

ILRS System Site Log Summary Spreadsheets' Description

The ILRS Site Log files were designed to capture all the important system details and provide the users of the data collected by the specific system with all the required information for the best use/analysis of that data. Although several sections of the site log template allow for entering information applicable to previous time periods, describing the system for years past, not all the sections support this option. Furthermore, one can only look at one site log at a time, so comparisons between systems are rather difficult to do.

In 2009 JCET created a s/w in MATLAB™ that attempts to address these issues and provide a solution that is easily updated when stations update/change their site logs. After testing we started providing CDDIS with updated versions of the results from this s/w starting in 2010. Input for this s/w are the ILRS site logs since the time we started using site logs at the ILRS stations. The output of the program are two Excel-compatible spreadsheets:

CURRENT: with information related to the currently valid site logs at all active ILRS stations that deposited a site log on CDDIS; and

HISTORICAL: contains partial information (see below) from all available site logs and stations, and for all time (since 2000).

The program runs on a UMBC server and when a new site log is deposited in the CDDIS archive or an old site log is updated, the s/w downloads these files, updates the local data base and generates new summary spreadsheets of both types. The second type of spreadsheet are primarily intended for use by the groups that develop the “target signature geometry” models, so only the columns relevant to this type of work are included. Two sheets are readily provided, one sorted by the submitted site log filename and one by the CDP SOD number for those more familiar with this manner of station identification. In any case, both sheets allow for sorting by any column, so it is easy to generate any kind of tabulation of the results for comparison.

The older versions of these summary spreadsheets are now archived online under the V1 subdirectory of

<ftp://ftp.cddis.eosdis.nasa.gov/pub/slr/slrlog>

since they represent summaries of the Version 1 site log files. The Version 1 site logs were completed by the station teams without uniform editing (or very little), so in many cases information appeared on the wrong column. These issues are now alleviated with

the new process of filing/updating the site log files, since the new process is done online, using a standard template or the previously approved version of the station's site log file and before their release they are approved by a review board which ensures the adherence to the correct format/syntax and the completeness of the site log. With the adoption of the new, Version 2, site log format we had to adopt the s/w to be consistent with the new input, that extra work however was well-worth the vastly improved quality and consistency of the new input site log files.

Examples of spreadsheet content

The new version of the ILRS Site log files (V2) comprise of the following sections:

0. Form
1. Identification of Ranging Syst. Reference Point (SRP)
2. Site Location Information
3. General System Information
4. Telescope Information
5. Laser System Information
6. Receiver System
 - 6a Primary Chain
 - 6b Secondary Chain
 - 6c Tertiary Chain
7. Tracking Capabilities
8. Calibration
9. Time and Frequency Standards
 - 9A Time and Frequency
 - 9B GNSS Receiver
 - 9C One-way System Cal
10. Preprocessing Information
11. Aircraft Detection
12. Meteorological Instrumentation
 - 12a Pressure Sensor
 - 12b Temperature Sensor
 - 12c Humidity Sensor
13. Local Ties, Eccentricities, & Co-location Information
 13. Co-location Info.
 - 13A. Local Ties
 - 13B. Eccentricities
14. Local Events Possibly Affecting Computed Position
15. On-Site, Point of Contact Agency Information
16. Responsible Agency (if different from 15.)
17. More Information

Each of these sections above appears as distinct Tab in the “CURRENT” spreadsheet with several columns of information corresponding to the items that fall under the title of that section. The easiest way to grasp this structure is to examine a couple of the sections with the most useful information for a station.

Site Number	Location	Prepared by	Preparer E-mail	Date Prepared	Report Type	Site Log Format Version	Site Log Revision
1824		Golosiv	Mykhaylo Medvedskyy	medved@mao.siev.ua	9/4/19	UPDATE	2
1863	Maidanak	Van Husson, Natalia Parkhomenko	van.husson@honeywell-tsi.com	5/13/03	NEW	1	
1864	Maidanak	Van Husson, Natalia Parkhomenko	van.husson@honeywell-tsi.com	5/13/03	NEW	1	
1868	Komsomolsk-na-Amure	Natalia Parkhomenko	parknatliya@yandex.ru	1/27/14	UPDATE	1	
1870	Mendeleevo	Mark Kaufman	mark@imvp.aspnet.ru	5/9/02	UPDATE	2	
1873	Simiez	Alexandr Volvach	volvach@meta.ua	3/16/16	UPDATE	1	
1874	Mendeleevo	Igor Ignatenko	igg@vniitri.ru	8/14/13	UPDATE	2	
1879	ALTAY	Natalia Parkhomenko	natalia.a@g23.riccom.ru	3/25/09	UPDATE	1	
1884	RIGA	Kalvis Salmits	kalvis.salmits@lu.lv	7/27/16	UPDATE	2	
1886	Arkhyz	Natalia Parkhomenko	parknatliya@yandex.ru	2/15/12	UPDATE	2	
1887	Baikour	Parkhomenko Natalia	parknatliya@yandex.ru	2/13/12	UPDATE	2	
1888	Svetloe	Iskander Gayazov	gayazov@iaaras.ru	3/5/19	UPDATE	2	
1889	Zelenchukskaya	Iskander Gayazov	gayazov@iaaras.ru	3/5/19	UPDATE	2	
1890	Ibadary	Iskander Gayazov	gayazov@iaaras.ru	3/5/19	UPDATE	2	
1891	Irkutsk	Emelyanov Valery	evad@vniitri.ru	9/2/14	Update	1	
1893	Katzevely	Andriy Makeyev	andriy@rambler.ru	8/2/11	UPDATE	2	
7040	Wrightwood (OCLT)	Keith E. Wilson	kwilson@jpl.nasa.gov	1/27/05	NEW		1
7041	WSC	Daniel Murphy	dmurphy@ll.mit.edu	8/20/13	NEW	1	
7045	APOLLO	Tom Murphy	tmurphy@physics.uscd.edu	6/29/09	NEW	2	
7080	McDonald Observatory / Mt. Fowlkes	Randall L. Ricklefs	ricklefs@csr.utexas.edu	12/10/19	UPDATE	2	
7090	MOBLAS-5 / YARRAGADEE	Randall Carman	Randall.Carman@gp.gov.au	1/15/20	UPDATE	2	
7105	Godard Geophysical Astronomical Observatory	Robin Dixon	rdixon07@peraton.com	2/4/19	UPDATE	2	1
7110	Monument Peak	Ronald Sebeny	rsebeny@peraton.com	2/27/20	UPDATE	2	
7119	Haleakala, Maui	Robin L Dixon	rdixon07@peraton.com	5/4/18	UPDATE	2	
7124	Tahiti Geodetic Observatory	Robin L Dixon	rdixon07@peraton.com	3/20/19	UPDATE	2	
7130	GGAO (ILRS-4)	Carey Noll	careynoll@nasa.gov	11/28/05	NEW		
7210	LURE Observatory	Daniel J. O'Gara	ogara@lure.ifa.hawaii.edu	5/9/02	UPDATE	2	
7237	Changchun	Han Xingwei	hanxw@cho.ac.cn	5/29/19	UPDATE	2	
7249	Beijing SLR Station	Zhangbin HE	hezb@com.ac.cn	3/14/19	UPDATE	2	
7308	Kogane	Hiroo Kunimori	kuni@nict.go.jp	10/7/02	NEW	2	
7328	Kogane	Hiroo Kunimori	kuni@nict.go.jp	8/31/10	UPDATE	2	
7335	Kashima	Hiroo Kunimori	kuni@nict.go.jp	5/9/02	UPDATE	2	
7337	Miura	Hiroo Kunimori	kuni@nict.go.jp	5/9/02	UPDATE	2	
7339	Tatayama	Hiroo Kunimori	kuni@nict.go.jp	5/9/02	UPDATE	2	
7343	Wuhan (TROS) SLR Station	Guo Tangyong	whsr@public.wh.hb.cn, guoty@21cn.com	5/9/02	UPDATE	2	
7355	Urumbi (TROS) SLR Station	Guo Tangyong	whsr@public.wh.hb.cn, guoty@21cn.com	4/20/03	UPDATE	2	
7356	Ihatsu (TROS) SLR Station	Guo Tangyong	whsr@public.wh.hb.cn, guoty@21cn.com	5/9/02	UPDATE	2	2
7357	Beijing SLR Station for Argentina	Wang Tanjiang	wangtj@263.net	3/20/03	NEW	2	
7358	Tanegashima (GUTS)	Takehiro Matsumoto	matsumoto.takehiro@jaxa.jp	8/8/19	UPDATE	2	3
7359	Daedeok	Hyung-Chul Lim	hclim@kasi.re.kr	10/22/12	NEW	2	
7394	Sejong	Hyung-Chul Lim	hclim@kasi.re.kr	9/6/17	UPDATE	2	20190616
7395	Geochang	Hyung-Chul Lim	hclim@kasi.re.kr	9/25/17	NEW	2	
7396	Jiufeng	Jie Zhang	zhangjie@asch.whigg.ac.cn	9/3/19	UPDATE	2	
7403	Arequipa	Robin L Dixon	rdixon07@peraton.com	4/3/19	UPDATE	2	
7405	TIGO SLR, Concepcion	Armin Boer	armin.boer@bkg.bund.de	9/29/10	UPDATE	2	
7406	San Juan SLR Station of Argentina	Liu Weidong	wdlu@nao.cas.cn	9/29/18	UPDATE	2	
7407	Brasilia	Parkhomenko Natalia	parknatliya@yandex.ru	8/26/14	UPDATE	2	
7501	Observatory Hartbeesthoek Radio Astronomy	Roelf Botha	roelf@hartaao.ac.za	4/3/19	UPDATE	2	1
7503	Observatory	Roelf Botha	roelf@hartaao.ac.za	1/17/19	UPDATE	2	
7548	Cagliari	Aldo Banni	banni@ca.astro.it	5/9/02	UPDATE	2	
7604	Brest (Vbi Pad 1989), France	Francis Pierron	francis.pierron@obs-azur.fr	9/30/04	NEW	2	
7806	Mesahov SLR	Artur Rajc-Hall	artur.rajc-hall@iol.it	11/6/17	UPDATE	2	
7810	Zimmerwald SLR	Pierre Lauber	pierre.lauber@alub.unibe.ch	10/1/18	UPDATE	1	
7811	Borowiec	Pawel Lejba	plejba@cbk.poznan.pl	5/24/19	UPDATE	2	
7816	Ullandsheoe Research Observatory (LFD)	Daniel Hampf	daniel.hampf@dlr.de	9/27/19	UPDATE	2	
7817	Guadalajara	Beq Vaquero	b.vaquero@aon.es	2/28/20	UPDATE	2	1
7819	Kunming	Zhulian Li	lzhli@ynao.ac.cn	1/19/17	UPDATE	2	
7820	Kunming	Xiangming Zheng	zhengxm@ynao.ac.cn	9/14/13	UPDATE	2	
7821	Shanghai	Zhang Zhongping	zpz@shao.ac.cn	11/14/15	UPDATE	2.1	
7822	Tahiti Geodetic Observatory	Francis Pierron	francis.pierron@obs-azur.fr	5/1/11	NEW	2	
7823	San Fernando (near old pad), Spain	Francis Pierron	francis.pierron@obs-azur.fr	6/10/04	UPDATE	2	
7824	San Fernando SLR	Manuel Catalan, Manuel Sanchez	mcatalan@rao.es, mansan@rao.es	5/12/19	UPDATE	2	
7825	Mount Stromlo	Chris Moore	cmoore@eospacestems.com	3/6/19	UPDATE	2	
7826	Mount Stromlo	Chris Moore	cmoore@eospacestems.com	8/13/19	UPDATE	2	
7827	Wertzel	Stefan Riepl	stefan.riepl@bkg.bund.de	5/31/19	UPDATE	2	
7828	Paris	Carey Noll	careynoll@nasa.gov	3/29/12	NEW	1	17
7830	Chania, Crete	Francis Pierron	francis.pierron@obs-azur.fr	4/1/03	UPDATE	2	
7831	Helwan SLR	Dr. Makram Ibrahim	makram@nriag.sci.eg	201607-27	UPDATE	2	
7832	SARNO	John Guilloyle	vernacul@bigpond.com	5/9/02	UPDATE	1	
7835	Grasse SLR	Francis Pierron	francis.pierron@obs-azur.fr	5/9/02	UPDATE	2	
7836	Potsdam SLR	Ludwig Gruwaldt	grun@gf-potsdam.de	9/5/13	UPDATE	2	
7837	Shanghai	Yang Fumin	yangfm@center.shao.ac.cn	5/9/02	UPDATE	2	
7838	Simosato	Shun-ichi Watanabe	eiwa@post.go.jp	9/19/19	UPDATE	2	
7839	GRIZ	Georg Kirchmeier	Georg.Kirchmeier@oew.ac.at	10/15/18	UPDATE	2	
7840	Herstmonceux	Robert Sherwood	rsher@nec.ac.uk	2/5/18	UPDATE	1	
7841	SLR Potsdam 3	Sven Bauer	sven.bauer@gf-potsdam.de	9/3/19	UPDATE	2	
7843	Ororal	Carey Noll	careynoll@nasa.gov	3/29/12	NEW	1	
7845	Grasse MeO	Herve Marley	herve.marley@cea.eu	2/5/20	UPDATE	2	
7846	Grasse, France (mobile slr)	Francis Pierron	francis.pierron@obs-azur.fr	5/9/02	UPDATE	2	
7849	Mount Stromlo	Jim Steed and Chris Moore	jim.steed@ga.gov.au,	3/10/03	UPDATE	2	
7855	NRL OPTICAL TEST FACILITY	Jake Griffiths	jakegriff@nrl.navy.mil	3/12/20	UPDATE	2	
7939	Matera CGS	Giuseppe Bianco, Francesco Vespe	bianco@asi.it, vespe@asi.it, laser@asi.it	5/9/02	UPDATE	2	
7941	Matera CGS	Giuseppe Bianco	giuseppe.bianco@asi.it, mlro@hp835.mt.asi.it	10/24/19	UPDATE	2	9

Section '0.Form'

Site Number	Location	Filename	IERS DOMES Number	CDP Pad ID	Subnetwork	Description	Monument Description	Monument Inscription	Mark Description	Date Installed	Date Removed	Geologic Characteristic	Additional Information
1824	Golovin	gpl_2010904.log	12165001	1824	EUROLAS	AZEL INTERSECT	PILLAR	N.A.	CROSSOVER	1997-04-01		CONGLOMERATE	
1861	Maidanak	maid_20090513.log	12165001	1861	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1999-10-01			
1864	Maidanak	maid_20090513.log	12165002	1864	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1999-10-01			
1868	KaramonkaleAstrum	kar_20140127.log	12165001	1868	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1999-09-01		CONGLOMERATE	
1870	Maidanovo	maid_20090509.log	12165001	1870	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1998-04-17		CLAY	
1873	Simit	smit_20160312.log	12137503	1873	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1988-05-01		BEDROCK	
1874	Maidanovo	maid_20130814.log	12165003	1874	EUROLAS	AZEL INTERSECT	CONCRETE PILLAR	N.A.	CHELLED CROSS	2011-12-18		CLAY	
1879	ALTAY	alt_20090229.log	12172501	1879	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2004-09-15		BEDROCK	
1884	RAA	raa_20160727.log	12165002	1884	EUROLAS	AZEL INTERSECT	Concrete monument	N.A.	brass/mir	1989-09-01		SAND	
1886	AKHYE	akhy_20130215.log	12173501	1886	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	2006-AM-00		BEDROCK	
1887	Bahman	bai_20130215.log	21609501	1887	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2011-06-01		CONGLOMERATE	
1888	Sattile	satt_20190105.log	12165002	1888	EUROLAS	AZEL INTERSECT	CONCRETE PILLAR	N.A.	CHELLED CROSS	2011-09-09		SAND	
1889	Zelenchukaya	zel_20190309.log	12151502	1889	EUROLAS	AZEL INTERSECT	CONCRETE PILLAR	120	CHELLED CROSS	2011-04-26		CLAY, FEBBLE	
1890	Batary	bat_20190309.log	12138504	1890	EUROLAS	AZEL INTERSECT	CONCRETE PILLAR	130	CHELLED CROSS	2011-06-13		BEDROCK	
1891	Ikuzik	iku_20140902.log	12133507	1891	Russian Network	AZEL INTERSECT	CONCRETE PILLAR	N.A.	N.A.	2012-10-10		LOAMY SOIL	
1893	Kaziviy	kaz_20130506.log	12137506	1893	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1989-10-10		CONGLOMERATE	
7040	Wrightwood (DCTI)	occi_20050127.log	49001501	7040	NASA	AZEL INTERSECT	None	N.A.	N.A.	N.A.	N.A.	BEDROCK	
7041	WSC	lud_20130820.log	49429501	7041	NASA	AZEL INTERSECT	N.A.	N.A.	N.A.	2013-06-04		CONGLOMERATE	
7045	AROLD	aprd_20090509.log	49447501	7045	N.A.	AZEL INTERSECT	N.A.	N.A.	N.A.		N.A.	BEDROCK	
7080	McDonald Observatory (Mt. Fowler)	mdol_201911210.log	404426006	7080	NASA	MONUMENT	Standard Brass Disk	7080 1988 NASA/GSC Greenbelt, MD	punched dimple	1988-01-01		Tertiary igneous rocks	Tertiary (igneous) rocks predominately found on the surface. The influence of topography on soil formation is pronounced. Due to extensive erosion, the levels of hills and mountains are shallow, whereas the soils of valleys and plains are deep.
7090	MOBILS-5 / FARRAGADE Goldard Geophysical Astronomical Observatory	ymf_20100115.log	501076001	7090	WFLTN	MONUMENT	CONCRETE BLOCK	DONGAR95	DIVOT ON BRASS ROD	1979-07-01		CONGLOMERATE/GRAVEL	
7105	Observatory	gph_20190226.log	406134015	7105	NASA	MONUMENT	STANDARD NASA DISK	7105-1981	Chisled Cross	1981-03-01		CHELLED SAND AND GRAVEL	
7110	Mount Pleasant Peak	moor_20020227.log	404976001	7110	NASA	MONUMENT	Standard NASA DISK	ORT24097/110 1981	Punch mark in center	1983-08-15		Granitic and Metamorphic rock	The marker has two punch marks. The center punch mark is the survey reference point.
7119	Hakajala, Maar	haji_20180504.log	404848004	7119	NASA	MONUMENT	STANDARD NASA DISK	NONE	CHELLED CROSS	2006-09-15		BASALT VOLCANIC CINDER	
7124	Takii Geodesic Observatory	taki_20190309.log	922639007	7124	NASA	MONUMENT	PLATE	NONE	CHELLED CROSS	1992-08-01		CONGLOMERATE	
7130	GGAD (TLRS-4)	gga_20051128.log	404514616	7130	NASA	MONUMENT	STANDARD NASA DISK	NONE	PUNCH MARK	2005-01-01		BASALT VOLCANIC CINDER	
7130	LUNA Observatory	lun_20020509.log	404848001	7130	NASA	MONUMENT	FIELD CARTRIDGE BOLT	NONE	PUNCH MARK	1973-03-01		BEDROCK	
7131	Changlun	cha_20190209.log	216155001	7131	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1988-01-31		SANDSTONES	
7249	Baling SLR Station	bal_20190314.log	216015004	7249	WFLTN	AZEL INTERSECT	PILLAR	N.A.	N.A.	1988-12-13		N/A	
7308	Kogane	kog_20020207.log	217045003	7308	WFLTN	Intersection of Axes of Telescope	N.A.	N.A.	N.A.	1988-03-01		N/A	
7328	Kogane	kog_20100831.log	217046001	7328	WFLTN	MONUMENT	PILLAR	Kogane_SLR_S2	Cross on Rotary sheet type reflective mirror	1998-01-01		N/A	
7335	Kashima	kas_20020509.log	217016002	7335	WFLTN	MONUMENT	PILLAR	Kashima_SLR_S2	Cross on Rotary sheet type reflective mirror	1998-01-01		N/A	
7337	Mura	mur_20020509.log	217396001	7337	WFLTN	MONUMENT	PILLAR	Mura_SLR_S2	Cross on Rotary sheet type reflective mirror	1998-01-01		N/A	
7339	Tateyama	tat_20020509.log	217408001	7339	WFLTN	MONUMENT	PILLAR	Tateyama_SLR_S2	Cross on Rotary sheet type reflective mirror	1998-01-01		N/A	
7343	Wuhan (TRDS) SLR Station	wuh_20020509.log	216039002	7343	WFLTN	MONUMENT	Concrete	Bajing SLR 7343 2000.8	Cross on rotary sheet type reflective mirror	2000-08-15		BEDROCK	
7355	Urumqi (TRDS) SLR Station	urum_20080430.log	216126002	7355	WFLTN	MONUMENT	PILLAR	Urumqi SLR 7355 2001.4	Small hole	1992-AM-00		BEDROCK	
7356	Lhua (TRDS) SLR Station	lhu_20020509.log	216136003	7356	WFLTN	MONUMENT	concrete	lhusa SLR 7356 2001.7	Circle hat with diameter 4cm	2000-07-10		BEDROCK	
7357	Bajing SLR Station for Argentina	bai_20090309.log	216039005	7357	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2000-08-30		SANDSTONES	
7358	Tangajuma (GUTS)	gms_20190808.log	217495001	7358	WFLTN	Intersection of Axes of Telescope	N.A.	N.A.	N.A.	2004-08-25		ic	
7359	Danabed	dab_20190309.log	239025002	7359	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2012-09-16		ic	
7394	Saeng	sa_20170906.log	239075002	7394	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2015-07-07		BEDROCK	
7395	Geochang	geol_20170925.log	239160001	7395	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2017-08-11		BEDROCK	The site is located southeast of Wuhan, 25 km away from town. The SRP is center of the cross between azimuth and elevation rotating shaft
7396	Jiufeng	jfu_20190903.log	216025008	7396	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2017-06-21		BEDROCK	
7403	Ancopap	anc_20190403.log	422236003	7403	NASA	MONUMENT	STANDARD NASA DISK	NASA 1403 1989	Brass Plate	1992-07-10		Eggsperical ball of Pleistocene Age	
7405	TIGO-SLR, Concepcion	con_20100929.log	417194001	7405	EUROLAS	MONUMENT	PLATE	NONE	NONE	2002-04-18		CLAY	
7406	San Juan SLR Station of Argentina	sju_20180929.log	415489003	7406	WFLTN	AZEL INTERSECTION	N.A.	N.A.	N.A.	2006-11-28		SANDSTONES	
7407	Brasilia	bra_20140816.log	488185001	7407	Russian Network	AZEL INTERSECT	CONCRETE PILLAR	N.A.	N.A.	2014-02-09		CONGLOMERATE	
7501	Hartbeeshoek Radio Astronomy Observatory	har_20190403.log	303204003	7501	NASA	MONUMENT	PILLAR	None	Bullseye	1993-07-12		Andesite	N/A
7503	Observatory	hvt_20180117.log	303201010	7503	Russian network	AZEL INTERSECT	PILLAR	N.A.	N.A.	2016-12-16		Andesite	Pillar on pile with anti-subduction block
7548	Cagliari	cgl_20020509.log	127255013	7548	EUROLAS	AZEL INTERSECT	PILLAR	N.A.	N.A.	1992-07-16		BEDROCK	
7604	Brest (VNI Pad 1989), France	brf_20040920.log	100049002	7604	EUROLAS	MONUMENT	Marker	N.A.	Chiselled cross	1989-AM-00		BEDROCK	
7606	Maitland SLR	mai_20171026.log	100039014	7606	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1996-10-15		BEDROCK	
7610	Zimmerwald SLR	zmi_20180101.log	140015007	7610	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1995-07-03		CONGLOMERATE	
7611	Borovane	bor_20190524.log	122050001	7611	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1988-05-13	N.A.	CLAY	There is a horizontal 5/8" standard thread at the AZEL Intersection Installation date is of first . data acceptance. Mount . installed in December 1986.
7616	(JFO)	urp_20190929.log	109165001	7616	EUROLAS	INTERSECT	PILLAR	N.A.	N.A.			BEDROCK	
7616	Guadalupe	gud_20190209.log	134020021	7616	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	2019-02-09		BEDROCK	
7619	Kunming	kun_20170119.log	216095004	7619	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2013-12-13		BEDROCK	
7620	Kunming	kun_20130914.log	216095002	7620	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1989-05-20		BEDROCK	
7821	Shanghai	sha_20151114.log	216056010	7821	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2005-07-10		BEDROCK	The site is located in southwest; Shanghai, 30 km away from town. SRP is center of 45 deg banding - mirror.
7822	Takii Geodesic Observatory	taki_20190309.log	922639017	7822	EUROLAS	MONUMENT	Marker	N.A.	ign Geodesic marker	2011-05-00		CONGLOMERATE	
7823	San Fernando (near old pad), Spain	saf_20040610.log	134026005	7823	EUROLAS	MONUMENT	Marker	N.A.	Chiselled cross	2004-06-01		BEDROCK	
7824	San Fernando SLR	saf_20190521.log	134025007	7824	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1999-04-04		BEDROCK	Since the dome was changed the mount is located 30 cm over the old location. IERS DOMES Number 134025004
7825	Mount Stromlo	str_20190306.log	501195003	7825	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2004-04-08		BEDROCK	Bedrock is FRESH IGNEOUS. Installation date is of first system acceptance. Operations started 2004-11-01.
7826	Mount Stromlo	str_20190813.log	501195007	7826	WFLTN	AZEL INTERSECTION	N.A.	N.A.	N.A.	2004-01-01		BEDROCK	Bedrock is FRESH IGNEOUS. Installation date is of first system acceptance.
7827	Wattail	wat_20190531.log	142015045	7827	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	2014-05-01		CONGLOMERATE/BEDROCK	Intersection point is tied to a local survey network consisting of 20 network pillars. Survey accuracy is better than 1 mm.
7828	Paris	par_20190329.log	78289501	7828	EUROLAS	MONUMENT	Marker	N.A.	Chiselled cross	2000-12-15		BEDROCK	
7830	Chama, Crete	cha_20090403.log	126176002	7830	EUROLAS	MONUMENT	Marker	N.A.	Chiselled cross	2000-12-15		BEDROCK	
7831	Hilvan SLR	hil_20160737.log	201015001	7831	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	5/12-89		Sandstone	The system is operated in annual . Campaigns in cooperation with the Czech . Technical University in Prague
7832	SALRO	sal_20020509.log	201015001	7832	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1995-08-01		BEDROCK	
7833	Grover SLR	gro_20020509.log	100020001	7833	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1995-05-01		BEDROCK	
7836	Podajun SLR	pod_20190909.log	141605009	7836	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1999-05-08		SAND	
7837	Shanghai	sha_20020509.log	216055001	7837	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1983-03-19		SANDSTONES	
7838	Simeizoo	siz_20190919.log	217365001	7838	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1982-01-31		BEDROCK	
7839	GRAZ	grl_20181015.log	110015002	7839	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1981-11-01		CONGLOMERATE	
7840	Harmoniconex	har_20180205.log	131235001	7840	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1982-01-01		CLAYS/SANDSTONES	
7841	SLR Potsdam 3	pot3_20190903.log	141060011	7841	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	2001-07-20		SAND	
7843	Chivral	chi_20190329.log	501304006	7843	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1989-09-01		BEDROCK	
7845	Grover NAO	gro_20020502	100020002	7845	EUROLAS	AZEL INTERSECT	N.A.	N.A.	N.A.	1989-09-01		BEDROCK	
7846	Grover, France (mobile sit)	gro_20020509.log	100020004	7846	EUROLAS	MONUMENT	Chiselled cross in a marker	N.A.	Chiselled cross	1995-01-01		BEDROCK	
7849	Mount Stromlo	str_20090309.log	501195001	7849	WFLTN	AZEL INTERSECT	N.A.	N.A.	N.A.	1989-06-19		BEDROCK	Referenced by 3 CHELLED CROSSES around the telescope.
7855	NRL OPTICAL TEST FACILITY	ntf_20100112.log	496544001	7855	US DOD	MONUMENT IN TELESCOPE PIER	BRASS MARKER CIRCLE WITH DIVOT	N					

Site Number	Location	City or Province	State or Province	Country	Tectonic Plate	Local Time (UTC +/- hours)	X coordinate	Y coordinate	Z coordinate	Latitude	Longitude	Elevation	Survey Method	Date Measured	Additional Information	
1824	Goloviv	Kyiv		Ukraine	Eurasian		512289.889	206869.811	4888817.932	50.3632 N	30.4962 E	212.9	GNSS		(multiple lines)	
1883	Maidan	Kyiv		Ukraine	Eurasian		376024.475	107776.34	491765.479	49.9323 N	28.9272 E	158.88	ION		Bryzhytskyi is a village 10 km from Lviv	
1884	Maidanak	Maidanak		Ukraine	Eurasian		192236.784	192236.784	498771.685	48.6689 N	16.5490 E	271.51991			TRF2000 coordinates, epoch 1997.0	
1888	Komarovsk-na-Amure	KHANKOVS'KYI TERRITORY		RUSSIA	EURASIAN		294845.483	274413.027	50.09462 N	116.7488 E	268.4027				(multiple lines)	
1870	Moskva	Moscow region		RUSSIA	EURASIAN		281498.3	212408.9	56.20219 N	37.2334 E	256.7				(multiple lines)	
1873	Simey	Crimea		Ukraine	Eurasian		3781002.507	255104.979	444127.696	44.4122 N	33.9931 E				TRF 96, 1997.0	
1874	Moskva	Moscow region		Russian Federation	Eurasian		286459.641	212408.9	56.20219 N	37.2334 E	256.7				(multiple lines)	
1879	ALST	Zemlingnahl		Russia	Eurasian		548486.129	395502.261	495782.104	51.24	82.2	270			The site is housed in the Altay Optic-Laser Center (AOLC), 100 km to South-West from city Barnaul, 20 km to North from town Zhengonggao.	
1884	Riga	Riga		Latvia	Eurasian		512899.88	1412497.086	56.98551 N	24.05975 E	31.3367				TRF 2005-2000.0	
1886	AKHYT	AKHYT		Northen Caucasus	Russia		386673.194	109973.864	481846.782	43.6500 N	41.4333 E	207				
1887	Bakoum	Bakoum		KAZAKHSTAN	Eurasian		292577.335	482477.672	45.7981 N	63.3822 E	98.3					
1888	Svetlov	Svetlov		Leninskaya region	Russian Federation		176218.911	502998.865	60.5332 N	29.7885 E	409				TRF2014, Epoch 2003.0	
1888	Zhenichukovka	Zhenichukovka		Russian Federation	Eurasian (EURAS)		365133.973	305033.206	43.7887 N	41.5064 E	1155.4				TRF2014, Epoch 2003.0	
1890	Budary	Budary		Buryatiya Republic	Russian Federation		438239.972	385738.847	487646.893	53.7700 N	102.2354 E	801.3			TRF2014, Epoch 2003.0	
1892	Hebi	Hebi		Hebei region	Russian Federation		485442.12	302217.8	51.2218 N	108.3368 E	505.62				(multiple lines)	
1893	Katovoly	Katovoly		Crimea	Eurasian		478544.434	255078.706	44.9392 N	33.9702 E	68.7				SRF2008	
1940	Wrightwood (DCL)	Wrightwood		California	USA		N.A.	N.A.	N.A.	34.832 N	117.083 W	2200			None	
1941	WFO	WFO		New Mexico	USA		N.A.	N.A.	N.A.	36.620 N	106.313 W	1445.6			(multiple lines)	
7045	APOLLO	Sunspot		NM	USA		-155906.306	341210.928	37.78055 N	105.82047 W	2788					
7045	McDonald Observatory / M.L.	McDonald Observatory (near Fort Davis)		Texas	USA		-113002.1	313840.7	30.8282 N	105.3846 E	2006.221					
7090	MORFAS / PASARODZIF	Donggri		Western Australia	Australia		501633.0	309200.0	29.2644 S	115.1867 E	244					
7100	Goodard Geophysical Astronomical Observatory	Greenhall		Maryland	USA		128719.512	-483230.514	39.6206 N	76.42770 W	19.384				Site is near of Donggri.	
7110	Monument Peak	Mount Laguna		California	United States		-486235.9	444881.7	32.8921 N	116.4227 W	1842.177				HEIGHT ABOVE LEIPSDOZ	
7119	Haleakala Observations	Haleakala		Hawaii	USA		-546005.493	-240438.332	20.4126 N	155.0748 N	2017.9379 E	3056.272			HEIGHT ABOVE LEIPSDOZ	
7124	Tahiti Geodesic Observatory	Tahiti		French Polynesia	Pacific		548406.607	307781.262	17.5788 S	170.3717 E	82.171				HEIGHT ABOVE LEIPSDOZ	
7130	GGAZ(TLS-4)	Greenhall		MD	USA				39.2020 N	76.8275 W						
7130	LUIG Observatory	Ni-Haleakala		Hawaii	Pacific		-546002.111	-240437.308	22.4134 S	155.7027 N	200.2461 E					
7237	Changtun	Changtun		P.R.China	Eurasian		247487	3757189	43.7905 N	125.4454 E	274.9					
7249	Beijing SLR Station	Beijing SLR station		Beijing	Eurasian		214676.766	445408.967	39.6068 N	115.8519 E	82.3				TRF2014	
7308	Koganei	Koganei		Tokyo	Japan		3368169	3368169	35.7020 N	139.4800 E	121.82					
7328	Kagami	Kagami		Japan	Eurasian		394141.244	1038168.323	37.0210.678	139.7520 N	139.4879 E	114				
7330	Kanama	Kanama		Japan	Eurasian		3971483.51	372764.209	35.9567.232	140.6710 N	140.6710 E	66.5				
7337	Miura	Miura		Kanagawa	North American		337784.696	365669.995	35.2807 N	139.6284 E	95.1					
7338	Tanayama	Tanayama		China	North American		400956.777	3375308.947	35.9369 N	139.8461 E	226.4					
7343	Wuhan (TRF03) SLR Station	Beijing		Beijing	Eurasian		144737.797	404455.024	39.4070 N	115.8921 E	71.159				The site is about 60 km from the reference frame WGS84	
7355	Urumqi (TRF03) SLR Station	Urumqi		China	Eurasian		384932.132	469576.134	43.8126 N	87.71 E	861.517					
7356	Lhasa (TRF03) SLR Station	Lhasa		Xizang	China		-108535.761	155066.396	31.1707.869	29.8348 N	92.0377 E	3604.244				
7357	Beijing SLR Station for Argentina	Beijing district		Beijing	Eurasian		214676.599	445408.965	39.6077 N	115.8519 E	82.3				The site is about 50 km from the reference frame WGS84	
7358	Tanegashima (DCL)	Tanegashima		Kagoshima	JAPAN		414737.719	322372.589	30.56609654 N	121.05147370 E	141.0967				Site is north of launch site.	
7359	Daejeon	Daejeon		Daepyon	Republic of Korea		322073.267	408421.939	37.0939.745	36.3990 N	127.3747 E	116.6				
7364	Sejong	Sejong		Sejong	Republic of Korea		321208.384	408217.289	37.9851.749	36.50996 N	127.80261 E	174.615				
7395	Geochang	Geochang		Geochang	Republic of Korea		319538.059	409498.28	36.0181.377	35.5002 N	127.3021 E	194.065				
7396	Jeju	Jeju		Jeju	Eurasian		327376.003	504737.465	33.7916.84	30.5568019 N	124.493019 E	717.365			SLR orbit determination	
7403	Arequipa	Chacarato		Arequipa	Peru		154288.1	-589406.7	-1.789515.4	16.4651 S	71.4930 W	2489.05				The site is about 12 km from the reference frame WGS84
7405	TRF-SLR Station of Argentina	Ushuaia		Ush. Region	South American		448232.819	-848786.941	-56.8485 S	73.2253 W	168.288					
7406	San Juan SLR Station of Argentina	San Juan		San Juan Province	South American		186104.114	-1068867.289	-31.4482.433	31.882695 S	68.621102 E	727.221				The site is about 12 km from the reference frame WGS84
7407	Brazilia	Brazilia		Goes	South American		4119502.13	-1722855.13	15.77715 S	47.8653 W	1029.24					
7501	Herzberg Radio Astronomy Observatory	Johannesburg		Gauteng	South Africa		508401.135	266830.108	-27.6888.865	25.8971 S	27.6881 E	1406.822				
7503	Observatory	Johannesburg		Gauteng	South Africa		508431.055	266838.661	-27.6864.201	25.8991 S	27.6811 E	1414				
7548	Capri	Capri		Italy	Eurasian		483848.6	490078.8	40.9180 N	8.9704 E	206.4					
7604	Brest (MJD Feb 1989), France	Brest		Bretagne	France		582987.149	1811113.079	48.4078615 N	4.520883 W	104.8					
7606	Moskva SLR	Belokoumni		Ukraine	Eurasian		3781002.507	255104.979	44.4122 N	33.9931 E	74.942					
7610	Zimmerwald SLR	Zimmerwald		Bern	Switzerland		431281.7	567548.7	46.8772 N	7.4652 E	951.2					
7611	Bornacze	Kornik, Poznan		Wielkopolska	Eurasian		3718332.8	502182.6	52.2770 N	17.0746 E	123.4					
7616	DFC	Stuttgart		Baden-Wuerttemberg	EURO		4158005.09	672899.98	47.94949.6	48.7824 N	9.1864 E	399				
7617	Goodlaxia	Spain		Gauteng	South Africa		508401.135	266830.108	-27.6888.865	25.8971 S	27.6881 E	1406.822				
7619	Kunming	Kunming		Yunnan Province	CHINA		1382301.485	5640734.424	26.8295.471	25.0298 N	102.7977 E	1987.05				
7620	Kunming	Kunming		Yunnan Province	CHINA		1281234.76	5640736.024	25.0298.726	25.0298 N	102.7972 E	1992.81				
7621	Shanghai	Shanghai		P.R. China	Eurasian		2830744.471	467680.282	32.0757.816	31.0962 N	121.4866 E	95.961				The site is located at the top of the reference frame WGS84
7622	Tahiti Geodesic Observatory	Pareara		Tahiti	Pacific		548415.484	-207724.526	-19.1807.566	17.5742919 S	149.6204300 E	84				
7623	San Fernando (near old pad), Spain	San Fernando		Andalucia	Eurasian		508401.135	266830.108	-27.6888.865	25.8971 S	27.6881 E	1406.822				
7624	San Fernando SLR	San Fernando		Casti.	Spain		5109473.022	555130.64	37.0989.747	36.4650 N	6.2055 W	88.127				
7625	Mount Stromlo	Canberra		Australian Capital Territory	Australia		448708.4	448708.4	35.3161 S	149.0099 E	805				X,Y,Z in TRF2000 @ 2001.0	
7626	Mount Stromlo	Canberra		Australian Capital Territory	Australia		448708.4	448708.4	35.3161 S	149.0099 E	805				X,Y,Z in TRF2000 @ 2001.0	
7627	Wendling	Wendling		Bavaria	Germany		407553.073	3617007.119	51.3314 S	149.0098 E	805.20736				Survey	
7628	Paris	Paris		France	Eurasian					48.85 E					(multiple lines)	
7630	Chania, Crete	Chania		Greece	Eurasian		474848.397	211908.207	36.8248.483	35.533 N	24.0705 E	137			positions are approximate	
7631	Haleakala SLR	Haleakala, Capri		H.A.	Egypt		478297	378961	315682	29.8500 N	31.1627 E	145.46				
7632	SAHD	Riyadh		Central Saudi Arabia	Arabian		391201.1	419217.4	26.9120 S	46.4004 E	773					
7633	Gravel SLR	Gravel		Alsippen-Limes	France		436109.14	502893.46	43.7548 N	6.3011 E	1322.8					
7634	Potsdam SLR	Potsdam		Brandenburg	Germany		381981.9	502893.46	52.3800 N	13.0649 E	131.7					
7637	Shanghai	Shanghai		P.R. Chinese	Eurasian		381598.51	476703.314	31.0751.81	121.1917 E	32.623					
7638	Simons	Nashville		West Virginia	Eurasian		382138.056	369363.546	39.0757.117	31.5717 N	115.9370 E	62.44			The site is located on heights near the sea. The geodesic coordinate datum is WGS84 (epoch 1997.0) and the elevation datum is Ellipsoid mean sea level (P.P.S.)	
7639	GRAZ	Graz		Styria	Austria		454951.7	1167789.7	47.0678 N	15.4942 E	495				The site is housed in the Observatory	
7640	Hertfordshire	Hertford		East Sussex	UK		483344.1	2362.8	49.2805 N	5.0301 E	75</					

Site Number	Location	Entry	System Name	4-Character Code	CDP System Number	Occupation Number	North	[m]	East	[m]	Up	[m]	Date Measured	Date Installed	Date Removed	Additional Information
1824	Golosiv	1	Golosiv	GLSL	81	1							N.A.		4/1/97	
1863	Maidanak	1	Maidanak-2	MAID	51	1									10/1/90	
1864	Maidanak	1	Maidanak-1	MAIL	54	1									10/1/90	
1868	Komsomolsk-na-Amure	1	Komsomolsk	KOML	59	1										
1870	Mendeleev	1	MENLAS /SAZHEN-2	MDVL	63	1									4/1/794	
1873	Simetz	1	Simetz	SIML	49	1									5/7/76	
1874	Mendeleev	1	Mendeleev	MDVS	83	1									12/23/11	
1879	ALTY	1	ALTY	1879	94	1	0		0		0		N.A.		9/15/04	
1884	RIGA	1	Riga	RIGL	44	1							9/1/87		9/1/87	
1886	Arkhyz	1	Arkhyz	ARKL	96	1									9/1/06	
1887	Balkonur	1	BAIL	1887	97	1										
1888	Svetloe	1	Svetloe	SVEL	98	1	0		0		0				10/24/11	
1889	Zelenchukskaya	1	Zelenchukskaya	ZELL	99	1	0		0		0				5/7/11	
1890	Badary	1	Badary	BADL	9	1	0		0		0				7/20/11	
1891	Irkutsk	1	Sazhen TM	IRKL	53	1	(m + m)		(m + m)		(m + m)		(yyyy-mm-dd)		7/23/13	
1893	Katzively	1	Katzively	KTZL	18	1							N.A.		9/20/82	
7040	Wrightwood (OCTL)	1	OCTL	OCTL	92	1										
7041	WSC	1	LLGD	LLCD	21	1	(m + m)		(m + m)		(m + m)		(yyyy-mm-dd)		6/4/13	
7045	APOLLO	1	APOLLO	APOL	95	1	N.A.		N.A.		N.A.		N.A.		10/15/05	N.A.
7080	McDonald Observatory / Mt. Fowlkes	1	McDonald Laser Ranging System (MLRS)	MDOL	24	19	-0.004 + -0.002		-0.005 + -0.002		1.756 + -0.002		2/10/88		2/10/88	
7080	McDonald Observatory / Mt. Fowlkes	2	McDonald Laser Ranging System (MLRS)	MDOL	24	19	-0.003 + -0.002		-0.006 + -0.002		1.763 + -0.002		1/29/93		2/10/88	
7080	McDonald Observatory / Mt. Fowlkes	3	McDonald Laser Ranging Station (MLRS)	MDOL	24	19	-0.003 + -0.002		-0.006 + -0.002		1.763 + -0.002		1/29/93		2/10/88	
7090	MOBLAS-5 / YARRAGADEE	1	MOBLAS-5	YARL	5	1	0.003 + -0.005		0.011 + -0.005		3.185 + -0.005		8/15/79		7/27/83	DONES number of SLR intersection of axes os 501075007.
7090	MOBLAS-5 / YARRAGADEE	2	MOBLAS-5	YARL	5	2	0.003 + -0.005		0.011 + -0.005		3.185 + -0.005		8/15/79		7/27/83	New Quantel laser installed.
7090	MOBLAS-5 / YARRAGADEE	3	MOBLAS-5	YARL	5	3	0.003 + -0.005		0.011 + -0.005		3.185 + -0.005		8/15/79		11/19/84	Improved 2233 PMT.
7090	MOBLAS-5 / YARRAGADEE	4	MOBLAS-5	YARL	5	4	0.003 + -0.005		0.011 + -0.005		3.185 + -0.005		8/15/79		9/5/85	Mount Releveling.
7090	MOBLAS-5 / YARRAGADEE	5	MOBLAS-5	YARL	5	5	0.003 + -0.005		0.011 + -0.005		3.185 + -0.005		8/15/79		4/16/87	MCP and Tennelec CFD installed.
7090	MOBLAS-5 / YARRAGADEE	6	MOBLAS-5	YARL	5	6	0.003 + -0.002		0.010 + -0.002		3.177 + -0.002		8/13/87		8/13/87	New site survey.
7090	MOBLAS-5 / YARRAGADEE	7	MOBLAS-5	YARL	5	7	0.003 + -0.002		0.010 + -0.002		3.177 + -0.002		8/13/87		8/26/87	New Calibration Target - Nelson Pier.
7090	MOBLAS-5 / YARRAGADEE	8	MOBLAS-5	YARL	5	8	0.003 + -0.002		0.010 + -0.002		3.177 + -0.002		8/13/87		8/5/88	Telescope Mount Levelled.
7090	MOBLAS-5 / YARRAGADEE	9	MOBLAS-5	YARL	5	9	0.003 + -0.002		0.010 + -0.002		3.177 + -0.002		8/13/87		11/13/90	Etalon EC.
7090	MOBLAS-5 / YARRAGADEE	10	MOBLAS-5	YARL	5	10	0.003 + -0.002		0.010 + -0.002		3.177 + -0.002		8/13/87		6/7/91	HP 380 Processor installed.
7090	MOBLAS-5 / YARRAGADEE	11	MOBLAS-5	YARL	5	11	-0.0096 + -0.002		0.0192 + -0.002		3.1813 + -0.002		1/12/92		1/21/92	Telescope mount replacement.
7090	MOBLAS-5 / YARRAGADEE	12	MOBLAS-5	YARL	5	12	-0.0096 + -0.002		0.0192 + -0.002		3.1813 + -0.002		1/12/92		3/24/92	Software update MODCOMP 6.2 HP 2.1
7090	MOBLAS-5 / YARRAGADEE	13	MOBLAS-5	YARL	5	13	-0.0096 + -0.002		0.0192 + -0.002		3.1813 + -0.002		1/12/92		7/21/92	Transistor and short pier calibrations
7090	MOBLAS-5 / YARRAGADEE	14	MOBLAS-5	YARL	5	13	-0.0083 + -0.001		0.0178 + -0.001		3.1809 + -0.001		8/22/98		7/21/92	Local Tie Survey
7090	MOBLAS-5 / YARRAGADEE	15	MOBLAS-5	YARL	5	13	N.A.		N.A.		N.A.		5/3/01		7/21/92	Local Tie Survey was performed but AUSLIG (Gary Johnston) did not submit new local tie data as "changes were minimal from 1998 and they wanted to avoid confusion"
7090	MOBLAS-5 / YARRAGADEE	16	MOBLAS-5	YARL	5	13	-0.0083 + -0.001		0.0184 + -0.001		3.1821 + -0.001		11/27/03		7/21/92	Local Tie Survey
7090	MOBLAS-5 / YARRAGADEE	17	MOBLAS-5	YARL	5	13	-0.0062 + -0.001		0.0190 + -0.001		3.1823 + -0.001		5/31/07		7/21/92	Local Tie Survey
7090	MOBLAS-5 / YARRAGADEE	18	MOBLAS-5	YARL	5	13	-0.0068 + -0.001		0.0164 + -0.001		3.1820 + -0.001		7/15/10		7/21/92	Local Tie Survey
7090	MOBLAS-5 / YARRAGADEE	19	MOBLAS-5	YARL	5	13	-0.0064 + -0.001		0.0194 + -0.001		3.1827 + -0.001		3/21/14		7/21/92	Local Tie Survey
7105	Goddard Geophysical Astronomical Observatory	1	MOBLAS 7	GDDL	7	25	-0.009 + -0.002		-0.032 + -0.002		3.138 + -0.002		11/23/13		3/1/81	Updated with 2012-11-23 survey and ITRF 2008
7110	Monument Peak	1	Moblas-4	MONL	4	12	-0.0242 + -0.001		-0.0148 + -0.001		3.1895 + -0.001		5/1/18		8/15/83	
7119	Haleakala, Maui	1	TLRS-4	HAAT	14	1	0.001 + -0.001		0.002 + -0.001		2.632 + -0.001		9/1/06		9/7/06	3/30/11
7119	Haleakala, Maui	2	TLRS-4	HAAT	14	2	0.001 + -0.001		0.002 + -0.001		2.632 + -0.001		3/30/11			
7119	Haleakala, Maui	3	TLRS-4	HAAT	14	2	0.005 + -0.001		0.005 + -0.001		2.632 + -0.001		3/15/13		3/30/11	Survey conducted prior to motor casing replacement
7119	Haleakala, Maui	4	TLRS-4	HAAT	14	2	0.003 + -0.001		0.0035 + -0.001		2.630 + -0.001		5/15/13		3/30/11	Survey conducted prior to motor casing replacement
7130	GGAO (TLRS-4)	1	TLRS-4	GO4F	14	3										
7210	LURE Observatory	1	HOLLAS	HALL	23	13	0.753 + -0.001		0.000 + -0.001		0.849 + -0.001		9/27/93		3/1/73	
7237	Changchun	1	CHALAS	CHAL	19	1							N.A.		1/1/88	
7249	Beijing SLR Station	1	SLR Beijing	BEIJ	61	2	0.0000 + -0.000		0.0000 + -0.000		0.0000 + -0.000		N.A.		12/31/88	
7308	Koganei	1	CRL	KOCC	50	1										
7328	Koganei	1	Koganei	KOGL	71	1	9.5459 + -0.002		29.0994 + -0.002		8.9843 + -0.002		10/12/99		4/1/97	
7335	Kashima	1	Kashima	KASL	72	1	10.0190 + -0.002		1.5323 + -0.002		4.4429 + -0.002		10/19/99		4/1/97	
7337	Miura	1	Miura	MIUL	73	1	2.5961 + -0.002		13.2112 + -0.002		4.4500 + -0.002		11/15/99		4/1/97	http
7339	Tateyama	1	Tateyama	TATL	74	1	-4.7338 + -0.002		7.3302 + -0.002		4.4586 + -0.002		11/9/99		4/1/97	
7343	Wuhan (TROS) SLR Station	1	TROS	BEIT	84	1	0.000 + -0.020		0.000 + -0.020		1.830 + -0.020		12/28/99		11/1/00	
7355	Urumqi (TROS) SLR Station	1	TROS	URUL	84	1	-40.4854 + -0.002		-15.4235 + -0.002		-4.8704 + -0.002		5/3/01		12/28/99	The eccs in the previous site
7356	Lhasa (TROS) SLR Station	1	TROS	LHAL	84	1	0.000 + -0.001		0.000 + -0.001		1.9041 + -0.001		8/3/01		12/28/99	
7357	Beijing SLR Station for Argentina	1	Beijing for Argentina	BEIA	88	1									6/30/03	
7358	Tanegashima (GUTS)	1	Tanegashima	GMSL	89	1									9/25/04	
7359	Daedeok	1	Daedeok	DAEK	26	1									N.A.	9/26/12
7394	Sejong	1	Sejong	SEIL	26	1									N.A.	8/7/15
7395	Geochang	1	Geochang	GEOL	65	1									N.A.	8/11/17
7396	JiuFeng	1	JiuFeng	JFNL	47	1										
7403	Arequipa	1	TLRS 3	AREL	13	1	0.013 + -0.002		-0.011 + -0.002		2.683 + -0.002		6/1/90		6/1/90	10/24/90
7403	Arequipa	2	TLRS 3	AREL	13	2	0.038 + -0.002		-0.016 + -0.002		2.904 + -0.002		4/9/91		10/25/91	
7403	Arequipa	3	TLRS 3	AREL	13	3	0.010 + -0.002		-0.004 + -0.002		2.696 + -0.002		7/15/92		7/10/92	2/10/04
7403	Arequipa	4	TLRS 3	AREL	13	3	0.010 + -0.002		-0.006 + -0.002		2.695 + -0.002		3/18/94		7/10/92	2/10/04
7403	Arequipa	5	TLRS 3	AREL	13	3	0.0112 + -0.002		-0.0046 + -0.002		2.6951 + -0.002		6/27/01		7/10/92	Crew measurements to horizontal verified : these measurements were still accurate in : June 2001 , post earthquake.
7403	Arequipa	6	TLRS 3	AREL	13	4	0.014 + -0.002		-0.002 + -0.002		2.679 + -0.002		5/8/07		10/1/06	8/4/09
7403	Arequipa	7	TLRS 3	AREL	13	5	0.014 + -0.002		-0.002 + -0.002		2.679 + -0.002		5/8/07		8/5/09	9/21/10
7403	Arequipa	8	TLRS 3	AREL	13	6	0.0112 + -0.002		-0.0046 + -0.002		2.6951 + -0.002		1/1/13		9/22/10	
7501	Hartebeesthoek Radio Astronomy Observatory	1	Moblas-6	HARL	6	2	-0.004 + -0.001		-0.007 + -0.001		3.227 + -0.001		3/1/14		6/9/00	Previously occupied by MTLRS AXIS INTERSECTION IN X,Y,Z is 1092771.2861, -4877224.1556, 3948977.81812 Local re-survey and analysis completed in September, 2016.
7865	NRL OPTICAL TEST FACILITY	1	NRL OPTICAL TEST FACILITY	STAL	86	1	-1.2022 + -0.0007		-0.102 + -0.0007		4.0545 + -0.0007		8/20/15		8/1/02	

Section '3.System Information'

On this spreadsheet there are tabs for sorting each of the columns in all possible ways, a feature that is sometimes essential when trying to compare systems or to group systems with similar components/features.

Both of these spreadsheets can be accessed by anonymous ftp from the same link:

<ftp://ftp.cddis.eosdis.nasa.gov/pub/slr/slrlog>

and although they are updated as necessary, the files seen from outside are named with the static names (all lower case):

current_sitelog_summary.xlsm and

historical_sitelog_summary.xlsm

This allows for a possibly automated download of these files from a cron job without any details about their update status.