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Houston, Texas

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For

EARTH OBSERVATIONS DIVISION

SPACE AND LIFE SCIENCES DIRECTORATE

National Aeronautics and Space Administration

LYNDON B. JOHNSON SPACE CENTER

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15. Supplementary Notes

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.

17. Key Words (Suggested by Author(s))	18. Distribution Statement
Earth Resources Program Large Area Crop Inventory Experiment PDP-11	

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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:

Quantity	Heading label
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

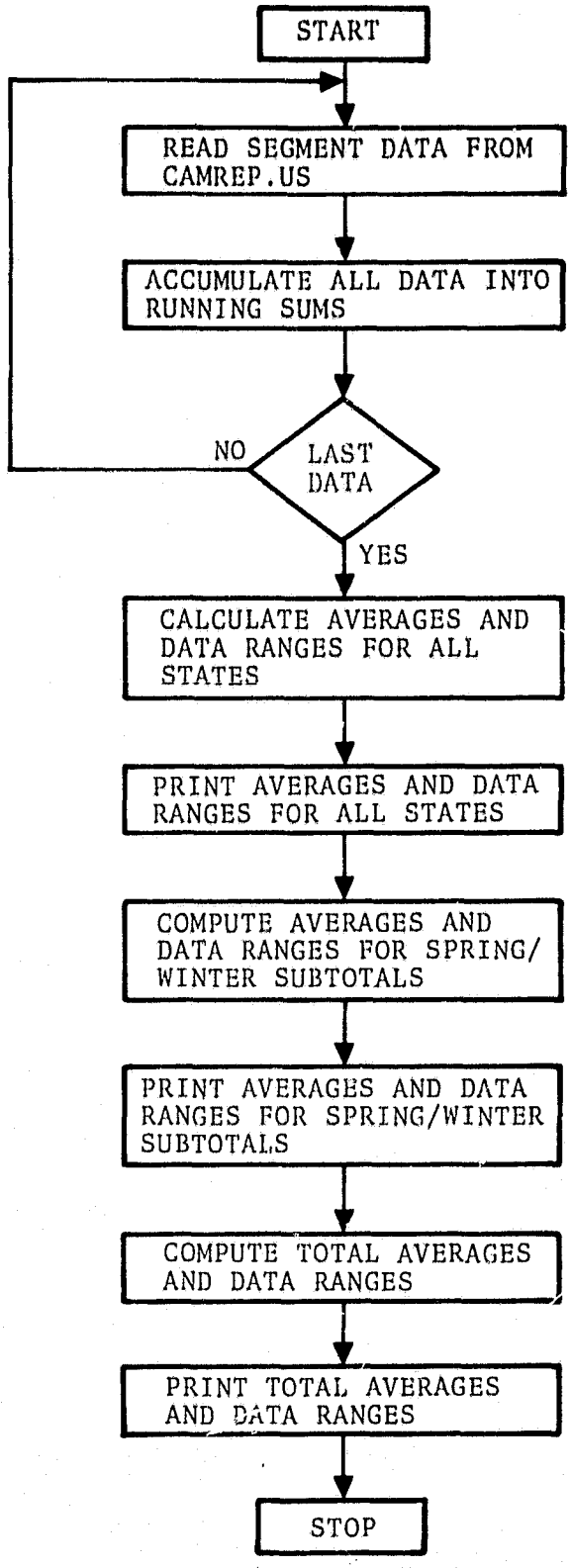

Figure 1.— Program functional flow chart.

Quantity	Heading label
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

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 FORTRAN IV-PLUS V02-04                    08:54:28    16-SEP-77          PAGE 1
MARQUI82.FTN     /TR:ALI /WR

0001          DIMENSION TOTALS(10,2,13),PCENT(10),RANGE(10,2,4,2)
0002          DIMENSION RR2(2,2)
0003          DIMENSION RR(2,2)
0004          DIMENSION IDIG4(3)
0005          DIMENSION AVE1(9,2,5),AVE2(9,2,5),IDIG3(9,2)
0006          DIMENSION MTOT(3,24),IFVALT(3,9),TOTWH(3),ELAPT(3)
0007          DIMENSION TCOUT(3)
0008          DIMENSION ACOTOT(3),RANGED(3,2),ANAME(3),RANGEW(3,2)
0009          DIMENSION IDATE(4),ISTAGE(4),ICOUNT(10,2)
0010          DIMENSION STATES(9)
0011          DIMENSION MONTH1(13),AMONTH(24),IDATE1(10,2,24)
0012          DIMENSION IEVAL1(10,2,9)
0013          DATA MONTH1 / 1,32,60,91,121,152,182,213,244,274,305,335,366 /
0014          DATA ANAME / 'SPRG' , 'WINT' , 'SUM ' /
0015          DATA AMONTH / 'JANI' , 'FEBR' , 'MARI' , 'APRI' , 'MAYI' , 'JUNI' ,
             1  'JULI' , 'AUGI' , 'SEPI' , 'OCTI' , 'NOVI' , 'DECI' , 'JANI' ,
             2  'FEBR' , 'MARI' , 'APRI' , 'MAYI' , 'JUNI' , 'JULI' , 'AUGI' ,
             3  'SEPI' , 'OCTI' , 'NOVI' , 'DECI' /
0016          DATA STATES / 'COLO' , 'KANS' , 'MINN' , 'MONT' , 'NEBR' ,
             1  'N DA' , 'OKLA' , 'S DA' , 'TEXS' /
0017          DATA IDIGIT /14/
0018          CALL ASSIGN(1,'CAMPER.DIS')
0019          CALL ASSIGN(2,'LP:')
0020          DEFINE FILE 1 (1000,39,U,I)
0021          I=1
0022          IDIG1=IDIGIT - IDIGIT/10*10
0023          IDIG2=IDIG1+1
0024          DO 1200 J=1,10
0025          DO 1200 K=1,2
0026          DO 1200 L=1,4
0027          RANGE(I,K,L,1)=-100000.
0028          RANGE(I,K,L,2)=1000000.
0029     1200 CONTINUE
0030          DO 1400 J=1,9
0031          RANGEW(J,1,1)=-1000000.
0032          RANGEW(J,2)=1000000.
0033          RANGED(J,1,1)=-10000000.
0034          RANGED(J,2)=10000000.
0035     1400 CONTINUE
0036     1500 CONTINUE
0037          READ(1'I,ERR=3000)IREG,ISTATE,ISTRAT,ISUB,ISEG,ICROP,IBIO,
             1  IEVAL,ICLASS,NACO, (IDATE(J),ISTAGE(J),J=1,4) ,
             2  (PCENT(J),J=1,10) , IGROUP
0038     1800 FORMAT(1H , 10X , A4,2X,5I10 ,F10.1)
0039          IF(ICROP.EQ.1.OR.ICROP.EQ.3)ICOL=1
0040          IF(ICROP.EQ.2.OR.ICROP.EQ.4)ICOL=2
0041          IF(PCENT(9).GT.99.9)TOTALS(ISTATE,ICOL,11)=TOTALS(ISTATE,ICOL,11)
             1  + 1.
0042          IF(IEVAL.LE.99)INDEX=(IEVAL/10) + 1
0043          IF(IEVAL.GE.100)INDEX= 3 + (IEVAL-28)/2
0044          IEVAL1(ISTATE,ICOL,INDEX)=IEVAL1(ISTATE,ICOL,INDEX) + 1
0045          ICOUNT(ISTATE,ICOL)=ICOUNT(ISTATE,ICOL)+1
0046          TOTALS(ISTATE,ICOL,1)=TOTALS(ISTATE,ICOL,1)+PCENT(1)
0047          TOTALS(ISTATE,ICOL,8)=TOTALS(ISTATE,ICOL,8)+PCENT(8)
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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     1  PCENT(I)
0050      IF(PCENT(1).LT.RANGE(ISTATE,ICOL,3,2))RANGE(ISTATE,ICOL,3,2) =
     1  PCENT(1)
0051      IF(ICOL.EQ.1)GO TO 2000
0052      TOTALS(ISTATE,2,3)=TOTALS(ISTATE,2,3)+PCENT(3)
0053      TOTALS(ISTATE,2,5)=TOTALS(ISTATE,2,5)+PCENT(5)
0054      TOTALS(ISTATE,2,7)=TOTALS(ISTATE,2,7)+PCENT(7)
0055      IF(PCENT(7).GT.RANGE(ISTATE,2,3,1))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(ISTATE,1,2)=TOTALS(ISTATE,1,2)+PCENT(2)
0060      TOTALS(ISTATE,1,4)=TOTALS(ISTATE,1,4)+PCENT(4)
0061      TOTALS(ISTATE,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      IACQ=IDATE(1)
0066      ACQ=IACQ
0067      IF(ACQ.GT.RANGE(ISTATE,ICOL,4,1))RANGE(ISTAYE,ICOL,4,1)=ACQ
0068      IF(ACQ.LT.RANGE(ISTATE,ICOL,4,2))RANGE(ISTATE,ICOL,4,2)=ACQ
0069      IADAY= IACQ - IACQ/1000*1000
0070      IAYEAR= (IACQ - IADAY)/1000
0071      DAYS=(IAYEAR-IDIGIT)*365 + IADAY
0072      TOTALS(ISTATE,ICOL,13)=TOTALS(ISTATE,ICOL,13) + DAYS
0073      IEDAY= ICLASS - ICLASS/1000*1000
0074      IEYEAR=(ICLASS - IEDAY)/1000
0075      IF(IEYEAR.EQ.IAYEAR)IDIF=ICLASS-IACQ
0076      IF(IEYEAR.NE.IAYEAR)IDIF=365-IADAY+IEDAY
0077      DO 2500 J=1,12
0078      IF(IADAY.GE.MONTH1(J).AND.IADAY.LT.MONTH1(J+1))MONTH=J
0079   2500 CONTINUE
0080      INDEX=(IAYEAR-IDIGIT)*12 + MONTH
0081      IDATE1(ISTATE,ICOL,INDEX) = IDATE1(ISTATE,ICOL,INDEX) + 1
      C   WRITE(2,1800)STATES(ISTATE),ISTATE,ISEG,IDIF,MONTH,IEYEAR,DAYS
0082      TOTALS(ISTATE,ICOL,12)=TOTALS(ISTATE,ICOL,12) + IDIF
0083      GO TO 1500
0084   3000 CONTINUE
0085      IMAGE=I-1
0086      WRITE(2,3100)IMAGE
0087   3100 FORMAT(1H1,20(/),40X,I3,' LINES HAVE BEEN READ FROM CAMREP.US1')
0088      DO 3200 J=1,9
0089      DO 3200 K=1,2
0090      IDIG3(J,K)=IDIG1
0091      IF(ICOUNT(J,K).LT.1)GO TO 3200
0092      AVE1(J,K,1)=TOTALS(J,K,6)/ICOUNT(J,K)
0093      AVE1(J,K,2)=TOTALS(J,K,7)/ICOUNT(J,K)
0094      AVE1(J,K,3)=TOTALS(J,K,12)/ICOUNT(J,K)
0095      AVE1(J,K,4)=TOTALS(J,K,13)/ICOUNT(J,K)
0096      IF(AVE1(J,K,4).GT.365.0 )IDIG3(J,K)=IDIG2
0097      IF(AVE1(J,K,4).GT.365.0 )AVE1(J,K,4) = AVE1(J,K,4) - 365.0
0098   3200 CONTINUE
      C   DO 4500 J=1,9
      C   WRITE(2,4100)STATES(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(J,2,K,1),K=1,4),(RANGE(J,2,K,2),K=1,4) ,
C    4  (IEVAL1(J,1,K),K=1,9) , (IEVAL1(J,2,K),K=1,9)
C    5 ,TOTG1,TOTG2,(AMONTH(K),K=1,24),(IDATE1(J,1,K),K=1,24),
C    6  (IDATE1(J,2,K),K=1,24)
C4100 FORMAT(1H1 , // , ' STATE=' , A4 , 5X , ' N SPRING=' , I3 , 5X ,
C    1  'N WINTER=' , I3, 5X , 'UN SPRING=' , F3.0 , 5X, 'UN WINTER=' ,
C    2  F3.0, // , ' TOTAL SPRING' , 13F9.1 , // , ' TOTAL WINTER' ,
C    3  13F9.1 , // , ' 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  '0-9' , 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    A  '197' , I1 , / , 12X , 24(A3,2X) , / ,' SPRING ' ,24I5 , / ,
C    B  ' WINTER ' , 24I5 )
C4500 CONTINUE
0099        DO 4900 J=1,9
0100        WRITE(2,4800)STATES(J),J
0101  4800 FORMAT(1H1 , ///, 50X ,A4 , '(' , I1 , ')' )
0102        DO 4650 K=1,2
0103        DO 4650 L=1,2
0104        RR(K,L)=RANGE(1,K,4,L)
0105        IF(RR(K,L).GT.100000..OR.RR(K,L).LT.-80000.)RR(K,L)=0.0
0106        RR2(L,K)=RANGE(J,L,L,K)
0107        IF(RR2(L,K).GT.100000..OR.RR2(L,K).LT.-80000.)RR2(L,K)=0.0
0108  4650 CONTINUE
0109        WRITE(2,4700)ICOUNT(J,1),ICOUNT(J,2),TOTALS(J,1,11),TOTALS(J,2,11)
0110  4700 FORMAT(/////////,9X, ' SPRING SEGS' , 9X , 'WINTER SEGS' , 9X ,
     1  'SPRING OTHER',8X,'WINTER OTHER',//,8X,I12,8X,I12,8X,F12.0,8X,
     2  F12.0,/////,50X,'AVERAGES',//,10X , 'AVE PCT WHT(RATIOED)' ,
     3  12X , 'AVE PROCESSING TIME' , 11X , 'AVE LAST ACQ DATE')
0111        WRITE(2,4800)ANAME(1),AVE1(J,1,1),AVE1(J,1,3),IDIG2(J,1),
     1  AVE1(J,1,4),ANAME(2),AVE1(J,2,2),AVE1(J,2,3),IDIG2(J,2),
     2  AVE1(J,2,4)
0112  4800 FORMAT(//,2X,A4,15X,F4.1 , 25X,F6.0,20X , '197' , I1,1X,F4.0,
     2        /,2X,A4,15X,F4.1,25X,F6.0,20X,'197',I1,1X,F4.0,//////,
     3  10X , ' MAX PCT WHT(RATIOED)' , 5X , 'MIN PCT WHT(RATIOED)',
     4  5X , 'EARLIEST ACQ DATE' , 9X , 'LATEST ACQ DATE' ,//)
0113        WRITE(2,4850)ANAME(1),RR2(1,1),RR2(1,2),
     1  RR(1,2),RR(1,1),ANAME(2),
     2  RR2(2,1),RR2(2,2),RR(2,1)
0114  4850 FORMAT(2X , A4,12X,F4.1,20X,F5.1,20X,F6.0,20X,F6.0 ,/,
     1        2X , A4,12X,F4.1,20X,F5.1,20X,F6.0,20X,F6.0 )
0115        WRITE(2,4870)ANAME(1),(IEVAL1(J,1,K),K=1,9),ANAME(2),
     1  (IEVAL1(J,2,K),K=1,9),TOTG1,TOTG2,(AMONTH(K),K=1,24),ANAME(1),
     2  (IDATE1(J,1,K),K=1,24),ANAME(2),(IDATE1(J,2,K),K=1,24)
0116  4870 FORMAT(/////,40X,'EVALUATION CODE DISTRIBUTION',//,24X,
     1 '0-9',5X,'10-19',3X,'20-29',3X,' 30',5X,' 32',5X,' 34',5X,
     2  ' 36',5X,' 38',5X,' 40',//,2X,A4,13X,9I8,/,2X,A4,13X,9I8,/////,
     3  50X,' ACQUISITION MONTH DISTRIBUTION',/,30X,'197',I1,60X,'197',
     4  I1,/,12X,24(A3,2X),//,2X,A4,4X,24I5,/,2X,A4,4X,24I5,//)
0117  4900 CONTINUE
0118        DO 5000 J=1,9
0119        TCOUT(1)=TCOUT(1)+TCOUNT(J,1)
0120        TCOUT(2)=TCOUT(2)+TCOUNT(J,2)
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0121          ICOUT(3)=ICOUT(3)+ICOUNT(J,1)+ICOUNT(J,2)
0122          DO 5000 L=1,24
0123          MTOT(1,L)=MTOT(1,L)+IDATE1(J,1,L)
0124          MTOT(2,L)=MTOT(2,L)+IDATE1(J,2,L)
0125          MTOT(3,L)=MTOT(3,L)+IDATE1(J,1,L)+IDATE1(J,2,L)
0126     5000 CONTINUE
0127          DO 5100 L=1,9
0128          IEVALT(1,L)=IEVALT(1,L)+IEVAL1(J,1,L)
0129          IEVALT(2,L)=IEVALT(2,L)+IEVAL1(J,2,L)
0130          IEVALT(3,L)=IEVALT(3,L)+IEVAL1(J,1,L)+IEVAL1(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          FLAPT(3)=FLAPT(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 5900 K=1,2
0143          IF(RANGE(J,K,4,1).GT.RANGED(3,1))RANGED(3,1)
             1   = RANGE(J,K,4,1)
0144          IF(RANGE(J,K,4,1).LT.RANGED(3,2))RANGED(3,2)
             1   = RANGE(J,K,4,2)
0145          IF(RANGE(J,K,4,1).GT.RANGED(K,1))RANGED(K,1)
             1   = RANGE(J,K,4,1)
0146          IF(RANGE(J,K,4,2).LT.RANGED(K,2))RANGED(K,2)
             1   = RANGE(J,K,4,2)
0147          IF(RANGE(J,K,K,1).GT.RANGEW(3,1))RANGEW(3,1)
             1   = RANGE(J,K,K,1)
0148          IF(RANGE(J,K,K,2).LT.RANGEW(3,2))
             1   RANGEW(3,2)=RANGE(J,K,K,2)
0149          IF(RANGE(J,K,K,1).GT.RANGEW(K,1))
             1   RANGEW(K,1)=RANGE(J,K,K,1)
0150          IF(RANGE(J,K,K,2).LT.RANGEW(K,2))
             1   RANGEW(K,2)=RANGE(J,K,K,2)
0151     5900 CONTINUE
0152          DO 5950 J=1,3
0153          TOTWH(J)=TOTWH(J)/FLOAT(ICOUT(J))
0154          FLAPT(J)=FLAPT(J)/FLOAT(ICOUT(J))
0155          ACQTOT(J)=ACQTOT(J)/FLOAT(ICOUT(J))
0156          IDIG4(J)=IDIG1
0157          IF(ACQTOT(J).GT.365.0)IDIG4(J)=IDIG2
0158          IF(ACQTOT(J).GT.365.0)ACQTOT(J)=ACQTOT(J) - 365.0
0159     5950 CONTINUE
0160          DO 6000 J=1,3
0161          WRITE(2,6020)ANAME(J),ICOUT(J)
0162     6020 FORMAT(1H1 , // , 50X , A4 , ' TOTALS FOR ' , I4 ,' SEGMENTS' )
0163          WRITE(2,6050) IDIG1 , IDIG2 , (AMONTH(K),K=1,24) ,
             1   (MTOT(J,K),K=1,24) , (IEVALT(J,K),K=1,9) ,
0164          WRITE(2,6100)TOTWH(J) , FLAPT(J) , IDIG4(J) , ACQTOT(J)
0165          WRITE(2,6200)RANGEW(J,1) , RANGEW(J,2) , RANGED(J,1) ,
             1   RANGED(J,2)
0166     6050 FORMAT(////,50X,'ACQUISITION MONTH DISTRIBUTION',/,30X,'19',I1 ,
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             2  60X,'197',I1,'/',12X,24(A3,2X),//,10X , 24I5,/ , //// , 80X ,
             3  'EVALUATION CODE DISTRIBUTION' , // , 28X , '0-9' , 5X ,
             4  '10-19' , 3X , '20-29' , 3X , ' 30' , 5X , ' 32' , 5X ,
             5  ' 34' , 5X , ' 36' , 5X , '38' , 5X , ' 40' ,//,18X,9I8)
0167      6100 FORMAT('1//// , 50X , 'AVERAGES' , // , 20X , 'PERCENT WHEAT EST',
             1  8X , 'PROCESSING TIME' , 6X , 'ACQUISITION DATE' , / ,  20X ,
             2  F10.1 , 10X , F10.1 , 15X , '197' , I1 , 1X , F4.0)
0168      6200 FORMAT('1//// , 80X , 'DATA RANGES' , // , 15X , 'MAX WHEAT' ,
             1  10X , 'MIN WHEAT' , 10X , 'LATEST ACQ DATE' , 5X ,
             2  'EARLIEST ACQ DATE' , // , 10X , F10.1 , 10X , F10.1 ,
             3  10X , F10.0 , 10X , F10.0)
0169      6800 CONTINUE
0170           STOP 1
0171           END
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PROGRAM SECTIONS

NUMBER	NAME	SIZE		ATTRIBUTES
1	$CODE1	007266	1975	RW,I,CON,LCL
2	$PDATA	000070	28	RW,D,CON,LCL
3	$IDATA	002102	561	RW,D,CON,LCL
4	$VARS	010476	2206	RW,D,CON,LCL
5	$TEMPS	000006	2	RW,D,CON,LCL

VARIABLES

NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS	NAME	TYPE	ADDRESS
ACQ	R*4	4-010406	DAYS	R*4	4-010456	I	I*2	4-010476	IACQ	I*2	4-010444	IADAY	I*2	4-010452
IAYEAR	I*2	4-010454	IBIN	I*2	4-010426	ICLASS	I*2	4-010432	ICOL	I*2	4-010440	ICROP	I*2	4-010424
IDIF	I*2	4-010466	IDIGIT	I*2	4-010374	IDIG1	I*2	4-010400	IDIG2	I*2	4-010402	IEDAY	I*2	4-010462
IEVAL	I*2	4-010450	IEYEAR	I*2	4-010464	IGROUP	I*2	4-010436	IMAGE	I*2	4-010472	INDEX	I*2	4-010442
IREG	I*2	4-010412	ISEG	I*2	4-010422	ISTATE	I*2	4-010414	ISTRAT	I*2	4-010416	ISUB	I*2	4-010420
J	I*2	4-010404	K	I*2	4-010406	L	I*2	4-010410	MONTH	I*2	4-010470	NACQ	I*2	4-010434

ARRAYS

NAME	TYPE	ADDRESS	SIZE		DIMENSIONS
ACOTOT	R*8	8-005246	000018	6	(3)
AMONTH	R*8	8-005568	000100	48	(24)
ANAME	R*8	8-005332	000018	6	(3)
AVE1	R*8	8-003376	000550	180	(9,2,5)
AVE2	R*8	8-004106	000550	180	(9,2,5)
ELAPT	R*8	8-005288	000018	6	(3)
ICOUNT	I*2	8-005416	000050	20	(10,2)
ICOUT	I*2	8-005260	000006	3	(3)
IDATE	I*2	8-005376	000010	8	(8)
IDATE1	I*2	8-005728	001760	880	(10,2,24)
IDIG3	I*2	8-004656	000024	18	(9,2)
IDIG4	I*2	8-003330	000006	3	(3)
IEVALT	I*2	8-005102	000046	27	(3,9)
IEVAL1	I*2	8-007628	000550	180	(10,2,9)
ISTAGE	I*2	8-005406	000010	8	(8)
MONTH1	I*2	8-005552	000032	13	(13)
MTOT	I*2	8-004728	000220	72	(3,24)
PCENT	R*8	8-003020	000050	20	(10)
RANGE	R*8	8-002070	001200	320	(10,2,8,2)
RANGED	R*8	8-005302	000030	12	(3,2)
RANGEW	R*8	8-005306	000030	12	(3,2)
RR	R*8	8-003310	000020	8	(2,2)
RR2	R*8	8-003270	000020	8	(2,2)
STATES	R*8	8-005046	000048	18	(9)
TOTALS	R*8	8-000000	002020	520	(10,2,13)
TOTWH	R*8	8-005230	000018	6	(3)

LABELS

LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS	LABEL	ADDRESS
1200	**	1400	**	1500	1-000460	1800'	**	2000	1-001624
2200	1-001764	2500	**	3000	1-002574	3100'	3-000000	3200	1-003154
4600'	3-000062	4650	**	4700'	3-000102	4800'	3-000366	4850'	3-000620
4870'	3-000702	4900	**	5000	**	5100	**	5300	**
5900	**	5950	**	6020'	3-001234	6050'	3-001302	6100'	3-001576
6200'	3-001746	6800	**						

FUNCTIONS AND SUBROUTINES REFERENCED

ASSIGN

TOTAL SPACE ALLOCATED = 022200 4672

MARQUIS2,LP:=MARQUIS2.FTN/TR

4. SAMPLE OUTPUT

COLO(1)

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

AVERAGES

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

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	0.0	0.0	0.	0.
WINT	46.0	0.0	17069.	17197.

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
WINT	0	0	0	0	0	0	2	29	0

ACQUISITON 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
WINT	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	7	15	6	0	0	0

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
SPRG	0.0	0.	1976 0.
WINT	96.1	54.	1977 138.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	0.0	0.0	0.	0.
WINT	72.0	1.0	17066.	17194.

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
WINT	0	0	0	6	0	0	1	104	0

ACQUISITON 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
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	9	9	63	10	0	0	0

MINN(3)

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

AVERAGES

	AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	12.8	47.	1977 169.
WINT	0.0	0.	1976 0.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	41.5	0.0	17136.	17193.
WINT	0.0	0.0	0.	0.

EVALUATION CODE DISTRIBUTION

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

MONT(4)

SPRING SEGS	WINTER SEGS	SPRING OTHER	WINTER OTHER
38	51	2.	3.

AVERAGES

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

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	27.9	0.0	17148.	17203.
WINT	35.0	0.0	17113.	17203.

EVALUATION CODE DISTRIBUTION

	0-9	10-19	20-29	30	32	34	36	38	40
SPRG	0	0	0	1	0	0	4	33	0
WINT	0	0	0	1	0	0	4	46	0

ACQUISITON 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	2	7	29	0	0	0
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	10	32	0	0	0

NEBR(5)

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

AVERAGES

	AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	0.0	0.	1976 0.
WINT	11.9	52.	1977 156.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	0.0	0.0	0.	0.
WINT	46.0	0.0	16363.	17214.

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
WINT	0	0	0	5	0	1	12	33	0

ACQUISITON 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
WINT	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 WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	10.6	50.	1977 181.
WINT	0.0	0.	1976 0.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	40.8	0.0	17157.	17198.
WINT	0.0	0.0	0.	0.

EVALUATION CODE DISTRIBUTION

	0-9	10-19	20-29	30	32	34	36	38	40
SPRG	0	0	0	5	0	3	4	53	0
WINT	0	0	0	0	0	0	0	0	0

ACQUISITON 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	37	28	0	0	0
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OKLA(7)

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

AVERAGES

	AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	0.0	0.	1976 0.
WINT	30.6	54.	1977 134.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	0.0	0.0	0.	0.
WINT	71.5	1.8	17031.	17173.

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
WINT	0	0	0	1	0	0	0	42	0

ACQUISITON 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
WINT	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	4	1	31	0	0	0	0

S DA(8)

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

AVERAGES

	AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	6.7	55.	1977 173.
WINT	8.8	56.	1977 173.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	19.6	0.0	17123.	17214.
WINT	19.8	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

ACQUISITON 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	5	18	9	1	0	0
WINT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	10	3	2	0	0

TEXAS(9)

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

AVERAGES

	AVE PCT WHT(RATIOED)	AVE PROCESSING TIME	AVE LAST ACQ DATE
SPRG	0.0	0.	1976 0.
WINT	16.8	59.	1977 136.

	MAX PCT WHT(RATIOED)	MIN PCT WHT(RATIOED)	EARLIEST ACQ DATE	LATEST ACQ DATE
SPRG	0.0	0.0	0.	0.
WINT	53.2	0.0	16361.	17158.

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
WINT	0	0	0	2	0	0	4	27	0

ACQUISITON 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
WINT	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	1	1	26	0	0	0	0

SPRG TOTALS FOR 180 SEGMENTS

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	10	94	75	1	0	0

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	PROCESSING TIME	ACQUISITION DATE
13.0	49.1	1977 177.

DATA RANGES

MAX WHEAT	MIN WHEAT	LATEST ACQ DATE	EARLIEST ACQ DATE
41.5	0.0	17214.	17123.

WINT TOTALS FOR 539 SEGMENTS

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	4	3	2	30	18	35	181	63	3	0	0

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	PROCESSING TIME	ACQUISITION DATE
19.0	53.5	1977 150.

DATA RANGES

MAX WHEAT	MIN WHEAT	LATEST ACQ DATE	EARLIEST ACQ DATE
72.9	0.0	17214.	16301.

SUM TOTALS FOR 519 SEGMENTS

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	8	3	2	30	18	45	275	138	8	0	0

EVALUATION CODE DISTRIBUTION

0-9	10-19	20-29	30	32	34	36	38	40
0	0	0	25	0	6	41	447	0

AVERAGES

PERCENT WHEAT EST	PROCESSING TIME	ACQUISITION DATE
16.9	52.0	1977 159.

DATA RANGES

MAX WHEAT	MIN WHEAT	LATEST ACQ DATE	EARLIEST ACQ DATE
72.9	0.0	17214.	16361.