

V&V Reference Report

L2 ASCDS Version : 10.4

Observation 16950 - L2 Version 1
Chandra X-Ray Center

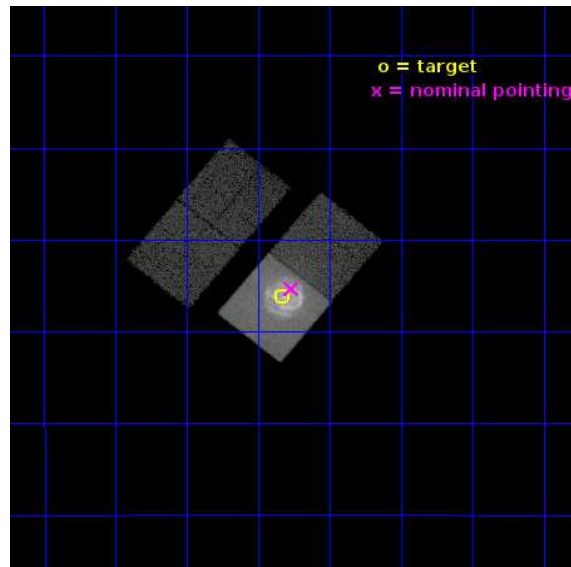
L2 Processing Date : Jun 5 2015

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1 Front

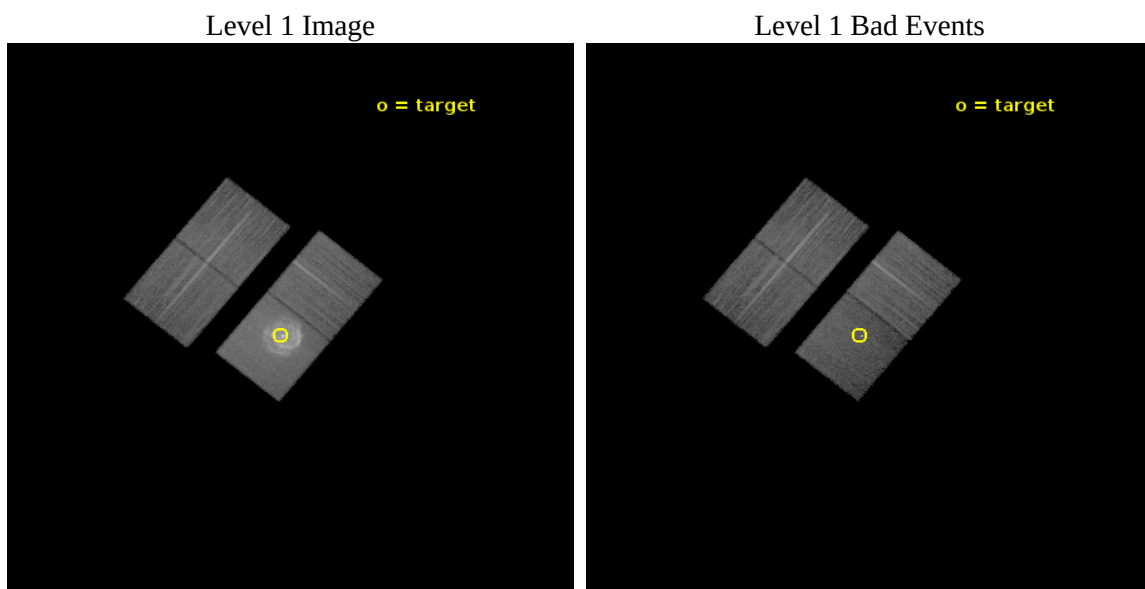
seq_num	502466	Sequence number
obs_id	16950	Observation id
title	Expansion of Kes 73, a shell supernova remnant containing a magnetar	
observer	Dr. Kazimierz Borkowski	Principal investigator
object	Kes 73	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	280.333333	Observer's specified target RA [deg]
dec_targ	-4.936389	Observer's specified target Dec [deg]
ra_nom	280.31746605815	Nominal RA [deg]
dec_nom	-4.9223404000727	Nominal Dec [deg]
roll_nom	129.15526923011	Nominal Roll [deg]
revision	1	Processing version of data
ontime	29064.193811655	Sum of GTIs [s]
livetime	28684.448722758	Livetime [s]
ontime2	29064.070691705	Sum of GTIs [s]
ontime3	29064.111731648	Sum of GTIs [s]
ontime6	29057.870711327	Sum of GTIs [s]
ontime7	29064.193811655	Sum of GTIs [s]
l2events	248462	Number of level 2 events



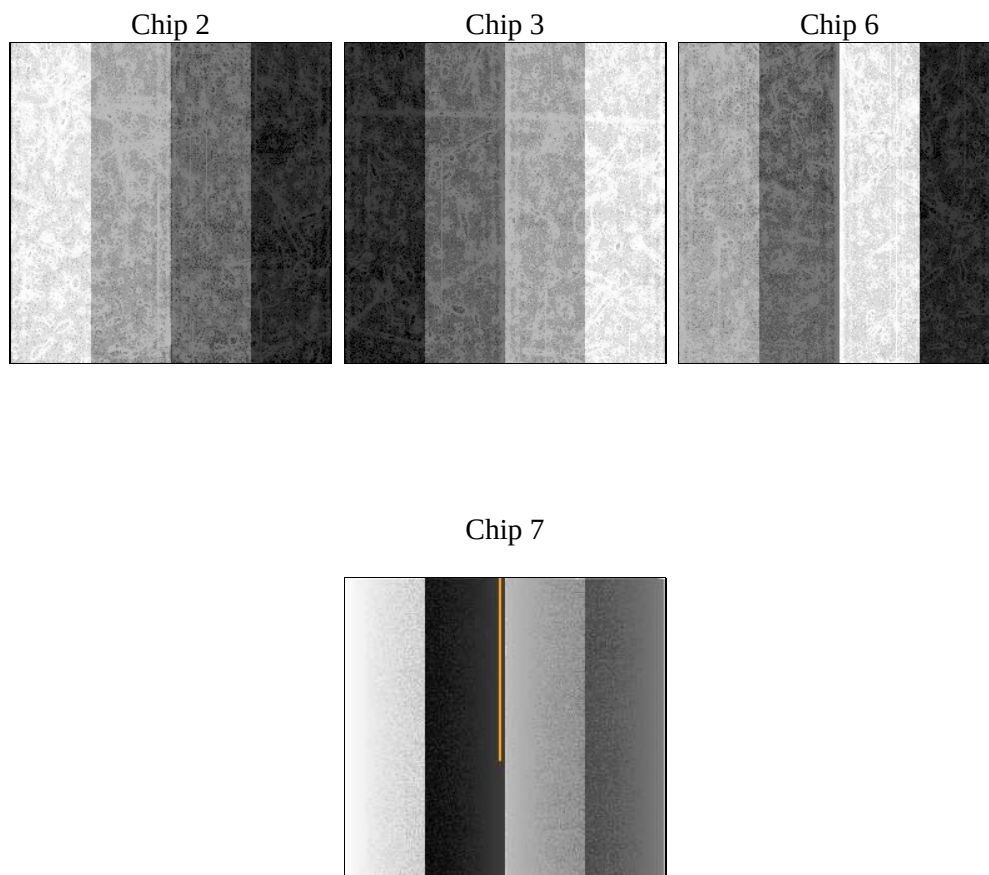
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	29064.193811655	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	29064.070691705	Sum of GTIs [s]
date	2015-06-05T23:42:25	Date and time of file creation	ontime3	29064.111731648	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	29057.870711327	Sum of GTIs [s]
			ontime7	29064.193811655	Sum of GTIs [s]
			l1events	717571	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	144247	132547	145718	295059
rejected events	127714	115785	123760	92015
rejected %	88%	87%	84%	31%

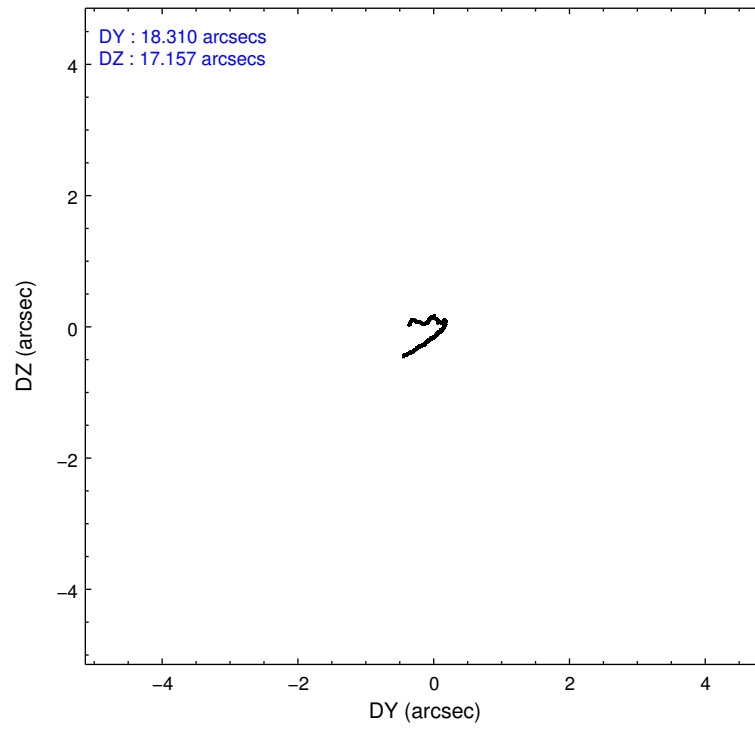
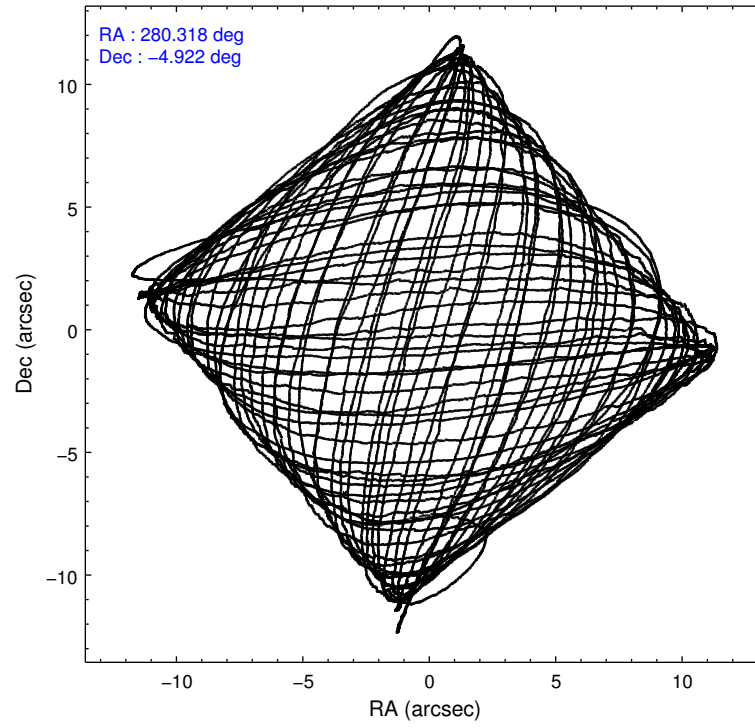
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	6880	7105	10216	37085
	4%	5%	7%	12%
grade 1 events	80	79	80	527
	0%	0%	0%	0%
grade 2 events	3683	3467	4354	50490
	2%	2%	2%	17%
grade 3 events	1534	1600	1884	21079
	1%	1%	1%	7%
grade 4 events	1654	1611	1753	20707
	1%	1%	1%	7%
grade 5 events	4763	6059	5932	18742
	3%	4%	4%	6%
grade 6 events	2788	2984	3756	73732
	1%	2%	2%	24%
grade 7 events	122865	109642	117743	72697
	85%	82%	80%	24%

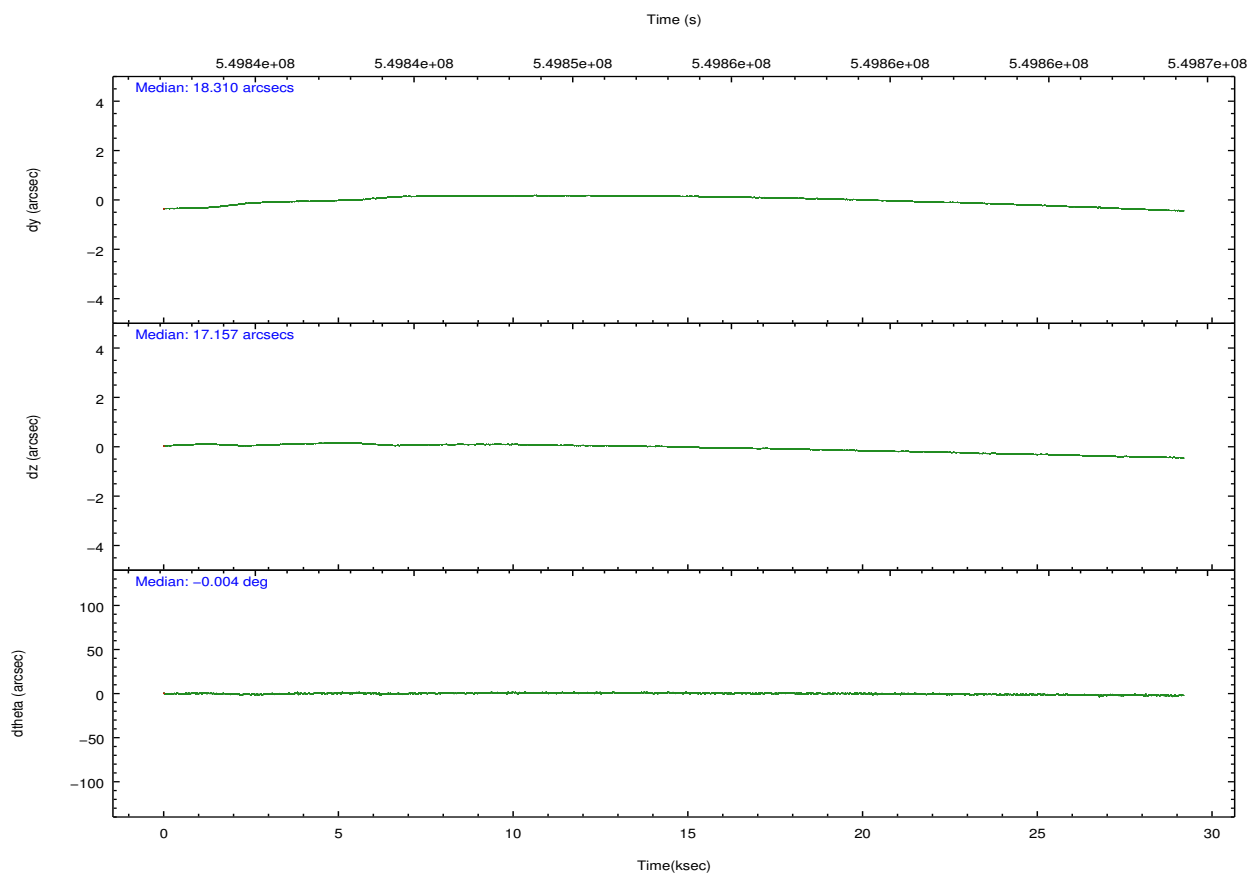
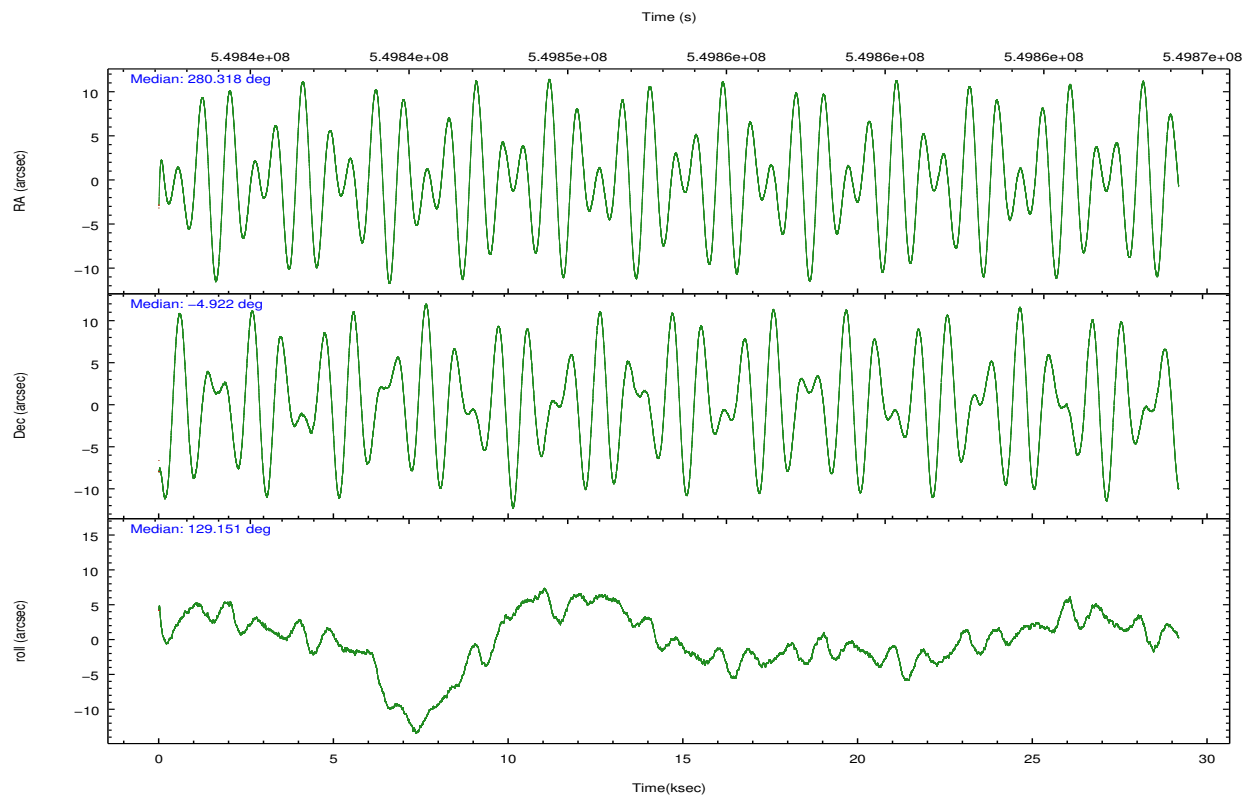
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2367	ACIS-2367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	280.343331	280.3174660581514
[deg] Pointing Dec	-4.931752	-4.922340400072748
[deg] Pointing Roll	129.000859	129.1552692301077
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	549838781.184000	549837740.4382401
Observation start date	2015-06-04T20:58:34	2015-06-04T20:42:20
[s] Observation end time (MET)	549867781.184000	549868581.15247
Observation end date	2015-06-05T05:01:54	2015-06-05T05:16:21
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



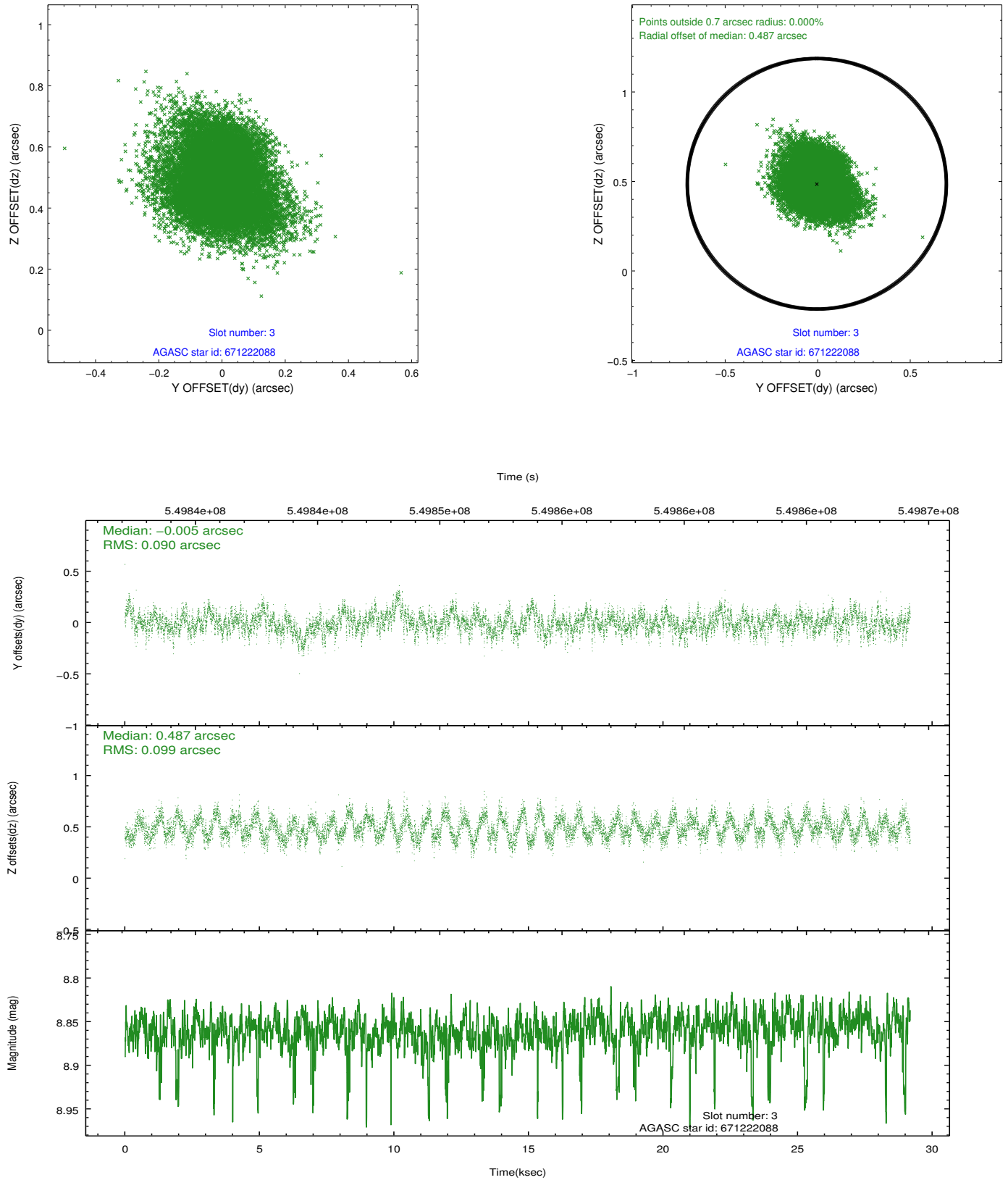


Slot Statistics

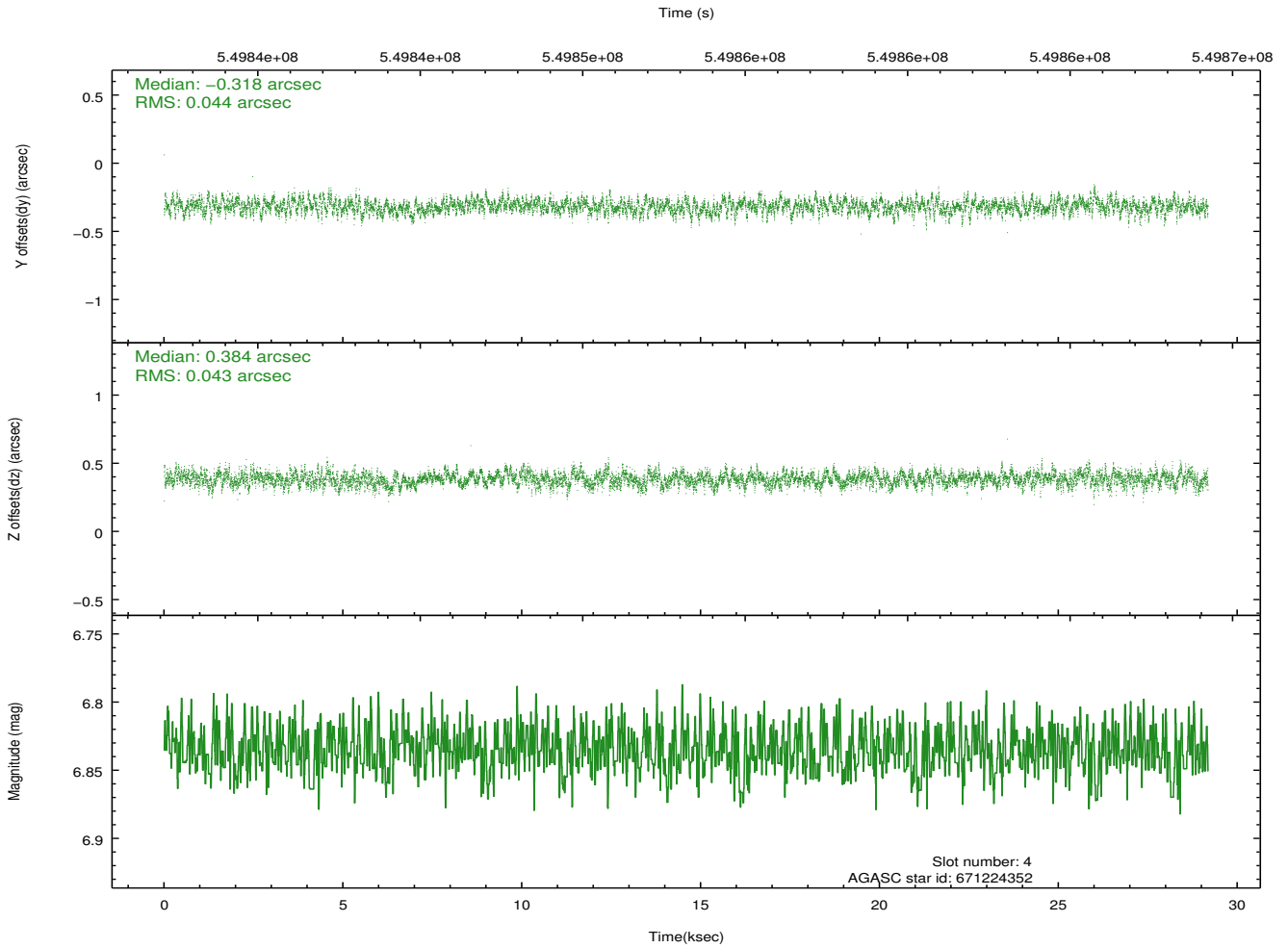
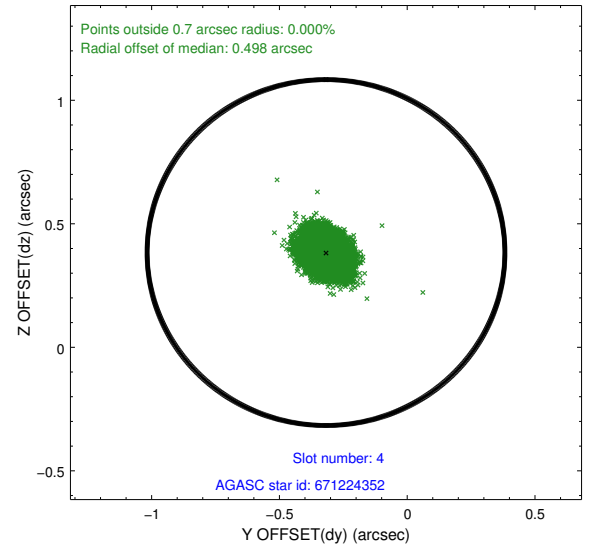
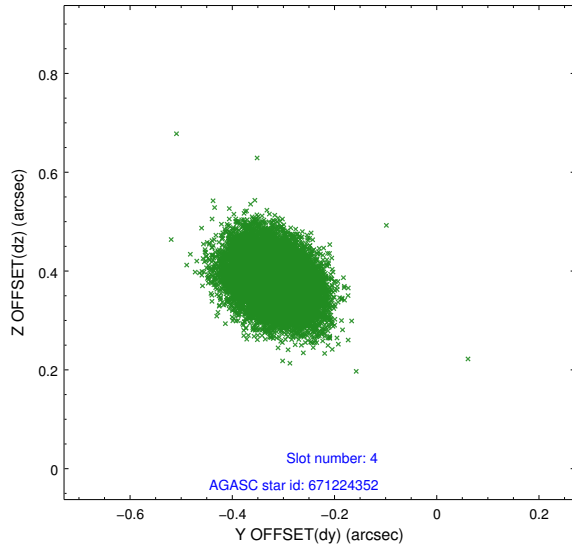
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	7118	-0.122	-0.081	0.012	0.021	0.000000	0.000000	-771.46	-1738.55
1	FID		ACIS-S-4	7.12	7118	0.374	0.080	0.008	0.016	0.000000	0.000000	2142.28	170.01
2	FID		ACIS-S-5	7.15	7118	-0.284	0.009	0.011	0.019	0.000000	0.000000	-1824.36	163.70
3	GUIDE	used	671222088	8.86	14228	-0.005	0.487	0.142	0.228	280.484932	-4.110652	1977.61	-2254.72
4	GUIDE	used	671224352	6.84	14236	-0.318	0.384	0.066	0.108	280.197595	-4.496426	1547.10	-579.32
5	GUIDE	used	671761568	8.38	14230	0.071	-0.086	0.084	0.141	280.250283	-5.657644	-1820.89	1903.52
6	GUIDE	used	671226160	7.01	14236	0.322	-0.539	0.103	0.162	279.439431	-4.806794	2388.88	2238.21
7	GUIDE	used	671763744	7.52	14233	-0.070	-0.258	0.100	0.162	280.132895	-5.707615	-1696.28	2343.62

2.4 Star Slots

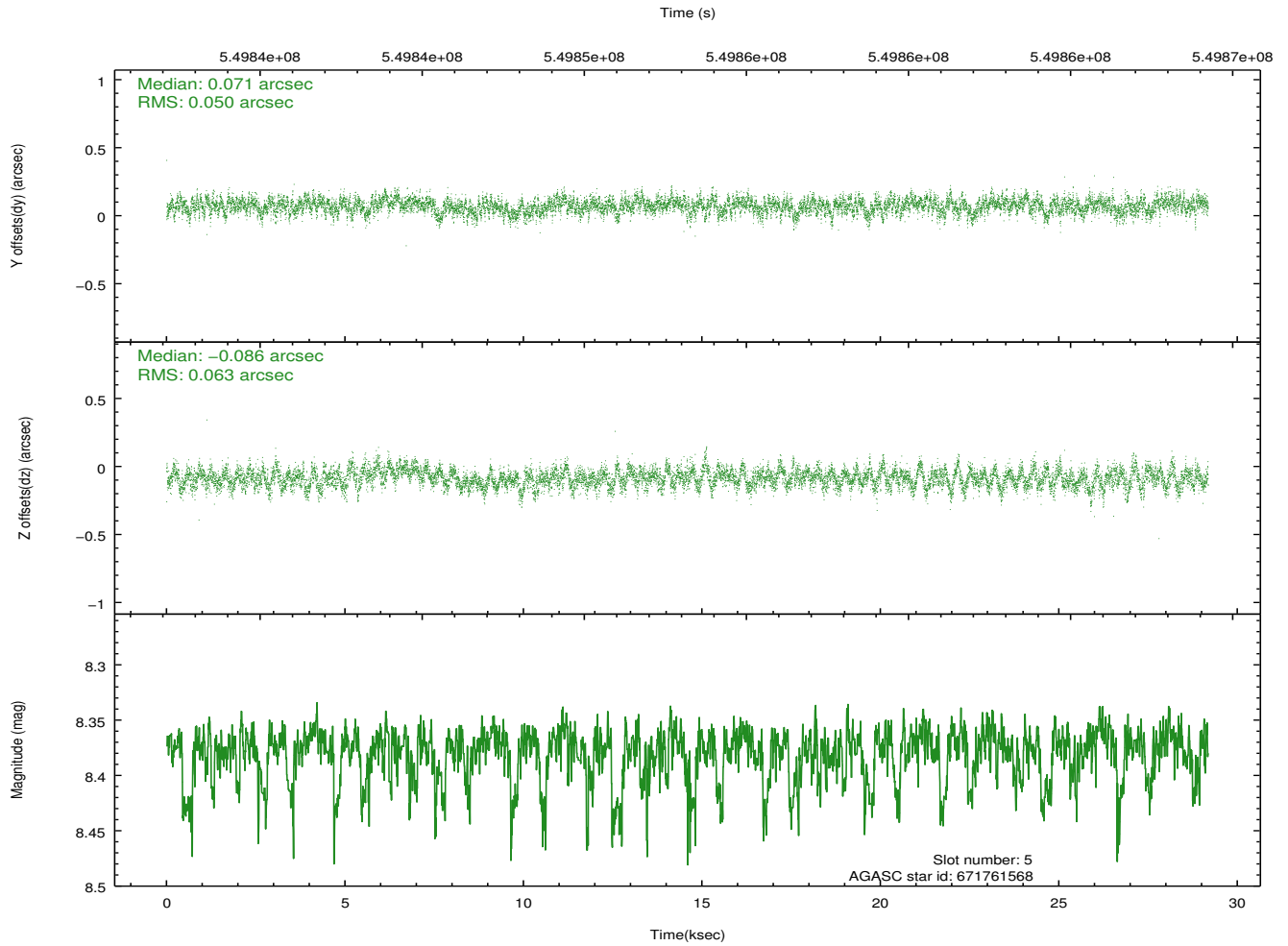
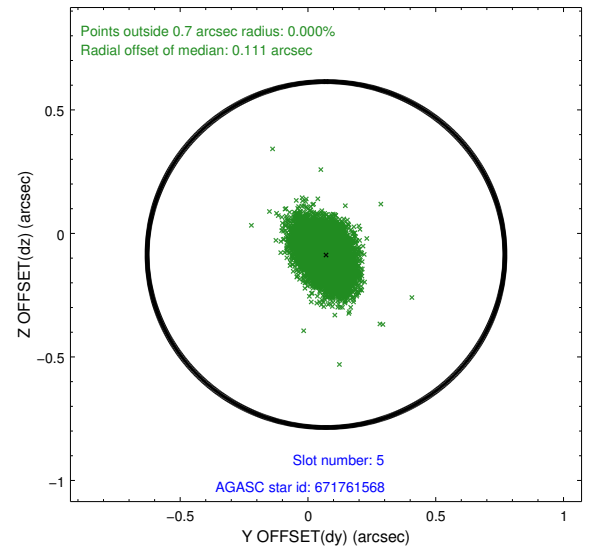
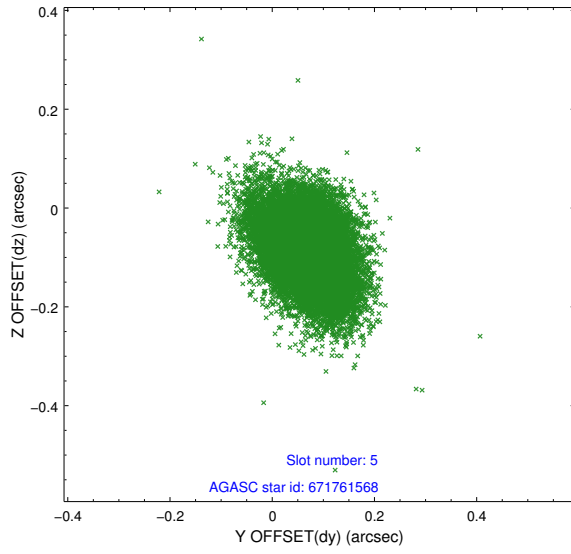
2.4.1 Slot 3



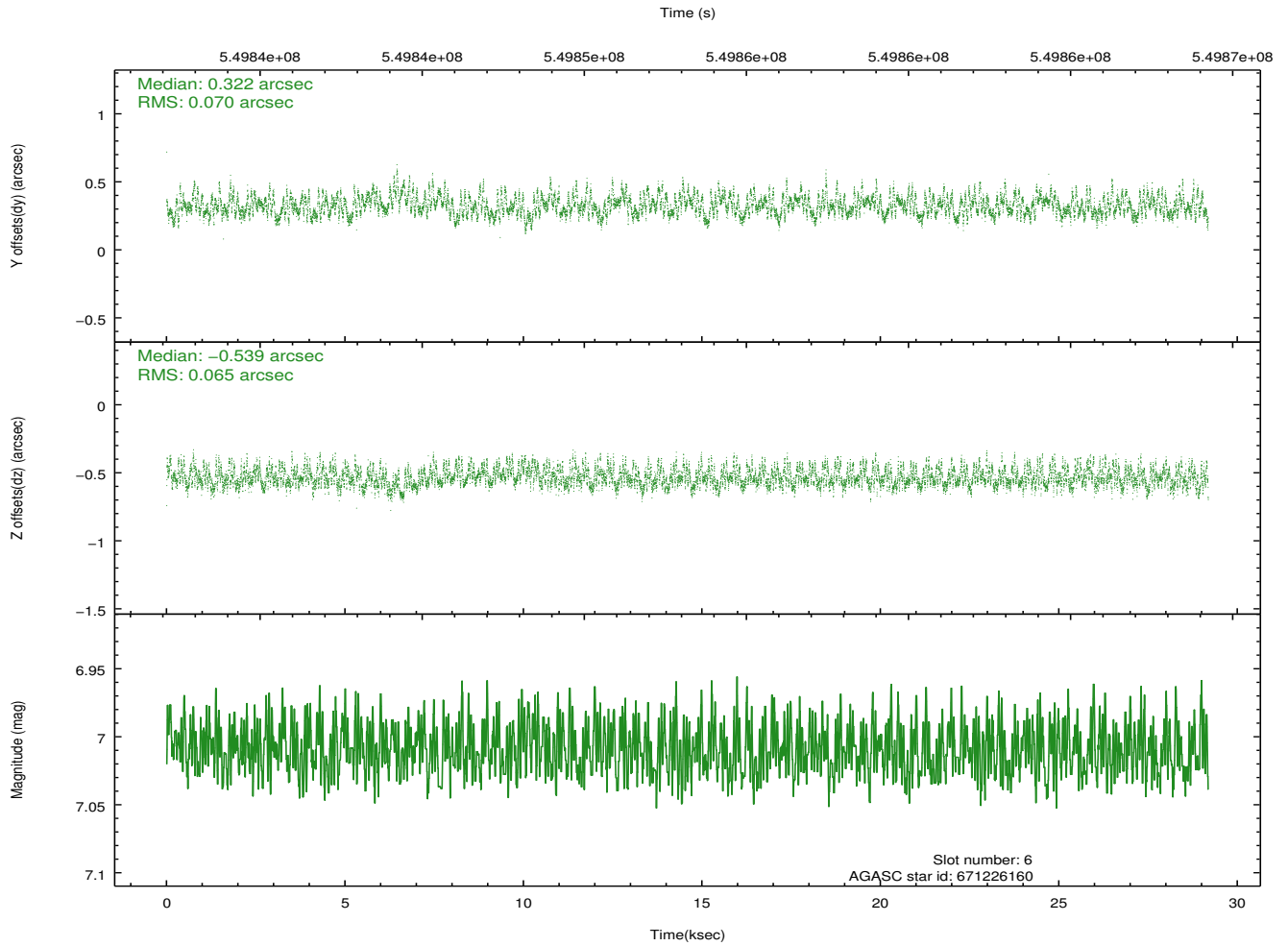
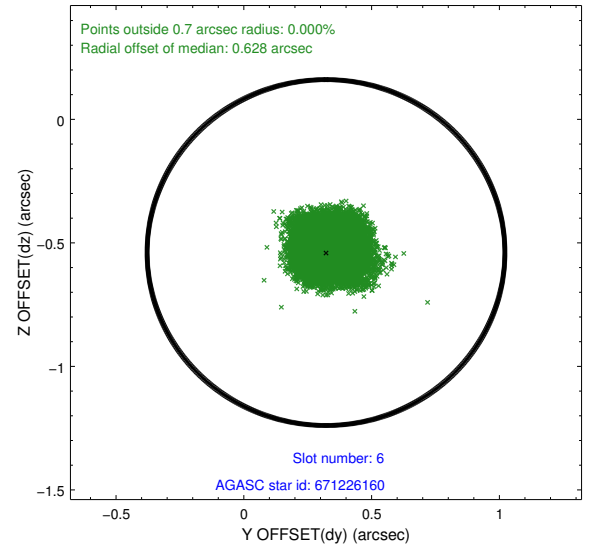
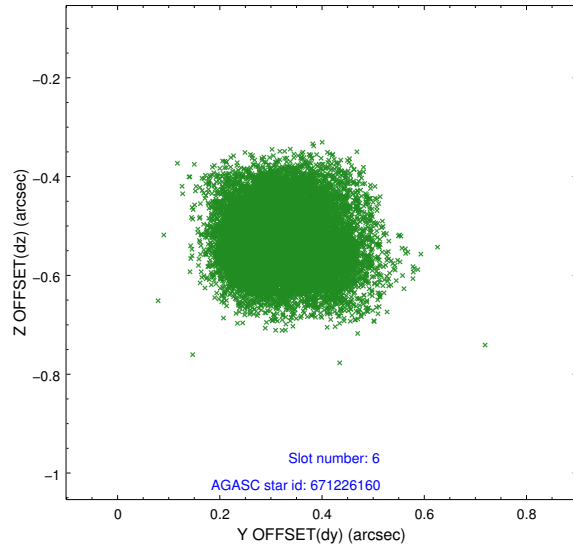
2.4.2 Slot 4



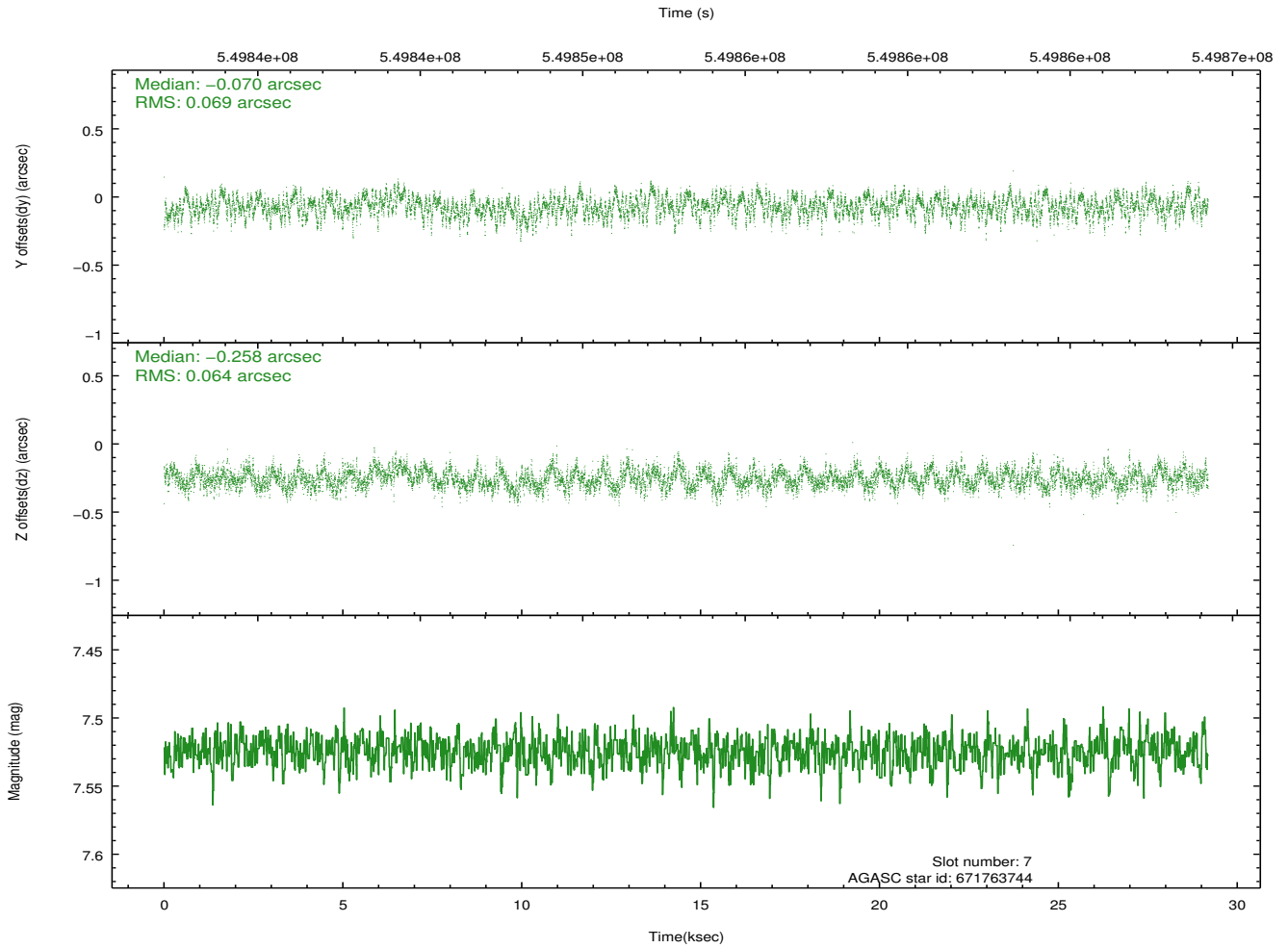
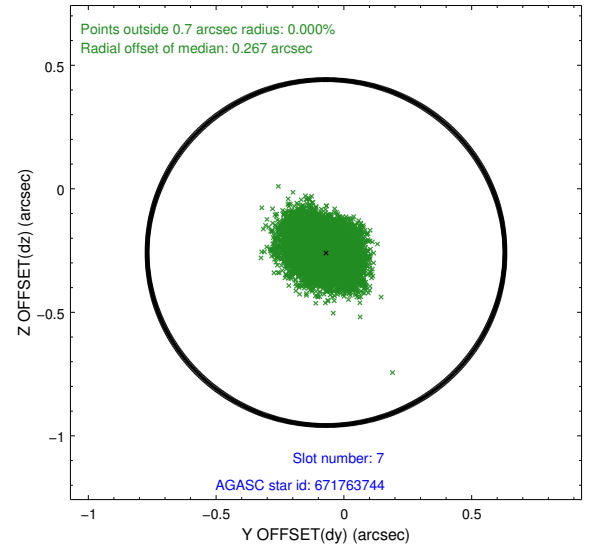
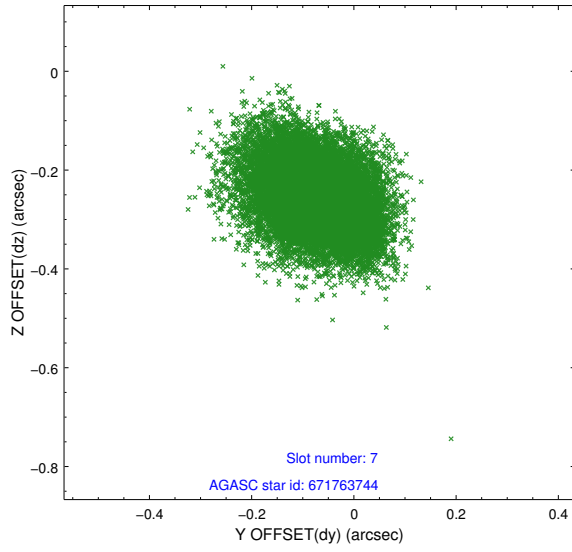
2.4.3 Slot 5



2.4.4 Slot 6

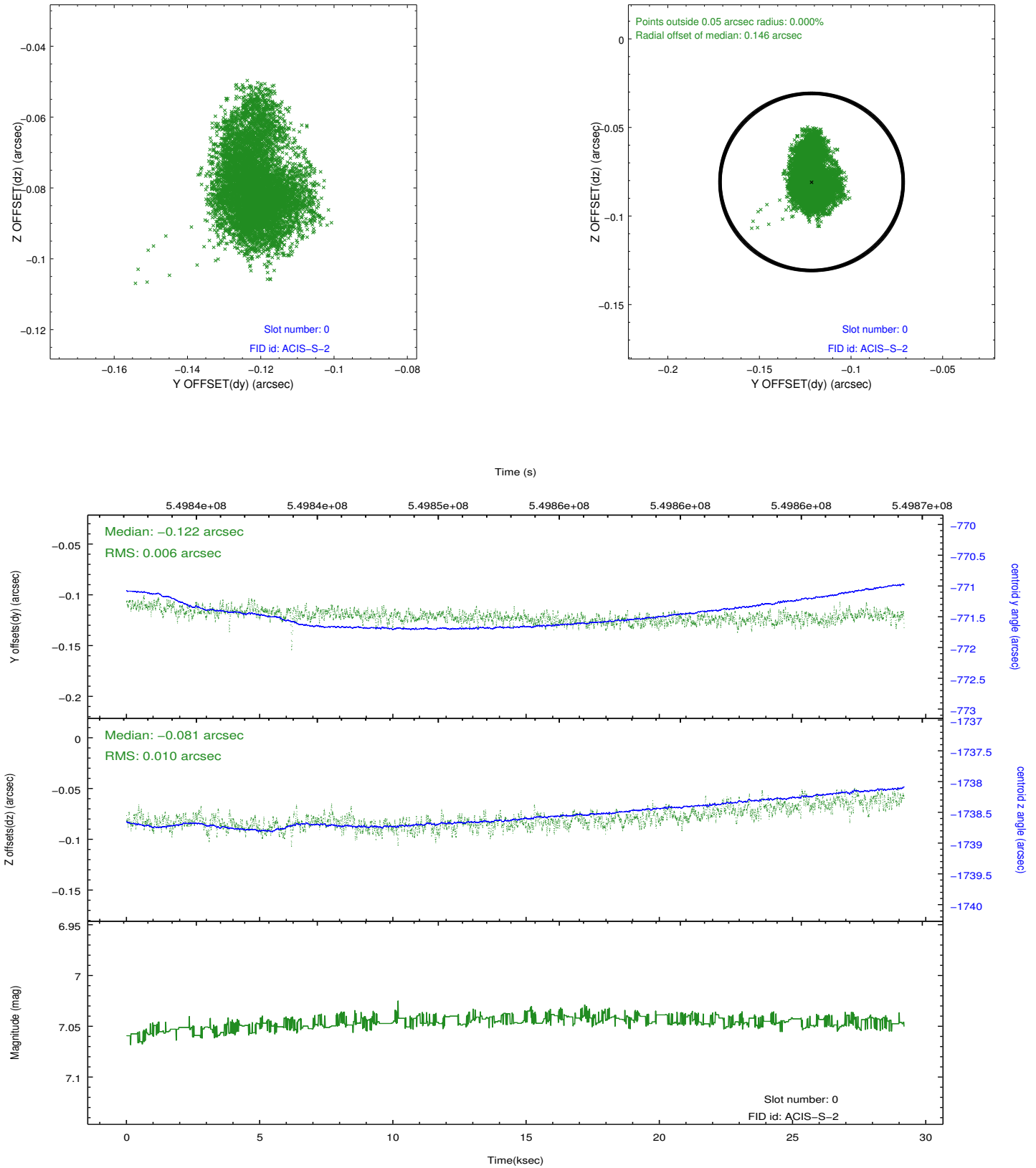


2.4.5 Slot 7

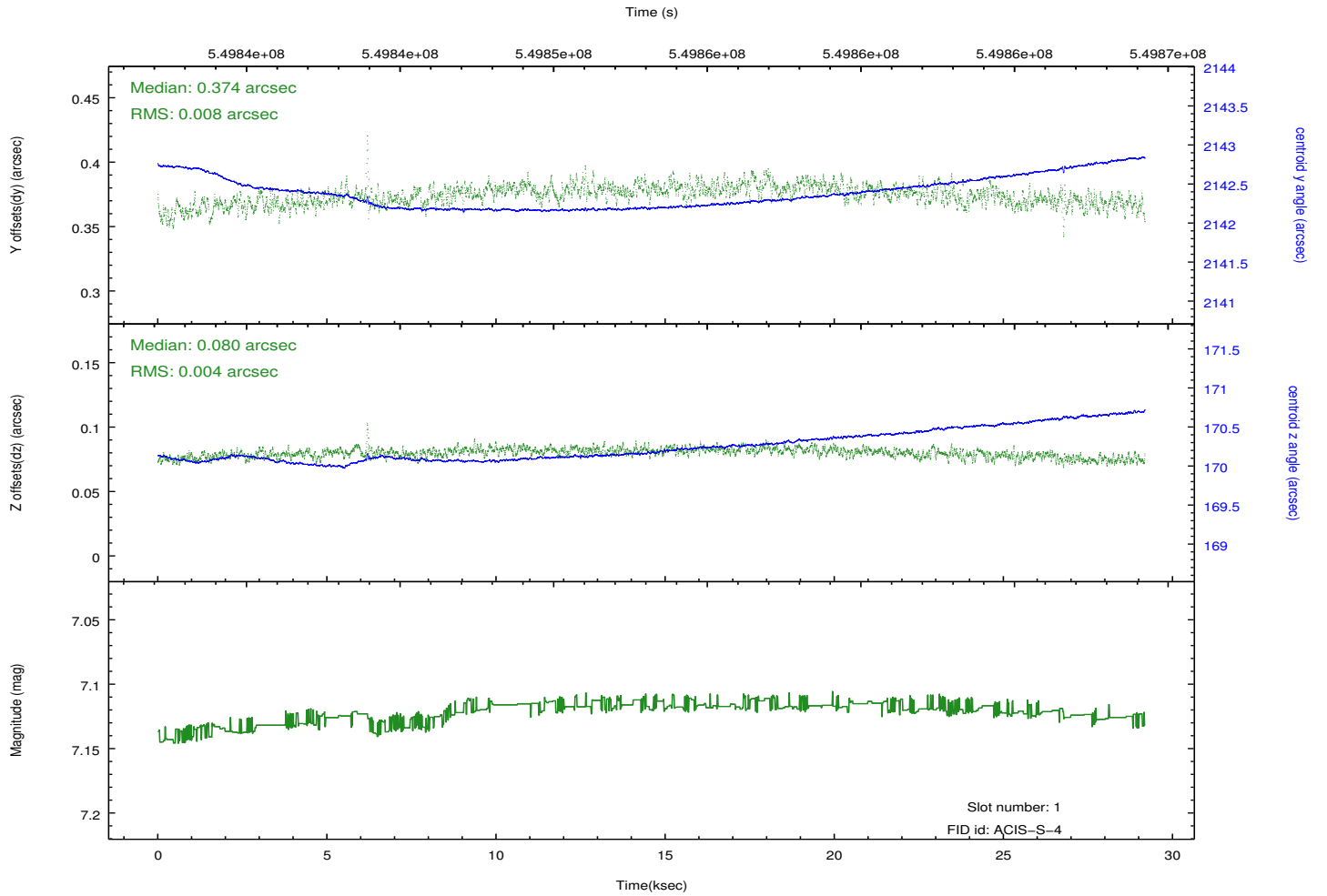
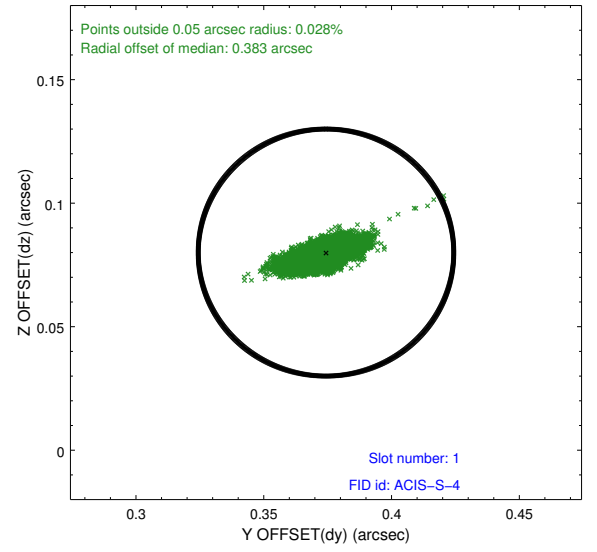
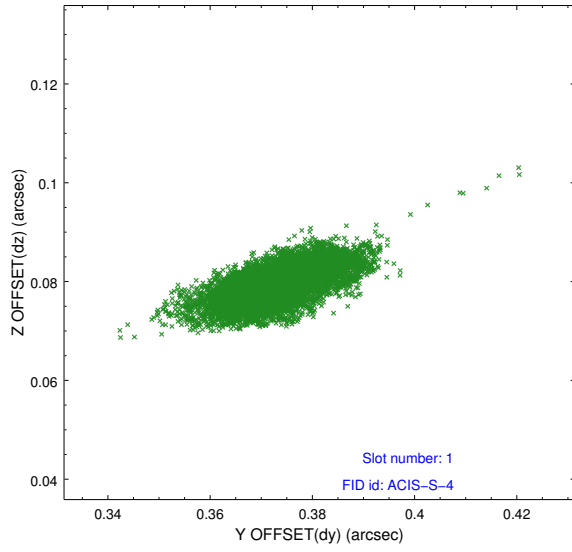


2.5 FID Slots

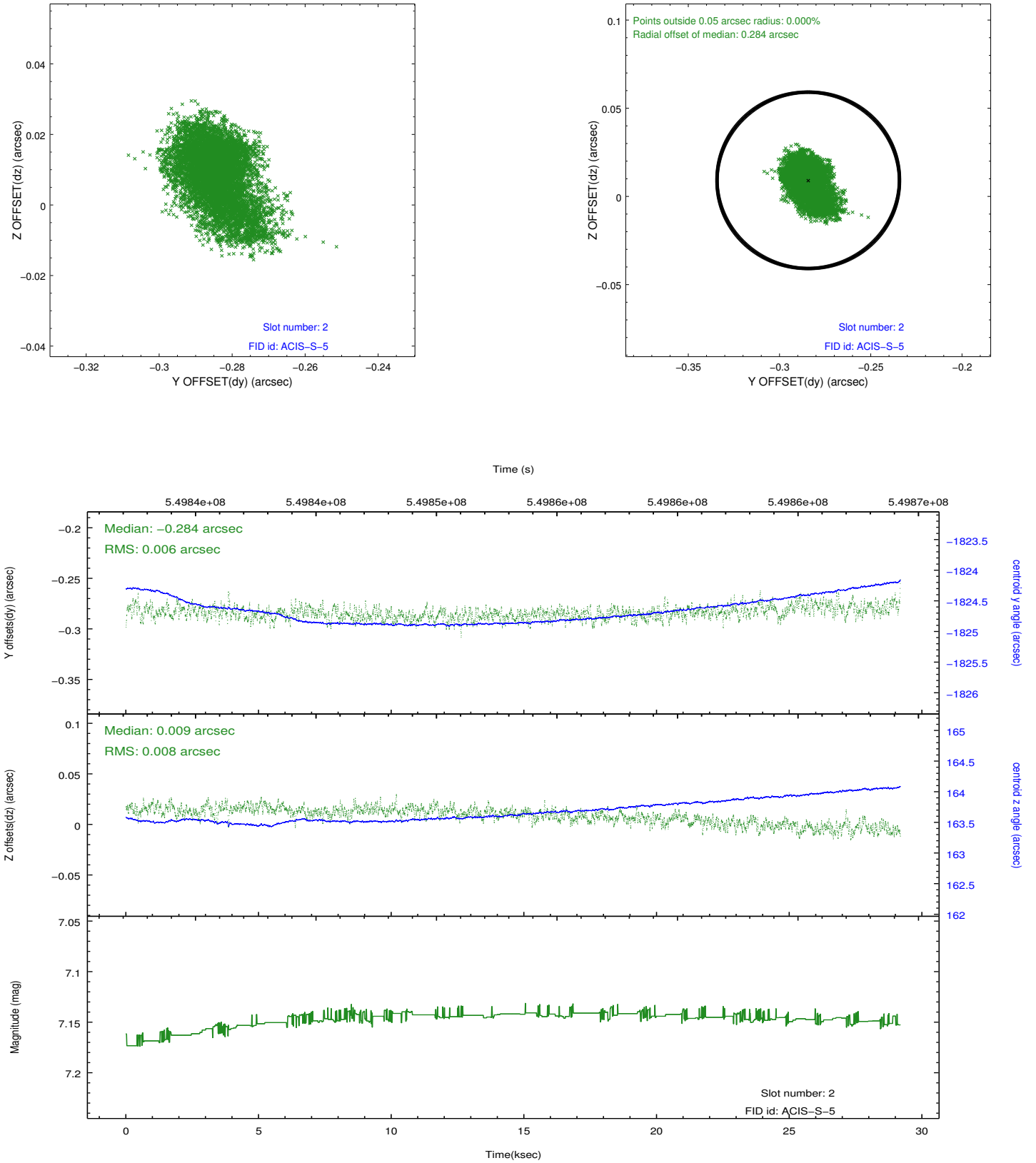
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.064193811655

A.2 Comments