#623

VOYAGER 2

SATURN TITAN DELTA SCORPII ENCOUNTER DATA

77-076A-11B

VOYAGER 2

SATURN, TITAN, DELTA SCORPII ENCOUNTER

77-076A-11B

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED ONE 9-TRACK, 1600 BPI TAPE WRITTEN IN ASCII. THERE IS ONE RESTORED TAPE. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPE WAS CREATED ON A VAX 11/780 COMPUTER AND WAS RESTORED ON THE MRS SYSTEM. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBER AND TIME SPAN IS A FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR005286	DS005286	D060131	9	08/12/81 - 08/25/81

REQ. AGENT	RAND NO.	ACQ. AGENT
DAD	V0227	WSC

VOYAGER 2

SATURN, TITAN, DELTA SCORPII ENCOUNTER DATA

77-076A-11B

This data set consists of 1 tape. The tape contains 9 files. The tape is 9-track, 1600 BPI, written in ASCII and was created on an VAX 11/780 computer. The D and C numbers along with the time span follow:

D#	C#	TIME SPAN
D-60131	C-23639	08/12/81 - 08/25/81

LABORATORY FOR ATMOSPHERIC AND SPACE PHYSICS

VOYAGER 2 PHOTOPOLARIMETER

PROCESSED DATA FOR THE

NATIONAL SPACE SCIENCE DATA CENTER

The Voyager 2 Photopolarimeter (PPS) Saturn encounter data consists of atmospheric measurements for Saturn and Titan and a stellar occultation of Saturn's ring system. A description of the PPS instrumentation is given by Lillie et al. (1977) and the Voyager 2 preliminary Saturn Encounter results are reported in Lane et al. (1982).

The intensity and polarization measurements for Saturn and Titan were obtained using the 2640Å (300Å bandpass) and 7500Å (250Å bandpass) filters, the 135° and 45° analyzers, the 0.11 degree circular aperture (full width at half maximum), a 0.4 second integration period, and low-gain voltage. The PPS data points that correspond to one Voyager Television frame (80 integrations, or 48 seconds) are accumulated into one set of Intensity and Percent Polarization values for each of the two filters; the time resolution of each Intensity and Polarization pair is 11 seconds. Observations made during scan platform slewing are not included.

The Saturn data sets are discussed by West et al. (1983a). This paper presents the Saturn tables provided herein. The Saturn data are divided into three groups: 1) the "East-West Map" , 2) the "North-South" scans, and 3) the "Belt" and "Zone" scans. The "East-West" Map was a raster scan of the 0.11°

PPS field of view across Saturn's northern hemisphere at a phase angle of 10°. Several additional scans are included in this group. These "latitude scans" were limb-to- terminator scans at five latitude bands. Group two, the three "North-South" scans, are along the central meridian. The high resolution limb-to- terminator scans in the "Equitorial Zone" and "North Equitorial Belt" at phase angles up to 68° are in the third group.

The whole disk intensity and polarization observations of Titan cover phase angles from 3° to 154°. West et al. (1982b) discusses the analysis of the Titan data in terms of model scattering atmospheres and presents the tabular Titan data provided here.

The stellar occultation data were obtained using the 2640Å filter, the 45° analyzer, the 1.0° circular aperture, a 0.0075 second integration period, and high-gain voltage. The occultation data presented here have been averaged into bins of 600 integrations. Successive integrations are separated by a radial distance of approximately 100m; 600 point bins are therefore approximately 60 Km wide. The star Delta Scorpii was observed continuously from its emersion from behind Saturn's disk through the shadowed D, C, B, A, and F rings. The discussion of the analysis of this 60 Km ring data is presented by Esposito et al. (1983).

Dr. Arthur L. Lane is the principal investigator for the Photopolarimeter experiment. He is resident at the Jet Propulsion Laboratory, Pasadena, California, 91109. Drs. Charles W. Hord, Larry W. Esposito, and Robert A. West are Co-Investagators and are resident at the University of Colorado, Boulder, Colorado, 80309. Drs. David L. Coffeen and Makiko Sato are also Co-Invesigators and are resident at the Goddard Institute for Space Studies, 2880 Broadway, New York, New York, 10025.

REFERENCES

Esposito, L.W., O'Callaaghan, M., Simmons, K.E., Hord, C.W., West, R.A., Lane, A.L., Pomphrey, R.B., Coffeen, D.L., Sato, M. (1983). Voyager Photopolarimeter Stellar Occultation of Saturn's Rings. JGR, in press.

Lane, A.L, Hord, C.W., West, R.A., Esposito, L.W., Simmons, K.E., Coffeen, D.L., Sato, M., Pomphrey, R.B., Morris, R.B., (1982). Photopolarimetry from Voyager 2 --- preliminary results on Saturn, Titan, and the rings. Science, 215, 537.

Lillie, C.F., Hord, C.W., Pang, K., Coffeen, D.L. and Hansen, J.E. (1977). The Voyager mission photopolarimeter experiment. Space Sci. Rev., 21, 159.

West, R.A., Sato, M., Hart, H., Lane, A.L., Hord, C.W., Simmons, K.E., Esposito, L.W., Coffeen, D.L., Pomphrey, R.B. (1983a). Photometry and Polarimetry of Saturn at 2640 and 7500A. JGR, in press.

West, R.A., Lane, A.L., Hart, H., Simmons, K.E., Hord, C.W., Coffeen, D.L., Esposito, L.W., Sato, M. and Pomphrey, R.B. (1983b). Voyager 2 Photopolarimeter Observations of Titan. JGR, in press.

LABORATORY FOR ATMOSPHERIC AND SPACE PHYSICS

VOYAGER 2 PHOTOPOLARIMETER

PROCESSED DATA FOR THE

NATIONAL SPACE SCIENCE DATA CENTER

APPENDIX

The enclosed tape has the following tape characteristics.

1) 9-track, 1600 bpi. Written on a Digital TU77 drive.

2) ANSI STANDARD tape headers and End-of-File (EOF) structure (7-bit ASCII characters) as per VAX 11/780 system software.
There is one Volume Header, one File Header, two Record Headers, one EOF, the
data record, and two EOFs for each of the three data files on this tape.

3) Physical data blocks are 2048 bytes long; data files are 7-bit ASCII records containing a four byte 'control' word followed by the ASCII bytes. The control word consists of two bytes of End-of-Text characters (hexadecimal=0) followed by a two byte logical record length value. The length refers to the

total number of bytes and includes the 4-byte control word. Logical records are blocked into physical records and a hexadecimal value of 5E is used as fill from the end of the last logical record to the end of the physical record.

4) The Vax writes bytes onto a 9-track tape in the following order:

```
  Vax word     0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Vax tape       <---------------> <----------------->
 word written          2nd               1st
```

The resulting tape (up is the tape beginning direction)

```
8 9 10 11 12 13 14 15        Word part 2
0 1  2  3  4  5  6  7        Word part 1
```

4) An annotated dump is attached which shows the contents of the first five physical blocks. The left side of the dump shows the hexadecimal word (read from right to left) and the right side of the dump shows the ASCII equivalent word contents (read from left to right) The last column on the right is the hexadecimal 4-byte word number for the rightmost four bytes in the hexidecimal dump section.

```
$JOB   9:32:39
$ASS IN TUO
$NOP ** LIST OF DOUT1 ** FILES 1 2 5 8 & 9 ***
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS AL

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   80
VOL1NSSDC                          D%C          1                          3

 TAPE NO.   1              FILE NO.   1
 RECORD   2                LENGTH   80
HDR1SATURN.MEM        NSSDC 00010001000106 83178 00000 000000DECFILE11A

 TAPE NO.   1              FILE NO.   1
 RECORD   3                LENGTH   80
HDR2D0204800112                     A              00

 TAPE NO.   1              FILE NO.   1
 RECORD   4                LENGTH   80
HDR3006C0102000000000001000000000000000000000000000000000000000000000000

***** JOB DONE.
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS FL=1=1

 TAPE NO.   1 File 2       FILE NO.   1
 RECORD   1                LENGTH   2048
0071                                   VOYAGER 2 PHOTOPOLARIMETER0005 0069
                        OBSERVATIONS OF SATURN0005 0103
                                                    0005 0098
                                2640A                   7500A0101    Lat.  Lon.    a     CHI        Mu
    Muo     dPhi          f     I/F    P(%)                I/F    P(%)0070                East-West Map:
 Equatorial Zone (0 to 15  Lat.)0101    3.3    76.2  10.8  17.7      0.412  0.566  175.8        1.128
  0.312  -5.8            0.467   1.70101    6.1    73.4  10.7  17.7      0.470  0.616  175.3        1.05
1  0.300  -5.0            0.483   1.40101    5.1    78.0  10.7  17.7      0.403  0.556  175.6        1.
218  0.348  -8.1           0.490  -0.10101   13.1    70.7  10.7  17.7      0.537  0.667  173.5
1.030  0.337  -3.6           0.484   1.50101    2.8    71.5  10.7  17.7      0.599  0.732  175.9
   1.010  0.290  -4.0           0.581   1.80101    5.8    70.8  10.6  17.7      0.623  0.750  175.2
     1.008  0.299  -3.6           0.591   1.40101    6.7    70.6  10.7  17.7      0.634  0.759  174.9
       1.009  0.304  -3.6           0.596   1.10101   13.8    65.5  10.6  17.7      0.715  0.816  171.
4       0.984  0.336  -2.3           0.545   0.20101   10.5    64.2  10.6  17.7      0.801  0.890  17
1.6       0.996  0.301  -0.1           0.629   0.10101   10.1    62.7  10.5  17.7      0.821  0.905
171.4       0.996  0.293  -4.8           0.629  -0.10101    8.7    64.2  10.5  17.7      0.808  0.897
  172.8       1.002  0.296  -2.8           0.658  -0.10101   13.5    60.5  10.5  17.7      0.853  0.9
23  167.3       0.971  0.335   2.6           0.578   0.30101   13.5    58.4  10.4  17.7      0.923  0
.969  159.9       0.966  0.295   0.1           0.631   0.50101    8.5    55.6  10.5  17.8      0.974
 0.999  180.0       1.000  0.301   1.4           0.665   0.90101   13.0    54.0  10.3  17.8      0.98
5  0.996  101.0       0.961  0.314   1.2           0.609   0.0^^^^^^

 TAPE NO.   1              FILE NO.   1
 RECORD   11               LENGTH   2048
0110
          0100 The first four columns give the planetodetic latitude and the System III longitude
 by Desch and0109 Kaiser (1981), the phase angle a, and the rotation angle CHI between the normal to
  the scattering plane,0111 and the polarization axis of the analyzer 7.  In the next three columns
 are Mu, the cosine of the emission0098 angle, Muo the cosine of the incidence angle, and dPhi, the
 azimuthal angle in the scattering0112 plane.  The remaining columns give f, the blur correction fac
 tor for 2640A data, and I/F and P for the two 0013 filters.^^^^^^
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***** JOB DONE.
$AVF IN 4
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS FL=1=1

 TAPE NC.   1                 FILE NO.   1
 RECORD   1                   LENGTH   2048
0074                                             VOYAGER 2 PHOTOPOLARIMETER0077
                        WHOLE DISK OBSERVATIONS OF TITAN0124_____________________________________
______________________________________________________________________________C005 0066
____________________________________2640 FILTER0124______________________________________________
______________________________________________________________________0116     SCET       dT
 a                                                 D                  P            NOTES0105  (D
OY:H:M)  (MIN)  (DEGREES)     <DN6>    +-      <DN7>   +-       B  (10^6Km) CHI   A       (%)      +-01
06   224:14:46   18    3.8             6.7   0.1       6.7  0.1     0.9  12.90    9.1  0.045     -1.9
  1.00106    226:10:41    20     2.8            6.8    0.1      6.9  0.1      0.4  12.00-108.8  0.043
 1.5     1.20106   227:12:41    20     2.7             8.7    0.1      8.8  0.1      0.8  11.40  -1.0  0.
048     -0.9      C.80115   228:12:08    10      3.5           529.9    1.0      559.2  1.2    120.0  10.80 -1
0.2  0.056     2.6      0.2     J-OFF0114    228:12:00     8    3.5          10.7    0.1      11.3  0.2
   2.4  10.80 -10.2  0.046     3.0      1.7     J-ON0106    229:11:20     20     5.4            20.0   0.1
    20.5   0.5     12.1   10.00   -3.6   0.038      3.3     3.40106    230:10:34     6     8.C             40.9
   0.3      43.8   0.6     30.7    9.17  10.5   0.046     16.1      3.10125    231:13:52    8    12.0
  17.1    0.2     17.3   0.2      3.6   7.93   23.0  0.040     -0.8      1.6    BEFORE FILTER 00124     23
1:14:10     20    12.0              21.3   0.3       20.4   0.3       3.6   7.93  23.0  0.050     -5.9      1.8
  AFTER FILTER 00106    232:13:30    18    16.2          21.4    0.1      22.2  0.2      0.3   6.73  29.2
  0.045      0.9      0.90106    233:10:17    20     20.3          31.8    0.1     33.1   0.2     0.0    5.5
8  32.1   0.047      1.2      0.90106    233:12:49    20    20.8           31.3    0.2      33.0   0.2     0.
0   5.43   33.1   0.044       3.1      1.1^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

 TAPE NO.   1                 FILE NC.   1
 RECORD   1                   LENGTH   2048
0106   237:01:10     9      78         23211.6   16.7   26025.1   6.5     40.0     0.82   38.8   0.120     45.6
   0.20120    237:01:20    10     78           35.9    0.0        41.0   0.0      0.0    0.82   38.8   0.000
  51.1      0.0    BACKGROUND0106    237:04:14    20      87         23541.0   12.5   27166.0   4.8       0.0
  0.74   39.0   0.102      50.8      0.20106    237:06:35    20      99        26436.0   12.9   29754.0   5.2
   0.0     0.69   39.0   0.096      48.2       0.20106    237:10:05    20     117        25243.2   10.4   28447.6
  4.2      0.0    0.67   38.4   0.086      44.3      0.10106    237:15:28    20     140         19651.0    9.1
21140.6   4.4      0.0     0.75   35.8   0.082      22.4      0.10106    237:19:55    10     154           16793.0
 11.9  17475.0   4.8       0.0     0.91   31.4   0.102     10.7      0.10125____________________________
____________________________________________________________________________________________0005 0082
The Spacecraft Event Time (SCET) of the beginning of the observation is givenC085 as Day-Of-Year (D
OY), hour and minutes.  The duration of the observation is dT. 0080 The parameter a is the phase an
gle.  The average count rates per 0.4 second0077 integration in analyzers 6 and 7 are, respectively
 <DN6> and <DN7>.  The0052 uncertainty in these quantities is computed by 0069                    SI
G=(1/N)(SQRT(SUM of i=1 tc n(DNi-<DN>)**2)).0079 The background count is given in the column under
B.  The Titan-spacecraft0083 distanace D is expressed in 10 to the 6 Km.  The angle CHI is describe
d in the0084 referred text.  The parameter A is the derived geometric albedo times the phase0044 la
w, and P is the derived polarization.^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
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```

F 5

File 5

File 5

Day 4 hour minute

Time Span is found here first and last records.
August 12, 1981 –
August 25, 1981

```
$JOB    9:35:00
$ASS IN TUO
$REW IN
$NOP LIST OF FILES 8 AND 9 ***
$AVF IN 7
$EXE TPLIST ES

INPUT PARAMETERS ARE:  AS FL=1=1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   2048
000510005 0076   DISTANCE    COUNT    OPTICAL          DISTANCE    COUNT    OPTICAL0075     (KM
)        RATE     DEPTH                (KM)       RATE      DEPTH0076
                                        0074     74611.     40.0      0.00             74676.
 37.8     0.010074     74742.      38.3      0.01            74808.      38.5     0.010074      7
4873.     37.0     0.03           74939.     36.4      0.030074     75005.     36.3     0.04
             75070.     38.5      0.010074     75136.     37.8     0.01            75202.
38.2    0.010074     75267.      38.1      0.01            75333.     38.3     0.010074     75
399.    38.1     0.01           75464.     38.1      0.010074     75530.     38.0     0.01
            75596.     38.3      0.010074     75661.     38.4     0.01            75727.      3
8.9    0.000074     75793.      38.7      0.00            75858.     36.6     0.030074     759
24.    34.6     0.06           75990.     34.2      0.060074     76055.     34.0     0.07
           76121.     32.4      0.090074     76187.     30.8     0.11            76252.     31
.0    0.110074     76318.      35.3      0.05            76384.     34.9     0.050074     7645
0.    35.8     0.04           76515.     37.4      0.020074     76581.     37.8     0.02
          76647.     37.8      0.020074     76712.     37.4     0.02            76778.     36.
8    0.030074     76844.      36.5      0.03            76909.     36.1     0.040074     76975
.    36.1     0.04           77041.     30.1      0.120074     77106.     29.8     0.13
          77172.     31.4      0.100074     77238.     35.2     0.05            77303.     34.7
   0.060074     77369.      30.8      0.11            77435.     35.5     0.040074     77500.
   34.8     0.05           77566.     35.2      0.050074     77632.     37.9     0.01
          77697.     37.7      0.02^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

 TAPE NO.   1              FILE NO.   1
 RECORD   21               LENGTH   2048
0074    140622.     39.2     0.00             140675.     39.0     0.000074     140728.     38.6
     0.00              140781.     39.0     0.000074     140835.     39.2     0.00             1
40888.     38.8     0.000074     140941.     39.0     0.00             140994.     38.9     0.000
074     141047.     39.0     0.00             141100.     38.6     0.000074     141153.     38.9
     0.00              141206.     39.1     0.000074     141259.     38.7     0.00             14
1312.     38.8     0.000074     141365.     38.4     0.01             141418.     39.2     0.0000
74     141470.     38.7     0.00             141523.     38.6     0.000074     141576.     38.9
     0.00              141629.     39.0     0.000074     141682.     39.0     0.00             141
734.     38.2     0.010074     141787.     39.0     0.00             141840.     38.5     0.01007
4     141892.     38.7     0.00             141945.     39.2     0.000074     141997.     38.8
     0.00              142050.     39.0     0.000074     142102.     38.9     0.00             1421
55.     39.0     0.000074     142207.     39.0     0.00             142260.     39.0     0.000074
     142312.     38.7     0.00             142365.     38.9     0.000074     142417.     39.2
  0.00              142469.     38.4     0.01^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
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***** JOB DONE.
$AVF IN 8
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS AL

 TAPE NO.   1              FILE NO.   1
```

File 8

Dump of device MT1: on 12-AUG-1980 16:36:14.09

Block number 5 (00000005), 2048 (0800) bytes

```
                                                                  ←  Word 2   4-byte Word 1
20202020 20202020 20202020 20202020 20202020 20202020 20202020 31373030 0071                                    000000
41404F50 4F544F48 50203220 52454741 594F5620 20202020 20202020                 VOYAGER 2 PHOTOPOLA 000020
20202020 20202020 20202020 20202020 39363030 20353030 30524554 45404952 RIMETER0005 0069                        000040
5245534E 4F202020 20202020 20202020 20202020 20202020 20202020 20202020                         OBSER 000060
5F5F5F5F 5F5F3330 31302035 30303044 50555441 5300464F 20534E4F 49544156 VATIONS OF SATURN0005 0103______ 000080
5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F ________________________________ 000040
5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F ________________________________ 000080
30303050 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F 5F5F5F5F ________________________________ 000000
20202020 20202020 20202020 20202020 20202020 20202020 20203839 30302035 ______________________________000 0000E0
20202020 20202020 20202020 20202020 20202020 20202020 20202020 20202020 5 0098                                 000100
                                                                                                            000120
37202020 20202020 20202020 20202020 20202020 20204130 34363220 20202020      2640A                        7 000140
43202020 20612020 20202E6E 6F403020 2E746140 20202020 31303130 41303035 500A0101    Lat.  Lon.    s     C 000160
20202020 20206965 50642020 20206F75 40203020 20754020 20202020 20204948 HI        Mu    Muo    dPhi        000180
49202020 20202020 20202020 20292528 50202020 20462F49 20202020 20662020   +      I/F    P(%)             I 0001A0
20202020 20202020 20202020 20202020 20202030 37303029 25285020 20204628 /F    P(%)0070                     0001C0
20656E6F 54206061 69726F74 61757146 20347061 40207473 65572074 77614520  East-West Map: Equatorial Zone  0001E0
2E363720 20203320 33202020 20313031 30292E74 61402020 3531206F 74203028 (0 to 15  Lat.)0101     3.3    76. 000200
20203636 352E3020 20323134 2E302020 20202037 2E373120 20332E30 31202032 2  10.8  17.7      0.412  0.566   000220
20203320 35202020 30313320 30202039 32312E31 20202020 20202038 2E353731 175.8        1.128  0.312  -5.8   000240
20312E36 20202020 31303130 372E3120 20203736 342E3020 20202020 20202020            0.467   1.70101    6.1  000260
2E302020 30373420 30202020 20203720 37312020 372E3031 20203420 33372020   73.4  10.7  17.7      0.470  0.  000280
20202030 30302E30 20203135 30203120 20202020 20203320 35373120 20363136 616  175.3        1.051  0.300  - 0002A0
20202031 30313034 2E312020 20333834 2E302020 20202020 20202020 20302E35 5.0              0.483   1.40101    000200
30342E30 20202020 20372E37 31202037 2E303120 20302E38 37202020 312E3520  5.1   78.0  10.7  17.7      0.40 0002E0
332E3020 20333132 2E312020 20202020 20362E35 37312020 3635352E 30202033 3  0.556  175.6        1.218  0.3 000300
3130312E 50202020 3039342E 30202020 20202020 20202020 312E3820 20203934 48  -8.1             0.490  -0.101 000320
20202020 372E3731 20207720 30312020 372E3037 20202031 2E333120 20203130 01   13.1   70.7  10.7  17.7      000340
30333020 31202020 20202020 752E3337 31202037 36362E30 20203733 352E3020  0.537  0.667  173.5        1.030 000360
20202034 38342E30 20202020 20202020 20202036 2E332020 20373333 2E302020   0.337  -3.6             0.484    000380
2E373120 20372E30 31202035 2E313720 20203820 32202020 20313031 30352E31 1.50101    2.8   71.5  10.7  17.  0003A0
20202020 20202039 2E353731 20203233 372E3020 20393935 2E302020 20202037 7      0.599  0.732  175.9        0003C0
352E3020 20202020 20202020 2020302E 34202020 3039322E 30202030 31302E31 1.010  0.290  -4.0             0.5 0003E0
362E3031 20203320 30373320 20332E35 20202020 31303130 382E3120 20203138 81   1.80101    5.8   70.8  10.6 000400
20203220 35373120 20303537 2E302020 3332362E 30202020 20203720 37312020   17.7      0.623  0.750  175.2   000420
20202020 20202020 20362E33 20202039 39322E30 20203830 302E3120 20202020       1.008  0.299  -3.6         000440
20362E30 37202020 372E3620 20202021 30313034 2E312020 20313935 2E302020   0.591   1.40101    6.7   70.6  000460
37312020 3935372E 30202034 33362E30 20202020 20372E37 31202037 2E303120  10.7  17.7      0.634  0.759  17 000480
20202020 362E3320 20203430 332E3020 20393030 2E312020 20202020 20392E34 4.6          1.009  0.304  -3.6    0004A0
20202038 2E333120 20203130 31303120 31202020 3639352E 30202020 20202020          0.596   1.10101   13.8    0004C0
313E2E30 20203531 372E3020 20202020 372E3731 20207620 30312020 352E3536 65.5  10.6  17.7      0.715  0.81 0004E0
2E322020 20363333 2E302020 3438392E 30202020 20202020 342E3137 31202036 6  171.4        0.984  0.336  -2. 000500
30312020 20313031 30322E30 20202035 34352E30 20202020 20202020 20202033 3            0.545   0.20101   10 000520
20313036 2E302020 20202037 2E373120 20362E30 31202032 2E343620 20203520 .5   64.2  10.6  17.7      0.801  000540
3130332E 30202036 39392E30 20202020 20202036 2E313731 20203039 382E3020  0.890  171.6        0.996  0.301 000560
31303130 312E3020 20203932 362E3020 20202020 20202020 20203120 30202020   -0.1             0.629   0.10101 000580
30202020 2020372E 37312020 352E3031 20207720 32362020 20312E30 31202020    10.1   62.7  10.5  17.7      0 000540
20203639 392E3020 20202020 20203420 31373120 20353039 2E302020 3132382E .821  0.905  171.4        0.996   000500
2E302020 20393236 2E302020 20202020 20202020 20332E34 20202033 39322E30 0.293  -4.8             0.629  -0. 000500
20372E37 31202036 2E303120 20322E34 36202020 372E3820 20202031 30313031 10101     8.7   64.2  10.5  17.7  000600
2E312020 20202020 20362E32 37312020 3739382E 30202039 30362E30 20202020      0.808  0.897  172.8        1. 000620
3635362E 30202020 20202020 20202020 382E3220 20203639 322E3020 20323030 002  0.296  -2.6             0.658 000640
20203520 30312020 352E3036 20202035 2E333120 20203130 31303120 30202020   -0.10101   13.5   60.5  10.5   000660
20202020 332E3736 31202033 32392E30 20203335 382E3020 20202020 372E3731 17.7      0.853  0.923  167.3    000680
20202020 20202020 20202036 2E332020 20353333 2E302020 31373920 30202020    0.971  0.335   2.6             0006A0
31202034 2E333900 20203520 33312020 20313031 30332E30 20202038 37352E30 0.578   0.30101   13.5   58.4  1 0006C0
2E393531 20203936 392E3020 20333239 2E302020 20202037 2E373120 20342E30 0.4  17.7      0.923  0.969  159. 0006E0
20202020 20303120 30202020 35393220 30202036 36392E30 20202020 20202039 9        0.966  0.295   0.1      000700
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