

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 17532 - L2 Version 1
Chandra X-Ray Center

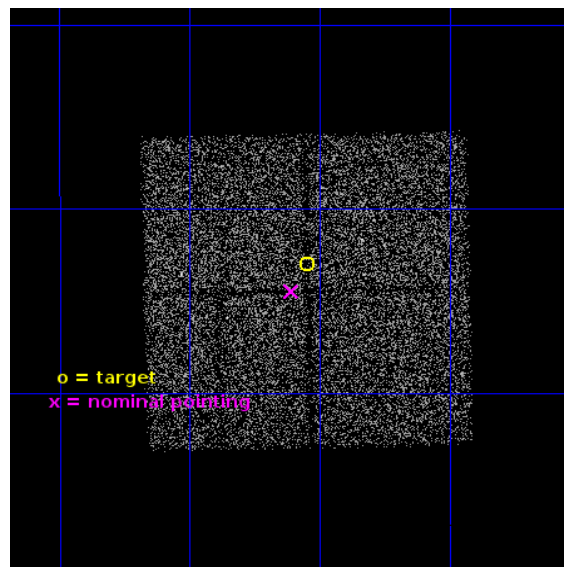
L2 Processing Date : Oct 20 2014

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1 Front

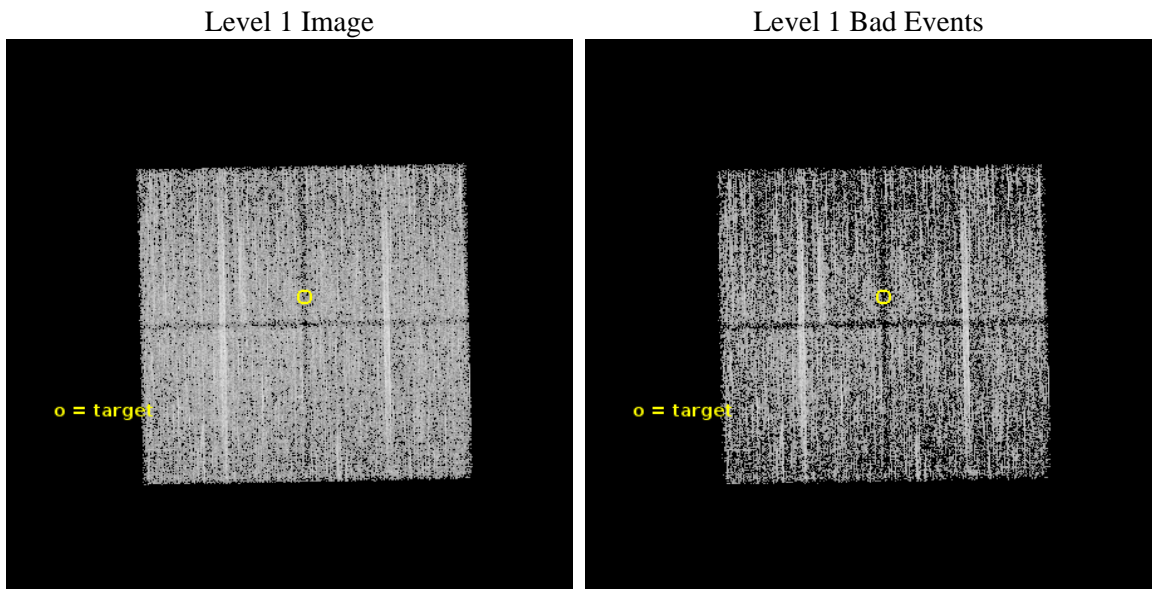
seq_num	100154	Sequence number
obs_id	17532	Observation id
title	Chandra Observations of Comet C/2013 A1 (Siding Spring)'s Encounter With Mars	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	Mars/Comet C/2013 A1 Siding Spring	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	264.5123	Observer's specified target RA [deg]
dec_targ	-24.8839	Observer's specified target Dec [deg]
ra_nom	264.5271598495	Nominal RA [deg]
dec_nom	-24.9080471963	Nominal Dec [deg]
roll_nom	268.91002554573	Nominal Roll [deg]
revision	1	Processing version of data
ontime	14535.859141469	Sum of GTIs [s]
livetime	14345.937440642	Livetime [s]
ontime0	14539.000111818	Sum of GTIs [s]
ontime1	14535.859141469	Sum of GTIs [s]
ontime2	14535.859171391	Sum of GTIs [s]
ontime3	14535.859141409	Sum of GTIs [s]
l2events	23383	Number of level 2 events



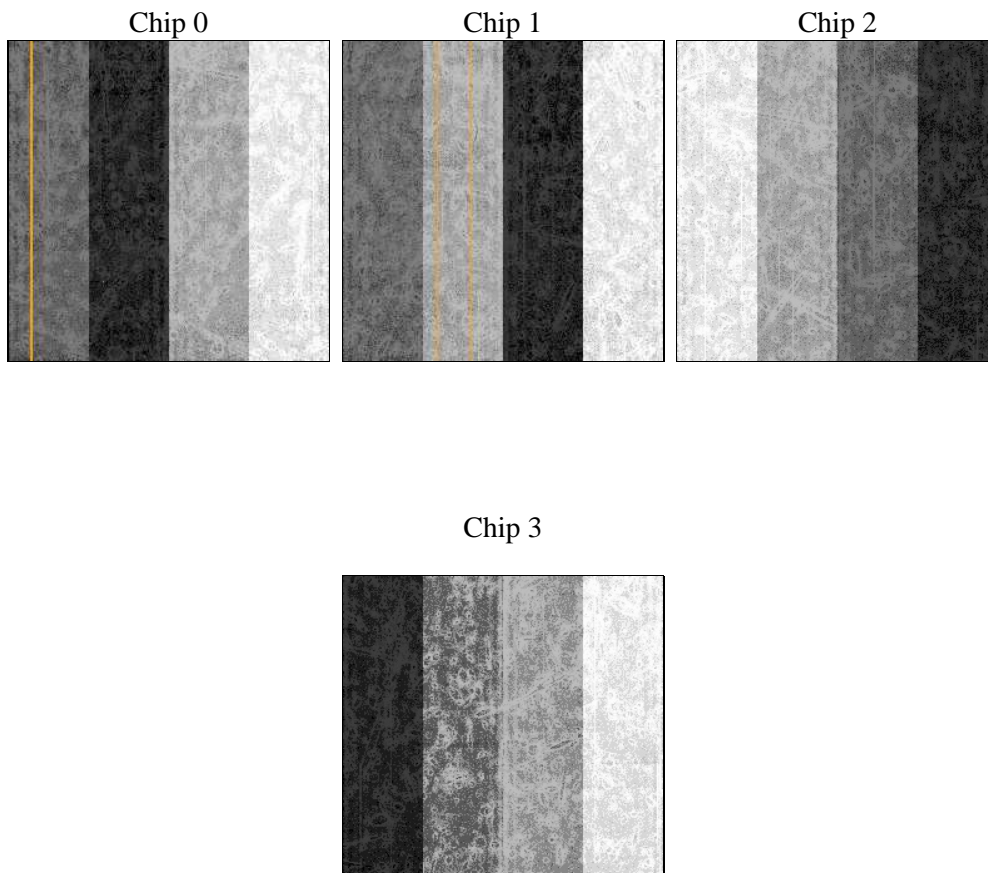
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	14400.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	14535.859141469	Sum of GTIs [s]
caldbver	4.6.3	 	ontime0	14539.000111818	Sum of GTIs [s]
date	2014-10-20T15:25:28	Date and time of file creation	ontime1	14535.859141469	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	14535.859171391	Sum of GTIs [s]
			ontime3	14535.859141409	Sum of GTIs [s]
			l1events	246428	Number of level 1 events

2.1.4 Events

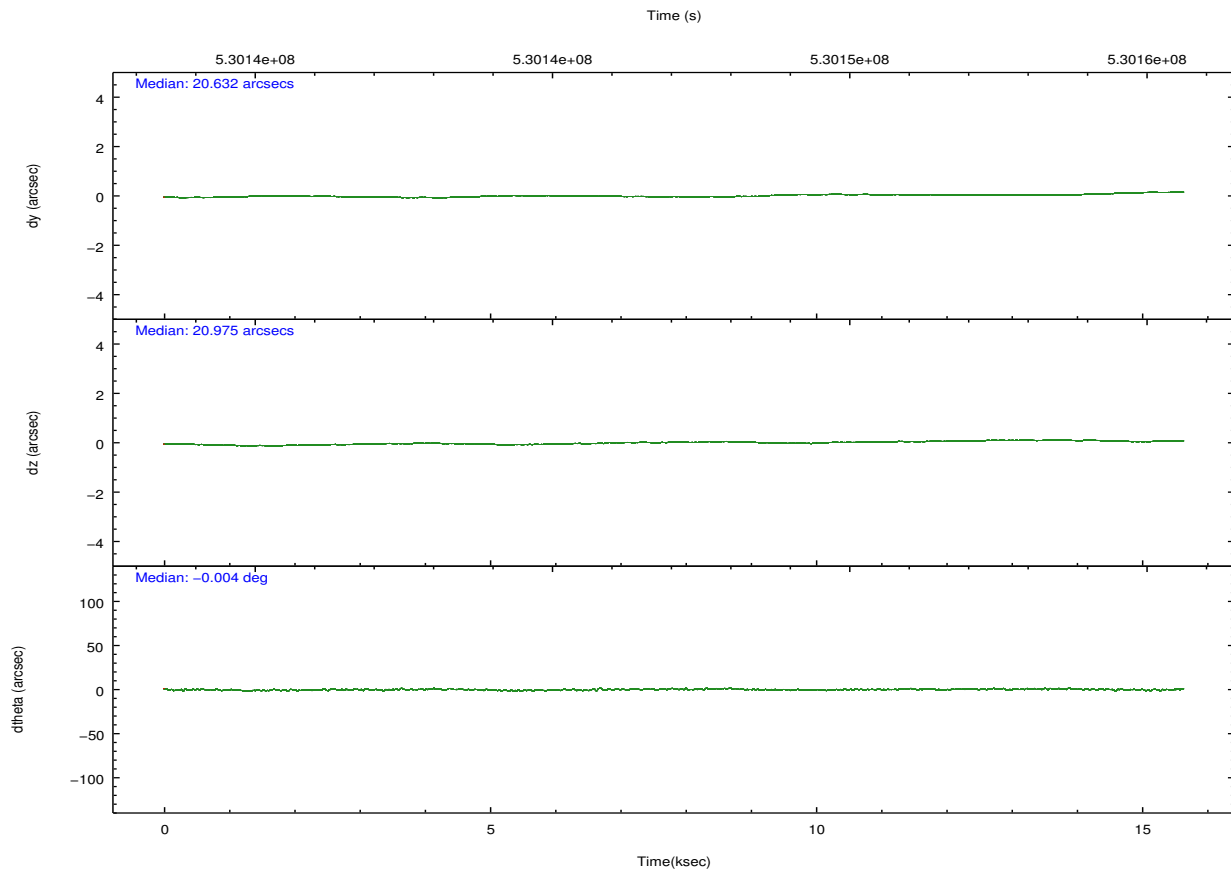
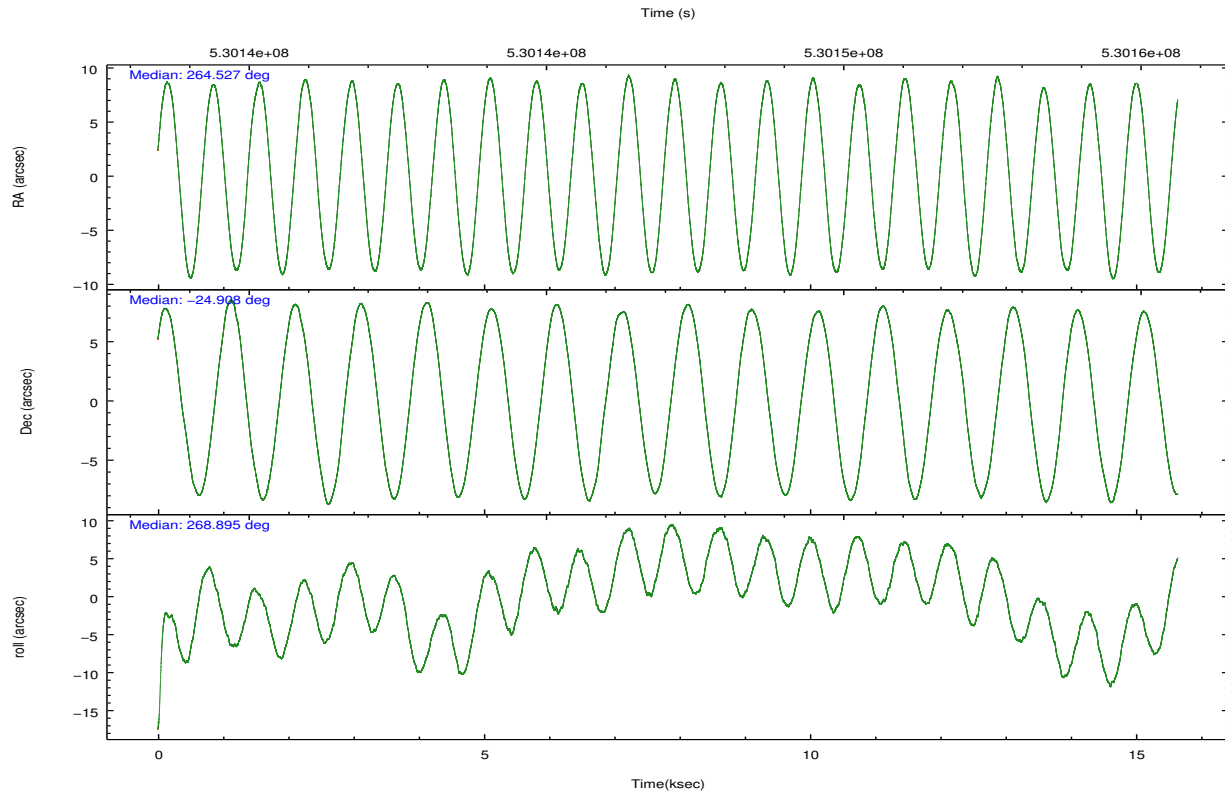
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	58144	59693	66059	62532
rejected events	50901	52129	58628	55663
rejected %	87%	87%	88%	89%

	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	3115	3205	3289	3019
	5%	5%	4%	4%
grade 1 events	38	42	41	27
	0%	0%	0%	0%
grade 2 events	1794	1722	1848	1482
	3%	2%	2%	2%
grade 3 events	651	764	629	695
	1%	1%	0%	1%
grade 4 events	686	721	719	681
	1%	1%	1%	1%
grade 5 events	1550	1626	1360	1818
	2%	2%	2%	2%
grade 6 events	1062	1228	1011	1050
	1%	2%	1%	1%
grade 7 events	49248	50385	57162	53760
	84%	84%	86%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	264.512358	264.5271598494951	Subarray requested	NONE	NONE
[deg] Pointing Dec	-24.883935	-24.90804719629967	Alternating exposures requested	N	N
[deg] Pointing Roll	268.695116	268.9100255457301	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	530109067.184000	530109067.184000			
[s] Window stop time (MET)	530188267.184000	530188267.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	530140462.184000	530139030.01263			
Observation start date	2014-10-19T21:13:15	2014-10-19T20:50:30			
[s] Observation end time (MET)	530154862.184000	530154995.92602			
Observation end date	2014-10-20T01:13:15	2014-10-20T01:16:35			
Read mode	TIMED	TIMED			

2.3 Aspect



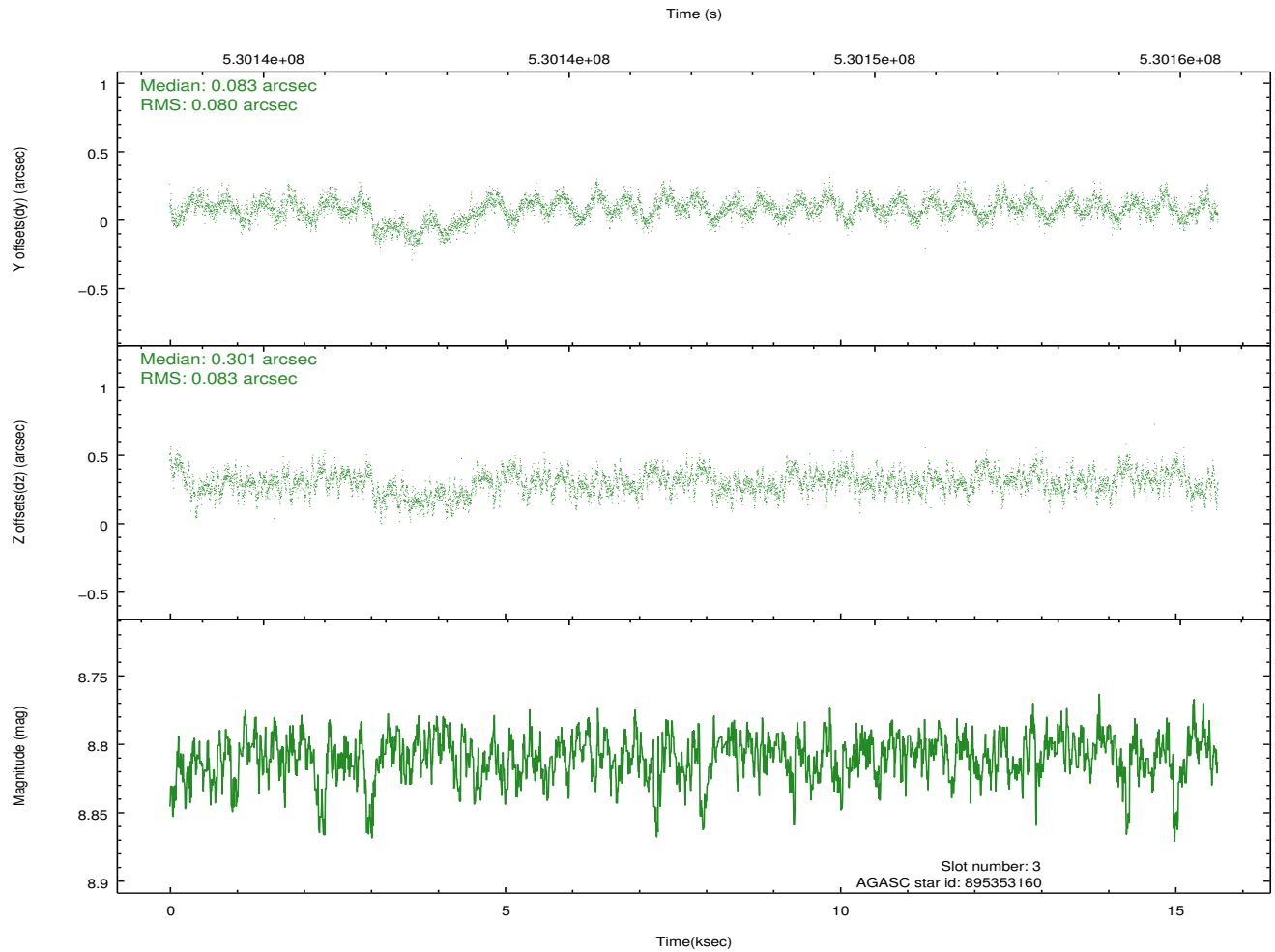
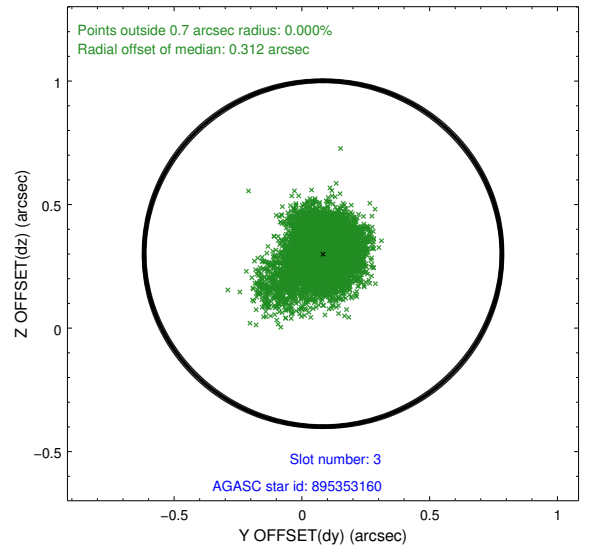
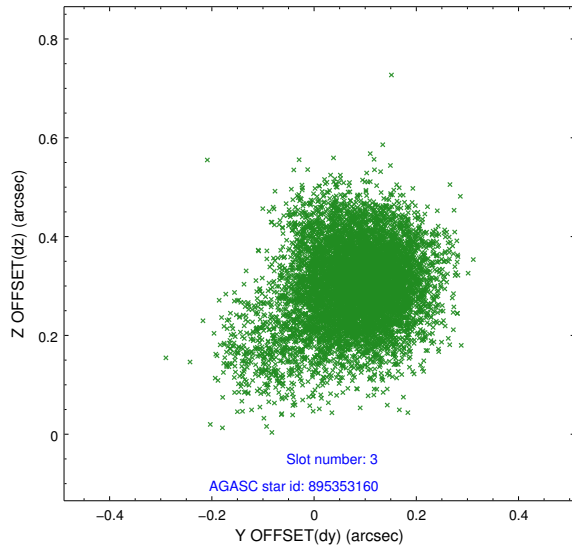
Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	3815	-0.020	-0.083	0.008	0.014	0.000000	0.000000	918.67	-844.78
1	FID	ACIS-I-4	7.00	3815	0.174	0.091	0.008	0.012	0.000000	0.000000	2139.00	1055.10
2	FID	ACIS-I-5	7.06	3815	-0.252	0.063	0.006	0.011	0.000000	0.000000	-1829.26	1053.11
3	GUIDE	895353160	8.81	7628	0.083	0.301	0.118	0.209	264.317198	-24.593240	-1031.46	-661.36
4	GUIDE	895353264	7.85	7629	-0.119	0.028	0.146	0.209	263.891704	-24.628320	-867.42	-2052.41
5	GUIDE	895353504	8.80	7630	0.275	-0.098	0.131	0.218	264.451518	-24.713614	-607.96	-213.07
6	GUIDE	895353520	8.73	7626	0.294	0.139	0.102	0.178	263.803092	-24.654210	-766.89	-2338.46
7	BAD	895354312	8.55	6917	-0.611	-0.464	0.282	0.407	264.478418	-24.965830	297.50	-104.08

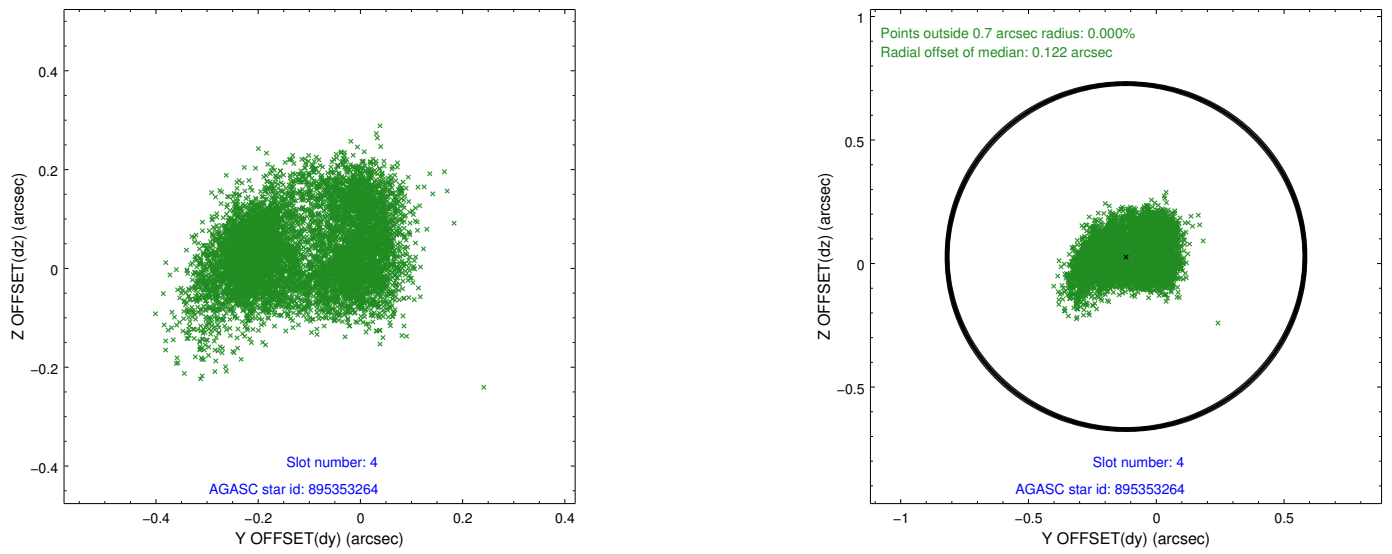
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2.4 Star Slots

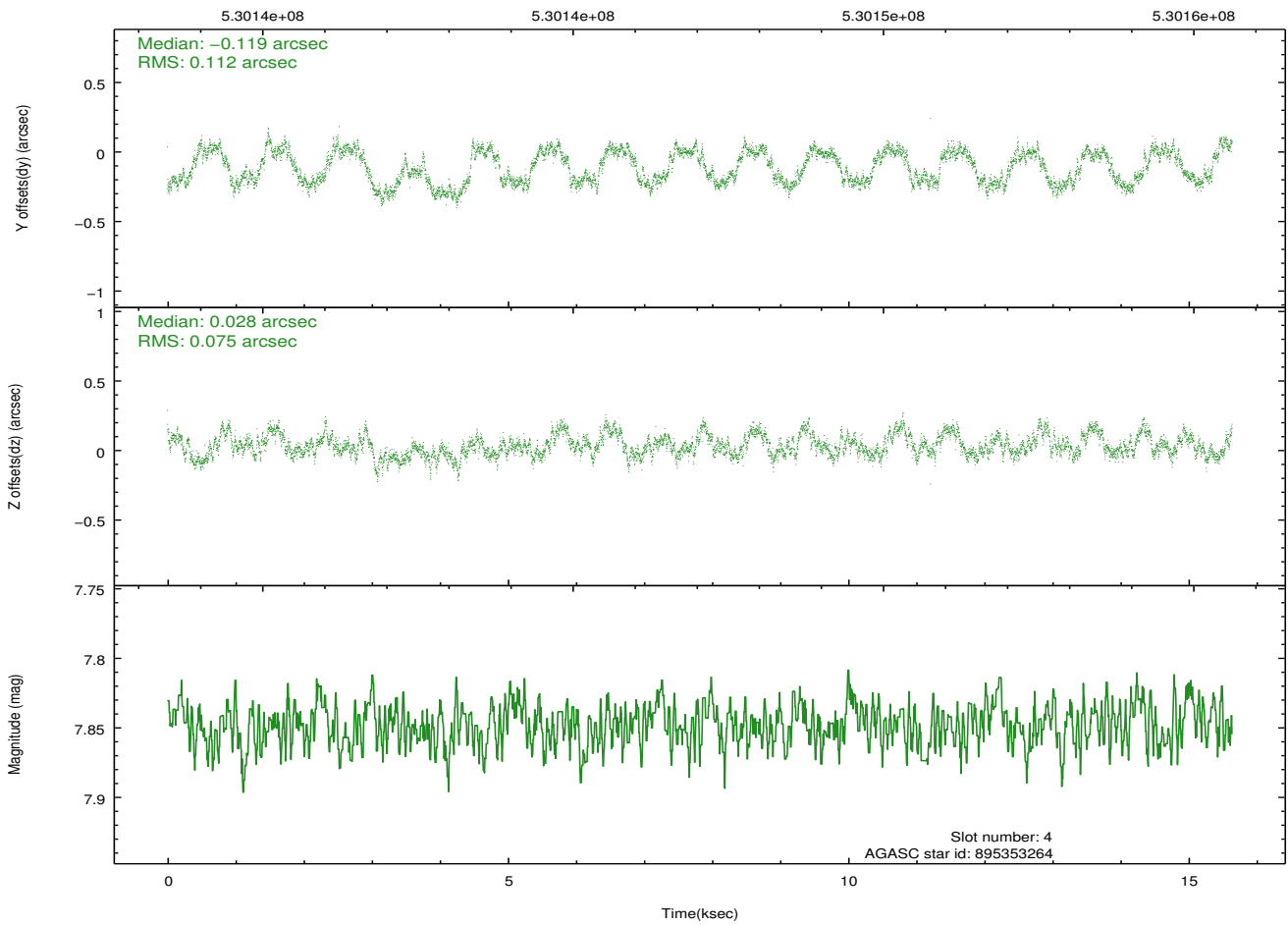
2.4.1 Slot 3



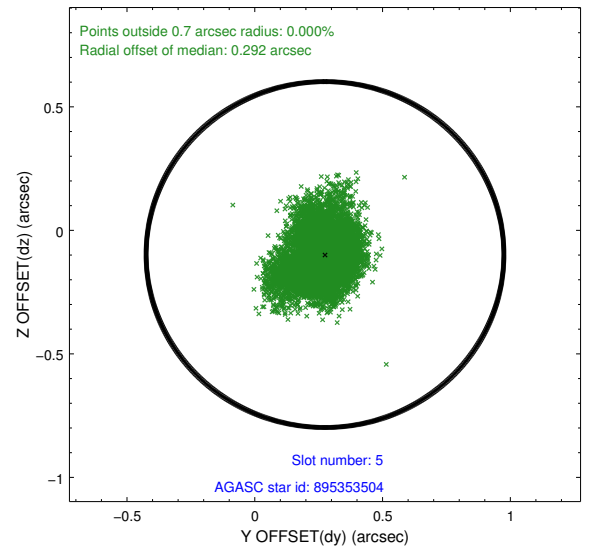
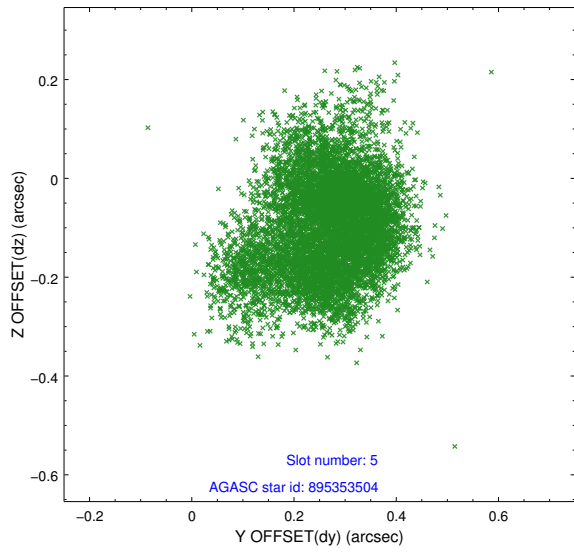
2.4.2 Slot 4



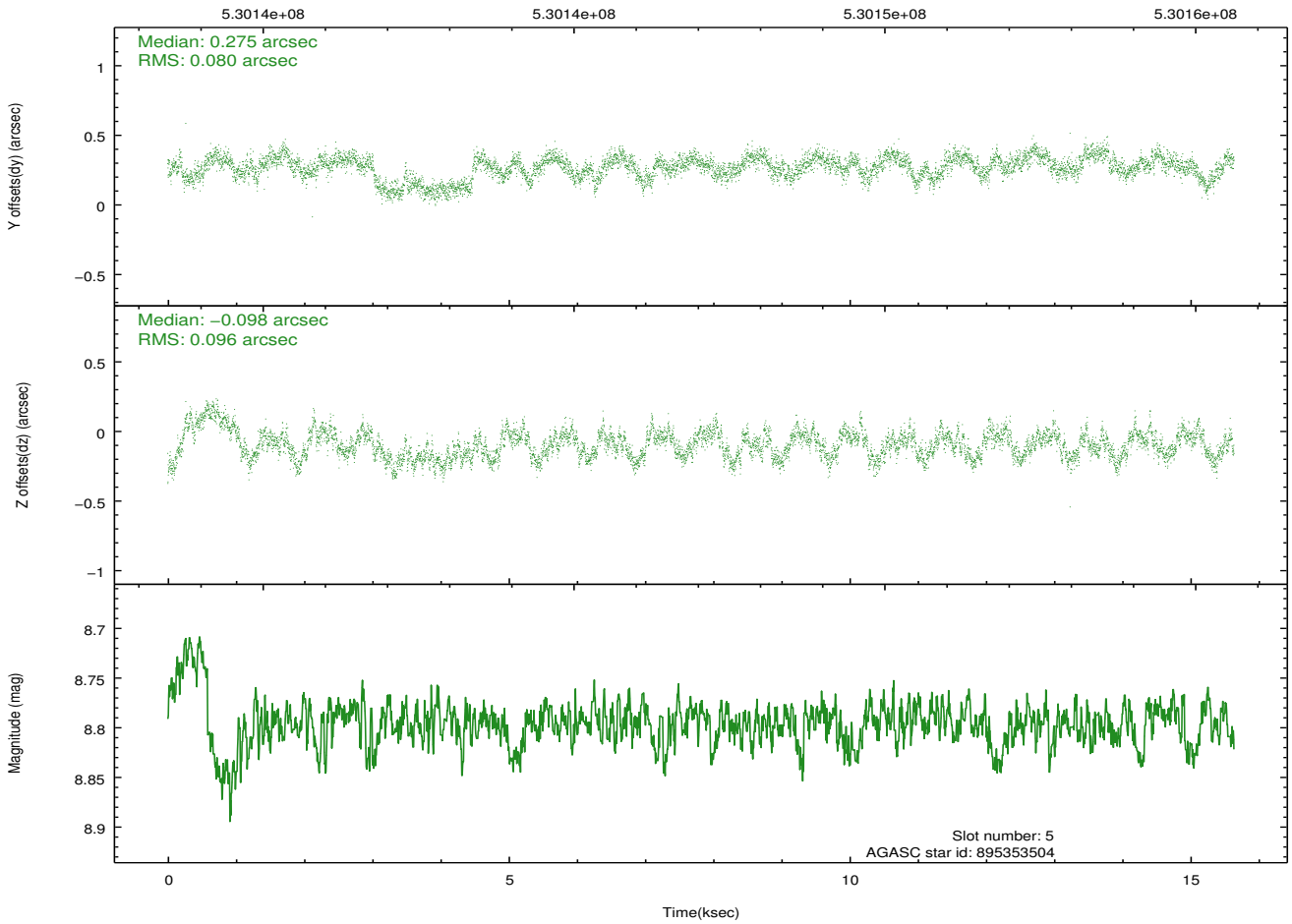
Time (s)



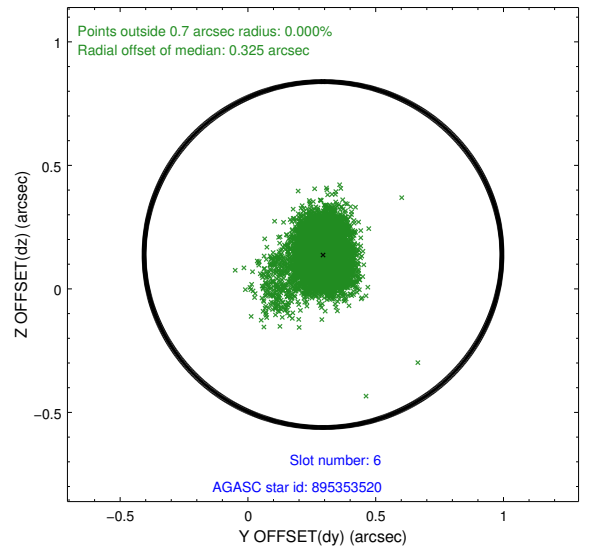
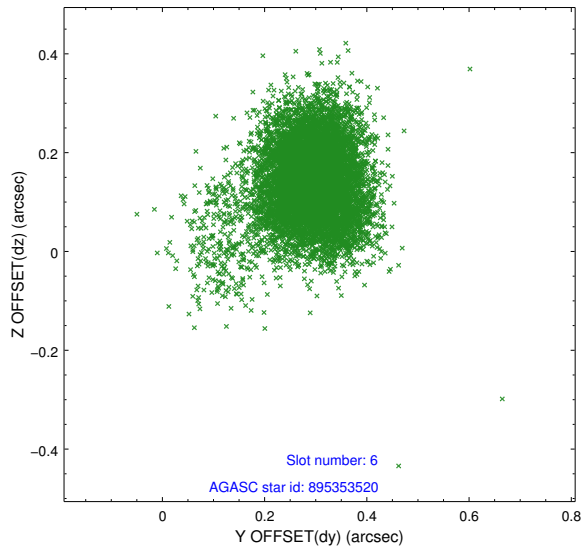
2.4.3 Slot 5



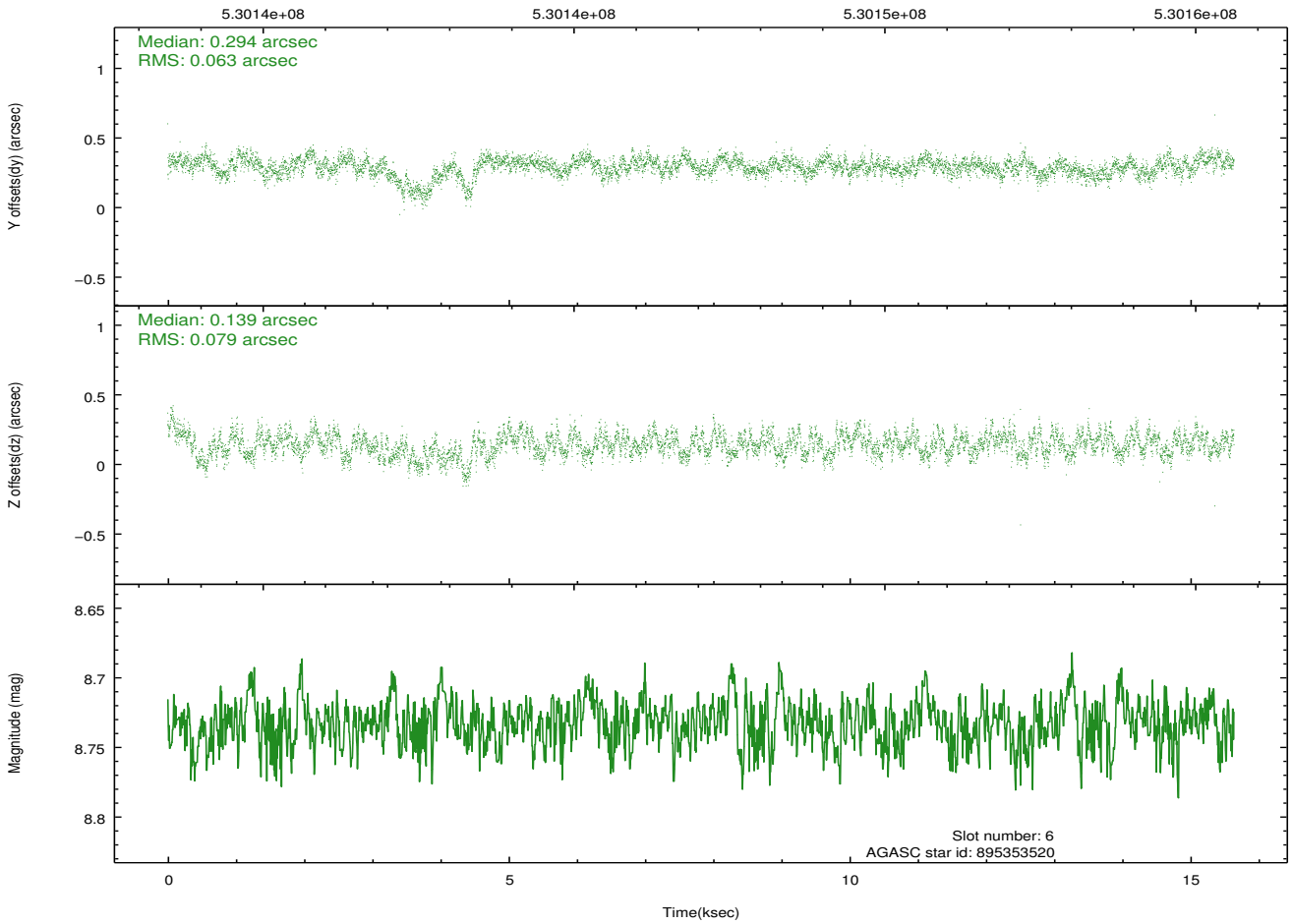
Time (s)



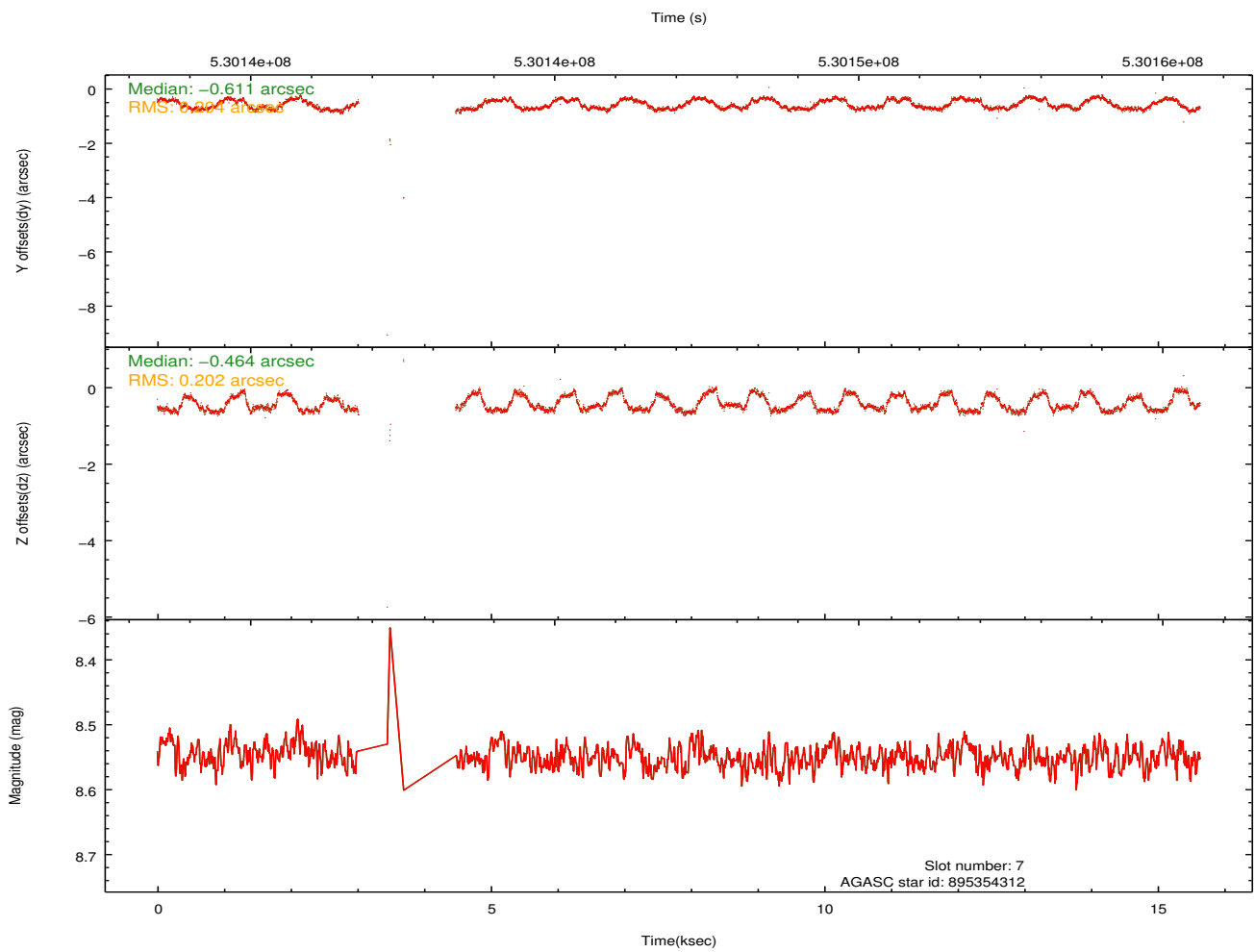
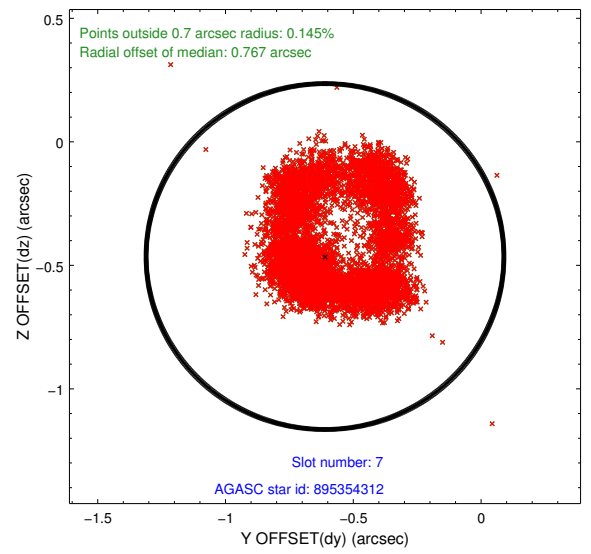
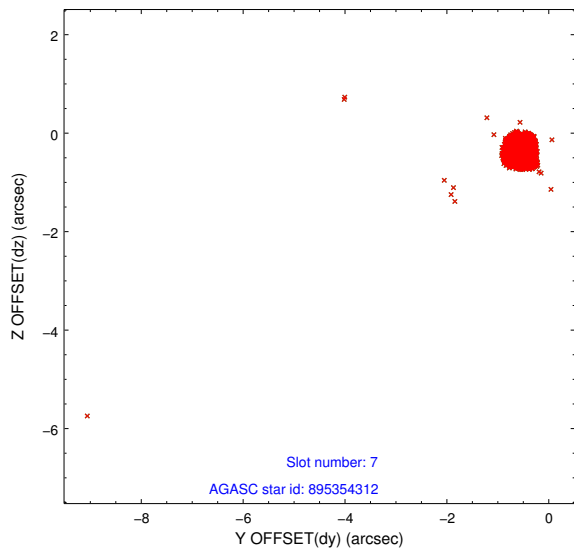
2.4.4 Slot 6



Time (s)

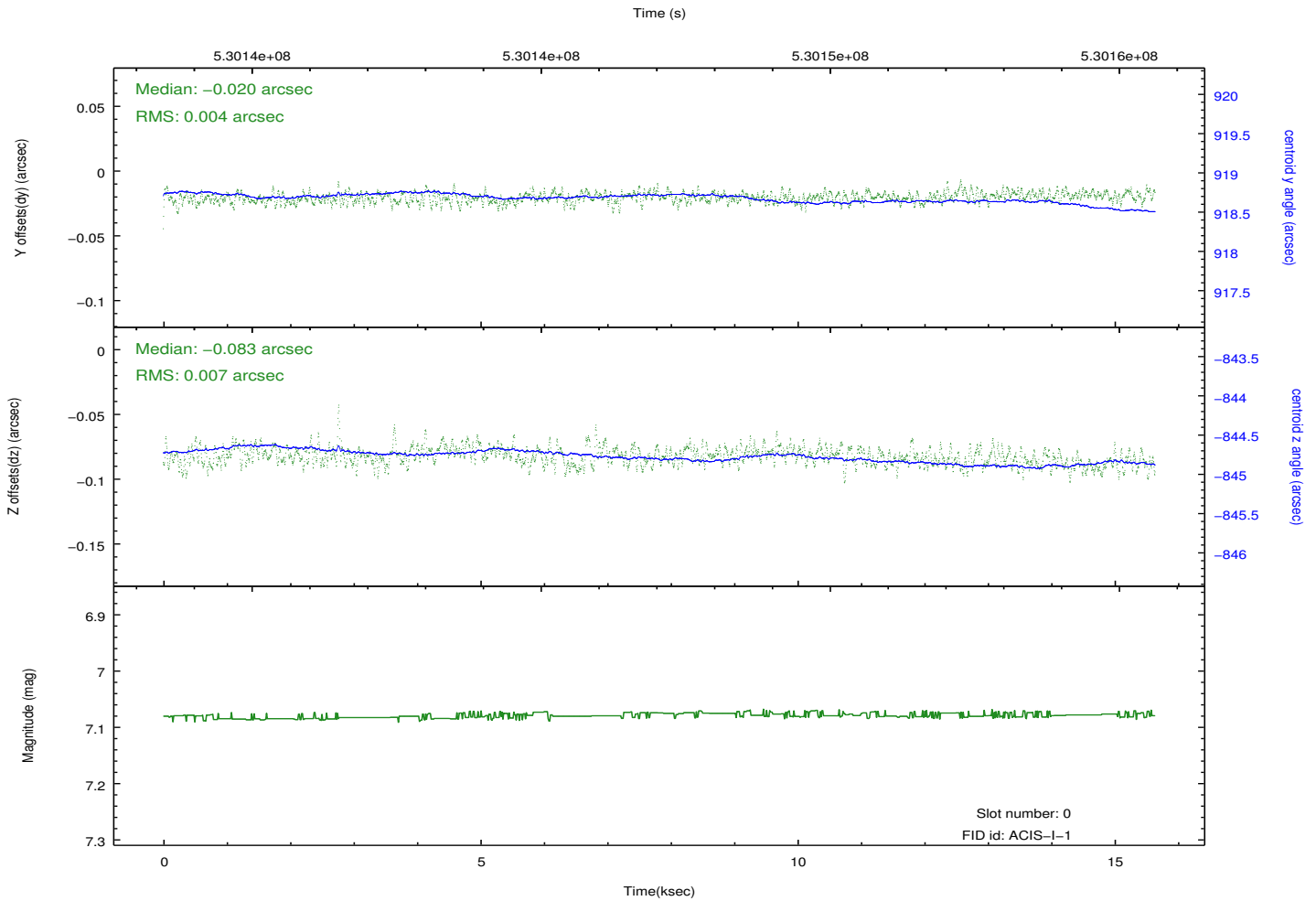
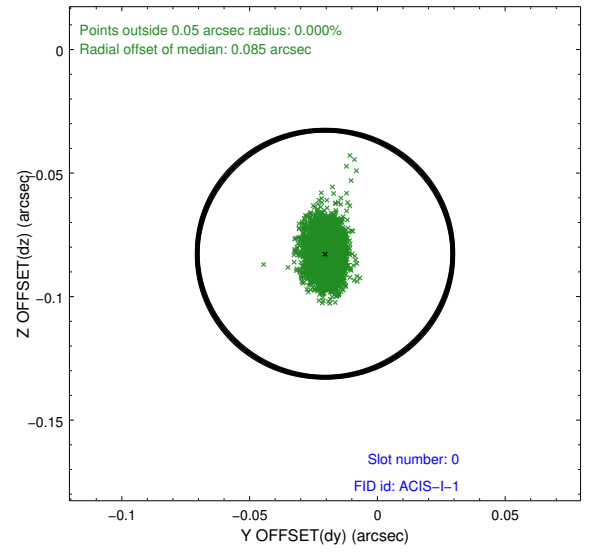
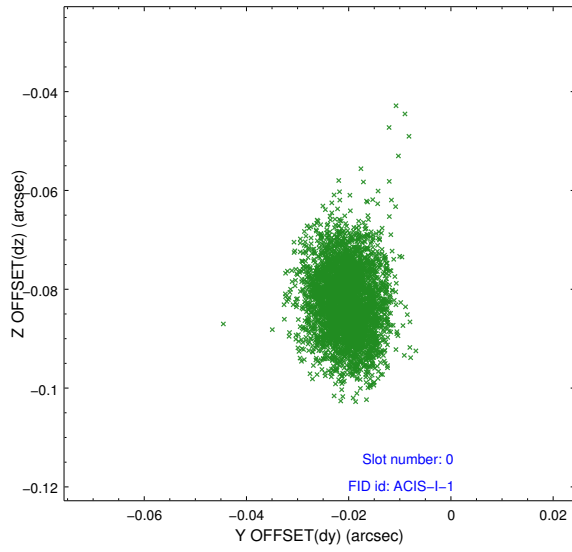


2.4.5 Slot 7

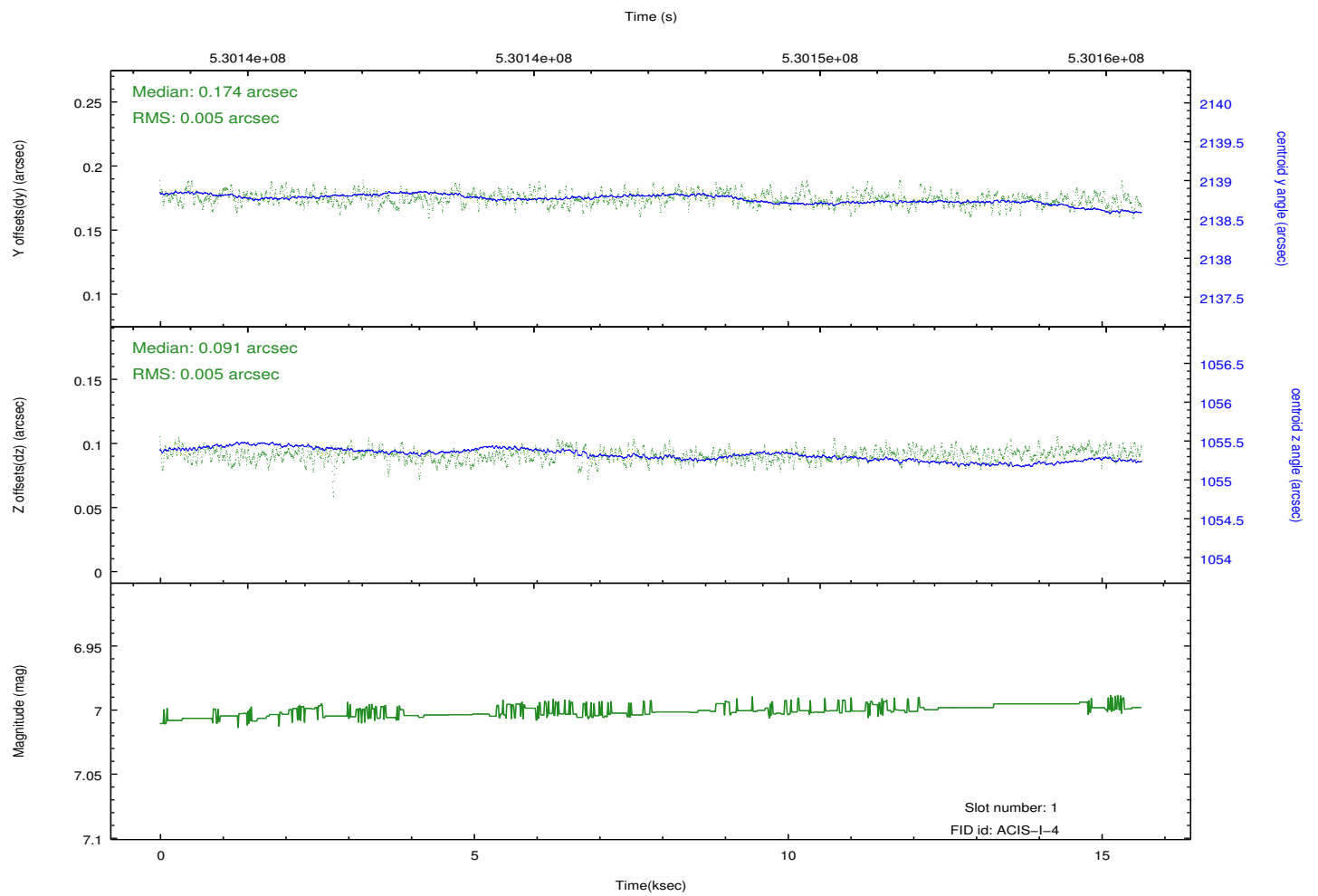
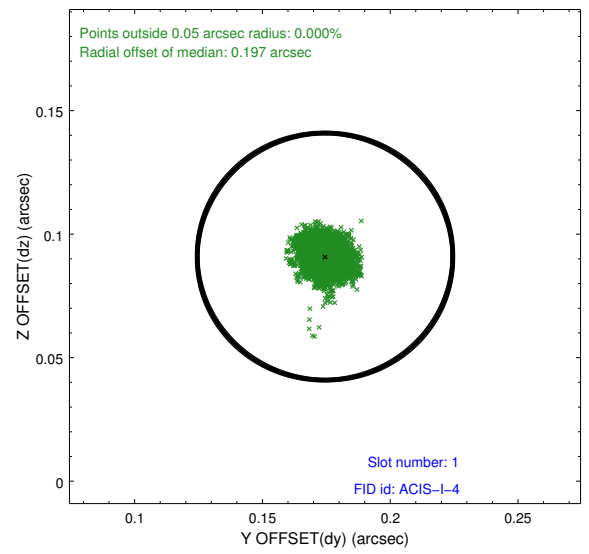
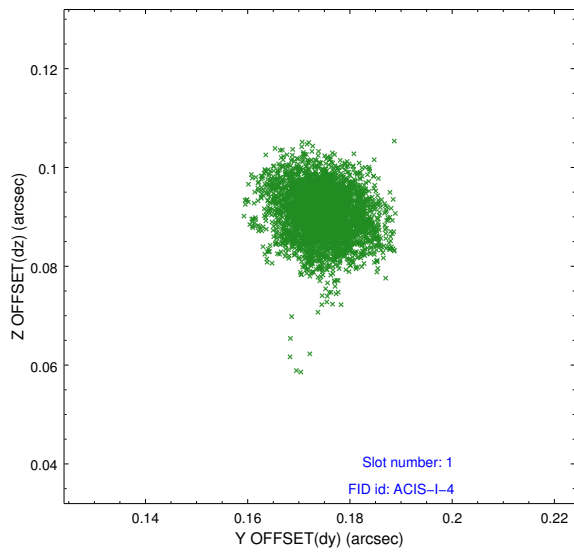


2.5 FID Slots

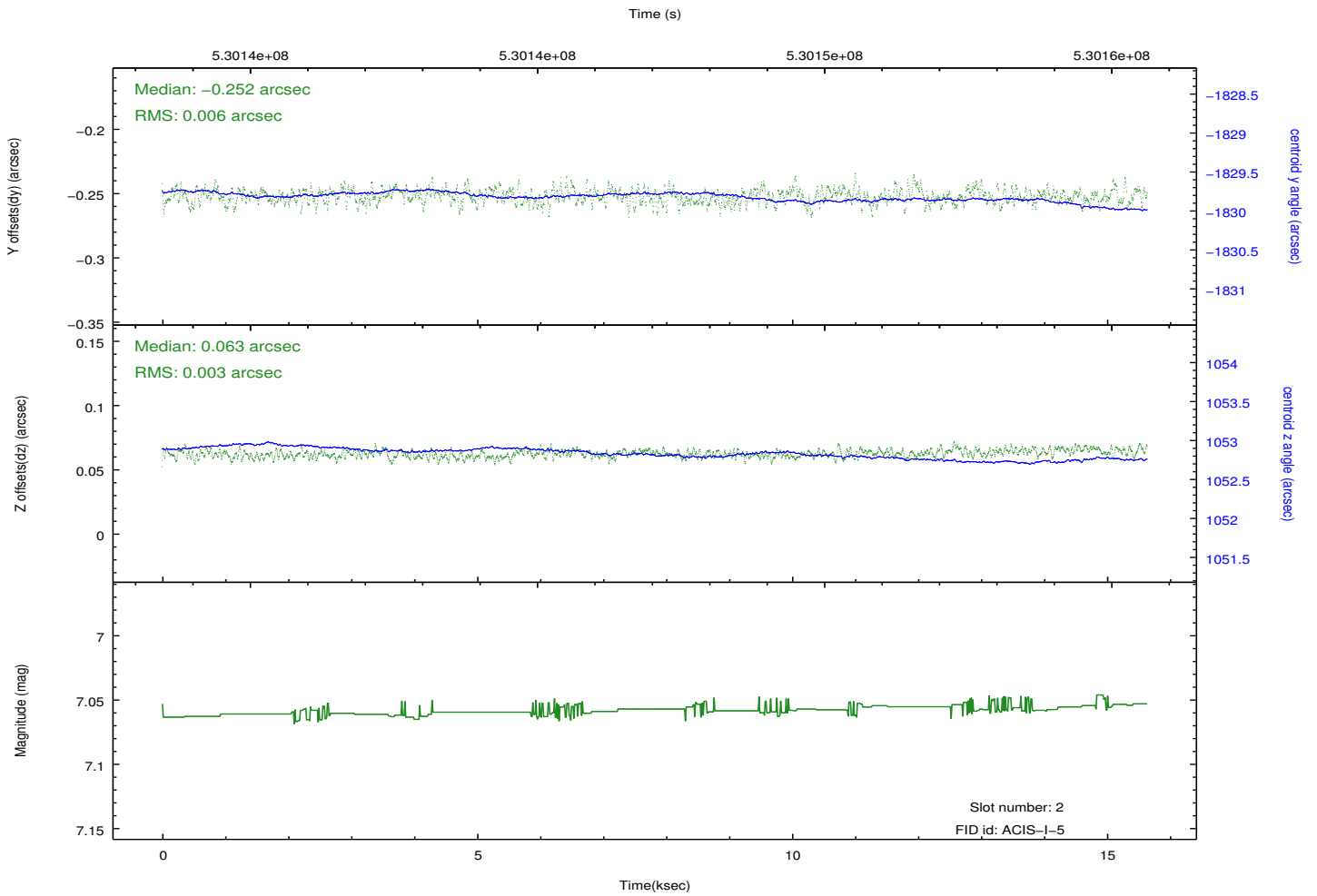
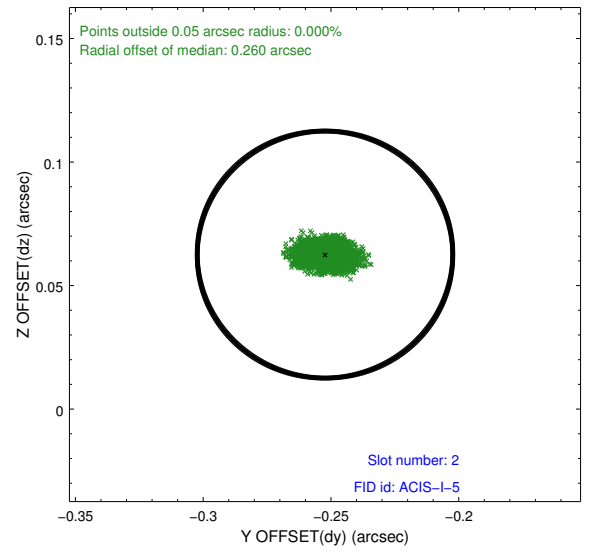
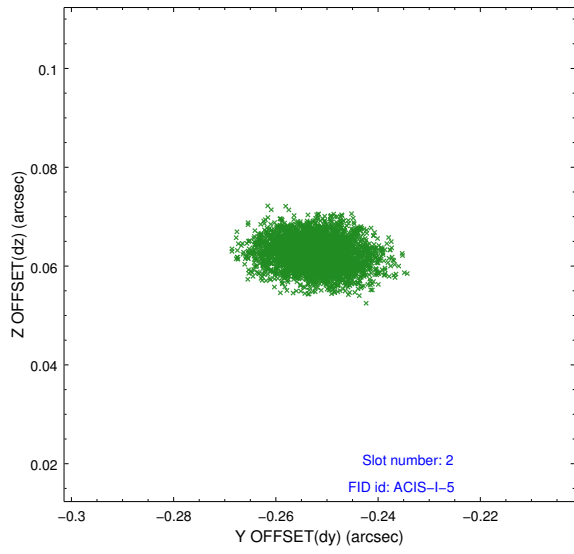
2.5.1 Slot 0



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)	2014.10.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.535859141469

A.2 Comments

Joint proposal with HST.

Window preference met.

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.