

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 18955 - L2 Version 2
Chandra X-Ray Center

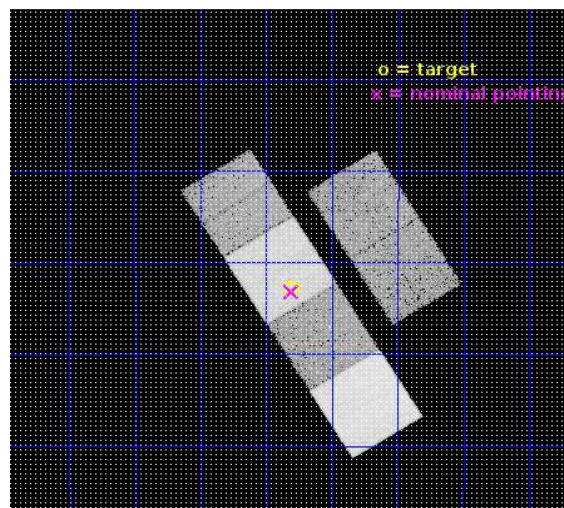
L2 Processing Date : Aug 21 2017

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1 Front

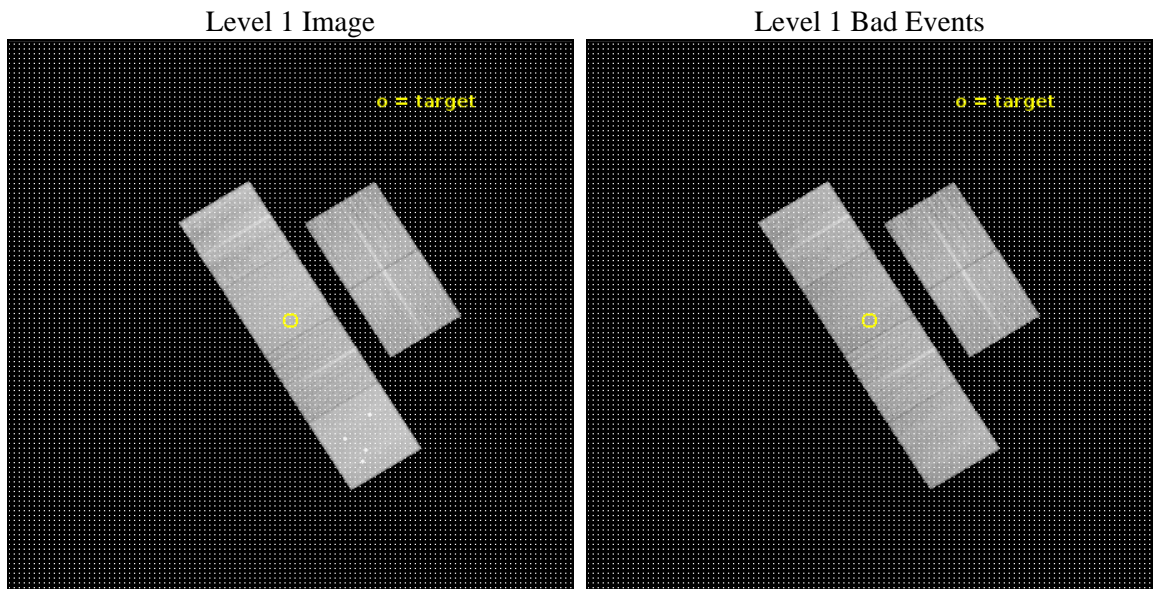
seq_num	401823	Sequence number
obs_id	18955	Observation id
title	Tracking the Evolution of an X-ray Counterpart to a Gravitational Wave Event	Proposal title
observer	Wen-Fai Fong	Principal investigator
object	SGRB170817A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.450375	Observer's specified target RA [deg]
dec_targ	-23.381486	Observer's specified target Dec [deg]
ra_nom	197.4522063718	Nominal RA [deg]
dec_nom	-23.386753817441	Nominal Dec [deg]
roll_nom	238.22977719917	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24953.600371838	Sum of GTIs [s]
livetime	24637.622858675	Livetime [s]
ontime2	24947.118390799	Sum of GTIs [s]
ontime3	24950.359291315	Sum of GTIs [s]
ontime5	24953.600371838	Sum of GTIs [s]
ontime6	24950.359220862	Sum of GTIs [s]
ontime7	24953.600371838	Sum of GTIs [s]
ontime8	24950.359311461	Sum of GTIs [s]
l2events	277948	Number of level 2 events



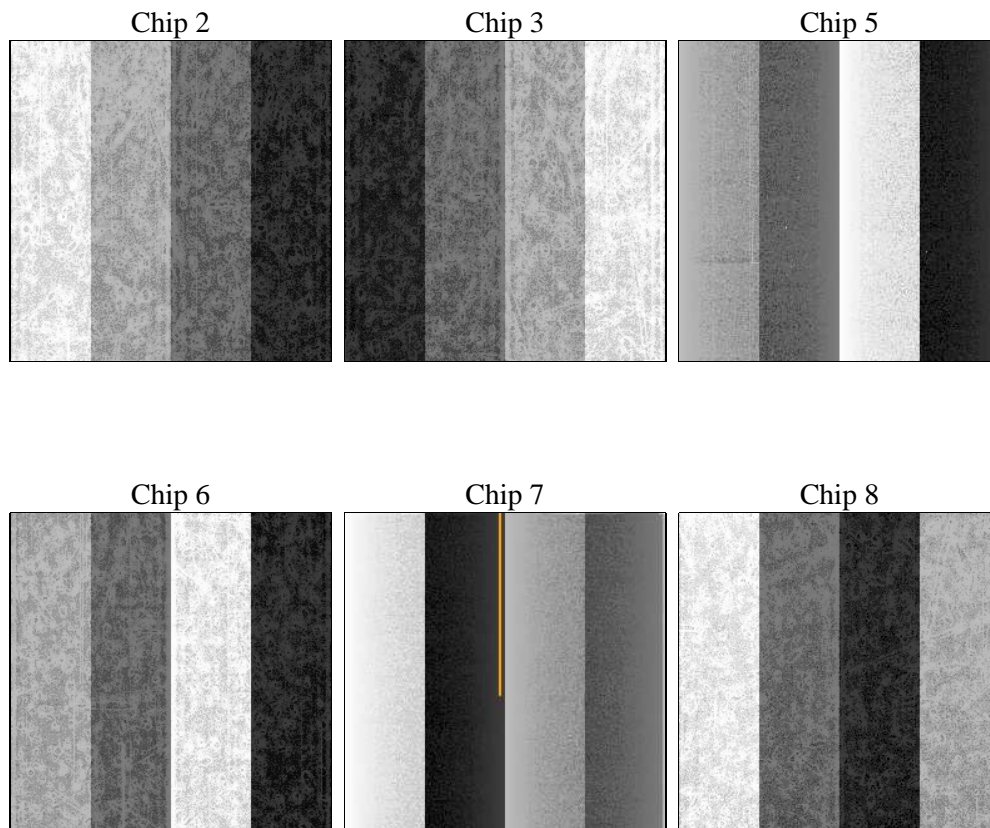
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	24953.600371838	Sum of GTIs [s]
caldbver	4.7.5	 	ontime2	24947.118390799	Sum of GTIs [s]
date	2017-08-21T23:51:42	Date and time of file creation	ontime3	24950.359291315	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	24953.600371838	Sum of GTIs [s]
			ontime6	24950.359220862	Sum of GTIs [s]
			ontime7	24953.600371838	Sum of GTIs [s]
			ontime8	24950.359311461	Sum of GTIs [s]
			l1events	1206609	Number of level 1 events

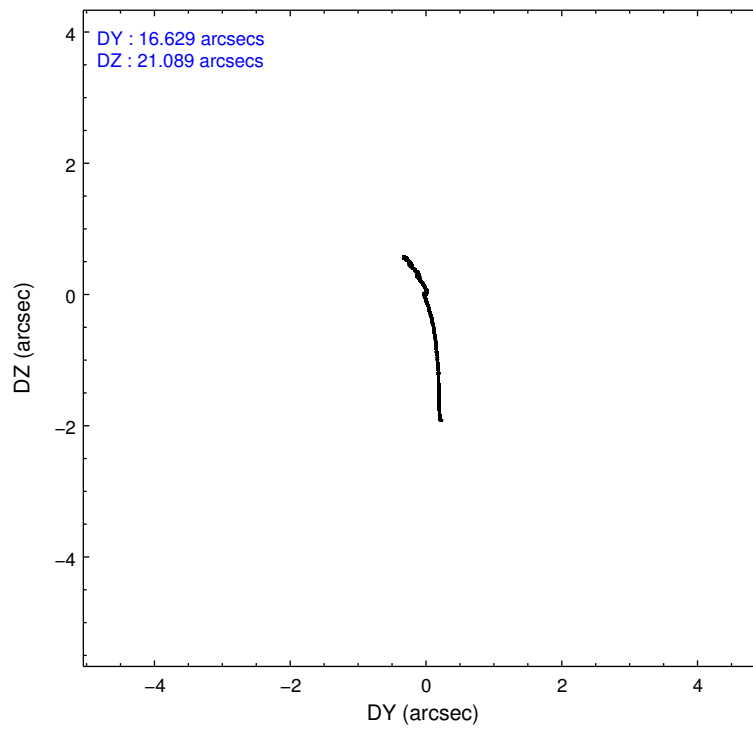
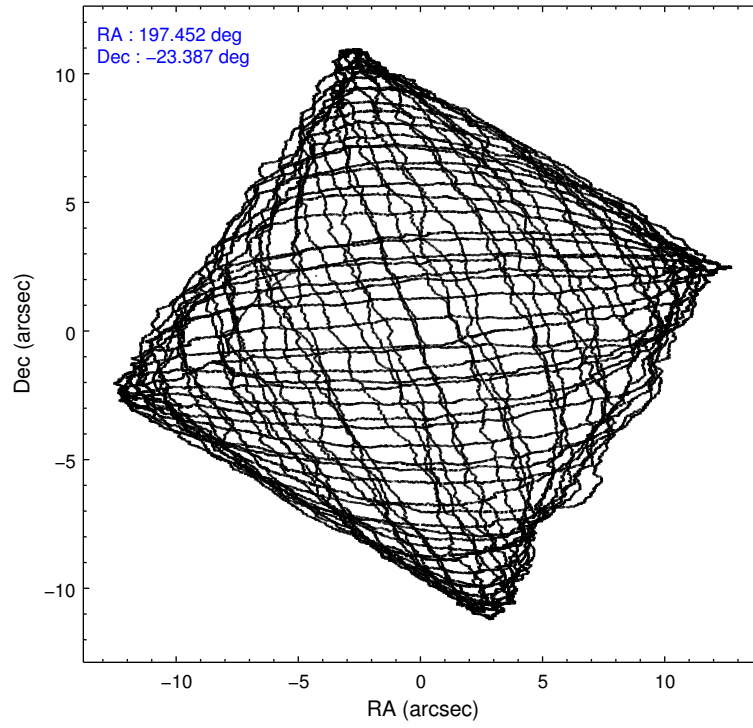
2.1.4 Events

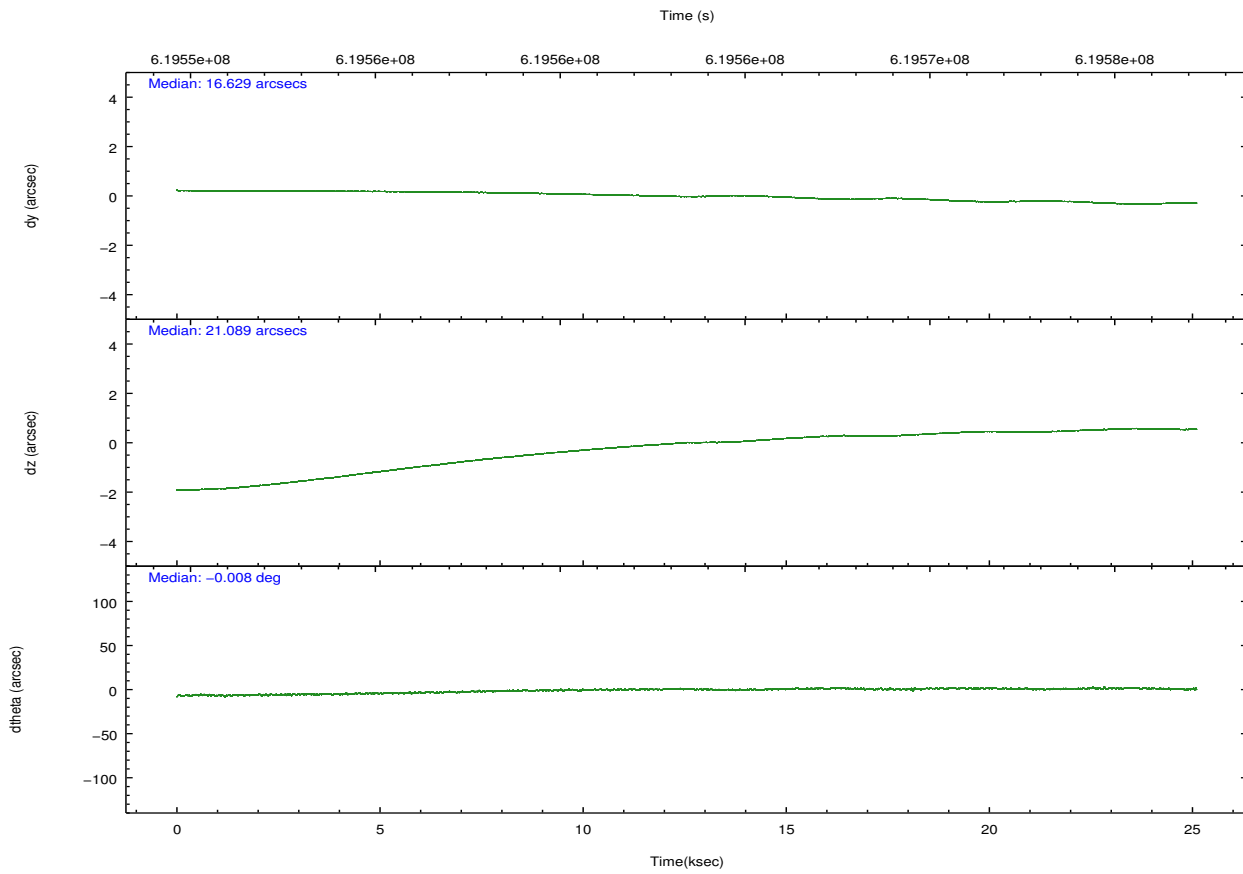
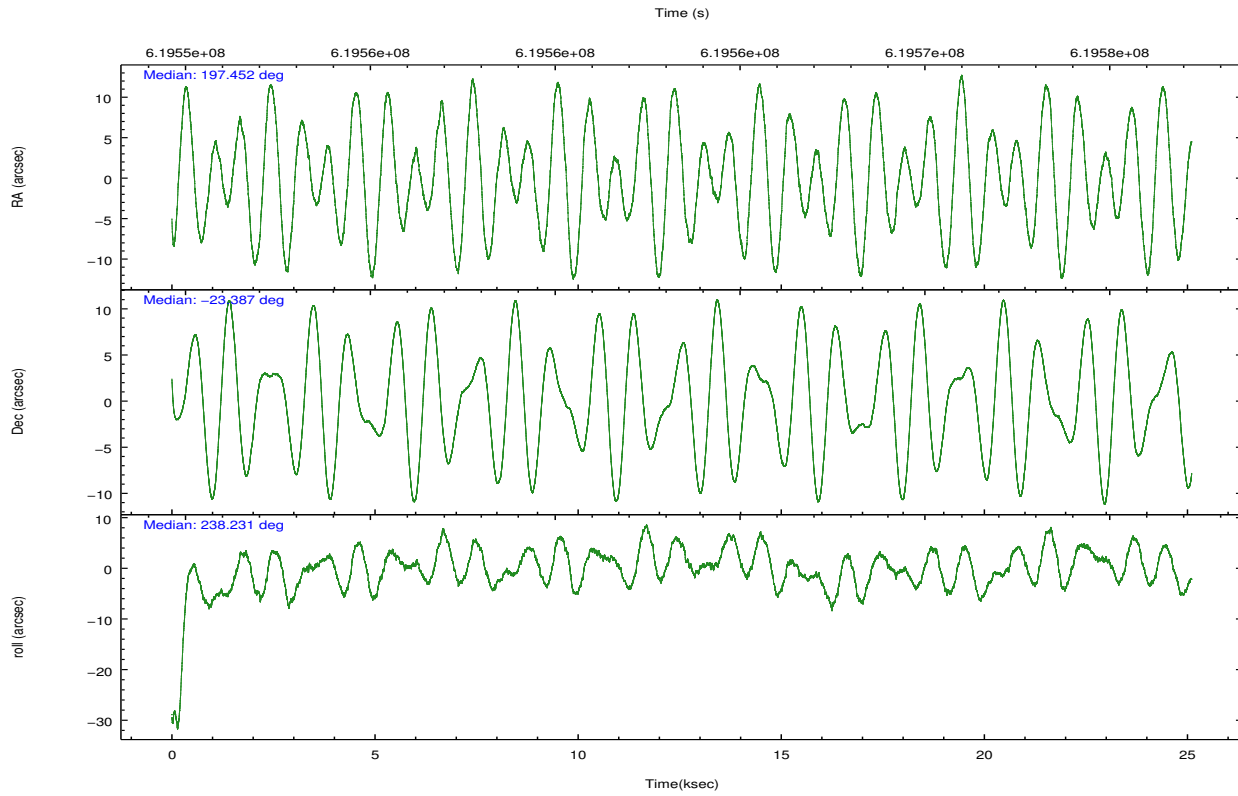
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	172731	160461	273478	170482	213569	215888	grade 0 events	6364	6124	17905	6784	7749	16007
rejected events	154739	143370	136861	150808	120979	158876		3%	3%	6%	3%	3%	7%
rejected %	89%	89%	50%	88%	56%	73%	grade 1 events	111	66	689	88	318	156
								0%	0%	0%	0%	0%	0%
							grade 2 events	4430	3661	40920	4568	19433	13628
								2%	2%	14%	2%	9%	6%
							grade 3 events	1763	1814	3895	1891	7459	6013
								1%	1%	1%	1%	3%	2%
							grade 4 events	1824	1789	3783	1794	7319	5607
								1%	1%	1%	1%	3%	2%
							grade 5 events	6573	7689	17733	7686	21253	11631
								3%	4%	6%	4%	9%	5%
							grade 6 events	3616	3708	70134	4642	50652	15801
								2%	2%	25%	2%	23%	7%
							grade 7 events	148050	135610	118419	143029	99386	147045
								85%	84%	43%	83%	46%	68%

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	197.452739	197.4522063718002	CCD I2 on	O1	Y
[deg] Pointing Dec	-23.359309	-23.386753817441	CCD I3 on	O2	Y
[deg] Pointing Roll	238.073370	238.2297771991651	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	619550976.184000	619549809.92196	CCD S5 on	N	N
Observation start date	2017-08-19T17:28:27	2017-08-19T17:10:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	619575976.184000	619577005.73605	On-chip summing requested	N	N
Observation end date	2017-08-20T00:25:07	2017-08-20T00:43:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



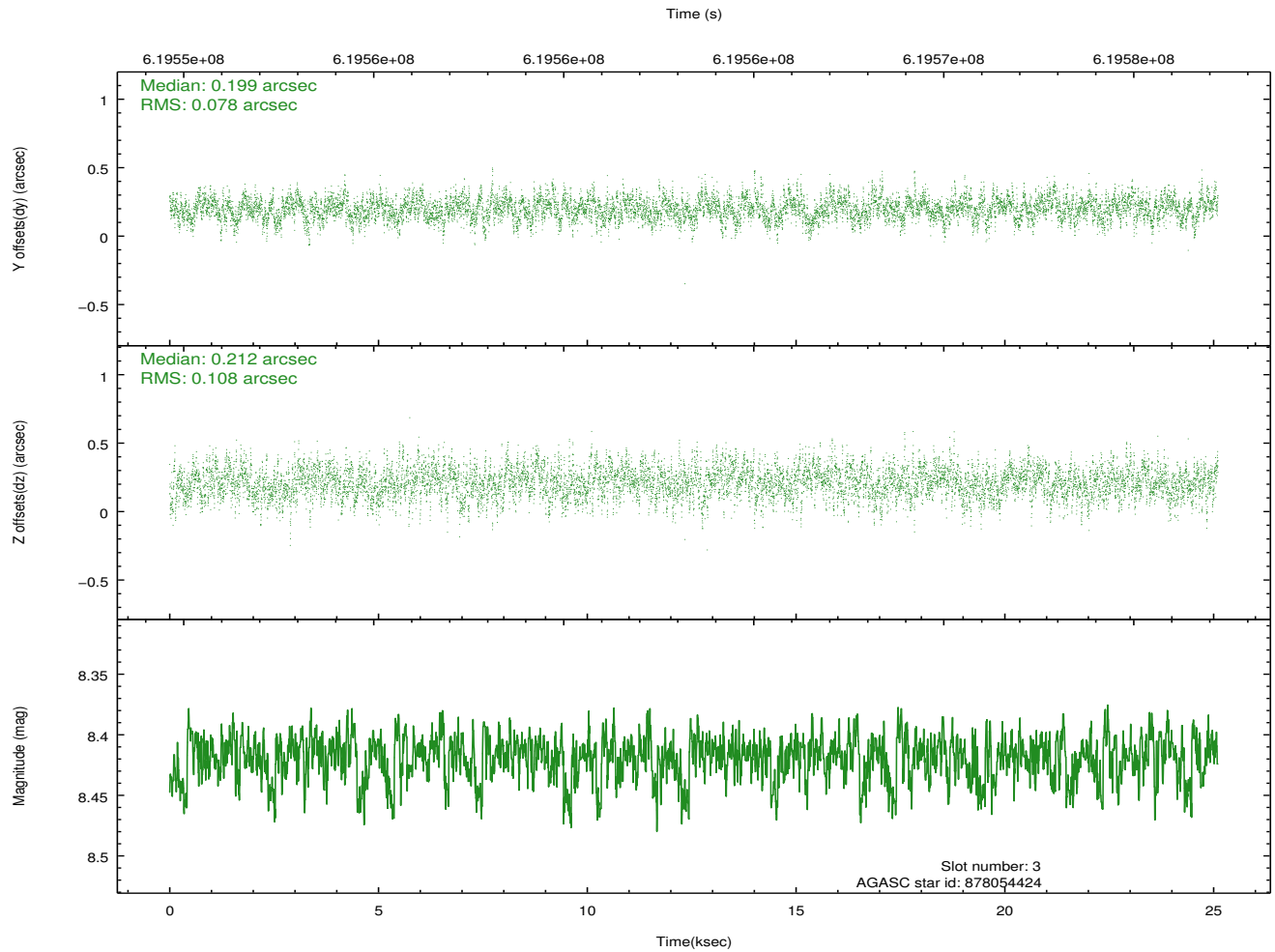
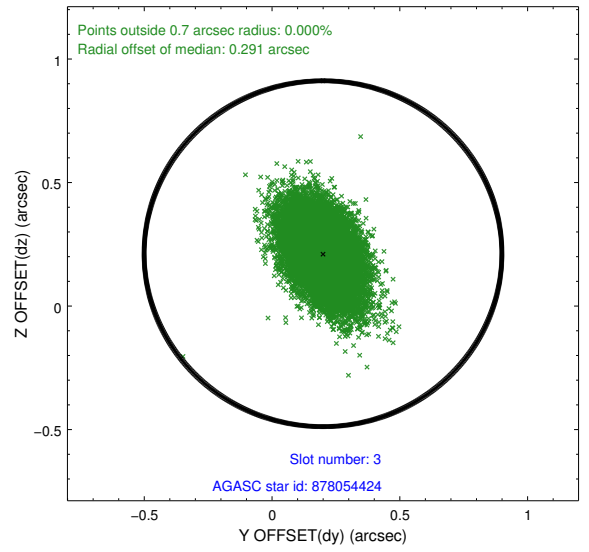
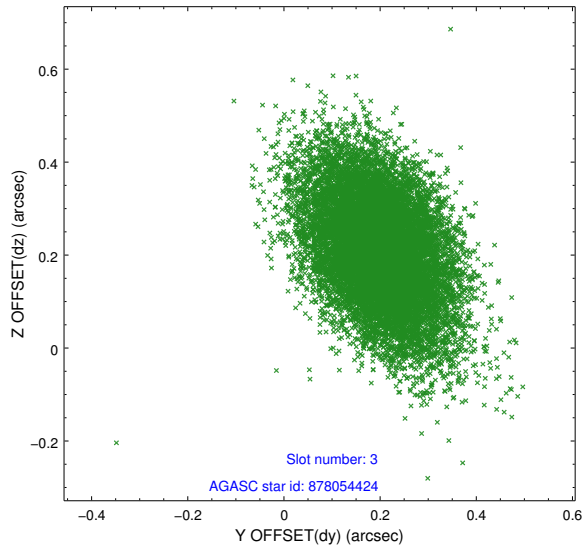


Slot Statistics

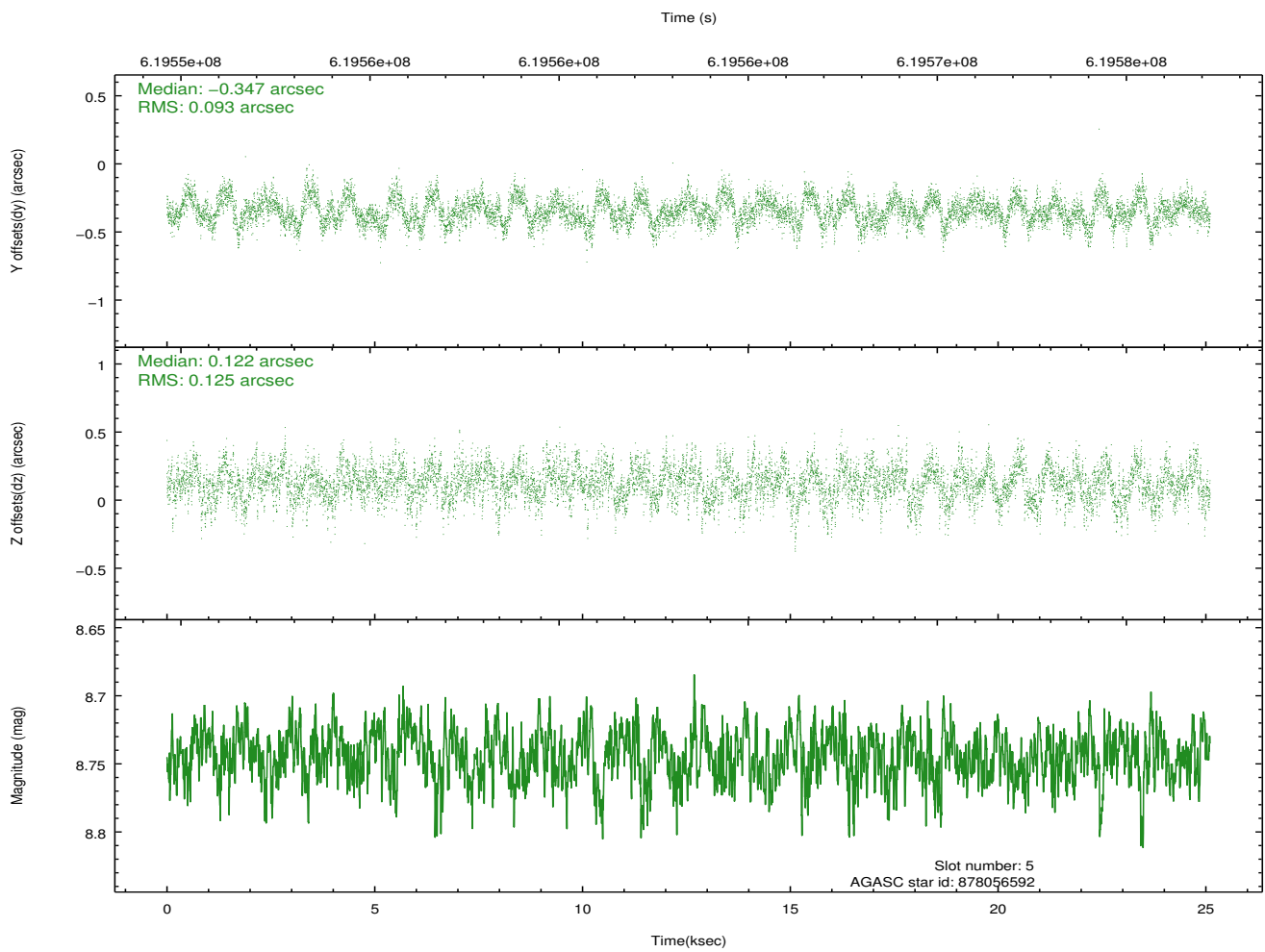
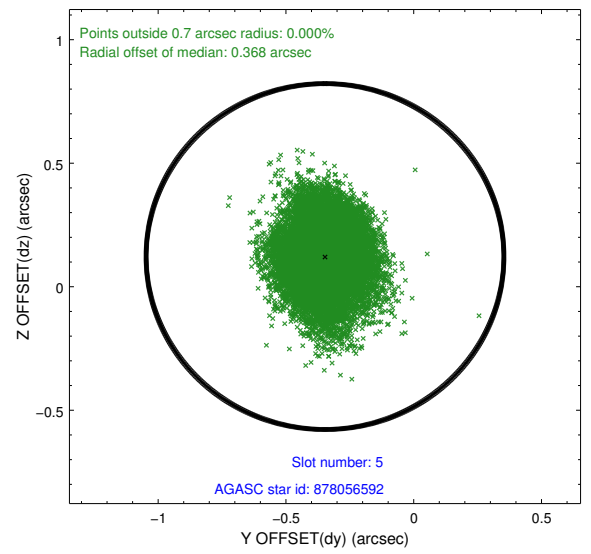
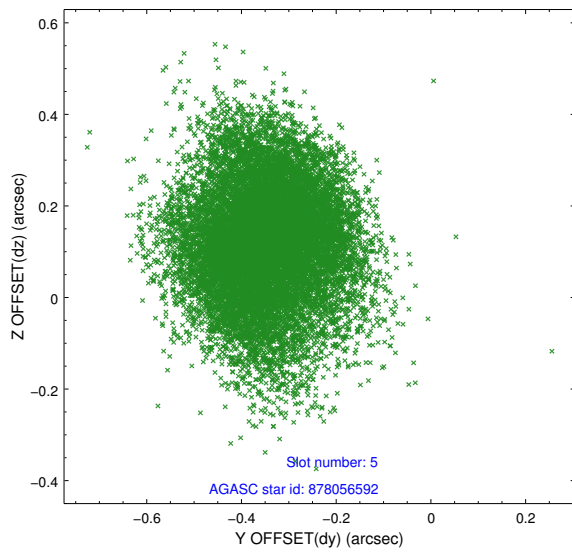
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.19	6123	0.270	-0.072	0.018	0.028	0.000000	0.000000	926.75	-1737.93
1	FID		ACIS-S-2	7.09	6123	-0.153	-0.033	0.013	0.036	0.000000	0.000000	-769.50	-1742.64
2	FID		ACIS-S-5	7.19	6120	-0.140	0.112	0.019	0.030	0.000000	0.000000	-1822.94	159.57
3	GUIDE	used	878054424	8.42	12238	0.199	0.212	0.139	0.237	197.311680	-23.210058	-208.15	-679.37
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	878056592	8.74	12237	-0.347	0.122	0.167	0.264	197.586702	-23.861101	1300.61	1328.83
6	GUIDE	used	878061480	7.96	12246	0.219	0.186	0.122	0.213	197.360027	-22.852260	-1385.06	-1226.43
7	GUIDE	used	878058424	9.18	12224	-0.071	-0.510	0.178	0.305	197.645163	-24.009629	1652.96	1774.84

2.4 Star Slots

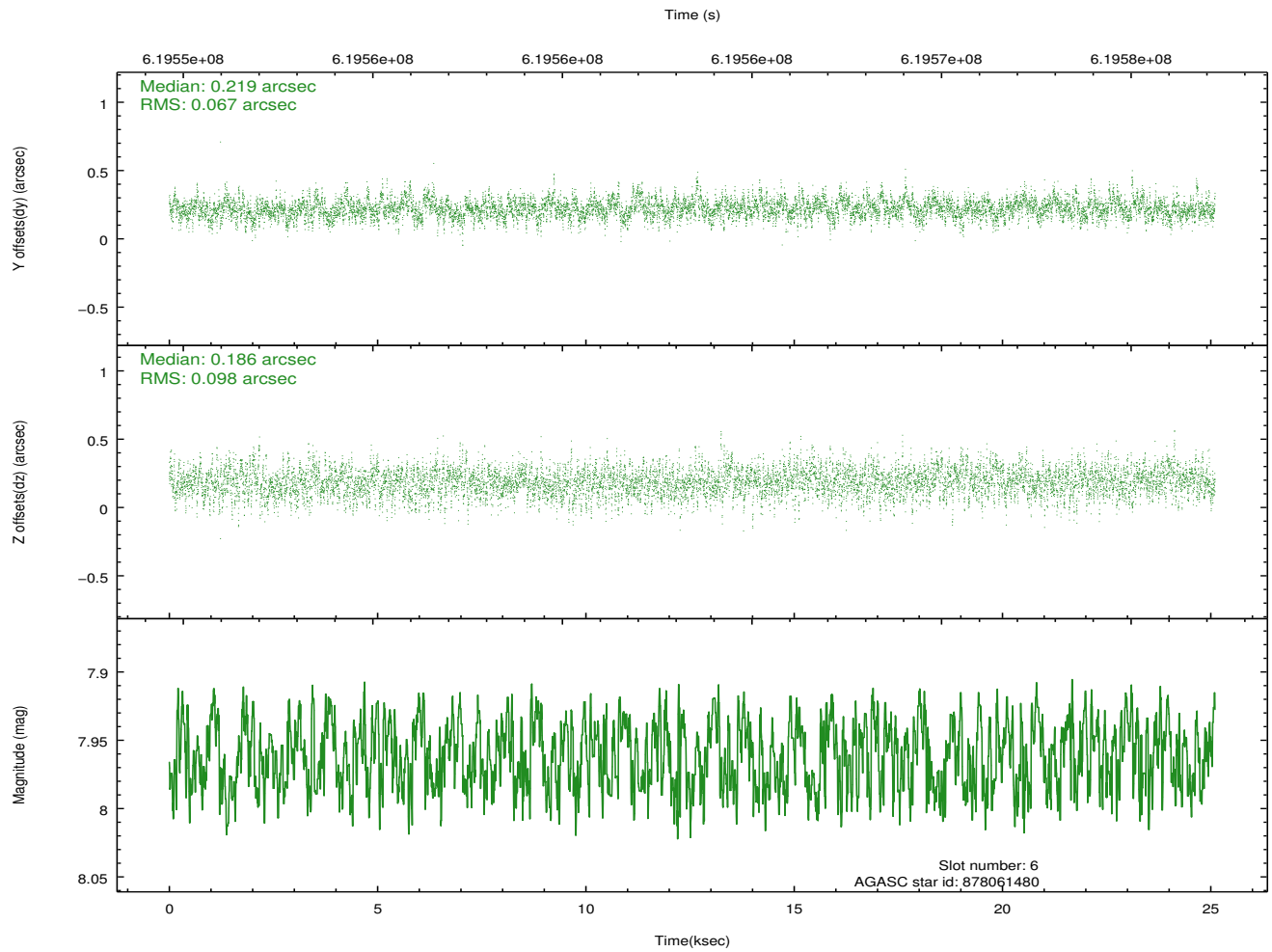
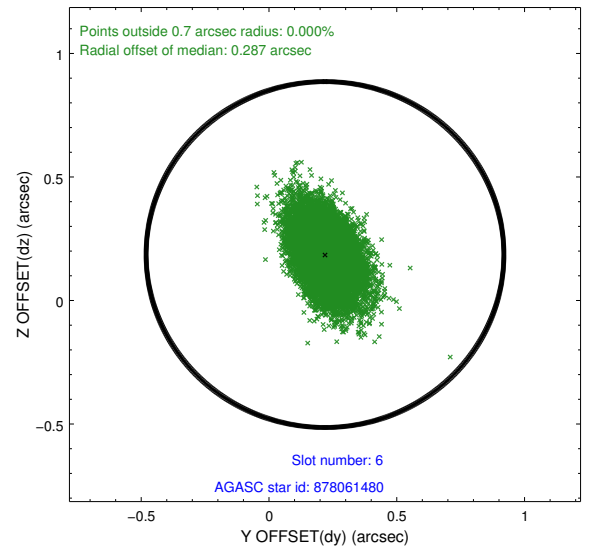
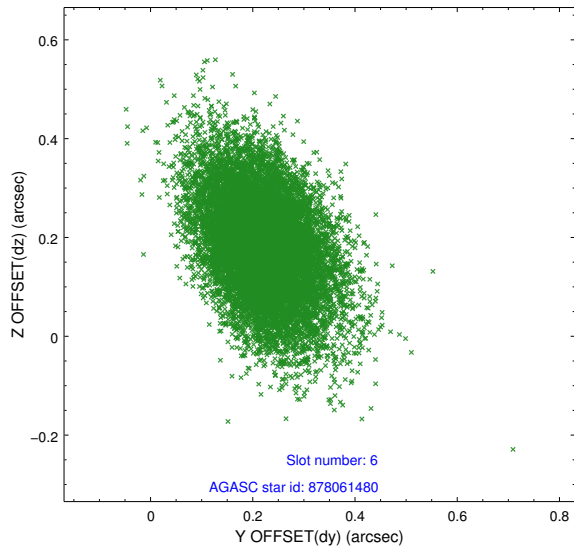
2.4.1 Slot 3



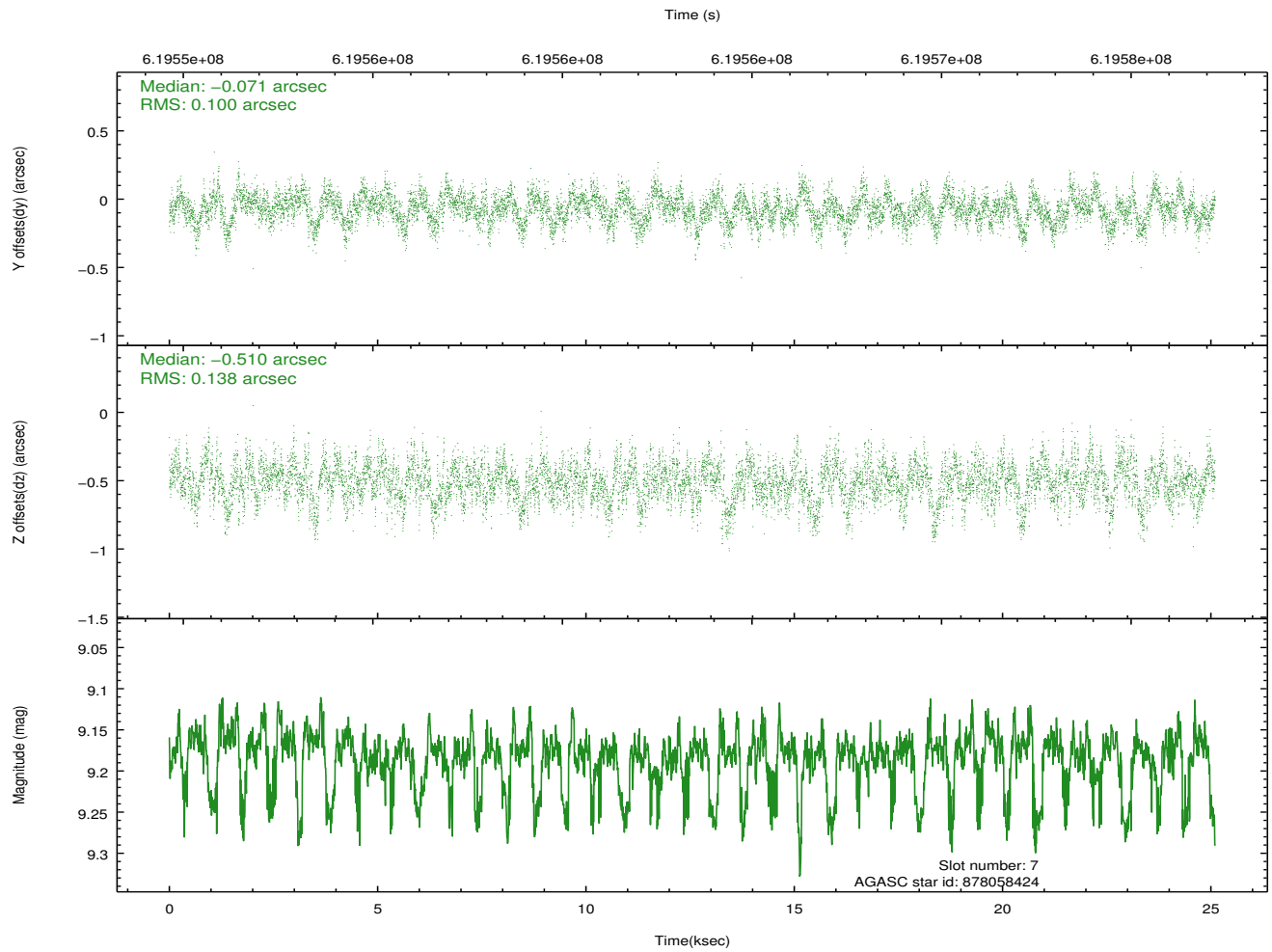
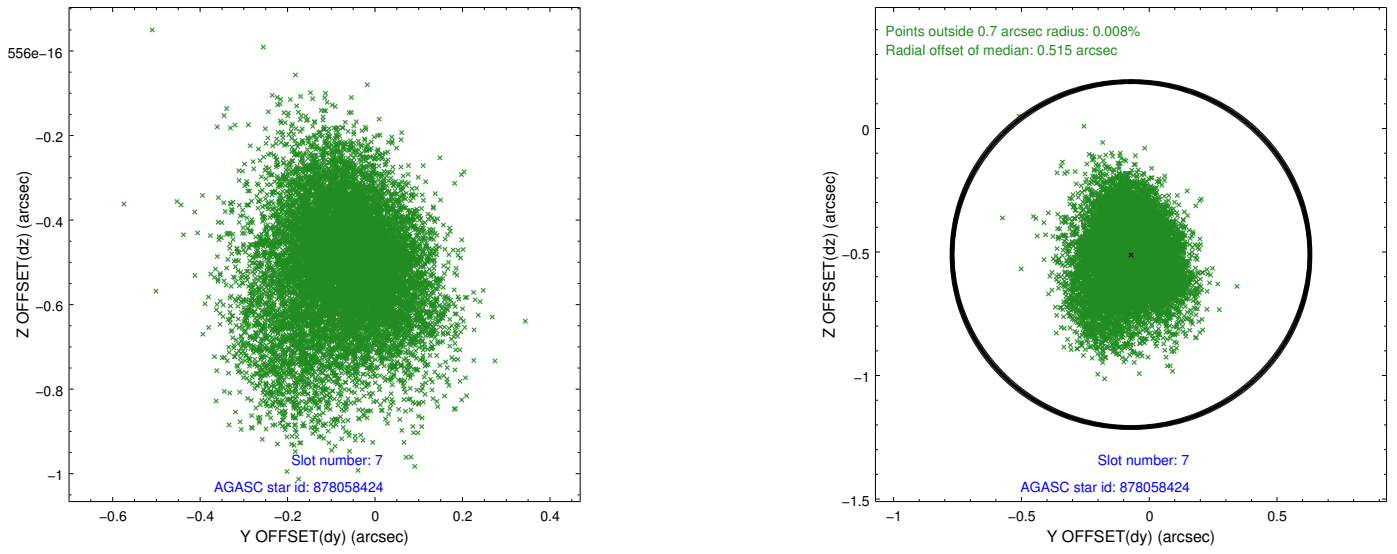
2.4.2 Slot 5



2.4.3 Slot 6

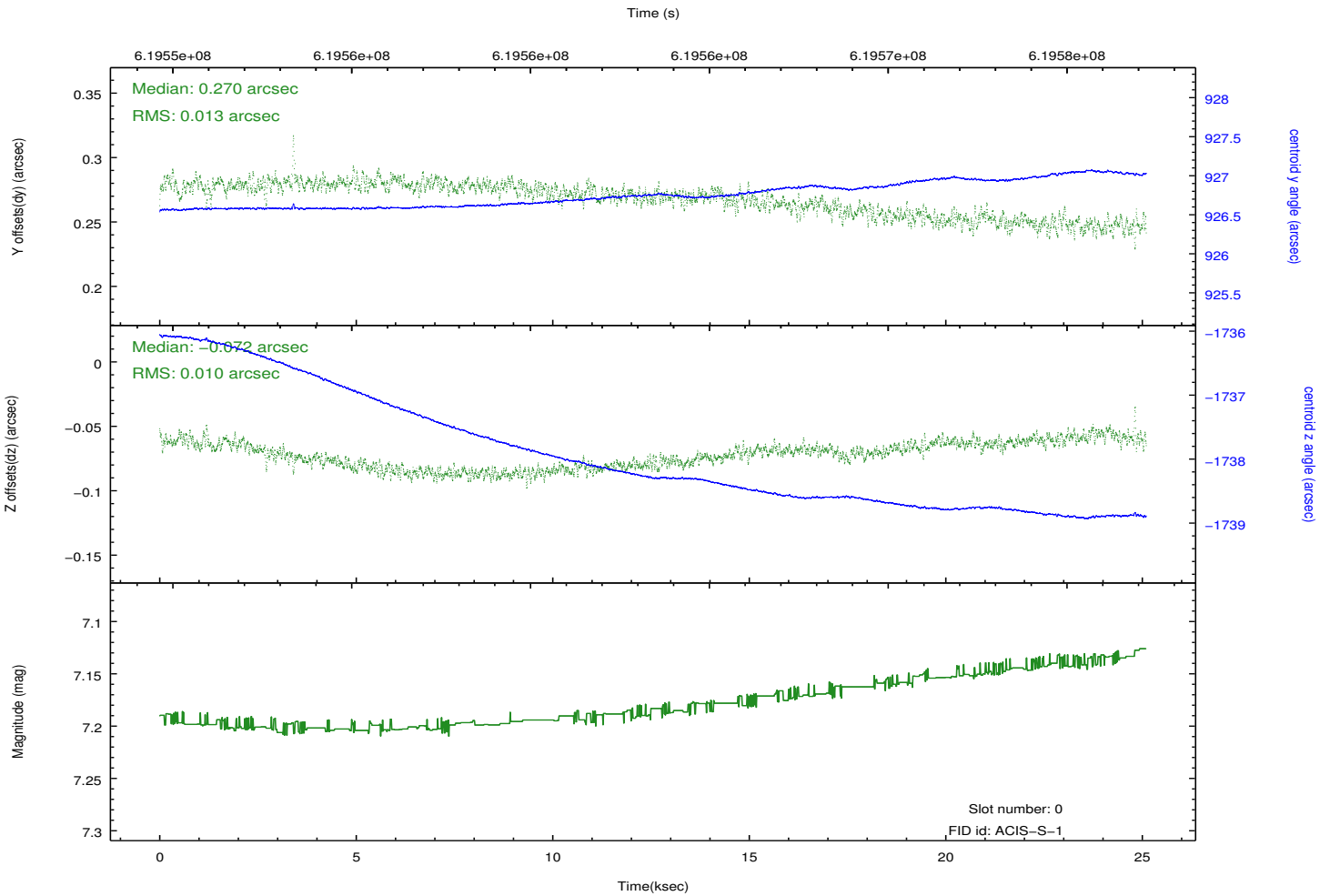
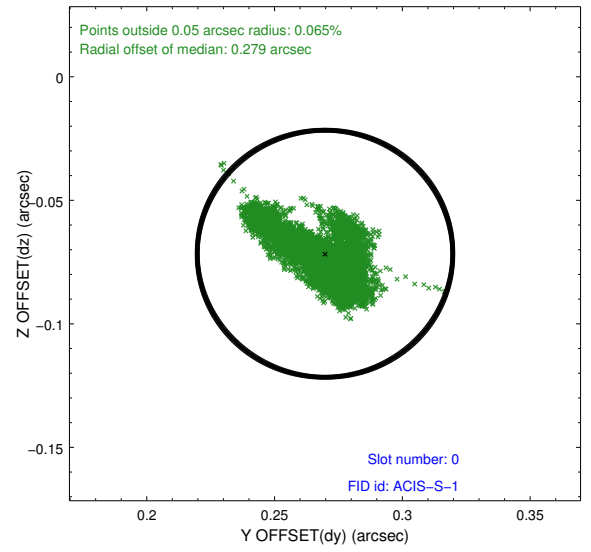
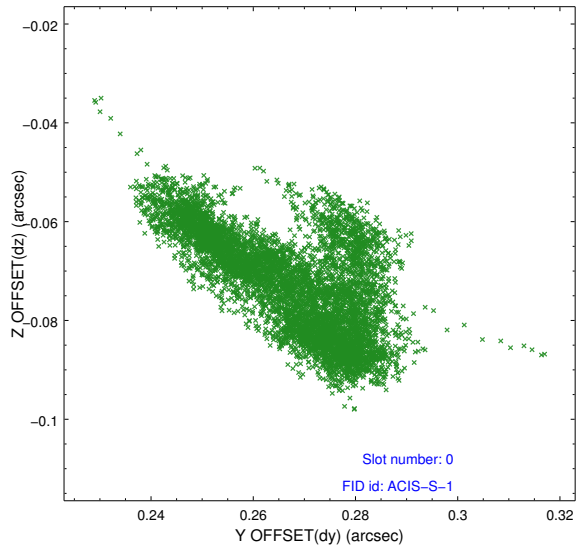


2.4.4 Slot 7

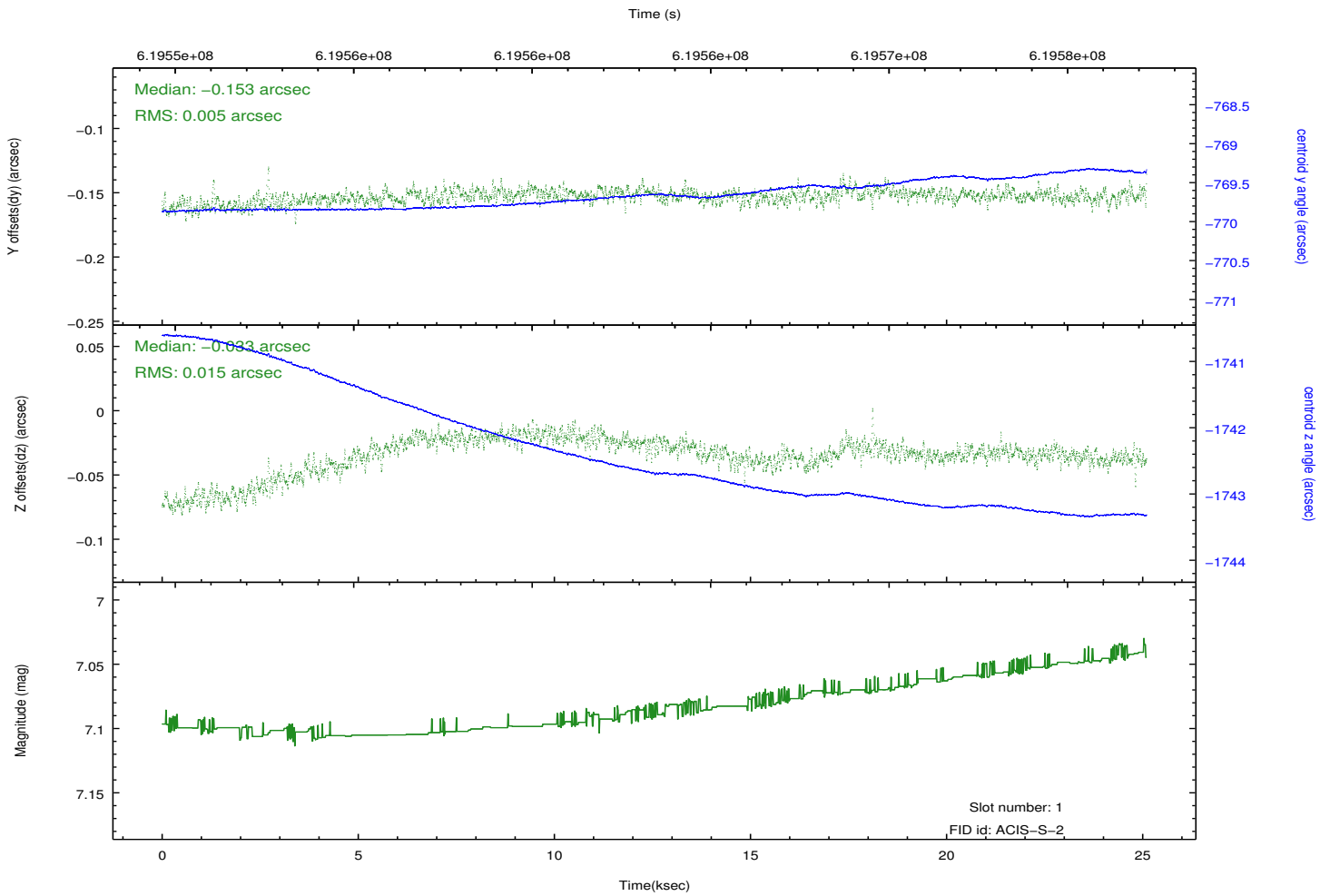
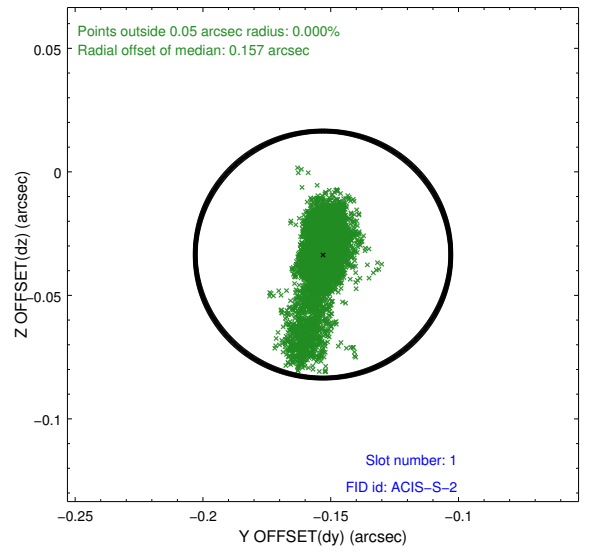
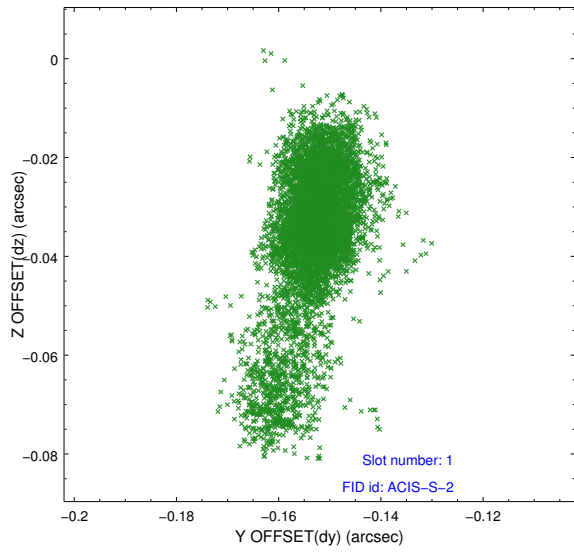


2.5 FID Slots

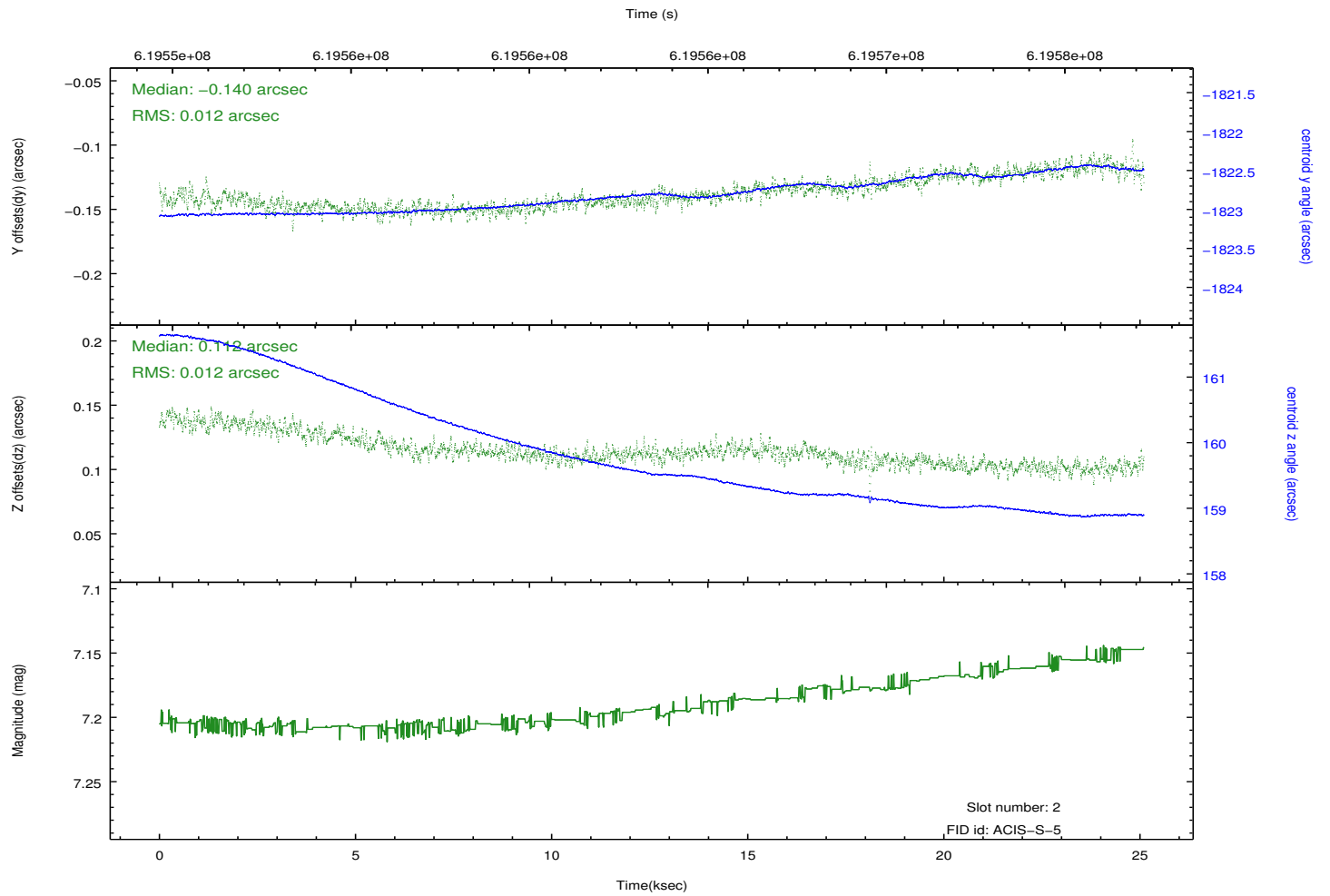
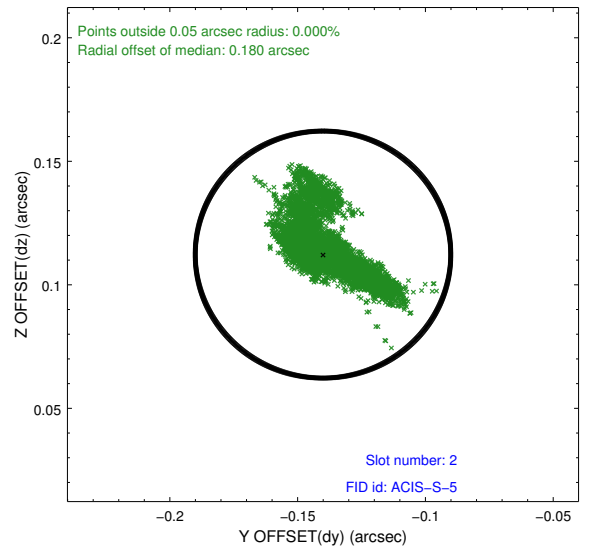
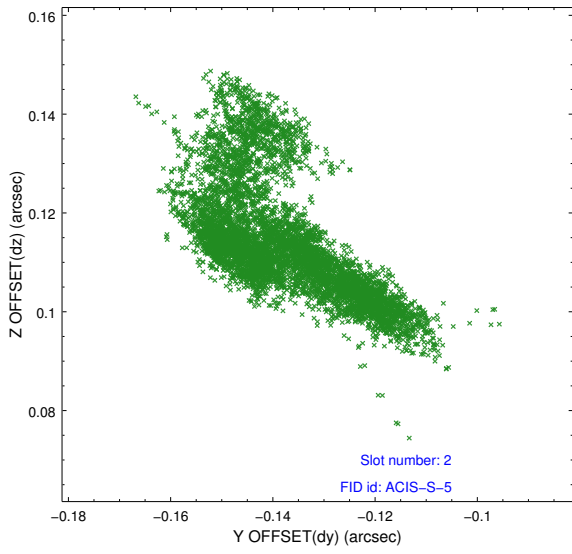
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.08.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.953600371838

A.2 Comments

The guide star in slot 4 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 solution.