

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 13480 - L2 Version 2
Chandra X-Ray Center

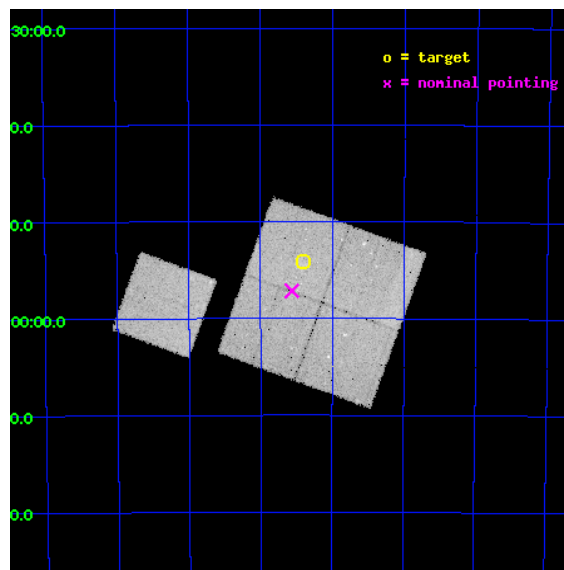
L2 Processing Date : Jan 9 2012

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1 Front

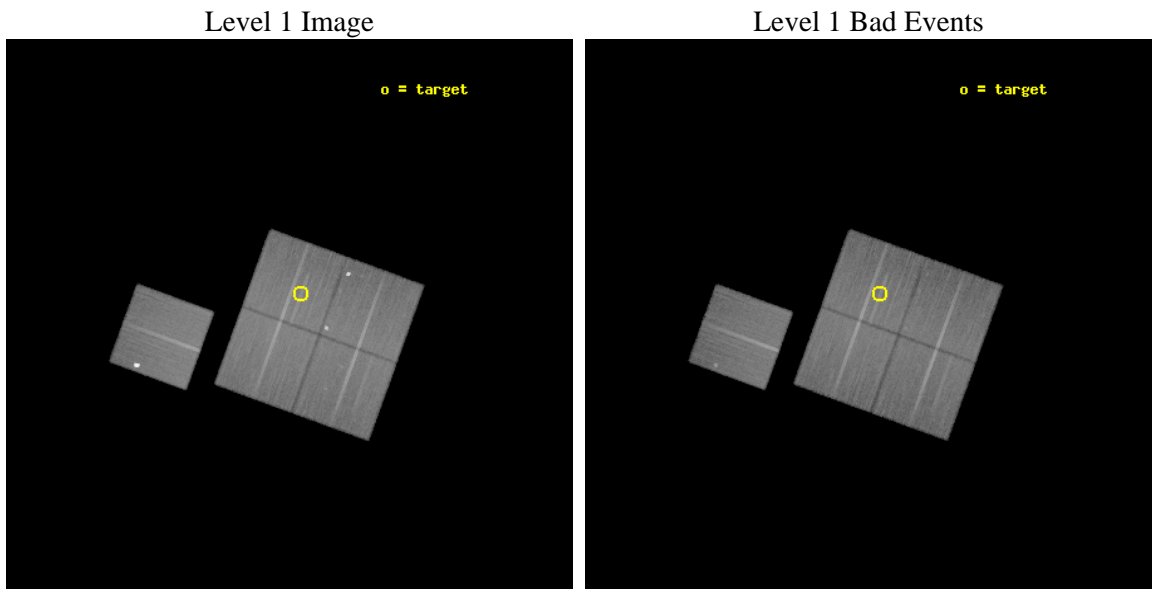
seq_num	801121	Sequence number
obs_id	13480	Observation id
title	Cosmology and Cluster Evolution from the 80 Most Massive Clusters in 2000 deg ² from the South Pole Telescope Survey	Proposal title
observer	Dr Bradford Benson	Principal investigator
object	SPT-CLJ0151-5954	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	27.849583	Observer's specified target RA [deg]
dec_targ	-59.902111	Observer's specified target Dec [deg]
ra_nom	27.89076685969	Nominal RA [deg]
dec_nom	-59.952469560626	Nominal Dec [deg]
roll_nom	289.95753061317	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50052.600384951	Sum of GTIs [s]
livetime	49398.626312733	Livetime [s]
ontime0	50052.600384951	Sum of GTIs [s]
ontime1	50033.754403234	Sum of GTIs [s]
ontime2	50049.459374785	Sum of GTIs [s]
ontime3	50052.600384951	Sum of GTIs [s]
ontime6	50052.600384951	Sum of GTIs [s]
l2events	151888	Number of level 2 events



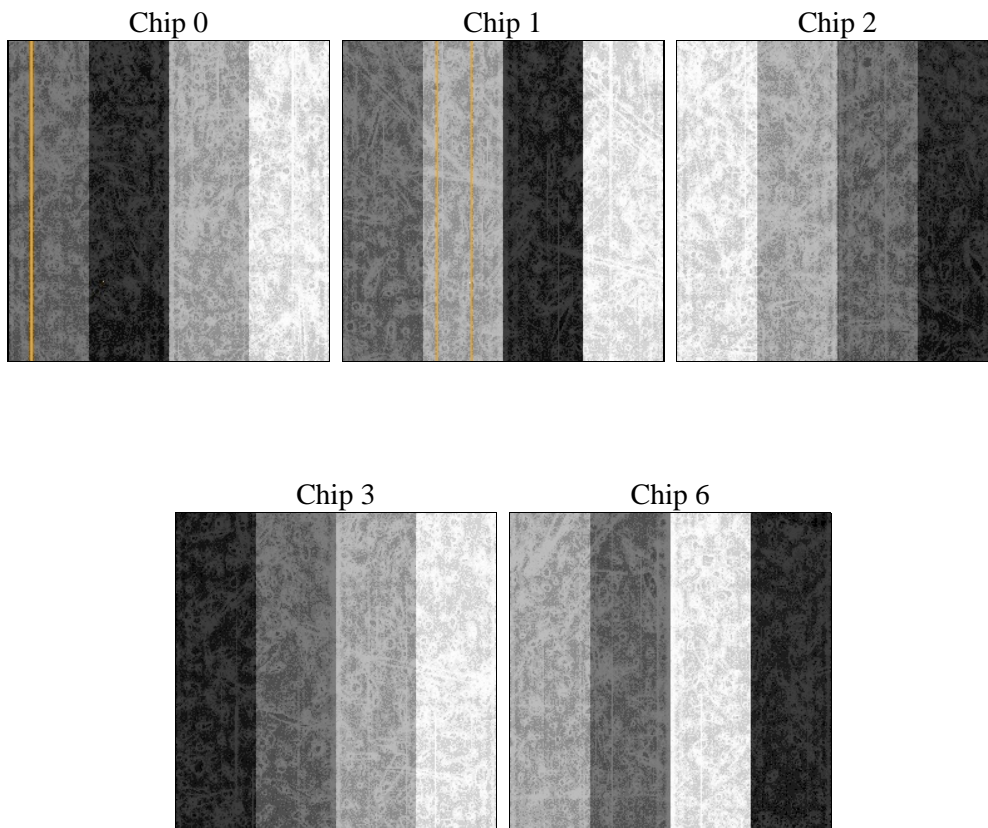
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	50052.600384951	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	50052.600384951	Sum of GTIs [s]
date	2012-01-09T20:00:00	Date and time of file creation	ontime1	50033.754403234	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	50049.459374785	Sum of GTIs [s]
			ontime3	50052.600384951	Sum of GTIs [s]
			ontime6	50052.600384951	Sum of GTIs [s]
			l1events	1641540	Number of level 1 events

2.1.4 Events

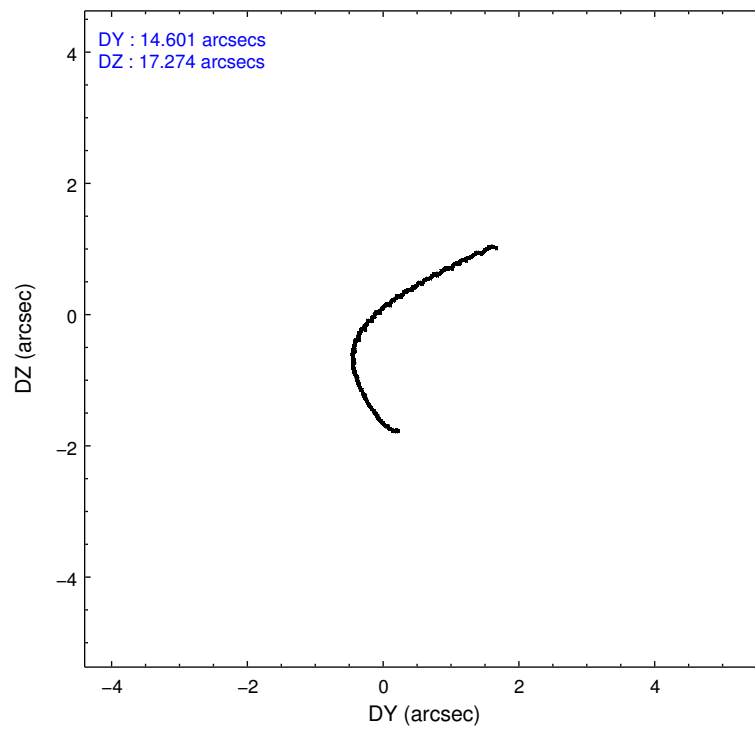
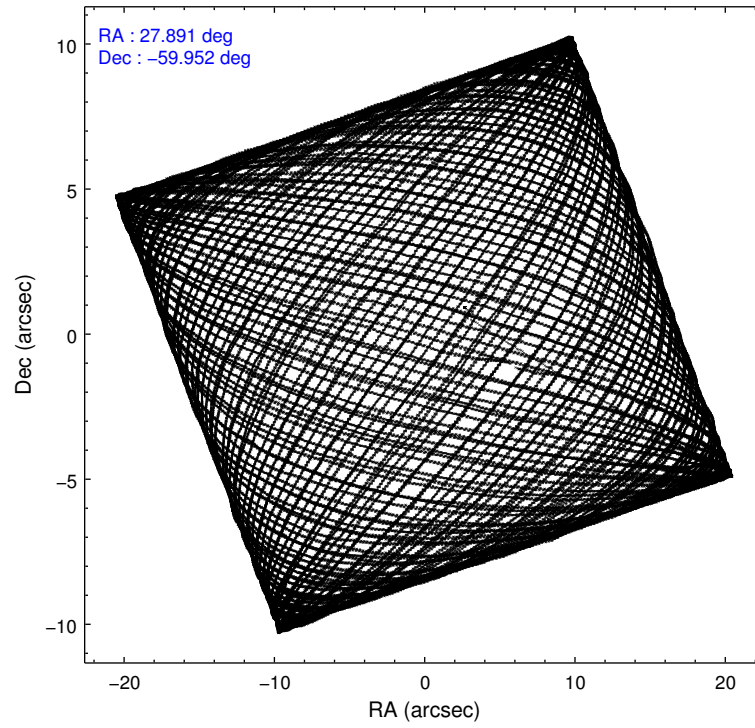
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	298470	322302	332135	320772	367861
rejected events	262870	259687	297826	286238	282244
rejected %	88%	80%	89%	89%	76%

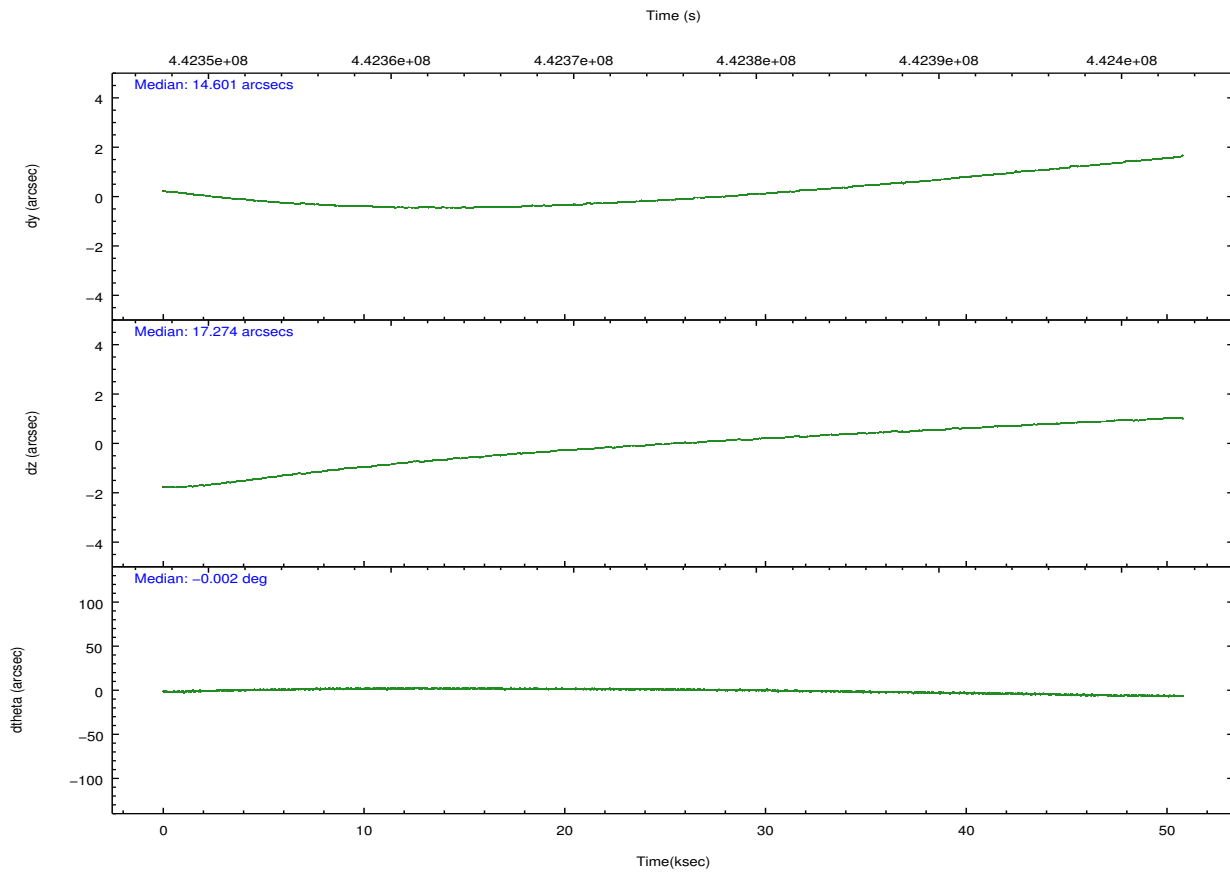
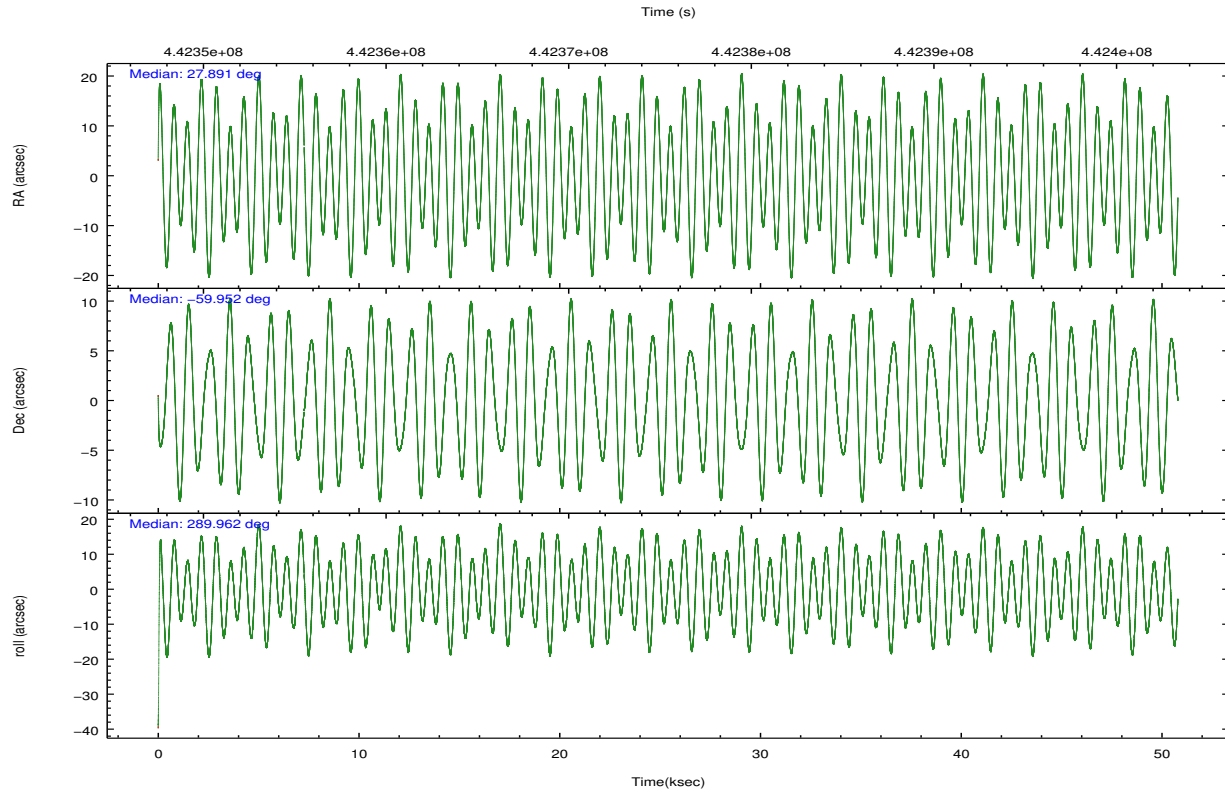
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	12292	20852	11940	12322	11922
	4%	6%	3%	3%	3%
grade 1 events	170	222	210	222	142
	0%	0%	0%	0%	0%
grade 2 events	8905	25330	8593	7687	57799
	2%	7%	2%	2%	15%
grade 3 events	3748	4022	3481	3740	3730
	1%	1%	1%	1%	1%
grade 4 events	3447	3950	3522	3642	3670
	1%	1%	1%	1%	0%
grade 5 events	13376	14434	12802	15279	14673
	4%	4%	3%	4%	3%
grade 6 events	7212	8464	6775	7144	8501
	2%	2%	2%	2%	2%
grade 7 events	249320	245028	284812	270736	267424
	83%	76%	85%	84%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	27.848625	27.89076685969037	CCD I2 on	Y	Y
[deg] Pointing Dec	-59.934868	-59.95246956062639	CCD I3 on	Y	Y
[deg] Pointing Roll	289.712384	289.9575306131689	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	442350842.184000	442349062.65178	CCD S5 on	N	N
Observation start date	2012-01-07T19:12:56	2012-01-07T18:44:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	442400842.184000	442402116.14208	On-chip summing requested	N	N
Observation end date	2012-01-08T09:06:16	2012-01-08T09:28:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



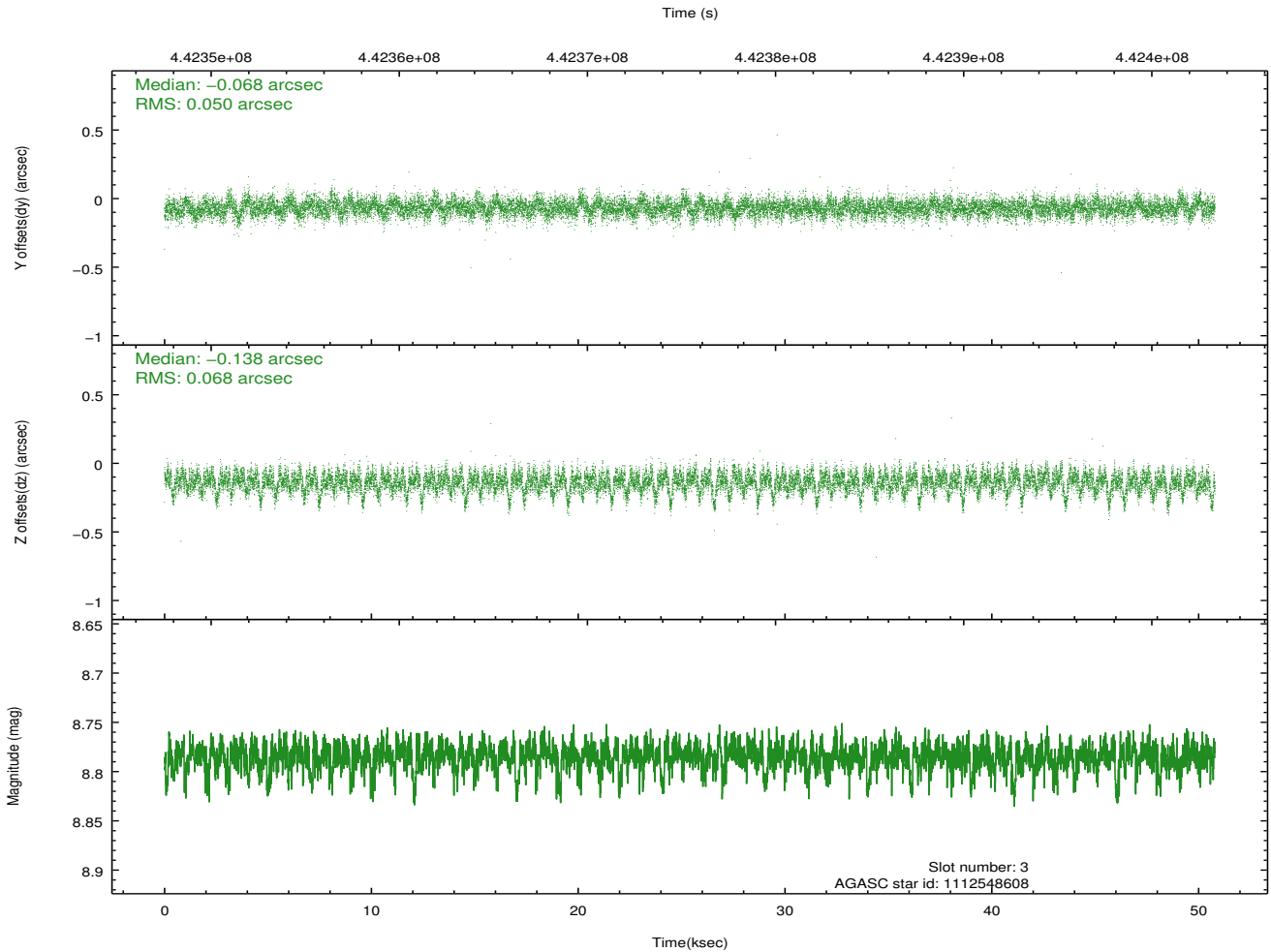
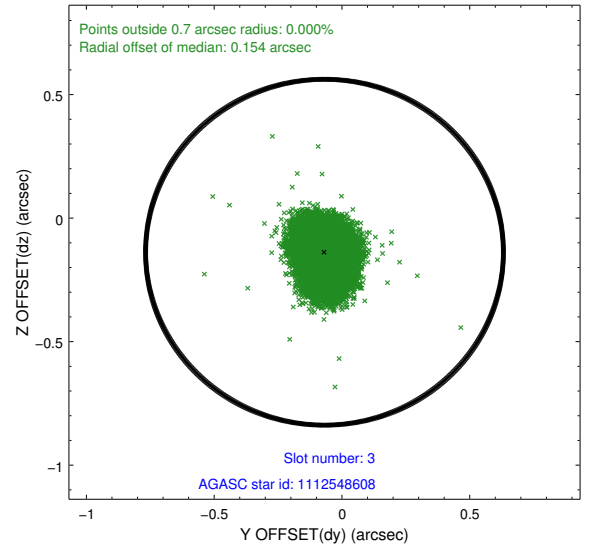
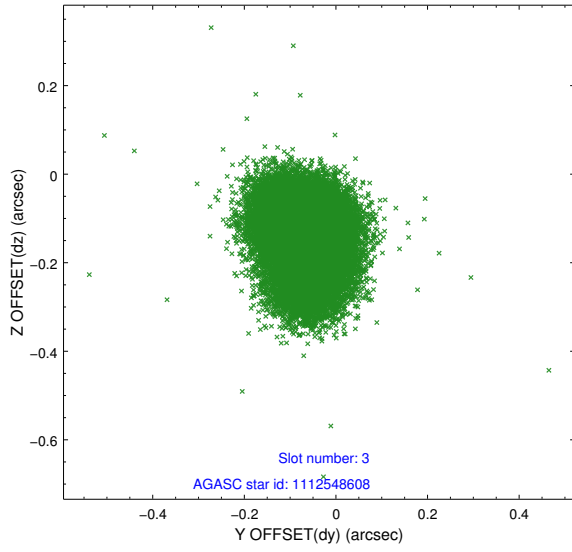


Slot Statistics

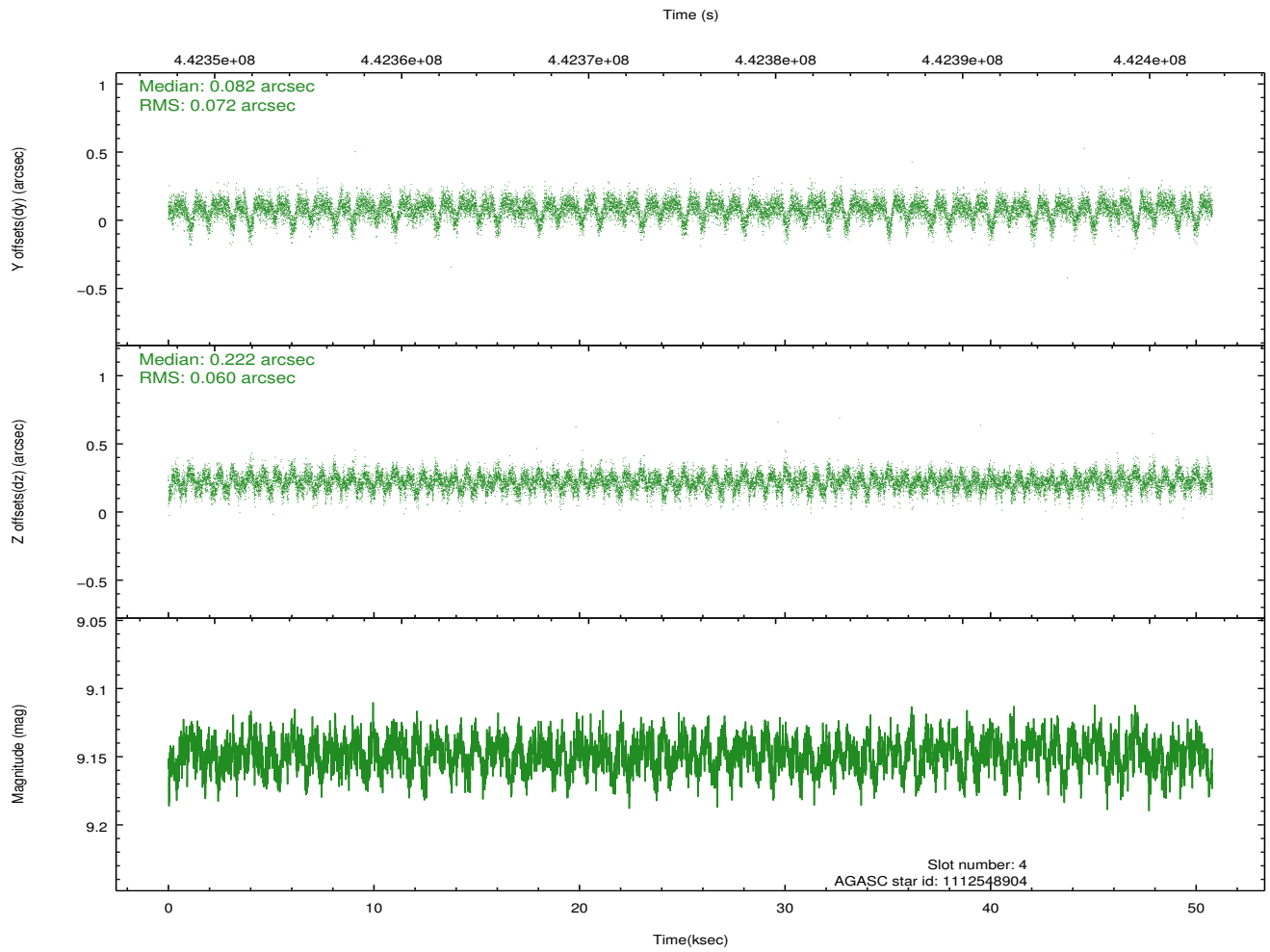
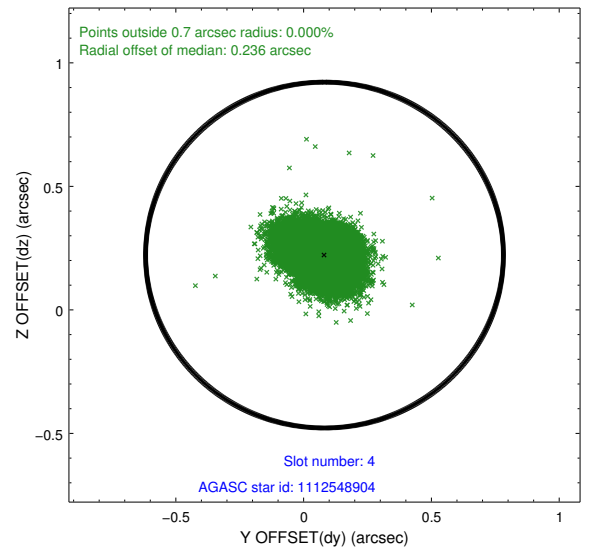
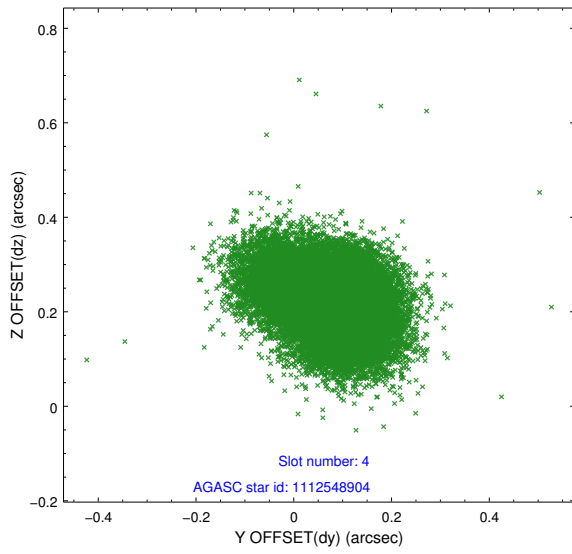
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	12391	0.156	-0.096	0.026	0.038	0.000000	0.000000	924.67	-999.96
1	FID	ACIS-I-5	7.08	12389	-0.326	0.123	0.012	0.034	0.000000	0.000000	-1823.94	897.73
2	FID	ACIS-I-6	7.09	12391	0.077	0.042	0.019	0.048	0.000000	0.000000	390.15	1542.15
3	GUIDE	1112548608	8.78	24760	-0.068	-0.138	0.088	0.149	28.282035	-59.412566	-1500.53	1381.84
4	GUIDE	1112548904	9.15	24759	0.082	0.222	0.098	0.165	27.315536	-59.373409	-2228.95	-239.95
5	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	1111628512	9.23	24755	0.075	0.015	0.115	0.188	26.268874	-59.718198	-1669.50	-2448.46
7	GUIDE	1160121336	8.62	24762	-0.080	-0.089	0.083	0.133	29.095398	-60.192716	1647.15	1778.32

2.4 Star Slots

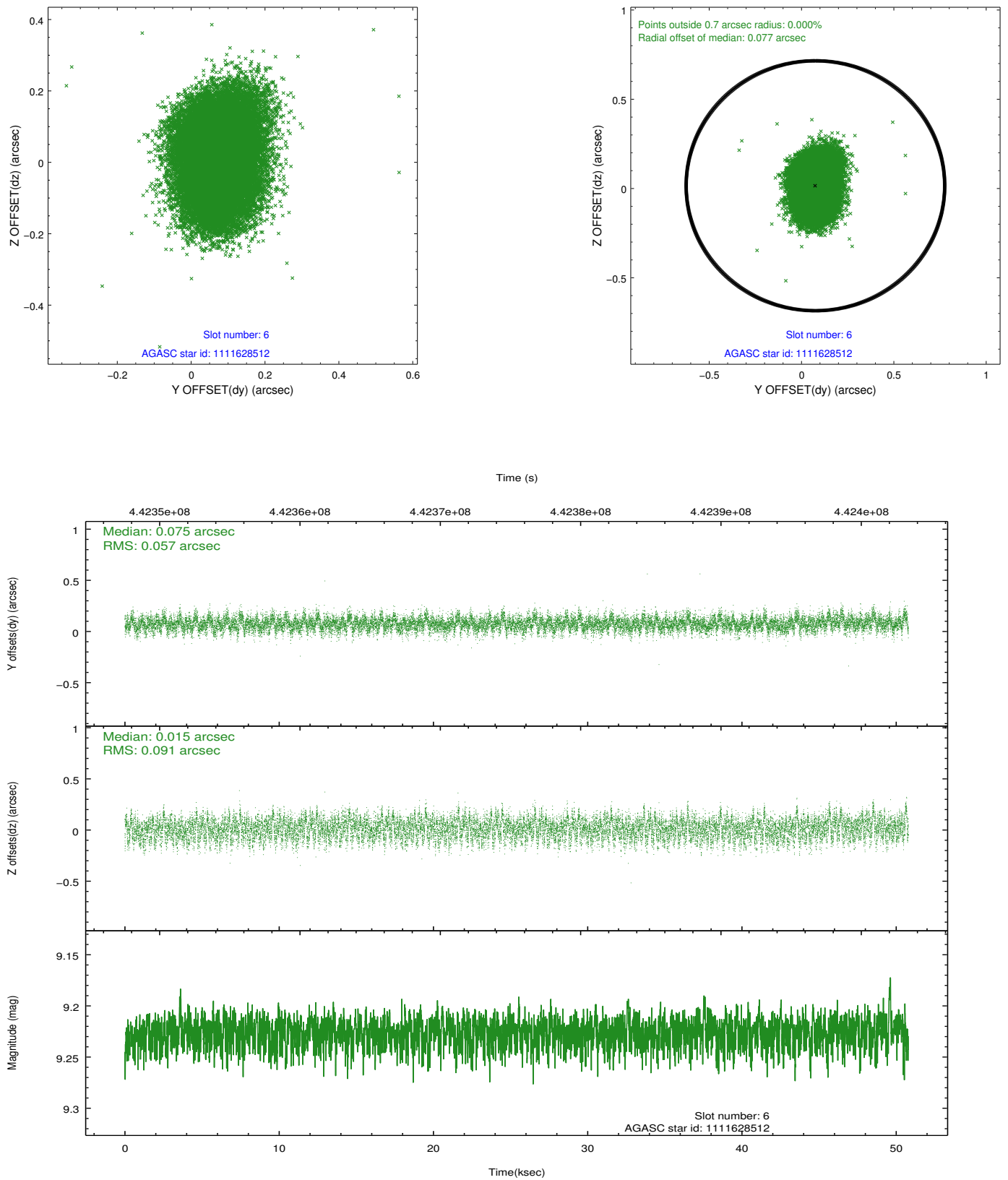
2.4.1 Slot 3



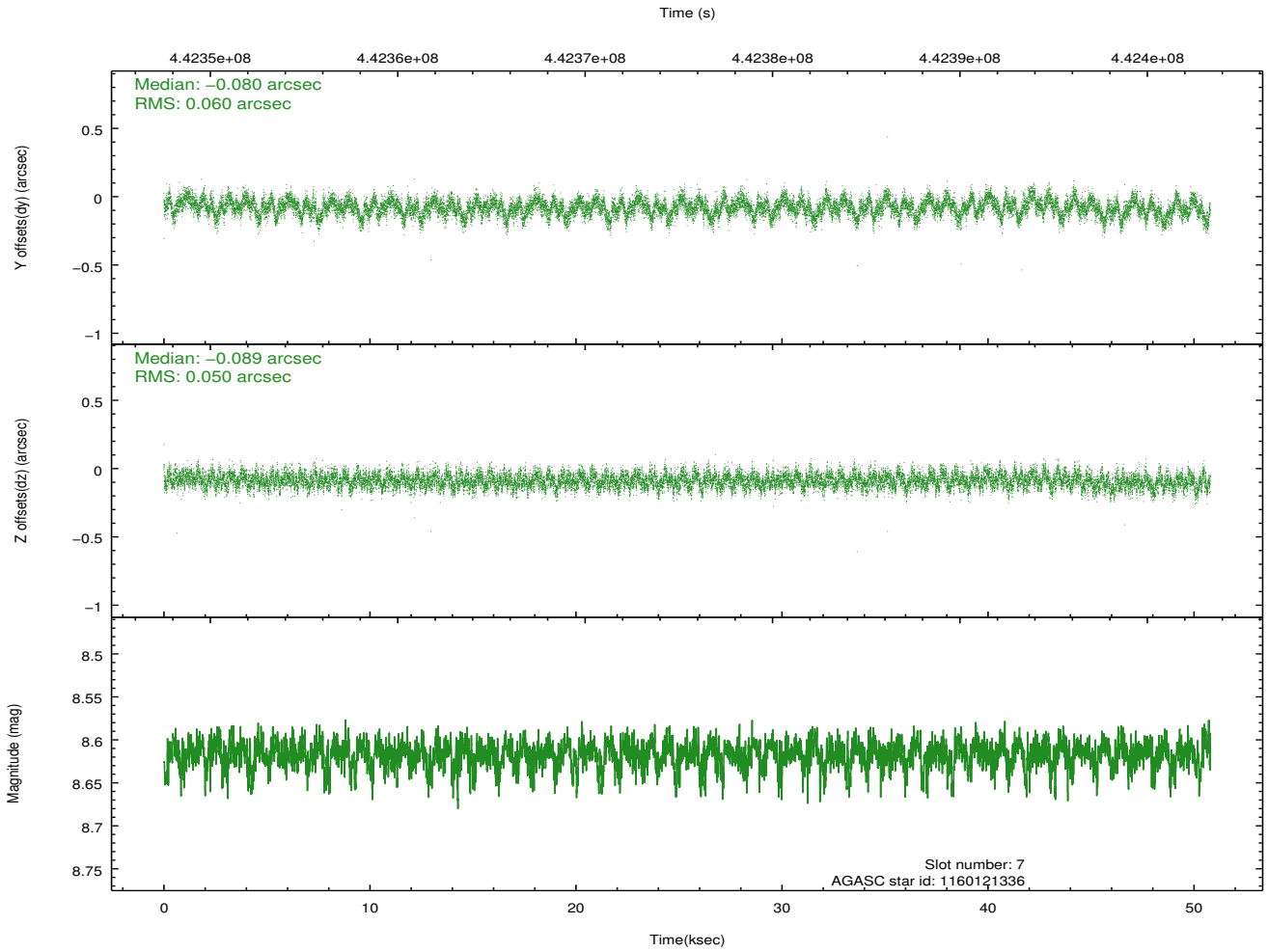
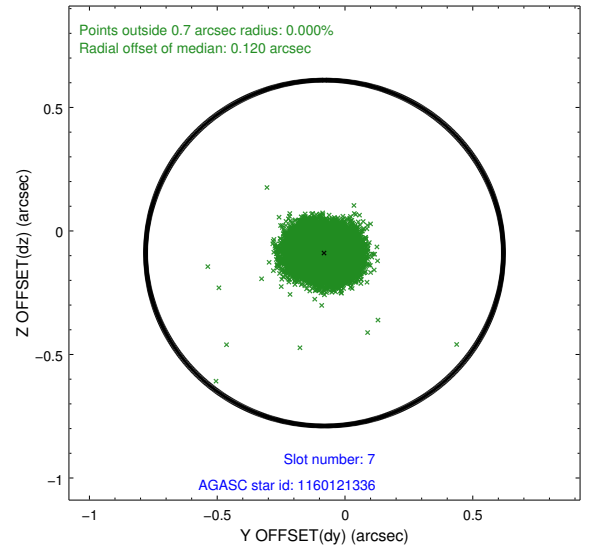
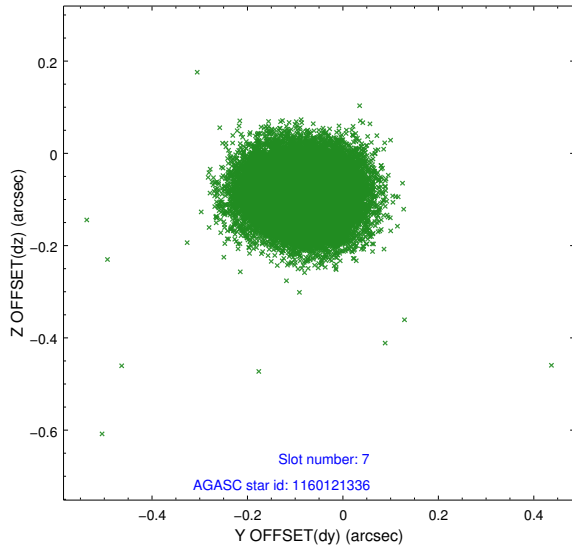
2.4.2 Slot 4



2.4.3 Slot 6

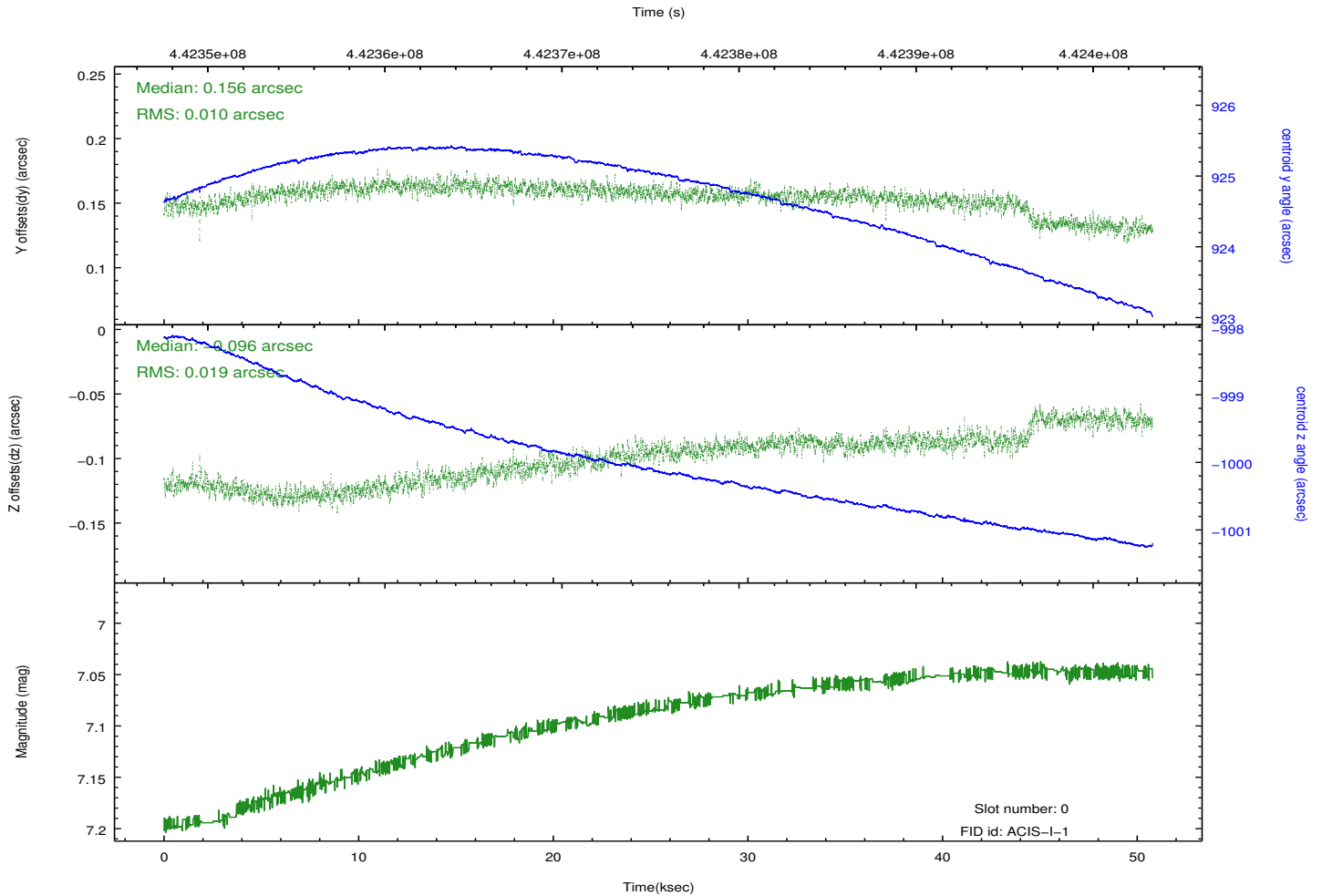
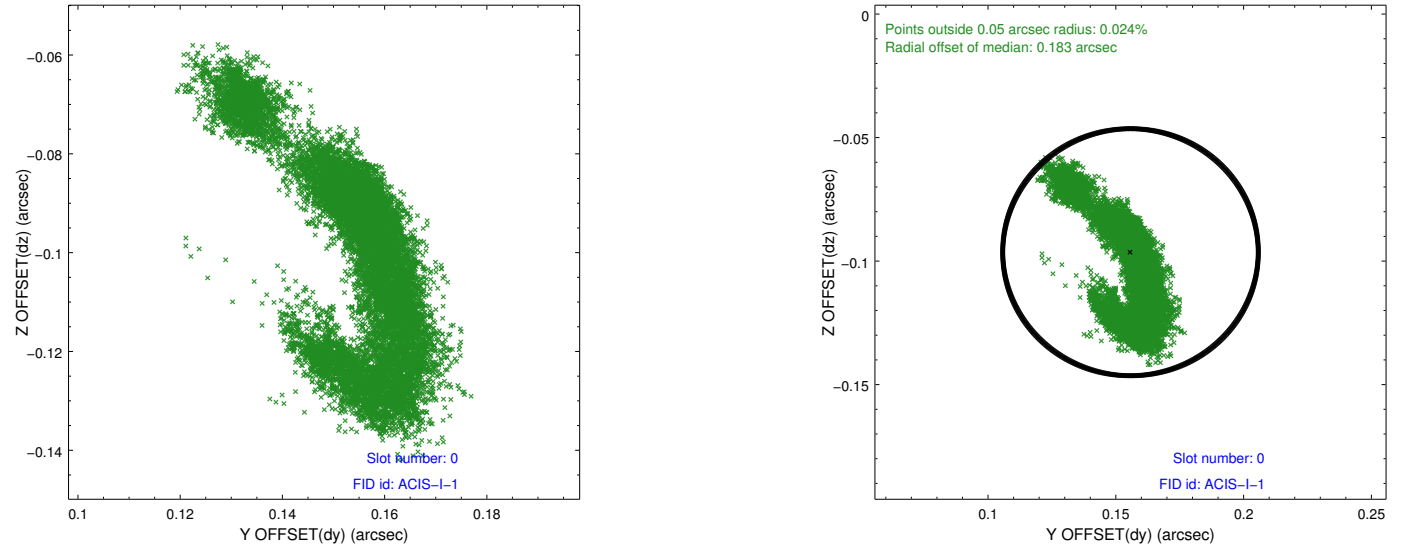


2.4.4 Slot 7

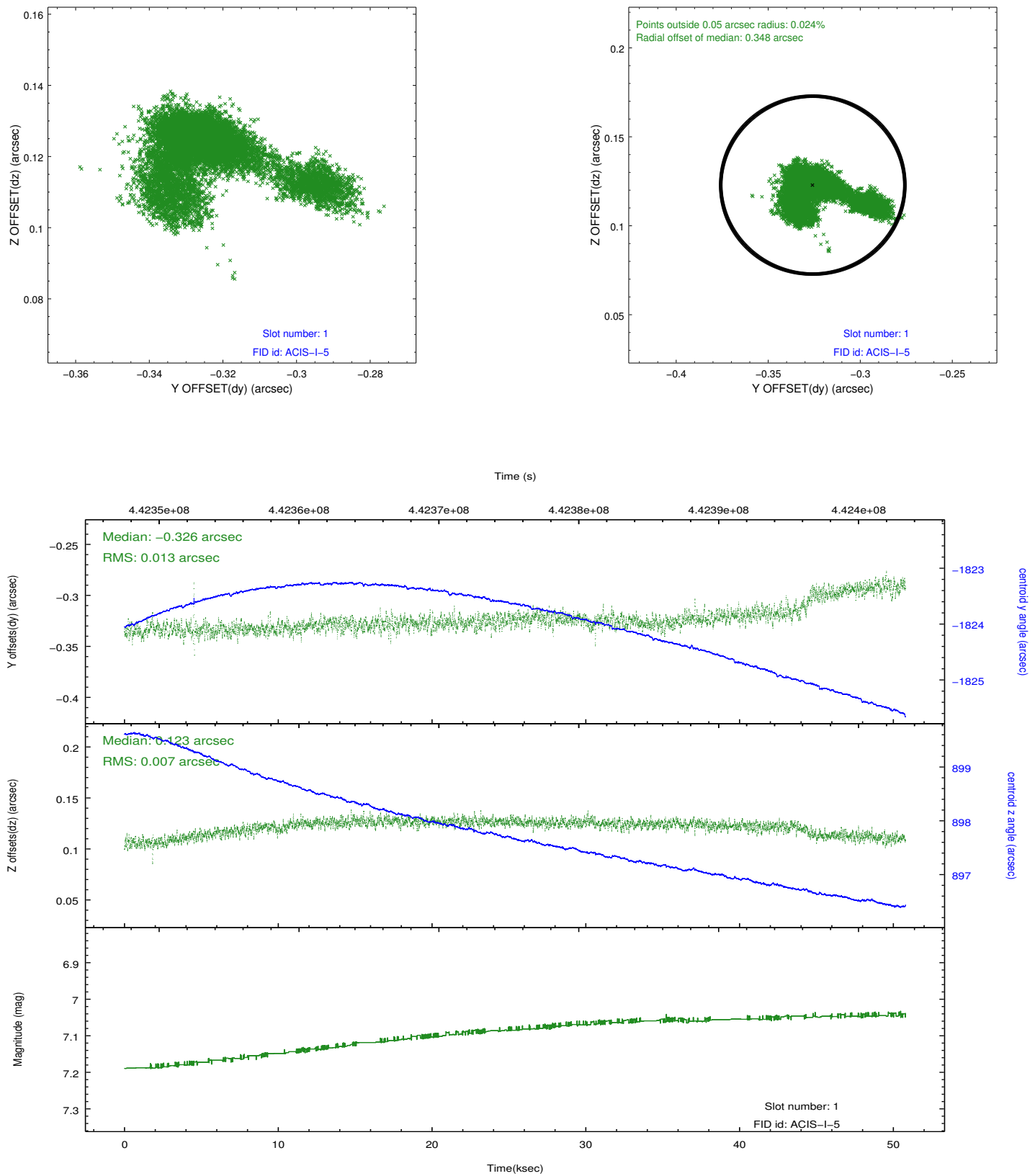


2.5 FID Slots

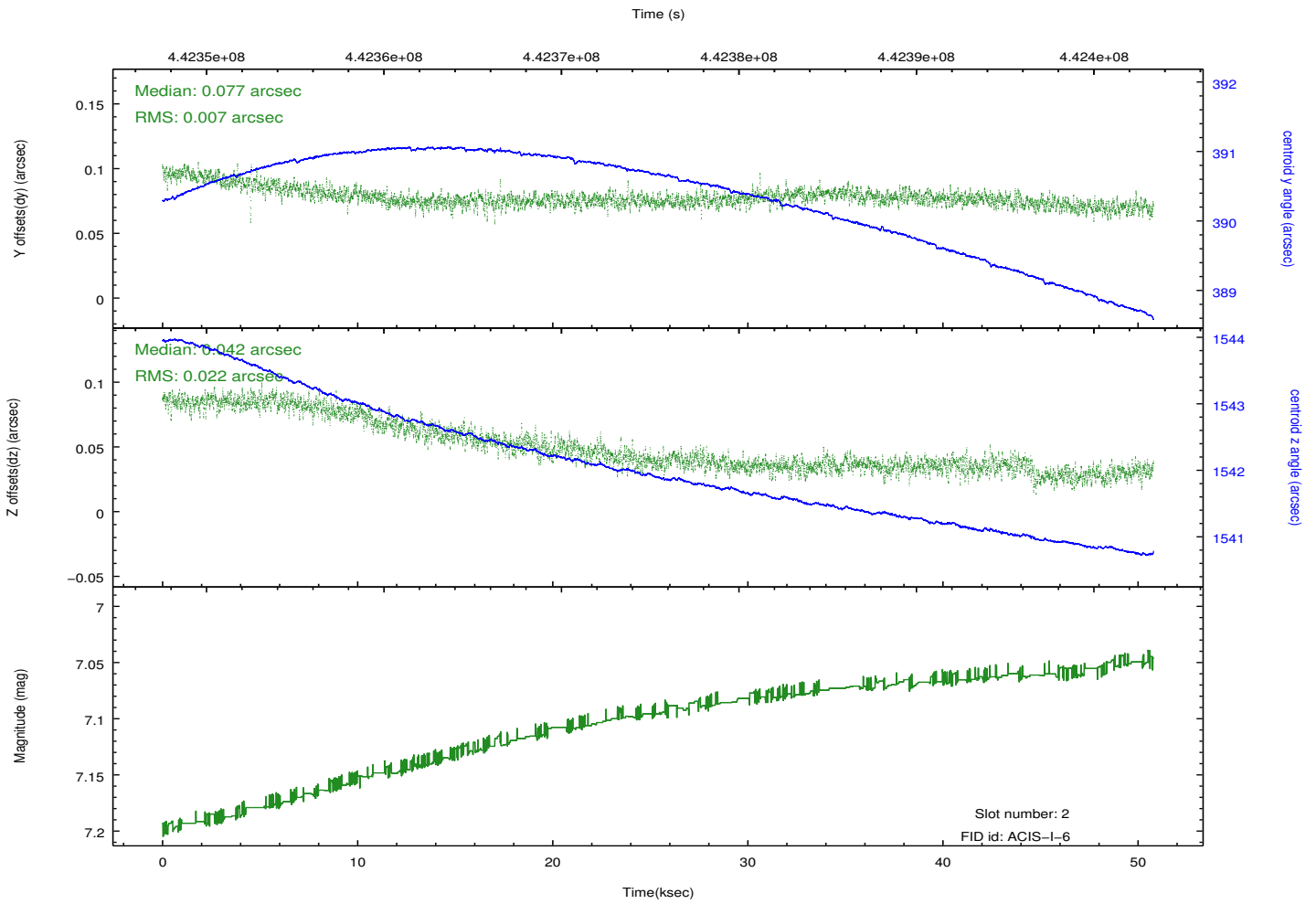
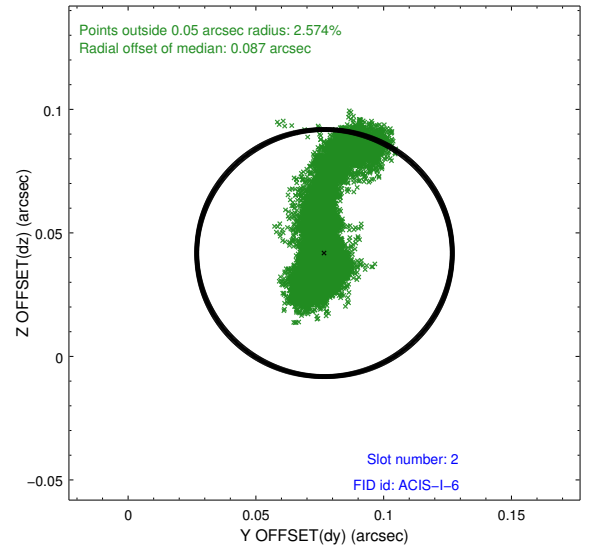
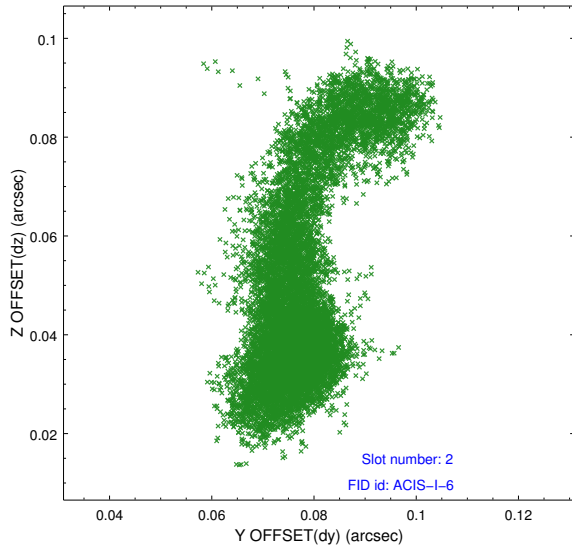
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.01.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.052600384951

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing one fid light or guide star from the solution.