

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15627 - L2 Version 2
Chandra X-Ray Center

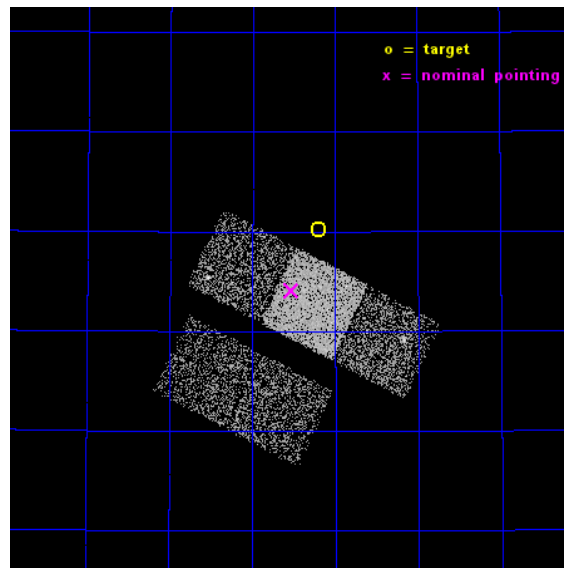
L2 Processing Date : Dec 2 2014

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1 Front

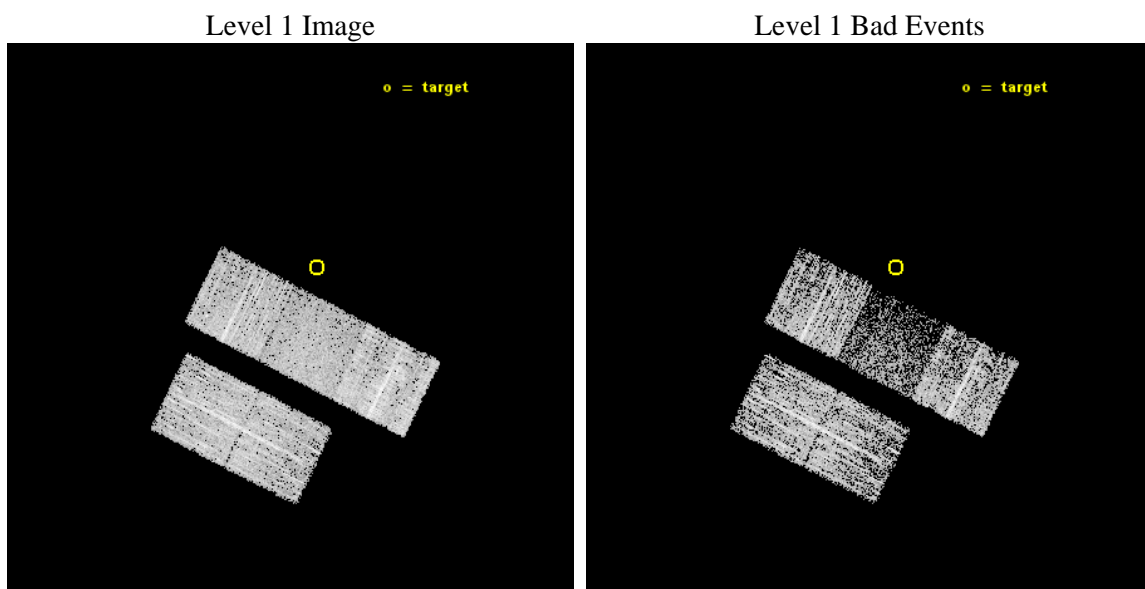
seq_num	100093	Sequence number
obs_id	15627	Observation id
title	High Latitude Charge Exchange X-rays from Comet PANSTARRS in the Cold Polar Solar Wind	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	Comet 2011 L4 (PANSTARRS)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	5.8005	Observer's specified target RA [deg]
dec_targ	54.837722	Observer's specified target Dec [deg]
ra_nom	5.8821738354977	Nominal RA [deg]
dec_nom	54.735312390046	Nominal Dec [deg]
roll_nom	26.707769414061	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5070.6992540956	Sum of GTIs [s]
livetime	5004.4468353463	Livetime [s]
ontime2	5070.5350940824	Sum of GTIs [s]
ontime3	5070.617174089	Sum of GTIs [s]
ontime6	5070.6582140923	Sum of GTIs [s]
ontime7	5070.6992540956	Sum of GTIs [s]
ontime8	5070.5761340857	Sum of GTIs [s]
l2events	16452	Number of level 2 events



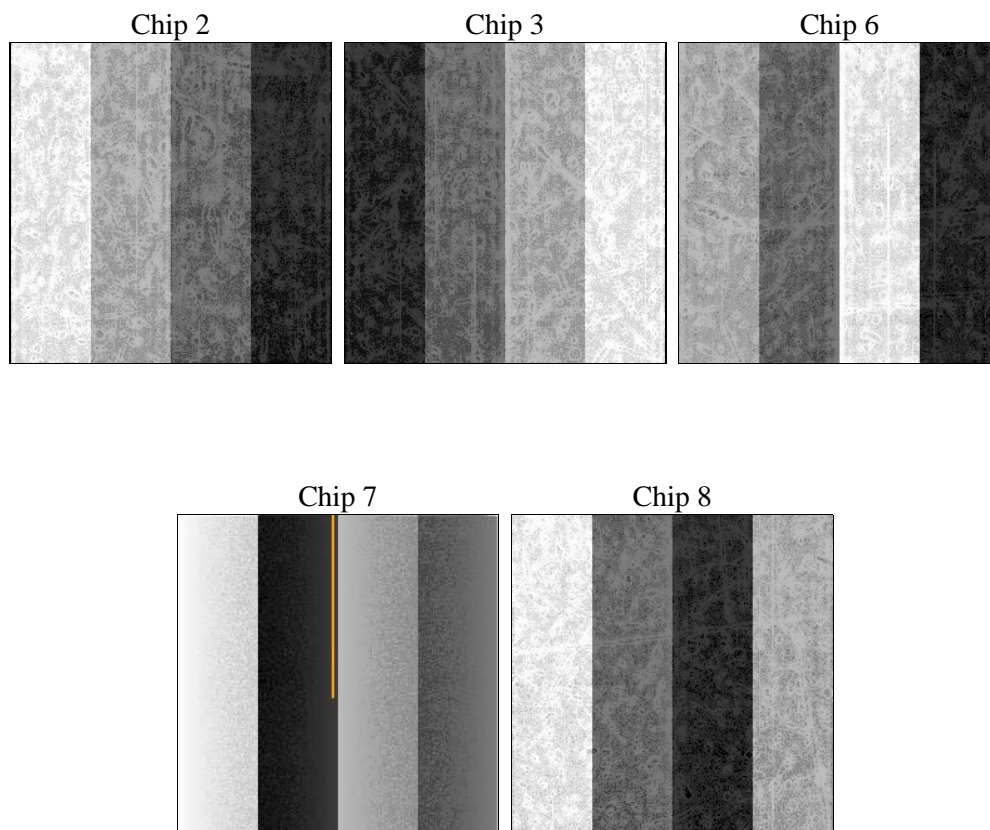
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	5070.6992540956	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	5070.5350940824	Sum of GTIs [s]
date	2014-12-02T17:45:55	Date and time of file creation	ontime3	5070.617174089	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	5070.6582140923	Sum of GTIs [s]
			ontime7	5070.6992540956	Sum of GTIs [s]
			ontime8	5070.5761340857	Sum of GTIs [s]
			l1events	107550	Number of level 1 events

2.1.4 Events

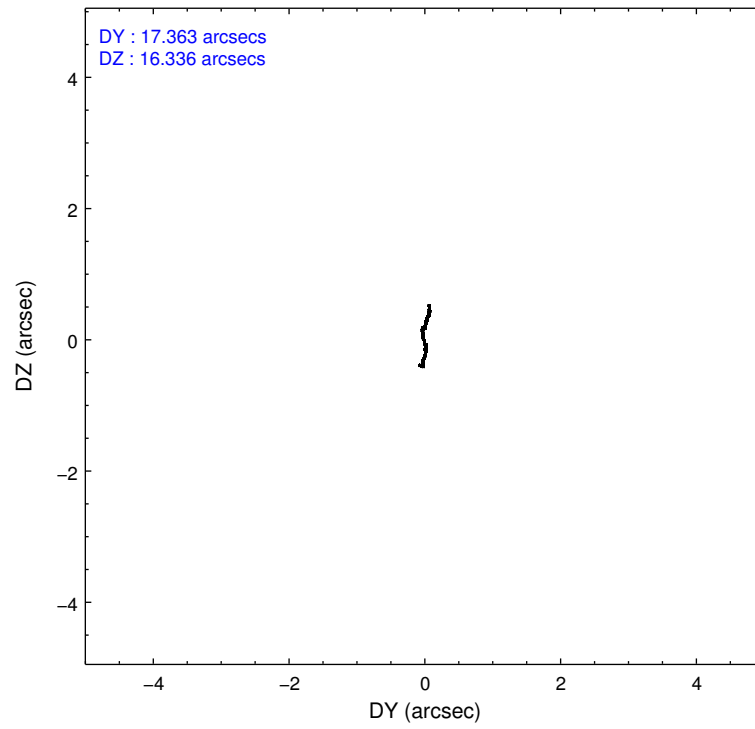
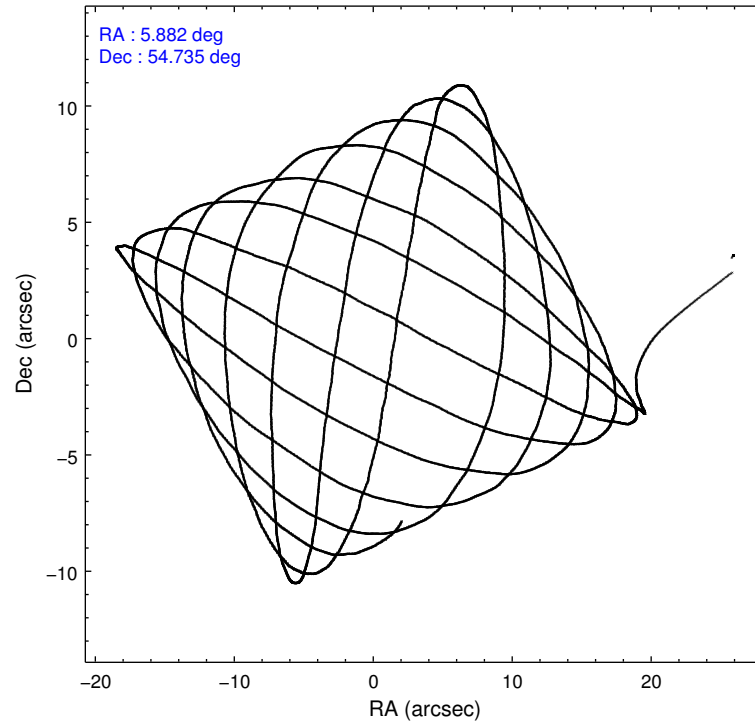
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	23178	20526	20770	16373	26703
rejected events	21104	18486	18313	7424	18536
rejected %	91%	90%	88%	45%	69%

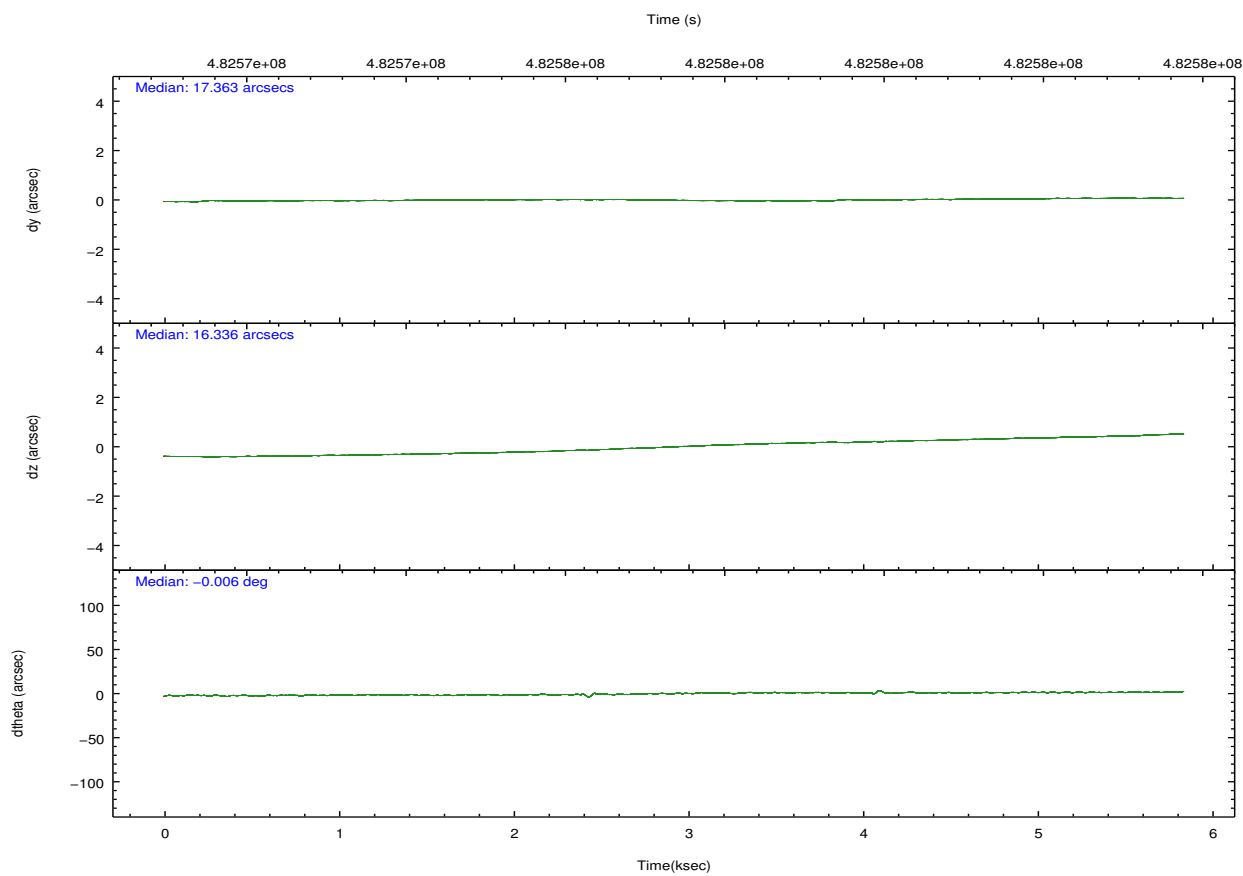
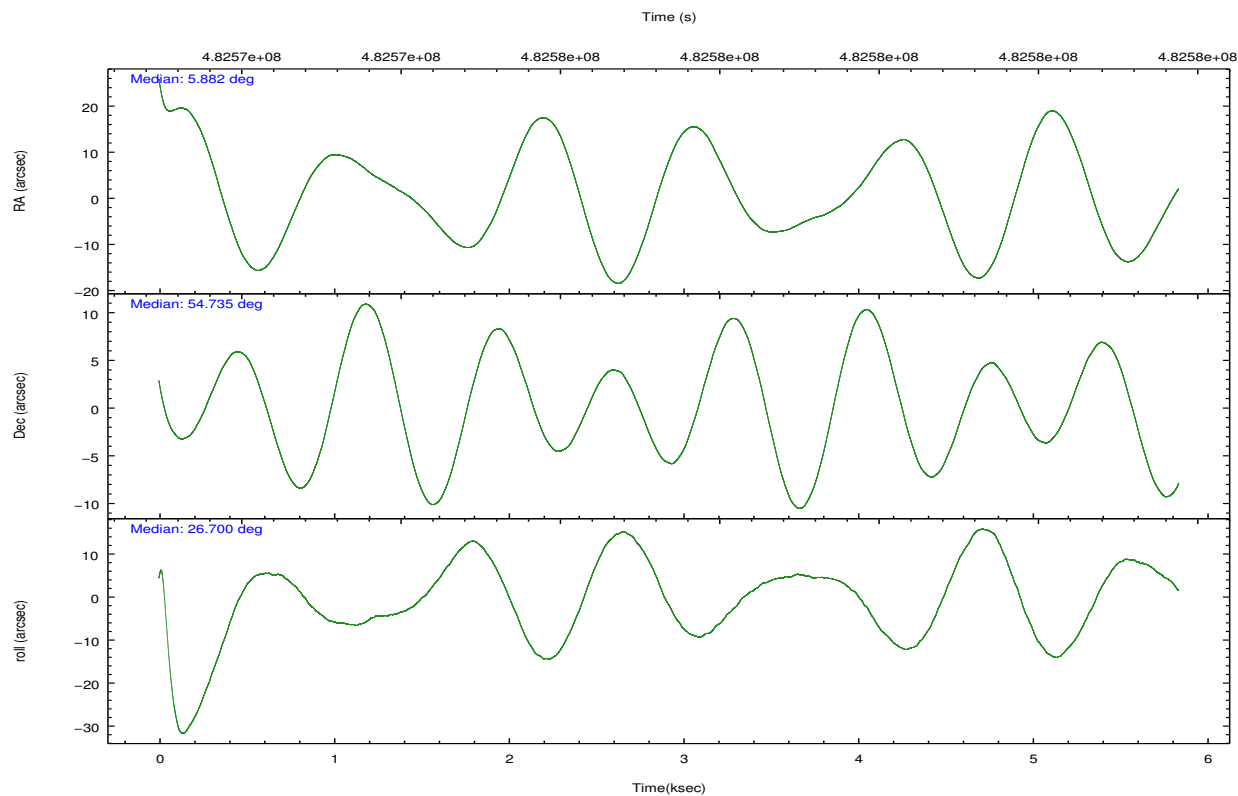
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	851	860	1041	1279	2578
	3%	4%	5%	7%	9%
grade 1 events	10	16	18	28	12
	0%	0%	0%	0%	0%
grade 2 events	528	469	554	2305	1959
	2%	2%	2%	14%	7%
grade 3 events	209	208	237	801	868
	0%	1%	1%	4%	3%
grade 4 events	209	226	262	843	878
	0%	1%	1%	5%	3%
grade 5 events	397	628	591	1709	976
	1%	3%	2%	10%	3%
grade 6 events	322	331	425	3979	2160
	1%	1%	2%	24%	8%
grade 7 events	20652	17788	17642	5429	17272
	89%	86%	84%	33%	64%

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	5.856691	5.882173835497724	Subarray requested	NONE	NONE
[deg] Pointing Dec	54.712302	54.73531239004576	Alternating exposures requested	N	N
[deg] Pointing Roll	26.571862	26.70776941406077	[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)	482573601.184000	482571634.07513			
Observation start date	2013-04-17T08:12:14	2013-04-17T07:40:34			
[s] Observation end time (MET)	482578601.184000	482578735.27551			
Observation end date	2013-04-17T09:35:34	2013-04-17T09:38:55			
Read mode	TIMED	TIMED			

2.3 Aspect



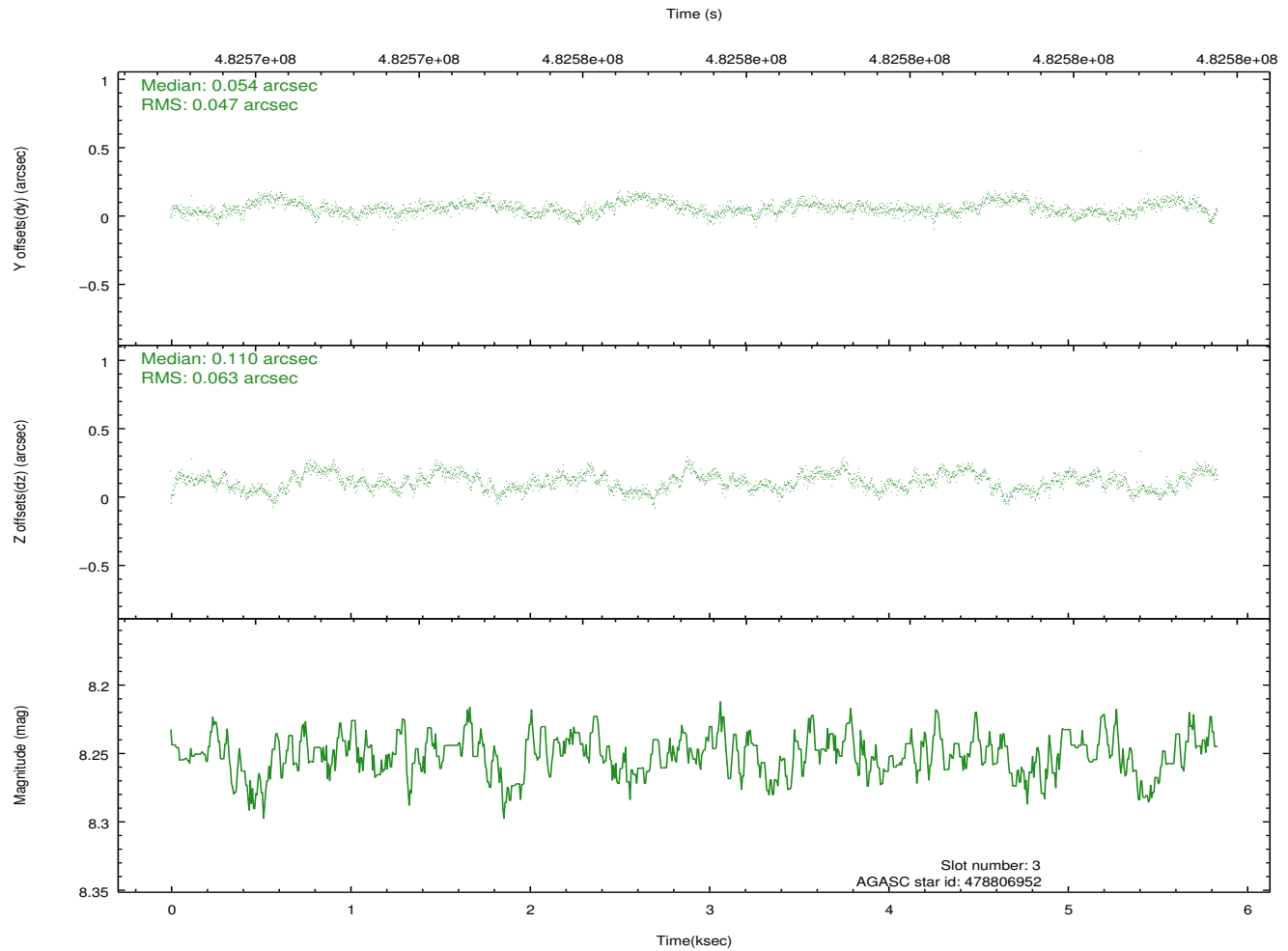
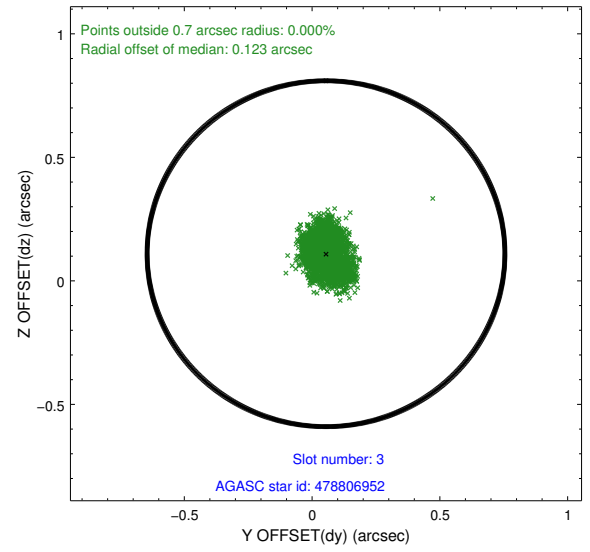
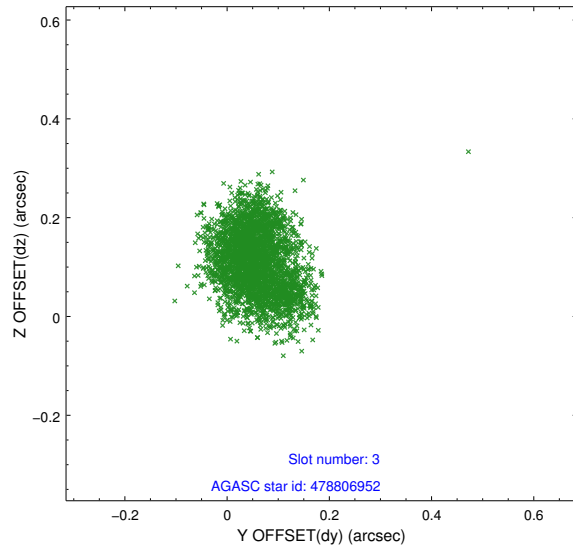


Slot Statistics

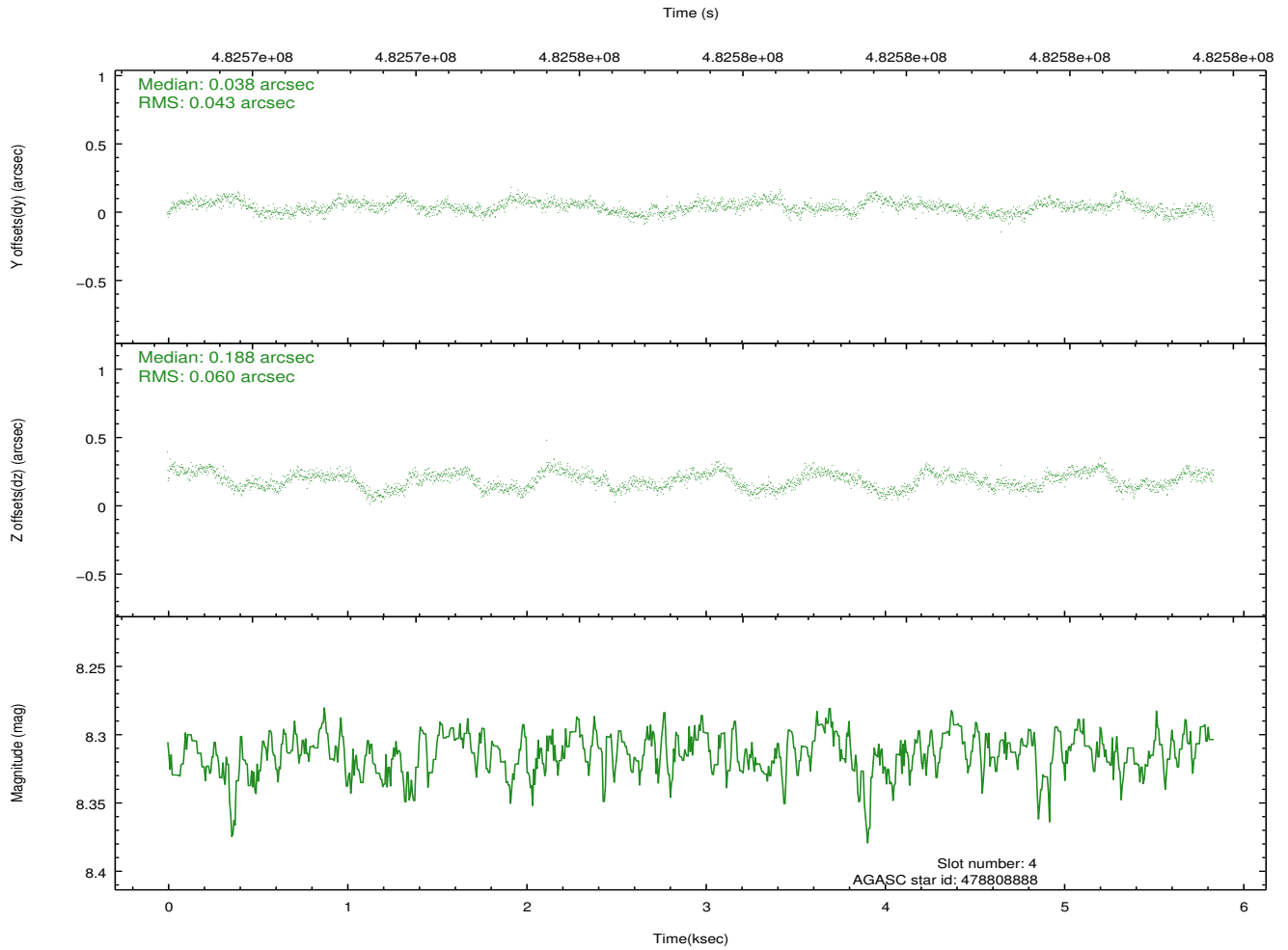
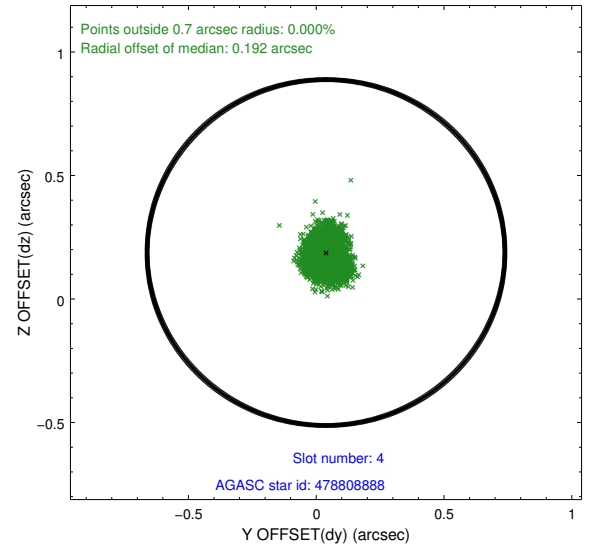
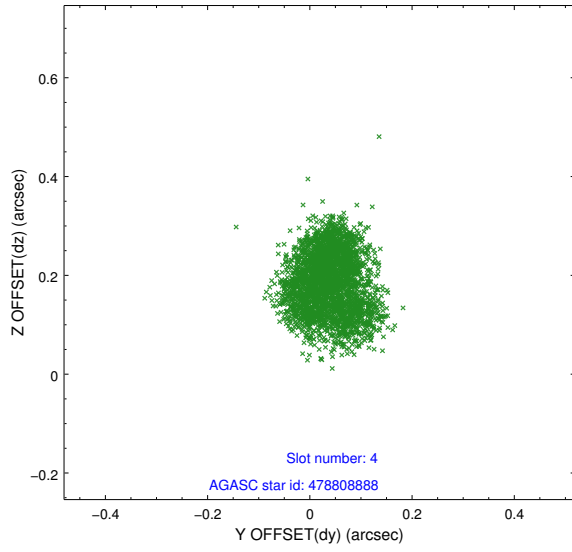
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.06	1425	0.070	-0.088	0.011	0.017	0.000000	0.000000	925.73	-1733.45
1	FID		ACIS-S-4	7.06	1425	0.162	0.032	0.008	0.013	0.000000	0.000000	2143.76	169.79
2	FID		ACIS-S-5	7.09	1424	-0.259	0.069	0.008	0.014	0.000000	0.000000	-1822.20	164.51
3	GUIDE	used	478806952	8.25	2848	0.054	0.110	0.085	0.133	6.145274	54.293971	-130.20	-1616.55
4	GUIDE	used	478808888	8.31	2849	0.038	0.188	0.081	0.121	5.972847	54.160339	-669.20	-1886.62
5	GUIDE	used	479340944	9.14	2840	0.032	-0.261	0.104	0.162	5.119403	55.184090	-592.22	2203.41
6	GUIDE	used	478949376	8.89	2846	-0.063	0.144	0.091	0.151	6.677035	54.235868	781.40	-2295.66
7	GUIDE	used	479341192	8.71	2848	-0.062	-0.180	0.072	0.117	5.913490	55.389722	1194.89	2128.80

2.4 Star Slots

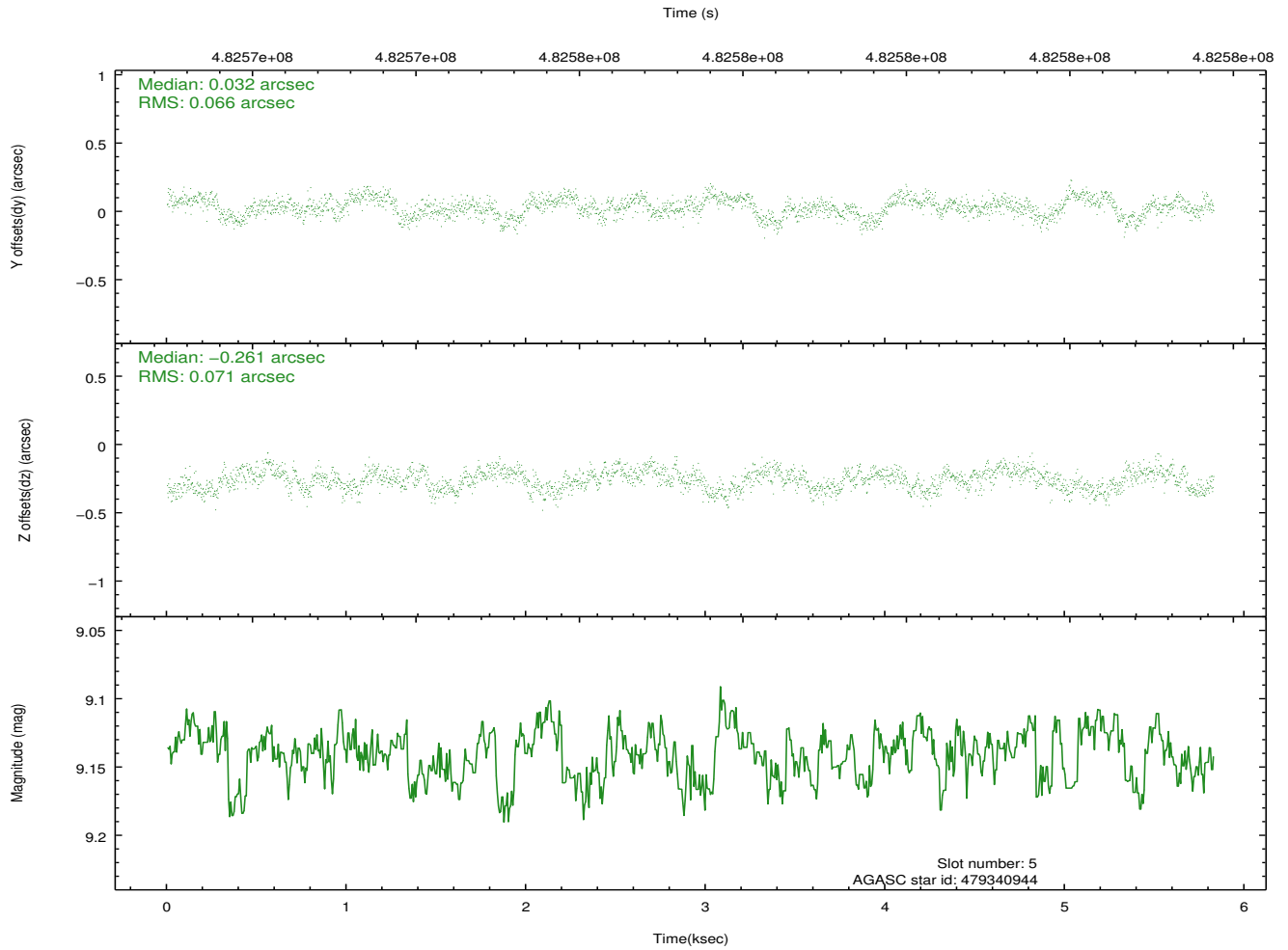
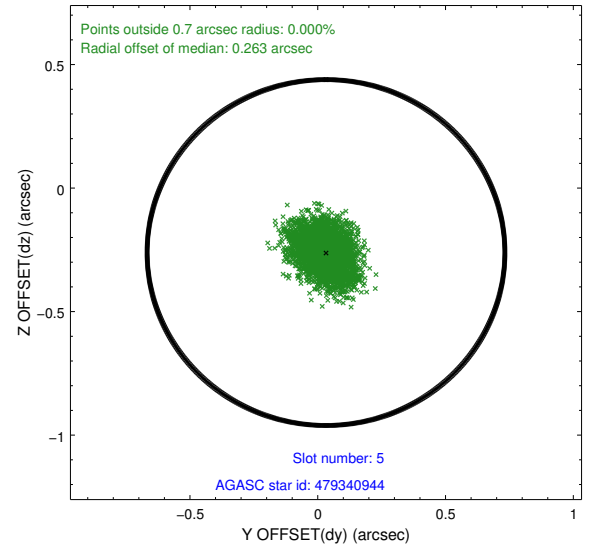
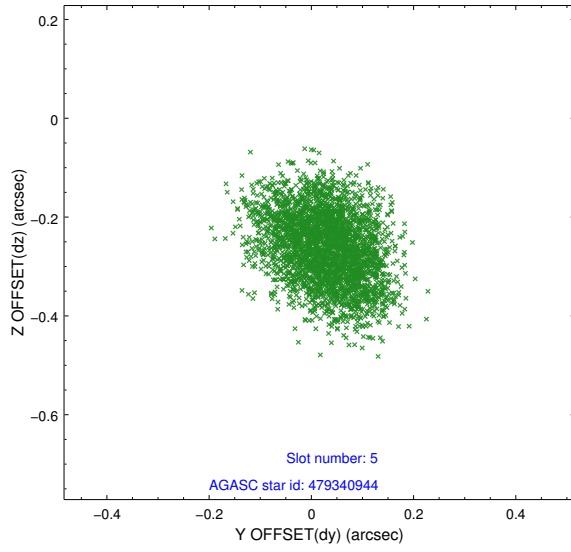
2.4.1 Slot 3



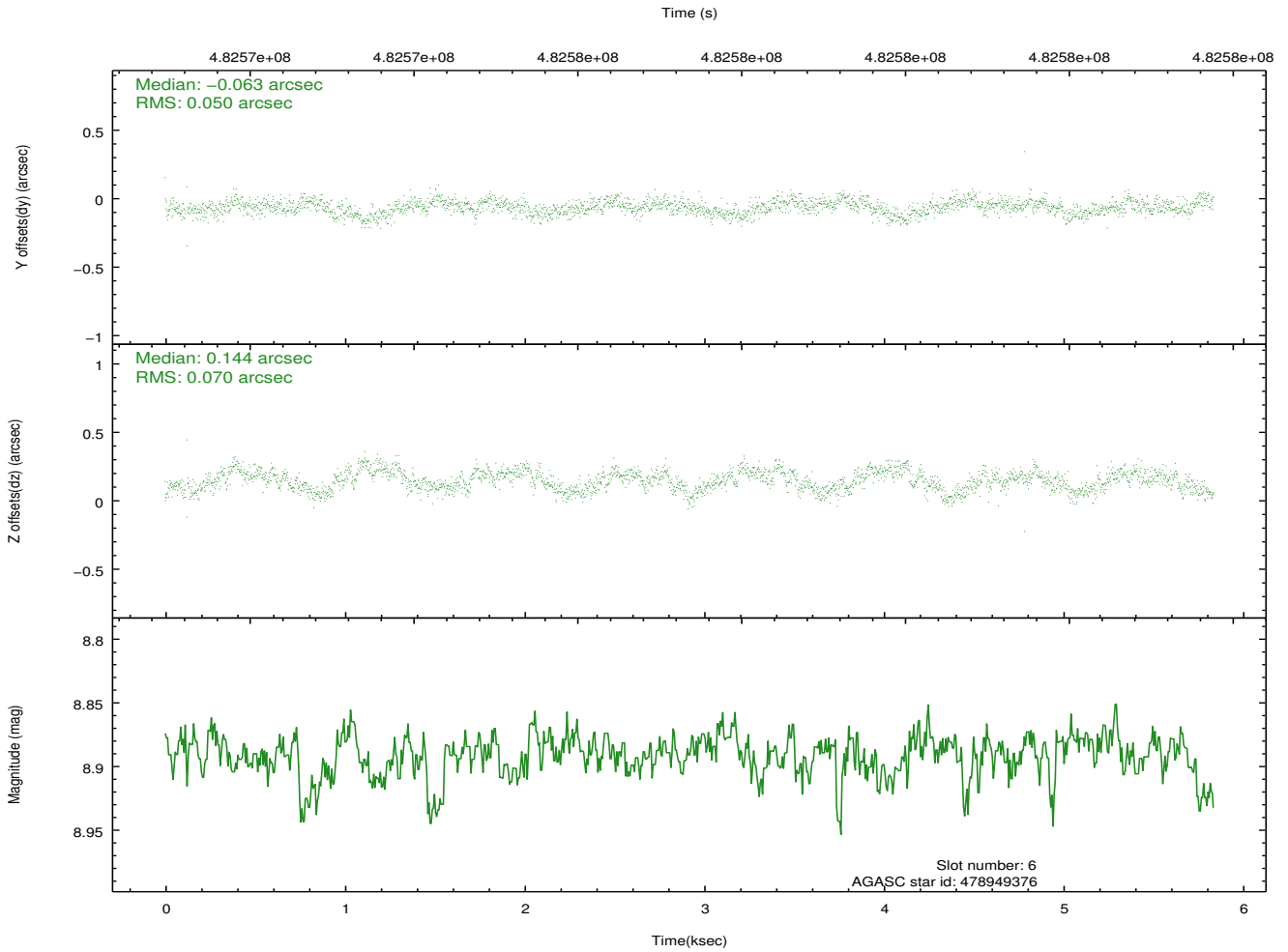
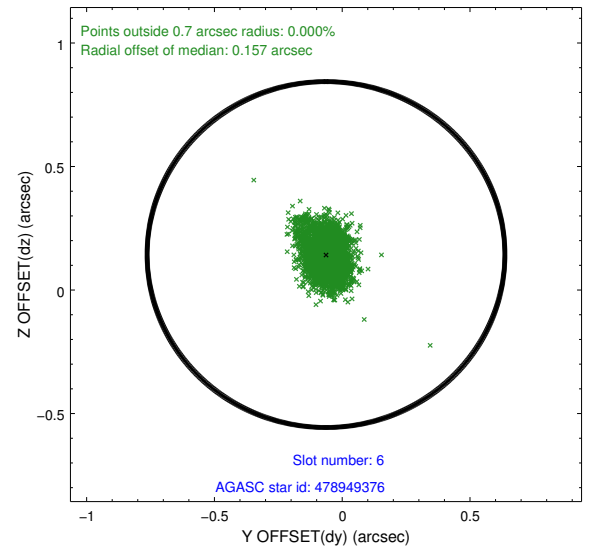
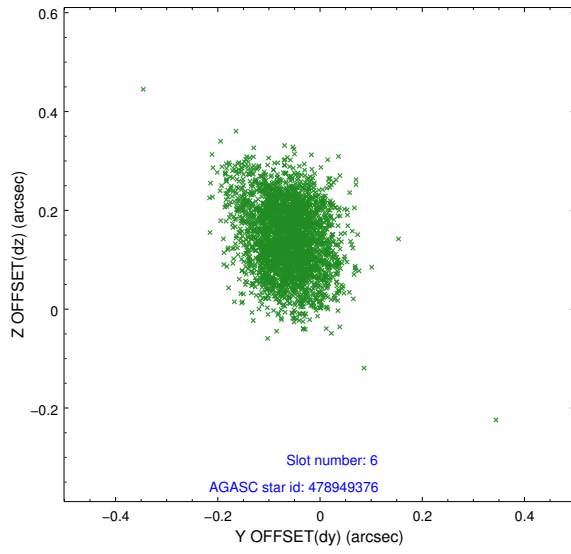
2.4.2 Slot 4



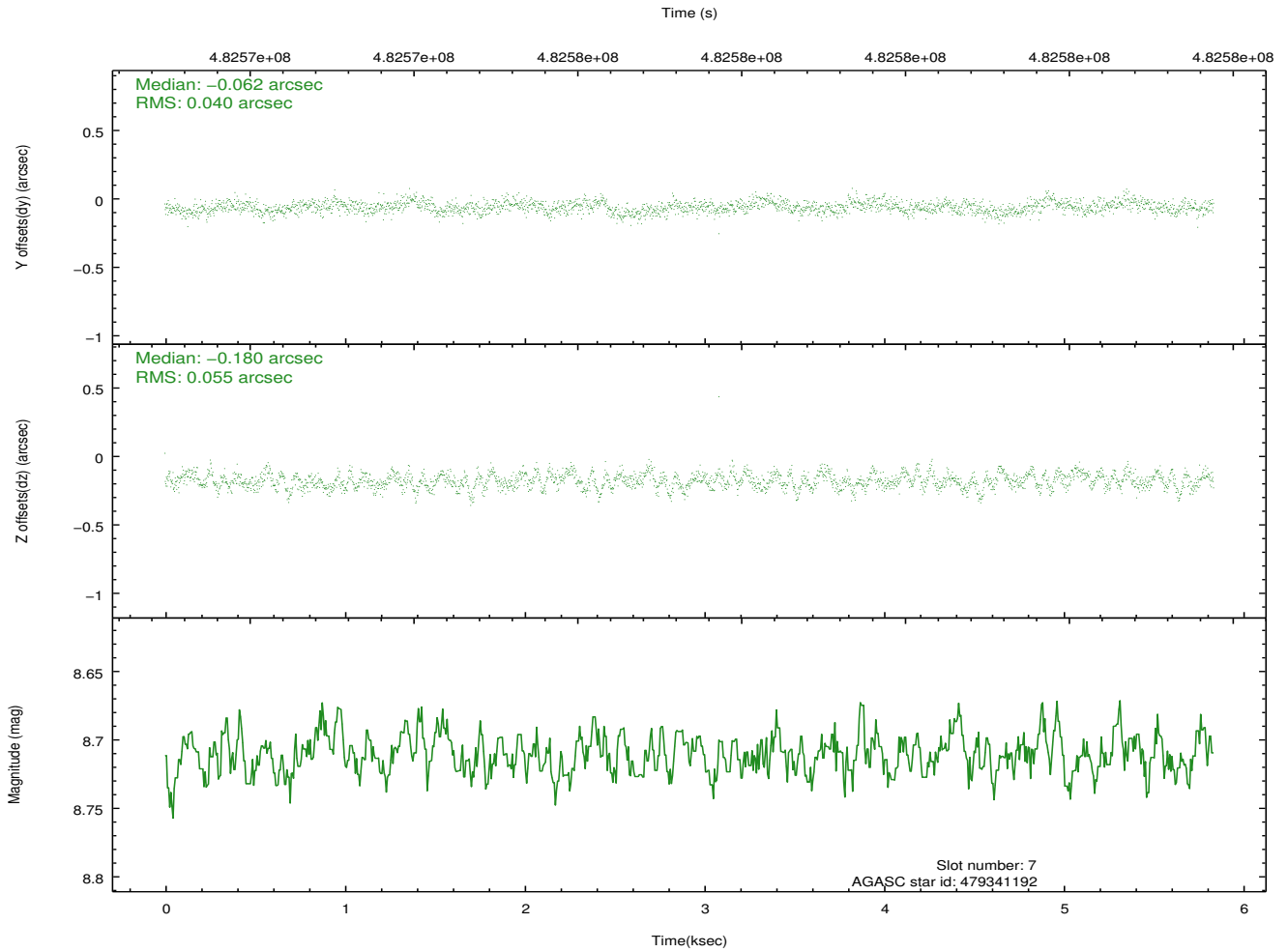
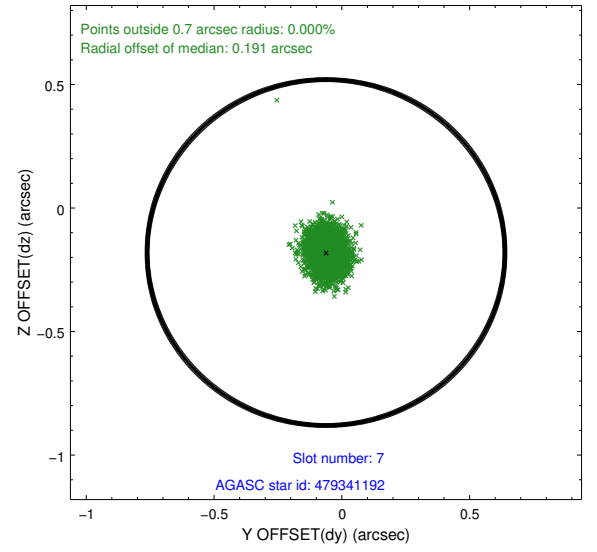
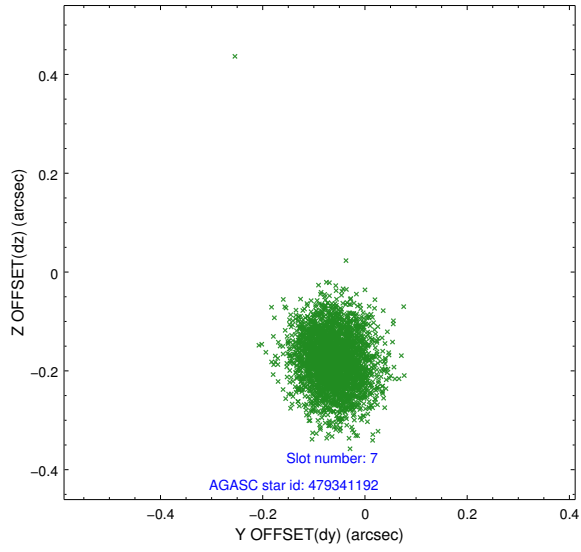
2.4.3 Slot 5



2.4.4 Slot 6

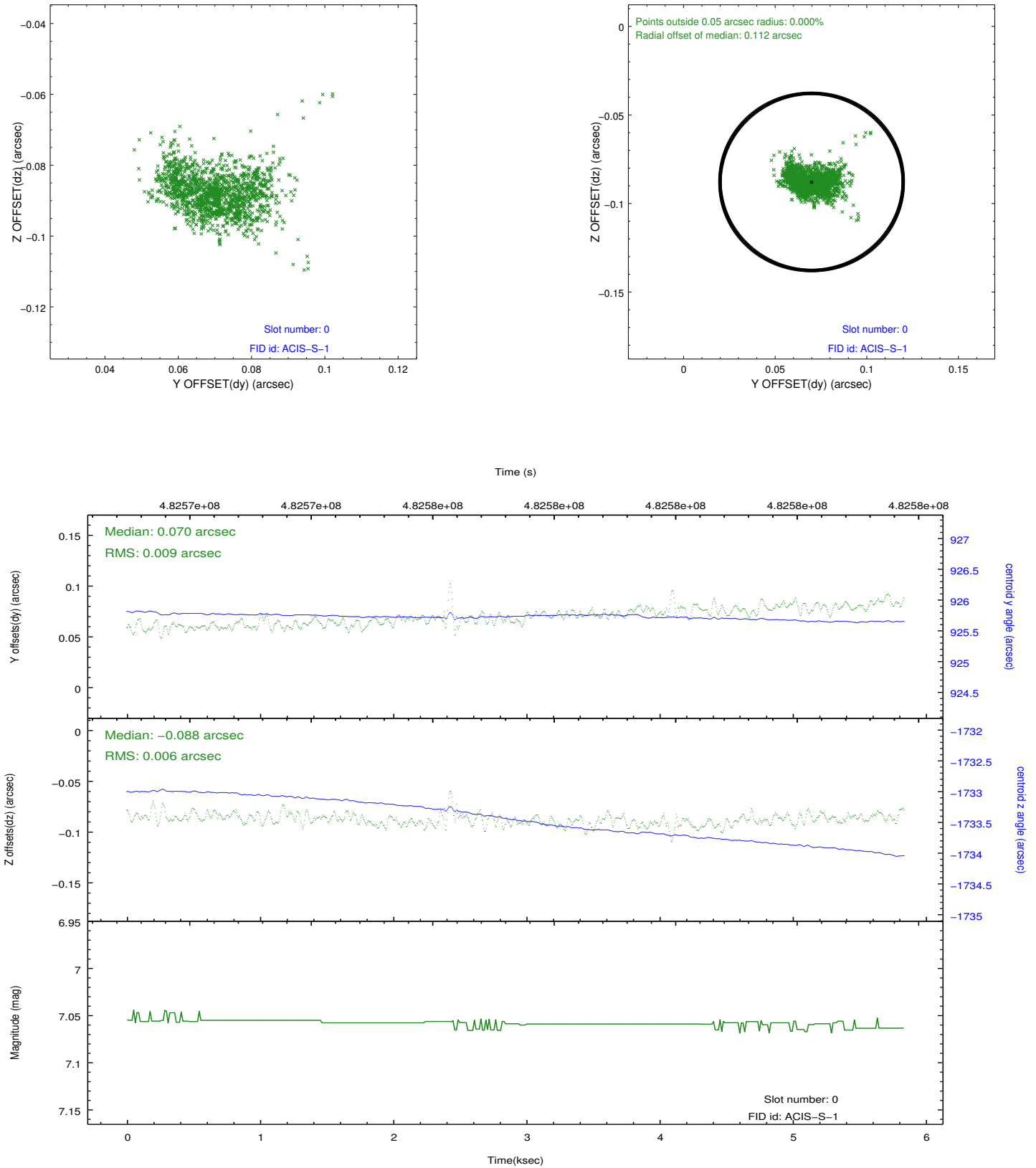


2.4.5 Slot 7

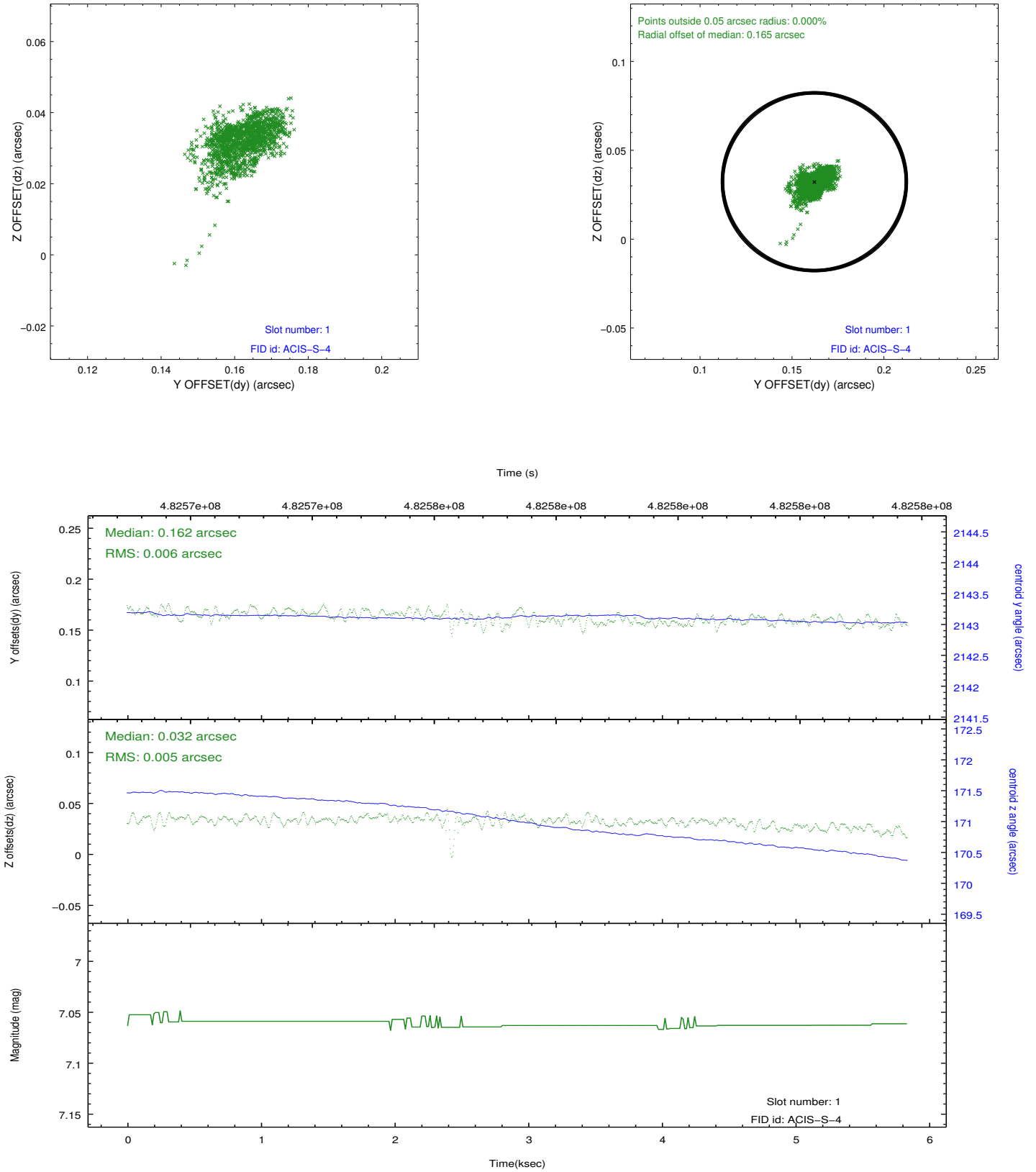


2.5 FID Slots

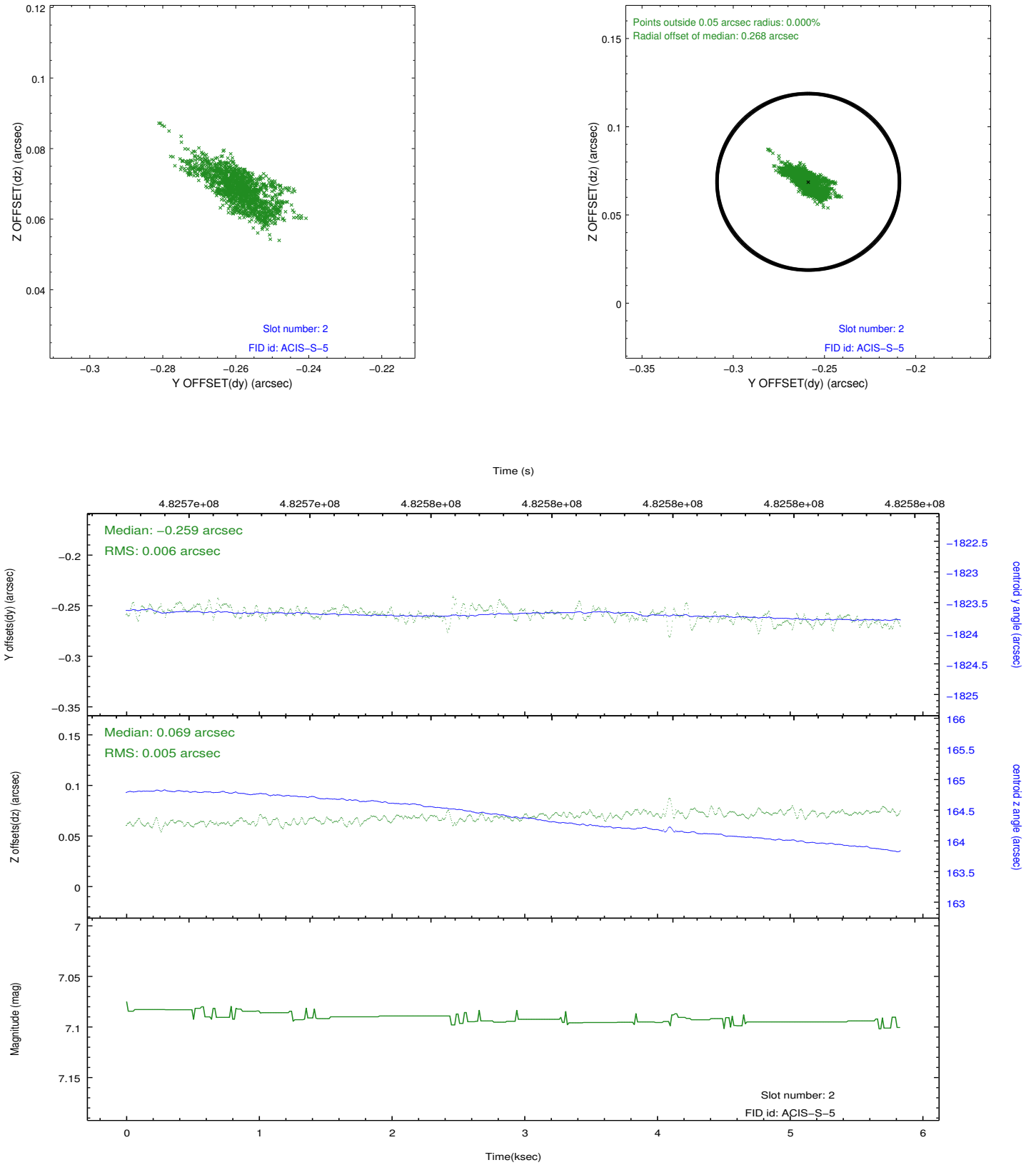
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.07069925

A.2 Comments

This is an observation of a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.

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.