

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14892 - L2 Version 2
Chandra X-Ray Center

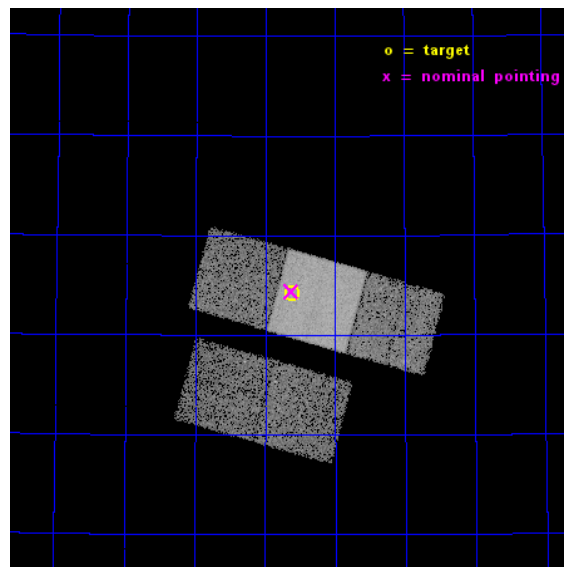
L2 Processing Date : Dec 1 2014

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1 Front

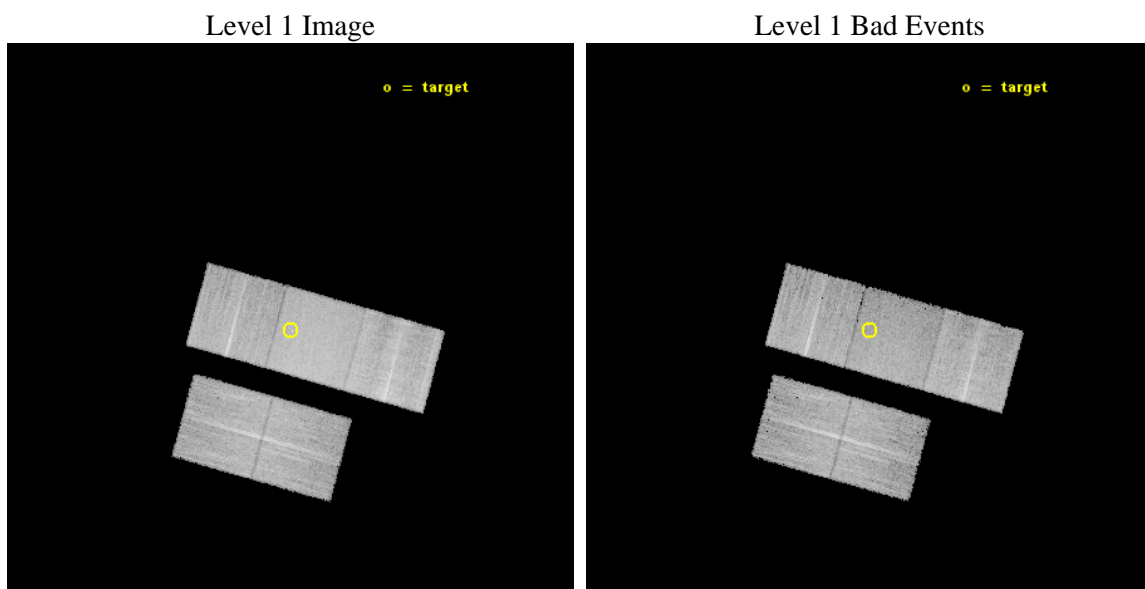
seq_num	502016	Sequence number
obs_id	14892	Observation id
title	Identifying the TeV gamma-ray source MGRO J2228+61, FINALLY!	Propo
observer	Dr. Ester Aliu	Principal investigator
object	Suzaku J2227+6054	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	336.904583	Observer's specified target RA [deg]
dec_targ	60.903806	Observer's specified target Dec [deg]
ra_nom	336.90635998763	Nominal RA [deg]
dec_nom	60.906692412425	Nominal Dec [deg]
roll_nom	15.450822210739	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15069.100115895	Sum of GTIs [s]
livetime	14872.211229171	Livetime [s]
ontime2	15047.113224089	Sum of GTIs [s]
ontime3	15069.100115895	Sum of GTIs [s]
ontime6	15069.100115895	Sum of GTIs [s]
ontime7	15069.100115895	Sum of GTIs [s]
ontime8	15069.100115895	Sum of GTIs [s]
l2events	84444	Number of level 2 events



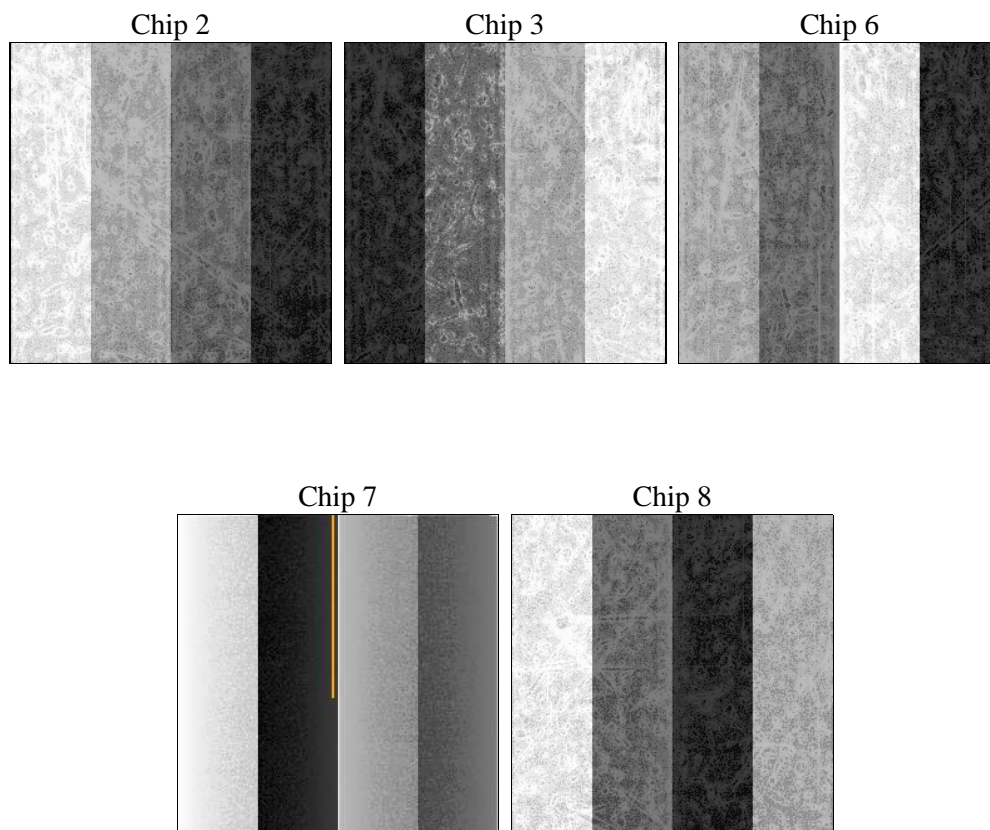
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.481000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15069.100115895	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	15047.113224089	Sum of GTIs [s]
date	2014-12-02T00:27:12	Date and time of file creation	ontime3	15069.100115895	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15069.100115895	Sum of GTIs [s]
			ontime7	15069.100115895	Sum of GTIs [s]
			ontime8	15069.100115895	Sum of GTIs [s]
			l1events	478765	Number of level 1 events

2.1.4 Events

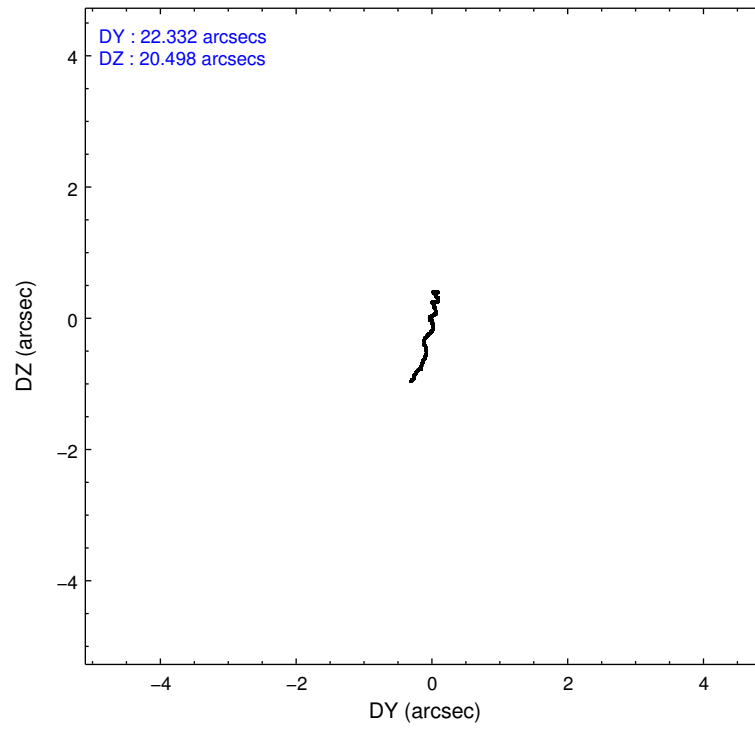
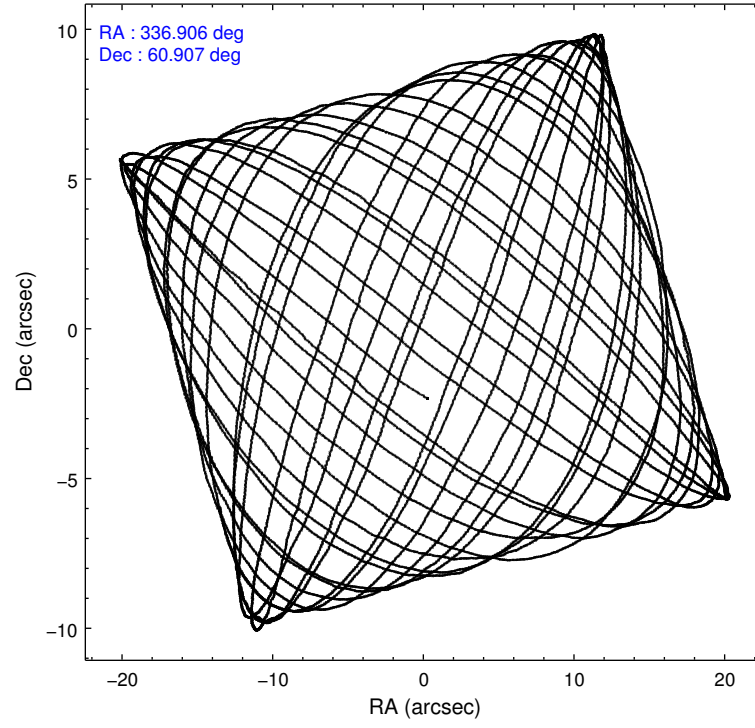
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	83960	80426	85920	113939	114520
rejected events	74563	71256	75649	64117	83495
rejected %	88%	88%	88%	56%	72%

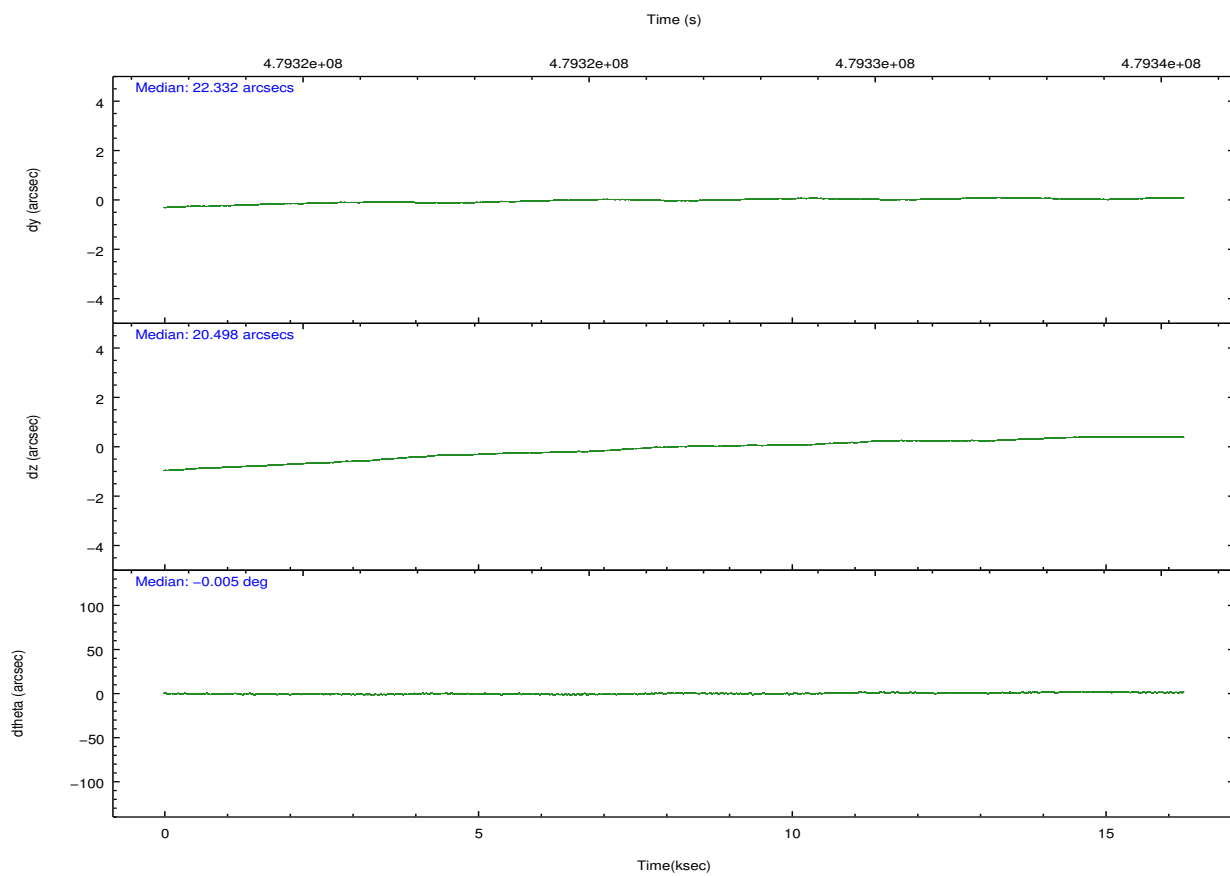
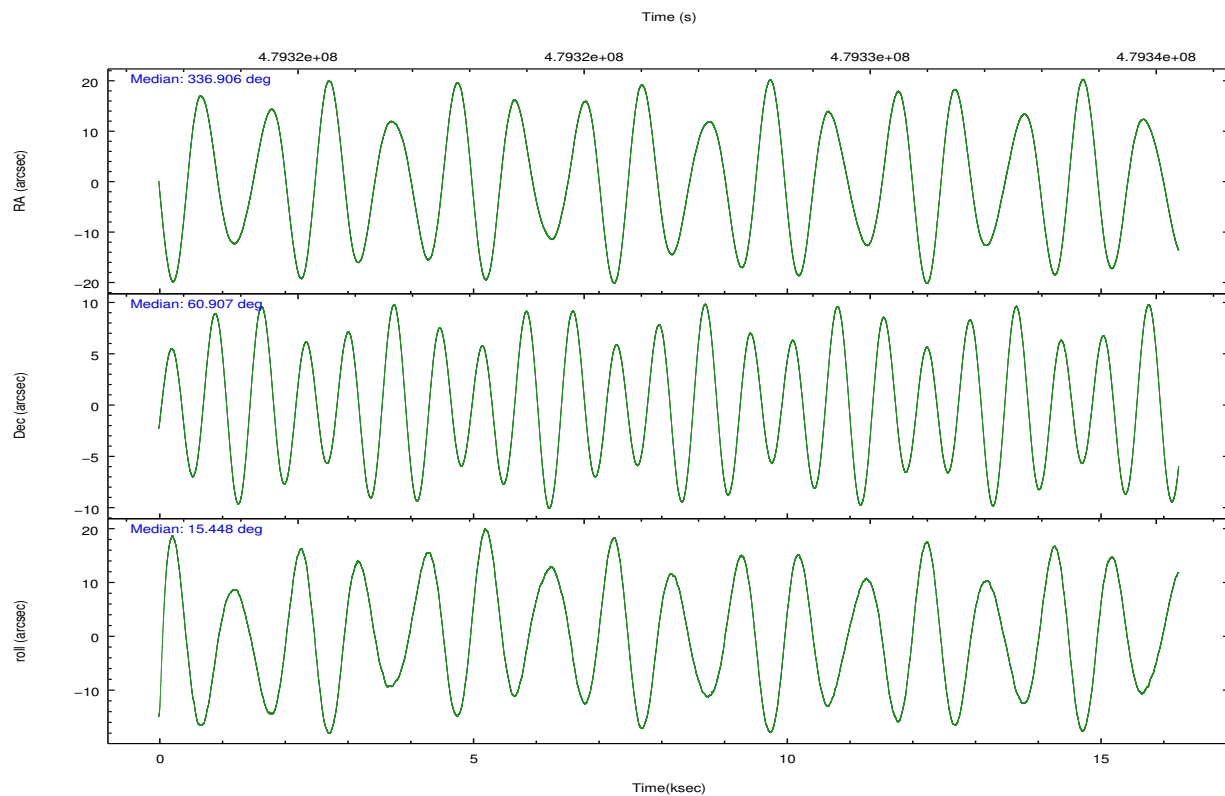
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3327	3200	3535	4391	9599
	3%	3%	4%	3%	8%
grade 1 events	49	46	37	144	108
	0%	0%	0%	0%	0%
grade 2 events	2285	1939	2342	10284	7085
	2%	2%	2%	9%	6%
grade 3 events	953	1017	1054	4411	3077
	1%	1%	1%	3%	2%
grade 4 events	979	1061	1015	4196	3016
	1%	1%	1%	3%	2%
grade 5 events	3523	4217	4221	11751	6230
	4%	5%	4%	10%	5%
grade 6 events	1853	1955	2326	26548	8251
	2%	2%	2%	23%	7%
grade 7 events	70991	66991	71390	52214	77154
	84%	83%	83%	45%	67%

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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	336.867531	336.906359987625	CCD I2 on	Y	Y
[deg] Pointing Dec	60.886949	60.90669241242457	CCD I3 on	Y	Y
[deg] Pointing Roll	15.328124	15.45082221073914	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	O1	Y
[s] Observation start time (MET)	479319604.184000	479318129.63662	CCD S5 on	N	N
Observation start date	2013-03-10T16:18:57	2013-03-10T15:55:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	479334605.184000	479334830.47503	On-chip summing requested	N	N
Observation end date	2013-03-10T20:28:58	2013-03-10T20:33:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



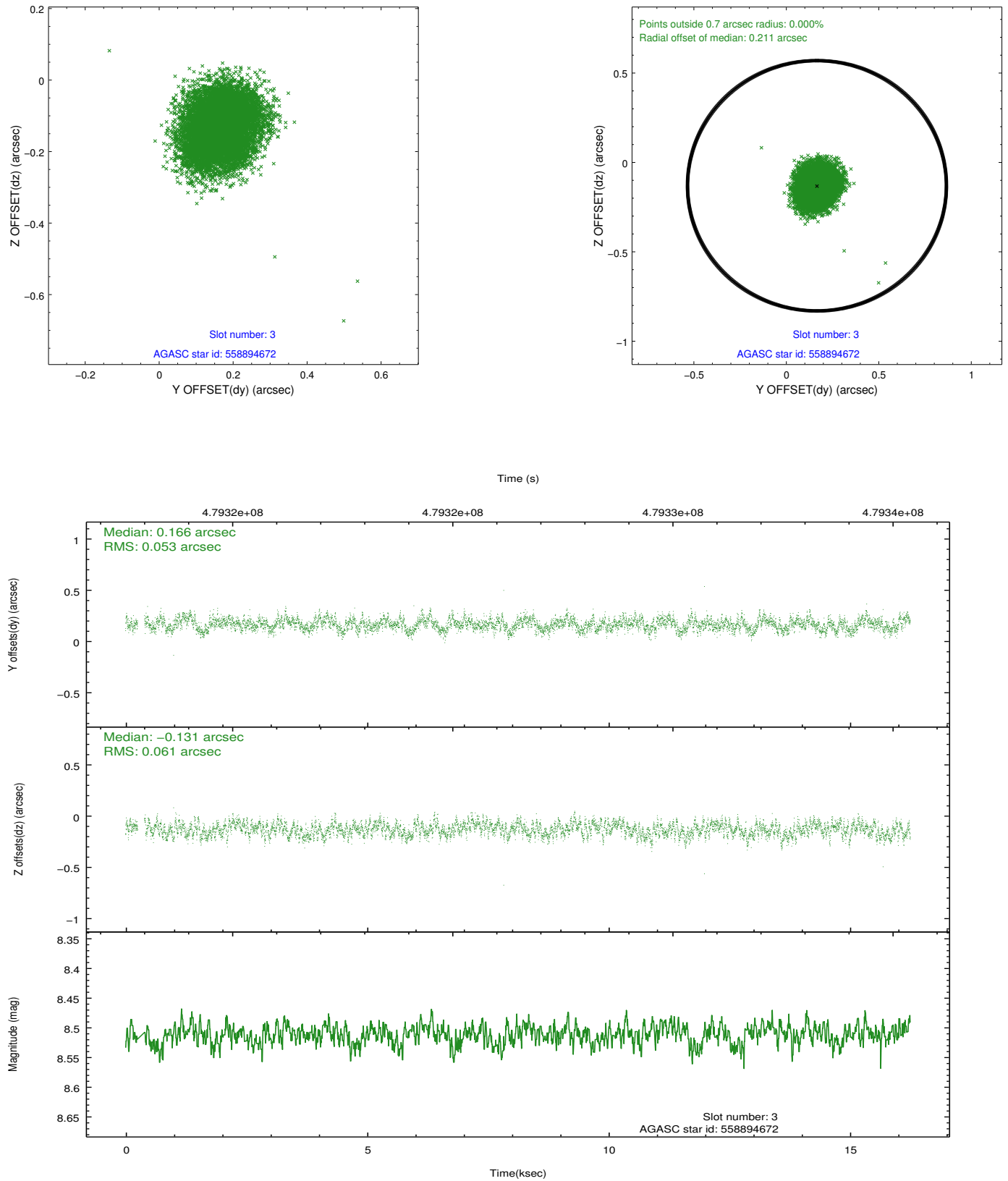


Slot Statistics

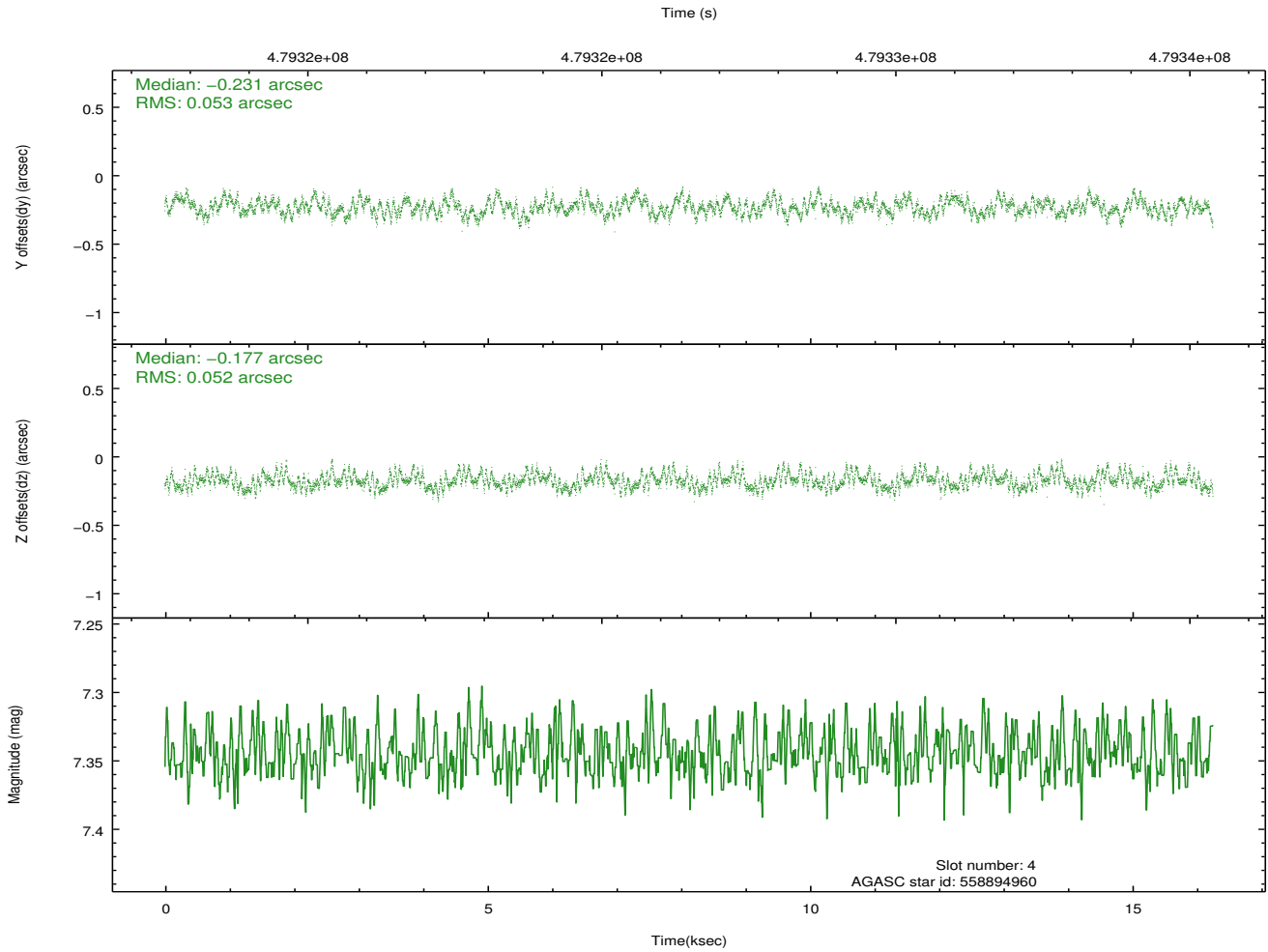
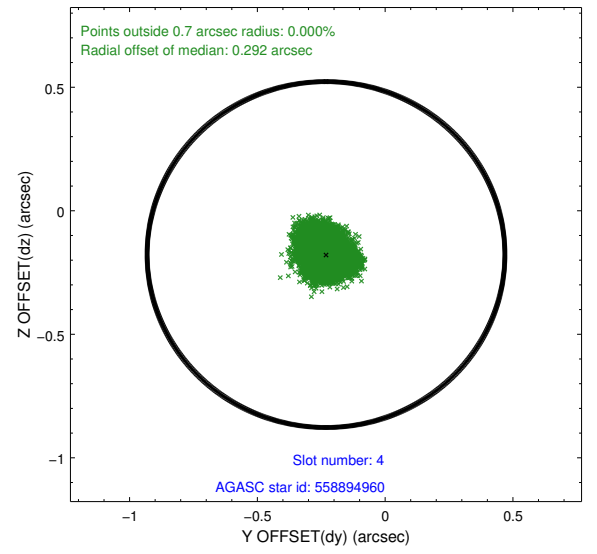
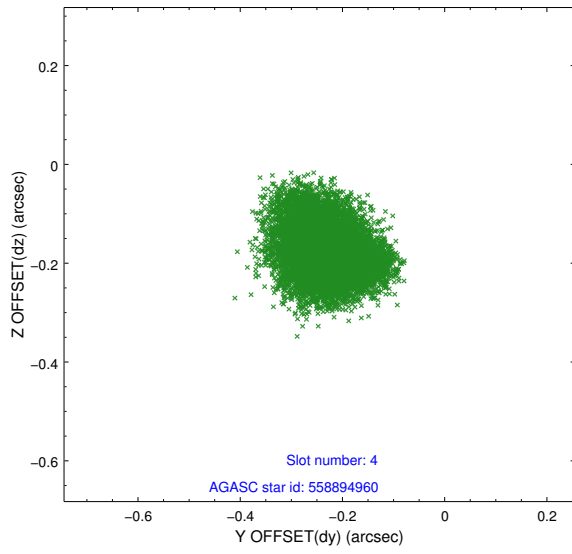
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	3963	-0.110	-0.006	0.009	0.014	0.000000	0.000000	-775.55	-1741.92
1	FID		ACIS-S-4	7.03	3964	0.244	0.055	0.006	0.011	0.000000	0.000000	2137.93	166.38
2	FID		ACIS-S-5	7.05	3964	-0.165	-0.040	0.008	0.013	0.000000	0.000000	-1828.14	160.21
3	GUIDE	used	558894672	8.51	7858	0.166	-0.131	0.088	0.135	336.308268	60.836317	-992.73	87.54
4	GUIDE	used	558894960	7.35	7926	-0.231	-0.177	0.081	0.124	337.171618	61.455544	1045.43	1837.41
5	GUIDE	used	558895376	8.43	7926	-0.078	-0.290	0.075	0.124	337.726598	61.089781	1637.98	318.59
6	GUIDE	used	558901144	8.34	7925	0.151	0.190	0.073	0.116	337.961491	60.724567	1707.85	-1056.97
7	GUIDE	used	558895336	8.27	7925	-0.001	0.410	0.075	0.119	336.719690	60.165141	-941.45	-2435.49

2.4 Star Slots

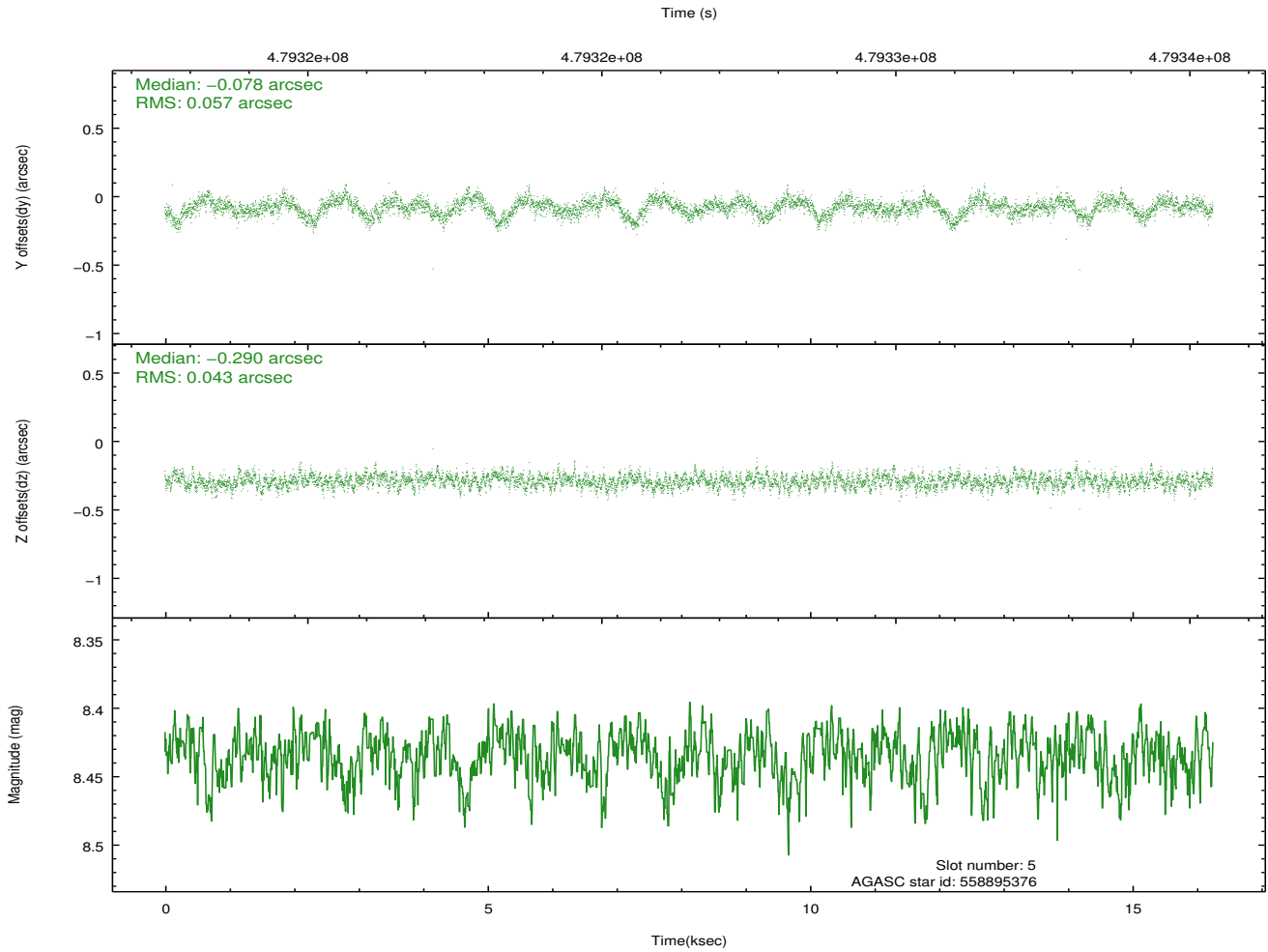
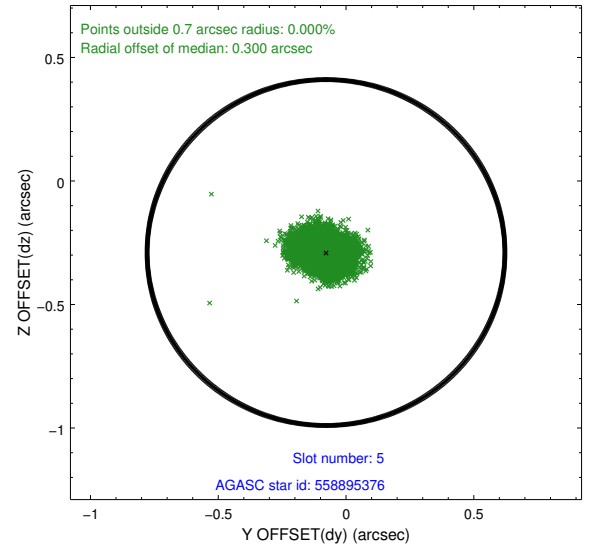
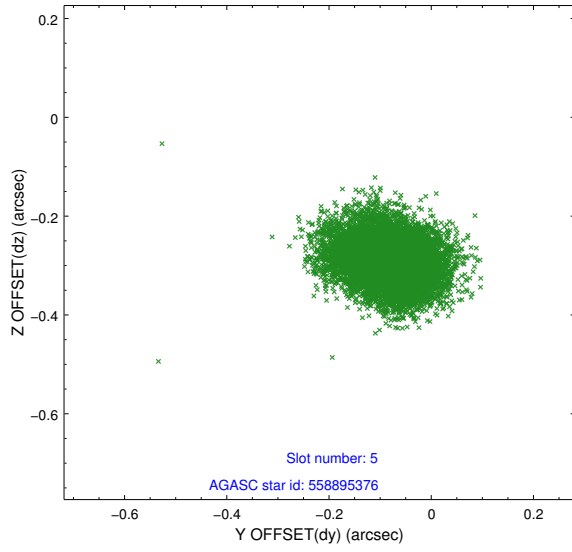
2.4.1 Slot 3



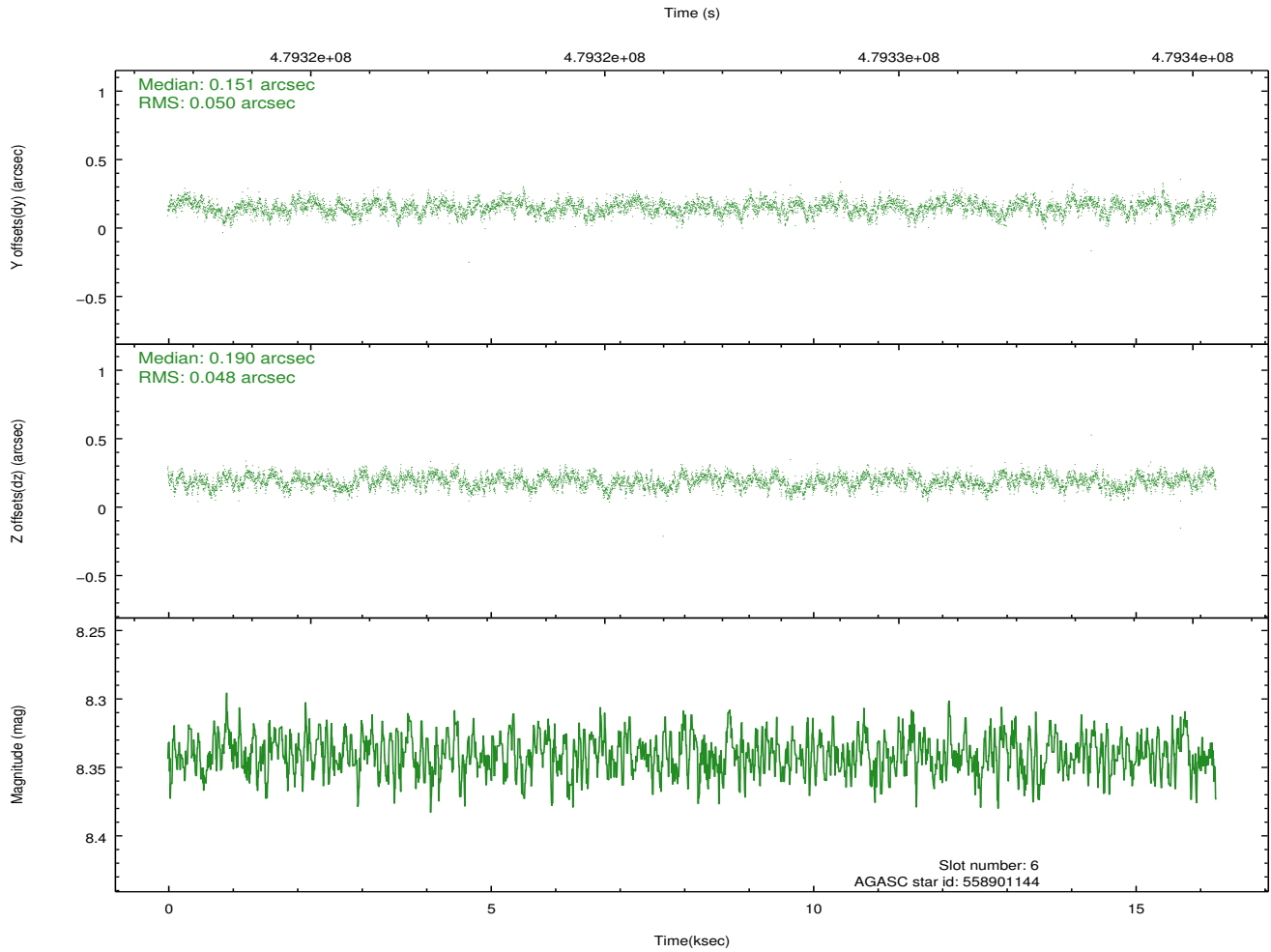
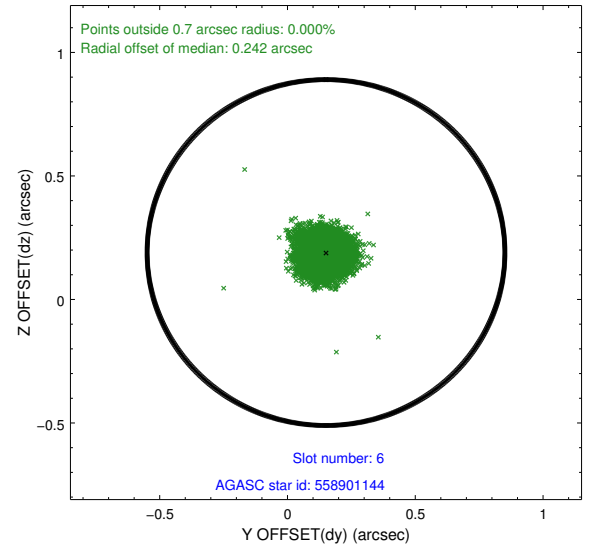
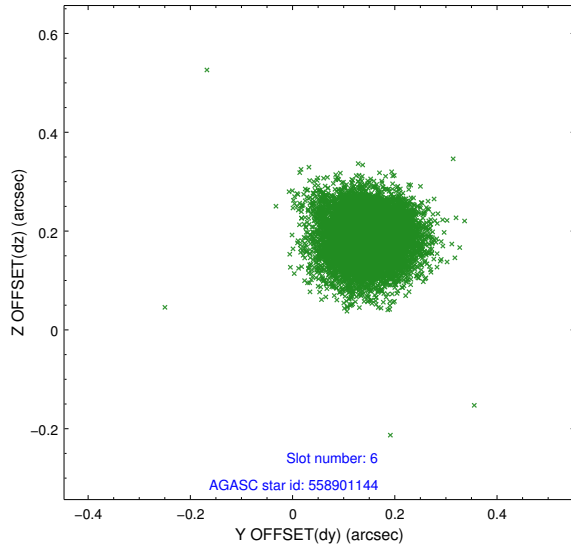
2.4.2 Slot 4



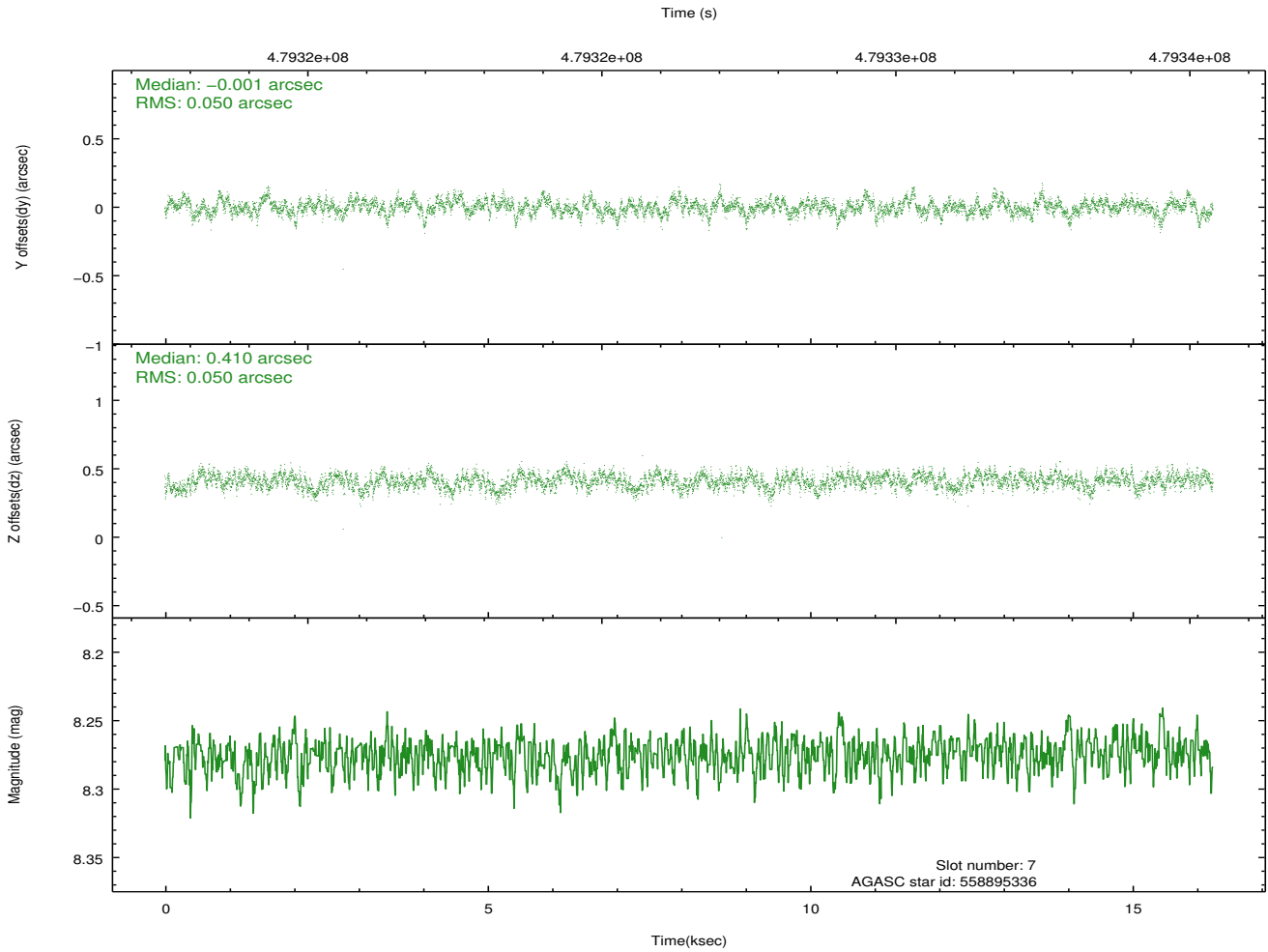
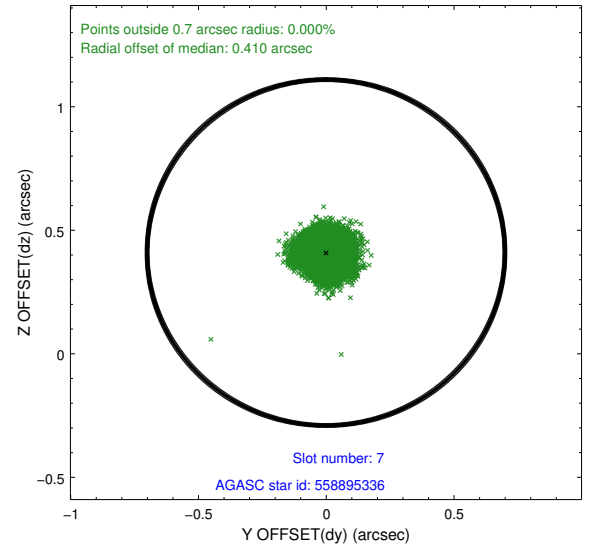
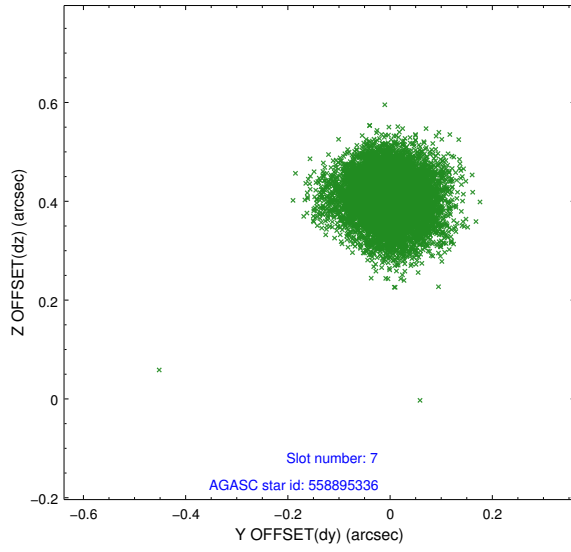
2.4.3 Slot 5



2.4.4 Slot 6

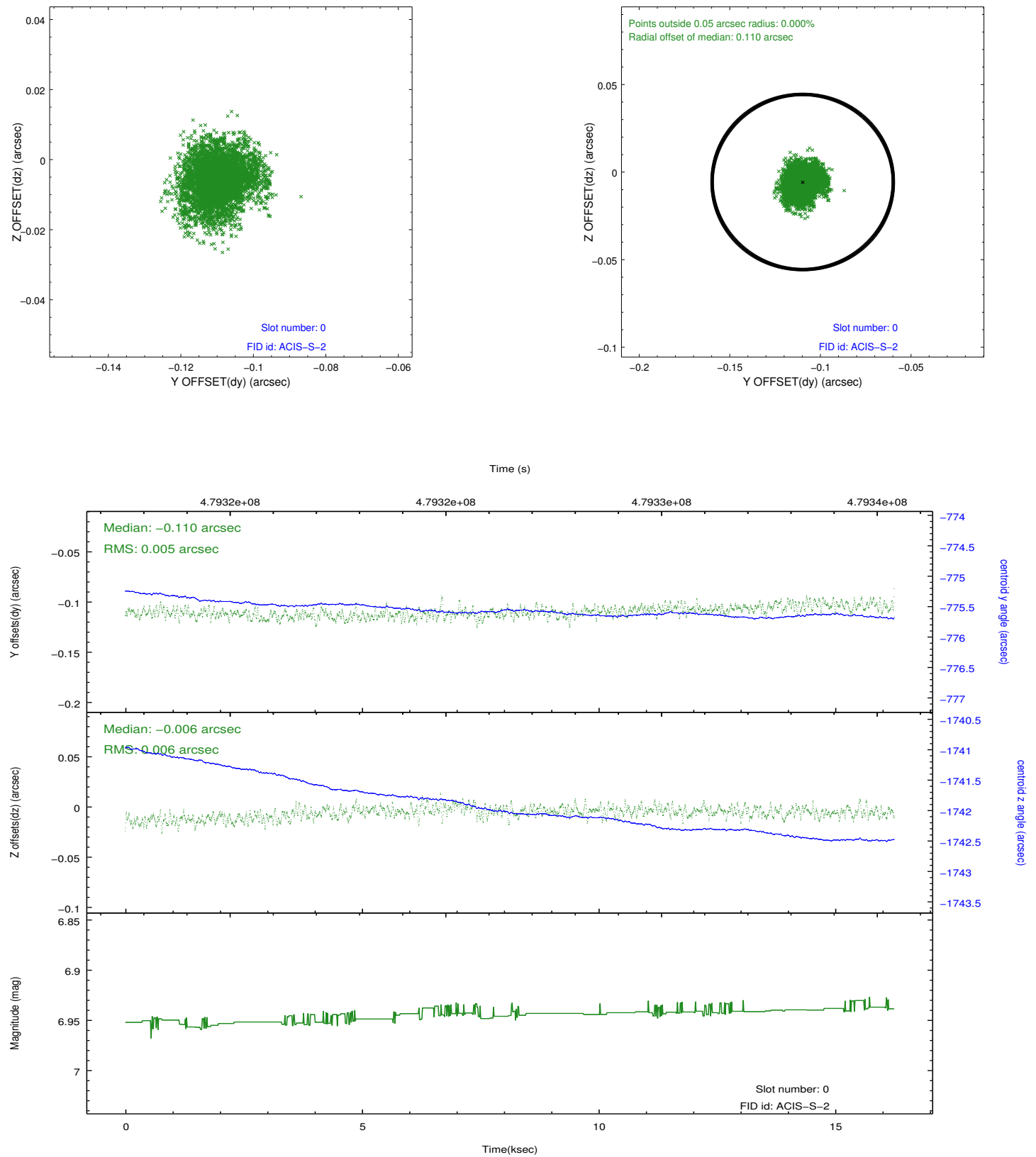


2.4.5 Slot 7

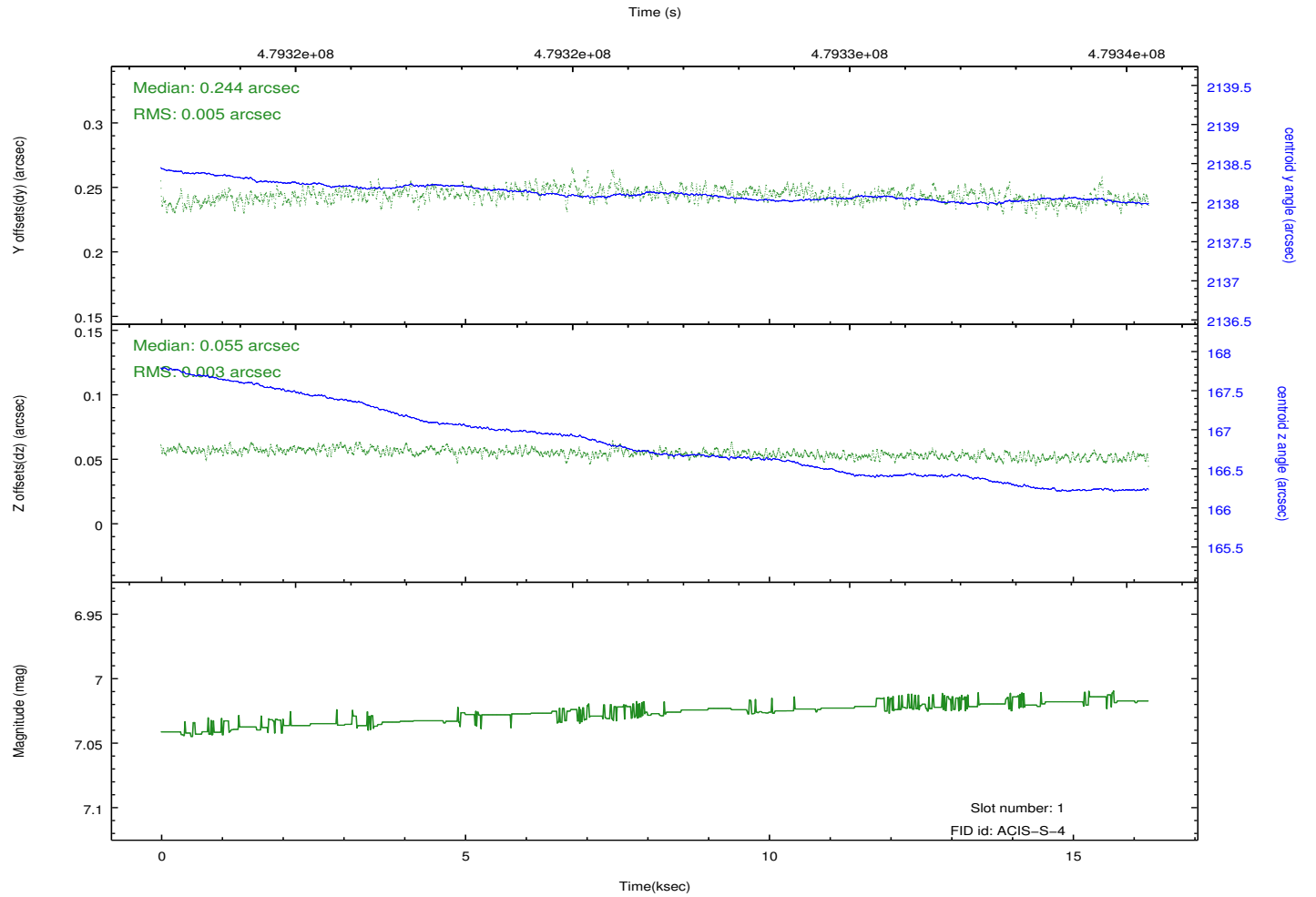
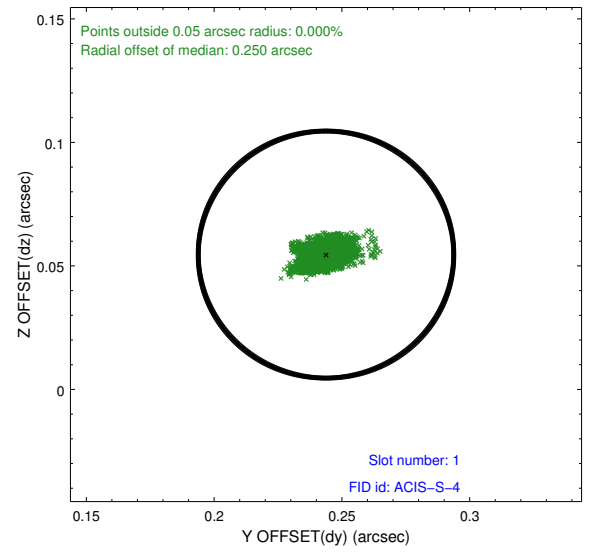
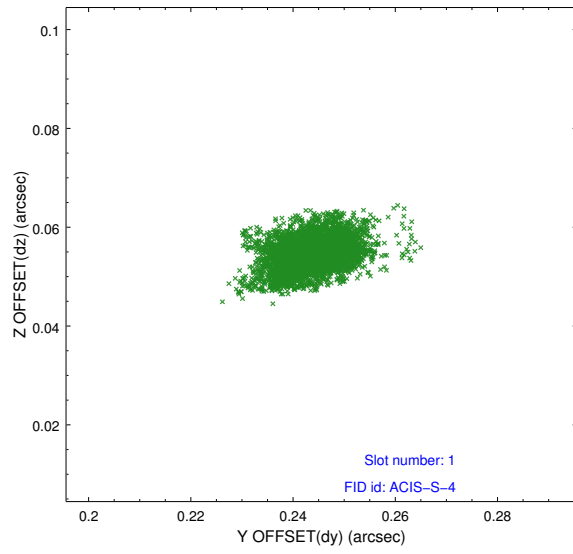


2.5 FID Slots

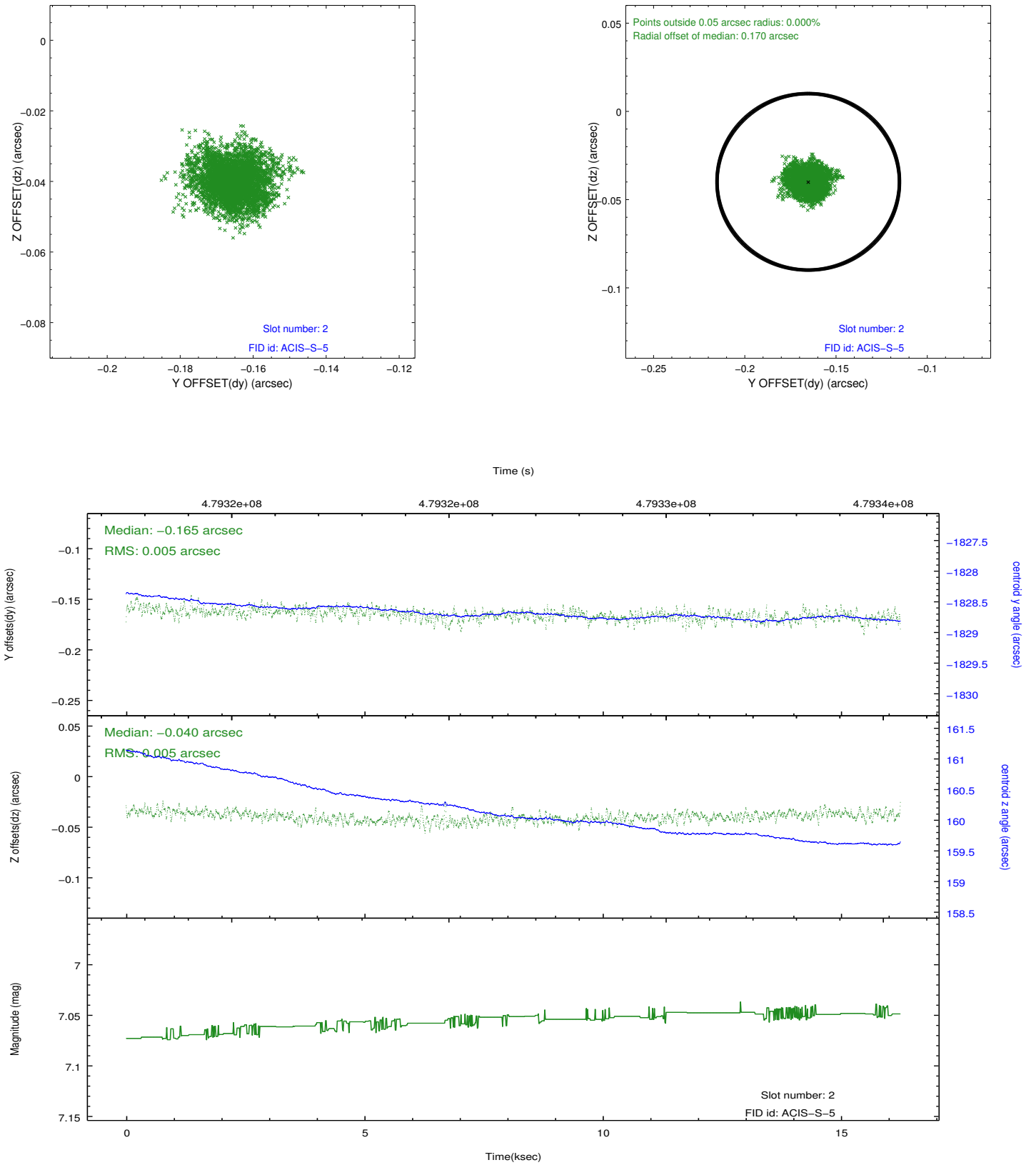
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.069100115895

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.