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# SPATIAL CHARACTERISTICS OF OBSERVED PRECIPITATION FIELDS: A CATALOG OF SUMMER STORMS IN ARIZONA

VOLUME I

*CSMJ 700 802  
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by  
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WANG QINLIANG  
and  
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RALPH M. PARSONS LABORATORY  
HYDROLOGY AND WATER RESOURCE SYSTEMS

Report Number 307

Prepared with the support of

The National Aeronautics and Space Administration

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and

The National Science Foundation

Grant No. ATM 8420781

March, 1986

# MIT

DEPARTMENT  
OF  
CIVIL  
ENGINEERING



SCHOOL OF ENGINEERING  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
Cambridge, Massachusetts 02139

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Volume I

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Neil M. Fennessey

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## PREFACE

This report is one of four in a sequence describing and evaluating the modeling of the total storm rainfall due to stationary events. These reports are

- Report No. 305 "Spatial Poisson Models of Stationary Storm Rainfall: Theoretical Development" by I. Rodriguez-Iturbe, Q. Wang, P. S. Eagleson, and B. L. Jacobs.
- Report No. 306 "Spatial Analysis of Storm Depths from an Arizona Raingage Network" by N. Fennessey, P. S. Eagleson, Q. Wang, and I. Rodriguez-Iturbe.
- Report No. 307 (Vols. 1 and 2) "Spatial Characteristics of Observed Precipitation Fields: A Catalog of Summer Storms in Arizona" by N. Fennessey, P. S. Eagleson, Q. Wang, and I. Rodriguez-Iturbe.
- Report No. 308 "Spatial Poisson Models of Stationary Storm Rainfall: Parameterization, Evaluation and Numerical Simulation" by Q. Wang, N. Fennessey, P. S. Eagleson, and I. Rodriguez-Iturbe.

They are all available from

Director  
Ralph M. Parsons Laboratory  
Room 48-311  
Massachusetts Institute of Technology  
Cambridge, Massachusetts 02139

The raw data were provided by the Agricultural Research Service (U.S. Department of Agriculture), and are available from their data center in Beltsville, Maryland.

Data tables for the 428 identified storms are available on computer tape from the above MIT address along with a computer program for retrieving the data for a particular storm.

### Abstract

Eight years of summer raingage observations are analyzed for a dense, 93 gage, network operated by the U.S. Department of Agriculture, Agricultural Research Service, in the 150 km<sup>2</sup> Walnut Gulch catchment near Tucson, Arizona. Storms are defined by the total depths collected at each raingage during the noon-to-noon period for which there was depth recorded at any of the gages. For each of the resulting 428 storms, the 93 gage depths are interpolated onto a dense grid and the resulting random field is analyzed. Presented are: storm depth isohyets at 2 mm contour intervals, first three moments of point storm depth, spatial correlation function, spatial variance function, and the spatial distribution of total rainstorm depth.

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## Acknowledgements

This material is based upon work supported (serially) by the National Aeronautics and Space Administration under Grant No. NAG 5-388 and the National Science Foundation under Grant No. ATM-8420781.

The work was performed by Mr. Neil M. Fennessey, Research Assistant in Civil Engineering, and this document is a part of his thesis submitted to the Massachusetts Institute of Technology in partial fulfillment of the requirements for the degree of Master of Science in Civil Engineering. The work was supervised by Dr. Peter S. Eagleson, Edmund K. Turner Professor of Civil Engineering. Mr. Wang Qinliang, Visiting Engineer, provided continuing assistance while on leave from the Yangtze Valley Planning Office, Ministry of Water Resources and Electric Power, People's Republic of China. Dr. Ignacio Rodriguez-Iturbe, Graduate Program in Hydrology and Water Resources, Universidad Simon Bolivar, Caracas, Venezuela, provided guidance on a consulting basis.

Special thanks are extended to Dr. David Woolhizer<sup>A</sup> and Ms. Fatima Lopez of the U.S.D.A. Southwest Rangeland Watershed Research Center in Tucson, Arizona for generously providing the data used in this study. Further thanks are due the operators at the M.I.T. Information Processing Services for their extraordinary diligence and patience in successfully executing and carefully reviewing several hundred computer-generated plots.

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## INDEX OF STORM DAYS

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
June 22, 1970	1	0.270	8	0.714	1
June 28, 1970	2	0.706	6	0.347	3
June 29, 1970	3	0.517	15	0.653	5
July 1, 1970	4	0.382	4	0.520	7
July 2, 1970	5	0.033	3	0.920	9
July 7, 1970	6	2.752	15	0.064	11
July 8, 1970	7	0.531	5	0.609	13
July 13, 1970	8	0.238	5	0.710	15
July 17, 1970	9	0.115	3	0.712	17
July 18, 1970	10	0.043	3	0.889	19
July 19, 1970	11	4.160	23	0.031	21
July 20, 1970	12	20.640	59	0.000	23
July 21, 1970	13	0.257	2	0.471	25
July 24, 1970	14	7.969	33	0.122	27
July 25, 1970	15	2.839	36	0.276	29
July 27, 1970	16	1.176	12	0.529	31
July 28, 1970	17	9.744	42	0.003	33
July 29, 1970	18	2.278	25	0.650	35
July 30, 1970	19	5.178	17	0.002	37
July 31, 1970	20	10.129	34	0.023	39
Aug 1, 1970	21	12.988	35	0.003	41
Aug 2, 1970	22	7.012	24	0.000	43
Aug 3, 1970	23	1.067	5	0.287	45

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Aug 4, 1970	24	0.552	9	0.682	47
Aug 5, 1970	25	0.435	8	0.624	49
Aug 6, 1970	26	0.399	14	0.833	51
Aug 7, 1970	27	1.393	19	0.317	53
Aug 8, 1970	28	5.490	40	0.149	55
Aug 9, 1970	29	7.552	37	0.004	57
Aug 10, 1970	30	17.618	35	0.000	59
Aug 11, 1970	31	0.503	28	0.739	61
Aug 14, 1970	32	4.812	21	0.044	63
Aug 15, 1970	33	2.177	14	0.172	65
Aug 16, 1970	34	12.850	48	0.000	67
Aug 17, 1970	35	5.587	37	0.004	69
Aug 18, 1970	36	0.172	6	0.829	71
Aug 19, 1970	37	1.073	13	0.467	73
Aug 21, 1970	38	0.028	3	0.945	75
Aug 22, 1970	39	4.121	19	0.050	77
Aug 23, 1970	40	4.457	28	0.080	79
Aug 26, 1970	41	1.907	12	0.339	81
Sept 2, 1970	42	0.240	6	0.661	83
Sept 3, 1970	43	11.431	19	0.000	85
Sept 4, 1970	44	9.434	18	0.000	87
Sept 8, 1970	45	6.400	41	0.315	89
Sept 9, 1970	46	8.003	22	0.000	91
Sept 11, 1970	47	0.054	4	0.907	93
Sept 12, 1970	48	0.055	1	0.785	95

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 30, 1970	49	1.344	8	0.189	97
June 24, 1971	1	6.621	29	0.014	99
July 2, 1971	2	3.563	16	0.079	101
July 3, 1971	3	0.377	7	0.639	103
July 5, 1971	4	1.258	19	0.503	105
July 10, 1971	5	0.561	9	0.563	107
July 13, 1971	6	0.040	3	0.932	109
July 16, 1971	7	3.065	19	0.035	111
July 17, 1971	8	1.094	19	0.759	113
July 18, 1971	9	6.209	31	0.020	115
July 19, 1971	10	0.652	8	0.458	117
July 20, 1971	11	1.905	21	0.344	119
July 21, 1971	12	1.652	31	0.531	121
July 23, 1971	13	23.769	67	0.017	123
July 24, 1971	14	12.120	55	0.000	125
July 26, 1971	15	0.871	8	0.440	127
July 27, 1971	16	3.015	13	0.022	129
July 28, 1971	17	7.076	22	0.031	131
July 29, 1971	18	2.311	16	0.187	133
July 30, 1971	19	4.077	11	0.000	135
July 31, 1971	20	5.338	20	0.017	137
Aug 1, 1971	21	0.038	5	0.948	139
Aug 3, 1971	22	5.024	15	0.002	141
Aug 8, 1971	23	2.846	19	0.275	143
Aug 10, 1971	24	27.526	59	0.000	145



Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Aug 11, 1971	25	1.566	15	0.513	147
Aug 12, 1971	26	20.985	37	0.000	149
Aug 13, 1971	27	0.007	1	0.953	151
Aug 14, 1971	28	4.350	21	0.024	153
Aug 16, 1971	29	1.059	14	0.398	155
Aug 17, 1971	30	2.015	20	0.571	157
Aug 18, 1971	31	26.033	46	0.000	159
Aug 19, 1971	32	0.308	3	0.524	161
Aug 20, 1971	33	5.097	25	0.144	163
Aug 21, 1971	34	2.218	18	0.409	165
Aug 23, 1971	35	2.656	20	0.487	167
Aug 24, 1971	36	7.997	50	0.000	169
Aug 27, 1971	37	4.692	20	0.071	171
Aug 28, 1971	38	3.894	34	0.016	173
Aug 31, 1971	39	0.503	11	0.691	175
Sept 1, 1971	40	3.872	33	0.001	177
Sept 2, 1971	41	1.063	8	0.514	179
Sept 3, 1971	42	1.366	11	0.340	181
Sept 5, 1971	43	0.146	3	0.518	183
Sept 6, 1971	44	0.087	2	0.733	185
Sept 7, 1971	45	0.051	5	0.940	187
Sept 8, 1971	46	2.938	40	0.004	189
Sept 16, 1971	47	0.008	1	0.935	191
Sept 17, 1971	48	0.127	4	0.679	193
Sept 18, 1971	49	17.799	33	0.000	195

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 28, 1971	50	2.554	16	0.000	197
Sept 29, 1971	51	0.768	15	0.403	199
June 4, 1972	1	0.195	4	0.624	201
June 5, 1972	2	3.963	10	0.010	203
June 6, 1972	3	24.434	48	0.012	205
June 7, 1972	4	0.080	2	0.688	207
June 8, 1972	5	4.511	15	0.016	209
June 9, 1972	6	0.047	1	0.800	211
June 11, 1972	7	1.166	11	0.323	213
June 12, 1972	8	4.307	19	0.050	215
June 14, 1972	9	6.417	28	0.158	217
June 17, 1972	10	0.017	1	0.929	219
June 20, 1972	11	0.166	2	0.429	221
July 5, 1972	12	1.873	20	0.187	223
July 6, 1972	13	0.309	5	0.711	225
July 7, 1972	14	0.868	6	0.458	227
July 8, 1972	15	0.022	2	0.936	229
July 9, 1972	16	0.035	2	0.896	231
July 10, 1972	17	2.762	15	0.186	233
July 12, 1972	18	1.691	12	0.175	235
July 14, 1972	19	1.779	9	0.092	237
July 15, 1972	20	15.274	34	0.000	239
July 16, 1972	21	0.445	5	0.475	241
July 19, 1972	22	1.330	13	0.312	243
July 22, 1972	23	13.734	45	0.000	245

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 23, 1972	24	0.142	3	0.643	247
July 24, 1972	25	19.046	91	0.004	249
July 25, 1972	26	1.224	16	0.482	251
July 26, 1972	27	0.982	16	0.742	253
July 28, 1972	28	7.418	23	0.070	255
July 29, 1972	29	0.389	3	0.300	257
Aug 3, 1972	30	1.875	18	0.071	259
Aug 4, 1972	31	0.072	1	0.819	261
Aug 5, 1972	32	4.687	26	0.198	263
Aug 6, 1972	33	10.935	39	0.000	265
Aug 8, 1972	34	9.785	30	0.001	267
Aug 9, 1972	35	4.583	17	0.000	269
Aug 10, 1972	36	0.205	3	0.617	271
Aug 12, 1972	37	29.425	81	0.000	273
Aug 13, 1972	38	0.561	9	0.682	275
Aug 17, 1972	39	0.653	11	0.474	277
Aug 18, 1972	40	0.779	10	0.260	279
Aug 19, 1972	41	0.001	1	0.992	281
Aug 25, 1972	42	7.271	14	0.000	283
Aug 26, 1972	43	10.625	31	0.000	285
Aug 28, 1972	44	3.061	14	0.093	287
Aug 29, 1972	45	10.508	69	0.001	289
Aug 30, 1972	46	0.067	5	0.773	291
Aug 31, 1972	47	1.248	19	0.665	293
Sept 1, 1972	48	10.329	105	0.040	295

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 2, 1972	49	8.065	34	0.000	297
Sept 5, 1972	50	0.057	2	0.832	299
Sept 6, 1972	51	6.539	31	0.048	301
Sept 7, 1972	52	0.004	1	0.954	303
Sept 9, 1972	53	0.590	28	0.564	305
Sept 10, 1972	54	0.169	3	0.784	307
Sept 11, 1972	55	2.702	16	0.283	309
Sept 13, 1972	56	0.235	35	0.882	311
Sept 14, 1972	57	0.748	13	0.504	313
Sept 15, 1972	58	0.540	10	0.674	315
June 1, 1973	1	0.086	2	0.757	317
June 11, 1973	2	2.027	17	0.352	319
June 12, 1973	3	12.759	23	0.011	321
June 13, 1973	4	0.035	1	0.750	323
July 2, 1973	5	2.723	8	0.017	325
July 5, 1973	6	0.850	8	0.192	327
July 6, 1973	7	0.958	7	0.473	329
July 8, 1973	8	2.752	16	0.336	331
July 9, 1973	9	1.107	6	0.275	333
July 10, 1973	10	16.499	37	0.000	335
July 11, 1973	11	0.454	14	0.817	337
July 12, 1973	12	10.291	43	0.066	339
July 13, 1973	13	1.563	27	0.504	341
July 14, 1973	14	17.386	49	0.000	343
July 15, 1973	15	6.229	45	0.033	345

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 18, 1973	16	0.711	7	0.488	347
July 26, 1973	17	0.288	4	0.596	349
July 27, 1973	18	17.630	78	0.008	351
July 28, 1973	19	0.331	5	0.290	353
July 29, 1973	20	0.282	13	0.680	355
July 30, 1973	21	0.035	2	0.887	357
July 31, 1973	22	0.794	9	0.421	359
Aug 1, 1973	23	0.414	12	0.497	361
Aug 2, 1973	24	0.031	4	0.951	363
Aug 3, 1973	25	0.006	1	0.951	365
Aug 5, 1973	26	3.040	20	0.246	367
Aug 6, 1973	27	0.063	4	0.915	369
Aug 9, 1973	28	0.004	1	0.964	371
Aug 10, 1973	29	4.528	14	0.001	373
Aug 19, 1973	30	0.038	1	0.862	375
Aug 20, 1973	31	0.214	2	0.461	377
Aug 21, 1973	32	12.295	58	0.017	379
Aug 22, 1973	33	0.449	10	0.711	381
Aug 23, 1973	34	3.137	27	0.485	383
Aug 27, 1973	35	0.370	9	0.783	385
Aug 28, 1973	36	0.171	3	0.505	387
Aug 29, 1973	37	0.838	5	0.166	389
Aug 31, 1973	38	0.017	1	0.897	391
Sept 5, 1973	39	0.030	2	0.927	393
Sept 6, 1973	40	0.007	1	0.956	395

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 9, 1973	41	0.144	12	0.716	397
Sept 15, 1973	42	0.035	1	0.750	399
Sept 16, 1973	43	4.790	23	0.206	401
Sept 20, 1973	44	2.945	26	0.030	403

## INTRODUCTION

This work is part of a larger study of the spatial characteristics of storm precipitation which is designed to improve the way in which the spatial variability of storms is handled in hydrologic computation. This, the first phase of the work, deals with the simplest case, rainstorms that are essentially stationary in space.

The storms are modeled conceptually as an agglomeration of rain-producing cells distributed randomly in two dimensions. The theoretical analysis of the resulting random field is presented in the first of the four reports in this series (No. 305).

The parameters of the conceptual model are evaluated from the analysis of eight years of summer rainstorm data collected by the Agricultural Research Service (U.S. Department of Agriculture) at a dense rain-gage network in their Walnut Gulch experimental catchment near Tucson, Arizona. The occurrence of measurable rain at any one of the catchment's 93 gages during a noon-to-noon day defines a "storm day". The total rainfall at each of the gages during a storm day constitutes the data set for a single storm. The data are interpolated onto a fine grid and analyzed to obtain: an isohyetal plot at 2 mm intervals, the first three moments of point storm depth, the spatial correlation function, the spatial variance function, and the spatial distribution of the total storm depth. The description of the data analysis and the computer programs necessary to read the associated data tapes are presented in the second report (No. 306).

The two volumes of this, the third report, contain the results of the data analysis for the 428 storms identified during the eight data

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years available. Each storm is described on a single sheet (both sides). The front of the sheet contains the isohyetal plot in the lower left hand corner of which are the mean and standard deviation of the observed raingage depths. Below this are plots of the spatial correlation and variance functions. On the reverse side is a data table which presents: the calculated values of the moments of the interpolated grid-point depths, the fraction of the basin which is wetted, the fraction of the basin which remains dry, the spatial correlation function, the spatial variance function, and the spatial distribution of total storm depth.

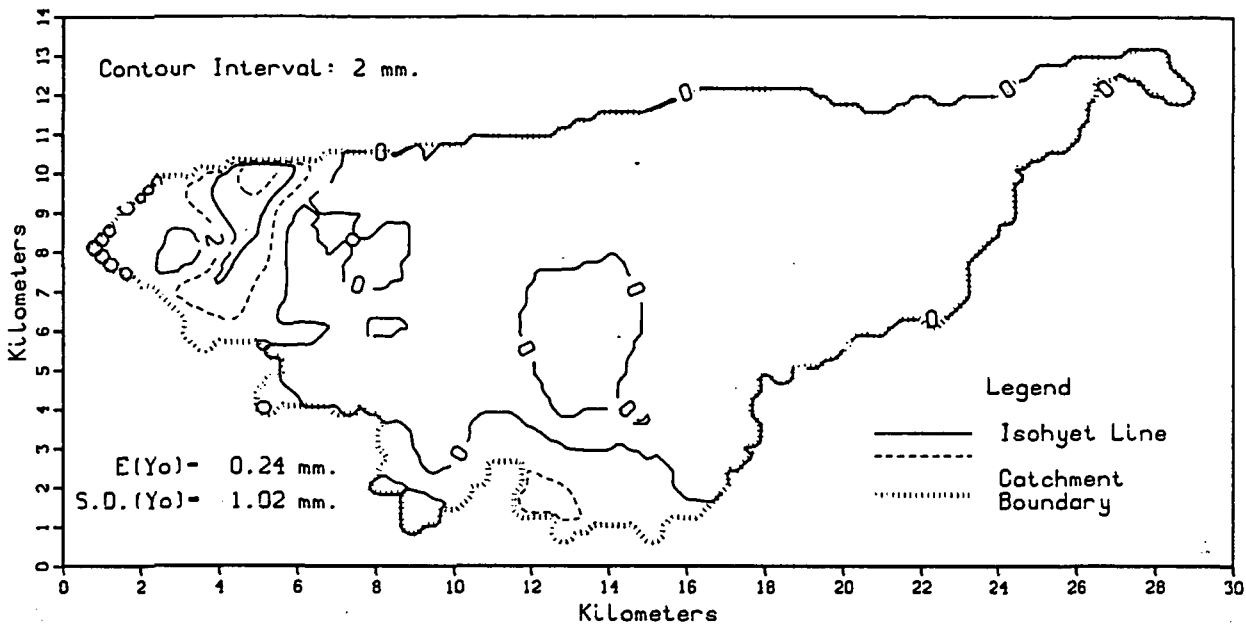
The fourth and final report in the series (No. 308) contains the split-sample parameter estimation and model evaluation as well as a numerical simulation of the stochastic models.



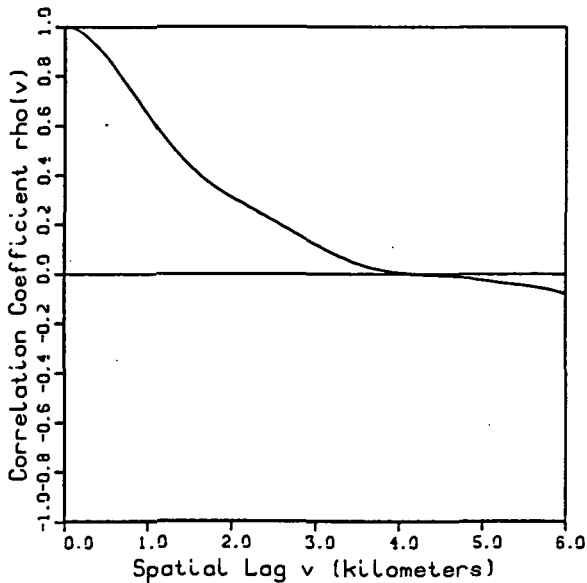
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

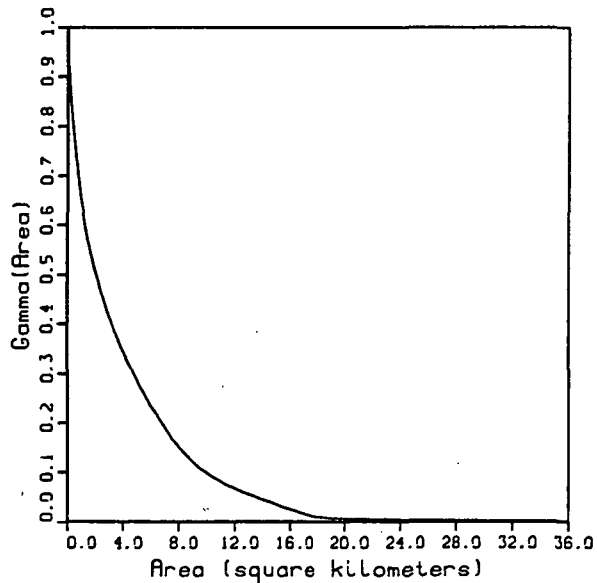
Storm Day  
June 22, 1970



### Spatial Correlation



### Variance Function



Storm Day June 22 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.714$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.286$

Expected Value of Point Depth (mm.):  $E(Y)= 0.270$

Variance of Point Depth (mm. sq.):  $Var(Y)= 0.771$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 4.386$

Spatial Distribution  
of Total Storm Depth  
y (mm.)  $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.) rho (v)

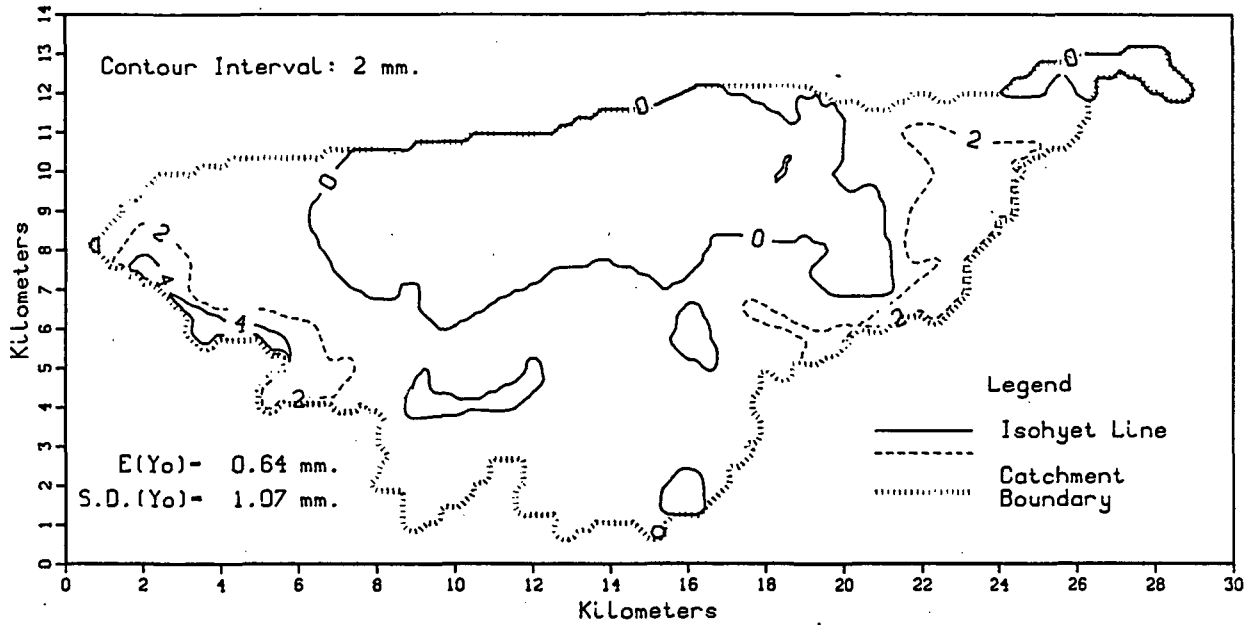
Variance Function  
A (km.sq.) Gamma (A)

	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.070	0.0	1.000	0.00	1.000
2	0.050	0.2	0.976	0.04	0.958
3	0.031	0.4	0.917	0.16	0.896
4	0.017	0.6	0.835	0.36	0.818
5	0.008	0.8	0.740	0.64	0.734
6	0.004	1.0	0.643	1.00	0.654
7	0.000	1.2	0.551	1.44	0.580
8	0.000	1.4	0.470	1.96	0.513
		1.6	0.402	2.56	0.452
		1.8	0.348	3.24	0.396
		2.0	0.306	4.00	0.344
		2.2	0.268	4.84	0.293
		2.4	0.231	5.76	0.244
		2.6	0.192	6.76	0.198
		2.8	0.153	7.84	0.156
		3.0	0.116	9.00	0.120
		3.2	0.081	10.24	0.093
		3.4	0.052	11.56	0.071
		3.6	0.027	12.96	0.055
		3.8	0.011	14.44	0.040
		4.0	0.001	16.00	0.024
		4.2	-.005	17.64	0.010
		4.4	-.008	19.36	0.006
		4.6	-.012	21.16	0.004
		4.8	-.019	23.04	0.004
		5.0	-.029	25.00	0.003
		5.2	-.038	27.04	0.002
		5.4	-.046	29.16	0.001
		5.6	-.054	31.36	0.001
		5.8	-.066	33.64	0.000
		6.0	-.085	36.00	0.000

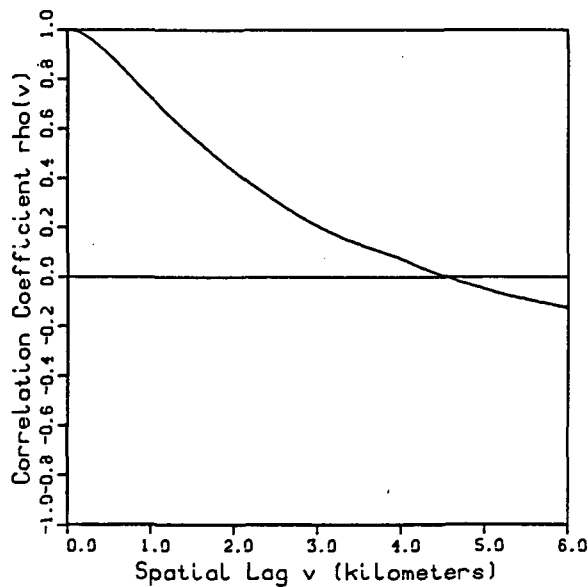
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

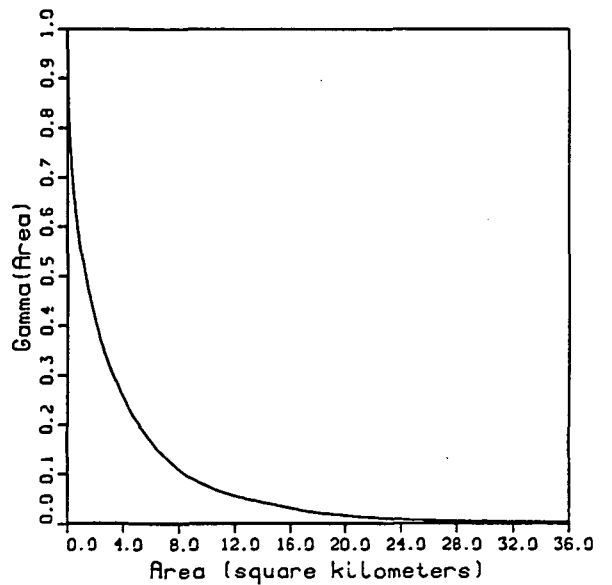
Storm Day  
June 28, 1970



Spatial Correlation



Variance Function



Storm Day June 28 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.347$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.653$

Expected Value of Point Depth (mm.):  $E(Y) = 0.706$

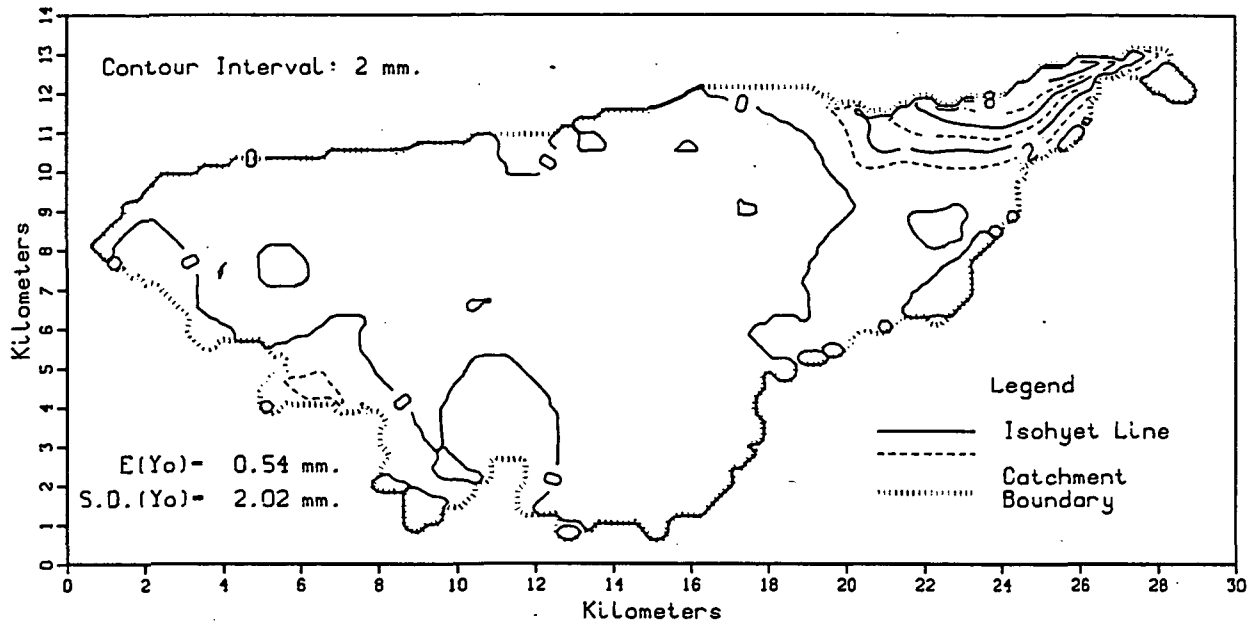
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.994$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.847$

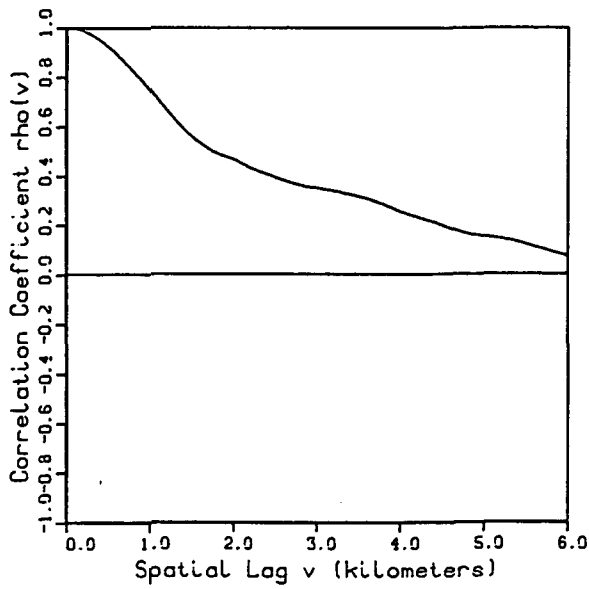
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.246	0.0	1.000	0.00	1.000
2	0.107	0.2	0.978	0.04	0.898
3	0.045	0.4	0.928	0.16	0.796
4	0.010	0.6	0.864	0.36	0.705
5	0.002	0.8	0.794	0.64	0.624
6	0.000	1.0	0.724	1.00	0.550
		1.2	0.658	1.44	0.481
		1.4	0.595	1.96	0.417
		1.6	0.536	2.56	0.357
		1.8	0.479	3.24	0.302
		2.0	0.426	4.00	0.255
		2.2	0.375	4.84	0.213
		2.4	0.328	5.76	0.175
		2.6	0.283	6.76	0.141
		2.8	0.242	7.84	0.111
		3.0	0.204	9.00	0.089
		3.2	0.171	10.24	0.071
		3.4	0.143	11.56	0.058
		3.6	0.118	12.96	0.047
		3.8	0.095	14.44	0.039
		4.0	0.069	16.00	0.030
		4.2	0.041	17.64	0.022
		4.4	0.012	19.36	0.016
		4.6	-.010	21.16	0.012
		4.8	-.032	23.04	0.008
		5.0	-.052	25.00	0.005
		5.2	-.072	27.04	0.004
		5.4	-.087	29.16	0.004
		5.6	-.101	31.36	0.003
		5.8	-.115	33.64	0.002
		6.0	-.128	36.00	0.001

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq.km.}$

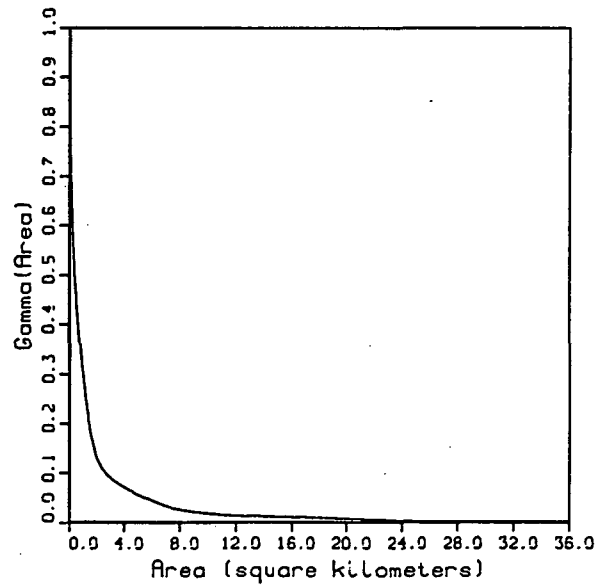
Storm Day  
 June 29, 1970



Spatial Correlation



Variance Function



Storm Day June 29 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.653$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.347$

Expected Value of Point Depth (mm.):  $E(Y) = 0.517$

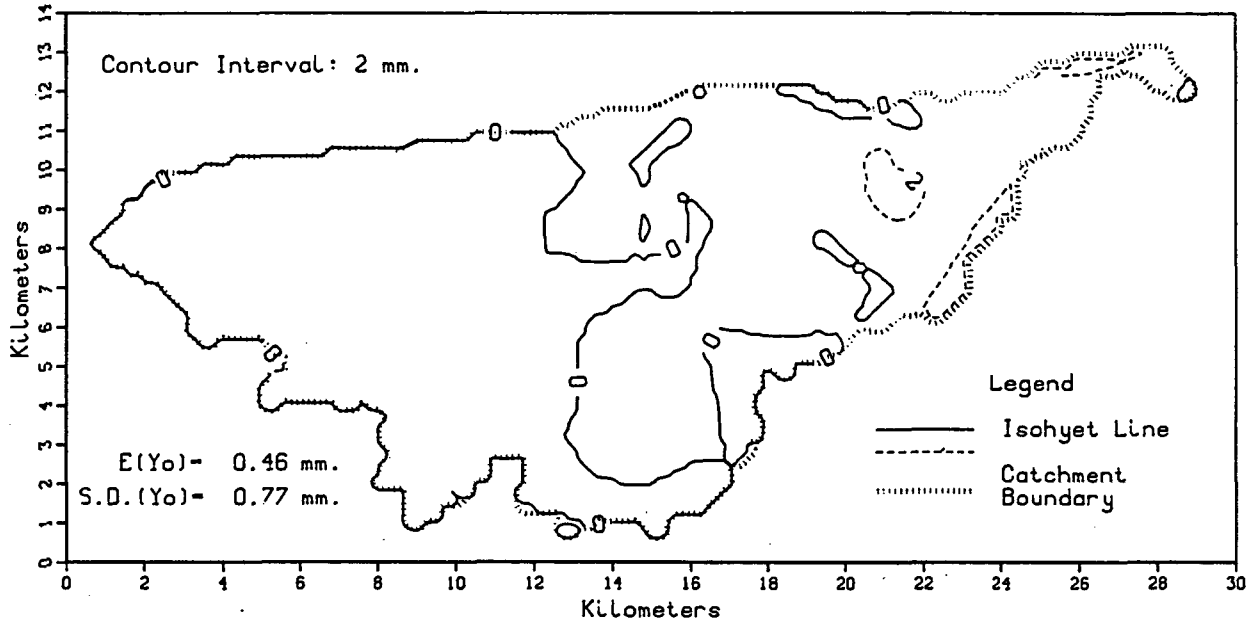
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.046$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.609$

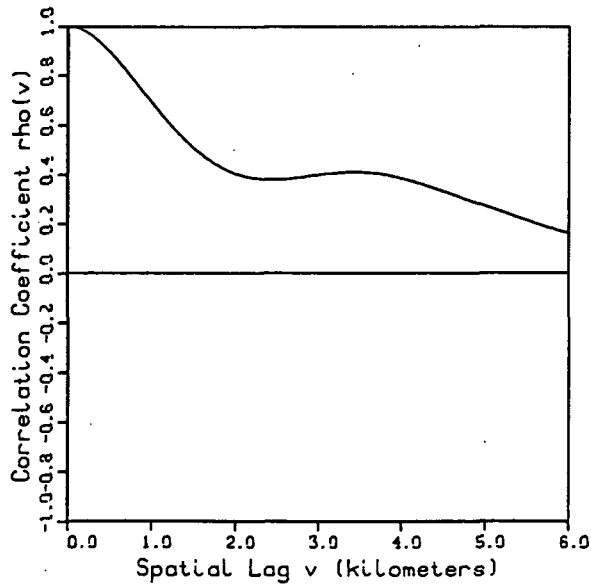
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.100	0.0	1.000	0.00	1.000
2	0.065	0.2	0.986	0.04	0.833
3	0.051	0.4	0.949	0.16	0.666
4	0.042	0.6	0.892	0.36	0.529
5	0.035	0.8	0.822	0.64	0.414
6	0.027	1.0	0.745	1.00	0.309
7	0.022	1.2	0.663	1.44	0.209
8	0.017	1.4	0.587	1.96	0.137
9	0.012	1.6	0.529	2.56	0.103
10	0.008	1.8	0.488	3.24	0.085
11	0.005	2.0	0.464	4.00	0.070
12	0.003	2.2	0.429	4.84	0.057
13	0.001	2.4	0.404	5.76	0.046
14	0.000	2.6	0.378	6.76	0.035
15	0.000	2.8	0.358	7.84	0.026
		3.0	0.347	9.00	0.020
		3.2	0.336	10.24	0.016
		3.4	0.322	11.56	0.013
		3.6	0.304	12.96	0.011
		3.8	0.282	14.44	0.011
		4.0	0.253	16.00	0.010
		4.2	0.231	17.64	0.008
		4.4	0.210	19.36	0.007
		4.6	0.186	21.16	0.005
		4.8	0.163	23.04	0.003
		5.0	0.153	25.00	0.001
		5.2	0.143	27.04	0.000
		5.4	0.129	29.16	0.000
		5.6	0.110	31.36	0.000
		5.8	0.091	33.64	0.000
		6.0	0.072	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

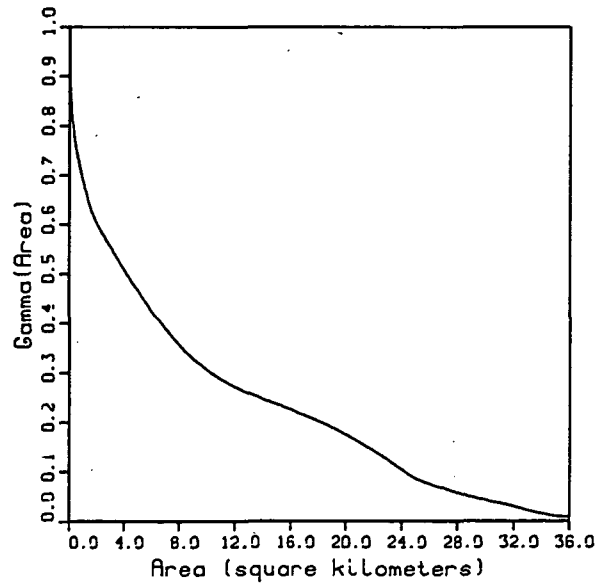
Storm Day  
 July 1, 1970



Spatial Correlation



Variance Function



Storm Day July 1 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.520$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.480$

Expected Value of Point Depth (mm.):  $E(Y) = 0.382$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.380$

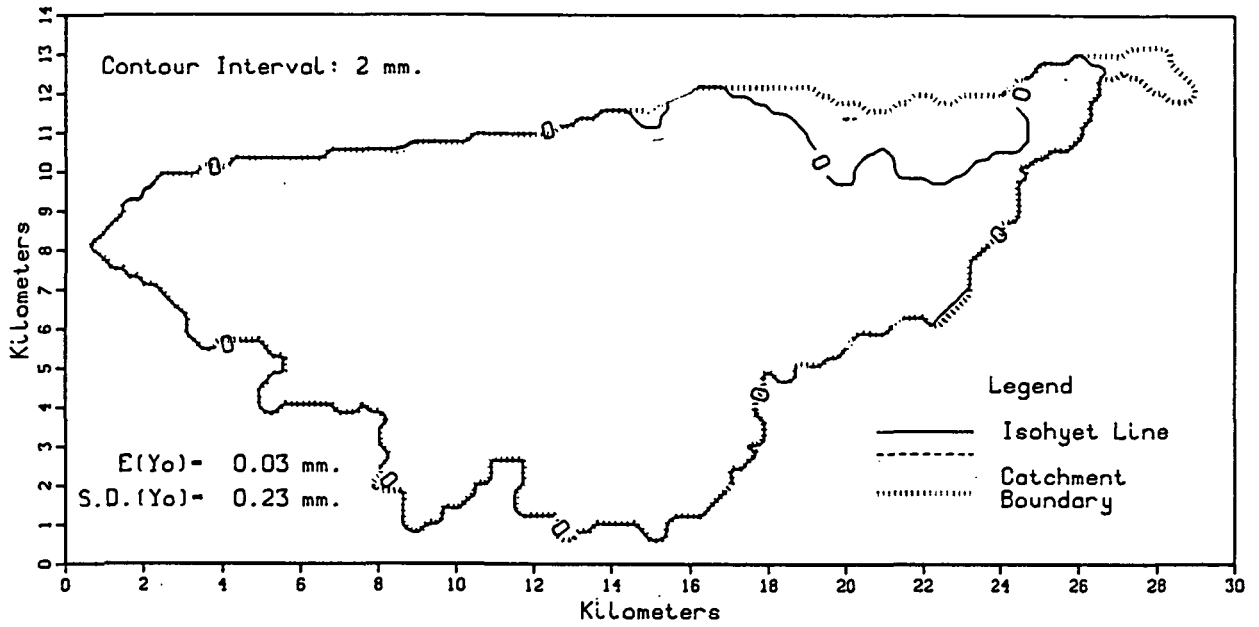
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.693$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.173	0.0	1.000	0.00	1.000
2	0.025	0.2	0.981	0.04	0.920
3	0.000	0.4	0.930	0.16	0.848
4	0.000	0.6	0.859	0.36	0.790
		0.8	0.776	0.64	0.738
		1.0	0.692	1.00	0.692
		1.2	0.610	1.44	0.646
		1.4	0.538	1.96	0.607
		1.6	0.479	2.56	0.576
		1.8	0.433	3.24	0.543
		2.0	0.401	4.00	0.508
		2.2	0.385	4.84	0.471
		2.4	0.378	5.76	0.434
		2.6	0.381	6.76	0.396
		2.8	0.389	7.84	0.360
		3.0	0.398	9.00	0.328
		3.2	0.406	10.24	0.300
		3.4	0.409	11.56	0.276
		3.6	0.407	12.96	0.257
		3.8	0.398	14.44	0.241
		4.0	0.383	16.00	0.224
		4.2	0.364	17.64	0.205
		4.4	0.342	19.36	0.183
		4.6	0.318	21.16	0.155
		4.8	0.294	23.04	0.123
		5.0	0.270	25.00	0.085
		5.2	0.248	27.04	0.065
		5.4	0.224	29.16	0.047
		5.6	0.200	31.36	0.033
		5.8	0.179	33.64	0.016
		6.0	0.161	36.00	0.008

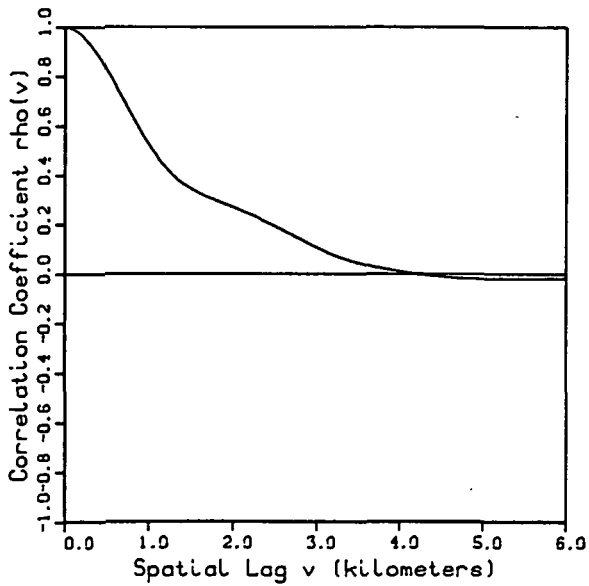


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

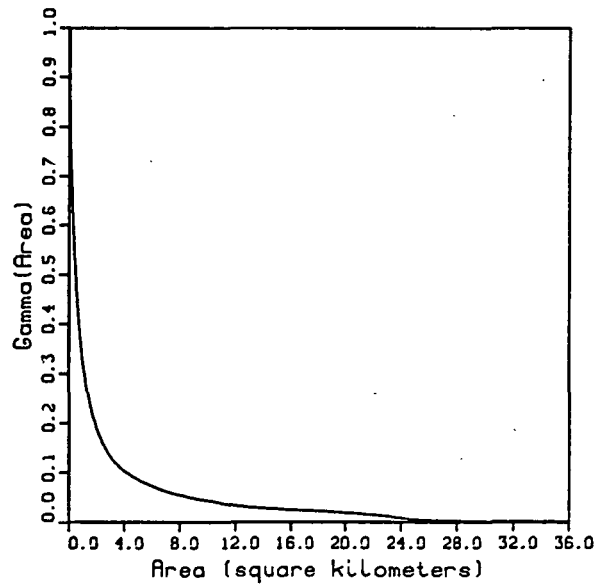
Storm Day  
 July 2, 1970



Spatial Correlation



Variance Function



Storm Day July 2 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.920$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.080$

Expected Value of Point Depth (mm.):  $E(Y) = 0.033$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.032$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.127$

Spatial Distribution  
of Total Storm Depth  
y (mm.)  $A_{cw}/A_c (Y \geq y)$

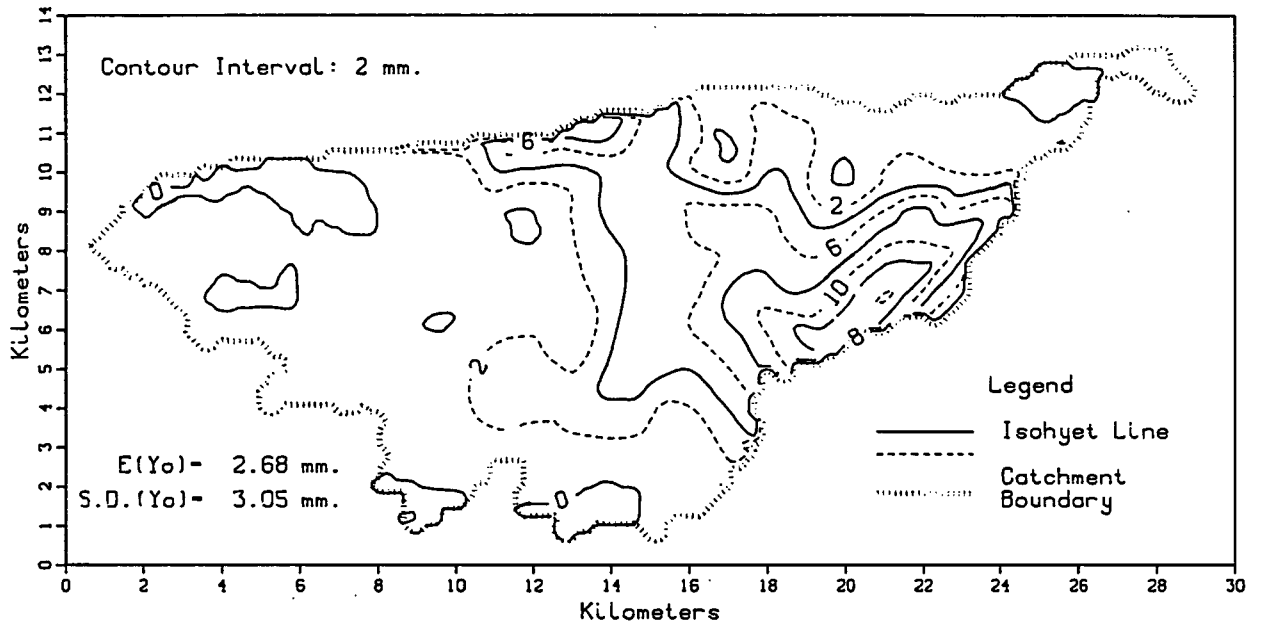
Spatial Correlation  
v (km.) rho (v)

Variance Function  
A (km. sq.) Gamma (A)

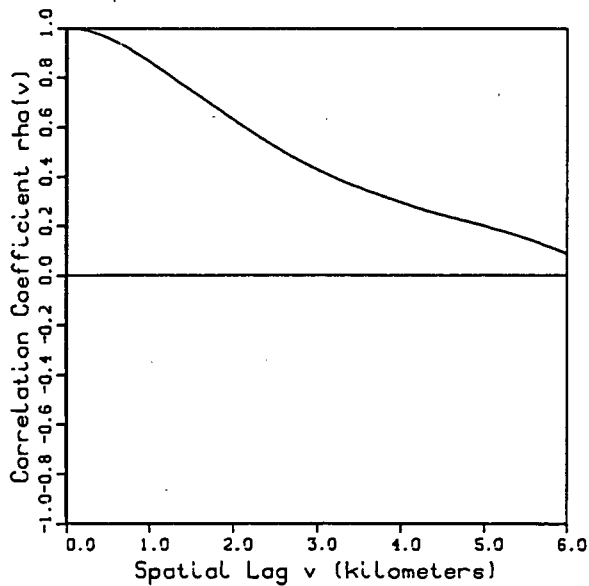
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.010	0.0	1.000	0.00	1.000
2	0.000	0.2	0.964	0.04	0.887
3	0.000	0.4	0.882	0.16	0.722
		0.6	0.765	0.36	0.563
		0.8	0.637	0.64	0.430
		1.0	0.521	1.00	0.325
		1.2	0.428	1.44	0.246
		1.4	0.363	1.96	0.190
		1.6	0.323	2.56	0.150
		1.8	0.294	3.24	0.122
		2.0	0.267	4.00	0.102
		2.2	0.239	4.84	0.086
		2.4	0.207	5.76	0.074
		2.6	0.173	6.76	0.063
		2.8	0.138	7.84	0.054
		3.0	0.104	9.00	0.047
		3.2	0.074	10.24	0.041
		3.4	0.050	11.56	0.035
		3.6	0.032	12.96	0.029
		3.8	0.018	14.44	0.026
		4.0	0.007	16.00	0.024
		4.2	-.002	17.64	0.022
		4.4	-.010	19.36	0.019
		4.6	-.016	21.16	0.015
		4.8	-.020	23.04	0.010
		5.0	-.022	25.00	0.004
		5.2	-.022	27.04	0.002
		5.4	-.022	29.16	0.000
		5.6	-.021	31.36	0.000
		5.8	-.020	33.64	0.000
		6.0	-.019	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

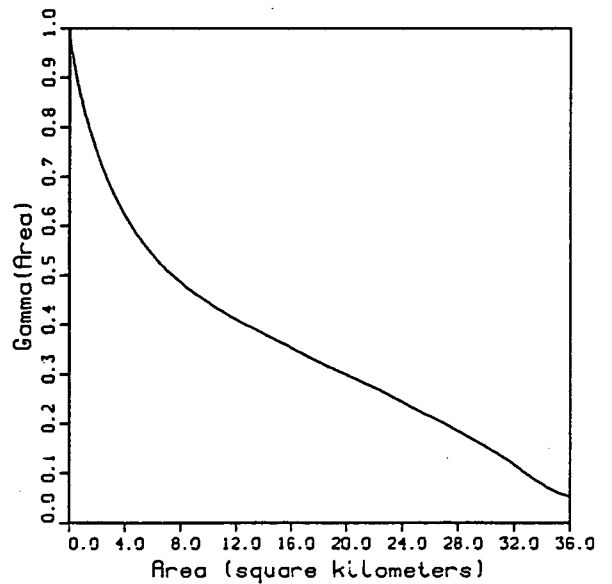
Storm Day  
 July 7, 1970



Spatial Correlation



Variance Function



Storm Day July 7 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.064$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.936$

Expected Value of Point Depth (mm.):  $E(Y) = 2.752$

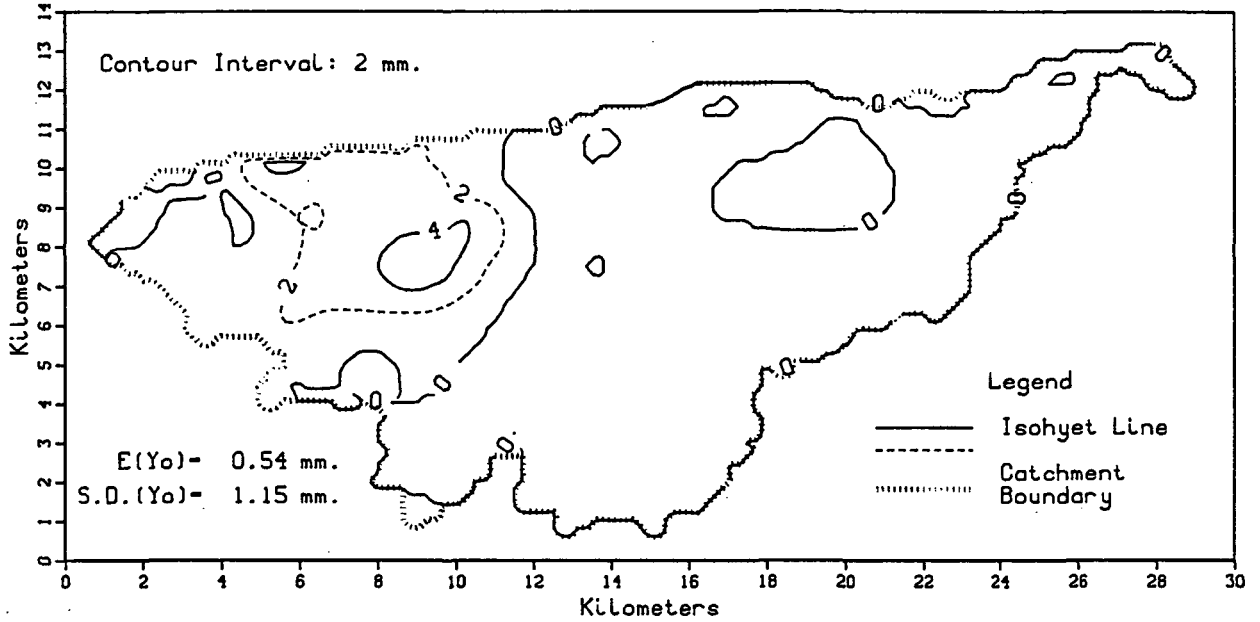
Variance of Point Depth (mm. sq.):  $Var(Y) = 9.454$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.444$

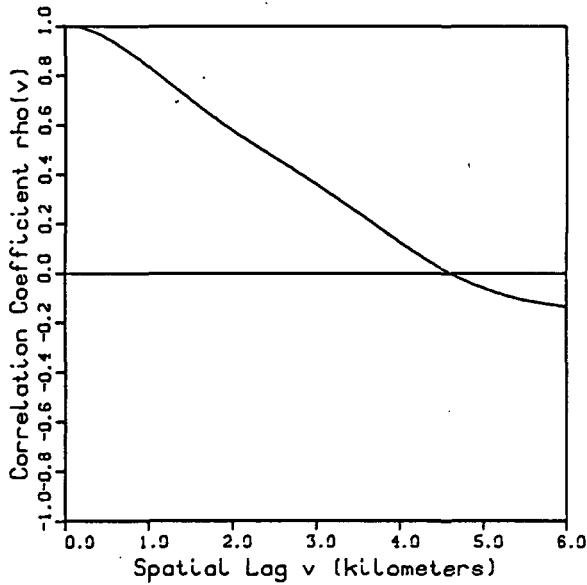
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.598	0.0	1.000	0.00	1.000
2	0.422	0.2	0.993	0.04	0.986
3	0.332	0.4	0.972	0.16	0.960
4	0.281	0.6	0.942	0.36	0.926
5	0.209	0.8	0.903	0.64	0.885
6	0.151	1.0	0.860	1.00	0.840
7	0.107	1.2	0.813	1.44	0.794
8	0.081	1.4	0.766	1.96	0.748
9	0.058	1.6	0.719	2.56	0.703
10	0.040	1.8	0.672	3.24	0.659
11	0.029	2.0	0.626	4.00	0.618
12	0.018	2.2	0.581	4.84	0.580
13	0.007	2.4	0.538	5.76	0.545
14	0.001	2.6	0.497	6.76	0.514
15	0.000	2.8	0.460	7.84	0.486
		3.0	0.426	9.00	0.460
		3.2	0.394	10.24	0.437
		3.4	0.366	11.56	0.415
		3.6	0.340	12.96	0.394
		3.8	0.316	14.44	0.373
		4.0	0.293	16.00	0.351
		4.2	0.271	17.64	0.328
		4.4	0.251	19.36	0.305
		4.6	0.233	21.16	0.281
		4.8	0.215	23.04	0.256
		5.0	0.198	25.00	0.226
		5.2	0.180	27.04	0.198
		5.4	0.160	29.16	0.164
		5.6	0.136	31.36	0.128
		5.8	0.112	33.64	0.082
		6.0	0.086	36.00	0.052

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

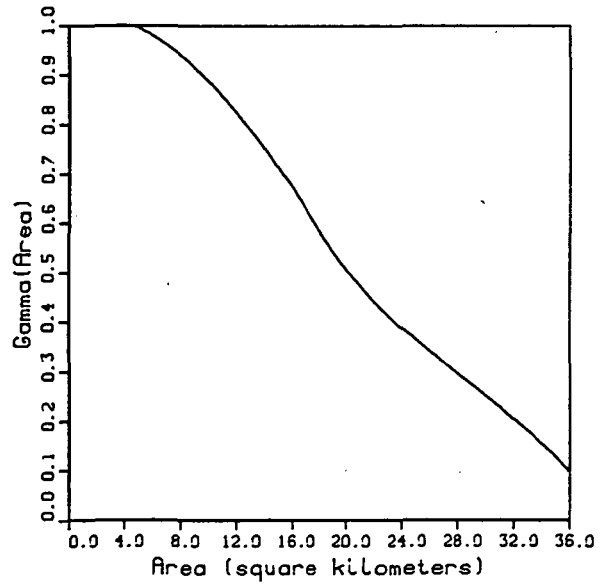
Storm Day  
July 8, 1970



Spatial Correlation



Variance Function



Storm Day July 8 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.609$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.391$

Expected Value of Point Depth (mm.):  $E(Y) = 0.531$

Variance of Point Depth (mm. sq.):  $Var(Y) = 1.111$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.109$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)      rho (v)

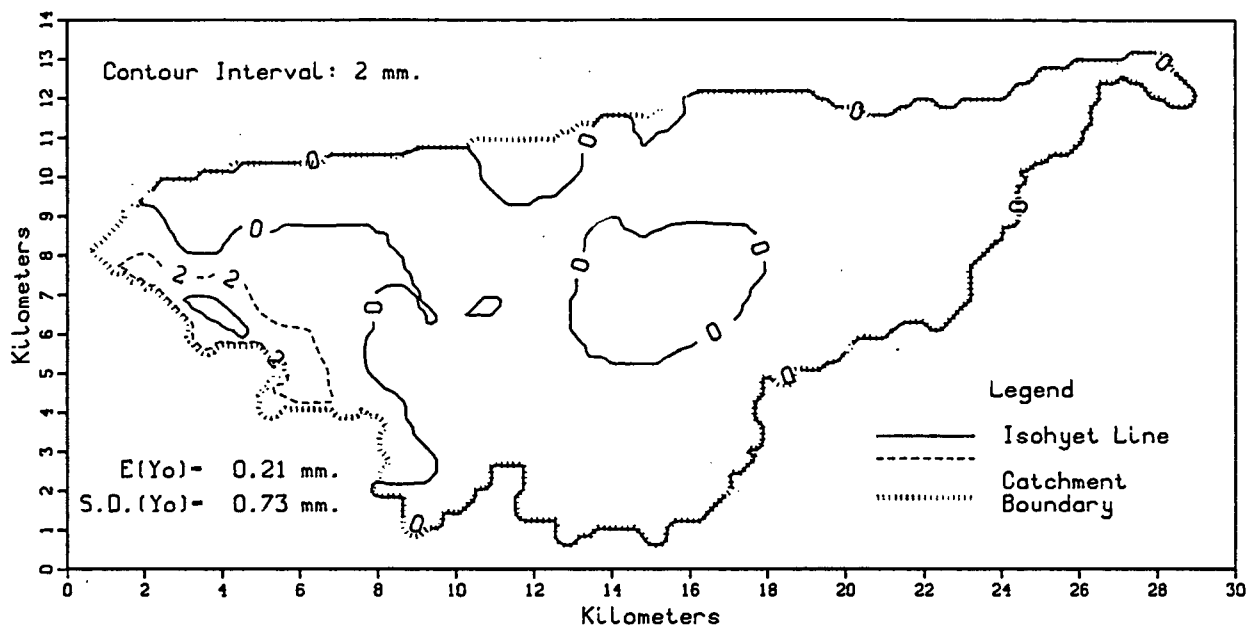
Variance Function  
A (km. sq.)      Gamma (A)

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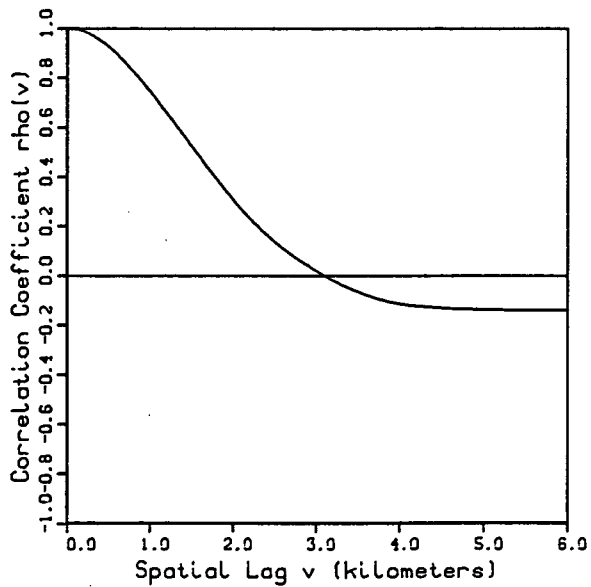
1	0.195	0.0	1.000	0.00	1.000
2	0.122	0.2	0.991	0.04	1.013
3	0.057	0.4	0.967	0.16	1.022
4	0.019	0.6	0.929	0.36	1.026
5	0.000	0.8	0.883	0.64	1.026
		1.0	0.831	1.00	1.025
		1.2	0.778	1.44	1.025
		1.4	0.724	1.96	1.023
		1.6	0.672	2.56	1.020
		1.8	0.622	3.24	1.014
		2.0	0.574	4.00	1.007
		2.2	0.530	4.84	0.997
		2.4	0.486	5.76	0.983
		2.6	0.443	6.76	0.965
		2.8	0.400	7.84	0.942
		3.0	0.356	9.00	0.914
		3.2	0.311	10.24	0.879
		3.4	0.265	11.56	0.838
		3.6	0.218	12.96	0.790
		3.8	0.170	14.44	0.735
		4.0	0.123	16.00	0.673
		4.2	0.078	17.64	0.603
		4.4	0.035	19.36	0.530
		4.6	-.002	21.16	0.468
		4.8	-.036	23.04	0.410
		5.0	-.063	25.00	0.364
		5.2	-.086	27.04	0.316
		5.4	-.105	29.16	0.269
		5.6	-.119	31.36	0.218
		5.8	-.129	33.64	0.163
		6.0	-.138	36.00	0.097

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

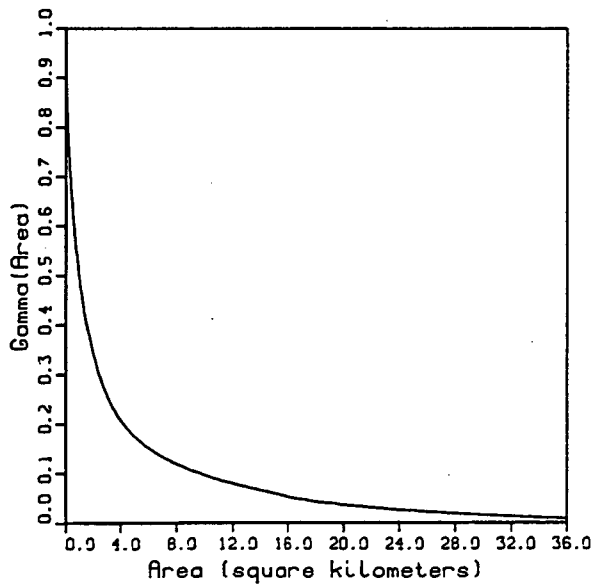
Storm Day  
 July 13, 1970



Spatial Correlation



Variance Function



Storm Day July 13 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.710$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.290$

Expected Value of Point Depth (mm.):  $E(Y) = 0.238$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.452$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.682$

Spatial Distribution  
of Total Storm Depth  
y (mm.)     $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)    rho (v)

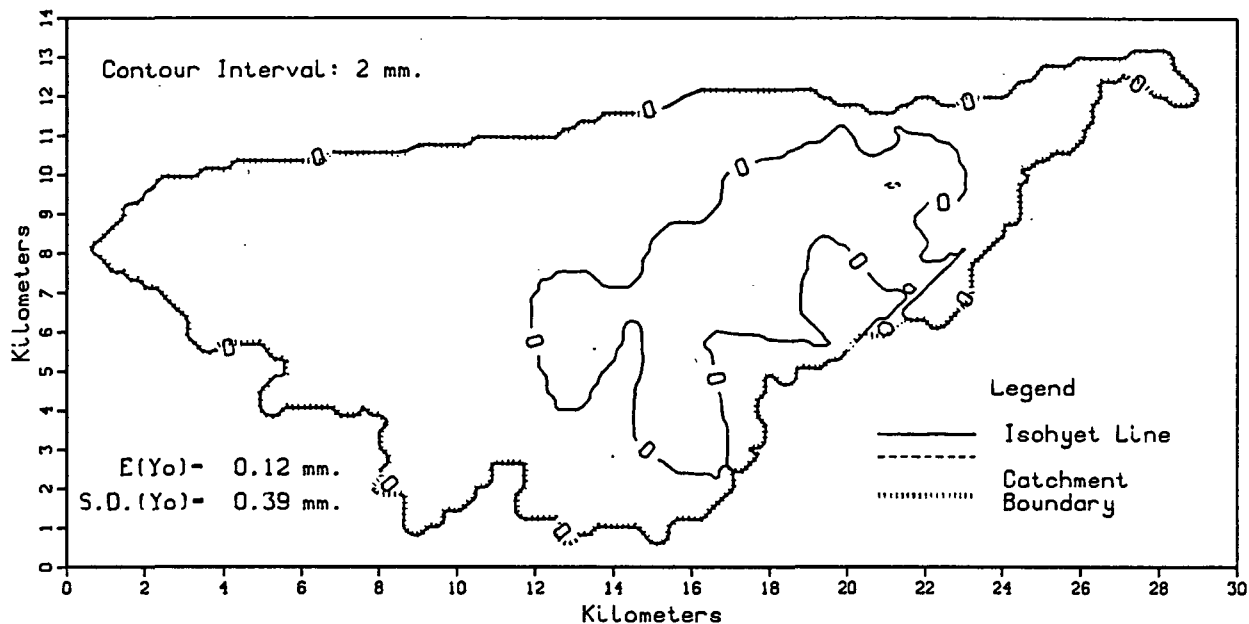
Variance Function  
A (km.sq.)    Gamma (A)

1	0.082	0.0	1.000	0.00	1.000
2	0.038	0.2	0.986	0.04	0.918
3	0.018	0.4	0.949	0.16	0.813
4	0.004	0.6	0.893	0.36	0.701
5	0.000	0.8	0.823	0.64	0.595
		1.0	0.743	1.00	0.499
		1.2	0.657	1.44	0.417
		1.4	0.568	1.96	0.348
		1.6	0.479	2.56	0.290
		1.8	0.391	3.24	0.244
		2.0	0.306	4.00	0.207
		2.2	0.230	4.84	0.178
		2.4	0.165	5.76	0.155
		2.6	0.109	6.76	0.136
		2.8	0.060	7.84	0.120
		3.0	0.016	9.00	0.106
		3.2	-0.022	10.24	0.093
		3.4	-0.054	11.56	0.082
		3.6	-0.082	12.96	0.071
		3.8	-0.103	14.44	0.061
		4.0	-0.118	16.00	0.052
		4.2	-0.127	17.64	0.043
		4.4	-0.132	19.36	0.037
		4.6	-0.136	21.16	0.032
		4.8	-0.139	23.04	0.027
		5.0	-0.141	25.00	0.023
		5.2	-0.142	27.04	0.019
		5.4	-0.144	29.16	0.016
		5.6	-0.144	31.36	0.013
		5.8	-0.143	33.64	0.010
		6.0	-0.142	36.00	0.007

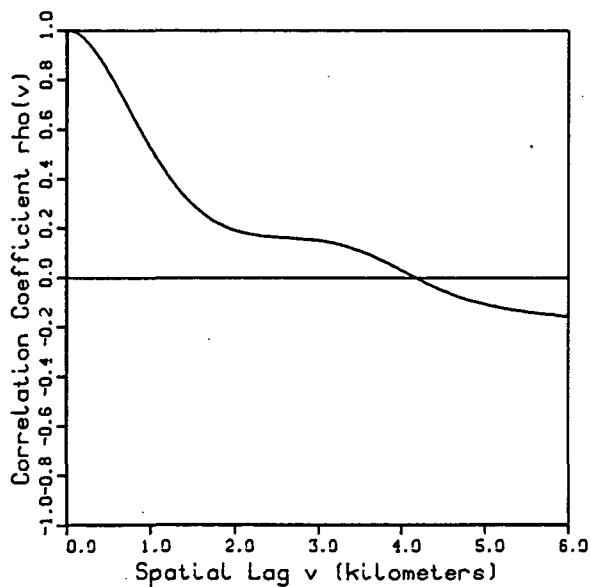


Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

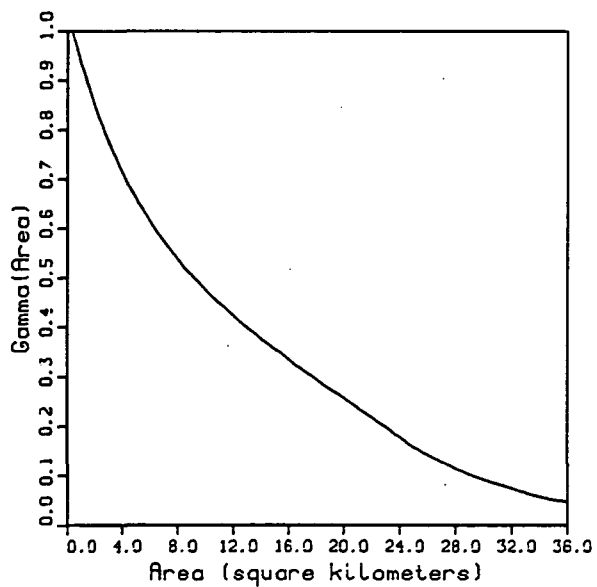
Storm Day  
 July 17, 1970



Spatial Correlation



Variance Function



Storm Day July 17 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.712$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.288$

Expected Value of Point Depth (mm.):  $E(Y) = 0.115$

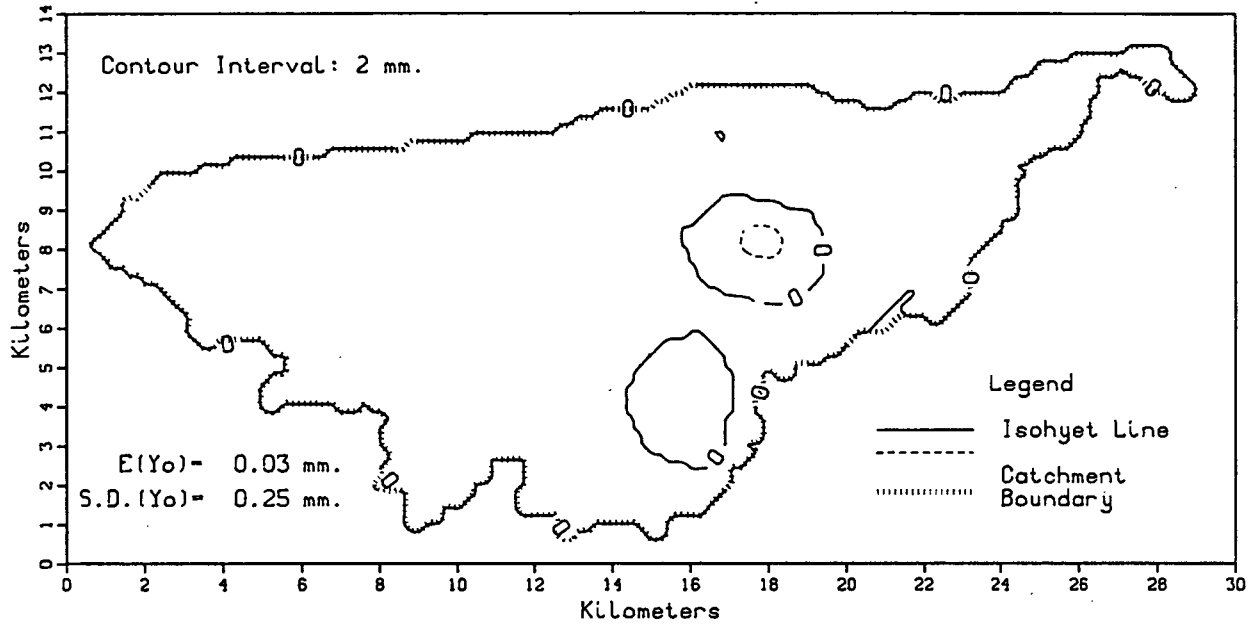
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.081$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.976$

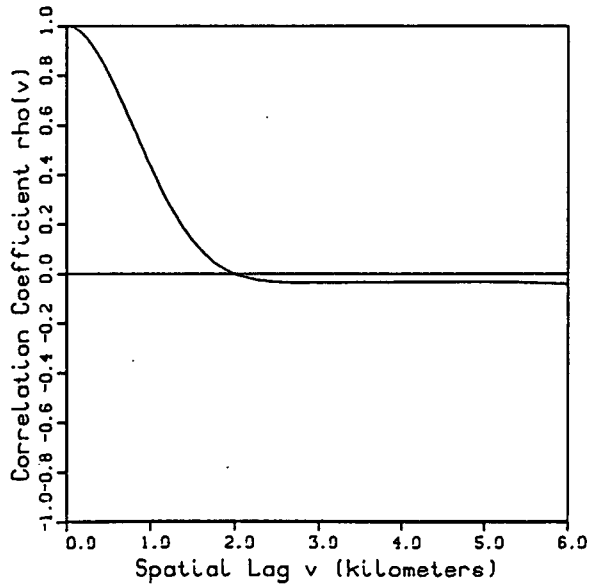
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.027	0.0	1.000	0.00	1.000
2	0.000	0.2	0.969	0.04	1.018
3	0.000	0.4	0.886	0.16	1.019
		0.6	0.772	0.36	1.003
		0.8	0.646	0.64	0.974
		1.0	0.525	1.00	0.937
		1.2	0.416	1.44	0.897
		1.4	0.328	1.96	0.853
		1.6	0.262	2.56	0.807
		1.8	0.217	3.24	0.760
		2.0	0.188	4.00	0.713
		2.2	0.171	4.84	0.668
		2.4	0.162	5.76	0.624
		2.6	0.157	6.76	0.582
		2.8	0.153	7.84	0.542
		3.0	0.146	9.00	0.504
		3.2	0.134	10.24	0.468
		3.4	0.116	11.56	0.434
		3.6	0.092	12.96	0.400
		3.8	0.061	14.44	0.367
		4.0	0.027	16.00	0.334
		4.2	-.008	17.64	0.301
		4.4	-.041	19.36	0.268
		4.6	-.070	21.16	0.233
		4.8	-.093	23.04	0.197
		5.0	-.111	25.00	0.157
		5.2	-.125	27.04	0.127
		5.4	-.137	29.16	0.099
		5.6	-.146	31.36	0.079
		5.8	-.154	33.64	0.059
		6.0	-.161	36.00	0.047

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

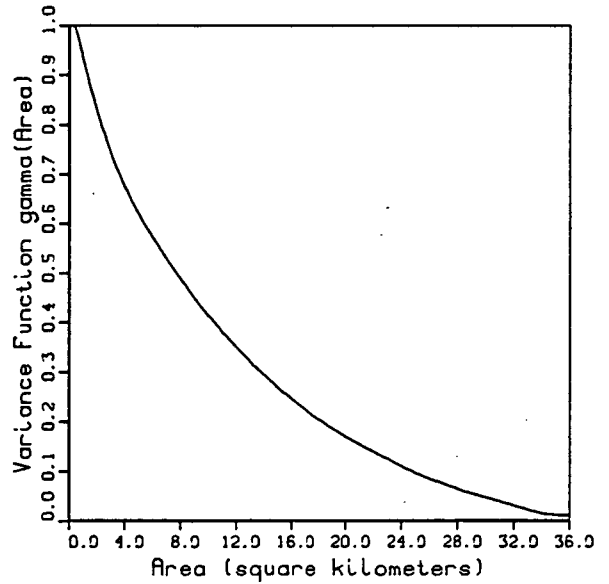
Storm Day  
 July 18, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.889$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.111$

Expected Value of Point Depth (mm.):  $E(Y) = 0.043$

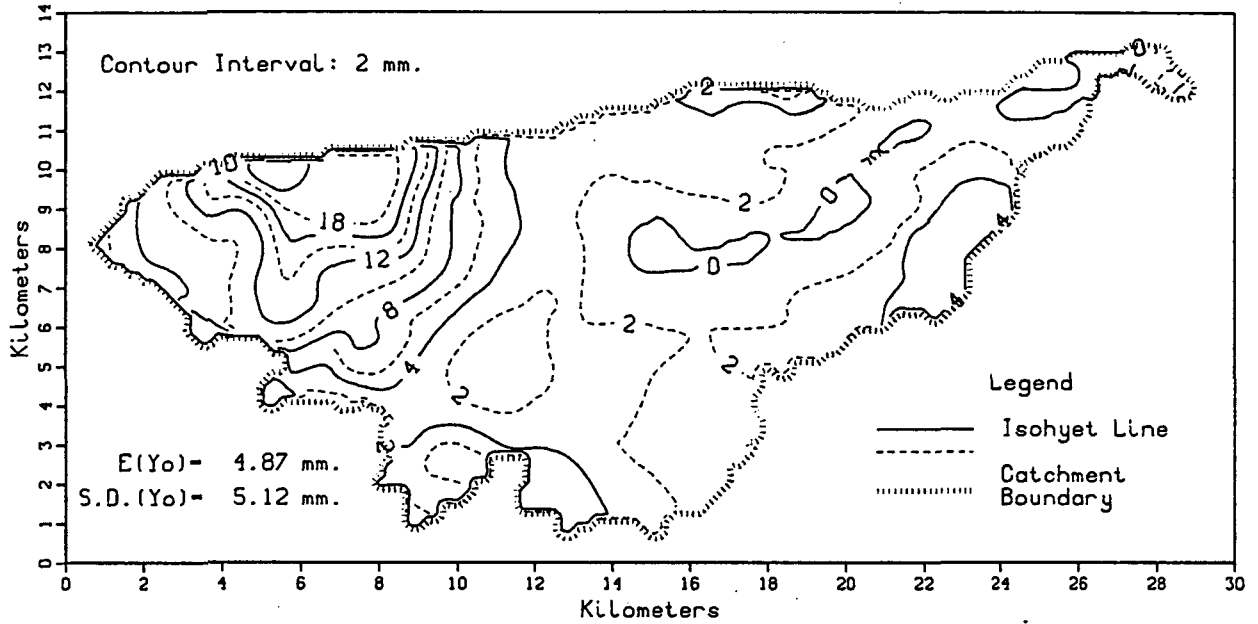
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.052$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.203$

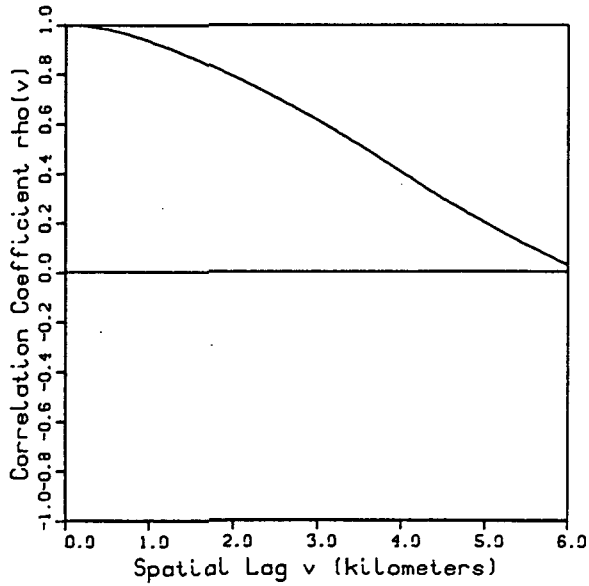
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.016	0.0	1.000	0.00	1.000
2	0.005	0.2	0.965	0.04	1.022
3	0.000	0.4	0.871	0.16	1.026
		0.6	0.738	0.36	1.009
		0.8	0.586	0.64	0.975
		1.0	0.434	1.00	0.932
		1.2	0.295	1.44	0.883
		1.4	0.181	1.96	0.831
		1.6	0.094	2.56	0.776
		1.8	0.035	3.24	0.723
		2.0	-.002	4.00	0.673
		2.2	-.022	4.84	0.627
		2.4	-.033	5.76	0.582
		2.6	-.038	6.76	0.538
		2.8	-.039	7.84	0.493
		3.0	-.040	9.00	0.449
		3.2	-.039	10.24	0.406
		3.4	-.038	11.56	0.363
		3.6	-.037	12.96	0.322
		3.8	-.037	14.44	0.283
		4.0	-.036	16.00	0.246
		4.2	-.036	17.64	0.212
		4.4	-.035	19.36	0.180
		4.6	-.035	21.16	0.151
		4.8	-.035	23.04	0.123
		5.0	-.036	25.00	0.096
		5.2	-.037	27.04	0.073
		5.4	-.038	29.16	0.053
		5.6	-.039	31.36	0.036
		5.8	-.041	33.64	0.017
		6.0	-.044	36.00	0.011

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

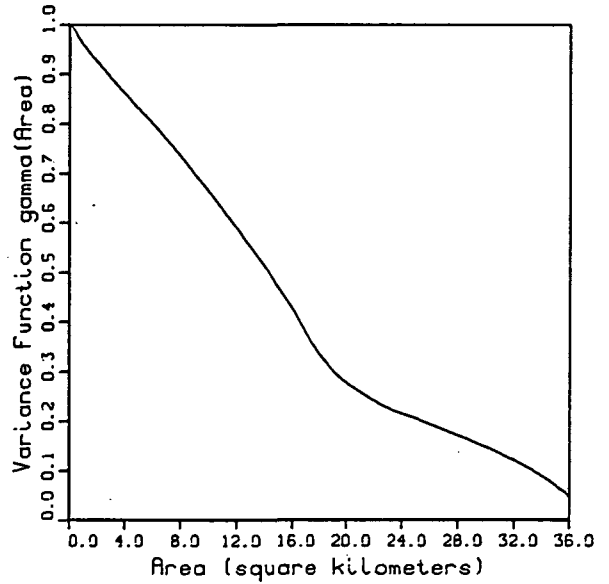
Storm Day  
 July 19, 1970



Spatial Correlation



Variance Function



Storm Day July 19 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.031$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.969$

Expected Value of Point Depth (mm.):  $E(Y) = 4.610$

Variance of Point Depth (mm. sq.):  $Var(Y) = 22.077$

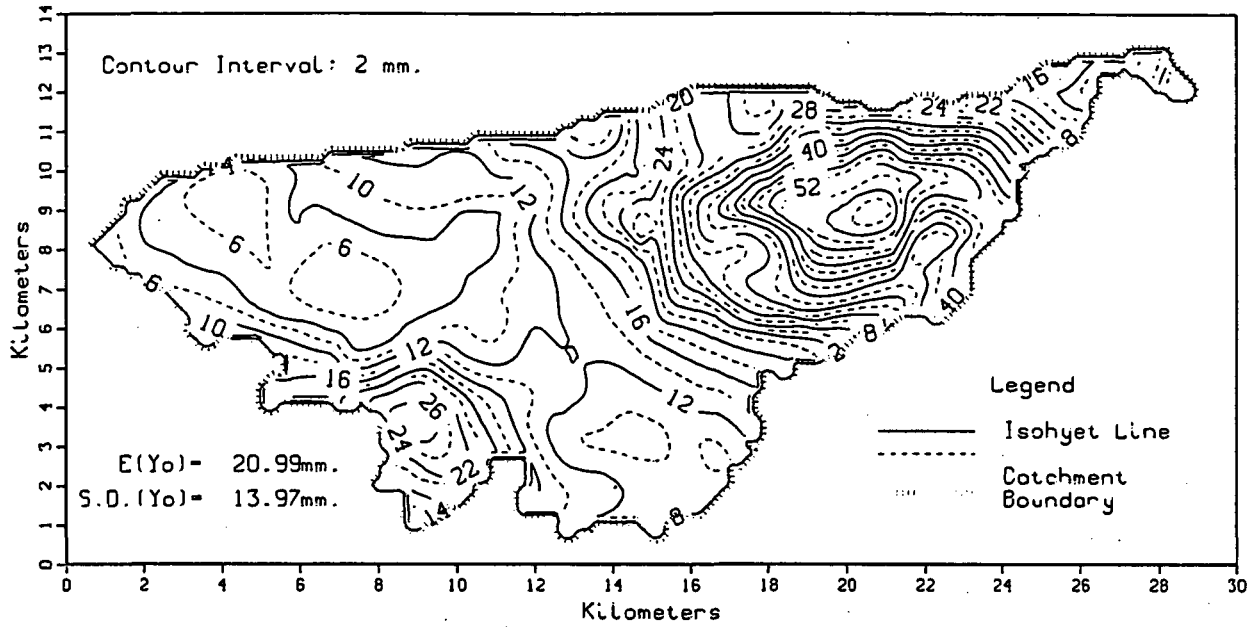
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.588$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.829	0.0	1.000	0.00	1.000
2	0.669	0.2	0.996	0.04	1.001
3	0.452	0.4	0.987	0.16	0.998
4	0.361	0.6	0.972	0.36	0.989
5	0.303	0.8	0.953	0.64	0.976
6	0.247	1.0	0.931	1.00	0.960
7	0.221	1.2	0.906	1.44	0.944
8	0.195	1.4	0.879	1.96	0.926
9	0.166	1.6	0.851	2.56	0.906
10	0.140	1.8	0.821	3.24	0.883
11	0.116	2.0	0.789	4.00	0.859
12	0.096	2.2	0.756	4.84	0.833
13	0.080	2.4	0.721	5.76	0.805
14	0.066	2.6	0.686	6.76	0.774
15	0.056	2.8	0.650	7.84	0.738
16	0.048	3.0	0.612	9.00	0.697
17	0.041	3.2	0.573	10.24	0.653
18	0.034	3.4	0.532	11.56	0.604
19	0.014	3.6	0.490	12.96	0.552
20	0.006	3.8	0.447	14.44	0.492
21	0.003	4.0	0.403	16.00	0.424
22	0.000	4.2	0.360	17.64	0.350
23	0.000	4.4	0.317	19.36	0.290
		4.6	0.276	21.16	0.254
		4.8	0.236	23.04	0.223
		5.0	0.199	25.00	0.203
		5.2	0.162	27.04	0.180
		5.4	0.127	29.16	0.156
		5.6	0.094	31.36	0.128
		5.8	0.061	33.64	0.095
		6.0	0.028	36.00	0.048

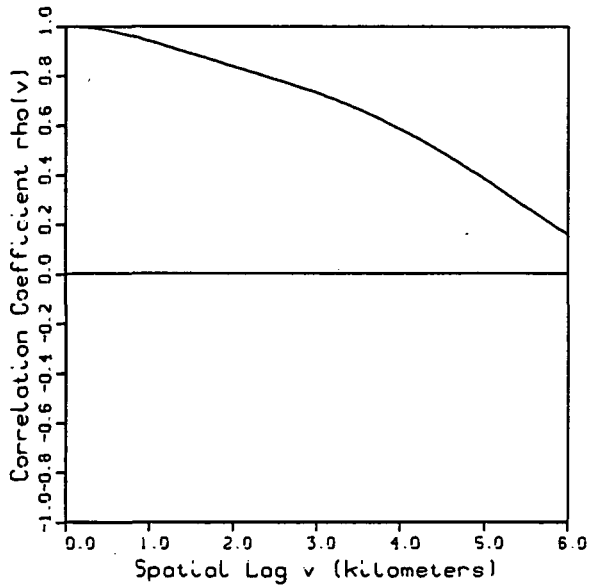
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

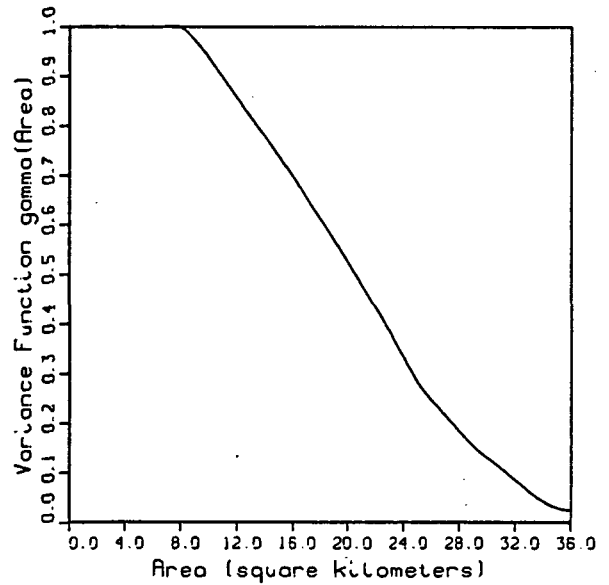
Storm Day  
July 20, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 20.640$

Variance of Point Depth (mm. sq.):  $Var(Y) = 185.010$

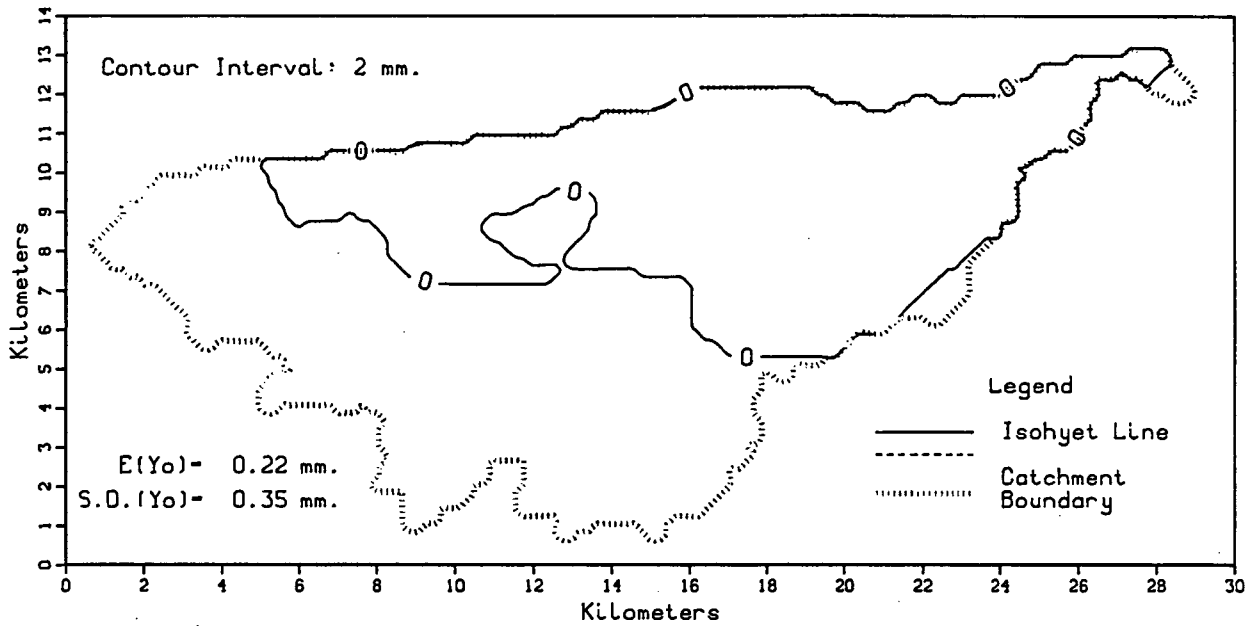
Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.997$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.997	0.04	1.027
5	0.989	0.4	0.988	0.16	1.054
7	0.904	0.6	0.974	0.36	1.077
9	0.816	0.8	0.957	0.64	1.095
11	0.702	1.0	0.938	1.00	1.110
13	0.573	1.2	0.917	1.44	1.123
15	0.504	1.4	0.897	1.96	1.132
17	0.451	1.6	0.876	2.56	1.133
19	0.412	1.8	0.855	3.24	1.130
21	0.378	2.0	0.835	4.00	1.120
23	0.345	2.2	0.814	4.84	1.104
25	0.316	2.4	0.793	5.76	1.082
27	0.279	2.6	0.772	6.76	1.052
29	0.246	2.8	0.750	7.84	1.014
31	0.221	3.0	0.728	9.00	0.971
33	0.203	3.2	0.704	10.24	0.924
35	0.182	3.4	0.677	11.56	0.872
37	0.160	3.6	0.647	12.96	0.817
39	0.138	3.8	0.616	14.44	0.759
41	0.120	4.0	0.582	16.00	0.695
43	0.102	4.2	0.546	17.64	0.627
45	0.085	4.4	0.508	19.36	0.553
47	0.068	4.6	0.468	21.16	0.470
49	0.052	4.8	0.427	23.04	0.380
51	0.039	5.0	0.383	25.00	0.281
53	0.027	5.2	0.338	27.04	0.214
55	0.016	5.4	0.292	29.16	0.149
57	0.006	5.6	0.247	31.36	0.101
59	0.000	5.8	0.202	33.64	0.048
		6.0	0.158	36.00	0.023

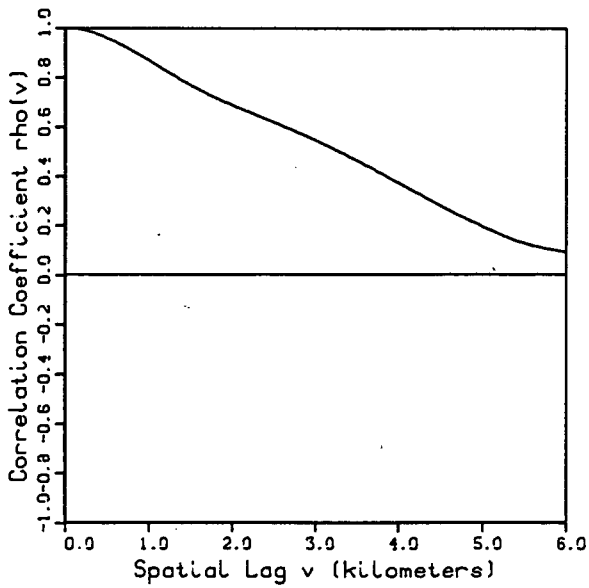


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

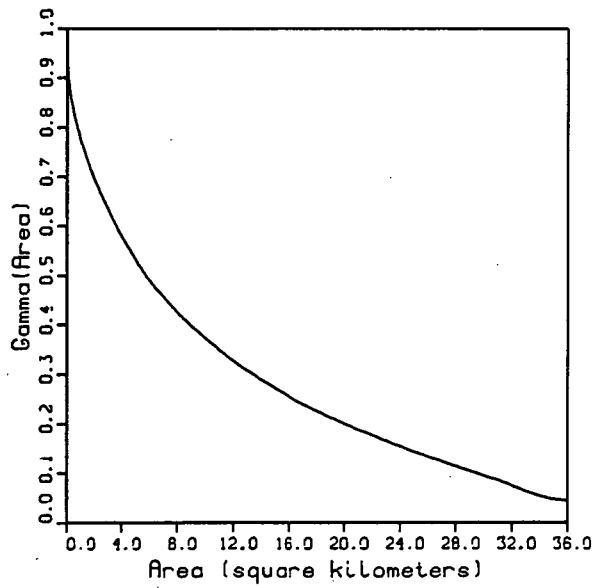
Storm Day  
 July 21, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.471$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.529$

Expected Value of Point Depth (mm.):  $E(Y) = 0.257$

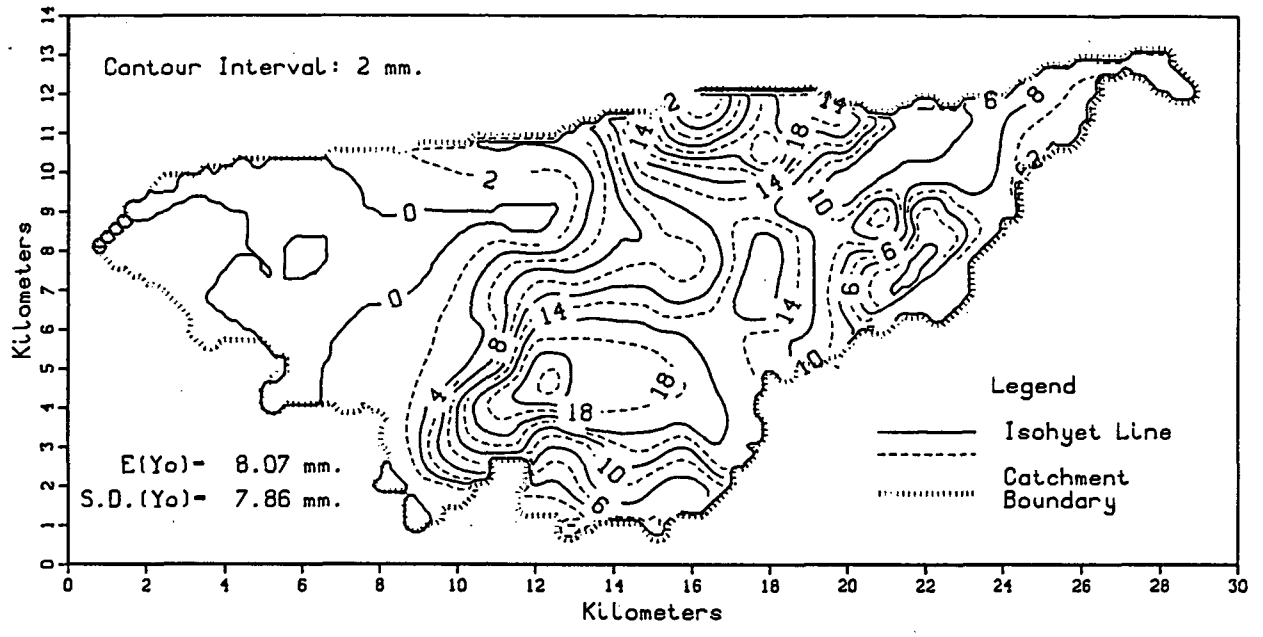
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.117$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.182$

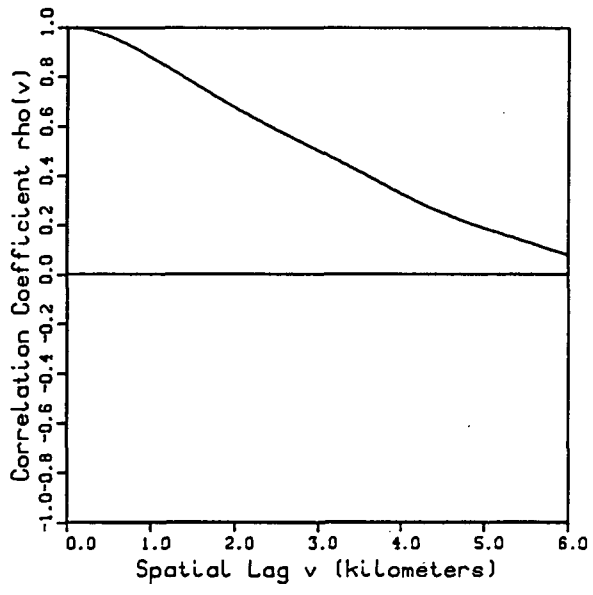
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.035	0.0	1.000	0.00	1.000
2	0.000	0.2	0.992	0.04	0.944
		0.4	0.971	0.16	0.894
		0.6	0.941	0.36	0.852
		0.8	0.905	0.64	0.815
		1.0	0.865	1.00	0.777
		1.2	0.824	1.44	0.739
		1.4	0.783	1.96	0.699
		1.6	0.746	2.56	0.658
		1.8	0.713	3.24	0.619
		2.0	0.684	4.00	0.578
		2.2	0.656	4.84	0.538
		2.4	0.628	5.76	0.497
		2.6	0.601	6.76	0.463
		2.8	0.573	7.84	0.429
		3.0	0.543	9.00	0.397
		3.2	0.511	10.24	0.366
		3.4	0.478	11.56	0.336
		3.6	0.443	12.96	0.307
		3.8	0.407	14.44	0.279
		4.0	0.370	16.00	0.253
		4.2	0.333	17.64	0.229
		4.4	0.296	19.36	0.206
		4.6	0.260	21.16	0.184
		4.8	0.226	23.04	0.163
		5.0	0.194	25.00	0.141
		5.2	0.164	27.04	0.122
		5.4	0.137	29.16	0.101
		5.6	0.117	31.36	0.081
		5.8	0.102	33.64	0.056
		6.0	0.091	36.00	0.043

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

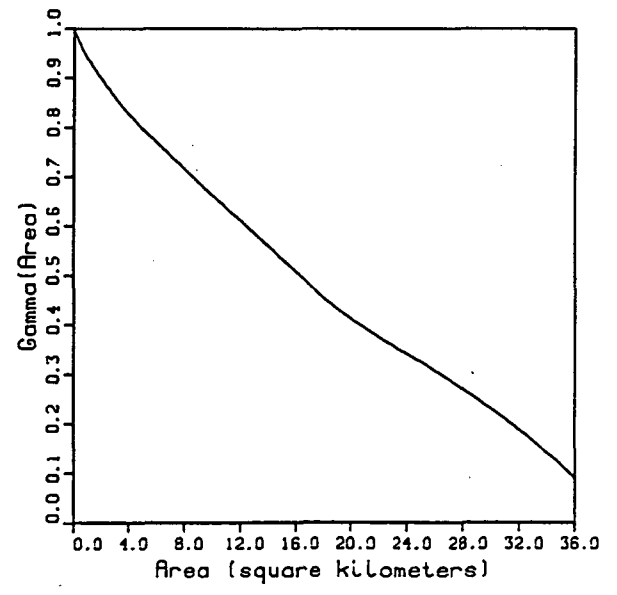
Storm Day  
 July 24, 1970



Spatial Correlation



Variance Function



Storm Day July 24 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.122$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.878$

Expected Value of Point Depth (mm.):  $E(Y) = 7.969$

Variance of Point Depth (mm. sq.):  $Var(Y) = 48.831$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.549$

Spatial Distribution  
of Total Storm Depth  
y (mm.)     $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)    rho (v)

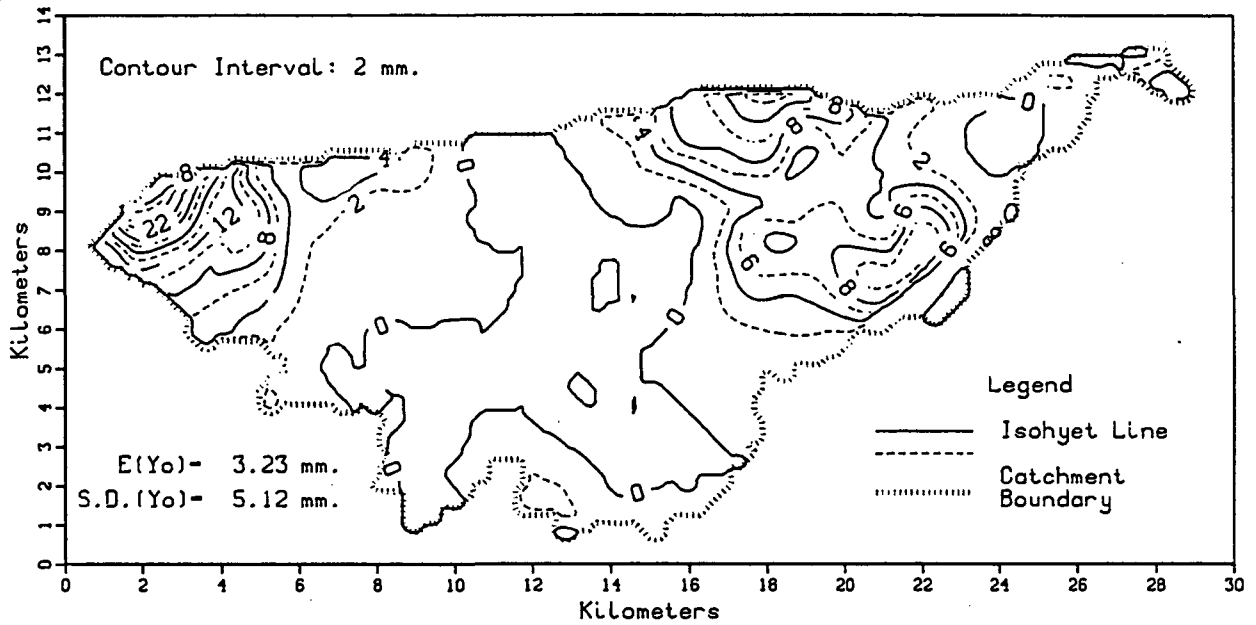
Variance Function  
A (km.sq.)    Gamma (A)

	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.736	0.0	1.000	0.00	1.000
2	0.690	0.2	0.993	0.04	0.997
3	0.654	0.4	0.975	0.16	0.988
4	0.627	0.6	0.948	0.36	0.975
5	0.602	0.8	0.914	0.64	0.957
6	0.575	1.0	0.876	1.00	0.939
7	0.521	1.2	0.835	1.44	0.920
8	0.466	1.4	0.793	1.96	0.899
9	0.420	1.6	0.752	2.56	0.875
10	0.378	1.8	0.712	3.24	0.850
11	0.343	2.0	0.673	4.00	0.825
12	0.309	2.2	0.635	4.84	0.800
13	0.275	2.4	0.600	5.76	0.774
14	0.239	2.6	0.566	6.76	0.747
15	0.198	2.8	0.533	7.84	0.718
16	0.159	3.0	0.499	9.00	0.687
17	0.119	3.2	0.466	10.24	0.655
18	0.092	3.4	0.431	11.56	0.622
19	0.063	3.6	0.396	12.96	0.586
20	0.042	3.8	0.360	14.44	0.548
21	0.033	4.0	0.325	16.00	0.507
22	0.024	4.2	0.292	17.64	0.463
23	0.017	4.4	0.261	19.36	0.423
24	0.014	4.6	0.234	21.16	0.389
25	0.012	4.8	0.209	23.04	0.354
26	0.010	5.0	0.185	25.00	0.323
27	0.008	5.2	0.164	27.04	0.286
28	0.006	5.4	0.142	29.16	0.245
29	0.004	5.6	0.121	31.36	0.201
30	0.003	5.8	0.099	33.64	0.149
31	0.001	6.0	0.077	36.00	0.088
32	0.000				
33	0.000				

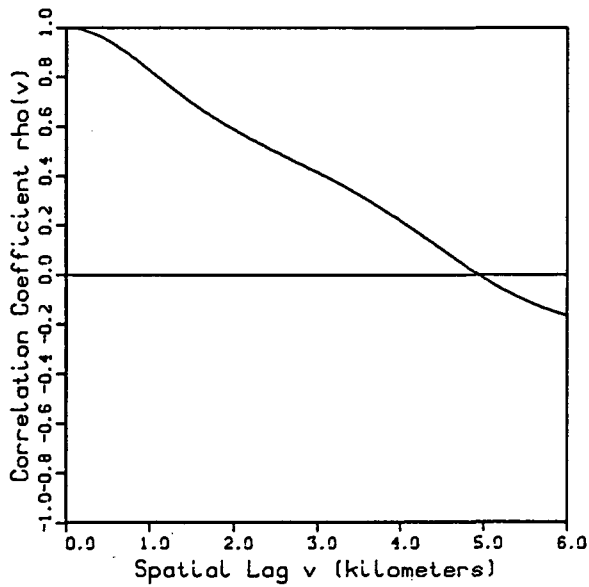
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

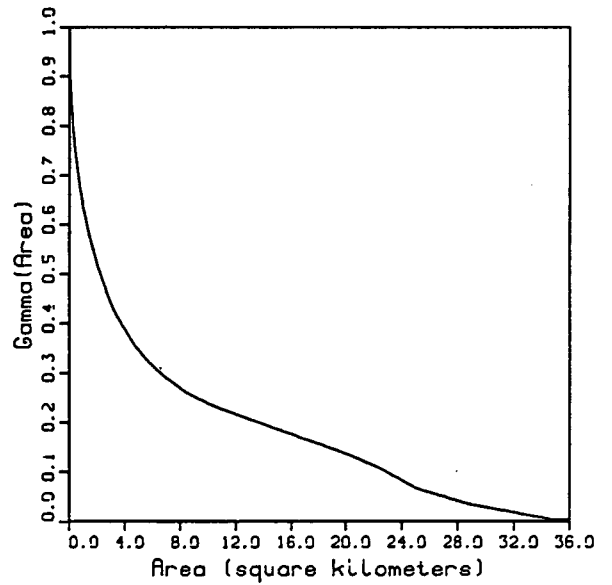
Storm Day  
July 25, 1970



Spatial Correlation



Variance Function



Storm Day July 25 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.276$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.724$

Expected Value of Point Depth (mm.):  $E(Y) = 2.839$

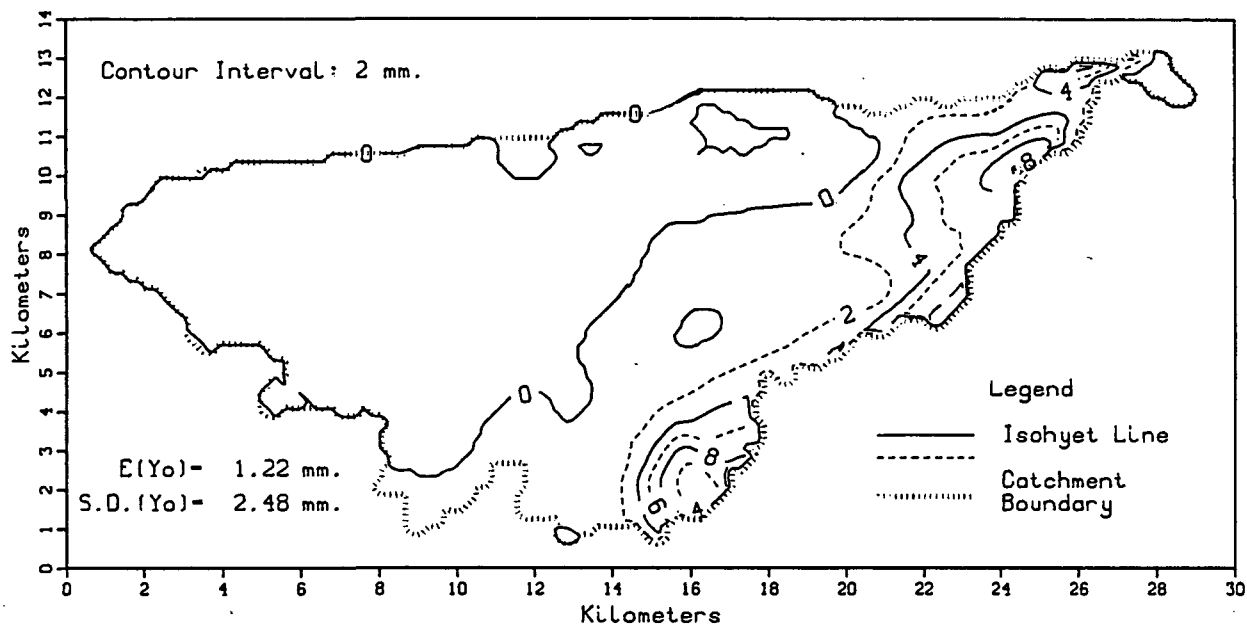
Variance of Point Depth (mm. sq.):  $Var(Y) = 20.485$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.733$

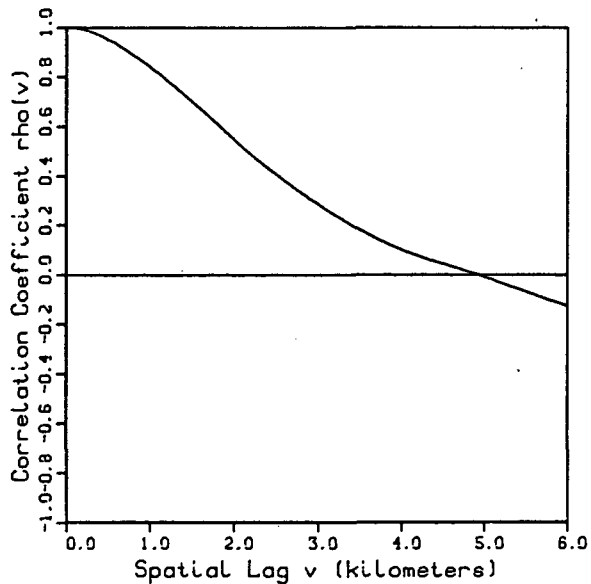
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.442	0.0	1.000	0.00	1.000
2	0.367	0.2	0.990	0.04	0.921
3	0.321	0.4	0.964	0.16	0.849
4	0.270	0.6	0.926	0.36	0.777
5	0.219	0.8	0.878	0.64	0.707
6	0.176	1.0	0.826	1.00	0.640
7	0.146	1.2	0.772	1.44	0.579
8	0.114	1.4	0.719	1.96	0.525
9	0.090	1.6	0.669	2.56	0.473
10	0.068	1.8	0.625	3.24	0.424
11	0.051	2.0	0.585	4.00	0.386
12	0.040	2.2	0.547	4.84	0.350
13	0.031	2.4	0.512	5.76	0.319
14	0.025	2.6	0.477	6.76	0.294
15	0.021	2.8	0.444	7.84	0.271
16	0.018	3.0	0.411	9.00	0.251
17	0.017	3.2	0.377	10.24	0.234
18	0.015	3.4	0.340	11.56	0.219
19	0.013	3.6	0.301	12.96	0.205
20	0.012	3.8	0.259	14.44	0.191
21	0.011	4.0	0.216	16.00	0.175
22	0.010	4.2	0.171	17.64	0.159
23	0.009	4.4	0.125	19.36	0.142
24	0.007	4.6	0.077	21.16	0.122
25	0.007	4.8	0.030	23.04	0.097
26	0.006	5.0	-0.016	25.00	0.067
27	0.005	5.2	-0.057	27.04	0.049
28	0.004	5.4	-0.092	29.16	0.031
29	0.003	5.6	-0.122	31.36	0.021
30	0.002	5.8	-0.147	33.64	0.007
31	0.002	6.0	-0.169	36.00	0.002
32	0.001				
33	0.001				
34	0.000				
35	0.000				
36	0.000				

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

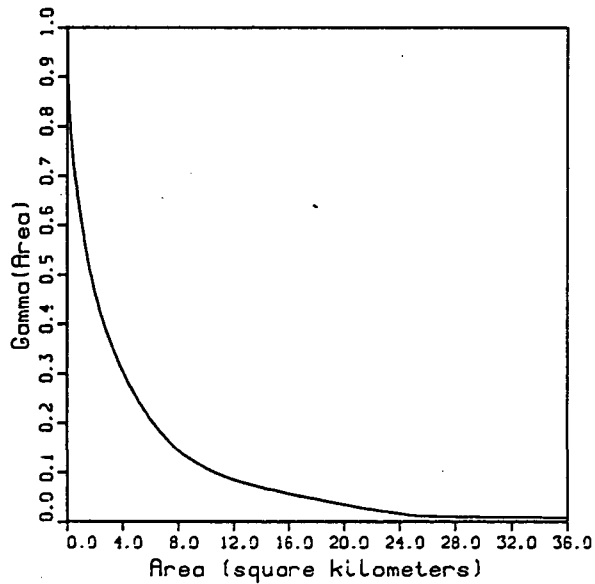
Storm Day  
 July 27, 1970



Spatial Correlation



Variance Function



Storm Day July 27 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.529$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.471$

Expected Value of Point Depth (mm.):  $E(Y)= 1.176$

Variance of Point Depth (mm. sq.):  $Var(Y)= 4.878$

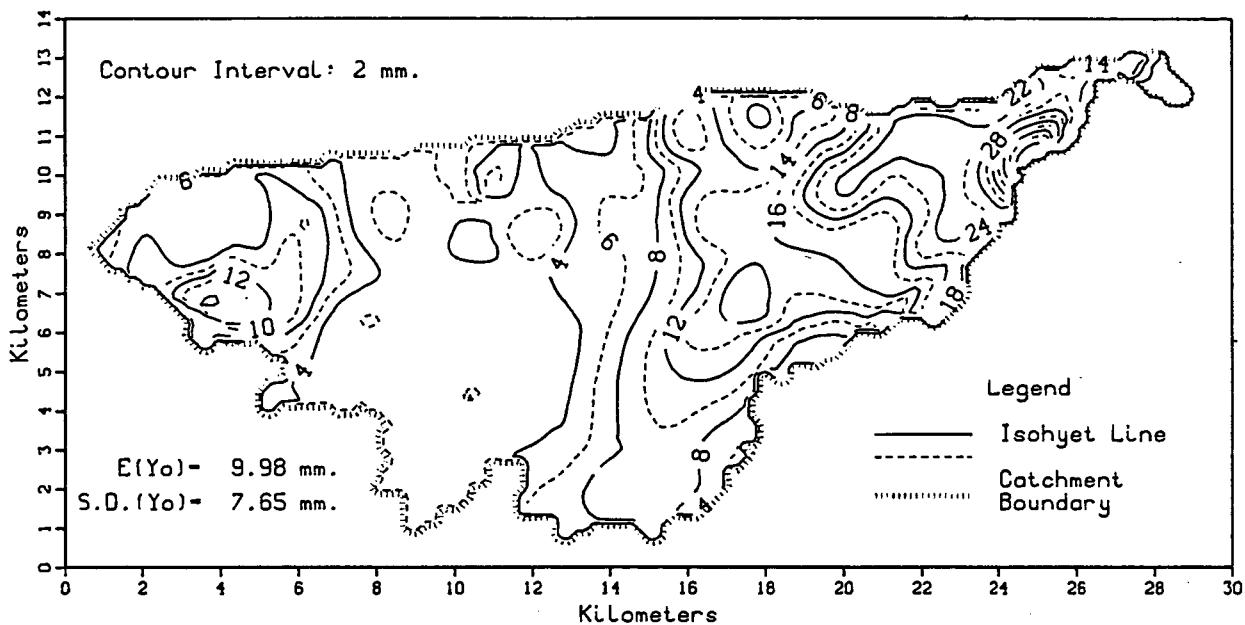
Coef. of Skewness of Point Depth:  $S.C.(Y)= 2.216$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.274	0.0	1.000	0.00	1.000
2	0.187	0.2	0.990	0.04	0.917
3	0.144	0.4	0.966	0.16	0.837
4	0.110	0.6	0.931	0.36	0.761
5	0.085	0.8	0.888	0.64	0.686
6	0.064	1.0	0.839	1.00	0.612
7	0.042	1.2	0.785	1.44	0.537
8	0.023	1.4	0.728	1.96	0.467
9	0.012	1.6	0.669	2.56	0.407
10	0.005	1.8	0.609	3.24	0.353
11	0.000	2.0	0.547	4.00	0.303
12	0.000	2.2	0.486	4.84	0.258
		2.4	0.431	5.76	0.216
		2.6	0.379	6.76	0.178
		2.8	0.330	7.84	0.146
		3.0	0.283	9.00	0.122
		3.2	0.240	10.24	0.103
		3.4	0.199	11.56	0.088
		3.6	0.162	12.96	0.075
		3.8	0.127	14.44	0.065
		4.0	0.098	16.00	0.055
		4.2	0.073	17.64	0.046
		4.4	0.051	19.36	0.037
		4.6	0.031	21.16	0.027
		4.8	0.010	23.04	0.019
		5.0	-.013	25.00	0.011
		5.2	-.037	27.04	0.010
		5.4	-.061	29.16	0.008
		5.6	-.085	31.36	0.008
		5.8	-.108	33.64	0.007
		6.0	-.129	36.00	0.007

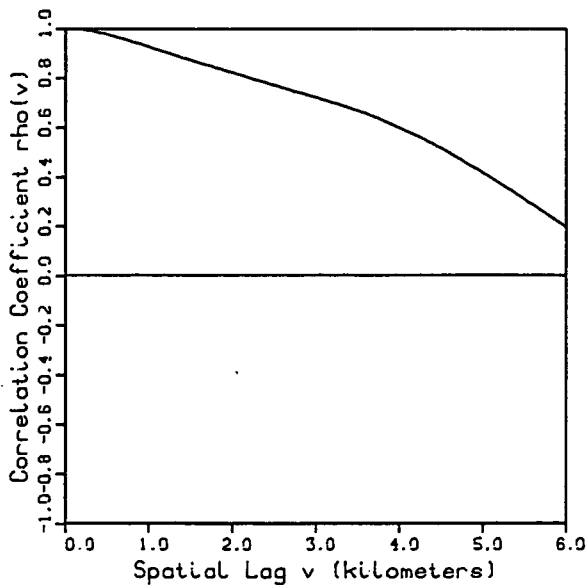


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

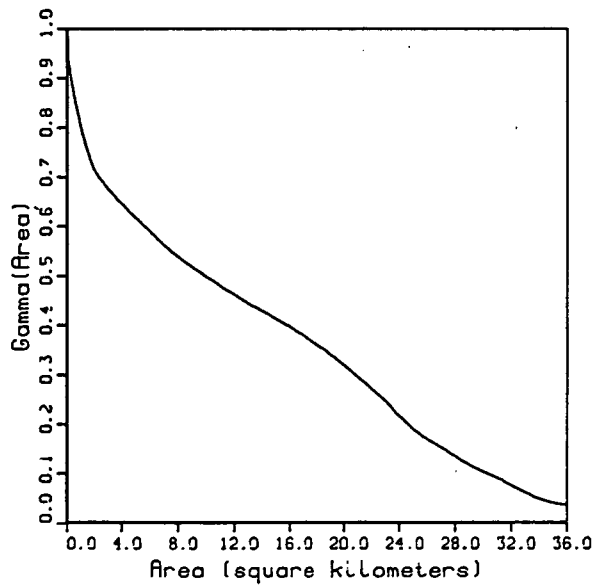
Storm Day  
 July 28, 1970



Spatial Correlation



Variance Function



Storm Day July 28 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.):  $E(Y) = 9.744$

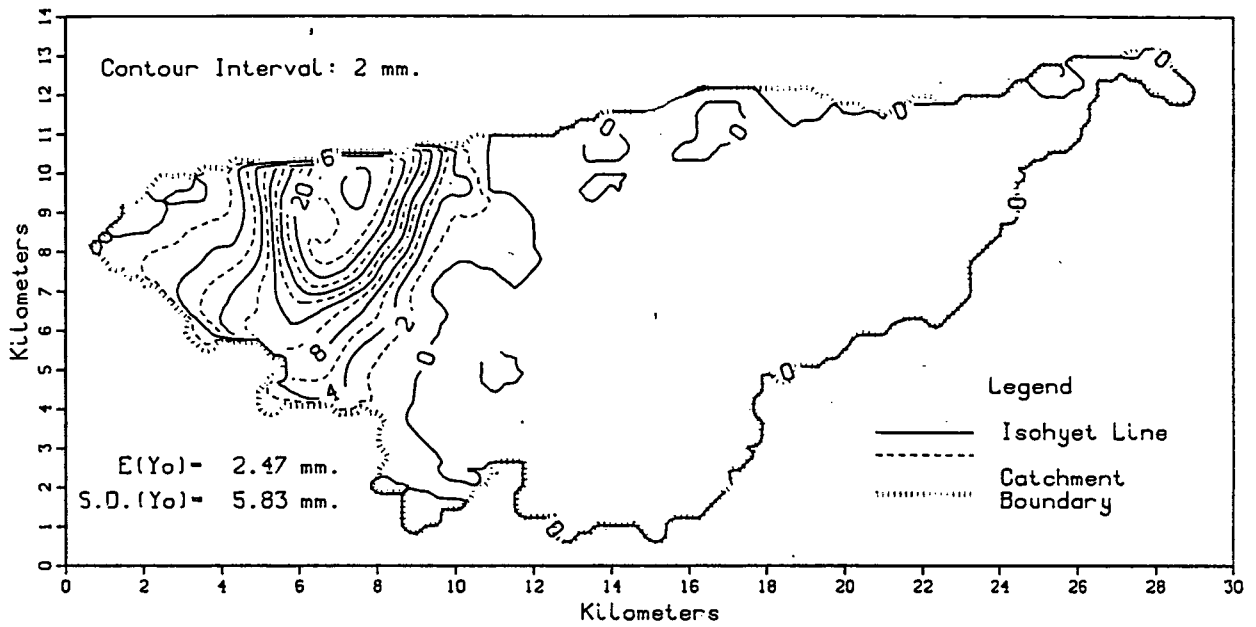
Variance of Point Depth (mm. sq.):  $Var(Y) = 53.787$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.191$

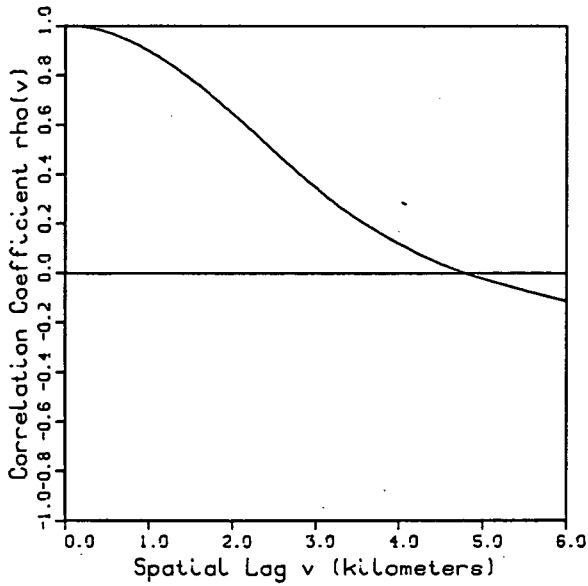
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.993	0.0	1.000	0.00	1.000
3	0.820	0.2	0.995	0.04	0.967
5	0.670	0.4	0.983	0.16	0.930
7	0.555	0.6	0.965	0.36	0.891
9	0.425	0.8	0.945	0.64	0.849
11	0.335	1.0	0.924	1.00	0.806
13	0.275	1.2	0.902	1.44	0.757
15	0.213	1.4	0.880	1.96	0.716
17	0.148	1.6	0.859	2.56	0.689
19	0.125	1.8	0.839	3.24	0.667
21	0.107	2.0	0.819	4.00	0.643
23	0.082	2.2	0.798	4.84	0.619
25	0.046	2.4	0.778	5.76	0.593
27	0.020	2.6	0.758	6.76	0.566
29	0.014	2.8	0.738	7.84	0.539
31	0.011	3.0	0.719	9.00	0.515
33	0.008	3.2	0.698	10.24	0.491
35	0.006	3.4	0.677	11.56	0.467
37	0.004	3.6	0.652	12.96	0.443
39	0.002	3.8	0.626	14.44	0.420
41	0.000	4.0	0.596	16.00	0.394
		4.2	0.565	17.64	0.366
		4.4	0.531	19.36	0.331
		4.6	0.495	21.16	0.289
		4.8	0.455	23.04	0.242
		5.0	0.414	25.00	0.187
		5.2	0.372	27.04	0.150
		5.4	0.329	29.16	0.113
		5.6	0.286	31.36	0.084
		5.8	0.241	33.64	0.052
		6.0	0.195	36.00	0.035

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

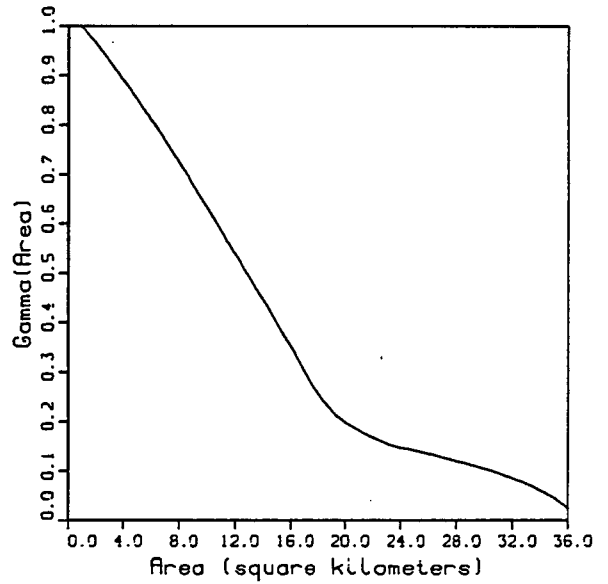
Storm Day  
 July 29, 1970



Spatial Correlation



Variance Function



Storm Day July 29 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.650$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.350$

Expected Value of Point Depth (mm.):  $E(Y) = 2.278$

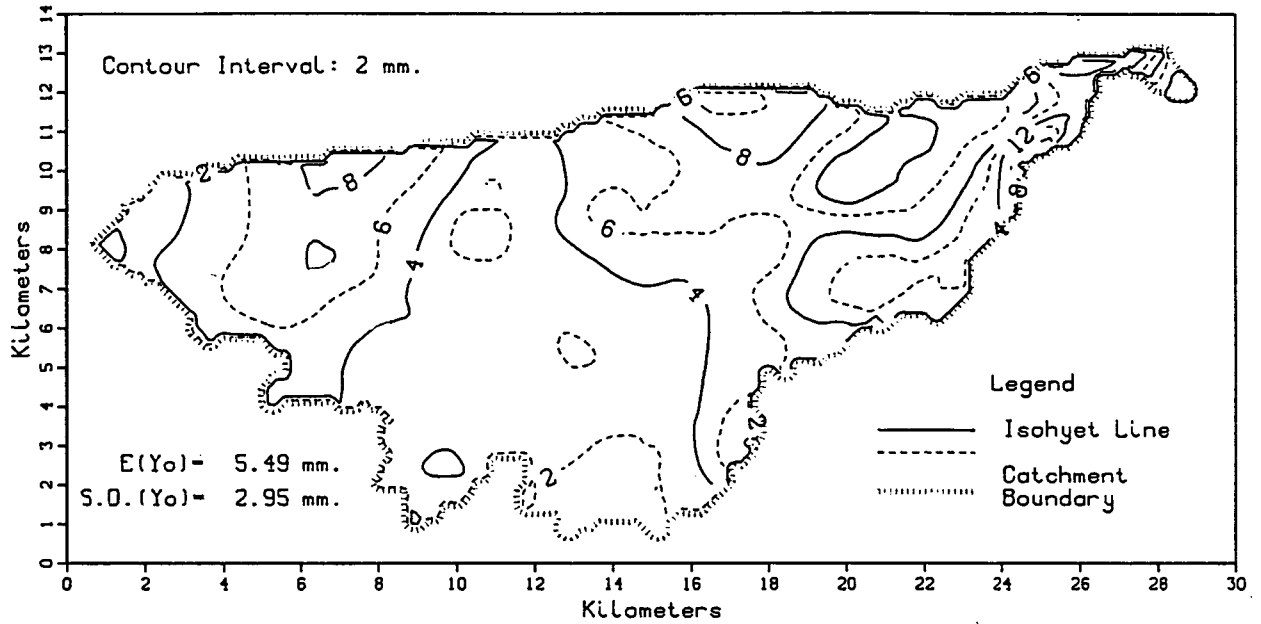
Variance of Point Depth (mm. sq.):  $Var(Y) = 28.928$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.663$

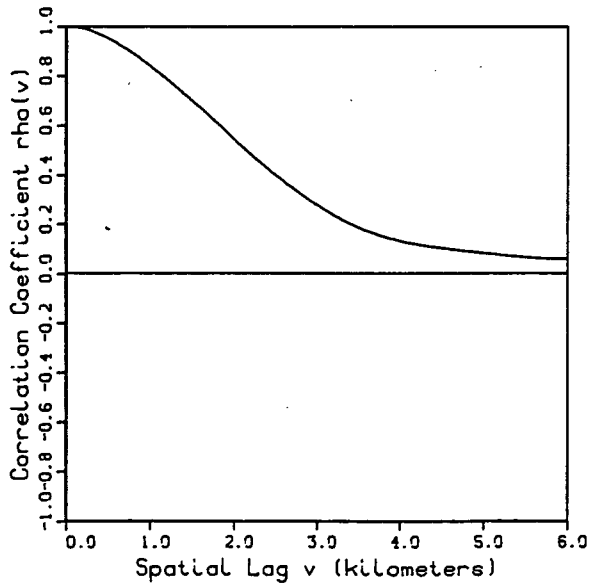
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.231	0.0	1.000	0.00	1.000
2	0.207	0.2	0.995	0.04	1.011
3	0.187	0.4	0.981	0.16	1.018
4	0.167	0.6	0.959	0.36	1.017
5	0.149	0.8	0.930	0.64	1.008
6	0.137	1.0	0.894	1.00	0.997
7	0.126	1.2	0.852	1.44	0.982
8	0.115	1.4	0.804	1.96	0.964
9	0.105	1.6	0.753	2.56	0.942
10	0.095	1.8	0.698	3.24	0.916
11	0.085	2.0	0.640	4.00	0.887
12	0.076	2.2	0.581	4.84	0.853
13	0.070	2.4	0.519	5.76	0.816
14	0.065	2.6	0.458	6.76	0.774
15	0.060	2.8	0.399	7.84	0.727
16	0.056	3.0	0.341	9.00	0.675
17	0.052	3.2	0.287	10.24	0.618
18	0.047	3.4	0.237	11.56	0.556
19	0.042	3.6	0.193	12.96	0.492
20	0.038	3.8	0.152	14.44	0.423
21	0.030	4.0	0.115	16.00	0.348
22	0.021	4.2	0.080	17.64	0.270
23	0.011	4.4	0.048	19.36	0.209
24	0.004	4.6	0.019	21.16	0.177
25	0.000	4.8	-.006	23.04	0.152
		5.0	-.027	25.00	0.139
		5.2	-.047	27.04	0.125
		5.4	-.066	29.16	0.109
		5.6	-.083	31.36	0.090
		5.8	-.100	33.64	0.064
		6.0	-.118	36.00	0.022

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

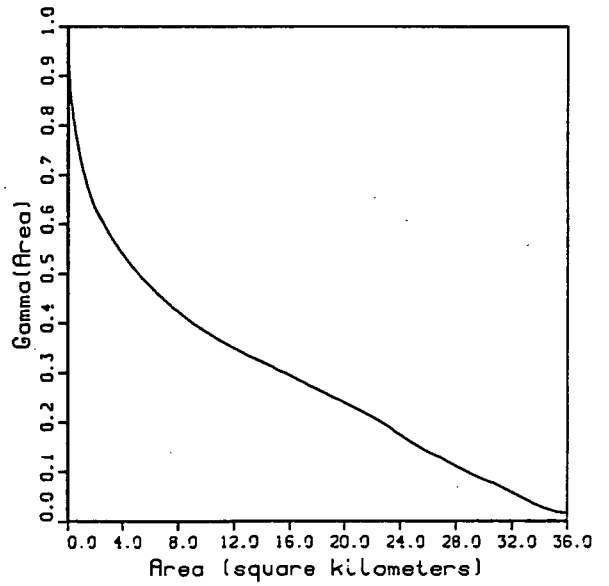
Storm Day  
 July 30, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.002$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.998$

Expected Value of Point Depth (mm.):  $E(Y) = 5.178$

Variance of Point Depth (mm. sq.):  $Var(Y) = 6.965$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.863$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

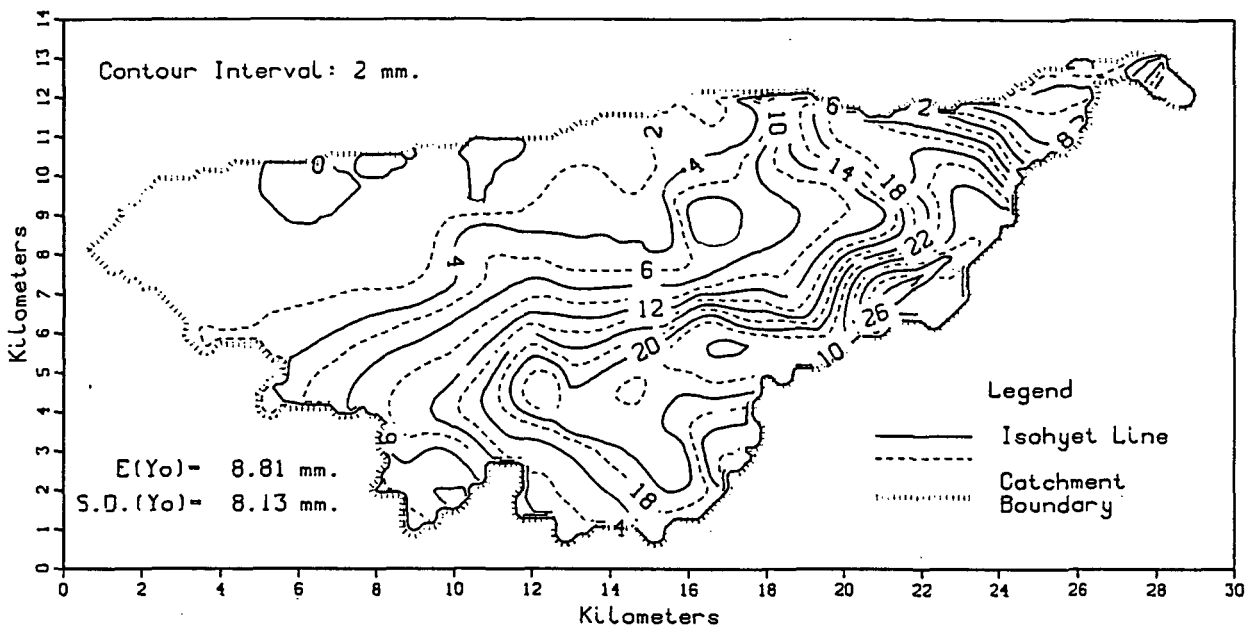
Spatial Correlation  
v (km.)      rho (v)

Variance Function  
A (km.sq.)      Gamma (A)

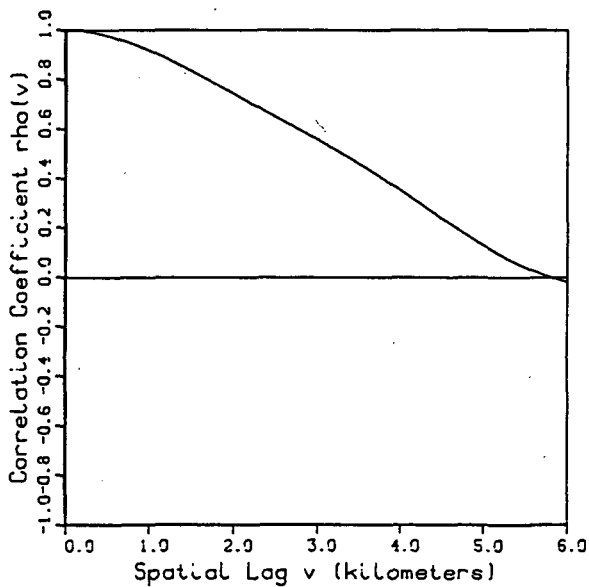
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.997	0.0	1.000	0.00	1.000
2	0.949	0.2	0.990	0.04	0.940
3	0.761	0.4	0.965	0.16	0.880
4	0.599	0.6	0.929	0.36	0.826
5	0.458	0.8	0.885	0.64	0.774
6	0.341	1.0	0.835	1.00	0.725
7	0.225	1.2	0.781	1.44	0.676
8	0.138	1.4	0.723	1.96	0.634
9	0.092	1.6	0.664	2.56	0.601
10	0.058	1.8	0.603	3.24	0.569
11	0.029	2.0	0.539	4.00	0.537
12	0.012	2.2	0.479	4.84	0.507
13	0.008	2.4	0.422	5.76	0.478
14	0.004	2.6	0.369	6.76	0.450
15	0.002	2.8	0.319	7.84	0.424
16	0.001	3.0	0.273	9.00	0.399
17	0.000	3.2	0.233	10.24	0.376
		3.4	0.199	11.56	0.354
		3.6	0.170	12.96	0.334
		3.8	0.147	14.44	0.313
		4.0	0.128	16.00	0.292
		4.2	0.115	17.64	0.269
		4.4	0.105	19.36	0.246
		4.6	0.096	21.16	0.220
		4.8	0.088	23.04	0.190
		5.0	0.081	25.00	0.152
		5.2	0.074	27.04	0.123
		5.4	0.067	29.16	0.092
		5.6	0.062	31.36	0.066
		5.8	0.059	33.64	0.032
		6.0	0.059	36.00	0.015

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

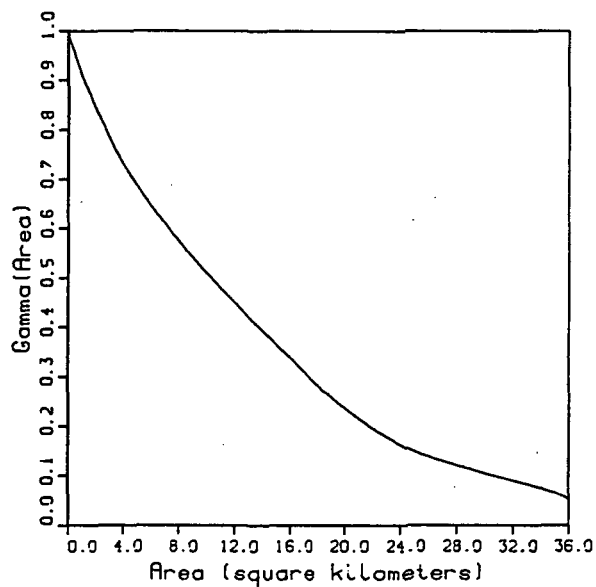
Storm Day  
July 31, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.023$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.977$

Expected Value of Point Depth (mm.):  $E(Y) = 10.129$

Variance of Point Depth (mm. sq.):  $Var(Y) = 64.582$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.445$

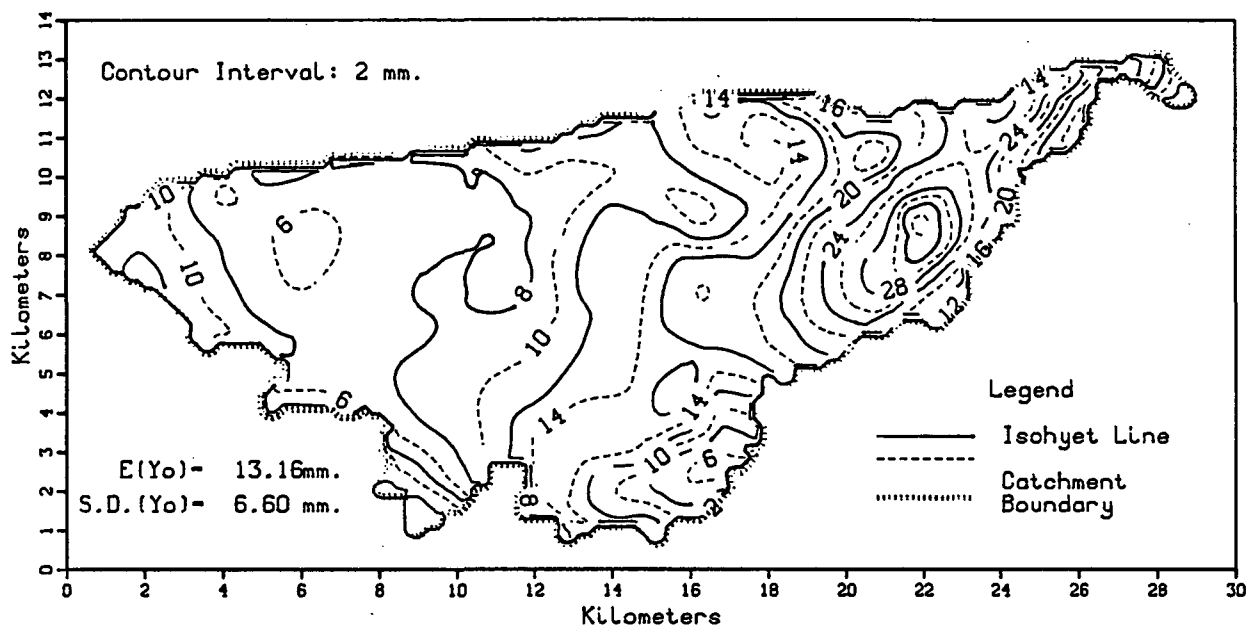
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.853	0.0	1.000	0.00	1.000
2	0.777	0.2	0.995	0.04	0.992
3	0.725	0.4	0.982	0.16	0.979
4	0.681	0.6	0.963	0.36	0.962
5	0.645	0.8	0.940	0.64	0.938
6	0.615	1.0	0.912	1.00	0.909
7	0.578	1.2	0.881	1.44	0.877
8	0.528	1.4	0.846	1.96	0.843
9	0.485	1.6	0.810	2.56	0.805
10	0.447	1.8	0.773	3.24	0.766
11	0.415	2.0	0.736	4.00	0.728
12	0.388	2.2	0.698	4.84	0.690
13	0.364	2.4	0.661	5.76	0.653
14	0.337	2.6	0.625	6.76	0.614
15	0.308	2.8	0.589	7.84	0.576
16	0.279	3.0	0.552	9.00	0.538
17	0.251	3.2	0.515	10.24	0.500
18	0.223	3.4	0.475	11.56	0.461
19	0.195	3.6	0.434	12.96	0.421
20	0.160	3.8	0.392	14.44	0.380
21	0.123	4.0	0.347	16.00	0.337
22	0.089	4.2	0.301	17.64	0.292
23	0.064	4.4	0.255	19.36	0.249
24	0.043	4.6	0.210	21.16	0.210
25	0.030	4.8	0.165	23.04	0.176
26	0.018	5.0	0.123	25.00	0.147
27	0.012	5.2	0.085	27.04	0.128
28	0.010	5.4	0.051	29.16	0.110
29	0.007	5.6	0.023	31.36	0.093
30	0.005	5.8	-0.002	33.64	0.076
31	0.004	6.0	-0.022	36.00	0.051
32	0.002				
33	0.001				
34	0.000				



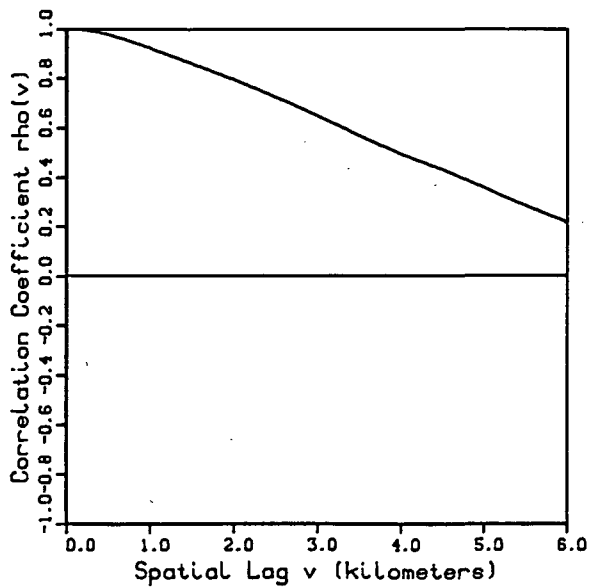
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OF POOR QUALITY

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

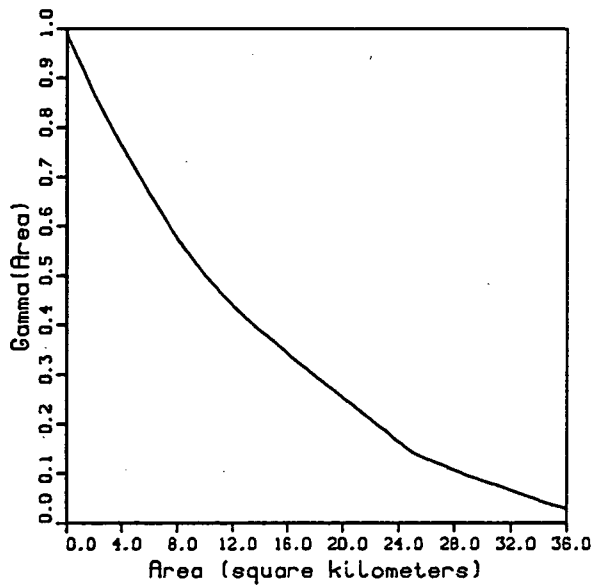
Storm Day  
Aug 1, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.):  $E(Y) = 12.988$

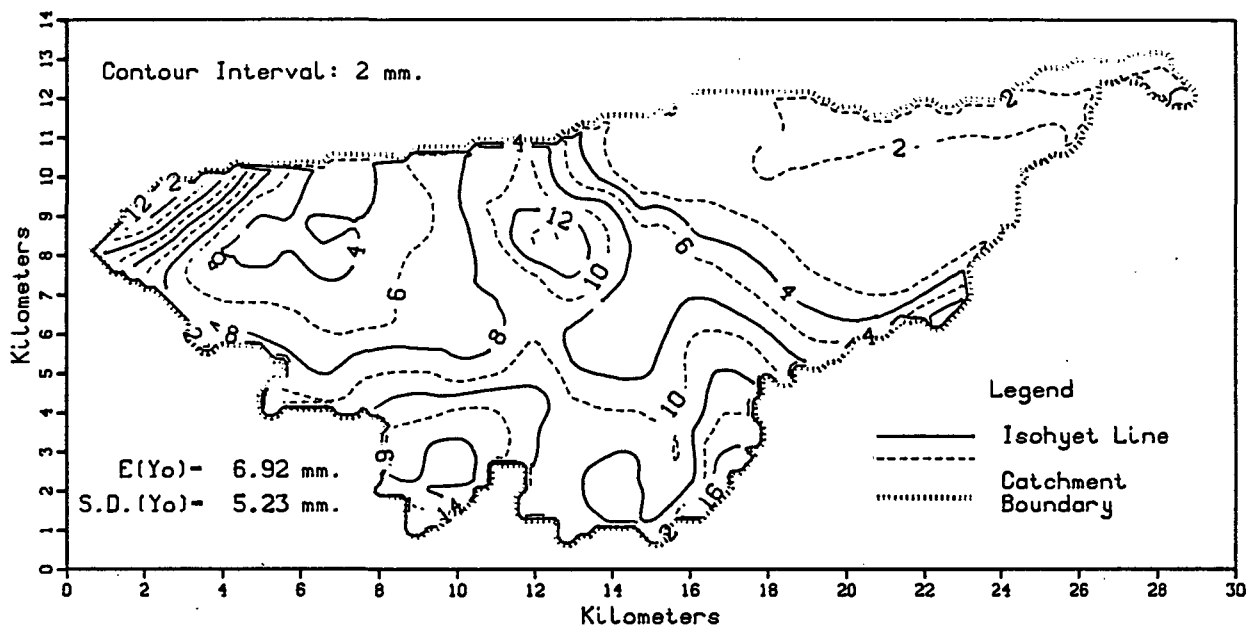
Variance of Point Depth (mm. sq.):  $Var(Y) = 41.904$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.948$

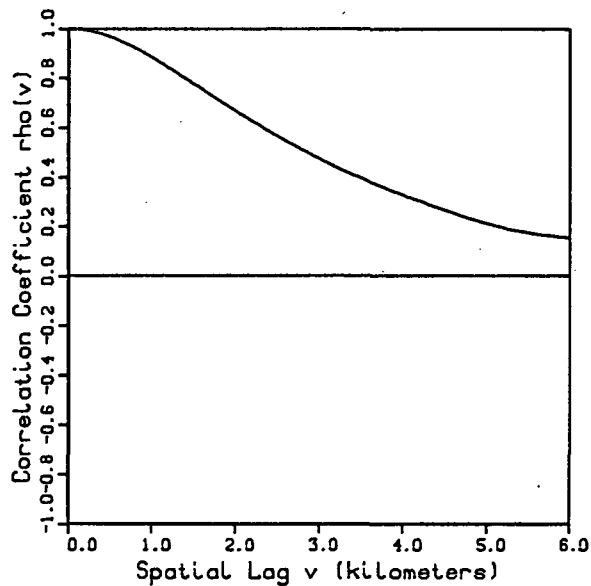
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.994	0.0	1.000	0.00	1.000
2	0.992	0.2	0.996	0.04	0.993
3	0.990	0.4	0.983	0.16	0.981
4	0.988	0.6	0.966	0.36	0.967
5	0.985	0.8	0.944	0.64	0.949
6	0.956	1.0	0.920	1.00	0.928
7	0.854	1.2	0.894	1.44	0.900
8	0.740	1.4	0.868	1.96	0.868
9	0.653	1.6	0.843	2.56	0.834
10	0.594	1.8	0.818	3.24	0.799
11	0.531	2.0	0.792	4.00	0.761
12	0.471	2.2	0.764	4.84	0.719
13	0.412	2.4	0.736	5.76	0.675
14	0.355	2.6	0.707	6.76	0.627
15	0.291	2.8	0.676	7.84	0.580
16	0.254	3.0	0.646	9.00	0.535
17	0.224	3.2	0.615	10.24	0.492
18	0.191	3.4	0.583	11.56	0.451
19	0.172	3.6	0.551	12.96	0.413
20	0.156	3.8	0.521	14.44	0.378
21	0.139	4.0	0.491	16.00	0.342
22	0.124	4.2	0.466	17.64	0.305
23	0.107	4.4	0.441	19.36	0.267
24	0.090	4.6	0.414	21.16	0.227
25	0.075	4.8	0.385	23.04	0.185
26	0.058	5.0	0.355	25.00	0.141
27	0.042	5.2	0.325	27.04	0.117
28	0.030	5.4	0.296	29.16	0.092
29	0.020	5.6	0.269	31.36	0.072
30	0.014	5.8	0.242	33.64	0.048
31	0.011	6.0	0.215	36.00	0.028
32	0.007				
33	0.004				
34	0.001				
35	0.000				

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

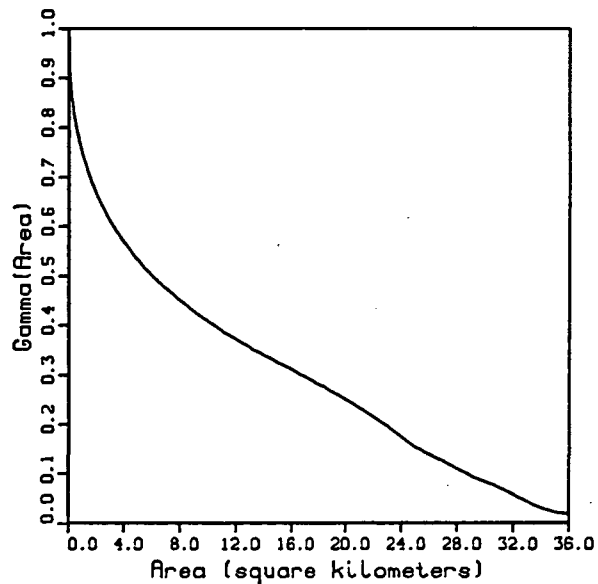
Storm Day  
Aug 2, 1970



Spatial Correlation



Variance Function



Storm Day Aug 2 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 7.012$

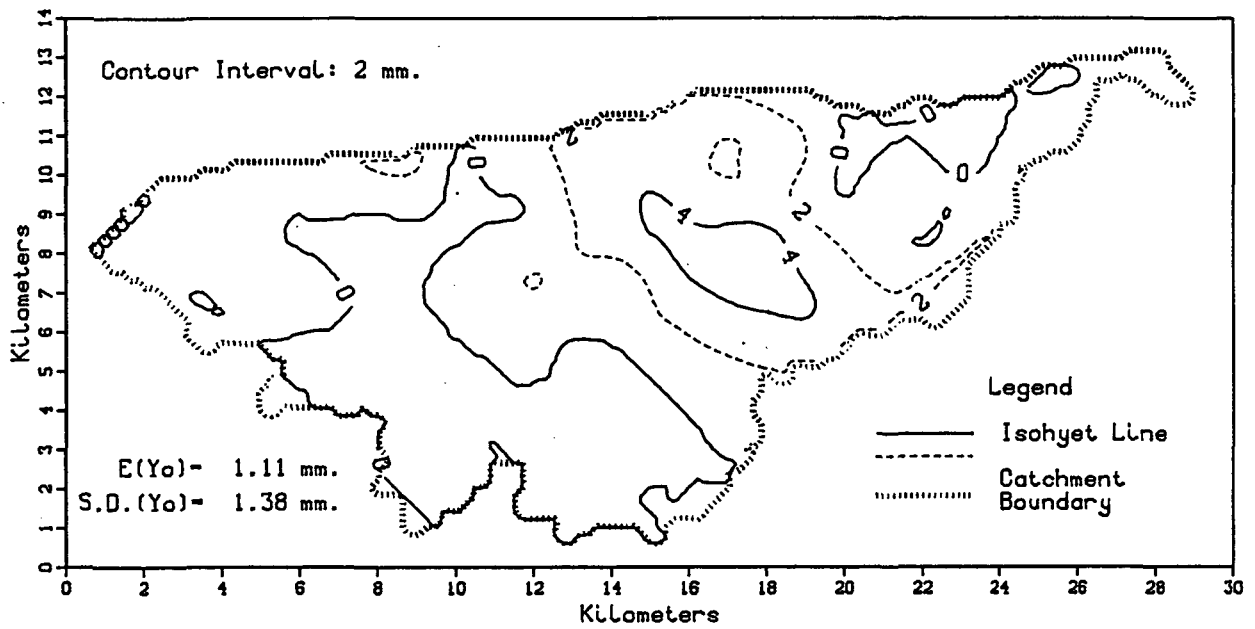
Variance of Point Depth (mm. sq.):  $Var(Y) = 21.048$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.484$

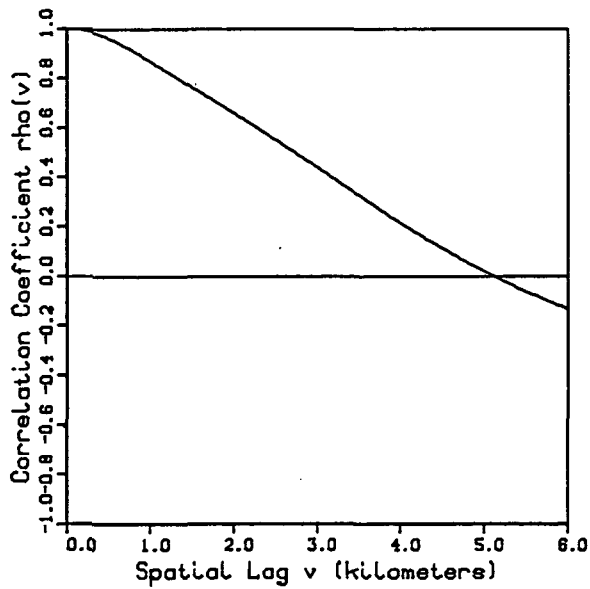
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.944	0.0	1.000	0.00	1.000
2	0.809	0.2	0.994	0.04	0.941
3	0.728	0.4	0.978	0.16	0.887
4	0.674	0.6	0.953	0.36	0.837
5	0.614	0.8	0.921	0.64	0.791
6	0.558	1.0	0.883	1.00	0.748
7	0.495	1.2	0.841	1.44	0.708
8	0.392	1.4	0.798	1.96	0.669
9	0.322	1.6	0.753	2.56	0.633
10	0.262	1.8	0.710	3.24	0.599
11	0.203	2.0	0.666	4.00	0.566
12	0.139	2.2	0.625	4.84	0.536
13	0.095	2.4	0.584	5.76	0.505
14	0.070	2.6	0.545	6.76	0.478
15	0.050	2.8	0.509	7.84	0.451
16	0.032	3.0	0.473	9.00	0.426
17	0.014	3.2	0.440	10.24	0.401
18	0.010	3.4	0.408	11.56	0.377
19	0.006	3.6	0.379	12.96	0.354
20	0.004	3.8	0.352	14.44	0.331
21	0.003	4.0	0.326	16.00	0.308
22	0.001	4.2	0.301	17.64	0.285
23	0.000	4.4	0.276	19.36	0.258
24	0.000	4.6	0.252	21.16	0.228
		4.8	0.230	23.04	0.193
		5.0	0.210	25.00	0.152
		5.2	0.193	27.04	0.123
		5.4	0.179	29.16	0.092
		5.6	0.168	31.36	0.066
		5.8	0.159	33.64	0.033
		6.0	0.152	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

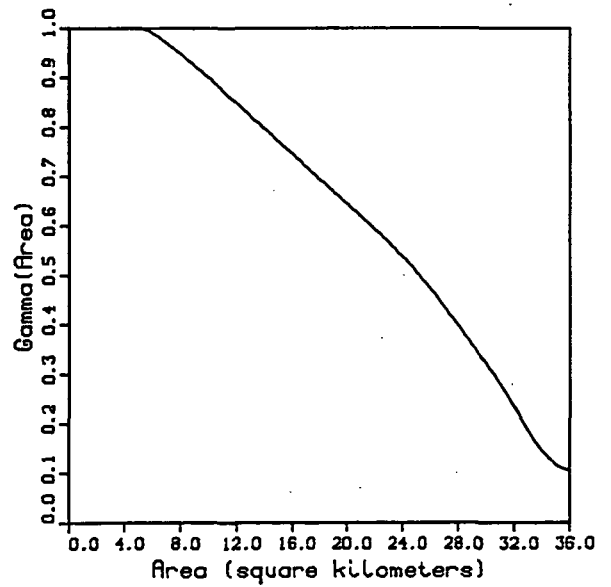
Storm Day  
 Aug 3, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.287$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.713$

Expected Value of Point Depth (mm.):  $E(Y) = 1.067$

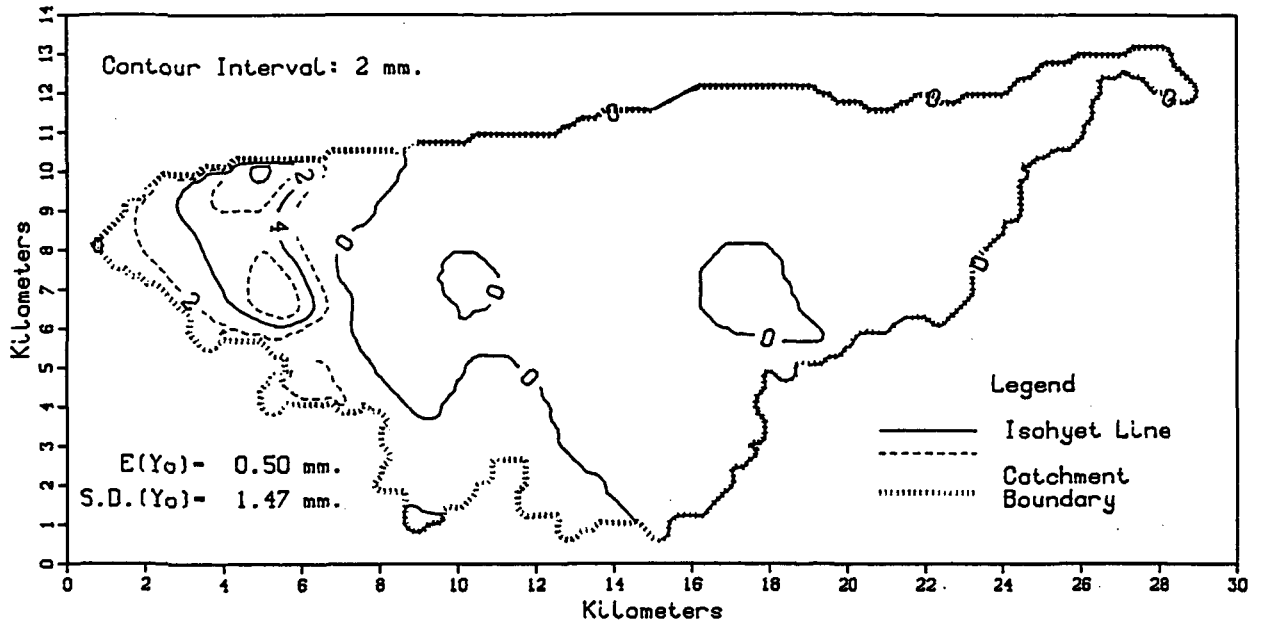
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.681$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.123$

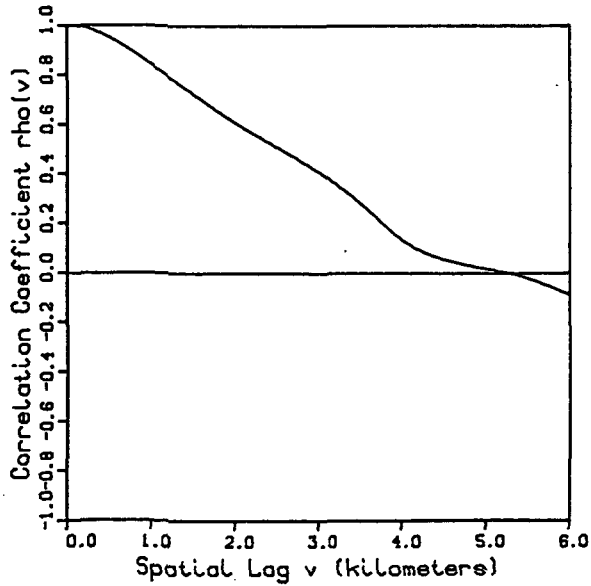
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.382	0.0	1.000	0.00	1.000
2	0.235	0.2	0.993	0.04	1.020
3	0.114	0.4	0.973	0.16	1.035
4	0.044	0.6	0.943	0.36	1.045
5	0.000	0.8	0.906	0.64	1.051
		1.0	0.865	1.00	1.053
		1.2	0.823	1.44	1.054
		1.4	0.781	1.96	1.051
		1.6	0.740	2.56	1.045
		1.8	0.698	3.24	1.035
		2.0	0.656	4.00	1.024
		2.2	0.614	4.84	1.010
		2.4	0.570	5.76	0.992
		2.6	0.526	6.76	0.972
		2.8	0.482	7.84	0.949
		3.0	0.437	9.00	0.922
		3.2	0.392	10.24	0.891
		3.4	0.346	11.56	0.858
		3.6	0.301	12.96	0.822
		3.8	0.256	14.44	0.784
		4.0	0.212	16.00	0.744
		4.2	0.170	17.64	0.703
		4.4	0.129	19.36	0.659
		4.6	0.090	21.16	0.613
		4.8	0.052	23.04	0.562
		5.0	0.016	25.00	0.504
		5.2	-.018	27.04	0.432
		5.4	-.050	29.16	0.350
		5.6	-.081	31.36	0.264
		5.8	-.109	33.64	0.158
		6.0	-.136	36.00	0.104

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

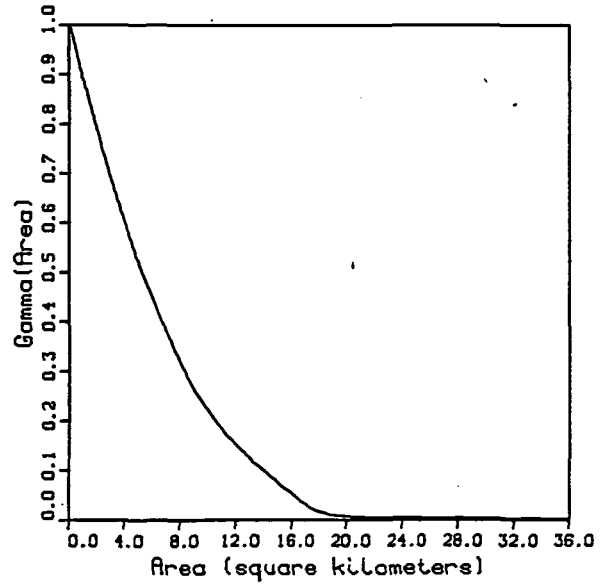
Storm Day  
 Aug 4, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.682$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.318$

Expected Value of Point Depth (mm.):  $E(Y) = 0.552$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.095$

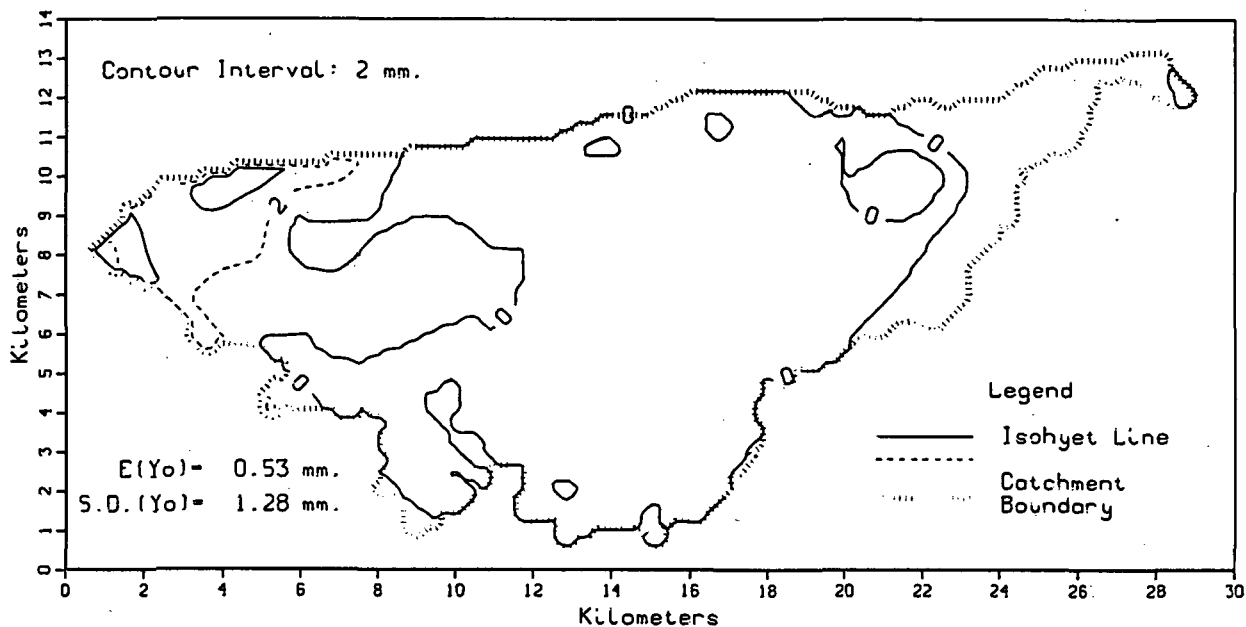
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.067$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.136	0.0	1.000	0.00	1.000
2	0.104	0.2	0.991	0.04	1.003
3	0.077	0.4	0.966	0.16	0.994
4	0.058	0.6	0.930	0.36	0.971
5	0.041	0.8	0.886	0.64	0.937
6	0.021	1.0	0.840	1.00	0.895
7	0.007	1.2	0.792	1.44	0.847
8	0.001	1.4	0.744	1.96	0.793
9	0.000	1.6	0.696	2.56	0.733
		1.8	0.650	3.24	0.669
		2.0	0.605	4.00	0.603
		2.2	0.564	4.84	0.534
		2.4	0.525	5.76	0.464
		2.6	0.486	6.76	0.396
		2.8	0.447	7.84	0.327
		3.0	0.405	9.00	0.264
		3.2	0.359	10.24	0.209
		3.4	0.307	11.56	0.163
		3.6	0.249	12.96	0.125
		3.8	0.188	14.44	0.088
		4.0	0.132	16.00	0.052
		4.2	0.090	17.64	0.020
		4.4	0.062	19.36	0.007
		4.6	0.042	21.16	0.005
		4.8	0.026	23.04	0.003
		5.0	0.013	25.00	0.003
		5.2	0.000	27.04	0.003
		5.4	-.014	29.16	0.003
		5.6	-.038	31.36	0.002
		5.8	-.064	33.64	0.001
		6.0	-.092	36.00	0.000

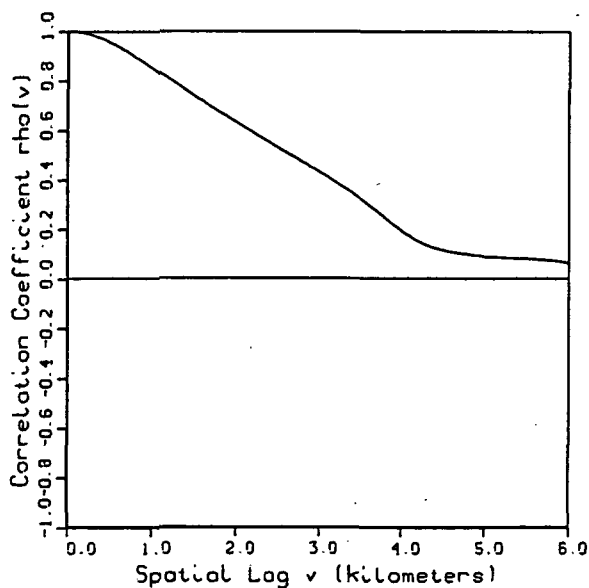


Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

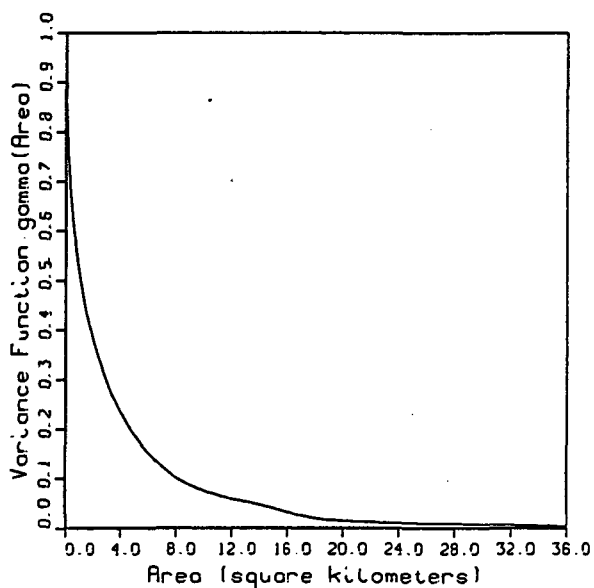
Storm Day  
 Aug 5, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.624$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.376$

Expected Value of Point Depth (mm.):  $E(Y) = 0.435$

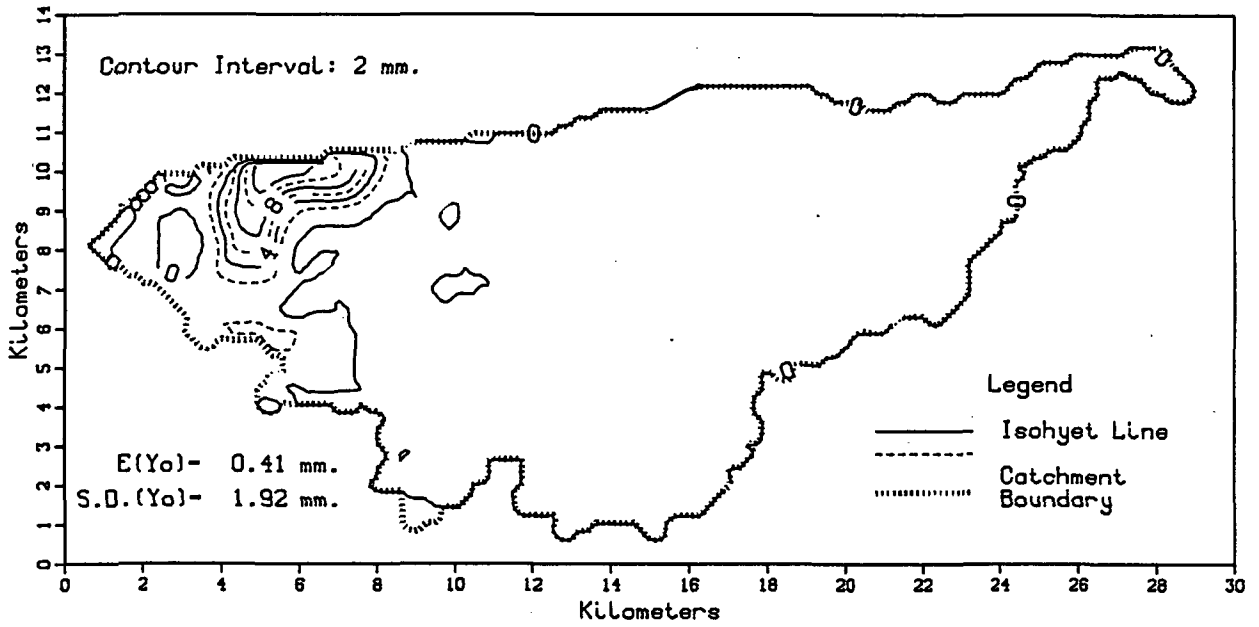
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.959$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.924$

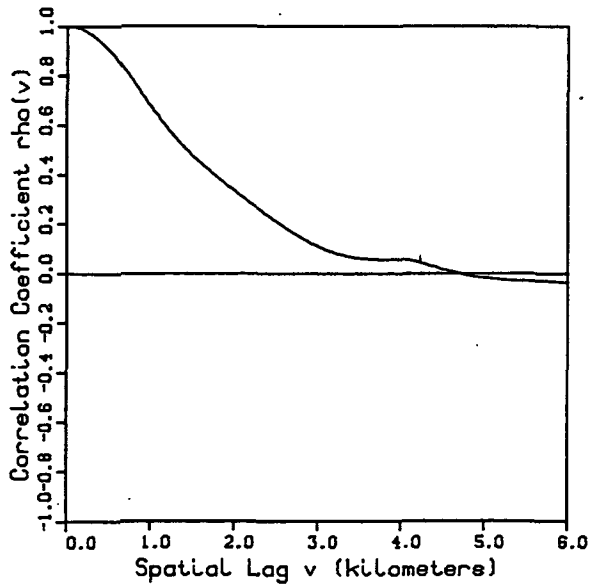
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.145	0.0	1.000	0.00	1.000
2	0.069	0.2	0.992	0.04	0.880
3	0.047	0.4	0.970	0.16	0.775
4	0.017	0.6	0.935	0.36	0.677
5	0.004	0.8	0.894	0.64	0.592
6	0.001	1.0	0.849	1.00	0.511
7	0.000	1.2	0.803	1.44	0.441
8	0.000	1.4	0.759	1.96	0.381
		1.6	0.714	2.56	0.327
		1.8	0.671	3.24	0.274
		2.0	0.630	4.00	0.232
		2.2	0.589	4.84	0.192
		2.4	0.548	5.76	0.157
		2.6	0.509	6.76	0.130
		2.8	0.470	7.84	0.104
		3.0	0.432	9.00	0.086
		3.2	0.390	10.24	0.072
		3.4	0.346	11.56	0.061
		3.6	0.297	12.96	0.053
		3.8	0.245	14.44	0.043
		4.0	0.194	16.00	0.032
		4.2	0.152	17.64	0.021
		4.4	0.123	19.36	0.015
		4.6	0.108	21.16	0.012
		4.8	0.098	23.04	0.010
		5.0	0.089	25.00	0.009
		5.2	0.084	27.04	0.008
		5.4	0.081	29.16	0.007
		5.6	0.079	31.36	0.006
		5.8	0.073	33.64	0.004
		6.0	0.063	36.00	0.002

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

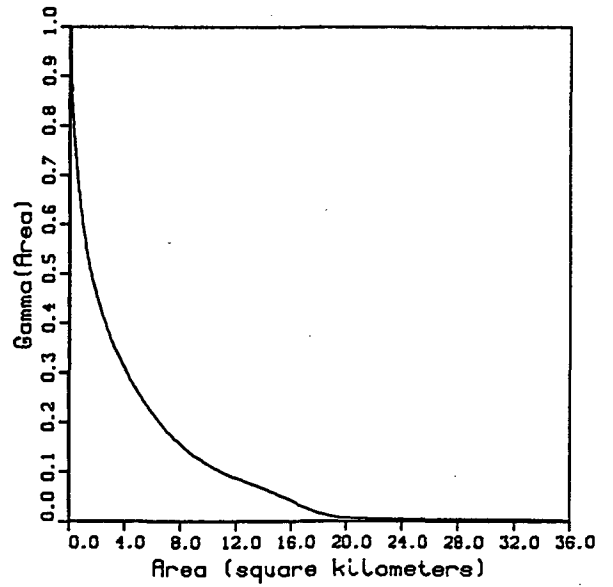
Storm Day  
 Aug 6, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.833$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.167$

Expected Value of Point Depth (mm.):  $E(Y) = 0.399$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.776$

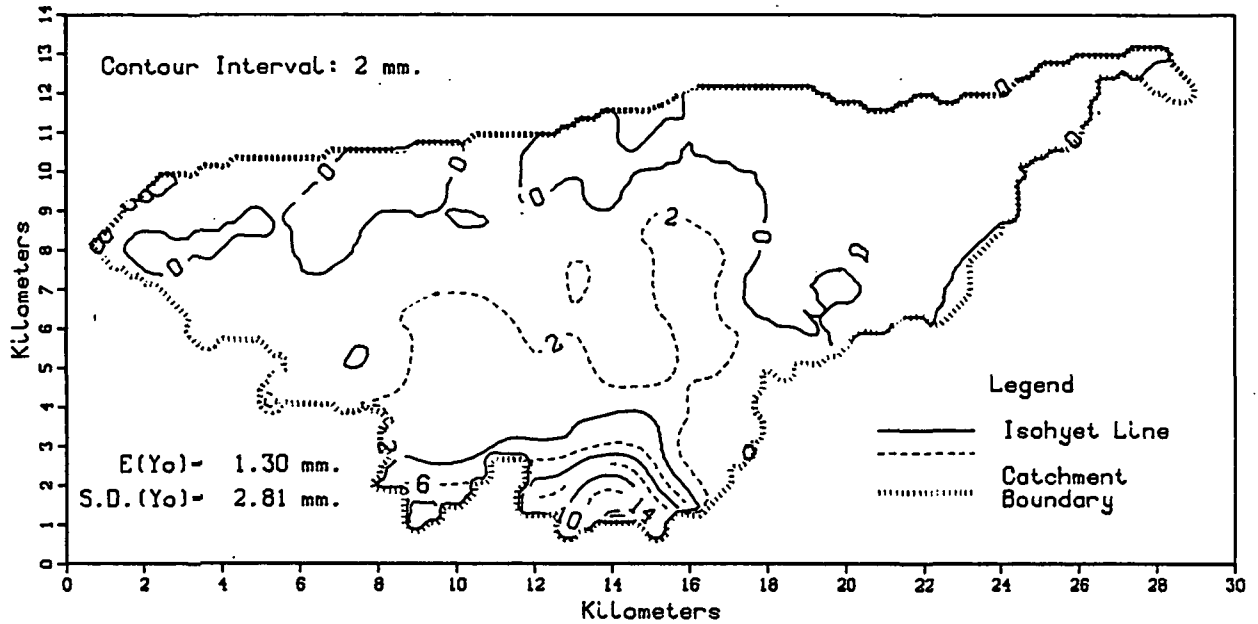
Coef. of Skewness of Point Depth:  $S.C.(Y) = 5.196$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.074	0.0	1.000	0.00	1.000
2	0.055	0.2	0.983	0.04	0.943
3	0.044	0.4	0.934	0.16	0.866
4	0.038	0.6	0.860	0.36	0.776
5	0.032	0.8	0.770	0.64	0.684
6	0.027	1.0	0.674	1.00	0.598
7	0.023	1.2	0.585	1.44	0.523
8	0.018	1.4	0.508	1.96	0.458
9	0.014	1.6	0.443	2.56	0.401
10	0.010	1.8	0.385	3.24	0.351
11	0.007	2.0	0.331	4.00	0.306
12	0.005	2.2	0.280	4.84	0.264
13	0.001	2.4	0.230	5.76	0.226
14	0.000	2.6	0.183	6.76	0.190
		2.8	0.141	7.84	0.158
		3.0	0.105	9.00	0.131
		3.2	0.079	10.24	0.109
		3.4	0.062	11.56	0.091
		3.6	0.055	12.96	0.076
		3.8	0.055	14.44	0.060
		4.0	0.054	16.00	0.041
		4.2	0.042	17.64	0.020
		4.4	0.022	19.36	0.008
		4.6	0.004	21.16	0.006
		4.8	-.011	23.04	0.004
		5.0	-.020	25.00	0.004
		5.2	-.027	27.04	0.004
		5.4	-.032	29.16	0.004
		5.6	-.033	31.36	0.004
		5.8	-.035	33.64	0.003
		6.0	-.042	36.00	0.001

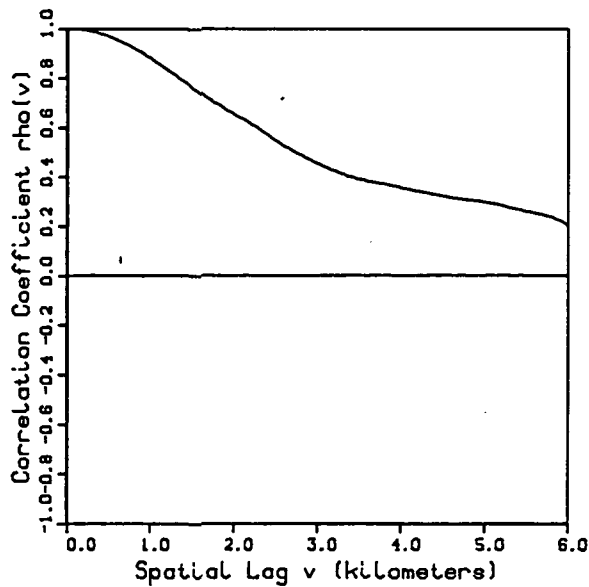
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

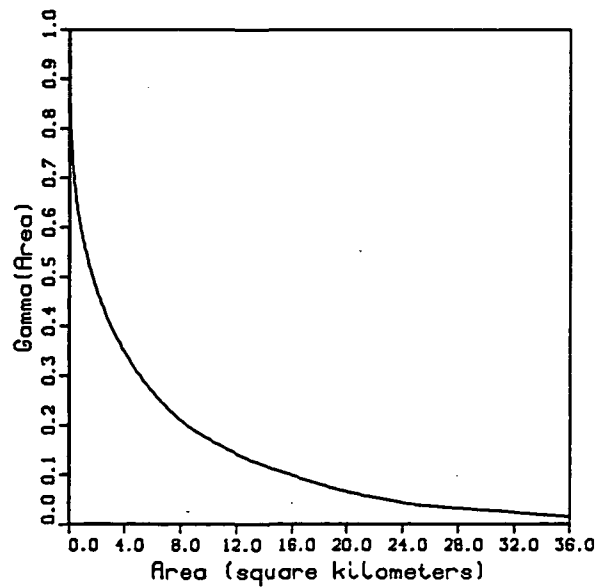
Storm Day  
Aug 7, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c) = 0.317$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c) = 0.683$

Expected Value of Point Depth (mm.):  $E(Y) = 1.393$

Variance of Point Depth (mm. sq.):  $Var(Y) = 6.158$

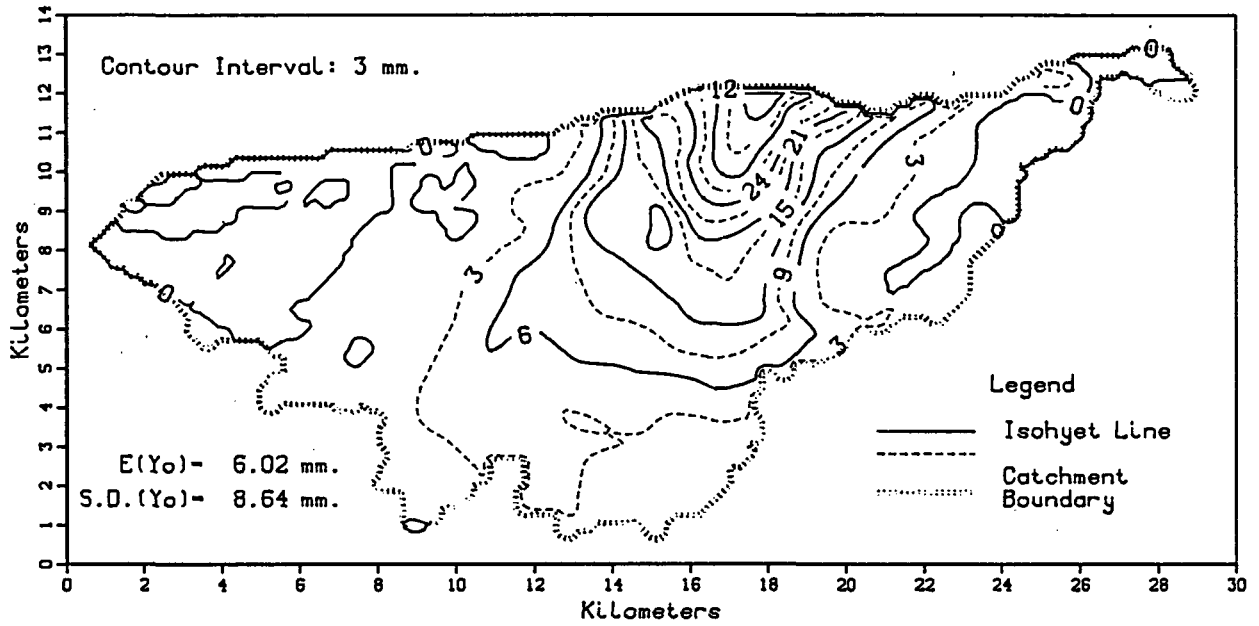
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.315$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.383	0.0	1.000	0.00	1.000
2	0.236	0.2	0.995	0.04	0.885
3	0.118	0.4	0.979	0.16	0.781
4	0.072	0.6	0.954	0.36	0.701
5	0.055	0.8	0.920	0.64	0.633
6	0.043	1.0	0.879	1.00	0.578
7	0.037	1.2	0.833	1.44	0.526
8	0.030	1.4	0.785	1.96	0.475
9	0.025	1.6	0.737	2.56	0.428
10	0.021	1.8	0.692	3.24	0.385
11	0.017	2.0	0.652	4.00	0.345
12	0.013	2.2	0.613	4.84	0.309
13	0.010	2.4	0.568	5.76	0.274
14	0.006	2.6	0.523	6.76	0.242
15	0.003	2.8	0.487	7.84	0.212
16	0.001	3.0	0.452	9.00	0.188
17	0.000	3.2	0.422	10.24	0.166
18	0.000	3.4	0.397	11.56	0.147
19	0.000	3.6	0.381	12.96	0.129
		3.8	0.369	14.44	0.112
		4.0	0.353	16.00	0.097
		4.2	0.340	17.64	0.083
		4.4	0.326	19.36	0.069
		4.6	0.313	21.16	0.057
		4.8	0.305	23.04	0.047
		5.0	0.296	25.00	0.037
		5.2	0.282	27.04	0.033
		5.4	0.266	29.16	0.028
		5.6	0.252	31.36	0.024
		5.8	0.235	33.64	0.019
		6.0	0.203	36.00	0.014

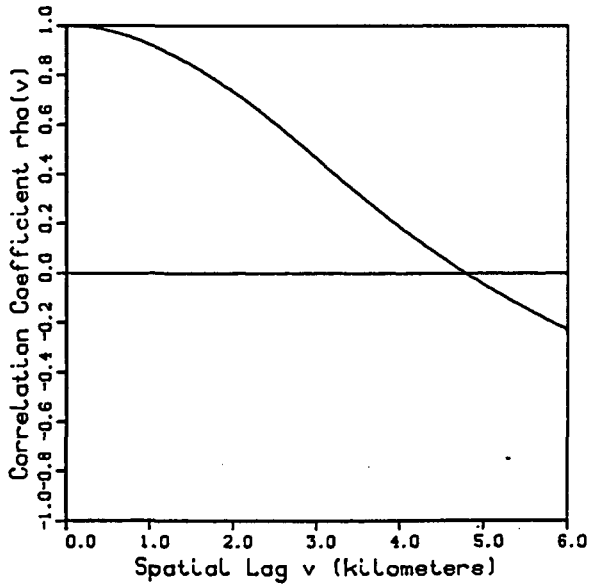
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

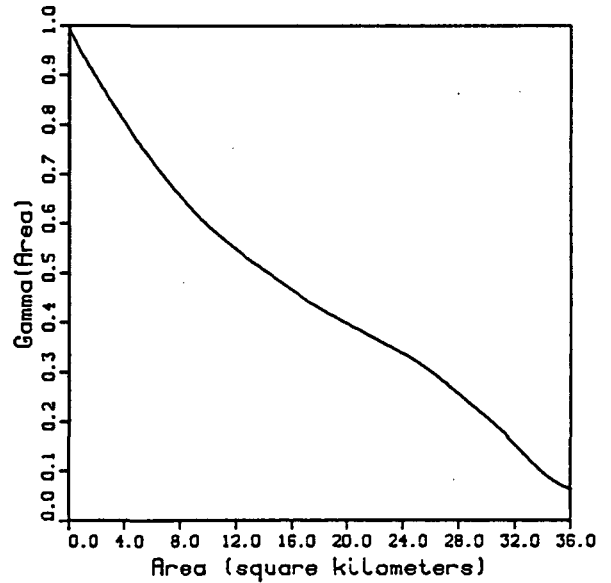
Storm Day  
Aug 8, 1970



Spatial Correlation



Variance Function



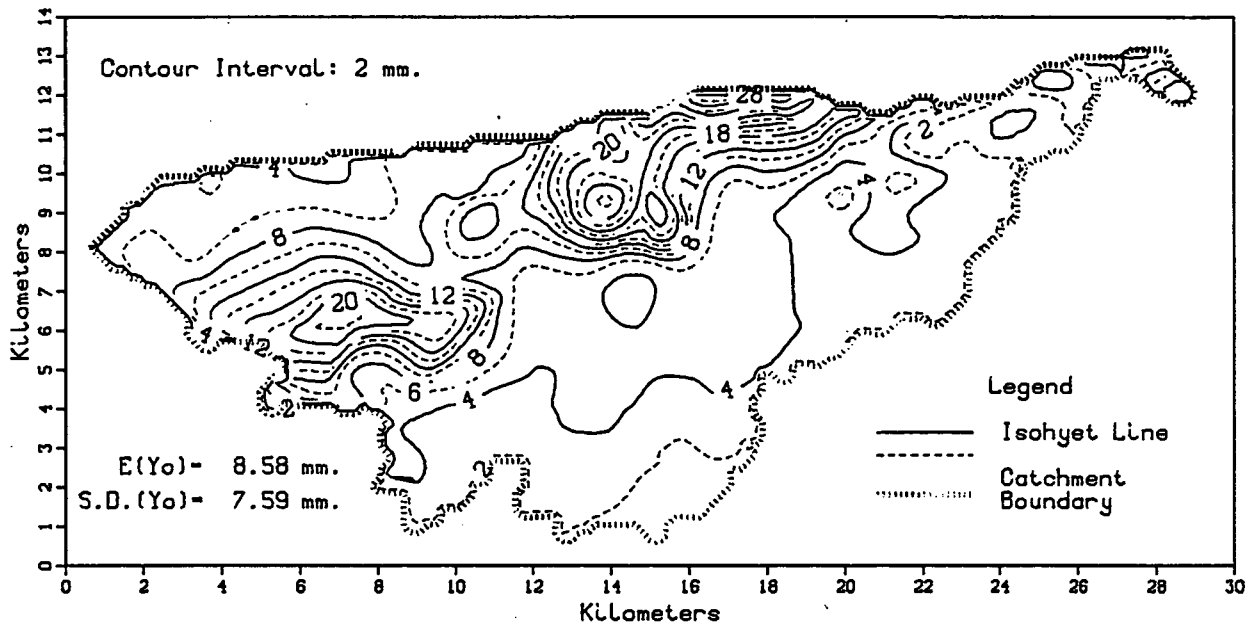
Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.149$ Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.851$ Expected Value of Point Depth (mm.):  $E(Y) = 5.490$ Variance of Point Depth (mm. sq.):  $Var(Y) = 53.891$ Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.988$ 

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.653	0.0	1.000	0.00	1.000
2	0.569	0.2	0.996	0.04	0.992
3	0.493	0.4	0.985	0.16	0.983
4	0.425	0.6	0.968	0.36	0.972
5	0.360	0.8	0.946	0.64	0.956
6	0.303	1.0	0.919	1.00	0.938
7	0.268	1.2	0.888	1.44	0.917
8	0.241	1.4	0.853	1.96	0.893
9	0.218	1.6	0.815	2.56	0.865
10	0.198	1.8	0.773	3.24	0.835
11	0.179	2.0	0.728	4.00	0.803
12	0.158	2.2	0.680	4.84	0.768
13	0.137	2.4	0.628	5.76	0.732
14	0.115	2.6	0.573	6.76	0.695
15	0.096	2.8	0.517	7.84	0.658
16	0.086	3.0	0.459	9.00	0.622
17	0.079	3.2	0.400	10.24	0.586
18	0.073	3.4	0.344	11.56	0.555
19	0.067	3.6	0.288	12.96	0.524
20	0.062	3.8	0.234	14.44	0.494
21	0.056	4.0	0.181	16.00	0.462
22	0.051	4.2	0.131	17.64	0.432
23	0.045	4.4	0.082	19.36	0.404
24	0.041	4.6	0.036	21.16	0.377
25	0.037	4.8	-0.008	23.04	0.348
26	0.033	5.0	-0.051	25.00	0.317
27	0.030	5.2	-0.092	27.04	0.274
28	0.027	5.4	-0.129	29.16	0.224
29	0.023	5.6	-0.166	31.36	0.170
30	0.020	5.8	-0.202	33.64	0.103
31	0.017	6.0	-0.236	36.00	0.062
32	0.013				
33	0.011				
34	0.008				
35	0.006				
36	0.004				
37	0.002				
38	0.001				
39	0.000				

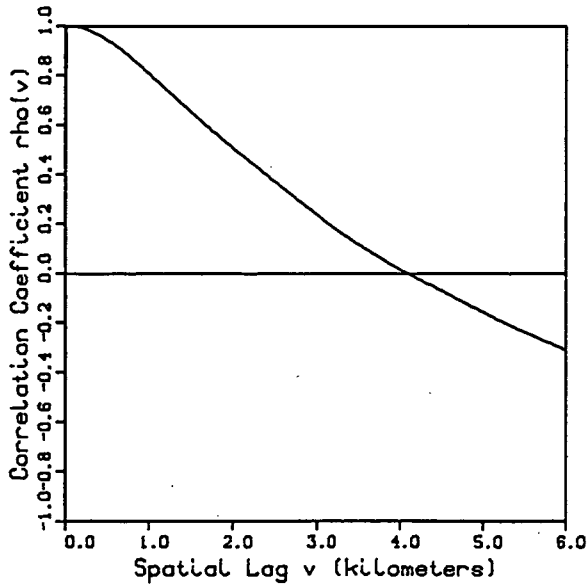


Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

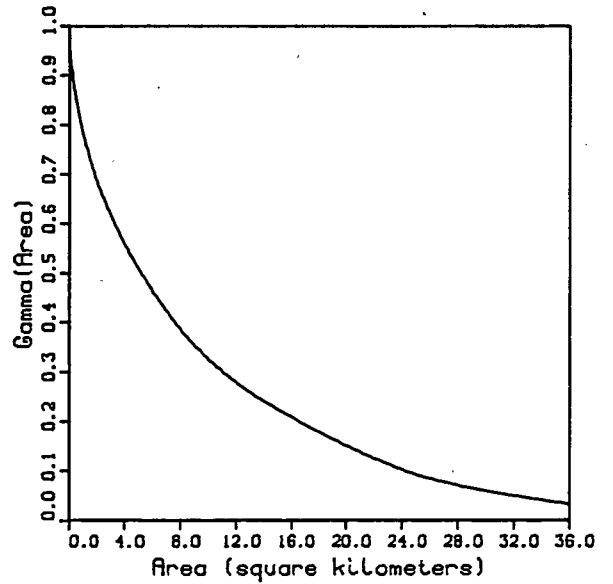
Storm Day  
 Aug 9, 1970



Spatial Correlation



Variance Function

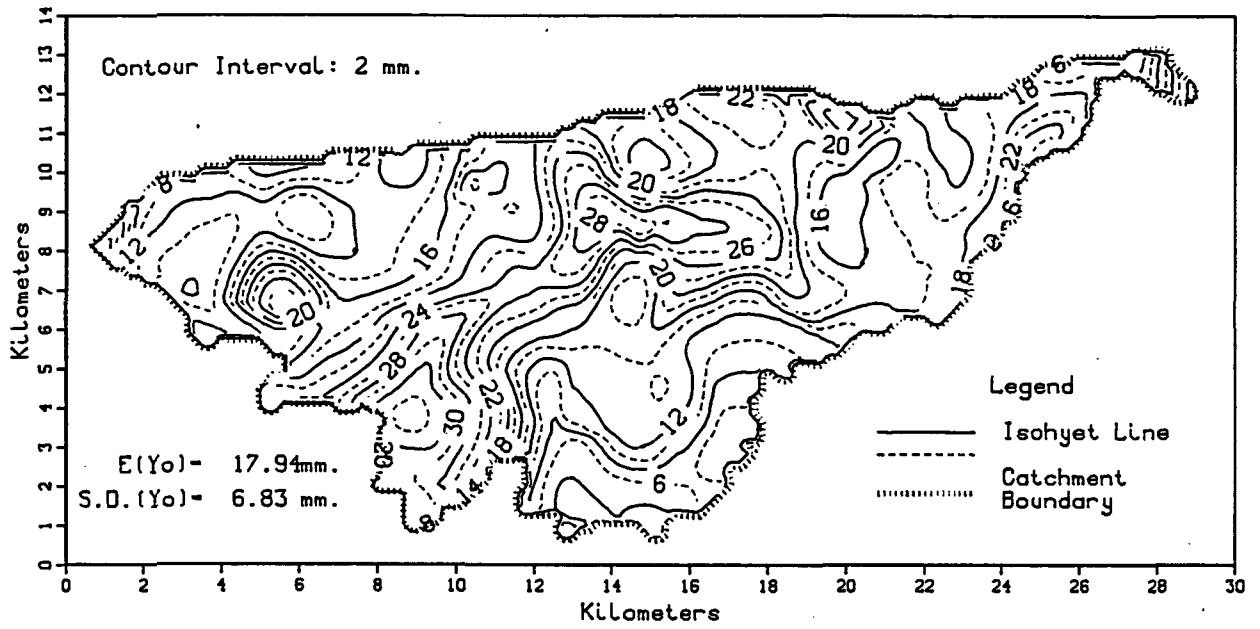


Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.004$ Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.996$ Expected Value of Point Depth (mm.):  $E(Y) = 7.552$ Variance of Point Depth (mm. sq.):  $Var(Y) = 36.318$ Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.613$ 

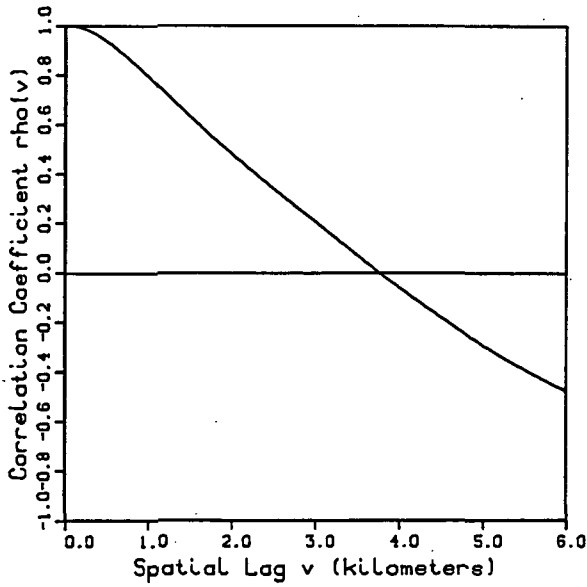
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.986	0.0	1.000	0.00	1.000
2	0.944	0.2	0.989	0.04	0.957
3	0.832	0.4	0.960	0.16	0.915
4	0.689	0.6	0.917	0.36	0.872
5	0.558	0.8	0.864	0.64	0.826
6	0.423	1.0	0.805	1.00	0.780
7	0.363	1.2	0.743	1.44	0.733
8	0.313	1.4	0.680	1.96	0.687
9	0.274	1.6	0.618	2.56	0.643
10	0.245	1.8	0.560	3.24	0.600
11	0.217	2.0	0.503	4.00	0.556
12	0.192	2.2	0.448	4.84	0.513
13	0.169	2.4	0.393	5.76	0.471
14	0.152	2.6	0.340	6.76	0.429
15	0.136	2.8	0.286	7.84	0.389
16	0.120	3.0	0.233	9.00	0.351
17	0.105	3.2	0.182	10.24	0.317
18	0.089	3.4	0.135	11.56	0.286
19	0.074	3.6	0.091	12.96	0.258
20	0.058	3.8	0.051	14.44	0.232
21	0.042	4.0	0.012	16.00	0.207
22	0.030	4.2	-0.023	17.64	0.182
23	0.022	4.4	-0.057	19.36	0.158
24	0.018	4.6	-0.092	21.16	0.134
25	0.014	4.8	-0.127	23.04	0.112
26	0.011	5.0	-0.162	25.00	0.091
27	0.009	5.2	-0.195	27.04	0.076
28	0.008	5.4	-0.226	29.16	0.062
29	0.006	5.6	-0.256	31.36	0.051
30	0.006	5.8	-0.285	33.64	0.041
31	0.005	6.0	-0.314	36.00	0.031
32	0.004				
33	0.003				
34	0.002				
35	0.001				
36	0.000				
37	0.000				

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

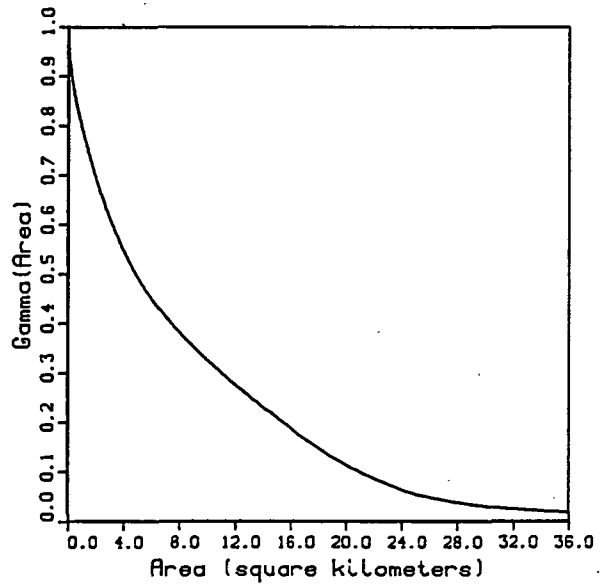
Storm Day  
 Aug 10, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 17.618$

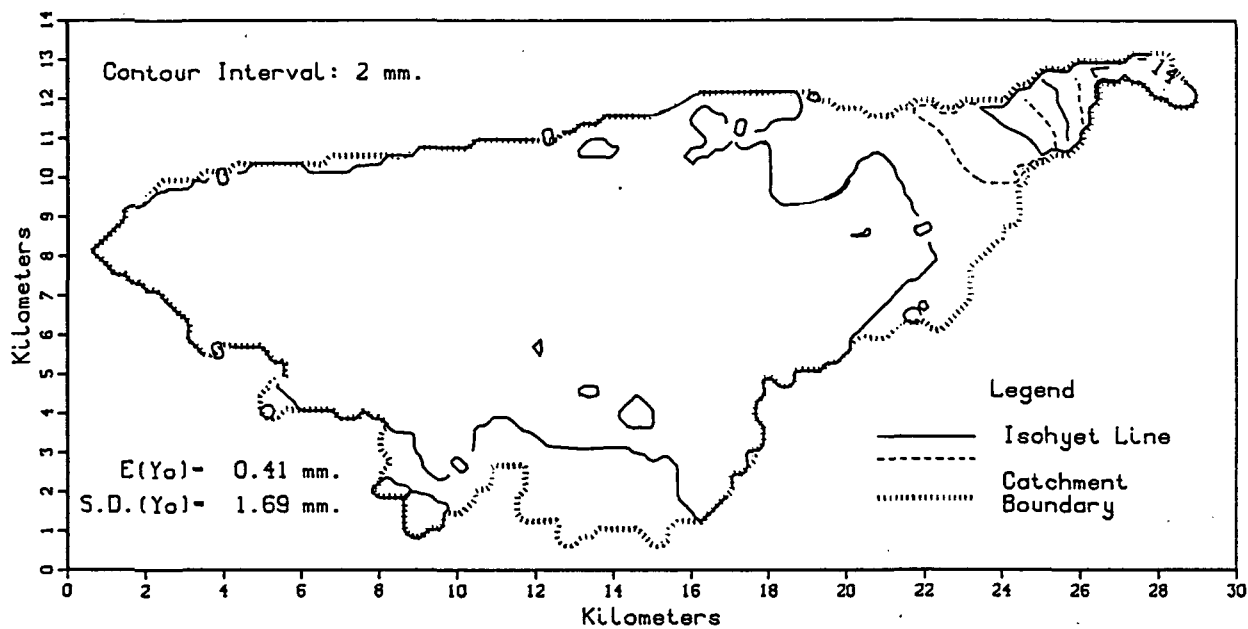
Variance of Point Depth (mm. sq.):  $Var(Y) = 44.128$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.134$

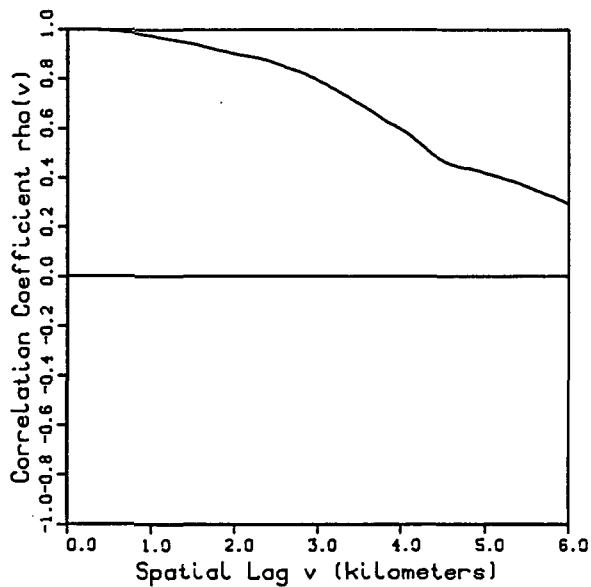
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.999	0.0	1.000	0.00	1.000
2	0.999	0.2	0.988	0.04	0.967
3	0.997	0.4	0.956	0.16	0.925
4	0.989	0.6	0.909	0.36	0.882
5	0.973	0.8	0.852	0.64	0.839
6	0.957	1.0	0.790	1.00	0.794
7	0.943	1.2	0.724	1.44	0.746
8	0.932	1.4	0.658	1.96	0.695
9	0.910	1.6	0.595	2.56	0.644
10	0.881	1.8	0.535	3.24	0.593
11	0.842	2.0	0.477	4.00	0.544
12	0.801	2.2	0.419	4.84	0.499
13	0.752	2.4	0.363	5.76	0.456
14	0.694	2.6	0.309	6.76	0.419
15	0.645	2.8	0.255	7.84	0.384
16	0.589	3.0	0.203	9.00	0.350
17	0.527	3.2	0.149	10.24	0.317
18	0.466	3.4	0.094	11.56	0.284
19	0.400	3.6	0.040	12.96	0.252
20	0.343	3.8	-0.013	14.44	0.219
21	0.295	4.0	-0.064	16.00	0.186
22	0.249	4.2	-0.113	17.64	0.154
23	0.208	4.4	-0.161	19.36	0.123
24	0.171	4.6	-0.208	21.16	0.096
25	0.141	4.8	-0.253	23.04	0.073
26	0.116	5.0	-0.298	25.00	0.053
27	0.093	5.2	-0.338	27.04	0.041
28	0.071	5.4	-0.377	29.16	0.032
29	0.054	5.6	-0.413	31.36	0.025
30	0.038	5.8	-0.448	33.64	0.021
31	0.023	6.0	-0.480	36.00	0.017
32	0.015				
33	0.009				
34	0.004				
35	0.000				

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

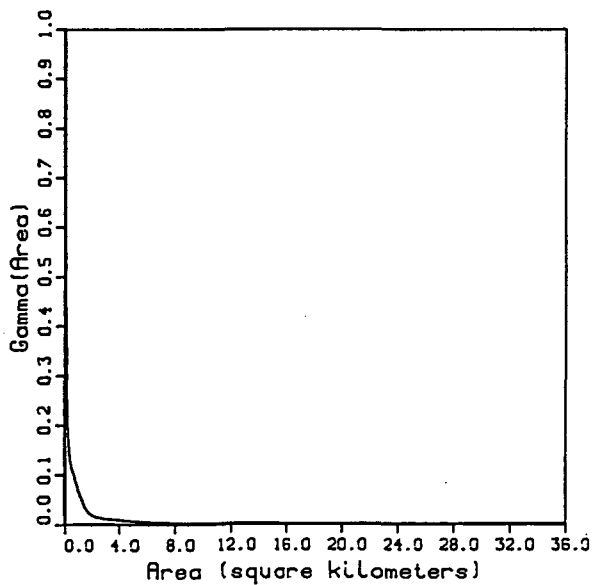
Storm Day  
 Aug 11, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.739$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.261$

Expected Value of Point Depth (mm.):  $E(Y) = 0.503$

Variance of Point Depth (mm. sq.):  $Var(Y) = 5.236$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.259$

Spatial Distribution  
of Total Storm Depth  
y (mm.)     $A_{cw}/A_c (Y \geq y)$

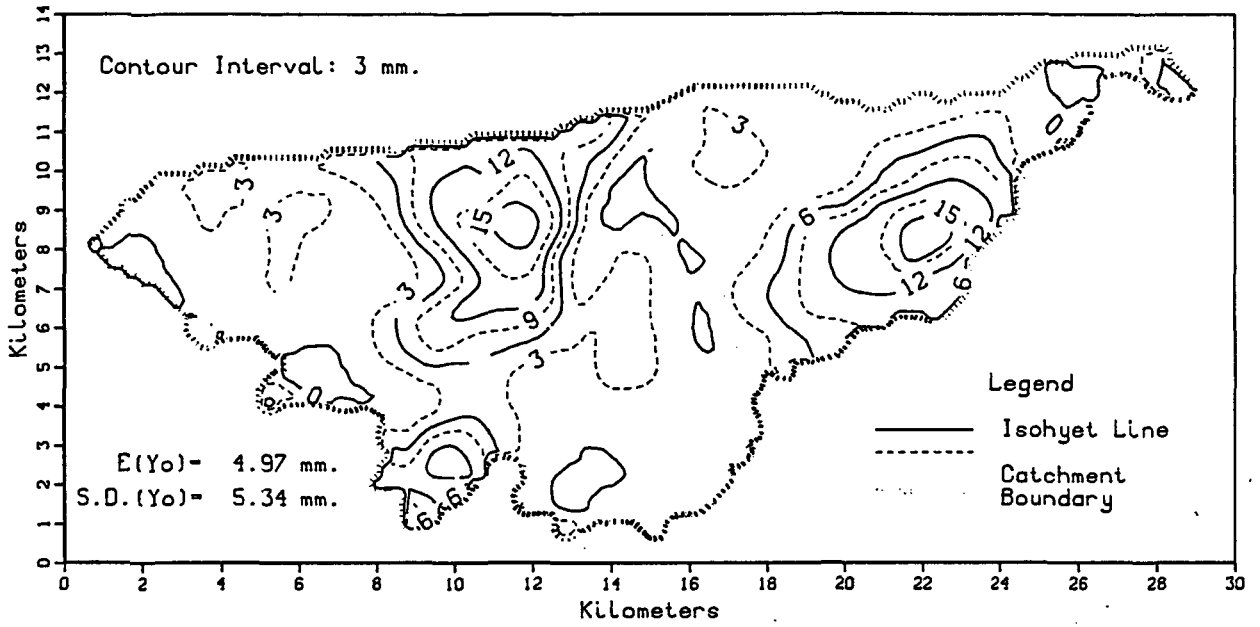
Spatial Correlation  
v (km.)    rho (v)

Variance Function  
A (km. sq.)    Gamma (A)

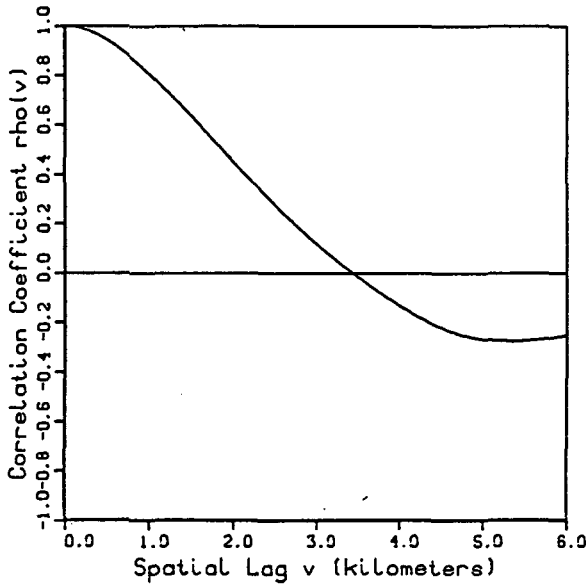
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.074	0.0	1.000	0.00	1.000
2	0.050	0.2	0.999	0.04	0.637
3	0.037	0.4	0.996	0.16	0.306
4	0.028	0.6	0.991	0.36	0.146
5	0.024	0.8	0.983	0.64	0.105
6	0.021	1.0	0.972	1.00	0.070
7	0.019	1.2	0.959	1.44	0.035
8	0.016	1.4	0.946	1.96	0.017
9	0.013	1.6	0.930	2.56	0.012
10	0.010	1.8	0.913	3.24	0.010
11	0.008	2.0	0.897	4.00	0.008
12	0.007	2.2	0.886	4.84	0.006
13	0.007	2.4	0.870	5.76	0.004
14	0.006	2.6	0.846	6.76	0.002
15	0.006	2.8	0.821	7.84	0.001
16	0.006	3.0	0.790	9.00	0.001
17	0.006	3.2	0.754	10.24	0.001
18	0.005	3.4	0.714	11.56	0.001
19	0.005	3.6	0.674	12.96	0.000
20	0.004	3.8	0.628	14.44	0.000
21	0.003	4.0	0.592	16.00	0.000
22	0.002	4.2	0.542	17.64	0.000
23	0.002	4.4	0.484	19.36	0.000
24	0.001	4.6	0.449	21.16	0.000
25	0.001	4.8	0.434	23.04	0.000
26	0.001	5.0	0.416	25.00	0.000
27	0.000	5.2	0.396	27.04	0.000
28	0.000	5.4	0.374	29.16	0.000
		5.6	0.346	31.36	0.000
		5.8	0.320	33.64	0.000
		6.0	0.290	36.00	0.000

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

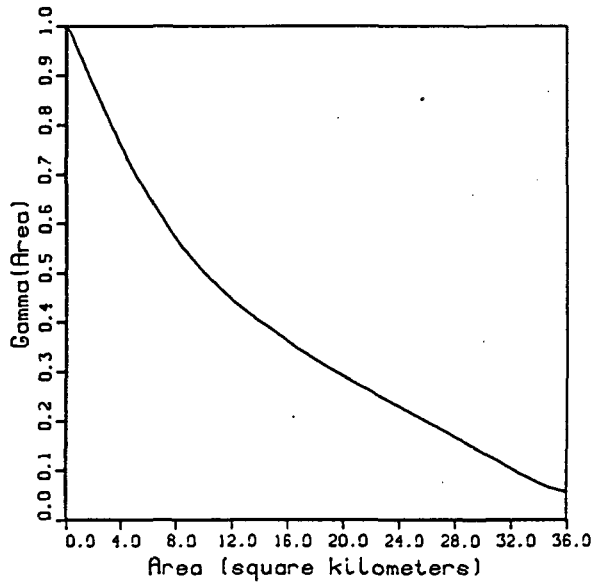
Storm Day  
 Aug 14, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.044$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.956$

Expected Value of Point Depth (mm.):  $E(Y) = 4.812$

Variance of Point Depth (mm. sq.):  $Var(Y) = 23.184$

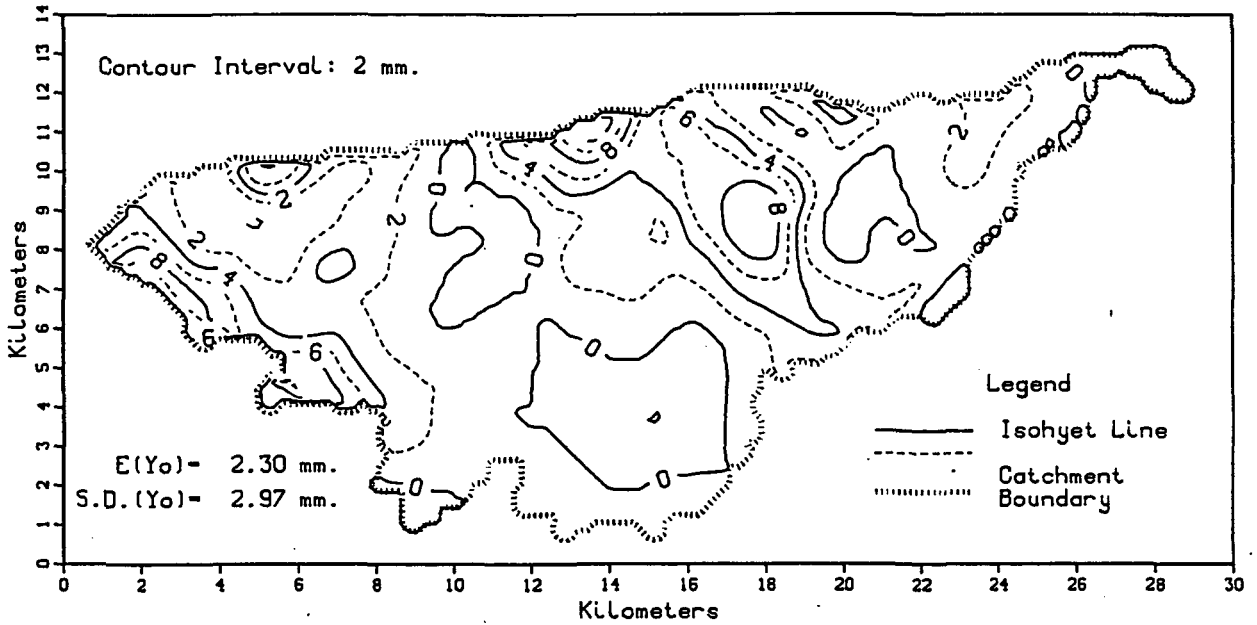
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.146$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.779	0.0	1.000	0.00	1.000
2	0.630	0.2	0.990	0.04	1.001
3	0.481	0.4	0.962	0.16	0.997
4	0.376	0.6	0.920	0.36	0.987
5	0.328	0.8	0.867	0.64	0.968
6	0.298	1.0	0.806	1.00	0.944
7	0.270	1.2	0.740	1.44	0.915
8	0.245	1.4	0.669	1.96	0.881
9	0.220	1.6	0.597	2.56	0.843
10	0.190	1.8	0.524	3.24	0.801
11	0.154	2.0	0.451	4.00	0.757
12	0.116	2.2	0.380	4.84	0.711
13	0.086	2.4	0.309	5.76	0.665
14	0.059	2.6	0.242	6.76	0.619
15	0.043	2.8	0.178	7.84	0.574
16	0.032	3.0	0.117	9.00	0.532
17	0.021	3.2	0.061	10.24	0.493
18	0.014	3.4	0.008	11.56	0.457
19	0.008	3.6	-.042	12.96	0.423
20	0.002	3.8	-.089	14.44	0.392
21	0.000	4.0	-.133	16.00	0.361
		4.2	-.174	17.64	0.330
		4.4	-.209	19.36	0.301
		4.6	-.237	21.16	0.272
		4.8	-.258	23.04	0.243
		5.0	-.271	25.00	0.213
		5.2	-.277	27.04	0.182
		5.4	-.278	29.16	0.149
		5.6	-.274	31.36	0.115
		5.8	-.266	33.64	0.079
		6.0	-.253	36.00	0.056

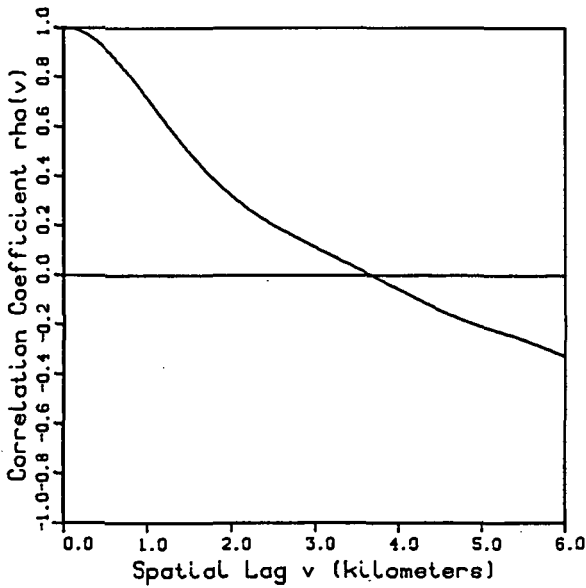


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

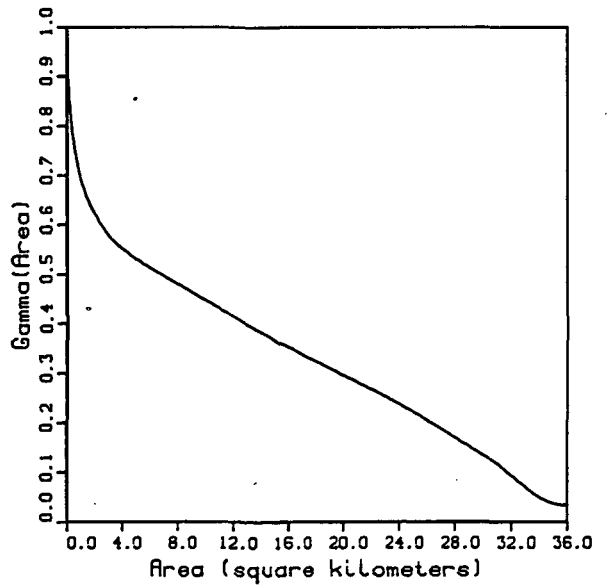
Storm Day  
 Aug 15, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.172$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.828$

Expected Value of Point Depth (mm.):  $E(Y) = 2.177$

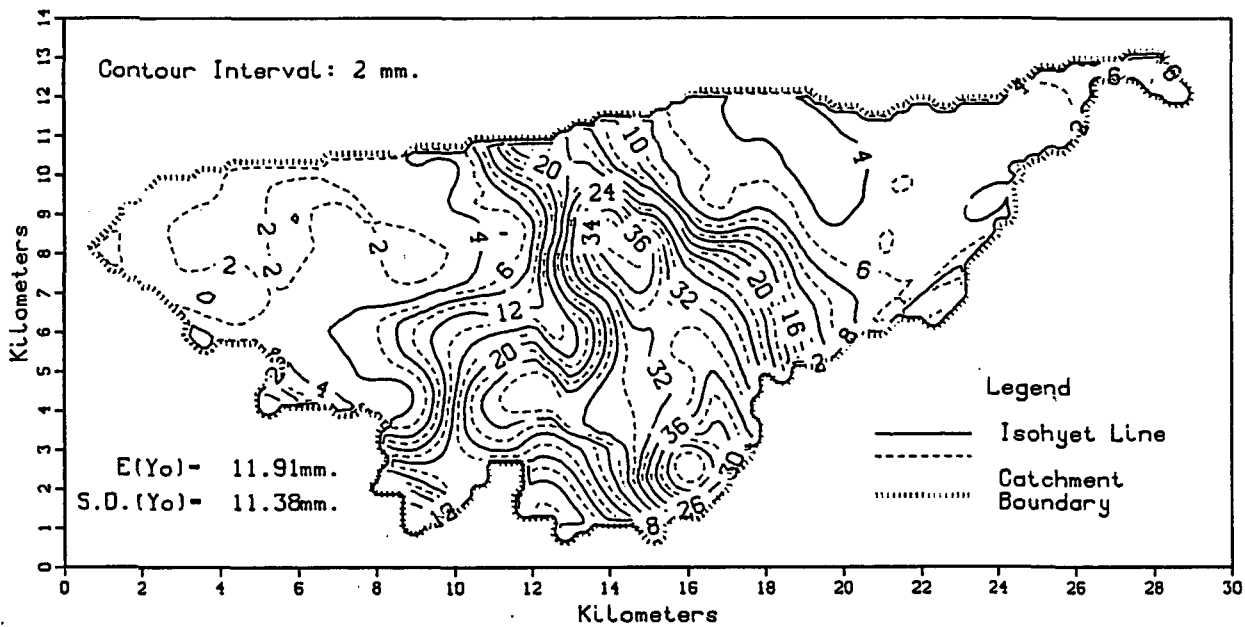
Variance of Point Depth (mm. sq.):  $Var(Y) = 6.466$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.498$

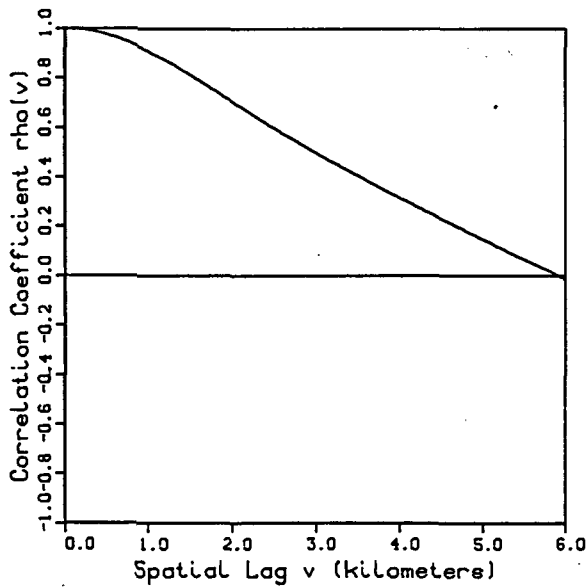
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.548	0.0	1.000	0.00	1.000
2	0.403	0.2	0.985	0.04	0.934
3	0.261	0.4	0.943	0.16	0.864
4	0.186	0.6	0.879	0.36	0.799
5	0.138	0.8	0.800	0.64	0.743
6	0.103	1.0	0.711	1.00	0.695
7	0.065	1.2	0.621	1.44	0.655
8	0.042	1.4	0.534	1.96	0.622
9	0.024	1.6	0.453	2.56	0.594
10	0.010	1.8	0.380	3.24	0.569
11	0.005	2.0	0.317	4.00	0.549
12	0.003	2.2	0.264	4.84	0.531
13	0.001	2.4	0.218	5.76	0.514
14	0.000	2.6	0.178	6.76	0.497
		2.8	0.142	7.84	0.480
		3.0	0.107	9.00	0.461
		3.2	0.073	10.24	0.441
		3.4	0.039	11.56	0.419
		3.6	0.006	12.96	0.397
		3.8	-0.028	14.44	0.373
		4.0	-0.062	16.00	0.350
		4.2	-0.097	17.64	0.326
		4.4	-0.131	19.36	0.302
		4.6	-0.162	21.16	0.277
		4.8	-0.190	23.04	0.249
		5.0	-0.213	25.00	0.219
		5.2	-0.233	27.04	0.184
		5.4	-0.253	29.16	0.147
		5.6	-0.278	31.36	0.107
		5.8	-0.305	33.64	0.054
		6.0	-0.331	36.00	0.033

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

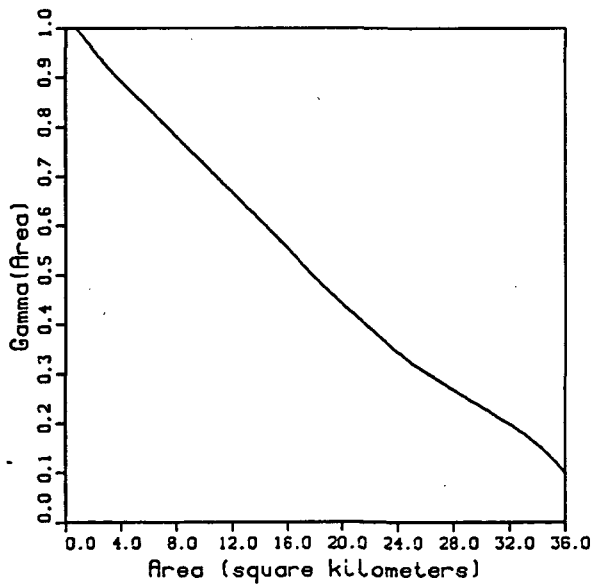
Storm Day  
 Aug 16, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y)=12.850$

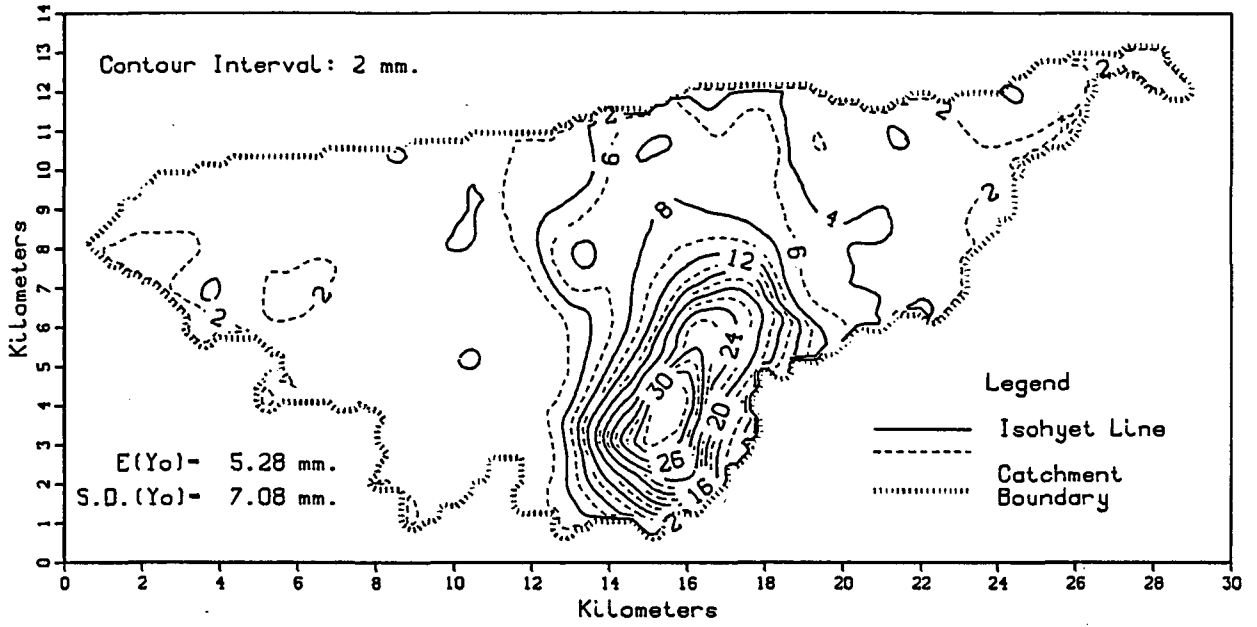
Variance of Point Depth (mm. sq.):  $Var(Y)=131.970$

Coef. of Skewness of Point Depth:  $S.C.(Y)=0.953$

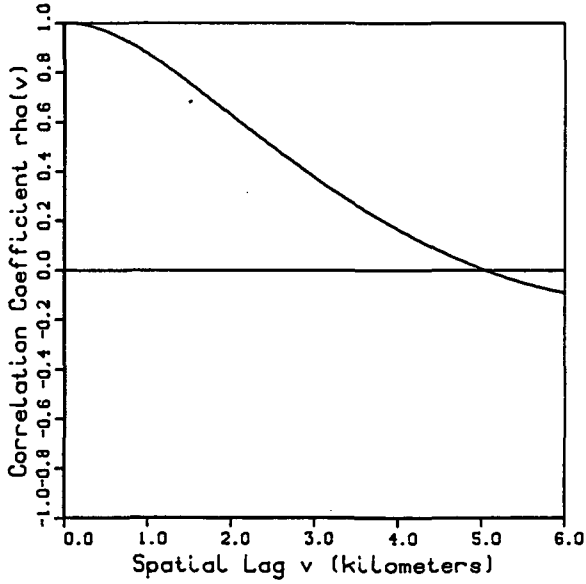
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.979	0.0	1.000	0.00	1.000
3	0.823	0.2	0.995	0.04	1.009
5	0.622	0.4	0.982	0.16	1.014
7	0.504	0.6	0.962	0.36	1.012
9	0.458	0.8	0.936	0.64	1.003
11	0.419	1.0	0.904	1.00	0.990
13	0.382	1.2	0.869	1.44	0.974
15	0.348	1.4	0.830	1.96	0.955
17	0.315	1.6	0.789	2.56	0.934
19	0.282	1.8	0.745	3.24	0.912
21	0.248	2.0	0.702	4.00	0.890
23	0.219	2.2	0.659	4.84	0.866
25	0.193	2.4	0.616	5.76	0.841
27	0.167	2.6	0.575	6.76	0.812
29	0.140	2.8	0.534	7.84	0.782
31	0.114	3.0	0.495	9.00	0.749
33	0.081	3.2	0.457	10.24	0.713
35	0.053	3.4	0.419	11.56	0.676
37	0.036	3.6	0.383	12.96	0.637
39	0.021	3.8	0.346	14.44	0.596
41	0.014	4.0	0.311	16.00	0.551
43	0.009	4.2	0.277	17.64	0.503
45	0.005	4.4	0.243	19.36	0.455
47	0.001	4.6	0.209	21.16	0.410
		4.8	0.176	23.04	0.363
		5.0	0.143	25.00	0.318
		5.2	0.110	27.04	0.282
		5.4	0.077	29.16	0.245
		5.6	0.045	31.36	0.207
		5.8	0.014	33.64	0.163
		6.0	-0.018	36.00	0.097

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

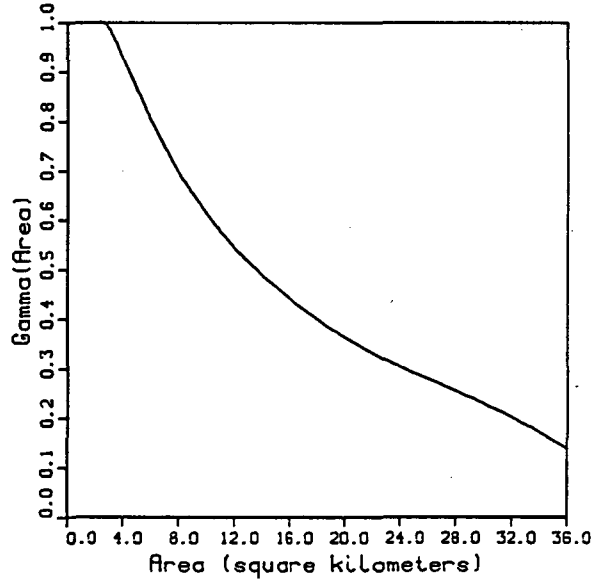
Storm Day  
 Aug 17, 1970



Spatial Correlation



Variance Function

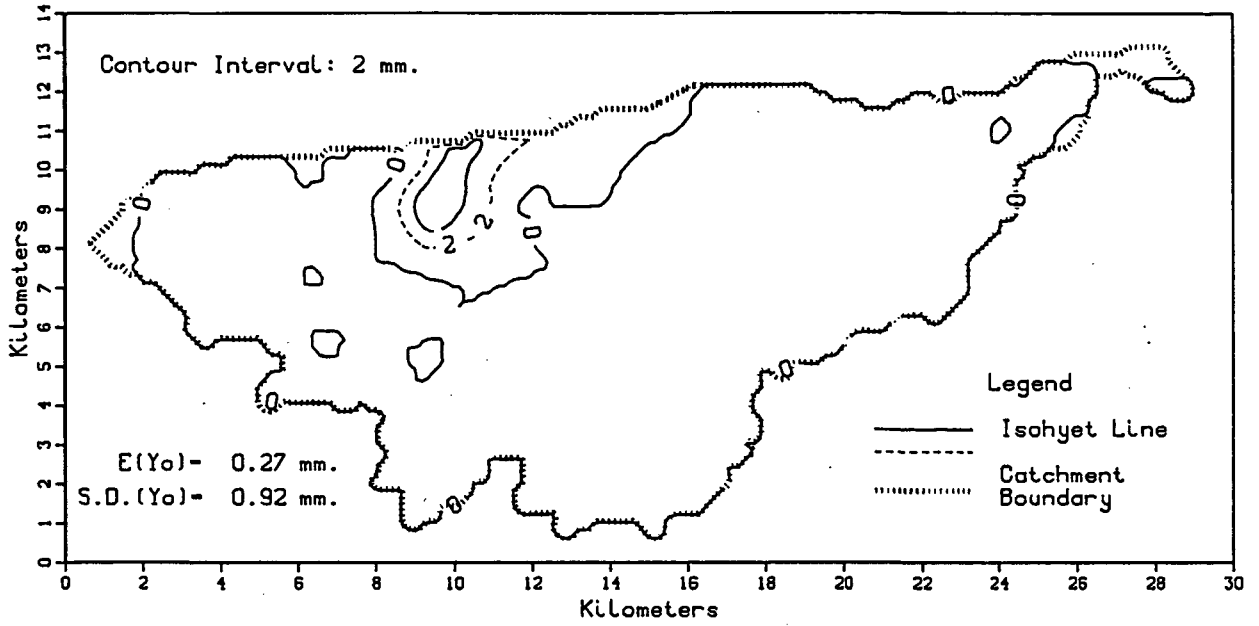


Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.004$ Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.996$ Expected Value of Point Depth (mm.):  $E(Y) = 5.587$ Variance of Point Depth (mm. sq.):  $Var(Y) = 50.220$ Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.187$ 

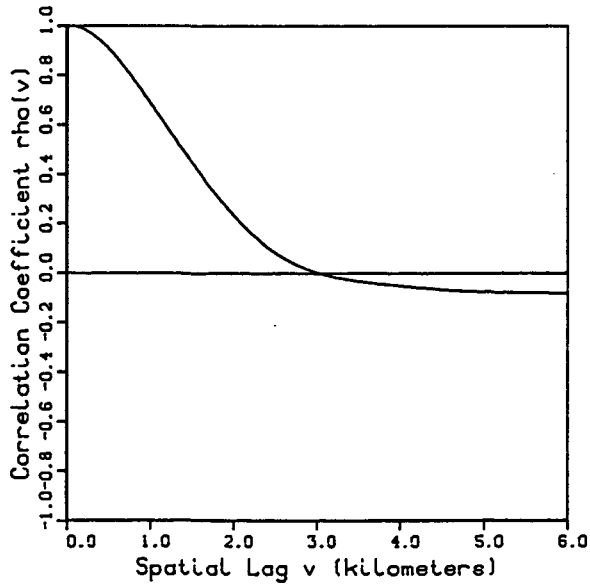
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.827	0.0	1.000	0.00	1.000
2	0.594	0.2	0.994	0.04	1.032
3	0.476	0.4	0.976	0.16	1.058
4	0.379	0.6	0.949	0.36	1.074
5	0.331	0.8	0.914	0.64	1.080
6	0.299	1.0	0.873	1.00	1.078
7	0.258	1.2	0.827	1.44	1.068
8	0.190	1.4	0.778	1.96	1.047
9	0.166	1.6	0.727	2.56	1.015
10	0.153	1.8	0.675	3.24	0.973
11	0.142	2.0	0.624	4.00	0.924
12	0.133	2.2	0.572	4.84	0.869
13	0.124	2.4	0.521	5.76	0.812
14	0.116	2.6	0.470	6.76	0.755
15	0.108	2.8	0.420	7.84	0.700
16	0.101	3.0	0.372	9.00	0.648
17	0.094	3.2	0.325	10.24	0.600
18	0.087	3.4	0.280	11.56	0.555
19	0.080	3.6	0.238	12.96	0.513
20	0.073	3.8	0.198	14.44	0.475
21	0.066	4.0	0.160	16.00	0.439
22	0.059	4.2	0.124	17.64	0.405
23	0.053	4.4	0.090	19.36	0.372
24	0.046	4.6	0.058	21.16	0.342
25	0.040	4.8	0.028	23.04	0.314
26	0.034	5.0	0.001	25.00	0.288
27	0.029	5.2	-.024	27.04	0.264
28	0.024	5.4	-.046	29.16	0.237
29	0.021	5.6	-.065	31.36	0.209
30	0.018	5.8	-.081	33.64	0.175
31	0.015	6.0	-.096	36.00	0.136
32	0.013				
33	0.010				
34	0.007				
35	0.003				
36	0.000				
37	0.000				

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

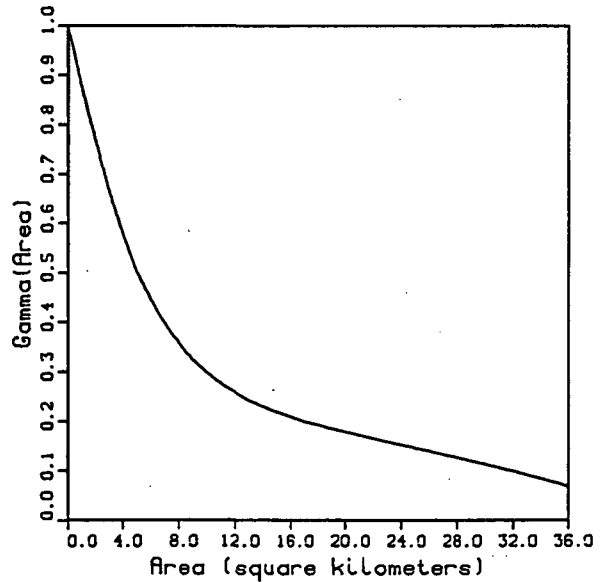
Storm Day  
 Aug 18, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.829$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.171$

Expected Value of Point Depth (mm.):  $E(Y)=0.172$

Variance of Point Depth (mm. sq.):  $Var(Y)=0.491$

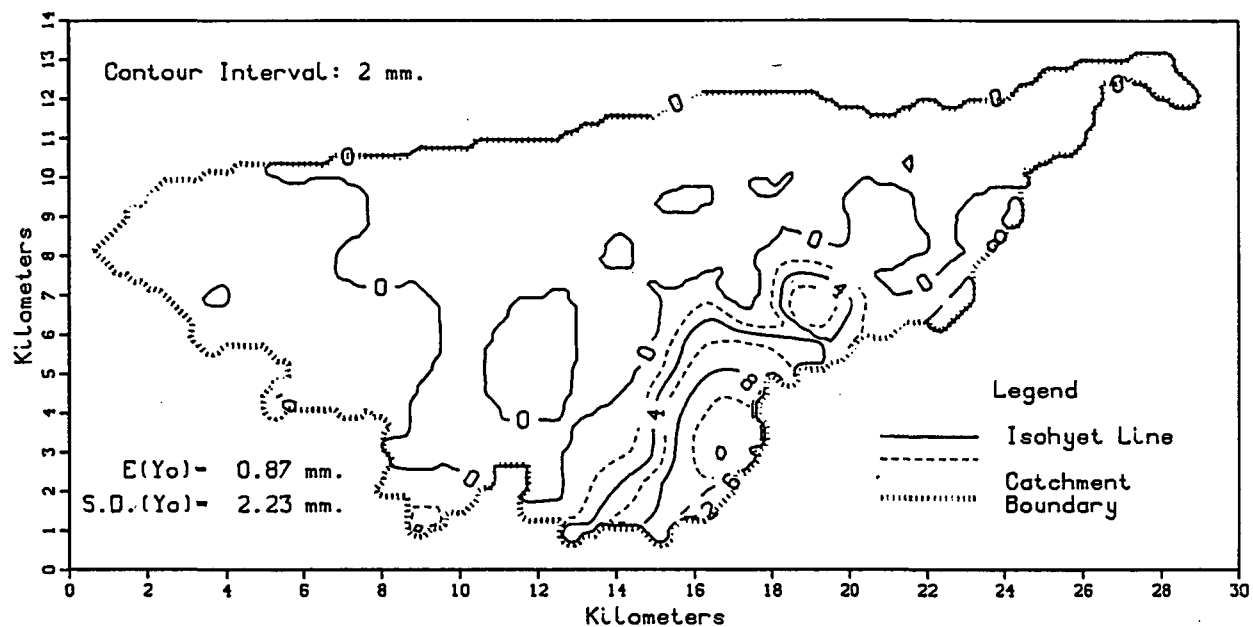
Coef. of Skewness of Point Depth:  $S.C.(Y)=5.069$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.053	0.0	1.000	0.00	1.000
2	0.034	0.2	0.984	0.04	0.996
3	0.022	0.4	0.938	0.16	0.982
4	0.013	0.6	0.867	0.36	0.958
5	0.004	0.8	0.779	0.64	0.923
6	0.000	1.0	0.683	1.00	0.879
		1.2	0.585	1.44	0.829
		1.4	0.489	1.96	0.771
		1.6	0.396	2.56	0.706
		1.8	0.309	3.24	0.640
		2.0	0.230	4.00	0.575
		2.2	0.161	4.84	0.513
		2.4	0.103	5.76	0.456
		2.6	0.057	6.76	0.405
		2.8	0.023	7.84	0.361
		3.0	-.002	9.00	0.323
		3.2	-.019	10.24	0.291
		3.4	-.032	11.56	0.264
		3.6	-.041	12.96	0.241
		3.8	-.049	14.44	0.222
		4.0	-.056	16.00	0.207
		4.2	-.063	17.64	0.193
		4.4	-.069	19.36	0.181
		4.6	-.073	21.16	0.169
		4.8	-.077	23.04	0.156
		5.0	-.080	25.00	0.144
		5.2	-.082	27.04	0.131
		5.4	-.083	29.16	0.117
		5.6	-.084	31.36	0.102
		5.8	-.085	33.64	0.085
		6.0	-.085	36.00	0.067

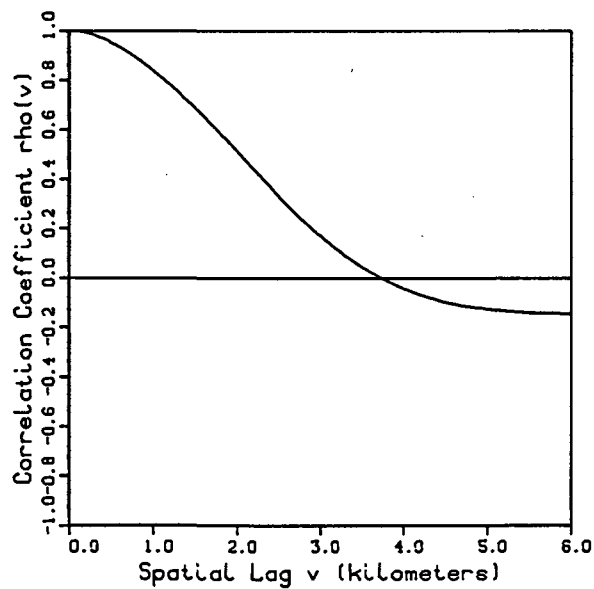


Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

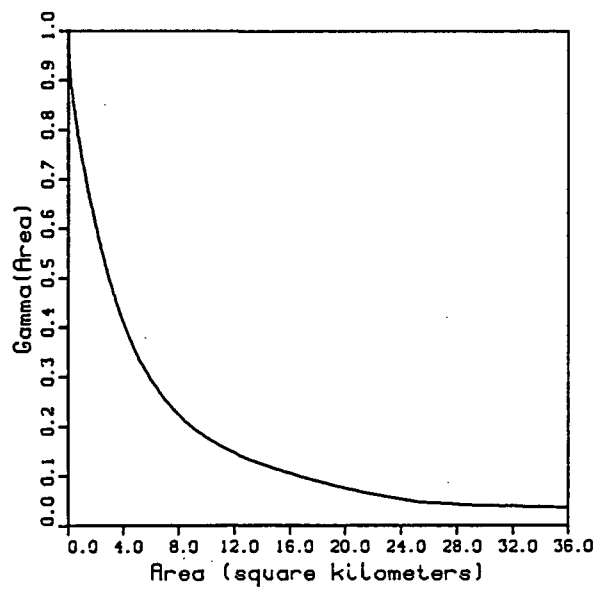
Storm Day  
 Aug 19, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.467$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.533$

Expected Value of Point Depth (mm.):  $E(Y) = 1.073$

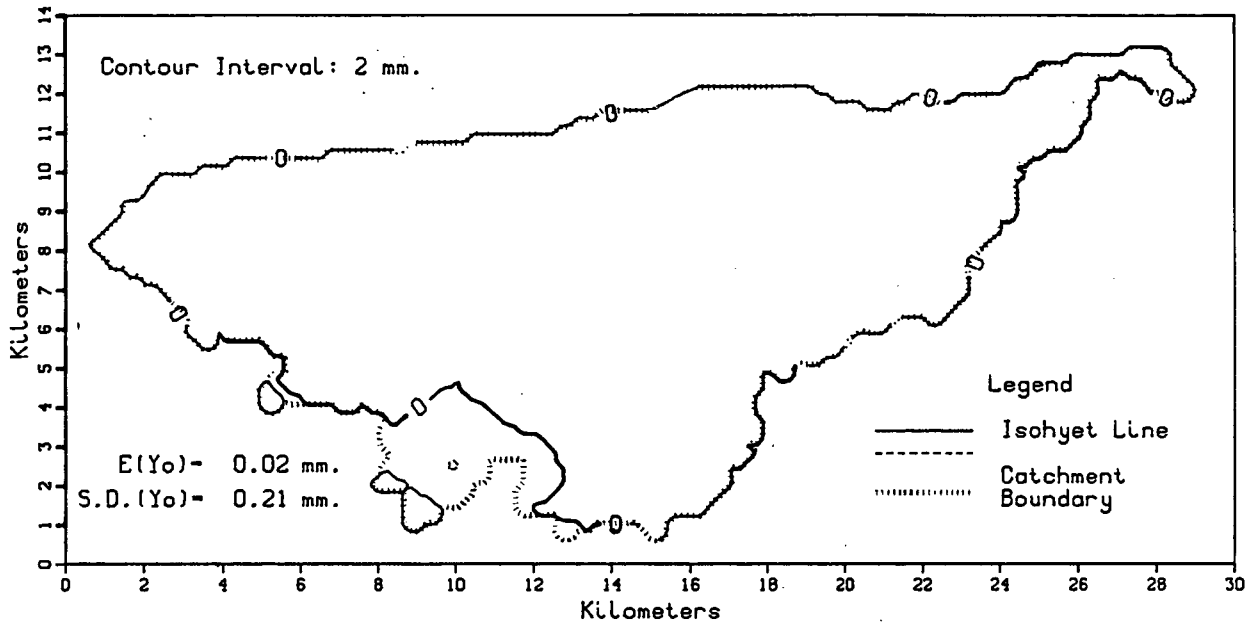
Variance of Point Depth (mm. sq.):  $Var(Y) = 5.556$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.748$

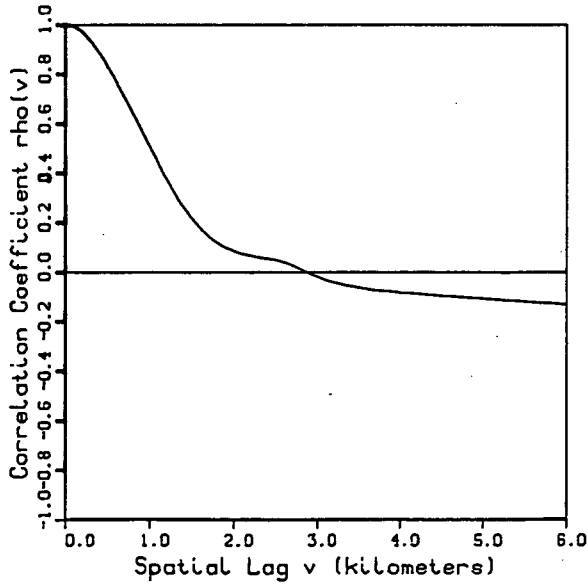
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.199	0.0	1.000	0.00	1.000
2	0.134	0.2	0.991	0.04	0.961
3	0.117	0.4	0.966	0.16	0.917
4	0.100	0.6	0.930	0.36	0.865
5	0.085	0.8	0.886	0.64	0.809
6	0.070	1.0	0.834	1.00	0.745
7	0.053	1.2	0.776	1.44	0.678
8	0.039	1.4	0.714	1.96	0.608
9	0.025	1.6	0.648	2.56	0.538
10	0.016	1.8	0.578	3.24	0.471
11	0.009	2.0	0.508	4.00	0.409
12	0.001	2.2	0.437	4.84	0.353
13	0.000	2.4	0.363	5.76	0.304
		2.6	0.291	6.76	0.262
		2.8	0.225	7.84	0.226
		3.0	0.166	9.00	0.197
		3.2	0.112	10.24	0.172
		3.4	0.063	11.56	0.151
		3.6	0.021	12.96	0.133
		3.8	-.015	14.44	0.118
		4.0	-.046	16.00	0.104
		4.2	-.071	17.64	0.091
		4.4	-.093	19.36	0.079
		4.6	-.110	21.16	0.067
		4.8	-.121	23.04	0.057
		5.0	-.129	25.00	0.048
		5.2	-.137	27.04	0.044
		5.4	-.142	29.16	0.040
		5.6	-.144	31.36	0.039
		5.8	-.146	33.64	0.037
		6.0	-.150	36.00	0.035

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

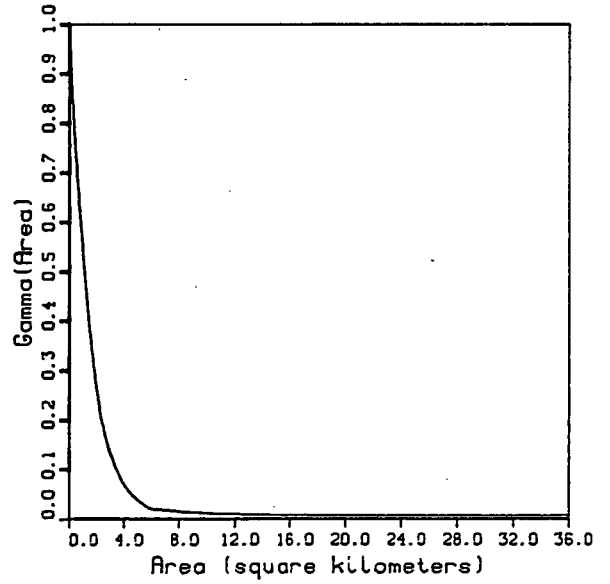
Storm Day  
 Aug 21, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.945$

Wetted Fraction of Total Basin Area:  $(\hat{A}_{cw}/A_c)=0.055$

Expected Value of Point Depth (mm.):  $E(Y) = 0.028$

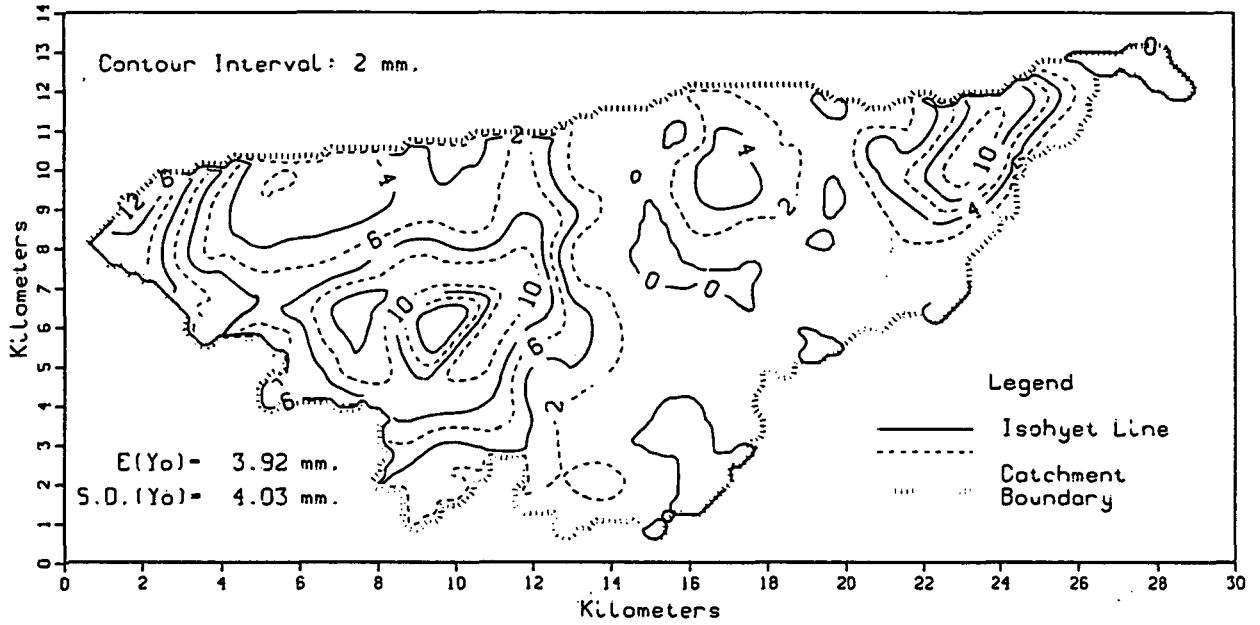
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.036$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 8.099$

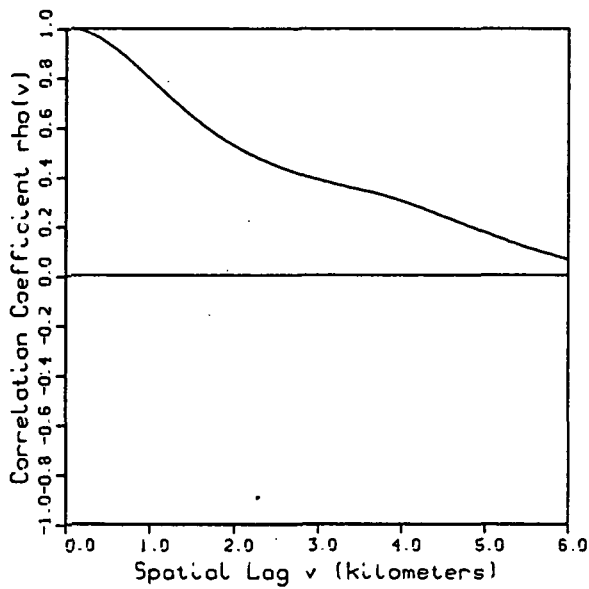
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.012	0.0	1.000	0.00	1.000
2	0.000	0.2	0.967	0.04	0.963
3	0.000	0.4	0.883	0.16	0.897
		0.6	0.767	0.36	0.802
		0.8	0.638	0.64	0.681
		1.0	0.503	1.00	0.543
		1.2	0.371	1.44	0.403
		1.4	0.258	1.96	0.274
		1.6	0.172	2.56	0.176
		1.8	0.115	3.24	0.113
		2.0	0.081	4.00	0.068
		2.2	0.063	4.84	0.041
		2.4	0.051	5.76	0.021
		2.6	0.037	6.76	0.017
		2.8	0.006	7.84	0.014
		3.0	-.023	9.00	0.012
		3.2	-.045	10.24	0.010
		3.4	-.061	11.56	0.009
		3.6	-.072	12.96	0.008
		3.8	-.080	14.44	0.007
		4.0	-.087	16.00	0.007
		4.2	-.092	17.64	0.006
		4.4	-.097	19.36	0.006
		4.6	-.102	21.16	0.006
		4.8	-.106	23.04	0.006
		5.0	-.111	25.00	0.006
		5.2	-.116	27.04	0.006
		5.4	-.121	29.16	0.006
		5.6	-.126	31.36	0.006
		5.8	-.131	33.64	0.006
		6.0	-.136	36.00	0.007

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

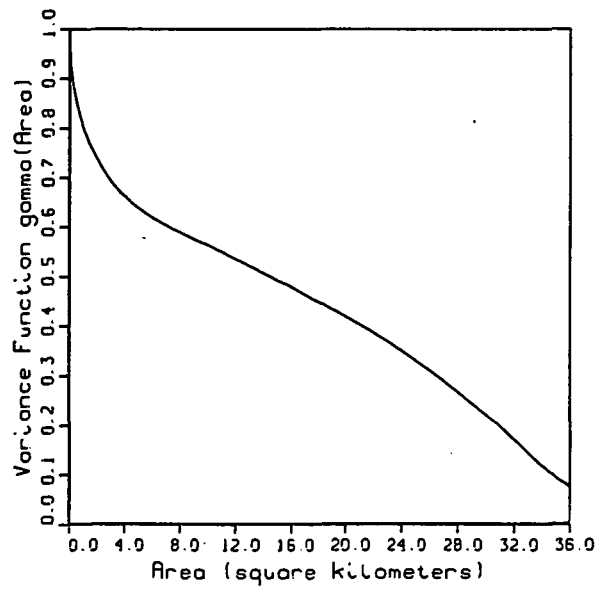
Storm Day  
 Aug 22, 1970



Spatial Correlation



Variance Function



Storm Day Aug 22 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.050$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.950$

Expected Value of Point Depth (mm.):  $E(Y) = 4.121$

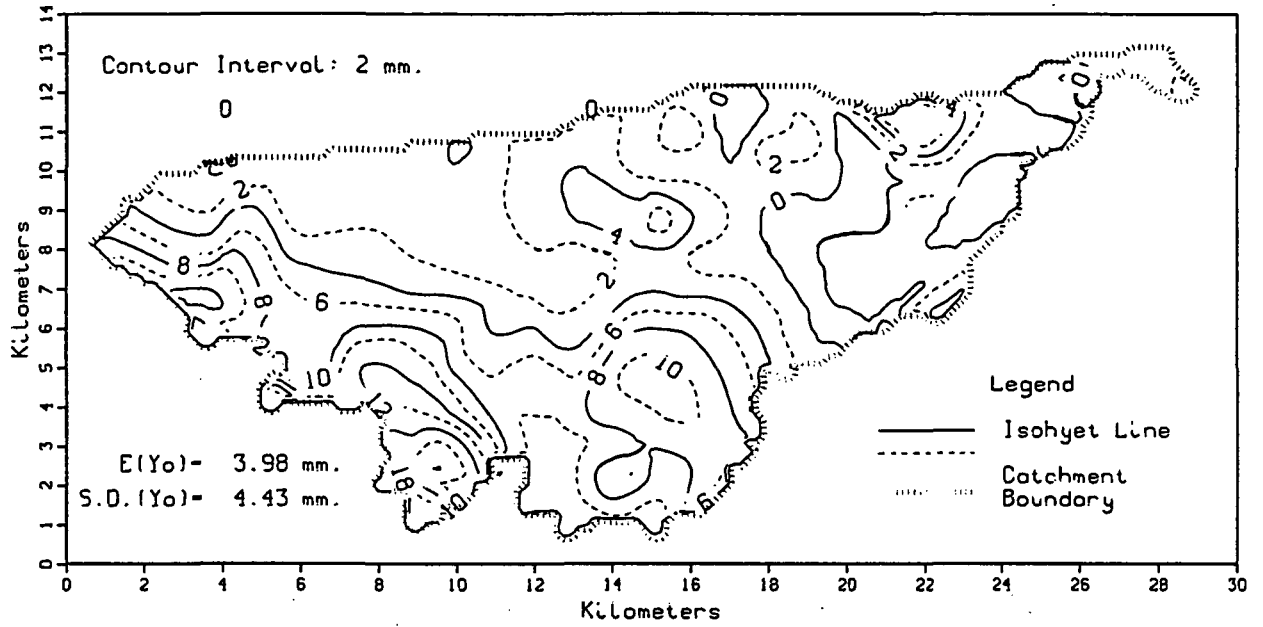
Variance of Point Depth (mm. sq.):  $Var(Y) = 14.551$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.924$

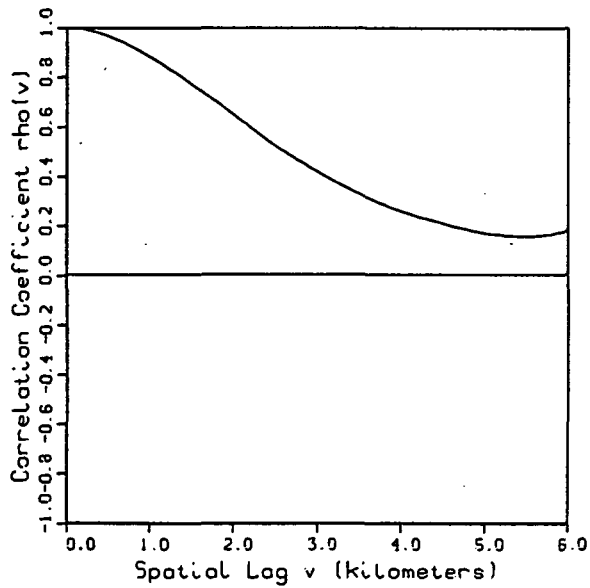
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.725	0.0	1.000	0.00	1.000
2	0.607	0.2	0.989	0.04	0.957
3	0.502	0.4	0.958	0.16	0.916
4	0.422	0.6	0.912	0.36	0.876
5	0.345	0.8	0.855	0.64	0.839
6	0.287	1.0	0.793	1.00	0.802
7	0.238	1.2	0.731	1.44	0.769
8	0.186	1.4	0.670	1.96	0.738
9	0.139	1.6	0.615	2.56	0.709
10	0.097	1.8	0.565	3.24	0.682
11	0.053	2.0	0.523	4.00	0.660
12	0.028	2.2	0.487	4.84	0.639
13	0.017	2.4	0.456	5.76	0.621
14	0.014	2.6	0.429	6.76	0.604
15	0.011	2.8	0.406	7.84	0.589
16	0.005	3.0	0.386	9.00	0.574
17	0.003	3.2	0.368	10.24	0.558
18	0.001	3.4	0.352	11.56	0.540
19	0.000	3.6	0.337	12.96	0.520
		3.8	0.320	14.44	0.499
		4.0	0.299	16.00	0.476
		4.2	0.276	17.64	0.453
		4.4	0.250	19.36	0.427
		4.6	0.225	21.16	0.398
		4.8	0.200	23.04	0.366
		5.0	0.174	25.00	0.328
		5.2	0.148	27.04	0.287
		5.4	0.124	29.16	0.238
		5.6	0.104	31.36	0.187
		5.8	0.084	33.64	0.126
		6.0	0.065	36.00	0.076

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

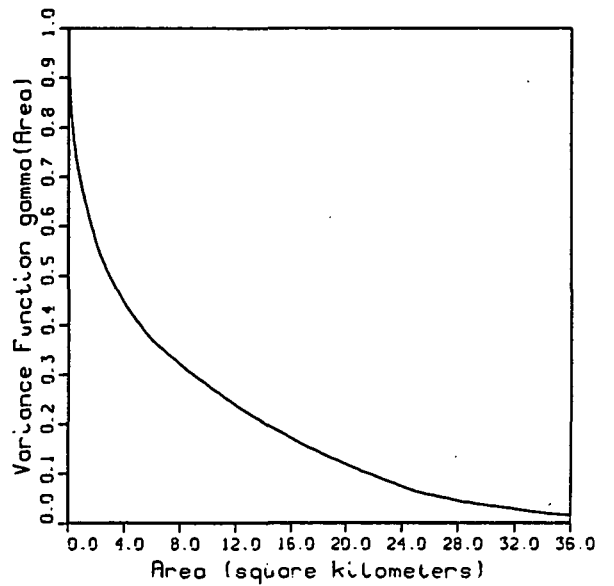
Storm Day  
 Aug 23, 1970



Spatial Correlation



Variance Function



Storm Day Aug 23 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.080$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.920$

Expected Value of Point Depth (mm.):  $E(Y) = 4.457$

Variance of Point Depth (mm. sq.):  $Var(Y) = 18.994$

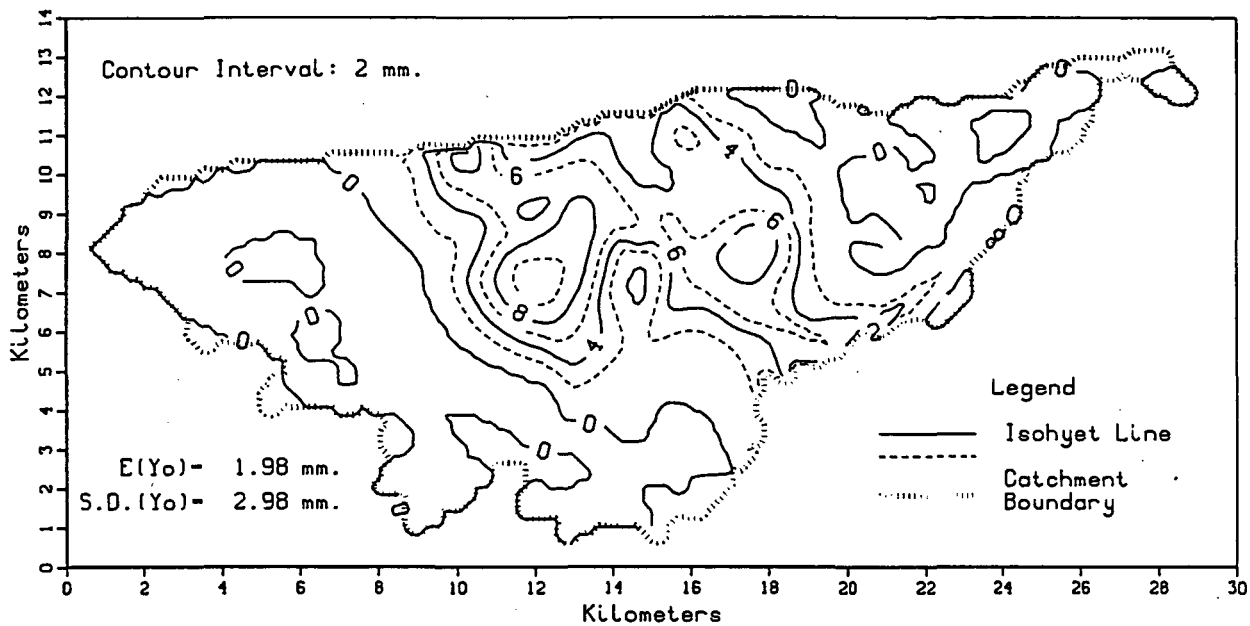
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.412$

Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.762	0.0	1.000	0.00	1.000
2	0.610	0.2	0.993	0.04	0.917
3	0.503	0.4	0.976	0.16	0.841
4	0.431	0.6	0.950	0.36	0.778
5	0.371	0.8	0.918	0.64	0.720
6	0.311	1.0	0.880	1.00	0.669
7	0.254	1.2	0.837	1.44	0.618
8	0.184	1.4	0.792	1.96	0.566
9	0.133	1.6	0.744	2.56	0.521
10	0.092	1.8	0.695	3.24	0.480
11	0.061	2.0	0.645	4.00	0.441
12	0.046	2.2	0.594	4.84	0.407
13	0.035	2.4	0.544	5.76	0.373
14	0.030	2.6	0.498	6.76	0.347
15	0.026	2.8	0.456	7.84	0.322
16	0.023	3.0	0.415	9.00	0.296
17	0.018	3.2	0.377	10.24	0.270
18	0.014	3.4	0.342	11.56	0.244
19	0.010	3.6	0.310	12.96	0.219
20	0.005	3.8	0.281	14.44	0.194
21	0.003	4.0	0.256	16.00	0.170
22	0.002	4.2	0.234	17.64	0.148
23	0.001	4.4	0.216	19.36	0.125
24	0.001	4.6	0.197	21.16	0.103
25	0.000	4.8	0.181	23.04	0.083
26	0.000	5.0	0.168	25.00	0.063
27	0.000	5.2	0.159	27.04	0.050
28	0.000	5.4	0.154	29.16	0.038
		5.6	0.156	31.36	0.030
		5.8	0.165	33.64	0.021
		6.0	0.180	36.00	0.015

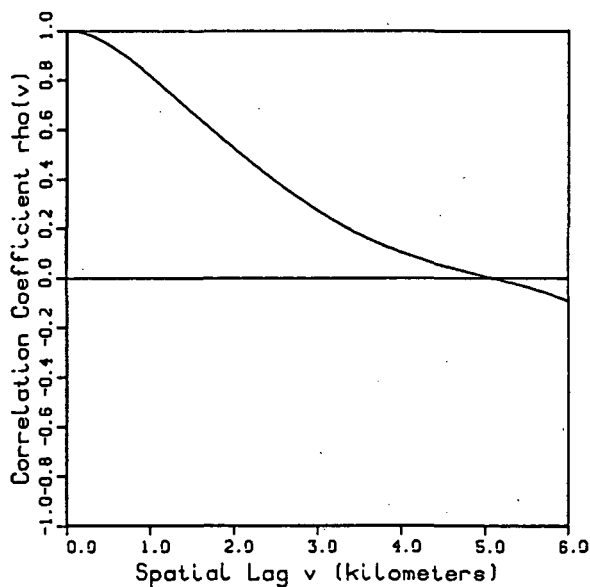


Walnut Gulch, Arizona  
Ac=154.21 sq.km.

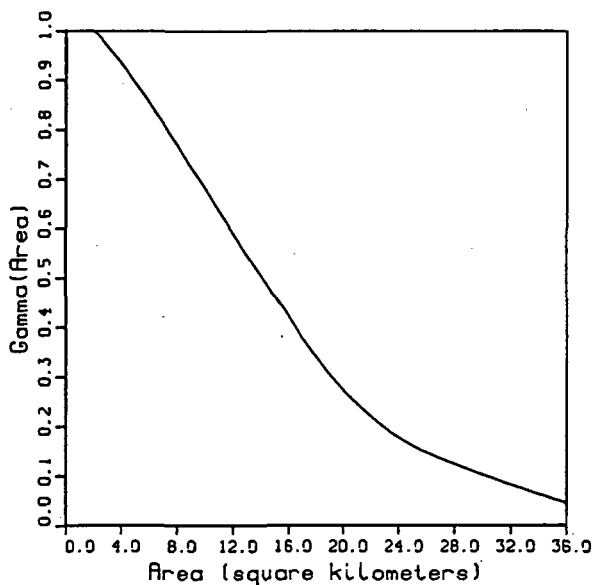
Storm Day  
Aug 26, 1970



Spatial Correlation



Variance Function



Storm Day Aug 26 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.339$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.661$

Expected Value of Point Depth (mm.):  $E(Y) = 1.907$

Variance of Point Depth (mm. sq.):  $Var(Y) = 7.569$

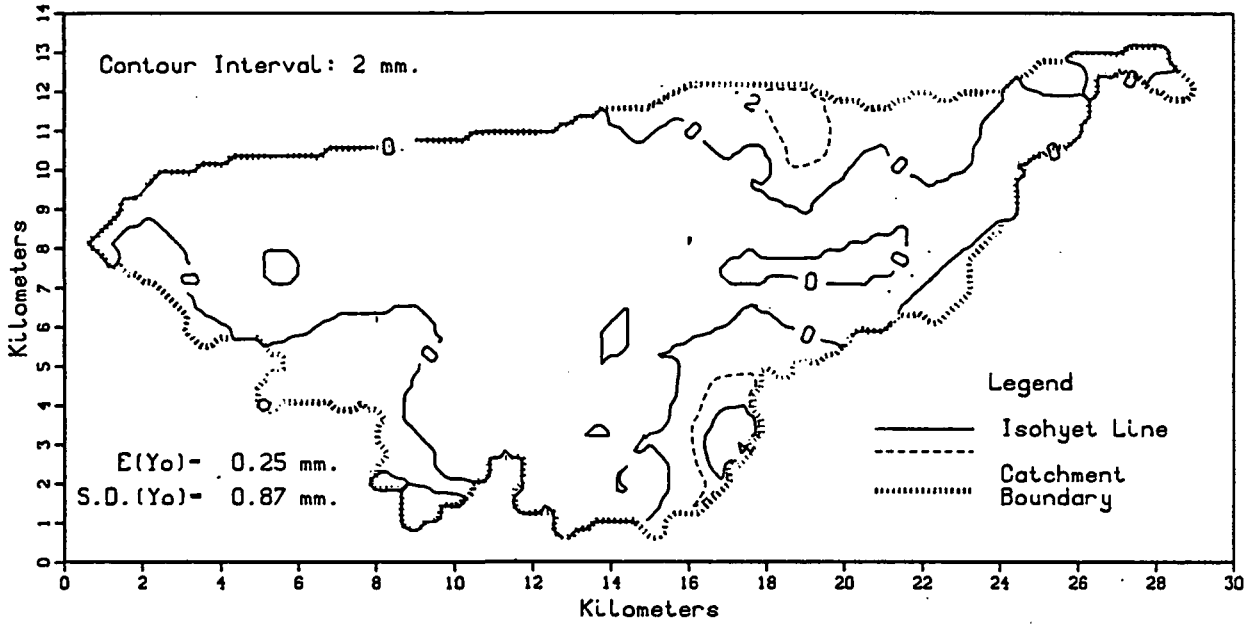
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.301$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.391	0.0	1.000	0.00	1.000
2	0.330	0.2	0.990	0.04	1.017
3	0.285	0.4	0.962	0.16	1.029
4	0.235	0.6	0.921	0.36	1.034
5	0.184	0.8	0.871	0.64	1.033
6	0.124	1.0	0.815	1.00	1.027
7	0.083	1.2	0.757	1.44	1.018
8	0.046	1.4	0.697	1.96	1.003
9	0.018	1.6	0.638	2.56	0.984
10	0.008	1.8	0.579	3.24	0.960
11	0.002	2.0	0.523	4.00	0.933
12	0.000	2.2	0.468	4.84	0.900
		2.4	0.415	5.76	0.863
		2.6	0.364	6.76	0.821
		2.8	0.316	7.84	0.774
		3.0	0.271	9.00	0.722
		3.2	0.230	10.24	0.667
		3.4	0.192	11.56	0.608
		3.6	0.159	12.96	0.547
		3.8	0.129	14.44	0.485
		4.0	0.102	16.00	0.421
		4.2	0.078	17.64	0.354
		4.4	0.057	19.36	0.292
		4.6	0.037	21.16	0.240
		4.8	0.020	23.04	0.195
		5.0	0.004	25.00	0.160
		5.2	-.012	27.04	0.134
		5.4	-.029	29.16	0.110
		5.6	-.049	31.36	0.088
		5.8	-.071	33.64	0.066
		6.0	-.097	36.00	0.045

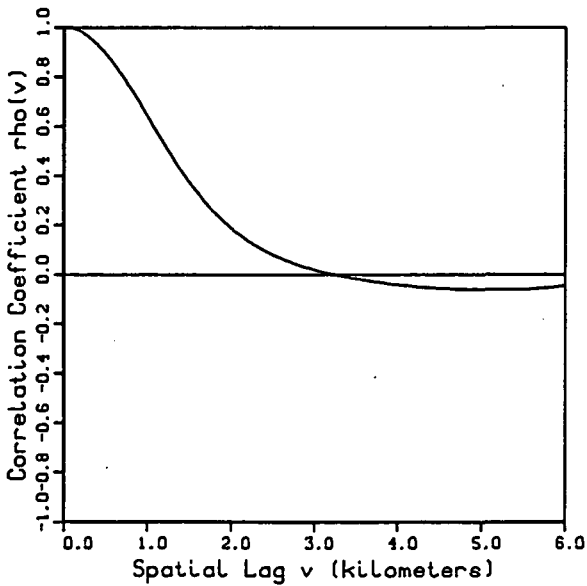
C-2

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

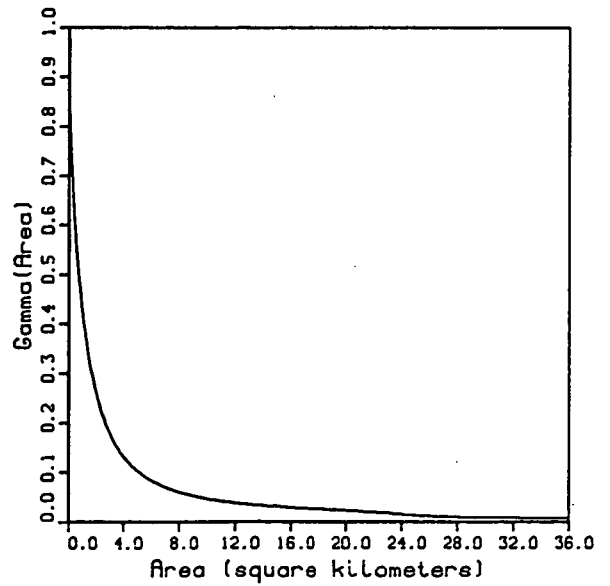
Storm Day  
Sept 2, 1970



Spatial Correlation



Variance Function



Storm Day Sept 2 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.661$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.339$

Expected Value of Point Depth (mm.):  $E(Y) = 0.240$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.541$

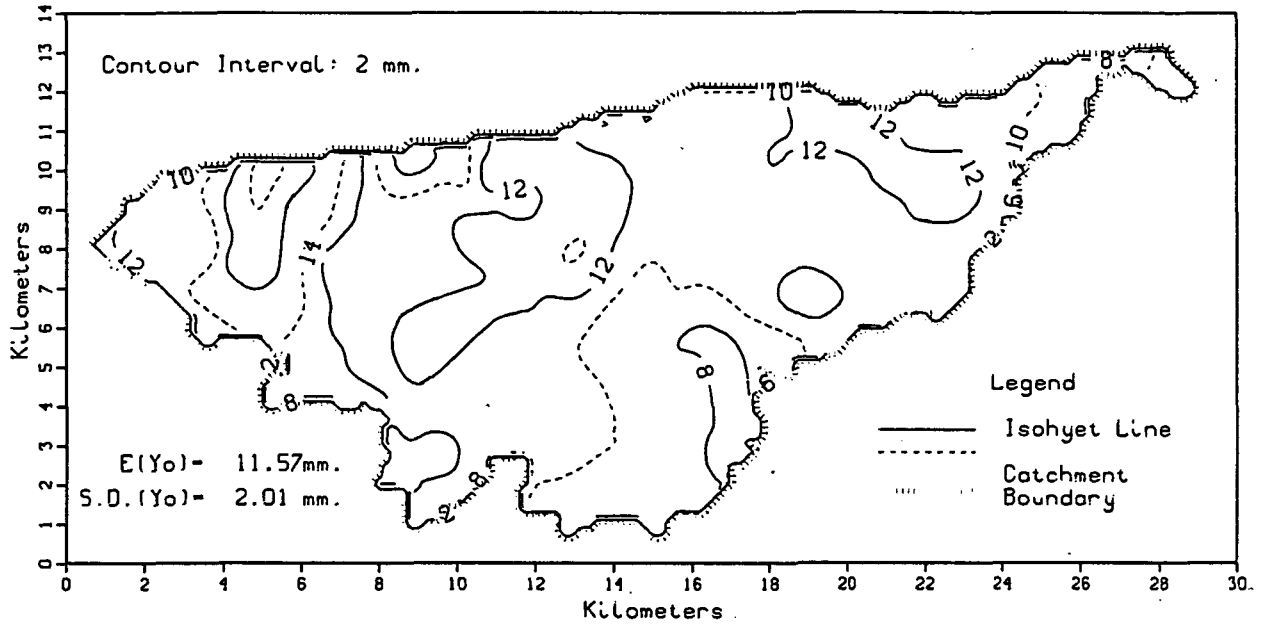
Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.408$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km. sq.)	Gamma (A)
1	0.070	0.0	1.000	0.00	1.000
2	0.037	0.2	0.981	0.04	0.881
3	0.022	0.4	0.929	0.16	0.768
4	0.009	0.6	0.850	0.36	0.647
5	0.004	0.8	0.751	0.64	0.535
6	0.000	1.0	0.639	1.00	0.431
		1.2	0.525	1.44	0.341
		1.4	0.419	1.96	0.267
		1.6	0.327	2.56	0.209
		1.8	0.249	3.24	0.165
		2.0	0.186	4.00	0.132
		2.2	0.135	4.84	0.106
		2.4	0.094	5.76	0.087
		2.6	0.062	6.76	0.073
		2.8	0.037	7.84	0.061
		3.0	0.016	9.00	0.052
		3.2	-.001	10.24	0.045
		3.4	-.015	11.56	0.039
		3.6	-.026	12.96	0.035
		3.8	-.036	14.44	0.031
		4.0	-.045	16.00	0.028
		4.2	-.052	17.64	0.026
		4.4	-.057	19.36	0.023
		4.6	-.061	21.16	0.020
		4.8	-.063	23.04	0.017
		5.0	-.064	25.00	0.012
		5.2	-.065	27.04	0.010
		5.4	-.065	29.16	0.008
		5.6	-.061	31.36	0.007
		5.8	-.054	33.64	0.007
		6.0	-.047	36.00	0.006

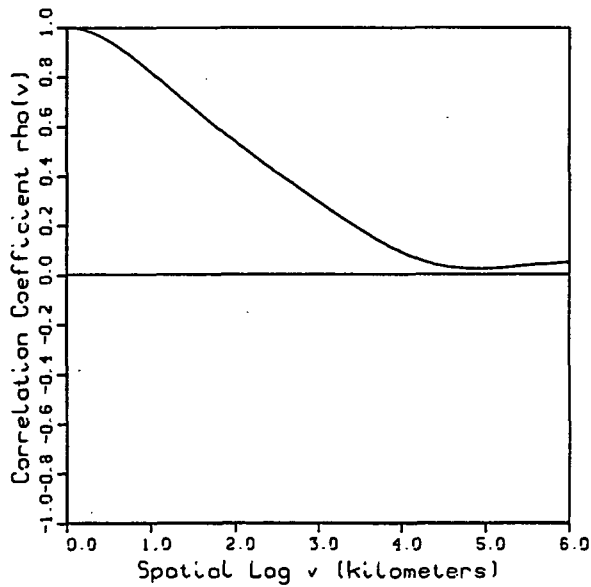
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

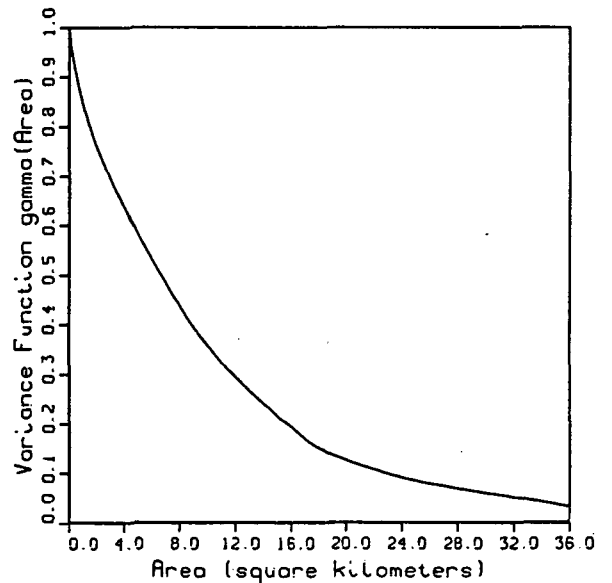
Storm Day  
Sept 3, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 11.431$

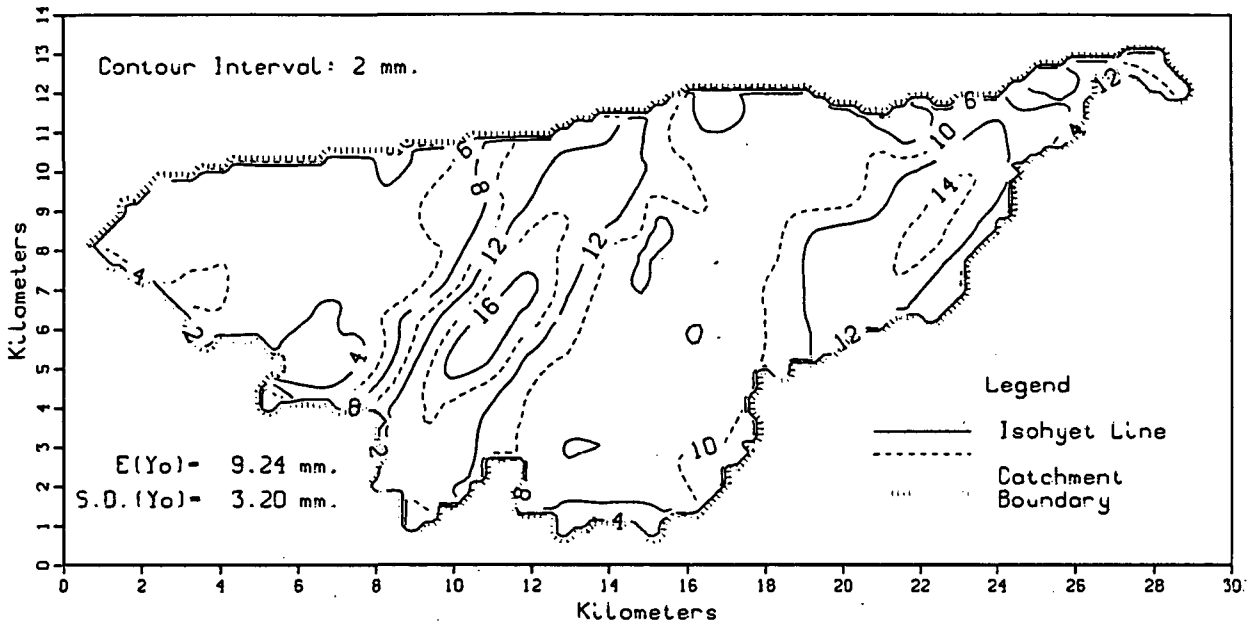
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.543$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.687$

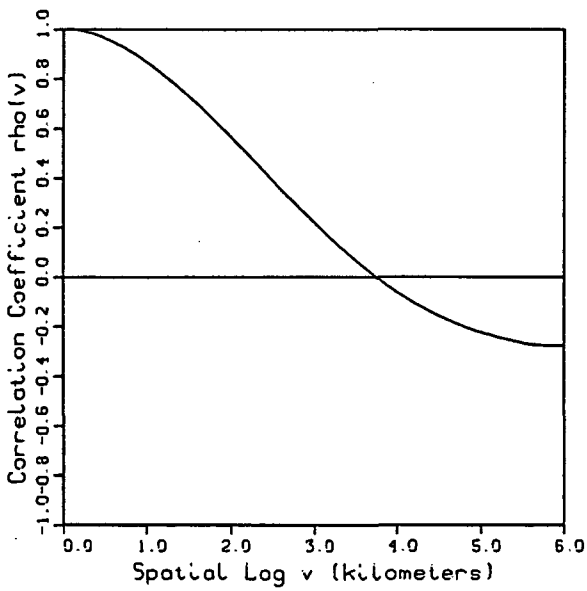
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y>y)$				
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.990	0.04	0.983
3	1.000	0.4	0.962	0.16	0.957
4	1.000	0.6	0.921	0.36	0.923
5	1.000	0.8	0.872	0.64	0.884
6	1.000	1.0	0.817	1.00	0.844
7	1.000	1.2	0.759	1.44	0.802
8	0.972	1.4	0.701	1.96	0.761
9	0.901	1.6	0.644	2.56	0.720
10	0.809	1.8	0.590	3.24	0.677
11	0.603	2.0	0.537	4.00	0.633
12	0.332	2.2	0.486	4.84	0.587
13	0.145	2.4	0.437	5.76	0.540
14	0.076	2.6	0.388	6.76	0.491
15	0.052	2.8	0.341	7.84	0.441
16	0.030	3.0	0.294	9.00	0.393
17	0.016	3.2	0.248	10.24	0.347
18	0.004	3.4	0.203	11.56	0.305
19	0.000	3.6	0.161	12.96	0.267
		3.8	0.123	14.44	0.229
		4.0	0.090	16.00	0.191
		4.2	0.062	17.64	0.156
		4.4	0.041	19.36	0.131
		4.6	0.029	21.16	0.113
		4.8	0.023	23.04	0.097
		5.0	0.024	25.00	0.083
		5.2	0.029	27.04	0.072
		5.4	0.036	29.16	0.062
		5.6	0.041	31.36	0.053
		5.8	0.046	33.64	0.043
		6.0	0.050	36.00	0.032

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

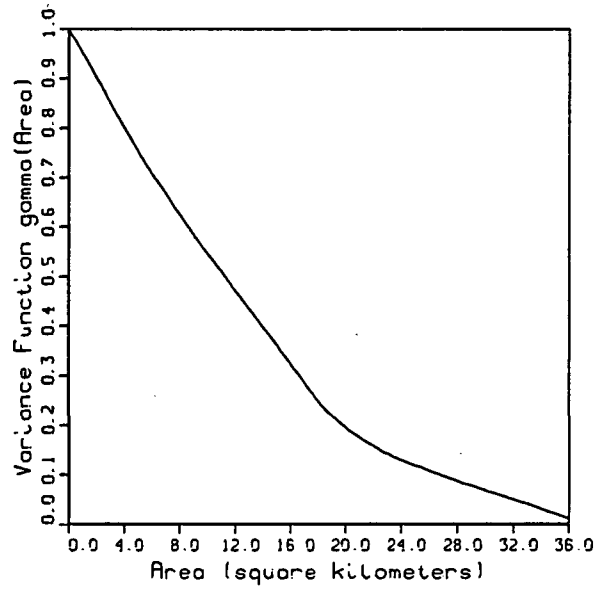
Storm Day  
 Sept 4, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 9.434$

Variance of Point Depth (mm. sq.):  $Var(Y) = 10.152$

Coef. of Skewness of Point Depth:  $S.C.(Y) = -0.021$

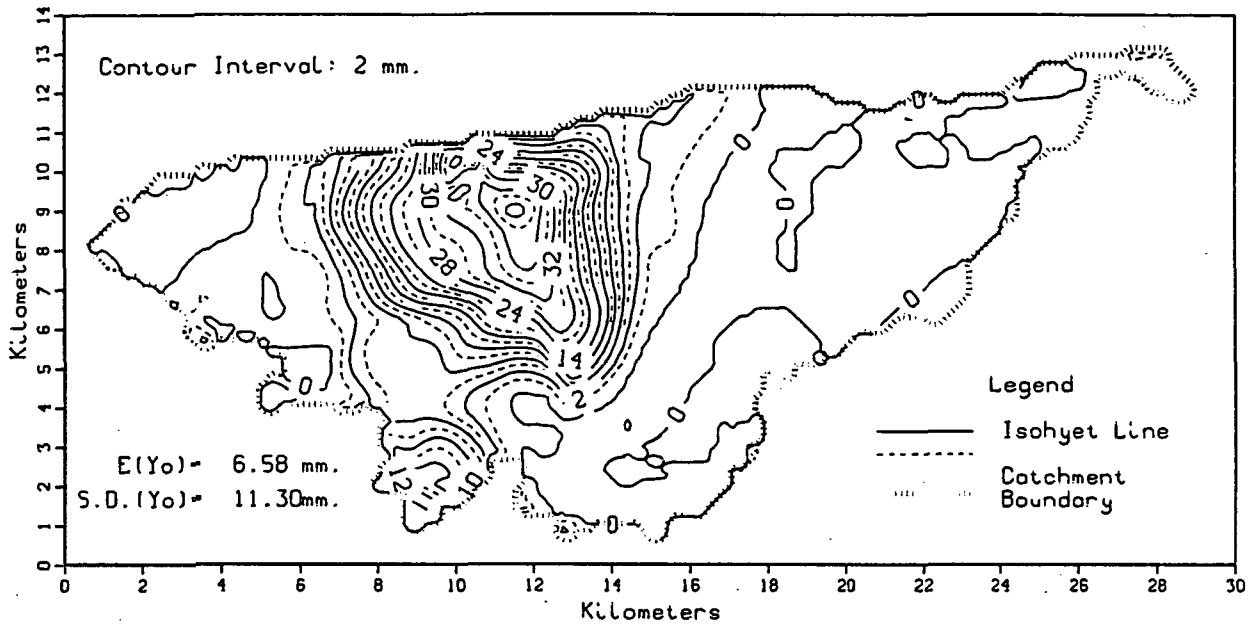
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.993	0.04	0.996
3	1.000	0.4	0.974	0.16	0.989
4	0.977	0.6	0.945	0.36	0.980
5	0.869	0.8	0.907	0.64	0.967
6	0.794	1.0	0.862	1.00	0.950
7	0.760	1.2	0.811	1.44	0.928
8	0.722	1.4	0.754	1.96	0.901
9	0.549	1.6	0.693	2.56	0.869
10	0.406	1.8	0.628	3.24	0.834
11	0.336	2.0	0.561	4.00	0.797
12	0.251	2.2	0.492	4.84	0.757
13	0.148	2.4	0.421	5.76	0.715
14	0.067	2.6	0.350	6.76	0.673
15	0.029	2.8	0.281	7.84	0.628
16	0.016	3.0	0.214	9.00	0.582
17	0.002	3.2	0.151	10.24	0.535
18	0.000	3.4	0.091	11.56	0.485
		3.6	0.034	12.96	0.434
		3.8	-0.019	14.44	0.380
		4.0	-0.065	16.00	0.322
		4.2	-0.108	17.64	0.261
		4.4	-0.145	19.36	0.208
		4.6	-0.176	21.16	0.171
		4.8	-0.203	23.04	0.140
		5.0	-0.226	25.00	0.117
		5.2	-0.245	27.04	0.095
		5.4	-0.261	29.16	0.075
		5.6	-0.274	31.36	0.055
		5.8	-0.280	33.64	0.034
		6.0	-0.278	36.00	0.011



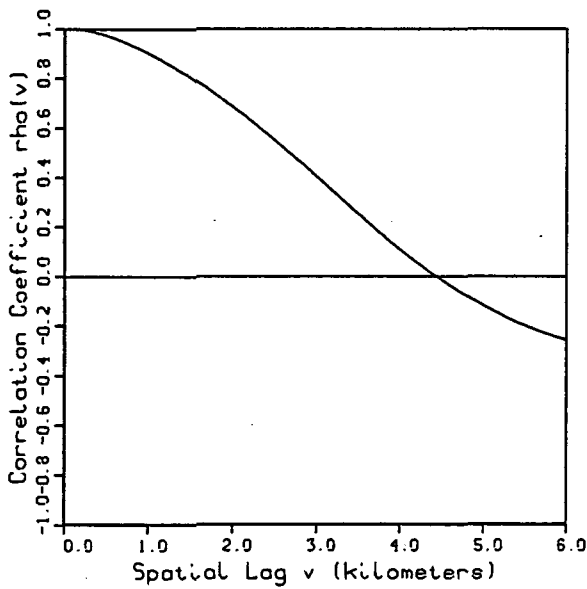
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

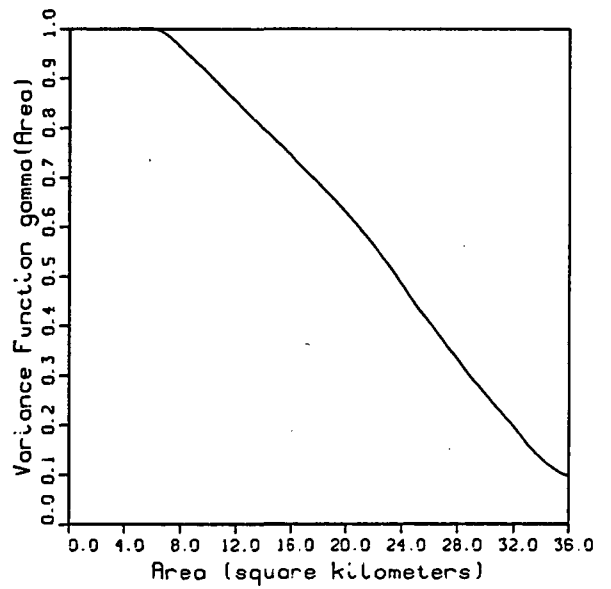
Storm Day  
Sept 8, 1970



Spatial Correlation



Variance Function



Storm Day Sept 8 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.315$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.685$

Expected Value of Point Depth (mm.):  $E(Y) = 6.400$

Variance of Point Depth (mm. sq.):  $Var(Y)=105.592$

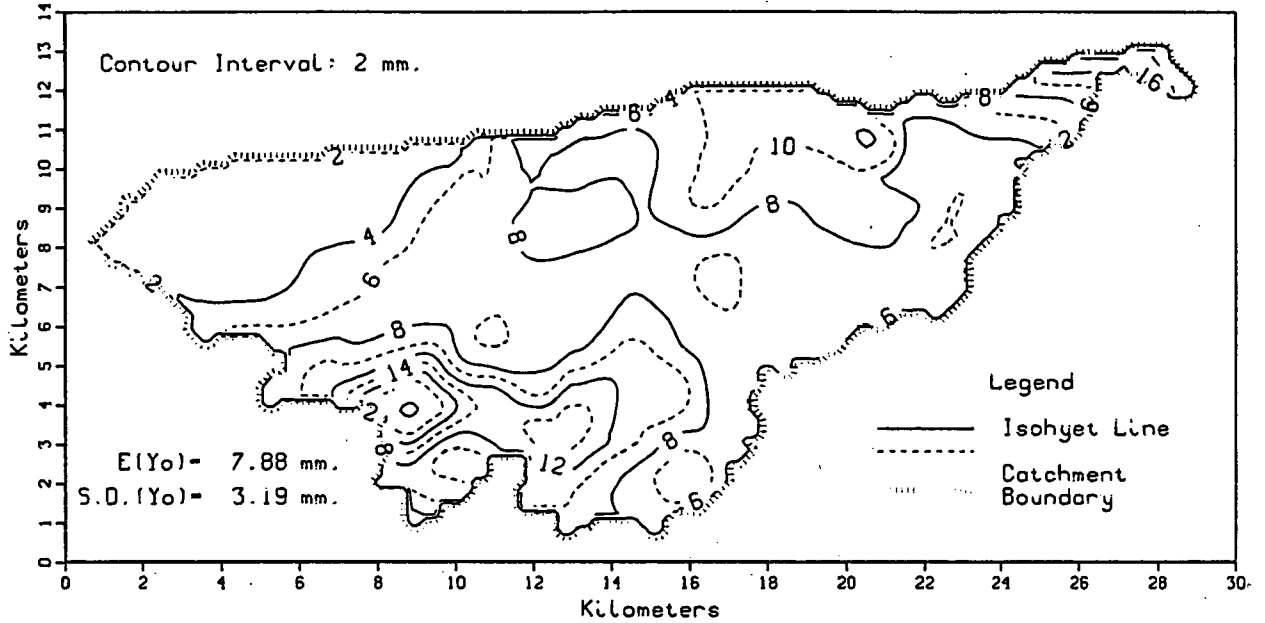
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.646$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.452	0.0	1.000	0.00	1.000
3	0.372	0.2	0.995	0.04	1.019
5	0.325	0.4	0.980	0.16	1.036
7	0.283	0.6	0.958	0.36	1.050
9	0.248	0.8	0.930	0.64	1.059
11	0.224	1.0	0.897	1.00	1.067
13	0.203	1.2	0.860	1.44	1.071
15	0.183	1.4	0.820	1.96	1.072
17	0.163	1.6	0.776	2.56	1.067
19	0.146	1.8	0.729	3.24	1.059
21	0.131	2.0	0.680	4.00	1.047
23	0.116	2.2	0.628	4.84	1.032
25	0.101	2.4	0.574	5.76	1.014
27	0.085	2.6	0.518	6.76	0.991
29	0.070	2.8	0.460	7.84	0.965
31	0.054	3.0	0.401	9.00	0.935
33	0.037	3.2	0.341	10.24	0.901
35	0.023	3.4	0.280	11.56	0.865
37	0.011	3.6	0.220	12.96	0.826
39	0.003	3.8	0.161	14.44	0.785
41	0.000	4.2	0.054	17.64	0.697
		4.4	0.006	19.36	0.647
		4.6	-0.038	21.16	0.589
		4.8	-0.080	23.04	0.522
		5.0	-0.119	25.00	0.441
		5.2	-0.154	27.04	0.368
		5.4	-0.186	29.16	0.289
		5.6	-0.214	31.36	0.219
		5.8	-0.238	33.64	0.142
		6.0	-0.259	36.00	0.096

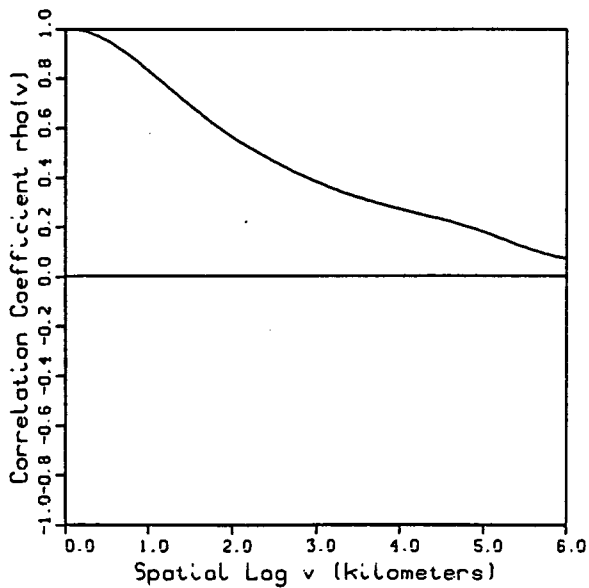
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OF POOR QUALITY

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

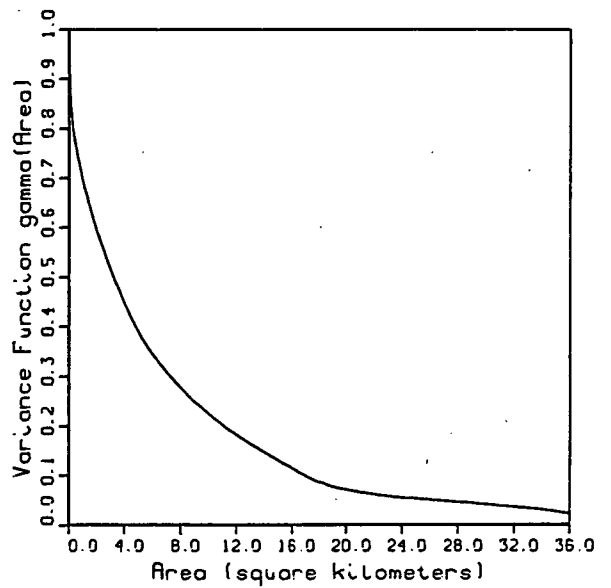
Storm Day  
Sept 9, 1970



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 8.003$

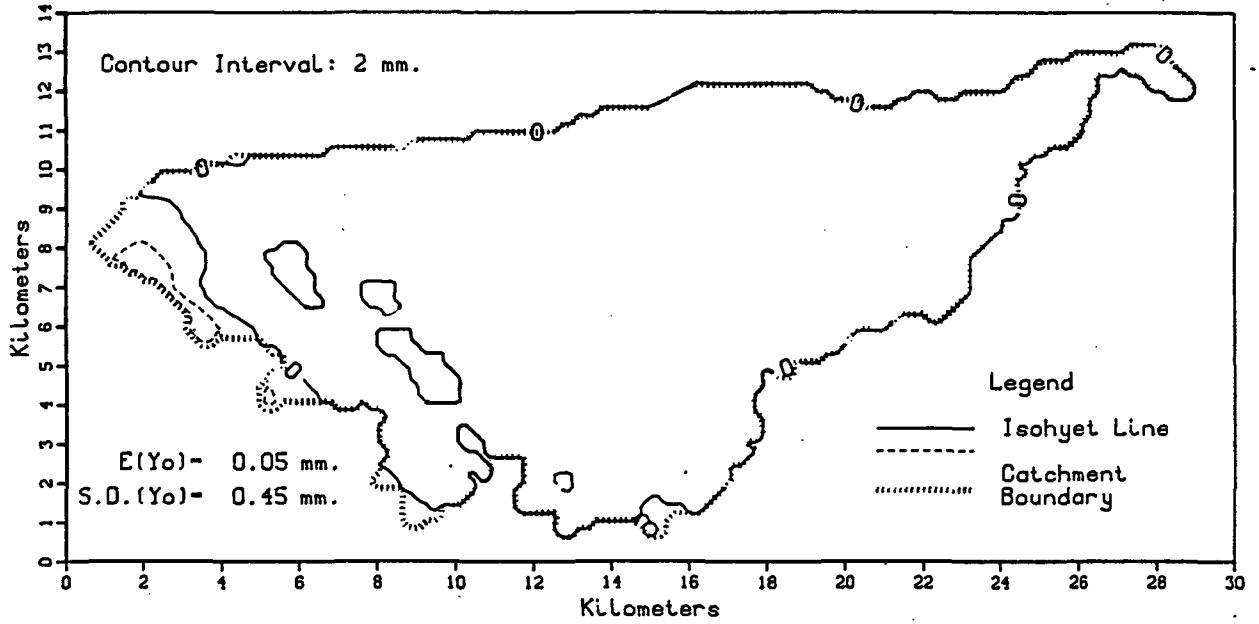
Variance of Point Depth (mm. sq.):  $Var(Y) = 10.486$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.933$

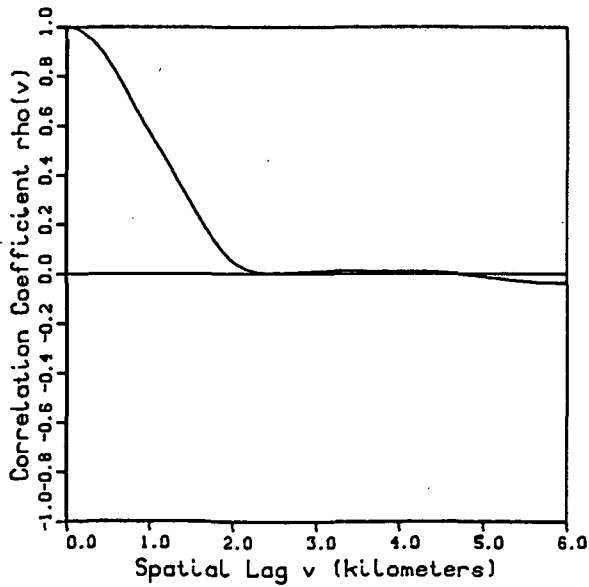
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.992	0.04	0.926
3	0.944	0.4	0.968	0.16	0.848
4	0.871	0.6	0.930	0.36	0.788
5	0.846	0.8	0.882	0.64	0.745
6	0.798	1.0	0.827	1.00	0.698
7	0.631	1.2	0.770	1.44	0.649
8	0.415	1.4	0.714	1.96	0.599
9	0.288	1.6	0.659	2.56	0.548
10	0.211	1.8	0.607	3.24	0.496
11	0.129	2.0	0.561	4.00	0.445
12	0.088	2.2	0.520	4.84	0.397
13	0.067	2.4	0.481	5.76	0.351
14	0.046	2.6	0.445	6.76	0.315
15	0.030	2.8	0.412	7.84	0.280
16	0.025	3.0	0.381	9.00	0.247
17	0.020	3.2	0.353	10.24	0.217
18	0.015	3.4	0.329	11.56	0.189
19	0.010	3.6	0.307	12.96	0.163
20	0.004	3.8	0.287	14.44	0.138
21	0.001	4.0	0.270	16.00	0.113
22	0.000	4.2	0.253	17.64	0.090
		4.4	0.236	19.36	0.074
		4.6	0.219	21.16	0.064
		4.8	0.199	23.04	0.056
		5.0	0.177	25.00	0.052
		5.2	0.152	27.04	0.047
		5.4	0.128	29.16	0.042
		5.6	0.104	31.36	0.037
		5.8	0.085	33.64	0.031
		6.0	0.072	36.00	0.022

Walnut Gulch, Arizona  
Ac-154.21 sq.km.

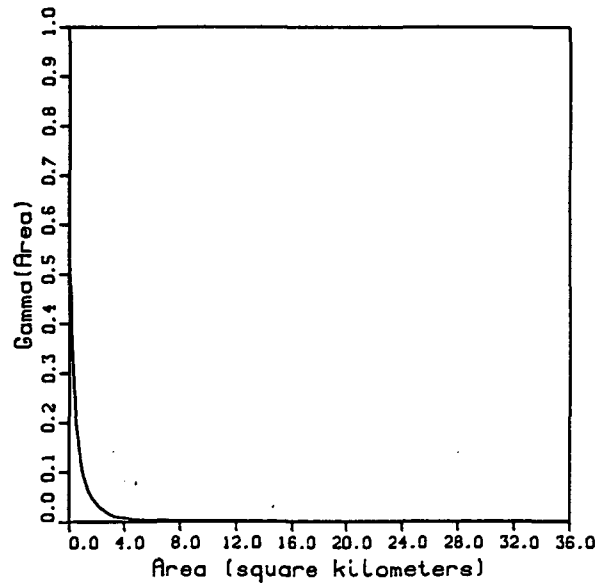
Storm Day  
Sept 11, 1970



Spatial Correlation



Variance Function



Storm Day Sept 11 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.907$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.093$

Expected Value of Point Depth (mm.):  $E(Y) = 0.054$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.112$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.622$

Spatial Distribution  
of Total Storm Depth  
y (mm.)     $A_{cw}/A_c (Y \geq y)$

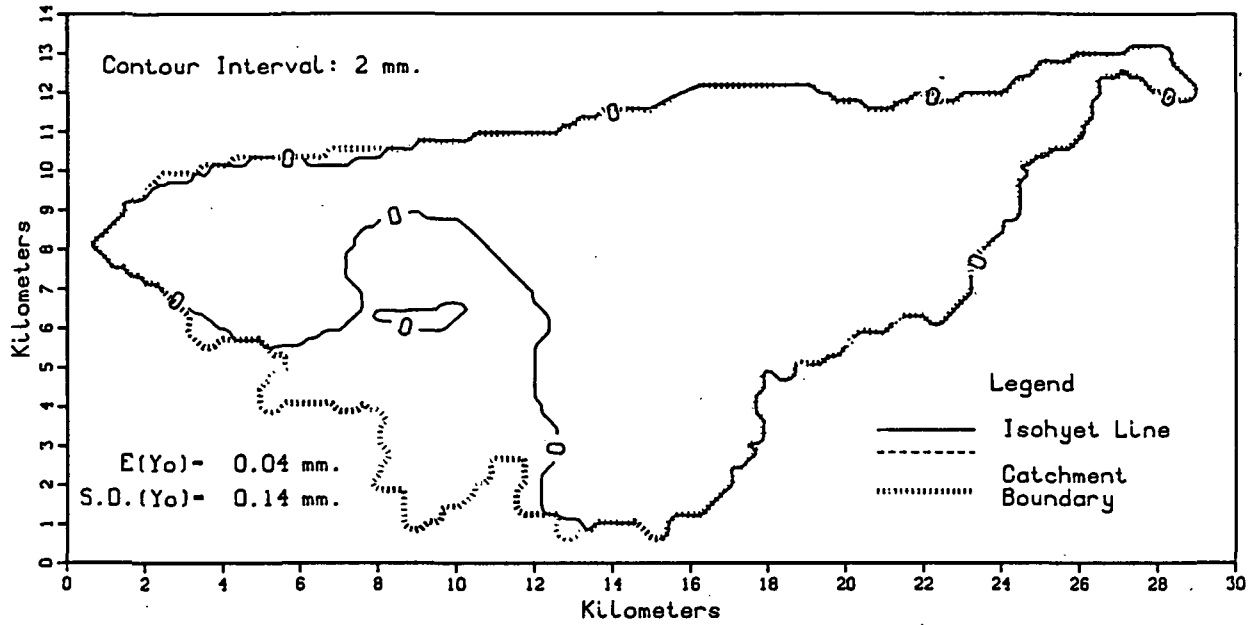
Spatial Correlation  
v (km.)    rho (v)

Variance Function  
A (km.sq.)    Gamma (A)

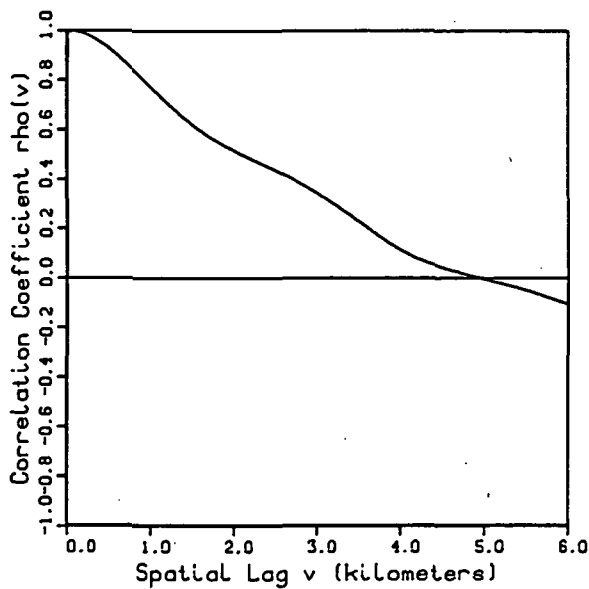
1	0.018	0.0	1.000	0.00	1.000
2	0.009	0.2	0.977	0.04	0.672
3	0.002	0.4	0.911	0.16	0.424
4	0.000	0.6	0.810	0.36	0.279
		0.8	0.688	0.64	0.179
		1.0	0.569	1.00	0.107
		1.2	0.459	1.44	0.063
		1.4	0.345	1.96	0.038
		1.6	0.226	2.56	0.022
		1.8	0.123	3.24	0.010
		2.0	0.048	4.00	0.006
		2.2	0.012	4.84	0.003
		2.4	0.000	5.76	0.002
		2.6	0.000	6.76	0.001
		2.8	0.004	7.84	0.001
		3.0	0.008	9.00	0.001
		3.2	0.011	10.24	0.000
		3.4	0.011	11.56	0.000
		3.6	0.009	12.96	0.000
		3.8	0.006	14.44	0.000
		4.0	0.007	16.00	0.000
		4.2	0.007	17.64	0.000
		4.4	0.006	19.36	0.000
		4.6	0.001	21.16	0.000
		4.8	-0.006	23.04	0.000
		5.0	-0.014	25.00	0.000
		5.2	-0.023	27.04	0.000
		5.4	-0.031	29.16	0.000
		5.6	-0.038	31.36	0.000
		5.8	-0.040	33.64	0.000
		6.0	-0.040	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

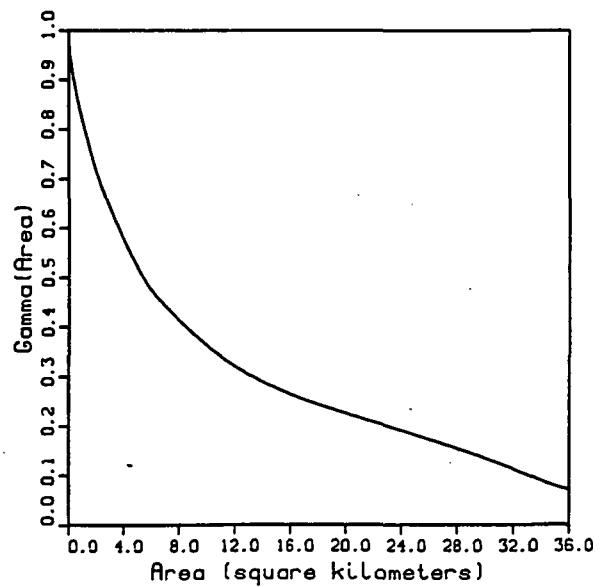
Storm Day  
 Sept 12, 1970



Spatial Correlation



Variance Function



Storm Day Sept 12 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.785$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.215$

Expected Value of Point Depth (mm.):  $E(Y) = 0.055$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.020$

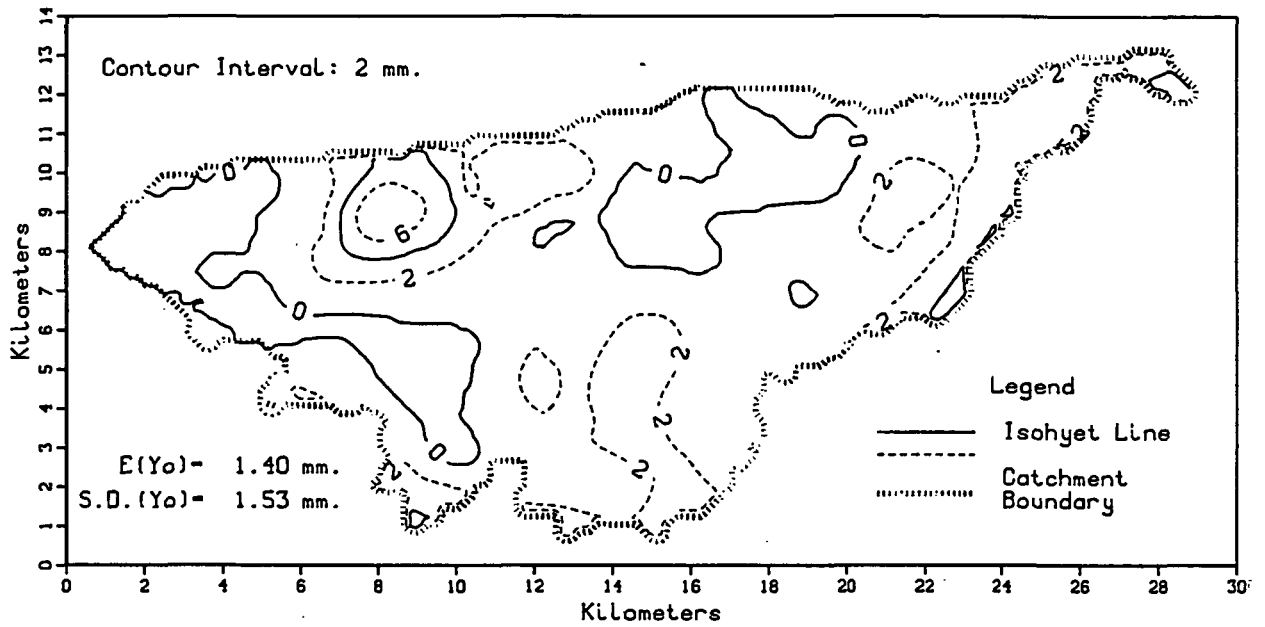
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.829$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.987	0.04	0.975
		0.4	0.952	0.16	0.943
		0.6	0.899	0.36	0.903
		0.8	0.836	0.64	0.861
		1.0	0.770	1.00	0.818
		1.2	0.704	1.44	0.771
		1.4	0.643	1.96	0.721
		1.6	0.591	2.56	0.670
		1.8	0.548	3.24	0.623
		2.0	0.512	4.00	0.574
		2.2	0.479	4.84	0.528
		2.4	0.448	5.76	0.481
		2.6	0.415	6.76	0.448
		2.8	0.379	7.84	0.416
		3.0	0.339	9.00	0.385
		3.2	0.295	10.24	0.355
		3.4	0.248	11.56	0.328
		3.6	0.200	12.96	0.303
		3.8	0.152	14.44	0.281
		4.0	0.110	16.00	0.262
		4.2	0.076	17.64	0.245
		4.4	0.049	19.36	0.229
		4.6	0.028	21.16	0.213
		4.8	0.010	23.04	0.197
		5.0	-.008	25.00	0.180
		5.2	-.025	27.04	0.162
		5.4	-.043	29.16	0.141
		5.6	-.064	31.36	0.119
		5.8	-.087	33.64	0.092
		6.0	-.109	36.00	0.069

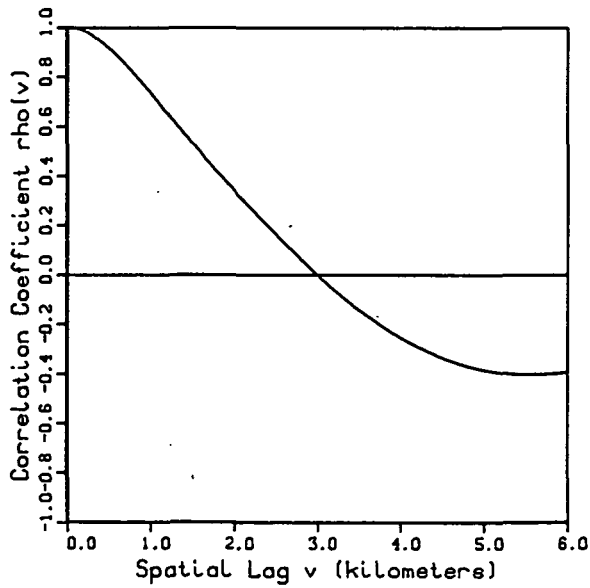


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

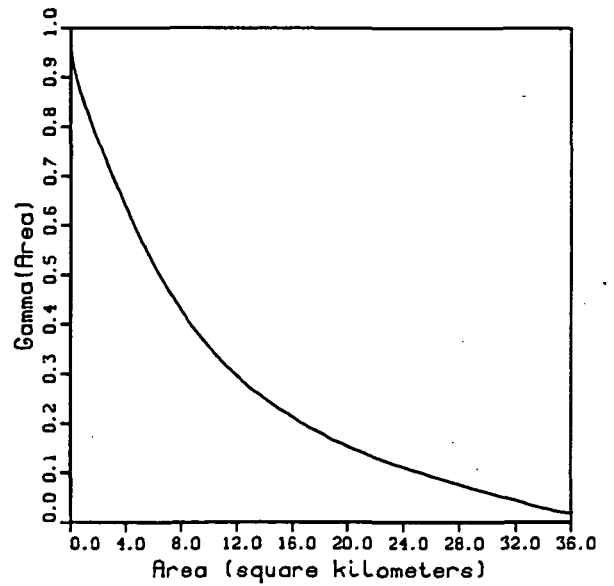
Storm Day  
 Sept 30, 1970



Spatial Correlation



Variance Function



Storm Day Sept 30 1970

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.189$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.811$

Expected Value of Point Depth (mm.):  $E(Y)= 1.344$

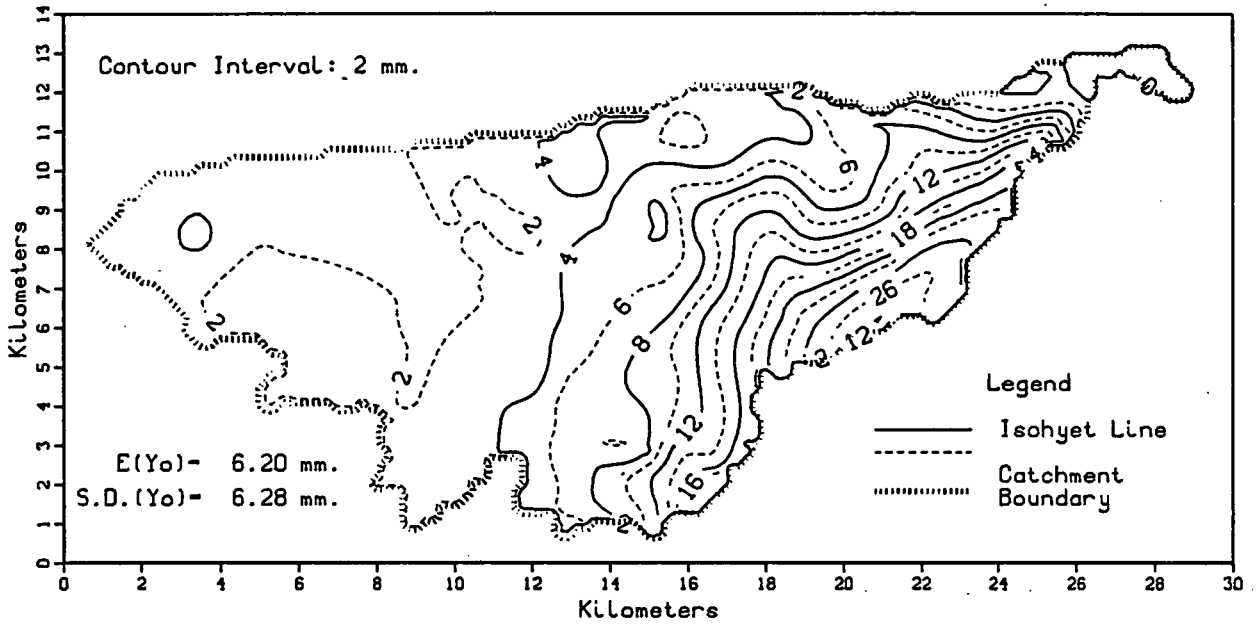
Variance of Point Depth (mm. sq.):  $Var(Y)= 1.937$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 1.341$

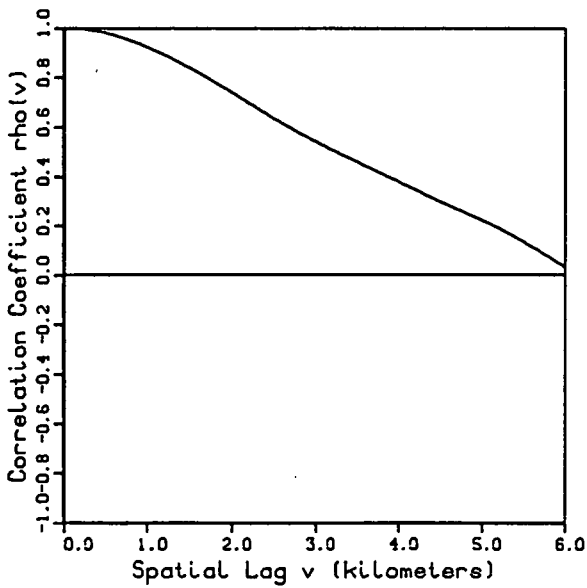
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.497	0.0	1.000	0.00	1.000
2	0.269	0.2	0.985	0.04	0.969
3	0.108	0.4	0.946	0.16	0.936
4	0.046	0.6	0.886	0.36	0.909
5	0.026	0.8	0.814	0.64	0.880
6	0.013	1.0	0.734	1.00	0.849
7	0.003	1.2	0.651	1.44	0.813
8	0.000	1.4	0.568	1.96	0.774
		1.6	0.488	2.56	0.732
		1.8	0.410	3.24	0.686
		2.0	0.336	4.00	0.637
		2.2	0.264	4.84	0.586
		2.4	0.194	5.76	0.535
		2.6	0.126	6.76	0.484
		2.8	0.060	7.84	0.435
		3.0	-.004	9.00	0.389
		3.2	-.064	10.24	0.346
		3.4	-.119	11.56	0.307
		3.6	-.169	12.96	0.272
		3.8	-.215	14.44	0.240
		4.0	-.256	16.00	0.212
		4.2	-.292	17.64	0.186
		4.4	-.324	19.36	0.161
		4.6	-.350	21.16	0.139
		4.8	-.371	23.04	0.119
		5.0	-.388	25.00	0.101
		5.2	-.399	27.04	0.083
		5.4	-.405	29.16	0.065
		5.6	-.405	31.36	0.048
		5.8	-.401	33.64	0.030
		6.0	-.396	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

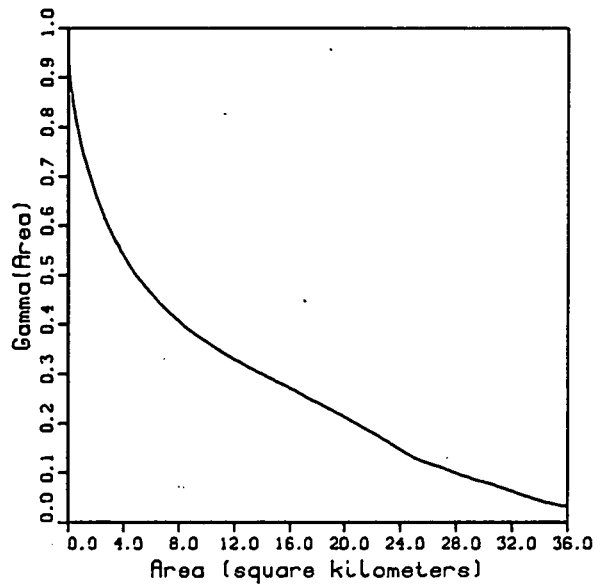
Storm Day  
 June 24, 1971



Spatial Correlation



Variance Function



Storm Day June 24 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.014$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.986$

Expected Value of Point Depth (mm.):  $E(Y)= 6.621$

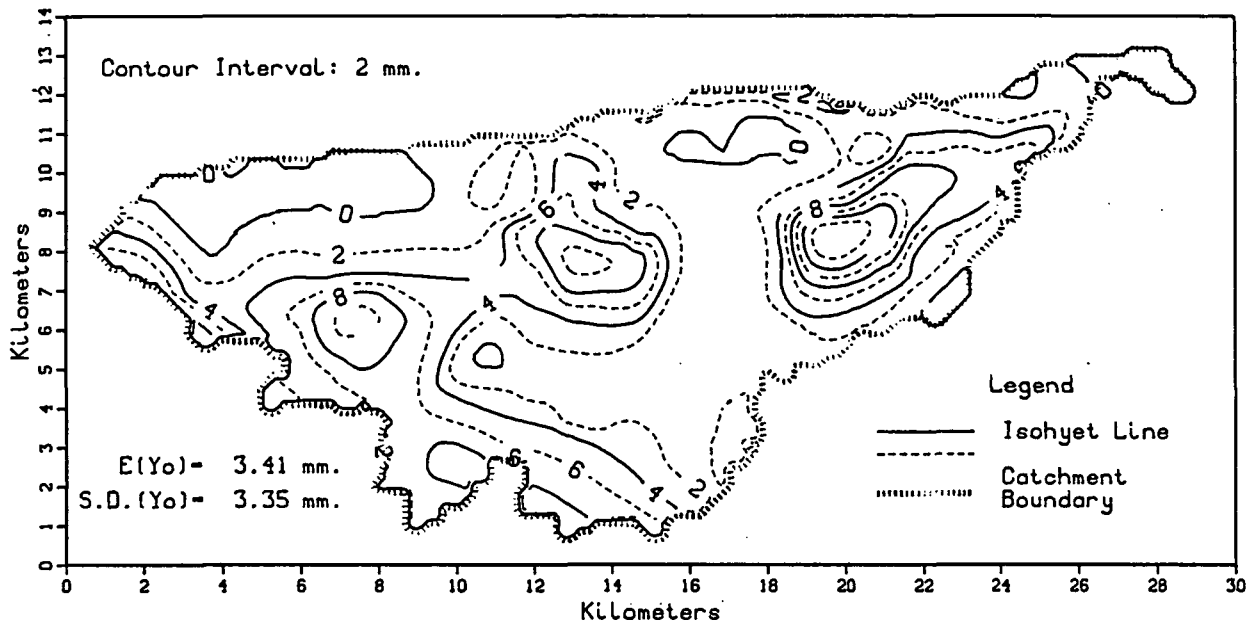
Variance of Point Depth (mm. sq.):  $Var(Y)= 40.557$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 1.471$

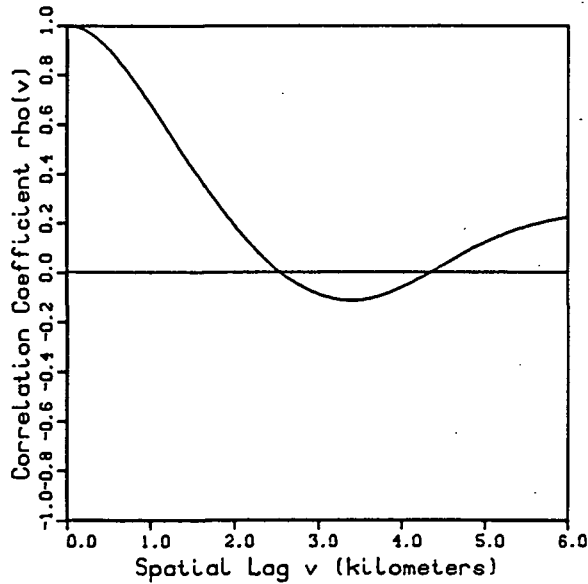
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.916	0.0	1.000	0.00	1.000
2	0.791	0.2	0.997	0.04	0.953
3	0.620	0.4	0.986	0.16	0.905
4	0.506	0.6	0.970	0.36	0.858
5	0.429	0.8	0.948	0.64	0.810
6	0.382	1.0	0.921	1.00	0.761
7	0.333	1.2	0.890	1.44	0.714
8	0.284	1.4	0.855	1.96	0.668
9	0.251	1.6	0.817	2.56	0.622
10	0.223	1.8	0.778	3.24	0.579
11	0.198	2.0	0.737	4.00	0.539
12	0.176	2.2	0.694	4.84	0.502
13	0.155	2.4	0.653	5.76	0.468
14	0.135	2.6	0.612	6.76	0.437
15	0.117	2.8	0.574	7.84	0.409
16	0.101	3.0	0.538	9.00	0.383
17	0.088	3.2	0.504	10.24	0.358
18	0.077	3.4	0.471	11.56	0.335
19	0.068	3.6	0.439	12.96	0.313
20	0.060	3.8	0.408	14.44	0.292
21	0.053	4.0	0.376	16.00	0.270
22	0.045	4.2	0.343	17.64	0.246
23	0.037	4.4	0.311	19.36	0.221
24	0.029	4.6	0.281	21.16	0.194
25	0.020	4.8	0.250	23.04	0.163
26	0.010	5.0	0.221	25.00	0.130
27	0.004	5.2	0.188	27.04	0.109
28	0.000	5.4	0.153	29.16	0.087
29	0.000	5.6	0.114	31.36	0.069
		5.8	0.073	33.64	0.046
		6.0	0.031	36.00	0.031

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

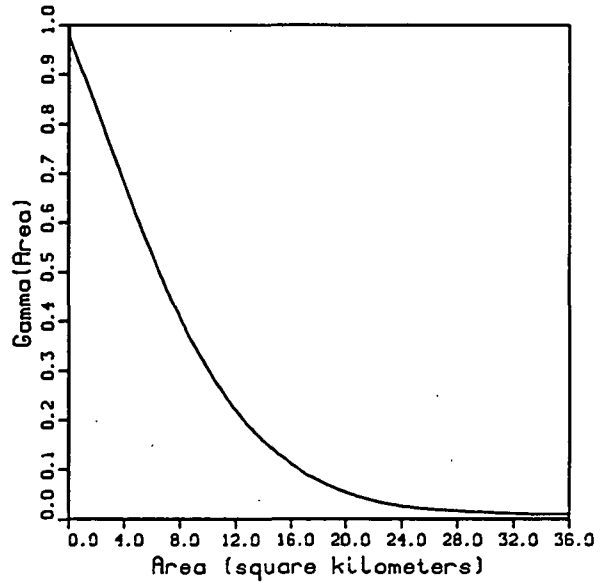
Storm Day  
July 2, 1971



Spatial Correlation



Variance Function



Storm Day July 2 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.079$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.921$

Expected Value of Point Depth (mm.):  $E(Y) = 3.563$

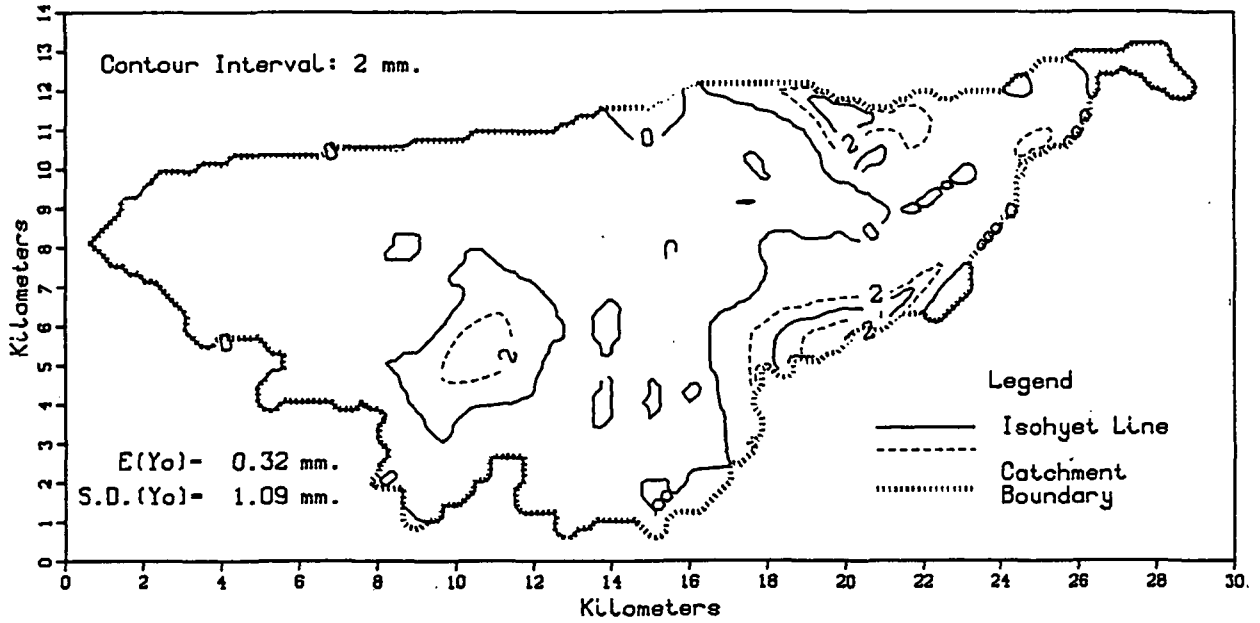
Variance of Point Depth (mm. sq.):  $Var(Y) = 9.737$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.985$

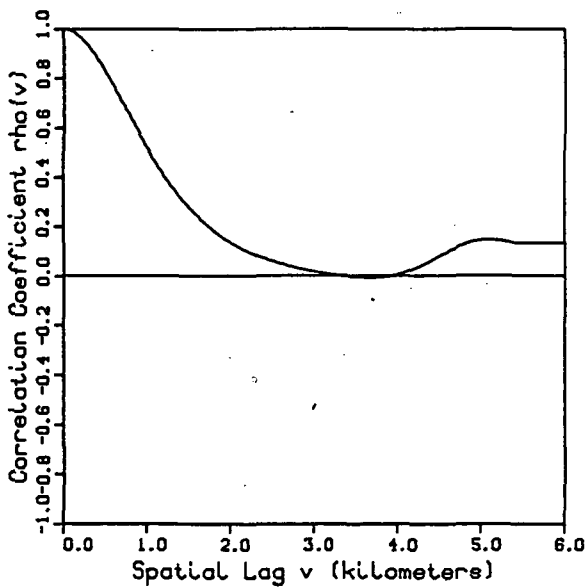
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.783	0.0	1.000	0.00	1.000
2	0.576	0.2	0.983	0.04	0.988
3	0.460	0.4	0.936	0.16	0.972
4	0.373	0.6	0.866	0.36	0.955
5	0.294	0.8	0.779	0.64	0.933
6	0.226	1.0	0.681	1.00	0.907
7	0.152	1.2	0.577	1.44	0.875
8	0.101	1.4	0.474	1.96	0.837
9	0.060	1.6	0.373	2.56	0.791
10	0.035	1.8	0.278	3.24	0.738
11	0.022	2.0	0.191	4.00	0.680
12	0.017	2.2	0.112	4.84	0.618
13	0.012	2.4	0.043	5.76	0.552
14	0.007	2.6	-0.014	6.76	0.484
15	0.003	2.8	-0.057	7.84	0.416
16	0.000	3.0	-0.089	9.00	0.351
		3.2	-0.109	10.24	0.291
		3.4	-0.114	11.56	0.236
		3.6	-0.107	12.96	0.188
		3.8	-0.087	14.44	0.146
		4.0	-0.059	16.00	0.111
		4.2	-0.024	17.64	0.083
		4.4	0.014	19.36	0.060
		4.6	0.052	21.16	0.042
		4.8	0.090	23.04	0.030
		5.0	0.124	25.00	0.021
		5.2	0.153	27.04	0.017
		5.4	0.177	29.16	0.013
		5.6	0.197	31.36	0.011
		5.8	0.214	33.64	0.008
		6.0	0.226	36.00	0.009

Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

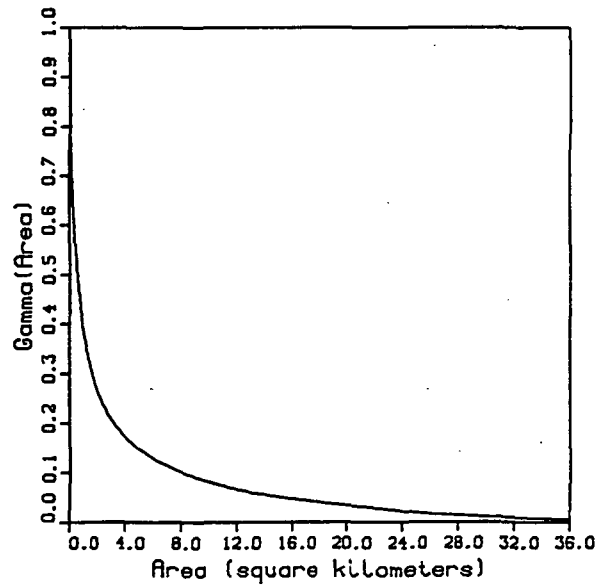
Storm Day  
 July 3, 1971



Spatial Correlation



Variance Function



Storm Day July 3 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.639$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.361$

Expected Value of Point Depth (mm.):  $E(Y) = 0.377$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.993$

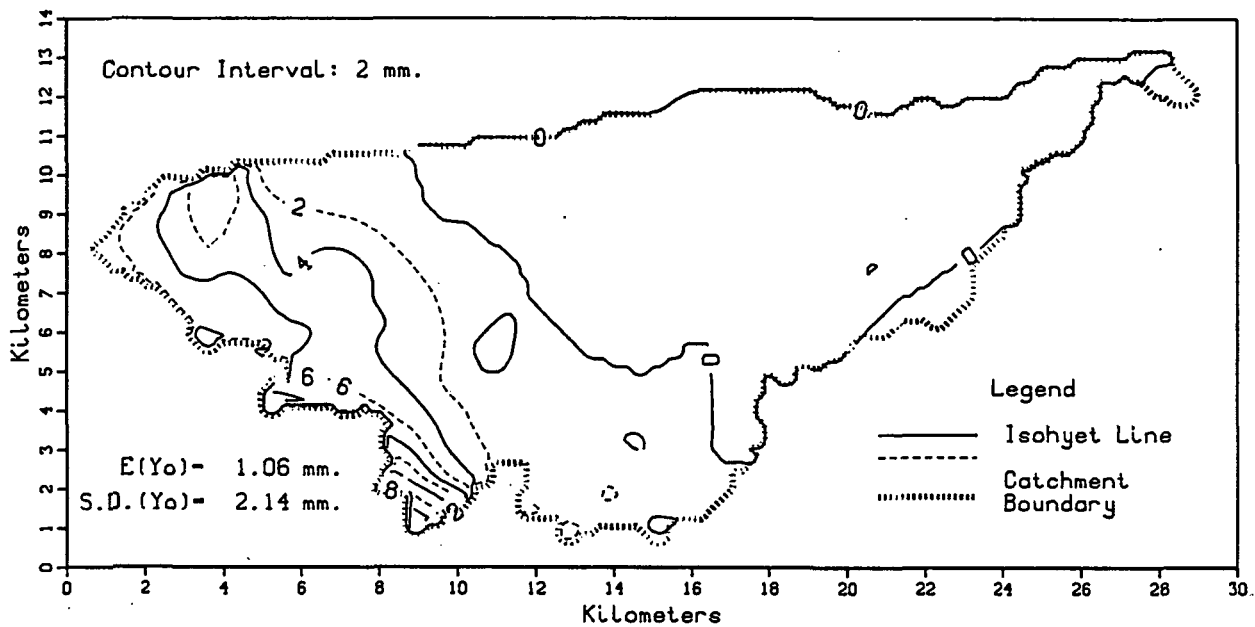
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.691$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.122	0.0	1.000	0.00	1.000
2	0.062	0.2	0.965	0.04	0.871
3	0.035	0.4	0.880	0.16	0.724
4	0.020	0.6	0.766	0.36	0.592
5	0.012	0.8	0.643	0.64	0.481
6	0.005	1.0	0.519	1.00	0.392
7	0.000	1.2	0.408	1.44	0.323
		1.4	0.317	1.96	0.270
		1.6	0.243	2.56	0.229
		1.8	0.182	3.24	0.196
		2.0	0.133	4.00	0.170
		2.2	0.096	4.84	0.149
		2.4	0.068	5.76	0.131
		2.6	0.047	6.76	0.116
		2.8	0.029	7.84	0.102
		3.0	0.015	9.00	0.089
		3.2	0.003	10.24	0.078
		3.4	-0.004	11.56	0.068
		3.6	-0.008	12.96	0.059
		3.8	-0.005	14.44	0.052
		4.0	0.008	16.00	0.046
		4.2	0.032	17.64	0.040
		4.4	0.065	19.36	0.035
		4.6	0.102	21.16	0.030
		4.8	0.131	23.04	0.024
		5.0	0.146	25.00	0.018
		5.2	0.143	27.04	0.015
		5.4	0.132	29.16	0.011
		5.6	0.133	31.36	0.009
		5.8	0.133	33.64	0.006
		6.0	0.133	36.00	0.004

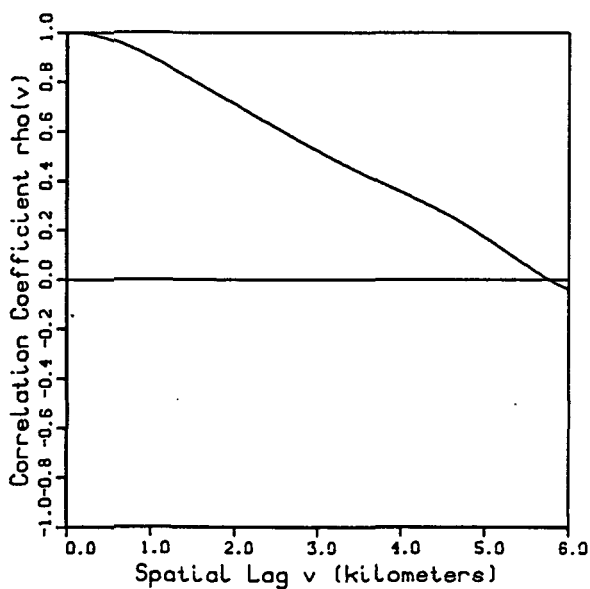


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

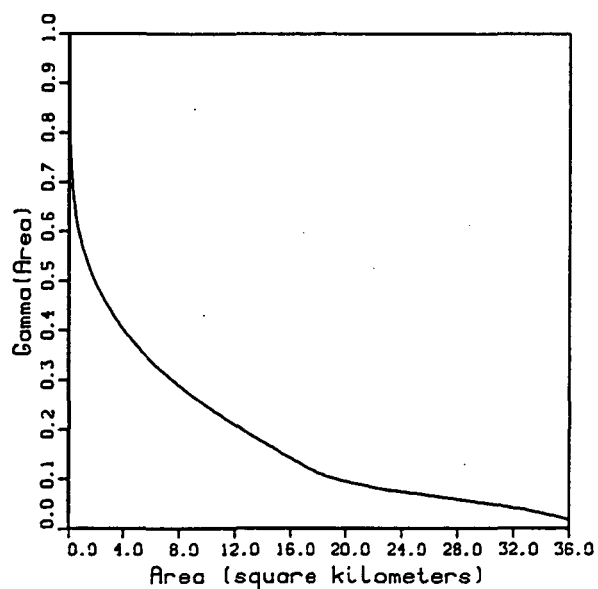
Storm Day  
 July 5, 1971



Spatial Correlation



Variance Function



Storm Day July 5 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.503$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.497$

Expected Value of Point Depth (mm.):  $E(Y) = 1.258$

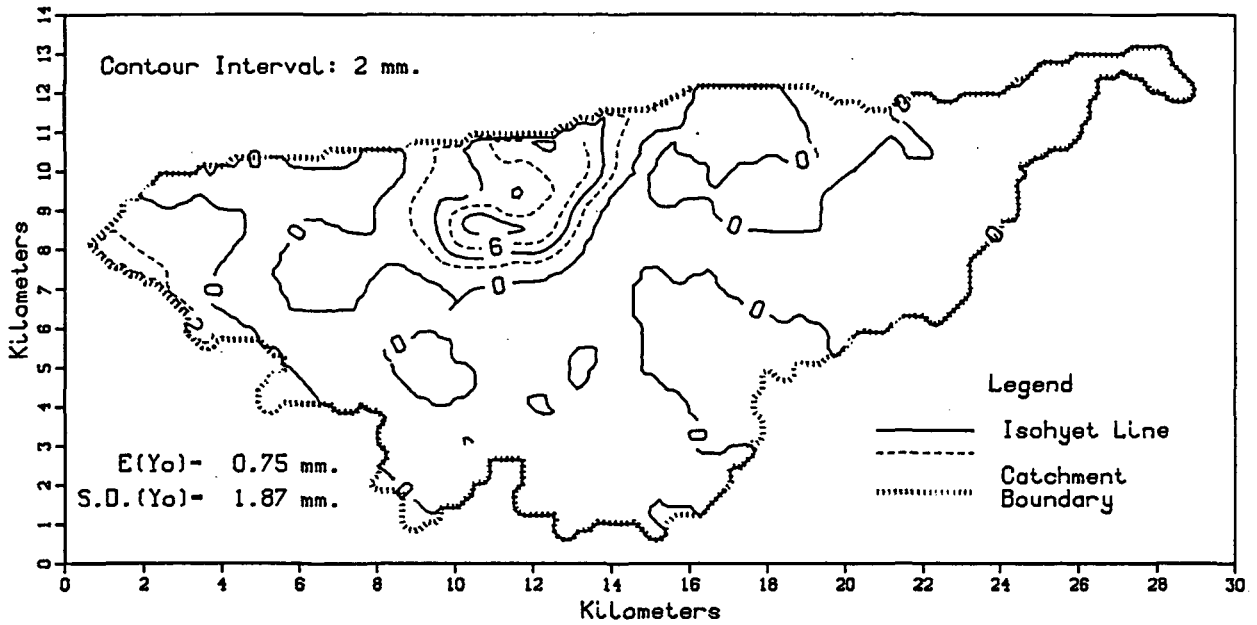
Variance of Point Depth (mm. sq.):  $Var(Y) = 5.161$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.670$

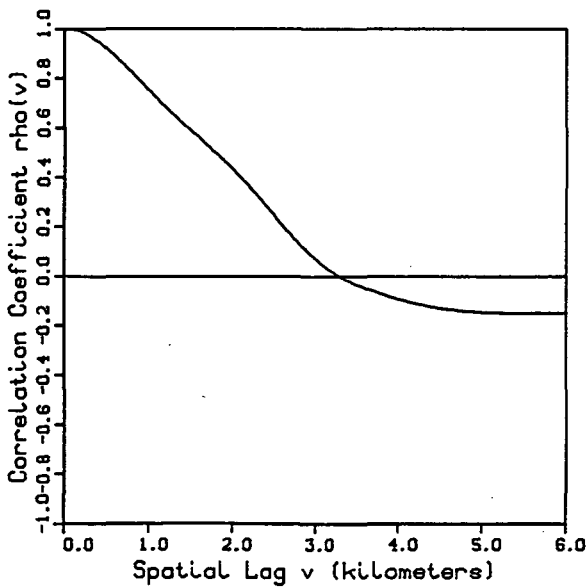
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.289	0.0	1.000	0.00	1.000
2	0.231	0.2	0.995	0.04	0.873
3	0.179	0.4	0.981	0.16	0.762
4	0.124	0.6	0.959	0.36	0.677
5	0.059	0.8	0.930	0.64	0.613
6	0.034	1.0	0.897	1.00	0.572
7	0.020	1.2	0.860	1.44	0.535
8	0.012	1.4	0.821	1.96	0.498
9	0.009	1.6	0.782	2.56	0.464
10	0.008	1.8	0.745	3.24	0.432
11	0.006	2.0	0.707	4.00	0.401
12	0.005	2.2	0.667	4.84	0.372
13	0.003	2.4	0.629	5.76	0.343
14	0.002	2.6	0.592	6.76	0.317
15	0.001	2.8	0.553	7.84	0.291
16	0.001	3.0	0.517	9.00	0.266
17	0.000	3.2	0.481	10.24	0.240
18	0.000	3.4	0.447	11.56	0.216
19	0.000	3.6	0.413	12.96	0.192
		3.8	0.383	14.44	0.167
		4.0	0.352	16.00	0.141
		4.2	0.318	17.64	0.116
		4.4	0.285	19.36	0.098
		4.6	0.250	21.16	0.087
		4.8	0.211	23.04	0.077
		5.0	0.167	25.00	0.069
		5.2	0.121	27.04	0.061
		5.4	0.076	29.16	0.053
		5.6	0.031	31.36	0.043
		5.8	-.010	33.64	0.032
		6.0	-.044	36.00	0.016

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

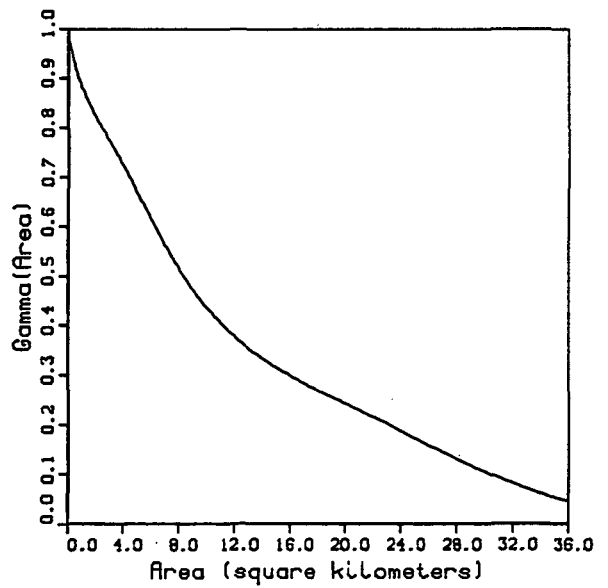
Storm Day  
 July 10, 1971



Spatial Correlation



Variance Function



Storm Day July 10 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.563$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.437$

Expected Value of Point Depth (mm.):  $E(Y) = 0.561$

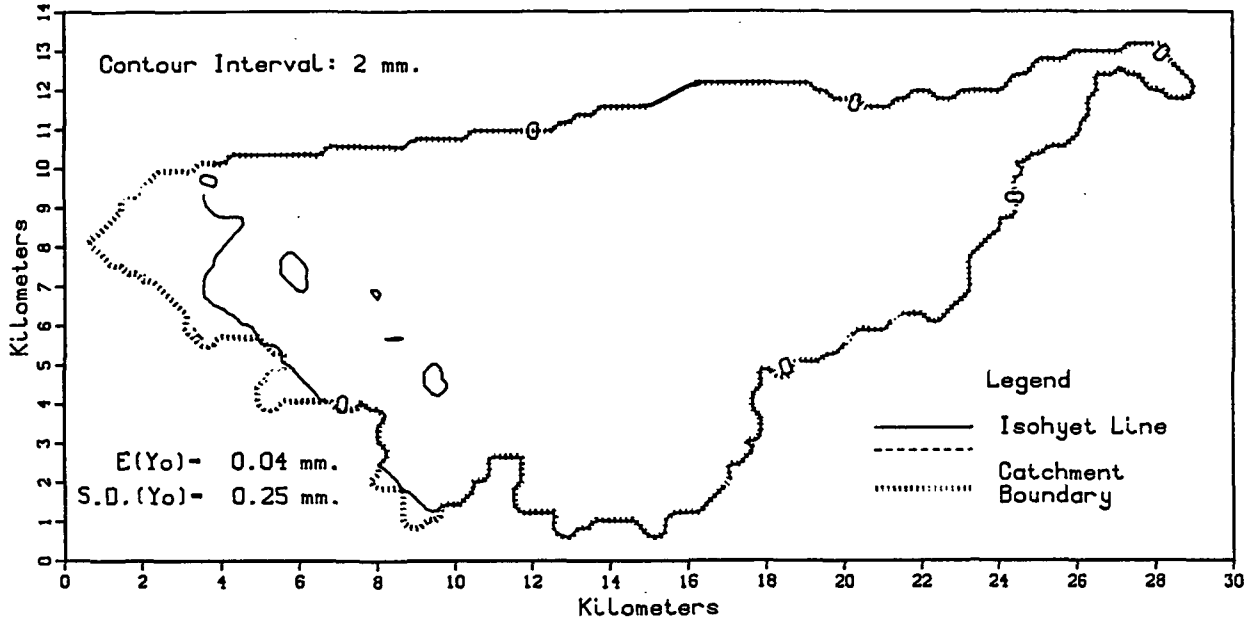
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.365$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.282$

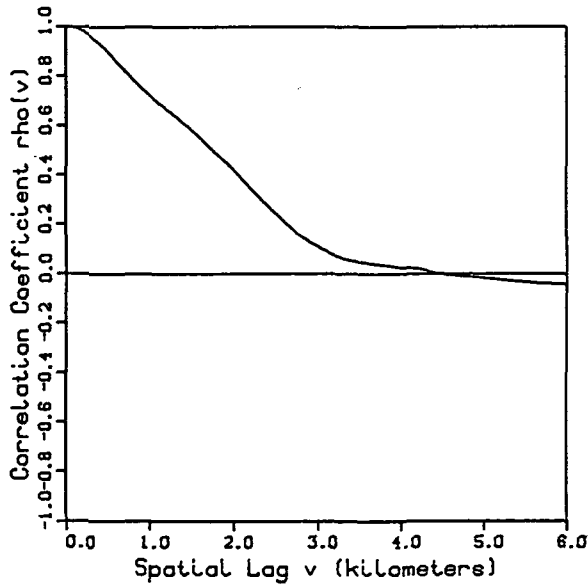
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.121	0.0	1.000	0.00	1.000
2	0.095	0.2	0.986	0.04	0.986
3	0.077	0.4	0.945	0.16	0.968
4	0.061	0.6	0.887	0.36	0.943
5	0.044	0.8	0.819	0.64	0.913
6	0.030	1.0	0.748	1.00	0.882
7	0.016	1.2	0.680	1.44	0.852
8	0.004	1.4	0.616	1.96	0.823
9	0.000	1.6	0.554	2.56	0.792
		1.8	0.493	3.24	0.759
		2.0	0.428	4.00	0.720
		2.2	0.358	4.84	0.676
		2.4	0.281	5.76	0.627
		2.6	0.203	6.76	0.573
		2.8	0.129	7.84	0.521
		3.0	0.065	9.00	0.471
		3.2	0.015	10.24	0.427
		3.4	-.023	11.56	0.388
		3.6	-.052	12.96	0.354
		3.8	-.077	14.44	0.324
		4.0	-.097	16.00	0.297
		4.2	-.114	17.64	0.273
		4.4	-.128	19.36	0.249
		4.6	-.138	21.16	0.225
		4.8	-.145	23.04	0.199
		5.0	-.149	25.00	0.170
		5.2	-.151	27.04	0.142
		5.4	-.152	29.16	0.113
		5.6	-.152	31.36	0.087
		5.8	-.151	33.64	0.063
		6.0	-.151	36.00	0.045

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

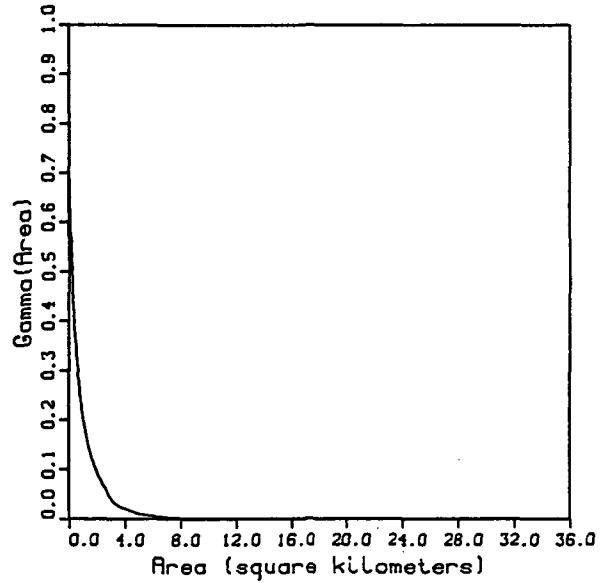
Storm Day  
 July 13, 1971



Spatial Correlation



Variance Function



Storm Day July 13 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.932$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.068$

Expected Value of Point Depth (mm.):  $E(Y) = 0.040$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.042$

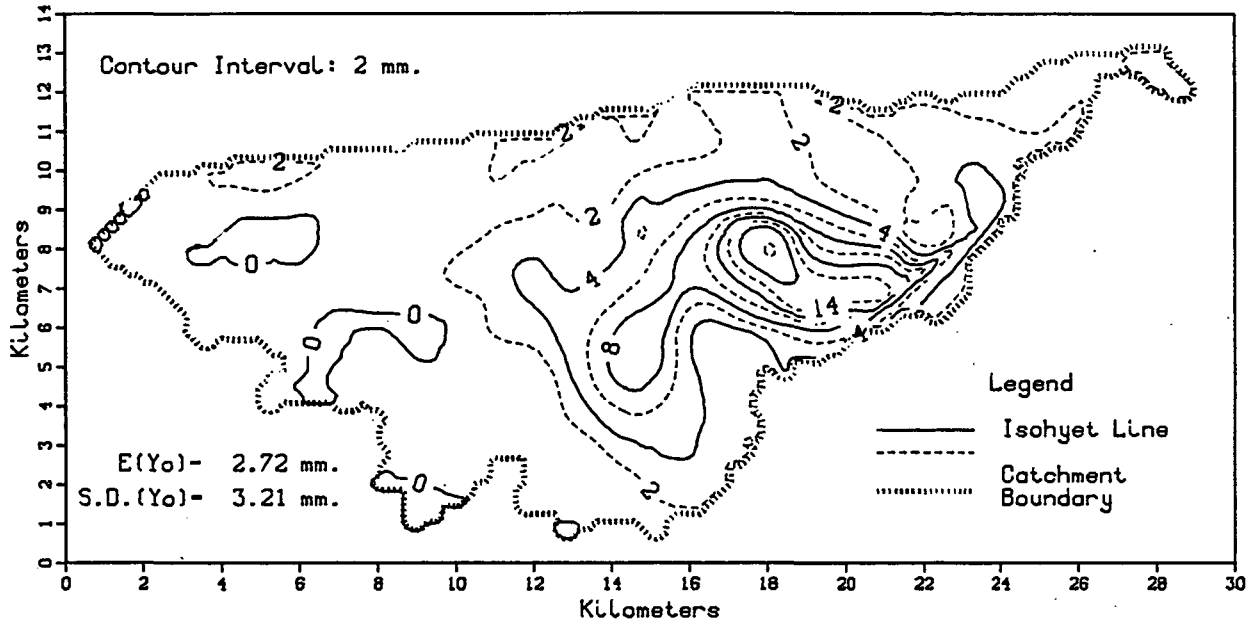
Coef. of Skewness of Point Depth:  $S.C.(Y) = 6.178$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.013	0.0	1.000	0.00	1.000
2	0.000	0.2	0.981	0.04	0.748
3	0.000	0.4	0.931	0.16	0.547
		0.6	0.861	0.36	0.410
		0.8	0.785	0.64	0.301
		1.0	0.719	1.00	0.210
		1.2	0.663	1.44	0.143
		1.4	0.607	1.96	0.097
		1.6	0.546	2.56	0.060
		1.8	0.479	3.24	0.031
		2.0	0.419	4.00	0.020
		2.2	0.346	4.84	0.011
		2.4	0.274	5.76	0.006
		2.6	0.209	6.76	0.004
		2.8	0.148	7.84	0.002
		3.0	0.106	9.00	0.001
		3.2	0.072	10.24	0.001
		3.4	0.050	11.56	0.000
		3.6	0.041	12.96	0.000
		3.8	0.032	14.44	0.000
		4.0	0.023	16.00	0.000
		4.2	0.019	17.64	0.000
		4.4	0.000	19.36	0.000
		4.6	-.007	21.16	0.000
		4.8	-.014	23.04	0.000
		5.0	-.021	25.00	0.000
		5.2	-.029	27.04	0.000
		5.4	-.036	29.16	0.000
		5.6	-.041	31.36	0.000
		5.8	-.044	33.64	0.000
		6.0	-.046	36.00	0.000

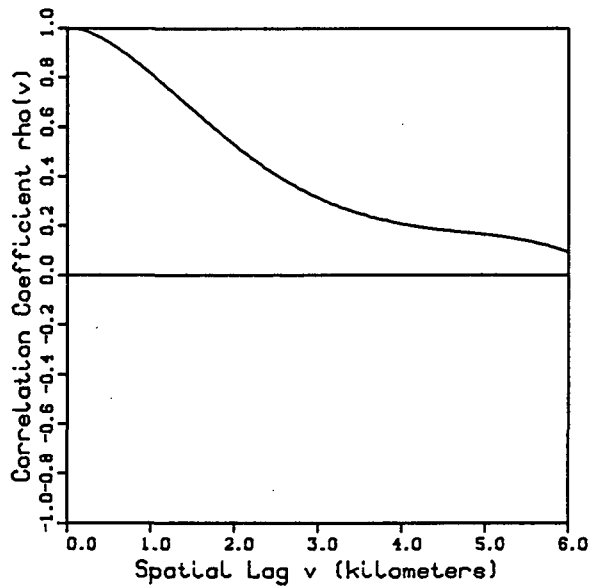
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Walnut Gulch, Arizona  
Ac-154.21 sq.km.

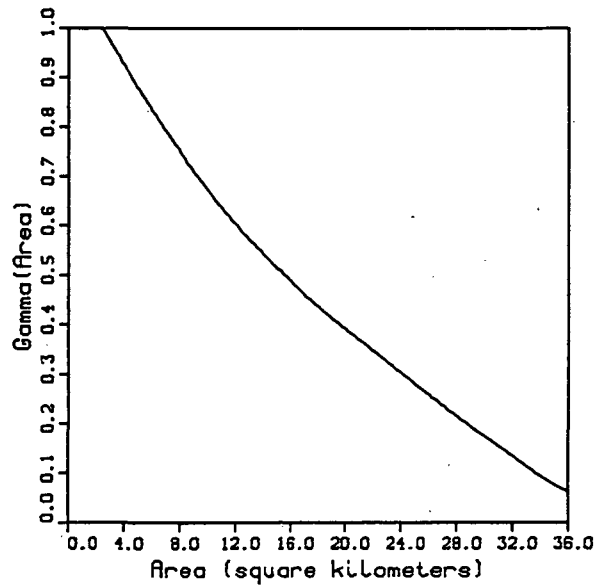
Storm Day  
July 16, 1971



Spatial Correlation



Variance Function



Storm Day July 16 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.035$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.965$

Expected Value of Point Depth (mm.):  $E(Y) = 3.065$

Variance of Point Depth (mm. sq.):  $Var(Y) = 11.816$

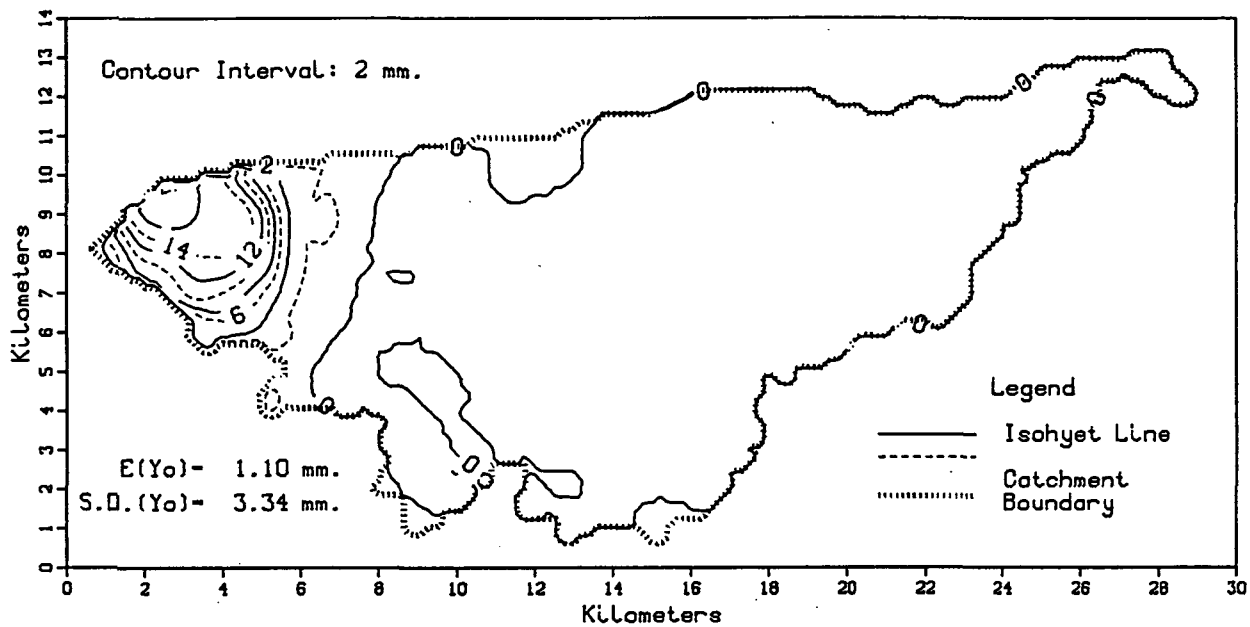
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.985$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.693	0.0	1.000	0.00	1.000
2	0.500	0.2	0.988	0.04	1.029
3	0.353	0.4	0.958	0.16	1.051
4	0.250	0.6	0.917	0.36	1.063
5	0.186	0.8	0.868	0.64	1.064
6	0.147	1.0	0.814	1.00	1.057
7	0.120	1.2	0.756	1.44	1.043
8	0.097	1.4	0.698	1.96	1.021
9	0.074	1.6	0.639	2.56	0.993
10	0.059	1.8	0.581	3.24	0.960
11	0.050	2.0	0.526	4.00	0.924
12	0.044	2.2	0.474	4.84	0.885
13	0.036	2.4	0.426	5.76	0.843
14	0.027	2.6	0.383	6.76	0.800
15	0.017	2.8	0.344	7.84	0.755
16	0.009	3.0	0.311	9.00	0.708
17	0.005	3.2	0.281	10.24	0.661
18	0.001	3.4	0.257	11.56	0.616
19	0.000	3.6	0.236	12.96	0.572
		3.8	0.219	14.44	0.529
		4.0	0.204	16.00	0.486
		4.2	0.193	17.64	0.443
		4.4	0.183	19.36	0.403
		4.6	0.176	21.16	0.364
		4.8	0.170	23.04	0.322
		5.0	0.162	25.00	0.278
		5.2	0.154	27.04	0.234
		5.4	0.143	29.16	0.189
		5.6	0.129	31.36	0.147
		5.8	0.112	33.64	0.099
		6.0	0.091	36.00	0.061

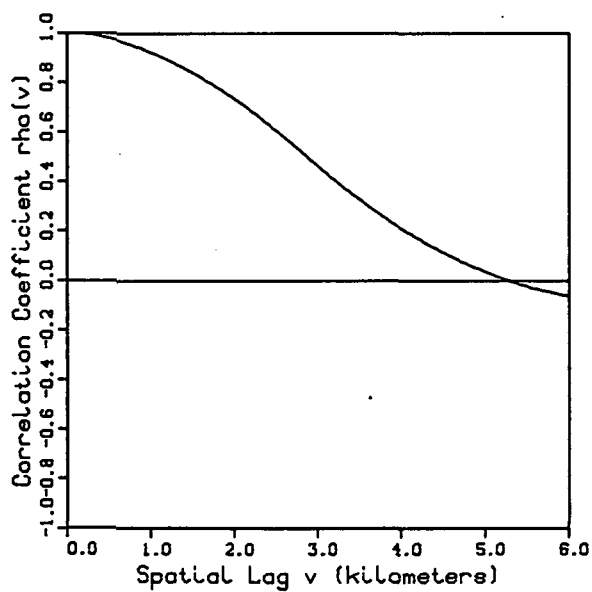


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

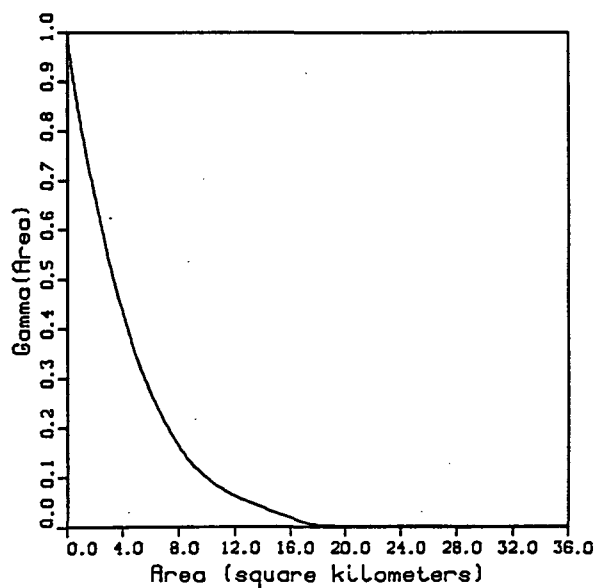
Storm Day  
 July 17, 1971



Spatial Correlation



Variance Function



Storm Day July 17 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.759$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.241$

Expected Value of Point Depth (mm.):  $E(Y) = 1.094$

Variance of Point Depth (mm. sq.):  $Var(Y) = 11.375$

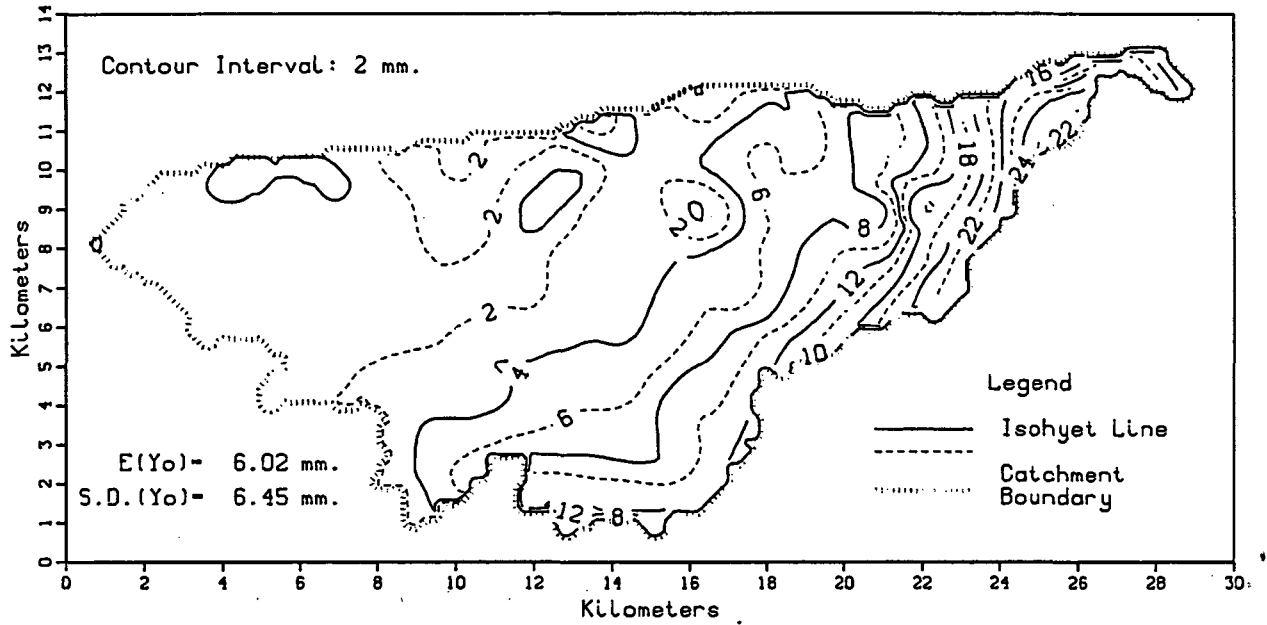
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.384$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.129	0.0	1.000	0.00	1.000
2	0.112	0.2	0.996	0.04	0.980
3	0.098	0.4	0.985	0.16	0.954
4	0.088	0.6	0.968	0.36	0.915
5	0.080	0.8	0.946	0.64	0.866
6	0.074	1.0	0.919	1.00	0.806
7	0.070	1.2	0.889	1.44	0.741
8	0.065	1.4	0.854	1.96	0.670
9	0.058	1.6	0.817	2.56	0.592
10	0.053	1.8	0.776	3.24	0.507
11	0.047	2.0	0.731	4.00	0.431
12	0.041	2.2	0.682	4.84	0.352
13	0.035	2.4	0.631	5.76	0.282
14	0.028	2.6	0.576	6.76	0.222
15	0.020	2.8	0.519	7.84	0.167
16	0.009	3.0	0.460	9.00	0.124
17	0.004	3.2	0.404	10.24	0.091
18	0.001	3.4	0.350	11.56	0.067
19	0.000	3.6	0.298	12.96	0.049
		3.8	0.250	14.44	0.032
		4.0	0.206	16.00	0.016
		4.2	0.165	17.64	0.004
		4.4	0.127	19.36	0.001
		4.6	0.092	21.16	0.001
		4.8	0.060	23.04	0.000
		5.0	0.031	25.00	0.000
		5.2	0.005	27.04	0.000
		5.4	-0.018	29.16	0.000
		5.6	-0.036	31.36	0.000
		5.8	-0.053	33.64	0.000
		6.0	-0.067	36.00	0.000

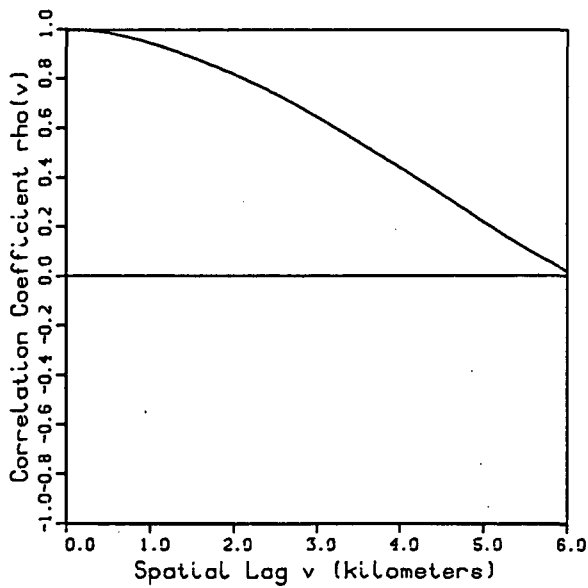
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

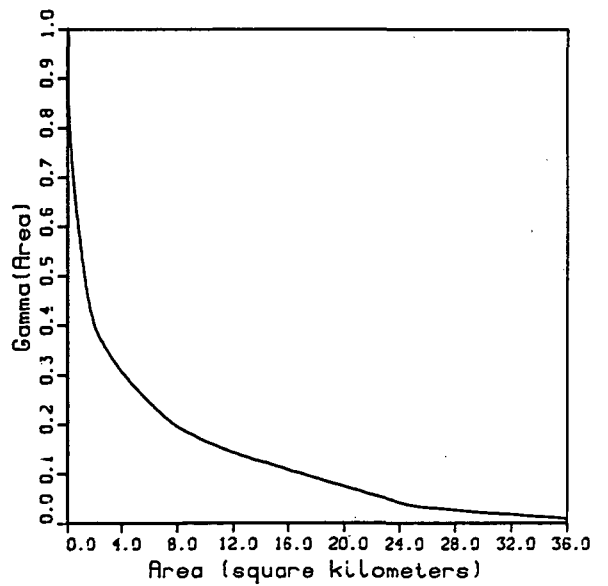
Storm Day  
July 18, 1971



Spatial Correlation



Variance Function



Storm Day July 18 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.020$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.980$

Expected Value of Point Depth (mm.):  $E(Y) = 6.209$

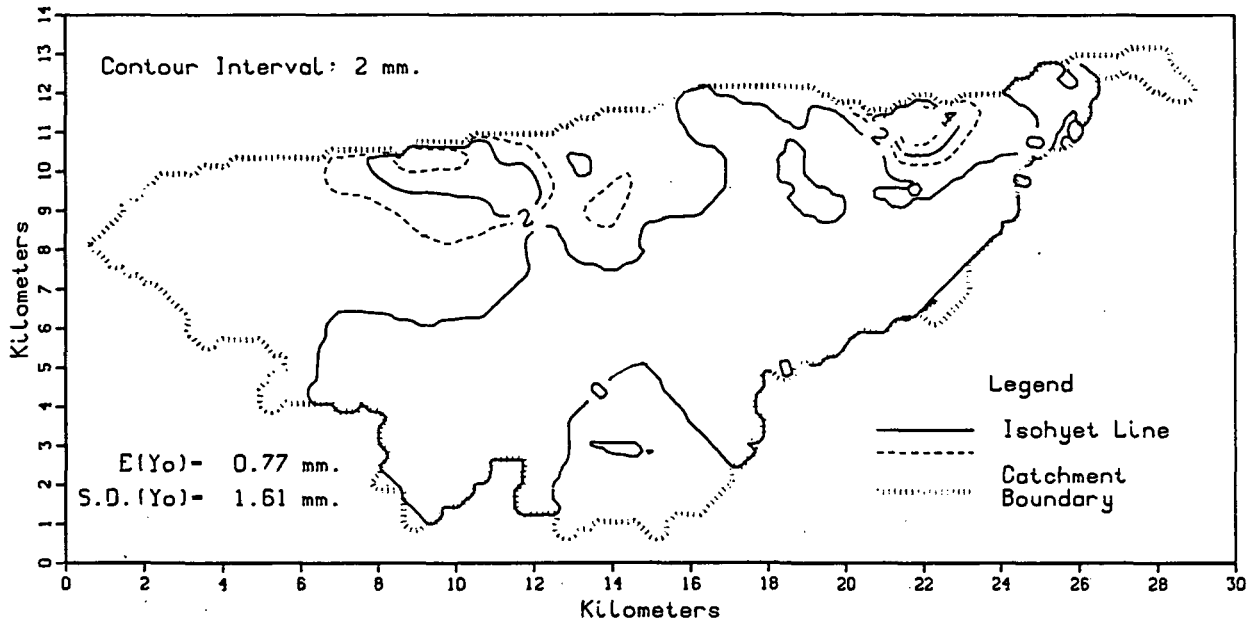
Variance of Point Depth (mm. sq.):  $Var(Y) = 40.297$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.646$

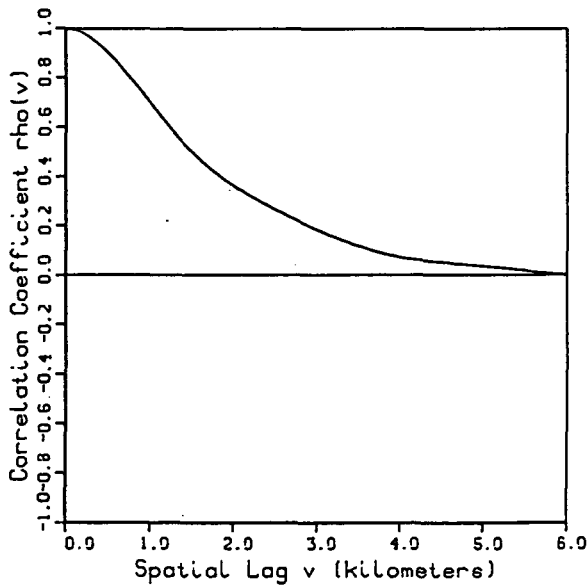
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.852	0.0	1.000	0.00	1.000
2	0.700	0.2	0.997	0.04	0.906
3	0.611	0.4	0.989	0.16	0.810
4	0.488	0.6	0.977	0.36	0.722
5	0.418	0.8	0.961	0.64	0.639
6	0.357	1.0	0.942	1.00	0.556
7	0.304	1.2	0.920	1.44	0.470
8	0.262	1.4	0.896	1.96	0.403
9	0.226	1.6	0.870	2.56	0.365
10	0.191	1.8	0.844	3.24	0.334
11	0.159	2.0	0.816	4.00	0.305
12	0.130	2.2	0.786	4.84	0.277
13	0.113	2.4	0.753	5.76	0.249
14	0.105	2.6	0.718	6.76	0.222
15	0.097	2.8	0.682	7.84	0.198
16	0.089	3.0	0.643	9.00	0.178
17	0.080	3.2	0.604	10.24	0.161
18	0.070	3.4	0.563	11.56	0.146
19	0.063	3.6	0.522	12.96	0.132
20	0.055	3.8	0.481	14.44	0.119
21	0.046	4.0	0.439	16.00	0.106
22	0.038	4.2	0.396	17.64	0.093
23	0.030	4.4	0.352	19.36	0.078
24	0.023	4.6	0.308	21.16	0.063
25	0.018	4.8	0.264	23.04	0.048
26	0.015	5.0	0.218	25.00	0.033
27	0.012	5.2	0.175	27.04	0.028
28	0.010	5.4	0.132	29.16	0.022
29	0.007	5.6	0.093	31.36	0.018
30	0.003	5.8	0.055	33.64	0.013
31	0.000	6.0	0.018	36.00	0.008

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

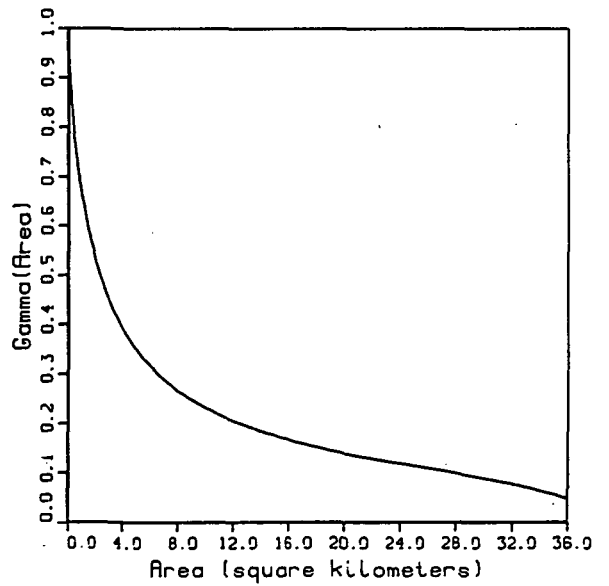
Storm Day  
 July 19, 1971



Spatial Correlation



Variance Function



Storm Day July 19 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.458$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.542$

Expected Value of Point Depth (mm.):  $E(Y) = 0.652$

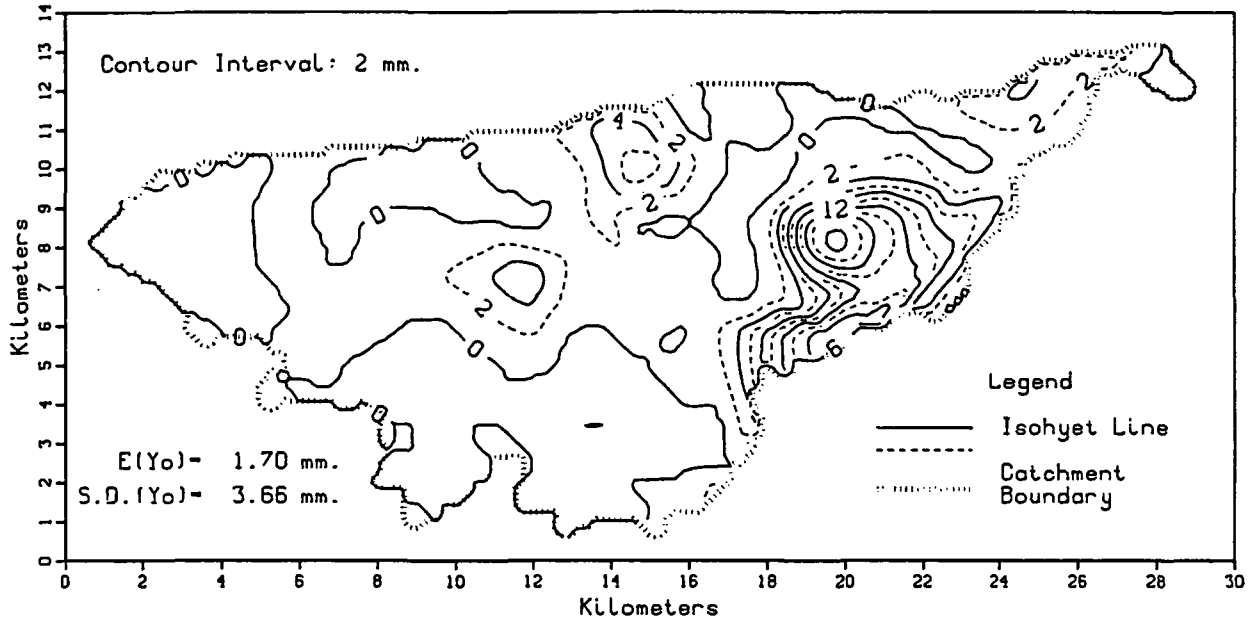
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.651$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.959$

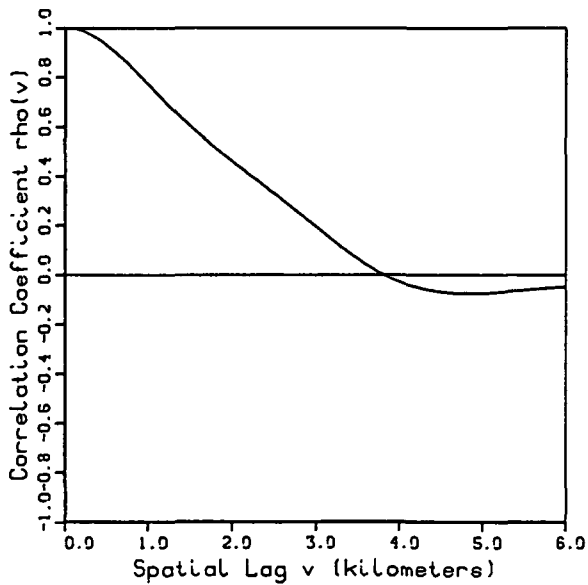
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.199	0.0	1.000	0.00	1.000
2	0.089	0.2	0.981	0.04	0.955
3	0.059	0.4	0.934	0.16	0.892
4	0.044	0.6	0.865	0.36	0.816
5	0.030	0.8	0.784	0.64	0.741
6	0.013	1.0	0.698	1.00	0.668
7	0.004	1.2	0.613	1.44	0.600
8	0.000	1.4	0.534	1.96	0.538
		1.6	0.466	2.56	0.482
		1.8	0.410	3.24	0.433
		2.0	0.361	4.00	0.390
		2.2	0.319	4.84	0.353
		2.4	0.281	5.76	0.322
		2.6	0.246	6.76	0.293
		2.8	0.213	7.84	0.268
		3.0	0.182	9.00	0.246
		3.2	0.154	10.24	0.227
		3.4	0.128	11.56	0.209
		3.6	0.105	12.96	0.193
		3.8	0.086	14.44	0.179
		4.0	0.072	16.00	0.166
		4.2	0.062	17.64	0.154
		4.4	0.054	19.36	0.142
		4.6	0.047	21.16	0.132
		4.8	0.041	23.04	0.122
		5.0	0.035	25.00	0.113
		5.2	0.029	27.04	0.103
		5.4	0.021	29.16	0.092
		5.6	0.012	31.36	0.080
		5.8	0.005	33.64	0.066
		6.0	0.000	36.00	0.047

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

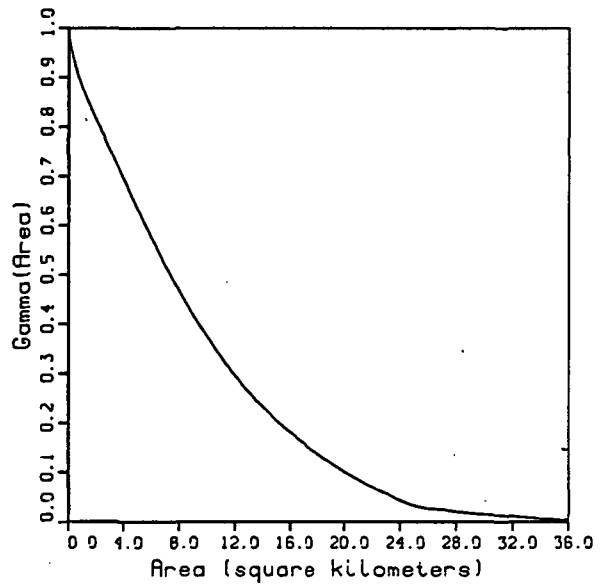
Storm Day  
 July 20, 1971



Spatial Correlation



Variance Function



Storm Day July 20 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.344$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.656$

Expected Value of Point Depth (mm.):  $E(Y) = 1.905$

Variance of Point Depth (mm. sq.):  $Var(Y) = 13.831$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.764$

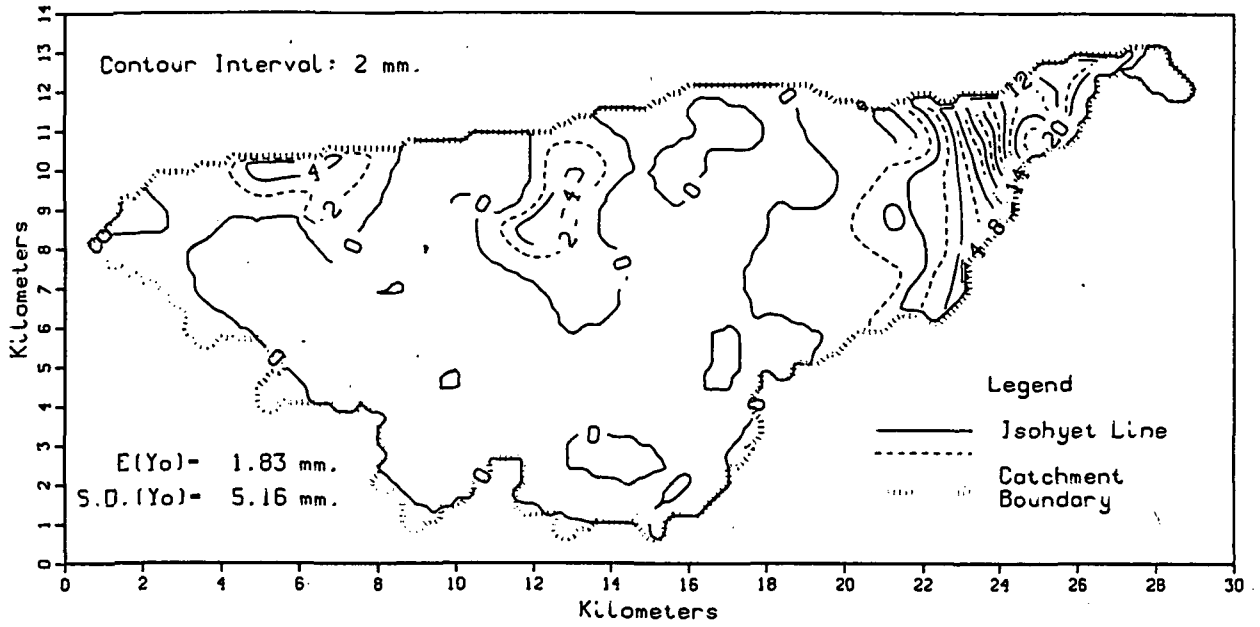
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.348	0.0	1.000	0.00	1.000
2	0.232	0.2	0.987	0.04	0.988
3	0.181	0.4	0.953	0.16	0.967
4	0.138	0.6	0.901	0.36	0.940
5	0.111	0.8	0.837	0.64	0.909
6	0.096	1.0	0.767	1.00	0.879
7	0.084	1.2	0.697	1.44	0.850
8	0.076	1.4	0.630	1.96	0.817
9	0.069	1.6	0.568	2.56	0.780
10	0.063	1.8	0.511	3.24	0.738
11	0.055	2.0	0.456	4.00	0.691
12	0.049	2.2	0.404	4.84	0.640
13	0.040	2.4	0.352	5.76	0.586
14	0.031	2.6	0.300	6.76	0.529
15	0.023	2.8	0.246	7.84	0.472
16	0.018	3.0	0.191	9.00	0.416
17	0.012	3.2	0.137	10.24	0.362
18	0.007	3.4	0.085	11.56	0.311
19	0.004	3.6	0.039	12.96	0.263
20	0.001	3.8	-0.001	14.44	0.220
21	0.000	4.0	-0.032	16.00	0.180
		4.2	-0.054	17.64	0.144
		4.4	-0.068	19.36	0.111
		4.6	-0.076	21.16	0.081
		4.8	-0.078	23.04	0.055
		5.0	-0.077	25.00	0.030
		5.2	-0.072	27.04	0.023
		5.4	-0.066	29.16	0.015
		5.6	-0.061	31.36	0.011
		5.8	-0.054	33.64	0.006
		6.0	-0.048	36.00	0.002



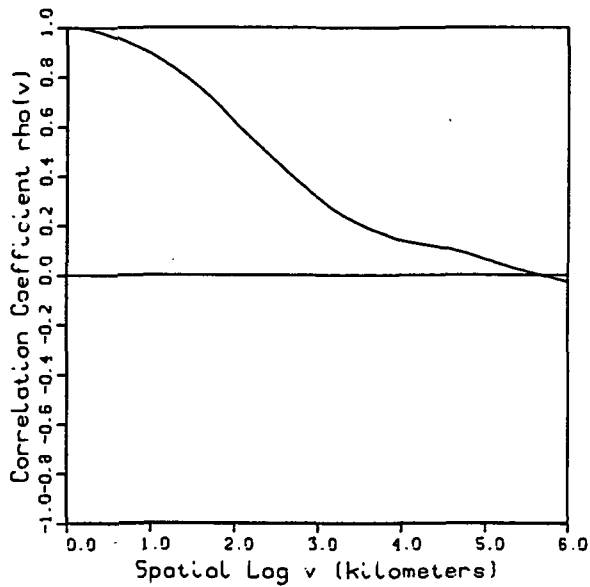
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

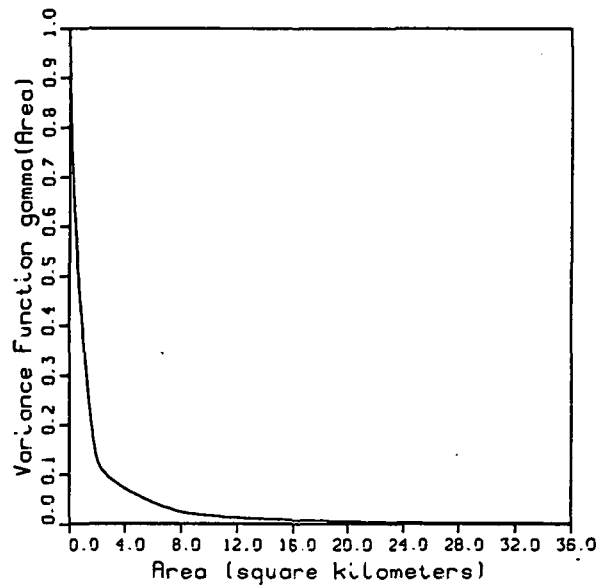
Storm Day  
July 21, 1971



Spatial Correlation



Variance Function



Storm Day July 21 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.531$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.469$

Expected Value of Point Depth (mm.):  $E(Y) = 1.652$

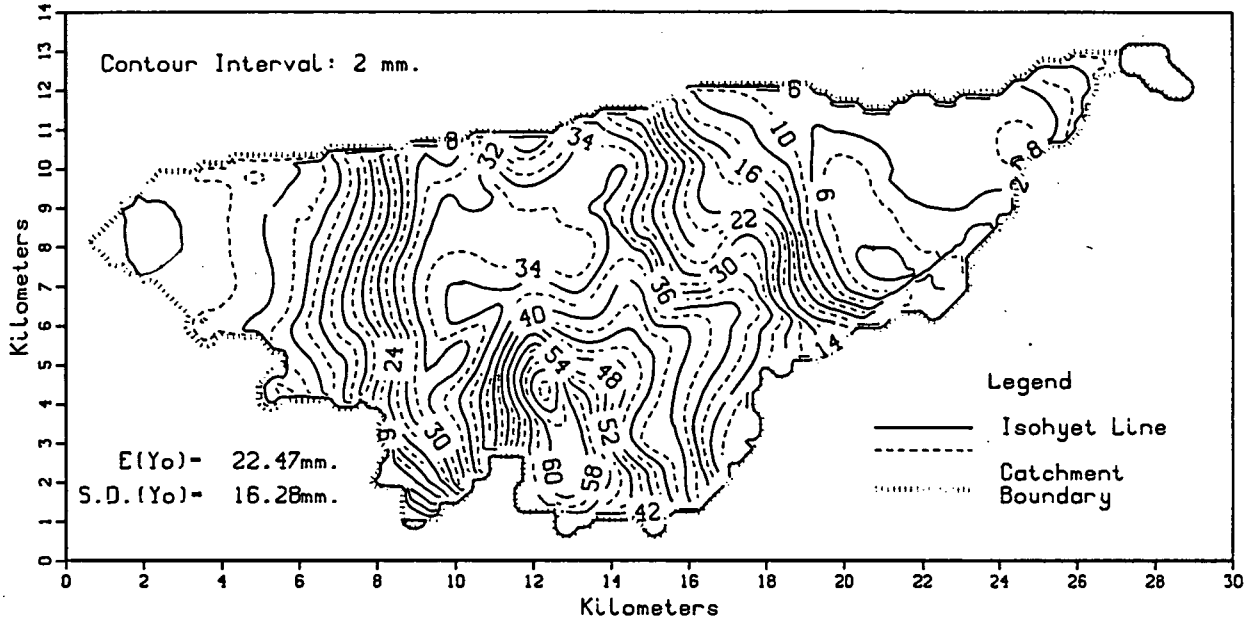
Variance of Point Depth (mm. sq.):  $Var(Y) = 22.417$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.996$

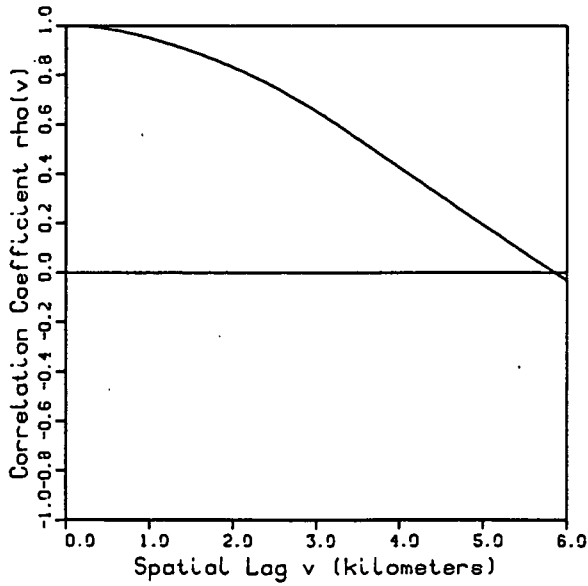
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.213	0.0	1.000	0.00	1.000
2	0.157	0.2	0.994	0.04	0.895
3	0.129	0.4	0.978	0.16	0.777
4	0.100	0.6	0.955	0.36	0.651
5	0.078	0.8	0.926	0.64	0.517
6	0.068	1.0	0.890	1.00	0.380
7	0.062	1.2	0.849	1.44	0.236
8	0.056	1.4	0.802	1.96	0.135
9	0.050	1.6	0.747	2.56	0.102
10	0.046	1.8	0.687	3.24	0.085
11	0.043	2.0	0.614	4.00	0.071
12	0.041	2.2	0.549	4.84	0.057
13	0.039	2.4	0.486	5.76	0.045
14	0.037	2.6	0.425	6.76	0.034
15	0.035	2.8	0.365	7.84	0.024
16	0.033	3.0	0.310	9.00	0.019
17	0.031	3.2	0.259	10.24	0.015
18	0.029	3.4	0.219	11.56	0.012
19	0.027	3.6	0.187	12.96	0.010
20	0.025	3.8	0.161	14.44	0.008
21	0.023	4.0	0.136	16.00	0.007
22	0.021	4.2	0.123	17.64	0.006
23	0.017	4.4	0.112	19.36	0.004
24	0.014	4.6	0.100	21.16	0.003
25	0.012	4.8	0.083	23.04	0.002
26	0.009	5.0	0.059	25.00	0.001
27	0.006	5.2	0.041	27.04	0.001
28	0.005	5.4	0.021	29.16	0.001
29	0.003	5.6	0.003	31.36	0.001
30	0.002	5.8	-0.013	33.64	0.000
31	0.000	6.0	-0.029	36.00	0.000

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

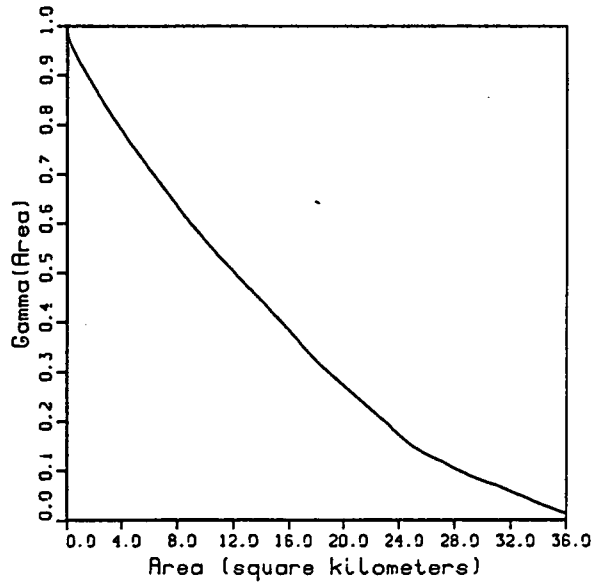
Storm Day  
 July 23, 1971



Spatial Correlation



Variance Function



Storm Day July 23 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.017$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.983$

Expected Value of Point Depth (mm.):  $E(Y) = 23.769$

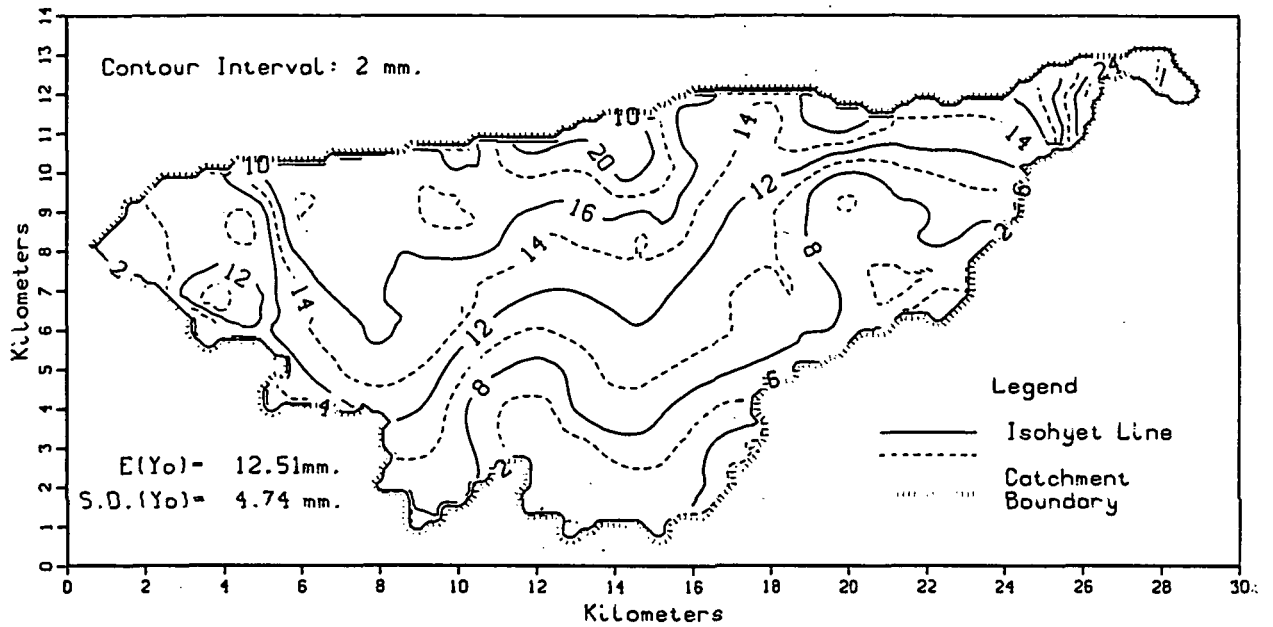
Variance of Point Depth (mm. sq.):  $Var(Y) = 268.325$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.355$

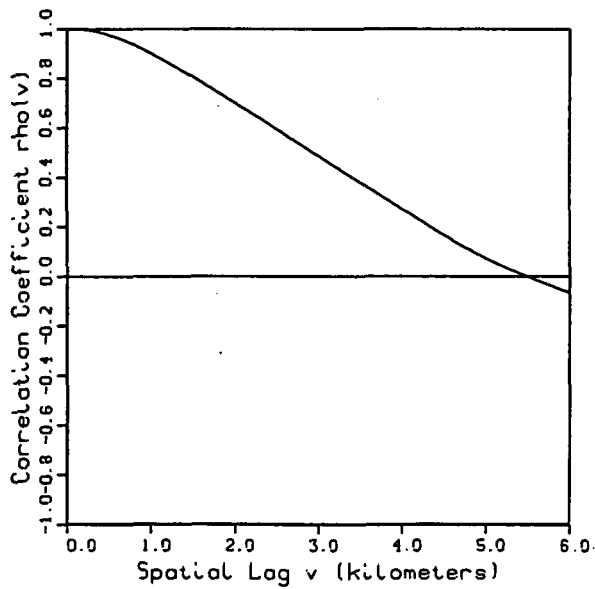
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.957	0.0	1.000	0.00	1.000
3	0.923	0.2	0.997	0.04	0.989
5	0.877	0.4	0.990	0.16	0.975
7	0.820	0.6	0.978	0.36	0.959
9	0.743	0.8	0.964	0.64	0.942
11	0.670	1.0	0.946	1.00	0.923
13	0.637	1.2	0.927	1.44	0.901
15	0.611	1.4	0.905	1.96	0.876
17	0.588	1.6	0.881	2.56	0.848
19	0.565	1.8	0.855	3.24	0.818
21	0.541	2.0	0.827	4.00	0.787
23	0.521	2.2	0.797	4.84	0.753
25	0.498	2.4	0.765	5.76	0.717
27	0.473	2.6	0.729	6.76	0.679
29	0.438	2.8	0.690	7.84	0.639
31	0.401	3.0	0.650	9.00	0.598
33	0.344	3.2	0.608	10.24	0.556
35	0.265	3.4	0.563	11.56	0.514
37	0.202	3.6	0.517	12.96	0.473
39	0.170	3.8	0.470	14.44	0.429
41	0.140	4.0	0.424	16.00	0.382
43	0.116	4.2	0.376	17.64	0.332
45	0.099	4.4	0.329	19.36	0.286
47	0.084	4.6	0.282	21.16	0.242
49	0.073	4.8	0.235	23.04	0.196
51	0.063	5.0	0.189	25.00	0.147
53	0.053	5.2	0.144	27.04	0.118
55	0.045	5.4	0.099	29.16	0.088
57	0.036	5.6	0.054	31.36	0.065
59	0.027	5.8	0.009	33.64	0.038
61	0.015	6.0	-.035	36.00	0.013
63	0.005				
65	0.002				
67	0.000				

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq.km.}$

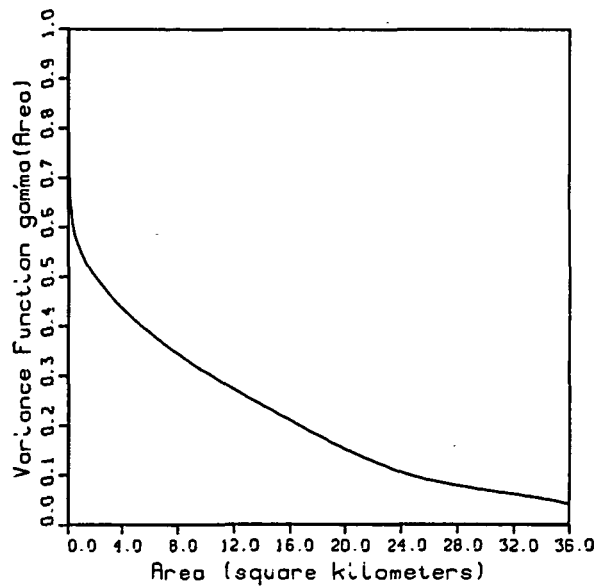
Storm Day  
 July 24, 1971



Spatial Correlation



Variance Function



Storm Day July 24 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 12.120$

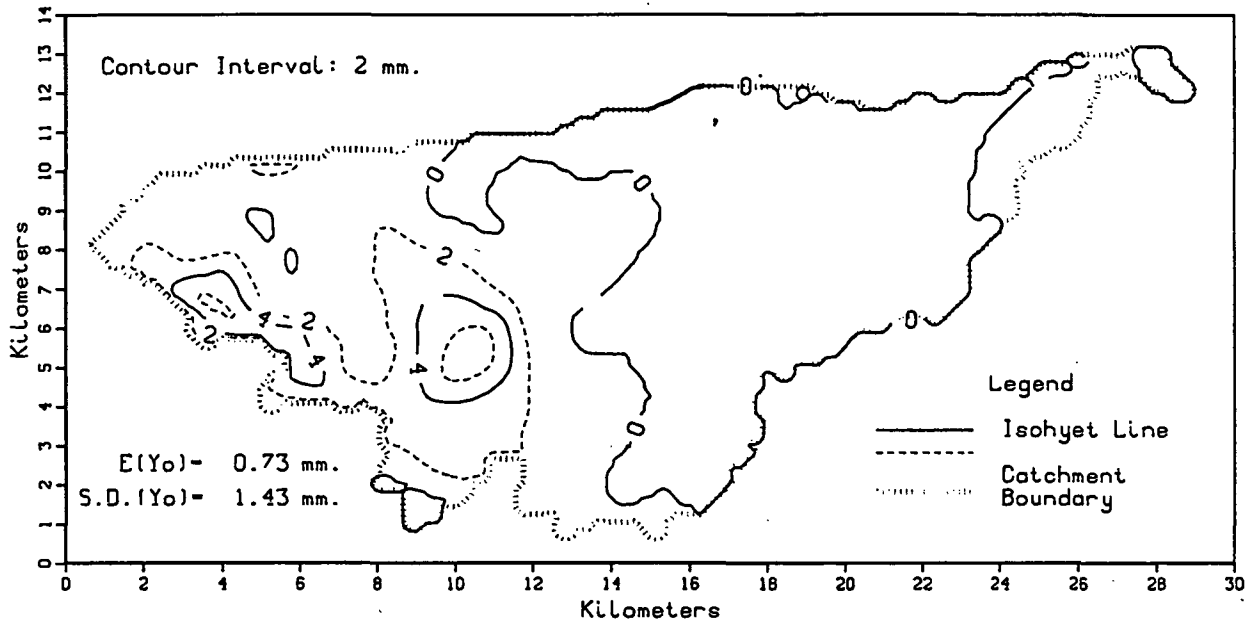
Variance of Point Depth (mm. sq.):  $Var(Y) = 25.709$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.002$

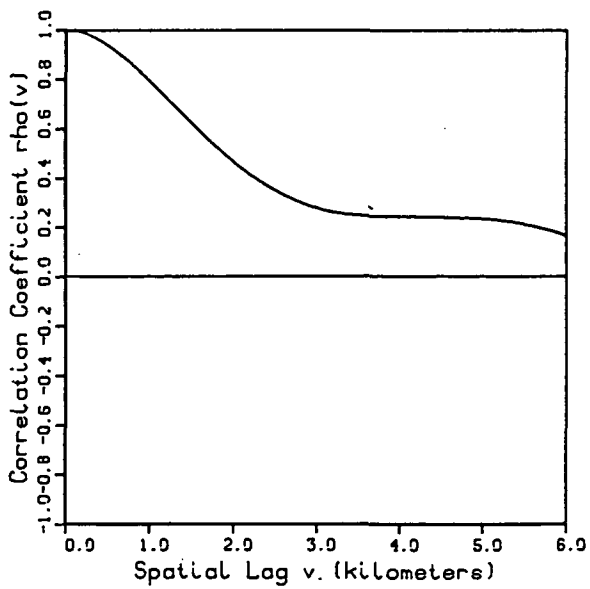
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
3	0.998	0.2	0.996	0.04	0.831
5	0.976	0.4	0.982	0.16	0.677
7	0.860	0.6	0.961	0.36	0.600
9	0.727	0.8	0.931	0.64	0.573
11	0.559	1.0	0.896	1.00	0.547
13	0.415	1.2	0.859	1.44	0.522
15	0.270	1.4	0.820	1.96	0.499
17	0.122	1.6	0.779	2.56	0.478
19	0.043	1.8	0.737	3.24	0.456
21	0.017	2.0	0.695	4.00	0.434
23	0.012	2.2	0.654	4.84	0.412
25	0.009	2.4	0.612	5.76	0.390
27	0.007	2.6	0.568	6.76	0.368
29	0.006	2.8	0.525	7.84	0.346
31	0.006	3.0	0.483	9.00	0.324
33	0.006	3.2	0.440	10.24	0.301
35	0.006	3.4	0.396	11.56	0.279
37	0.005	3.6	0.354	12.96	0.255
39	0.005	3.8	0.311	14.44	0.232
41	0.004	4.0	0.269	16.00	0.209
43	0.003	4.2	0.226	17.64	0.185
45	0.002	4.4	0.184	19.36	0.160
47	0.002	4.6	0.143	21.16	0.136
49	0.001	4.8	0.105	23.04	0.115
51	0.001	5.0	0.069	25.00	0.095
53	0.000	5.2	0.039	27.04	0.083
55	0.000	5.4	0.009	29.16	0.072
		5.6	-.018	31.36	0.063
		5.8	-.044	33.64	0.054
		6.0	-.069	36.00	0.041

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

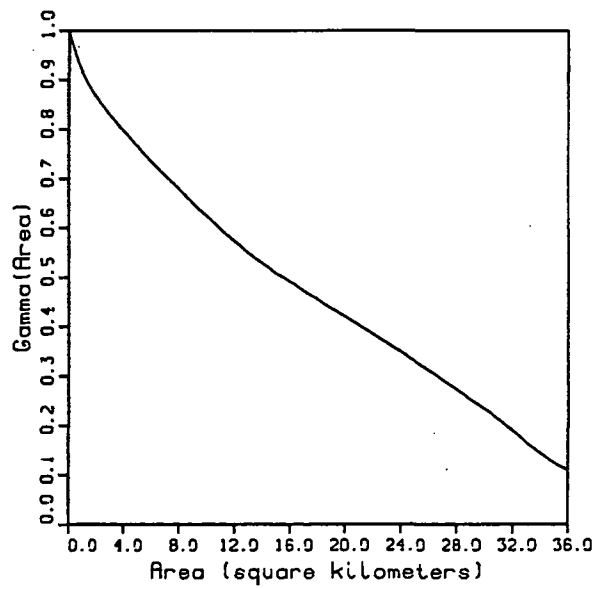
Storm Day  
 July 26, 1971



Spatial Correlation



Variance Function



Storm Day July 26 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.440$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.560$

Expected Value of Point Depth (mm.):  $E(Y) = 0.871$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.054$

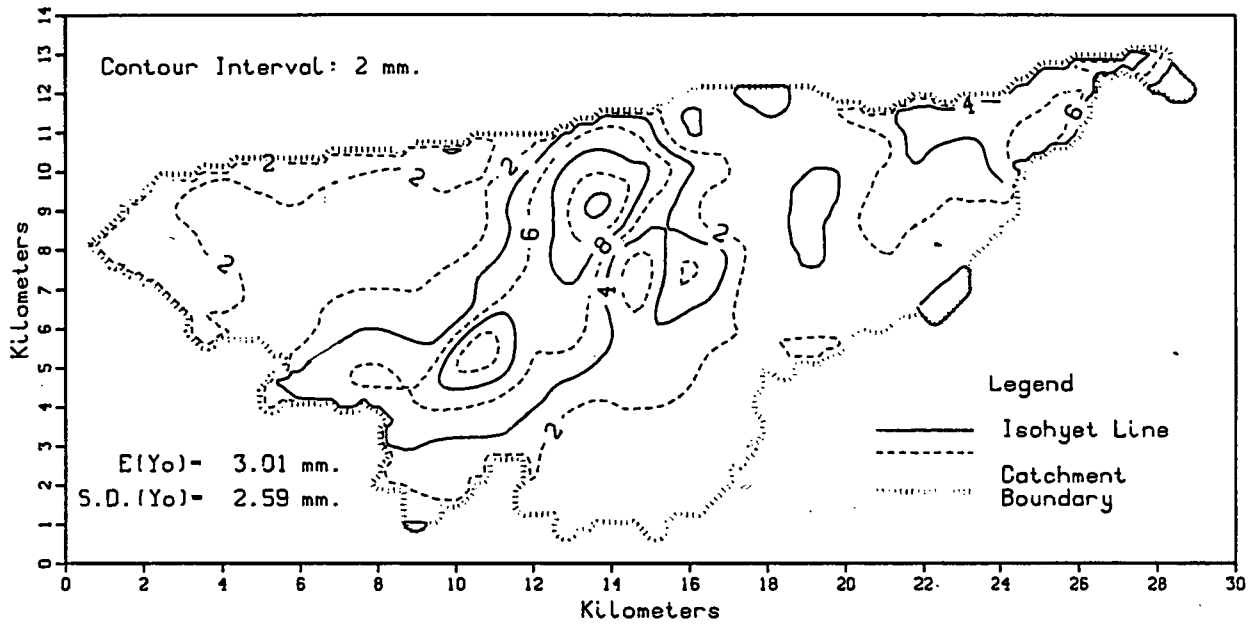
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.989$

Spatial Distribution of Total Storm Depth $y$ (mm.)	$A_{cw}/A_c (Y \geq y)$	Spatial Correlation		Variance Function	
		$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	Gamma ( $A$ )
1	0.273	0.0	1.000	0.00	1.000
2	0.169	0.2	0.988	0.04	1.000
3	0.106	0.4	0.957	0.16	0.987
4	0.055	0.6	0.911	0.36	0.965
5	0.029	0.8	0.854	0.64	0.941
6	0.011	1.0	0.791	1.00	0.916
7	0.002	1.2	0.724	1.44	0.892
8	0.000	1.4	0.655	1.96	0.868
		1.6	0.587	2.56	0.845
		1.8	0.523	3.24	0.821
		2.0	0.464	4.00	0.796
		2.2	0.412	4.84	0.770
		2.4	0.367	5.76	0.740
		2.6	0.329	6.76	0.712
		2.8	0.298	7.84	0.682
		3.0	0.275	9.00	0.650
		3.2	0.259	10.24	0.616
		3.4	0.248	11.56	0.583
		3.6	0.243	12.96	0.550
		3.8	0.241	14.44	0.519
		4.0	0.241	16.00	0.489
		4.2	0.240	17.64	0.460
		4.4	0.239	19.36	0.430
		4.6	0.237	21.16	0.398
		4.8	0.235	23.04	0.365
		5.0	0.232	25.00	0.328
		5.2	0.225	27.04	0.290
		5.4	0.216	29.16	0.248
		5.6	0.202	31.36	0.204
		5.8	0.185	33.64	0.151
		6.0	0.164	36.00	0.109

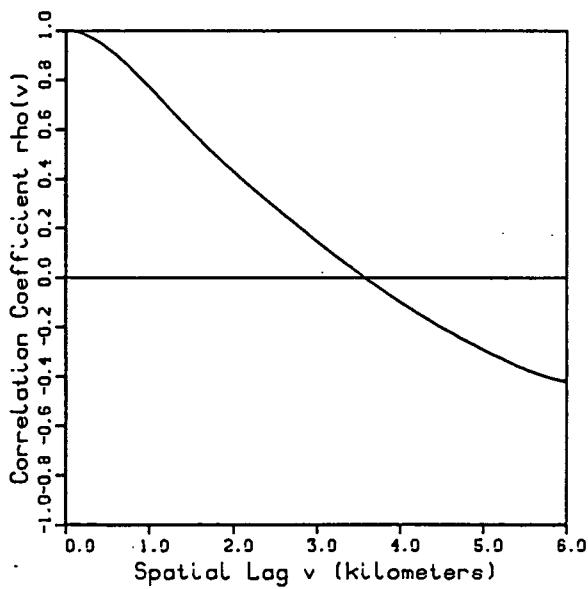


Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

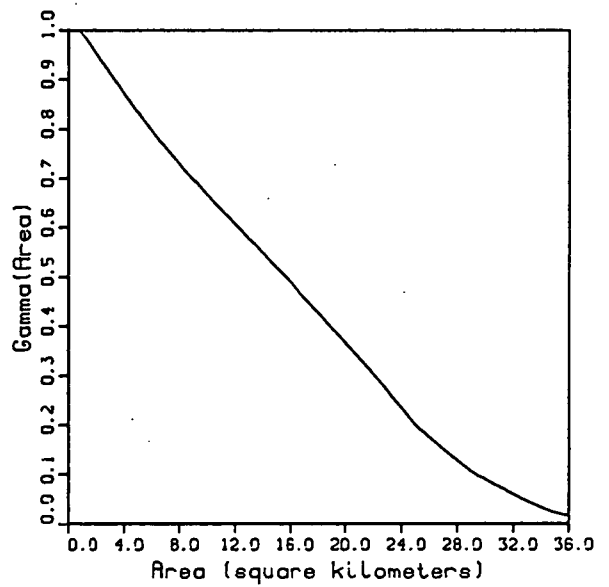
Storm Day  
 July 27, 1971



Spatial Correlation



Variance Function



Storm Day July 27 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.022$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.978$

Expected Value of Point Depth (mm.):  $E(Y) = 3.015$

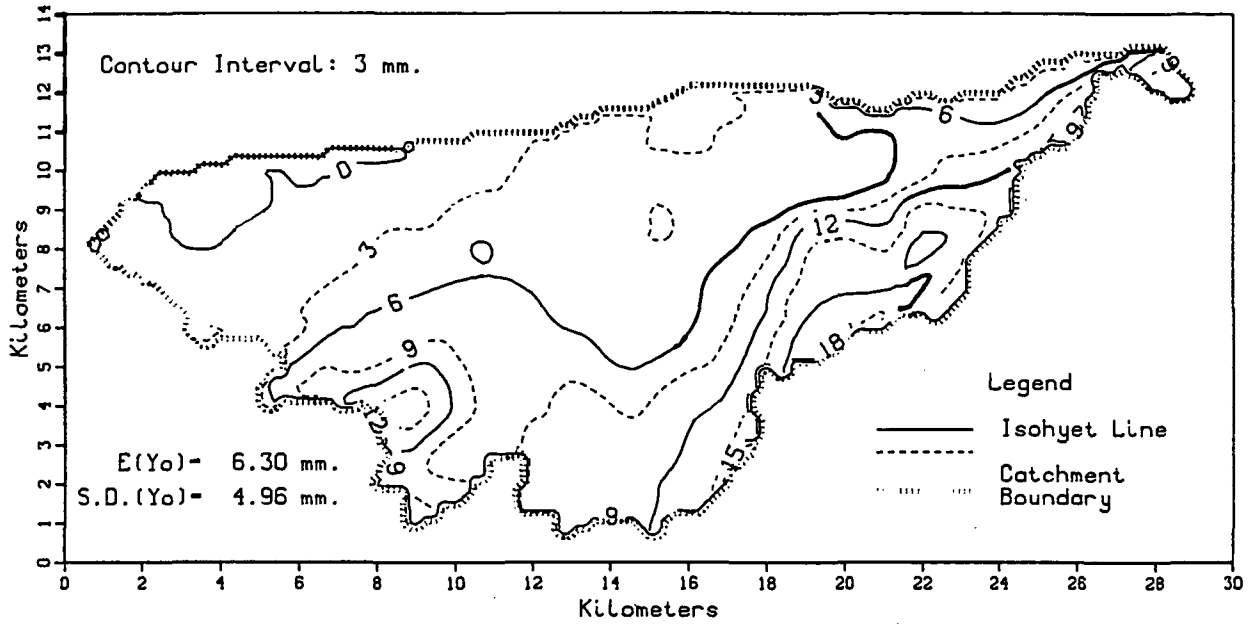
Variance of Point Depth (mm. sq.):  $Var(Y) = 5.879$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.204$

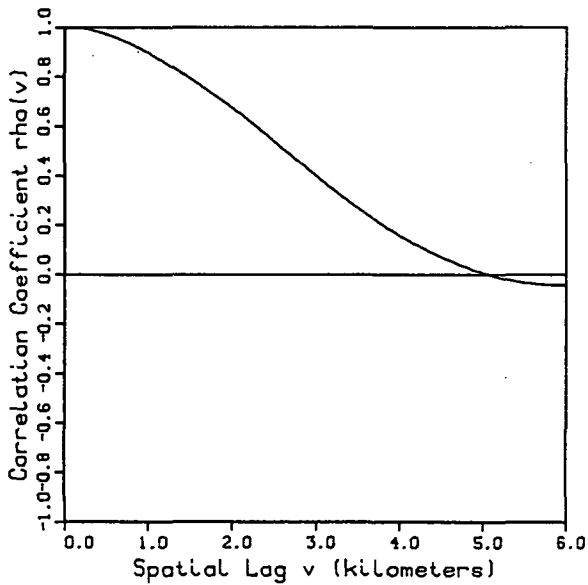
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.822	0.0	1.000	0.00	1.000
2	0.555	0.2	0.987	0.04	1.011
3	0.375	0.4	0.952	0.16	1.016
4	0.281	0.6	0.901	0.36	1.015
5	0.204	0.8	0.838	0.64	1.006
6	0.131	1.0	0.768	1.00	0.992
7	0.080	1.2	0.696	1.44	0.975
8	0.050	1.4	0.624	1.96	0.954
9	0.031	1.6	0.554	2.56	0.929
10	0.017	1.8	0.489	3.24	0.901
11	0.007	2.0	0.426	4.00	0.870
12	0.002	2.2	0.367	4.84	0.837
13	0.000	2.4	0.309	5.76	0.802
		2.6	0.253	6.76	0.767
		2.8	0.198	7.84	0.732
		3.0	0.144	9.00	0.695
		3.2	0.091	10.24	0.658
		3.4	0.039	11.56	0.619
		3.6	-.010	12.96	0.578
		3.8	-.057	14.44	0.534
		4.0	-.102	16.00	0.488
		4.2	-.145	17.64	0.438
		4.4	-.185	19.36	0.384
		4.6	-.224	21.16	0.328
		4.8	-.260	23.04	0.267
		5.0	-.295	25.00	0.199
		5.2	-.328	27.04	0.150
		5.4	-.358	29.16	0.102
		5.6	-.386	31.36	0.069
		5.8	-.408	33.64	0.036
		6.0	-.425	36.00	0.015

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

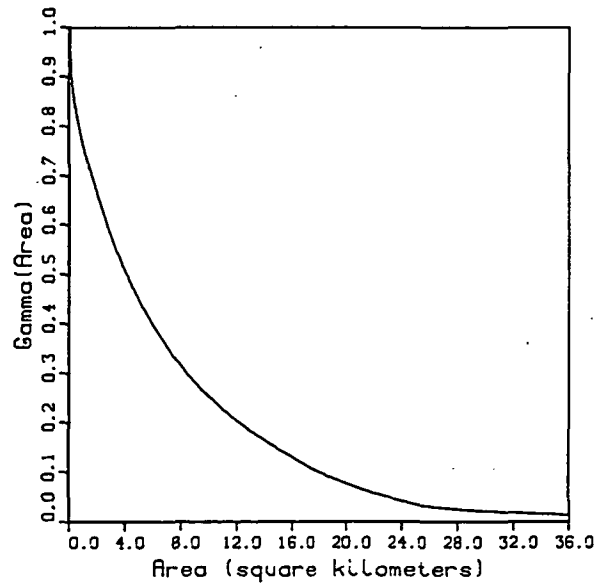
Storm Day  
 July 28, 1971



Spatial Correlation



Variance Function



Storm Day July 28 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.031$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.969$

Expected Value of Point Depth (mm.):  $E(Y) = 7.076$

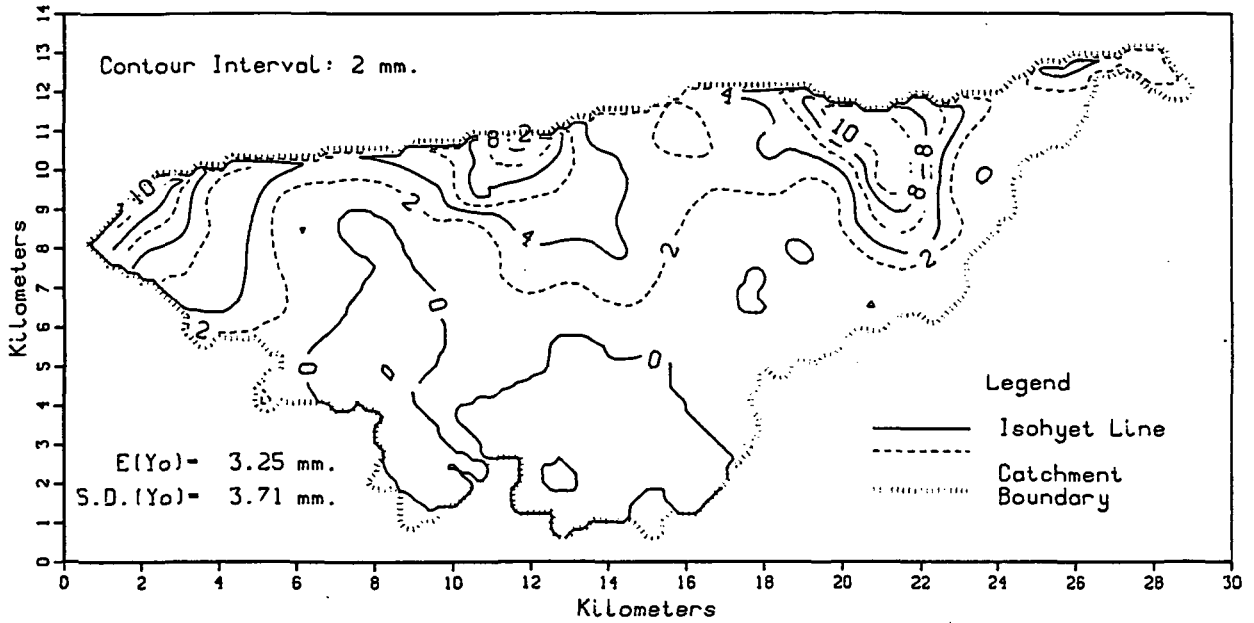
Variance of Point Depth (mm. sq.):  $Var(Y) = 23.848$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.646$

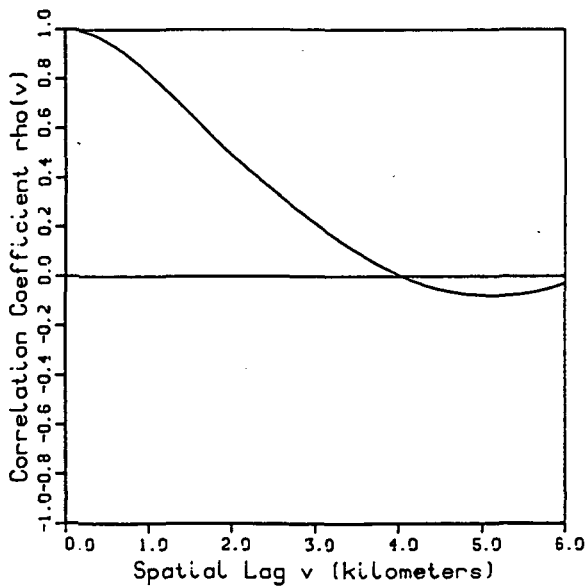
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.898	0.0	1.000	0.00	1.000
2	0.848	0.2	0.995	0.04	0.955
3	0.801	0.4	0.980	0.16	0.905
4	0.718	0.6	0.956	0.36	0.859
5	0.588	0.8	0.927	0.64	0.812
6	0.498	1.0	0.892	1.00	0.764
7	0.423	1.2	0.852	1.44	0.715
8	0.362	1.4	0.810	1.96	0.665
9	0.308	1.6	0.766	2.56	0.611
10	0.260	1.8	0.719	3.24	0.558
11	0.207	2.0	0.671	4.00	0.506
12	0.158	2.2	0.618	4.84	0.456
13	0.129	2.4	0.564	5.76	0.407
14	0.105	2.6	0.507	6.76	0.362
15	0.081	2.8	0.450	7.84	0.319
16	0.059	3.0	0.394	9.00	0.280
17	0.043	3.2	0.340	10.24	0.244
18	0.024	3.4	0.288	11.56	0.212
19	0.013	3.6	0.240	12.96	0.183
20	0.008	3.8	0.195	14.44	0.156
21	0.003	4.0	0.153	16.00	0.129
22	0.000	4.2	0.115	17.64	0.104
		4.4	0.081	19.36	0.083
		4.6	0.051	21.16	0.064
		4.8	0.024	23.04	0.048
		5.0	0.001	25.00	0.033
		5.2	-.017	27.04	0.026
		5.4	-.031	29.16	0.021
		5.6	-.040	31.36	0.018
		5.8	-.045	33.64	0.015
		6.0	-.045	36.00	0.012

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

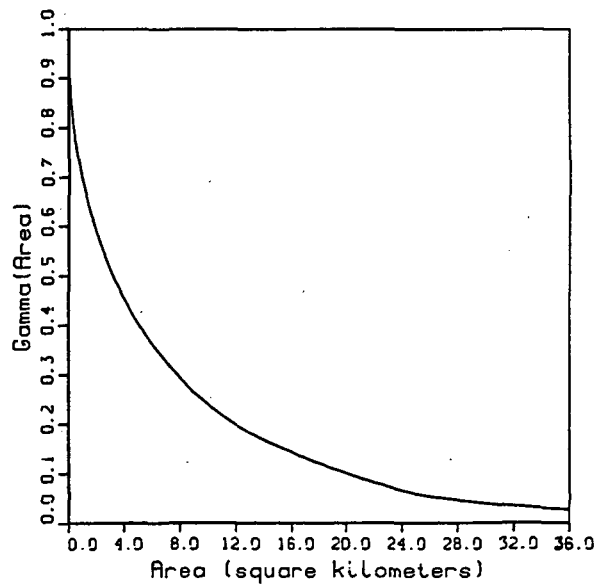
Storm Day  
 July 29, 1971



Spatial Correlation



Variance Function



Storm Day July 29 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.187$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.813$

Expected Value of Point Depth (mm.):  $E(Y) = 2.311$

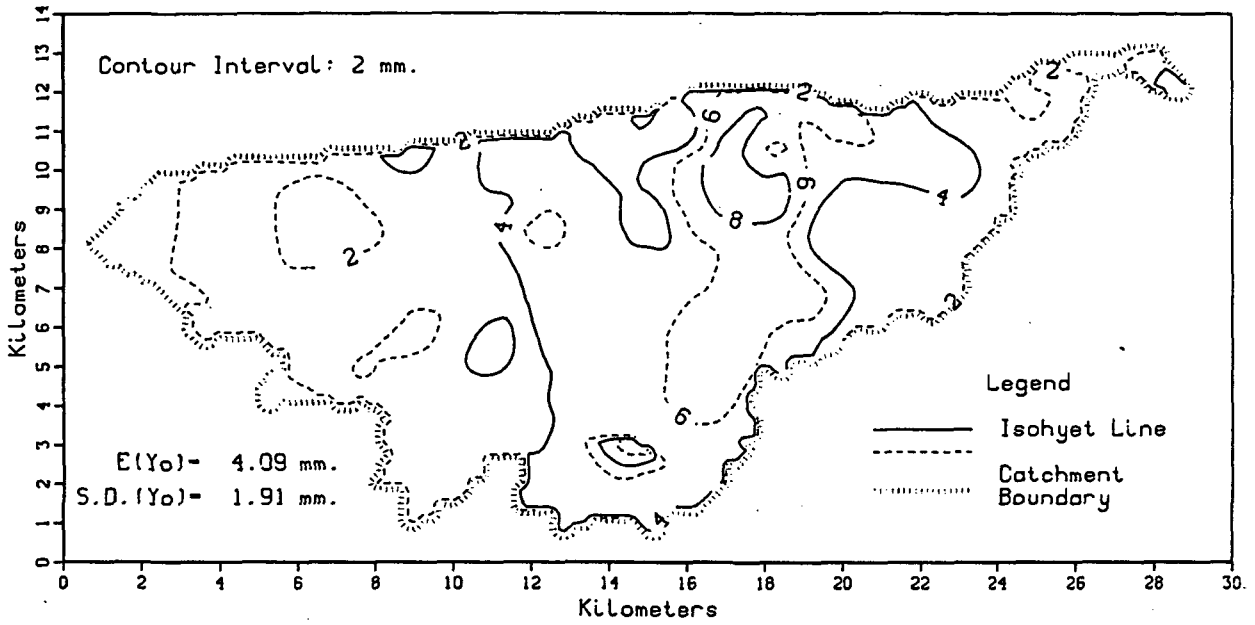
Variance of Point Depth (mm. sq.):  $Var(Y) = 8.717$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.637$

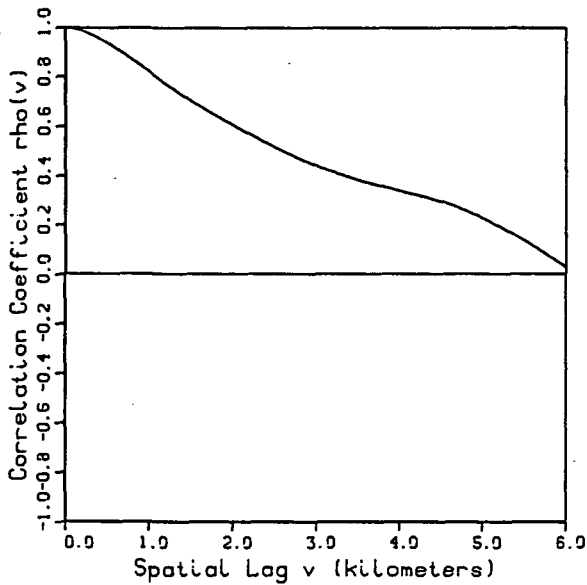
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.506	0.0	1.000	0.00	1.000
2	0.396	0.2	0.991	0.04	0.934
3	0.301	0.4	0.966	0.16	0.873
4	0.218	0.6	0.927	0.36	0.810
5	0.159	0.8	0.878	0.64	0.752
6	0.111	1.0	0.820	1.00	0.695
7	0.086	1.2	0.757	1.44	0.643
8	0.066	1.4	0.690	1.96	0.594
9	0.049	1.6	0.622	2.56	0.544
10	0.035	1.8	0.555	3.24	0.496
11	0.018	2.0	0.491	4.00	0.454
12	0.009	2.2	0.430	4.84	0.412
13	0.005	2.4	0.373	5.76	0.373
14	0.002	2.6	0.318	6.76	0.335
15	0.001	2.8	0.265	7.84	0.298
16	0.000	3.0	0.214	9.00	0.264
		3.2	0.164	10.24	0.233
		3.4	0.118	11.56	0.206
		3.6	0.075	12.96	0.182
		3.8	0.037	14.44	0.161
		4.0	0.002	16.00	0.142
		4.2	-.026	17.64	0.124
		4.4	-.049	19.36	0.106
		4.6	-.065	21.16	0.088
		4.8	-.075	23.04	0.072
		5.0	-.081	25.00	0.057
		5.2	-.081	27.04	0.049
		5.4	-.076	29.16	0.041
		5.6	-.067	31.36	0.035
		5.8	-.051	33.64	0.030
		6.0	-.030	36.00	0.025

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq. km.

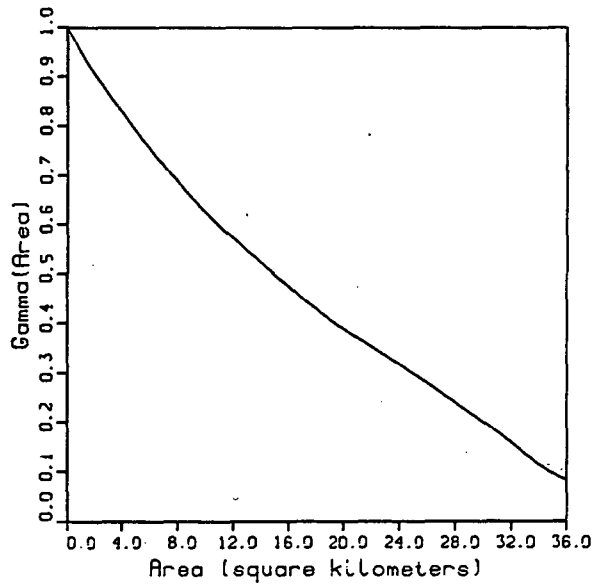
Storm Day  
 July 30, 1971



Spatial Correlation



Variance Function



Storm Day July 30 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 4.077$

Variance of Point Depth (mm. sq.):  $Var(Y) = 3.159$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.775$

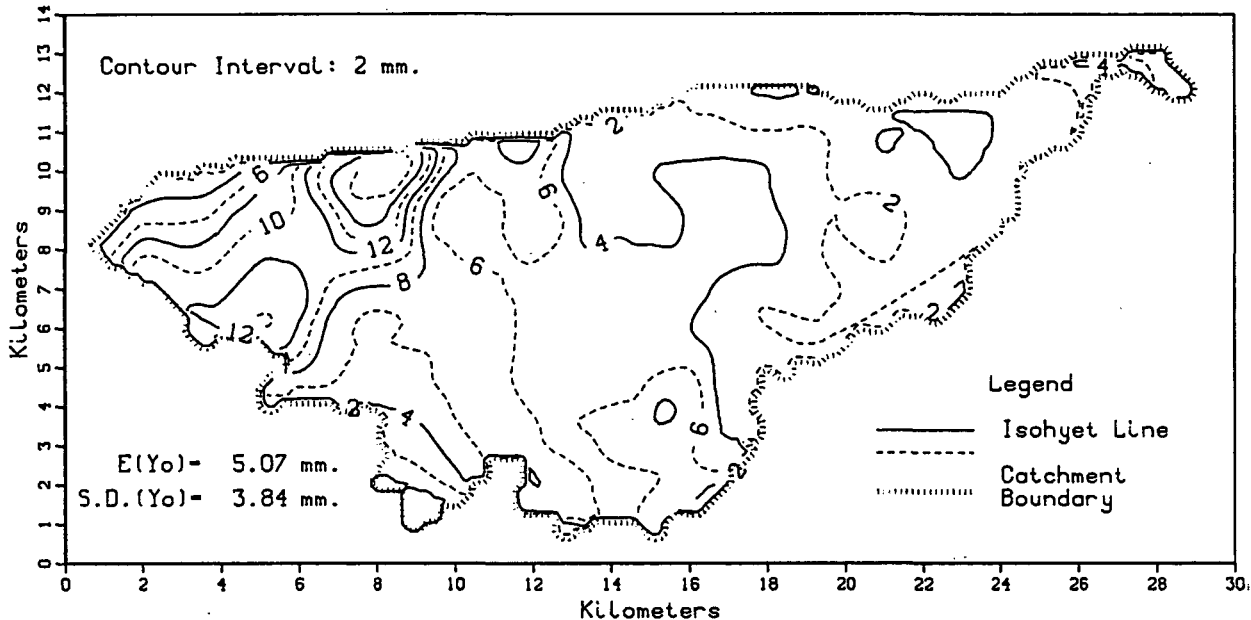
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	0.925	0.2	0.985	0.04	0.998
3	0.663	0.4	0.955	0.16	0.993
4	0.473	0.6	0.914	0.36	0.982
5	0.270	0.8	0.868	0.64	0.968
6	0.159	1.0	0.819	1.00	0.949
7	0.083	1.2	0.770	1.44	0.929
8	0.028	1.4	0.723	1.96	0.907
9	0.011	1.6	0.680	2.56	0.883
10	0.001	1.8	0.640	3.24	0.856
11	0.000	2.0	0.603	4.00	0.826
		2.2	0.565	4.84	0.795
		2.4	0.529	5.76	0.761
		2.6	0.496	6.76	0.727
		2.8	0.466	7.84	0.691
		3.0	0.438	9.00	0.655
		3.2	0.413	10.24	0.618
		3.4	0.390	11.56	0.583
		3.6	0.371	12.96	0.548
		3.8	0.353	14.44	0.513
		4.0	0.336	16.00	0.475
		4.2	0.320	17.64	0.436
		4.4	0.302	19.36	0.400
		4.6	0.282	21.16	0.368
		4.8	0.257	23.04	0.333
		5.0	0.227	25.00	0.298
		5.2	0.193	27.04	0.258
		5.4	0.155	29.16	0.216
		5.6	0.114	31.36	0.174
		5.8	0.072	33.64	0.122
		6.0	0.028	36.00	0.083



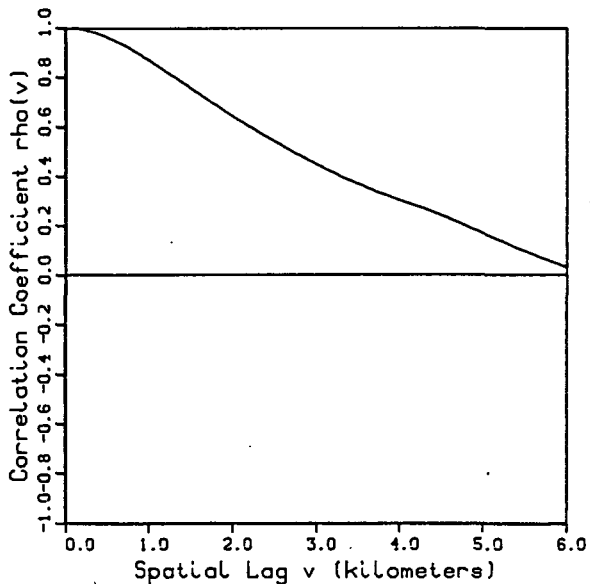
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

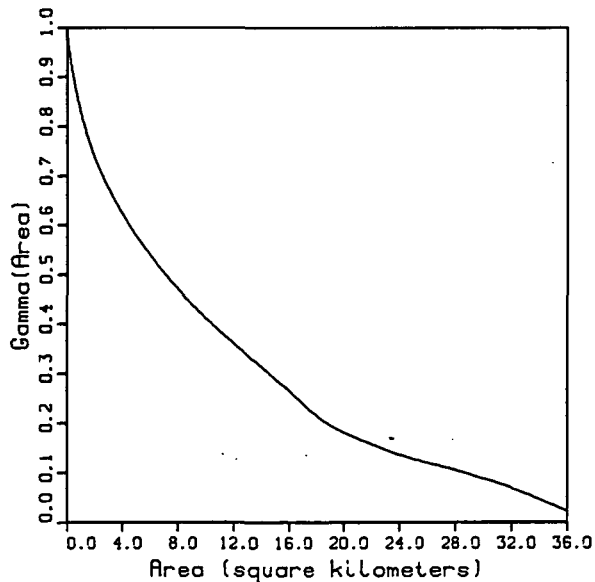
Storm Day  
July 31, 1971



Spatial Correlation



Variance Function



Storm Day July 31 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.017$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.983$

Expected Value of Point Depth (mm.):  $E(Y) = 5.338$

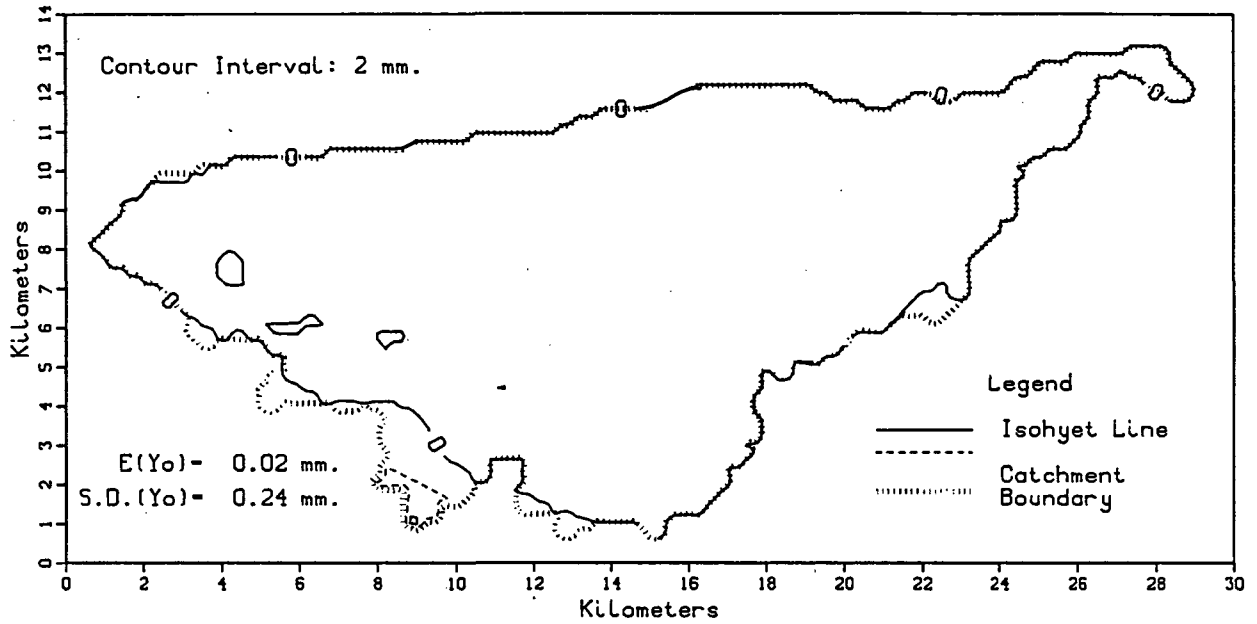
Variance of Point Depth (mm. sq.):  $Var(Y) = 13.323$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.089$

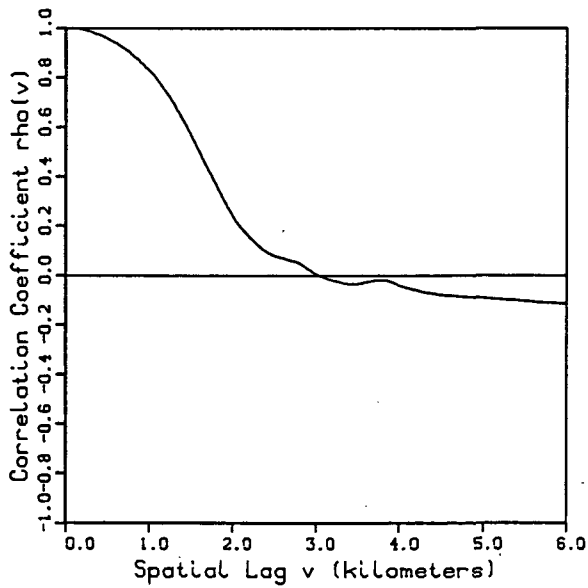
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.906	0.0	1.000	0.00	1.000
2	0.833	0.2	0.993	0.04	0.982
3	0.724	0.4	0.974	0.16	0.954
4	0.637	0.6	0.946	0.36	0.918
5	0.500	0.8	0.909	0.64	0.874
6	0.355	1.0	0.868	1.00	0.829
7	0.237	1.2	0.822	1.44	0.784
8	0.158	1.4	0.776	1.96	0.739
9	0.133	1.6	0.730	2.56	0.697
10	0.113	1.8	0.685	3.24	0.658
11	0.087	2.0	0.641	4.00	0.620
12	0.063	2.2	0.599	4.84	0.582
13	0.046	2.4	0.558	5.76	0.545
14	0.029	2.6	0.520	6.76	0.508
15	0.023	2.8	0.482	7.84	0.472
16	0.018	3.0	0.447	9.00	0.438
17	0.013	3.2	0.413	10.24	0.404
18	0.008	3.4	0.381	11.56	0.370
19	0.003	3.6	0.352	12.96	0.337
20	0.000	3.8	0.326	14.44	0.302
		4.0	0.301	16.00	0.263
		4.2	0.278	17.64	0.222
		4.4	0.254	19.36	0.188
		4.6	0.226	21.16	0.166
		4.8	0.197	23.04	0.144
		5.0	0.167	25.00	0.126
		5.2	0.138	27.04	0.111
		5.4	0.110	29.16	0.094
		5.6	0.082	31.36	0.075
		5.8	0.056	33.64	0.049
		6.0	0.031	36.00	0.022

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

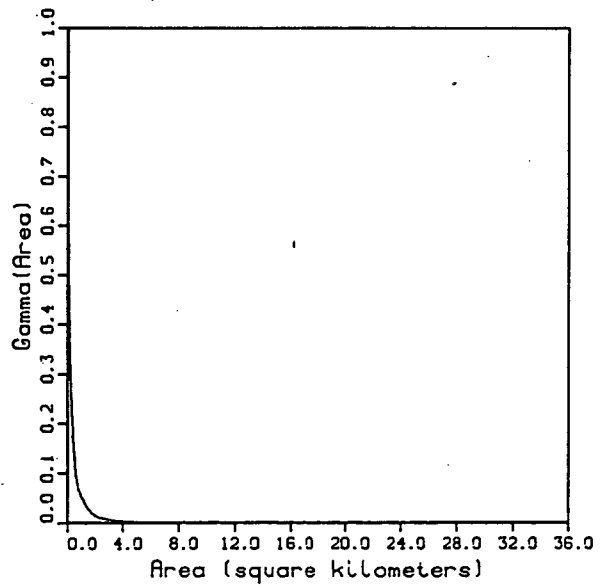
Storm Day  
 Aug 1, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.948$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.052$

Expected Value of Point Depth (mm.):  $E(Y) = 0.038$

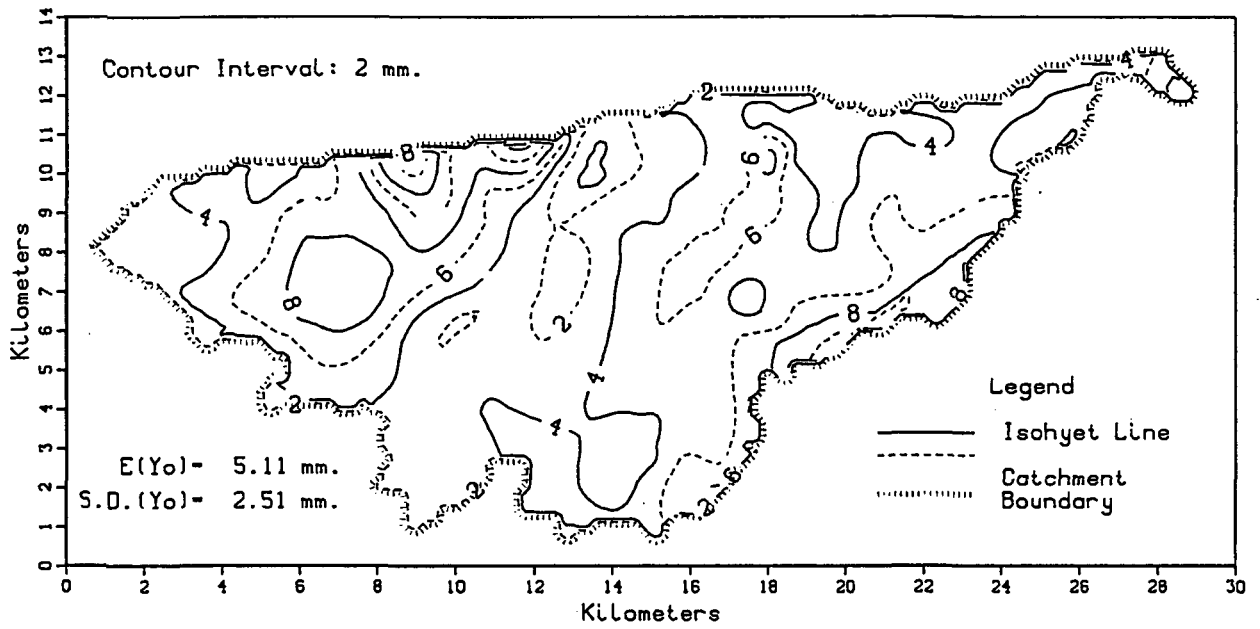
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.077$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 9.447$

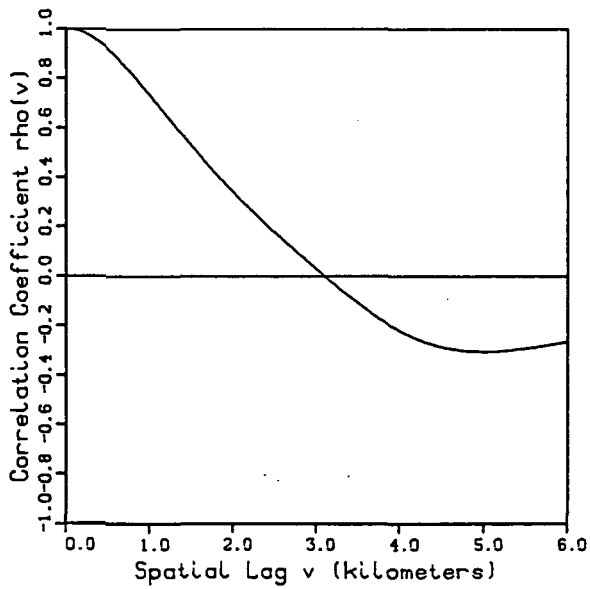
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.011	0.0	1.000	0.00	1.000
2	0.005	0.2	0.992	0.04	0.641
3	0.001	0.4	0.970	0.16	0.367
4	0.000	0.6	0.935	0.36	0.201
5	0.000	0.8	0.886	0.64	0.090
		1.0	0.824	1.00	0.053
		1.2	0.739	1.44	0.030
		1.4	0.627	1.96	0.014
		1.6	0.493	2.56	0.007
		1.8	0.365	3.24	0.004
		2.0	0.238	4.00	0.002
		2.2	0.153	4.84	0.001
		2.4	0.094	5.76	0.000
		2.6	0.066	6.76	0.000
		2.8	0.045	7.84	0.000
		3.0	0.001	9.00	0.000
		3.2	-.023	10.24	0.000
		3.4	-.039	11.56	0.000
		3.6	-.028	12.96	0.000
		3.8	-.019	14.44	0.000
		4.0	-.045	16.00	0.000
		4.2	-.065	17.64	0.000
		4.4	-.079	19.36	0.000
		4.6	-.086	21.16	0.000
		4.8	-.091	23.04	0.000
		5.0	-.096	25.00	0.000
		5.2	-.101	27.04	0.000
		5.4	-.105	29.16	0.000
		5.6	-.111	31.36	0.000
		5.8	-.115	33.64	0.000
		6.0	-.116	36.00	0.000

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

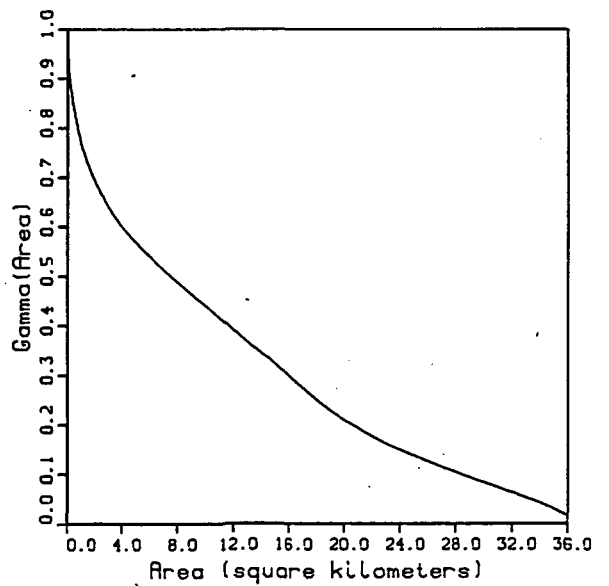
Storm Day  
 Aug 3, 1971



Spatial Correlation



Variance Function



Storm Day Aug 3 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.002$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.998$

Expected Value of Point Depth (mm.):  $E(Y) = 5.024$

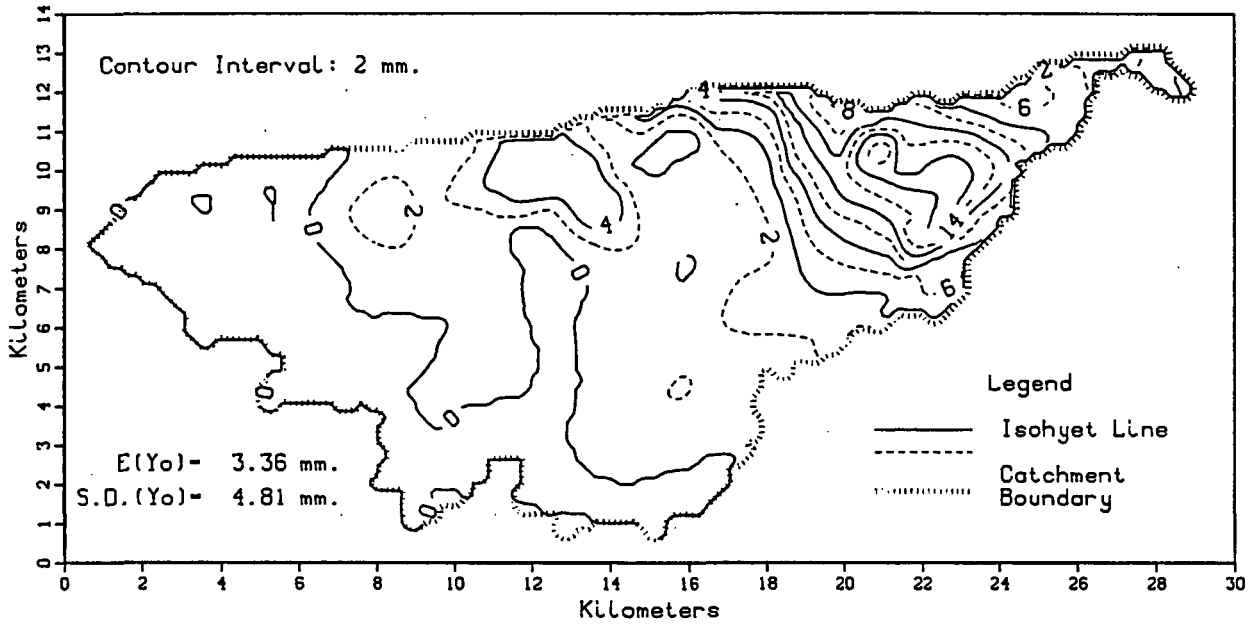
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.816$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.945$

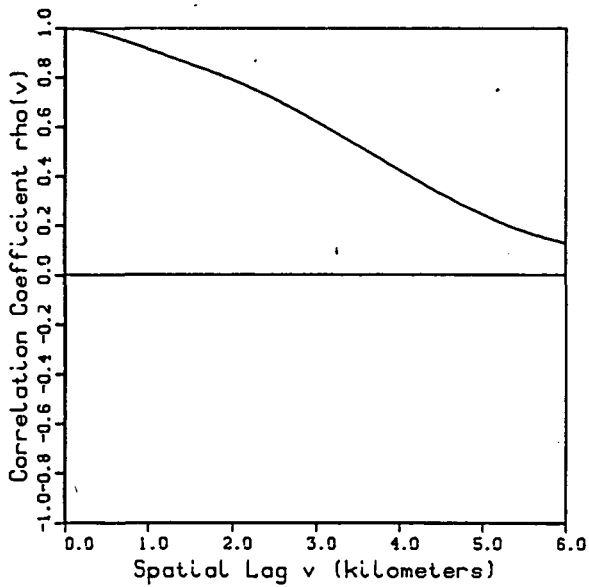
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.988	0.0	1.000	0.00	1.000
2	0.958	0.2	0.985	0.04	0.956
3	0.857	0.4	0.943	0.16	0.907
4	0.641	0.6	0.882	0.36	0.861
5	0.429	0.8	0.807	0.64	0.814
6	0.270	1.0	0.727	1.00	0.770
7	0.159	1.2	0.644	1.44	0.730
8	0.102	1.4	0.562	1.96	0.693
9	0.061	1.6	0.482	2.56	0.659
10	0.025	1.8	0.407	3.24	0.627
11	0.013	2.0	0.335	4.00	0.598
12	0.008	2.2	0.268	4.84	0.570
13	0.005	2.4	0.204	5.76	0.543
14	0.002	2.6	0.143	6.76	0.516
15	0.000	2.8	0.083	7.84	0.489
		3.0	0.025	9.00	0.461
		3.2	-.032	10.24	0.431
		3.4	-.087	11.56	0.400
		3.6	-.138	12.96	0.367
		3.8	-.185	14.44	0.332
		4.0	-.225	16.00	0.296
		4.2	-.257	17.64	0.257
		4.4	-.281	19.36	0.219
		4.6	-.297	21.16	0.188
		4.8	-.306	23.04	0.159
		5.0	-.307	25.00	0.135
		5.2	-.304	27.04	0.112
		5.4	-.297	29.16	0.090
		5.6	-.288	31.36	0.068
		5.8	-.278	33.64	0.044
		6.0	-.265	36.00	0.015

Walnut Gulch, Arizona  
Ac-154.21 sq.km.

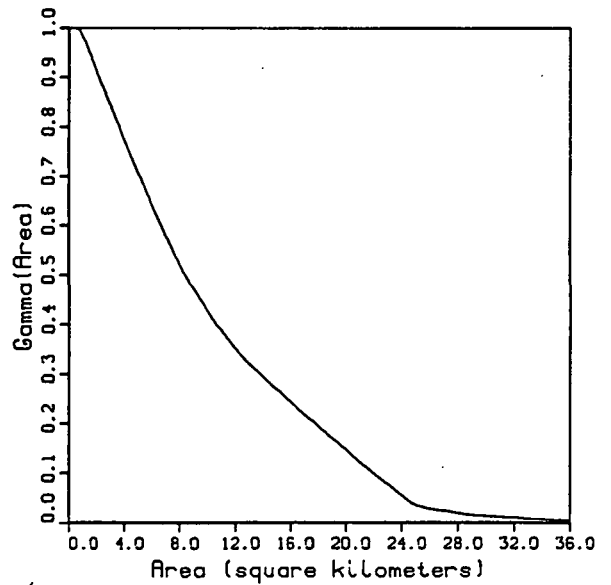
Storm Day  
Aug 8, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.275$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.725$

Expected Value of Point Depth (mm.):  $E(Y) = 2.846$

Variance of Point Depth (mm. sq.):  $Var(Y) = 17.968$

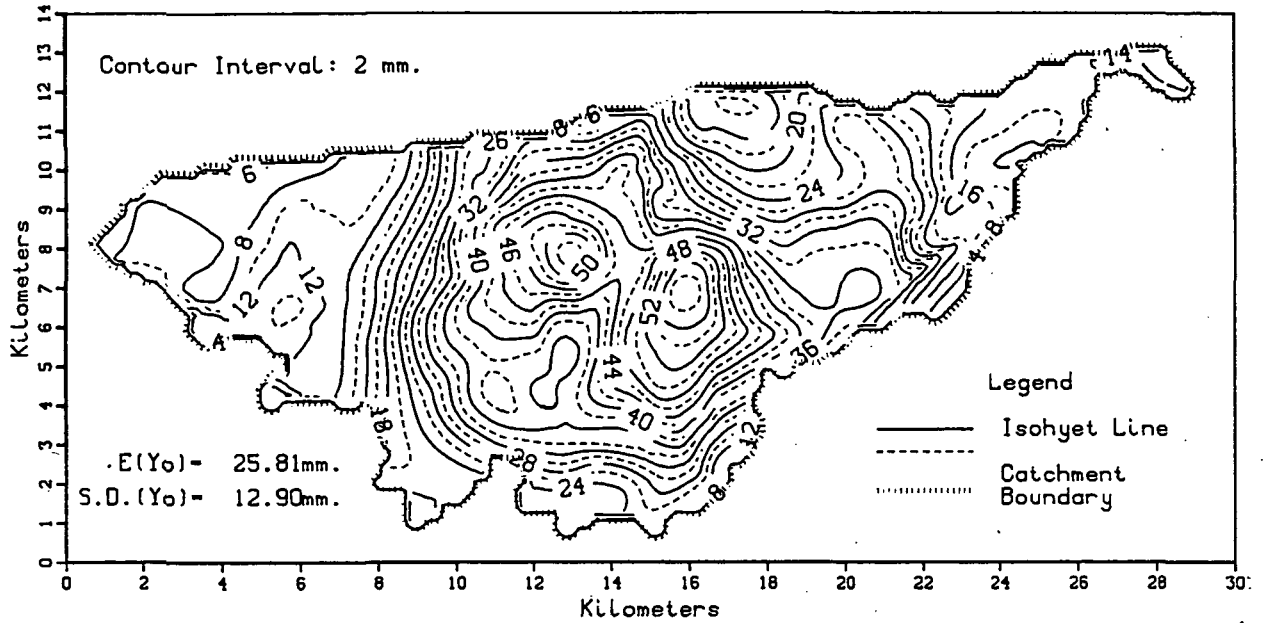
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.759$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.473	0.0	1.000	0.00	1.000
2	0.342	0.2	0.995	0.04	1.008
3	0.278	0.4	0.980	0.16	1.013
4	0.246	0.6	0.960	0.36	1.011
5	0.214	0.8	0.936	0.64	1.000
6	0.176	1.0	0.911	1.00	0.980
7	0.149	1.2	0.886	1.44	0.951
8	0.131	1.4	0.862	1.96	0.914
9	0.115	1.6	0.837	2.56	0.870
10	0.100	1.8	0.812	3.24	0.822
11	0.085	2.0	0.785	4.00	0.769
12	0.068	2.2	0.756	4.84	0.713
13	0.052	2.4	0.725	5.76	0.654
14	0.042	2.6	0.691	6.76	0.591
15	0.030	2.8	0.655	7.84	0.528
16	0.017	3.0	0.617	9.00	0.470
17	0.006	3.2	0.578	10.24	0.415
18	0.001	3.4	0.540	11.56	0.365
19	0.000	3.6	0.501	12.96	0.320
		3.8	0.461	14.44	0.281
		4.0	0.421	16.00	0.242
		4.2	0.382	17.64	0.202
		4.4	0.344	19.36	0.161
		4.6	0.308	21.16	0.117
		4.8	0.274	23.04	0.075
		5.0	0.242	25.00	0.034
		5.2	0.213	27.04	0.023
		5.4	0.187	29.16	0.014
		5.6	0.165	31.36	0.010
		5.8	0.145	33.64	0.005
		6.0	0.128	36.00	0.003

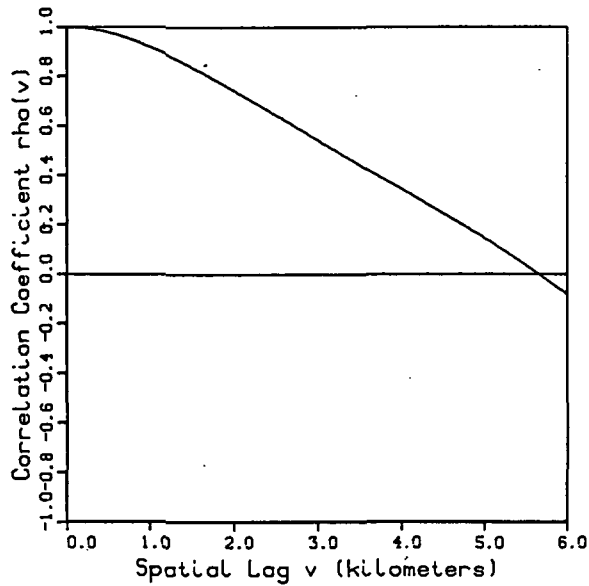


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

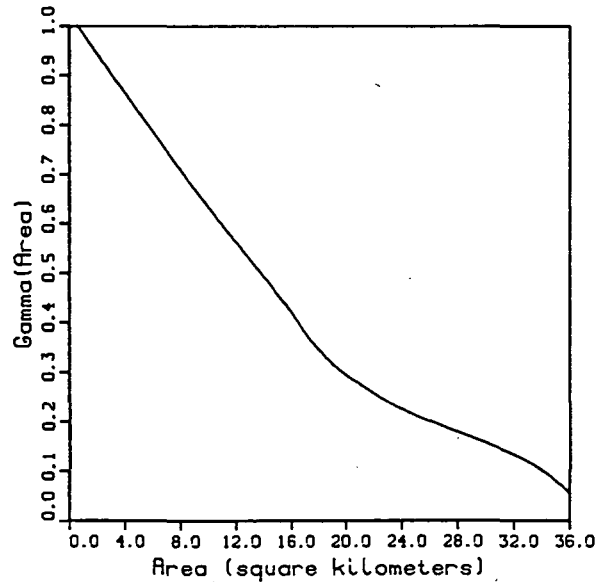
Storm Day  
 Aug 10, 1971



Spatial Correlation



Variance Function



Storm Day Aug 10 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 27.526$

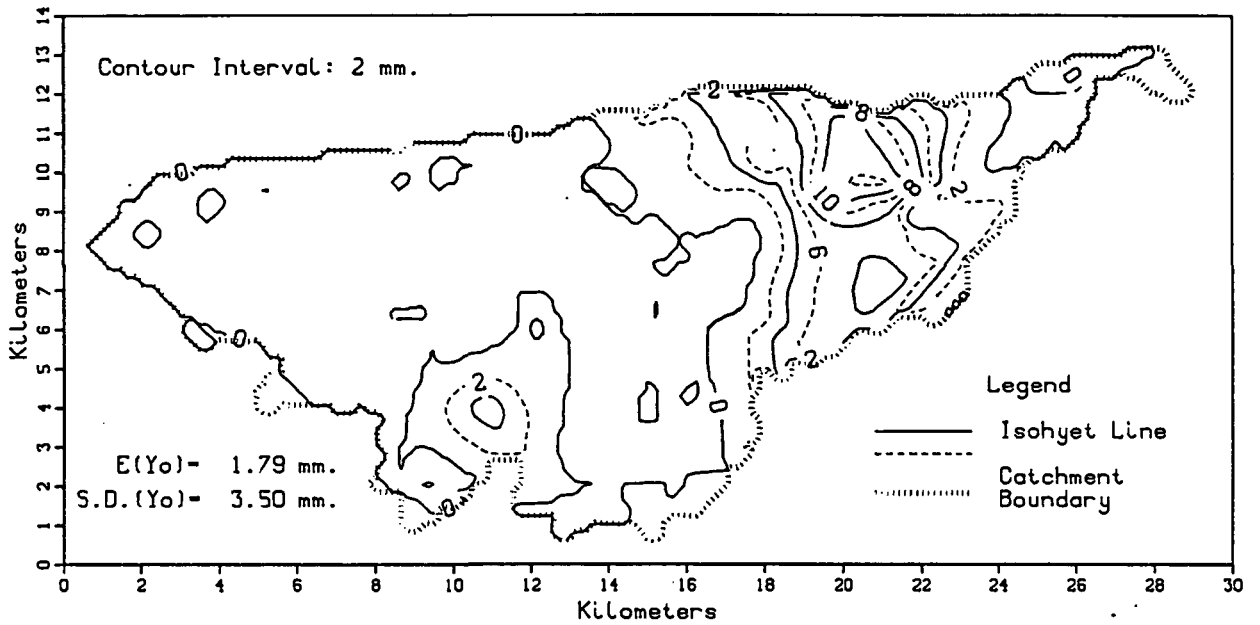
Variance of Point Depth (mm. sq.):  $Var(Y) = 174.063$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.221$

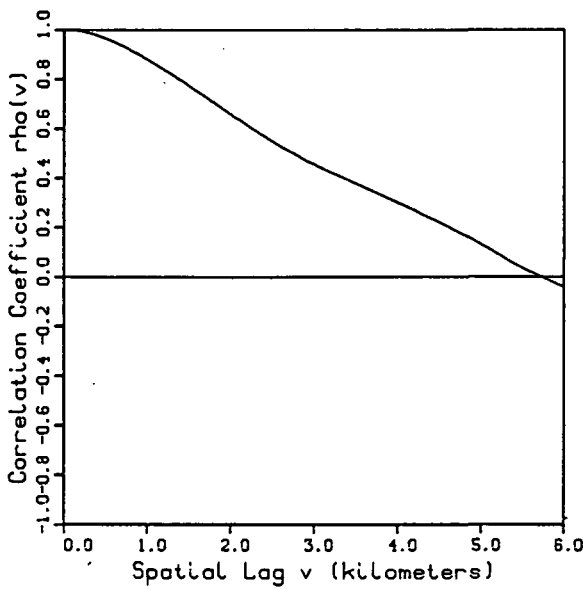
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.996	0.04	1.008
5	1.000	0.4	0.984	0.16	1.011
7	0.985	0.6	0.966	0.36	1.008
9	0.930	0.8	0.943	0.64	0.998
11	0.880	1.0	0.916	1.00	0.984
13	0.826	1.2	0.885	1.44	0.965
15	0.766	1.4	0.851	1.96	0.943
17	0.724	1.6	0.815	2.56	0.919
19	0.690	1.8	0.778	3.24	0.891
21	0.657	2.0	0.739	4.00	0.862
23	0.607	2.2	0.700	4.84	0.829
25	0.554	2.4	0.660	5.76	0.793
27	0.500	2.6	0.620	6.76	0.754
29	0.462	2.8	0.579	7.84	0.712
31	0.428	3.0	0.538	9.00	0.668
33	0.391	3.2	0.498	10.24	0.622
35	0.342	3.4	0.457	11.56	0.575
37	0.268	3.6	0.417	12.96	0.527
39	0.220	3.8	0.378	14.44	0.476
41	0.184	4.0	0.339	16.00	0.418
43	0.146	4.2	0.300	17.64	0.356
45	0.113	4.4	0.261	19.36	0.306
47	0.085	4.6	0.223	21.16	0.270
49	0.063	4.8	0.183	23.04	0.237
51	0.044	5.0	0.142	25.00	0.210
53	0.027	5.2	0.099	27.04	0.187
55	0.014	5.4	0.055	29.16	0.164
57	0.007	5.6	0.009	31.36	0.139
		6.0	-.086	36.00	0.054

Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

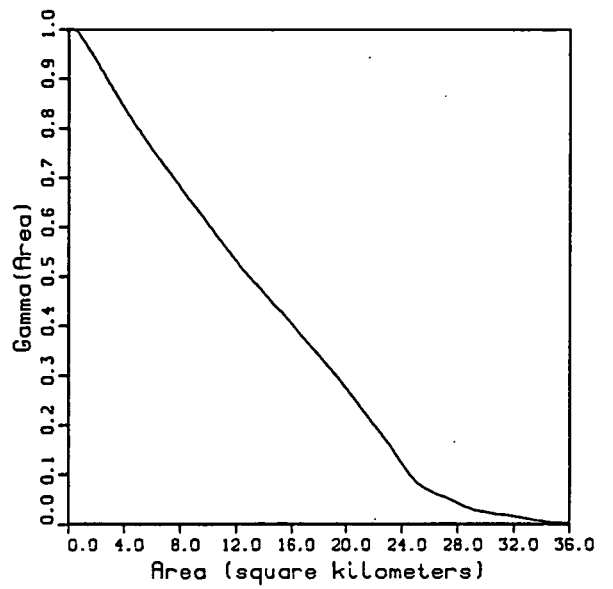
Storm Day  
 Aug 11, 1971



Spatial Correlation



Variance Function



Storm Day Aug 11 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.513$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.487$

Expected Value of Point Depth (mm.):  $E(Y) = 1.566$

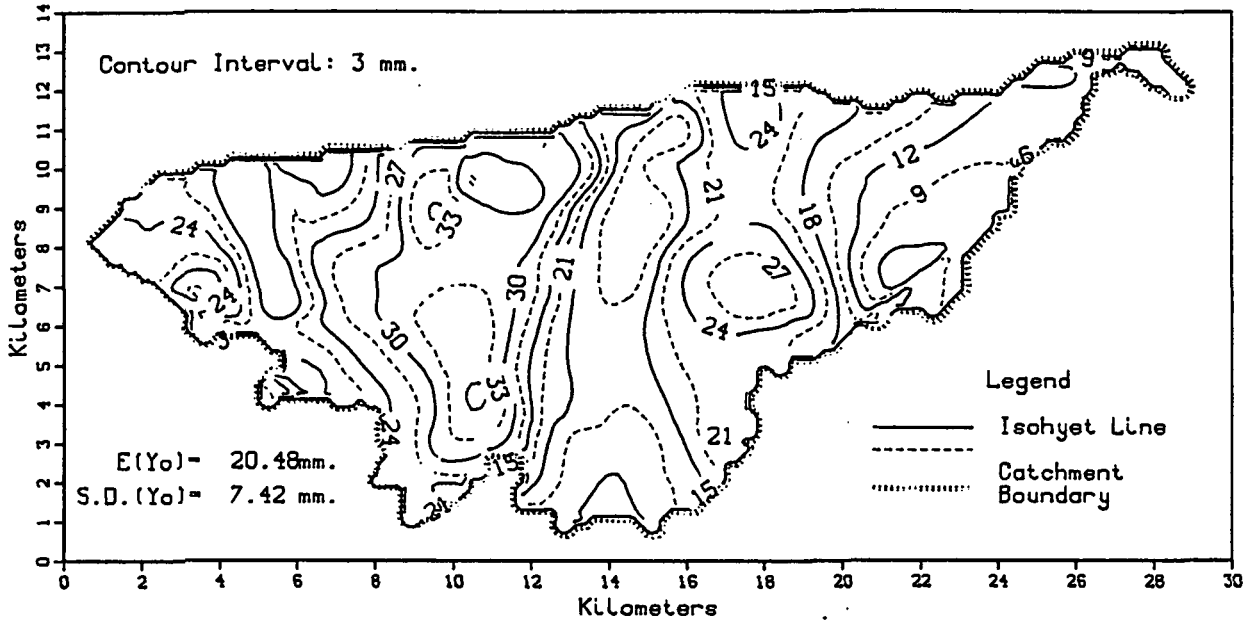
Variance of Point Depth (mm. sq.):  $Var(Y) = 9.080$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.160$

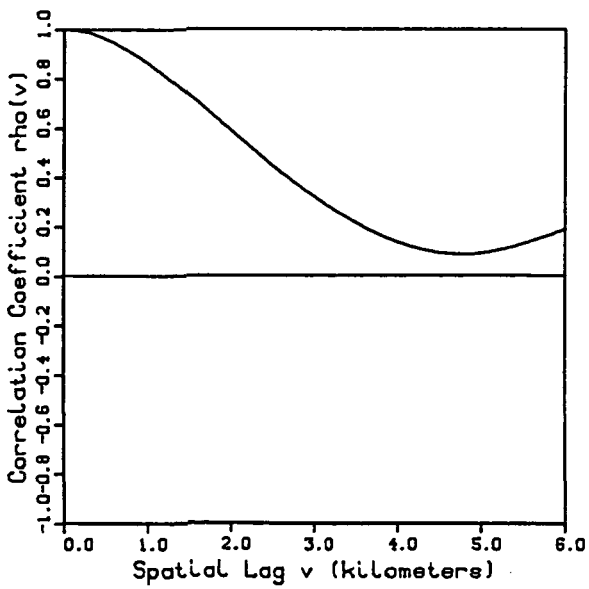
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.281	0.0	1.000	0.00	1.000
2	0.233	0.2	0.993	0.04	1.010
3	0.195	0.4	0.975	0.16	1.012
4	0.164	0.6	0.948	0.36	1.007
5	0.135	0.8	0.914	0.64	0.995
6	0.115	1.0	0.876	1.00	0.979
7	0.091	1.2	0.835	1.44	0.960
8	0.060	1.4	0.792	1.96	0.937
9	0.042	1.6	0.747	2.56	0.908
10	0.034	1.8	0.701	3.24	0.875
11	0.026	2.0	0.656	4.00	0.839
12	0.018	2.2	0.611	4.84	0.802
13	0.009	2.4	0.567	5.76	0.764
14	0.001	2.6	0.526	6.76	0.725
15	0.000	2.8	0.488	7.84	0.684
		3.0	0.453	9.00	0.640
		3.2	0.421	10.24	0.593
		3.4	0.389	11.56	0.545
		3.6	0.358	12.96	0.496
		3.8	0.328	14.44	0.450
		4.0	0.297	16.00	0.402
		4.2	0.265	17.64	0.351
		4.4	0.233	19.36	0.294
		4.6	0.200	21.16	0.229
		4.8	0.165	23.04	0.159
		5.0	0.128	25.00	0.084
		5.2	0.088	27.04	0.054
		5.4	0.050	29.16	0.027
		5.6	0.017	31.36	0.017
		5.8	-0.015	33.64	0.006
		6.0	-0.044	36.00	0.001

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

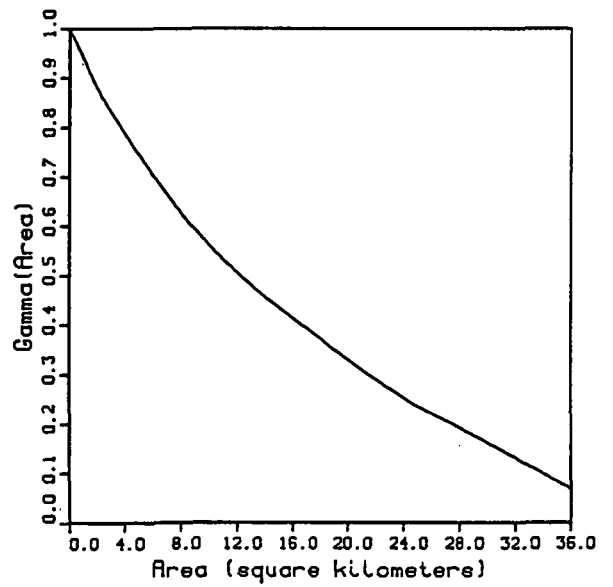
Storm Day  
 Aug 12, 1971



Spatial Correlation



Variance Function



Storm Day Aug 12 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 20.985$

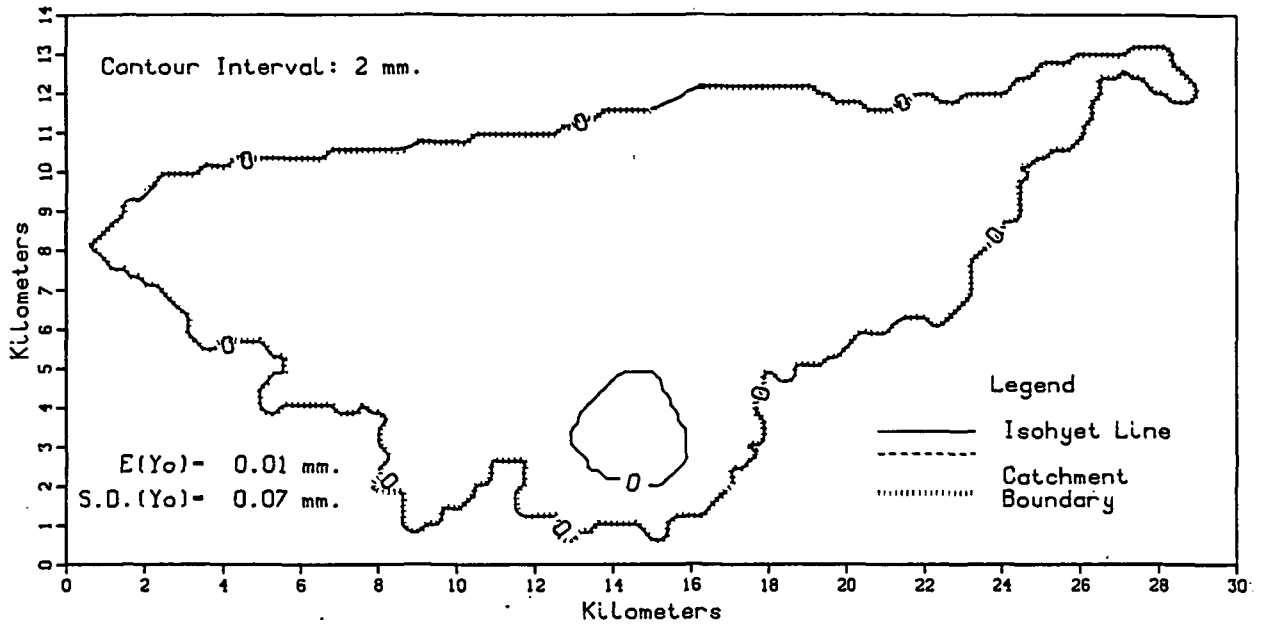
Variance of Point Depth (mm. sq.):  $Var(Y) = 53.595$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.031$

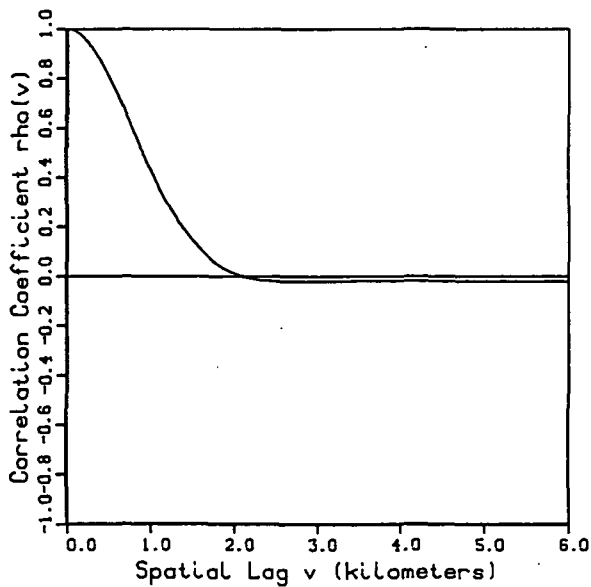
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.992	0.04	0.996
3	1.000	0.4	0.971	0.16	0.988
4	0.999	0.6	0.941	0.36	0.977
5	0.997	0.8	0.902	0.64	0.961
6	0.993	1.0	0.858	1.00	0.938
7	0.986	1.2	0.808	1.44	0.910
8	0.970	1.4	0.755	1.96	0.879
9	0.953	1.6	0.699	2.56	0.849
10	0.931	1.8	0.642	3.24	0.818
11	0.904	2.0	0.584	4.00	0.785
12	0.881	2.2	0.527	4.84	0.749
13	0.849	2.4	0.470	5.76	0.711
14	0.818	2.6	0.416	6.76	0.671
15	0.780	2.8	0.365	7.84	0.630
16	0.736	3.0	0.316	9.00	0.591
17	0.679	3.2	0.272	10.24	0.553
18	0.625	3.4	0.231	11.56	0.515
19	0.580	3.6	0.193	12.96	0.479
20	0.538	3.8	0.160	14.44	0.445
21	0.496	4.0	0.133	16.00	0.411
22	0.454	4.2	0.111	17.64	0.377
23	0.401	4.4	0.096	19.36	0.341
24	0.354	4.6	0.088	21.16	0.304
25	0.309	4.8	0.088	23.04	0.268
26	0.270	5.0	0.093	25.00	0.233
27	0.239	5.2	0.105	27.04	0.204
28	0.210	5.4	0.122	29.16	0.172
29	0.178	5.6	0.142	31.36	0.139
30	0.147	5.8	0.166	33.64	0.103
31	0.115	6.0	0.192	36.00	0.066
32	0.083				
33	0.048				
34	0.032				
35	0.013				
36	0.003				
37	0.000				

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

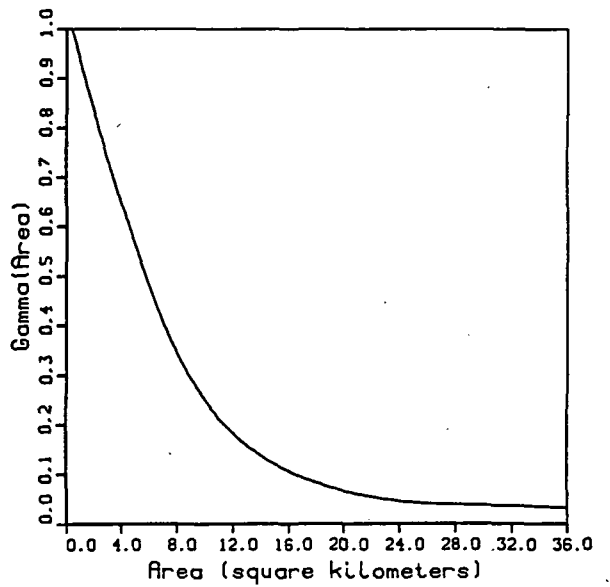
Storm Day  
 Aug 13, 1971



Spatial Correlation



Variance Function



Storm Day Aug 13 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.953$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.047$

Expected Value of Point Depth (mm.):  $E(Y) = 0.007$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.002$

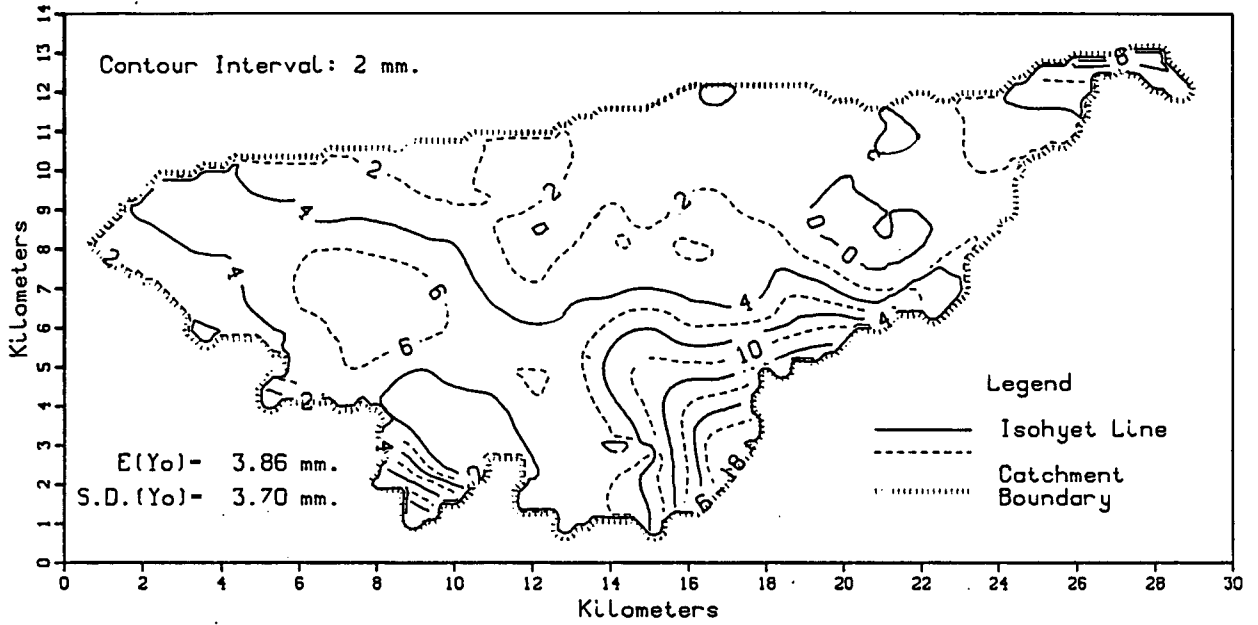
Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.886$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.965	0.04	1.023
		0.4	0.871	0.16	1.027
		0.6	0.736	0.36	1.011
		0.8	0.582	0.64	0.977
		1.0	0.430	1.00	0.934
		1.2	0.294	1.44	0.886
		1.4	0.183	1.96	0.834
		1.6	0.101	2.56	0.778
		1.8	0.044	3.24	0.716
		2.0	0.009	4.00	0.647
		2.2	-0.011	4.84	0.574
		2.4	-0.021	5.76	0.498
		2.6	-0.024	6.76	0.422
		2.8	-0.024	7.84	0.352
		3.0	-0.023	9.00	0.292
		3.2	-0.022	10.24	0.240
		3.4	-0.021	11.56	0.195
		3.6	-0.020	12.96	0.158
		3.8	-0.020	14.44	0.129
		4.0	-0.021	16.00	0.105
		4.2	-0.021	17.64	0.086
		4.4	-0.022	19.36	0.070
		4.6	-0.023	21.16	0.057
		4.8	-0.024	23.04	0.048
		5.0	-0.024	25.00	0.041
		5.2	-0.024	27.04	0.039
		5.4	-0.024	29.16	0.037
		5.6	-0.024	31.36	0.036
		5.8	-0.024	33.64	0.034
		6.0	-0.024	36.00	0.031

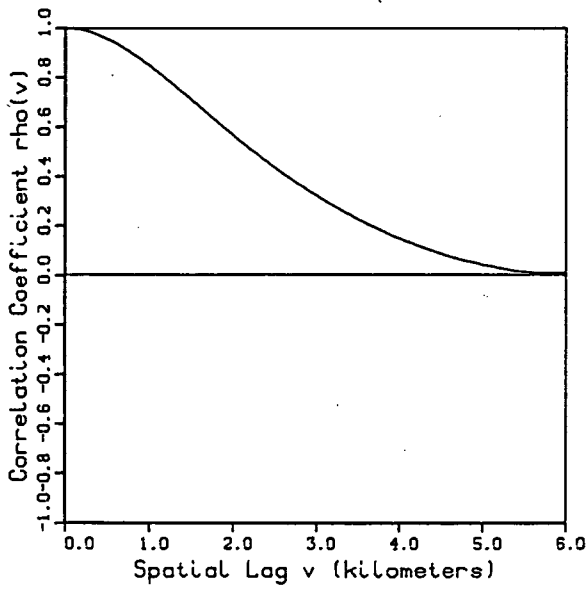


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

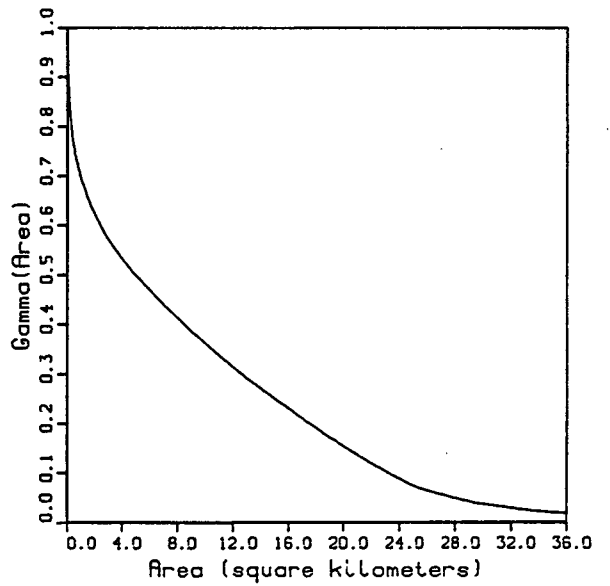
Storm Day  
 Aug 14, 1971



Spatial Correlation



Variance Function



Storm Day Aug 14 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.024$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.976$

Expected Value of Point Depth (mm.):  $E(Y) = 4.350$

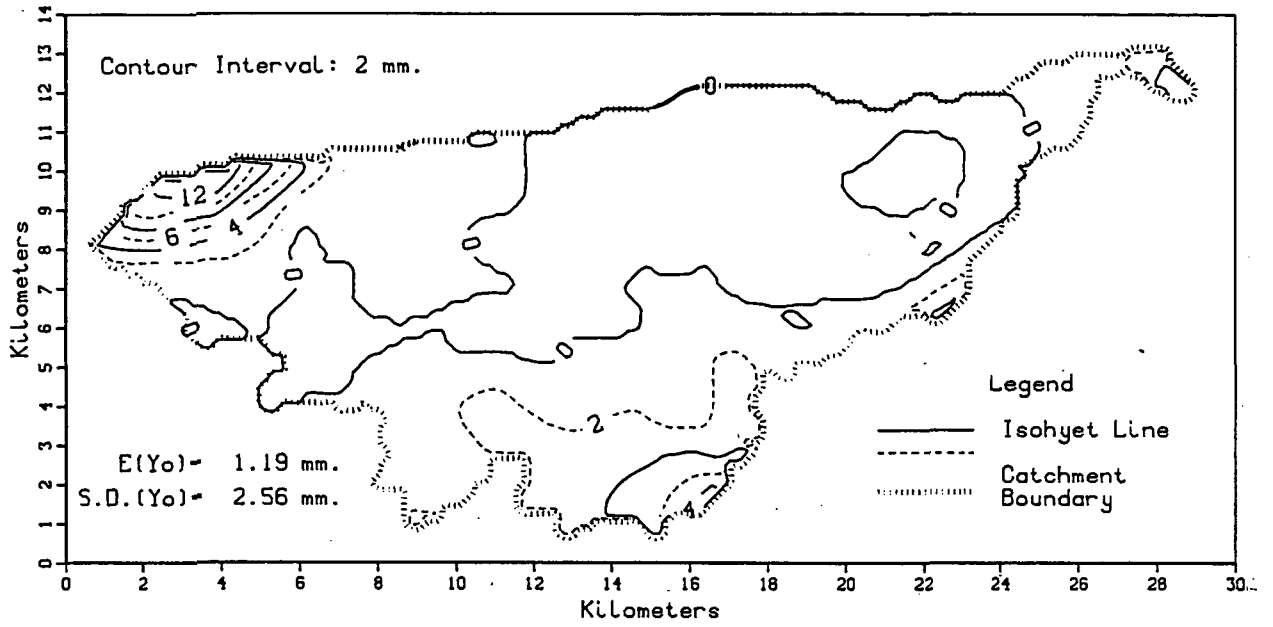
Variance of Point Depth (mm. sq.):  $Var(Y) = 12.415$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.656$

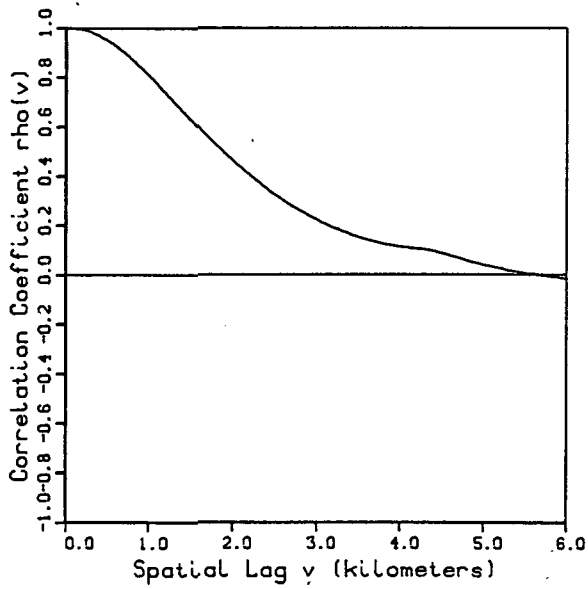
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.889	0.0	1.000	0.00	1.000
2	0.729	0.2	0.991	0.04	0.917
3	0.576	0.4	0.969	0.16	0.846
4	0.460	0.6	0.935	0.36	0.785
5	0.330	0.8	0.893	0.64	0.735
6	0.212	1.0	0.844	1.00	0.695
7	0.132	1.2	0.791	1.44	0.658
8	0.108	1.4	0.734	1.96	0.623
9	0.087	1.6	0.677	2.56	0.590
10	0.069	1.8	0.620	3.24	0.559
11	0.054	2.0	0.563	4.00	0.530
12	0.042	2.2	0.509	4.84	0.502
13	0.032	2.4	0.457	5.76	0.474
14	0.025	2.6	0.408	6.76	0.445
15	0.019	2.8	0.362	7.84	0.415
16	0.015	3.0	0.320	9.00	0.385
17	0.011	3.2	0.280	10.24	0.354
18	0.007	3.4	0.242	11.56	0.323
19	0.004	3.6	0.207	12.96	0.291
20	0.001	3.8	0.175	14.44	0.260
21	0.000	4.0	0.146	16.00	0.228
		4.2	0.120	17.64	0.197
		4.4	0.096	19.36	0.164
		4.6	0.074	21.16	0.131
		4.8	0.056	23.04	0.101
		5.0	0.041	25.00	0.072
		5.2	0.027	27.04	0.055
		5.4	0.016	29.16	0.040
		5.6	0.009	31.36	0.030
		5.8	0.008	33.64	0.022
		6.0	0.009	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

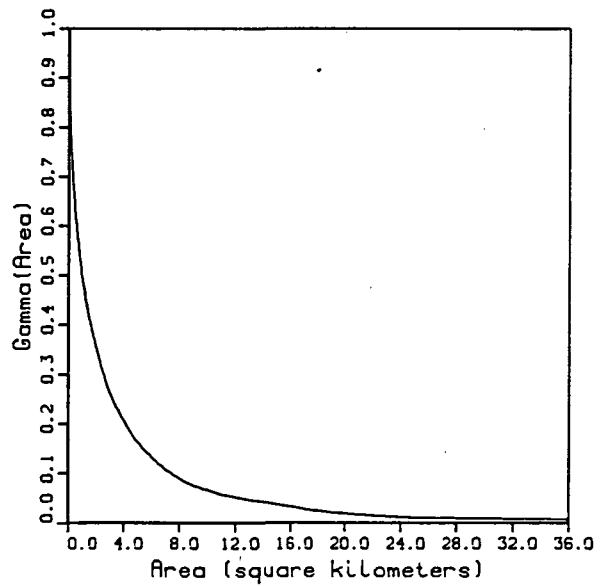
Storm Day  
 Aug 16, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.398$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.602$

Expected Value of Point Depth (mm.):  $E(Y) = 1.059$

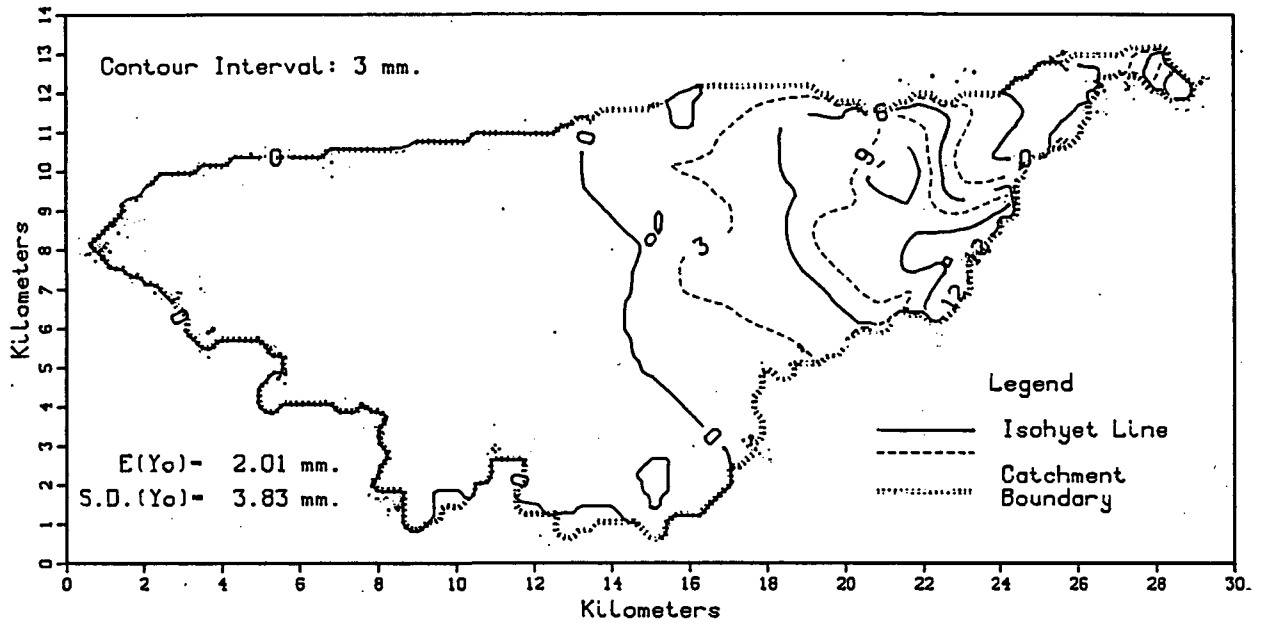
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.251$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.219$

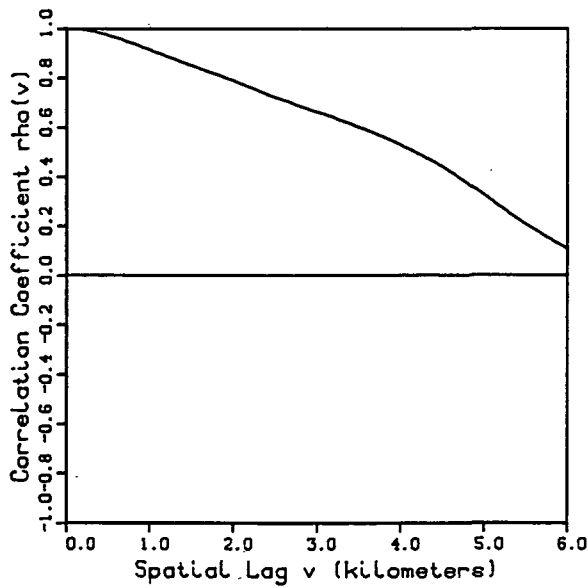
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	Acw/Ac (Y≥y)	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.265	0.0	1.000	0.00	1.000
2	0.169	0.2	0.992	0.04	0.895
3	0.100	0.4	0.967	0.16	0.787
4	0.068	0.6	0.926	0.36	0.684
5	0.048	0.8	0.871	0.64	0.589
6	0.036	1.0	0.805	1.00	0.502
7	0.028	1.2	0.734	1.44	0.425
8	0.022	1.4	0.661	1.96	0.358
9	0.017	1.6	0.591	2.56	0.299
10	0.014	1.8	0.524	3.24	0.246
11	0.010	2.0	0.460	4.00	0.204
12	0.006	2.2	0.402	4.84	0.167
13	0.002	2.4	0.347	5.76	0.137
14	0.000	2.6	0.298	6.76	0.113
		2.8	0.256	7.84	0.090
		3.0	0.220	9.00	0.074
		3.2	0.188	10.24	0.062
		3.4	0.161	11.56	0.053
		3.6	0.138	12.96	0.046
		3.8	0.122	14.44	0.039
		4.0	0.110	16.00	0.031
		4.2	0.102	17.64	0.024
		4.4	0.093	19.36	0.019
		4.6	0.073	21.16	0.015
		4.8	0.055	23.04	0.012
		5.0	0.036	25.00	0.009
		5.2	0.022	27.04	0.008
		5.4	0.009	29.16	0.008
		5.6	-.001	31.36	0.007
		5.8	-.010	33.64	0.006
		6.0	-.020	36.00	0.006

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

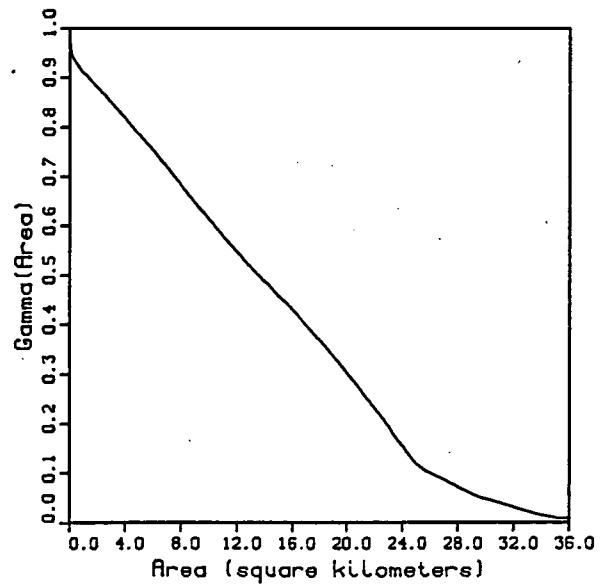
Storm Day  
 Aug 17, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.571$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.429$

Expected Value of Point Depth (mm.):  $E(Y) = 2.015$

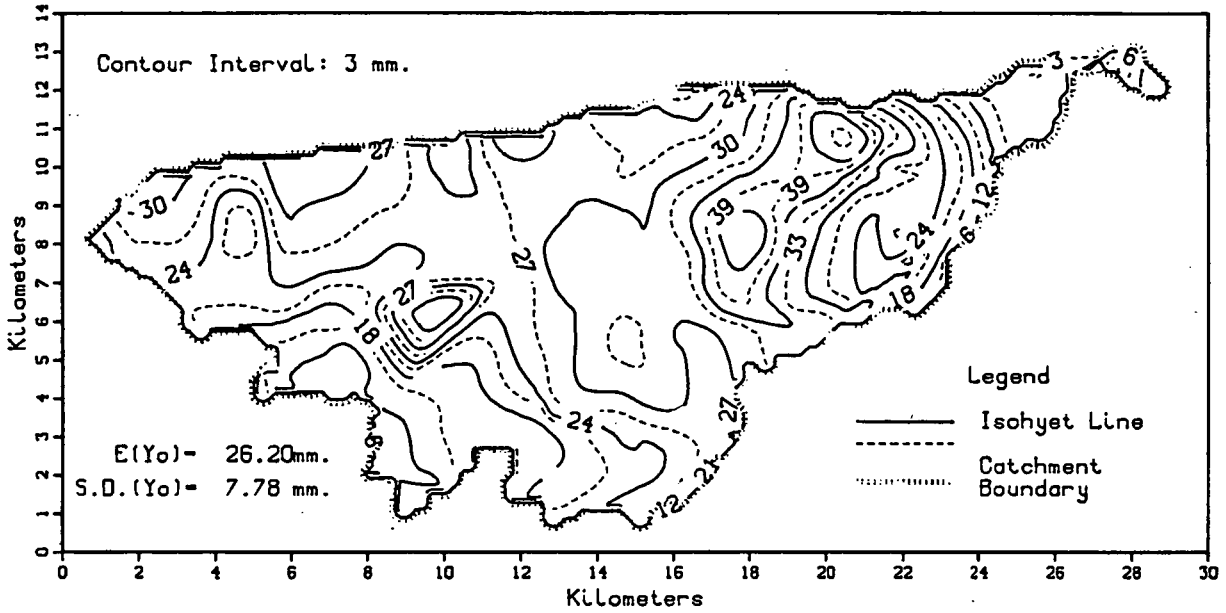
Variance of Point Depth (mm. sq.):  $Var(Y) = 12.369$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.825$

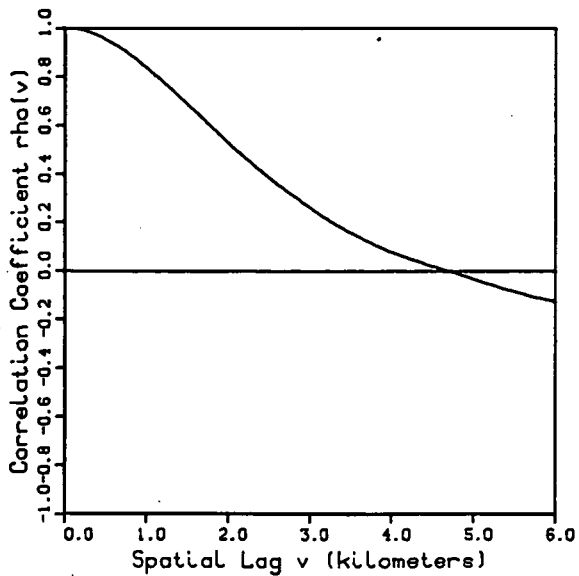
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.337	0.0	1.000	0.00	1.000
2	0.292	0.2	0.994	0.04	0.971
3	0.243	0.4	0.980	0.16	0.946
4	0.189	0.6	0.960	0.36	0.933
5	0.160	0.8	0.935	0.64	0.921
6	0.143	1.0	0.910	1.00	0.908
7	0.125	1.2	0.884	1.44	0.895
8	0.102	1.4	0.858	1.96	0.879
9	0.083	1.6	0.834	2.56	0.861
10	0.062	1.8	0.810	3.24	0.839
11	0.041	2.0	0.784	4.00	0.815
12	0.025	2.2	0.757	4.84	0.788
13	0.010	2.4	0.729	5.76	0.758
14	0.003	2.6	0.705	6.76	0.724
15	0.001	2.8	0.681	7.84	0.685
16	0.001	3.0	0.658	9.00	0.645
17	0.000	3.2	0.635	10.24	0.602
18	0.000	3.4	0.610	11.56	0.559
19	0.000	3.6	0.584	12.96	0.515
20	0.000	3.8	0.556	14.44	0.472
		4.0	0.525	16.00	0.427
		4.2	0.491	17.64	0.378
		4.4	0.456	19.36	0.323
		4.6	0.415	21.16	0.259
		4.8	0.369	23.04	0.191
		5.0	0.322	25.00	0.117
		5.2	0.272	27.04	0.085
		5.4	0.225	29.16	0.054
		5.6	0.183	31.36	0.036
		5.8	0.143	33.64	0.016
		6.0	0.105	36.00	0.007

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

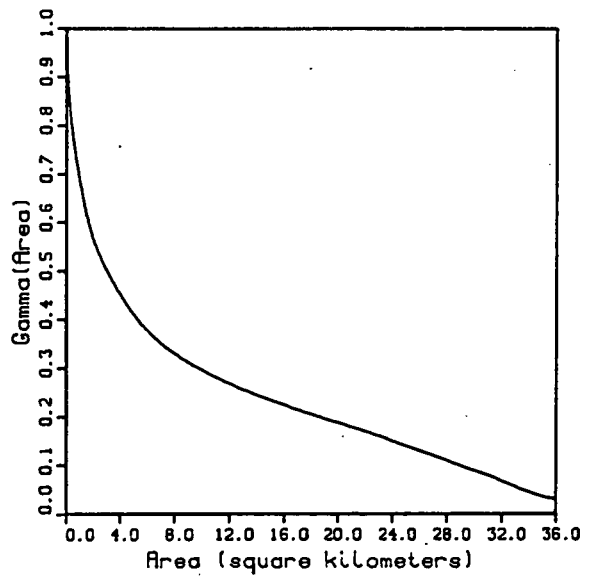
Storm Day  
 Aug 18, 1971



Spatial Correlation



Variance Function



Storm Day Aug 18 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 26.033$

Variance of Point Depth (mm. sq.):  $Var(Y) = 56.754$

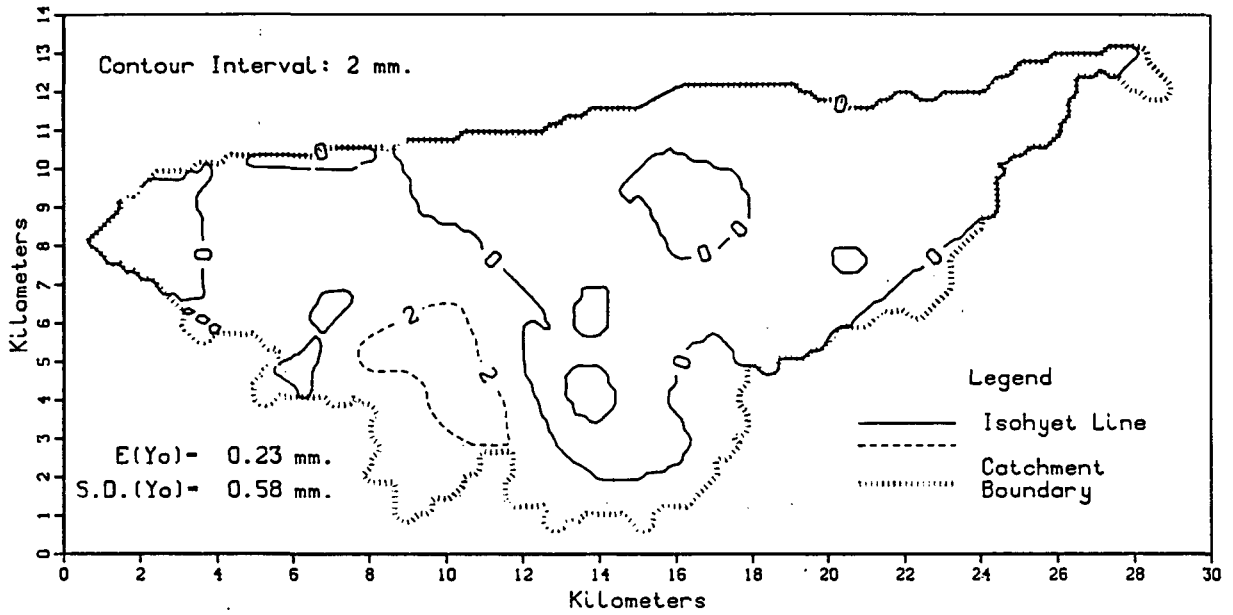
Coef. of Skewness of Point Depth:  $S.C.(Y) = -0.320$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.991	0.04	0.943
5	0.999	0.4	0.966	0.16	0.880
7	0.994	0.6	0.930	0.36	0.815
9	0.979	0.8	0.884	0.64	0.753
11	0.966	1.0	0.832	1.00	0.691
13	0.939	1.2	0.773	1.44	0.625
15	0.914	1.4	0.712	1.96	0.568
17	0.879	1.6	0.649	2.56	0.526
19	0.836	1.8	0.586	3.24	0.488
21	0.792	2.0	0.522	4.00	0.450
23	0.726	2.2	0.462	4.84	0.415
25	0.632	2.4	0.405	5.76	0.382
27	0.496	2.6	0.352	6.76	0.355
29	0.364	2.8	0.303	7.84	0.331
31	0.232	3.0	0.255	9.00	0.310
33	0.136	3.2	0.210	10.24	0.290
35	0.097	3.4	0.170	11.56	0.272
37	0.071	3.6	0.134	12.96	0.254
39	0.044	3.8	0.101	14.44	0.238
41	0.024	4.0	0.073	16.00	0.222
43	0.012	4.2	0.048	17.64	0.206
45	0.001	4.4	0.025	19.36	0.191
		4.6	0.004	21.16	0.176
		4.8	-.016	23.04	0.158
		5.0	-.039	25.00	0.138
		5.2	-.061	27.04	0.118
		5.4	-.082	29.16	0.096
		5.6	-.100	31.36	0.074
		5.8	-.117	33.64	0.047
		6.0	-.131	36.00	0.029

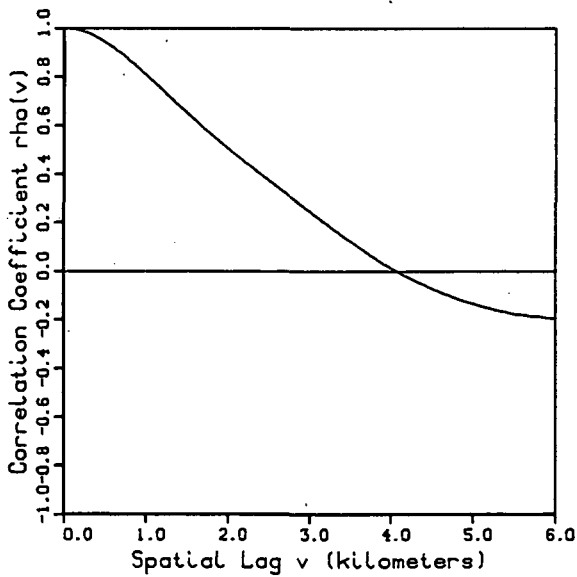


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

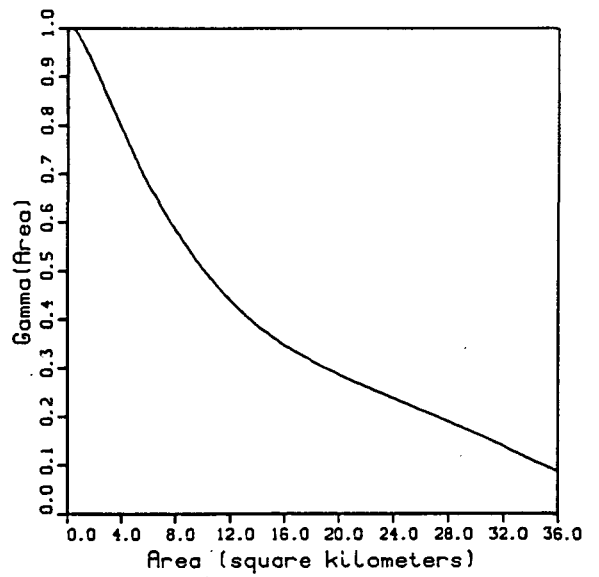
Storm Day  
 Aug 19, 1971



Spatial Correlation



Variance Function



Storm Day Aug 19 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.524$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.476$

Expected Value of Point Depth (mm.):  $E(Y) = 0.308$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.383$

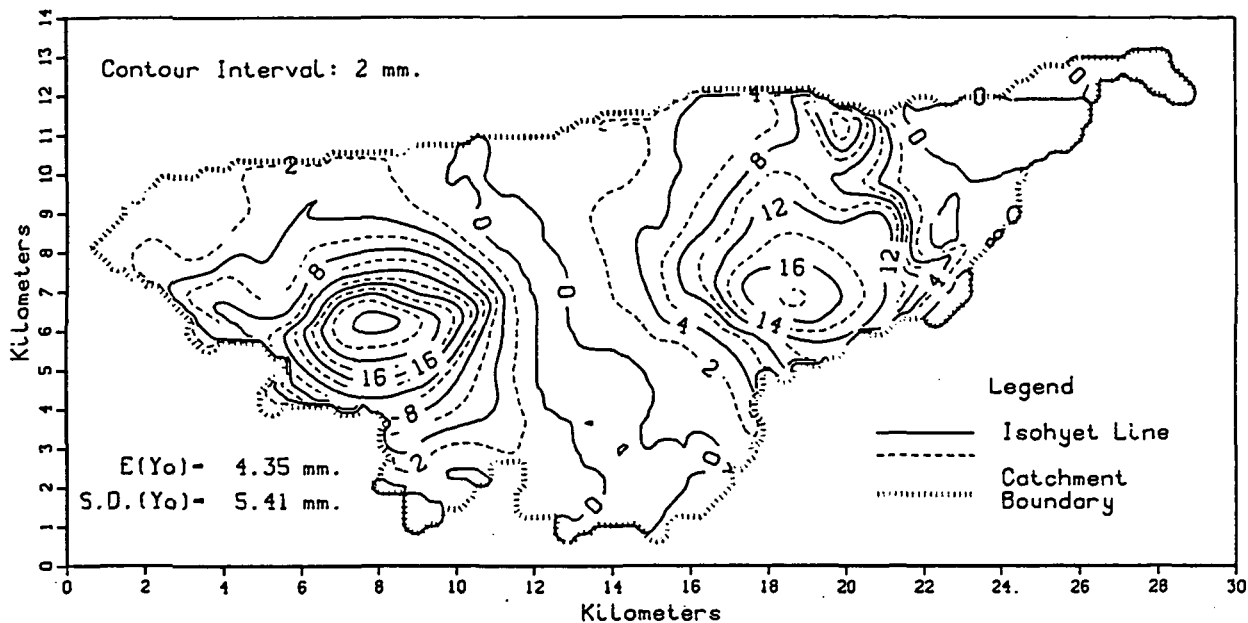
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.381$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.115	0.0	1.000	0.00	1.000
2	0.047	0.2	0.990	0.04	1.007
3	0.000	0.4	0.961	0.16	1.010
		0.6	0.918	0.36	1.005
		0.8	0.865	0.64	0.993
		1.0	0.805	1.00	0.976
		1.2	0.742	1.44	0.952
		1.4	0.678	1.96	0.921
		1.6	0.616	2.56	0.883
		1.8	0.557	3.24	0.840
		2.0	0.501	4.00	0.792
		2.2	0.447	4.84	0.741
		2.4	0.395	5.76	0.686
		2.6	0.343	6.76	0.638
		2.8	0.293	7.84	0.590
		3.0	0.242	9.00	0.541
		3.2	0.192	10.24	0.495
		3.4	0.143	11.56	0.451
		3.6	0.096	12.96	0.411
		3.8	0.051	14.44	0.375
		4.0	0.009	16.00	0.345
		4.2	-0.028	17.64	0.318
		4.4	-0.061	19.36	0.293
		4.6	-0.091	21.16	0.269
		4.8	-0.116	23.04	0.246
		5.0	-0.139	25.00	0.223
		5.2	-0.157	27.04	0.199
		5.4	-0.173	29.16	0.173
		5.6	-0.185	31.36	0.146
		5.8	-0.193	33.64	0.114
		6.0	-0.199	36.00	0.087

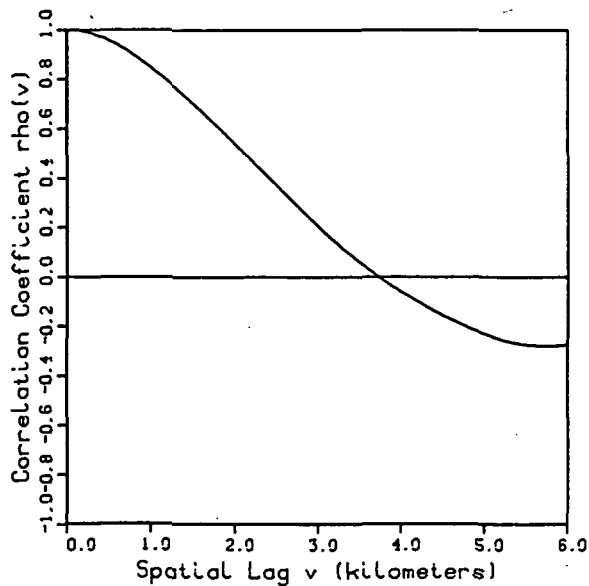
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

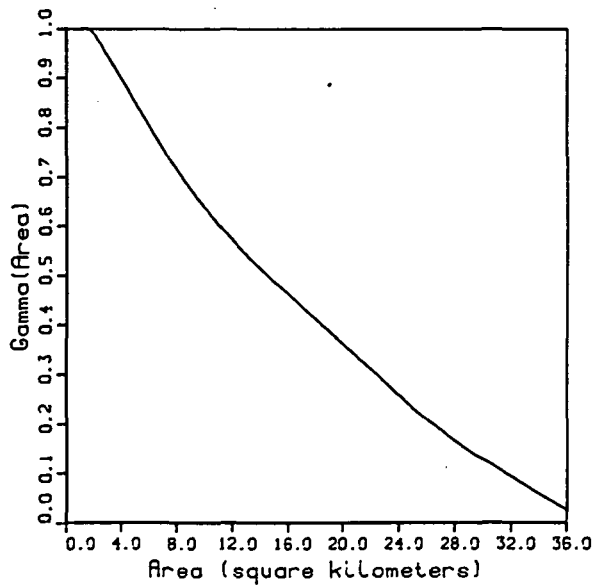
Storm Day  
Aug 20, 1971



Spatial Correlation



Variance Function



Storm Day Aug 20 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.144$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.856$

Expected Value of Point Depth (mm.):  $E(Y) = 5.097$

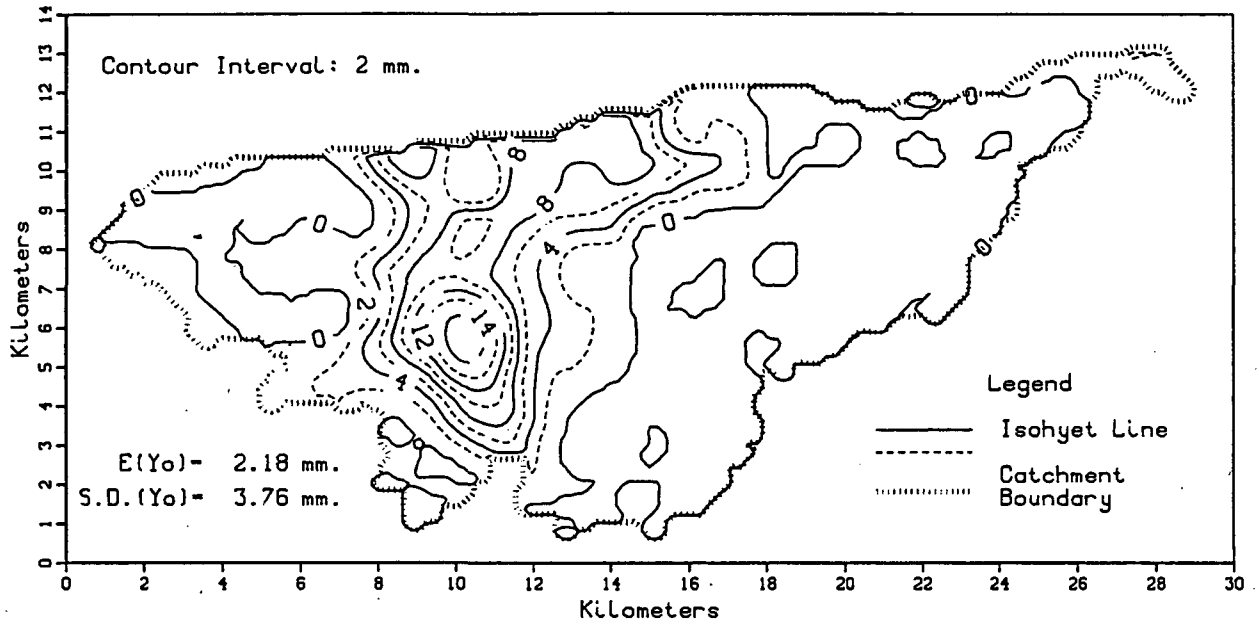
Variance of Point Depth (mm. sq.):  $Var(Y) = 32.627$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.215$

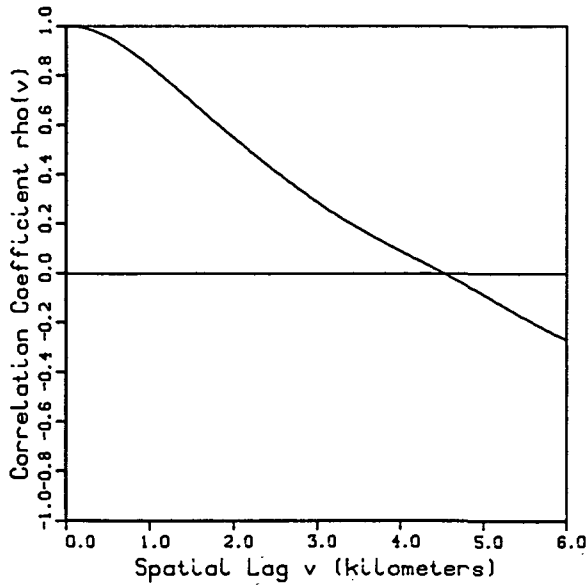
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.670	0.0	1.000	0.00	1.000
2	0.579	0.2	0.992	0.04	1.017
3	0.513	0.4	0.969	0.16	1.029
4	0.437	0.6	0.936	0.36	1.035
5	0.379	0.8	0.893	0.64	1.033
6	0.335	1.0	0.843	1.00	1.025
7	0.299	1.2	0.788	1.44	1.010
8	0.266	1.4	0.729	1.96	0.990
9	0.231	1.6	0.667	2.56	0.964
10	0.204	1.8	0.602	3.24	0.932
11	0.180	2.0	0.536	4.00	0.896
12	0.155	2.2	0.469	4.84	0.856
13	0.129	2.4	0.400	5.76	0.812
14	0.100	2.6	0.331	6.76	0.766
15	0.080	2.8	0.264	7.84	0.718
16	0.065	3.0	0.199	9.00	0.672
17	0.050	3.2	0.138	10.24	0.627
18	0.037	3.4	0.080	11.56	0.583
19	0.030	3.6	0.027	12.96	0.541
20	0.024	3.8	-.021	14.44	0.500
21	0.019	4.0	-.066	16.00	0.460
22	0.013	4.2	-.106	17.64	0.419
23	0.008	4.4	-.143	19.36	0.375
24	0.003	4.6	-.177	21.16	0.330
25	0.000	4.8	-.208	23.04	0.281
		5.0	-.235	25.00	0.229
		5.2	-.257	27.04	0.184
		5.4	-.273	29.16	0.140
		5.6	-.281	31.36	0.103
		5.8	-.282	33.64	0.063
		6.0	-.276	36.00	0.024

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

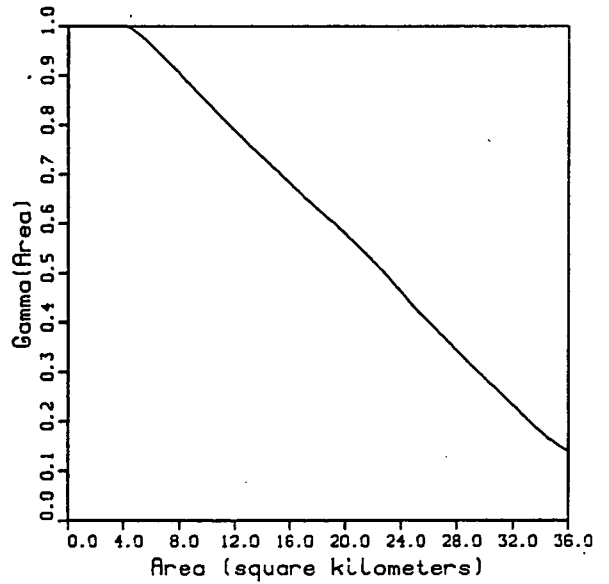
Storm Day  
 Aug 21, 1971



Spatial Correlation



Variance Function



Storm Day Aug 21 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.409$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.591$

Expected Value of Point Depth (mm.):  $E(Y) = 2.218$

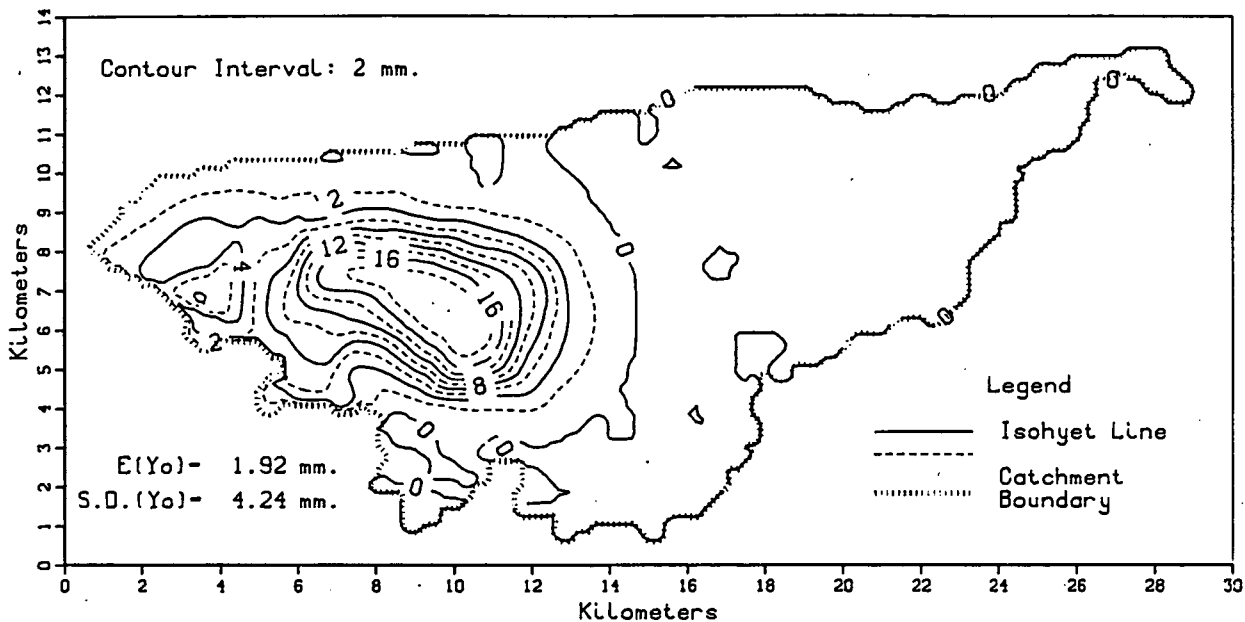
Variance of Point Depth (mm. sq.):  $Var(Y) = 13.435$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.751$

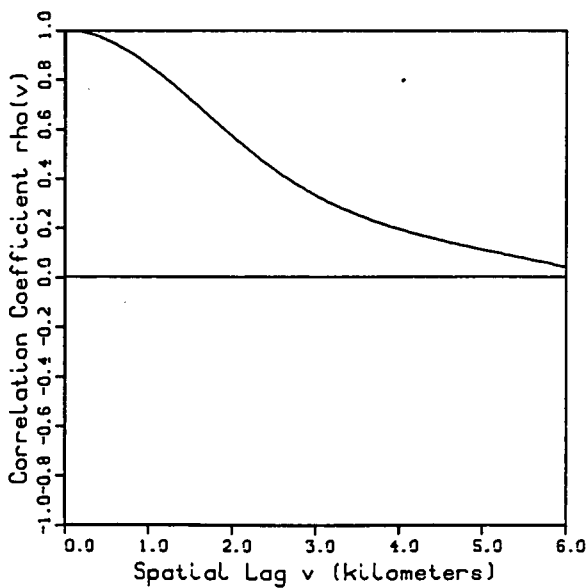
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.360	0.0	1.000	0.00	1.000
2	0.305	0.2	0.992	0.04	1.020
3	0.264	0.4	0.969	0.16	1.037
4	0.234	0.6	0.933	0.36	1.047
5	0.205	0.8	0.887	0.64	1.050
6	0.174	1.0	0.835	1.00	1.051
7	0.142	1.2	0.778	1.44	1.050
8	0.114	1.4	0.720	1.96	1.045
9	0.082	1.6	0.661	2.56	1.036
10	0.046	1.8	0.602	3.24	1.024
11	0.034	2.0	0.545	4.00	1.007
12	0.027	2.2	0.489	4.84	0.987
13	0.022	2.4	0.435	5.76	0.964
14	0.016	2.6	0.382	6.76	0.936
15	0.011	2.8	0.332	7.84	0.906
16	0.006	3.0	0.284	9.00	0.872
17	0.000	3.2	0.239	10.24	0.836
18	0.000	3.4	0.197	11.56	0.799
		3.6	0.158	12.96	0.760
		3.8	0.121	14.44	0.721
		4.0	0.086	16.00	0.680
		4.2	0.052	17.64	0.638
		4.4	0.017	19.36	0.594
		4.6	-0.018	21.16	0.546
		4.8	-0.054	23.04	0.491
		5.0	-0.091	25.00	0.427
		5.2	-0.130	27.04	0.369
		5.4	-0.168	29.16	0.307
		5.6	-0.205	31.36	0.250
		5.8	-0.241	33.64	0.187
		6.0	-0.274	36.00	0.138

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

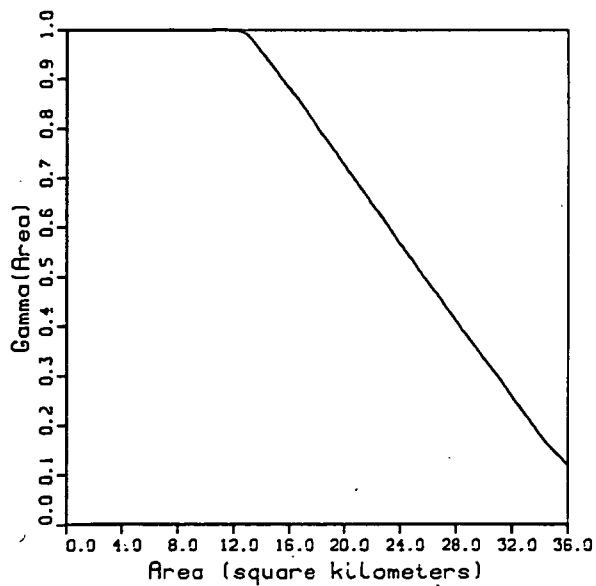
Storm Day  
 Aug 23, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.487$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.513$

Expected Value of Point Depth (mm.):  $E(Y) = 2.656$

Variance of Point Depth (mm. sq.):  $Var(Y) = 23.056$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.050$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)      rho (v)

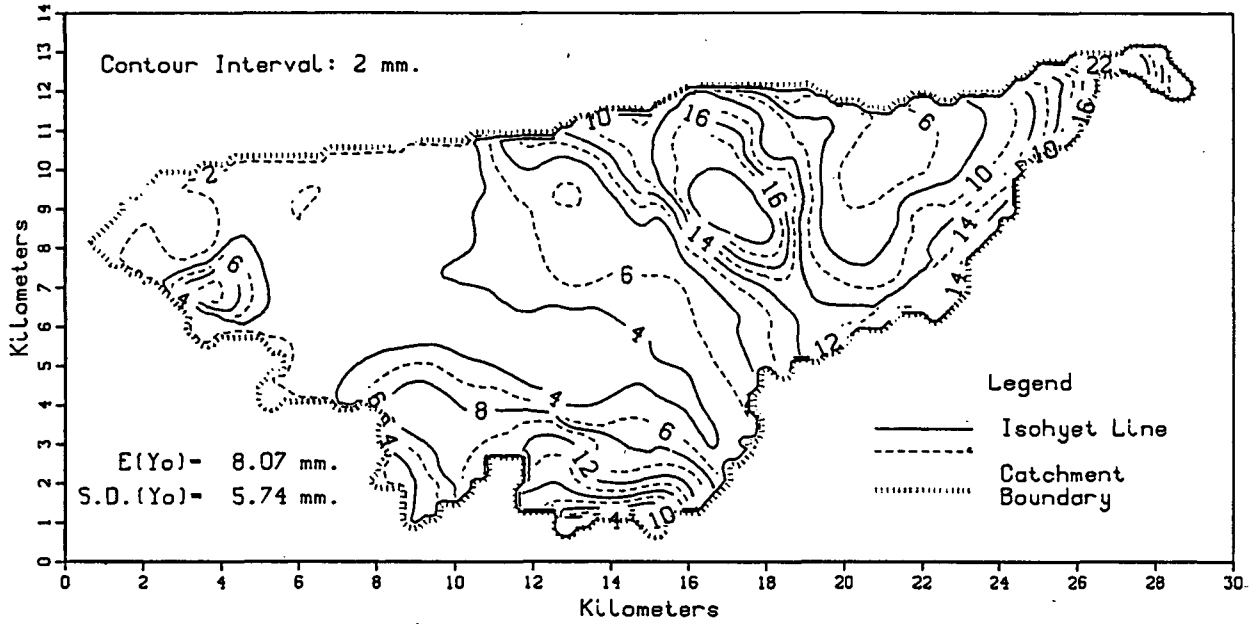
Variance Function  
A (km. sq.)      Gamma (A)

	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.361	0.0	1.000	0.00	1.000
2	0.308	0.2	0.993	0.04	1.036
3	0.265	0.4	0.974	0.16	1.070
4	0.229	0.6	0.943	0.36	1.098
5	0.194	0.8	0.904	0.64	1.121
6	0.169	1.0	0.857	1.00	1.140
7	0.152	1.2	0.804	1.44	1.156
8	0.134	1.4	0.747	1.96	1.168
9	0.118	1.6	0.688	2.56	1.176
10	0.105	1.8	0.628	3.24	1.180
11	0.093	2.0	0.569	4.00	1.181
12	0.082	2.2	0.513	4.84	1.178
13	0.072	2.4	0.461	5.76	1.170
14	0.063	2.6	0.412	6.76	1.156
15	0.054	2.8	0.369	7.84	1.136
16	0.044	3.0	0.330	9.00	1.109
17	0.034	3.2	0.296	10.24	1.076
18	0.024	3.4	0.265	11.56	1.035
19	0.012	3.6	0.239	12.96	0.988
20	0.000	3.8	0.214	14.44	0.935
		4.0	0.193	16.00	0.879
		4.2	0.174	17.64	0.817
		4.4	0.156	19.36	0.749
		4.6	0.140	21.16	0.678
		4.8	0.124	23.04	0.602
		5.0	0.110	25.00	0.525
		5.2	0.095	27.04	0.446
		5.4	0.081	29.16	0.364
		5.6	0.068	31.36	0.283
		5.8	0.054	33.64	0.193
		6.0	0.038	36.00	0.119

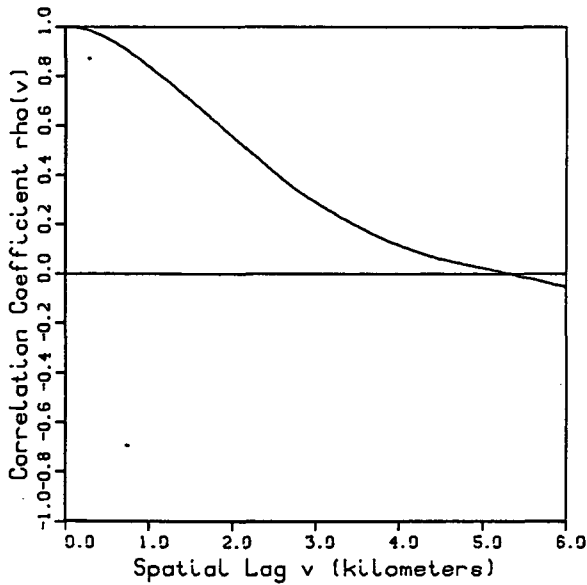


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

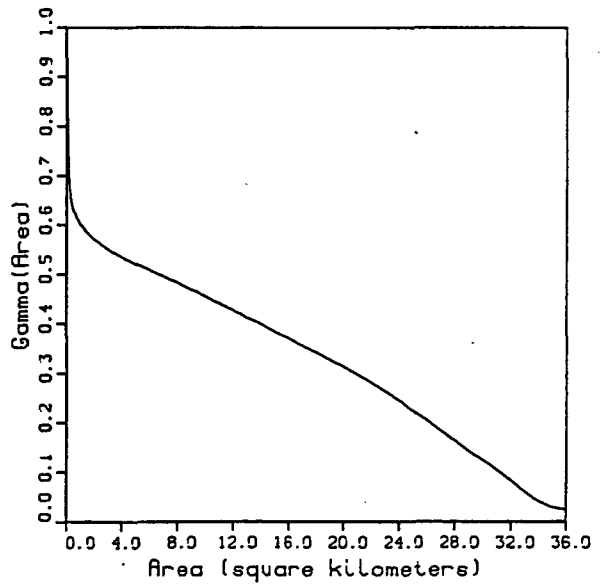
Storm Day  
 Aug 24, 1971



Spatial Correlation



Variance Function



Storm Day Aug 24 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 7.997$

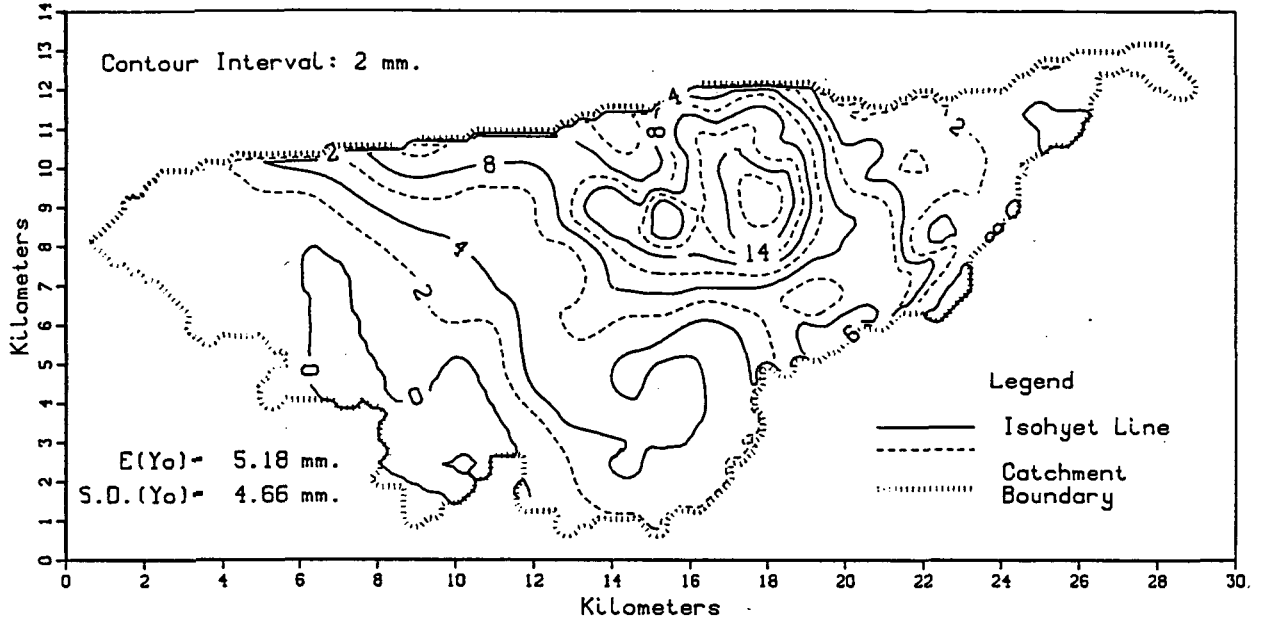
Variance of Point Depth (mm. sq.):  $Var(Y) = 33.428$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.874$

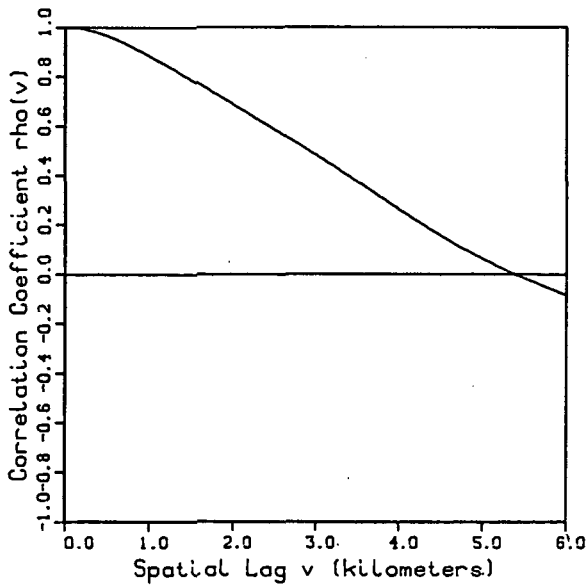
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.998	0.0	1.000	0.00	1.000
3	0.850	0.2	0.992	0.04	0.849
5	0.609	0.4	0.968	0.16	0.715
7	0.447	0.6	0.932	0.36	0.647
9	0.320	0.8	0.886	0.64	0.622
11	0.230	1.0	0.833	1.00	0.603
13	0.166	1.2	0.780	1.44	0.585
15	0.114	1.4	0.725	1.96	0.571
17	0.072	1.6	0.668	2.56	0.558
19	0.044	1.8	0.610	3.24	0.545
21	0.021	2.0	0.551	4.00	0.534
23	0.010	2.2	0.494	4.84	0.522
25	0.008	2.4	0.436	5.76	0.510
27	0.007	2.6	0.380	6.76	0.497
29	0.006	2.8	0.330	7.84	0.483
31	0.006	3.0	0.287	9.00	0.468
33	0.005	3.2	0.246	10.24	0.450
35	0.005	3.4	0.208	11.56	0.432
37	0.004	3.6	0.173	12.96	0.412
39	0.003	3.8	0.140	14.44	0.391
41	0.002	4.0	0.113	16.00	0.368
43	0.001	4.2	0.088	17.64	0.345
45	0.001	4.4	0.067	19.36	0.320
47	0.000	4.6	0.049	21.16	0.293
49	0.000	4.8	0.034	23.04	0.261
		5.0	0.021	25.00	0.223
		5.2	0.007	27.04	0.182
		5.4	-.008	29.16	0.138
		5.6	-.025	31.36	0.097
		5.8	-.041	33.64	0.047
		6.0	-.056	36.00	0.025

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

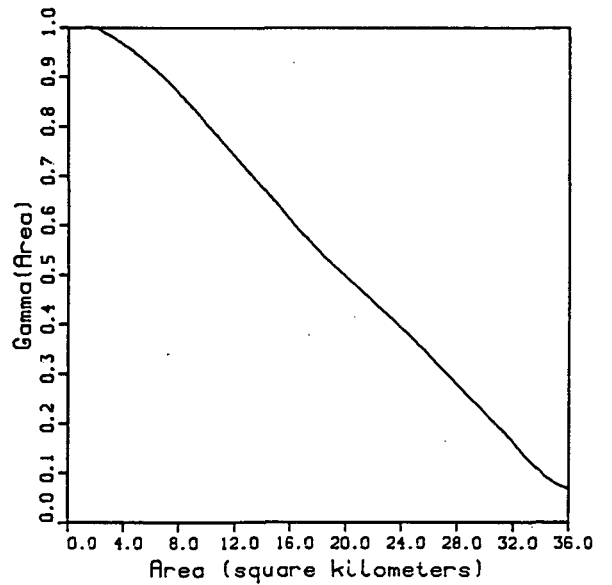
Storm Day  
 Aug 27, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.071$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.929$

Expected Value of Point Depth (mm.):  $E(Y) = 4.692$

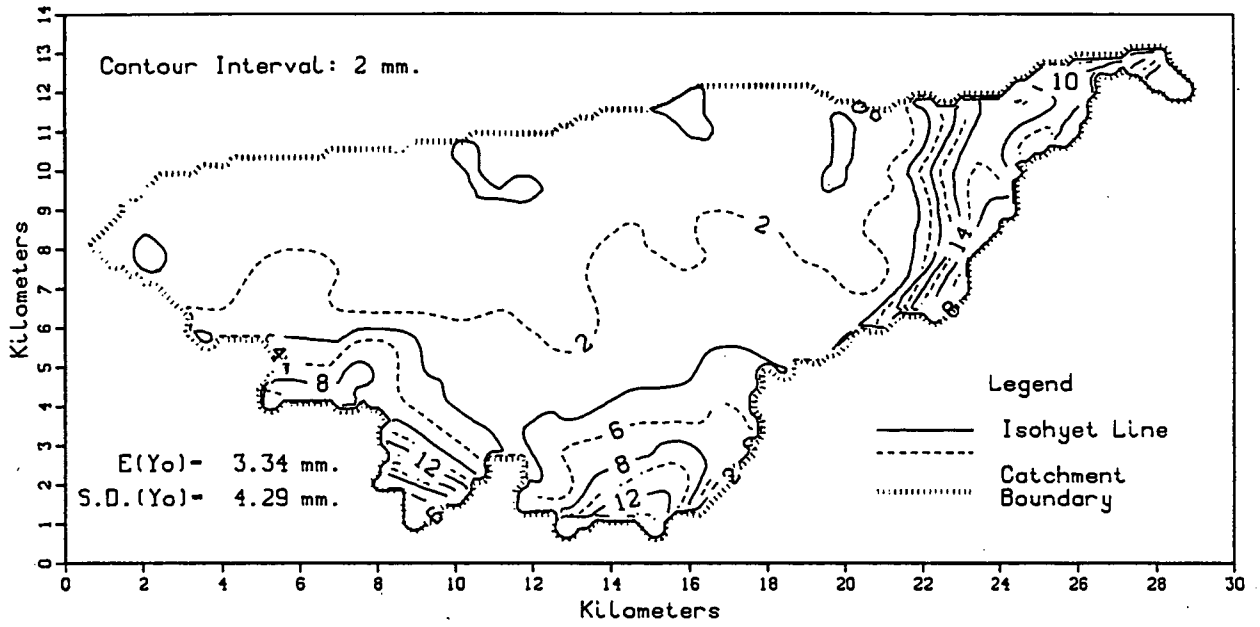
Variance of Point Depth (mm. sq.):  $Var(Y) = 19.056$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.096$

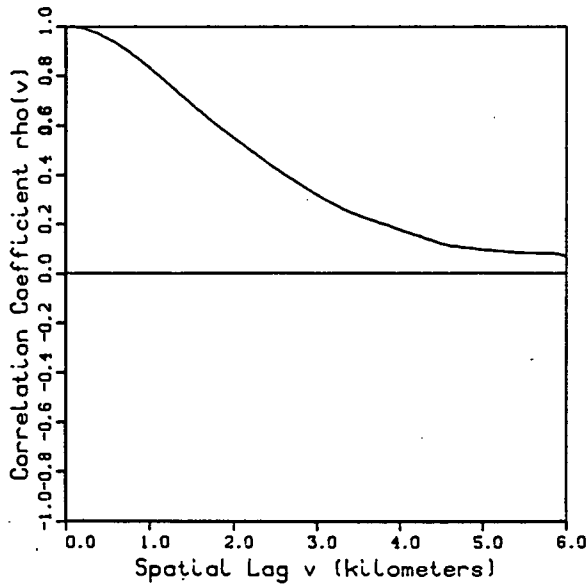
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.764	0.0	1.000	0.00	1.000
2	0.661	0.2	0.993	0.04	1.011
3	0.572	0.4	0.975	0.16	1.017
4	0.485	0.6	0.948	0.36	1.018
5	0.401	0.8	0.916	0.64	1.016
6	0.310	1.0	0.880	1.00	1.012
7	0.255	1.2	0.842	1.44	1.005
8	0.202	1.4	0.803	1.96	0.997
9	0.161	1.6	0.764	2.56	0.988
10	0.127	1.8	0.723	3.24	0.977
11	0.107	2.0	0.683	4.00	0.963
12	0.090	2.2	0.643	4.84	0.946
13	0.071	2.4	0.602	5.76	0.924
14	0.051	2.6	0.562	6.76	0.899
15	0.036	2.8	0.521	7.84	0.869
16	0.025	3.0	0.479	9.00	0.834
17	0.015	3.2	0.436	10.24	0.794
18	0.007	3.4	0.392	11.56	0.753
19	0.002	3.6	0.347	12.96	0.708
20	0.000	3.8	0.302	14.44	0.659
		4.0	0.258	16.00	0.609
		4.2	0.214	17.64	0.558
		4.4	0.171	19.36	0.510
		4.6	0.131	21.16	0.464
		4.8	0.094	23.04	0.415
		5.0	0.058	25.00	0.363
		5.2	0.025	27.04	0.304
		5.4	-0.005	29.16	0.242
		5.6	-0.034	31.36	0.180
		5.8	-0.062	33.64	0.109
		6.0	-0.088	36.00	0.066

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

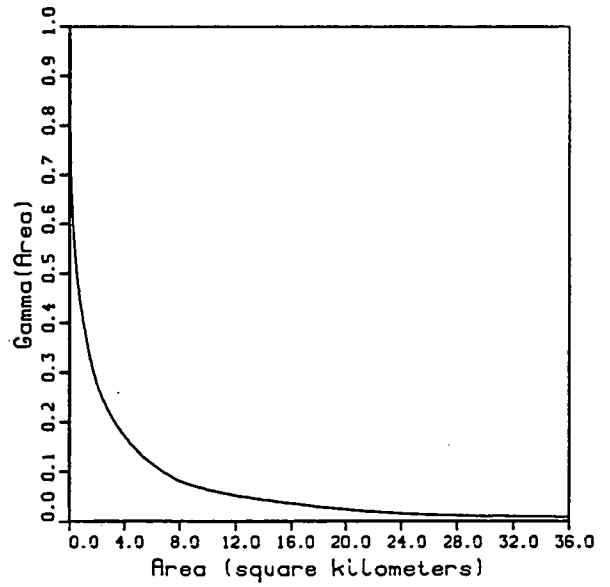
Storm Day  
 Aug 28, 1971



Spatial Correlation



Variance Function



Storm Day Aug 28 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.016$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.984$

Expected Value of Point Depth (mm.):  $E(Y) = 3.894$

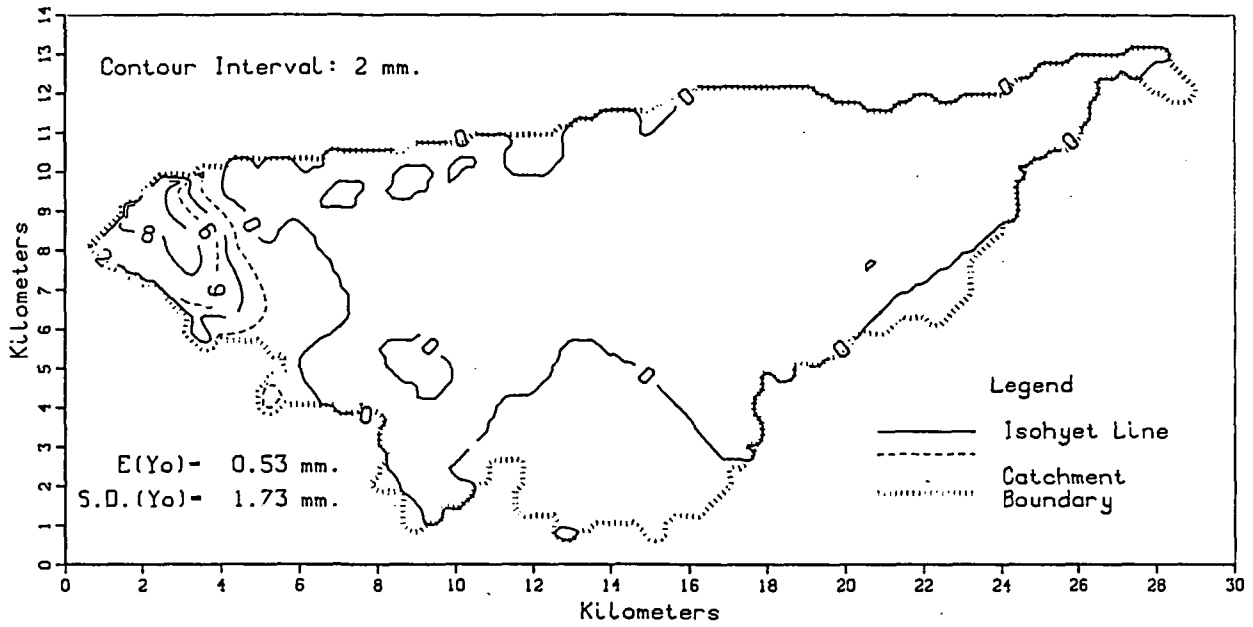
Variance of Point Depth (mm. sq.):  $Var(Y) = 19.747$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.131$

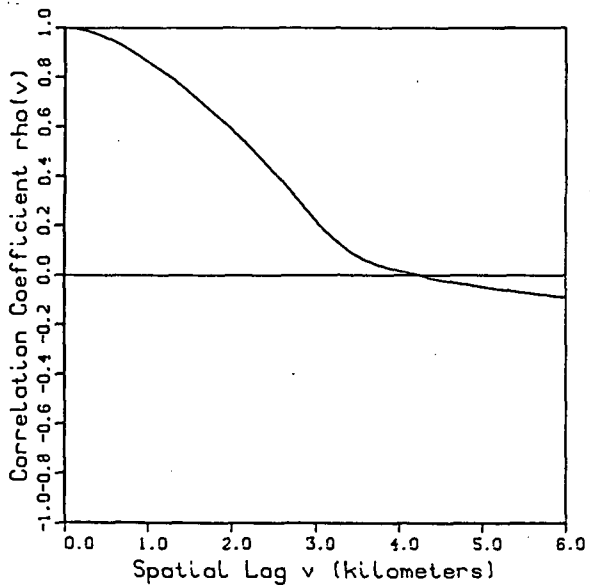
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.738	0.0	1.000	0.00	1.000
2	0.544	0.2	0.991	0.04	0.823
3	0.390	0.4	0.966	0.16	0.668
4	0.281	0.6	0.929	0.36	0.562
5	0.234	0.8	0.882	0.64	0.476
6	0.196	1.0	0.829	1.00	0.407
7	0.160	1.2	0.771	1.44	0.339
8	0.133	1.4	0.711	1.96	0.279
9	0.112	1.6	0.653	2.56	0.236
10	0.095	1.8	0.598	3.24	0.201
11	0.080	2.0	0.546	4.00	0.170
12	0.063	2.2	0.497	4.84	0.143
13	0.049	2.4	0.447	5.76	0.119
14	0.031	2.6	0.400	6.76	0.099
15	0.023	2.8	0.357	7.84	0.082
16	0.018	3.0	0.315	9.00	0.070
17	0.014	3.2	0.279	10.24	0.061
18	0.011	3.4	0.246	11.56	0.053
19	0.008	3.6	0.220	12.96	0.046
20	0.006	3.8	0.198	14.44	0.040
21	0.005	4.0	0.174	16.00	0.035
22	0.004	4.2	0.152	17.64	0.029
23	0.003	4.4	0.128	19.36	0.024
24	0.003	4.6	0.111	21.16	0.020
25	0.002	4.8	0.103	23.04	0.016
26	0.002	5.0	0.094	25.00	0.013
27	0.001	5.2	0.089	27.04	0.011
28	0.001	5.4	0.083	29.16	0.010
29	0.000	5.6	0.082	31.36	0.009
30	0.000	5.8	0.080	33.64	0.008
31	0.000	6.0	0.067	36.00	0.007
32	0.000				
33	0.000				
34	0.000				

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

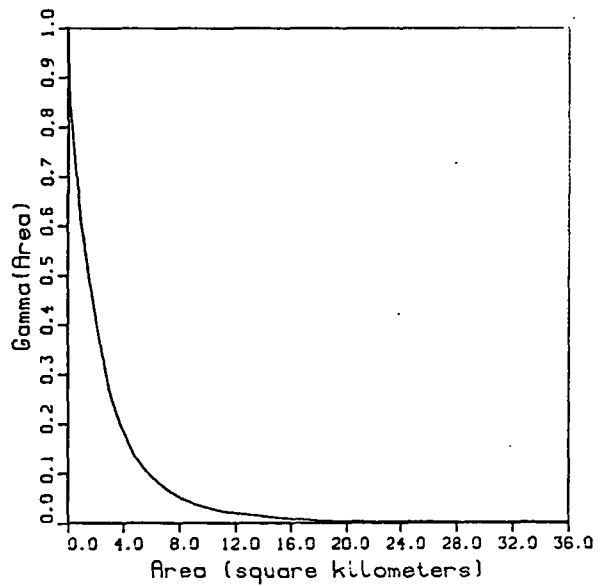
Storm Day  
 Aug 31, 1971



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.691$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.309$

Expected Value of Point Depth (mm.):  $E(Y) = 0.503$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.461$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.920$

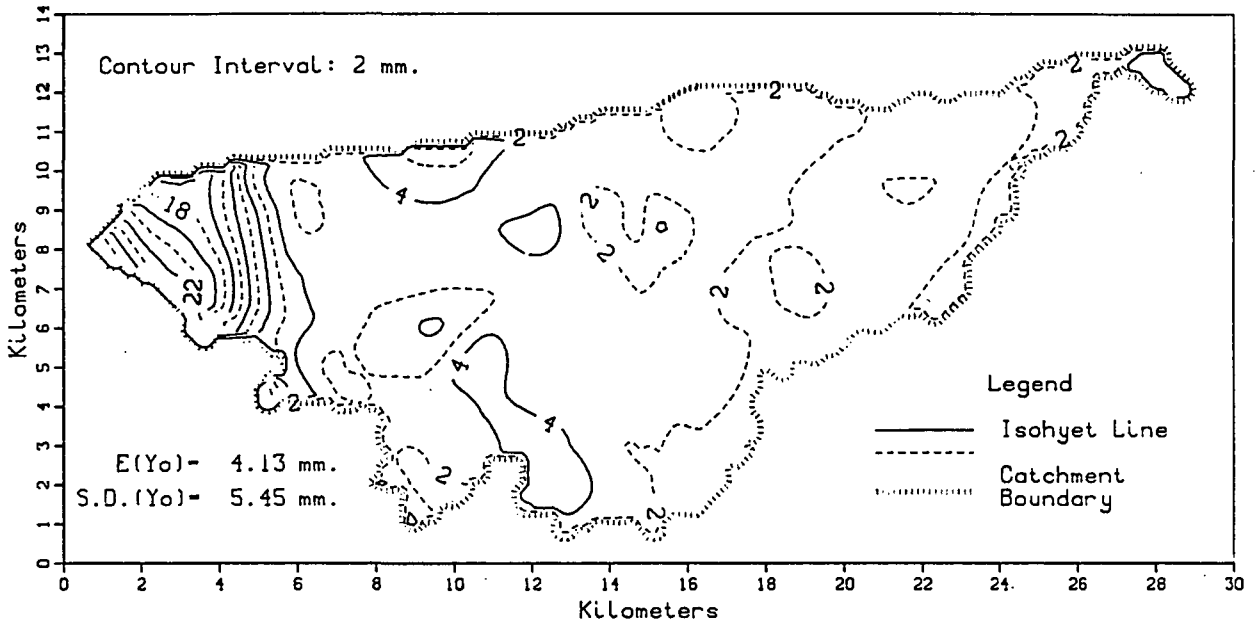
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.114	0.0	1.000	0.00	1.000
2	0.061	0.2	0.991	0.04	0.925
3	0.054	0.4	0.971	0.16	0.855
4	0.047	0.6	0.942	0.36	0.779
5	0.041	0.8	0.904	0.64	0.696
6	0.037	1.0	0.861	1.00	0.604
7	0.025	1.2	0.813	1.44	0.510
8	0.012	1.4	0.761	1.96	0.419
9	0.002	1.6	0.706	2.56	0.328
10	0.000	1.8	0.647	3.24	0.242
11	0.000	2.0	0.586	4.00	0.184
		2.2	0.519	4.84	0.134
		2.4	0.449	5.76	0.099
		2.6	0.375	6.76	0.074
		2.8	0.297	7.84	0.053
		3.0	0.217	9.00	0.038
		3.2	0.148	10.24	0.027
		3.4	0.093	11.56	0.020
		3.6	0.056	12.96	0.015
		3.8	0.032	14.44	0.011
		4.0	0.013	16.00	0.007
		4.2	0.000	17.64	0.004
		4.4	-.019	19.36	0.003
		4.6	-.031	21.16	0.002
		4.8	-.042	23.04	0.002
		5.0	-.052	25.00	0.001
		5.2	-.062	27.04	0.001
		5.4	-.071	29.16	0.001
		5.6	-.079	31.36	0.001
		5.8	-.087	33.64	0.001
		6.0	-.094	36.00	0.001



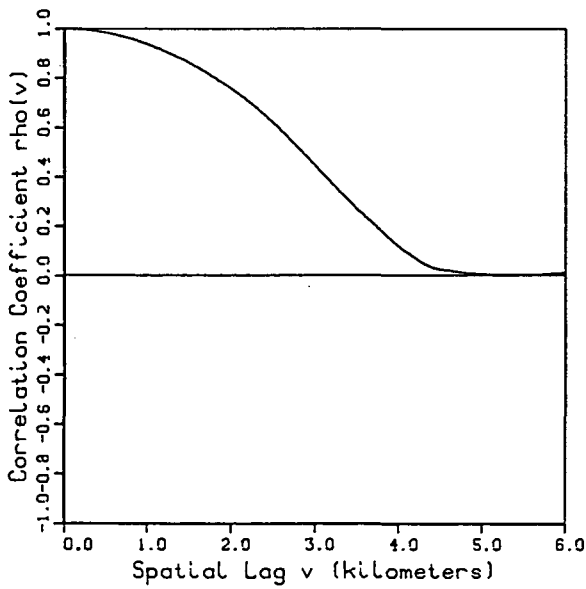
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

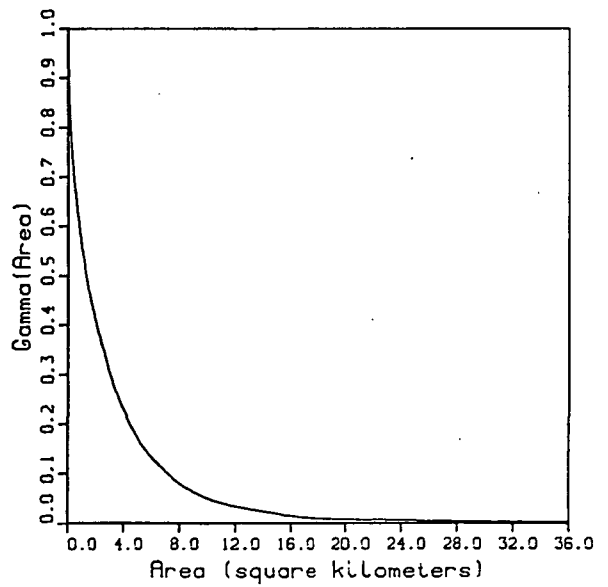
Storm Day  
Sept 1, 1971



Spatial Correlation



Variance Function



Storm Day Sept 1 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.):  $E(Y) = 3.872$

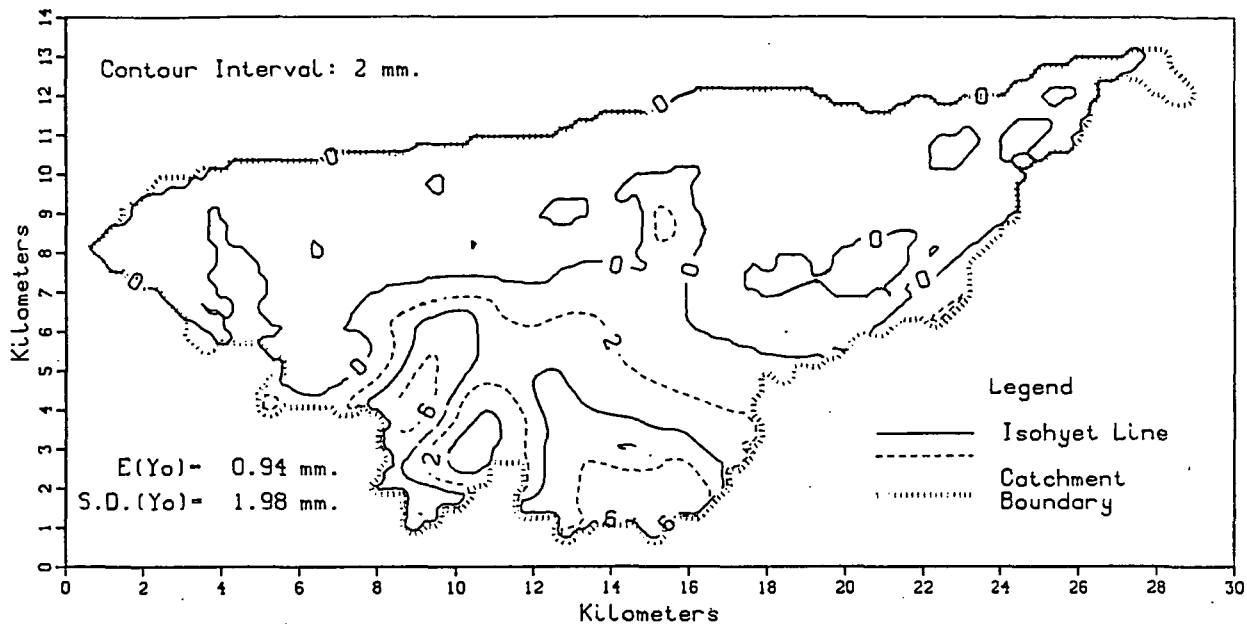
Variance of Point Depth (mm. sq.):  $Var(Y) = 21.587$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.382$

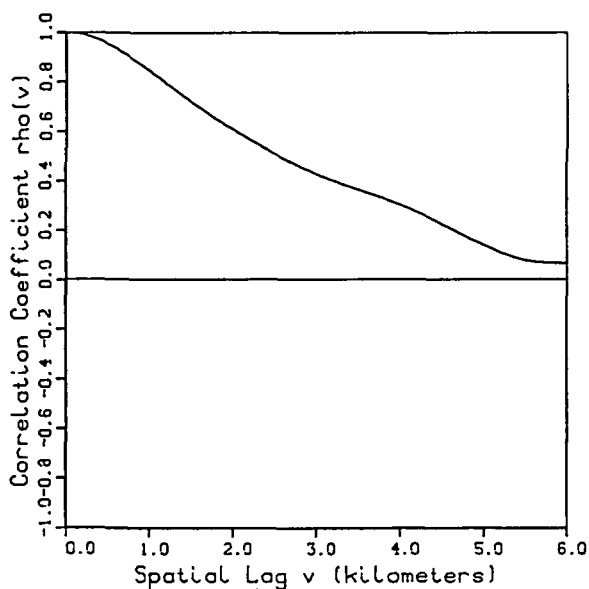
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.964	0.0	1.000	0.00	1.000
2	0.708	0.2	0.997	0.04	0.899
3	0.365	0.4	0.988	0.16	0.806
4	0.179	0.6	0.974	0.36	0.720
5	0.111	0.8	0.956	0.64	0.639
6	0.094	1.0	0.934	1.00	0.557
7	0.083	1.2	0.907	1.44	0.482
8	0.078	1.4	0.876	1.96	0.414
9	0.074	1.6	0.839	2.56	0.346
10	0.071	1.8	0.798	3.24	0.279
11	0.068	2.0	0.753	4.00	0.227
12	0.065	2.2	0.703	4.84	0.179
13	0.061	2.4	0.647	5.76	0.139
14	0.058	2.6	0.584	6.76	0.109
15	0.054	2.8	0.516	7.84	0.081
16	0.050	3.0	0.444	9.00	0.061
17	0.046	3.2	0.371	10.24	0.046
18	0.039	3.4	0.301	11.56	0.035
19	0.033	3.6	0.236	12.96	0.027
20	0.028	3.8	0.174	14.44	0.020
21	0.024	4.0	0.116	16.00	0.013
22	0.019	4.2	0.067	17.64	0.008
23	0.015	4.4	0.031	19.36	0.007
24	0.011	4.6	0.018	21.16	0.006
25	0.008	4.8	0.009	23.04	0.005
26	0.006	5.0	0.004	25.00	0.004
27	0.004	5.2	0.001	27.04	0.003
28	0.003	5.4	0.002	29.16	0.003
29	0.002	5.6	0.005	31.36	0.002
30	0.001	5.8	0.009	33.64	0.001
31	0.001	6.0	0.013	36.00	0.001
32	0.000				
33	0.000				

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

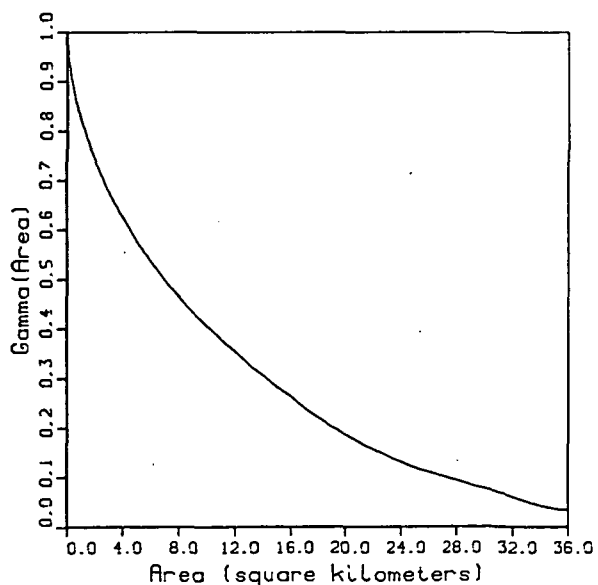
Storm Day  
 Sept 2, 1971



Spatial Correlation



Variance Function



C-3

Storm Day Sept 2 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.514$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.486$

Expected Value of Point Depth (mm.):  $E(Y) = 1.063$

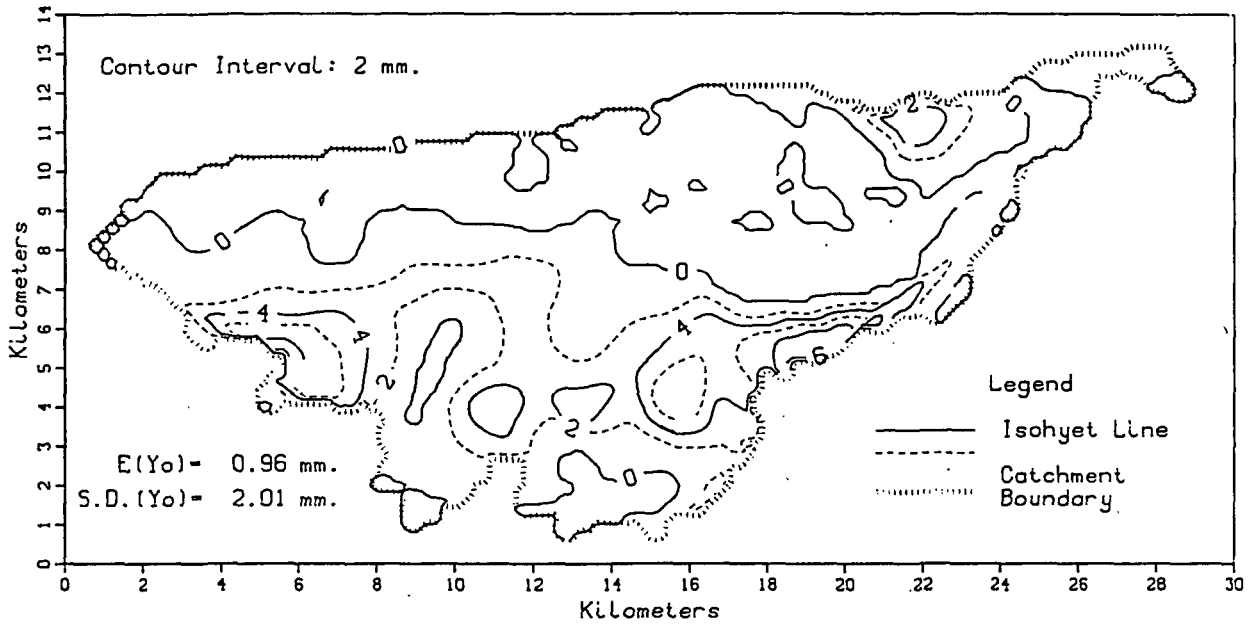
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.560$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.711$

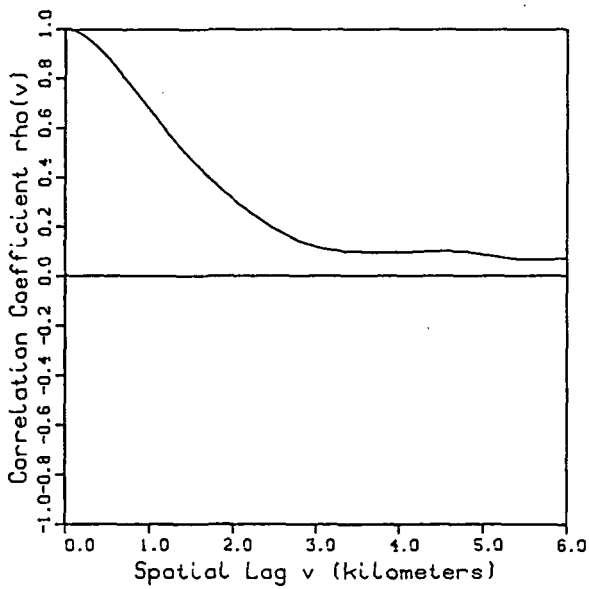
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.265	0.0	1.000	0.00	1.000
2	0.213	0.2	0.991	0.04	0.970
3	0.166	0.4	0.968	0.16	0.935
4	0.115	0.6	0.933	0.36	0.898
5	0.066	0.8	0.890	0.64	0.860
6	0.037	1.0	0.842	1.00	0.823
7	0.006	1.2	0.791	1.44	0.785
8	0.000	1.4	0.740	1.96	0.745
		1.6	0.691	2.56	0.704
		1.8	0.646	3.24	0.664
		2.0	0.604	4.00	0.624
		2.2	0.564	4.84	0.584
		2.4	0.525	5.76	0.544
		2.6	0.489	6.76	0.506
		2.8	0.457	7.84	0.468
		3.0	0.427	9.00	0.433
		3.2	0.400	10.24	0.398
		3.4	0.374	11.56	0.364
		3.6	0.351	12.96	0.329
		3.8	0.328	14.44	0.295
		4.0	0.301	16.00	0.261
		4.2	0.272	17.64	0.227
		4.4	0.240	19.36	0.195
		4.6	0.205	21.16	0.167
		4.8	0.171	23.04	0.142
		5.0	0.138	25.00	0.118
		5.2	0.109	27.04	0.101
		5.4	0.085	29.16	0.082
		5.6	0.072	31.36	0.065
		5.8	0.067	33.64	0.044
		6.0	0.064	36.00	0.033

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

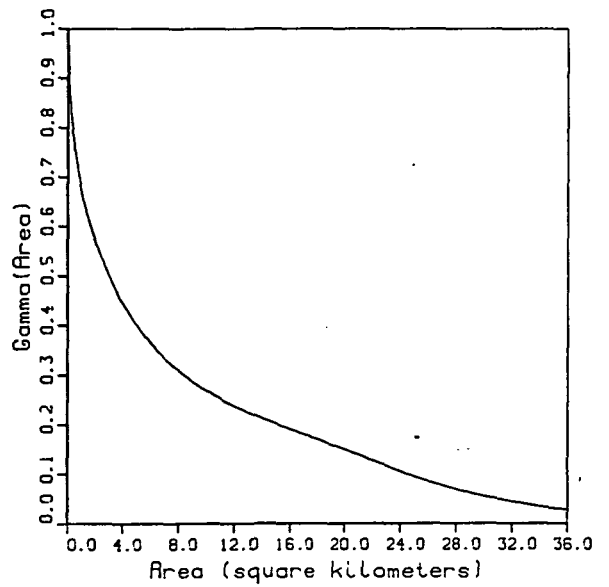
Storm Day  
 Sept 3, 1971



Spatial Correlation



Variance Function



Storm Day Sept 3 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c) = 0.340$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c) = 0.660$

Expected Value of Point Depth (mm.):  $E(Y) = 1.366$

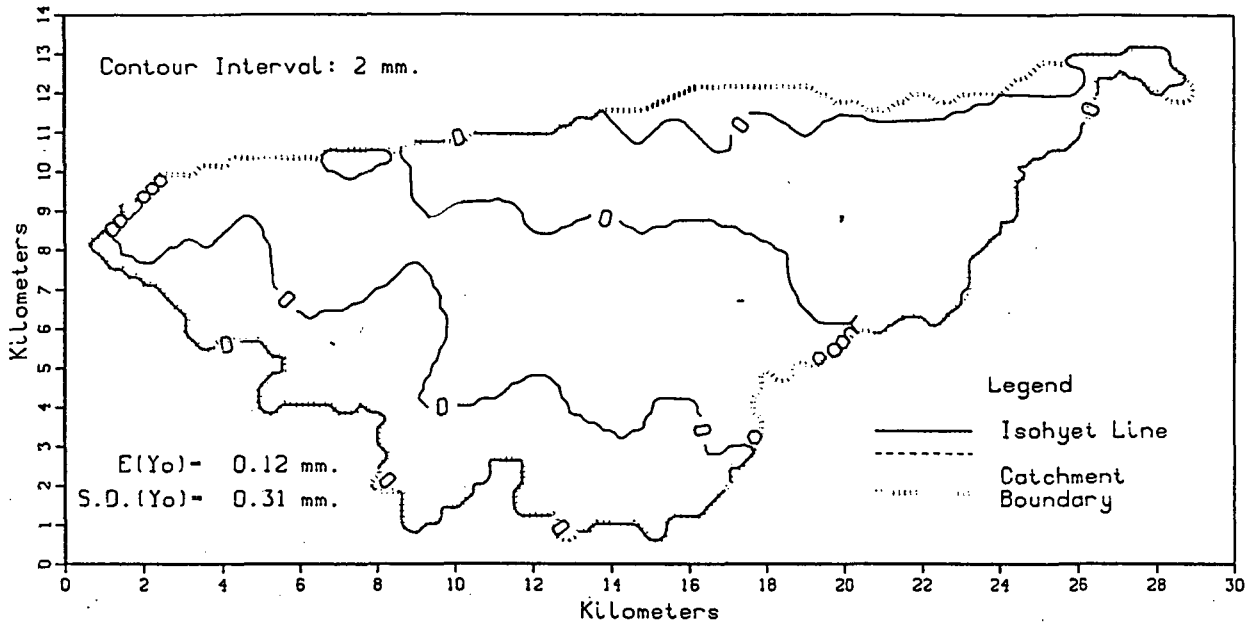
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.099$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.735$

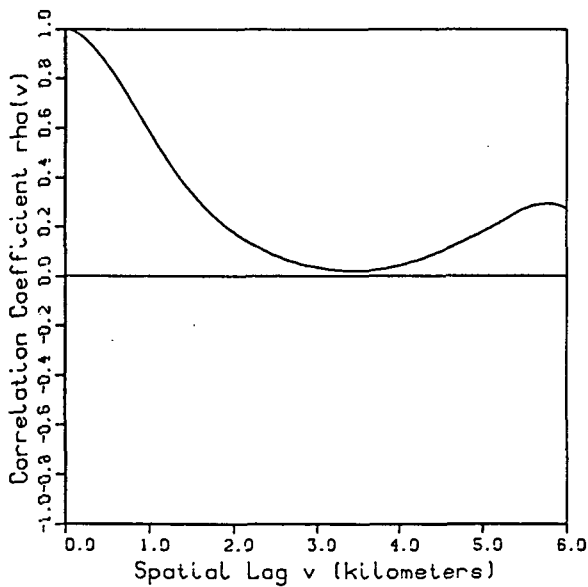
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.367	0.0	1.000	0.00	1.000
2	0.265	0.2	0.976	0.04	0.941
3	0.183	0.4	0.920	0.16	0.871
4	0.118	0.6	0.845	0.36	0.800
5	0.073	0.8	0.762	0.64	0.735
6	0.046	1.0	0.674	1.00	0.677
7	0.027	1.2	0.588	1.44	0.624
8	0.011	1.4	0.507	1.96	0.575
9	0.004	1.6	0.434	2.56	0.529
10	0.000	1.8	0.369	3.24	0.485
11	0.000	2.0	0.310	4.00	0.444
		2.2	0.257	4.84	0.405
		2.4	0.210	5.76	0.371
		2.6	0.171	6.76	0.339
		2.8	0.140	7.84	0.311
		3.0	0.118	9.00	0.285
		3.2	0.104	10.24	0.263
		3.4	0.097	11.56	0.242
		3.6	0.095	12.96	0.223
		3.8	0.095	14.44	0.205
		4.0	0.096	16.00	0.189
		4.2	0.099	17.64	0.172
		4.4	0.101	19.36	0.154
		4.6	0.100	21.16	0.135
		4.8	0.095	23.04	0.114
		5.0	0.085	25.00	0.093
		5.2	0.075	27.04	0.075
		5.4	0.068	29.16	0.059
		5.6	0.066	31.36	0.046
		5.8	0.067	33.64	0.035
		6.0	0.074	36.00	0.027

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

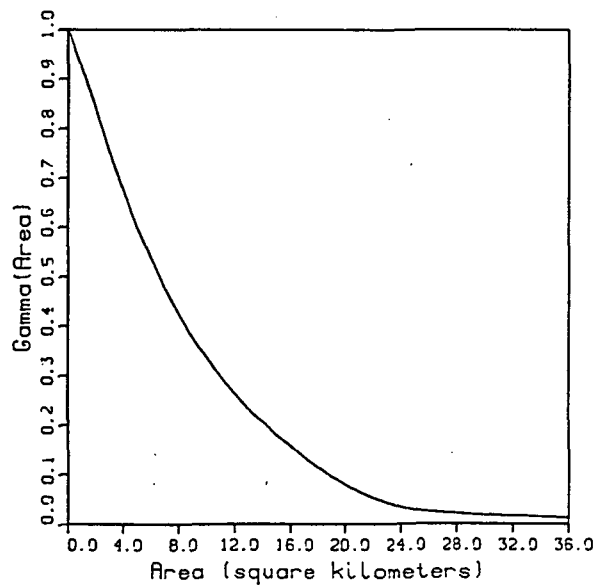
Storm Day  
 Sept 5, 1971



Spatial Correlation



Variance Function



Storm Day Sept 5 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.518$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.482$

Expected Value of Point Depth (mm.):  $E(Y) = 0.146$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.072$

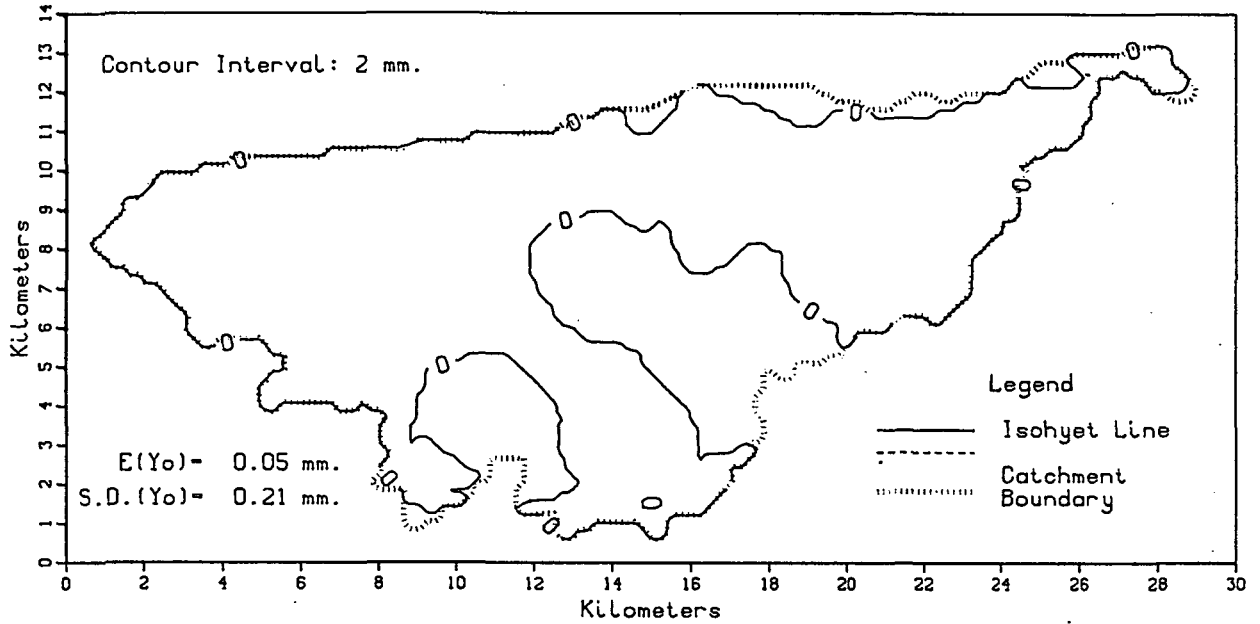
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.945$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.015	0.0	1.000	0.00	1.000
2	0.000	0.2	0.971	0.04	0.998
3	0.000	0.4	0.899	0.16	0.990
		0.6	0.802	0.36	0.974
		0.8	0.693	0.64	0.950
		1.0	0.581	1.00	0.920
		1.2	0.474	1.44	0.884
		1.4	0.379	1.96	0.840
		1.6	0.298	2.56	0.789
		1.8	0.231	3.24	0.733
		2.0	0.177	4.00	0.674
		2.2	0.134	4.84	0.612
		2.4	0.098	5.76	0.550
		2.6	0.070	6.76	0.489
		2.8	0.048	7.84	0.431
		3.0	0.033	9.00	0.377
		3.2	0.024	10.24	0.326
		3.4	0.021	11.56	0.279
		3.6	0.023	12.96	0.235
		3.8	0.031	14.44	0.195
		4.0	0.045	16.00	0.157
		4.2	0.064	17.64	0.122
		4.4	0.089	19.36	0.090
		4.6	0.116	21.16	0.062
		4.8	0.147	23.04	0.041
		5.0	0.181	25.00	0.027
		5.2	0.218	27.04	0.022
		5.4	0.257	29.16	0.019
		5.6	0.287	31.36	0.016
		5.8	0.294	33.64	0.014
		6.0	0.275	36.00	0.012

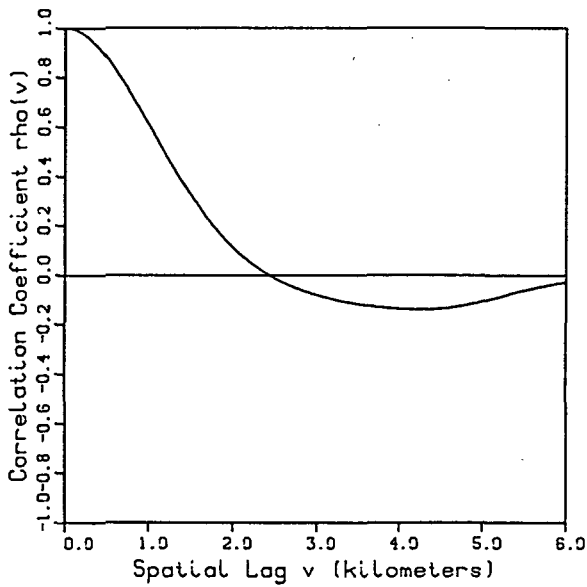


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

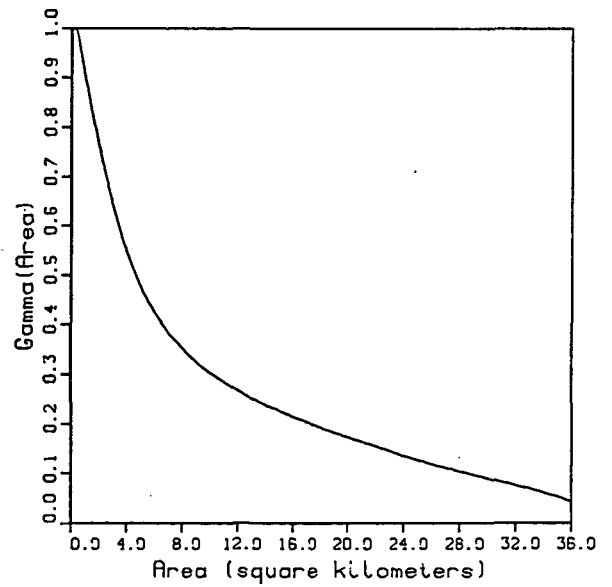
Storm Day  
 Sept 6, 1971



Spatial Correlation



Variance Function



Storm Day Sept 6 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.733$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.267$

Expected Value of Point Depth (mm.):  $E(Y)= 0.087$

Variance of Point Depth (mm. sq.):  $Var(Y)= 0.056$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 3.207$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)      rho (v)

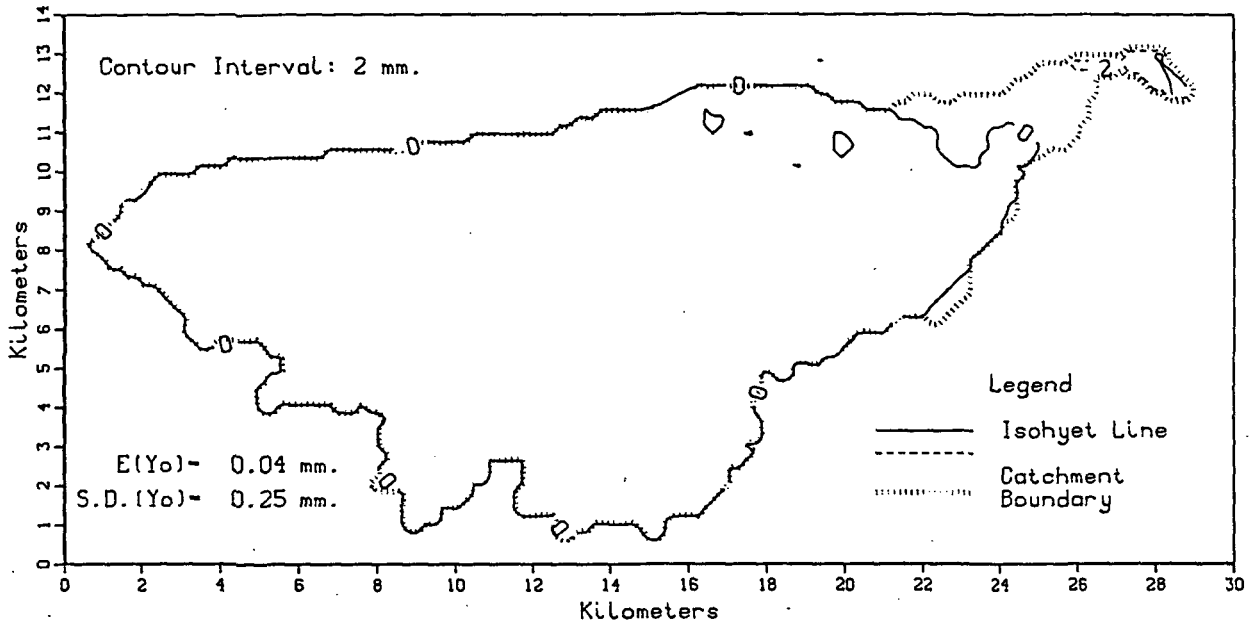
Variance Function  
A (km. sq.)      Gamma (A)

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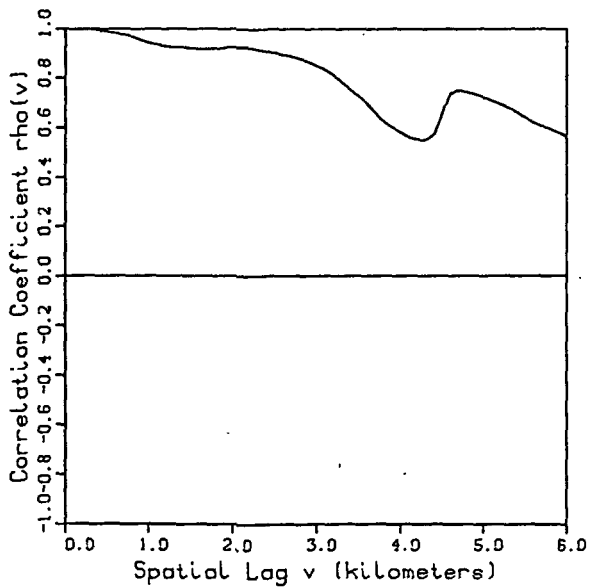
1	0.022	0.0	1.000	0.00	1.000
2	0.000	0.2	0.978	0.04	1.018
		0.4	0.918	0.16	1.017
		0.6	0.829	0.36	0.997
		0.8	0.721	0.64	0.956
		1.0	0.604	1.00	0.900
		1.2	0.485	1.44	0.835
		1.4	0.373	1.96	0.763
		1.6	0.271	2.56	0.687
		1.8	0.183	3.24	0.614
		2.0	0.110	4.00	0.545
		2.2	0.052	4.84	0.485
		2.4	0.005	5.76	0.435
		2.6	-0.032	6.76	0.392
		2.8	-0.061	7.84	0.357
		3.0	-0.084	9.00	0.326
		3.2	-0.101	10.24	0.298
		3.4	-0.115	11.56	0.274
		3.6	-0.126	12.96	0.252
		3.8	-0.134	14.44	0.232
		4.0	-0.139	16.00	0.214
		4.2	-0.142	17.64	0.196
		4.4	-0.140	19.36	0.179
		4.6	-0.133	21.16	0.162
		4.8	-0.122	23.04	0.144
		5.0	-0.106	25.00	0.126
		5.2	-0.089	27.04	0.110
		5.4	-0.071	29.16	0.095
		5.6	-0.054	31.36	0.080
		5.8	-0.040	33.64	0.063
		6.0	-0.029	36.00	0.043

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

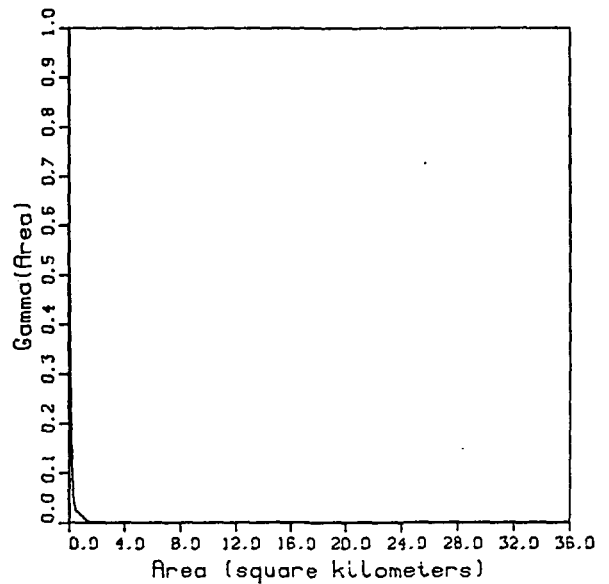
Storm Day  
 Sept 7, 1971



Spatial Correlation



Variance Function



Storm Day Sept 7 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.940$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.060$

Expected Value of Point Depth (mm.):  $E(Y)= 0.051$

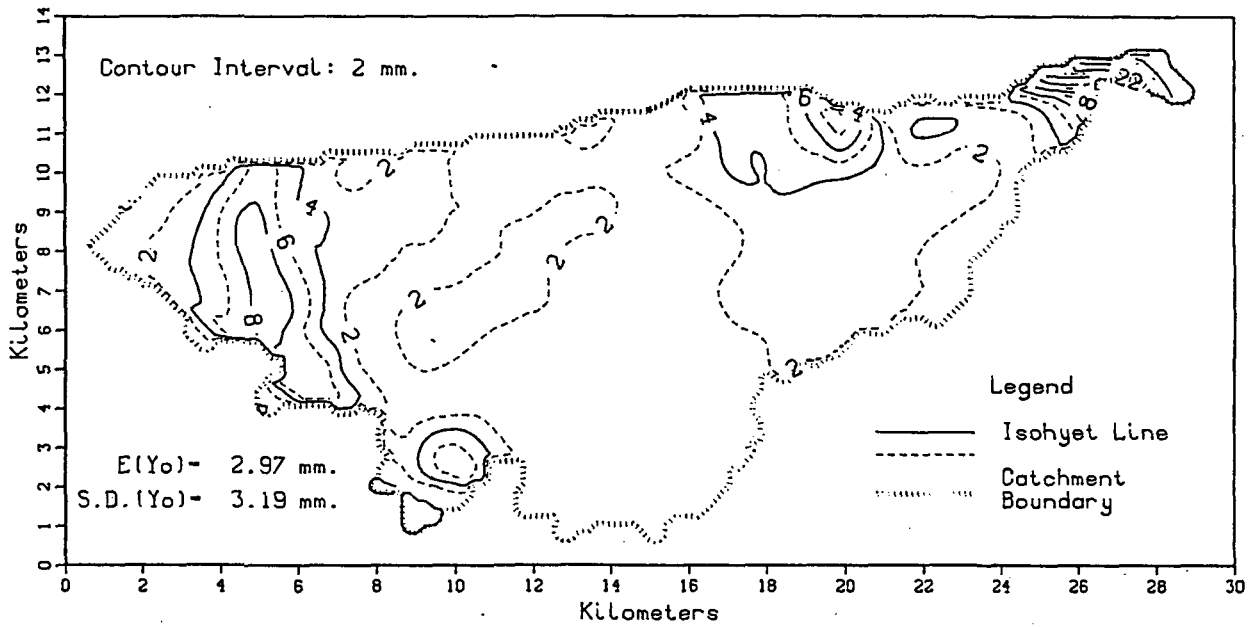
Variance of Point Depth (mm. sq.):  $Var(Y)= 0.135$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 8.958$

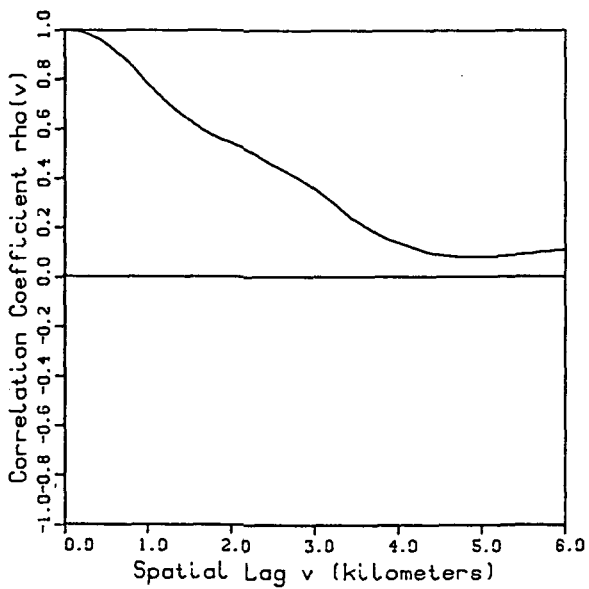
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.013	0.0	1.000	0.00	1.000
2	0.008	0.2	0.998	0.04	0.579
3	0.005	0.4	0.992	0.16	0.207
4	0.002	0.6	0.981	0.36	0.042
5	0.000	0.8	0.966	0.64	0.022
		1.0	0.942	1.00	0.011
		1.2	0.927	1.44	0.002
		1.4	0.922	1.96	0.000
		1.6	0.917	2.56	0.000
		1.8	0.918	3.24	0.000
		2.0	0.926	4.00	0.000
		2.2	0.922	4.84	0.000
		2.4	0.908	5.76	0.000
		2.6	0.893	6.76	0.000
		2.8	0.876	7.84	0.000
		3.0	0.849	9.00	0.000
		3.2	0.810	10.24	0.000
		3.4	0.751	11.56	0.000
		3.6	0.696	12.96	0.000
		3.8	0.623	14.44	0.000
		4.0	0.580	16.00	0.000
		4.2	0.550	17.64	0.000
		4.4	0.574	19.36	0.000
		4.6	0.736	21.16	0.000
		4.8	0.742	23.04	0.000
		5.0	0.720	25.00	0.000
		5.2	0.694	27.04	0.000
		5.4	0.661	29.16	0.000
		5.6	0.618	31.36	0.000
		5.8	0.592	33.64	0.000
		6.0	0.561	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

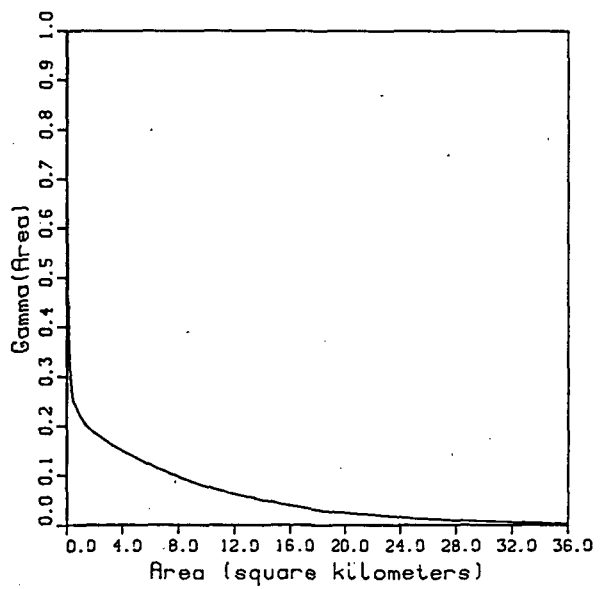
Storm Day  
 Sept 8, 1971



Spatial Correlation



Variance Function



Storm Day Sept 8 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.004$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.996$

Expected Value of Point Depth (mm.):  $E(Y) = 2.938$

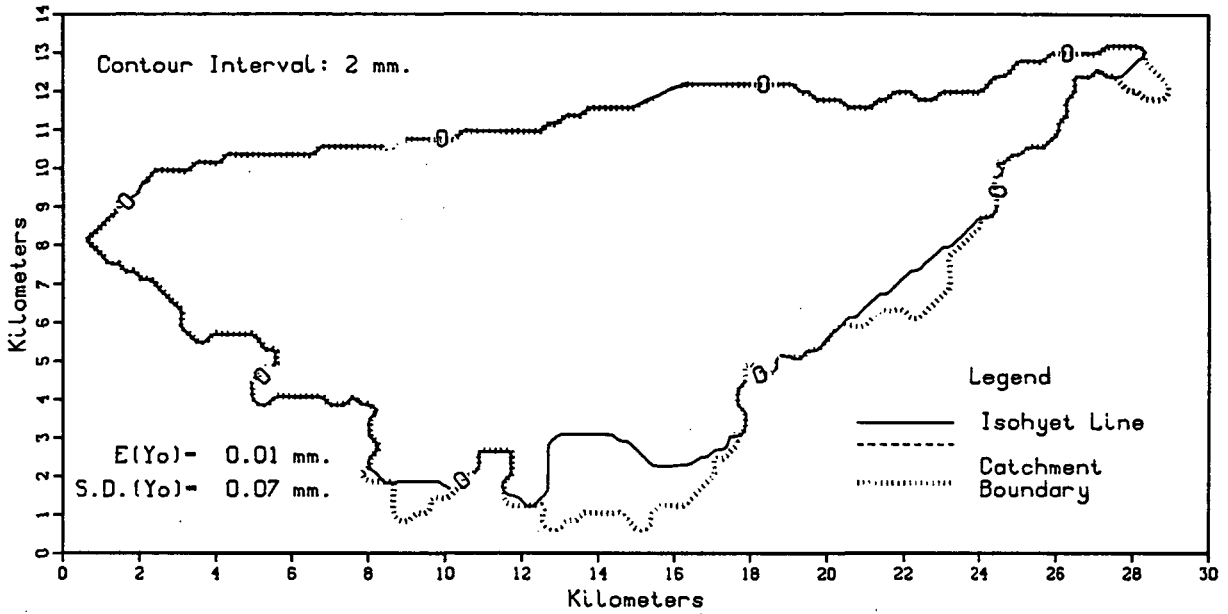
Variance of Point Depth (mm. sq.):  $Var(Y) = 12.814$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 5.549$

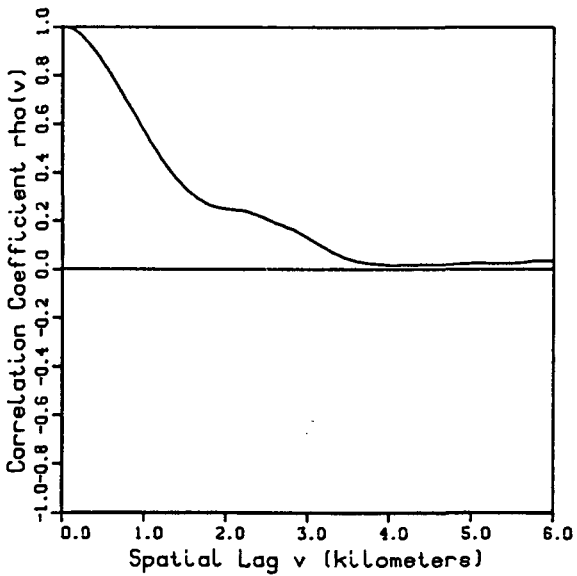
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.864	0.0	1.000	0.00	1.000
3	0.271	0.2	0.991	0.04	0.688
5	0.128	0.4	0.964	0.16	0.409
7	0.065	0.6	0.917	0.36	0.271
9	0.019	0.8	0.856	0.64	0.242
11	0.013	1.0	0.780	1.00	0.220
13	0.012	1.2	0.715	1.44	0.200
15	0.011	1.4	0.660	1.96	0.187
17	0.011	1.6	0.609	2.56	0.174
19	0.010	1.8	0.569	3.24	0.162
21	0.009	2.0	0.543	4.00	0.149
23	0.008	2.2	0.514	4.84	0.137
25	0.007	2.4	0.473	5.76	0.124
27	0.006	2.6	0.438	6.76	0.111
29	0.005	2.8	0.402	7.84	0.098
31	0.004	3.0	0.357	9.00	0.086
33	0.003	3.2	0.307	10.24	0.075
35	0.001	3.4	0.250	11.56	0.065
37	0.000	3.6	0.207	12.96	0.056
39	0.000	3.8	0.165	14.44	0.047
		4.0	0.139	16.00	0.039
		4.2	0.115	17.64	0.031
		4.4	0.095	19.36	0.025
		4.6	0.085	21.16	0.022
		4.8	0.080	23.04	0.017
		5.0	0.080	25.00	0.012
		5.2	0.084	27.04	0.010
		5.4	0.090	29.16	0.007
		5.6	0.096	31.36	0.006
		5.8	0.104	33.64	0.004
		6.0	0.110	36.00	0.002

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

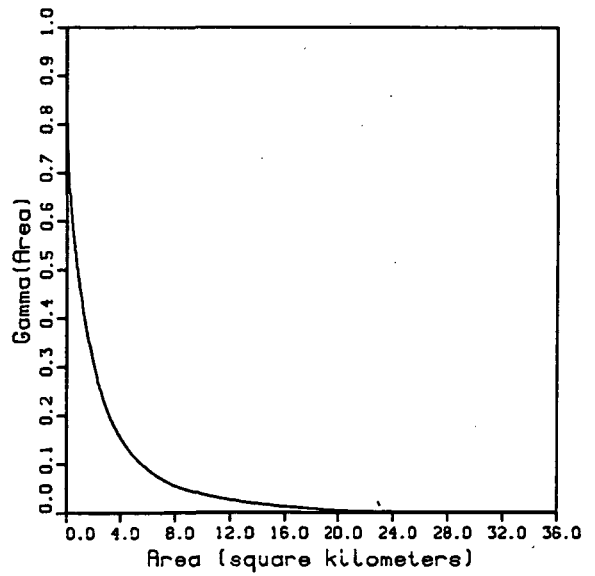
Storm Day  
 Sept 16, 1971



Spatial Correlation



Variance Function



Storm Day Sept 16 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.935$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.065$

Expected Value of Point Depth (mm.):  $E(Y) = 0.008$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.002$

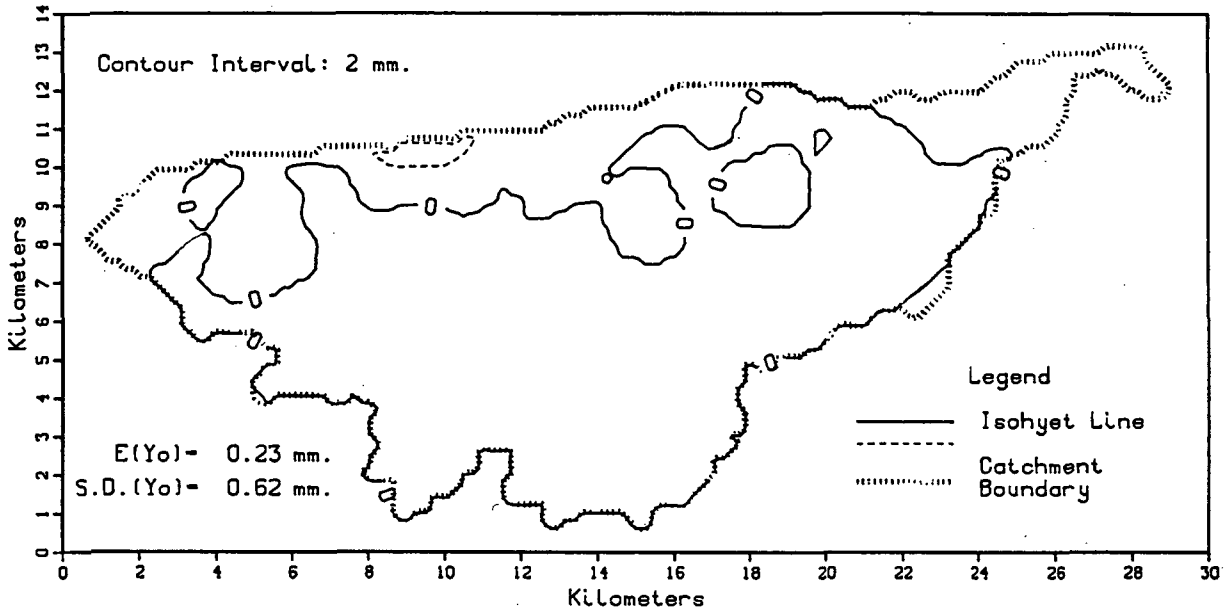
Coef. of Skewness of Point Depth:  $S.C.(Y) = 5.488$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.972	0.04	0.834
		0.4	0.896	0.16	0.708
		0.6	0.795	0.36	0.620
		0.8	0.681	0.64	0.540
		1.0	0.567	1.00	0.462
		1.2	0.461	1.44	0.385
		1.4	0.372	1.96	0.312
		1.6	0.305	2.56	0.247
		1.8	0.264	3.24	0.194
		2.0	0.249	4.00	0.152
		2.2	0.241	4.84	0.120
		2.4	0.220	5.76	0.094
		2.6	0.191	6.76	0.073
		2.8	0.166	7.84	0.056
		3.0	0.130	9.00	0.045
		3.2	0.090	10.24	0.036
		3.4	0.055	11.56	0.028
		3.6	0.033	12.96	0.021
		3.8	0.022	14.44	0.016
		4.0	0.018	16.00	0.012
		4.2	0.019	17.64	0.008
		4.4	0.020	19.36	0.004
		4.6	0.019	21.16	0.002
		4.8	0.023	23.04	0.001
		5.0	0.026	25.00	0.000
		5.2	0.026	27.04	0.000
		5.4	0.024	29.16	0.000
		5.6	0.029	31.36	0.000
		5.8	0.035	33.64	0.000
		6.0	0.032	36.00	0.000

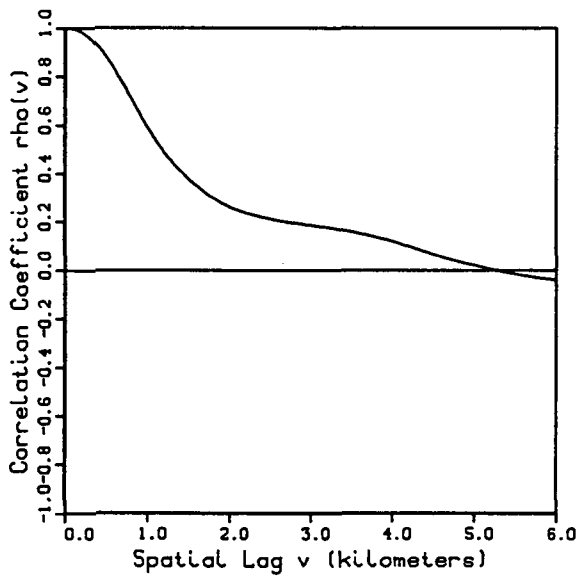


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

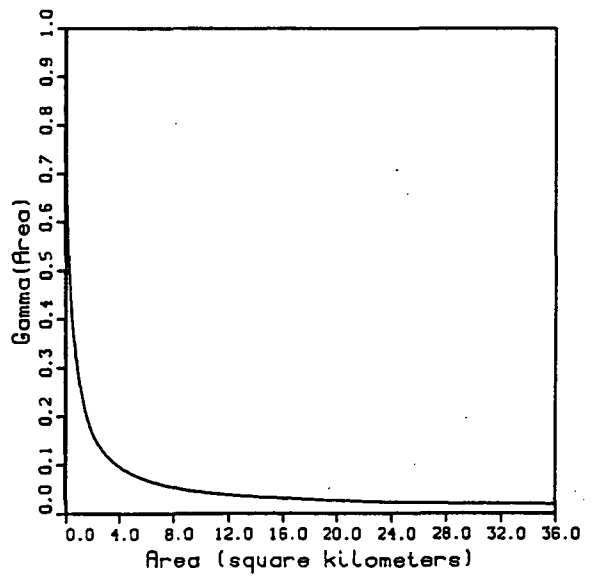
Storm Day  
 Sept 17, 1971



Spatial Correlation



Variance Function



Storm Day Sept 17 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.679$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.321$

Expected Value of Point Depth (mm.):  $E(Y) = 0.127$

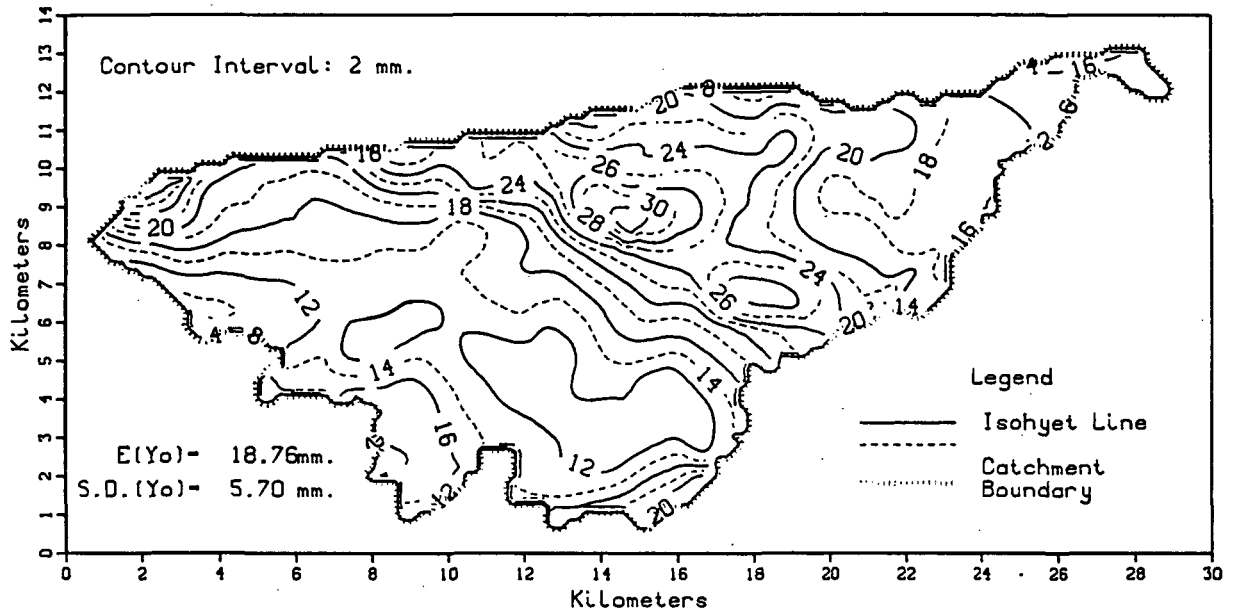
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.121$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.525$

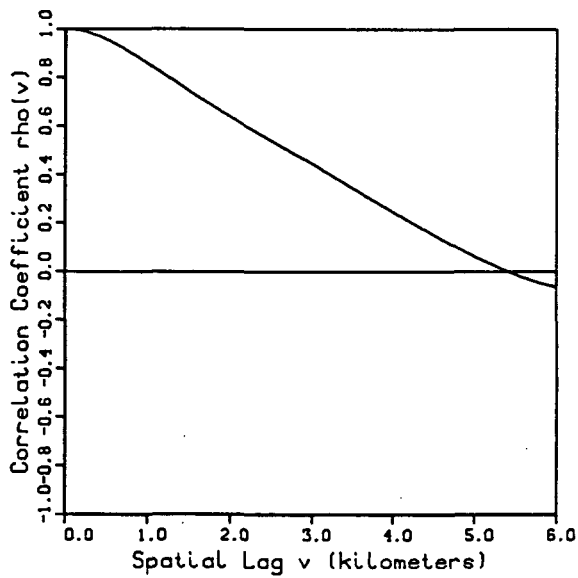
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.025	0.0	1.000	0.00	1.000
2	0.008	0.2	0.978	0.04	0.789
3	0.000	0.4	0.919	0.16	0.597
4	0.000	0.6	0.823	0.36	0.456
		0.8	0.705	0.64	0.357
		1.0	0.584	1.00	0.278
		1.2	0.484	1.44	0.215
		1.4	0.405	1.96	0.168
		1.6	0.341	2.56	0.136
		1.8	0.293	3.24	0.113
		2.0	0.258	4.00	0.095
		2.2	0.234	4.84	0.081
		2.4	0.217	5.76	0.070
		2.6	0.203	6.76	0.061
		2.8	0.193	7.84	0.054
		3.0	0.183	9.00	0.048
		3.2	0.173	10.24	0.042
		3.4	0.163	11.56	0.038
		3.6	0.149	12.96	0.035
		3.8	0.133	14.44	0.032
		4.0	0.116	16.00	0.030
		4.2	0.095	17.64	0.028
		4.4	0.073	19.36	0.026
		4.6	0.052	21.16	0.024
		4.8	0.035	23.04	0.022
		5.0	0.018	25.00	0.021
		5.2	0.002	27.04	0.020
		5.4	-.012	29.16	0.019
		5.6	-.024	31.36	0.019
		5.8	-.035	33.64	0.019
		6.0	-.043	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

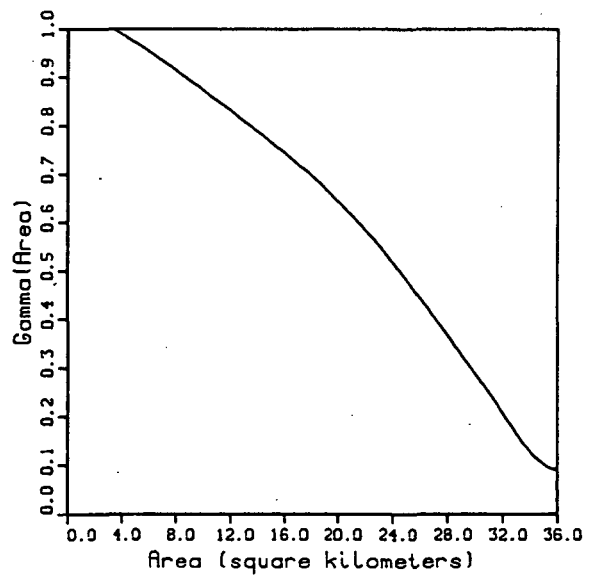
Storm Day  
 Sept 18, 1971



Spatial Correlation



Variance Function



Storm Day Sept 18 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y)=17.799$

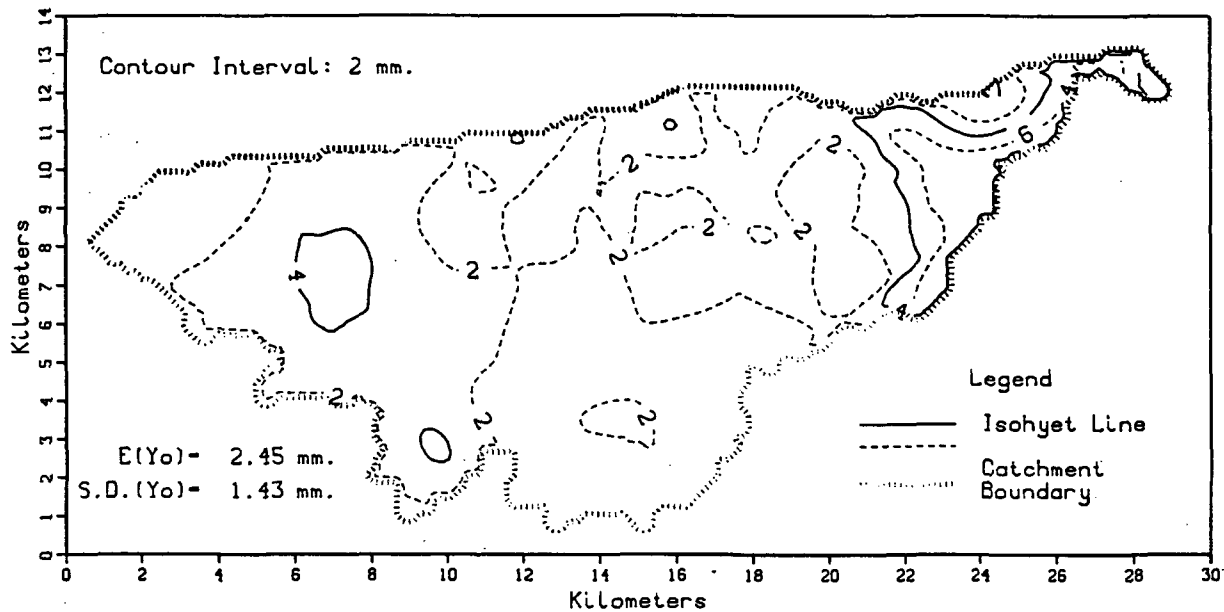
Variance of Point Depth (mm. sq.):  $Var(Y)=26.270$

Coef. of Skewness of Point Depth:  $S.C.(Y)=0.568$

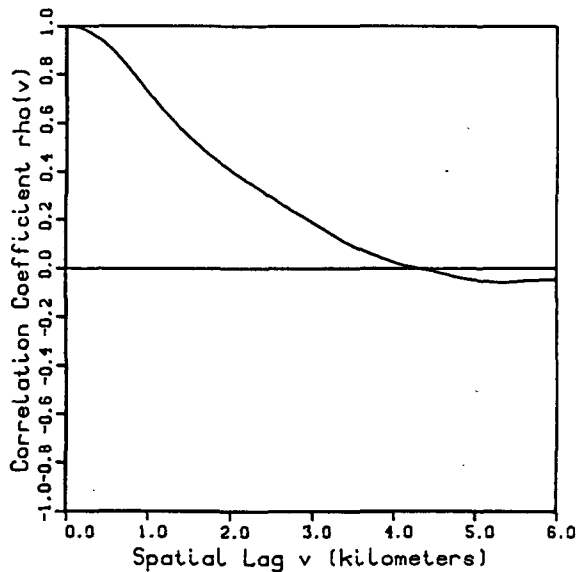
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.992	0.04	1.006
3	1.000	0.4	0.970	0.16	1.014
4	1.000	0.6	0.938	0.36	1.021
5	1.000	0.8	0.899	0.64	1.024
6	1.000	1.0	0.856	1.00	1.025
7	1.000	1.2	0.811	1.44	1.024
8	1.000	1.4	0.765	1.96	1.020
9	1.000	1.6	0.720	2.56	1.012
10	0.995	1.8	0.677	3.24	1.001
11	0.957	2.0	0.635	4.00	0.988
12	0.874	2.2	0.596	4.84	0.974
13	0.783	2.4	0.557	5.76	0.957
14	0.713	2.6	0.518	6.76	0.938
15	0.650	2.8	0.480	7.84	0.917
16	0.581	3.0	0.442	9.00	0.893
17	0.493	3.2	0.402	10.24	0.868
18	0.424	3.4	0.362	11.56	0.840
19	0.362	3.6	0.322	12.96	0.810
20	0.316	3.8	0.282	14.44	0.778
21	0.267	4.0	0.243	16.00	0.743
22	0.229	4.2	0.204	17.64	0.704
23	0.195	4.4	0.167	19.36	0.660
24	0.157	4.6	0.130	21.16	0.609
25	0.115	4.8	0.094	23.04	0.549
26	0.080	5.0	0.060	25.00	0.480
27	0.053	5.2	0.028	27.04	0.402
28	0.035	5.4	-0.001	29.16	0.318
29	0.020	5.6	-0.027	31.36	0.234
30	0.014	5.8	-0.050	33.64	0.139
31	0.008	6.0	-0.069	36.00	0.090
32	0.003				
33	0.000				

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

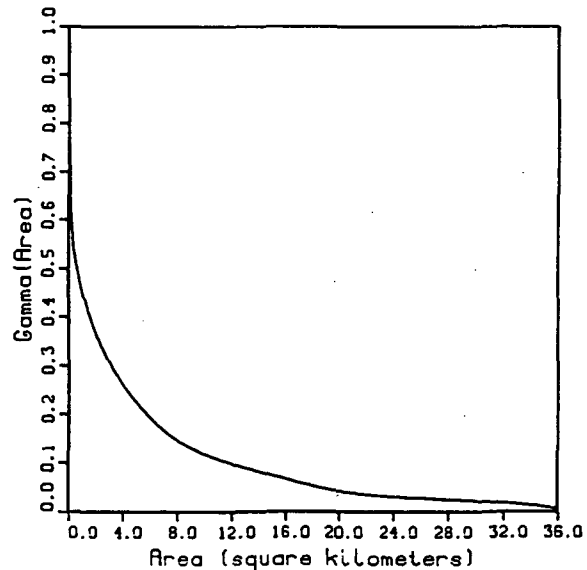
Storm Day  
 Sept 28, 1971



Spatial Correlation



Variance Function



Storm Day Sept 28 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 2.554$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.386$

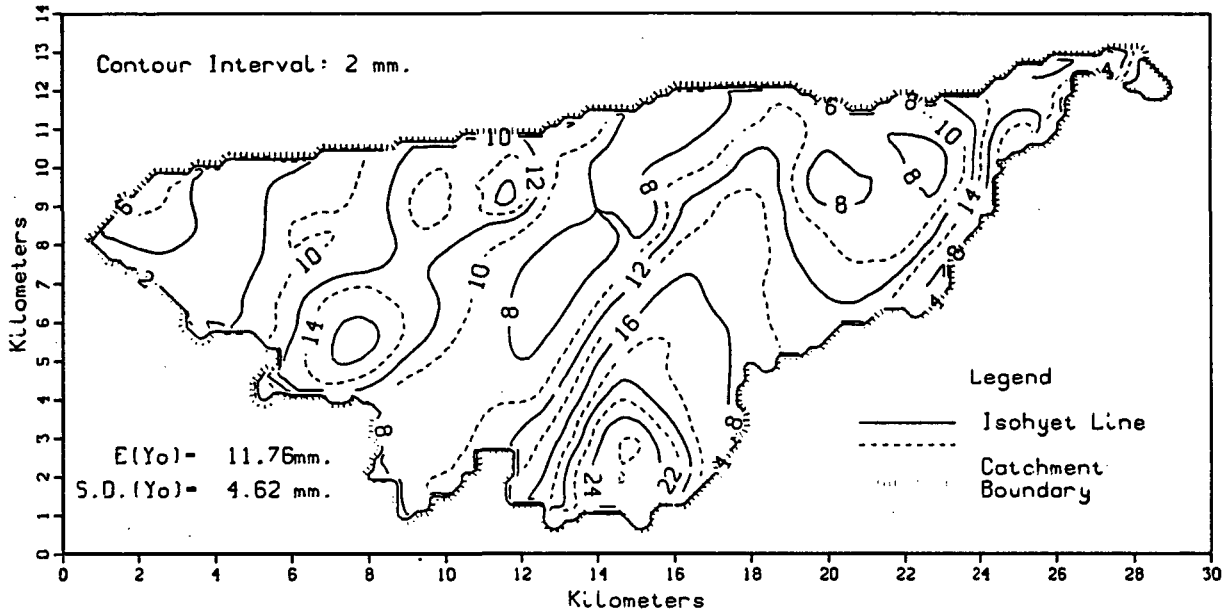
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.572$

Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.959	0.0	1.000	0.00	1.000
2	0.571	0.2	0.987	0.04	0.816
3	0.257	0.4	0.949	0.16	0.650
4	0.110	0.6	0.889	0.36	0.555
5	0.066	0.8	0.812	0.64	0.503
6	0.042	1.0	0.726	1.00	0.455
7	0.018	1.2	0.646	1.44	0.411
8	0.006	1.4	0.575	1.96	0.370
9	0.005	1.6	0.510	2.56	0.331
10	0.004	1.8	0.453	3.24	0.294
11	0.003	2.0	0.405	4.00	0.260
12	0.002	2.2	0.358	4.84	0.229
13	0.002	2.4	0.315	5.76	0.199
14	0.001	2.6	0.270	6.76	0.172
15	0.000	2.8	0.228	7.84	0.148
16	0.000	3.0	0.188	9.00	0.131
		3.2	0.147	10.24	0.116
		3.4	0.106	11.56	0.102
		3.6	0.074	12.96	0.090
		3.8	0.047	14.44	0.079
		4.0	0.022	16.00	0.067
		4.2	0.005	17.64	0.055
		4.4	-.008	19.36	0.044
		4.6	-.023	21.16	0.037
		4.8	-.040	23.04	0.032
		5.0	-.051	25.00	0.028
		5.2	-.059	27.04	0.025
		5.4	-.058	29.16	0.022
		5.6	-.052	31.36	0.018
		5.8	-.050	33.64	0.013
		6.0	-.050	36.00	0.005

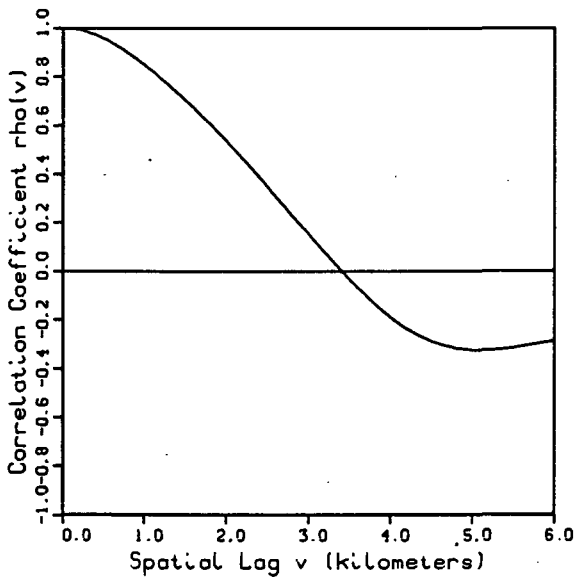
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

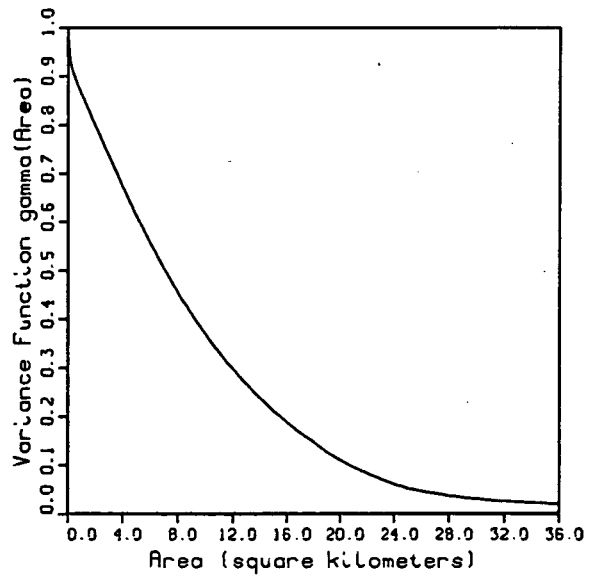
Storm Day  
Sept 29, 1971



### Spatial Correlation



### Variance Function



Storm Day Sept 29 1971

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.):  $E(Y)=11.882$

Variance of Point Depth (mm. sq.):  $Var(Y)=18.302$

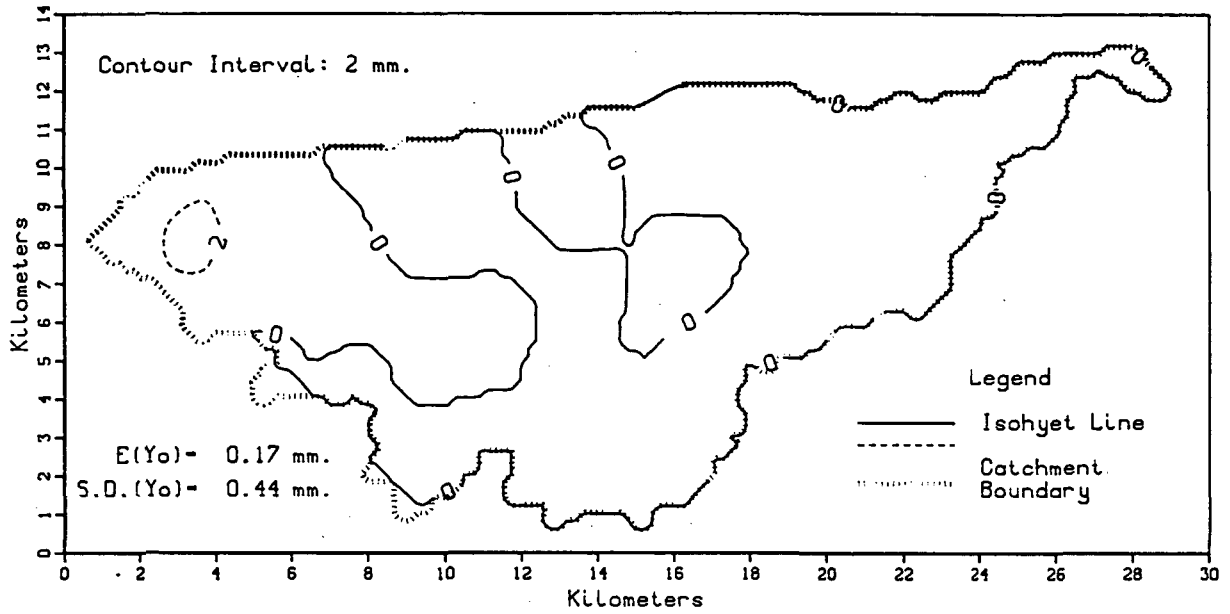
Coef. of Skewness of Point Depth:  $S.C.(Y)=1.012$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.997	0.0	1.000	0.00	1.000
2	0.997	0.2	0.992	0.04	0.967
3	0.996	0.4	0.970	0.16	0.933
4	0.996	0.6	0.937	0.36	0.908
5	0.996	0.8	0.895	0.64	0.887
6	0.994	1.0	0.846	1.00	0.862
7	0.949	1.2	0.791	1.44	0.832
8	0.842	1.4	0.731	1.96	0.799
9	0.700	1.6	0.668	2.56	0.760
10	0.583	1.8	0.602	3.24	0.717
11	0.493	2.0	0.533	4.00	0.669
12	0.419	2.2	0.460	4.84	0.619
13	0.345	2.4	0.384	5.76	0.567
14	0.273	2.6	0.305	6.76	0.513
15	0.205	2.8	0.227	7.84	0.459
16	0.146	3.0	0.150	9.00	0.408
17	0.104	3.2	0.073	10.24	0.359
18	0.077	3.4	0.000	11.56	0.311
19	0.061	3.6	-.071	12.96	0.267
20	0.051	3.8	-.135	14.44	0.225
21	0.044	4.0	-.192	16.00	0.187
22	0.037	4.2	-.240	17.64	0.152
23	0.031	4.4	-.278	19.36	0.120
24	0.024	4.6	-.304	21.16	0.093
25	0.016	4.8	-.321	23.04	0.070
26	0.002	5.0	-.329	25.00	0.052
27	0.000	5.2	-.328	27.04	0.041
		5.4	-.322	29.16	0.032
		5.6	-.312	31.36	0.026
		5.8	-.301	33.64	0.022
		6.0	-.288	36.00	0.019

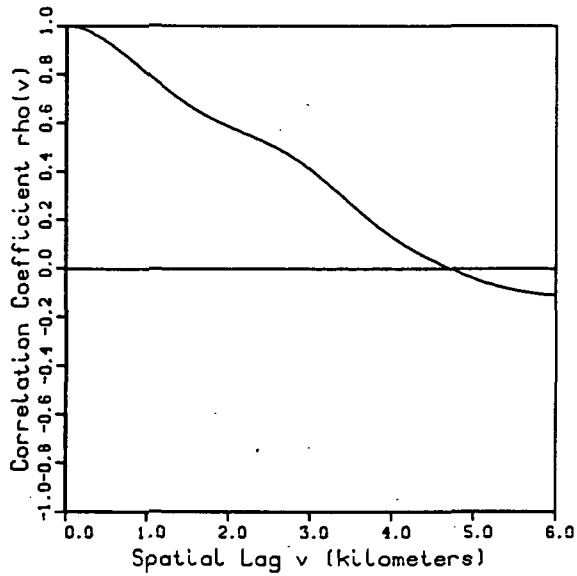


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

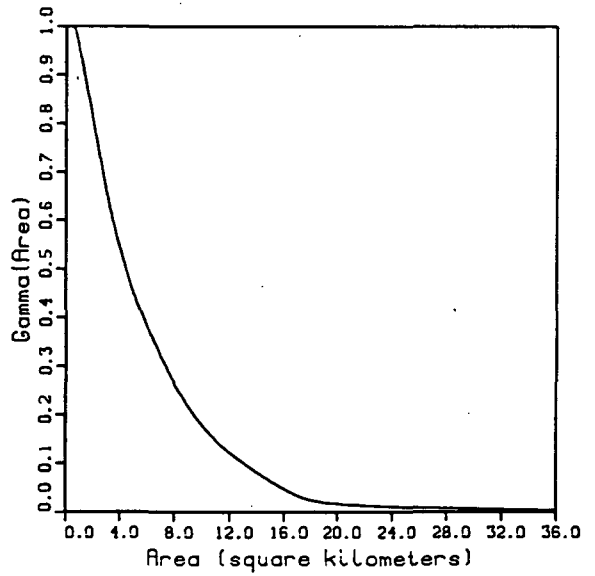
Storm Day  
 June 4, 1972



Spatial Correlation



Variance Function



Storm Day June 4 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.624$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.376$

Expected Value of Point Depth (mm.):  $E(Y) = 0.195$

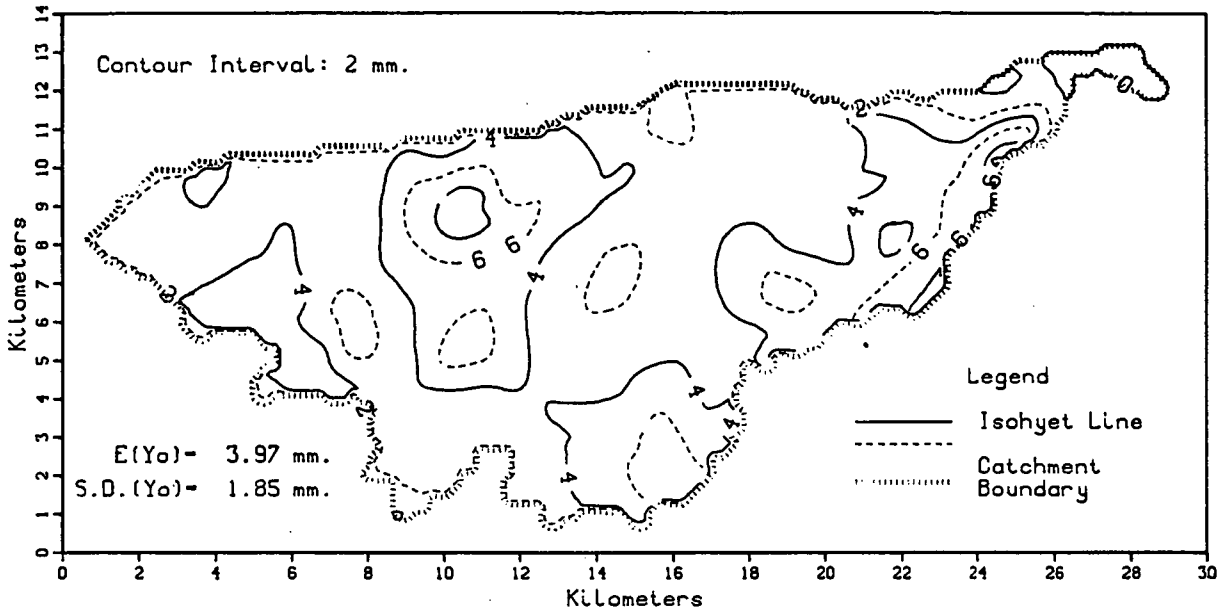
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.190$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.153$

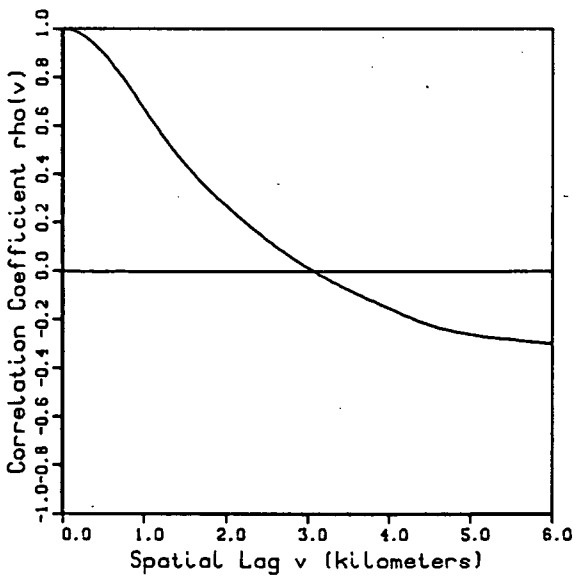
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.069	0.0	1.000	0.00	1.000
2	0.013	0.2	0.988	0.04	1.020
3	0.000	0.4	0.955	0.16	1.029
4	0.000	0.6	0.909	0.36	1.023
		0.8	0.856	0.64	0.997
		1.0	0.800	1.00	0.952
		1.2	0.746	1.44	0.889
		1.4	0.695	1.96	0.811
		1.6	0.651	2.56	0.722
		1.8	0.615	3.24	0.626
		2.0	0.583	4.00	0.541
		2.2	0.555	4.84	0.461
		2.4	0.527	5.76	0.392
		2.6	0.494	6.76	0.330
		2.8	0.455	7.84	0.269
		3.0	0.407	9.00	0.216
		3.2	0.353	10.24	0.169
		3.4	0.294	11.56	0.131
		3.6	0.235	12.96	0.101
		3.8	0.179	14.44	0.073
		4.0	0.129	16.00	0.046
		4.2	0.085	17.64	0.026
		4.4	0.047	19.36	0.017
		4.6	0.014	21.16	0.014
		4.8	-.016	23.04	0.011
		5.0	-.044	25.00	0.009
		5.2	-.067	27.04	0.007
		5.4	-.085	29.16	0.006
		5.6	-.098	31.36	0.005
		5.8	-.108	33.64	0.003
		6.0	-.112	36.00	0.002

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq.km.}$

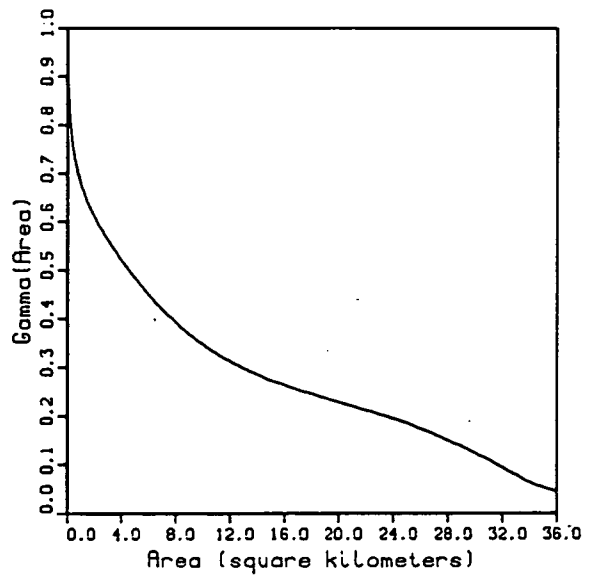
Storm Day  
 June 5, 1972



Spatial Correlation



Variance Function



Storm Day June 5 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.010$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.990$

Expected Value of Point Depth (mm.):  $E(Y) = 3.963$

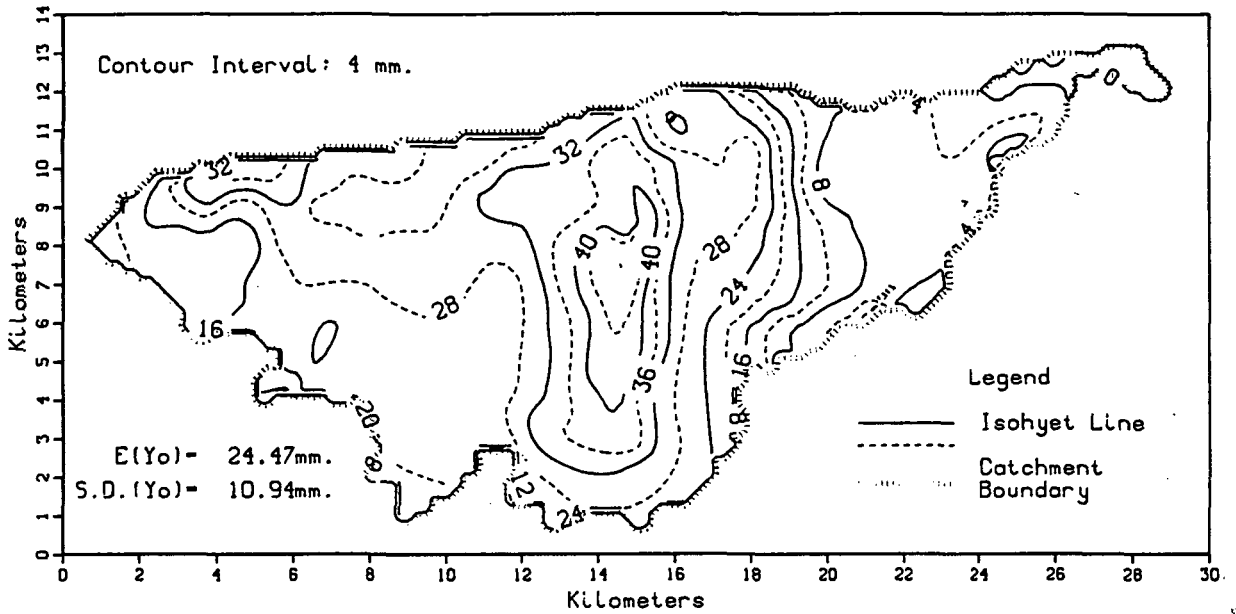
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.439$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.467$

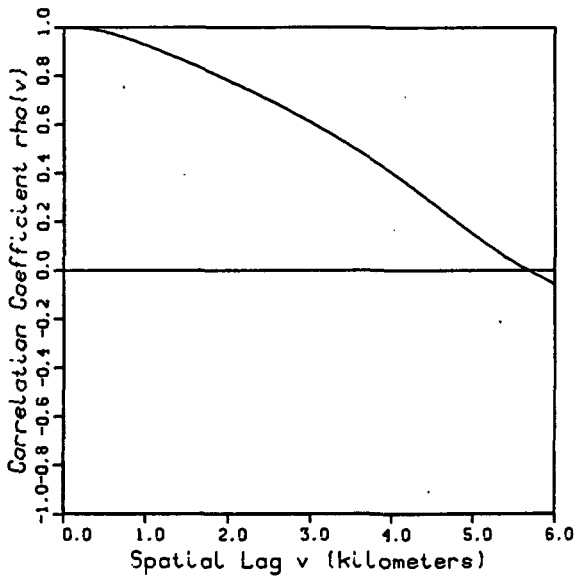
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.982	0.0	1.000	0.00	1.000
2	0.945	0.2	0.982	0.04	0.915
3	0.727	0.4	0.932	0.16	0.834
4	0.432	0.6	0.857	0.36	0.771
5	0.228	0.8	0.765	0.64	0.722
6	0.103	1.0	0.665	1.00	0.681
7	0.045	1.2	0.567	1.44	0.644
8	0.013	1.4	0.477	1.96	0.613
9	0.001	1.6	0.398	2.56	0.583
10	0.000	1.8	0.329	3.24	0.552
		2.0	0.268	4.00	0.520
		2.2	0.208	4.84	0.489
		2.4	0.153	5.76	0.458
		2.6	0.100	6.76	0.426
		2.8	0.054	7.84	0.396
		3.0	0.011	9.00	0.368
		3.2	-0.028	10.24	0.342
		3.4	-0.063	11.56	0.319
		3.6	-0.096	12.96	0.298
		3.8	-0.127	14.44	0.279
		4.0	-0.156	16.00	0.262
		4.2	-0.186	17.64	0.247
		4.4	-0.213	19.36	0.233
		4.6	-0.235	21.16	0.218
		4.8	-0.252	23.04	0.202
		5.0	-0.264	25.00	0.184
		5.2	-0.275	27.04	0.161
		5.4	-0.283	29.16	0.134
		5.6	-0.290	31.36	0.104
		5.8	-0.296	33.64	0.068
		6.0	-0.301	36.00	0.044

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

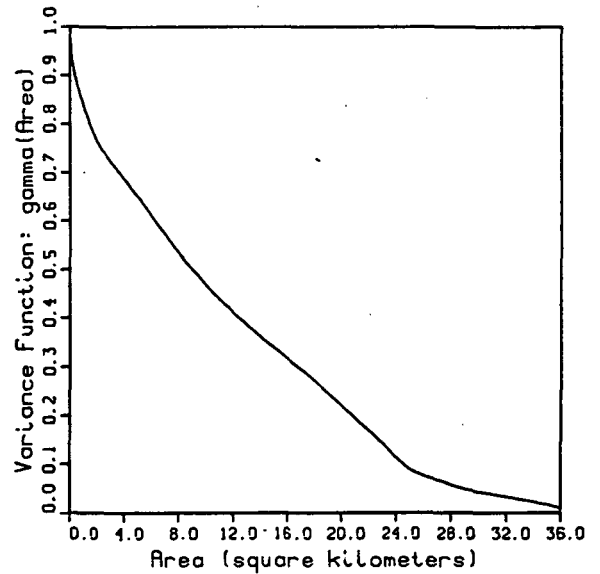
Storm Day  
 June 6, 1972



Spatial Correlation



Variance Function



Storm Day June 6 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.012$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.988$

Expected Value of Point Depth (mm.):  $E(Y) = 24.434$

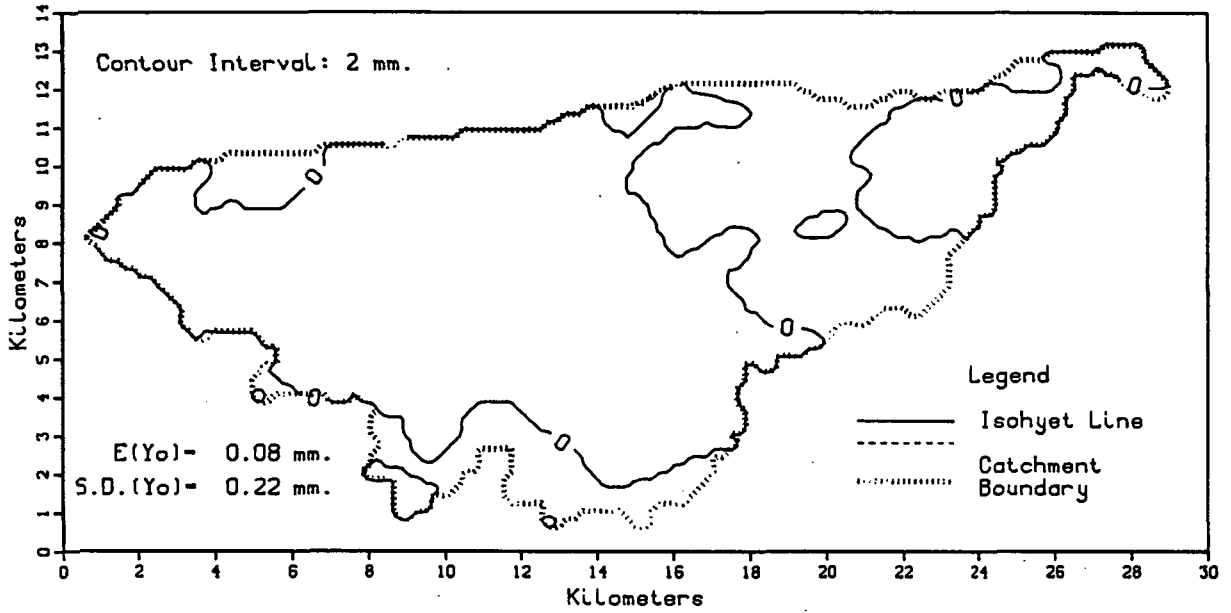
Variance of Point Depth (mm. sq.):  $Var(Y) = 113.449$

Coef. of Skewness of Point Depth:  $S.C.(Y) = -0.661$

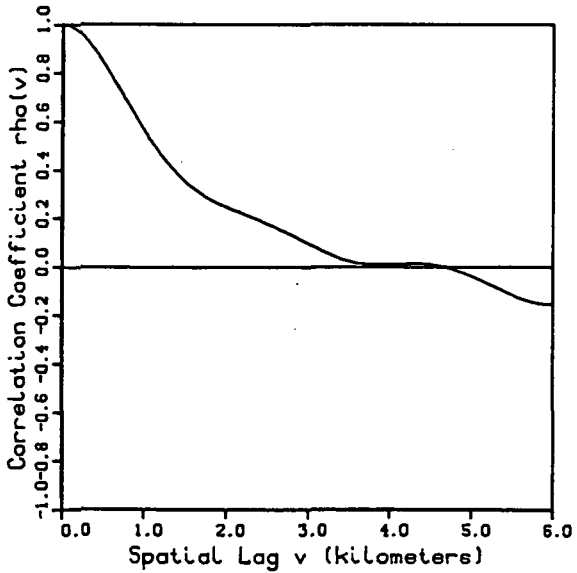
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.982	0.0	1.000	0.00	1.000
3	0.972	0.2	0.996	0.04	0.968
5	0.933	0.4	0.986	0.16	0.931
7	0.872	0.6	0.970	0.36	0.898
9	0.846	0.8	0.949	0.64	0.868
11	0.830	1.0	0.924	1.00	0.835
13	0.816	1.2	0.897	1.44	0.798
15	0.804	1.4	0.869	1.96	0.764
17	0.794	1.6	0.840	2.56	0.737
19	0.781	1.8	0.810	3.24	0.711
21	0.761	2.0	0.778	4.00	0.683
23	0.719	2.2	0.747	4.84	0.651
25	0.628	2.4	0.714	5.76	0.616
27	0.482	2.6	0.680	6.76	0.577
29	0.347	2.8	0.644	7.84	0.537
31	0.230	3.0	0.607	9.00	0.498
33	0.179	3.2	0.568	10.24	0.459
35	0.130	3.4	0.528	11.56	0.421
37	0.090	3.6	0.486	12.96	0.385
39	0.058	3.8	0.443	14.44	0.350
41	0.036	4.0	0.398	16.00	0.315
43	0.021	4.2	0.350	17.64	0.277
45	0.011	4.4	0.299	19.36	0.236
47	0.004	4.6	0.248	21.16	0.189
		4.8	0.197	23.04	0.141
		5.0	0.147	25.00	0.089
		5.2	0.098	27.04	0.067
		5.4	0.052	29.16	0.047
		5.6	0.014	31.36	0.036
		5.8	-0.023	33.64	0.024
		6.0	-0.060	36.00	0.010

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

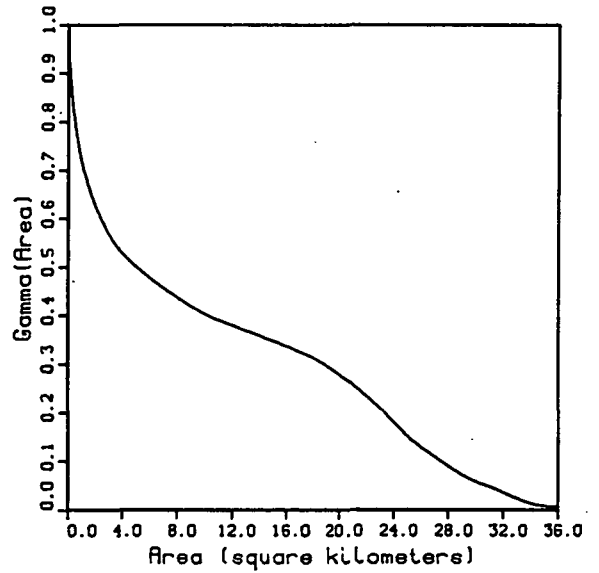
Storm Day  
 June 7, 1972



Spatial Correlation



Variance Function



Storm Day June 7 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c) = 0.688$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c) = 0.312$

Expected Value of Point Depth (mm.):  $E(Y) = 0.080$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.035$

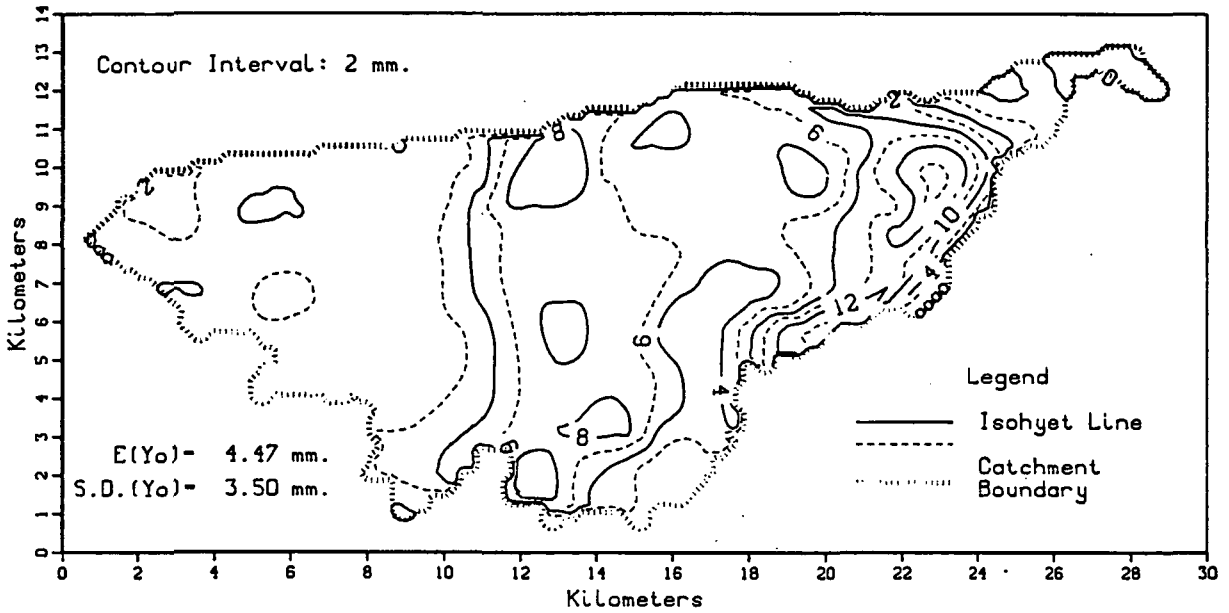
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.831$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.001	0.0	1.000	0.00	1.000
2	0.000	0.2	0.967	0.04	0.955
		0.4	0.889	0.16	0.896
		0.6	0.787	0.36	0.831
		0.8	0.673	0.64	0.772
		1.0	0.562	1.00	0.718
		1.2	0.463	1.44	0.670
		1.4	0.383	1.96	0.627
		1.6	0.321	2.56	0.588
		1.8	0.276	3.24	0.554
		2.0	0.244	4.00	0.526
		2.2	0.216	4.84	0.502
		2.4	0.189	5.76	0.480
		2.6	0.159	6.76	0.458
		2.8	0.126	7.84	0.437
		3.0	0.092	9.00	0.417
		3.2	0.058	10.24	0.398
		3.4	0.029	11.56	0.382
		3.6	0.012	12.96	0.368
		3.8	0.007	14.44	0.352
		4.0	0.008	16.00	0.335
		4.2	0.010	17.64	0.315
		4.4	0.009	19.36	0.289
		4.6	0.000	21.16	0.252
		4.8	-.018	23.04	0.206
		5.0	-.044	25.00	0.149
		5.2	-.074	27.04	0.107
		5.4	-.106	29.16	0.068
		5.6	-.135	31.36	0.043
		5.8	-.152	33.64	0.016
		6.0	-.157	36.00	0.005

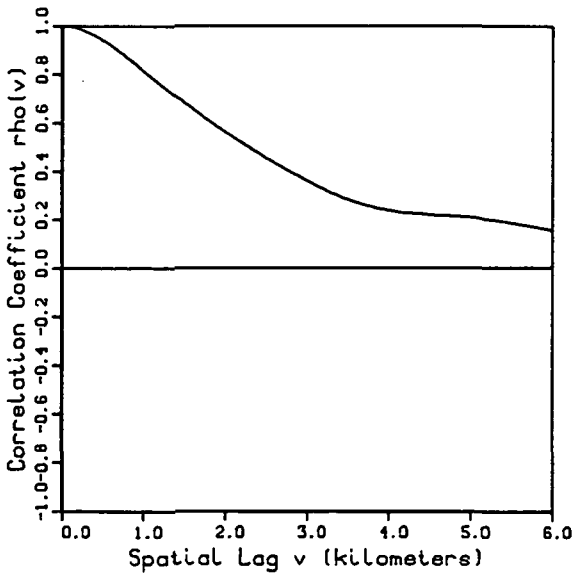


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

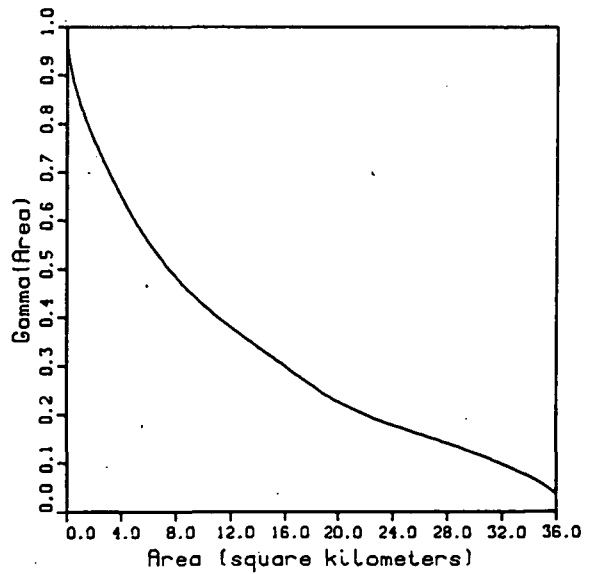
Storm Day  
 June 8, 1972



Spatial Correlation



Variance Function



Storm Day June 8 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.016$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.984$

Expected Value of Point Depth (mm.):  $E(Y) = 4.511$

Variance of Point Depth (mm. sq.):  $Var(Y) = 10.935$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.537$

Spatial Distribution  
of Total Storm Depth  
 $y$  (mm.)       $A_{cw}/A_c (Y \geq y)$

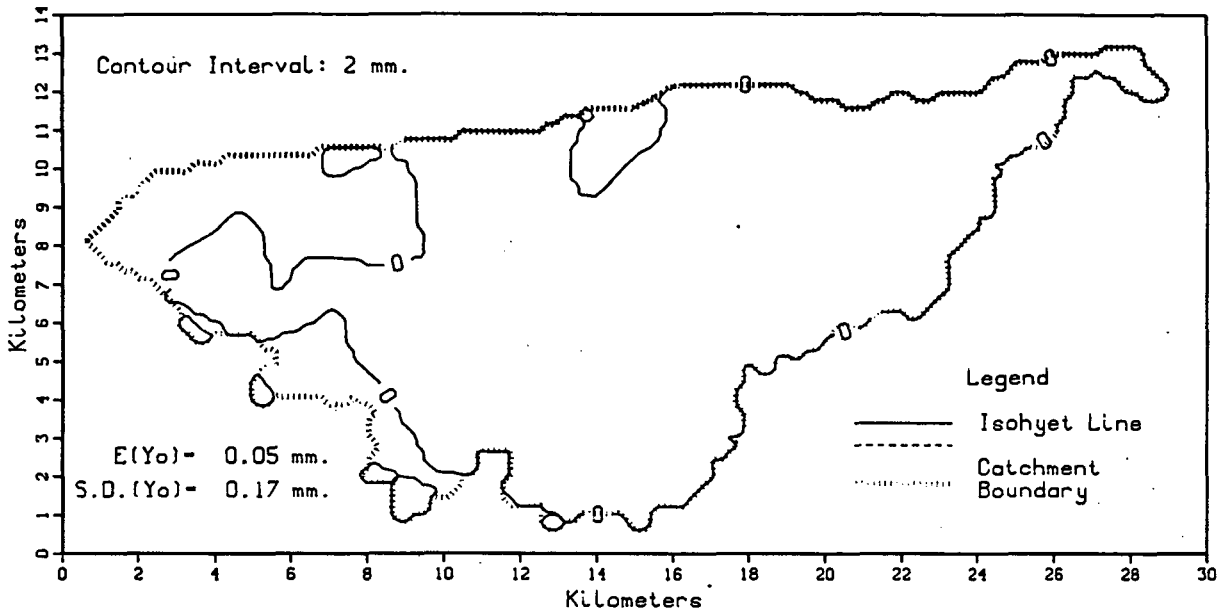
Spatial Correlation  
 $v$  (km.)       $\rho(v)$

Variance Function  
 $A$  (km. sq.)      Gamma ( $A$ )

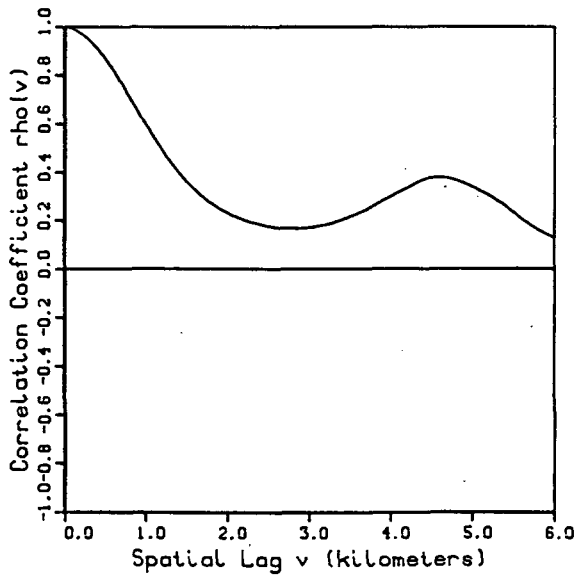
	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	Gamma ( $A$ )
1	0.818	0.0	1.000	0.00	1.000
2	0.699	0.2	0.989	0.04	0.973
3	0.613	0.4	0.961	0.16	0.940
4	0.542	0.6	0.920	0.36	0.908
5	0.442	0.8	0.870	0.64	0.875
6	0.340	1.0	0.815	1.00	0.842
7	0.243	1.2	0.759	1.44	0.807
8	0.144	1.4	0.706	1.96	0.771
9	0.086	1.6	0.655	2.56	0.732
10	0.058	1.8	0.607	3.24	0.691
11	0.040	2.0	0.561	4.00	0.650
12	0.026	2.2	0.517	4.84	0.608
13	0.014	2.4	0.475	5.76	0.566
14	0.005	2.6	0.435	6.76	0.525
15	0.000	2.8	0.396	7.84	0.487
		3.0	0.360	9.00	0.452
		3.2	0.325	10.24	0.420
		3.4	0.295	11.56	0.389
		3.6	0.270	12.96	0.359
		3.8	0.251	14.44	0.330
		4.0	0.237	16.00	0.299
		4.2	0.227	17.64	0.265
		4.4	0.221	19.36	0.235
		4.6	0.217	21.16	0.210
		4.8	0.214	23.04	0.186
		5.0	0.208	25.00	0.168
		5.2	0.200	27.04	0.149
		5.4	0.190	29.16	0.128
		5.6	0.180	31.36	0.104
		5.8	0.168	33.64	0.076
		6.0	0.154	36.00	0.036

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

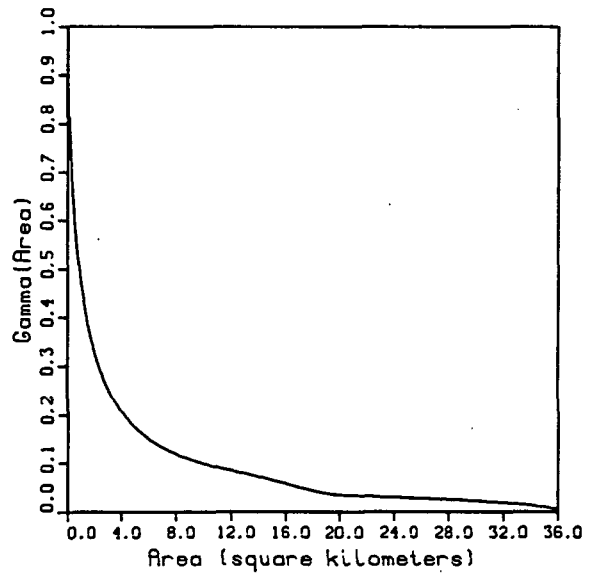
Storm Day  
 June 9, 1972



Spatial Correlation



Variance Function



Storm Day June 9 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.800$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.200$

Expected Value of Point Depth (mm.):  $E(Y) = 0.047$

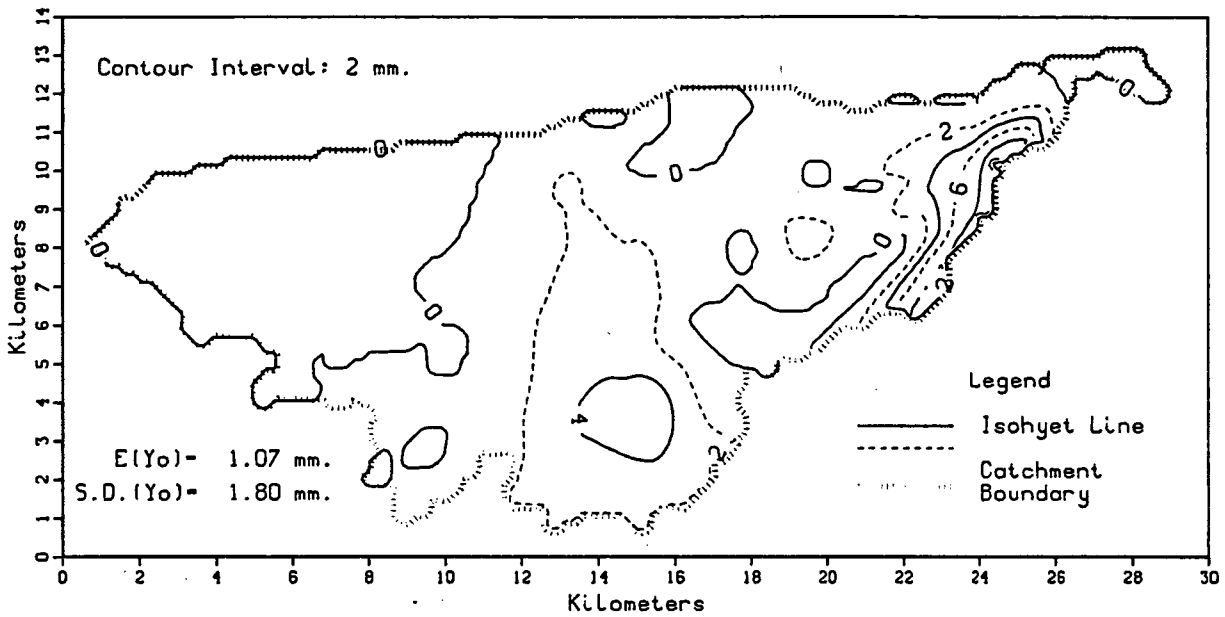
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.018$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.481$

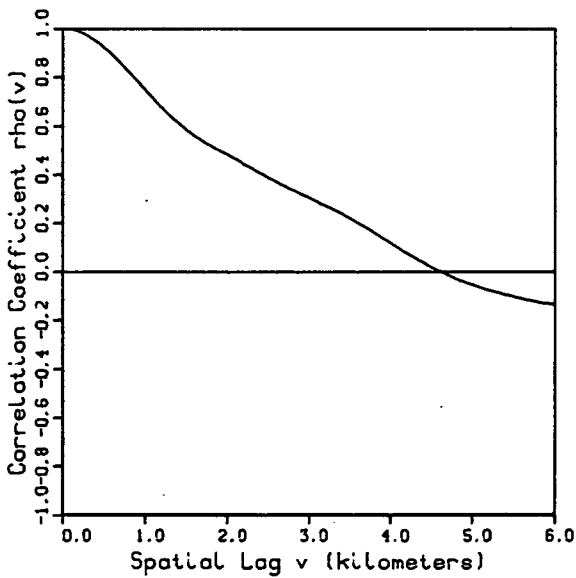
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.973	0.04	0.906
		0.4	0.910	0.16	0.794
		0.6	0.819	0.36	0.674
		0.8	0.708	0.64	0.568
		1.0	0.592	1.00	0.475
		1.2	0.486	1.44	0.397
		1.4	0.396	1.96	0.334
		1.6	0.325	2.56	0.282
		1.8	0.271	3.24	0.239
		2.0	0.231	4.00	0.205
		2.2	0.202	4.84	0.176
		2.4	0.183	5.76	0.154
		2.6	0.171	6.76	0.135
		2.8	0.168	7.84	0.120
		3.0	0.173	9.00	0.107
		3.2	0.186	10.24	0.096
		3.4	0.206	11.56	0.087
		3.6	0.233	12.96	0.078
		3.8	0.267	14.44	0.068
		4.0	0.304	16.00	0.057
		4.2	0.339	17.64	0.044
		4.4	0.372	19.36	0.036
		4.6	0.379	21.16	0.032
		4.8	0.366	23.04	0.029
		5.0	0.337	25.00	0.028
		5.2	0.300	27.04	0.025
		5.4	0.259	29.16	0.023
		5.6	0.204	31.36	0.019
		5.8	0.161	33.64	0.013
		6.0	0.126	36.00	0.004

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

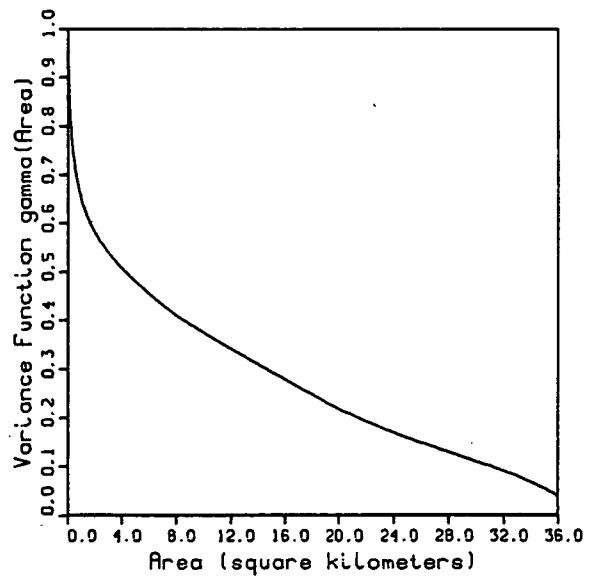
Storm Day  
 June 11, 1972



Spatial Correlation



Variance Function



Storm Day June 11 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.323$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.677$

Expected Value of Point Depth (mm.):  $E(Y) = 1.166$

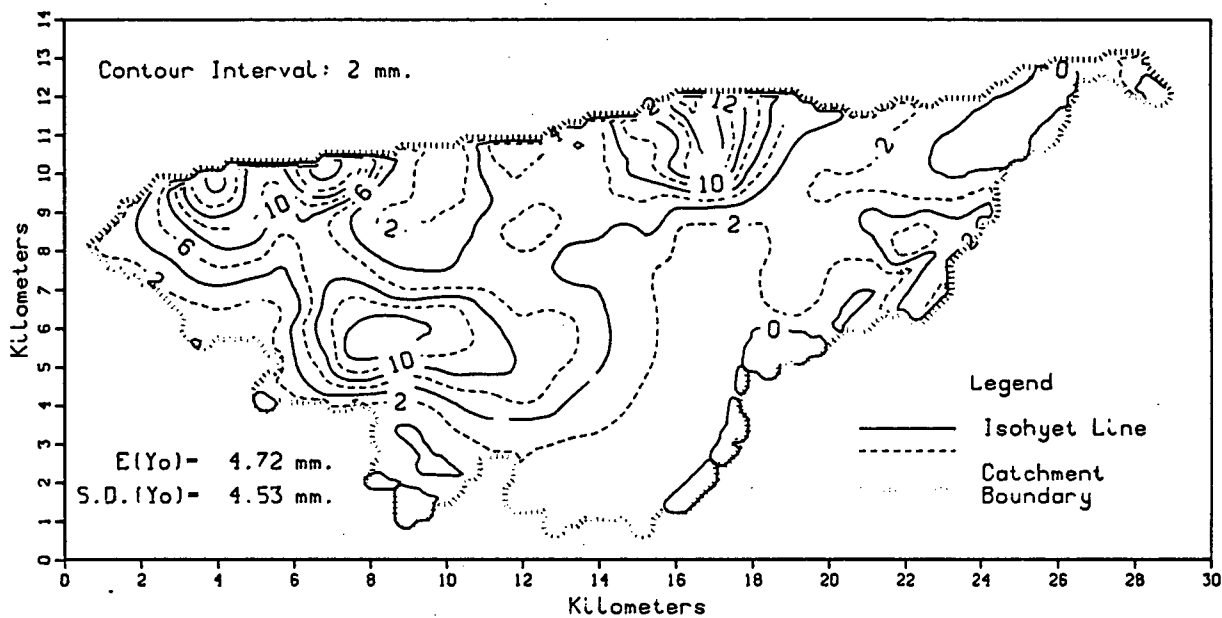
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.862$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.014$

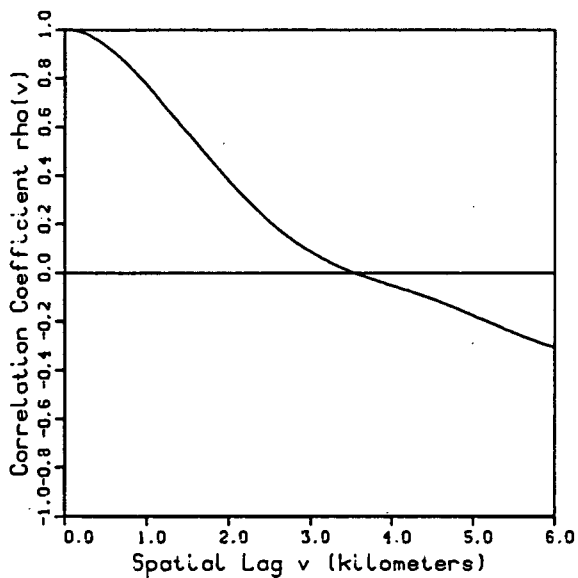
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.361	0.0	1.000	0.00	1.000
2	0.245	0.2	0.986	0.04	0.905
3	0.131	0.4	0.948	0.16	0.821
4	0.063	0.6	0.890	0.36	0.751
5	0.033	0.8	0.820	0.64	0.692
6	0.022	1.0	0.744	1.00	0.647
7	0.015	1.2	0.672	1.44	0.611
8	0.008	1.4	0.608	1.96	0.580
9	0.001	1.6	0.555	2.56	0.554
10	0.000	1.8	0.514	3.24	0.530
11	0.000	2.0	0.479	4.00	0.506
		2.2	0.440	4.84	0.482
		2.4	0.403	5.76	0.458
		2.6	0.366	6.76	0.435
		2.8	0.332	7.84	0.412
		3.0	0.301	9.00	0.391
		3.2	0.269	10.24	0.370
		3.4	0.235	11.56	0.348
		3.6	0.198	12.96	0.325
		3.8	0.157	14.44	0.302
		4.0	0.115	16.00	0.277
		4.2	0.073	17.64	0.251
		4.4	0.034	19.36	0.225
		4.6	-.001	21.16	0.202
		4.8	-.032	23.04	0.179
		5.0	-.057	25.00	0.158
		5.2	-.080	27.04	0.138
		5.4	-.098	29.16	0.117
		5.6	-.115	31.36	0.096
		5.8	-.129	33.64	0.072
		6.0	-.139	36.00	0.039

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

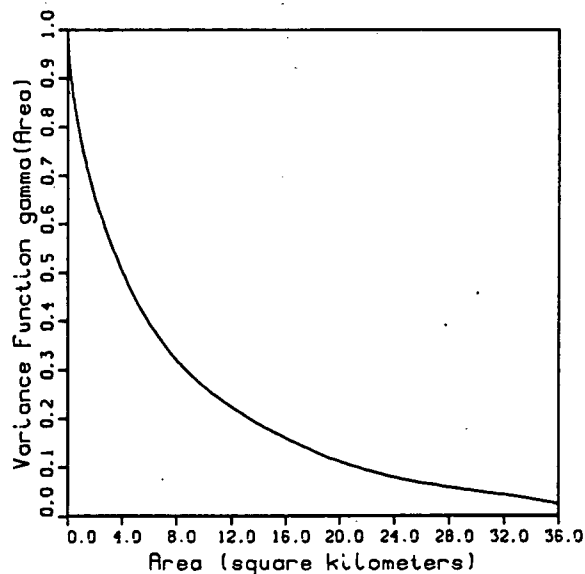
Storm Day  
 June 12, 1972



Spatial Correlation



Variance Function



Storm Day June 12 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.050$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.950$

Expected Value of Point Depth (mm.):  $E(Y) = 4.307$

Variance of Point Depth (mm. sq.):  $Var(Y) = 14.687$

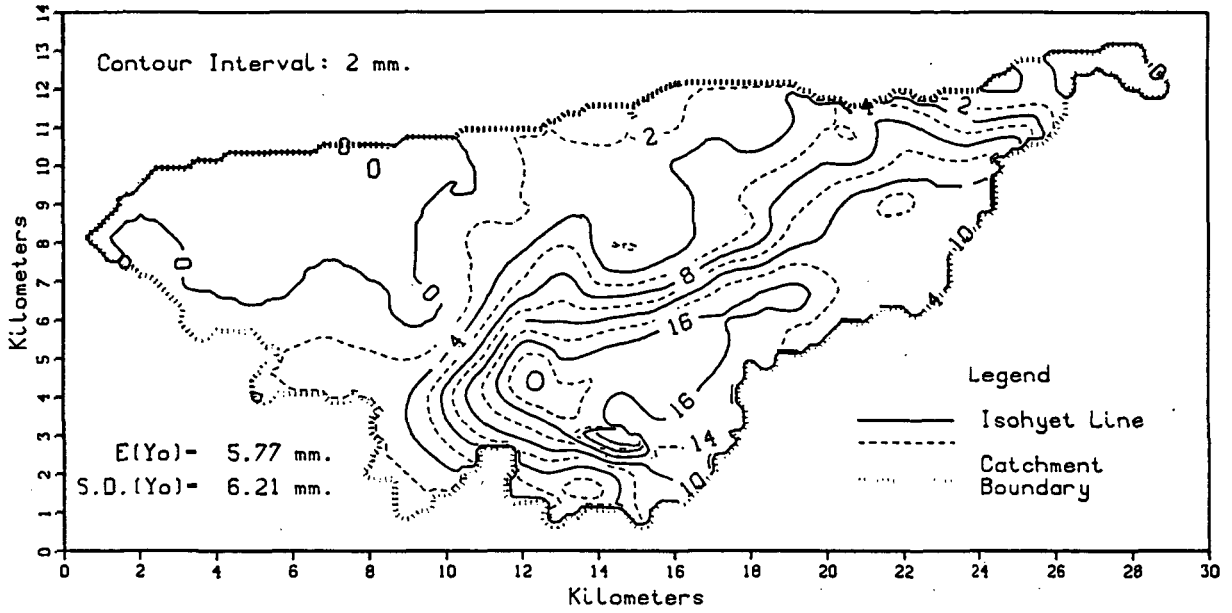
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.172$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.799	0.0	1.000	0.00	1.000
2	0.679	0.2	0.988	0.04	0.967
3	0.551	0.4	0.955	0.16	0.925
4	0.448	0.6	0.905	0.36	0.877
5	0.348	0.8	0.841	0.64	0.824
6	0.266	1.0	0.769	1.00	0.770
7	0.199	1.2	0.691	1.44	0.715
8	0.157	1.4	0.612	1.96	0.659
9	0.128	1.6	0.532	2.56	0.605
10	0.101	1.8	0.454	3.24	0.552
11	0.075	2.0	0.377	4.00	0.500
12	0.055	2.2	0.305	4.84	0.451
13	0.037	2.4	0.238	5.76	0.405
14	0.026	2.6	0.179	6.76	0.362
15	0.019	2.8	0.128	7.84	0.323
16	0.011	3.0	0.084	9.00	0.289
17	0.005	3.2	0.047	10.24	0.259
18	0.001	3.4	0.016	11.56	0.231
19	0.000	3.6	-.011	12.96	0.205
		3.8	-.034	14.44	0.181
		4.0	-.055	16.00	0.158
		4.2	-.076	17.64	0.137
		4.4	-.099	19.36	0.117
		4.6	-.124	21.16	0.100
		4.8	-.150	23.04	0.085
		5.0	-.178	25.00	0.072
		5.2	-.207	27.04	0.062
		5.4	-.235	29.16	0.053
		5.6	-.263	31.36	0.045
		5.8	-.288	33.64	0.036
		6.0	-.310	36.00	0.023

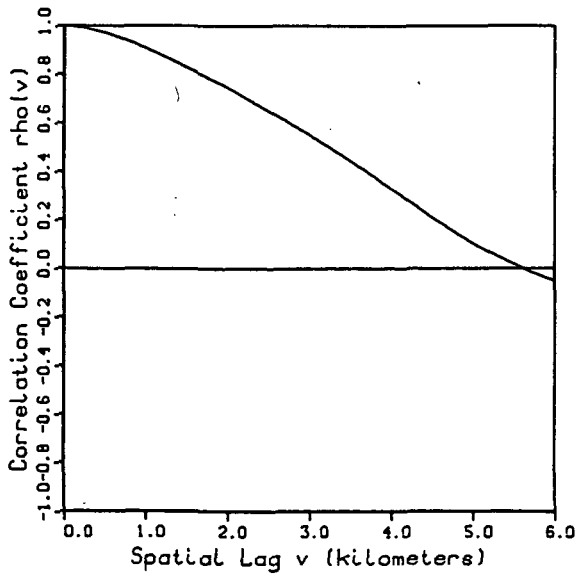


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

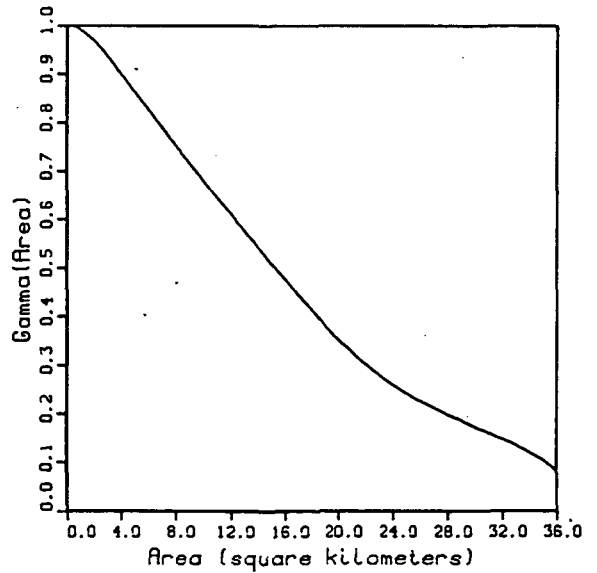
Storm Day  
 June 14, 1972



Spatial Correlation



Variance Function



Storm Day June 14 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.158$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.842$

Expected Value of Point Depth (mm.):  $E(Y)= 6.417$

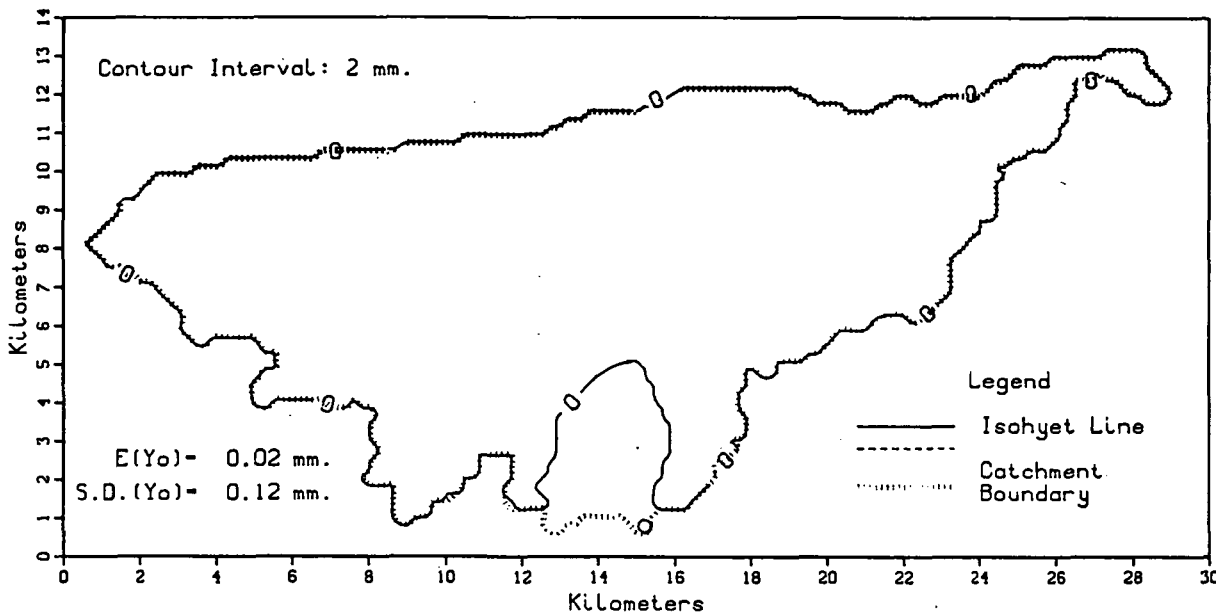
Variance of Point Depth (mm. sq.):  $Var(Y)= 35.642$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 0.589$

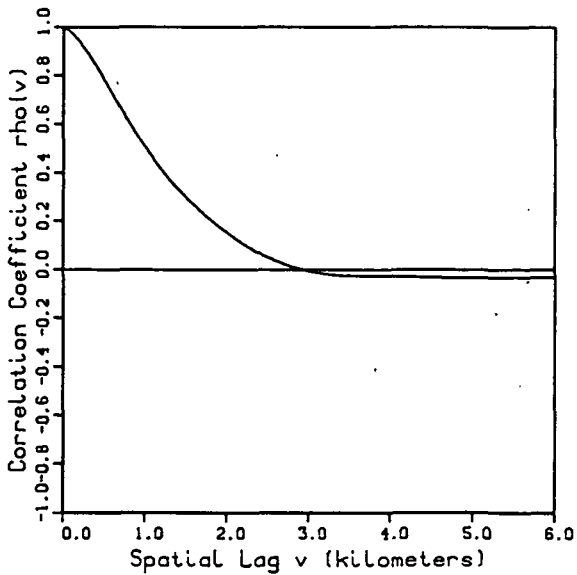
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.747	0.0	1.000	0.00	1.000
2	0.686	0.2	0.993	0.04	1.002
3	0.597	0.4	0.979	0.16	1.002
4	0.520	0.6	0.958	0.36	1.002
5	0.473	0.8	0.934	0.64	0.998
6	0.435	1.0	0.906	1.00	0.991
7	0.397	1.2	0.876	1.44	0.983
8	0.367	1.4	0.844	1.96	0.970
9	0.341	1.6	0.811	2.56	0.951
10	0.314	1.8	0.778	3.24	0.927
11	0.286	2.0	0.745	4.00	0.900
12	0.260	2.2	0.707	4.84	0.868
13	0.211	2.4	0.669	5.76	0.835
14	0.157	2.6	0.630	6.76	0.798
15	0.122	2.8	0.590	7.84	0.758
16	0.081	3.0	0.550	9.00	0.715
17	0.043	3.2	0.508	10.24	0.671
18	0.018	3.4	0.465	11.56	0.625
19	0.009	3.6	0.420	12.96	0.578
20	0.005	3.8	0.374	14.44	0.528
21	0.003	4.0	0.326	16.00	0.476
22	0.002	4.2	0.278	17.64	0.422
23	0.002	4.4	0.230	19.36	0.369
24	0.001	4.6	0.185	21.16	0.322
25	0.001	4.8	0.141	23.04	0.278
26	0.000	5.0	0.101	25.00	0.240
27	0.000	5.2	0.063	27.04	0.211
28	0.000	5.4	0.030	29.16	0.182
		5.6	0.000	31.36	0.155
		5.8	-.029	33.64	0.125
		6.0	-.056	36.00	0.082

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

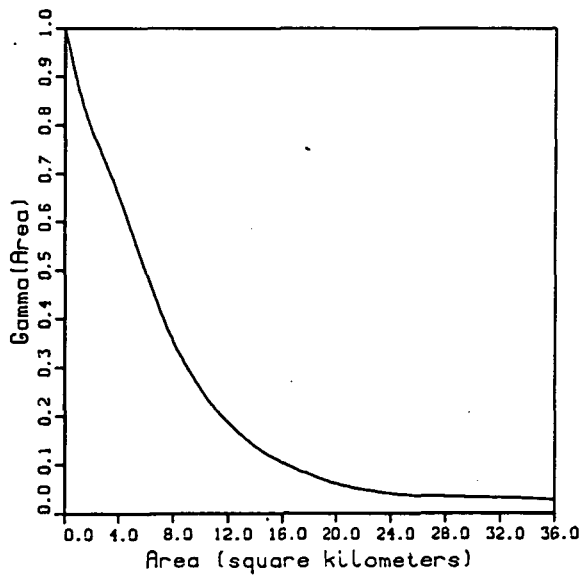
Storm Day  
 June 17, 1972



Spatial Correlation



Variance Function



Storm Day June 17 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.929$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.071$

Expected Value of Point Depth (mm.):  $E(Y) = 0.017$

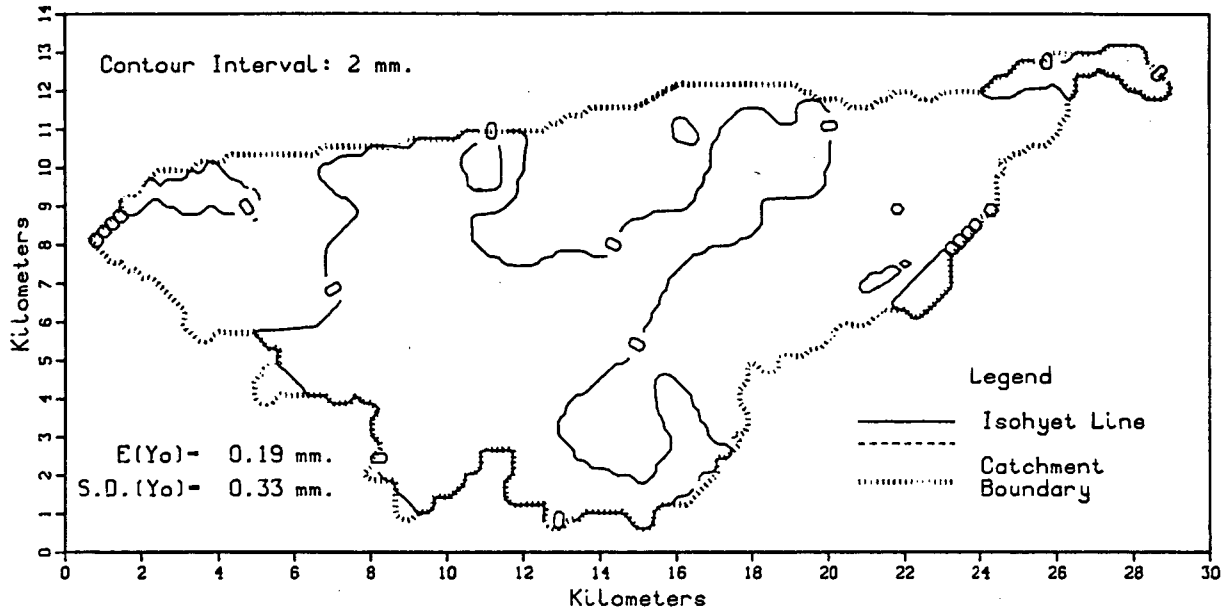
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.008$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 6.629$

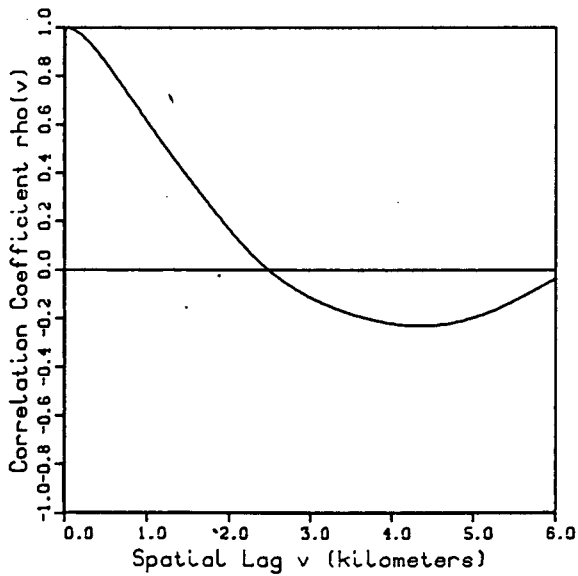
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.937	0.04	0.994
		0.4	0.839	0.16	0.983
		0.6	0.723	0.36	0.958
		0.8	0.607	0.64	0.922
		1.0	0.502	1.00	0.881
		1.2	0.409	1.44	0.837
		1.4	0.329	1.96	0.794
		1.6	0.263	2.56	0.750
		1.8	0.205	3.24	0.705
		2.0	0.152	4.00	0.652
		2.2	0.106	4.84	0.586
		2.4	0.067	5.76	0.512
		2.6	0.034	6.76	0.435
		2.8	0.009	7.84	0.362
		3.0	-.008	9.00	0.300
		3.2	-.019	10.24	0.245
		3.4	-.025	11.56	0.199
		3.6	-.027	12.96	0.160
		3.8	-.029	14.44	0.129
		4.0	-.030	16.00	0.103
		4.2	-.032	17.64	0.083
		4.4	-.033	19.36	0.065
		4.6	-.035	21.16	0.052
		4.8	-.036	23.04	0.043
		5.0	-.036	25.00	0.037
		5.2	-.036	27.04	0.035
		5.4	-.035	29.16	0.033
		5.6	-.035	31.36	0.032
		5.8	-.035	33.64	0.030
		6.0	-.035	36.00	0.026

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

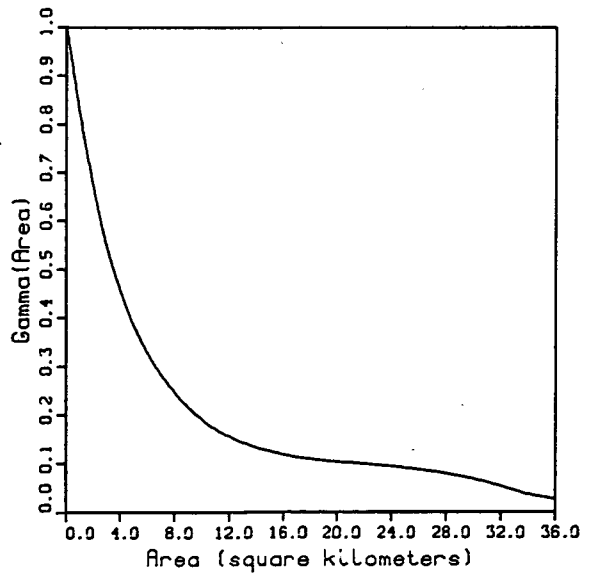
Storm Day  
 June 20, 1972



Spatial Correlation



Variance Function



Storm Day June 20 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.429$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.571$

Expected Value of Point Depth (mm.):  $E(Y) = 0.166$

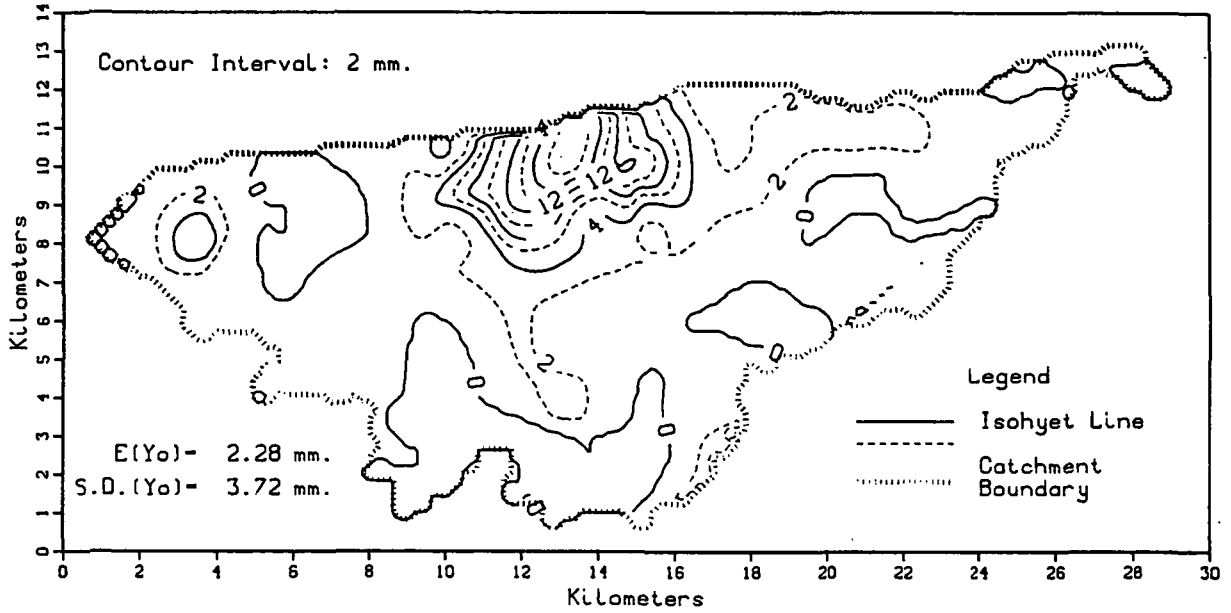
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.071$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.557$

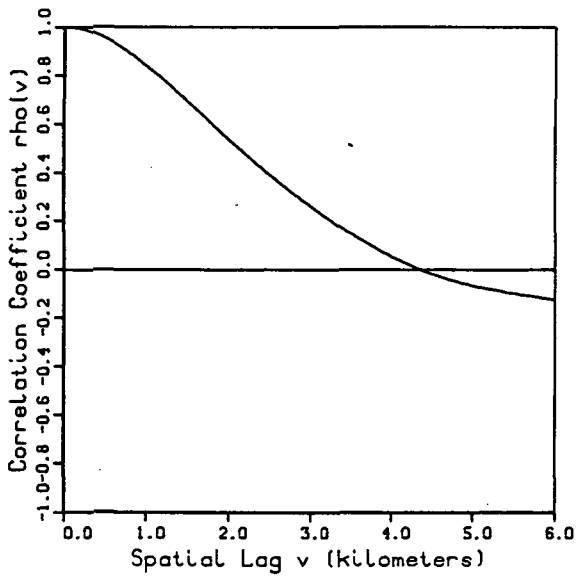
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.025	0.0	1.000	0.00	1.000
2	0.000	0.2	0.969	0.04	1.000
		0.4	0.897	0.16	0.984
		0.6	0.806	0.36	0.948
		0.8	0.709	0.64	0.896
		1.0	0.611	1.00	0.831
		1.2	0.516	1.44	0.758
		1.4	0.424	1.96	0.681
		1.6	0.335	2.56	0.602
		1.8	0.247	3.24	0.526
		2.0	0.164	4.00	0.457
		2.2	0.088	4.84	0.396
		2.4	0.022	5.76	0.342
		2.6	-.034	6.76	0.294
		2.8	-.080	7.84	0.252
		3.0	-.118	9.00	0.216
		3.2	-.149	10.24	0.186
		3.4	-.175	11.56	0.162
		3.6	-.196	12.96	0.143
		3.8	-.213	14.44	0.128
		4.0	-.225	16.00	0.117
		4.2	-.232	17.64	0.110
		4.4	-.233	19.36	0.105
		4.6	-.227	21.16	0.100
		4.8	-.216	23.04	0.096
		5.0	-.198	25.00	0.090
		5.2	-.173	27.04	0.082
		5.4	-.143	29.16	0.072
		5.6	-.109	31.36	0.057
		5.8	-.072	33.64	0.038
		6.0	-.035	36.00	0.026

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

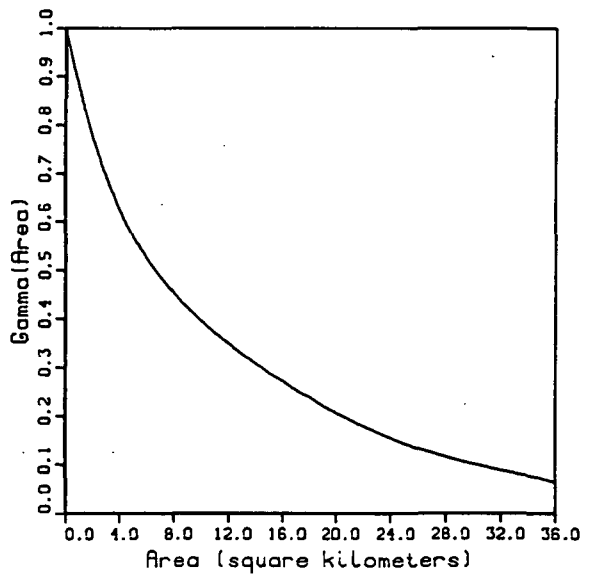
Storm Day  
 July 5, 1972



Spatial Correlation



Variance Function



Storm Day July 5 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.187$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.813$

Expected Value of Point Depth (mm.):  $E(Y) = 1.873$

Variance of Point Depth (mm. sq.):  $Var(Y) = 10.689$

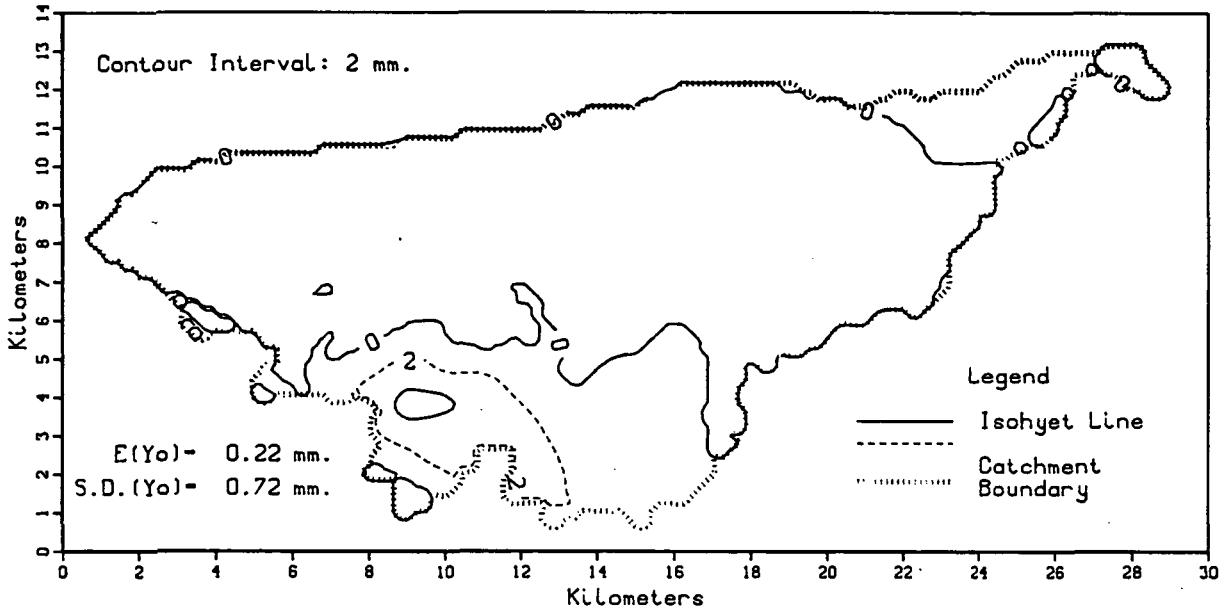
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.056$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.431	0.0	1.000	0.00	1.000
2	0.264	0.2	0.992	0.04	0.995
3	0.159	0.4	0.969	0.16	0.980
4	0.116	0.6	0.934	0.36	0.954
5	0.094	0.8	0.889	0.64	0.919
6	0.082	1.0	0.838	1.00	0.878
7	0.072	1.2	0.781	1.44	0.832
8	0.063	1.4	0.722	1.96	0.782
9	0.055	1.6	0.660	2.56	0.729
10	0.047	1.8	0.598	3.24	0.677
11	0.039	2.0	0.536	4.00	0.626
12	0.032	2.2	0.476	4.84	0.579
13	0.026	2.4	0.418	5.76	0.535
14	0.022	2.6	0.362	6.76	0.495
15	0.018	2.8	0.309	7.84	0.458
16	0.015	3.0	0.259	9.00	0.423
17	0.011	3.2	0.212	10.24	0.390
18	0.007	3.4	0.167	11.56	0.359
19	0.001	3.6	0.125	12.96	0.329
20	0.000	3.8	0.086	14.44	0.300
		4.0	0.051	16.00	0.271
		4.2	0.019	17.64	0.243
		4.4	-0.010	19.36	0.216
		4.6	-0.034	21.16	0.190
		4.8	-0.054	23.04	0.165
		5.0	-0.070	25.00	0.142
		5.2	-0.084	27.04	0.123
		5.4	-0.096	29.16	0.107
		5.6	-0.108	31.36	0.092
		5.8	-0.119	33.64	0.078
		6.0	-0.130	36.00	0.063

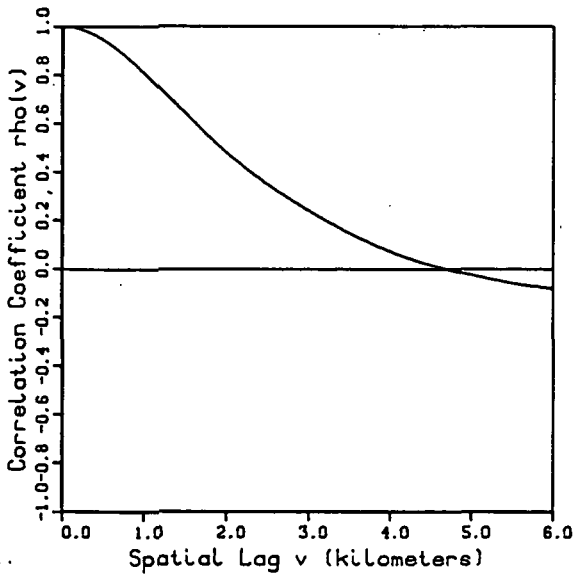


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

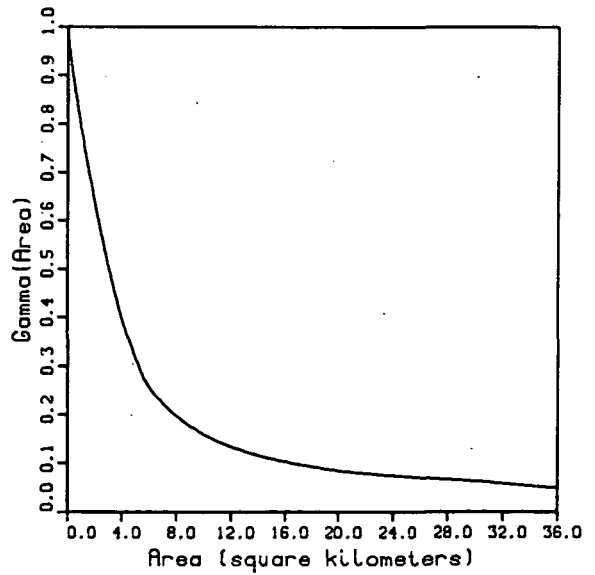
Storm Day  
 July 6, 1972



Spatial Correlation



Variance Function



Storm Day July 6 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.711$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.289$

Expected Value of Point Depth (mm.):  $E(Y) = 0.309$

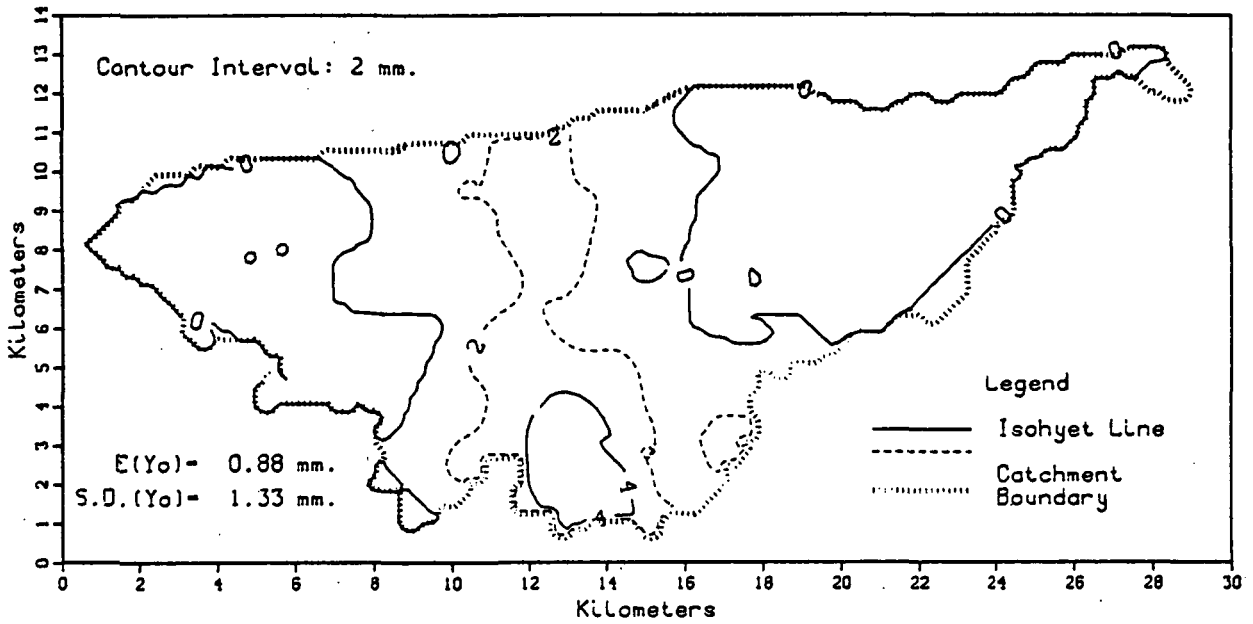
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.676$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.145$

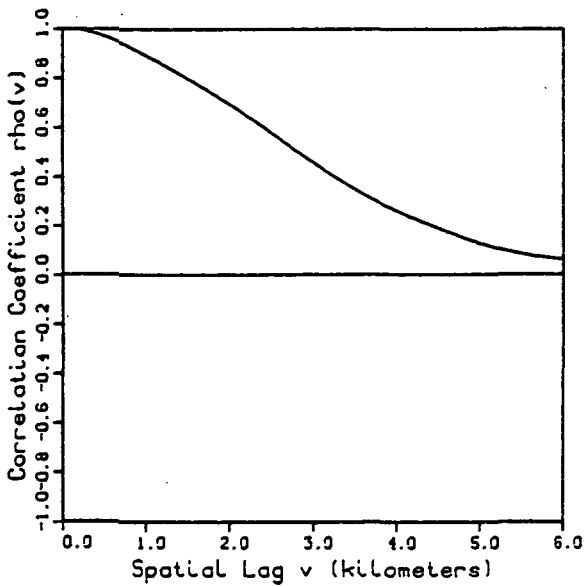
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.091	0.0	1.000	0.00	1.000
2	0.063	0.2	0.990	0.04	0.986
3	0.036	0.4	0.963	0.16	0.956
4	0.006	0.6	0.921	0.36	0.910
5	0.000	0.8	0.867	0.64	0.856
		1.0	0.804	1.00	0.794
		1.2	0.739	1.44	0.723
		1.4	0.672	1.96	0.644
		1.6	0.604	2.56	0.560
		1.8	0.538	3.24	0.478
		2.0	0.477	4.00	0.397
		2.2	0.421	4.84	0.327
		2.4	0.370	5.76	0.264
		2.6	0.323	6.76	0.229
		2.8	0.279	7.84	0.199
		3.0	0.238	9.00	0.175
		3.2	0.199	10.24	0.155
		3.4	0.162	11.56	0.138
		3.6	0.127	12.96	0.124
		3.8	0.096	14.44	0.112
		4.0	0.069	16.00	0.102
		4.2	0.043	17.64	0.093
		4.4	0.021	19.36	0.086
		4.6	0.003	21.16	0.080
		4.8	-.014	23.04	0.075
		5.0	-.028	25.00	0.071
		5.2	-.043	27.04	0.067
		5.4	-.056	29.16	0.063
		5.6	-.067	31.36	0.059
		5.8	-.077	33.64	0.053
		6.0	-.083	36.00	0.048

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

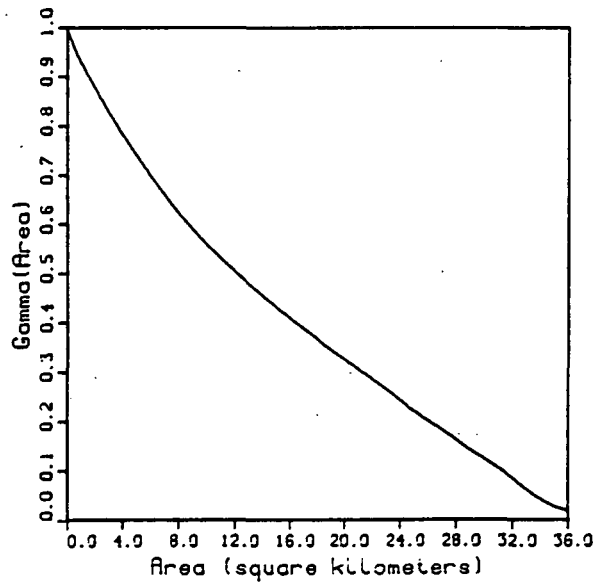
Storm Day  
 July 7, 1972



Spatial Correlation



Variance Function



Storm Day July 7 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.458$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.542$

Expected Value of Point Depth (mm.):  $E(Y) = 0.868$

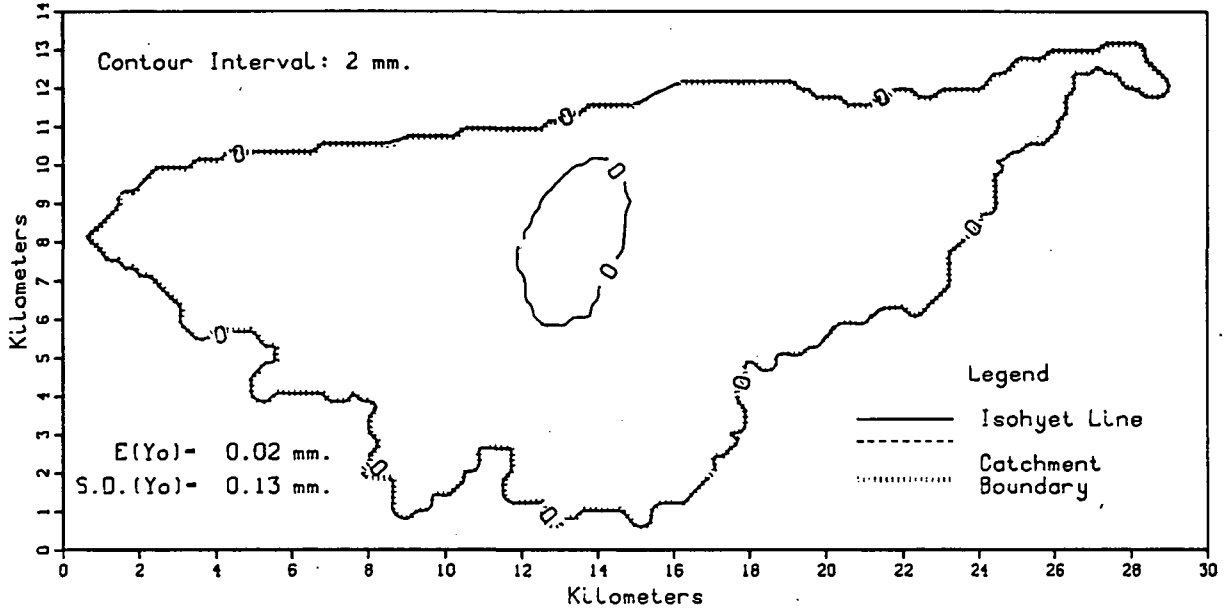
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.606$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.554$

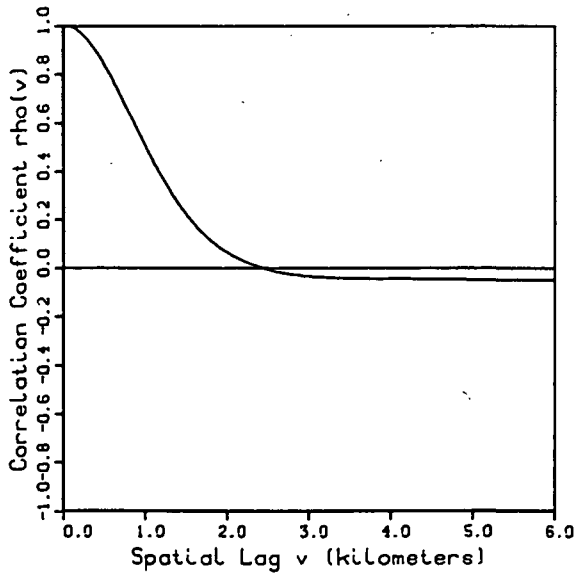
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.332	0.0	1.000	0.00	1.000
2	0.186	0.2	0.994	0.04	0.995
3	0.072	0.4	0.978	0.16	0.985
4	0.041	0.6	0.953	0.36	0.969
5	0.012	0.8	0.923	0.64	0.950
6	0.000	1.0	0.889	1.00	0.929
		1.2	0.852	1.44	0.904
		1.4	0.814	1.96	0.877
		1.6	0.774	2.56	0.846
		1.8	0.733	3.24	0.814
		2.0	0.691	4.00	0.779
		2.2	0.646	4.84	0.743
		2.4	0.599	5.76	0.705
		2.6	0.550	6.76	0.665
		2.8	0.500	7.84	0.625
		3.0	0.453	9.00	0.587
		3.2	0.408	10.24	0.549
		3.4	0.365	11.56	0.513
		3.6	0.325	12.96	0.477
		3.8	0.288	14.44	0.442
		4.0	0.256	16.00	0.407
		4.2	0.227	17.64	0.371
		4.4	0.199	19.36	0.335
		4.6	0.174	21.16	0.300
		4.8	0.149	23.04	0.262
		5.0	0.126	25.00	0.218
		5.2	0.106	27.04	0.180
		5.4	0.090	29.16	0.137
		5.6	0.077	31.36	0.097
		5.8	0.068	33.64	0.048
		6.0	0.062	36.00	0.018

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

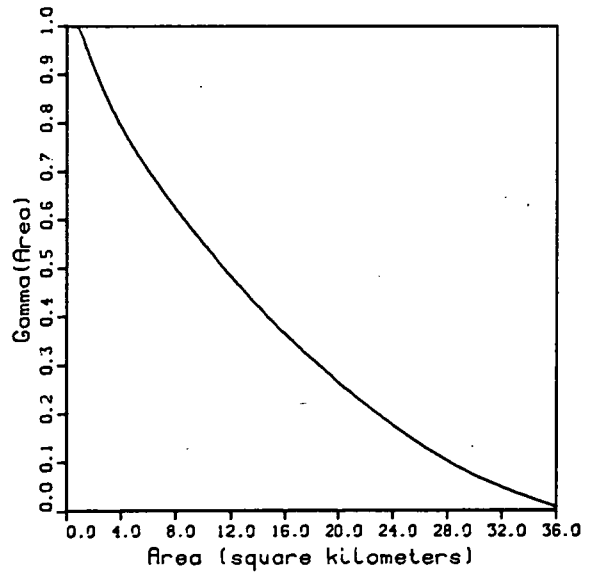
Storm Day  
July 8, 1972



Spatial Correlation



Variance Function



Storm Day July 8 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.936$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.064$

Expected Value of Point Depth (mm.):  $E(Y)=0.022$

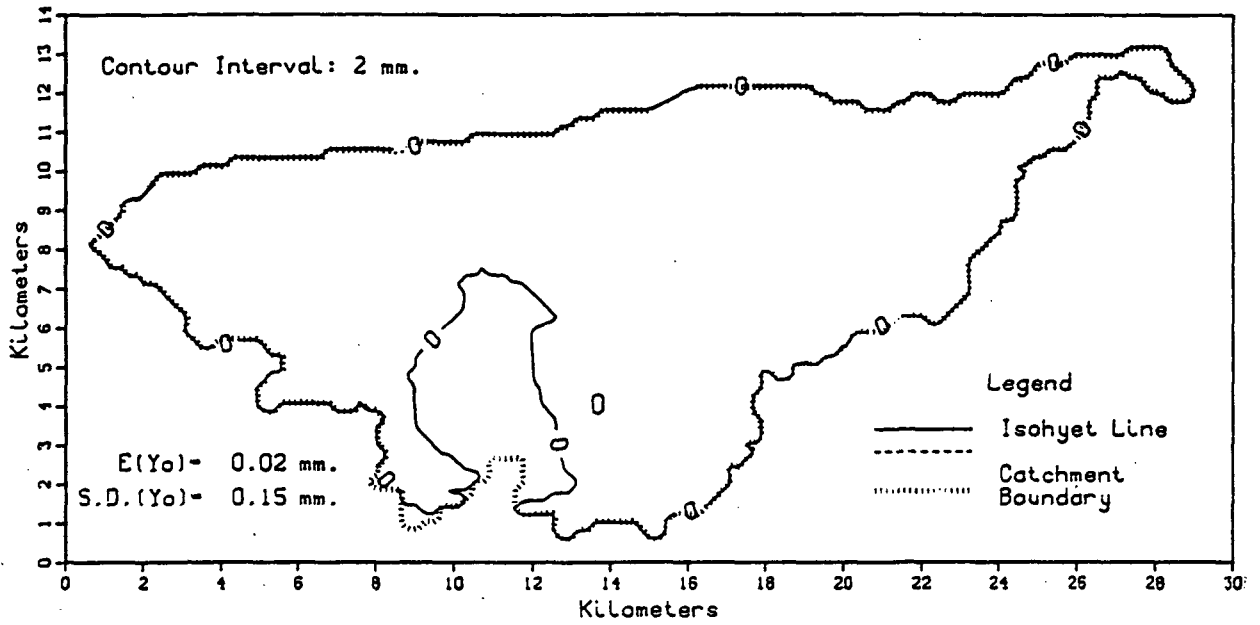
Variance of Point Depth (mm. sq.):  $Var(Y)=0.014$

Coef. of Skewness of Point Depth:  $S.C.(Y)=6.192$

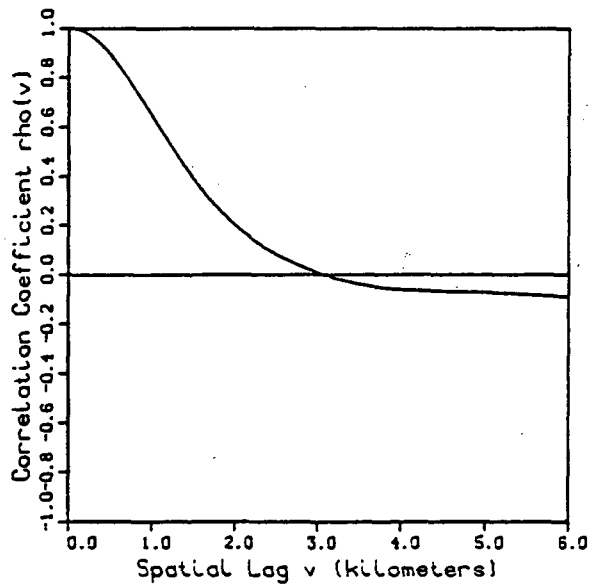
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.001	0.0	1.000	0.00	1.000
2	0.000	0.2	0.971	0.04	1.029
		0.4	0.891	0.16	1.041
		0.6	0.775	0.36	1.036
		0.8	0.640	0.64	1.016
		1.0	0.502	1.00	0.987
		1.2	0.374	1.44	0.954
		1.4	0.265	1.96	0.915
		1.6	0.177	2.56	0.874
		1.8	0.110	3.24	0.832
		2.0	0.061	4.00	0.791
		2.2	0.026	4.84	0.750
		2.4	0.001	5.76	0.709
		2.6	-0.017	6.76	0.668
		2.8	-0.029	7.84	0.627
		3.0	-0.037	9.00	0.584
		3.2	-0.041	10.24	0.541
		3.4	-0.044	11.56	0.496
		3.6	-0.045	12.96	0.450
		3.8	-0.046	14.44	0.405
		4.0	-0.047	16.00	0.361
		4.2	-0.048	17.64	0.318
		4.4	-0.048	19.36	0.276
		4.6	-0.049	21.16	0.235
		4.8	-0.050	23.04	0.194
		5.0	-0.050	25.00	0.153
		5.2	-0.051	27.04	0.117
		5.4	-0.051	29.16	0.083
		5.6	-0.052	31.36	0.054
		5.8	-0.052	33.64	0.029
		6.0	-0.052	36.00	0.005

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

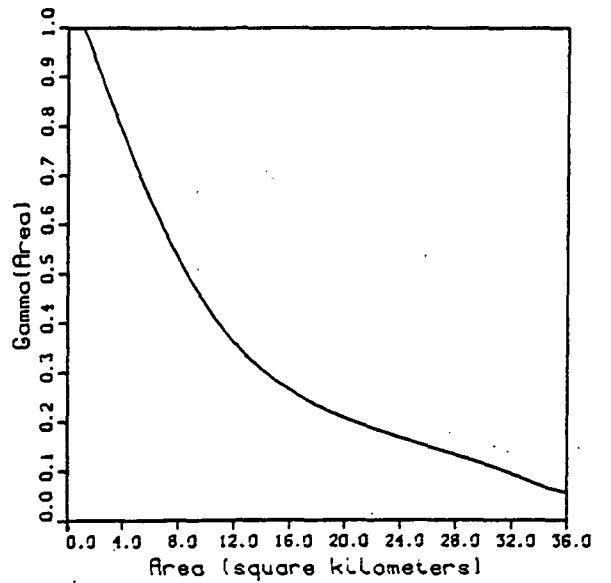
Storm Day  
 July 9, 1972



Spatial Correlation



Variance Function



Storm Day July 9 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.896$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.104$

Expected Value of Point Depth (mm.):  $E(Y)=0.035$

Variance of Point Depth (mm. sq.):  $Var(Y)=0.023$

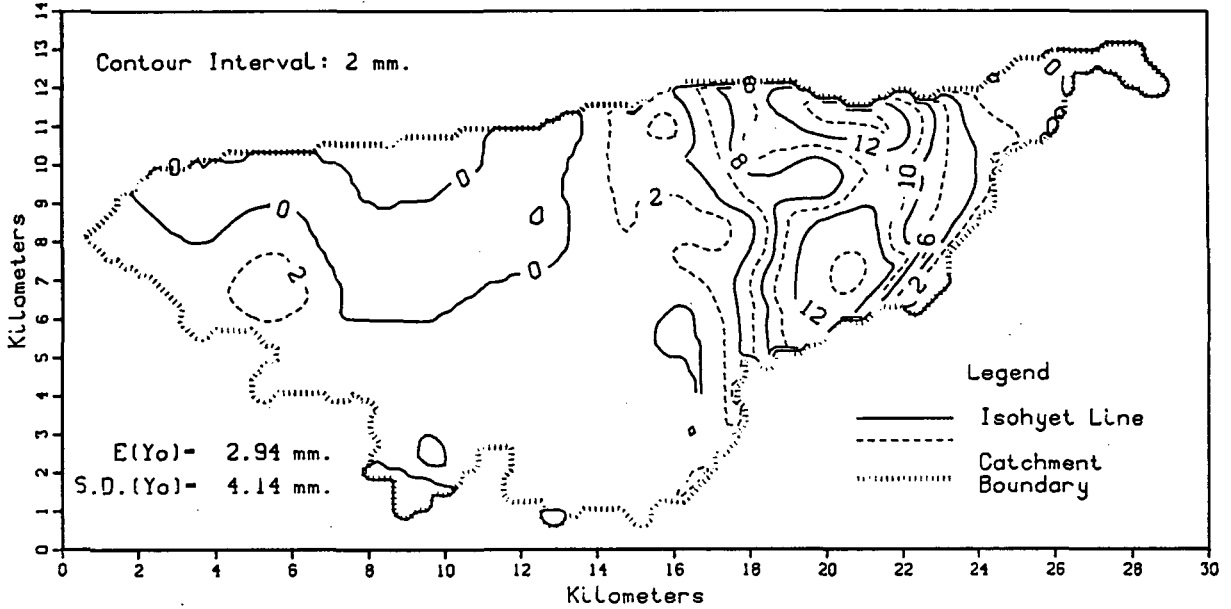
Coef. of Skewness of Point Depth:  $S.C.(Y)=4.938$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.005	0.0	1.000	0.00	1.000
2	0.000	0.2	0.981	0.04	1.030
		0.4	0.926	0.16	1.047
		0.6	0.846	0.36	1.049
		0.8	0.748	0.64	1.036
		1.0	0.642	1.00	1.012
		1.2	0.535	1.44	0.980
		1.4	0.434	1.96	0.940
		1.6	0.343	2.56	0.894
		1.8	0.263	3.24	0.842
		2.0	0.197	4.00	0.787
		2.2	0.143	4.84	0.727
		2.4	0.098	5.76	0.663
		2.6	0.061	6.76	0.601
		2.8	0.030	7.84	0.540
		3.0	0.004	9.00	0.480
		3.2	-0.017	10.24	0.424
		3.4	-0.035	11.56	0.374
		3.6	-0.049	12.96	0.331
		3.8	-0.058	14.44	0.294
		4.0	-0.064	16.00	0.263
		4.2	-0.067	17.64	0.236
		4.4	-0.070	19.36	0.213
		4.6	-0.072	21.16	0.193
		4.8	-0.074	23.04	0.175
		5.0	-0.076	25.00	0.157
		5.2	-0.079	27.04	0.139
		5.4	-0.083	29.16	0.120
		5.6	-0.087	31.36	0.100
		5.8	-0.091	33.64	0.074
		6.0	-0.093	36.00	0.055

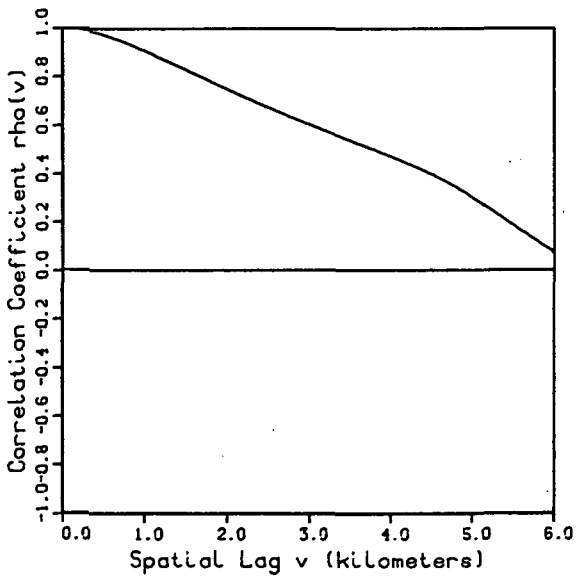


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

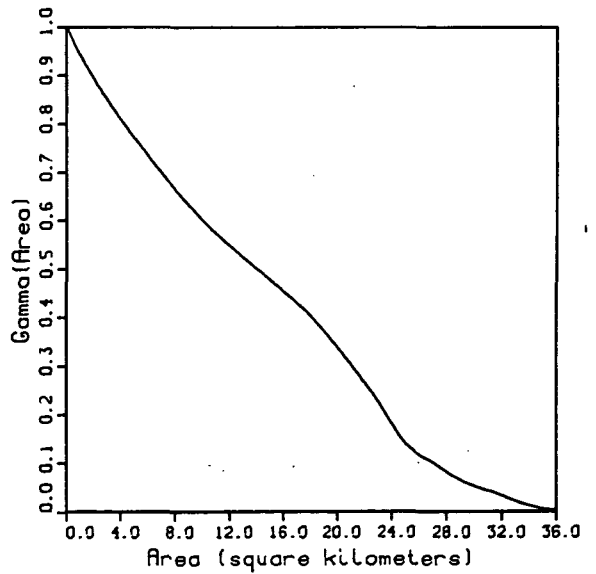
Storm Day  
 July 10, 1972



Spatial Correlation



Variance Function



Storm Day July 10 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.186$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.814$

Expected Value of Point Depth (mm.):  $E(Y) = 2.762$

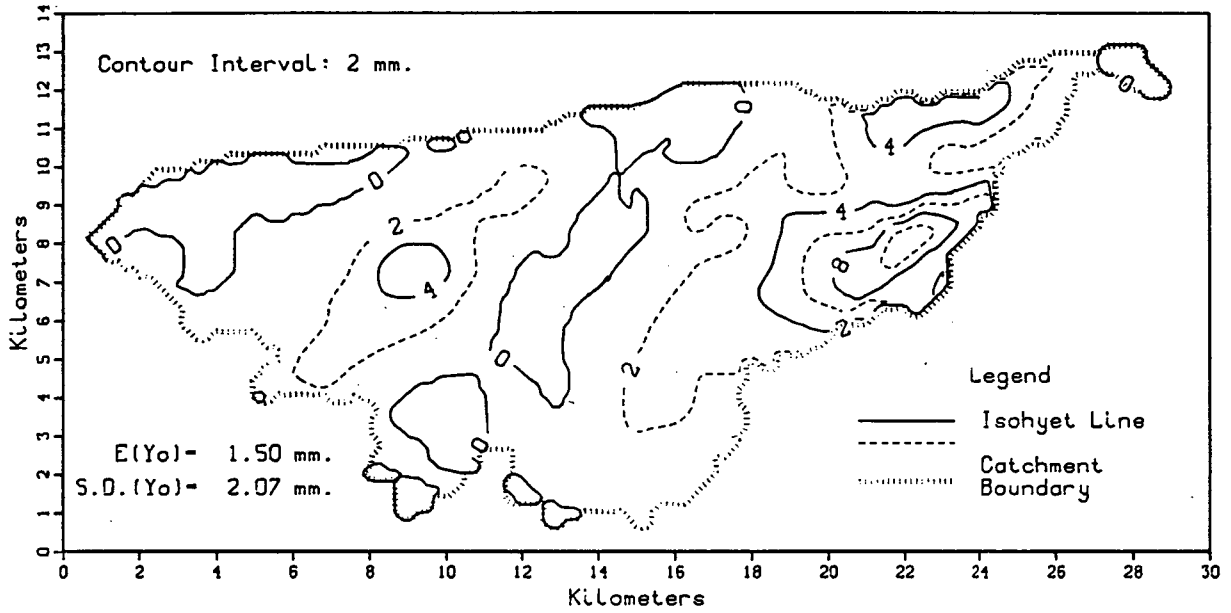
Variance of Point Depth (mm. sq.):  $Var(Y) = 15.302$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.611$

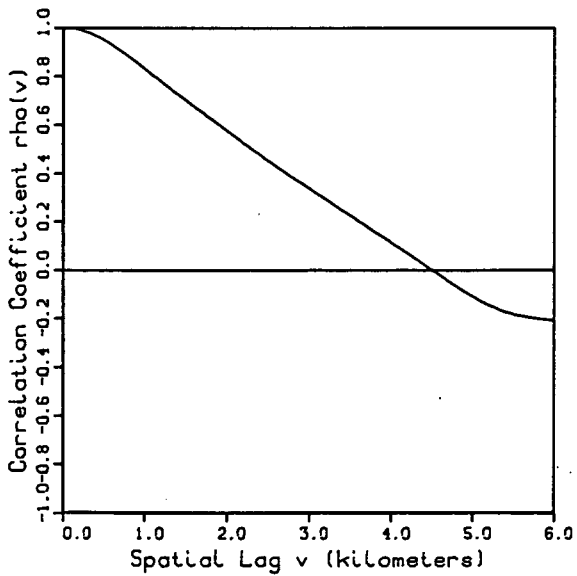
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.506	0.0	1.000	0.00	1.000
2	0.316	0.2	0.995	0.04	1.000
3	0.262	0.4	0.980	0.16	0.994
4	0.225	0.6	0.959	0.36	0.981
5	0.206	0.8	0.933	0.64	0.963
6	0.187	1.0	0.904	1.00	0.943
7	0.165	1.2	0.872	1.44	0.921
8	0.144	1.4	0.840	1.96	0.896
9	0.125	1.6	0.808	2.56	0.868
10	0.104	1.8	0.776	3.24	0.838
11	0.080	2.0	0.744	4.00	0.807
12	0.056	2.2	0.713	4.84	0.775
13	0.033	2.4	0.683	5.76	0.741
14	0.011	2.6	0.654	6.76	0.705
15	0.000	2.8	0.626	7.84	0.668
		3.0	0.598	9.00	0.631
		3.2	0.572	10.24	0.594
		3.4	0.545	11.56	0.558
		3.6	0.520	12.96	0.523
		3.8	0.494	14.44	0.490
		4.0	0.468	16.00	0.453
		4.2	0.439	17.64	0.411
		4.4	0.410	19.36	0.360
		4.6	0.377	21.16	0.296
		4.8	0.341	23.04	0.223
		5.0	0.299	25.00	0.138
		5.2	0.253	27.04	0.099
		5.4	0.206	29.16	0.061
		5.6	0.161	31.36	0.039
		5.8	0.116	33.64	0.014
		6.0	0.071	36.00	0.003

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

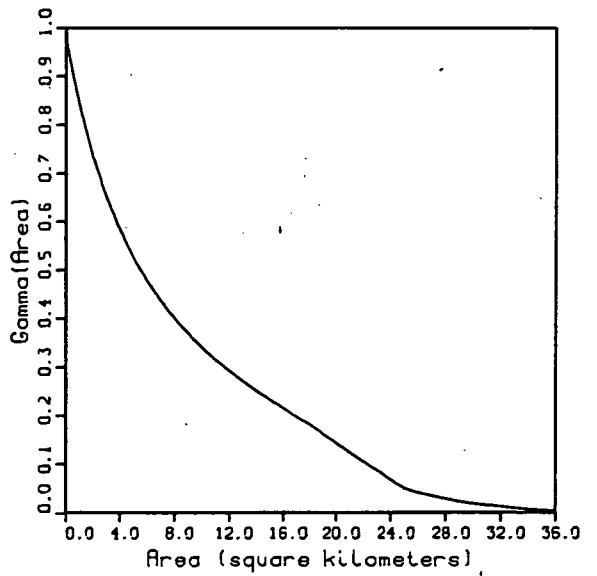
Storm Day  
 July 12, 1972



Spatial Correlation



Variance Function



Storm Day July 12 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.175$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.825$

Expected Value of Point Depth (mm.):  $E(Y) = 1.691$

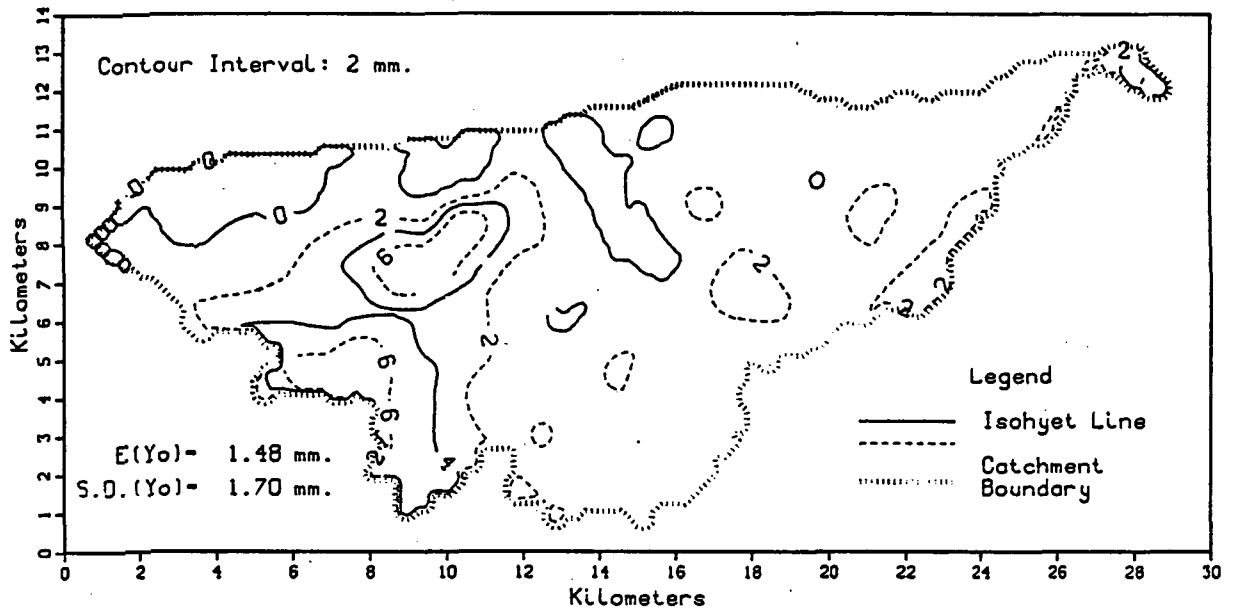
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.393$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.795$

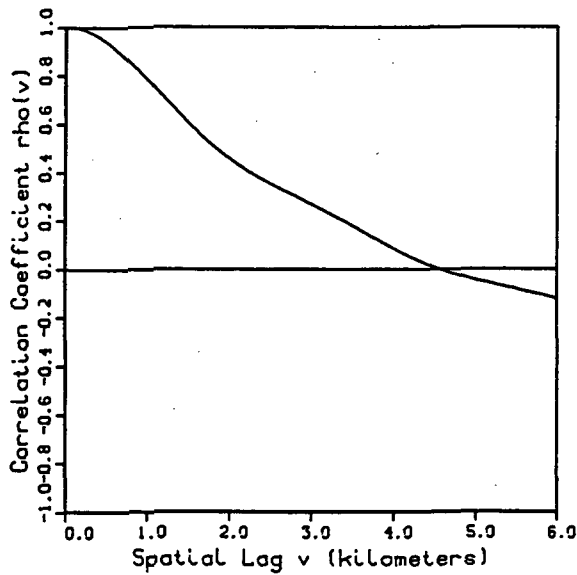
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.504	0.0	1.000	0.00	1.000
2	0.332	0.2	0.990	0.04	0.983
3	0.189	0.4	0.963	0.16	0.959
4	0.118	0.6	0.925	0.36	0.929
5	0.073	0.8	0.877	0.64	0.890
6	0.053	1.0	0.826	1.00	0.845
7	0.041	1.2	0.773	1.44	0.796
8	0.022	1.4	0.720	1.96	0.742
9	0.013	1.6	0.670	2.56	0.687
10	0.005	1.8	0.620	3.24	0.633
11	0.002	2.0	0.570	4.00	0.581
12	0.000	2.2	0.520	4.84	0.532
		2.4	0.471	5.76	0.486
		2.6	0.423	6.76	0.443
		2.8	0.377	7.84	0.403
		3.0	0.332	9.00	0.366
		3.2	0.287	10.24	0.332
		3.4	0.242	11.56	0.299
		3.6	0.198	12.96	0.269
		3.8	0.153	14.44	0.241
		4.0	0.108	16.00	0.213
		4.2	0.063	17.64	0.184
		4.4	0.018	19.36	0.153
		4.6	-.028	21.16	0.119
		4.8	-.073	23.04	0.084
		5.0	-.115	25.00	0.049
		5.2	-.150	27.04	0.034
		5.4	-.178	29.16	0.021
		5.6	-.194	31.36	0.013
		5.8	-.205	33.64	0.007
		6.0	-.214	36.00	0.002

Walnut Gulch, Arizona  
 $A_c=154.21 \text{ sq.km.}$

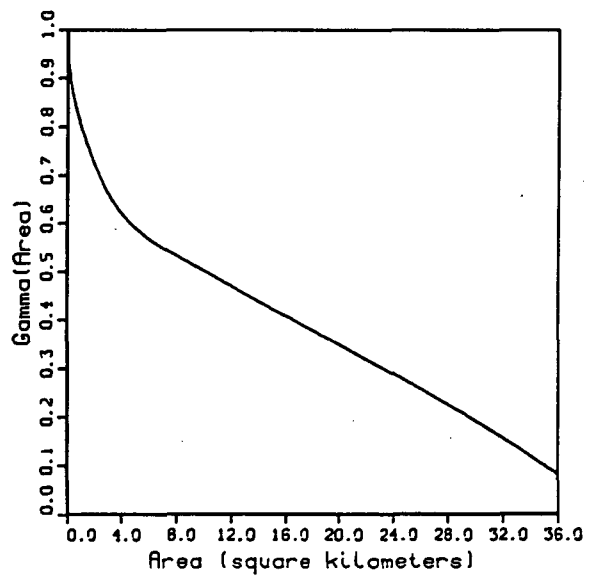
Storm Day  
 July 14, 1972



Spatial Correlation



Variance Function



Storm Day July 14 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.092$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.908$

Expected Value of Point Depth (mm.):  $E(Y) = 1.779$

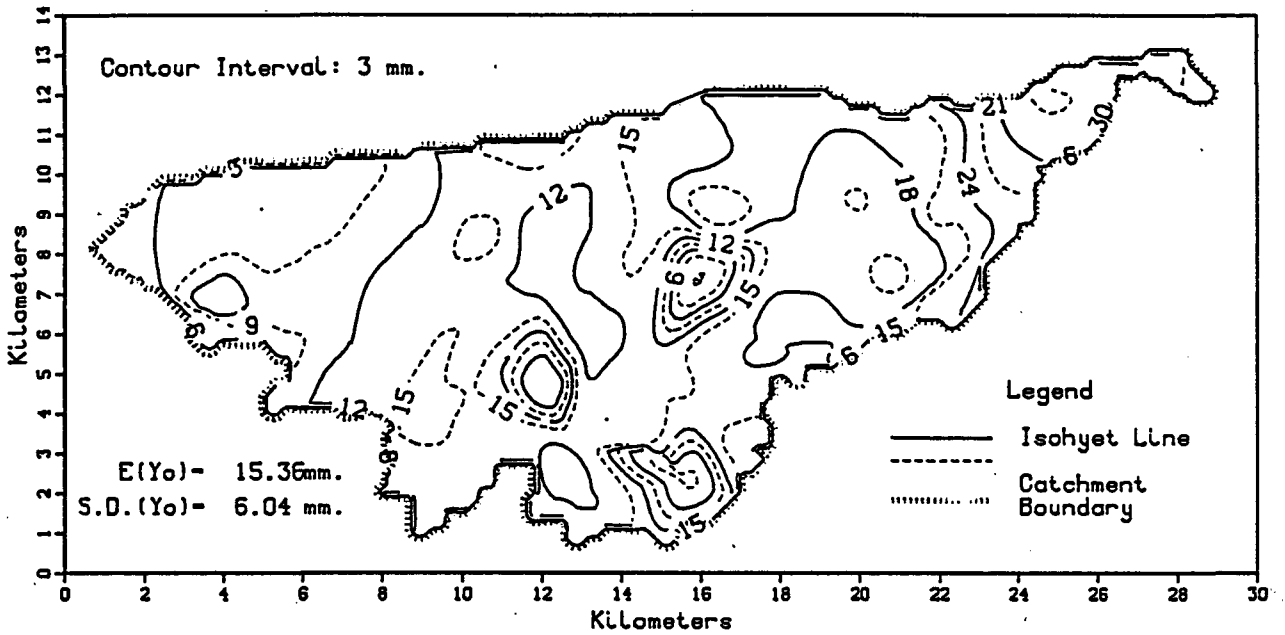
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.042$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.457$

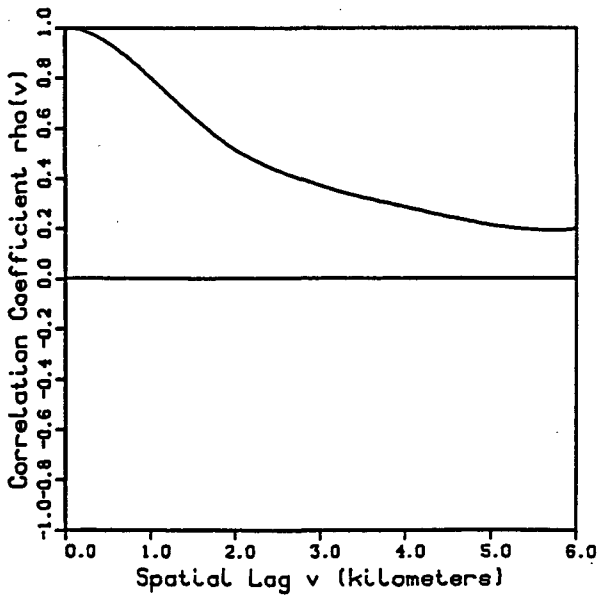
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.608	0.0	1.000	0.00	1.000
2	0.277	0.2	0.989	0.04	0.964
3	0.174	0.4	0.956	0.16	0.921
4	0.119	0.6	0.907	0.36	0.878
5	0.083	0.8	0.847	0.64	0.840
6	0.043	1.0	0.779	1.00	0.802
7	0.014	1.2	0.707	1.44	0.764
8	0.000	1.4	0.635	1.96	0.724
9	0.000	1.6	0.567	2.56	0.685
		1.8	0.507	3.24	0.650
		2.0	0.454	4.00	0.619
		2.2	0.407	4.84	0.593
		2.4	0.367	5.76	0.570
		2.6	0.332	6.76	0.551
		2.8	0.298	7.84	0.533
		3.0	0.265	9.00	0.515
		3.2	0.230	10.24	0.496
		3.4	0.194	11.56	0.475
		3.6	0.156	12.96	0.453
		3.8	0.119	14.44	0.430
		4.0	0.082	16.00	0.406
		4.2	0.047	17.64	0.383
		4.4	0.018	19.36	0.357
		4.6	-.008	21.16	0.330
		4.8	-.030	23.04	0.301
		5.0	-.048	25.00	0.272
		5.2	-.064	27.04	0.239
		5.4	-.079	29.16	0.205
		5.6	-.094	31.36	0.167
		5.8	-.110	33.64	0.125
		6.0	-.125	36.00	0.080

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

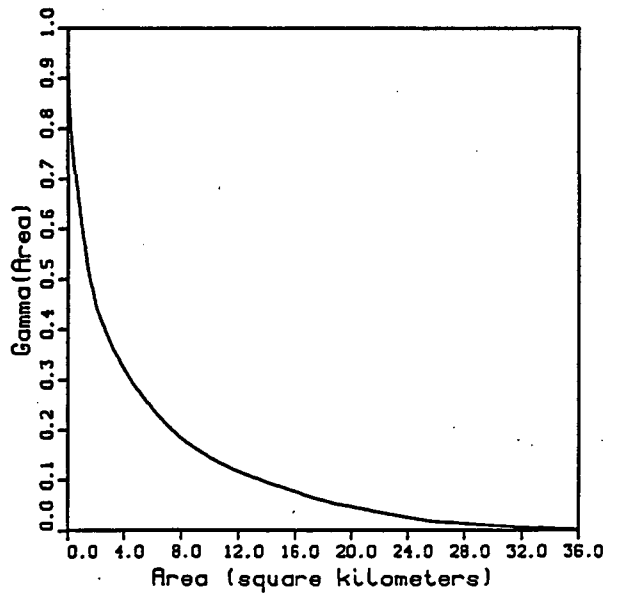
Storm Day  
 July 15, 1972



Spatial Correlation



Variance Function



Storm Day July 15 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 15.274$

Variance of Point Depth (mm. sq.):  $Var(Y) = 32.682$

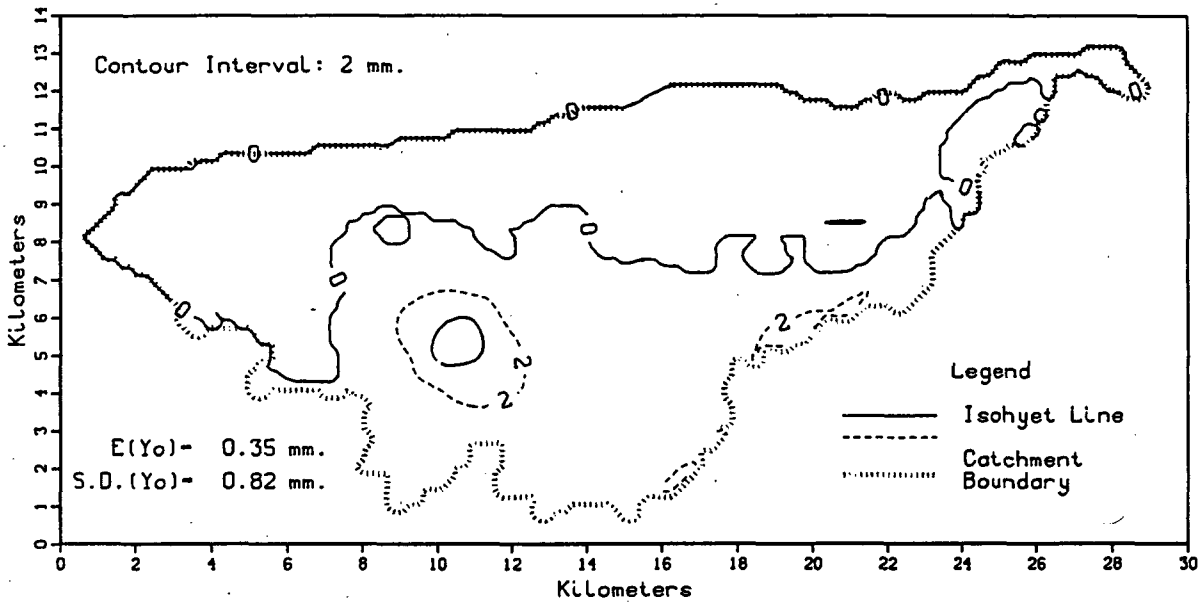
Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.795$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.997	0.0	1.000	0.00	1.000
2	0.995	0.2	0.987	0.04	0.923
3	0.993	0.4	0.957	0.16	0.841
4	0.991	0.6	0.912	0.36	0.762
5	0.989	0.8	0.857	0.64	0.686
6	0.975	1.0	0.796	1.00	0.606
7	0.947	1.2	0.734	1.44	0.522
8	0.907	1.4	0.672	1.96	0.451
9	0.885	1.6	0.613	2.56	0.402
10	0.859	1.8	0.559	3.24	0.359
11	0.813	2.0	0.511	4.00	0.320
12	0.746	2.2	0.474	4.84	0.282
13	0.655	2.4	0.441	5.76	0.248
14	0.558	2.6	0.414	6.76	0.215
15	0.461	2.8	0.390	7.84	0.185
16	0.367	3.0	0.367	9.00	0.161
17	0.303	3.2	0.346	10.24	0.139
18	0.243	3.4	0.329	11.56	0.121
19	0.168	3.6	0.312	12.96	0.105
20	0.140	3.8	0.297	14.44	0.090
21	0.125	4.0	0.282	16.00	0.076
22	0.109	4.2	0.266	17.64	0.061
23	0.093	4.4	0.250	19.36	0.049
24	0.080	4.6	0.237	21.16	0.039
25	0.067	4.8	0.223	23.04	0.029
26	0.056	5.0	0.210	25.00	0.019
27	0.044	5.2	0.201	27.04	0.014
28	0.038	5.4	0.194	29.16	0.010
29	0.033	5.6	0.192	31.36	0.006
30	0.028	5.8	0.193	33.64	0.003
31	0.023	6.0	0.200	36.00	0.001
32	0.012				
33	0.002				
34	0.000				

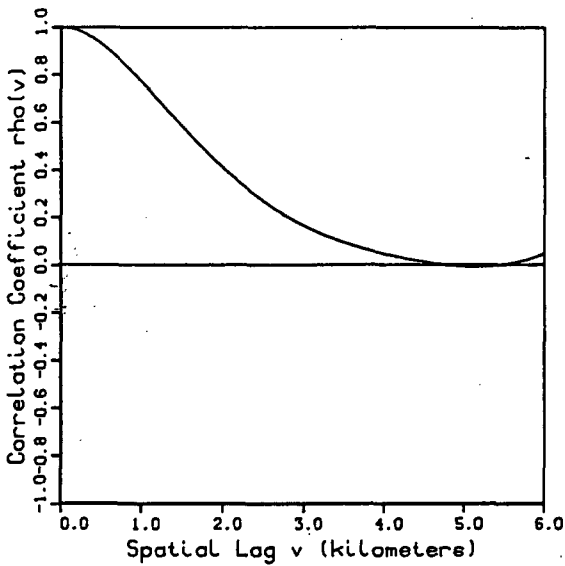


Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

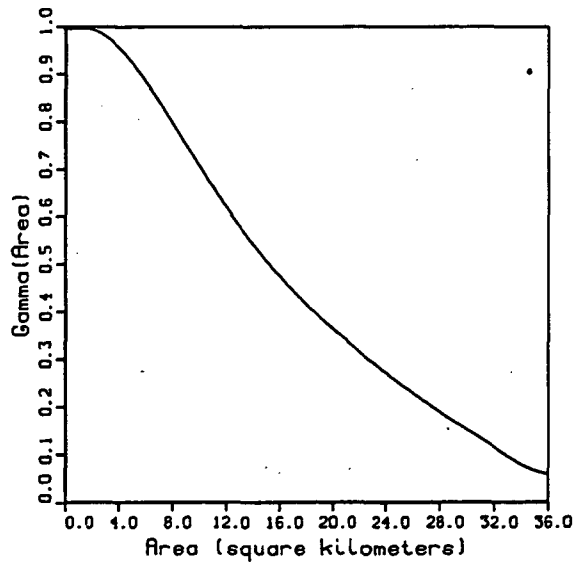
Storm Day  
 July 16, 1972



Spatial Correlation



Variance Function



Storm Day July 16 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.475$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.525$

Expected Value of Point Depth (mm.):  $E(Y) = 0.445$

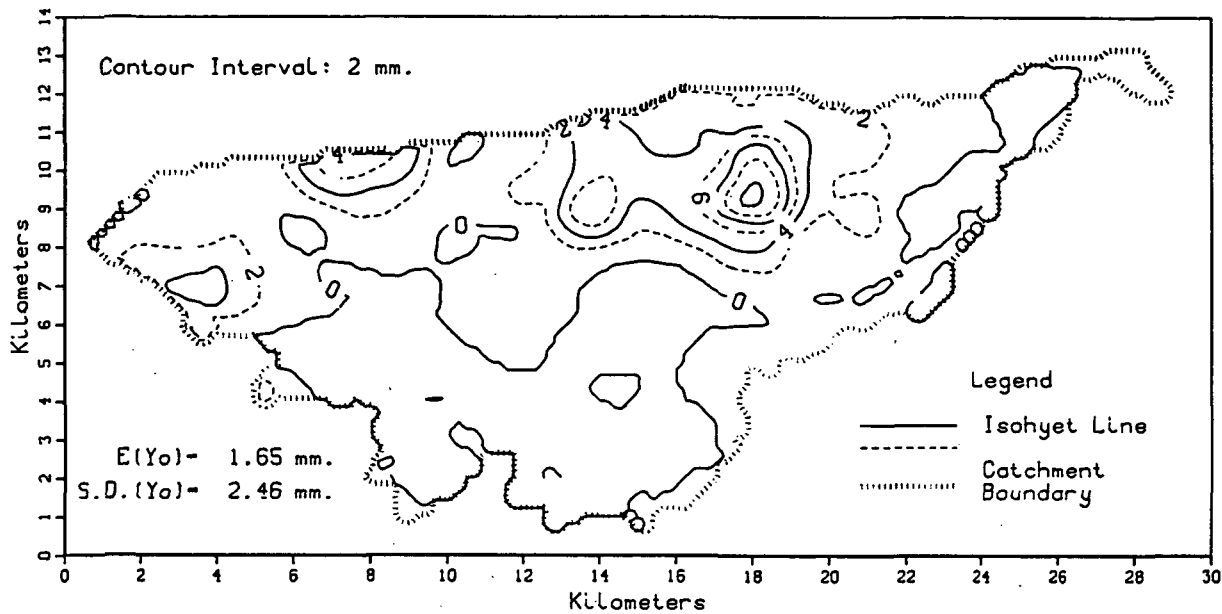
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.613$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.582$

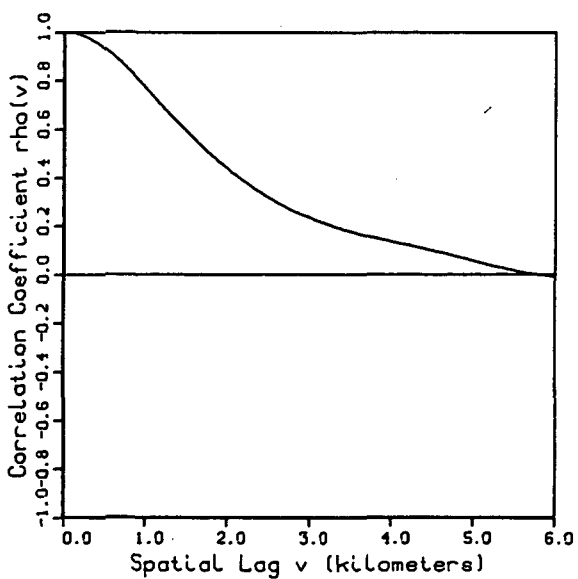
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.150	0.0	1.000	0.00	1.000
2	0.057	0.2	0.986	0.04	0.996
3	0.021	0.4	0.951	0.16	0.994
4	0.009	0.6	0.900	0.36	0.994
5	0.000	0.8	0.837	0.64	0.995
		1.0	0.767	1.00	0.995
		1.2	0.692	1.44	0.996
		1.4	0.617	1.96	0.993
		1.6	0.543	2.56	0.986
		1.8	0.472	3.24	0.972
		2.0	0.406	4.00	0.953
		2.2	0.345	4.84	0.926
		2.4	0.290	5.76	0.891
		2.6	0.241	6.76	0.849
		2.8	0.199	7.84	0.801
		3.0	0.163	9.00	0.748
		3.2	0.131	10.24	0.692
		3.4	0.105	11.56	0.635
		3.6	0.082	12.96	0.579
		3.8	0.062	14.44	0.524
		4.0	0.044	16.00	0.472
		4.2	0.030	17.64	0.423
		4.4	0.016	19.36	0.377
		4.6	0.005	21.16	0.334
		4.8	-.002	23.04	0.291
		5.0	-.007	25.00	0.247
		5.2	-.007	27.04	0.206
		5.4	-.002	29.16	0.165
		5.6	0.009	31.36	0.127
		5.8	0.026	33.64	0.083
		6.0	0.049	36.00	0.059

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

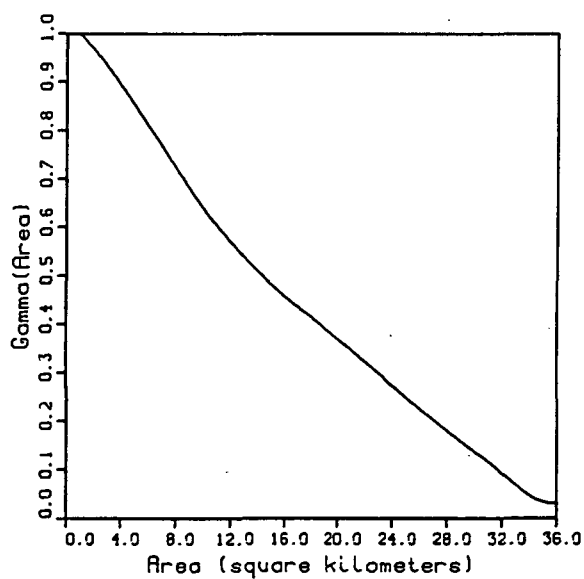
Storm Day  
 July 19, 1972



Spatial Correlation



Variance Function



Storm Day July 19 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.312$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.688$

Expected Value of Point Depth (mm.):  $E(Y) = 1.330$

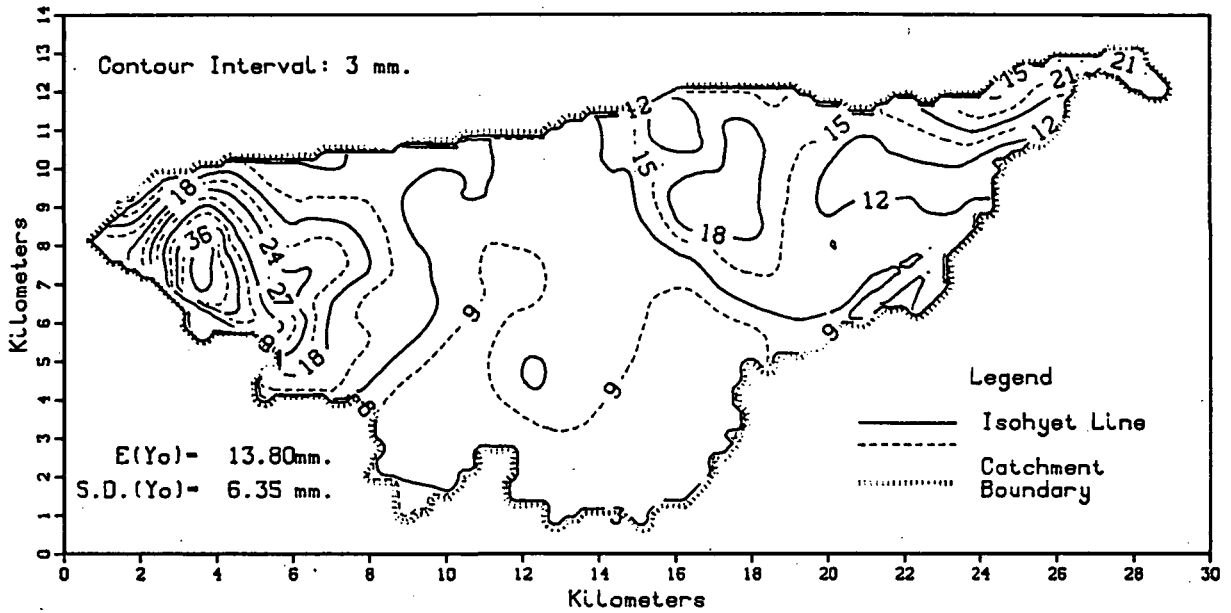
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.441$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.146$

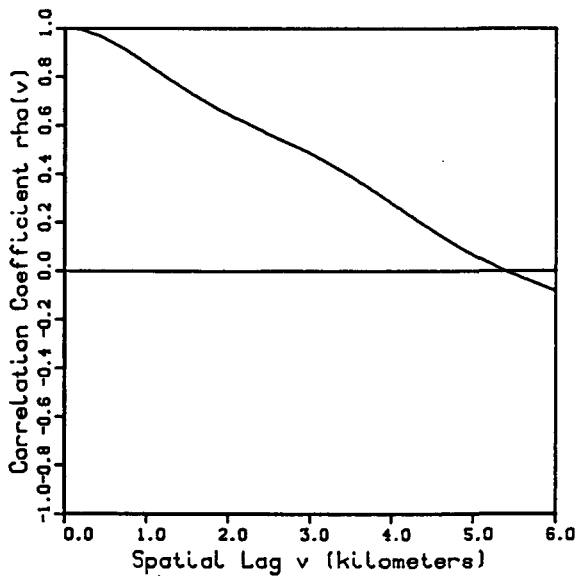
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.346	0.0	1.000	0.00	1.000
2	0.254	0.2	0.987	0.04	1.012
3	0.177	0.4	0.952	0.16	1.017
4	0.120	0.6	0.900	0.36	1.016
5	0.068	0.8	0.836	0.64	1.009
6	0.044	1.0	0.766	1.00	0.998
7	0.028	1.2	0.693	1.44	0.985
8	0.018	1.4	0.622	1.96	0.968
9	0.014	1.6	0.554	2.56	0.947
10	0.009	1.8	0.491	3.24	0.921
11	0.006	2.0	0.434	4.00	0.891
12	0.002	2.2	0.382	4.84	0.856
13	0.000	2.4	0.336	5.76	0.818
		2.6	0.295	6.76	0.774
		2.8	0.261	7.84	0.727
		3.0	0.232	9.00	0.677
		3.2	0.206	10.24	0.628
		3.4	0.184	11.56	0.582
		3.6	0.165	12.96	0.537
		3.8	0.148	14.44	0.495
		4.0	0.133	16.00	0.455
		4.2	0.119	17.64	0.419
		4.4	0.104	19.36	0.382
		4.6	0.088	21.16	0.340
		4.8	0.071	23.04	0.296
		5.0	0.053	25.00	0.246
		5.2	0.036	27.04	0.200
		5.4	0.021	29.16	0.152
		5.6	0.008	31.36	0.107
		5.8	-.002	33.64	0.053
		6.0	-.009	36.00	0.030

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

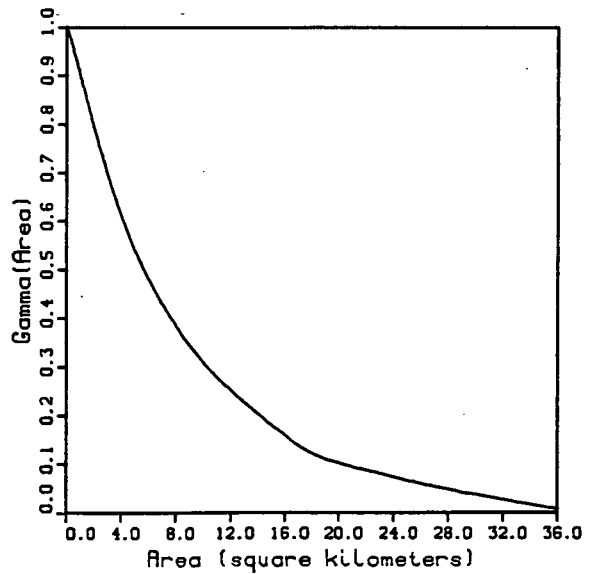
Storm Day  
 July 22, 1972



Spatial Correlation



Variance Function



Storm Day July 22 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y)=13.734$

Variance of Point Depth (mm. sq.):  $Var(Y)=41.077$

Coef. of Skewness of Point Depth:  $S.C.(Y)=1.876$

Spatial Distribution  
of Total Storm Depth  
 $y$  (mm.)  $A_{cw}/A_c (Y \geq y)$

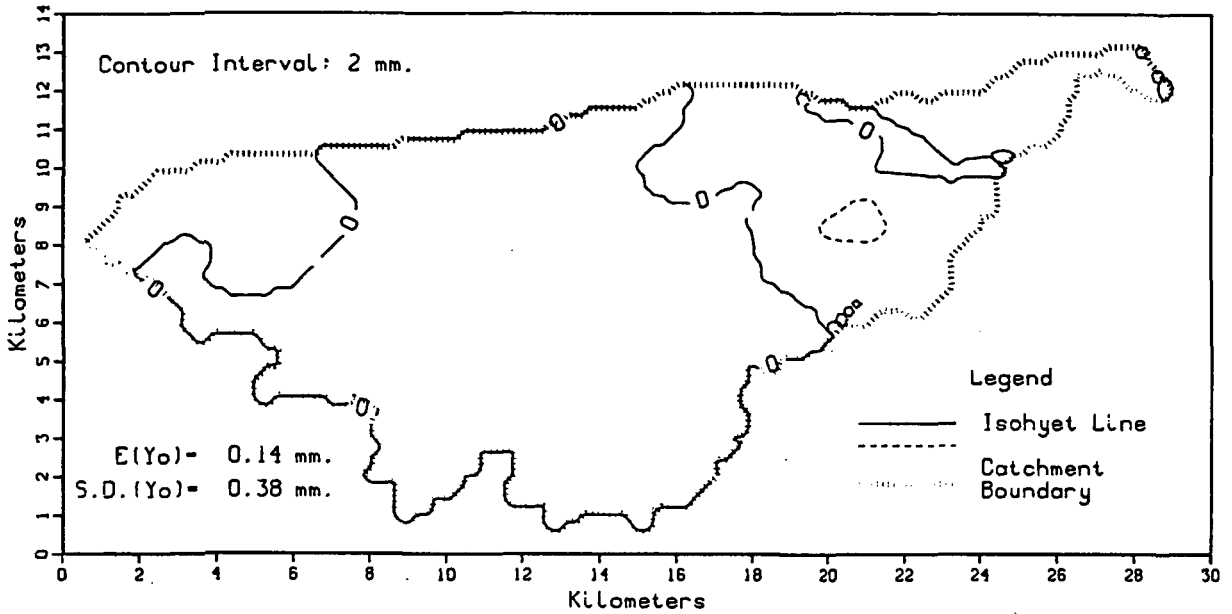
Spatial Correlation  
 $v$  (km.)  $\rho(v)$

Variance Function  
 $A$  (km. sq.)  $\Gamma(A)$

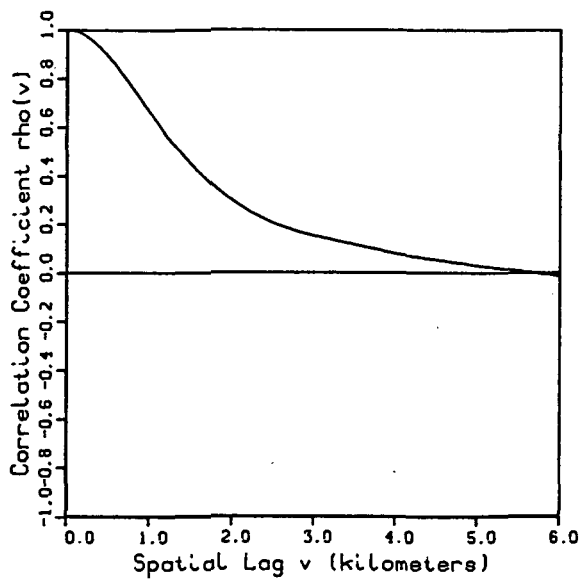
$y$ (mm.)	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	$\Gamma(A)$
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.991	0.04	0.998
5	0.999	0.4	0.968	0.16	0.987
7	0.971	0.6	0.934	0.36	0.967
9	0.787	0.8	0.894	0.64	0.936
11	0.619	1.0	0.849	1.00	0.897
13	0.394	1.2	0.803	1.44	0.850
15	0.297	1.4	0.757	1.96	0.795
17	0.223	1.6	0.715	2.56	0.736
19	0.146	1.8	0.676	3.24	0.672
21	0.103	2.0	0.641	4.00	0.611
23	0.079	2.2	0.608	4.84	0.550
25	0.059	2.4	0.575	5.76	0.493
27	0.049	2.6	0.543	6.76	0.441
29	0.040	2.8	0.512	7.84	0.390
31	0.033	3.0	0.480	9.00	0.344
33	0.026	3.2	0.444	10.24	0.301
35	0.020	3.4	0.406	11.56	0.262
37	0.015	3.6	0.364	12.96	0.227
39	0.011	3.8	0.320	14.44	0.192
41	0.006	4.0	0.275	16.00	0.157
43	0.002	4.2	0.229	17.64	0.125
		4.6	0.140	21.16	0.092
		4.8	0.099	23.04	0.079
		5.0	0.061	25.00	0.065
		5.2	0.026	27.04	0.052
		5.4	-0.006	29.16	0.040
		5.6	-0.035	31.36	0.029
		5.8	-0.062	33.64	0.017
		6.0	-0.089	36.00	0.007

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

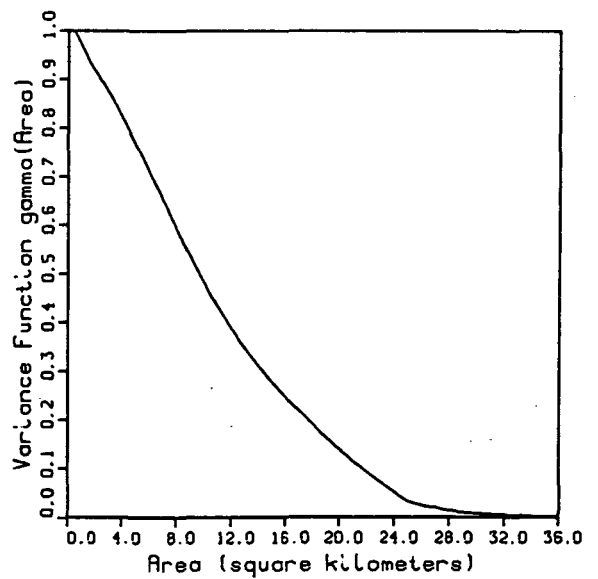
Storm Day  
July 23, 1972



Spatial Correlation



Variance Function



Storm Day July 23 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.643$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.357$

Expected Value of Point Depth (mm.):  $E(Y) = 0.142$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.124$

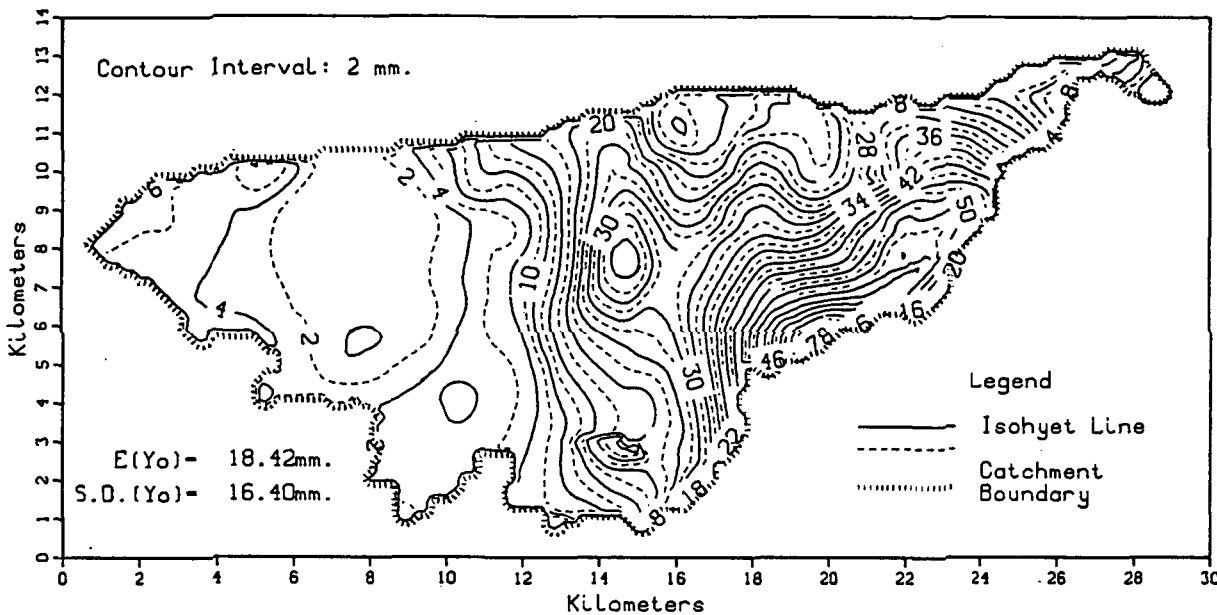
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.805$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.041	0.0	1.000	0.00	1.000
2	0.009	0.2	0.980	0.04	1.012
3	0.000	0.4	0.925	0.16	1.013
		0.6	0.846	0.36	1.005
		0.8	0.754	0.64	0.987
		1.0	0.658	1.00	0.965
		1.2	0.566	1.44	0.941
		1.4	0.483	1.96	0.915
		1.6	0.410	2.56	0.889
		1.8	0.348	3.24	0.858
		2.0	0.295	4.00	0.819
		2.2	0.251	4.84	0.773
		2.4	0.216	5.76	0.721
		2.6	0.188	6.76	0.662
		2.8	0.166	7.84	0.599
		3.0	0.149	9.00	0.534
		3.2	0.134	10.24	0.469
		3.4	0.120	11.56	0.407
		3.6	0.105	12.96	0.349
		3.8	0.091	14.44	0.296
		4.0	0.077	16.00	0.246
		4.2	0.066	17.64	0.200
		4.4	0.056	19.36	0.155
		4.6	0.047	21.16	0.111
		4.8	0.038	23.04	0.071
		5.0	0.028	25.00	0.032
		5.2	0.019	27.04	0.019
		5.4	0.010	29.16	0.008
		5.6	0.002	31.36	0.005
		5.8	-0.005	33.64	0.002
		6.0	-0.015	36.00	0.000

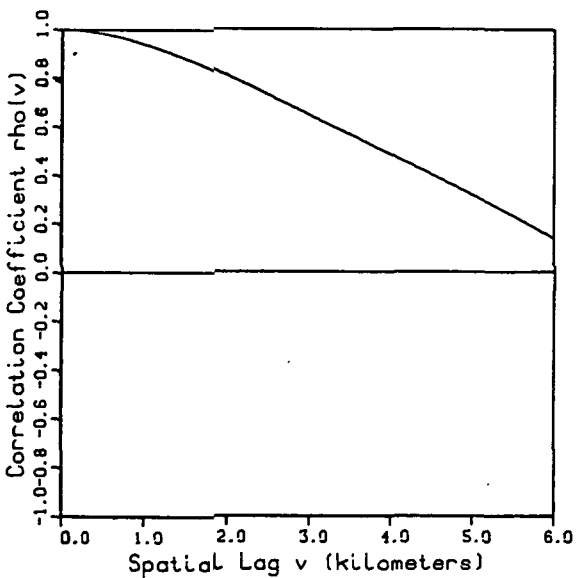


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

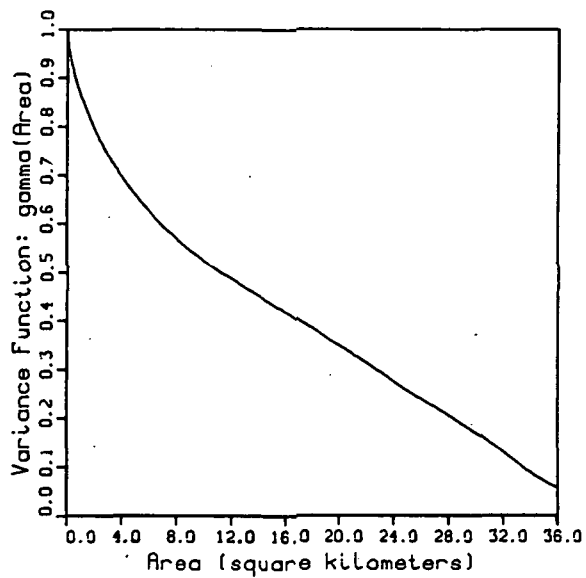
Storm Day  
 July 24, 1972



Spatial Correlation



Variance Function



Storm Day July 24 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.004$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.996$

Expected Value of Point Depth (mm.):  $E(Y)=19.046$

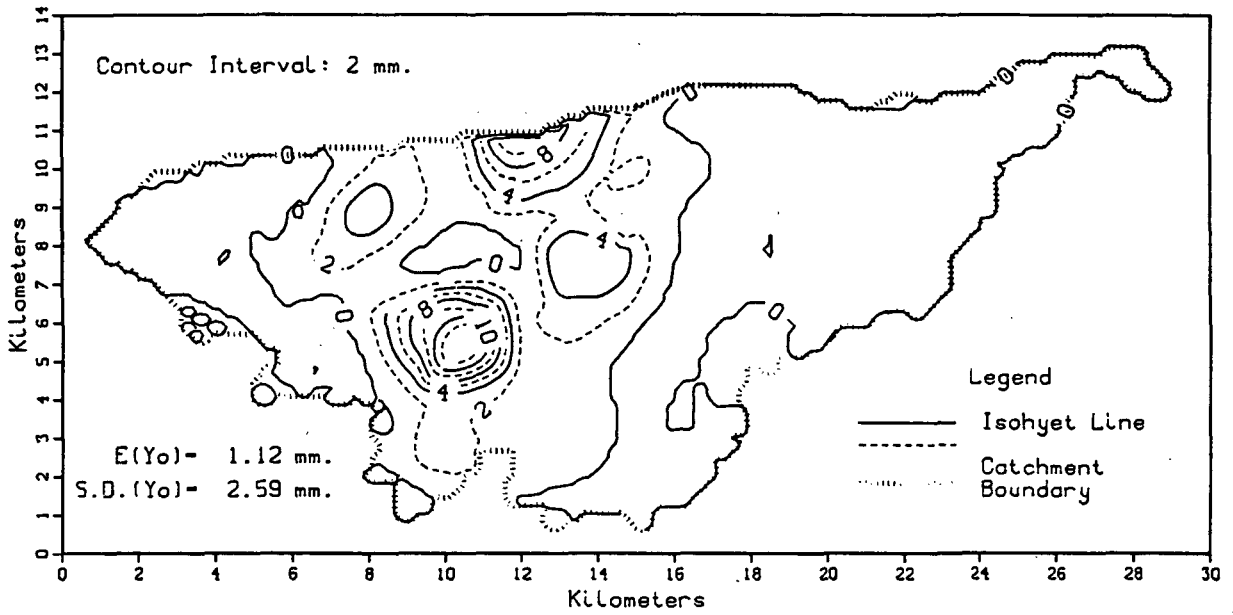
Variance of Point Depth (mm. sq.):  $Var(Y)=305.948$

Coef. of Skewness of Point Depth:  $S.C.(Y)=1.120$

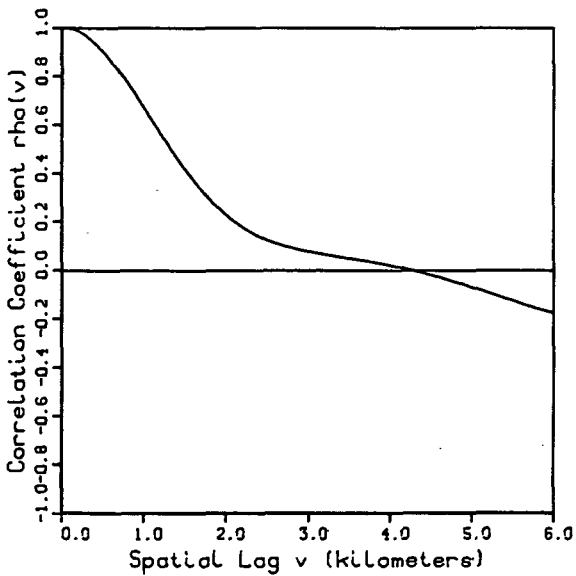
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.920	0.0	1.000	0.00	1.000
4	0.789	0.2	0.996	0.04	0.981
7	0.634	0.4	0.988	0.16	0.955
10	0.584	0.6	0.975	0.36	0.928
13	0.535	0.8	0.958	0.64	0.897
16	0.491	1.0	0.938	1.00	0.864
19	0.431	1.2	0.916	1.44	0.832
22	0.368	1.4	0.891	1.96	0.798
25	0.312	1.6	0.865	2.56	0.763
28	0.264	1.8	0.837	3.24	0.729
31	0.215	2.0	0.807	4.00	0.696
34	0.176	2.2	0.775	4.84	0.664
37	0.144	2.4	0.743	5.76	0.632
40	0.124	2.6	0.710	6.76	0.601
43	0.107	2.8	0.677	7.84	0.572
46	0.092	3.0	0.644	9.00	0.544
49	0.080	3.2	0.611	10.24	0.518
52	0.067	3.4	0.579	11.56	0.493
55	0.053	3.6	0.548	12.96	0.469
58	0.038	3.8	0.515	14.44	0.444
61	0.025	4.0	0.483	16.00	0.418
64	0.020	4.2	0.450	17.64	0.389
67	0.016	4.4	0.417	19.36	0.359
70	0.013	4.6	0.384	21.16	0.328
73	0.010	4.8	0.351	23.04	0.293
76	0.007	5.0	0.317	25.00	0.255
79	0.004	5.2	0.283	27.04	0.222
82	0.000	5.4	0.249	29.16	0.184
85	0.000	5.6	0.213	31.36	0.144
88	0.000	5.8	0.176	33.64	0.095
91	0.000	6.0	0.139	36.00	0.057

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

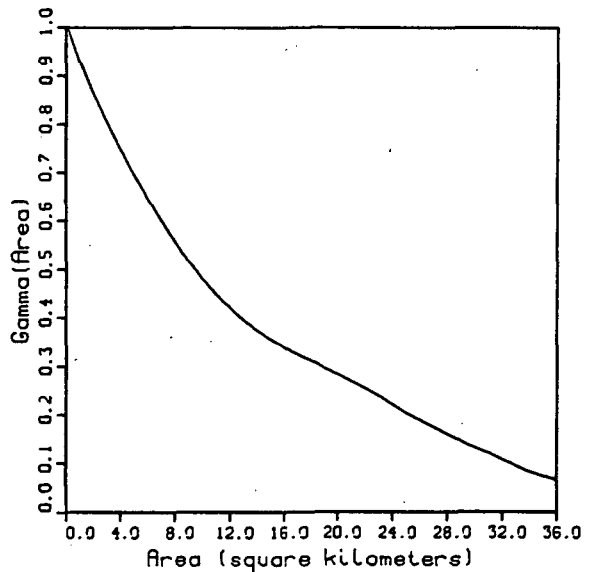
Storm Day  
 July 25, 1972



Spatial Correlation



Variance Function



Storm Day July 25 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.482$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.518$

Expected Value of Point Depth (mm.):  $E(Y) = 1.224$

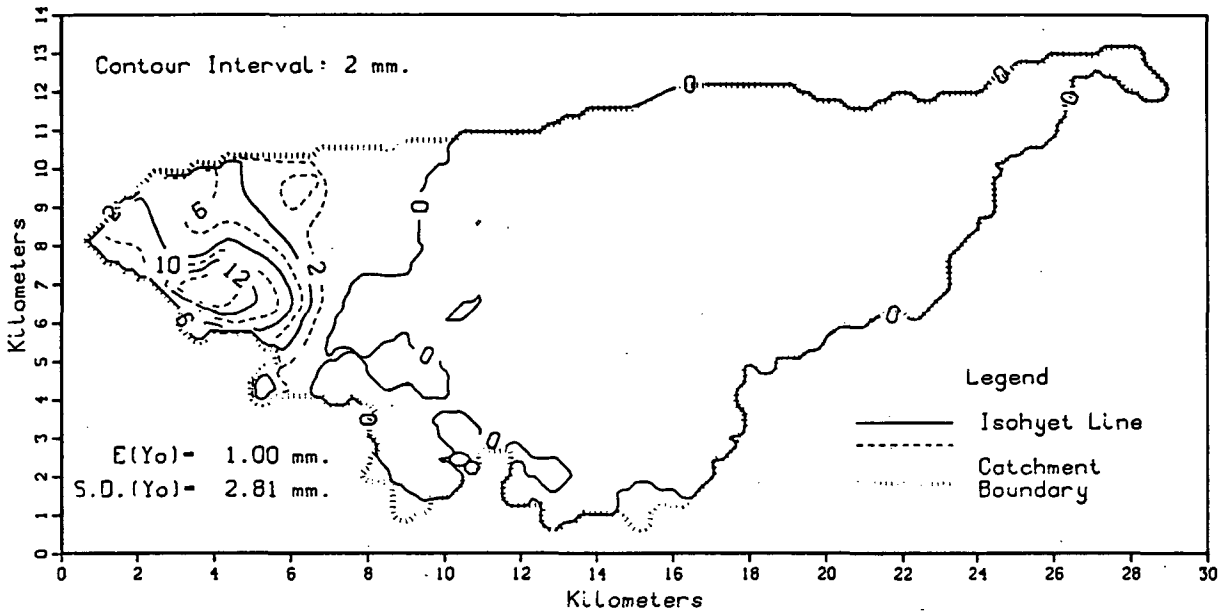
Variance of Point Depth (mm. sq.):  $Var(Y) = 5.817$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.969$

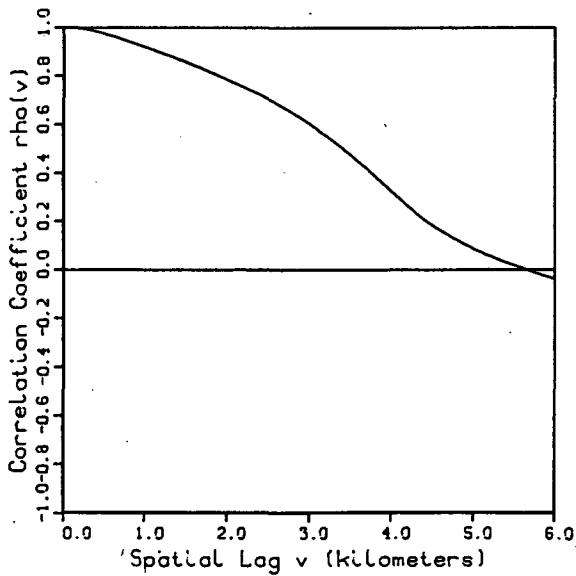
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.310	0.0	1.000	0.00	1.000
2	0.213	0.2	0.983	0.04	1.002
3	0.144	0.4	0.934	0.16	0.996
4	0.101	0.6	0.860	0.36	0.981
5	0.070	0.8	0.769	0.64	0.957
6	0.051	1.0	0.667	1.00	0.930
7	0.041	1.2	0.563	1.44	0.899
8	0.033	1.4	0.462	1.96	0.865
9	0.026	1.6	0.370	2.56	0.827
10	0.020	1.8	0.290	3.24	0.788
11	0.014	2.0	0.224	4.00	0.747
12	0.010	2.2	0.173	4.84	0.703
13	0.008	2.4	0.135	5.76	0.657
14	0.005	2.6	0.108	6.76	0.610
15	0.003	2.8	0.088	7.84	0.562
16	0.000	3.0	0.073	9.00	0.515
		3.2	0.061	10.24	0.470
		3.4	0.050	11.56	0.430
		3.6	0.040	12.96	0.395
		3.8	0.029	14.44	0.365
		4.0	0.016	16.00	0.338
		4.2	0.001	17.64	0.314
		4.4	-.015	19.36	0.290
		4.6	-.034	21.16	0.265
		4.8	-.054	23.04	0.237
		5.0	-.075	25.00	0.202
		5.2	-.097	27.04	0.173
		5.4	-.119	29.16	0.142
		5.6	-.142	31.36	0.116
		5.8	-.163	33.64	0.086
		6.0	-.181	36.00	0.066

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

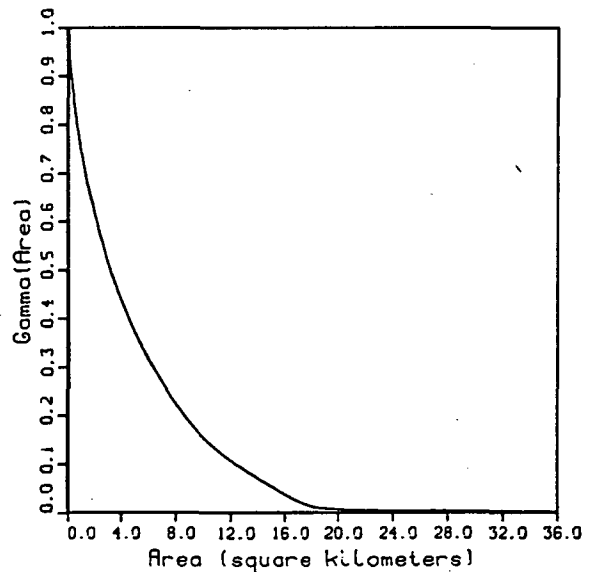
Storm Day  
 July 26, 1972



Spatial Correlation



Variance Function



Storm Day July 26 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.742$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.258$

Expected Value of Point Depth (mm.):  $E(Y) = 0.982$

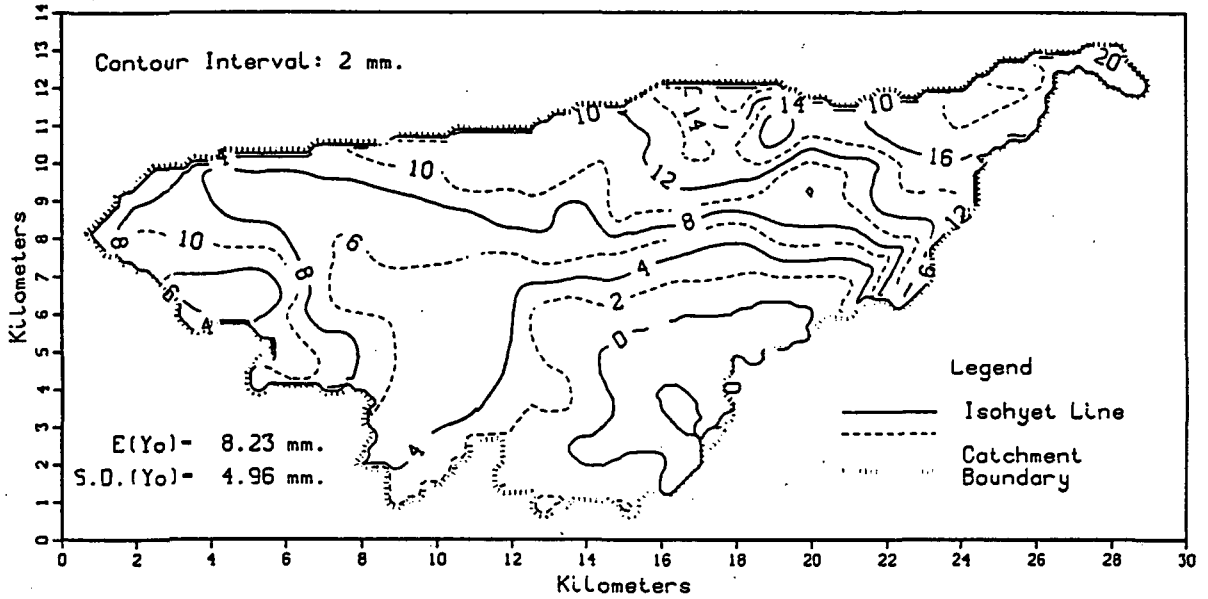
Variance of Point Depth (mm. sq.):  $Var(Y) = 7.311$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.072$

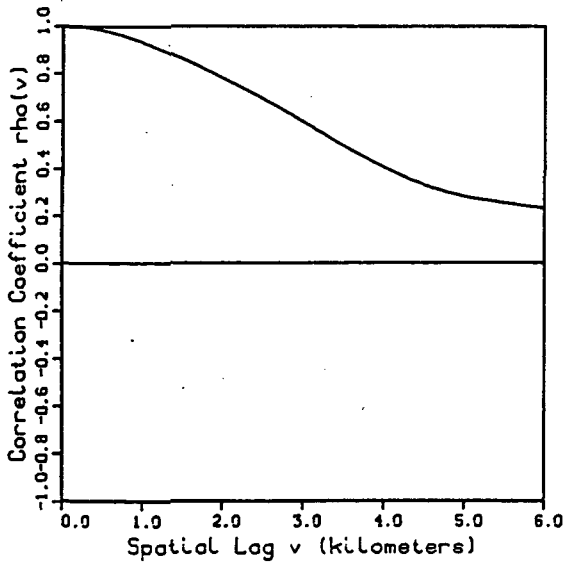
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.151	0.0	1.000	0.00	1.000
2	0.124	0.2	0.994	0.04	0.970
3	0.107	0.4	0.980	0.16	0.931
4	0.098	0.6	0.960	0.36	0.880
5	0.090	0.8	0.937	0.64	0.820
6	0.079	1.0	0.914	1.00	0.753
7	0.063	1.2	0.890	1.44	0.687
8	0.050	1.4	0.864	1.96	0.622
9	0.039	1.6	0.838	2.56	0.557
10	0.028	1.8	0.808	3.24	0.492
11	0.017	2.0	0.779	4.00	0.434
12	0.013	2.2	0.749	4.84	0.377
13	0.009	2.4	0.717	5.76	0.324
14	0.005	2.6	0.682	6.76	0.275
15	0.002	2.8	0.643	7.84	0.227
16	0.000	3.0	0.599	9.00	0.184
		3.2	0.551	10.24	0.146
		3.4	0.498	11.56	0.114
		3.6	0.442	12.96	0.087
		3.8	0.382	14.44	0.061
		4.0	0.320	16.00	0.036
		4.2	0.259	17.64	0.014
		4.4	0.202	19.36	0.006
		4.6	0.159	21.16	0.004
		4.8	0.118	23.04	0.003
		5.0	0.084	25.00	0.003
		5.2	0.053	27.04	0.002
		5.4	0.027	29.16	0.002
		5.6	0.003	31.36	0.002
		5.8	-.021	33.64	0.001
		6.0	-.043	36.00	0.000

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq.km.}$

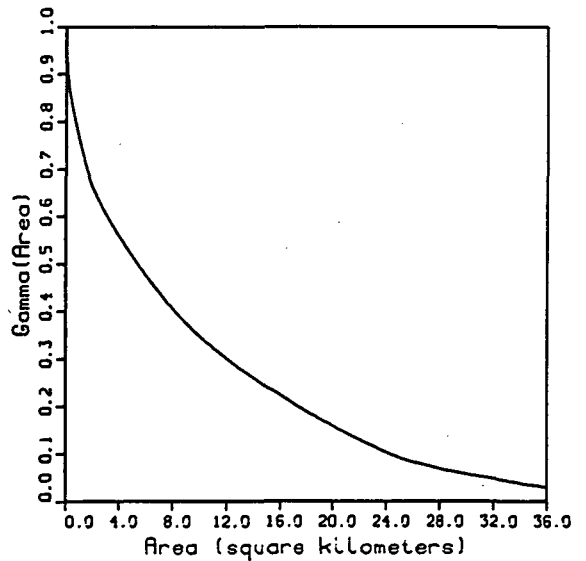
Storm Day  
 July 28, 1972



Spatial Correlation



Variance Function



Storm Day July 28 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.070$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.930$

Expected Value of Point Depth (mm.):  $E(Y) = 7.418$

Variance of Point Depth (mm. sq.):  $Var(Y) = 25.141$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.289$

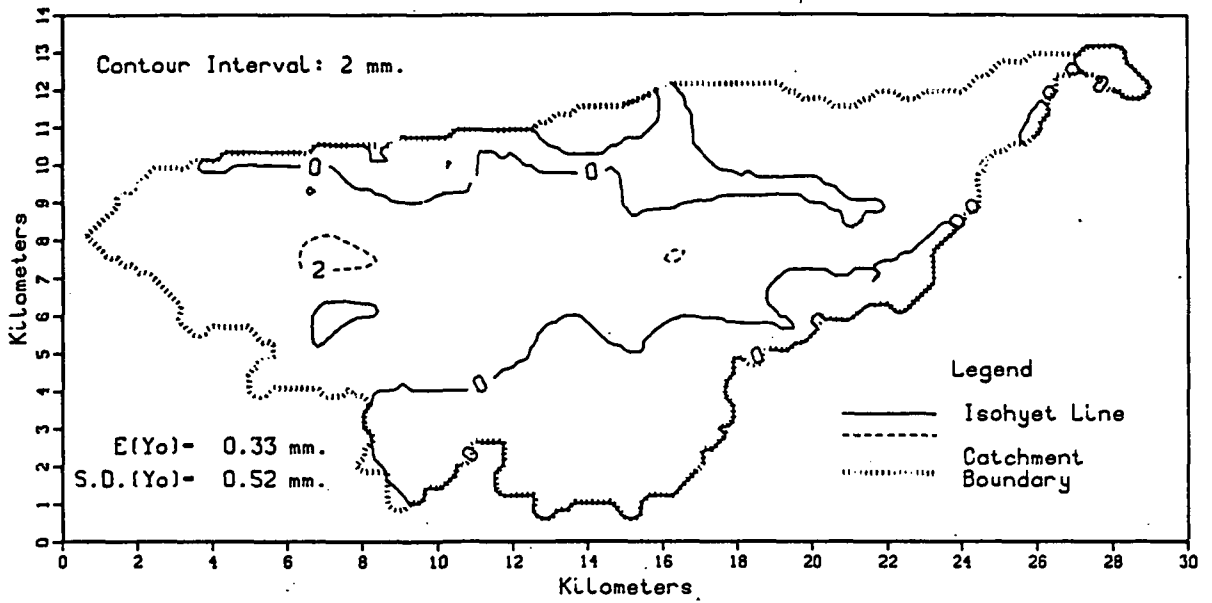
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.850	0.0	1.000	0.00	1.000
2	0.808	0.2	0.996	0.04	0.950
3	0.776	0.4	0.986	0.16	0.898
4	0.732	0.6	0.971	0.36	0.851
5	0.662	0.8	0.951	0.64	0.810
6	0.593	1.0	0.926	1.00	0.764
7	0.522	1.2	0.900	1.44	0.713
8	0.446	1.4	0.871	1.96	0.665
9	0.370	1.6	0.840	2.56	0.627
10	0.311	1.8	0.808	3.24	0.592
11	0.235	2.0	0.775	4.00	0.557
12	0.173	2.2	0.742	4.84	0.521
13	0.127	2.4	0.707	5.76	0.484
14	0.099	2.6	0.670	6.76	0.446
15	0.076	2.8	0.632	7.84	0.408
16	0.058	3.0	0.592	9.00	0.373
17	0.037	3.2	0.551	10.24	0.339
18	0.017	3.4	0.511	11.56	0.308
19	0.007	3.6	0.472	12.96	0.278
20	0.006	3.8	0.435	14.44	0.249
21	0.002	4.0	0.400	16.00	0.221
22	0.000	4.2	0.369	17.64	0.194
23	0.000	4.4	0.340	19.36	0.167
		4.6	0.316	21.16	0.139
		4.8	0.296	23.04	0.114
		5.0	0.279	25.00	0.090
		5.2	0.267	27.04	0.074
		5.4	0.257	29.16	0.060
		5.6	0.247	31.36	0.050
		5.8	0.238	33.64	0.039
		6.0	0.229	36.00	0.028



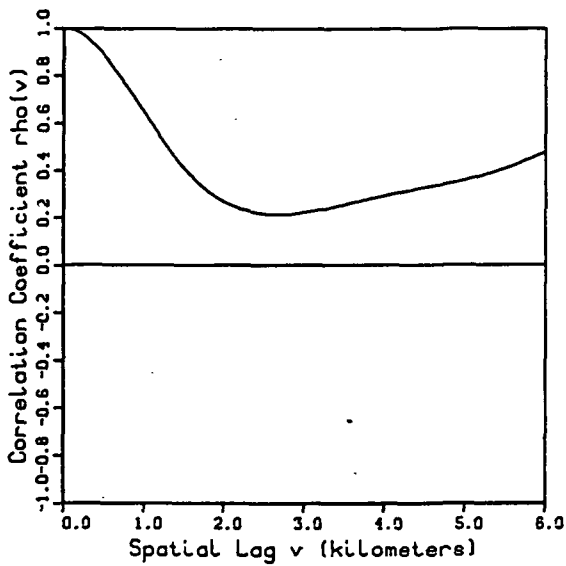
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

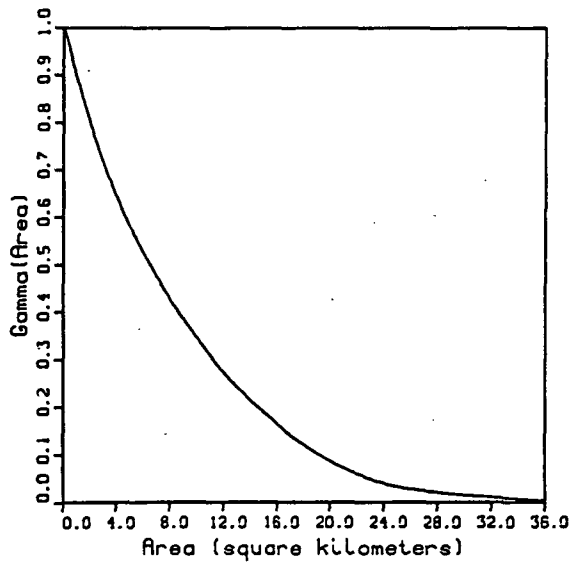
Storm Day  
July 29, 1972



Spatial Correlation



Variance Function



Storm Day July 29 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.300$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.700$

Expected Value of Point Depth (mm.):  $E(Y) = 0.389$

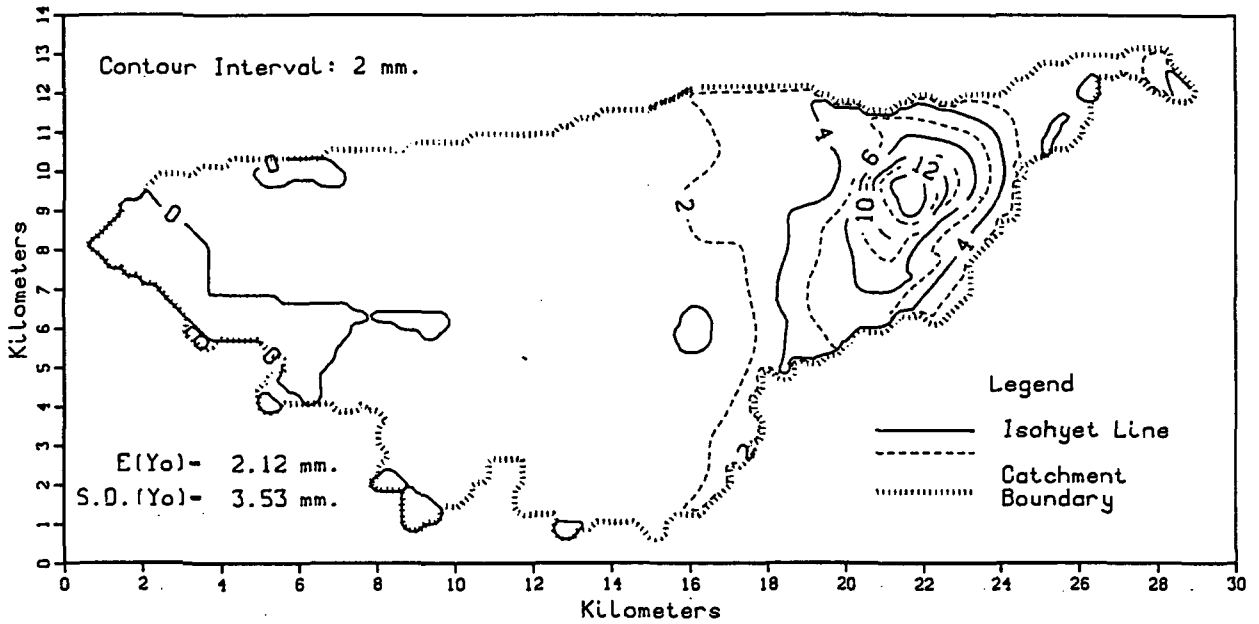
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.270$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.564$

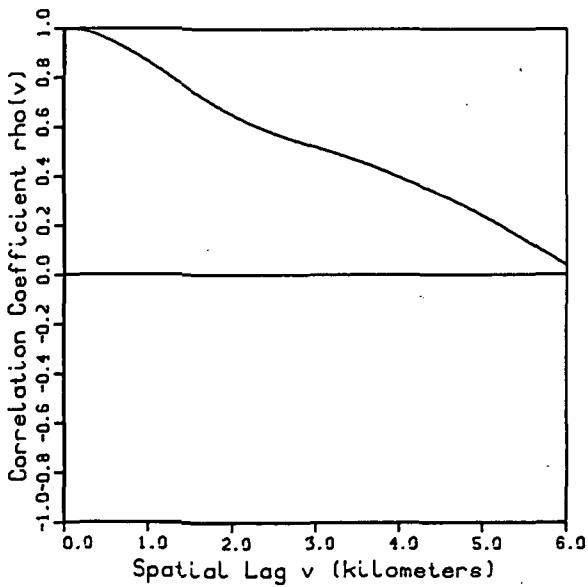
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.146	0.0	1.000	0.00	1.000
2	0.010	0.2	0.980	0.04	1.002
3	0.000	0.4	0.926	0.16	0.992
		0.6	0.845	0.36	0.971
		0.8	0.749	0.64	0.938
		1.0	0.646	1.00	0.899
		1.2	0.545	1.44	0.855
		1.4	0.452	1.96	0.805
		1.6	0.374	2.56	0.752
		1.8	0.312	3.24	0.698
		2.0	0.267	4.00	0.643
		2.2	0.238	4.84	0.590
		2.4	0.221	5.76	0.538
		2.6	0.213	6.76	0.486
		2.8	0.215	7.84	0.435
		3.0	0.223	9.00	0.384
		3.2	0.235	10.24	0.335
		3.4	0.250	11.56	0.287
		3.6	0.266	12.96	0.243
		3.8	0.281	14.44	0.202
		4.0	0.296	16.00	0.164
		4.2	0.310	17.64	0.129
		4.4	0.324	19.36	0.097
		4.6	0.335	21.16	0.069
		4.8	0.348	23.04	0.048
		5.0	0.362	25.00	0.031
		5.2	0.379	27.04	0.023
		5.4	0.400	29.16	0.016
		5.6	0.424	31.36	0.011
		5.8	0.451	33.64	0.006
		6.0	0.480	36.00	0.002

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

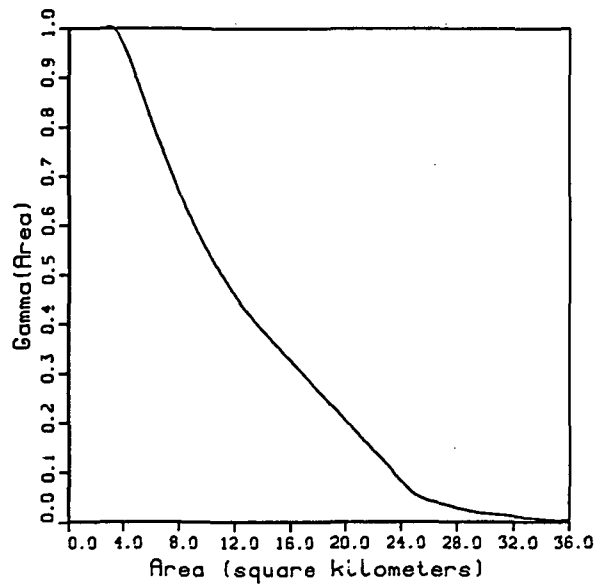
Storm Day  
 Aug 3, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.071$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.929$

Expected Value of Point Depth (mm.):  $E(Y) = 1.875$

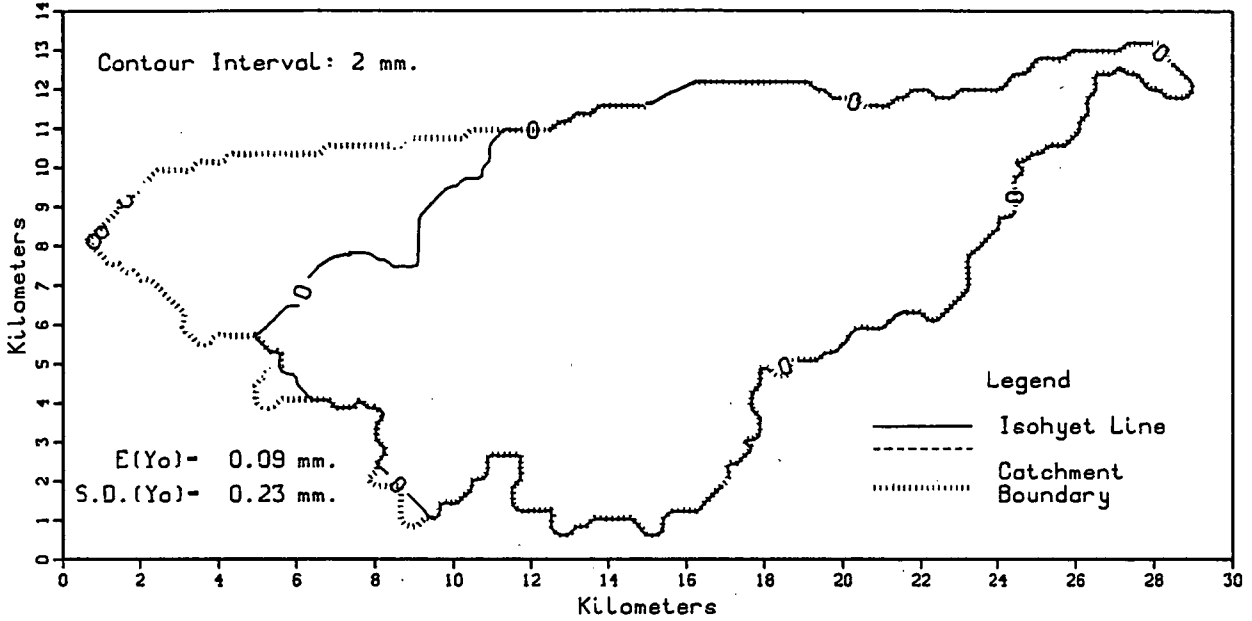
Variance of Point Depth (mm. sq.):  $Var(Y) = 8.132$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.500$

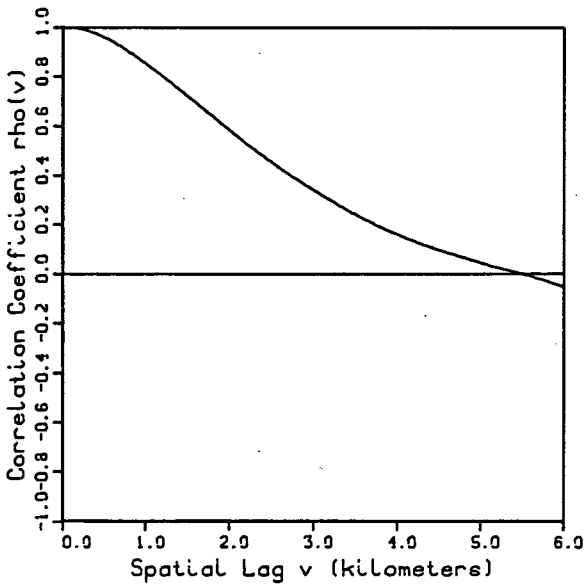
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.375	0.0	1.000	0.00	1.000
2	0.276	0.2	0.992	0.04	1.028
3	0.206	0.4	0.971	0.16	1.053
4	0.155	0.6	0.941	0.36	1.072
5	0.124	0.8	0.903	0.64	1.083
6	0.097	1.0	0.862	1.00	1.089
7	0.071	1.2	0.817	1.44	1.088
8	0.051	1.4	0.772	1.96	1.076
9	0.037	1.6	0.728	2.56	1.052
10	0.029	1.8	0.687	3.24	1.015
11	0.023	2.0	0.649	4.00	0.965
12	0.018	2.2	0.615	4.84	0.904
13	0.014	2.4	0.586	5.76	0.834
14	0.010	2.6	0.561	6.76	0.756
15	0.007	2.8	0.538	7.84	0.678
16	0.005	3.0	0.517	9.00	0.605
17	0.001	3.2	0.496	10.24	0.538
18	0.000	3.4	0.474	11.56	0.477
		3.6	0.450	12.96	0.422
		3.8	0.424	14.44	0.373
		4.0	0.395	16.00	0.325
		4.2	0.367	17.64	0.277
		4.4	0.338	19.36	0.225
		4.6	0.308	21.16	0.168
		4.8	0.276	23.04	0.112
		5.0	0.240	25.00	0.054
		5.2	0.200	27.04	0.035
		5.4	0.160	29.16	0.019
		5.6	0.119	31.36	0.012
		5.8	0.079	33.64	0.005
		6.0	0.038	36.00	0.001

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

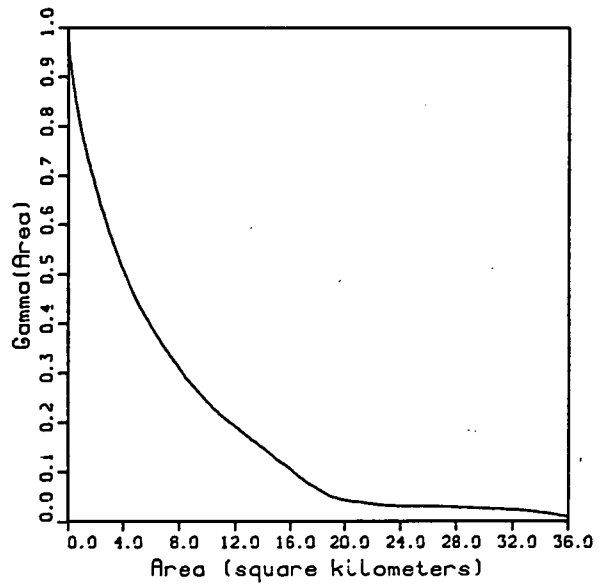
Storm Day  
 Aug 4, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.819$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.181$

Expected Value of Point Depth (mm.):  $E(Y) = 0.072$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.037$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.918$

Spatial Distribution  
of Total Storm Depth  
 $y$  (mm.)  $A_{cw}/A_c (Y \geq y)$

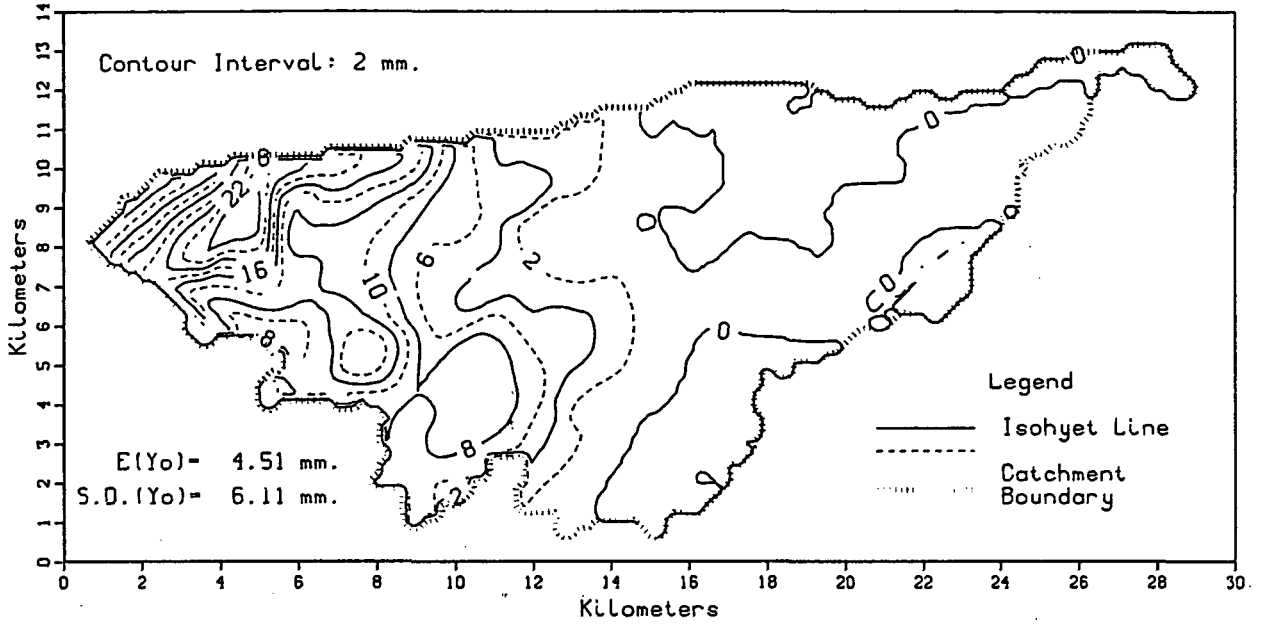
Spatial Correlation  
 $v$  (km.)  $\rho(v)$

Variance Function  
 $A$  (km.sq.)  $\Gamma(A)$

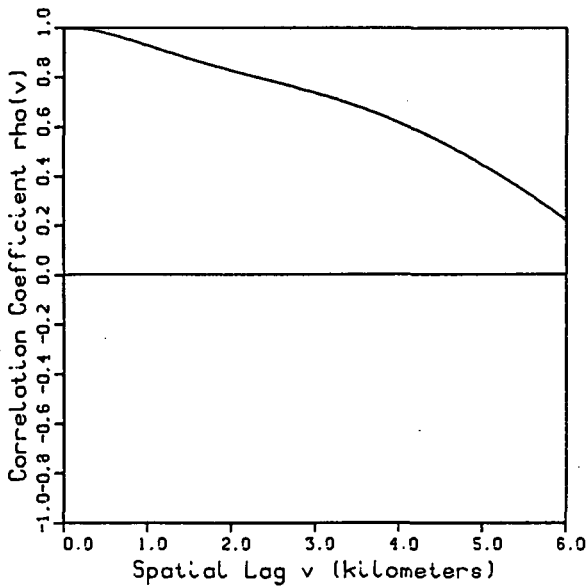
$y$ (mm.)	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km.sq.)	$\Gamma(A)$
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.993	0.04	0.973
		0.4	0.972	0.16	0.939
		0.6	0.939	0.36	0.897
		0.8	0.898	0.64	0.847
		1.0	0.850	1.00	0.794
		1.2	0.799	1.44	0.740
		1.4	0.746	1.96	0.683
		1.6	0.692	2.56	0.623
		1.8	0.637	3.24	0.564
		2.0	0.582	4.00	0.507
		2.2	0.528	4.84	0.453
		2.4	0.476	5.76	0.404
		2.6	0.427	6.76	0.358
		2.8	0.382	7.84	0.314
		3.0	0.338	9.00	0.272
		3.2	0.297	10.24	0.234
		3.4	0.257	11.56	0.200
		3.6	0.221	12.96	0.170
		3.8	0.188	14.44	0.138
		4.0	0.157	16.00	0.104
		4.2	0.130	17.64	0.069
		4.4	0.106	19.36	0.046
		4.6	0.084	21.16	0.037
		4.8	0.063	23.04	0.031
		5.0	0.042	25.00	0.030
		5.2	0.023	27.04	0.028
		5.4	0.005	29.16	0.026
		5.6	-0.013	31.36	0.023
		5.8	-0.033	33.64	0.018
		6.0	-0.057	36.00	0.007

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

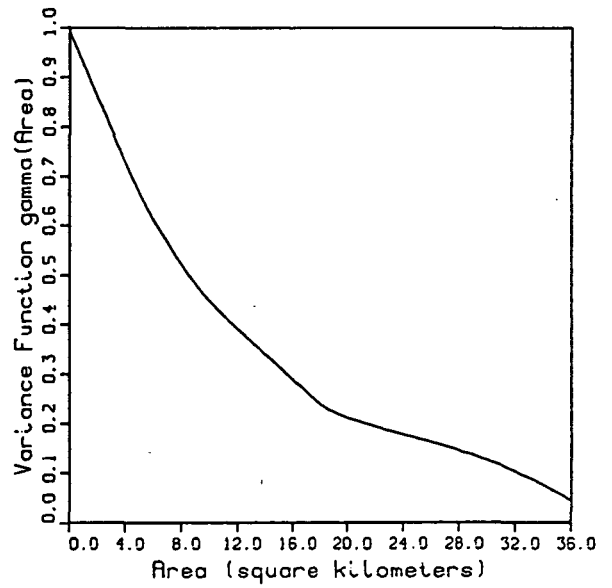
Storm Day  
 Aug 5, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.198$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.802$

Expected Value of Point Depth (mm.):  $E(Y) = 4.687$

Variance of Point Depth (mm. sq.):  $Var(Y) = 35.809$

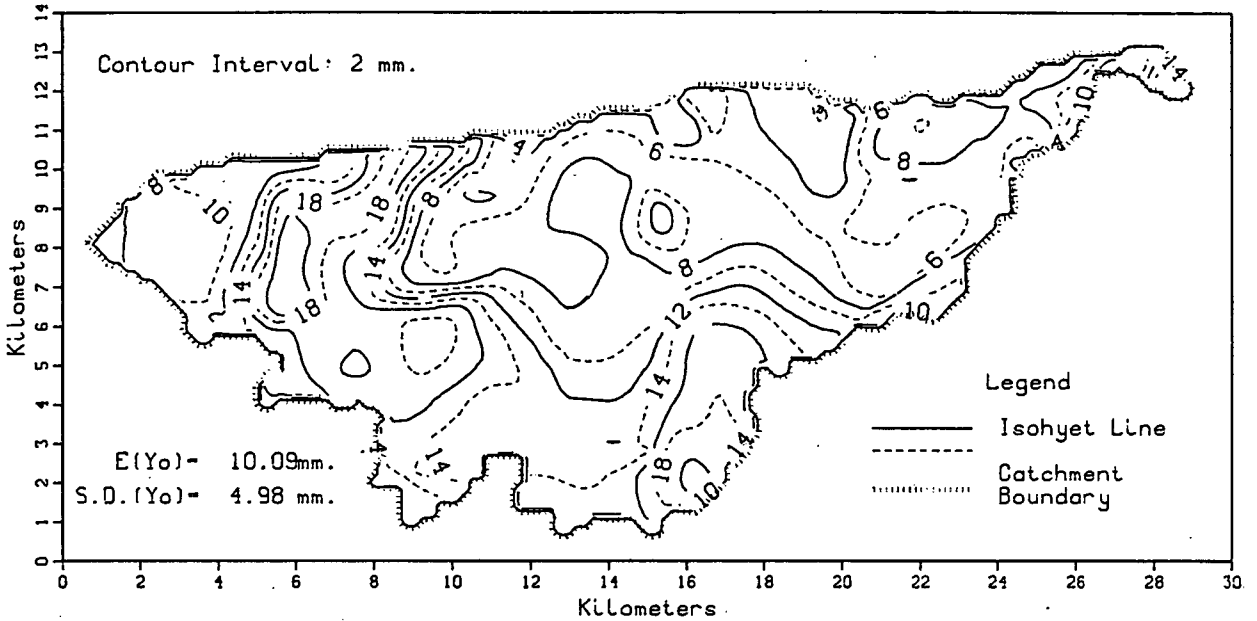
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.306$

Spatial Distribution of Total Storm Depth $y$ (mm.)		Spatial Correlation		Variance Function	
$y$ (mm.)	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	$\Gamma(A)$
1	0.528	0.0	1.000	0.00	1.000
2	0.468	0.2	0.996	0.04	0.991
3	0.430	0.4	0.984	0.16	0.980
4	0.395	0.6	0.967	0.36	0.966
5	0.362	0.8	0.947	0.64	0.947
6	0.330	1.0	0.925	1.00	0.923
7	0.297	1.2	0.903	1.44	0.894
8	0.259	1.4	0.881	1.96	0.860
9	0.221	1.6	0.861	2.56	0.819
10	0.190	1.8	0.841	3.24	0.773
11	0.167	2.0	0.822	4.00	0.725
12	0.135	2.2	0.804	4.84	0.674
13	0.107	2.4	0.787	5.76	0.623
14	0.091	2.6	0.769	6.76	0.574
15	0.077	2.8	0.751	7.84	0.525
16	0.064	3.0	0.732	9.00	0.480
17	0.055	3.2	0.712	10.24	0.439
18	0.045	3.4	0.690	11.56	0.401
19	0.036	3.6	0.666	12.96	0.365
20	0.029	3.8	0.640	14.44	0.328
21	0.023	4.0	0.612	16.00	0.287
22	0.016	4.2	0.583	17.64	0.246
23	0.012	4.4	0.552	19.36	0.217
24	0.007	4.6	0.519	21.16	0.200
25	0.003	4.8	0.483	23.04	0.184
26	0.000	5.0	0.443	25.00	0.169
		5.2	0.403	27.04	0.153
		5.4	0.360	29.16	0.133
		5.6	0.316	31.36	0.110
		5.8	0.268	33.64	0.080
		6.0	0.220	36.00	0.044

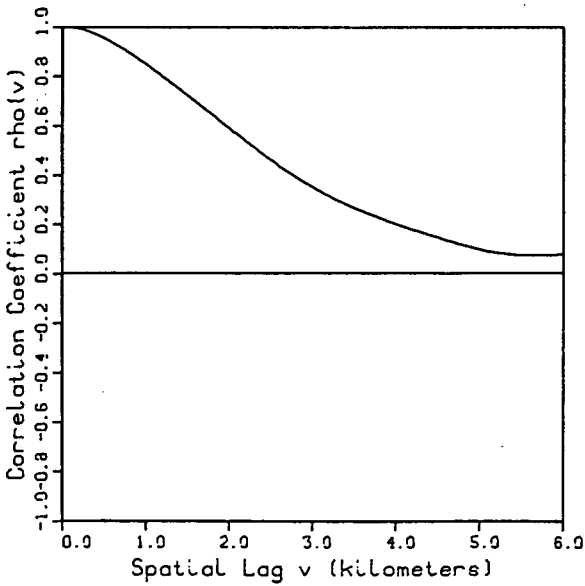


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

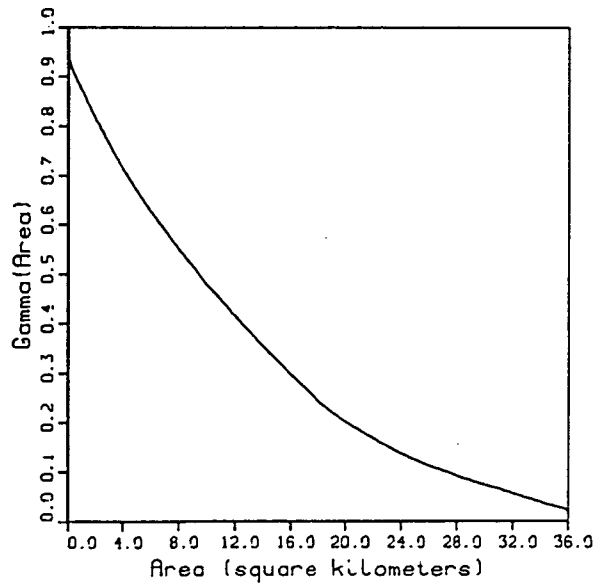
Storm Day  
 Aug 6, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 10.935$

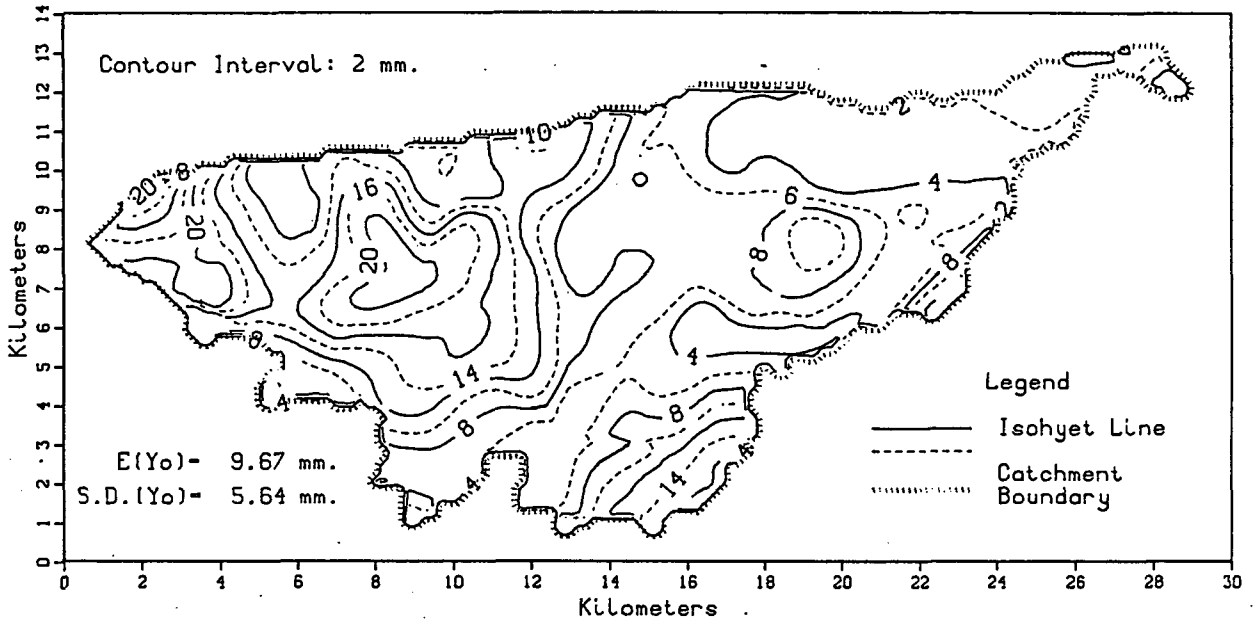
Variance of Point Depth (mm. sq.):  $Var(Y) = 22.944$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.482$

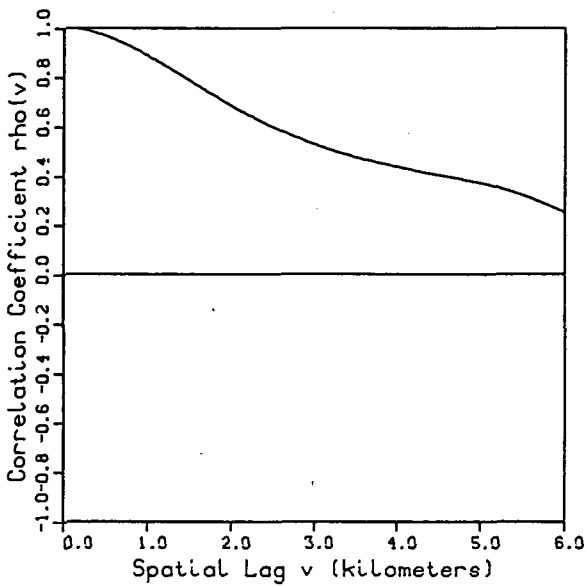
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	1.000	0.0	1.000	0.00	1.000
2	0.999	0.2	0.992	0.04	0.966
3	0.985	0.4	0.969	0.16	0.931
4	0.958	0.6	0.935	0.36	0.911
5	0.913	0.8	0.893	0.64	0.895
6	0.846	1.0	0.846	1.00	0.874
7	0.751	1.2	0.797	1.44	0.848
8	0.655	1.4	0.746	1.96	0.819
9	0.565	1.6	0.694	2.56	0.785
10	0.489	1.8	0.641	3.24	0.750
11	0.444	2.0	0.588	4.00	0.712
12	0.408	2.2	0.535	4.84	0.674
13	0.360	2.4	0.484	5.76	0.635
14	0.284	2.6	0.436	6.76	0.596
15	0.232	2.8	0.390	7.84	0.555
16	0.188	3.0	0.349	9.00	0.514
17	0.126	3.2	0.312	10.24	0.471
18	0.078	3.4	0.279	11.56	0.428
19	0.042	3.6	0.250	12.96	0.385
20	0.021	3.8	0.224	14.44	0.341
21	0.010	4.0	0.199	16.00	0.296
22	0.004	4.2	0.176	17.64	0.252
23	0.004	4.4	0.155	19.36	0.213
24	0.003	4.6	0.134	21.16	0.180
25	0.003	4.8	0.113	23.04	0.150
26	0.002	5.0	0.096	25.00	0.122
27	0.002	5.2	0.083	27.04	0.101
28	0.002	5.4	0.075	29.16	0.080
29	0.002	5.6	0.073	31.36	0.061
30	0.002	5.8	0.074	33.64	0.041
31	0.001	6.0	0.078	36.00	0.022
32	0.001				
33	0.001				
34	0.001				
35	0.000				
36	0.000				
37	0.000				
38	0.000				
39	0.000				

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

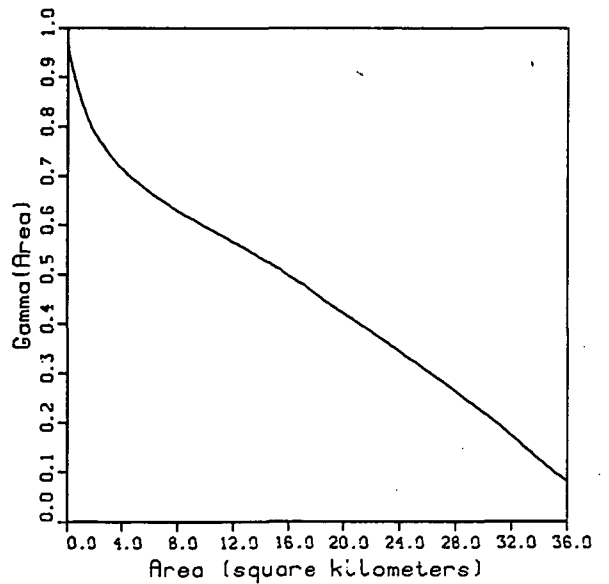
Storm Day  
 Aug 8, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.):  $E(Y) = 9.785$

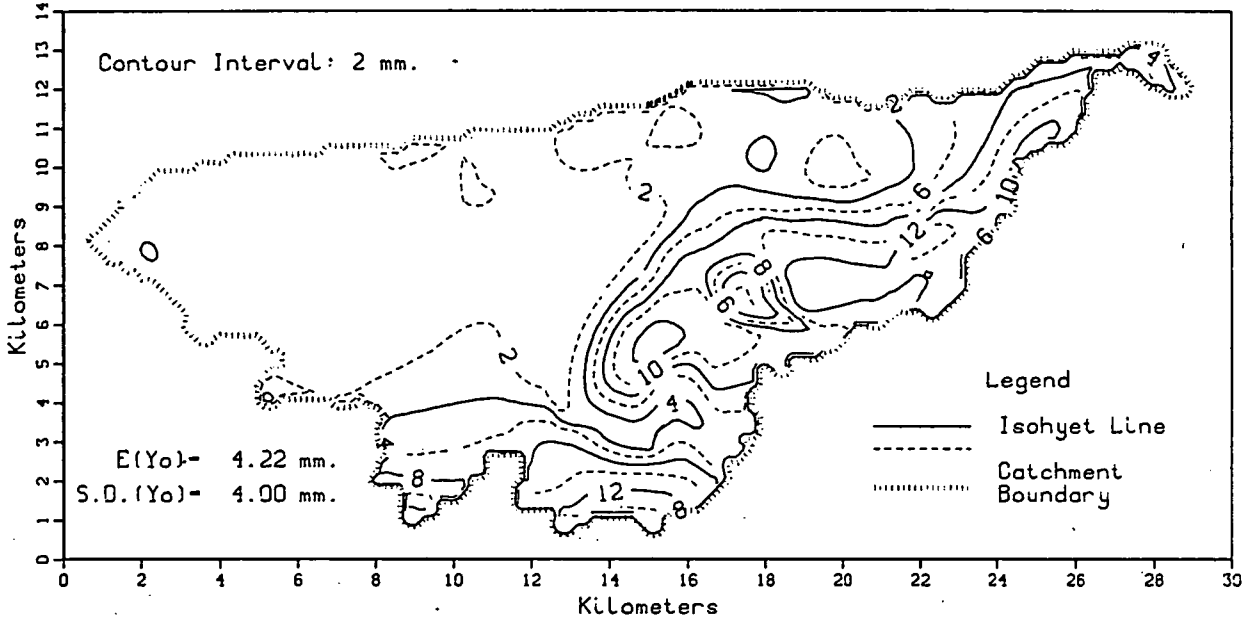
Variance of Point Depth (mm. sq.):  $Var(Y) = 29.731$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.602$

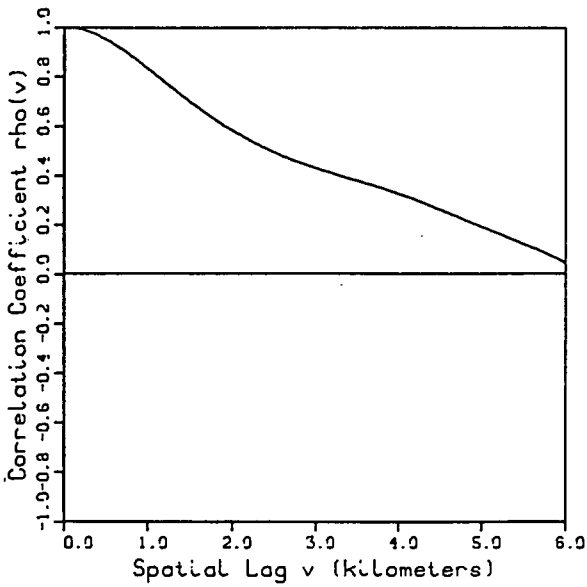
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.992	0.0	1.000	0.00	1.000
2	0.979	0.2	0.994	0.04	0.973
3	0.917	0.4	0.977	0.16	0.946
4	0.856	0.6	0.953	0.36	0.916
5	0.798	0.8	0.922	0.64	0.885
6	0.719	1.0	0.886	1.00	0.852
7	0.636	1.2	0.847	1.44	0.819
8	0.527	1.4	0.805	1.96	0.788
9	0.470	1.6	0.764	2.56	0.761
10	0.432	1.8	0.722	3.24	0.735
11	0.383	2.0	0.682	4.00	0.713
12	0.331	2.2	0.646	4.84	0.691
13	0.281	2.4	0.612	5.76	0.671
14	0.235	2.6	0.581	6.76	0.651
15	0.194	2.8	0.552	7.84	0.631
16	0.152	3.0	0.525	9.00	0.612
17	0.120	3.2	0.502	10.24	0.592
18	0.098	3.4	0.482	11.56	0.572
19	0.076	3.6	0.465	12.96	0.550
20	0.050	3.8	0.449	14.44	0.526
21	0.022	4.0	0.434	16.00	0.497
22	0.014	4.2	0.420	17.64	0.465
23	0.010	4.4	0.406	19.36	0.432
24	0.007	4.6	0.394	21.16	0.398
25	0.005	4.8	0.381	23.04	0.362
26	0.003	5.0	0.368	25.00	0.322
27	0.002	5.2	0.351	27.04	0.282
28	0.001	5.4	0.330	29.16	0.237
29	0.000	5.6	0.306	31.36	0.190
30	0.000	5.8	0.279	33.64	0.134
		0.0	0.000	0.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

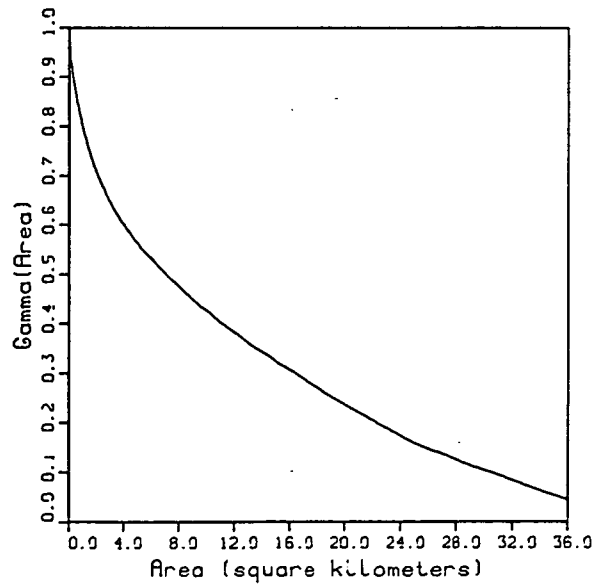
Storm Day  
 Aug 9, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y)=4.583$

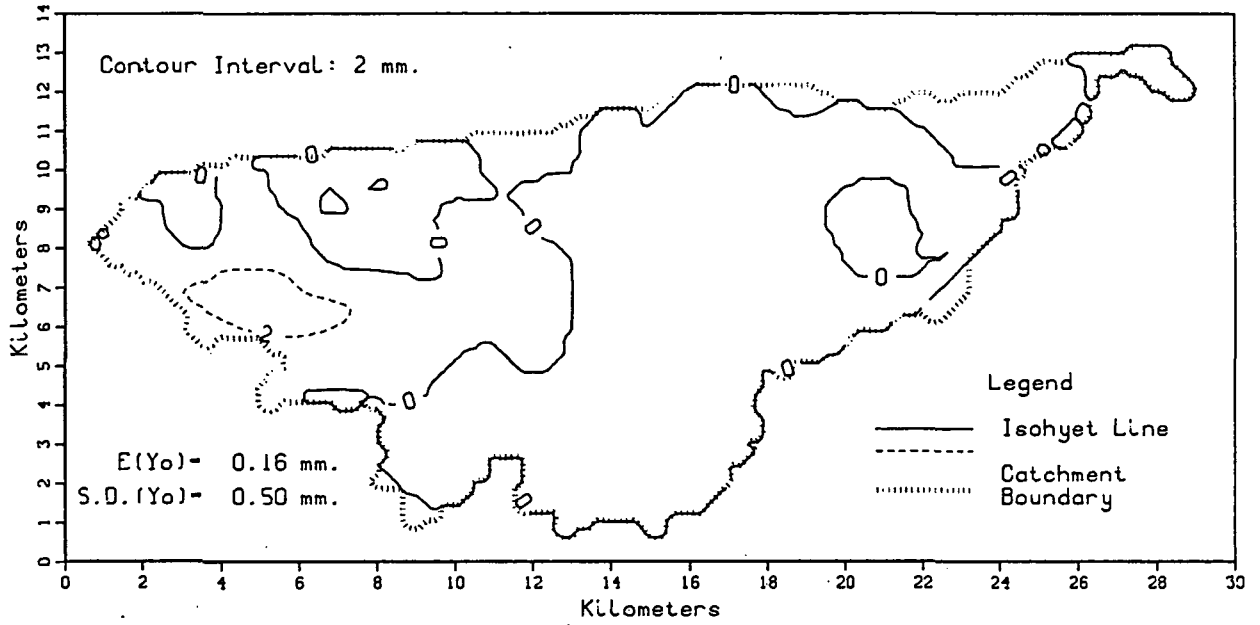
Variance of Point Depth (mm. sq.):  $Var(Y)=16.030$

Coef. of Skewness of Point Depth:  $S.C.(Y)=0.814$

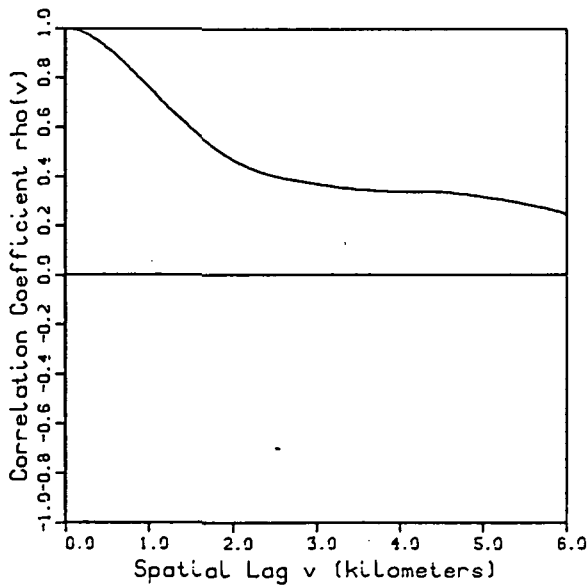
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.788	0.0	1.000	0.00	1.000
2	0.597	0.2	0.991	0.04	0.967
3	0.505	0.4	0.966	0.16	0.931
4	0.413	0.6	0.929	0.36	0.892
5	0.355	0.8	0.882	0.64	0.849
6	0.310	1.0	0.830	1.00	0.804
7	0.269	1.2	0.775	1.44	0.757
8	0.228	1.4	0.721	1.96	0.712
9	0.189	1.6	0.669	2.56	0.672
10	0.145	1.8	0.622	3.24	0.634
11	0.104	2.0	0.579	4.00	0.600
12	0.064	2.2	0.541	4.84	0.568
13	0.019	2.4	0.506	5.76	0.538
14	0.006	2.6	0.476	6.76	0.508
15	0.001	2.8	0.451	7.84	0.478
16	0.000	3.0	0.427	9.00	0.449
17	0.000	3.2	0.406	10.24	0.420
		3.4	0.385	11.56	0.391
		3.6	0.365	12.96	0.363
		3.8	0.345	14.44	0.334
		4.0	0.322	16.00	0.306
		4.2	0.298	17.64	0.276
		4.4	0.272	19.36	0.247
		4.6	0.244	21.16	0.217
		4.8	0.217	23.04	0.188
		5.0	0.189	25.00	0.158
		5.2	0.162	27.04	0.135
		5.4	0.134	29.16	0.112
		5.6	0.106	31.36	0.090
		5.8	0.077	33.64	0.066
		6.0	0.043	36.00	0.044

Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

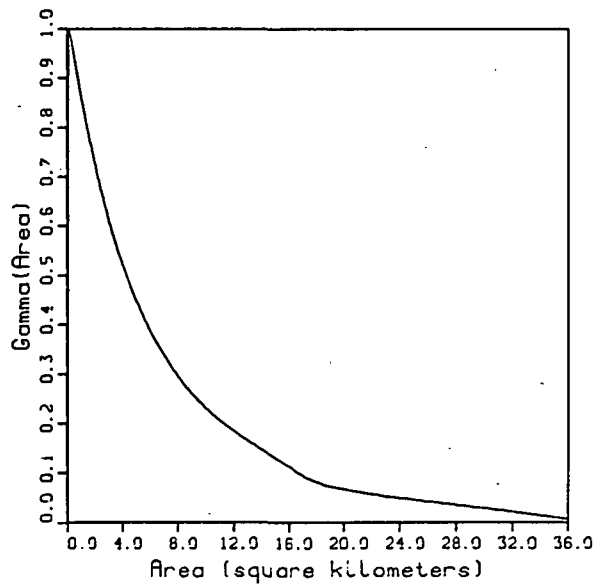
Storm Day  
 Aug 10, 1972



Spatial Correlation



Variance Function



Storm Day Aug 10 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.617$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.383$

Expected Value of Point Depth (mm.):  $E(Y)=0.205$

Variance of Point Depth (mm. sq.):  $Var(Y)=0.258$

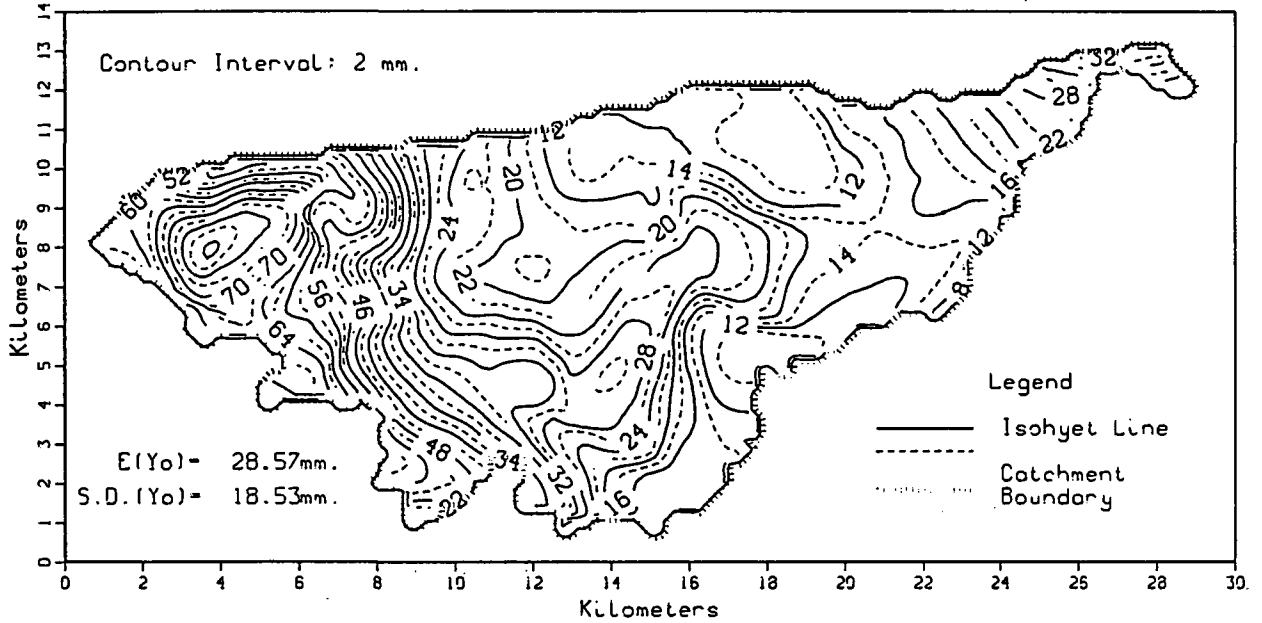
Coef. of Skewness of Point Depth:  $S.C.(Y)=3.289$

Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.069	0.0	1.000	0.00	1.000
2	0.030	0.2	0.986	0.04	1.005
3	0.000	0.4	0.948	0.16	0.995
		0.6	0.894	0.36	0.968
		0.8	0.830	0.64	0.922
		1.0	0.762	1.00	0.865
		1.2	0.692	1.44	0.800
		1.4	0.626	1.96	0.730
		1.6	0.564	2.56	0.658
		1.8	0.511	3.24	0.587
		2.0	0.466	4.00	0.520
		2.2	0.433	4.84	0.457
		2.4	0.408	5.76	0.400
		2.6	0.391	6.76	0.348
		2.8	0.378	7.84	0.301
		3.0	0.367	9.00	0.259
		3.2	0.357	10.24	0.224
		3.4	0.349	11.56	0.193
		3.6	0.343	12.96	0.166
		3.8	0.340	14.44	0.139
		4.0	0.337	16.00	0.112
		4.2	0.337	17.64	0.085
		4.4	0.337	19.36	0.069
		4.6	0.331	21.16	0.060
		4.8	0.324	23.04	0.051
		5.0	0.315	25.00	0.045
		5.2	0.305	27.04	0.038
		5.4	0.293	29.16	0.030
		5.6	0.279	31.36	0.023
		5.8	0.264	33.64	0.014
		6.0	0.246	36.00	0.005

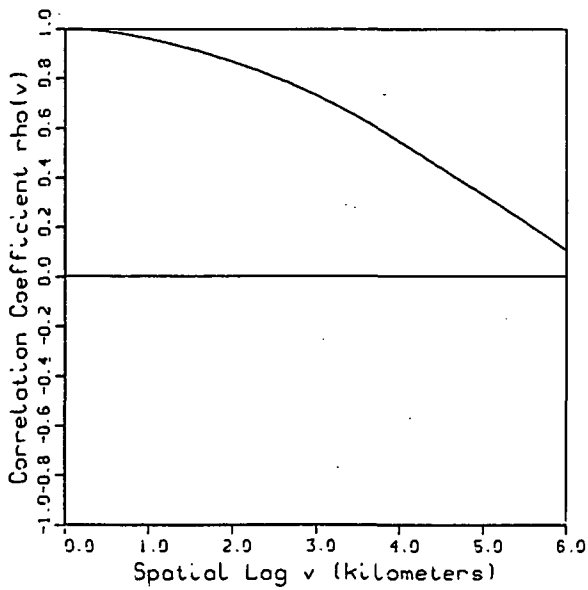


Walnut Gulch, Arizona  
Ac-154.21 sq.km.

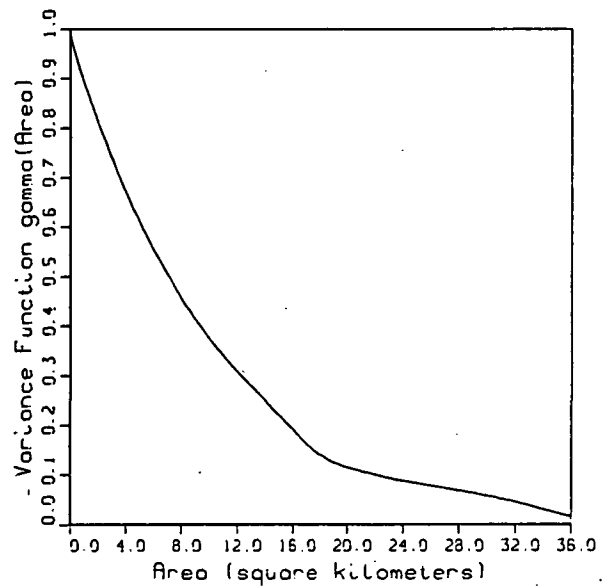
Storm Day  
Aug 12, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 29.425$

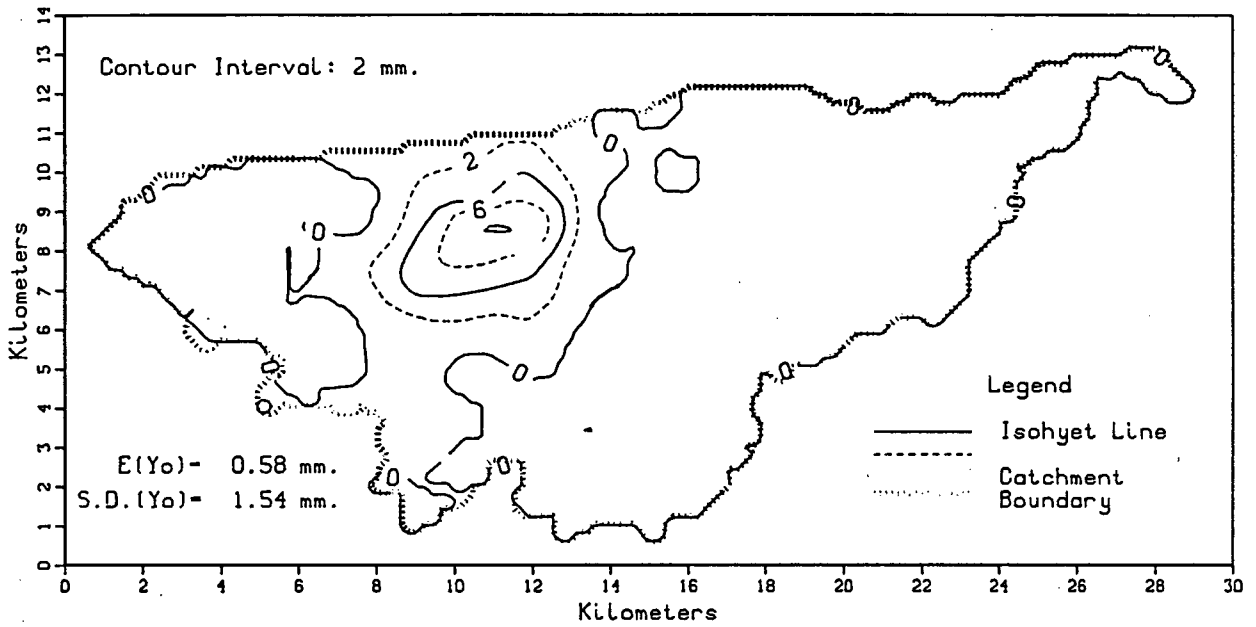
Variance of Point Depth (mm. sq.):  $Var(Y) = 342.981$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.073$

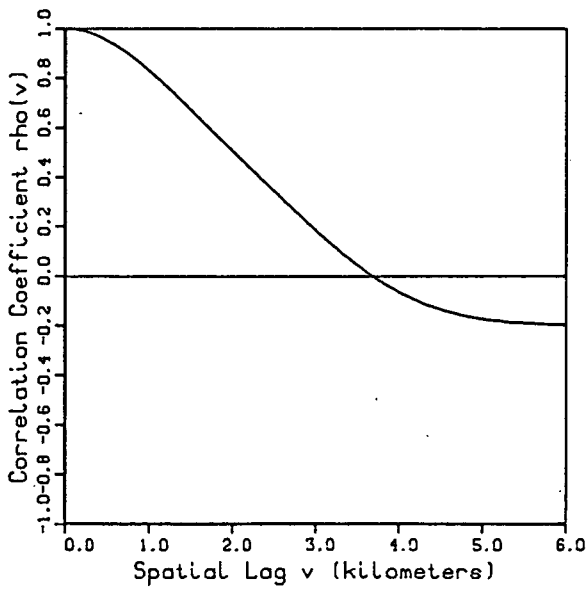
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	1.000	0.0	1.000	0.00	1.000
4	1.000	0.2	0.998	0.04	0.989
7	1.000	0.4	0.992	0.16	0.973
10	0.952	0.6	0.983	0.36	0.950
13	0.861	0.8	0.972	0.64	0.923
16	0.716	1.0	0.958	1.00	0.891
19	0.617	1.2	0.943	1.44	0.855
22	0.523	1.4	0.926	1.96	0.815
25	0.435	1.6	0.907	2.56	0.769
28	0.368	1.8	0.888	3.24	0.718
31	0.312	2.0	0.866	4.00	0.668
34	0.274	2.2	0.843	4.84	0.615
37	0.252	2.4	0.818	5.76	0.563
40	0.233	2.6	0.791	6.76	0.513
43	0.217	2.8	0.762	7.84	0.461
46	0.201	3.0	0.731	9.00	0.411
49	0.183	3.2	0.697	10.24	0.364
52	0.162	3.4	0.662	11.56	0.320
55	0.140	3.6	0.625	12.96	0.279
58	0.123	3.8	0.585	14.44	0.237
61	0.109	4.0	0.544	16.00	0.191
64	0.086	4.2	0.501	17.64	0.148
67	0.058	4.4	0.457	19.36	0.121
70	0.043	4.6	0.415	21.16	0.106
73	0.029	4.8	0.372	23.04	0.092
76	0.014	5.0	0.330	25.00	0.082
79	0.003	5.2	0.286	27.04	0.072
82	0.000	5.4	0.242	29.16	0.061
85	0.000	5.6	0.197	31.36	0.049
88	0.000	5.8	0.152	33.64	0.033
91	0.000	6.0	0.107	36.00	0.015

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

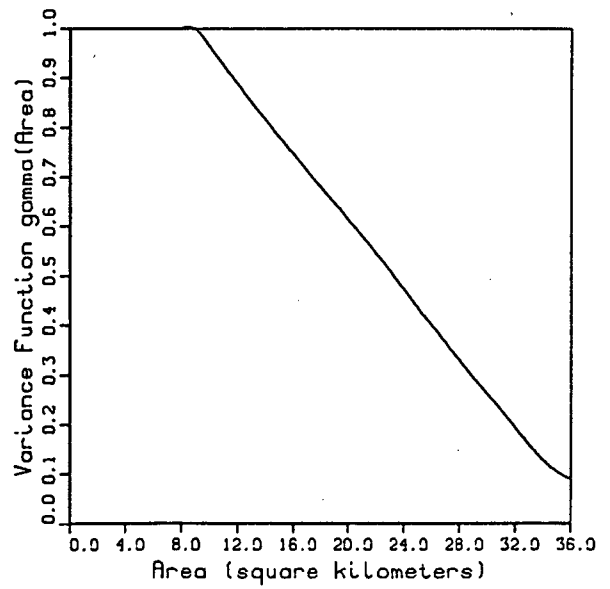
Storm Day  
 Aug 13, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.682$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.318$

Expected Value of Point Depth (mm.):  $E(Y) = 0.561$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.087$

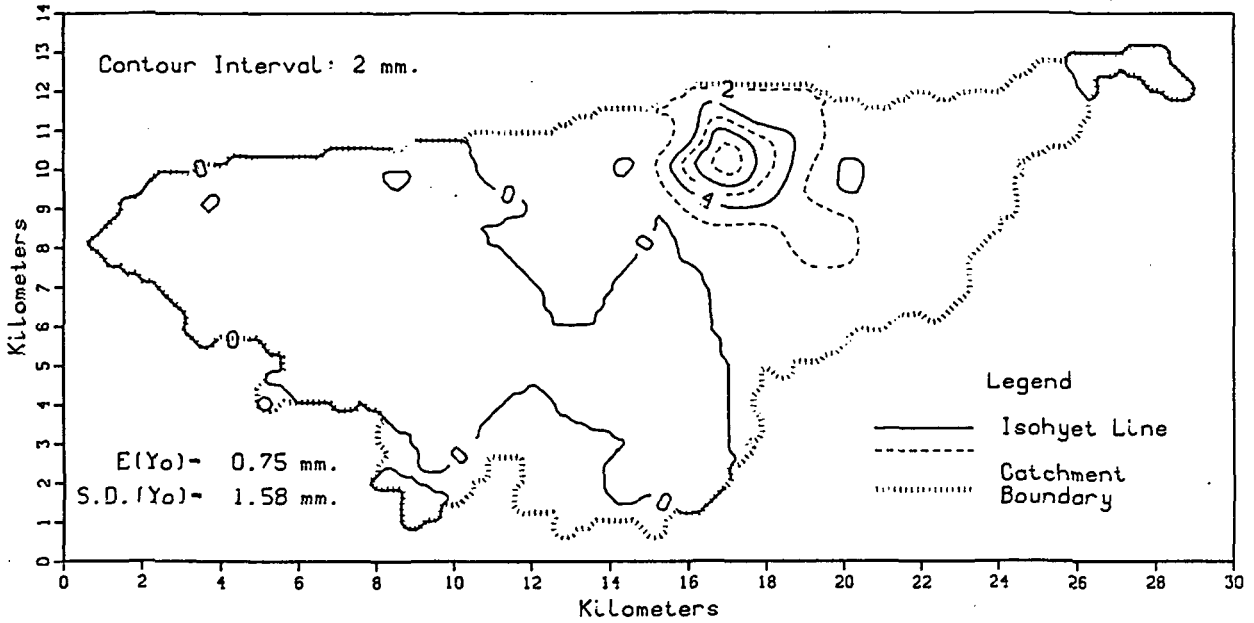
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.076$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.151	0.0	1.000	0.00	1.000
2	0.110	0.2	0.992	0.04	1.043
3	0.079	0.4	0.968	0.16	1.081
4	0.055	0.6	0.931	0.36	1.114
5	0.036	0.8	0.885	0.64	1.139
6	0.021	1.0	0.830	1.00	1.159
7	0.011	1.2	0.769	1.44	1.175
8	0.001	1.4	0.705	1.96	1.185
9	0.000	1.6	0.638	2.56	1.187
		1.8	0.572	3.24	1.182
		2.0	0.506	4.00	1.169
		2.2	0.441	4.84	1.148
		2.4	0.377	5.76	1.121
		2.6	0.312	6.76	1.086
		2.8	0.248	7.84	1.047
		3.0	0.186	9.00	1.002
		3.2	0.126	10.24	0.955
		3.4	0.070	11.56	0.904
		3.6	0.019	12.96	0.852
		3.8	-.026	14.44	0.799
		4.0	-.066	16.00	0.746
		4.2	-.099	17.64	0.691
		4.4	-.127	19.36	0.635
		4.6	-.148	21.16	0.574
		4.8	-.164	23.04	0.508
		5.0	-.176	25.00	0.435
		5.2	-.185	27.04	0.363
		5.4	-.191	29.16	0.289
		5.6	-.196	31.36	0.217
		5.8	-.199	33.64	0.139
		6.0	-.201	36.00	0.090

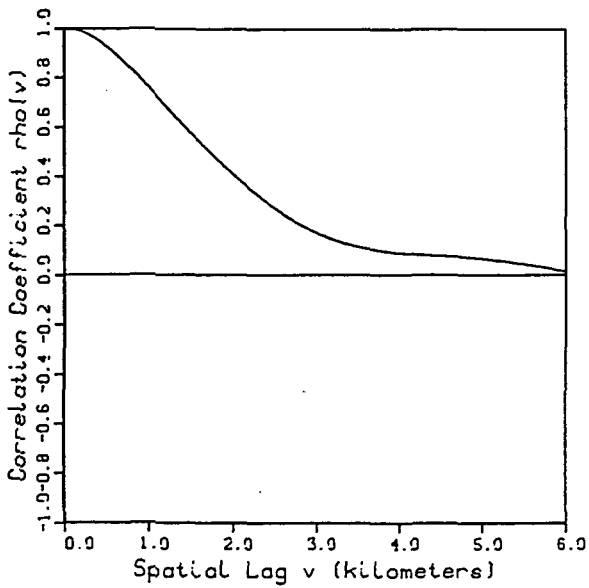
C-4

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

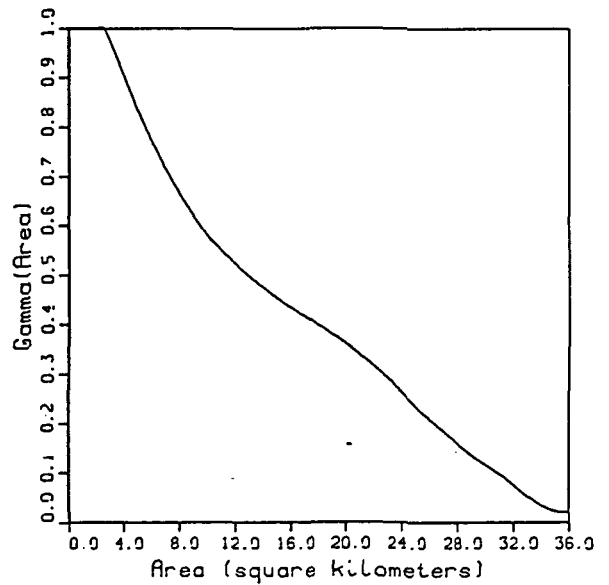
Storm Day  
 Aug 17, 1972



Spatial Correlation



Variance Function



Storm Day Aug 17 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.474$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.526$

Expected Value of Point Depth (mm.):  $E(Y) = 0.653$

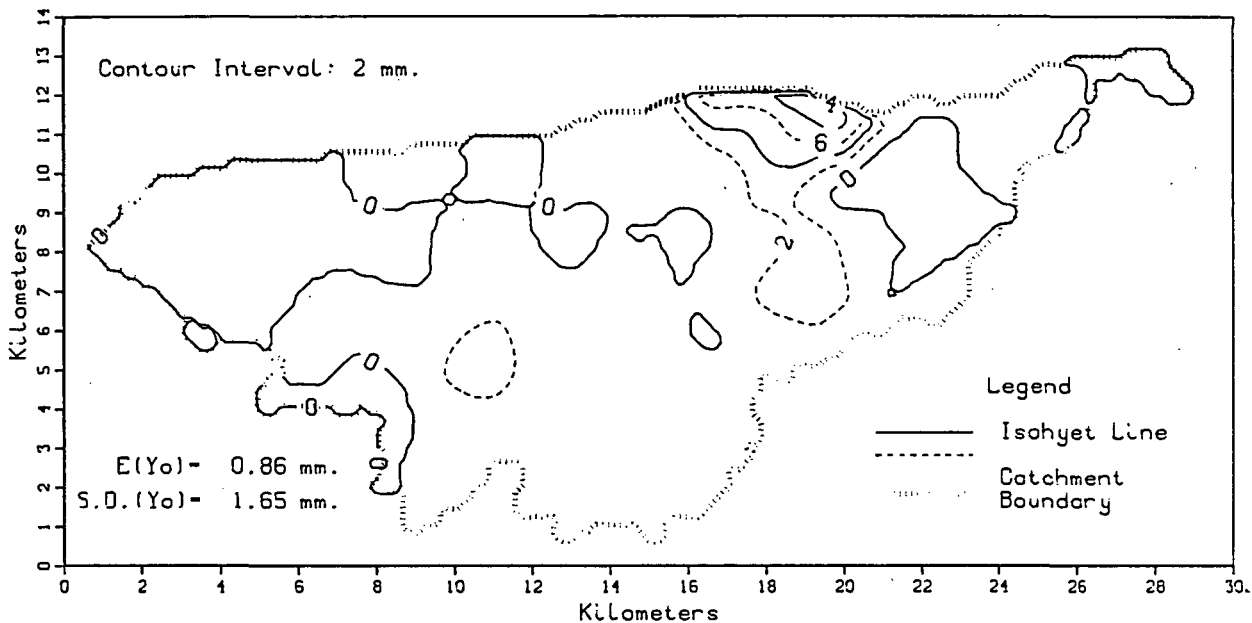
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.023$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.816$

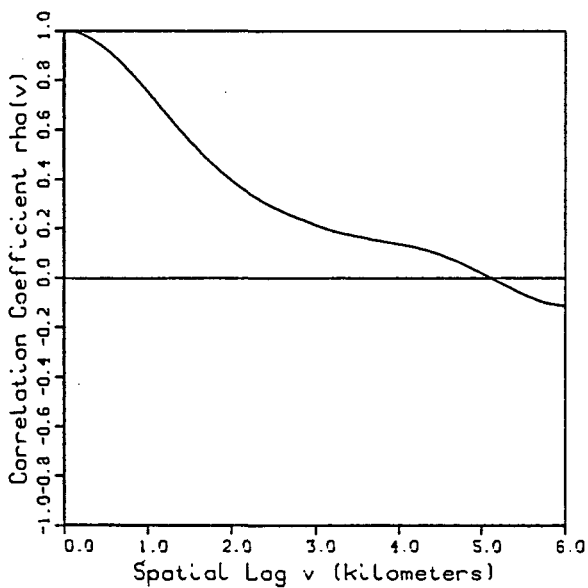
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.190	0.0	1.000	0.00	1.000
2	0.092	0.2	0.987	0.04	1.029
3	0.061	0.4	0.951	0.16	1.053
4	0.036	0.6	0.897	0.36	1.069
5	0.026	0.8	0.832	0.64	1.075
6	0.020	1.0	0.759	1.00	1.073
7	0.015	1.2	0.685	1.44	1.063
8	0.010	1.4	0.611	1.96	1.041
9	0.006	1.6	0.541	2.56	1.005
10	0.003	1.8	0.474	3.24	0.958
11	0.000	2.0	0.411	4.00	0.904
		2.2	0.352	4.84	0.845
		2.4	0.298	5.76	0.786
		2.6	0.249	6.76	0.728
		2.8	0.207	7.84	0.672
		3.0	0.172	9.00	0.621
		3.2	0.144	10.24	0.573
		3.4	0.123	11.56	0.534
		3.6	0.108	12.96	0.499
		3.8	0.097	14.44	0.465
		4.0	0.089	16.00	0.433
		4.2	0.083	17.64	0.405
		4.4	0.079	19.36	0.373
		4.6	0.076	21.16	0.336
		4.8	0.071	23.04	0.291
		5.0	0.065	25.00	0.234
		5.2	0.058	27.04	0.183
		5.4	0.049	29.16	0.133
		5.6	0.038	31.36	0.091
		5.8	0.026	33.64	0.040
		6.0	0.012	36.00	0.021

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

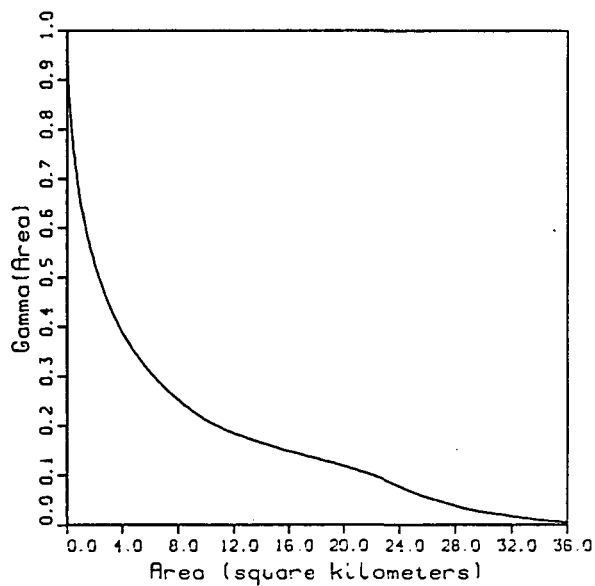
Storm Day  
 Aug 18, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.260$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.740$

Expected Value of Point Depth (mm.):  $E(Y) = 0.779$

Variance of Point Depth (mm. sq.):  $Var(Y) = 1.716$

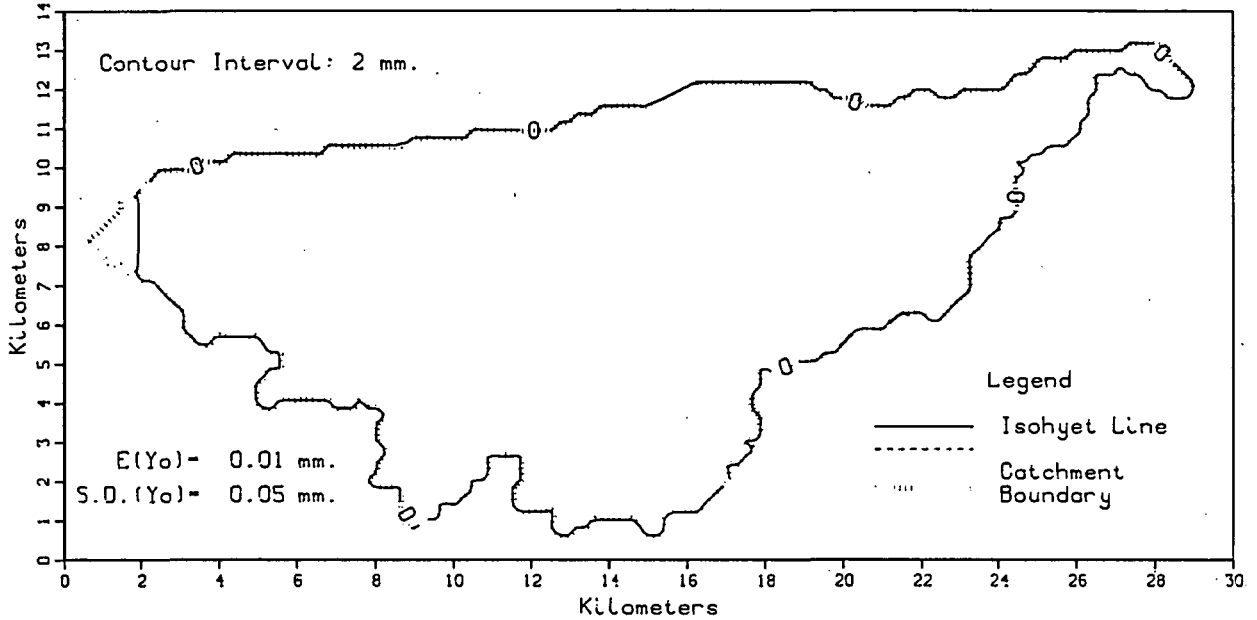
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.278$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.227	0.0	1.000	0.00	1.000
2	0.101	0.2	0.986	0.04	0.941
3	0.055	0.4	0.950	0.16	0.870
4	0.034	0.6	0.896	0.36	0.794
5	0.026	0.8	0.827	0.64	0.720
6	0.017	1.0	0.749	1.00	0.651
7	0.010	1.2	0.669	1.44	0.588
8	0.005	1.4	0.589	1.96	0.530
9	0.001	1.6	0.515	2.56	0.477
10	0.000	1.8	0.449	3.24	0.429
		2.0	0.391	4.00	0.386
		2.2	0.341	4.84	0.348
		2.4	0.300	5.76	0.314
		2.6	0.266	6.76	0.282
		2.8	0.238	7.84	0.254
		3.0	0.211	9.00	0.228
		3.2	0.188	10.24	0.206
		3.4	0.171	11.56	0.189
		3.6	0.157	12.96	0.174
		3.8	0.145	14.44	0.160
		4.0	0.133	16.00	0.147
		4.2	0.119	17.64	0.135
		4.4	0.101	19.36	0.123
		4.6	0.077	21.16	0.108
		4.8	0.047	23.04	0.088
		5.0	0.014	25.00	0.063
		5.2	-.020	27.04	0.045
		5.4	-.054	29.16	0.029
		5.6	-.085	31.36	0.019
		5.8	-.107	33.64	0.010
		6.0	-.117	36.00	0.004

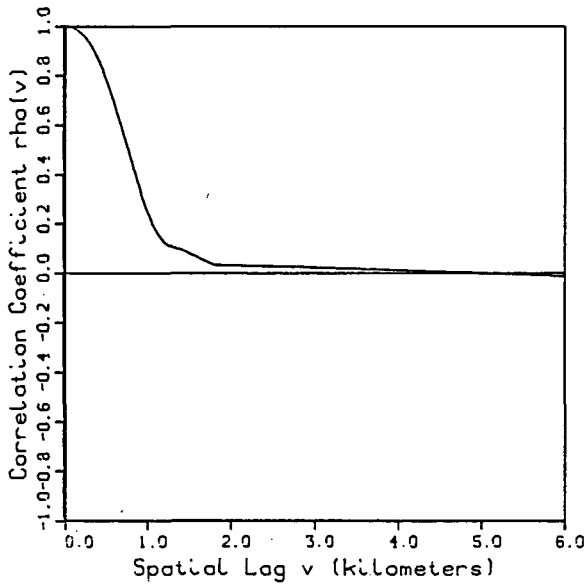


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

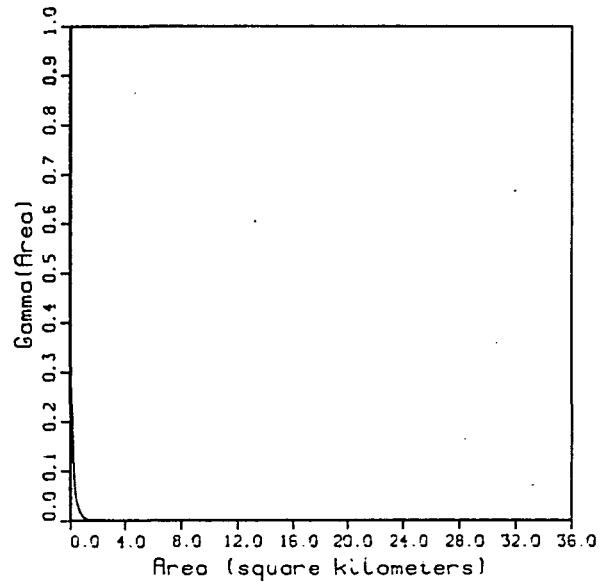
Storm Day  
 Aug 19, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.992$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.008$

Expected Value of Point Depth (mm.):  $E(Y) = 0.001$

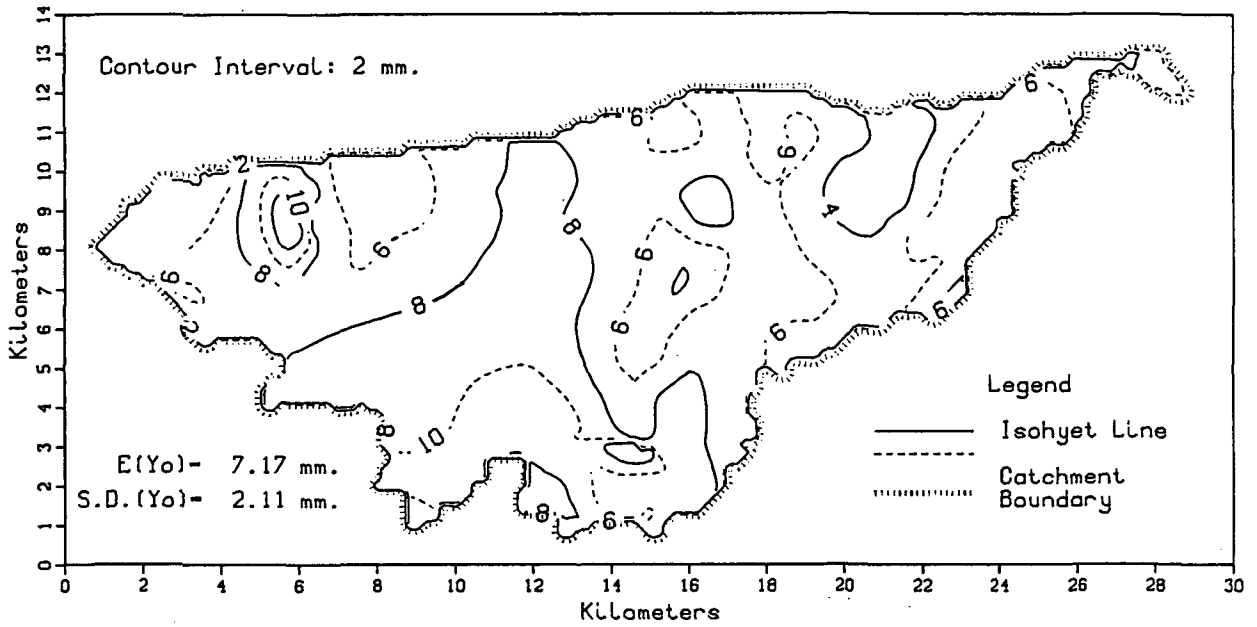
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.000$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 16.758$

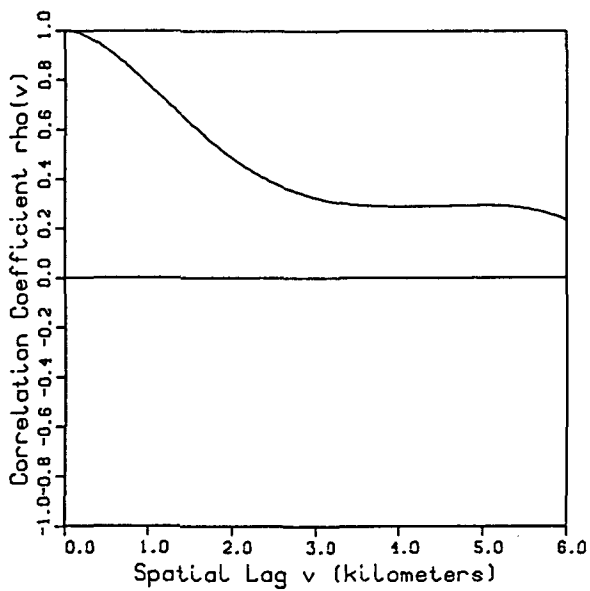
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.971	0.04	0.485
		0.4	0.872	0.16	0.227
		0.6	0.690	0.36	0.070
		0.8	0.469	0.64	0.027
		1.0	0.247	1.00	0.005
		1.2	0.125	1.44	0.001
		1.4	0.094	1.96	0.001
		1.6	0.062	2.56	0.000
		1.8	0.033	3.24	0.000
		2.0	0.031	4.00	0.000
		2.2	0.029	4.84	0.000
		2.4	0.027	5.76	0.000
		2.6	0.025	6.76	0.000
		2.8	0.022	7.84	0.000
		3.0	0.020	9.00	0.000
		3.2	0.018	10.24	0.000
		3.4	0.016	11.56	0.000
		3.6	0.014	12.96	0.000
		3.8	0.012	14.44	0.000
		4.0	0.009	16.00	0.000
		4.2	0.007	17.64	0.000
		4.4	0.004	19.36	0.000
		4.6	0.002	21.16	0.000
		4.8	0.000	23.04	0.000
		5.0	-.003	25.00	0.000
		5.2	-.005	27.04	0.000
		5.4	-.008	29.16	0.000
		5.6	-.010	31.36	0.000
		5.8	-.012	33.64	0.000
		6.0	-.015	36.00	0.000

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

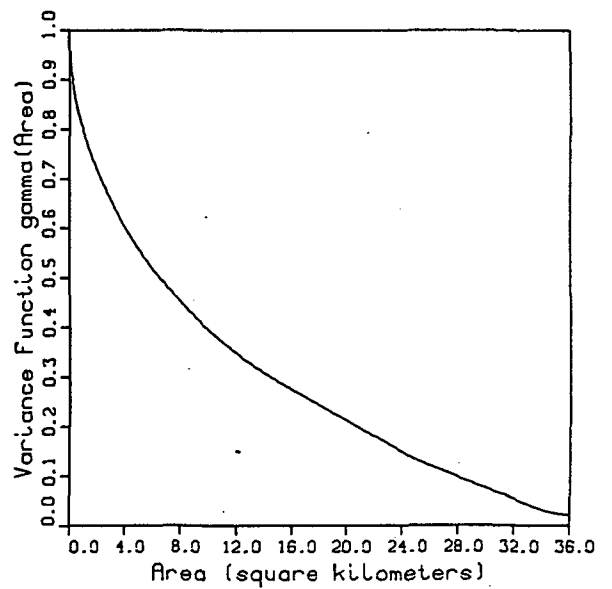
Storm Day  
 Aug 25, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y)=7.271$

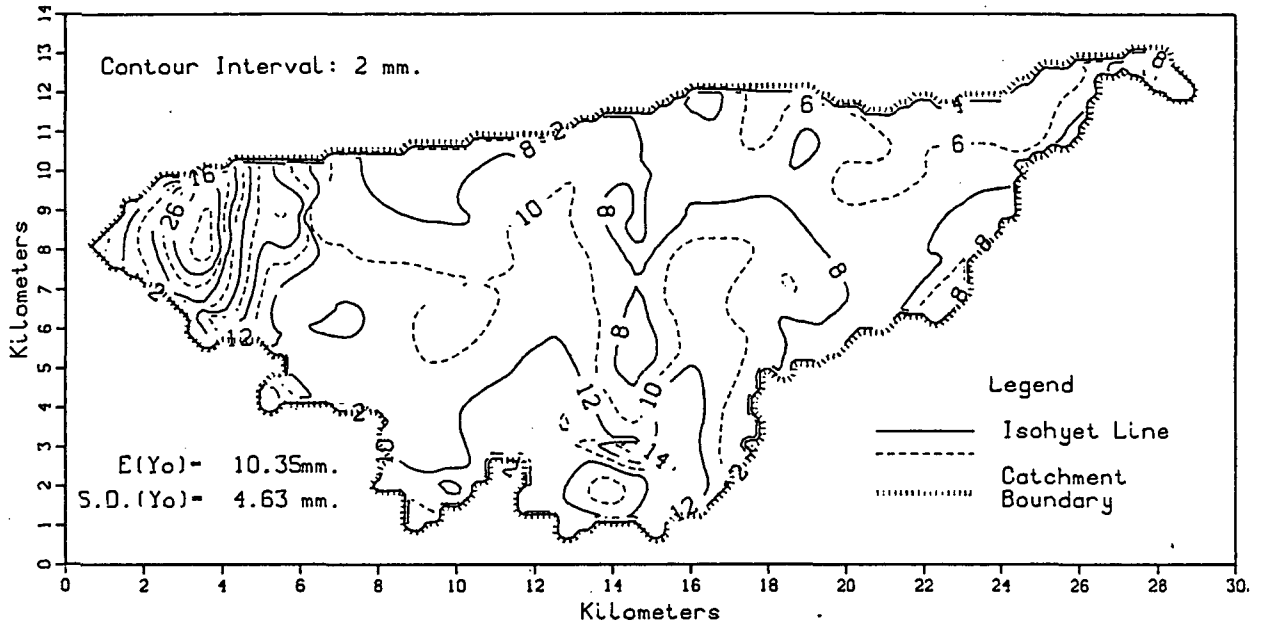
Variance of Point Depth (mm. sq.):  $Var(Y)=3.948$

Coef. of Skewness of Point Depth:  $S.C.(Y)=0.333$

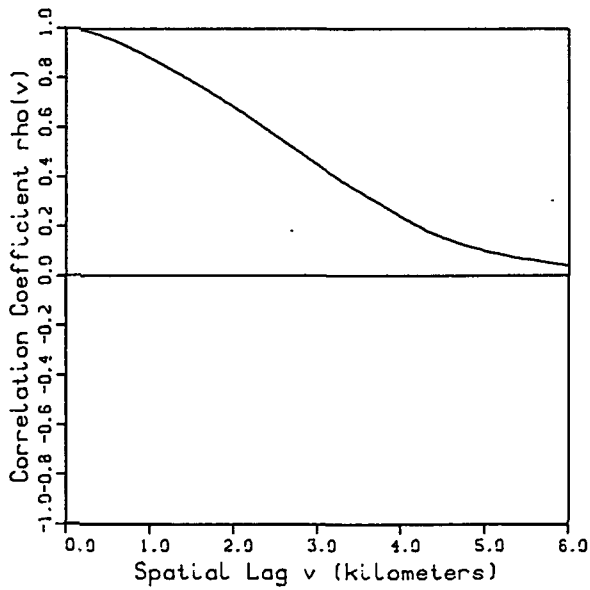
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.983	0.04	0.962
3	0.997	0.4	0.947	0.16	0.917
4	0.958	0.6	0.897	0.36	0.874
5	0.884	0.8	0.839	0.64	0.835
6	0.731	1.0	0.777	1.00	0.797
7	0.539	1.2	0.714	1.44	0.761
8	0.336	1.4	0.653	1.96	0.723
9	0.175	1.6	0.593	2.56	0.683
10	0.094	1.8	0.537	3.24	0.643
11	0.037	2.0	0.485	4.00	0.603
12	0.015	2.2	0.440	4.84	0.564
13	0.003	2.4	0.401	5.76	0.526
14	0.000	2.6	0.369	6.76	0.490
		2.8	0.343	7.84	0.454
		3.0	0.322	9.00	0.420
		3.2	0.307	10.24	0.387
		3.4	0.298	11.56	0.356
		3.6	0.292	12.96	0.326
		3.8	0.289	14.44	0.299
		4.0	0.287	16.00	0.273
		4.2	0.288	17.64	0.247
		4.4	0.289	19.36	0.221
		4.6	0.291	21.16	0.193
		4.8	0.292	23.04	0.164
		5.0	0.293	25.00	0.131
		5.2	0.291	27.04	0.108
		5.4	0.286	29.16	0.083
		5.6	0.275	31.36	0.061
		5.8	0.258	33.64	0.035
		6.0	0.233	36.00	0.021

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

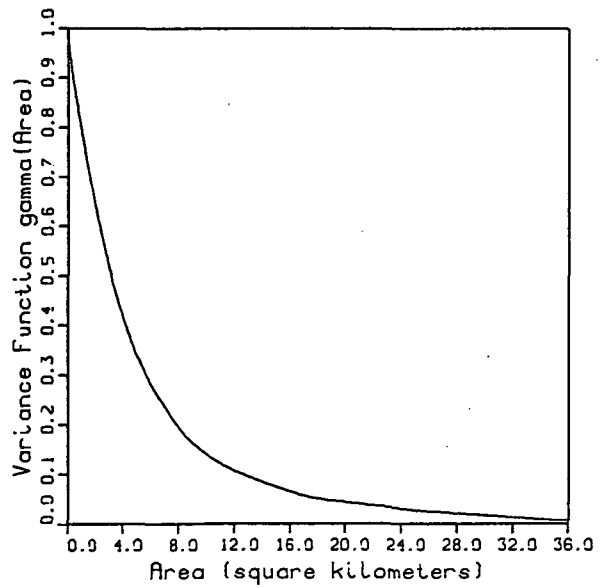
Storm Day  
 Aug 26, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 10.625$

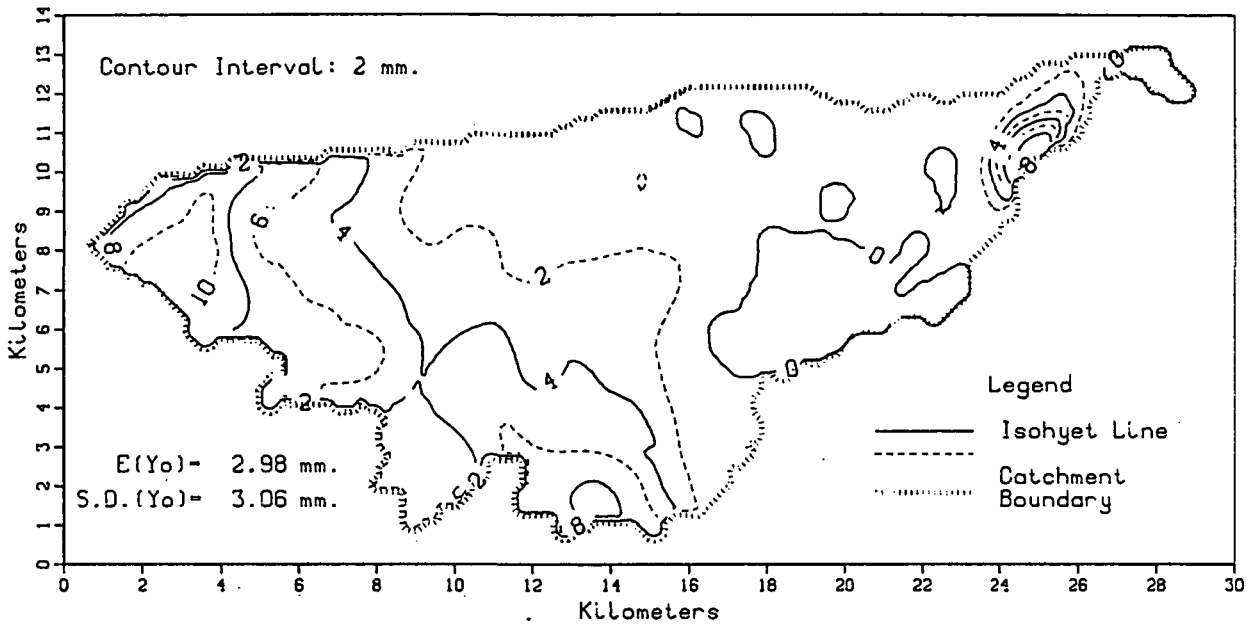
Variance of Point Depth (mm. sq.):  $Var(Y) = 19.970$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.034$

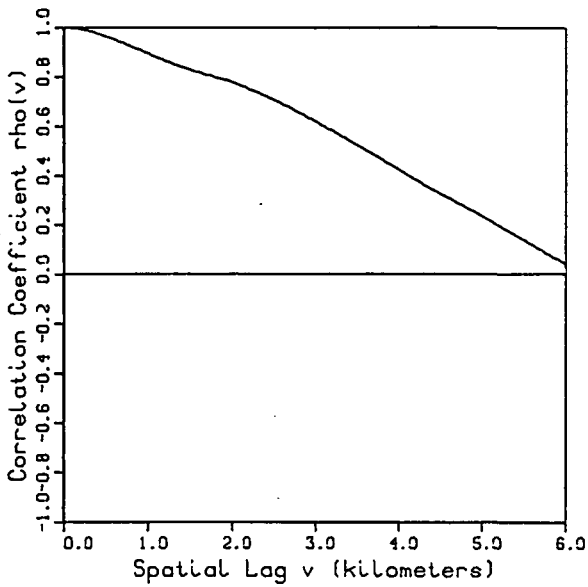
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.991	0.04	0.976
3	1.000	0.4	0.972	0.16	0.943
4	1.000	0.6	0.945	0.36	0.903
5	0.986	0.8	0.913	0.64	0.851
6	0.938	1.0	0.879	1.00	0.788
7	0.853	1.2	0.841	1.44	0.718
8	0.721	1.4	0.803	1.96	0.644
9	0.592	1.6	0.763	2.56	0.567
10	0.467	1.8	0.723	3.24	0.486
11	0.349	2.0	0.680	4.00	0.417
12	0.222	2.2	0.636	4.84	0.350
13	0.151	2.4	0.589	5.76	0.293
14	0.106	2.6	0.543	6.76	0.245
15	0.096	2.8	0.496	7.84	0.200
16	0.087	3.0	0.449	9.00	0.163
17	0.079	3.2	0.403	10.24	0.134
18	0.068	3.4	0.360	11.56	0.112
19	0.061	3.6	0.320	12.96	0.095
20	0.054	3.8	0.281	14.44	0.079
21	0.048	4.0	0.240	16.00	0.064
22	0.042	4.2	0.202	17.64	0.052
23	0.036	4.4	0.168	19.36	0.045
24	0.031	4.6	0.143	21.16	0.039
25	0.026	4.8	0.120	23.04	0.033
26	0.022	5.0	0.101	25.00	0.026
27	0.017	5.2	0.085	27.04	0.022
28	0.013	5.4	0.072	29.16	0.018
29	0.008	5.6	0.061	31.36	0.014
30	0.003	5.8	0.050	33.64	0.009
31	0.000	6.0	0.039	36.00	0.006

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

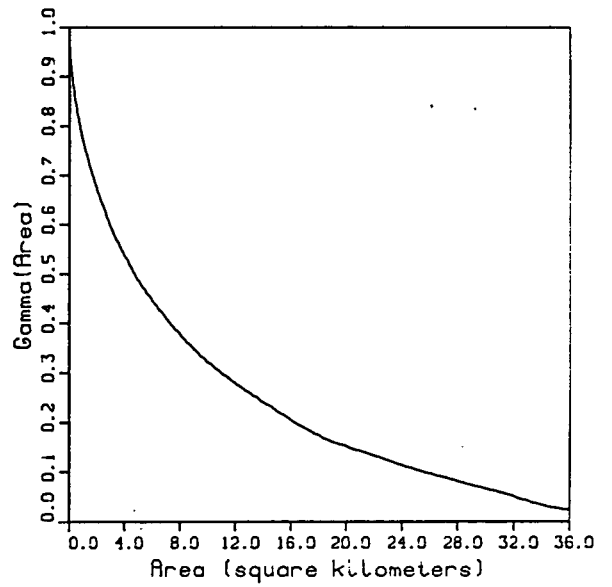
Storm Day  
 Aug 28, 1972



Spatial Correlation



Variance Function



Storm Day Aug 28 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.093$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.907$

Expected Value of Point Depth (mm.):  $E(Y) = 3.061$

Variance of Point Depth (mm. sq.):  $Var(Y) = 8.325$

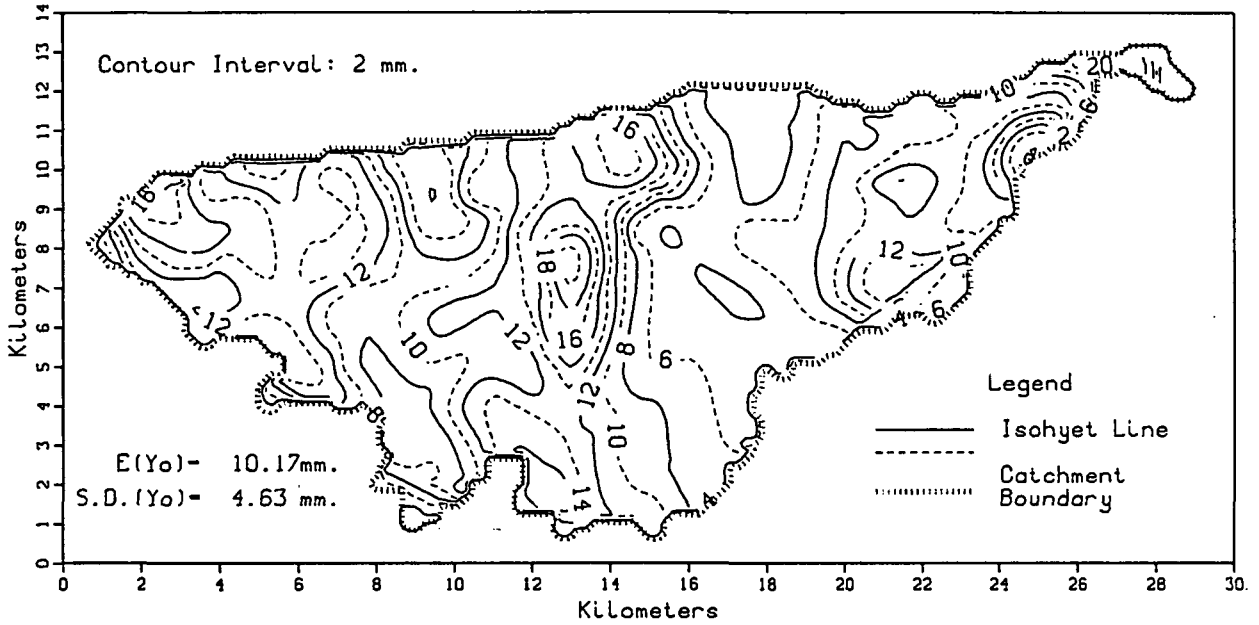
Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.949$

Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.686	0.0	1.000	0.00	1.000
2	0.519	0.2	0.993	0.04	0.959
3	0.419	0.4	0.975	0.16	0.915
4	0.320	0.6	0.950	0.36	0.868
5	0.248	0.8	0.922	0.64	0.821
6	0.164	1.0	0.893	1.00	0.773
7	0.102	1.2	0.864	1.44	0.725
8	0.073	1.4	0.839	1.96	0.678
9	0.048	1.6	0.817	2.56	0.630
10	0.029	1.8	0.797	3.24	0.581
11	0.008	2.0	0.777	4.00	0.538
12	0.002	2.2	0.750	4.84	0.495
13	0.001	2.4	0.721	5.76	0.456
14	0.000	2.6	0.689	6.76	0.419
		2.8	0.654	7.84	0.383
		3.0	0.618	9.00	0.349
		3.2	0.581	10.24	0.317
		3.4	0.543	11.56	0.288
		3.6	0.504	12.96	0.261
		3.8	0.465	14.44	0.234
		4.0	0.425	16.00	0.205
		4.2	0.384	17.64	0.178
		4.4	0.344	19.36	0.158
		4.6	0.308	21.16	0.141
		4.8	0.272	23.04	0.123
		5.0	0.235	25.00	0.104
		5.2	0.196	27.04	0.088
		5.4	0.158	29.16	0.072
		5.6	0.119	31.36	0.056
		5.8	0.080	33.64	0.036
		6.0	0.042	36.00	0.023

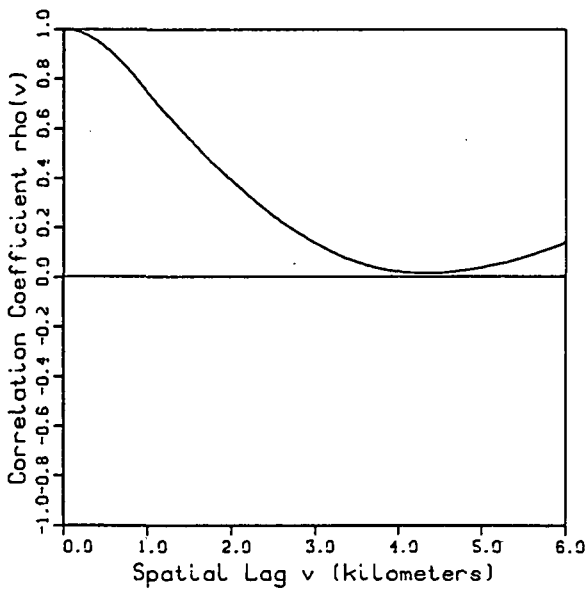


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

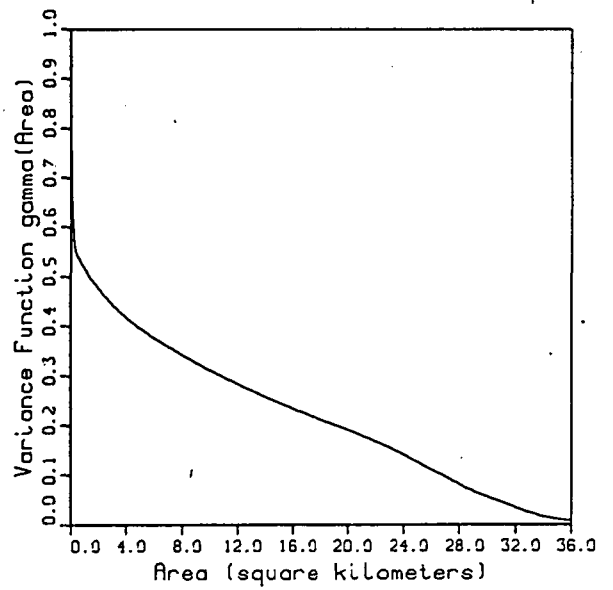
Storm Day  
 Aug 29, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.):  $E(Y) = 10.508$

Variance of Point Depth (mm. sq.):  $Var(Y) = 28.287$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.927$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

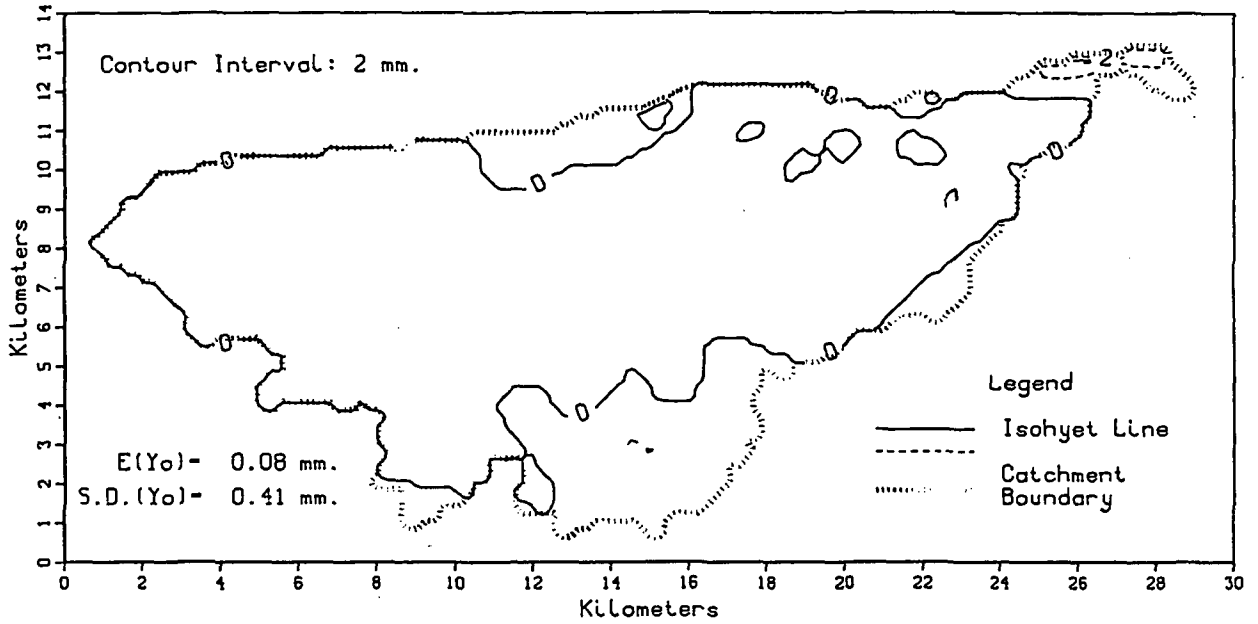
Spatial Correlation  
v (km.)      rho (v)

Variance Function  
A (km. sq.)      Gamma (A)

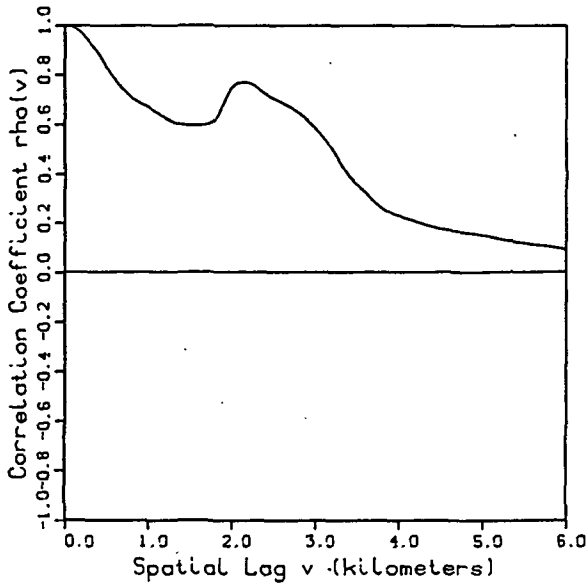
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.997	0.0	1.000	0.00	1.000
3	0.986	0.2	0.987	0.04	0.803
5	0.885	0.4	0.952	0.16	0.629
7	0.743	0.6	0.897	0.36	0.554
9	0.601	0.8	0.826	0.64	0.535
11	0.434	1.0	0.745	1.00	0.517
13	0.276	1.2	0.667	1.44	0.498
15	0.134	1.4	0.592	1.96	0.478
17	0.061	1.6	0.519	2.56	0.458
19	0.025	1.8	0.452	3.24	0.437
21	0.014	2.0	0.389	4.00	0.417
23	0.007	2.2	0.329	4.84	0.399
25	0.006	2.4	0.271	5.76	0.380
27	0.006	2.6	0.221	6.76	0.362
29	0.006	2.8	0.175	7.84	0.344
31	0.006	3.0	0.136	9.00	0.326
33	0.005	3.2	0.101	10.24	0.307
35	0.005	3.4	0.071	11.56	0.289
37	0.005	3.6	0.048	12.96	0.270
39	0.005	3.8	0.030	14.44	0.251
41	0.004	4.0	0.021	16.00	0.233
43	0.004	4.2	0.015	17.64	0.215
45	0.003	4.4	0.015	19.36	0.197
47	0.003	4.6	0.020	21.16	0.177
49	0.002	4.8	0.029	23.04	0.154
51	0.002	5.0	0.041	25.00	0.125
53	0.002	5.2	0.055	27.04	0.095
55	0.002	5.4	0.072	29.16	0.065
57	0.001	5.6	0.092	31.36	0.041
59	0.001	5.8	0.115	33.64	0.018
61	0.001	6.0	0.142	36.00	0.009
63	0.001				
65	0.000				
67	0.000				
69	0.000				

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

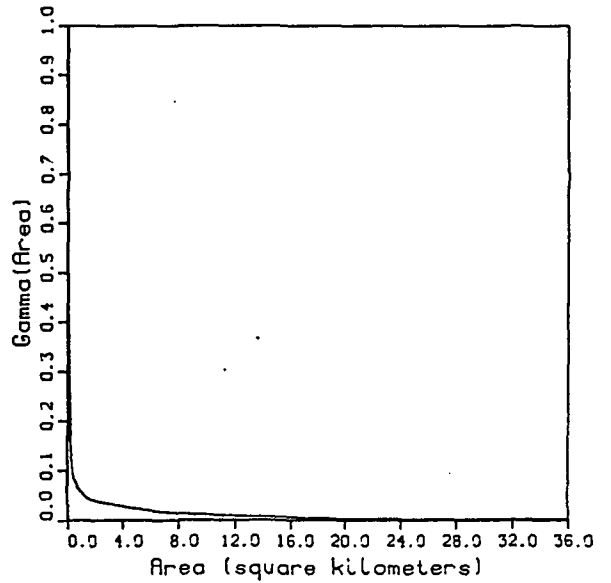
Storm Day  
 Aug 30, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.773$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.227$

Expected Value of Point Depth (mm.):  $E(Y) = 0.067$

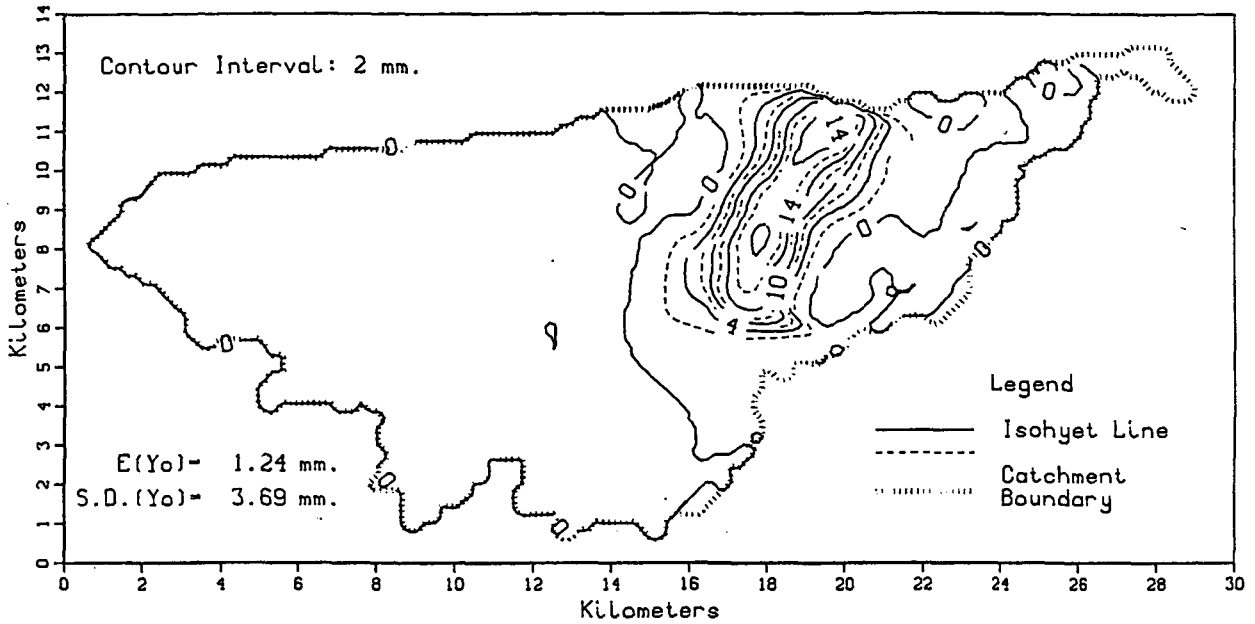
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.096$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 8.865$

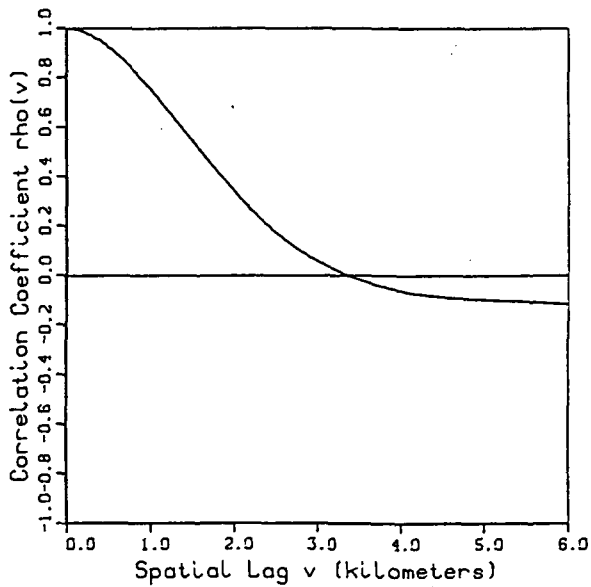
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.011	0.0	1.000	0.00	1.000
2	0.006	0.2	0.966	0.04	0.580
3	0.003	0.4	0.881	0.16	0.265
4	0.001	0.6	0.778	0.36	0.110
5	0.000	0.8	0.704	0.64	0.075
		1.0	0.666	1.00	0.058
		1.2	0.621	1.44	0.045
		1.4	0.595	1.96	0.039
		1.6	0.596	2.56	0.034
		1.8	0.615	3.24	0.030
		2.0	0.750	4.00	0.027
		2.2	0.768	4.84	0.023
		2.4	0.719	5.76	0.019
		2.6	0.684	6.76	0.016
		2.8	0.642	7.84	0.014
		3.0	0.580	9.00	0.012
		3.2	0.498	10.24	0.010
		3.4	0.385	11.56	0.008
		3.6	0.321	12.96	0.007
		3.8	0.255	14.44	0.006
		4.0	0.227	16.00	0.005
		4.2	0.204	17.64	0.004
		4.4	0.181	19.36	0.003
		4.6	0.168	21.16	0.002
		4.8	0.158	23.04	0.001
		5.0	0.149	25.00	0.001
		5.2	0.134	27.04	0.001
		5.4	0.120	29.16	0.001
		5.6	0.111	31.36	0.001
		5.8	0.102	33.64	0.001
		6.0	0.089	36.00	0.001

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

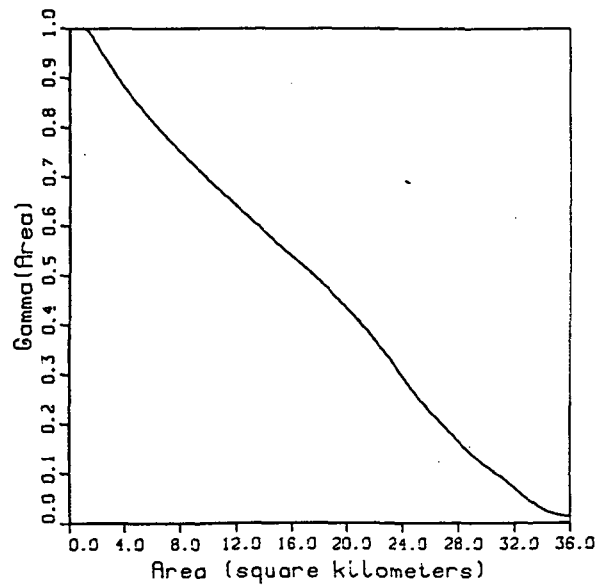
Storm Day  
 Aug 31, 1972



Spatial Correlation



Variance Function



Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.665$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.335$

Expected Value of Point Depth (mm.):  $E(Y) = 1.248$

Variance of Point Depth (mm. sq.):  $Var(Y) = 11.883$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.138$

Spatial Distribution  
of Total Storm Depth  
 $y$  (mm.)  $A_{cw}/A_c (Y \geq y)$

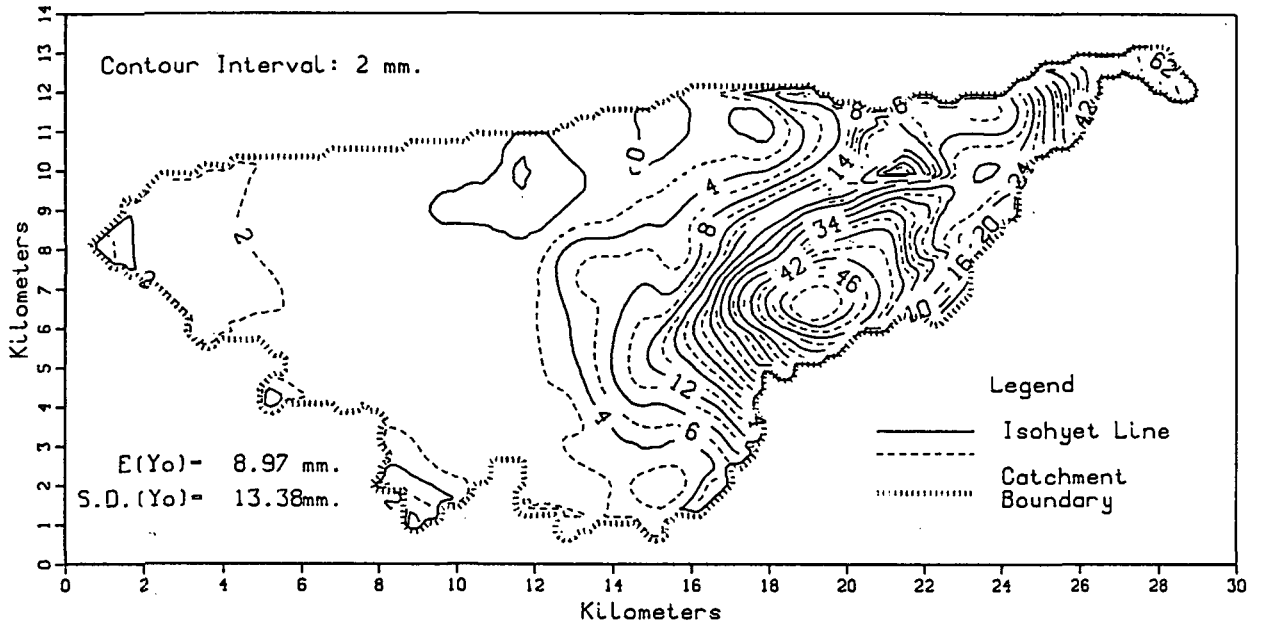
Spatial Correlation  
 $v$  (km.)  $\rho(v)$

Variance Function  
 $A$  (km. sq.)  $\Gamma(A)$

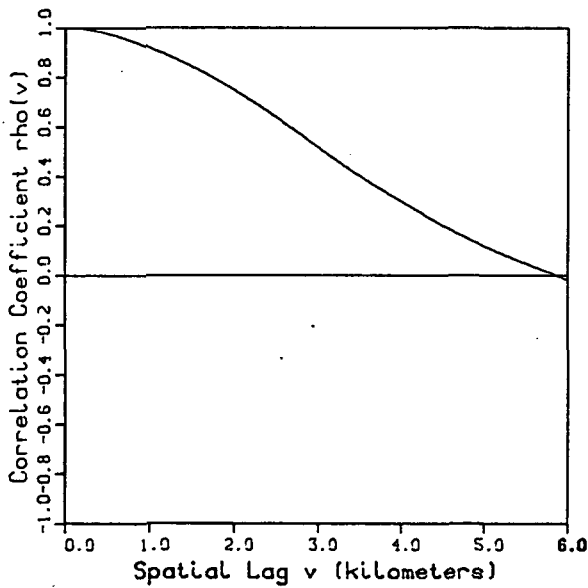
	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	$\Gamma(A)$
1	0.168	0.0	1.000	0.00	1.000
2	0.137	0.2	0.986	0.04	1.027
3	0.118	0.4	0.950	0.16	1.041
4	0.105	0.6	0.898	0.36	1.042
5	0.094	0.8	0.832	0.64	1.031
6	0.085	1.0	0.756	1.00	1.013
7	0.078	1.2	0.673	1.44	0.993
8	0.071	1.4	0.587	1.96	0.968
9	0.064	1.6	0.501	2.56	0.941
10	0.058	1.8	0.418	3.24	0.911
11	0.051	2.0	0.339	4.00	0.881
12	0.044	2.2	0.267	4.84	0.850
13	0.037	2.4	0.202	5.76	0.819
14	0.029	2.6	0.145	6.76	0.787
15	0.020	2.8	0.097	7.84	0.754
16	0.009	3.0	0.056	9.00	0.721
17	0.003	3.2	0.023	10.24	0.687
18	0.000	3.4	-0.006	11.56	0.652
19	0.000	3.6	-0.030	12.96	0.616
		3.8	-0.050	14.44	0.578
		4.0	-0.065	16.00	0.538
		4.2	-0.077	17.64	0.497
		4.4	-0.086	19.36	0.451
		4.6	-0.092	21.16	0.397
		4.8	-0.097	23.04	0.334
		5.0	-0.101	25.00	0.257
		5.2	-0.104	27.04	0.194
		5.4	-0.107	29.16	0.133
		5.6	-0.111	31.36	0.087
		5.8	-0.116	33.64	0.034
		6.0	-0.120	36.00	0.014

Walnut Gulch, Arizona  
 Ac=154.21 sq. km.

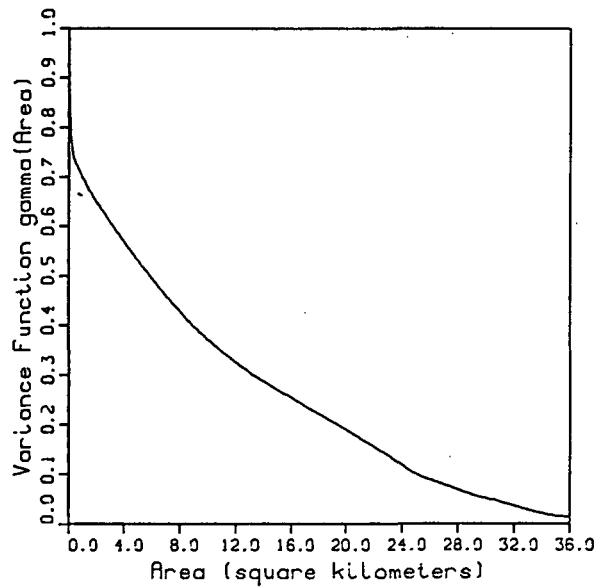
Storm Day  
 Sept 1, 1972



Spatial Correlation



Variance Function



Storm Day Sept 1 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.040$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.960$

Expected Value of Point Depth (mm.):  $E(Y)=10.329$

Variance of Point Depth (mm. sq.):  $Var(Y)=223.648$

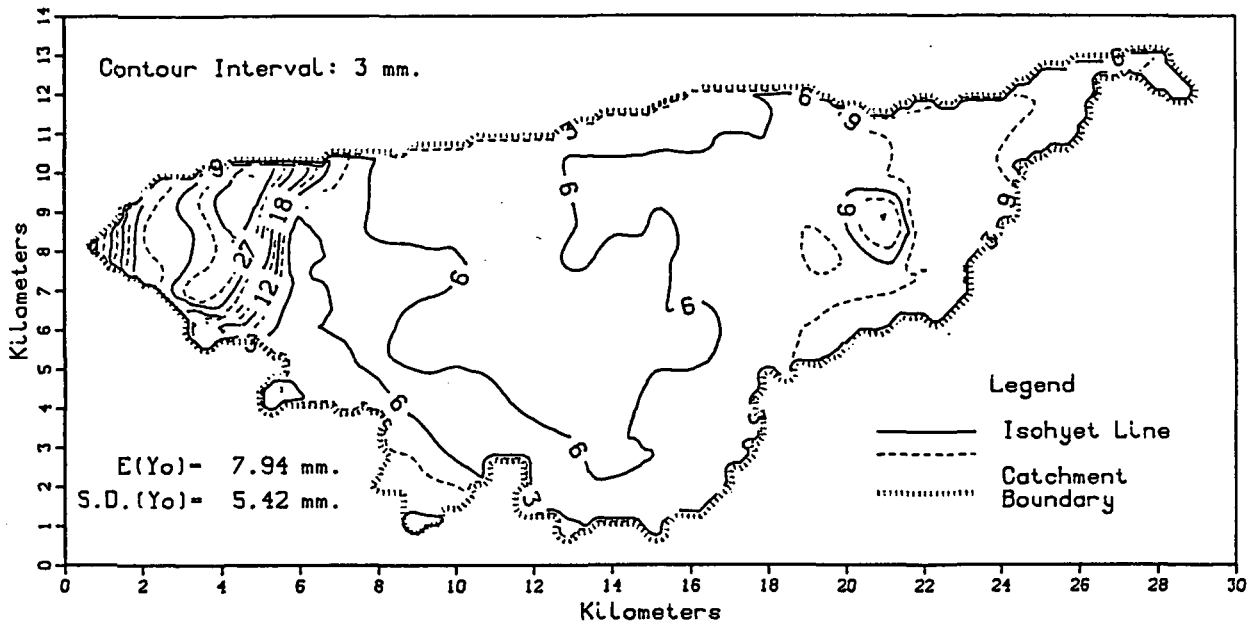
Coef. of Skewness of Point Depth:  $S.C.(Y)=2.148$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.830	0.0	1.000	0.00	1.000
4	0.426	0.2	0.996	0.04	0.893
7	0.337	0.4	0.984	0.16	0.792
10	0.286	0.6	0.966	0.36	0.739
13	0.255	0.8	0.943	0.64	0.720
16	0.232	1.0	0.916	1.00	0.699
19	0.212	1.2	0.887	1.44	0.674
22	0.191	1.4	0.856	1.96	0.650
25	0.162	1.6	0.822	2.56	0.625
28	0.129	1.8	0.785	3.24	0.598
31	0.111	2.0	0.745	4.00	0.568
34	0.095	2.2	0.704	4.84	0.536
37	0.081	2.4	0.659	5.76	0.502
40	0.066	2.6	0.611	6.76	0.467
43	0.046	2.8	0.563	7.84	0.433
46	0.030	3.0	0.515	9.00	0.399
49	0.018	3.2	0.468	10.24	0.366
52	0.008	3.4	0.421	11.56	0.335
55	0.008	3.6	0.378	12.96	0.306
58	0.007	3.8	0.337	14.44	0.280
61	0.007	4.0	0.298	16.00	0.254
64	0.006	4.2	0.258	17.64	0.228
67	0.006	4.4	0.219	19.36	0.200
70	0.006	4.6	0.181	21.16	0.170
73	0.006	4.8	0.147	23.04	0.137
76	0.005	5.0	0.116	25.00	0.100
79	0.005	5.2	0.086	27.04	0.079
82	0.005	5.4	0.059	29.16	0.057
85	0.004	5.6	0.033	31.36	0.042
88	0.003	5.8	0.007	33.64	0.023
91	0.003	6.0	-0.020	36.00	0.014
94	0.002				
97	0.001				
100	0.001				
103	0.000				

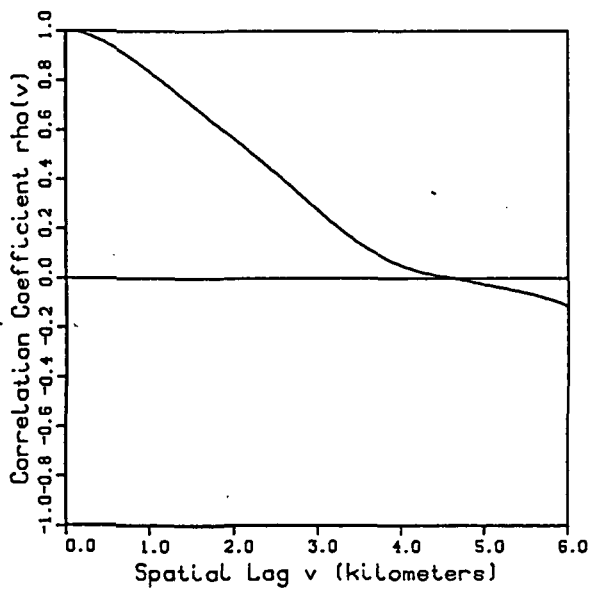


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

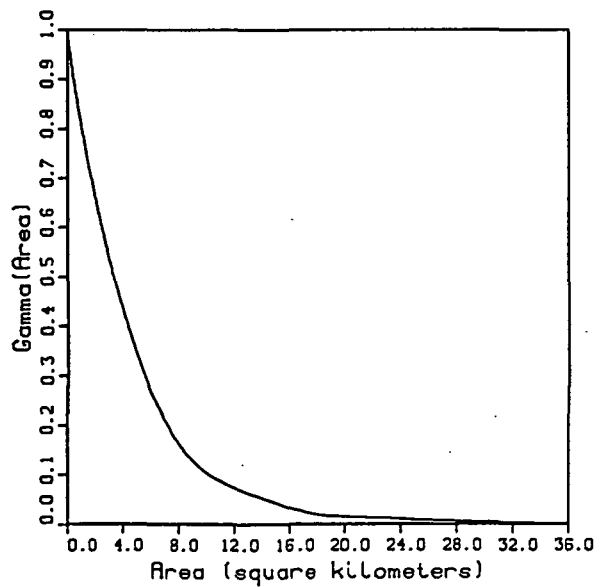
Storm Day  
 Sept 2, 1972



Spatial Correlation



Variance Function



Storm Day Sept 2 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 8.065$

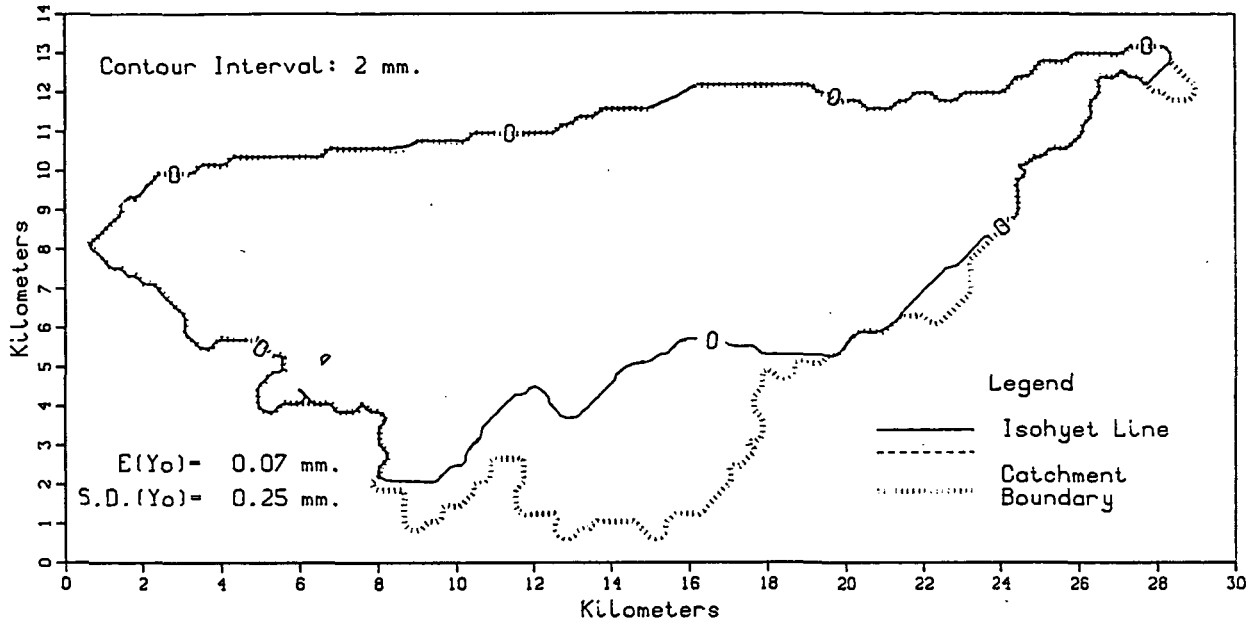
Variance of Point Depth (mm. sq.):  $Var(Y) = 27.110$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.830$

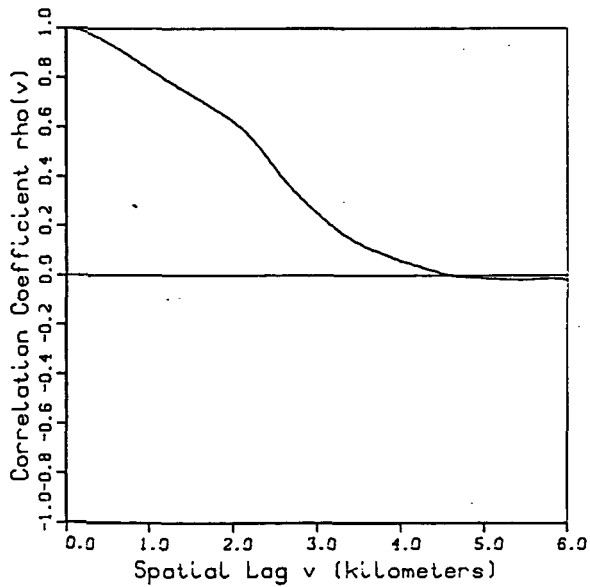
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.993	0.0	1.000	0.00	1.000
2	0.988	0.2	0.990	0.04	0.986
3	0.983	0.4	0.963	0.16	0.959
4	0.975	0.6	0.926	0.36	0.918
5	0.907	0.8	0.881	0.64	0.863
6	0.630	1.0	0.831	1.00	0.802
7	0.386	1.2	0.779	1.44	0.734
8	0.278	1.4	0.725	1.96	0.663
9	0.199	1.6	0.670	2.56	0.586
10	0.117	1.8	0.615	3.24	0.505
11	0.094	2.0	0.561	4.00	0.428
12	0.085	2.2	0.505	4.84	0.351
13	0.083	2.4	0.449	5.76	0.280
14	0.080	2.6	0.391	6.76	0.221
15	0.078	2.8	0.330	7.84	0.167
16	0.075	3.0	0.270	9.00	0.127
17	0.072	3.2	0.212	10.24	0.098
18	0.069	3.4	0.159	11.56	0.077
19	0.067	3.6	0.113	12.96	0.062
20	0.063	3.8	0.076	14.44	0.047
21	0.058	4.0	0.046	16.00	0.032
22	0.053	4.2	0.023	17.64	0.020
23	0.046	4.4	0.008	19.36	0.015
24	0.040	4.6	-.003	21.16	0.013
25	0.035	4.8	-.016	23.04	0.011
26	0.030	5.0	-.031	25.00	0.008
27	0.025	5.2	-.045	27.04	0.006
28	0.020	5.4	-.059	29.16	0.004
29	0.015	5.6	-.074	31.36	0.003
30	0.011	5.8	-.094	33.64	0.001
31	0.007	6.0	-.118	36.00	0.001
32	0.003				
33	0.000				
34	0.000				

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

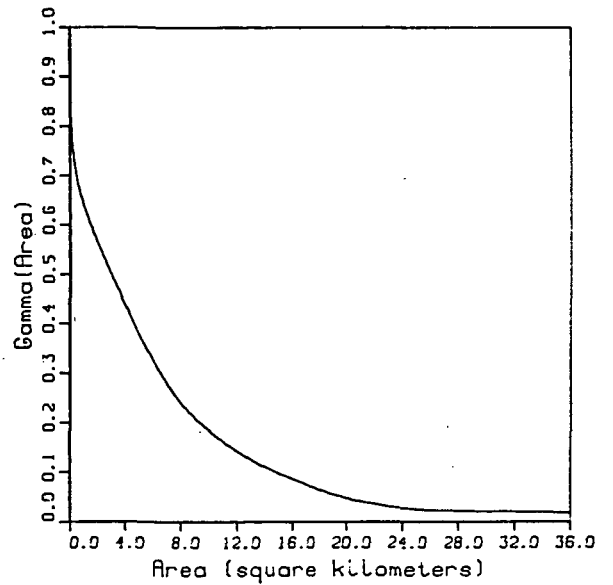
Storm Day  
Sept 5, 1972



Spatial Correlation



Variance Function



Storm Day Sept 5 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.832$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.168$

Expected Value of Point Depth (mm.):  $E(Y) = 0.057$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.035$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.179$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

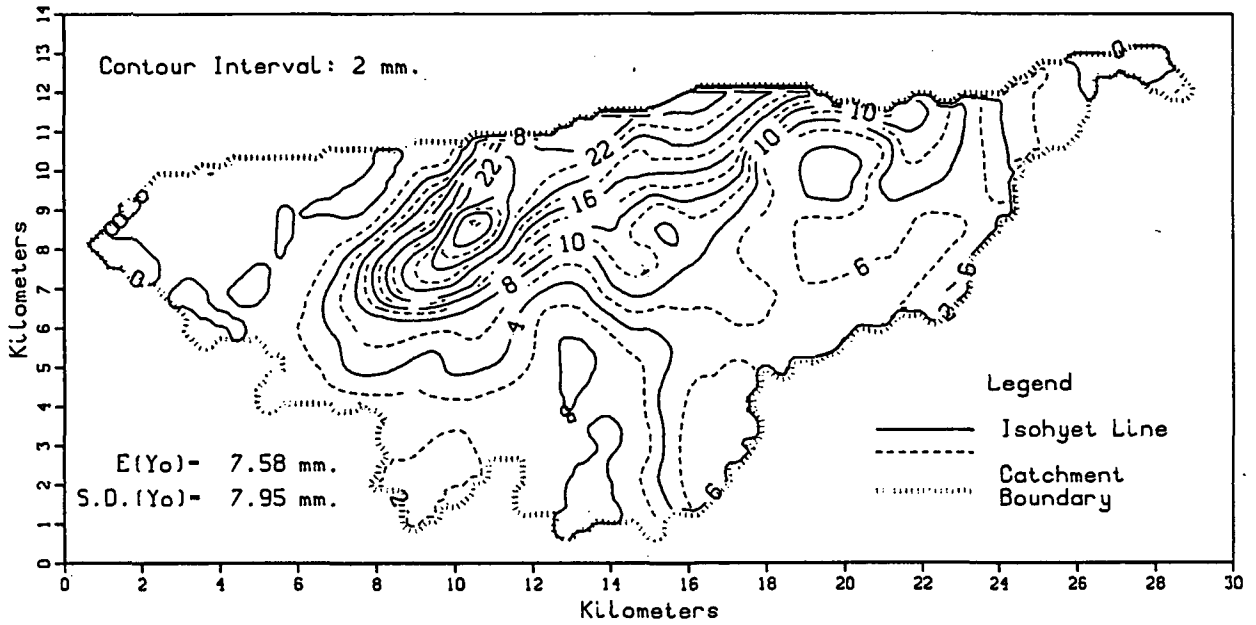
Spatial Correlation  
v (km.)      rho (v)

Variance Function  
A (km. sq.)      Gamma (A)

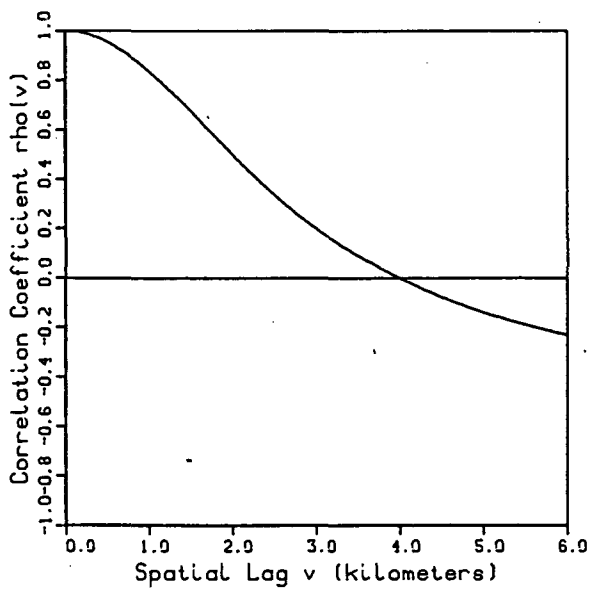
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.006	0.0	1.000	0.00	1.000
2	0.000	0.2	0.988	0.04	0.883
		0.4	0.960	0.16	0.786
		0.6	0.922	0.36	0.726
		0.8	0.879	0.64	0.682
		1.0	0.835	1.00	0.643
		1.2	0.791	1.44	0.606
		1.4	0.750	1.96	0.569
		1.6	0.710	2.56	0.529
		1.8	0.667	3.24	0.485
		2.0	0.623	4.00	0.438
		2.2	0.563	4.84	0.388
		2.4	0.481	5.76	0.338
		2.6	0.391	6.76	0.290
		2.8	0.316	7.84	0.245
		3.0	0.250	9.00	0.209
		3.2	0.194	10.24	0.178
		3.4	0.146	11.56	0.151
		3.6	0.110	12.96	0.126
		3.8	0.083	14.44	0.105
		4.0	0.056	16.00	0.086
		4.2	0.035	17.64	0.068
		4.4	0.014	19.36	0.052
		4.6	-0.003	21.16	0.039
		4.8	-0.009	23.04	0.030
		5.0	-0.014	25.00	0.024
		5.2	-0.017	27.04	0.022
		5.4	-0.020	29.16	0.020
		5.6	-0.016	31.36	0.020
		5.8	-0.013	33.64	0.019
		6.0	-0.021	36.00	0.017

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

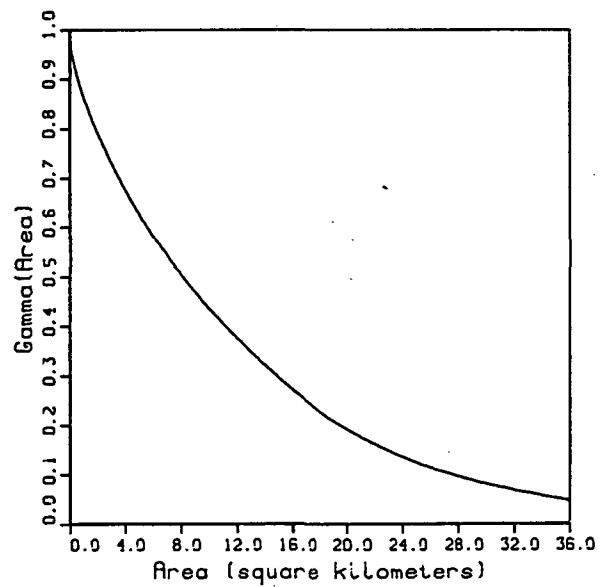
Storm Day  
 Sept 6, 1972



Spatial Correlation



Variance Function



Storm Day Sept 6 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.048$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.952$

Expected Value of Point Depth (mm.):  $E(Y) = 6.539$

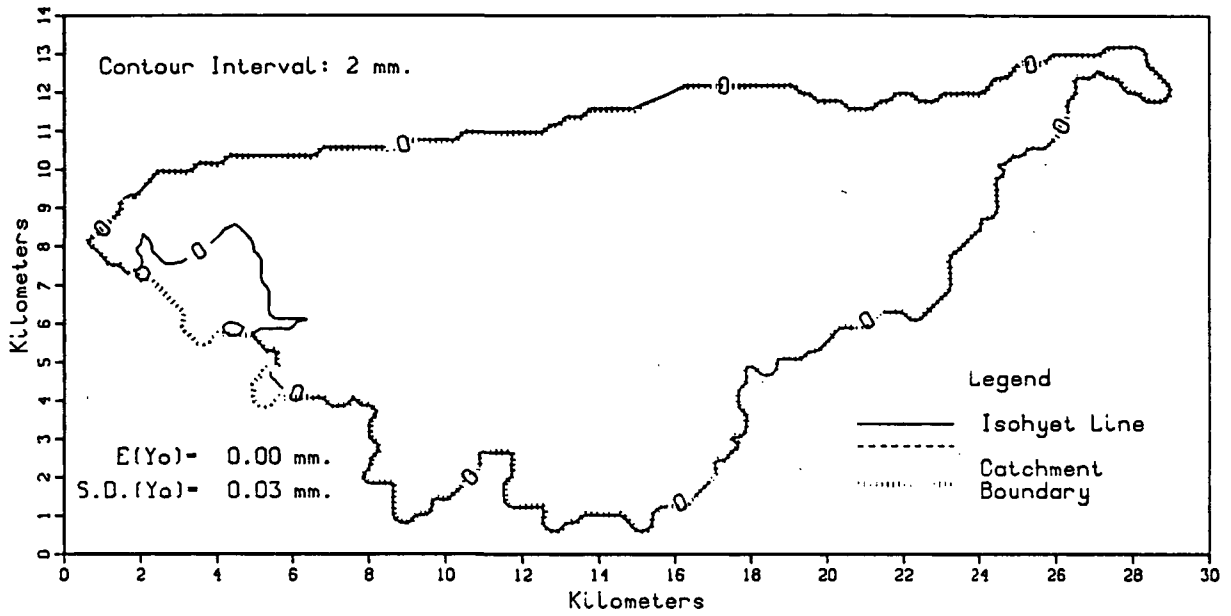
Variance of Point Depth (mm. sq.):  $Var(Y) = 44.316$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.404$

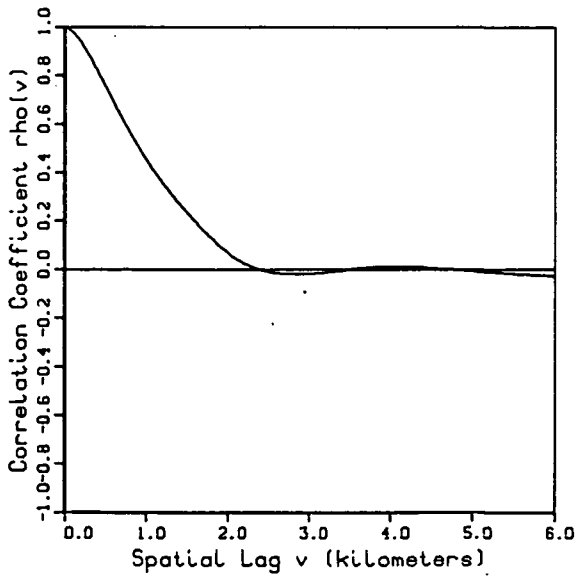
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.785	0.0	1.000	0.00	1.000
2	0.701	0.2	0.992	0.04	0.979
3	0.640	0.4	0.970	0.16	0.956
4	0.593	0.6	0.935	0.36	0.928
5	0.546	0.8	0.890	0.64	0.898
6	0.420	1.0	0.836	1.00	0.865
7	0.315	1.2	0.775	1.44	0.831
8	0.260	1.4	0.709	1.96	0.795
9	0.227	1.6	0.640	2.56	0.757
10	0.202	1.8	0.569	3.24	0.716
11	0.182	2.0	0.499	4.00	0.675
12	0.165	2.2	0.432	4.84	0.634
13	0.151	2.4	0.367	5.76	0.592
14	0.139	2.6	0.306	6.76	0.551
15	0.129	2.8	0.250	7.84	0.509
16	0.119	3.0	0.198	9.00	0.468
17	0.108	3.2	0.150	10.24	0.427
18	0.097	3.4	0.107	11.56	0.387
19	0.086	3.6	0.068	12.96	0.348
20	0.076	3.8	0.031	14.44	0.309
21	0.065	4.0	-.004	16.00	0.271
22	0.054	4.2	-.036	17.64	0.234
23	0.042	4.4	-.067	19.36	0.201
24	0.027	4.6	-.094	21.16	0.172
25	0.017	4.8	-.120	23.04	0.146
26	0.011	5.0	-.143	25.00	0.123
27	0.007	5.2	-.165	27.04	0.103
28	0.004	5.4	-.184	29.16	0.086
29	0.002	5.6	-.202	31.36	0.071
30	0.000	5.8	-.219	33.64	0.058
31	0.000	6.0	-.235	36.00	0.046

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

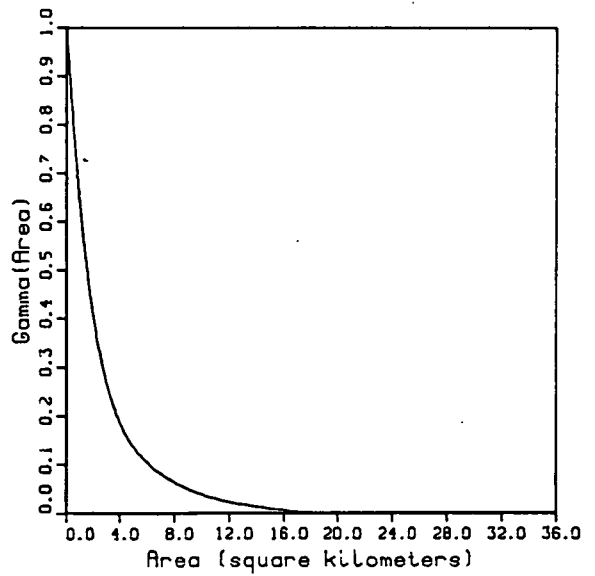
Storm Day  
 Sept 7, 1972



Spatial Correlation



Variance Function



Storm Day Sept 7 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.954$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.046$

Expected Value of Point Depth (mm.):  $E(Y) = 0.004$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.001$

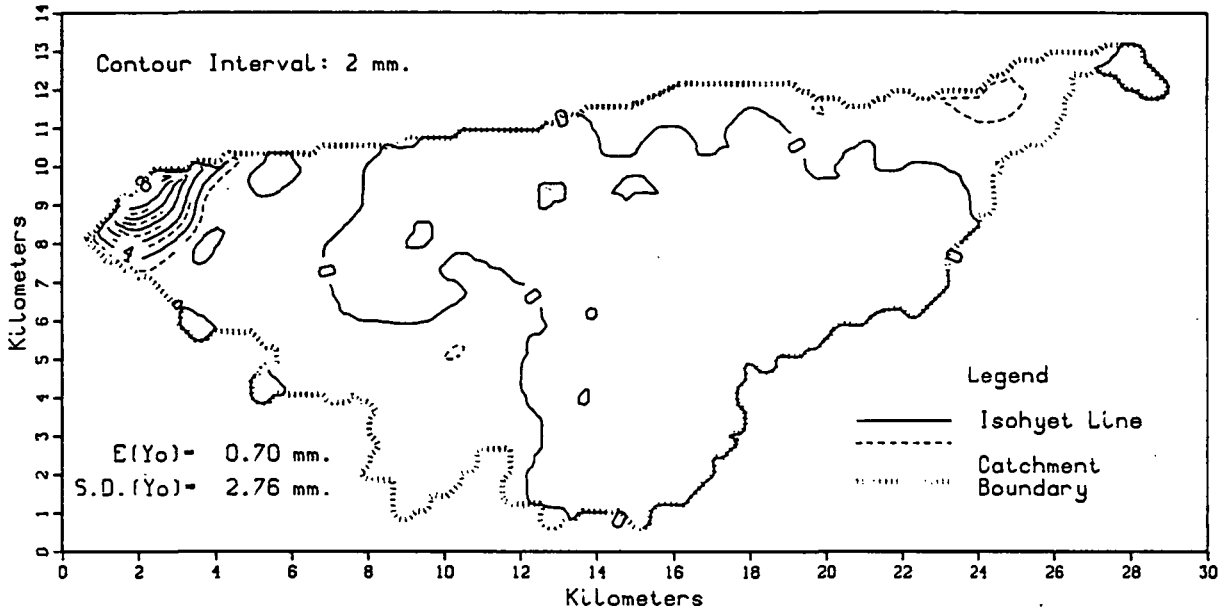
Coef. of Skewness of Point Depth:  $S.C.(Y) = 8.226$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.941	0.04	0.993
		0.4	0.823	0.16	0.952
		0.6	0.692	0.36	0.876
		0.8	0.566	0.64	0.771
		1.0	0.454	1.00	0.651
		1.2	0.357	1.44	0.531
		1.4	0.272	1.96	0.419
		1.6	0.197	2.56	0.323
		1.8	0.128	3.24	0.246
		2.0	0.069	4.00	0.187
		2.2	0.024	4.84	0.143
		2.4	-0.003	5.76	0.111
		2.6	-0.016	6.76	0.086
		2.8	-0.020	7.84	0.066
		3.0	-0.017	9.00	0.049
		3.2	-0.011	10.24	0.035
		3.4	-0.003	11.56	0.024
		3.6	0.006	12.96	0.017
		3.8	0.010	14.44	0.010
		4.0	0.012	16.00	0.004
		4.2	0.011	17.64	0.000
		4.4	0.007	19.36	0.000
		4.6	0.002	21.16	0.000
		4.8	-0.003	23.04	0.000
		5.0	-0.008	25.00	0.000
		5.2	-0.013	27.04	0.000
		5.4	-0.018	29.16	0.000
		5.6	-0.022	31.36	0.000
		5.8	-0.027	33.64	0.000
		6.0	-0.031	36.00	0.000

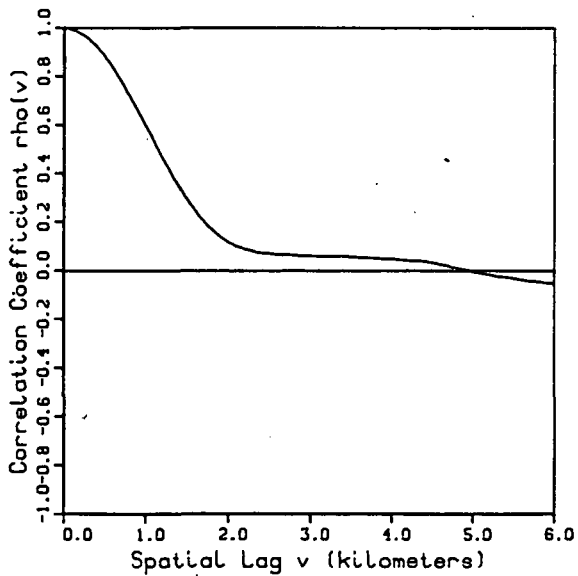


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

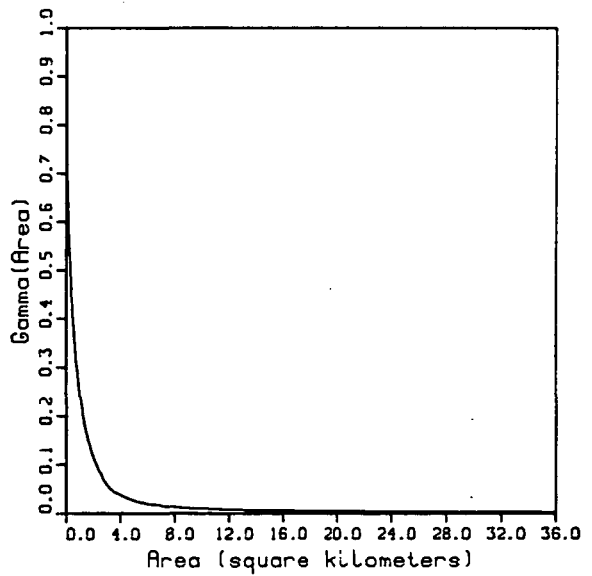
Storm Day  
 Sept 9, 1972



Spatial Correlation



Variance Function



Storm Day Sept 9 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.564$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.436$

Expected Value of Point Depth (mm.):  $E(Y) = 0.590$

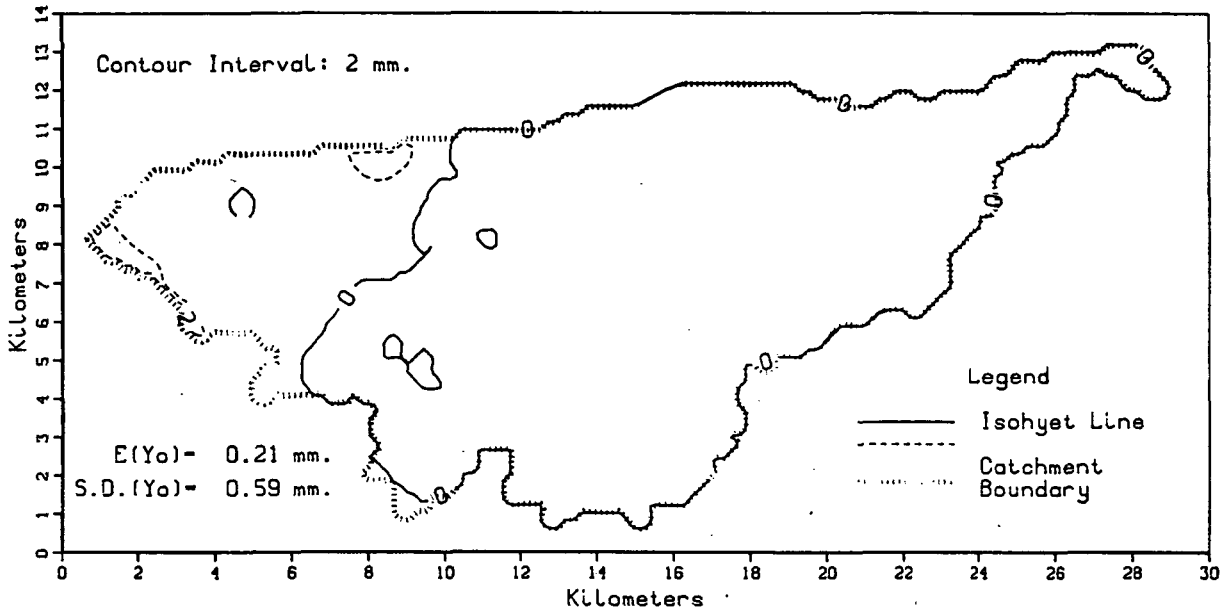
Variance of Point Depth (mm. sq.):  $Var(Y) = 4.654$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.757$

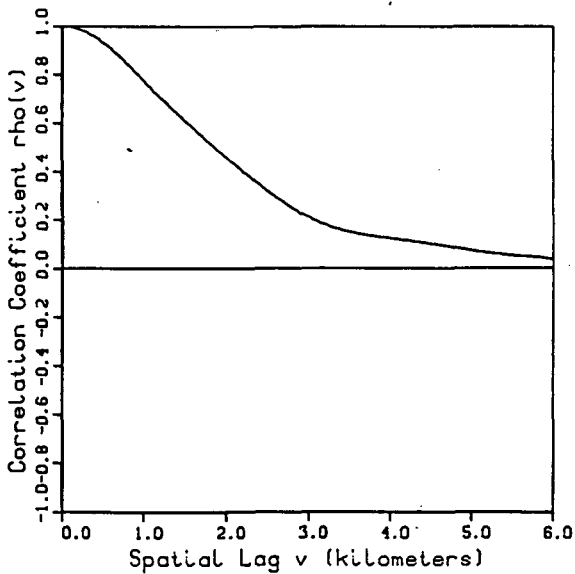
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.141	0.0	1.000	0.00	1.000
2	0.039	0.2	0.977	0.04	0.787
3	0.027	0.4	0.923	0.16	0.619
4	0.024	0.6	0.836	0.36	0.474
5	0.021	0.8	0.723	0.64	0.353
6	0.019	1.0	0.598	1.00	0.252
7	0.017	1.2	0.470	1.44	0.175
8	0.015	1.4	0.349	1.96	0.121
9	0.014	1.6	0.247	2.56	0.081
10	0.012	1.8	0.170	3.24	0.051
11	0.011	2.0	0.116	4.00	0.038
12	0.010	2.2	0.086	4.84	0.027
13	0.009	2.4	0.072	5.76	0.020
14	0.008	2.6	0.065	6.76	0.016
15	0.007	2.8	0.062	7.84	0.012
16	0.006	3.0	0.058	9.00	0.010
17	0.005	3.2	0.057	10.24	0.008
18	0.004	3.4	0.057	11.56	0.007
19	0.004	3.6	0.052	12.96	0.006
20	0.003	3.8	0.049	14.44	0.005
21	0.003	4.0	0.046	16.00	0.005
22	0.002	4.2	0.040	17.64	0.004
23	0.001	4.4	0.036	19.36	0.004
24	0.001	4.6	0.023	21.16	0.003
25	0.001	4.8	0.008	23.04	0.003
26	0.000	5.0	-.006	25.00	0.003
27	0.000	5.2	-.019	27.04	0.003
28	0.000	5.4	-.030	29.16	0.002
		5.6	-.041	31.36	0.002
		5.8	-.050	33.64	0.001
		6.0	-.057	36.00	0.001

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

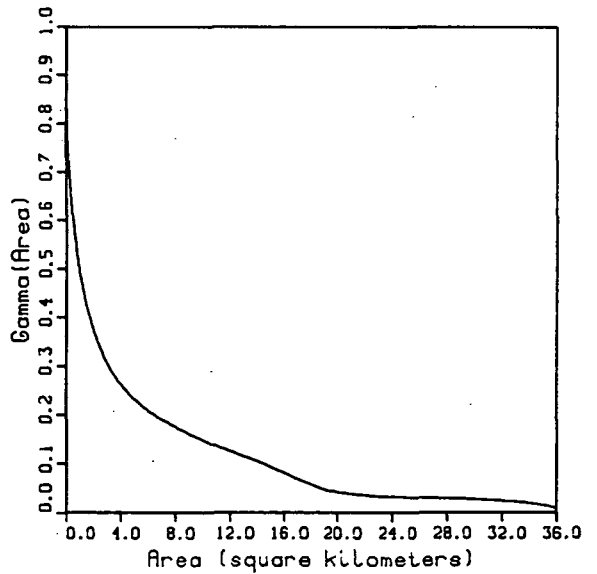
Storm Day  
 Sept 10, 1972



Spatial Correlation



Variance Function



Storm Day Sept 10 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.784$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.216$

Expected Value of Point Depth (mm.):  $E(Y)=0.169$

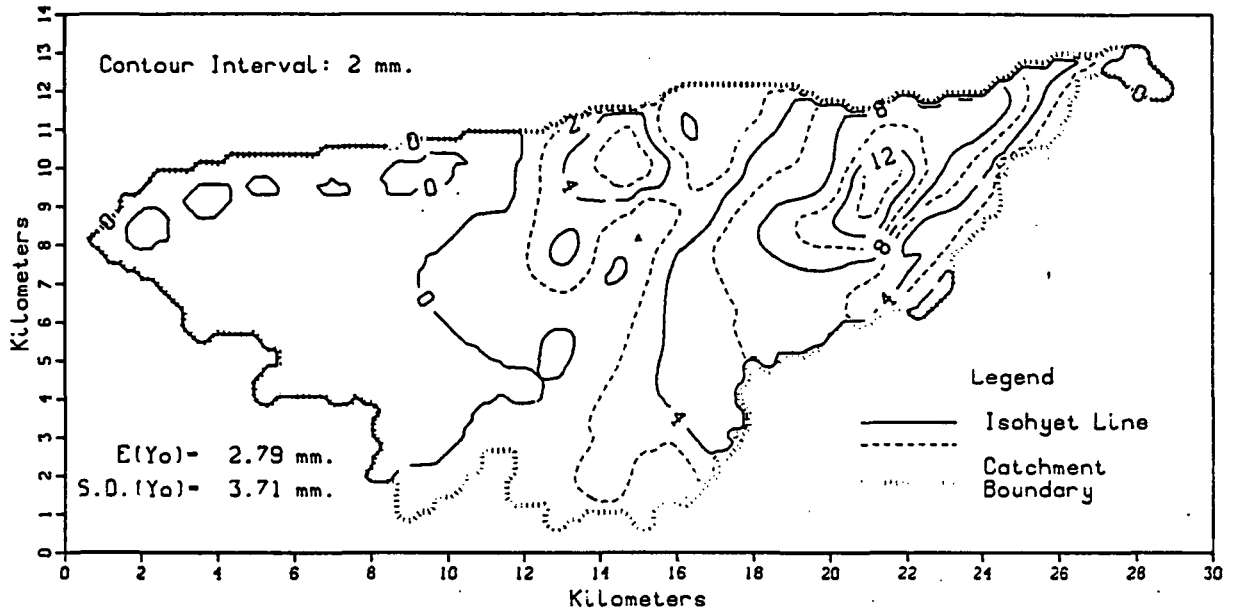
Variance of Point Depth (mm. sq.):  $Var(Y)=0.200$

Coef. of Skewness of Point Depth:  $S.C.(Y)=3.203$

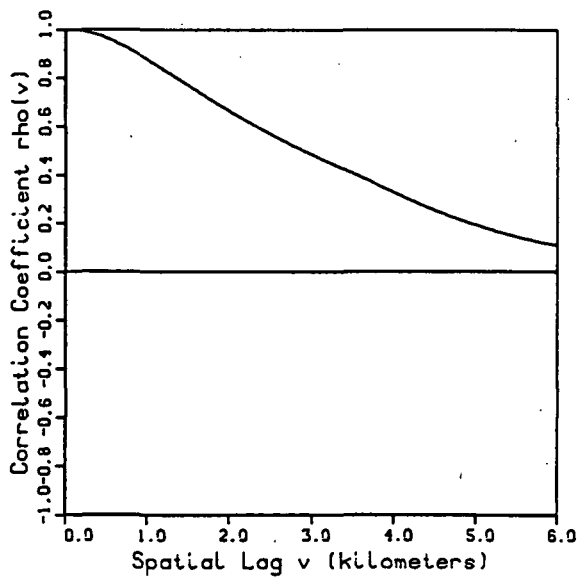
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.062	0.0	1.000	0.00	1.000
2	0.013	0.2	0.989	0.04	0.865
3	0.000	0.4	0.957	0.16	0.749
		0.6	0.908	0.36	0.650
		0.8	0.845	0.64	0.567
		1.0	0.776	1.00	0.493
		1.2	0.708	1.44	0.431
		1.4	0.643	1.96	0.380
		1.6	0.581	2.56	0.335
		1.8	0.520	3.24	0.294
		2.0	0.462	4.00	0.263
		2.2	0.405	4.84	0.236
		2.4	0.350	5.76	0.214
		2.6	0.297	6.76	0.194
		2.8	0.251	7.84	0.176
		3.0	0.212	9.00	0.160
		3.2	0.181	10.24	0.144
		3.4	0.159	11.56	0.130
		3.6	0.144	12.96	0.115
		3.8	0.133	14.44	0.099
		4.0	0.124	16.00	0.080
		4.2	0.116	17.64	0.060
		4.4	0.106	19.36	0.044
		4.6	0.095	21.16	0.037
		4.8	0.084	23.04	0.032
		5.0	0.073	25.00	0.030
		5.2	0.064	27.04	0.029
		5.4	0.056	29.16	0.027
		5.6	0.051	31.36	0.024
		5.8	0.045	33.64	0.019
		6.0	0.037	36.00	0.009

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

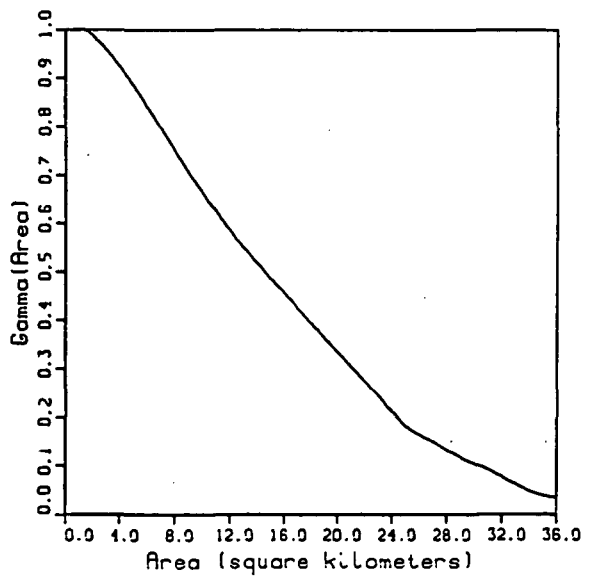
Storm Day  
 Sept 11, 1972



Spatial Correlation



Variance Function



Storm Day Sept 11 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.283$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.717$

Expected Value of Point Depth (mm.):  $E(Y) = 2.702$

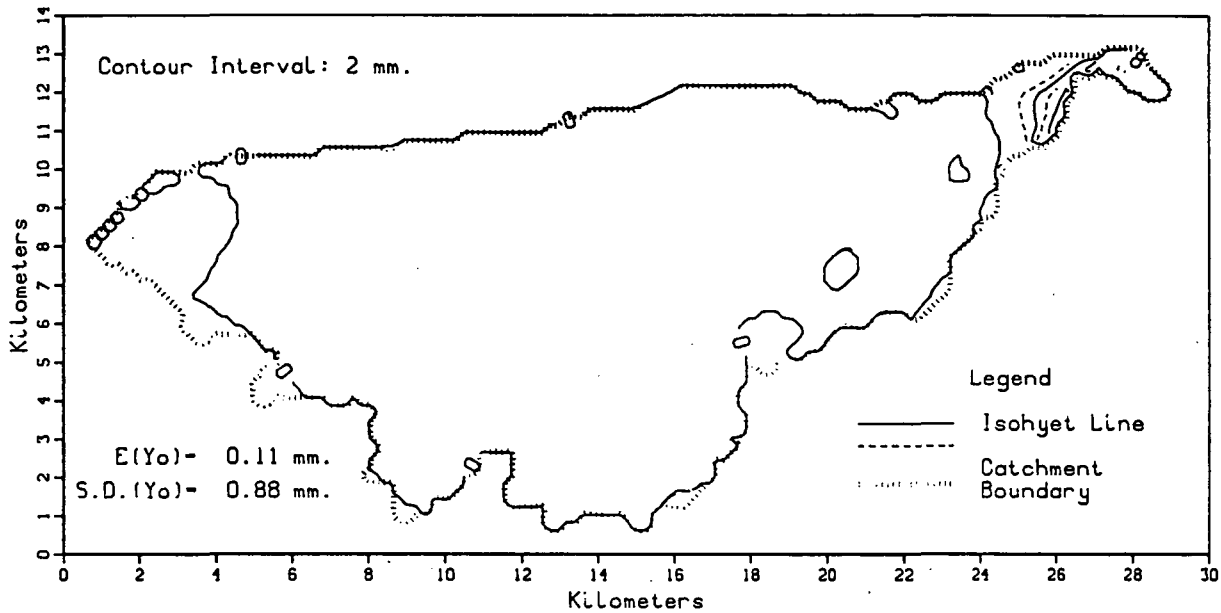
Variance of Point Depth (mm. sq.):  $Var(Y) = 11.036$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.238$

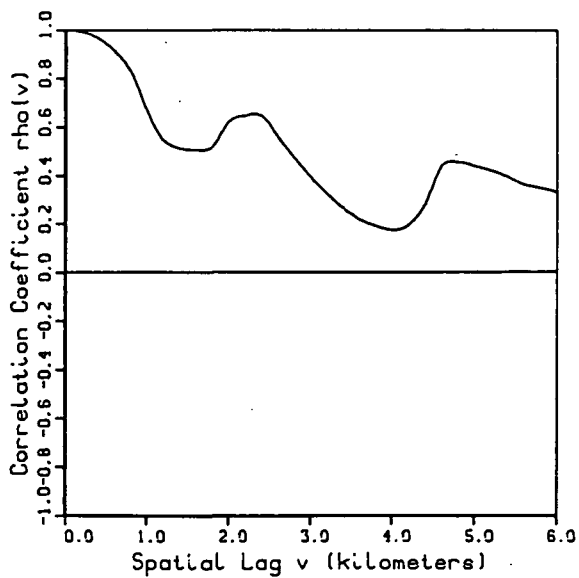
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	Acw/Ac (Y≥y)				
1	0.522	0.0	1.000	0.00	1.000
2	0.438	0.2	0.993	0.04	1.013
3	0.368	0.4	0.976	0.16	1.020
4	0.304	0.6	0.948	0.36	1.022
5	0.242	0.8	0.914	0.64	1.020
6	0.181	1.0	0.875	1.00	1.014
7	0.118	1.2	0.833	1.44	1.004
8	0.089	1.4	0.790	1.96	0.990
9	0.066	1.6	0.747	2.56	0.972
10	0.038	1.8	0.705	3.24	0.951
11	0.025	2.0	0.664	4.00	0.924
12	0.018	2.2	0.624	4.84	0.891
13	0.012	2.4	0.586	5.76	0.852
14	0.006	2.6	0.550	6.76	0.807
15	0.000	2.8	0.516	7.84	0.757
16	0.000	3.0	0.483	9.00	0.706
		3.2	0.452	10.24	0.654
		3.4	0.421	11.56	0.602
		3.6	0.390	12.96	0.552
		3.8	0.358	14.44	0.505
		4.0	0.326	16.00	0.456
		4.2	0.294	17.64	0.406
		4.4	0.265	19.36	0.354
		4.6	0.239	21.16	0.299
		4.8	0.214	23.04	0.242
		5.0	0.192	25.00	0.181
		5.2	0.171	27.04	0.148
		5.4	0.153	29.16	0.114
		5.6	0.135	31.36	0.087
		5.8	0.120	33.64	0.053
		6.0	0.107	36.00	0.033

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

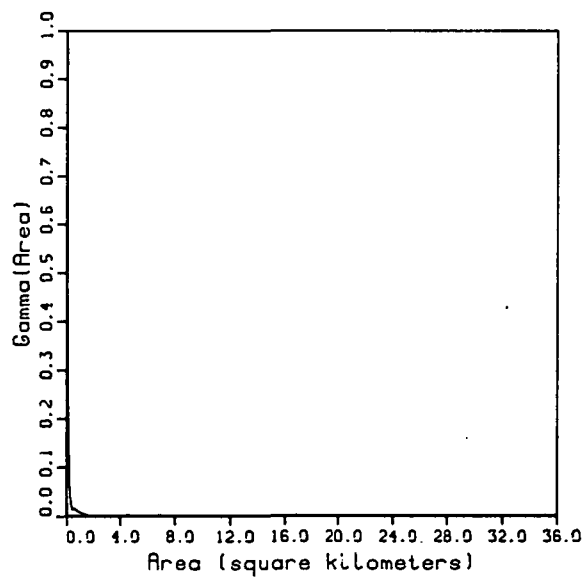
Storm Day  
 Sept 13, 1972



Spatial Correlation



Variance Function



Storm Day Sept 13 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.882$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.118$

Expected Value of Point Depth (mm.):  $E(Y) = 0.235$

Variance of Point Depth (mm. sq.):  $Var(Y) = 3.768$

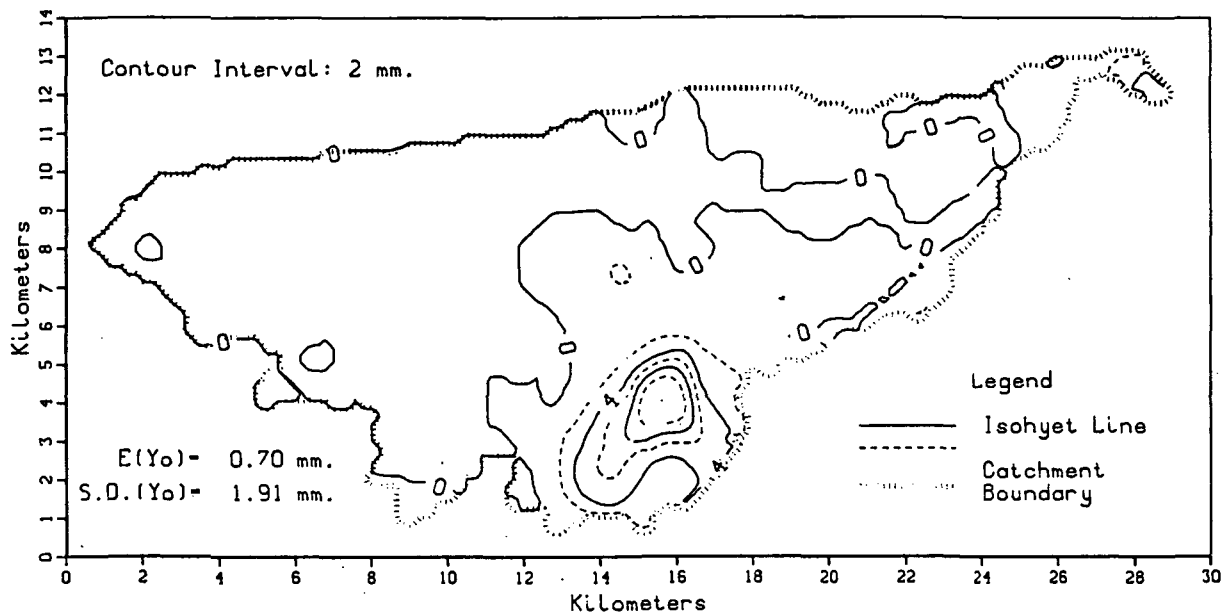
Coef. of Skewness of Point Depth:  $S.C.(Y) = 11.208$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.020	0.0	1.000	0.00	1.000
2	0.017	0.2	0.992	0.04	0.559
3	0.015	0.4	0.966	0.16	0.167
4	0.013	0.6	0.914	0.36	0.028
5	0.011	0.8	0.831	0.64	0.016
6	0.010	1.0	0.670	1.00	0.009
7	0.008	1.2	0.548	1.44	0.002
8	0.007	1.4	0.511	1.96	0.000
9	0.006	1.6	0.504	2.56	0.000
10	0.006	1.8	0.517	3.24	0.000
11	0.006	2.0	0.623	4.00	0.000
12	0.006	2.2	0.646	4.84	0.000
13	0.005	2.4	0.648	5.76	0.000
14	0.005	2.6	0.563	6.76	0.000
15	0.005	2.8	0.475	7.84	0.000
16	0.004	3.0	0.396	9.00	0.000
17	0.004	3.2	0.326	10.24	0.000
18	0.004	3.4	0.267	11.56	0.000
19	0.003	3.6	0.219	12.96	0.000
20	0.003	3.8	0.192	14.44	0.000
21	0.003	4.0	0.174	16.00	0.000
22	0.002	4.2	0.197	17.64	0.000
23	0.002	4.4	0.285	19.36	0.000
24	0.002	4.6	0.444	21.16	0.000
25	0.002	4.8	0.455	23.04	0.000
26	0.002	5.0	0.439	25.00	0.000
27	0.001	5.2	0.419	27.04	0.000
28	0.001	5.4	0.393	29.16	0.000
29	0.001	5.6	0.362	31.36	0.000
30	0.001	5.8	0.347	33.64	0.000
31	0.000	6.0	0.328	36.00	0.000
32	0.000				
33	0.000				
34	0.000				
35	0.000				

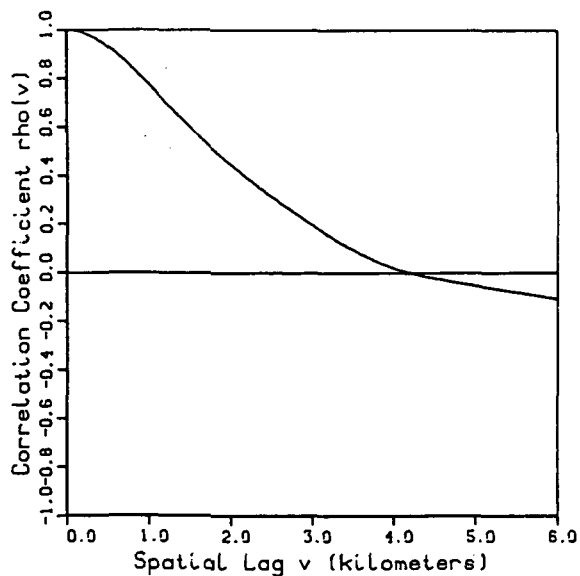


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

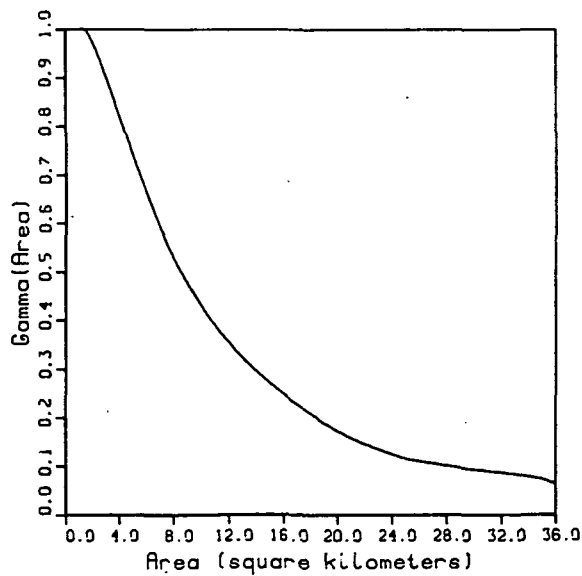
Storm Day  
 Sept 14, 1972



Spatial Correlation



Variance Function



Storm Day Sept 14 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.504$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.496$

Expected Value of Point Depth (mm.):  $E(Y) = 0.748$

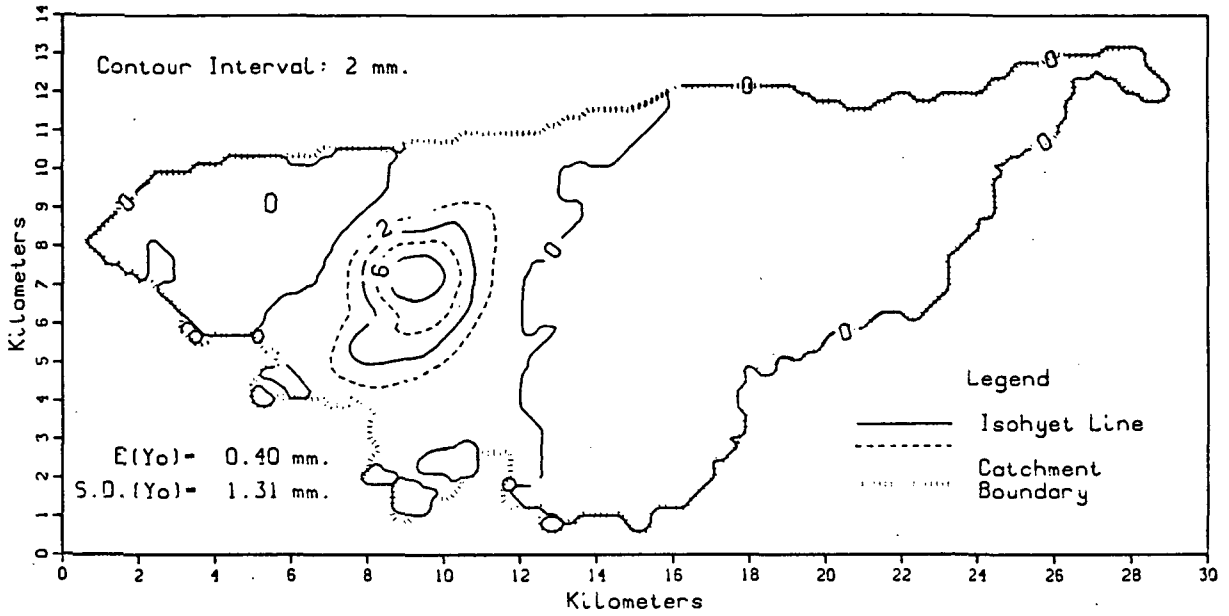
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.086$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.486$

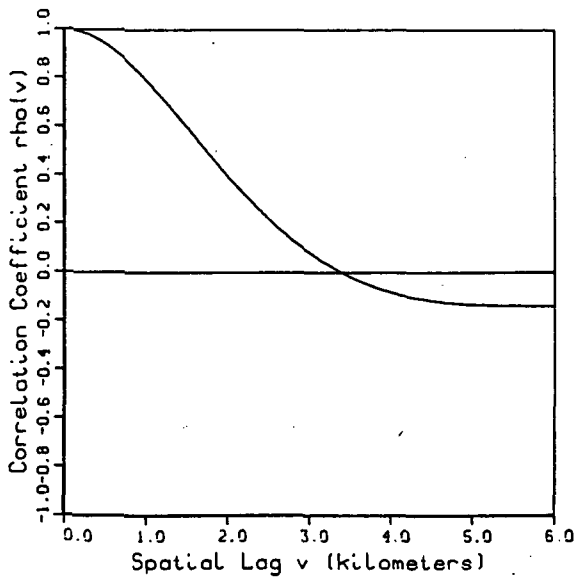
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.180	0.0	1.000	0.00	1.000
2	0.105	0.2	0.988	0.04	1.009
3	0.083	0.4	0.954	0.16	1.016
4	0.063	0.6	0.904	0.36	1.023
5	0.046	0.8	0.842	0.64	1.024
6	0.031	1.0	0.772	1.00	1.018
7	0.021	1.2	0.700	1.44	1.003
8	0.016	1.4	0.629	1.96	0.977
9	0.011	1.6	0.563	2.56	0.936
10	0.008	1.8	0.501	3.24	0.884
11	0.004	2.0	0.442	4.00	0.821
12	0.000	2.2	0.387	4.84	0.751
13	0.000	2.4	0.336	5.76	0.679
		2.6	0.286	6.76	0.607
		2.8	0.239	7.84	0.539
		3.0	0.194	9.00	0.477
		3.2	0.152	10.24	0.421
		3.4	0.112	11.56	0.370
		3.6	0.076	12.96	0.324
		3.8	0.044	14.44	0.284
		4.0	0.018	16.00	0.247
		4.2	-.003	17.64	0.214
		4.4	-.019	19.36	0.182
		4.6	-.032	21.16	0.156
		4.8	-.045	23.04	0.133
		5.0	-.056	25.00	0.115
		5.2	-.068	27.04	0.105
		5.4	-.079	29.16	0.095
		5.6	-.090	31.36	0.088
		5.8	-.101	33.64	0.080
		6.0	-.112	36.00	0.063

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

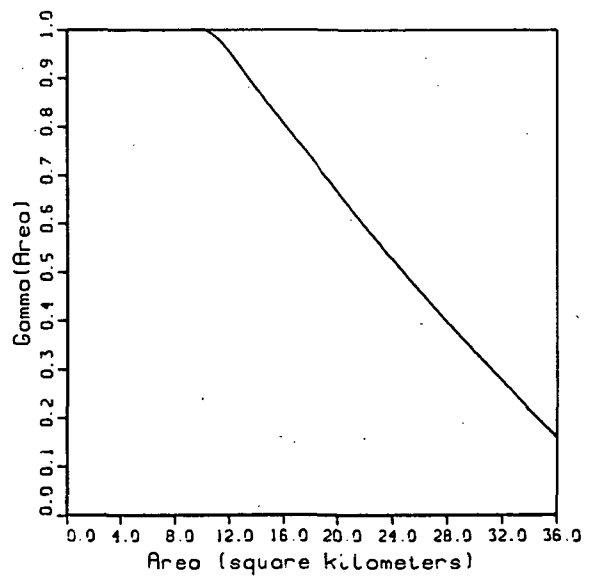
Storm Day  
 Sept 15, 1972



Spatial Correlation



Variance Function



Storm Day Sept 15 1972

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.674$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.326$

Expected Value of Point Depth (mm.):  $E(Y) = 0.540$

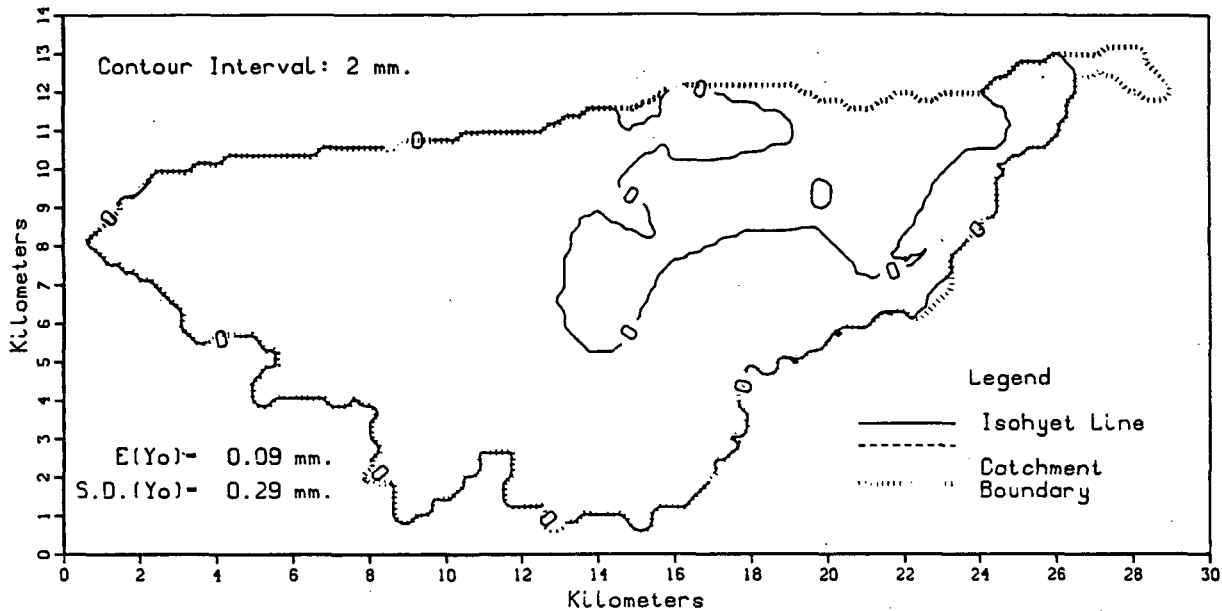
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.224$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.499$

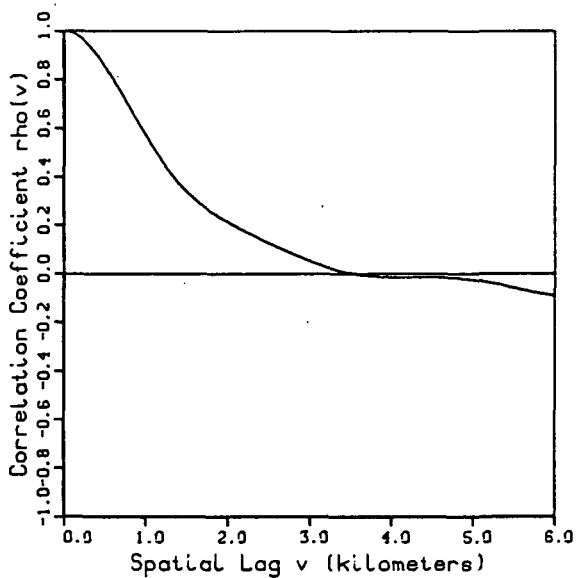
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.134	0.0	1.000	0.00	1.000
2	0.093	0.2	0.990	0.04	1.043
3	0.072	0.4	0.961	0.16	1.082
4	0.054	0.6	0.916	0.36	1.113
5	0.038	0.8	0.859	0.64	1.136
6	0.025	1.0	0.791	1.00	1.153
7	0.015	1.2	0.716	1.44	1.166
8	0.008	1.4	0.637	1.96	1.174
9	0.002	1.6	0.556	2.56	1.174
10	0.000	1.8	0.475	3.24	1.170
		2.0	0.397	4.00	1.163
		2.2	0.321	4.84	1.152
		2.4	0.251	5.76	1.137
		2.6	0.187	6.76	1.116
		2.8	0.130	7.84	1.090
		3.0	0.079	9.00	1.057
		3.2	0.034	10.24	1.017
		3.4	-.004	11.56	0.970
		3.6	-.037	12.96	0.918
		3.8	-.064	14.44	0.863
		4.0	-.085	16.00	0.806
		4.2	-.102	17.64	0.749
		4.4	-.115	19.36	0.688
		4.6	-.125	21.16	0.623
		4.8	-.132	23.04	0.558
		5.0	-.136	25.00	0.492
		5.2	-.139	27.04	0.427
		5.4	-.141	29.16	0.361
		5.6	-.142	31.36	0.295
		5.8	-.143	33.64	0.226
		6.0	-.145	36.00	0.160

Walnut Gulch, Arizona  
Ac=154.21 sq.km.

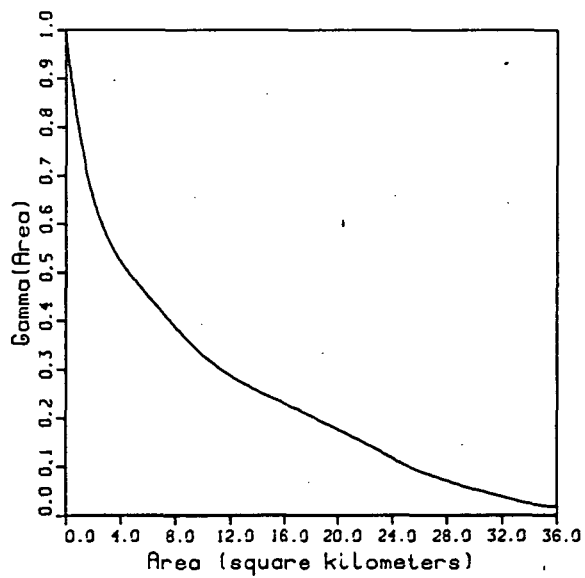
Storm Day  
June 1, 1973



Spatial Correlation



Variance Function



Storm Day June 1 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.757$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.243$

Expected Value of Point Depth (mm.):  $E(Y)= 0.086$

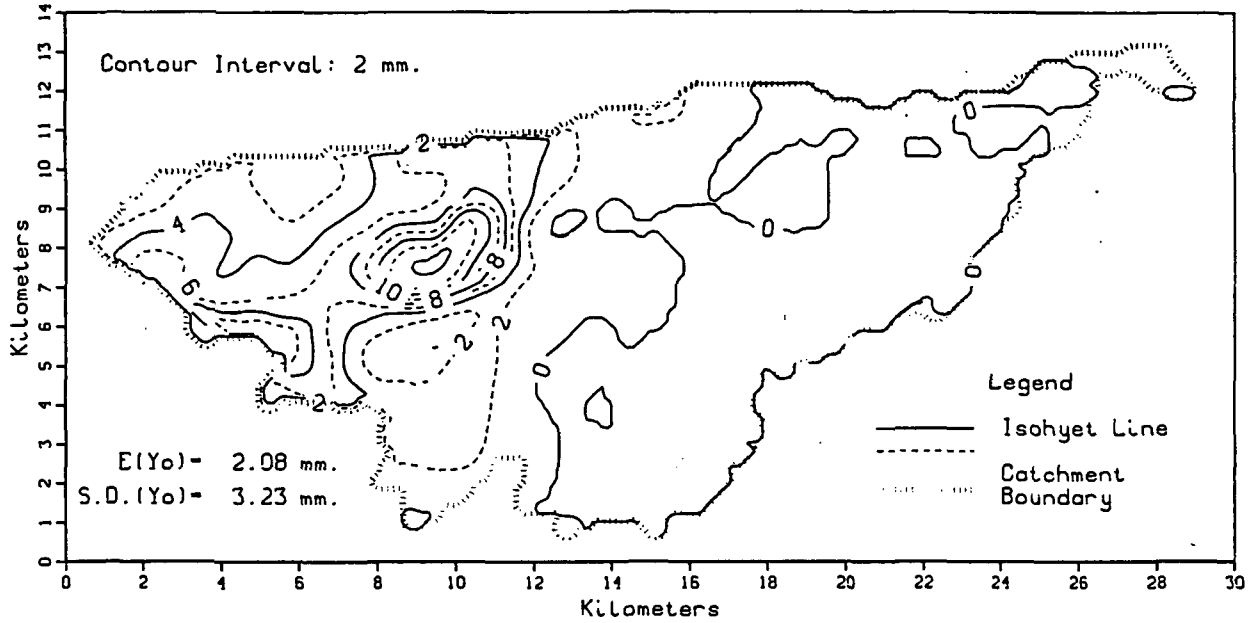
Variance of Point Depth (mm. sq.):  $Var(Y)= 0.060$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 3.492$

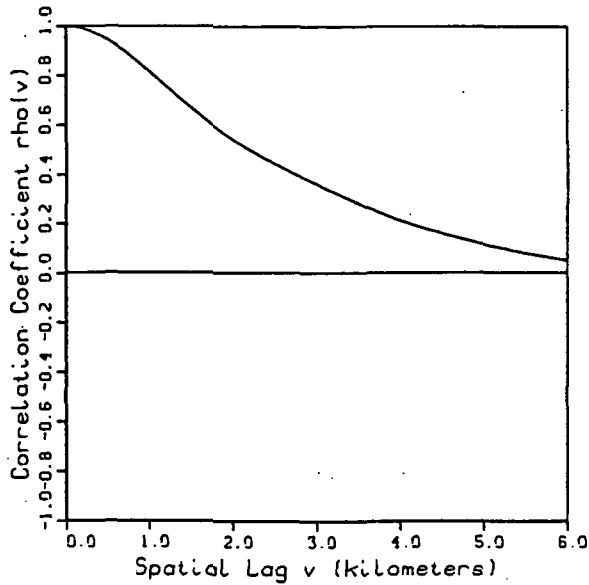
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.028	0.0	1.000	0.00	1.000
2	0.000	0.2	0.975	0.04	0.990
		0.4	0.905	0.16	0.959
		0.6	0.805	0.36	0.908
		0.8	0.690	0.64	0.847
		1.0	0.573	1.00	0.780
		1.2	0.465	1.44	0.715
		1.4	0.375	1.96	0.655
		1.6	0.306	2.56	0.602
		1.8	0.254	3.24	0.558
		2.0	0.212	4.00	0.521
		2.2	0.175	4.84	0.488
		2.4	0.141	5.76	0.458
		2.6	0.109	6.76	0.425
		2.8	0.079	7.84	0.391
		3.0	0.051	9.00	0.356
		3.2	0.026	10.24	0.322
		3.4	0.006	11.56	0.294
		3.6	-0.006	12.96	0.270
		3.8	-0.013	14.44	0.249
		4.0	-0.015	16.00	0.228
		4.2	-0.015	17.64	0.208
		4.4	-0.015	19.36	0.185
		4.6	-0.016	21.16	0.160
		4.8	-0.020	23.04	0.132
		5.0	-0.029	25.00	0.101
		5.2	-0.040	27.04	0.080
		5.4	-0.055	29.16	0.059
		5.6	-0.070	31.36	0.043
		5.8	-0.084	33.64	0.025
		6.0	-0.096	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

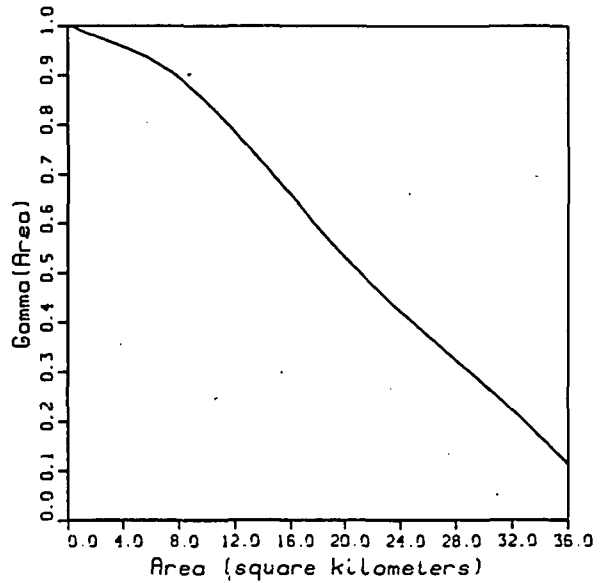
Storm Day  
 June 11, 1973



Spatial Correlation



Variance Function



Storm Day June 11 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.352$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.648$

Expected Value of Point Depth (mm.):  $E(Y) = 2.027$

Variance of Point Depth (mm. sq.):  $Var(Y) = 10.155$

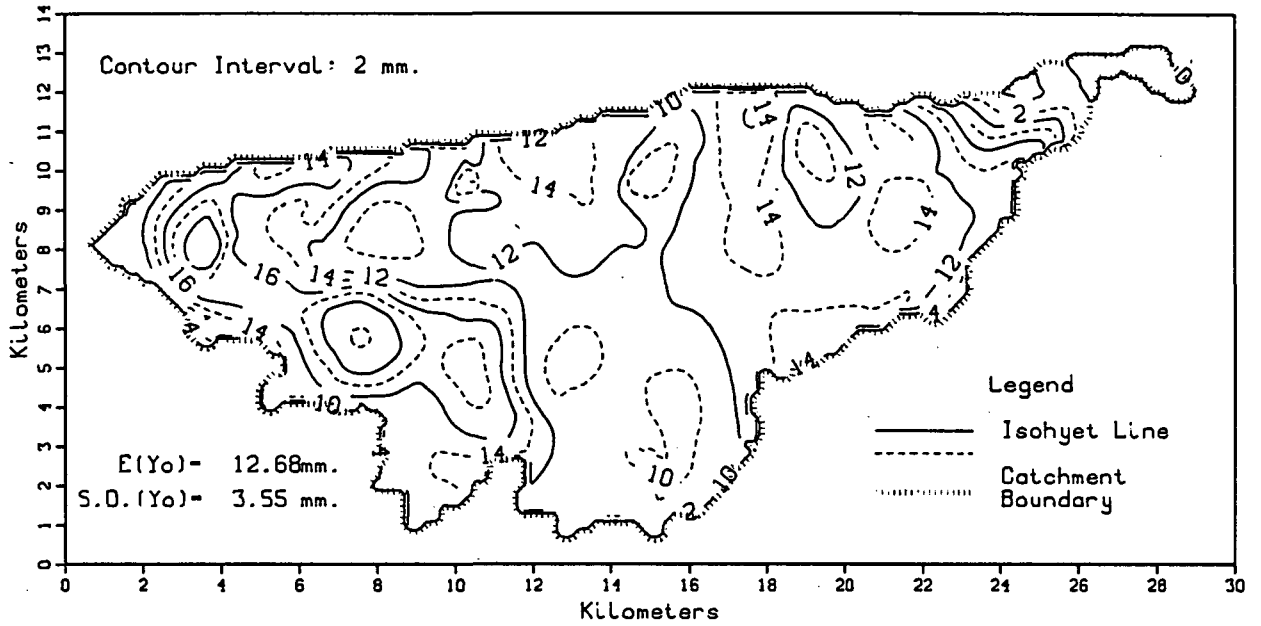
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.023$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.413	0.0	1.000	0.00	1.000
2	0.326	0.2	0.990	0.04	1.006
3	0.239	0.4	0.963	0.16	1.006
4	0.201	0.6	0.922	0.36	1.001
5	0.165	0.8	0.872	0.64	0.995
6	0.122	1.0	0.816	1.00	0.989
7	0.081	1.2	0.756	1.44	0.984
8	0.060	1.4	0.697	1.96	0.979
9	0.048	1.6	0.641	2.56	0.972
10	0.039	1.8	0.589	3.24	0.965
11	0.030	2.0	0.541	4.00	0.957
12	0.023	2.2	0.499	4.84	0.947
13	0.018	2.4	0.460	5.76	0.934
14	0.013	2.6	0.425	6.76	0.918
15	0.007	2.8	0.392	7.84	0.897
16	0.002	3.0	0.360	9.00	0.870
17	0.000	3.2	0.329	10.24	0.838
		3.4	0.298	11.56	0.799
		3.6	0.267	12.96	0.755
		3.8	0.238	14.44	0.707
		4.0	0.212	16.00	0.657
		4.2	0.190	17.64	0.604
		4.4	0.170	19.36	0.550
		4.6	0.151	21.16	0.498
		4.8	0.133	23.04	0.445
		5.0	0.116	25.00	0.396
		5.2	0.100	27.04	0.346
		5.4	0.086	29.16	0.294
		5.6	0.074	31.36	0.239
		5.8	0.062	33.64	0.178
		6.0	0.050	36.00	0.113

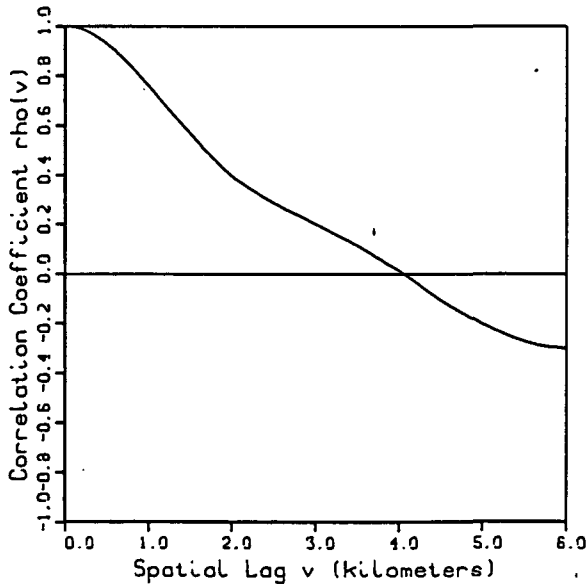


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

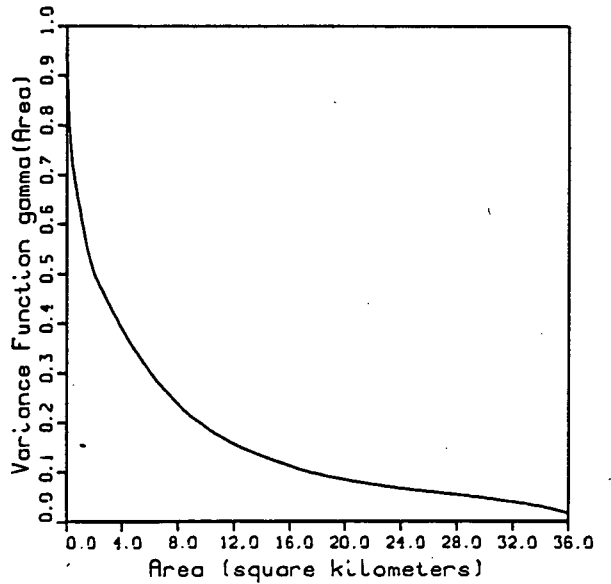
Storm Day  
 June 12, 1973



Spatial Correlation



Variance Function



Storm Day June 12 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.011$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.989$

Expected Value of Point Depth (mm.):  $E(Y) = 12.759$

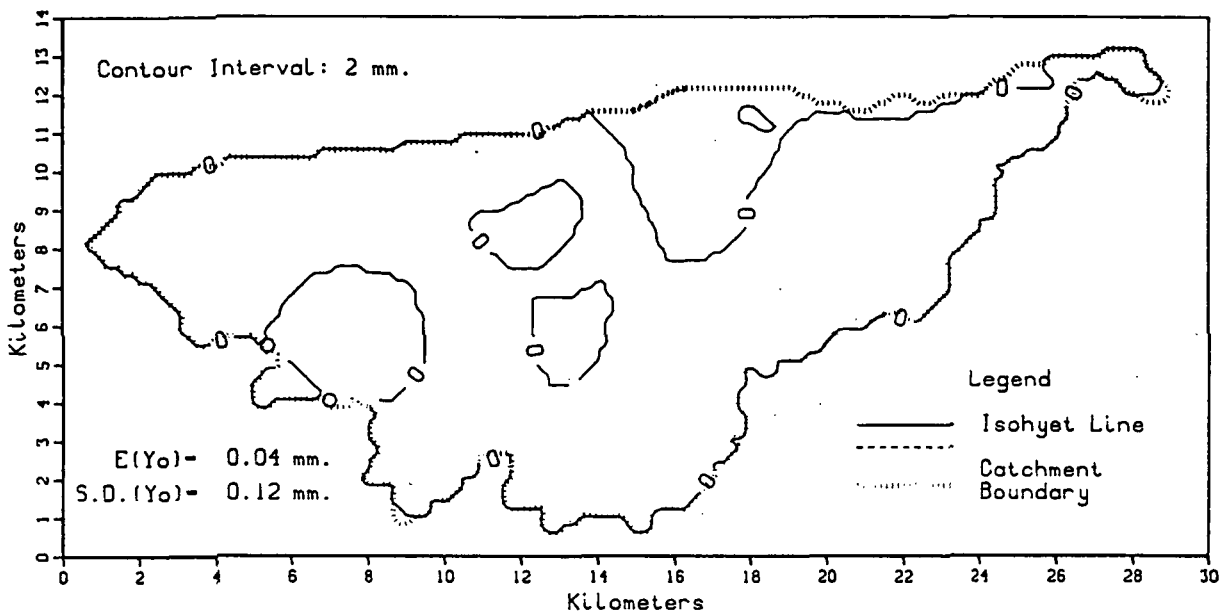
Variance of Point Depth (mm. sq.):  $Var(Y) = 11.738$

Coef. of Skewness of Point Depth:  $S.C.(Y) = -0.829$

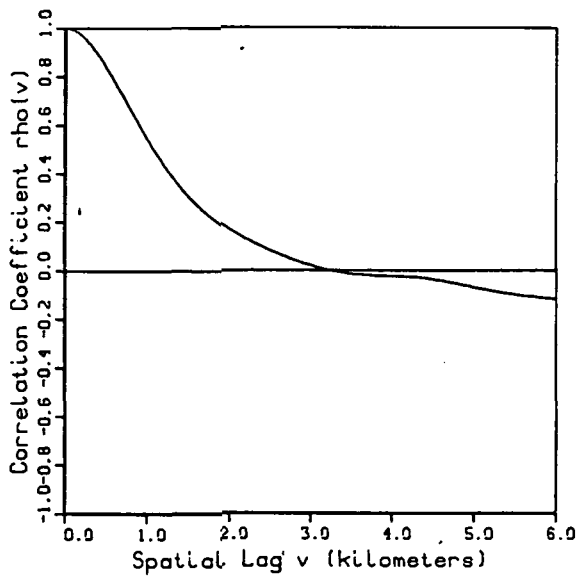
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.983	0.0	1.000	0.00	1.000
2	0.980	0.2	0.987	0.04	0.906
3	0.977	0.4	0.952	0.16	0.809
4	0.974	0.6	0.899	0.36	0.735
5	0.971	0.8	0.832	0.64	0.677
6	0.968	1.0	0.756	1.00	0.618
7	0.966	1.2	0.678	1.44	0.554
8	0.963	1.4	0.601	1.96	0.502
9	0.956	1.6	0.525	2.56	0.464
10	0.891	1.8	0.455	3.24	0.426
11	0.740	2.0	0.392	4.00	0.387
12	0.610	2.2	0.345	4.84	0.348
13	0.478	2.4	0.304	5.76	0.310
14	0.324	2.6	0.266	6.76	0.274
15	0.202	2.8	0.233	7.84	0.240
16	0.137	3.0	0.199	9.00	0.210
17	0.091	3.2	0.165	10.24	0.184
18	0.058	3.4	0.130	11.56	0.162
19	0.034	3.6	0.092	12.96	0.143
20	0.023	3.8	0.051	14.44	0.126
21	0.012	4.0	0.011	16.00	0.111
22	0.001	4.2	-.036	17.64	0.098
23	0.000	4.4	-.086	19.36	0.087
		4.6	-.130	21.16	0.078
		4.8	-.168	23.04	0.070
		5.0	-.205	25.00	0.063
		5.2	-.237	27.04	0.056
		5.4	-.264	29.16	0.049
		5.6	-.284	31.36	0.041
		5.8	-.298	33.64	0.032
		6.0	-.303	36.00	0.017

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

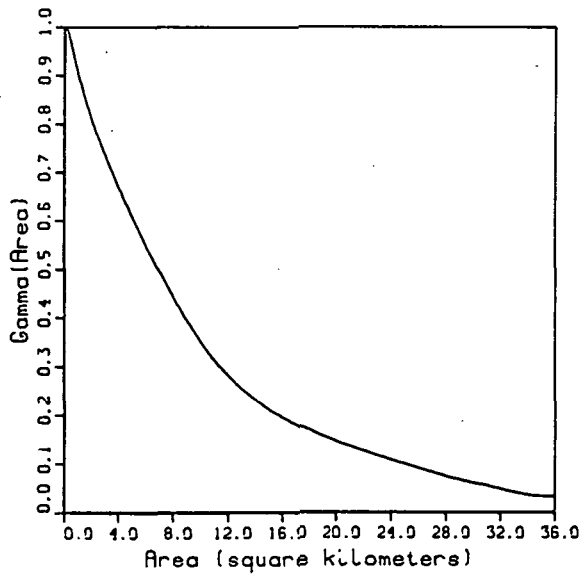
Storm Day  
 June 13, 1973



Spatial Correlation



Variance Function



Storm Day June 13 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.750$ .

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.250$

Expected Value of Point Depth (mm.):  $E(Y) = 0.035$

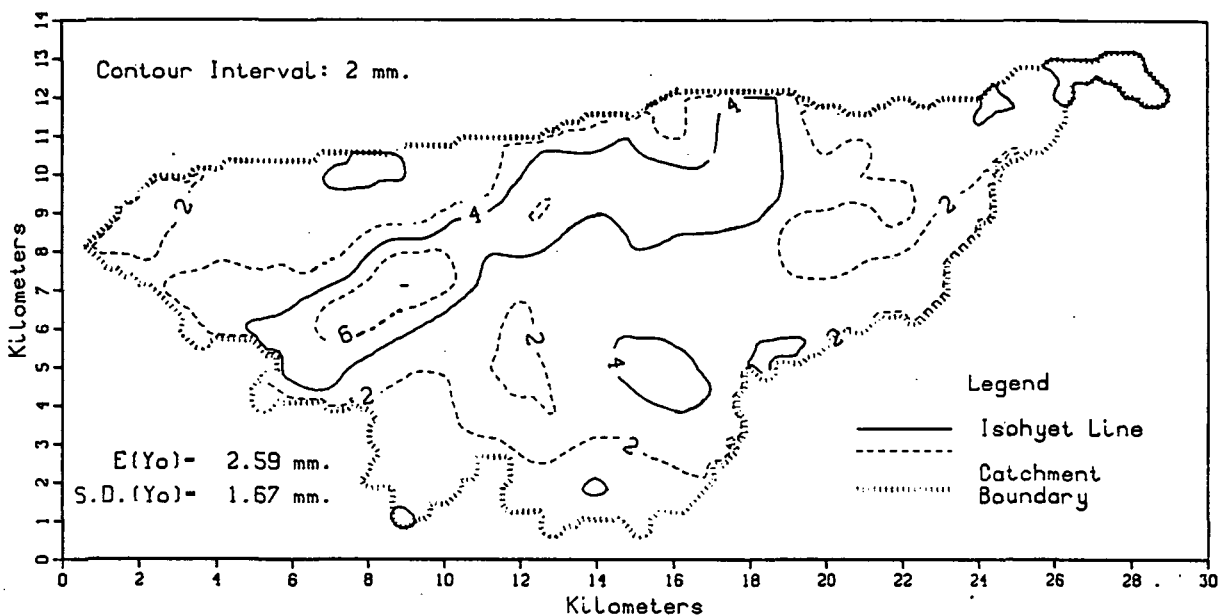
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.010$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.955$

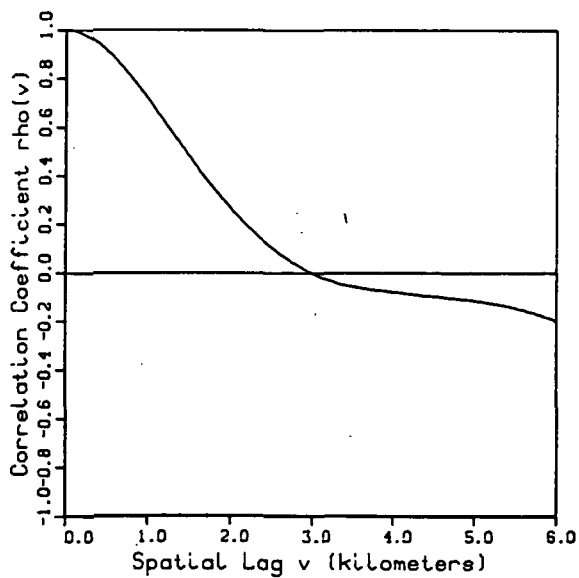
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.970	0.04	1.008
		0.4	0.892	0.16	1.002
		0.6	0.784	0.36	0.979
		0.8	0.664	0.64	0.944
		1.0	0.546	1.00	0.903
		1.2	0.439	1.44	0.859
		1.4	0.347	1.96	0.814
		1.6	0.273	2.56	0.767
		1.8	0.214	3.24	0.719
		2.0	0.168	4.00	0.669
		2.2	0.129	4.84	0.617
		2.4	0.096	5.76	0.564
		2.6	0.066	6.76	0.508
		2.8	0.040	7.84	0.451
		3.0	0.018	9.00	0.395
		3.2	0.001	10.24	0.342
		3.4	-.012	11.56	0.296
		3.6	-.021	12.96	0.256
		3.8	-.025	14.44	0.223
		4.0	-.028	16.00	0.194
		4.2	-.030	17.64	0.172
		4.4	-.036	19.36	0.152
		4.6	-.046	21.16	0.133
		4.8	-.059	23.04	0.115
		5.0	-.073	25.00	0.098
		5.2	-.087	27.04	0.081
		5.4	-.098	29.16	0.065
		5.6	-.108	31.36	0.051
		5.8	-.116	33.64	0.037
		6.0	-.122	36.00	0.032

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

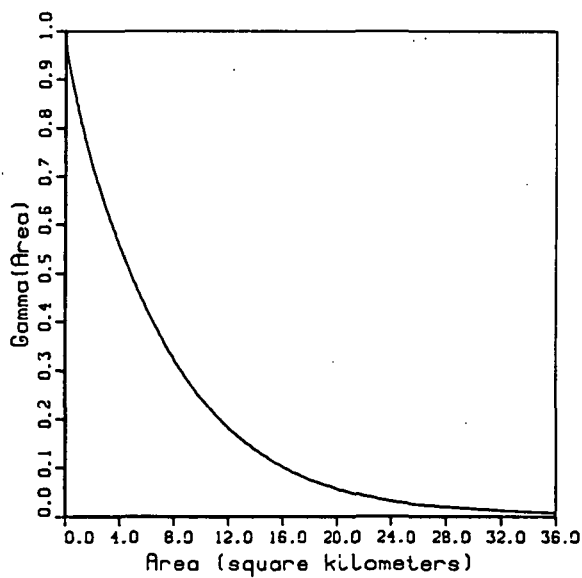
Storm Day  
 July 2, 1973



Spatial Correlation



Variance Function



Storm Day July 2 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.017$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.983$

Expected Value of Point Depth (mm.):  $E(Y) = 2.723$

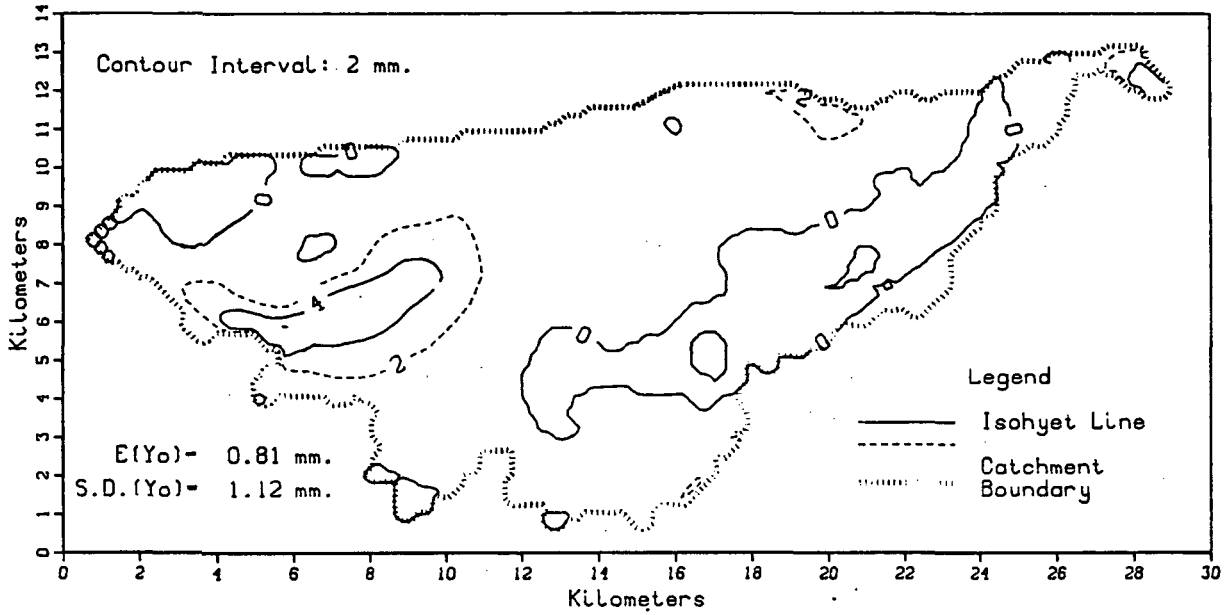
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.531$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.408$

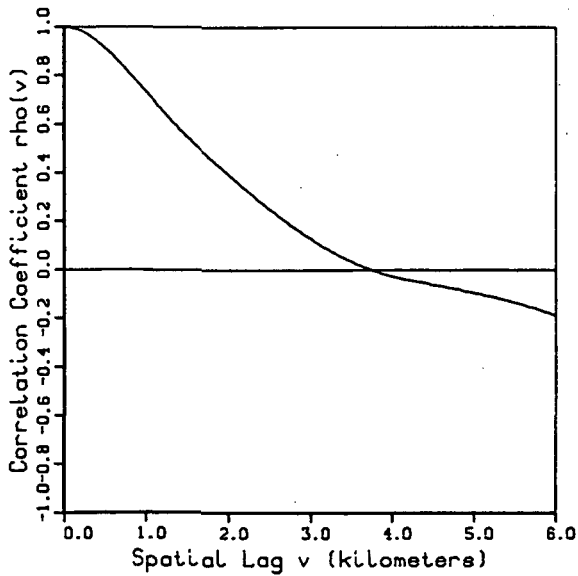
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.857	0.0	1.000	0.00	1.000
2	0.658	0.2	0.985	0.04	0.980
3	0.422	0.4	0.943	0.16	0.950
4	0.216	0.6	0.881	0.36	0.917
5	0.086	0.8	0.804	0.64	0.879
6	0.028	1.0	0.716	1.00	0.833
7	0.010	1.2	0.622	1.44	0.781
8	0.000	1.4	0.527	1.96	0.725
		1.6	0.434	2.56	0.669
		1.8	0.347	3.24	0.613
		2.0	0.266	4.00	0.556
		2.2	0.196	4.84	0.498
		2.4	0.133	5.76	0.440
		2.6	0.079	6.76	0.384
		2.8	0.035	7.84	0.330
		3.0	-.003	9.00	0.281
		3.2	-.031	10.24	0.235
		3.4	-.052	11.56	0.194
		3.6	-.065	12.96	0.158
		3.8	-.074	14.44	0.128
		4.0	-.082	16.00	0.101
		4.2	-.089	17.64	0.079
		4.4	-.097	19.36	0.061
		4.6	-.104	21.16	0.047
		4.8	-.110	23.04	0.036
		5.0	-.118	25.00	0.027
		5.2	-.128	27.04	0.021
		5.4	-.140	29.16	0.017
		5.6	-.156	31.36	0.013
		5.8	-.176	33.64	0.009
		6.0	-.202	36.00	0.007

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

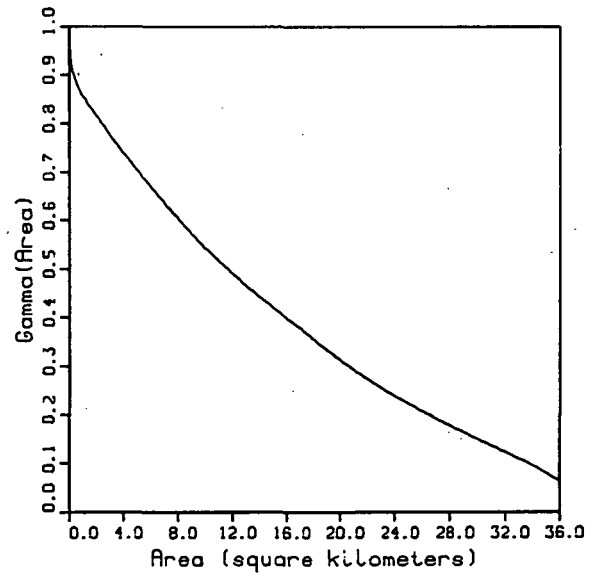
Storm Day  
 July 5, 1973



Spatial Correlation



Variance Function



Storm Day July 5 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.192$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.808$

Expected Value of Point Depth (mm.):  $E(Y) = 0.850$

Variance of Point Depth (mm. sq.):  $Var(Y) = 1.320$

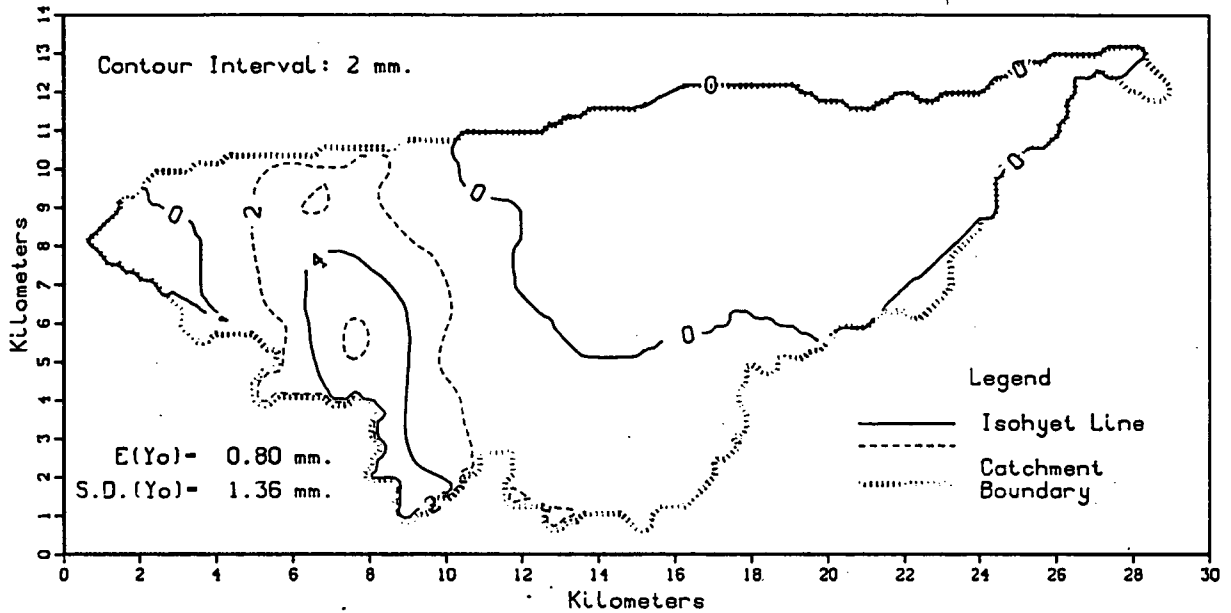
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.159$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.281	0.0	1.000	0.00	1.000
2	0.116	0.2	0.984	0.04	0.963
3	0.070	0.4	0.942	0.16	0.922
4	0.040	0.6	0.881	0.36	0.898
5	0.012	0.8	0.808	0.64	0.878
6	0.001	1.0	0.732	1.00	0.859
7	0.000	1.2	0.655	1.44	0.840
8	0.000	1.4	0.580	1.96	0.818
		1.6	0.512	2.56	0.794
		1.8	0.450	3.24	0.767
		2.0	0.391	4.00	0.739
		2.2	0.331	4.84	0.709
		2.4	0.275	5.76	0.677
		2.6	0.222	6.76	0.643
		2.8	0.172	7.84	0.608
		3.0	0.126	9.00	0.572
		3.2	0.084	10.24	0.537
		3.4	0.048	11.56	0.501
		3.6	0.017	12.96	0.466
		3.8	-.009	14.44	0.432
		4.0	-.030	16.00	0.398
		4.2	-.045	17.64	0.362
		4.4	-.057	19.36	0.325
		4.6	-.071	21.16	0.288
		4.8	-.084	23.04	0.253
		5.0	-.099	25.00	0.221
		5.2	-.113	27.04	0.191
		5.4	-.130	29.16	0.161
		5.6	-.148	31.36	0.131
		5.8	-.169	33.64	0.100
		6.0	-.193	36.00	0.063

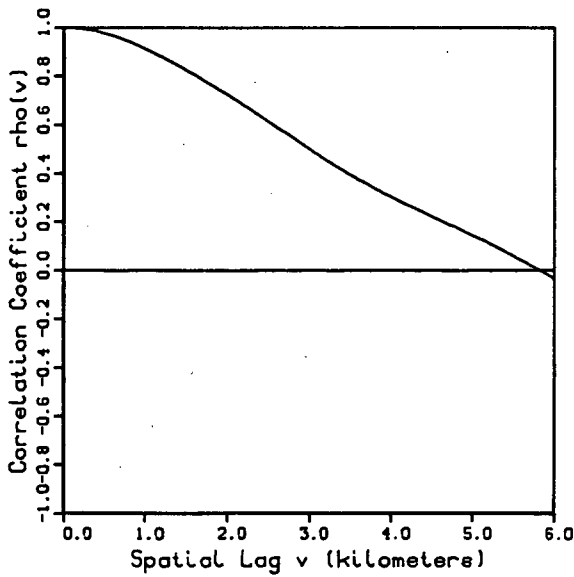


Walnut Gulch, Arizona  
Ac=154.21 sq.km.

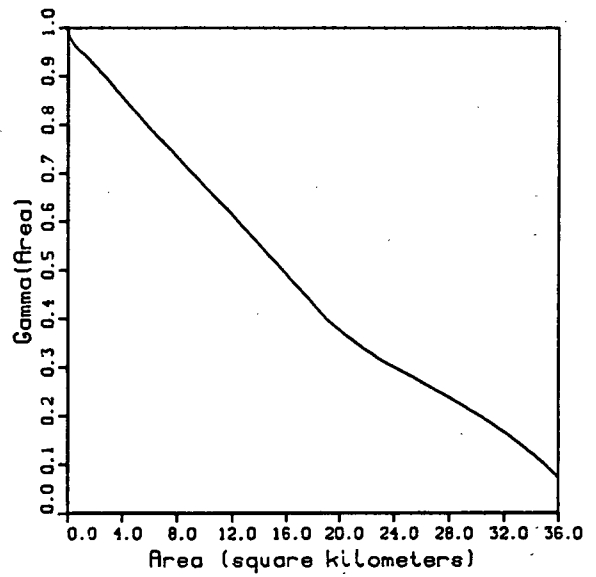
Storm Day  
July 6, 1973



Spatial Correlation



Variance Function



Storm Day July 6 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.473$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.527$

Expected Value of Point Depth (mm.):  $E(Y)= 0.958$

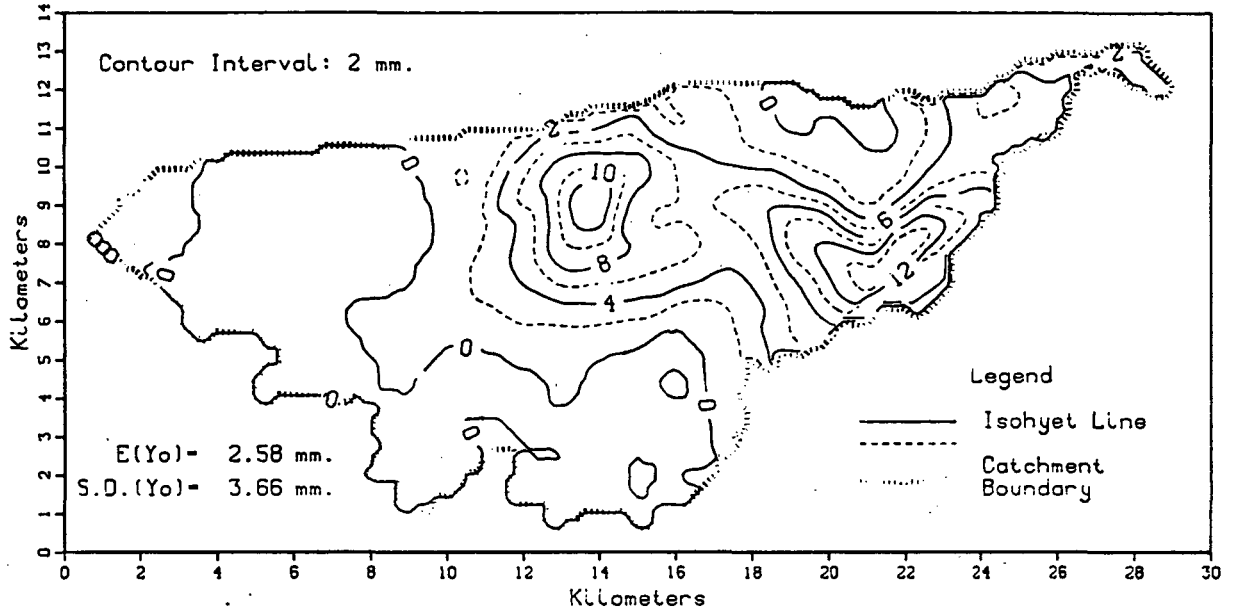
Variance of Point Depth (mm. sq.):  $Var(Y)= 2.109$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 1.673$

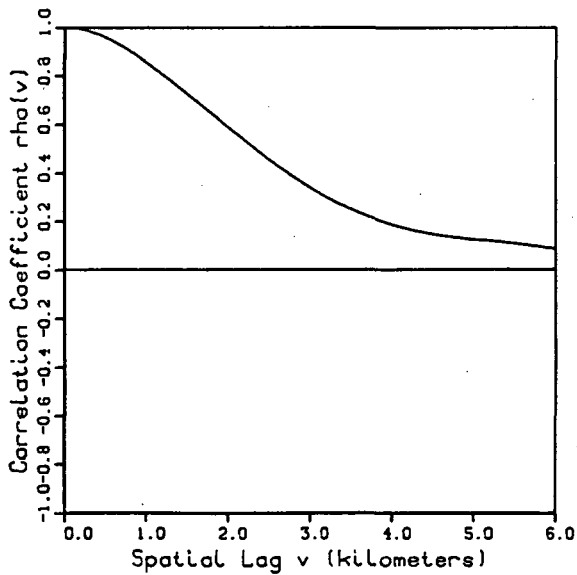
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.322	0.0	1.000	0.00	1.000
2	0.189	0.2	0.995	0.04	0.990
3	0.108	0.4	0.983	0.16	0.979
4	0.067	0.6	0.964	0.36	0.967
5	0.027	0.8	0.939	0.64	0.956
6	0.004	1.0	0.909	1.00	0.947
7	0.000	1.2	0.875	1.44	0.935
		1.4	0.838	1.96	0.919
		1.6	0.800	2.56	0.900
		1.8	0.760	3.24	0.879
		2.0	0.718	4.00	0.853
		2.2	0.675	4.84	0.827
		2.4	0.631	5.76	0.797
		2.6	0.586	6.76	0.767
		2.8	0.541	7.84	0.735
		3.0	0.495	9.00	0.700
		3.2	0.451	10.24	0.663
		3.4	0.409	11.56	0.624
		3.6	0.370	12.96	0.581
		3.8	0.333	14.44	0.537
		4.0	0.298	16.00	0.489
		4.2	0.264	17.64	0.437
		4.4	0.233	19.36	0.388
		4.6	0.201	21.16	0.349
		4.8	0.171	23.04	0.313
		5.0	0.139	25.00	0.283
		5.2	0.106	27.04	0.251
		5.4	0.072	29.16	0.216
		5.6	0.036	31.36	0.177
		5.8	-.001	33.64	0.130
		6.0	-.039	36.00	0.070

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

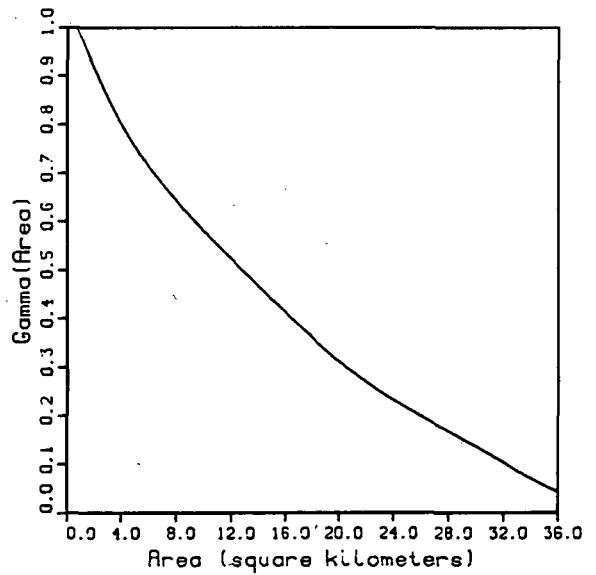
Storm Day  
 July 8, 1973



Spatial Correlation



Variance Function



Storm Day July 8 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.336$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.664$

Expected Value of Point Depth (mm.):  $E(Y) = 2.752$

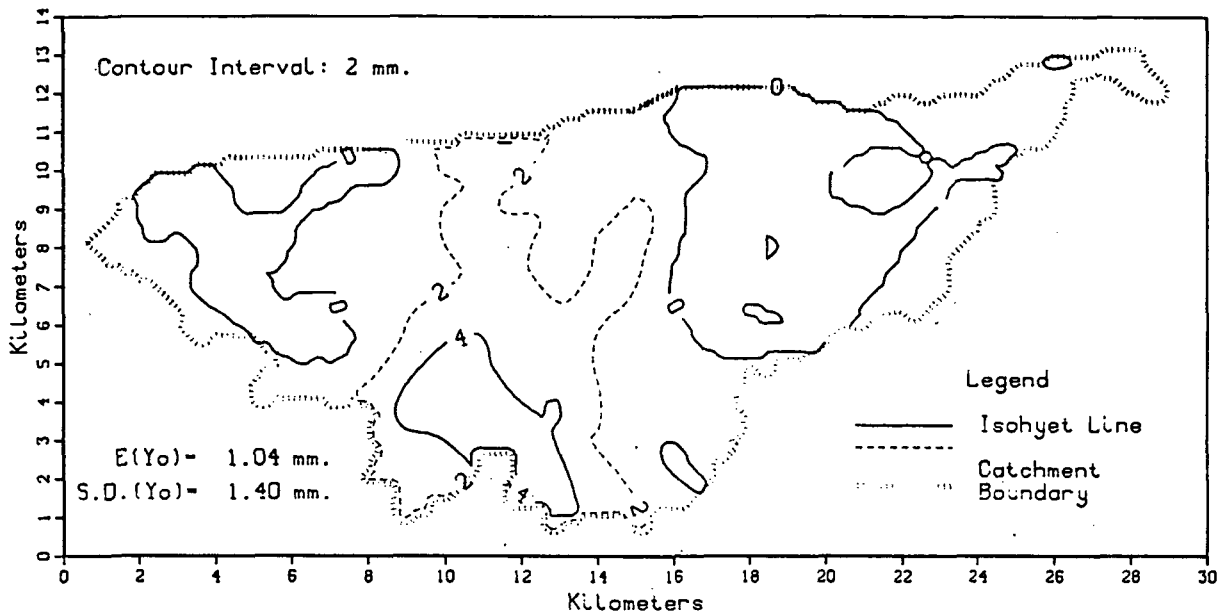
Variance of Point Depth (mm. sq.):  $Var(Y) = 13.070$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.283$

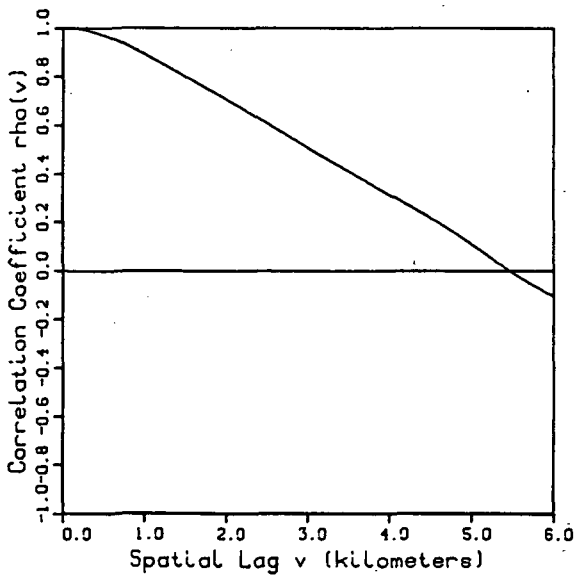
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.473	0.0	1.000	0.00	1.000
2	0.413	0.2	0.992	0.04	1.014
3	0.363	0.4	0.970	0.16	1.020
4	0.311	0.6	0.938	0.36	1.017
5	0.253	0.8	0.897	0.64	1.003
6	0.189	1.0	0.851	1.00	0.981
7	0.140	1.2	0.801	1.44	0.952
8	0.110	1.4	0.748	1.96	0.918
9	0.084	1.6	0.694	2.56	0.879
10	0.059	1.8	0.639	3.24	0.839
11	0.043	2.0	0.584	4.00	0.798
12	0.029	2.2	0.530	4.84	0.759
13	0.018	2.4	0.477	5.76	0.720
14	0.008	2.6	0.426	6.76	0.682
15	0.001	2.8	0.378	7.84	0.645
16	0.000	3.0	0.335	9.00	0.608
		3.2	0.296	10.24	0.571
		3.4	0.262	11.56	0.532
		3.6	0.232	12.96	0.493
		3.8	0.206	14.44	0.452
		4.0	0.184	16.00	0.410
		4.2	0.166	17.64	0.366
		4.4	0.151	19.36	0.323
		4.6	0.140	21.16	0.284
		4.8	0.131	23.04	0.247
		5.0	0.123	25.00	0.213
		5.2	0.117	27.04	0.181
		5.4	0.111	29.16	0.148
		5.6	0.103	31.36	0.113
		5.8	0.094	33.64	0.075
		6.0	0.085	36.00	0.043

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

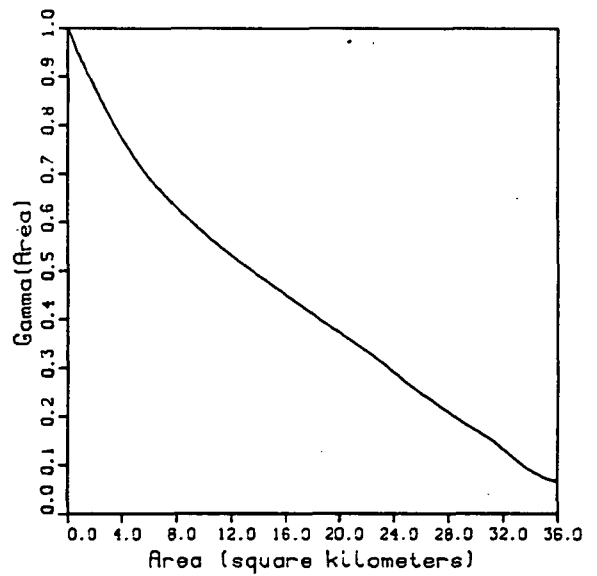
Storm Day  
 July 9, 1973



Spatial Correlation



Variance Function



Storm Day July 9 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.275$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.725$

Expected Value of Point Depth (mm.):  $E(Y) = 1.107$

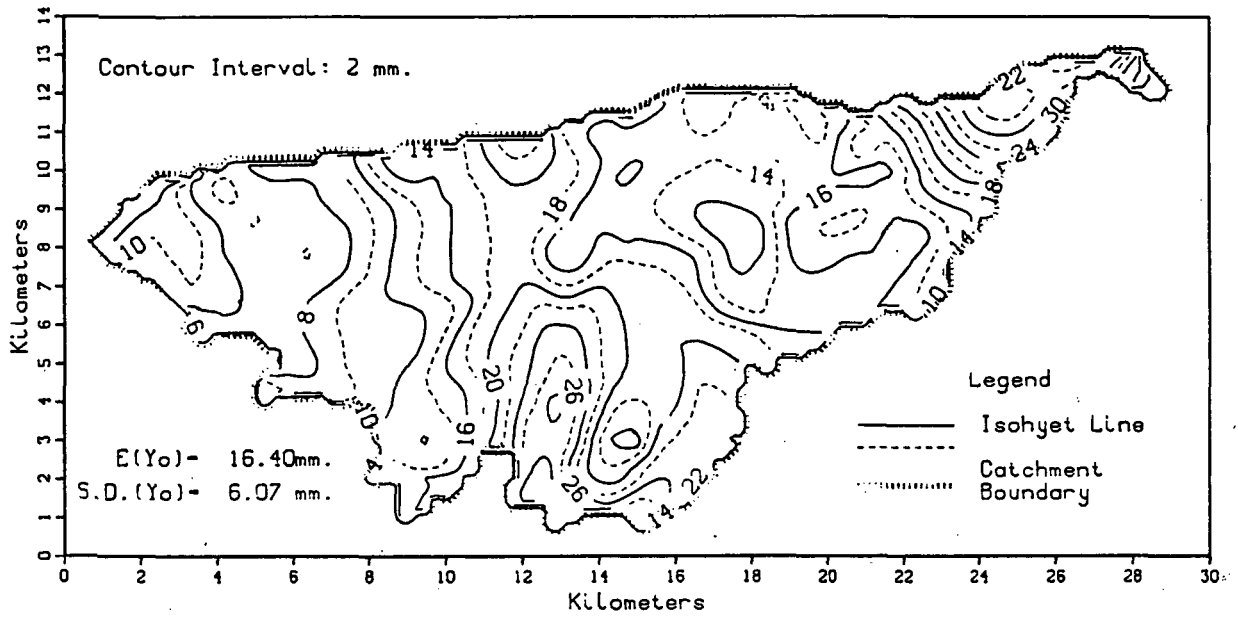
Variance of Point Depth (mm. sq.):  $Var(Y) = 2.055$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.233$

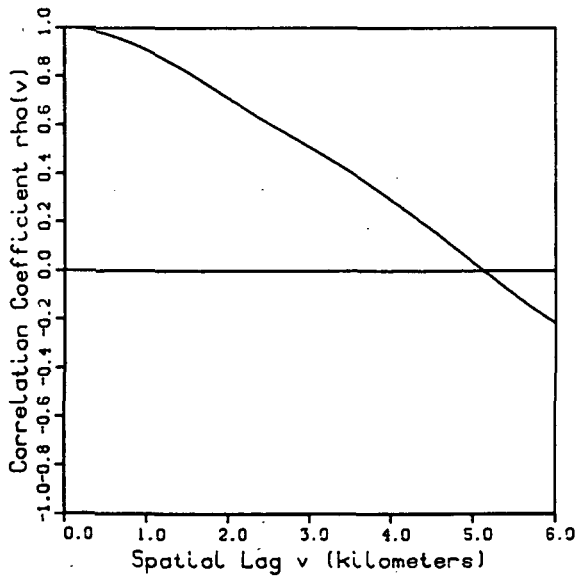
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.359	0.0	1.000	0.00	1.000
2	0.253	0.2	0.994	0.04	0.999
3	0.126	0.4	0.978	0.16	0.991
4	0.061	0.6	0.954	0.36	0.976
5	0.015	0.8	0.923	0.64	0.955
6	0.000	1.0	0.889	1.00	0.932
		1.2	0.852	1.44	0.906
		1.4	0.814	1.96	0.876
		1.6	0.776	2.56	0.842
		1.8	0.739	3.24	0.807
		2.0	0.702	4.00	0.771
		2.2	0.664	4.84	0.734
		2.4	0.624	5.76	0.697
		2.6	0.584	6.76	0.664
		2.8	0.544	7.84	0.632
		3.0	0.503	9.00	0.600
		3.2	0.463	10.24	0.569
		3.4	0.424	11.56	0.539
		3.6	0.386	12.96	0.508
		3.8	0.348	14.44	0.478
		4.0	0.310	16.00	0.447
		4.2	0.272	17.64	0.414
		4.4	0.233	19.36	0.382
		4.6	0.192	21.16	0.348
		4.8	0.150	23.04	0.310
		5.0	0.105	25.00	0.264
		5.2	0.056	27.04	0.226
		5.4	0.009	29.16	0.184
		5.6	-.035	31.36	0.146
		5.8	-.075	33.64	0.094
		6.0	-.110	36.00	0.066

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

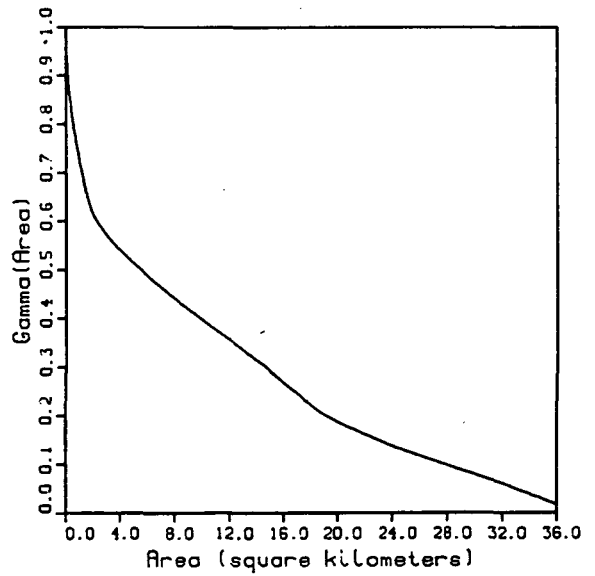
Storm Day  
 July 10, 1973



Spatial Correlation



Variance Function



Storm Day July 10 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 16.499$

Variance of Point Depth (mm. sq.):  $Var(Y) = 35.523$

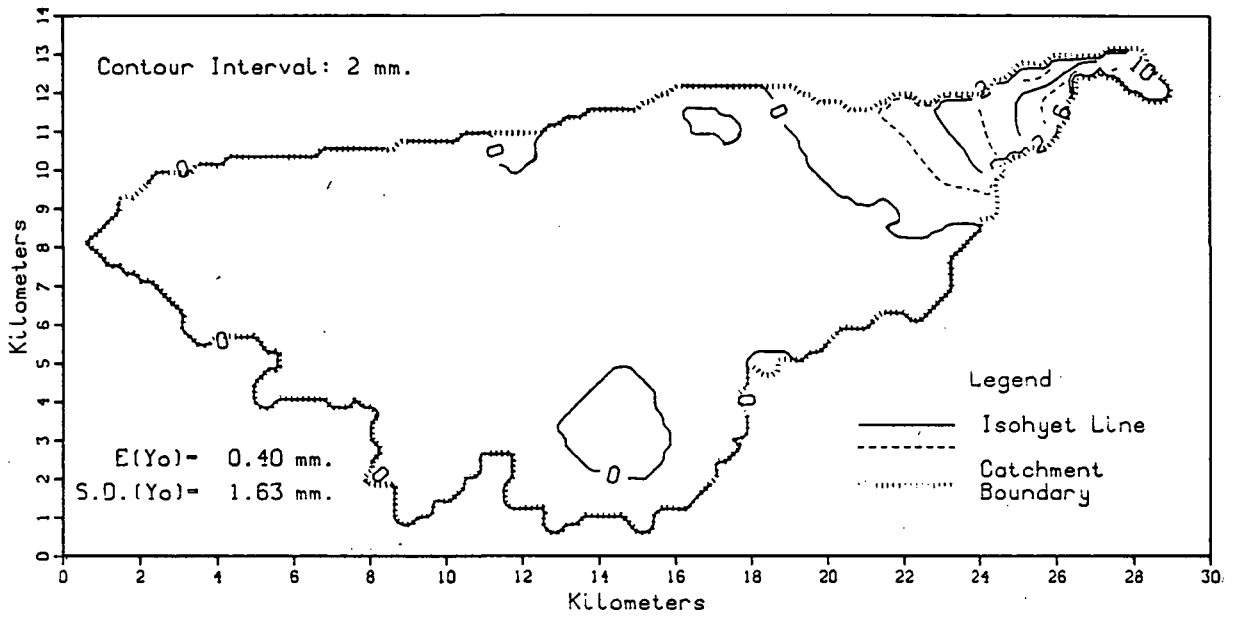
Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.597$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.995	0.04	0.950
3	1.000	0.4	0.981	0.16	0.893
4	1.000	0.6	0.961	0.36	0.836
5	1.000	0.8	0.935	0.64	0.779
6	0.997	1.0	0.904	1.00	0.721
7	0.956	1.2	0.869	1.44	0.660
8	0.919	1.4	0.831	1.96	0.613
9	0.885	1.6	0.790	2.56	0.584
10	0.854	1.8	0.749	3.24	0.560
11	0.821	2.0	0.705	4.00	0.537
12	0.780	2.2	0.663	4.84	0.514
13	0.735	2.4	0.620	5.76	0.491
14	0.677	2.6	0.581	6.76	0.466
15	0.585	2.8	0.542	7.84	0.441
16	0.491	3.0	0.504	9.00	0.416
17	0.419	3.2	0.464	10.24	0.390
18	0.351	3.4	0.423	11.56	0.362
19	0.284	3.6	0.380	12.96	0.333
20	0.219	3.8	0.335	14.44	0.301
21	0.182	4.0	0.287	16.00	0.265
22	0.153	4.2	0.237	17.64	0.227
23	0.125	4.4	0.187	19.36	0.195
24	0.098	4.6	0.137	21.16	0.171
25	0.083	4.8	0.083	23.04	0.147
26	0.069	5.0	0.028	25.00	0.126
27	0.057	5.2	-.025	27.04	0.106
28	0.042	5.4	-.079	29.16	0.085
29	0.033	5.6	-.130	31.36	0.065
30	0.027	5.8	-.179	33.64	0.041
31	0.023	6.0	-.222	36.00	0.015
32	0.018				
33	0.013				
34	0.007				
35	0.003				
36	0.000				
37	0.000				

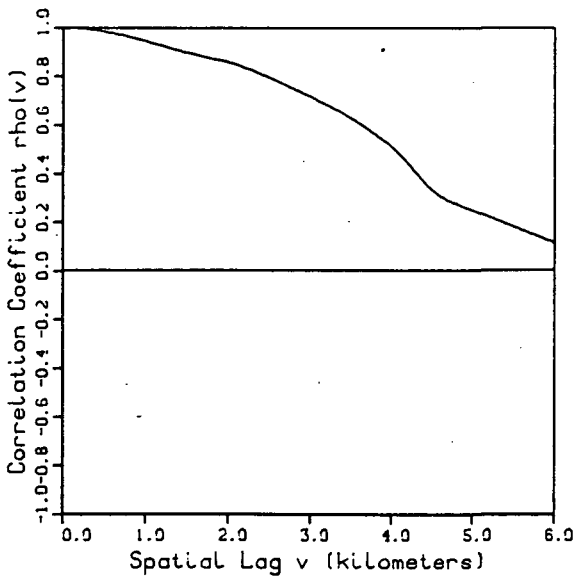


Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

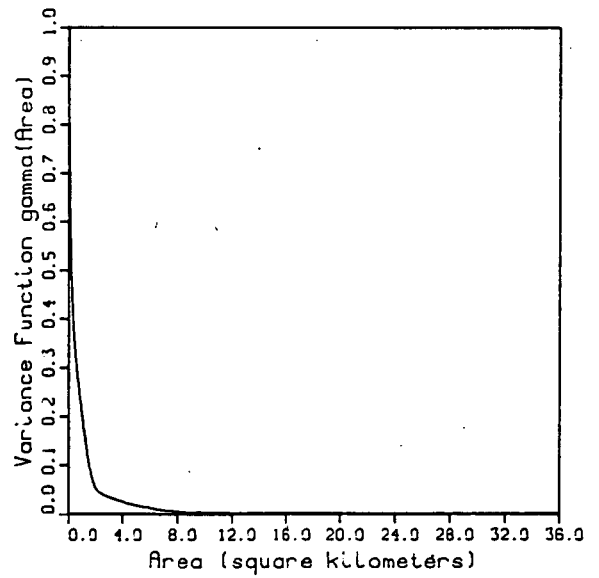
Storm Day  
 July 11, 1973



Spatial Correlation



Variance Function



Storm Day July 11 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.817$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.183$

Expected Value of Point Depth (mm.):  $E(Y) = 0.454$

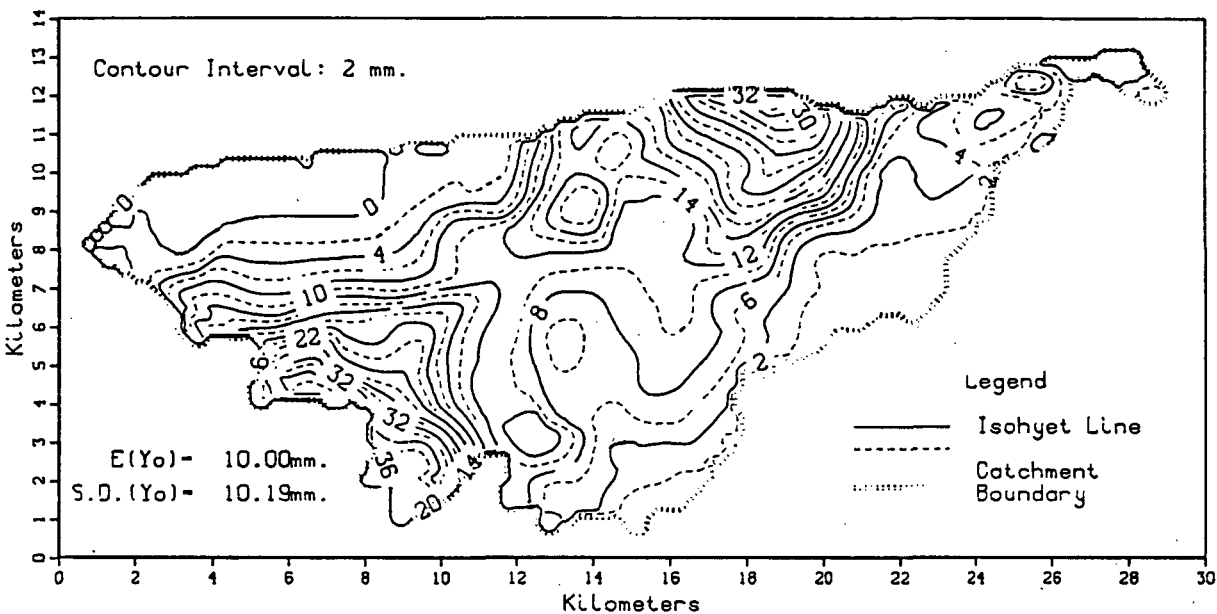
Variance of Point Depth (mm. sq.):  $Var(Y) = 3.185$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.755$

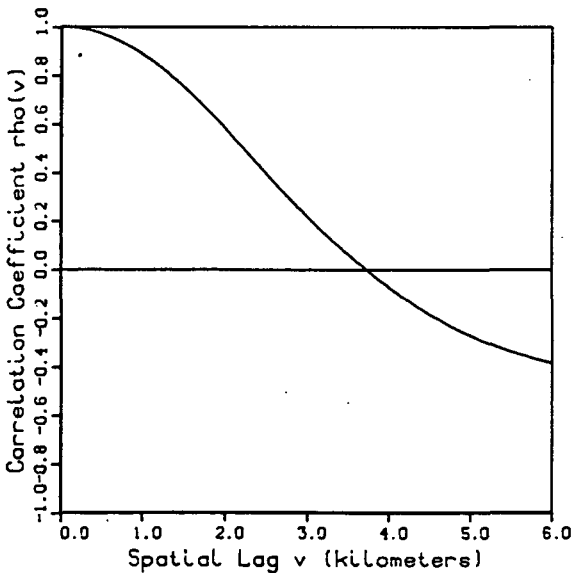
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.074	0.0	1.000	0.00	1.000
2	0.059	0.2	0.997	0.04	0.762
3	0.049	0.4	0.989	0.16	0.533
4	0.041	0.6	0.976	0.36	0.382
5	0.035	0.8	0.960	0.64	0.291
6	0.029	1.0	0.943	1.00	0.203
7	0.022	1.2	0.923	1.44	0.112
8	0.017	1.4	0.904	1.96	0.055
9	0.013	1.6	0.887	2.56	0.040
10	0.009	1.8	0.870	3.24	0.032
11	0.006	2.0	0.857	4.00	0.025
12	0.004	2.2	0.834	4.84	0.018
13	0.001	2.4	0.807	5.76	0.013
14	0.000	2.6	0.776	6.76	0.008
		2.8	0.747	7.84	0.004
		3.0	0.715	9.00	0.003
		3.2	0.681	10.24	0.002
		3.4	0.648	11.56	0.001
		3.6	0.607	12.96	0.001
		3.8	0.560	14.44	0.001
		4.0	0.513	16.00	0.001
		4.2	0.444	17.64	0.001
		4.4	0.365	19.36	0.000
		4.6	0.307	21.16	0.000
		4.8	0.273	23.04	0.000
		5.0	0.247	25.00	0.000
		5.2	0.220	27.04	0.000
		5.4	0.194	29.16	0.000
		5.6	0.167	31.36	0.000
		5.8	0.139	33.64	0.000
		6.0	0.114	36.00	0.000

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

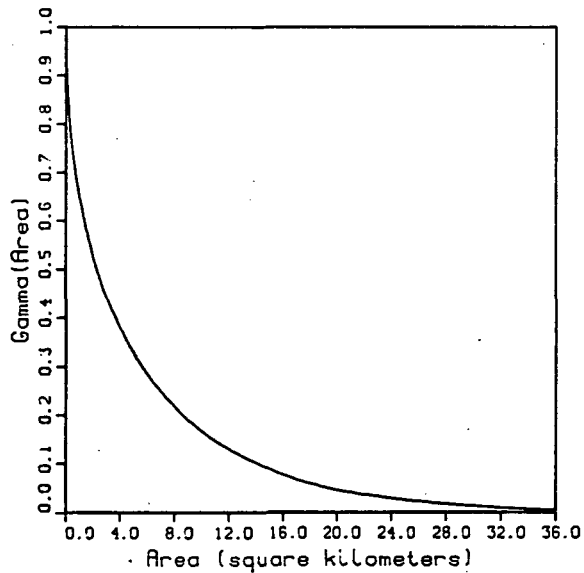
Storm Day  
 July 12, 1973



Spatial Correlation



Variance Function



Storm Day July 12 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.066$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.934$

Expected Value of Point Depth (mm.):  $E(Y) = 10.291$

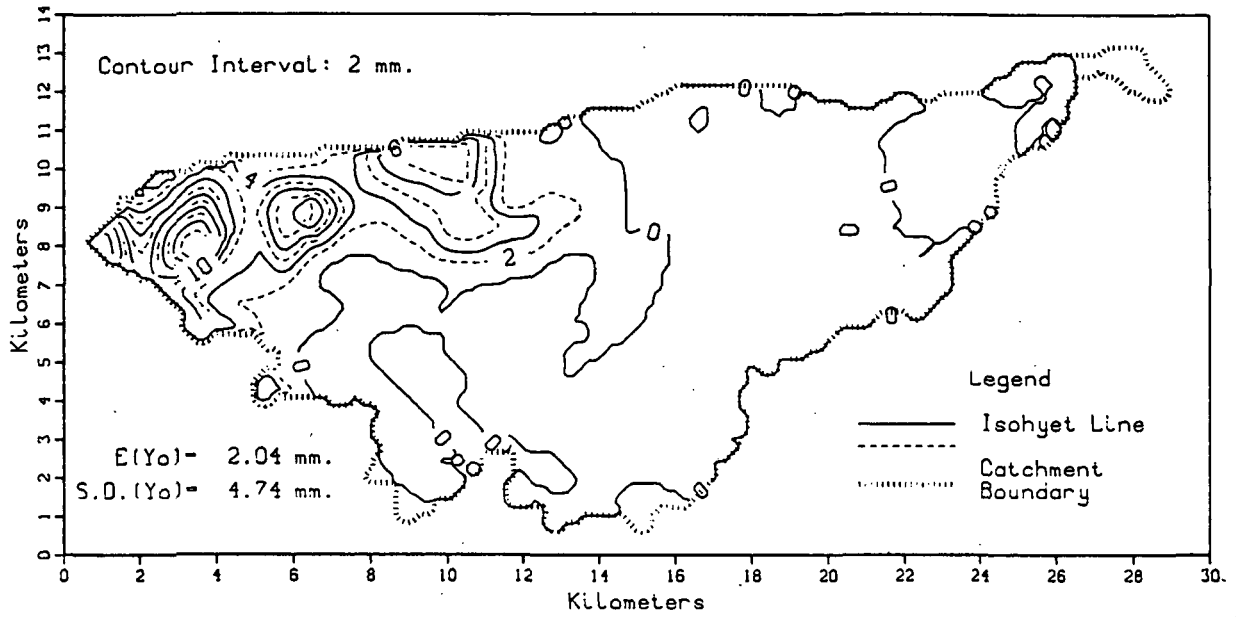
Variance of Point Depth (mm. sq.):  $Var(Y) = 89.424$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.222$

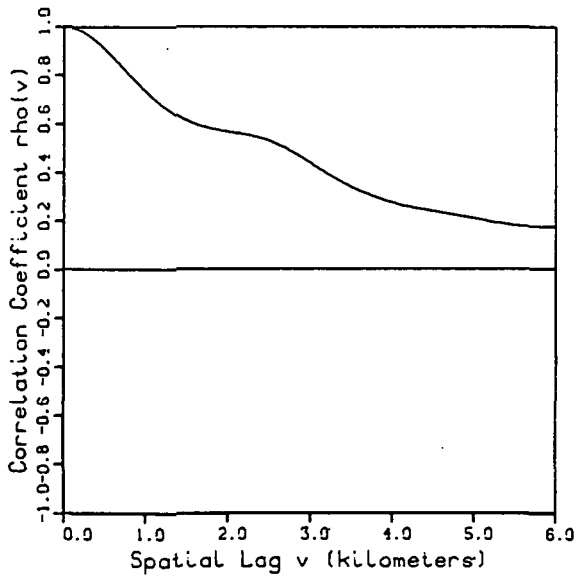
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.873	0.0	1.000	0.00	1.000
3	0.749	0.2	0.994	0.04	0.932
5	0.647	0.4	0.979	0.16	0.860
7	0.552	0.6	0.954	0.36	0.786
9	0.462	0.8	0.922	0.64	0.719
11	0.368	1.0	0.881	1.00	0.656
13	0.284	1.2	0.832	1.44	0.593
15	0.230	1.4	0.777	1.96	0.532
17	0.189	1.6	0.714	2.56	0.476
19	0.158	1.8	0.647	3.24	0.425
21	0.132	2.0	0.576	4.00	0.377
23	0.109	2.2	0.502	4.84	0.333
25	0.088	2.4	0.426	5.76	0.291
27	0.071	2.6	0.352	6.76	0.254
29	0.058	2.8	0.281	7.84	0.220
31	0.046	3.0	0.212	9.00	0.189
33	0.035	3.2	0.147	10.24	0.160
35	0.027	3.4	0.086	11.56	0.136
37	0.019	3.6	0.029	12.96	0.114
39	0.008	3.8	-.026	14.44	0.094
41	0.001	4.0	-.078	16.00	0.076
		4.4	-.169	19.36	0.049
		4.6	-.208	21.16	0.039
		4.8	-.244	23.04	0.031
		5.0	-.277	25.00	0.024
		5.2	-.306	27.04	0.019
		5.4	-.331	29.16	0.013
		5.6	-.352	31.36	0.010
		5.8	-.372	33.64	0.005
		6.0	-.390	36.00	0.003

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

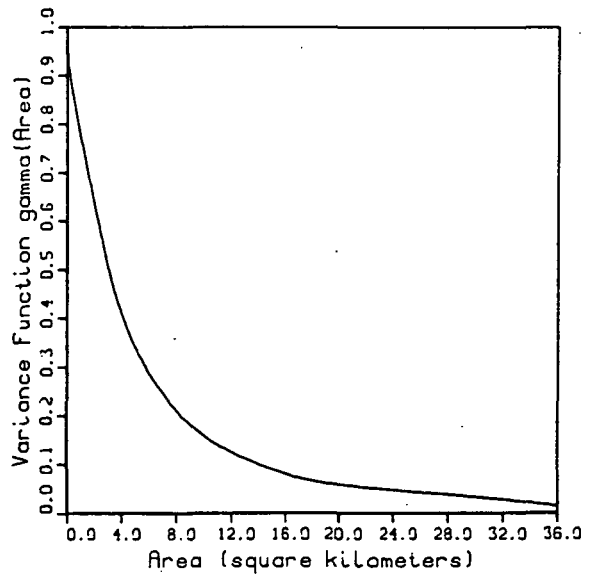
Storm Day  
 July 13, 1973



Spatial Correlation



Variance Function



Storm Day July 13 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.504$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.496$

Expected Value of Point Depth (mm.):  $E(Y)= 1.563$

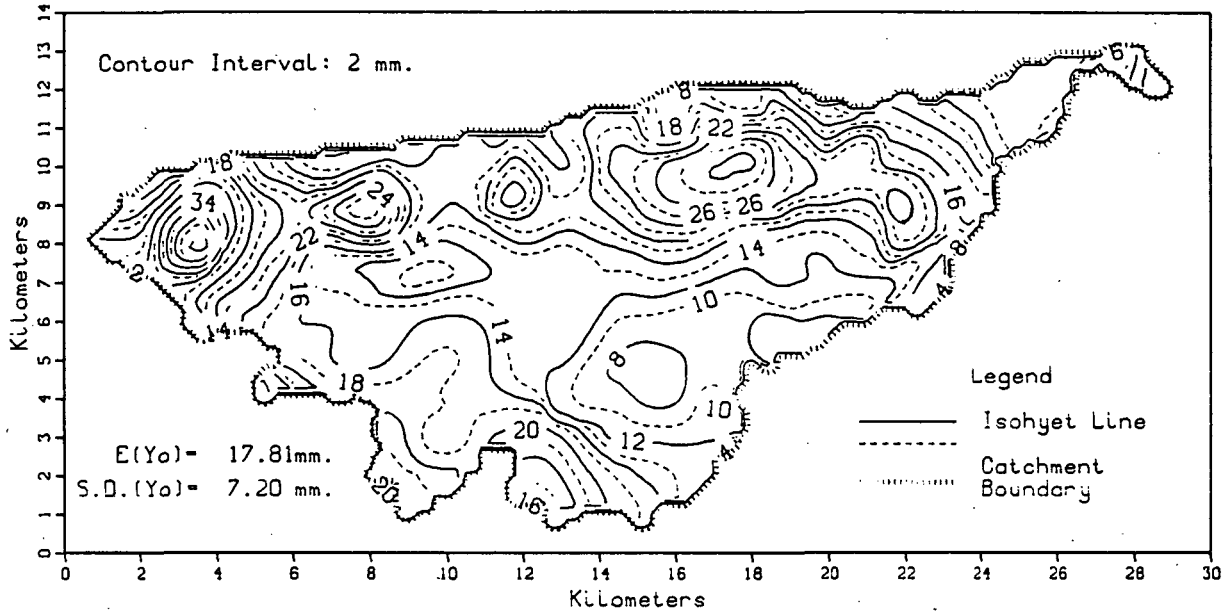
Variance of Point Depth (mm. sq.):  $Var(Y)= 12.760$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 3.126$

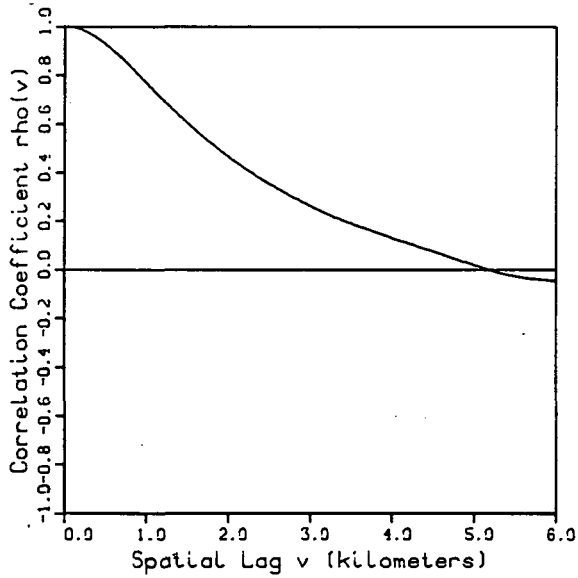
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.246	0.0	1.000	0.00	1.000
2	0.193	0.2	0.983	0.04	0.951
3	0.166	0.4	0.938	0.16	0.914
4	0.141	0.6	0.874	0.36	0.874
5	0.120	0.8	0.803	0.64	0.831
6	0.100	1.0	0.734	1.00	0.777
7	0.082	1.2	0.675	1.44	0.714
8	0.067	1.4	0.630	1.96	0.642
9	0.055	1.6	0.598	2.56	0.562
10	0.045	1.8	0.578	3.24	0.479
11	0.035	2.0	0.565	4.00	0.410
12	0.025	2.2	0.554	4.84	0.348
13	0.022	2.4	0.540	5.76	0.298
14	0.018	2.6	0.515	6.76	0.255
15	0.015	2.8	0.480	7.84	0.216
16	0.013	3.0	0.438	9.00	0.182
17	0.012	3.2	0.395	10.24	0.154
18	0.009	3.4	0.356	11.56	0.131
19	0.008	3.6	0.323	12.96	0.112
20	0.006	3.8	0.295	14.44	0.096
21	0.005	4.0	0.273	16.00	0.080
22	0.003	4.2	0.256	17.64	0.067
23	0.001	4.4	0.244	19.36	0.060
24	0.000	4.6	0.233	21.16	0.055
25	0.000	4.8	0.221	23.04	0.049
26	0.000	5.0	0.208	25.00	0.045
27	0.000	5.2	0.196	27.04	0.040
		5.4	0.185	29.16	0.035
		5.6	0.178	31.36	0.029
		5.8	0.174	33.64	0.022
		6.0	0.175	36.00	0.014

Walnut Gulch, Arizona  
 $A_c = 154.21$  sq.km.

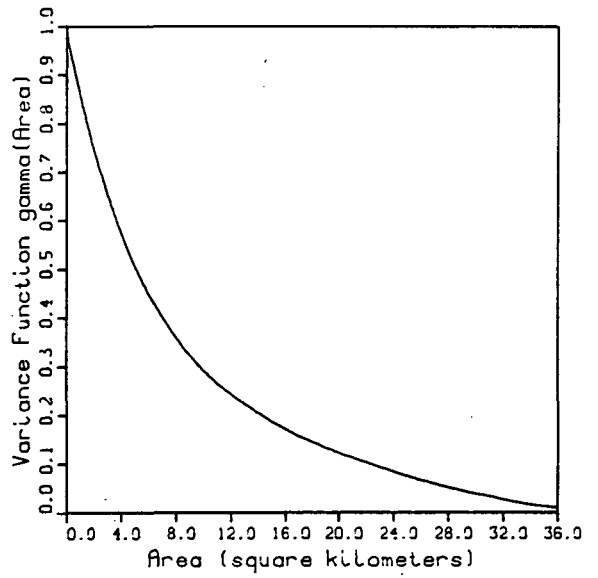
Storm Day  
 July 14, 1973



Spatial Correlation



Variance Function



Storm Day July 14 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.):  $E(Y) = 17.386$

Variance of Point Depth (mm. sq.):  $Var(Y) = 49.469$

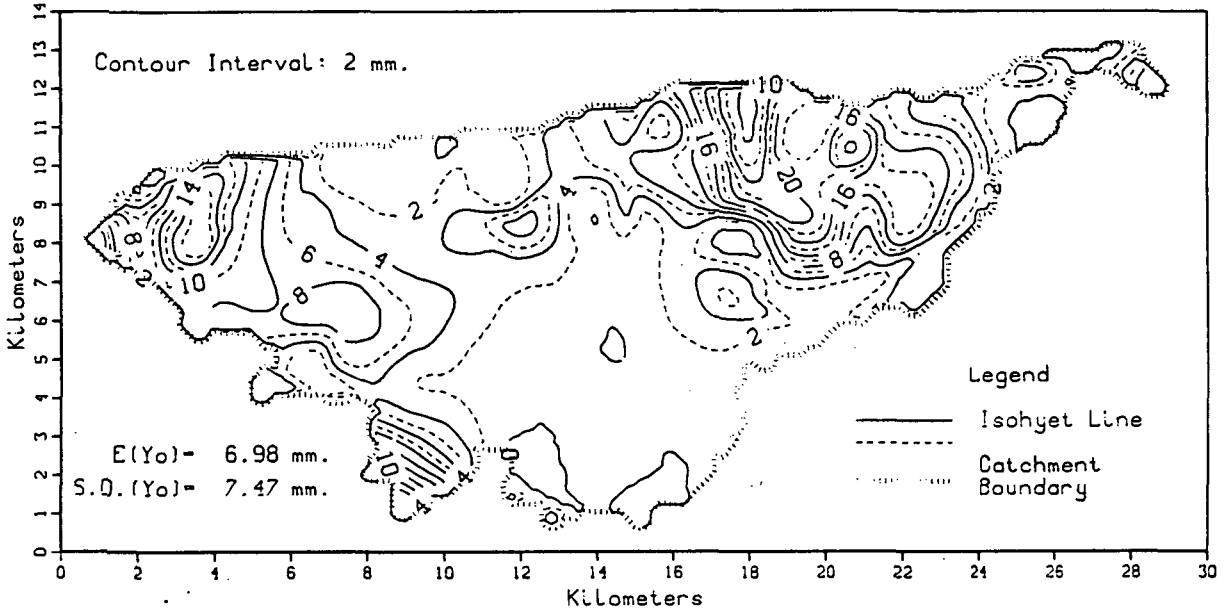
Coef. of Skewness of Point Depth:  $S.C.(Y) = 0.958$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.987	0.04	0.985
5	0.991	0.4	0.952	0.16	0.963
7	0.973	0.6	0.899	0.36	0.936
9	0.908	0.8	0.836	0.64	0.901
11	0.835	1.0	0.768	1.00	0.857
13	0.718	1.2	0.700	1.44	0.806
15	0.592	1.4	0.634	1.96	0.751
17	0.458	1.6	0.573	2.56	0.694
19	0.335	1.8	0.517	3.24	0.632
21	0.259	2.0	0.465	4.00	0.574
23	0.191	2.2	0.418	4.84	0.515
25	0.131	2.4	0.374	5.76	0.462
27	0.095	2.6	0.334	6.76	0.412
29	0.066	2.8	0.296	7.84	0.365
31	0.039	3.0	0.261	9.00	0.322
33	0.024	3.2	0.229	10.24	0.284
35	0.019	3.4	0.201	11.56	0.251
37	0.016	3.6	0.176	12.96	0.223
39	0.013	3.8	0.152	14.44	0.195
41	0.010	4.0	0.128	16.00	0.170
43	0.007	4.2	0.105	17.64	0.147
45	0.005	4.4	0.084	19.36	0.128
47	0.002	4.6	0.062	21.16	0.110
		5.0	0.016	25.00	0.074
		5.2	-.005	27.04	0.058
		5.4	-.023	29.16	0.043
		5.6	-.035	31.36	0.030
		5.8	-.044	33.64	0.017
		6.0	-.048	36.00	0.010

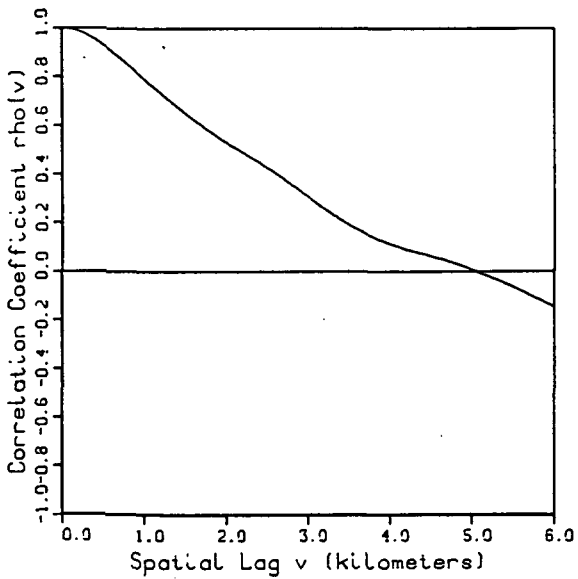


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

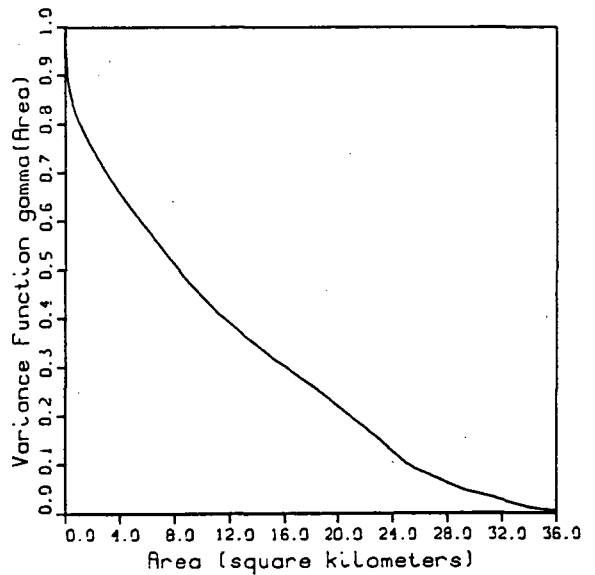
Storm Day  
 July 15, 1973



Spatial Correlation



Variance Function



Storm Day July 15 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.033$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.967$

Expected Value of Point Depth (mm.):  $E(Y) = 6.229$

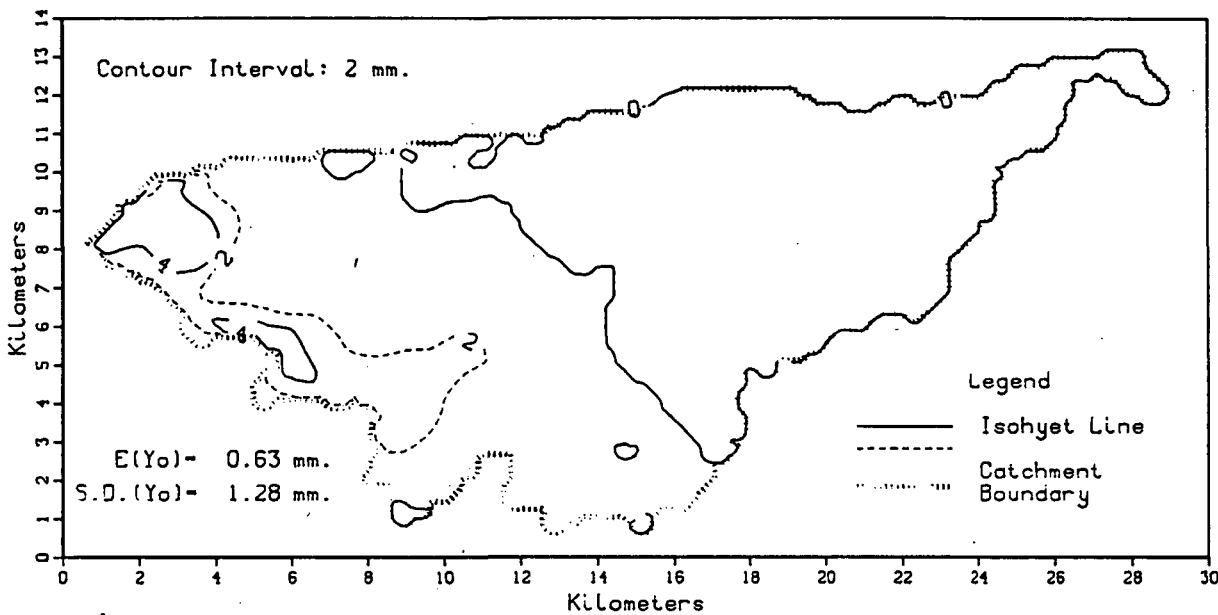
Variance of Point Depth (mm. sq.):  $Var(Y) = 42.863$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.546$

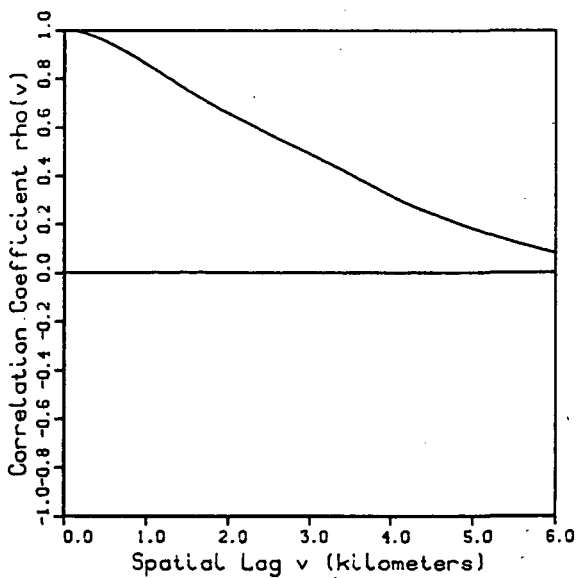
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.808	0.0	1.000	0.00	1.000
3	0.566	0.2	0.986	0.04	0.940
5	0.433	0.4	0.952	0.16	0.894
7	0.338	0.6	0.904	0.36	0.861
9	0.240	0.8	0.848	0.64	0.829
11	0.185	1.0	0.789	1.00	0.804
13	0.150	1.2	0.730	1.44	0.778
15	0.114	1.4	0.674	1.96	0.750
17	0.089	1.6	0.621	2.56	0.721
19	0.058	1.8	0.572	3.24	0.689
21	0.039	2.0	0.527	4.00	0.657
23	0.025	2.2	0.486	4.84	0.624
25	0.016	2.4	0.445	5.76	0.591
27	0.009	2.6	0.402	6.76	0.555
29	0.002	2.8	0.354	7.84	0.516
31	0.001	3.0	0.305	9.00	0.477
33	0.001	3.2	0.255	10.24	0.438
35	0.001	3.4	0.210	11.56	0.402
37	0.000	3.6	0.171	12.96	0.368
39	0.000	3.8	0.137	14.44	0.335
41	0.000	4.0	0.110	16.00	0.301
43	0.000	4.2	0.087	17.64	0.269
		4.6	0.050	21.16	0.195
		4.8	0.029	23.04	0.152
		5.0	0.004	25.00	0.103
		5.2	-.023	27.04	0.075
		5.4	-.052	29.16	0.049
		5.6	-.084	31.36	0.032
		5.8	-.117	33.64	0.013
		6.0	-.149	36.00	0.004

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

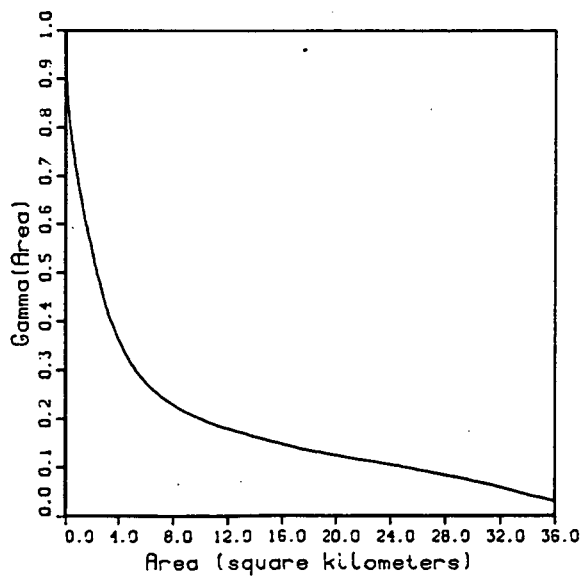
Storm Day  
 July 18, 1973



Spatial Correlation



Variance Function



Storm Day July 18 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.488$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.512$

Expected Value of Point Depth (mm.):  $E(Y) = 0.711$

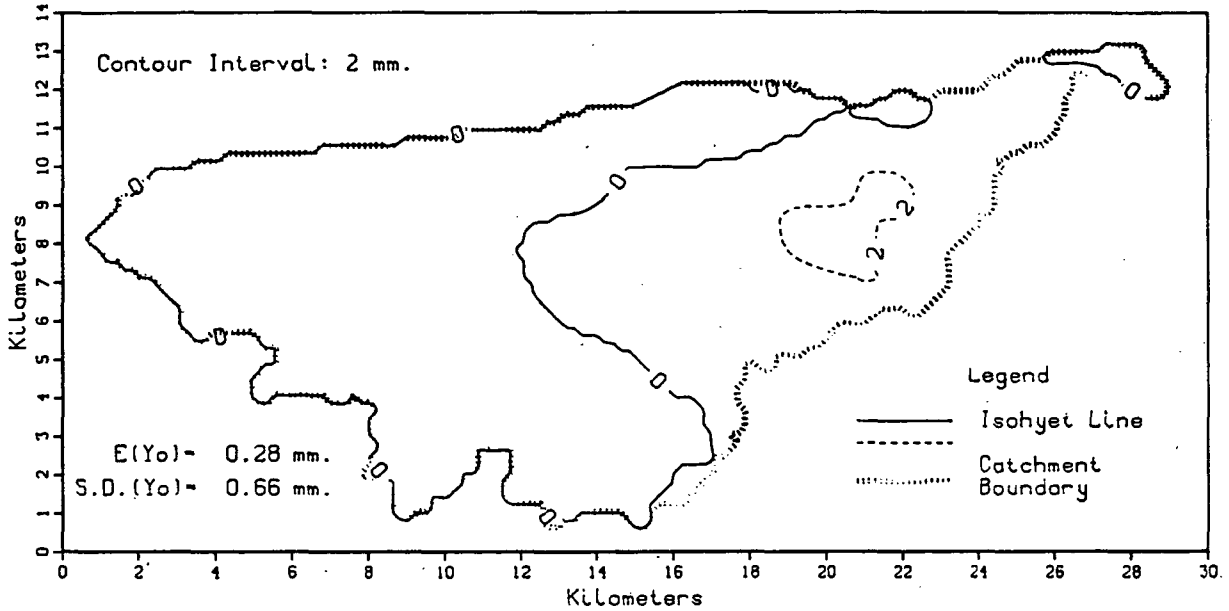
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.489$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.233$

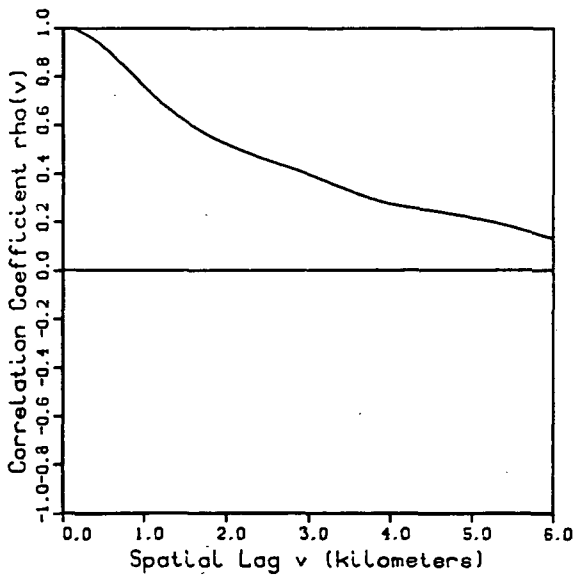
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.244	0.0	1.000	0.00	1.000
2	0.117	0.2	0.990	0.04	0.940
3	0.070	0.4	0.967	0.16	0.879
4	0.038	0.6	0.935	0.36	0.812
5	0.018	0.8	0.897	0.64	0.748
6	0.001	1.0	0.856	1.00	0.681
7	0.000	1.2	0.813	1.44	0.613
		1.4	0.770	1.96	0.546
		1.6	0.728	2.56	0.478
		1.8	0.690	3.24	0.411
		2.0	0.654	4.00	0.360
		2.2	0.620	4.84	0.314
		2.4	0.586	5.76	0.278
		2.6	0.552	6.76	0.252
		2.8	0.520	7.84	0.229
		3.0	0.488	9.00	0.210
		3.2	0.454	10.24	0.195
		3.4	0.420	11.56	0.182
		3.6	0.385	12.96	0.170
		3.8	0.349	14.44	0.158
		4.0	0.314	16.00	0.146
		4.2	0.282	17.64	0.134
		4.4	0.255	19.36	0.126
		4.6	0.228	21.16	0.117
		4.8	0.204	23.04	0.108
		5.0	0.180	25.00	0.098
		5.2	0.156	27.04	0.087
		5.4	0.135	29.16	0.075
		5.6	0.115	31.36	0.062
		5.8	0.097	33.64	0.044
		6.0	0.080	36.00	0.029

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

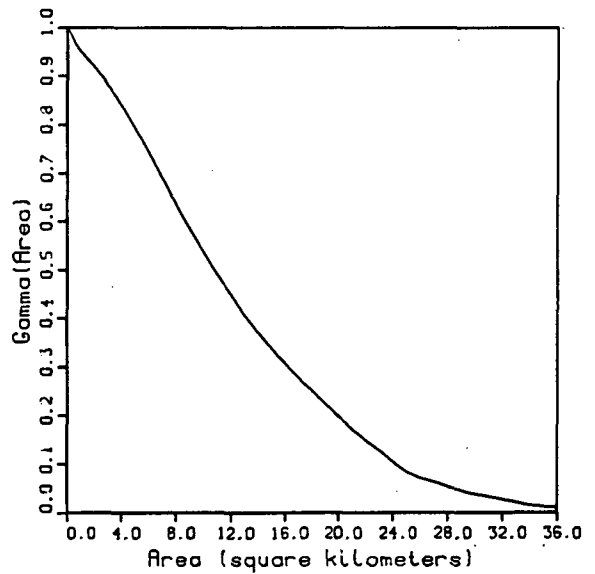
Storm Day  
 July 26, 1973



Spatial Correlation



Variance Function



Storm Day July 26 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.596$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.404$

Expected Value of Point Depth (mm.):  $E(Y) = 0.288$

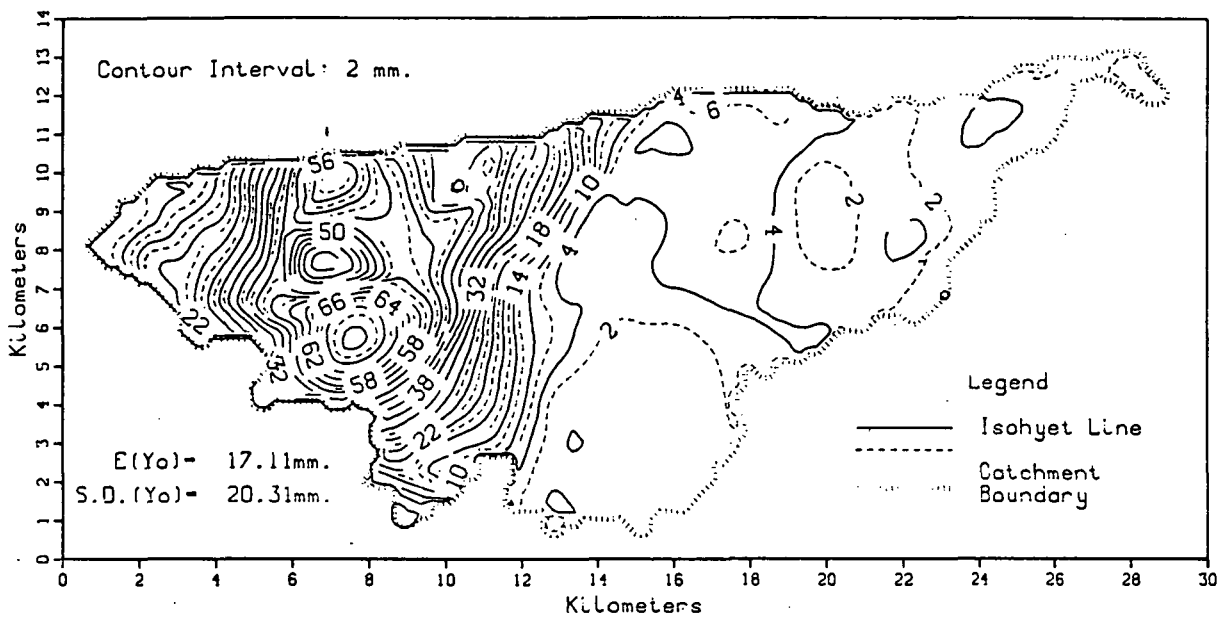
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.341$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.552$

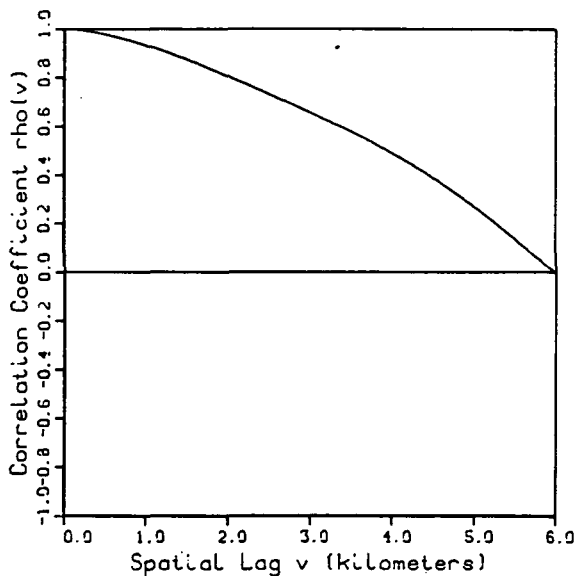
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.103	0.0	1.000	0.00	1.000
2	0.034	0.2	0.985	0.04	1.002
3	0.003	0.4	0.944	0.16	0.995
4	0.000	0.6	0.887	0.36	0.982
		0.8	0.821	0.64	0.965
		1.0	0.754	1.00	0.949
		1.2	0.691	1.44	0.934
		1.4	0.636	1.96	0.917
		1.6	0.590	2.56	0.896
		1.8	0.551	3.24	0.870
		2.0	0.519	4.00	0.837
		2.2	0.490	4.84	0.798
		2.4	0.464	5.76	0.752
		2.6	0.440	6.76	0.698
		2.8	0.417	7.84	0.641
		3.0	0.393	9.00	0.581
		3.2	0.367	10.24	0.522
		3.4	0.340	11.56	0.463
		3.6	0.313	12.96	0.407
		3.8	0.291	14.44	0.355
		4.0	0.273	16.00	0.305
		4.2	0.260	17.64	0.258
		4.4	0.250	19.36	0.212
		4.6	0.239	21.16	0.168
		4.8	0.227	23.04	0.125
		5.0	0.215	25.00	0.082
		5.2	0.201	27.04	0.062
		5.4	0.186	29.16	0.042
		5.6	0.167	31.36	0.030
		5.8	0.148	33.64	0.016
		6.0	0.129	36.00	0.009

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

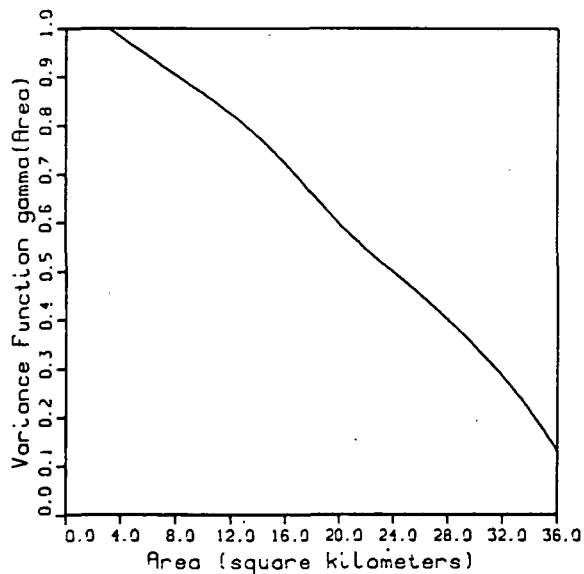
Storm Day  
 July 27, 1973



Spatial Correlation



Variance Function



Storm Day July 27 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.008$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.992$

Expected Value of Point Depth (mm.):  $E(Y)=17.630$

Variance of Point Depth (mm. sq.):  $Var(Y)=432.166$

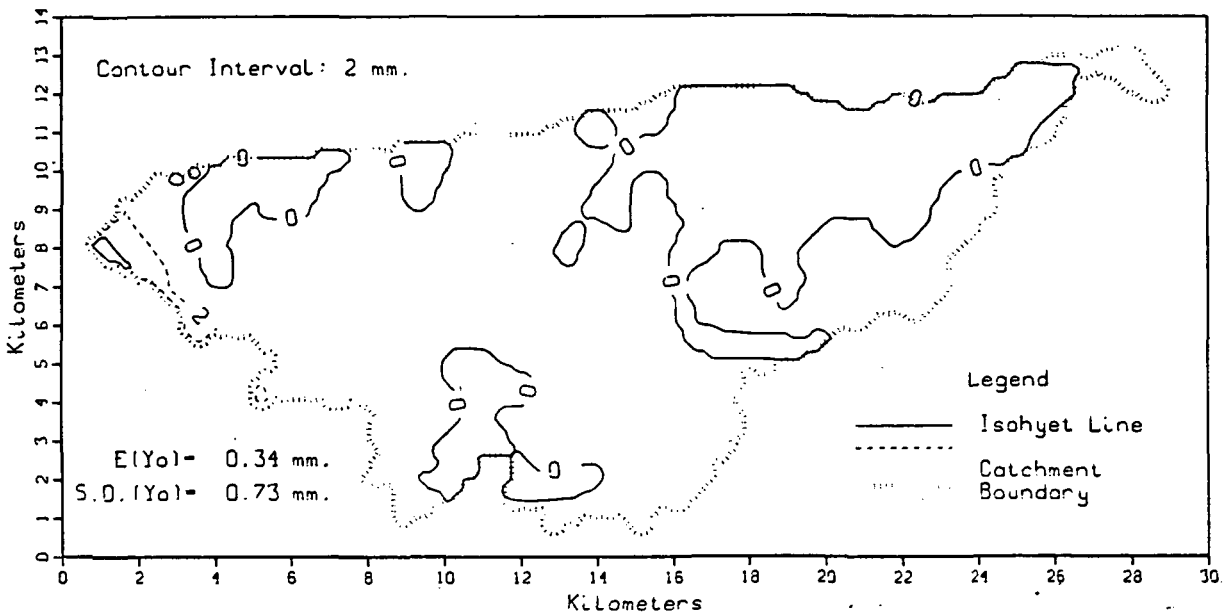
Coef. of Skewness of Point Depth:  $S.C.(Y)=1.123$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.906	0.0	1.000	0.00	1.000
4	0.597	0.2	0.995	0.04	1.016
7	0.441	0.4	0.984	0.16	1.027
10	0.417	0.6	0.968	0.36	1.033
13	0.395	0.8	0.950	0.64	1.035
16	0.368	1.0	0.930	1.00	1.033
19	0.344	1.2	0.908	1.44	1.028
22	0.321	1.4	0.884	1.96	1.021
25	0.296	1.6	0.857	2.56	1.010
28	0.274	1.8	0.830	3.24	0.996
31	0.253	2.0	0.801	4.00	0.981
34	0.231	2.2	0.773	4.84	0.964
37	0.214	2.4	0.744	5.76	0.946
40	0.195	2.6	0.714	6.76	0.926
43	0.176	2.8	0.684	7.84	0.905
46	0.159	3.0	0.654	9.00	0.883
49	0.139	3.2	0.623	10.24	0.859
52	0.114	3.4	0.591	11.56	0.832
55	0.083	3.6	0.558	12.96	0.801
58	0.062	3.8	0.524	14.44	0.764
61	0.047	4.0	0.487	16.00	0.721
64	0.035	4.2	0.448	17.64	0.669
67	0.023	4.4	0.407	19.36	0.615
70	0.016	4.6	0.363	21.16	0.567
73	0.008	4.8	0.316	23.04	0.518
76	0.002	5.0	0.267	25.00	0.474
79	0.000	5.2	0.216	27.04	0.424
		5.4	0.162	29.16	0.368
		5.6	0.106	31.36	0.304
		5.8	0.049	33.64	0.227
		6.0	-0.008	36.00	0.131

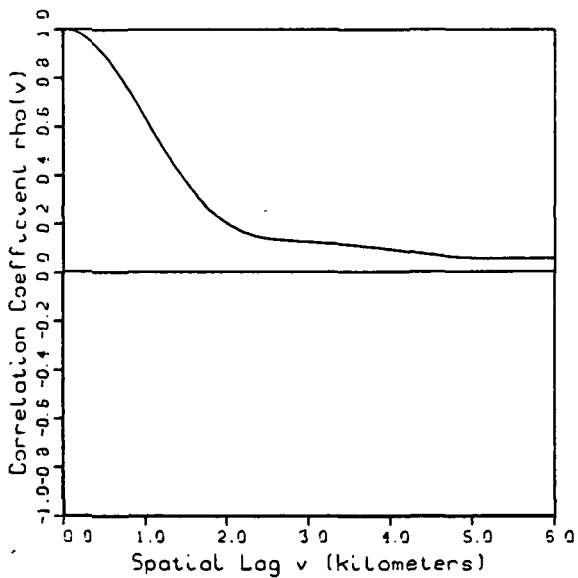


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

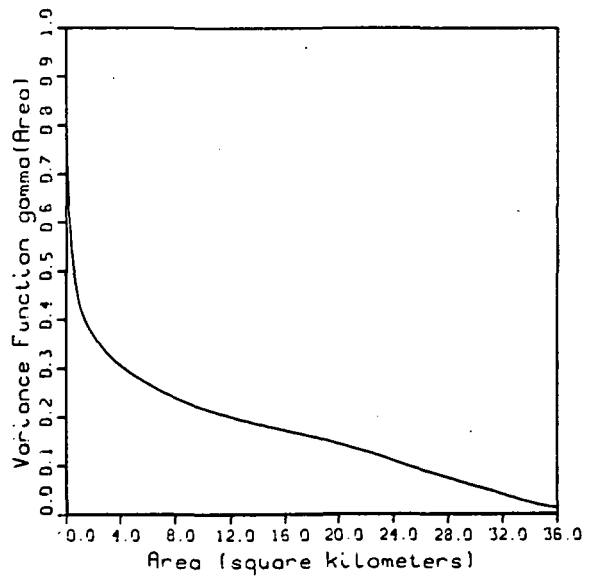
Storm Day  
 July 28, 1973



Spatial Correlation



Variance Function



Storm Day July 28 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.290$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.710$

Expected Value of Point Depth (mm.):  $E(Y) = 0.331$

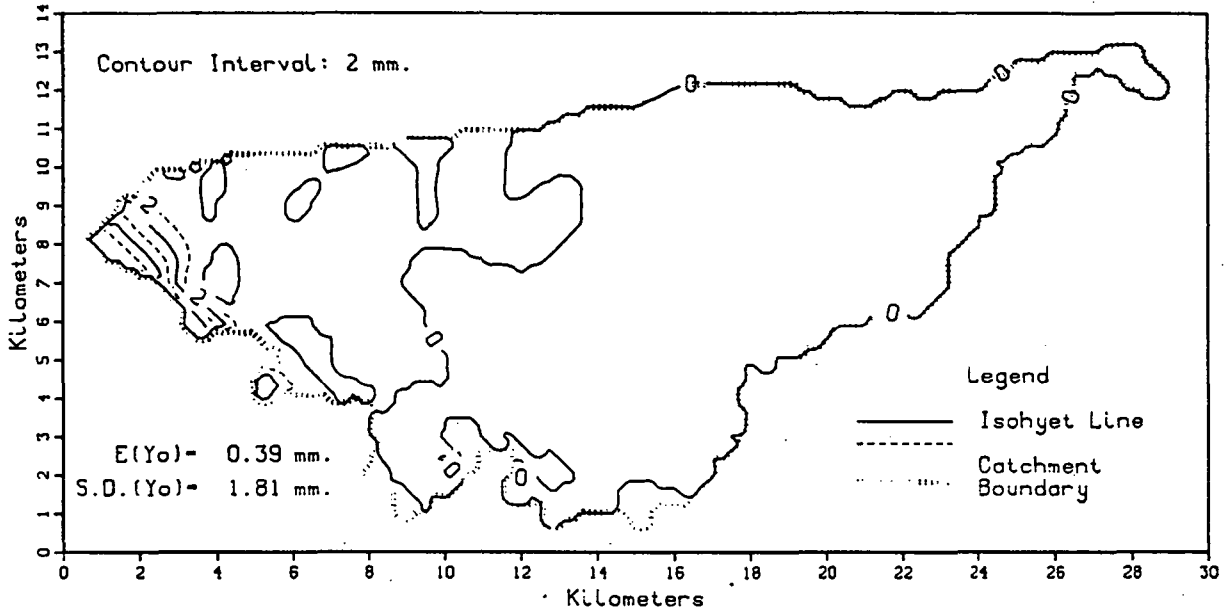
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.270$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.625$

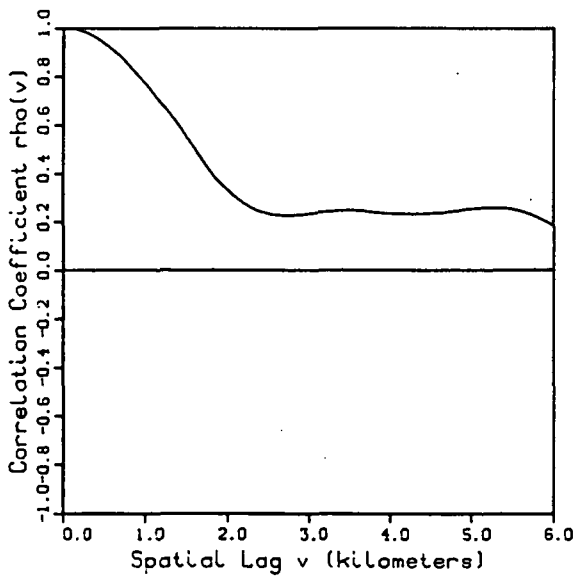
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.070	0.0	1.000	0.00	1.000
2	0.014	0.2	0.982	0.04	0.806
3	0.006	0.4	0.931	0.16	0.663
4	0.002	0.6	0.849	0.36	0.560
5	0.000	0.8	0.747	0.64	0.491
		1.0	0.634	1.00	0.435
		1.2	0.522	1.44	0.398
		1.4	0.418	1.96	0.371
		1.6	0.328	2.56	0.347
		1.8	0.253	3.24	0.324
		2.0	0.201	4.00	0.306
		2.2	0.165	4.84	0.288
		2.4	0.143	5.76	0.272
		2.6	0.133	6.76	0.256
		2.8	0.127	7.84	0.241
		3.0	0.122	9.00	0.227
		3.2	0.118	10.24	0.214
		3.4	0.113	11.56	0.203
		3.6	0.107	12.96	0.192
		3.8	0.100	14.44	0.181
		4.0	0.092	16.00	0.171
		4.2	0.083	17.64	0.161
		4.4	0.075	19.36	0.149
		4.6	0.066	21.16	0.135
		4.8	0.060	23.04	0.119
		5.0	0.056	25.00	0.100
		5.2	0.054	27.04	0.082
		5.4	0.053	29.16	0.064
		5.6	0.054	31.36	0.046
		5.8	0.056	33.64	0.026
		6.0	0.056	36.00	0.012

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

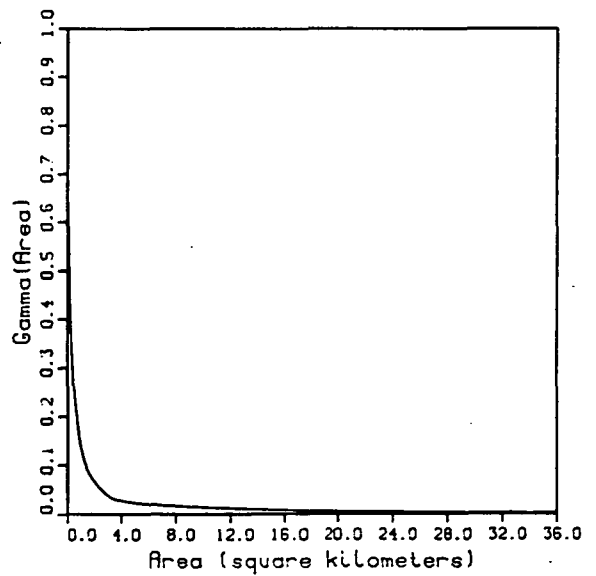
Storm Day  
 July 29, 1973



Spatial Correlation



Variance Function



Storm Day July 29 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.680$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.320$

Expected Value of Point Depth (mm.):  $E(Y) = 0.282$

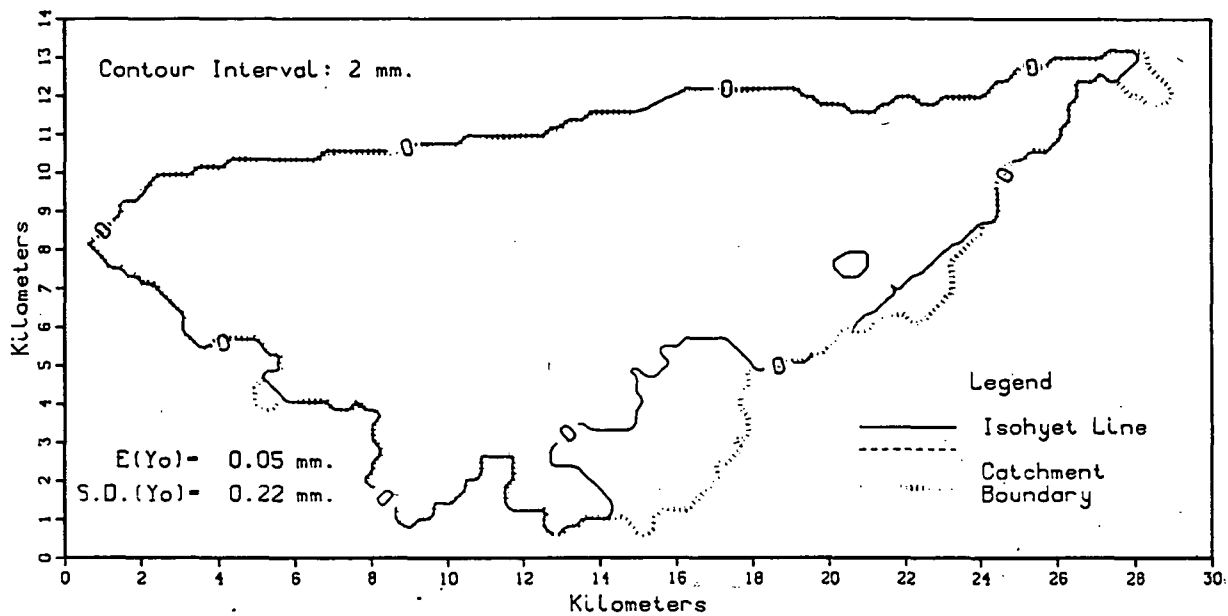
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.419$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 6.622$

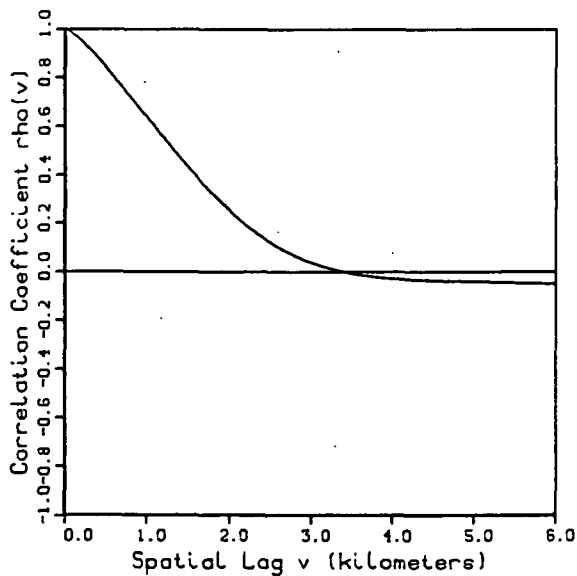
Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho(v)	A (km.sq.)	Gamma (A)
1	0.036	0.0	1.000	0.00	1.000
2	0.028	0.2	0.989	0.04	0.696
3	0.023	0.4	0.957	0.16	0.472
4	0.019	0.6	0.907	0.36	0.315
5	0.015	0.8	0.842	0.64	0.214
6	0.012	1.0	0.765	1.00	0.138
7	0.010	1.2	0.683	1.44	0.092
8	0.007	1.4	0.595	1.96	0.066
9	0.005	1.6	0.498	2.56	0.047
10	0.003	1.8	0.397	3.24	0.032
11	0.002	2.0	0.328	4.00	0.027
12	0.000	2.2	0.274	4.84	0.023
13	0.000	2.4	0.241	5.76	0.020
		2.6	0.227	6.76	0.018
		2.8	0.228	7.84	0.016
		3.0	0.235	9.00	0.015
		3.2	0.244	10.24	0.013
		3.4	0.248	11.56	0.012
		3.6	0.245	12.96	0.010
		3.8	0.238	14.44	0.009
		4.0	0.233	16.00	0.007
		4.2	0.231	17.64	0.005
		4.4	0.234	19.36	0.004
		4.6	0.237	21.16	0.004
		4.8	0.246	23.04	0.003
		5.0	0.255	25.00	0.003
		5.2	0.260	27.04	0.003
		5.4	0.258	29.16	0.002
		5.6	0.243	31.36	0.002
		5.8	0.217	33.64	0.001
		6.0	0.182	36.00	0.000

Walnut Gulch, Arizona  
 Ac-154.21 sq.km.

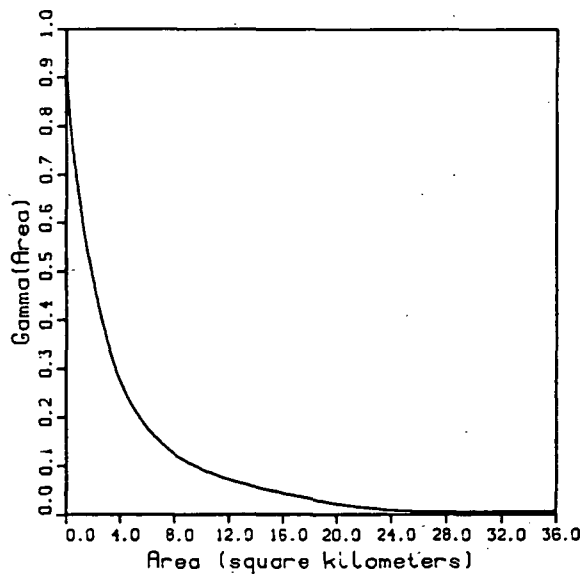
Storm Day  
 July 30, 1973



Spatial Correlation



Variance Function



Storm Day July 30 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.887$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.113$

Expected Value of Point Depth (mm.):  $E(Y) = 0.035$

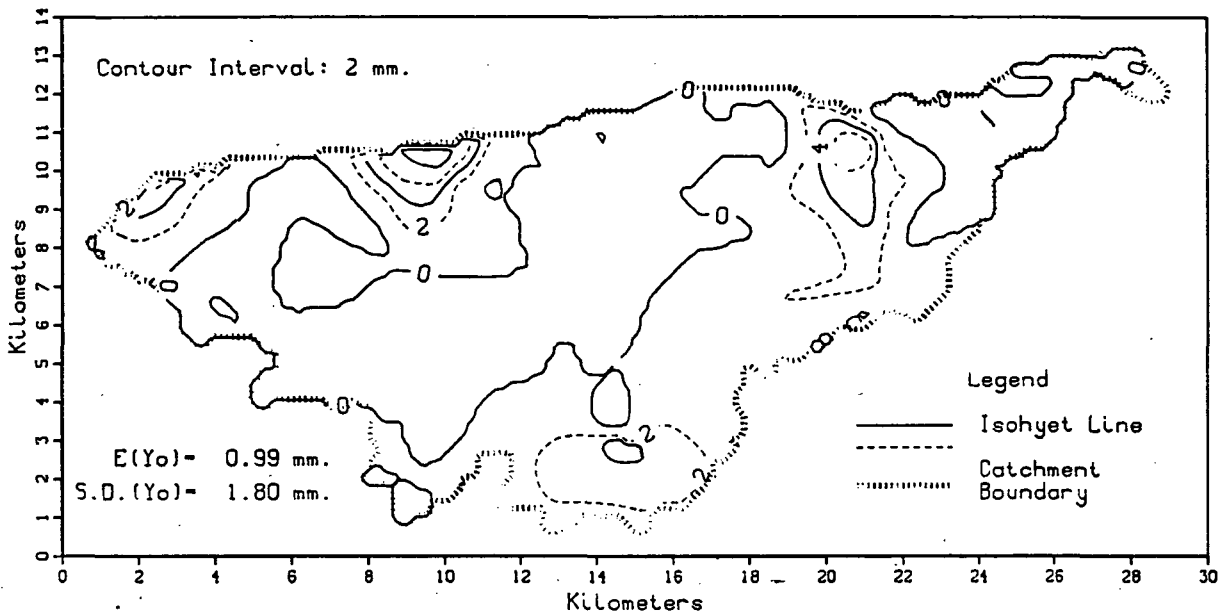
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.025$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 5.666$

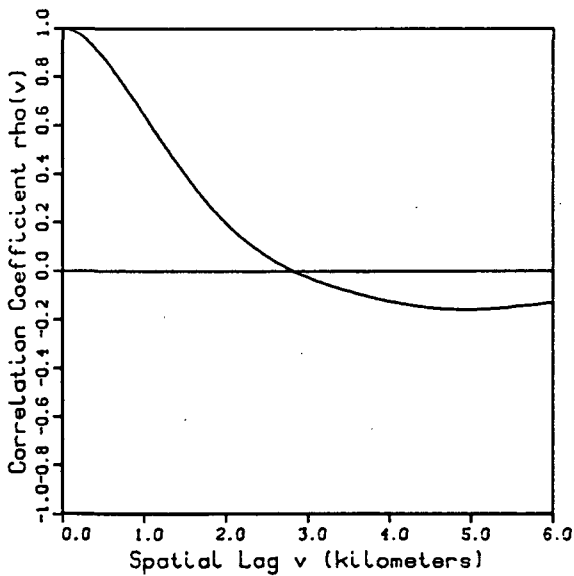
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.010	0.0	1.000	0.00	1.000
2	0.000	0.2	0.949	0.04	0.930
		0.4	0.879	0.16	0.864
		0.6	0.799	0.36	0.792
		0.8	0.717	0.64	0.717
		1.0	0.634	1.00	0.641
		1.2	0.550	1.44	0.564
		1.4	0.466	1.96	0.486
		1.6	0.386	2.56	0.407
		1.8	0.313	3.24	0.334
		2.0	0.250	4.00	0.272
		2.2	0.189	4.84	0.222
		2.4	0.139	5.76	0.183
		2.6	0.097	6.76	0.151
		2.8	0.062	7.84	0.125
		3.0	0.035	9.00	0.105
		3.2	0.013	10.24	0.088
		3.4	-0.003	11.56	0.074
		3.6	-0.015	12.96	0.063
		3.8	-0.024	14.44	0.052
		4.0	-0.031	16.00	0.043
		4.2	-0.035	17.64	0.033
		4.4	-0.038	19.36	0.024
		4.6	-0.040	21.16	0.016
		4.8	-0.042	23.04	0.010
		5.0	-0.043	25.00	0.006
		5.2	-0.045	27.04	0.005
		5.4	-0.046	29.16	0.004
		5.6	-0.048	31.36	0.004
		5.8	-0.050	33.64	0.005
		6.0	-0.052	36.00	0.005

Walnut Gulch, Arizona  
 $A_c = 154.21 \text{ sq. km.}$

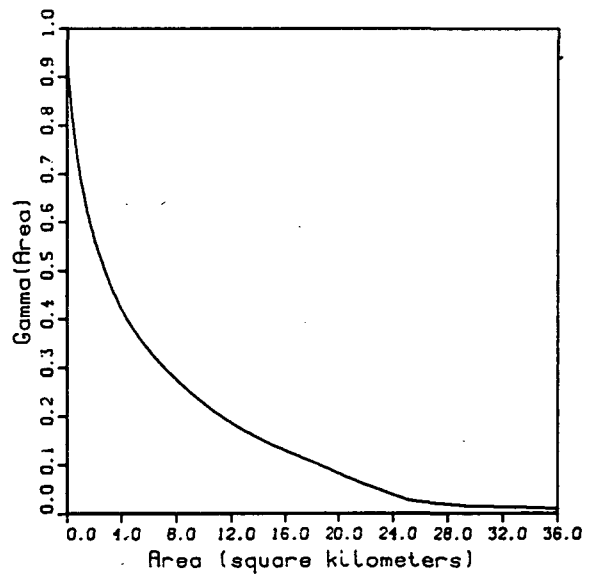
Storm Day  
 July 31, 1973



Spatial Correlation



Variance Function



Storm Day July 31 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.421$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.579$

Expected Value of Point Depth (mm.):  $E(Y) = 0.794$

Variance of Point Depth (mm. sq.):  $Var(Y) = 2.030$

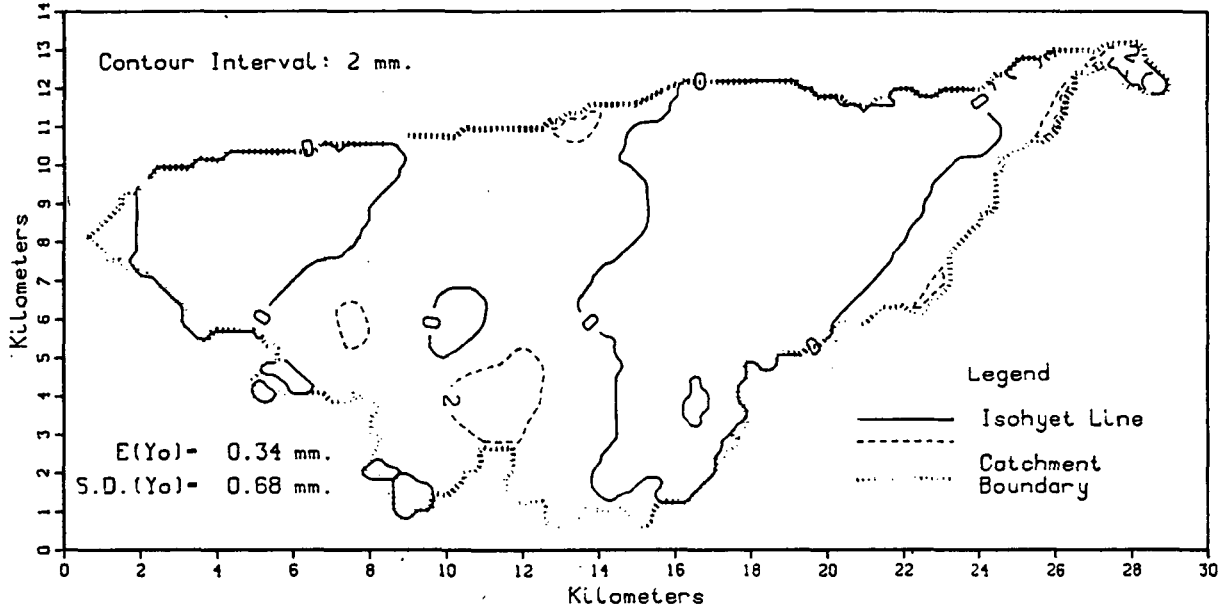
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.521$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.259	0.0	1.000	0.00	1.000
2	0.145	0.2	0.975	0.04	0.947
3	0.084	0.4	0.916	0.16	0.889
4	0.046	0.6	0.834	0.36	0.825
5	0.024	0.8	0.739	0.64	0.757
6	0.015	1.0	0.638	1.00	0.692
7	0.009	1.2	0.538	1.44	0.629
8	0.003	1.4	0.440	1.96	0.570
9	0.000	1.6	0.348	2.56	0.514
		1.8	0.265	3.24	0.463
		2.0	0.192	4.00	0.417
		2.2	0.131	4.84	0.377
		2.4	0.080	5.76	0.341
		2.6	0.037	6.76	0.308
		2.8	0.001	7.84	0.277
		3.0	-0.030	9.00	0.247
		3.2	-0.055	10.24	0.219
		3.4	-0.077	11.56	0.192
		3.6	-0.097	12.96	0.168
		3.8	-0.114	14.44	0.147
		4.0	-0.129	16.00	0.127
		4.2	-0.143	17.64	0.108
		4.4	-0.152	19.36	0.088
		4.6	-0.159	21.16	0.067
		4.8	-0.163	23.04	0.047
		5.0	-0.162	25.00	0.027
		5.2	-0.159	27.04	0.020
		5.4	-0.153	29.16	0.015
		5.6	-0.146	31.36	0.013
		5.8	-0.139	33.64	0.011
		6.0	-0.132	36.00	0.008

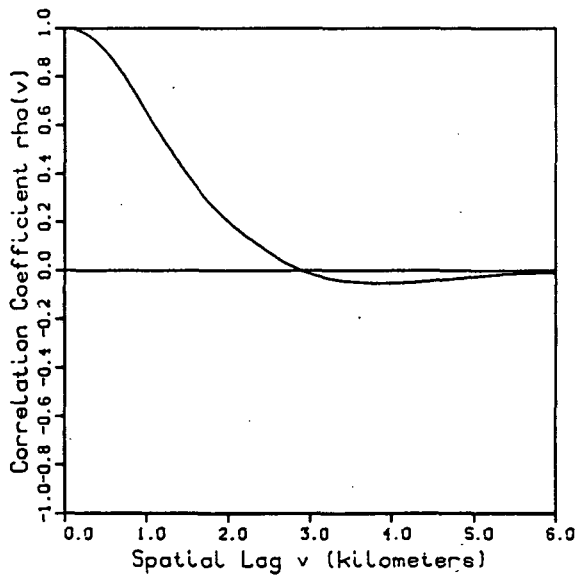


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

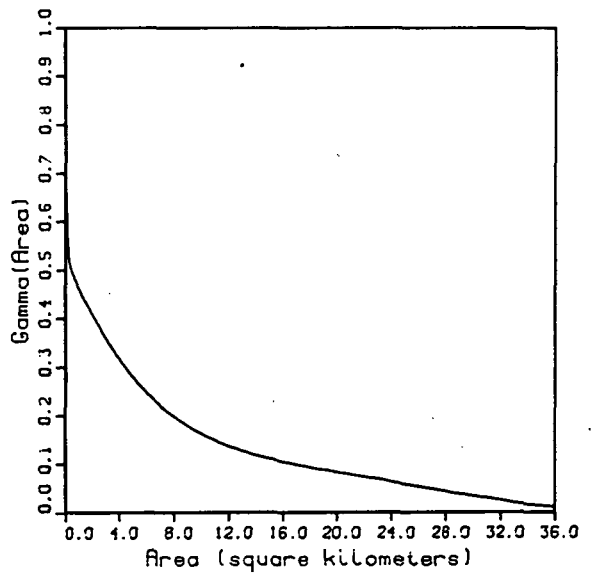
Storm Day  
 Aug 1, 1973



Spatial Correlation



Variance Function



Storm Day Aug 1 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.497$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.503$

Expected Value of Point Depth (mm.):  $E(Y) = 0.414$

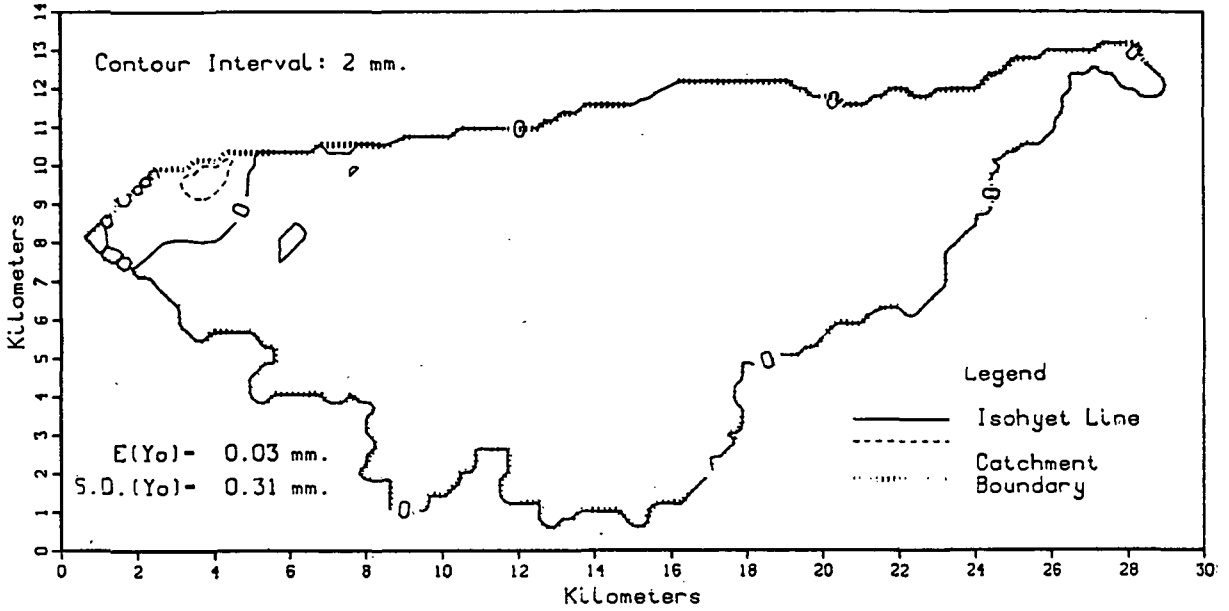
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.707$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.602$

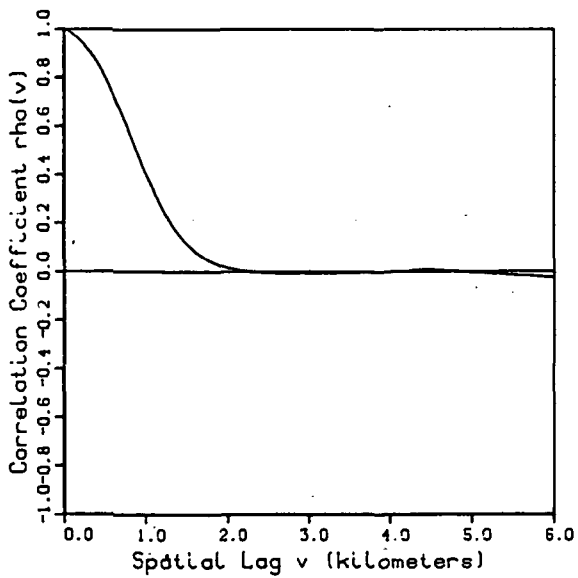
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.146	0.0	1.000	0.00	1.000
2	0.045	0.2	0.985	0.04	0.780
3	0.012	0.4	0.938	0.16	0.583
4	0.005	0.6	0.860	0.36	0.509
5	0.004	0.8	0.760	0.64	0.487
6	0.003	1.0	0.645	1.00	0.463
7	0.002	1.2	0.537	1.44	0.437
8	0.002	1.4	0.437	1.96	0.410
9	0.001	1.6	0.345	2.56	0.379
10	0.001	1.8	0.263	3.24	0.346
11	0.000	2.0	0.197	4.00	0.314
12	0.000	2.2	0.141	4.84	0.282
		2.4	0.095	5.76	0.252
		2.6	0.047	6.76	0.224
		2.8	0.010	7.84	0.199
		3.0	-.016	9.00	0.177
		3.2	-.034	10.24	0.157
		3.4	-.046	11.56	0.140
		3.6	-.052	12.96	0.126
		3.8	-.054	14.44	0.113
		4.0	-.053	16.00	0.103
		4.2	-.050	17.64	0.093
		4.4	-.045	19.36	0.085
		4.6	-.039	21.16	0.076
		4.8	-.033	23.04	0.067
		5.0	-.026	25.00	0.057
		5.2	-.020	27.04	0.047
		5.4	-.014	29.16	0.036
		5.6	-.012	31.36	0.027
		5.8	-.010	33.64	0.016
		6.0	-.011	36.00	0.010

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

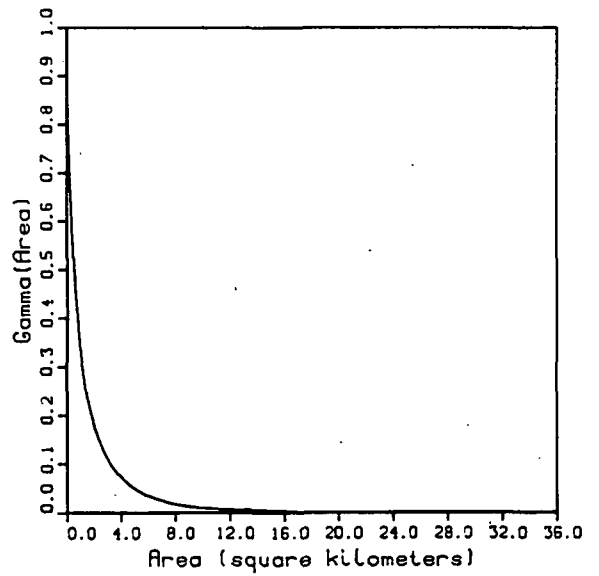
Storm Day  
 Aug 2, 1973



Spatial Correlation



Variance Function



Storm Day Aug 2 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.951$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.049$

Expected Value of Point Depth (mm.):  $E(Y) = 0.031$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.053$

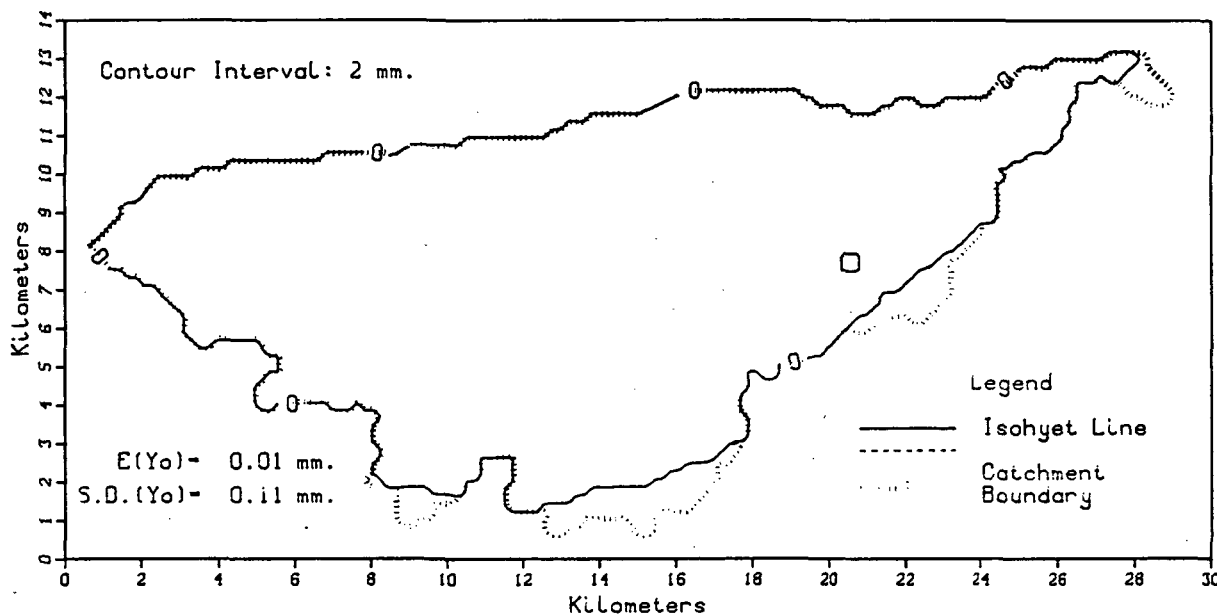
Coef. of Skewness of Point Depth:  $S.C.(Y) = 9.460$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.011	0.0	1.000	0.00	1.000
2	0.005	0.2	0.949	0.04	0.883
3	0.000	0.4	0.861	0.16	0.742
4	0.000	0.6	0.727	0.36	0.594
		0.8	0.565	0.64	0.456
		1.0	0.400	1.00	0.340
		1.2	0.257	1.44	0.250
		1.4	0.150	1.96	0.183
		1.6	0.080	2.56	0.135
		1.8	0.038	3.24	0.098
		2.0	0.013	4.00	0.072
		2.2	0.001	4.84	0.051
		2.4	-.005	5.76	0.036
		2.6	-.007	6.76	0.026
		2.8	-.008	7.84	0.017
		3.0	-.008	9.00	0.012
		3.2	-.007	10.24	0.008
		3.4	-.006	11.56	0.006
		3.6	-.005	12.96	0.005
		3.8	-.004	14.44	0.003
		4.0	-.001	16.00	0.001
		4.2	0.002	17.64	0.000
		4.4	0.009	19.36	0.000
		4.6	0.004	21.16	0.000
		4.8	-.001	23.04	0.000
		5.0	-.006	25.00	0.000
		5.2	-.010	27.04	0.000
		5.4	-.015	29.16	0.000
		5.6	-.019	31.36	0.000
		5.8	-.023	33.64	0.000
		6.0	-.028	36.00	0.000

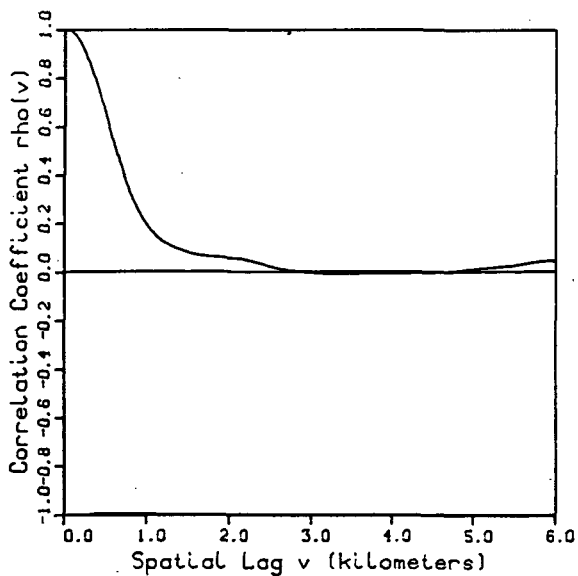
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

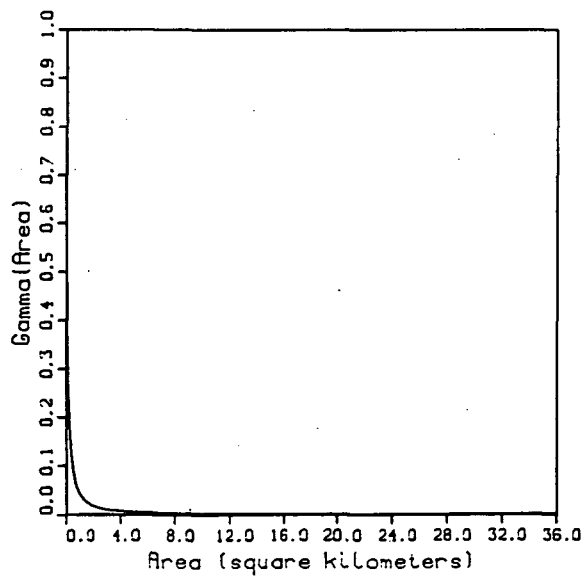
Storm Day  
Aug 3, 1973



## Spatial Correlation



## Variance Function



Storm Day Aug 3 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.951$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.049$

Expected Value of Point Depth (mm.):  $E(Y) = 0.006$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.001$

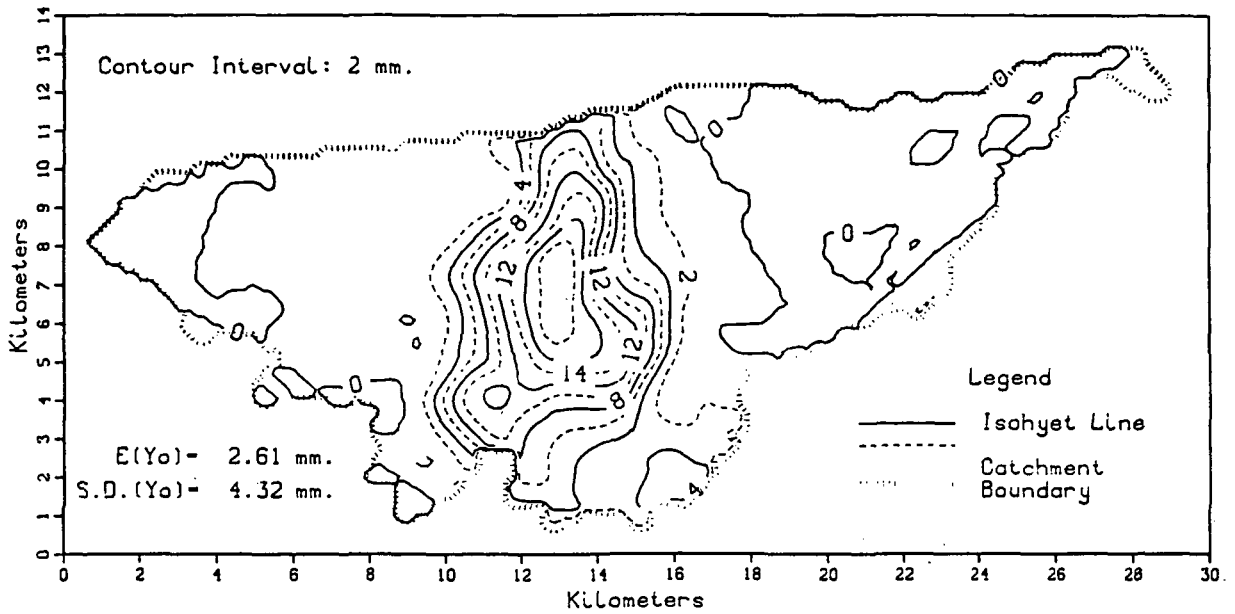
Coef. of Skewness of Point Depth:  $S.C.(Y) = 8.881$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.942	0.04	0.554
		0.4	0.769	0.16	0.272
		0.6	0.537	0.36	0.140
		0.8	0.331	0.64	0.074
		1.0	0.195	1.00	0.042
		1.2	0.124	1.44	0.026
		1.4	0.090	1.96	0.017
		1.6	0.070	2.56	0.012
		1.8	0.061	3.24	0.008
		2.0	0.055	4.00	0.006
		2.2	0.048	4.84	0.005
		2.4	0.030	5.76	0.004
		2.6	0.012	6.76	0.003
		2.8	0.002	7.84	0.002
		3.0	-0.005	9.00	0.002
		3.2	-0.008	10.24	0.002
		3.4	-0.009	11.56	0.001
		3.6	-0.008	12.96	0.001
		3.8	-0.007	14.44	0.001
		4.0	-0.006	16.00	0.001
		4.2	-0.003	17.64	0.001
		4.4	-0.002	19.36	0.001
		4.6	0.000	21.16	0.000
		4.8	0.006	23.04	0.000
		5.0	0.014	25.00	0.000
		5.2	0.019	27.04	0.000
		5.4	0.024	29.16	0.000
		5.6	0.035	31.36	0.000
		5.8	0.046	33.64	0.000
		6.0	0.044	36.00	0.000

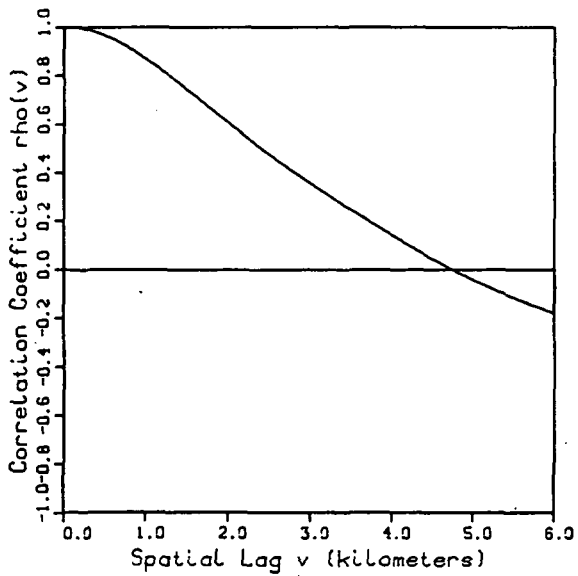
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

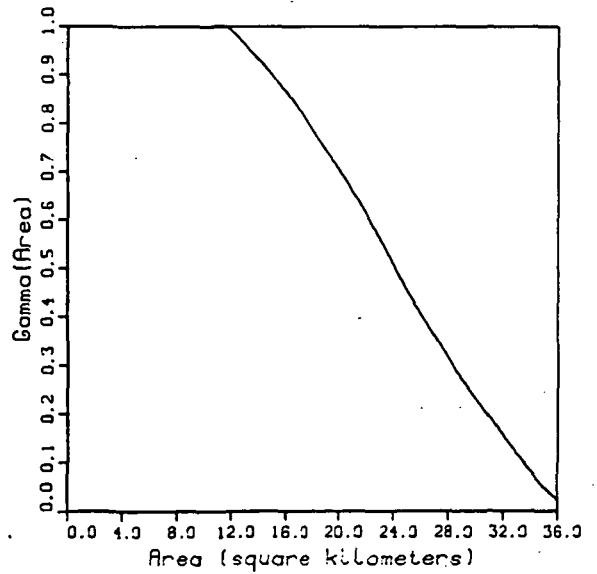
Storm Day  
Aug 5, 1973



### Spatial Correlation



### Variance Function



Storm Day Aug 5 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c) = 0.246$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c) = 0.754$

Expected Value of Point Depth (mm.):  $E(Y) = 3.040$

Variance of Point Depth (mm. sq.):  $Var(Y) = 21.658$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.758$

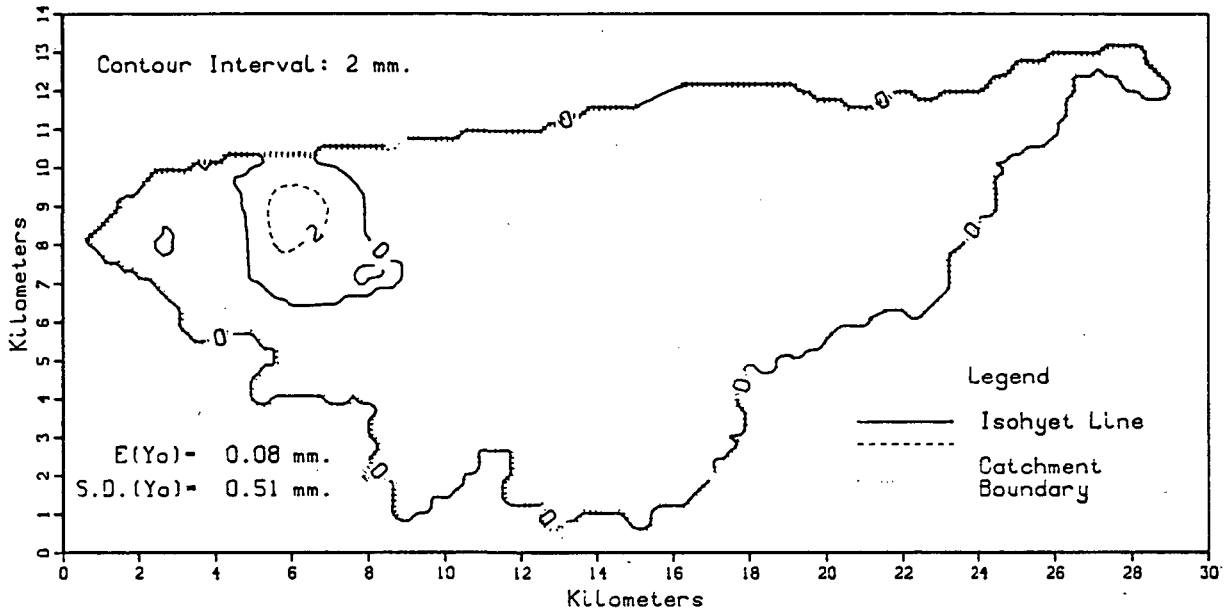
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.456	0.0	1.000	0.00	1.000
2	0.344	0.2	0.994	0.04	1.033
3	0.304	0.4	0.976	0.16	1.062
4	0.258	0.6	0.948	0.36	1.085
5	0.221	0.8	0.911	0.64	1.102
6	0.198	1.0	0.867	1.00	1.115
7	0.176	1.2	0.818	1.44	1.125
8	0.157	1.4	0.766	1.96	1.131
9	0.138	1.6	0.712	2.56	1.133
10	0.120	1.8	0.657	3.24	1.132
11	0.102	2.0	0.602	4.00	1.129
12	0.082	2.2	0.549	4.84	1.123
13	0.066	2.4	0.497	5.76	1.114
14	0.053	2.6	0.447	6.76	1.101
15	0.041	2.8	0.398	7.84	1.083
16	0.031	3.0	0.352	9.00	1.060
17	0.022	3.2	0.307	10.24	1.033
18	0.014	3.4	0.263	11.56	1.000
19	0.004	3.6	0.221	12.96	0.962
20	0.000	3.8	0.179	14.44	0.917
		4.0	0.139	16.00	0.864
		4.2	0.099	17.64	0.802
		4.4	0.060	19.36	0.731
		4.6	0.022	21.16	0.652
		4.8	-0.013	23.04	0.559
		5.0	-0.047	25.00	0.453
		5.2	-0.078	27.04	0.359
		5.4	-0.107	29.16	0.262
		5.6	-0.134	31.36	0.180
		5.8	-0.159	33.64	0.094
		6.0	-0.184	36.00	0.023



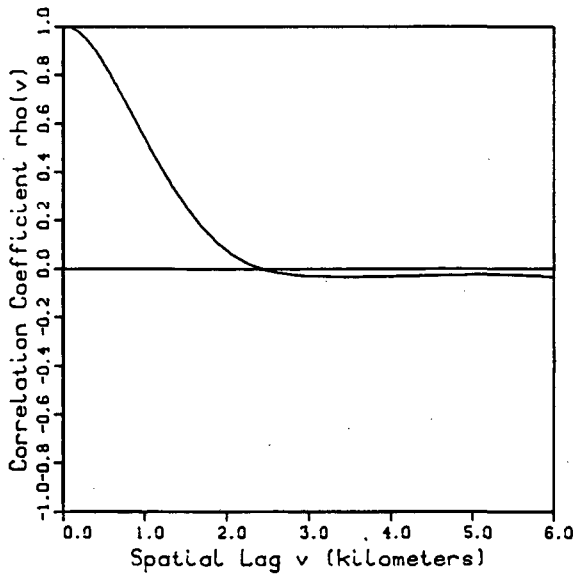
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

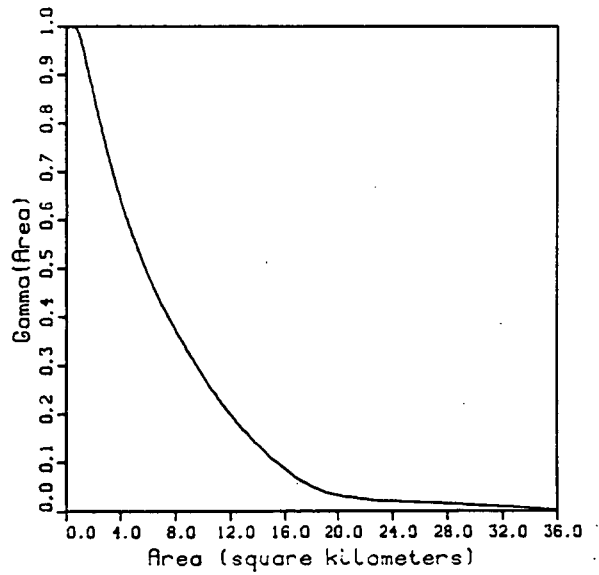
Storm Day  
Aug 6, 1973



### Spatial Correlation



### Variance Function



Storm Day Aug 6 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.915$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.085$

Expected Value of Point Depth (mm.):  $E(Y)=0.063$

Variance of Point Depth (mm. sq.):  $Var(Y)=0.124$

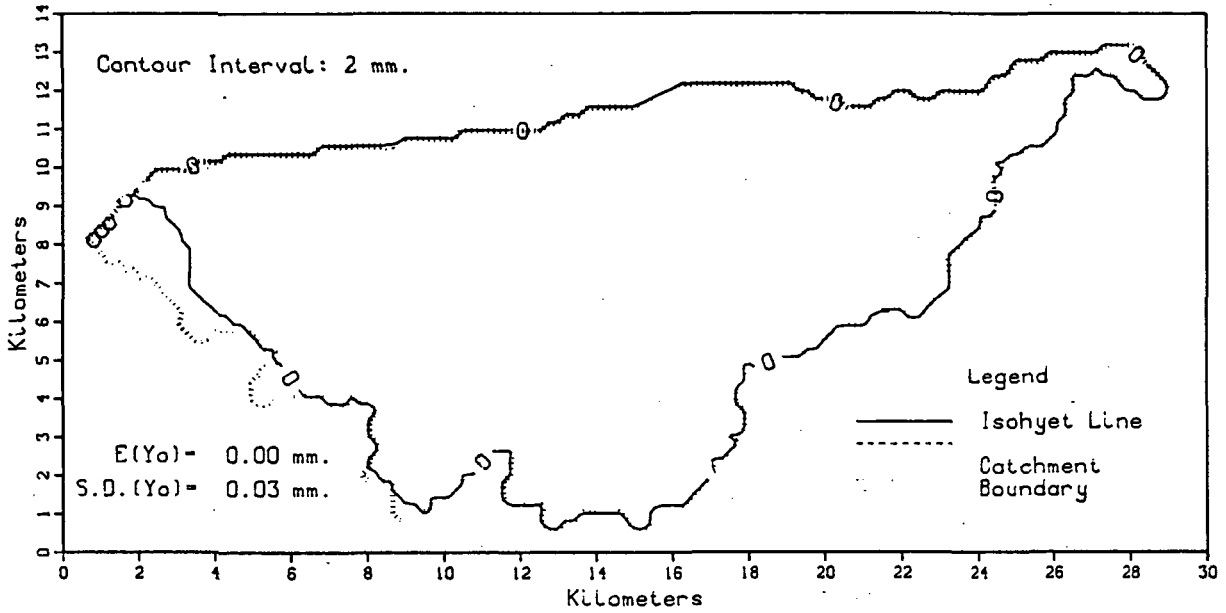
Coef. of Skewness of Point Depth:  $S.C.(Y)=6.924$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.024	0.0	1.000	0.00	1.000
2	0.013	0.2	0.972	0.04	1.030
3	0.004	0.4	0.896	0.16	1.045
4	0.000	0.6	0.787	0.36	1.040
		0.8	0.663	0.64	1.017
		1.0	0.537	1.00	0.980
		1.2	0.417	1.44	0.929
		1.4	0.308	1.96	0.865
		1.6	0.213	2.56	0.793
		1.8	0.135	3.24	0.716
		2.0	0.074	4.00	0.640
		2.2	0.030	4.84	0.568
		2.4	0.001	5.76	0.500
		2.6	-0.017	6.76	0.438
		2.8	-0.027	7.84	0.379
		3.0	-0.032	9.00	0.322
		3.2	-0.034	10.24	0.267
		3.4	-0.035	11.56	0.214
		3.6	-0.034	12.96	0.166
		3.8	-0.034	14.44	0.124
		4.0	-0.032	16.00	0.086
		4.2	-0.031	17.64	0.054
		4.4	-0.030	19.36	0.035
		4.6	-0.028	21.16	0.027
		4.8	-0.027	23.04	0.020
		5.0	-0.026	25.00	0.018
		5.2	-0.026	27.04	0.015
		5.4	-0.027	29.16	0.013
		5.6	-0.030	31.36	0.009
		5.8	-0.034	33.64	0.005
		6.0	-0.039	36.00	0.000

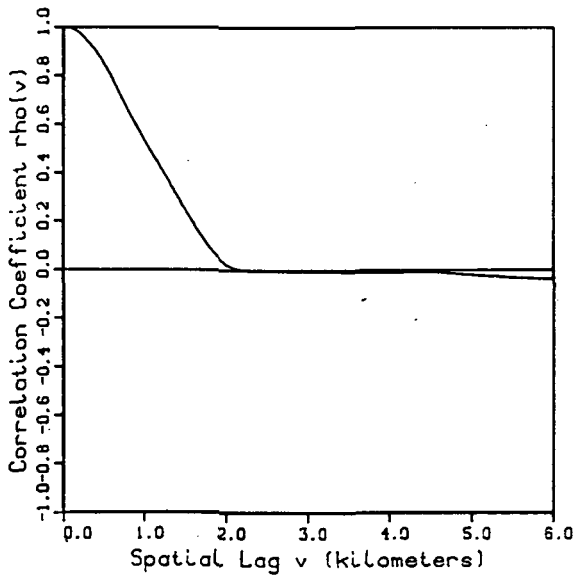
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

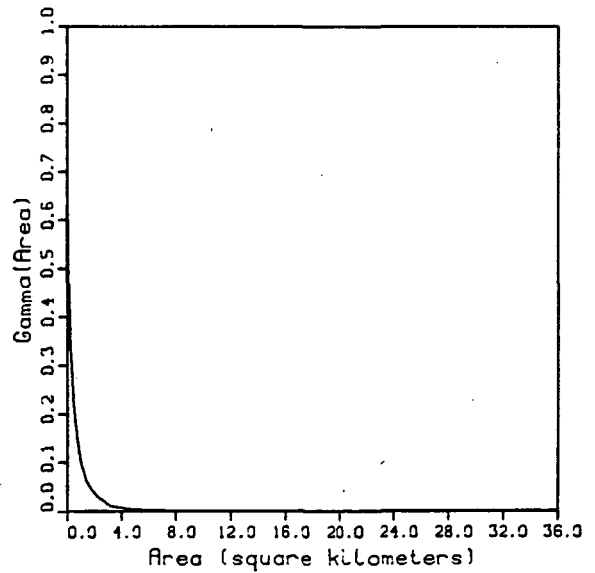
Storm Day  
Aug 9, 1973



## Spatial Correlation



## Variance Function



Storm Day Aug 9 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.964$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.036$

Expected Value of Point Depth (mm.):  $E(Y)=0.004$

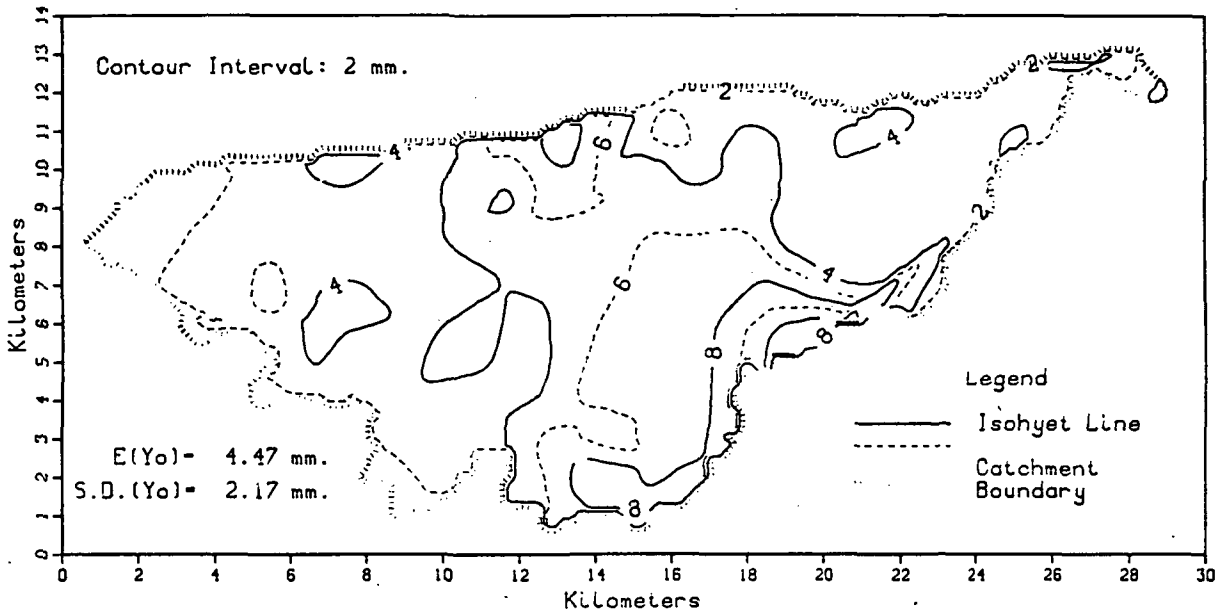
Variance of Point Depth (mm. sq.):  $Var(Y)=0.001$

Coef. of Skewness of Point Depth:  $S.C.(Y)=7.752$

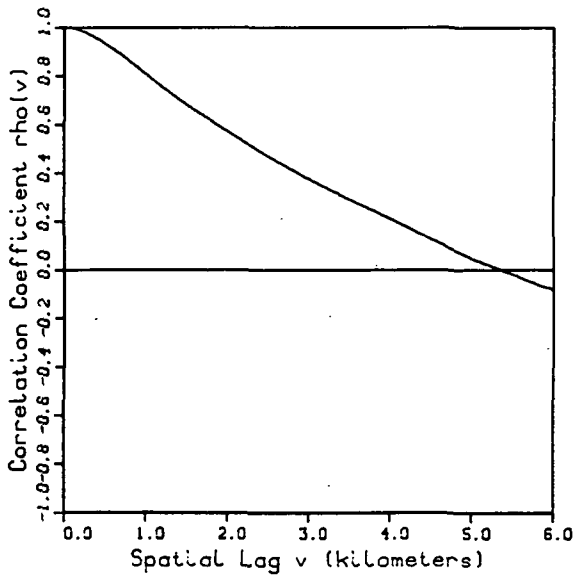
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.974	0.04	0.669
		0.4	0.900	0.16	0.419
		0.6	0.789	0.36	0.276
		0.8	0.655	0.64	0.178
		1.0	0.532	1.00	0.107
		1.2	0.419	1.44	0.063
		1.4	0.305	1.96	0.038
		1.6	0.188	2.56	0.022
		1.8	0.091	3.24	0.010
		2.0	0.020	4.00	0.006
		2.2	-0.003	4.84	0.003
		2.4	-0.004	5.76	0.002
		2.6	-0.005	6.76	0.001
		2.8	-0.006	7.84	0.001
		3.0	-0.007	9.00	0.001
		3.2	-0.008	10.24	0.000
		3.4	-0.010	11.56	0.000
		3.6	-0.012	12.96	0.000
		3.8	-0.013	14.44	0.000
		4.0	-0.011	16.00	0.000
		4.2	-0.009	17.64	0.000
		4.4	-0.008	19.36	0.000
		4.6	-0.013	21.16	0.000
		4.8	-0.018	23.04	0.000
		5.0	-0.023	25.00	0.000
		5.2	-0.029	27.04	0.000
		5.4	-0.034	29.16	0.000
		5.6	-0.037	31.36	0.000
		5.8	-0.039	33.64	0.000
		6.0	-0.038	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

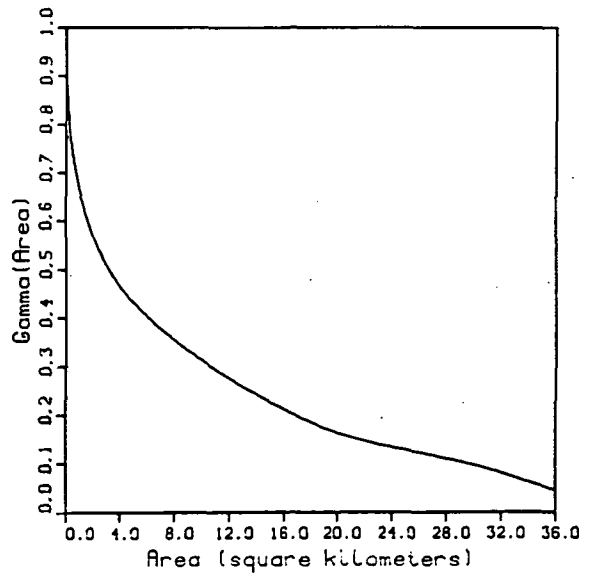
Storm Day  
 Aug 10, 1973



Spatial Correlation



Variance Function



C-5

Storm Day Aug 10 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.):  $E(Y) = 4.528$

Variance of Point Depth (mm. sq.):  $Var(Y) = 4.567$

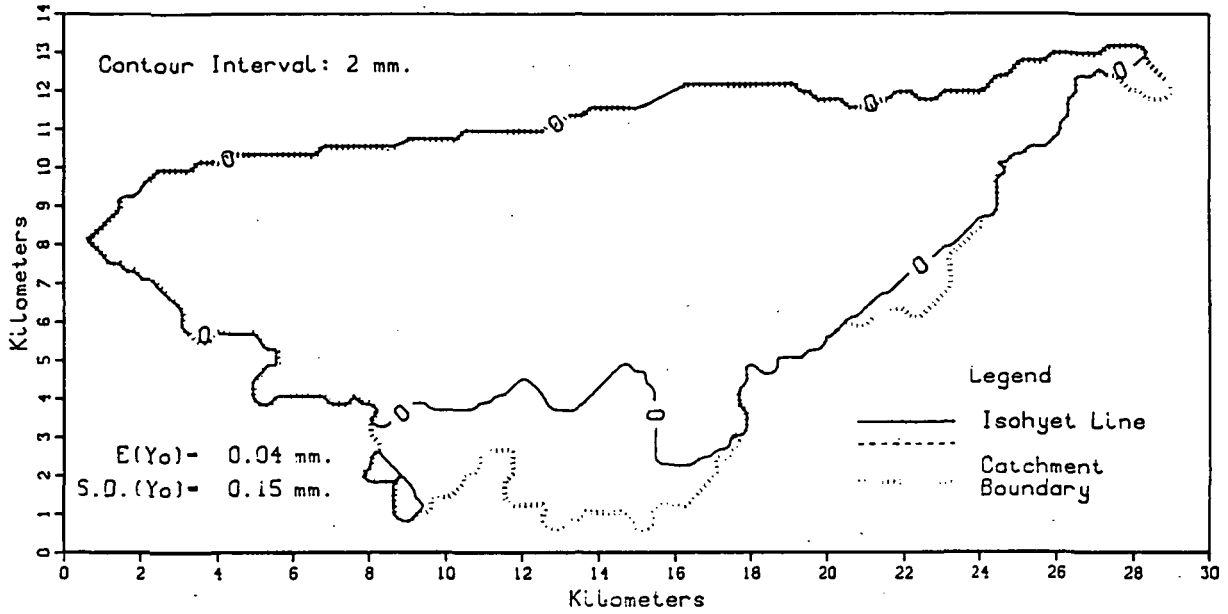
Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.057$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.989	0.0	1.000	0.00	1.000
2	0.944	0.2	0.986	0.04	0.922
3	0.778	0.4	0.953	0.16	0.845
4	0.486	0.6	0.909	0.36	0.779
5	0.337	0.8	0.859	0.64	0.720
6	0.230	1.0	0.805	1.00	0.667
7	0.139	1.2	0.751	1.44	0.618
8	0.067	1.4	0.700	1.96	0.573
9	0.028	1.6	0.654	2.56	0.532
10	0.017	1.8	0.610	3.24	0.496
11	0.012	2.0	0.568	4.00	0.464
12	0.007	2.2	0.527	4.84	0.435
13	0.003	2.4	0.486	5.76	0.408
14	0.000	2.6	0.447	6.76	0.382
		2.8	0.409	7.84	0.357
		3.0	0.372	9.00	0.332
		3.2	0.337	10.24	0.307
		3.4	0.304	11.56	0.282
		3.6	0.272	12.96	0.258
		3.8	0.241	14.44	0.235
		4.0	0.209	16.00	0.211
		4.2	0.175	17.64	0.188
		4.4	0.141	19.36	0.168
		4.6	0.108	21.16	0.152
		4.8	0.075	23.04	0.138
		5.0	0.044	25.00	0.127
		5.2	0.017	27.04	0.116
		5.4	-0.010	29.16	0.102
		5.6	-0.037	31.36	0.086
		5.8	-0.064	33.64	0.065
		6.0	-0.085	36.00	0.044

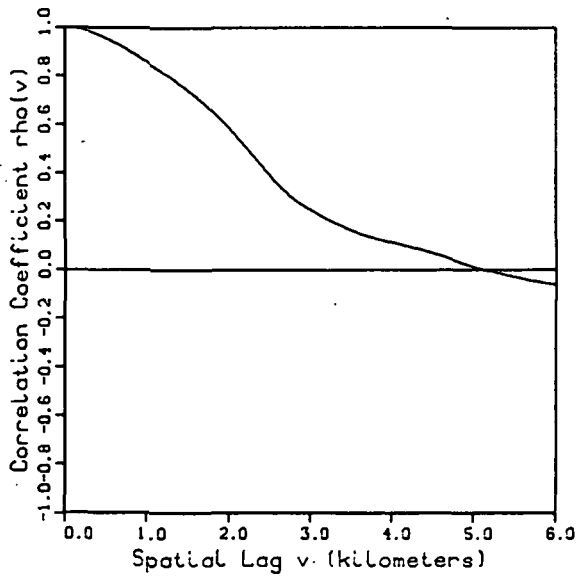
# Walnut Gulch, Arizona

Ac=154.21 sq.km.

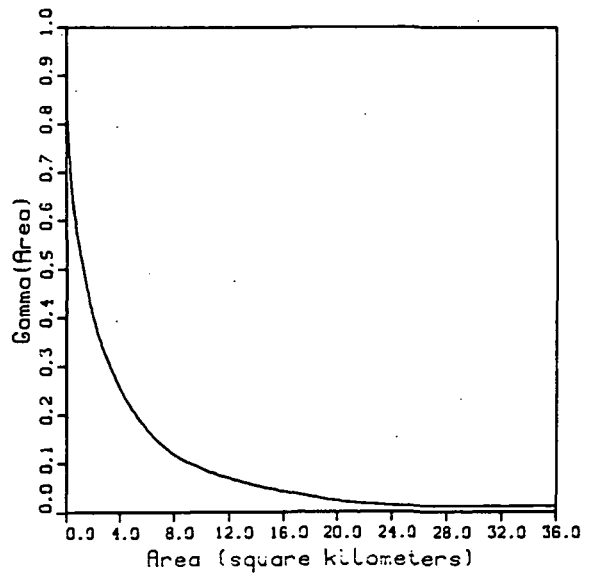
Storm Day  
Aug 19, 1973



### Spatial Correlation



### Variance Function



Storm Day Aug 19 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.862$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.138$

Expected Value of Point Depth (mm.):  $E(Y) = 0.038$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.017$

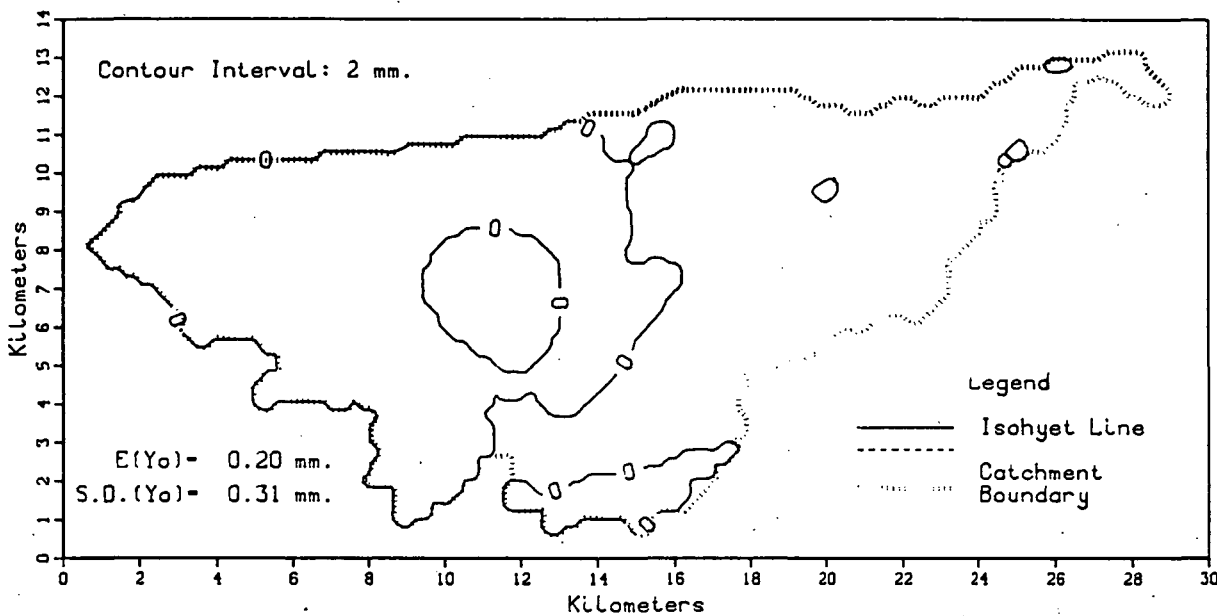
Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.998$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.991	0.04	0.898
		0.4	0.969	0.16	0.791
		0.6	0.936	0.36	0.694
		0.8	0.898	0.64	0.609
		1.0	0.855	1.00	0.538
		1.2	0.811	1.44	0.471
		1.4	0.764	1.96	0.410
		1.6	0.711	2.56	0.353
		1.8	0.651	3.24	0.301
		2.0	0.583	4.00	0.254
		2.2	0.508	4.84	0.212
		2.4	0.428	5.76	0.176
		2.6	0.351	6.76	0.146
		2.8	0.289	7.84	0.120
		3.0	0.245	9.00	0.101
		3.2	0.207	10.24	0.086
		3.4	0.175	11.56	0.072
		3.6	0.147	12.96	0.061
		3.8	0.125	14.44	0.051
		4.0	0.109	16.00	0.042
		4.2	0.093	17.64	0.033
		4.4	0.076	19.36	0.024
		4.6	0.055	21.16	0.018
		4.8	0.031	23.04	0.015
		5.0	0.008	25.00	0.012
		5.2	-.009	27.04	0.012
		5.4	-.026	29.16	0.011
		5.6	-.041	31.36	0.011
		5.8	-.055	33.64	0.011
		6.0	-.065	36.00	0.011

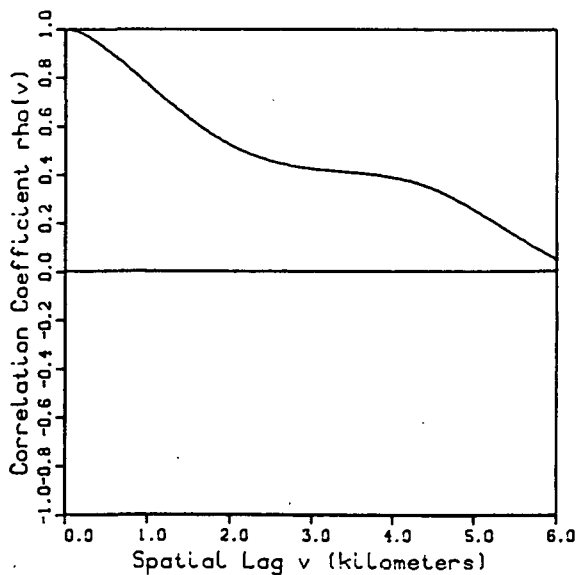


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

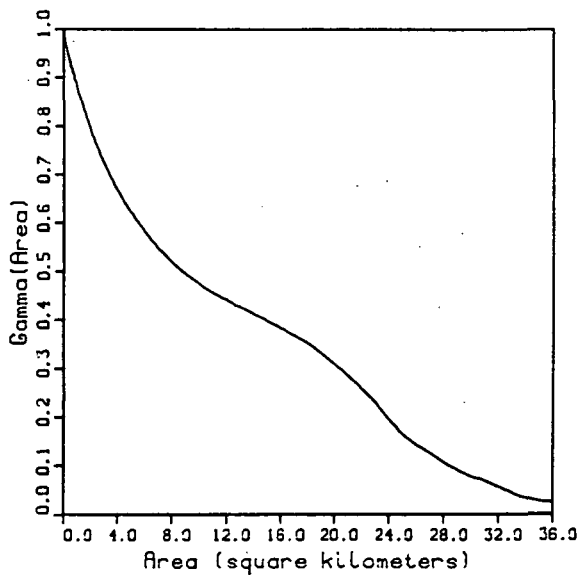
Storm Day  
 Aug 20, 1973



Spatial Correlation



Variance Function



Storm Day Aug 20 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.461$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.539$

Expected Value of Point Depth (mm.):  $E(Y) = 0.214$

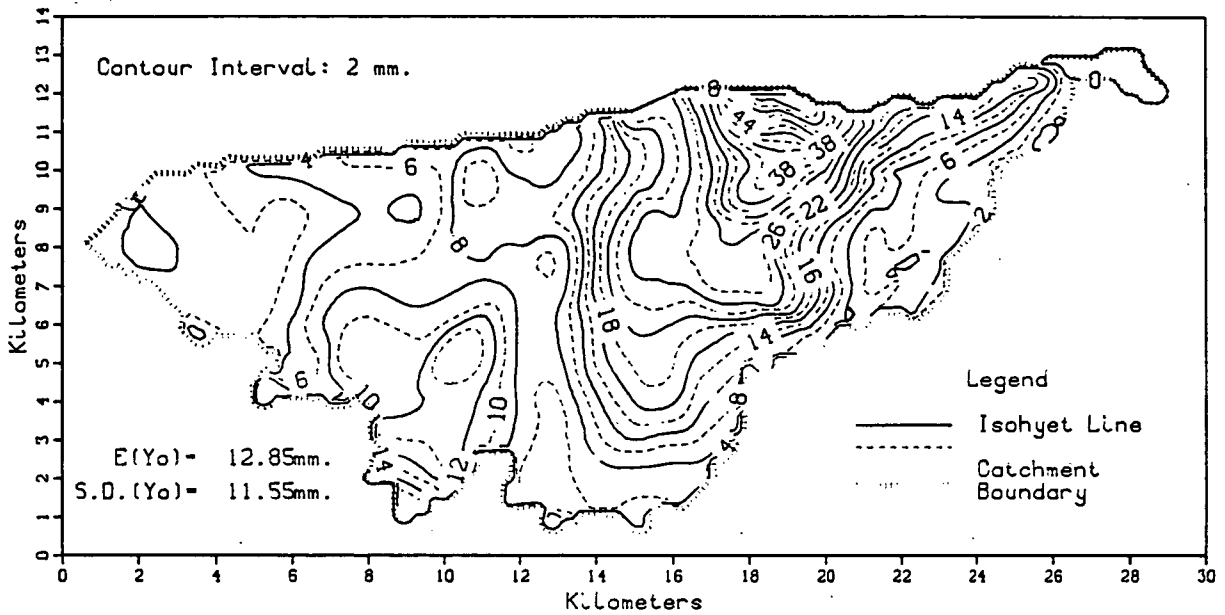
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.090$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.500$

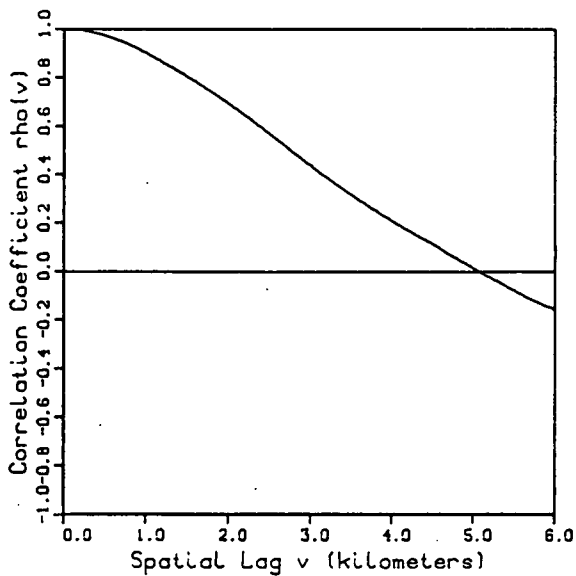
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.020	0.0	1.000	0.00	1.000
2	0.000	0.2	0.982	0.04	0.990
		0.4	0.942	0.16	0.970
		0.6	0.890	0.36	0.946
		0.8	0.832	0.64	0.915
		1.0	0.772	1.00	0.877
		1.2	0.713	1.44	0.837
		1.4	0.657	1.96	0.793
		1.6	0.605	2.56	0.749
		1.8	0.559	3.24	0.706
		2.0	0.520	4.00	0.665
		2.2	0.488	4.84	0.626
		2.4	0.463	5.76	0.589
		2.6	0.445	6.76	0.554
		2.8	0.431	7.84	0.522
		3.0	0.421	9.00	0.493
		3.2	0.415	10.24	0.468
		3.4	0.409	11.56	0.446
		3.6	0.403	12.96	0.425
		3.8	0.395	14.44	0.405
		4.0	0.385	16.00	0.382
		4.2	0.370	17.64	0.356
		4.4	0.350	19.36	0.323
		4.6	0.322	21.16	0.280
		4.8	0.289	23.04	0.228
		5.0	0.251	25.00	0.163
		5.2	0.210	27.04	0.124
		5.4	0.167	29.16	0.087
		5.6	0.127	31.36	0.063
		5.8	0.087	33.64	0.036
		6.0	0.048	36.00	0.025

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

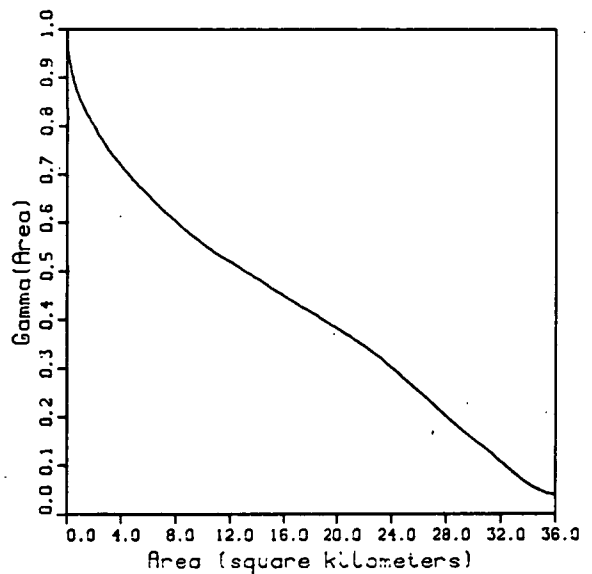
Storm Day  
 Aug 21, 1973



Spatial Correlation



Variance Function



Storm Day Aug 21 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.017$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.983$

Expected Value of Point Depth (mm.):  $E(Y) = 12.295$

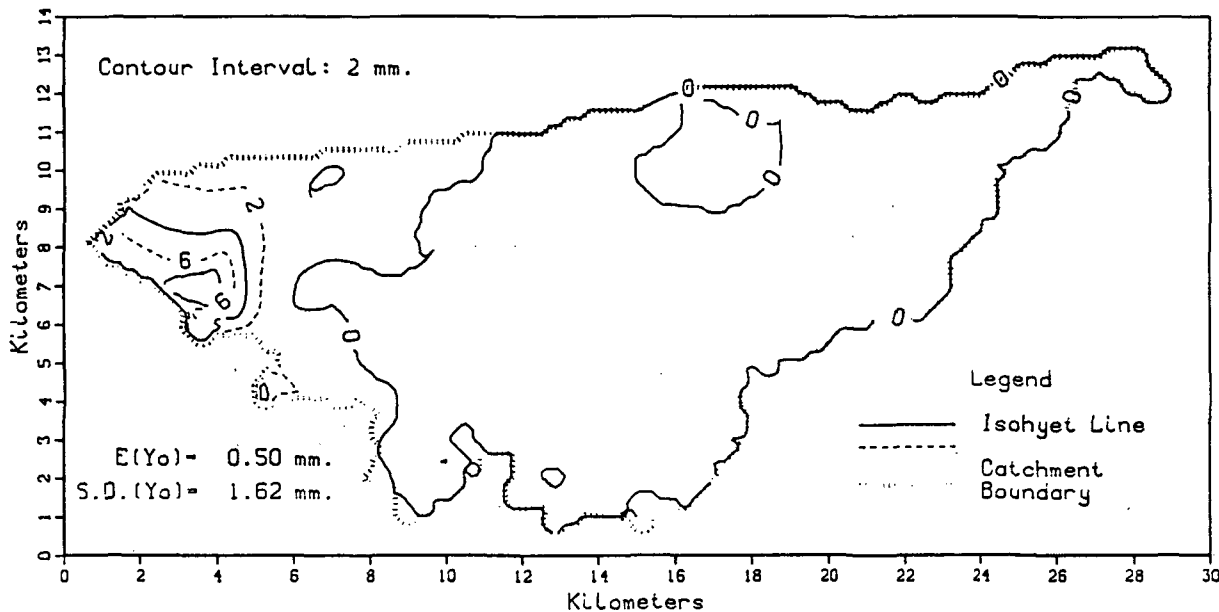
Variance of Point Depth (mm. sq.):  $Var(Y)=102.530$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.583$

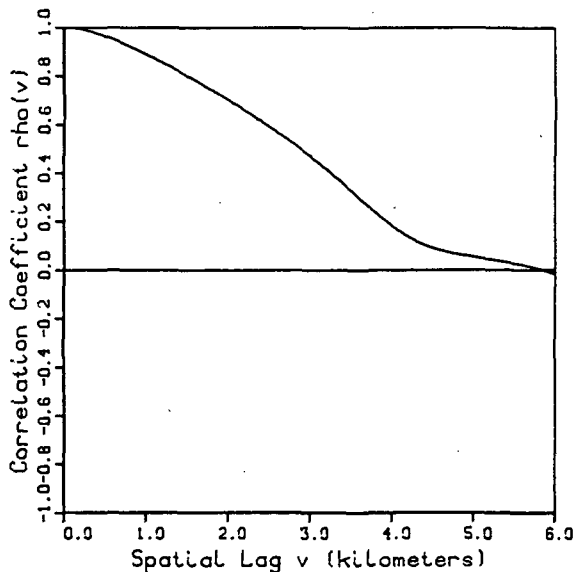
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.949	0.0	1.000	0.00	1.000
3	0.883	0.2	0.995	0.04	0.972
5	0.797	0.4	0.981	0.16	0.941
7	0.657	0.6	0.960	0.36	0.911
9	0.513	0.8	0.931	0.64	0.882
11	0.426	1.0	0.898	1.00	0.853
13	0.344	1.2	0.861	1.44	0.826
15	0.286	1.4	0.821	1.96	0.799
17	0.245	1.6	0.780	2.56	0.772
19	0.205	1.8	0.736	3.24	0.744
21	0.174	2.0	0.691	4.00	0.717
23	0.144	2.2	0.642	4.84	0.689
25	0.111	2.4	0.591	5.76	0.661
27	0.082	2.6	0.538	6.76	0.633
29	0.064	2.8	0.485	7.84	0.605
31	0.057	3.0	0.434	9.00	0.577
33	0.051	3.2	0.384	10.24	0.550
35	0.044	3.4	0.336	11.56	0.526
37	0.036	3.6	0.290	12.96	0.502
39	0.027	3.8	0.247	14.44	0.476
41	0.023	4.0	0.206	16.00	0.448
43	0.020	4.2	0.166	17.64	0.420
45	0.016	4.4	0.128	19.36	0.391
47	0.013	4.6	0.090	21.16	0.361
49	0.010	4.8	0.050	23.04	0.323
51	0.008	5.0	0.011	25.00	0.275
53	0.005	5.2	-.027	27.04	0.225
55	0.003	5.4	-.064	29.16	0.171
57	0.001	5.6	-.100	31.36	0.123
		5.8	-.133	33.64	0.068
		6.0	-.160	36.00	0.039

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

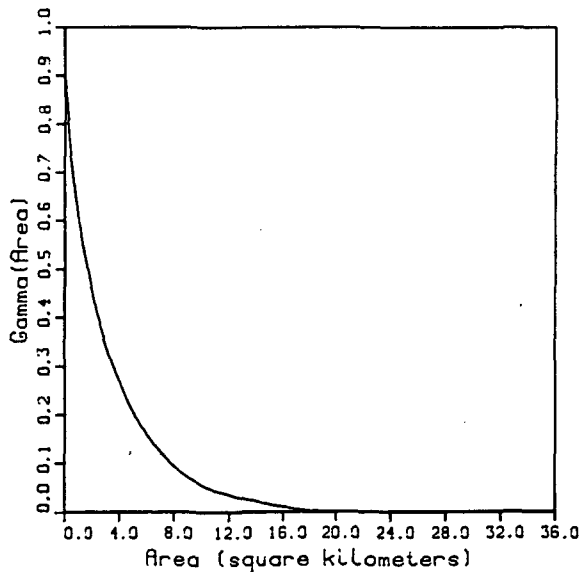
Storm Day  
 Aug 22, 1973



Spatial Correlation



Variance Function



Storm Day Aug 22 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.711$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.289$

Expected Value of Point Depth (mm.):  $E(Y) = 0.449$

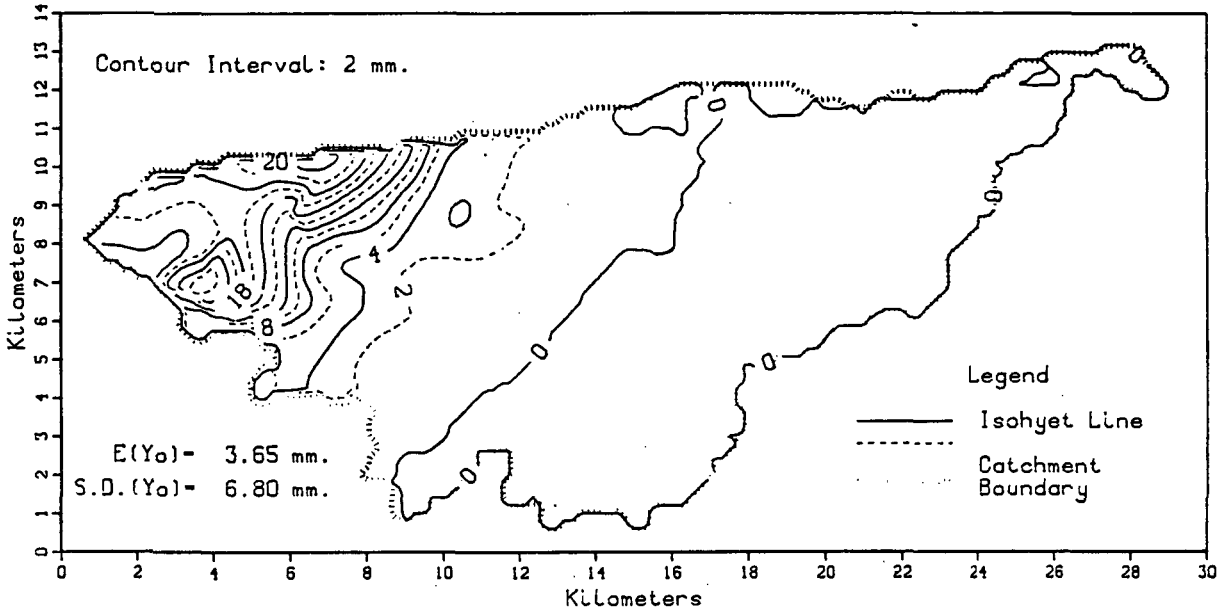
Variance of Point Depth (mm. sq.):  $Var(Y) = 1.984$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 3.945$

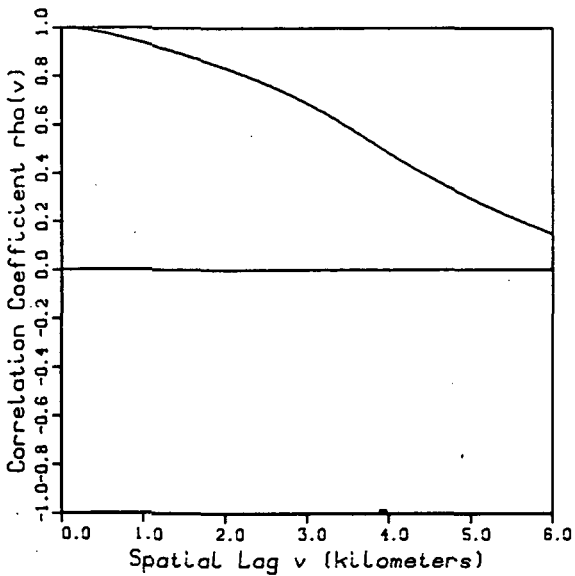
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.093	0.0	1.000	0.00	1.000
2	0.073	0.2	0.992	0.04	0.922
3	0.056	0.4	0.973	0.16	0.846
4	0.042	0.6	0.948	0.36	0.770
5	0.031	0.8	0.919	0.64	0.694
6	0.022	1.0	0.886	1.00	0.612
7	0.013	1.2	0.852	1.44	0.536
8	0.006	1.4	0.816	1.96	0.464
9	0.002	1.6	0.778	2.56	0.394
10	0.000	1.8	0.738	3.24	0.325
		2.0	0.697	4.00	0.268
		2.2	0.654	4.84	0.214
		2.4	0.610	5.76	0.169
		2.6	0.564	6.76	0.131
		2.8	0.517	7.84	0.098
		3.0	0.467	9.00	0.072
		3.2	0.413	10.24	0.052
		3.4	0.355	11.56	0.038
		3.6	0.294	12.96	0.028
		3.8	0.234	14.44	0.018
		4.0	0.179	16.00	0.009
		4.2	0.133	17.64	0.002
		4.4	0.098	19.36	0.001
		4.6	0.077	21.16	0.001
		4.8	0.061	23.04	0.001
		5.0	0.050	25.00	0.001
		5.2	0.039	27.04	0.001
		5.4	0.029	29.16	0.001
		5.6	0.017	31.36	0.001
		5.8	-.001	33.64	0.000
		6.0	-.020	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

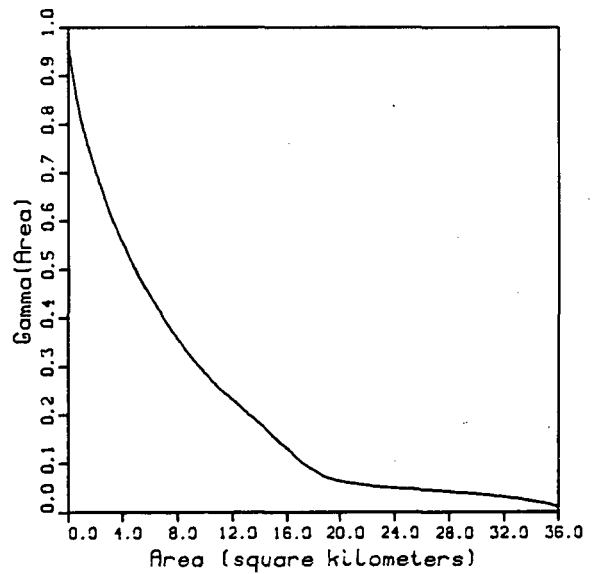
Storm Day  
 Aug 23, 1973



Spatial Correlation



Variance Function



Storm Day Aug 23 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.485$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.515$

Expected Value of Point Depth (mm.):  $E(Y) = 3.137$

Variance of Point Depth (mm. sq.):  $Var(Y) = 37.406$

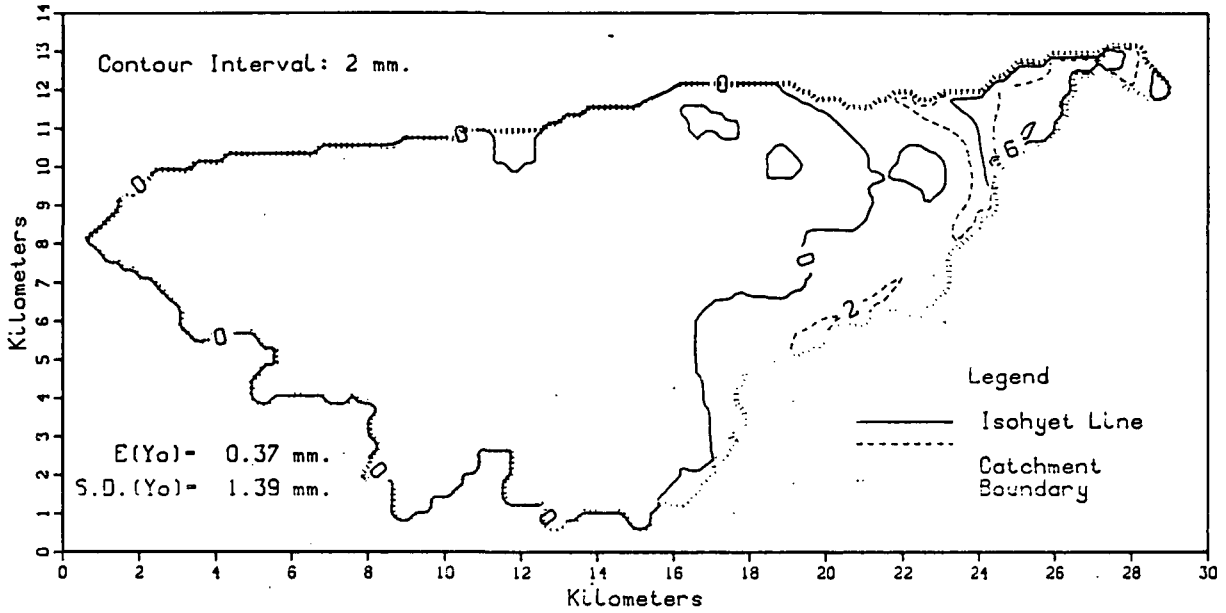
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.095$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.343	0.0	1.000	0.00	1.000
2	0.265	0.2	0.996	0.04	0.974
3	0.233	0.4	0.985	0.16	0.942
4	0.197	0.6	0.970	0.36	0.903
5	0.178	0.8	0.953	0.64	0.857
6	0.164	1.0	0.935	1.00	0.808
7	0.155	1.2	0.917	1.44	0.759
8	0.148	1.4	0.897	1.96	0.709
9	0.141	1.6	0.876	2.56	0.657
10	0.136	1.8	0.854	3.24	0.604
11	0.129	2.0	0.831	4.00	0.555
12	0.122	2.2	0.806	4.84	0.504
13	0.116	2.4	0.780	5.76	0.455
14	0.110	2.6	0.752	6.76	0.410
15	0.103	2.8	0.721	7.84	0.363
16	0.091	3.0	0.687	9.00	0.319
17	0.075	3.2	0.651	10.24	0.279
18	0.061	3.4	0.611	11.56	0.241
19	0.046	3.6	0.569	12.96	0.207
20	0.033	3.8	0.525	14.44	0.171
21	0.024	4.0	0.481	16.00	0.130
22	0.018	4.2	0.440	17.64	0.090
23	0.013	4.4	0.401	19.36	0.067
24	0.008	4.6	0.364	21.16	0.058
25	0.004	4.8	0.328	23.04	0.051
26	0.002	5.0	0.293	25.00	0.047
27	0.000	5.2	0.260	27.04	0.043
		5.4	0.230	29.16	0.038
		5.6	0.201	31.36	0.032
		5.8	0.174	33.64	0.023
		6.0	0.146	36.00	0.010

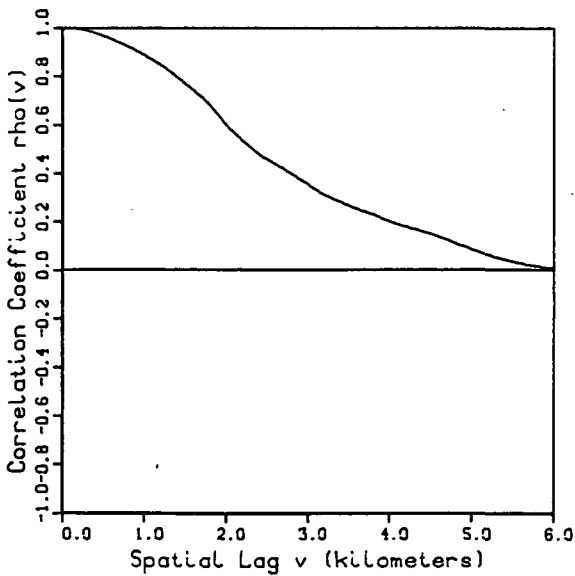


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

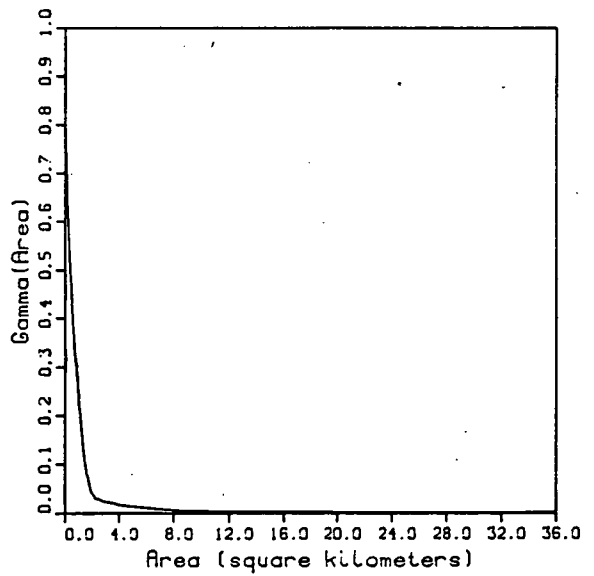
Storm Day  
 Aug 27, 1973



Spatial Correlation



Variance Function



Storm Day Aug 27 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.783$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.217$

Expected Value of Point Depth (mm.):  $E(Y) = 0.370$

Variance of Point Depth (mm. sq.):  $Var(Y) = 1.535$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 4.255$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

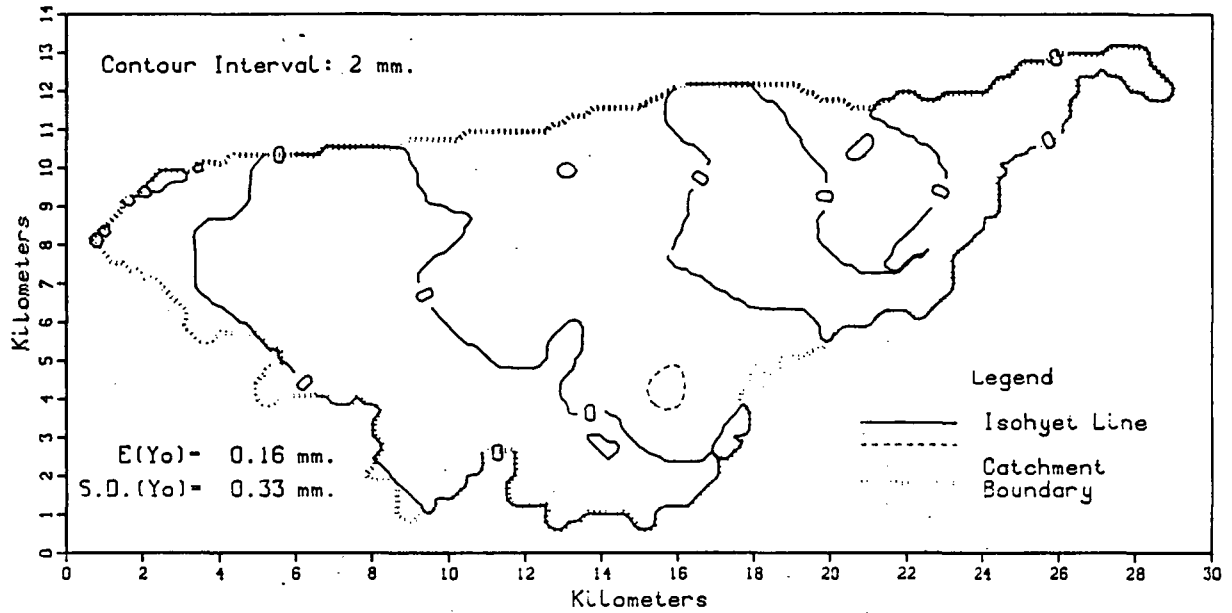
Spatial Correlation  
v (km.)      rho (v)

Variance Function  
A (km. sq.)      Gamma (A)

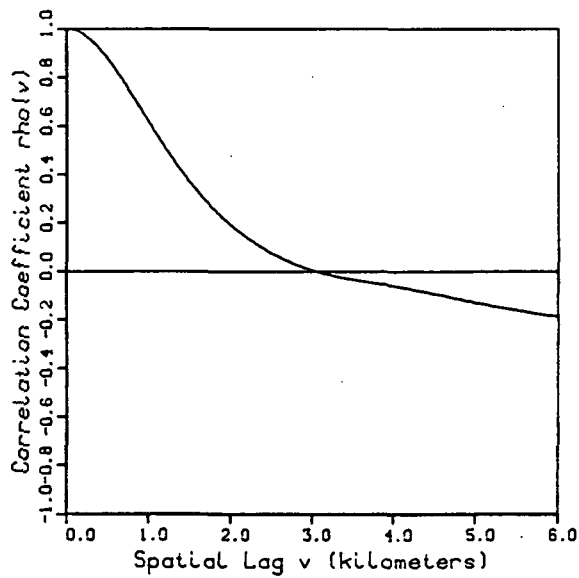
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km. sq.)	Gamma (A)
1	0.091	0.0	1.000	0.00	1.000
2	0.051	0.2	0.994	0.04	0.838
3	0.036	0.4	0.977	0.16	0.674
4	0.030	0.6	0.951	0.36	0.523
5	0.026	0.8	0.920	0.64	0.385
6	0.019	1.0	0.885	1.00	0.254
7	0.010	1.2	0.844	1.44	0.122
8	0.001	1.4	0.794	1.96	0.042
9	0.000	1.6	0.739	2.56	0.027
		1.8	0.679	3.24	0.021
		2.0	0.597	4.00	0.017
		2.2	0.533	4.84	0.013
		2.4	0.477	5.76	0.010
		2.6	0.437	6.76	0.007
		2.8	0.396	7.84	0.005
		3.0	0.351	9.00	0.004
		3.2	0.309	10.24	0.003
		3.4	0.279	11.56	0.003
		3.6	0.250	12.96	0.002
		3.8	0.227	14.44	0.002
		4.0	0.198	16.00	0.002
		4.2	0.177	17.64	0.002
		4.4	0.157	19.36	0.001
		4.6	0.136	21.16	0.001
		4.8	0.109	23.04	0.001
		5.0	0.083	25.00	0.000
		5.2	0.061	27.04	0.000
		5.4	0.041	29.16	0.000
		5.6	0.026	31.36	0.000
		5.8	0.013	33.64	0.000
		6.0	0.001	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

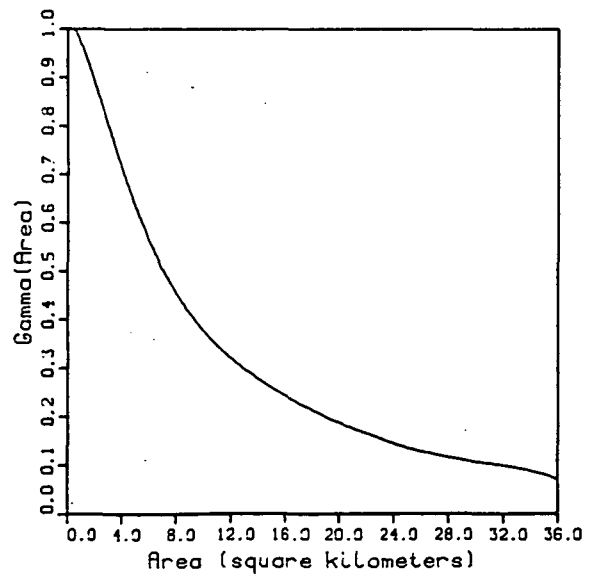
Storm Day  
 Aug 28, 1973



Spatial Correlation



Variance Function



Storm Day Aug 28 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.505$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.495$

Expected Value of Point Depth (mm.):  $E(Y)=0.171$

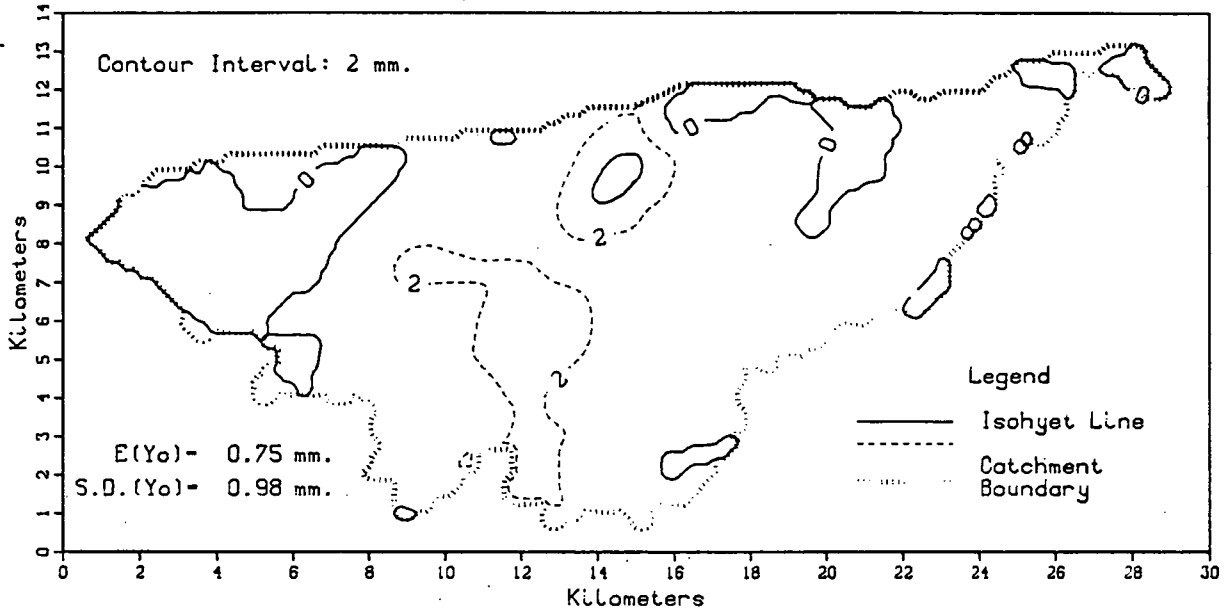
Variance of Point Depth (mm. sq.):  $Var(Y)=0.099$

Coef. of Skewness of Point Depth:  $S.C.(Y)=3.153$

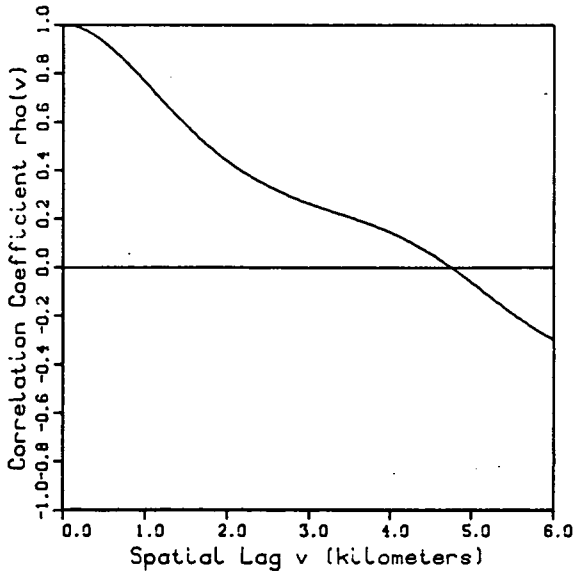
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.025	0.0	1.000	0.00	1.000
2	0.006	0.2	0.978	0.04	1.014
3	0.000	0.4	0.917	0.16	1.018
		0.6	0.829	0.36	1.012
		0.8	0.725	0.64	0.996
		1.0	0.615	1.00	0.971
		1.2	0.508	1.44	0.938
		1.4	0.410	1.96	0.895
		1.6	0.323	2.56	0.842
		1.8	0.250	3.24	0.781
		2.0	0.187	4.00	0.714
		2.2	0.135	4.84	0.645
		2.4	0.091	5.76	0.579
		2.6	0.055	6.76	0.518
		2.8	0.025	7.84	0.462
		3.0	0.002	9.00	0.413
		3.2	-0.017	10.24	0.369
		3.4	-0.031	11.56	0.331
		3.6	-0.043	12.96	0.298
		3.8	-0.054	14.44	0.269
		4.0	-0.065	16.00	0.242
		4.2	-0.077	17.64	0.217
		4.4	-0.090	19.36	0.194
		4.6	-0.104	21.16	0.173
		4.8	-0.119	23.04	0.153
		5.0	-0.133	25.00	0.134
		5.2	-0.147	27.04	0.121
		5.4	-0.159	29.16	0.109
		5.6	-0.171	31.36	0.101
		5.8	-0.182	33.64	0.090
		6.0	-0.192	36.00	0.070

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

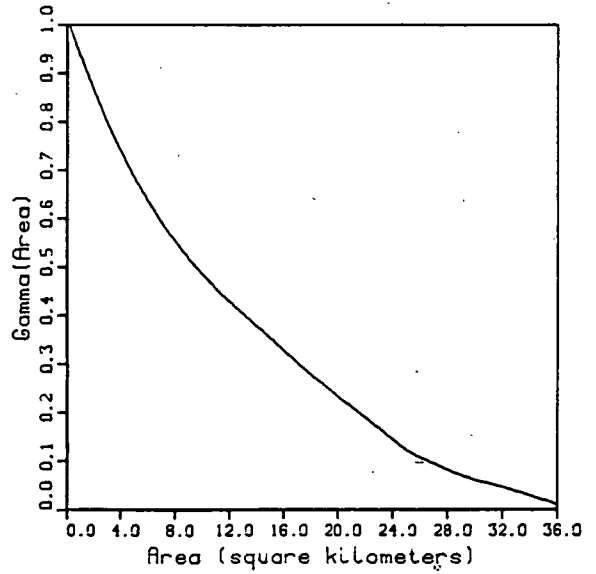
Storm Day  
 Aug 29, 1973



Spatial Correlation



Variance Function



Storm Day Aug 29 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.166$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.834$

Expected Value of Point Depth (mm.):  $E(Y) = 0.838$

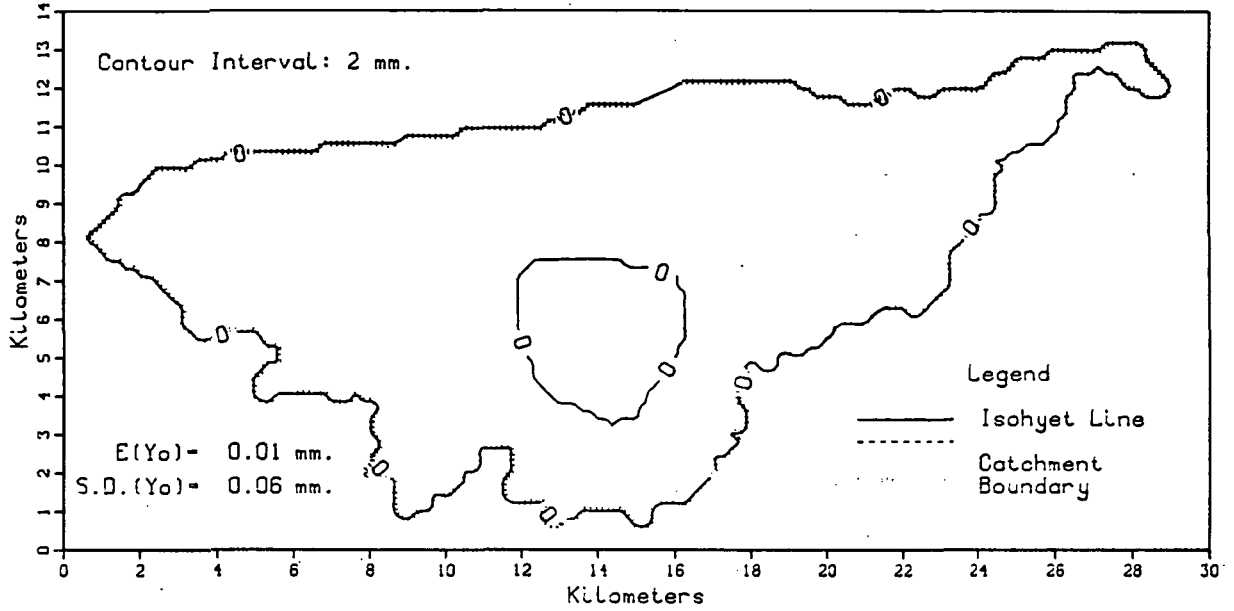
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.800$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.307$

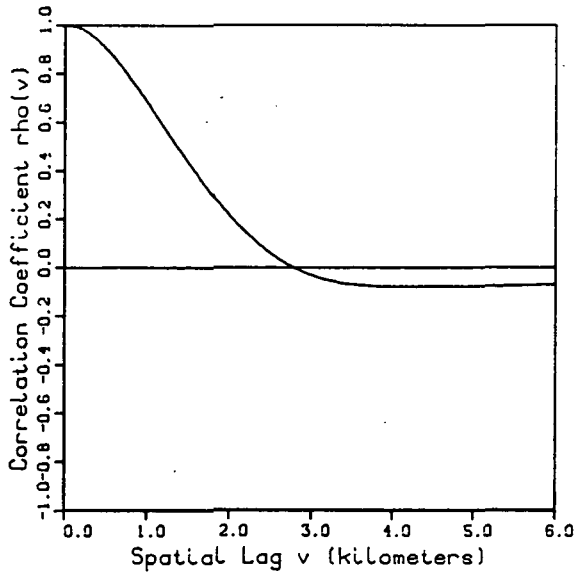
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	Acw/Ac (Y≥y)		rho (v)		Gamma (A)
1	0.338	0.0	1.000	0.00	1.000
2	0.123	0.2	0.987	0.04	1.005
3	0.030	0.4	0.951	0.16	1.000
4	0.007	0.6	0.899	0.36	0.986
5	0.000	0.8	0.834	0.64	0.965
		1.0	0.762	1.00	0.938
		1.2	0.688	1.44	0.906
		1.4	0.616	1.96	0.869
		1.6	0.549	2.56	0.828
		1.8	0.488	3.24	0.784
		2.0	0.434	4.00	0.739
		2.2	0.388	4.84	0.692
		2.4	0.348	5.76	0.647
		2.6	0.314	6.76	0.602
		2.8	0.285	7.84	0.558
		3.0	0.259	9.00	0.517
		3.2	0.235	10.24	0.477
		3.4	0.213	11.56	0.440
		3.6	0.191	12.96	0.404
		3.8	0.167	14.44	0.367
		4.0	0.140	16.00	0.327
		4.2	0.108	17.64	0.285
		4.4	0.072	19.36	0.246
		4.6	0.031	21.16	0.208
		4.8	-.016	23.04	0.166
		5.0	-.066	25.00	0.122
		5.2	-.119	27.04	0.093
		5.4	-.171	29.16	0.067
		5.6	-.219	31.36	0.050
		5.8	-.263	33.64	0.031
		6.0	-.301	36.00	0.009

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

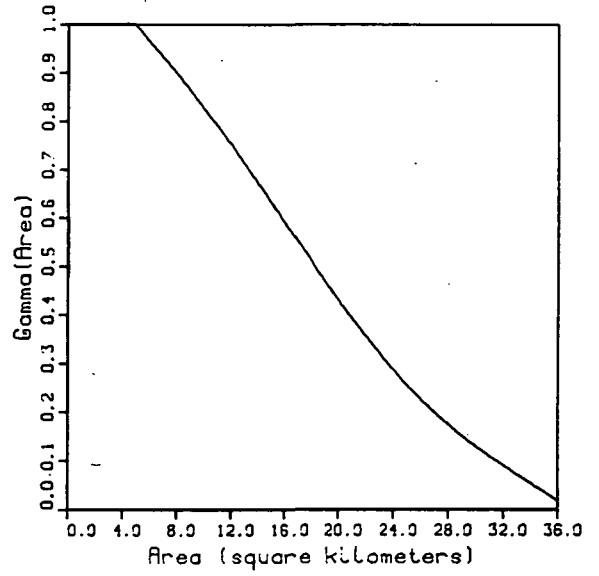
Storm Day  
 Aug 31, 1973



Spatial Correlation



Variance Function



Storm Day Aug 31 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.897$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.103$

Expected Value of Point Depth (mm.):  $E(Y)=0.017$

Variance of Point Depth (mm. sq.):  $Var(Y)=0.005$

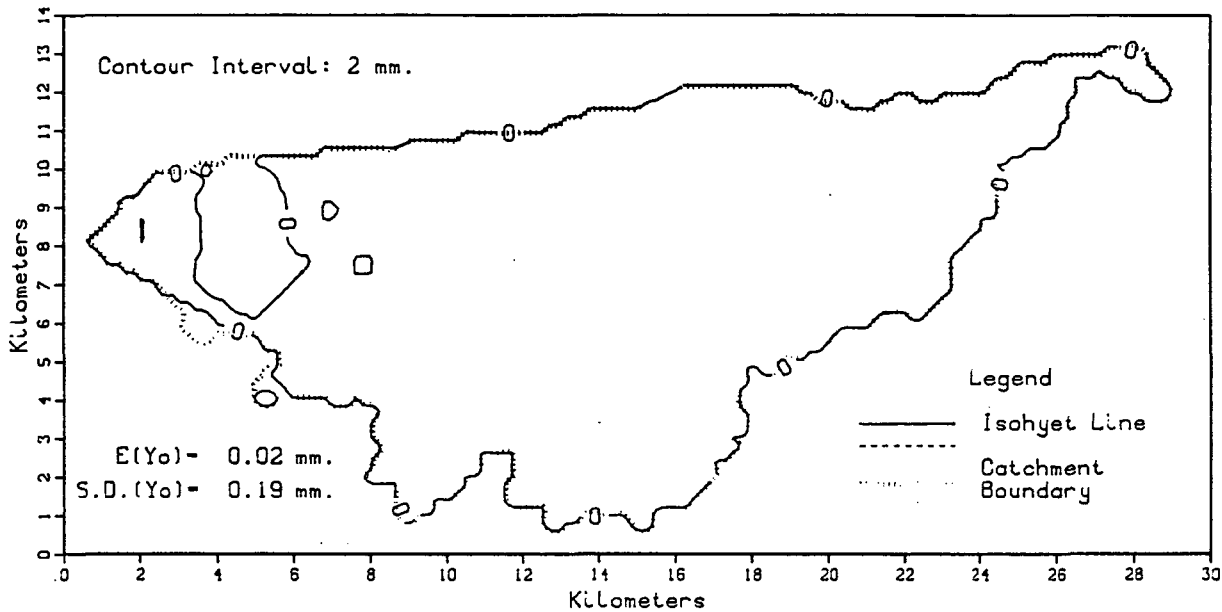
Coef. of Skewness of Point Depth:  $S.C.(Y)=4.736$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation		Variance Function	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.983	0.04	1.040
		0.4	0.937	0.16	1.071
		0.6	0.866	0.36	1.092
		0.8	0.779	0.64	1.101
		1.0	0.682	1.00	1.103
		1.2	0.581	1.44	1.100
		1.4	0.480	1.96	1.090
		1.6	0.384	2.56	1.074
		1.8	0.294	3.24	1.052
		2.0	0.213	4.00	1.028
		2.2	0.142	4.84	1.001
		2.4	0.082	5.76	0.971
		2.6	0.033	6.76	0.938
		2.8	-.006	7.84	0.903
		3.0	-.035	9.00	0.863
		3.2	-.056	10.24	0.818
		3.4	-.069	11.56	0.768
		3.6	-.077	12.96	0.714
		3.8	-.080	14.44	0.654
		4.0	-.082	16.00	0.591
		4.2	-.082	17.64	0.524
		4.4	-.081	19.36	0.455
		4.6	-.080	21.16	0.386
		4.8	-.080	23.04	0.319
		5.0	-.079	25.00	0.254
		5.2	-.078	27.04	0.198
		5.4	-.076	29.16	0.146
		5.6	-.075	31.36	0.102
		5.8	-.073	33.64	0.060
		6.0	-.071	36.00	0.017

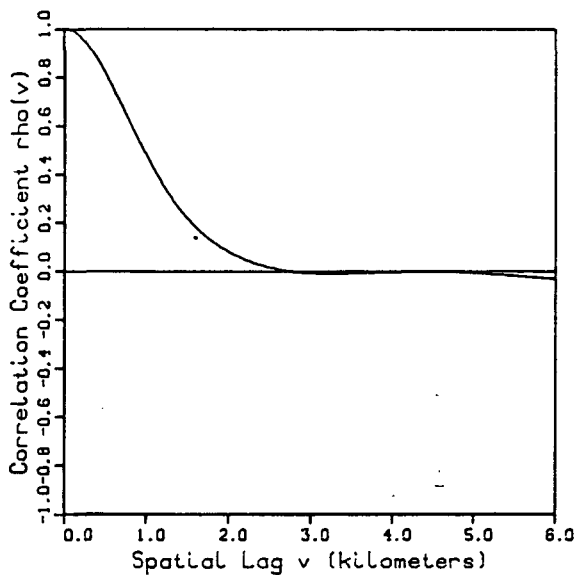


Walnut Gulch, Arizona  
Ac=154.21 sq.km.

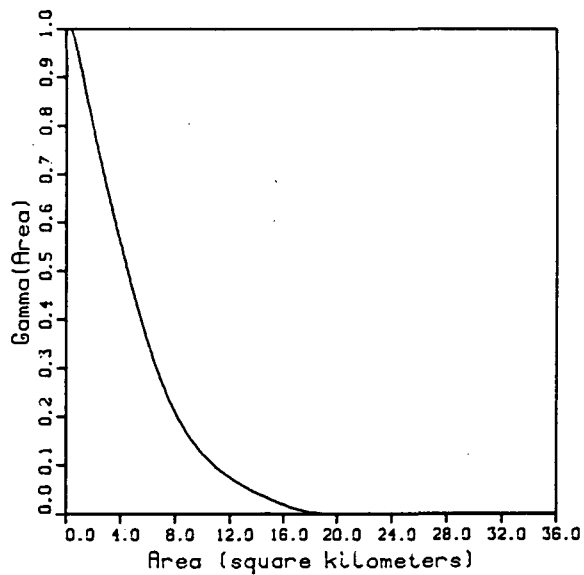
Storm Day  
Sept 5, 1973



Spatial Correlation



Variance Function



Storm Day Sept 5 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.927$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.073$

Expected Value of Point Depth (mm.):  $E(Y) = 0.030$

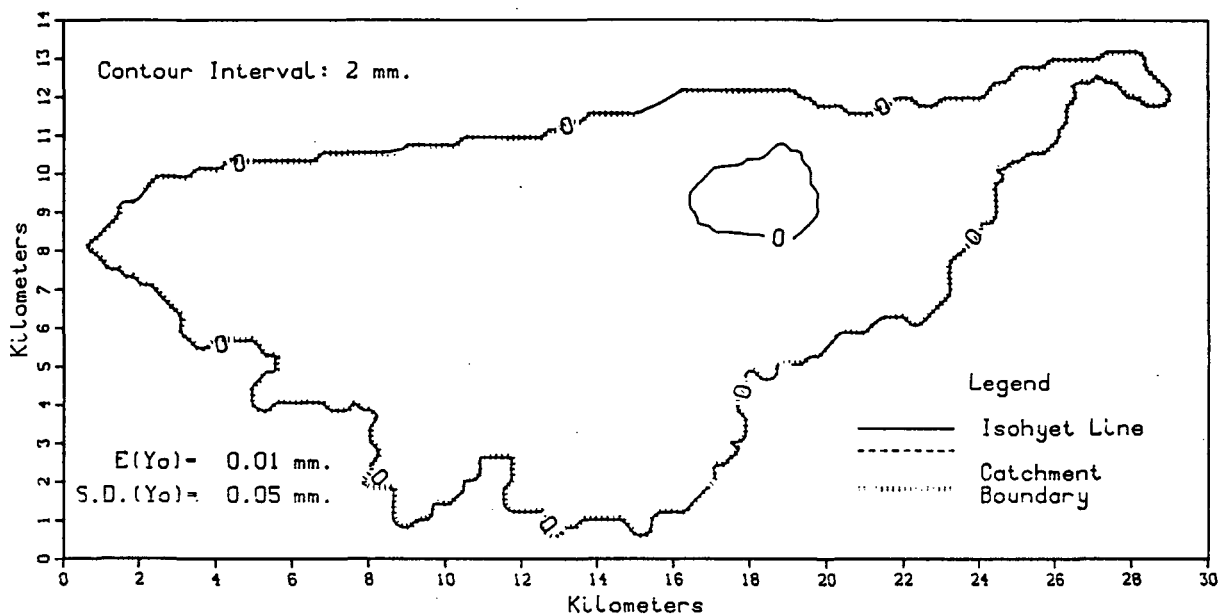
Variance of Point Depth (mm. sq.):  $Var(Y) = 0.031$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 7.237$

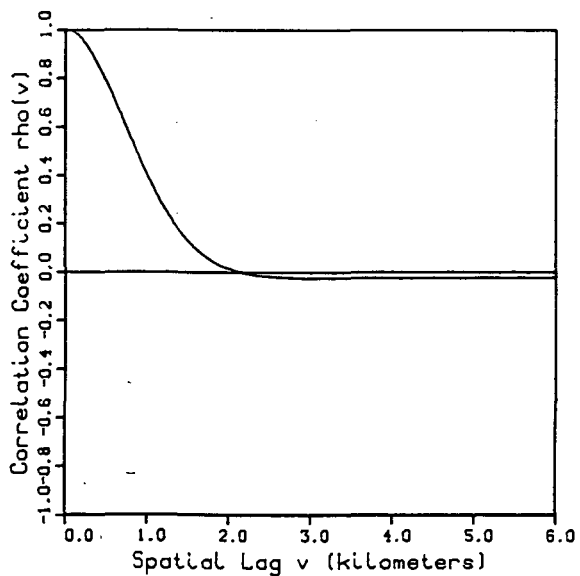
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.013	0.0	1.000	0.00	1.000
2	0.000	0.2	0.967	0.04	1.025
		0.4	0.878	0.16	1.031
		0.6	0.753	0.36	1.016
		0.8	0.614	0.64	0.982
		1.0	0.478	1.00	0.933
		1.2	0.357	1.44	0.873
		1.4	0.257	1.96	0.802
		1.6	0.179	2.56	0.725
		1.8	0.122	3.24	0.643
		2.0	0.079	4.00	0.557
		2.2	0.046	4.84	0.466
		2.4	0.022	5.76	0.375
		2.6	0.006	6.76	0.291
		2.8	-0.004	7.84	0.217
		3.0	-0.009	9.00	0.160
		3.2	-0.011	10.24	0.116
		3.4	-0.010	11.56	0.083
		3.6	-0.007	12.96	0.058
		3.8	-0.005	14.44	0.036
		4.0	-0.002	16.00	0.018
		4.2	-0.001	17.64	0.004
		4.4	-0.001	19.36	0.000
		4.6	-0.002	21.16	0.000
		4.8	-0.005	23.04	0.000
		5.0	-0.008	25.00	0.000
		5.2	-0.013	27.04	0.000
		5.4	-0.019	29.16	0.000
		5.6	-0.024	31.36	0.000
		5.8	-0.029	33.64	0.000
		6.0	-0.035	36.00	0.000

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

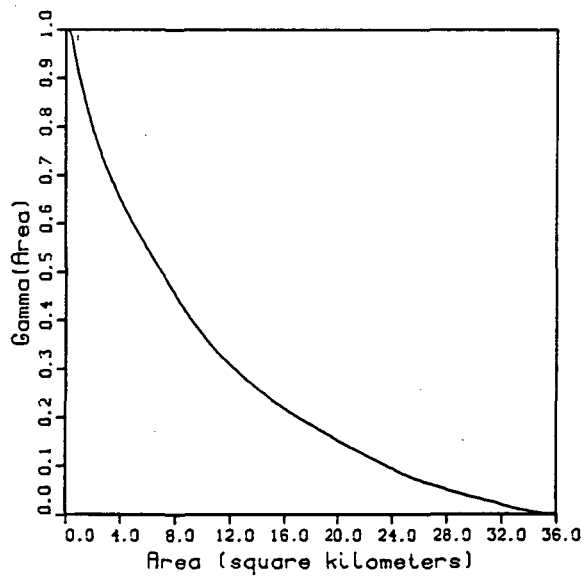
Storm Day  
 Sept 6, 1973



Spatial Correlation



Variance Function



Storm Day Sept 6 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.956$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.044$

Expected Value of Point Depth (mm.):  $E(Y)= 0.007$

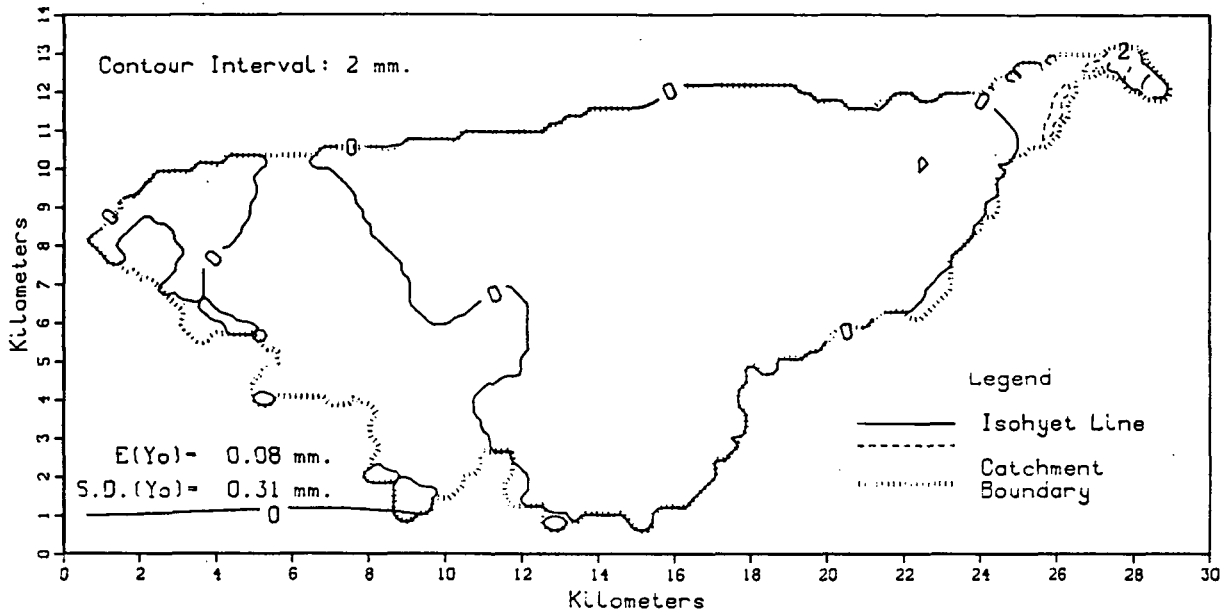
Variance of Point Depth (mm. sq.):  $Var(Y)= 0.002$

Coef. of Skewness of Point Depth:  $S.C.(Y)= 7.988$

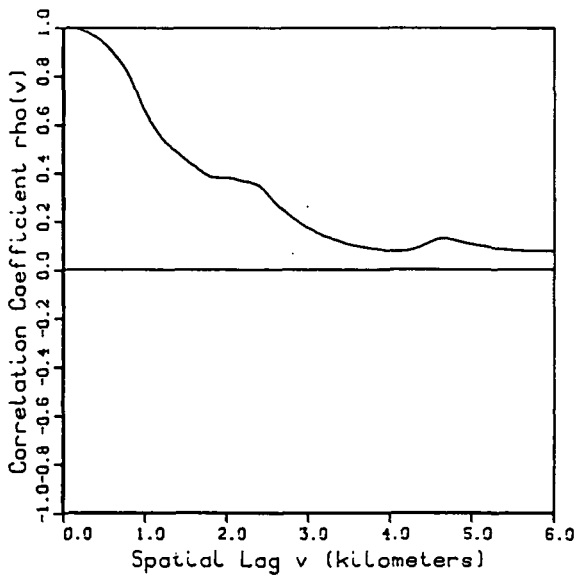
Spatial Distribution of Total Storm Depth $y$ (mm.)		Spatial Correlation $v$ (km.)		Variance Function $A$ (km. sq.)	
$y$ (mm.)	$A_{cw}/A_c (Y \geq y)$	$v$ (km.)	$\rho(v)$	$A$ (km. sq.)	$\Gamma(A)$
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.961	0.04	1.018
		0.4	0.856	0.16	1.016
		0.6	0.712	0.36	0.992
		0.8	0.554	0.64	0.953
		1.0	0.403	1.00	0.905
		1.2	0.271	1.44	0.853
		1.4	0.168	1.96	0.800
		1.6	0.093	2.56	0.747
		1.8	0.043	3.24	0.697
		2.0	0.011	4.00	0.650
		2.2	-0.008	4.84	0.605
		2.4	-0.018	5.76	0.559
		2.6	-0.024	6.76	0.510
		2.8	-0.026	7.84	0.458
		3.0	-0.027	9.00	0.407
		3.2	-0.028	10.24	0.359
		3.4	-0.028	11.56	0.319
		3.6	-0.028	12.96	0.282
		3.8	-0.028	14.44	0.248
		4.0	-0.028	16.00	0.217
		4.2	-0.028	17.64	0.188
		4.4	-0.027	19.36	0.161
		4.6	-0.027	21.16	0.134
		4.8	-0.027	23.04	0.107
		5.0	-0.026	25.00	0.080
		5.2	-0.026	27.04	0.059
		5.4	-0.025	29.16	0.040
		5.6	-0.025	31.36	0.025
		5.8	-0.025	33.64	0.007
		6.0	-0.026	36.00	0.001

Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

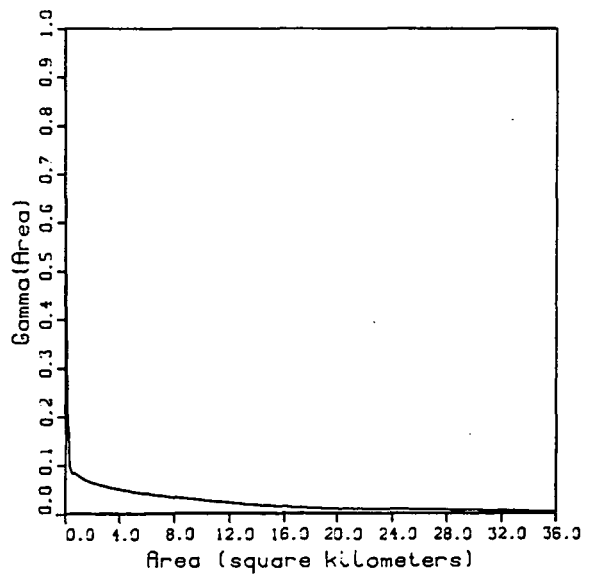
Storm Day  
 Sept 9, 1973



Spatial Correlation



Variance Function



Storm Day Sept 9 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.716$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.284$

Expected Value of Point Depth (mm.):  $E(Y) = 0.144$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.412$

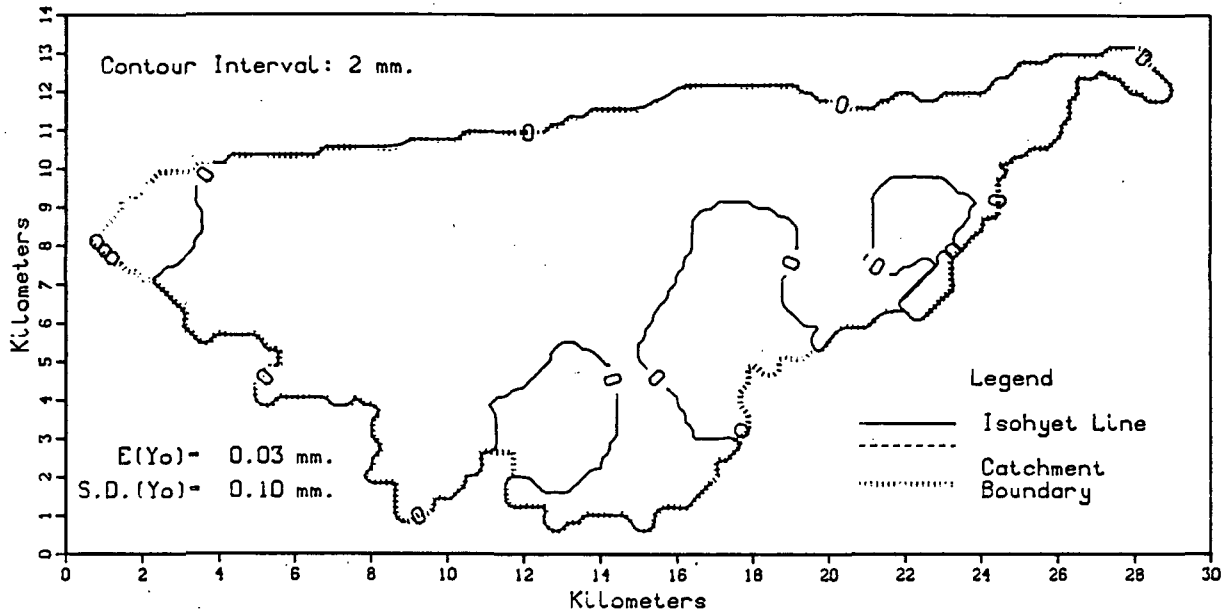
Coef. of Skewness of Point Depth:  $S.C.(Y) = 10.366$

Spatial Distribution of Total Storm Depth y (mm.)	Acw/Ac (Y≥y)	Spatial Correlation		Variance Function	
		v (km.)	rho(v)	A (km. sq.)	Gamma (A)
1	0.014	0.0	1.000	0.00	1.000
2	0.008	0.2	0.990	0.04	0.588
3	0.006	0.4	0.959	0.16	0.221
4	0.005	0.6	0.899	0.36	0.094
5	0.004	0.8	0.805	0.64	0.084
6	0.003	1.0	0.652	1.00	0.076
7	0.002	1.2	0.545	1.44	0.069
8	0.002	1.4	0.480	1.96	0.063
9	0.001	1.6	0.426	2.56	0.058
10	0.001	1.8	0.383	3.24	0.053
11	0.000	2.0	0.378	4.00	0.049
12	0.000	2.2	0.364	4.84	0.045
		2.4	0.344	5.76	0.040
		2.6	0.273	6.76	0.037
		2.8	0.214	7.84	0.033
		3.0	0.170	9.00	0.029
		3.2	0.138	10.24	0.025
		3.4	0.113	11.56	0.022
		3.6	0.096	12.96	0.019
		3.8	0.087	14.44	0.016
		4.0	0.077	16.00	0.013
		4.2	0.081	17.64	0.011
		4.4	0.103	19.36	0.009
		4.6	0.131	21.16	0.008
		4.8	0.119	23.04	0.008
		5.0	0.104	25.00	0.007
		5.2	0.092	27.04	0.006
		5.4	0.083	29.16	0.006
		5.6	0.077	31.36	0.005
		5.8	0.077	33.64	0.003
		6.0	0.076	36.00	0.001

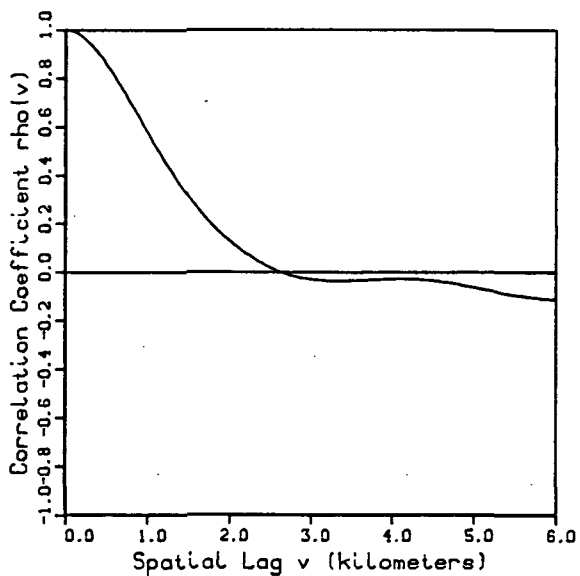
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Walnut Gulch, Arizona  
Ac=154.21 sq.km.

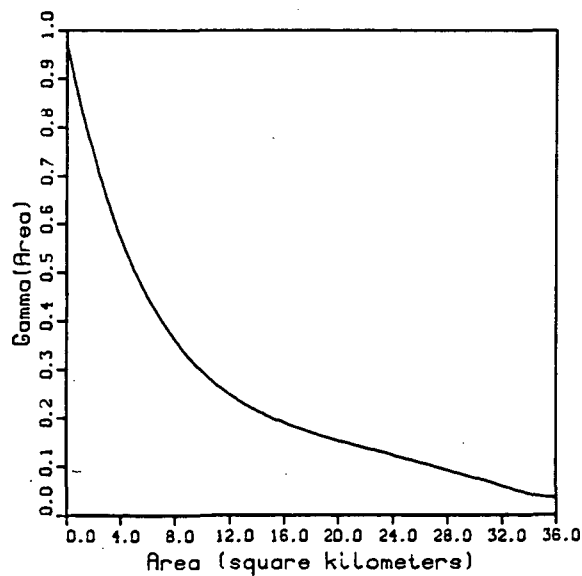
Storm Day  
Sept 15, 1973



Spatial Correlation



Variance Function



Storm Day Sept 15 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.750$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.250$

Expected Value of Point Depth (mm.):  $E(Y) = 0.035$

Variance of Point Depth (mm. sq.):  $Var(Y) = 0.008$

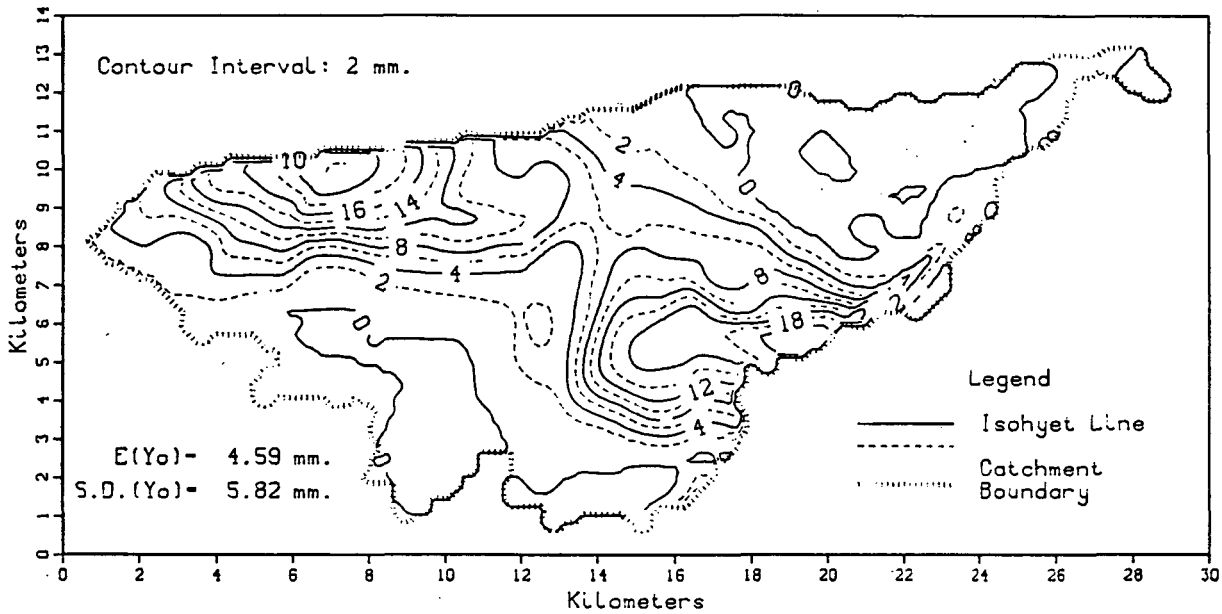
Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.891$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.972	0.04	0.975
		0.4	0.903	0.16	0.953
		0.6	0.806	0.36	0.925
		0.8	0.692	0.64	0.889
		1.0	0.574	1.00	0.847
		1.2	0.460	1.44	0.800
		1.4	0.356	1.96	0.747
		1.6	0.265	2.56	0.689
		1.8	0.189	3.24	0.629
		2.0	0.127	4.00	0.570
		2.2	0.076	4.84	0.514
		2.4	0.034	5.76	0.461
		2.6	0.002	6.76	0.412
		2.8	-.020	7.84	0.367
		3.0	-.033	9.00	0.326
		3.2	-.038	10.24	0.290
		3.4	-.039	11.56	0.258
		3.6	-.036	12.96	0.231
		3.8	-.033	14.44	0.208
		4.0	-.030	16.00	0.189
		4.2	-.030	17.64	0.173
		4.4	-.034	19.36	0.158
		4.6	-.042	21.16	0.144
		4.8	-.054	23.04	0.130
		5.0	-.067	25.00	0.115
		5.2	-.080	27.04	0.100
		5.4	-.093	29.16	0.082
		5.6	-.104	31.36	0.065
		5.8	-.112	33.64	0.045
		6.0	-.117	36.00	0.035

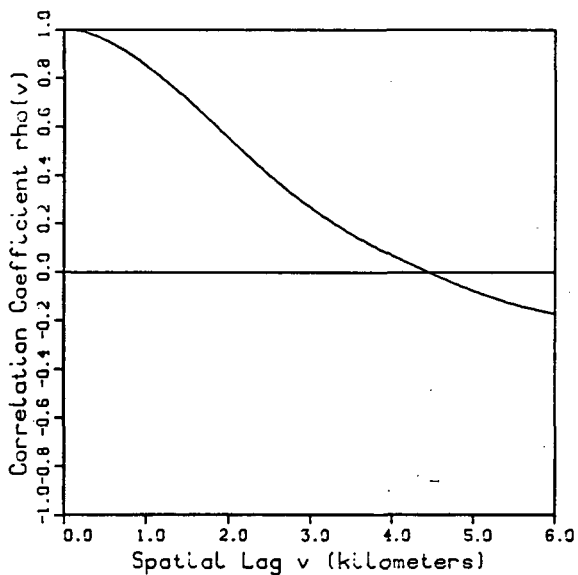


Walnut Gulch, Arizona  
 Ac=154.21 sq.km.

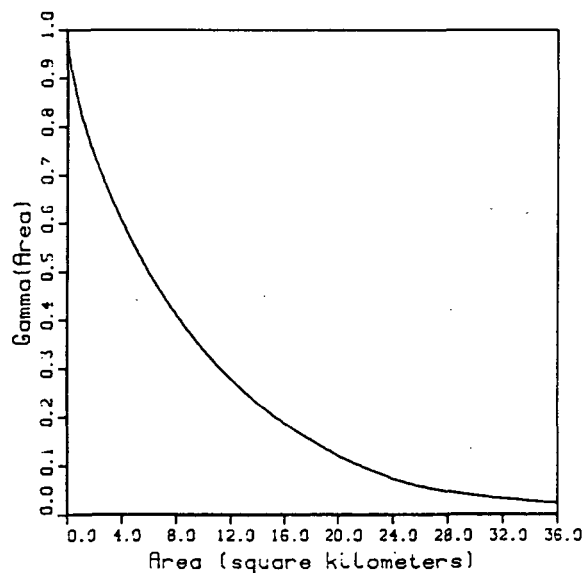
Storm Day  
 Sept 16, 1973



Spatial Correlation



Variance Function



Storm Day Sept 16 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.206$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.794$

Expected Value of Point Depth (mm.):  $E(Y) = 4.790$

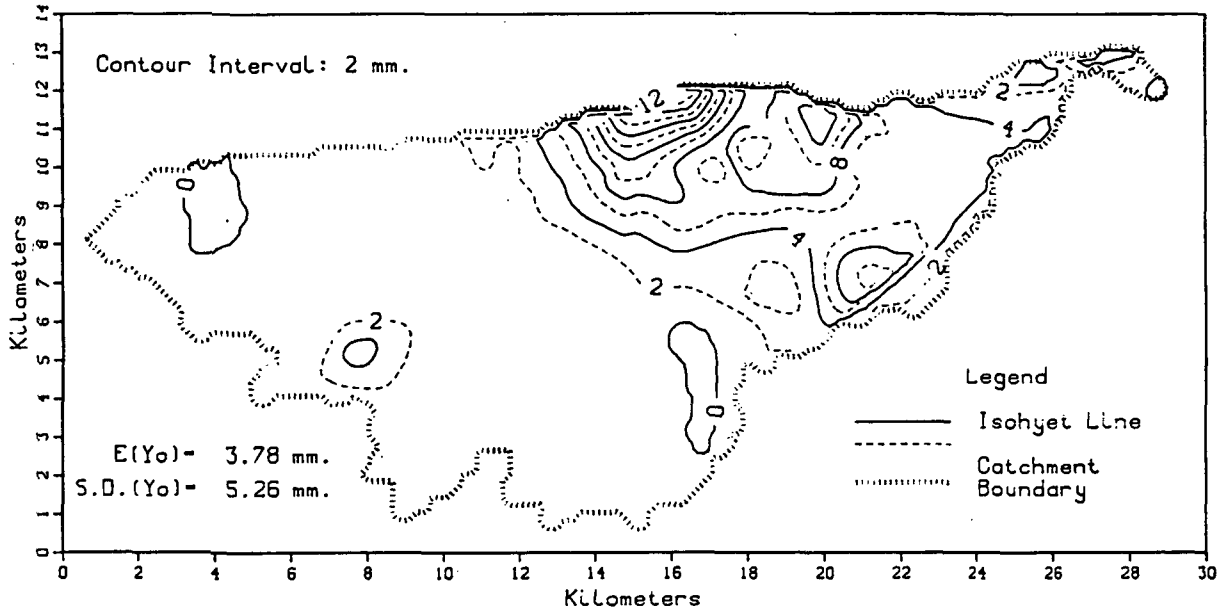
Variance of Point Depth (mm. sq.):  $Var(Y) = 32.955$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 1.151$

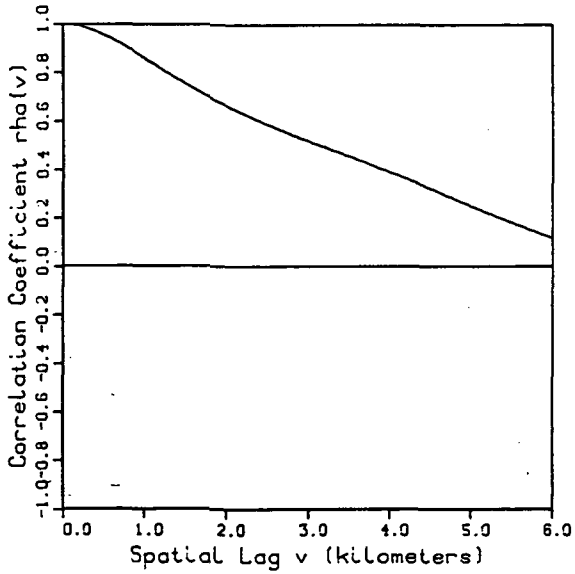
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.603	0.0	1.000	0.00	1.000
2	0.529	0.2	0.991	0.04	0.977
3	0.461	0.4	0.970	0.16	0.945
4	0.416	0.6	0.938	0.36	0.908
5	0.376	0.8	0.897	0.64	0.868
6	0.337	1.0	0.849	1.00	0.827
7	0.297	1.2	0.795	1.44	0.784
8	0.258	1.4	0.737	1.96	0.740
9	0.219	1.6	0.677	2.56	0.695
10	0.189	1.8	0.614	3.24	0.649
11	0.166	2.0	0.550	4.00	0.602
12	0.143	2.2	0.487	4.84	0.555
13	0.123	2.4	0.426	5.76	0.508
14	0.105	2.6	0.368	6.76	0.461
15	0.088	2.8	0.314	7.84	0.416
16	0.070	3.0	0.264	9.00	0.372
17	0.052	3.2	0.217	10.24	0.330
18	0.033	3.4	0.175	11.56	0.290
19	0.024	3.6	0.136	12.96	0.252
20	0.016	3.8	0.100	14.44	0.218
21	0.008	4.0	0.066	16.00	0.186
22	0.001	4.2	0.034	17.64	0.156
23	0.000	4.4	0.003	19.36	0.129
		4.6	-0.027	21.16	0.105
		4.8	-0.055	23.04	0.083
		5.0	-0.082	25.00	0.064
		5.2	-0.106	27.04	0.051
		5.4	-0.128	29.16	0.041
		5.6	-0.147	31.36	0.034
		5.8	-0.163	33.64	0.028
		6.0	-0.177	36.00	0.023

Walnut Gulch, Arizona  
 $A_c=154.21$  sq.km.

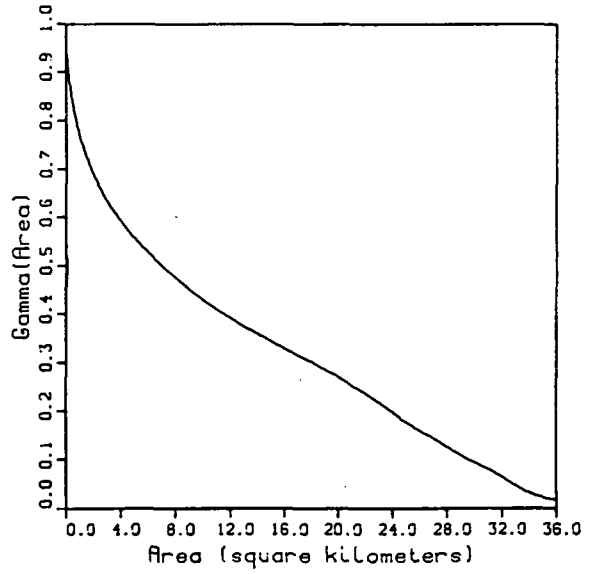
Storm Day  
 Sept 20, 1973



Spatial Correlation



Variance Function



Storm Day Sept 20 1973

Dry Fraction of Total Basin Area:  $(A_{cd}/A_c)=0.030$

Wetted Fraction of Total Basin Area:  $(A_{cw}/A_c)=0.970$

Expected Value of Point Depth (mm.):  $E(Y) = 2.945$

Variance of Point Depth (mm. sq.):  $Var(Y) = 12.521$

Coef. of Skewness of Point Depth:  $S.C.(Y) = 2.170$

Spatial Distribution  
of Total Storm Depth  
y (mm.)       $A_{cw}/A_c (Y \geq y)$

Spatial Correlation  
v (km.)      rho (v)

Variance Function  
A (km.sq.)      Gamma (A)

	$A_{cw}/A_c (Y \geq y)$	v (km.)	rho (v)	A (km.sq.)	Gamma (A)
1	0.628	0.0	1.000	0.00	1.000
2	0.390	0.2	0.991	0.04	0.955
3	0.331	0.4	0.968	0.16	0.908
4	0.276	0.6	0.937	0.36	0.860
5	0.224	0.8	0.898	0.64	0.812
6	0.158	1.0	0.856	1.00	0.767
7	0.128	1.2	0.813	1.44	0.727
8	0.096	1.4	0.771	1.96	0.690
9	0.071	1.6	0.732	2.56	0.655
10	0.047	1.8	0.696	3.24	0.622
11	0.033	2.0	0.662	4.00	0.591
12	0.025	2.2	0.630	4.84	0.561
13	0.018	2.4	0.599	5.76	0.533
14	0.015	2.6	0.570	6.76	0.505
15	0.013	2.8	0.542	7.84	0.478
16	0.010	3.0	0.515	9.00	0.451
17	0.008	3.2	0.490	10.24	0.424
18	0.007	3.4	0.465	11.56	0.399
19	0.005	3.6	0.439	12.96	0.375
20	0.004	3.8	0.413	14.44	0.352
21	0.003	4.0	0.387	16.00	0.328
22	0.002	4.2	0.361	17.64	0.305
23	0.001	4.4	0.334	19.36	0.280
24	0.000	4.6	0.305	21.16	0.251
25	0.000	4.8	0.276	23.04	0.217
26	0.000	5.0	0.247	25.00	0.176
		5.2	0.219	27.04	0.143
		5.4	0.192	29.16	0.106
		5.6	0.166	31.36	0.075
		5.8	0.140	33.64	0.036
		6.0	0.115	36.00	0.018