

V&V Reference Report

L2 ASCDS Version : 10.3.1

Observation 16996 - L2 Version 2
Chandra X-Ray Center

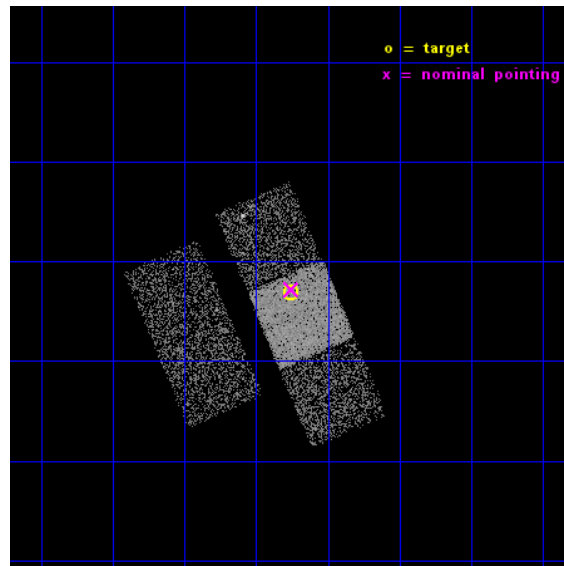
L2 Processing Date : Dec 29 2014

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1 Front

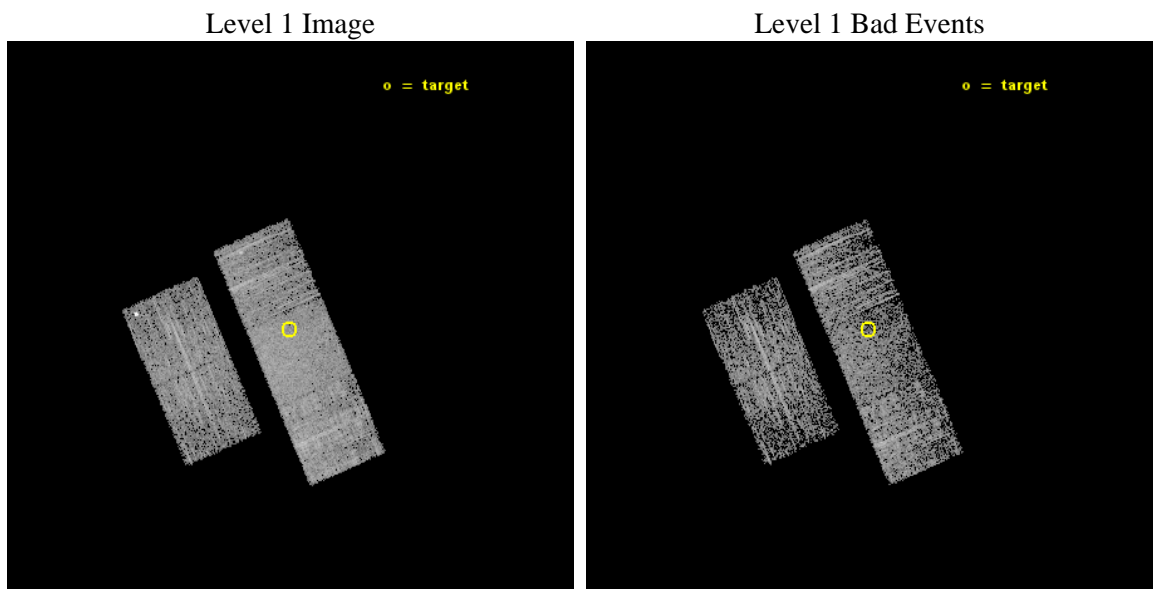
seq_num	601189	Sequence number
obs_id	16996	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC4517	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.19	Observer's specified target RA [deg]
dec_targ	0.115028	Observer's specified target Dec [deg]
ra_nom	188.18861184891	Nominal RA [deg]
dec_nom	0.12022386706348	Nominal Dec [deg]
roll_nom	66.633803680772	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4367.9000335932	Sum of GTIs [s]
livetime	4310.8302040531	Livetime [s]
ontime2	4367.9000335932	Sum of GTIs [s]
ontime3	4367.9000335932	Sum of GTIs [s]
ontime6	4367.9000335932	Sum of GTIs [s]
ontime7	4367.9000335932	Sum of GTIs [s]
ontime8	4367.9000335932	Sum of GTIs [s]
l2events	19913	Number of level 2 events



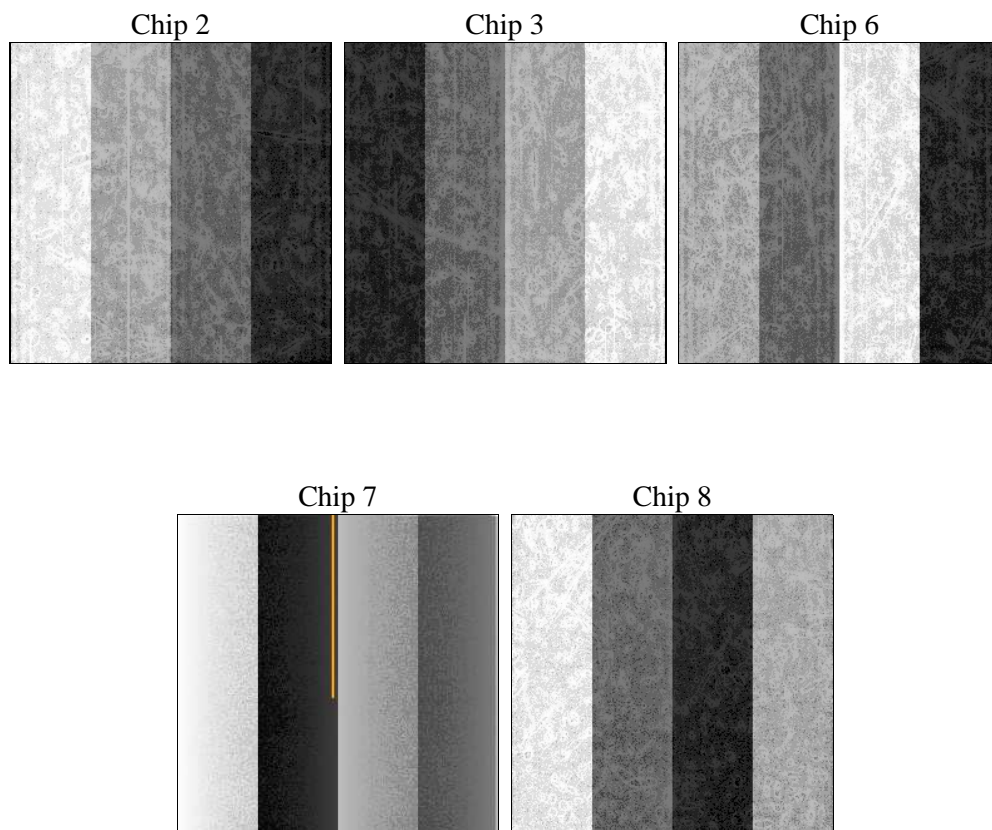
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	4300.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4367.9000335932	Sum of GTIs [s]
caldsver	4.6.5	 	ontime2	4367.9000335932	Sum of GTIs [s]
date	2014-12-29T22:03:55	Date and time of file creation	ontime3	4367.9000335932	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	4367.9000335932	Sum of GTIs [s]
			ontime7	4367.9000335932	Sum of GTIs [s]
			ontime8	4367.9000335932	Sum of GTIs [s]
			l1events	115765	Number of level 1 events

2.1.4 Events

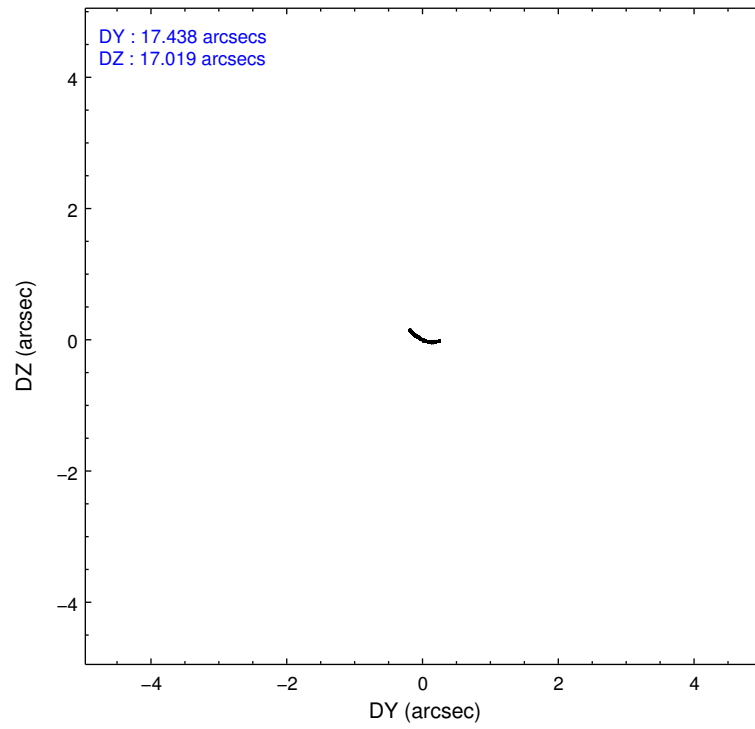
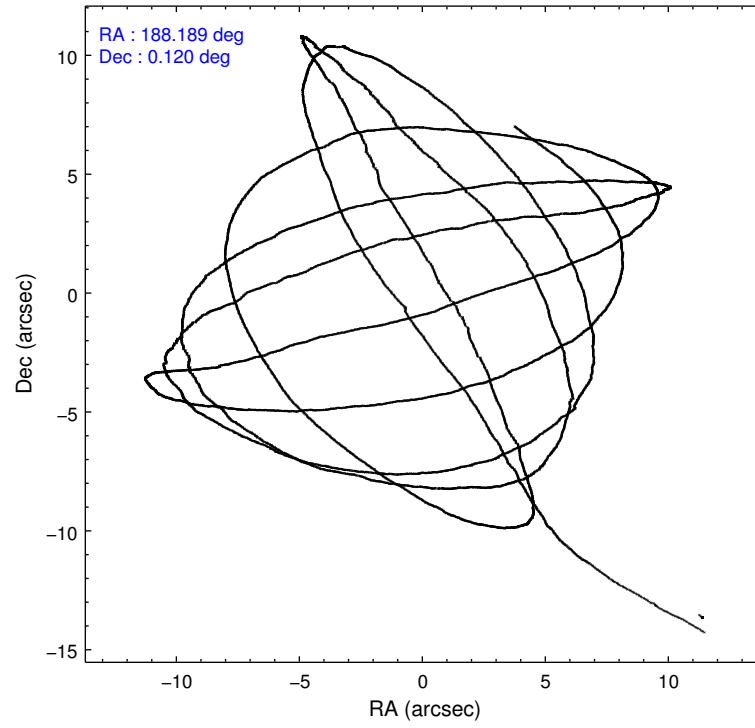
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	20773	18055	21311	27369	28257
rejected events	17239	15833	18756	15538	20234
rejected %	82%	87%	88%	56%	71%

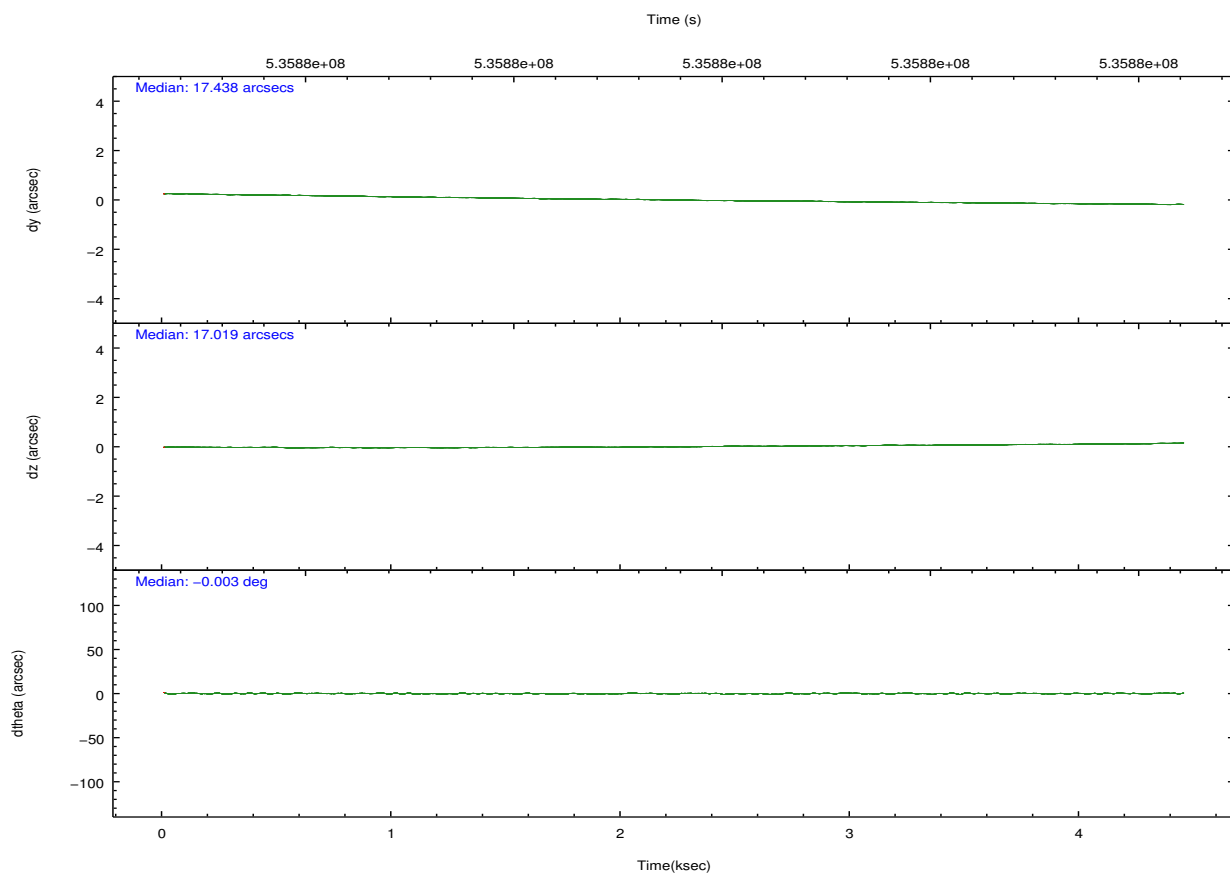
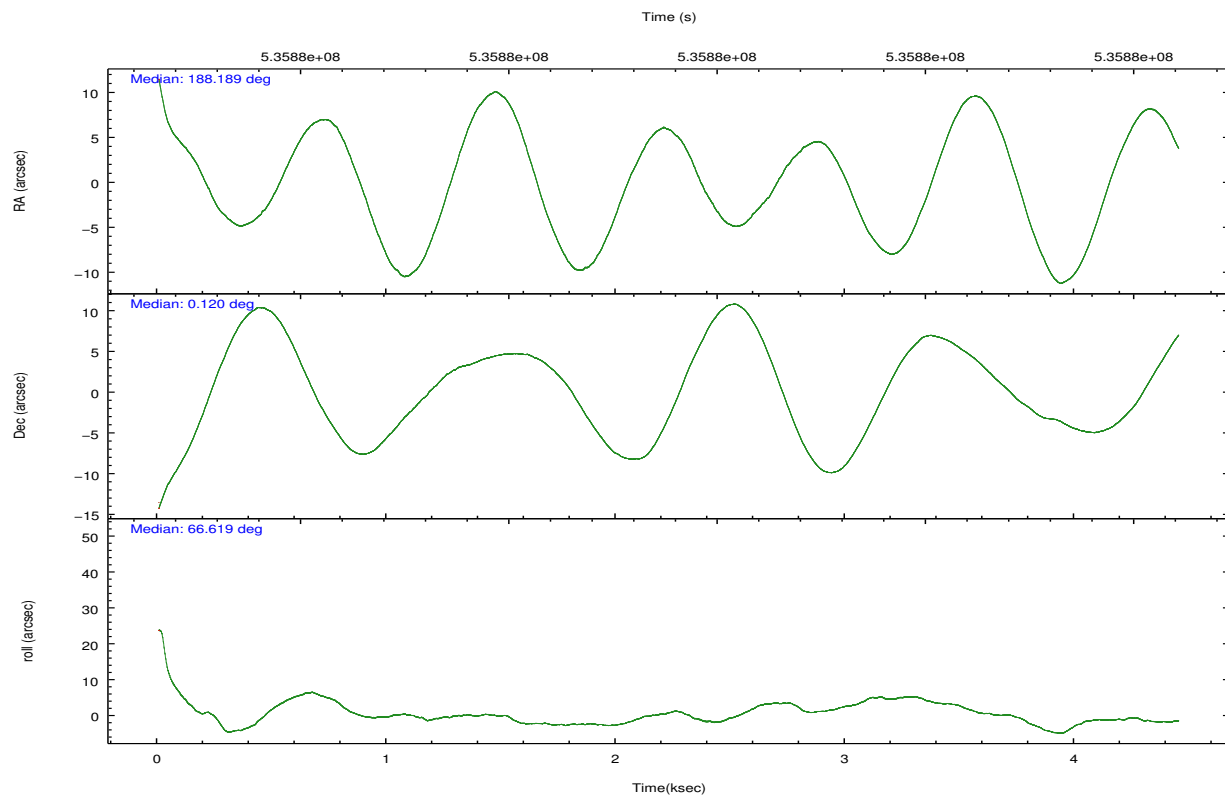
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2129	760	914	1050	2329
	10%	4%	4%	3%	8%
grade 1 events	12	6	10	27	27
	0%	0%	0%	0%	0%
grade 2 events	508	484	600	2410	1735
	2%	2%	2%	8%	6%
grade 3 events	237	270	219	990	975
	1%	1%	1%	3%	3%
grade 4 events	221	246	225	944	914
	1%	1%	1%	3%	3%
grade 5 events	885	1018	1038	2590	1488
	4%	5%	4%	9%	5%
grade 6 events	444	464	598	6441	2072
	2%	2%	2%	23%	7%
grade 7 events	16337	14807	17707	12917	18717
	78%	82%	83%	47%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	188.192069	188.1886118489078	CCD I2 on	O2	Y
[deg] Pointing Dec	0.093042	0.1202238670634788	CCD I3 on	O1	Y
[deg] Pointing Roll	66.477118	66.63380368077219	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	535880704.184000	535879657.11974	CCD S5 on	N	N
Observation start date	2014-12-25T07:43:57	2014-12-25T07:27:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	535885004.184000	535885794.82009	On-chip summing requested	N	N
Observation end date	2014-12-25T08:55:37	2014-12-25T09:09:54	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



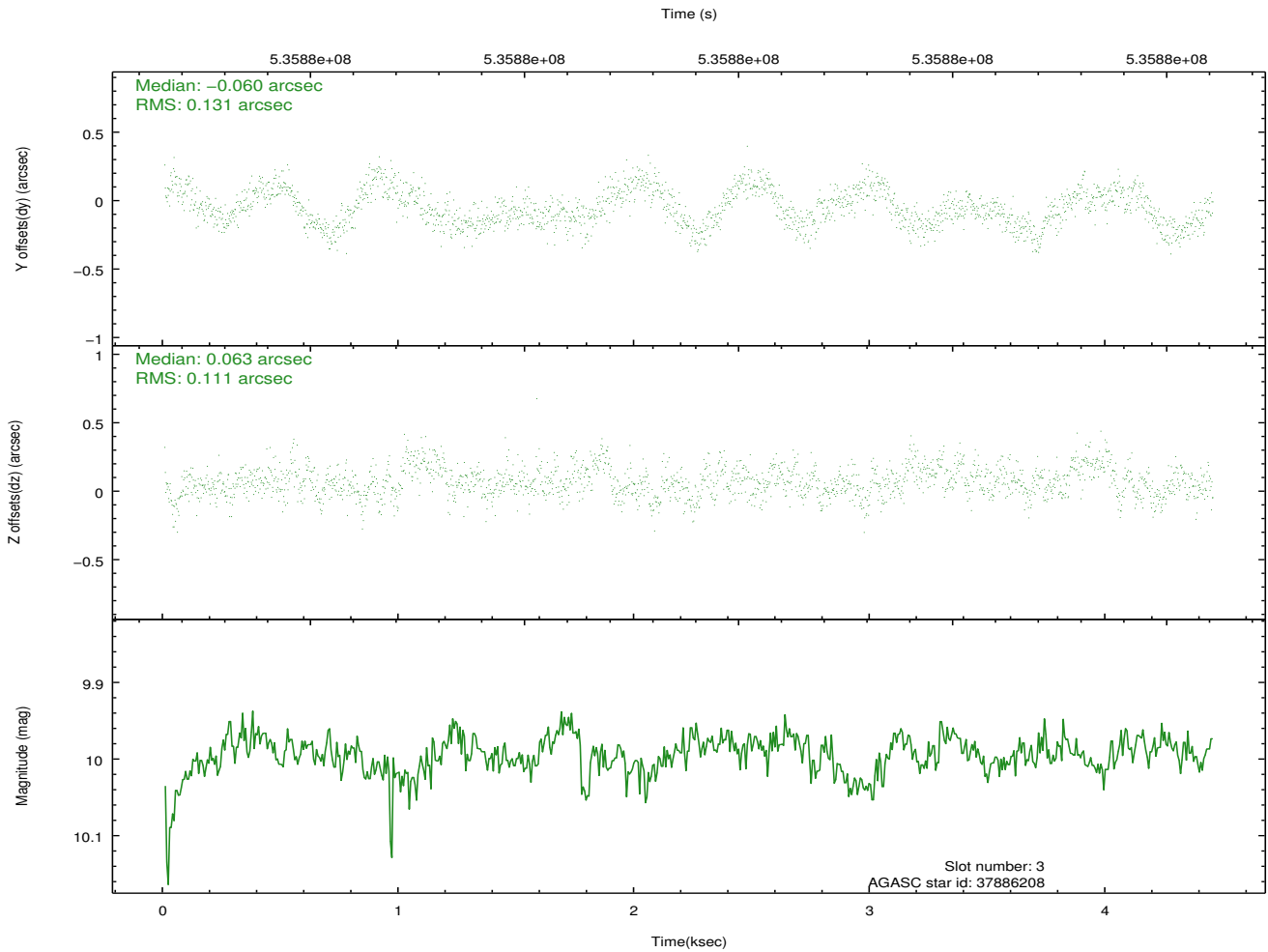
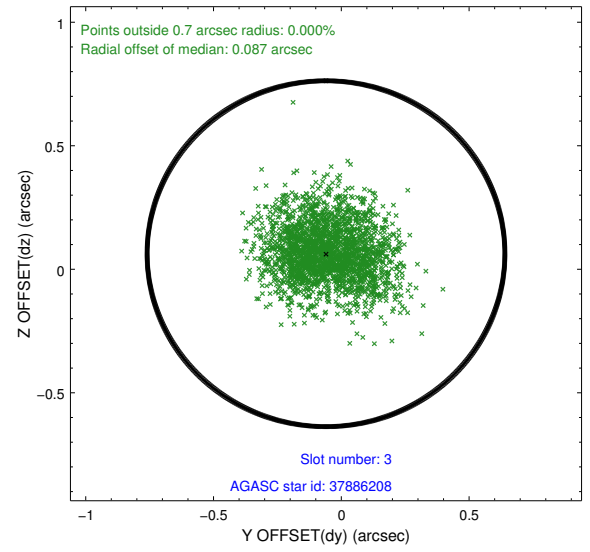
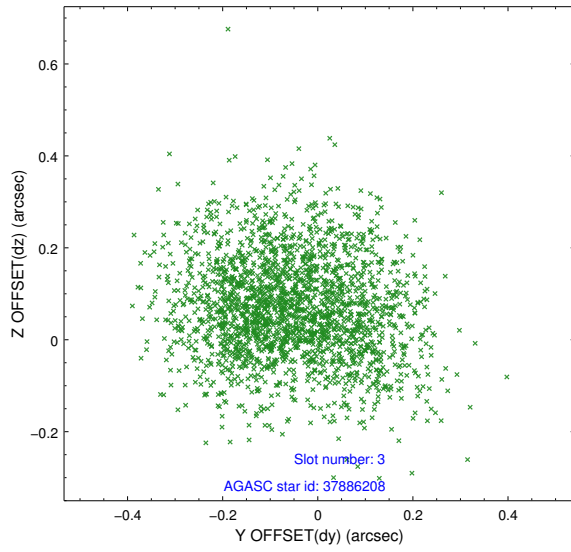


Slot Statistics

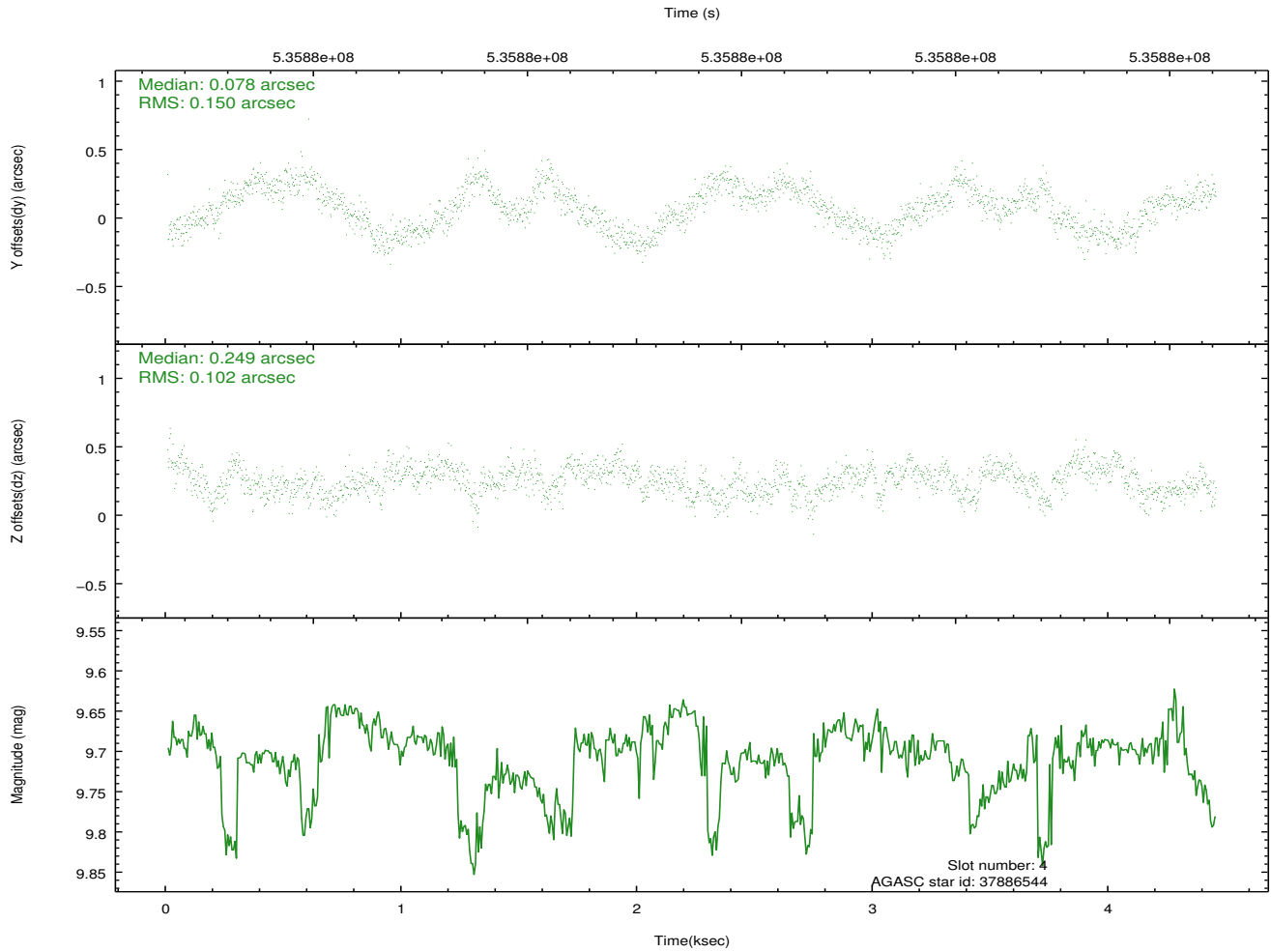
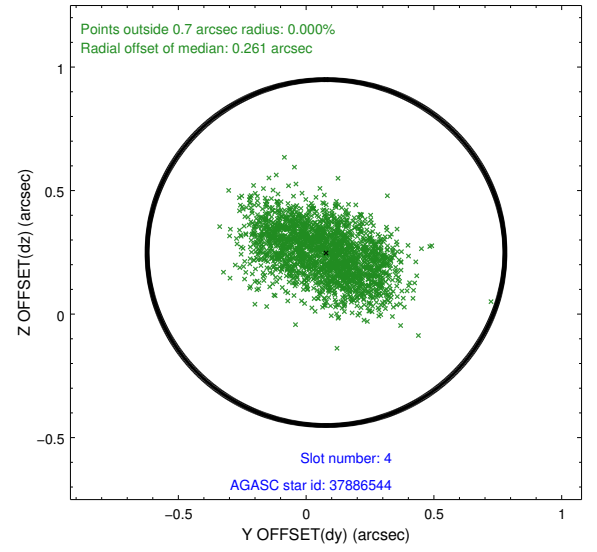
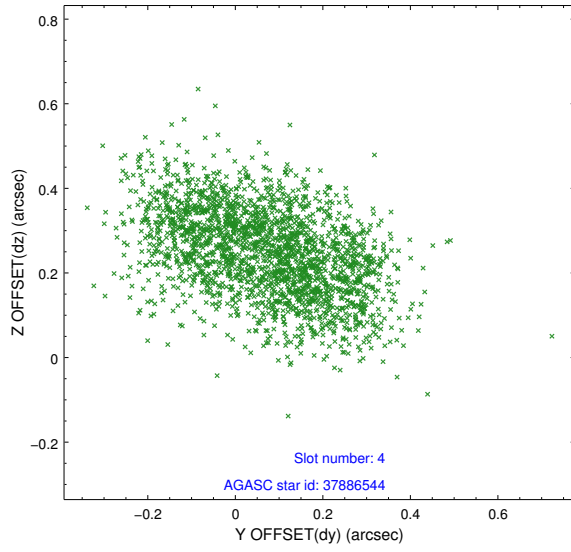
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	1086	-0.071	-0.049	0.007	0.011	0.000000	0.000000	-770.57	-1738.51
1	FID		ACIS-S-4	7.16	1086	0.260	0.048	0.006	0.014	0.000000	0.000000	2142.42	168.59
2	FID		ACIS-S-5	7.19	1085	-0.221	0.011	0.007	0.013	0.000000	0.000000	-1821.77	163.85
3	GUIDE	used	37886208	9.99	2169	-0.060	0.063	0.184	0.290	188.788019	0.097717	872.71	-1960.00
4	GUIDE	used	37886544	9.70	2170	0.078	0.249	0.196	0.305	188.640599	0.188811	961.61	-1343.10
5	GUIDE	used	37886664	9.88	2164	-0.003	0.299	0.183	0.315	188.965528	0.232274	1572.30	-2352.75
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	37888096	8.57	2170	0.001	-0.610	0.117	0.194	187.726187	0.664782	1218.16	2359.53

2.4 Star Slots

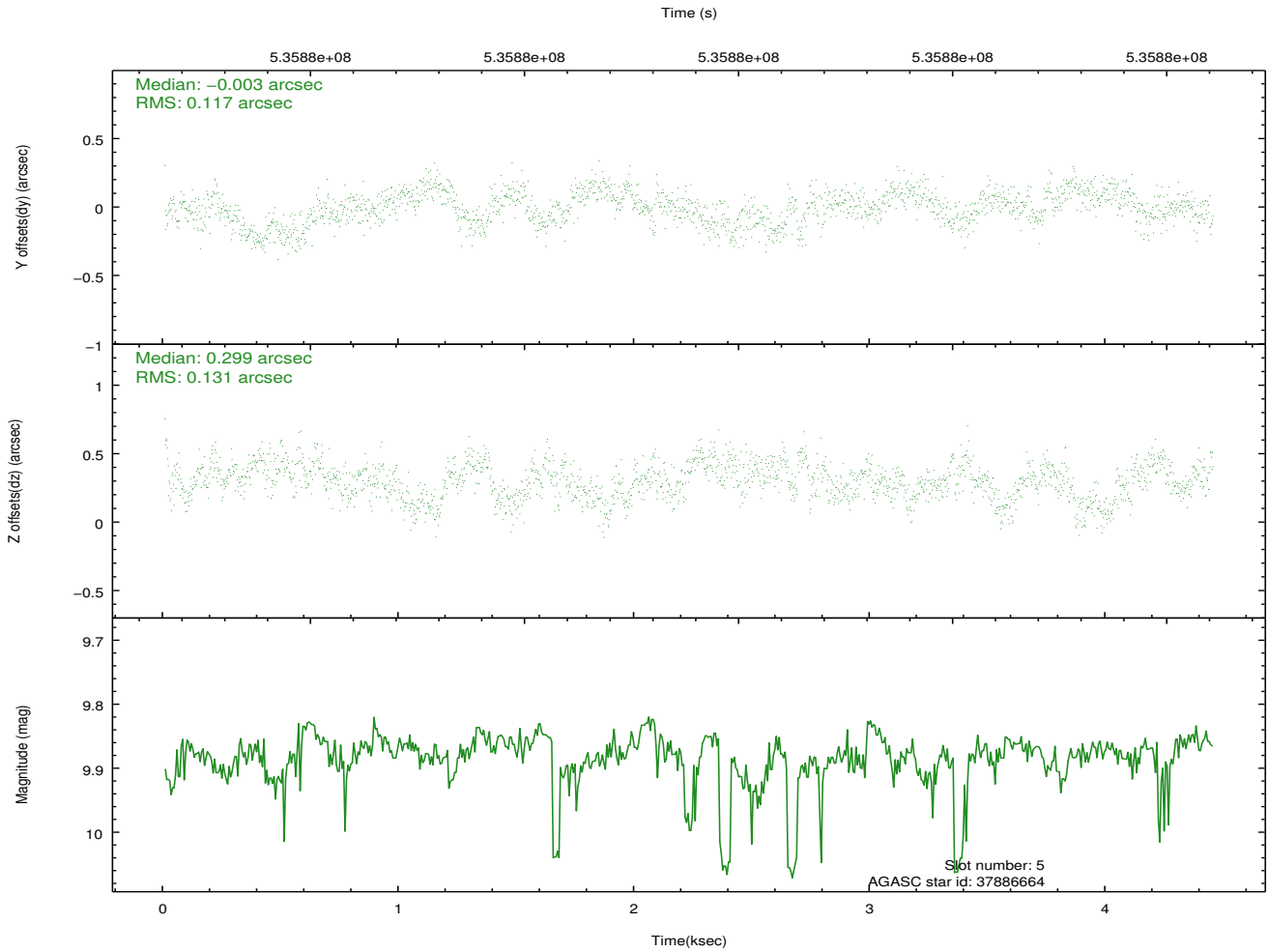
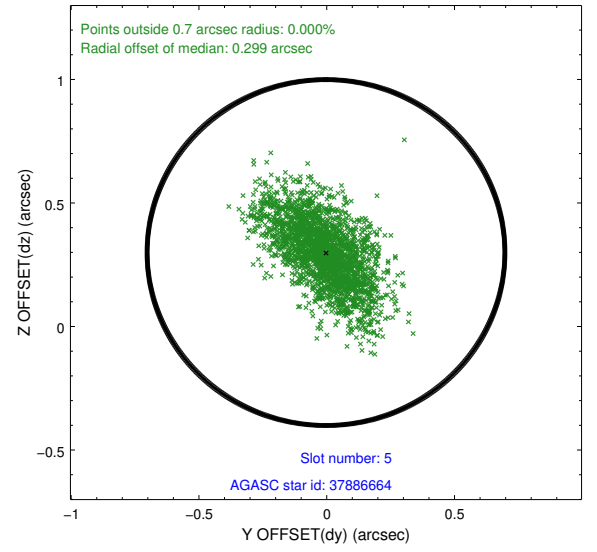
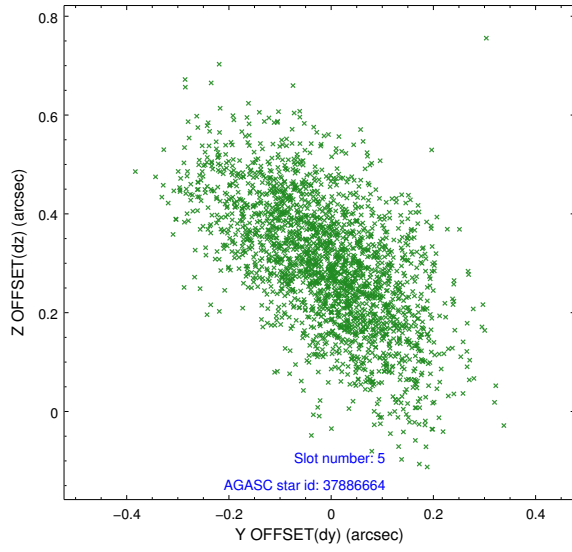
2.4.1 Slot 3



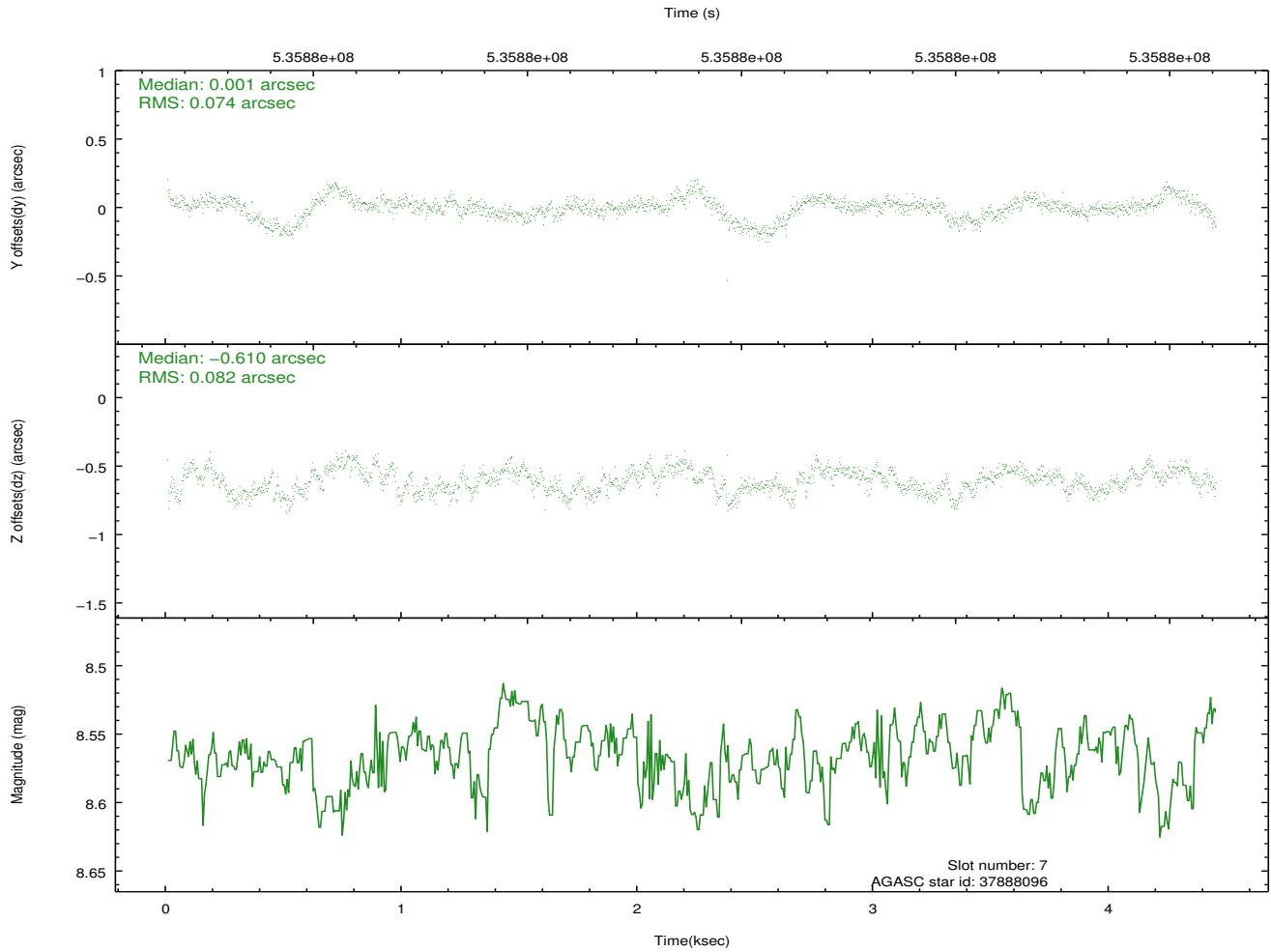
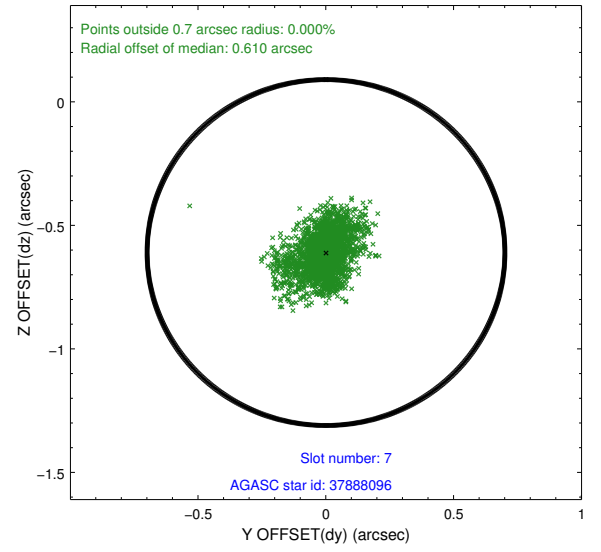
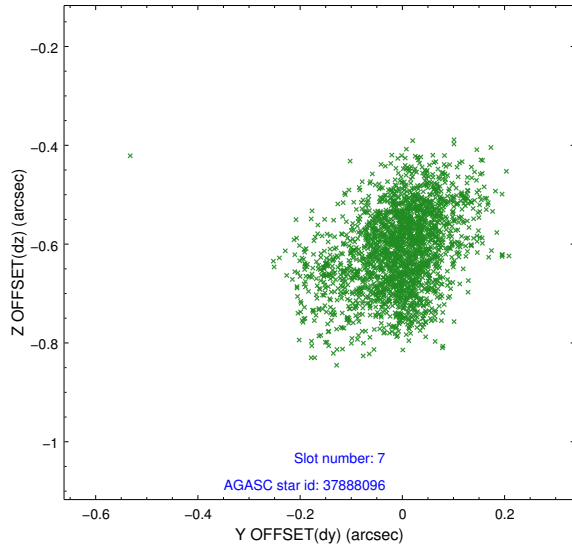
2.4.2 Slot 4



2.4.3 Slot 5

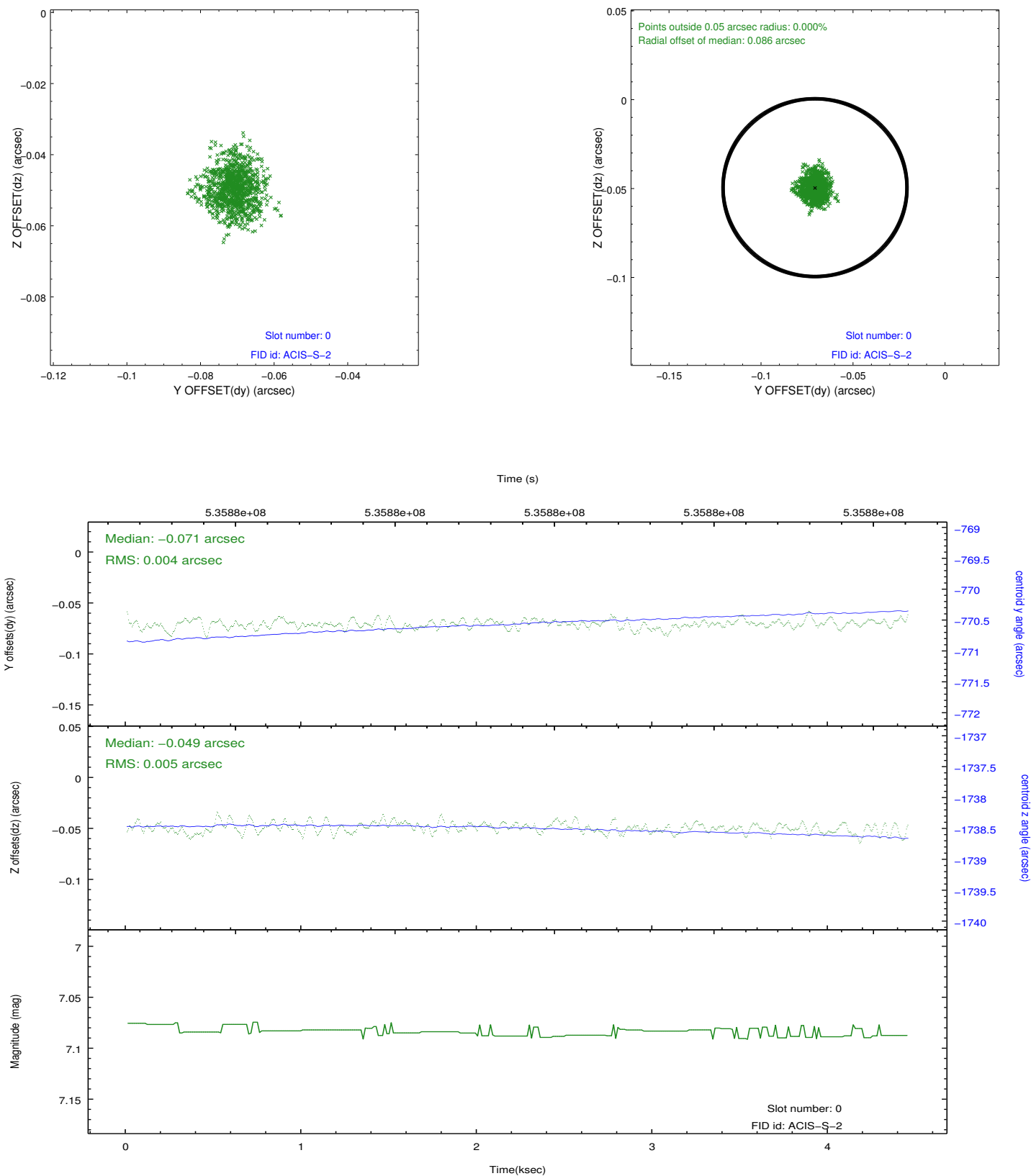


2.4.4 Slot 7

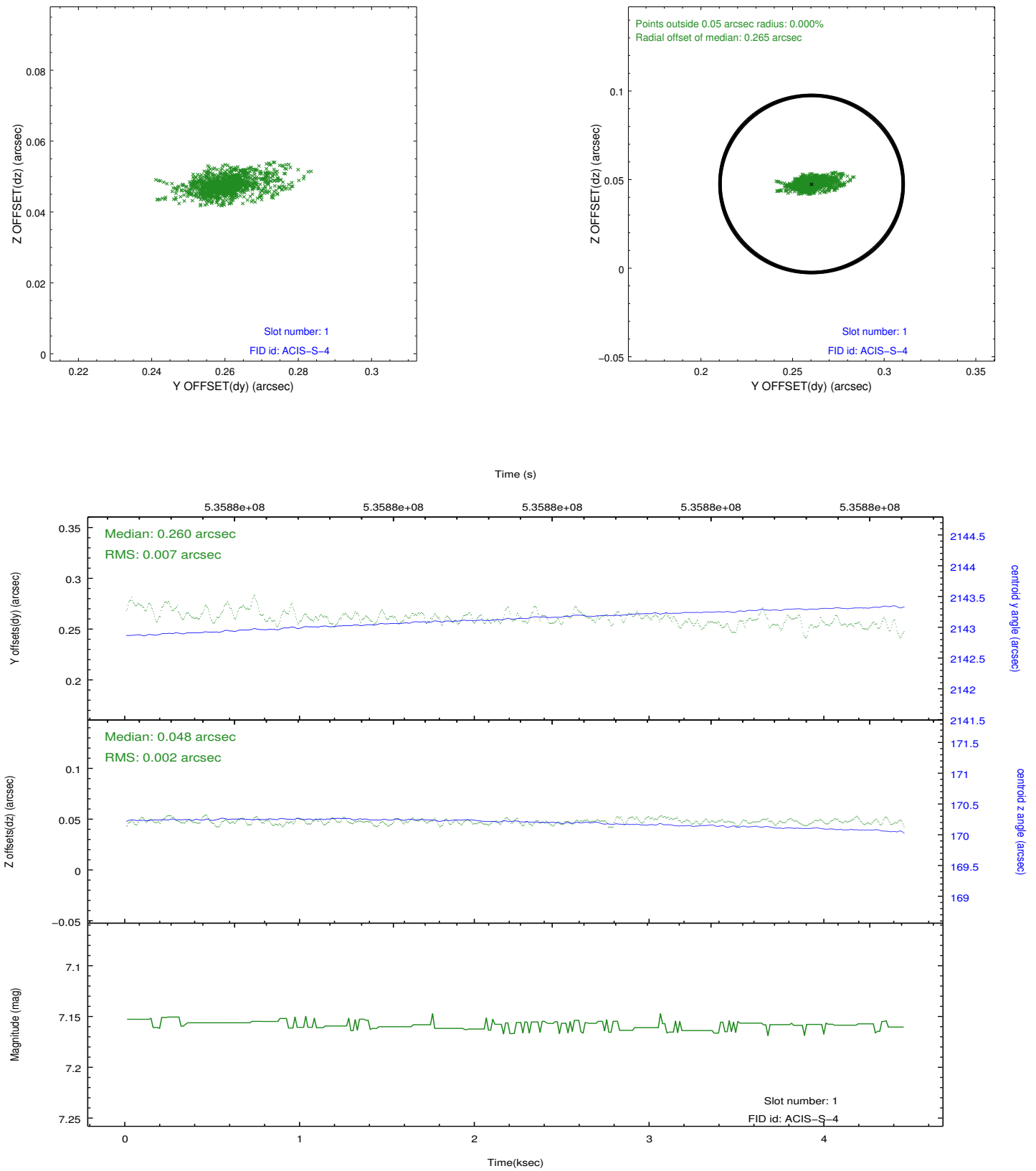


2.5 FID Slots

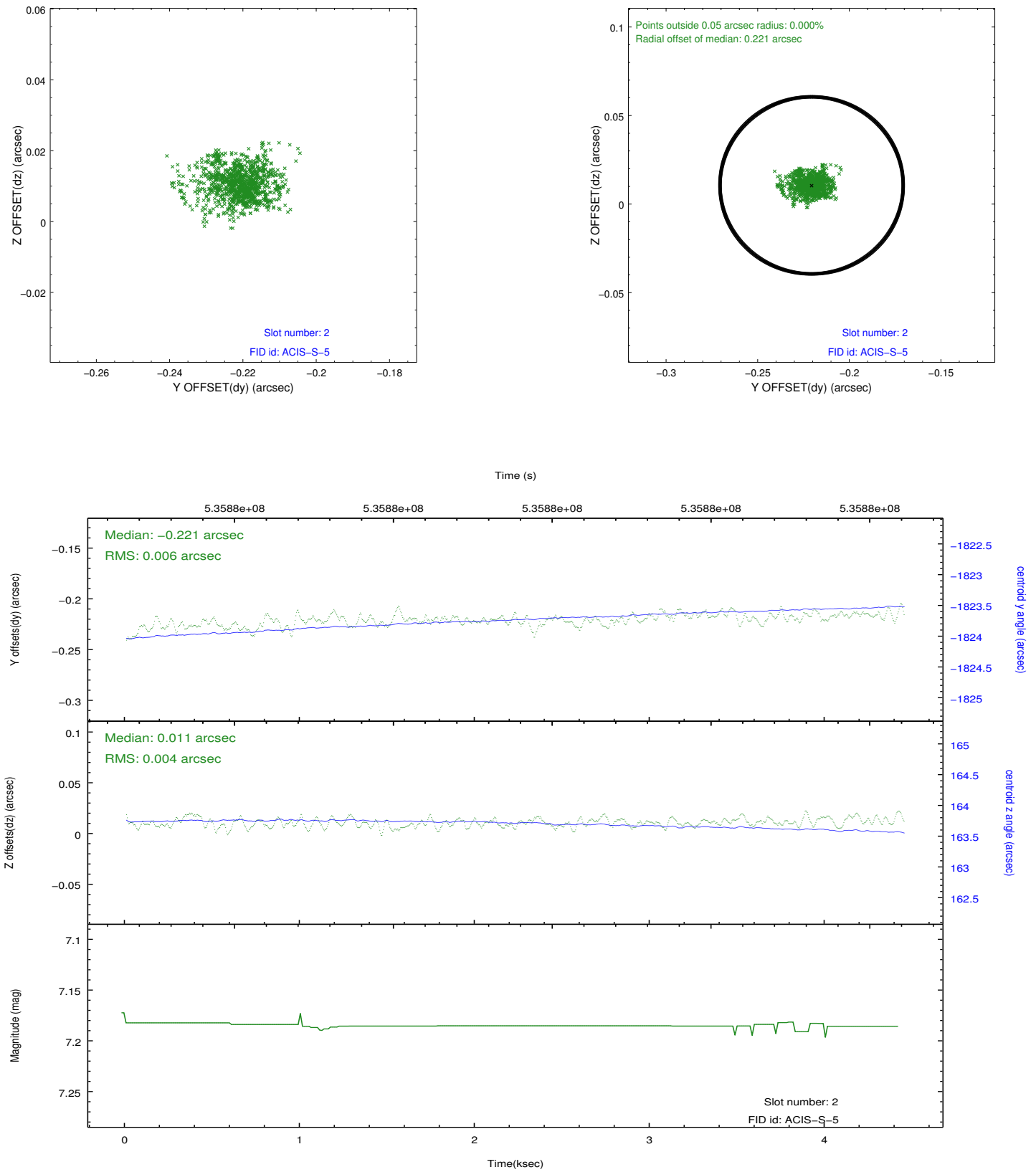
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.3679000335932

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.