

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 318 - L2 Version 4
Chandra X-Ray Center

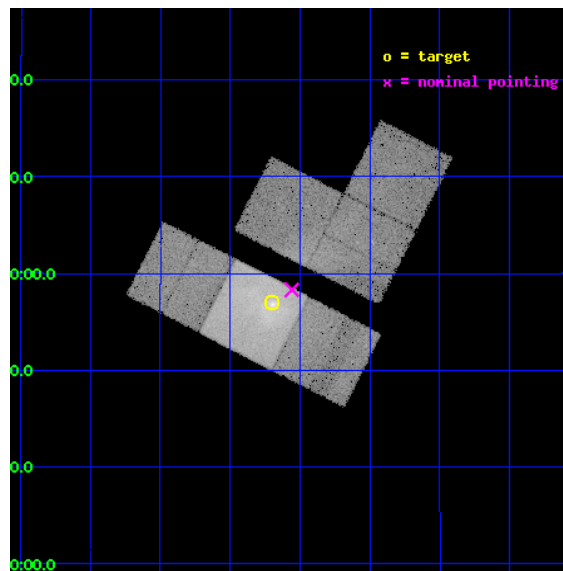
L2 Processing Date : Aug 25 2012

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1 Front

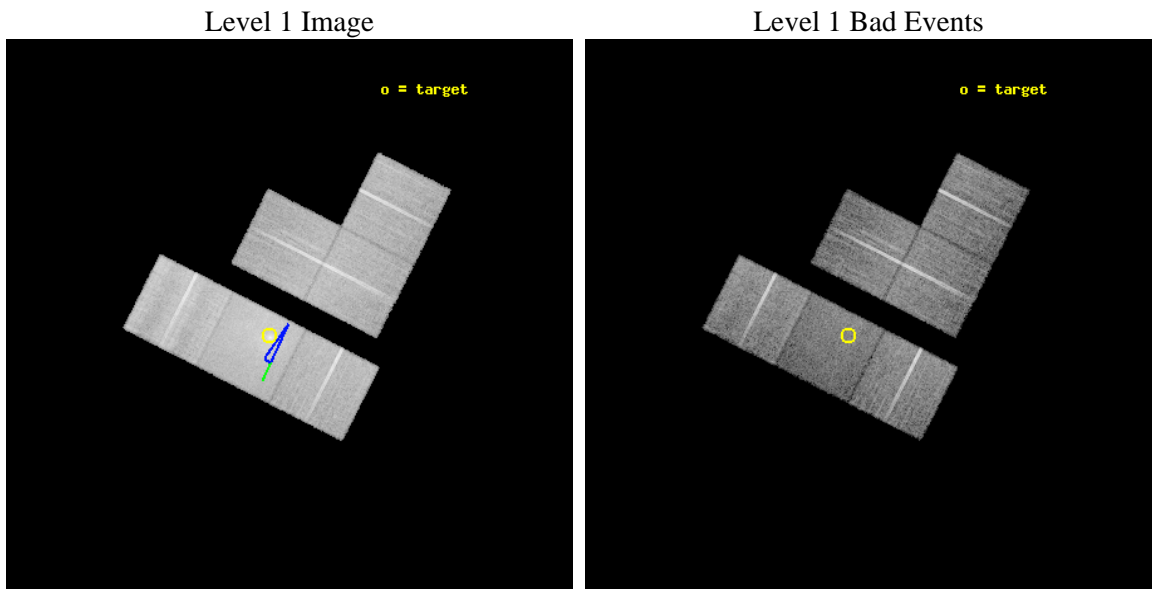
seq_num	600078	Sequence number
obs_id	318	Observation id
title	EARLY TYPE GALAXIES	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC 4406	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	186.55	Observer's specified target RA [deg]
dec_targ	12.95	Observer's specified target Dec [deg]
ra_nom	186.51448848872	Nominal RA [deg]
dec_nom	12.971894702721	Nominal Dec [deg]
roll_nom	206.97762817782	Nominal Roll [deg]
revision	4	Processing version of data
ontime	14816.000013784	Sum of GTIs [s]
livetime	14628.390900485	Livetime [s]
ontime0	14816.000013784	Sum of GTIs [s]
ontime2	14816.000013784	Sum of GTIs [s]
ontime3	14816.000013784	Sum of GTIs [s]
ontime6	14816.000013784	Sum of GTIs [s]
ontime7	14816.000013784	Sum of GTIs [s]
ontime8	14816.000013784	Sum of GTIs [s]
l2events	213086	Number of level 2 events



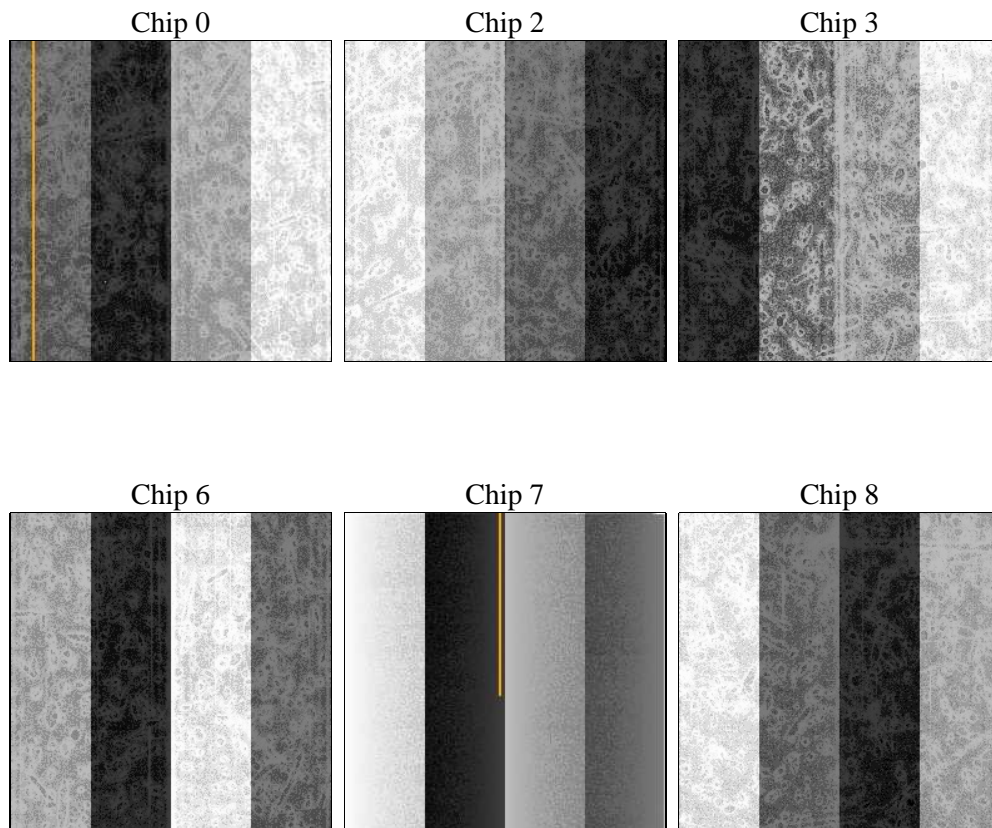
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15766.507000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14816.000013784	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime0	14816.000013784	Sum of GTIs [s]
date	2012-08-25T15:08:28	Date and time of file creation	ontime2	14816.000013784	Sum of GTIs [s]
revision	4	Processing version of data	ontime3	14816.000013784	Sum of GTIs [s]
			ontime6	14816.000013784	Sum of GTIs [s]
			ontime7	14816.000013784	Sum of GTIs [s]
			ontime8	14816.000013784	Sum of GTIs [s]
			l1events	819564	Number of level 1 events

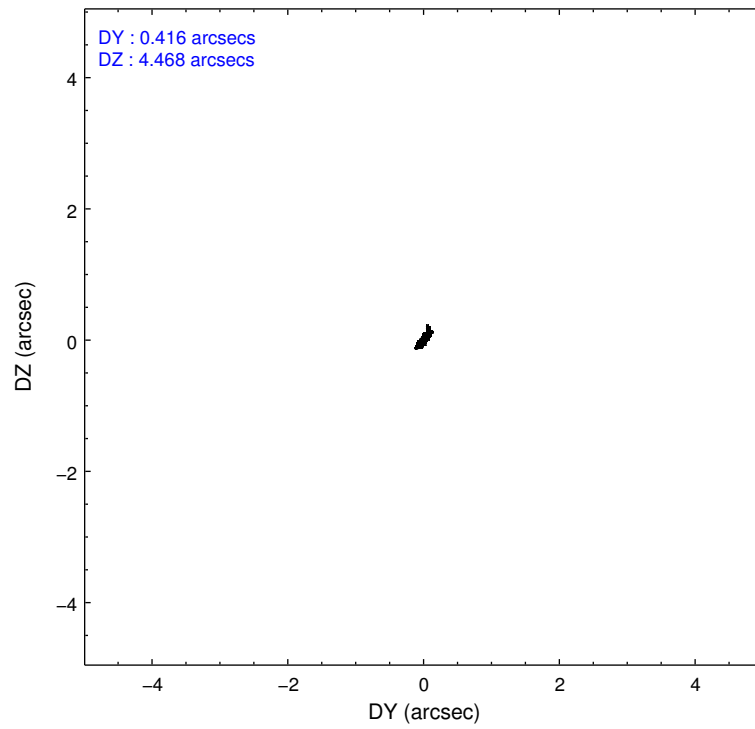
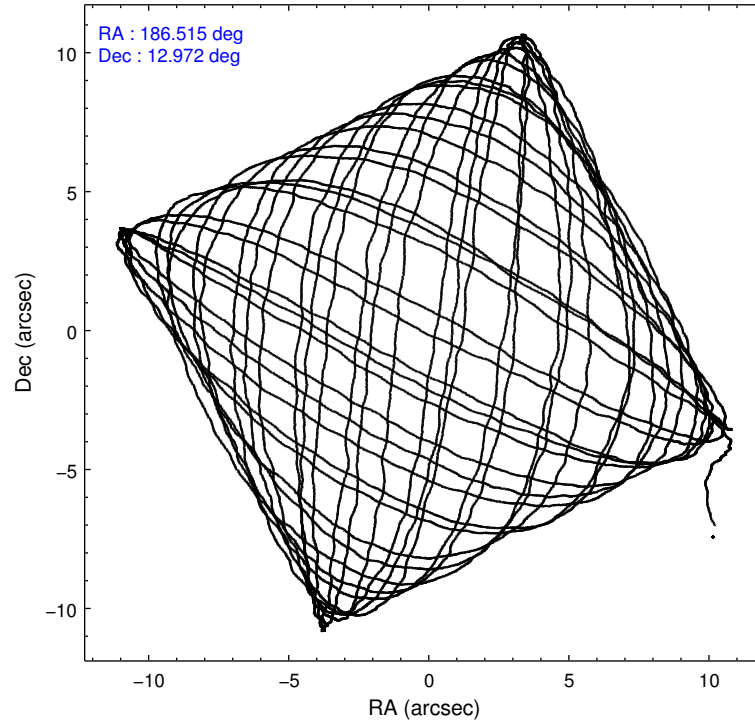
2.1.4 Events

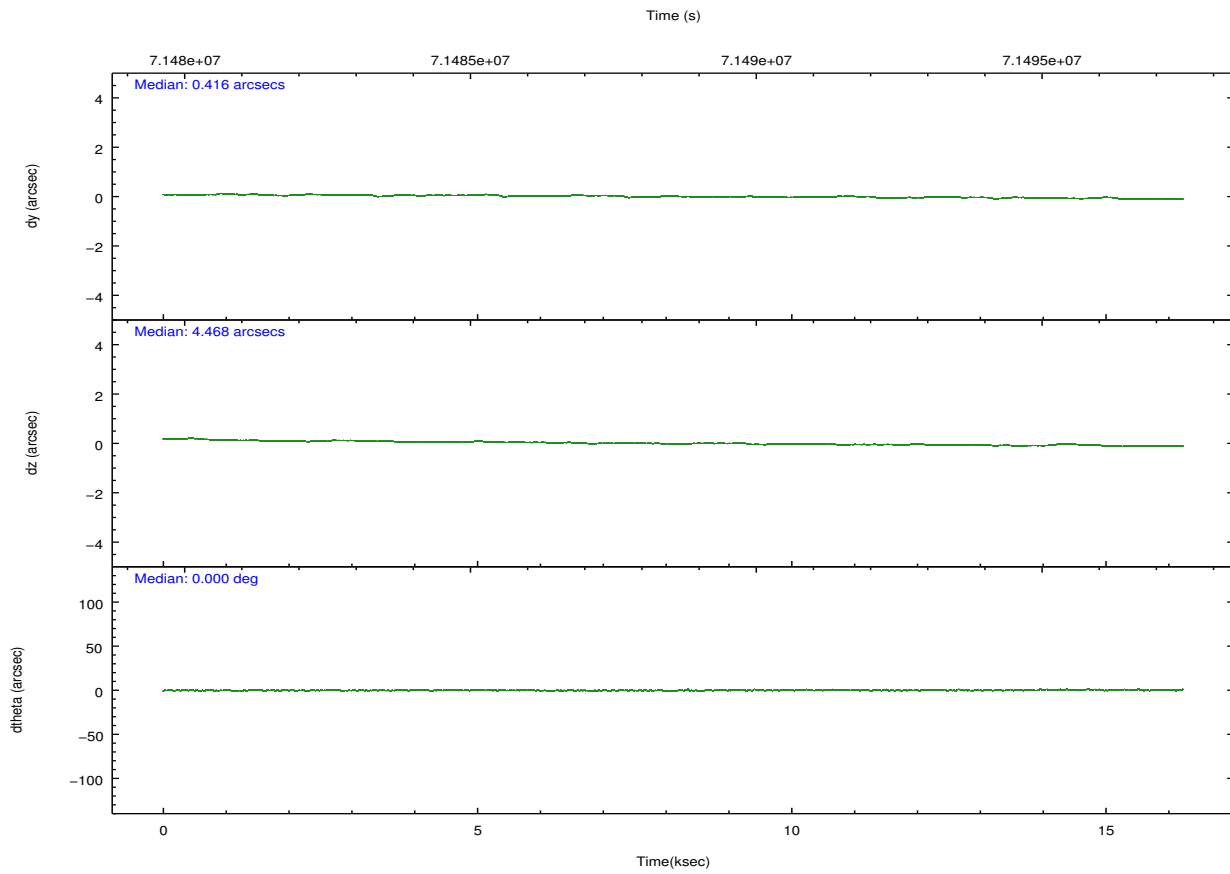
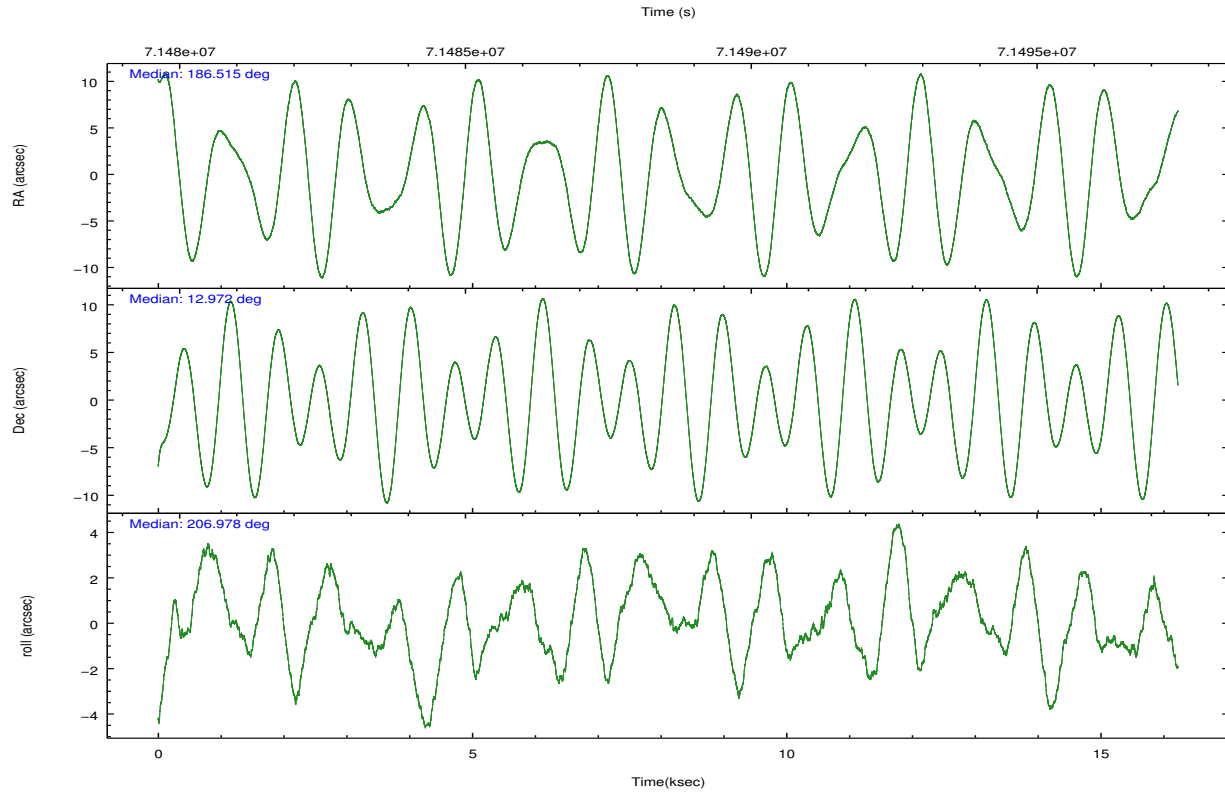
	ccd 0	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 0	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	110817	123265	114974	125618	173476	171414	grade 0 events	10865	16118	12310	15572	22270	27335
rejected events	89548	96795	92313	99148	68026	106764		9%	13%	10%	12%	12%	15%
rejected %	80%	78%	80%	78%	39%	62%	grade 1 events	79	81	69	112	131	225
								0%	0%	0%	0%	0%	0%
							grade 2 events	4779	4707	4880	5104	23818	10020
								4%	3%	4%	4%	13%	5%
							grade 3 events	1250	1303	1266	1352	10658	8696
								1%	1%	1%	1%	6%	5%
							grade 4 events	1256	1439	1255	1365	10752	7819
								1%	1%	1%	1%	6%	4%
							grade 5 events	3372	3032	3385	3774	11562	4957
								3%	2%	2%	3%	6%	2%
							grade 6 events	3123	2915	2961	3088	37997	10793
								2%	2%	2%	2%	21%	6%
							grade 7 events	86093	93670	88848	95251	56288	101569
								77%	75%	77%	75%	32%	59%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-023678	ACIS-023678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	186.529754	186.5144884887219	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.994937	12.97189470272126	Alternating exposures requested	N	N
[deg] Pointing Roll	206.817564	206.9776281778168	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	210.000000	210.000000			
[deg] Roll tolerance	5.000000	5.000000			
Roll constraint allows 180D rotation	N	N			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-201.898523	-201.9070616611727			
[mm] SIM translation stage offset	11.766	11.77453907816488			
[s] Observation start time (MET)	71480894.184000	71480248.545803			
Observation start date	2000-04-07T07:47:10	2000-04-07T07:37:28			
[s] Observation end time (MET)	71496661.184000	71496970.396415			
Observation end date	2000-04-07T12:09:57	2000-04-07T12:16:10			
Read mode	TIMED	TIMED			

2.3 Aspect



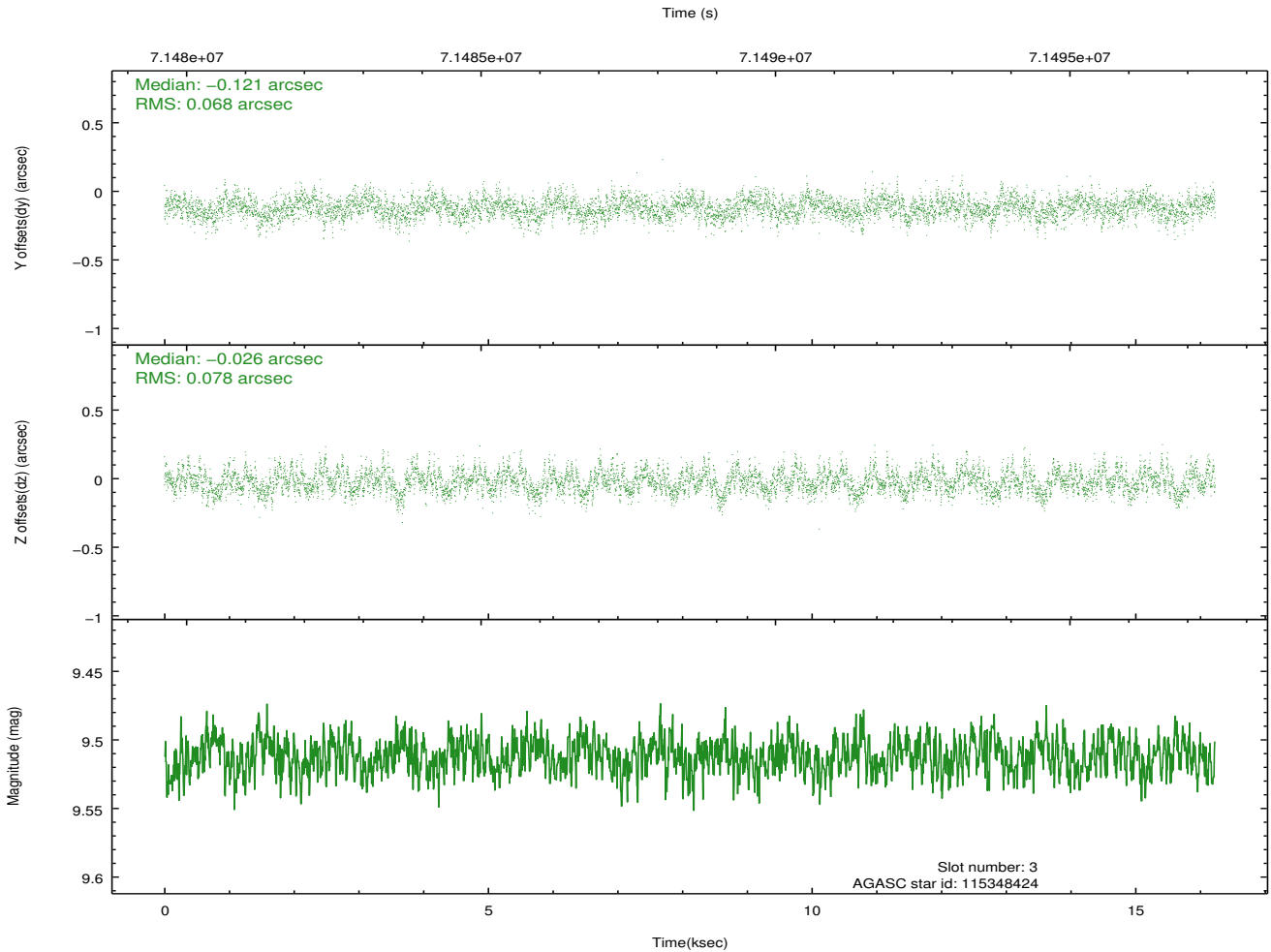
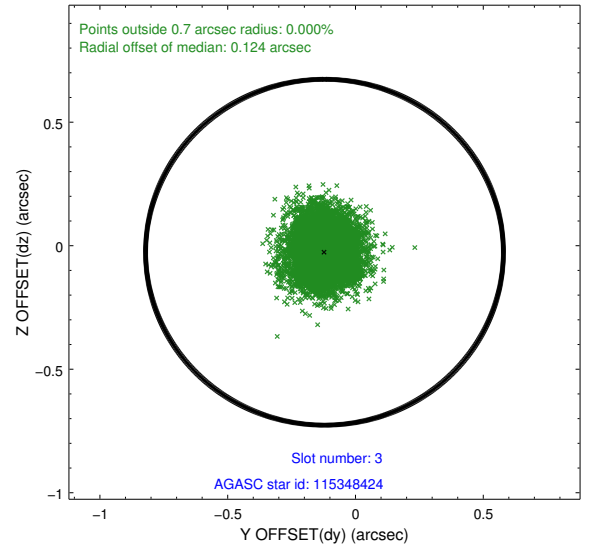
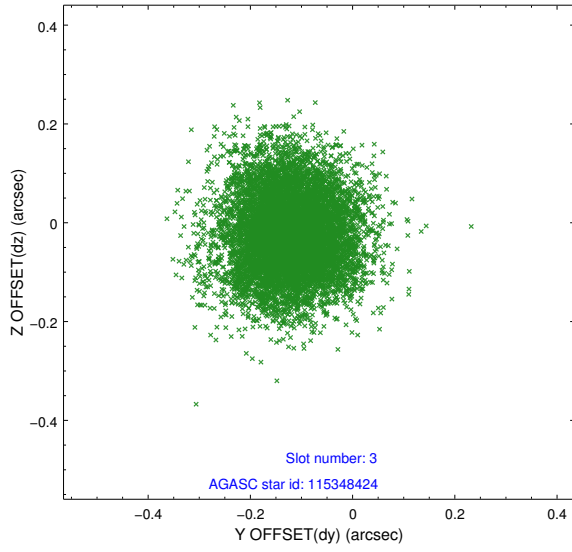


Slot Statistics

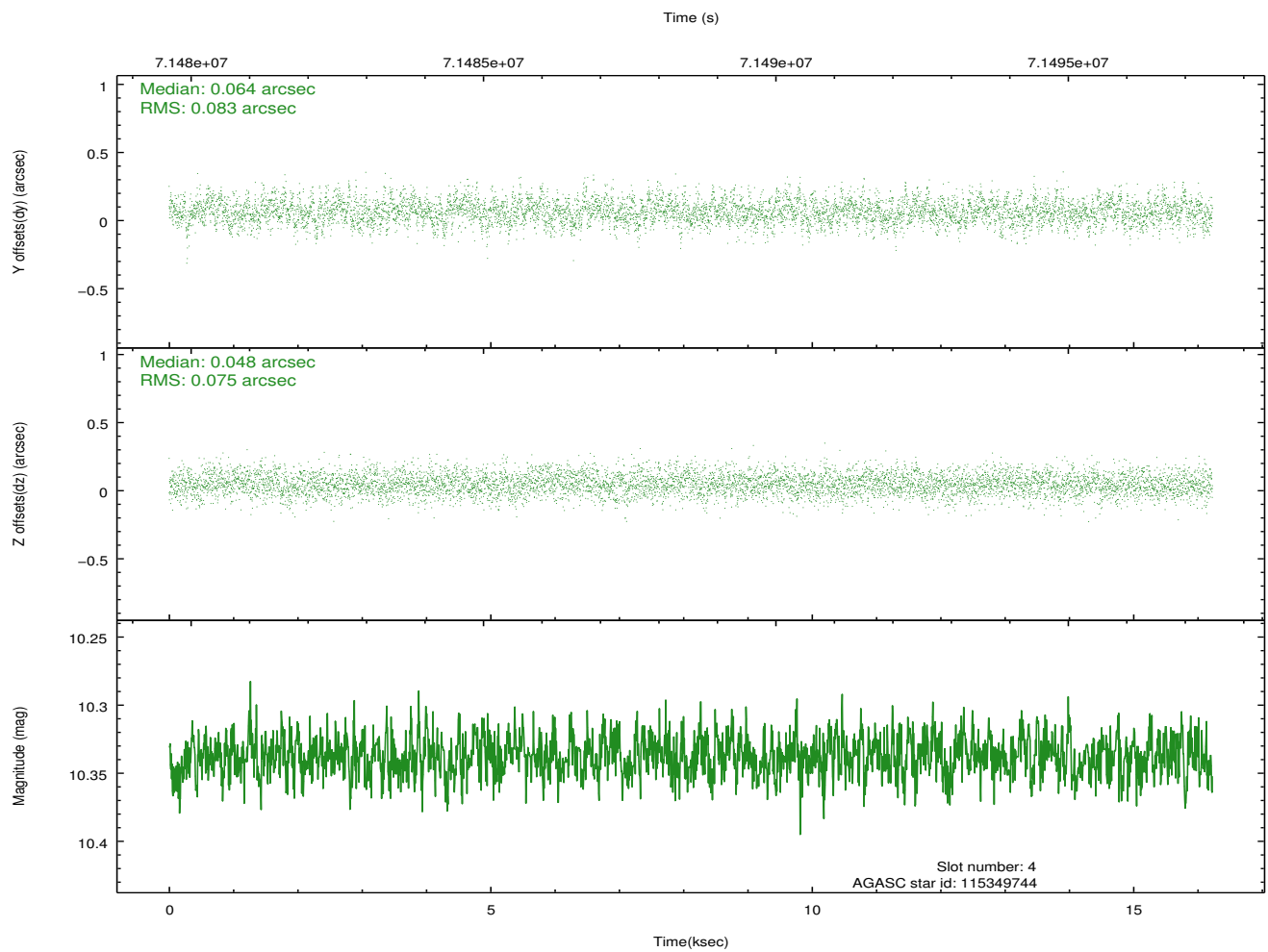
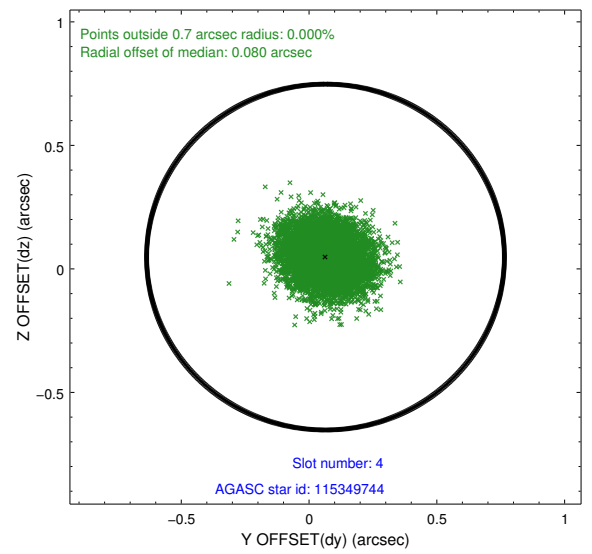
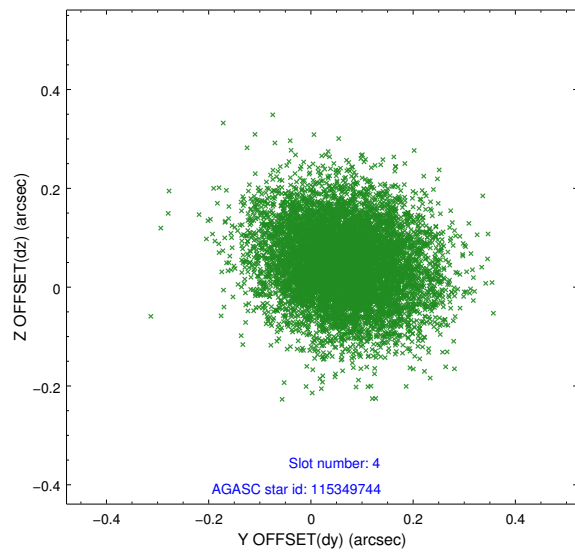
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.15	3958	0.066	0.154	0.007	0.011	0.000000	0.000000	-753.73	-1482.56
1	FID	ACIS-S-4	7.24	3958	-0.025	-0.073	0.006	0.010	0.000000	0.000000	2159.48	425.27
2	FID	ACIS-S-5	6.97	3958	-0.073	-0.072	0.007	0.011	0.000000	0.000000	-1806.23	419.55
3	GUIDE	115348424	9.51	7912	-0.121	-0.026	0.110	0.179	187.199498	13.087929	-2246.80	758.17
4	GUIDE	115349744	10.34	7904	0.064	0.048	0.119	0.194	186.878186	12.752529	-697.11	1330.34
5	GUIDE	115215984	9.98	7907	0.057	-0.025	0.112	0.182	186.134733	12.875031	1433.08	-240.85
6	BAD	115215968	10.24	7906	-2548.859	133.169	0.131	0.212	186.327588	13.159527	-2182.04	-715.47
7	BAD	115347400	10.19	7909	2548.783	-133.146	0.135	0.221	186.994146	13.445598	366.39	-848.73

2.4 Star Slots

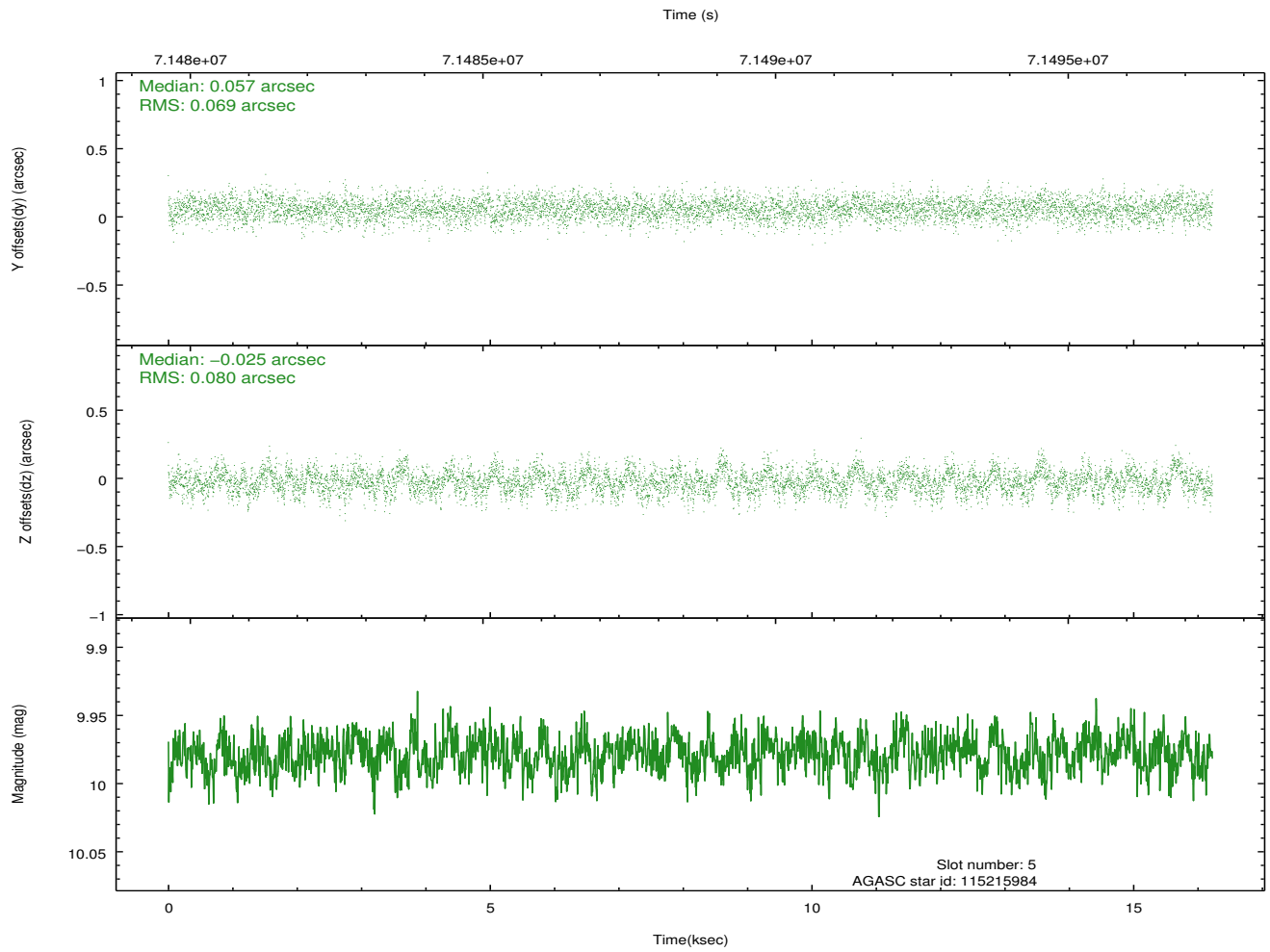
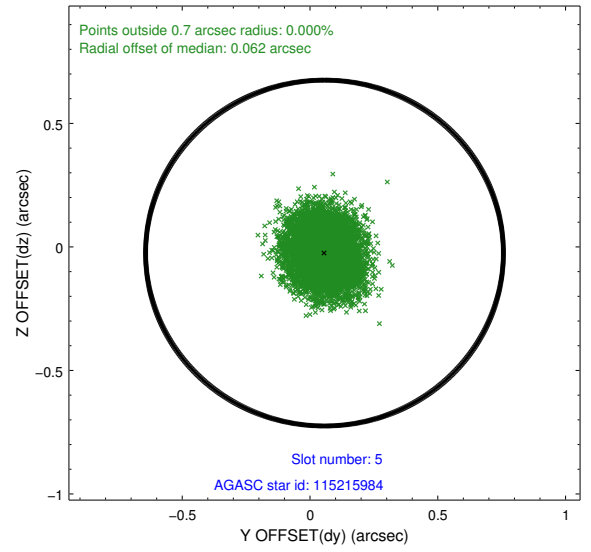
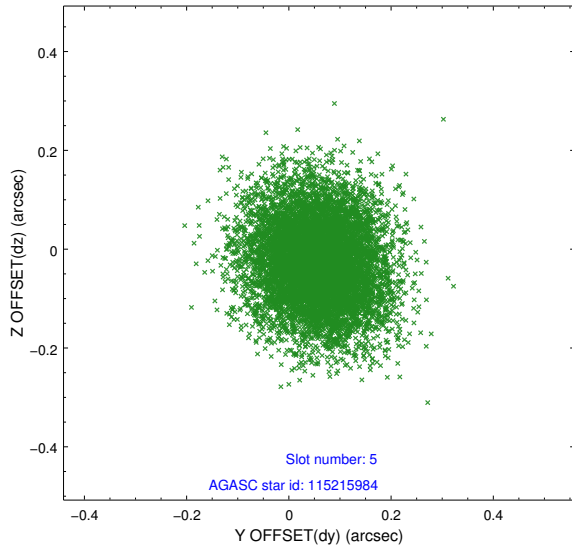
2.4.1 Slot 3



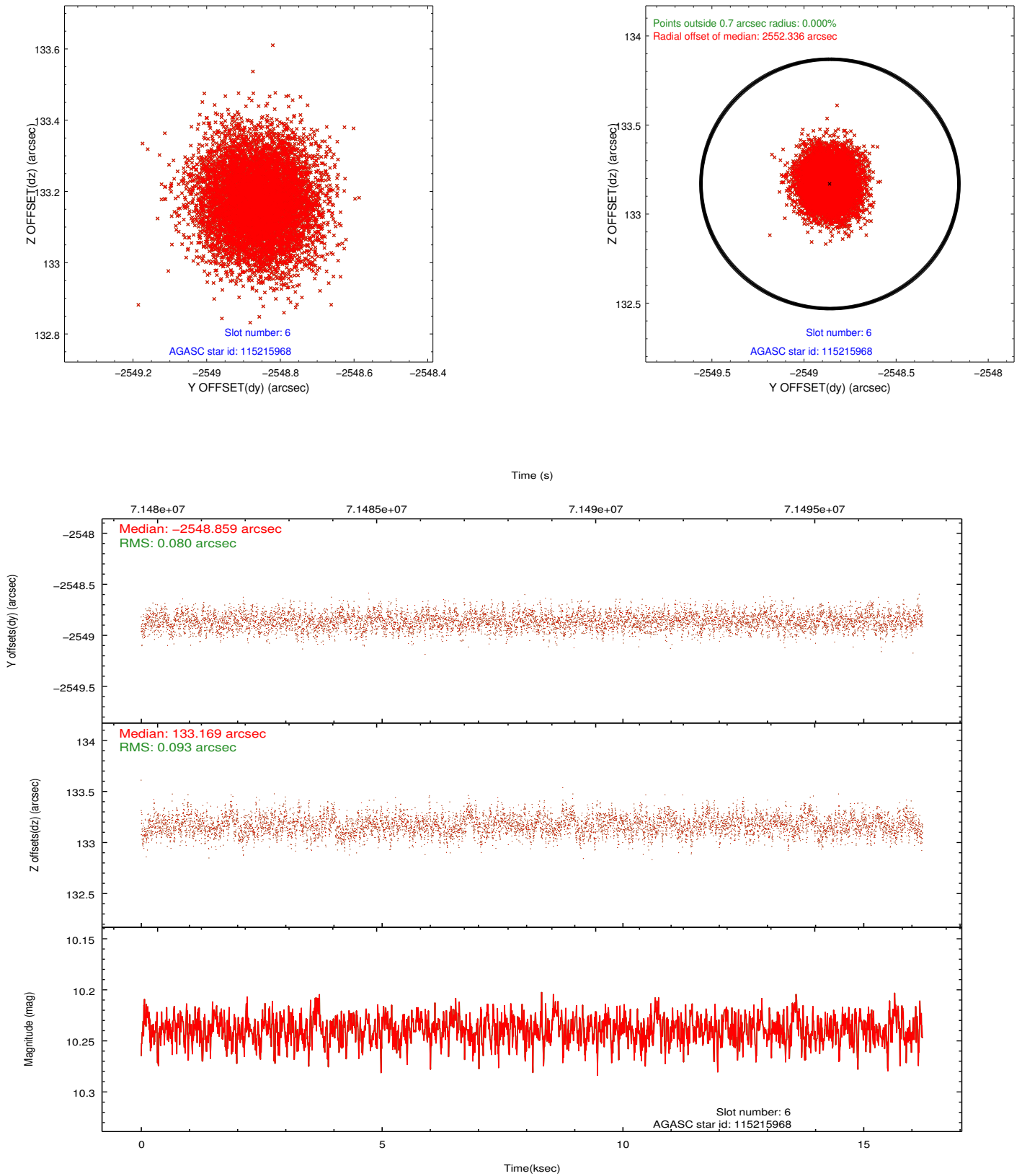
2.4.2 Slot 4



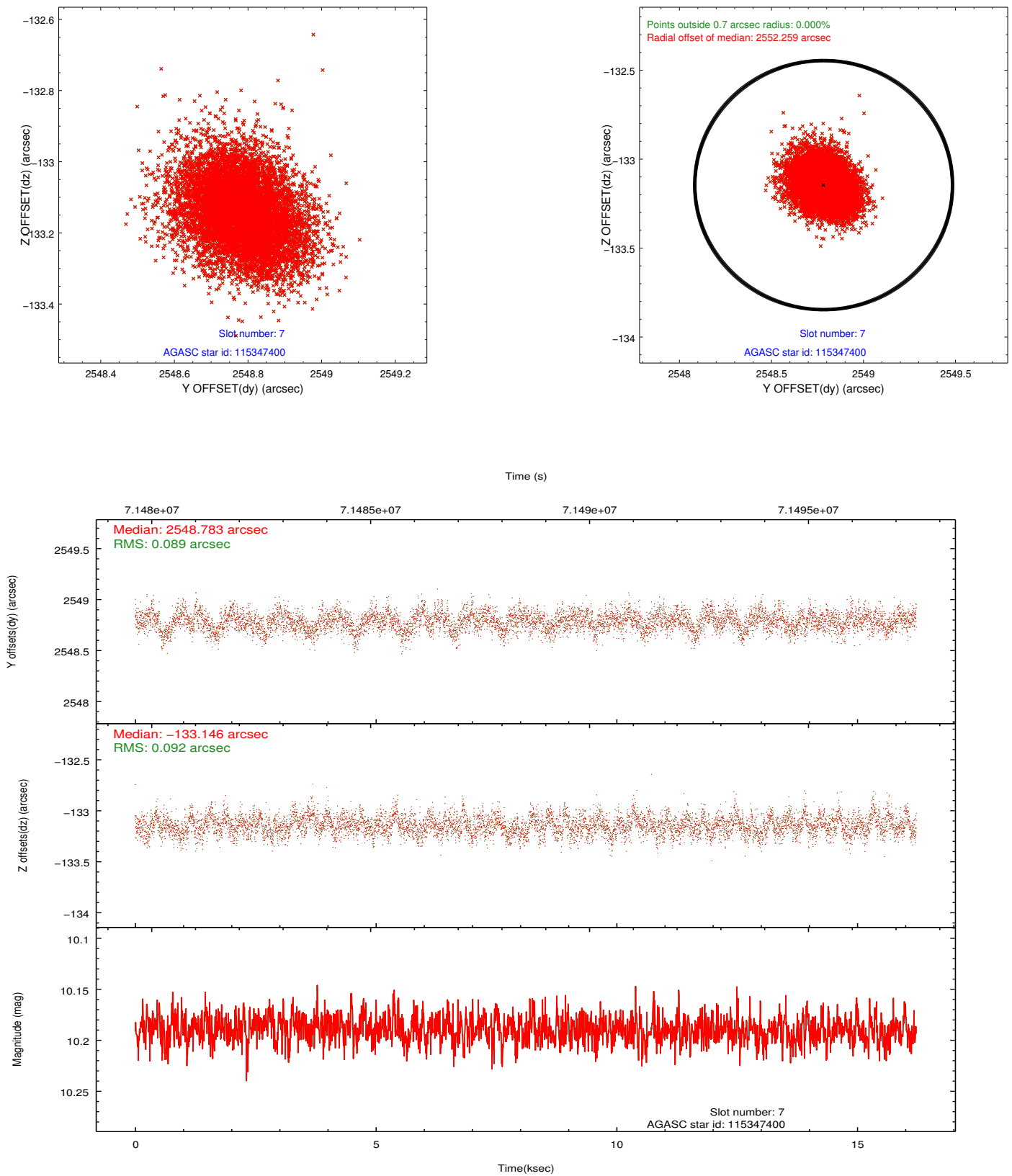
2.4.3 Slot 5



2.4.4 Slot 6

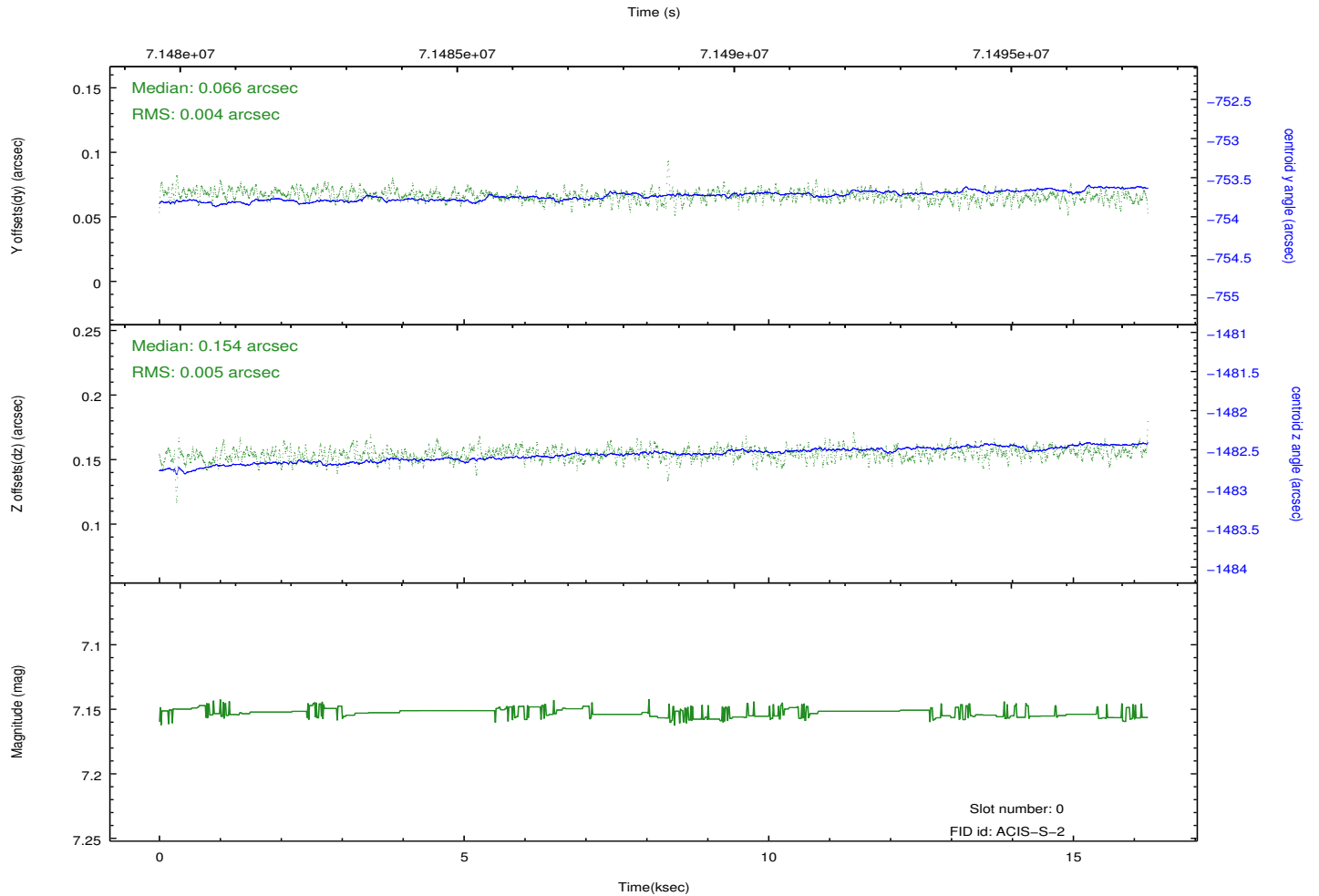
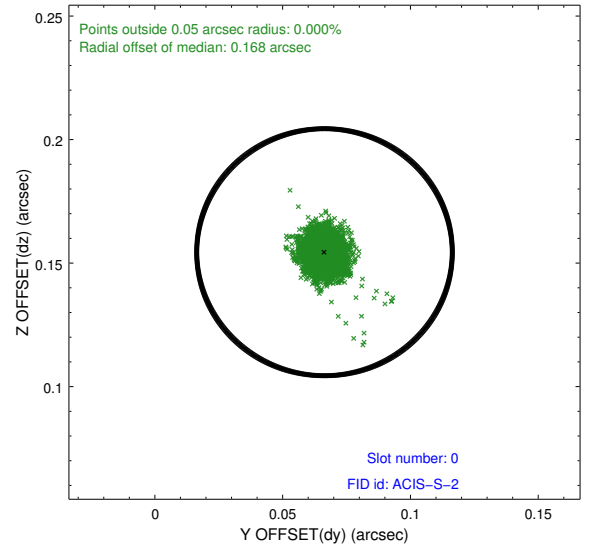
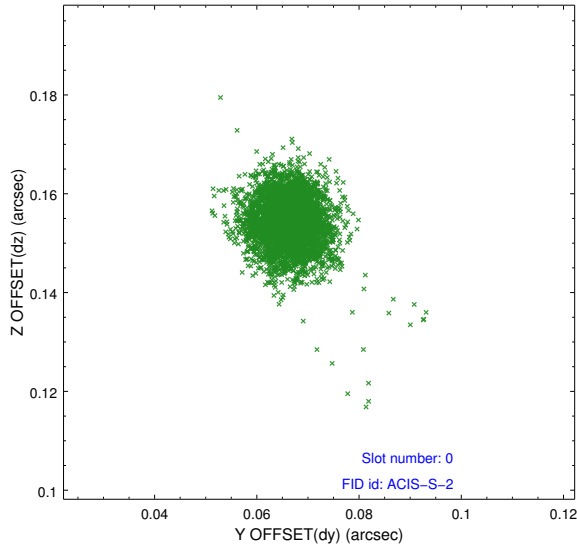


2.4.5 Slot 7

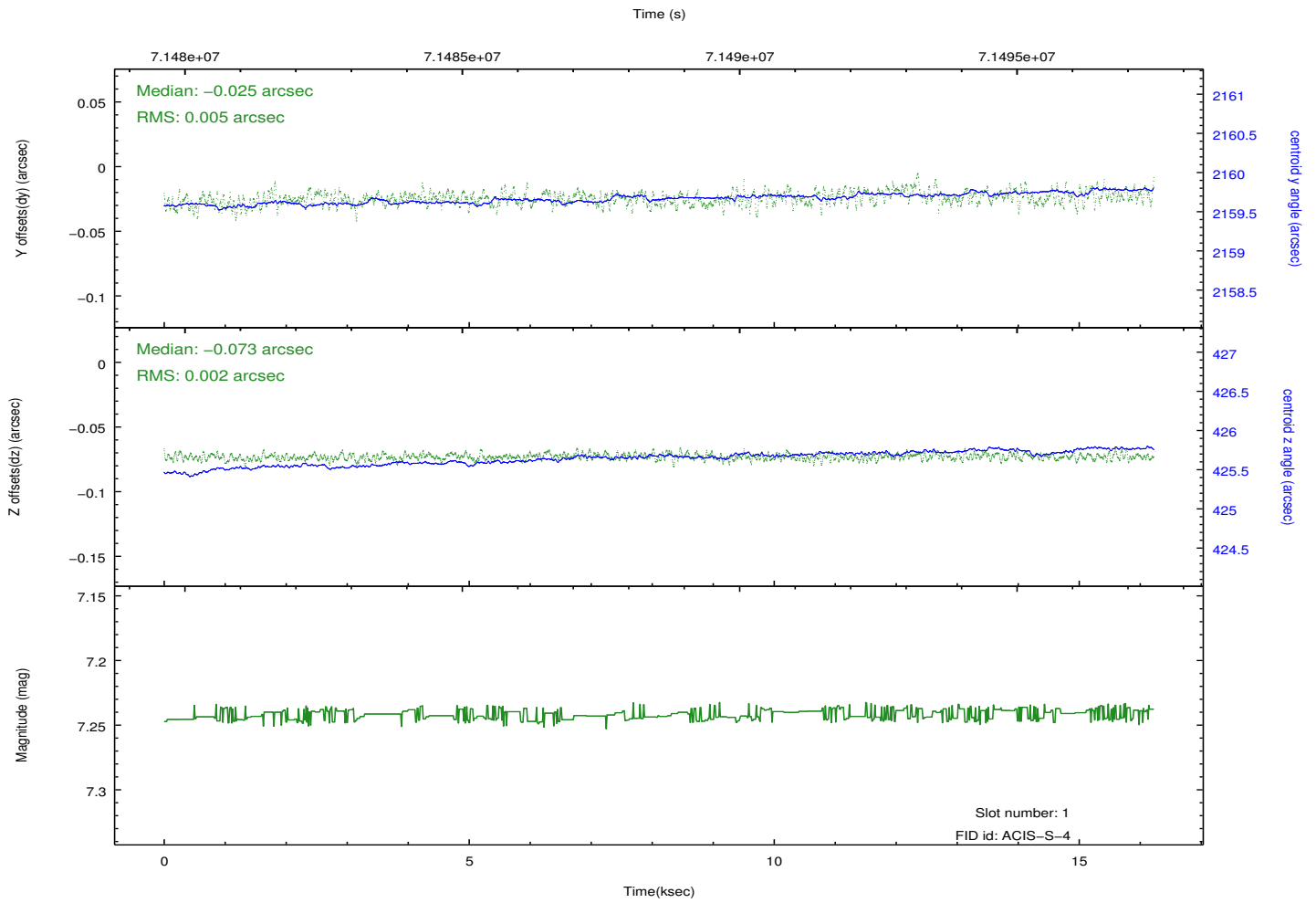
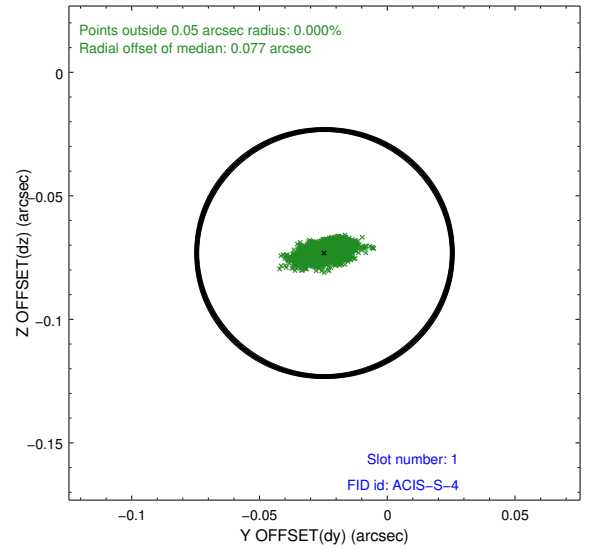
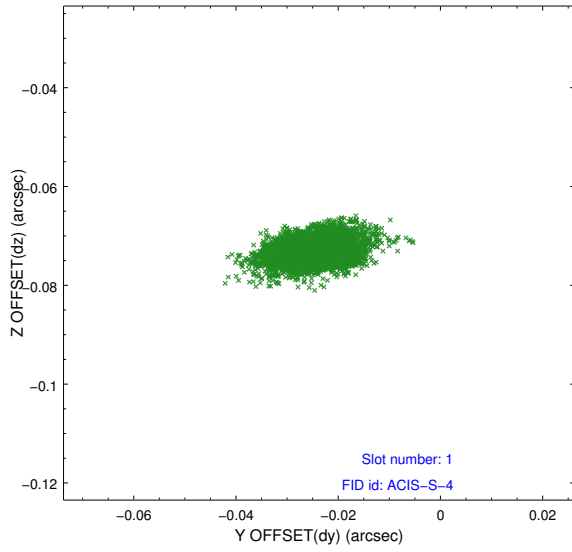


2.5 FID Slots

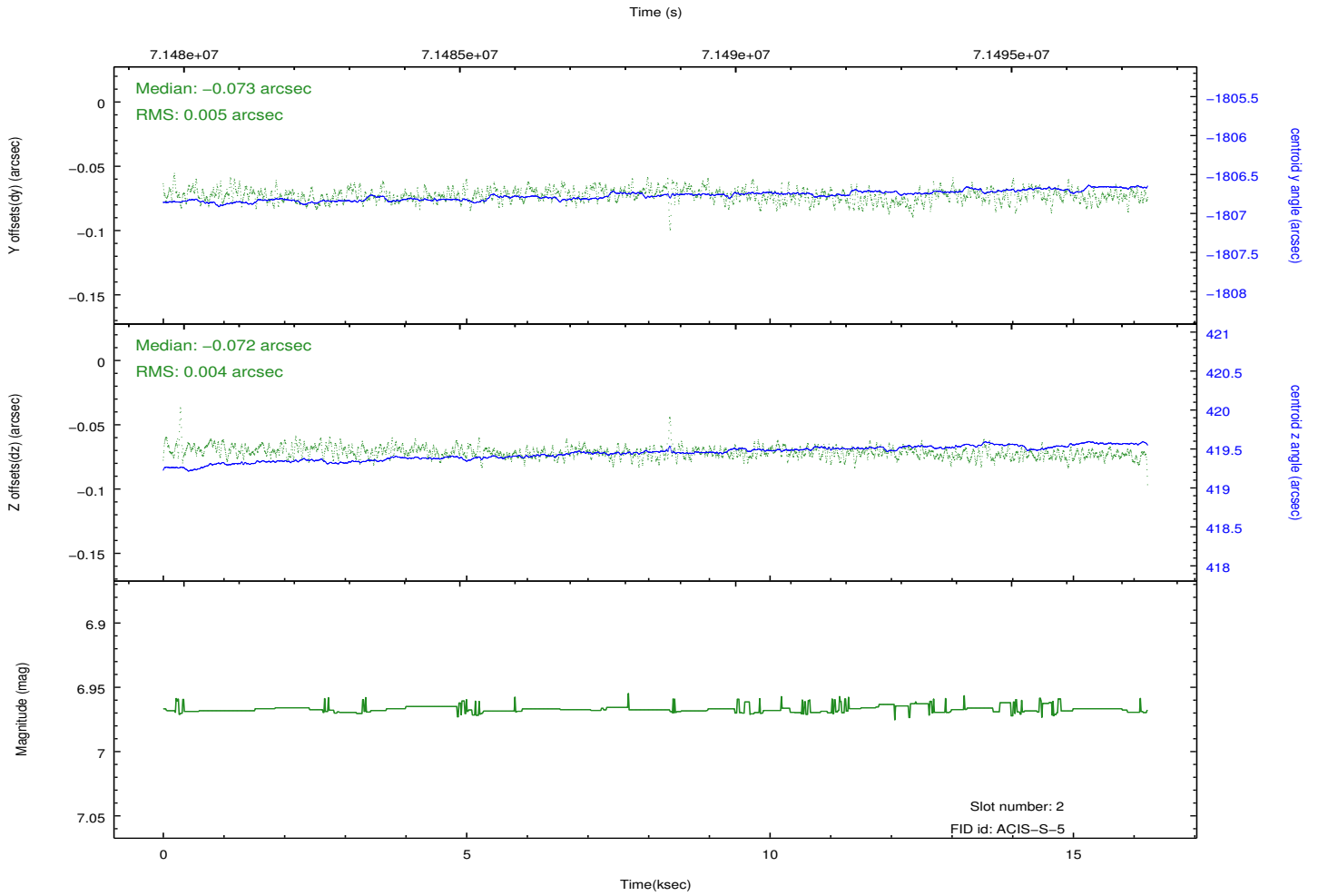
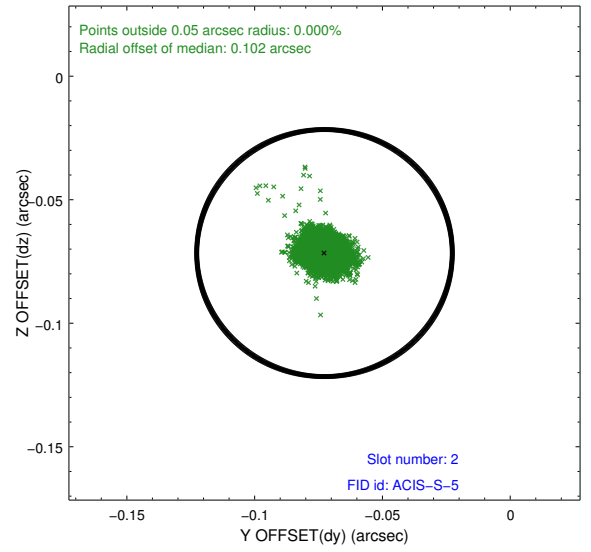
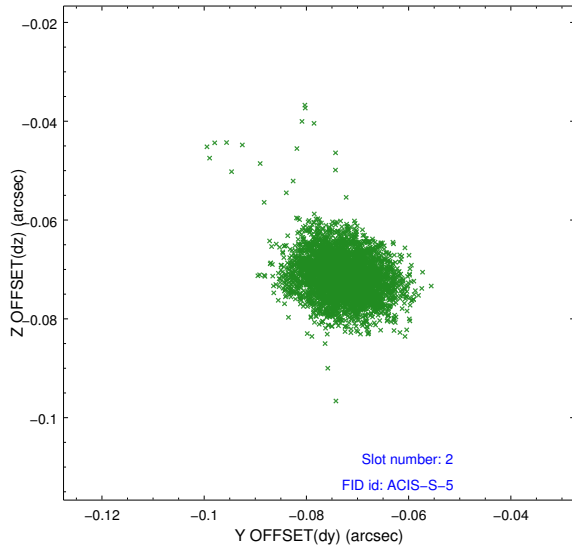
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.819

A.2 Comments

Roll constraint met. The guide stars in slots 6 and 7 were automatically excluded from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by removing these slots from the solution.