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N93-26469

ON THE ESTIMATION OF RISK
ASSOCIATED WITH AN ATTENUATION PREDICTION

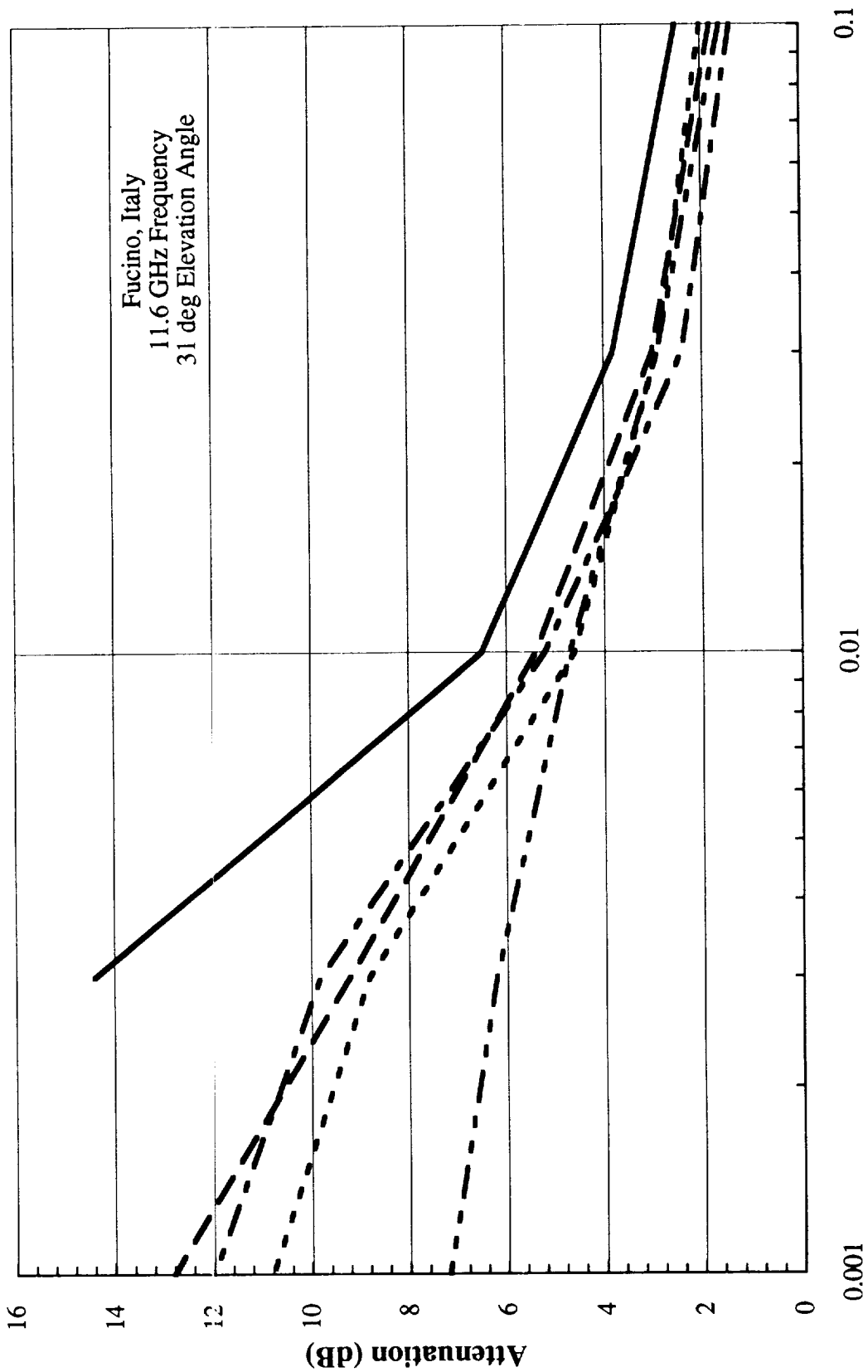
R. K. Crane
University of Oklahoma

**ing a specified threshold for a specified
ervals**

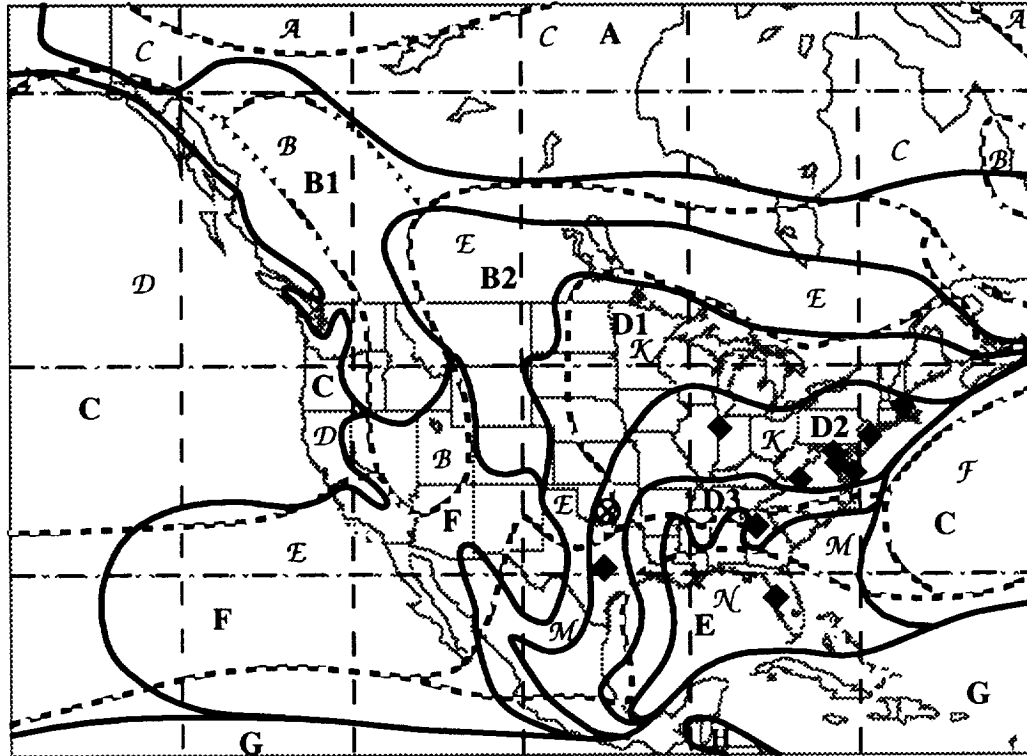
**one or more failures during the lifetime of
specified accounting interval**

**ability of attenuation by rainfall to
n of the attenuation threshold for a**

he inadequacy of a model or models

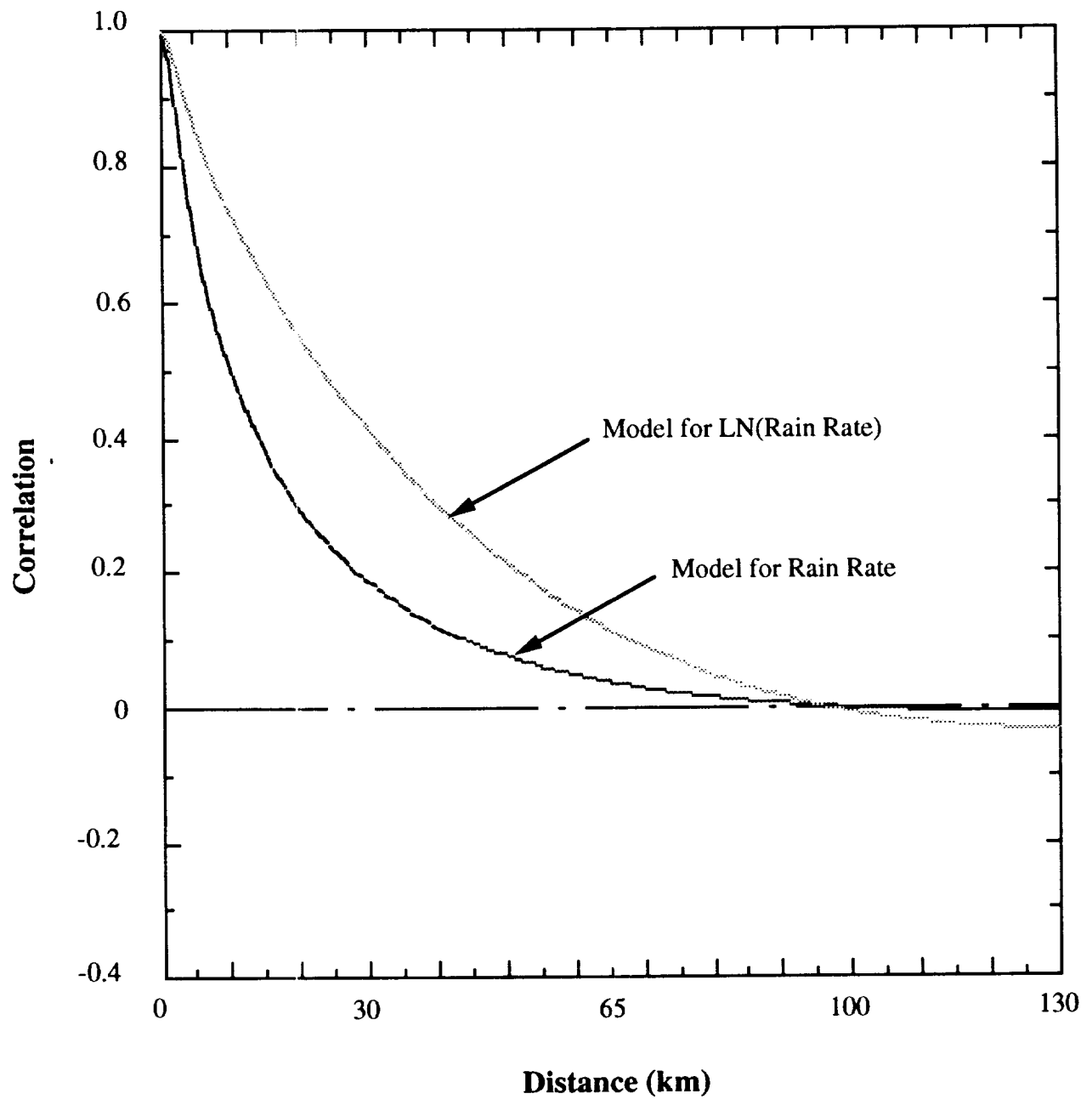


GLOBAL RAIN CLIMATE ZONES —
CCIR RAIN CLIMATE ZONES - - -

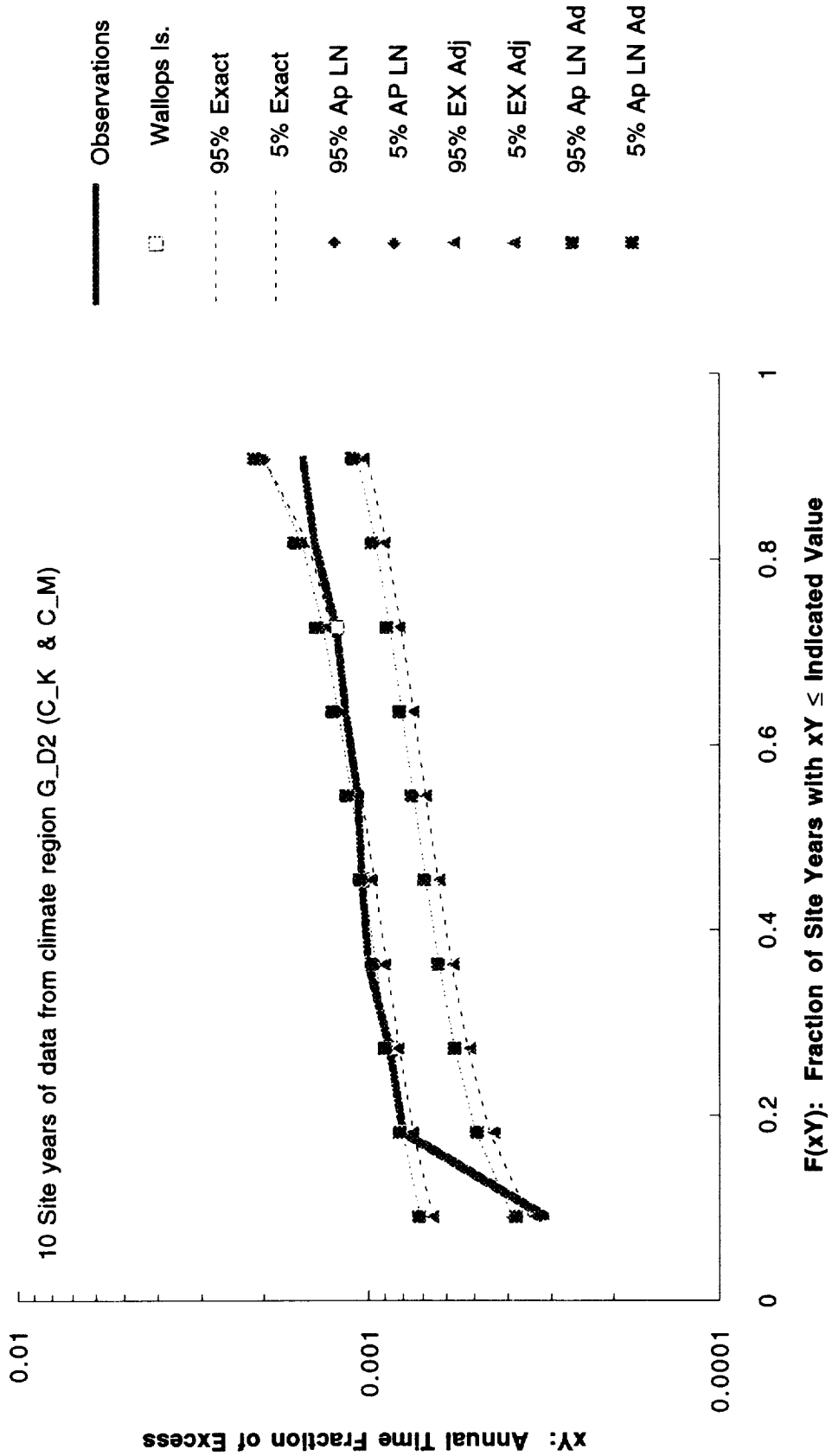


- ◆ Beacon Observation Sites
 - 12 GHz: 5 sites and 12 site years
 - 19 GHz: 7 sites and 15 site years
 - 29 GHz: 9 sites and 14 site years
 - Total of 10 sites

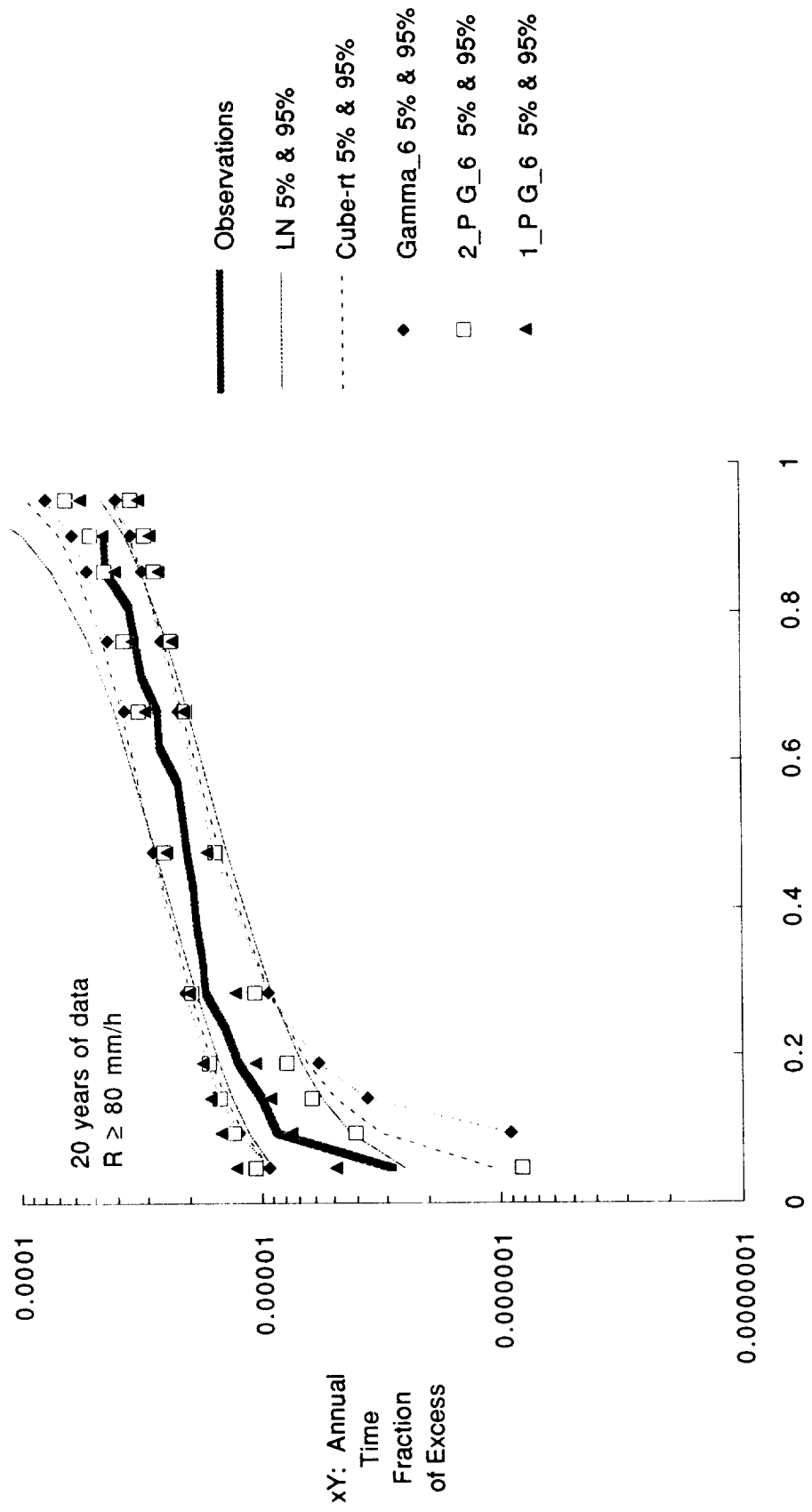
⊗ Norman OK



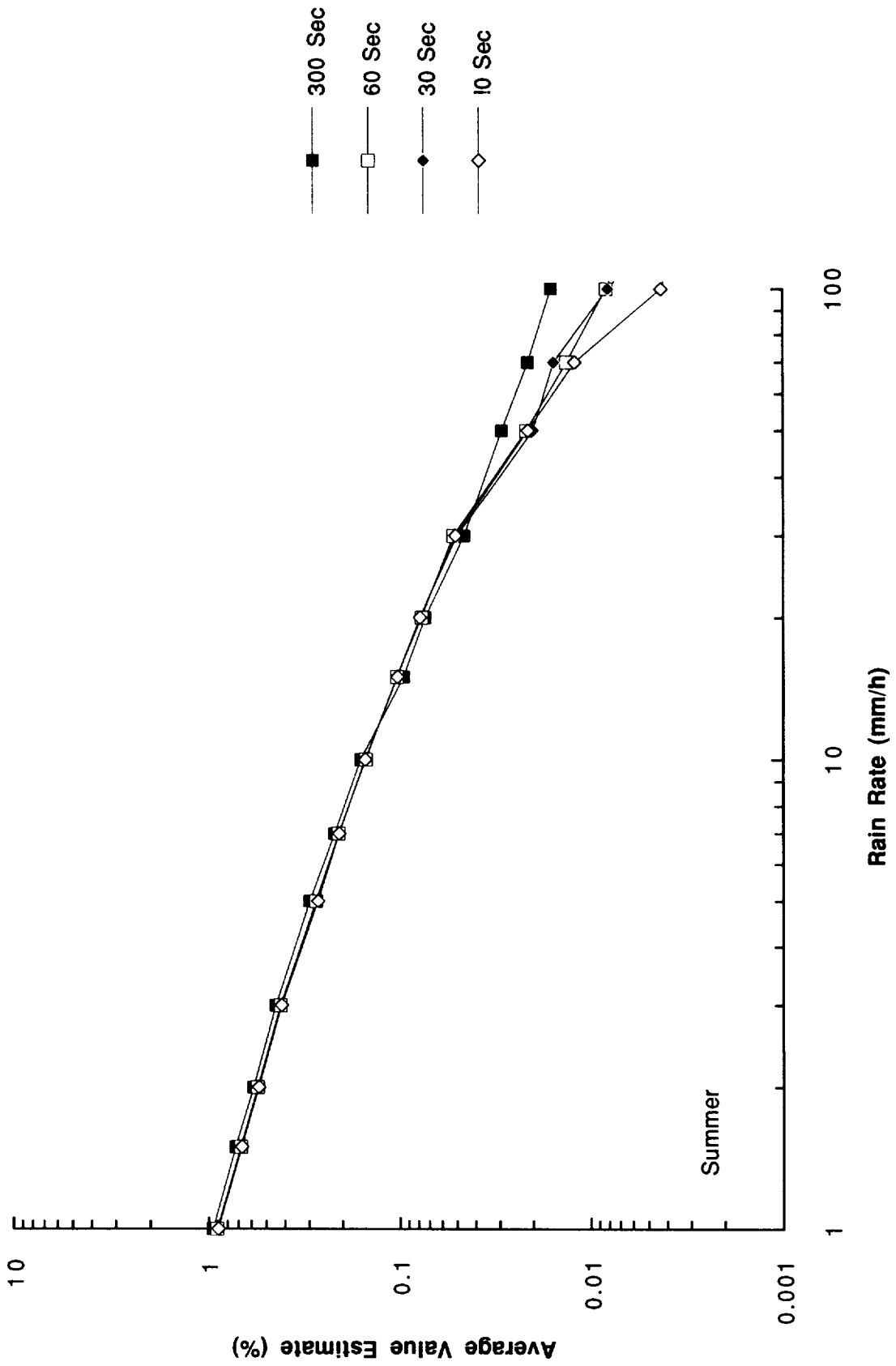
Cumulative Distribution - Annual Time Fraction of Excess
 29 GHz - 15 dB Attenuation Threshold - Lognormal Model



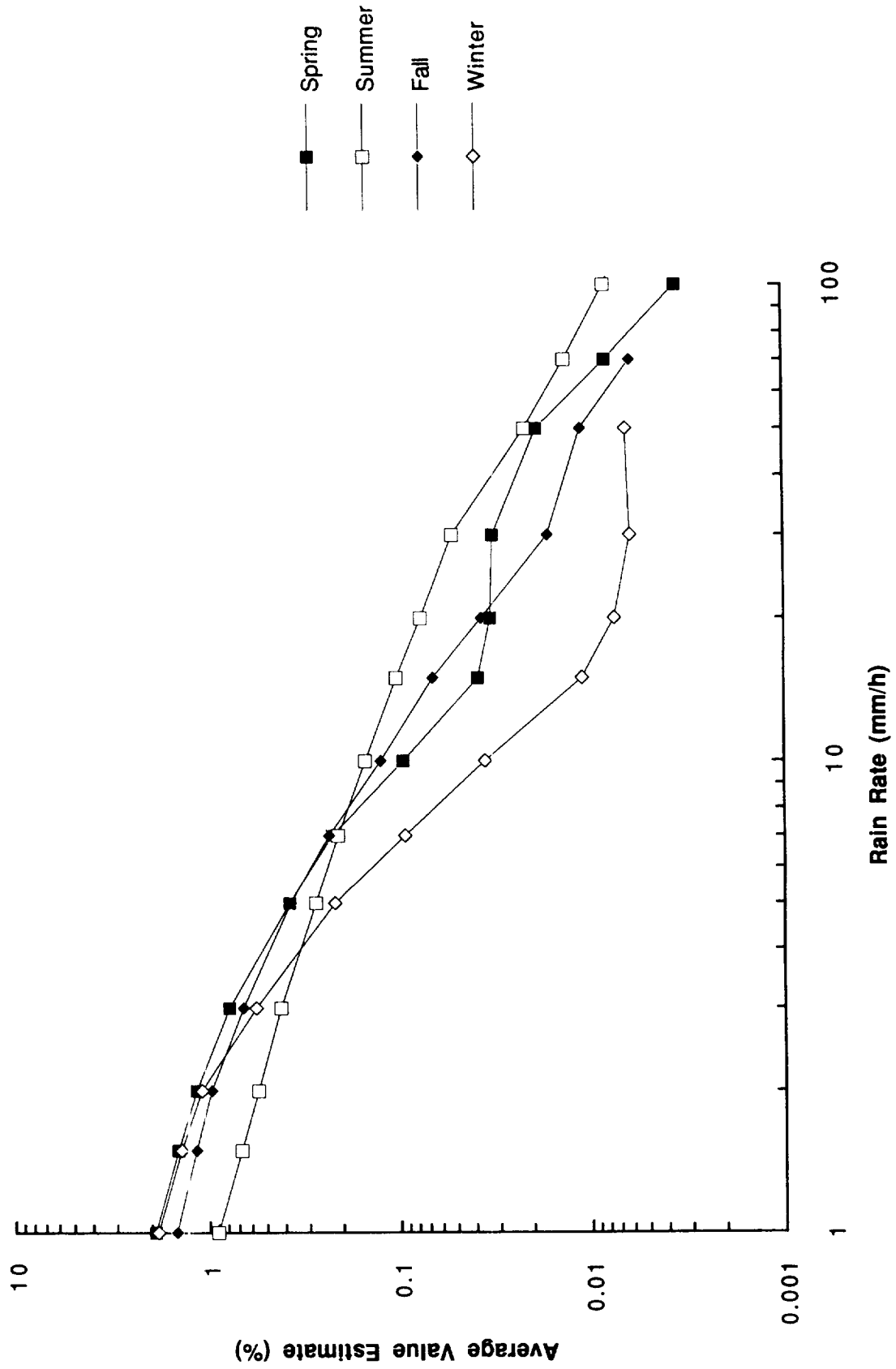
Cumulative Distribution - Annual Time Fraction of Excess
 Rain Rate Distributions from London, Ontario [Segal, 1979]



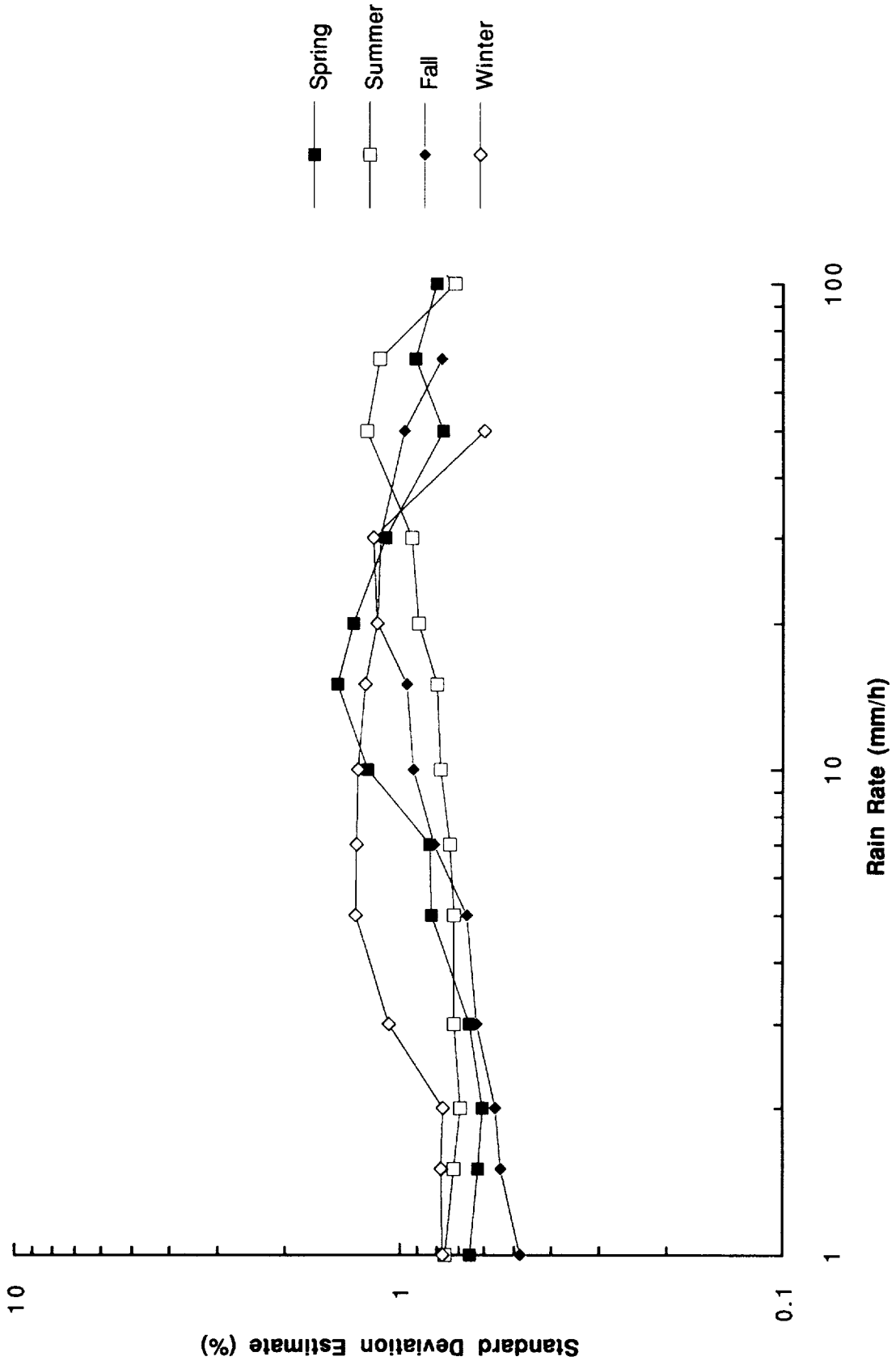
Integration Time Gauge 05



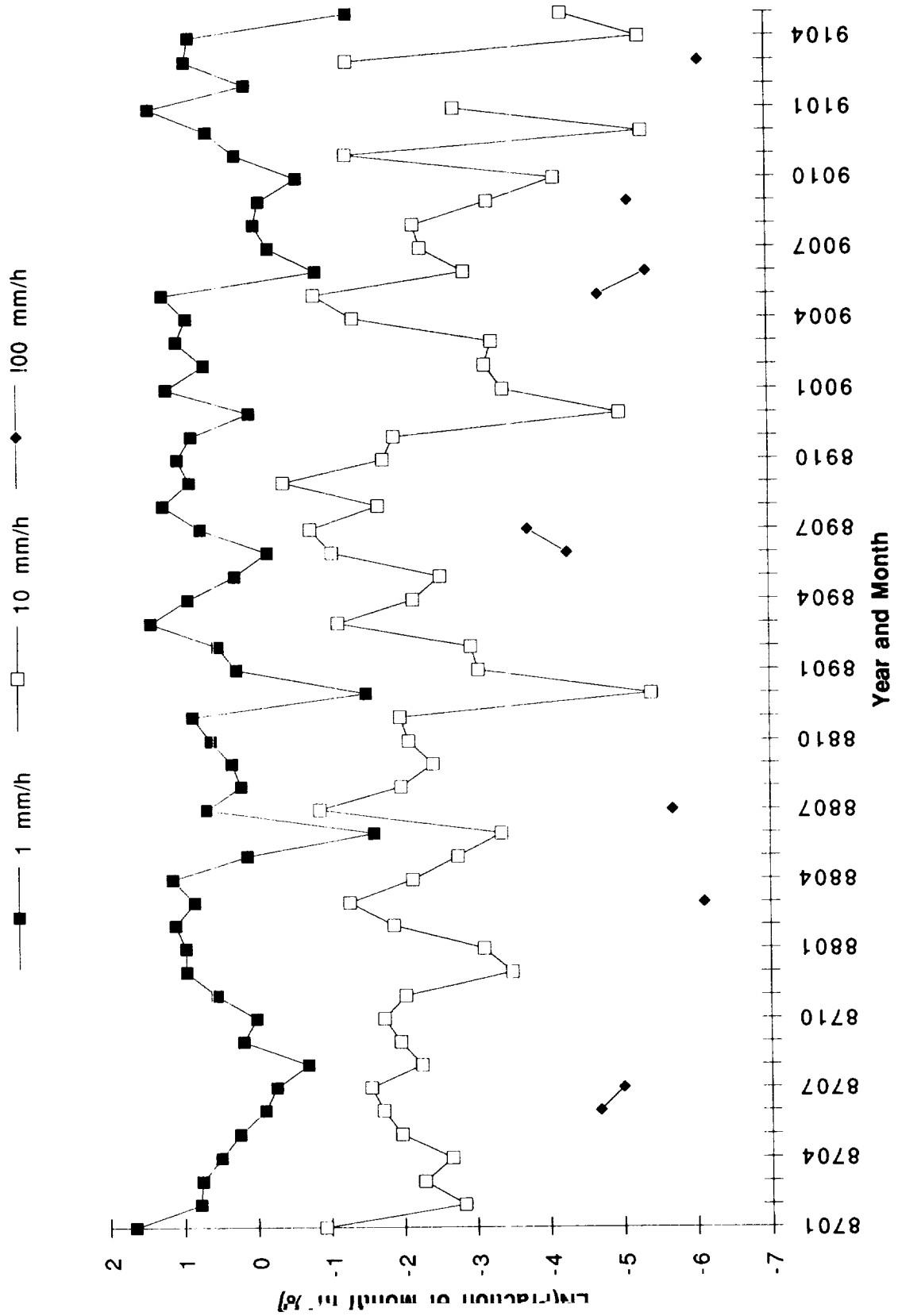
Seasonal edfs Gauge 05

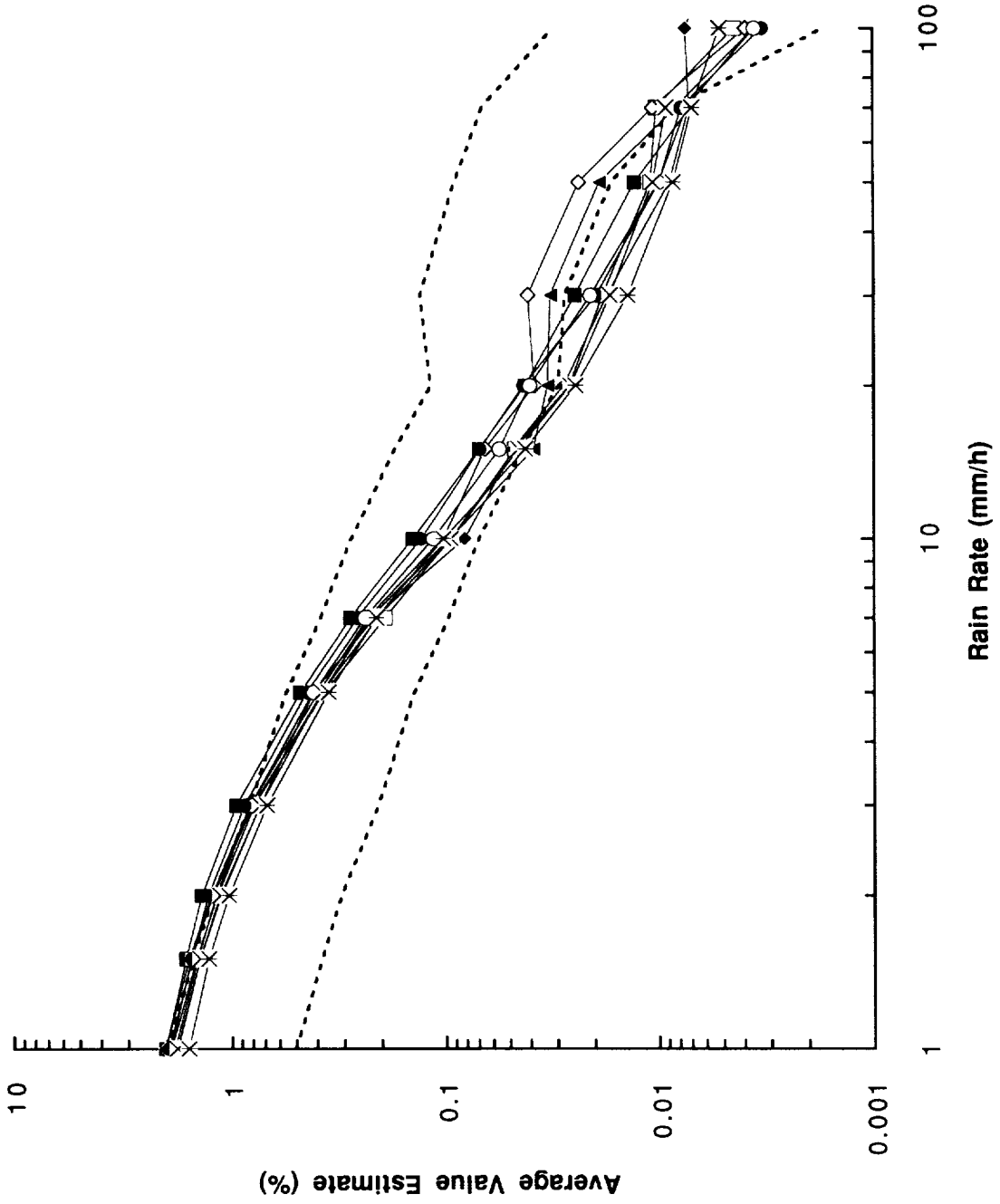
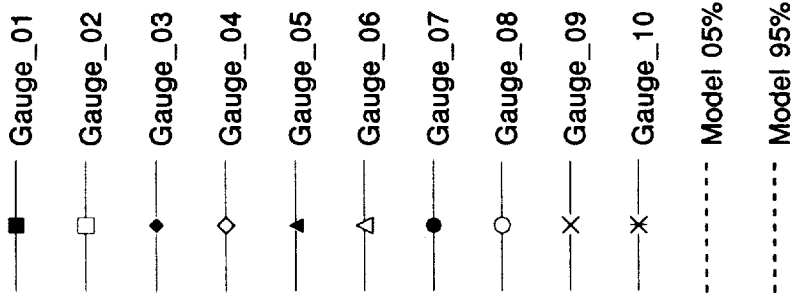


Seasonal edfs s Gauge 05



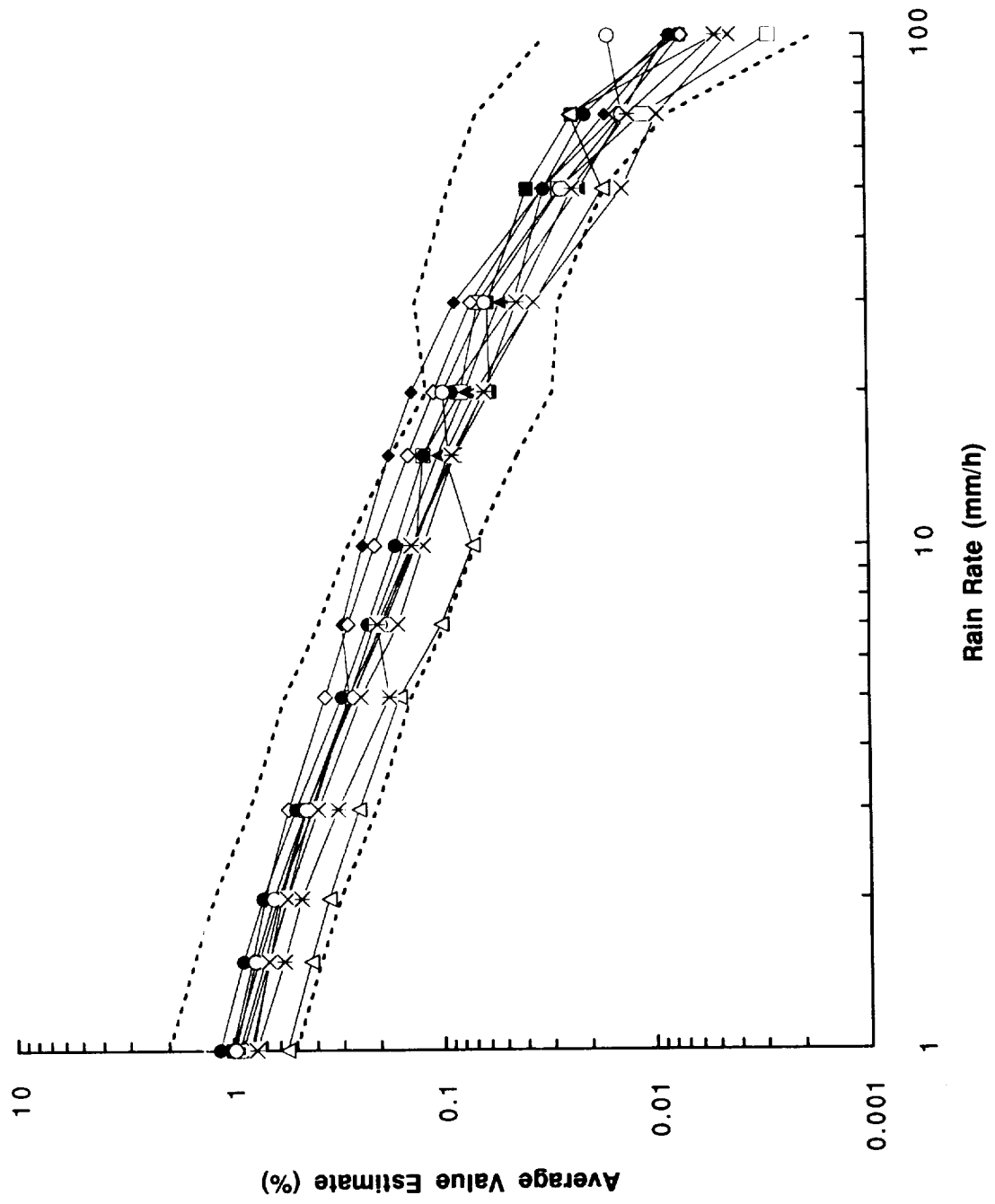
Seasonal Behavior_Gauge 05



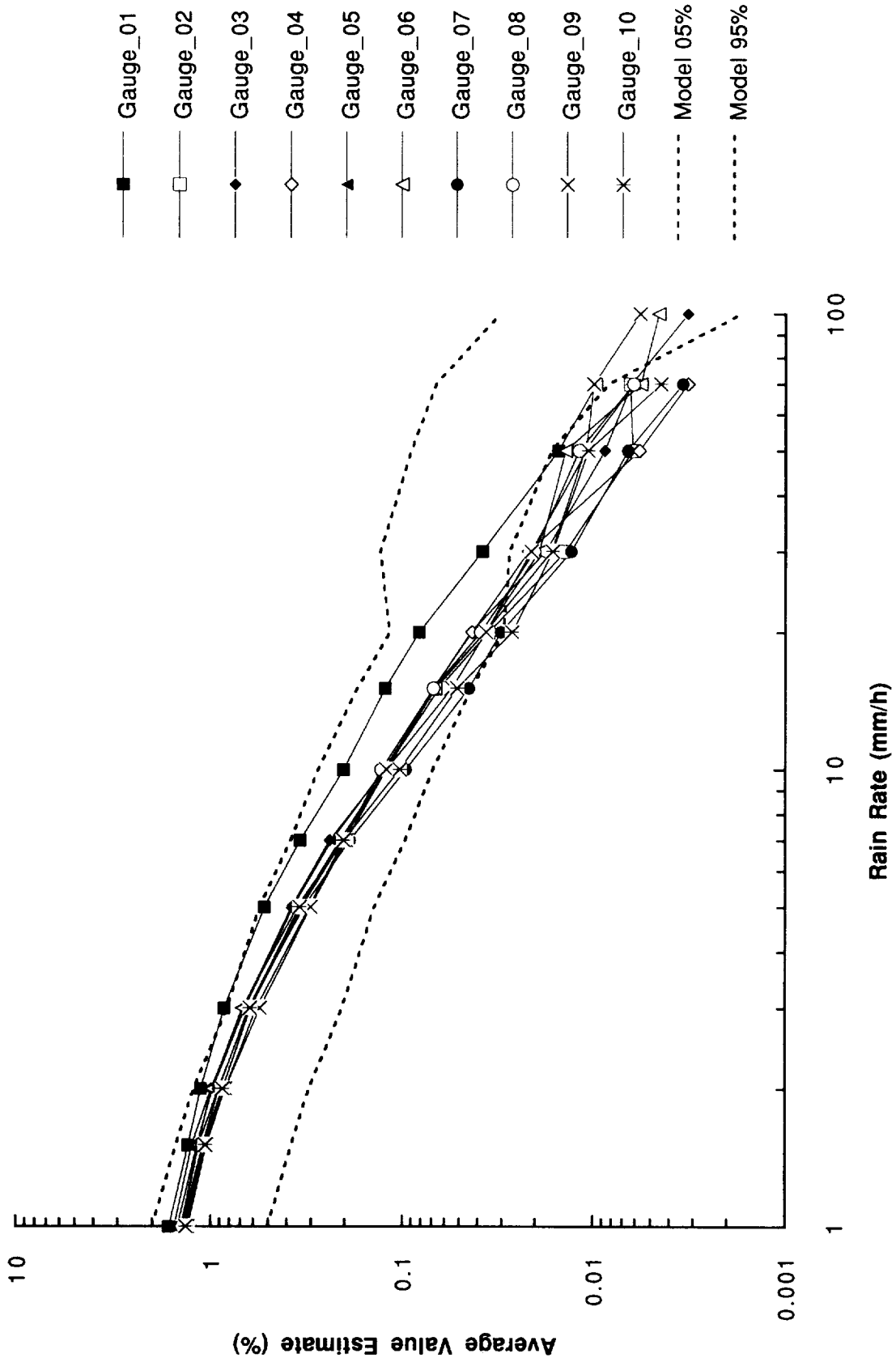


WI_MGAUGE_060_X_Avg_RR

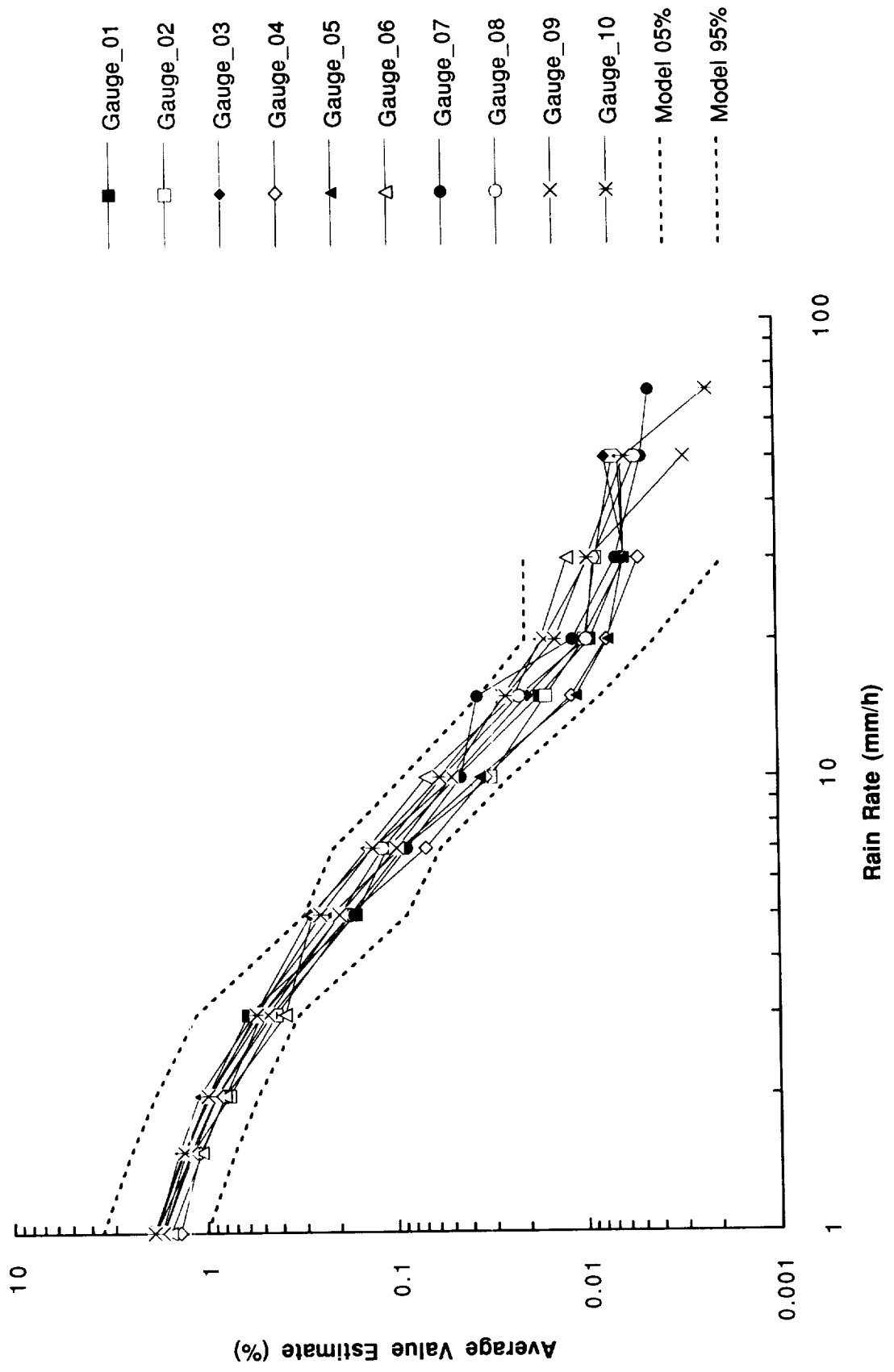
- Gauge_01
- Gauge_02
- ◆ Gauge_03
- ◇ Gauge_04
- ▲ Gauge_05
- △ Gauge_06
- Gauge_07
- Gauge_08
- × Gauge_09
- * Gauge_10
- Model 05%
- Model 95%



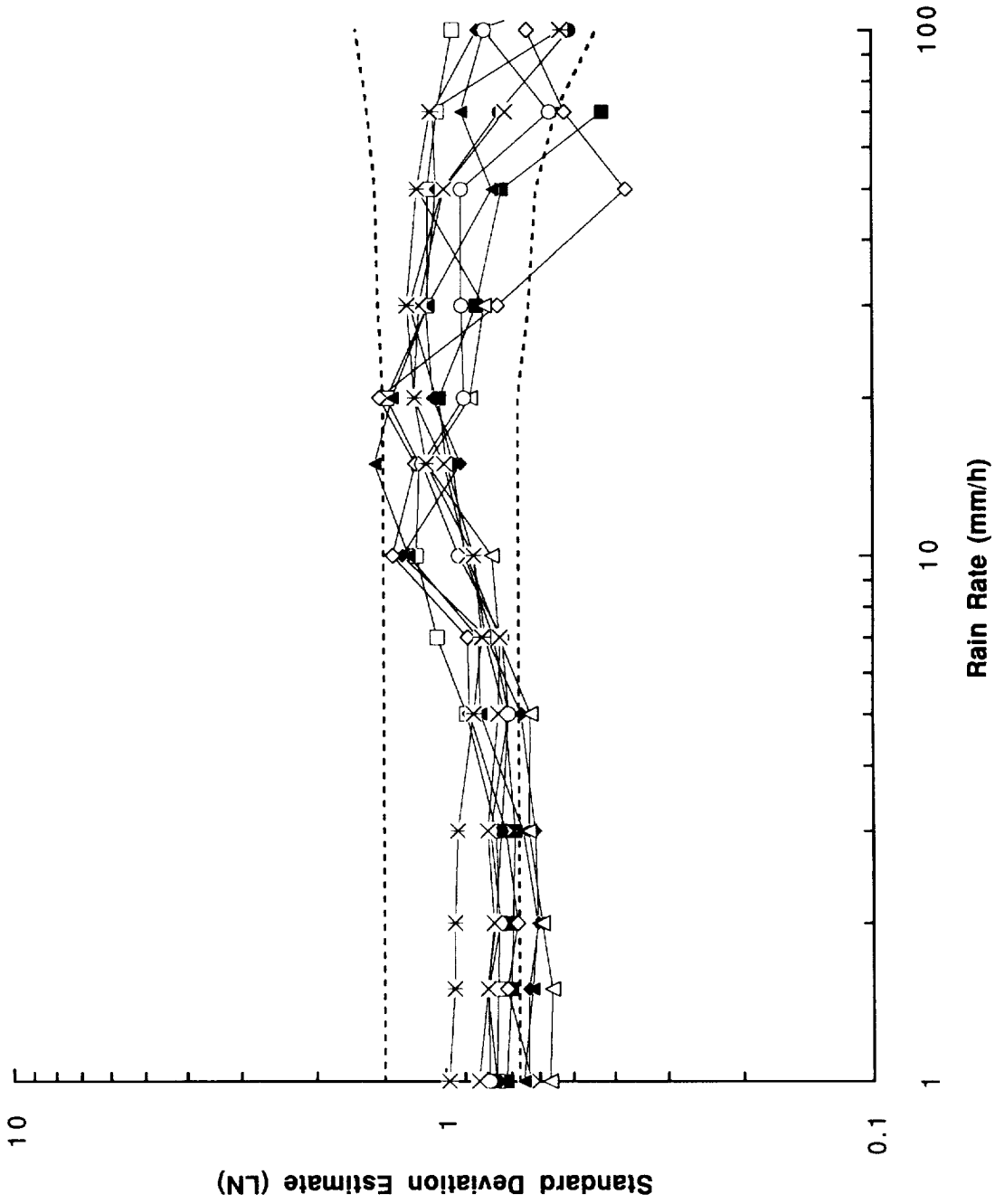
WI_MGAUGE_060_F_Avg_RR

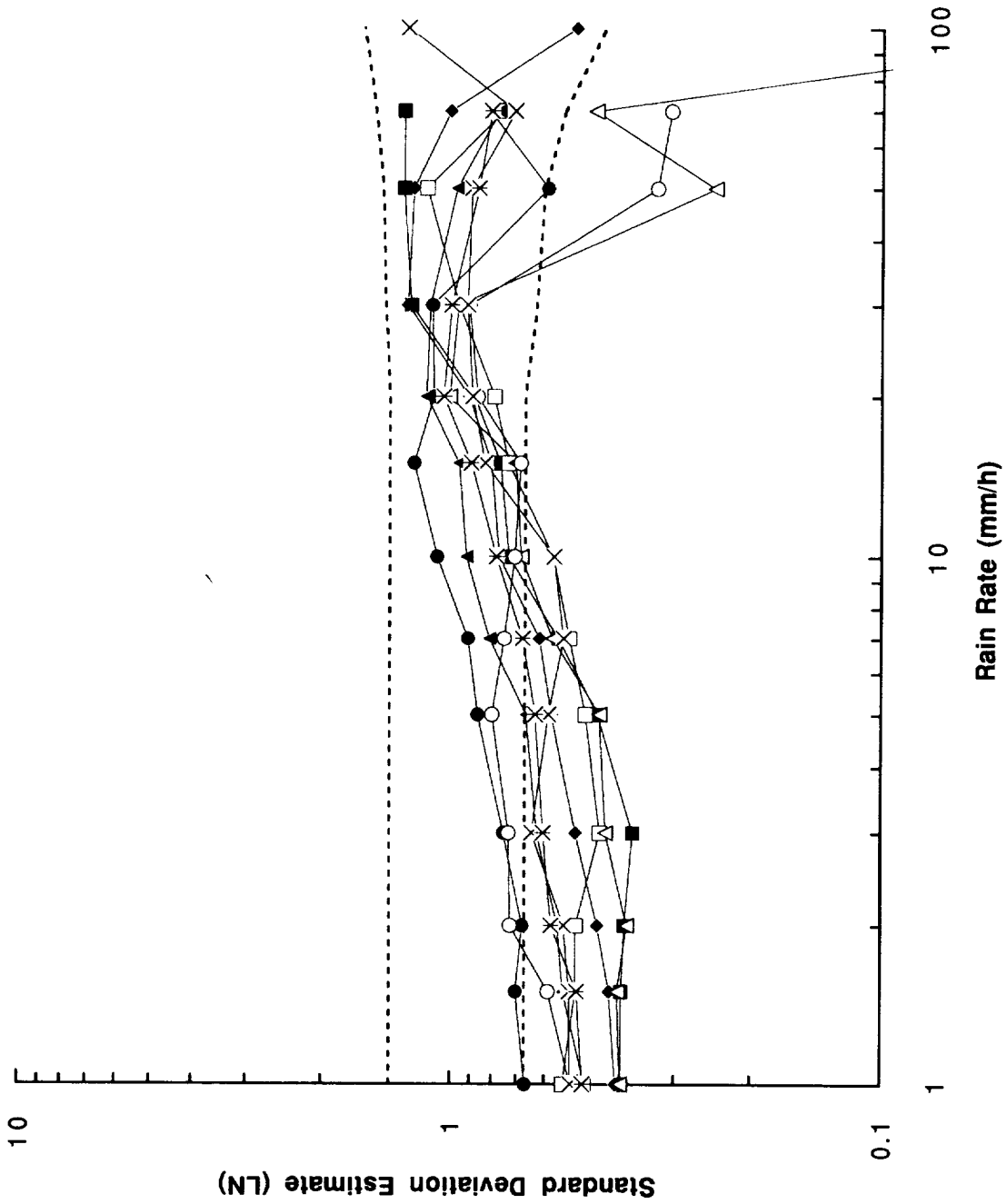
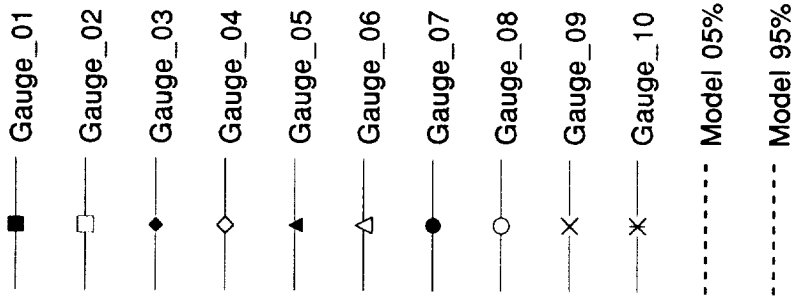


WI_MGAUGE_060_W_Avg_RR



- Gauge_01
- Gauge_02
- Gauge_03
- Gauge_04
- Gauge_05
- Gauge_06
- Gauge_07
- Gauge_08
- Gauge_09
- Gauge_10
- Model 05%
- Model 95%





WI_MGAUGE_060_W_StD_RR

