

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 16485 - L2 Version 2
Chandra X-Ray Center

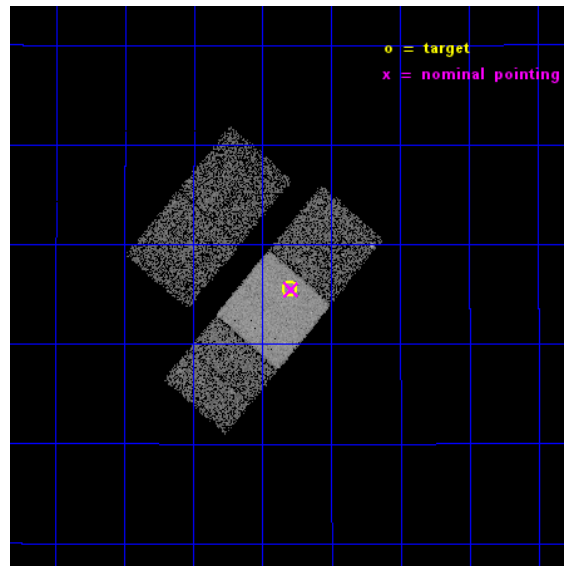
L2 Processing Date : Dec 6 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

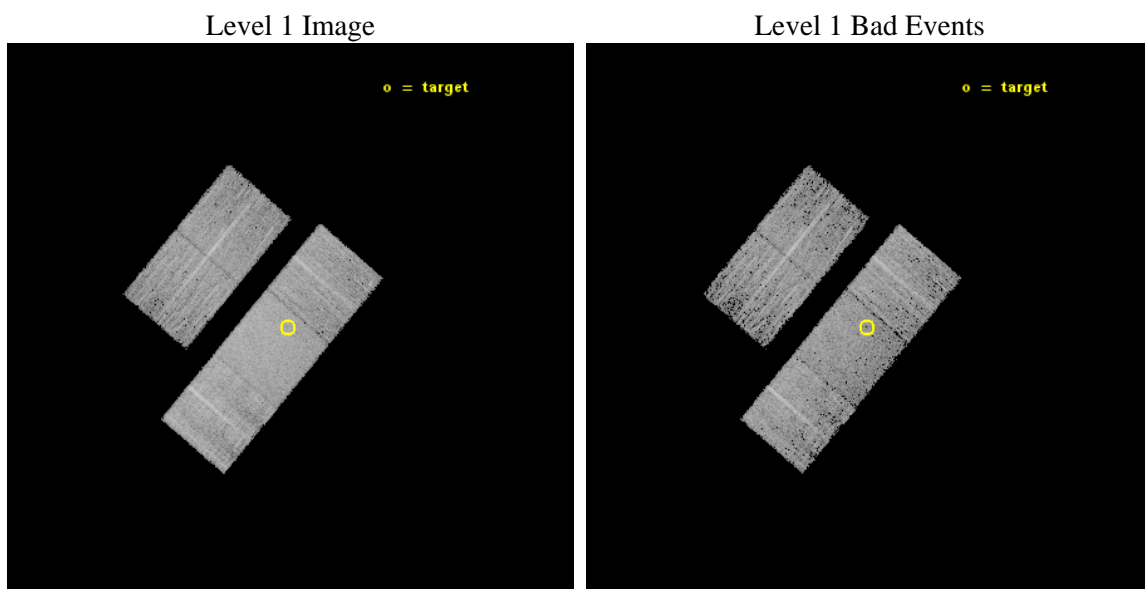
seq_num	502234	Sequence number
obs_id	16485	Observation id
title	State of the shocked plasma: X-ray and radio signatures from type IIP supernovae	Proposal title
observer	Prof. Alak Ray	Principal investigator
object	SN 2013ej	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	24.200667	Observer's specified target RA [deg]
dec_targ	15.758611	Observer's specified target Dec [deg]
ra_nom	24.197557757296	Nominal RA [deg]
dec_nom	15.758195262094	Nominal Dec [deg]
roll_nom	130.15750221849	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9106.5244286656	Sum of GTIs [s]
livetime	8987.5409828794	Livetime [s]
ontime2	9106.3602686524	Sum of GTIs [s]
ontime3	9106.442348659	Sum of GTIs [s]
ontime6	9103.3423883319	Sum of GTIs [s]
ontime7	9106.5244286656	Sum of GTIs [s]
ontime8	9106.4013086557	Sum of GTIs [s]
l2events	45352	Number of level 2 events



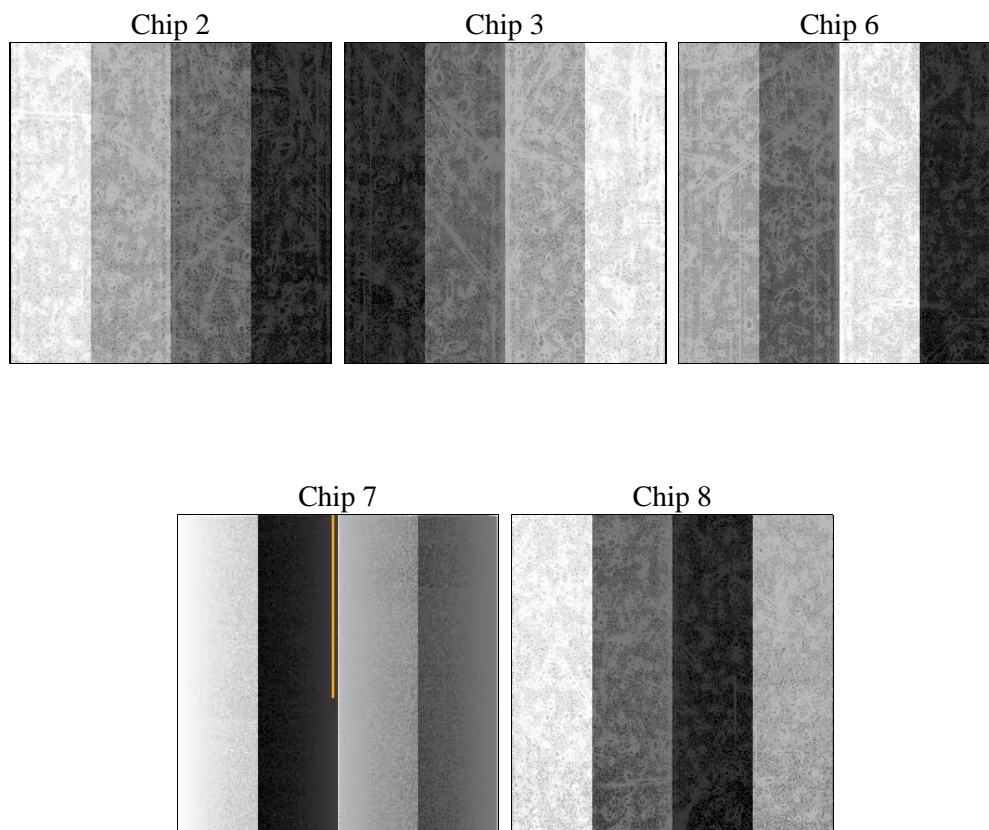
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9040.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9106.5244286656	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	9106.3602686524	Sum of GTIs [s]
date	2014-12-07T02:07:06	Date and time of file creation	ontime3	9106.442348659	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	9103.3423883319	Sum of GTIs [s]
			ontime7	9106.5244286656	Sum of GTIs [s]
			ontime8	9106.4013086557	Sum of GTIs [s]
			l1events	253130	Number of level 1 events

2.1.4 Events

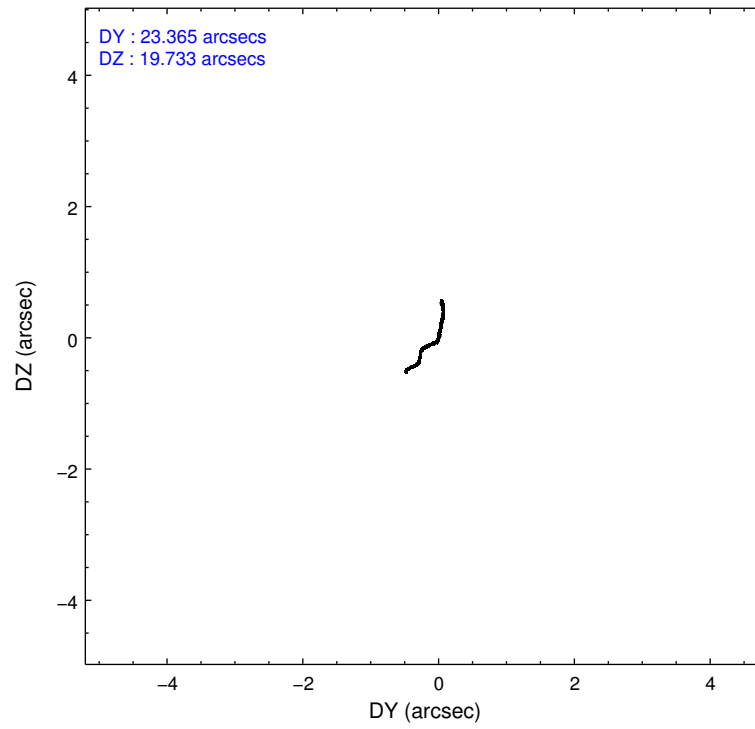
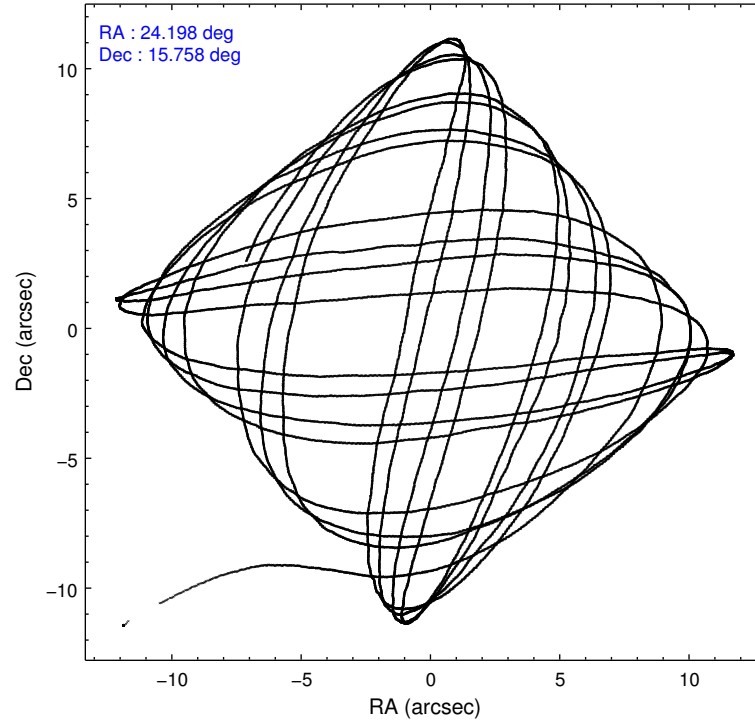
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	40977	42469	47725	62156	59803
rejected events	36036	37688	42066	35096	43967
rejected %	87%	88%	88%	56%	73%

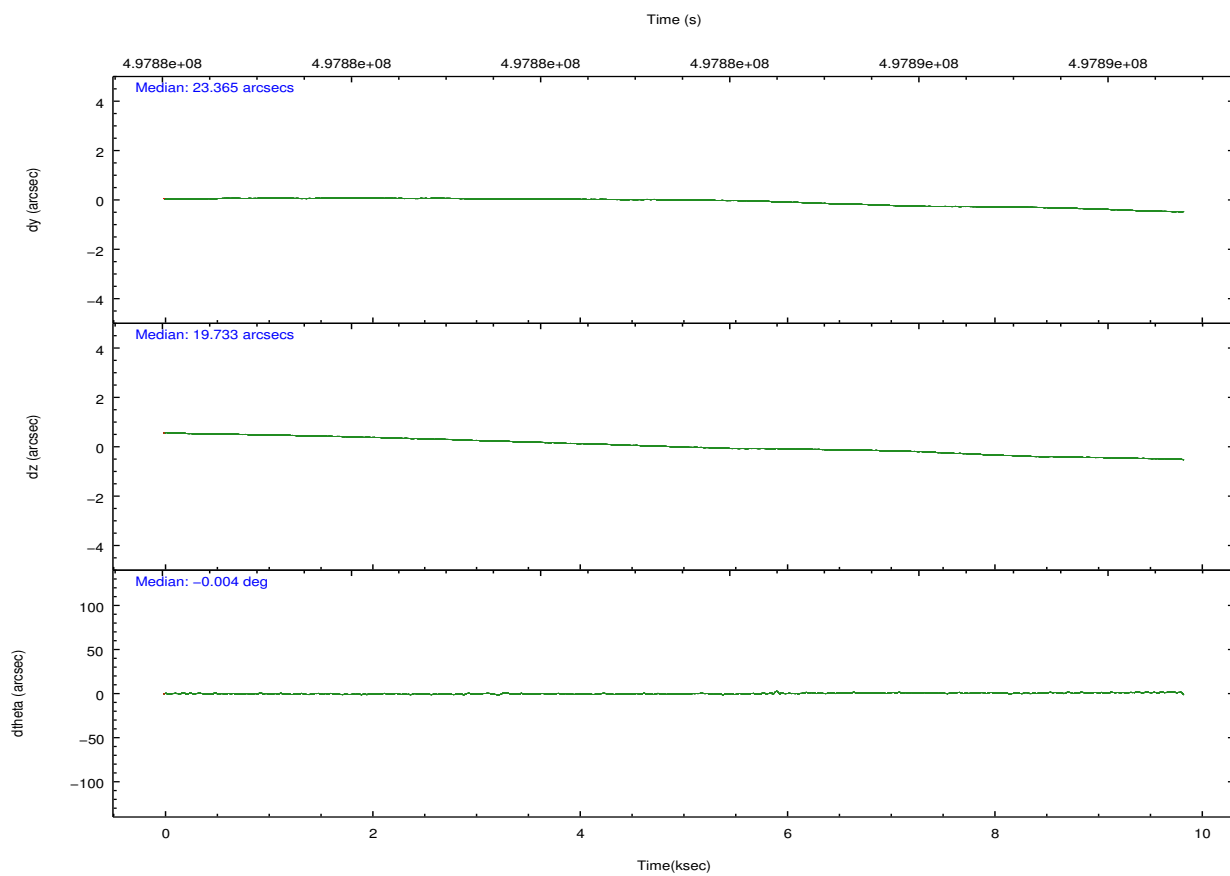
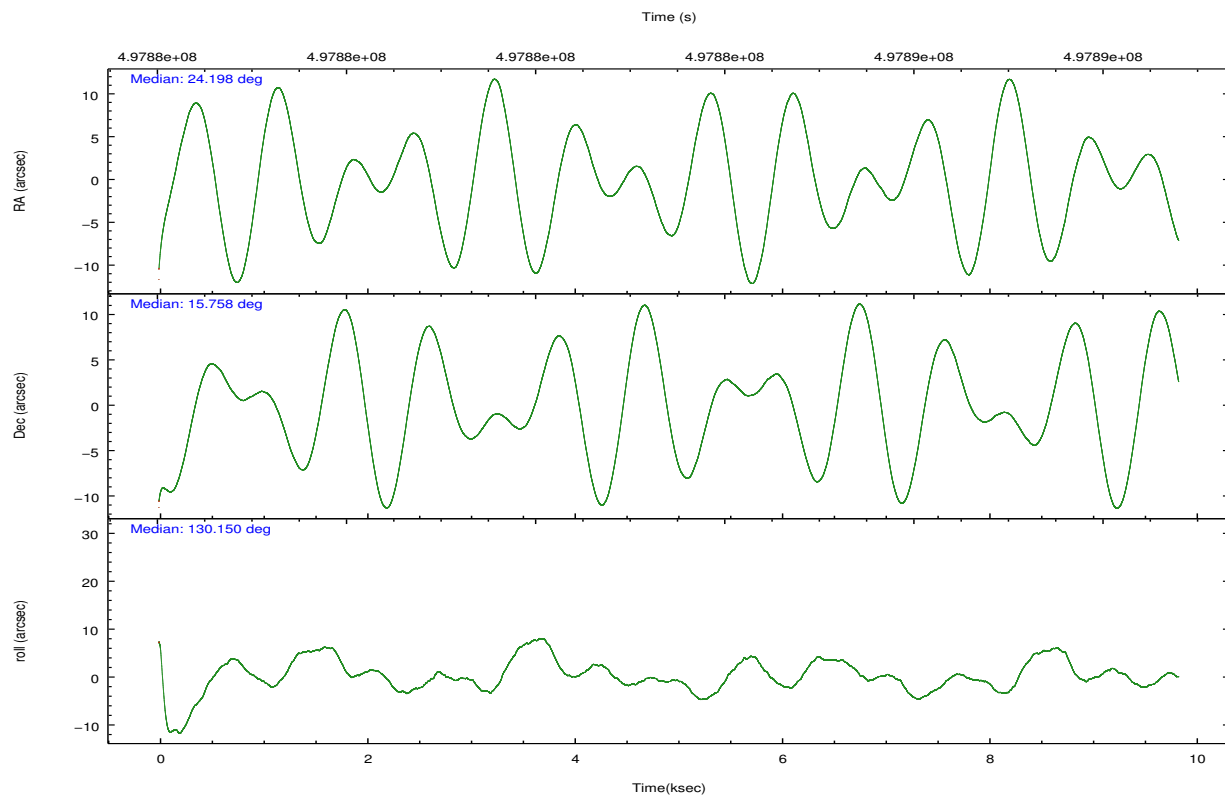
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1632	1632	2005	2407	4668
	3%	3%	4%	3%	7%
grade 1 events	21	22	12	87	46
	0%	0%	0%	0%	0%
grade 2 events	1180	1045	1321	5492	3725
	2%	2%	2%	8%	6%
grade 3 events	546	540	548	2332	1682
	1%	1%	1%	3%	2%
grade 4 events	561	513	541	2303	1532
	1%	1%	1%	3%	2%
grade 5 events	2010	2320	2457	6472	3490
	4%	5%	5%	10%	5%
grade 6 events	1024	1054	1247	14543	4236
	2%	2%	2%	23%	7%
grade 7 events	34003	35343	39594	28520	40424
	82%	83%	82%	45%	67%

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	24.224399	24.19755775729589	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.749274	15.75819526209417	Alternating exposures requested	N	N
[deg] Pointing Roll	129.993556	130.1575022184929	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	497879276.184000	497877215.7579			
Observation start date	2013-10-11T11:46:49	2013-10-11T11:13:35			
[s] Observation end time (MET)	497888316.184000	497889063.22105			
Observation end date	2013-10-11T14:17:29	2013-10-11T14:31:03			
Read mode	TIMED	TIMED			

2.3 Aspect



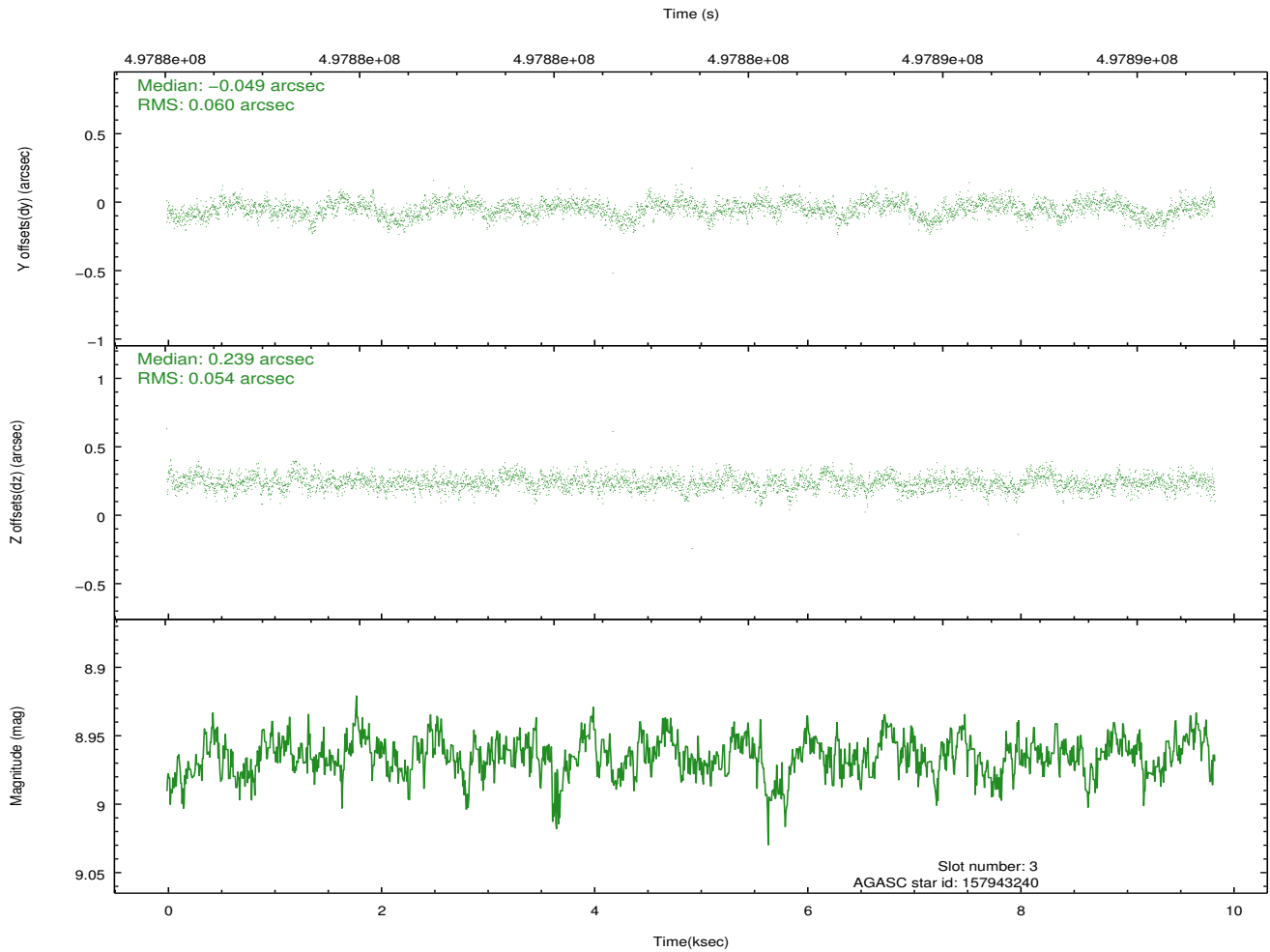
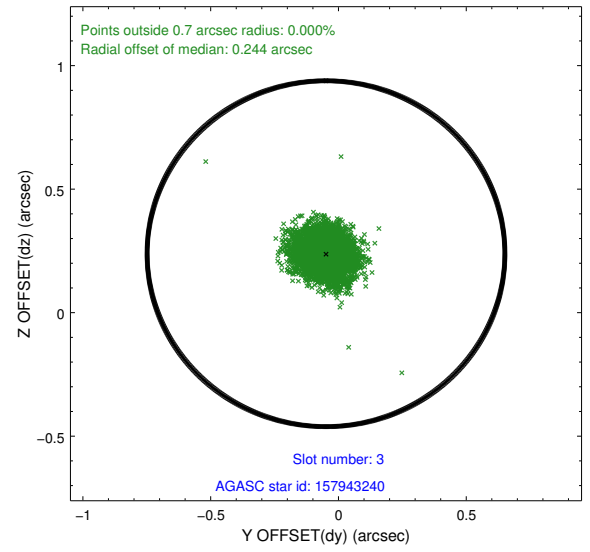
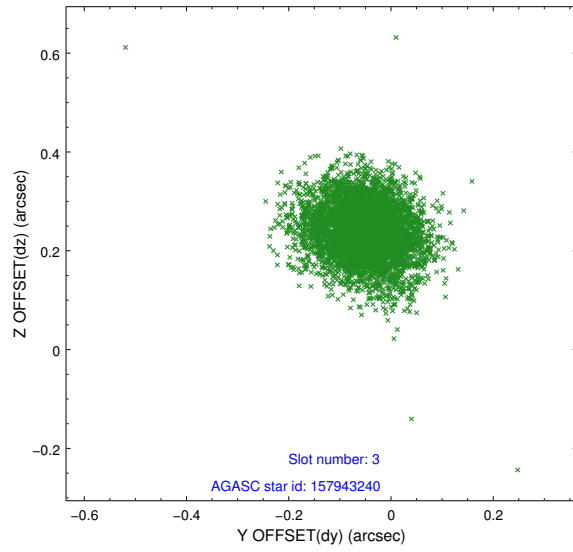


Slot Statistics

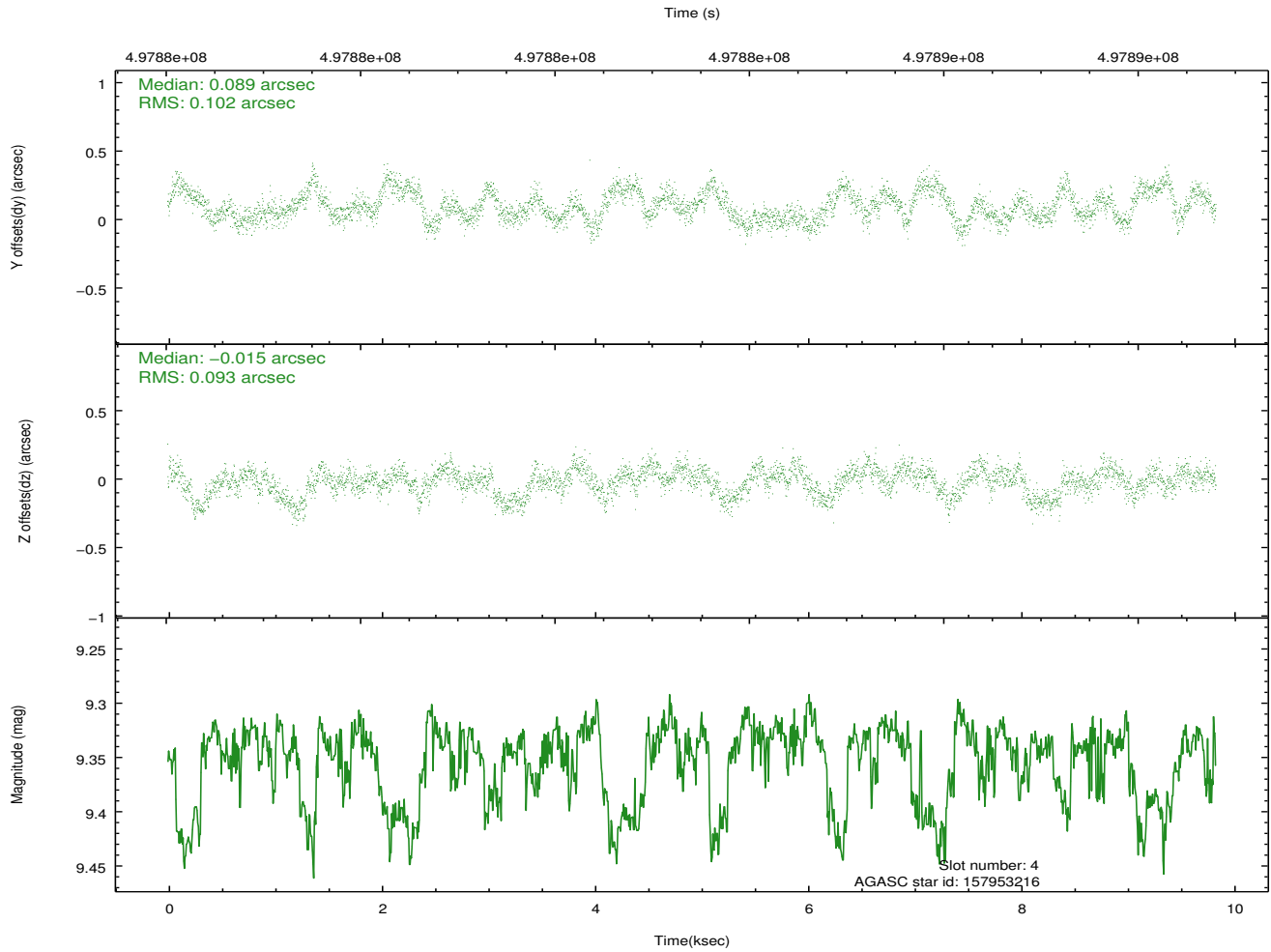
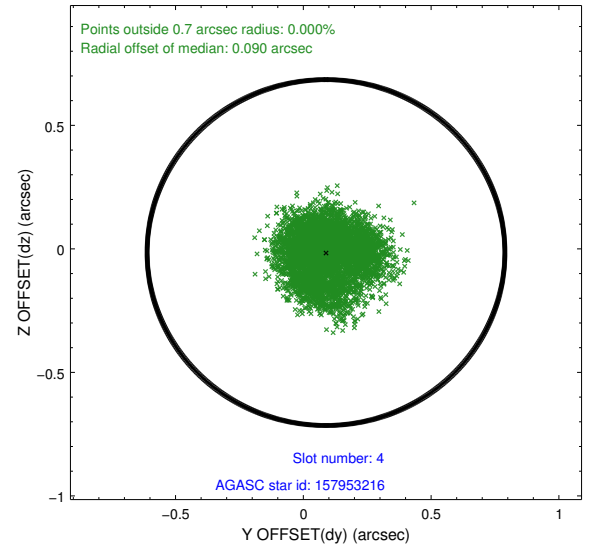
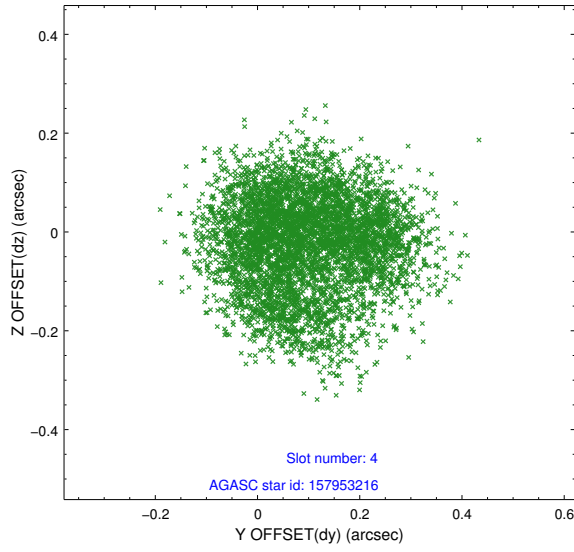
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.89	2400	-0.132	-0.016	0.013	0.021	0.000000	0.000000	-776.59	-1741.29
1	FID		ACIS-S-4	6.98	2400	0.306	0.068	0.010	0.020	0.000000	0.000000	2136.86	166.73
2	FID		ACIS-S-5	6.99	2399	-0.204	-0.045	0.012	0.019	0.000000	0.000000	-1828.82	160.88
3	GUIDE	used	157943240	8.97	4798	-0.049	0.239	0.085	0.139	24.500363	16.361777	1077.80	-2147.35
4	GUIDE	used	157953216	9.35	4780	0.089	-0.015	0.152	0.224	24.189817	15.248642	-1303.03	1249.95
5	GUIDE	used	157953384	9.49	4793	0.212	0.539	0.135	0.213	25.000047	15.804560	-1569.97	-2188.68
6	GUIDE	used	157026584	9.00	4797	-0.233	-0.316	0.085	0.137	23.464180	15.603174	1294.01	2353.87
7	GUIDE	used	157029352	9.07	4788	-0.023	-0.432	0.103	0.185	23.764744	15.271289	-291.16	2327.74

2.4 Star Slots

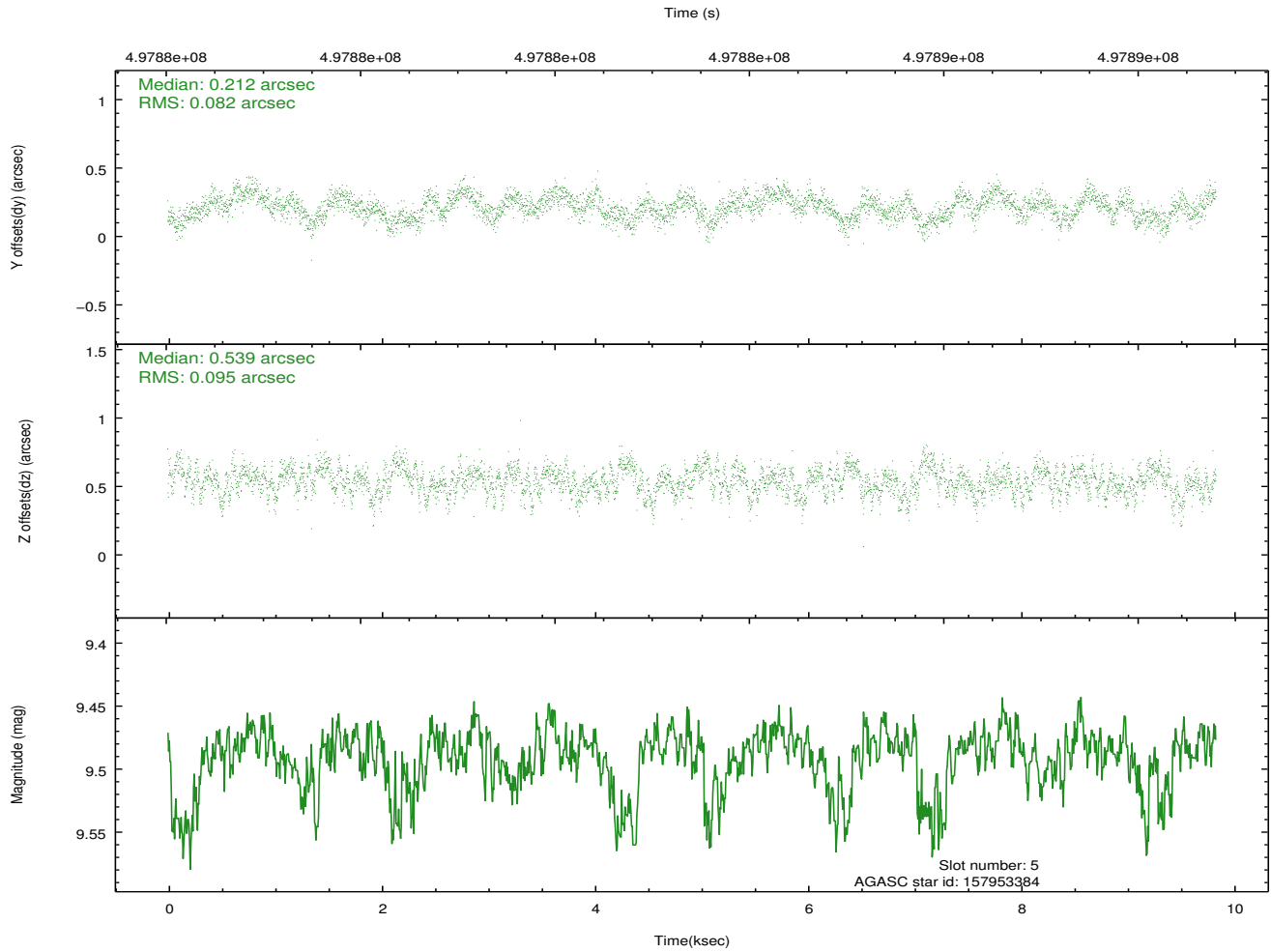
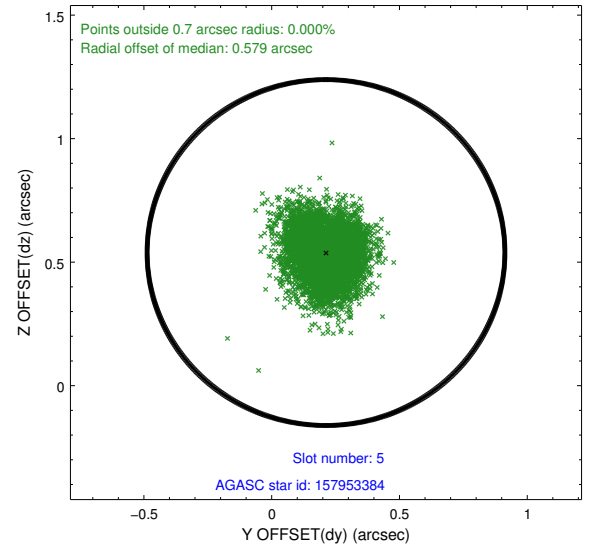
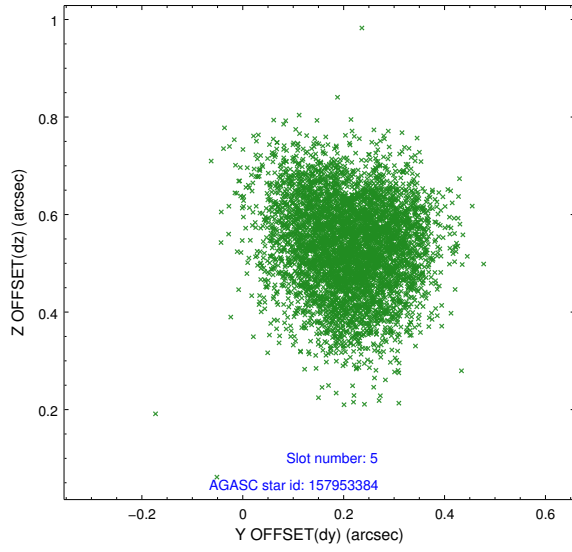
2.4.1 Slot 3



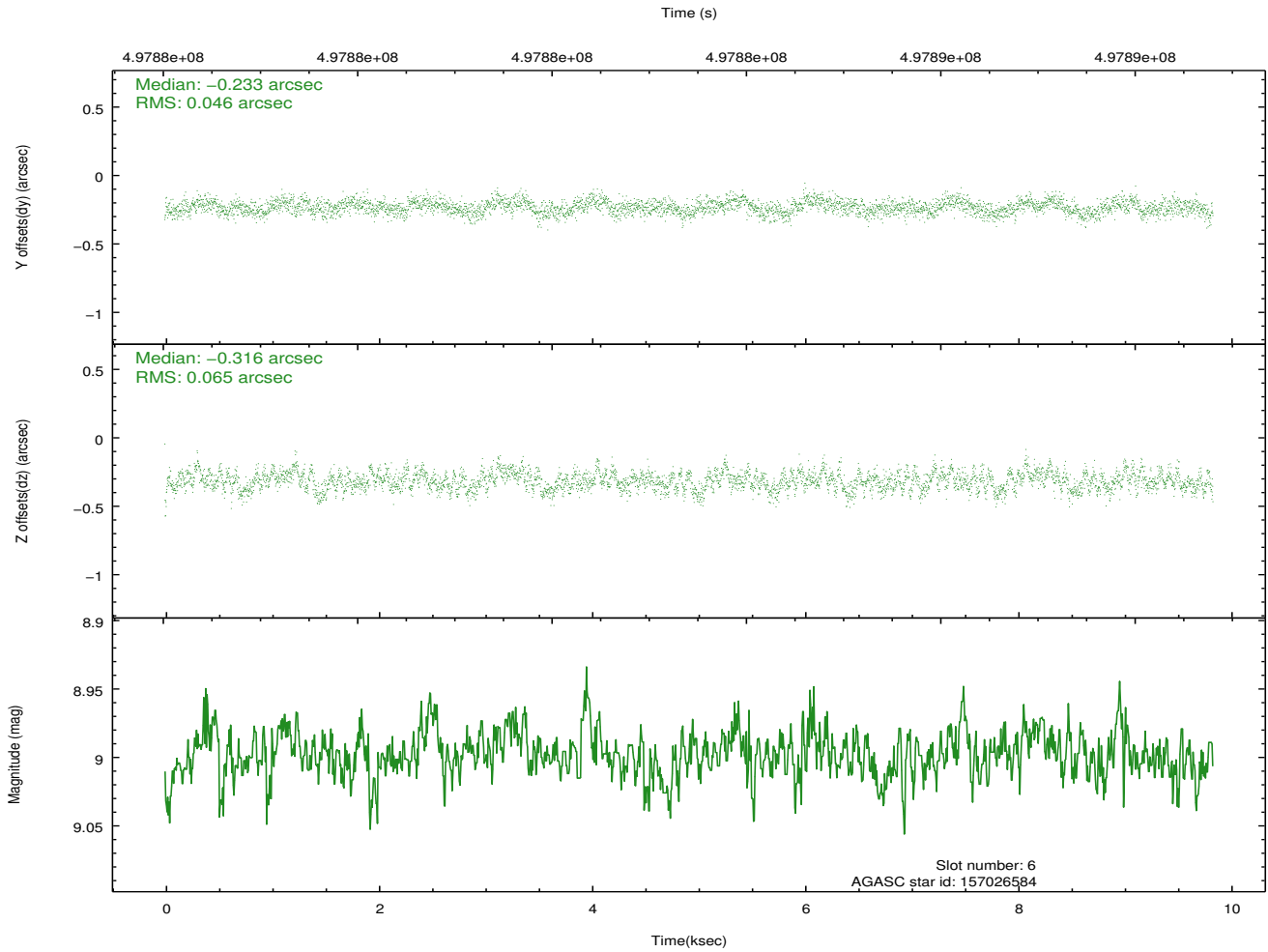
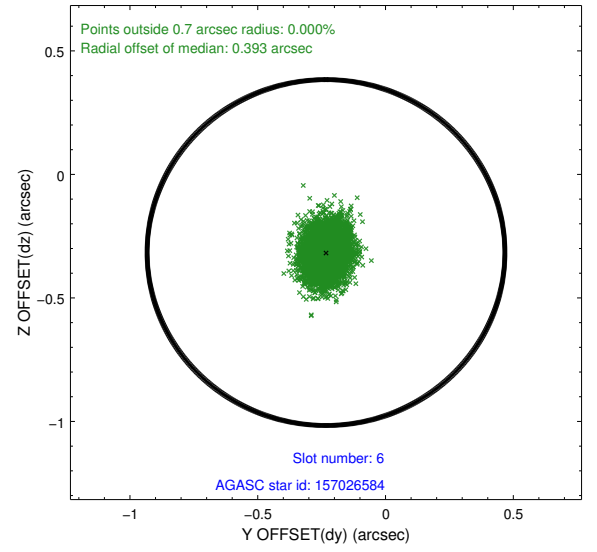
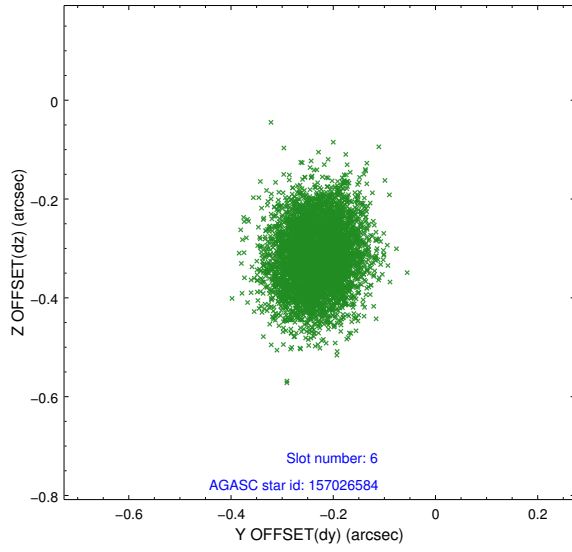
2.4.2 Slot 4



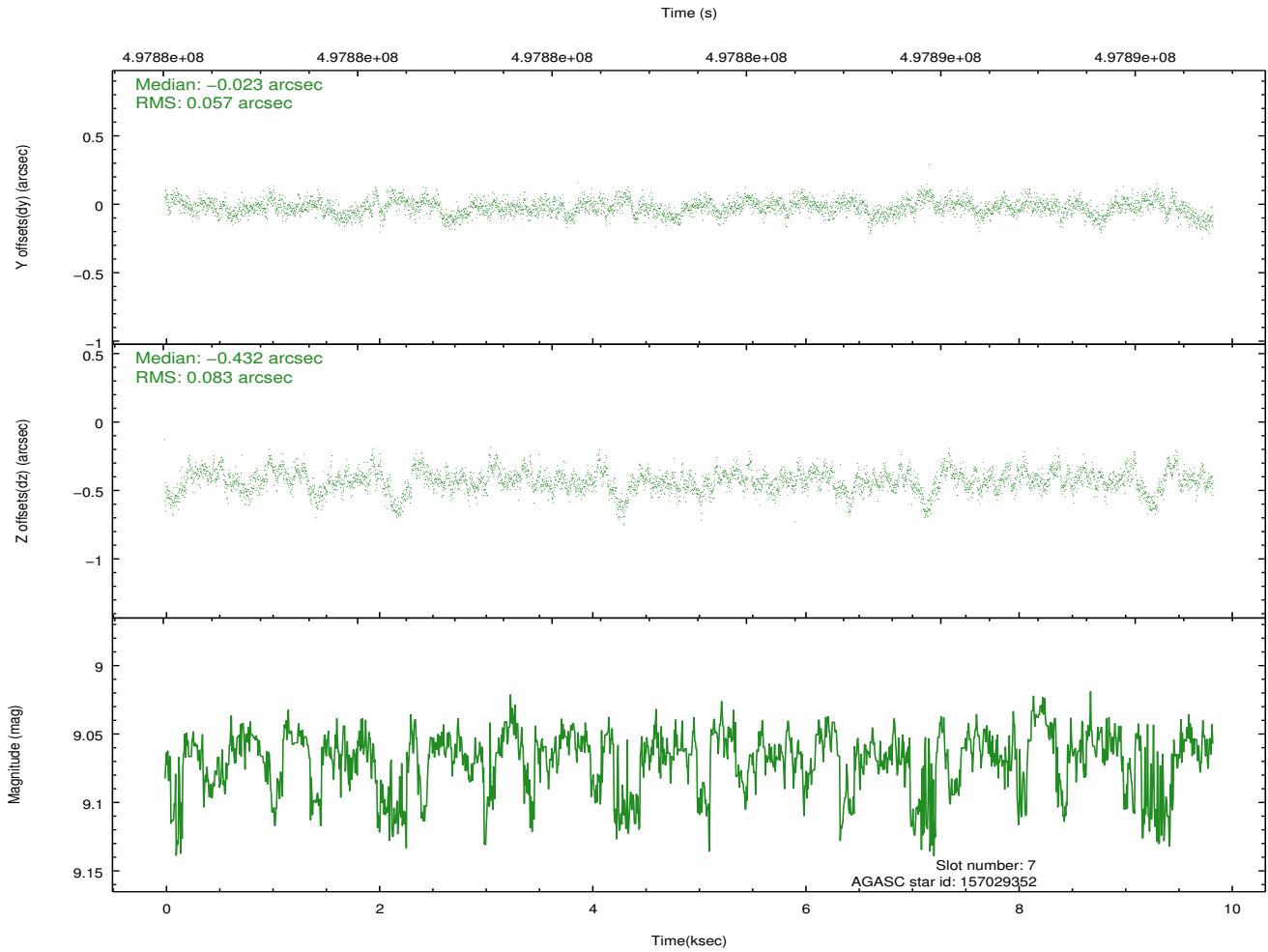
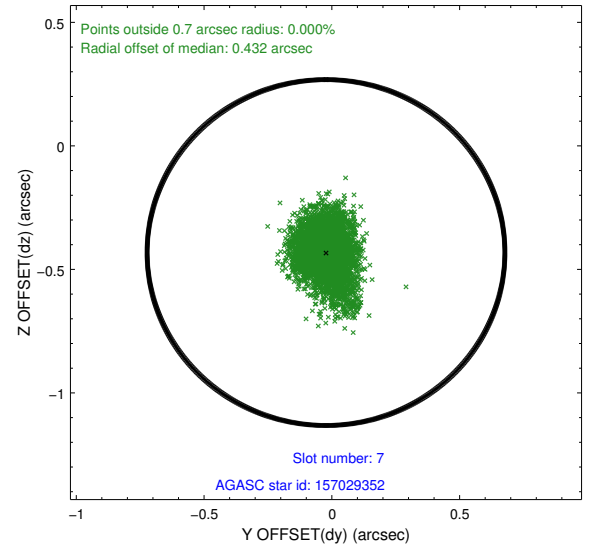
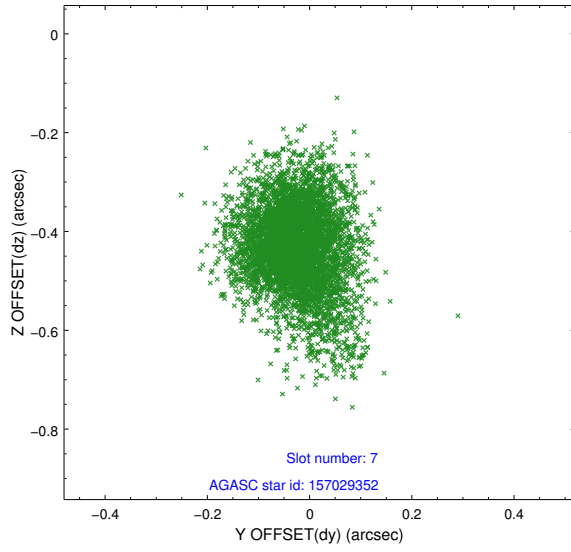
2.4.3 Slot 5



2.4.4 Slot 6

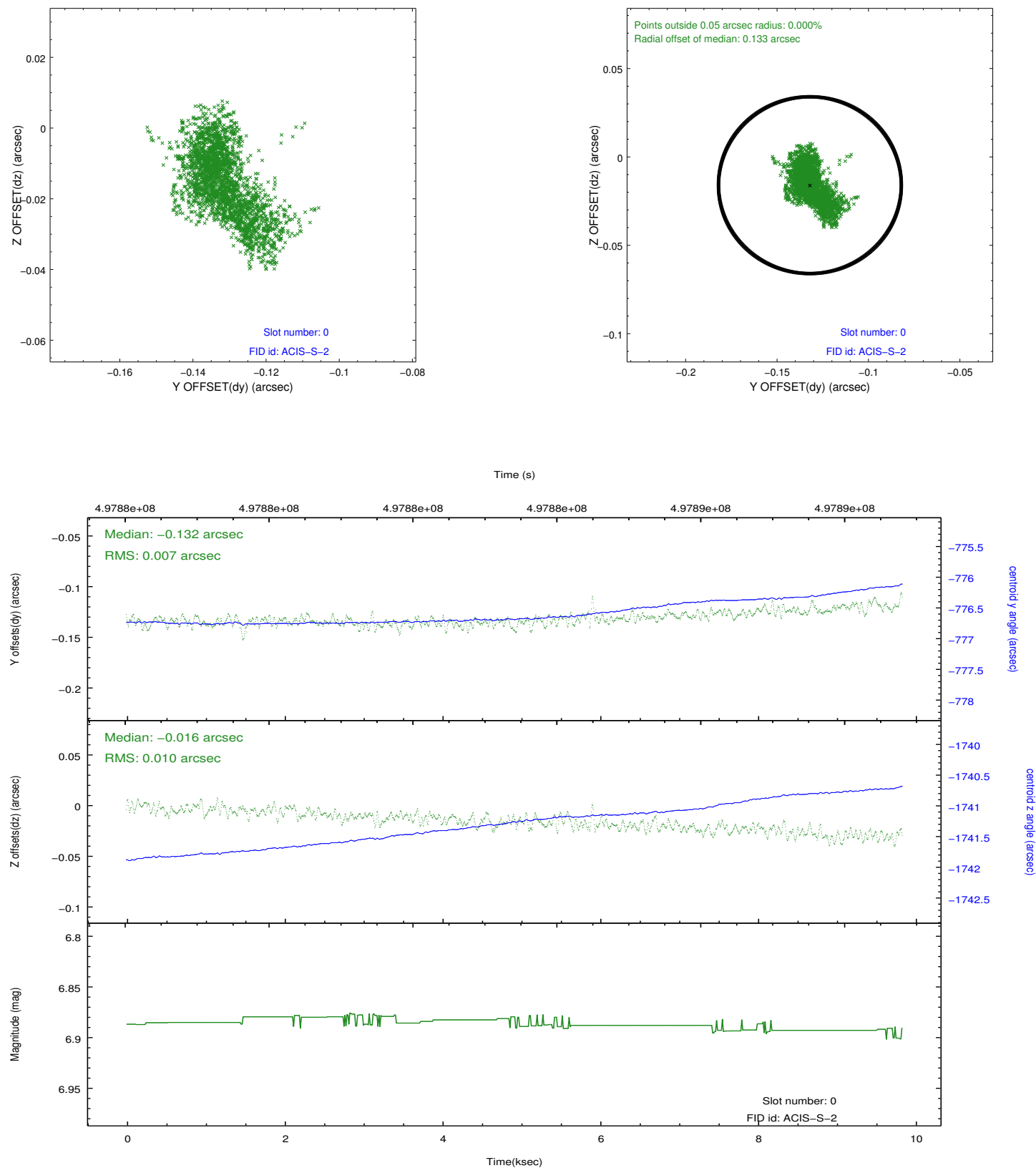


2.4.5 Slot 7

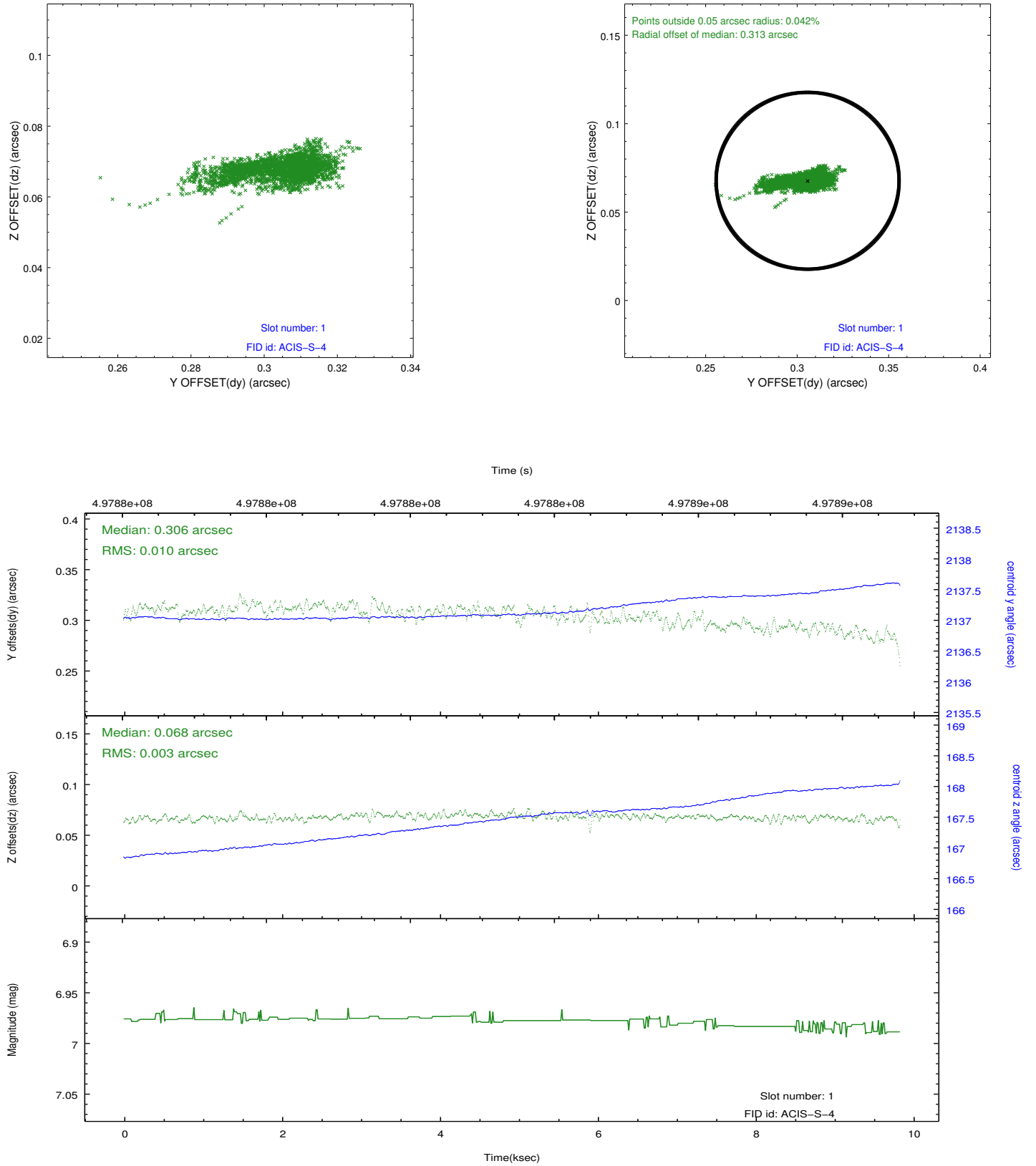


2.5 FID Slots

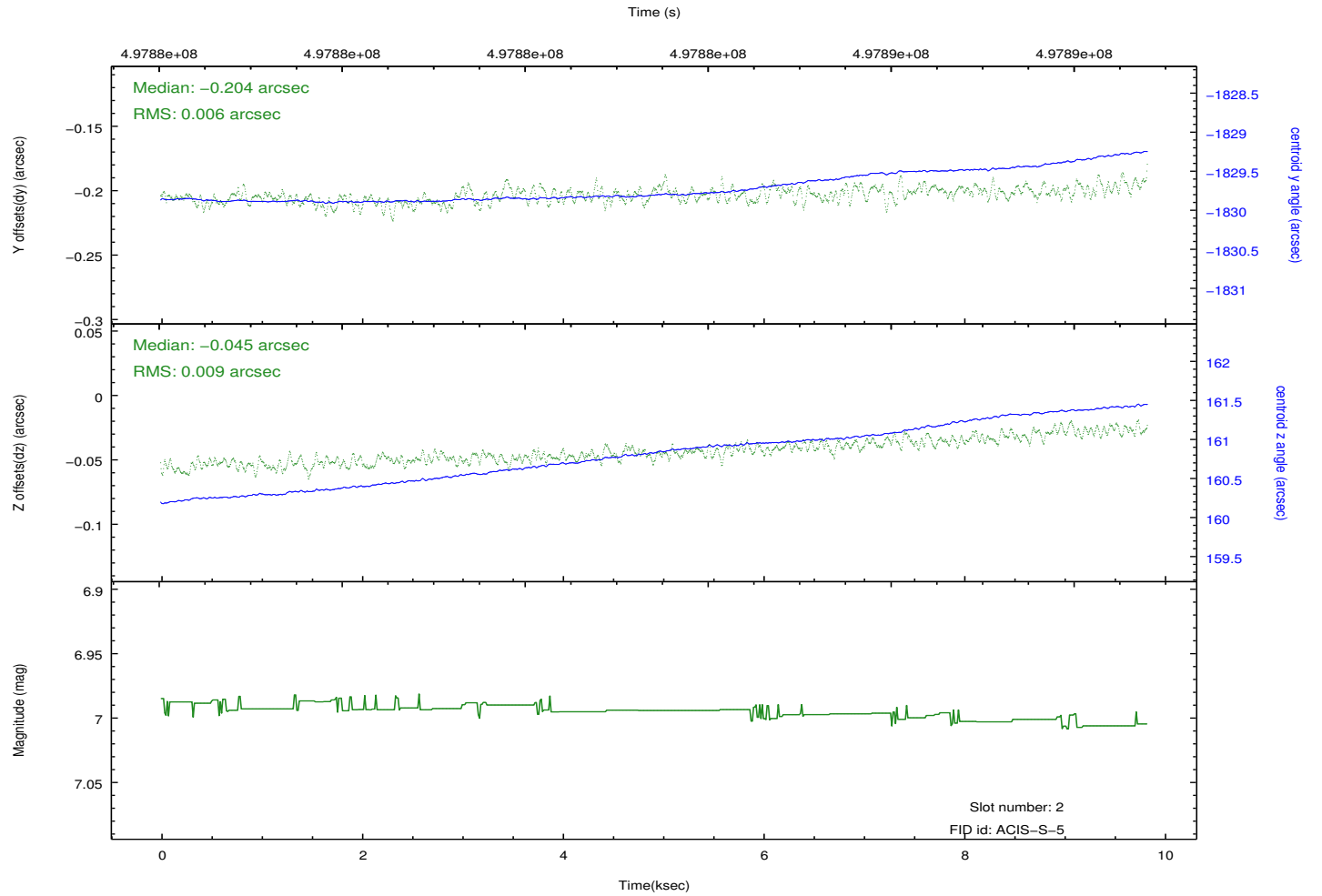
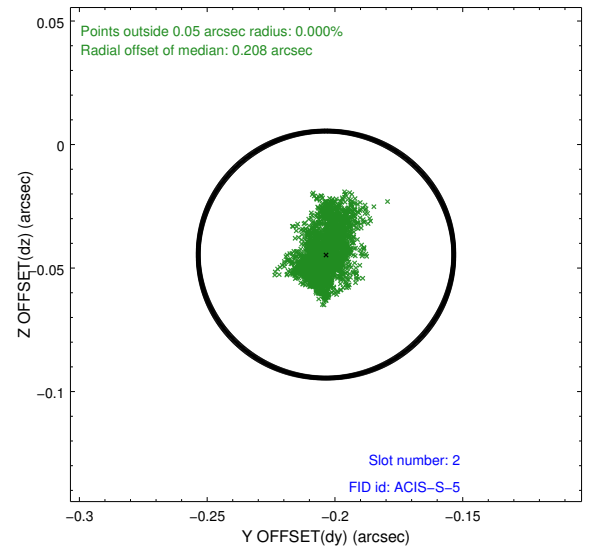
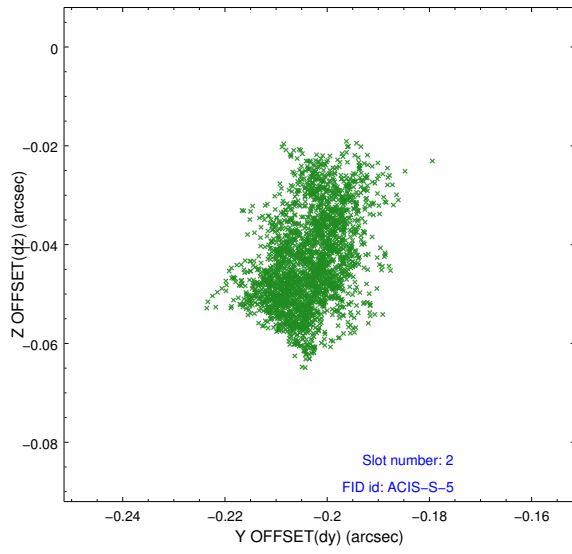
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.1065244286656

A.2 Comments

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.