

0.0 GRACEC ACC 1 1 Initial default by hywen  
0.0 GRACED ACC 1 1 Initial default by hywen  
0.0 GRACEC AOCS 1 1 Initial default by hywen  
0.0 GRACED AOCS 1 1 Initial default by hywen  
0.0 GRACEC ICUVP 1 0 Initial default by hywen  
0.0 GRACED ICUVP 1 0 Initial default by hywen  
0.0 GRACEC IPU 1 1 Initial default by hywen  
0.0 GRACED IPU 1 1 Initial default by hywen  
0.0 GRACEC IPUR 3 1 0 1 Initial default by hywen  
0.0 GRACED IPUR 3 1 0 1 Initial default by hywen  
0.0 GRACEC KAMI 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACED KAMI 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACEC KBR 1 1 Initial default by hywen  
0.0 GRACED KBR 1 1 Initial default by hywen  
0.0 GRACEC K\_MI 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACED K\_MI 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACEC KTOFF 1 0.0 Initial default by hywen  
0.0 GRACED KTOFF 1 0.0 Initial default by hywen  
0.0 GRACEC LRI 1 1 Initial default by hywen  
0.0 GRACED LRI 1 0 Initial default by hywen  
0.0 GRACEC LRIDATATION 1 0 Initial default by hywen  
0.0 GRACED LRIDATATION 1 0 Initial default by hywen  
0.0 GRACEC MTEA 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACED MTEA 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACEC MTEB 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACED MTEB 3 0.0 0.0 0.0 Initial default by hywen  
0.0 GRACEC QSA 5 1 -0.1846523033914243 0.6877863330342120 0.6765142470974430  
0.1875685485836400 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACEC QSA 5 2 0.2482955018618801 -0.0400731149707713 0.8516159983601500  
0.4598844208589170 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACEC QSA 5 3 -0.4627545612843981 0.8531198681517500 -0.0427367676938312 -  
0.2371039334602200 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACED QSA 5 1 -0.1789388979356683 0.6827348935446690 0.6828070775129600  
0.1887549491810180 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACED QSA 5 2 0.2364914939710544 -0.0535740306800429 0.8517947395024960  
0.4643784214107150 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACED QSA 5 3 -0.4504277250139701 0.8590253079524141 -0.0480909983022378 -  
0.2384903367398640 Mon May 14 10:00:00 2018 by tamarab - values from ground SCA calibration  
by Justin Maki

0.0 GRACEC USO 1 1 Initial default by hywen

0.0 GRACED USO 1 1 Initial default by hywen

0.0 GRACEC VCM 3 0.00000 0.00000 0.00000 Initial default by hywen

0.0 GRACED VCM 3 0.00000 0.00000 0.00000 Initial default by hywen

0.0 GRACEC VGB 6 -1.56125 -0.300 -0.19 -1.56125 -0.300 -0.19 Initial GRACE values

0.0 GRACED VGB 6 -1.56125 -0.300 -0.19 -1.56125 -0.300 -0.19 Initial GRACE values

x 0.0 GRACEC VGN 6 0.2602357 -0.001283 -0.433248 0.2602357 -0.001283 -0.439248 From 2018-  
04-25 Powerpoint by Jeff Tien and Brian Schratz, with 53 mm added to Z values (email forwarded to  
hywen by glk on 2018-05-18). Updated by hywen on 2018-05-18.

x 0.0 GRACED VGN 6 0.26004425 -0.001079 -0.4324555 0.26004425 -0.001079 -0.4384555 From  
2018-04-25 Powerpoint by Jeff Tien and Brian Schratz, with 53 mm added to Z values (email  
forwarded to hywen by glk on 2018-05-18). Updated by hywen on 2018-05-18.

0.0 GRACEC VGN 6 0.2602357 -0.001283 -0.486248 0.2602357 -0.001283 -0.492248 These values  
were already given in Satellite/Science Reference Frame, so no need to add 53 mm to Z. Updated  
by hywen on 2019-05-07.

0.0 GRACED VGN 6 0.26004425 -0.001079 -0.4854555 0.26004425 -0.001079 -0.4914555 These  
values were already given in Satellite/Science Reference Frame, so no need to add 53 mm to Z.  
Updated by hywen on 2019-05-07.

0.0 GRACEC VGO 6 -1.56125 0.000 -0.19 -1.56125 0.000 -0.19 Initial GRACE values

0.0 GRACED VGO 6 -1.56125 0.000 -0.19 -1.56125 0.000 -0.19 Initial GRACE values

x 0.0 GRACEC VKB 3 1.4443985 -0.000054 0.000448 Mon May 14 10:00:00 2018 by tamarab - values from ground calibration

x 0.0 GRACED VKB 3 1.4444575 -0.000054 0.000230 Mon May 14 10:00:00 2018 by tamarab - values from ground calibration

0.0 GRACEC VKB 3 1.4443985 -0.00017 0.000448 Updated 2019-05-07 by hywen. Add 53 mm to Z values (to translate from satellite build frame to Satellite/Science Reference Frame) on slide 6 of 2018-04-25 "GRACE-FO KBR & GPS POD Antenna Phase Center" powerpoint by Jeff Tien and Brian Schratz, then get dual-frequency combination of the K and Ka values.

0.0 GRACED VKB 3 1.4444575 0.000054 0.000230 Updated 2019-05-07 by hywen. Add 53 mm to Z values (to translate from satellite build frame to Satellite/Science Reference Frame) on slide 6 of 2018-04-25 "GRACE-FO KBR & GPS POD Antenna Phase Center" powerpoint by Jeff Tien and Brian Schratz, then get dual-frequency combination of the K and Ka values.

x 0.0 GRACEC VSL 3 -0.6000 -0.3275 0.2178 Initial GRACE values. Also applies to GRACE-FO, according to email from glkruizi to hywen and wbert on 2018-06-05.

x 0.0 GRACED VSL 3 -0.6000 -0.3275 0.2178 Initial GRACE values. Also applies to GRACE-FO, according to email from glkruizi to hywen and wbert on 2018-06-05.

0.0 GRACEC VSL 3 -0.6000 -0.3275 0.22078 From 2018-05-28 email from Sven Bauer, forward to hywen by glkruizi on 2019-05-13. Updated 2019-05-13 by hywen.

0.0 GRACED VSL 3 -0.6000 -0.3275 0.22078 From 2018-05-28 email from Sven Bauer, forward to hywen by glkruizi on 2019-05-13. Updated 2019-05-13 by hywen.

580321260 GRACEC IPUR 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-23\_C\_00.dat by glkruizi on 2018-06-11

580321260 GRACEC IPU 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-23\_C\_00.dat by glkruizi on 2018-06-11 for webpage

580323370 GRACED IPUR 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-23\_D\_00.dat by glkruizi on 2018-06-11

580323370 GRACED IPU 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-23\_D\_00.dat by glkruizi on 2018-06-11. Added for webpage by glkruizi

580414784.600034 GRACEC MANV 4 127.000 0.0988 0 0.0 Wed Oct 10 21:55:15 2018 by operator (2018-05-24 06:19:44)

580431375.598931 GRACED MANV 4 126.000 0.0988 0 0.0 Wed Oct 10 21:56:10 2018 by operator (2018-05-24 10:56:15)

580562581.599849 GRACEC MANV 4 416.000 0.0988 0 0.0 Wed Oct 10 21:55:16 2018 by operator (2018-05-25 23:23:01)

580568286.597180 GRACED MANV 4 406.000 0.0988 0 0.0 Wed Oct 10 21:56:11 2018 by operator (2018-05-26 00:58:06)

580573978.599828 GRACEC MANV 4 423.000 0.0988 0 0.0 Manually added on 2018-10-11 by hywen (2018-05-26 02:32:58)

580579682.597023 GRACED MANV 4 413.000 0.0988 0 0.0 Wed Oct 10 21:56:11 2018 by operator (2018-05-26 04:08:02)

580857980 GRACEC IPUR 4 -1 580858163 -1 -0.47028 Mon Jun 11 20:12:07 2018 by operator

580857980 GRACEC USO 1 -1 Mon Jun 11 20:12:07 2018 by operator

x 580858000 GRACEC IPUR 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-29\_C\_00.dat by hywen on 2018-05-29

580858000 GRACEC IPU 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-29\_C\_00.dat by hywen on 2018-05-29. Added for webpage by glkruizi

x 580863600 GRACED IPUR 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-29\_D\_00.dat by hywen on 2018-05-29

x 580863600 GRACED IPU 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-05-29\_D\_00.dat by hywen on 2018-05-29. Added for webpage by glkruizi

580863610 GRACED IPUR 4 -1 580863803 -1 -0.453379 Tue Aug 28 20:30:23 2018 by operator

580863610 GRACED USO 1 -1 Tue Aug 28 20:30:23 2018 by operator

x 581653840 GRACED IPUR 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-06-07\_D\_00.dat by glkruizi on 2018-06-11

581653840 GRACED IPU 3 1 0 1 Manually added to lie within time gap in GNV1A\_2018-06-07\_D\_00.dat by glkruizi on 2018-06-11. Added for webpage by glkruizi

581654080 GRACED IPUR 4 -1 581654221 -1 -0.07481599999999999999 Mon Jun 11 20:12:10 2018 by operator

581654080 GRACED USO 1 -1 Mon Jun 11 20:12:10 2018 by operator

582159702 GRACEC LRIDATATION 1 -16827596 2018-06-13 11:01:42 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

582159702 GRACED LRIDATATION 1 3805482 2018-06-13 11:01:42 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

582199192 GRACED LRIDATATION 1 0 2018-06-13 21:59:02 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value unknown for this reboot. Added by hywen on 2019-07-16.

582199205 GRACEC LRIDATATION 1 0 2018-06-13 22:00:05 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value unknown for this reboot. Added by hywen on 2019-07-16.

582201115 GRACEC LRIDATATION 1 2558831 2018-06-13 22:31:55 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

582201115 GRACED LRIDATATION 1 1168503 2018-06-13 22:31:55 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

582240592 GRACED LRI 1 0 2018-06-14 09:29:52 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D set to master at 2018-06-14 09:29 UTC. Added by hywen on 2018-06-15.

582240592 GRACED LRIDATATION 1 0 2018-06-14 09:29:52 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value unknown for this reboot. Added by hywen on 2019-07-16.

582240605 GRACEC LRI 1 1 2018-06-14 09:30:05 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE C set to transponder. Updated by hywen on 2019-07-16.

582240605 GRACEC LRIDATATION 1 0 2018-06-14 09:30:05 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value unknown for this reboot. Added by hywen on 2019-07-16.

582323330 GRACEC IPUR 4 -1 582323656 -1 -0.088711

582323330 GRACEC IPU 3 1 0 1 Added manually for webpage by glkruizi

582327560 GRACEC IPUR 4 -1 582327874 -1 -0.09574100000000001

582327560 GRACEC IPU 3 1 0 1 Added manually for webpage by glkruizi

582329460 GRACEC LRI 1 0 From 2018-06-15 operations status report; GRACE C set to master at 2018-06-15 10:11 UTC (but no science data in this role). Added by hywen on 2018-06-15.

582329460 GRACED LRI 1 1 From 2018-06-15 operations status report; GRACE D set to transponder at 2018-06-15 10:11 UTC (but no science data in this role). Added by hywen on 2018-06-15.

582341471 GRACEC LRI 1 1 From 2018-06-27 email from C. Woodruff; GRACE C set to transponder at 2018-06-15 13:31:11.555 UTC. Added by hywen on 2018-07-09.

582343920 GRACED LRI 1 0 From 2018-06-27 email from C. Woodruff; GRACE D set to master at 2018-06-15 14:12 UTC. Added by hywen on 2018-07-09.

582423579 GRACED LRI 1 0 2018-06-16 12:19:39 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D set to master. Updated by hywen on 2019-07-15.

582423579 GRACED LRIDATATION 1 5234842 From 2018-06-20 LRI datation reports. Updated by hywen on 2019-07-15.

582440360 GRACEC LRI 1 1 2018-06-16 16:59:20 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE C set to transponder. Updated by hywen on 2019-07-15.

582440360 GRACEC LRIDATATION 1 -6093212 From 2018-06-20 LRI datation reports. This is 32562788-8\*4.832000e6, because datation bias is negative at this reboot. Updated by hywen on 2019-07-15.

582969454.597614 GRACEC MANV 4 49.000 0.0988 0 0.0 Wed Oct 10 21:35:06 2018 by operator (2018-06-22 19:57:34)

582975462.578039 GRACED MANV 4 84.000 0.0988 0 0.0 Wed Oct 10 21:35:16 2018 by operator (2018-06-22 21:37:42)

583675635.0 GRACED K\_MI 3 0.02 0.0 0.0 added by glkruizi

583785850.0 GRACED K\_MI 3 0.0 0.0 0.0 commanded IPU reboot added by glkruizi

583785850 GRACED IPUR 4 -1 583786025 -1 -0.259386 From using FindIpuReset.e by efahnest on 2018-07-05

583785850 GRACED IPU 3 1 0 1 Added manually for webpage by efahnest

583785850 GRACED USO 1 -1 Mon Jul 23 23:54:40 2018 by operator

584280360 GRACED IPUR 4 -1 584280766 -1 -0.340103 Mon Jul 09 14:45:22 2018 by operator

584280360 GRACED USO 1 -1 Mon Jul 09 14:45:22 2018 by operator

584280826 GRACED IPU 3 1 0 1 Added manually for webpage by glkruizi

585005371.0 GRACEC IPU 3 1 1215768571.0 1 Tue Jul 17 04:13:44 2018 by operator

585005380 GRACEC IPUR 4 -1 585005556 -1 -0.077153 Tue Jul 17 14:39:29 2018 by operator

585005380 GRACEC USO 1 -1 Tue Jul 17 14:39:29 2018 by operator

585186900 GRACEC MTEA 3 0.0 6.2175 0.0 Wed Jul 18 07:34:38 2018 by mpaik 0.0 6.2175 0.0

585187560 GRACEC MTEA 3 0.0 6.220 0.0 Wed Jul 18 07:38:29 2018 by mpaik 0.0 12.4375 0.0

585191815 GRACED LRIDATATION 1 3416077 2018-07-18 13:16:55 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Updated by hywen on 2019-07-15.

585209294.0 GRACED IPU 3 1 1215972494.0 1 Wed Jul 18 20:02:46 2018 by operator

585209300 GRACED IPUR 4 -1 585209467 -1 -0.079089999999999999 Thu Jul 19 14:29:08 2018 by operator

585209300 GRACED USO 1 -1 Thu Jul 19 14:29:08 2018 by operator

585255563 GRACEC LRIDATATION 1 10280082 2018-07-19 06:59:23 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; only GF1 LRI rebooted, with no change in role. Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Updated by hywen on 2019-07-15.

585266600 GRACED IPUR 4 -1 585266843 -1 -0.451454 Wed Aug 22 16:44:25 2018 by operator

585266600 GRACED USO 1 -1 Wed Aug 22 16:44:25 2018 by operator

585345934.0 GRACEC IPU 3 1 1216109134.0 1 Fri Jul 20 11:28:21 2018 by operator

585345940 GRACEC IPUR 4 -1 585346257 -1 -0.095093 Sat Jul 21 15:50:15 2018 by operator

585345940 GRACEC USO 1 -1 Sat Jul 21 15:50:15 2018 by operator

585696660 GRACEC MTEA 3 0.0 0.0 -1.8125 Tue Jul 24 08:16:21 2018 by mpaik 0.0 12.4375 -1.8125

585697260 GRACEC MTEA 3 0.0 0.0 -1.810 Tue Jul 24 08:17:59 2018 by mpaik 0.0 12.4375 -3.6225

585836313.0 GRACEC IPU 3 1 1216599513.0 1 Thu Jul 26 03:02:19 2018 by operator

585836320 GRACEC IPUR 4 -1 585836499 -1 -0.088821 Fri Jul 27 04:19:05 2018 by operator

585836320 GRACEC USO 1 -1 Fri Jul 27 04:19:05 2018 by operator

585879093.0 GRACEC IPU 3 1 1216642293.0 1 Thu Jul 26 15:36:36 2018 by operator

585879100 GRACEC IPUR 4 -1 585879274 -1 -0.095717 Fri Jul 27 04:19:05 2018 by operator

585879100 GRACEC USO 1 -1 Fri Jul 27 04:19:05 2018 by operator

587161670 GRACEC LRIDATATION 1 -5409522 2018-08-10 08:27:50 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

587167259 GRACED LRIDATATION 1 0 2018-08-10 10:00:59 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value unknown for this reboot. Added by hywen on 2019-07-16.

588285715 GRACEC LRI 1 0 2018-08-23 08:41:55 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE C set to master while GRACE D is also master at this time, but LRI tracking is off. Added by hywen on 2018-08-23.

588285715 GRACEC LRIDATATION 1 -8847085 2018-08-10 08:41:55 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation

value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

589288249.0 GRACEC IPU 3 1 1220051449.0 1 Tue Sep 04 01:23:30 2018 by operator

589288260 GRACEC IPUR 4 -1 589288523 -1 -0.54763 Tue Sep 04 14:54:57 2018 by operator

589288260 GRACEC USO 1 -1 Tue Sep 04 14:54:57 2018 by operator

589317813.0 GRACEC IPU 3 1 1220081013.0 1 Tue Sep 04 10:44:33 2018 by operator

589317820 GRACEC IPUR 4 -1 589317977 -1 -0.092805 Wed Sep 05 05:46:43 2018 by operator

589317820 GRACEC USO 1 -1 Wed Sep 05 05:46:43 2018 by operator

591057045.0 GRACEC IPU 3 1 1221820245.0 1 Mon Sep 24 12:57:43 2018 by operator

591057050 GRACEC IPUR 4 -1 591057354 -1 -0.398774 Tue Sep 25 14:30:17 2018 by operator

591057050 GRACEC USO 1 -1 Tue Sep 25 14:30:17 2018 by operator

591220795.0 GRACEC IPU 3 1 1221983995.0 1 Wed Sep 26 14:19:53 2018 by operator

591220810 GRACEC IPUR 4 -1 591221060 -1 -0.343867 Thu Sep 27 04:16:23 2018 by operator

591220810 GRACEC USO 1 -1 Thu Sep 27 04:16:23 2018 by operator

591246446.0 GRACEC IPU 3 1 1222009646.0 1 Wed Sep 26 15:27:54 2018 by operator

591246460 GRACEC IPUR 4 -1 591246628 -1 -0.09508800000000001 Thu Sep 27 04:16:23 2018 by operator

591246460 GRACEC USO 1 -1 Thu Sep 27 04:16:23 2018 by operator

591246498 GRACEC LRIDATATION 1 -19889254 2018-09-26 15:08:18 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

592949216.0 GRACED IPU 3 1 1223712416.0 1 Wed Oct 17 22:40:07 2018 by operator

592949230 GRACED IPUR 4 -1 592949429 -1 -0.10272 Tue Oct 16 12:00:54 2018 by operator

592949230 GRACED USO 1 -1 Tue Oct 16 12:00:54 2018 by operator

593456620.586537 GRACEC MANV 4 735.000 0.0988 0 0.0 Tue Oct 23 04:39:51 2018 by operator (2018-10-22 05:03:40)

593467285.0 GRACEC IPU 3 1 1224230485.0 1 Mon Oct 22 09:26:54 2018 by operator

593467290 GRACEC IPUR 4 -1 593467500 -1 -0.48177 Tue Oct 23 04:21:06 2018 by operator

593467290 GRACEC USO 1 -1 Tue Oct 23 04:21:06 2018 by operator

593471079.0 GRACED IPU 3 1 1224234279.0 1 Mon Oct 22 16:35:56 2018 by operator

593471090 GRACED IPUR 4 -1 593471347 -1 -0.326692 Tue Oct 23 05:52:32 2018 by operator

593471090 GRACED USO 1 -1 Tue Oct 23 05:52:32 2018 by operator

594566348 GRACEC LRIDATATION 1 -2675550 2018-11-04 01:19:08 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

594707754 GRACEC LRIDATATION 1 -24825642 2018-11-05 16:35:54 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

594750012.0 GRACED IPU 3 1 1225513212.0 1 Tue Nov 06 07:09:40 2018 by operator

594750020 GRACED IPUR 4 -1 594750202 -1 -0.324122 Wed Nov 07 05:15:36 2018 by operator

594750020 GRACED USO 1 -1 Wed Nov 07 05:15:36 2018 by operator

595026025.0 GRACEC IPU 3 1 1225789225.0 1 Fri Nov 09 12:19:38 2018 by operator

595026030 GRACEC IPUR 4 -1 595026325 -1 -0.486148 Sat Nov 10 17:26:36 2018 by operator

595026030 GRACEC USO 1 -1 Sat Nov 10 17:26:36 2018 by operator

595298185.0 GRACED IPU 3 1 1226061385.0 1 Mon Nov 12 14:30:41 2018 by operator

595298190 GRACED IPUR 4 -1 595298387 -1 -0.371786 Tue Nov 13 06:30:20 2018 by operator

595298190 GRACED USO 1 -1 Tue Nov 13 06:30:20 2018 by operator

596123029 GRACEC LRIDATATION 1 -18848375 2018-11-22 01:43:49 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

597471205.0 GRACEC IPU 3 1 1228234405.0 1 Fri Dec 07 18:10:32 2018 by operator

597471210 GRACEC IPUR 4 -1 597471442 -1 -0.471698 Sat Dec 08 03:41:15 2018 by operator

597471210 GRACEC USO 1 -1 Sat Dec 08 03:41:15 2018 by operator

597471235.0 GRACED IPU 3 1 1228234435.0 1 Fri Dec 07 16:33:13 2018 by operator

597471250 GRACED IPUR 4 -1 597471477 -1 -0.352533 Sat Dec 08 05:12:27 2018 by operator

597471250 GRACED USO 1 -1 Sat Dec 08 05:12:27 2018 by operator

597822865.0 GRACED IPU 3 1 1228586065.0 1 Tue Dec 11 18:18:56 2018 by operator

597822865.0 GRACEC IPU 3 1 1228586065.0 1 Tue Dec 11 19:56:02 2018 by operator

597822870 GRACED IPUR 4 -1 597823032 -1 -0.35727 Wed Dec 12 03:42:40 2018 by operator

597822870 GRACED USO 1 -1 Wed Dec 12 03:42:40 2018 by operator

597822870 GRACEC IPUR 4 -1 597823098 -1 -0.479385 Wed Dec 12 05:19:05 2018 by operator

597822870 GRACEC USO 1 -1 Wed Dec 12 05:19:05 2018 by operator

597891456 GRACED LRI 1 0 2018-12-12 12:57:36 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D rebooted to master. Updated by hywen on 2017-07-15.

597891456 GRACED LRIDATATION 1 2410965 From GF2\_L0\_ISP\_NSCI\_NYA\_20181213T105637\_20181213T075147\_20181213T105646\_VC2 datation report. Added by hywen on 2019-07-09.

597897223 GRACEC LRI 1 1 2018-12-12 14:33:43 reboot time-tag from 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE C rebooted to transponder. Added by hywen on 2018-12-12.

597897223 GRACEC LRIDATATION 1 422173 From GF1\_L0\_ISP\_NSCI\_NYA\_20181212T235826\_20181212T205449\_20181213T000148\_VC2 datation report. Added by hywen on 2019-07-09.

597965521 GRACEC LRI 1 0 GRACE C switched to master at 2018-12-13 09:32:01 UTC. From 2019-07-09 email from Chris Woodruff titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Modified by hywen on 2019-07-12.

597965521 GRACEC LRIDATATION 1 -19487610 From GF1\_L0\_ISP\_NSCI\_NYA\_20181213T220239\_20181213T185849\_20181213T220648\_VC2 datation report. This is  $19168390 \cdot 8 \cdot 4.832000e6$ , because apparently the datation bias is negative in this instance - have to figure out how to determine this. Added by hywen on 2019-07-09.

597965534 GRACED LRI 1 1 2018-12-13 09:32:14 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D switched to transponder. Updated by hywen on 2019-07-15.

597965534 GRACED LRIDATATION 1 4770056 From GF2\_L0\_ISP\_NSCI\_NYA\_20181213T233727\_20181213T203346\_20181213T234046\_VC2 datation report. Added by hywen on 2019-07-09.

598083685.0 GRACED IPU 3 1 1228846885.0 1 Fri Dec 14 18:54:59 2018 by operator

598083686.0 GRACEC IPU 3 1 1228846886.0 1 Fri Dec 14 20:28:16 2018 by operator

598083690 GRACED IPUR 4 -1 598083844 -1 -0.349102 Sat Dec 15 04:15:22 2018 by operator

598083690 GRACED USO 1 -1 Sat Dec 15 04:15:22 2018 by operator

598083700 GRACEC IPUR 4 -1 598083895 -1 -0.086495 Sat Dec 15 05:52:14 2018 by operator

598083700 GRACEC USO 1 -1 Sat Dec 15 05:52:14 2018 by operator

599254105.0 GRACED IPU 3 1 1230017305.0 1 Fri Dec 28 10:40:18 2018 by operator

599254106.0 GRACEC IPU 3 1 1230017306.0 1 Fri Dec 28 08:59:43 2018 by operator

599254110 GRACED IPUR 4 -1 599254390 -1 -0.39172 Sat Dec 29 16:15:36 2018 by operator

599254110 GRACED USO 1 -1 Sat Dec 29 16:15:36 2018 by operator

599254120 GRACEC IPUR 4 -1 599254406 -1 -0.084377999999999999 Sat Dec 29 16:17:54 2018 by operator

599254120 GRACEC USO 1 -1 Sat Dec 29 16:17:54 2018 by operator

600557260 GRACEC IPUR 4 -1 600557415 -1 -0.082008 Sun Jan 13 03:13:24 2019 by operator

600557260 GRACEC IPU 4 -1 600557415 -1 -0.082008 Manually added on 2019-01-13 by hywen

600557260 GRACEC USO 1 -1 Sun Jan 13 03:13:24 2019 by operator

600557290 GRACED IPUR 4 -1 600557448 -1 -0.381034 Sun Jan 13 16:28:17 2019 by operator

600557290 GRACED IPU 4 -1 600557448 -1 -0.381034 Manually added on 2019-01-13 by hywen

600557290 GRACED USO 1 -1 Sun Jan 13 16:28:17 2019 by operator

601772820 GRACED IPUR 4 -1 601773131 -1 -0.378789 Sun Jan 27 22:56:33 2019 by operator

601772820 GRACED IPU 4 -1 601773131 -1 -0.378789 Manually added on 2019-01-27 by hywen

601772820 GRACED USO 1 -1 Sun Jan 27 22:56:33 2019 by operator

602295164.0 GRACEC IPU 3 1 1233058364.0 1 Fri Feb 01 13:54:26 2019 by operator

602295170 GRACEC IPUR 4 -1 602295473 -1 -0.076730000000000001 Sat Feb 02 16:37:48 2019 by operator

602295170 GRACEC USO 1 -1 Sat Feb 02 16:37:48 2019 by operator

602568025.0 GRACED IPU 3 1 1233331225.0 1 Mon Feb 04 19:10:43 2019 by operator

602568030 GRACED IPUR 4 -1 602568282 -1 -0.424674 Tue Feb 05 18:55:57 2019 by operator

602568030 GRACED USO 1 -1 Tue Feb 05 18:55:57 2019 by operator

602822645.0 GRACEC IPU 3 1 1233585845.0 1 Thu Feb 07 18:01:45 2019 by operator

602822650 GRACEC IPUR 4 -1 602822911 -1 -0.488631 Fri Feb 08 17:21:48 2019 by operator

602822650 GRACEC USO 1 -1 Fri Feb 08 17:21:48 2019 by operator

602822687 GRACEC LRIDATATION 1 -4530816 From GF1\_L0\_ISP\_NSCI\_NYA\_20190220T174817\_20190220T144248\_20190220T175048\_VC2 datation report. This is 34125184-8\*4.832000e6 because datation bias is negative at this time. Time-tag is 2019-02-07 14:44:47 LRI reboot time from 2019-07-09 email from Chris Woodruff, "Re: [EXTERNAL] Re: Fwd: Datation time history". Added by hywen on 2019-07-10.

603854366.0 GRACED IPU 3 1 1234617566.0 1 Tue Feb 19 15:17:15 2019 by operator

603854380 GRACED IPUR 4 -1 603854602 -1 -0.604758 Wed Feb 20 21:12:18 2019 by operator

603854380 GRACED USO 1 -1 Wed Feb 20 21:12:18 2019 by operator

604026325.0 GRACED IPU 3 1 1234789525.0 1 Thu Feb 21 14:40:58 2019 by operator

604026326.0 GRACEC IPU 3 1 1234789526.0 1 Thu Feb 21 16:08:51 2019 by operator

604026330 GRACED IPUR 4 -1 604026565 -1 -0.40186 Fri Feb 22 16:24:01 2019 by operator

604026330 GRACED USO 1 -1 Fri Feb 22 16:24:01 2019 by operator

604026340 GRACEC IPUR 4 -1 604026603 -1 -0.0789 Fri Feb 22 16:24:39 2019 by operator

604026340 GRACEC USO 1 -1 Fri Feb 22 16:24:39 2019 by operator

604997295.0 GRACEC IPU 3 1 1235760495.0 1 Mon Mar 04 20:06:45 2019 by operator

604997310 GRACEC IPUR 4 -1 604997483 -1 -0.085179 Tue Mar 05 05:35:37 2019 by operator

604997310 GRACEC USO 1 -1 Tue Mar 05 05:35:37 2019 by operator

605150726.0 GRACEC IPU 3 1 1235913926.0 1 Wed Mar 06 16:15:17 2019 by operator

605150740 GRACEC IPUR 4 -1 605151123 -1 -0.085954 Thu Mar 07 17:30:50 2019 by operator

605150740 GRACEC USO 1 -1 Thu Mar 07 17:30:50 2019 by operator

605150740 GRACEC LRIDATATION 1 -3799453 This is the datation value after this 2019-03-06 IPU reboot, which is the last IPU reboot before LRI/LSM data resumes on 2019-03-18 after the GF2 OBC switch-over on 2019-02-07. This value is placed here to give the most accurate datation bias for LRI data starting 2019-03-18. Added by hywen on 2019-07-11.

606186421 GRACED LRIDATATION 1 -17599006 2018-03-18 13:07:01 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; powered back on after the GF2 OBC switch-over on 2019-02-07. Updated by hywen on 2019-07-15.

606274222.6 GRACED MANV 4 17.000 0.0988 0.0000 0 Wed Mar 20 16:39:41 UTC 2019 by byun (2019-03-19 13:30:22)

606546685.0 GRACED IPU 3 1 1237309885.0 1 Fri Mar 22 18:21:52 2019 by operator

606546686.0 GRACEC IPU 3 1 1237309886.0 1 Fri Mar 22 19:51:40 2019 by operator

606546690 GRACED IPUR 4 -1 606546918 -1 -0.387921 Sat Mar 23 03:49:26 2019 by operator

606546690 GRACED USO 1 -1 Sat Mar 23 03:49:26 2019 by operator

606546700 GRACEC IPUR 4 -1 606546941 -1 -0.082701 Sat Mar 23 14:54:52 2019 by operator

606546700 GRACEC USO 1 -1 Sat Mar 23 14:54:52 2019 by operator

607253961 GRACEC LRIDATATION 1 -4177100 From GF1\_L0\_ISP\_NSCI\_NYA\_20190331T145056\_20190331T114448\_20190331T145348\_VC2 datation report. This is 34478900-8\*4.832000e6, because apparently the datation bias is negative in this

instance. Time-tag is 2019-03-30 21:39:21 LRI reboot time from 2019-07-09 email from Chris Woodruff, "Re: [EXTERNAL] Re: Fwd: Datation time history". Added by hywen on 2019-07-10.

608398386.0 GRACED IPU 3 1 1239161586.0 1 Sat Apr 13 04:04:24 2019 by operator

608398400 GRACED IPUR 4 -1 608398660 -1 -0.404842 Sun Apr 14 14:34:06 2019 by operator

608398400 GRACED USO 1 -1 Sun Apr 14 14:34:06 2019 by operator

609435121 GRACED LRI 1 0 2019-04-25 03:32:01 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D switched to master for high rate test (GRACE C is also master). Updated by hywen on 2019-07-15.

609435121 GRACED LRIDATATION 1 987513 2019-04-25 03:32:01 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history". Datation value from 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-15.

609458126.0 GRACEC IPU 3 1 1240221326.0 1 Thu Apr 25 11:09:37 2019 by operator

609458140 GRACEC IPUR 4 -1 609458371 -1 -0.068608 Fri Apr 26 23:14:01 2019 by operator

609458140 GRACEC USO 1 -1 Fri Apr 26 23:14:01 2019 by operator

609789721 GRACED LRI 1 1 2019-04-29 06:02:01 reboot time-tag from 2019-07-15 email from Brent Ware titled "Re: [EXTERNAL] Re: Fwd: Datation time history"; GRACE D switched to transponder after reset. Updated by hywen on 2019-07-15.

609789721 GRACED LRIDATATION 1 2894137 From 2019-07-11 email from Brent Ware titled "Re: [EXTERNAL] Datation time history". Added by hywen on 2019-07-11.

610149715.0 GRACED IPU 3 1 1240912915.0 1 Fri May 03 12:52:35 2019 by operator

610149730 GRACED IPUR 4 -1 610149948 -1 -0.473089 Sat May 04 16:28:02 2019 by operator

610149730 GRACED USO 1 -1 Sat May 04 16:28:02 2019 by operator

610770991.0 GRACEC IPU 3 1 1241534191.0 1 Fri May 10 16:29:37 2019 by operator

610771000 GRACEC IPUR 4 -1 610771181 -1 -0.427225 Sat May 11 05:10:59 2019 by operator

610771000 GRACEC USO 1 -1 Sat May 11 05:10:59 2019 by operator

610964318.0 GRACEC IPU 3 1 1241727518.0 1 Sun May 12 22:08:58 2019 by operator

610964330 GRACEC IPUR 4 -1 610964550 -1 -0.085261 Mon May 13 14:38:28 2019 by operator

610964330 GRACEC USO 1 -1 Mon May 13 14:38:28 2019 by operator

611159945.0 GRACEC IPU 3 1 1241923145.0 1 Wed May 15 03:46:44 2019 by operator

611159950 GRACEC IPUR 4 -1 611160184 -1 -0.489049 Thu May 16 15:21:53 2019 by operator

611159950 GRACEC USO 1 -1 Thu May 16 15:21:53 2019 by operator

612345626.0 GRACEC IPU 3 1 1243108826.0 1 Tue May 28 22:44:22 2019 by operator  
612345640 GRACEC IPUR 4 -1 612345973 -1 -0.076573 Wed May 29 15:05:37 2019 by operator  
612345640 GRACEC USO 1 -1 Wed May 29 15:05:37 2019 by operator  
612652981.0 GRACEC IPU 3 1 1243416181.0 1 Sat Jun 01 11:47:24 2019 by operator  
612652990 GRACEC IPUR 4 -1 612653215 -1 -0.091324 Sun Jun 02 16:41:04 2019 by operator  
612652990 GRACEC USO 1 -1 Sun Jun 02 16:41:04 2019 by operator  
613077300 GRACEC ACCTEMPCAL 1 12960 Anomaly in 2019-06-06 GPSPHS post-fit residuals due to testing of ACC temperature calibration, and does not negatively impact gravity solution, after use of proper parameterization. Added by hywen on 2019-06-20  
613203176.0 GRACED IPU 3 1 1243966376.0 1 Fri Jun 07 20:36:41 2019 by operator  
613203190 GRACED IPUR 4 -1 613203438 -1 -0.457836 Sat Jun 08 17:44:10 2019 by operator  
613203190 GRACED USO 1 -1 Sat Jun 08 17:44:10 2019 by operator  
614553810 GRACED IPUR 4 -1 614554091 -1 -0.078902 Mon Jun 24 17:26:16 2019 by operator  
614553810 GRACED IPU 4 -1 614554091 -1 -0.078902 Mon Jun 24 17:26:16 2019 by byun. Manually copied IPUR to IPU.  
614553810 GRACED USO 1 -1 Mon Jun 24 17:26:16 2019 by operator  
614900099.0 GRACEC IPU 3 1 1245663299.0 1 Thu Jun 27 11:58:01 2019 by operator  
614900110 GRACEC IPUR 4 -1 614900480 -1 -0.06967 Fri Jun 28 15:40:45 2019 by operator  
614900110 GRACEC USO 1 -1 Fri Jun 28 15:40:45 2019 by operator  
615872036.0 GRACEC IPU 3 1 1246635236.0 1 Mon Jul 08 19:00:18 2019 by operator  
615872050 GRACEC IPUR 4 -1 615872255 -1 -0.083135 Tue Jul 09 04:31:41 2019 by operator  
615872050 GRACEC USO 1 -1 Tue Jul 09 04:31:41 2019 by operator  
616133186.0 GRACEC IPU 3 1 1246896386.0 1 Thu Jul 11 19:24:28 2019 by operator  
616133200 GRACEC IPUR 4 -1 616133461 -1 -0.091494000000000001 Fri Jul 12 14:55:20 2019 by operator  
616133200 GRACEC USO 1 -1 Fri Jul 12 14:55:20 2019 by operator  
616695086.0 GRACEC IPU 3 1 1247458286.0 1 Thu Jul 18 06:00:22 2019 by operator  
616695086.0 GRACED IPU 3 1 1247458286.0 1 Thu Jul 18 07:28:39 2019 by operator  
616695100 GRACEC IPUR 4 -1 616695347 -1 -0.08703 Fri Jul 19 16:47:38 2019 by operator  
616695100 GRACEC USO 1 -1 Fri Jul 19 16:47:38 2019 by operator

616695100 GRACED IPUR 4 -1 616695354 -1 -0.077904 Fri Jul 19 16:47:41 2019 by operator  
616695100 GRACED USO 1 -1 Fri Jul 19 16:47:41 2019 by operator  
616863626.0 GRACED IPU 3 1 1247626826.0 1 Sat Jul 20 03:37:56 2019 by operator  
616863626.0 GRACEC IPU 3 1 1247626826.0 1 Sat Jul 20 05:18:50 2019 by operator  
616863640 GRACEC IPUR 4 -1 616864009 -1 -0.085643 Sun Jul 21 16:04:38 2019 by operator  
616863640 GRACEC USO 1 -1 Sun Jul 21 16:04:38 2019 by operator  
616863640 GRACED IPUR 4 -1 616863912 -1 -0.086701 Sun Jul 21 16:04:43 2019 by operator  
616863640 GRACED USO 1 -1 Sun Jul 21 16:04:43 2019 by operator  
617386286.0 GRACEC IPU 3 1 1248149486.0 1 Fri Jul 26 07:12:38 2019 by operator  
617386300 GRACEC IPUR 4 -1 617386468 -1 -0.08733200000000001 Sat Jul 27 06:50:31 2019 by operator  
617386300 GRACEC USO 1 -1 Sat Jul 27 06:50:31 2019 by operator  
617386330 GRACED IPUR 4 -1 617386498 -1 -0.082093 Sat Jul 27 05:55:46 2019 by operator  
617386330 GRACED IPU 4 -1 617386498 -1 -0.082093 Manual copy of corresponding IPUR entry, on 2019-07-31 by hywen  
617386330 GRACED USO 1 -1 Sat Jul 27 05:55:46 2019 by operator  
617733626.0 GRACEC IPU 3 1 1248496826.0 1 Tue Jul 30 07:54:07 2019 by operator  
617733640 GRACEC IPUR 4 -1 617733897 -1 -0.086477 Wed Jul 31 18:10:18 2019 by operator  
617733640 GRACEC USO 1 -1 Wed Jul 31 18:10:18 2019 by operator  
617733656.0 GRACED IPU 3 1 1248496856.0 1 Tue Jul 30 06:18:59 2019 by operator  
617733670 GRACED IPUR 4 -1 617734137 -1 -0.093555 Wed Jul 31 18:10:19 2019 by operator  
617733670 GRACED USO 1 -1 Wed Jul 31 18:10:19 2019 by operator  
618074216.0 GRACEC IPU 3 1 1248837416.0 1 Sat Aug 03 06:33:52 2019 by operator  
618074230 GRACEC IPUR 4 -1 618074472 -1 -0.08595 Sun Aug 04 04:48:57 2019 by operator  
618074230 GRACEC USO 1 -1 Sun Aug 04 04:48:57 2019 by operator  
618074246.0 GRACED IPU 3 1 1248837446.0 1 Sat Aug 03 04:53:31 2019 by operator  
618074260 GRACED IPUR 4 -1 618074516 -1 -0.0917729999999999999 Sun Aug 04 16:04:25 2019 by operator  
618074260 GRACED USO 1 -1 Sun Aug 04 16:04:25 2019 by operator  
618590666.0 GRACEC IPU 3 1 1249353866.0 1 Fri Aug 09 05:47:45 2019 by operator

618590680 GRACEC IPUR 4 -1 618590922 -1 -0.08522 Sat Aug 10 05:35:00 2019 by operator  
618590680 GRACEC USO 1 -1 Sat Aug 10 05:35:00 2019 by operator  
618590680 GRACEC LRIDATATION 1 125033 Added manually by hywen on 2019-08-20.  
618590696.0 GRACED IPU 3 1 1249353896.0 1 Fri Aug 09 05:55:22 2019 by operator  
618590710 GRACED IPUR 4 -1 618590949 -1 -0.089428999999999999 Sat Aug 10 04:00:24 2019 by operator  
618590710 GRACED USO 1 -1 Sat Aug 10 04:00:24 2019 by operator  
618590710 GRACED LRIDATATION 1 6036912 Added manually by hywen on 2019-08-20.  
620406406.0 GRACEC IPU 3 1 1251169606.0 1 Fri Aug 30 04:39:58 2019 by operator  
620406420 GRACEC IPUR 4 -1 620406844 -1 -0.075312 Sat Aug 31 14:17:31 2019 by operator  
620406420 GRACEC USO 1 -1 Sat Aug 31 14:17:31 2019 by operator  
620406420.0 GRACEC LRIDATATION 1 829732 Sat Aug 31 14:30:07 2019 by operator  
620406426.0 GRACED IPU 3 1 1251169626.0 1 Fri Aug 30 06:08:09 2019 by operator  
620406440 GRACED IPUR 4 -1 620406853 -1 -0.080782000000000001 Sat Aug 31 14:17:31 2019 by operator  
620406440 GRACED USO 1 -1 Sat Aug 31 14:17:31 2019 by operator  
620406440.0 GRACED LRIDATATION 1 6635919 Sat Aug 31 15:47:27 2019 by operator  
622035756.0 GRACEC IPU 3 1 1252798956.0 1 Wed Sep 18 02:33:05 2019 by operator  
622035770 GRACEC IPUR 4 -1 622036259 -1 -0.069907 Wed Sep 18 16:36:16 2019 by operator  
622035770 GRACEC USO 1 -1 Wed Sep 18 16:36:16 2019 by operator  
622035770.0 GRACEC LRIDATATION 1 1472693 Thu Sep 19 03:46:15 2019 by operator  
622231180.0 GRACEC LRIDATATION 1 -21027064 Thu Sep 21 11:06:15 2019 by byun. LRI reboot  
622231190.0 GRACED LRIDATATION 1 -8601571 Thu Sep 21 11:06:15 2019 by byun. LRI reboot  
622401917.0 GRACED IPU 3 1 1253165117.0 1 Sun Sep 22 09:10:52 2019 by operator  
622401930 GRACED IPUR 4 -1 622402233 -1 -0.072332999999999999 Mon Sep 23 15:06:17 2019 by operator  
622401930 GRACED USO 1 -1 Mon Sep 23 15:06:17 2019 by operator  
622401930.0 GRACED LRIDATATION 1 -7930176 Mon Sep 23 15:09:21 2019 by operator  
623358447.0 GRACEC IPU 3 1 1254121647.0 1 Thu Oct 03 08:21:50 2019 by operator  
623358460 GRACEC IPUR 4 -1 623358633 -1 -0.462269 Fri Oct 04 14:38:23 2019 by operator

623358460 GRACEC USO 1 -1 Fri Oct 04 14:38:23 2019 by operator  
623358460.0 GRACEC LRIDATATION 1 -20498220 Fri Oct 04 14:42:28 2019 by operator  
623375245.1 GRACEC KAMI 3 0.02 0.0 0.0  
623377965.6 GRACEC KAMI 3 0.04 0.0 0.0  
623392741.2 GRACEC KAMI 3 0.06 0.0 0.0  
623406960.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
623648481.0 GRACED IPU 3 1 1254411681.0 1 Sun Oct 06 16:31:56 2019 by operator  
623648490 GRACED IPUR 4 -1 623648708 -1 -0.442053 Mon Oct 07 05:08:41 2019 by operator  
623648490 GRACED USO 1 -1 Mon Oct 07 05:08:41 2019 by operator  
623648490.0 GRACED LRIDATATION 1 -7503588 Mon Oct 07 05:08:43 2019 by operator  
624011200 GRACEC IPUR 4 -1 624011480 -1 -0.085817 Fri Oct 11 19:01:22 2019 by operator  
624011200 GRACEC IPU 4 -1 624011480 -1 -0.085817 Fri Oct 14 12:01:22 2019 manually by byun.  
624011200 GRACEC USO 1 -1 Fri Oct 11 19:01:22 2019 by operator  
624011200.0 GRACEC LRIDATATION 1 -20234717 Sat Oct 12 06:31:20 2019 by operator  
624575486.0 GRACEC IPU 3 1 1255338686.0 1 Thu Oct 17 12:29:23 2019 by operator  
624575500 GRACEC IPUR 4 -1 624575761 -1 -0.082562 Fri Oct 18 15:23:35 2019 by operator  
624575500 GRACEC USO 1 -1 Fri Oct 18 15:23:35 2019 by operator  
624575500.0 GRACEC LRIDATATION 1 -20005662 Fri Oct 18 15:26:54 2019 by operator  
625572546.0 GRACED IPU 3 1 1256335746.0 1 Tue Oct 29 00:21:47 2019 by operator  
625572560 GRACED IPUR 4 -1 625572814 -1 -0.075626 Tue Oct 29 14:58:11 2019 by operator  
625572560 GRACED USO 1 -1 Tue Oct 29 14:58:11 2019 by operator  
625572560.0 GRACED LRIDATATION 1 -6834058 Wed Oct 30 04:46:48 2019 by operator  
626259982.0 GRACED IPU 3 1 1257023182.0 1 Tue Nov 05 21:32:23 2019 by operator  
626259990 GRACED IPUR 4 -1 626260209 -1 -0.080323000000000001 Wed Nov 06 03:49:42 2019 by operator  
626259990 GRACED USO 1 -1 Wed Nov 06 03:49:42 2019 by operator  
626259990.0 GRACED LRIDATATION 1 -6591732 Thu Nov 07 15:57:53 2019 by operator  
626342846.0 GRACEC IPU 3 1 1257106046.0 1 Wed Nov 06 21:09:48 2019 by operator  
626342846.0 GRACED IPU 3 1 1257106046.0 1 Wed Nov 06 22:38:59 2019 by operator

626342860 GRACEC IPUR 4 -1 626343107 -1 -0.072182 Thu Nov 07 15:56:11 2019 by operator  
626342860 GRACEC USO 1 -1 Thu Nov 07 15:56:11 2019 by operator  
626342860 GRACED IPUR 4 -1 626343029 -1 -0.085631 Thu Nov 07 15:57:42 2019 by operator  
626342860 GRACED USO 1 -1 Thu Nov 07 15:57:42 2019 by operator  
626342860.0 GRACEC LRIDATATION 1 -19280899 Fri Nov 08 04:39:40 2019 by operator  
626343390.0 GRACED IPU 3 1 1257106590.0 1 Wed Nov 06 22:38:59 2019 by operator  
626343400 GRACED IPUR 4 -1 626343549 -1 -0.09063599999999999999 Thu Nov 07 15:57:42 2019 by operator  
626343400 GRACED USO 1 -1 Thu Nov 07 15:57:42 2019 by operator  
626343400.0 GRACED LRIDATATION 1 -6562235 Fri Nov 08 05:59:46 2019 by operator  
626784549.0 GRACED IPU 3 1 1257547749.0 1 Tue Nov 12 01:32:59 2019 by operator  
626784560 GRACED IPUR 4 -1 626784763 -1 -0.091717000000000001 Tue Nov 12 16:03:06 2019 by operator  
626784560 GRACED USO 1 -1 Tue Nov 12 16:03:06 2019 by operator  
626784560.0 GRACED LRIDATATION 1 -6405635 Wed Nov 13 17:48:14 2019 by operator  
627254535.0 GRACED IPU 3 1 1258017735.0 1 Sun Nov 17 10:49:01 2019 by operator  
627254550 GRACED IPUR 4 -1 627254913 -1 -0.08892600000000000001 Mon Nov 18 15:26:23 2019 by operator  
627254550 GRACED USO 1 -1 Mon Nov 18 15:26:23 2019 by operator  
627254550.0 GRACED LRIDATATION 1 -6237982 Mon Nov 18 15:26:32 2019 by operator  
627545246.0 GRACEC IPU 3 1 1258308446.0 1 Wed Nov 20 19:15:12 2019 by operator  
627545260 GRACEC IPUR 4 -1 627545540 -1 -0.082332 Thu Nov 21 17:05:58 2019 by operator  
627545260 GRACEC USO 1 -1 Thu Nov 21 17:05:58 2019 by operator  
627545260.0 GRACEC LRIDATATION 1 -18781551 Fri Nov 22 05:43:00 2019 by operator  
627644726.0 GRACEC IPU 3 1 1258407926.0 1 Thu Nov 21 23:35:03 2019 by operator  
627644726.0 GRACED IPU 3 1 1258407926.0 1 Fri Nov 22 01:09:44 2019 by operator  
627644740 GRACED IPUR 4 -1 627644924 -1 -0.086117 Fri Nov 22 04:12:43 2019 by operator  
627644740 GRACED USO 1 -1 Fri Nov 22 04:12:43 2019 by operator  
627644740 GRACEC IPUR 4 -1 627644969 -1 -0.087296 Fri Nov 22 05:42:55 2019 by operator  
627644740 GRACEC USO 1 -1 Fri Nov 22 05:42:55 2019 by operator

627644740.0 GRACEC LRIDATATION 1 -18740025 Sat Nov 23 03:55:22 2019 by operator  
627644740.0 GRACED LRIDATATION 1 -6098312 Sat Nov 23 05:20:33 2019 by operator  
628325246.0 GRACEC IPU 3 1 1259088446.0 1 Fri Nov 29 20:46:34 2019 by operator  
628325260 GRACEC IPUR 4 -1 628325448 -1 -0.088604 Sat Nov 30 05:57:00 2019 by operator  
628325260 GRACEC USO 1 -1 Sat Nov 30 05:57:00 2019 by operator  
628325260.0 GRACEC LRIDATATION 1 -18455102 Sun Dec 01 04:14:56 2019 by operator  
629243044.0 GRACED IPU 3 1 1260006244.0 1 Tue Dec 10 10:37:19 2019 by operator  
629243050 GRACED IPUR 4 -1 629243292 -1 -0.077696 Wed Dec 11 17:22:08 2019 by operator  
629243050 GRACED USO 1 -1 Wed Dec 11 17:22:08 2019 by operator  
629243050.0 GRACED LRIDATATION 1 -5520244 Wed Dec 11 17:22:12 2019 by operator  
629401560.0 GRACEC LRIDATATION 1 7773715 Fri Dec 13 11:45:15 2019 by byun. LRI reboot  
629402917.0 GRACED LRIDATATION 1 -16297667 Fri Dec 13 11:45:15 2019 by byun. LRI reboot  
629528800 GRACEC LRIDATATION 1 6665300 Mon Dec 30 14:28 by tamarab. LRI reboot  
629528800 GRACED LRIDATATION 1 -15175913 Mon Dec 30 14:28 by tamarab. LRI reboot  
629711999.0 GRACED IPU 3 1 1260475199.0 1 Mon Dec 16 23:34:08 2019 by operator  
629712010 GRACED IPUR 4 -1 629712305 -1 -0.083474000000000001 Mon Dec 16 19:58:31 2019 by operator  
629712010 GRACED USO 1 -1 Mon Dec 16 19:58:31 2019 by operator  
629712010.0 GRACED LRIDATATION 1 -15004578 Tue Dec 17 09:13:08 2019 by operator  
630089546.0 GRACEC IPU 3 1 1260852746.0 1 Fri Dec 20 19:40:40 2019 by operator  
630089560 GRACEC IPUR 4 -1 630089787 -1 -0.066611 Sat Dec 21 06:32:38 2019 by operator  
630089560 GRACEC USO 1 -1 Sat Dec 21 06:32:38 2019 by operator  
630089560.0 GRACEC LRIDATATION 1 7410687 Sat Dec 21 06:33:26 2019 by operator  
630089576.0 GRACED IPU 3 1 1260852776.0 1 Fri Dec 20 19:40:41 2019 by operator  
630089590 GRACED IPUR 4 -1 630089836 -1 -0.087159 Sat Dec 21 04:52:34 2019 by operator  
630089590 GRACED USO 1 -1 Sat Dec 21 04:52:34 2019 by operator  
630089590.0 GRACED LRIDATATION 1 -14866113 Sat Dec 21 04:53:19 2019 by operator  
630247730.0 GRACEC IPU 3 1 1261010930.0 1 Sun Dec 22 01:27:12 2019 by operator  
630247740 GRACEC IPUR 4 -1 630247999 -1 -0.087709 Mon Dec 23 17:21:20 2019 by operator

630247740 GRACEC USO 1 -1 Mon Dec 23 17:21:20 2019 by operator  
630247740.0 GRACEC LRIDATATION 1 7477986 Mon Dec 23 17:21:41 2019 by operator  
631258166.0 GRACED IPU 3 1 1262021366.0 1 Thu Jan 02 19:24:26 2020 by operator  
631258180 GRACED IPUR 4 -1 631258367 -1 -0.082305 Fri Jan 03 18:51:19 2020 by operator  
631258180 GRACED USO 1 -1 Fri Jan 03 18:51:19 2020 by operator  
631258180.0 GRACED LRIDATATION 1 -14434357 Sat Jan 04 06:06:35 2020 by operator  
631443521.0 GRACEC IPU 3 1 1262206721.0 1 Sat Jan 04 23:28:00 2020 by operator  
631443530 GRACEC IPUR 4 -1 631443723 -1 -0.078248 Sun Jan 05 05:43:51 2020 by operator  
631443530 GRACEC USO 1 -1 Sun Jan 05 05:43:51 2020 by operator  
631443530.0 GRACEC LRIDATATION 1 7989129 Mon Jan 06 03:51:37 2020 by operator  
631783845.0 GRACEC IPU 3 1 1262547045.0 1 Wed Jan 08 21:59:48 2020 by operator  
631783850 GRACEC IPUR 4 -1 631784040 -1 -0.082674 Thu Jan 09 17:13:56 2020 by operator  
631783850 GRACEC USO 1 -1 Thu Jan 09 17:13:56 2020 by operator  
631783900 GRACEC LRIDATATION 1 8138894 Fri Jan 10 05:31:37 2020 by operator  
631791955.0 GRACEC IPU 3 1 1262555155.0 1 Thu Jan 09 01:10:52 2020 by operator  
631791970 GRACEC IPUR 4 -1 631792152 -1 -0.08831 Thu Jan 09 17:13:56 2020 by operator  
631791970 GRACEC USO 1 -1 Thu Jan 09 17:13:56 2020 by operator  
631791970.0 GRACEC LRIDATATION 1 8138894 Fri Jan 10 05:31:37 2020 by operator  
631792854.1 GRACEC KAMI 3 0.02 0.0 0.0  
631795685.5 GRACEC KAMI 3 0.04 0.0 0.0  
631800177.5 GRACEC KAMI 3 0.06 0.0 0.0  
631810274.5 GRACEC KAMI 3 0.08 0.0 0.0  
631825971.3 GRACEC KAMI 3 0.10 0.0 0.0  
631838760.5 GRACEC KAMI 3 0.12 0.0 0.0  
631839223.4 GRACEC KAMI 3 0.14 0.0 0.0  
631871131.8 GRACEC KAMI 3 0.16 0.0 0.0  
631889909.8 GRACEC KAMI 3 0.18 0.0 0.0  
631892471.8 GRACEC KAMI 3 0.20 0.0 0.0  
631893344.4 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker

631921766.0 GRACEC IPU 3 1 1262684966.0 1 Fri Jan 10 11:48:23 2020 by operator

631921780 GRACEC IPUR 4 -1 631922349 -1 -0.08810900000000001 Sat Jan 11 03:40:35 2020 by operator

631921780 GRACEC USO 1 -1 Sat Jan 11 03:40:35 2020 by operator

631921780.0 GRACEC LRIDATATION 1 8194944 Sat Jan 11 03:45:02 2020 by operator

631921786.0 GRACED IPU 3 1 1262684986.0 1 Fri Jan 10 10:16:54 2020 by operator

631921800 GRACED IPUR 4 -1 631922256 -1 -0.089493 Sat Jan 11 05:14:24 2020 by operator

631921800 GRACED USO 1 -1 Sat Jan 11 05:14:24 2020 by operator

631921800.0 GRACED LRIDATATION 1 -14186988 Sat Jan 11 05:15:14 2020 by operator

632330606.0 GRACED IPU 3 1 1263093806.0 1 Wed Jan 15 06:53:23 2020 by operator

632330620 GRACED IPUR 4 -1 632330792 -1 -0.085787 Thu Jan 16 15:49:17 2020 by operator

632330620 GRACED USO 1 -1 Thu Jan 16 15:49:17 2020 by operator

632330620.0 GRACED LRIDATATION 1 -14033959 Thu Jan 16 15:49:19 2020 by operator

632519004.0 GRACED IPU 3 1 1263282204.0 1 Fri Jan 17 09:22:41 2020 by operator

632519010 GRACED IPUR 4 -1 632519306 -1 -0.0899279999999999999 Sat Jan 18 07:30:03 2020 by operator

632519010 GRACED USO 1 -1 Sat Jan 18 07:30:03 2020 by operator

632522966.0 GRACED IPU 3 1 1263286166.0 1 Fri Jan 17 09:22:41 2020 by operator

632522966.0 GRACEC IPU 3 1 1263286166.0 1 Fri Jan 17 10:57:04 2020 by operator

632522980 GRACEC IPUR 4 -1 632523629 -1 -0.0862499999999999999 Sat Jan 18 07:06:29 2020 by operator

632522980 GRACEC USO 1 -1 Sat Jan 18 07:06:29 2020 by operator

632522980.0 GRACEC LRIDATATION 1 8454510 Sat Jan 18 07:07:59 2020 by operator

632522980 GRACED IPUR 4 -1 632523695 -1 -0.090742 Sat Jan 18 07:30:03 2020 by operator

632522980 GRACED USO 1 -1 Sat Jan 18 07:30:03 2020 by operator

632522980.0 GRACED LRIDATATION 1 -13961521 Sat Jan 18 07:55:09 2020 by operator

632640626.0 GRACEC IPU 3 1 1263403826.0 1 Wed Jan 22 18:17:04 2020 by operator

632640640 GRACEC IPUR 4 -1 632640816 -1 -0.0895230000000000001 Wed Jan 22 00:36:33 2020 by operator

632640640 GRACEC USO 1 -1 Wed Jan 22 00:36:33 2020 by operator

632641340.0 GRACEC IPU 3 1 1263404540.0 1 Wed Jan 22 18:17:04 2020 by operator  
632641350 GRACEC IPUR 4 -1 632641808 -1 -0.08594400000000001 Wed Jan 22 00:36:33 2020 by operator  
632641350 GRACEC USO 1 -1 Wed Jan 22 00:36:33 2020 by operator  
632641350.0 GRACEC LRIDATATION 1 8505644 Thu Jan 23 23:15:18 2020 by operator  
632677526.0 GRACEC IPU 3 1 1263440726.0 1 Thu Jan 23 22:58:25 2020 by operator  
632677526 GRACEC IPUR 4 -1 632678010 -1 -0.08810900000000001 Thu Jan 23 22:58:25 2020 by operator  
632677526 GRACEC USO 1 -1 Thu Jan 23 22:58:25 2020 by operator  
632677526.0 GRACEC LRIDATATION 1 8521319 Thu Jan 23 23:15:18 2020 by operator  
633071733.0 GRACED IPU 3 1 1263834933.0 1 Thu Jan 23 19:42:22 2020 by operator  
633071733 GRACED IPUR 4 -1 633071865 -1 -0.08810900000000001  
633071733 GRACED USO 1 -1  
633132026.0 GRACEC IPU 3 1 1263895226.0 1 Sat Jan 25 19:31:52 2020 by operator  
633132026.0 GRACED IPU 3 1 1263895226.0 1 Sat Jan 25 19:34:49 2020 by operator  
633132040 GRACED IPUR 4 -1 633132217 -1 -0.094007999999999999 Sat Jan 25 06:25:33 2020 by operator  
633132040 GRACED USO 1 -1 Sat Jan 25 06:25:33 2020 by operator  
633132040 GRACEC IPUR 4 -1 633132330 -1 -0.083301 Sat Jan 25 19:20:20 2020 by operator  
633132040 GRACEC USO 1 -1 Sat Jan 25 19:20:20 2020 by operator  
633132040.0 GRACEC LRIDATATION 1 8718468 Sat Jan 25 19:20:26 2020 by operator  
633132040.0 GRACED LRIDATATION 1 -20349124 Sat Jan 25 19:25:30 2020 by operator  
634265100 GRACEC MTEA 3 -13.6325 0.0 0.0 Thu Feb 6 19:02:35 2020 by mpaik -13.6325 12.4375 -3.6225  
634353626.0 GRACED IPU 3 1 1265116826.0 1 Fri Feb 07 15:53:48 2020 by operator  
634353640 GRACED IPUR 4 -1 634353891 -1 -0.075374 Sat Feb 08 07:31:57 2020 by operator  
634353640 GRACED USO 1 -1 Sat Feb 08 07:31:57 2020 by operator  
634353640.0 GRACED LRIDATATION 1 -19863362 Sun Feb 09 16:17:17 2020 by operator  
634696735.0 GRACEC IPU 3 1 1265459935.0 1 Tue Feb 11 16:01:02 2020 by operator  
634696750 GRACEC IPUR 4 -1 634697073 -1 -0.677951 Wed Feb 12 15:49:20 2020 by operator

634696750 GRACEC USO 1 -1 Wed Feb 12 15:49:20 2020 by operator  
634782401.0 GRACEC IPU 3 1 1265545601.0 1 Wed Feb 12 14:14:15 2020 by operator  
634782410 GRACEC IPUR 4 -1 634782663 -1 -0.619437 Thu Feb 13 19:06:41 2020 by operator  
634782410 GRACEC USO 1 -1 Thu Feb 13 19:06:41 2020 by operator  
634865426.0 GRACEC IPU 3 1 1265628626.0 1 Thu Feb 13 12:27:59 2020 by operator  
634865426.0 GRACED IPU 3 1 1265628626.0 1 Thu Feb 13 13:54:56 2020 by operator  
634865440 GRACEC IPUR 4 -1 634865732 -1 -0.09252000000000001 Fri Feb 14 17:28:49 2020 by operator  
634865440 GRACEC USO 1 -1 Fri Feb 14 17:28:49 2020 by operator  
634865440 GRACED IPUR 4 -1 634865700 -1 -0.087963 Fri Feb 14 17:28:50 2020 by operator  
634865440 GRACED USO 1 -1 Fri Feb 14 17:28:50 2020 by operator  
634865440.0 GRACED LRIDATATION 1 -19688041 Fri Feb 14 17:28:51 2020 by operator  
634865440.0 GRACEC LRIDATATION 1 1963031 Sat Feb 15 17:19:42 2020 by operator  
634942826.0 GRACEC IPU 3 1 1265706026.0 1 Fri Feb 14 10:28:36 2020 by operator  
634942826.0 GRACED IPU 3 1 1265706026.0 1 Fri Feb 14 11:56:16 2020 by operator  
634942840 GRACEC IPUR 4 -1 634943035 -1 -0.089768 Sat Feb 15 05:08:09 2020 by operator  
634942840 GRACEC USO 1 -1 Sat Feb 15 05:08:09 2020 by operator  
634942840.0 GRACEC LRIDATATION 1 1997046 Sat Feb 15 17:19:42 2020 by operator  
634942840 GRACED IPUR 4 -1 634943064 -1 -0.089561 Sat Feb 15 17:19:44 2020 by operator  
634942840 GRACED USO 1 -1 Sat Feb 15 17:19:44 2020 by operator  
634942840.0 GRACED LRIDATATION 1 -19658286 Sat Feb 15 17:20:04 2020 by operator  
635196757.0 GRACEC IPU 3 1 1265959957.0 1 Mon Feb 17 10:45:51 2020 by operator  
635196770 GRACEC IPUR 4 -1 635197040 -1 -0.091656 Tue Feb 18 16:05:55 2020 by operator  
635196770 GRACEC USO 1 -1 Tue Feb 18 16:05:55 2020 by operator  
635196770.0 GRACEC LRIDATATION 1 2108940 Tue Feb 18 16:06:08 2020 by operator  
635308865.0 GRACED IPU 3 1 1266072065.0 1 Tue Feb 18 16:40:51 2020 by operator  
635308870 GRACED IPUR 4 -1 635309129 -1 -0.090151 Wed Feb 19 17:36:44 2020 by operator  
635308870 GRACED USO 1 -1 Wed Feb 19 17:36:44 2020 by operator  
635308870.0 GRACED LRIDATATION 1 -19517230 Wed Feb 19 17:38:31 2020 by operator

635543066.0 GRACEC IPU 3 1 1266306266.0 1 Fri Feb 21 09:19:53 2020 by operator  
635543066.0 GRACED IPU 3 1 1266306266.0 1 Mon Feb 24 19:18:03 2020 by operator  
635543080 GRACED IPUR 4 -1 635543324 -1 -0.093827999999999999 Sat Feb 22 18:42:50 2020 by operator  
635543080 GRACED USO 1 -1 Sat Feb 22 18:42:50 2020 by operator  
635543080 GRACEC IPUR 4 -1 635543320 -1 -0.083172 Sat Feb 22 18:43:46 2020 by operator  
635543080 GRACEC USO 1 -1 Sat Feb 22 18:43:46 2020 by operator  
635543080.0 GRACED LRIDATATION 1 -19426746 Sat Feb 22 18:43:53 2020 by operator  
635543080.0 GRACEC LRIDATATION 1 2261784 Sat Feb 22 18:44:02 2020 by operator  
635684138.0 GRACED IPU 3 1 1266447338.0 1 Sun Feb 23 00:39:49 2020 by operator  
635684150 GRACED IPUR 4 -1 635684313 -1 -0.092678 Sun Feb 23 16:42:51 2020 by operator  
635684150 GRACED USO 1 -1 Sun Feb 23 16:42:51 2020 by operator  
635684150.0 GRACED LRIDATATION 1 -19372174 Mon Feb 24 05:12:17 2020 by operator  
636180997.0 GRACEC IPU 3 1 1266944197.0 1 Fri Feb 28 17:49:12 2020 by operator  
636181010 GRACEC IPUR 4 -1 636181421 -1 -0.086337 Sat Feb 29 15:57:54 2020 by operator  
636181010 GRACEC USO 1 -1 Sat Feb 29 15:57:54 2020 by operator  
636181010.0 GRACEC LRIDATATION 1 2544316 Sat Feb 29 16:01:46 2020 by operator  
636420982.0 GRACEC IPU 3 1 1267184182.0 1 Mon Mar 02 12:22:25 2020 by operator  
636420990 GRACEC IPUR 4 -1 636421172 -1 -0.112955 Tue Mar 03 03:50:16 2020 by operator  
636420990 GRACEC USO 1 -1 Tue Mar 03 03:50:16 2020 by operator  
636420990.0 GRACEC LRIDATATION 1 2650787 Tue Mar 03 03:50:19 2020 by operator  
636588920.0 GRACEC IPU 3 1 636588920.0 1 Mon Mar 23 21:26:29 2020 by operator  
636589000 GRACEC IPUR 4 -1 636588994 -1 0 Thu Mar 05 17:00:48 2020 by operator  
636589000 GRACEC USO 1 -1 Thu Mar 05 17:00:48 2020 by operator  
636600172.0 GRACEC IPU 3 1 636600172.0 1 Mon Mar 23 21:26:02 2020 by operator  
636600490 GRACEC IPUR 4 -1 636600478 -1 0 Thu Mar 05 17:00:48 2020 by operator  
636600490 GRACEC USO 1 -1 Thu Mar 05 17:00:48 2020 by operator  
636600490.0 GRACEC LRIDATATION 1 870736 Thu Mar 05 17:00:48 2020 by operator  
636907700.0 GRACED LRIDATATION 1 9893411 Mod Mar 9 12:02:00 2020 by operator

637106722.0 GRACEC IPU 3 1 637106722.0 1 Mon Mar 23 21:11:25 2020 by operator  
637106990 GRACEC IPUR 4 -1 637106982 -1 0 Wed Mar 11 06:25:04 2020 by operator  
637106990 GRACEC USO 1 -1 Wed Mar 11 06:25:04 2020 by operator  
637106990.0 GRACEC LRIDATATION 1 1096445 Wed Mar 11 06:25:08 2020 by operator  
637464314.0 GRACED IPU 3 1 1268227514.0 1 Mon Mar 23 21:35:47 2020 by operator  
637464320 GRACED IPUR 4 -1 637465059 -1 -0.121965 Sun Mar 15 17:46:33 2020 by operator  
637464320 GRACED USO 1 -1 Sun Mar 15 17:46:33 2020 by operator  
637465719.0 GRACED IPU 3 1 1268228919.0 1 Mon Mar 23 21:35:47 2020 by operator  
637465730 GRACED IPUR 4 -1 637466034 -1 -0.041515 Sun Mar 15 17:46:33 2020 by operator  
637465730 GRACED USO 1 -1 Sun Mar 15 17:46:33 2020 by operator  
637465730.0 GRACED LRIDATATION 1 10588674 Sun Mar 15 17:46:35 2020 by operator  
637761850.0 GRACEC IPU 3 1 637761850.0 1 Mon Mar 23 21:37:51 2020 by operator  
637762290 GRACEC IPUR 4 -1 637762284 -1 0 Thu Mar 19 14:41:36 2020 by operator  
637762290 GRACEC USO 1 -1 Thu Mar 19 14:41:36 2020 by operator  
637762290.0 GRACEC LRIDATATION 1 1389514 Thu Mar 19 14:41:56 2020 by operator  
637932866.0 GRACED IPU 3 1 1268696066.0 1 Fri Mar 20 00:45:08 2020 by operator  
637932880 GRACED IPUR 4 -1 637933374 -1 -0.082536 Fri Mar 20 14:42:44 2020 by operator  
637932880 GRACED USO 1 -1 Fri Mar 20 14:42:44 2020 by operator  
637932880.0 GRACED LRIDATATION 1 10772770 Sat Mar 21 05:11:57 2020 by operator  
638456467.0 GRACEC IPU 3 1 638456467.0 1 Thu Mar 26 17:33:31 2020 by operator  
638456790 GRACEC IPUR 4 -1 638456785 -1 0 Fri Mar 27 16:23:13 2020 by operator  
638456790 GRACEC USO 1 -1 Fri Mar 27 16:23:13 2020 by operator  
638456790.0 GRACEC LRIDATATION 1 1701378 Fri Mar 27 16:23:28 2020 by operator  
639220826.0 GRACED IPU 3 1 1269984026.0 1 Sat Apr 04 00:07:18 2020 by operator  
639220840 GRACED IPUR 4 -1 639221134 -1 -0.076056 Sat Apr 04 14:54:14 2020 by operator  
639220840 GRACED USO 1 -1 Sat Apr 04 14:54:14 2020 by operator  
639220840.0 GRACED LRIDATATION 1 11283919 Sun Apr 05 04:26:36 2020 by operator  
640133881.0 GRACED IPU 3 1 1270897081.0 1 Tue Apr 14 12:12:05 2020 by operator  
640133890 GRACED IPUR 4 -1 640134165 -1 -0.081799 Wed Apr 15 15:22:14 2020 by operator

640133890 GRACED USO 1 -1 Wed Apr 15 15:22:14 2020 by operator  
640133890.0 GRACED LRIDATATION 1 11649770 Wed Apr 15 15:24:02 2020 by operator  
640206630.0 GRACEC IPU 3 1 640206630.0 1 Wed Apr 15 08:52:58 2020 by operator  
640206900 GRACEC IPUR 4 -1 640206886 -1 0 Thu Apr 16 14:26:40 2020 by operator  
640206900 GRACEC USO 1 -1 Thu Apr 16 14:26:40 2020 by operator  
640206900.0 GRACEC LRIDATATION 1 2493138 Thu Apr 16 14:26:45 2020 by operator  
640996706.0 GRACED IPU 3 1 1271759906.0 1 Fri Apr 24 11:59:49 2020 by operator  
640996720 GRACED IPUR 4 -1 640996878 -1 -0.085484 Sat Apr 25 03:29:51 2020 by operator  
640996720 GRACED USO 1 -1 Sat Apr 25 03:29:51 2020 by operator  
640996720.0 GRACED LRIDATATION 1 11998191 Sat Apr 25 03:31:47 2020 by operator  
641098853.0 GRACEC IPU 3 1 641098853.0 1 Sat Apr 25 17:42:05 2020 by operator  
641099350 GRACEC IPUR 4 -1 641099345 -1 0 Sun Apr 26 13:46:32 2020 by operator  
641099350 GRACEC USO 1 -1 Sun Apr 26 13:46:32 2020 by operator  
641099350.0 GRACEC LRIDATATION 1 2900233 Sun Apr 26 13:49:27 2020 by operator  
641592506.0 GRACED IPU 3 1 1272355706.0 1 Fri May 01 10:46:54 2020 by operator  
641592520 GRACED IPUR 4 -1 641592747 -1 -0.081442 Sat May 02 15:43:23 2020 by operator  
641592520 GRACED USO 1 -1 Sat May 02 15:43:23 2020 by operator  
641592520.0 GRACED LRIDATATION 1 12240346 Sat May 02 15:45:58 2020 by operator  
641890406.0 GRACED IPU 3 1 1272653606.0 1 Mon May 04 20:38:26 2020 by operator  
641890420 GRACED IPUR 4 -1 641890675 -1 -0.088792 Tue May 05 18:27:30 2020 by operator  
641890420 GRACED USO 1 -1 Tue May 05 18:27:30 2020 by operator  
641890420.0 GRACED LRIDATATION 1 12361854 Wed May 06 04:19:50 2020 by operator  
642219266.0 GRACED IPU 3 1 1272982466.0 1 Fri May 08 16:32:51 2020 by operator  
642219280 GRACED IPUR 4 -1 642219520 -1 -0.09088599999999999999 Sat May 09 19:04:50 2020 by operator  
642219280 GRACED USO 1 -1 Sat May 09 19:04:50 2020 by operator  
642219280.0 GRACED LRIDATATION 1 12496354 Sat May 09 19:04:54 2020 by operator  
642717720 GRACEC MTEA 3 0 0.0 -3.86 Thu Feb 6 19:02:35 2020 by cmccullo -13.6325 12.4375 -7.4825

642786446.0 GRACED IPU 3 1 1273549646.0 1 Fri May 15 05:48:11 2020 by operator  
642786460 GRACED IPUR 4 -1 642786616 -1 -0.081548 Sat May 16 03:51:31 2020 by operator  
642786460 GRACED USO 1 -1 Sat May 16 03:51:31 2020 by operator  
642786460.0 GRACED LRIDATATION 1 12729152 Sat May 16 03:51:39 2020 by operator  
642905880.0 GRACEC IPU 3 1 642905880.0 1 Sat May 16 14:44:07 2020 by operator  
642906200 GRACEC IPUR 4 -1 642906191 -1 0 Sun May 17 15:34:52 2020 by operator  
642906200 GRACEC USO 1 -1 Sun May 17 15:34:52 2020 by operator  
642906200.0 GRACEC LRIDATATION 1 3731295 Sun May 17 15:34:57 2020 by operator  
643439726.0 GRACED IPU 3 1 1274202926.0 1 Fri May 22 20:27:58 2020 by operator  
643439740 GRACED IPUR 4 -1 643440157 -1 -0.081457 Sat May 23 15:27:47 2020 by operator  
643439740 GRACED USO 1 -1 Sat May 23 15:27:47 2020 by operator  
643439740.0 GRACED LRIDATATION 1 12998808 Sun May 24 04:06:28 2020 by operator  
643824142.0 GRACEC IPU 3 1 643824142.0 1 Wed May 27 06:13:29 2020 by operator  
643824560 GRACEC IPUR 4 -1 643824548 -1 0 Thu May 28 14:43:31 2020 by operator  
643824560 GRACEC USO 1 -1 Thu May 28 14:43:31 2020 by operator  
643824560.0 GRACEC LRIDATATION 1 4157171 Thu May 28 14:47:27 2020 by operator  
643828262.0 GRACEC KAMI 3 0.02 0.0 0.0  
643832903.0 GRACEC KAMI 3 0.04 0.0 0.0  
643850176.7 GRACEC KAMI 3 0.06 0.0 0.0  
643860428.7 GRACEC KAMI 3 0.08 0.0 0.0  
643861600.0 GRACEC KAMI 3 0.10 0.0 0.0  
643864105.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
643867984.0 GRACEC KAMI 3 0.02 0.0 0.0  
643870142.5 GRACEC KAMI 3 0.04 0.0 0.0  
643873392.8 GRACEC KAMI 3 0.06 0.0 0.0  
643902465.1 GRACEC KAMI 3 0.08 0.0 0.0  
643907635.4 GRACEC KAMI 3 0.10 0.0 0.0  
643910534.4 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
643983146.0 GRACED IPU 3 1 1274746346.0 1 Fri May 29 00:47:43 2020 by operator

643983160 GRACED IPUR 4 -1 643983612 -1 -0.085217 Sat May 30 15:44:34 2020 by operator  
643983160 GRACED USO 1 -1 Sat May 30 15:44:34 2020 by operator  
643983160.0 GRACED LRIDATATION 1 13224093 Sat May 30 15:44:45 2020 by operator  
644387662.0 GRACEC IPU 3 1 644387662.0 1 Tue Jun 02 19:39:27 2020 by operator  
644387940 GRACEC IPUR 4 -1 644387930 -1 0 Wed Jun 03 05:15:03 2020 by operator  
644387940 GRACEC USO 1 -1 Wed Jun 03 05:15:03 2020 by operator  
644416290.0 GRACEC IPU 3 1 644416290.0 1 Wed Jun 03 01:59:59 2020 by operator  
644416680 GRACEC IPUR 4 -1 644416672 -1 0 Thu Jun 04 14:52:46 2020 by operator  
644416680 GRACEC USO 1 -1 Thu Jun 04 14:52:46 2020 by operator  
644416962.0 GRACEC IPU 3 1 644416962.0 1 Wed Jun 03 01:59:59 2020 by operator  
644417260 GRACEC IPUR 4 -1 644417252 -1 0 Thu Jun 04 14:52:46 2020 by operator  
644417260 GRACEC USO 1 -1 Thu Jun 04 14:52:46 2020 by operator  
644417260.0 GRACEC LRIDATATION 1 4433268 Thu Jun 4 21:31:00 2020 by tamarab  
644418955.1 GRACEC KAMI 3 0.02 0.0 0.0  
644429980.0 GRACEC KAMI 3 0.04 0.0 0.0  
644432405.0 GRACEC KAMI 3 0.06 0.0 0.0  
644433300.0 GRACEC KAMI 3 0.08 0.0 0.0  
644433635.0 GRACEC KAMI 3 0.10 0.0 0.0  
644436285.85 GRACEC KAMI 3 0.12 0.0 0.0  
644440380.0 GRACEC KAMI 3 0.14 0.0 0.0  
644442710.0 GRACEC KAMI 3 0.16 0.0 0.0  
644451700.0 GRACEC KAMI 3 0.18 0.0 0.0  
644454550.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
644459649 GRACEC LRIDATATION 1 -7807288 Thu Jun 3 12:32:00 2020 by tamarab. LRI reboot  
644501540.0 GRACEC IPU 3 1 644501540.0 1 Thu Jun 04 03:18:15 2020 by operator  
644501890 GRACEC IPUR 4 -1 644501885 -1 0 Fri Jun 05 13:30:51 2020 by operator  
644501890 GRACEC USO 1 -1 Fri Jun 05 13:30:51 2020 by operator  
644501890.0 GRACEC LRIDATATION 1 -7767789 Fri Jun 05 13:30:55 2020 by operator  
645017222.0 GRACEC IPU 3 1 645017222.0 1 Wed Jun 10 01:08:03 2020 by operator

645017600 GRACEC IPUR 4 -1 645017591 -1 0 Wed Jun 10 17:39:15 2020 by operator  
645017600 GRACEC USO 1 -1 Wed Jun 10 17:39:15 2020 by operator  
645017600.0 GRACEC LRIDATATION 1 -7526701 Thu Jun 11 05:31:49 2020 by operator  
645757449.0 GRACED LRIDATATION 1 -21380816 Fri Jun 19 14:19:20 2020 by mpaik. LRI reboot  
645809422.0 GRACEC IPU 3 1 645809422.0 1 Fri Jun 19 05:39:48 2020 by operator  
645809426.0 GRACED IPU 3 1 1276572626.0 1 Fri Jun 19 04:05:00 2020 by operator  
645809440 GRACED IPUR 4 -1 645809644 -1 -0.069539 Sat Jun 20 14:46:43 2020 by operator  
645809440 GRACED USO 1 -1 Sat Jun 20 14:46:43 2020 by operator  
645809440.0 GRACED LRIDATATION 1 -20616684 Sat Jun 20 14:46:49 2020 by operator  
645809640 GRACEC IPUR 4 -1 645809633 -1 0 Sat Jun 20 14:44:40 2020 by operator  
645809640 GRACEC USO 1 -1 Sat Jun 20 14:44:40 2020 by operator  
645809640.0 GRACEC LRIDATATION 1 -7155054 Sat Jun 20 14:46:42 2020 by operator  
645895213.0 GRACED IPU 3 1 1276658413.0 1 Sat Jun 20 05:19:34 2020 by operator  
645895220 GRACED IPUR 4 -1 645895536 -1 -0.095192 Sun Jun 21 16:09:17 2020 by operator  
645895220 GRACED USO 1 -1 Sun Jun 21 16:09:17 2020 by operator  
645895220.0 GRACED LRIDATATION 1 -20580441 Sun Jun 21 16:09:22 2020 by operator  
646464320.0 GRACEC IPU 3 1 646464320.0 1 Fri Jun 26 20:27:09 2020 by operator  
646464326.0 GRACED IPU 3 1 1277227526.0 1 Fri Jun 26 18:57:39 2020 by operator  
646464340 GRACED IPUR 4 -1 646464508 -1 -0.088192000000000001 Sat Jun 27 04:19:52 2020 by operator  
646464340 GRACED USO 1 -1 Sat Jun 27 04:19:52 2020 by operator  
646464340.0 GRACED LRIDATATION 1 -20339866 Sun Jun 28 05:33:30 2020 by operator  
646464770 GRACEC IPUR 4 -1 646464762 -1 0 Sat Jun 27 16:31:31 2020 by operator  
646464770 GRACEC USO 1 -1 Sat Jun 27 16:31:31 2020 by operator  
646464770.0 GRACEC LRIDATATION 1 -6846404 Sun Jun 28 15:14:07 2020 by operator  
646481430.0 GRACEC KAMI 3 0.02 0.0 0.0  
646482934.5 GRACEC KAMI 3 0.04 0.0 0.0  
646491350.6 GRACEC KAMI 3 0.06 0.0 0.0  
646496180.0 GRACEC KAMI 3 0.08 0.0 0.0

646497620.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
646846526.0 GRACED IPU 3 1 1277609726.0 1 Wed Jul 01 06:03:24 2020 by operator  
646846540 GRACED IPUR 4 -1 646846904 -1 -0.091951 Thu Jul 02 18:26:13 2020 by operator  
646846540 GRACED USO 1 -1 Thu Jul 02 18:26:13 2020 by operator  
646846540.0 GRACED LRIDATATION 1 -20177588 Thu Jul 02 18:26:21 2020 by operator  
647606542.0 GRACEC IPU 3 1 647606542.0 1 Thu Jul 09 23:39:42 2020 by operator  
647606546.0 GRACED IPU 3 1 1278369746.0 1 Fri Jul 10 01:13:57 2020 by operator  
647606560 GRACED IPUR 4 -1 647606876 -1 -0.079056 Fri Jul 10 18:17:44 2020 by operator  
647606560 GRACED USO 1 -1 Fri Jul 10 18:17:44 2020 by operator  
647606560.0 GRACED LRIDATATION 1 -19853564 Sat Jul 11 05:35:10 2020 by operator  
647606920 GRACEC IPUR 4 -1 647606909 -1 0 Fri Jul 10 18:17:44 2020 by operator  
647606920 GRACEC USO 1 -1 Fri Jul 10 18:17:44 2020 by operator  
647606920.0 GRACEC LRIDATATION 1 -6305558 Fri Jul 10 18:32:50 2020 by operator  
648042682.0 GRACEC IPU 3 1 648042682.0 1 Wed Jul 15 02:38:20 2020 by operator  
648042686.0 GRACED IPU 3 1 1278805886.0 1 Wed Jul 15 01:04:17 2020 by operator  
648042700 GRACED IPUR 4 -1 648042894 -1 -0.084868 Wed Jul 15 04:15:13 2020 by operator  
648042700 GRACED USO 1 -1 Wed Jul 15 04:15:13 2020 by operator  
648042700.0 GRACED LRIDATATION 1 -19666800 Thu Jul 16 05:23:38 2020 by operator  
648043000 GRACEC IPUR 4 -1 648042992 -1 0 Wed Jul 15 14:51:20 2020 by operator  
648043000 GRACEC USO 1 -1 Wed Jul 15 14:51:20 2020 by operator  
648043000.0 GRACEC LRIDATATION 1 -6098157 Thu Jul 16 03:53:23 2020 by operator  
648178903.0 GRACEC IPU 3 1 648178903.0 1 Thu Jul 16 16:23:50 2020 by operator  
648179470 GRACEC IPUR 4 -1 648179455 -1 0 Fri Jul 17 15:41:40 2020 by operator  
648179470 GRACEC USO 1 -1 Fri Jul 17 15:41:40 2020 by operator  
648179470.0 GRACEC LRIDATATION 1 -6033140 Sat Jul 18 06:13:46 2020 by operator  
648290576.0 GRACED IPU 3 1 1279053776.0 1 Fri Jul 17 22:22:19 2020 by operator  
648290590 GRACED IPUR 4 -1 648290951 -1 -0.084365 Sat Jul 18 16:04:56 2020 by operator  
648290590 GRACED USO 1 -1 Sat Jul 18 16:04:56 2020 by operator  
648290590.0 GRACED LRIDATATION 1 -19560270 Sun Jul 19 05:56:13 2020 by operator

648522530 GRACED IPUR 4 -1 648522806 -1 -0.085786 Tue Jul 21 11:34:33 2020 by operator  
648522530 GRACED USO 1 -1 Tue Jul 21 11:34:33 2020 by operator  
648522530.0 GRACED LRIDATATION 1 -19460511 Tue Jul 21 11:35:40 2020 by operator  
648898570.0 GRACEC IPU 3 1 648898570.0 1 Fri Jul 24 23:00:02 2020 by operator  
648898890 GRACEC IPUR 4 -1 648898884 -1 0 Sat Jul 25 14:43:23 2020 by operator  
648898890 GRACEC USO 1 -1 Sat Jul 25 14:43:23 2020 by operator  
648898890.0 GRACEC LRIDATATION 1 -5689559 Sat Jul 25 14:43:25 2020 by operator  
649293244.0 GRACED IPU 3 1 649293244.0 1 Wed Jul 29 11:35:57 2020 by operator  
649293249.0 GRACED IPU 3 1 1280056449.0 1 Wed Jul 29 14:51:42 2020 by operator  
649293260 GRACED IPUR 4 -1 649293701 -1 -0.086467 Thu Jul 30 14:56:16 2020 by operator  
649293260 GRACED USO 1 -1 Thu Jul 30 14:56:16 2020 by operator  
649293260.0 GRACED LRIDATATION 1 -19127561 Fri Jul 31 04:43:35 2020 by operator  
649919990.0 GRACEC IPU 3 1 649919990.0 1 Wed Aug 05 18:36:48 2020 by operator  
649920280 GRACEC IPUR 4 -1 649920266 -1 0 Thu Aug 06 16:34:03 2020 by operator  
649920280 GRACEC USO 1 -1 Thu Aug 06 16:34:03 2020 by operator  
649920280.0 GRACEC LRIDATATION 1 -5199316 Thu Aug 06 16:34:32 2020 by operator  
649922620.0 GRACEC KAMI 3 0.02 0.0 0.0  
649923620.0 GRACEC KAMI 3 0.04 0.0 0.0  
649956914.7 GRACEC KAMI 3 0.06 0.0 0.0  
649961490.0 GRACEC KAMI 3 0.08 0.0 0.0  
649967720.0 GRACEC KAMI 3 0.10 0.0 0.0  
649972150.0 GRACEC KAMI 3 0.12 0.0 0.0  
649974420.0 GRACEC KAMI 3 0.14 0.0 0.0  
649979660.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
649985800.0 GRACEC KAMI 3 0.02 0.0 0.0  
649989270.0 GRACEC KAMI 3 0.04 0.0 0.0  
649990550.0 GRACEC KAMI 3 0.06 0.0 0.0  
649992240.0 GRACEC KAMI 3 0.08 0.0 0.0  
649993800.0 GRACEC KAMI 3 0.10 0.0 0.0

650017520.0 GRACEC KAMI 3 0.12 0.0 0.0  
650021736.6 GRACEC KAMI 3 0.14 0.0 0.0  
650021737.6 GRACEC KAMI 3 0.16 0.0 0.0  
650022900.0 GRACEC KAMI 3 0.18 0.0 0.0  
650026228.0 GRACEC IPU 3 1 650026228.0 1 Fri Aug 07 02:09:21 2020 by operator  
650026500.0 GRACEC KAMI 3 0.00 0.0 0.0 # IPU reboot  
650026580 GRACEC IPUR 4 -1 650026566 -1 0 Fri Aug 07 11:41:30 2020 by operator  
650026580 GRACEC USO 1 -1 Fri Aug 07 11:41:30 2020 by operator  
650064622.0 GRACEC IPU 3 1 650064622.0 1 Fri Aug 07 11:35:54 2020 by operator  
650064626.0 GRACED IPU 3 1 1280827826.0 1 Fri Aug 07 09:55:26 2020 by operator  
650064640 GRACED IPUR 4 -1 650064818 -1 -0.081927 Sat Aug 08 15:06:55 2020 by operator  
650064640 GRACED USO 1 -1 Sat Aug 08 15:06:55 2020 by operator  
650064640.0 GRACED LRIDATATION 1 -18792550 Mon Aug 10 18:40:02 2020 by operator  
650064880 GRACEC IPUR 4 -1 650064866 -1 0 Sat Aug 08 15:09:21 2020 by operator  
650064880 GRACEC USO 1 -1 Sat Aug 08 15:09:21 2020 by operator  
650064880.0 GRACEC LRIDATATION 1 -5129664 Sat Aug 08 15:30:08 2020 by operator  
650095380.0 GRACEC IPU 3 1 650095380.0 1 Fri Aug 07 21:07:14 2020 by operator  
650095670 GRACEC IPUR 4 -1 650095664 -1 0 Sat Aug 08 15:09:21 2020 by operator  
650095670 GRACEC USO 1 -1 Sat Aug 08 15:09:21 2020 by operator  
650095670.0 GRACEC LRIDATATION 1 -5114813 Sun Aug 09 05:00:08 2020 by operator  
650133468.0 GRACED IPU 3 1 1280896668.0 1 Sat Aug 08 08:02:25 2020 by operator  
650133480 GRACED IPUR 4 -1 650133757 -1 -0.094271999999999999 Sun Aug 09 13:40:45 2020 by operator  
650133480 GRACED USO 1 -1 Sun Aug 09 13:40:45 2020 by operator  
650133480.0 GRACED LRIDATATION 1 -18762499 Sun Aug 09 13:40:50 2020 by operator  
650277110.0 GRACEC IPU 3 1 650277110.0 1 Sun Aug 09 23:33:29 2020 by operator  
650277390 GRACEC IPUR 4 -1 650277378 -1 0 Mon Aug 10 05:51:26 2020 by operator  
650277390 GRACEC USO 1 -1 Mon Aug 10 05:51:26 2020 by operator  
650277390.0 GRACEC LRIDATATION 1 -5027189 Mon Aug 10 05:52:45 2020 by operator

650435800.0 GRACEC IPU 3 1 650435800.0 1 Tue Aug 11 19:36:12 2020 by operator  
650436120 GRACEC IPUR 4 -1 650436110 -1 0 Thu Aug 13 02:36:07 2020 by operator  
650436120 GRACEC USO 1 -1 Thu Aug 13 02:36:07 2020 by operator  
650436120.0 GRACEC LRIDATATION 1 -4950589 Thu Aug 13 04:52:40 2020 by operator  
651278733.0 GRACED IPU 3 1 1282041933.0 1 Fri Aug 21 14:06:03 2020 by operator  
651278740 GRACED IPUR 4 -1 651278925 -1 -0.078444 Sat Aug 22 14:27:14 2020 by operator  
651278740 GRACED USO 1 -1 Sat Aug 22 14:27:14 2020 by operator  
651278740.0 GRACED LRIDATATION 1 -18260905 Sat Aug 22 14:28:58 2020 by operator  
651317720.0 GRACEC IPU 3 1 651317720.0 1 Fri Aug 21 22:21:47 2020 by operator  
651317726.0 GRACED IPU 3 1 1282080926.0 1 Fri Aug 21 23:49:26 2020 by operator  
651317740 GRACED IPUR 4 -1 651318136 -1 -0.08967799999999999999 Sat Aug 22 14:27:14 2020 by operator  
651317740 GRACED USO 1 -1 Sat Aug 22 14:27:14 2020 by operator  
651317740.0 GRACED LRIDATATION 1 -18243655 Sun Aug 23 04:10:21 2020 by operator  
651318020 GRACEC IPUR 4 -1 651318014 -1 0 Sat Aug 22 14:27:13 2020 by operator  
651318020 GRACEC USO 1 -1 Sat Aug 22 14:27:13 2020 by operator  
651318020.0 GRACEC LRIDATATION 1 -4523757 Sat Aug 22 14:28:53 2020 by operator  
651340570.0 GRACEC IPU 3 1 651340570.0 1 Sat Aug 22 07:43:33 2020 by operator  
651340930 GRACEC IPUR 4 -1 651340923 -1 0 Sun Aug 23 12:18:14 2020 by operator  
651340930 GRACEC USO 1 -1 Sun Aug 23 12:18:14 2020 by operator  
651340930.0 GRACEC LRIDATATION 1 -4512651 Sun Aug 23 12:20:58 2020 by operator  
651593481.0 GRACED IPU 3 1 1282356681.0 1 Tue Aug 25 03:31:56 2020 by operator  
651593490 GRACED IPUR 4 -1 651593642 -1 -0.089988 Wed Aug 26 18:00:03 2020 by operator  
651593490 GRACED USO 1 -1 Wed Aug 26 18:00:03 2020 by operator  
651593490.0 GRACED LRIDATATION 1 -18122318 Wed Aug 26 20:27:01 2020 by operator  
651916480.0 GRACEC IPU 3 1 651916480.0 1 Fri Aug 28 21:22:54 2020 by operator  
651917220 GRACEC IPUR 4 -1 651917206 -1 0 Sat Aug 29 15:34:14 2020 by operator  
651917220 GRACEC USO 1 -1 Sat Aug 29 15:34:14 2020 by operator  
651917220.0 GRACEC LRIDATATION 1 -4232548 Sat Aug 29 15:34:18 2020 by operator

652804261.0 GRACED IPU 3 1 1283567461.0 1 Tue Sep 08 04:37:45 2020 by operator  
652804270 GRACED IPUR 4 -1 652804517 -1 -0.073058 Wed Sep 09 13:42:43 2020 by operator  
652804270 GRACED USO 1 -1 Wed Sep 09 13:42:43 2020 by operator  
652804270.0 GRACED LRIDATATION 1 -17586198 Wed Sep 09 13:43:56 2020 by operator  
652911315.598771 GRACED MANV 4 5.000 0.0988 0.0000 0 Thu Sep 10 17:14:36 2020 by operator  
653014014.0 GRACEC IPU 3 1 653014014.0 1 Thu Sep 10 15:45:13 2020 by operator  
653014320 GRACEC IPUR 4 -1 653014314 -1 0 Fri Sep 11 14:06:50 2020 by operator  
653014320 GRACEC USO 1 -1 Fri Sep 11 14:06:50 2020 by operator  
653014320.0 GRACEC LRIDATATION 1 -3696999 Fri Sep 11 14:40:15 2020 by operator  
653403148.0 GRACED IPU 3 1 1284166348.0 1 Tue Sep 15 03:47:21 2020 by operator  
653403160 GRACED IPUR 4 -1 653403426 -1 -0.093165 Wed Sep 16 14:57:32 2020 by operator  
653403160 GRACED USO 1 -1 Wed Sep 16 14:57:32 2020 by operator  
653403160.0 GRACED LRIDATATION 1 -17319307 Wed Sep 16 14:57:34 2020 by operator  
653660870.0 GRACEC IPU 3 1 653660870.0 1 Fri Sep 18 02:42:57 2020 by operator  
653661230 GRACEC IPUR 4 -1 653661215 -1 0 Sat Sep 19 05:43:38 2020 by operator  
653661230 GRACEC USO 1 -1 Sat Sep 19 05:43:38 2020 by operator  
653661230.0 GRACEC LRIDATATION 1 -3379878 Sat Sep 19 05:44:16 2020 by operator  
654126022.0 GRACEC IPU 3 1 654126022.0 1 Wed Sep 23 11:58:19 2020 by operator  
654126026.0 GRACED IPU 3 1 1284889226.0 1 Wed Sep 23 10:24:33 2020 by operator  
654126040 GRACED IPUR 4 -1 654126290 -1 -0.081358 Thu Sep 24 14:27:34 2020 by operator  
654126040 GRACED USO 1 -1 Thu Sep 24 14:27:34 2020 by operator  
654126040.0 GRACED LRIDATATION 1 -16995678 Thu Sep 24 14:27:39 2020 by operator  
654126380 GRACEC IPUR 4 -1 654126367 -1 0 Thu Sep 24 14:25:03 2020 by operator  
654126380 GRACEC USO 1 -1 Thu Sep 24 14:25:03 2020 by operator  
654126380.0 GRACEC LRIDATATION 1 -3151202 Thu Sep 24 14:27:33 2020 by operator  
654520830.0 GRACED IPU 3 1 1285284030.0 1 Mon Sep 28 00:37:27 2020 by operator  
654520840 GRACED IPUR 4 -1 654521038 -1 -0.089632 Mon Sep 28 16:32:25 2020 by operator  
654520840 GRACED USO 1 -1 Mon Sep 28 16:32:25 2020 by operator  
654520840.0 GRACED LRIDATATION 1 -16818278 Tue Sep 29 05:14:04 2020 by operator

654886480.0 GRACEC IPU 3 1 654886480.0 1 Mon Oct 12 05:19:42 2020 by operator  
654886760 GRACEC IPUR 4 -1 654886746 -1 0 Sun Oct 04 15:15:39 2020 by operator  
654886760 GRACEC USO 1 -1 Sun Oct 04 15:15:39 2020 by operator  
654886760.0 GRACEC LRIDATATION 1 -2776294 Sun Oct 04 15:15:42 2020 by operator  
655023742.0 GRACEC IPU 3 1 655023742.0 1 Sun Oct 04 14:09:53 2020 by operator  
655023746.0 GRACED IPU 3 1 1285786946.0 1 Sun Oct 04 14:09:53 2020 by operator  
655023760 GRACED IPUR 4 -1 655024684 -1 -0.120066 Sun Oct 04 15:24:01 2020 by operator  
655023760 GRACED USO 1 -1 Sun Oct 04 15:24:01 2020 by operator  
655023760.0 GRACED LRIDATATION 1 -16814959 Sun Oct 04 15:25:47 2020 by operator  
655023760.0 GRACED LRIDATATION 1 -16591260 Mon Oct 05 05:53:39 2020 by operator  
655024040 GRACEC IPUR 4 -1 655024032 -1 0 Sun Oct 04 15:25:44 2020 by operator  
655024040 GRACEC USO 1 -1 Sun Oct 04 15:25:44 2020 by operator  
655024040.0 GRACEC LRIDATATION 1 -2708469 Mon Oct 05 18:14:18 2020 by operator  
655462822.0 GRACEC IPU 3 1 655462822.0 1 Thu Oct 08 23:47:15 2020 by operator  
655462826.0 GRACED IPU 3 1 1286226026.0 1 Thu Oct 08 22:11:58 2020 by operator  
655462840 GRACED IPUR 4 -1 655463306 -1 -0.115217 Sat Oct 10 11:44:30 2020 by operator  
655462840 GRACED USO 1 -1 Sat Oct 10 11:44:30 2020 by operator  
655462840.0 GRACED LRIDATATION 1 -16591260 manually added by efahnest (as operator), value same as previous  
655463150 GRACEC IPUR 4 -1 655463138 -1 0 Sat Oct 10 11:44:28 2020 by operator  
655463150 GRACEC USO 1 -1 Sat Oct 10 11:44:28 2020 by operator  
655463150.0 GRACEC LRIDATATION 1 -2491220 Sat Oct 10 11:44:41 2020 by operator  
655476692.0 GRACED IPU 3 1 1286239892.0 1 Fri Oct 09 01:17:35 2020 by operator  
655476700 GRACED IPUR 4 -1 655476948 -1 -0.114219 Sat Oct 10 11:44:30 2020 by operator  
655476700 GRACED USO 1 -1 Sat Oct 10 11:44:30 2020 by operator  
655476700.0 GRACED LRIDATATION 1 -16386661 Sat Oct 10 11:44:48 2020 by operator  
655740930.0 GRACED IPU 3 1 1286504130.0 1 Mon Oct 12 04:58:41 2020 by operator  
655740940 GRACED IPUR 4 -1 655741197 -1 -0.08507199999999999 Tue Oct 13 15:32:39 2020 by operator

655740940 GRACED USO 1 -1 Tue Oct 13 15:32:39 2020 by operator  
655740940.0 GRACED LRIDATATION 1 -16386661 manually added by efahnest (as operator), value same as previous  
655741943.0 GRACED IPU 3 1 1286505143.0 1 Mon Oct 12 04:58:41 2020 by operator  
655741950 GRACED IPUR 4 -1 655742194 -1 -0.292434 Tue Oct 13 15:32:39 2020 by operator  
655741950 GRACED USO 1 -1 Tue Oct 13 15:32:39 2020 by operator  
655741950.0 GRACED LRIDATATION 1 -16266390 Tue Oct 13 15:32:49 2020 by operator  
655796700.0 GRACEC IPU 3 1 655796700.0 1 Mon Oct 12 19:13:43 2020 by operator  
655796980 GRACEC IPUR 4 -1 655796970 -1 0 Tue Oct 13 15:27:30 2020 by operator  
655796980 GRACEC USO 1 -1 Tue Oct 13 15:27:30 2020 by operator  
655796980.0 GRACEC LRIDATATION 1 -2325743 Tue Oct 13 15:27:38 2020 by operator  
655881910.0 GRACEC IPU 3 1 655881910.0 1 Tue Oct 13 20:43:42 2020 by operator  
655882190 GRACEC IPUR 4 -1 655882175 -1 0 Wed Oct 14 05:34:17 2020 by operator  
655882190 GRACEC USO 1 -1 Wed Oct 14 05:34:17 2020 by operator  
655882190.0 GRACEC LRIDATATION 1 -2283502 Wed Oct 14 05:36:24 2020 by operator  
656163142.0 GRACEC IPU 3 1 656163142.0 1 Sat Oct 17 03:07:53 2020 by operator  
656163145.0 GRACED IPU 3 1 1286926345.0 1 Sat Oct 17 01:37:51 2020 by operator  
656163150 GRACED IPUR 4 -1 656163388 -1 -0.316043 Sat Oct 17 16:15:11 2020 by operator  
656163150 GRACED USO 1 -1 Sat Oct 17 16:15:11 2020 by operator  
656163150.0 GRACED LRIDATATION 1 -16074939 Sun Oct 18 05:42:45 2020 by operator  
656163390 GRACEC IPUR 4 -1 656163380 -1 0 Sat Oct 17 16:15:11 2020 by operator  
656163390 GRACEC USO 1 -1 Sat Oct 17 16:15:11 2020 by operator  
656163390.0 GRACEC LRIDATATION 1 -2143849 Sun Oct 18 16:13:16 2020 by operator  
656307593.0 GRACED IPU 3 1 1287070793.0 1 Sun Oct 18 18:42:17 2020 by operator  
656307600 GRACED IPUR 4 -1 656307832 -1 -0.311283 Mon Oct 19 20:16:44 2020 by operator  
656307600 GRACED USO 1 -1 Mon Oct 19 20:16:44 2020 by operator  
656307600.0 GRACED LRIDATATION 1 -16009141 Mon Oct 19 20:16:53 2020 by operator  
656482500.0 GRACED IPU 3 1 1287072900.0 1 manually added by cmccullo on Thu Oct 22 16:42:28 2020

656482550 GRACED IPUR 4 -1 656483268 -1 -0.360663 Thu Oct 22 17:03:00 2020 by operator  
656482550 GRACED USO 1 -1 Thu Oct 22 17:03:00 2020 by operator  
656482550.0 GRACED LRIDATATION 1 -15929145 Thu Oct 22 17:03:26 2020 by operator  
656502786.0 GRACED IPU 3 1 1287265986.0 1 Wed Oct 21 00:13:00 2020 by operator  
656502800 GRACED IPUR 4 -1 656503595 -1 -0.331644 Thu Oct 22 16:57:57 2020 by operator  
656502800 GRACED USO 1 -1 Thu Oct 22 16:57:57 2020 by operator  
656502800.0 GRACED LRIDATATION 1 -15929145 manually added by efahnest on Mon Oct 26 21:49:09 2020 to match previous  
656508519.0 GRACED IPU 3 1 1287271719.0 1 Wed Oct 21 00:13:00 2020 by operator  
656508520.0 GRACEC IPU 3 1 656508520.0 1 Wed Oct 21 01:42:37 2020 by operator  
656508530 GRACED IPUR 4 -1 656509036 -1 -0.095301 Thu Oct 22 16:57:57 2020 by operator  
656508530 GRACED USO 1 -1 Thu Oct 22 16:57:57 2020 by operator  
656508530.0 GRACED LRIDATATION 1 -15929145 manually added by efahnest on Mon Oct 26 21:49:09 2020 to match previous  
656508890 GRACEC IPUR 4 -1 656508875 -1 0 Thu Oct 22 17:02:57 2020 by operator  
656508890 GRACEC USO 1 -1 Thu Oct 22 17:02:57 2020 by operator  
656508890.0 GRACEC LRIDATATION 1 -2143849 manually added by efahnest on Mon Oct 26 21:49:09 2020 to match previous  
656510722.0 GRACEC IPU 3 1 656510722.0 1 Wed Oct 21 01:42:38 2020 by operator  
656510725.0 GRACED IPU 3 1 1287273925.0 1 Wed Oct 21 03:18:56 2020 by operator  
656510730 GRACED IPUR 4 -1 656510883 -1 -0.337579 Thu Oct 22 16:57:57 2020 by operator  
656510730 GRACED USO 1 -1 Thu Oct 22 16:57:57 2020 by operator  
656510730.0 GRACED LRIDATATION 1 -15916535 Thu Oct 22 16:58:02 2020 by operator  
656511010 GRACEC IPUR 4 -1 656510995 -1 0 Thu Oct 22 17:02:57 2020 by operator  
656511010 GRACEC USO 1 -1 Thu Oct 22 17:02:57 2020 by operator  
656511010.0 GRACEC LRIDATATION 1 -1970982 Thu Oct 22 17:03:17 2020 by operator  
656593915.0 GRACED IPU 3 1 1287357115.0 1 Thu Oct 22 01:24:37 2020 by operator  
656593930 GRACED IPUR 4 -1 656594157 -1 -0.23691 Thu Oct 22 16:57:57 2020 by operator  
656593930 GRACED USO 1 -1 Thu Oct 22 16:57:57 2020 by operator  
656593930.0 GRACED LRIDATATION 1 -15878517 Fri Oct 23 05:45:33 2020 by operator

656679683.0 GRACEC IPU 3 1 656679683.0 1 Fri Oct 23 01:00:08 2020 by operator  
656680190 GRACEC IPUR 4 -1 656680176 -1 0 Sat Oct 24 19:39:01 2020 by operator  
656680190 GRACEC USO 1 -1 Sat Oct 24 19:39:01 2020 by operator  
656680190.0 GRACEC LRIDATATION 1 -1970982 manually added by efahnest on Mon Oct 26 21:49:09 2020 to match previous  
656685238.0 GRACED IPU 3 1 1287448438.0 1 Fri Oct 23 02:33:51 2020 by operator  
656685250 GRACED IPUR 4 -1 656685626 -1 -0.375189 Sat Oct 24 19:39:02 2020 by operator  
656685250 GRACED USO 1 -1 Sat Oct 24 19:39:02 2020 by operator  
656685250.0 GRACED LRIDATATION 1 -15878517 manually added by efahnest on Mon Oct 26 21:46:50 2020 to match previous  
656687100.0 GRACEC IPU 3 1 656687100.0 1 manually added by cmccullo on Fri Oct 23 02:33:51 2020  
656687125.0 GRACED IPU 3 1 1287450325.0 1 Fri Oct 23 02:33:51 2020 by operator  
656687130 GRACED IPUR 4 -1 656687557 -1 -0.367621 Sat Oct 24 19:39:02 2020 by operator  
656687130 GRACED USO 1 -1 Sat Oct 24 19:39:02 2020 by operator  
656687130.0 GRACED LRIDATATION 1 -15835851 Sat Oct 24 19:39:16 2020 by operator  
656687480 GRACEC IPUR 4 -1 656687472 -1 0 Sat Oct 24 19:39:01 2020 by operator  
656687480 GRACEC USO 1 -1 Sat Oct 24 19:39:01 2020 by operator  
656687480.0 GRACEC LRIDATATION 1 -1883107 Sat Oct 24 19:39:08 2020 by operator  
657037942.0 GRACEC IPU 3 1 657037942.0 1 Tue Oct 27 05:49:59 2020 by operator  
657037945.0 GRACED IPU 3 1 1287801145.0 1 Tue Oct 27 04:16:27 2020 by operator  
657037950 GRACED IPUR 4 -1 657038269 -1 -0.357595 Wed Oct 28 15:21:44 2020 by operator  
657037950 GRACED USO 1 -1 Wed Oct 28 15:21:44 2020 by operator  
657037950.0 GRACED LRIDATATION 1 -15835851 manually added by efahnest on Thu Oct 29 19:12:41 UTC 2020 to match previous  
657038280 GRACEC IPUR 4 -1 657038271 -1 0 Wed Oct 28 15:19:35 2020 by operator  
657038280 GRACEC USO 1 -1 Wed Oct 28 15:19:35 2020 by operator  
657038280.0 GRACEC LRIDATATION 1 -1883107 manually added by efahnest on Thu Oct 29 19:12:41 UTC 2020 to match previous  
657038791.0 GRACED IPU 3 1 1287801991.0 1 Tue Oct 27 04:16:27 2020 by operator

657038800.0 GRACEC IPU 3 1 657038800.0 1 Tue Oct 27 05:49:59 2020 by operator  
657038800 GRACED IPUR 4 -1 657039333 -1 -0.357052 Wed Oct 28 15:21:44 2020 by operator  
657038800 GRACED USO 1 -1 Wed Oct 28 15:21:44 2020 by operator  
657038800.0 GRACED LRIDATATION 1 -15674937 Wed Oct 28 15:21:47 2020 by operator  
657039470 GRACEC IPUR 4 -1 657039455 -1 0 Wed Oct 28 15:19:35 2020 by operator  
657039470 GRACEC USO 1 -1 Wed Oct 28 15:19:35 2020 by operator  
657039470.0 GRACEC LRIDATATION 1 -1883107 manually added by efahnest on Thu Oct 29 19:12:41 UTC 2020 to match previous  
657078280.0 GRACEC IPU 3 1 657078280.0 1 Tue Oct 27 15:23:13 2020 by operator  
657078500 GRACEC IPUR 4 -1 657078494 -1 0 Wed Oct 28 15:19:35 2020 by operator  
657078500 GRACEC USO 1 -1 Wed Oct 28 15:19:35 2020 by operator  
657078500.0 GRACEC LRIDATATION 1 -1688160 Wed Oct 28 15:21:43 2020 by operator  
657201742.0 GRACEC IPU 3 1 657201742.0 1 Thu Oct 29 01:54:46 2020 by operator  
657201745.0 GRACED IPU 3 1 1287964945.0 1 Thu Oct 29 03:28:21 2020 by operator  
657201750 GRACED IPUR 4 -1 657202168 -1 -0.39303 Fri Oct 30 15:12:23 2020 by operator  
657201750 GRACED USO 1 -1 Fri Oct 30 15:12:23 2020 by operator  
657201750.0 GRACED LRIDATATION 1 -15600351 Fri Oct 30 15:12:27 2020 by operator  
657202080 GRACEC IPUR 4 -1 657202072 -1 0 Fri Oct 30 15:12:23 2020 by operator  
657202080 GRACEC USO 1 -1 Fri Oct 30 15:12:23 2020 by operator  
657202080.0 GRACEC LRIDATATION 1 -1626408 Fri Oct 30 15:12:33 2020 by operator  
657285970.0 GRACEC IPU 3 1 657285970.0 1 Fri Oct 30 03:10:12 2020 by operator  
657286490 GRACEC IPUR 4 -1 657286476 -1 0 Fri Oct 30 15:12:23 2020 by operator  
657286490 GRACEC USO 1 -1 Fri Oct 30 15:12:23 2020 by operator  
657286490.0 GRACEC LRIDATATION 1 -1584248 Sat Oct 31 04:28:18 2020 by operator  
657325822.0 GRACEC IPU 3 1 657325822.0 1 Fri Oct 30 13:23:00 2020 by operator  
657325825.0 GRACED IPU 3 1 1288089025.0 1 Fri Oct 30 11:37:17 2020 by operator  
657325830 GRACED IPUR 4 -1 657326041 -1 -0.388498 Sat Oct 31 15:23:47 2020 by operator  
657325830 GRACED USO 1 -1 Sat Oct 31 15:23:47 2020 by operator  
657325830.0 GRACED LRIDATATION 1 -15543526 Sat Oct 31 15:23:49 2020 by operator

657326070 GRACEC IPUR 4 -1 657326059 -1 0 Sat Oct 31 04:25:48 2020 by operator  
657326070 GRACEC USO 1 -1 Sat Oct 31 04:25:48 2020 by operator  
657326070.0 GRACEC LRIDATATION 1 -1564480 Sat Oct 31 04:28:18 2020 by operator  
657333257.5 GRACEC KAMI 3 0.02 0.0 0.0  
657370973.0 GRACED IPU 3 1 1288134173.0 1 Fri Oct 30 23:41:41 2020 by operator  
657370980 GRACED IPUR 4 -1 657371229 -1 -0.387004 Sat Oct 31 15:23:47 2020 by operator  
657370980 GRACED USO 1 -1 Sat Oct 31 15:23:47 2020 by operator  
657370980.0 GRACED LRIDATATION 1 -15522793 Sun Nov 01 04:05:11 2020 by operator  
657384333.3 GRACEC KAMI 3 0.04 0.0 0.0  
657384369.2 GRACEC KAMI 3 0.06 0.0 0.0  
657384376.9 GRACEC KAMI 3 0.08 0.0 0.0  
657400816.3 GRACEC KAMI 3 0.10 0.0 0.0  
657448240.0 GRACEC IPU 3 1 657448240.0 1 Sat Oct 31 23:20:16 2020 by operator  
657448550.0 GRACEC KAMI 3 0.00 0.0 0.0 # IPU reboot  
657448550 GRACEC IPUR 4 -1 657448542 -1 0 Sun Nov 01 15:41:21 2020 by operator  
657448550 GRACEC USO 1 -1 Sun Nov 01 15:41:21 2020 by operator  
657448550.0 GRACEC LRIDATATION 1 -1503253 Mon Nov 02 03:42:52 2020 by operator  
657633742.0 GRACEC IPU 3 1 657633742.0 1 Tue Nov 03 01:47:28 2020 by operator  
657633745.0 GRACED IPU 3 1 1288396945.0 1 Tue Nov 03 03:14:59 2020 by operator  
657633750 GRACED IPUR 4 -1 657633935 -1 -0.454173 Wed Nov 04 16:38:33 2020 by operator  
657633750 GRACED USO 1 -1 Wed Nov 04 16:38:33 2020 by operator  
657633750.0 GRACED LRIDATATION 1 -15402114 Wed Nov 04 16:38:48 2020 by operator  
657633990 GRACEC IPUR 4 -1 657633976 -1 0 Wed Nov 04 16:33:23 2020 by operator  
657633990 GRACEC USO 1 -1 Wed Nov 04 16:33:23 2020 by operator  
657633990.0 GRACEC LRIDATATION 1 -1410493 Wed Nov 04 16:33:30 2020 by operator  
657796570.0 GRACEC IPU 3 1 657796570.0 1 Thu Nov 05 00:58:23 2020 by operator  
657797180 GRACEC IPUR 4 -1 657797170 -1 0 Fri Nov 06 16:28:17 2020 by operator  
657797180 GRACEC USO 1 -1 Fri Nov 06 16:28:17 2020 by operator  
657797180.0 GRACEC LRIDATATION 1 -1328772 Fri Nov 06 16:28:21 2020 by operator

657809122.0 GRACEC IPU 3 1 657809122.0 1 Thu Nov 05 03:53:12 2020 by operator  
657809125.0 GRACED IPU 3 1 1288572325.0 1 Thu Nov 05 02:31:36 2020 by operator  
657809130 GRACED IPUR 4 -1 657809286 -1 -0.449377 Fri Nov 06 03:42:40 2020 by operator  
657809130 GRACED USO 1 -1 Fri Nov 06 03:42:40 2020 by operator  
657809130.0 GRACED LRIDATATION 1 -15321433 Fri Nov 06 03:42:43 2020 by operator  
657809370 GRACEC IPUR 4 -1 657809360 -1 0 Fri Nov 06 16:33:22 2020 by operator  
657809370 GRACEC USO 1 -1 Fri Nov 06 16:33:22 2020 by operator  
657809370.0 GRACEC LRIDATATION 1 -1322680 manually added by cmccullo on Fri Nov 06 16:47:45  
657887090.0 GRACEC IPU 3 1 657887090.0 1 Fri Nov 06 02:14:32 2020 by operator  
657887630 GRACEC IPUR 4 -1 657887624 -1 0 Fri Nov 06 16:33:22 2020 by operator  
657887630 GRACEC USO 1 -1 Fri Nov 06 16:33:22 2020 by operator  
657887630.0 GRACEC LRIDATATION 1 -1283475 Sat Nov 07 03:21:39 2020 by operator  
658073873.0 GRACED IPU 3 1 1288837073.0 1 Sun Nov 08 03:03:16 2020 by operator  
658073880 GRACED IPUR 4 -1 658074136 -1 -0.447469 Mon Nov 09 15:12:24 2020 by operator  
658073880 GRACED USO 1 -1 Mon Nov 09 15:12:24 2020 by operator  
658073880.0 GRACED LRIDATATION 1 -15199402 manually added by cmccullo on Mon Nov 09 15:42:39 2020  
658122480.0 GRACEC IPU 3 1 658122480.0 1 Mon Nov 09 17:44:50 2020 by operator  
658122860 GRACEC IPUR 4 -1 658122850 -1 0 Mon Nov 09 15:12:20 2020 by operator  
658122860 GRACEC USO 1 -1 Mon Nov 09 15:12:20 2020 by operator  
658122860.0 GRACEC LRIDATATION 1 -1165598 Mon Nov 09 15:16:42 2020 by operator  
658222168.0 GRACED IPU 3 1 1288985368.0 1 Sun Nov 22 19:52:29 2020 by operator  
658222180 GRACED IPUR 4 -1 658222494 -1 -0.475434 Tue Nov 10 16:57:35 2020 by operator  
658222180 GRACED USO 1 -1 Tue Nov 10 16:57:35 2020 by operator  
658222180.0 GRACED LRIDATATION 1 -15130754 Tue Nov 10 16:57:38 2020 by operator  
658252222.0 GRACEC IPU 3 1 658252222.0 1 Wed Nov 11 16:16:00 2020 by operator  
658252225.0 GRACED IPU 3 1 1289015425.0 1 Wed Nov 11 16:17:41 2020 by operator  
658252230 GRACED IPUR 4 -1 658252415 -1 -0.48967 Wed Nov 11 15:59:56 2020 by operator

658252230 GRACED USO 1 -1 Wed Nov 11 15:59:56 2020 by operator  
658252230.0 GRACED LRIDATATION 1 -15117143 manually added by mpaik on Wed Nov 11 21:38:10 UTC 2020  
658252540 GRACEC IPUR 4 -1 658252533 -1 0 Wed Nov 11 15:59:55 2020 by operator  
658252540 GRACEC USO 1 -1 Wed Nov 11 15:59:55 2020 by operator  
658252540.0 GRACEC LRIDATATION 1 -1100481 manually added by mpaik on Wed Nov 11 21:38:10 UTC 2020  
658335922.0 GRACEC IPU 3 1 658335922.0 1 Wed Nov 11 16:47:01 2020 by operator  
658335925.0 GRACED IPU 3 1 1289099125.0 1 Wed Nov 11 03:31:52 2020 by operator  
658335930 GRACED IPUR 4 -1 658336213 -1 -0.481364 Thu Nov 12 15:56:44 2020 by operator  
658335930 GRACED USO 1 -1 Thu Nov 12 15:56:44 2020 by operator  
658335930.0 GRACED LRIDATATION 1 -15078450 manually added by mpaik on Thu Nov 12 16:43:56 UTC 2020  
658336160 GRACEC IPUR 4 -1 658336153 -1 0 Thu Nov 12 15:56:45 2020 by operator  
658336160 GRACEC USO 1 -1 Thu Nov 12 15:56:45 2020 by operator  
658336160.0 GRACEC LRIDATATION 1 -1058504 manually added by mpaik on Thu Nov 12 16:43:56 UTC 2020  
658403700 GRACEC IPUR 4 -1 658403694 -1 0 Thu Nov 12 15:56:45 2020 by operator  
658403700 GRACEC USO 1 -1 Thu Nov 12 15:56:45 2020 by operator  
658403700.0 GRACEC LRIDATATION 1 -1024576 manually added by mpaik on Fri Nov 13 15:51:40 UTC 2020  
658405948.05 GRACEC KAMI 3 0.02 0.0 0.0 by mpaik on Fri Nov 13 19:16:01 UTC 2020  
658411836.45 GRACEC KAMI 3 0.04 0.0 0.0  
658416171.75 GRACEC KAMI 3 0.06 0.0 0.0  
658418879.75 GRACEC KAMI 3 0.08 0.0 0.0  
658418884.55 GRACEC KAMI 3 0.10 0.0 0.0  
658419315.85 GRACEC KAMI 3 0.12 0.0 0.0  
658421258.0 GRACEC KAMI 3 0.00 0.0 0.0 # commanded restart tracker.  
658542022.0 GRACEC IPU 3 1 658542022.0 1 Fri Nov 13 13:58:48 2020 by operator  
658542025.0 GRACED IPU 3 1 1289305225.0 1 Fri Nov 13 15:32:29 2020 by operator

658542030 GRACED IPUR 4 -1 658542225 -1 -0.47406 Sat Nov 14 15:18:11 2020 by operator  
658542030 GRACED USO 1 -1 Sat Nov 14 15:18:11 2020 by operator  
658542030.0 GRACED LRIDATATION 1 -14983207 manually added by mpaik on Sat Nov 14 18:45:51 UTC 2020  
658542620 GRACEC IPUR 4 -1 658542610 -1 0 Sat Nov 14 15:22:15 2020 by operator  
658542620 GRACEC USO 1 -1 Sat Nov 14 15:22:15 2020 by operator  
658542620.0 GRACEC LRIDATATION 1 -954774 manually added by mpaik on Sat Nov 14 18:45:51 UTC 2020  
658553593.0 GRACED IPU 3 1 1289316793.0 1 Fri Nov 13 18:33:37 2020 by operator  
658553600 GRACED IPUR 4 -1 658553933 -1 -0.473487 Sat Nov 14 15:18:11 2020 by operator  
658553600 GRACED USO 1 -1 Sat Nov 14 15:18:11 2020 by operator  
658553600.0 GRACED LRIDATATION 1 -14977805 manually added by mpaik on Sun Nov 15 16:44:50 UTC 2020  
658813723.0 GRACED IPU 3 1 1289576923.0 1 Mon Nov 16 19:03:17 2020 by operator  
658813730 GRACED IPUR 4 -1 658814074 -1 -0.091134999999999999 Tue Nov 17 19:06:30 2020 by operator  
658813730 GRACED USO 1 -1 Tue Nov 17 19:06:30 2020 by operator  
658813730.0 GRACED LRIDATATION 1 -14857319 Tue Nov 17 21:01:00 2020 by cvolk  
658870522.0 GRACEC IPU 3 1 658870522.0 1 Tue Nov 17 09:25:58 2020 by operator  
658870526.0 GRACED IPU 3 1 1289633726.0 1 Tue Nov 17 10:48:30 2020 by operator  
658870540 GRACED IPUR 4 -1 658870835 -1 -0.086702 Wed Nov 18 17:20:38 2020 by operator  
658870540 GRACED USO 1 -1 Wed Nov 18 17:20:38 2020 by operator  
658870540.0 GRACED LRIDATATION 1 -14831005 Wed Nov 18 17:20:44 2020 by cmccullo  
658870840 GRACEC IPUR 4 -1 658870826 -1 0 Wed Nov 18 17:30:45 2020 by operator  
658870840 GRACEC USO 1 -1 Wed Nov 18 17:30:45 2020 by operator  
658870840.0 GRACEC LRIDATATION 1 -789889 Wed Nov 18 17:30:53 2020 by operator  
658874110.0 GRACEC IPU 3 1 658874110.0 1 Tue Nov 17 09:25:58 2020 by operator  
658874520 GRACEC IPUR 4 -1 658874506 -1 0 Wed Nov 18 17:30:45 2020 by operator  
658874520 GRACEC USO 1 -1 Wed Nov 18 17:30:45 2020 by operator  
658874520.0 GRACEC LRIDATATION 1 -787833 Wed Nov 18 17:30:53 2020 by cmccullo

658919814.0 GRACED IPU 3 1 1289683014.0 1 Wed Nov 18 16:49:30 2020 by operator  
658919820 GRACED IPUR 4 -1 658920052 -1 -0.09057999999999999999 Wed Nov 18 17:20:38 2020 by operator  
658919820 GRACED USO 1 -1 Wed Nov 18 17:20:38 2020 by operator  
658919820.0 GRACED LRIDATATION 1 -14808173 Wed Nov 18 17:20:44 2020 by cmccullo  
658997422.0 GRACEC IPU 3 1 658997422.0 1 Wed Nov 18 19:57:15 2020 by operator  
658997426.0 GRACED IPU 3 1 1289760626.0 1 Wed Nov 18 21:30:29 2020 by operator  
658997440 GRACED IPUR 4 -1 658997614 -1 -0.091062 Thu Nov 19 18:10:14 2020 by operator  
658997440 GRACED USO 1 -1 Thu Nov 19 18:10:14 2020 by operator  
658997440.0 GRACED LRIDATATION 1 -14772172 Wed Nov 19 21:20:00 2020 by cvolk  
658997800 GRACEC IPUR 4 -1 658997791 -1 0 Thu Nov 19 18:10:14 2020 by operator  
658997800 GRACEC USO 1 -1 Thu Nov 19 18:10:14 2020 by operator  
658997800.0 GRACEC LRIDATATION 1 -725724 Wed Nov 19 21:20:20 2020 by cvolk  
659180920.0 GRACEC IPU 3 1 659180920.0 1 Sun Nov 22 01:23:36 2020 by operator  
659181230 GRACEC IPUR 4 -1 659181223 -1 0 Sat Nov 21 18:42:58 2020 by operator  
659181230 GRACEC USO 1 -1 Sat Nov 21 18:42:58 2020 by operator  
659181230.0 GRACEC LRIDATATION 1 -409865 Sat Nov 21 18:46:22 2020 by operator  
659200222.0 GRACEC IPU 3 1 659200222.0 1 Sun Nov 22 01:24:05 2020 by operator  
659200226.0 GRACED IPU 3 1 1289963426.0 1 Sun Nov 22 01:24:07 2020 by operator  
659200240 GRACED IPUR 4 -1 659200577 -1 -0.092484 Sun Nov 22 17:26:56 2020 by operator  
659200240 GRACED USO 1 -1 Sun Nov 22 17:26:56 2020 by operator  
659200240.0 GRACED LRIDATATION 1 -14677897 manually added by cmccullo on Sat Nov 22 20:51:46 2020  
659200610 GRACEC IPUR 4 -1 659200602 -1 0 Sun Nov 22 18:45:06 2020 by operator  
659200610 GRACEC USO 1 -1 Sun Nov 22 18:45:06 2020 by operator  
659200610.0 GRACEC LRIDATATION 1 -623509 manually added by cmccullo on Sat Nov 22 20:49:36 2020  
659265670.0 GRACEC IPU 3 1 659265670.0 1 Sun Nov 22 01:24:07 2020 by operator  
659265930 GRACEC IPUR 4 -1 659265921 -1 0 Sun Nov 22 18:45:06 2020 by operator  
659265930 GRACEC USO 1 -1 Sun Nov 22 18:45:06 2020 by operator

659265930.0 GRACEC LRIDATATION 1 -590571 manually added by cmccullo on Sat Nov 22 20:56:46 2020

659435755.0 GRACED IPU 3 1 1290198955.0 1 Mon Nov 23 21:27:42 2020 by operator

659435770 GRACED IPUR 4 -1 659436054 -1 -0.09254 Tue Nov 24 16:19:17 2020 by operator

659435770 GRACED USO 1 -1 Tue Nov 24 16:19:17 2020 by operator

659435770.0 GRACED LRIDATATION 1 -14568488 Tue Nov 24 16:21:14 2020 by operator

659470222.0 GRACEC IPU 3 1 659470222.0 1 Tue Nov 24 08:16:35 2020 by operator

659470226.0 GRACED IPU 3 1 1290233426.0 1 Tue Nov 24 06:43:33 2020 by operator

659470240 GRACED IPUR 4 -1 659470405 -1 -0.09234100000000001 Wed Nov 25 16:08:34 2020 by operator

659470240 GRACED USO 1 -1 Wed Nov 25 16:08:34 2020 by operator

659470240.0 GRACED LRIDATATION 1 -14552383 manually added by mpaik on Wed Nov 25 19:24:39 UTC 2020

659470500 GRACEC IPUR 4 -1 659470487 -1 0 Wed Nov 25 16:10:45 2020 by operator

659470500 GRACEC USO 1 -1 Wed Nov 25 16:10:45 2020 by operator

659470500.0 GRACEC LRIDATATION 1 -487324 manually added by mpaik on Wed Nov 25 19:24:39 UTC 2020

659495670.0 GRACEC IPU 3 1 659495670.0 1 Tue Nov 24 14:42:58 2020 by operator

659495940 GRACEC IPUR 4 -1 659495929 -1 0 Wed Nov 25 16:10:45 2020 by operator

659495940 GRACEC USO 1 -1 Wed Nov 25 16:10:45 2020 by operator

659495940.0 GRACEC LRIDATATION 1 -474540 manually added by mpaik on Wed Nov 25 19:24:39 UTC 2020

659500908.0 GRACEC IPU 3 1 659500908.0 1 Tue Nov 24 17:43:40 2020 by operator

659501270 GRACEC IPUR 4 -1 659501260 -1 0 Wed Nov 25 16:10:45 2020 by operator

659501270 GRACEC USO 1 -1 Wed Nov 25 16:10:45 2020 by operator

659501270.0 GRACEC LRIDATATION 1 -471796 manually added by mpaik on Wed Nov 25 19:24:39 UTC 2020

659503017.55 GRACEC KAMI 3 0.02 0.0 0.0 by mpaik on Wed Nov 25 19:12:23 UTC 2020

659511409.75 GRACEC KAMI 3 0.04 0.0 0.0

659524658.0 GRACEC KAMI 3 0.00 0.0 0.0 #commanded restart tracker

659527314.0 GRACEC IPU 3 1 659527314.0 1 Wed Nov 25 00:04:09 2020 by operator

659527670 GRACEC IPUR 4 -1 659527655 -1 0 Wed Nov 25 16:10:45 2020 by operator  
659527670 GRACEC USO 1 -1 Wed Nov 25 16:10:45 2020 by operator  
659527670.0 GRACEC LRIDATATION 1 -458482 Thu Nov 26 04:21:01 2020 by operator  
659730317.0 GRACED IPU 3 1 1290493517.0 1 Fri Nov 27 07:07:17 2020 by operator  
659730330 GRACED IPUR 4 -1 659730803 -1 -0.08698 Sat Nov 28 16:49:19 2020 by operator  
659730330 GRACED USO 1 -1 Sat Nov 28 16:49:19 2020 by operator  
659730330.0 GRACED LRIDATATION 1 -14431069 manually added by mpaik on Sat Nov 28 21:36:23 UTC 2020  
659867170.0 GRACEC IPU 3 1 659867170.0 1 Sat Nov 28 22:35:56 2020 by operator  
659867420 GRACEC IPUR 4 -1 659867407 -1 0 Sun Nov 29 17:05:22 2020 by operator  
659867420 GRACEC USO 1 -1 Sun Nov 29 17:05:22 2020 by operator  
659867420.0 GRACEC LRIDATATION 1 -286761 Mon Nov 30 16:42:31 2020 by operator  
659932050.0 GRACEC IPU 3 1 659932050.0 1 Sun Nov 29 17:33:27 2020 by operator  
659932420 GRACEC IPUR 4 -1 659932409 -1 0 Mon Nov 30 16:42:28 2020 by operator  
659932420 GRACEC USO 1 -1 Mon Nov 30 16:42:28 2020 by operator  
659932420.0 GRACEC LRIDATATION 1 -253875 Mon Nov 30 17:24:00 2020 by cvolk  
660017330.0 GRACEC IPU 3 1 660017330.0 1 Mon Nov 30 16:15:40 2020 by operator  
660017630 GRACEC IPUR 4 -1 660017617 -1 0 Tue Dec 01 17:08:54 2020 by operator  
660017630 GRACEC USO 1 -1 Tue Dec 01 17:08:54 2020 by operator  
660017630.0 GRACEC LRIDATATION 1 -210810 Tue Dec 01 20:00:00 2020 by cvolk  
660019918.8 GRACEC K\_MI 3 0.02 0.0 0.0 Dec 01 19:00:00 by cvolk  
660023318.1 GRACEC K\_MI 3 0.04 0.0 0.0 Dec 01 19:00:00 by cvolk  
660038191.2 GRACEC K\_MI 3 0.06 0.0 0.0 Dec 01 19:00:00 by cvolk  
660042965.5 GRACEC K\_MI 3 0.08 0.0 0.0 Dec 01 19:00:00 by cvolk  
660045675.4 GRACEC K\_MI 3 0.10 0.0 0.0 Dec 01 19:00:00 by cvolk  
660056112.0 GRACEC K\_MI 3 0.14 0.0 0.0 Dec 02 16:30:00 by cvolk  
660057888.2 GRACEC K\_MI 3 0.16 0.0 0.0 Dec 02 16:30:00 by cvolk  
660063753.1 GRACEC K\_MI 3 0.20 0.0 0.0 Dec 02 16:30:00 by cvolk  
660066264.5 GRACEC K\_MI 3 0.00 0.0 0.0 Dec 02 16:30:00 by cvolk

660186509.0 GRACED IPU 3 1 1290949709.0 1 Wed Dec 02 16:28:10 2020 by operator  
660186520 GRACED IPUR 4 -1 660186717 -1 -0.082674 Thu Dec 03 05:00:24 2020 by operator  
660186520 GRACED USO 1 -1 Thu Dec 03 05:00:24 2020 by operator  
660186520.0 GRACED LRIDATATION 1 -14218168 Thu Dec 03 15:00:00 2020 by cvolk  
660192318.0 GRACEC IPU 3 1 660192318.0 1 Wed Dec 02 18:01:20 2020 by operator  
660192540 GRACEC IPUR 4 -1 660192534 -1 0 Thu Dec 03 14:46:12 2020 by operator  
660192540 GRACEC USO 1 -1 Thu Dec 03 14:46:12 2020 by operator  
660192540.0 GRACEC LRIDATATION 1 -122443 Thu Dec 03 14:46:16 2020 by operator  
660213020.0 GRACEC IPU 3 1 660213020.0 1 Wed Dec 02 21:07:50 2020 by operator  
660213460 GRACEC IPUR 4 -1 660213453 -1 0 Thu Dec 03 14:46:12 2020 by operator  
660213460 GRACEC USO 1 -1 Thu Dec 03 14:46:12 2020 by operator  
660213460.0 GRACEC LRIDATATION 1 -111602 Thu Dec 03 14:46:16 2020 by cvolk  
660510847.0 GRACED IPU 3 1 1291274047.0 1 Sun Dec 06 08:43:16 2020 by operator  
660510860 GRACED IPUR 4 -1 660511091 -1 -0.087296 Mon Dec 07 18:06:31 2020 by operator  
660510860 GRACED USO 1 -1 Mon Dec 07 18:06:31 2020 by operator  
660510860.0 GRACED LRIDATATION 1 -14066334 Mon Dec 07 18:10:10 UTC 2020 by mpaik  
660787010.0 GRACEC LRIDATATION 1 8070942 Thu Dec 10 18:09:26 UTC 2020 by mpaik. LRI  
reboot  
660787010.0 GRACED LRIDATATION 1 -11712549 Thu Dec 10 18:09:26 UTC 2020 by mpaik. LRI  
reboot  
660787872.0 GRACED IPU 3 1 1291551072.0 1 Wed Dec 09 17:09:40 2020 by operator  
660787880 GRACED IPUR 4 -1 660788271 -1 -0.084574 Thu Dec 10 17:24:21 2020 by operator  
660787880 GRACED USO 1 -1 Thu Dec 10 17:24:21 2020 by operator  
660787880.0 GRACED LRIDATATION 1 -11582624 Fri Dec 11 17:10:21 UTC 2020 by mpaik  
661292732.0 GRACEC IPU 3 1 661292732.0 1 Tue Dec 15 11:44:22 2020 by operator  
661293020 GRACEC IPUR 4 -1 661293011 -1 0 Wed Dec 16 15:30:17 2020 by operator  
661293020 GRACEC USO 1 -1 Wed Dec 16 15:30:17 2020 by operator  
661293020.0 GRACEC LRIDATATION 1 8618967 by cvolk  
661639750.0 GRACEC IPU 3 1 661639750.0 1 Sat Dec 19 10:38:24 2020 by operator

661640050 GRACEC IPUR 4 -1 661640045 -1 0 Sun Dec 20 21:52:13 2020 by operator  
661640050 GRACEC USO 1 -1 Sun Dec 20 21:52:13 2020 by operator  
661640050.0 GRACEC LRIDATATION 1 8795675 Sun Dec 20 21:53:49 2020 by cvolk  
661820225.0 GRACED IPU 3 1 1292583425.0 1 Mon Dec 21 14:14:36 2020 by operator  
661820230 GRACED IPUR 4 -1 661820454 -1 -0.082811 Tue Dec 22 15:28:20 2020 by operator  
661820230 GRACED USO 1 -1 Tue Dec 22 15:28:20 2020 by operator  
661820230.0 GRACED LRIDATATION 1 -11096795 Tue Dec 22 15:41:53 UTC 2020 by cmccullo  
661971110.0 GRACEC IPU 3 1 661971110.0 1 Wed Dec 23 05:38:32 2020 by operator  
661971460 GRACEC IPUR 4 -1 661971454 -1 0 Thu Dec 24 14:44:54 2020 by operator  
661971460 GRACEC USO 1 -1 Thu Dec 24 14:44:54 2020 by operator  
661971460.0 GRACEC LRIDATATION 1 8964661 Thu Dec 24 14:57:26 2020 by cmccullo  
662076350.0 GRACEC IPU 3 1 662076350.0 1 Thu Dec 24 13:09:58 2020 by operator  
662076830 GRACEC IPUR 4 -1 662076816 -1 0 Fri Dec 25 14:02:44 2020 by operator  
662076830 GRACEC USO 1 -1 Fri Dec 25 14:02:44 2020 by operator  
662076830.0 GRACEC LRIDATATION 1 9018444 Fri Dec 25 14:02:49 2020 by cmccullo  
662161020.0 GRACEC IPU 3 1 662161020.0 1 Fri Dec 25 11:43:31 2020 by operator  
662161508.0 GRACED IPU 3 1 1292924708.0 1 Fri Dec 25 12:58:31 2020 by operator  
662161520 GRACED IPUR 4 -1 662161803 -1 -0.0886 Sat Dec 26 21:24:20 2020 by operator  
662161520 GRACED USO 1 -1 Sat Dec 26 21:24:20 2020 by operator  
662161520.0 GRACED LRIDATATION 1 -10935419 Sat Dec 26 21:20:53 2020 by cmccullo  
662161630 GRACEC IPUR 4 -1 662161623 -1 0 Sat Dec 26 21:19:16 2020 by operator  
662161630 GRACEC USO 1 -1 Sat Dec 26 21:19:16 2020 by operator  
662161630.0 GRACEC LRIDATATION 1 9061757 Sat Dec 26 21:20:00 2020 by cmccullo  
662234950.0 GRACEC IPU 3 1 662234950.0 1 Sat Dec 26 09:15:16 2020 by operator  
662235380 GRACEC IPUR 4 -1 662235374 -1 0 Sun Dec 27 16:45:19 2020 by operator  
662235380 GRACEC USO 1 -1 Sun Dec 27 16:45:19 2020 by operator  
662235380.0 GRACEC LRIDATATION 1 9099422 Sat Dec 27 16:50:00 2020 by cmccullo  
662246160.0 GRACEC IPU 3 1 662246160.0 1 Sat Dec 26 12:27:31 2020 by operator  
662246910 GRACEC IPUR 4 -1 662246901 -1 0 Sun Dec 27 16:45:19 2020 by operator

662246910 GRACEC USO 1 -1 Sun Dec 27 16:45:19 2020 by operator  
662246910.0 GRACEC LRIDATATION 1 9105310 Sat Dec 27 16:50:00 2020 by cmccullo  
662440472.0 GRACEC IPU 3 1 662440472.0 1 Mon Dec 28 17:58:14 2020 by operator  
662440800 GRACEC IPUR 4 -1 662440790 -1 0 Tue Dec 29 17:47:55 2020 by operator  
662440800 GRACEC USO 1 -1 Tue Dec 29 17:47:55 2020 by operator  
662440800.0 GRACEC LRIDATATION 1 9204406 Tue Dec 29 18:26:06 UTC 2020 by mpaik  
662446081.0 GRACED IPU 3 1 1293209281.0 1 Mon Dec 28 19:31:39 2020 by operator  
662446090 GRACED IPUR 4 -1 662446252 -1 -0.089487 Tue Dec 29 05:17:21 2020 by operator  
662446090 GRACED USO 1 -1 Tue Dec 29 05:17:21 2020 by operator  
662446090.0 GRACED LRIDATATION 1 -10800695 Tue Dec 29 18:26:06 UTC 2020 by mpaik  
663655722.0 GRACED IPU 3 1 1294418922.0 1 Mon Jan 11 17:35:44 2021 by operator  
663655730 GRACED IPUR 4 -1 663656006 -1 -0.078066 Tue Jan 12 15:50:47 2021 by operator  
663655730 GRACED USO 1 -1 Tue Jan 12 15:50:47 2021 by operator  
663655730.0 GRACED LRIDATATION 1 -10787347 Tue Jan 12 17:17:10 UTC 2021 by mpaik  
663656630.0 GRACED IPU 3 1 1294419830.0 1 Mon Jan 11 17:35:44 2021 by operator  
663656640 GRACED IPUR 4 -1 663656866 -1 -0.07224 Tue Jan 12 15:50:47 2021 by operator  
663656640 GRACED USO 1 -1 Tue Jan 12 15:50:47 2021 by operator  
663656640.0 GRACED LRIDATATION 1 -9792739 Tue Jan 23 16:00:00 UTC 2021 by cvolk  
663656640.0 GRACED LRIDATATION 1 -10224855 Tue Jan 12 17:17:10 UTC 2021 by mpaik  
664559122.0 GRACEC IPU 3 1 664559122.0 1 Fri Jan 22 04:08:04 2021 by operator  
664559126.0 GRACED IPU 3 1 1295322326.0 1 Fri Jan 22 05:46:59 2021 by operator  
664559140 GRACED IPUR 4 -1 664559368 -1 -0.0791 Sat Jan 23 04:00:28 2021 by operator  
664559140 GRACED USO 1 -1 Sat Jan 23 04:00:28 2021 by operator  
664559140.0 GRACED LRIDATATION 1 -9792739 Tue Jan 24 01:50:00 UTC 2021 by cvolk  
664559380 GRACEC IPUR 4 -1 664559370 -1 0 Sun Jan 24 00:06:18 2021 by operator  
664559380 GRACEC USO 1 -1 Sun Jan 24 00:06:18 2021 by operator  
664559380.0 GRACEC LRIDATATION 1 10291981 Sun Jan 24 01:50:00 2021 by cvolk  
664646290.0 GRACEC IPU 3 1 664646290.0 1 Sat Jan 23 05:32:44 2021 by operator  
664646550 GRACEC IPUR 4 -1 664646544 -1 0 Sun Jan 24 20:23:38 2021 by operator

664646550 GRACEC USO 1 -1 Sun Jan 24 20:23:38 2021 by operator  
664646550.0 GRACEC LRIDATATION 1 10336964 Sun Jan 24 01:50:00 2021 by cvolk  
665338950.0 GRACEC IPU 3 1 665338950.0 1 Sun Jan 31 05:40:22 2021 by operator  
665339230 GRACEC IPUR 4 -1 665339220 -1 0 Mon Feb 01 19:54:30 2021 by operator  
665339230 GRACEC USO 1 -1 Mon Feb 01 19:54:30 2021 by operator  
665339230.0 GRACEC LRIDATATION 1 10694712 Mon Feb 01 19:55:54 2021 by operator  
665782520.0 GRACEC IPU 3 1 665782520.0 1 Fri Feb 05 08:38:05 2021 by operator  
665782526.0 GRACED IPU 3 1 1296545726.0 1 Fri Feb 05 10:17:16 2021 by operator  
665782540 GRACED IPUR 4 -1 665782836 -1 -0.077941 Sun Feb 07 16:33:40 2021 by operator  
665782540 GRACED USO 1 -1 Sun Feb 07 16:33:40 2021 by operator  
665782540.0 GRACED LRIDATATION 1 -9203028 Sun Feb 07 17:00:12 2021 by operator  
665782870 GRACEC IPUR 4 -1 665782863 -1 0 Sun Feb 07 16:30:10 2021 by operator  
665782870 GRACEC USO 1 -1 Sun Feb 07 16:30:10 2021 by operator  
665782870.0 GRACEC LRIDATATION 1 10924406 Sun Feb 07 17:00:08 2021 by operator  
665840710.0 GRACEC K\_MI 3 0.00 0.0 0.0 Autonomous restart trackers Mon Feb 8 20:14:15 2021  
by operator  
665840710.0 GRACEC KAMI 3 0.00 0.0 0.0 Autonomous restart trackers Mon Feb 8 20:14:15 2021  
by operator  
666580935.0 GRACEC IPU 3 1 666580935.0 1 Sun Feb 14 16:15:30 2021 by operator  
666581180 GRACEC IPUR 4 -1 666581172 -1 0 Mon Feb 15 04:56:28 2021 by operator  
666581180 GRACEC USO 1 -1 Mon Feb 15 04:56:28 2021 by operator  
666581180.0 GRACEC LRIDATATION 1 11338887 Tue Feb 16 06:16:46 2021 by operator  
666997822.0 GRACEC IPU 3 1 666997822.0 1 Fri Feb 19 09:44:47 2021 by operator  
666997826.0 GRACED IPU 3 1 1297761026.0 1 Fri Feb 19 11:23:34 2021 by operator  
666997840 GRACED IPUR 4 -1 666998088 -1 -0.072678000000000001 Sat Feb 20 15:22:47 2021 by  
operator  
666997840 GRACED USO 1 -1 Sat Feb 20 15:22:47 2021 by operator  
666997840.0 GRACED LRIDATATION 1 -8613000 Sat Feb 20 18:02:39 2021 by cmccullo  
666998080 GRACEC IPUR 4 -1 666998072 -1 0 Sat Feb 20 15:21:27 2021 by operator  
666998080 GRACEC USO 1 -1 Sat Feb 20 15:21:27 2021 by operator

666998080.0 GRACEC LRIDATATION 1 11555848 Sat Feb 20 18:02:39 2021 by cmccullo  
667050550.0 GRACEC IPU 3 1 667050550.0 1 Sat Feb 20 01:28:42 2021 by operator  
667050860 GRACEC IPUR 4 -1 667050847 -1 0 Sat Feb 20 15:21:27 2021 by operator  
667050860 GRACEC USO 1 -1 Sat Feb 20 15:21:27 2021 by operator  
667050860.0 GRACEC LRIDATATION 1 11583322 Sat Feb 20 18:02:39 2021 by cmccullo  
667358575.0 GRACED IPU 3 1 1298121775.0 1 Tue Feb 23 16:56:17 2021 by operator  
667358590 GRACED IPUR 4 -1 667358737 -1 -0.091089 Wed Feb 24 04:52:11 2021 by operator  
667358590 GRACED USO 1 -1 Wed Feb 24 04:52:11 2021 by operator  
667358590.0 GRACED LRIDATATION 1 -8437059 Wed Feb 24 16:40:58 2021 by mpaik  
667366480.0 GRACEC IPU 3 1 667366480.0 1 Tue Feb 23 17:41:07 2021 by operator  
667366830 GRACEC IPUR 4 -1 667366815 -1 0 Wed Feb 24 16:40:54 2021 by operator  
667366830 GRACEC USO 1 -1 Wed Feb 24 16:40:54 2021 by operator  
667366830.0 GRACEC LRIDATATION 1 11748054 Wed Feb 24 16:40:58 2021 by mpaik  
667580722.0 GRACEC IPU 3 1 667580722.0 1 Fri Feb 26 05:43:45 2021 by operator  
667580726.0 GRACED IPU 3 1 1298343926.0 1 Fri Feb 26 03:58:33 2021 by operator  
667580740 GRACED IPUR 4 -1 667580976 -1 -0.084453 Sat Feb 27 05:18:27 2021 by operator  
667580740 GRACED USO 1 -1 Sat Feb 27 05:18:27 2021 by operator  
667580740.0 GRACED LRIDATATION 1 -8328513 Sat Feb 27 05:18:35 2021 by operator  
667580970 GRACEC IPUR 4 -1 667580956 -1 0 Sat Feb 27 17:14:07 2021 by operator  
667580970 GRACEC USO 1 -1 Sat Feb 27 17:14:07 2021 by operator  
667580970.0 GRACEC LRIDATATION 1 11859843 Sat Feb 27 17:14:12 2021 by operator  
667670722.0 GRACEC IPU 3 1 667670722.0 1 Sat Feb 27 06:50:55 2021 by operator  
667670726.0 GRACED IPU 3 1 1298433926.0 1 Sat Feb 27 05:18:03 2021 by operator  
667670740 GRACED IPUR 4 -1 667670971 -1 -0.090297 Sun Feb 28 06:41:13 2021 by operator  
667670740 GRACED USO 1 -1 Sun Feb 28 06:41:13 2021 by operator  
667670740.0 GRACED LRIDATATION 1 -8284455 Sun Feb 28 19:39:08 UTC 2021 by mpaik  
667670970 GRACEC IPUR 4 -1 667670955 -1 0 Sun Feb 28 17:10:57 2021 by operator  
667670970 GRACEC USO 1 -1 Sun Feb 28 17:10:57 2021 by operator  
667670970.0 GRACEC LRIDATATION 1 11906809 Sun Feb 28 19:39:08 UTC 2021 by mpaik

668012722.0 GRACEC IPU 3 1 668012722.0 1 Wed Mar 03 05:27:44 2021 by operator  
668012726.0 GRACED IPU 3 1 1298775926.0 1 Wed Mar 03 03:48:36 2021 by operator  
668012740 GRACED IPUR 4 -1 668013245 -1 -0.090943 Thu Mar 04 14:59:53 2021 by operator  
668012740 GRACED USO 1 -1 Thu Mar 04 14:59:53 2021 by operator  
668012740.0 GRACED LRIDATATION 1 -8116868 Thu Mar 04 16:40:00 UTC 2021 by cvolk  
668013390 GRACEC IPUR 4 -1 668013382 -1 0 Thu Mar 04 14:59:51 2021 by operator  
668013390 GRACEC USO 1 -1 Thu Mar 04 14:59:51 2021 by operator  
668013390.0 GRACEC LRIDATATION 1 12085760 Thu Mar 04 16:40:00 UTC 2021 by cvolk  
668052622.0 GRACEC IPU 3 1 668052622.0 1 Wed Mar 03 14:45:46 2021 by operator  
668053210 GRACEC IPUR 4 -1 668053199 -1 0 Thu Mar 04 14:59:51 2021 by operator  
668053210 GRACEC USO 1 -1 Thu Mar 04 14:59:51 2021 by operator  
668053210.0 GRACEC LRIDATATION 1 12106592 Thu Mar 04 16:40:00 UTC 2021 by cvolk  
668566821.0 GRACED LRIDATATION 1 -5165066 Wed Mar 10 18:24:48 UTC 2021 by mpaik. LRI  
reboot  
668838022.0 GRACEC IPU 3 1 668838022.0 1 Fri Mar 12 19:26:32 2021 by operator  
668838026.0 GRACED IPU 3 1 1299601226.0 1 Fri Mar 12 17:59:48 2021 by operator  
668838040 GRACED IPUR 4 -1 668838430 -1 -0.07883800000000001 Sat Mar 13 16:58:46 2021 by  
operator  
668838040 GRACED USO 1 -1 Sat Mar 13 16:58:46 2021 by operator  
668838040.0 GRACED LRIDATATION 1 -4759797 Sat Mar 13 19:08:39 UTC 2021 by mpaik  
668838450 GRACEC IPUR 4 -1 668838445 -1 0 Sat Mar 13 16:58:45 2021 by operator  
668838450 GRACEC USO 1 -1 Sat Mar 13 16:58:45 2021 by operator  
668838450.0 GRACEC LRIDATATION 1 12517883 Sat Mar 13 19:08:39 UTC 2021 by mpaik  
669030467.0 GRACED IPU 3 1 1299793667.0 1 Sun Mar 14 23:23:55 2021 by operator  
669030480 GRACED IPUR 4 -1 669030724 -1 -0.091275 Mon Mar 15 14:44:30 2021 by operator  
669030480 GRACED USO 1 -1 Mon Mar 15 14:44:30 2021 by operator  
669030480.0 GRACED LRIDATATION 1 -4665090 Sat Mar 15 14:45:00 UTC 2021 by cvolk  
669406822.0 GRACEC IPU 3 1 669406822.0 1 Fri Mar 19 09:15:45 2021 by operator  
669406826.0 GRACED IPU 3 1 1300170026.0 1 Fri Mar 19 07:36:52 2021 by operator

669406840 GRACED IPUR 4 -1 669407031 -1 -0.090888 Sat Mar 20 05:32:29 2021 by operator  
669406840 GRACED USO 1 -1 Sat Mar 20 05:32:29 2021 by operator  
669406840.0 GRACED LRIDATATION 1 -4479468 Sat Mar 15 14:45:00 UTC 2021 by cvolk  
669407100 GRACEC IPUR 4 -1 669407087 -1 0 Sat Mar 20 13:47:51 2021 by operator  
669407100 GRACEC USO 1 -1 Sat Mar 20 13:47:51 2021 by operator  
669407100.0 GRACEC LRIDATATION 1 12816502 Sat Mar 15 14:45:00 UTC 2021 by cvolk  
669811591.0 GRACED IPU 3 1 1300574791.0 1 Wed Mar 24 00:52:09 2021 by operator  
669811600 GRACED IPUR 4 -1 669811860 -1 -0.087946 Wed Mar 24 15:32:44 2021 by operator  
669811600 GRACED USO 1 -1 Wed Mar 24 15:32:44 2021 by operator  
669811600.0 GRACED LRIDATATION 1 -4279364 Wed Mar 24 17:06:11 UTC 2021 by mpaik  
669860606.0 GRACEC IPU 3 1 669860606.0 1 Wed Mar 24 14:59:15 2021 by operator  
669860860 GRACEC IPUR 4 -1 669860850 -1 0 Thu Mar 25 03:43:41 2021 by operator  
669860860 GRACEC USO 1 -1 Thu Mar 25 03:43:41 2021 by operator  
669860860.0 GRACEC LRIDATATION 1 13055211 Thu Mar 25 16:03:24 UTC 2021 by mpaik  
670551783.0 GRACED IPU 3 1 1301314983.0 1 Thu Apr 01 13:40:04 2021 by operator  
670551790 GRACED IPUR 4 -1 670552085 -1 -0.081223 Fri Apr 02 13:58:01 2021 by operator  
670551790 GRACED USO 1 -1 Fri Apr 02 13:58:01 2021 by operator  
670551790.0 GRACED LRIDATATION 1 -3912216 Fri Apr 02 13:58:05 2021 by operator  
670604722.0 GRACEC IPU 3 1 670604722.0 1 Fri Apr 02 03:54:34 2021 by operator  
670604726.0 GRACED IPU 3 1 1301367926.0 1 Fri Apr 02 05:28:01 2021 by operator  
670604740 GRACED IPUR 4 -1 670604897 -1 -0.086805999999999999 Sat Apr 03 14:46:13 2021 by operator  
670604740 GRACED USO 1 -1 Sat Apr 03 14:46:13 2021 by operator  
670604740.0 GRACED LRIDATATION 1 -3886049 Fri Apr 04 00:55:00 2021 by cvolk  
670604990 GRACEC IPUR 4 -1 670604981 -1 0 Sat Apr 03 14:46:13 2021 by operator  
670604990 GRACEC USO 1 -1 Sat Apr 03 14:46:13 2021 by operator  
670604990.0 GRACEC LRIDATATION 1 13447476 Fri Apr 04 00:55:00 2021 by cvolk  
670947973.0 GRACED IPU 3 1 1301711173.0 1 Tue Apr 06 03:57:57 2021 by operator  
670947980 GRACED IPUR 4 -1 670948188 -1 -0.09104 Wed Apr 07 05:14:50 2021 by operator

670947980 GRACED USO 1 -1 Wed Apr 07 05:14:50 2021 by operator  
670947980.0 GRACED LRIDATATION 1 -3715335 Wed Apr 7 16:51:26 UTC 2021 by mpaik  
671215822.0 GRACEC IPU 3 1 671215822.0 1 Fri Apr 09 06:08:28 2021 by operator  
671215826.0 GRACED IPU 3 1 1301979026.0 1 Fri Apr 09 07:54:18 2021 by operator  
671215840 GRACED IPUR 4 -1 671216075 -1 -0.09123100000000001 Sat Apr 10 05:44:58 2021 by operator  
671215840 GRACED USO 1 -1 Sat Apr 10 05:44:58 2021 by operator  
671215840.0 GRACED LRIDATATION 1 -3581761 Sat Apr 10 05:48:33 2021 by operator  
671216070 GRACEC IPUR 4 -1 671216064 -1 0 Sat Apr 10 04:34:46 2021 by operator  
671216070 GRACEC USO 1 -1 Sat Apr 10 04:34:46 2021 by operator  
671216070.0 GRACEC LRIDATATION 1 13770425 Sat Apr 10 04:38:24 2021 by operator  
671705559.0 GRACED IPU 3 1 1302468759.0 1 Wed Apr 14 23:07:38 2021 by operator  
671705570 GRACED IPUR 4 -1 671705835 -1 -0.085676 Thu Apr 15 13:37:12 2021 by operator  
671705570 GRACED USO 1 -1 Thu Apr 15 13:37:12 2021 by operator  
671705570.0 GRACED LRIDATATION 1 -3337200 Sat Apr 15 13:40:00 2021 by cvolk  
672051476.0 GRACED IPU 3 1 1302814676.0 1 Sun Apr 18 21:39:54 2021 by operator  
672051490 GRACED IPUR 4 -1 672051790 -1 -0.085992 Mon Apr 19 16:06:31 2021 by operator  
672051490 GRACED USO 1 -1 Mon Apr 19 16:06:31 2021 by operator  
672051490.0 GRACED LRIDATATION 1 -3164073 Mon Apr 19 17:45:38 UTC 2021 by mpaik  
672185700.0 GRACED IPU 3 1 1302948900.0 1 Tue Apr 20 13:28:27 2021 by operator  
672185710 GRACED IPUR 4 -1 672185847 -1 -0.084782 Wed Apr 21 10:45:20 2021 by operator  
672185710 GRACED USO 1 -1 Wed Apr 21 10:45:20 2021 by operator  
672185710.0 GRACED LRIDATATION 1 -3096853 Wed Apr 21 10:45:26 2021 by operator  
672419122.0 GRACEC IPU 3 1 672419122.0 1 Fri Apr 23 04:13:22 2021 by operator  
672419126.0 GRACED IPU 3 1 1303182326.0 1 Fri Apr 23 05:47:11 2021 by operator  
672419140 GRACED IPUR 4 -1 672419431 -1 -0.088389 Sat Apr 24 16:59:48 2021 by operator  
672419140 GRACED USO 1 -1 Sat Apr 24 16:59:48 2021 by operator  
672419140.0 GRACED LRIDATATION 1 -2979907 Sat Apr 24 17:04:18 UTC 2021 by mpaik  
672419140.0 GRACED LRIDATATION 1 -2979736 Sun Apr 25 05:07:13 2021 by operator

672419420 GRACEC IPUR 4 -1 672419411 -1 0 Sat Apr 24 16:58:42 2021 by operator  
672419420 GRACEC USO 1 -1 Sat Apr 24 16:58:42 2021 by operator  
672419420.0 GRACEC LRIDATATION 1 14408208 Sat Apr 24 16:59:45 2021 by operator  
672724222.0 GRACEC IPU 3 1 672724222.0 1 Mon Apr 26 17:05:53 2021 by operator  
672724226.0 GRACED IPU 3 1 1303487426.0 1 Mon Apr 26 18:40:35 2021 by operator  
672724240 GRACED IPUR 4 -1 672724495 -1 -0.085351 Tue Apr 27 15:08:04 2021 by operator  
672724240 GRACED USO 1 -1 Tue Apr 27 15:08:04 2021 by operator  
672724240.0 GRACED LRIDATATION 1 -2826487 Tue Apr 27 05:57:46 2021 by cvolk  
672724470 GRACEC IPUR 4 -1 672724464 -1 0 Tue Apr 27 05:57:32 2021 by operator  
672724470 GRACEC USO 1 -1 Tue Apr 27 05:57:32 2021 by operator  
672724470.0 GRACEC LRIDATATION 1 14570345 Tue Apr 27 05:57:46 2021 by cvolk  
673584322.0 GRACEC IPU 3 1 673584322.0 1 Thu May 06 16:39:44 2021 by operator  
673584326.0 GRACED IPU 3 1 1304347526.0 1 Thu May 06 18:12:39 2021 by operator  
673584340 GRACED IPUR 4 -1 673584568 -1 -0.08107399999999999999 Fri May 07 03:52:12 2021 by operator  
673584340 GRACED USO 1 -1 Fri May 07 03:52:12 2021 by operator  
673584340.0 GRACED LRIDATATION 1 -2393026 Fri May 07 03:52:15 2021 by operator  
673584600 GRACEC IPUR 4 -1 673584586 -1 0 Fri May 07 15:37:47 2021 by operator  
673584600 GRACEC USO 1 -1 Fri May 07 15:37:47 2021 by operator  
673584600.0 GRACEC LRIDATATION 1 15028359 Fri May 07 16:40:56 2021 by mpaik  
673584600.0 GRACEC LRIDATATION 1 15028486 Sat May 08 03:22:11 2021 by operator  
674838326.0 GRACED IPU 3 1 1305601526.0 1 Fri May 21 04:53:59 2021 by operator  
674838340 GRACED IPUR 4 -1 674838583 -1 -0.070821 Sat May 22 16:51:47 2021 by operator  
674838340 GRACED USO 1 -1 Sat May 22 16:51:47 2021 by operator  
674838340.0 GRACED LRIDATATION 1 -1757627 Sat May 22 16:51:50 2021 by operator  
675334822.0 GRACEC IPU 3 1 675334822.0 1 Wed May 26 22:03:54 2021 by operator  
675335090 GRACEC IPUR 4 -1 675335075 -1 0 Thu May 27 14:12:51 2021 by operator  
675335090 GRACEC USO 1 -1 Thu May 27 14:12:51 2021 by operator  
675335090.0 GRACEC LRIDATATION 1 15965267 Thu May 27 14:14:26 2021 by operator

675412816.0 GRACED IPU 3 1 1306176016.0 1 Thu May 27 22:02:32 2021 by operator

675412830 GRACED IPUR 4 -1 675412980 -1 -0.08348800000000001 Fri May 28 16:15:16 2021 by operator

675412830 GRACED USO 1 -1 Fri May 28 16:15:16 2021 by operator

675412830.0 GRACED LRIDATATION 1 -1465069 Thu May 28 14:15:00 2021 by cvolk

675478226.0 GRACED IPU 3 1 1306241426.0 1 Fri May 28 14:53:42 2021 by operator

675478240 GRACED IPUR 4 -1 675478384 -1 -0.09254900000000001 Sat May 29 05:11:43 2021 by operator

675478240 GRACED USO 1 -1 Sat May 29 05:11:43 2021 by operator

675478240.0 GRACED LRIDATATION 1 -1431716 Sat May 29 16:40:00 2021 by cvolk

675495022.0 GRACEC IPU 3 1 675495022.0 1 Fri May 28 18:01:48 2021 by operator

675495270 GRACEC IPUR 4 -1 675495262 -1 0 Sat May 29 03:39:33 2021 by operator

675495270 GRACEC USO 1 -1 Sat May 29 03:39:33 2021 by operator

675495270.0 GRACEC LRIDATATION 1 16051313 Sat May 29 03:41:38 2021 by operator

675497595.0 GRACEC K\_MI 3 0.00 0.0 0.0 Autonomous restart trackers Tue Jun 1 18:22:13 2021 by operator

675497595.0 GRACEC KAMI 3 0.00 0.0 0.0 Autonomous restart trackers Tue Jun 1 18:22:13 2021 by operator

675707915.0 GRACEC K\_MI 3 0.00 0.0 0.0 Autonomous restart trackers Tue Jun 1 18:22:13 2021 by operator

675707915.0 GRACEC KAMI 3 0.00 0.0 0.0 Autonomous restart trackers Tue Jun 1 18:22:13 2021 by operator

675754519.0 GRACED IPU 3 1 1306517719.0 1 Mon May 31 20:05:21 2021 by operator

675754530 GRACED IPUR 4 -1 675754823 -1 -0.09170200000000001 Tue Jun 01 15:30:10 2021 by operator

675754530 GRACED USO 1 -1 Tue Jun 01 15:30:10 2021 by operator

675754530.0 GRACED LRIDATATION 1 -1290488 Tue Jun 1 19:08:32 UTC 2021 by mpaik

675755371.0 GRACED IPU 3 1 1306518571.0 1 Mon May 31 20:05:21 2021 by operator

675755380 GRACED IPUR 4 -1 675755670 -1 -0.09444900000000001 Tue Jun 01 15:30:10 2021 by operator

675755380 GRACED USO 1 -1 Tue Jun 01 15:30:10 2021 by operator

675755380.0 GRACED LRIDATATION 1 -1290170 Tue Jun 1 19:08:32 UTC 2021 by mpaik

676469800.0 GRACED LRIDATATION 1 -15613030 Fri Jun 11 15:10:00 2021 by cvolk  
676469800.0 GRACEC LRIDATATION 1 2267590 Fri Jun 11 15:10:00 2021 by cvolk  
676528021.0 GRACED LRIDATATION 1 -4653097 Fri Jun 11 15:10:00 2021 by cvolk  
676547033.8 GRACED K\_MI 3 0.04 0.0 0.0 Fri Jun 11 15:10:00 2021 by cvolk  
676570854.5 GRACED K\_MI 3 0.00 0.0 0.0 Fri Jun 11 15:10:00 2021 by cvolk  
676669820.0 GRACED IPU 3 1 676669820.0 1 Fri Jun 11 08:13:21 2021 by operator  
676669822.0 GRACEC IPU 3 1 676669822.0 1 Fri Jun 11 11:37:43 2021 by operator  
676669826.0 GRACED IPU 3 1 1307433026.0 1 Fri Jun 11 11:24:13 2021 by operator  
676669840 GRACED IPUR 4 -1 676670365 -1 -0.077917 Sat Jun 12 15:38:51 2021 by operator  
676669840 GRACED USO 1 -1 Sat Jun 12 15:38:51 2021 by operator  
676669840.0 GRACED LRIDATATION 1 -4184720 Sat Jun 12 18:30:00 2021 by cvolk  
676670140 GRACEC IPUR 4 -1 676670131 -1 0 Sat Jun 12 18:43:26 2021 by operator  
676670140 GRACEC USO 1 -1 Sat Jun 12 18:43:26 2021 by operator  
676670140.0 GRACEC LRIDATATION 1 2899993 Sat Jun 12 18:30:00 2021 by cvolk  
677073621.0 GRACEC LRIDATATION 1 2652315 Thu Jun 17 18:00:56 UTC 2021 by mpaik  
677073621.0 GRACED LRIDATATION 1 -9971901 Thu Jun 17 18:00:56 UTC 2021 by mpaik  
677221425.0 GRACED IPU 3 1 1307984625.0 1 Thu Jun 17 18:50:00 2021 by operator  
677221430 GRACED IPUR 4 -1 677221714 -1 -0.082186 Fri Jun 18 15:40:55 2021 by operator  
677221430 GRACED USO 1 -1 Fri Jun 18 15:40:55 2021 by operator  
677221430.0 GRACED LRIDATATION 1 -9688629 Fri Jun 18 15:40:59 2021 by operator  
677678421.0 GRACEC LRIDATATION 1 4947923 Thu Jun 23 16:30:00 2021 by cvolk  
677734858.0 GRACED IPU 3 1 1308498058.0 1 Thu Jun 24 00:26:20 2021 by operator  
677734870 GRACED IPUR 4 -1 677735171 -1 -0.079657000000000001 Thu Jun 24 15:58:15 2021 by operator  
677734870 GRACED USO 1 -1 Thu Jun 24 15:58:15 2021 by operator  
677734870.0 GRACED LRIDATATION 1 -15007637 Thu 23 16:30:00 2021 by cvolk  
678283221.0 GRACEC LRIDATATION 1 -10722186 Thu Jul 1 17:17:45 UTC 2021 by mpaik  
678283221.0 GRACED LRIDATATION 1 -15555736 Thu Jul 1 17:17:45 UTC 2021 by mpaik  
678801621.0 GRACEC LRIDATATION 1 -1425666 Thu Jul 1 17:17:45 UTC 2021 by mpaik

678836332.0 GRACED IPU 3 1 1309599532.0 1 Tue Jul 06 10:13:10 2021 by operator  
678836340 GRACED IPUR 4 -1 678836653 -1 -0.078301 Wed Jul 07 14:41:50 2021 by operator  
678836340 GRACED USO 1 -1 Wed Jul 07 14:41:50 2021 by operator  
678836340.0 GRACED LRIDATATION 1 -13315724 Thu Jul 1 17:17:45 UTC 2021 by cvolk  
678947616.0 GRACED IPU 3 1 1309710816.0 1 Wed Jul 07 19:08:49 2021 by operator  
678947630 GRACED IPUR 4 -1 678947854 -1 -0.08673599999999999999 Thu Jul 08 13:56:17 2021 by operator  
678947630 GRACED USO 1 -1 Thu Jul 08 13:56:17 2021 by operator  
678947630.0 GRACED LRIDATATION 1 -13258042 Thu Jul 1 17:17:45 UTC 2021 by cvolk  
678986603.0 GRACED IPU 3 1 1309749803.0 1 Thu Jul 08 06:11:13 2021 by operator  
678986610 GRACED IPUR 4 -1 678986913 -1 -0.092352 Fri Jul 09 14:47:08 2021 by operator  
678986610 GRACED USO 1 -1 Fri Jul 09 14:47:08 2021 by operator  
678986610.0 GRACED LRIDATATION 1 -13237786 Fri Jul 9 14:51:00 UTC 2021 by cvolk  
679125022.0 GRACEC IPU 3 1 679125022.0 1 Fri Jul 09 18:24:06 2021 by operator  
679125026.0 GRACED IPU 3 1 1309888226.0 1 Fri Jul 09 20:03:05 2021 by operator  
679125040 GRACED IPUR 4 -1 679125296 -1 -0.089556 Sat Jul 10 12:59:36 2021 by operator  
679125040 GRACED USO 1 -1 Sat Jul 10 12:59:36 2021 by operator  
679125040.0 GRACED LRIDATATION 1 -13165956 Sat Jul 10 13:10:00 UTC 2021 by cvolk  
679125370 GRACEC IPUR 4 -1 679125360 -1 0 Sat Jul 10 12:54:41 2021 by operator  
679125370 GRACEC USO 1 -1 Sat Jul 10 12:54:41 2021 by operator  
679125370.0 GRACEC LRIDATATION 1 -95957 Sat Jul 10 13:10:00 UTC 2021 by cvolk  
679329692.0 GRACED IPU 3 1 1310092892.0 1 Mon Jul 12 04:44:36 2021 by operator  
679329700 GRACED IPUR 4 -1 679329946 -1 -0.085357 Tue Jul 13 05:58:26 2021 by operator  
679329700 GRACED USO 1 -1 Tue Jul 13 05:58:26 2021 by operator  
679329700.0 GRACED LRIDATATION 1 -14641863 Wed Jul 14 04:04:46 2021 by operator  
679493741.0 GRACEC LRIDATATION 1 -16682293 Thu Jul 15 18:04:47 UTC 2021 by mpaik  
679493741.0 GRACED LRIDATATION 1 865987 Thu Jul 15 18:04:47 UTC 2021 by mpaik  
679539732.0 GRACED IPU 3 1 1310302932.0 1 Wed Jul 14 13:31:39 2021 by operator  
679539740 GRACED IPUR 4 -1 679539996 -1 -0.09229 Thu Jul 15 15:56:54 2021 by operator

679539740 GRACED USO 1 -1 Thu Jul 15 15:56:54 2021 by operator  
679539740.0 GRACED LRIDATATION 1 975184 Fri Jul 16 06:44:13 2021 by operator  
679677622.0 GRACEC IPU 3 1 679677622.0 1 Fri Jul 16 04:48:56 2021 by operator  
679677626.0 GRACED IPU 3 1 1310440826.0 1 Fri Jul 16 06:41:57 2021 by operator  
679677640 GRACED IPUR 4 -1 679678079 -1 -0.090141 Sat Jul 17 19:13:49 2021 by operator  
679677640 GRACED USO 1 -1 Sat Jul 17 19:13:49 2021 by operator  
679677640.0 GRACED LRIDATATION 1 1047041 Sat Jul 17 20:22:57 UTC 2021 by mpaik  
679678250 GRACEC IPUR 4 -1 679678242 -1 0 Sat Jul 17 19:13:48 2021 by operator  
679678250 GRACEC USO 1 -1 Sat Jul 17 19:13:48 2021 by operator  
679678250.0 GRACEC LRIDATATION 1 -16381430 Sat Jul 17 20:22:57 UTC 2021 by mpaik  
679680249.0 GRACEC LRIDATATION 1 -22991516 Sat Jul 17 20:22:57 UTC 2021 by mpaik  
679680249.0 GRACED LRIDATATION 1 5774027 Sat Jul 17 20:22:57 UTC 2021 by mpaik  
679954830.0 GRACED IPU 3 1 1310718030.0 1 Mon Jul 19 10:08:25 2021 by operator  
679954840 GRACED IPUR 4 -1 679955088 -1 -0.110365 Tue Jul 20 10:38:13 2021 by operator  
679954840 GRACED USO 1 -1 Tue Jul 20 10:38:13 2021 by operator  
679954840.0 GRACED LRIDATATION 1 5918347 Tue Jul 20 12:05:00 UTC 2021 by cvolk  
680144268.0 GRACED IPU 3 1 680144268.0 1 Wed Jul 21 15:39:37 2021 by operator  
680144580 GRACED IPUR 4 -1 680144573 -1 0 Thu Jul 22 11:27:58 2021 by operator  
680144580 GRACED USO 1 -1 Thu Jul 22 11:27:58 2021 by operator  
680144580.0 GRACED LRIDATATION 1 6017169 Thu Jul 22 11:40:00 UTC 2021 by cvolk  
680230572.0 GRACED IPU 3 1 680230572.0 1 Thu Jul 22 13:40:49 2021 by operator  
680230980 GRACED IPUR 4 -1 680230966 -1 0 Fri Jul 23 11:51:27 2021 by operator  
680230980 GRACED USO 1 -1 Fri Jul 23 11:51:27 2021 by operator  
680230980.0 GRACED LRIDATATION 1 6062262 Fri Jul 23 11:55:00 UTC 2021 by cvolk  
680286922.0 GRACED IPU 3 1 680286922.0 1 Fri Jul 23 05:24:58 2021 by operator  
680286922.0 GRACEC IPU 3 1 680286922.0 1 Fri Jul 23 06:59:24 2021 by operator  
680287150 GRACED IPUR 4 -1 680287135 -1 0 Sat Jul 24 03:28:58 2021 by operator  
680287150 GRACED USO 1 -1 Sat Jul 24 03:28:58 2021 by operator  
680287150.0 GRACED LRIDATATION 1 6091584 Sat Jul 24 11:00:00 2021 by cvolk

680287150 GRACEC IPUR 4 -1 680287137 -1 0 Sat Jul 24 05:04:23 2021 by operator  
680287150 GRACEC USO 1 -1 Sat Jul 24 05:04:23 2021 by operator  
680287150.0 GRACEC LRIDATATION 1 -22659545 Sat Jul 24 11:00:00 2021 by cvolk  
680702421.0 GRACEC LRIDATATION 1 3450816 Thu Jul 29 15:39:41 UTC 2021 by mpaik  
680702421.0 GRACED LRIDATATION 1 -13383958 Thu Jul 29 15:39:41 UTC 2021 by mpaik  
680941222.0 GRACEC IPU 3 1 680941222.0 1 Fri Jul 30 18:44:30 2021 by operator  
680941222.0 GRACED IPU 3 1 680941222.0 1 Fri Jul 30 20:19:14 2021 by operator  
680941470 GRACED IPUR 4 -1 680941464 -1 0 Sat Jul 31 15:50:33 2021 by operator  
680941470 GRACED USO 1 -1 Sat Jul 31 15:50:33 2021 by operator  
680941470.0 GRACED LRIDATATION 1 -13041732 Sat Jul 31 18:26:31 UTC 2021 by mpaik  
680941510 GRACEC IPUR 4 -1 680941501 -1 0 Sat Jul 31 15:50:32 2021 by operator  
680941510 GRACEC USO 1 -1 Sat Jul 31 15:50:32 2021 by operator  
680941510.0 GRACEC LRIDATATION 1 3808208 Sat Jul 31 15:50:36 2021 by operator  
681134348.0 GRACED LRIDATATION 1 -10255771 Mon Aug 02 16:50:00 2021 by cvolk  
681156761.0 GRACEC LRIDATATION 1 -11756615 Tue Aug 03 15:30:00 2021 by cvolk  
681156761.0 GRACED LRIDATATION 1 -27416337 Tue Aug 03 15:30:00 2021 by cvolk  
681308152.0 GRACED LRIDATATION 1 -10365448 Thu Aug 05 15:00:00 2021 by cvolk  
681530122.0 GRACEC IPU 3 1 681530122.0 1 Fri Aug 06 14:37:32 2021 by operator  
681530122.0 GRACED IPU 3 1 681530122.0 1 Fri Aug 06 16:44:05 2021 by operator  
681530370 GRACED IPUR 4 -1 681530365 -1 0 Sat Aug 07 11:51:04 2021 by operator  
681530370 GRACED USO 1 -1 Sat Aug 07 11:51:04 2021 by operator  
681530370.0 GRACED LRIDATATION 1 -10056541 Sat Aug 07 11:50:00 2021 by cvolk  
681530380 GRACEC IPUR 4 -1 681530367 -1 0 Sat Aug 07 06:18:36 2021 by operator  
681530380 GRACEC USO 1 -1 Sat Aug 07 06:18:36 2021 by operator  
681530380.0 GRACEC LRIDATATION 1 -11434250 Sat Aug 07 11:50:00 2021 by cvolk  
681912021.0 GRACEC LRIDATATION 1 1135128 Thu Aug 12 16:33:43 UTC 2021 by mpaik  
681912021.0 GRACED LRIDATATION 1 -10083845 Thu Aug 12 16:33:43 UTC 2021 by mpaik  
682357430.0 GRACED IPU 3 1 682357430.0 1 Mon Aug 16 06:03:48 2021 by operator  
682357700 GRACED IPUR 4 -1 682357692 -1 0 Tue Aug 17 14:56:48 2021 by operator

682357700 GRACED USO 1 -1 Tue Aug 17 14:56:48 2021 by operator  
682357700.0 GRACED LRIDATATION 1 -10231794 Wed Aug 18 05:25:22 2021 by operator  
682516800.0 GRACEC LRIDATATION 1 4069693 Thu Aug 19 17:00:00 2021 by cvolk  
683726400.0 GRACED LRIDATATION 1 -12724601 Thu Sep 02 15:00:00 2021 by cvolk  
683726400.0 GRACEC LRIDATATION 1 2037593 Thu Sep 02 15:00:00 2021 by cvolk  
684936000.0 GRACED LRIDATATION 1 -13188077 Thu Sep 02 15:00:00 2021 by cvolk  
684936000.0 GRACEC LRIDATATION 1 4755518 Thu Sep 02 15:00:00 2021 by cvolk  
685768642.0 GRACEC IPU 3 1 685768642.0 1 Fri Sep 24 17:05:30 2021 by operator  
685768642.0 GRACED IPU 3 1 685768642.0 1 Fri Sep 24 18:41:09 2021 by operator  
685768960 GRACEC IPUR 4 -1 685768948 -1 0 Sat Sep 25 16:14:04 2021 by operator  
685768960 GRACEC USO 1 -1 Sat Sep 25 16:14:04 2021 by operator  
685768960.0 GRACEC LRIDATATION 1 7093517 Sat Sep 25 16:14:24 2021 by operator  
685769010 GRACED IPUR 4 -1 685768998 -1 0 Sat Sep 25 16:14:11 2021 by operator  
685769010 GRACED USO 1 -1 Sat Sep 25 16:14:11 2021 by operator  
685769010.0 GRACED LRIDATATION 1 -11374861 Sat Sep 25 17:29:07 UTC 2021 by mpaik  
685769010.0 GRACED LRIDATATION 1 -11374729 Sun Sep 26 05:16:59 2021 by operator  
686145600.0 GRACEC LRIDATATION 1 2136928 Thu Sep 31 03:40:00 UTC 2021 by cvolk  
686145600.0 GRACED LRIDATATION 1 -10398351 Thu Sep 31 03:40:00 UTC 2021 by cvolk  
688011840.0 GRACEC IPU 3 1 688011840.0 1 Wed Oct 20 16:59:46 2021 by operator  
688012190 GRACEC IPUR 4 -1 688012178 -1 0 Thu Oct 21 18:03:13 2021 by operator  
688012190 GRACEC USO 1 -1 Thu Oct 21 18:03:13 2021 by operator  
688012190.0 GRACEC LRIDATATION 1 3385718 Thu Oct 21 18:03:17 2021 by operator  
689083221.0 GRACEC LRIDATATION 1 2782573 Wed Nov 3 16:32:46 UTC 2021 by mpaik  
689083221.0 GRACED LRIDATATION 1 -16537304 Wed Nov 3 16:32:46 UTC 2021 by mpaik  
689180002.0 GRACED IPU 3 1 689180002.0 1 Wed Nov 03 03:53:01 2021 by operator  
689180002.0 GRACEC IPU 3 1 689180002.0 1 Wed Nov 03 05:28:58 2021 by operator  
689180660 GRACEC IPUR 4 -1 689180654 -1 0 Thu Nov 04 13:29:31 2021 by operator  
689180660 GRACEC USO 1 -1 Thu Nov 04 13:29:31 2021 by operator  
689180660.0 GRACEC LRIDATATION 1 3435861 Thu Nov 4 23:46:24 UTC 2021 by mpaik

689180700 GRACED IPUR 4 -1 689180691 -1 0 Thu Nov 04 13:34:30 2021 by operator  
689180700 GRACED USO 1 -1 Thu Nov 04 13:34:30 2021 by operator  
689180700.0 GRACED LRIDATATION 1 -14696400 Thu Nov 4 23:46:24 UTC 2021 by mpaik  
689184168.599951 GRACED MANV 4 1790.000 0.0988 0.0000 0 Thu Nov 04 17:15:22 2021 by operator  
689184498.599944 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Nov 04 17:06:51 2021 by operator  
689228343.599309 GRACEC MANV 4 31.000 0.0988 0.0000 0 Thu Nov 04 17:06:51 2021 by operator  
689232922.0 GRACEC IPU 3 1 689232922.0 1 Wed Nov 03 18:08:22 2021 by operator  
689232922.0 GRACED IPU 3 1 689232922.0 1 Wed Nov 03 19:37:32 2021 by operator  
689233180 GRACEC IPUR 4 -1 689233169 -1 0 Thu Nov 04 13:29:31 2021 by operator  
689233180 GRACEC USO 1 -1 Thu Nov 04 13:29:31 2021 by operator  
689233180.0 GRACEC LRIDATATION 1 3465347 Thu Nov 4 23:46:24 UTC 2021 by mpaik  
689233190 GRACED IPUR 4 -1 689233184 -1 0 Thu Nov 04 13:34:30 2021 by operator  
689233190 GRACED USO 1 -1 Thu Nov 04 13:34:30 2021 by operator  
689233190.0 GRACED LRIDATATION 1 -14667764 Thu Nov 4 23:46:24 UTC 2021 by mpaik  
689733462.0 GRACEC IPU 3 1 689733462.0 1 Tue Nov 09 15:55:25 2021 by operator  
689733720 GRACEC IPUR 4 -1 689733713 -1 0 Wed Nov 10 15:43:40 2021 by operator  
689733720 GRACEC USO 1 -1 Wed Nov 10 15:43:40 2021 by operator  
689733720.0 GRACEC LRIDATATION 1 3745982 Wed Nov 10 15:45:00 2021 by cvolk  
689752313.0 GRACED IPU 3 1 689752313.0 1 Tue Nov 09 20:35:48 2021 by operator  
689752610 GRACED IPUR 4 -1 689752600 -1 0 Wed Nov 10 15:43:37 2021 by operator  
689752610 GRACED USO 1 -1 Wed Nov 10 15:43:37 2021 by operator  
689752610.0 GRACED LRIDATATION 1 -14385075 Wed Nov 10 16:00:12 2021 by operator  
690322822.0 GRACEC IPU 3 1 690322822.0 1 Tue Nov 16 11:56:28 2021 by operator  
690322822.0 GRACED IPU 3 1 690322822.0 1 Tue Nov 16 11:56:29 2021 by operator  
690323100 GRACEC IPUR 4 -1 690323091 -1 0 Wed Nov 17 16:27:57 2021 by operator  
690323100 GRACEC USO 1 -1 Wed Nov 17 16:27:57 2021 by operator  
690323100.0 GRACEC LRIDATATION 1 4076873 Wed Nov 17 18:41:13 UTC 2021 by mpaik

690323140 GRACED IPUR 4 -1 690323130 -1 0 Wed Nov 17 16:27:59 2021 by operator  
690323140 GRACED USO 1 -1 Wed Nov 17 16:27:59 2021 by operator  
690323140.0 GRACED LRIDATATION 1 -14073733 Wed Nov 17 16:30:12 2021 by operator  
690977700.0 GRACEC IPU 3 1 690977700.0 1 Tue Nov 23 23:06:09 2021 by operator  
690977970 GRACEC IPUR 4 -1 690977964 -1 0 Wed Nov 24 05:44:56 2021 by operator  
690977970 GRACEC USO 1 -1 Wed Nov 24 05:44:56 2021 by operator  
690977970.0 GRACEC LRIDATATION 1 4445283 Wed Nov 24 05:45:07 2021 by operator  
691815922.0 GRACEC IPU 3 1 691815922.0 1 Fri Dec 03 16:37:54 2021 by operator  
691815922.0 GRACED IPU 3 1 691815922.0 1 Fri Dec 03 18:07:27 2021 by operator  
691816200 GRACED IPUR 4 -1 691816190 -1 0 Sat Dec 04 17:39:11 2021 by operator  
691816200 GRACED USO 1 -1 Sat Dec 04 17:39:11 2021 by operator  
691816200.0 GRACED LRIDATATION 1 -13256178 Sat Dec 4 21:43:51 UTC 2021 by mpaik  
691816200 GRACEC IPUR 4 -1 691816189 -1 0 Sat Dec 04 17:41:38 2021 by operator  
691816200 GRACEC USO 1 -1 Sat Dec 04 17:41:38 2021 by operator  
691816200.0 GRACEC LRIDATATION 1 4917532 Sat Dec 04 18:00:09 2021 by operator  
691816200.0 GRACED LRIDATATION 1 -13255834 Sun Dec 05 20:07:54 2021 by operator  
692377522.0 GRACED IPU 3 1 692377522.0 1 Fri Dec 10 04:32:06 2021 by operator  
692377522.0 GRACEC IPU 3 1 692377522.0 1 Fri Dec 10 06:07:59 2021 by operator  
692377800 GRACED IPUR 4 -1 692377794 -1 0 Sat Dec 11 17:15:34 2021 by operator  
692377800 GRACED USO 1 -1 Sat Dec 11 17:15:34 2021 by operator  
692377800.0 GRACED LRIDATATION 1 -12946915 Sun Dec 12 03:46:26 2021 by operator  
692378180 GRACEC IPUR 4 -1 692378169 -1 0 Sat Dec 11 17:15:33 2021 by operator  
692378180 GRACEC USO 1 -1 Sat Dec 11 17:15:33 2021 by operator  
692378180.0 GRACEC LRIDATATION 1 5234787 Sun Dec 12 05:31:37 2021 by operator  
693403200.0 GRACEC LRIDATATION 1 6138398 Thu Dec 23 20:21:33 UTC 2021 by cmccullo  
693403200.0 GRACED LRIDATATION 1 -12150768 Thu Dec 23 20:21:33 UTC 2021 by cmccullo  
693947974.0 GRACED IPU 3 1 693947974.0 1 Tue Dec 28 10:33:26 2021 by operator  
693948180 GRACED IPUR 4 -1 693948174 -1 0 Wed Dec 29 05:29:32 2021 by operator  
693948180 GRACED USO 1 -1 Wed Dec 29 05:29:32 2021 by operator

694076720.0 GRACED IPU 3 1 694076720.0 1 Wed Dec 29 21:01:30 2021 by operator  
694076722.0 GRACEC IPU 3 1 694076722.0 1 Wed Dec 29 19:37:57 2021 by operator  
694077010 GRACEC IPUR 4 -1 694076999 -1 0 Thu Dec 30 16:45:17 2021 by operator  
694077010 GRACEC USO 1 -1 Thu Dec 30 16:45:17 2021 by operator  
694077010.0 GRACEC LRIDATATION 1 7051683 Thu Dec 30 22:12:41 UTC 2021 by mpaik  
694077010 GRACED IPUR 4 -1 694076998 -1 0 Thu Dec 30 16:45:18 2021 by operator  
694077010 GRACED USO 1 -1 Thu Dec 30 16:45:18 2021 by operator  
694077010.0 GRACED LRIDATATION 1 -11066364 Thu Dec 30 22:12:41 UTC 2021 by mpaik  
694098646.0 GRACEC IPU 3 1 694098646.0 1 Thu Dec 30 02:03:06 2021 by operator  
694098870 GRACEC IPUR 4 -1 694098861 -1 0 Fri Dec 31 06:27:50 2021 by operator  
694098870 GRACEC USO 1 -1 Fri Dec 31 06:27:50 2021 by operator  
694098870.0 GRACEC LRIDATATION 1 7064066 Fri Dec 31 20:08:15 UTC 2021 by mpaik  
694598819.0 GRACEC IPU 3 1 694598819.0 1 Tue Jan 04 20:21:29 2022 by operator  
694599150 GRACEC IPUR 4 -1 694599142 -1 0 Wed Jan 05 15:19:55 2022 by operator  
694599150 GRACEC USO 1 -1 Wed Jan 05 15:19:55 2022 by operator  
694599150.0 GRACEC LRIDATATION 1 -14820485 Thu Jan 06 04:13:22 2022 by operator  
694612800.0 GRACED LRIDATATION 1 8280446 Fri Jan 07 15:30:00 UTC 2021 by cvolk  
695217600.0 GRACEC LRIDATATION 1 -1050375 Thu Jan 13 16:33:58 UTC 2022 by mpaik  
695217600.0 GRACED LRIDATATION 1 -13620775 Thu Jan 13 16:33:58 UTC 2022 by mpaik  
695649548.0 GRACED LRIDATATION 1 -10356112 Wed Jan 19 19:45:00 UTC 2022 by cvolk  
695801268.0 GRACEC IPU 3 1 695801268.0 1 Tue Jan 18 18:23:34 2022 by operator  
695801560 GRACEC IPUR 4 -1 695801553 -1 0 Wed Jan 19 17:07:47 2022 by operator  
695801560 GRACEC USO 1 -1 Wed Jan 19 17:07:47 2022 by operator  
695801560.0 GRACEC LRIDATATION 1 2684732 Thu Jan 20 05:25:28 2022 by operator  
695823578.0 GRACED LRIDATATION 1 -14424507 Thu Jan 20 15:20:00 2022 by cvolk  
696413927.0 GRACEC IPU 3 1 696413927.0 1 Tue Jan 25 20:40:35 2022 by operator  
696414290 GRACEC IPUR 4 -1 696414278 -1 0 Wed Jan 26 17:12:57 2022 by operator  
696414290 GRACEC USO 1 -1 Wed Jan 26 17:12:57 2022 by operator  
696414290.0 GRACEC LRIDATATION 1 8205593 Thu Jan 27 04:17:39 2022 by operator

696427221.0 GRACED LRIDATATION 1 -11769354 Thu Jan 27 18:33:55 UTC 2022 by mpaik  
696558652.0 GRACEC IPU 3 1 696558652.0 1 Thu Jan 27 13:40:39 2022 by operator  
696559000 GRACEC IPUR 4 -1 696558988 -1 0 Fri Jan 28 17:38:17 2022 by operator  
696559000 GRACEC USO 1 -1 Fri Jan 28 17:38:17 2022 by operator  
696559000.0 GRACEC LRIDATATION 1 8288086 Fri Jan 28 19:03:59 UTC 2022 by mpaik  
696584022.0 GRACED IPU 3 1 696584022.0 1 Thu Jan 27 21:36:20 2022 by operator  
696584460 GRACED IPUR 4 -1 696584452 -1 0 Fri Jan 28 17:39:33 2022 by operator  
696584460 GRACED USO 1 -1 Fri Jan 28 17:39:33 2022 by operator  
696584460.0 GRACED LRIDATATION 1 -10373737 Fri Jan 28 18:00:08 2022 by operator  
697032000.0 GRACED LRIDATATION 1 -13417402 Thu Feb 03 16:40:08 2022 by cvolk  
697032000.0 GRACEC LRIDATATION 1 8614707 Thu Feb 03 16:40:08 2022 by cvolk  
697636821.0 GRACEC LRIDATATION 1 2560196 Thu Feb 10 16:36:31 UTC 2022 by mpaik  
697636821.0 GRACED LRIDATATION 1 -15308669 Thu Feb 10 16:36:31 UTC 2022 by mpaik  
697640060.0 GRACEC IPU 3 1 697640060.0 1 Wed Feb 09 04:15:51 2022 by operator  
697640400 GRACEC IPUR 4 -1 697640389 -1 0 Thu Feb 10 16:32:46 2022 by operator  
697640400 GRACEC USO 1 -1 Thu Feb 10 16:32:46 2022 by operator  
697640400.0 GRACEC LRIDATATION 1 3177364 Fri Feb 11 03:33:53 2022 by operator  
698141830.0 GRACEC IPU 3 1 698141830.0 1 Mon Feb 14 22:45:14 2022 by operator  
698142530 GRACEC IPUR 4 -1 698142520 -1 0 Tue Feb 15 15:27:11 2022 by operator  
698142530 GRACEC USO 1 -1 Tue Feb 15 15:27:11 2022 by operator  
698142530.0 GRACEC LRIDATATION 1 1913639 Wed Feb 16 06:25:22 2022 by operator  
698308200.0 GRACEC IPU 3 1 698308200.0 1 Wed Feb 16 18:55:11 2022 by operator  
698308490 GRACEC IPUR 4 -1 698308485 -1 0 Thu Feb 17 15:21:32 2022 by operator  
698308490 GRACEC USO 1 -1 Thu Feb 17 15:21:32 2022 by operator  
698308490.0 GRACEC LRIDATATION 1 2008599 Thu Feb 17 15:23:15 2022 by operator  
698312032.0 GRACED IPU 3 1 698312032.0 1 Wed Feb 16 20:24:30 2022 by operator  
698312370 GRACED IPUR 4 -1 698312356 -1 0 Thu Feb 17 15:21:39 2022 by operator  
698312370 GRACED USO 1 -1 Thu Feb 17 15:21:39 2022 by operator  
698312370.0 GRACED LRIDATATION 1 -11472566 Thu Feb 17 16:00:00 2022 by cvolk

698846644 GRACEC LRI 1 1 GRACE-C switched to transponder Thu Mar 10 00:01:10 by cmccullo  
698846644 GRACED LRI 1 0 GRACE-D switched to master Thu Mar 10 00:01:12 by cmccullo  
698846649.0 GRACEC LRIDATATION 1 -15716864 Thu Feb 24 17:25:48 UTC 2022 by mpaik  
698846649.0 GRACED LRIDATATION 1 1092650 Thu Feb 24 17:25:48 UTC 2022 by mpaik  
699010822.0 GRACEC IPU 3 1 699010822.0 1 Thu Feb 24 22:22:04 2022 by operator  
699010822.0 GRACED IPU 3 1 699010822.0 1 Thu Feb 24 23:56:33 2022 by operator  
699011150 GRACED IPUR 4 -1 699011144 -1 0 Fri Feb 25 17:22:38 2022 by operator  
699011150 GRACED USO 1 -1 Fri Feb 25 17:22:38 2022 by operator  
699011150.0 GRACED LRIDATATION 1 1486111 Fri Feb 25 17:30:04 2022 by operator  
699011780.0 GRACEC IPU 3 1 699011780.0 1 Thu Feb 24 22:22:05 2022 by operator  
699012090 GRACEC IPUR 4 -1 699012080 -1 0 Fri Feb 25 17:22:37 2022 by operator  
699012090 GRACEC USO 1 -1 Fri Feb 25 17:22:37 2022 by operator  
699012090.0 GRACEC LRIDATATION 1 -15313849 Fri Feb 25 19:51:52 UTC 2022 by mpaik  
699012090.0 GRACEC LRIDATATION 1 -15314050 Sat Feb 26 05:53:48 2022 by operator  
700041824.0 GRACED IPU 3 1 700041824.0 1 Tue Mar 08 22:32:58 2022 by operator  
700042030 GRACED IPUR 4 -1 700042017 -1 0 Wed Mar 09 16:47:55 2022 by operator  
700042030 GRACED USO 1 -1 Wed Mar 09 16:47:55 2022 by operator  
700042030.0 GRACED LRIDATATION 1 2068154 Wed Mar 9 18:24:42 UTC 2022 by mpaik  
700271422.0 GRACED IPU 3 1 700271422.0 1 Mon Mar 14 02:03:17 2022 by operator  
700271422.0 GRACEC IPU 3 1 700271422.0 1 Mon Mar 14 02:10:21 2022 by operator  
700271750 GRACED IPUR 4 -1 700271745 -1 0 Mon Mar 14 04:18:12 2022 by operator  
700271750 GRACED USO 1 -1 Mon Mar 14 04:18:12 2022 by operator  
700271750.0 GRACED LRIDATATION 1 2198097 Mon Mar 14 04:47:01 UTC 2022 by mpaik  
700271770 GRACEC IPUR 4 -1 700271757 -1 0 Mon Mar 14 04:17:31 2022 by operator  
700271770 GRACEC USO 1 -1 Mon Mar 14 04:17:31 2022 by operator  
700271770.0 GRACEC LRIDATATION 1 -14591355 Mon Mar 14 04:30:07 2022 by operator  
700844480.0 GRACED IPU 3 1 700844480.0 1 Fri Mar 18 06:17:08 2022 by operator  
700844482.0 GRACEC IPU 3 1 700844482.0 1 Fri Mar 18 04:48:43 2022 by operator  
700844760 GRACED IPUR 4 -1 700844749 -1 0 Sun Mar 20 14:46:00 2022 by operator

700844760 GRACED USO 1 -1 Sun Mar 20 14:46:00 2022 by operator  
700844760.0 GRACED LRIDATATION 1 2522539 Sun Mar 20 14:46:02 2022 by cvolk  
700844770 GRACEC IPUR 4 -1 700844763 -1 0 Sun Mar 20 14:45:59 2022 by operator  
700844770 GRACEC USO 1 -1 Sun Mar 20 14:45:59 2022 by operator  
700844770.0 GRACEC LRIDATATION 1 -14261908 Sun Mar 20 14:46:02 2022 by operator  
701451142.0 GRACED IPU 3 1 701451142.0 1 Fri Mar 25 05:15:39 2022 by operator  
701451142.0 GRACEC IPU 3 1 701451142.0 1 Fri Mar 25 06:49:40 2022 by operator  
701451420 GRACED IPUR 4 -1 701451410 -1 0 Sat Mar 26 17:45:36 2022 by operator  
701451420 GRACED USO 1 -1 Sat Mar 26 17:45:36 2022 by operator  
701451420.0 GRACED LRIDATATION 1 2866643 Sat Mar 26 17:51:57 UTC 2022 by mpaik  
701451460 GRACEC IPUR 4 -1 701451454 -1 0 Sat Mar 26 17:45:36 2022 by operator  
701451460 GRACEC USO 1 -1 Sat Mar 26 17:45:36 2022 by operator  
701451460.0 GRACEC LRIDATATION 1 -13912998 Sat Mar 26 17:51:57 UTC 2022 by mpaik  
701719076.0 GRACEC IPU 3 1 701719076.0 1 Mon Mar 28 07:19:29 2022 by operator  
701719390 GRACEC IPUR 4 -1 701719383 -1 0 Tue Mar 29 15:38:18 2022 by operator  
701719390 GRACEC USO 1 -1 Tue Mar 29 15:38:18 2022 by operator  
701719390.0 GRACEC LRIDATATION 1 -13758768 Tue Mar 28 17:00:00 UTC 2022 by cvolk  
702703102.0 GRACED IPU 3 1 702703102.0 1 Fri Apr 08 15:51:15 2022 by operator  
702703102.0 GRACEC IPU 3 1 702703102.0 1 Fri Apr 08 17:19:06 2022 by operator  
702703430 GRACEC IPUR 4 -1 702703416 -1 0 Sat Apr 09 17:32:25 2022 by operator  
702703430 GRACEC USO 1 -1 Sat Apr 09 17:32:25 2022 by operator  
702703430.0 GRACEC LRIDATATION 1 -13191670 Sat Apr 9 21:34:29 UTC 2022 by mpaik  
702703540 GRACED IPUR 4 -1 702703528 -1 0 Sat Apr 09 17:32:24 2022 by operator  
702703540 GRACED USO 1 -1 Sat Apr 09 17:32:24 2022 by operator  
702703540.0 GRACED LRIDATATION 1 3578686 Sat Apr 9 21:34:29 UTC 2022 by mpaik  
702829312.0 GRACED IPU 3 1 702829312.0 1 Sun Apr 10 05:38:16 2022 by operator  
702829600 GRACED IPUR 4 -1 702829588 -1 0 Mon Apr 11 14:05:10 2022 by operator  
702829600 GRACED USO 1 -1 Mon Apr 11 14:05:10 2022 by operator  
702829600.0 GRACED LRIDATATION 1 3650503 Sat Apr 12 14:35:00 UTC 2022 by cvolk

703870342.0 GRACED IPU 3 1 703870342.0 1 Fri Apr 22 04:21:57 2022 by operator  
703870342.0 GRACEC IPU 3 1 703870342.0 1 Fri Apr 22 05:50:33 2022 by operator  
703870710 GRACEC IPUR 4 -1 703870696 -1 0 Sat Apr 23 17:04:22 2022 by operator  
703870710 GRACEC USO 1 -1 Sat Apr 23 17:04:22 2022 by operator  
703870710.0 GRACEC LRIDATATION 1 -12517751 Sat Apr 23 17:04:31 2022 by operator  
703871300.0 GRACED IPU 3 1 703871300.0 1 Fri Apr 22 04:21:57 2022 by operator  
703871610 GRACED IPUR 4 -1 703871604 -1 0 Sat Apr 23 17:04:22 2022 by operator  
703871610 GRACED USO 1 -1 Sat Apr 23 17:04:22 2022 by operator  
703871610.0 GRACED LRIDATATION 1 4245026 Sat Apr 23 17:10:47 UTC 2022 by mpaik  
704862010.0 GRACED IPU 3 1 704862010.0 1 Tue May 03 17:37:11 2022 by operator  
704862600 GRACED IPUR 4 -1 704862588 -1 0 Wed May 04 16:16:18 2022 by operator  
704862600 GRACED USO 1 -1 Wed May 04 16:16:18 2022 by operator  
704862600.0 GRACED LRIDATATION 1 4812103 Wed May 04 16:19:40 2022 by operator  
705043834.0 GRACEC IPU 3 1 705043834.0 1 Thu May 05 18:26:51 2022 by operator  
705044060 GRACEC IPUR 4 -1 705044048 -1 0 Fri May 06 03:46:30 2022 by operator  
705044060 GRACEC USO 1 -1 Fri May 06 03:46:30 2022 by operator  
705044060.0 GRACEC LRIDATATION 1 -11839025 Fri May 6 19:31:14 UTC 2022 by mpaik  
706306822.0 GRACED IPU 3 1 706306822.0 1 Fri May 20 09:32:19 2022 by operator  
706306822.0 GRACEC IPU 3 1 706306822.0 1 Fri May 20 11:14:25 2022 by operator  
706307100 GRACED IPUR 4 -1 706307092 -1 0 Sat May 21 16:14:14 2022 by operator  
706307100 GRACED USO 1 -1 Sat May 21 16:14:14 2022 by operator  
706307100.0 GRACED LRIDATATION 1 5641193 Sat May 21 17:59:09 UTC 2022 by mpaik  
706307110 GRACEC IPUR 4 -1 706307105 -1 0 Sat May 21 16:14:13 2022 by operator  
706307110 GRACEC USO 1 -1 Sat May 21 16:14:13 2022 by operator  
706307110.0 GRACEC LRIDATATION 1 -11107004 Sat May 21 17:59:09 UTC 2022 by mpaik  
706900642.0 GRACEC IPU 3 1 706900642.0 1 Fri May 27 06:57:36 2022 by operator  
706900642.0 GRACED IPU 3 1 706900642.0 1 Fri May 27 08:32:05 2022 by operator  
706900940 GRACEC IPUR 4 -1 706900931 -1 0 Mon May 30 15:39:12 2022 by operator  
706900940 GRACEC USO 1 -1 Mon May 30 15:39:12 2022 by operator

706900940.0 GRACEC LRIDATATION 1 -10762370 Mon May 30 15:41:53 2022 by operator  
706900970 GRACED IPUR 4 -1 706900965 -1 0 Mon May 30 15:39:14 2022 by operator  
706900970 GRACED USO 1 -1 Mon May 30 15:39:14 2022 by operator  
706900970.0 GRACED LRIDATATION 1 5982934 Mon May 30 15:41:53 2022 by operator  
707386483.592703 GRACEC MANV 4 69.000 0.0988 0.0000 0 Mon Jun 06 15:42:41 2022 by operator  
707392153.592678 GRACED MANV 4 70.000 0.0988 0.0000 0 Mon Jun 06 15:44:48 2022 by operator  
707929522.0 GRACED IPU 3 1 707929522.0 1 Wed Jun 08 04:02:21 2022 by operator  
707929522.0 GRACEC IPU 3 1 707929522.0 1 Wed Jun 08 05:36:35 2022 by operator  
707929810 GRACEC IPUR 4 -1 707929803 -1 0 Fri Jun 10 12:50:56 2022 by operator  
707929810 GRACEC USO 1 -1 Fri Jun 10 12:50:56 2022 by operator  
707929810.0 GRACEC LRIDATATION 1 -10164447 Fri Jun 10 13:00:11 2022 by operator  
707929810 GRACED IPUR 4 -1 707929802 -1 0 Fri Jun 10 12:50:57 2022 by operator  
707929810 GRACED USO 1 -1 Fri Jun 10 12:50:57 2022 by operator  
707929810.0 GRACED LRIDATATION 1 6576179 Fri Jun 10 13:00:11 2022 by operator  
708411110.0 GRACED IPU 3 1 708411110.0 1 Mon Jun 13 19:38:05 2022 by operator  
708411470 GRACED IPUR 4 -1 708411465 -1 0 Tue Jun 14 15:48:06 2022 by operator  
708411470 GRACED USO 1 -1 Tue Jun 14 15:48:06 2022 by operator  
708411470.0 GRACED LRIDATATION 1 6854372 Tue Jun 14 16:46:24 UTC 2022 by mpaik  
708741037.0 GRACED IPU 3 1 708741037.0 1 Fri Jun 17 14:50:35 2022 by operator  
708741350 GRACED IPUR 4 -1 708741335 -1 0 Sat Jun 18 16:48:10 2022 by operator  
708741350 GRACED USO 1 -1 Sat Jun 18 16:48:10 2022 by operator  
708741350.0 GRACED LRIDATATION 1 7045109 Sat Jun 18 18:56:24 UTC 2022 by mpaik  
709136722.0 GRACEC IPU 3 1 709136722.0 1 Wed Jun 22 03:30:48 2022 by operator  
709136722.0 GRACED IPU 3 1 709136722.0 1 Wed Jun 22 05:11:34 2022 by operator  
709136990 GRACEC IPUR 4 -1 709136977 -1 0 Thu Jun 23 16:43:06 2022 by operator  
709136990 GRACEC USO 1 -1 Thu Jun 23 16:43:06 2022 by operator  
709136990.0 GRACEC LRIDATATION 1 -9461773 Thu Jun 23 17:00:03 2022 by operator

709136990 GRACED IPUR 4 -1 709136976 -1 0 Thu Jun 23 16:51:08 2022 by operator  
709136990 GRACED USO 1 -1 Thu Jun 23 16:51:08 2022 by operator  
709136990.0 GRACED LRIDATATION 1 7274069 Thu Jun 23 17:00:03 2022 by operator  
709139423.599963 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Jun 23 16:52:06 2022 by operator  
709139437.599963 GRACED MANV 4 1763.000 0.0988 0.0000 0 Thu Jun 23 17:12:12 2022 by operator  
709182922.0 GRACEC IPU 3 1 709182922.0 1 Wed Jun 22 16:07:57 2022 by operator  
709182922.0 GRACED IPU 3 1 709182922.0 1 Wed Jun 22 17:48:28 2022 by operator  
709183140 GRACED IPUR 4 -1 709183133 -1 0 Thu Jun 23 16:51:08 2022 by operator  
709183140 GRACED USO 1 -1 Thu Jun 23 16:51:08 2022 by operator  
709183140.0 GRACED LRIDATATION 1 7300678 Thu Jun 23 17:00:03 2022 by operator  
709183160 GRACEC IPUR 4 -1 709183149 -1 0 Thu Jun 23 16:43:06 2022 by operator  
709183160 GRACEC USO 1 -1 Thu Jun 23 16:43:06 2022 by operator  
709183160.0 GRACEC LRIDATATION 1 -9434887 Thu Jun 23 17:00:03 2022 by cvolk  
709372222.0 GRACEC IPU 3 1 709372222.0 1 Fri Jun 24 21:40:04 2022 by operator  
709372222.0 GRACED IPU 3 1 709372222.0 1 Fri Jun 24 23:08:14 2022 by operator  
709372460 GRACED IPUR 4 -1 709372449 -1 0 Sat Jun 25 05:34:21 2022 by operator  
709372460 GRACED USO 1 -1 Sat Jun 25 05:34:21 2022 by operator  
709372460.0 GRACED LRIDATATION 1 7410376 Sat Jun 25 16:10:00 2022 by cvolk  
709372500 GRACEC IPUR 4 -1 709372494 -1 0 Sat Jun 25 16:09:44 2022 by operator  
709372500 GRACEC USO 1 -1 Sat Jun 25 16:09:44 2022 by operator  
709372500.0 GRACEC LRIDATATION 1 -9324574 Sat Jun 25 16:10:00 2022 by cvolk  
709890622.0 GRACED IPU 3 1 709890622.0 1 Thu Jun 30 21:07:08 2022 by operator  
709890622.0 GRACEC IPU 3 1 709890622.0 1 Thu Jun 30 22:36:10 2022 by operator  
709890890 GRACEC IPUR 4 -1 709890883 -1 0 Fri Jul 01 08:04:28 2022 by operator  
709890890 GRACEC USO 1 -1 Fri Jul 01 08:04:28 2022 by operator  
709890890 GRACED IPUR 4 -1 709890882 -1 0 Fri Jul 01 16:20:26 2022 by operator  
709890890 GRACED USO 1 -1 Fri Jul 01 16:20:26 2022 by operator

709890890.0 GRACEC LRIDATATION 1 -9022450 Fri Jul 1 20:40:20 UTC 2022 by mpaik  
709890890.0 GRACED LRIDATATION 1 7710865 Fri Jul 01 16:20:30 2022 by operator  
709905621.0 GRACED LRIDATATION 1 -11934287 Sat Jul 02 04:27:10 2022 by operator  
709905621.0 GRACEC LRIDATATION 1 883349 Sat Jul 02 06:07:15 2022 by operator  
710433695.591851 GRACED MANV 4 24.000 0.0988 0.0000 0 Fri Jul 08 15:28:51 2022 by operator  
711167422.0 GRACEC IPU 3 1 711167422.0 1 Fri Jul 15 15:27:05 2022 by operator  
711167422.0 GRACED IPU 3 1 711167422.0 1 Fri Jul 15 17:02:09 2022 by operator  
711167680 GRACED IPUR 4 -1 711167674 -1 0 Sat Jul 16 14:03:42 2022 by operator  
711167680 GRACED USO 1 -1 Sat Jul 16 14:03:42 2022 by operator  
711167680.0 GRACED LRIDATATION 1 -11192664 Sun Jul 17 03:34:49 2022 by operator  
711167750 GRACEC IPUR 4 -1 711167744 -1 0 Sat Jul 16 14:03:32 2022 by operator  
711167750 GRACEC USO 1 -1 Sat Jul 16 14:03:32 2022 by operator  
711167750.0 GRACEC LRIDATATION 1 1628338 Sun Jul 17 08:17:03 2022 by operator  
712375342.0 GRACED IPU 3 1 712375342.0 1 Fri Jul 29 14:52:36 2022 by operator  
712375342.0 GRACEC IPU 3 1 712375342.0 1 Fri Jul 29 16:33:37 2022 by operator  
712375620 GRACED IPUR 4 -1 712375606 -1 0 Sat Jul 30 21:54:51 2022 by operator  
712375620 GRACED USO 1 -1 Sat Jul 30 21:54:51 2022 by operator  
712375620.0 GRACED LRIDATATION 1 -10488761 Sun Jul 31 04:27:59 2022 by operator  
712376300.0 GRACEC IPU 3 1 712376300.0 1 Fri Jul 29 16:33:37 2022 by operator  
712376620 GRACEC IPUR 4 -1 712376608 -1 0 Sat Jul 30 21:56:12 2022 by operator  
712376620 GRACEC USO 1 -1 Sat Jul 30 21:56:12 2022 by operator  
712376620.0 GRACEC LRIDATATION 1 2334571 Sun Jul 31 06:13:49 2022 by operator  
712763422.0 GRACEC IPU 3 1 712763422.0 1 Wed Aug 03 03:29:13 2022 by operator  
712763422.0 GRACED IPU 3 1 712763422.0 1 Wed Aug 03 04:51:59 2022 by operator  
712763710 GRACED IPUR 4 -1 712763705 -1 0 Thu Aug 04 15:51:30 2022 by operator  
712763710 GRACED USO 1 -1 Thu Aug 04 15:51:30 2022 by operator  
712763710 GRACEC IPUR 4 -1 712763705 -1 0 Thu Aug 04 15:51:33 2022 by operator  
712763710 GRACEC USO 1 -1 Thu Aug 04 15:51:33 2022 by operator  
712763710.0 GRACEC LRIDATATION 1 2560907 Thu Aug 04 16:00:04 2022 by operator

712765823.599967 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Aug 04 16:54:20 2022 by operator

712765828.599967 GRACED MANV 4 1780.000 0.0988 0.0000 0 Thu Aug 04 16:54:34 2022 by operator

712782923.599709 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Aug 04 16:54:20 2022 by operator

712782928.599709 GRACED MANV 4 1780.000 0.0988 0.0000 0 Thu Aug 04 16:54:34 2022 by operator

712836013.598907 GRACED MANV 4 28.000 0.0988 0.0000 0 Thu Aug 04 16:54:34 2022 by operator

712836322.0 GRACED IPU 3 1 712836322.0 1 Wed Aug 03 23:55:42 2022 by operator

712836322.0 GRACEC IPU 3 1 712836322.0 1 Thu Aug 04 01:29:43 2022 by operator

712836730 GRACEC IPUR 4 -1 712836725 -1 0 Thu Aug 04 15:51:33 2022 by operator

712836730 GRACEC USO 1 -1 Thu Aug 04 15:51:33 2022 by operator

712836730.0 GRACEC LRIDATATION 1 2603605 Thu Aug 04 16:00:04 2022 by operator

712836830 GRACED IPUR 4 -1 712836817 -1 0 Thu Aug 04 15:51:30 2022 by operator

712836830 GRACED USO 1 -1 Thu Aug 04 15:51:30 2022 by operator

712836830.0 GRACED LRIDATATION 1 -10219462 Fri Aug 05 04:06:24 2022 by operator

713572822.0 GRACEC IPU 3 1 713572822.0 1 Fri Aug 12 11:10:23 2022 by operator

713572822.0 GRACED IPU 3 1 713572822.0 1 Fri Aug 12 12:46:09 2022 by operator

713573170 GRACEC IPUR 4 -1 713573163 -1 0 Sat Aug 13 14:48:16 2022 by operator

713573170 GRACEC USO 1 -1 Sat Aug 13 14:48:16 2022 by operator

713573170.0 GRACEC LRIDATATION 1 3034471 Sat Aug 13 15:00:04 2022 by operator

713573250 GRACED IPUR 4 -1 713573235 -1 0 Sat Aug 13 14:48:15 2022 by operator

713573250 GRACED USO 1 -1 Sat Aug 13 14:48:15 2022 by operator

713573250.0 GRACED LRIDATATION 1 -9788873 Sun Aug 14 05:42:29 2022 by operator

714314949.588761 GRACEC MANV 4 103.000 0.0988 0.0000 0 Mon Aug 22 22:21:49 2022 by operator

714371415.587905 GRACEC MANV 4 98.000 0.0988 0.0000 0 Mon Aug 22 22:21:49 2022 by operator

714524421.0 GRACEC LRIDATATION 1 -4806619 Wed Aug 24 19:23:50 UTC 2022 by mpaik

714524421.0 GRACED LRIDATATION 1 -5344269 Wed Aug 24 19:23:50 UTC 2022 by mpaik  
714805547.95 GRACED K\_MI 3 0.02 0.0 0.0 Sat Aug 27 18:06:22 UTC 2022a by mpaik  
714837782.0 GRACED K\_MI 3 0.00 0.0 0.0 # commanded restart tracker  
715746685.0 GRACED LRIDATATION 1 -12437775 Thu Sep 8 14:53:40 UTC 2022 by mpaik  
715784898.0 GRACEC LRIDATATION 1 -15513434 Thu Sep 8 14:53:40 UTC 2022 by mpaik  
715966222.0 GRACEC IPU 3 1 715966222.0 1 Fri Sep 09 03:57:18 2022 by operator  
715966222.0 GRACED IPU 3 1 715966222.0 1 Fri Sep 09 05:32:59 2022 by operator  
715966770 GRACED IPUR 4 -1 715966757 -1 0 Sat Sep 10 15:45:33 2022 by operator  
715966770 GRACED USO 1 -1 Sat Sep 10 15:45:33 2022 by operator  
715966770.0 GRACED LRIDATATION 1 -11033193 Sat Sep 10 16:00:06 2022 by operator  
715966940 GRACEC IPUR 4 -1 715966929 -1 0 Sat Sep 10 15:45:32 2022 by operator  
715966940 GRACEC USO 1 -1 Sat Sep 10 15:45:32 2022 by operator  
715966940.0 GRACEC LRIDATATION 1 -14110108 Sat Sep 10 15:47:45 UTC 2022 by mpaik  
716558510 GRACEC LRI 1 0 GRACE-C switched to master Tue Sep 20 15:23:35 by cmccullo  
716558510 GRACED LRI 1 1 GRACE-D switched to transponder Tue Sep 20 15:23:35 by cmccullo  
716558648.0 GRACED LRIDATATION 1 -14532709 Sat Sep 17 15:47:45 UTC 2022 by cvolk  
716558648.0 GRACEC LRIDATATION 1 -16405958 Sat Sep 17 15:47:45 UTC 2022 by cvolk  
716569522.0 GRACED IPU 3 1 716569522.0 1 Fri Sep 16 04:34:00 2022 by operator  
716569522.0 GRACEC IPU 3 1 716569522.0 1 Fri Sep 16 06:04:40 2022 by operator  
716569780 GRACEC IPUR 4 -1 716569767 -1 0 Sat Sep 17 04:09:58 2022 by operator  
716569780 GRACEC USO 1 -1 Sat Sep 17 04:09:58 2022 by operator  
716569780.0 GRACEC LRIDATATION 1 -16051909 Sat Sep 17 15:47:45 UTC 2022 by cvolk  
716569930 GRACED IPUR 4 -1 716569921 -1 0 Sat Sep 17 15:55:58 2022 by operator  
716569930 GRACED USO 1 -1 Sat Sep 17 15:55:58 2022 by operator  
716569930.0 GRACED LRIDATATION 1 -14177547 Sat Sep 17 15:47:45 UTC 2022 by cvolk  
716608353.0 GRACED IPU 3 1 716608353.0 1 Fri Sep 16 17:06:14 2022 by operator  
716608560 GRACED IPUR 4 -1 716608550 -1 0 Sat Sep 17 15:55:58 2022 by operator  
716608560 GRACED USO 1 -1 Sat Sep 17 15:55:58 2022 by operator  
716608560.0 GRACED LRIDATATION 1 -14154790 Sat Sep 17 15:47:45 UTC 2022 by cvolk

716693368.0 GRACEC IPU 3 1 716693368.0 1 Sat Sep 17 16:45:33 2022 by operator  
716693590 GRACEC IPUR 4 -1 716693576 -1 0 Sun Sep 18 05:18:53 2022 by operator  
716693590 GRACEC USO 1 -1 Sun Sep 18 05:18:53 2022 by operator  
716693590.0 GRACEC LRIDATATION 1 -15979171 Sat Sep 17 15:47:45 UTC 2022 by cvolk  
717174082.0 GRACED IPU 3 1 717174082.0 1 Fri Sep 23 03:27:43 2022 by operator  
717174082.0 GRACEC IPU 3 1 717174082.0 1 Fri Sep 23 05:02:51 2022 by operator  
717174360 GRACEC IPUR 4 -1 717174350 -1 0 Sat Sep 24 18:29:48 2022 by operator  
717174360 GRACEC USO 1 -1 Sat Sep 24 18:29:48 2022 by operator  
717174360.0 GRACEC LRIDATATION 1 -15696595 Sat Sep 24 22:59:37 UTC 2022 by mpaik  
717174790 GRACED IPUR 4 -1 717174785 -1 0 Sat Sep 24 18:29:49 2022 by operator  
717174790 GRACED USO 1 -1 Sat Sep 24 18:29:49 2022 by operator  
717174790.0 GRACED LRIDATATION 1 -13820847 Sat Sep 24 18:30:05 2022 by operator  
717806542.0 GRACED IPU 3 1 717806542.0 1 Fri Sep 30 11:53:36 2022 by operator  
717806542.0 GRACEC IPU 3 1 717806542.0 1 Fri Sep 30 13:34:56 2022 by operator  
717806860 GRACEC IPUR 4 -1 717806854 -1 0 Sat Oct 01 15:37:23 2022 by operator  
717806860 GRACEC USO 1 -1 Sat Oct 01 15:37:23 2022 by operator  
717806860.0 GRACEC LRIDATATION 1 -15324663 Sat Sep 24 18:30:05 2022 by cvolk  
717806860 GRACED IPUR 4 -1 717806853 -1 0 Sat Oct 01 15:37:24 2022 by operator  
717806860 GRACED USO 1 -1 Sat Oct 01 15:37:24 2022 by operator  
717806860.0 GRACED LRIDATATION 1 -13447562 Sat Sep 24 18:30:05 2022 by cvolk  
718383682.0 GRACED IPU 3 1 718383682.0 1 Fri Oct 07 04:33:37 2022 by operator  
718383682.0 GRACEC IPU 3 1 718383682.0 1 Fri Oct 07 06:15:09 2022 by operator  
718383910 GRACEC IPUR 4 -1 718383900 -1 0 Sat Oct 08 04:15:47 2022 by operator  
718383910 GRACEC USO 1 -1 Sat Oct 08 04:15:47 2022 by operator  
718383910.0 GRACEC LRIDATATION 1 -14985056 Sat Oct 08 04:16:07 2022 by operator  
718383960 GRACED IPUR 4 -1 718383952 -1 0 Sat Oct 08 05:46:05 2022 by operator  
718383960 GRACED USO 1 -1 Sat Oct 08 05:46:05 2022 by operator  
718383960.0 GRACED LRIDATATION 1 -13106345 Sat Oct 08 23:08:22 UTC 2022 by mpaik  
719051722.0 GRACED IPU 3 1 719051722.0 1 Fri Oct 14 22:20:06 2022 by operator

719051722.0 GRACEC IPU 3 1 719051722.0 1 Fri Oct 14 23:54:58 2022 by operator  
719052010 GRACEC IPUR 4 -1 719051999 -1 0 Sun Oct 16 15:42:00 2022 by operator  
719052010 GRACEC USO 1 -1 Sun Oct 16 15:42:00 2022 by operator  
719052010.0 GRACEC LRIDATATION 1 -14591886 Sun Oct 16 15:45:53 by cmccullo  
719052080 GRACED IPUR 4 -1 719052070 -1 0 Sun Oct 16 15:42:01 2022 by operator  
719052080 GRACED USO 1 -1 Sun Oct 16 15:42:01 2022 by operator  
719052080.0 GRACED LRIDATATION 1 -12710727 Sun Oct 16 15:56:42 2022 by cmccullo  
719420482.0 GRACEC IPU 3 1 719420482.0 1 Wed Oct 19 04:44:16 2022 by operator  
719420482.0 GRACED IPU 3 1 719420482.0 1 Wed Oct 19 06:25:16 2022 by operator  
719420730 GRACEC IPUR 4 -1 719420721 -1 0 Thu Oct 20 16:29:36 2022 by operator  
719420730 GRACEC USO 1 -1 Thu Oct 20 16:29:36 2022 by operator  
719420730.0 GRACEC LRIDATATION 1 -14374738 Thu Oct 20 18:49:57 UTC 2022 by mpaik  
719420740 GRACED IPUR 4 -1 719420727 -1 0 Thu Oct 20 16:59:45 2022 by operator  
719420740 GRACED USO 1 -1 Thu Oct 20 16:59:45 2022 by operator  
719420740.0 GRACED LRIDATATION 1 -12492303 Thu Oct 20 17:00:08 2022 by operator  
719506942.0 GRACED IPU 3 1 719506942.0 1 Thu Oct 20 04:24:52 2022 by operator  
719506942.0 GRACEC IPU 3 1 719506942.0 1 Thu Oct 20 05:59:33 2022 by operator  
719507260 GRACED IPUR 4 -1 719507246 -1 0 Fri Oct 21 15:26:44 2022 by operator  
719507260 GRACED USO 1 -1 Fri Oct 21 15:26:44 2022 by operator  
719507260.0 GRACED LRIDATATION 1 -12440928 Fri Oct 21 15:27:45 2022 by operator  
719507450 GRACEC IPUR 4 -1 719507445 -1 0 Fri Oct 21 15:26:39 2022 by operator  
719507450 GRACEC USO 1 -1 Fri Oct 21 15:26:39 2022 by operator  
719507450.0 GRACEC LRIDATATION 1 -14323704 Fri Oct 21 15:27:40 2022 by operator  
719596942.0 GRACED IPU 3 1 719596942.0 1 Fri Oct 21 05:33:23 2022 by operator  
719596942.0 GRACEC IPU 3 1 719596942.0 1 Fri Oct 21 07:14:39 2022 by operator  
719597240 GRACEC IPUR 4 -1 719597232 -1 0 Sat Oct 22 17:57:58 2022 by operator  
719597240 GRACEC USO 1 -1 Sat Oct 22 17:57:58 2022 by operator  
719597240.0 GRACEC LRIDATATION 1 -14270795 Sat Oct 22 20:32:08 UTC 2022 by mpaik  
719597790 GRACED IPUR 4 -1 719597777 -1 0 Sat Oct 22 17:58:01 2022 by operator

719597790 GRACED USO 1 -1 Sat Oct 22 17:58:01 2022 by operator  
719597790.0 GRACED LRIDATATION 1 -12387202 Sat Oct 22 20:32:08 UTC 2022 by mpaik  
719679922.0 GRACED IPU 3 1 719679922.0 1 Sat Oct 22 03:35:02 2022 by operator  
719679922.0 GRACEC IPU 3 1 719679922.0 1 Sat Oct 22 05:22:12 2022 by operator  
719680210 GRACEC IPUR 4 -1 719680205 -1 0 Sun Oct 23 19:24:26 2022 by operator  
719680210 GRACEC USO 1 -1 Sun Oct 23 19:24:26 2022 by operator  
719680210.0 GRACEC LRIDATATION 1 -14221927 Sun Oct 23 19:34:22 UTC 2022 by mpaik  
719680250 GRACED IPUR 4 -1 719680243 -1 0 Sun Oct 23 19:29:28 2022 by operator  
719680250 GRACED USO 1 -1 Sun Oct 23 19:29:28 2022 by operator  
719680250.0 GRACED LRIDATATION 1 -12338286 Sun Oct 23 19:34:22 UTC 2022 by mpaik  
720016222.0 GRACED IPU 3 1 720016222.0 1 Wed Oct 26 02:07:10 2022 by operator  
720016222.0 GRACEC IPU 3 1 720016222.0 1 Wed Oct 26 03:42:02 2022 by operator  
720016430 GRACEC IPUR 4 -1 720016425 -1 0 Thu Oct 27 15:38:53 2022 by operator  
720016430 GRACEC USO 1 -1 Thu Oct 27 15:38:53 2022 by operator  
720016430.0 GRACEC LRIDATATION 1 -14023862 Thu Oct 27 17:11:56 UTC 2022 by cmccullo  
720016450 GRACED IPUR 4 -1 720016437 -1 0 Thu Oct 27 15:38:54 2022 by operator  
720016450 GRACED USO 1 -1 Thu Oct 27 15:38:54 2022 by operator  
720016450.0 GRACED LRIDATATION 1 -12138739 Thu Oct 27 17:14:18 UTC 2022 by cmccullo  
720018923.599962 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Oct 27 16:23:37 2022 by operator  
720018928.599961 GRACED MANV 4 1780.000 0.0988 0.0000 0 Thu Oct 27 16:23:55 2022 by operator  
720032423.599756 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Thu Oct 27 16:23:37 2022 by operator  
720032428.599754 GRACED MANV 4 1780.000 0.0988 0.0000 0 Thu Oct 27 16:23:55 2022 by operator  
720072243.599142 GRACED MANV 4 29.000 0.0988 0.0000 0 Thu Oct 27 16:23:55 2022 by operator  
720072922.0 GRACED IPU 3 1 720072922.0 1 Wed Oct 26 17:47:45 2022 by operator  
720072922.0 GRACEC IPU 3 1 720072922.0 1 Wed Oct 26 19:22:11 2022 by operator

720073210 GRACEC IPUR 4 -1 720073203 -1 0 Thu Oct 27 15:38:53 2022 by operator  
720073210 GRACEC USO 1 -1 Thu Oct 27 15:38:53 2022 by operator  
720073210.0 GRACEC LRIDATATION 1 -13990398 Thu Oct 27 17:12:55 UTC 2022 by cmccullo  
720073210 GRACED IPUR 4 -1 720073203 -1 0 Thu Oct 27 15:38:54 2022 by operator  
720073210 GRACED USO 1 -1 Thu Oct 27 15:38:54 2022 by operator  
720073210.0 GRACED LRIDATATION 1 -12105039 Thu Oct 27 17:15:07 UTC 2022 by cmccullo  
720224739.0 GRACED IPU 3 1 720224739.0 1 Fri Oct 28 10:53:15 2022 by operator  
720225070 GRACED IPUR 4 -1 720225059 -1 0 Sun Oct 30 20:06:08 2022 by operator  
720225070 GRACED USO 1 -1 Sun Oct 30 20:06:08 2022 by operator  
720225070.0 GRACED LRIDATATION 1 -12014840 Thu Oct 30 20:12:12 UTC 2022 by cmccullo  
720414396.0 GRACED IPU 3 1 720414396.0 1 Sun Oct 30 16:25:10 2022 by operator  
720414740 GRACED IPUR 4 -1 720414732 -1 0 Mon Oct 31 16:17:15 2022 by operator  
720414740 GRACED USO 1 -1 Mon Oct 31 16:17:15 2022 by operator  
720414740.0 GRACED LRIDATATION 1 -11902160 Mon Oct 31 16:20:33 UTC 2022 by mpaik  
720770242.0 GRACEC IPU 3 1 720770242.0 1 Thu Nov 03 19:34:50 2022 by operator  
720770242.0 GRACED IPU 3 1 720770242.0 1 Thu Nov 03 21:09:41 2022 by operator  
720770530 GRACED IPUR 4 -1 720770517 -1 0 Fri Nov 04 15:29:46 2022 by operator  
720770530 GRACED USO 1 -1 Fri Nov 04 15:29:46 2022 by operator  
720770530.0 GRACED LRIDATATION 1 -11690668 Fri Nov 4 16:59:33 UTC 2022 by mpaik  
720770540 GRACEC IPUR 4 -1 720770531 -1 0 Fri Nov 04 15:29:45 2022 by operator  
720770540 GRACEC USO 1 -1 Fri Nov 04 15:29:45 2022 by operator  
720770540.0 GRACEC LRIDATATION 1 -13579391 Fri Nov 4 16:59:33 UTC 2022 by mpaik  
720866842.0 GRACED IPU 3 1 720866842.0 1 Fri Nov 04 22:20:28 2022 by operator  
720866842.0 GRACEC IPU 3 1 720866842.0 1 Sat Nov 16 19:28:10 2024 by operator  
720867040 GRACEC IPUR 4 -1 720867034 -1 0 Sun Nov 06 02:11:40 2022 by operator  
720867040 GRACEC USO 1 -1 Sun Nov 06 02:11:40 2022 by operator  
720867040.0 GRACEC LRIDATATION 1 -13522484 Sun Nov 6 02:35:04 UTC 2022 by mpaik  
720867060 GRACED IPUR 4 -1 720867047 -1 0 Sat Nov 05 04:46:58 2022 by operator  
720867060 GRACED USO 1 -1 Sat Nov 05 04:46:58 2022 by operator

720867060.0 GRACED LRIDATATION 1 -11633265 Sun Nov 6 02:35:04 UTC 2022 by mpaik  
721134466.0 GRACED IPU 3 1 721134466.0 1 Tue Nov 08 02:00:38 2022 by operator  
721135120 GRACED IPUR 4 -1 721135110 -1 0 Tue Nov 08 16:29:56 2022 by operator  
721135120 GRACED USO 1 -1 Tue Nov 08 16:29:56 2022 by operator  
721135120.0 GRACED LRIDATATION 1 -11474183 Tue Nov 08 16:32:44 2022 by operator  
721148722.0 GRACEC IPU 3 1 721148722.0 1 Tue Nov 08 03:36:01 2022 by operator  
721148722.0 GRACED IPU 3 1 721148722.0 1 Tue Nov 08 05:11:07 2022 by operator  
721148970 GRACEC IPUR 4 -1 721148964 -1 0 Wed Nov 09 04:49:37 2022 by operator  
721148970 GRACEC USO 1 -1 Wed Nov 09 04:49:37 2022 by operator  
721148970.0 GRACEC LRIDATATION 1 -13356229 Wed Nov 09 18:50:00 2022 by cvolk  
721148970 GRACED IPUR 4 -1 721148964 -1 0 Wed Nov 09 06:25:06 2022 by operator  
721148970 GRACED USO 1 -1 Wed Nov 09 06:25:06 2022 by operator  
721148970.0 GRACED LRIDATATION 1 -11465526 Wed Nov 09 18:50:00 2022 by cvolk  
721409422.0 GRACEC IPU 3 1 721409422.0 1 Fri Nov 11 04:02:35 2022 by operator  
721409422.0 GRACED IPU 3 1 721409422.0 1 Fri Nov 11 05:37:45 2022 by operator  
721409670 GRACEC IPUR 4 -1 721409664 -1 0 Sat Nov 12 14:56:10 2022 by operator  
721409670 GRACEC USO 1 -1 Sat Nov 12 14:56:10 2022 by operator  
721409670.0 GRACEC LRIDATATION 1 -13202570 Sat Nov 12 14:56:14 2022 by operator  
721409690 GRACED IPUR 4 -1 721409675 -1 0 Sat Nov 12 03:49:19 2022 by operator  
721409690 GRACED USO 1 -1 Sat Nov 12 03:49:19 2022 by operator  
721409690.0 GRACED LRIDATATION 1 -11310341 Sat Nov 12 16:45:00 2022 by cvolk  
721801042.0 GRACEC IPU 3 1 721801042.0 1 Tue Nov 15 18:16:33 2022 by operator  
721801042.0 GRACED IPU 3 1 721801042.0 1 Tue Nov 15 19:51:39 2022 by operator  
721801380 GRACED IPUR 4 -1 721801369 -1 0 Wed Nov 16 16:26:44 2022 by operator  
721801380 GRACED USO 1 -1 Wed Nov 16 16:26:44 2022 by operator  
721801380.0 GRACED LRIDATATION 1 -11076949 Wed Nov 16 16:26:56 2022 by operator  
721801390 GRACEC IPUR 4 -1 721801382 -1 0 Wed Nov 16 16:31:54 2022 by operator  
721801390 GRACEC USO 1 -1 Wed Nov 16 16:31:54 2022 by operator  
721801390.0 GRACEC LRIDATATION 1 -12971385 Wed Nov 16 16:34:58 UTC 2022 by mpaik

721926322.0 GRACED IPU 3 1 721926322.0 1 Thu Nov 17 03:21:35 2022 by operator  
721926322.0 GRACEC IPU 3 1 721926322.0 1 Thu Nov 17 05:02:59 2022 by operator  
721926560 GRACED IPUR 4 -1 721926552 -1 0 Fri Nov 18 04:34:41 2022 by operator  
721926560 GRACED USO 1 -1 Fri Nov 18 04:34:41 2022 by operator  
721926560.0 GRACED LRIDATATION 1 -11002402 Fri Nov 18 16:19:15 UTC 2022 by mpaik  
721926620 GRACEC IPUR 4 -1 721926614 -1 0 Fri Nov 18 16:14:40 2022 by operator  
721926620 GRACEC USO 1 -1 Fri Nov 18 16:14:40 2022 by operator  
721926620.0 GRACEC LRIDATATION 1 -12897590 Fri Nov 18 16:16:47 2022 by operator  
722071350.0 GRACED IPU 3 1 722071350.0 1 Fri Nov 18 20:07:18 2022 by operator  
722071630 GRACED IPUR 4 -1 722071616 -1 0 Sat Nov 19 05:51:33 2022 by operator  
722071630 GRACED USO 1 -1 Sat Nov 19 05:51:33 2022 by operator  
722071630.0 GRACED LRIDATATION 1 -10915989 Sat Nov 19 05:51:35 2022 by operator  
722361622.0 GRACEC IPU 3 1 722361622.0 1 Tue Nov 22 04:41:29 2022 by operator  
722361622.0 GRACED IPU 3 1 722361622.0 1 Tue Nov 22 06:22:49 2022 by operator  
722361910 GRACED IPUR 4 -1 722361902 -1 0 Wed Nov 23 15:46:00 2022 by operator  
722361910 GRACED USO 1 -1 Wed Nov 23 15:46:00 2022 by operator  
722361910.0 GRACED LRIDATATION 1 -10742763 Fri Nov 18 16:16:47 2022 by cvolk  
722361910 GRACEC IPUR 4 -1 722361903 -1 0 Wed Nov 23 15:46:02 2022 by operator  
722361910 GRACEC USO 1 -1 Wed Nov 23 15:46:02 2022 by operator  
722361910.0 GRACEC LRIDATATION 1 -12640637 Fri Nov 18 16:16:47 2022 by cvolk  
722364323.599963 GRACEC MANV 4 1790.000 0.0988 0.0000 0 Wed Nov 23 15:58:26 2022 by operator  
722364328.599962 GRACED MANV 4 1780.000 0.0988 0.0000 0 Wed Nov 23 15:58:52 2022 by operator  
722406653.599309 GRACED MANV 4 16.000 0.0988 0.0000 0 Wed Nov 23 15:58:52 2022 by operator  
722424622.0 GRACED IPU 3 1 722424622.0 1 Tue Nov 22 21:55:25 2022 by operator  
722424622.0 GRACEC IPU 3 1 722424622.0 1 Tue Nov 22 23:30:13 2022 by operator  
722424940 GRACEC IPUR 4 -1 722424931 -1 0 Wed Nov 23 15:46:02 2022 by operator  
722424940 GRACEC USO 1 -1 Wed Nov 23 15:46:02 2022 by operator

722424940.0 GRACEC LRIDATATION 1 -12603432 Fri Nov 18 16:16:47 2022 by cvolk  
722425070 GRACED IPUR 4 -1 722425063 -1 0 Wed Nov 23 15:46:00 2022 by operator  
722425070 GRACED USO 1 -1 Wed Nov 23 15:46:00 2022 by operator  
722425070.0 GRACED LRIDATATION 1 -10705083 Fri Nov 18 16:16:47 2022 by cvolk  
723595886.0 GRACED IPU 3 1 723595886.0 1 Tue Dec 06 13:34:01 2022 by operator  
723596160 GRACED IPUR 4 -1 723596146 -1 0 Wed Dec 07 05:34:48 2022 by operator  
723596160 GRACED USO 1 -1 Wed Dec 07 05:34:48 2022 by operator  
723596160.0 GRACED LRIDATATION 1 -10005328 Fri Nov 18 16:16:47 2022 by cvolk  
723679342.0 GRACED IPU 3 1 723679342.0 1 Wed Dec 07 11:45:34 2022 by operator  
723679342.0 GRACEC IPU 3 1 723679342.0 1 Wed Dec 07 13:20:12 2022 by operator  
723679560 GRACED IPUR 4 -1 723679553 -1 0 Thu Dec 08 03:32:30 2022 by operator  
723679560 GRACED USO 1 -1 Thu Dec 08 03:32:30 2022 by operator  
723679560.0 GRACED LRIDATATION 1 -9955446 Thu Dec 08 03:32:38 2022 by operator  
723679560 GRACEC IPUR 4 -1 723679554 -1 0 Thu Dec 08 05:07:43 2022 by operator  
723679560 GRACEC USO 1 -1 Thu Dec 08 05:07:43 2022 by operator  
723679560.0 GRACEC LRIDATATION 1 -11862489 Thu Dec 18 17:00:00 2022 by cvolk  
723862942.0 GRACED IPU 3 1 723862942.0 1 Fri Dec 09 14:03:50 2022 by operator  
723862942.0 GRACEC IPU 3 1 723862942.0 1 Fri Dec 09 15:38:31 2022 by operator  
723863290 GRACEC IPUR 4 -1 723863283 -1 0 Sat Dec 10 17:11:41 2022 by operator  
723863290 GRACEC USO 1 -1 Sat Dec 10 17:11:41 2022 by operator  
723863290.0 GRACEC LRIDATATION 1 -11753986 Sat Dec 10 17:12:32 2022 by operator  
723863310 GRACED IPUR 4 -1 723863295 -1 0 Sat Dec 10 17:12:33 2022 by operator  
723863310 GRACED USO 1 -1 Sat Dec 10 17:12:33 2022 by operator  
723863310.0 GRACED LRIDATATION 1 -9845502 Sat Dec 10 17:12:38 2022 by operator  
724184187.0 GRACED LRIDATATION 1 1636972 Wed Dec 14 18:00:01 UTC 2022 by mpaik. LRI  
reboot  
724189829.0 GRACEC LRIDATATION 1 -19495882 Wed Dec 14 18:00:01 UTC 2022 by mpaik. LRI  
reboot  
724288222.0 GRACEC IPU 3 1 724288222.0 1 Wed Dec 14 12:19:18 2022 by operator

724288222.0 GRACED IPU 3 1 724288222.0 1 Wed Dec 14 13:54:13 2022 by operator  
724288510 GRACEC IPUR 4 -1 724288505 -1 0 Thu Dec 15 16:09:12 2022 by operator  
724288510 GRACEC USO 1 -1 Thu Dec 15 16:09:12 2022 by operator  
724288510.0 GRACEC LRIDATATION 1 -19244605 Thu Dec 15 16:11:12 2022 by operator  
724288530 GRACED IPUR 4 -1 724288524 -1 0 Thu Dec 15 16:09:16 2022 by operator  
724288530 GRACED USO 1 -1 Thu Dec 15 16:09:16 2022 by operator  
724288530.0 GRACED LRIDATATION 1 1891593 Thu Dec 15 16:57:01 UTC 2022 by mpaik  
724385048.0 GRACEC LRIDATATION 1 -17886529 Tue Jan 11 00:11:22 UTC 2023 by cmccullo  
724385048.0 GRACED LRIDATATION 1 -13554760 Tue Jan 11 00:12:45 UTC 2023 by cmccullo  
724387376.0 GRACEC LRIDATATION 1 -21863694 Fri Dec 16 16:35:37 UTC 2022 by mpaik  
724387378.0 GRACED LRIDATATION 1 -14452715 Fri Dec 16 16:35:37 UTC 2022 by mpaik  
724475122.0 GRACED IPU 3 1 724475122.0 1 Fri Dec 16 16:18:00 2022 by operator  
724475122.0 GRACEC IPU 3 1 724475122.0 1 Fri Dec 16 17:46:52 2022 by operator  
724475430 GRACEC IPUR 4 -1 724475418 -1 0 Sat Dec 17 17:23:57 2022 by operator  
724475430 GRACEC USO 1 -1 Sat Dec 17 17:23:57 2022 by operator  
724475430.0 GRACEC LRIDATATION 1 -21753202 Sat Dec 17 21:57:49 UTC 2022 by mpaik  
724475430 GRACED IPUR 4 -1 724475430 -1 0 Sat Dec 17 17:33:52 2022 by operator  
724475430 GRACED USO 1 -1 Sat Dec 17 17:33:52 2022 by operator  
724475430.0 GRACED LRIDATATION 1 -14340712 Sat Dec 17 21:57:49 UTC 2022 by mpaik  
724524196.0 GRACED IPU 3 1 724524196.0 1 Sat Dec 17 08:04:17 2022 by operator  
724524560 GRACED IPUR 4 -1 724524546 -1 0 Sun Dec 18 21:55:16 2022 by operator  
724524560 GRACED USO 1 -1 Sun Dec 18 21:55:16 2022 by operator  
724524560.0 GRACED LRIDATATION 1 -14311287 Sun Dec 18 22:32:35 UTC 2022 by mpaik  
724870220.0 GRACEC IPU 3 1 724870220.0 1 Wed Dec 28 18:43:32 2022 by operator  
724870222.0 GRACED IPU 3 1 724870222.0 1 Wed Dec 28 18:44:08 2022 by operator  
724870630 GRACED IPUR 4 -1 724870624 -1 0 Sat Dec 24 01:50:15 2022 by operator  
724870630 GRACED USO 1 -1 Sat Dec 24 01:50:15 2022 by operator  
724870630.0 GRACED LRIDATATION 1 -14103780 Sat Dec 24 02:03:40 2022 by cmccullo  
724870720 GRACEC IPUR 4 -1 724870713 -1 0 Sat Dec 24 01:50:14 2022 by operator

724870720 GRACEC USO 1 -1 Sat Dec 24 01:50:14 2022 by operator  
724870720.0 GRACEC LRIDATATION 1 -21519510 Sat Dec 24 01:58:50 UTC 2022 by cmccullo  
725803200.0 GRACED LRIDATATION 1 -11223010 Tue Jan 02 21:00:00 UTC 2022 by cvolk  
726722722.0 GRACED IPU 3 1 726722722.0 1 Wed Jan 11 15:58:53 2023 by operator  
726722722.0 GRACEC IPU 3 1 726722722.0 1 Wed Jan 11 17:33:51 2023 by operator  
726723020 GRACEC IPUR 4 -1 726723012 -1 0 Thu Jan 12 06:23:44 2023 by operator  
726723020 GRACEC USO 1 -1 Thu Jan 12 06:23:44 2023 by operator  
726723020 GRACED IPUR 4 -1 726723011 -1 0 Thu Jan 12 06:24:18 2023 by operator  
726723020 GRACED USO 1 -1 Thu Jan 12 06:24:18 2023 by operator  
726723020.0 GRACED LRIDATATION 1 -10110144 Thu Jan 12 06:30:03 2023 by operator  
726723020.0 GRACEC LRIDATATION 1 -20423667 Fri Jan 13 04:17:42 2023 by operator  
727456300.0 GRACED IPU 3 1 727456300.0 1 Fri Jan 20 04:49:46 2023 by operator  
727456710 GRACED IPUR 4 -1 727456704 -1 0 Sun Jan 22 02:37:07 2023 by operator  
727456710 GRACED USO 1 -1 Sun Jan 22 02:37:07 2023 by operator  
727456710.0 GRACED LRIDATATION 1 -9668306 Sun Jan 22 18:13:29 2023 by operator  
728062342.0 GRACEC IPU 3 1 728062342.0 1 Fri Jan 27 05:21:26 2023 by operator  
728062342.0 GRACED IPU 3 1 728062342.0 1 Fri Jan 27 06:50:04 2023 by operator  
728062550 GRACED IPUR 4 -1 728062536 -1 0 Sat Jan 28 17:22:38 2023 by operator  
728062550 GRACED USO 1 -1 Sat Jan 28 17:22:38 2023 by operator  
728062710 GRACEC IPUR 4 -1 728062696 -1 0 Sat Jan 28 17:20:27 2023 by operator  
728062710 GRACEC USO 1 -1 Sat Jan 28 17:20:27 2023 by operator  
728100983.0 GRACEC IPU 3 1 728100983.0 1 Fri Jan 27 14:27:08 2023 by operator  
728101290 GRACEC IPUR 4 -1 728101283 -1 0 Sat Jan 28 17:20:27 2023 by operator  
728101290 GRACEC USO 1 -1 Sat Jan 28 17:20:27 2023 by operator  
728101290.0 GRACEC LRIDATATION 1 -19600324 Sun Jan 29 04:40:24 2023 by operator  
728121790.0 GRACED IPU 3 1 728121790.0 1 Fri Jan 27 22:42:43 2023 by operator  
728122160 GRACED IPUR 4 -1 728122149 -1 0 Sat Jan 28 17:22:38 2023 by operator  
728122160 GRACED USO 1 -1 Sat Jan 28 17:22:38 2023 by operator  
728122160.0 GRACED LRIDATATION 1 -9266890 Sun Jan 29 06:16:15 2023 by operator

728418630.595368 GRACED MANV 4 36.000 0.0988 0.0000 0 Wed Feb 01 16:58:53 2023 by operator

728713882.0 GRACED IPU 3 1 728713882.0 1 Fri Feb 03 18:20:21 2023 by operator

728713882.0 GRACEC IPU 3 1 728713882.0 1 Fri Feb 03 19:55:27 2023 by operator

728714130 GRACED IPUR 4 -1 728714123 -1 0 Sat Feb 04 03:57:42 2023 by operator

728714130 GRACED USO 1 -1 Sat Feb 04 03:57:42 2023 by operator

728714130 GRACEC IPUR 4 -1 728714123 -1 0 Sat Feb 04 05:27:35 2023 by operator

728714130 GRACEC USO 1 -1 Sat Feb 04 05:27:35 2023 by operator

728714130.0 GRACEC LRIDATATION 1 -19244468 Sun Feb 05 03:31:54 2023 by operator

728814143.0 GRACED IPU 3 1 728814143.0 1 Sat Feb 04 22:44:37 2023 by operator

728814360 GRACED IPUR 4 -1 728814347 -1 0 Sun Feb 05 04:59:14 2023 by operator

728814360 GRACED USO 1 -1 Sun Feb 05 04:59:14 2023 by operator

728814360.0 GRACED LRIDATATION 1 -8848692 Mon Feb 06 06:18:14 2023 by operator

729898342.0 GRACED IPU 3 1 729898342.0 1 Fri Feb 17 09:58:53 2023 by operator

729898342.0 GRACEC IPU 3 1 729898342.0 1 Fri Feb 17 11:34:59 2023 by operator

729898640 GRACEC IPUR 4 -1 729898632 -1 0 Sat Feb 18 16:19:54 2023 by operator

729898640 GRACEC USO 1 -1 Sat Feb 18 16:19:54 2023 by operator

729898640.0 GRACEC LRIDATATION 1 -18542512 Sat Feb 18 16:21:10 2023 by operator

729898640 GRACED IPUR 4 -1 729898626 -1 0 Sat Feb 18 16:21:11 2023 by operator

729898640 GRACED USO 1 -1 Sat Feb 18 16:21:11 2023 by operator

729898640.0 GRACED LRIDATATION 1 -8192551 Sat Feb 18 16:21:11 2023 by operator

730900800 GRACEC LRI 1 1 GRACE-C switched to transponder Mar 27 17:05:04 by cmccullo

730900800 GRACED LRI 1 0 GRACE-D switched to master Mar 27 17:05:04 by cmccullo

730900800 GRACEC LRIDATATION 1 -19755515 Wed Mar 29 15:45:36 2023 by cmccullo

730900800 GRACED LRIDATATION 1 -8192605 Wed Mar 29 15:46:12 2023 by cmccullo

730911622.0 GRACEC IPU 3 1 730911622.0 1 Wed Mar 01 03:49:50 2023 by operator

730911622.0 GRACED IPU 3 1 730911622.0 1 Wed Mar 01 05:38:28 2023 by operator

730911950 GRACED IPUR 4 -1 730911945 -1 0 Thu Mar 02 16:09:15 2023 by operator

730911950 GRACED USO 1 -1 Thu Mar 02 16:09:15 2023 by operator

730911950 GRACEC IPUR 4 -1 730911945 -1 0 Thu Mar 02 16:09:15 2023 by operator  
730911950 GRACEC USO 1 -1 Thu Mar 02 16:09:15 2023 by operator  
730911950.0 GRACED LRIDATATION 1 -7578236 Thu Mar 02 16:30:12 2023 by operator  
730911950.0 GRACEC LRIDATATION 1 -19154663 Fri Mar 03 17:36:51 2023 by operator  
731713642.0 GRACEC IPU 3 1 731713642.0 1 Fri Mar 10 11:10:27 2023 by operator  
731713642.0 GRACED IPU 3 1 731713642.0 1 Fri Mar 10 12:54:10 2023 by operator  
731713980 GRACEC IPUR 4 -1 731713972 -1 0 Sat Mar 11 22:24:24 2023 by operator  
731713980 GRACEC USO 1 -1 Sat Mar 11 22:24:24 2023 by operator  
731713980.0 GRACEC LRIDATATION 1 -18678979 Sun Mar 12 01:02:05 UTC 2023 by mpaik  
731714120 GRACED IPUR 4 -1 731714110 -1 0 Sat Mar 11 22:29:14 2023 by operator  
731714120 GRACED USO 1 -1 Sat Mar 11 22:29:14 2023 by operator  
731714120.0 GRACED LRIDATATION 1 -7091086 Sun Mar 12 01:02:05 UTC 2023 by mpaik  
732159453.0 GRACED IPU 3 1 732159453.0 1 Wed Mar 15 15:49:28 2023 by operator  
732159750 GRACED IPUR 4 -1 732159741 -1 0 Thu Mar 16 20:59:57 2023 by operator  
732159750 GRACED USO 1 -1 Thu Mar 16 20:59:57 2023 by operator  
732159750.0 GRACED LRIDATATION 1 -6820132 Sun Mar 16 23:00:00 UTC 2023 by cvolk  
732727330.0 GRACEC LRIDATATION 1 -18678979 Wed Mar 29 16:17:52 UTC 2023 by cmccullo  
732727330.0 GRACED LRIDATATION 1 -6820132 Thu Mar 30 13:19:02 UTC 2023 by cmccullo  
734135542.0 GRACED IPU 3 1 734135542.0 1 Fri Apr 07 11:39:33 2023 by operator  
734135542.0 GRACEC IPU 3 1 734135542.0 1 Fri Apr 07 13:08:49 2023 by operator  
734135770 GRACED IPUR 4 -1 734135758 -1 0 Sat Apr 08 03:26:08 2023 by operator  
734135770 GRACED USO 1 -1 Sat Apr 08 03:26:08 2023 by operator  
734135770.0 GRACED LRIDATATION 1 -5616501 Sun Apr 9 03:17:24 UTC 2023 by mpaik  
734135780 GRACEC IPUR 4 -1 734135767 -1 0 Sat Apr 08 04:55:07 2023 by operator  
734135780 GRACEC USO 1 -1 Sat Apr 08 04:55:07 2023 by operator  
734135780.0 GRACEC LRIDATATION 1 -17241864 Sun Apr 9 03:17:24 UTC 2023 by mpaik  
734728642.0 GRACEC IPU 3 1 734728642.0 1 Fri Apr 14 08:48:43 2023 by operator  
734728642.0 GRACED IPU 3 1 734728642.0 1 Fri Apr 14 10:30:09 2023 by operator  
734728960 GRACED IPUR 4 -1 734728953 -1 0 Sun Apr 16 02:13:11 2023 by operator

734728960 GRACED USO 1 -1 Sun Apr 16 02:13:11 2023 by operator  
734728960.0 GRACED LRIDATATION 1 -5254361 Sun Apr 16 03:30:28 2023 by operator  
734728970 GRACEC IPUR 4 -1 734728959 -1 0 Sun Apr 16 02:13:24 2023 by operator  
734728970 GRACEC USO 1 -1 Sun Apr 16 02:13:24 2023 by operator  
734728970.0 GRACEC LRIDATATION 1 -16889673 Sun Apr 16 05:00:39 2023 by operator  
735562324.0 GRACED IPU 3 1 735562324.0 1 Mon Apr 24 00:17:24 2023 by operator  
735562580 GRACED IPUR 4 -1 735562572 -1 0 Mon Apr 24 14:09:54 2023 by operator  
735562580 GRACED USO 1 -1 Mon Apr 24 14:09:54 2023 by operator  
735562580.0 GRACED LRIDATATION 1 -4744741 Sun Apr 16 05:00:39 2023 by cvolk  
735982522.0 GRACEC IPU 3 1 735982522.0 1 Fri Apr 28 22:22:16 2023 by operator  
735982890 GRACEC IPUR 4 -1 735982881 -1 0 Sat Apr 29 14:56:25 2023 by operator  
735982890.0 GRACEC LRIDATATION 1 -16145168 Sun Apr 16 05:00:39 2023 by cvolk  
735982890 GRACEC USO 1 -1 Sat Apr 29 14:56:25 2023 by operator  
736449902.0 GRACEC LRIDATATION 1 -16145168 Wed May 17 16:59:26 2023 by cmccullo  
736449902.0 GRACED LRIDATATION 1 -4744741 Wed May 17 16:59:26 2023 by cmccullo  
737537649.0 GRACEC LRIDATATION 1 -2551272 Wed May 17 14:56:43 UTC 2023 by mpaik  
737558340.0 GRACEC LRIDATATION 1 -5016274 Thu May 18 17:55:13 UTC 2023 by mpaik  
737558340.0 GRACED LRIDATATION 1 551110 Thu May 18 17:55:13 UTC 2023 by mpaik  
737764342.0 GRACED IPU 3 1 737764342.0 1 Fri May 19 10:55:36 2023 by operator  
737764342.0 GRACEC IPU 3 1 737764342.0 1 Fri May 19 12:37:10 2023 by operator  
737764620 GRACEC IPUR 4 -1 737764610 -1 0 Sat May 20 15:26:52 2023 by operator  
737764620 GRACEC USO 1 -1 Sat May 20 15:26:52 2023 by operator  
737764620.0 GRACEC LRIDATATION 1 -3958160 Sat May 20 18:55:18 UTC 2023 by mpaik  
737764740 GRACED IPUR 4 -1 737764729 -1 0 Sat May 20 18:55:18 UTC 2023 by mpaik  
737764740 GRACED USO 1 -1 Sat May 20 18:55:18 UTC 2023 by mpaik  
737764740.0 GRACED LRIDATATION 1 1900935 Sat May 20 18:55:18 UTC 2023 by mpaik  
739033522.0 GRACED IPU 3 1 739033522.0 1 Sat Jun 03 03:32:20 2023 by operator  
739033522.0 GRACEC IPU 3 1 739033522.0 1 Sat Jun 03 05:01:37 2023 by operator  
739033840 GRACEC IPUR 4 -1 739033830 -1 0 Sun Jun 04 23:15:12 2023 by operator

739033840 GRACEC USO 1 -1 Sun Jun 04 23:15:12 2023 by operator  
739033840.0 GRACEC LRIDATATION 1 -3204320 Mon Jun 5 02:43:05 UTC 2023 by mpaik  
739033840 GRACED IPUR 4 -1 739033829 -1 0 Sun Jun 04 23:16:22 2023 by operator  
739033840 GRACED USO 1 -1 Sun Jun 04 23:16:22 2023 by operator  
739033840.0 GRACED LRIDATATION 1 2681382 Mon Jun 5 02:43:05 UTC 2023 by mpaik  
739610242.0 GRACEC IPU 3 1 739610242.0 1 Sat Jun 10 04:55:45 2023 by operator  
739610242.0 GRACED IPU 3 1 739610242.0 1 Sat Jun 10 04:55:45 2023 by operator  
739610920 GRACEC IPUR 4 -1 739610906 -1 0 Sat Jun 10 19:27:46 2023 by operator  
739610920 GRACEC USO 1 -1 Sat Jun 10 19:27:46 2023 by operator  
739610920 GRACED IPUR 4 -1 739610906 -1 0 Sat Jun 10 19:27:47 2023 by operator  
739610920 GRACED USO 1 -1 Sat Jun 10 19:27:47 2023 by operator  
739610920.0 GRACEC LRIDATATION 1 -2861683 Sat Jun 10 19:27:50 2023 by operator  
739610920.0 GRACED LRIDATATION 1 3036876 Sat Jun 10 19:27:54 2023 by operator  
740096555.592254 GRACED MANV 4 4.000 0.0988 0.0000 0 Mon Jun 26 01:54:34 2023 by operator  
741417442.0 GRACEC IPU 3 1 741417442.0 1 Fri Jun 30 18:02:15 2023 by operator  
741417442.0 GRACED IPU 3 1 741417442.0 1 Fri Jun 30 19:30:01 2023 by operator  
741418120 GRACEC IPUR 4 -1 741418114 -1 0 Sat Jul 01 17:50:11 2023 by operator  
741418120 GRACEC USO 1 -1 Sat Jul 01 17:50:11 2023 by operator  
741418120.0 GRACEC LRIDATATION 1 -1787901 Sat Jul 1 23:51:34 UTC 2023 by mpaik  
741418120.0 GRACEC LRIDATATION 1 -13817728 Sun Jul 02 04:37:19 2023 by operator  
741418310 GRACED IPUR 4 -1 741418298 -1 0 Sat Jul 01 17:55:12 2023 by operator  
741418310 GRACED USO 1 -1 Sat Jul 01 17:55:12 2023 by operator  
741418310.0 GRACED LRIDATATION 1 4152335 Sat Jul 1 23:51:34 UTC 2023 by mpaik  
741993442.0 GRACEC IPU 3 1 741993442.0 1 Fri Jul 07 10:33:15 2023 by operator  
741993442.0 GRACED IPU 3 1 741993442.0 1 Fri Jul 07 12:07:07 2023 by operator  
741993740 GRACEC IPUR 4 -1 741993731 -1 0 Sat Jul 08 20:02:30 2023 by operator  
741993740 GRACEC USO 1 -1 Sat Jul 08 20:02:30 2023 by operator  
741993740.0 GRACEC LRIDATATION 1 -13475708 Sat Jul 08 20:06:11 2023 by operator  
741993750 GRACED IPUR 4 -1 741993743 -1 0 Sat Jul 08 20:02:28 2023 by operator

741993750 GRACED USO 1 -1 Sat Jul 08 20:02:28 2023 by operator  
741993750.0 GRACED LRIDATATION 1 4508230 Sat Jul 08 20:06:11 2023 by cvolk  
742614442.0 GRACEC IPU 3 1 742614442.0 1 Fri Jul 14 15:44:08 2023 by operator  
742614442.0 GRACED IPU 3 1 742614442.0 1 Fri Jul 14 17:51:17 2023 by operator  
742614780 GRACED IPUR 4 -1 742614772 -1 0 Sat Jul 15 14:45:10 2023 by operator  
742614780 GRACED USO 1 -1 Sat Jul 15 14:45:10 2023 by operator  
742614790 GRACEC IPUR 4 -1 742614777 -1 0 Sat Jul 15 14:44:11 2023 by operator  
742614790 GRACEC USO 1 -1 Sat Jul 15 14:44:11 2023 by operator  
742665082.0 GRACEC IPU 3 1 742665082.0 1 Sat Jul 15 08:21:00 2023 by operator  
742665082.0 GRACED IPU 3 1 742665082.0 1 Sat Jul 15 08:30:09 2023 by operator  
742665410 GRACEC IPUR 4 -1 742665403 -1 0 Thu Jul 20 15:47:24 2023 by operator  
742665410 GRACEC USO 1 -1 Thu Jul 20 15:47:24 2023 by operator  
742665440 GRACED IPUR 4 -1 742665432 -1 0 Thu Jul 20 15:51:59 2023 by operator  
742665440 GRACED USO 1 -1 Thu Jul 20 15:51:59 2023 by operator  
742827953.0 GRACEC IPU 3 1 742827953.0 1 Tue Jul 18 06:48:36 2023 by operator  
742828230 GRACEC IPUR 4 -1 742828223 -1 0 Tue Jul 18 06:48:06 2023 by operator  
742828230 GRACEC USO 1 -1 Tue Jul 18 06:48:06 2023 by operator  
742828230.0 GRACEC LRIDATATION 1 -12979771 Wed Jul 19 05:51:05 2023 by operator  
743702349.583374 GRACED MANV 4 46.000 0.0988 0.0000 0 Fri Jul 28 20:26:26 2023 by operator  
745949782.0 GRACEC IPU 3 1 745949782.0 1 Tue Aug 22 04:42:26 2023 by cjf\_operator  
745949782.0 GRACED IPU 3 1 745949782.0 1 Tue Aug 22 15:06:39 2023 by cjf\_operator  
745950030 GRACED IPUR 4 -1 745950017 -1 0 Wed Aug 23 04:24:09 2023 by cjf\_operator  
745950030 GRACED USO 1 -1 Wed Aug 23 04:24:09 2023 by cjf\_operator  
745950030.0 GRACED LRIDATATION 1 6963918 Thu Aug 24 05:31:25 2023 by cjf\_operator  
745950040 GRACEC IPUR 4 -1 745950029 -1 0 Wed Aug 23 14:10:00 2023 by cjf\_operator  
745950040 GRACEC USO 1 -1 Wed Aug 23 14:10:00 2023 by cjf\_operator  
745950040.0 GRACEC LRIDATATION 1 -11124381 Thu Aug 24 03:55:07 2023 by cjf\_operator  
746215522.0 GRACEC IPU 3 1 746215522.0 1 Fri Aug 25 15:06:59 2023 by cjf\_operator  
746215522.0 GRACED IPU 3 1 746215522.0 1 Fri Aug 25 15:06:59 2023 by cjf\_operator

746215810 GRACED IPUR 4 -1 746215798 -1 0 Sat Aug 26 15:37:41 2023 by cjf\_operator  
746215810 GRACED USO 1 -1 Sat Aug 26 15:37:41 2023 by cjf\_operator  
746215860 GRACEC IPUR 4 -1 746215853 -1 0 Sat Aug 26 15:37:50 2023 by cjf\_operator  
746215860 GRACEC USO 1 -1 Sat Aug 26 15:37:50 2023 by cjf\_operator  
746215860.0 GRACEC LRIDATATION 1 -10966327 Sat Aug 26 15:37:51 2023 by cjf\_operator  
746329101.0 GRACED IPU 3 1 746329101.0 1 Sat Aug 26 15:34:14 2023 by operator  
746329830 GRACED IPUR 4 -1 746329818 -1 0 Sun Aug 27 23:18:31 2023 by cjf\_operator  
746329830 GRACED USO 1 -1 Sun Aug 27 23:18:31 2023 by cjf\_operator  
746329830.0 GRACED LRIDATATION 1 7200478 Mon Aug 28 03:53:19 2023 by cjf\_operator  
746419430.0 GRACEC IPU 3 1 746419430.0 1 Sun Aug 27 23:04:39 2023 by operator  
746419890 GRACEC IPUR 4 -1 746419876 -1 0 Mon Aug 28 15:49:11 2023 by cjf\_operator  
746419890 GRACEC USO 1 -1 Mon Aug 28 15:49:11 2023 by cjf\_operator  
746419890.0 GRACEC LRIDATATION 1 -10845173 Mon Aug 28 03:53:19 2023 by cvolk  
746487910.0 GRACEC IPU 3 1 746487910.0 1 Mon Aug 28 15:07:05 2023 by cjf\_operator  
746488200 GRACEC IPUR 4 -1 746488186 -1 0 Tue Aug 29 15:37:29 2023 by cjf\_operator  
746488200 GRACEC USO 1 -1 Tue Aug 29 15:37:29 2023 by cjf\_operator  
746488200.0 GRACEC LRIDATATION 1 -10804587 Mon Aug 28 03:53:19 2023 by cvolk  
746847922.0 GRACEC IPU 3 1 746847922.0 1 Mon Sep 18 15:09:38 2023 by operator  
746847922.0 GRACED IPU 3 1 746847922.0 1 Mon Sep 18 15:10:37 2023 by operator  
746848220 GRACED IPUR 4 -1 746848210 -1 0 Sat Sep 02 17:09:57 2023 by cjf\_operator  
746848220 GRACED USO 1 -1 Sat Sep 02 17:09:57 2023 by cjf\_operator  
746848220.0 GRACED LRIDATATION 1 7523681 Mon Aug 28 03:53:19 2023 by cvolk  
746848220 GRACEC IPUR 4 -1 746848208 -1 0 Sat Sep 02 17:09:59 2023 by cjf\_operator  
746848220 GRACEC USO 1 -1 Sat Sep 02 17:09:59 2023 by cjf\_operator  
746848220.0 GRACEC LRIDATATION 1 -10590722 Mon Aug 28 03:53:19 2023 by cvolk  
747431422.0 GRACEC IPU 3 1 747431422.0 1 Fri Sep 08 08:54:07 2023 by cjf\_operator  
747431422.0 GRACED IPU 3 1 747431422.0 1 Fri Sep 08 10:34:16 2023 by cjf\_operator  
747431650 GRACED IPUR 4 -1 747431636 -1 0 Sat Sep 09 05:23:13 2023 by cjf\_operator  
747431650 GRACED USO 1 -1 Sat Sep 09 05:23:13 2023 by cjf\_operator

747431650.0 GRACED LRIDATATION 1 7887706 Sun Sep 10 03:25:26 2023 by cjf\_operator  
747431670 GRACEC IPUR 4 -1 747431660 -1 0 Sat Sep 09 03:48:03 2023 by cjf\_operator  
747431670 GRACEC USO 1 -1 Sat Sep 09 03:48:03 2023 by cjf\_operator  
747431670.0 GRACEC LRIDATATION 1 -10243939 Sun Sep 10 04:56:30 2023 by cjf\_operator  
748050442.0 GRACED IPU 3 1 748050442.0 1 Fri Sep 15 12:24:19 2023 by cjf\_operator  
748050442.0 GRACEC IPU 3 1 748050442.0 1 Fri Sep 15 13:59:33 2023 by cjf\_operator  
748050720 GRACED IPUR 4 -1 748050713 -1 0 Sat Sep 16 14:38:19 2023 by cjf\_operator  
748050720 GRACED USO 1 -1 Sat Sep 16 14:38:19 2023 by cjf\_operator  
748050720.0 GRACED LRIDATATION 1 8274398 Sat Sep 16 15:00:05 2023 by cjf\_operator  
748050730 GRACEC IPUR 4 -1 748050719 -1 0 Sat Sep 16 14:38:18 2023 by cjf\_operator  
748050730 GRACEC USO 1 -1 Sat Sep 16 14:38:18 2023 by cjf\_operator  
748050730.0 GRACEC LRIDATATION 1 -9876093 Sun Sep 17 03:44:16 2023 by cjf\_operator  
748856490.0 GRACED IPU 3 1 748856490.0 1 Sun Sep 24 22:37:39 2023 by cjf\_operator  
748856840 GRACED IPUR 4 -1 748856833 -1 0 Mon Sep 25 15:26:59 2023 by cjf\_operator  
748856840 GRACED USO 1 -1 Mon Sep 25 15:26:59 2023 by cjf\_operator  
748856840.0 GRACED LRIDATATION 1 8778394 Tue Sep 26 06:19:50 2023 by cjf\_operator  
749880142.0 GRACEC IPU 3 1 749880142.0 1 Fri Oct 06 16:21:49 2023 by cjf\_operator  
749880142.0 GRACED IPU 3 1 749880142.0 1 Fri Oct 06 18:02:56 2023 by cjf\_operator  
749880370 GRACEC IPUR 4 -1 749880355 -1 0 Sat Oct 07 05:02:49 2023 by cjf\_operator  
749880370 GRACEC USO 1 -1 Sat Oct 07 05:02:49 2023 by cjf\_operator  
749880370.0 GRACEC LRIDATATION 1 -8788971 Sun Oct 08 06:13:07 2023 by cjf\_operator  
749880440 GRACED IPUR 4 -1 749880429 -1 0 Sat Oct 07 16:22:57 2023 by cjf\_operator  
749880440 GRACED USO 1 -1 Sat Oct 07 16:22:57 2023 by cjf\_operator  
749880440.0 GRACED LRIDATATION 1 9419554 Sat Oct 07 16:22:57 2023 by cjf\_operator  
750493042.0 GRACED IPU 3 1 750493042.0 1 Fri Oct 13 19:37:16 2023 by cjf\_operator  
750493042.0 GRACEC IPU 3 1 750493042.0 1 Fri Oct 13 21:18:51 2023 by cjf\_operator  
750493360 GRACED IPUR 4 -1 750493346 -1 0 Sat Oct 14 14:58:36 2023 by cjf\_operator  
750493360 GRACED USO 1 -1 Sat Oct 14 14:58:36 2023 by cjf\_operator  
750493360.0 GRACED LRIDATATION 1 9803859 Sat Oct 14 15:00:04 2023 by cjf\_operator

750493430 GRACEC IPUR 4 -1 750493420 -1 0 Sat Oct 14 14:58:37 2023 by cjf\_operator  
750493430 GRACEC USO 1 -1 Sat Oct 14 14:58:37 2023 by cjf\_operator  
750493430.0 GRACEC LRIDATATION 1 -8424754 Sun Oct 15 04:59:22 2023 by cjf\_operator  
750948210.592615 GRACED MANV 4 66.000 0.0988 0.0000 0 Fri Oct 20 18:07:41 2023 by operator  
751045641.0 GRACED IPU 3 1 751045641.0 1 Fri Oct 20 06:08:34 2023 by cjf\_operator  
751045642.0 GRACEC IPU 3 1 751045642.0 1 Fri Oct 20 04:27:34 2023 by cjf\_operator  
751045890 GRACED IPUR 4 -1 751045879 -1 0 Sat Oct 21 04:05:09 2023 by cjf\_operator  
751045890 GRACED USO 1 -1 Sat Oct 21 04:05:09 2023 by cjf\_operator  
751045890 GRACEC IPUR 4 -1 751045879 -1 0 Sat Oct 21 05:40:42 2023 by cjf\_operator  
751045890 GRACEC USO 1 -1 Sat Oct 21 05:40:42 2023 by cjf\_operator  
751045890.0 GRACEC LRIDATATION 1 -8096605 Sun Oct 22 03:36:41 2023 by cjf\_operator  
751045890.0 GRACED LRIDATATION 1 10150610 Sun Oct 22 05:12:32 2023 by cjf\_operator  
752274141.0 GRACED IPU 3 1 752274141.0 1 Fri Nov 03 09:40:38 2023 by cjf\_operator  
752274142.0 GRACEC IPU 3 1 752274142.0 1 Fri Nov 03 11:14:26 2023 by cjf\_operator  
752274450 GRACED IPUR 4 -1 752274436 -1 0 Mon Nov 06 15:34:59 2023 by cjf\_operator  
752274450 GRACED USO 1 -1 Mon Nov 06 15:34:59 2023 by cjf\_operator  
752275030 GRACEC IPUR 4 -1 752275016 -1 0 Mon Nov 06 16:00:04 2023 by cjf\_operator  
752275030 GRACEC USO 1 -1 Mon Nov 06 16:00:04 2023 by cjf\_operator  
752399260.0 GRACED IPU 3 1 752399260.0 1 Sat Nov 04 20:16:59 2023 by cjf\_operator  
752399570 GRACED IPUR 4 -1 752399564 -1 0 Sun Nov 05 22:42:34 2023 by cjf\_operator  
752399570 GRACED USO 1 -1 Sun Nov 05 22:42:34 2023 by cjf\_operator  
752399570.0 GRACED LRIDATATION 1 11001525 Mon Nov 06 03:47:52 2023 by cjf\_operator  
754525942.0 GRACEC IPU 3 1 754525942.0 1 Wed Nov 29 16:56:26 2023 by operator  
754525942.0 GRACED IPU 3 1 754525942.0 1 Wed Nov 29 16:56:26 2023 by operator  
754526480 GRACEC IPUR 4 -1 754526469 -1 0 Thu Nov 30 17:15:46 2023 by operator  
754526480 GRACEC USO 1 -1 Thu Nov 30 17:15:46 2023 by operator  
754526480.0 GRACEC LRIDATATION 1 -6029865 Fri Dec 01 06:04:38 2023 by cjf\_operator  
754526500 GRACED IPUR 4 -1 754526485 -1 0 Thu Nov 30 17:15:45 2023 by operator  
754526500 GRACED USO 1 -1 Thu Nov 30 17:15:45 2023 by operator

754526500.0 GRACED LRIDATATION 1 12342029 Thu Nov 30 17:30:05 2023 by cjf\_operator  
754672522.0 GRACED IPU 3 1 754672522.0 1 Fri Dec 01 04:33:36 2023 by operator  
754672522.0 GRACEC IPU 3 1 754672522.0 1 Fri Dec 01 06:01:18 2023 by operator  
754672770 GRACED IPUR 4 -1 754672760 -1 0 Mon Dec 11 17:32:33 2023 by mpaik  
754672770 GRACED USO 1 -1 Mon Dec 11 17:32:33 2023 by mpaik  
754672830 GRACEC IPUR 4 -1 754672820 -1 0 Sat Dec 02 15:41:07 2023 by cjf\_operator  
754672830 GRACEC USO 1 -1 Sat Dec 02 15:41:07 2023 by cjf\_operator  
754672830.0 GRACEC LRIDATATION 1 -5943014 Sun Dec 03 05:15:54 2023 by cjf\_operator  
755189126.591561 GRACED MANV 4 74.000 0.0988 0.0000 0 Fri Dec 08 22:53:50 2023 by operator  
755292922.0 GRACED IPU 3 1 755292922.0 1 Fri Dec 08 09:21:57 2023 by cjf\_operator  
755292922.0 GRACEC IPU 3 1 755292922.0 1 Fri Dec 08 10:55:33 2023 by cjf\_operator  
755293210 GRACED IPUR 4 -1 755293196 -1 0 Sat Dec 09 14:41:16 2023 by cjf\_operator  
755293210 GRACED USO 1 -1 Sat Dec 09 14:41:16 2023 by cjf\_operator  
755293210.0 GRACED LRIDATATION 1 12826296 Sun Dec 10 05:30:37 2023 by cjf\_operator  
755293240 GRACEC IPUR 4 -1 755293227 -1 0 Sat Dec 09 14:41:15 2023 by cjf\_operator  
755293240 GRACEC USO 1 -1 Sat Dec 09 14:41:15 2023 by cjf\_operator  
755293240.0 GRACEC LRIDATATION 1 -5574807 Sun Dec 10 03:54:30 2023 by cjf\_operator  
755889622.0 GRACEC IPU 3 1 755889622.0 1 Fri Dec 15 06:23:45 2023 by cjf\_operator  
755889622.0 GRACED IPU 3 1 755889622.0 1 Fri Dec 15 08:03:29 2023 by cjf\_operator  
755889830 GRACEC IPUR 4 -1 755889819 -1 0 Sat Dec 16 04:30:52 2023 by cjf\_operator  
755889830 GRACEC USO 1 -1 Sat Dec 16 04:30:52 2023 by cjf\_operator  
755889830.0 GRACEC LRIDATATION 1 -12043532 Sun Dec 17 05:46:28 2023 by cjf\_operator  
755889840 GRACED IPUR 4 -1 755889834 -1 0 Sat Dec 16 06:02:15 2023 by cjf\_operator  
755889840 GRACED USO 1 -1 Sat Dec 16 06:02:15 2023 by cjf\_operator  
755889840.0 GRACED LRIDATATION 1 -1280716 Sun Dec 17 04:05:23 2023 by cjf\_operator  
756486320.0 GRACEC IPU 3 1 756486320.0 1 Fri Dec 22 05:12:30 2023 by cjf\_operator  
756486322.0 GRACED IPU 3 1 756486322.0 1 Fri Dec 22 03:31:59 2023 by cjf\_operator  
756486630 GRACEC IPUR 4 -1 756486618 -1 0 Sat Dec 23 15:39:44 2023 by cjf\_operator  
756486630 GRACEC USO 1 -1 Sat Dec 23 15:39:44 2023 by cjf\_operator

756486630.0 GRACEC LRIDATATION 1 -11689522 Sat Dec 23 15:39:46 2023 by cjf\_operator  
756486790 GRACED IPUR 4 -1 756486779 -1 0 Sat Dec 23 15:39:46 2023 by cjf\_operator  
756486790 GRACED USO 1 -1 Sat Dec 23 15:39:46 2023 by cjf\_operator  
756486790.0 GRACED LRIDATATION 1 -902839 Sat Dec 23 15:39:46 2023 by cjf\_operator  
757656248.580822 GRACED MANV 4 81.000 0.0988 0.0000 0 Fri Jan 05 17:36:54 2024 by operator  
757756042.0 GRACEC IPU 3 1 757756042.0 1 Fri Jan 05 21:17:26 2024 by operator  
757756042.0 GRACED IPU 3 1 757756042.0 1 Fri Jan 05 22:48:37 2024 by operator  
757756490 GRACEC IPUR 4 -1 757756480 -1 0 Tue Jan 16 19:19:50 UTC 2024 by mpaik  
757756490 GRACED IPUR 4 -1 757756479 -1 0 Tue Jan 16 19:19:50 UTC 2024 by mpaik  
757809618.599127 GRACED MANV 4 74.000 0.0988 0.0000 0 Sun Jan 07 19:53:22 2024 by operator  
758300482.0 GRACEC IPU 3 1 758300482.0 1 Fri Jan 12 04:11:45 2024 by cjf\_operator  
758300482.0 GRACED IPU 3 1 758300482.0 1 Fri Jan 12 05:41:05 2024 by cjf\_operator  
758300700 GRACEC IPUR 4 -1 758300694 -1 0 Sat Jan 13 05:17:19 2024 by cjf\_operator  
758300700 GRACEC USO 1 -1 Sat Jan 13 05:17:19 2024 by cjf\_operator  
758300700.0 GRACEC LRIDATATION 1 -10613397 Sun Jan 14 03:22:50 2024 by cjf\_operator  
758300880 GRACED IPUR 4 -1 758300865 -1 0 Sat Jan 13 16:38:22 2024 by cjf\_operator  
758300880 GRACED USO 1 -1 Sat Jan 13 16:38:22 2024 by cjf\_operator  
758300880.0 GRACED LRIDATATION 1 247666 Sun Jan 14 23:07:18 2024 by cjf\_operator  
758868300.0 GRACEC MTEA 3 14.36 0.0 0.0 Mon Jan 22 21:12:00 2024 by cmccullo  
759310852.0 GRACED IPU 3 1 759310852.0 1 Tue Jan 23 21:39:39 2024 by cjf\_operator  
759311130 GRACED IPUR 4 -1 759311116 -1 0 Wed Jan 24 19:25:03 2024 by cjf\_operator  
759311130 GRACED USO 1 -1 Wed Jan 24 19:25:03 2024 by cjf\_operator  
759311130.0 GRACED LRIDATATION 1 889771 Thu Jan 25 05:00:09 2024 by cjf\_operator  
759378472.0 GRACEC IPU 3 1 759378472.0 1 Wed Jan 24 17:53:47 2024 by cjf\_operator  
759378780 GRACEC IPUR 4 -1 759378769 -1 0 Thu Jan 25 16:17:45 2024 by cjf\_operator  
759378780 GRACEC USO 1 -1 Thu Jan 25 16:17:45 2024 by cjf\_operator  
759378780.0 GRACEC LRIDATATION 1 -9974153 Fri Jan 26 04:38:47 2024 by cjf\_operator  
759549742.0 GRACED IPU 3 1 759549742.0 1 Fri Jan 26 15:33:20 2024 by cjf\_operator

759549742.0 GRACEC IPU 3 1 759549742.0 1 Fri Jan 26 17:07:01 2024 by cjf\_operator  
759550020 GRACEC IPUR 4 -1 759550006 -1 0 Sat Jan 27 05:35:07 2024 by cjf\_operator  
759550020 GRACEC USO 1 -1 Sat Jan 27 05:35:07 2024 by cjf\_operator  
759550020.0 GRACEC LRIDATATION 1 -9872680 Sun Jan 28 03:43:10 2024 by cjf\_operator  
759550170 GRACED IPUR 4 -1 759550161 -1 0 Sat Jan 27 16:22:47 2024 by cjf\_operator  
759550170 GRACED USO 1 -1 Sat Jan 27 16:22:47 2024 by cjf\_operator  
759550170.0 GRACED LRIDATATION 1 1041860 Sun Jan 28 05:19:17 2024 by cjf\_operator  
760807100.0 GRACEC IPU 3 1 760807100.0 1 Sat Feb 10 06:04:45 2024 by cjf\_operator  
760807102.0 GRACED IPU 3 1 760807102.0 1 Sat Feb 10 04:24:05 2024 by cjf\_operator  
760807360 GRACEC IPUR 4 -1 760807349 -1 0 Sun Feb 11 04:03:11 2024 by cjf\_operator  
760807360 GRACEC USO 1 -1 Sun Feb 11 04:03:11 2024 by cjf\_operator  
760807360.0 GRACEC LRIDATATION 1 -9127521 Sun Feb 11 04:06:39 2024 by cjf\_operator  
760807360 GRACED IPUR 4 -1 760807349 -1 0 Sun Feb 11 22:09:57 2024 by cjf\_operator  
760807360 GRACED USO 1 -1 Sun Feb 11 22:09:57 2024 by cjf\_operator  
760807360.0 GRACED LRIDATATION 1 1842595 Mon Feb 12 03:38:27 2024 by cjf\_operator  
761611760.0 GRACEC IPU 3 1 761611760.0 1 Mon Feb 19 13:08:25 2024 by cjf\_operator  
761612510 GRACEC IPUR 4 -1 761612504 -1 0 Tue Feb 20 19:11:57 2024 by cjf\_operator  
761612510 GRACEC USO 1 -1 Tue Feb 20 19:11:57 2024 by cjf\_operator  
761630722.0 GRACED IPU 3 1 761630722.0 1 Mon Feb 19 17:56:22 2024 by cjf\_operator  
761630722.0 GRACEC IPU 3 1 761630722.0 1 Mon Feb 19 19:29:55 2024 by cjf\_operator  
761630970 GRACEC IPUR 4 -1 761630960 -1 0 Tue Feb 20 19:11:57 2024 by cjf\_operator  
761630970 GRACEC USO 1 -1 Tue Feb 20 19:11:57 2024 by cjf\_operator  
761630970.0 GRACEC LRIDATATION 1 -8345006 Wed Feb 21 06:01:31 2024 by operator  
761631010 GRACED IPUR 4 -1 761630996 -1 0 Tue Feb 20 19:22:07 2024 by cjf\_operator  
761631010 GRACED USO 1 -1 Tue Feb 20 19:22:07 2024 by cjf\_operator  
761631010.0 GRACED LRIDATATION 1 2368070 Wed Feb 21 04:30:31 2024 by operator  
762301123.588926 GRACED MANV 4 70.000 0.0988 0.0000 0 Fri Mar 01 15:31:14 2024 by operator  
762683662.0 GRACED IPU 3 1 762683662.0 1 Sat Mar 02 22:09:11 2024 by cjf\_operator  
762683662.0 GRACEC IPU 3 1 762683662.0 1 Sat Mar 02 23:49:12 2024 by cjf\_operator

762684020 GRACED IPUR 4 -1 762684009 -1 0 Sun Mar 03 13:06:40 2024 by cjf\_operator  
762684020 GRACED USO 1 -1 Sun Mar 03 13:06:40 2024 by cjf\_operator  
762684020.0 GRACED LRIDATATION 1 3040964 Sun Mar 03 13:30:05 2024 by cjf\_operator  
762684070 GRACEC IPUR 4 -1 762684059 -1 0 Sun Mar 03 13:06:39 2024 by cjf\_operator  
762684070 GRACEC USO 1 -1 Sun Mar 03 13:06:39 2024 by cjf\_operator  
762684070.0 GRACEC LRIDATATION 1 -8015882 Mon Mar 04 04:05:15 2024 by cjf\_operator  
763200202.0 GRACEC IPU 3 1 763200202.0 1 Fri Mar 08 21:13:03 2024 by cjf\_operator  
763200202.0 GRACED IPU 3 1 763200202.0 1 Fri Mar 08 22:43:15 2024 by cjf\_operator  
763200450 GRACED IPUR 4 -1 763200439 -1 0 Sat Mar 09 05:01:06 2024 by cjf\_operator  
763200450 GRACED USO 1 -1 Sat Mar 09 05:01:06 2024 by cjf\_operator  
763200450.0 GRACED LRIDATATION 1 3371273 Sat Mar 09 05:01:07 2024 by cjf\_operator  
763200490 GRACEC IPUR 4 -1 763200480 -1 0 Sat Mar 09 21:11:36 2024 by cjf\_operator  
763200490 GRACEC USO 1 -1 Sat Mar 09 21:11:36 2024 by cjf\_operator  
763200490.0 GRACEC LRIDATATION 1 -7710086 Sun Mar 10 04:35:24 2024 by cjf\_operator  
764262262.0 GRACEC IPU 3 1 764262262.0 1 Thu Mar 21 04:32:06 2024 by cjf\_operator  
764262262.0 GRACED IPU 3 1 764262262.0 1 Thu Mar 21 06:12:26 2024 by cjf\_operator  
764262520 GRACEC IPUR 4 -1 764262506 -1 0 Fri Mar 22 15:49:07 2024 by cjf\_operator  
764262520 GRACEC USO 1 -1 Fri Mar 22 15:49:07 2024 by cjf\_operator  
764262520.0 GRACEC LRIDATATION 1 -7081471 Sat Mar 23 03:43:10 2024 by cjf\_operator  
764262570 GRACED IPUR 4 -1 764262556 -1 0 Fri Mar 22 15:49:08 2024 by cjf\_operator  
764262570 GRACED USO 1 -1 Fri Mar 22 15:49:08 2024 by cjf\_operator  
764262570.0 GRACED LRIDATATION 1 4051403 Fri Mar 22 16:00:04 2024 by cjf\_operator  
766086100.0 GRACED IPU 3 1 766086100.0 1 Thu Apr 11 07:51:48 2024 by cjf\_operator  
766086380 GRACED IPUR 4 -1 766086370 -1 0 Sat Apr 13 14:41:22 2024 by cjf\_operator  
766086380 GRACED USO 1 -1 Sat Apr 13 14:41:22 2024 by cjf\_operator  
766086380.0 GRACED LRIDATATION 1 5221852 Sat Apr 13 15:00:07 2024 by cjf\_operator  
766292722.0 GRACED IPU 3 1 766292722.0 1 Sat Apr 13 16:46:49 2024 by cjf\_operator  
766292722.0 GRACEC IPU 3 1 766292722.0 1 Sat Apr 13 18:26:57 2024 by cjf\_operator  
766293010 GRACEC IPUR 4 -1 766292997 -1 0 Sun Apr 14 20:02:46 2024 by cjf\_operator

766293010 GRACEC USO 1 -1 Sun Apr 14 20:02:46 2024 by cjf\_operator  
766293010.0 GRACEC LRIDATATION 1 -5880181 Mon Apr 15 04:45:40 2024 by cjf\_operator  
766293050 GRACED IPUR 4 -1 766293037 -1 0 Sun Apr 14 20:02:47 2024 by cjf\_operator  
766293050 GRACED USO 1 -1 Sun Apr 14 20:02:47 2024 by cjf\_operator  
766293050.0 GRACED LRIDATATION 1 5354697 Mon Apr 15 06:11:53 2024 by cjf\_operator  
766926130.0 GRACEC IPU 3 1 766926130.0 1 Sun Apr 21 02:09:38 2024 by cjf\_operator  
766926370 GRACEC IPUR 4 -1 766926358 -1 0 Sun Apr 21 22:46:35 2024 by cjf\_operator  
766926370 GRACEC USO 1 -1 Sun Apr 21 22:46:35 2024 by cjf\_operator  
766926370.0 GRACEC LRIDATATION 1 -5505374 Sun Apr 21 22:46:35 2024 by cjf\_operator  
766926370.0 GRACEC LRIDATATION 1 -5505613 Wed Apr 24 14:28:44 2024 by cjf\_operator  
769025527.554467 GRACED MANV 4 66.000 0.0988 0.0000 0 Thu May 16 16:15:44 2024 by operator  
769273282.0 GRACEC IPU 3 1 769273282.0 1 Sat May 18 04:28:57 2024 by cjf\_operator  
769273282.0 GRACED IPU 3 1 769273282.0 1 Sat May 18 06:08:47 2024 by cjf\_operator  
769273620 GRACEC IPUR 4 -1 769273605 -1 0 Tue May 21 16:35:05 2024 by cjf\_operator  
769273620 GRACEC USO 1 -1 Tue May 21 16:35:05 2024 by cjf\_operator  
769273700 GRACED IPUR 4 -1 769273688 -1 0 Tue May 21 16:18:25 2024 by cjf\_operator  
769273700 GRACED USO 1 -1 Tue May 21 16:18:25 2024 by cjf\_operator  
769683022.0 GRACED IPU 3 1 769683022.0 1 Wed May 22 23:05:53 2024 by cjf\_operator  
769683022.0 GRACEC IPU 3 1 769683022.0 1 Thu May 23 00:45:22 2024 by cjf\_operator  
769683370 GRACED IPUR 4 -1 769683362 -1 0 Thu May 23 14:23:40 2024 by cjf\_operator  
769683370 GRACED USO 1 -1 Thu May 23 14:23:40 2024 by cjf\_operator  
769683570 GRACEC IPUR 4 -1 769683561 -1 0 Thu May 23 14:23:39 2024 by cjf\_operator  
769683570 GRACEC USO 1 -1 Thu May 23 14:23:39 2024 by cjf\_operator  
769684221.0 GRACED IPU 3 1 769684221.0 1 Wed May 22 23:05:53 2024 by cjf\_operator  
769684540 GRACED IPUR 4 -1 769684527 -1 0 Thu May 23 14:23:40 2024 by cjf\_operator  
769684540 GRACED USO 1 -1 Thu May 23 14:23:40 2024 by cjf\_operator  
770450722.0 GRACEC IPU 3 1 770450722.0 1 Fri May 31 19:29:32 2024 by cjf\_operator  
770450722.0 GRACED IPU 3 1 770450722.0 1 Fri May 31 20:44:15 2024 by cjf\_operator

770450940 GRACEC IPUR 4 -1 770450930 -1 0 Sat Jun 01 04:22:14 2024 by cjf\_operator  
770450940 GRACEC USO 1 -1 Sat Jun 01 04:22:14 2024 by cjf\_operator  
770450940.0 GRACEC LRIDATATION 1 -3423199 Sun Jun 02 05:47:07 2024 by cjf\_operator  
770451000 GRACED IPUR 4 -1 770450986 -1 0 Sat Jun 01 14:02:05 2024 by cjf\_operator  
770451000 GRACED USO 1 -1 Sat Jun 01 14:02:05 2024 by cjf\_operator  
770451000.0 GRACED LRIDATATION 1 8036142 Sun Jun 02 03:55:39 2024 by cjf\_operator  
770971102.0 GRACED IPU 3 1 770971102.0 1 Thu Jun 06 21:29:04 2024 by cjf\_operator  
770971102.0 GRACEC IPU 3 1 770971102.0 1 Thu Jun 06 22:50:41 2024 by cjf\_operator  
770971390 GRACEC IPUR 4 -1 770971384 -1 0 Fri Jun 07 15:40:10 2024 by cjf\_operator  
770971390 GRACEC USO 1 -1 Fri Jun 07 15:40:10 2024 by cjf\_operator  
770971390.0 GRACEC LRIDATATION 1 -3115972 Sat Jun 08 06:25:47 2024 by cjf\_operator  
770971450 GRACED IPUR 4 -1 770971442 -1 0 Fri Jun 07 15:40:07 2024 by cjf\_operator  
770971450 GRACED USO 1 -1 Fri Jun 07 15:40:07 2024 by cjf\_operator  
770971450.0 GRACED LRIDATATION 1 8372997 Fri Jun 07 16:00:07 2024 by cjf\_operator  
771606082.0 GRACEC IPU 3 1 771606082.0 1 Fri Jun 14 03:48:48 2024 by operator  
771606082.0 GRACED IPU 3 1 771606082.0 1 Fri Jun 14 05:03:56 2024 by operator  
771606400 GRACED IPUR 4 -1 771606394 -1 0 Sat Jun 15 14:49:24 2024 by cjf\_operator  
771606400 GRACED USO 1 -1 Sat Jun 15 14:49:24 2024 by cjf\_operator  
771606400.0 GRACED LRIDATATION 1 8784501 Sat Jun 15 15:00:05 2024 by cjf\_operator  
771606600 GRACEC IPUR 4 -1 771606591 -1 0 Sat Jun 15 14:48:30 2024 by cjf\_operator  
771606600 GRACEC USO 1 -1 Sat Jun 15 14:48:30 2024 by cjf\_operator  
771606600.0 GRACEC LRIDATATION 1 -2741164 Sun Jun 16 05:50:14 2024 by cjf\_operator  
772038082.0 GRACED IPU 3 1 772038082.0 1 Wed Jun 19 04:27:57 2024 by cjf\_operator  
772038082.0 GRACEC IPU 3 1 772038082.0 1 Wed Jun 19 06:07:51 2024 by cjf\_operator  
772038430 GRACED IPUR 4 -1 772038424 -1 0 Fri Jun 21 15:37:20 2024 by cjf\_operator  
772038430 GRACED USO 1 -1 Fri Jun 21 15:37:20 2024 by cjf\_operator  
772038430.0 GRACED LRIDATATION 1 9064501 Fri Jun 21 15:37:20 2024 by cjf\_operator  
772038460 GRACEC IPUR 4 -1 772038449 -1 0 Fri Jun 21 15:37:15 2024 by cjf\_operator  
772038460 GRACEC USO 1 -1 Fri Jun 21 15:37:15 2024 by cjf\_operator

772038460.0 GRACEC LRIDATATION 1 -2486272 Fri Jun 21 15:37:20 2024 by cjf\_operator  
772827022.0 GRACEC IPU 3 1 772827022.0 1 Fri Jun 28 06:46:42 2024 by cjf\_operator  
772827022.0 GRACED IPU 3 1 772827022.0 1 Fri Jun 28 08:26:01 2024 by cjf\_operator  
772827270 GRACEC IPUR 4 -1 772827257 -1 0 Sat Jun 29 04:44:24 2024 by cjf\_operator  
772827270 GRACEC USO 1 -1 Sat Jun 29 04:44:24 2024 by cjf\_operator  
772827270 GRACED IPUR 4 -1 772827256 -1 0 Sat Jun 29 06:24:38 2024 by cjf\_operator  
772827270 GRACED USO 1 -1 Sat Jun 29 06:24:38 2024 by cjf\_operator  
772827270.0 GRACEC LRIDATATION 1 -2021077 Sun Jun 30 19:45:35 2024 by cjf\_operator  
772827270.0 GRACED LRIDATATION 1 9576385 Sun Jun 30 19:45:35 2024 by cjf\_operator  
774107220.0 GRACED IPU 3 1 774107220.0 1 Sat Jul 13 03:04:10 2024 by cjf\_operator  
774107620 GRACED IPUR 4 -1 774107613 -1 0 Sun Jul 14 21:51:47 2024 by cjf\_operator  
774107620 GRACED USO 1 -1 Sun Jul 14 21:51:47 2024 by cjf\_operator  
774107620.0 GRACED LRIDATATION 1 10408394 Mon Jul 15 05:25:12 2024 by cjf\_operator  
774108335.580461 GRACEC MANV 4 206.000 0.0988 0.0000 0 Sun Jul 14 21:58:51 2024 by operator  
774373685.595522 GRACED MANV 4 250.000 0.0988 0.0000 0 Thu Jul 18 16:09:44 2024 by operator  
775603579.0 GRACEC IPU 3 1 775603579.0 1 Wed Jul 31 08:04:25 2024 by cjf\_operator  
775603930 GRACEC IPUR 4 -1 775603919 -1 0 Wed Jul 31 14:18:44 2024 by cjf\_operator  
775603930 GRACEC USO 1 -1 Wed Jul 31 14:18:44 2024 by cjf\_operator  
775603930.0 GRACEC LRIDATATION 1 -384660 Wed Aug 14 21:30:06 2024 by cjf\_operator  
776444482.0 GRACEC IPU 3 1 776444482.0 1 Fri Aug 09 03:45:36 2024 by cjf\_operator  
776444482.0 GRACED IPU 3 1 776444482.0 1 Fri Aug 09 05:06:10 2024 by cjf\_operator  
776444790 GRACEC IPUR 4 -1 776444778 -1 0 Sat Aug 10 14:56:19 2024 by cjf\_operator  
776444790 GRACEC USO 1 -1 Sat Aug 10 14:56:19 2024 by cjf\_operator  
776444790.0 GRACEC LRIDATATION 1 110485 Wed Aug 14 22:00:05 2024 by cjf\_operator  
776444820 GRACED IPUR 4 -1 776444807 -1 0 Sat Aug 10 14:56:21 2024 by cjf\_operator  
776444820 GRACED USO 1 -1 Sat Aug 10 14:56:21 2024 by cjf\_operator  
776444820.0 GRACED LRIDATATION 1 11930972 Wed Aug 14 22:00:06 2024 by cjf\_operator

776831236.0 GRACED IPU 3 1 776831236.0 1 Tue Aug 13 15:46:06 2024 by cjf\_operator  
776831740 GRACED IPUR 4 -1 776831725 -1 0 Wed Aug 14 13:29:36 2024 by cjf\_operator  
776831740 GRACED USO 1 -1 Wed Aug 14 13:29:36 2024 by cjf\_operator  
776831740.0 GRACED LRIDATATION 1 12183505 Wed Aug 14 22:30:04 2024 by cjf\_operator  
777069322.0 GRACED IPU 3 1 777069322.0 1 Fri Aug 16 09:48:49 2024 by cjf\_operator  
777069322.0 GRACEC IPU 3 1 777069322.0 1 Fri Aug 16 11:28:26 2024 by cjf\_operator  
777069610 GRACED IPUR 4 -1 777069599 -1 0 Tue Sep 03 17:33:40 2024 by cjf\_operator  
777069610 GRACED USO 1 -1 Tue Sep 03 17:33:40 2024 by cjf\_operator  
777069610 GRACEC IPUR 4 -1 777069599 -1 0 Tue Sep 03 17:33:41 2024 by cjf\_operator  
777069610 GRACEC USO 1 -1 Tue Sep 03 17:33:41 2024 by cjf\_operator  
777813023.0 GRACEC IPU 3 1 777813023.0 1 Sun Aug 25 02:27:49 2024 by cjf\_operator  
777813520 GRACEC IPUR 4 -1 777813509 -1 0 Sun Aug 25 21:16:23 2024 by cjf\_operator  
777813520 GRACEC USO 1 -1 Sun Aug 25 21:16:23 2024 by cjf\_operator  
777813520.0 GRACEC LRIDATATION 1 2856315 Mon Aug 26 14:51:43 2024 by cjf\_operator  
778839620.0 GRACED IPU 3 1 778839620.0 1 Thu Sep 05 22:28:24 2024 by cjf\_operator  
778840350 GRACED IPUR 4 -1 778840340 -1 0 Sat Sep 07 03:56:19 2024 by cjf\_operator  
778840350 GRACED USO 1 -1 Sat Sep 07 03:56:19 2024 by cjf\_operator  
778918462.0 GRACEC IPU 3 1 778918462.0 1 Fri Sep 06 19:05:18 2024 by cjf\_operator  
778918720 GRACEC IPUR 4 -1 778918714 -1 0 Sat Sep 07 14:54:22 2024 by cjf\_operator  
778918720 GRACEC USO 1 -1 Sat Sep 07 14:54:22 2024 by cjf\_operator  
778918720.0 GRACEC LRIDATATION 1 3506306 Mon Sep 09 00:23:42 2024 by cjf\_operator  
778929980.0 GRACED IPU 3 1 778929980.0 1 Fri Sep 06 23:45:26 2024 by cjf\_operator  
778930470 GRACED IPUR 4 -1 778930458 -1 0 Sat Sep 07 14:54:16 2024 by cjf\_operator  
778930470 GRACED USO 1 -1 Sat Sep 07 14:54:16 2024 by cjf\_operator  
778930470.0 GRACED LRIDATATION 1 -23283995 Sun Sep 08 20:10:00 2024 by cjf\_operator  
779009600.0 GRACED IPU 3 1 779009600.0 1 Sat Sep 07 21:46:47 2024 by cjf\_operator  
779010040 GRACED IPUR 4 -1 779010027 -1 0 Sun Sep 08 20:10:00 2024 by cjf\_operator  
779010040 GRACED USO 1 -1 Sun Sep 08 20:10:00 2024 by cjf\_operator  
779010040.0 GRACED LRIDATATION 1 -23231867 Sun Sep 08 20:10:00 2024 by cjf\_operator

779099460.0 GRACEC IPU 3 1 779099460.0 1 Sun Sep 08 21:04:08 2024 by cjf\_operator  
779099990.0 GRACED IPU 3 1 779099990.0 1 Sun Sep 08 22:43:02 2024 by cjf\_operator  
779100150 GRACEC IPUR 4 -1 779100143 -1 0 Mon Sep 09 18:28:58 2024 by cjf\_operator  
779100150 GRACEC USO 1 -1 Mon Sep 09 18:28:58 2024 by cjf\_operator  
779100150.0 GRACEC LRIDATATION 1 3613045 Mon Sep 09 18:31:25 2024 by cjf\_operator  
779100340 GRACED IPUR 4 -1 779100328 -1 0 Mon Sep 09 18:28:57 2024 by cjf\_operator  
779100340 GRACED USO 1 -1 Mon Sep 09 18:28:57 2024 by cjf\_operator  
779155880.0 GRACEC IPU 3 1 779155880.0 1 Mon Sep 09 16:08:56 2024 by cjf\_operator  
779155900.0 GRACED IPU 3 1 779155900.0 1 Mon Sep 09 14:26:00 2024 by cjf\_operator  
779156230 GRACED IPUR 4 -1 779156224 -1 0 Tue Sep 10 14:48:33 2024 by cjf\_operator  
779156230 GRACED USO 1 -1 Tue Sep 10 14:48:33 2024 by cjf\_operator  
779156440 GRACEC IPUR 4 -1 779156428 -1 0 Tue Sep 10 14:48:32 2024 by cjf\_operator  
779156440 GRACEC USO 1 -1 Tue Sep 10 14:48:32 2024 by cjf\_operator  
779156440.0 GRACEC LRIDATATION 1 3646055 Mon Sep 16 17:00:06 2024 by cjf\_operator  
779224090.0 GRACED IPU 3 1 779224090.0 1 Tue Sep 10 09:24:57 2024 by cjf\_operator  
779241120.0 GRACEC IPU 3 1 779241120.0 1 Tue Sep 10 14:03:51 2024 by cjf\_operator  
779241490 GRACEC IPUR 4 -1 779241477 -1 0 Mon Sep 16 16:50:03 2024 by cjf\_operator  
779241490 GRACEC USO 1 -1 Mon Sep 16 16:50:03 2024 by cjf\_operator  
779241490.0 GRACEC LRIDATATION 1 3696082 Mon Sep 16 17:00:06 2024 by cjf\_operator  
779275070.0 GRACED IPU 3 1 779275070.0 1 Tue Sep 10 21:45:56 2024 by cjf\_operator  
779275410 GRACED IPUR 4 -1 779275395 -1 0 Thu Sep 12 05:26:28 2024 by cjf\_operator  
779275410 GRACED USO 1 -1 Thu Sep 12 05:26:28 2024 by cjf\_operator  
779275410.0 GRACED LRIDATATION 1 -23058013 Thu Sep 12 05:26:28 2024 by cjf\_operator  
779408069.597750 GRACED MANV 4 84.000 0.0988 0.0000 0 Fri Sep 13 22:06:03 2024 by operator  
779511922.0 GRACED IPU 3 1 779511922.0 1 Fri Sep 13 15:49:41 2024 by cjf\_operator  
779511922.0 GRACEC IPU 3 1 779511922.0 1 Fri Sep 13 17:29:22 2024 by cjf\_operator  
779512270 GRACEC IPUR 4 -1 779512262 -1 0 Sat Sep 14 15:14:57 2024 by operator  
779512270 GRACEC USO 1 -1 Sat Sep 14 15:14:57 2024 by operator  
779512270.0 GRACEC LRIDATATION 1 3855232 Sun Sep 15 04:13:27 2024 by cjf\_operator

779512700 GRACED IPUR 4 -1 779512686 -1 0 Sat Sep 14 15:14:51 2024 by operator  
779512700 GRACED USO 1 -1 Sat Sep 14 15:14:51 2024 by operator  
779512700.0 GRACED LRIDATATION 1 -22902471 Sun Sep 15 05:39:21 2024 by cjf\_operator  
780007822.0 GRACED IPU 3 1 780007822.0 1 Thu Sep 19 09:47:17 2024 by cjf\_operator  
780007822.0 GRACEC IPU 3 1 780007822.0 1 Thu Sep 19 11:26:52 2024 by cjf\_operator  
780008210 GRACEC IPUR 4 -1 780008204 -1 0 Sat Sep 21 03:44:17 2024 by cjf\_operator  
780008210 GRACEC USO 1 -1 Sat Sep 21 03:44:17 2024 by cjf\_operator  
780008210.0 GRACEC LRIDATATION 1 4146689 Sat Sep 21 04:30:05 2024 by cjf\_operator  
780008390 GRACED IPUR 4 -1 780008375 -1 0 Sat Sep 21 03:47:02 2024 by cjf\_operator  
780008390 GRACED USO 1 -1 Sat Sep 21 03:47:02 2024 by cjf\_operator  
780008390.0 GRACED LRIDATATION 1 -22577517 Sat Sep 21 22:58:36 2024 by cjf\_operator  
780726322.0 GRACEC IPU 3 1 780726322.0 1 Fri Sep 27 17:06:10 2024 by cjf\_operator  
780726322.0 GRACED IPU 3 1 780726322.0 1 Fri Sep 27 18:45:51 2024 by cjf\_operator  
780726540 GRACEC IPUR 4 -1 780726533 -1 0 Sat Sep 28 05:48:39 2024 by cjf\_operator  
780726540 GRACEC USO 1 -1 Sat Sep 28 05:48:39 2024 by cjf\_operator  
780726540.0 GRACEC LRIDATATION 1 4568731 Sun Sep 29 03:48:43 2024 by cjf\_operator  
780726590 GRACED IPUR 4 -1 780726584 -1 0 Sat Sep 28 15:46:35 2024 by cjf\_operator  
780726590 GRACED USO 1 -1 Sat Sep 28 15:46:35 2024 by cjf\_operator  
780726590.0 GRACED LRIDATATION 1 -22106398 Sun Sep 29 05:29:58 2024 by cjf\_operator  
781311922.0 GRACEC IPU 3 1 781311922.0 1 Fri Oct 04 14:13:50 2024 by cjf\_operator  
781311922.0 GRACED IPU 3 1 781311922.0 1 Fri Oct 04 14:13:50 2024 by cjf\_operator  
781312210 GRACED IPUR 4 -1 781312198 -1 0 Sat Oct 05 18:57:20 2024 by cjf\_operator  
781312210 GRACED USO 1 -1 Sat Oct 05 18:57:20 2024 by cjf\_operator  
781312210.0 GRACED LRIDATATION 1 -21721751 Sat Oct 05 18:57:20 2024 by cjf\_operator  
781312230 GRACEC IPUR 4 -1 781312215 -1 0 Sat Oct 05 18:57:19 2024 by cjf\_operator  
781312230 GRACEC USO 1 -1 Sat Oct 05 18:57:19 2024 by cjf\_operator  
781312230.0 GRACEC LRIDATATION 1 4912699 Sat Oct 05 18:57:20 2024 by cjf\_operator  
782348722.0 GRACEC IPU 3 1 782348722.0 1 Wed Oct 16 12:44:35 2024 by cjf\_operator  
782348722.0 GRACED IPU 3 1 782348722.0 1 Wed Oct 16 14:23:50 2024 by cjf\_operator

782349050 GRACED IPUR 4 -1 782349041 -1 0 Thu Oct 17 14:23:36 2024 by cjf\_operator  
782349050 GRACED USO 1 -1 Thu Oct 17 14:23:36 2024 by cjf\_operator  
782349050.0 GRACED LRIDATATION 1 -21039941 Thu Oct 17 14:30:04 2024 by cjf\_operator  
782349060 GRACEC IPUR 4 -1 782349050 -1 0 Thu Oct 17 14:21:50 2024 by cjf\_operator  
782349060 GRACEC USO 1 -1 Thu Oct 17 14:21:50 2024 by cjf\_operator  
782349060.0 GRACEC LRIDATATION 1 5521425 Fri Oct 18 05:50:52 2024 by cjf\_operator  
784647484.0 GRACEC IPU 3 1 784647484.0 1 Tue Nov 12 04:47:46 2024 by cjf\_operator  
784648050 GRACEC IPUR 4 -1 784648037 -1 0 Wed Nov 13 15:08:16 2024 by cjf\_operator  
784648050 GRACEC USO 1 -1 Wed Nov 13 15:08:16 2024 by cjf\_operator  
784648050.0 GRACEC LRIDATATION 1 6869955 Wed Nov 13 15:11:04 2024 by cjf\_operator  
784953142.0 GRACEC IPU 3 1 784953142.0 1 Sat Nov 16 19:24:10 2024 by operator  
784953142.0 GRACED IPU 3 1 784953142.0 1 Sat Nov 16 19:24:53 2024 by operator  
784953430 GRACED IPUR 4 -1 784953420 -1 0 Sat Nov 16 19:10:08 2024 by cjf\_operator  
784953430 GRACED USO 1 -1 Sat Nov 16 19:10:08 2024 by cjf\_operator  
784953430.0 GRACED LRIDATATION 1 -19323575 Sun Nov 17 05:27:00 2024 by cjf\_operator  
784953460 GRACEC IPUR 4 -1 784953448 -1 0 Sat Nov 16 19:10:09 2024 by cjf\_operator  
784953460 GRACEC USO 1 -1 Sat Nov 16 19:10:09 2024 by cjf\_operator  
784953460.0 GRACEC LRIDATATION 1 7049057 Sun Nov 17 04:06:16 2024 by cjf\_operator  
785184550.0 GRACED IPU 3 1 785184550.0 1 Mon Nov 18 09:43:45 2024 by cjf\_operator  
785184800 GRACED IPUR 4 -1 785184785 -1 0 Tue Nov 19 08:50:12 2024 by cjf\_operator  
785184800 GRACED USO 1 -1 Tue Nov 19 08:50:12 2024 by cjf\_operator  
785184800.0 GRACED LRIDATATION 1 -19170800 Wed Nov 20 05:49:44 2024 by cjf\_operator  
785454442.0 GRACEC IPU 3 1 785454442.0 1 Thu Nov 21 11:29:55 2024 by cjf\_operator  
785454442.0 GRACED IPU 3 1 785454442.0 1 Thu Nov 21 12:39:26 2024 by cjf\_operator  
785454740 GRACED IPUR 4 -1 785454734 -1 0 Fri Nov 22 15:07:36 2024 by cjf\_operator  
785454740 GRACED USO 1 -1 Fri Nov 22 15:07:36 2024 by cjf\_operator  
785454740.0 GRACED LRIDATATION 1 -18992496 Sat Nov 23 05:49:31 2024 by cjf\_operator  
785455000 GRACEC IPUR 4 -1 785454994 -1 0 Fri Nov 22 15:07:35 2024 by cjf\_operator  
785455000 GRACEC USO 1 -1 Fri Nov 22 15:07:35 2024 by cjf\_operator

785455000.0 GRACEC LRIDATATION 1 7343092 Fri Nov 22 15:09:08 2024 by cjf\_operator  
786140182.0 GRACED IPU 3 1 786140182.0 1 Fri Nov 29 09:04:05 2024 by cjf\_operator  
786140182.0 GRACEC IPU 3 1 786140182.0 1 Fri Nov 29 10:46:36 2024 by cjf\_operator  
786140550 GRACEC IPUR 4 -1 786140543 -1 0 Sat Nov 30 20:03:44 2024 by cjf\_operator  
786140550 GRACEC USO 1 -1 Sat Nov 30 20:03:44 2024 by cjf\_operator  
786140550.0 GRACEC LRIDATATION 1 7744645 Sun Dec 01 03:29:19 2024 by cjf\_operator  
786140960 GRACED IPUR 4 -1 786140951 -1 0 Sat Nov 30 20:03:45 2024 by cjf\_operator  
786140960 GRACED USO 1 -1 Sat Nov 30 20:03:45 2024 by cjf\_operator  
786140960.0 GRACED LRIDATATION 1 -18538941 Sun Dec 01 22:01:59 2024 by cjf\_operator  
786559026.592845 GRACED MANV 4 144.000 0.0988 0.0000 0 Thu Dec 05 16:42:40 2024 by operator  
786765805.0 GRACEC IPU 3 1 786765805.0 1 Fri Dec 06 15:09:21 2024 by cjf\_operator  
786766220 GRACEC IPUR 4 -1 786766211 -1 0 Mon Dec 09 19:40:24 2024 by cjf\_operator  
786766220 GRACEC USO 1 -1 Mon Dec 09 19:40:24 2024 by cjf\_operator  
786774922.0 GRACEC IPU 3 1 786774922.0 1 Fri Dec 06 18:24:25 2024 by cjf\_operator  
786774922.0 GRACED IPU 3 1 786774922.0 1 Fri Dec 06 19:46:33 2024 by cjf\_operator  
786775600 GRACEC IPUR 4 -1 786775587 -1 0 Fri Dec 13 20:32:02 2024 by cjf\_operator  
786775600 GRACEC USO 1 -1 Fri Dec 13 20:32:02 2024 by cjf\_operator  
786775820 GRACEC IPUR 4 -1 786775587 -1 0 Fri Dec 13 20:22:06 2024 by mpaik  
786775820 GRACEC USO 1 -1 Fri Dec 13 20:22:06 2024 by mpaik  
786775880.0 GRACED IPU 3 1 786775880.0 1 Fri Dec 06 19:46:33 2024 by cjf\_operator  
786776250 GRACED IPUR 4 -1 786776235 -1 0 Mon Dec 09 16:02:19 2024 by cjf\_operator  
786776250 GRACED USO 1 -1 Mon Dec 09 16:02:19 2024 by cjf\_operator  
786776250.0 GRACED LRIDATATION 1 -18118569 Mon Dec 09 16:30:03 2024 by cjf\_operator  
787276627.591429 GRACED MANV 4 201.000 0.0988 0.0000 0 Fri Dec 13 16:57:16 2024 by operator  
787439863.588632 GRACED MANV 4 213.000 0.0988 0.0000 0 Mon Dec 16 17:02:30 2024 by operator  
787685482.0 GRACEC IPU 3 1 787685482.0 1 Tue Dec 17 08:08:42 2024 by cjf\_operator  
787685482.0 GRACED IPU 3 1 787685482.0 1 Tue Dec 17 09:48:49 2024 by cjf\_operator

787685750 GRACED IPUR 4 -1 787685736 -1 0 Thu Dec 19 01:03:42 2024 by cjf\_operator  
787685750 GRACED USO 1 -1 Thu Dec 19 01:03:42 2024 by cjf\_operator  
787685750.0 GRACED LRIDATATION 1 -4879778 Thu Dec 19 05:47:28 2024 by cjf\_operator  
787685760 GRACEC IPUR 4 -1 787685746 -1 0 Thu Dec 19 01:03:51 2024 by cjf\_operator  
787685760 GRACEC USO 1 -1 Thu Dec 19 01:03:51 2024 by cjf\_operator  
787685760.0 GRACEC LRIDATATION 1 -12320761 Thu Dec 19 04:06:24 2024 by cjf\_operator  
787850422.0 GRACEC IPU 3 1 787850422.0 1 Thu Dec 19 04:06:45 2024 by cjf\_operator  
787850422.0 GRACED IPU 3 1 787850422.0 1 Thu Dec 19 05:46:31 2024 by cjf\_operator  
787850890 GRACED IPUR 4 -1 787850882 -1 0 Fri Dec 20 19:26:50 2024 by cjf\_operator  
787850890 GRACED USO 1 -1 Fri Dec 20 19:26:50 2024 by cjf\_operator  
787850890.0 GRACED LRIDATATION 1 -4770347 Sat Dec 21 12:18:56 2024 by cjf\_operator  
787851060 GRACEC IPUR 4 -1 787851048 -1 0 Fri Dec 20 19:28:16 2024 by cjf\_operator  
787851060 GRACEC USO 1 -1 Fri Dec 20 19:28:16 2024 by cjf\_operator  
787851060.0 GRACEC LRIDATATION 1 -12223975 Fri Dec 20 19:28:34 2024 by operator  
788283022.0 GRACEC IPU 3 1 788283022.0 1 Tue Dec 24 06:27:52 2024 by cjf\_operator  
788283022.0 GRACED IPU 3 1 788283022.0 1 Tue Dec 24 07:43:07 2024 by cjf\_operator  
788283350 GRACEC IPUR 4 -1 788283335 -1 0 Mon Dec 30 17:00:58 2024 by cjf\_operator  
788283350 GRACEC USO 1 -1 Mon Dec 30 17:00:58 2024 by cjf\_operator  
788283350.0 GRACEC LRIDATATION 1 -11971120 Mon Dec 30 17:00:59 2024 by cjf\_operator  
788283440 GRACED IPUR 4 -1 788283434 -1 0 Mon Dec 30 17:00:59 2024 by cjf\_operator  
788283440 GRACED USO 1 -1 Mon Dec 30 17:00:59 2024 by cjf\_operator  
788293793.5 GRACEC KAMI 3 0.02 0.0 0.0  
788300782.4 GRACEC KAMI 3 0.04 0.0 0.0  
788302411.2 GRACEC KAMI 3 0.06 0.0 0.0  
788308320.4 GRACEC KAMI 3 0.08 0.0 0.0  
788314572.7 GRACEC KAMI 3 0.10 0.0 0.0  
788319666.3 GRACEC KAMI 3 0.12 0.0 0.0  
788320491.6 GRACEC KAMI 3 0.16 0.0 0.0  
788323288.4 GRACEC KAMI 3 0.18 0.0 0.0

788335897.0 GRACEC KAMI 3 0.20 0.0 0.0  
788337817.5 GRACEC KAMI 3 0.22 0.0 0.0  
788342827.4 GRACEC KAMI 3 0.24 0.0 0.0  
788352347.4 GRACEC KAMI 3 0.28 0.0 0.0  
788362584.5 GRACEC KAMI 3 0.00 0.0 0.0  
788373304.5 GRACEC KAMI 3 0.00 0.0 0.0 #commanded restart tracker Mon Dec 30 20:56:58 2024  
by operator  
788954760.0 GRACED IPU 3 1 788954760.0 1 Wed Jan 01 00:46:29 2025 by cjf\_operator  
788955080 GRACED IPUR 4 -1 788955069 -1 0 Wed Jan 01 15:05:10 2025 by cjf\_operator  
788955080 GRACED USO 1 -1 Wed Jan 01 15:05:10 2025 by cjf\_operator  
789750322.0 GRACEC IPU 3 1 789750322.0 1 Sat Jan 11 20:29:05 2025 by operator  
789750322.0 GRACED IPU 3 1 789750322.0 1 Sat Jan 11 20:29:26 2025 by operator  
789750550 GRACED IPUR 4 -1 789750535 -1 0 Sat Jan 11 05:26:04 2025 by cjf\_operator  
789750550 GRACED USO 1 -1 Sat Jan 11 05:26:04 2025 by cjf\_operator  
789750550.0 GRACED LRIDATATION 1 -3509906 Sat Jan 11 05:26:04 2025 by cjf\_operator  
789750590 GRACEC IPUR 4 -1 789750579 -1 0 Sat Jan 11 03:44:49 2025 by cjf\_operator  
789750590 GRACEC USO 1 -1 Sat Jan 11 03:44:49 2025 by cjf\_operator  
789750590.0 GRACEC LRIDATATION 1 -11113144 Sun Jan 12 04:47:26 2025 by cjf\_operator  
790977922.0 GRACED IPU 3 1 790977922.0 1 Fri Jan 24 09:44:40 2025 by cjf\_operator  
790977922.0 GRACEC IPU 3 1 790977922.0 1 Fri Jan 24 11:25:10 2025 by cjf\_operator  
790978250 GRACEC IPUR 4 -1 790978236 -1 0 Sat Jan 25 16:58:17 2025 by cjf\_operator  
790978250 GRACEC USO 1 -1 Sat Jan 25 16:58:17 2025 by cjf\_operator  
790978250 GRACED IPUR 4 -1 790978236 -1 0 Sat Jan 25 16:58:18 2025 by cjf\_operator  
790978250 GRACED USO 1 -1 Sat Jan 25 16:58:18 2025 by cjf\_operator  
790978250.0 GRACEC LRIDATATION 1 -10395668 Sun Jan 26 04:07:40 2025 by cjf\_operator  
790978250.0 GRACED LRIDATATION 1 -2693627 Sun Jan 26 05:48:50 2025 by cjf\_operator  
791599822.0 GRACED IPU 3 1 791599822.0 1 Fri Jan 31 14:07:49 2025 by cjf\_operator  
791599822.0 GRACEC IPU 3 1 791599822.0 1 Fri Jan 31 15:48:51 2025 by cjf\_operator  
791600160 GRACEC IPUR 4 -1 791600146 -1 0 Sat Feb 01 14:47:56 2025 by cjf\_operator

791600160 GRACEC USO 1 -1 Sat Feb 01 14:47:56 2025 by cjf\_operator  
791600160.0 GRACEC LRIDATATION 1 -10032386 Sun Feb 02 05:30:20 2025 by cjf\_operator  
791600780.0 GRACED IPU 3 1 791600780.0 1 Fri Jan 31 14:07:49 2025 by cjf\_operator  
791601110 GRACED IPUR 4 -1 791601098 -1 0 Sat Feb 01 14:47:57 2025 by cjf\_operator  
791601110 GRACED USO 1 -1 Sat Feb 01 14:47:57 2025 by cjf\_operator  
791601110.0 GRACED LRIDATATION 1 -2278996 Sun Feb 02 03:49:05 2025 by cjf\_operator  
792030922.0 GRACED IPU 3 1 792030922.0 1 Wed Feb 05 13:07:13 2025 by cjf\_operator  
792030922.0 GRACEC IPU 3 1 792030922.0 1 Wed Feb 05 14:48:01 2025 by cjf\_operator  
792031250 GRACEC IPUR 4 -1 792031236 -1 0 Thu Feb 06 16:48:56 2025 by cjf\_operator  
792031250 GRACEC USO 1 -1 Thu Feb 06 16:48:56 2025 by cjf\_operator  
792031250 GRACED IPUR 4 -1 792031235 -1 0 Thu Feb 06 16:49:04 2025 by cjf\_operator  
792031250 GRACED USO 1 -1 Thu Feb 06 16:49:04 2025 by cjf\_operator  
792031250.0 GRACEC LRIDATATION 1 -9780578 Thu Feb 06 16:51:53 2025 by cjf\_operator  
792031250.0 GRACED LRIDATATION 1 -1992478 Fri Feb 07 06:09:50 2025 by cjf\_operator  
792255680.0 GRACED IPU 3 1 792255680.0 1 Sat Feb 08 04:03:33 2025 by cjf\_operator  
792255682.0 GRACEC IPU 3 1 792255682.0 1 Sat Feb 08 05:26:16 2025 by cjf\_operator  
792255880 GRACEC IPUR 4 -1 792255870 -1 0 Sun Feb 09 22:29:19 2025 by cjf\_operator  
792255880 GRACEC USO 1 -1 Sun Feb 09 22:29:19 2025 by cjf\_operator  
792255880.0 GRACEC LRIDATATION 1 -9649440 Sun Feb 09 22:33:40 2025 by cjf\_operator  
792255890 GRACED IPUR 4 -1 792255882 -1 0 Sun Feb 09 22:29:25 2025 by cjf\_operator  
792255890 GRACED USO 1 -1 Sun Feb 09 22:29:25 2025 by cjf\_operator  
792255890.0 GRACED LRIDATATION 1 -1842797 Sun Feb 09 22:33:40 2025 by cjf\_operator  
792535847.595172 GRACED MANV 4 103.000 0.0988 0.0000 0 Thu Feb 13 00:52:20 2025 by operator  
792687682.0 GRACEC IPU 3 1 792687682.0 1 Thu Feb 13 04:25:41 2025 by cjf\_operator  
792687682.0 GRACED IPU 3 1 792687682.0 1 Thu Feb 13 06:06:16 2025 by cjf\_operator  
792687950 GRACED IPUR 4 -1 792687938 -1 0 Fri Feb 14 04:10:10 2025 by cjf\_operator  
792687950 GRACED USO 1 -1 Fri Feb 14 04:10:10 2025 by cjf\_operator  
792687950.0 GRACED LRIDATATION 1 -1554737 Sat Feb 15 05:12:53 2025 by cjf\_operator

792687960 GRACEC IPUR 4 -1 792687952 -1 0 Fri Feb 14 16:02:01 2025 by cjf\_operator  
792687960 GRACEC USO 1 -1 Fri Feb 14 16:02:01 2025 by cjf\_operator  
792687960.0 GRACEC LRIDATATION 1 -9397269 Fri Feb 14 16:03:32 2025 by cjf\_operator  
792690197.6 GRACEC KAMI 3 0.02 0.0 0.0  
792710449.9 GRACEC KAMI 3 0.04 0.0 0.0  
792714641.0 GRACEC KAMI 3 0.08 0.0 0.0  
792718077.0 GRACEC KAMI 3 0.10 0.0 0.0  
792728132.0 GRACEC KAMI 3 0.12 0.0 0.0  
792732275.0 GRACEC KAMI 3 0.14 0.0 0.0  
792734815.6 GRACEC KAMI 3 0.16 0.0 0.0  
792738752.2 GRACEC KAMI 3 0.20 0.0 0.0  
792748751.0 GRACEC KAMI 3 0.00 0.0 0.0 #commanded restart tracker Fri Feb 14 22:02:46 2025  
by operator  
794605822.0 GRACEC IPU 3 1 794605822.0 1 Fri Mar 07 09:03:52 2025 by cjf\_operator  
794605822.0 GRACED IPU 3 1 794605822.0 1 Fri Mar 07 10:43:54 2025 by cjf\_operator  
794606140 GRACED IPUR 4 -1 794606131 -1 0 Sat Mar 08 17:49:07 2025 by cjf\_operator  
794606140 GRACED USO 1 -1 Sat Mar 08 17:49:07 2025 by cjf\_operator  
794606140.0 GRACED LRIDATATION 1 -274185 Sat Mar 08 18:00:05 2025 by cjf\_operator  
794606210 GRACEC IPUR 4 -1 794606202 -1 0 Sat Mar 08 17:46:20 2025 by cjf\_operator  
794606210 GRACEC USO 1 -1 Sat Mar 08 17:46:20 2025 by cjf\_operator  
794606210.0 GRACEC LRIDATATION 1 -8278527 Sun Mar 09 05:07:18 2025 by cjf\_operator  
795037641.0 GRACED IPU 3 1 795037641.0 1 Wed Mar 12 09:44:15 2025 by cjf\_operator  
795037642.0 GRACEC IPU 3 1 795037642.0 1 Wed Mar 12 11:24:18 2025 by cjf\_operator  
795037900 GRACED IPUR 4 -1 795037892 -1 0 Thu Mar 13 15:07:02 2025 by cjf\_operator  
795037900 GRACED USO 1 -1 Thu Mar 13 15:07:02 2025 by cjf\_operator  
795037900 GRACEC IPUR 4 -1 795037892 -1 0 Thu Mar 13 15:08:25 2025 by cjf\_operator  
795037900 GRACEC USO 1 -1 Thu Mar 13 15:08:25 2025 by cjf\_operator  
795037900.0 GRACED LRIDATATION 1 14359 Thu Mar 13 15:08:25 2025 by cjf\_operator  
795037900.0 GRACEC LRIDATATION 1 -8026876 Thu Mar 13 15:08:26 2025 by cjf\_operator

795116722.0 GRACED IPU 3 1 795116722.0 1 Thu Mar 13 07:47:59 2025 by cjf\_operator  
795116722.0 GRACEC IPU 3 1 795116722.0 1 Thu Mar 13 09:27:55 2025 by cjf\_operator  
795117010 GRACEC IPUR 4 -1 795117004 -1 0 Fri Mar 14 15:09:17 2025 by cjf\_operator  
795117010 GRACEC USO 1 -1 Fri Mar 14 15:09:17 2025 by cjf\_operator  
795117010.0 GRACEC LRIDATATION 1 -7980820 Sat Mar 15 05:09:16 2025 by cjf\_operator  
795117090 GRACED IPUR 4 -1 795117081 -1 0 Fri Mar 14 15:09:18 2025 by cjf\_operator  
795117090 GRACED USO 1 -1 Fri Mar 14 15:09:18 2025 by cjf\_operator  
795117090.0 GRACED LRIDATATION 1 67322 Fri Mar 14 15:30:03 2025 by cjf\_operator  
797071642.0 GRACED IPU 3 1 797071642.0 1 Fri Apr 04 21:26:05 2025 by cjf\_operator  
797071642.0 GRACEC IPU 3 1 797071642.0 1 Fri Apr 04 23:06:27 2025 by cjf\_operator  
797071970 GRACED IPUR 4 -1 797071956 -1 0 Sat Apr 05 20:05:58 2025 by cjf\_operator  
797071970 GRACED USO 1 -1 Sat Apr 05 20:05:58 2025 by cjf\_operator  
797071970 GRACEC IPUR 4 -1 797071956 -1 0 Sat Apr 05 20:06:12 2025 by cjf\_operator  
797071970 GRACEC USO 1 -1 Sat Apr 05 20:06:12 2025 by cjf\_operator  
797071970.0 GRACED LRIDATATION 1 1376345 Sun Apr 06 04:50:30 2025 by cjf\_operator  
797072210.0 GRACEC IPU 3 1 797072210.0 1 Fri Apr 04 23:06:27 2025 by cjf\_operator  
797072540 GRACEC IPUR 4 -1 797072530 -1 0 Sat Apr 05 20:06:12 2025 by cjf\_operator  
797072540 GRACEC USO 1 -1 Sat Apr 05 20:06:12 2025 by cjf\_operator  
797072540.0 GRACEC LRIDATATION 1 -6841866 Sun Apr 06 06:31:47 2025 by cjf\_operator  
798238940.0 GRACED IPU 3 1 798238940.0 1 Fri Apr 18 11:08:58 2025 by cjf\_operator  
798238942.0 GRACEC IPU 3 1 798238942.0 1 Fri Apr 18 09:47:50 2025 by cjf\_operator  
798239240 GRACEC IPUR 4 -1 798239234 -1 0 Sat Apr 19 21:53:05 2025 by cjf\_operator  
798239240 GRACEC USO 1 -1 Sat Apr 19 21:53:05 2025 by cjf\_operator  
798239240.0 GRACEC LRIDATATION 1 -6163002 Sun Apr 20 05:29:36 2025 by cjf\_operator  
798239250 GRACED IPUR 4 -1 798239236 -1 0 Sat Apr 19 21:55:01 2025 by cjf\_operator  
798239250 GRACED USO 1 -1 Sat Apr 19 21:55:01 2025 by cjf\_operator  
798239250.0 GRACED LRIDATATION 1 2159642 Sun Apr 20 03:48:37 2025 by cjf\_operator  
798240958.7 GRACEC K\_MI 3 0.02 0.0 0.0

798256214.5 GRACEC K\_MI 3 0.00 0.0 0.0 #commanded restart tracker Mon Apr 21 16:38:10 2025  
by operator

798786322.0 GRACEC IPU 3 1 798786322.0 1 Thu Apr 24 19:07:45 2025 by cjf\_operator

798786322.0 GRACED IPU 3 1 798786322.0 1 Thu Apr 24 20:23:20 2025 by cjf\_operator

798786580 GRACED IPUR 4 -1 798786569 -1 0 Fri Apr 25 06:07:55 2025 by cjf\_operator

798786580 GRACED USO 1 -1 Fri Apr 25 06:07:55 2025 by cjf\_operator

798786580.0 GRACED LRIDATATION 1 2527339 Fri Apr 25 06:11:25 2025 by cjf\_operator

798786610 GRACEC IPUR 4 -1 798786604 -1 0 Fri Apr 25 15:57:50 2025 by cjf\_operator

798786610 GRACEC USO 1 -1 Fri Apr 25 15:57:50 2025 by cjf\_operator

798786610.0 GRACEC LRIDATATION 1 -5844697 Sat Apr 26 05:29:34 2025 by cjf\_operator

799411720.0 GRACEC IPU 3 1 799411720.0 1 Fri May 02 02:29:02 2025 by cjf\_operator

799411830 GRACEC IPUR 4 -1 799411819 -1 0 Sat May 03 05:30:39 2025 by cjf\_operator

799411830 GRACEC USO 1 -1 Sat May 03 05:30:39 2025 by cjf\_operator

799411830.0 GRACEC LRIDATATION 1 -5481178 Sat May 03 05:31:46 2025 by cjf\_operator

799471222.0 GRACED IPU 3 1 799471222.0 1 Fri May 02 16:23:43 2025 by cjf\_operator

799471222.0 GRACEC IPU 3 1 799471222.0 1 Fri May 02 18:04:06 2025 by cjf\_operator

799471540 GRACED IPUR 4 -1 799471530 -1 0 Sat May 03 15:56:45 2025 by cjf\_operator

799471540 GRACED USO 1 -1 Sat May 03 15:56:45 2025 by cjf\_operator

799471540.0 GRACED LRIDATATION 1 2987756 Sun May 04 06:04:23 2025 by cjf\_operator

799471680 GRACEC IPUR 4 -1 799471674 -1 0 Sat May 03 15:53:24 2025 by cjf\_operator

799471680 GRACEC USO 1 -1 Sat May 03 15:53:24 2025 by cjf\_operator

799471680.0 GRACEC LRIDATATION 1 -5446445 Sat May 03 15:53:24 2025 by cjf\_operator

799999794.0 GRACED IPU 3 1 799999794.0 1 Thu May 08 19:27:51 2025 by cjf\_operator

800000040 GRACED IPUR 4 -1 800000032 -1 0 Fri May 09 05:19:09 2025 by cjf\_operator

800000040 GRACED USO 1 -1 Fri May 09 05:19:09 2025 by cjf\_operator

800049742.0 GRACEC IPU 3 1 800049742.0 1 Fri May 09 09:44:08 2025 by cjf\_operator

800049742.0 GRACED IPU 3 1 800049742.0 1 Fri May 09 11:24:13 2025 by cjf\_operator

800049980 GRACEC IPUR 4 -1 800049972 -1 0 Sat May 10 13:01:07 2025 by cjf\_operator

800049980 GRACEC USO 1 -1 Sat May 10 13:01:07 2025 by cjf\_operator

800049980.0 GRACEC LRIDATATION 1 -5110308 Sat May 10 13:01:08 2025 by cjf\_operator  
800050410 GRACED IPUR 4 -1 800050402 -1 0 Sat May 10 13:01:08 2025 by cjf\_operator  
800050410 GRACED USO 1 -1 Sat May 10 13:01:08 2025 by cjf\_operator  
800164822.0 GRACED IPU 3 1 800164822.0 1 Sat May 10 18:25:14 2025 by cjf\_operator  
800165120 GRACED IPUR 4 -1 800165106 -1 0 Sun May 11 13:13:35 2025 by cjf\_operator  
800165120 GRACED USO 1 -1 Sun May 11 13:13:35 2025 by cjf\_operator  
800165120.0 GRACED LRIDATATION 1 3454369 Mon May 12 05:10:30 2025 by cjf\_operator  
800604022.0 GRACEC IPU 3 1 800604022.0 1 Thu May 15 19:04:36 2025 by cjf\_operator  
800604650 GRACEC IPUR 4 -1 800604639 -1 0 Sat May 17 04:08:21 2025 by cjf\_operator  
800604650 GRACEC USO 1 -1 Sat May 17 04:08:21 2025 by cjf\_operator  
800604650.0 GRACEC LRIDATATION 1 -4788189 Sat May 17 04:08:54 2025 by cjf\_operator  
800608133.7 GRACEC KAMI 3 0.02 0.0 0.0  
800612694.5 GRACEC KAMI 3 0.00 0.0 0.0 #autonomous restart tracker Wed Jun 4 18:37:04 2025  
by operator  
801592222.0 GRACED IPU 3 1 801592222.0 1 Tue May 27 04:48:49 2025 by cjf\_operator  
801592222.0 GRACEC IPU 3 1 801592222.0 1 Tue May 27 06:24:22 2025 by cjf\_operator  
801592540 GRACEC IPUR 4 -1 801592525 -1 0 Wed May 28 14:11:55 2025 by cjf\_operator  
801592540 GRACEC USO 1 -1 Wed May 28 14:11:55 2025 by cjf\_operator  
801592540 GRACED IPUR 4 -1 801592525 -1 0 Wed May 28 14:11:56 2025 by cjf\_operator  
801592540 GRACED USO 1 -1 Wed May 28 14:11:56 2025 by cjf\_operator  
801592540.0 GRACED LRIDATATION 1 4415941 Thu May 29 03:48:27 2025 by cjf\_operator  
801592540.0 GRACEC LRIDATATION 1 -4214693 Thu May 29 05:29:38 2025 by cjf\_operator  
802177509.0 GRACED IPU 3 1 802177509.0 1 Mon Jun 02 23:47:07 2025 by cjf\_operator  
802177780 GRACED IPUR 4 -1 802177766 -1 0 Tue Jun 03 06:06:21 2025 by cjf\_operator  
802177780 GRACED USO 1 -1 Tue Jun 03 06:06:21 2025 by cjf\_operator  
802177780.0 GRACED LRIDATATION 1 4810792 Tue Jun 03 06:09:27 2025 by cjf\_operator  
802278564.598240 GRACED MANV 4 107.000 0.0988 0.0000 0 Thu Jun 05 21:03:51 2025 by  
operator  
802366342.0 GRACED IPU 3 1 802366342.0 1 Thu Jun 05 05:08:19 2025 by cjf\_operator

802366342.0 GRACEC IPU 3 1 802366342.0 1 Thu Jun 05 06:23:57 2025 by cjf\_operator  
802366620 GRACEC IPUR 4 -1 802366605 -1 0 Tue Jun 10 14:36:20 2025 by cjf\_operator  
802366620 GRACEC USO 1 -1 Tue Jun 10 14:36:20 2025 by cjf\_operator  
802366620.0 GRACEC LRIDATATION 1 -3765580 Thu May 29 05:29:38 2025 by cjf\_operator  
802366720 GRACED IPUR 4 -1 802366712 -1 0 Tue Jun 10 14:36:24 2025 by cjf\_operator  
802366720 GRACED USO 1 -1 Tue Jun 10 14:36:24 2025 by cjf\_operator  
802366720.0 GRACED LRIDATATION 1 4938275 Tue Jun 03 06:09:27 2025 by cjf\_operator  
803532424.582514 GRACEC MANV 4 69.000 0.0988 0.0000 0 Fri Jun 20 14:33:27 2025 by operator  
803774236.575401 GRACED MANV 4 74.000 0.0988 0.0000 0 Mon Jun 23 20:09:16 2025 by operator  
803900002.0 GRACEC IPU 3 1 803900002.0 1 Mon Jun 23 00:10:01 2025 by cjf\_operator  
803900290 GRACEC IPUR 4 -1 803900279 -1 0 Mon Jun 23 15:25:03 2025 by operator  
803900290 GRACEC USO 1 -1 Mon Jun 23 15:25:03 2025 by operator  
803900290.0 GRACEC LRIDATATION 1 -2876475 Tue Jun 24 04:23:28 2025 by cjf\_operator  
804179122.0 GRACED IPU 3 1 804179122.0 1 Thu Jun 26 04:43:20 2025 by cjf\_operator  
804179122.0 GRACEC IPU 3 1 804179122.0 1 Thu Jun 26 06:29:50 2025 by cjf\_operator  
804179380 GRACEC IPUR 4 -1 804179374 -1 0 Sat Jun 28 02:08:38 2025 by cjf\_operator  
804179380 GRACEC USO 1 -1 Sat Jun 28 02:08:38 2025 by cjf\_operator  
804179380 GRACED IPUR 4 -1 804179372 -1 0 Sat Jun 28 02:09:02 2025 by cjf\_operator  
804179380 GRACED USO 1 -1 Sat Jun 28 02:09:02 2025 by cjf\_operator  
804179380.0 GRACED LRIDATATION 1 6163158 Sat Jun 28 02:30:04 2025 by cjf\_operator  
804226522.0 GRACED IPU 3 1 804226522.0 1 Thu Jun 26 17:28:38 2025 by cjf\_operator  
804226522.0 GRACEC IPU 3 1 804226522.0 1 Thu Jun 26 18:44:11 2025 by cjf\_operator  
804226740 GRACED IPUR 4 -1 804226729 -1 0 Sat Jun 28 02:09:02 2025 by cjf\_operator  
804226740 GRACED USO 1 -1 Sat Jun 28 02:09:02 2025 by cjf\_operator  
804226740.0 GRACED LRIDATATION 1 6195207 Sat Jun 28 02:30:04 2025 by cjf\_operator  
804226770 GRACEC IPUR 4 -1 804226757 -1 0 Sat Jun 28 02:08:38 2025 by cjf\_operator  
804226770 GRACEC USO 1 -1 Sat Jun 28 02:08:38 2025 by cjf\_operator  
804226770.0 GRACEC LRIDATATION 1 -2687337 Sat Jun 28 05:27:03 2025 by cjf\_operator

804885442.0 GRACEC IPU 3 1 804885442.0 1 Fri Jul 04 08:27:24 2025 by cjf\_operator  
804885442.0 GRACED IPU 3 1 804885442.0 1 Fri Jul 04 10:07:42 2025 by cjf\_operator  
804885730 GRACEC IPUR 4 -1 804885718 -1 0 Sat Jul 05 10:18:33 2025 by cjf\_operator  
804885730 GRACEC USO 1 -1 Sat Jul 05 10:18:33 2025 by cjf\_operator  
804885730.0 GRACEC LRIDATATION 1 -2305708 Sun Jul 06 04:11:01 2025 by cjf\_operator  
804885760 GRACED IPUR 4 -1 804885745 -1 0 Sat Jul 05 10:18:34 2025 by cjf\_operator  
804885760 GRACED USO 1 -1 Sat Jul 05 10:18:34 2025 by cjf\_operator  
804885760.0 GRACED LRIDATATION 1 6641350 Sun Jul 06 05:52:04 2025 by cjf\_operator  
805436242.0 GRACEC IPU 3 1 805436242.0 1 Thu Jul 10 17:49:02 2025 by cjf\_operator  
805436242.0 GRACED IPU 3 1 805436242.0 1 Thu Jul 10 19:29:20 2025 by cjf\_operator  
805436540 GRACEC IPUR 4 -1 805436532 -1 0 Sat Jul 12 02:20:06 2025 by cjf\_operator  
805436540 GRACEC USO 1 -1 Sat Jul 12 02:20:06 2025 by cjf\_operator  
805436540.0 GRACEC LRIDATATION 1 -1986785 Sat Jul 12 04:10:53 2025 by cjf\_operator  
805436770 GRACED IPUR 4 -1 805436756 -1 0 Sat Jul 12 02:25:09 2025 by cjf\_operator  
805436770 GRACED USO 1 -1 Sat Jul 12 02:25:09 2025 by cjf\_operator  
805436770.0 GRACED LRIDATATION 1 7014584 Sat Jul 12 05:46:54 2025 by cjf\_operator  
806931590.0 GRACED IPU 3 1 806931590.0 1 Mon Jul 28 00:31:20 2025 by cjf\_operator  
806931940 GRACED IPUR 4 -1 806931932 -1 0 Mon Jul 28 15:29:01 2025 by cjf\_operator  
806931940 GRACED USO 1 -1 Mon Jul 28 15:29:01 2025 by cjf\_operator  
806931940.0 GRACED LRIDATATION 1 8028317 Mon Jul 28 15:29:01 2025 by cjf\_operator  
806931940.0 GRACED LRIDATATION 1 8028506 Tue Jul 29 15:24:11 2025 by cjf\_operator  
807264322.0 GRACEC IPU 3 1 807264322.0 1 Thu Jul 31 20:51:47 2025 by cjf\_operator  
807264322.0 GRACED IPU 3 1 807264322.0 1 Thu Jul 31 22:25:26 2025 by cjf\_operator  
807264600 GRACEC IPUR 4 -1 807264588 -1 0 Fri Aug 01 16:34:25 2025 by cjf\_operator  
807264600 GRACEC USO 1 -1 Fri Aug 01 16:34:25 2025 by cjf\_operator  
807264600.0 GRACEC LRIDATATION 1 -929003 Sat Aug 02 04:30:04 2025 by cjf\_operator  
807264630 GRACED IPUR 4 -1 807264615 -1 0 Fri Aug 01 16:34:29 2025 by cjf\_operator  
807264630 GRACED USO 1 -1 Fri Aug 01 16:34:29 2025 by cjf\_operator  
807264630.0 GRACED LRIDATATION 1 8254405 Fri Aug 01 20:25:10 2025 by cjf\_operator

807784836.25 GRACED KAMI 3 0.02 0.0 0.0 Sat Aug 9 04:51:16 UTC 2025 by mpaik  
807823629.0 GRACED KAMI 3 0.00 0.0 0.0 # commanded restart tracker  
808325432.0 GRACED IPU 3 1 808325432.0 1 Wed Aug 13 04:29:33 2025 by cjf\_operator  
808325720 GRACED IPUR 4 -1 808325712 -1 0 Thu Aug 14 15:36:55 2025 by cjf\_operator  
808325720 GRACED USO 1 -1 Thu Aug 14 15:36:55 2025 by cjf\_operator  
808325720.0 GRACED LRIDATATION 1 8975339 Fri Aug 15 03:28:05 2025 by cjf\_operator  
808998620.0 GRACED IPU 3 1 808998620.0 1 Thu Aug 21 00:11:47 2025 by cjf\_operator  
808999330 GRACED IPUR 4 -1 808999322 -1 0 Thu Aug 21 17:48:23 2025 by cjf\_operator  
808999330 GRACED USO 1 -1 Thu Aug 21 17:48:23 2025 by cjf\_operator  
809639422.0 GRACEC IPU 3 1 809639422.0 1 Thu Aug 28 09:11:17 2025 by cjf\_operator  
809639422.0 GRACED IPU 3 1 809639422.0 1 Thu Aug 28 10:45:54 2025 by cjf\_operator  
809639670 GRACEC IPUR 4 -1 809639663 -1 0 Fri Aug 29 15:39:11 2025 by cjf\_operator  
809639670 GRACEC USO 1 -1 Fri Aug 29 15:39:11 2025 by cjf\_operator  
809639670.0 GRACEC LRIDATATION 1 443362 Sat Aug 30 05:00:05 2025 by cjf\_operator  
809639710 GRACED IPUR 4 -1 809639704 -1 0 Fri Aug 29 15:40:06 2025 by cjf\_operator  
809639710 GRACED USO 1 -1 Fri Aug 29 15:40:06 2025 by cjf\_operator  
809639710.0 GRACED LRIDATATION 1 9869544 Sat Aug 30 06:30:55 2025 by cjf\_operator  
810157222.0 GRACEC IPU 3 1 810157222.0 1 Wed Sep 03 08:45:45 2025 by cjf\_operator  
810157222.0 GRACED IPU 3 1 810157222.0 1 Wed Sep 03 10:26:11 2025 by cjf\_operator  
810157460 GRACEC IPUR 4 -1 810157450 -1 0 Thu Sep 04 03:46:54 2025 by cjf\_operator  
810157460 GRACEC USO 1 -1 Thu Sep 04 03:46:54 2025 by cjf\_operator  
810157460.0 GRACEC LRIDATATION 1 742251 Fri Sep 05 04:47:21 2025 by cjf\_operator  
810157560 GRACED IPUR 4 -1 810157547 -1 0 Thu Sep 04 17:39:20 2025 by cjf\_operator  
810157560 GRACED USO 1 -1 Thu Sep 04 17:39:20 2025 by cjf\_operator  
810157560.0 GRACED LRIDATATION 1 10222369 Fri Sep 05 06:28:29 2025 by cjf\_operator  
810335122.0 GRACEC IPU 3 1 810335122.0 1 Fri Sep 05 11:09:23 2025 by cjf\_operator  
810335122.0 GRACED IPU 3 1 810335122.0 1 Fri Sep 05 12:25:02 2025 by cjf\_operator  
810335360 GRACEC IPUR 4 -1 810335346 -1 0 Sat Sep 06 05:46:39 2025 by cjf\_operator  
810335360 GRACEC USO 1 -1 Sat Sep 06 05:46:39 2025 by cjf\_operator

810335360.0 GRACEC LRIDATATION 1 844834 Sat Sep 06 05:49:05 2025 by cjf\_operator  
810335490 GRACED IPUR 4 -1 810335484 -1 0 Sat Sep 06 16:31:48 2025 by cjf\_operator  
810335490 GRACED USO 1 -1 Sat Sep 06 16:31:48 2025 by cjf\_operator  
810335490.0 GRACED LRIDATATION 1 10343656 Sun Sep 07 21:09:32 2025 by cjf\_operator  
812192949.572283 GRACEC MANV 4 137.000 0.0988 0.0000 0 Sat Sep 27 14:28:20 2025 by operator  
812474334.562236 GRACED MANV 4 168.000 0.0988 0.0000 0 Wed Oct 01 15:43:08 2025 by operator  
812476783.562193 GRACED MANV 4 70.000 0.0988 0.0000 0 Wed Oct 01 15:43:08 2025 by operator  
812758882.0 GRACEC IPU 3 1 812758882.0 1 Fri Oct 03 11:29:36 2025 by cjf\_operator  
812758882.0 GRACED IPU 3 1 812758882.0 1 Fri Oct 03 13:09:57 2025 by cjf\_operator  
812759160 GRACEC IPUR 4 -1 812759152 -1 0 Mon Oct 06 01:27:00 2025 by cjf\_operator  
812759160 GRACEC USO 1 -1 Mon Oct 06 01:27:00 2025 by cjf\_operator  
812759490 GRACED IPUR 4 -1 812759483 -1 0 Sat Oct 04 17:42:58 2025 by cjf\_operator  
812759490 GRACED USO 1 -1 Sat Oct 04 17:42:58 2025 by cjf\_operator  
812759490.0 GRACED LRIDATATION 1 11998326 Sat Oct 04 18:00:06 2025 by cjf\_operator  
813138442.0 GRACED IPU 3 1 813138442.0 1 Tue Oct 07 20:30:12 2025 by cjf\_operator  
813138442.0 GRACEC IPU 3 1 813138442.0 1 Tue Oct 07 22:10:59 2025 by cjf\_operator  
813138750 GRACEC IPUR 4 -1 813138737 -1 0 Wed Oct 08 14:05:06 2025 by operator  
813138750.0 GRACEC LRIDATATION 1 2461369 Thu Oct 09 05:26:23 2025 by cjf\_operator  
813138780 GRACED IPUR 4 -1 813138766 -1 0 Wed Oct 08 14:10:07 2025 by operator  
813138780.0 GRACED LRIDATATION 1 12257714 Thu Oct 09 04:00:05 2025 by cjf\_operator  
813312922.0 GRACEC IPU 3 1 813312922.0 1 Thu Oct 09 20:51:12 2025 by operator  
813312922.0 GRACED IPU 3 1 813312922.0 1 Thu Oct 09 22:25:51 2025 by operator  
813313250 GRACEC IPUR 4 -1 813313242 -1 0 Fri Oct 10 12:28:45 2025 by cjf\_operator  
813313250 GRACEC USO 1 -1 Fri Oct 10 12:28:45 2025 by cjf\_operator  
813313250.0 GRACEC LRIDATATION 1 2561970 Fri Oct 10 12:28:46 2025 by cjf\_operator  
813313300 GRACED IPUR 4 -1 813313285 -1 0 Fri Oct 10 12:28:45 2025 by cjf\_operator  
813313300 GRACED USO 1 -1 Fri Oct 10 12:28:45 2025 by cjf\_operator

813313300.0 GRACED LRIDATATION 1 12377100 Sat Oct 11 05:46:54 2025 by cjf\_operator  
813954082.0 GRACEC IPU 3 1 813954082.0 1 Fri Oct 17 07:08:47 2025 by cjf\_operator  
813954082.0 GRACED IPU 3 1 813954082.0 1 Fri Oct 17 08:49:04 2025 by cjf\_operator  
813954420 GRACEC IPUR 4 -1 813954413 -1 0 Sat Oct 18 16:11:30 2025 by cjf\_operator  
813954420 GRACEC USO 1 -1 Sat Oct 18 16:11:30 2025 by cjf\_operator  
813954420.0 GRACEC LRIDATATION 1 2931092 Sat Oct 18 16:12:12 2025 by cjf\_operator  
813954420.0 GRACEC LRIDATATION 1 2931195 Sun Oct 19 20:35:15 2025 by cjf\_operator  
813954640 GRACED IPUR 4 -1 813954633 -1 0 Sat Oct 18 16:09:58 2025 by cjf\_operator  
813954640 GRACED USO 1 -1 Sat Oct 18 16:09:58 2025 by cjf\_operator  
813954640.0 GRACED LRIDATATION 1 12815986 Sun Oct 19 20:35:15 2025 by cjf\_operator  
815715970.0 GRACEC IPU 3 1 815715970.0 1 Thu Nov 06 18:09:31 2025 by cjf\_operator  
815716680 GRACEC IPUR 4 -1 815716665 -1 0 Fri Nov 07 16:43:46 2025 by cjf\_operator  
815716680 GRACEC USO 1 -1 Fri Nov 07 16:43:46 2025 by cjf\_operator  
815716680.0 GRACEC LRIDATATION 1 3945445 Fri Nov 07 16:46:06 2025 by cjf\_operator  
815784425.0 GRACED IPU 3 1 815784425.0 1 Fri Nov 07 11:03:59 2025 by cjf\_operator  
815785120 GRACED IPUR 4 -1 815785111 -1 0 Sat Nov 08 21:09:44 2025 by cjf\_operator  
815785120 GRACED USO 1 -1 Sat Nov 08 21:09:44 2025 by cjf\_operator