Revised Eccentricity Files - Release 200420

2020.04.20
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Since the middle of last year Van Husson initiated an effort to review the NASA station site
logs and internal logbooks with a comparison to information that was available in public. Van
found numerous pieces of information that were not previously disclosed or were reported
incorrectly. A lot of these pertained to eccentricity related issues, including missing survey
entries, wrong entries, and incorrect entries. Another substantial amount of changes was related
to local systematics and the correct period over which they applied, these however will be dealt
with in the revision of the Data Handling file (completed and soon to be released too).

Here we will focus on the new eccentricity files dated 200420. Since the revisions are not
simply additional new entries and affect more than a couple of sites, their application requires
careful review of the new vs the old (previous) version of the eccentricity files used by each
AC. We assume here that you all use the last revision of the eccentricity files dated 191030, so
our comparisons are done wrt that last release of the eccentricity files.

To simplify your task, we furnish (along with the standard text version of the new release) an
annotated RTF version that contains the revised/new records in the "SITE/ECCENTRICITY" Block
highlighted in RED font so that you can easily spot the changes that need to be applied (ONLY
the UNE file is included below but the changes are at the same locations for the XYZ version).

One change that is not visible from this comparison is the deletion of an eccentricity entry for
Arequipa (7403) which does not correspond to a real survey (it was inferred from an IGN site
survey which had used an outdated a priori value):

```
 7403  A    1 L 13:011:00000 00:000:00000 XYZ   0.8170  -2.4553  -0.7532

 7403  A    1 L 13:011:00000 00:000:00000 UNE   2.6950   0.0111  -0.0046
```

These records no longer exist in the two new files. The new files should be implemented
immediately for all operational products and the ITRF2020 reprocessing effort.

The file   "slrecc.200420.ILRS.une.snx":

```
%=SNX 2.02 JCT 20:111:61200 JCT 68:041:00000 20:111:61200 L 00549 0 X
+FILE/REFERENCE
 DESCRIPTION        UNE 200420 ILRS eccentricities file
 OUTPUT             ILRS SINEX Formatted Eccentricity File
 CONTACT            epavlis@UMBC.edu
 SOFTWARE           JCET's eccCDDIS2snx
 HARDWARE           Apple MacBook Pro
 INPUT              Official Eccentricity file from CDDIS (110707)
 INPUT              and previous version slrecc.191030.ILRS.une.snx
 INPUT              Numerous emails/reports from Van Husson's review
-FILE/REFERENCE
+INPUT/HISTORY
 =SNX 2.02 JCT 20:111:61200 JCT 68:041:00000 20:111:61200 L 00549 0 X
-INPUT/HISTORY
+FILE/COMMENT
*
* LAST UPDATE 20 Apr., 2020, MAJOR UPDATE WITH MANY CORRECTIONS IN
*                           ENTRIES OF PRIOR YEARS !!!
```

```
*
* UPDATED 30 Oct., 2019, Added new 7865 Stafford, NRL entry
*
* UPDATED 25 Sep., 2019, Added 7395 Geochang & 7396 Wuhan (JFNL)
*
* UPDATED 26 Mar., 2019, New surveys for 7110, 7119, 7403 and 7501
*
* UPDATED 12 Feb., 2018, Corrected last Ajaccio (78486904) entry
*
* UPDATED 06 Feb., 2018, Added new Russian (HRTL) system (7503)
*
* UPDATED 02 Nov., 2017, End-date for 1891 corrected to 00:000:00000
*
* UPDATED 12 Feb., 2017, Added new Kunming system (7819)
*
* UPDATED  5 July, 2016, Added Sejong 7394
*
* UPDATED 29 Sept., 2015, Added Irkutsk 1891, Brazilia 7407 & SOSW 7827
*
* UPDATED 21 Nov., 2014, to convert the two superfluous Arequipa entries
*    for the period 92:196:00000 04:031:86399 to comments by placing a "*"
*    in column 1 of the records.
*
* UPDATED  9 Apr., 2014, Corrected geographic coordinates of Altay 1879
*
*                 Some SITEID_BLOCK entries were also corrected !!!
*
*      This has corrections to 7090 pending clarification from GA.
*
* UPDATED 25 Oct., 2013, Added 7359 Daedeok, Korea
* UPDATED 18 Dec., 2012, Added 1887, 1888, 1889, 1890, 7822
* UPDATED 29 May,  2012, Added new Beijing SOD 72496102
* UPDATED  5 Aug., 2011, Corrected start date for 74031304 Occupation
* UPDATED  7 July, 2011, Added new sites/SOD 1886, 7119, 7403
* UPDATED 18 Mar., 2011, Corrected sign of NEU ecc. for 2001 Urumqi
* UPDATED  9 July, 2010, Corrected 1981 7110 Effective dates
* UPDATED 13 May 2010, Based on Contents slrecc.100513
* UPDATED 13 April 2010, Based on Contents slrecc.100309
* UPDATED 14 May 2009, Added Altay site (from site log)
* UPDATED 13 Nov. 2008    Source: Previous & new 7405 eccentricity
* UPDATED 19 May 2008     Source: CDDIS slrecc.070924 & Burnie info
* UPDATED 02 May  2008, added 7370 eccentricty from FTLRS survey
* UPDATED 05 Oct. 2007, added 7119 eccentricty from HTSI survey
* UPDATED 15 Aug. 2007, the file has been recreated on the basis of the
*    eccentricity file maintained on CDDIS (version of 070625) and all
*    known (508 up to present) SLR site occupations have been included
*    in this version, irrespective of whether the data exist or
*    not in the CDDIS archives. Identification of the correct set of
*    eccentricities to be used is now aided by the inclusion of the
*    familiar CDP SOD 8-digit identification No. with each entry.
*    With this release we format the file in a more "formal" SINEX
*    form, including all the mandatory records. The value of the
*    "estimated parameters in the header is really the number of sites
*    (unique 8-digit No. and eccentricity combinations!) included, and
*    we use "X" to designate "eccentricity" information as contents.
*    The first-last dates indicate the earliest and latest dates that
*    appear in this file, with the latter equal to the release date,
*    indicating that this is current up that date. For all current
*    occupations the end-date is set to 00:000:00000 as in past
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*   releases.
*
*   (See footnotes 14 & 15 for more details)
*
* UPDATED 29 June 2005, prior to release to ILRS web (ECP)
* UPDATED 12 April 2004, to add Helwan A (7831) eccentricity
* UPDATED 29 January 2004, to RETRO-actively change the 2nd set
*   of eccs for station 7501
* UPDATED 7 October 2003, to add the SITE/ID block
* UPDATED 10 September 2003, to fix sign on Urumqi (7355) initial
*   eccs from its first occupation
* UPDATED 15 July 2003, added Beijing A (7357) eccentricity
* UPDATED 14 July 2003, added Greenbelt (GUTS at 7127) and new Monument
*   Peak (7110) eccentricities
* UPDATED 30 June 2003, added Olifantsfontein (7902), closed out 7548 and 7505
*   and fixed inversion error in 7830 North and UP eccs
* UPDATED 13 May 2003, added 2nd occupation of Urumqi (7355)
* UPDATED 23 April 2003, added FTLRS eccentricity at Chania, Crete (7830)
* UPDATED 20 February 2003 (See footnote 13 for revision)
* UPDATED 18 December 2002 (See footnote 12 for the revision)
* UPDATED 22 November 2002 (See footnote 11 for the revision)
* UPDATED 20 October 2002, to change the DOMES number for
*   7301 and 7302 from 'S' to 'M', added three DOMES numbers for
*   7307 which now give that site 4 unique DOMES numbers and point codes
*
* Eccentricities are sorted by CDP marker number.
*
* List of station eccentricities from the marker to the intersection of
* optical axis (i.e. optical axes - marker, the UP eccentricity should
* in most cases be positive)
*
* Special Notes:
*
*   (1) Eccentricities, by definition, should NOT exceed a
*       magnitude of 15 meters (+/-). If they exceed +/- 15 meters,
*       then they are considered a LOCAL TIE.
*
*   (2) HTLRS occupations of marks (7300, 7304, 7307, 7321, 7322, 7323,
*       7844) have very large eccentricities, which violate the intention
*       of system eccentricities (see note:1 above) and violate the
*       F8.4 SINEX eccentricity format. The data from these locations
*       may NOT exist in the ILRS global data centers. Since the
*       eccentricities violate the SINEX format, we have listed them in
*       this release with only three (3) decimal places, in order to
*       provide users who have access to these data, with these information.
*
*       NOTE: For most accurate results, please use the UNE eccentricities
*       instead of the Cartesian version which are prone to large
*       conversion errors due to the large distances between the sites.
*
*       CDP  Start_epoch  End_epoch    UNE  Up(m)    North(m)   East(m)
*       ---- ------------ ------------ --- ------- --------- ---------
*       7300 89:010:00000 89:083:00000 UNE  -0.6140  -516.4230  -565.4650
*       7304 90:336:00000 91:038:00000 UNE   1.8990  -114.0920   152.6220
*       7307 88:200:00000 88:261:00000 UNE -17.6930 -1490.1010 -4030.6300
*       7307 97:215:00000 97:309:00000 UNE -19.6060 -1499.9910 -3979.5520
*       7307 98:223:00000 98:317:00000 UNE -19.6060 -1499.7820 -3979.7450
*       7307 99:257:00000 99:346:00000 UNE -19.6100 -1510.8970 -3982.0250
*       7321 94:152:00000 94:304:00000 UNE   2.1830  -259.1000   -49.6760
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*       7322 95:305:00000 96:091:00000 UNE   -4.1810    -51.5480   -118.8600
*       7323 94:001:00000 94:090:00000 UNE  -25.1050   -653.5770   -573.9810
*       7844 88:001:00000 88:073:00000 UNE  210.1370   -728.2680  1870.2800
*       7844 96:122:00000 96:213:00000 UNE  210.2150   -725.4850  1865.3340
*
*
*   (3) Yarragedee has been occupied by an SLR system since 1979.
*       The 1st set of eccentricities were measured in 1979 and
*       were remeasured in 1987. There was a noted significant difference
*       of 8mm in the UP eccentricities between these 2 surveys,
*       which is still unexplained. The possible causes could be an
*       error in the original value or a change due to mount re-leveling(s)
*       during those 8 years. The net effect of this change will be
*       a 8mm discontinuity in the station's height on the date (day 225)
*       of the 1987 survey.
*
*       In 1992, the mount was removed and refurbished resulting
*       in a new position and eccentricities of the optical axes
*       relative to the mark 7090. The eccentricities were remeasured
*       on 20 August 1998 (day 232), but the observed changes in
*       eccentricities relative to the previous measurements in 1992
*       were within the uncertainty of the measurement. Therefore the
*       1992 eccentricities are still considered valid. The 1998
*       measurements in UNE were 3.1809 m, -0.0083 m, and 0.0178 m,
*       respectively.
*
*7090  A    1 L 92:203:00000 00:000:00000 UNE   3.1809  -0.0083   0.0178       70900513
*
*       A new measurement in 2003 produced yet another set of eccentricities
*       which are still indistinguishable from the 1992, given their accuracy.
*
*7090  A    1 L 03:331:00000 00:000:00000 UNE   3.1821  -0.0083   0.0184       70900513
*
*   (4) Greenbelt in 1985 had 3 systems (MOBLAS-7, MOBLAS-2 and TLRS-2)
*       simultaneously occupying marker 7105 during. MOBLAS-2 and TLRS-2
*       were in engineering evaluation and were physically
*       parked on the street near MOBLAS-7. The data from these
*       two systems (MOBLAS-2 and TLRS-2) was never released and older
*       versions were missing these eccentricities. With the introduction
*       of CDP SOD Nos., we can avoid confusion and we have re-entered them.
*
*   (5) The Japanese Keystone systems (Koganei 7328, Kashima 7335,
*       Miura 7337, and Tateyama 7339) eccentricities were remeasured
*       in October 1999 and differed by a few to many millimeters
*       from the original values measured in 1997. The original 1997
*       eccentricities are believed to be in error and have been
*       replaced by the 1999 values.
*
*   (6) Arequipa eccentricities were remeasured post-earthquake on 13 July
*       2001 (day 194), but the observed changes in eccentricities relative to
*       the previous measurements in 1994 were within the uncertainty
*       of the measurement. Therefore the 1994 eccentricities
*       are still considered valid. The 2001 measurements in UNE were
*       2.6951 m, 0.0112 m, and -0.0046 m, respectively.
*
*   (7) Mark 7889 was destroyed during construction of marker 7130
*
*   (8) TLRS-1 7082 eccentricities in late 1983 and early 1984 were measured
*       changes due to upheaval of the pad from freezing cold temperatures. The
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*         position of the mark 7082 and it's concrete pad probably also changed.
*
*   (9) TIGO's 7594 eccentricity at Wettzell was measured in Jan 1998 and
*         Feb 2001. In 2001, there was a 5mm change in the East component.
*         The Jan 1998 "EAST" ecc. measurement is believed to be in error
*         and has been replaced with the Feb 2001 value (i.e. the Feb 2001
*         measurements are back-dated to Jan 1998).
*
*  (10) TIGO's 7405 "UP" eccentricity at Concepcion was incorrectly
*         reported in the original site log. The corrected "UP" eccentricity
*         appears below for entry 7405:
*
*  (11) The start date of 79:135:00000 for eccentricity 7102 was changed
*         to 79:138:00000 to avoid overlap with previous 7102 entry.
*
*  (12) a. Modified the end date(s) to ensure there were no overlaps between
*            consecutive site eccentricities.
*             (e.g. changed endate 99:020:00000 to 99:019:86399)
*
*         b. Modified the end dates to ensure eccentricities cover the entire
*            last day of the site occupation versus the beginning of the last
*            day.
*             (e.g. 91:340:00000 to 91:340:86399)
*
*         c. Added another entry for Zimmerwald (7810) to correspond
*            to the two 7810 DOMES numbers ( 14001S001 & 14001S007 ).
*            The last entry has a point code of "B" to distinquish it
*            from point "A".
*
*         d. Added another entry for San Fernando (7824) to correspond
*            to the two 7824 DOMES numbers ( 13402S004 & 13402S007 ).
*            The last entry has a point code of "B" to distinquish it
*            from point "A".
*
*         e. Added eccentricities for 7941 in Matera and 7841 in Potsdam.
*
*         f. Closed out old occupations.
*
*  (13) a. The eccentricities for the FTLRS 2002 occupation of
*            Ajaccio were retroactively modified due to the final survey
*            conducted by IGN in September 2002 (i.e. the original
*            eccentricities were an approximation).
*
*  (14) This version in addition to the other changes, it expands the
*         SITE/ID block to include a separate entry for each known SLR
*         site occupation, corresponding to each CDP SOD 8-digit No.
*         On the same record we include in the "_STATION DESCRIPTION__"
*         string the system that occupied the site in each case.
*         In addition to that, we have added one more field beyond
*         column 80, not to interfere with the current SINEX format.
*         In cols. 81-89 we insert the "CDP-SOD_" field where we list
*         the CDP SOD 8-digit Nos for the particular occupation.
*
*  (15) In the case of two sites, Bear Lake, Utah (TLRS-1) 7082 and Arequipa,
*         Peru, (TLRS-3) 7403, we have multiple surveys which all fall under one
*         SOD No.. In past releases only one of these was included. This release
*         includes all surveys and associates them with time intervals defined
*         by the "Effective date" listed in the CDDIS eccentricy master file.
*         In all cases the differences are small, a few mm at most, but these are
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*        considered significant today, so we suggest users apply them. The
*        explanation given for these are detailed in footnotes (8) and (6)
*        respectively.
*
-FILE/COMMENT
+SITE/ID
*Code PT __DOMES__ T _STATION DESCRIPTION__ APPROX_LON_ APPROX_LAT_ _APP_H_     CDP-SOD_
 1148 A   ---     L Ondrejov  OND. FIXED   14 47 08.1  49 54 49.3    592.6     11480901
 1181 A 14106S001 L Potsdam   GDR FIXED    13  3 55.0  52 22 48.9    148.5     11813901
 1824 A 12356S001 L Kiev      KIEV FIXED   30 29 45.1  50 21 47.2    213.1     18248101
 1831 A 12368S001 L Lviv      LVIV         23 57 15.8  49 55  3.2    359.8     18318501
 1863 A 12340S001 L Maidanak  MDN. FIXED   66 56 35.3  38 41  8.6   2712.0     18635101
 1864 A 12340S002 L Maidanak  MDN2 FIXED   66 56 35.1  38 41  5.6   2714.2     18645401
 1866 A 12347S001 L Dunaovcy  DUN. FIXED   26 43  6.3  48 50 53.6    397.2     18665201
 1867 A 12344S001 L Evpatoria EVP. FIXED   33  9 50.5  45 13 11.0     47.7     18675301
 1868 A 12341S001 L Komsomolsk KOM. FIXED 136 44 37.7  50 41 40.6    270.1     18685901
 1869 A 12343S001 L Balkhash  BAL. FIXED   73 36  2.2  45 53 58.6    321.4     18696001
 1870 A 12309S001 L Mendeleevo MENLAS      37 13 24.4  56  1 39.3    257.3     18706301
 1871 A 12357S001 L Sarapul   SARLAS       56 28 45.2  53 47 15.0    141.8     18716401
 1873 A 12337S003 L Simeiz    SIM. FIXED   33 59 27.4  44 24 47.4    365.3     18734901
 1874 A 12309S003 L Mendeleev2 MDVS        37 13 24.4  56  1 39.3    257.3     18748301
 1879 A 12372S001 L Altay     ALTL         82 10 38.3  51 20 38.0    270.0     18799401
 1884 A 12302S002 L Riga      RIGA FIXED   24  3 31.0  56 56 55.3     31.7     18844401
 1885 A 12302S006 L Riga      RIGA         24  3 31.1  56 56 55.4     31.5     18856701
 1886 A 12373S001 L Arkhyz                 41 25 53.3  43 38 59.4   2078.2     18869601
 1887 A 25603S001 L Baikonur  BAIL         63 20 31.9  45 42 16.9     98.3     18879701
 1888 A 12350S002 L Svetloe   QUASAR       29 47 00.0  60 32 00.0    100.0     18889801
 1889 A 12351S002 L Zelenchuks QUASAR      41 34 00.0  43 47 00.0   1000.0     18899901
 1890 A 12338S004 L Badary    QUASAR      102 14  7.3  51 46 12.1    100.0     18900901
 1891 A 12313S007 L Irkutsk   IRKL FIXED  104 18 59.0  52 13  8.8    505.6     18915301
 1893 A 12337S006 L Katzively CRIMEA FIX   33 58 12.4  44 23 35.4     68.7     18931801
 1953 A 40701S001 L Santiago D CUBA FIXED 284 14 16.0  20  0 43.0     18.3     19532001
 7035 A 40436M003 L Otay Mount TLRS-3     243  9 32.9  34 22 55.2   2200.0     70351301
 7040 A 49901S001 L Wrightwood OCTL       248 34 45.4  41 56  0.7   1963.9     70409201
 7046 A 40438M002 L Bear Lake TLRS-4      248 34 45.4  41 56  0.7   1963.9     70461402
 7046 A 40438M002 L Bear Lake MTLRS-1     248 34 45.4  41 56  0.8   1060.7     70461501
 7051 A 40433M001 L Quincy    MOBLAS-1    239  3 37.6  39 58 24.5   1060.7     70510101
 7051 A 40433M001 L Quincy    MOBLAS-2    239  3 37.6  39 58 24.5   1060.7     70510202
 7051 A 40433M001 L Quincy    MOBLAS-2    239  3 37.6  39 58 24.5   1060.7     70510203
 7051 A 40433M001 L Quincy    MOBLAS-8    239  3 37.6  39 58 24.5   1060.7     70510804
 7061 A 41703M001 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1    116.8     70611201
 7061 A 41703M001 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1    116.8     70611202
 7062 A 40436M002 L Otay Mount MOBLAS-2   243  9 32.8  32 36  2.6    989.0     70620201
 7062 A 40436M002 L Otay Mount MOBLAS-3   243  9 32.8  32 36  2.6    989.0     70620302
 7062 A 40436M002 L Otay Mount MOBLAS-3   243  9 32.8  32 36  2.6    989.0     70620303
 7062 A 40436M002 L Otay Mount TLRS-1     243  9 32.8  32 36  2.6    989.0     70621104
 7062 A 40436M002 L Otay Mount TLRS-2     243  9 32.8  32 36  2.6    989.0     70621205
 7063 A 40451M112 L Greenbelt GSFC FIXED  283 10 19.9  39  1 13.3     19.9     70632101
 7064 A 40451M107 L Greenbelt MOBLAS-1    283 10 19.1  39  1 14.9     18.7     70640101
 7064 A 40451M107 L Greenbelt MOBLAS-1    283 10 19.1  39  1 14.9     18.7     70640102
 7065 A 40451M108 L Greenbelt MOBLAS-2    283 10 19.1  39  1 14.4     18.6     70650201
 7065 A 40451M108 L Greenbelt MOBLAS-2    283 10 19.1  39  1 14.4     18.6     70650203
 7065 A 40451M108 L Greenbelt MOBLAS-3    283 10 19.1  39  1 14.4     18.6     70650302
 7066 A   ---     L Wallops Is WAL. FIXED 284 29 25.2  37 51 36.5      5.8     70662701
 7067 A 42501M001 L Bermuda   MOBLAS-1    295 20 37.6  32 21 12.8    -20.5     70670101
 7067 A 42501M001 L Bermuda   MOBLAS-1    295 20 37.6  32 21 12.8    -20.5     70670102
 7068 A 43602M002 L Grand Turk MOBLAS-2   288 52  5.1  21 27 37.7    -17.6     70680201
 7068 A 43602M002 L Grand Turk MOBLAS-2   288 52  5.1  21 27 37.7    -17.6     70680202
 7069 A 40417M002 L Patrick   PAFB FIXED  279 23 39.4  28 13 40.6    -23.0     70692201
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7070  A   ---     L Wallops Is MOBLAS-2  284 29 23.4  37 51 35.9     5.6    70700201
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802401
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802402
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802403
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802404
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802405
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802406
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802407
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802408
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802409
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802410
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802411
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802412
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802413
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802414
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802415
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802416
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802417
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802418
7080  A 40442M006 L Mcdonald   MLRS      255 59  5.2  30 40 48.9  2004.9    70802419
7081  A 40417M001 L Patrick    MOBLAS-2  279 23 36.5  28 13 39.7     1.8    70810201
7082  A 40438M001 L Bear Lake  MOBLAS-1  248 34 45.6  41 56  0.8  1963.7    70820101
7082  A 40438M001 L Bear Lake  MOBLAS-1  248 34 45.6  41 56  0.8  1963.7    70820102
7082  A 40438M001 L Bear Lake  TLRS-1    248 34 45.6  41 56  0.8  1963.7    70821103
7082  A 40438M001 L Bear Lake  TLRS-1    248 34 45.6  41 56  0.8  1963.7    70821104
7083  A 40451M122 L Greenbelt  MOBLAS-3  283 10 19.1  39  1 14.0    18.6    70830301
7084  A 40439M003 L Owens Vall MOBLAS-2  241 42 15.2  37 13 55.6  1178.7    70840201
7085  A 40405M001 L Goldstone  MOBLAS-1  243  6 49.0  35 25 27.9   966.7    70850101
7086  A 40442M001 L Mcdonald   MOBLAS-1  255 59  2.6  30 40 37.3  1962.1    70860101
7086  A 40442M001 L Mcdonald   TLRS-1    255 59  2.6  30 40 37.3  1962.1    70861102
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862403
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862404
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862405
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862406
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862407
7086  A 40442M001 L Mcdonald   MLRS      255 59  2.6  30 40 37.3  1962.1    70862408
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900501
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900502
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900503
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7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900506
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900507
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7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900509
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900510
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900511
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900512
7090  A 50107M001 L Yarragadee MOBLAS-5  115 20 48.2 -29 -2-47.3   242.0    70900513
7091  A 40440M001 L Westford   MOBLAS-3  288 30 44.4  42 37 21.7    92.8    70910301
7091  A 40440M001 L Westford   MOBLAS-7  288 30 44.4  42 37 21.7    92.8    70910702
7091  A 40440M001 L Westford   TLRS-1    288 30 44.4  42 37 21.7    92.8    70911103
7091  A 40440M001 L Westford   TLRS-1    288 30 44.4  42 37 21.7    92.8    70911104
7092  A 50505M001 L Kwajalein  MOBLAS-8  167 28 32.5   9 23 37.6    31.3    70920801
7096  A 50503M001 L American N-MOBLAS-6  189 16 30.4 -14-20 -7.4    45.5    70960601
7097  A 41703M002 L Easter Isl TLRS-2    250 36 59.1 -27 -8-52.1   118.2    70971201
7097  A 41703M002 L Easter Isl TLRS-2    250 36 59.1 -27 -8-52.1   118.2    70971202
7097  A 41703M002 L Easter Isl TLRS-2    250 36 59.1 -27 -8-52.1   118.2    70971203
7097  A 41703M002 L Easter Isl TLRS-2    250 36 59.1 -27 -8-52.1   118.2    70971204
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7097  A 41703M002 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1   118.2    70971205
7097  A 41703M002 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1   118.2    70971206
7097  A 41703M002 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1   118.2    70971207
7097  A 41703M002 L Easter Isl TLRS-2     250 36 59.1 -27 -8-52.1   118.2    70971208
7100  A 40451M106 L Greenbelt  MOBLAS-3   283 10 47.7  39  1 15.4    10.8    71000301
7100  A 40451M106 L Greenbelt  MOBLAS-4   283 10 47.7  39  1 15.4    10.8    71000402
7101  A 40451M101 L Greenbelt  MOBLAS-6   283 10 43.0  39  1 16.2     8.1    71010602
7101  A 40451M101 L Greenbelt  MOBLAS-8   283 10 43.0  39  1 16.2     8.1    71010801
7102  A 40451M102 L Greenbelt  MOBLAS-3   283 10 18.9  39  1 14.4    19.1    71020305
7102  A 40451M102 L Greenbelt  MOBLAS-4   283 10 18.9  39  1 14.4    19.1    71020402
7102  A 40451M102 L Greenbelt  MOBLAS-4   283 10 18.9  39  1 14.4    19.1    71020403
7102  A 40451M102 L Greenbelt  MOBLAS-4   283 10 18.9  39  1 14.4    19.1    71020404
7102  A 40451M102 L Greenbelt  MOBLAS-5   283 10 18.9  39  1 14.4    19.1    71020501
7102  A 40451M102 L Greenbelt  TLRS-1     283 10 18.9  39  1 14.4    19.1    71021106
7102  A 40451M102 L Greenbelt  TLRS-1     283 10 18.9  39  1 14.4    19.1    71021107
7103  A 40451M103 L Greenbelt  MOBLAS-6   283 10 18.9  39  1 14.6    18.1    71030601
7103  A 40451M103 L Greenbelt  MOBLAS-6   283 10 18.9  39  1 14.6    18.1    71030602
7104  A 40451M104 L Greenbelt  MOBLAS-7   283 10 36.9  39  1 17.0    11.9    71040701
7105  A 40451M105 L Greenbelt  TLRS-2     283 10 20.3  39  1 14.1    19.8    71051206
7105  A 40451M105 L Greenbelt  MOBLAS-2   283 10 20.3  39  1 14.1    19.8    71050207
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050701
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050702
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050703
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050704
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050705
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050708
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050709
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050710
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050711
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050712
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050713
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050714
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050715
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050716
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050717
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050718
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050719
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050720
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050721
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050722
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050723
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050724
7105  A 40451M105 L Greenbelt  MOBLAS-7   283 10 20.3  39  1 14.1    19.8    71050725
7106  A 40451M113 L Greenbelt  48-INCH    283 10 17.7  39  1 17.3    20.0    71065601
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090801
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090802
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090803
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090804
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090805
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090806
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090807
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090808
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090809
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090810
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090812
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090813
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090814
7109  A 40433M002 L Quincy     MOBLAS-8   239  3 19.0  39 58 30.0  1107.0    71090815
7109  A 40433M002 L Quincy     TLRS-4     239  3 19.0  39 58 30.0  1107.0    71091411
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7110  A 40497M001 L Monument P MOBLAS-3   243 34 38.3  32 53 30.2  1839.7   71100301
7110  A 40497M001 L Monument P MOBLAS-3   243 34 38.3  32 53 30.2  1839.7   71100301
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100402
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100403
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100404
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100405
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100406
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100407
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100408
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100409
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100410
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100411
7110  A 40497M001 L Monument P MOBLAS-4   243 34 38.3  32 53 30.2  1839.7   71100412
7111  A 40420M001 L Vandenberg TLRS-1     239 29 58.0  34 33 58.4   601.6   71111101
7112  A 40496M001 L Plattevill MOBLAS-2   255 16 26.4  40 10 58.0  1502.2   71120201
7112  A 40496M001 L Plattevill TLRS-1     255 16 26.4  40 10 58.0  1502.2   71121105
7112  A 40496M001 L Plattevill TLRS-4     255 16 26.4  40 10 58.0  1502.2   71121403
7112  A 40496M001 L Plattevill MTLRS-1    255 16 26.4  40 10 58.0  1502.2   71121502
7112  A 40496M001 L Plattevill MTLRS-1    255 16 26.4  40 10 58.0  1502.2   71121504
7114  A 40439M001 L Owens Vall MOBLAS-2   241 42 22.3  37 13 57.2  1178.6   71140201
7114  A 40439M001 L Owens Vall TLRS-1     241 42 22.3  37 13 57.2  1178.6   71141102
7114  A 40439M001 L Owens Vall TLRS-1     241 42 22.3  37 13 57.2  1178.6   71141103
7115  A 40405M002 L Goldstone  MOBLAS-3   243 12 29.1  35 14 53.9  1037.6   71150301
7119  A 40445M004 L Haleakala  TLRS-4     203 44 35.2  20 42 27.4  3068.5   71191401
7119  A 40445M004 L Haleakala  TLRS-4     203 44 35.2  20 42 27.4  3068.5   71191402
7120  A 40445M002 L Haleakala  MOBLAS-1   203 44 38.2  20 42 27.4  3069.6   71200101
7121  A 92202M002 L Huahine    MOBLAS-1   208 57 31.9 -16-44 -0.6    44.3   71210101
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220601
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220602
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220603
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220604
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220605
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220606
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220607
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220608
7122  A 40504M001 L Mazatlan   MOBLAS-6   253 32 27.3  23 20 34.2    31.6   71220609
7122  A 40504M001 L Mazatlan   TLRS-4     253 32 27.3  23 20 34.2    31.6   71221410
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231201
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231202
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231203
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231204
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231205
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231206
7123  A 92202M004 L Huahine    TLRS-2     208 57 31.9 -16-44 -0.6    46.1   71231207
7124  A 92201M007 L Papeete    MOBLAS-8   210 23 37.6 -17-34-36.5    95.1   71240801
7124  A 92201M007 L Papeete    MOBLAS-8   210 23 37.6 -17-34-36.5    95.1   71240802
7125  A 40451M114 L Greenbelt  TLRS-3     283 10 21.2  39  1 12.9    19.0   71251302
7125  A 40451M114 L Greenbelt  MTLRS-1    283 10 21.2  39  1 12.9    19.0   71251501
7125  A 40451M114 L Greenbelt  NGSLR01    283 10 21.2  39  1 12.9    19.0   71259301
7126  A   ---     L Greenbelt  MLRO       283 10 21.1  39  1 12.9    19.2   71267701
7127  A   ---     L Greenbelt  GUTS       283 10 21.1  39  1 12.9    19.2   71278901
7130  A 40451M116 L Greenbelt  TLRS-2     283 10 21.1  39  1 15.2    19.6   71301201
7130  A 40451M116 L Greenbelt  TLRS-4     283 10 21.1  39  1 15.2    19.6   71301402
7130  A 40451M116 L Greenbelt  TLRS-4     283 10 21.1  39  1 15.2    19.6   71301403
7206  A 40442S002 L Mcdonald   2.7 METER  255 58 40.8  30 40 18.3  2059.0   72062601
7210  A 40445M001 L Haleakala  HALEAKALA  203 44 38.7  20 42 25.9  3068.2   72102301
7210  A 40445M001 L Haleakala  HALEAKALA  203 44 38.7  20 42 25.9  3068.2   72102302
7210  A 40445M001 L Haleakala  HALEAKALA  203 44 38.7  20 42 25.9  3068.2   72102303
7210  A 40445M001 L Haleakala  HALEAKALA  203 44 38.7  20 42 25.9  3068.2   72102304
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7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102305
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102306
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102307
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102308
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102309
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102310
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7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102312
7210  A 40445M001 L Haleakala   HALEAKALA   203 44 38.7  20 42 25.9  3068.2    72102313
7220  A 40497M002 L Monument P  TLRS-1      243 34 37.7  32 53 30.2  1840.9    72201101
7220  A 40497M002 L Monument P  TLRS-1      243 34 37.7  32 53 30.2  1840.9    72201102
7220  A 40497M002 L Monument P  TLRS-1      243 34 37.7  32 53 30.2  1840.9    72201103
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7220  A 40497M002 L Monument P  TLRS-1      243 34 37.7  32 53 30.2  1840.9    72201105
7231  A 21602S004 L Wuhan       WUHAN       114 29 22.8  30 30 56.4    87.1    72312901
7236  A 21602S003 L Wuhan       WUH. FIXED  114 20 46.5  30 32 30.4    39.4    72362901
7237  A 21611S001 L Changchun   CHALAS      125 26 36.4  43 47 25.8   274.9    72371901
7249  A 21601S004 L Beijing     BEIJ FIXED  115 53 31.3  39 36 24.9    82.3    72496101
7249  A 21601S004 L Beijing     BEIJ FIXED  115 53 31.3  39 36 24.9    82.3    72496102
7261  A 40491M003 L Flagstaff   TLRS-1      248 21 55.7  35 12 52.3  2144.9    72611101
7265  A 40405M006 L Mojave      TLRS-1      243  6 31.3  35 19 52.3   896.7    72651101
7274  A 40497M003 L Monument P  TLRS-1      243 34 37.8  32 53 30.3  1839.4    72741101
7288  A 40405M013 L Mojave      TLRS-3      243  6 30.5  35 19 52.4   896.8    72881301
7288  A 40405M013 L Mojave      TLRS-4      243  6 30.5  35 19 52.4   896.8    72881402
7288  A 40405M013 L Mojave      TLRS-4      243  6 30.5  35 19 52.4   896.8    72881403
7288  A 40405M013 L Mojave      TLRS-4      243  6 30.5  35 19 52.4   896.8    72881404
7295  A 40499M002 L Richmond    TLRS-1      279 36 57.1  25 36 48.0   -22.0    72951102
7295  A 40499M002 L Richmond    TLRS-4      279 36 57.1  25 36 48.0   -22.0    72951403
7295  A 40499M002 L Richmond    MTLRS-1     279 36 57.1  25 36 48.0   -22.0    72951501
7300  A 21733S001 L Minami Tor  HTLRS-1     153 59  3.1  24 17 40.8    35.9    73001701
7301  A 21709S001 L Okinawa (J  HTLRS-1     127 42 56.9  26  7 54.7   126.5    73011701
7302  A 21735S001 L Tsushima    HTLRS-1     129 17 37.0  34 11 47.4    33.9    73021701
7303  A    ---    L Oki Gunto   HTLRS-1     133 19  9.7  36 10 48.3   122.5    73031701
7304  A    ---    L Minami Dai  HTLRS-1     131 13 47.4  25 49 45.1    50.8    73041701
7305  A    ---    L Iwo Jima    HTLRS-1     141 18 20.2  24 46 18.3   135.7    73051701
7307  A 21736S001 L Isigaki Sh  HTLRS-1     124 12 51.4  24 22  9.1   100.8    73071701
7307  B 21736S003 L Isigaki Sh  HTLRS-1     124 12 51.4  24 22  9.1   100.8    73071702
7307  C 21736S004 L Isigaki Sh  HTLRS-1     124 12 51.4  24 22  9.1   100.8    73071703
7307  D 21736S005 L Isigaki Sh  HTLRS-1     124 12 51.4  24 22  9.1   100.8    73071704
7308  A 21704S002 L Koganei     CRLLAS      139 29 20.8  35 42 36.3   123.1    73085001
7309  A    ---    L Hachijo Ji  HTLRS-1     139 49 22.1  33  4 22.7   264.1    73091701
7313  A    ---    L Hiroo       HTLRS-1     143 19 42.4  42 19  4.1    46.1    73131701
7320  A    ---    L Wakkanai    HTLRS-1     141 43 47.8  45 23  9.5    91.6    73201701
7321  A    ---    L Oga         HTLRS-1     139 42  6.2  40  0 16.7    69.4    73211701
7322  A    ---    L Tyosi       HTLRS-1     140 51 12.4  35 42 17.8    90.1    73221701
7323  A    ---    L Makura Sak  HTLRS-1     130 17 35.4  31 16 19.2    62.7    73231701
7328  A 21704M001 L Koganei     KOGLAS      139 29 16.6  35 42 36.6   115.1    73287101
7335  A 21701M002 L Kashima     KASH. FIXD  140 39 27.3  35 57 22.2    66.4    73357201
7337  A 21739M001 L Miura       MIULAS      139 39  1.4  35 12 24.2    99.1    73377301
7339  A 21740M001 L Tateyama    TATLAS      139 50 53.3  34 56 12.9   120.3    73397401
7341  A    ---    L Bisei       HTLRS-1     133 34 15.1  34 40 47.0   549.4    73411701
7341  A    ---    L Bisei       HTLRS-1     133 34 15.1  34 40 47.0   549.4    73411702
7343  A 21601M002 L Beijing     TROS        115 53 31.3  39 36 24.9    82.4    73438401
7355  A 21612M002 L Urumqi      TROS         87 42 19.3  43 48 49.0   846.1    73558401
7355  A 21612M002 L Urumqi      TROS         87 42 19.3  43 48 49.0   846.1    73558402
7356  A 21613M003 L Lhasa       TROS         91  2 15.5  29 38  5.4  3601.5    73568401
7357  A 21601S005 L Beijing     BEIJING-A   115 53 33.6  39 36 27.8    72.7    73578801
7358  A 21749S001 L Tanegashim  GUTS        131  0 55.5  30 33 30.4   140.7    73588901
7359  A 23902S002 L Daedeok     DAEK        127 22 28.9  36 23 56.5   116.6    73592601
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7370  A 50186M001 L BurnieTS    FTLRS       145 52 53.0 -41 -3-44.0   129.6    73706901
7394  A 23907S002 L Sejong      SEJL        127 18 10.5  36 31 15.6   176.4    73942601
7395  A 23910S001 L Geochang    GEOL        127 55 12.4  35 35 24.7   934.1    73956501
7396  A 21602S008 L Wuhan       JFNL FIXED  114 29 24.7  30 30 59.5    77.4    73964701
7400  A 41705M001 L Santiago    TLRS-1      289 19 52.9 -33 -8-58.6   723.4    74001101
7401  A 41706M001 L Cerro Tolo  TLRS-1      289 11 59.8 -30-10-20.8  2155.9    74011101
7401  A 41706M001 L Cerro Tolo  TLRS-3      289 11 59.8 -30-10-20.8  2155.9    74011302
7401  A 41706M001 L Cerro Tolo  TLRS-3      289 11 59.8 -30-10-20.8  2155.9    74011303
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031301
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031302
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031303
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031304
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031305
7403  A 42202M003 L Arequipa    TLRS-3      288 30 25.3 -16-27-56.5  2489.5    74031306
7404  A 41705M004 L Santiago    TLRS-2      289 19 53.5 -33 -8-58.6   724.5    74041201
7404  A 41705M004 L Santiago    TLRS-2      289 19 53.5 -33 -8-58.6   724.5    74041202
7405  A 41719M001 L Concepcion  TIGO        286 58 28.8 -36-50-34.8   170.0    74057901
7405  A 41719M001 L Concepcion  TIGO        286 58 28.8 -36-50-34.8   170.0    74057902
7405  A 41719M001 L Concepcion  TIGO        286 58 28.8 -36-50-34.8   170.0    74057903
7405  A 41719M001 L Concepcion  TIGO        286 58 28.8 -36-50-34.8   170.0    74057904
7406  A 41508S003 L San Juan    BEIJING-A   291 22 36.6 -31-30-31.0   727.2    74068801
7407  A 48081S001 L Brazilia    BRAL        312 08 04.9 -15 46 23.0  1028.8    74072701
7410  A 40104M003 L Algonquin   TLRS-4      281 55 46.9  45 57 20.1   195.9    74101401
7411  A 40132M001 L La Grande   TLRS-4      281 25 43.4  53 41 53.6    20.2    74111401
7411  A 40132M001 L La Grande   TLRS-4      281 25 43.4  53 41 53.6    20.2    74111402
7501  A 30302M003 L Hartebeest  MTLRS-1      27 41 10.2 -25-53-22.9  1407.5    75011501
7501  A 30302M003 L Hartebeest  MOBLAS-6     27 41 10.2 -25-53-22.9  1407.5    75010602
7502  A 30314M001 L Sutherland  MTLRS-1      20 48  8.9 -32-22-45.0  1730.0    75021501
7503  A 30301S010 L HartRTL     HRTL         27 41 10.0 -25-53-21.1  1414.0    75036401
7505  A 11101M001 L Sofia       MTLRS-1      23 23 41.0  42 33 20.4  1113.9    75051501
7510  A 12612M001 L Askites     MTLRS-1      25 33 58.4  40 55 40.8   183.2    75101501
7510  A 12612M001 L Askites     MTLRS-1      25 33 58.4  40 55 40.8   183.2    75101504
7510  A 12612M001 L Askites     MTLRS-1      25 33 58.4  40 55 40.8   183.2    75101505
7510  A 12612M001 L Askites     MTLRS-1      25 33 58.4  40 55 40.8   183.2    75101506
7510  A 12612M001 L Askites     MTLRS-2      25 33 58.4  40 55 40.8   183.2    75101602
7510  A 12612M001 L Askites     MTLRS-2      25 33 58.4  40 55 40.8   183.2    75101603
7512  A 12615M001 L Katavia     MTLRS-1      27 46 50.8  35 57  5.4    74.6    75121501
7512  A 12615M001 L Katavia     MTLRS-1      27 46 50.8  35 57  5.4    74.6    75121503
7512  A 12615M001 L Katavia     MTLRS-1      27 46 50.8  35 57  5.4    74.6    75121504
7512  A 12615M001 L Katavia     MTLRS-2      27 46 50.8  35 57  5.4    74.6    75121602
7515  A 12602M002 L Dionysos    MTLRS-1      23 55 56.8  38  4 42.9   511.2    75151501
7515  A 12602M002 L Dionysos    MTLRS-1      23 55 56.8  38  4 42.9   511.2    75151502
7515  A 12602M002 L Dionysos    MTLRS-1      23 55 56.8  38  4 42.9   511.2    75151503
7515  A 12602M002 L Dionysos    MTLRS-2      23 55 56.8  38  4 42.9   511.2    75151604
7517  A 12613M001 L Roumelli    TLRS-1       24 41 39.0  35 24 15.2   103.3    75171102
7517  A 12613M001 L Roumelli    TLRS-1       24 41 39.0  35 24 15.2   103.3    75171104
7517  A 12613M001 L Roumelli    TLRS-1       24 41 39.0  35 24 15.2   103.3    75171105
7517  A 12613M001 L Roumelli    MTLRS-1      24 41 39.0  35 24 15.2   103.3    75171503
7517  A 12613M001 L Roumelli    MTLRS-2      24 41 39.0  35 24 15.2   103.3    75171601
7520  A 12614M001 L Karitsa     MTLRS-1      20 39 53.4  39 44  3.3   599.3    75201501
7520  A 12614M001 L Karitsa     MTLRS-1      20 39 53.4  39 44  3.3   599.3    75201502
7520  A 12614M001 L Karitsa     MTLRS-1      20 39 53.4  39 44  3.3   599.3    75201503
7525  A 12616M001 L Xrisokelar  TLRS-1       21 52 39.4  36 47 29.2   476.8    75251104
7525  A 12616M001 L Xrisokelar  TLRS-1       21 52 39.4  36 47 29.2   476.8    75251105
7525  A 12616M001 L Xrisokelar  TLRS-1       21 52 39.4  36 47 29.2   476.8    75251106
7525  A 12616M001 L Xrisokelar  TLRS-1       21 52 39.4  36 47 29.2   476.8    75251107
7525  A 12616M001 L Xrisokelar  MTLRS-2      21 52 39.4  36 47 29.2   476.8    75251601
7525  A 12616M001 L Xrisokelar  MTLRS-2      21 52 39.4  36 47 29.2   476.8    75251602
7525  A 12616M001 L Xrisokelar  MTLRS-2      21 52 39.4  36 47 29.2   476.8    75251603
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7530  A 20702M001 L Bar Giyyor MOBLAS-2    35   5 18.7  31 43 20.6   773.7   75300201
7530  A 20702M001 L Bar Giyyor MOBLAS-2    35   5 18.7  31 43 20.6   773.7   75300202
7530  A 20702M001 L Bar Giyyor MOBLAS-2    35   5 18.7  31 43 20.6   773.7   75300203
7530  A 20702M001 L Bar Giyyor MOBLAS-2    35   5 18.7  31 43 20.6   773.7   75300204
7540  A 12734M005 L Matera     MTLRS-1     16 42 16.1  40 38 54.7   529.3   75401501
7541  A 12734M004 L Matera     TLRS-1      16 42 15.4  40 38 54.7   529.0   75411102
7541  A 12734M004 L Matera     TLRS-1      16 42 15.4  40 38 54.7   529.0   75411103
7541  A 12734M004 L Matera     MTLRS-2     16 42 15.4  40 38 54.7   529.0   75411601
7542  A 12749M001 L Monte Vend MTLRS-2     11 41 34.9  45 19 18.6   524.0   75421601
7543  A 12717M001 L Noto       TLRS-1      14 59 18.2  36 52 35.7   126.4   75431102
7543  A 12717M001 L Noto       MTLRS-2     14 59 18.2  36 52 35.7   126.4   75431601
7544  A 12706M001 L Lampedusa  MTLRS-1     12 34  2.8  35 31  3.9   112.6   75441502
7544  A 12706M001 L Lampedusa  MTLRS-1     12 34  2.8  35 31  3.9   112.6   75441503
7544  A 12706M001 L Lampedusa  MTLRS-1     12 34  2.8  35 31  3.9   112.6   75441504
7544  A 12706M001 L Lampedusa  MTLRS-2     12 34  2.8  35 31  3.9   112.6   75441601
7545  A 12725M002 L Punta Sa M TLRS-1       8 58 22.7  39  8  7.7   230.7   75451103
7545  A 12725M002 L Punta Sa M TLRS-1       8 58 22.7  39  8  7.7   230.7   75451104
7545  A 12725M002 L Punta Sa M MTLRS-2      8 58 22.7  39  8  7.7   230.7   75451601
7545  A 12725M002 L Punta Sa M MTLRS-2      8 58 22.7  39  8  7.7   230.7   75451602
7546  A 12711M002 L Medicina   TLRS-1      11 38 47.3  44 31 12.1    50.1   75461102
7546  A 12711M002 L Medicina   MTLRS-2     11 38 47.3  44 31 12.1    50.1   75461601
7548  A 12725S013 L Cagliari   CAGLAS       8 58 19.3  39  8 11.9   252.8   75486201
7550  A 12718M002 L Basovizza  MTLRS-2     13 52 32.0  45 38 34.6   447.9   75501601
7550  A 12718M002 L Basovizza  MTLRS-2     13 52 32.0  45 38 34.6   447.9   75501602
7560  A 12302M001 L Riga       MTLRS-1     24  3 30.9  56 56 54.4    30.0   75601501
7561  A 12337M001 L Simeiz     MTLRS-1     33 59 29.7  44 24 55.2   387.1   75611501
7575  A 20801M001 L Diyarbakir MTLRS-1     40 11 41.6  37 55 12.8   725.5   75751501
7575  A 20801M001 L Diyarbakir MTLRS-1     40 11 41.6  37 55 12.8   725.5   75751502
7580  A 20803M001 L Melengicli TLRS-1      33 11 28.5  37 22 39.5  1358.3   75801101
7580  A 20803M001 L Melengicli TLRS-1      33 11 28.5  37 22 39.5  1358.3   75801102
7580  A 20803M001 L Melengicli TLRS-1      33 11 28.5  37 22 39.5  1358.3   75801103
7580  A 20803M001 L Melengicli TLRS-1      33 11 28.5  37 22 39.5  1358.3   75801104
7585  A 20802M001 L Yozgat     MTLRS-1     34 48 46.8  39 48  1.9  1677.6   75851501
7585  A 20802M001 L Yozgat     MTLRS-1     34 48 46.8  39 48  1.9  1677.6   75851502
7585  A 20802M001 L Yozgat     MTLRS-1     34 48 46.8  39 48  1.9  1677.6   75851503
7587  A 20804M001 L Yigilca    TLRS-1      31 26 19.6  40 56 13.1   823.3   75871101
7587  A 20804M001 L Yigilca    TLRS-1      31 26 19.6  40 56 13.1   823.3   75871102
7587  A 20804M001 L Yigilca    TLRS-1      31 26 19.6  40 56 13.1   823.3   75871103
7587  A 20804M001 L Yigilca    MTLRS-1     31 26 19.6  40 56 13.1   823.3   75871504
7589  A 20805M001 L Ankara     TLRS-1      32 45 30.8  39 53 15.0   974.5   75891101
7590  A 14005M002 L Monte Gene MTLRS-2      9 01 04.3  45 55 39.5  1663.4   75901601
7594  A 14201M200 L Wettzell   TIGO        12 52 38.0  49  8 39.4   659.3   75947901
7596  A 14201M004 L Wettzell   MTLRS-1     12 52 43.2  49  8 38.9   659.4   75961502
7596  A 14201M004 L Wettzell   MTLRS-1     12 52 43.2  49  8 38.9   659.4   75961503
7596  A 14201M004 L Wettzell   MTLRS-2     12 52 43.2  49  8 38.9   659.4   75961601
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971501
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971502
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971503
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971504
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971505
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971506
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971507
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971508
7597  A 14201M005 L Wettzell   MTLRS-1     12 52 42.5  49  8 38.3   660.9   75971509
7599  A 14201M007 L Wettzell   MTLRS-1     12 52 39.9  49  8 42.5   657.8   75991501
7602  A 10302M002 L Tromso     MTLRS-2     18 56 21.9  69 39 46.7   133.7   76021601
7604  A 10004M002 L Brest      FTLRS      355 29 46.2  48 24 28.2   104.8   76046901
7801  A 30101S001 L Helwan     EGY1 FIXED  31 20 33.7  29 51 32.4   132.5   78014601
7805  A 10503S001 L Metsahovi  FIN. FIXED  24 23 40.3  60 13  2.3    79.0   78053301
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7806  A 10503S014 L Metsahovi   METLAS       24 23 40.3  60 13  1.7     74.7    78067601
7810  A 14001S001 L Zimmerwald  SWI. FIXED    7 27 54.7  46 52 38.0    951.7    78104801
7810  B 14001S007 L Zimmerwald  SWI2 FIXED    7 27 54.7  46 52 38.0    951.7    78106801
7811  A 12205S001 L Borowiec    POL. FIXED   17  4 28.5  52 16 37.1    123.3    78113801
7811  A 12205S001 L Borowiec    POL. FIXED   17  4 28.5  52 16 37.1    123.3    78113802
7819  A 21609S004 L Kunming2    KUNMING2    102 47 50.7  25  1 47.8   1993.6    78198201
7820  A 21609S002 L Kunming     KUNMING     102 47 50.7  25  1 47.8   1993.6    78208201
7821  A 21605S010 L Shanghai    SO FIXED    121 11 11.8  31  5 45.9    100.9    78212801
7822  A 92201M017 L Punaaia     FTLRS       210 23 37.6 -17-34-36.5     95.1    78226901
7823  A 13402M005 L San Fernan  FTLRS       353 47 40.8  36 27 54.9     98.6    78236901
7824  A 13402S004 L San Fernan  SPN. FIXED  353 47 40.8  36 27 54.9     98.6    78244501
7824  B 13402S007 L San Fernan  SPN. FIXED  353 47 40.8  36 27 54.9     98.6    78244502
7825  A 50119S003 L Mount Stro  STR2 FIXED  149  0 35.5 -35-18-58.1    805.6    78259001
7826  A 50119S007 L Mount Stro  STR3 FIXED  149  0 35.5 -35-18-58.1    805.6    78269101
7827  A 14201S045 L Wettzell    SOSW         12 52 41.2  49  8 41.8    663.2    78272201
7829  A 10002S017 L Grasse      FTLRS         6 55 14.9  43 45 16.8   1319.4    78296903
7830  A 12617M002 L Chania      FTLRS        24  4 13.9  35 31 58.9    160.9    78306901
7831  A 30101S001 L Helwan      EGY. FIXED   31 20 33.7  29 51 32.4    132.5    78314601
7832  A 20101S001 L Riyadh      SALRO        46 24  1.3  24 54 37.9    760.8    78325501
7833  A 13504S001 L Kootwijk    NL. FIXED     5 48 35.3  52 10 42.2     94.5    78333201
7834  A 14201S002 L Wettzell    GER. FIXED   12 52 41.1  49  8 41.7    661.8    78343001
7835  A 10002S001 L Grasse      FRA. FIXED    6 55 16.0  43 45 16.8   1323.5    78353101
7835  A 10002S001 L Grasse      FRA. FIXED    6 55 16.0  43 45 16.8   1323.5    78353102
7836  A 14106S009 L Potsdam     GFZLAS       13  3 53.6  52 22 48.0    134.2    78365801
7837  A 21605S001 L Shanghai    SO FIXED    121 11 30.2  31  5 51.1     28.5    78372804
7837  A 21605S001 L Shanghai    SO FIXED    121 11 30.2  31  5 51.1     28.5    78372805
7837  A 21605S001 L Shanghai    SO FIXED    121 11 30.2  31  5 51.1     28.5    78373701
7837  A 21605S001 L Shanghai    SO FIXED    121 11 30.2  31  5 51.1     28.5    78373702
7837  A 21605S001 L Shanghai    SO FIXED    121 11 30.2  31  5 51.1     28.5    78373703
7838  A 21726S001 L Simosato    SHO FIXED   135 56 13.3  33 34 39.6    102.3    78383601
7838  A 21726S001 L Simosato    SHO FIXED   135 56 13.3  33 34 39.6    102.3    78383602
7838  A 21726S001 L Simosato    SHO FIXED   135 56 13.3  33 34 39.6    102.3    78383603
7839  A 11001S002 L Graz        GRAZ FIXED   15 29 36.0  47  4  1.6    540.1    78393401
7839  A 11001S002 L Graz        GRAZ FIXED   15 29 36.0  47  4  1.6    540.1    78393402
7840  A 13212S001 L Herstmonce  RGO FIXED     0 20 10.0  50 52  2.5     76.1    78403501
7841  A 14106S011 L Potsdam     GFZLAS3      13  3 41.1  52 22 58.8    127.9    78418701
7843  A 50103S007 L Orroral     NLRS        148 56 21.5 -35-38-10.5   1350.6    78432501
7843  A 50103S007 L Orroral     NLRS        148 56 21.5 -35-38-10.5   1350.6    78432502
7844  A 21732S002 L Chichi Jim  HTLRS-1     142 11 52.4  27  5 54.0     53.0    78441701
7844  B 21732S002 L Chichi Jim  HTLRS-1     142 11 52.4  27  5 54.0     53.0    78441702
7845  A 10002S002 L Grasse      GRASLLR       6 55 17.6  43 45 16.6   1324.0    78457801
7846  A 10002M004 L Grasse      FTLRS         6 55 14.9  43 45 16.8   1319.4    78466901
7847  A 50107S009 L Yarragadee  PSLR        115 20 48.5 -29 -2-46.6    243.1    78477001
7848  A 10077M002 L Ajaccio     FTLRS         8 45 45.6  41 55 38.5     97.5    78486901
7848  A 10077M002 L Ajaccio     FTLRS         8 45 45.6  41 55 38.5     97.5    78486902
7848  A 10077M002 L Ajaccio     FTLRS         8 45 45.6  41 55 38.5     97.5    78486903
7848  A 10077M002 L Ajaccio     FTLRS         8 45 45.6  41 55 38.5     97.5    78486904
7849  A 50119S001 L Mount Stro  STR. FIXED  149  0 35.5 -35-18-58.1    804.7    78498001
7850  A 40442M008 L Mcdonald    TLRS-4      255 59  5.6  30 40 49.7   2004.9    78501401
7853  A 40439M004 L Owens Vall  MTLRS-1     241 42 22.3  37 13 57.3   1178.7    78531501
7853  A 40439M004 L Owens Vall  MTLRS-1     241 42 22.3  37 13 57.3   1178.7    78531502
7865  A 49654M001 L NRL OTF     NRL OTF     282 37 44.0  38 29 57.1     24.6    78658601
7882  A 40505M001 L Cabo San L  TLRS-1      250  8  8.0  22 55  3.1    112.3    78821102
7882  A 40505M001 L Cabo San L  TLRS-2      250  8  8.0  22 55  3.1    112.3    78821201
7882  A 40505M001 L Cabo San L  TLRS-4      250  8  8.0  22 55  3.1    112.3    78821403
7882  A 40505M001 L Cabo San L  TLRS-4      250  8  8.0  22 55  3.1    112.3    78821404
7883  A 40506M001 L Ensenada    TLRS-4      243 50 21.3  31 15 23.9    165.6    78831401
7883  A 40506M001 L Ensenada    TLRS-4      243 50 21.3  31 15 23.9    165.6    78831402
7883  A 40506M001 L Ensenada    TLRS-4      243 50 21.3  31 15 23.9    165.6    78831403
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7883  A 40506M001 L Ensenada   TLRS-4    243 50 21.3  31 15 23.9   165.6   78831404
7884  A 40429S001 L Albuquerqu STARFIRE  253 32  9.9  34 57 51.2  1876.1   78846601
7885  A 40442M005 L Mcdonald   TLRS-1    255 59  2.6  30 40 37.3  1962.0   78851101
7886  A 40433M005 L Quincy     TLRS-1    239  3 18.7  39 58 30.0  1107.3   78861101
7886  A 40433M005 L Quincy     TLRS-1    239  3 18.7  39 58 30.0  1107.3   78861102
7886  A 40433M005 L Quincy     TLRS-1    239  3 18.7  39 58 30.0  1107.3   78861103
7886  A 40433M005 L Quincy     TLRS-1    239  3 18.7  39 58 30.0  1107.3   78861104
7887  A 40420M004 L Vandenberg TLRS-1    239 29 58.0  34 33 58.4   601.6   78871101
7888  A 40434M002 L Mount Hopk TLRS-1    249  7 18.6  31 41  6.4  2330.8   78881101
7889  A 40451M118 L Greenbelt  TLRS-2    283 10 21.1  39  1 15.2    19.2   78891201
7889  A 40451M118 L Greenbelt  TLRS-2    283 10 21.1  39  1 15.2    19.2   78891203
7889  A 40451M118 L Greenbelt  TLRS-3    283 10 21.1  39  1 15.2    19.2   78891302
7890  A 40412M001 L Austin     TLRS-1    262 08 01.5  30 18 46.8   244.6   78901101
7890  A 40412M001 L Austin     TLRS-1    262 08 01.5  30 18 46.8   244.6   78901102
7891  A 40491M002 L Flagstaff  TLRS-1    248 21 55.7  35 12 52.3  2145.1   78911101
7892  A 40492M001 L Vernal     TLRS-1    250 25 45.0  40 19 36.6  1589.8   78921101
7892  A 40492M001 L Vernal     TLRS-1    250 25 45.0  40 19 36.6  1589.8   78921102
7894  A 40493M001 L Yuma       TLRS-1    245 47 48.7  32 56 20.8   237.6   78941101
7895  A    ---    L Mount Wils TLRS-1    283 10 19.7  39  1 14.5    21.9   78951101
7896  A 40400M001 L Pasadena   TLRS-1    241 49 39.7  34 12 19.9   442.9   78961101
7897  A 40442M010 L Mcdonald   TLRS-1    255 59  5.6  30 40 49.7  2004.9   78971101
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7899  A 40451M111 L Greenbelt  TLRS-1    283 10 48.1  39  1 15.3    10.2   78991101
7899  A 40451M111 L Greenbelt  TLRS-1    283 10 48.1  39  1 15.3    10.2   78991102
7902  A 30304S001 L Olifantsfo SAO-3      27 41 10.2 -25-53-22.9  1407.5   79024201
7907  A 42202S001 L Arequipa   SAO-2     288 30 24.7 -16-27-56.6  2492.9   79074001
7907  A 42202S001 L Arequipa   SAO-2     288 30 24.7 -16-27-56.6  2492.9   79074002
7907  A 42202S001 L Arequipa   SAO-2     288 30 24.7 -16-27-56.6  2492.9   79074003
7917  A 40451M119 L Greenbelt  SAO-3     283 10 18.9  39  1 17.7    25.7   79174201
7918  A 40451M120 L Greenbelt  MOBLAS-6  283 10 19.7  39  1 14.5    19.4   79180608
7918  A 40451M120 L Greenbelt  MOBLAS-6  283 10 19.7  39  1 14.5    19.4   79180609
7918  A 40451M120 L Greenbelt  TLRS-3    283 10 19.7  39  1 14.5    19.4   79181301
7918  A 40451M120 L Greenbelt  TLRS-3    283 10 19.7  39  1 14.5    19.4   79181302
7918  A 40451M120 L Greenbelt  TLRS-3    283 10 19.7  39  1 14.5    19.4   79181306
7918  A 40451M120 L Greenbelt  TLRS-4    283 10 19.7  39  1 14.5    19.4   79181403
7918  A 40451M120 L Greenbelt  TLRS-4    283 10 19.7  39  1 14.5    19.4   79181404
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7918  A 40451M120 L Greenbelt  TLRS-4    283 10 19.7  39  1 14.5    19.4   79181407
7919  A 40451M121 L Greenbelt  TLRS-4    283 10 19.7  39  1 14.5    21.9   79191401
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201101
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201102
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201103
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201104
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201105
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201110
7920  A 40451M117 L Greenbelt  TLRS-1    283 10 21.0  39  1 12.9    19.3   79201111
7920  A 40451M117 L Greenbelt  TLRS-3    283 10 21.0  39  1 12.9    19.3   79201306
7920  A 40451M117 L Greenbelt  TLRS-3    283 10 21.0  39  1 12.9    19.3   79201307
7920  A 40451M117 L Greenbelt  TLRS-3    283 10 21.0  39  1 12.9    19.3   79201308
7920  A 40451M117 L Greenbelt  TLRS-3    283 10 21.0  39  1 12.9    19.3   79201309
7920  A 40451M117 L Greenbelt  TLRS-4    283 10 21.0  39  1 12.9    19.3   79201414
7920  A 40451M117 L Greenbelt  SALRO     283 10 21.0  39  1 12.9    19.3   79205512
7920  A 40451M117 L Greenbelt  SALRO     283 10 21.0  39  1 12.9    19.3   79205513
7921  A 40434S001 L Mount Hopk SAO-4     249  7 18.9  31 41  3.2  2358.2   79214301
7929  A 41604S001 L Natal      SAO-1     324 50  7.3  -5-55-40.1    42.6   79294101
7935  A 21705S001 L Dodair     DDR FIXED 139 11 30.6  36  0 20.7   903.2   79356501
7939  A 12734S001 L Matera     SAO-1      16 42 16.8  40 38 55.7   536.5   79394101
7940  A 12602S001 L Dionysos   GRE. FIXED 23 55 57.9  38  4 42.3   511.9   79404701
7941  A 12734S008 L Matera     MLRO       16 42 16.5  40 38 55.2   537.6   79417701
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7943  A 50103S003 L Orroral    SAO-3      148 57 17.2 -35-37-29.7   950.3     79434201
7944  A   ---     L Tidbinbill SALRO      148 57 17.3 -35 37 29.7   689.0     79445501
7999  A   ---     L Mcdonald   TLRS-1     255 59  5.6  30 40 49.7  2004.9     79991101
8833  A 13504M002 L Kootwijk   MTLRS-1      5 48 36.6  52 10 41.4    89.2     88331501
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331602
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331603
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331604
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331605
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331606
8833  A 13504M002 L Kootwijk   MTLRS-2      5 48 36.6  52 10 41.4    89.2     88331607
8834  A 14201S018 L Wettzell    WLRS       12 52 40.8  49  8 39.9   666.0     88341001
-SITE/ID
+SITE/ECCENTRICITY
*SITE PT SOLN T DATA_START__ DATA_END____ UNE UP_____ NORTH___ EAST____     CDP-SOD_
 1148 A    1 L 88:001:00000 91:365:86399 UNE   0.0000   0.0000   0.0000     11480901
 1181 A    1 L 74:001:00000 93:365:86399 UNE   0.0000   0.0000   0.0000     11813901
 1824 A    1 L 96:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18248101
 1831 A    1 L 02:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18318501
 1863 A    1 L 90:274:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18635101
 1864 A    1 L 90:274:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18645401
 1866 A    1 L 90:274:00000 90:365:86399 UNE   0.0000   0.0000   0.0000     18665201
 1867 A    1 L 90:274:00000 94:365:86399 UNE   0.0000   0.0000   0.0000     18675301
 1868 A    1 L 92:122:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18685901
 1869 A    1 L 92:001:00000 93:365:86399 UNE   0.0000   0.0000   0.0000     18696001
 1870 A    1 L 94:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18706301
 1871 A    1 L 94:001:00000 99:365:86399 UNE   0.0000   0.0000   0.0000     18716401
 1873 A    1 L 76:122:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18734901
 1874 A    1 L 99:152:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18748301
 1879 A    1 L 04:259:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18799401
 1884 A    1 L 76:122:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18844401
 1885 A    1 L 96:245:00000 97:365:86399 UNE   0.0000   0.0000   0.0000     18856701
 1886 A    1 L 10:335:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18869601
 1887 A    1 L 11:152:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18879701
 1888 A    1 L 12:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18889801
 1889 A    1 L 12:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18899901
 1890 A    1 L 12:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18900901
 1891 A    1 C 13:203:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18915301
 1893 A    1 L 76:122:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     18931801
 1953 A    1 L 76:122:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     19532001
 7035 A    1 L 88:176:00000 88:265:86399 UNE   2.5870   0.0060   0.0170     70351301
 7040 A    1 L 05:001:00000 00:000:00000 UNE   0.0000   0.0000   0.0000     70409201
 7046 A    1 L 91:237:00000 91:290:86399 UNE   2.6390   0.0030  -0.0020     70461402
 7046 A    1 L 90:215:00000 90:246:86399 UNE   1.3350   1.7760   1.9460     70461501
 7051 A    1 L 74:239:00000 74:331:86399 UNE   3.6800   0.0020  -0.0010     70510101
 7051 A    1 L 76:191:00000 76:335:86399 UNE   3.6040  -0.0050  -0.0030     70510202
 7051 A    1 L 79:001:00000 79:150:86399 UNE   3.6190  -0.0060   0.0040     70510203
 7051 A    1 L 81:032:00000 81:141:86399 UNE   3.2790  -0.0220   0.0230     70510804
 7061 A    1 L 83:010:00000 83:214:86399 UNE   1.7360   0.0000   0.0000     70611201
 7061 A    1 L 84:079:00000 84:347:86399 UNE   1.7350   0.0000   0.0000     70611202
 7062 A    1 L 74:240:00000 74:348:86399 UNE   3.5700  -0.0050   0.0000     70620201
 7062 A    1 L 76:258:00000 77:120:86399 UNE   3.6150   0.0000   0.0000     70620302
 7062 A    1 L 78:180:00000 79:150:86399 UNE   3.5680  -0.0110  -0.0100     70620303
 7062 A    1 L 81:277:00000 82:008:86399 UNE   3.4080   0.0310  -1.6010     70621104
 7062 A    1 L 83:255:00000 84:004:86399 UNE   1.7940   0.0000   0.0000     70621205
 7063 A    1 L 76:122:00000 81:240:86399 UNE   3.0360   0.0000   0.0000     70632101
 7064 A    1 L 73:274:00000 74:181:86399 UNE   2.9780   0.0000   0.0000     70640101
 7064 A    1 L 77:294:00000 77:332:86399 UNE   2.9660   0.0020   0.0020     70640102
 7065 A    1 L 73:274:00000 74:181:86399 UNE   3.4170   0.0000   0.0000     70650201
 7065 A    1 L 77:290:00000 77:325:86399 UNE   3.4680  -0.0130   0.0020     70650203
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7065  A    1 L 75:213:00000 76:191:86399 UNE    3.4650   -0.0810   -0.1760        70650302
7066  A    1 L 76:122:00000 79:152:86399 UNE    9.0800    0.0000    0.0000        70662701
7067  A    1 L 75:236:00000 76:198:86399 UNE    3.7010    0.0000    0.0000        70670101
7067  A    1 L 78:181:00000 78:313:86399 UNE    3.6890   -0.0050   -0.0080        70670102
7068  A    1 L 75:109:00000 76:065:86399 UNE    3.5780    0.0000    0.0050        70680201
7068  A    1 L 78:211:00000 78:311:86399 UNE    3.6780    0.0090   -0.0290        70680202
7069  A    1 L 76:122:00000 80:274:86399 UNE    3.4360    0.0000    0.0000        70692201
7070  A    1 L 75:024:00000 75:059:86399 UNE    3.3600    0.0000    0.0000        70700201
7080  A    1 L 88:041:00000 88:154:86399 UNE    1.7560   -0.0040   -0.0050        70802401
7080  A    1 L 88:155:00000 88:265:86399 UNE    1.7560   -0.0040   -0.0050        70802402
7080  A    1 L 88:266:00000 89:255:86399 UNE    1.7560   -0.0040   -0.0050        70802403
7080  A    1 L 89:256:00000 89:270:86399 UNE    1.7560   -0.0040   -0.0050        70802404
7080  A    1 L 89:271:00000 89:297:86399 UNE    1.7560   -0.0040   -0.0050        70802405
7080  A    1 L 89:309:00000 90:015:86399 UNE    1.7560   -0.0040   -0.0050        70802406
7080  A    1 L 90:016:00000 90:025:86399 UNE    1.7560   -0.0040   -0.0050        70802407
7080  A    1 L 90:026:00000 90:093:86399 UNE    1.7560   -0.0040   -0.0050        70802408
7080  A    1 L 90:094:00000 90:119:86399 UNE    1.7560   -0.0040   -0.0050        70802409
7080  A    1 L 90:120:00000 90:156:86399 UNE    1.7560   -0.0040   -0.0050        70802410
7080  A    1 L 90:157:00000 90:267:86399 UNE    1.7560   -0.0040   -0.0050        70802411
7080  A    1 L 90:268:00000 90:334:86399 UNE    1.7560   -0.0040   -0.0050        70802412
7080  A    1 L 90:335:00000 91:099:86399 UNE    1.7560   -0.0040   -0.0050        70802413
7080  A    1 L 91:100:00000 91:184:86399 UNE    1.7560   -0.0040   -0.0050        70802414
7080  A    1 L 91:185:00000 92:100:86399 UNE    1.7560   -0.0040   -0.0050        70802415
7080  A    1 L 92:101:00000 92:225:86399 UNE    1.7560   -0.0040   -0.0050        70802416
7080  A    1 L 92:226:00000 93:028:86399 UNE    1.7560   -0.0040   -0.0050        70802417
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7080  A    1 L 93:162:00000 00:000:00000 UNE    1.7630   -0.0030   -0.0060        70802419
7081  A    1 L 76:103:00000 76:128:86399 UNE    3.4220    0.0000    0.0000        70810201
7082  A    1 L 76:268:00000 76:335:86399 UNE    3.7740    0.0020    0.0030        70820101
7082  A    1 L 79:001:00000 79:232:86399 UNE    3.8170   -0.0040    0.0050        70820102
7082  A    1 L 81:089:00000 81:126:86399 UNE    3.5100   -1.0870    1.1120        70821103
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7083  A    1 L 75:001:00000 75:166:86399 UNE    2.8730    0.0000    0.0000        70830301
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7086  A    1 L 86:290:00000 87:210:86399 UNE    1.9770   -5.3080    5.5900        70862405
7086  A    1 L 87:211:00000 87:259:86399 UNE    1.9770   -5.3080    5.5900        70862406
7086  A    1 L 87:260:00000 87:327:86399 UNE    1.9770   -5.3080    5.5900        70862407
7086  A    1 L 87:328:00000 88:032:86399 UNE    1.9770   -5.3080    5.5900        70862408
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7090  A    1 L 83:208:00000 84:323:86399 UNE    3.1850    0.0030    0.0110        70900502
7090  A    1 L 84:324:00000 85:247:86399 UNE    3.1850    0.0030    0.0110        70900503
7090  A    1 L 85:248:00000 87:106:86399 UNE    3.1850    0.0030    0.0110        70900504
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7090  A    1 L 92:203:00000 98:233:86399 UNE    3.1813   -0.0096    0.0192        70900513
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7090  A    1 L 03:331:00000 07:150:86399 UNE    3.1821   -0.0083    0.0184        70900513
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7091   A     1 L 77:339:00000 78:090:86399 UNE    3.7480    0.0000    0.0030        70910301
7091   A     1 L 79:161:00000 80:319:86399 UNE    3.3810   -0.0160   -0.0030        70910702
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7091   A     1 L 90:283:00000 90:345:86399 UNE    3.4970    1.5500   -0.0590        70911104
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7096   A     1 L 79:161:00000 80:319:86399 UNE    3.1980    0.0000    0.0000        70960601
7097   A     1 L 87:315:00000 88:060:86399 UNE    1.4960    0.0000    0.0000        70971201
7097   A     1 L 88:266:00000 89:090:86399 UNE    1.4740    0.0000    0.0000        70971202
7097   A     1 L 89:279:00000 90:056:86399 UNE    1.4820    0.0000    0.0000        70971203
7097   A     1 L 90:248:00000 91:068:86399 UNE    1.4870    0.0000   -0.0010        70971204
7097   A     1 L 91:261:00000 92:069:86399 UNE    1.4820   -0.0010   -0.0020        70971205
7097   A     1 L 92:070:00000 92:078:86399 UNE    1.4820   -0.0010   -0.0020        70971206
7097   A     1 L 92:226:00000 93:089:86399 UNE    1.4970   -0.0010   -0.0010        70971207
7097   A     1 L 93:331:00000 95:090:86399 UNE    1.4950    0.0000   -0.0010        70971208
7100   A     1 L 77:228:00000 77:322:86399 UNE    3.5130    0.0000   -0.0020        71000301
7100   A     1 L 78:060:00000 78:286:86399 UNE    3.1910    0.0050    0.0210        71000402
7101   A     1 L 82:032:00000 82:152:86399 UNE    3.1500    0.1190   -0.6480        71010602
7101   A     1 L 78:213:00000 79:150:86399 UNE    3.1330    0.1680   -0.6910        71010801
7102   A     1 L 84:336:00000 88:174:86399 UNE    3.4880    0.0580    0.0180        71020305
7102   A     1 L 79:138:00000 82:319:86399 UNE    3.2050   -0.0020   -0.0040        71020402
7102   A     1 L 82:335:00000 83:090:86399 UNE    3.1540    0.0080    0.0480        71020403
7102   A     1 L 83:091:00000 83:212:86399 UNE    3.1960   -0.0190    0.0420        71020404
7102   A     1 L 78:091:00000 79:137:86399 UNE    3.2080   -0.0090    0.0020        71020501
7102   A     1 L 88:295:00000 89:001:86399 UNE    3.2670    1.5660   -0.0180        71021106
7102   A     1 L 89:002:00000 89:065:86399 UNE    3.2670    1.5660   -0.0180        71021107
7103   A     1 L 78:135:00000 79:130:86399 UNE    3.1920    0.0000   -0.0330        71030601
7103   A     1 L 82:159:00000 82:306:86399 UNE    3.1660   -0.0460   -0.0060        71030602
7104   A     1 L 78:182:00000 79:155:86399 UNE    3.1300    0.0690    0.0620        71040701
7105   A     1 L 85:060:00000 85:204:86399 UNE    1.4650    0.9700   16.5080        71051206
7105   A     1 L 85:088:00000 85:184:86399 UNE    2.9820   13.2060  -12.1060        71050207
7105   A     1 L 81:001:00000 81:166:86399 UNE    3.1690    0.0160   -0.0260        71050701
7105   A     1 L 81:167:00000 83:031:86399 UNE    3.1690    0.0160   -0.0260        71050702
7105   A     1 L 83:032:00000 83:233:86399 UNE    3.1690    0.0160   -0.0260        71050703
7105   A     1 L 83:234:00000 84:081:86399 UNE    3.1690    0.0170   -0.0310        71050704
7105   A     1 L 84:082:00000 85:126:86399 UNE    3.1690    0.0170   -0.0320        71050705
7105   A     1 L 85:127:00000 85:209:86399 UNE    3.1690    0.0170   -0.0320        71050708
7105   A     1 L 85:210:00000 86:086:86399 UNE    3.1690    0.0170   -0.0320        71050709
7105   A     1 L 86:090:00000 86:339:86399 UNE    3.1680    0.0170   -0.0310        71050710
7105   A     1 L 86:340:00000 88:208:86399 UNE    3.1680    0.0170   -0.0310        71050711
7105   A     1 L 88:209:00000 89:009:86399 UNE    3.1680    0.0170   -0.0310        71050712
7105   A     1 L 89:010:00000 89:165:86399 UNE    3.1680    0.0170   -0.0310        71050713
7105   A     1 L 89:166:00000 89:214:86399 UNE    3.1680    0.0170   -0.0310        71050714
7105   A     1 L 89:215:00000 89:284:86399 UNE    3.1680    0.0170   -0.0310        71050715
7105   A     1 L 89:285:00000 90:205:86399 UNE    3.1620    0.0350   -0.0400        71050716
7105   A     1 L 90:206:00000 90:243:86399 UNE    3.1530   -0.0140   -0.0330        71050717
7105   A     1 L 90:244:00000 90:343:86399 UNE    3.1530   -0.0140   -0.0330        71050718
7105   A     1 L 90:344:00000 91:190:86399 UNE    3.1530   -0.0140   -0.0330        71050719
7105   A     1 L 91:191:00000 91:203:86399 UNE    3.1530   -0.0140   -0.0330        71050720
7105   A     1 L 91:204:00000 91:289:86399 UNE    3.1530   -0.0140   -0.0330        71050721
7105   A     1 L 91:291:00000 91:342:86399 UNE    3.1530   -0.0140   -0.0330        71050722
7105   A     1 L 91:343:00000 92:174:86399 UNE    3.1530   -0.0140   -0.0330        71050723
7105   A     1 L 92:192:00000 99:031:86399 UNE    3.1380   -0.0110   -0.0300        71050724
7105   A     1 L 99:032:00000 07:304:86399 UNE    3.1380   -0.0070   -0.0340        71050725
7105   A     1 L 07:305:00000 12:151:86399 UNE    3.1380   -0.0070   -0.0340        71050725
7105   A     1 L 12:152:00000 00:000:00000 UNE    3.1379   -0.0087   -0.0327        71050725
7106   A     1 L 90:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        71065601
7109   A     1 L 81:274:00000 82:210:86399 UNE    3.2250    0.0120    0.0110        71090801
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7109   A     1 L 85:071:00000 85:226:86399 UNE    3.1420   -0.0290    0.0110      71090803
7109   A     1 L 85:227:00000 86:261:86399 UNE    3.1420   -0.0290    0.0110      71090804
7109   A     1 L 86:269:00000 88:346:86399 UNE    3.1420   -0.0290    0.0110      71090805
7109   A     1 L 88:347:00000 89:081:86399 UNE    3.1380   -0.0270    0.0120      71090806
7109   A     1 L 89:082:00000 90:179:86399 UNE    3.1380   -0.0270    0.0120      71090807
7109   A     1 L 90:182:00000 90:199:86399 UNE    3.1380   -0.0270    0.0120      71090808
7109   A     1 L 90:200:00000 90:256:86399 UNE    3.1380   -0.0270    0.0120      71090809
7109   A     1 L 90:257:00000 91:066:86399 UNE    3.1380   -0.0270    0.0120      71090810
7109   A     1 L 91:322:00000 91:345:86399 UNE    3.1840   -0.0190    0.0050      71090812
7109   A     1 L 91:346:00000 92:094:86399 UNE    3.1840   -0.0350   -0.0030      71090813
7109   A     1 L 92:099:00000 92:117:86399 UNE    3.1840   -0.0350   -0.0030      71090814
7109   A     1 L 92:118:00000 97:161:86399 UNE    3.1840   -0.0350   -0.0030      71090815
7109   A     1 L 91:078:00000 91:231:86399 UNE    2.6510   -0.0050    0.0000      71091411
7110   A     1 L 81:182:00000 81:212:86399 UNE    3.5000   -0.0070   -0.0030      71100301
7110   A     1 L 81:213:00000 83:181:86399 UNE    3.5200   -0.0070   -0.0030      71100301
7110   A     1 L 83:227:00000 86:316:86399 UNE    3.2090   -0.0330   -0.0150      71100402
7110   A     1 L 86:324:00000 88:121:86399 UNE    3.2100   -0.0330   -0.0150      71100403
7110   A     1 L 88:121:00000 88:167:86399 UNE    3.2130   -0.0330   -0.0160      71100404
7110   A     1 L 88:168:00000 88:347:86399 UNE    3.2130   -0.0330   -0.0160      71100405
7110   A     1 L 88:348:00000 90:256:86399 UNE    3.2130   -0.0330   -0.0160      71100406
7110   A     1 L 90:257:00000 91:092:86399 UNE    3.2130   -0.0330   -0.0160      71100407
7110   A     1 L 91:093:00000 91:339:86399 UNE    3.2130   -0.0330   -0.0160      71100408
7110   A     1 L 91:340:00000 92:014:86399 UNE    3.2130   -0.0330   -0.0160      71100409
7110   A     1 L 92:018:00000 92:069:86399 UNE    3.2130   -0.0330   -0.0160      71100410
7110   A     1 L 92:122:00000 03:099:86399 UNE    3.1890   -0.0260   -0.0190      71100411
7110   A     1 L 03:143:00000 11:316:86399 UNE    3.1880   -0.0213   -0.0208      71100412
7110   A     1 L 11:317:00000 18:136:86399 UNE    3.1900   -0.0260   -0.0180      71100412
7110   A     1 L 18:137:00000 00:000:00000 UNE    3.1895   -0.0242   -0.0148      71100412
7111   A     1 L 82:118:00000 82:145:86399 UNE    3.3050   -1.1620   -1.0510      71111101
7112   A     1 L 81:091:00000 84:287:86399 UNE    3.5110    0.0050   -0.0020      71120201
7112   A     1 L 91:288:00000 91:359:86399 UNE    3.2730    1.1770   -1.0390      71121105
7112   A     1 L 90:026:00000 90:054:86399 UNE    2.6280   -0.0070    0.0220      71121403
7112   A     1 L 88:212:00000 88:274:86399 UNE    1.3510   -2.7050    0.0110      71121502
7112   A     1 L 90:249:00000 90:289:86399 UNE    1.3470   -2.7480    0.0420      71121504
7114   A     1 L 79:159:00000 81:031:86399 UNE    3.6220   -0.0030   -0.0080      71140201
7114   A     1 L 81:223:00000 81:272:86399 UNE    3.4590    1.5120   -0.4420      71141102
7114   A     1 L 82:312:00000 83:021:86399 UNE    3.5140    1.5200   -0.3640      71141103
7115   A     1 L 79:166:00000 81:100:86399 UNE    3.6150    0.0070   -0.0290      71150301
7119   A     1 L 06:250:00000 11:088:86399 UNE    2.6320    0.0010    0.0020      71191401
7119   A     1 L 11:089:00000 13:134:86399 UNE    2.6320    0.0010    0.0020      71191402
7119   A     1 L 13:135:00000 00:000:00000 UNE    2.6304    0.0029    0.0032      71191402
7120   A     1 L 80:167:00000 82:022:86399 UNE    3.6020   -0.0130    0.0090      71200101
7121   A     1 L 83:032:00000 86:101:86399 UNE    3.6620    0.0010    0.0060      71210101
7122   A     1 L 83:060:00000 84:061:86399 UNE    3.1820    0.0010   -0.0070      71220601
7122   A     1 L 84:150:00000 85:349:86399 UNE    3.1820    0.0010   -0.0070      71220602
7122   A     1 L 85:350:00000 87:021:86399 UNE    3.1820    0.0010   -0.0070      71220603
7122   A     1 L 87:028:00000 88:229:86399 UNE    3.1820    0.0010   -0.0070      71220604
7122   A     1 L 88:230:00000 89:011:86399 UNE    3.1810    0.0020   -0.0060      71220605
7122   A     1 L 89:012:00000 89:173:86399 UNE    3.1810    0.0020   -0.0060      71220606
7122   A     1 L 89:174:00000 89:276:86399 UNE    3.1810    0.0020   -0.0060      71220607
7122   A     1 L 89:277:00000 90:354:86399 UNE    3.1810    0.0020   -0.0060      71220608
7122   A     1 L 90:355:00000 91:103:86399 UNE    3.1810    0.0020   -0.0060      71220609
7122   A     1 L 92:254:00000 93:013:86399 UNE    2.6550   -0.0010   -0.0130      71221410
7123   A     1 L 87:195:00000 87:281:86399 UNE    1.4530    0.0000    0.0000      71231201
7123   A     1 L 88:076:00000 88:245:86399 UNE    1.4370    0.0000    0.0000      71231202
7123   A     1 L 89:114:00000 89:245:86399 UNE    1.4820    0.0000    0.0000      71231203
7123   A     1 L 90:074:00000 90:232:86399 UNE    1.4590   -0.0010    0.0030      71231204
7123   A     1 L 91:095:00000 91:247:86399 UNE    1.4820   -0.0020    0.0040      71231205
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7123   A    1 L 93:098:00000 93:318:86399 UNE    1.4810   -0.0010    0.0020          71231207
7124   A    1 L 97:213:00000 99:348:86399 UNE    3.1450   -0.0120    0.0110          71240801
7124   A    1 L 99:349:00000 07:275:86399 UNE    3.1430   -0.0150    0.0110          71240802
7124   A    1 L 07:276:00000 00:000:00000 UNE    3.1410   -0.0150    0.0100          71240802
7125   A    1 L 87:258:00000 88:028:86399 UNE    2.5800    0.0000    0.0000          71251302
7125   A    1 L 85:121:00000 85:204:86399 UNE    1.3400   -0.3550   -2.1190          71251501
7125   A    1 L 12:001:00000 00:000:00000 UNE    3.6960   -0.0820   -2.8140          71259301
7126   A    1 L 96:275:00000 99:339:86399 UNE    0.0000    0.0000    0.0000          71267701
7127   A    1 L 03:182:00000 04:213:86399 UNE    0.0000    0.0000    0.0000          71278901
7130   A    1 L 85:310:00000 87:139:86399 UNE    2.4860    0.0000    0.0000          71301201
7130   A    1 L 99:015:00000 04:366:86399 UNE    2.6550    0.0020   -0.0030          71301402
7130   A    1 L 05:001:00000 06:109:86399 UNE    2.6704   -0.0096   -0.0159          71301403
7206   A    1 L 76:122:00000 85:180:86399 UNE    5.3280   -0.8100   -0.0410          72062601
7210   A    1 L 76:122:00000 84:091:86399 UNE    0.8480    0.7520    0.0000          72102301
7210   A    1 L 84:092:00000 87:197:86399 UNE    0.8480    0.7520    0.0000          72102302
7210   A    1 L 87:198:00000 89:215:86399 UNE    0.8480    0.7520    0.0000          72102303
7210   A    1 L 89:216:00000 90:304:86399 UNE    0.8480    0.7530    0.0010          72102304
7210   A    1 L 90:305:00000 91:021:86399 UNE    0.8480    0.7530    0.0010          72102305
7210   A    1 L 91:022:00000 91:169:86399 UNE    0.8480    0.7530    0.0010          72102306
7210   A    1 L 91:170:00000 92:013:86399 UNE    0.8480    0.7530    0.0010          72102307
7210   A    1 L 92:014:00000 92:098:86399 UNE    0.8480    0.7530    0.0010          72102308
7210   A    1 L 92:099:00000 92:183:86399 UNE    0.8480    0.7530    0.0010          72102309
7210   A    1 L 92:184:00000 92:196:86399 UNE    0.8480    0.7530    0.0010          72102310
7210   A    1 L 92:197:00000 93:229:86399 UNE    0.8480    0.7530    0.0010          72102311
7210   A    1 L 93:232:00000 95:244:86399 UNE    0.8490    0.7530    0.0000          72102312
7210   A    1 L 95:245:00000 04:159:86399 UNE    0.8490    0.7530    0.0000          72102313
7220   A    1 L 83:242:00000 83:306:86399 UNE    3.2410    1.4390    0.6560          72201101
7220   A    1 L 84:363:00000 85:010:86399 UNE    3.2540    1.2750    0.9030          72201102
7220   A    1 L 85:013:00000 85:058:86399 UNE    3.2300    0.9270    1.2710          72201103
7220   A    1 L 85:062:00000 85:082:86399 UNE    3.2300    0.9270    1.2710          72201104
7220   A    1 L 85:083:00000 85:133:86399 UNE    3.2300    0.9270    1.2710          72201105
7231   A    1 L 00:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000          72312901
7236   A    1 L 88:001:00000 99:273:86399 UNE    0.0000    0.0000    0.0000          72362901
7237   A    1 L 88:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000          72371901
7249   A    1 L 92:336:00000 12:066:86399 UNE    0.0000    0.0000    0.0000          72496101
7249   A    1 L 12:067:00000 00:000:00000 UNE    0.0000    0.0000    0.0000          72496102
7261   A    1 L 91:121:00000 91:227:86399 UNE    3.2700    1.5610    0.1290          72611101
7265   A    1 L 84:018:00000 84:066:86399 UNE    3.4840    0.4700   -1.5020          72651101
7274   A    1 L 85:136:00000 85:199:86399 UNE    3.3010    1.2580    0.9510          72741101
7288   A    1 L 88:039:00000 88:167:86399 UNE    2.5840    0.0000   -0.0030          72881301
7288   A    1 L 89:023:00000 89:108:86399 UNE    2.6100    0.0050   -0.0110          72881402
7288   A    1 L 89:294:00000 90:017:86399 UNE    2.6170    0.0130   -0.0040          72881403
7288   A    1 L 90:293:00000 91:053:86399 UNE    2.6370    0.0080   -0.0120          72881404
7295   A    1 L 90:355:00000 91:107:86399 UNE    3.2880    0.1660    1.5650          72951102
7295   A    1 L 94:280:00000 95:112:86399 UNE    2.6560    0.0060   -0.0050          72951403
7295   A    1 L 88:084:00000 88:203:86399 UNE    1.3410   -2.6110    0.1960          72951501
7300   A    1 L 89:010:00000 89:083:86399 UNE   -0.6140-516.4230-565.4650          73001701
7301   A    1 L 89:191:00000 89:247:86399 UNE    1.5600   13.3950   19.1470          73011701
7302   A    1 L 89:276:00000 89:329:86399 UNE    1.6850   -3.6970   -1.0760          73021701
7303   A    1 L 90:254:00000 90:303:86399 UNE    1.6700    6.6200    8.4780          73031701
7304   A    1 L 90:336:00000 91:038:86399 UNE    1.8990-114.0920 152.6220          73041701
7305   A    1 L 92:001:00000 92:091:86399 UNE    1.8300   38.6450   60.9860          73051701
7307   A    1 L 88:200:00000 88:261:86399 UNE  -17.6930-1490.101-4030.630          73071701
7307   B    1 L 97:215:00000 97:309:86399 UNE  -19.6060-1499.991-3979.552          73071702
7307   C    1 L 98:223:00000 98:317:86399 UNE  -19.6060-1499.782-3979.745          73071703
7307   D    1 L 99:257:00000 99:346:86399 UNE  -19.6100-1510.897-3982.025          73071704
7308   A    1 L 90:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000          73085001
7309   A    1 L 93:032:00000 93:090:86399 UNE    1.2720   15.3400  -20.5420          73091701
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7313   A     1 L 91:213:00000 91:304:86399 UNE     1.8500   -8.0840 -11.9970        73131701
7320   A     1 L 92:214:00000 92:305:86399 UNE     1.7790   -9.7540   5.8090        73201701
7321   A     1 L 94:152:00000 94:304:86399 UNE     2.1830-259.1000 -49.6760        73211701
7322   A     1 L 95:305:00000 96:091:86399 UNE    -4.1810 -51.5480-118.8670        73221701
7323   A     1 L 94:001:00000 94:090:86399 UNE   -25.1050-653.5770-573.9810        73231701
7328   A     1 L 96:061:00000 01:031:86399 UNE     8.9840    9.5460  29.0990        73287101
7335   A     1 L 96:061:00000 01:031:86399 UNE     4.4430   10.0190   1.5320        73357201
7337   A     1 L 96:061:00000 00:152:86399 UNE     4.4500    2.5960  13.2110        73377301
7339   A     1 L 96:061:00000 01:304:86399 UNE     4.4590   -4.7340   7.3300        73397401
7341   A     1 L 95:032:00000 95:090:86399 UNE     0.3680    3.9270  30.4830        73411701
7341   A     1 L 95:182:00000 95:243:86399 UNE     0.3680    3.9270  30.4830        73411702
7343   A     1 L 00:214:00000 00:366:86399 UNE     1.8300    0.0000   0.0000        73438401
7355   A     1 L 01:110:00000 01:181:86399 UNE    -4.8704  -40.4854 -15.4235        73558401
7355   A     1 L 03:091:00000 00:000:00000 UNE     0.9242    3.4911   0.6144        73558402
7356   A     1 L 01:182:00000 01:365:86399 UNE     1.9041    0.0000   0.0000        73568401
7357   A     1 L 03:001:00000 05:210:86399 UNE     0.0000    0.0000   0.0000        73578801
7358   A     1 L 02:244:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        73588901
7359   A     1 L 13:298:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        73592601
7370   A     1 L 07:334:00000 00:000:00000 UNE     2.0178    0.0000   0.0000        73706901
7394   A     1 L 15:218:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        73942601
7395   A     1 L 17:268:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        73956501
7396   A     1 L 19:246:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        73964701
7400   A     1 L 84:067:00000 84:131:86399 UNE     3.3340   -1.5670  -0.0090        74001101
7401   A     1 L 84:135:00000 84:182:86399 UNE     3.3020   -1.5800   0.1190        74011101
7401   A     1 L 90:008:00000 90:153:86399 UNE     2.6990    0.0220  -0.0090        74011302
7401   A     1 L 90:315:00000 91:072:86399 UNE     2.7010    0.0170  -0.0040        74011303
7403   A     1 L 90:165:00000 90:297:86399 UNE     2.6830    0.0130  -0.0110        74031301
7403   A     1 L 91:085:00000 91:288:86399 UNE     2.7010    0.0180  -0.0160        74031302
7403   A     1 L 92:196:00000 04:031:86399 UNE     2.6951    0.0112  -0.0046        74031303
7403   A     1 L 06:244:00000 09:216:86399 UNE     2.6790    0.0140  -0.0020        74031304
7403   A     1 L 09:217:00000 10:264:86399 UNE     2.6790    0.0140  -0.0020        74031305
7403   A     1 L 10:265:00000 00:000:00000 UNE     2.6790    0.0140  -0.0020        74031306
7404   A     1 L 95:114:00000 95:300:86399 UNE     1.4500    0.1340  -0.0050        74041201
7404   A     1 L 95:303:00000 96:335:86399 UNE     1.4560    0.1330  -0.0010        74041202
7405   A     1 L 02:001:00000 04:277:86399 UNE     1.4650   -0.1930   0.0010        74057901
7405   A     1 L 04:278:00000 08:281:86399 UNE     1.4667   -0.1956   0.0008        74057902
7405   A     1 L 08:282:00000 10:058:86399 UNE     1.4627   -0.1996   0.0085        74057903
7405   A     1 L 10:059:00000 00:000:00000 UNE     1.4638   -0.1891   0.0063        74057904
7406   A     1 L 05:332:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        74068801
7407   A     1 C 14:128:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        74072701
7410   A     1 L 93:132:00000 93:259:86399 UNE     2.6430   -0.0050   0.0010        74101401
7411   A     1 L 93:265:00000 93:286:86399 UNE     2.6480   -0.0030   0.0010        74111401
7411   A     1 L 94:157:00000 94:263:86399 UNE     2.6480   -0.0030   0.0010        74111402
7501   A     1 L 93:166:00000 93:220:86399 UNE     1.3320   -2.7460  -0.0120        75011501
7501   A     1 L 00:122:00000 03:202:86399 UNE     3.2280   -0.0030  -0.0060        75010602
7501   A     1 L 03:203:00000 14:089:86399 UNE     3.2271   -0.0006  -0.0060        75010602
7501   A     1 L 14:090:00000 00:000:00000 UNE     3.2270   -0.0040  -0.0070        75010602
7502   A     1 L 93:227:00000 93:365:86399 UNE     1.3620    1.3940   1.2980        75021501
7503   A     1 L 17:351:00000 00:000:00000 UNE     0.0000    0.0000   0.0000        75036401
7505   A     1 L 95:273:00000 95:304:86399 UNE     1.3410   -2.7105   0.0629        75051501
7510   A     1 L 86:141:00000 86:202:86399 UNE     1.3440   -2.5460   0.0260        75101501
7510   A     1 L 89:307:00000 89:338:86399 UNE     1.3580   -2.6510  -0.0060        75101504
7510   A     1 L 92:136:00000 92:173:86399 UNE     1.3420   -2.7040  -0.3610        75101505
7510   A     1 L 92:174:00000 92:216:86399 UNE     1.3460   -2.7860  -0.1050        75101506
7510   A     1 L 87:145:00000 87:240:86399 UNE     1.3580   -2.6190  -0.0730        75101602
7510   A     1 L 89:217:00000 89:306:86399 UNE     1.3570   -2.6250  -0.0590        75101603
7512   A     1 L 86:248:00000 86:291:86399 UNE     1.3400   -2.5570   0.0730        75121501
7512   A     1 L 89:285:00000 89:299:86399 UNE     1.3440   -2.6780   0.0750        75121503
7512   A     1 L 92:080:00000 92:125:86399 UNE     1.3440   -2.5980   0.0590        75121504
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7512  A    1 L 87:078:00000 87:135:86399 UNE    1.3540   -2.5750    0.0700        75121602
7515  A    1 L 86:208:00000 86:242:86399 UNE    1.3280   -2.5770   -0.0140        75151501
7515  A    1 L 87:201:00000 87:291:86399 UNE    1.3290   -2.6220    0.0030        75151502
7515  A    1 L 89:349:00000 90:029:86399 UNE    1.3330   -2.6160    0.0280        75151503
7515  A    1 L 92:080:00000 92:236:86399 UNE    1.3490   -2.6380    0.0400        75151604
7517  A    1 L 87:201:00000 87:240:86399 UNE    3.3090   -1.5680   -0.0580        75171102
7517  A    1 L 89:106:00000 89:171:86399 UNE    3.2380   -1.5620   -0.0720        75171104
7517  A    1 L 92:174:00000 92:219:86399 UNE    3.2560   -1.5670    0.0210        75171105
7517  A    1 L 87:295:00000 87:345:86399 UNE    1.3390   -2.5760   -0.0140        75171503
7517  A    1 L 86:147:00000 86:243:86399 UNE    1.3600   -2.5920    0.0580        75171601
7520  A    1 L 86:077:00000 86:133:86399 UNE    1.3390   -2.4275    0.0681        75201501
7520  A    1 L 89:175:00000 89:216:86399 UNE    1.3540   -2.7220    0.0700        75201502
7520  A    1 L 95:234:00000 95:273:86399 UNE    1.3301   -2.6600    0.0683        75201503
7525  A    1 L 87:253:00000 87:345:86399 UNE    3.2630   -1.5700    0.0780        75251104
7525  A    1 L 89:323:00000 90:020:86399 UNE    3.2600   -1.5680    0.0180        75251105
7525  A    1 L 92:070:00000 92:164:86399 UNE    3.2740   -1.5680   -0.0120        75251106
7525  A    1 L 94:182:00000 94:282:86399 UNE    3.2770   -1.5640   -0.0010        75251107
7525  A    1 L 86:246:00000 86:255:86399 UNE    1.3700   -2.5720   -0.1030        75251601
7525  A    1 L 86:256:00000 86:258:86399 UNE    1.3700   -2.5720   -0.1030        75251602
7525  A    1 L 86:258:00000 86:291:86399 UNE    1.3700   -2.5720   -0.1030        75251603
7530  A    1 L 85:214:00000 89:219:86399 UNE    2.0240    0.0000    0.5790        75300201
7530  A    1 L 89:220:00000 90:174:86399 UNE    2.0240    0.0000    0.5790        75300202
7530  A    1 L 90:175:00000 91:292:86399 UNE    3.4900    0.0200    0.0000        75300203
7530  A    1 L 91:293:00000 94:289:86399 UNE    3.4800    0.0180   -0.0060        75300204
7540  A    1 L 86:008:00000 86:076:86399 UNE    1.3200   -2.6530   -0.0230        75401501
7541  A    1 L 94:083:00000 94:169:86399 UNE    3.2500   -1.5670   -0.1360        75411102
7541  A    1 L 94:344:00000 95:090:86399 UNE    3.2380   -1.5590    0.1090        75411103
7541  A    1 L 85:342:00000 86:071:86399 UNE    1.3360   -2.6390   -0.1160        75411601
7542  A    1 L 91:107:00000 91:365:86399 UNE    1.3550   -2.6490    0.0910        75421601
7543  A    1 L 93:187:00000 93:289:86399 UNE    3.2860   -1.5580   -0.0780        75431102
7543  A    1 L 90:295:00000 90:346:86399 UNE    1.3610   -2.6020   -0.2640        75431601
7544  A    1 L 89:087:00000 89:151:86399 UNE    1.3460   -2.6860    0.0380        75441502
7544  A    1 L 92:253:00000 92:286:86399 UNE    1.3470   -2.6190    0.0710        75441503
7544  A    1 L 92:287:00000 92:345:86399 UNE    1.3460   -2.6310    0.0840        75441504
7544  A    1 L 87:257:00000 87:345:86399 UNE    1.3630   -2.6510   -0.0160        75441601
7545  A    1 L 90:032:00000 90:114:86399 UNE    3.2490    0.0380    1.5650        75451103
7545  A    1 L 93:297:00000 94:074:86399 UNE    3.2600   -1.5480    0.1410        75451104
7545  A    1 L 85:292:00000 85:341:86399 UNE    1.3480   -2.6070    0.0890        75451601
7545  A    1 L 88:008:00000 88:083:86399 UNE    1.3610   -2.6320    0.0370        75451602
7546  A    1 L 94:294:00000 94:336:86399 UNE    3.2500   -1.5670   -0.1360        75461102
7546  A    1 L 88:088:00000 88:156:86399 UNE    1.3490   -2.6480   -0.1120        75461601
7548  A    1 L 93:001:00000 02:120:86399 UNE    0.0000    0.0000    0.0000        75486201
7550  A    1 L 86:077:00000 86:139:86399 UNE    1.3460   -2.0620    0.5520        75501601
7550  A    1 L 89:146:00000 89:201:86399 UNE    1.3530   -2.6310    0.0450        75501602
7560  A    1 L 91:227:00000 91:275:86399 UNE    1.3110   -2.1430   -0.3070        75601501
7561  A    1 L 91:289:00000 91:326:86399 UNE    1.3870   -2.6760    0.0280        75611501
7575  A    1 L 87:082:00000 87:135:86399 UNE    1.3280   -2.6250   -0.0870        75751501
7575  A    1 L 89:254:00000 89:269:86399 UNE    1.3500   -2.6760   -0.1660        75751502
7580  A    1 L 87:092:00000 87:136:86399 UNE    3.3180   -1.5740   -0.1030        75801101
7580  A    1 L 89:289:00000 89:316:86399 UNE    3.2450   -1.5550   -0.2300        75801102
7580  A    1 L 92:311:00000 92:317:86399 UNE    3.2780   -1.5580   -0.2240        75801103
7580  A    1 L 92:318:00000 93:006:86399 UNE    3.2770   -1.5560   -0.2260        75801104
7585  A    1 L 87:145:00000 87:184:86399 UNE    1.3440   -2.5810   -0.1680        75851501
7585  A    1 L 89:232:00000 89:248:86399 UNE    1.3420   -2.6030   -0.1530        75851502
7585  A    1 L 92:207:00000 92:240:86399 UNE    1.3200   -2.6080   -0.2120        75851503
7587  A    1 L 87:140:00000 87:184:86399 UNE    3.3070   -1.5760   -0.0360        75871101
7587  A    1 L 89:186:00000 89:284:86399 UNE    3.2730   -1.5590   -0.1980        75871102
7587  A    1 L 92:233:00000 92:303:86399 UNE    3.2760   -1.5660   -0.1340        75871103
7587  A    1 L 94:258:00000 94:365:86399 UNE    1.3220    0.0010    2.5930        75871504
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7589  A    1 L 93:021:00000 93:170:86399 UNE    3.2870   -1.5640    0.0110        75891101
7590  A    1 L 85:244:00000 85:291:86399 UNE    1.1320   -2.3070   -0.5130        75901601
7594  A    1 L 97:274:00000 01:328:86399 UNE    1.4670   -0.1000   -0.0550        75947901
7596  A    1 L 85:219:00000 85:365:86399 UNE    1.3410   -2.4450   -0.0060        75961502
7596  A    1 L 95:057:00000 95:111:86399 UNE    1.3177   -2.6745   -0.0081        75961503
7596  A    1 L 85:060:00000 85:106:86399 UNE    1.3710   -2.4080   -0.0300        75961601
7597  A    1 L 85:032:00000 85:087:86399 UNE    1.3330   -2.5240    0.0090        75971501
7597  A    1 L 85:088:00000 85:120:86399 UNE    1.3240   -2.5850    0.0010        75971502
7597  A    1 L 91:183:00000 91:199:86399 UNE    1.3177   -2.6745   -0.0081        75971503
7597  A    1 L 91:200:00000 91:205:86399 UNE    1.3177   -2.6745   -0.0081        75971504
7597  A    1 L 91:206:00000 91:210:86399 UNE    1.3177   -2.6745   -0.0081        75971505
7597  A    1 L 92:025:00000 92:069:86399 UNE    1.3177   -2.6745   -0.0081        75971506
7597  A    1 L 94:121:00000 94:243:86399 UNE    1.3070   -2.6500    0.0330        75971507
7597  A    1 L 95:144:00000 95:228:86399 UNE    1.3177   -2.6745   -0.0081        75971508
7597  A    1 L 96:092:00000 96:366:86399 UNE    1.3277   -2.6972    0.0171        75971509
7599  A    1 L 84:245:00000 84:366:86399 UNE    1.3680   -2.3040    0.0550        75991501
7602  A    1 L 90:217:00000 90:274:86399 UNE    1.3490   -0.7920    2.0040        76021601
7604  A    1 L 04:245:00000 04:366:86399 UNE    1.8455    0.0000    0.0000        76046901
7801  A    1 L 78:060:00000 78:365:86399 UNE    0.0000    0.0000    0.0000        78014601
7805  A    1 L 78:213:00000 98:365:86399 UNE    0.0000    0.0000    0.0000        78053301
7806  A    1 L 96:275:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78067601
7810  A    1 L 84:122:00000 95:120:86399 UNE    0.0000    0.0000    0.0000        78104801
7810  B    1 L 95:274:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78106801
7811  A    1 L 76:001:00000 83:365:86399 UNE    0.0000    0.0000    0.0000        78113801
7811  A    1 L 88:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78113802
7819  A    1 L 16:343:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78198201
7820  A    1 L 98:244:00000 16:343:00000 UNE    0.0000    0.0000    0.0000        78208201
7821  A    1 L 05:244:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78212801
7822  A    1 L 11:121:00000 00:000:00000 UNE    1.7846    0.0000    0.0000        78226901
7823  A    1 L 04:153:00000 04:182:86399 UNE    1.8201    0.0000    0.0000        78236901
7824  A    1 L 76:122:00000 98:365:86399 UNE    0.0000    0.0000    0.0000        78244501
7824  B    1 L 99:091:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78244502
7825  A    1 L 04:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78259001
7826  A    1 L 04:183:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78269101
7827  A    1 C 14:120:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78272201
7829  A    1 C 09:243:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78296903
7830  A    1 L 03:086:00000 03:334:86399 UNE    1.8184    0.0000    0.0000        78306901
7831  A    1 L 83:121:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78314601
7832  A    1 L 95:121:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78325501
7833  A    1 L 76:122:00000 84:366:86399 UNE    0.0000    0.0000    0.0000        78333201
7834  A    1 L 76:122:00000 91:365:86399 UNE    0.0000    0.0000    0.0000        78343001
7835  A    1 L 76:122:00000 83:080:86399 UNE    0.0000    0.0000    0.0000        78353101
7835  A    1 L 83:357:00000 05:212:86399 UNE    0.0000    0.0000    0.0000        78353102
7836  A    1 L 91:319:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78365801
7837  A    1 L 87:300:00000 88:098:86399 UNE    0.0000    0.0000    0.0000        78372804
7837  A    1 L 88:099:00000 05:105:86399 UNE    0.0000    0.0000    0.0000        78372805
7837  A    1 L 83:213:00000 85:345:86399 UNE    0.0000    0.0000    0.0000        78373701
7837  A    1 L 85:346:00000 86:059:86399 UNE    0.0000    0.0000    0.0000        78373702
7837  A    1 L 86:060:00000 87:299:86399 UNE    0.0000    0.0000    0.0000        78373703
7838  A    1 L 82:060:00000 90:181:86399 UNE    0.0000    0.0000    0.0000        78383601
7838  A    1 L 90:182:00000 09:243:86399 UNE    0.0000    0.0000    0.0000        78383602
7838  A    1 L 09:244:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78383603
7839  A    1 L 83:244:00000 88:213:86399 UNE    0.0000    0.0000    0.0000        78393401
7839  A    1 L 88:214:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78393402
7840  A    1 L 83:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78403501
7841  A    1 L 01:001:00000 00:000:00000 UNE    0.0000    0.0000    0.0000        78418701
7843  A    1 L 84:214:00000 89:300:86399 UNE    0.0000    0.0000    0.0000        78432501
7843  A    1 L 89:301:00000 98:334:86399 UNE    0.0000    0.0000    0.0000        78432502
7844  A    1 L 88:001:00000 88:073:86399 UNE  210.1370 -728.268  1870.28         78441701
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7844  B    1 L 96:122:00000 96:213:86399 UNE 210.2150 -725.485  1865.33      78441702
7845  A    1 L 97:001:00000 00:000:00000 UNE   0.0000    0.0000   0.0000      78457801
7846  A    1 L 95:274:00000 95:334:86399 UNE   1.8150    0.0000   0.0000      78466901
7847  A    1 L 95:244:00000 96:121:86399 UNE   0.0000    0.0000   0.0000      78477001
7848  A    1 L 96:245:00000 97:090:86399 UNE   1.7772    0.0000   0.0000      78486901
7848  A    1 L 02:001:00000 02:273:86399 UNE   1.8260    0.0000   0.0000      78486902
7848  A    1 L 05:130:00000 05:365:86399 UNE   1.8504    0.0000   0.0000      78486903
7848  A    1 L 08:190:00000 08:366:86399 UNE   1.7772    0.0000   0.0000      78486904
7849  A    1 L 98:001:00000 03:031:86399 UNE   0.0000    0.0000   0.0000      78498001
7850  A    1 L 93:023:00000 93:121:86399 UNE   2.6530    0.0010   0.0040      78501401
7853  A    1 L 88:275:00000 88:335:86399 UNE   1.3210   -2.6740  -0.0140      78531501
7853  A    1 L 90:178:00000 90:212:86399 UNE   1.3300   -2.6900  -0.0040      78531502
7865  A    1 L 01:244:00000 15:231:86399 UNE   4.0720   -1.2160  -0.0190      78658601
7865  A    1 L 15:232:00000 00:000:00000 UNE   4.0545   -1.2022  -0.0102      78658601
7882  A    1 L 88:081:00000 88:214:86399 UNE   3.2540   -0.3530   1.5250      78821102
7882  A    1 L 84:032:00000 84:070:86399 UNE   1.7030    0.0000   0.0000      78821201
7882  A    1 L 92:057:00000 92:154:86399 UNE   2.6460   -0.0060  -0.0030      78821403
7882  A    1 L 94:052:00000 94:132:86399 UNE   2.6470   -0.0130   0.0080      78821404
7883  A    1 L 89:115:00000 89:194:86399 UNE   2.6260    0.0060  -0.0060      78831401
7883  A    1 L 89:195:00000 89:279:86399 UNE   2.6260    0.0060  -0.0060      78831402
7883  A    1 L 91:299:00000 92:043:86399 UNE   2.6530    0.0000  -0.0100      78831403
7883  A    1 L 93:326:00000 94:043:86399 UNE   2.6550    0.0060  -0.0160      78831404
7884  A    1 L 95:001:00000 02:059:86399 UNE   0.0000    0.0000   0.0000      78846601
7885  A    1 L 82:204:00000 82:283:86399 UNE   3.5640    1.4690   0.5430      78851101
7886  A    1 L 83:186:00000 83:240:86399 UNE   3.3640   -0.3000   1.5590      78861101
7886  A    1 L 84:191:00000 84:195:86399 UNE   3.3400   -0.4560   1.5130      78861102
7886  A    1 L 84:221:00000 84:251:86399 UNE   3.3330   -0.4600   1.5060      78861103
7886  A    1 L 84:255:00000 84:353:86399 UNE   3.3340    0.4360  -1.5330      78861104
7887  A    1 L 83:025:00000 83:052:86399 UNE   3.3390   -1.4090   0.6780      78871101
7888  A    1 L 82:025:00000 82:106:86399 UNE   3.4190   -1.4940   0.4670      78881101
7889  A    1 L 82:121:00000 82:354:86399 UNE   1.7200    0.0000   0.0000      78891201
7889  A    1 L 85:213:00000 85:288:86399 UNE   0.0000    0.0000   0.0000      78891203
7889  A    1 L 84:306:00000 85:213:86399 UNE   0.0000    0.0000   0.0000      78891302
7890  A    1 L 80:052:00000 80:054:86399 UNE   3.2500   -1.4860   0.3790      78901101
7890  A    1 L 81:030:00000 81:075:86399 UNE   3.2940    0.4420  -1.5100      78901102
7891  A    1 L 81:171:00000 81:218:86399 UNE   3.3770   -0.0010  -1.5740      78911101
7892  A    1 L 81:127:00000 81:168:86399 UNE   3.3510   -0.0540   1.5620      78921101
7892  A    1 L 82:151:00000 82:202:86399 UNE   3.3250    0.0210   1.5700      78921102
7894  A    1 L 83:053:00000 83:185:86399 UNE   3.2990    1.3340   0.8320      78941101
7895  A    1 L 81:006:00000 81:028:86399 UNE   0.0000    0.0000   0.0000      78951101
7896  A    1 L 80:298:00000 81:006:86399 UNE   3.3070    1.5100   0.4590      78961101
7897  A    1 L 79:244:00000 79:365:86399 UNE   3.1970   -1.5830   0.1020      78971101
7897  A    1 L 80:001:00000 80:044:86399 UNE   3.3330   -1.5490   0.1260      78971102
7899  A    1 L 80:060:00000 80:142:86399 UNE   3.3060    1.5410   0.3010      78991101
7899  A    1 L 80:231:00000 80:284:86399 UNE   3.3040    1.5260   0.3260      78991102
7902  A    1 L 71:001:00000 75:365:86399 UNE   0.0000    0.0000   0.0000      79024201
7907  A    1 L 70:244:00000 88:166:86399 UNE   0.0000    0.0000   0.0000      79074001
7907  A    1 L 88:167:00000 91:121:86399 UNE   0.0000    0.0000   0.0000      79074002
7907  A    1 L 91:291:00000 92:366:86399 UNE   0.0000    0.0000   0.0000      79074003
7917  A    1 L 84:245:00000 85:365:86399 UNE   2.0240    0.0000   0.5790      79174201
7918  A    1 L 93:111:00000 94:173:86399 UNE   3.1000   -1.2160  -1.5040      79180608
7918  A    1 L 94:269:00000 00:091:86399 UNE   3.1680   -0.9680  -1.2520      79180609
7918  A    1 L 85:234:00000 86:189:86399 UNE   2.4640   -0.0050   0.0010      79181301
7918  A    1 L 87:042:00000 87:257:86399 UNE   2.4640   -0.0050   0.0010      79181302
7918  A    1 L 91:352:00000 92:135:86399 UNE   2.7000   -0.0080  -0.0030      79181306
7918  A    1 L 88:032:00000 88:358:86399 UNE   2.6010   -0.0090  -0.0060      79181403
7918  A    1 L 90:065:00000 90:204:86399 UNE   2.6130   -0.0070  -0.0050      79181404
7918  A    1 L 90:205:00000 90:277:86399 UNE   2.6130   -0.0070  -0.0050      79181405
7918  A    1 L 92:174:00000 92:242:86399 UNE   2.6390    0.0000  -1.1020      79181407
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7919  A    1 L 85:322:00000 87:092:86399 UNE    2.5910   0.0000  -0.0110      79191401
7920  A    1 L 85:210:00000 86:015:86399 UNE    3.2870   1.5560  -0.1430      79201101
7920  A    1 L 86:016:00000 86:353:86399 UNE    3.3190   1.5860  -0.0810      79201102
7920  A    1 L 86:355:00000 87:020:86399 UNE    3.3190   1.5860  -0.0810      79201103
7920  A    1 L 87:021:00000 87:037:86399 UNE    3.3190   1.5860  -0.0810      79201104
7920  A    1 L 88:034:00000 88:068:86399 UNE    3.3190   1.5860  -0.0810      79201105
7920  A    1 L 90:247:00000 90:283:86399 UNE    3.2410   1.5720  -0.0540      79201110
7920  A    1 L 91:238:00000 91:277:86399 UNE    3.2730   1.5630  -0.0730      79201111
7920  A    1 L 88:277:00000 89:046:86399 UNE    2.7000   1.5660   0.8490      79201306
7920  A    1 L 89:047:00000 89:169:86399 UNE    2.6950   1.5670   0.8570      79201307
7920  A    1 L 89:170:00000 89:284:86399 UNE    2.6960   1.5660   0.8580      79201308
7920  A    1 L 89:285:00000 89:320:86399 UNE    2.6970   1.5690   0.8600      79201309
7920  A    1 L 95:121:00000 99:014:86399 UNE    2.6460   1.4630  -0.0430      79201414
7920  A    1 L 92:043:00000 93:098:86399 UNE    3.1590   1.4940  -0.0500      79205512
7920  A    1 L 93:099:00000 95:110:86399 UNE    3.1290   1.4880  -0.0470      79205513
7921  A    1 L 68:041:00000 82:064:86399 UNE    0.0000   0.0000   0.0000      79214301
7929  A    1 L 70:304:00000 81:273:86399 UNE    0.0000   0.0000   0.0000      79294101
7935  A    1 L 76:001:00000 77:365:86399 UNE    0.0000   0.0000   0.0000      79356501
7939  A    1 L 83:121:00000 00:366:86399 UNE    0.0000   0.0000   0.0000      79394101
7940  A    1 L 76:122:00000 77:365:86399 UNE    0.0000   0.0000   0.0000      79404701
7941  A    1 L 00:001:00000 00:000:00000 UNE    0.0000   0.0000   0.0000      79417701
7943  A    1 L 76:167:00000 82:069:86399 UNE    0.0000   0.0000   0.0000      79434201
7944  A    1 L 91:274:00000 91:354:86399 UNE    0.0000   0.0000   0.0000      79445501
7999  A    1 L 80:222:00000 80:224:86399 UNE    0.0000   0.0000   0.0000      79991101
8833  A    1 L 84:092:00000 84:152:86399 UNE   -0.0360  -0.0120  -0.0080      88331501
8833  A    1 L 84:320:00000 85:059:86399 UNE    0.0890  -0.2210   0.0000      88331602
8833  A    1 L 85:108:00000 85:243:86399 UNE    0.0890  -0.2210   0.0000      88331603
8833  A    1 L 88:160:00000 89:144:86399 UNE    0.0810  -0.2200   0.0020      88331604
8833  A    1 L 89:309:00000 90:211:86399 UNE    0.0990  -0.2180  -0.0010      88331605
8833  A    1 L 92:238:00000 93:365:86399 UNE    0.0820  -0.2180  -0.0010      88331606
8833  A    1 L 95:079:00000 95:243:86399 UNE    0.0790  -0.2180   0.0010      88331607
8834  A    1 L 90:244:00000 00:000:00000 UNE    0.0000   0.0000   0.0000      88341001
-SITE/ECCENTRICITY
%ENDSNX
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