

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16003 - L2 Version 2
Chandra X-Ray Center

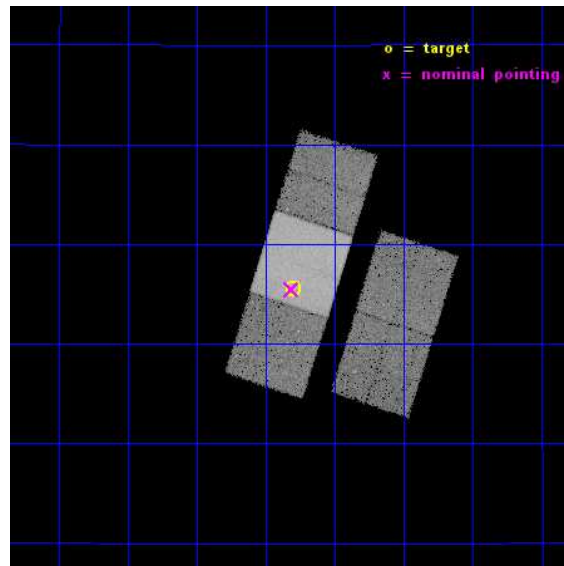
L2 Processing Date : Dec 8 2014

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1 Front

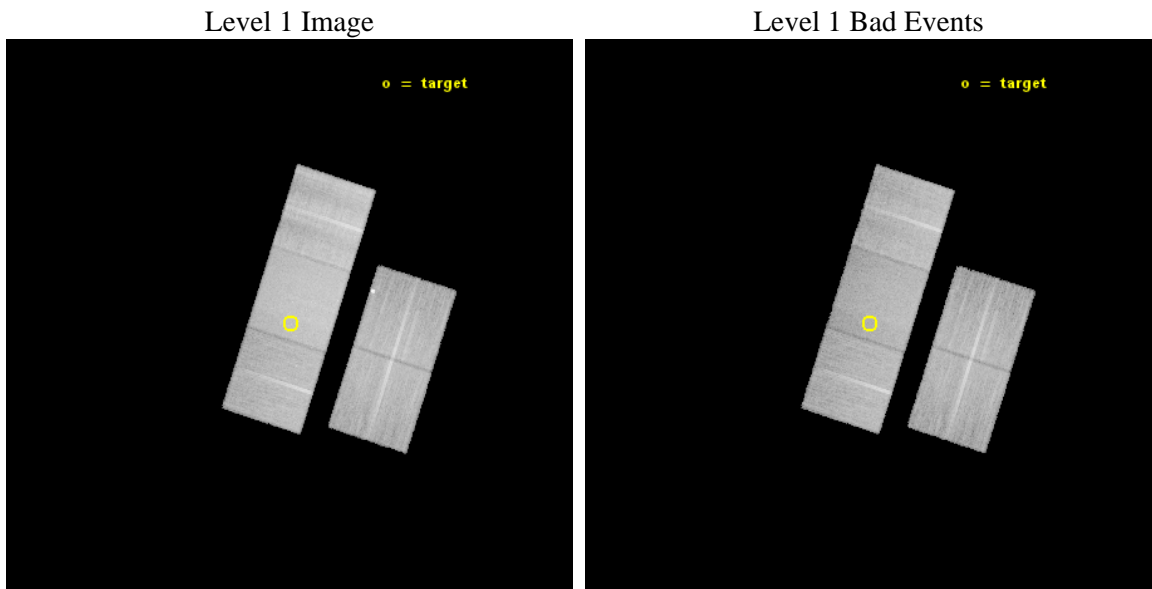
seq_num	502236	Sequence number
obs_id	16003	Observation id
title	State of the shocked plasma: X-ray and radio signatures from type IIP supernovae	Proposal title
observer	Prof. Alak Ray	Principal investigator
object	SN 2013ej	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	24.200667	Observer's specified target RA [deg]
dec_targ	15.758611	Observer's specified target Dec [deg]
ra_nom	24.203713008873	Nominal RA [deg]
dec_nom	15.757845958466	Nominal Dec [deg]
roll_nom	287.92027473667	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40972.700315118	Sum of GTIs [s]
livetime	40437.361821838	Livetime [s]
ontime2	40966.272320688	Sum of GTIs [s]
ontime3	40972.636511743	Sum of GTIs [s]
ontime6	40972.677551746	Sum of GTIs [s]
ontime7	40972.700315118	Sum of GTIs [s]
ontime8	40972.59547174	Sum of GTIs [s]
l2events	179604	Number of level 2 events



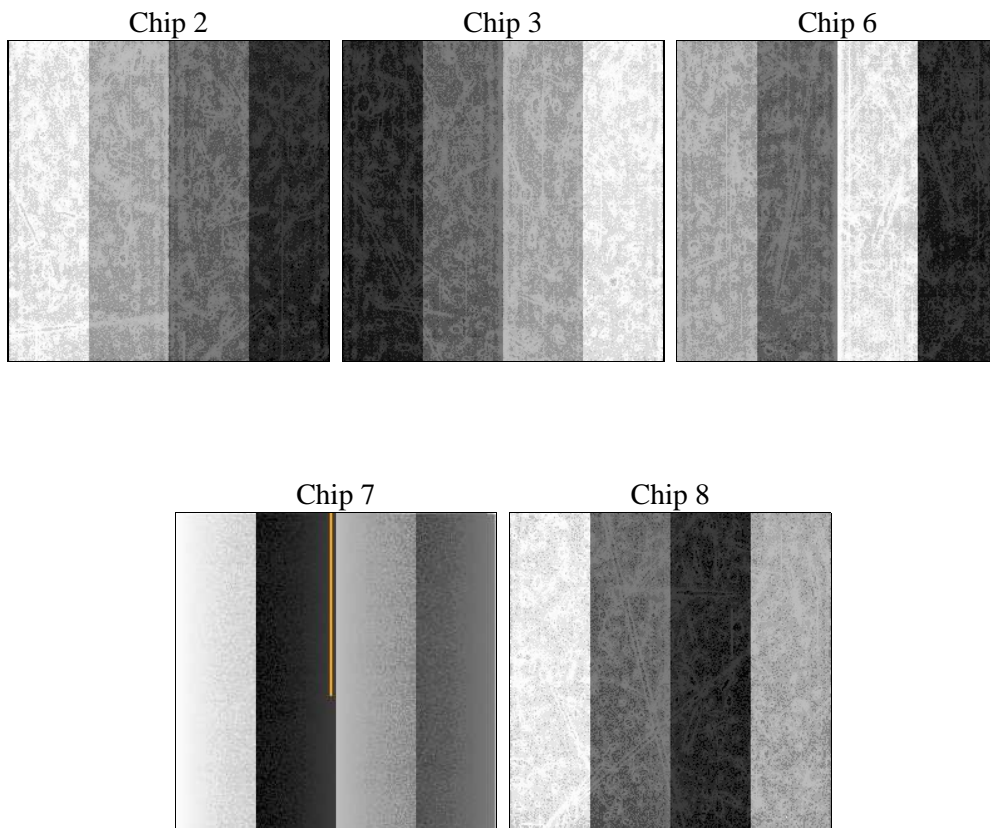
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40904.721000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	40972.700315118	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	40966.272320688	Sum of GTIs [s]
date	2014-12-08T10:35:00	Date and time of file creation	ontime3	40972.636511743	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	40972.677551746	Sum of GTIs [s]
			ontime7	40972.700315118	Sum of GTIs [s]
			ontime8	40972.59547174	Sum of GTIs [s]
			l1events	1029158	Number of level 1 events

2.1.4 Events

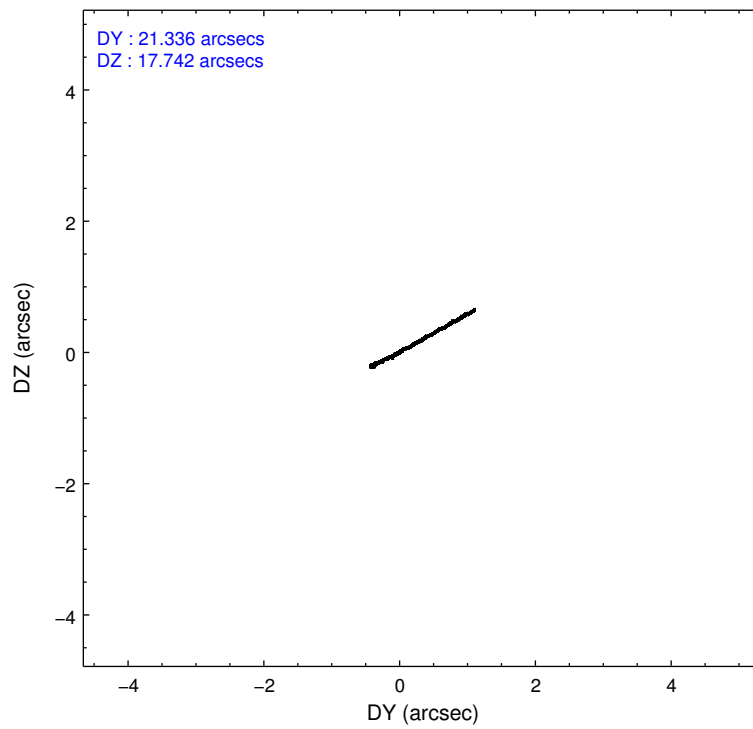
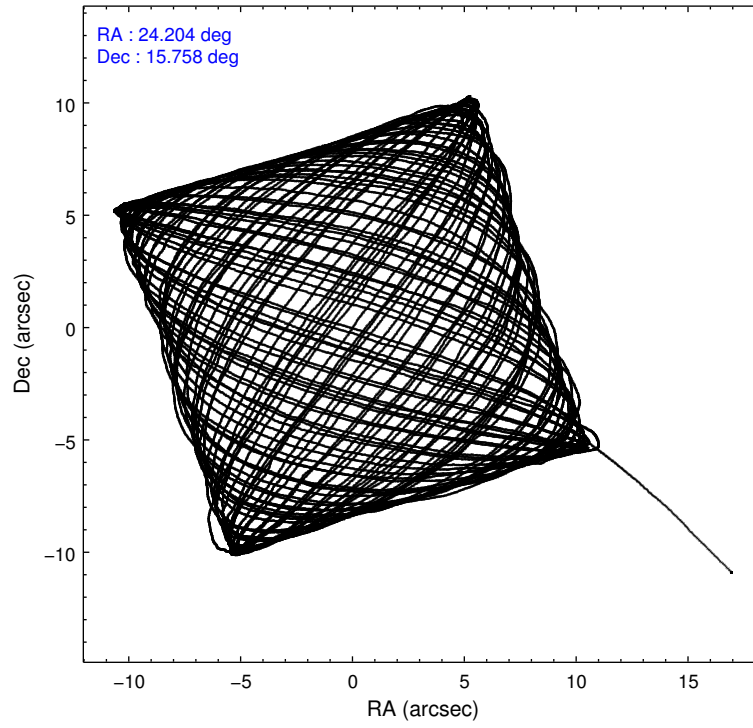
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	173221	175781	181443	250780	247933
rejected events	152773	152980	159375	143050	178579
rejected %	88%	87%	87%	57%	72%

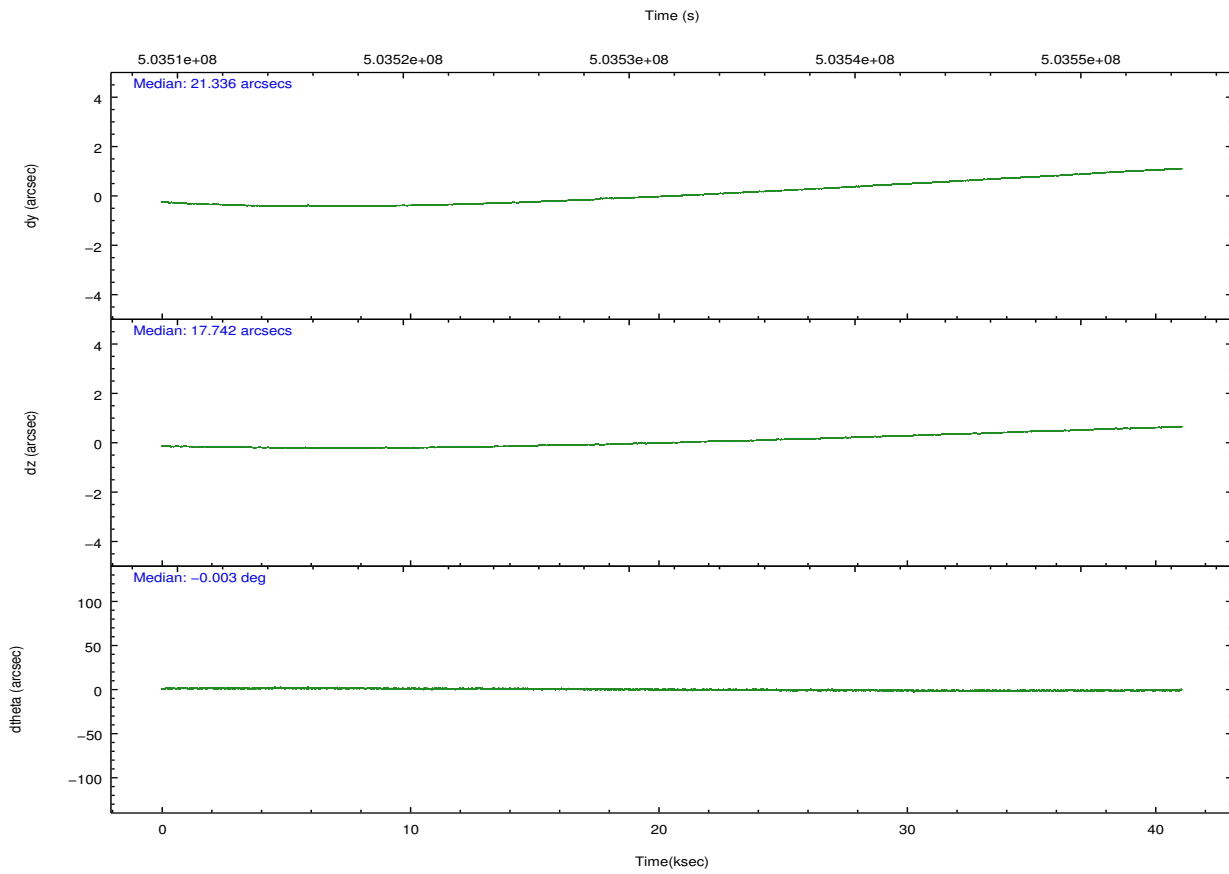
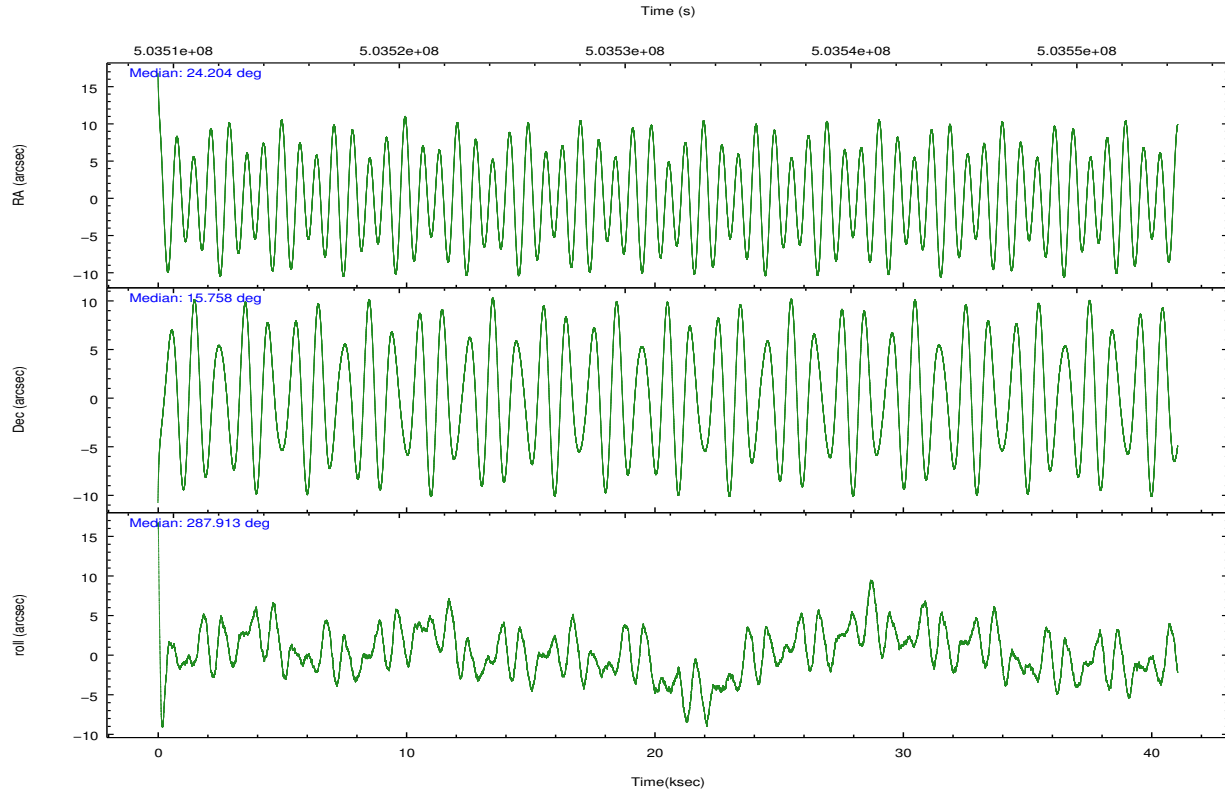
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	7321	9494	7430	9549	19977
	4%	5%	4%	3%	8%
grade 1 events	101	120	83	295	194
	0%	0%	0%	0%	0%
grade 2 events	4864	4501	5005	22278	15587
	2%	2%	2%	8%	6%
grade 3 events	2043	2167	2232	8952	7895
	1%	1%	1%	3%	3%
grade 4 events	2252	2190	2160	8763	7600
	1%	1%	1%	3%	3%
grade 5 events	7652	9851	9717	25014	14040
	4%	5%	5%	9%	5%
grade 6 events	3972	4450	5245	58203	18297
	2%	2%	2%	23%	7%
grade 7 events	145016	143008	149571	117726	164343
	83%	81%	82%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	24.182366	24.2037130088725	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.775891	15.75784595846565	Alternating exposures requested	N	N
[deg] Pointing Roll	287.769440	287.9202747366716	[s] Primary exposure time	0.000000	3.1
[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)	503511501.184000	503510142.00404			
Observation start date	2013-12-15T16:17:14	2013-12-15T15:55:42			
[s] Observation end time (MET)	503552405.184000	503552632.35638			
Observation end date	2013-12-16T03:38:58	2013-12-16T03:43:52			
Read mode	TIMED	TIMED			

2.3 Aspect





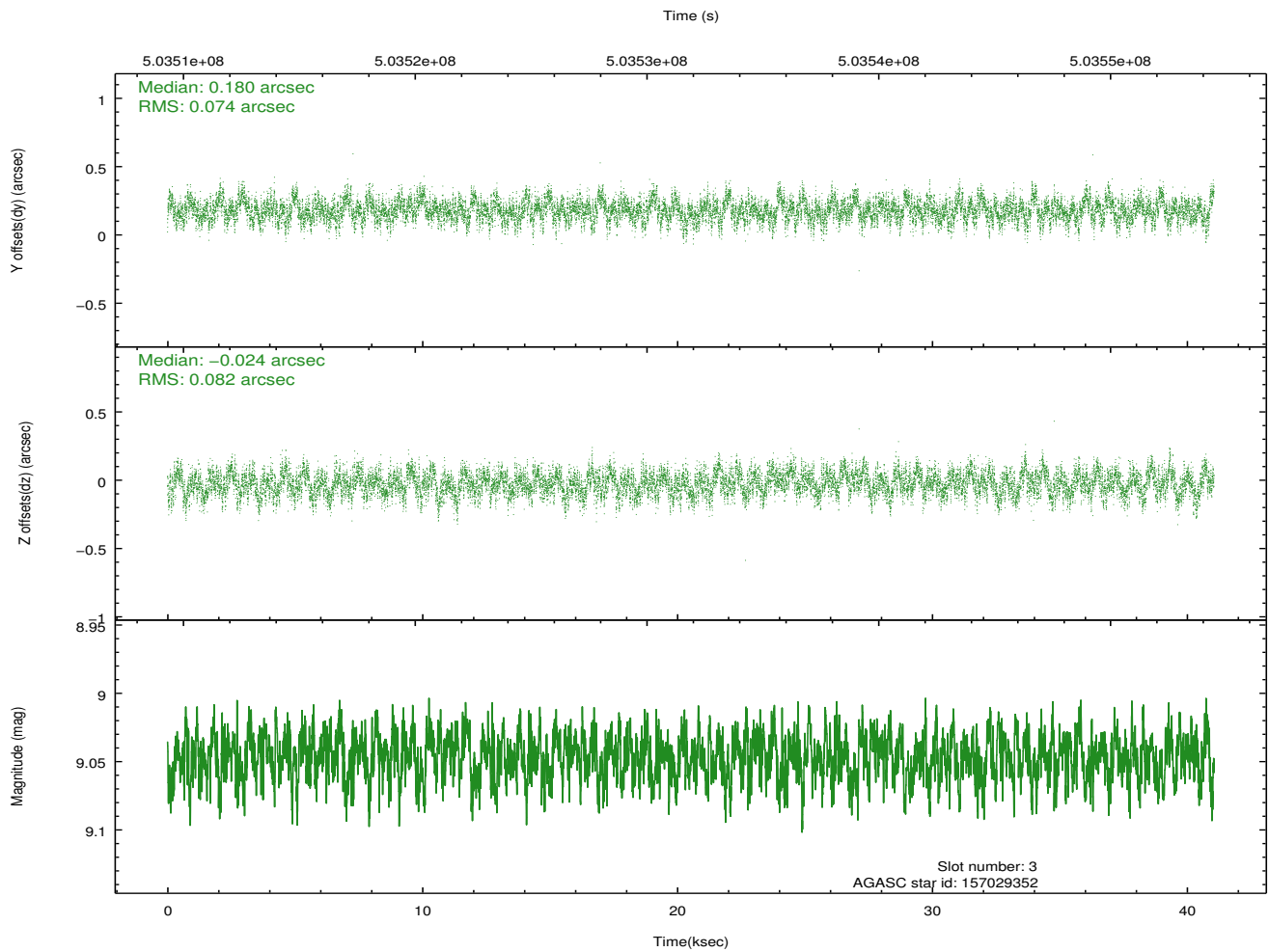
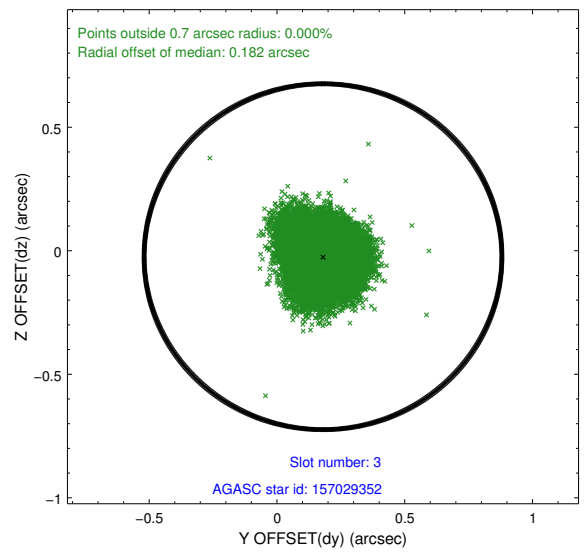
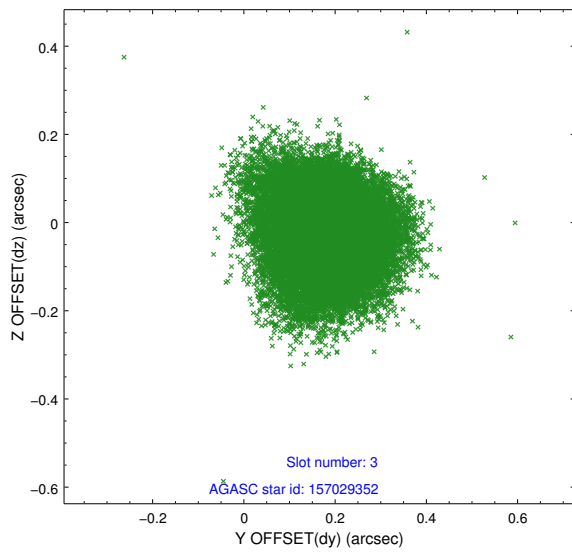
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	10013	-0.165	-0.112	0.008	0.015	0.000000	0.000000	-774.81	-1739.32
1	FID		ACIS-S-4	7.14	10014	0.214	0.075	0.008	0.016	0.000000	0.000000	2138.88	169.26
2	FID		ACIS-S-6	7.27	10014	-0.078	0.043	0.009	0.014	0.000000	0.000000	387.33	806.68
3	GUIDE	used	157029352	9.05	20018	0.180	-0.024	0.118	0.187	23.764744	15.271289	1286.99	-1934.47
4	GUIDE	used	157036752	9.05	20019	-0.100	0.164	0.123	0.192	23.400830	16.130370	-2044.09	-2183.38
5	GUIDE	used	157943240	8.95	20009	-0.085	-0.029	0.107	0.181	24.500363	16.361777	-1674.30	1689.84
6	GUIDE	used	157953216	9.38	20016	0.093	-0.001	0.137	0.212	24.189817	15.248642	1815.84	-554.25
7	GUIDE	used	157954272	8.69	20022	-0.099	-0.105	0.096	0.157	24.932144	15.423798	1997.25	2092.40

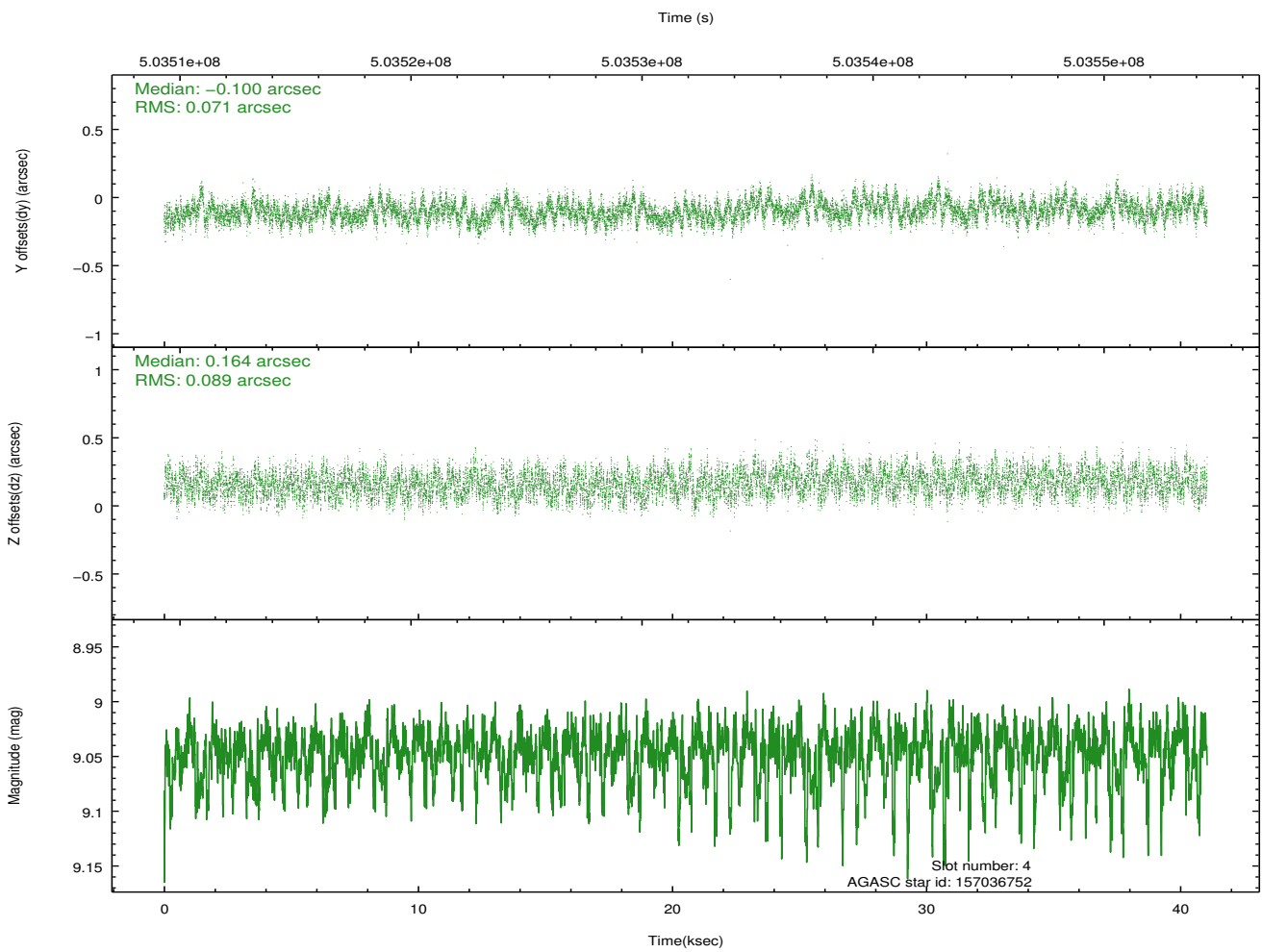
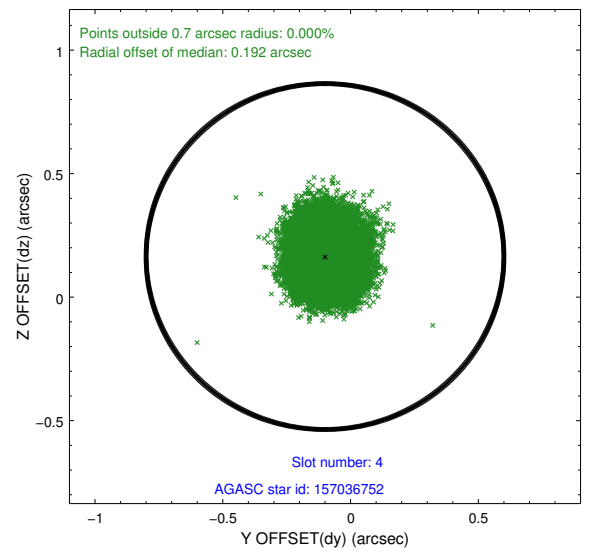
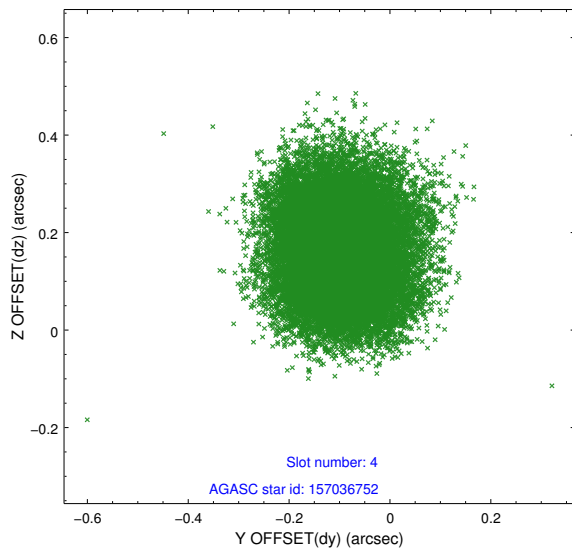
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2.4 Star Slots

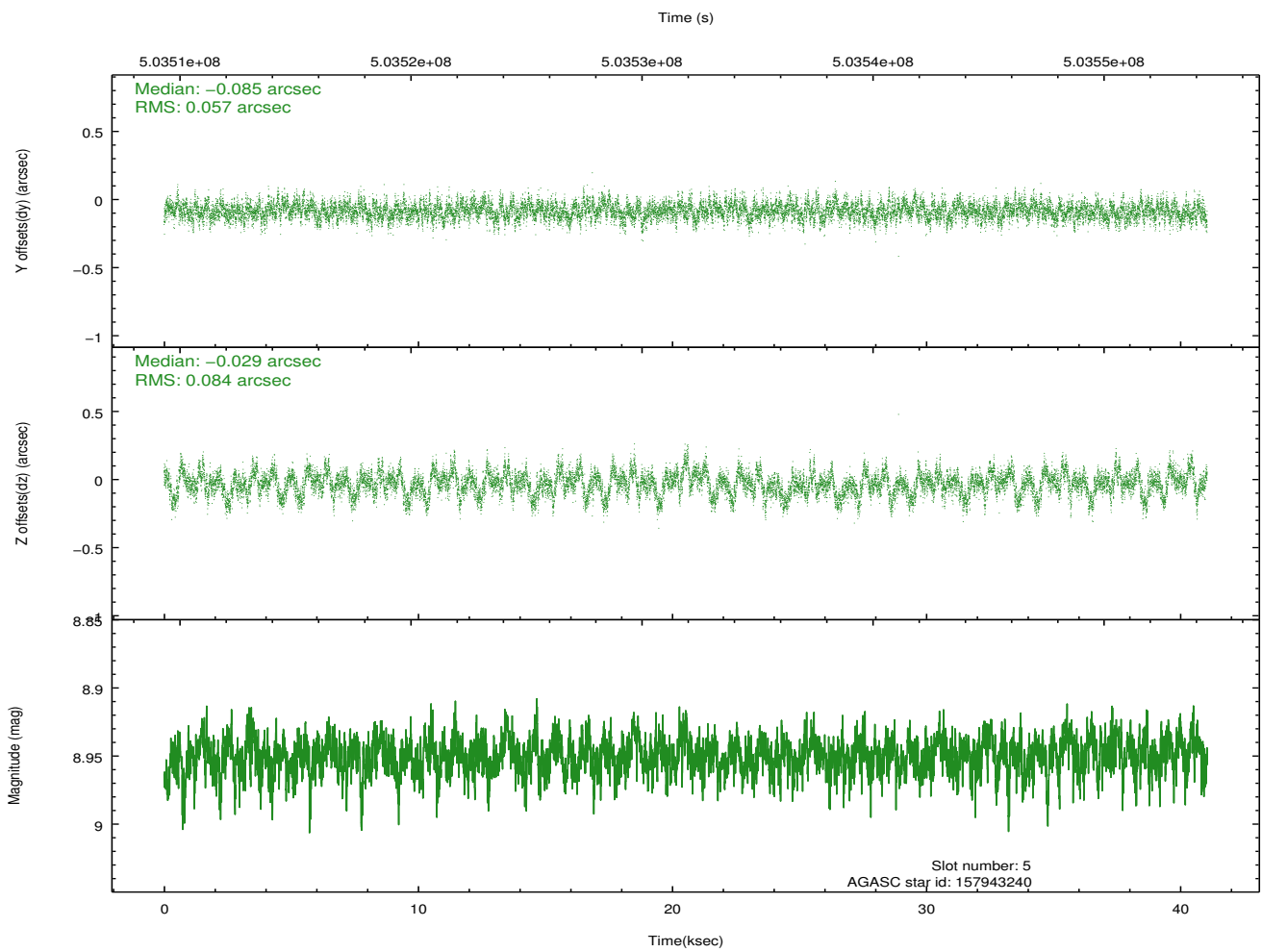
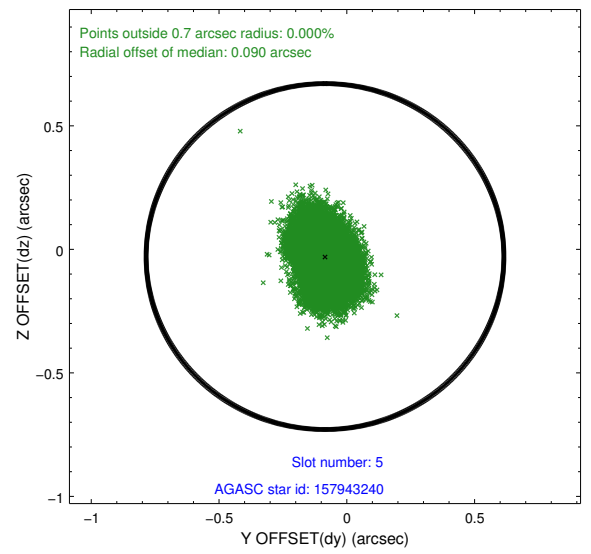
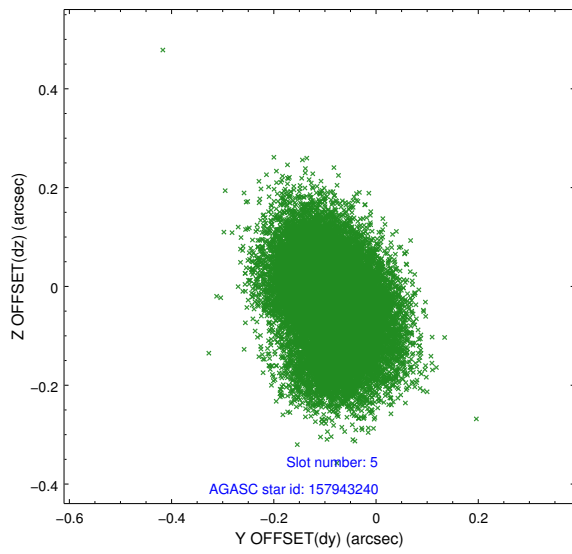
2.4.1 Slot 3



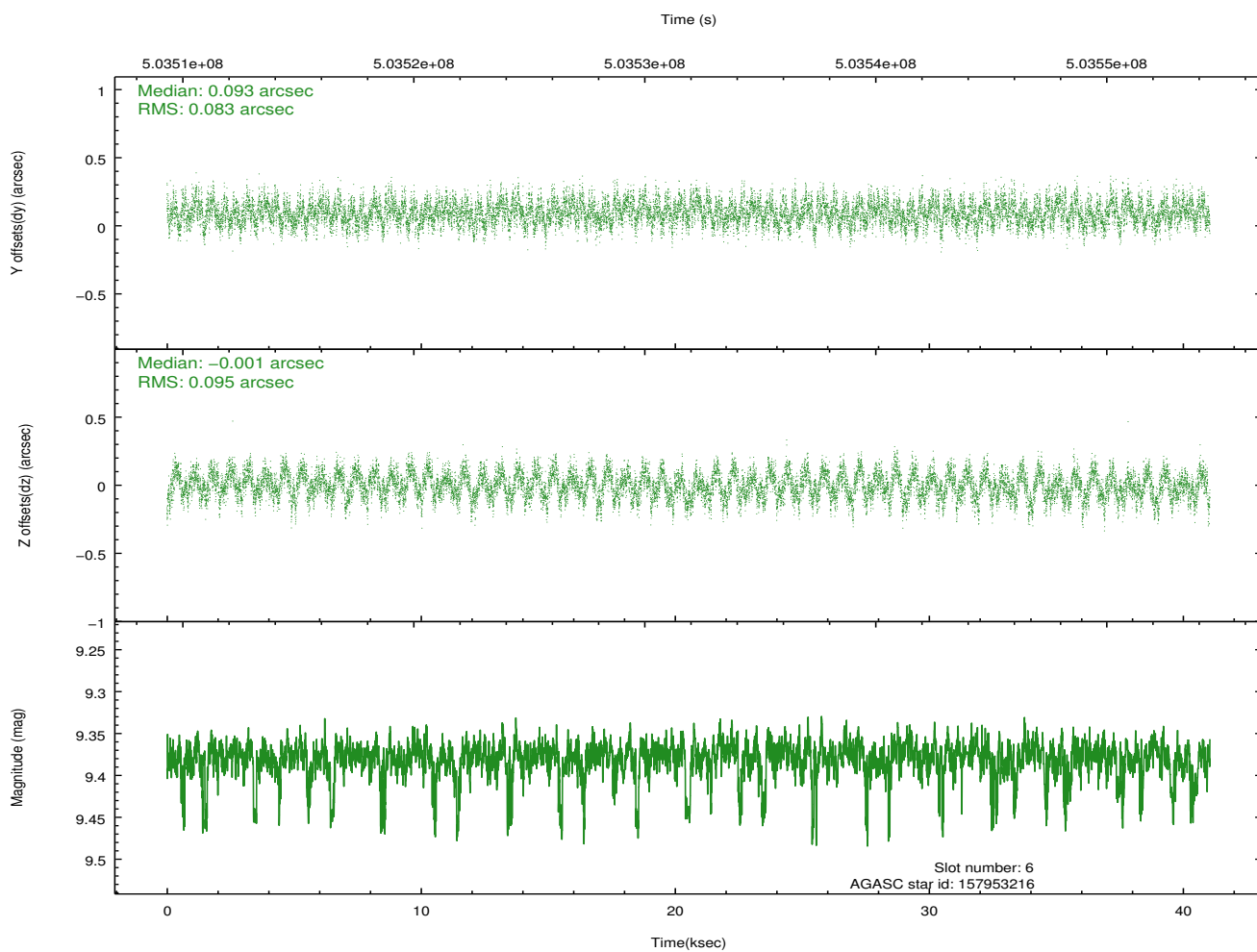
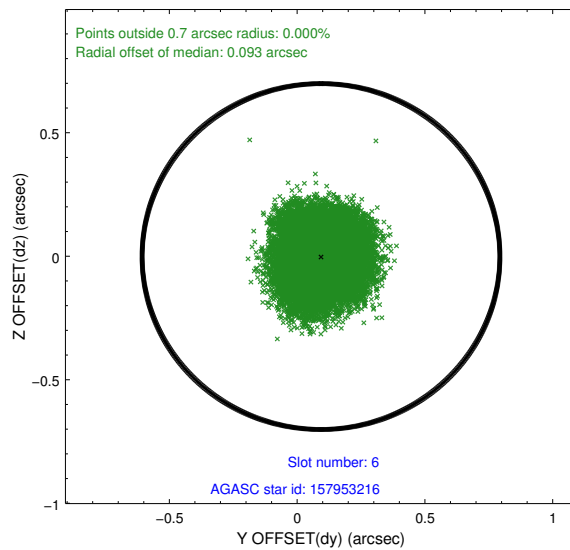
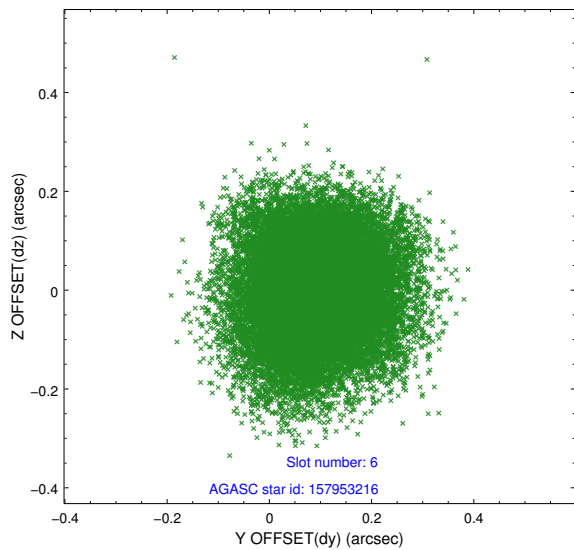
2.4.2 Slot 4



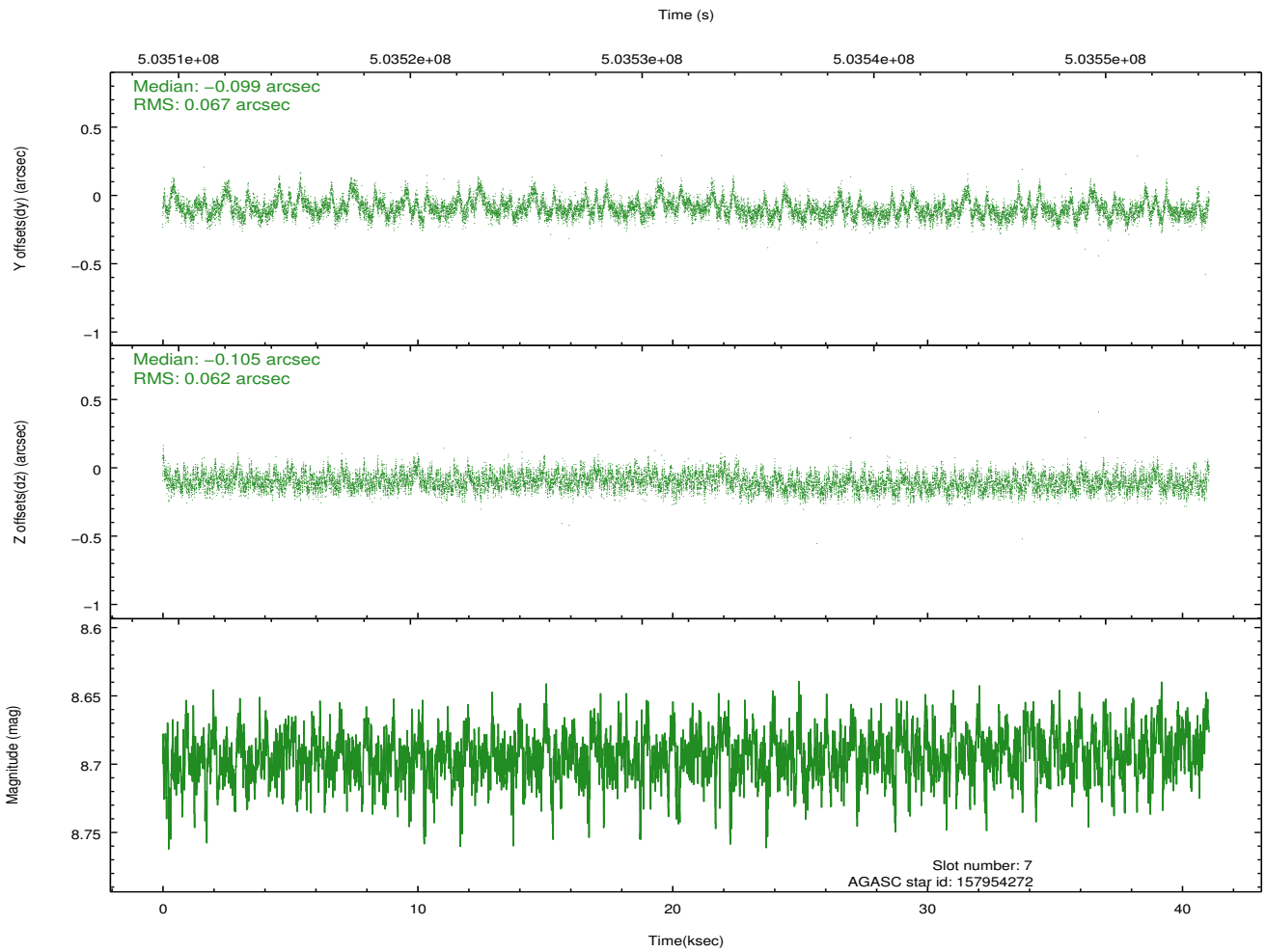
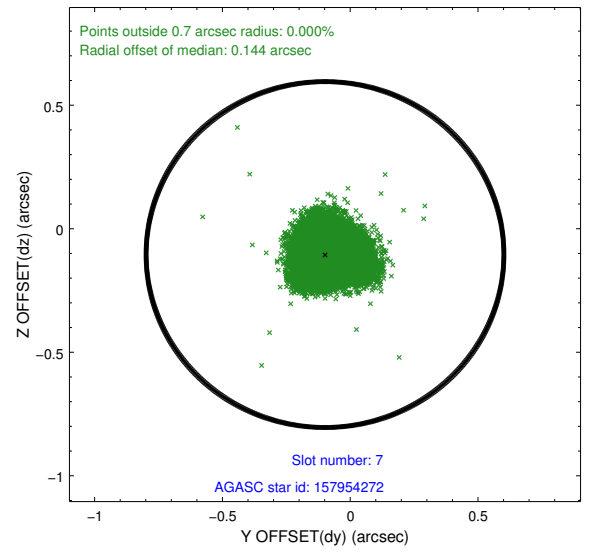
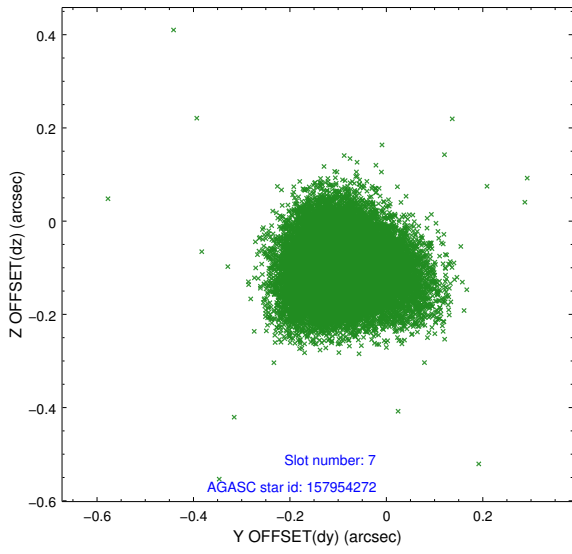
2.4.3 Slot 5



2.4.4 Slot 6

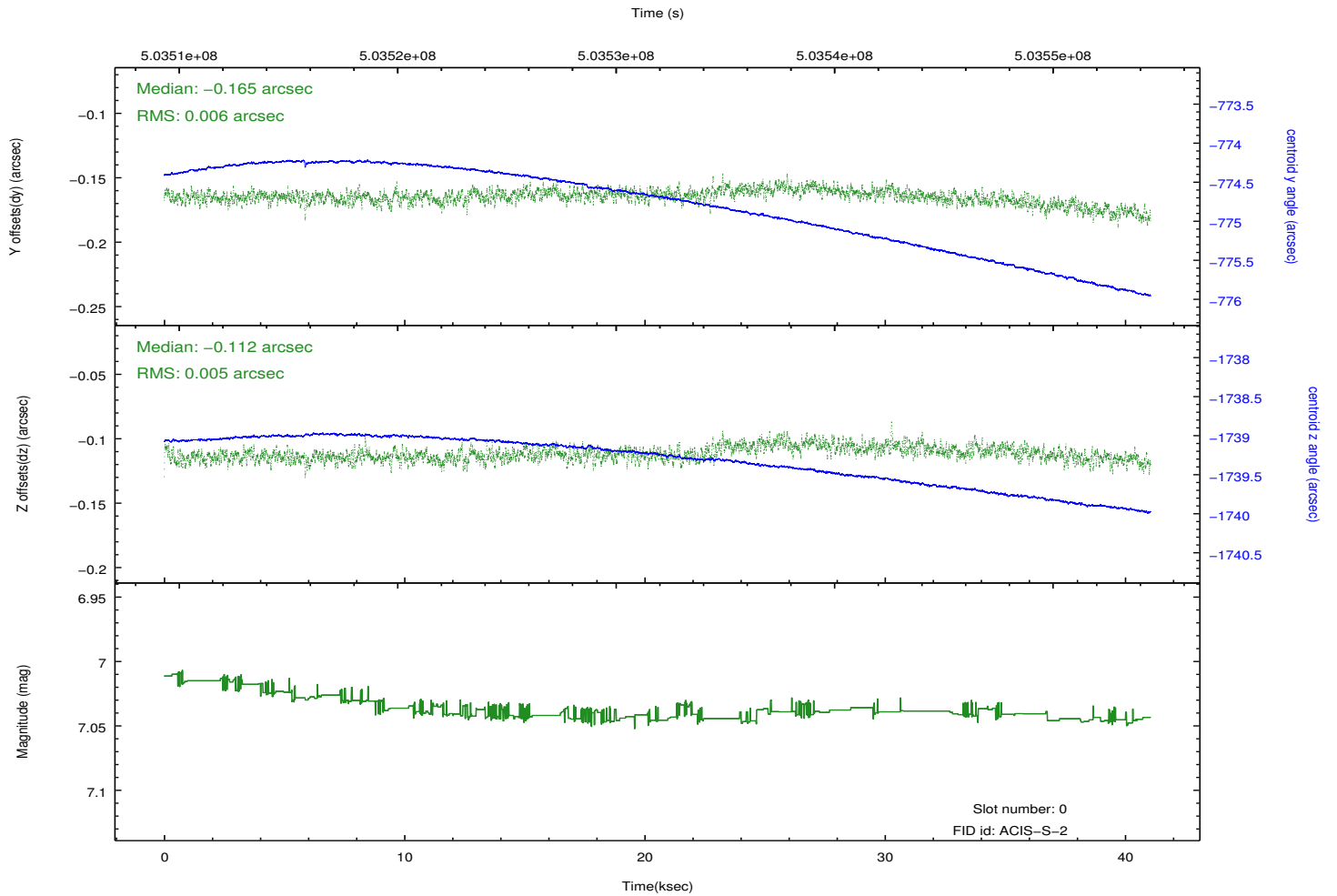
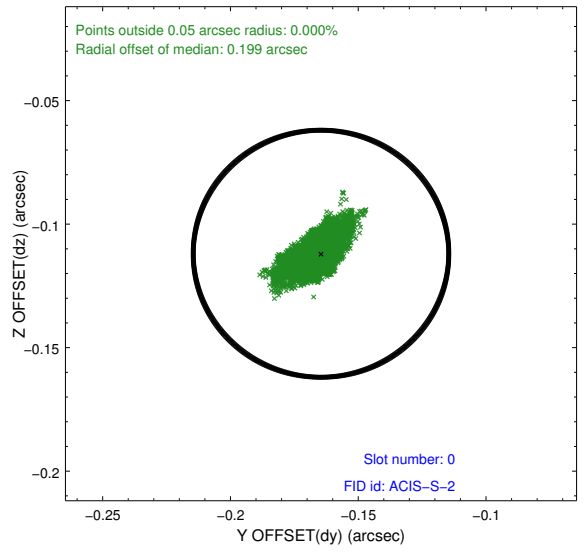
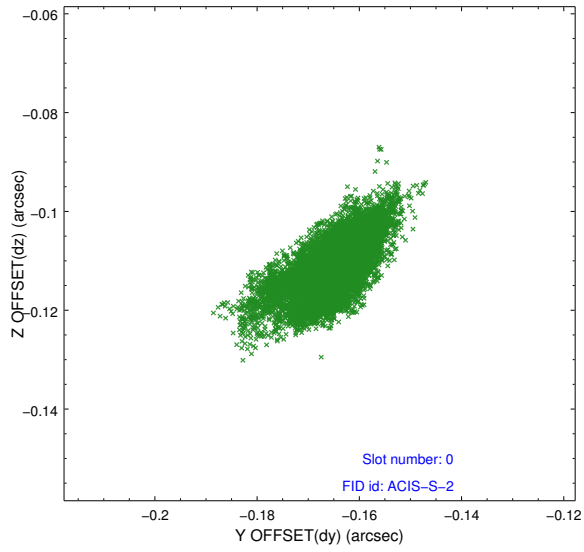


2.4.5 Slot 7

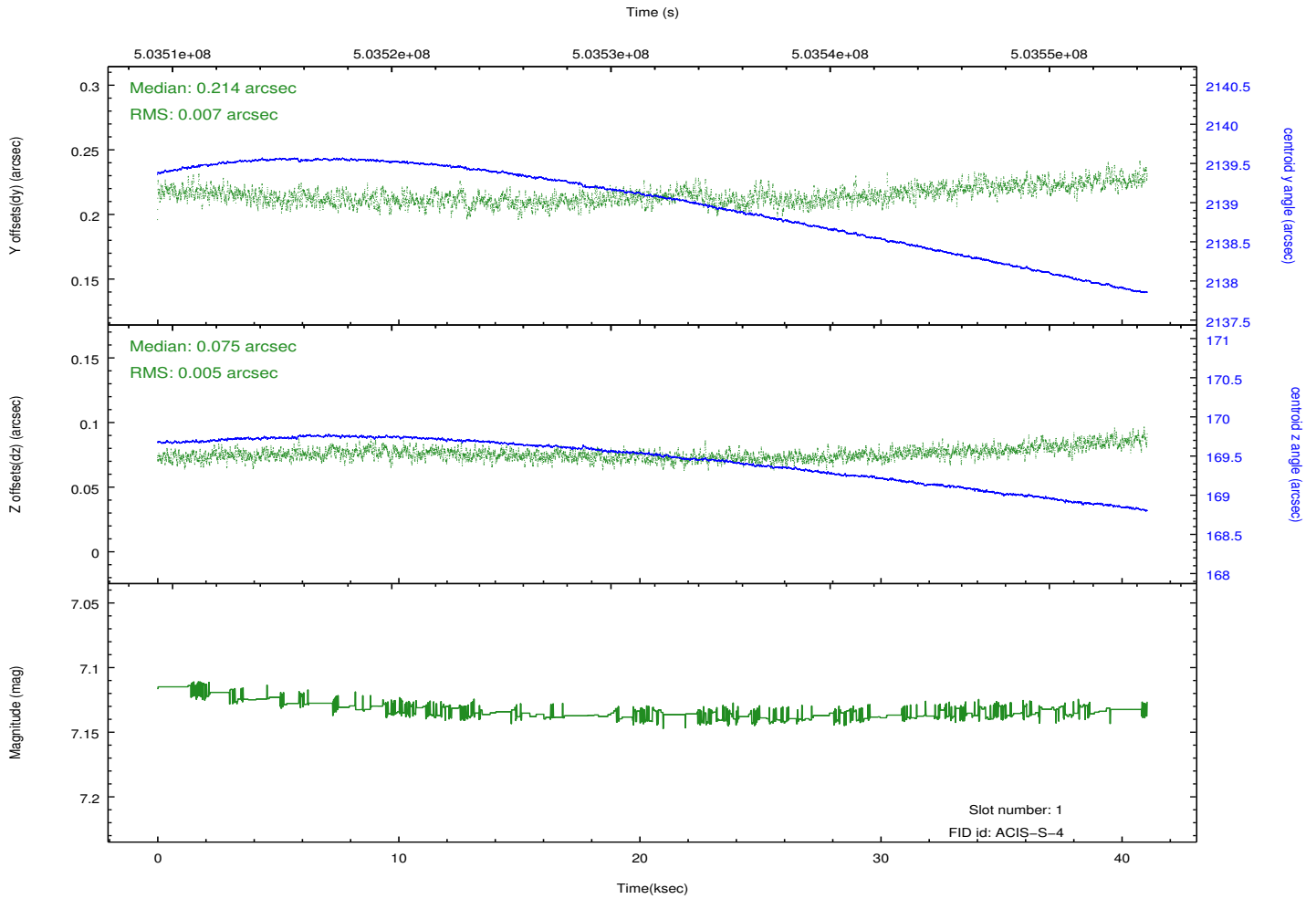
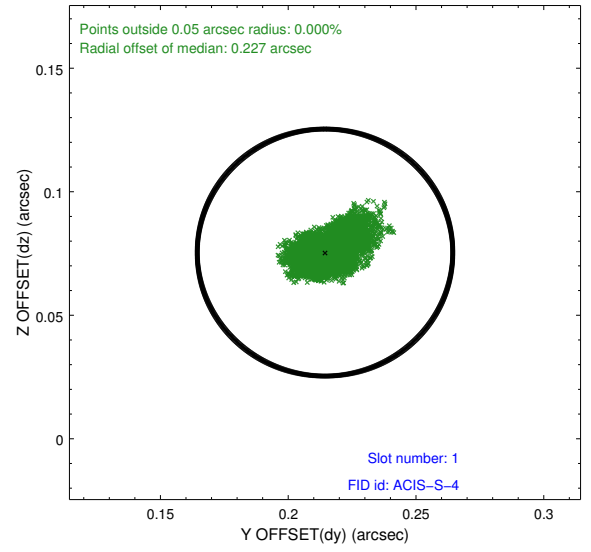
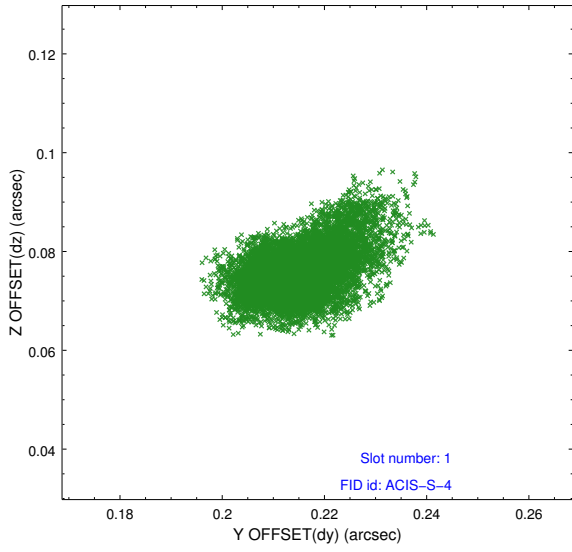


2.5 FID Slots

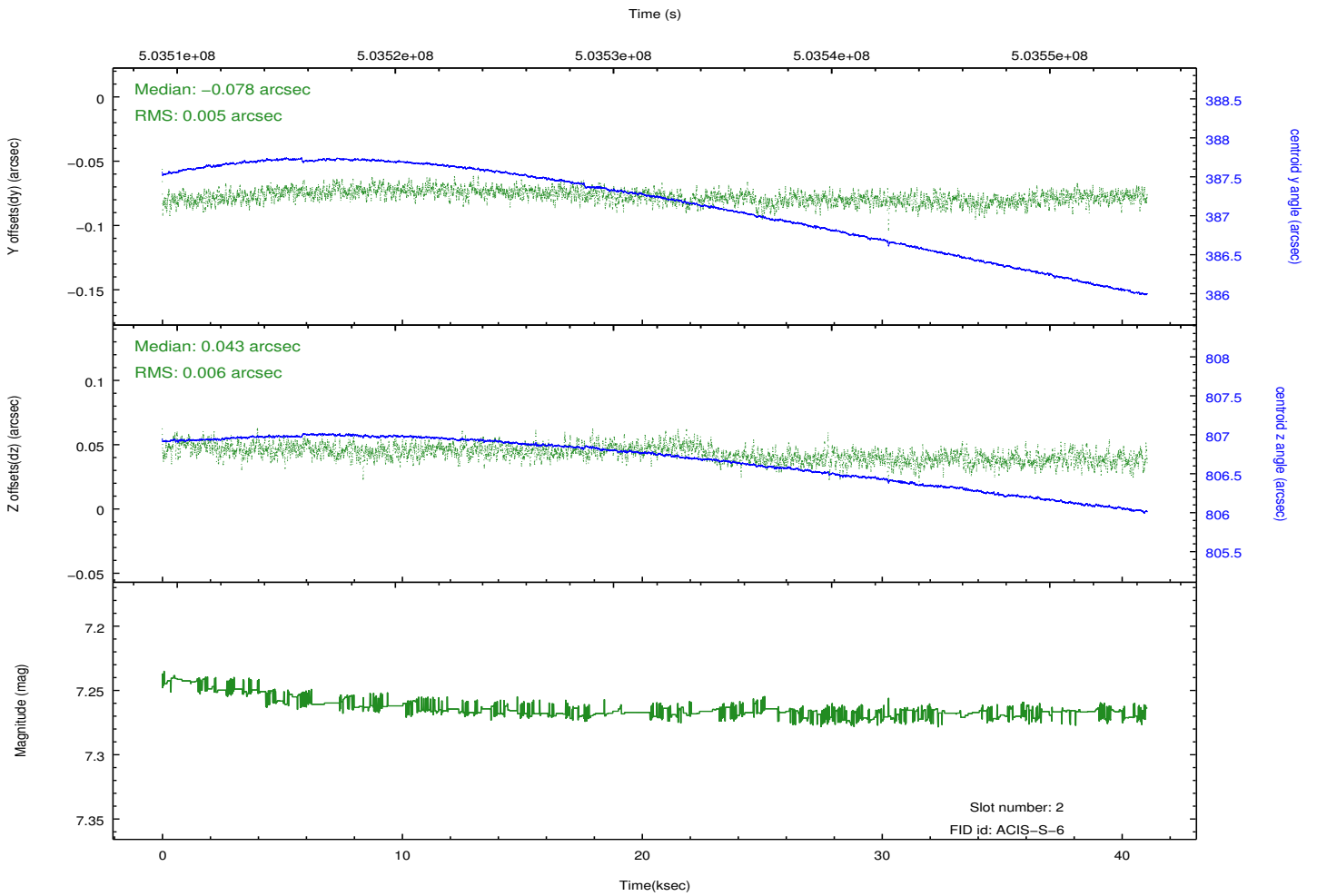
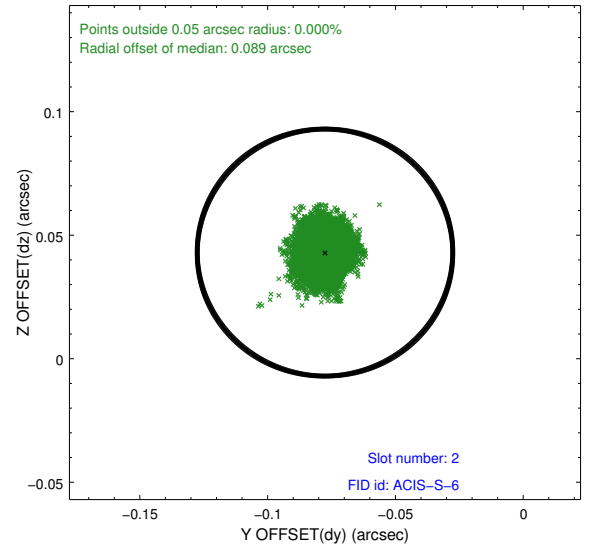
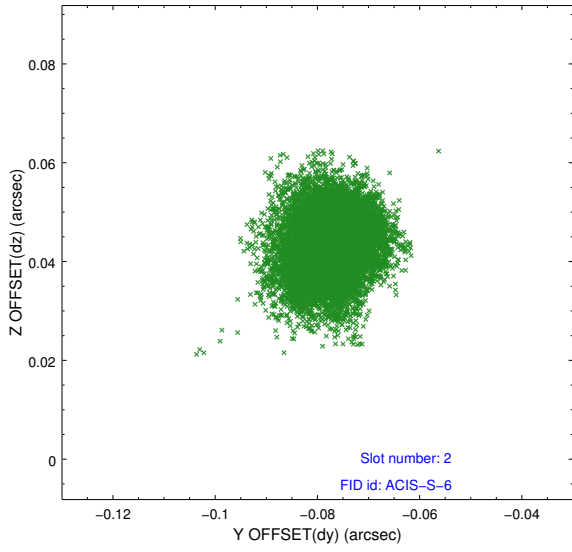
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.972700315118

A.2 Comments

Joint Proposal: NRAO. Monitor constraint met.

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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.