27
2-28-83
JWS

I-8074

1

Dr. 1214

UCID- 19690

THE DMSP/MFR TOTAL OZONE AND
RADIANCE DATA BASE

J. S. Ellis, J. E. Lovill,
F. M. Luther, T. J. Sullivan,
S. S. Taylor and R. L. Weichel

UCID--19690

DS93 007300

January 1983

Lawrence
Livermore
Laboratory

This is an informal report intended primarily for internal or limited external distribution. The opinions and conclusions stated are those of the author and may or may not be those of the Laboratory.

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED.

THE DMSP/MFR TOTAL OZONE AND RADIANCE DATA BASE

J. S. Ellis, J. E. Lovill, F. M. Luther, T. J. Sullivan
S. S. Taylor and R. L. Weichel

Lawrence Livermore National Laboratory, University of California
Livermore, California 94550

January 1983

1. INTRODUCTION

The radiance measurements by the multichannel filter radiometer (MFR), a scanning instrument carried on the Defense Meteorological Satellite Program (DMSP) Block 5D series of satellites (flight models F1, F2, F3 and F4), were used to calculate the total column ozone globally for the period March 1977 through February 1980. The infrared MFR sensors made both daytime and nighttime observations, thus permitting a possible 67,500 observations every 24 hours by each satellite. These MFR instruments were unique in that they each had a channel for measurement of upwelling radiation in the 9.6 μm band of ozone.

Uncalibrated radiance data on magnetic tape were sent to Lawrence Livermore National Laboratory (LLNL) throughout the data period from the Air Force Global Weather Center (AFGWC). These data were then calibrated and mapped to earth coordinates at LLNL. We derived total column ozone from these calibrated radiance data (Lovill et al., 1978, 1983; Luther, 1980) and placed both the ozone and calibrated radiance data into a computer data base called SOAC (Satellite Ozone Analysis Center). The uncalibrated radiance data tapes were initially sent on to the National Climate Center, Asheville, North Carolina and then to the Satellite

DISCLAIMER

This material was prepared as an account of work sponsored by the United States Government. Therefore, the United States Government is authorized to reproduce and distribute reprints for government purposes, not withstanding any copyright notation that may appear hereon. It is understood that any copyright in any material in this document has been exhausted by its prior publication for general dissemination. It is further understood that any copyright in any material in this document has been exhausted by its prior publication for general dissemination. It is further understood that any copyright in any material in this document has been exhausted by its prior publication for general dissemination.

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

Data Services Branch /EDS/NOAA, Suitland, Maryland where they were archived. Copies of the data base containing the total ozone and the calibrated radiance data reside both at LLNL and at the National Space Science Data Center, NASA Goddard Space Flight Center, Greenbelt, Maryland.

The data base was constructed on a VAX 11/780 computer with a VMS operating system using the FRAMIS code, a relational data base manager. The data base can be implemented on any VAX system with a VMS operating system providing that the system has sufficient disc space to hold one day of data, i.e., approximately 25,060 blocks on a disk are required to contain the largest data day. The FRAMIS code and its documentation are available from the National Energy Software Center, Argonne, Illinois.

The purpose of this report is to describe the entries into the data base in sufficient detail so that the data base might be useful to others. The characteristics of the MFR sensor are briefly discussed and a complete index to the data base tapes is given.

2. THE MFR DATA

The DMSP Block 5D series satellites, flight models F1, F2, F3 and F4, which carried an MFR with a channel sensing in the 9.6 μm ozone band, were in an approximately 835 km altitude, near polar, sun-synchronous orbits. The local overpass time varied between satellites (Table 1). The operational lifetimes of these satellites also varied. The data period for F1 was shortest with 6 months of intermittent data receipts. The F2 data period was continuous for 2-1/2 years, including and extending beyond the F3 and F4 data periods. During the period from mid-June 1979 through December 1979, the three satellites, F2, F3 and F4, continuously provided data.

TABLE 1. The Data Periods Covered by the MFR Sensors on the Defense Meteorological Satellites.

Defense Meteorological Satellite	Data Period	Local Equatorial Overpass Time	Local AM Orbit
F1	March 1977 - July 1977	~ 12 (AM;PM)	Ascending*
F2	July 1977 - February 1980	~ 8-10 (AM;PM)	Ascending
F3	August 1978 - December 1979	~ 7 (AM;PM)	Ascending
F4	June 1979 - December 1979	~ 10 (AM;PM)	Descending

*Moving from south to north

The MFR scanned across the satellite ground track every 32 seconds in 25 steps at every 4 degrees of scan angle (± 48 degrees from nadir). The ground projection of the sampled area at each of the 25 scan positions and the spacing of the cross-track scans are shown in Fig. 1. The cross-track scanning capability of the MFR and its daytime and nighttime sampling capability permitted up to 67,500 observations daily by each satellite. However, the actual number of daily observations retained in the data base was less because of various reasons, including operational cycle, noisy data when a sensor system began to fail, insufficient disc space at AFGWC to contain multiple satellite data (occurred in start up of F2),

FIGURE 1. Earth-projected scan pattern for the MFR (after Nichols, 1975).

tapes being unreadable, failure of onboard satellite recorders, periodic satellite readout conflicts when multiple satellites were operational, and radiance values falling outside the range checks used during the total ozone calculation.

The satellite readout of the MFR data on all four satellites was on a continuous duty cycle. Out of a possible maximum of 1059 satellite-days of data, there are 991 days of data in the SOAC data base. There are but two extended temporal gaps in the 3-year data base; both occurred in the first half of 1977. These periods are March 31 to April 7, 1977 and May 16 to June 10, 1977, inclusive. These data losses occurred with the F1 satellite. There are 21 days of data intermittently missing from the data base in the second half of 1977. During the remaining period from January 1, 1978 to February 16, 1980, only 2 days of data are missing from the data base.

The F2 MFR daily data count was on the order of 50% or less of that possible for the first 3 months of its operation between July 13, 1977 and the last of October 1977. The computer disc space allocated by the AFGWC was not sufficient to hold both the data of the failing F1 MFR and the new F2 MFR data. Even with the reduced data counts, the F2 global coverage was quite good because either daytime or nighttime data were usually recovered. After October 1977, F2 had a high data rate (40,630 average daily count) and there were no significant losses of data.

The F2 satellite MFR had a lower maximum possible data count throughout the sensor's lifetime because a sun shield on the spacecraft blocked the field of view in the last four scan positions to right of the spacecraft direction of travel. Nevertheless, the data coverage was quite good (Fig. 2b). After the F4 satellite became operational in June 1979, there were three satellite MFR instruments operating at one time until the end of December 1979 when only the F2 MFR continued to operate. During this period, the F2 MFR data became lower priority. Whenever a satellite readout conflict occurred, the F2 MFR data count decreased.

FIGURE 2a. Locations where total ozone retrievals were made during the 24-hour period of June 11, 1977, F1 satellite.

FIGURE 2b. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F2 satellite.

Thus, there were occasional days of F2 data with counts less than 50 percent of that possible.

The F3 MFR satellite generally provided 65 to 70 percent of the possible coverage during its lifetime because of a sun shield and an object(s) attached to the spacecraft which drifted through the field of view of the MFR during each orbit. The field of view in 8 to 9 scan positions was quite often obscured. However the F3 MFR coverage was still quite extensive (Figure 2c) with an average daily data count of 39,827. All 25 scan positions in the F4 MFR provided high quality data allowing high spatial sampling (Figure 2d). Data base data counts average 53,243 samples per day.

3. THE MFR CHARACTERISTICS

The MFR sensor measures upwelling radiances in 16 spectral bands. One channel is centered in the $9.6 \mu\text{m}$ O_3 bands, six channels are in the $15 \mu\text{m}$ CO_2 bands, one channel is in the so called atmospheric window near $12 \mu\text{m}$, and eight channels are in the water vapor rotation band (18 to $30 \mu\text{m}$). The nominal MFR channel characteristics are shown in Table 2; more specific channel characteristics for each satellite are presented in Appendix A.

The channels used to retrieve values of total ozone included the first three channels sensing in the $15 \mu\text{m}$ CO_2 band (1, 2, and 3), the atmospheric window channel (7), and the channel sensing in the $9.6 \mu\text{m}$ O_3 band (16). The three CO_2 channels sense IR radiation emitted from the upper, middle and lower stratosphere and the upper troposphere. The derivation of the method to calculate total ozone from these infrared radiances and the application of the method was first discussed in Lovill et al. (1978). Modifications were later made to the method as described in Luther (1980).

FIGURE 2c. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F3 satellite.

FIGURE 2d. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F4 satellite.

Table 2. Nominal MFR Channel Characteristics^a

Channel Number	Center (μm)	(cm^{-1})	Half Width (cm^{-1})	Species	NESR ^b
1	15.0	668.5	3.5	CO ₂	0.30
2	14.8	676.0	10.0	CO ₂	0.09
3	14.4	695.0	10.0	CO ₂	0.10
4	14.1	708.0	10.0	CO ₂	0.11
5	13.8	725.0	10.0	CO ₂	0.11
6	13.4	747.0	10.0	CO ₂	0.12
7	12.0	835.0	8.0	Window	0.11
8 ^c	18.7	535.0	16.0	H ₂ O	0.15
9	24.5	408.5	12.0	H ₂ O	0.14
10	22.7	441.5	18.0	H ₂ O	0.09
11	23.9	420.0	20.0	H ₂ O	0.12
12	26.7	374.0	12.0	H ₂ O	0.18
13	25.2	397.5	10.0	H ₂ O	0.16
14	28.2	355.4	15.0	H ₂ O	0.25
15	28.3	353.5	11.0	H ₂ O	0.33
16	9.8	1022.0	12.5	O ₃	0.05

^aAfter Nichols (1975)

^bNESR = Noise Equivalent Spectral Radiance in $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$.

^cNot on Flight Model 1.

The filter in channel 1 on the F1 MFR was found to have a wide band-pass leak; it was partially transparent to radiation upwelling from the lower troposphere and the earth's surface. The calibration of the channel 2 radiances of the MFR's on the F2, F3 and F4 satellites is suspect since the calibration source possibly did not fill the field of view for this channel during the calibration checks. This alignment problem resulted from a hardware change in these MFR's. Therefore, radiance data from channel 1 on the F1 MFR and from channel 2 on the F2, F3 and F4 MFR were not used in our ozone retrieval algorithm.

If data from one or more of the 5 channels that were used in calculating total ozone fell outside range checks, then none of the data from that sample location were placed into the data base. Occasionally the daily data count in the data base was larger than the theoretical maximum or larger than it should have been. This

happened because, occasionally, the data from a satellite orbit were duplicated in the input data set received at LLNL from the AFGWC. In the most obvious cases, the data were sorted and the duplicate data were removed.

4. THE MFR DATA BASE

Derived total column ozone and the MFR calibrated radiance data were placed into a user oriented data base, called SOAC, using the FRAMIS database manager. FRAMIS is an interactive, relational, data base management tool developed by the Data Management Group of the Computation Department at the Lawrence Livermore National Laboratory (Jones et al, 1981).

A version of the FRAMIS code (Taylor, 1981), which is compatible with a VAX computer and the VMS operating system, and the documentation required to implement and operate the FRAMIS code can be obtained from the:

National Energy Software Center
9700 South Cass Avenue
Argonne, Illinois 60439

A sample database called Wildlife, which is used extensively in the FRAMIS tutorial (Dittli, 1981), is also available from NESL.

The database structure may be thought of as a series of files called tables. Each table is made up of columns (the different variables) and rows (the data). A table, representing MFR satellite data from one day, has 36 columns in the SOAC data base. Each of the columns is defined in Table 3. Each row in the data base represents all of the data, as defined by the column names, from one MFR scan spot.

The rows of the data base have been sorted into 2.5 by 2.5 degree latitude and longitude data cells. These cells are represented by the column name "BOX". The first cell (1) is centered at the Greenwich Meridian and the South pole; the last cell

Table 3. Names and definition of the columns in the FRAMIS data base.

BOX	- a 2.5 degree latitude and longitude cell within the database
BIRD	- Satellite number (F1, F2, F3 or F4)
JDAY	- YYJJJ, YY is year and JJJ is the Julian day
TIME	- HHMMSS, Greenwich time (hours, minutes, seconds)
NDPOS	- Day-night and scan position indicator (+day, -night, ± 1 to ± 25 left to right)
LAT	- Latitude x 100 (+North, -South)
LONG	- Longitude x 100 (+East, -West)
OZONE	- Total column ozone in Dobson units (m.atm.cm)
ORBIT	- Satellite orbit number
CO2T1	- Brightness temperature x 10 of CO2R1 (°K)
CO2T2	- Brightness temperature x 10 of CO2R2 (°K)
CO2T3	- Brightness temperature x 10 of CO2R3 (°K)
WINDT	- Brightness temperature x 10 of WIND (°K)
DT12	- (CO2T1-CO2T2) x 100
DT13	- (CO2T1-CO2T3) x 100
BAND	- Retrieval model band that data point is in (1 through 11)
BANDA	- Band blend indicator
ALPH	- Fractional weight assigned to the southern band model (BANDA) when band model blending is done x 100
SEC	- Secant of the zenith angle x 10,000
CO2R1	- Channel 1 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$
CO2R2	- Channel 2 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$
CO2R3	- Channel 3 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$
CO2R4	- Channel 4 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$
CO2R5	- Channel 5 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$
CO2R6	- Channel 6 radiance x 100 $\text{mW}/(\text{m}^2 \text{sr cm}^{-1})$

Table 3. Continued.

WIND1 - Channel 7 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ (Single look at scene)
WIND - Channel 7 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OK1 - Channel 8 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR2 - Channel 9 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR3 - Channel 10 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR4 - Channel 11 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2O5 - Channel 12 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR6 - Channel 13 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR7 - Channel 14 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
H2OR8 - Channel 15 radiance x 100 $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$
O3R - Channel 16 radiance x 100 (Avg. of 12 looks at a scene) $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$

NOTE: Channel radiances are the average of two looks at the view scene except as noted above.

(72144) is centered at 2.5 degrees west longitude and the North pole. The cell numbers increase from east to west (1 to 144) and south to north (0 to 72000). The algorithm used to compute a cell number from any latitude-longitude pair is as follows:

- a. Change the longitude from the standard (+) east and (-) west to (+) east longitude, (0 to 360 degrees east longitude).

IF (ALON.LT.0) ALON=ALON+360

- b. Change the latitude from the standard (+) north and (-) south to colatitude, where the south pole is zero and the north pole is 180 degrees.

ALAT = ALAT + 90

c. Calculate the cell (box) number:

$$IX = IFIX(ALON * 0.4 + 1.5)$$

$$IF (IX.GE.145) IX = 1$$

$$IY = IFIX(ALAT * 0.4 + 1.5)$$

$$BOX = (IY-1) * 1600 + IX$$

The SOAC database was built on a VAX 11/780 computer with a VMS operating system using the VAX FRAMIS code. A VAX computer with a VMS operating system using the VAX FRAMIS code is required to access the data in the SOAC data base. The data base resides on 109 nine track magnetic tapes written at 6250 bpi density. This data base is available to various users and can be obtained from:

National Space Science Data Center

Code 60L4

Goddard Space Flight Center

Greenbelt, MD 20771

Each file on a database tape contains the data for all of the satellites for one data-day. A data-day is 24 hours long beginning with 0000 Greenwich Mean Time (GMT). The data time is the time in GMT when the observation was taken by the satellite. These are denoted by the JDAY and TIME columns in the data base.

There are up to 10 files (days of data) on each data base tape. The file naming convention is SOACZYJJJ, where "Y" is the last digit of the year and JJJ is the Julian day. The label for each tape (volume number-ZYJJ) was constructed using the last digit of the year followed by the first two digits of the Julian day for the files on the tape, e.g. Z800 contains data for Julian days 1 through 9, 1978; Z801 contains data for Julian days 10 through 19, 1978, etc. and the name of the file containing the data for Julian day 1 on tape Z800 is SOACZ8001.FRM. A complete list of the tape labels, the data-days, and the data count by satellite is given in Appendix C.

Before using FRAMIS on a VAX computer, we typically establish a shorthand method for executing FRAMIS by defining a global variable as

```
FRAMIS := RUN device:[directory]FRAMIS
```

where the lower case names represent names to be inserted by the user.

A file is moved from a database tape to a disc by using the commands

```
MOUNT device: tapelabel
```

```
COPY device : filename.FRM *.*
```

An interactive session using FRAMIS is begun by executing FRAMIS followed by two necessary replies to the FRAMIS prompt (i.e. >) :

```
FRAMIS
```

```
> CREATE SOAC ;
```

```
> INCLUDE filename ;
```

where filename is the name of the file containing the data for one day (e.g. SOACZ8001).

An example of a FRAMIS session that we have used to extract data by cell number is illustrated in Appendix B.

ACKNOWLEDGMENTS

This work was performed under the auspices of the U.S. Department of Energy by the Lawrence Livermore National Laboratory under contract No. W-7405-Eng-48, and supported in part by the High Altitude Pollution Program of the Department of Transportation, Federal Aviation Administration and by the National Aeronautics and Space Administration.

REFERENCES

- Dittli, A. L., "Introduction to FRAMIS - A Tutorial," Lawrence Livermore National Laboratory, LCSD-555, 1981.
- Jones, S. E., D. R. Ries, L. Lyles, A. L. Dittli, and K. W. Johnson, "FRAMIS Reference Manual," Lawrence Livermore National Laboratory, LCSD-554, 1981.
- Lovill, J. E., T. J. Sullivan, R. L. Weichel, J. S. Ellis, J. G. Huebel, J. A. Korver, P. P. Weidhaas, and F. A. Phelps, "Total Ozone Retrieval From Satellite Multichannel Filter Radiometer Measurements," Lawrence Livermore National Laboratory, UCRL-52473, 1978.
- Lovill, J. E., J. S. Ellis, F. M. Luther, T. J. Sullivan, and R. L. Weichel, "The DMSP/MFR Global Distribution of Total Ozone, March 1977-February 1980," Lawrence Livermore National Laboratory (in preparation), 1983.
- Luther, F. M., "Annual Report of Lawrence Livermore National Laboratory to the FAA on the High Altitude Pollution Program - 1980", Lawrence Livermore National Laboratory, UCRL-50042-80, 1980.
- Nichols, D. A., "DMSP Block 5D Special Meteorological Sensor H, Optical Subsystem", Opt. Engr., 14, 284-288, 1975.
- Taylor, S. S., "VAX FRAMIS Notes," Lawrence Livermore National Laboratory, Report DMG 82-07, 1981.

APPENDIX A

Table A-1. Optical properties of selected MFR channels

DMSF Satellite	Channel number	Optical Center (cm ⁻¹)	Equivalent band width (cm ⁻¹)	Half-width of filter (cm ⁻¹)	Half power throughput (%)	Tenth-width of filter (cm ⁻¹)	Peak center (cm ⁻¹)	Peak Transmittance
F1	1	669.02	1.73	3.10	57.30	8.01	669.00	0.40
	2	678.30	6.92	11.62	85.65	16.86	679.90	0.59
	3	693.99	5.83	11.44	86.52	16.38	692.20	0.51
	4	708.10	5.44	9.99	87.15	14.11	711.00	0.53
	5	725.65	6.44	10.22	85.66	14.73	725.60	0.64
	6	746.82	5.18	9.57	79.86	15.52	747.10	0.54
	7	835.66	5.44	7.19	64.40	16.73	834.40	0.63
	16	1019.59	8.56	11.63	68.51	25.34	1020.00	0.63
F2	1	668.57	1.34	2.93	57.39	7.92	668.50	0.32
	2	678.01	6.71	11.51	84.72	17.08	679.90	0.56
	3	694.00	5.89	11.53	86.59	16.39	692.10	0.52
	4	707.26	5.66	9.97	86.71	14.24	705.60	0.56
	5	724.33	5.57	9.66	82.65	14.87	724.20	0.57
	6	746.11	5.15	9.71	80.34	15.75	746.30	0.53
	7	834.57	6.03	8.36	70.90	16.89	833.70	0.65
	16	1019.06	8.43	11.54	69.13	25.06	1019.50	0.63
F3	1	668.89	1.40	3.04	58.81	7.84	668.90	0.34
	2	677.87	5.06	11.67	85.27	17.17	679.30	0.44
	3	693.92	5.75	11.50	85.75	16.62	692.10	0.50
	4	707.93	5.62	9.87	85.79	14.29	706.40	0.55
	5	725.41	6.26	9.78	83.99	14.60	725.60	0.64
	6	747.62	5.29	9.71	81.38	15.34	747.80	0.55
	7	834.43	6.03	8.36	70.86	17.01	833.30	0.65
	16	1019.79	8.80	11.95	69.82	25.22	1020.00	0.64

Table A-1. Continued.

DMSP Satellite	Channel number	Optical Center (cm^{-1})	Equivalent band width (cm^{-1})	Half-width of filter (cm^{-1})	Half power throughout (%)	Tenth-width of filter (cm^{-1})	Peak center (cm^{-1})	Peak Transmittance
F4	1	668.45	1.55	3.13	80.82	3.14	668.40	0.38
	2	678.57	6.64	11.60	85.65	13.85	680.00	0.59
	3	693.93	5.78	11.43	86.48	16.28	692.00	0.51
	4	707.10	5.50	10.15	86.93	14.36	710.40	0.54
	5	724.16	5.55	9.72	83.69	14.58	724.20	0.58
	6	748.95	5.18	9.37	78.67	15.50	749.30	0.54
	7	835.02	5.52	8.37	70.52	17.33	833.90	0.59
	16	1021.09	11.10	14.01	75.85	25.88	1022.20	0.73

Table A-2. Optical centers of the water vapor channels.

DMSP Satellite	Channel number	Optical center (cm^{-1})
F1	9	356.27
	10	398.15
	11	418.29
	12	441.94
	13	410.08
	14	373.36
	15	353.84
F2	8	534.50
	9	356.20
	10	398.80
	11	418.90
	12	441.90
	13	407.30
	14	372.90
F3	8	534.80
	9	356.30
	10	398.70
	11	418.70
	12	443.60
	13	409.70
	14	374.00
F4	8	534.80
	9	355.00
	10	399.40
	11	418.80
	12	442.10
	13	409.10
	14	375.20
	15	353.00

A P P E N D I X B

EXAMPLE OF A FRAMIS SESSION

```

$      SAVE$DIR := '$$DIRECTORY()'
$      SET DEFAULT DPROD:[TEST]
$ STARTUP:
$      ON CONTROL$Y THEN GOTO ALLDONE
$      ON WARNING THEN GOTO ALLDONE
$!*****
$! INCLUDE HERE APPROPRIATE BOX NUMBERS FOR EXTRACTION
$      OPEN/WRITE BOXFILE BOXFILE.DAT
$      WRITE BOXFILE " 60137"
$      WRITE BOXFILE " 56065"
$      WRITE BOXFILE " 52095"
$      CLOSE BOXFILE
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$      EDIT BOXFILE.DAT
EXIT
$      SET DEFAULT [TEST]
$!*****
$! ESTABLISH FORMAT FILE FOR INPUTTING FRAMIS TABLE
$      OPEN/WRITE FMT BOXFILE.FMT
$      WRITE FMT "FIXED 1 CD 1"
$      WRITE FMT "BOX 2 5"
$      CLOSE FMT
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$      EDIT BOXFILE.FMT
EXIT
$      SET DEFAULT [TEST]
$!*****
$! ESTABLISH TABLE IN FRAMIS
$! WRITE FRAMIS EXECUTE FILE WITH TABLNAME
$      OPEN/WRITE COMMAND BOXEXTR.CMD
$      WRITE COMMAND "CREATE SOAC;"
$      WRITE COMMAND "DELETE TABLE BOXFILE;"
$      WRITE COMMAND "DEFINE TABLE BOXFILE BOX INT 3;"
$      WRITE COMMAND "INPUT BOXFILE FROM BOXFILE.DAT "
$      WRITE COMMAND "USING FILE BOXFILE.FMT;"
$      WRITE COMMAND "BOXFILE=BOXFILE SORT BOX;"
$      WRITE COMMAND "PRINT BOXFILE;"
$      WRITE COMMAND "END;"
$      CLOSE COMMAND
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$      EDIT BOXEXTR.CMD
EXIT
$      SET DEFAULT [TEST]
$      FRAMIS
$      EXECUTE [TEST]BOXEXTR.CMD;
$      SET DEFAULT [TEST]
$      DELETE BOXEXTR.CMD.*
$!*****

```

```

$! PROCESS FILES IN DIRECTORY
$   DIR/OUTPUT=[TEST]DTEMP.NAM/COLUMNS=1/NOHEAD/NOTRAIL -
$       [TEST]SOACZ*.FRM
$   OPEN DDIR [TEST]DTEMP.NAM
$ LOOP:
$   READ/END-OF-FILE=ALLDONE DDIR DIRNAME
$ FOUNDONE:
$   START = 'F$LOCATE("'",DIRNAME)' + 1
$   LEN = 'F$LOCATE("'",DIRNAME)' - START
$   DIRNAME := "'F$EXTRACT(START,LEN,DIRNAME)'"
$   LEN = LEN - 5
$   DATE := "'F$EXTRACT(5,LEN,DIRNAME)'"
$   IF DATE.GTS."9999" THEN GOTO ALLDONE
$! WRITE FRAMIS EXECUTE FILE WITH APPROPRIATE TABLE NAMES
$   OPEN/WRITE COMMAND BOXEXTR.CMD
$   WRITE COMMAND "OPEN SOAC;"
$   WRITE COMMAND "INCLUDE SOACZ'DATE';"
$   WRITE COMMAND "TEMP = Z'DATE' JOIN BOXFILE ON BOX;"
$   WRITE COMMAND "TEMPOUT = TEMP "
$   WRITE COMMAND "PROJ LAT LONG TIME JDAY BIRD SEC C02R1 C02R2 "
$   WRITE COMMAND "C02R3 O3R WINDT OZONE;"
$   WRITE COMMAND "OUTPUT TEMPOUT WITH CONTROL TO Z'DATE'.DAT;"
$   WRITE COMMAND "DELETE TABLE TEMP TEMPOUT;"
$   WRITE COMMAND "DELETE TABLE Z'DATE';"
$   WRITE COMMAND "END;"
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$   CLOSE COMMAND
$   EDIT BOXEXTR.CMD
EXIT
$   SET DEFAULT [TEST]
$   FRAMIS
$ EXECUTE [TEST]BOXEXTR.CMD;
$   SET DEFAULT [TEST]
$   DELETE BOXEXTR.CMD.*
$   WRITE SYS$OUTPUT -
$       " BOX EXTRACT COMPLETED NORMALLY FOR FILE 'DIRNAME'"
$   GOTO LOOP
$ ALLDONE:
$   SET DEFAULT [TEST]
$   CLOSE DDIR
$   DELETE DTEMP.NAM.*
$   DELETE SOAC*.FRM.1
$   DELETE BOXFILE.DAT.*
$   DELETE BOXFILE.FMT.*
$   SET DEFAULT 'SAVE&DIR'
$   EXIT

```

FRAMIS OUTPUT FROM SOAC DATABASE

FIXED 12 CD 2

LAT	1	8	1						
LONG	10	8	1						
TIME	19	8	1						
DAY	28	8	1						
BIRD	37	8	1						
SEC	46	8	1						
CO2R1	55	8	1						
CO2R2	64	8	1						
CO2R3	73	8	1						
ORR	1	8	2						
WINDT	10	8	2						
OZONE	19	13	2 E 6						
4048	-12444	45908	78004	2	18677	5700	4880	4469	
3546	2740	3.45809E+02							
4048	-12448	45908	78004	2	18677	5700	4880	4469	
3546	2740	3.545793E+02							
3675	-12542	45940	78004	2	18677	5655	4867	4416	
2880	2583	3.252596E+02							
3955	-12536	144210	78004	2	12481	5471	4717	4345	
2135	2284	3.171061E+02							
3980	-12446	144211	78004	2	11793	5412	4697	4311	
1666	2227	3.276149E+02							
5054	15995	100121	78004	2	13437	5986	5517	5265	
2782	2500	4.571405E+02							
4880	15881	100153	78004	2	13438	5911	5450	5207	
2954	2560	4.503140E+02							
6036	-2009	82050	78004	2	16188	4773	3489	3256	
1332	2108	2.712137E+02							
5988	-2025	80057	78004	2	11263	4612	3535	3318	
1469	2160	2.756629E+02							
6008	-1893	80058	78004	2	11802	4642	3535	3302	
1507	2174	2.740614E+02							

APPENDIX C

MFR DATA COUNT AND TAPE INDEX

TAPE	JULDAY	DATE	SAT COUNT	SAT COUNT	SAT COUNT	SAT COUNT
Z708	08477	3/25/77	F1 = 21508	F2 = 0	F3 = 0	F4 = 0
	08577	3/26/77	F1 = 18761	F2 = 0	F3 = 0	F4 = 0
	08677	3/27/77	F1 = 17297	F2 = 0	F3 = 0	F4 = 0
	08877	3/29/77	F1 = 24843	F2 = 0	F3 = 0	F4 = 0
	08977	3/30/77	F1 = 33370	F2 = 0	F3 = 0	F4 = 0
Z709	09677	4/ 8/77	F1 = 13313	F2 = 0	F3 = 0	F4 = 0
	09977	4/ 9/77	F1 = 70925	F2 = 0	F3 = 0	F4 = 0
Z710	10077	4/10/77	F1 = 44034	F2 = 0	F3 = 0	F4 = 0
	10177	4/11/77	F1 = 45135	F2 = 0	F3 = 0	F4 = 0
	10277	4/12/77	F1 = 25510	F2 = 0	F3 = 0	F4 = 0
	10377	4/13/77	F1 = 41684	F2 = 0	F3 = 0	F4 = 0
	10477	4/14/77	F1 = 33820	F2 = 0	F3 = 0	F4 = 0
	10577	4/15/77	F1 = 30709	F2 = 0	F3 = 0	F4 = 0
	10677	4/16/77	F1 = 30360	F2 = 0	F3 = 0	F4 = 0
	10877	4/18/77	F1 = 12090	F2 = 0	F3 = 0	F4 = 0
	10977	4/19/77	F1 = 47050	F2 = 0	F3 = 0	F4 = 0
Z711	11077	4/20/77	F1 = 54769	F2 = 0	F3 = 0	F4 = 0
	11177	4/21/77	F1 = 60594	F2 = 0	F3 = 0	F4 = 0
	11277	4/22/77	F1 = 47069	F2 = 0	F3 = 0	F4 = 0
	11377	4/23/77	F1 = 45080	F2 = 0	F3 = 0	F4 = 0
	11477	4/24/77	F1 = 29342	F2 = 0	F3 = 0	F4 = 0
	11577	4/25/77	F1 = 5204	F2 = 0	F3 = 0	F4 = 0
	11677	4/26/77	F1 = 31733	F2 = 0	F3 = 0	F4 = 0
	11777	4/27/77	F1 = 51407	F2 = 0	F3 = 0	F4 = 0
	11877	4/28/77	F1 = 47032	F2 = 0	F3 = 0	F4 = 0
	11977	4/29/77	F1 = 52142	F2 = 0	F3 = 0	F4 = 0
Z712	12077	4/30/77	F1 = 46376	F2 = 0	F3 = 0	F4 = 0
	12177	5/ 1/77	F1 = 53798	F2 = 0	F3 = 0	F4 = 0
	12277	5/ 2/77	F1 = 51285	F2 = 0	F3 = 0	F4 = 0
	12377	5/ 3/77	F1 = 42951	F2 = 0	F3 = 0	F4 = 0
	12477	5/ 4/77	F1 = 53730	F2 = 0	F3 = 0	F4 = 0
	12577	5/ 5/77	F1 = 35678	F2 = 0	F3 = 0	F4 = 0
	12677	5/ 6/77	F1 = 19474	F2 = 0	F3 = 0	F4 = 0
	12777	5/ 7/77	F1 = 41125	F2 = 0	F3 = 0	F4 = 0
	12877	5/ 8/77	F1 = 44344	F2 = 0	F3 = 0	F4 = 0
	12977	5/ 9/77	F1 = 58992	F2 = 0	F3 = 0	F4 = 0
Z713	13077	5/10/77	F1 = 42431	F2 = 0	F3 = 0	F4 = 0
	13177	5/11/77	F1 = 58787	F2 = 0	F3 = 0	F4 = 0
	13277	5/12/77	F1 = 43945	F2 = 0	F3 = 0	F4 = 0
	13377	5/13/77	F1 = 47968	F2 = 0	F3 = 0	F4 = 0

	13477	5/14/77	F1 = 50573	F2 =	0	F3 =	0	F4 =	0
	13577	5/15/77	F1 = 43814	F2 =	0	F3 =	0	F4 =	0
	13677	5/16/77	F1 = 406	F2 =	0	F3 =	0	F4 =	0
	13777	5/17/77	F1 = 223	F2 =	0	F3 =	0	F4 =	0
Z714	14377	5/23/77	F1 = 35	F2 =	0	F3 =	0	F4 =	0
	14477	5/24/77	F1 = 33	F2 =	0	F3 =	0	F4 =	0
	14577	5/25/77	F1 = 20	F2 =	0	F3 =	0	F4 =	0
	14677	5/26/77	F1 = 10	F2 =	0	F3 =	0	F4 =	0
	14777	5/27/77	F1 = 20	F2 =	0	F3 =	0	F4 =	0
	14877	5/28/77	F1 = 8	F2 =	0	F3 =	0	F4 =	0
	14977	5/29/77	F1 = 15	F2 =	0	F3 =	0	F4 =	0
Z715	15077	5/30/77	F1 = 11	F2 =	0	F3 =	0	F4 =	0
	15277	6/ 1/77	F1 = 21	F2 =	0	F3 =	0	F4 =	0
	15377	6/ 2/77	F1 = 185	F2 =	0	F3 =	0	F4 =	0
	15477	6/ 3/77	F1 = 135	F2 =	0	F3 =	0	F4 =	0
	15577	6/ 4/77	F1 = 4	F2 =	0	F3 =	0	F4 =	0
	15777	6/ 6/77	F1 = 70	F2 =	0	F3 =	0	F4 =	0
	15877	6/ 7/77	F1 = 1710	F2 =	0	F3 =	0	F4 =	0
	15977	6/ 8/77	F1 = 5916	F2 =	0	F3 =	0	F4 =	0
Z716	16077	6/ 9/77	F1 = 1828	F2 =	0	F3 =	0	F4 =	0
	16177	6/10/77	F1 = 20430	F2 =	0	F3 =	0	F4 =	0
	16277	6/11/77	F1 = 51144	F2 =	0	F3 =	0	F4 =	0
	16377	6/12/77	F1 = 40848	F2 =	0	F3 =	0	F4 =	0
	16477	6/13/77	F1 = 5096	F2 =	0	F3 =	0	F4 =	0
	16677	6/15/77	F1 = 28165	F2 =	0	F3 =	0	F4 =	0
	16777	6/16/77	F1 = 31157	F2 =	0	F3 =	0	F4 =	0
	16977	6/18/77	F1 = 49470	F2 =	0	F3 =	0	F4 =	0
Z717	17077	6/19/77	F1 = 58739	F2 =	0	F3 =	0	F4 =	0
	17177	6/20/77	F1 = 58774	F2 =	0	F3 =	0	F4 =	0
	17277	6/21/77	F1 = 40046	F2 =	0	F3 =	0	F4 =	0
	17477	6/23/77	F1 = 26239	F2 =	0	F3 =	0	F4 =	0
	17577	6/24/77	F1 = 40074	F2 =	0	F3 =	0	F4 =	0
	17677	6/25/77	F1 = 37846	F2 =	0	F3 =	0	F4 =	0
	17777	6/26/77	F1 = 20316	F2 =	0	F3 =	0	F4 =	0
	17877	6/27/77	F1 = 17258	F2 =	0	F3 =	0	F4 =	0
	17977	6/28/77	F1 = 28220	F2 =	0	F3 =	0	F4 =	0
Z718	18077	6/29/77	F1 = 20480	F2 =	0	F3 =	0	F4 =	0
	18177	6/30/77	F1 = 27255	F2 =	0	F3 =	0	F4 =	0
	18277	7/ 1/77	F1 = 28725	F2 =	0	F3 =	0	F4 =	0
	18377	7/ 2/77	F1 = 32896	F2 =	0	F3 =	0	F4 =	0
	18477	7/ 3/77	F1 = 14852	F2 =	0	F3 =	0	F4 =	0
	18577	7/ 4/77	F1 = 65293	F2 =	0	F3 =	0	F4 =	0
	18677	7/ 5/77	F1 = 32028	F2 =	0	F3 =	0	F4 =	0
	18777	7/ 6/77	F1 = 19653	F2 =	0	F3 =	0	F4 =	0
	18877	7/ 7/77	F1 = 39920	F2 =	0	F3 =	0	F4 =	0
	18977	7/ 8/77	F1 = 5092	F2 =	0	F3 =	0	F4 =	0
Z719	19077	7/ 9/77	F1 = 17017	F2 =	0	F3 =	0	F4 =	0

	19177	7/10/77	F1 =	14314	F2 =	0	F3 =	0	F4 =	0
	19477	7/13/77	F1 =	0	F2 =	7590	F3 =	0	F4 =	0
	19677	7/15/77	F1 =	0	F2 =	3819	F3 =	0	F4 =	0
	19977	7/18/77	F1 =	2949	F2 =	16767	F3 =	0	F4 =	0
Z720	20177	7/20/77	F1 =	0	F2 =	21262	F3 =	0	F4 =	0
	20277	7/21/77	F1 =	76	F2 =	15324	F3 =	0	F4 =	0
	20377	7/22/77	F1 =	28	F2 =	19069	F3 =	0	F4 =	0
	20477	7/23/77	F1 =	92	F2 =	52242	F3 =	0	F4 =	0
	20677	7/25/77	F1 =	0	F2 =	27068	F3 =	0	F4 =	0
	20777	7/26/77	F1 =	0	F2 =	24874	F3 =	0	F4 =	0
	20877	7/27/77	F1 =	0	F2 =	24133	F3 =	0	F4 =	0
	20977	7/28/77	F1 =	0	F2 =	23751	F3 =	0	F4 =	0
Z721	21077	7/29/77	F1 =	0	F2 =	23805	F3 =	0	F4 =	0
	21177	7/30/77	F1 =	0	F2 =	27521	F3 =	0	F4 =	0
	21277	7/31/77	F1 =	0	F2 =	27570	F3 =	0	F4 =	0
	21377	8/ 1/77	F1 =	0	F2 =	26645	F3 =	0	F4 =	0
	21477	8/ 2/77	F1 =	0	F2 =	24205	F3 =	0	F4 =	0
	21577	8/ 3/77	F1 =	0	F2 =	23986	F3 =	0	F4 =	0
	21777	8/ 5/77	F1 =	0	F2 =	24650	F3 =	0	F4 =	0
	21877	8/ 6/77	F1 =	0	F2 =	21851	F3 =	0	F4 =	0
Z722	22077	8/ 8/77	F1 =	0	F2 =	25883	F3 =	0	F4 =	0
	22177	8/ 9/77	F1 =	0	F2 =	22091	F3 =	0	F4 =	0
	22277	8/10/77	F1 =	0	F2 =	24664	F3 =	0	F4 =	0
	22377	8/11/77	F1 =	0	F2 =	26562	F3 =	0	F4 =	0
	22477	8/12/77	F1 =	0	F2 =	23742	F3 =	0	F4 =	0
	22577	8/13/77	F1 =	0	F2 =	21246	F3 =	0	F4 =	0
	22677	8/14/77	F1 =	0	F2 =	22153	F3 =	0	F4 =	0
	22777	8/15/77	F1 =	0	F2 =	22857	F3 =	0	F4 =	0
	22877	8/16/77	F1 =	0	F2 =	7401	F3 =	0	F4 =	0
Z723	23077	8/18/77	F1 =	0	F2 =	32482	F3 =	0	F4 =	0
	23177	8/19/77	F1 =	0	F2 =	23896	F3 =	0	F4 =	0
	23277	8/20/77	F1 =	0	F2 =	19840	F3 =	0	F4 =	0
	23377	8/21/77	F1 =	0	F2 =	27499	F3 =	0	F4 =	0
	23477	8/22/77	F1 =	0	F2 =	27786	F3 =	0	F4 =	0
	23577	8/23/77	F1 =	0	F2 =	24739	F3 =	0	F4 =	0
	23677	8/24/77	F1 =	0	F2 =	21628	F3 =	0	F4 =	0
	23777	8/25/77	F1 =	0	F2 =	24350	F3 =	0	F4 =	0
	23877	8/26/77	F1 =	0	F2 =	23771	F3 =	0	F4 =	0
	23977	8/27/77	F1 =	0	F2 =	27548	F3 =	0	F4 =	0
Z724	24077	8/28/77	F1 =	0	F2 =	26909	F3 =	0	F4 =	0
	24177	8/29/77	F1 =	0	F2 =	24430	F3 =	0	F4 =	0
	24777	9/ 4/77	F1 =	0	F2 =	16726	F3 =	0	F4 =	0
	24877	9/ 5/77	F1 =	0	F2 =	33323	F3 =	0	F4 =	0
	24977	9/ 6/77	F1 =	0	F2 =	20974	F3 =	0	F4 =	0
Z725	25077	9/ 7/77	F1 =	0	F2 =	10890	F3 =	0	F4 =	0
	25177	9/ 8/77	F1 =	0	F2 =	10490	F3 =	0	F4 =	0
	25277	9/ 9/77	F1 =	0	F2 =	20936	F3 =	0	F4 =	0

C-

	25377	9/10/77	F1 =	0	F2 = 23087	F3 =	0	F4 =	0
	25477	9/11/77	F1 =	0	F2 = 25326	F3 =	0	F4 =	0
	25577	9/12/77	F1 =	0	F2 = 19390	F3 =	0	F4 =	0
	25677	9/13/77	F1 =	0	F2 = 6984	F3 =	0	F4 =	0
	25777	9/14/77	F1 =	0	F2 = 26073	F3 =	0	F4 =	0
	25877	9/15/77	F1 =	0	F2 = 10467	F3 =	0	F4 =	0
	25977	9/16/77	F1 =	0	F2 = 28365	F3 =	0	F4 =	0
Z726	26077	9/17/77	F1 =	0	F2 = 24543	F3 =	0	F4 =	0
	26277	9/19/77	F1 =	0	F2 = 20043	F3 =	0	F4 =	0
	26377	9/20/77	F1 =	0	F2 = 29384	F3 =	0	F4 =	0
	26477	9/21/77	F1 =	0	F2 = 12003	F3 =	0	F4 =	0
	26577	9/22/77	F1 =	0	F2 = 24286	F3 =	0	F4 =	0
	26677	9/23/77	F1 =	0	F2 = 23501	F3 =	0	F4 =	0
	26877	9/25/77	F1 =	0	F2 = 24494	F3 =	0	F4 =	0
	26977	9/26/77	F1 =	0	F2 = 17918	F3 =	0	F4 =	0
Z727	27077	9/27/77	F1 =	0	F2 = 24045	F3 =	0	F4 =	0
	27177	9/28/77	F1 =	0	F2 = 24794	F3 =	0	F4 =	0
	27277	9/29/77	F1 =	0	F2 = 3401	F3 =	0	F4 =	0
	27377	9/30/77	F1 =	0	F2 = 25045	F3 =	0	F4 =	0
	27477	10/ 1/77	F1 =	0	F2 = 25858	F3 =	0	F4 =	0
	27577	10/ 2/77	F1 =	0	F2 = 27982	F3 =	0	F4 =	0
	27677	10/ 3/77	F1 =	0	F2 = 3507	F3 =	0	F4 =	0
	27777	10/ 4/77	F1 =	0	F2 = 21271	F3 =	0	F4 =	0
	27877	10/ 5/77	F1 =	0	F2 = 25093	F3 =	0	F4 =	0
Z728	28077	10/ 7/77	F1 =	0	F2 = 25247	F3 =	0	F4 =	0
	28177	10/ 8/77	F1 =	0	F2 = 28325	F3 =	0	F4 =	0
	28277	10/ 9/77	F1 =	0	F2 = 23827	F3 =	0	F4 =	0
	28377	10/10/77	F1 =	0	F2 = 21756	F3 =	0	F4 =	0
	28477	10/11/77	F1 =	0	F2 = 16435	F3 =	0	F4 =	0
	28577	10/12/77	F1 =	0	F2 = 7013	F3 =	0	F4 =	0
	28777	10/14/77	F1 =	0	F2 = 25485	F3 =	0	F4 =	0
	28877	10/15/77	F1 =	0	F2 = 25865	F3 =	0	F4 =	0
	28977	10/16/77	F1 =	0	F2 = 25441	F3 =	0	F4 =	0
Z729	29077	10/17/77	F1 =	0	F2 = 21698	F3 =	0	F4 =	0
	29177	10/18/77	F1 =	0	F2 = 25472	F3 =	0	F4 =	0
	29277	10/19/77	F1 =	0	F2 = 25151	F3 =	0	F4 =	0
	29377	10/20/77	F1 =	0	F2 = 10377	F3 =	0	F4 =	0
	29477	10/21/77	F1 =	0	F2 = 30473	F3 =	0	F4 =	0
	29577	10/22/77	F1 =	0	F2 = 47696	F3 =	0	F4 =	0
	29677	10/23/77	F1 =	0	F2 = 52377	F3 =	0	F4 =	0
	29777	10/24/77	F1 =	0	F2 = 29184	F3 =	0	F4 =	0
	29877	10/25/77	F1 =	0	F2 = 21866	F3 =	0	F4 =	0
	29977	10/26/77	F1 =	0	F2 = 31953	F3 =	0	F4 =	0
Z730	30177	10/28/77	F1 =	0	F2 = 34929	F3 =	0	F4 =	0
	30277	10/29/77	F1 =	0	F2 = 30061	F3 =	0	F4 =	0
	30377	10/30/77	F1 =	0	F2 = 31729	F3 =	0	F4 =	0
	30477	10/31/77	F1 =	0	F2 = 40864	F3 =	0	F4 =	0
	30577	11/ 1/77	F1 =	0	F2 = 42772	F3 =	0	F4 =	0

	30877	11/ 2/77	F1 =	0	F2 = 38287	F3 =	0	F4 =	0
	30777	11/ 3/77	F1 =	0	F2 = 51777	F3 =	0	F4 =	0
	30877	11/ 4/77	F1 =	0	F2 = 36781	F3 =	0	F4 =	0
	30977	11/ 5/77	F1 =	0	F2 = 50616	F3 =	0	F4 =	0
Z731	31077	11/ 6/77	F1 =	0	F2 = 34705	F3 =	0	F4 =	0
	31177	11/ 7/77	F1 =	0	F2 = 15873	F3 =	0	F4 =	0
	31277	11/ 8/77	F1 =	0	F2 = 46513	F3 =	0	F4 =	0
	31377	11/ 9/77	F1 =	0	F2 = 16715	F3 =	0	F4 =	0
	31477	11/10/77	F1 =	0	F2 = 40647	F3 =	0	F4 =	0
	31577	11/11/77	F1 =	0	F2 = 35481	F3 =	0	F4 =	0
	31677	11/12/77	F1 =	0	F2 = 18578	F3 =	0	F4 =	0
	31777	11/13/77	F1 =	0	F2 = 54311	F3 =	0	F4 =	0
	31877	11/14/77	F1 =	0	F2 = 30171	F3 =	0	F4 =	0
	31977	11/15/77	F1 =	0	F2 = 31565	F3 =	0	F4 =	0
Z732	32077	11/16/77	F1 =	0	F2 = 44229	F3 =	0	F4 =	0
	32177	11/17/77	F1 =	0	F2 = 19734	F3 =	0	F4 =	0
	32277	11/18/77	F1 =	0	F2 = 14934	F3 =	0	F4 =	0
	32377	11/19/77	F1 =	0	F2 = 45984	F3 =	0	F4 =	0
	32477	11/20/77	F1 =	0	F2 = 43845	F3 =	0	F4 =	0
	32577	11/21/77	F1 =	0	F2 = 40174	F3 =	0	F4 =	0
	32677	11/22/77	F1 =	0	F2 = 40445	F3 =	0	F4 =	0
	32777	11/23/77	F1 =	0	F2 = 30354	F3 =	0	F4 =	0
	32877	11/24/77	F1 =	0	F2 = 36643	F3 =	0	F4 =	0
	32977	11/25/77	F1 =	0	F2 = 35094	F3 =	0	F4 =	0
Z733	33077	11/26/77	F1 =	0	F2 = 28268	F3 =	0	F4 =	0
	33177	11/27/77	F1 =	0	F2 = 42612	F3 =	0	F4 =	0
	33277	11/28/77	F1 =	0	F2 = 36427	F3 =	0	F4 =	0
	33377	11/29/77	F1 =	0	F2 = 39719	F3 =	0	F4 =	0
	33477	11/30/77	F1 =	0	F2 = 6856	F3 =	0	F4 =	0
	33577	12/ 1/77	F1 =	0	F2 = 3523	F3 =	0	F4 =	0
	33677	12/ 2/77	F1 =	0	F2 = 19847	F3 =	0	F4 =	0
	33777	12/ 3/77	F1 =	0	F2 = 48407	F3 =	0	F4 =	0
	33877	12/ 4/77	F1 =	0	F2 = 31794	F3 =	0	F4 =	0
	33977	12/ 5/77	F1 =	0	F2 = 46768	F3 =	0	F4 =	0
Z734	34077	12/ 6/77	F1 =	0	F2 = 21182	F3 =	0	F4 =	0
	34177	12/ 7/77	F1 =	0	F2 = 19253	F3 =	0	F4 =	0
	34277	12/ 8/77	F1 =	0	F2 = 33567	F3 =	0	F4 =	0
	34377	12/ 9/77	F1 =	0	F2 = 10950	F3 =	0	F4 =	0
	34477	12/10/77	F1 =	0	F2 = 46402	F3 =	0	F4 =	0
	34577	12/11/77	F1 =	0	F2 = 35850	F3 =	0	F4 =	0
	34677	12/12/77	F1 =	0	F2 = 43105	F3 =	0	F4 =	0
	34777	12/13/77	F1 =	0	F2 = 35371	F3 =	0	F4 =	0
	34877	12/14/77	F1 =	0	F2 = 49378	F3 =	0	F4 =	0
	34977	12/15/77	F1 =	0	F2 = 32747	F3 =	0	F4 =	0
Z735	35077	12/16/77	F1 =	0	F2 = 23400	F3 =	0	F4 =	0
	35177	12/17/77	F1 =	0	F2 = 47540	F3 =	0	F4 =	0
	35277	12/18/77	F1 =	0	F2 = 47655	F3 =	0	F4 =	0
	35377	12/19/77	F1 =	0	F2 = 30718	F3 =	0	F4 =	0

35477	12/20/77	F1 =	0	F2 = 47983	F3 =	0	F4 =	0	
35577	12/21/77	F1 =	0	F2 = 43702	F3 =	0	F4 =	0	
35677	12/22/77	F1 =	0	F2 = 52680	F3 =	0	F4 =	0	
35777	12/23/77	F1 =	0	F2 = 46179	F3 =	0	F4 =	0	
35877	12/24/77	F1 =	0	F2 = 43412	F3 =	0	F4 =	0	
35977	12/25/77	F1 =	0	F2 = 45114	F3 =	0	F4 =	0	
2736	36077	12/26/77	F1 =	0	F2 = 49015	F3 =	0	F4 =	0
	36177	12/27/77	F1 =	0	F2 = 29815	F3 =	0	F4 =	0
	36277	12/28/77	F1 =	0	F2 = 52794	F3 =	0	F4 =	0
	36377	12/29/77	F1 =	0	F2 = 35415	F3 =	0	F4 =	0
	36477	12/30/77	F1 =	0	F2 = 39900	F3 =	0	F4 =	0
	36577	12/31/77	F1 =	0	F2 = 42731	F3 =	0	F4 =	0
2800	00178	1/ 1/78	F1 =	0	F2 = 30544	F3 =	0	F4 =	0
	00278	1/ 2/78	F1 =	0	F2 = 46497	F3 =	0	F4 =	0
	00378	1/ 3/78	F1 =	0	F2 = 44042	F3 =	0	F4 =	0
	00478	1/ 4/78	F1 =	0	F2 = 41598	F3 =	0	F4 =	0
	00578	1/ 5/78	F1 =	0	F2 = 40632	F3 =	0	F4 =	0
	00678	1/ 6/78	F1 =	0	F2 = 51209	F3 =	0	F4 =	0
	00778	1/ 7/78	F1 =	0	F2 = 49833	F3 =	0	F4 =	0
	00878	1/ 8/78	F1 =	0	F2 = 40874	F3 =	0	F4 =	0
	00978	1/ 9/78	F1 =	0	F2 = 45879	F3 =	0	F4 =	0
2801	01078	1/10/78	F1 =	0	F2 = 46932	F3 =	0	F4 =	0
	01178	1/11/78	F1 =	0	F2 = 51863	F3 =	0	F4 =	0
	01278	1/12/78	F1 =	0	F2 = 34155	F3 =	0	F4 =	0
	01378	1/13/78	F1 =	0	F2 = 14698	F3 =	0	F4 =	0
	01478	1/14/78	F1 =	0	F2 = 7601	F3 =	0	F4 =	0
	01578	1/15/78	F1 =	0	F2 = 59286	F3 =	0	F4 =	0
	01678	1/16/78	F1 =	0	F2 = 38801	F3 =	0	F4 =	0
	01778	1/17/78	F1 =	0	F2 = 53449	F3 =	0	F4 =	0
	01878	1/18/78	F1 =	0	F2 = 40459	F3 =	0	F4 =	0
	01978	1/19/78	F1 =	0	F2 = 48001	F3 =	0	F4 =	0
2802	02078	1/20/78	F1 =	0	F2 = 50099	F3 =	0	F4 =	0
	02178	1/21/78	F1 =	0	F2 = 47873	F3 =	0	F4 =	0
	02278	1/22/78	F1 =	0	F2 = 44967	F3 =	0	F4 =	0
	02378	1/23/78	F1 =	0	F2 = 34967	F3 =	0	F4 =	0
	02478	1/24/78	F1 =	0	F2 = 4514	F3 =	0	F4 =	0
	02578	1/25/78	F1 =	0	F2 = 26043	F3 =	0	F4 =	0
	02678	1/26/78	F1 =	0	F2 = 29253	F3 =	0	F4 =	0
	02778	1/27/78	F1 =	0	F2 = 29249	F3 =	0	F4 =	0
	02878	1/28/78	F1 =	0	F2 = 22143	F3 =	0	F4 =	0
	02978	1/29/78	F1 =	0	F2 = 48716	F3 =	0	F4 =	0
2803	03078	1/30/78	F1 =	0	F2 = 42716	F3 =	0	F4 =	0
	03178	1/31/78	F1 =	0	F2 = 49784	F3 =	0	F4 =	0
	03278	2/ 1/78	F1 =	0	F2 = 37087	F3 =	0	F4 =	0
	03378	2/ 2/78	F1 =	0	F2 = 42781	F3 =	0	F4 =	0
	03478	2/ 3/78	F1 =	0	F2 = 41032	F3 =	0	F4 =	0
	03578	2/ 4/78	F1 =	0	F2 = 48786	F3 =	0	F4 =	0
	03678	2/ 5/78	F1 =	0	F2 = 46982	F3 =	0	F4 =	0

	03778	2/ 6/78	F1 =	0	F2 = 49354	F3 =	0	F4 =	0
	03878	2/ 7/78	F1 =	0	F2 = 49929	F3 =	0	F4 =	0
	03978	2/ 6/78	F1 =	0	F2 = 35155	F3 =	0	F4 =	0
Z804	04078	2/ 9/78	F1 =	0	F2 = 48925	F3 =	0	F4 =	0
	04178	2/10/78	F1 =	0	F2 = 46268	F3 =	0	F4 =	0
	04278	2/11/78	F1 =	0	F2 = 50180	F3 =	0	F4 =	0
	04378	2/12/78	F1 =	0	F2 = 46794	F3 =	0	F4 =	0
	04478	2/13/78	F1 =	0	F2 = 36425	F3 =	0	F4 =	0
	04578	2/14/78	F1 =	0	F2 = 30460	F3 =	0	F4 =	0
	04678	2/15/78	F1 =	0	F2 = 46295	F3 =	0	F4 =	0
	04778	2/16/78	F1 =	0	F2 = 57760	F3 =	0	F4 =	0
	04878	2/17/78	F1 =	0	F2 = 43261	F3 =	0	F4 =	0
	04978	2/18/78	F1 =	0	F2 = 33331	F3 =	0	F4 =	0
Z805	05078	2/19/78	F1 =	0	F2 = 11837	F3 =	0	F4 =	C
	05178	2/20/78	F1 =	0	F2 = 49253	F3 =	0	F4 =	0
	05278	2/21/78	F1 =	0	F2 = 50288	F3 =	0	F4 =	0
	05378	2/22/78	F1 =	0	F2 = 32470	F3 =	0	F4 =	0
	05478	2/23/78	F1 =	0	F2 = 53349	F3 =	0	F4 =	0
	05578	2/24/78	F1 =	0	F2 = 49737	F3 =	0	F4 =	0
	05678	2/25/78	F1 =	0	F2 = 47206	F3 =	0	F4 =	0
	05778	2/26/78	F1 =	0	F2 = 47187	F3 =	0	F4 =	0
	05878	2/27/78	F1 =	0	F2 = 48308	F3 =	0	F4 =	0
	05978	2/28/78	F1 =	0	F2 = 42618	F3 =	0	F4 =	C
Z806	06078	3/ 1/78	F1 =	0	F2 = 55465	F3 =	0	F4 =	0
	06178	3/ 2/78	F1 =	0	F2 = 50922	F3 =	0	F4 =	0
	06278	3/ 3/78	F1 =	0	F2 = 49874	F3 =	0	F4 =	0
	06378	3/ 4/78	F1 =	0	F2 = 43320	F3 =	0	F4 =	0
	06478	3/ 5/78	F1 =	0	F2 = 29932	F3 =	0	F4 =	0
	06578	3/ 6/78	F1 =	0	F2 = 15831	F3 =	0	F4 =	0
	06678	3/ 7/78	F1 =	0	F2 = 46237	F3 =	0	F4 =	0
	06778	3/ 8/78	F1 =	0	F2 = 51309	F3 =	0	F4 =	0
	06878	3/ 9/78	F1 =	0	F2 = 47464	F3 =	0	F4 =	0
	06978	3/10/78	F1 =	0	F2 = 39679	F3 =	0	F4 =	0
Z807	07078	3/11/78	F1 =	0	F2 = 44404	F3 =	0	F4 =	0
	07178	3/12/78	F1 =	0	F2 = 49963	F3 =	0	F4 =	0
	07278	3/13/78	F1 =	0	F2 = 36018	F3 =	0	F4 =	0
	07378	3/14/78	F1 =	0	F2 = 45080	F3 =	0	F4 =	0
	07478	3/15/78	F1 =	0	F2 = 50306	F3 =	0	F4 =	0
	07578	3/16/78	F1 =	0	F2 = 48116	F3 =	0	F4 =	0
	07678	3/17/78	F1 =	0	F2 = 49797	F3 =	0	F4 =	0
	07778	3/18/78	F1 =	0	F2 = 50537	F3 =	0	F4 =	0
	07878	3/19/78	F1 =	0	F2 = 44741	F3 =	0	F4 =	0
	07978	3/20/78	F1 =	0	F2 = 49576	F3 =	0	F4 =	0
Z808	08078	3/21/78	F1 =	0	F2 = 43312	F3 =	0	F4 =	0
	08178	3/22/78	F1 =	0	F2 = 45201	F3 =	0	F4 =	0
	08278	3/23/78	F1 =	0	F2 = 47093	F3 =	0	F4 =	0
	08378	3/24/78	F1 =	0	F2 = 49177	F3 =	0	F4 =	0
	08478	3/25/78	F1 =	0	F2 = 48813	F3 =	0	F4 =	0

	08578	3/26/78	F1 =	0	F2 = 48851	F3 =	0	F4 =	0
	08678	3/27/78	F1 =	0	F2 = 52029	F3 =	0	F4 =	0
	08778	3/28/78	F1 =	0	F2 = 50997	F3 =	0	F4 =	0
	08878	3/29/78	F1 =	0	F2 = 48792	F3 =	0	F4 =	0
	08978	3/30/78	F1 =	0	F2 = 46703	F3 =	0	F4 =	0
2809	09078	3/31/78	F1 =	0	F2 = 47104	F3 =	0	F4 =	0
	09178	4/ 1/78	F1 =	0	F2 = 48834	F3 =	0	F4 =	0
	09278	4/ 2/78	F1 =	0	F2 = 35358	F3 =	0	F4 =	0
	09378	4/ 3/78	F1 =	0	F2 = 50729	F3 =	0	F4 =	0
	09478	4/ 4/78	F1 =	0	F2 = 50002	F3 =	0	F4 =	0
	09578	4/ 5/78	F1 =	0	F2 = 36819	F3 =	0	F4 =	0
	09678	4/ 6/78	F1 =	0	F2 = 49780	F3 =	0	F4 =	0
	09778	4/ 7/78	F1 =	0	F2 = 43595	F3 =	0	F4 =	0
	09878	4/ 8/78	F1 =	0	F2 = 45733	F3 =	0	F4 =	0
	09978	4/ 9/78	F1 =	0	F2 = 51150	F3 =	0	F4 =	0
2810	10078	4/10/78	F1 =	0	F2 = 41290	F3 =	0	F4 =	0
	10178	4/11/78	F1 =	0	F2 = 55270	F3 =	0	F4 =	0
	10278	4/12/78	F1 =	0	F2 = 45217	F3 =	0	F4 =	0
	10378	4/13/78	F1 =	0	F2 = 49240	F3 =	0	F4 =	0
	10478	4/14/78	F1 =	0	F2 = 38537	F3 =	0	F4 =	0
	10578	4/15/78	F1 =	0	F2 = 46084	F3 =	0	F4 =	0
	10678	4/16/78	F1 =	0	F2 = 46387	F3 =	0	F4 =	0
	10778	4/17/78	F1 =	0	F2 = 48834	F3 =	0	F4 =	0
	10878	4/18/78	F1 =	0	F2 = 48175	F3 =	0	F4 =	0
	10978	4/19/78	F1 =	0	F2 = 49934	F3 =	0	F4 =	0
2811	11078	4/20/78	F1 =	0	F2 = 51203	F3 =	0	F4 =	0
	11178	4/21/78	F1 =	0	F2 = 53361	F3 =	0	F4 =	0
	11278	4/22/78	F1 =	0	F2 = 51711	F3 =	0	F4 =	0
	11378	4/23/78	F1 =	0	F2 = 47430	F3 =	0	F4 =	0
	11478	4/24/78	F1 =	0	F2 = 39880	F3 =	0	F4 =	0
	11578	4/25/78	F1 =	0	F2 = 33652	F3 =	0	F4 =	0
	11678	4/26/78	F1 =	0	F2 = 36052	F3 =	0	F4 =	0
	11778	4/27/78	F1 =	0	F2 = 15332	F3 =	0	F4 =	0
	11878	4/28/78	F1 =	0	F2 = 50426	F3 =	0	F4 =	0
	11978	4/29/78	F1 =	0	F2 = 44458	F3 =	0	F4 =	0
2812	12078	4/30/78	F1 =	0	F2 = 48010	F3 =	0	F4 =	0
	12178	5/ 1/78	F1 =	0	F2 = 44642	F3 =	0	F4 =	0
	12278	5/ 2/78	F1 =	0	F2 = 36321	F3 =	0	F4 =	0
	12478	5/ 4/78	F1 =	0	F2 = 19151	F3 =	0	F4 =	0
	12578	5/ 5/78	F1 =	0	F2 = 29359	F3 =	0	F4 =	0
	12778	5/ 7/78	F1 =	0	F2 = 28867	F3 =	0	F4 =	0
	12878	5/ 8/78	F1 =	0	F2 = 36690	F3 =	0	F4 =	0
	12978	5/ 9/78	F1 =	0	F2 = 15176	F3 =	0	F4 =	0
2813	13078	5/10/78	F1 =	0	F2 = 55327	F3 =	0	F4 =	0
	13178	5/11/78	F1 =	0	F2 = 55341	F3 =	0	F4 =	0
	13278	5/12/78	F1 =	0	F2 = 43638	F3 =	0	F4 =	0
	13378	5/13/78	F1 =	0	F2 = 43721	F3 =	0	F4 =	0
	13478	5/14/78	F1 =	0	F2 = 47818	F3 =	0	F4 =	0

	13578	5/15/78	F1 =	0	F2 = 20901	F3 =	0	F4 =	0
	13678	5/16/78	F1 =	0	F2 = 17600	F3 =	0	F4 =	0
	13778	5/17/78	F1 =	0	F2 = 41744	F3 =	0	F4 =	0
	13878	5/18/78	F1 =	0	F2 = 39657	F3 =	0	F4 =	0
	13978	5/19/78	F1 =	0	F2 = 39365	F3 =	0	F4 =	0
Z814	14078	5/20/78	F1 =	0	F2 = 39150	F3 =	0	F4 =	0
	14178	5/21/78	F1 =	0	F2 = 39674	F3 =	0	F4 =	0
	14278	5/22/78	F1 =	0	F2 = 35406	F3 =	0	F4 =	0
	14478	5/24/78	F1 =	0	F2 = 33326	F3 =	0	F4 =	0
	14578	5/25/78	F1 =	0	F2 = 25623	F3 =	0	F4 =	0
	14678	5/26/78	F1 =	0	F2 = 27125	F3 =	0	F4 =	0
	14778	5/27/78	F1 =	0	F2 = 23790	F3 =	0	F4 =	0
	14878	5/28/78	F1 =	0	F2 = 7432	F3 =	0	F4 =	0
	14978	5/29/78	F1 =	0	F2 = 36093	F3 =	0	F4 =	0
Z815	15078	5/30/78	F1 =	0	F2 = 31895	F3 =	0	F4 =	0
	15278	6/ 1/78	F1 =	0	F2 = 36364	F3 =	0	F4 =	0
	15378	6/ 2/78	F1 =	0	F2 = 25246	F3 =	0	F4 =	0
	15478	6/ 3/78	F1 =	0	F2 = 23384	F3 =	0	F4 =	0
	15578	6/ 4/78	F1 =	0	F2 = 20820	F3 =	0	F4 =	0
	15678	6/ 5/78	F1 =	0	F2 = 38912	F3 =	0	F4 =	0
	15778	6/ 6/78	F1 =	0	F2 = 21783	F3 =	0	F4 =	0
	15878	6/ 7/78	F1 =	0	F2 = 4464	F3 =	0	F4 =	0
	15978	6/ 8/78	F1 =	0	F2 = 46754	F3 =	0	F4 =	0
Z816	16078	6/ 9/78	F1 =	0	F2 = 25029	F3 =	0	F4 =	0
	16178	6/10/78	F1 =	0	F2 = 34819	F3 =	0	F4 =	0
	16278	6/11/78	F1 =	0	F2 = 31333	F3 =	0	F4 =	0
	16378	6/12/78	F1 =	0	F2 = 3882	F3 =	0	F4 =	0
	16478	6/13/78	F1 =	0	F2 = 42759	F3 =	0	F4 =	0
	16578	6/14/78	F1 =	0	F2 = 31516	F3 =	0	F4 =	0
	16678	6/15/78	F1 =	0	F2 = 31617	F3 =	0	F4 =	0
	16778	6/16/78	F1 =	0	F2 = 33736	F3 =	0	F4 =	0
	16878	6/17/78	F1 =	0	F2 = 44367	F3 =	0	F4 =	0
	16978	6/18/78	F1 =	0	F2 = 44747	F3 =	0	F4 =	0
Z817	17078	6/19/78	F1 =	0	F2 = 16948	F3 =	0	F4 =	0
	17178	6/20/78	F1 =	0	F2 = 35093	F3 =	0	F4 =	0
	17278	6/21/78	F1 =	0	F2 = 35157	F3 =	0	F4 =	0
	17378	6/22/78	F1 =	0	F2 = 52913	F3 =	0	F4 =	0
	17478	6/23/78	F1 =	0	F2 = 30165	F3 =	0	F4 =	0
	17578	6/24/78	F1 =	0	F2 = 35148	F3 =	0	F4 =	0
	17678	6/25/78	F1 =	0	F2 = 46329	F3 =	0	F4 =	0
	17778	6/26/78	F1 =	0	F2 = 36875	F3 =	0	F4 =	0
	17878	6/27/78	F1 =	0	F2 = 41822	F3 =	0	F4 =	0
	17978	6/28/78	F1 =	0	F2 = 44083	F3 =	0	F4 =	0
Z818	18078	6/29/78	F1 =	0	F2 = 27283	F3 =	0	F4 =	0
	18178	6/30/78	F1 =	0	F2 = 35871	F3 =	0	F4 =	0
	18278	7/ 1/78	F1 =	0	F2 = 32682	F3 =	0	F4 =	0
	18378	7/ 2/78	F1 =	0	F2 = 37331	F3 =	0	F4 =	0
	18478	7/ 3/78	F1 =	0	F2 = 33060	F3 =	0	F4 =	0

C-10

	18578	7/ 4/78	F1 =	0	F2 = 33828	F3 =	0	F4 =	0
	18678	7/ 5/78	F1 =	0	F2 = 36753	F3 =	0	F4 =	0
	18778	7/ 6/78	F1 =	0	F2 = 24884	F3 =	0	F4 =	0
	18978	7/ 8/78	F1 =	0	F2 = 29791	F3 =	0	F4 =	0
2819	19078	7/ 9/78	F1 =	0	F2 = 35041	F3 =	0	F4 =	0
	19178	7/10/78	F1 =	0	F2 = 34917	F3 =	0	F4 =	0
	19278	7/11/78	F1 =	0	F2 = 35920	F3 =	0	F4 =	0
	19378	7/12/78	F1 =	0	F2 = 45991	F3 =	0	F4 =	0
	19478	7/13/78	F1 =	0	F2 = 26445	F3 =	0	F4 =	0
	19578	7/14/78	F1 =	0	F2 = 45939	F3 =	0	F4 =	0
	19678	7/15/78	F1 =	0	F2 = 24766	F3 =	0	F4 =	0
	19778	7/16/78	F1 =	0	F2 = 31151	F3 =	0	F4 =	0
	19878	7/17/78	F1 =	0	F2 = 33183	F3 =	0	F4 =	0
	19978	7/18/78	F1 =	0	F2 = 33079	F3 =	0	F4 =	0
2820	20078	7/19/78	F1 =	0	F2 = 33877	F3 =	0	F4 =	0
	20178	7/20/78	F1 =	0	F2 = 41244	F3 =	0	F4 =	0
	20278	7/21/78	F1 =	0	F2 = 20543	F3 =	0	F4 =	0
	20378	7/22/78	F1 =	0	F2 = 13796	F3 =	0	F4 =	0
	20478	7/23/78	F1 =	0	F2 = 32045	F3 =	783	F4 =	0
	20578	7/24/78	F1 =	0	F2 = 36248	F3 =	21645	F4 =	0
	20678	7/25/78	F1 =	0	F2 = 36739	F3 =	21595	F4 =	0
	20778	7/26/78	F1 =	0	F2 = 28546	F3 =	19543	F4 =	0
	20878	7/27/78	F1 =	0	F2 = 17441	F3 =	11198	F4 =	0
	20978	7/28/78	F1 =	0	F2 = 47147	F3 =	28638	F4 =	0
2821	21078	7/29/78	F1 =	0	F2 = 49186	F3 =	30853	F4 =	0
	21178	7/30/78	F1 =	0	F2 = 45959	F3 =	34643	F4 =	0
	21278	7/31/78	F1 =	0	F2 = 45252	F3 =	31468	F4 =	0
	21378	8/ 1/78	F1 =	0	F2 = 43428	F3 =	19609	F4 =	0
	21478	8/ 2/78	F1 =	0	F2 = 34089	F3 =	28840	F4 =	0
	21578	8/ 3/78	F1 =	0	F2 = 45545	F3 =	26594	F4 =	0
	21678	8/ 4/78	F1 =	0	F2 = 45972	F3 =	27198	F4 =	0
	21778	8/ 5/78	F1 =	0	F2 = 47261	F3 =	26898	F4 =	0
	21878	8/ 6/78	F1 =	0	F2 = 27377	F3 =	17854	F4 =	0
	21978	8/ 7/78	F1 =	0	F2 = 16403	F3 =	17460	F4 =	0
2822	22078	8/ 8/78	F1 =	0	F2 = 46008	F3 =	26670	F4 =	0
	22178	8/ 9/78	F1 =	0	F2 = 46417	F3 =	27628	F4 =	0
	22278	8/10/78	F1 =	0	F2 = 44915	F3 =	26819	F4 =	0
	22378	8/11/78	F1 =	0	F2 = 48215	F3 =	27534	F4 =	0
	22478	8/12/78	F1 =	0	F2 = 47168	F3 =	25148	F4 =	0
	22578	8/13/78	F1 =	0	F2 = 43042	F3 =	25589	F4 =	0
	22678	8/14/78	F1 =	0	F2 = 36319	F3 =	28928	F4 =	0
	22778	8/15/78	F1 =	0	F2 = 32408	F3 =	21284	F4 =	0
	22878	8/16/78	F1 =	0	F2 = 15262	F3 =	8479	F4 =	0
	22978	8/17/78	F1 =	0	F2 = 46598	F3 =	25746	F4 =	0
2823	23078	8/18/78	F1 =	0	F2 = 48293	F3 =	25135	F4 =	0
	23178	8/19/78	F1 =	0	F2 = 48613	F3 =	25509	F4 =	0
	23278	8/20/78	F1 =	0	F2 = 45879	F3 =	25403	F4 =	0
	23378	8/21/78	F1 =	0	F2 = 48052	F3 =	25258	F4 =	0

	23478	8/22/78	F1 =	0	F2 = 46637	F3 = 25350	F4 =	0
	23678	8/23/78	F1 =	0	F2 = 47183	F3 = 25346	F4 =	0
	23678	8/24/78	F1 =	0	F2 = 52666	F3 = 25081	F4 =	0
	23778	8/25/78	F1 =	0	F2 = 46374	F3 = 32057	F4 =	0
	23878	8/26/78	F1 =	0	F2 = 45412	F3 = 24848	F4 =	0
	23978	8/27/78	F1 =	0	F2 = 47658	F3 = 24901	F4 =	0
Z824	24078	8/28/78	F1 =	0	F2 = 51266	F3 = 18279	F4 =	0
	24178	8/29/78	F1 =	0	F2 = 44874	F3 = 27206	F4 =	0
	24278	8/30/78	F1 =	0	F2 = 45142	F3 = 25110	F4 =	0
	24378	8/31/78	F1 =	0	F2 = 47506	F3 = 24950	F4 =	0
	24478	9/ 1/78	F1 =	0	F2 = 40774	F3 = 16578	F4 =	0
	24578	9/ 2/78	F1 =	0	F2 = 41883	F3 = 23027	F4 =	0
	24678	9/ 3/78	F1 =	0	F2 = 27066	F3 = 28481	F4 =	0
	24778	9/ 4/78	F1 =	0	F2 = 31776	F3 = 24931	F4 =	0
	24878	9/ 5/78	F1 =	0	F2 = 42192	F3 = 25252	F4 =	0
	24978	9/ 6/78	F1 =	0	F2 = 40991	F3 = 27914	F4 =	0
Z825	25078	9/ 7/78	F1 =	0	F2 = 35250	F3 = 24774	F4 =	0
	25178	9/ 8/78	F1 =	0	F2 = 45155	F3 = 24741	F4 =	0
	25278	9/ 9/78	F1 =	0	F2 = 45886	F3 = 28758	F4 =	0
	25378	9/10/78	F1 =	0	F2 = 51475	F3 = 27141	F4 =	0
	25478	9/11/78	F1 =	0	F2 = 40772	F3 = 27342	F4 =	0
	25578	9/12/78	F1 =	0	F2 = 46914	F3 = 28950	F4 =	0
	25678	9/13/78	F1 =	0	F2 = 46935	F3 = 27626	F4 =	0
	25778	9/14/78	F1 =	0	F2 = 47651	F3 = 27013	F4 =	0
	25878	9/15/78	F1 =	0	F2 = 41958	F3 = 26317	F4 =	0
	25978	9/16/78	F1 =	0	F2 = 45361	F3 = 26079	F4 =	0
Z826	26078	9/17/78	F1 =	0	F2 = 64626	F3 = 33360	F4 =	0
	26178	9/18/78	F1 =	0	F2 = 46819	F3 = 24078	F4 =	0
	26278	9/19/78	F1 =	0	F2 = 33279	F3 = 26064	F4 =	0
	26378	9/20/78	F1 =	0	F2 = 47801	F3 = 25770	F4 =	0
	26478	9/21/78	F1 =	0	F2 = 46010	F3 = 19469	F4 =	0
	26578	9/22/78	F1 =	0	F2 = 47889	F3 = 26032	F4 =	0
	26678	9/23/78	F1 =	0	F2 = 49106	F3 = 26086	F4 =	0
	26778	9/24/78	F1 =	0	F2 = 40415	F3 = 31410	F4 =	0
	26878	9/25/78	F1 =	0	F2 = 46386	F3 = 25334	F4 =	0
	26978	9/26/78	F1 =	0	F2 = 47700	F3 = 25899	F4 =	0
Z827	27078	9/27/78	F1 =	0	F2 = 56880	F3 = 29206	F4 =	0
	27178	9/28/78	F1 =	0	F2 = 47122	F3 = 28971	F4 =	0
	27278	9/29/78	F1 =	0	F2 = 46481	F3 = 25282	F4 =	0
	27378	9/30/78	F1 =	0	F2 = 45131	F3 = 27750	F4 =	0
	27478	10/ 1/78	F1 =	0	F2 = 44037	F3 = 27697	F4 =	0
	27578	10/ 2/78	F1 =	0	F2 = 46533	F3 = 29287	F4 =	0
	27678	10/ 3/78	F1 =	0	F2 = 42239	F3 = 27360	F4 =	0
	27778	10/ 4/78	F1 =	0	F2 = 44414	F3 = 27098	F4 =	0
	27878	10/ 5/78	F1 =	0	F2 = 48476	F3 = 34249	F4 =	0
	27978	10/ 6/78	F1 =	0	F2 = 42627	F3 = 25085	F4 =	0
Z828	28078	10/ 7/78	F1 =	0	F2 = 44954	F3 = 26172	F4 =	0
	28178	10/ 8/78	F1 =	0	F2 = 31840	F3 = 19009	F4 =	0

	28278	10/ 9/78	F1 =	0	F2 = 12273	F3 = 8815	F4 =	0	
	28378	10/10/78	F1 =	0	F2 = 46510	F3 = 31148	F4 =	0	
	28478	10/11/78	F1 =	0	F2 = 44819	F3 = 25903	F4 =	0	
	28578	10/12/78	F1 =	0	F2 = 43887	F3 = 30450	F4 =	0	
	28678	10/13/78	F1 =	0	F2 = 45037	F3 = 24991	F4 =	0	
	28778	10/14/78	F1 =	0	F2 = 46724	F3 = 26202	F4 =	0	
	28878	10/15/78	F1 =	0	F2 = 48297	F3 = 26581	F4 =	0	
	28978	10/16/78	F1 =	0	F2 = 35524	F3 = 13993	F4 =	0	
2829	29078	10/17/78	F1 =	0	F2 = 46813	F3 =	0	F4 =	0
	29178	10/18/78	F1 =	0	F2 = 47448	F3 = 20077	F4 =	0	
	29278	10/19/78	F1 =	0	F2 = 45088	F3 = 43162	F4 =	0	
	29378	10/20/78	F1 =	0	F2 = 41538	F3 = 38446	F4 =	0	
	29478	10/21/78	F1 =	0	F2 = 41821	F3 = 40041	F4 =	0	
	29578	10/22/78	F1 =	0	F2 = 34739	F3 = 41219	F4 =	0	
	29678	10/23/78	F1 =	0	F2 = 42883	F3 = 33824	F4 =	0	
	29778	10/24/78	F1 =	0	F2 = 24911	F3 = 39569	F4 =	0	
	29878	10/25/78	F1 =	0	F2 = 38525	F3 = 43466	F4 =	0	
	29978	10/26/78	F1 =	0	F2 = 49156	F3 = 43545	F4 =	0	
2830	30078	10/27/78	F1 =	0	F2 = 50853	F3 = 43837	F4 =	0	
	30178	10/28/78	F1 =	0	F2 = 50100	F3 = 43510	F4 =	0	
	30278	10/29/78	F1 =	0	F2 = 51250	F3 = 43527	F4 =	0	
	30378	10/30/78	F1 =	0	F2 = 49224	F3 = 44405	F4 =	0	
	30478	10/31/78	F1 =	0	F2 = 51713	F3 = 45339	F4 =	0	
	30578	11/ 1/78	F1 =	0	F2 = 48326	F3 = 45348	F4 =	0	
	30678	11/ 2/78	F1 =	0	F2 = 51159	F3 = 44989	F4 =	0	
	30778	11/ 3/78	F1 =	0	F2 = 51751	F3 = 45434	F4 =	0	
	30878	11/ 4/78	F1 =	0	F2 = 52118	F3 = 45356	F4 =	0	
	30978	11/ 5/78	F1 =	0	F2 = 51770	F3 = 45520	F4 =	0	
2831	31078	11/ 6/78	F1 =	0	F2 = 48289	F3 = 38753	F4 =	0	
	31178	11/ 7/78	F1 =	0	F2 = 51600	F3 = 45652	F4 =	0	
	31278	11/ 8/78	F1 =	0	F2 = 53184	F3 = 45622	F4 =	0	
	31378	11/ 9/78	F1 =	0	F2 = 48315	F3 = 44732	F4 =	0	
	31478	11/10/78	F1 =	0	F2 = 51730	F3 = 45220	F4 =	0	
	31578	11/11/78	F1 =	0	F2 = 49236	F3 = 41883	F4 =	0	
	31678	11/12/78	F1 =	0	F2 = 50129	F3 = 45237	F4 =	0	
	31778	11/13/78	F1 =	0	F2 = 52049	F3 = 44903	F4 =	0	
	31878	11/14/78	F1 =	0	F2 = 51793	F3 = 37161	F4 =	0	
	31978	11/15/78	F1 =	0	F2 = 51811	F3 = 45400	F4 =	0	
2832	32078	11/16/78	F1 =	0	F2 = 51346	F3 = 44830	F4 =	0	
	32078	11/16/78	F1 =	0	F2 = 51346	F3 = 44830	F4 =	0	
	32178	11/17/78	F1 =	0	F2 = 50325	F3 = 44605	F4 =	0	
	32178	11/17/78	F1 =	0	F2 = 50325	F3 = 44605	F4 =	0	
	32278	11/18/78	F1 =	0	F2 = 51988	F3 = 45186	F4 =	0	
	32278	11/18/78	F1 =	0	F2 = 51988	F3 = 45186	F4 =	0	
	32378	11/19/78	F1 =	0	F2 = 47987	F3 = 45305	F4 =	0	
	32378	11/19/78	F1 =	0	F2 = 47987	F3 = 45305	F4 =	0	
	32478	11/20/78	F1 =	0	F2 = 50233	F3 = 44899	F4 =	0	
	32578	11/21/78	F1 =	0	F2 = 51781	F3 = 44499	F4 =	0	
	32678	11/22/78	F1 =	0	F2 = 43741	F3 = 45310	F4 =	0	

32778	11/23/78	F1 =	0	F2 = 51461	F3 = 44893	F4 =	0	
32878	11/24/78	F1 =	0	F2 = 47925	F3 = 45084	F4 =	0	
32978	11/25/78	F1 =	0	F2 = 51448	F3 = 45284	F4 =	0	
2833	33078	11/26/78	F1 =	0	F2 = 51378	F3 = 45632	F4 =	0
	33178	11/27/78	F1 =	0	F2 = 51387	F3 = 33473	F4 =	0
	33278	11/28/78	F1 =	0	F2 = 47484	F3 = 44355	F4 =	0
	33378	11/29/78	F1 =	0	F2 = 50148	F3 = 45268	F4 =	0
	33478	11/30/78	F1 =	0	F2 = 50830	F3 = 40818	F4 =	0
	33578	12/ 1/78	F1 =	0	F2 = 46041	F3 = 45150	F4 =	0
	33678	12/ 2/78	F1 =	0	F2 = 51502	F3 = 48035	F4 =	0
	33778	12/ 3/78	F1 =	0	F2 = 51330	F3 = 34009	F4 =	0
	33878	12/ 4/78	F1 =	0	F2 = 50850	F3 = 36488	F4 =	0
	33978	12/ 5/78	F1 =	0	F2 = 50572	F3 = 37464	F4 =	0
2834	34078	12/ 6/78	F1 =	0	F2 = 48148	F3 = 45284	F4 =	0
	34178	12/ 7/78	F1 =	0	F2 = 42282	F3 = 42566	F4 =	0
	34278	12/ 8/78	F1 =	0	F2 = 36227	F3 = 44570	F4 =	0
	34378	12/ 9/78	F1 =	0	F2 = 36643	F3 = 53700	F4 =	0
	34478	12/10/78	F1 =	0	F2 = 38379	F3 = 43115	F4 =	0
	34578	12/11/78	F1 =	0	F2 = 38877	F3 = 43149	F4 =	0
	34678	12/12/78	F1 =	0	F2 = 47436	F3 = 44972	F4 =	0
	34778	12/13/78	F1 =	0	F2 = 50176	F3 = 45002	F4 =	0
	34878	12/14/78	F1 =	0	F2 = 50689	F3 = 44950	F4 =	0
	34978	12/15/78	F1 =	0	F2 = 51041	F3 = 44498	F4 =	0
2835	35078	12/16/78	F1 =	0	F2 = 43610	F3 = 44853	F4 =	0
	35178	12/17/78	F1 =	0	F2 = 37070	F3 = 38325	F4 =	0
	35278	12/18/78	F1 =	0	F2 = 51656	F3 = 45116	F4 =	0
	35378	12/19/78	F1 =	0	F2 = 50168	F3 = 45245	F4 =	0
	35478	12/20/78	F1 =	0	F2 = 51257	F3 = 45532	F4 =	0
	35578	12/21/78	F1 =	0	F2 = 51250	F3 = 44911	F4 =	0
	35678	12/22/78	F1 =	0	F2 = 36258	F3 = 31813	F4 =	0
	35778	12/23/78	F1 =	0	F2 = 11730	F3 = 14353	F4 =	0
	35878	12/24/78	F1 =	0	F2 = 49404	F3 = 45181	F4 =	0
	35978	12/25/78	F1 =	0	F2 = 47641	F3 = 45103	F4 =	0
2836	36078	12/26/78	F1 =	0	F2 = 38002	F3 = 28872	F4 =	0
	36278	12/28/78	F1 =	0	F2 = 35301	F3 = 33758	F4 =	0
	36278	12/28/78	F1 =	0	F2 = 35301	F3 = 33758	F4 =	0
	36378	12/29/78	F1 =	0	F2 = 48187	F3 = 44718	F4 =	0
	36378	12/29/78	F1 =	0	F2 = 48187	F3 = 44718	F4 =	0
	36478	12/30/78	F1 =	0	F2 = 42172	F3 = 44667	F4 =	0
	36478	12/30/78	F1 =	0	F2 = 42172	F3 = 44667	F4 =	0
	36578	12/31/78	F1 =	0	F2 = 51977	F3 = 42068	F4 =	0
	36578	12/31/78	F1 =	0	F2 = 51977	F3 = 42068	F4 =	0
2900	00179	1/ 1/79	F1 =	0	F2 = 48050	F3 = 42228	F4 =	0
	00279	1/ 2/79	F1 =	0	F2 = 43656	F3 = 41958	F4 =	0
	00379	1/ 3/79	F1 =	0	F2 = 48538	F3 = 41909	F4 =	0
	00479	1/ 4/79	F1 =	0	F2 = 43617	F3 = 41413	F4 =	0
	00579	1/ 5/79	F1 =	0	F2 = 41361	F3 = 41576	F4 =	0
	00679	1/ 6/79	F1 =	0	F2 = 43443	F3 = 41915	F4 =	0

	00779	1/ 7/79	F1 =	0	F2 = 45574	F3 = 41346	F4 =	0
	00879	1/ 8/79	F1 =	0	F2 = 30833	F3 = 29260	F4 =	0
	00979	1/ 9/79	F1 =	0	F2 = 16778	F3 = 25138	F4 =	0
	00979	1/ 9/79	F1 =	0	F2 = 16778	F3 = 25138	F4 =	0
Z901	01179	1/11/79	F1 =	0	F2 = 39347	F3 = 41343	F4 =	0
	01279	1/12/79	F1 =	0	F2 = 43477	F3 = 41558	F4 =	0
	01379	1/13/79	F1 =	0	F2 = 43000	F3 = 41044	F4 =	0
	01479	1/14/79	F1 =	0	F2 = 45810	F3 = 41281	F4 =	0
	01579	1/15/79	F1 =	0	F2 = 41265	F3 = 42972	F4 =	0
	01679	1/16/79	F1 =	0	F2 = 43064	F3 = 42988	F4 =	0
	01779	1/17/79	F1 =	0	F2 = 44960	F3 = 42703	F4 =	0
	01879	1/18/79	F1 =	0	F2 = 43221	F3 = 42892	F4 =	0
	01979	1/19/79	F1 =	0	F2 = 42164	F3 = 41144	F4 =	0
Z902	02079	1/20/79	F1 =	0	F2 = 45827	F3 = 41246	F4 =	0
	02179	1/21/79	F1 =	0	F2 = 38112	F3 = 40787	F4 =	0
	02279	1/22/79	F1 =	0	F2 = 32776	F3 = 41398	F4 =	0
	02379	1/23/79	F1 =	0	F2 = 31327	F3 = 41492	F4 =	0
	02479	1/24/79	F1 =	0	F2 = 31880	F3 = 40471	F4 =	0
	02579	1/25/79	F1 =	0	F2 = 22814	F3 = 31590	F4 =	0
	02679	1/26/79	F1 =	0	F2 = 31443	F3 = 40754	F4 =	0
	02779	1/27/79	F1 =	0	F2 = 28340	F3 = 40130	F4 =	0
	02879	1/28/79	F1 =	0	F2 = 33726	F3 = 41245	F4 =	0
	02979	1/29/79	F1 =	0	F2 = 46175	F3 = 42391	F4 =	0
Z903	03079	1/30/79	F1 =	0	F2 = 42623	F3 = 46605	F4 =	0
	03179	1/31/79	F1 =	0	F2 = 46547	F3 = 41474	F4 =	0
	03279	2/ 1/79	F1 =	0	F2 = 44126	F3 = 38887	F4 =	0
	03379	2/ 2/79	F1 =	0	F2 = 46172	F3 = 38972	F4 =	0
	03479	2/ 3/79	F1 =	0	F2 = 46709	F3 = 40272	F4 =	0
	03579	2/ 4/79	F1 =	0	F2 = 42921	F3 = 40023	F4 =	0
	03679	2/ 5/79	F1 =	0	F2 = 49039	F3 = 39004	F4 =	0
	03779	2/ 6/79	F1 =	0	F2 = 45248	F3 = 40972	F4 =	0
	03879	2/ 7/79	F1 =	0	F2 = 43360	F3 = 41624	F4 =	0
	03979	2/ 8/79	F1 =	0	F2 = 44250	F3 = 41776	F4 =	0
Z904	04079	2/ 9/79	F1 =	0	F2 = 42491	F3 = 41379	F4 =	0
	04179	2/10/79	F1 =	0	F2 = 42178	F3 = 38002	F4 =	0
	04279	2/11/79	F1 =	0	F2 = 41722	F3 = 38999	F4 =	0
	04379	2/12/79	F1 =	0	F2 = 41988	F3 = 36627	F4 =	0
	04479	2/13/79	F1 =	0	F2 = 44435	F3 = 41547	F4 =	0
	04579	2/14/79	F1 =	0	F2 = 45403	F3 = 41197	F4 =	0
	04679	2/15/79	F1 =	0	F2 = 40425	F3 = 38690	F4 =	0
	04779	2/16/79	F1 =	0	F2 = 45811	F3 = 38600	F4 =	0
	04879	2/17/79	F1 =	0	F2 = 46079	F3 = 41895	F4 =	0
	04979	2/18/79	F1 =	0	F2 = 49415	F3 = 28174	F4 =	0
Z905	05079	2/19/79	F1 =	0	F2 = 46820	F3 = 42153	F4 =	0
	05179	2/20/79	F1 =	0	F2 = 45561	F3 = 42902	F4 =	0
	05279	2/21/79	F1 =	0	F2 = 46042	F3 = 38608	F4 =	0
	05379	2/22/79	F1 =	0	F2 = 45180	F3 = 48118	F4 =	0
	05479	2/23/79	F1 =	0	F2 = 47645	F3 = 43741	F4 =	0

	05579	2/24/79	F1 =	0	F2 = 49215	F3 = 43711	F4 =	0
	05679	2/25/79	F1 =	0	F2 = 46005	F3 = 44084	F4 =	0
	05779	2/26/79	F1 =	0	F2 = 42813	F3 = 44153	F4 =	0
	05879	2/27/79	F1 =	0	F2 = 43441	F3 = 44411	F4 =	0
	05979	2/28/79	F1 =	0	F2 = 36768	F3 = 30484	F4 =	0
ZF06	06079	3/ 1/79	F1 =	0	F2 = 45899	F3 = 44884	F4 =	0
	06179	3/ 2/79	F1 =	0	F2 = 47105	F3 = 43815	F4 =	0
	06279	3/ 3/79	F1 =	0	F2 = 35082	F3 = 42257	F4 =	0
	06379	3/ 4/79	F1 =	0	F2 = 41815	F3 = 45714	F4 =	0
	06479	3/ 5/79	F1 =	0	F2 = 36466	F3 = 30365	F4 =	0
	06579	3/ 6/79	F1 =	0	F2 = 41049	F3 = 24014	F4 =	0
	06679	3/ 7/79	F1 =	0	F2 = 49171	F3 = 46595	F4 =	0
	06779	3/ 8/79	F1 =	0	F2 = 49807	F3 = 45369	F4 =	0
	06879	3/ 9/79	F1 =	0	F2 = 45779	F3 = 43744	F4 =	0
	06979	3/10/79	F1 =	0	F2 = 48034	F3 = 42405	F4 =	0
Z907	07079	3/11/79	F1 =	0	F2 = 38576	F3 = 46300	F4 =	0
	07179	3/12/79	F1 =	0	F2 = 35796	F3 = 46836	F4 =	0
	07279	3/13/79	F1 =	0	F2 = 45299	F3 = 47179	F4 =	0
	07379	3/14/79	F1 =	0	F2 = 45166	F3 = 47031	F4 =	0
	07479	3/15/79	F1 =	0	F2 = 48108	F3 = 42197	F4 =	0
	07579	3/16/79	F1 =	0	F2 = 41890	F3 = 47215	F4 =	0
	07679	3/17/79	F1 =	0	F2 = 22687	F3 = 46921	F4 =	0
	07779	3/18/79	F1 =	0	F2 = 36203	F3 = 37874	F4 =	0
	07879	3/19/79	F1 =	0	F2 = 50523	F3 = 46786	F4 =	0
	07979	3/20/79	F1 =	0	F2 = 50472	F3 = 47469	F4 =	0
Z908	08079	3/21/79	F1 =	0	F2 = 50053	F3 = 47015	F4 =	0
	08179	3/22/79	F1 =	0	F2 = 46190	F3 = 47090	F4 =	0
	08279	3/23/79	F1 =	0	F2 = 45860	F3 = 39834	F4 =	0
	08379	3/24/79	F1 =	0	F2 = 40581	F3 = 47027	F4 =	0
	08479	3/25/79	F1 =	0	F2 = 29748	F3 = 48850	F4 =	0
	08579	3/26/79	F1 =	0	F2 = 46058	F3 = 48331	F4 =	0
	08679	3/27/79	F1 =	0	F2 = 49818	F3 = 47488	F4 =	0
	08779	3/28/79	F1 =	0	F2 = 51081	F3 = 46790	F4 =	0
	08879	3/29/79	F1 =	0	F2 = 49900	F3 = 48273	F4 =	0
	08979	3/30/79	F1 =	0	F2 = 50258	F3 = 47888	F4 =	0
Z909	09079	3/31/79	F1 =	0	F2 = 49098	F3 = 48653	F4 =	0
	09179	4/ 1/79	F1 =	0	F2 = 49054	F3 = 48503	F4 =	0
	09279	4/ 2/79	F1 =	0	F2 = 47813	F3 = 48569	F4 =	0
	09379	4/ 3/79	F1 =	0	F2 = 49543	F3 = 48144	F4 =	0
	09479	4/ 4/79	F1 =	0	F2 = 49966	F3 = 48636	F4 =	0
	09579	4/ 5/79	F1 =	0	F2 = 47475	F3 = 48355	F4 =	0
	09679	4/ 6/79	F1 =	0	F2 = 45949	F3 = 47080	F4 =	0
	09779	4/ 7/79	F1 =	0	F2 = 50637	F3 = 48267	F4 =	0
	09879	4/ 8/79	F1 =	0	F2 = 47000	F3 = 48080	F4 =	0
	09979	4/ 9/79	F1 =	0	F2 = 37205	F3 = 48619	F4 =	0
Z910	10079	4/10/79	F1 =	0	F2 = 35342	F3 = 48825	F4 =	0
	10179	4/11/79	F1 =	0	F2 = 28325	F3 = 46949	F4 =	0
	10279	4/12/79	F1 =	0	F2 = 41824	F3 = 47239	F4 =	0

	10379	4/13/79	F1 =	0	F2 = 39846	F3 = 46806	F4 =	0
	10479	4/14/79	F1 =	0	F2 = 44117	F3 = 47575	F4 =	0
	10579	4/15/79	F1 =	0	F2 = 48097	F3 = 47076	F4 =	0
	10679	4/16/79	F1 =	0	F2 = 48455	F3 = 47334	F4 =	0
	10779	4/17/79	F1 =	0	F2 = 41356	F3 = 48335	F4 =	0
	10879	4/18/79	F1 =	0	F2 = 46585	F3 = 47802	F4 =	0
	10979	4/19/79	F1 =	0	F2 = 39298	F3 = 47807	F4 =	0
Z911	11079	4/20/79	F1 =	0	F2 = 48539	F3 = 48100	F4 =	0
	11179	4/21/79	F1 =	0	F2 = 48578	F3 = 47399	F4 =	0
	11279	4/22/79	F1 =	0	F2 = 47742	F3 = 44283	F4 =	0
	11379	4/23/79	F1 =	0	F2 = 50755	F3 = 48123	F4 =	0
	11479	4/24/79	F1 =	0	F2 = 44546	F3 = 39150	F4 =	0
	11579	4/25/79	F1 =	0	F2 = 36123	F3 = 48400	F4 =	0
	11679	4/26/79	F1 =	0	F2 = 31836	F3 = 25746	F4 =	0
	11779	4/27/79	F1 =	0	F2 = 50887	F3 = 43428	F4 =	0
	11879	4/28/79	F1 =	0	F2 = 42221	F3 = 48411	F4 =	0
	11979	4/29/79	F1 =	0	F2 = 48702	F3 = 47994	F4 =	0
Z912	12079	4/30/79	F1 =	0	F2 = 39475	F3 = 49040	F4 =	0
	12179	5/ 1/79	F1 =	0	F2 = 47099	F3 = 39610	F4 =	0
	12279	5/ 2/79	F1 =	0	F2 = 51181	F3 = 48289	F4 =	0
	12379	5/ 3/79	F1 =	0	F2 = 50807	F3 = 48242	F4 =	0
	12479	5/ 4/79	F1 =	0	F2 = 41073	F3 = 47699	F4 =	0
	12579	5/ 5/79	F1 =	0	F2 = 48017	F3 = 48188	F4 =	0
	12679	5/ 6/79	F1 =	0	F2 = 47801	F3 = 47852	F4 =	0
	12779	5/ 7/79	F1 =	0	F2 = 44334	F3 = 47069	F4 =	0
	12879	5/ 8/79	F1 =	0	F2 = 42920	F3 = 31433	F4 =	0
	12979	5/ 9/79	F1 =	0	F2 = 44854	F3 = 48651	F4 =	0
Z913	13079	5/10/79	F1 =	0	F2 = 45174	F3 = 47330	F4 =	0
	13179	5/11/79	F1 =	0	F2 = 49045	F3 = 47400	F4 =	0
	13279	5/12/79	F1 =	0	F2 = 30148	F3 = 48419	F4 =	0
	13379	5/13/79	F1 =	0	F2 = 43293	F3 = 48295	F4 =	0
	13479	5/14/79	F1 =	0	F2 = 53523	F3 = 45794	F4 =	0
	13579	5/15/79	F1 =	0	F2 = 37398	F3 = 46511	F4 =	0
	13679	5/16/79	F1 =	0	F2 = 43809	F3 = 48185	F4 =	0
	13779	5/17/79	F1 =	0	F2 = 48822	F3 = 47658	F4 =	0
	13879	5/18/79	F1 =	0	F2 = 33112	F3 = 28901	F4 =	0
	13979	5/19/79	F1 =	0	F2 = 11142	F3 = 13970	F4 =	0
Z914	14079	5/20/79	F1 =	0	F2 = 48557	F3 = 47436	F4 =	0
	14179	5/21/79	F1 =	0	F2 = 45998	F3 = 47265	F4 =	0
	14279	5/22/79	F1 =	0	F2 = 46262	F3 = 45661	F4 =	0
	14379	5/23/79	F1 =	0	F2 = 41785	F3 = 46642	F4 =	0
	14479	5/24/79	F1 =	0	F2 = 49894	F3 = 47485	F4 =	0
	14579	5/25/79	F1 =	0	F2 = 44417	F3 = 47710	F4 =	0
	14679	5/26/79	F1 =	0	F2 = 37535	F3 = 47633	F4 =	0
	14779	5/27/79	F1 =	0	F2 = 42638	F3 = 47841	F4 =	0
	14879	5/28/79	F1 =	0	F2 = 45740	F3 = 46480	F4 =	0
	14979	5/29/79	F1 =	0	F2 = 35843	F3 = 43936	F4 =	0
Z915	15079	5/30/79	F1 =	0	F2 = 46253	F3 = 44326	F4 =	0

	15179	5/31/79	F1 =	0	F2 = 41481	F3 = 47580	F4 =	0
	15279	6/ 1/79	F1 =	0	F2 = 45887	F3 = 47159	F4 =	0
	15379	6/ 2/79	F1 =	0	F2 = 35922	F3 = 47687	F4 =	0
	15479	6/ 3/79	F1 =	0	F2 = 48427	F3 = 47050	F4 =	0
	15579	6/ 4/79	F1 =	0	F2 = 40367	F3 = 46382	F4 =	0
	15679	6/ 5/79	F1 =	0	F2 = 52355	F3 = 46794	F4 =	0
	15779	6/ 6/79	F1 =	0	F2 = 44767	F3 = 46788	F4 =	0
	15879	6/ 7/79	F1 =	0	F2 = 44239	F3 = 46410	F4 =	0
	15979	6/ 8/79	F1 =	0	F2 = 47059	F3 = 37955	F4 =	0
Z916	16079	6/ 9/79	F1 =	0	F2 = 37417	F3 = 38385	F4 =	0
	16179	6/10/79	F1 =	0	F2 = 29247	F3 = 46597	F4 =	0
	16279	6/11/79	F1 =	0	F2 = 36289	F3 = 29971	F4 =	0
	16379	6/12/79	F1 =	0	F2 = 33212	F3 = 34526	F4 =	0
	16479	6/13/79	F1 =	0	F2 = 38833	F3 = 47210	F4 =	0
	16579	6/14/79	F1 =	0	F2 = 33471	F3 = 47688	F4 =	0
	16679	6/15/79	F1 =	0	F2 = 40175	F3 = 47294	F4 =	0
	16779	6/16/79	F1 =	0	F2 = 37717	F3 = 34278	F4 =	0
	16879	6/17/79	F1 =	0	F2 = 43355	F3 = 46283	F4 =	18638
	16979	6/18/79	F1 =	0	F2 = 40106	F3 = 40283	F4 =	59874
Z917	17079	6/19/79	F1 =	0	F2 = 49698	F3 = 47231	F4 =	58975
	17179	6/20/79	F1 =	0	F2 = 28281	F3 = 34888	F4 =	39974
	17279	6/21/79	F1 =	0	F2 = 41559	F3 = 41406	F4 =	40247
	17379	6/22/79	F1 =	0	F2 = 40835	F3 = 40107	F4 =	59445
	17479	6/23/79	F1 =	0	F2 = 46683	F3 = 47144	F4 =	58963
	17579	6/24/79	F1 =	0	F2 = 51720	F3 = 43425	F4 =	59231
	17679	6/25/79	F1 =	0	F2 = 32675	F3 = 47407	F4 =	56342
	17779	6/26/79	F1 =	0	F2 = 50310	F3 = 46853	F4 =	35745
	17879	6/27/79	F1 =	0	F2 = 25692	F3 = 47027	F4 =	43053
	17979	6/28/79	F1 =	0	F2 = 51046	F3 = 42692	F4 =	55184
Z918	18079	6/29/79	F1 =	0	F2 = 47138	F3 = 46108	F4 =	43057
	18179	6/30/79	F1 =	0	F2 = 45815	F3 = 47071	F4 =	33437
	18279	7/ 1/79	F1 =	0	F2 = 34189	F3 = 27847	F4 =	24666
	18379	7/ 2/79	F1 =	0	F2 = 17571	F3 = 16497	F4 =	17906
	18479	7/ 3/79	F1 =	0	F2 = 39305	F3 = 40994	F4 =	46234
	18579	7/ 4/79	F1 =	0	F2 = 30488	F3 = 42872	F4 =	59907
	18679	7/ 5/79	F1 =	0	F2 = 49540	F3 = 45758	F4 =	60152
	18779	7/ 6/79	F1 =	0	F2 = 41573	F3 = 47104	F4 =	55877
	18879	7/ 7/79	F1 =	0	F2 = 30450	F3 = 30333	F4 =	19562
	18979	7/ 8/79	F1 =	0	F2 = 16483	F3 = 18924	F4 =	6542
Z919	19079	7/ 9/79	F1 =	0	F2 = 46432	F3 = 31879	F4 =	54325
	19179	7/10/79	F1 =	0	F2 = 55105	F3 = 51597	F4 =	66998
	19279	7/11/79	F1 =	0	F2 = 46718	F3 = 41827	F4 =	47929
	19379	7/12/79	F1 =	0	F2 = 42952	F3 = 47217	F4 =	76274
	19479	7/13/79	F1 =	0	F2 = 38448	F3 = 35772	F4 =	47736
	19579	7/14/79	F1 =	0	F2 = 42280	F3 = 43029	F4 =	66230
	19679	7/15/79	F1 =	0	F2 = 47989	F3 = 47837	F4 =	59373
	19779	7/16/79	F1 =	0	F2 = 24771	F3 = 42633	F4 =	60834
	19879	7/17/79	F1 =	0	F2 = 31305	F3 = 48283	F4 =	55387
	19979	7/18/79	F1 =	0	F2 = 34228	F3 = 43293	F4 =	61052

Z920	20079	7/19/79	F1 =	0	F2 = 33548	F3 = 40378	F4 = 50798
	20179	7/20/79	F1 =	0	F2 = 35530	F3 = 48443	F4 = 57184
	20279	7/21/79	F1 =	0	F2 = 32461	F3 = 34059	F4 = 60251
	20379	7/22/79	F1 =	0	F2 = 41965	F3 = 40568	F4 = 56230
	20479	7/23/79	F1 =	0	F2 = 30800	F3 = 32517	F4 = 54453
	20579	7/24/79	F1 =	0	F2 = 25269	F3 = 45641	F4 = 37260
	20679	7/25/79	F1 =	0	F2 = 32461	F3 = 42548	F4 = 50808
	20779	7/26/79	F1 =	0	F2 = 22983	F3 = 36854	F4 = 50376
	20879	7/27/79	F1 =	0	F2 = 25768	F3 = 37980	F4 = 39332
	20979	7/28/79	F1 =	0	F2 = 28232	F3 = 45827	F4 = 60332
Z921	21079	7/29/79	F1 =	0	F2 = 23548	F3 = 49669	F4 = 60953
	21179	7/30/79	F1 =	0	F2 = 20756	F3 = 49447	F4 = 54467
	21279	7/31/79	F1 =	0	F2 = 20713	F3 = 44975	F4 = 61227
	21379	8/ 1/79	F1 =	0	F2 = 17165	F3 = 43811	F4 = 62307
	21479	8/ 2/79	F1 =	0	F2 = 23149	F3 = 46152	F4 = 52073
	21579	8/ 3/79	F1 =	0	F2 = 53179	F3 = 58368	F4 = 68846
	21679	8/ 4/79	F1 =	0	F2 = 41477	F3 = 49547	F4 = 59840
	21779	8/ 5/79	F1 =	0	F2 = 27597	F3 = 47714	F4 = 62282
	21879	8/ 6/79	F1 =	0	F2 = 48611	F3 = 48930	F4 = 57883
	21979	8/ 7/79	F1 =	0	F2 = 38060	F3 = 48712	F4 = 58671
Z922	22079	8/ 8/79	F1 =	0	F2 = 45272	F3 = 49236	F4 = 59407
	22179	8/ 9/79	F1 =	0	F2 = 38545	F3 = 48621	F4 = 56079
	22279	8/10/79	F1 =	0	F2 = 45128	F3 = 47978	F4 = 56021
	22379	8/11/79	F1 =	0	F2 = 48023	F3 = 49675	F4 = 61052
	22479	8/12/79	F1 =	0	F2 = 51659	F3 = 49791	F4 = 62052
	22579	8/13/79	F1 =	0	F2 = 36443	F3 = 36127	F4 = 42583
	22679	8/14/79	F1 =	0	F2 = 13068	F3 = 14228	F4 = 18834
	22779	8/15/79	F1 =	0	F2 = 46875	F3 = 49805	F4 = 61110
	22879	8/16/79	F1 =	0	F2 = 47252	F3 = 48583	F4 = 61433
	22979	8/17/79	F1 =	0	F2 = 48304	F3 = 48989	F4 = 62326
Z923	23079	8/18/79	F1 =	0	F2 = 47571	F3 = 48857	F4 = 60575
	23179	8/19/79	F1 =	0	F2 = 26283	F3 = 32098	F4 = 50680
	23279	8/20/79	F1 =	0	F2 = 50552	F3 = 54502	F4 = 61868
	23379	8/21/79	F1 =	0	F2 = 2626	F3 = 25616	F4 = 30543
	23479	8/22/79	F1 =	0	F2 = 38648	F3 = 41355	F4 = 61153
	23579	8/23/79	F1 =	0	F2 = 48966	F3 = 49573	F4 = 52270
	23679	8/24/79	F1 =	0	F2 = 39902	F3 = 49982	F4 = 60982
	23779	8/25/79	F1 =	0	F2 = 51669	F3 = 48784	F4 = 60406
	23879	8/26/79	F1 =	0	F2 = 35982	F3 = 37584	F4 = 48039
	23979	8/27/79	F1 =	0	F2 = 13120	F3 = 12618	F4 = 16652
Z924	24079	8/28/79	F1 =	0	F2 = 36104	F3 = 39072	F4 = 58005
	24179	8/29/79	F1 =	0	F2 = 36893	F3 = 35820	F4 = 38099
	24279	8/30/79	F1 =	0	F2 = 12534	F3 = 11366	F4 = 9922
	24379	8/31/79	F1 =	0	F2 = 47360	F3 = 46792	F4 = 61379
	24479	9/ 1/79	F1 =	0	F2 = 47147	F3 = 48543	F4 = 80783
	24579	9/ 2/79	F1 =	0	F2 = 50846	F3 = 48593	F4 = 61372
	24679	9/ 3/79	F1 =	0	F2 = 37496	F3 = 46022	F4 = 59966
	24779	9/ 4/79	F1 =	0	F2 = 36812	F3 = 45967	F4 = 61088
	24879	9/ 5/79	F1 =	0	F2 = 33777	F3 = 48002	F4 = 56665

	24379	9/ 6/79	F1 =	0	F2 = 33328	F3 = 46653	F4 = 61350
Z925	25079	9/ 7/79	F1 =	0	F2 = 32804	F3 = 35068	F4 = 44827
	25179	9/ 8/79	F1 =	0	F2 = 15744	F3 = 14278	F4 = 17500
	25279	9/ 9/79	F1 =	0	F2 = 38245	F3 = 43860	F4 = 60520
	25379	9/10/79	F1 =	0	F2 = 32731	F3 = 49478	F4 = 59508
	25479	9/11/79	F1 =	0	F2 = 33502	F3 = 46047	F4 = 54023
	25579	9/12/79	F1 =	0	F2 = 32838	F3 = 43476	F4 = 57887
	25679	9/13/79	F1 =	0	F2 = 35598	F3 = 47451	F4 = 62397
	25779	9/14/79	F1 =	0	F2 = 37285	F3 = 49392	F4 = 60026
	25879	9/15/79	F1 =	0	F2 = 52053	F3 = 48785	F4 = 59954
	25979	9/16/79	F1 =	0	F2 = 39277	F3 = 48454	F4 = 61928
Z926	26079	9/17/79	F1 =	0	F2 = 33336	F3 = 45458	F4 = 58757
	26179	9/18/79	F1 =	0	F2 = 47499	F3 = 49386	F4 = 62114
	26279	9/19/79	F1 =	0	F2 = 35805	F3 = 43861	F4 = 58414
	26379	9/20/79	F1 =	0	F2 = 48002	F3 = 39712	F4 = 62374
	26479	9/21/79	F1 =	0	F2 = 47240	F3 = 40003	F4 = 47616
	26579	9/22/79	F1 =	0	F2 = 47482	F3 = 42547	F4 = 60718
	26679	9/23/79	F1 =	0	F2 = 47582	F3 = 46631	F4 = 61183
	26779	9/24/79	F1 =	0	F2 = 35843	F3 = 44598	F4 = 56159
	26879	9/25/79	F1 =	0	F2 = 39096	F3 = 47188	F4 = 54733
	26979	9/26/79	F1 =	0	F2 = 47297	F3 = 47878	F4 = 50456
Z927	27079	9/27/79	F1 =	0	F2 = 46651	F3 = 47432	F4 = 51377
	27179	9/28/79	F1 =	0	F2 = 13599	F3 = 44815	F4 = 54447
	27279	9/29/79	F1 =	0	F2 =	F3 = 44600	F4 = 60001
	27379	9/30/79	F1 =	0	F2 = 14985	F3 = 45637	F4 = 60008
	27479	10/ 1/79	F1 =	0	F2 = 48582	F3 = 40009	F4 = 59869
	27579	10/ 2/79	F1 =	0	F2 = 36480	F3 = 45383	F4 = 58818
	27679	10/ 3/79	F1 =	0	F2 = 46837	F3 = 39972	F4 = 57443
	27779	10/ 4/79	F1 =	0	F2 = 51898	F3 = 45027	F4 = 61114
	27879	10/ 5/79	F1 =	0	F2 = 47402	F3 = 39373	F4 = 59215
	27979	10/ 6/79	F1 =	0	F2 = 47087	F3 = 42836	F4 = 59684
Z928	28079	10/ 7/79	F1 =	0	F2 = 47888	F3 = 45360	F4 = 55193
	28179	10/ 8/79	F1 =	0	F2 = 47087	F3 = 46564	F4 = 59355
	28279	10/ 9/79	F1 =	0	F2 = 47406	F3 = 46855	F4 = 61720
	28379	10/10/79	F1 =	0	F2 = 36323	F3 = 46077	F4 = 59357
	28479	10/11/79	F1 =	0	F2 = 37426	F3 = 46140	F4 = 60832
	28579	10/12/79	F1 =	0	F2 = 42335	F3 = 43809	F4 = 60566
	28679	10/13/79	F1 =	0	F2 = 53523	F3 = 44540	F4 = 55209
	28779	10/14/79	F1 =	0	F2 = 50210	F3 = 41385	F4 = 65479
	28879	10/15/79	F1 =	0	F2 = 49203	F3 = 41128	F4 = 52082
	28979	10/16/79	F1 =	0	F2 = 51971	F3 = 40479	F4 = 50753
Z929	29079	10/17/79	F1 =	0	F2 = 48510	F3 = 44420	F4 = 56388
	29179	10/18/79	F1 =	0	F2 = 37378	F3 = 43902	F4 = 60892
	29279	10/19/79	F1 =	0	F2 = 31268	F3 = 44300	F4 = 58754
	29379	10/20/79	F1 =	0	F2 = 47512	F3 = 41602	F4 = 47351
	29479	10/21/79	F1 =	0	F2 = 35481	F3 = 44124	F4 = 52514
	29579	10/22/79	F1 =	0	F2 = 42822	F3 = 51577	F4 = 57329
	29679	10/23/79	F1 =	0	F2 = 39581	F3 = 45247	F4 = 60577

	29779	10/24/79	F1 =	0	F2 = 21954	F3 = 44834	F4 = 62263
	29879	10/25/79	F1 =	0	F2 = 32408	F3 = 45379	F4 = 61866
	29979	10/26/79	F1 =	0	F2 = 35115	F3 = 45229	F4 = 50140
Z930	30079	10/27/79	F1 =	0	F2 = 35052	F3 = 46788	F4 = 63759
	30179	10/28/79	F1 =	0	F2 = 31024	F3 = 46316	F4 = 61123
	30279	10/29/79	F1 =	0	F2 = 24035	F3 = 45623	F4 = 57355
	30379	10/30/79	F1 =	0	F2 = 36033	F3 = 48051	F4 = 58495
	30479	10/31/79	F1 =	0	F2 = 45999	F3 = 45888	F4 = 58035
	30579	11/ 1/79	F1 =	0	F2 = 39925	F3 = 45593	F4 = 59802
	30679	11/ 2/79	F1 =	0	F2 = 19629	F3 = 41783	F4 = 59500
	30779	11/ 3/79	F1 =	0	F2 = 28996	F3 = 40666	F4 = 51910
	30879	11/ 4/79	F1 =	0	F2 = 49502	F3 = 46351	F4 = 53770
	30979	11/ 5/79	F1 =	0	F2 = 36059	F3 = 47119	F4 = 59108
Z931	31079	11/ 6/79	F1 =	0	F2 = 49770	F3 = 44785	F4 = 58529
	31179	11/ 7/79	F1 =	0	F2 = 45501	F3 = 46798	F4 = 56027
	31279	11/ 8/79	F1 =	0	F2 = 31253	F3 = 46712	F4 = 41664
	31379	11/ 9/79	F1 =	0	F2 = 0	F3 = 11313	F4 = 16245
	31479	11/10/79	F1 =	0	F2 = 64022	F3 = 65046	F4 = 88308
	31579	11/11/79	F1 =	0	F2 = 13856	F3 = 12817	F4 = 16769
	31679	11/12/79	F1 =	0	F2 = 39199	F3 = 47425	F4 = 60883
	31779	11/13/79	F1 =	0	F2 = 35962	F3 = 44216	F4 = 59556
	31879	11/14/79	F1 =	0	F2 = 27261	F3 = 46614	F4 = 61122
	31979	11/15/79	F1 =	0	F2 = 37810	F3 = 45790	F4 = 57297
Z932	32079	11/16/79	F1 =	0	F2 = 50118	F3 = 47388	F4 = 54901
	32179	11/17/79	F1 =	0	F2 = 39319	F3 = 30691	F4 = 41511
	32279	11/18/79	F1 =	0	F2 = 14819	F3 = 14373	F4 = 19518
	32379	11/19/79	F1 =	0	F2 = 49598	F3 = 43864	F4 = 56391
	32479	11/20/79	F1 =	0	F2 = 33259	F3 = 43910	F4 = 56395
	32579	11/21/79	F1 =	0	F2 = 44186	F3 = 45258	F4 = 57448
	32679	11/22/79	F1 =	0	F2 = 49520	F3 = 48106	F4 = 59443
	32779	11/23/79	F1 =	0	F2 = 49466	F3 = 45070	F4 = 59087
	32879	11/24/79	F1 =	0	F2 = 29301	F3 = 44339	F4 = 60173
	32979	11/25/79	F1 =	0	F2 = 32449	F3 = 47756	F4 = 60035
Z933	33079	11/26/79	F1 =	0	F2 = 41005	F3 = 47963	F4 = 60914
	33179	11/27/79	F1 =	0	F2 = 25571	F3 = 30754	F4 = 42635
	33279	11/28/79	F1 =	0	F2 = 14213	F3 = 14450	F4 = 18582
	33379	11/29/79	F1 =	0	F2 = 40276	F3 = 44548	F4 = 61547
	33479	11/30/79	F1 =	0	F2 = 46745	F3 = 48948	F4 = 48002
	33579	12/ 1/79	F1 =	0	F2 = 43006	F3 = 45690	F4 = 61000
	33679	12/ 2/79	F1 =	0	F2 = 44507	F3 = 47723	F4 = 60369
	33779	12/ 3/79	F1 =	0	F2 = 38930	F3 = 40026	F4 = 62287
	33879	12/ 4/79	F1 =	0	F2 = 51185	F3 = 43057	F4 = 56318
	33979	12/ 5/79	F1 =	0	F2 = 47821	F3 = 42089	F4 = 57093
Z934	34079	12/ 6/79	F1 =	0	F2 = 46131	F3 = 35704	F4 = 62262
	34179	12/ 7/79	F1 =	0	F2 = 37329	F3 = 35828	F4 = 59091
	34279	12/ 8/79	F1 =	0	F2 = 42180	F3 = 41702	F4 = 52291
	34379	12/ 9/79	F1 =	0	F2 = 38098	F3 = 41306	F4 = 62323
	34479	12/10/79	F1 =	0	F2 = 43162	F3 = 44285	F4 = 58510

C-21

	34579	12/11/79	F1 =	0	F2 = 45677	F3 = 42950	F4 = 61605
	34679	12/12/79	F1 =	0	F2 = 41850	F3 = 41724	F4 = 59452
	34779	12/13/79	F1 =	0	F2 = 36705	F3 = 27127	F4 = 41520
	34879	12/14/79	F1 =	0	F2 = 13679	F3 = 11891	F4 = 18642
	34979	12/15/79	F1 =	0	F2 = 46262	F3 = 44523	F4 = 61086
Z935	35079	12/16/79	F1 =	0	F2 = 49583	F3 = 47663	F4 = 76657
	35179	12/17/79	F1 =	0	F2 = 44861	F3 = 43080	F4 = 60800
	35279	12/18/79	F1 =	0	F2 = 21505	F3 = 32470	F4 = 42954
	35379	12/19/79	F1 =	0	F2 = 13183	F3 = 11950	F4 = 18598
	35479	12/20/79	F1 =	0	F2 = 38146	F3 = 47604	F4 = 58044
	35579	12/21/79	F1 =	0	F2 = 42660	F3 = 35749	F4 = 56832
	35679	12/22/79	F1 =	0	F2 = 44325	F3 = 47080	F4 = 61469
	35779	12/23/79	F1 =	0	F2 = 33603	F3 = 46302	F4 = 63263
	35879	12/24/79	F1 =	0	F2 = 47433	F3 = 47865	F4 = 55751
	35979	12/25/79	F1 =	0	F2 = 40868	F3 = 48346	F4 = 56703
Z936	36079	12/26/79	F1 =	0	F2 = 38486	F3 = 48037	F4 = 58114
	36179	12/27/79	F1 =	0	F2 = 21378	F3 = 27178	F4 = 52919
	36279	12/28/79	F1 =	0	F2 = 40933	F3 = 44161	F4 = 59395
	36379	12/29/79	F1 =	0	F2 = 43200	F3 = 48145	F4 = 11314
	36479	12/30/79	F1 =	0	F2 = 46011	F3 = 44548	F4 = 0
	36579	12/31/79	F1 =	0	F2 = 50295	F3 = 48098	F4 = 0
Z000	00180	1/ 1/80	F1 =	0	F2 = 52040	F3 = 43687	F4 = 0
	00280	1/ 2/80	F1 =	0	F2 = 55018	F3 = 36768	F4 = 0
	00380	1/ 3/80	F1 =	0	F2 = 74675	F3 = 47210	F4 = 0
	00480	1/ 4/80	F1 =	0	F2 = 12994	F3 = 0	F4 = 0
	00580	1/ 5/80	F1 =	0	F2 = 51658	F3 = 0	F4 = 0
	00680	1/ 6/80	F1 =	0	F2 = 49184	F3 = 0	F4 = 0
	00780	1/ 7/80	F1 =	0	F2 = 54952	F3 = 0	F4 = 0
	00880	1/ 8/80	F1 =	0	F2 = 51984	F3 = 0	F4 = 0
	00980	1/ 9/80	F1 =	0	F2 = 50395	F3 = 0	F4 = 0
Z001	01080	1/10/80	F1 =	0	F2 = 47010	F3 = 0	F4 = 0
	01180	1/11/80	F1 =	0	F2 = 49087	F3 = 0	F4 = 0
	01280	1/12/80	F1 =	0	F2 = 48946	F3 = 0	F4 = 0
	01380	1/13/80	F1 =	0	F2 = 50158	F3 = 0	F4 = 0
	01480	1/14/80	F1 =	0	F2 = 37769	F3 = 0	F4 = 0
	01780	1/17/80	F1 =	0	F2 = 10742	F3 = 0	F4 = 0
	01880	1/18/80	F1 =	0	F2 = 35568	F3 = 0	F4 = 0
Z002	02280	1/22/80	F1 =	0	F2 = 17879	F3 = 0	F4 = 0
	02380	1/23/80	F1 =	0	F2 = 50022	F3 = 0	F4 = 0
	02480	1/24/80	F1 =	0	F2 = 50561	F3 = 0	F4 = 0
	02580	1/25/80	F1 =	0	F2 = 48155	F3 = 0	F4 = 0
	02680	1/26/80	F1 =	0	F2 = 39792	F3 = 0	F4 = 0
	02780	1/27/80	F1 =	0	F2 = 36326	F3 = 0	F4 = 0
	02880	1/28/80	F1 =	0	F2 = 32443	F3 = 0	F4 = 0
	02980	1/29/80	F1 =	0	F2 = 71940	F3 = 0	F4 = 0
Z003	03080	1/30/80	F1 =	0	F2 = 42082	F3 = 0	F4 = 0
	03180	1/31/80	F1 =	0	F2 = 48699	F3 = 0	F4 = 0

C-22

	03280	2/ 1/80	F1 =	0	F2 = 43090	F3 =	0	F4 =	0
	03380	2/ 2/80	F1 =	0	F2 = 32232	F3 =	0	F4 =	0
	03580	2/ 4/80	F1 =	0	F2 =	0	F3 = 3197	F4 =	0
	03680	2/ 5/80	F1 =	0	F2 = 6716	F3 =	6917	F4 =	664
	03780	2/ 6/80	F1 =	0	F2 = 21318	F3 =	0	F4 =	3164
	03880	2/ 7/80	F1 =	0	F2 = 19511	F3 =	0	F4 =	0
	03980	2/ 8/80	F1 =	0	F2 = 2170	F3 =	0	F4 =	0
Z034	04080	2/ 9/80	F1 =	0	F2 = 44485	F3 =	0	F4 =	0
	04180	2/10/80	F1 =	0	F2 = 15262	F3 =	0	F4 =	0
	04280	2/11/80	F1 =	0	F2 = 52859	F3 =	0	F4 =	0
	04380	2/12/80	F1 =	0	F2 = 35944	F3 =	0	F4 =	0
	04480	2/13/80	F1 =	0	F2 = 5501	F3 =	0	F4 =	0
	04580	2/14/80	F1 =	0	F2 = 40891	F3 =	0	F4 =	0
	04680	2/15/80	F1 =	0	F2 = 5598	F3 =	0	F4 =	0
	04780	2/16/80	F1 =	0	F2 = 36587	F3 =	0	F4 =	0