

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 15053 - L2 Version 3
Chandra X-Ray Center

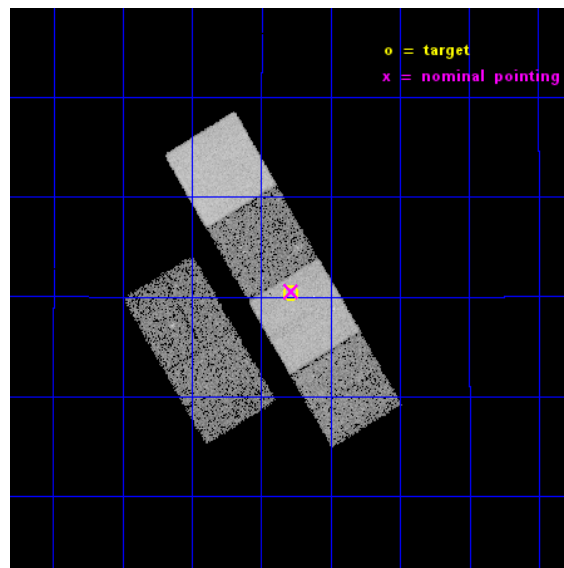
L2 Processing Date : Dec 9 2014

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1 Front

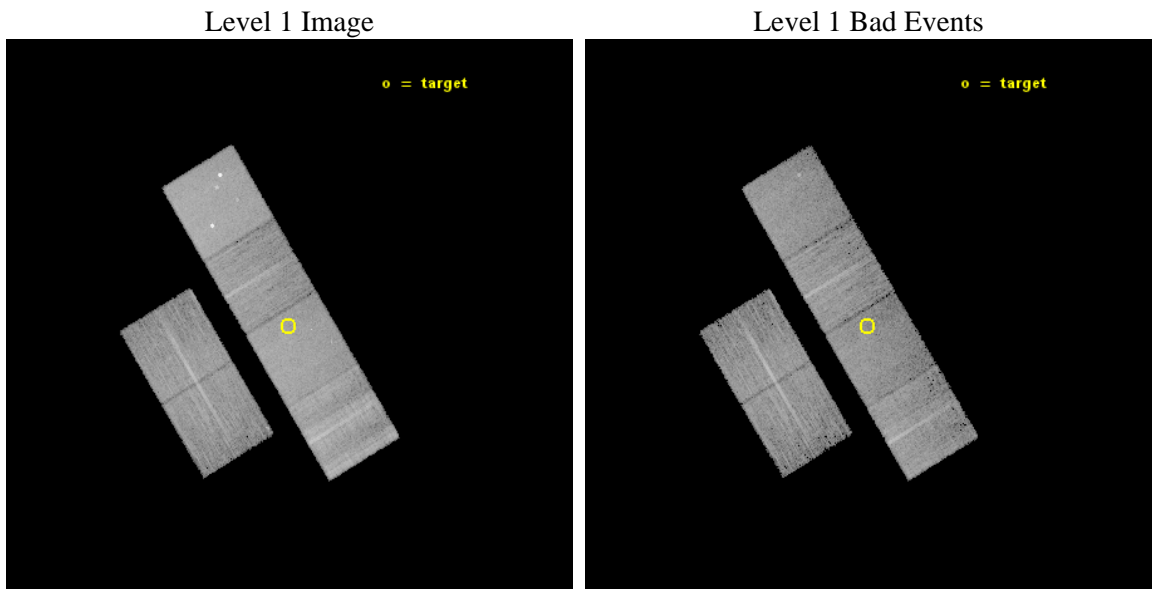
seq_num	702860	Sequence number
obs_id	15053	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	IC 2810	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	171.447083	Observer's specified target RA [deg]
dec_targ	14.673056	Observer's specified target Dec [deg]
ra_nom	171.44566523543	Nominal RA [deg]
dec_nom	14.675783301776	Nominal Dec [deg]
roll_nom	59.156969762461	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14966.399944305	Sum of GTIs [s]
livetime	14776.886376526	Livetime [s]
ontime2	14966.399944305	Sum of GTIs [s]
ontime3	14966.399944305	Sum of GTIs [s]
ontime5	14966.399944305	Sum of GTIs [s]
ontime6	14966.399944305	Sum of GTIs [s]
ontime7	14966.399944305	Sum of GTIs [s]
ontime8	14966.399944305	Sum of GTIs [s]
l2events	139247	Number of level 2 events



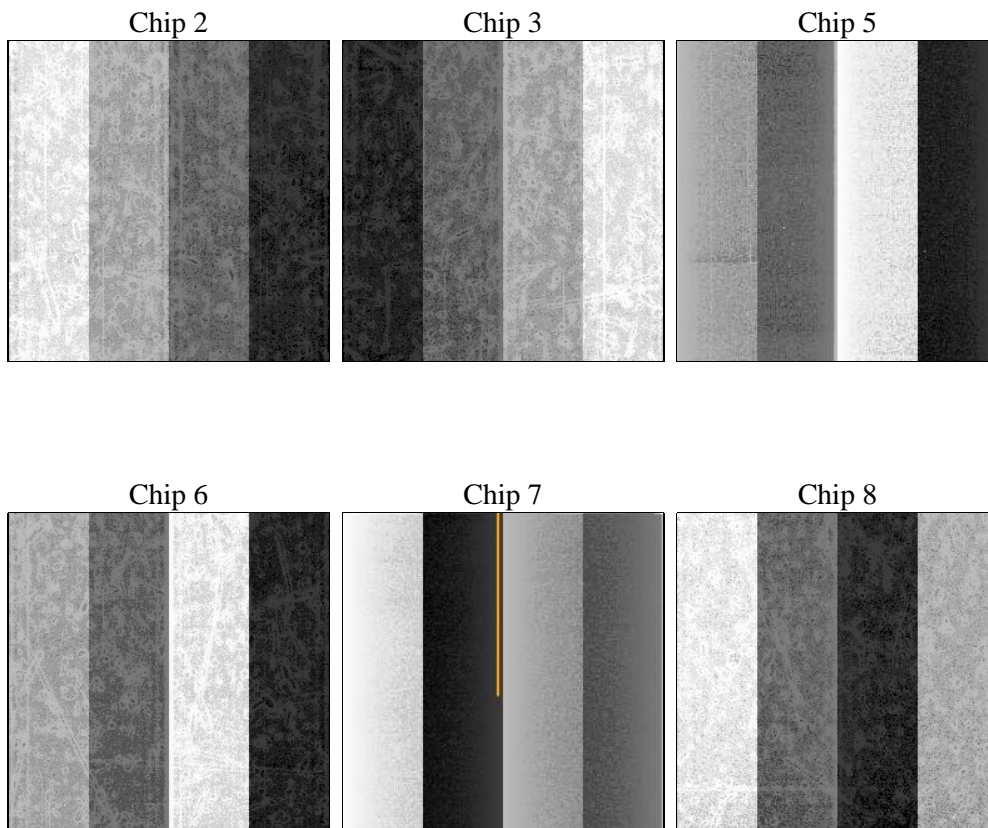
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	14966.399944305	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	14966.399944305	Sum of GTIs [s]
date	2014-12-09T17:53:08	Date and time of file creation	ontime3	14966.399944305	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	14966.399944305	Sum of GTIs [s]
			ontime6	14966.399944305	Sum of GTIs [s]
			ontime7	14966.399944305	Sum of GTIs [s]
			ontime8	14966.399944305	Sum of GTIs [s]
			l1events	578012	Number of level 1 events

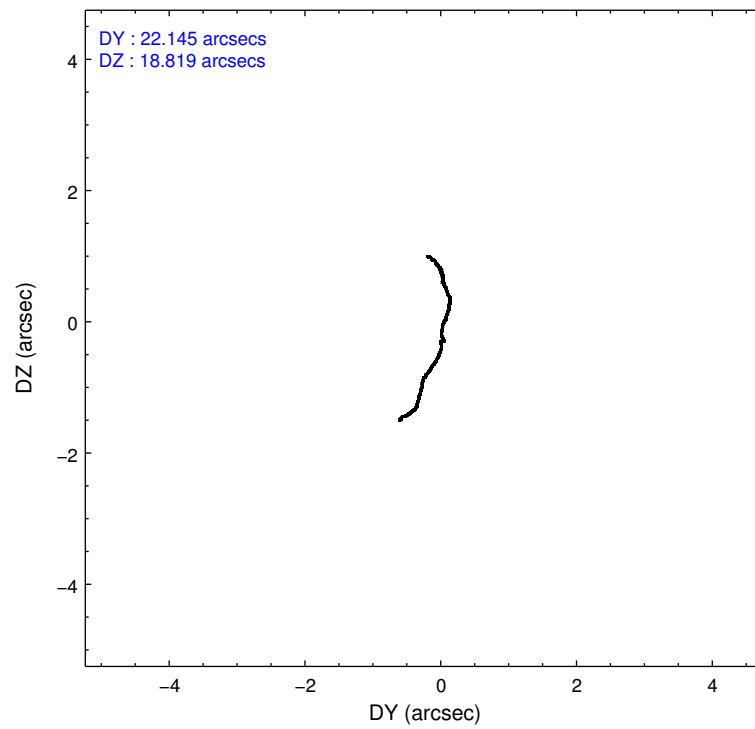
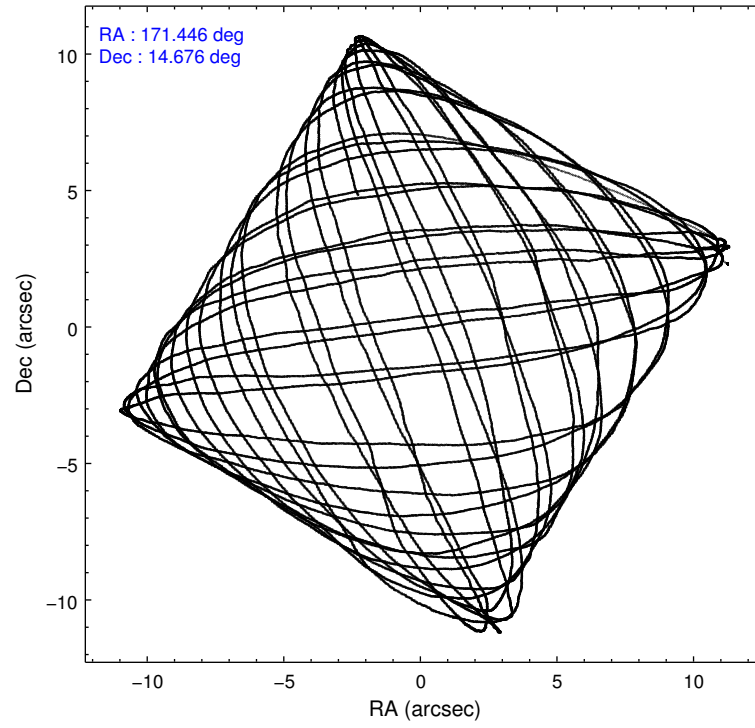
2.1.4 Events

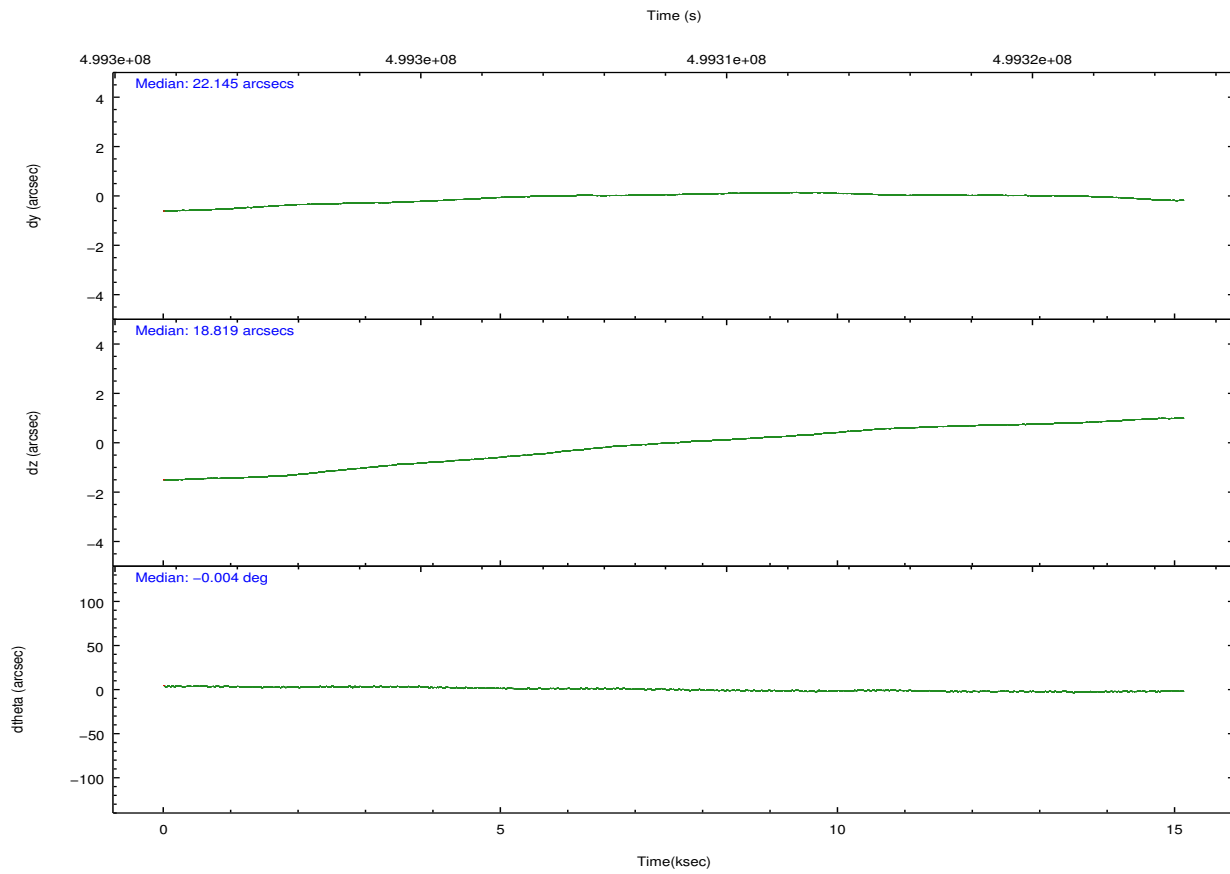
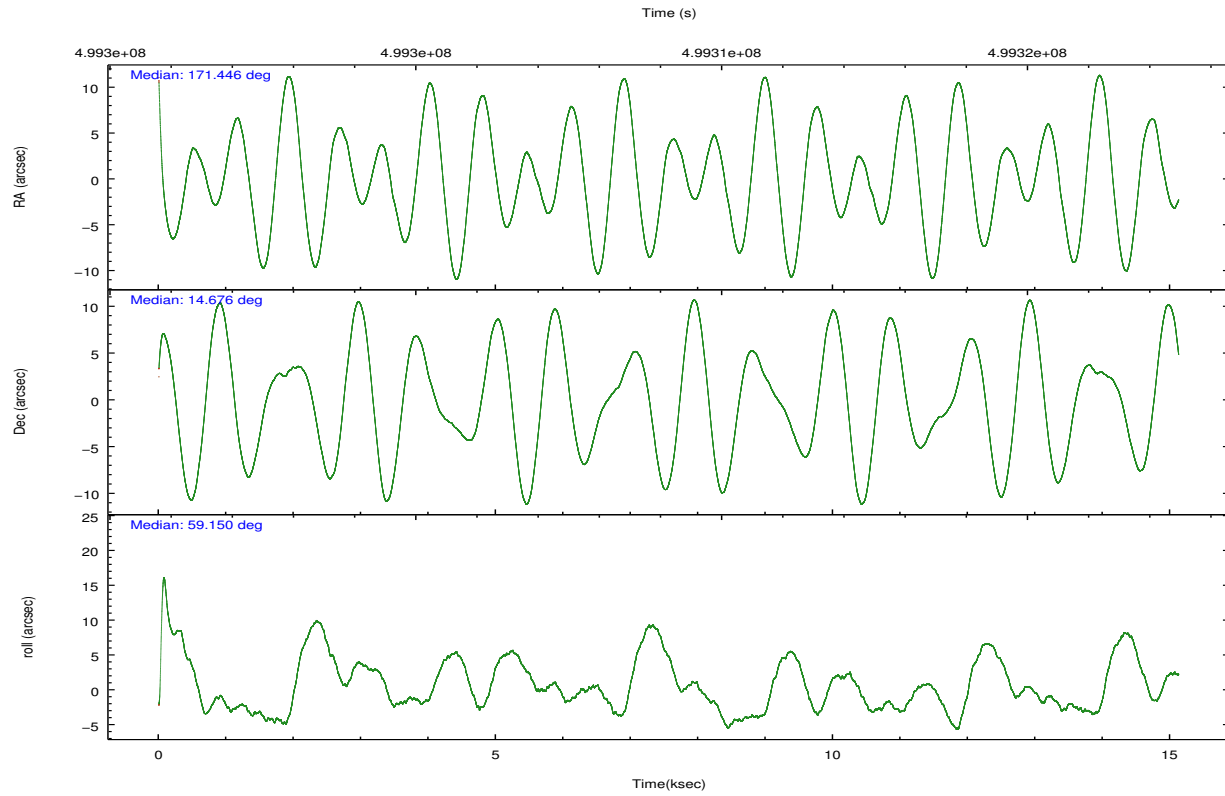
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	77368	72209	130191	80334	102547	115363	grade 0 events	3759	3316	10044	3799	4291	14079
rejected events	67049	62921	64764	69478	56871	72477		4%	4%	7%	4%	4%	12%
rejected %	86%	87%	49%	86%	55%	62%	grade 1 events	57	53	455	41	141	117
								0%	0%	0%	0%	0%	0%
							grade 2 events	2485	2062	18702	2409	9540	7645
								3%	2%	14%	2%	9%	6%
							grade 3 events	995	952	2328	1043	3824	5961
								1%	1%	1%	1%	3%	5%
							grade 4 events	1031	933	2188	1004	3813	5634
								1%	1%	1%	1%	3%	4%
							grade 5 events	3454	3882	9430	3836	10470	5682
								4%	5%	7%	4%	10%	4%
							grade 6 events	2050	2026	32175	2601	24223	9569
								2%	2%	24%	3%	23%	8%
							grade 7 events	63537	58985	54869	65601	46245	66676
								82%	81%	42%	81%	45%	57%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	171.445643	171.445665235427	CCD I2 on	O2	Y
[deg] Pointing Dec	14.648418	14.67578330177601	CCD I3 on	Y	Y
[deg] Pointing Roll	59.000364	59.15696976246145	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[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	Y	Y
[s] Observation start time (MET)	499301702.184000	499300545.18577	CCD S5 on	N	N
Observation start date	2013-10-27T22:53:55	2013-10-27T22:35:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	499316702.184000	499317676.0117	On-chip summing requested	N	N
Observation end date	2013-10-28T03:03:55	2013-10-28T03:21:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





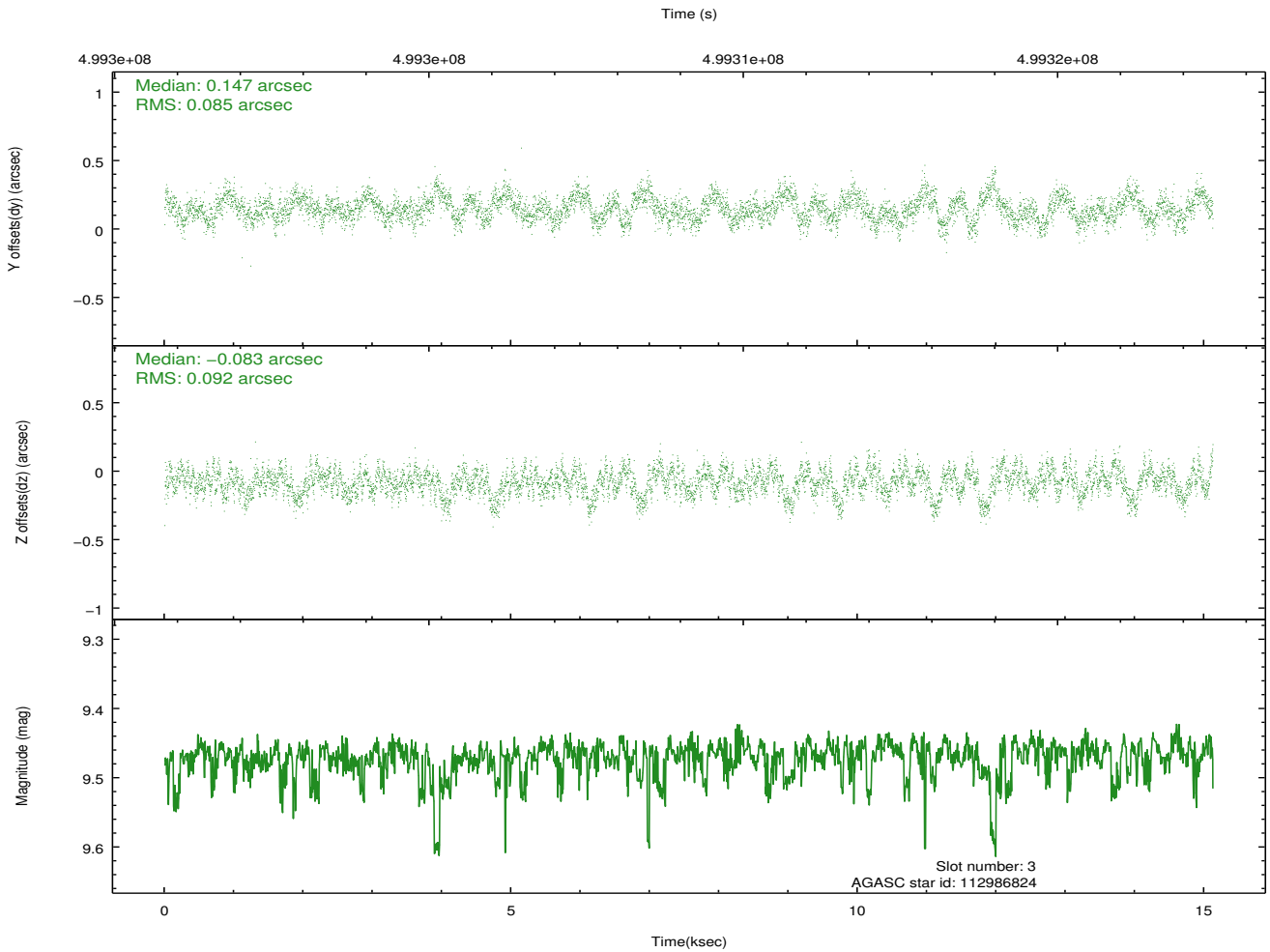
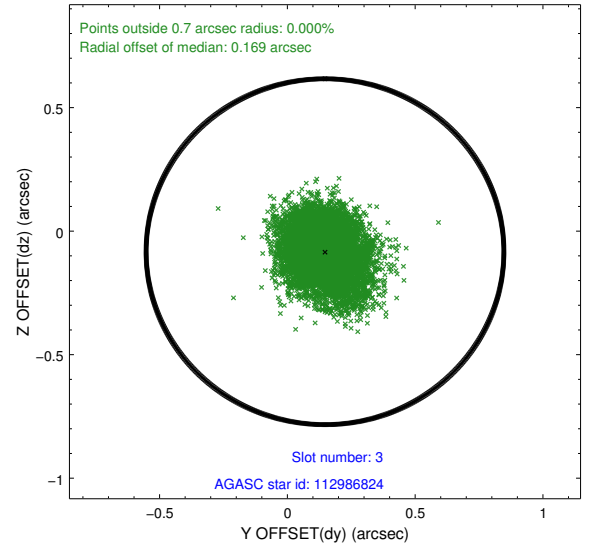
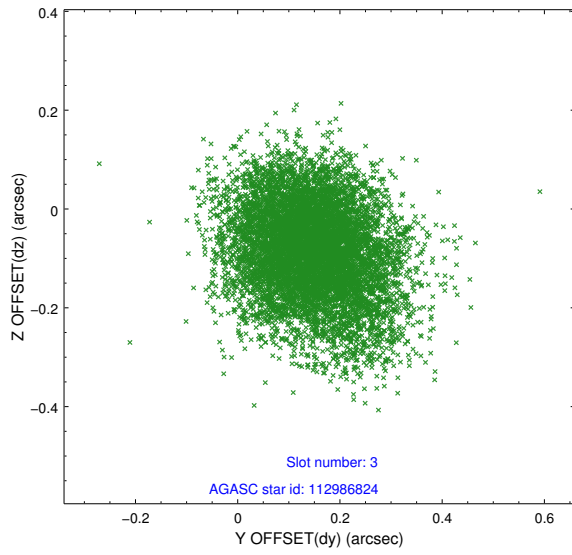
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	3690	-0.113	-0.046	0.016	0.024	0.000000	0.000000	-775.33	-1740.21
1	FID		ACIS-S-4	7.05	3690	0.266	0.067	0.011	0.019	0.000000	0.000000	2138.19	168.07
2	FID		ACIS-S-5	7.08	3690	-0.186	-0.010	0.014	0.023	0.000000	0.000000	-1827.86	162.01
3	GUIDE	used	112986824	9.47	7378	0.147	-0.083	0.134	0.216	171.235331	14.467506	-935.54	293.08
4	GUIDE	used	112987264	9.72	7373	-0.160	0.183	0.176	0.276	171.936246	14.518861	482.53	-1704.91
5	GUIDE	used	112987600	9.27	7374	-0.127	0.093	0.203	0.307	171.993829	14.832073	1551.59	-1294.76
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	112856376	7.97	7377	0.149	-0.185	0.078	0.132	170.728081	14.323006	-2289.59	1543.40

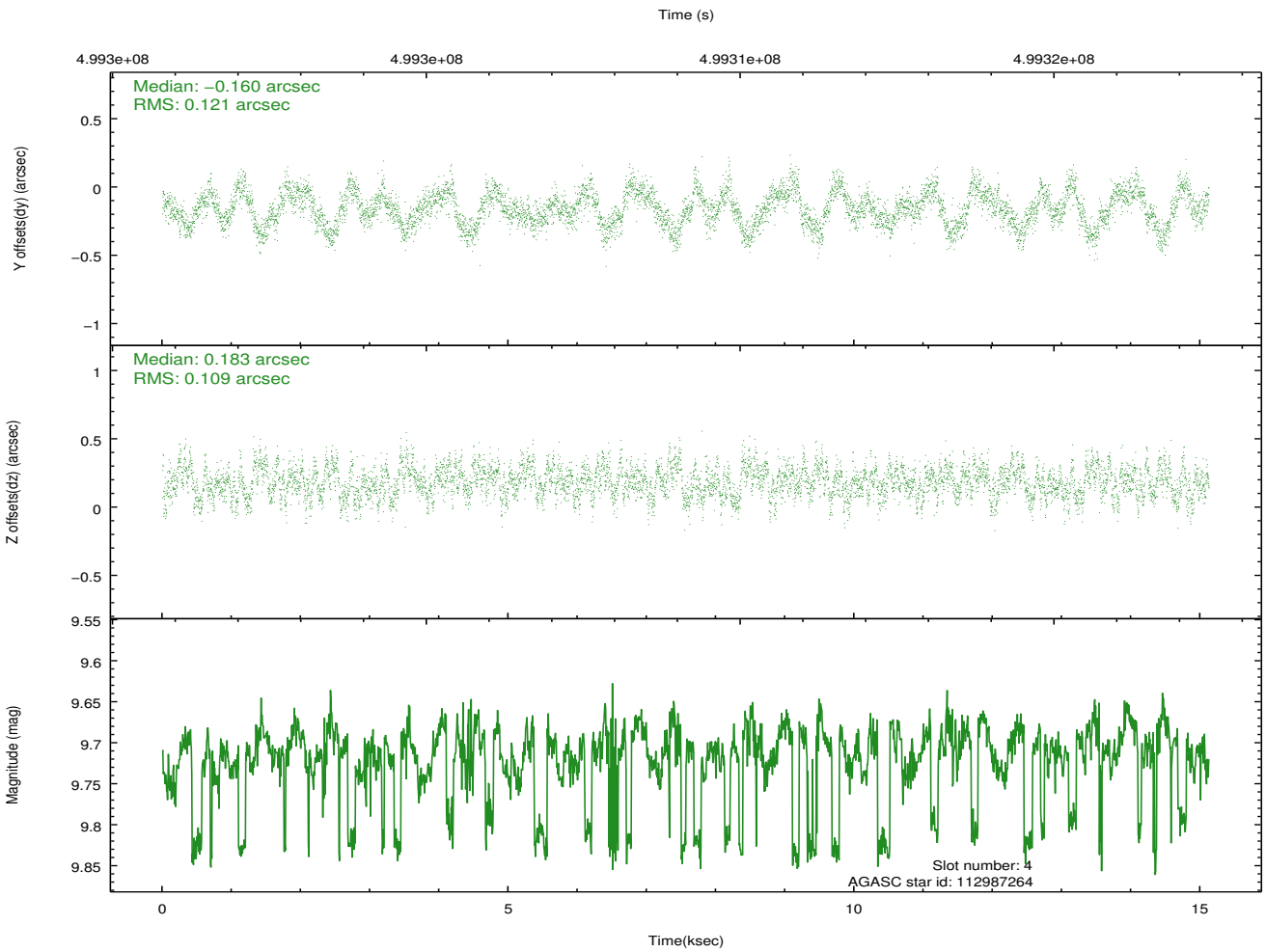
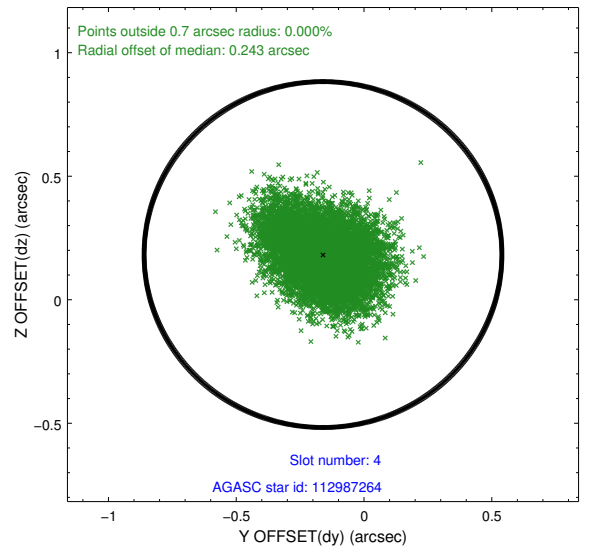
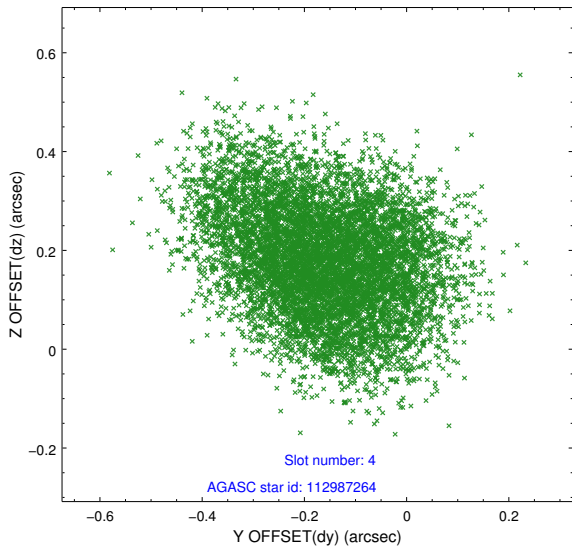
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2.4 Star Slots

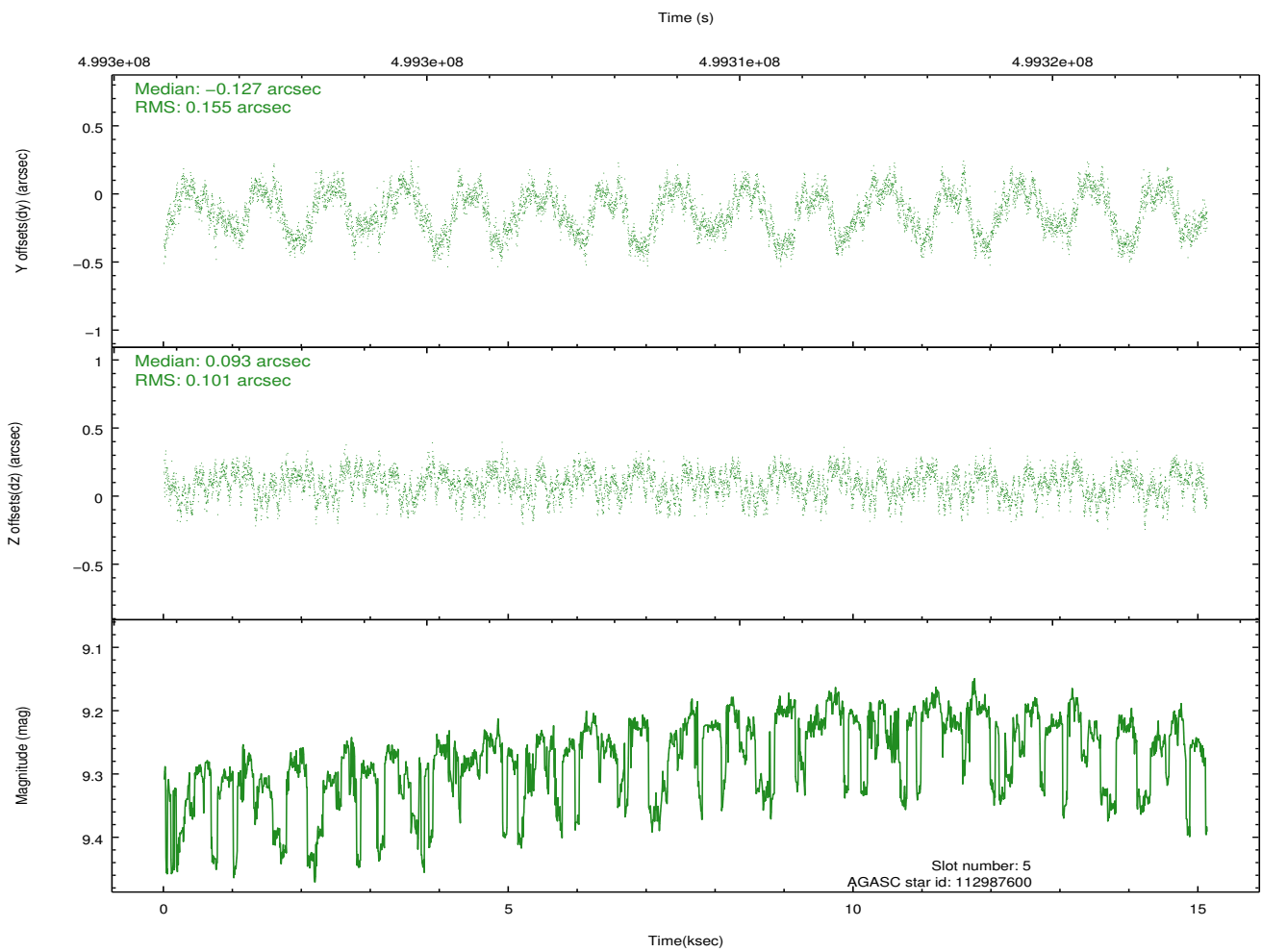
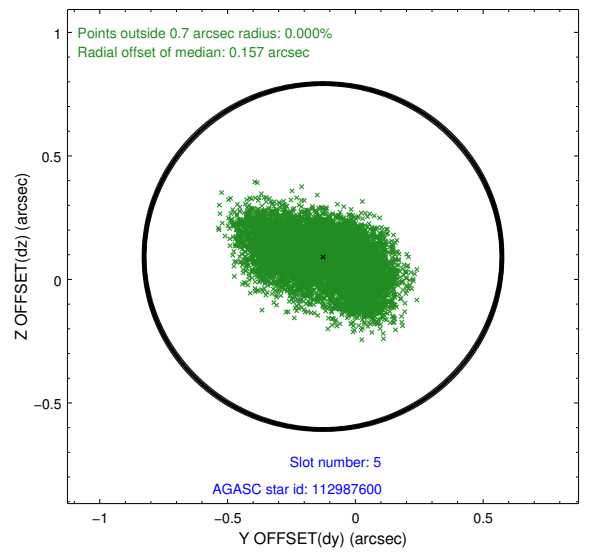
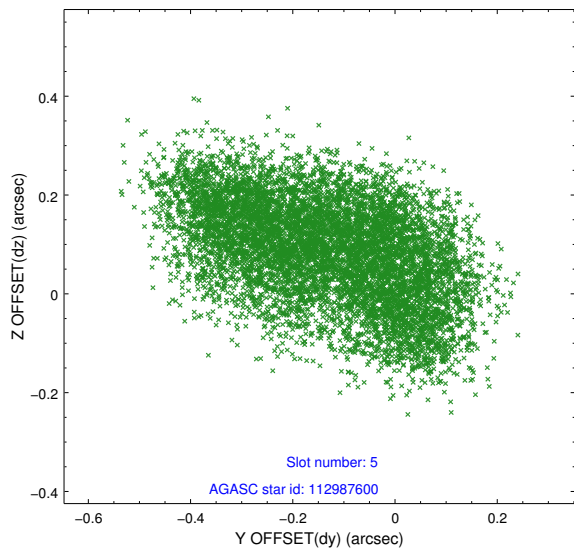
2.4.1 Slot 3



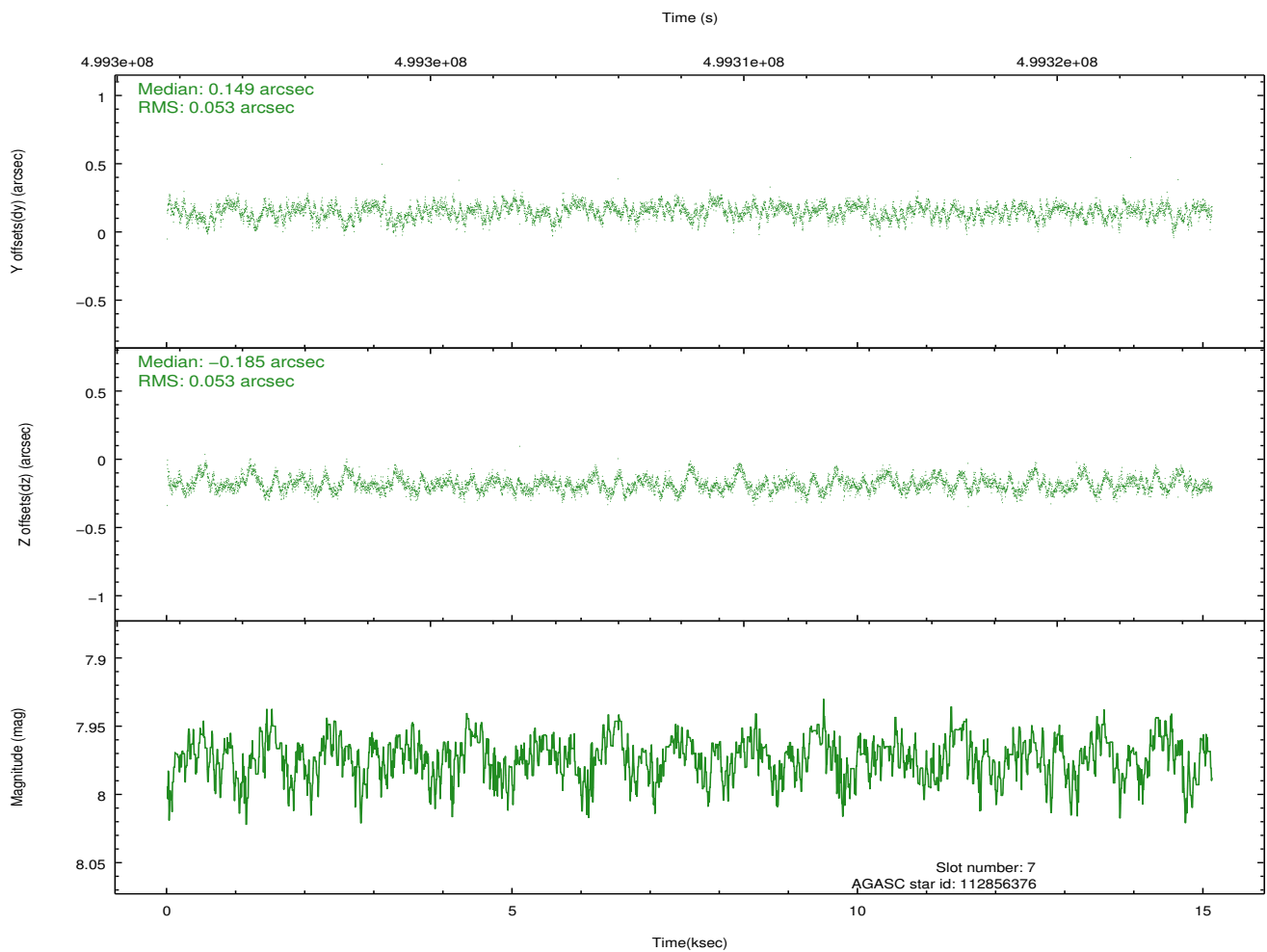
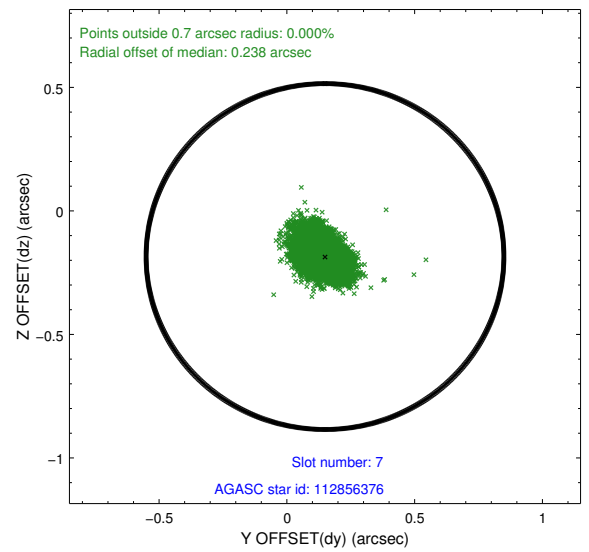
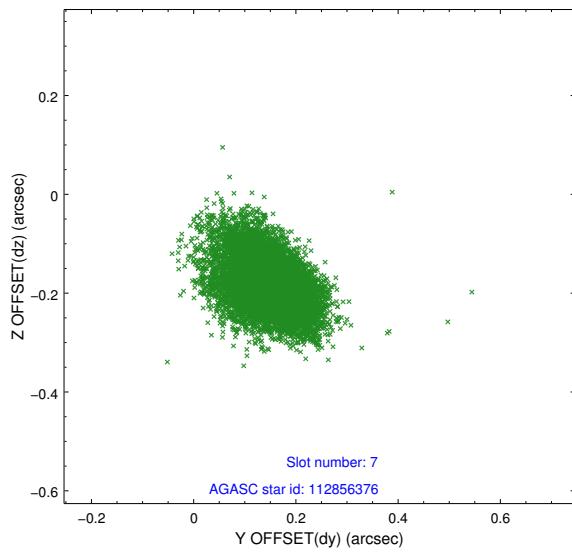
2.4.2 Slot 4



2.4.3 Slot 5

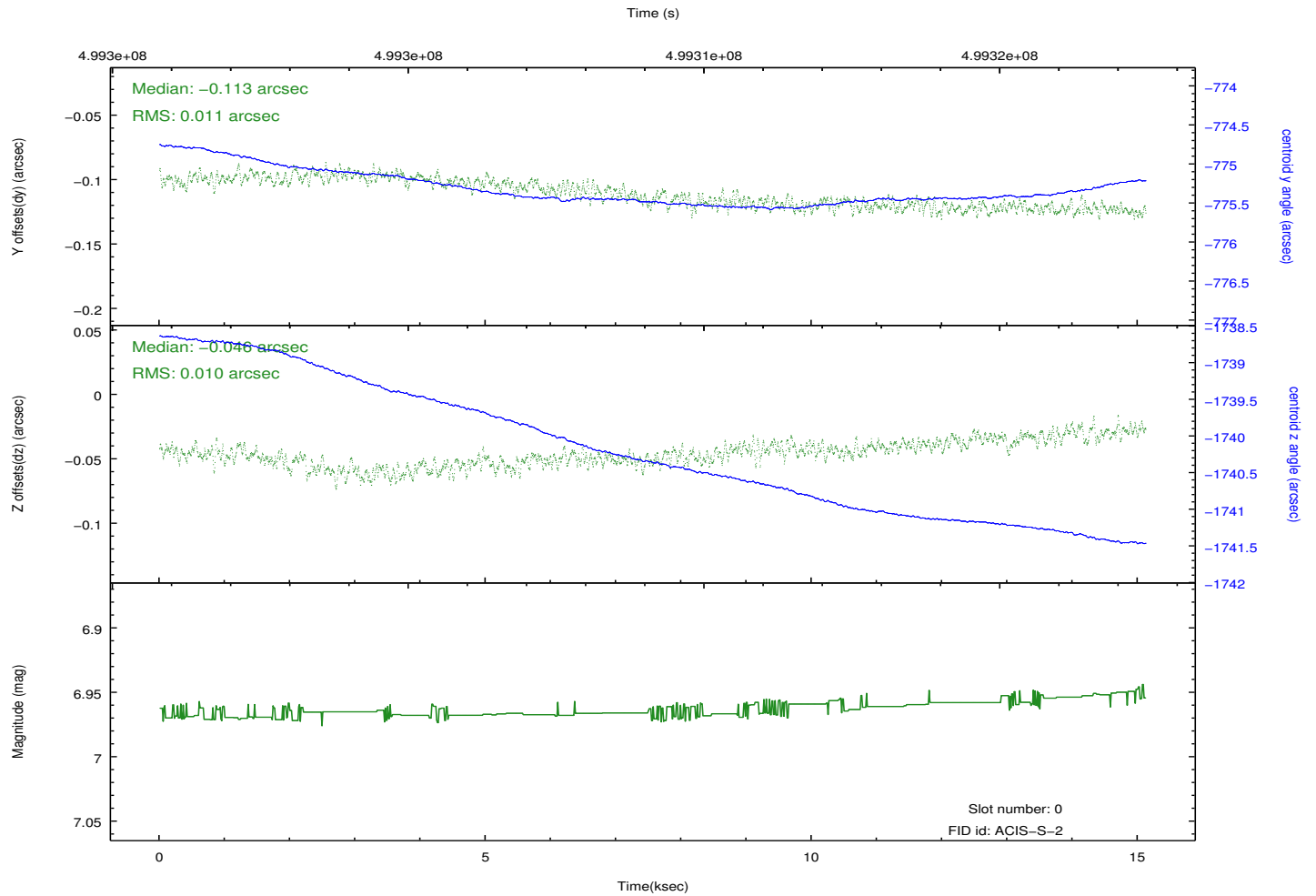
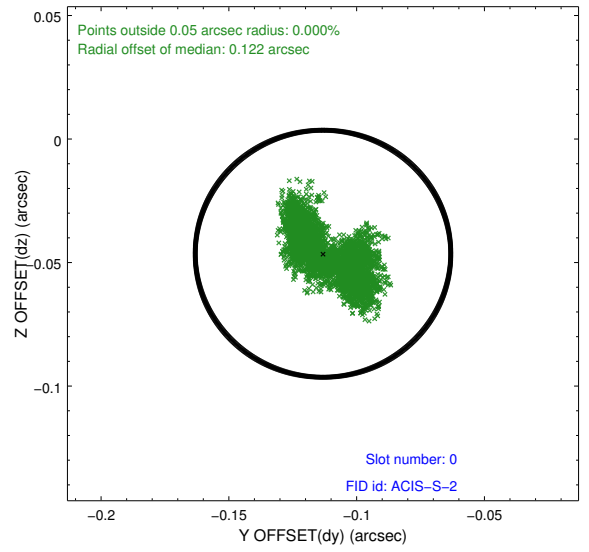
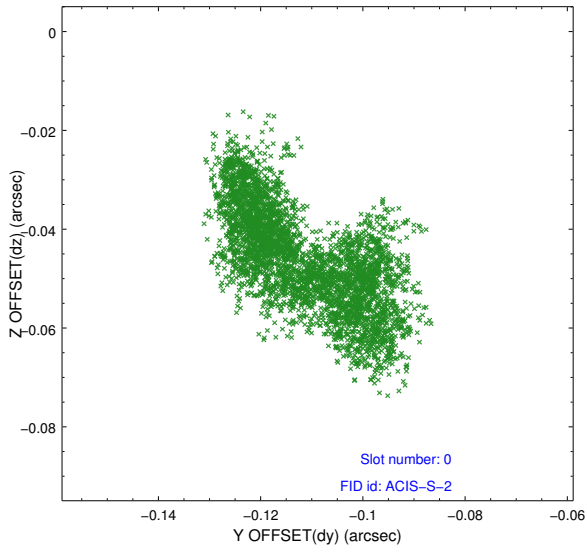


2.4.4 Slot 7

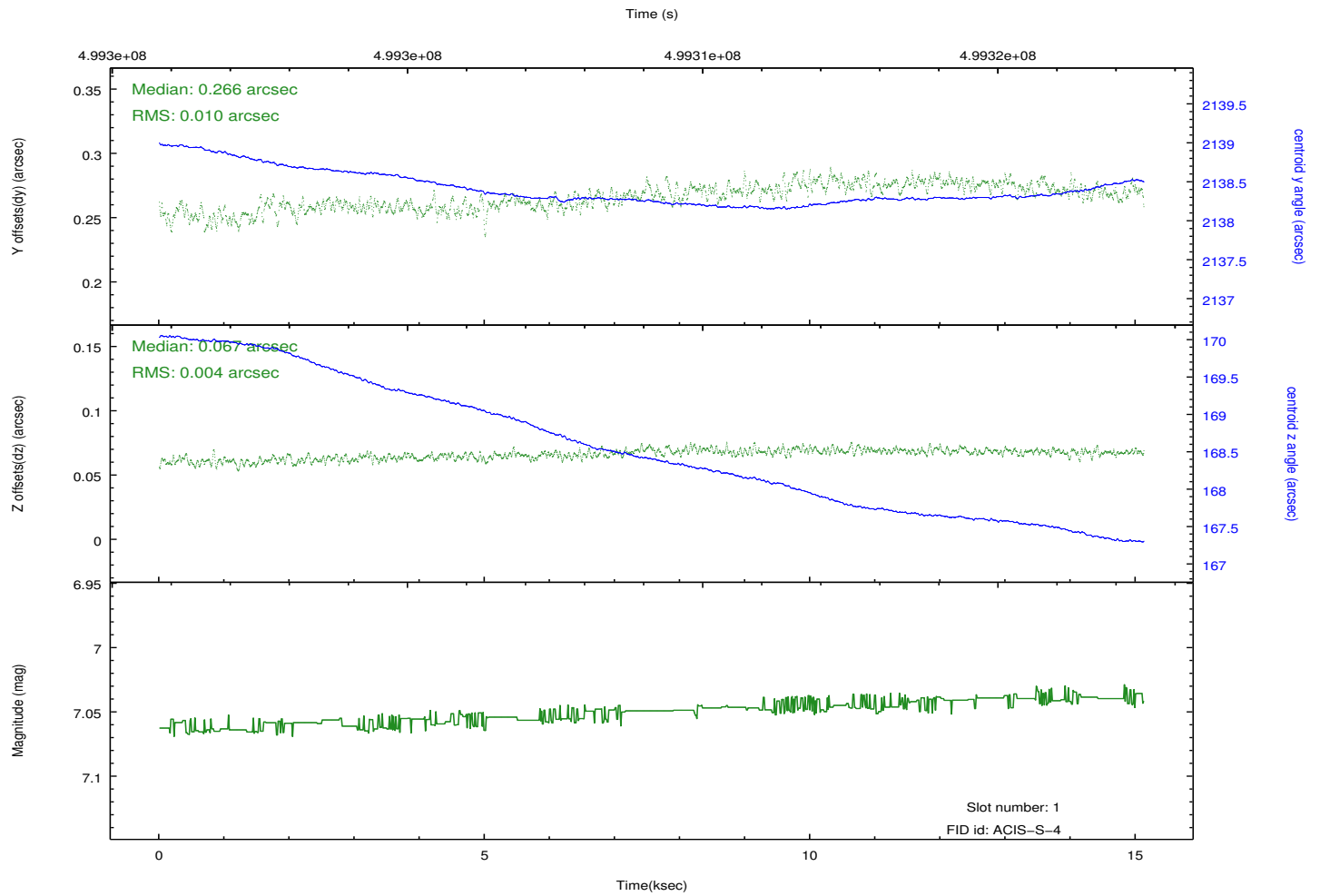
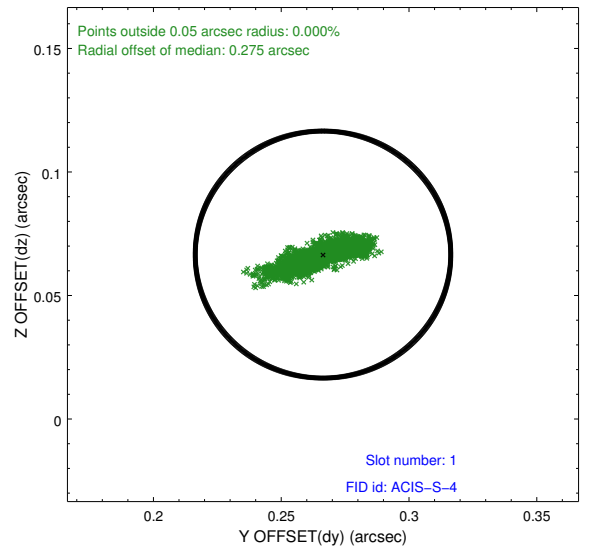
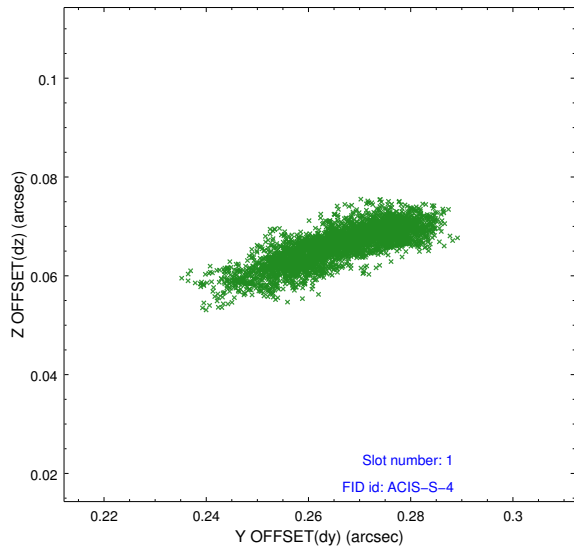


2.5 FID Slots

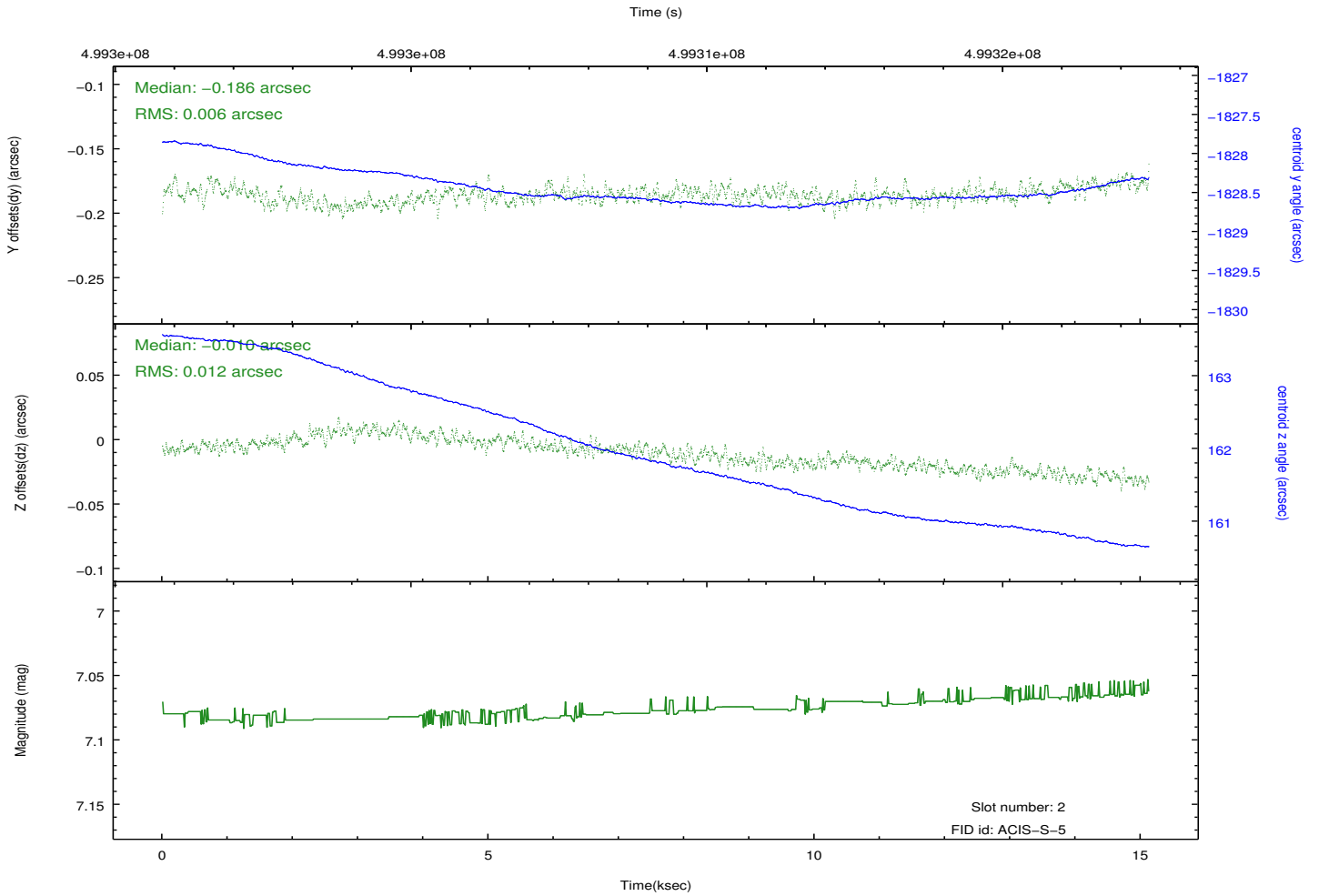
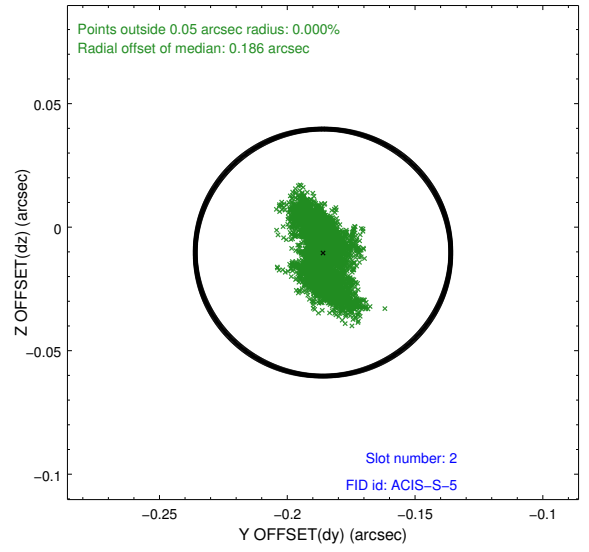
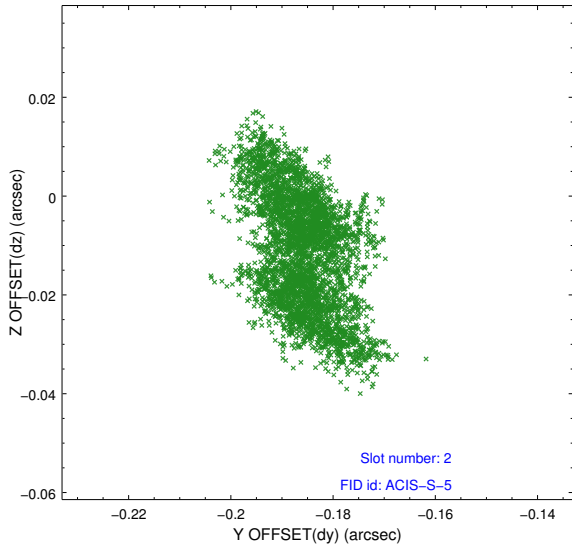
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.966399944305

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 star from the solution.

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.