

V&V Reference Report

L2 ASCDS Version : 10

Observation 16001 - L2 Version 2
Chandra X-Ray Center

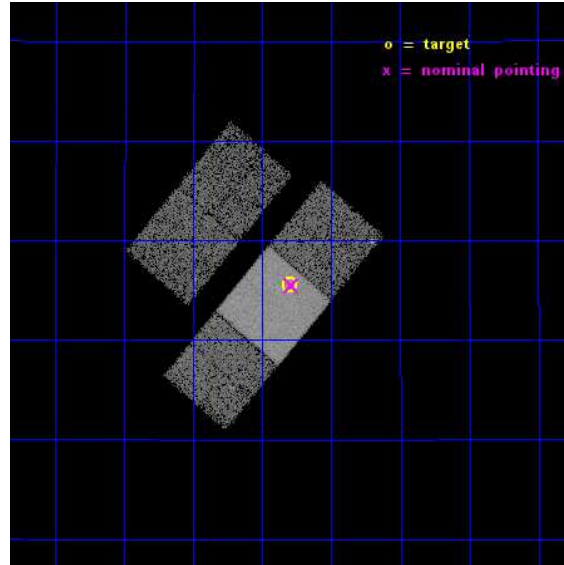
L2 Processing Date : Dec 6 2014

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1 Front

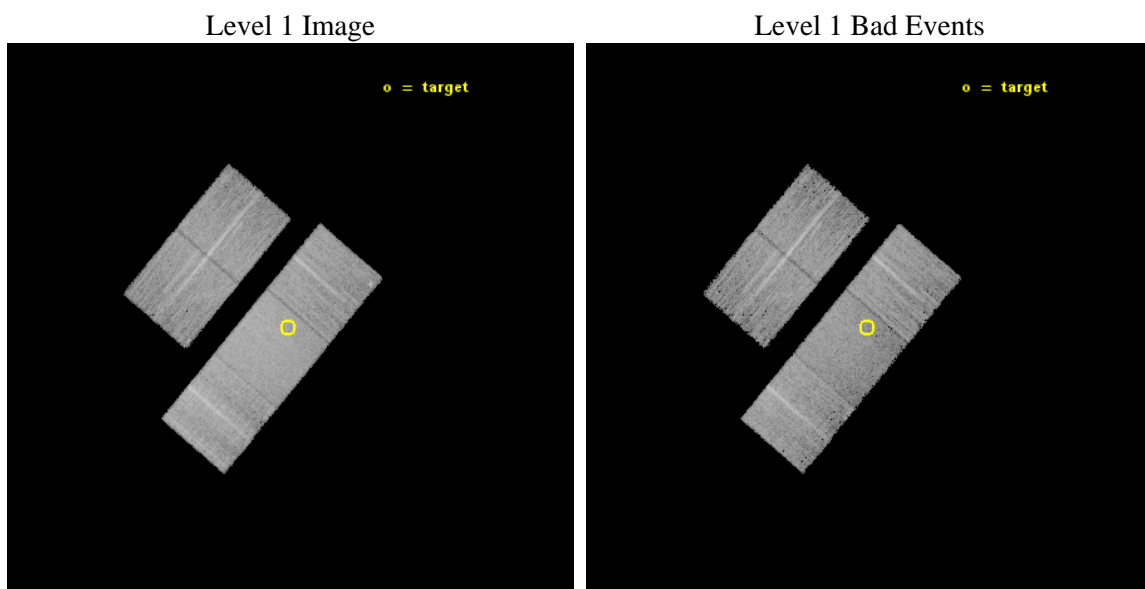
seq_num	502234	Sequence number
obs_id	16001	Observation id
title	State of the shocked plasma: X-ray and radio signatures from type IIP supernovae	Proposal title
observer	Prof. Alak Ray	Principal investigator
object	SN 2013ej	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	24.200667	Observer's specified target RA [deg]
dec_targ	15.758611	Observer's specified target Dec [deg]
ra_nom	24.197528744847	Nominal RA [deg]
dec_nom	15.758193672183	Nominal Dec [deg]
roll_nom	130.15750412532	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14929.08206588	Sum of GTIs [s]
livetime	14734.022618059	Livetime [s]
ontime2	14925.776885509	Sum of GTIs [s]
ontime3	14925.858995616	Sum of GTIs [s]
ontime6	14929.041025877	Sum of GTIs [s]
ontime7	14929.08206588	Sum of GTIs [s]
ontime8	14925.81794554	Sum of GTIs [s]
l2events	74642	Number of level 2 events



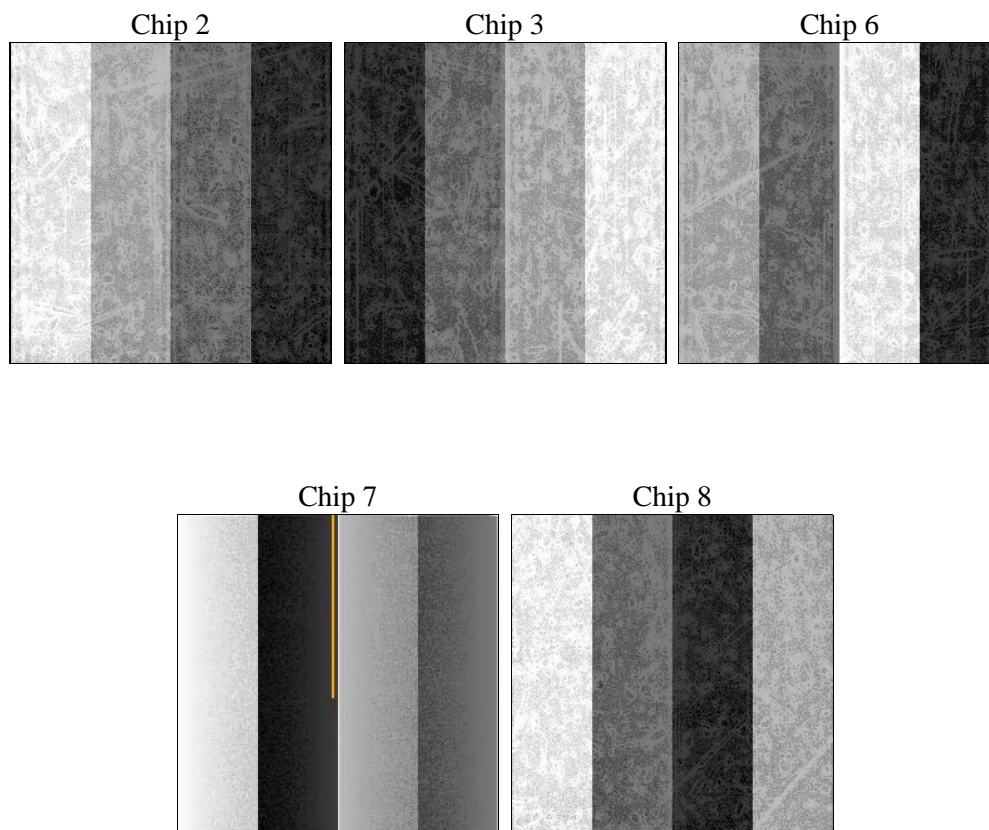
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14860.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	14929.08206588	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	14925.776885509	Sum of GTIs [s]
date	2014-12-07T02:17:30	Date and time of file creation	ontime3	14925.858995616	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14929.041025877	Sum of GTIs [s]
			ontime7	14929.08206588	Sum of GTIs [s]
			ontime8	14925.81794554	Sum of GTIs [s]
			l1events	415146	Number of level 1 events

2.1.4 Events

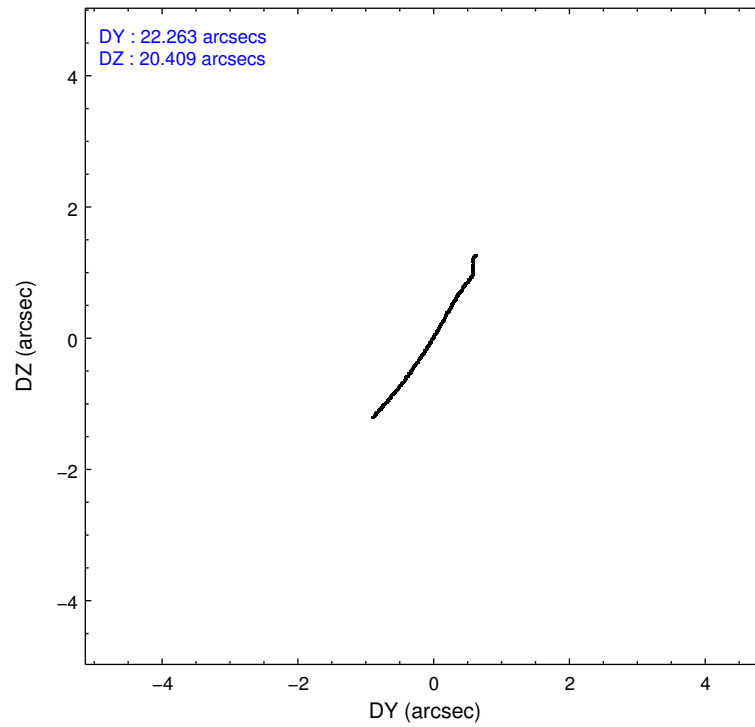
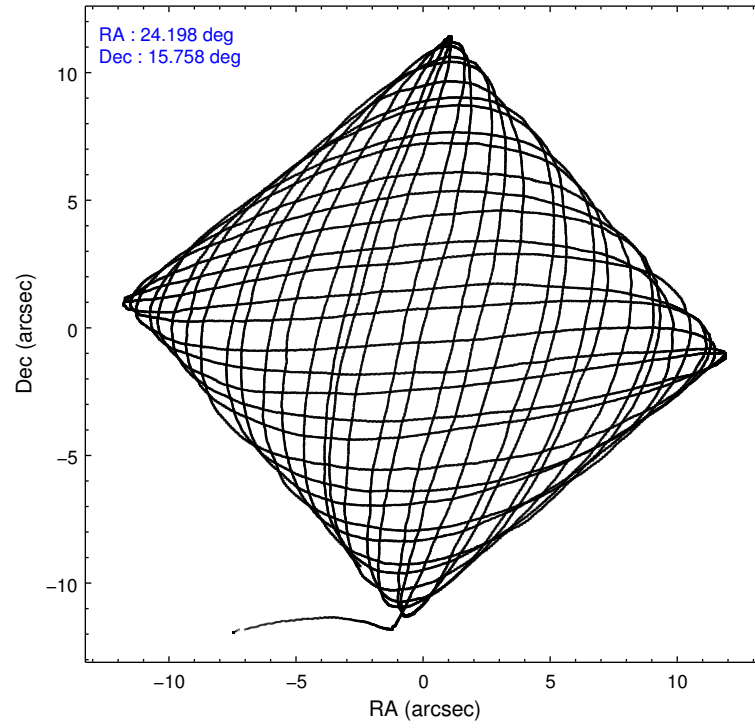
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	70058	69670	74889	101169	99360
rejected events	61912	61483	65557	56996	72711
rejected %	88%	88%	87%	56%	73%

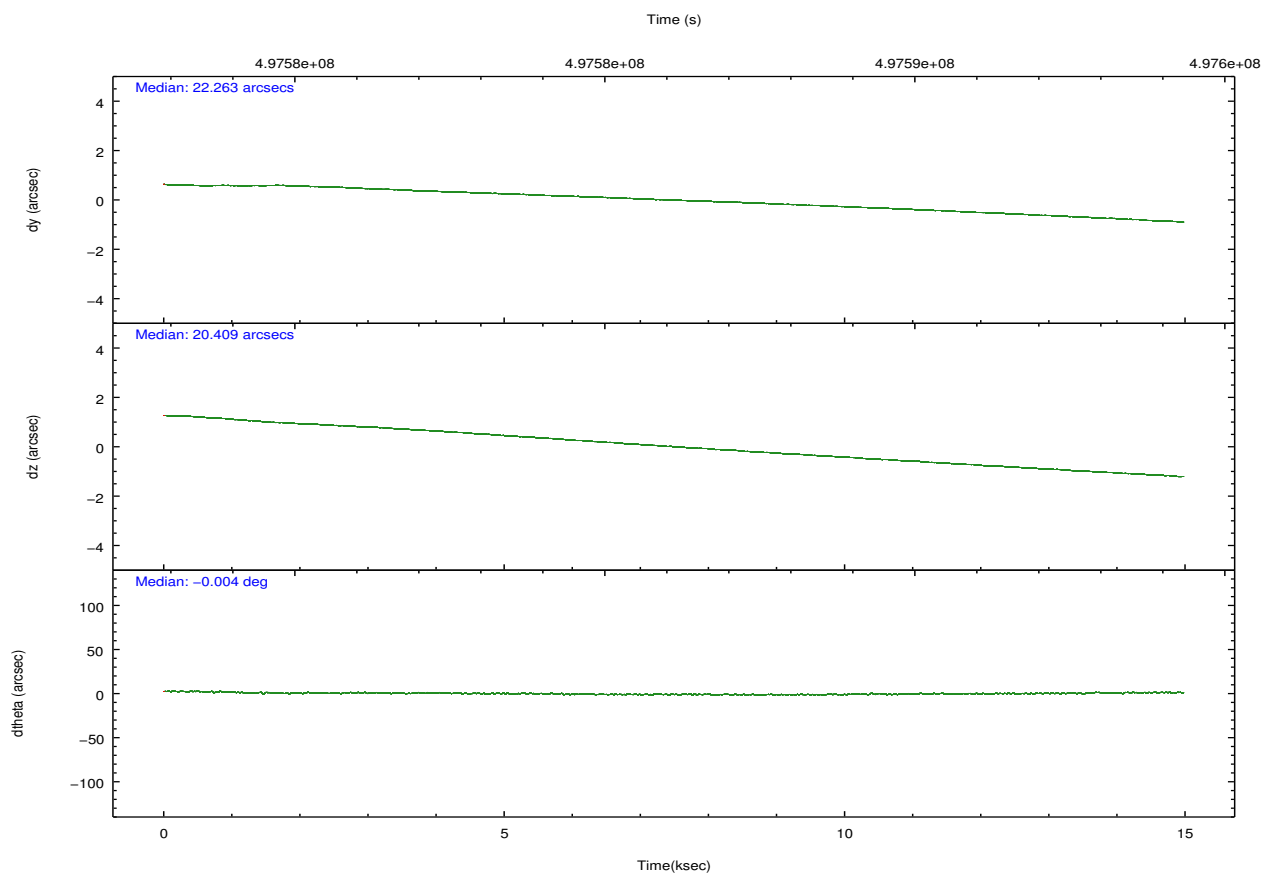
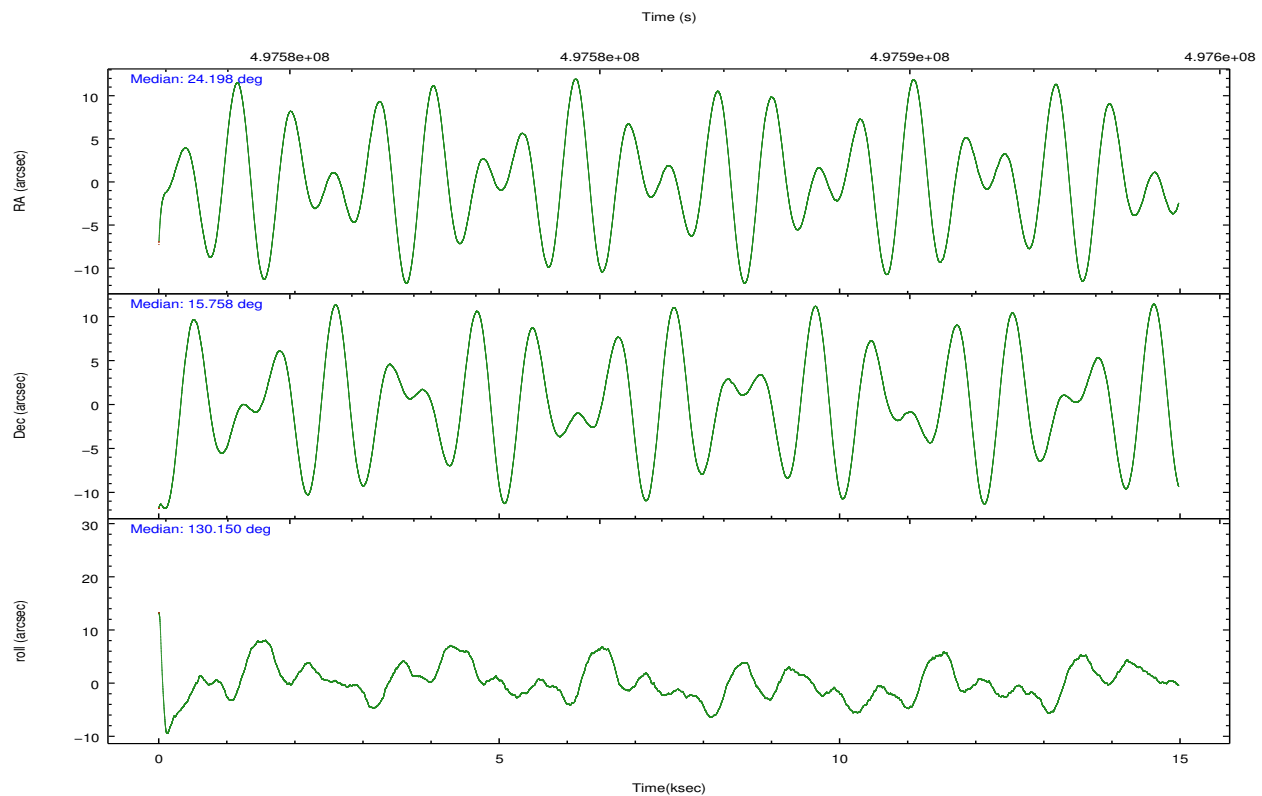
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2834	2853	3333	4067	7761
	4%	4%	4%	4%	7%
grade 1 events	33	55	35	114	74
	0%	0%	0%	0%	0%
grade 2 events	1982	1809	2003	9126	6300
	2%	2%	2%	9%	6%
grade 3 events	828	856	960	3846	2870
	1%	1%	1%	3%	2%
grade 4 events	884	879	915	3751	2713
	1%	1%	1%	3%	2%
grade 5 events	3103	4018	4035	10532	5619
	4%	5%	5%	10%	5%
grade 6 events	1621	1793	2126	23394	7018
	2%	2%	2%	23%	7%
grade 7 events	58773	57407	61482	46339	67005
	83%	82%	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	24.19752874484676	Subarray requested	NONE	NONE
[deg] Pointing Dec	15.749274	15.75819367218319	Alternating exposures requested	N	N
[deg] Pointing Roll	129.993556	130.1575041253247	[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)	497578746.184000	497577377.10397			
Observation start date	2013-10-08T00:17:59	2013-10-07T23:56:17			
[s] Observation end time (MET)	497593606.184000	497594339.82989			
Observation end date	2013-10-08T04:25:39	2013-10-08T04:38:59			
Read mode	TIMED	TIMED			

2.3 Aspect



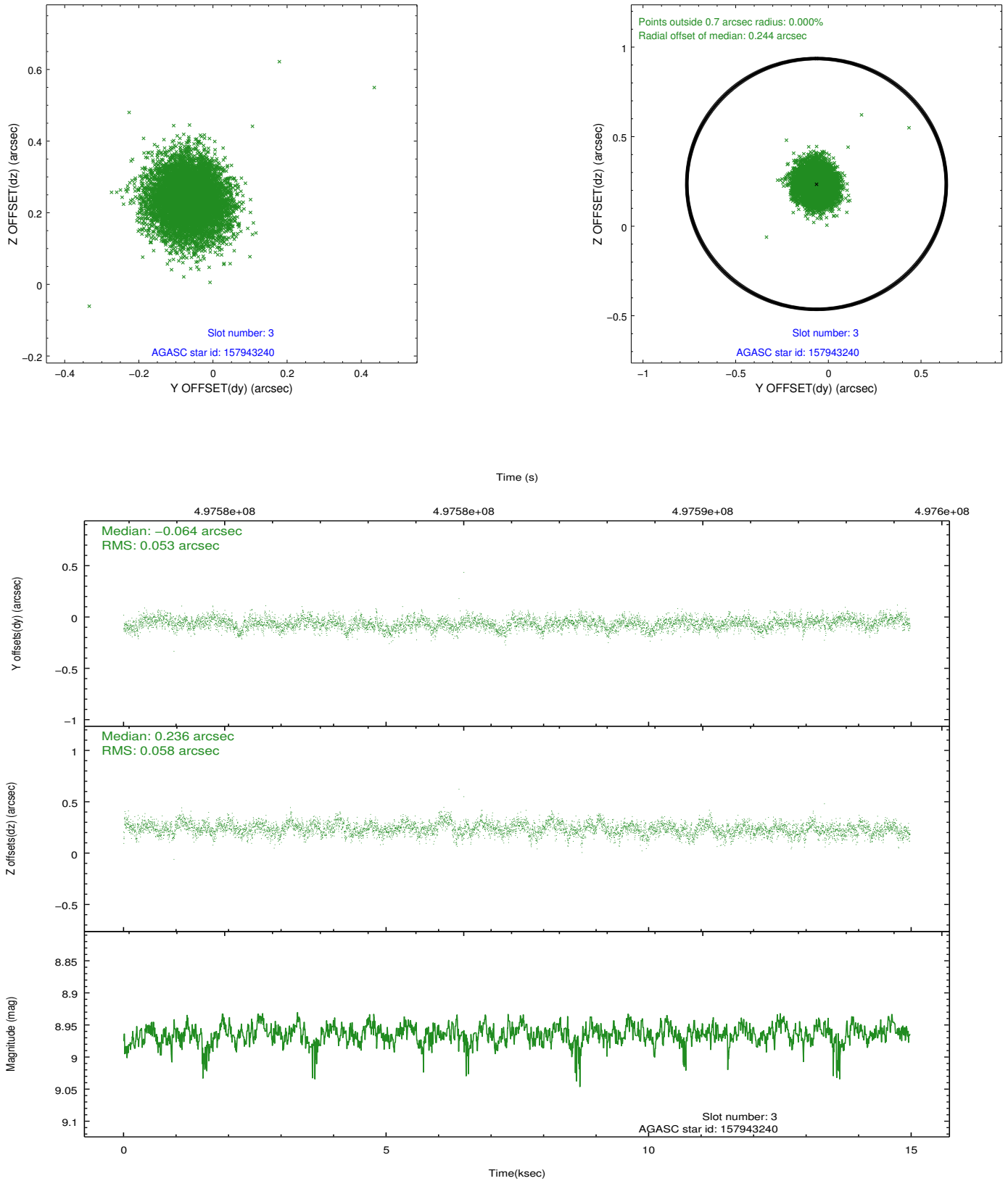


Slot Statistics

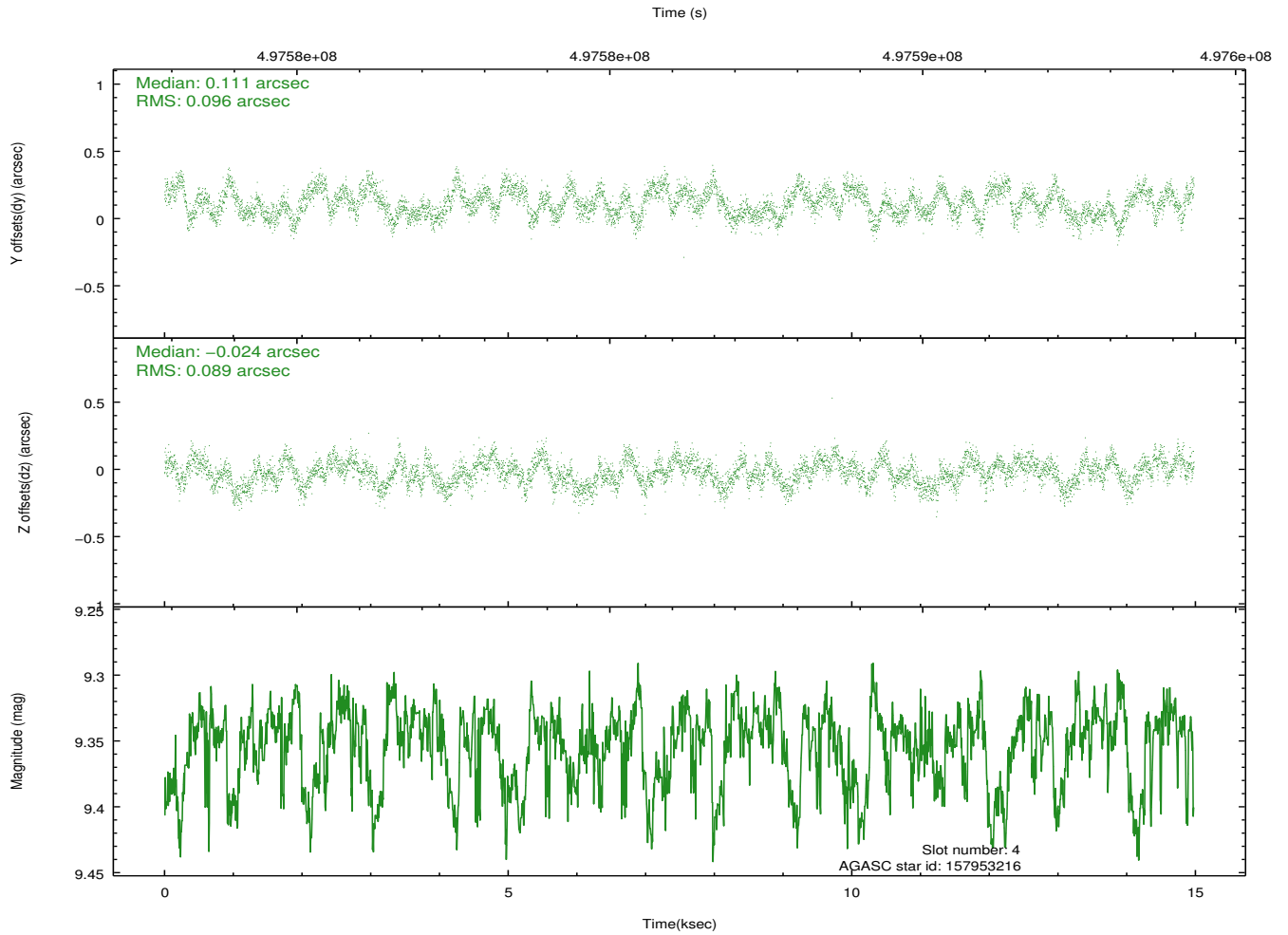
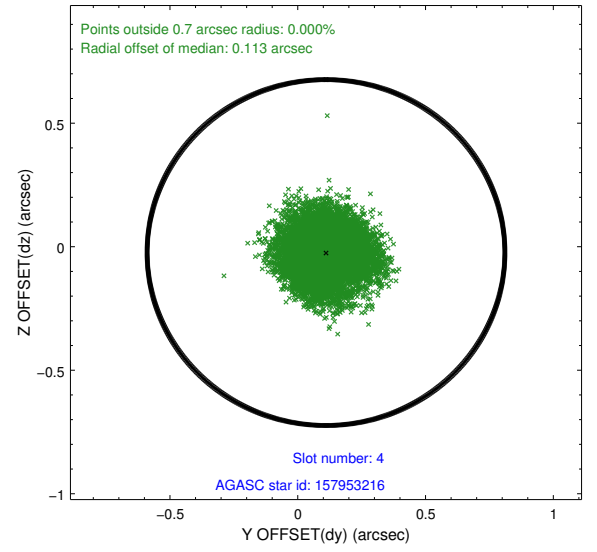
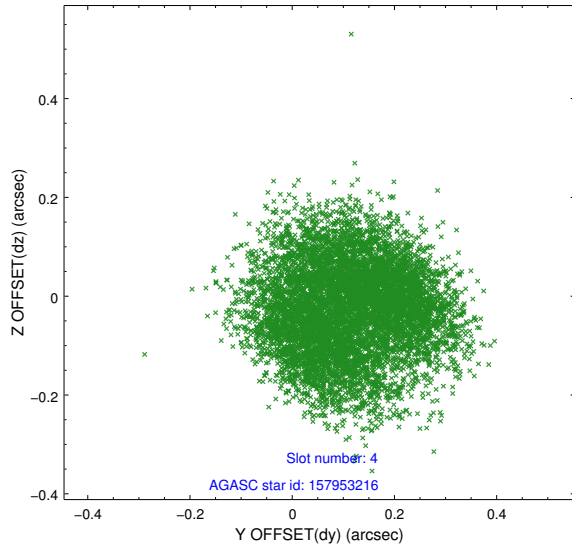
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	3654	-0.114	0.005	0.018	0.027	0.000000	0.000000	-775.50	-1741.95
1	FID		ACIS-S-4	7.02	3654	0.238	0.053	0.013	0.020	0.000000	0.000000	2137.98	166.27
2	FID		ACIS-S-5	7.05	3653	-0.153	-0.046	0.020	0.040	0.000000	0.000000	-1828.01	160.18
3	GUIDE	used	157943240	8.96	7298	-0.064	0.236	0.084	0.135	24.500363	16.361777	1077.72	-2147.45
4	GUIDE	used	157953216	9.35	7298	0.111	-0.024	0.144	0.211	24.189817	15.248642	-1303.16	1250.01
5	GUIDE	used	157953384	9.49	7298	0.231	0.554	0.128	0.204	25.000047	15.804560	-1569.92	-2188.84
6	GUIDE	used	157026584	9.00	7303	-0.257	-0.332	0.105	0.166	23.464180	15.603174	1294.03	2353.91
7	GUIDE	used	157029352	9.05	7280	-0.019	-0.431	0.096	0.159	23.764744	15.271289	-291.31	2327.49

2.4 Star Slots

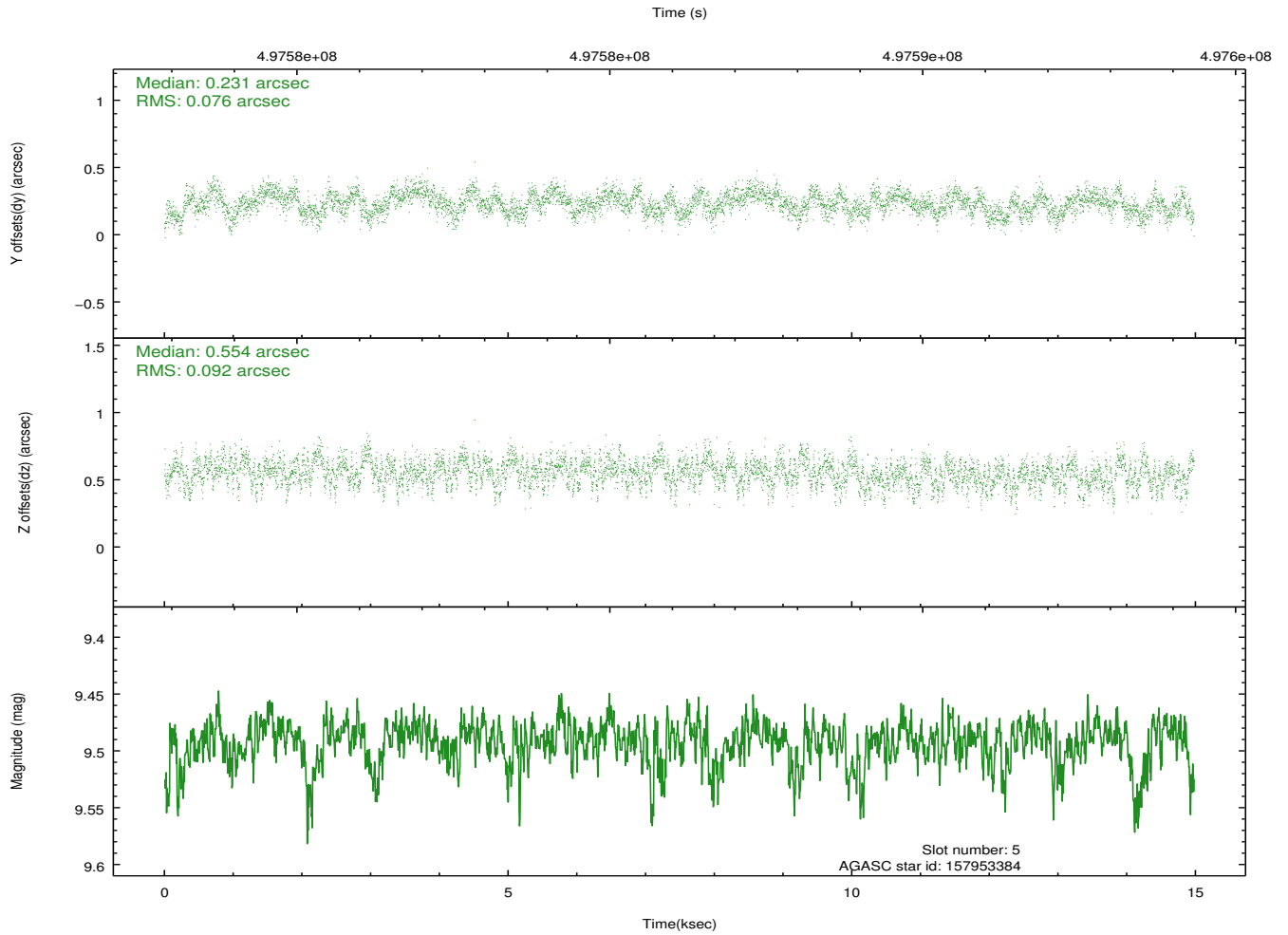
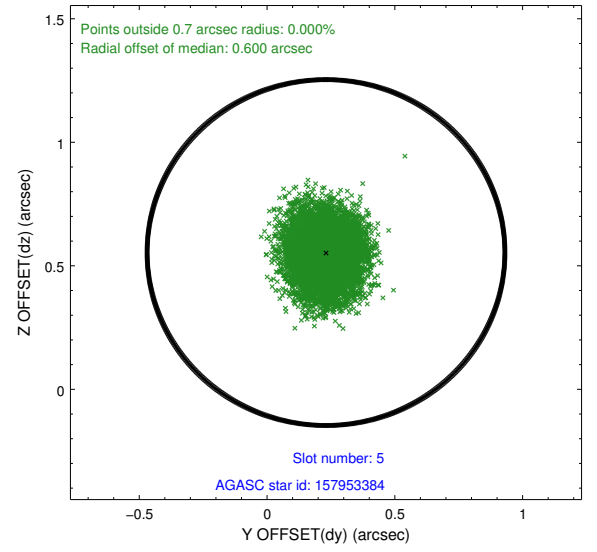
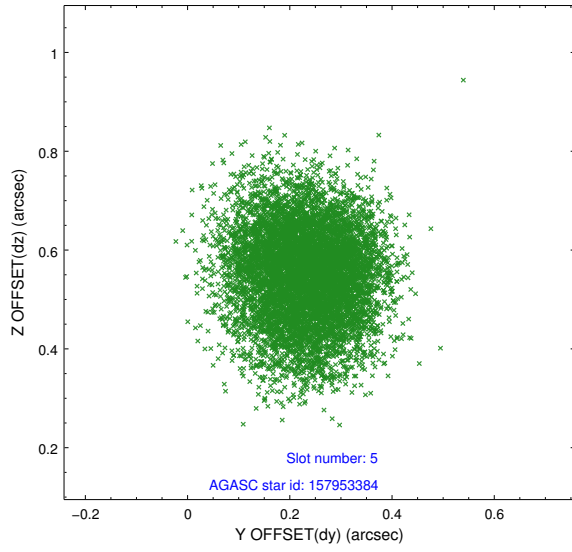
2.4.1 Slot 3



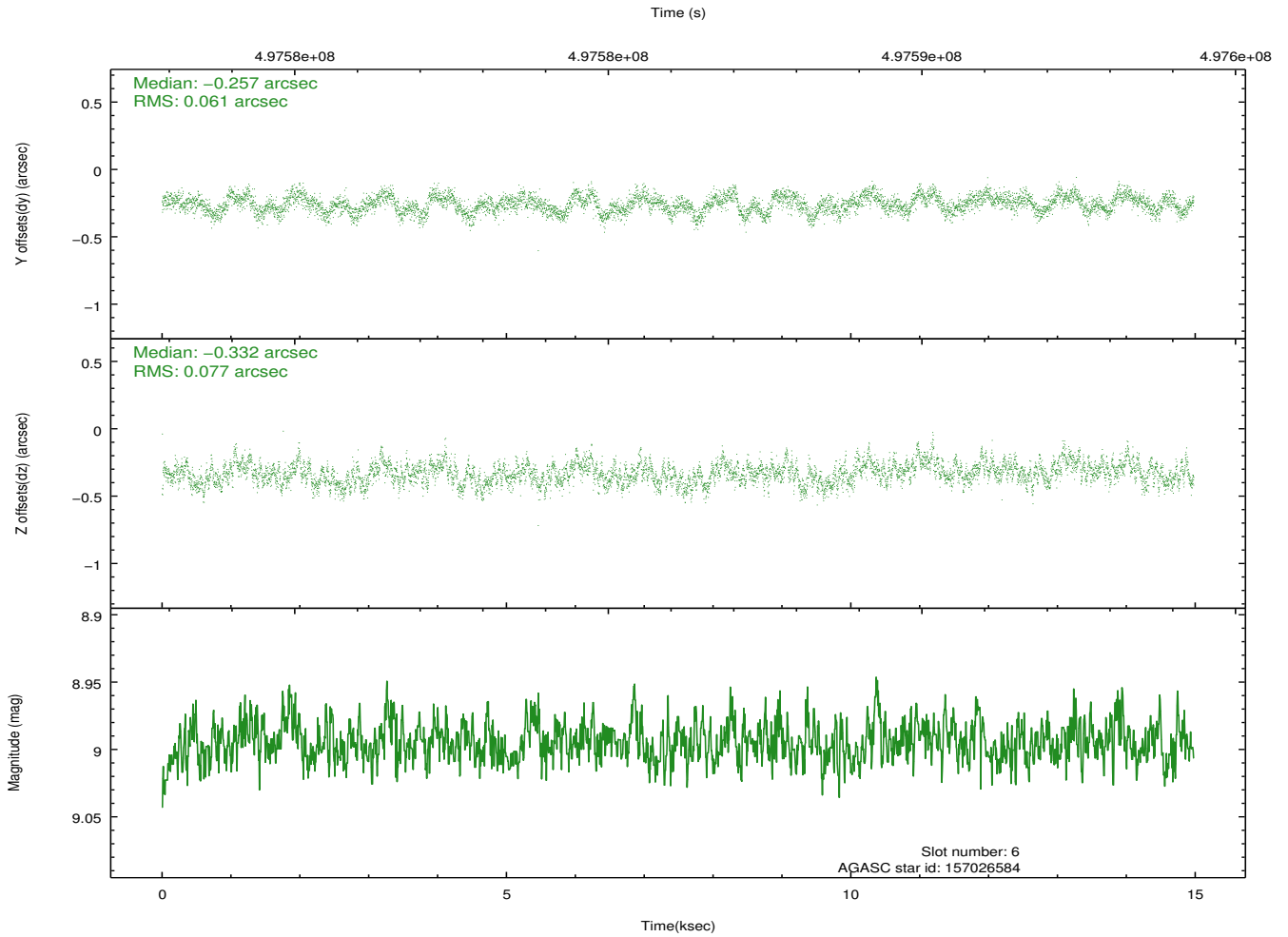
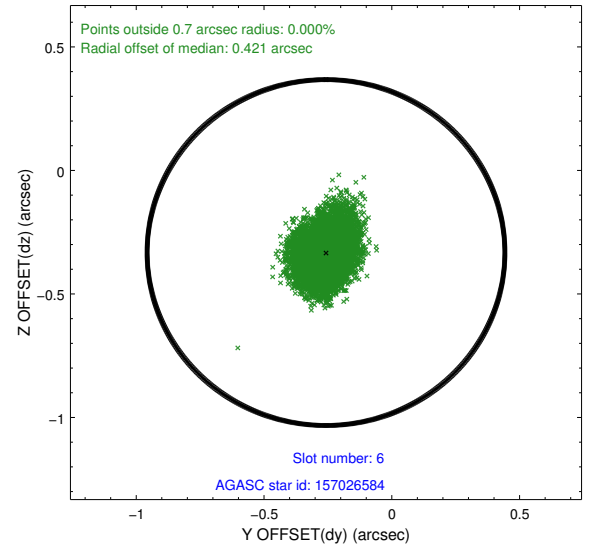
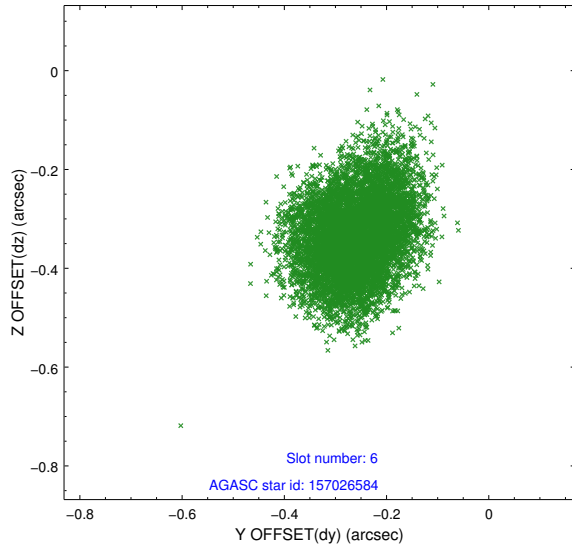
2.4.2 Slot 4



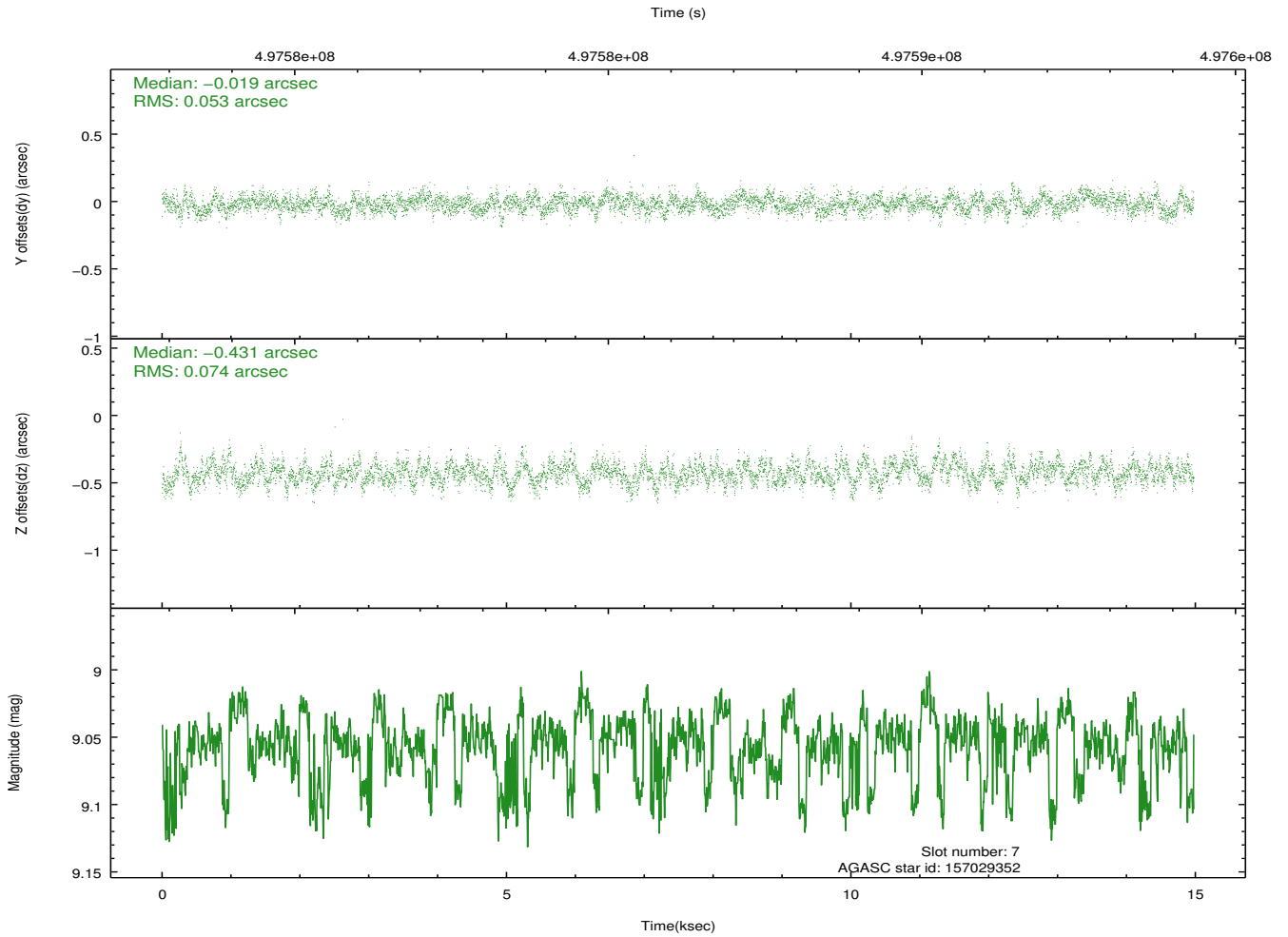
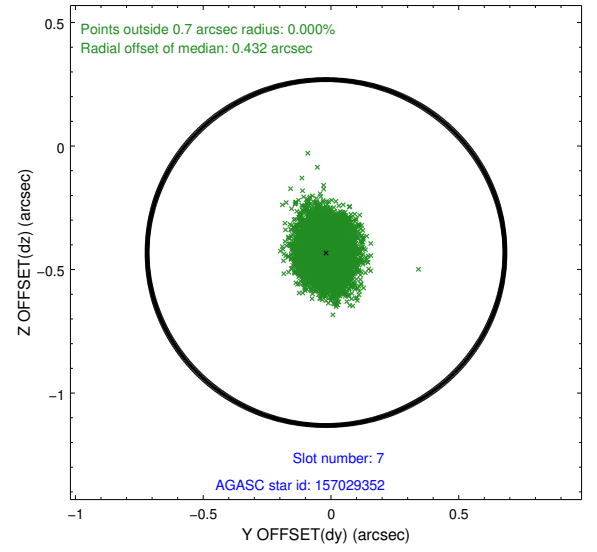
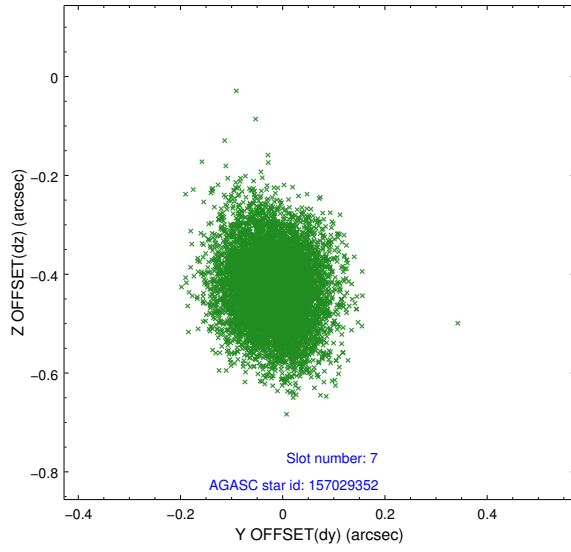
2.4.3 Slot 5



2.4.4 Slot 6

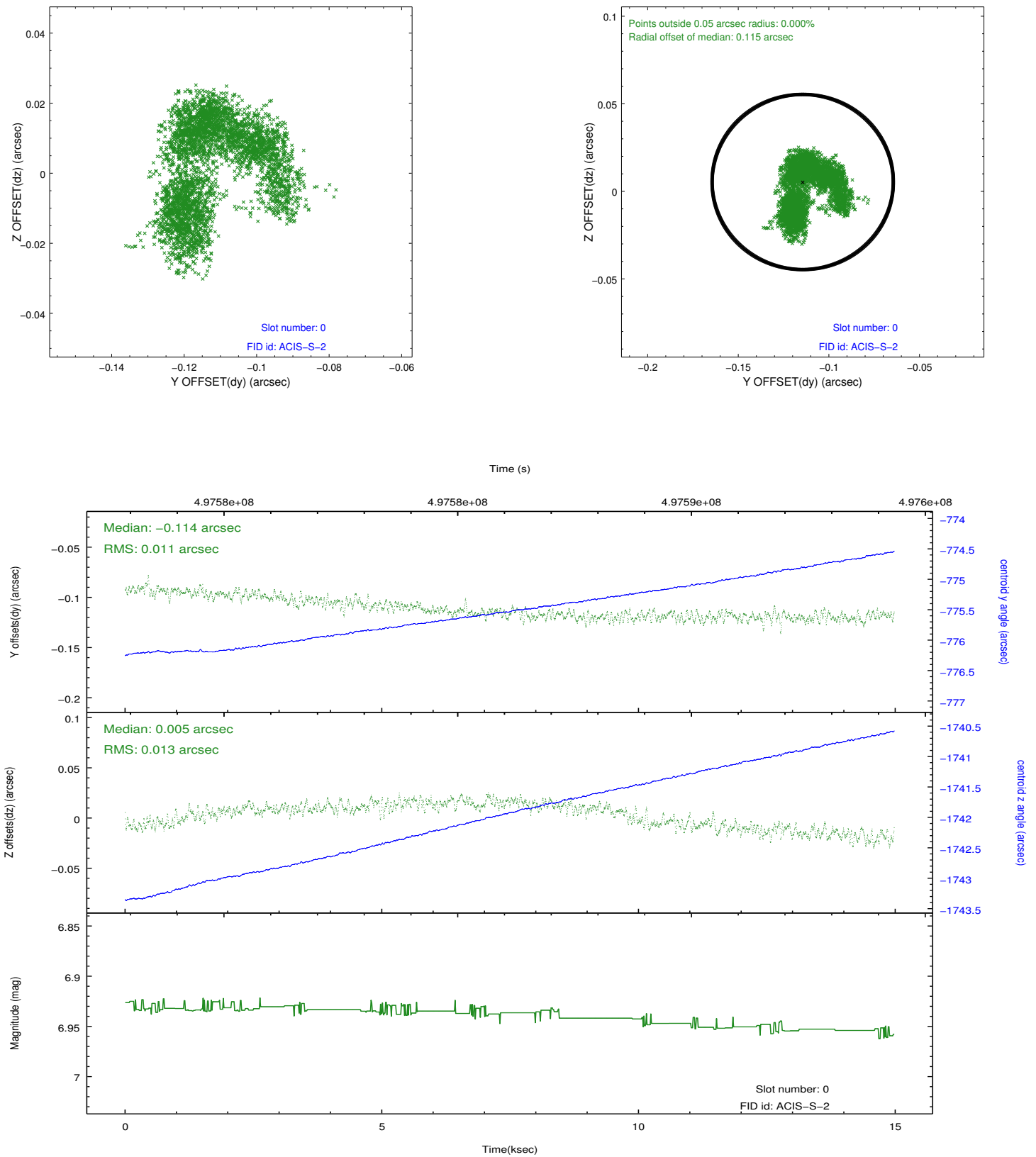


2.4.5 Slot 7

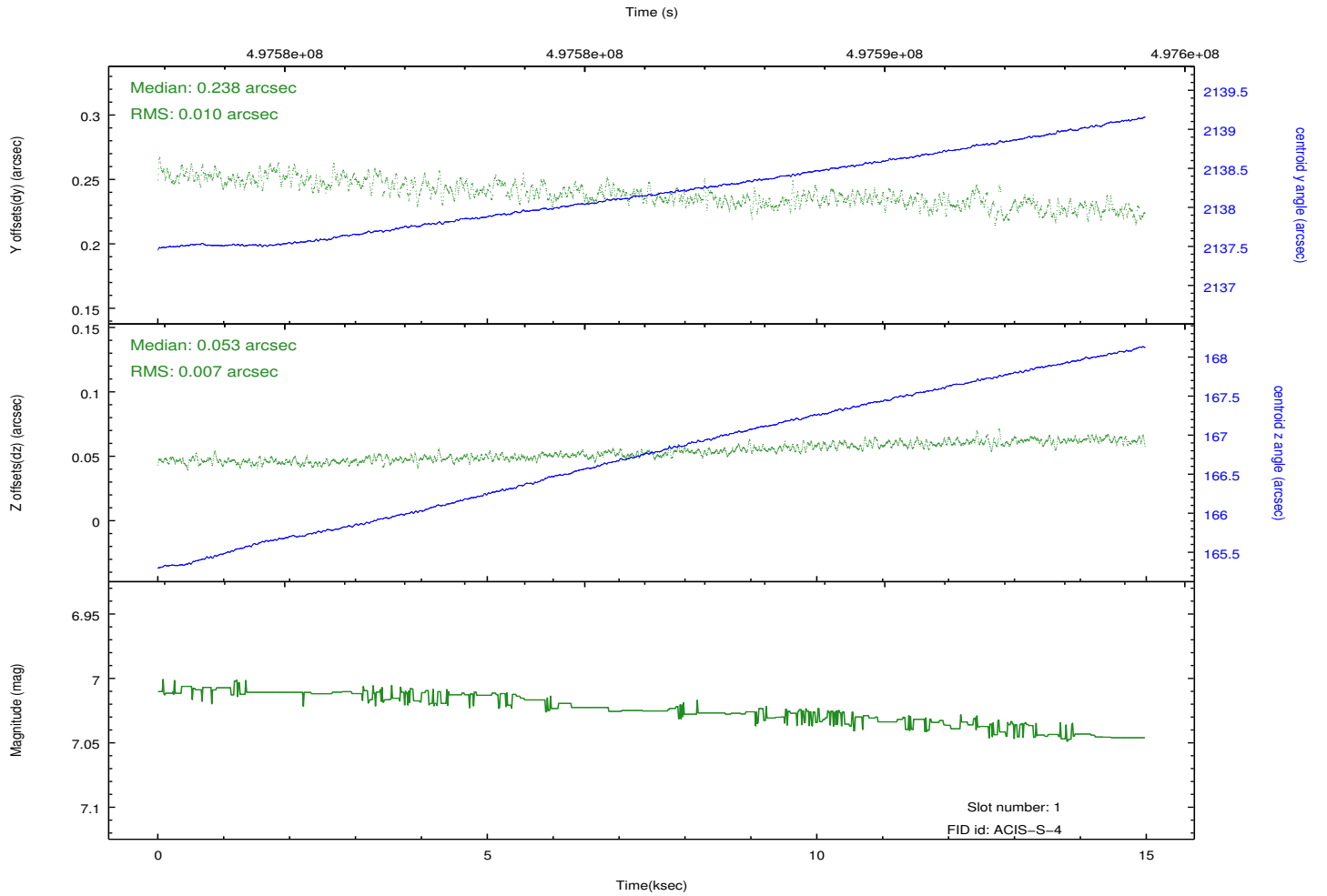
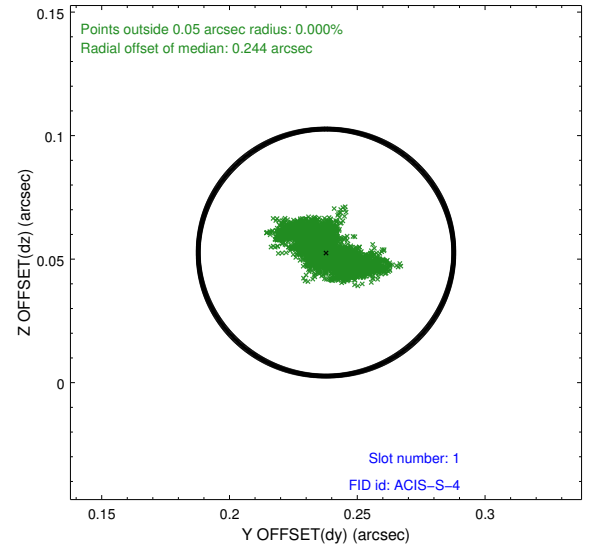
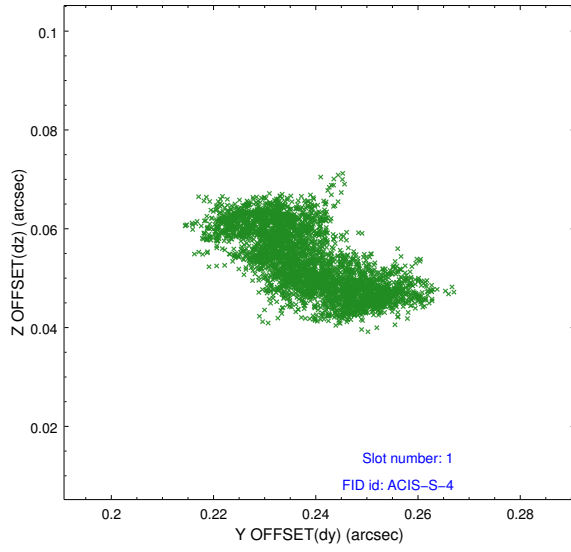


2.5 FID Slots

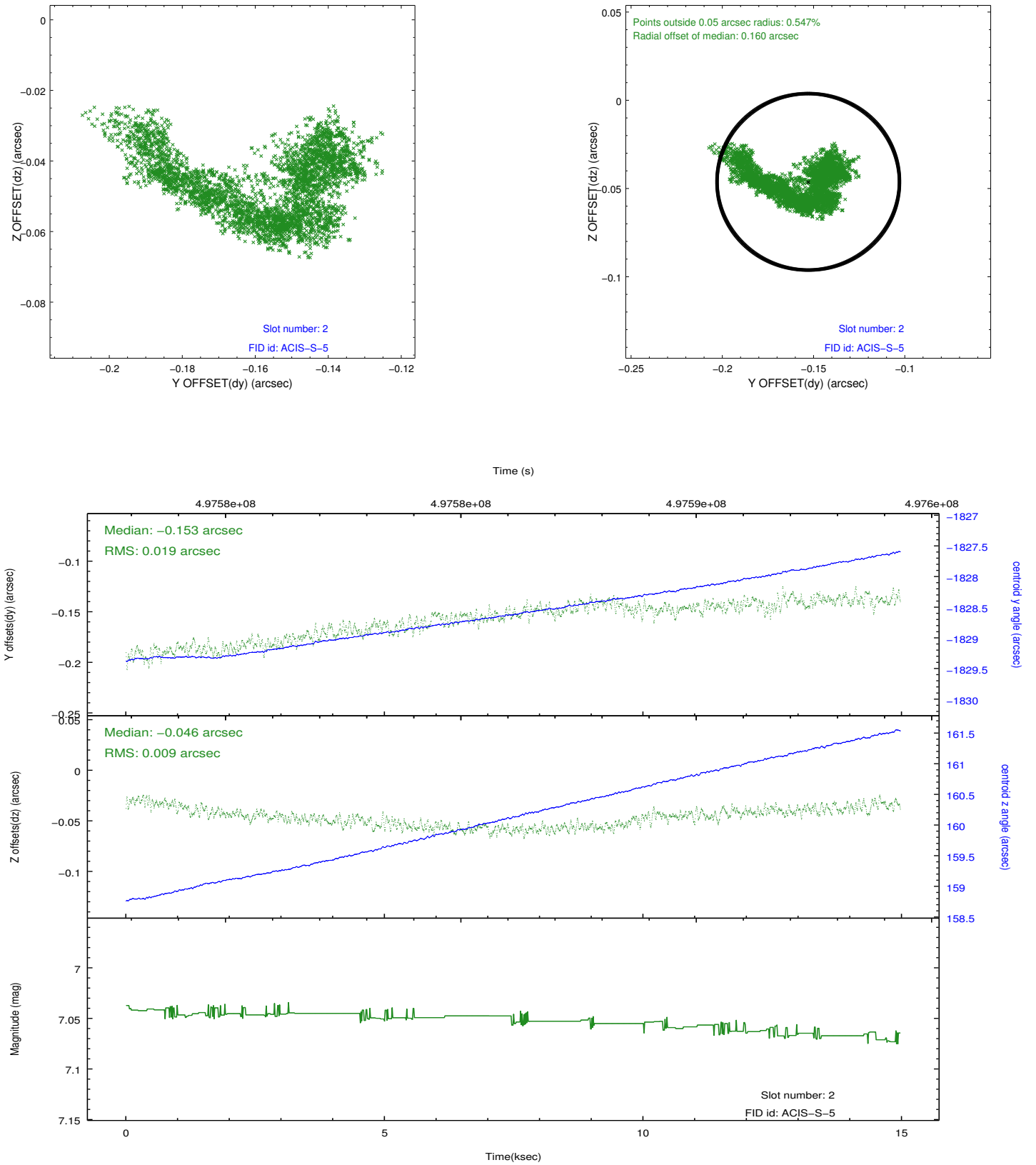
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.92908206588

A.2 Comments

Joint proposal with NRAO.

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.