

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14380 - L2 Version 3
Chandra X-Ray Center

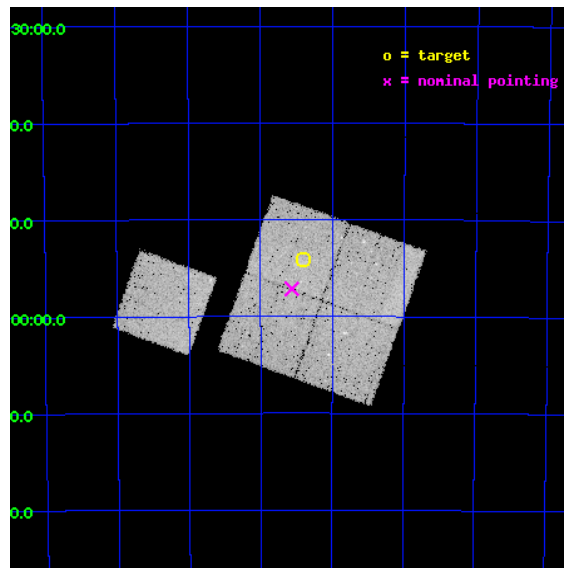
L2 Processing Date : Jan 23 2012

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1 Front

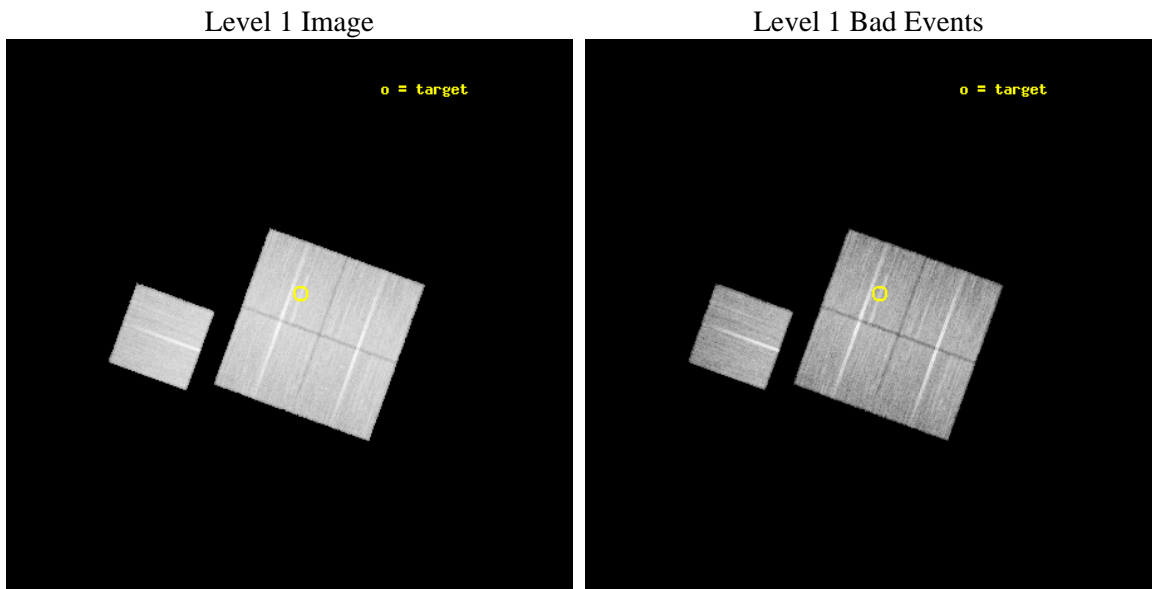
seq_num	801121	Sequence number
obs_id	14380	Observation id
title	Cosmology and Cluster Evolution from the 80 Most Massive Clusters in 2000 deg ² from the South Pole Telescope Survey	Proposal title
observer	Dr Bradford Benson	Principal investigator
object	SPT-CLJ0151-5954	Source name
dtcycle	0	
cycle	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	27.890783441609	Nominal RA [deg]
dec_nom	-59.952484744049	Nominal Dec [deg]
roll_nom	289.9567210941	Nominal Roll [deg]
revision	3	Processing version of data
ontime	32052.636414647	Sum of GTIs [s]
livetime	31633.845123082	Livetime [s]
ontime0	32055.654275	Sum of GTIs [s]
ontime1	32052.554344654	Sum of GTIs [s]
ontime2	32055.736355007	Sum of GTIs [s]
ontime3	32052.636414647	Sum of GTIs [s]
ontime6	32055.613234997	Sum of GTIs [s]
l2events	97682	Number of level 2 events



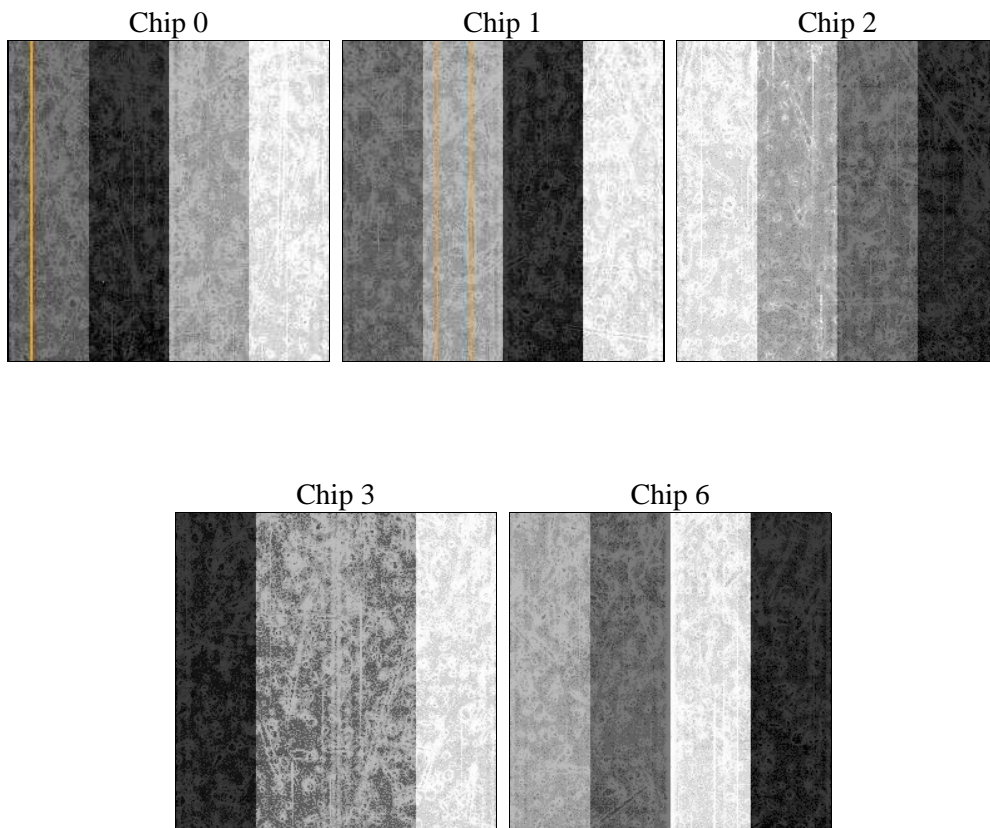
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	32052.636414647	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	32055.654275	Sum of GTIs [s]
date	2012-01-23T23:40:39	Date and time of file creation	ontime1	32052.554344654	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	32055.736355007	Sum of GTIs [s]
			ontime3	32052.636414647	Sum of GTIs [s]
			ontime6	32055.613234997	Sum of GTIs [s]
			l1events	972672	Number of level 1 events

2.1.4 Events

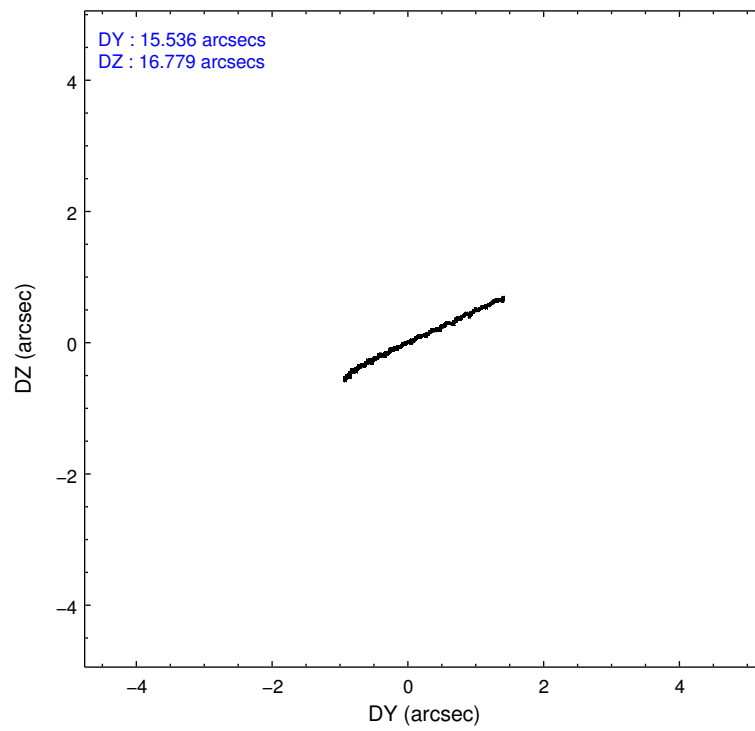
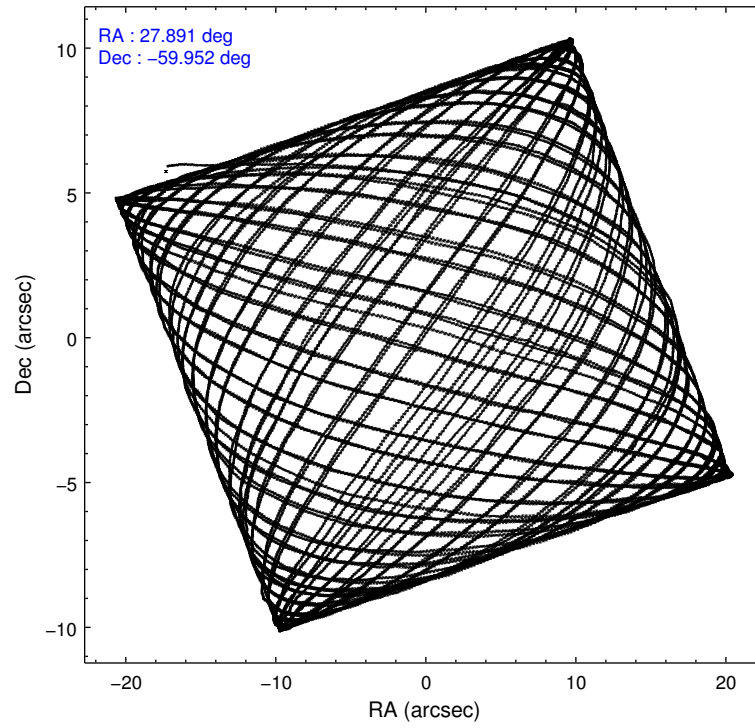
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	183794	194558	199544	196219	198557
rejected events	160965	168797	177329	173857	175407
rejected %	87%	86%	88%	88%	88%

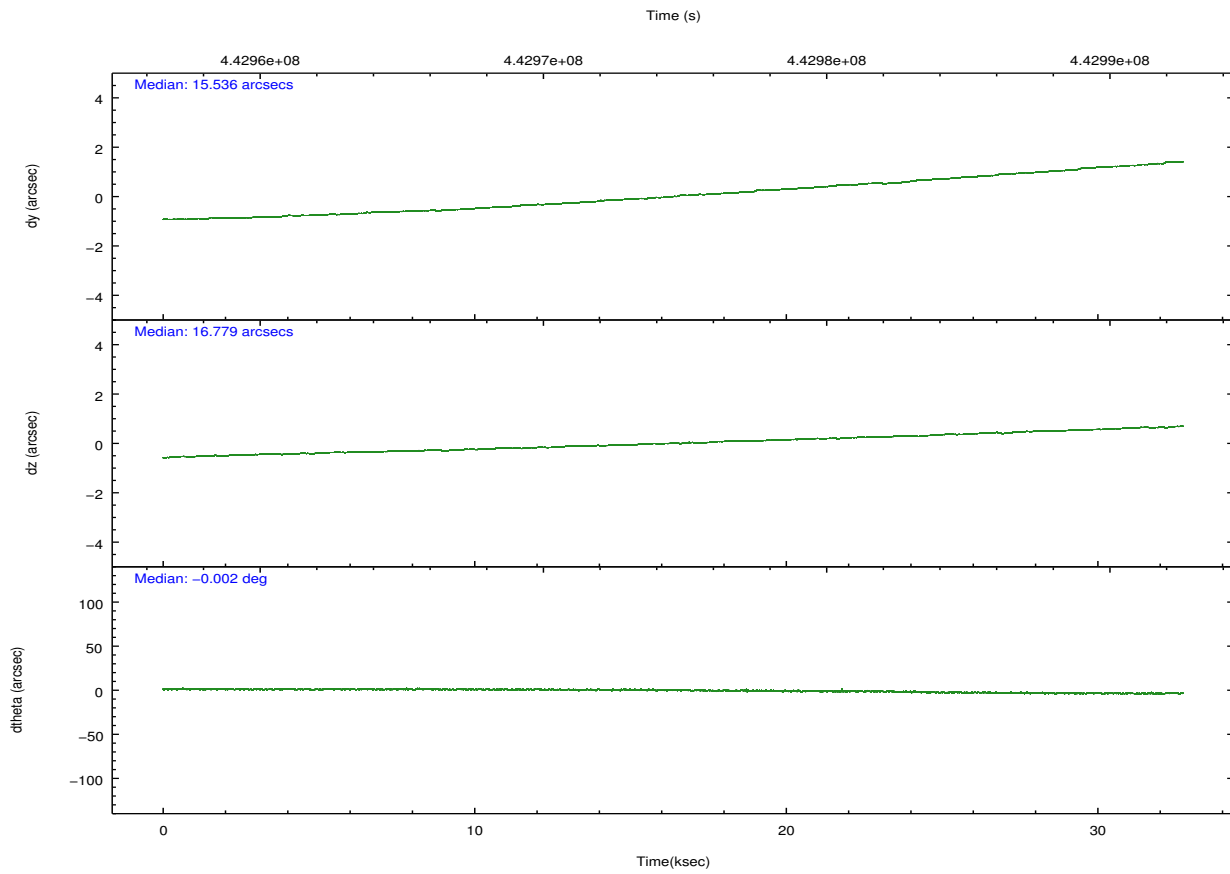
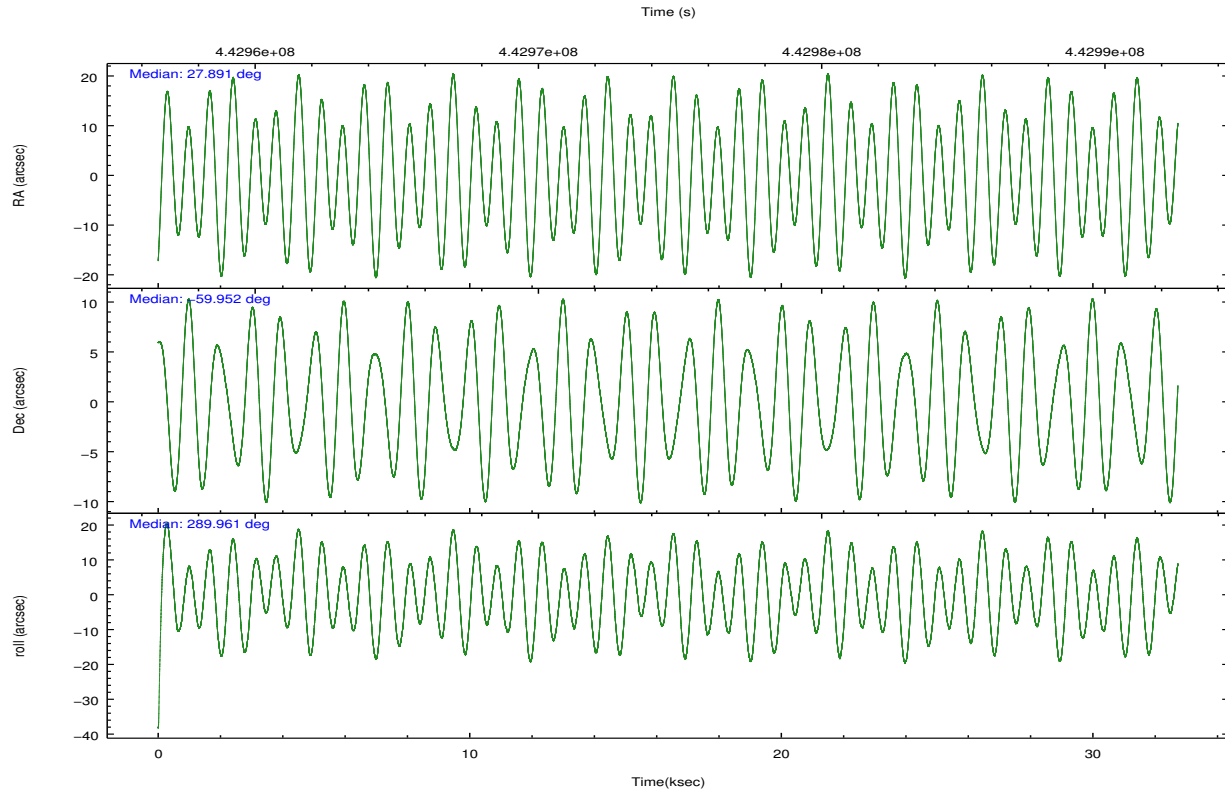
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7935	9005	7724	7955	7833
	4%	4%	3%	4%	3%
grade 1 events	131	123	133	129	93
	0%	0%	0%	0%	0%
grade 2 events	5625	6235	5496	5079	5160
	3%	3%	2%	2%	2%
grade 3 events	2451	2630	2249	2334	2479
	1%	1%	1%	1%	1%
grade 4 events	2258	2580	2331	2386	2426
	1%	1%	1%	1%	1%
grade 5 events	8759	9214	8272	9859	9469
	4%	4%	4%	5%	4%
grade 6 events	4565	5313	4417	4610	5258
	2%	2%	2%	2%	2%
grade 7 events	152070	159458	168922	163867	165839
	82%	81%	84%	83%	83%

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	27.848626	27.89078344160935	CCD I2 on	Y	Y
[deg] Pointing Dec	-59.934864	-59.9524847440486	CCD I3 on	Y	Y
[deg] Pointing Roll	289.711553	289.9567210940966	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	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	442958937.184000	442957734.33396	CCD S5 on	N	N
Observation start date	2012-01-14T20:07:51	2012-01-14T19:48:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	442990937.184000	442991353.31074	On-chip summing requested	N	N
Observation end date	2012-01-15T05:01:11	2012-01-15T05:09:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



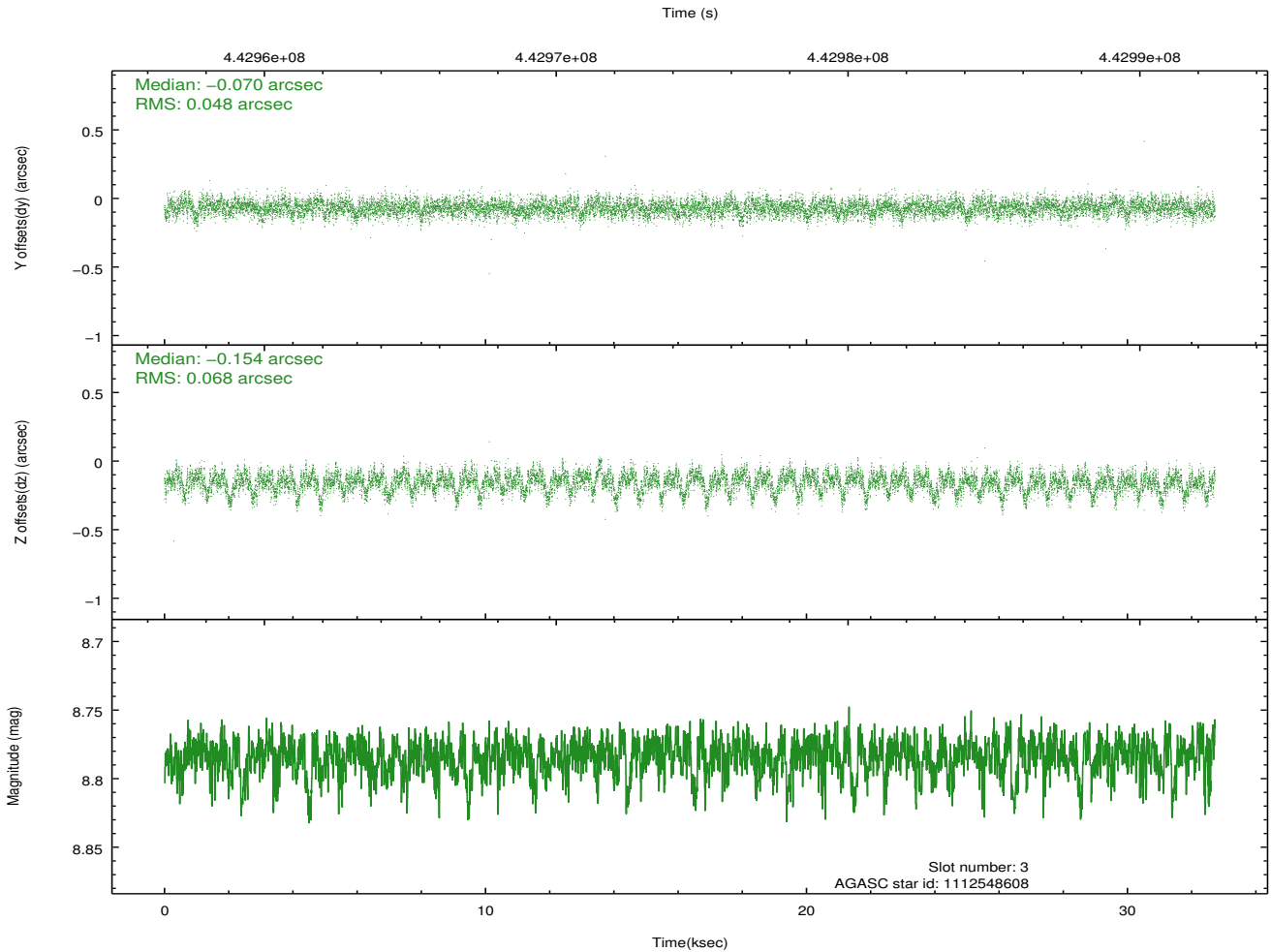
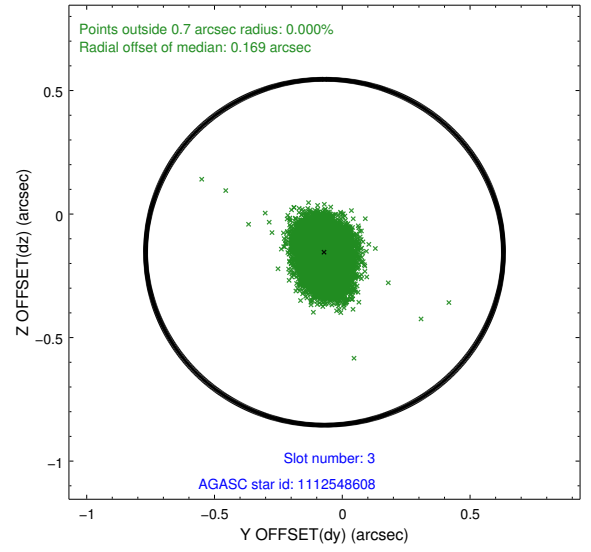
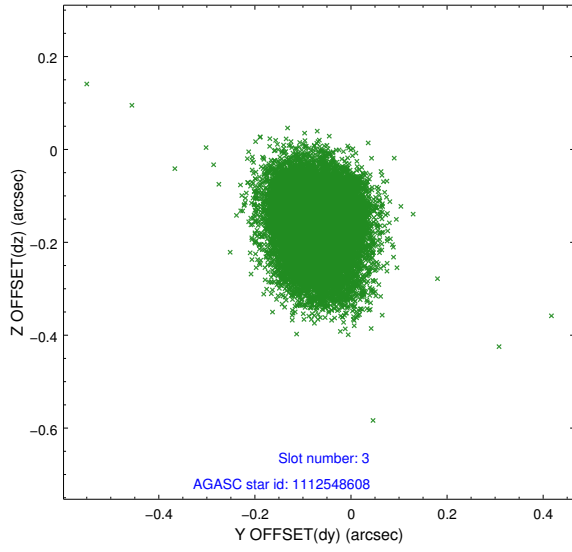


Slot Statistics

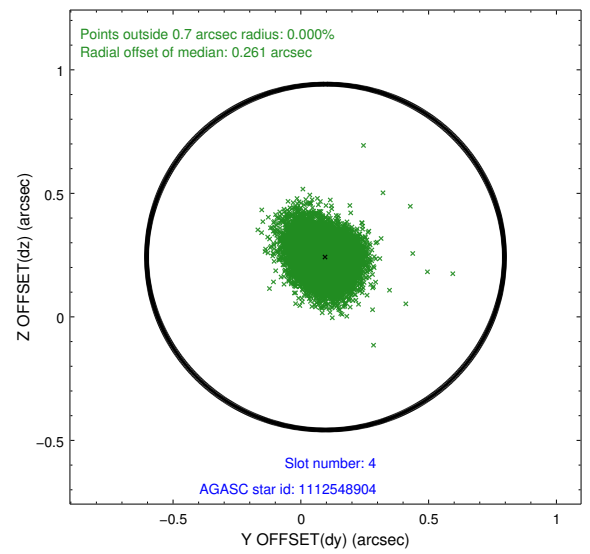
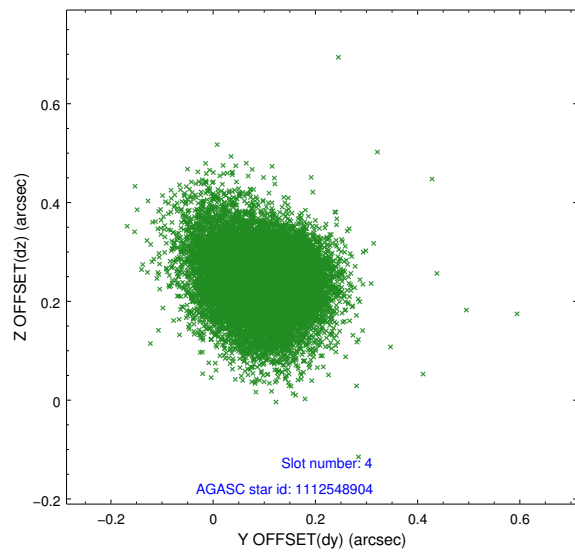
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	7983	0.159	-0.107	0.010	0.018	0.000000	0.000000	923.85	-999.58
1	FID	ACIS-I-5	7.05	7981	-0.310	0.132	0.019	0.028	0.000000	0.000000	-1824.70	898.09
2	FID	ACIS-I-6	7.06	7983	0.055	0.046	0.022	0.030	0.000000	0.000000	389.23	1542.58
3	GUIDE	1112548608	8.78	15954	-0.070	-0.154	0.088	0.146	28.282035	-59.412566	-1500.58	1381.79
4	GUIDE	1112548904	9.16	15885	0.096	0.242	0.091	0.156	27.315536	-59.373409	-2228.96	-239.93
5	GUIDE	1160121336	8.62	15930	-0.113	-0.114	0.081	0.127	29.095398	-60.192716	1646.98	1778.41
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	1111628512	9.23	15952	0.089	0.036	0.112	0.179	26.268874	-59.718198	-1669.29	-2448.35

2.4 Star Slots

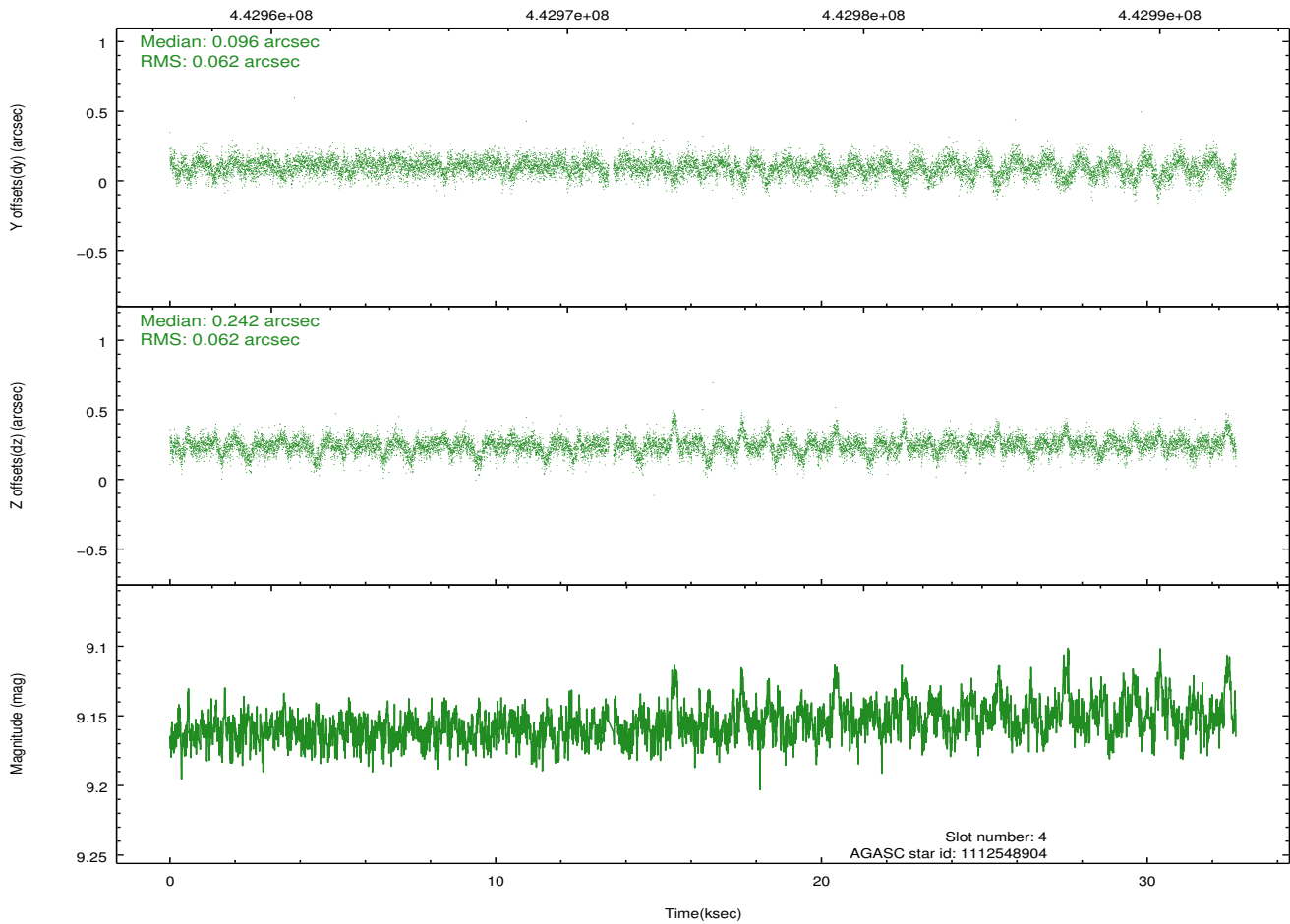
2.4.1 Slot 3



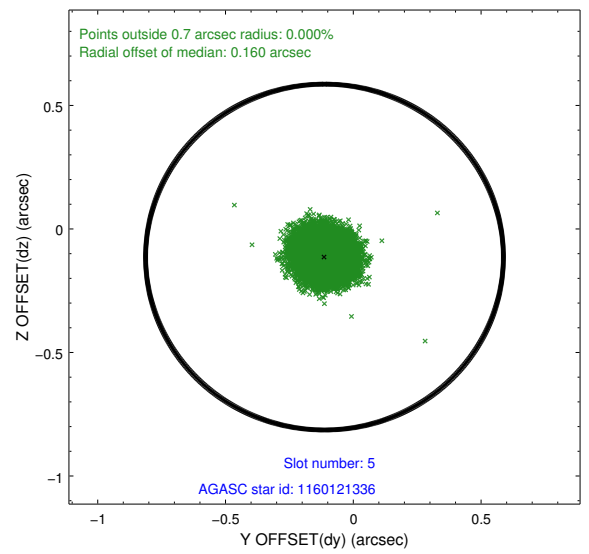
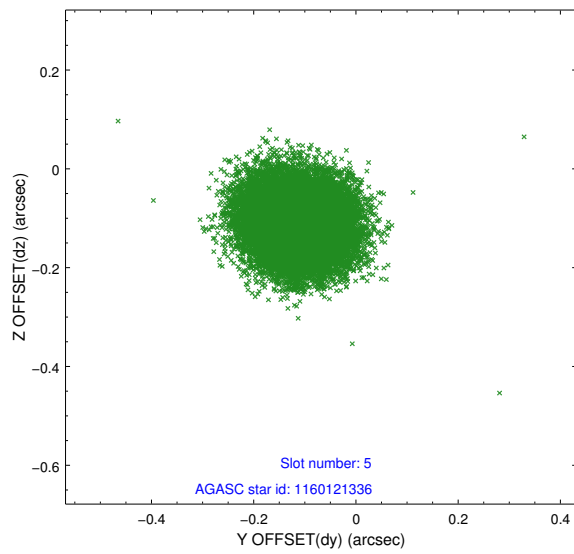
2.4.2 Slot 4



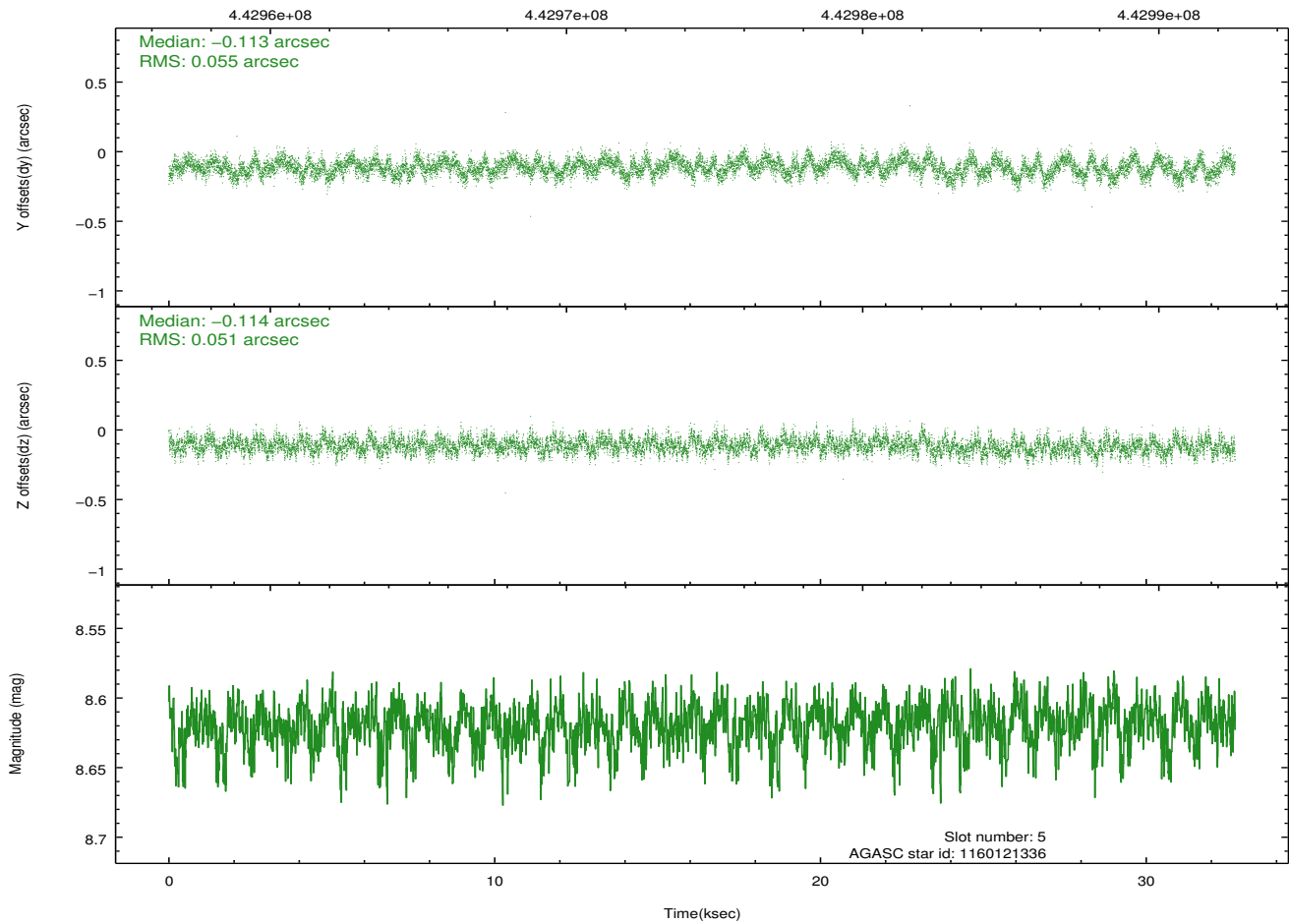
Time (s)



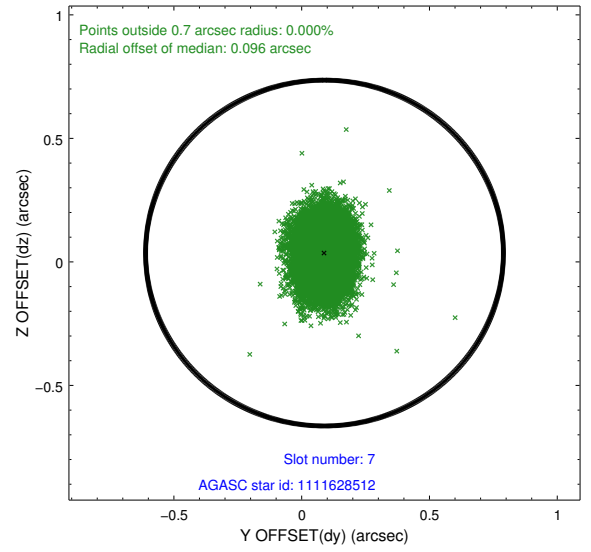
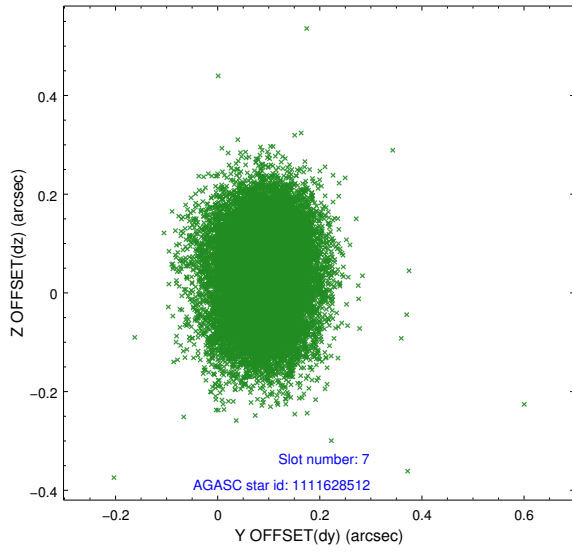
2.4.3 Slot 5



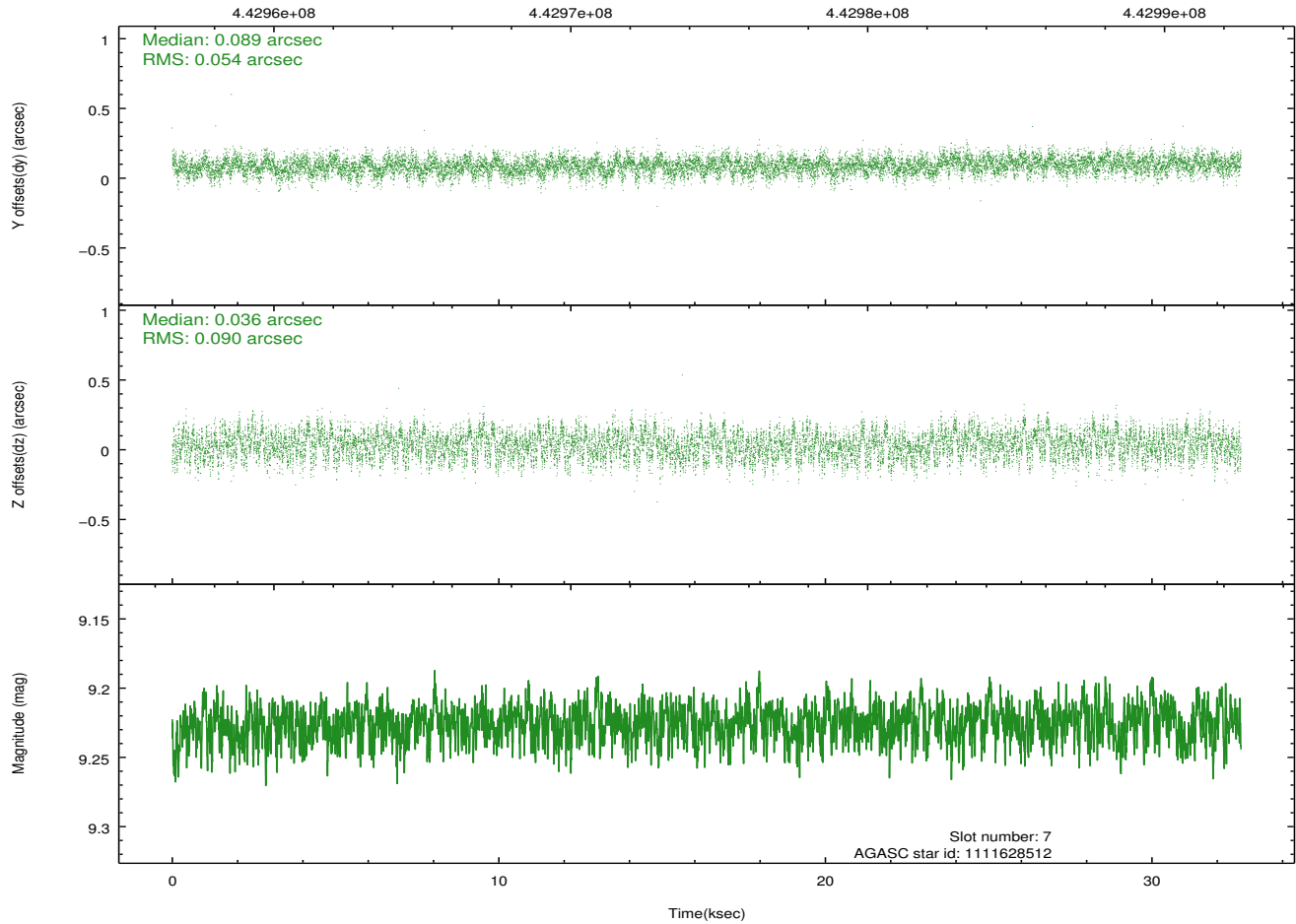
Time (s)



2.4.4 Slot 7

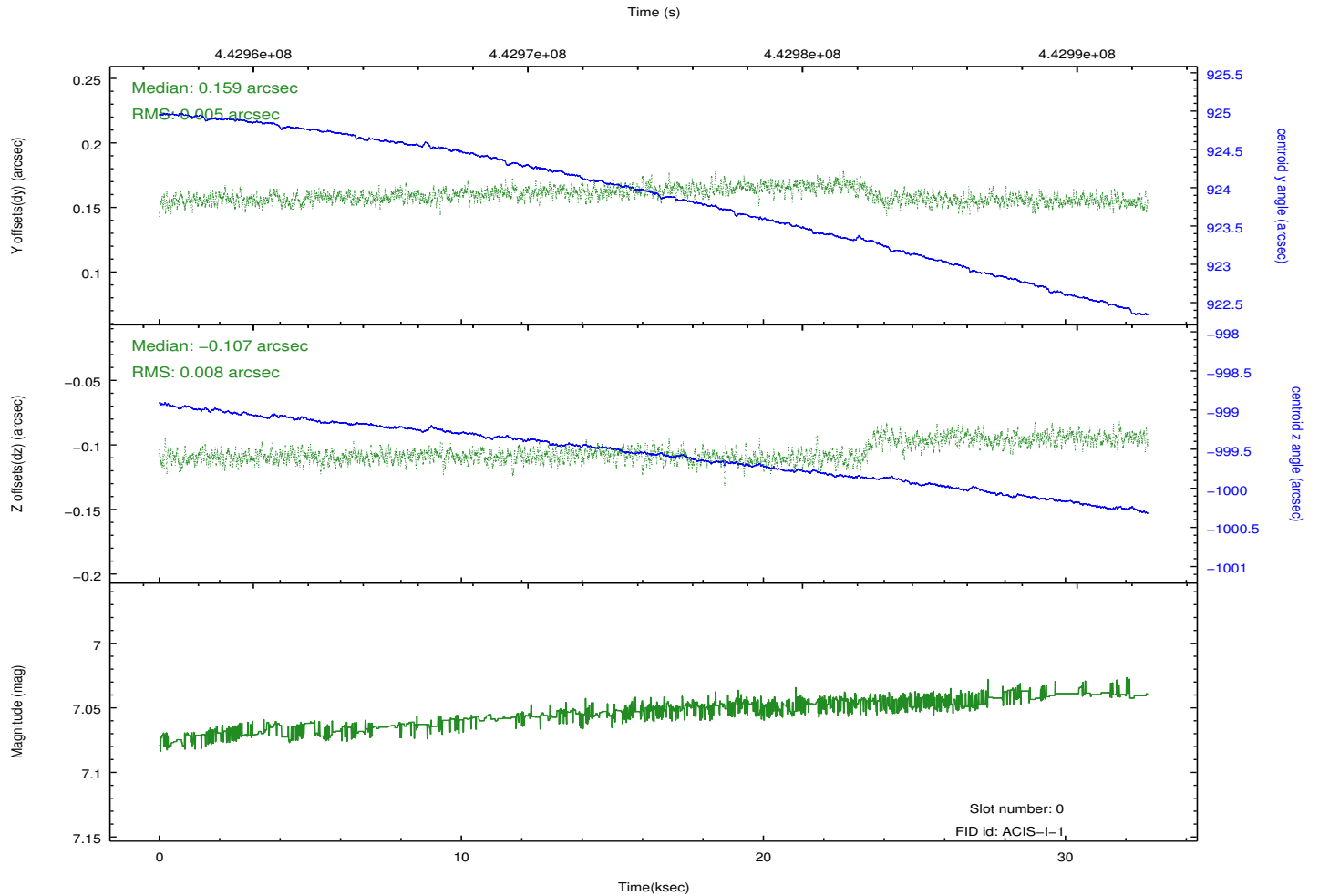
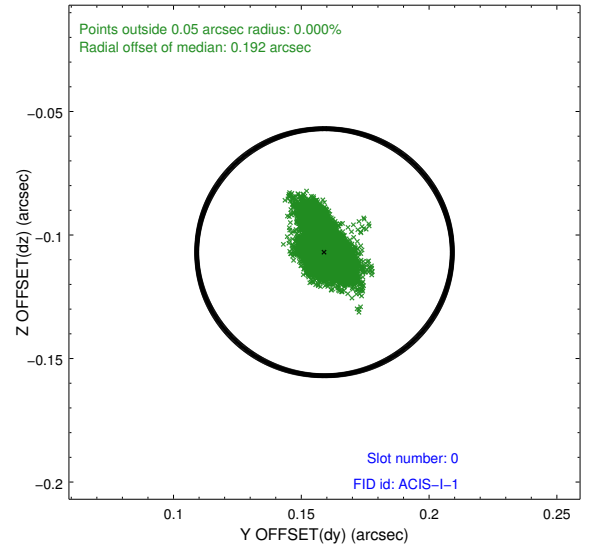
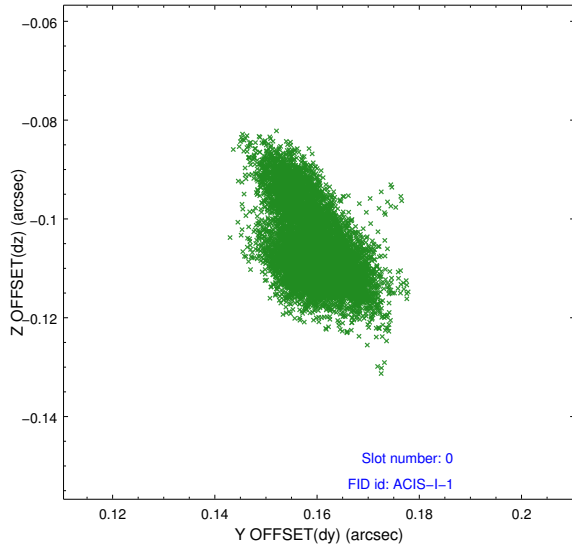


Time (s)

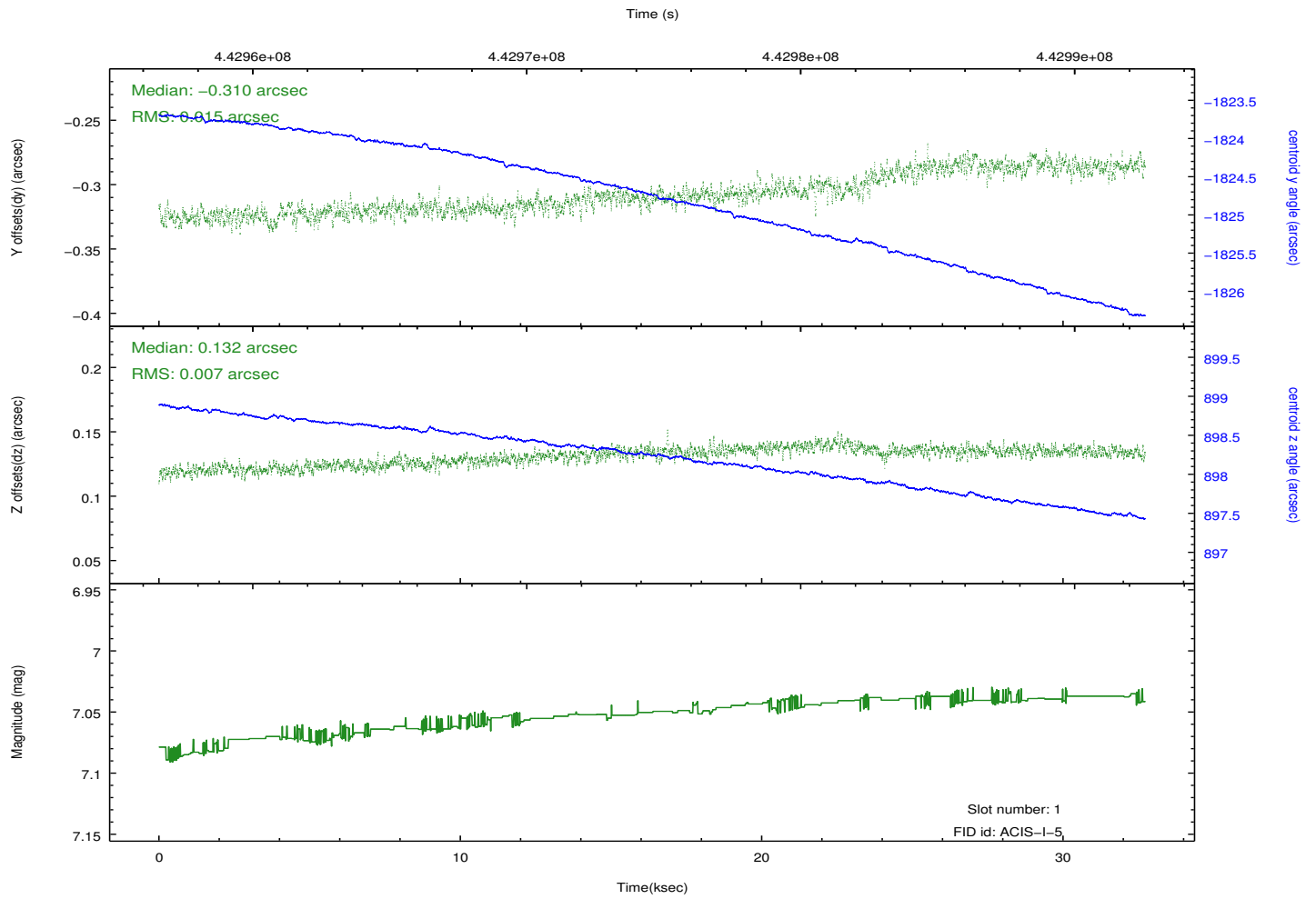
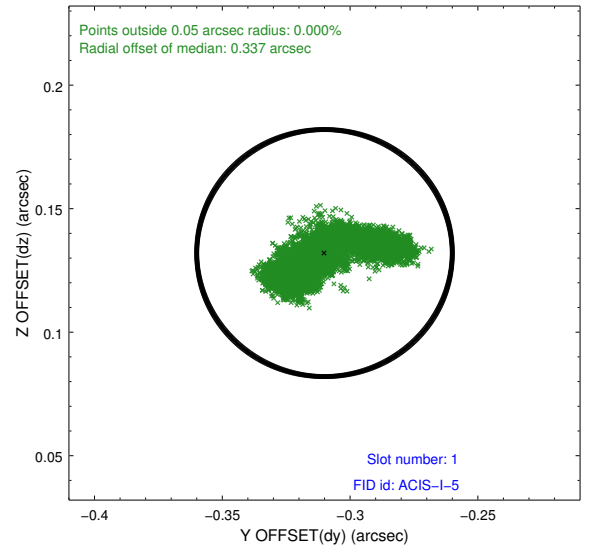
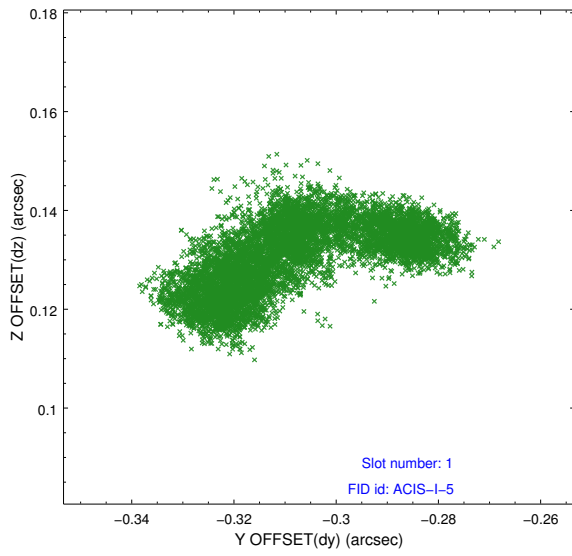


2.5 FID Slots

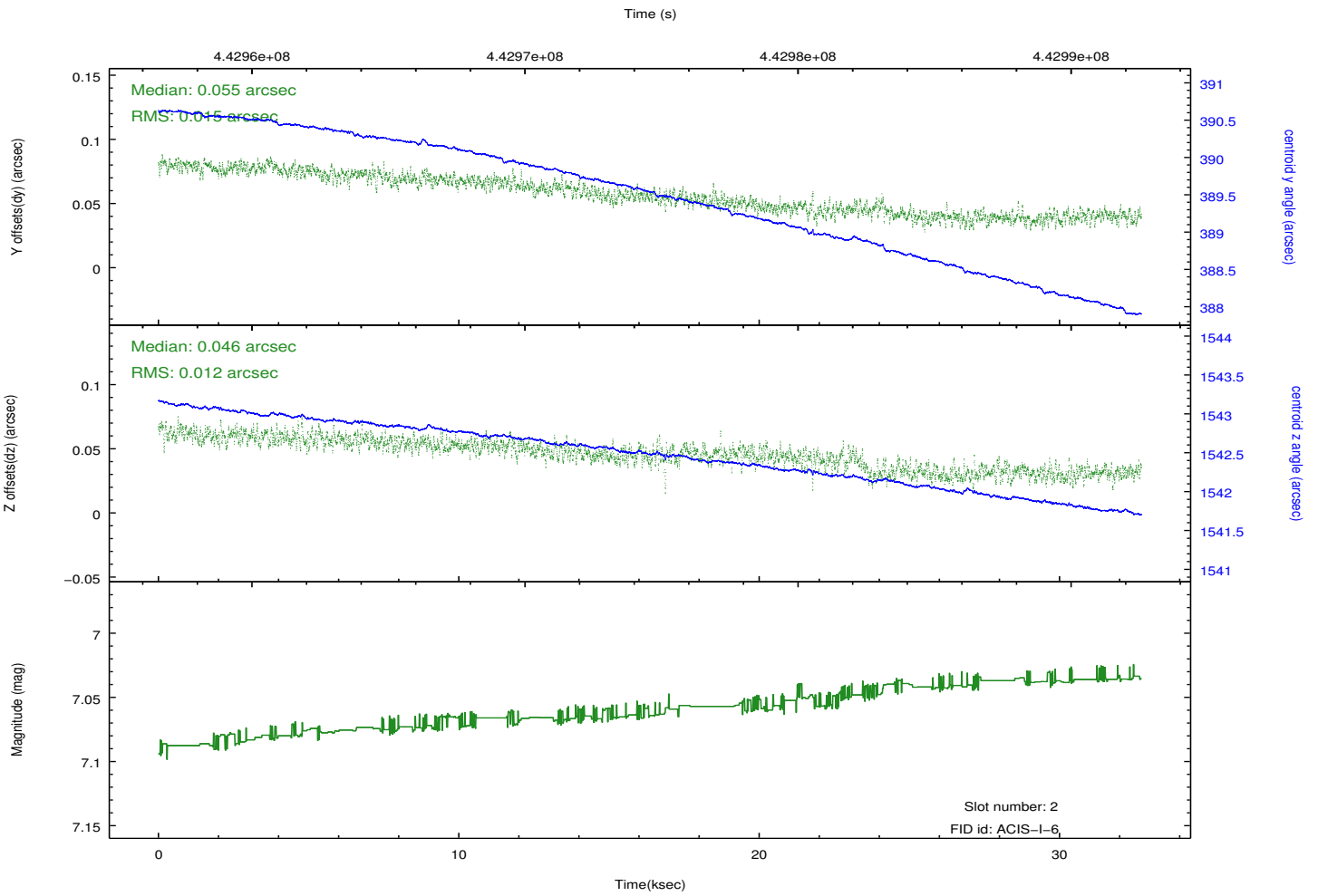
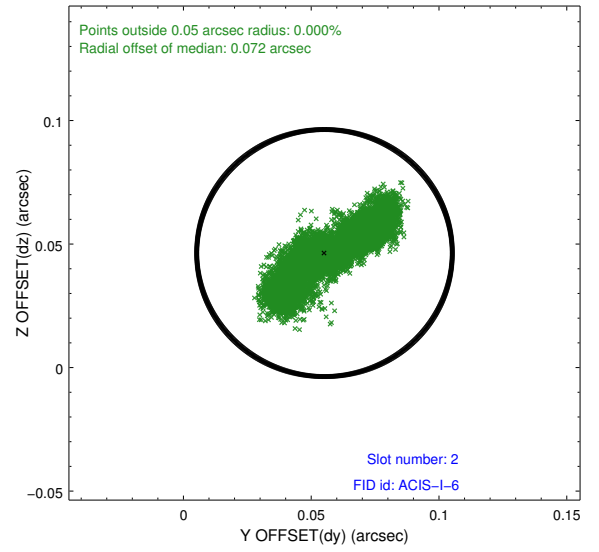
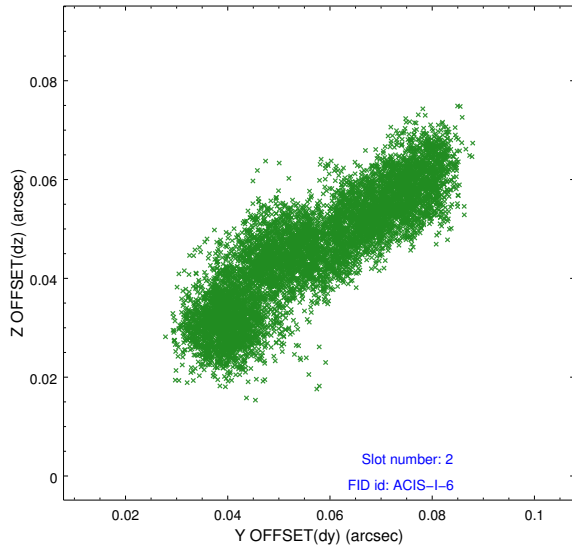
2.5.1 Slot 0



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)	2012.01.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.052636414647

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 aspect solution.