

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 62436 - L2 Version 3
Chandra X-Ray Center

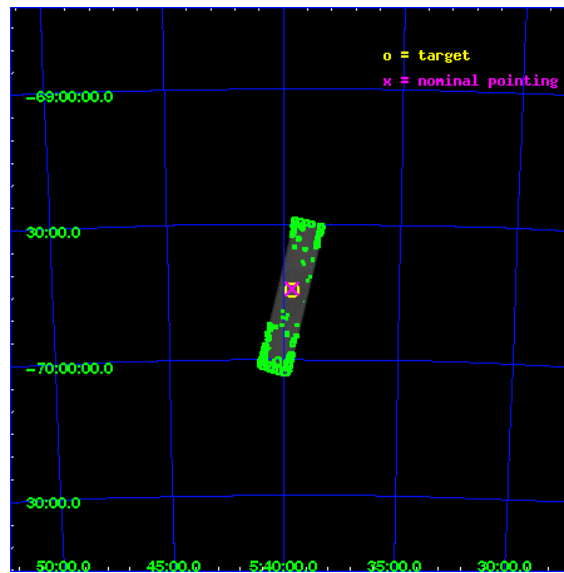
L2 Processing Date : Jan 29 2010

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1 Front

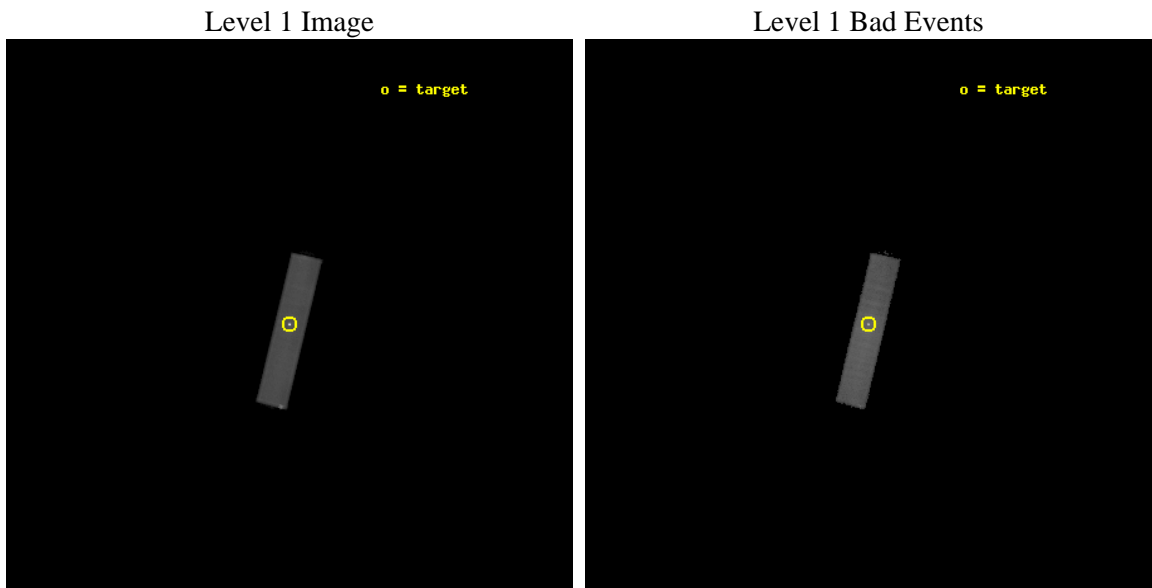
seq_num	490016	Sequence number
obs_id	62436	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	LMC X-1	Source name
ra_targ	84.914583	Observer's specified target RA
dec_targ	-69.743611	Observer's specified target Dec
ra_nom	84.912440798721	Nominal RA
dec_nom	-69.738153225734	Nominal Dec
roll_nom	103.52986300425	Nominal Roll
revision	3	Processing version of data
ontime	10384.275372855	[s]
livetime	10258.402225173	Ontime multiplied by DTCOR
l2events	789988	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	36000.000000	Scheduled observation exposure time
ascdsver	8.2.1	Processing system revision	ontime	10384.275372855	[s]
caldbver	4.1.5	 	ll events	1044616	Number of level 1 events
date	2010-01-29T22:22:00	Date and time of file creation			
revision	4	Processing version of data			

2.1.3 Events

Level 1 Events

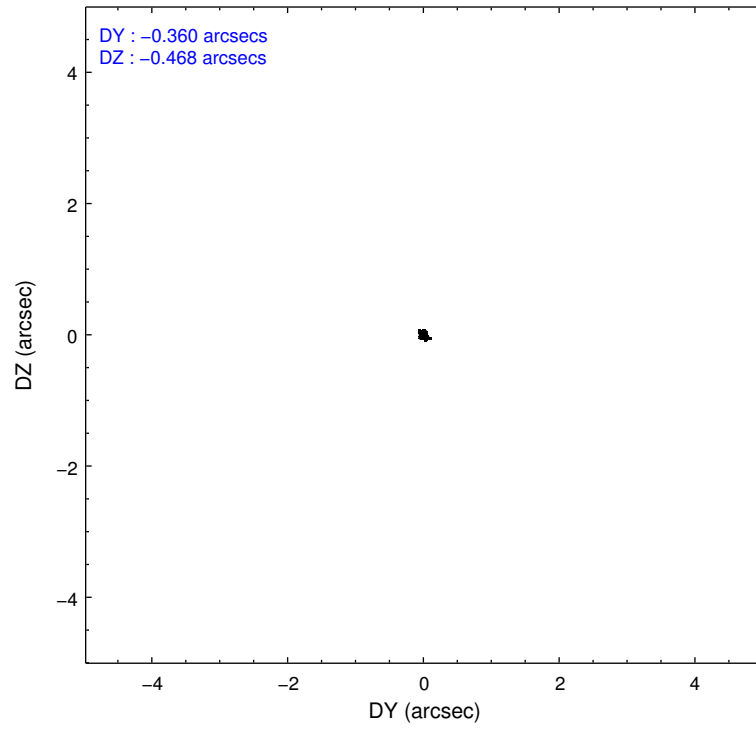
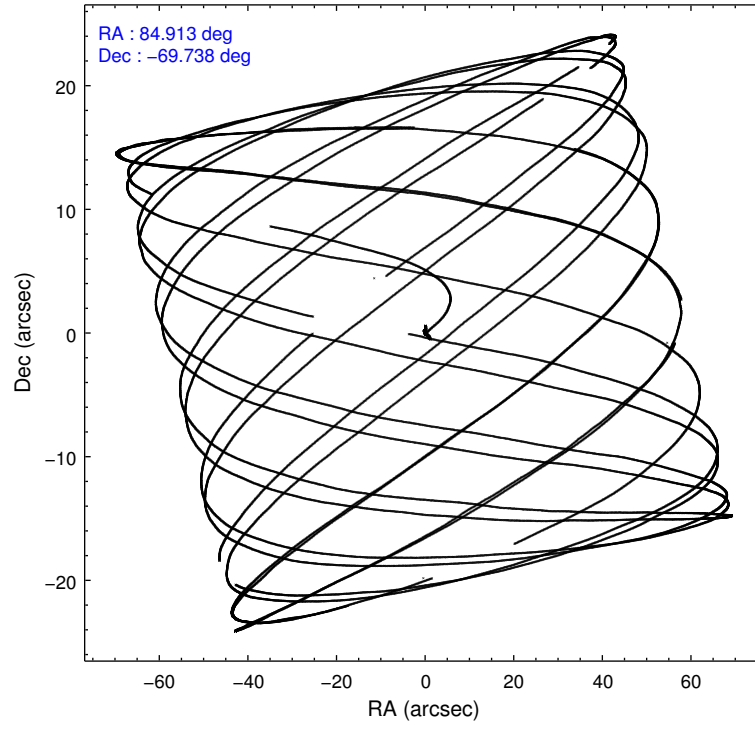
	segment 1	segment 2	segment 3
level 1 events	0	1044616	0
rejected events	0	216573	0
rejected %	0%	20%	0%

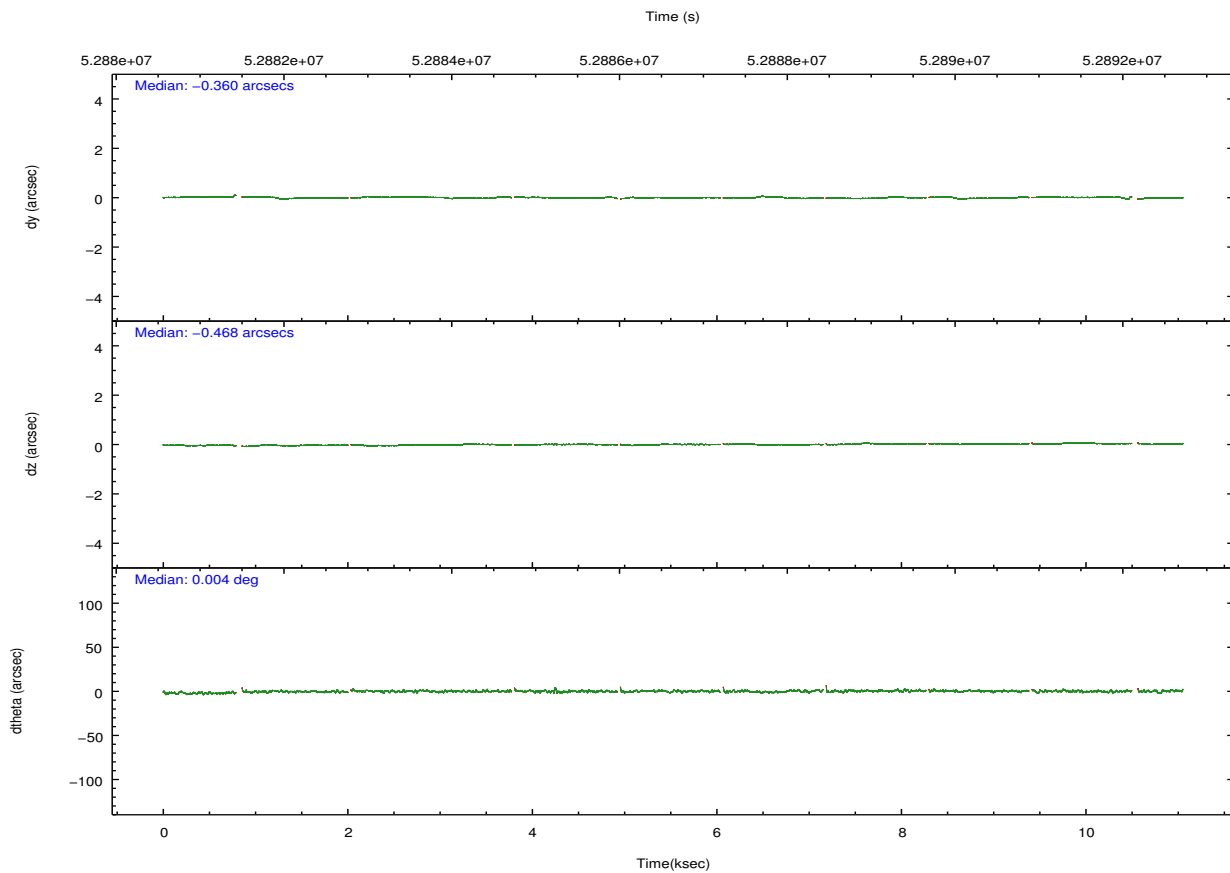
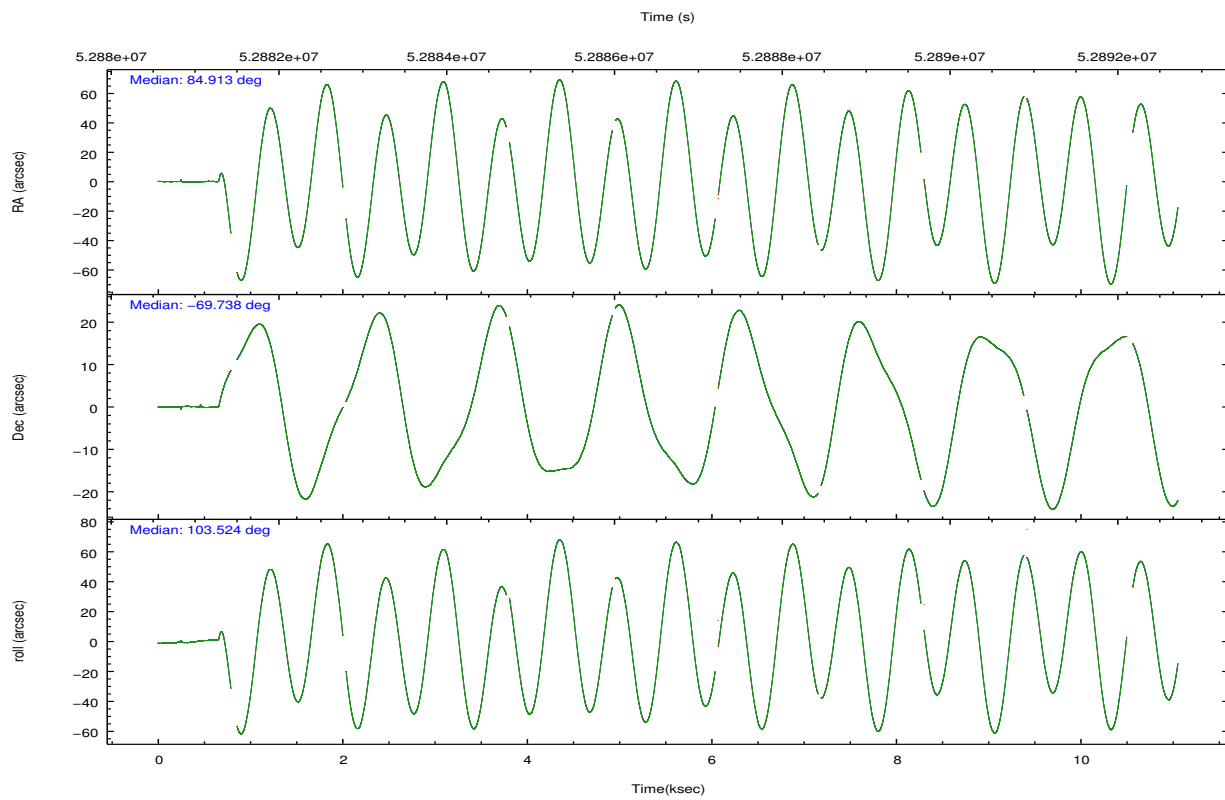
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
Pointing RA	84.971636	84.91244079872104
Pointing Dec	-69.758744	-69.73815322573407
Pointing Roll	103.518059	103.5298630042497
Window start time	52856164.184000	52856164.184000
Window stop time	52892164.184000	52892164.184000
SIM focus pos (mm)	-2.445622	-0.7765883295792845
SIM defocus (mm)	-0.9122852289566712	0.7567483098250124
SIM translation stage pos (mm)	250.455976	250.466033080201
SIM translation stage offset (mm)	0	-0.01005468664627074
Observation start time	52856164.184000	52881109.287392
Observation start date	1999-09-04T18:15:00	1999-09-05T01:11:49
Observation end time	52892164.184000	52892254.112792
Observation end date	1999-09-05T04:15:00	1999-09-05T04:17:34

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect



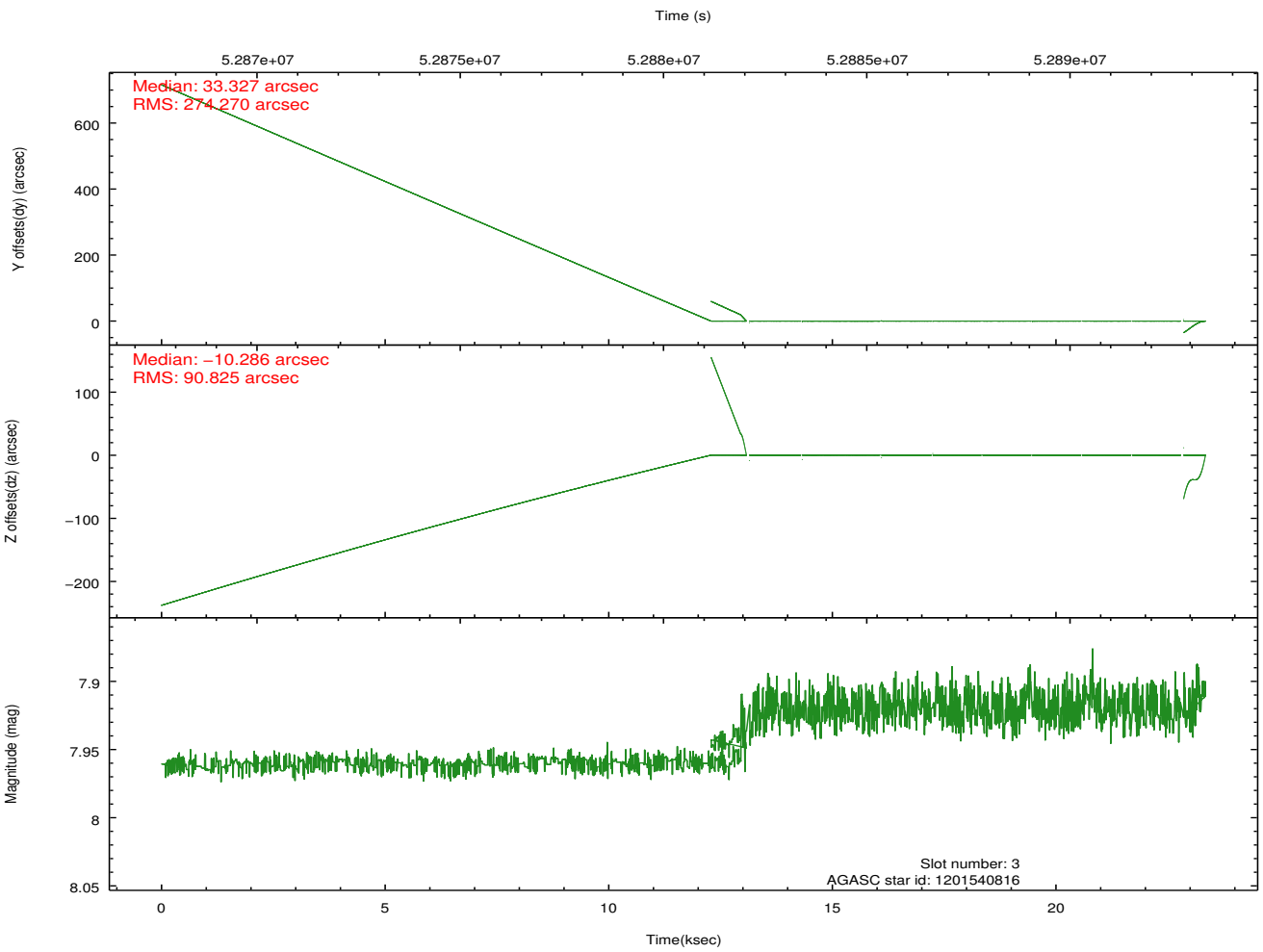
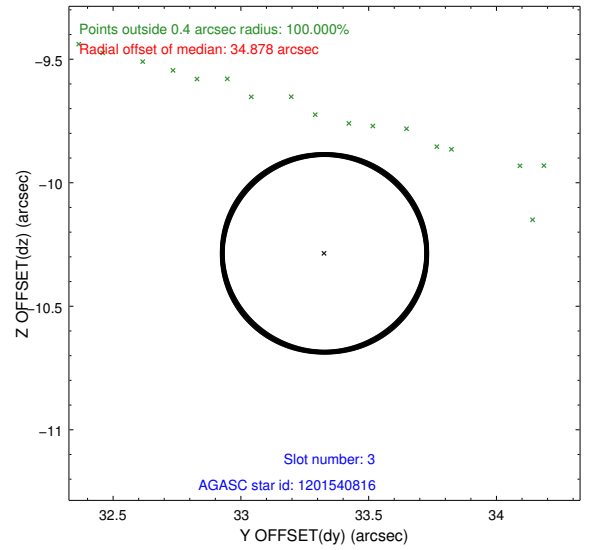
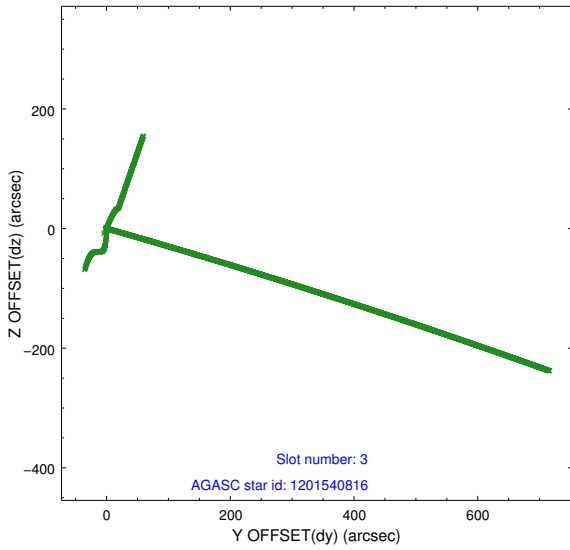


Slot Statistics

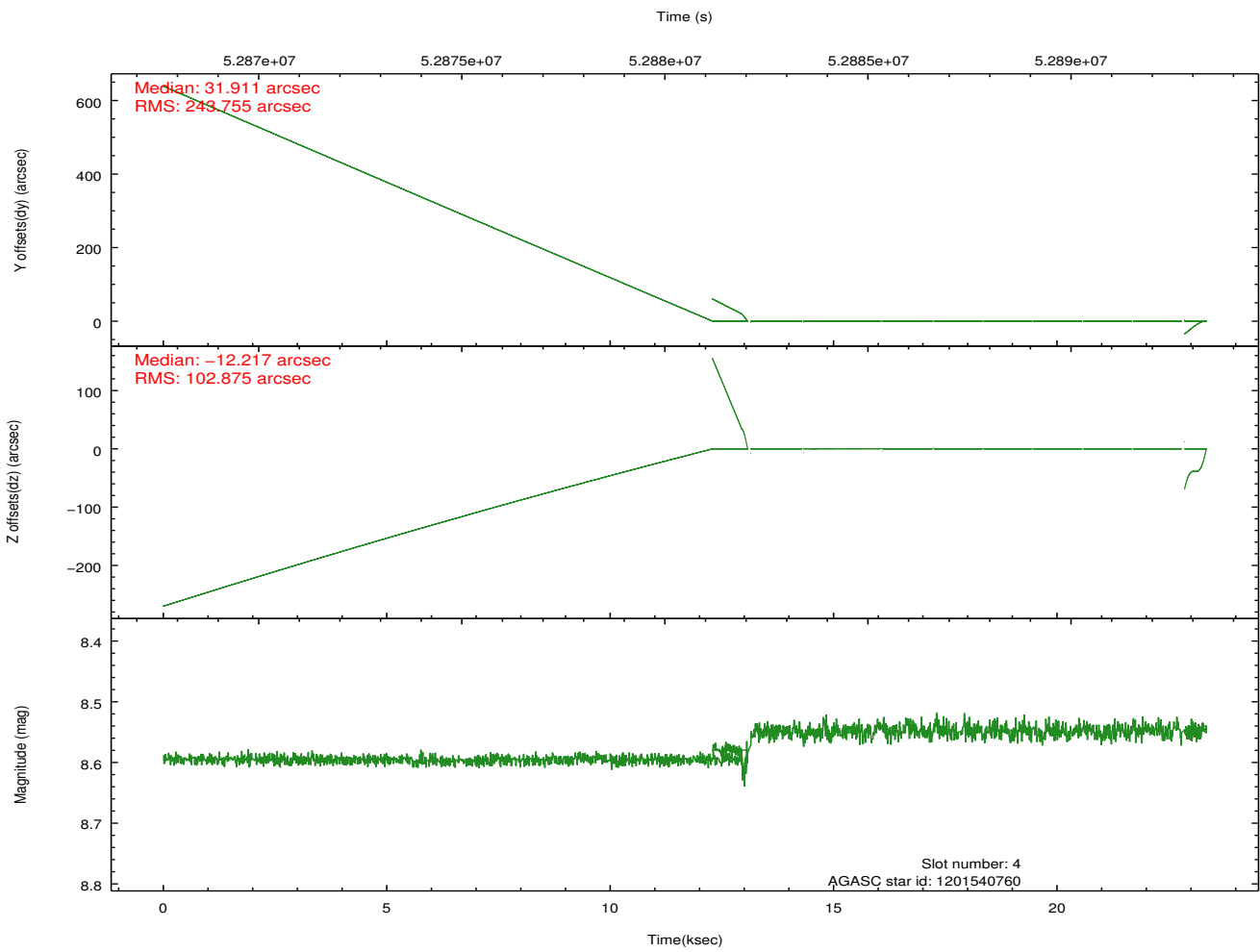
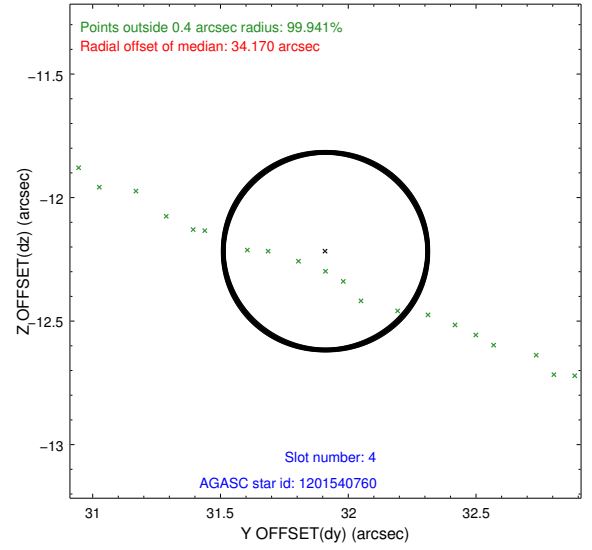
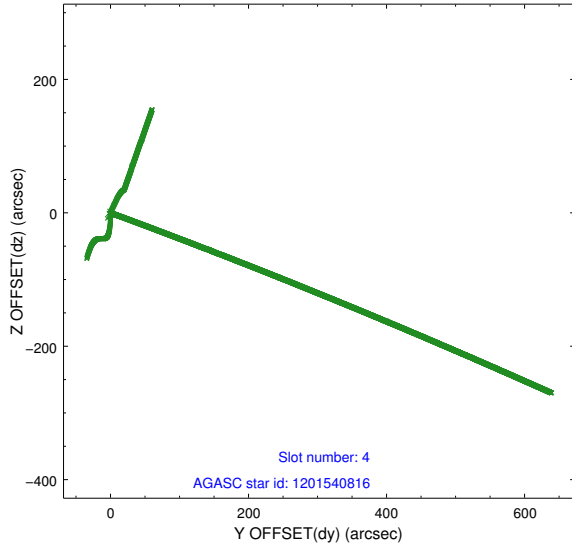
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.00	9627	0.133	-0.012	13.296	43.317	0.000000	0.000000	-1153.73	-447.56
1	FID	HRC-S-3	7.01	11827	0.048	0.461	15.939	39.805	0.000000	0.000000	-1156.48	581.89
2	FID	HRC-S-4	6.99	11831	0.030	0.377	4.554	11.848	0.000000	0.000000	1244.66	584.24
3	GUIDE	1201540816	7.95	11834	33.327	-10.286	239.424	643.805	86.998494	-69.749817	-599.53	-2452.14
4	GUIDE	1201540760	8.59	11829	31.911	-12.217	217.958	589.720	84.403691	-70.419249	-2154.84	1222.96
5	GUIDE	1201411368	10.05	11744	33.053	-13.696	212.242	571.899	83.629696	-70.495613	-2219.84	2192.85
6	GUIDE	1200883536	9.88	11826	31.269	-7.593	204.406	553.445	83.119228	-69.218429	2409.33	1855.10
7	GUIDE	1201020088	10.49	11772	35.290	-8.593	234.105	626.859	86.319248	-68.997756	2239.51	-2325.69

2.4 Star Slots

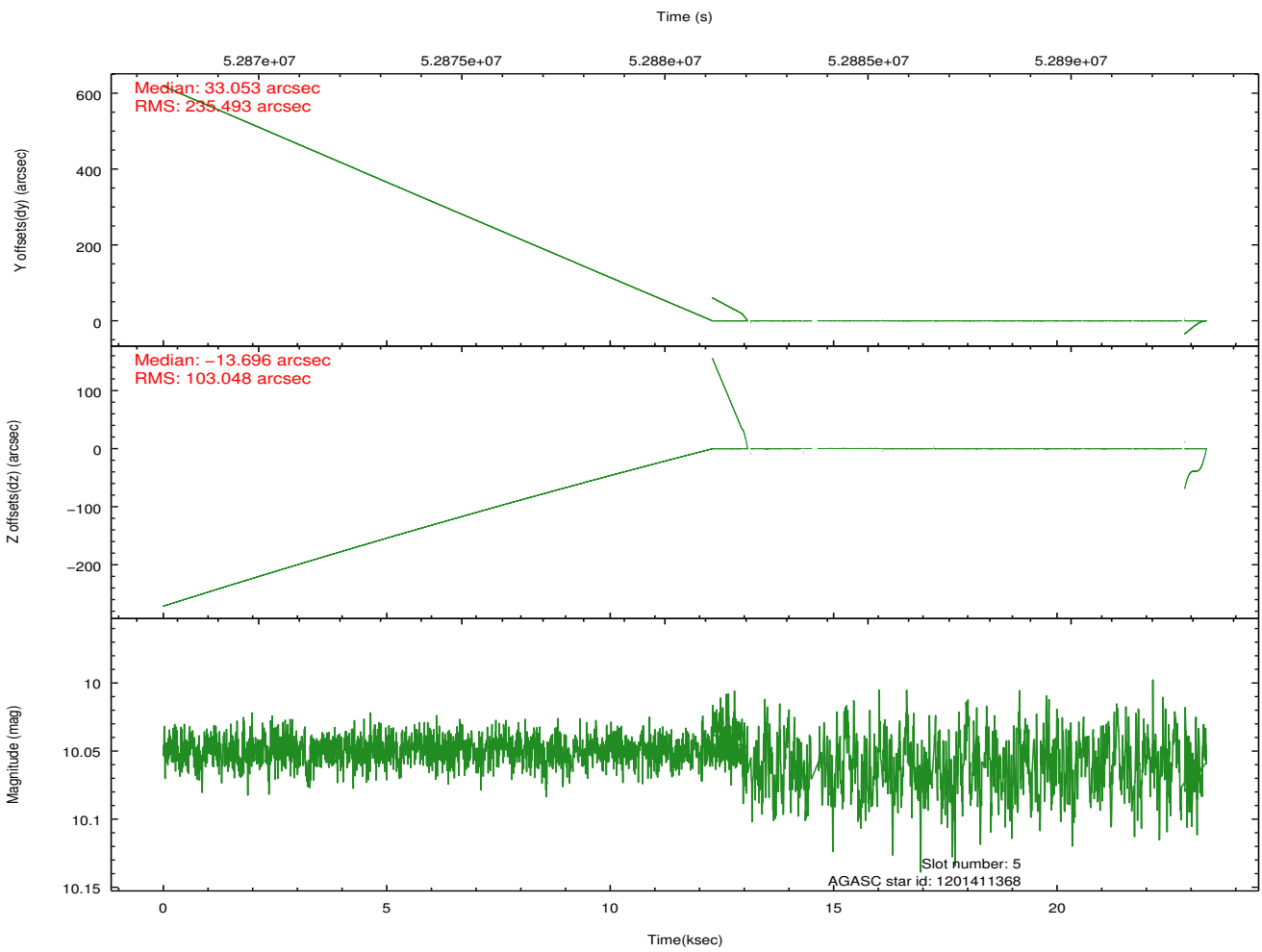
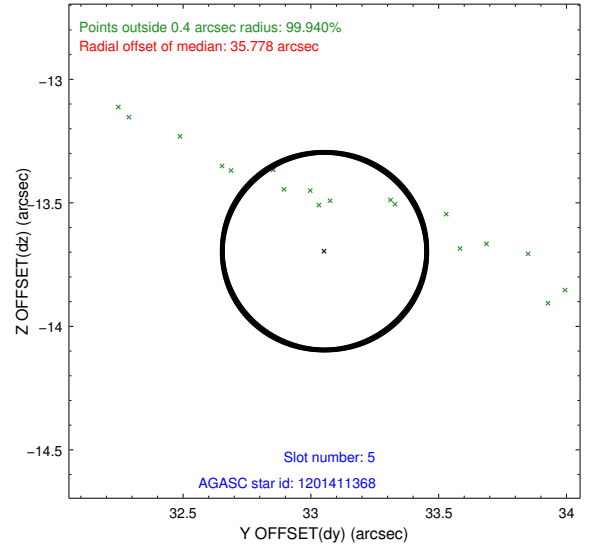
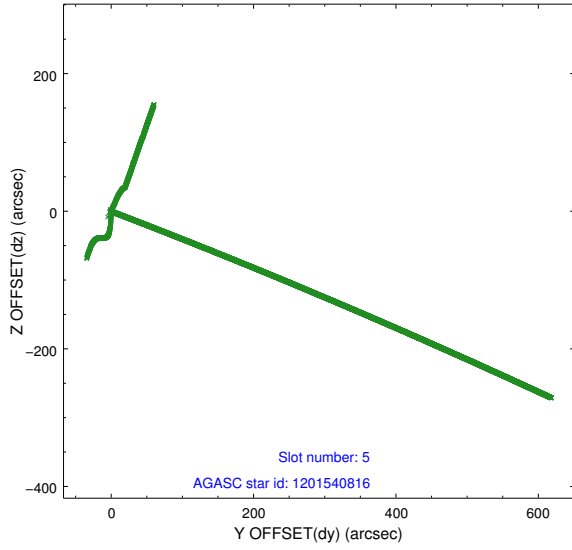
2.4.1 Slot 3



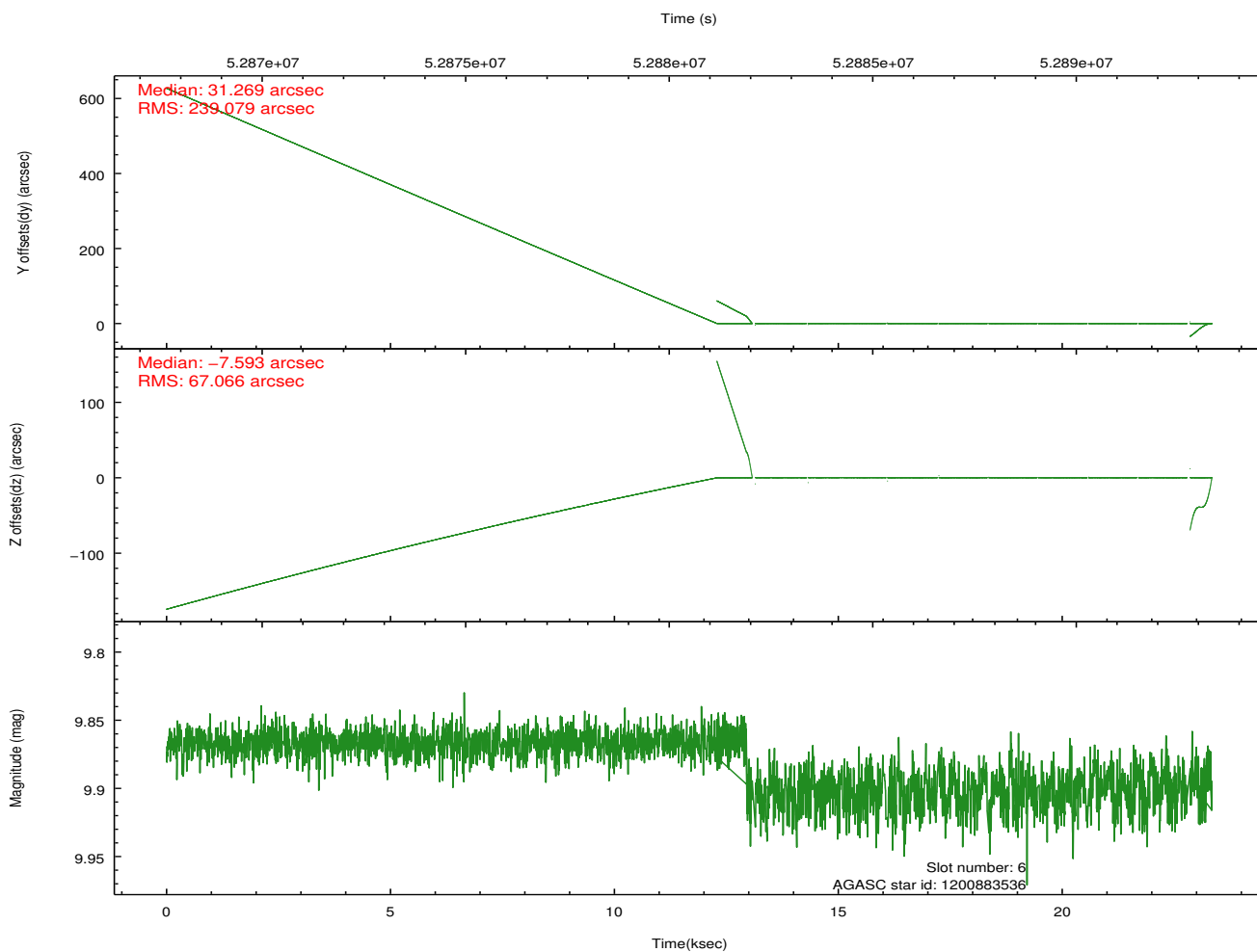
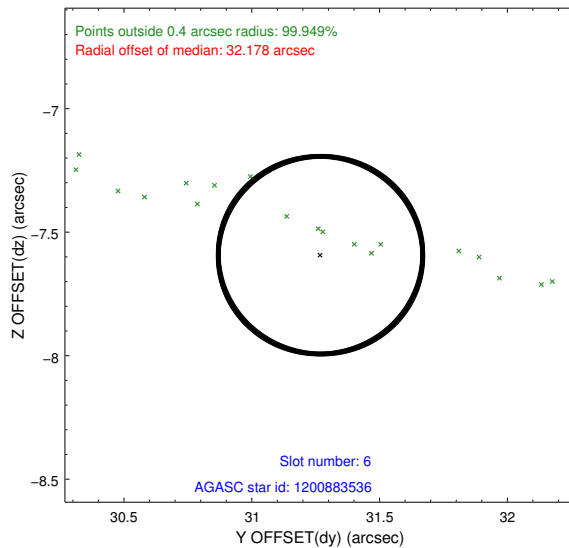
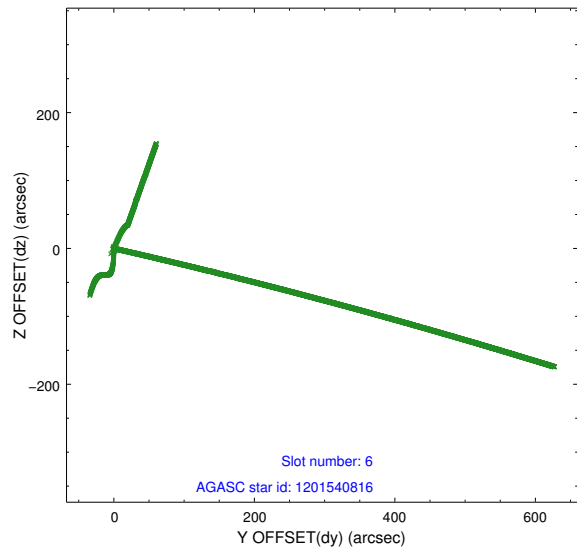
2.4.2 Slot 4



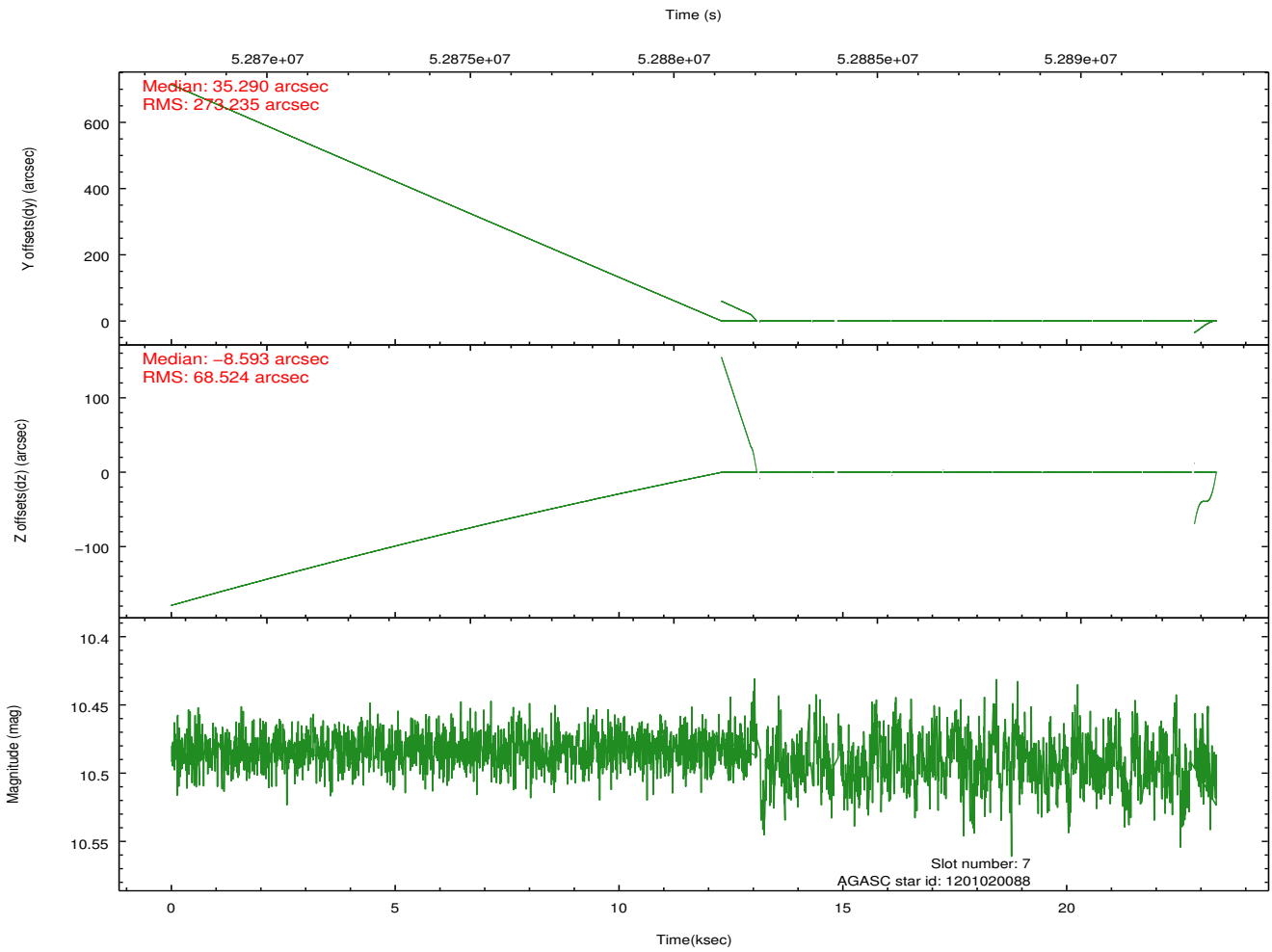
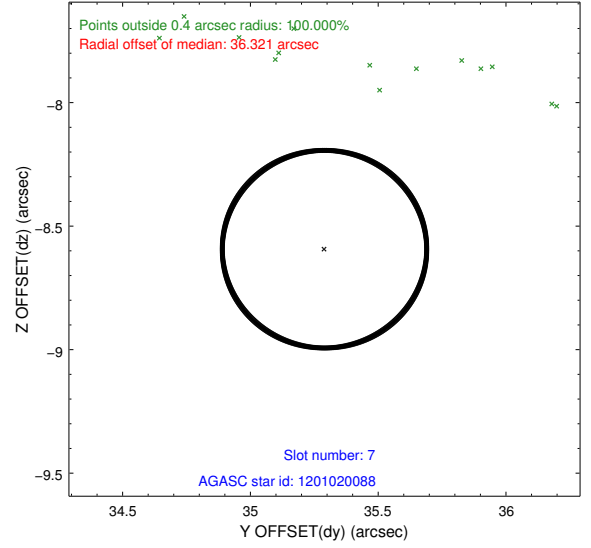
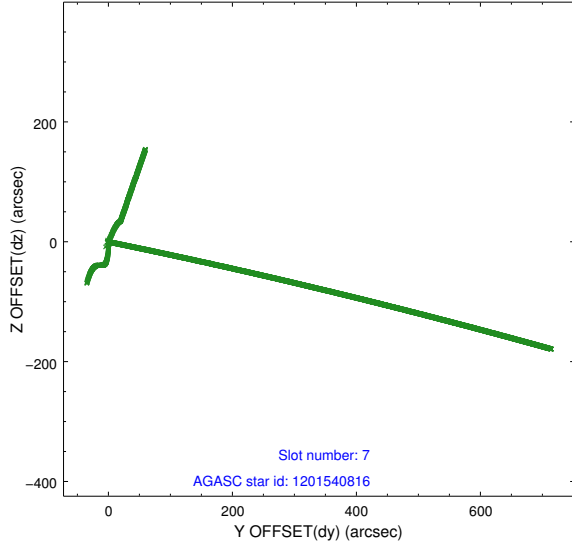
2.4.3 Slot 5



2.4.4 Slot 6

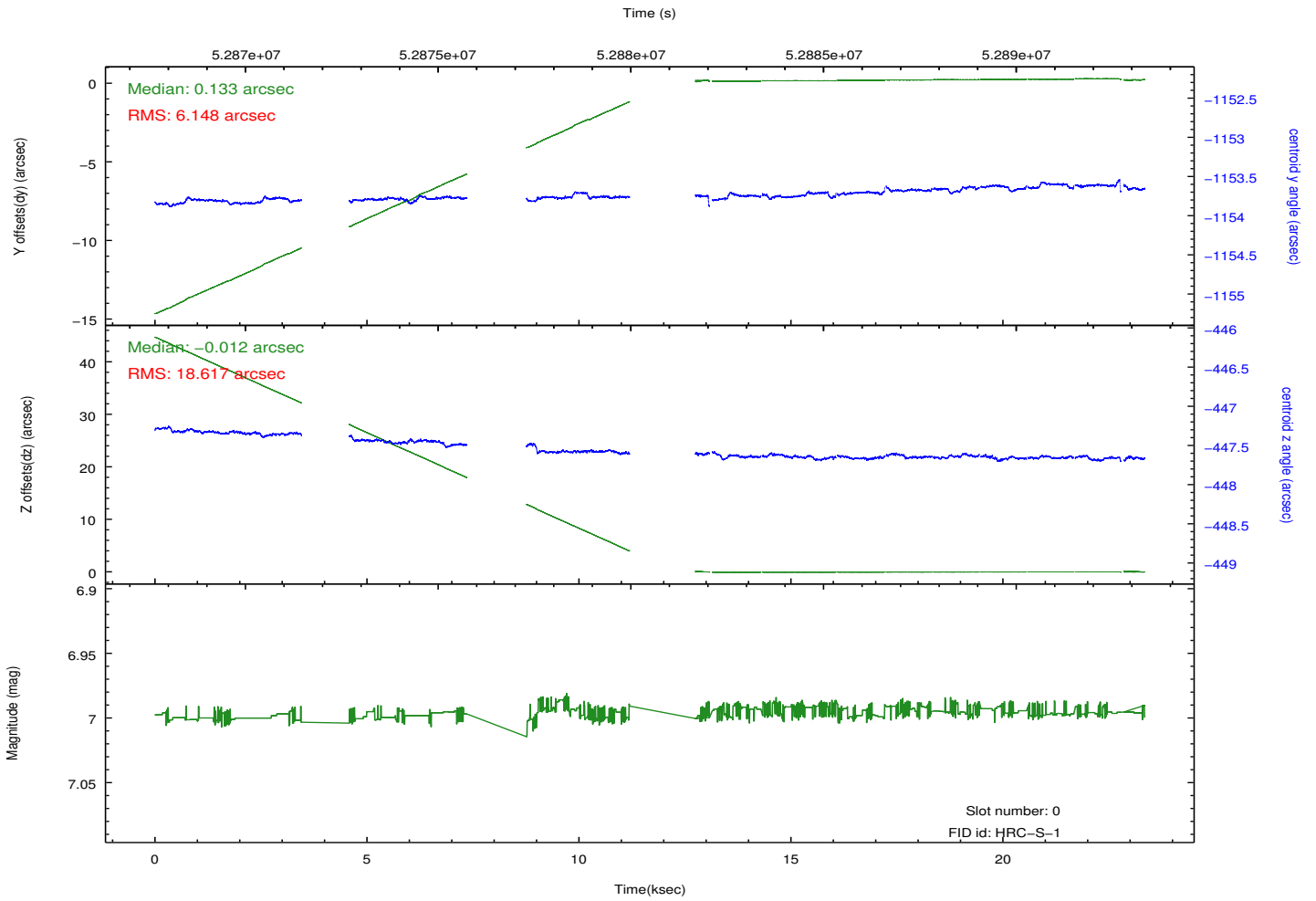
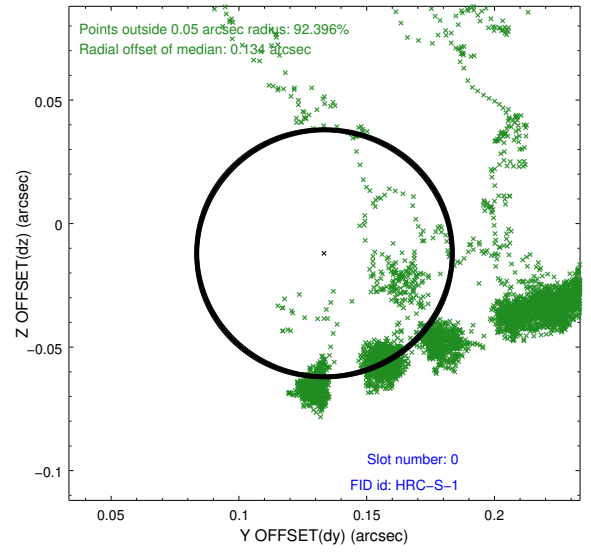
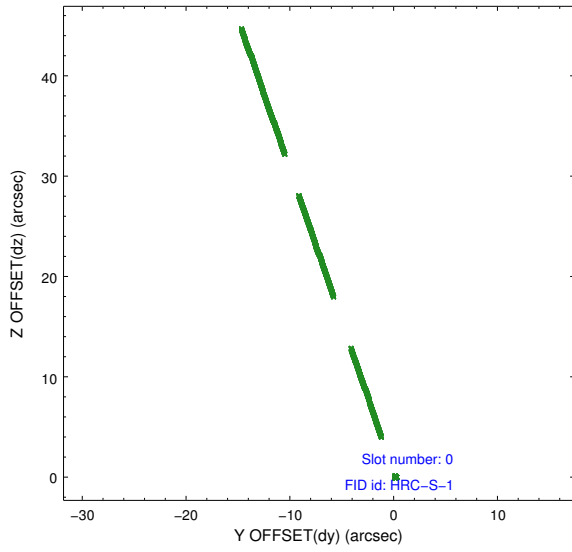


2.4.5 Slot 7

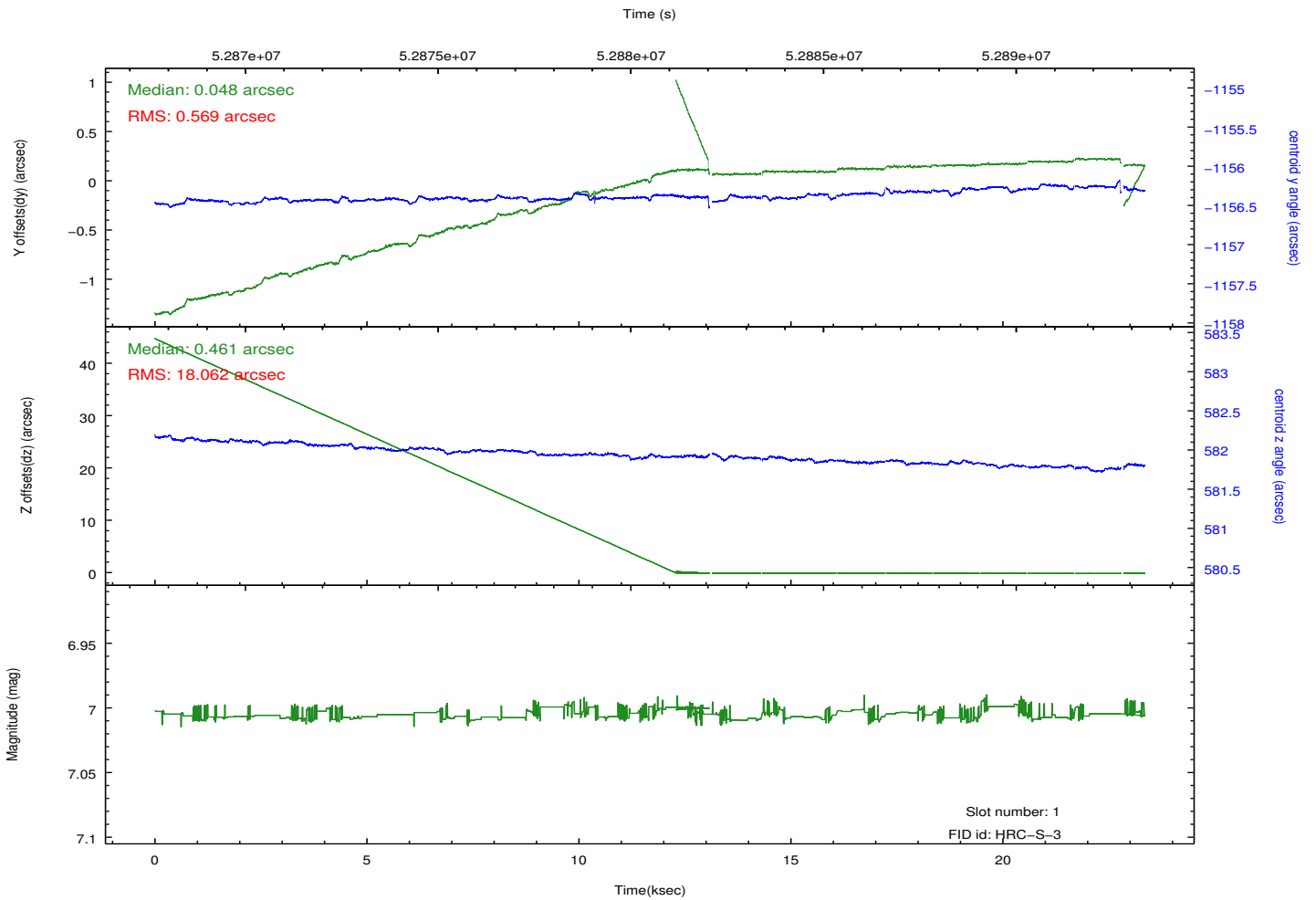
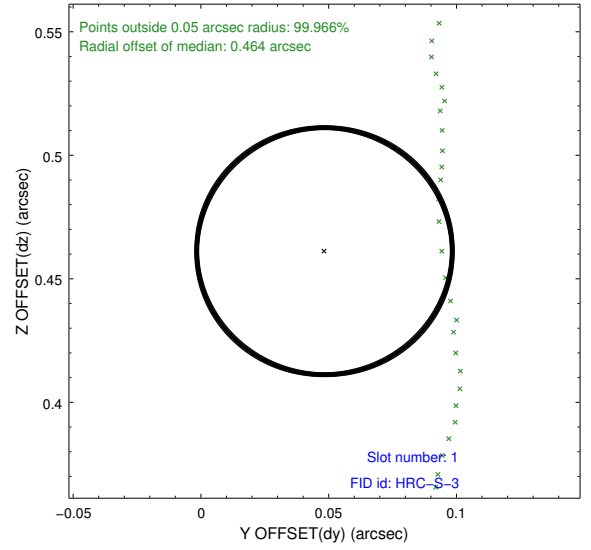
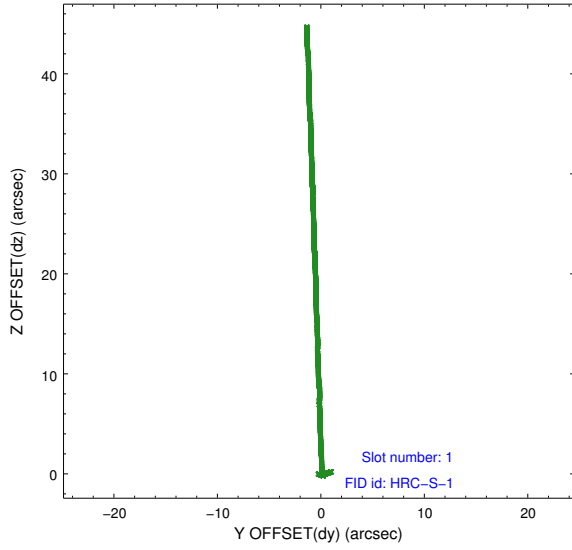


2.5 FID Slots

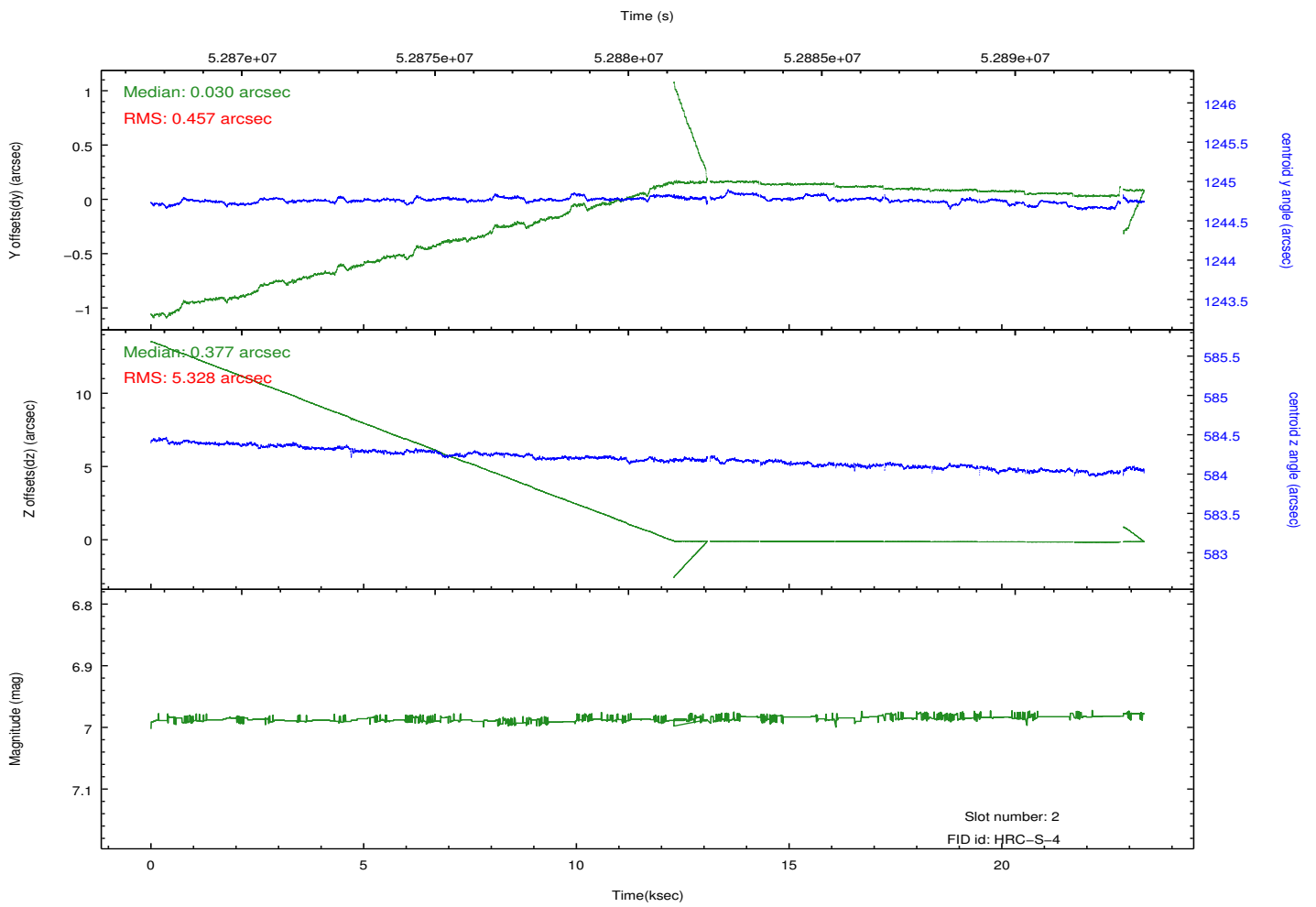
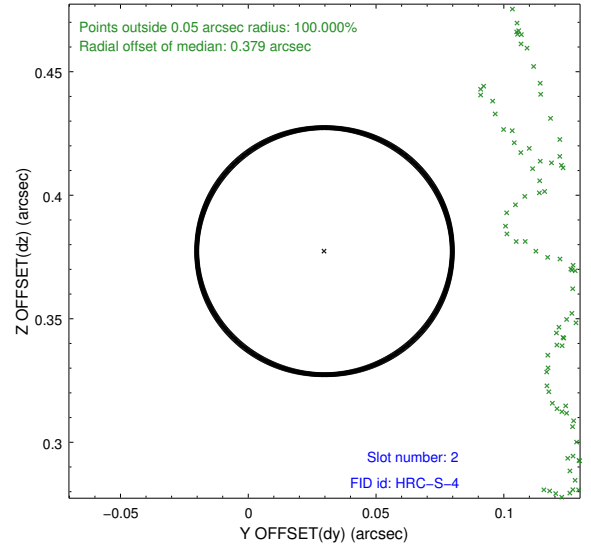
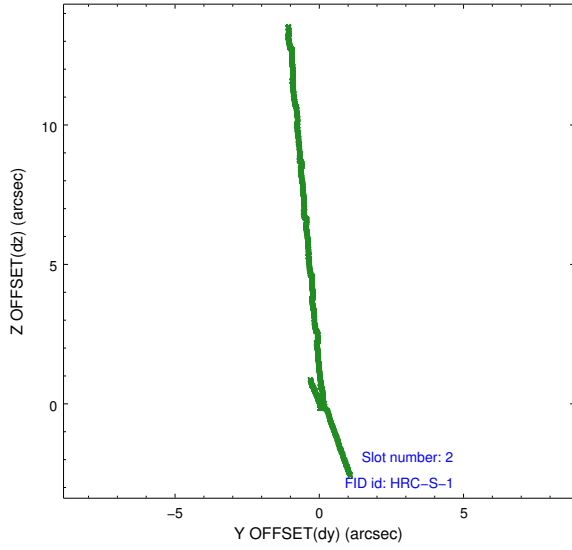
2.5.1 Slot 0



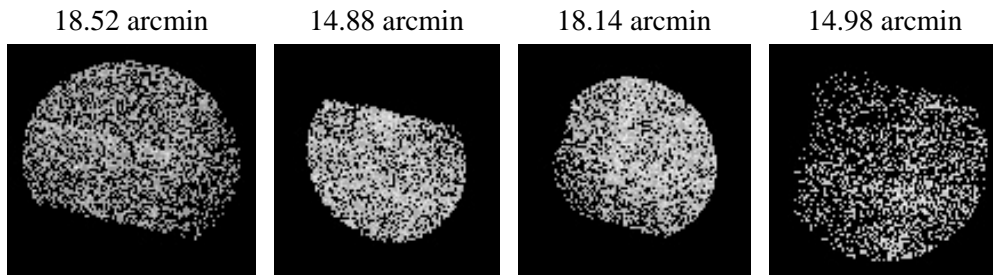
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.384275372855

A.2 Comments

HRC-S focus plates measurements. Note that the single OBSID, 62436, contains all the HRC-S data from eight different focus positions during the time 248:01:23 to 04:15, plus a return to -950 motor steps at 04:04. As a result of these multiple SIM movements, the aspect solution would need to be determined for each individual segment of this obsid separately. None of the data from the guide stars or fid lights is acceptable when the entire observation is considered.

Comments for Obi 0

Star in slot 3 has an RMS deviation > 0.300000 arcsec

Star in slot 3 has deviations > 0.050000 for more than 0.998056% of the observation

Star in slot 3 radial offset > 1.500000 arcsec

Star in slot 4 has an RMS deviation > 0.300000 arcsec

Star in slot 4 has deviations > 0.050000 for more than 0.998225% of the observation

Star in slot 4 radial offset > 1.500000 arcsec

Star in slot 5 has an RMS deviation > 0.300000 arcsec

Star in slot 5 has deviations > 0.050000 for more than 0.998041% of the observation

Star in slot 5 radial offset > 1.500000 arcsec

Star in slot 6 has an RMS deviation > 0.300000 arcsec

Star in slot 6 has deviations > 0.050000 for more than 0.997801% of the observation

Star in slot 6 radial offset > 1.500000 arcsec

Star in slot 7 has an RMS deviation > 0.300000 arcsec

Star in slot 7 has deviations > 0.050000 for more than 0.998046% of the observation

Star in slot 7 radial offset > 1.500000 arcsec

Fid in slot 0 has an RMS deviation > 0.050000 arcsec

Fid in slot 1 has an RMS deviation > 0.050000 arcsec

Fid in slot 1 radial offset > 0.400000 arcsec

Fid in slot 2 has an RMS deviation > 0.050000 arcsec

Charge time:

New charge time differs by more than 5% of existing charge time and the difference is not due to more Obis.

NEW CHARGE TIME = 10.384275 ks, 1 Obis

EXISTING CHARGE TIME = 9.873000 ks, 1 Obis.

ONTIME of 10384.275372855 seconds is less than 85% of expected scheduled time of 36000 seconds