



Station Performance Assessment Tools for the ILRS Stations


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19th International Workshop on Laser Ranging
Celebrating 50 Years of SLR: Remembering the Past and Planning for the Future
October 27-31, 2014
Annapolis, MD , USA

- ◆ CRD-NP data content archived online, several parameters and flags are visualized by station over time for all available pass segments
- ◆ Data analysis for LAGEOS 1 & 2, ETALON 1 & 2 daily
 - QC report for past 7 days with pass-by-pass systematics
 - Report submitted to CDDIS and upon request to stations
 - Reports archived on CDDIS and JCET data base for visualization
- ◆ Weekly arc analysis with single set of weekly-averaged systematics (far more stable than the pass-by-pass QC)
 - Systematic measurement errors archived and visualized online
- ◆ AWG product results archived daily for QC analysis
 - AC offsets for positions and EOP from official TRF and IERS EOP series
 - Statistics of AC performance wrt ITRF and to the combined products
 - Station position and EOP evolution over time from ILRS products
- ◆ QC Viewer s/w package for all QC Reports

Monitoring of ILRS Analysis WG Products

geodesy.jcet.umbc.edu/ILRS_AWG_MONITORING/ Reader

 **International Laser Ranging Service**
Analysis Working Group



Monitoring of ILRS Analysis WG Products


- WEEKLY STATION POSITIONS & DAILY EOP SERIES
- EVALUATION OF WEEKLY AWG PRODUCTS
- MONITORING SYSTEMATIC ERRORS AT ILRS STATIONS
- NORMAL POINT DATA MONITORING (CDDIS)

http://geodesy.jcet.umbc.edu/ILRS_AWG_MONITORING/

 **UMBC**
AN HONORS UNIVERSITY IN MARYLAND

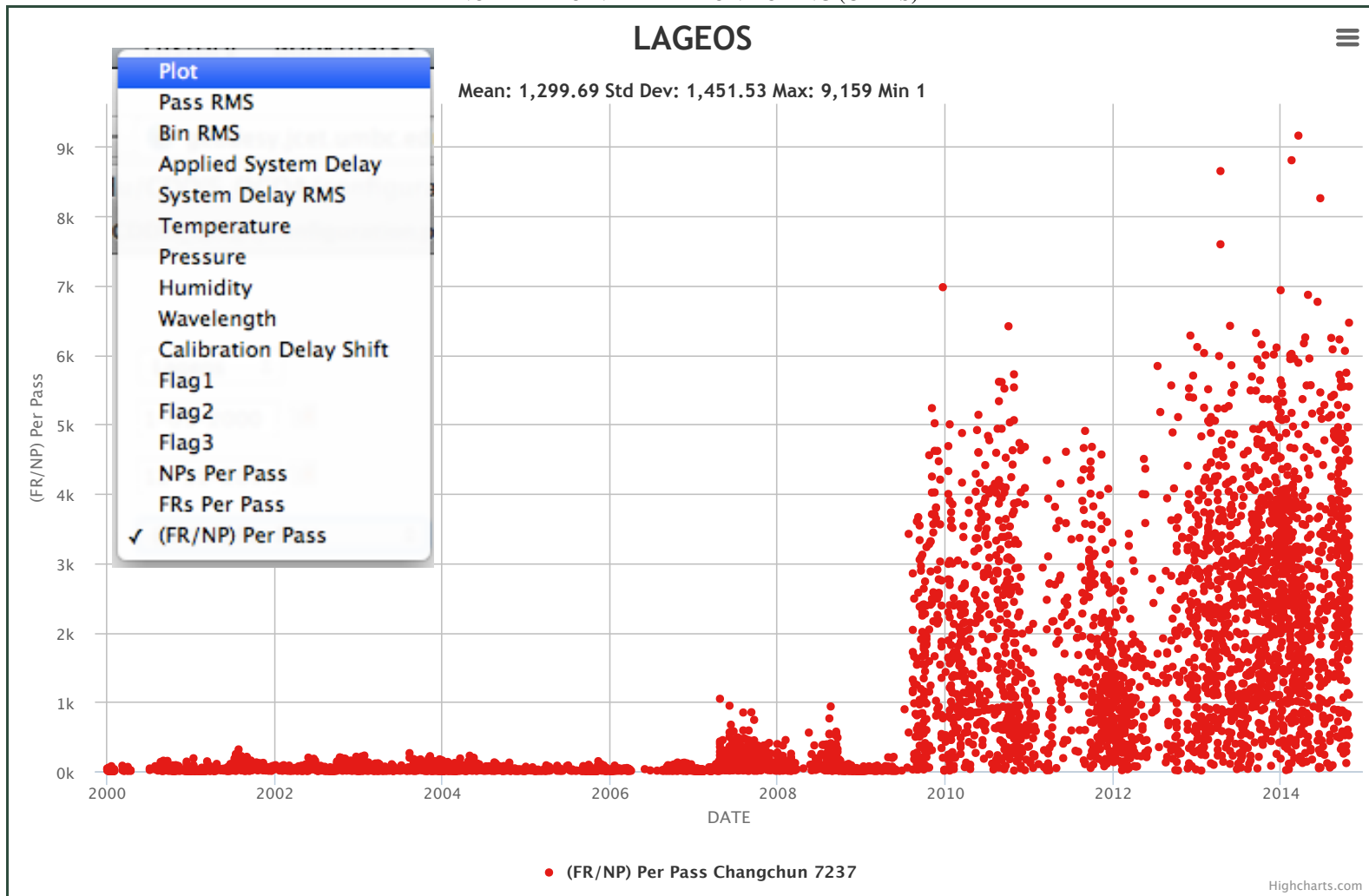
Responsible JCET Official: Dr. Ericos Pavlis
Web Curator: Magda Kuzmicz-Cieslak
Contact Us

Last Modified: 2014-10-27
Privacy Policy & Important Notice

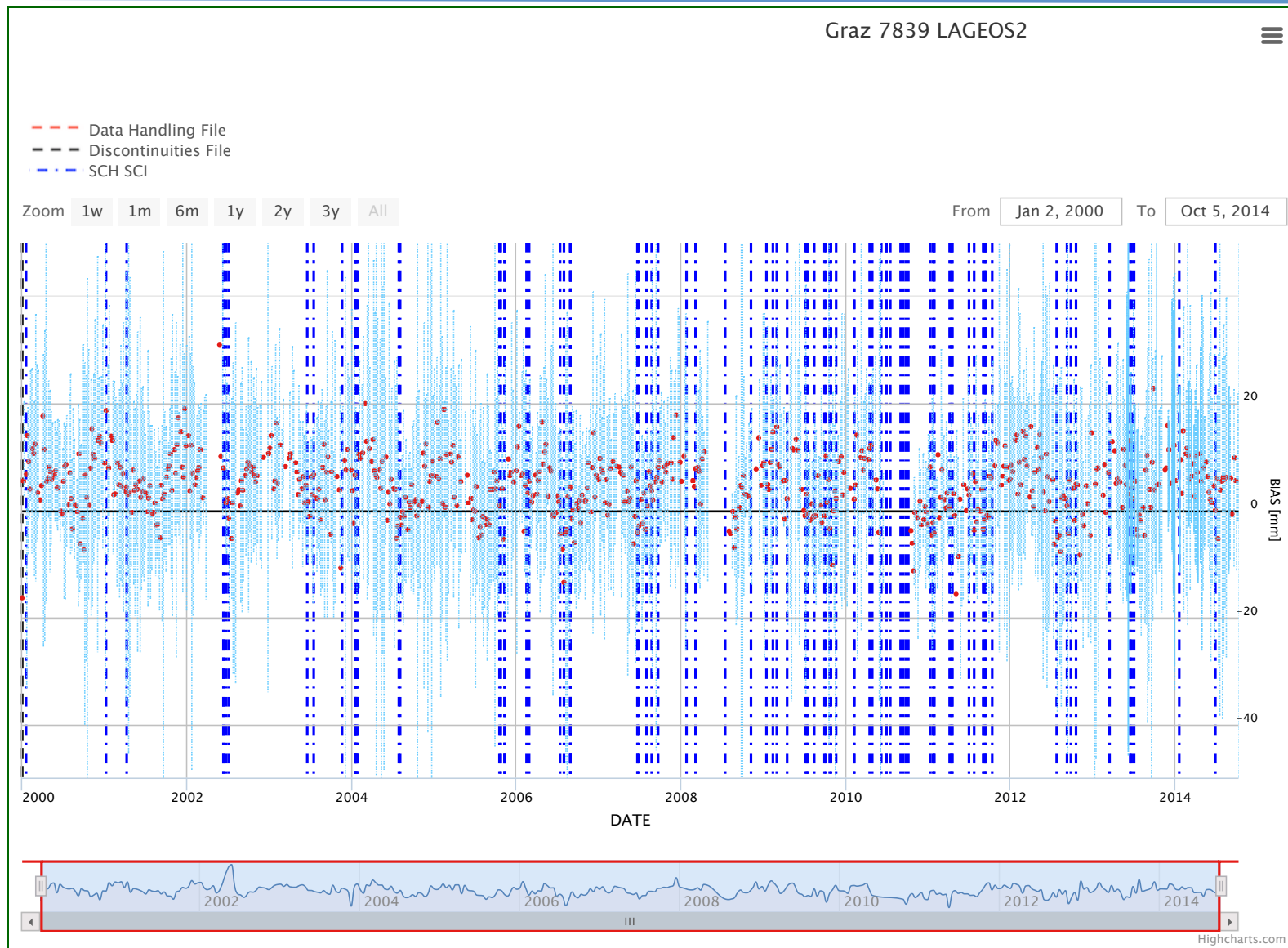


Number of FR Ranges in a NP Range

NORMAL POINT DATA MONITORING (CDDIS)



Systematic Range Error & SHC Events





Weekly/Daily ILRS Products – Position Offsets



DAILY PRODUCT

WEEKLY PRODUCT

7-day arc weekly solution
(one solution/week)

Combination Center: ILRSA ILRSB

Analysis Center: ASI

Start (MM-DD-YYYY): 1-01-2000

End (MM-DD-YYYY): 12-31-2014

Group of results: SITE COORDINATES

Quantities to display: N-E-U OFFSETS

Station: 7105 Greenbelt

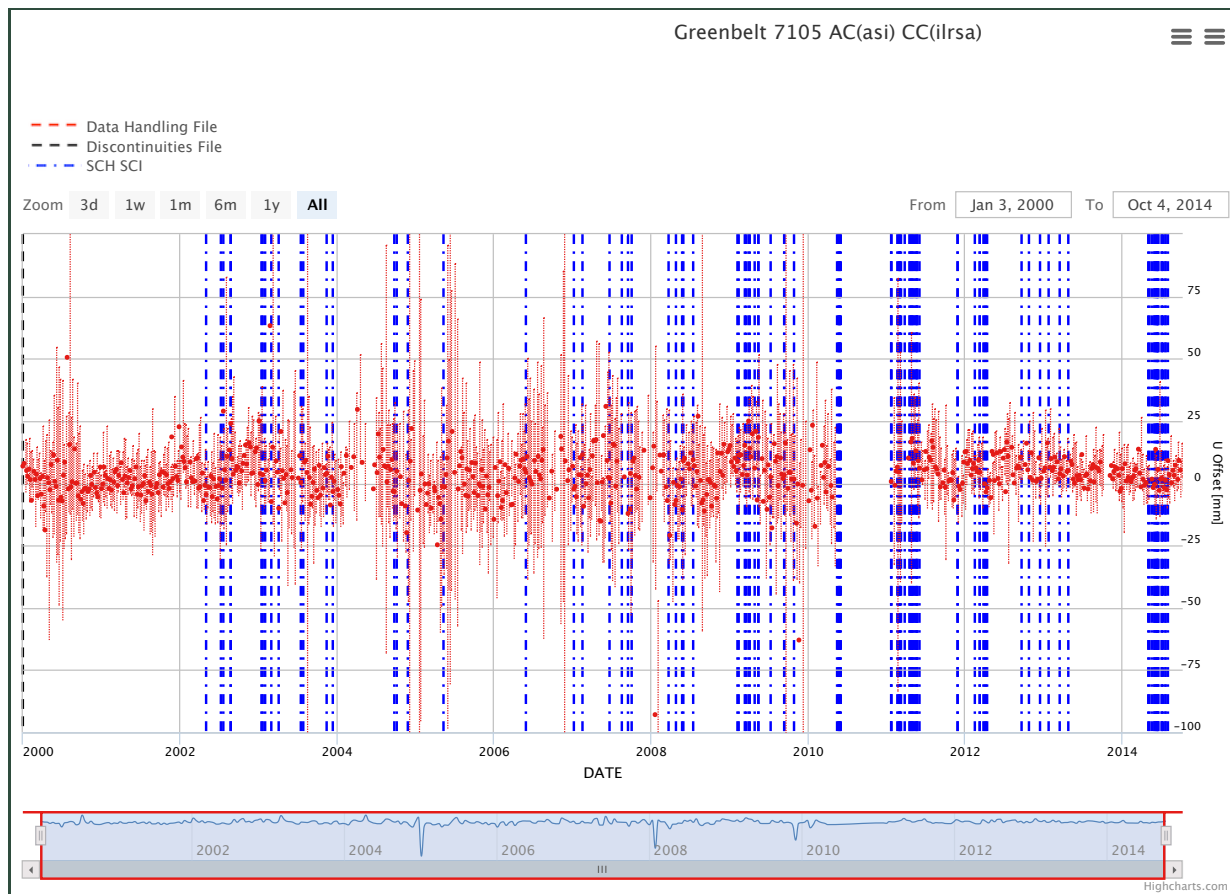
N E U

STATIONS EVENT

Plot Size Minimum Maximum

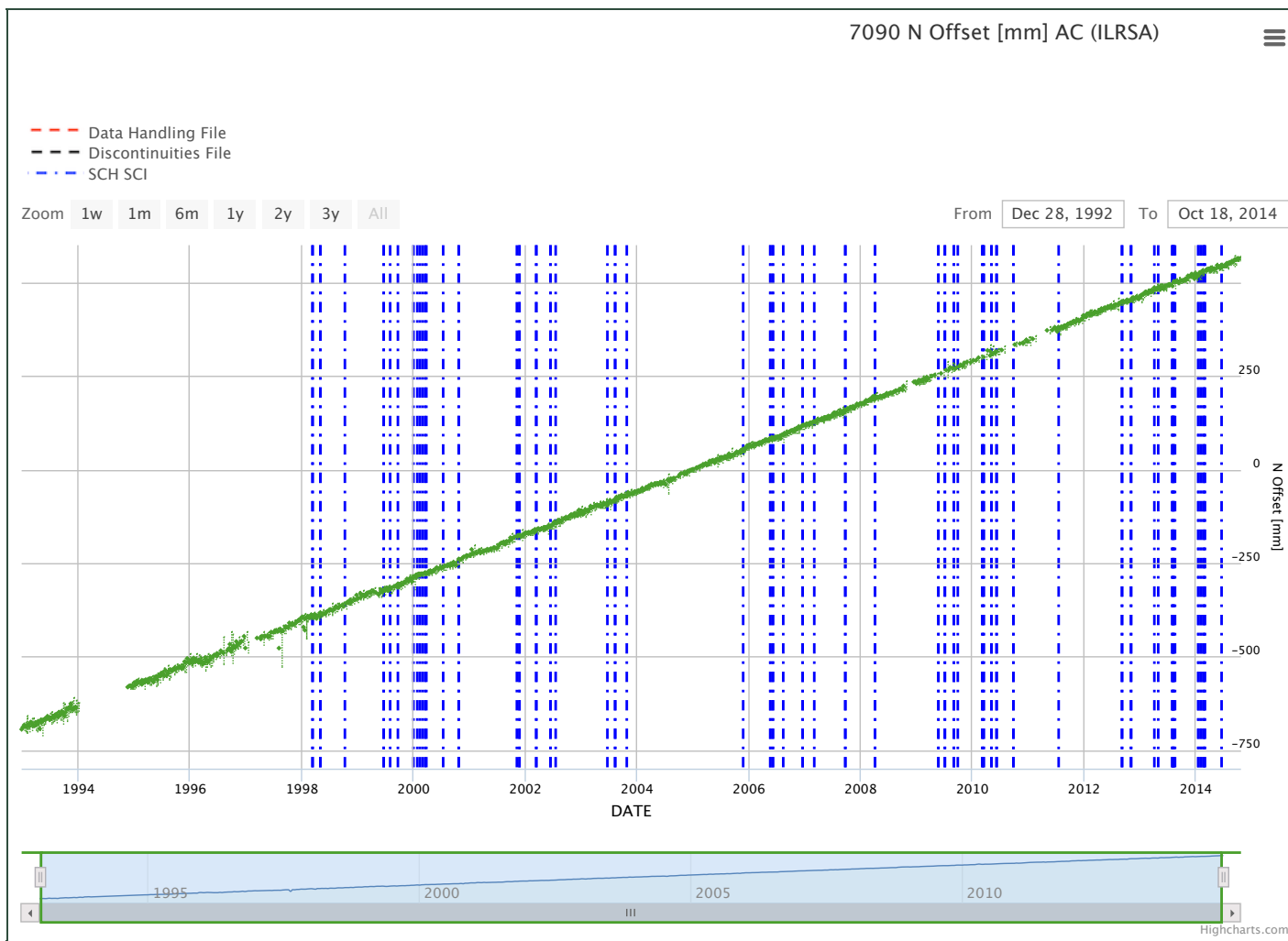
Y axis -100 100

Submit Reset form

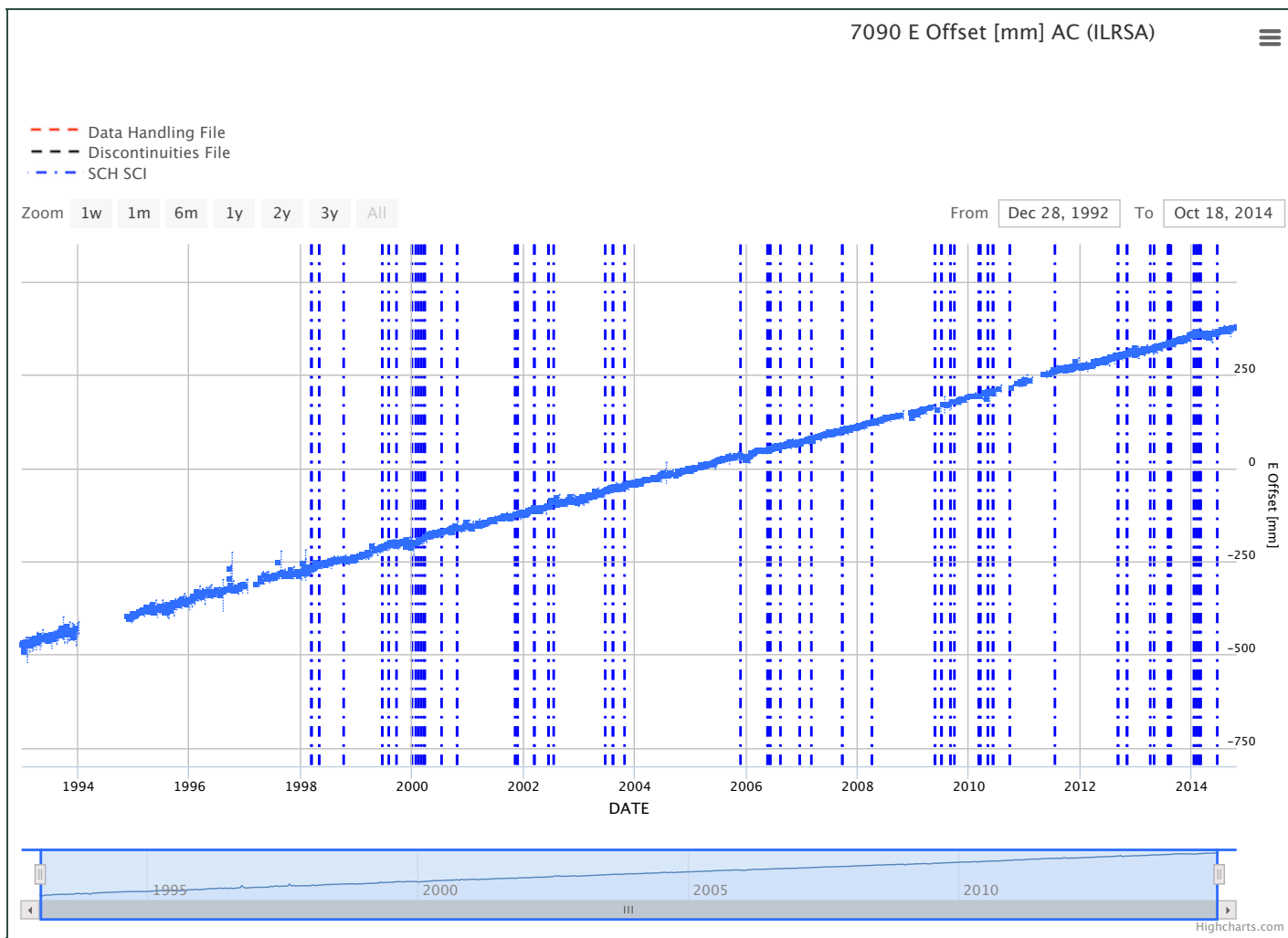


N Offset [mm] Greenbelt 7105 AC(asi) CC(ilrsa)	E Offset [mm] Greenbelt 7105 AC(asi) CC(ilrsa)	U Offset [mm] Greenbelt 7105 AC(asi) CC(ilrsa)
Mean/Std. Dev.: -1.01 ± 10.20 Count:623	Mean/Std. Dev.: 1.89 ± 11.92 Count:627	Mean/Std. Dev.: 3.14 ± 10.63 Count:622

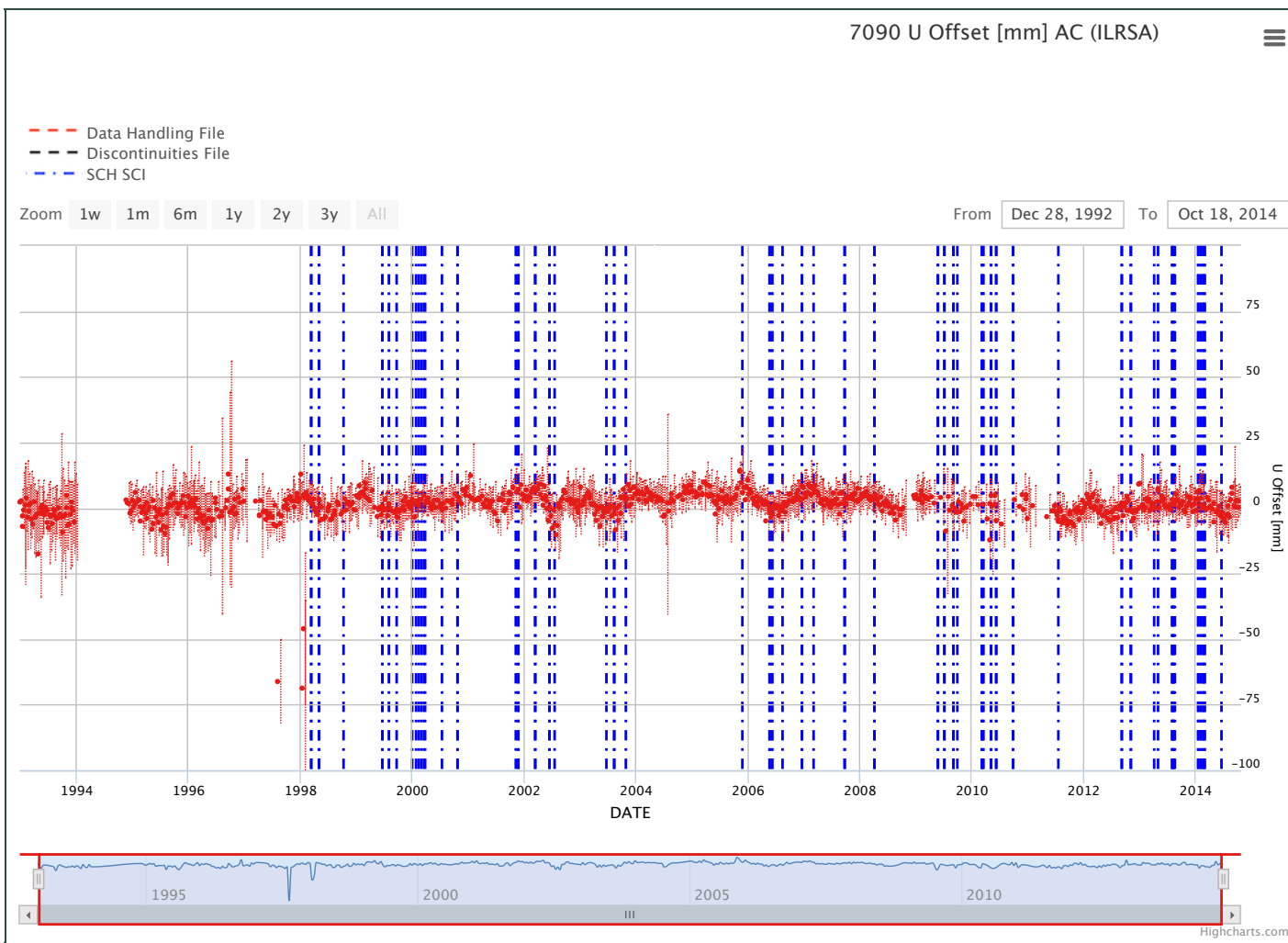
Yarragadee (7090) North



Yarragadee (7090) East



Yarragadee (7090) Up





QC Reports (HITU)



```

#
# @contact t.otsubo@r.hit-u.ac.jp (Toshimichi Otsubo)
# @website http://geo.science.hit-u.ac.jp/slr/bias/
# @version 0.16 (2012/08/16)
# @createdAt 2014/10/30 14:17:02
#
# each line contains:
# sat = 4-char satellite name
# site = 4-char site name (CDP ID)
# date/time = pass starting time
# dur = pass duration (min)
# rb = estimated range bias (mm) with 1-sigma error
# tb = estimated time bias (microsec) with 1-sigma error
# prec = post-fit scattering rms (mm)
# bad/total = number of bad/total normal-points
# rms = single-shot rms (mm)
# pres/temp/humi = pressure (hPa), temperature (K) and humidity (%)
# sdelay = applied system delay (mm)
# shft = system delay shift (mm)
# rms = calibration single-shot rms (mm)
# cfg = system configuration flag; SCH and SCI
# r = data release flag
# wlen = laser wavelength (nm)
#
# 1824 = KIEV
# sat site date time dur rb mm error tb us error prec bad total rms pres temp hum sdelay shft rms cfg r wlen
LAG1 1824 2014/10/18 16:38 3 13 ( 26 ) ----- ( ---- ) 5 0 / 3 24 1004.3 275.8 66 40120 0 11 0 0 0 532
AJI1 1824 2014/10/18 17:42 3 -28 ( 34 ) ----- ( ---- ) 6 1 / 4 22 1005.0 275.6 72 40120 0 11 0 0 0 532
AJI1 1824 2014/10/18 19:45 3 -1058 ( 0 ) ----- ( ---- ) 0 2 / 4 18 1007.0 274.6 72 40120 0 11 0 0 0 532
LAG1 1824 2014/10/18 20:03 11 27 ( 681 ) -16.0 ( 314.6 ) 32 0 / 5 30 1007.1 274.9 68 40120 0 11 0 0 0 532
AJI1 1824 2014/10/18 21:47 0 12 ( 89 ) ----- ( ---- ) 13 0 / 2 22 1007.8 273.8 67 40120 0 11 0 0 0 532
LAG1 1824 2014/10/18 23:35 31 46 ( 71 ) 24.6 ( 38.4 ) 13 1 / 6 28 1008.3 271.6 69 40110 0 10 0 0 0 532
AJI1 1824 2014/10/18 23:52 1 101 ( 175 ) ----- ( ---- ) 35 0 / 4 22 1008.2 271.7 69 40110 0 10 0 0 0 532
STRL 1824 2014/10/19 00:24 5 -22 ( 102 ) ----- ( ---- ) 18 1 / 4 23 1008.3 271.4 71 40110 0 10 0 0 0 532
LAG2 1824 2014/10/19 01:40 8 14 ( 389 ) ----- ( ---- ) 44 2 / 4 24 1009.1 270.7 73 40165 0 11 0 0 0 532
STRL 1824 2014/10/19 02:14 0 -39 ( 134 ) ----- ( ---- ) 23 0 / 3 26 1009.3 270.5 74 40165 0 11 0 0 0 532
LAG1 1824 2014/10/19 03:07 12 -29 ( 119 ) ----- ( ---- ) 21 0 / 3 23 1009.8 270.5 75 40165 0 11 0 0 0 532
AJI1 1824 2014/10/19 16:54 1 -79 ( 99 ) ----- ( ---- ) 20 0 / 4 24 1004.1 276.5 67 40156 0 11 0 0 0 532
AJI1 1824 2014/10/24 20:29 4 100 ( 66 ) ----- ( ---- ) 11 1 / 4 30 1015.6 269.4 83 40121 0 11 0 0 0 532
AJI1 1824 2014/10/24 22:27 7 88 ( 31 ) 2.4 ( 14.4 ) 7 2 / 10 22 1015.8 268.7 86 40121 0 11 0 0 0 532
STRL 1824 2014/10/24 22:45 0 -42 ( 42 ) ----- ( ---- ) 7 0 / 3 19 1015.8 268.6 86 40121 0 11 0 0 0 532
LAG1 1824 2014/10/24 22:53 6 50 ( 134 ) ----- ( ---- ) 27 1 / 5 27 1015.8 268.7 86 40121 0 11 0 0 0 532
STRL 1824 2014/10/25 00:35 1 27 ( 40 ) ----- ( ---- ) 8 0 / 4 26 1015.6 268.2 89 40121 0 11 0 0 0 532
STEL 1824 2014/10/25 01:00 0 72 ( ---- ) ----- ( ---- ) 0 1 / 2 22 1015.6 268.1 90 40121 0 11 0 0 0 532
LAG1 1824 2014/10/25 02:03 7 -109 ( 32 ) ----- ( ---- ) 6 0 / 4 36 1015.5 268.1 91 40121 0 11 0 0 0 532
LAG2 1824 2014/10/25 02:17 14 -2 ( 185 ) -35.3 ( 135.3 ) 22 0 / 5 21 1015.6 267.6 93 40121 0 11 0 0 0 532

```



QC Reports (JCET)



```
# @Data span 141023-141030
# @contact epavlis@umbc.edu
# @website http://geodesy.jcet.umbc.edu/
# ITRF used: SLRF2008 (http://ilrs.gsfc.nasa.gov/working_groups/awg/SLRF2008.html)
# @version 1.0
#
```

each line contains:

```
#
# STA ID = site name
# YY/MM/DD HH:MM = pass starting time
# SAT = satellite name (L1: LAGEOS1; L2: LAGEOS2; E1: ETAL01; E2:ETAL02; S1: STARLETTE; A1: AJISAI; LR: LARES)
# GOD OBS = number of good normal points
# RAW RMS = residual RMS before editing & bias application
# PREC EST = post-fit scattering rms
# RANGE BIAS = estimated range bias
# RANGE BIAS SIGMA = estimated range bias sigma
# TIME BIAS = estimated time bias
# TIME BIAS SIGMA = estimated time bias sigma
# PASS DUR = pass duration
# EDIT OBS = number of bad normal points
# CALIB+ MEAN = mean Applied System Delay (ILRS FR format cols 97-104)
# CALIB SDEV = mean System Calibration Method (ILRS FR format cols 126)
# CALIB SHIFT+ = mean Root Mean Square (ILRS FR format cols 111-114)
# STPASS RMS = mean Pass RMS (ILRS FR format cols 58-64)
# TEMP = mean surface temperature [K]
# HUM = mean relative humidity of surface %
# PRES = mean pressure [hPa]
# WLEN = walelength [nm]
# SCH = System Change Indicator (ILRS FR format cols 127)
# SCI = System Configuration (ILRS FR format cols 128)
# DRF = Data Release Flag (ILRS FR format cols 130)
# ELEVATION MAX = maximum elevation for pass [degrees]
# ELEVATION MIN = minimum elevation for pass [degrees]
#
```

```
#1824 Kiev 12356S001
```

#	GOOD	RAW	PREC	RANGE	RANGE	TIME	TIME	PASS	EDIT	CALIB+	CALIB	CALIB++	STPASS	TEMP	HUM	PRES	WLEN	S S D	ELEVATION						
#	OBS	RMS	EST	BIAS	BIAS	BIAS	BIAS	DUR	OBS	MEAN	SDEV	SHIFT	RMS	[K]	%	[hPa]	[nm]	C C R	MAX						
#	STA ID	YY/MM/DD	HH:MM	SAT	A	[mm]	[mm]	[mm]	[mm]	[us]	[MIN]	[mm]	[mm]	[mm]				H I F	[degrees]						
18248101	14/10/29	15:53	A1	17	39.8	23.0	32.5	9.6	61.0	2.6	0	0	40122	E	18	0	P	36	277.6	68.0	1007.9	532.0	1 1 0	65.8	20.8
18248101	14/10/29	17:54	A1	9	86.4	34.3	-79.3	25.8	21.4	6.7	0	0	40122	E	18	0	P	42	274.8	76.0	1007.5	532.0	6 5 0	70.9	31.0
18248101	14/10/29	19:55	A1	2	84.6	40.0	-74.6	49.2	0.2	8.7	0	0	40122	E	18	0	P	30	273.7	81.0	1007.4	532.0	0 1 0	22.9	21.9



Supported QC Reports



DGFI – Data files for the Deutsches Geodaetisches Forschungsinstitut Analysis Center (AC). The online source for these files is http://ilrs.dgfi.badw.de/fileadmin/quality/weekly_biases/ Last updated 8/14/2014

JCET – Data files for the Joint Center for Earth Systems Technology Analysis Center. The online source for these files is <ftp://cddis.gsfc.nasa.gov/pub/reports/slrjcet/> Last updated 8/14/2014

SLRCSR – Data files for the Center for Space Research Analysis Center. The online source for these files is <ftp://cddis.gsfc.nasa.gov/pub/reports/slrcsr/> Last updated 8/14/2014

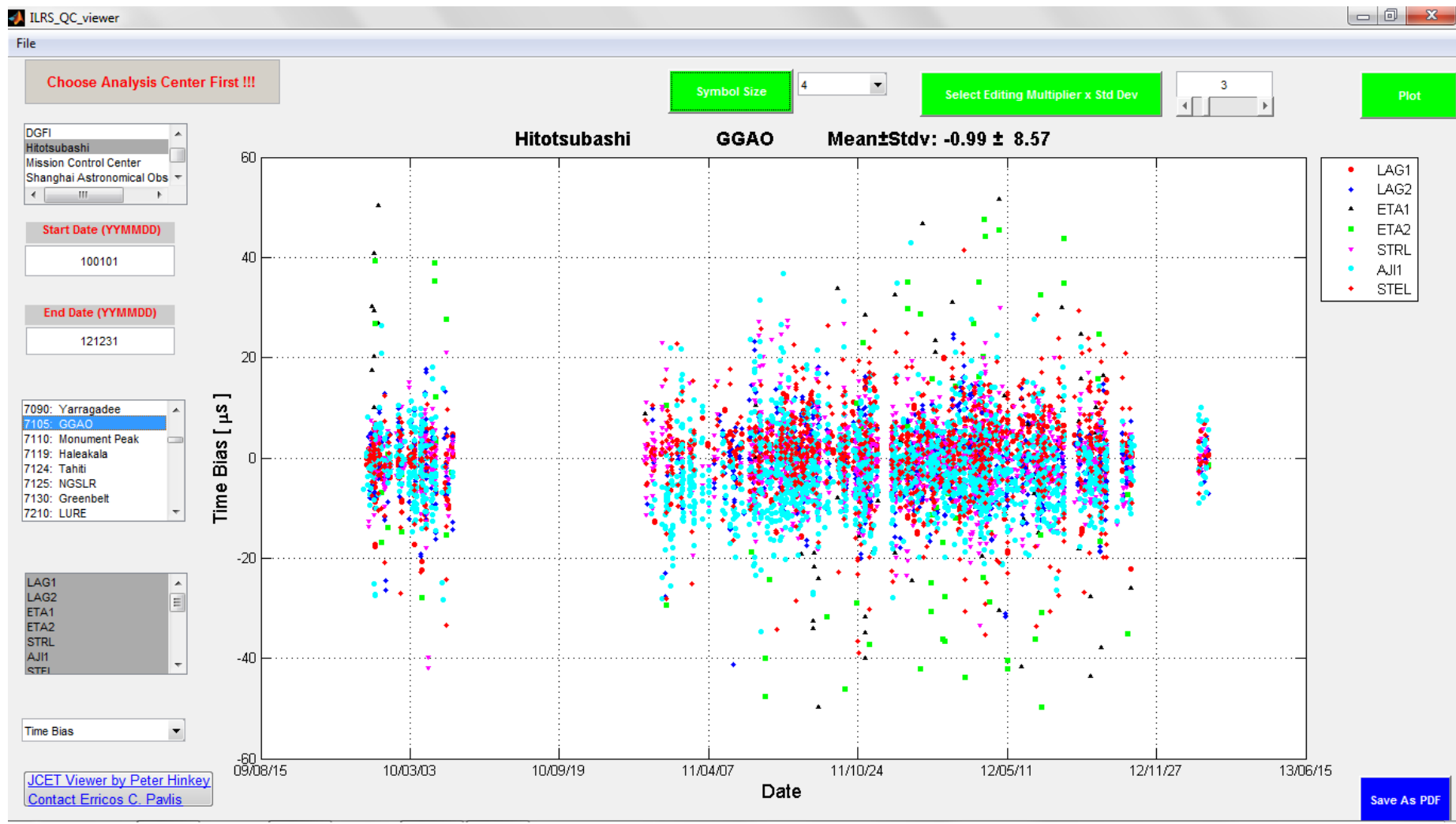
SLRSAO – Data files for the Shanghai Astronomical Observatory Analysis Center. The online source for these files is <ftp://cddis.gsfc.nasa.gov/pub/reports/slrsao/> Last updated 8/14/2014

SLRMCC – Data files for the Mission Control Center Analysis Center. The online source for these files is <ftp://cddis.gsfc.nasa.gov/pub/reports/slrmcc/> Last updated 8/14/2014

SLRHITU – Data files for the Hitotsubashi Analysis Center. The online source for these files is <ftp://cddis.gsfc.nasa.gov/pub/reports/slrhitu/> Last updated 8/14/2014

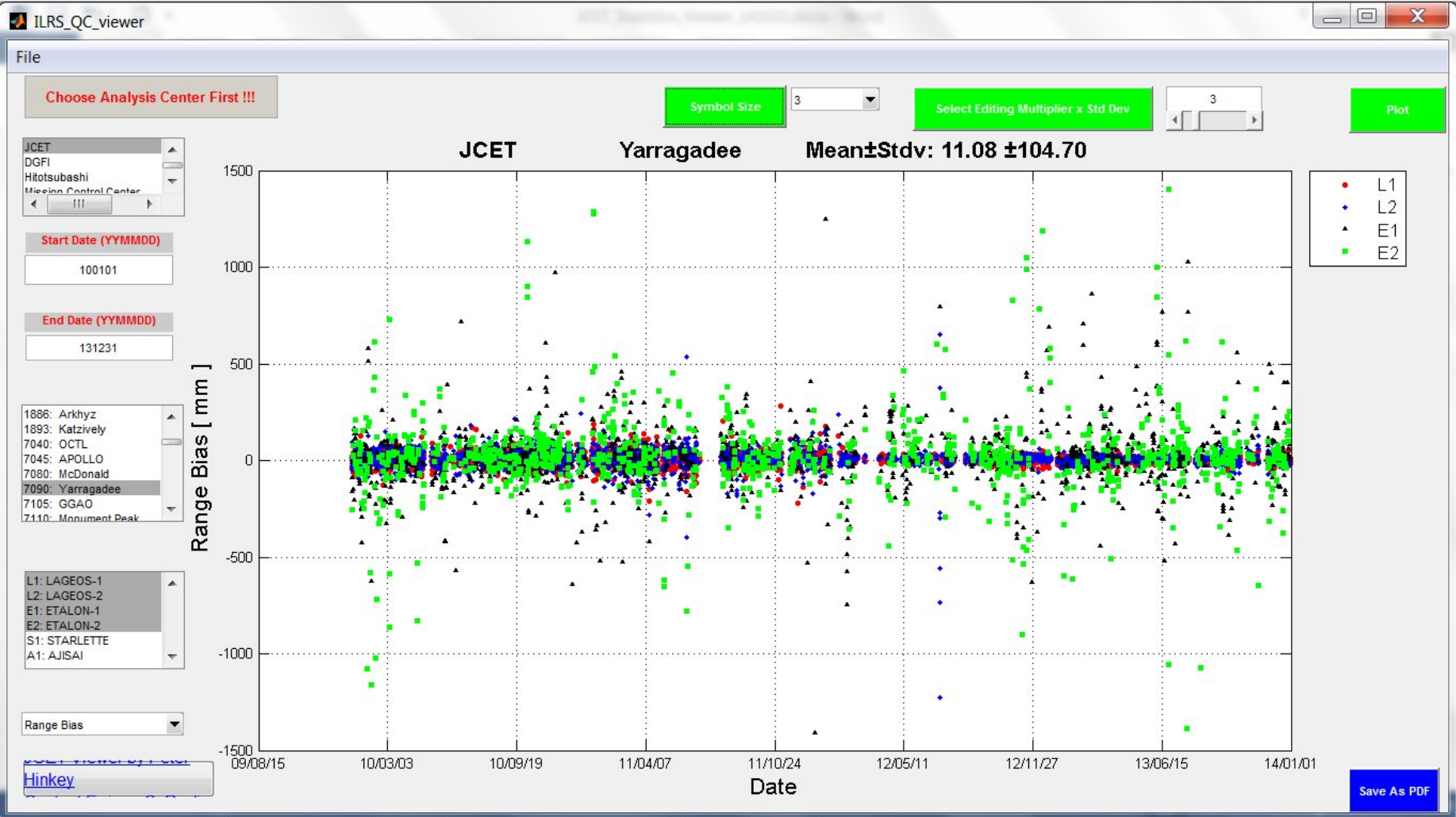


JCET QC Viewer s/w





JCET QC Viewer s/w





SLR SITE LOGs Spreadsheets



<ftp://cddis.gsfc.nasa.gov/slr/slrlog>

Name	Date Modified	Size	Kind
gol1_20141019.log	Oct 28, 2014 11:25 AM	27 KB	Log File
▶ slrhst	Oct 25, 2014 12:03 PM	--	Folder
▶ oldlog	Oct 25, 2014 10:50 AM	--	Folder
ziml_20141025.log	Oct 25, 2014 10:47 AM	46 KB	Log File
site_log_book_20141022.xlsm	Oct 23, 2014 7:51 AM	322 KB	Micro...rkbook
site_log_book_full_20141020.xlsm	Oct 23, 2014 7:50 AM	146 KB	Micro...rkbook
site_log_book_full.xlsm	Oct 23, 2014 7:49 AM	146 KB	Micro...rkbook
site_log_book.xlsm	Oct 23, 2014 7:49 AM	322 KB	Micro...rkbook
sfel_20140916.log	Sep 26, 2014 9:59 AM	30 KB	Log File
matm_20140902.log	Sep 17, 2014 11:10 AM	38 KB	Log File
▶ images	Sep 10, 2014 9:28 PM	--	Folder
irkl_20140902.log	Sep 2, 2014 9:30 AM	14 KB	Log File
monl_20140619.log	Aug 29, 2014 11:42 AM	24 KB	Log File
bral_20140826.log	Aug 26, 2014 9:12 AM	13 KB	Log File
sosw_20140501.log	Aug 1, 2014 8:58 AM	18 KB	Log File
sisl_20140707.log	Jul 10, 2014 1:04 PM	31 KB	Log File
ha4t_20140702.log	Jul 8, 2014 7:30 AM	23 KB	Log File



SLR SITE LOGs Summary: Current



Sections "0" to "17" as in each Site Log

Site Number	Location	Prepared by	Preparer E-mail	Date Prepared	Report Type	Format Version
1824	Golosiiv	Mikhailo Medvedskij	medved@mao.kiev.ua	4/21/11	UPDATE	1
1831	Lviv	Andriy Bilinsky	slr1831@ukr.net	1/13/14	UPDATE	1
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	parknataliya@yandex.ru	1/27/14	UPDATE	1
1870	Mendeleevo	Mark Kaufman	mark@imvp.aspnet.ru	5/9/02	UPDATE	1
1873	SIML	Lazar Shtirberg	lazar@crao.crimea.ua	1/26/09	UPDATE	1
1874	Mendeleevo	Igor Ignatenko	lgig@vniiftri.ru	8/14/13	UPDATE	1
1879	ALTAY	Natalia Parkhomenko	natalia.n@g23.relcom.ru	3/25/09	UPDATE	1
1884	RIGA	Kalvis Salminsh	kalvis.salmins@lu.lv	3/11/14	UPDATE	1
1886	Arkhyz	Natalia Parkhomenko	parknatliya@yandex.ru	2/15/12	UPDATE	1
1887	Baikonur	Parkhomenko Natalia	parknataliya@yandex.ru	2/13/12	UPDATE	1
1888	Svetloe	Iskander Gayazov	gayazov@ipa.nw.ru	1/31/12	NEW	1
1889	Zelenchukskaya	Iskander Gayazov	gayazov@ipa.nw.ru	1/31/12	NEW	1
1890	Badary	Iskander Gayazov	gayazov@ipa.nw.ru	1/31/12	NEW	1
1891	Irkutsk	Emelyanov Valery	eva@niiftri.irk.ru	9/2/14	Update	1
1893	Katzively	Andriy Makeyev	clogao@rambler.ru	8/2/11	UPDATE	1
7040	OCTL	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.ucsd.edu	6/29/09	NEW	1
7080	McDonald Observatory / Mt. Fowkes	Randall L. Ricklefs	ricklefs@csr.utexas.edu	2/4/14	UPDATE	1
7090	MOBLAS-5 / YARRAGA DEE	Nikki Desch	nikki.desch@exelisinc.com	10/11/12	UPDATE	1
7105	Goddard Geophysical Astronomical Observatory	Justine Woo	Justine.woo@exelisinc.com	1/16/14	UPDATE	1
7110	Monument Peak	Justine Woo	Justine.Woo@exelisinc.com	6/19/14	UPDATE	1
7119	Haleakala, Maui	Daniel O'Gara	ogara@ifa.hawaii.edu	7/1/14	UPDATE	1
7124	Tahiti Geodetic Observatory	Nikki Desch	nikki.desch@exelisinc.com	10/31/12	UPDATE	1
7125	NGSLR	Julie Horvath	julie.horvath@honeywell.com	10/19/14	UPDATE	1
7130	Greenbelt	Craig Foreman	Craig.Foreman@honeywell-tsi.com	1/17/06	UPDATE	1
7210	LURE	Daniel J. O'Gara	ogara@lure.ifa.hawaii.edu	5/9/02	UPDATE	1
7231	Wuhan	Guo Tangyong	whslr@public.wh.hb.cn	5/9/02	UPDATE	1
7237	Changchun	Fan Cunbo	fancb@cho.ac.cn	8/13/13	UPDATE	1.02
7249	Beijing SLR Station	Qu Feng	qufeng@casm.ac.cn	1/3/12	UPDATE	1
7308	Koganei	Hiroo Kunimori	kuni@crl.go.jp	10/7/02	NEW	1
7328	Koganei	Hiroo Kunimori	kuni@nict.go.jp	8/31/10	UPDATE	1
7335	Kashima	Hiroo Kunimori	kuni@crl.go.jp	5/9/02	UPDATE	1
7337	Miura	Hiroo Kunimori	kuni@crl.go.jp	5/9/02	UPDATE	1
7339	Tateyama	Hiroo Kunimori	kuni@crl.go.jp	5/9/02	UPDATE	1
7343	Beijing	Guo Tangyong	whslr@public.wh.hb.cn, guoty@21cn.com	5/9/02	UPDATE	1
7355	Huamei	Guo Tangyong	whslr@public.wh.hb.cn, guoty@21cn.com	4/20/03	UPDATE	1



SLR SITE LOGs Summary: All

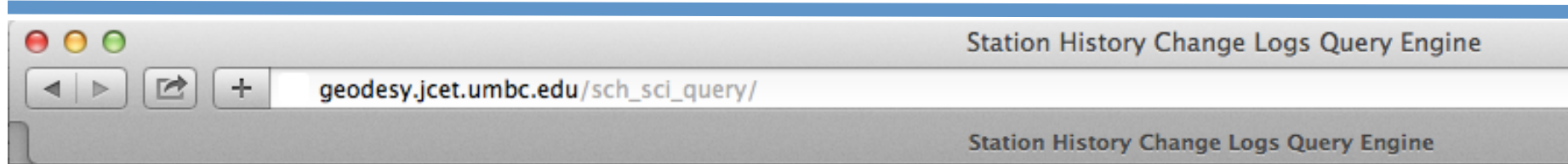


1	RELEASE: 10/20/14	1.0 Identification of the Ranging System Reference Point	2011-06-dd)	3.01 System Name	5.01 Laser Type								
2	File Name	IERS DOMES Number	CDP Pad ID	Date Installed	2011-06-dd)	System Name	4-Character Code	CDP System Number	CDP Occupation Number	Laser Type	Secondary Wavelength	Secondary Max Energy	Pu
3	apaf_20010111.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	60	
4	apaf_20010312.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	60	
5	apaf_20020121.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	2	ND-YAG	532	60	
6	apaf_20020509.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	20	
7	apaf_20020722.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	20	
8	apaf_20030220.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	20	
9	apaf_20030418.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	1	ND-YAG	532	20	
10	apaf_20050516.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	3	ND-YAG	532	20	
11	apaf_20080710.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	4	ND-YAG	532	20	
12	apaf_20080929.log	10077M002	7848	1996-09-01	in use	FTLRS	AJAF	69	4	ND-YAG	532	20	
13	atf_20090303.log	12372S001	1879	2004-09-15	in use	ALTL	1879	94	1	ND-YAG	532	2.5	
14	atf_20090325.log	12372S001	1879	2004-09-15	in use	ALTL	1879	94	1	ND-YAG	532	2.5	
15	apol_20090601.log	49447S001	7045	??	??	APOL	APOL	95	1	ND-YAG	532	100	
16	apol_20090629.log	49447S001	7045	??	??	APOL	APOL	95	1	ND-YAG	532	100	
17	arel_20001030.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	3	ND-YAG	532	100	
18	arel_20011001.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	3	ND-YAG	532	100	
19	arel_20020609.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	3	ND-YAG	532	100	
20	arel_20020610.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	3	ND-YAG	532	100	
21	arel_20031002.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	3	ND-YAG	532	100	
22	arel_20070215.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	4	ND-YAG	532	100	
23	arel_20090320.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	4	ND-YAG	532	100	
24	arel_20110921.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	4	ND-YAG	532	100	
25	arel_20120912.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	4	ND-YAG	532	100	
26	arel_20140121.log	42202M003	7403	1992-07-10	in use	TLRS 3	AREL	13	4	ND-YAG	532	100	
27	arkl_20120215.log	12373S001	1886	(yyyy-mm-dd)	in use	NLRS	ORRL	25	2	(ND-YAG/TL-SAP/IR/RE/etc)			
28	baif_20120131.log	12338S004	1890	1995-07-03	in use	ZIMAT	ZIM	68	1	TL-Sapphire	423	40	
29	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
30	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
31	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
32	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
33	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
34	baif_20111014.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
35	baif_20120213.log	25603S001	1887	2011-06-dd)	in use	BAIL	1887	97	1	ND-YAG	532	2.5	
36	beia_20030608.log	21601S005	7357	2002-06-30	in use	Beijing for Argentina	BEIA	88	1	ND-YAG	532	50	
37	beia_20030821.log	21601S005	7357	2002-06-30	in use	Beijing for Argentina	BEIA	88	1	ND-YAG	532	50	
38	bel_20000930.log	21601S004	7249	1988-12-31	in use	Beijing	BEIL	61	1	ND-YAG	532	30	
39	bel_20020509.log	21601S004	7249	1988-12-31	in use	Beijing	BEIL	61	1	ND-YAG	532	30	
40	bel_20020722.log	21601S004	7249	1988-12-31	in use	Beijing	BEIL	61	1	ND-YAG	532	30	
41	bel_20030821.log	21601S004	7249	1988-12-31	in use	Beijing	BEIL	61	1	ND-YAG	532	30	
42	bel_20041102.log	21601S004	7249	1988-12-31	in use	SLR Beijing	bel	61	1	ND-YAG	532	30	
43	bel_20100712.log	21601S004	7249	1988-12-31	in use	SLR Beijing	bel	61	1	ND-Vanadate	532	30	
44	bel_20100620.log	21601S004	7249	1988-12-31	in use	SLR Beijing	bel	61	1	ND-Vanadate	532	30	
45	bel_20120103.log	21601S004	7249	1988-12-31	in use	SLR Beijing	bel	61	2	ND-YVO4	532	30	
46	bel_20090925.log	21601M002	7343	2000-08-25	in use	TROS	BEIT	84	1	Nd-YAG	532.1	15	
47	bel_20010507.log	21601M002	7343	2000-08-25	in use	TROS	BEIT	84	1	Nd-YAG	532.1	15	
48	bel_20020509.log	21601M002	7343	2000-08-25	in use	TROS	BEIT	84	1	Nd-YAG	532.1	15	
49	bel_20020722.log	21601M002	7343	2000-08-25	in use	TROS	BEIT	84	1	Nd-YAG	532.1	15	
50	borf_20000904.log	12205S001	7811	1988-05-13	in use	Borowiec	BORL	38	2	ND-YAG	532	50	
51	borf_20011211.log	12205S001	7811	1988-05-13	in use	Borowiec	BORL	38	2	ND-YAG	532	50	
52	borf_20020509.log	12205S001	7811	1988-05-13	in use	Borowiec	BORL	38	2	ND-YAG	532	50	
53	borf_20020801.log	12205S001	7811	1988-05-13	in use	Borowiec	BORL	38	2	ND-YAG	532	50	
54	borf_20030331.log	12205S001	7811	1988-05-13	in use	Borowiec	BORL	38	2	ND-YAG	532	50	
55	brf_20040910.log	10004M002	7604	1989	in use	FTLRS	BREF	69	1	ND-YAG	532	20	
56	brf_20040930.log	10004M002	7604	1989	in use	FTLRS	BREF	69	1	ND-YAG	532	20	
57	burf_20071205.log	50186M001	7370	November 2007	in use	FTLRS	BURF	69	1	ND-YAG	532	20	
58	burf_20071219.log	50186M001	7370	November 2007	in use	FTLRS	BURF	69	1	ND-YAG	532	20	
59	burf_20071221.log	50186M001	7370	November 2007	in use	FTLRS	BURF	69	1	ND-YAG	532	20	
60	cgll_20000928.log	12725S013	7548	1992-07-16	in use	CAGLAS	CGLL	62	1	ND-YAG	532	80	
61	cgll_20020509.log	12725S013	7548	1992-07-16	in use	CAGLAS	CGLL	62	1	ND-YAG	532	80	
62	cgll_20020722.log	12725S013	7548	1992-07-16	in use	CAGLAS	CGLL	62	1	ND-YAG	532	80	
63	chaf_20030423.log	12617M002	7830	2002-12-15	in use	FTLRS	CHAF	69	1	ND-YAG	532	20	
64	chal_20000818.log	21611S001	7237	1983-01-01	in use	CHALAS	CHAL	19	1	ND-YAG	532	100	

By File Name By CDP Pad + Normal View Ready Sum = 0



System History Change Logs



Station History Change Logs Query Engine

Query:

http://geodesy.jcet.umbc.edu/sch_sci_query/

Query:

```
select * from sch where station_cdp_no=7840
select * from sch where station_name=7105
select * from sch where station_name=7105 and seq_num=0724
select * from sci
select * from sci
select * from sci and sci=1
select * from sci where sci=1
select * from sci where station_cdp_no=7105
select * from sci where station_cdp_no=7840
select * from sci where station_name=7105 and seq_num=0724
```



System History Change Logs



Query Result

[SELECT * FROM HST WHERE STATION_CDP_NO='7403']

[Get data file](#)

DATE	TIME	STATION_CDP_NO	SOD_NO	SCH	SCI	HST	DATA_IMPCT_FLG	SUBSYSTEM	DESCRIPTION
1992-07-18		7403	1303	1					Baseline configuration: MCP-PMT, cascaded constant fraction discriminator, HP5370 timer, Setra barometer, cesium beam frequency standard, GPS receiver, az-el mount, ND: YAG Laser, wavelength 532.1 nm, 200 ps laser, 100 meter target HP computer upgrade, optical attenuation mechanism
1995-10-23		7403	1303	2					New normal point generation software (VM)
1998-11-30		7403	1303	3					New controller computer and tracking software, new data processing computer and data processing software, parascientific barometer
2001-05-23		7403	1303	4					New processing and normal point software V2.5 system
2001-05-26		7403	1303	5					True Time GPS steered rubidium and CNS clock
2002-04-08		7403	1303	6					Laser Data Processing System v1.3 installation
2002-07-24		7403	1303	7					Laser Data Processing System v1.3 Final Installation
2002-12-16		7403	1303	8					Laser Cavity Dump Upgrade
1992-07-18		7403	1303		1				Baseline configuration
2011-09-06	15.4833	7403	1306	0	0	1	2	12	MET 4 installation and update to Monitor and Sattrk programs
2011-09-06	15.4833	7403	1306	0	0	1	2	12	MET 4 installation and update to Monitor and Sattrk programs
2011-09-06	15.4833	7403	1306	0	0	1	2	12	MET 4 installation and update to Monitor and Sattrk programs
2011-09-06	15.4833	7403	1306	0	0	1	2	12	MET 4 installation and update to Monitor and Sattrk programs
2011-04-27	14.5	7403	1306	0	0	1	2	5.01	Installation of a Laser Start Diode and Start Diode Cable
2011-10-24	14.5	7403	1306	0	0	1	2	5.01	Changed Laser Table and Start Diode
2011-09-06	15.4833	7403	1306	0	0	1	2	12	MET 4 installation and update to Monitor and Sattrk programs

See you at Table 7 !