#253

OGO-5

1 MIN. PARTICLE ACCUMULATIONS
68-014A-09B

OGO 5

1 MIN. CHARGED PART ACCUMS&PHA, TAPE

68-014A-09B

This data set has been restored. There were originally 106 7-track, 800 BPI tapes written in Binary. There are 35 restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 9-track, 6250 BPI. The original tapes were created on a XDS/930 computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

| DR# | DS# | D# | FILES | TIME SPAN | |
|---|---|---|---|---|---|
| DR004611 | DS004611 | D012570 | 1 - 3 | 03/05/68 - 03/12/68 | |
| | | D012571 | 4 - 6 | 03/12/68 - 03/19/68 | (a) |
| | | D012572 | 7 - 11 | 03/20/68 - 04/01/68 | |
| | | D012573 | 12 - 16 | 04/02/68 - 04/15/68 | |
| DR004612 | DS004612 | D012574 | 1 - 5 | 04/15/68 - 04/28/68 | |
| | | D012575 | 6 - 10 | 04/28/68 - 05/11/68 | (b) |
| | | D012576 | 11 - 15 | 05/11/68 - 05/24/68 | (c) |
| DR004613 | DS004613 | D012577 | 1 - 5 | 05/24/68 - 06/05/68 | |
| | | D012578 | 6 - 10 | 06/06/68 - 06/08/68 | |
| | | D012487 | 11 - 15 | 06/09/68 - 09/30/68 | |
| DR004614 | DS004614 | D012579 | 1 - 5 | 06/19/68 - 07/01/68 | |
| | | D012569 | 6 - 10 | 07/04/68 - 07/14/68 | (d) |
| | | D012568 | 11 - 15 | 07/15/68 - 07/27/68 | |
| DR004615 | DS004615 | D012567 | 1 - 5 | 07/28/68 - 08/09/68 | (e) |
| | | D012566 | 6 - 10 | 08/10/68 - 08/22/68 | |
| DR004616 | DS004616 | D012565 | 1 - 5 | 08/23/68 - 09/04/68 | |
| | | D012564 | 6 - 10 | 09/05/68 - 09/17/68 | (f) |
| DR004617 | DS004617 | D012563 | 1 - 5 | 09/18/68 - 09/30/68 | (g) |
| | | D012562 | 6 - 10 | 10/01/68 - 10/14/68 | |
| | | D012488 | 11 - 15 | 10/03/68 - 12/07/68 | |
| DR004618 | DS004618 | D012561 | 1 - 5 | 10/14/68 - 10/27/68 | |
| | | D012560 | 6 - 10 | 10/27/68 - 11/09/68 | |
| | | D012550 | 11 - 15 | 11/09/68 - 11/21/68 | |
| DR004619 | DS004619 | D012551 | 1 - 5 | 11/22/68 - 12/04/68 | |
| | | D012552 | 6 - 10 | 12/05/68 - 12/18/68 | |
| | | D012553 | 11 - 14 | 12/18/68 - 12/28/68 | |
| DR004623 | DS004623 | D012554 | 1 - 5 | 12/31/68 - 01/13/69 | |
| | | D012555 | 6 - 10 | 01/13/69 - 01/26/69 | (h) |
| | | D012556 | 11 - 15 | 01/26/69 - 02/07/69 | |
| DR004624 | DS004624 | D012557 | 1 - 5 | 02/08/69 - 02/20/69 | |
| | | D012558 | 6 - 10 | 02/21/69 - 03/06/69 | |
| | | D012489 | 11 - 15 | 02/24/69 - 04/14/69 | |

| DR# | DS# | D# | FILES | TIME SPAN | |
|---|---|---|---|---|---|
| DR004625 | DS004625 | D012559 | 1 - 5 | 03/06/69 - 03/19/69 | |
| | | D012541 | 6 - 10 | 03/19/69 - 04/01/69 | |
| | | D012542 | 11 - 15 | 04/01/69 - 04/14/69 | |
| DR004626 | DS004626 | D012543 | 1 - 5 | 04/14/69 - 04/27/69 | |
| | | D012544 | 6 - 10 | 04/27/69 - 05/10/69 | |
| | | D012545 | 11 - 15 | 05/10/69 - 05/23/69 | |
| DR004627 | DS004627 | D012546 | 1 - 5 | 05/23/69 - 06/05/69 | |
| | | D012547 | 6 - 11 | 06/06/69 - 06/20/69 | |
| | | D012548 | 12 - 16 | 06/21/69 - 07/03/69 | |
| DR004628 | DS004628 | D012549 | 1 - 6 | 07/04/69 - 07/19/69 | (i) |
| | | D012531 | 7 - 11 | 07/19/69 - 08/01/69 | |
| | | D012532 | 12 - 16 | 08/01/69 - 08/14/69 | |
| DR004629 | DS004629 | D012533 | 1 - 5 | 08/14/69 - 08/27/69 | |
| | | D012534 | 6 - 9 | 08/27/69 - 09/06/69 | |
| | | D012535 | 10 - 13 | 09/07/69 - 09/17/69 | |
| DR004630 | DS004630 | D012536 | 1 - 5 | 09/17/69 - 09/30/69 | |
| | | D012490 | 6 - 9 | 09/25/69 - 06/17/72 | |
| | | D012537 | 10 - 14 | 09/30/69 - 10/13/69 | |
| DR004631 | DS004631 | D012540 | 1 - 5 | 10/26/69 - 11/07/69 | (j) |
| | | D012539 | 6 - 10 | 11/08/69 - 11/21/69 | |
| | | D012521 | 11 - 15 | 11/21/69 - 12/04/69 | |
| DR004632 | DS004632 | D012522 | 1 - 5 | 12/04/69 - 12/17/69 | (k) |
| | | D012523 | 6 - 10 | 12/17/69 - 12/30/69 | (l) |
| | | D012524 | 11 - 15 | 12/30/69 - 01/12/70 | |
| DR004642 | DS004642 | D012525 | 1 - 5 | 01/12/69 - 01/25/70 | (m) |
| | | D012526 | 6 - 10 | 01/25/69 - 02/07/70 | |
| | | D012527 | 11 - 15 | 02/07/69 - 02/20/70 | (n) |
| DR004643 | DS004643 | D012528 | 1 - 5 | 02/20/70 - 03/05/70 | |
| | | D012529 | 6 - 10 | 03/05/70 - 03/18/70 | |
| | | D012530 | 11 - 15 | 03/18/70 - 03/31/70 | |
| DR004644 | DS004644 | D012590 | 1 - 2 | 03/31/70 - 04/04/70 | |
| | | D012589 | 3 - 7 | 04/13/70 - 04/26/70 | |
| | | D012587 | 8 - 12 | 05/09/70 - 05/22/70 | |
| DR004645 | DS004645 | D012586 | 1 - 5 | 05/22/70 - 06/04/70 | (o) |
| | | D012585 | 6 - 10 | 06/04/70 - 06/17/70 | (p) |
| | | D012584 | 11 - 15 | 06/17/70 - 06/30/70 | |
| DR004646 | DS004646 | D012583 | 1 - 5 | 06/30/70 - 07/13/70 | |
| | | D012582 | 6 - 10 | 07/13/70 - 07/26/70 | (q) |
| | | D012581 | 11 - 15 | 07/26/70 - 08/08/70 | |
| DR004647 | DS004647 | D012501 | 1 - 4 | 08/21/70 - 08/31/70 | |
| | | D012502 | 5 - 9 | 09/03/70 - 09/08/70 | (r) |
| | | D012503 | 10 - 14 | 09/16/70 - 09/29/70 | |
| DR004648 | DS004648 | D012504 | 1 - 5 | 09/29/70 - 10/12/70 | |
| | | D012505 | 6 | 10/22/70 - 10/15/70 | |
| | | D012506 | 7 - 11 | 10/15/70 - 10/25/70 | (s) |

| DR# | DS# | D# | FILES | TIME SPAN | |
|---|---|---|---|---|---|
| DR004649 | DS004649 | D012507 | 1 - 5 | 10/28/70 - 11/10/70 | |
| | | D012508 | 6 - 7 | 11/10/70 - 11/15/70 | |
| | | D012509 | 8 - 12 | 11/15/70 - 11/28/70 | |
| DR004650 | DS004650 | D012510 | 1 - 5 | 11/28/70 - 12/11/70 | |
| | | D012500 | 6 - 10 | 12/11/70 - 12/24/70 | |
| | | D012491 | 11 - 15 | 12/24/70 - 01/06/71 | |
| DR004651 | DS004651 | D012492 | 1 - 5 | 01/06/71 - 01/19/71 | |
| | | D012493 | 6 - 10 | 01/19/71 - 02/01/71 | |
| | | D012494 | 11 - 15 | 02/01/71 - 02/14/71 | (t) |
| DR004652 | DS004652 | D012495 | 1 - 5 | 02/14/71 - 02/27/71 | |
| | | D012496 | 6 - 10 | 02/27/71 - 03/12/71 | |
| | | D012497 | 11 - 15 | 03/12/71 - 03/25/71 | |
| DR004653 | DS004653 | D012498 | 1 - 5 | 03/25/71 - 04/07/71 | |
| | | D012499 | 6 - 10 | 04/07/71 - 04/20/71 | |
| | | D012511 | 11 - 15 | 04/20/71 - 05/03/71 | |
| DR004654 | DS004654 | D012512 | 1 - 5 | 05/03/71 - 05/16/71 | |
| | | D012513 | 6 - 10 | 05/16/71 - 05/29/71 | (u) |
| | | D012514 | 11 - 14 | 05/29/71 - 06/08/71 | |
| DR004655 | DS004655 | D012515 | 1 - 2 | 06/16/71 - 06/18/71 | |
| | | D012516 | 3 - 5 | 06/26/71 - 07/01/71 | (v) |
| | | D012517 | 6 - 7 | 07/09/71 - 07/12/71 | |
| | | D012518 | 8 - 9 | 07/20/71 - 07/22/71 | |
| | | D012519 | 10 - 12 | 08/12/71 - 08/17/71 | |
| DR004656 | DS004656 | D012520 | 1 - 2 | 08/25/71 - 08/28/71 | |
| | | D012482 | 3 - 11 | 09/03/71 - 09/24/71 | (w) |
| | | D012483 | 12 - 14 | 06/03/72 - 06/09/72 | |
| DR004657 | DS004657 | D012484 | 1 - 5 | 06/09/72 - 06/22/72 | |
| | | D012485 | 6 - 9 | 06/23/72 - 07/03/72 | (x) |
| | | D012486 | 10 - 14 | 07/03/72 - 07/14/72 | |

(a) D012571: Read error occurred in record 3015 of file 1.
(b) D012575: Read error occurred in record 1387 of file 1.
(c) D012576: Read errors occurred in records 491 & 492 of file 1.
(d) D012569: Read errors occurred in record 1185 of file 1 & record 2452 of file 5.
(e) D012567: Read errors occurred in records 1779, 2575, 2576 of file 1 and record 2572 of file 4.
(f) D012564: Read errors occurred in records 1338 & 1635 of file 2.
(g) D012563: Read error occurred in record 2534 of file 2.
(h) D012555: Read errors occurred in records 472 & 477 of file 1.
(i) D012549: Read errors occurred in records 1, 2, 11, 47, 64, 112, 214, & 289 of file 1.
(j) D012540: Read error occurred in record 477 of file 2.
(k) D012522: Read error occurred in record 147 of file 1.
(l) D012523: Read error occurred in record 43 of file 1.
(m) D012525: Read errors occurred in records 2094, 2786 of file 1, & records 92, 710, 1474, & 1546 of file 2, & records 1764, 2497, 2671, 2707, & 2724 of file 3, & record 2890 of file 4, and records 12, 583, 674, 937, 2112, 2234, 2708, & 2802 of file 5.

(n) D012527: Read errors occurred in records 171, 2810 of file 1, & record 580 of file 2, and record 1438 of file 5.
(o) D012586: Read errors occurred in records 1326, 3154 of file 1, and records 2, 118, 1326, 3053 of file 2, and records 914, 1148, 3285, 3354 of file 3, and records 833, 1246, of file 4, and 2636 of file 5.
(p) D012585: Read error occurred in record 742 of file 1.
(q) D012582: Read errors occurred in records 632, 702, 2391 of file 1, and record 2984 of file 2, and records 1327, 1887, 2316, 2492, 2503, 2531, 2845, 3119, 3220 of file 4, and records 1034, 1885 of file 5.
(r) D012502: Read error occurred in record 1 of file 5.
(s) D012506: Read errors occurred in records 235, & 237 of file 1.
(t) D012494: Read error occurred in record 43 of file 1.
(u) D012513: Read error occurred in record 1231 of file 5.
(v) D012516: Read errors occurred in records 29, 31 of file 1.
(w) D012482: Read errors occurred in records 124, 159, & 160 of file 1.
(x) D012485: Read errors occurred in records 15, 19, 20, 24, & 26 of file 1.

| REQ. AGENT | RASH NO. | ACQ. AGENT |
|---|---|---|
| CLB | RB4687 | JJB |

68-014A-09B

OGO-5

1 MINUTE PARTICLE ACCUMULATIONS

This data set consists of 104, 800 BPI, BIN 7-track tapes, created on the XDS/930 computer. Five of the original 109 tapes in this data set were physically damaged and were not included in this catalog.

I MEV. PARTICLE ACCUMULATIONS
OGO-5
68-014A-09D

| D# | C# | FILES | TIME SPAN | ORBIT NO. |
|---|---|---|---|---|
| D-12482 | C-09889 | 9 | 9/03/71 - 9/23/71 | 492-500 |
| D-12483 | C-09890 | 3 | 6/03/72 - 6/09/72 | 597-599 |
| D-12484 | C-09891 | 5 | 6/09/72 - 7/03/72 | 600-604 |
| D-12485 | C-09892 | 4 | 6/23/72 - 7/03/72 | 605-608 |
| D-12486 | C-09893 | 5 | 7/03/72 - 7/14/72 | 609-613 |
| D-12487 | C-09894 | 5 | 6/09/68 - 9/30/68 | 38,39,51,81,81 |
| D-12488 | C-09895 | 5 | 10/03/68 - 12/07/68 | 83,94,100,101,107 |
| D-12489 | C-09896 | 5 | 2/27/71 - 3/12/71 | 138,139,144,151,156 |
| D-12490 | C-09897 | 4 | 9/25/69 - 1/27/71 | 220,291,407,602 |
| D-12491 | C-09898 | 5 | 12/24/70 - 1/06/71 | 395-399 |
| D-12492 | C-09899 | 5 | 1/06/71 - 1/23/71 | 400-404 |
| D-12493 | C-09900 | 5 | 1/23/71 - 2/09/71 | 405-409 |
| D-12494 | C-09901 | 5 | 2/01/71 - 2/24/71 | 410-414 |
| D-12495 | C-09902 | 5 | 2/24/71 - 3/13/71 | 415-419 |
| D-12496 | C-09903 | 5 | 2/27/71 - 3/12/71 | 420-424 |
| D-12497 | C-09904 | 5 | 4/17/71 - 5/04/71 | 425-429 |
| D-12498 | C-09905 | 5 | 5/04/71 - 5/21/71 | 430-434 |

1 MIN. PARTICLE ACCUMULATIONS

OGO-5

68-014A-09B

| D# | C# | FILES | START | STOP | ORBIT NO. |
|---|---|---|---|---|---|
| D-12499 | C-09912 | 5 | 4/07/71 | 4/20/71 | 435-539 |
| D-12500 | C-09913 | 5 | 12/11/70 | 12/24/70 | 390-394 |
| D-12501 | C-09914 | 5 | 8/21/70 | 8/31/70 | 347-351 |
| D-12502 | C-09915 | 5 | 9/03/70 | 9/08/70 | 352-356 |
| D-12503 | C-09916 | 5 | 9/16/70 | 9/29/70 | 357-361 |
| D-12504 | C-09917 | 5 | 9/29/70 | 10/12/70 | 362-366 |
| D-12505 | C-09918 | 2 | 10/28/70 | 11/07/70 | 367 |
| D-12506 | C-09919 | 2 | 10/15/70 | 10/20/70 | 368-369 |
| D-12507 | C-09920 | 5 | 10/12/70 | 11/10/70 | 373-377 |
| D-12508 | C-09921 | 2 | 11/10/70 | 11/15/70 | 378-379 |
| D-12509 | C-09922 | 5 | 11/15/70 | 11/28/70 | 380-384 |
| D-12510 | C-09923 | 5 | 11/28/70 | 12/11/70 | 385-389 |
| D-12511 | C-09924 | 5 | 4/20/71 | 5/03/71 | 440-444 |
| D-12512 | C-09925 | 5 | 5/03/71 | 5/16/71 | 445-449 |
| D-12513 | C-09926 | 5 | 5/16/71 | 5/29/71 | 450-454 |
| D-12514 | C-09927 | 5 | 5/29/71 | 6/08/71 | 455-458 |
| D-12515 | C-09928 | 2 | 6/16/71 | 6/18/71 | 461-462 |
| D-12516 | C-09929 | 3 | 6/28/71 | 6/29/71 | 465-467 |
| D-12517 | C-09930 | 2 | 7/09/71 | 7/12/71 | 470-471 |
| D-12518 | C-09931 | 2 | 7/20/71 | 7/22/71 | 474-475 |

1 MIN. PARTICLE ACCUMULATIONS

OGO-5

68-014A-09B

| D# | C# | FILES | TIME SPAN | ORBIT NO. |
|---|---|---|---|---|
| D-12519 | C-10118 | 3 | 08/12/71 - 08/17/71 | 483-485 |
| D-12520 | C-10119 | 2 | 08/25/71 - 08/28/71 | 488-489 |
| D-12521 | C-10120 | 5 | 11/21/69 - 12/04/69 | 242-246 |
| D-12522 | C-10121 | 5 | 12/04/69 - 12/17/69 | 247-251 |
| D-12523 | C-10122 | 5 | 12/17/69 - 12/30/69 | 252-256 |
| D-12524 | C-10123 | 5 | 12/30/69 - 01/12/70 | 257-261 |
| D-12525 | C-23402 | 3 | 01/13/70 - 01/20/70 | 262-264 |
| D-12526 | C-10124 | 5 | 01/25/70 - 02/07/70 | 267-271 |
| D-12527 | C-10125 | 5 | 02/07/70 - 02/20/70 | 272-276 |
| D-12528 | C-10126 | 5 | 02/20/70 - 03/05/70 | 277-281 |
| D-12529 | C-10127 | 5 | 03/05/70 - 03/18/70 | 282-286 |
| D-12530 | C-10128 | 5 | 03/18/70 - 03/31/70 | 287-291 |
| D-12531 | C-10129 | 5 | 07/19/69 - 08/01/69 | 194-198 |
| D-12532 | C-10130 | 5 | 08/01/69 - 08/14/69 | 199-203 |
| D-12533 | C-10131 | 5 | 08/14/69 - 08/27/69 | 204-208 |
| D-12534 | C-10132 | 4 | 08/27/69 - 09/06/69 | 209-212 |
| D-12535 | C-10133 | 4 | 09/07/69 - 09/17/69 | 213-216 |
| D-12536 | C-10134 | 5 | 09/17/69 - 09/30/69 | 217-221 |
| D-12537 | C-10135 | 5 | 09/30/69 - 10/13/69 | 222-226 |
| D-12539 | C-10136 | 5 | 11/08/69 - 11/21/69 | 237-241 |
| D-12540 | C-10137 | 5 | 10/26/69 - 11/07/69 | 232-236 |
| D-12541 | C-10138 | 5 | 03/19/69 - 04/01/69 | 147-151 |
| D-12542 | C-10139 | 5 | 04/11/69 - 04/14/69 | 156 |
| D-12543 | C-10140 | 5 | 04/14/69 - 04/27/69 | 157-161 |
| D-12544 | C-10141 | 5 | 05/07/69 - 05/10/69 | 162-166 |
| D-12545 | C-10142 | 5 | 05/10/69 - 05/23/69 | 167-171 |
| D-12546 | C-10143 | 5 | 05/23/69 - 06/05/69 | 172-176 |

1 MIN. PARTICLE ACCUMULATIONS

OGO-5

68-014A-09B

| D# | C# | FILES | START | STOP | ORBIT NO |
|---|---|---|---|---|---|
| D-12547 | C-10144 | 6 | 6/06/69 | 6/20/69 | 177-182 |
| D-12548 | C-10145 | 5 | 6/21/69 | 7/03/69 | 183-187 |
| D-12549 | C-10146 | 6 | 7/04/69 | 7/19/69 | 188-193 |
| D-12550 | C-10147 | 5 | 11/10/68 | 11/21/68 | 97-101 |
| D-12551 | C-10148 | 5 | 11/22/68 | 12/04/68 | 102-106 |
| D-12552 | C-10149 | 5 | 12/05/68 | 12/18/68 | 107-111 |
| D-12553 | C-10150 | 5 | 12/18/68 | 12/30/68 | 112-116 |
| D-12554 | C-10151 | 5 | 12/31/68 | 1/13/69 | 117-121 |
| D-12555 | C-10152 | 5 | 1/24/69 | 1/26/69 | 122-126 |
| D-12556 | C-10153 | 5 | 1/26/69 | 2/07/69 | 127-131 |
| D-12557 | C-10154 | 5 | 2/08/69 | 2/20/69 | 132-136 |
| D-12558 | C-10155 | 5 | 3/03/69 | 3/06/69 | 141 |
| D-12559 | C-10156 | 5 | 3/06/69 | 3/19/69 | 142-146 |
| D-12560 | C-10157 | 5 | 10/27/68 | 11/09/68 | 92- 96 |
| D-12561 | C-10158 | 5 | 10/14/68 | 10/27/68 | 87- 91 |
| D-12562 | C-10159 | 5 | 10/01/68 | 10/14/68 | 82- 86 |
| D-12563 | C-10160 | 5 | 9/18/68 | 9/30/68 | 77- 81 |
| D-12564 | C-10161 | 5 | 9/04/68 | 9/17/68 | 72- 76 |
| D-12565 | C-10162 | 5 | 3/15/69 | 3/18/69 | 146 |
| D-12566 | C-10163 | 5 | 8/10/68 | 8/22/68 | 62- 66 |
| D-12567 | C-10164 | 5 | 7/28/68 | 8/09/68 | 57- 61 |
| D-12568 | C-10165 | 5 | 7/15/68 | 7/26/68 | 52- 56 |
| D-12569 | C-10166 | 5 | 7/13/68 | 7/15/68 | 51 |
| D-12570 | C-10167 | 3 | 3/05/68 | 3/12/68 | 1- 3 |
| D-12571 | C-10168 | 3 | 3/12/68 | 3/19/68 | 4- 6 |
| D-12572 | C-10169 | 5 | 3/20/68 | 4/01/68 | 7- 11 |
| D-12573 | C-10170 | 5 | 4/02/68 | 4/15/68 | 12- 16 |

1 MIN. PARTICLE ACCUMULATIONS

OGO-5

68-014A-09B

| D# | C# | FILES | START | STOP | ORBIT NO |
|---|---|---|---|---|---|
| D-12574 | C-10171 | 5 | 4/15/68 | 4/28/68 | 17- 21 |
| D-12575 | C-10172 | 5 | 5/11/68 | 5/11/68 | 26 |
| D-12576 | C-10173 | 5 | 5/11/68 | 5/24/68 | 27- 31 |
| D-12577 | C-10174 | 5 | 5/24/68 | 6/05/68 | 32- 36 |
| D-12578 | C-10175 | 5 | 6/06/68 | 6/08/68 | 37- 41 |

1 MIN. PARTICLE ACCUMULATIONS

OGO-5

68-014A-09B

| D# | C# | FILES | TIME SPAN | ORBIT NO. |
|---|---|---|---|---|
| D-12579 | C-10176 | 5 | 06/20/68 - 07/02/68 | 42-46 |
| D-12581 | C-10177 | 5 | 07/26/70 - 08/08/70 | 337-341 |
| D-12582 | C-10178 | 5 | 07/24/70 - 07/26/70 | 332-336 |
| D-12583 | C-10179 | 5 | 06/30/70 - 07/13/70 | 327-331 |
| C-12584 | C-10180 | 5 | 06/28/70 - 06/30/70 | 326 |
| D-12585 | C-10181 | 5 | 06/15/70 - 06/17/70 | 321 |
| D-12586 | C-10182 | 5 | 08/08/70 - 08/21/70 | 342-346 |
| D-12587 | C-10183 | 5 | 05/09/70 - 05/22/70 | 307-311 |
| D-12589 | C-10184 | 5 | 04/13/70 - 04/26/70 | 297-301 |
| D-12590 | C-23401 | 2 | 03/31/70 - 04/31/70 | 292-293 |

68-014A-09B

The University of Chicago

OGO-E09 Library Summary Tapes

July 2, 1973

The tapes are written in 7-track binary mode at 800 BPI. One end-of-file follows each orbit on a tape, and a second consecutive end-of-file terminates the tape (typically five orbits are placed on one tape).

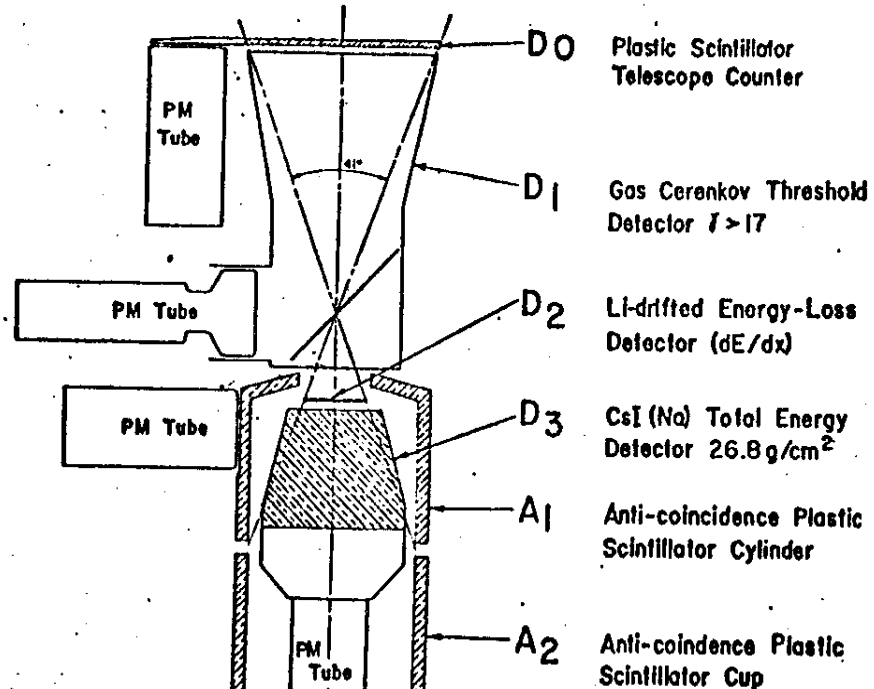
Data on the tape is represented in 24-bit binary integer words (4 characters on tape correspond to one word). Bits within a word are numbered from 0 (high-order) to 23 (low order).

Records are variable length, but will always be a multiple of 15 words (60 characters), and less than or equal to 1200 words total (4800 characters). A record contains summary information from a one minute period (with some exceptions--see the description of "record type", word 9 of the record); at least one record appears in the file for each minute between the time the E09 experiment was turned on and the time it was turned off at the end of the orbit. Within an orbit, dummy records (with data sums equal to zero) appear for those times without either real time or playback telemetry coverage. The first record in an orbit may have misleadingly large totals for some counts, since it includes any data coverage during the time the E09 experiment was turned off.

There are two types of tapes: standard tapes, which cover the entire mission, and flare tapes, which are generated only for special events with high count rates. Part of the error-checking procedure for quiet times involves examining the rate data. During flares this check has to be relaxed (see word 79 in the detailed description of the record), and in consequence the data may be noisier. Since this check is always enforced on the standard tapes, they should not be used for high count rate periods.

OGO-E09 Instrument and Data

## OGO-V ELECTRON TELESCOPE
UNIVERSITY OF CHICAGO




Count Rate Data:

| Detector | Bits read out* |
|---|---|
| Singles rate: | |
| $D_0$ | $2^{10}$, $2^{11}$ |
| $D_1$ | $2^{13}$ |
| $D_2$ | $2^{7}$, $2^{8}$ |
| $D_3$ | $2^{11}$, $2^{12}$ |
| $A_1$ | $2^{13}$, $2^{14}$ |
| $A_2$ | $2^{13}$, $2^{14}$ |

*It is the change in these bits that are summed in words 11-19 of the summary tape records.

Coincidence rates:

| | |
|---|---|
| $AR = D_0\ D_1\ D_2\ D_3\ \overline{A_1}\ \overline{A_2}$ | $2, ^1\ 2, ^2\ 2^3$ |
| $BR = D_0\ D_1\ D_2\ D_3\ \overline{A}_1, A_2$ | $2, ^1 2^2$ |
| $R = D_0\ D_2\ D_3\ \overline{A_1}$ | $2^7,\ 2^8$ |

Pulse Height Analyzed Events:

| | |
|---|---|
| $D_2$ Pulse Height | 7 bits |
| $D_3$ Pulse Height | 8 bits |
| Event Type | 2 bits |

Type 0 = $\overline{A}_2\overline{D}_1$ . ($D_0\ D_2\ D_3\ \overline{A_1}$)

1 = $\overline{A}_2\ D_1$ . "

2 = $A_2\ \overline{D_1}$ . "

3 = $A_2\ D_1$ . "

Type 1 and 3 events have priority, i.e., a type 1 or 3 event will override a type 0 or 2 event which has not yet been read out.

# Contents of OGO-E09 Summary Tapes

| Word no. within record | Word no. within block | Description |
|---|---|---|
| | | **Pointer block** |
| 1 | 1 | End of pad block (= record size) |
| 2 | 2 | End of pointer block |
| 3 | 3 | End of record block |
| 4 | 4 | End of count sub-block |
| 5 | 5 | End of summary block |
| 6 | 6 | End of program modification block |
| 7 | 7 | End of pulse height list |
| | | **Record block** |
| 8 | 1 | Record type:<br>0 for last record in summary period<br>1 for pulse height overflow (this and following record have same GMT summary-period-start time; this record has counts and time accumulated to current point (and reset for next record). )<br>2 for end of input file before end of summary period. (This and following record have same GMT summary-period-start time; this record has counts and time accumulated to current point (and reset). Current point is where end-of-file is found). |
| 9 | 2 | Summary record number within orbit |
| 10 | 3 | Orbit number (starting at OGO-E09-on-time) |
| | | **count Sub-block** |
| 11 | 1 | D0 good rate change subtotal } Sum of scaler changes for each rate from all class 2 and 3 frames* |
| 12 | 2 | D1 " " " " |
| 13 | 3 | D2 " " " " |
| 14 | 4 | D3 " " " " |
| 15 | 5 | A1 " " " " |

* Frame classes are defined in the descriptions of words 26-32 of the record

| Word no. within record | Word no. within block | Description |
|---|---|---|
| | | Count sub-block, continued |
| 16 | 6 | A2 good rate change subtotal |
| 17 | 7 | AR good rate change subtotal, less increments from class 2 or 3 frames for which word 53 of record was incremented. |
| 18 | 8 | BR good rate change subtotal |
| 19 | 9 | CR good rate change subtotal |
| 20 | 10 | Event type 0, good data, subtotal |
| 21 | 11 | Event type 1, good data, subtotal |
| 22 | 12 | Event type 2, good data, subtotal |
| 23 | 13 | Event type 3, good data, subtotal |
| 24 | 14 | Number of good data frames (class 1,2, or 3) |
| 25 | 15 | Sum of frame sync word bit errors (sum of Field F1's (bits 1-6)* from all non-overlap frames with good GMT continuous from last frame) |
| 26 | 16 | No. of frames, Class 1: redundant frame - no events recorded in pulse heights or scalers |
| 27 | 17 | No. of frames, Class 2: frames with change in some scaler or non-reset P.H. (pulse height) |
| 28 | 18 | No. of frames, Class 3: frames with change in some scaler of > 1 |
| 29 | 19 | No. of frames, Class 4: frames with pulse-height analyzer busy, all data zero, or some data fill |
| 30 | 20 | No. of frames, Class 5: possibly anomalous (follows a frame with bad second difference in some rate) |
| 31 | 21 | No. of frames, Class 6: rate or PH anomaly PH outside limits or second difference check bad for some rate |
| 32 | 22 | No. of frames, Class 7: special anomalies - priority PH without corresponding scaler change, 2 identical PH events in a row |

No. of pulse height events of each type in class 2 or 3 frames

Frame with no over-lap and good GMT

*See OGO-E Data Processiong Plan, p. 56

| Word no. within record | Word no. within block | Description |
|---|---|---|
| | Count sub-block,continued | |
| 33 | 23 | No. of analyzed frames [good data frames except for redundant (class 1) frames] |
| 34 | 24 | No. of zero frames: all E09 data zero or fill |
| 35 | 25 | No. of fill frames: any fill in data supplied to us |
| 36 | 26 | No. of frames found before end of summary period (except overlap or bad GMT frames) |
| 37 | 27 | No. of good data frames with PH reset |
| 38 | 28 | No. of overlap frames(with GMT good): these frames are not included in other counts, may be previous to summary period |
| 39 | 29 | D0 |
| 40 | 30 | D1 — No. of error occurrences (by second |
| 41 | 31 | D2 — difference check) for each scaler, during |
| 42 | 32 | D3 — periods of no overlap and good GMT which |
| 43 | 33 | A1 — is continuous from previous frame. These |
| 44 | 34 | A2 — errors are not counted, for D0, or at all, |
| 45 | 35 | AR — if second difference rate check parameter |
| 46 | 36 | BR — (word 79 of the record) is set to delete |
| 47 | 37 | CR — second difference check |
| 48 | 38 | No. of frames with bad GMT (Day bad, or time discontinuous on both sides): these frames are not included in other counts, and may be outside the summary period. |
| 49 | 39 | Sum of bit errors in input word 33 (spacecraft clock high-order 7 bits) in non-overlap frames with good GMT continuous from last frame. |
| 50 | 40 | The sum, in seconds (word 40) and milliseconds (word 41), of the ideal frame times for all good data frames |
| 51 | 41 | |
| 52 | 42 | Sum of bit errors in spacecraft word 65, bits 1-7 (sub-com. no.) in non-overlap frames with good GMT continuous from last frame. |

| Word no. within record | Word no. within block | Description |
|---|---|---|
| | Count sub-block, continued | |
| 53 | 43 | No. of non-overlap, good GMT frames in which some increment in AR scaler deleted because of simultaneous type 3 event, BR change, and D3 pulse height saturated. |
| 54 | 44 | No. of non-overlap, good GMT frames in which a type 1 PH event occurred without corresponding AR scaler increment, or Type 3 without BR increment. |
| 55 | 45 | No. of GMT discontinuities: cases where GMT interval from frame n-1 to frame n bad, but interval from frame n to n+1 correct |
| 56 | 46 | No. of strings of contiguous good data frames |
| 57 | 47 | No. of good data frames with 0 increment in D0 scaler |
| 58 | 48 | No. of good data frames with 1 increment in D0 scaler |
| 59 | 49 | No. of good data frames with increment of 2 in D0 scaler |
| 60 | 50 | No. of good data frames with increment of 3 in D0 scaler |
| | Rest of Summary Block | |
| 61 | 1 | Size of summary period in seconds, = 60 |
| 62 | 2 | Bit rate (kilobits) |
| 63 | 3 | Bit rate code from file label:<br>0 for 1 kilobit realtime<br>1 for 8 kilobit realtime<br>2 for 64 kilobit realtime<br>3 for 1 kilobit playback |
| 64 | 4 | No. of summary periods completed within orbit |
| 65 | 5 | GMT day at beginning of this summary period (Julian day) |

| Word no. within record | Word no. within block | Description |
|---|---|---|
| | Rest of Summary Block (cont'd) | |
| 66 | 6 | Hour |
| 67 | 7 | Minute GMT time of beginning of this summary period |
| 68 | 8 | Second |
| 69 | 9 | Station receiving this data |
| 70 | 10 | Input file no. within orbit (separate sequences are used for realtime and playback) |
| 71 | 11 | Data form code: Production = 0, Quicklook = 1 |
| 72 | 12 | Time search parameter: if nonzero, only partial orbit |
| 73 | 13 | Uncalibrated spacecraft temperature E 21 (top third (-Z) ), Last one available in a good data frame in this summary period; = $0400000_8$ if no data |
| 74 | 14 | Uncalibrated spacecraft temperature E 24 (top third (-X) ), Last one available in a good data frame in this summary period; = $0400000_8$ if no data |
| 75 | 15 | Low order 16 bits of this word contain high order 16 bits of spacecraft clock from first frame of summary period. If first frame is not a good data frame, or there is a previous type 1 or 2 record in this summary period, then this word = $0400000_8$. If discontinuity between previous frame and first frame or if spacecraft word 33 bit 1 flag is set, $0400000_8$ flag merged with data |
| 76 | 16 | Low order 16 bits of this word contain (high order to low order) low order 9 bits of S/C clock and the 7-bit subcom counter from first frame of summary period Flag $0400000_8$ used as in previous word. |
| 77 | 17 | Days since launch (March 4, 1968 =0) |
| 78 | 18 | Year of data (2-digit number) |
| 79 | 19 | Second difference rate check parameter.<br>0 if all second difference checks made<br>1 if second difference check skipped for DO rate only<br>2 if no second difference checks made |

| Word no. hin record | Word no. within block | Description |
|---|---|---|
| | **Program Modification Block** | |
| 80 | 1 | ISDP Program version date: binary number, which, when converted to decimal, gives the date as MMDDYY. E.g., Dec. 10, 1969 is coded as 121069. |
| 81 | 2 | Date unmerged summary tape made - date coded as in Word 80. |
| 82 | 3 | Program ID of program generating unmerged tape (Program is "ISDP", ID = 1) |
| 83 | 4 | Program version date of program generating library tape, coded as in word 80 above. |
| 84 | 5 | Date library tape made, coded as in word 80 above |
| 85 | 6 | Program ID for library tape generation<br>3 for reformatted and corrected unmerged tape<br>4 for correction of merged tape |
| | **Pulse Height List Block** | |
| 86 | 1 | Pulse height list starts here.<br>All PH's entered here except: PH reset frames, bad GMT frames, overlap frames, and zero frames.<br>Each PH takes 1 word, in form:<br>Bits 0-5: not used<br>Bit 6: flag; set to 1 if and only if frame class >3<br>Bits 7-8: Event type (0-3)<br>Bits 9-15: D2 pulse height<br>Bits 16-23: D3 pulse height<br>Pulse height readouts with analyzer busy are coded $400000_8$. |
| ? | **Pad Block** | Record is filled out to a multiple of 15 24-bit words (a multiple of 60 characters) with zeros. |

# List of Times the Experiment Was Turned On & Off In Each Orbit

OGO 5
68-014A-09

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ON | 65 | 09 | 10 | 00 | OFF | 67 | 01 | 05 | 00 | ORB | 1 | YR 68 |
| ON | 67 | 09 | 34 | 00 | OFF | 69 | 14 | 27 | 00 | ORB | 2 | YR 68 |
| ON | 69 | 23 | 20 | 00 | OFF | 70 | 15 | 54 | 00 | ORB | 3 | YR 68 |
| ON | 70 | 19 | 01 | 00 | OFF | 72 | 04 | 30 | 45 | ORB | 3 | YR 68 |
| ON | 72 | 13 | 40 | 00 | OFF | 74 | 18 | 58 | 00 | ORB | 4 | YR 68 |
| ON | 75 | 04 | 43 | 30 | OFF | 77 | 09 | 21 | 00 | ORB | 5 | YR 68 |
| ON | 77 | 19 | 03 | 00 | OFF | 78 | 16 | 55 | 00 | ORB | 6 | YR 68 |
| ON | 78 | 17 | 39 | 00 | OFF | 79 | 23 | 41 | 00 | ORB | 6 | YR 68 |
| ON | 80 | 09 | 26 | 00 | OFF | 82 | 12 | 59 | 44 | ORB | 7 | |
| ON | 83 | 00 | 31 | 00 | OFF | 85 | 04 | 30 | 00 | ORB | 8 | |
| ON | 85 | 14 | 21 | 00 | OFF | 87 | 18 | 50 | 00 | ORB | 9 | |
| ON | 88 | 05 | 15 | 00 | OFF | 90 | 09 | 14 | 00 | ORB | 10 | |
| ON | 90 | 19 | 09 | 00 | OFF | 92 | 23 | 39 | 00 | ORB | 11 | |
| ON | 93 | 08 | 51 | 00 | OFF | 95 | 14 | 44 | 00 | ORB | 12 | |
| ON | 96 | 00 | 37 | 00 | OFF | 98 | 04 | 51 | 00 | ORB | 13 | |
| ON | 98 | 13 | 33 | 00 | OFF | 100 | 19 | 38 | 00 | ORB | 14 | |
| ON | 101 | 04 | 05 | 00 | OFF | 103 | 09 | 14 | 00 | ORB | 15 | |
| ON | 103 | 18 | 35 | 00 | OFF | 106 | 00 | 13 | 00 | ORB | 16 | |
| ON | 106 | 10 | 08 | 00 | OFF | 108 | 14 | 44 | 00 | ORB | 17 | |
| ON | 108 | 23 | 32 | 00 | OFF | 111 | 05 | 04 | 00 | ORB | 18 | |
| ON | 111 | 13 | 50 | 00 | OFF | 113 | 19 | 39 | 00 | ORB | 19 | |
| ON | 114 | 04 | 12 | 00 | OFF | 116 | 09 | 09 | 00 | ORB | 20 | |
| ON | 116 | 18 | 35 | 00 | OFF | 119 | 00 | 05 | 00 | ORB | 21 | |
| ON | 119 | 09 | 35 | 00 | OFF | 121 | 14 | 34 | 00 | ORB | 22 | |
| ON | 121 | 23 | 05 | 00 | OFF | 124 | 05 | 04 | 00 | ORB | 23 | |
| ON | 124 | 13 | 48 | 00 | OFF | 126 | 19 | 35 | 00 | ORB | 24 | |
| ON | 127 | 04 | 14 | 00 | OFF | 129 | 09 | 54 | 00 | ORB | 25 | |
| ON | 129 | 18 | 50 | 00 | OFF | 132 | 00 | 40 | 00 | ORB | 26 | |

| | | | | |
|---|---|---|---|---|
| ON 132 09 15 00 | OFF 134 14 49 00 | ORB | 27 | |
| ON 134 23 45 00 | OFF 137 05 04 00 | ORB | 28 | |
| ON 137 13 55 00 | OFF 139 19 34 00 | ORB | 29 | |
| ON 140 04 25 00 | OFF 142 09 49 00 | ORB | 30 | |
| ON 142 18 45 00 | OFF 145 00 14 00 | ORB | 31 | |
| ON 145 09 16 00 | OFF 147 14 34 00 | ORB | 32 | |
| ON 147 23 35 00 | OFF 150 05 04 00 | ORB | 33 | |
| ON 150 14 00 00 | OFF 152 19 19 00 | ORB | 34 | |
| ON 153 04 25 00 | OFF 155 09 49 00 | ORB | 35 | |
| ON 155 19 00 00 | OFF 157 22 04 00 | ORB | 36 | |
| ON 158 11 41 00 | OFF 160 12 24 00 | ORB | 37 | |
| ON 161 02 04 00 | OFF 163 02 34 00 | ORB | 38 | |
| ON 163 16 28 00 | OFF 165 17 35 00 | ORB | 39 | YR 68 |
| ON 166 06 55 00 | OFF 168 07 44 00 | ORB | 40 | YR 68 |
| ON 168 21 20 00 | OFF 170 21 34 00 | ORB | 41 | YR 68 |
| ON 171 11 58 00 | OFF 173 12 43 00 | ORB | 42 | |
| ON 174 02 08 00 | OFF 176 03 07 00 | ORB | 43 | |
| ON 176 16 33 00 | OFF 178 17 04 00 | ORB | 44 | |
| ON 179 06 35 00 | OFF 181 07 34 00 | ORB | 45 | YR 68 |
| ON 181 21 30 00 | OFF 183 22 20 00 | ORB | 46 | |
| ON 184 11 55 00 | OFF 186 13 04 00 | ORB | 47 | |
| ON 187 04 03 00 | OFF 189 03 26 00 | ORB | 48 | |
| ON 189 17 05 00 | OFF 191 17 34 00 | ORB | 49 | |
| ON 192 07 20 00 | OFF 194 08 04 00 | ORB | 50 | |
| ON 194 21 45 00 | OFF 196 22 28 00 | ORB | 51 | |
| ON 197 12 36 00 | OFF 199 12 56 00 | ORB | 52 | |
| ON 199 21 44 00 | OFF 202 03 14 00 | ORB | 53 | |
| ON 202 20 01 00 | OFF 204 17 54 00 | ORB | 54 | |
| ON 205 03 40 | OFF 207 08 04 | ORB | 55 | |

ON 207 19 06 00 OFF 209 22 15 00 ORB 56

ON 210 11 05 00 OFF 212 13 04 00 ORB 57

ON 212 22 10 OFF 215 04 14 ORB 58

ON 215 17 10 00 OFF 217 18 39 00 ORB 59

ON 218 02 58 00 OFF 220 09 00 00 ORB 60

ON 220 19 24 00 OFF 222 23 01 00 ORB 61

ON 223 10 24 00 OFF 225 12 28 00 ORB 62

ON 225 21 59 00 OFF 228 04 24 00 ORB 63

ON 228 15 35 00 OFF 230 18 49 00 ORB 64

ON 231 03 32 00 OFF 233 08 47 00 ORB 65

ON 233 16 34 00 OFF 235 23 14 00 ORB 66

ON 236 10 42 00 OFF 238 14 12 00 ORB 67

ON 238 22 05 00 OFF 241 04 40 00 ORB 68

ON 241 15 15 00 OFF 243 18 35 00 ORB 69

ON 244 04 15 00 OFF 246 08 59 00 ORB 70

ON 246 18 19 00 OFF 248 23 28 00 ORB 71

ON 249 12 05 00 OFF 251 14 20 00 ORB 72

ON 251 22 16 00 OFF 254 04 20 00 ORB 73

ON 254 15 05 00 OFF 256 18 50 00 ORB 74

ON 257 05 05 00 OFF 259 09 09 00 ORB 75

ON 259 18 06 00 OFF 261 23 36 00 ORB 76

ON 262 11 38 00 OFF 264 14 35 00 ORB 77

ON 264 22 35 00 OFF 267 04 35 00 ORB 78

ON 267 14 57 00 OFF 269 19 02 00 ORB 79

ON 270 03 35 00 OFF 272 09 25 00 ORB 80

ON 272 17 59 00 OFF 274 23 10 00 ORB 81

ON 275 12 30 00 OFF 277 14 45 00 ORB 82

ON 277 23 04 00 OFF 280 04 49 00 ORB 83

ON 280 14 43 00 OFF 282 19 10 00 ORB 84

ON 283 07 42 00 OFF 285 08 23 00 ORB 85

ON 285 17 55 00 OFF 288 00 00 00 ORB 86

ON 288 11 29 00 OFF 290 14 55 00 ORB 87

ON 290 23 32 00 OFF 293 04 20 00 ORB 88

ON 293 14 23 00 OFF 295 19 18 00 ORB 89

ON 296 00 38 00 OFF 298 08 22 00 ORB 90

ON 298 17 56 00 OFF 301 00 06 00 ORB 91

ON 301 11 04 00 OFF 303 14 32 00 ORB 92

ON 304 00 01 00 OFF 306 04 26 00 ORB 93

ON 306 15 03 00 OFF 308 18 56 00 ORB 94

ON 309 08 05 00 OFF 311 08 38 00 ORB 95

ON 311 17 59 00 OFF 314 00 10 00 ORB 96

ON 314 10 50 00 OFF 316 14 30 00 ORB 97

ON 317 00 34 00 OFF 319 04 36 00 ORB 98

ON 319 14 04 00 OFF 321 19 01 00 ORB 99

ON 322 07 05 00 OFF 324 02 33 00 ORB 100

ON 324 18 15 00 OFF 326 23 20 00 ORB 101

ON 327 10 33 00 OFF 329 14 40 00 ORB 102

ON 330 01 09 00 OFF 332 04 55 00 ORB 103

ON 332 13 30 00 OFF 334 19 00 00 ORB 104

ON 335 06 49 00 OFF 337 06 05 00 ORB 105

ON 337 18 28 00 OFF 339 21 55 00 ORB 106

ON 340 10 13 00 OFF 342 14 41 00 ORB 107

ON 343 04 59 00 OFF 345 04 07 00 ORB 108

ON 345 14 18 00 OFF 347 19 30 00 ORB 109

ON 348 07 50 00 OFF 350 10 30 00 ORB 110

ON 350 18 52 00 OFF 353 00 00 00 ORB 111

ON 353 09 56 00 OFF 355 13 00 00 ORB 112

ON 356 05 29 00 OFF 357 23 32 00 ORB 113

ON 358 13 23 00 OFF 360 19 23 00 ORB 114

ON 361 06 42 00 OFF 363 10 48 00 ORB 115

ON 363 19 18 00 OFF 365 22 35 00 ORB 116

ON 366 09 33 00 OFF 366 23 59 59 ORB 117 YR 68

ON 001 00 00 00 OFF 002 14 38 00 ORB 117 YR 69

ON 003 03 52 00 OFF 005 06 05 00 ORB 118

ON 05 13 39 00 OFF 07 20 00 00 ORB 119

ON 08 06 23 00 OFF 10 08 18 00 ORB 120

ON 010 20 01 00 OFF 013 00 45 00 ORB 121

ON 013 09 58 00 OFF 015 15 27 00 ORB 122

ON 016 02 30 00 OFF 018 05 51 00 ORB 123

ON 018 13 55 00 OFF 020 13 50 00 ORB 124

ON 021 06 10 00 OFF 023 09 40 00 ORB 125

ON 024 00 54 00 OFF 026 00 40 00 ORB 126

ON 026 09 07 00 OFF 028 15 05 00 ORB 127

ON 029 02 29 00 OFF 031 07 04 00 ORB 128

ON 031 14 21 00 OFF 033 20 01 00 ORB 129

ON 034 05 56 00 OFF 036 10 14 00 ORB 130

ON 037 00 13 00 OFF 038 23 15 00 ORB 131

ON 039 09 40 00 OFF 041 14 08 00 ORB 132

ON 042 02 32 00 OFF 044 06 31 00 ORB 133

ON 044 14 53 00 OFF 046 19 46 00 ORB 134

ON 047 09 38 30 OFF 049 09 40 00 ORB 135

ON 050 00 05 00 OFF 051 23 24 00 ORB 136

ON 052 09 30 00 OFF 054 15 10 00 ORB 137

ON 055 03 24 00 OFF 057 06 25 00 ORB 138

ON 057 17 57 00 OFF 059 20 00 00 ORB 139

ON 060 05 20 00 OFF 062 10 07 00 ORB 140

ON 062 22 31 00 OFF 065 01 44 00 ORB 141

ON 065 09 50 00 OFF 067 15 25 00 ORB 142

ON 068 02 30 00 OFF 070 06 30 00 ORB 143

ON 070 16 05 00 OFF 072 19 40 00 ORB 144

ON 073 05 10 00 OFF 075 10 19 00 ORB 145

ON 075 22 20 00 OFF 078 02 34 00 ORB 146

ON 078 10 05 00 OFF 080 14 55 00 ORB 147

ON 081 07 04 00 OFF 083 00 02 00 ORB 148

ON 083 16 40 00 OFF 085 20 00 00 ORB 149

ON 086 05 05 00 OFF 088 10 15 00 ORB 150

ON 088 22 20 00 OFF 091 02 44 00 ORB 151

ON 091 10 30 00 OFF 093 14 24 00 ORB 152

ON 094 01 35 00 OFF 096 06 05 00 ORB 153

ON 096 17 24 25 OFF 098 20 30 00 ORB 154

ON 099 05 10 00 OFF 101 10 29 00 ORB 155

ON 101 22 44 00 OFF 104 00 51 00 ORB 156

ON 104 10 51 00 OFF 106 14 54 00 ORB 157

ON 107 01 15 00 OFF 109 06 09 00 ORB 158

ON 109 17 30 00 OFF 111 17 10 00 ORB 159

ON 112 05 15 00 OFF 114 10 29 00 ORB 160

ON 114 22 00 00 OFF 117 02 27 30 ORB 161

ON 117 11 10 00 OFF 119 15 19 00 ORB 162

ON 120 01 00 00 OFF 122 06 14 00 ORB 163

ON 122 17 45 00 OFF 124 21 51 00 ORB 164

ON 125 05 25 00 OFF 127 10 34 00 ORB 165

ON 127 21 45 00 OFF 130 02 29 00 ORB 166

ON 130 11 38 00 OFF 132 15 52 00 ORB 167

ON 133 00 45 00 OFF 135 05 34 00 ORB 168

ON 135 17 45 00 OFF 137 22 15 00 ORB 169

ON 138 05 40 00 OFF 140 10 41 00 ORB 170

ON 140 21 50 00 OFF 143 00 11 00 ORB 171

ON 143 12 00 00 OFF 145 15 30 00 ORB 172

ON 146 01 08 00 OFF 148 05 45 00 ORB 173 YR 69

ON 148 16 00 00 OFF 150 23 35 00 ORB 174

ON 151 05 55 00 OFF 153 10 30 00 ORB 175 YR 69

ON 153 22 45 00 OFF 156 00 45 00 ORB 176 YR 69

ON 157 10 37 00 OFF 158 13 05 00 ORB 177 YR 69

ON 159 03 05 00 OFF 161 06 10 00 ORB 178 YR 69

ON 161 18 20 00 OFF 163 20 25 00 ORB 179 YR 69

ON 164 09 45 00 OFF 166 10 05 00 ORB 180 YR 69

ON 166 23 02 00 OFF 169 00 30 00 ORB 181 YR 69

ON 169 16 05 00 OFF 171 14 05 00 ORB 182 YR 69

ON 172 03 11 00 OFF 174 05 50 00 ORB 183 YR 69

ON 174 17 20 00 OFF 176 23 00 00 ORB 184 YR 69

ON 177 06 40 00 OFF 179 10 09 00 ORB 185 YR 69

ON 179 20 41 00 OFF 182 03 09 00 ORB 186 YR 69

ON 182 16 24 00 OFF 184 16 04 00 ORB 187 YR 69

ON 185 02 45 00 OFF 187 06 54 00 ORB 188 YR 69

ON 187 17 30 OFF 189 23 25 00 ORB 189 YR 69

ON 190 08 02 OFF 192 13 04 00 ORB 190 YR 69

ON 192 20 25 OFF 195 01 04 00 ORB 191 YR 69

ON 195 13 55 OFF 197 20 30 00 ORB 192 YR 69

ON 198 02 50 OFF 200 08 10 00 ORB 193 YR 69

ON 200 19 05 OFF 202 22 10 00 ORB 194 YR 69

ON 203 12 19 OFF 205 12 29 00 ORB 195 YR 69

ON 206 00 20 OFF 208 02 59 00 ORB 196 YR 69

ON 208 14 00 OFF 210 20 05 00 ORB 197 YR 69

ON 211 03 00 OFF 213 08 04 00 ORB 198 YR 69

ON 213 18 35 OFF 215 23 00 00 ORB 199 YR 69

ON 216 10 45 OFF 218 17 00 00 ORB 200 YR 69

ON 218 21 30 OFF 221 01 34 00 ORB 201 YR 69

ON 221 14 00 OFF 223 22 22 00 ORB 202 YR 69

ON 224 03 15 OFF 226 03 29 00 ORB 203 YR 69

ON 226 17 00 OFF 228 19 05 00 ORB 204 YR 69

ON 229 09 12 OFF 231 09 35 00 ORB 205 YR 69

ON 231 22 00 OFF 234 00 07 00 ORB 206 YR 69

ON 234 14 00 OFF 236 23 15 00 ORB 207 YR 69

ON 237 06 25 OFF 239 06 44 00 ORB 208 YR 69

ON 239 17 00 OFF 241 22 33 00 ORB 209 YR 69

ON 242 09 30 00 OFF 244 10 05 00 ORB 210 YR 69

ON 244 22 45 00 OFF 247 00 30 00 ORB 211 YR 69

ON 247 14 00 00 OFF 249 19 35 00 ORB 212 YR 69

ON 250 05 59 00 OFF 252 06 10 00 ORB 213 YR 69

ON 252 18 16 00 OFF 254 21 04 00 ORB 214 YR 69

ON 255 09 30 00 OFF 257 13 21 00 ORB 215 YR 69

ON 257 23 00 00 OFF 260 03 29 00 ORB 216 YR 69

ON 260 13 55 00 OFF 262 19 42 00 ORB 217 YR 69

ON 263 05 00 00 OFF 265 08 40 00 ORB 218 YR 69

ON 265 20 00 00 OFF 267 21 50 00 ORB 219 YR 69

ON 268 09 35 00 OFF 270 17 45 00 ORB 220 YR 69

ON 270 22 24 00 OFF 273 02 10 00 ORB 221 YR 69

ON 273 14 00 00 OFF 275 15 24 00 ORB 222 YR 69

ON 276 05 20 00 OFF 278 10 53 00 ORB 223 YR 69

ON 278 18 30 00 OFF 280 23 45 00 ORB 224 YR 69

ON 281 09 00 00 OFF 283 18 10 00 ORB 225 YR 69

ON 284 03 03 00 OFF 286 02 30 00 ORB 226 YR 69

ON 286 14 03 00 OFF 288 19 00 00 ORB 227 YR 69

ON 289 05 00 00 OFF 291 10 32 00 ORB 228 YR 69

ON 291 17 30 00 OFF 293 21 50 00 ORB 229 YR 69

ON 294 10 30 00 OFF 296 19 10 00 ORB 230 YR 69

ON 296 23 35 00 OFF 299 03 16 00 ORB 231 YR 69

ON 299 12 40 00 OFF 301 19 15 00 ORB 232 YR 69

ON 302 05 00 00 OFF 304 06 17 00 ORB 233 YR 69

ON 304 18 30 00 OFF 306 21 33 00 ORB 234 YR 69

ON 307 12 35 00 OFF 309 18 00 00 ORB 235 YR 69

ON 309 23 45 00 OFF 311 22 03 00 ORB 236 YR 69

ON 312 13 12 00 OFF 314 17 53 00 ORB 237 YR 69

ON 315 05 00 00 OFF 317 13 15 00 ORB 238 YR 69

ON 317 17 40 00 OFF 319 23 02 00 ORB 239 YR 69

ON 320 09 42 15 OFF 322 17 15 00 ORB 240 YR 69

ON 323 00 00 00 OFF 325 01 52 00 ORB 241 YR 69

ON 325 13 00 00 OFF 327 16 02 00 ORB 242 YR 69

ON 328 05 00 00 OFF 330 14 00 00 ORB 243 YR 69

ON 330 18 00 00 OFF 332 22 32 00 ORB 244 YR 69

ON 333 08 10 00 OFF 335 15 01 00 ORB 245 YR 69

ON 336 00 20 00 OFF 338 07 40 00 ORB 246 YR 69

ON 338 15 15 00 OFF 340 17 02 00 ORB 247 YR 69

ON 341 07 15 00 OFF 343 12 20 00 ORB 248 YR 69

ON 343 20 46 00 OFF 345 21 22 00 ORB 249 YR 69

ON 346 10 10 00 OFF 348 14 57 00 ORB 250 YR 69

ON 348 23 45 00 OFF 351 08 30 15 ORB 251 YR 69

ON 351 13 11 00 OFF 353 17 08 00 ORB 252 YR 69

ON 354 04 35 00 OFF 356 13 25 00 ORB 253 YR 69

ON 356 18 05 00 OFF 358 23 45 00 ORB 254 YR 69

ON 359 08 25 00 OFF 361 15 51 30 ORB 255 YR 69

ON 361 23 20 00 OFF 364 09 15 00 ORB 256 YR 69

ON 364 13 35 00 OFF 365 23 59 59 ORB 257 YR 69

ON 001 00 00 00 OFF 001 19 15 00 ORB 257 YR 70

ON 002 04 03 00 OFF 004 14 00 00 ORB 258 YR 70

ON 004 19 00 00 OFF 007 00 05 00 ORB 259 YR 70

ON 007 10 00 00 OFF 009 14 35 00 ORB 260 YR 70

ON 010 01 30 00 OFF 012 07 46 00 ORB 261 YR 70

ON 012 14 00 00 OFF 014 17 32 00 ORB 262 YR 70

ON 015 05 05 00 OFF 017 13 55 00 ORB 263 YR 70

ON 017 20 01 00 OFF 020 04 20 00 ORB 264 YR 70

ON 020 10 47 00 OFF 022 12 10 00 ORB 265 YR 70

ON 023 03 31 00 OFF 025 10 01 00 ORB 266 YR 70

ON 025 14 00 00 OFF 027 18 53 00 ORB 267 YR 70

ON 028 04 50 00 OFF 030 14 10 00 ORB 268 YR 70

ON 030 19 35 00 OFF 033 05 25 00 ORB 269 YR 70

ON 033 09 10 00 OFF 035 14 00 00 ORB 270 YR 70

ON 036 01 25 00 OFF 038 10 00 00 ORB 271 YR 70

ON 038 16 00 00 OFF 040 18 00 00 ORB 272 YR 70

ON 041 04 35 00 OFF 043 15 20 00 ORB 273 YR 70

ON 043 20 00 00 OFF 046 05 00 00 ORB 274 YR 70

ON 046 09 15 00 OFF 048 14 25 00 ORB 275 YR 70

ON 049 01 30 00 OFF 051 10 03 00 ORB 276 YR 70

ON 051 15 10 00 OFF 053 19 30 00 ORB 277 YR 70

ON 054 04 25 00 OFF 056 11 46 00 ORB 278 YR 70

ON 056 21 15 00 OFF 059 06 00 00 ORB 279 YR 70

ON 059 09 30 00 OFF 061 13 50 00 ORB 280 YR 70

ON 062 00 46 00 OFF 064 10 05 00 ORB 281 YR 70

ON 064 15 42 00 OFF 066 23 35 00 ORB 282 YR 70

ON 067 04 35 00 OFF 069 12 00 00 ORB 283 YR 70

ON 069 20 55 00 OFF 072 05 00 00 ORB 284 YR 70

ON 072 09 45 00 OFF 074 14 30 00 ORB 285 YR 70

ON 075 00 15 00 OFF 077 11 15 00 ORB 286 YR 70

ON 077 15 32 00 OFF 080 00 21 00 ORB 287 YR 70

ON 080 04 40 00 OFF 082 11 35 00 ORB 288 YR 70

ON 082 20 45 00 OFF 085 06 10 00 ORB 289 YR 70

ON 085 10 05 00 OFF 087 14 40 00 ORB 290 YR 70

ON 088 02 41 00 OFF 090 11 25 00 ORB 291 YR 70

ON 090 20 05 00 OFF 093 01 10 00 ORB 292 YR 70

ON 093 04 55 00 OFF 095 11 57 00 ORB 293 YR 70

ON 095 23 23 10 OFF 098 06 43 00 ORB 294 YR 70

ON 098 10 47 00 OFF 100 14 50 00 ORB 295 YR 70

ON 101 00 20 00 OFF 103 11 25 00 ORB 296 YR 70

ON 103 17 48 00 OFF 106 01 35 00 ORB 297 YR 70

ON 106 05 10 00 OFF 108 10 40 00 ORB 298 YR 70

ON 109 00 03 00 OFF 111 00 50 00 ORB 299 YR 70

ON 111 11 07 00 OFF 113 15 30 00 ORB 300 YR 70

ON 114 00 26 00 OFF 116 11 15 00 ORB 301 YR 70

ON 116 16 25 00 OFF 119 01 45 00 ORB 302 YR 70

ON 119 05 25 00 OFF 121 10 20 00 ORB 303 YR 70

ON 121 20 45 00 OFF 124 07 00 00 ORB 304 YR 70

ON 124 11 36 00 OFF 126 19 40 00 ORB 305 YR 70

ON 127 00 35 00 OFF 129 09 00 00 ORB 306 YR 70

ON 129 10 30 00 OFF 131 20 48 00 ORB 307 YR 70

ON 132 05 45 00 OFF 134 10 30 00 ORB 308 YR 70

ON 134 20 25 00 OFF 137 07 10 00 ORB 309 YR 70

ON 137 12 25 00 OFF 139 20 25 00 ORB 310 YR 70

ON 140 00 34 00 OFF 142 07 45 00 ORB 311 YR 70

ON 142 16 30 00 OFF 145 02 15 00 ORB 312 YR 70

ON 145 06 05 00 OFF 147 10 35 00 ORB 313 YR 70

ON 147 21 05 00 OFF 150 07 15 00 ORB 314 YR 70

ON 150 11 55 00 OFF 152 20 50 00 ORB 315 YR 70

ON 153 00 46 00 OFF 155 06 25 00 ORB 316 YR 70

ON 155 17 06 00 OFF 158 02 30 00 ORB 317 YR 70

ON 158 06 25 00 OFF 160 10 45 00 ORB 318 YR 70

ON 160 20 15 00 OFF 163 07 20 00 ORB 319 YR 70

ON 163 12 10 00 OFF 165 21 05 00 ORB 320 YR 70

ON 166 01 20 00 OFF 168 06 40 00 ORB 321 YR 70

ON 168 17 03 00 OFF 171 01 40 00 ORB 322 YR 70

ON 171 06 50 00 OFF 173 11 22 00 ORB 323 YR 70

ON 173 20 21 00 OFF 176 07 00 00 ORB 324 YR 70

ON 176 13 41 00 OFF 178 21 35 00 ORB 325 YR 70

ON 179 01 28 00 OFF 181 06 50 00 ORB 326 YR 70

ON 181 16 20 00 OFF 184 02 30 00 ORB 327 YR 70

ON 184 07 41 00 OFF 186 16 00 00 ORB 328 YR 70

ON 186 20 35 00 OFF 189 07 21 00 ORB 329 YR 70

ON 189 12 35 00 OFF 191 21 15 00 ORB 330 YR 70

ON 192 01 56 00 OFF 194 07 06 00 ORB 331 YR 70

ON 194 16 21 00 OFF 197 02 26 00 ORB 332 YR 70

ON 197 08 26 00 OFF 199 16 35 00 ORB 333 YR 70

ON 199 20 41 00 OFF 202 07 06 00 ORB 334 YR 70

ON 202 12 36 00 OFF 204 22 50 00 ORB 335 YR 70

ON 205 02 21 00 OFF 207 07 38 00 ORB 336 YR 70

ON 207 16 41 00 OFF 210 03 26 03 ORB 337 YR 70

ON 210 07 37 00 OFF 212 16 36 00 ORB 338 YR 70

ON 212 21 06 00 OFF 215 05 10 00 ORB 339 YR 70

ON 215 12 35 00 OFF 217 22 40 00 ORB 340 YR 70

ON 218 02 50 00 OFF 220 09 05 00 ORB 341 YR 70

ON 220 16 31 00 OFF 223 03 15 00 ORB 342 YR 70

ON 223 10 11 00 OFF 225 17 25 00 ORB 343 YR 70

ON 225 21 25 00 OFF 228 04 31 00 ORB 344 YR 70

ON 228 10 56 00 OFF 230 23 00 00 ORB 345 YR 70

ON 231 03 20 00 OFF 233 11 40 00 ORB 346 YR 70

ON 233 17 40 00 OFF 236 03 41 00 ORB 347 YR 70

ON 236 08 35 00 OFF 238 17 50 00 ORB 348 YR 70

ON 238 21 50 00 OFF 241 04 22 00 ORB 349 YR 70

ON 241 12 35 00 OFF 243 22 51 00 ORB 350 YR 70

ON 244 07 56 00 OFF 246 12 20 00 ORB 351 YR 70

ON 246 10 50 00 OFF 249 03 35 00 ORB 352 YR 70

ON 249 08 45 00 OFF 251 18 00 00 ORB 353 YR 70

ON 251 22 20 00 OFF 254 04 25 00 ORB 354 YR 70

ON 254 12 56 00 OFF 256 23 25 00 ORB 355 YR 70

ON 257 04 30 00 OFF 259 12 40 00 ORB 356 YR 70

ON 259 17 05 00 OFF 262 01 50 00 ORB 357 YR 70

ON 262 08 50 00 OFF 264 16 40 00 ORB 358 YR 70

ON 264 22 45 00 OFF 267 06 10 00 ORB 359 YR 70

ON 267 12 50 00 OFF 269 23 25 00 ORB 360 YR 70

ON 270 04 30 00 OFF 272 13 05 00 ORB 361 YR 70

ON 272 17 25 00 OFF 275 03 10 00 ORB 362 YR 70

ON 275 08 50 00 OFF 277 18 45 00 ORB 363 YR 70

ON 277 23 15 00 OFF 280 06 50 00 ORB 364 YR 70

ON 280 12 24 00 OFF 282 23 05 00 ORB 365 YR 70

ON 283 04 40 00 OFF 285 13 30 00 ORB 366 YR 70

ON 285 17 50 00 OFF 288 01 45 00 ORB 367 YR 70

ON 288 09 16 00 OFF 290 19 00 00 ORB 368 YR 70

ON 291 00 25 00 OFF 293 05 50 00 ORB 369 YR 70

ON 293 12 46 00 OFF 295 23 40 00 ORB 370 YR 70

ON 296 04 45 00 OFF 298 13 45 00 ORB 371 YR 70

ON 298 18 05 00 OFF 301 02 20 00 ORB 372 YR 70

ON 301 08 45 00 OFF 303 14 50 00 ORB 373 YR 70

ON 303 23 55 00 OFF 306 08 05 00 ORB 374 YR 70

ON 306 12 55 00 OFF 308 23 35 00 ORB 375 YR 70

ON 309 04 50 00 OFF 311 14 05 00 ORB 376 YR 70

ON 311 10 50 00 OFF 314 02 20 00 ORB 377 YR 70

ON 314 09 21 00 OFF 316 19 05 00 ORB 378 YR 70

ON 317 00 10 00 OFF 319 08 50 00 ORB 379 YR 70

ON 319 13 05 00 OFF 321 23 25 00 ORB 380 YR 70

ON 322 04 45 00 OFF 324 13 30 00 ORB 381 YR 70

ON 324 19 11 00 OFF 327 02 70 00 ORB 382 YR 70

ON 327 08 40 00 OFF 329 19 25 00 ORB 383 YR 70

ON 330 00 25 00 OFF 332 08 15 00 ORB 384 YR 70

ON 332 13 20 00 OFF 334 23 15 00 ORB 385 YR 70

ON 335 04 45 00 OFF 337 14 35 00 ORB 386 YR 70

ON 337 19 16 00 OFF 340 03 01 00 ORB 387 YR 70

ON 340 08 48 00 OFF 342 19 31 00 ORB 388 YR 70

ON 343 00 35 00 OFF 345 09 10 00 ORB 389 YR 70

ON 345 13 40 00 OFF 347 23 05 00 ORB 390 YR 70

ON 348 06 11 00 OFF 350 14 50 00 ORB 391 YR 70

ON 350 19 35 00 OFF 353 03 40 00 ORB 392 YR 70

ON 353 08 45 00 OFF 355 19 35 00 ORB 393 YR 70

ON 356 04 45 00 OFF 358 09 40 00 ORB 394 YR 70

ON 358 14 05 00 OFF 360 23 00 00 ORB 395 YR 70

ON 361 05 35 00 OFF 363 15 05 00 ORB 396 YR 70

ON 363 19 55 00 OFF 365 23 59 59 ORB 397 YR 70

ON 001 00 00 00 OFF 001 04 10 00 ORB 397 YR 71

ON 001 09 00 00 OFF 003 19 40 00 ORB 398 YR 71

ON 004 00 50 00 OFF 006 10 00 00 ORB 399 YR 71

ON 006 14 35 00 OFF 008 23 05 00 ORB 400 YR 71

ON 009 03 37 00 OFF 011 14 41 00 ORB 401 YR 71

ON 011 20 15 00 OFF 014 04 35 00 ORB 402 YR 71

ON 014 09 15 00 OFF 016 19 40 00 ORB 403 YR 71

ON 017 01 55 00 OFF 019 10 10 00 ORB 404 YR 71

ON 019 15 05 00 OFF 021 23 19 00 ORB 405 YR 71

ON 022 04 55 00 OFF 024 15 15 00 ORB 406 YR 71

ON 024 20 35 00 OFF 027 01 20 00 ORB 407 YR 71

ON 027 09 40 00 OFF 029 19 40 00 ORB 408 YR 71

ON 030 01 00 00 OFF 032 10 50 00 ORB 409 YR 71

ON 032 15 31 00 OFF 034 23 41 00 ORB 410 YR 71

ON 035 04 56 00 OFF 037 15 41 00 ORB 411 YR 71

ON 037 20 51 00 OFF 040 05 27 30 ORB 412 YR 71

ON 040 10 16 30 OFF 042 19 36 00 ORB 413 YR 71

ON 043 01 01 00 OFF 045 11 10 00 ORB 414 YR 71

ON 045 16 06 00 OFF 047 23 31 00 ORB 415 YR 71

ON 048 05 11 00 OFF 050 15 56 00 ORB 416 YR 71

ON 050 21 06 00 OFF 053 35 10 00 ORB 417 YR 71

ON 053 10 40 00 OFF 055 19 30 00 ORB 418 YR 71

ON 056 01 05 00 OFF 058 11 15 00 ORB 419 YR 71

ON 058 16 30 00 OFF 061 00 25 00 ORB 420 YR 71

ON 061 05 25 00 OFF 063 15 55 00 ORB 421 YR 71

ON 063 21 59 00 OFF 066 06 20 00 ORB 422 YR 71

ON 066 11 10 00 OFF 068 19 35 00 ORB 423 YR 71

ON 069 01 05 00 OFF 071 11 40 00 ORB 424 YR 71

ON 071 17 26 00 OFF 073 23 50 00 ORB 425 YR 71

ON 074 05 45 00 OFF 076 15 50 00 ORB 426 YR 71

ON 076 21 15 00 OFF 079 06 34 00 ORB 427 YR 71

ON 079 11 36 00 OFF 081 19 40 00 ORB 428 YR 71

ON 082 01 05 00 OFF 084 11 50 00 ORB 429 YR 71

ON 084 17 05 00 OFF 087 01 11 00 ORB 430 YR 71

ON 087 00 10 00 OFF 089 15 50 00 ORB 431 YR 71

ON 089 21 15 00 OFF 092 05 35 00 ORB 432 YR 71

ON 092 12 00 00 OFF 094 19 51 00 ORB 433 YR 71

ON 095 01 15 00 OFF 097 10 40 00 ORB 434 YR 71

ON 097 17 26 00 OFF 100 01 35 00 ORB 435 YR 71

ON 100 00 30 00 OFF 102 15 40 00 ORB 436 YR 71

ON 102 21 10 00 OFF 105 07 10 00 ORB 437 YR 71

ON 105 12 20 00 OFF 107 20 00 00 ORB 438 YR 71

ON 108 01 20 00 OFF 110 12 01 00 ORB 439 YR 71

ON 110 17 15 00 OFF 113 01 54 00 ORB 440 YR 71

ON 113 00 50 00 OFF 115 15 35 00 ORB 441 YR 71

ON 115 21 20 00 OFF 118 07 20 00 ORB 442 YR 71

ON 118 12 40 00 OFF 120 20 20 00 ORB 443 YR 71

ON 121 01 25 00 OFF 123 11 45 00 ORB 444 YR 71

ON 123 17 15 00 OFF 125 20 55 00 ORB 445 YR 71

ON 126 07 15 00 OFF 128 15 35 00 ORB 446 YR 71

ON 128 21 00 00 OFF 131 07 00 00 ORB 447 YR 71

ON 131 12 56 00 OFF 133 20 30 00 ORB 448 YR 71

ON 134 02 20 00 OFF 136 11 55 00 ORB 449 YR 71

ON 136 17 15 00 OFF 138 23 50 00 ORB 450 YR 71

ON 139 07 45 00 OFF 141 15 35 00 ORB 451 YR 71

ON 141 21 20 00 OFF 144 07 45 00 ORB 452 YR 71

ON 144 13 00 00 OFF 146 21 00 00 ORB 453 YR 71

ON 147 02 05 00 OFF 149 11 50 00 ORB 454 YR 71

ON 149 17 15 00 OFF 152 02 20 00 ORB 455 YR 71

ON 152 08 27 00 OFF 154 15 50 00 ORB 456 YR 71

ON 154 21 15 00 OFF 157 07 50 00 ORB 457 YR 71

ON 157 13 10 00 OFF 159 13 02 00 ORB 458 YR 71

ON 167 09 06 00 OFF 167 16 05 00 ORB 461 YR 71

ON 167 21 26 00 OFF 169 22 30 00 ORB 462 YR 71

ON 177 19 05 00 OFF 178 03 10 00 ORB 465 YR 71

ON 178 08 40 00 OFF 180 16 30 00 ORB 466 YR 71

ON 180 21 40 00 OFF 182 20 55 00 ORB 467 YR 71

ON 190 15 00 00 OFF 191 03 35 00 ORB 470 YR 71

ON 191 09 00 00 OFF 193 05 20 00 ORB 471 YR 71

ON 201 00 50 30 OFF 201 11 56 00 ORB 474 YR 71

ON 201 17 21 00 OFF 203 12 05 00 ORB 475 YR 71

ON 224 09 32 00 OFF 224 22 40 00 ORB 483 YR 71

ON 225 04 56 00 OFF 227 12 31 00 ORB 484 YR 71

ON 227 14 49 00 OFF 229 15 43 30 ORB 485 YR 71

ON 237 12 18 00 OFF 238 00 01 00 ORB 488 YR 71

ON 238 05 50 00 OFF 240 16 17 32 ORB 489 YR 71

ON 246 14 19 00 OFF 247 18 58 00 ORB 492 YR 71

ON 249 01 45 00 OFF 249 22 39 15 ORB 493 YR 71

ON 251 18 29 00 OFF 252 18 35 00 ORB 494 YR 71

ON 254 11 21 00 OFF 255 16 02 30 ORB 495 YR 71

ON 257 07 01 00 OFF 258 02 27 00 ORB 496 YR 71

ON 259 15 11 00 OFF 261 06 35 04 ORB 497 YR 71

ON 261 13 34 00 OFF 263 09 44 33 ORB 498 YR 71

ON 264 00 35 00 OFF 266 05 49 32 ORB 499 YR 71

ON 267 13 11 00 OFF 267 13 49 30 ORB 500 YR 71

ON 155 00 48 00 OFF 156 10 15 00 ORB 597 YR 72

ON 156 18 30 00 OFF 159 04 05 00 ORB 598 YR 72

ON 159 10 20 00 OFF 161 16 20 00 ORB 599 YR 72

ON 161 23 00 00 OFF 164 09 13 00 ORB 600 YR 72

ON 164 15 25 00 OFF 166 12 35 00 ORB 601 YR 72

ON 167 05 23 00 OFF 169 08 16 00 ORB 602 YR 72

ON 169 23 25 00 OFF 172 02 40 00 ORB 003 YR 72

ON 172 10 15 00 OFF 174 09 35 00 ORB 004 YR 72

ON 175 00 05 00 OFF 177 09 05 00 ORB 005 YR 72

ON 177 15 40 00 OFF 179 23 20 00 ORB 006 YR 72

ON 180 05 30 00 OFF 182 11 10 00 ORB 007 YR 72

ON 182 18 35 00 OFF 185 03 02 00 ORB 008 YR 72

ON 185 07 00 00 OFF 187 16 13 00 ORB 009 YR 72

ON 187 18 21 00 OFF 190 08 09 00 ORB 010 YR 72

ON 190 15 35 00 OFF 192 06 47 00 ORB 011 YR 72

ON 193 04 52 00 OFF 195 15 09 00 ORB 012 YR 72

ON 196 00 00 00 OFF 196 11 44 00 ORB 013 YR 72

(1)

3/5/68 — 3/12/68

RECORD 1 OF FILE 1
LENGTH = 360 BYTES

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1( 1) | 000001320000 | 000700000012 | 000000740000 | 011700000125 | 000001250000 | 000000000002 | 000000010000 | 000000000000 |
| 9( 49) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 17( 97) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 25( 145) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 33( 193) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 41( 241) | 000000740000 | 001000000001 | 000000020000 | 010100000011 | 000000140000 | 000000000075 | 000000010000 | 000100000000 |
| 49( 289) | 004000000040 | 000000400000 | 004000000000 | 000100000104 | 000000000035 | 520000030435 | 000000010012 | 001500142141 |
| 57( 337) | 000000040000 | 000000000000 | 000000000000 | 000000000000 | | | | |

DAY 65

YEAR 68

RECORD 2 OF FILE 1
LENGTH = 360 BYTES

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1( 1) | 000001320000 | 000700000012 | 000000740000 | 011700000125 | 000001250000 | 000000000003 | 000000010000 | 000000000000 |
| 9( 49) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 17( 97) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 25( 145) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 33( 193) | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 41( 241) | 000000740000 | 001000000001 | 000000030000 | 010100000011 | 000000150000 | 000000000075 | 000000010000 | 000100000000 |
| 49( 289) | 004000000040 | 000000400000 | 004000000000 | 000100000104 | 000000000035 | 520000030435 | 000000010012 | 001500142141 |
| 57( 337) | 000000040000 | 000000000000 | 000000000000 | 000000000000 | | | | |

RECORD 3270 OF FILE 3
LENGTH = 540 BYTES

92 DAM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1( 1) | 000002070000 | 000700000012 | 000000740000 | 011700000125 | 000001710000 | 000000006306 | 000000030000 | 001300000016 |
| 9( 49) | 000000100000 | 000400000003 | 000000040000 | 000000000000 | 000000000000 | 000300000000 | 000000360000 | 000000000331 |
| 17( 97) | 000000000000 | 022500000104 | 000000000000 | 030200000001 | 000000050000 | 000000000104 | 000003050000 | 000000000641 |
| 25( 145) | 000002700000 | 000000000000 | 000000000000 | 000000000003 | 000000000000 | 000000000003 | 000000000000 | 000000000000 |
| 33( 193) | 000000000000 | 003700000370 | 000000000000 | 000000000000 | 000000000000 | 000300000316 | 000000130000 | 000000000000 |
| 41( 241) | 000000740000 | 001000000001 | 000061660000 | 011000000004 | 000000360000 | 000000000026 | 000001500000 | 000100000000 |
| 49( 289) | 000001220000 | 017300133757 | 000755110000 | 001000000104 | 000000000035 | 520000047461 | 000000010012 | 001500142141 |
| 57( 337) | 000000040021 | 212100213472 | 002175200026 | 637100042476 | 002110660021 | 206300214115 | 002130720021 | 203600600377 |
| 65( 385) | 002114770027 | 637200212073 | 002071150021 | 607200033771 | 002235320021 | 007000224206 | 000760460021 | 407300231527 |
| 73( 433) | 002141060021 | 007600213076 | 002124660021 | 312100217124 | 002763710027 | 637200600377 | 002135040023 | 736200222551 |
| 81( 481) | 006235600000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| 89( 529) | 000000000000 | 000000000000 | | | | | | |

3270 RECORDS IN FILE 3 OF TAPE

3/31/1970 $0 | 4/3/70 D-1259

DUMP OF TAPE DOUTZ

INPUT TAPE DOUTZ ON MT5
DATA INPUT 07 NF 2 SR 1 1 5 SR 2 1 5

Orbit 292 - 293

| FILE | 1 RECORD | 1 LENGTH | 660BYTES | | | | ORBIT # | |
|---|---|---|---|---|---|---|---|---|
| ( 0) | 000002450000 | 000700000012 | 000000740000 | 011700000125 | 000002430000 | 000000000001 | 000004440000 | 020300000030 |
| ( 48) | 000000230000 | 001300000007 | 000000210000 | 000100000002 | 000000020000 | 005200000001 | 000000400000 | 000200000621 |
| ( 96) | 000000000000 | 025600000343 | 000000000001 | 304300000002 | 000000040000 | 000000000343 | 000130460000 | 000000013672 |
| ( 144) | 000005040000 | 000000000001 | 000000010000 | 000100000001 | 000000010000 | 000000010000 | 000000000000 | 000400000000 |
| ( 192) | 000000000000 | 007100001350 | 000000000000 | 000000000000 | 000000000000 | 000100000416 | 000002030000 | 000000000000 |
| ( 240) | 000000740000 | 001000000001 | 000000010000 | 013200000024 | 000000050000 | 000000000023 | 000000010000 | 000000000000 |
| ( 288) | 000002060000 | 020600400000 | 004000000000 | 136500000106 | 000000000031 | 107100264632 | 000000010033 | 305400334660 |
| ( 336) | 000000040040 | 000000072643 | 000761270007 | 605600076164 | 002301760024 | 410200076067 | 003567740002 | 766300207063 |
| ( 384) | 002141240007 | 607000070236 | 000760250005 | 075400273374 | 002115140007 | 613500227242 | 002165240022 | 765400036043 |
| ( 432) | 000762030007 | 617600076031 | 002104650021 | 147200113437 | 002134770021 | 243500220117 | 002476370005 | 527600213101 |
| ( 480) | 000761530007 | 611500076136 | 000761240021 | 107600076143 | 002335010022 | 717400212411 | 002126320007 | 607600076026 |
| ( 528) | 000716500031 | 147600065421 | 000761570021 | 307400276352 | 002074750021 | 150500076107 | 000726530004 | 772300210473 |
| ( 576) | 000760760007 | 603700052721 | 000761640007 | 621300076025 | 000752040021 | 410300076051 | 000761100023 | 651400232571 |
| ( 624) | 002265010021 | 307000076306 | 000732230022 | 151300076154 | 000761720000 | 000000000000 | | |

| FILE | 1 RECORD | 2 LENGTH | 720BYTES | | | | | |
|---|---|---|---|---|---|---|---|---|
| ( 0) | 000002640000 | 000700000012 | 000000740000 | 011700000125 | 000002640000 | 000000000002 | 000004440000 | 021400000034 |
| ( 48) | 000000250000 | 001300000010 | 000000220000 | 000100000002 | 000000020000 | 007500000001 | 000000370000 | 000200000641 |
| ( 96) | 000000000000 | 025500000364 | 000000000000 | 000000000000 | 000000000000 | 000000000364 | 000000000000 | 000000000641 |
| ( 144) | 000005020000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| ( 192) | 000000000000 | 007400000060 | 000000000000 | 000000000000 | 000000000000 | 000100000425 | 000002140000 | 000000000000 |
| ( 240) | 000000740000 | 001000000001 | 000000020000 | 013200000024 | 000000060000 | 000000000023 | 000000010000 | 000000000000 |
| ( 288) | 000002060000 | 020600062343 | 000522740000 | 136500000106 | 000000000031 | 107100264632 | 000000010033 | 305400334660 |
| ( 336) | 000000040007 | 616700076060 | 000762410005 | 527400076114 | 000760350007 | 604300076111 | 000761040007 | 621100050367 |
| ( 384) | 000423740035 | 677400223543 | 000273740021 | 307700221174 | 002075040002 | 267700076105 | 002130720022 | 055700213501 |
| ( 432) | 000760770021 | 161500212466 | 002125130022 | 307300222541 | 000761470007 | 604300076041 | 002244770020 | 647300176204 |
| ( 480) | 002237740004 | 621600076137 | 002441060007 | 601500212077 | 000761750024 | 461300076043 | 000760120003 | 507400076227 |
| ( 528) | 000760220007 | 617300210102 | 002130700021 | 210100031774 | 000360020021 | 110400076121 | 000761620007 | 603400050241 |
| ( 576) | 000762120007 | 223100076150 | 002204730006 | 763500076107 | 002140740032 | 415600076141 | 002050330004 | 035600076023 |
| ( 624) | 000706520003 | 520300214500 | 000762100007 | 606000076106 | 000762120005 | 726700076162 | 000315470007 | 365700232615 |
| ( 672) | 000240050024 | 524500066214 | 002401550007 | 605300055373 | 000760650022 | 312200076153 | 000761130021 | 525500076066 |

| FILE | 1 RECORD | 3 LENGTH | 780BYTES | | | | | |
|---|---|---|---|---|---|---|---|---|
| ( 0) | 000003030000 | 000700000012 | 000000740000 | 011700000125 | 000003000000 | 000000000003 | 000004440000 | 021400000033 |
| ( 48) | 000000250000 | 001200000007 | 000000220000 | 000100000000 | 000000020000 | 010400000000 | 000000470000 | 000000000640 |
| ( 96) | 000000000000 | 023600000402 | 000000000000 | 000000000000 | 000000000000 | 000000000402 | 000000000000 | 000000000640 |
| ( 144) | 000004650000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| ( 192) | 000000000000 | 007300001610 | 000000000000 | 000000000000 | 000000000000 | 000100000424 | 000002140000 | 000000000000 |
| ( 240) | 000000740000 | 001000000001 | 000000030000 | 013200000024 | 000000070000 | 000000000023 | 000000010000 | 000000000000 |
| ( 288) | 000002060000 | 020600062343 | 000675350000 | 136500000106 | 000000000031 | 107100264632 | 000000010033 | 305400334660 |
| ( 336) | 000000040007 | 461200260774 | 002271460021 | 450000063764 | 000143020005 | 470700062545 | 000761000002 | 226100076135 |
| ( 384) | 000761330021 | 210100076174 | 002377370007 | 606700076070 | 002552560006 | 120200061521 | 002135100021 | 210000076106 |
| ( 432) | 002335500007 | 610300240374 | 000607260007 | 621300076201 | 000672730007 | 615600076207 | 002124770007 | 616500210506 |
| ( 480) | 000656470007 | 623000047565 | 002030200021 | 250400207471 | 000761470021 | 251300017412 | 000761270007 | 605300211502 |
| ( 528) | 000107220007 | 612100076141 | 000761640021 | 146300212474 | 002347000005 | 723600076063 | 002215650006 | 130000053340 |
| ( 576) | 002150760007 | 063300212475 | 000636670007 | 616600073246 | 000762030021 | 551500023413 | 000437740022 | 207200040374 |
| ( 624) | 000760670007 | 611700076123 | 002174670005 | 771000066276 | 002206120021 | 512400076172 | 002154710021 | 351000076065 |
| ( 672) | 000603210005 | 315300076037 | 000761000007 | 604600076026 | 002140710026 | 126600076031 | 000151430021 | 146300076131 |
| ( 720) | 000064140022 | 251700076144 | 002320720021 | 206600076237 | 002407220006 | 233300047234 | 002151120021 | 250300055252 |
| ( 768) | 000000000000 | 000000000000 | | | | | | |

| FILE | 1 RECORD | 4 LENGTH | 780BYTES | | | | | |
|---|---|---|---|---|---|---|---|---|
| ( 0) | 000003030000 | 000700000012 | 000000740000 | 011700000125 | 000002700000 | 000000000004 | 000004440000 | 021500000031 |
| ( 48) | 000000260000 | 001300000010 | 000000210000 | 000200000002 | 000000010000 | 007400000002 | 000000430000 | 000200000641 |
| ( 96) | 000000000000 | 025500000364 | 000000000000 | 000000000000 | 000000000000 | 000000000364 | 000000000000 | 000000000641 |
| ( 144) | 000004760000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 | 000000000000 |
| ( 192) | 000000000000 | 007400000060 | 000000000000 | 000000000000 | 000000000000 | 000100000424 | 000002150000 | 000000000000 |
| ( 240) | 000000740000 | 001000000001 | 000000040000 | 013200000024 | 000000100000 | 000000000023 | 000000010000 | 000000000000 |

```
(   0)  000001700000  000700000012  000000740000  011700000125  000001610000  000000003343  000004100000  001600000013
(  48)  000000150000  000700000005  000000110000  000000000001  000000000000  000500000000  000000260000  000100000064
(  96)  000000000000  001000000054  000000000000  000000000000  000000000000  000000000054  000000000000  000000000064
( 144)  000000300000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
( 192)  000000000000  007300001610  000000000000  000000000000  000000000000  000100000046  000000160000  000000000000
( 240)  000000740000  000100000003  000033300000  002300000001  000000140000  000000000024  000000020000  000000000000
( 288)  004000000040  000000035717  001173470000  125600000106  000000000031  107100241666  000000010033  305400334514
( 336)  000000040023  410700211104  002114720031  110500211473  002325070021  307100207502  002511500027  636700212110
( 384)  002161050022  051500044323  002211270021  210300227166  002111030021  247700014441  000760050004  576700212104
( 432)  002331460020  750200224553  000717410021  307600000000  000000000000  000000000000  000000000000  000000000000

FILE    3  RECORD    1925  LENGTH    480BYTES
(   0)  000001700000  000700000012  000000740000  011700000125  000001610000  000000003343  000004100000  001600000013
(  48)  000000150000  000700000005  000000110000  000000000001  000000000000  000500000000  000000260000  000100000064
(  96)  000000000000  001000000054  000000000000  000000000000  000000000000  000000000054  000000000000  000000000064
( 144)  000000300000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
( 192)  000000000000  007300001610  000000000000  000000000000  000000000000  000100000046  000000160000  000000000000
( 240)  000000740000  000100000003  000033300000  002300000001  000000140000  000000000024  000000020000  000000000000
( 288)  004000000040  000000035717  001173470000  125600000106  000000000031  107100241666  000000010033  305400334514
( 336)  000000040023  410700211104  002114720031  110500211473  002325070021  307100207502  002511500027  636700212110
( 384)  002161050022  051500044323  002211270021  210300227166  002111030021  247700014441  000760050004  576700212104
( 432)  002331460020  750200224553  000717410021  307600000000  000000000000  000000000000  000000000000  000000000000

FILE    3  RECORD    1926  LENGTH    480BYTES
(   0)  000001700000  000700000012  000000740000  011700000125  000001610000  000000003343  000004100000  001600000013
(  48)  000000150000  000700000005  000000110000  000000000001  000000000000  000500000000  000000260000  000100000064
(  96)  000000000000  001000000054  000000000000  000000000000  000000000000  000000000054  000000000000  000000000064
( 144)  000000300000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
( 192)  000000000000  007300001610  000000000000  000000000000  000000000000  000100000046  000000160000  000000000000
( 240)  000000740000  000100000003  000033300000  002300000001  000000140000  000000000024  000000020000  000000000000
( 288)  004000000040  000000035717  001173470000  125600000106  000000000031  107100241666  000000010033  305400334514
( 336)  000000040023  410700211104  002114720031  110500211473  002325070021  307100207502  002511500027  636700212110
( 384)  002161050022  051500044323  002211270021  210300227166  002111030021  247700014441  000760050004  576700212104
( 432)  002331460020  750200224553  000717410021  307600000000  000000000000  000000000000  000000000000  000000000000

FILE    3  RECORD    1927  LENGTH    480BYTES
(   0)  000001700000  000700000012  000000740000  011700000125  000001610000  000000003343  000004100000  001600000013
(  48)  000000150000  000700000005  000000110000  000000000001  000000000000  000500000000  000000260000  000100000064
(  96)  000000000000  001000000054  000000000000  000000000000  000000000000  000000000054  000000000000  000000000064
( 144)  000000300000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
( 192)  000000000000  007300001610  000000000000  000000000000  000000000000  000100000046  000000160000  000000000000
( 240)  000000740000  000100000003  000033300000  002300000001  000000140000  000000000024  000000020000  000000000000
( 288)  004000000040  000000035717  001173470000  125600000106  000000000031  107100241666  000000010033  305400334514
( 336)  000000040023  410700211104  002114720031  110500211473  002325070021  307100207502  002511500027  636700212110
( 384)  002161050022  051500044323  002211270021  210300227166  002111030021  247700014441  000760050004  576700212104
( 432)  002331460020  750200224553  000717410021  307600000000  000000000000  000000000000  000000000000  000000000000

        FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.        INPUT         SIZE      PERM  ZERO B  SHORT  UNDEF.  #RECS.  TOTAL#
          3    1927        1932           600         0      0       0      0       0       0

EOJ       DUMP STOPPED AFTER FILE   3          # OF PERMANENT READ ERRORS   0

START TIME 08/06/83  12:50:50        STOP TIME 08/06/83  12:53:45

$$
$ASS IN TUO
$NOP
```