

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 12842 - L2 Version 2
Chandra X-Ray Center

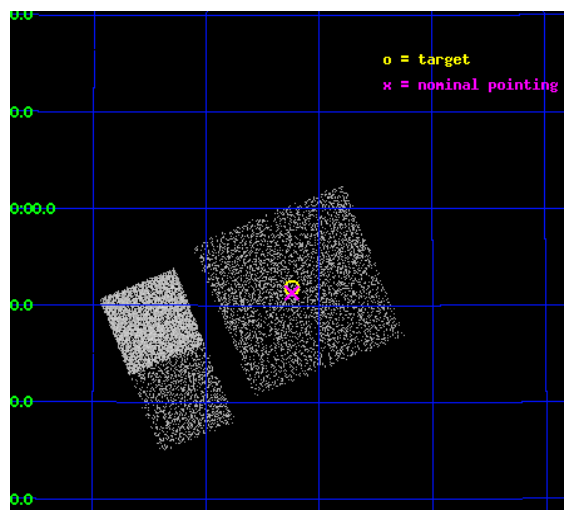
L2 Processing Date : Feb 2 2012

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

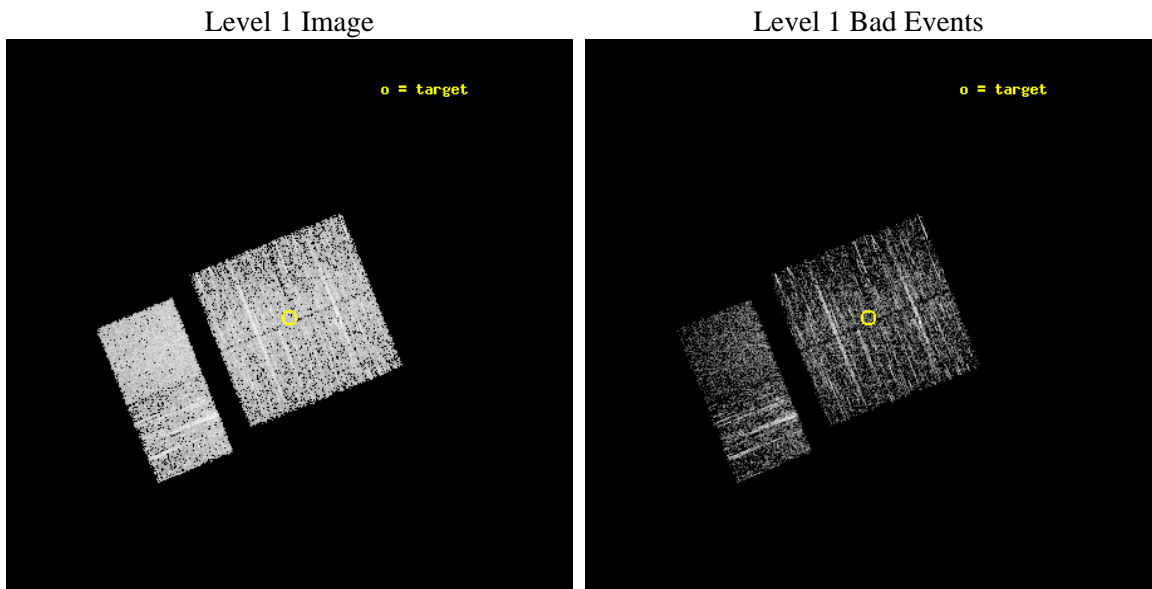
seq_num	702475	Sequence number
obs_id	12842	Observation id
title	Chandra observations of unidentified Fermi sources detected by INTEGRAL	Proposal title
observer	Mr. Claudio Ricci	Principal investigator
object	1FGL J0622.2+3751	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	95.56125	Observer's specified target RA [deg]
dec_targ	37.8635	Observer's specified target Dec [deg]
ra_nom	95.560490407069	Nominal RA [deg]
dec_nom	37.855457245253	Nominal Dec [deg]
roll_nom	247.99509665855	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2053.2891671658	Sum of GTIs [s]
livetime	2027.2891833888	Livetime [s]
ontime0	2053.1660471559	Sum of GTIs [s]
ontime1	2053.2070871592	Sum of GTIs [s]
ontime2	2053.2481271625	Sum of GTIs [s]
ontime3	2053.2891671658	Sum of GTIs [s]
ontime6	2053.3712471724	Sum of GTIs [s]
ontime7	2053.3302071691	Sum of GTIs [s]
l2events	14784	Number of level 2 events



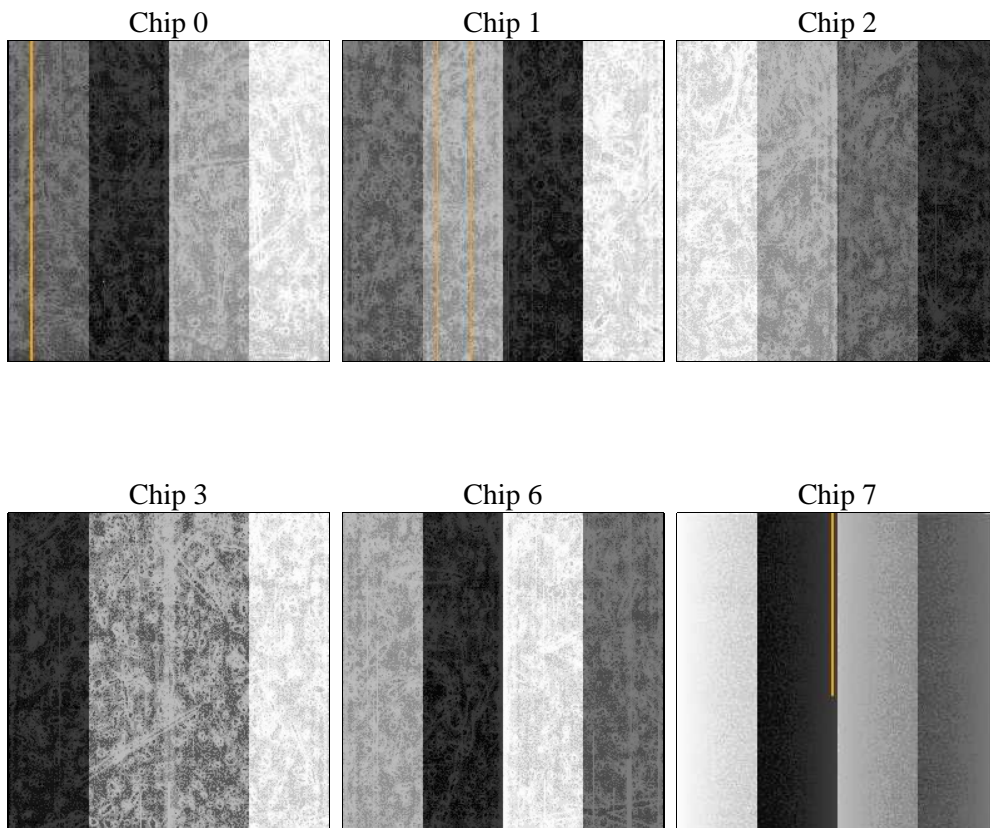
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	2053.2891671658	Sum of GTIs [s]
caldbver	4.4.7	 	ontime0	2053.1660471559	Sum of GTIs [s]
date	2012-02-02T23:01:24	Date and time of file creation	ontime1	2053.2070871592	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	2053.2481271625	Sum of GTIs [s]
			ontime3	2053.2891671658	Sum of GTIs [s]
			ontime6	2053.3712471724	Sum of GTIs [s]
			ontime7	2053.3302071691	Sum of GTIs [s]
			l1events	90967	Number of level 1 events

2.1.4 Events

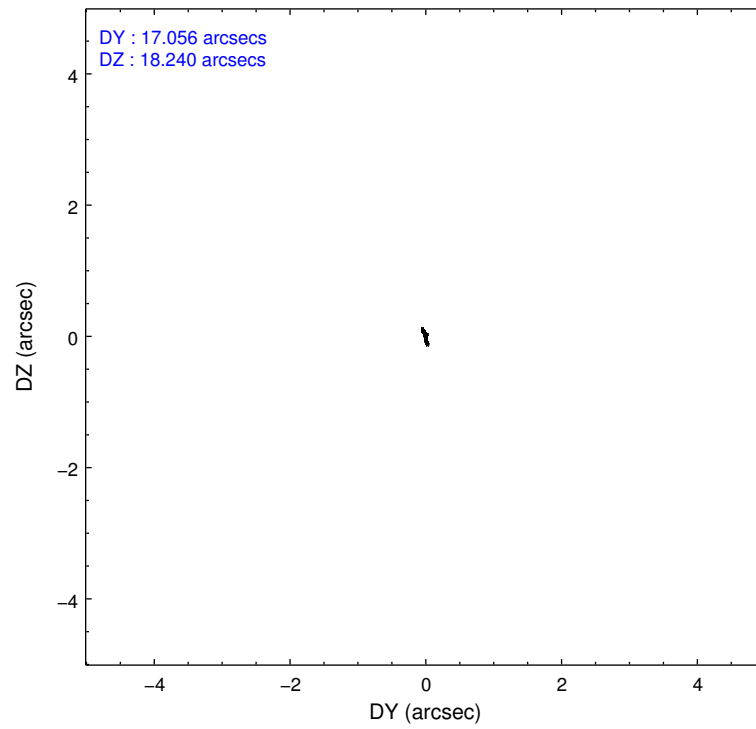
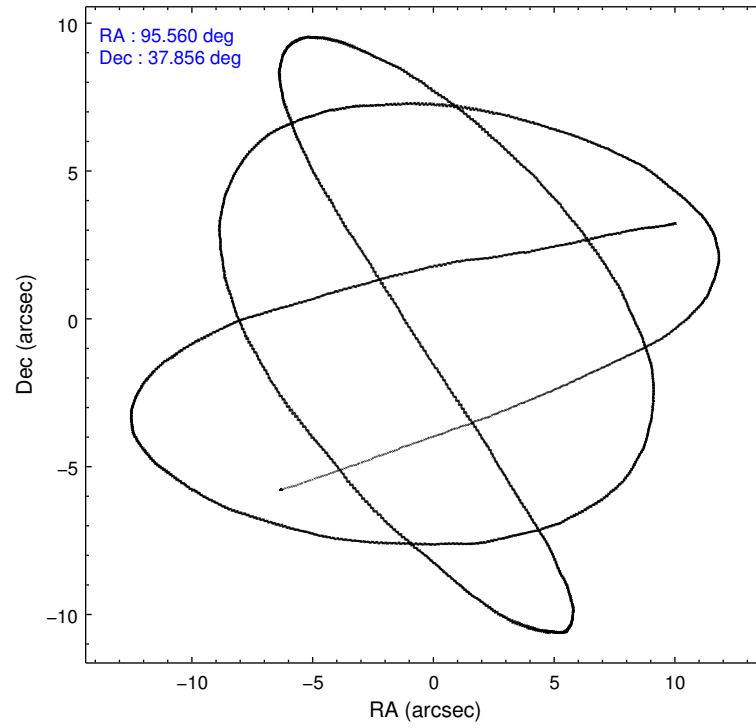
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	14637	14049	14212	14375	15478	18216
rejected events	13085	12211	12740	12720	13783	10139
rejected %	89%	86%	89%	88%	89%	55%

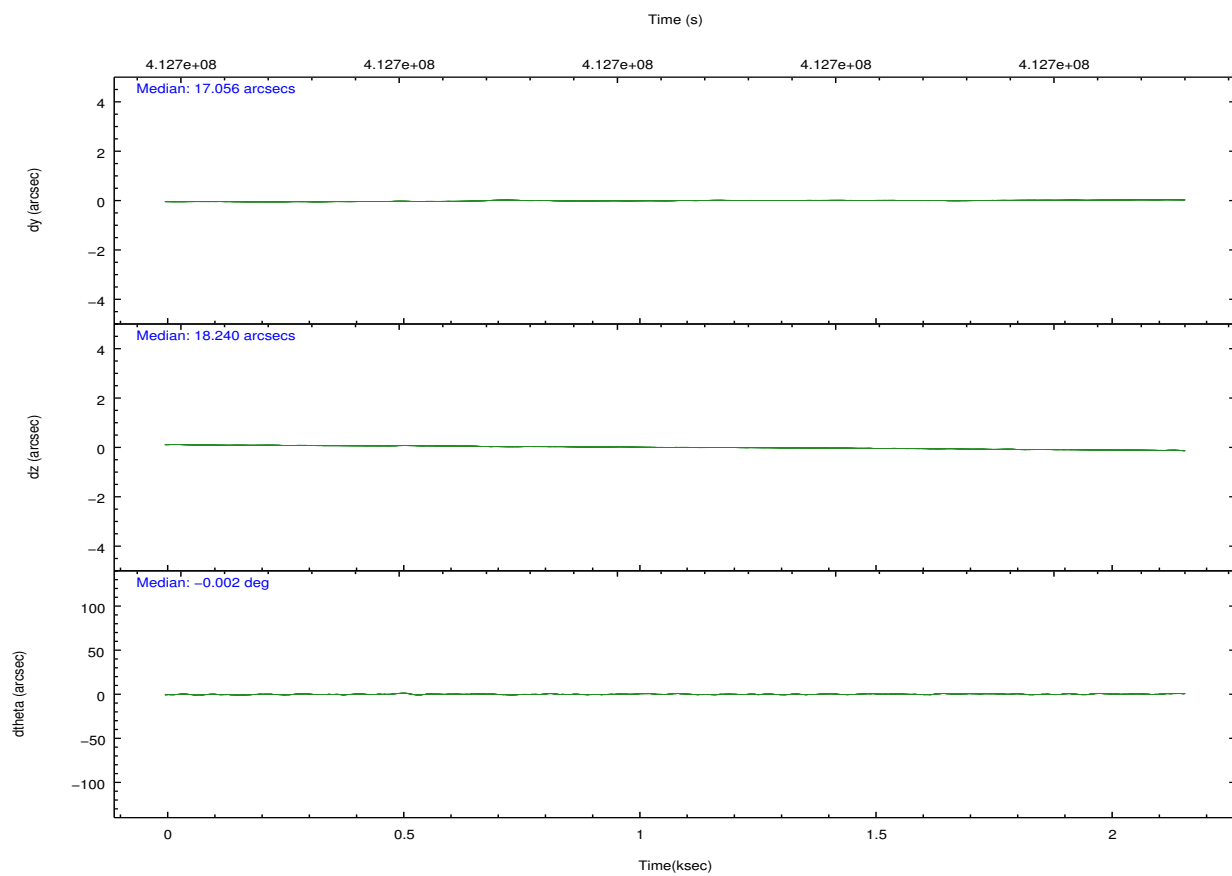
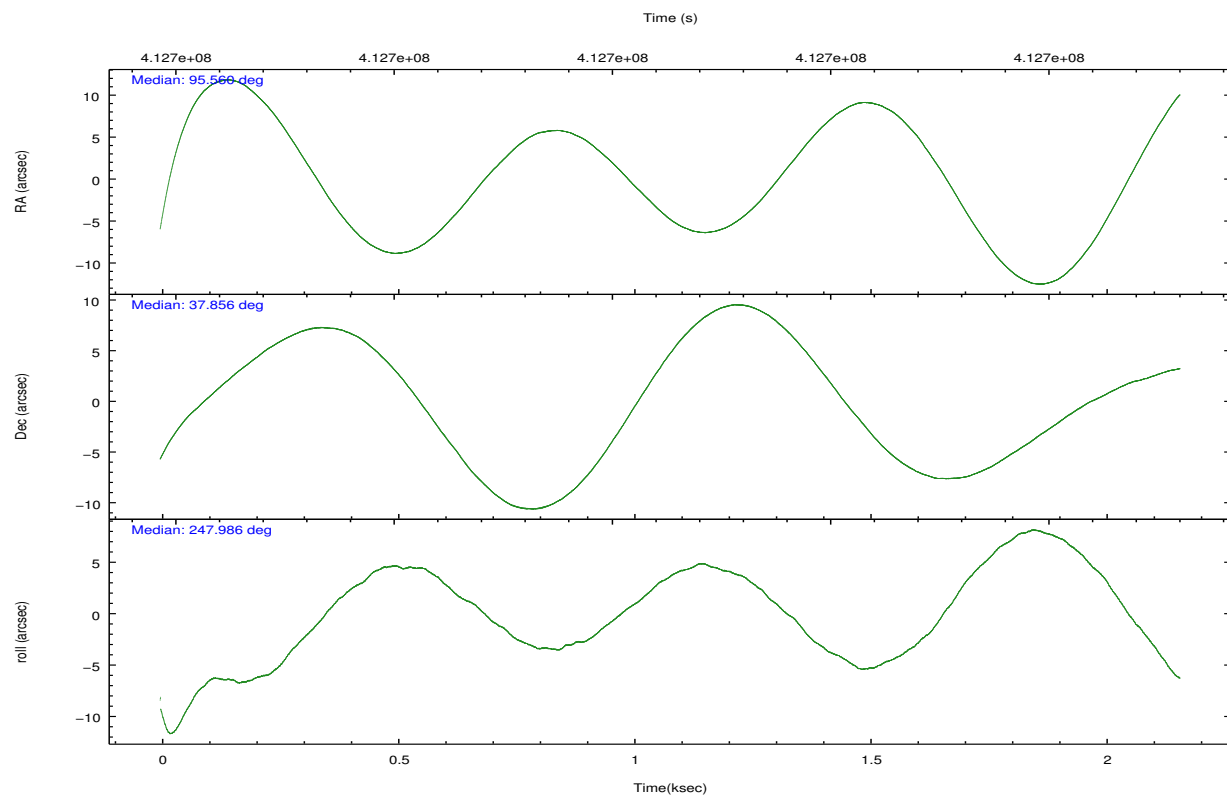
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	542	623	520	642	540	740
	3%	4%	3%	4%	3%	4%
grade 1 events	8	12	7	9	7	23
	0%	0%	0%	0%	0%	0%
grade 2 events	376	441	359	378	414	1691
	2%	3%	2%	2%	2%	9%
grade 3 events	164	195	130	167	193	727
	1%	1%	0%	1%	1%	3%
grade 4 events	155	180	185	167	167	721
	1%	1%	1%	1%	1%	3%
grade 5 events	645	655	619	716	695	1901
	4%	4%	4%	4%	4%	10%
grade 6 events	319	401	279	301	381	4207
	2%	2%	1%	2%	2%	23%
grade 7 events	12428	11542	12113	11995	13081	8206
	84%	82%	85%	83%	84%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	95.555420	95.56049040706871	CCD I2 on	Y	Y
[deg] Pointing Dec	37.882660	37.85545724525271	CCD I3 on	Y	Y
[deg] Pointing Roll	247.789578	247.9950966585494	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	412698714.184000	412697527.02526	CCD S5 on	N	N
Observation start date	2011-01-29T14:30:48	2011-01-29T14:12:07	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	412700714.184000	412702020.113	On-chip summing requested	N	N
Observation end date	2011-01-29T15:04:08	2011-01-29T15:27:00	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



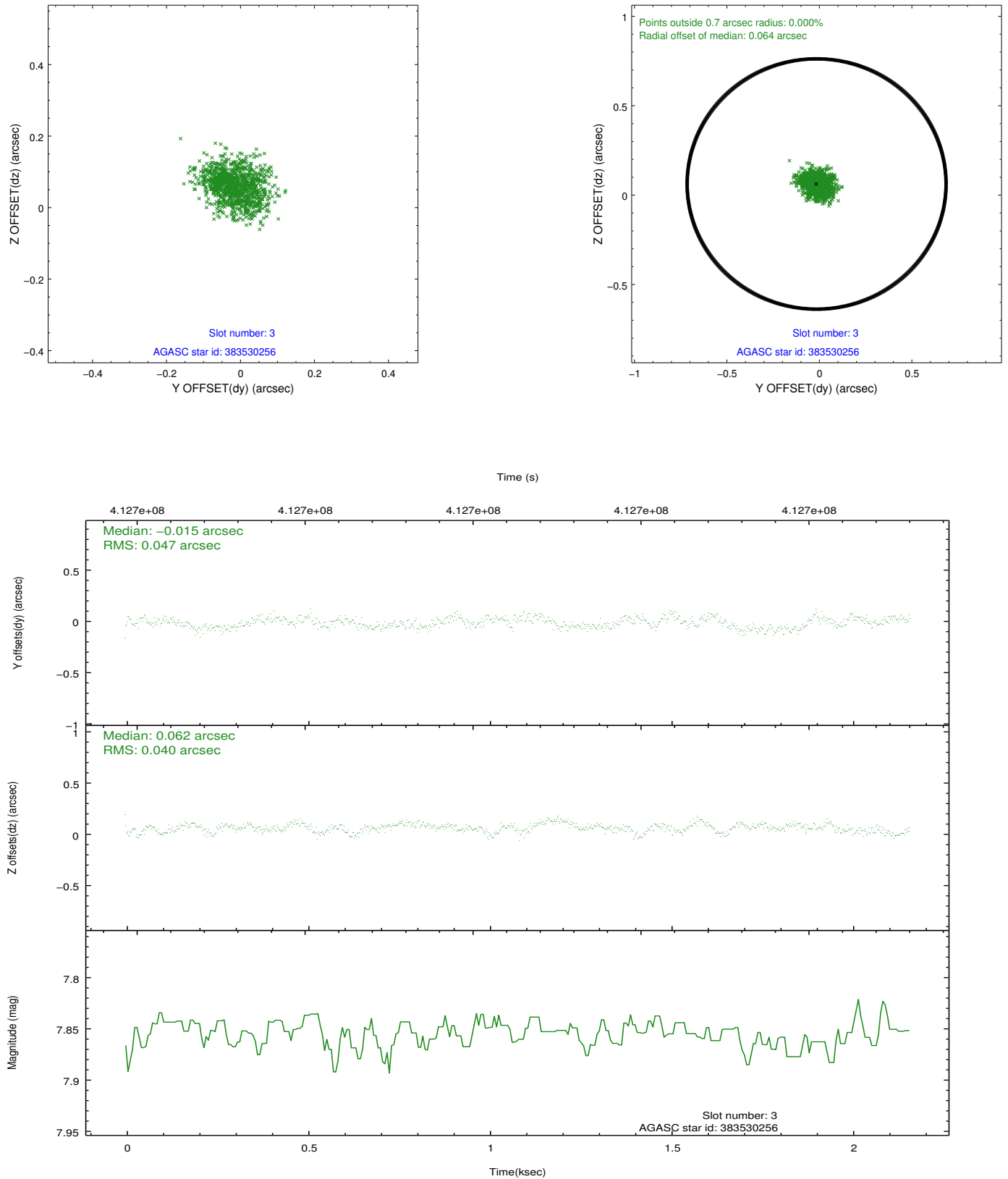


Slot Statistics

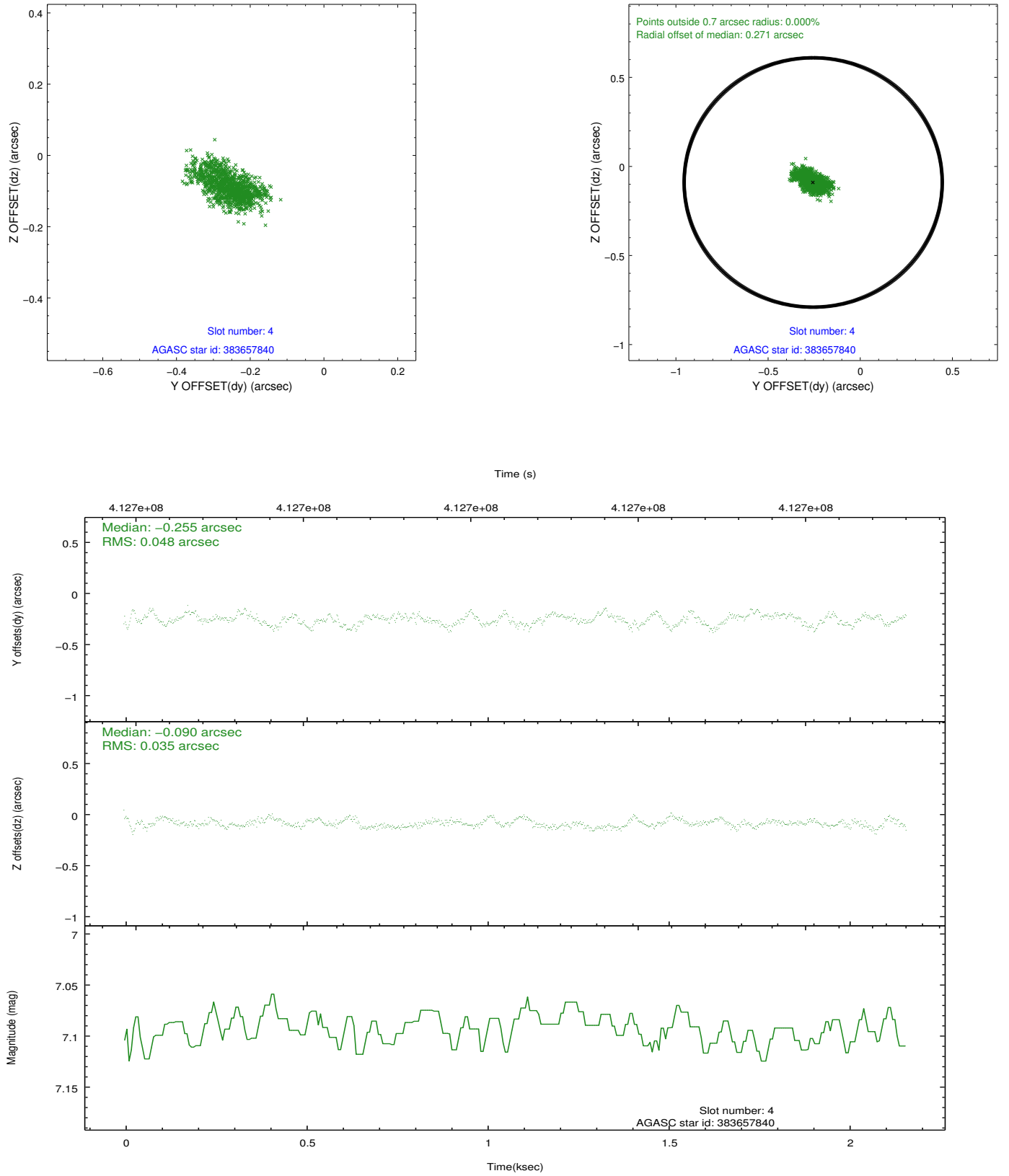
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	6.99	527	0.015	0.044	0.006	0.012	0.000000	0.000000	922.37	-841.87
1	FID	ACIS-I-5	6.98	528	-0.180	0.038	0.007	0.010	0.000000	0.000000	-1824.28	1054.07
2	FID	ACIS-I-6	7.00	527	0.073	-0.012	0.007	0.010	0.000000	0.000000	384.67	1701.96
3	GUIDE	383530256	7.85	1055	-0.015	0.062	0.066	0.105	94.851656	37.501545	2023.50	-1344.78
4	GUIDE	383657840	7.09	1055	-0.255	-0.090	0.063	0.107	96.429540	38.050351	-1504.80	2059.90
5	GUIDE	383661528	7.45	1055	0.208	0.048	0.062	0.098	95.840892	38.036029	-819.32	542.00
6	GUIDE	318904104	6.78	1055	0.076	-0.178	0.074	0.110	96.121642	37.316582	1268.60	2269.85
7	GUIDE	383525368	7.41	1053	-0.012	0.150	0.064	0.099	94.931914	38.435213	-1180.48	-2379.50

2.4 Star Slots

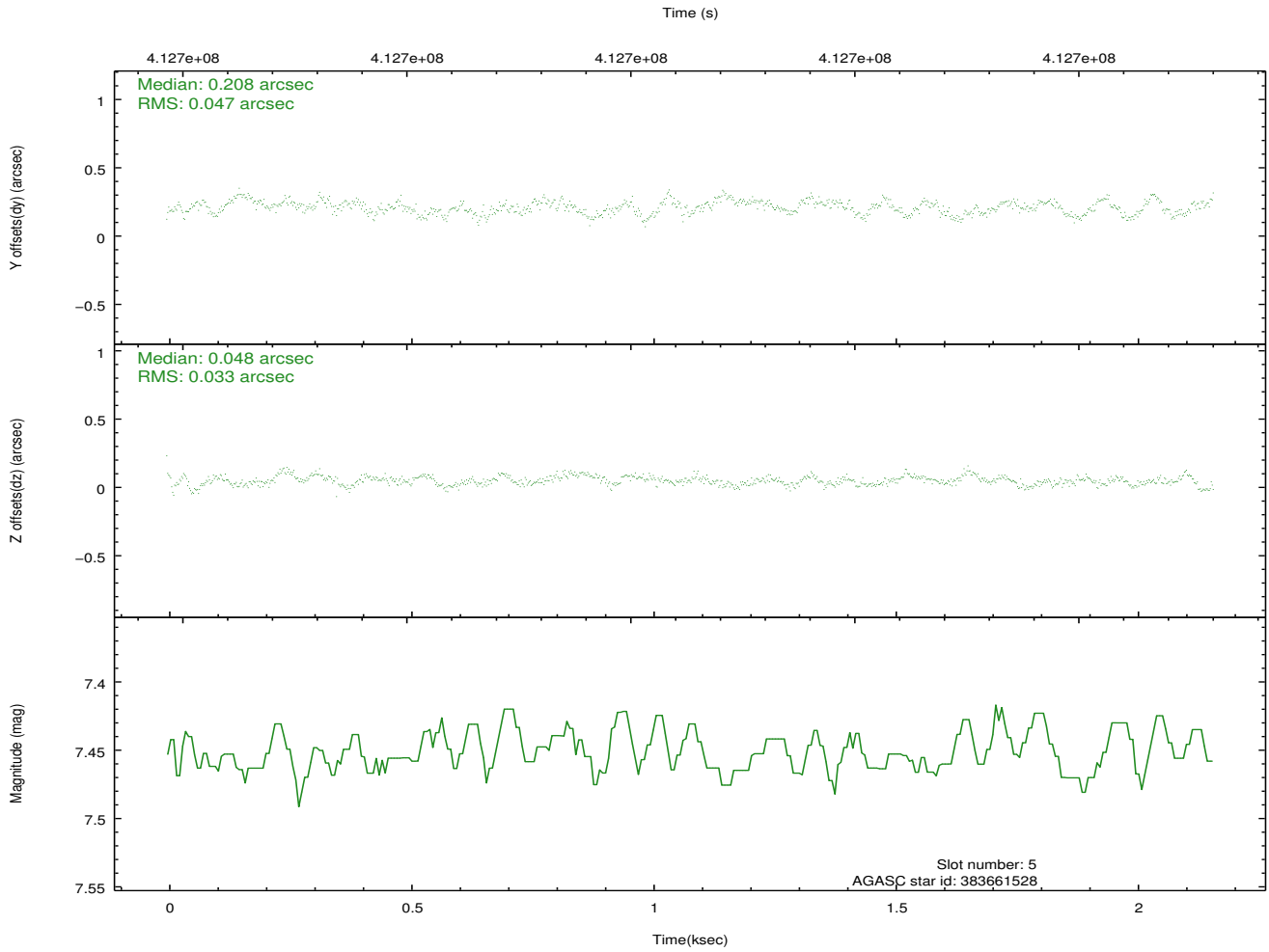
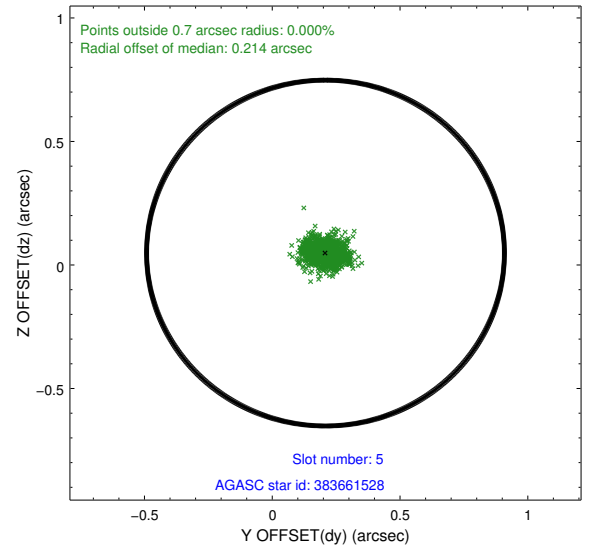
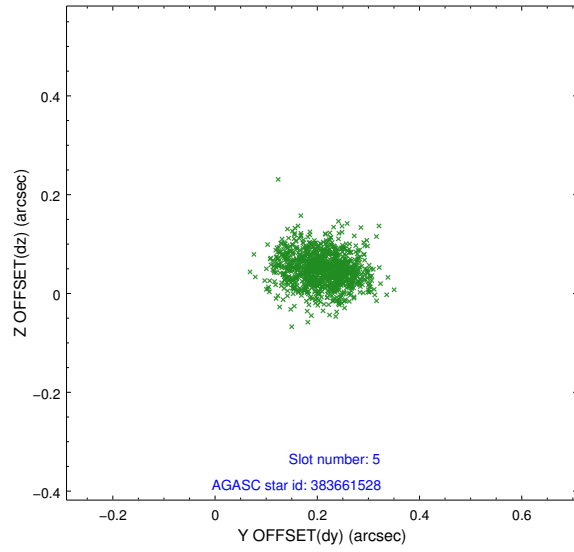
2.4.1 Slot 3



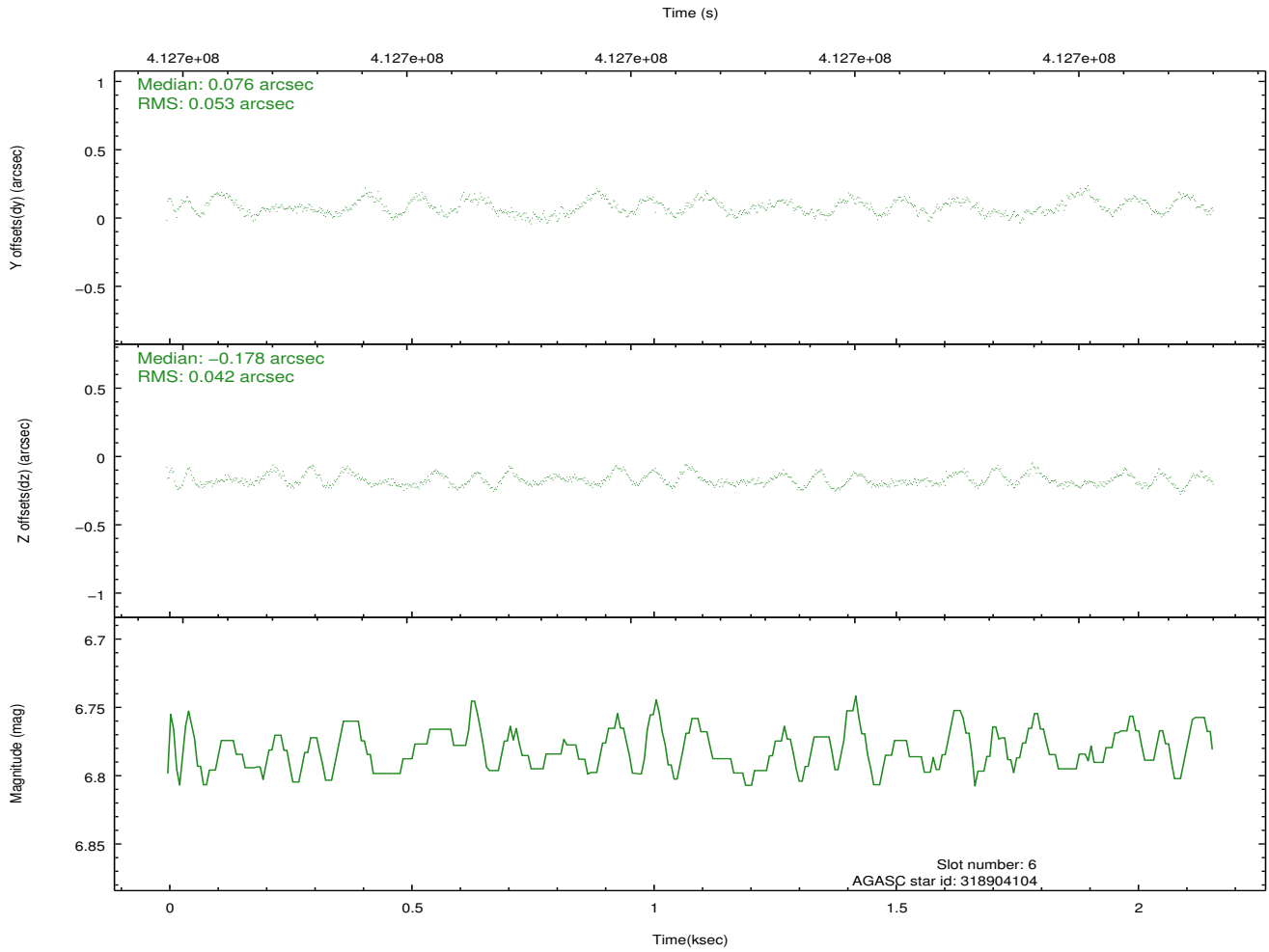
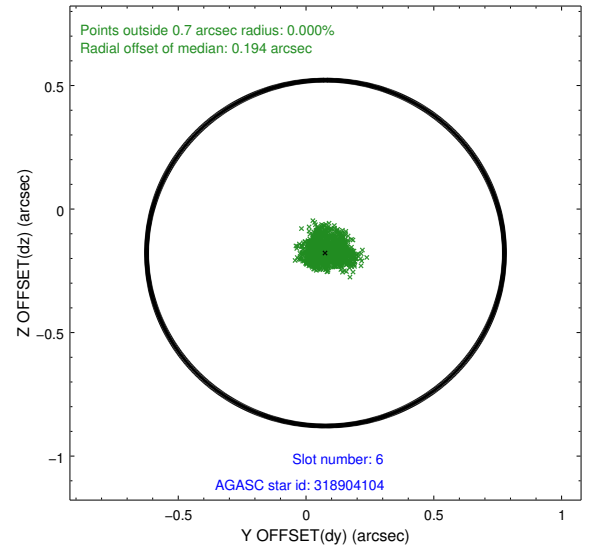
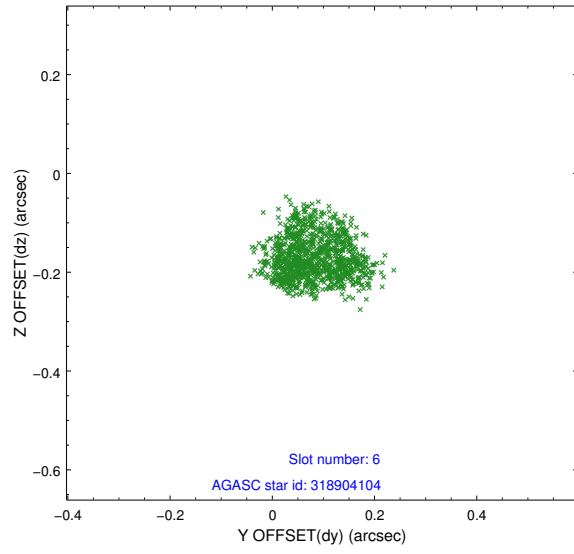
2.4.2 Slot 4



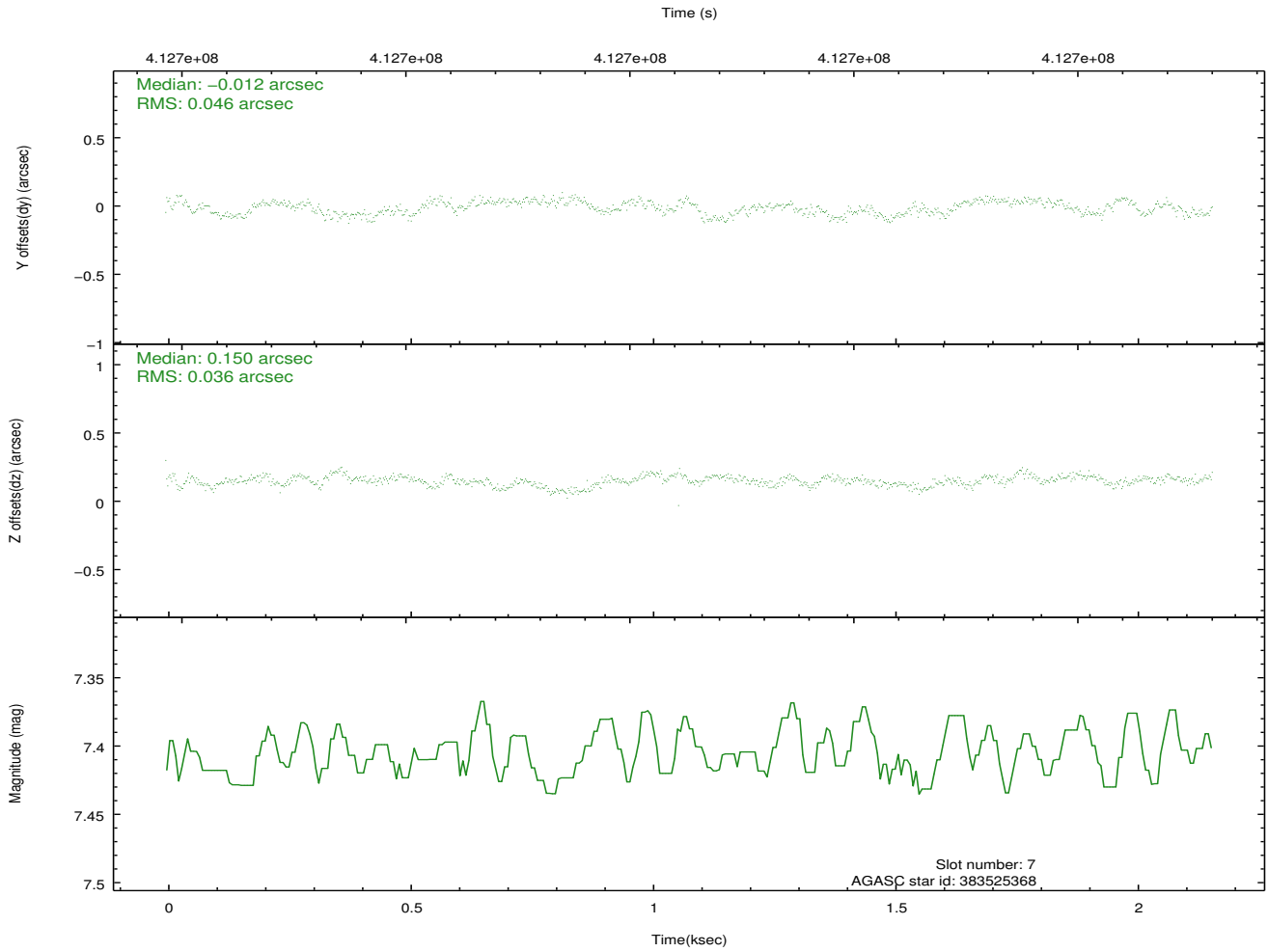
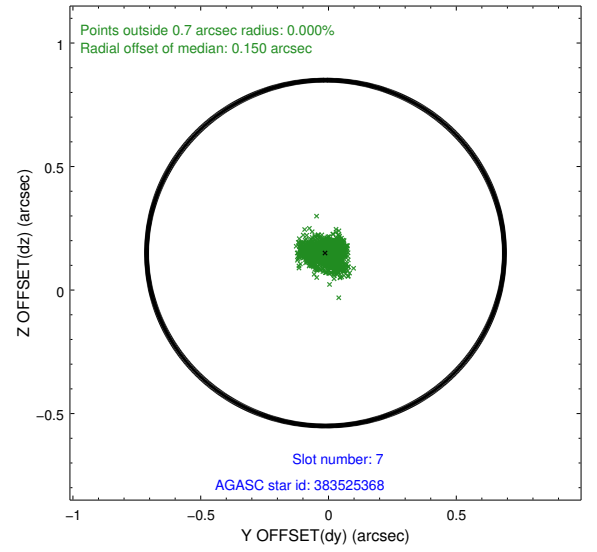
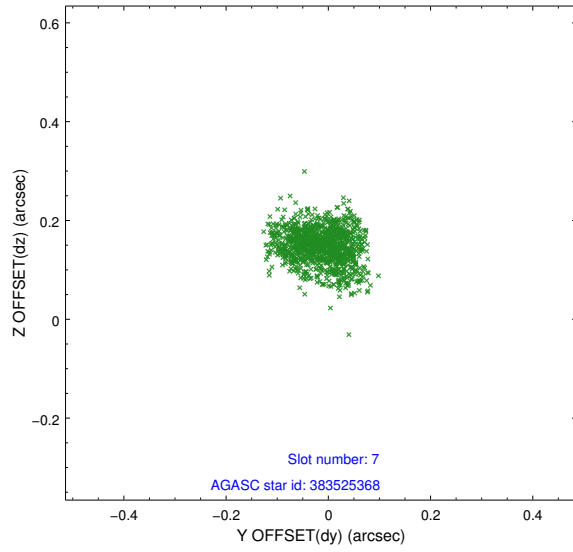
2.4.3 Slot 5



2.4.4 Slot 6

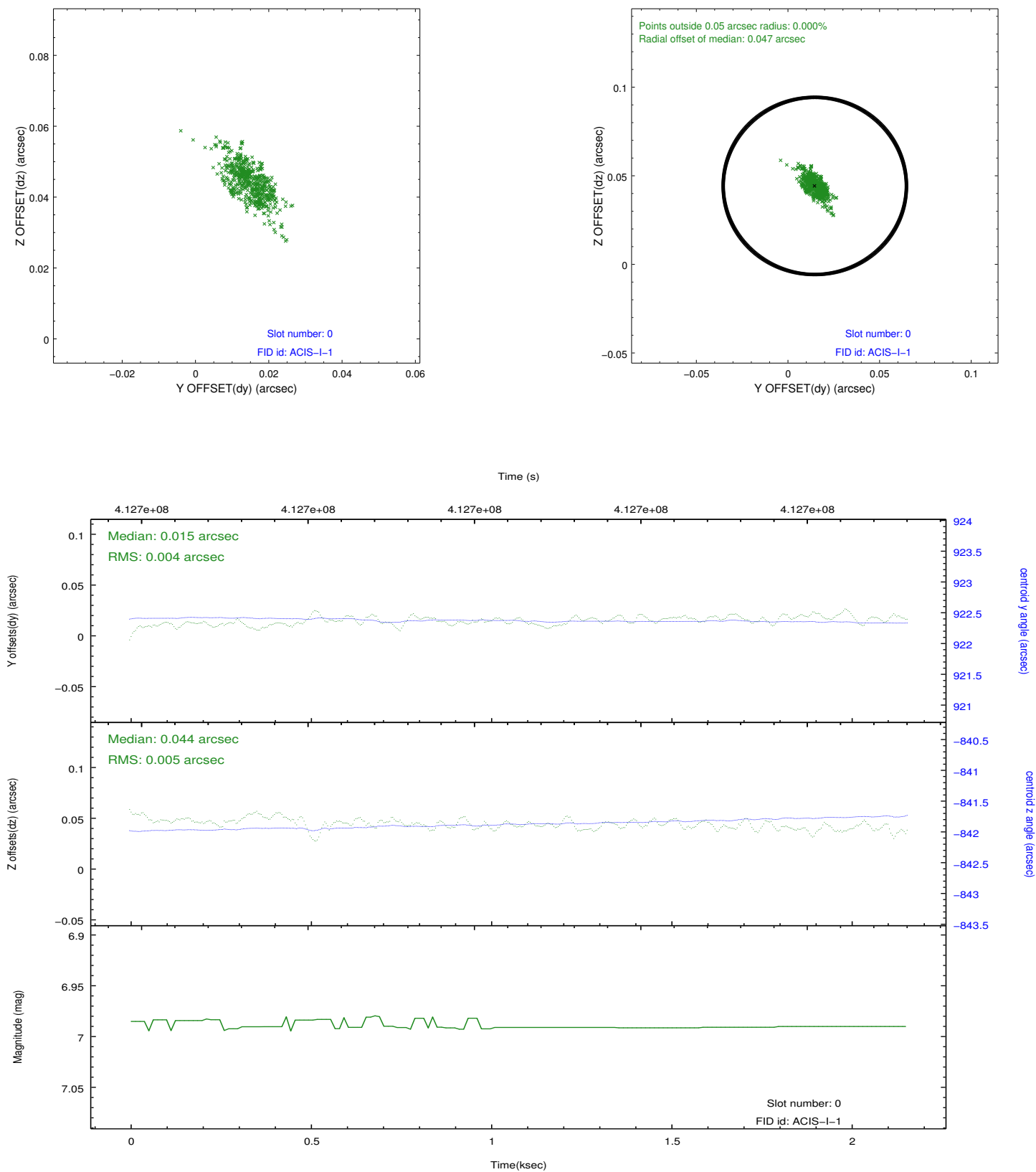


2.4.5 Slot 7

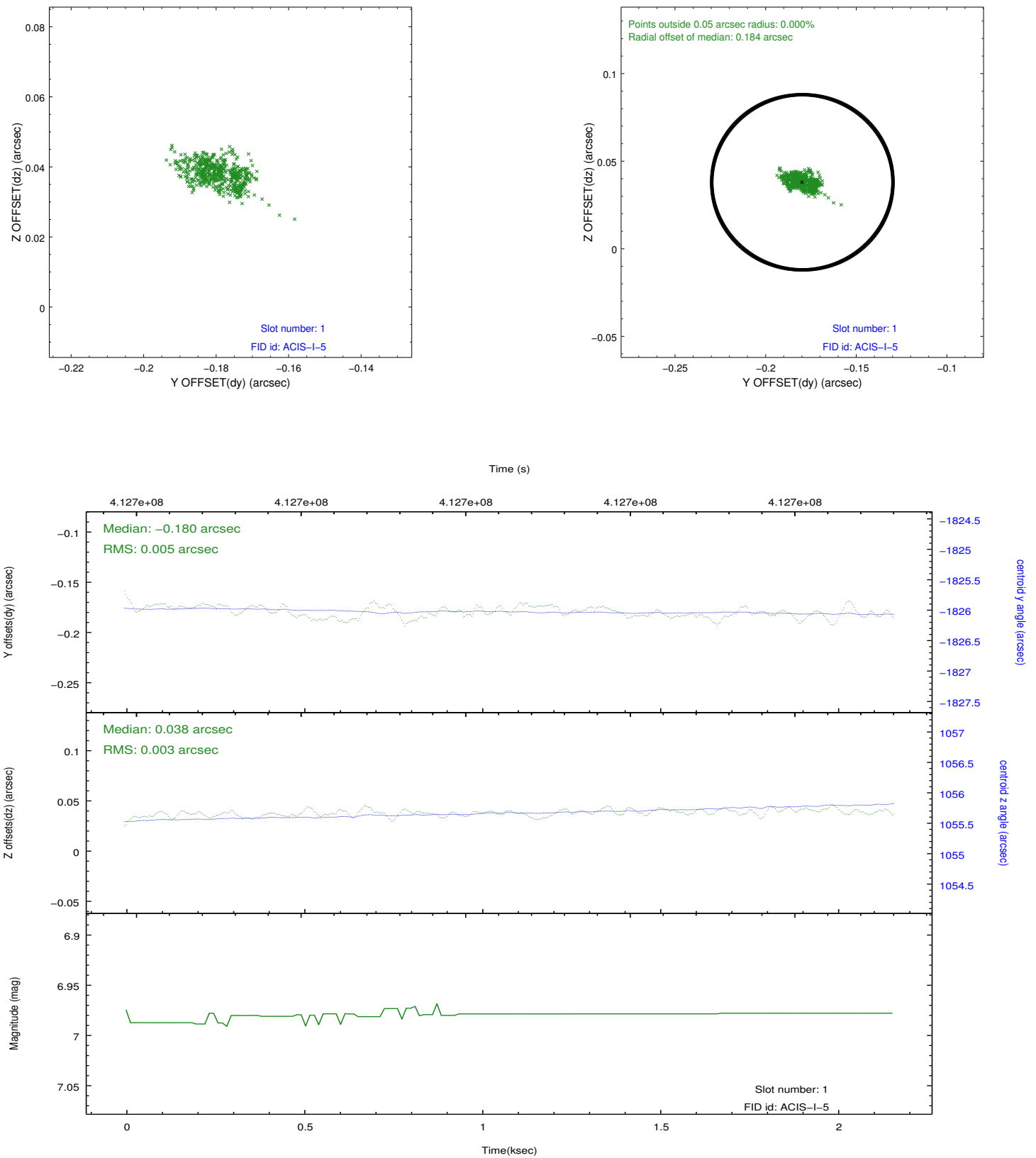


2.5 FID Slots

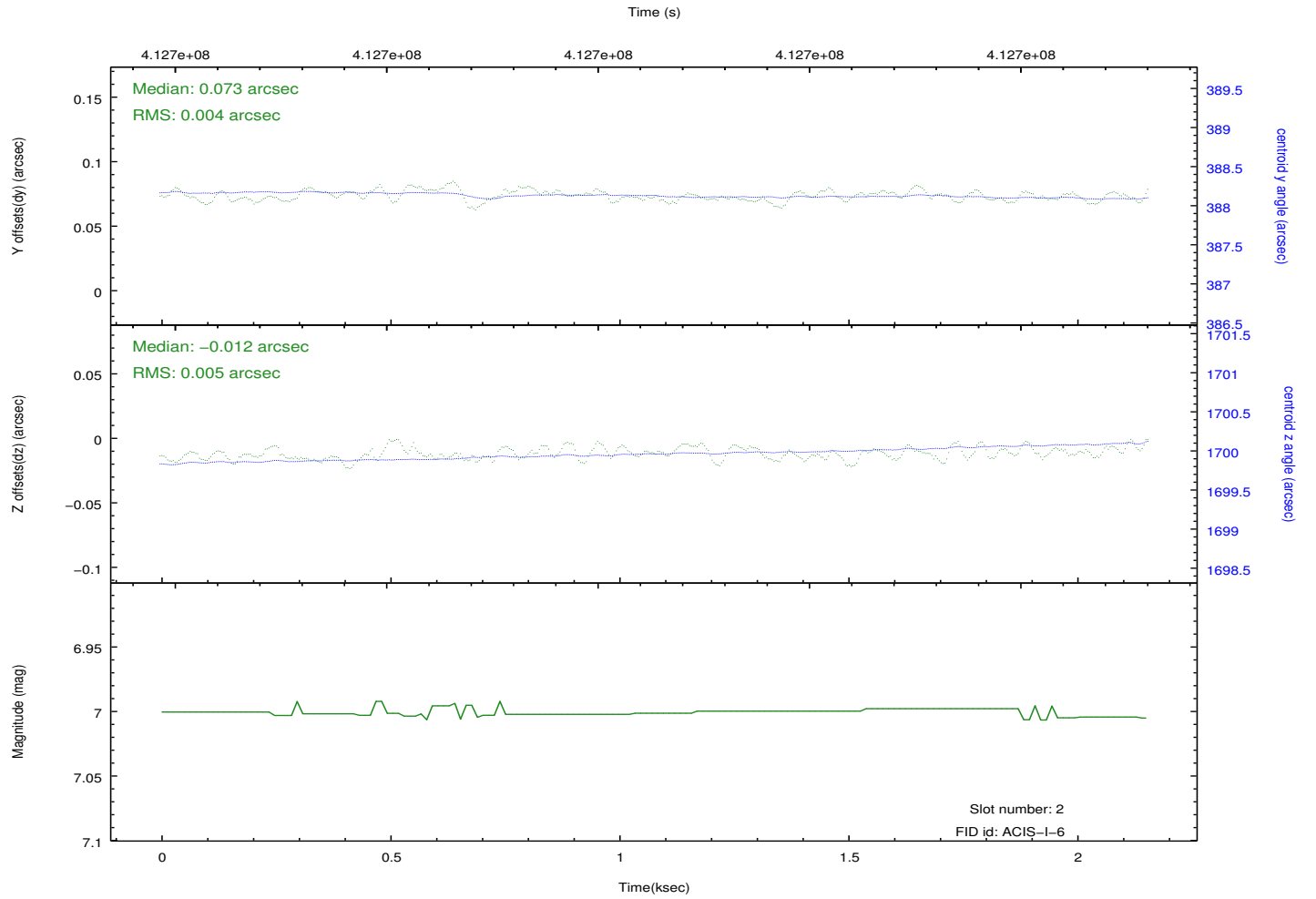
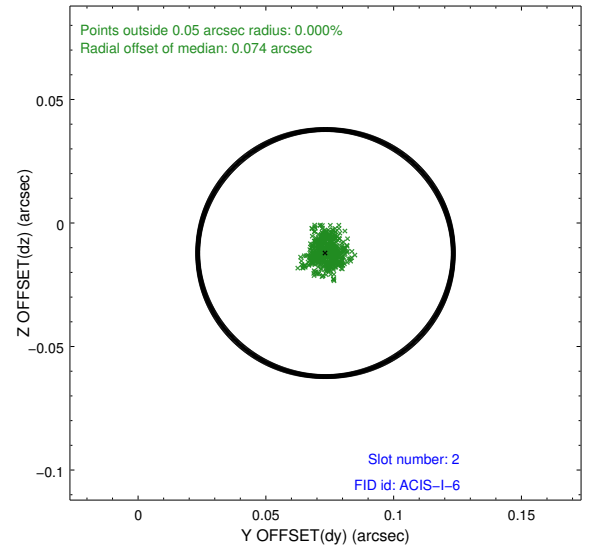
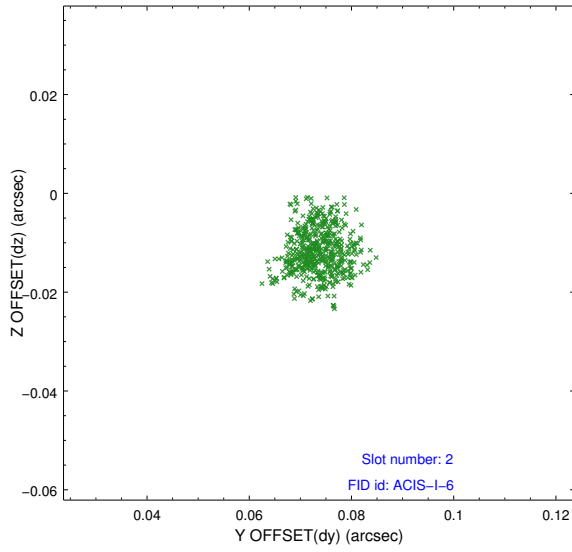
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.02.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0532891725898

A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.