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PROGRAM DOCUMENTATION:
MARQUIS2.FTN

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Job Order 74-903

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For

EARTH OBSERVATIONS DIVISION
SPACE AND LIFE SCIENCES DIRECTORATE



National Aeronautics and Space Administration
LYNDON B. JOHNSON SPACE CENTER
Houston, Texas

December 1977

LEC-11092

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16. Abstract This program computes averages and ranges of Large Area Crop Inventory Experiment/Land Satellite acquisitions and wheat estimates data. This output is the primary source for the data used in the Crop Assessment Subsystem reports. Input data for this program are obtained from CAMREP.US, the Crop Assessment Subsystem interactive system data base.			
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1. PROGRAM DESCRIPTION

Program MARQUIS2.FTN is used to read and perform calculations on an output file of the Crop Assessment Subsystem (CAS) interactive system. This program is written in Fortran IV PLUS to operate on the Programmed Data Processor, model 11/45 (PDP 11/45), computer under the Resource Sharing Executive, model 11D (RSX-11D), operating system. The CAS output file, CAMREP.US, is created during an aggregation and consists of the Classification and Mensuration Subsystem (CAMS) segments, estimates, and other data. There are no data inputs to the program other than a file with the name CAMREP.US. (A program functional flow chart is presented in figure 1.)

2. OUTPUT DESCRIPTION

MARQUIS2.FTN computes and outputs to the Gould printer the following quantities:

<u>Quantity</u>	<u>Heading label</u>
Number of lines read from CAMREP.US (For every state)	—
State name	—
Total number of spring and winter segments for the given state	SPRING SEGS WINTER SEGS
Number of spring and winter segments designated 100 percent other	SPRING OTHER WINTER OTHER
Percentage of spring and winter ratioed wheat averaged over all segments	AVE PCT WHT (RATIOED)
Average number of elapsed days between last segment acquisition and classification date	AVE PROCESSING TIME
Average of the last segment acquisition date for all segments	AVE LAST ACQ DATE

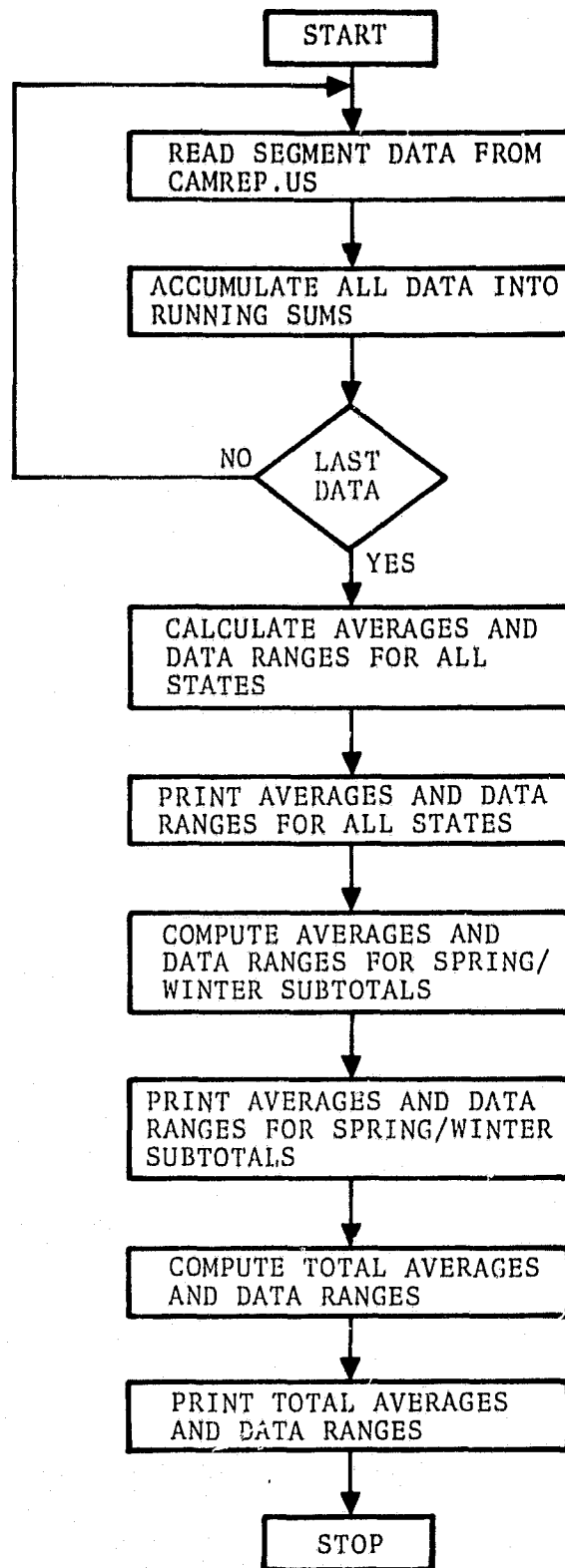


Figure 1.— Program functional flow chart.

<u>Quantity</u>	<u>Heading label</u>
Percentage of ratioed wheat in the segment with largest percentage of ratioed wheat	MAX PCT WHT (RATIOED)
Percentage of ratioed wheat in the segment with the least percentage of ratioed wheat	MIN PCT WHT (RATIOED)
Earliest acquisition date	EARLIEST ACQ DATE
Latest acquisition date	LATEST ACQ DATE
Distribution of latest acquisitions with respect to evaluation code	—
Distribution of latest acquisitions with respect to month of acquisition	—

The identical quantities mentioned above are then recomputed and printed for all spring acquisitions, all winter acquisitions, and all acquisitions.

3. PROGRAM LISTING


```
0001 DIMENSION TOTALS(10,2,13),PCENT(10),RANGE(10,2,4,2)
0002 DIMENSION RRP(2,2)
0003 DIMENSION RR(2,2)
0004 DIMENSION TDIG4(3)
0005 DIMENSION AVF1(9,2,5),AVF2(9,2,5),TDIG3(9,2)
0006 DIMENSION MTOT(3,24),TVALT(3,9),TOTWH(3),ELAPT(3)
0007 DIMENSION TCOU(3)
0008 DIMENSION ACOTAT(3),RANGED(3,2),ANAME(3),RANGEW(3,2)
0009 DIMENSION TDATE(4),ISTAGE(4),ICOUNT(10,2)
0010 DIMENSION STATPS(9)
0011 DIMENSION MONTH(13),AMONTH(24),TDATE(10,2,24)
0012 DIMENSION TVALT(10,2,9)
0013 DATA MONTH / 1,32,60,91,121,152,182,213,244,274,305,335,366 /
0014 DATA ANAME / ISPPG , IKINTI , ISUM /
0015 DATA AMONTH / JANI , FEBI , MARI , APRI , MAYI , JUNI ,
1 JULI , AUGI , SEPI , OCTI , NOVI , DECI , JANI ,
2 FEBI , MARI , APRI , MAYI , JUNI , JULI , AUGI ,
3 SEPI , OCTI , NOVI , DECI /
0016 DATA STATES / ICOLI , IKANSI , IMINNI , IMONTI , INEBRI ,
1 INDAI , IKIAI , ISDAI , ITEXSI /
0017 DATA TDIGIT /14/
0018 CALL ARSTGN(1,ICAMP,151)
0019 CALL ARSTGN(2,ILP,1)
0020 DEFINE FIF 1 /1000,59,U,1)
0021 I=1
0022 TDIGW=TDIGIT - TDIGIT/10+10
0023 TDIGP=TDIGI+1
0024 DO 1200 J=1,10
0025 DO 1200 K=1,2
0026 DO 1200 L=1,4
0027 RANGE(I,K,1,1)=1000000.
0028 RANGE(I,K,1,2)=10000000.
0029 1200 CONTINUE
0030 DO 1400 J=1,4
0031 RANGE(I,J,1)=10000000.
0032 RANGE(I,J,2)=10000000.
0033 RANGE(I,J,1)=10000000.
0034 RANGE(I,J,2)=100000000.
0035 1400 CONTINUE
0036 1500 CONTINUE
0037 READ(IIT,FRR=3000)TREG,ISTATE,ISTRAT,ISUB,ISFG,ICRNP,IRIO,
1 TVAL,ICLASS,NACC, (TDATE(J),ISTAGE(J),J=1,4) ,
2 PCENT(J),I=1,10) , IGROUP
0038 1A00 FORMAT(IH,10Y,4.2X,5I10,F10.1)
0039 IF(ICRNP,EO.1,OR,ICRNP,EO.3)ICOL=1
0040 IF(ICRNP,EO.2,OR,ICRNP,EO.4)ICOL=2
0041 IF(PCENT(9).GT.99.9)TOTALS(ISTATE,ICOL,11)=TOTALS(ISTATE,ICOL,11)
1 + 1.
0042 IF(TVAL,IF,29)INDEX=(TVAL/10) + 1
0043 IF(TVAL,GF,30)INDEX= 3 + (TVAL-28)/2
0044 TVAL(ISTATE,ICOL,INDEX)=TVAL(ISTATE,ICOL,INDEX) + 1
0045 TCOUNT(ISTATE,ICOL)=TCOUNT(ISTATE,ICOL)+1
0046 TOTALS(ISTATE,ICOL,11)=TOTALS(ISTATE,ICOL,11)+PCENT(1)
0047 TOTALS(ISTATE,ICOL,A)=TOTALS(ISTATE,ICOL,8)+PCENT(A)
0048 TOTALS(ISTATE,ICOL,9)=TOTALS(ISTATE,ICOL,9)+PCENT(9)
0049 IF(PCENT(1).GT.RANGE(ISTATE,ICOL,3,1))RANGE(ISTATE,ICOL,3,1) =
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0050      1 PCFNT(1)
          IF(PCENT(1).LT.RANGE(ISTATE,ICOL,3,2))RANGE(ISTATE,ICOL,3,2) =
          1 PCFNT(1)
0051      IF(ICOL.EQ.1)GO TO 2000
0052      TOTALS(ISTATF,2,3)=TOTALS(ISTATE,2,3)+PCFNT(3)
0053      TOTALS(ISTATF,2,5)=TOTALS(ISTATE,2,5)+PCENT(5)
0054      TOTALS(ISTATF,2,7)=TOTALS(ISTATE,2,7)+PCENT(7)
0055      IF(PCENT(7).GT.RANGE(ISTATE,2,2,1))RANGE(ISTATE,2,2,1)=PCENT(7)
0056      IF(PCENT(7).LT.RANGE(ISTATE,2,2,2))RANGE(ISTATE,2,2,2)=PCENT(7)
0057      GO TO 2200
0058  2000 CONTINUE
0059      TOTALS(ISTATF,1,2)=TOTALS(ISTATE,1,2)+PCENT(2)
0060      TOTALS(ISTATF,1,4)=TOTALS(ISTATE,1,4)+PCENT(4)
0061      TOTALS(ISTATF,1,6)=TOTALS(ISTATE,1,6)+PCENT(6)
0062      IF(PCENT(6).GT.RANGE(ISTATE,1,1,1))RANGE(ISTATE,1,1,1)=PCENT(6)
0063      IF(PCENT(6).LT.RANGE(ISTATE,1,1,2))RANGE(ISTATE,1,1,2)=PCENT(6)
0064  2200 CONTINUE
0065      YACQ=IDATE(1)
0066      ACQ=YACQ
0067      IF(ACQ.GT.RANGE(ISTATE,ICOL,4,1))RANGE(ISTATE,ICOL,4,1)=ACQ
0068      IF(ACQ.LT.RANGE(ISTATE,ICOL,4,2))RANGE(ISTATE,ICOL,4,2)=ACQ
0069      IADAY=ACQ - YACQ/1000*1000
0070      IYEAR= (YACQ - IADAY)/1000
0071      DAYS=(IYEAR-IDIGIT)*365 + IADAY
0072      TOTALS(ISTATF,ICOL,13)=TOTALS(ISTATE,ICOL,13) + DAYS
0073      IEDAY=ICLASS - ICLASS/1000*1000
0074      IEYEAR= (ICLASS - IEDAY)/1000
0075      IF(IYEAR.EQ.IAYFAR)IDIF=ICLASS-IACQ
0076      IF(IYEAR.NE.IAYFAR)IDIF=365-IADAY+IFDAY
0077      DD,2500 J=1,12
0078      IF(IADAY.HF.MONTH(J).AND.IADAY.LT.MONTH(J+1))MONTH=J
0079  2500 CONTINUE
0080      INDEX=(IAYFAR-IDIGIT)*12 + MONTH
0081      IDATE1(ISTATF,ICOL,INDEX) = IDATE1(ISTATE,ICOL,INDEX) + 1
          C WRITE(2,1000)STATE(ISTATE),ISTATE,ISFG,IDIF,MONTH,IEYEAR,DAYS
          C TOTALS(ISTATF,ICOL,12)=TOTALS(ISTATE,ICOL,12) + IDIF
          C GO TO 1500
0082  3000 CONTINUE
0083      IMAGE=1
0084      WRITE(2,3100)IMAGE
0085  3100 FORMAT(1H1,20(7),40X,13,1 LINES HAVE BEEN READ FROM GAMREP,US1)
0086      DO 3200 J=1,9
0087      DO 3200 K=1,2
0088      IDIG1(J,K)=IDIG1
0089      IF(ICOUNT(J,K).LT.1)GO TO 3200
0090      AVF1(J,K,1)=TOTALS(J,K,6)/ICOUNT(J,K)
0091      AVF1(J,K,2)=TOTALS(J,K,7)/ICOUNT(J,K)
0092      AVF1(J,K,3)=TOTALS(J,K,12)/ICOUNT(J,K)
0093      AVF1(J,K,4)=TOTALS(J,K,13)/ICOUNT(J,K)
0094      IF(AVF1(J,K,4).GT.365.0)IDIG2(J,K)=IDIG2
0095      IF(AVF1(J,K,4).GT.365.0)AVF1(J,K,4)=AVE1(J,K,4) - 365.0
0096  3200 CONTINUE
          C DO 4500 J=1,9
          C WRITE(2,4100)STATE(J),ICOUNT(J,1),ICOUNT(J,2),TOTALS(J,1,11),
          C 1 TOTALS(J,2,11),(TOTALS(J,1,K),K=1,13),(TOTALS(J,2,K),K=1,13) ,
          C 2 (RANGE(J,1,K,1),K=1,4) ,(RANGE(J,1,K,2),K=1,4) ,

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C 3 (RANGE(I,2,K,1),K=1,4),(RANGE(J,2,K,2),K=1,4) ,
C 4 (IFVAL1(J,1,K),K=1,9) , (TEVAL1(J,2,K);K=1,9)
C 5 ,TDIG1,TDIG2,(AMONTH(K),K=1,24),(IDATE1(J,1,K),K=1,24),
C 6 (IDATE1(J,2,K),K=1,24)
C4100 FORMAT(IHI, // , ' STATE#1 , A4 , 5X , ' N SPRING#1 , I3 , 5X ,
C 1 ' IN WINTER#1 , I3 , 5X , ' UN SPRING#1 , F3.0 , 5X , ' UN WINTER#1 ,
C 2 F3.0 , // , ' TOTAL SPRING' , I3F9.1 , // , ' TOTAL WINTER' ,
C 3 I3F9.1 , // , ' SPRING HIGH' , 4F12.2 , // , ' SPRING LOW ' ,
C 4 4F12.2 , // , ' WINTER HIGH' , 4F12.2 , // , ' WINTER LOW ' ,
C 5 4F12.2 , // , 20X , ' EVALUATION CODE DISTRIBUTION' , / , 14X ,
C 6 ' 10-9' , 5X , ' 10-19' , 3X , ' 20-29' , 3X , ' 30' , 5X , ' 32' ,
C 7 5X , ' 34' , 5X , ' 36' , 5X , ' 38' , 5X , ' 40' , // ,
C 8 ' SPRING ' , 9IA , / , ' WINTER ' , 9IA , // , 40X ,
C 9 ' ACQUISITION MONTH DISTRIBUTION' , / , 30X , ' 197' , I1 , 60X ,
C 10 ' 197' , I1 , / , 12X , 24(A3,2X) , / , ' SPRING ' , 24I5 , / ,
C 11 ' WINTER ' , 24I5 )
C4500 CONTINUE
0099 DO 4000 J=1,9
0100 WRITE(2,4600)STATES(J),J
0101 4600 FORMAT(IHI, // , 50X ,A4 , '( ' , I1 , ' )' )
0102 DO 4650 K=1,2
0103 DO 4650 L=1,2
0104 RR(K,L)=RANGE(I,K,4,1)
0105 IF(RR(K,L).GT.100000. .OR. RR(K,L).LT.-80000.)RR(K,L)=0.0
0106 RR(L,K)=RANGE(J,L,4,K)
0107 IF(RR(L,K).GT.100000. .OR. RR(L,K).LT.-80000.)RR(L,K)=0.0
0108 4650 CONTINUE
0109 WRITE(2,4700)ICOUNT(J,1),ICOUNT(J,2),TOTALS(J,1,1),TOTALS(J,2,1)
0110 4700 FORMAT(//, // , 9X , ' SPRING SEGS' , 9X , ' WINTER SEGS' , 9X ,
0111 1 ' SPRING OTHER' , 8X , ' WINTER OTHER' , // , 8X , I12,8X , I12,8X , F12.0,8X ,
0112 2 F12.0 , // , 50X , ' AVERAGES' , // , 10X , ' AVE PCT WHT(RATIOED)' ,
0113 3 12X , ' AVE PROCESSING TIME' , 11X , ' AVE LAST ACQ DATE' )
0114 WRITE(2,4800)ANAME(1),AVE1(J,1,1),AVE1(J,1,3),IDIG2(J,1),
0115 1 AVE1(J,1,4),ANAME(2),AVE1(J,2,2),AVE1(J,2,3),TDIG3(J,2),
0116 2 AVE1(J,2,4)
0117 4800 FORMAT(//, 2X , A4,15X , F4.1 , 25X , F6.0,20X , ' 197' , I1,1X , F4.0 ,
0118 2 // , 2X , A4,15X , F4.1,25X , F6.0,20X , ' 197' , I1,1X , F4.0 , // , // ,
0119 3 10X , ' MAX PCT WHT(RATIOED)' , 5X , ' MIN PCT WHT(RATIOED)' ,
0120 4 5X , ' EARLIEST ACQ DATE' , 9X , ' LATEST ACQ DATE' , // )
0121 WRITE(2,4850)ANAME(1),RR(1,1),RR(1,2),
0122 1 RR(1,2),RR(1,1),ANAME(2),
0123 2 RR(2,1),RR(2,2),RR(2,2),RR(2,1)
0124 4850 FORMAT(2X , A4,12X , F4.1,20X , F5.1,20X , F6.0,20X , F6.0 , // ,
0125 1 2X , A4,12X , F4.1,20X , F5.1,20X , F6.0,20X , F6.0 )
0126 WRITE(2,4900)ANAME(1),(IFVAL1(J,1,K),K=1,9),ANAME(2),
0127 1 (IFVAL1(J,2,K),K=1,9),TDIG1,TDIG2,(AMONTH(K),K=1,24),ANAME(1),
0128 2 (IDATE1(J,1,K),K=1,24),ANAME(2),(IDATE1(J,2,K),K=1,24)
0129 4900 FORMAT(//, // , 40X , ' EVALUATION CODE DISTRIBUTION' , // , 24X ,
0130 1 ' 10-9' , 5X , ' 10-19' , 3X , ' 20-29' , 3X , ' 30' , 5X , ' 32' , 5X , ' 34' , 5X ,
0131 2 ' 36' , 5X , ' 38' , 5X , ' 40' , // , 2X , A4,13X , 9I8 , // , 2X , A4,13X , 9I8 , // , // ,
0132 3 50X , ' ACQUISITION MONTH DISTRIBUTION' , // , 30X , ' 197' , I1 , 60X , ' 197' ,
0133 4 I1 , // , 12X , 24(A3,2X) , // , 2X , A4,4X , 24I5 , // , 2X , A4,4X , 24I5 , // )
0134 4900 CONTINUE
0135 DO 5000 J=1,9
0136 ICOUNT(1)=ICOUNT(1)+ICOUNT(J,1)
0137 ICOUNT(2)=ICOUNT(2)+ICOUNT(J,2)
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0121      TCOUT(I)=TCOUT(I)+TCOUNT(J,1)+TCOUNT(J,2)
0122      DO 5000 I=1,P4
0123      MTOT(I,L)=MTOT(I,L)+IDATEI(J,1,L)
0124      MTOT(2,L)=MTOT(2,L)+IDATEI(J,2,L)
0125      MTOT(3,L)=MTOT(3,L)+IDATEI(J,1,L)+IDATEI(J,2,L)
0126      5000 CONTINUE
0127      DO 5100 I=1,4
0128      TEVAL(I,1)=TEVAL(I,1)+TEVALI(J,1,L)
0129      TEVAL(I,2)=TEVAL(I,2)+TEVALI(J,2,L)
0130      TEVAL(I,3)=TEVAL(I,3)+TEVALI(J,1,L)+TEVALI(J,2,L)
0131      5100 CONTINUE
0132      TOTWH(1)=TOTWH(1)+TOTALS(J,1,6)
0133      TOTWH(2)=TOTWH(2)+TOTALS(J,2,7)
0134      TOTWH(3)=TOTWH(3)+TOTALS(J,1,6)+TOTALS(J,2,7)
0135      FLAPT(1)=FLAPT(1)+TOTALS(J,1,12)
0136      FLAPT(2)=FLAPT(2)+TOTALS(J,2,12)
0137      ELAPT(3)=ELAPT(3)+TOTALS(J,1,12)+TOTALS(J,2,12)
0138      ACQTOT(1)=ACQTOT(1)+TOTALS(J,1,13)
0139      ACQTOT(2)=ACQTOT(2)+TOTALS(J,2,13)
0140      ACQTOT(3)=ACQTOT(3)+TOTALS(J,1,13)+TOTALS(J,2,13)
0141      5300 CONTINUE
0142      DO 5400 K=1,2
0143      IF(RANGE(I,K,4,1).GT.RANGED(3,1))RANGED(3,1)
0144      I=RANGE(J,K,4,1)
0145      IF(RANGE(I,K,4,1).GT.RANGED(3,2))RANGED(3,2)
0146      I=RANGE(J,K,4,2)
0147      IF(RANGE(I,K,4,1).GT.RANGED(K,1))RANGED(K,1)
0148      I=RANGE(J,K,4,1)
0149      IF(RANGE(I,K,4,2).GT.RANGED(K,2))RANGED(K,2)
0150      I=RANGE(J,K,4,2)
0151      IF(RANGE(I,K,K,1).GT.RANGEW(3,1))RANGEW(3,1)
0152      I=RANGE(J,K,K,1)
0153      IF(RANGE(I,K,K,2).GT.RANGEW(K,1))RANGEW(K,1)
0154      I=RANGE(J,K,K,2)
0155      IF(RANGE(I,K,K,2).GT.RANGEW(K,2))RANGEW(K,2)
0156      I=RANGE(J,K,K,2)
0157      5400 CONTINUE
0158      DO 5500 J=1,3
0159      TOTWH(1)=TOTWH(J)/FLOAT(TCOUT(J))
0160      FLAPT(1)=FLAPT(J)/FLOAT(TCOUT(J))
0161      ACQTOT(J)=ACQTOT(J)/FLOAT(TCOUT(J))
0162      IDIG4(1)=IDIG1
0163      IF(ACQTOT(1).GT.365.0)IDIG4(J)=IDIG2
0164      IF(ACQTOT(2).GT.365.0)ACQTOT(J)=ACQTOT(J)-365.0
0165      5500 CONTINUE
0166      DO 6000 I=1,3
0167      WRITE(2,6000)ANAME(J),TCOUT(J)
0168      6000 FORMAT(1H1, //,50X, A4, ' TOTALS FOR I, 13, 1 SEGMENTS')
0169      WRITE(2,6050) IDIG1, IDIG2, (AMONTH(K),K=1,24),
0170      I (MTOT(I,K),K=1,24), (TEVAL(I,K),K=1,3)
0171      WRITE(2,6100)TOTWH(J), FLAPT(J), IDIG4(J), ACQTOT(J)
0172      WRITE(2,6200)RANGEW(J,1), RANGEW(J,2), RANGED(J,1),
0173      I RANGED(J,2)
0174      6050 FORMAT(///,50X, 'ACQUISITION MONTH DISTRIBUTION',/,30X, '1971, 11,

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2 60X .1971,11,12X,24(13,2X),10X, 215./, ///, 80X .
3 REVALUATION CODE DISTRIBUTION, //, 24X, 10-91, 5X,
4 110-101, 1X, 120-201, 3X, 1301, 5X, 1321, 5X,
5 1301, 5X, 1341, 5X, 1341, 5X, 1401,18X,91A)
0167 6100 FORMAT(///, 50X, 'AVERAGES', //, 20X, 'PERCENT WHEAT EST',
1 6X, 'PROCESSING TIME', 6X, 'ACQUISITION DATE', /, 20X,
2 F10.1, 10X, F10.1, 15X, 1971, 11, 1X, F4.0)
0168 6200 FORMAT(///, 80X, 'DATA RANGES', //, 15X, 'MAX WHEAT',
1 10X, 'MTN WHEAT', 10X, 'LATEST ACC DATE', 5X,
2 'EARLIEST ACC DATE', //, 10X, F10.1, 10X, F10.1,
3 10X, F10.0, 10X, F10.0)
0169 6400 CONTINUE
0170 STOP 1
0171 FNR
    
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PROGRAM SECTIONS
NUMBER NAME SIZE ATTRIBUTES
1 SCODE1 007206 1875 RM,I,CON,LCL
2 WDATA 000070 28 RM,D,CON,LCL
3 SIDATA 002122 541 RM,D,CON,LCL
4 WARS 010078 2706 RM,D,CON,LCL
5 WTEMS 000008 2 RM,D,CON,LCL
    
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VARIABLES

NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS
ACO	R+D	0-010806	DAYS	R+D	0-010856	I	I+2	0-010176
IAYFAR	I+2	0-010808	YMIN	I+2	0-010826	ICLASS	I+2	0-010432
IDIF	I+2	0-010808	IDIGIT	I+2	0-010378	IDIG1	I+2	0-010400
IEVAL	I+2	0-010810	IFYEAR	I+2	0-010808	IGROUP	I+2	0-010436
IREG	I+2	0-010812	ISEC	I+2	0-010822	ISTATE	I+2	0-010418
J	I+2	0-010808	K	I+2	0-010808	L	I+2	0-010410
						IACO	I+2	0-010854
						ICOL	I+2	0-010850
						IMAGE	I+2	0-010802
						ISTRAT	I+2	0-010472
						MONTH	I+2	0-010870
						IAUAY	I+2	0-010852
						ICMOP	I+2	0-010828
						IEUAY	I+2	0-010802
						INDEX	I+2	0-010802
						ISUE	I+2	0-010820
						MACO	I+2	0-010834

ORIGINAL OF PAPER CLIP

ARRAYS

NAME	TYPE	ADDRESS	SIZE	DIMENSIONS
ACOTOT	R+4	4-005246	000014	(3)
AMONTH	R+8	4-005248	000180	(24)
ANAME	R+8	4-005312	000018	(3)
AVE1	R+8	4-003316	000550	(9,2,5)
AVE2	R+8	4-000106	000550	(9,2,5)
ELAPT	R+8	4-005224	000014	(3)
ICOUNT	I+2	4-005016	000050	(10,2)
ICOUT	I+2	4-005240	000006	(3)
IDATE	I+2	4-005376	000010	(4)
IDATE1	I+2	4-005378	001760	(10,2,24)
IDIG3	I+2	4-004654	000004	(4,2)
IDIG4	I+2	4-003340	000006	(3)
IEVALT	I+2	4-005102	000046	(3,9)
IEVAL1	I+2	4-007624	000550	(10,2,9)
ISTAGE	I+2	4-005006	000010	(4)
MONTH1	I+2	4-005372	000032	(13)
MOT	I+2	4-000722	000220	(3,24)
PENT	R+8	4-002020	000050	(10)
RANGE	R+8	4-002070	001200	(10,2,4,2)
RANGED	R+8	4-005302	000030	(3,2)
RANGEL	R+8	4-005306	000030	(3,2)
RR	R+8	4-003310	000020	(2,2)
RR2	R+8	4-003270	000020	(2,2)
STATES	R+8	4-005044	000004	(4)
TOTALS	R+8	4-000000	002020	(10,2,13)
TOTMH	R+8	4-005240	000014	(3)

LABELS

LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS
1200	**	1500	1-000800	1900	**	2000	1-001624		
2200	1-001764	2500	1-002574	3100	3-000000	3200	1-003158		
4600	3-000062	4700	3-000102	4800	3-000366	4850	3-000620		
4870	3-000702	4900	**	5100	**	5300	**		
5900	**	6020	3-001234	6050	3-001302	6100	3-001574		
6200	3-001744	6400	**						

FUNCTIONS AND SUBROUTINES REFERENCED

ASSTGN

TOTAL SPACE ALLOCATED = 02200 4672

MARQUIS2.LPI:MARQUIS2.FTN/TR

4. SAMPLE OUTPUT

ORIGINAL PAGE IS
OF POOR QUALITY

COLO(1)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 0 31 0. 2.

AVERAGES

AVE PCT WMT(RATIOED) AVE PROCESSING TIME AVE LAST ACQ DATE
 0.0 52. 1976 0.
 10.1 1977 158.

SPRG
 WINT

MAX PCT WMT(RATIOED) MIN PCT WMT(RATIOED) EARLIEST ACQ DATE LATEST ACQ DATE
 0.0 0.0 0. 17197.

SPRG
 WINT

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	2	29	0

SPRG
 WINT

ACQUISITION MONTH DISTRIBUTION

1976												1977											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	7	15	6	0	0		

SPRG
 WINT

KANS(2)

SPRING SEGS	WINTER SEGS	SPRING OTHER	WINTER OTHER
0	111	0.	0.

AVERAGES

AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
0.0	0.	1976 0.
26.1	54.	1977 156.

SPRG
WINT

MAY PCT WHT(RATIOED)	MTN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
0.0	0.	0.	17194.
72.0	1.0	17066.	

SPRG
WINT

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	0	0	0	0	0	0
0	0	0	6	0	0	1	104	0

SPRG
WINT

ACQUISITION MONTH DISTRIBUTION

1976												1977									
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	9	9	63	10	0	0

SPRG
WINT

MINN(3)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
44 0 5 0

AVERAGES

AVE PCT WMT(RATIOED) AVE PROCESSING TIME AVE LAST ACQ DATE
12.4 07. 1977 169.
0.0 0. 1976 0.

SPRG
WINT

MAY PCT WMT(RATIOED) MTN PCT WMT(RATIOED) EARLIEST ACQ DATE LATEST ACQ DATE
41.5 0.0 17136. 17193.
0.0 0.0 0. 0.

SPRG
WINT

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	3	0	1	6	34	0
0	0	0	0	0	0	0	0	0

SPRG
WINT

ACQUISITION MONTH DISTRIBUTION

1976		1977																			
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	32	9	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SPRG
WINT

MONT(4)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 3A 51 2. 3.

AVERAGES

AVE PCT WMT(RATIOED) AVE PROCESSING TIME AVE LAST ACO DATE
 SPRG 7.3 45. 1977 184.
 WINT 10.4 50. 1977 177.

MAX PCT WMT(RATIOED) WTN PCT WMT(RATIOED) EARLIEST ACO DATE LATEST ACO DATE
 SPRG 27.9 0.0 17146. 17203.
 WINT 35.0 0.0 17113. 17203.

EVALUATION CODE DISTRIBUTION

	0-9	10-19	20-29	30	32	34	36	39	40
SPRG	0	0	0	1	0	0	4	33	0
WINT	0	0	0	1	0	0	4	46	0

ACQUISITION MONTH DISTRIBUTION

	1976												1977									
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
SPRG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	29	0	0
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	10	32	0	0

WFR(S)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 0 51 0. 10.

AVERAGES

AVE PCT WMT(RATIOED) AVE PROCESSING TIME AVE LAST ACQ DATE

SPRG 0.0 0. 1976 0.
 WINT 11.9 52. 1977 156.

MAX PCT WMT(RATIOED) MTN PCT WMT(RATIOED) EARLIEST ACQ DATE LATEST ACQ DATE

SPRG 0.0 0.0 0. 0.
 WINT 86.8 16363. 17214.

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	0	0	0	0	0	0
0	0	0	5	0	1	12	33	0

ACQUISITION MONTH DISTRIBUTION

1976												1977									
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	2	6	26	12	1	0	0

N DA(6)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 65 0 4 0

AVERAGES

AVE PCT WMT(RATIOED) AVE PROCESSING TIME AVE LAST ACB DATE
 10.5 50. 1977 181.
 0.0 0. 1976 0.

SPRG
WINT

MAX PCT WMT(RATIOED) MIN PCT WMT(RATIOED) EARLIEST ACB DATE LATEST ACB DATE
 40.5 0.0 17157. 17198.
 0.0 0.0 0. 0.

SPRG
WINT

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	40
0	0	0	5	0	3	4	53
0	0	0	0	0	0	0	0

SPRG
WINT

ACQUISITION MONTH DISTRIBUTION

1974												1977									
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SPRG
WINT

OKLA(7)

SPRING SEGS	WINTER SEGS	SPRING OTHER	WINTER OTHER
0	43	0.	0.

AVERAGES

AVE PCT WH(TI(RATED))	AVE PROCESSING TIME	AVE LAST ACQ DATE
07.0	0.	1976 0.
40.6	50.	1977 134.

SPRG
WINT

MAX PCT WH(TI(RATED))	MIN PCT WH(TI(RATED))	EARLIEST ACQ DATE	LATEST ACQ DATE
07.0	0.0	0.	0.
71.6	1.8	17031.	17173.

SPRG
WINT

EVALUATION CODE DISTRIBUTION

6-8	10-19	20-29	10	32	34	36	38	40
0	0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	42	0

SPRG
WINT

ACQUISITION MONTH DISTRIBUTION

1976												1977									
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	2	1	31	0	0	0	0

SPRG
WINT

S DA(R)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 33 19 1. 2.

AVERAGES

AVE PCT WHT(RATIOFD) AVE PROCESSING TIME AVE LAST ACO DATE
 SPRG 6.7 55. 1977 173.
 WINT 4.4 56. 1977 173.

MAX PCT WHT(RATIOFD) MIN PCT WHT(RATIOFD) EARLIEST ACO DATE LATEST ACO DATE

SPRG 19.4 0.0 17123. 17214.
 WINT 14.8 0.0 17123. 17214.

EVALUATION CODE DISTRIBUTION

	0-9	10-19	20-29	30	32	34	36	38	40
SPRG	0	0	0	1	0	0	2	30	0
WINT	0	0	0	0	0	1	2	16	0

ACQUISITION MONTH DISTRIBUTION

	1974												1977											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT		
SPRG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	18	9	1	0	0
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	3	2	0	0

TXS(9)

SPRING SEGS WINTER SEGS SPRING OTHER WINTER OTHER
 0 33 0. 1.

AVERAGES

AVE PCT WMT(RATIOFD)	AVE PROCESSING TIME	AVE LAST ACO DATE
SPRG 0.0	0.	1976 0.
WTNT 16.8	59.	1977 136.

MAY PCT WMT(RATIOFD)	MIN PCT WMT(RATIOFD)	EARLIEST ACO DATE	LATEST ACO DATE
SPRG 0.0	0.0	0.	17150.
WTNT 51.2	16361.	0.	17150.

EVALUATION CODE DISTRIBUTION

	0-9	10-19	20-29	30	32	34	36	38	40
SPRG	0	0	0	0	0	0	0	0	0
WTNT	0	0	2	0	0	4	27	0	0

ACQUISITION MONTH DISTRIBUTION

	1976												1977											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT		
SPRG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WTNT	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	1	0	0	0	0	0	0	0	0

ORIGINAL FILE OF POOR QUALITY

SPRG TOTALS FOR 180 SEGMENTS

1976												1977										
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	98	75	1	0	0

ACQUISITION MONTH DISTRIBUTION

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	10	0	4	16	150	0

AVERAGES

PERCENT WHEAT EST 13.0
 PROCESSING TIME 49.1
 ACQUISITION DATE 1977 177.

DATA RANGES

MAY WHEAT 41.5
 MIN WHEAT 0.0
 LATEST ACQ DATE 17219.
 EARLIEST ACQ DATE 17123.

WINT TOTALS FOR 339 SEGMENTS

1976												1977										
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	
0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	30	18	35	181	83	3	0	0

ACQUISITION MONTH DISTRIBUTION

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	15	0	2	25	297	0

AVERAGES

PERCENT WHEAT EST	19.0	PROCESSING TIME	53.5	ACQUISITION DATE	1977 150.
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DATA RANGES

MAY WHEAT	72.0	MIN WHEAT	0.0	LATEST ACQ DATE	17210.	EARLIEST ACQ DATE	16361.
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THE FOLLOWING REPORT IS
OF POOR QUALITY

SUM TOTALS FOR 519 SEGMENTS

ACQUISITION MONTH DISTRIBUTION																					
1974						1977															
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	30	18	45	275	138	0	0

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	25	0	6	41	487	0

AVERAGES

PERCENT WHEAT EST 14.0
 PROCESSING TIME 52.0
 ACQUISITION DATE 1977 159.

DATA RANGES

MAY WHEAT 72.0
 MIN WHEAT 0.0
 LATEST ACQ DATE 17214.
 EARLIEST ACQ DATE 16361.