

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 16993 - L2 Version 2
Chandra X-Ray Center

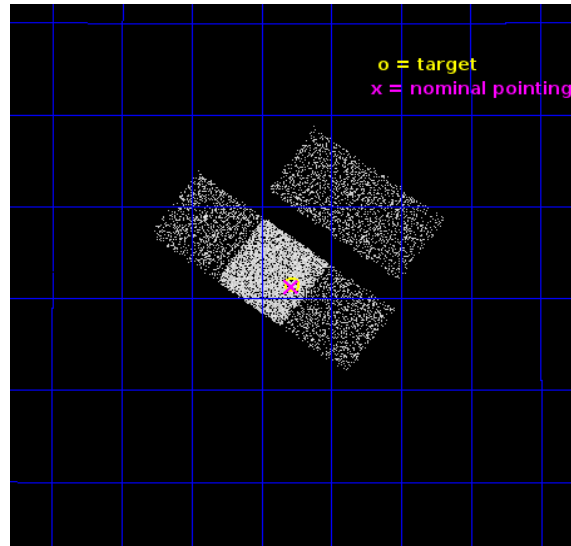
L2 Processing Date : May 9 2016

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1 Front

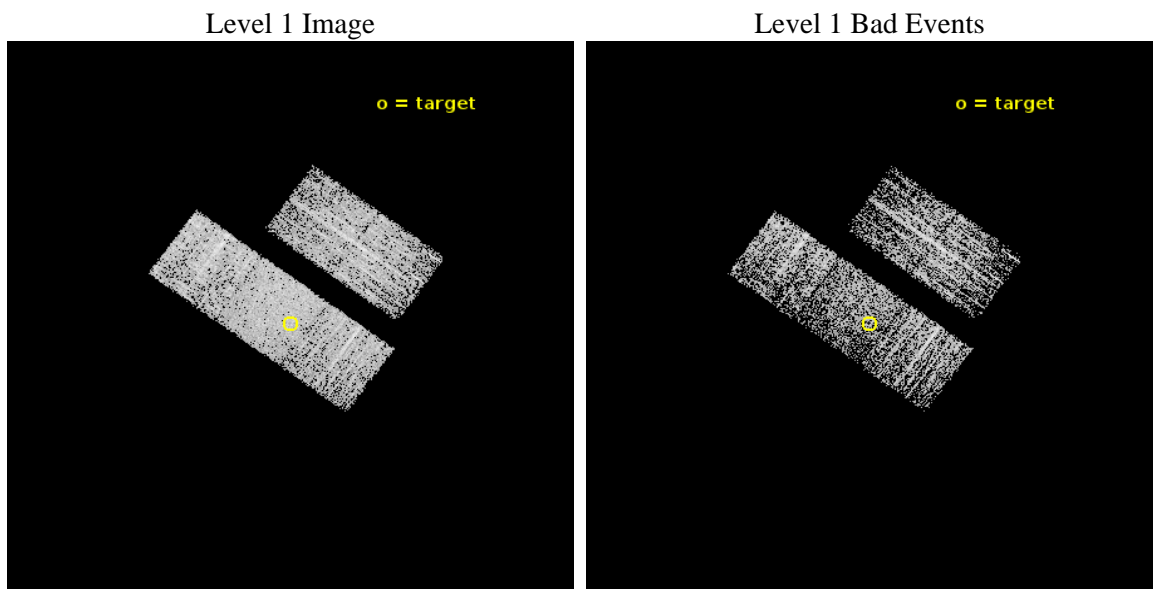
seq_num	601186	Sequence number
obs_id	16993	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC4206	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	183.820417	Observer's specified target RA [deg]
dec_targ	13.023833	Observer's specified target Dec [deg]
ra_nom	183.82134002356	Nominal RA [deg]
dec_nom	13.021363304253	Nominal Dec [deg]
roll_nom	216.1566739677	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2027.4000157118	Sum of GTIs [s]
livetime	2000.9105419563	Livetime [s]
ontime2	2027.4000157118	Sum of GTIs [s]
ontime3	2027.4000157118	Sum of GTIs [s]
ontime6	2027.4000157118	Sum of GTIs [s]
ontime7	2027.4000157118	Sum of GTIs [s]
ontime8	2027.4000157118	Sum of GTIs [s]
l2events	11487	Number of level 2 events



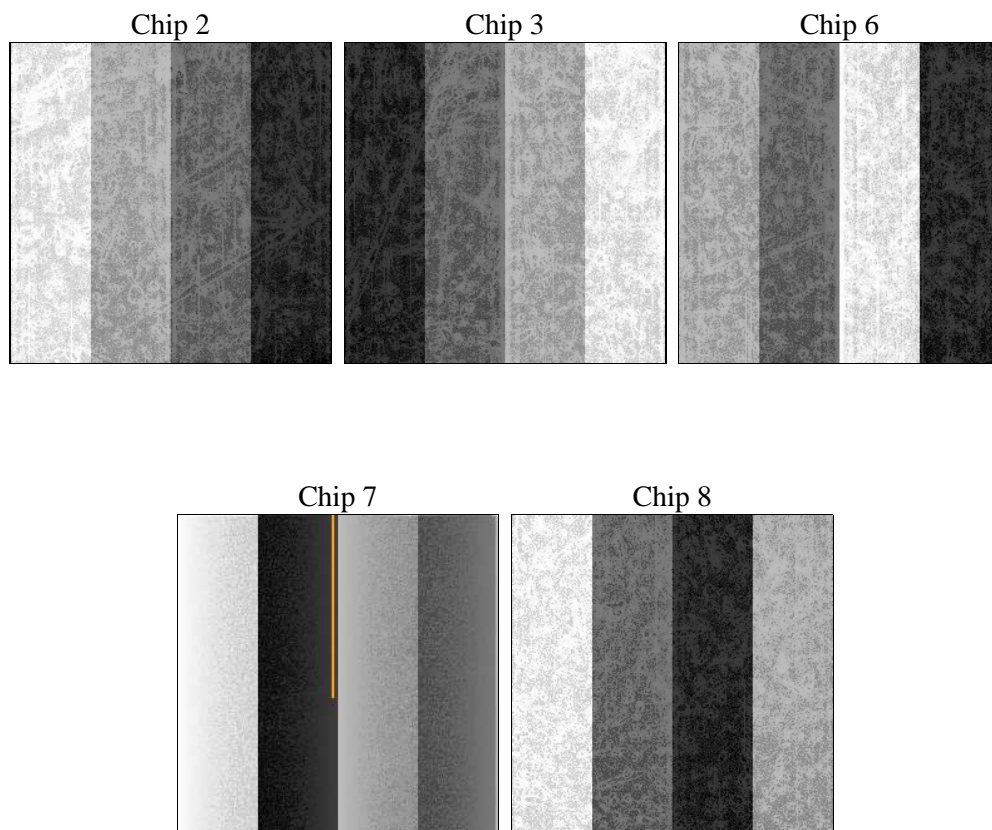
2 OBI

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	10.4.3.1	Processing system revision	ontime	2027.4000157118	Sum of GTIs [s]
caldsver	4.7.1	 	ontime2	2027.4000157118	Sum of GTIs [s]
date	2016-05-09T15:57:33	Date and time of file creation	ontime3	2027.4000157118	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	2027.4000157118	Sum of GTIs [s]
			ontime7	2027.4000157118	Sum of GTIs [s]
			ontime8	2027.4000157118	Sum of GTIs [s]
			l1events	71697	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	13270	12101	13260	16312	16754
rejected events	11947	10832	11831	9478	12924
rejected %	90%	89%	89%	58%	77%

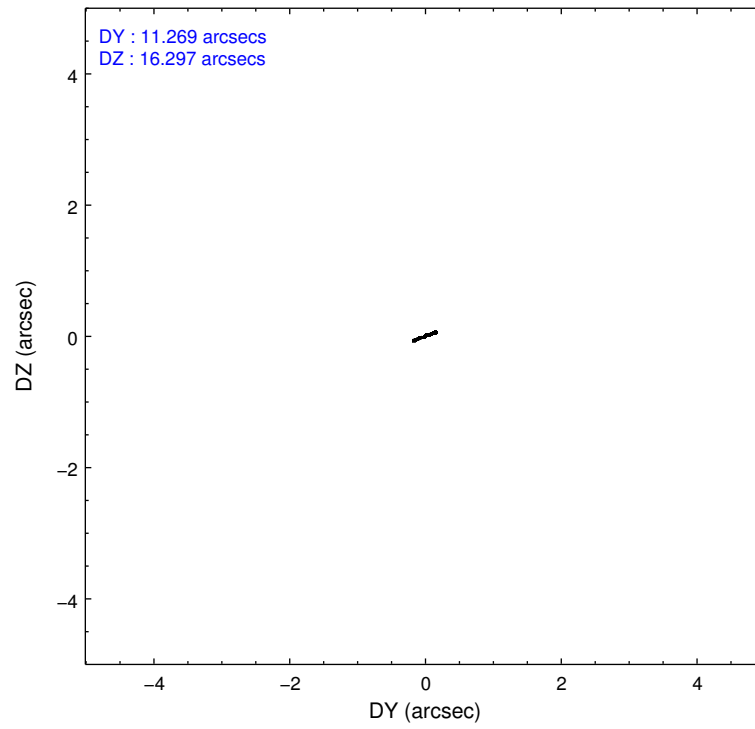
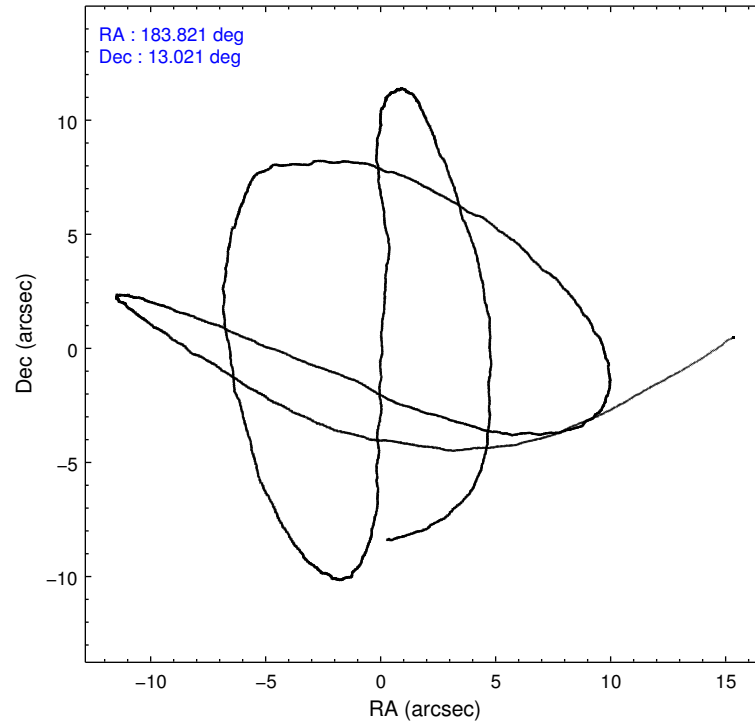
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	481	458	445	509	1123
	3%	3%	3%	3%	6%
grade 1 events	6	8	5	19	14
	0%	0%	0%	0%	0%
grade 2 events	301	270	351	1459	947
	2%	2%	2%	8%	5%
grade 3 events	134	149	130	501	399
	1%	1%	0%	3%	2%
grade 4 events	129	138	143	491	348
	0%	1%	1%	3%	2%
grade 5 events	492	529	631	1507	901
	3%	4%	4%	9%	5%
grade 6 events	282	255	362	3883	1016
	2%	2%	2%	23%	6%
grade 7 events	11445	10294	11193	7943	12006
	86%	85%	84%	48%	71%

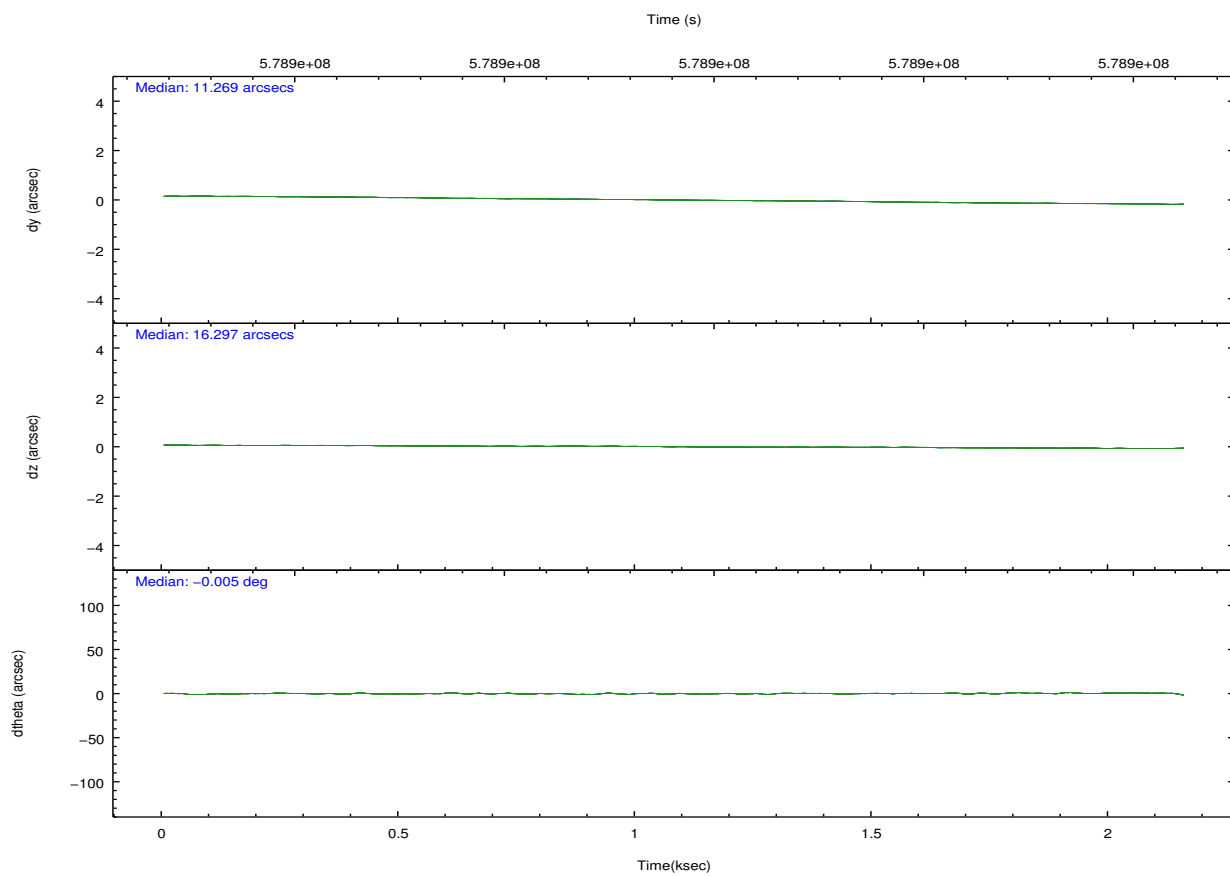
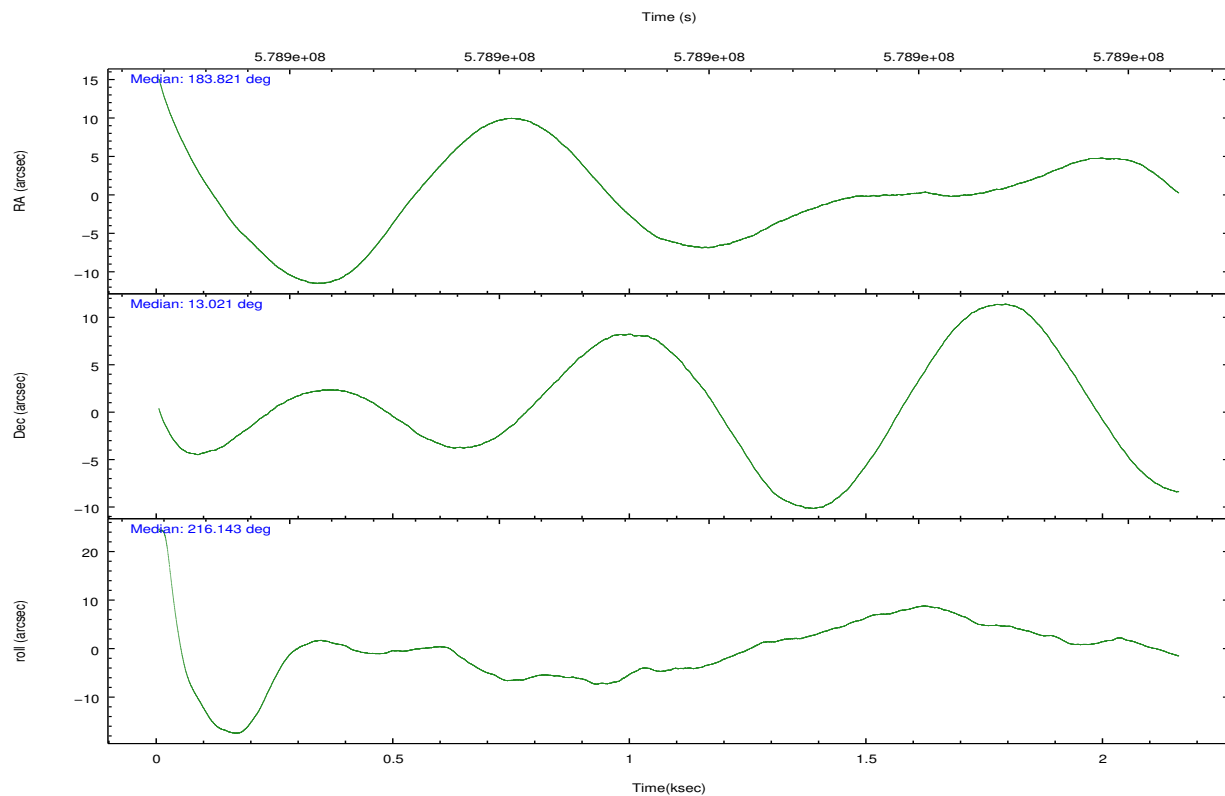
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	183.832324	183.821340023564
[deg] Pointing Dec	13.046658	13.02136330425294
[deg] Pointing Roll	215.997323	216.1566739677029
[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)	578898978.184000	578897293.3342
Observation start date	2016-05-06T05:15:10	2016-05-06T04:48:13
[s] Observation end time (MET)	578900978.184000	578901767.9719599
Observation end date	2016-05-06T05:48:30	2016-05-06T06:02:47
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O2	Y
CCD I3 on	O1	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



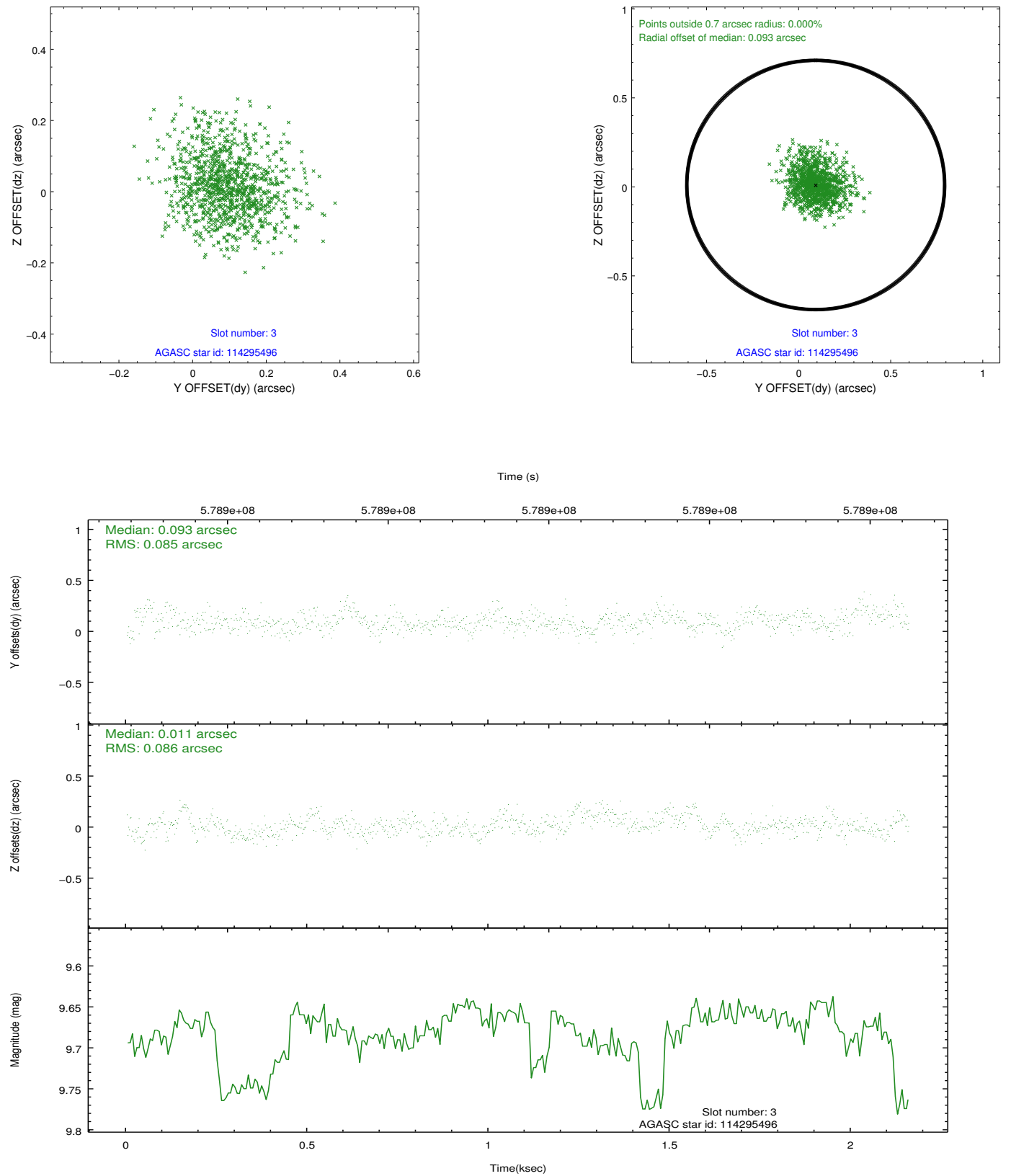


Slot Statistics

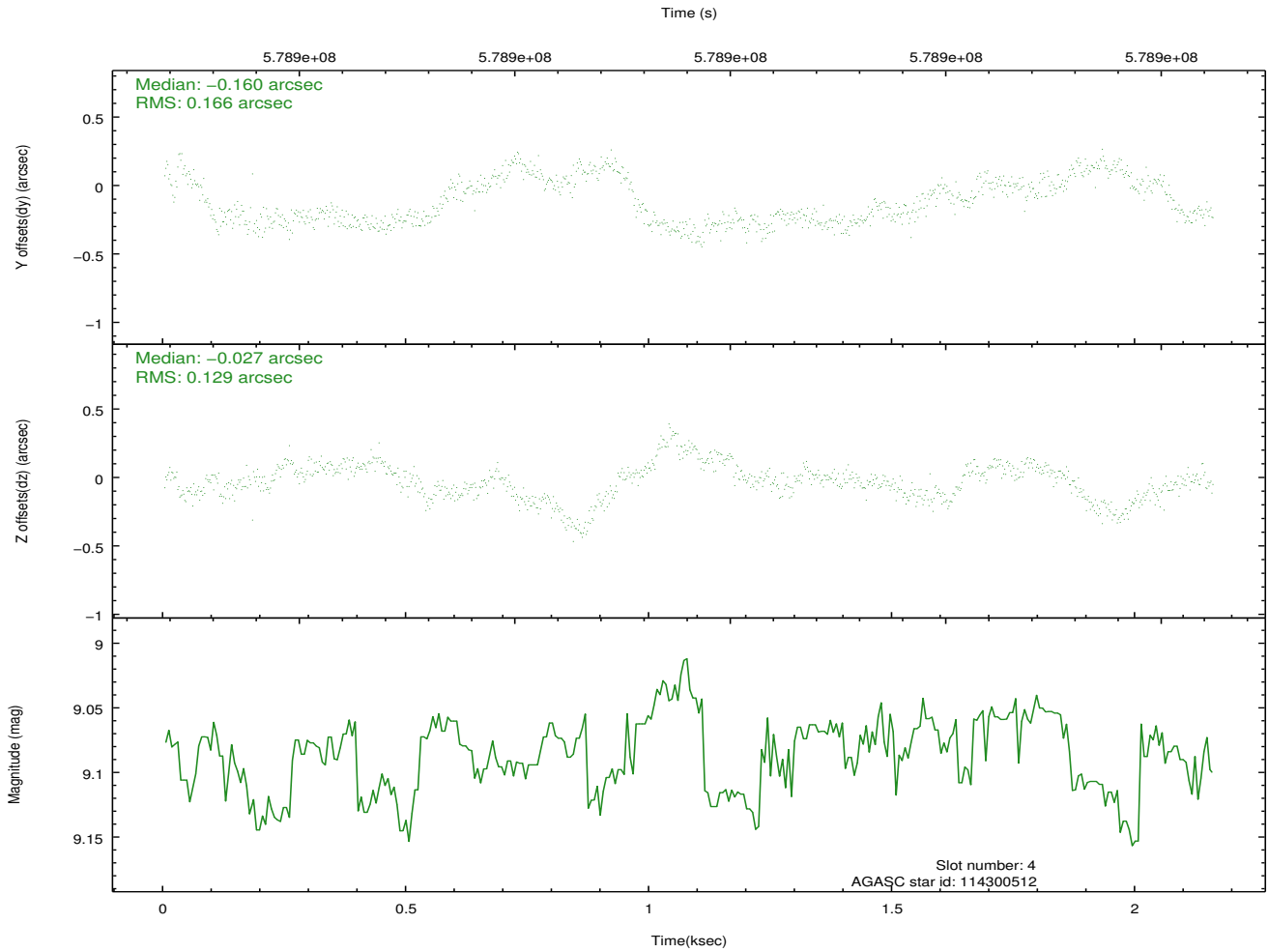
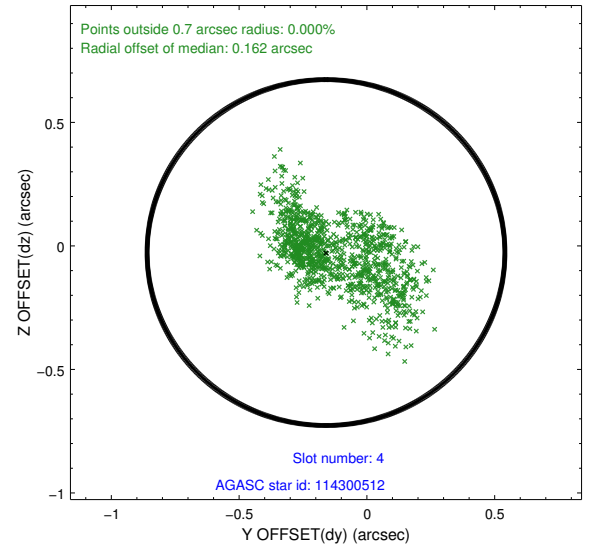
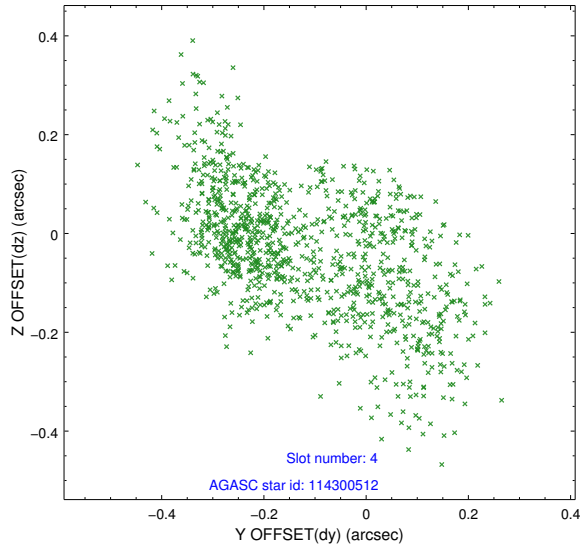
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	526	-0.150	-0.076	0.007	0.011	0.000000	0.000000	-764.27	-1737.80
1	FID		ACIS-S-4	7.25	526	0.385	0.093	0.006	0.011	0.000000	0.000000	2148.15	167.74
2	FID		ACIS-S-5	7.26	526	-0.265	-0.008	0.008	0.017	0.000000	0.000000	-1813.36	164.72
3	GUIDE	used	114295496	9.68	1052	0.093	0.011	0.129	0.215	183.211405	12.908034	2054.85	-879.53
4	GUIDE	used	114300512	9.09	1052	-0.160	-0.027	0.217	0.380	183.274843	13.061330	1551.95	-1194.64
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	115218080	9.49	1052	-0.036	0.110	0.175	0.278	184.130022	12.510081	289.75	2176.01
7	GUIDE	used	114299320	10.16	1050	0.080	-0.089	0.320	0.514	183.005704	13.261280	1894.90	-2325.58

2.4 Star Slots

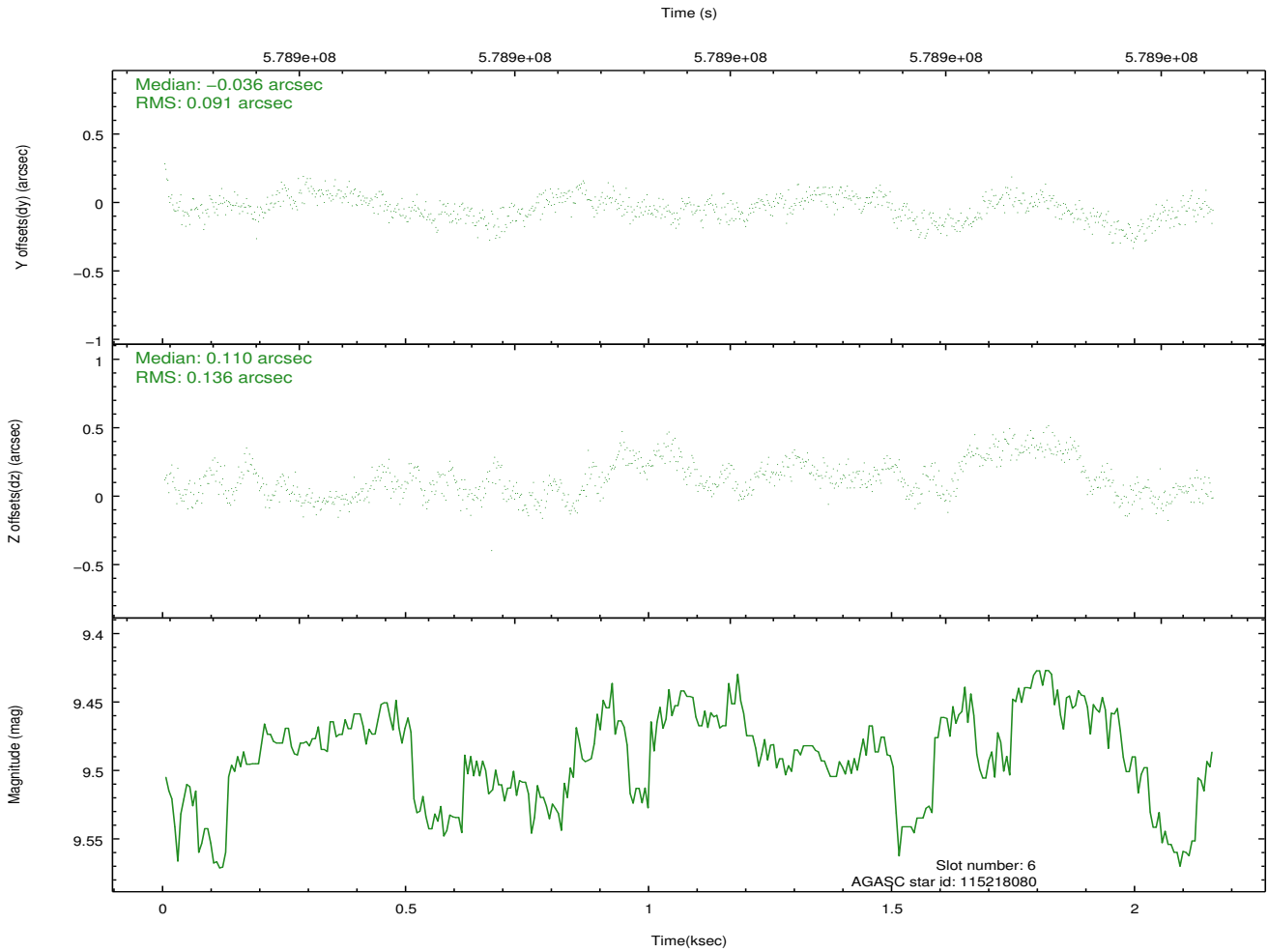
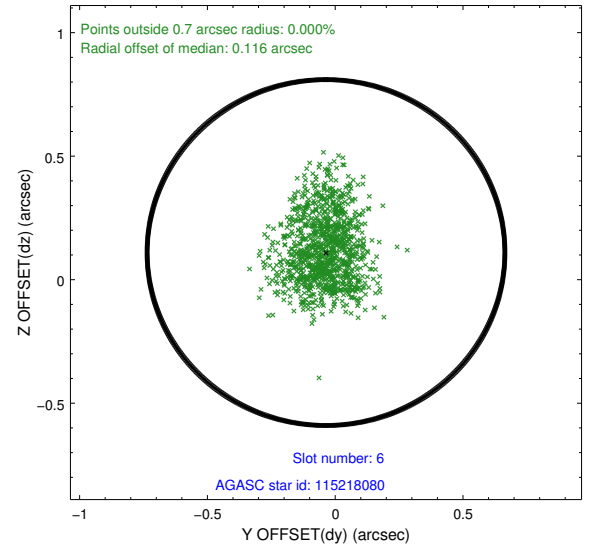
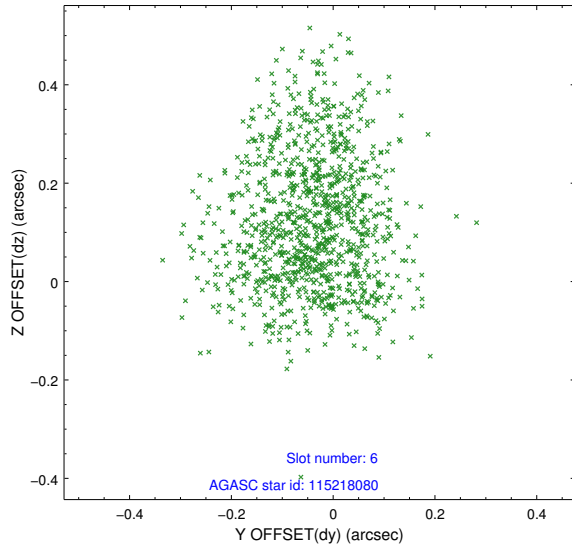
2.4.1 Slot 3



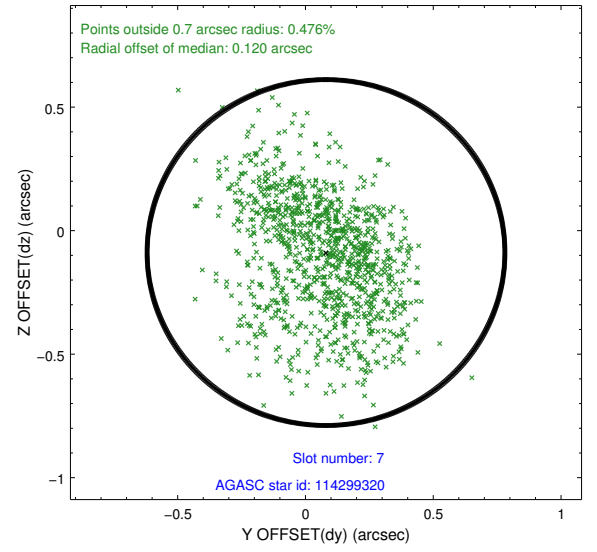
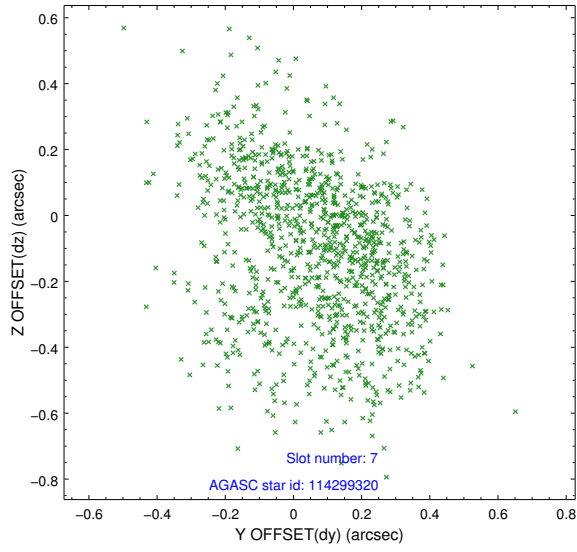
2.4.2 Slot 4



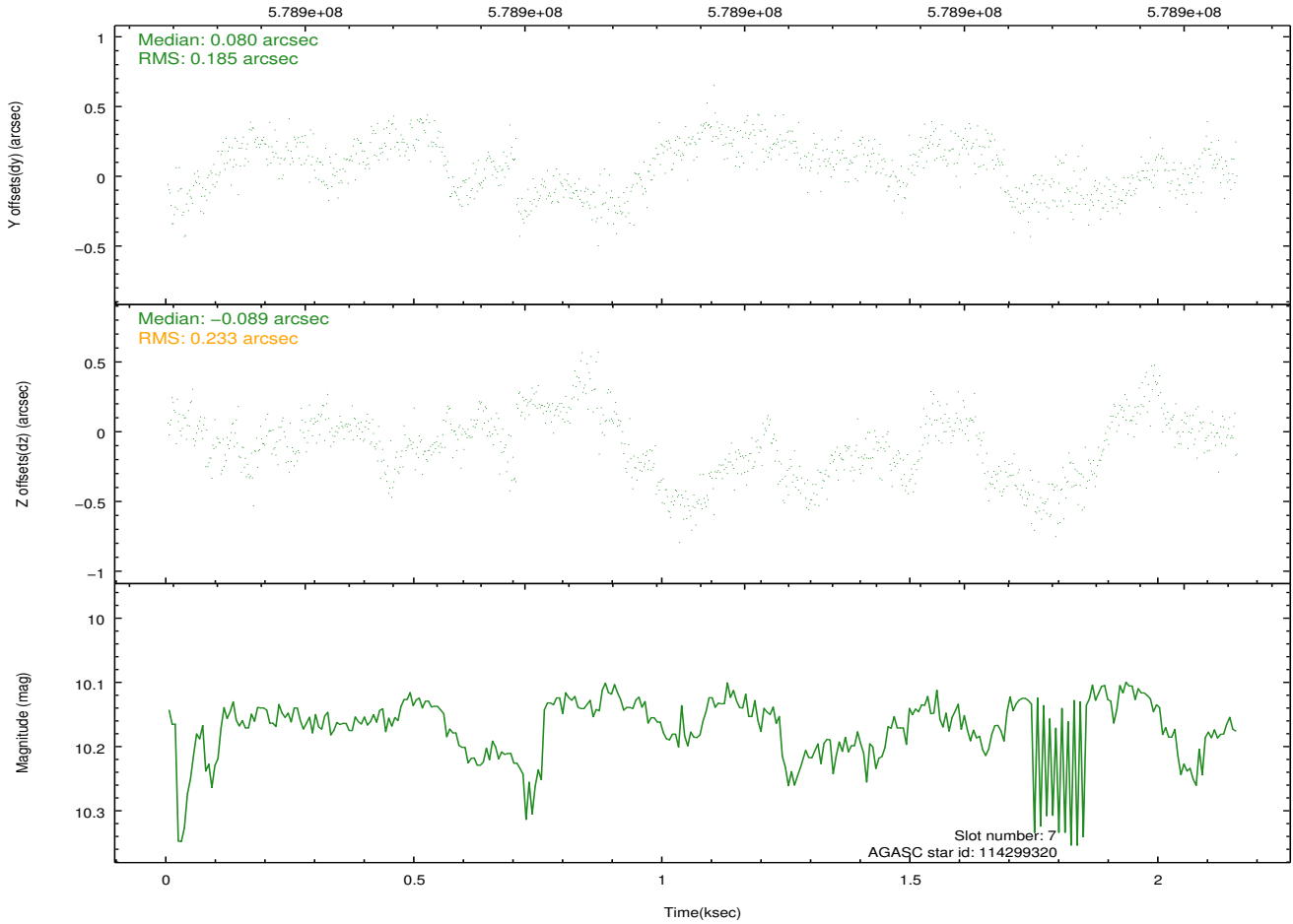
2.4.3 Slot 6



2.4.4 Slot 7

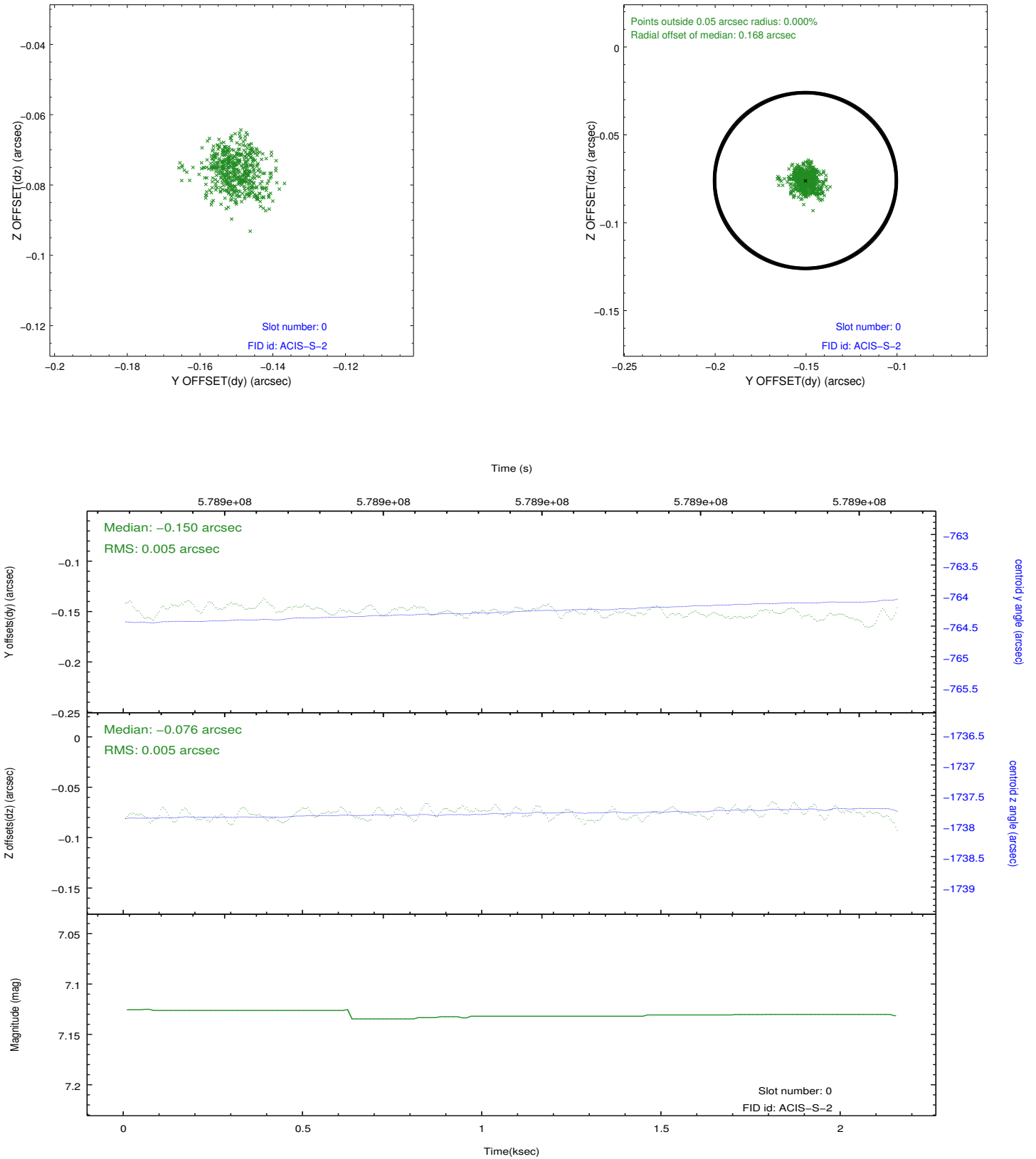


Time (s)

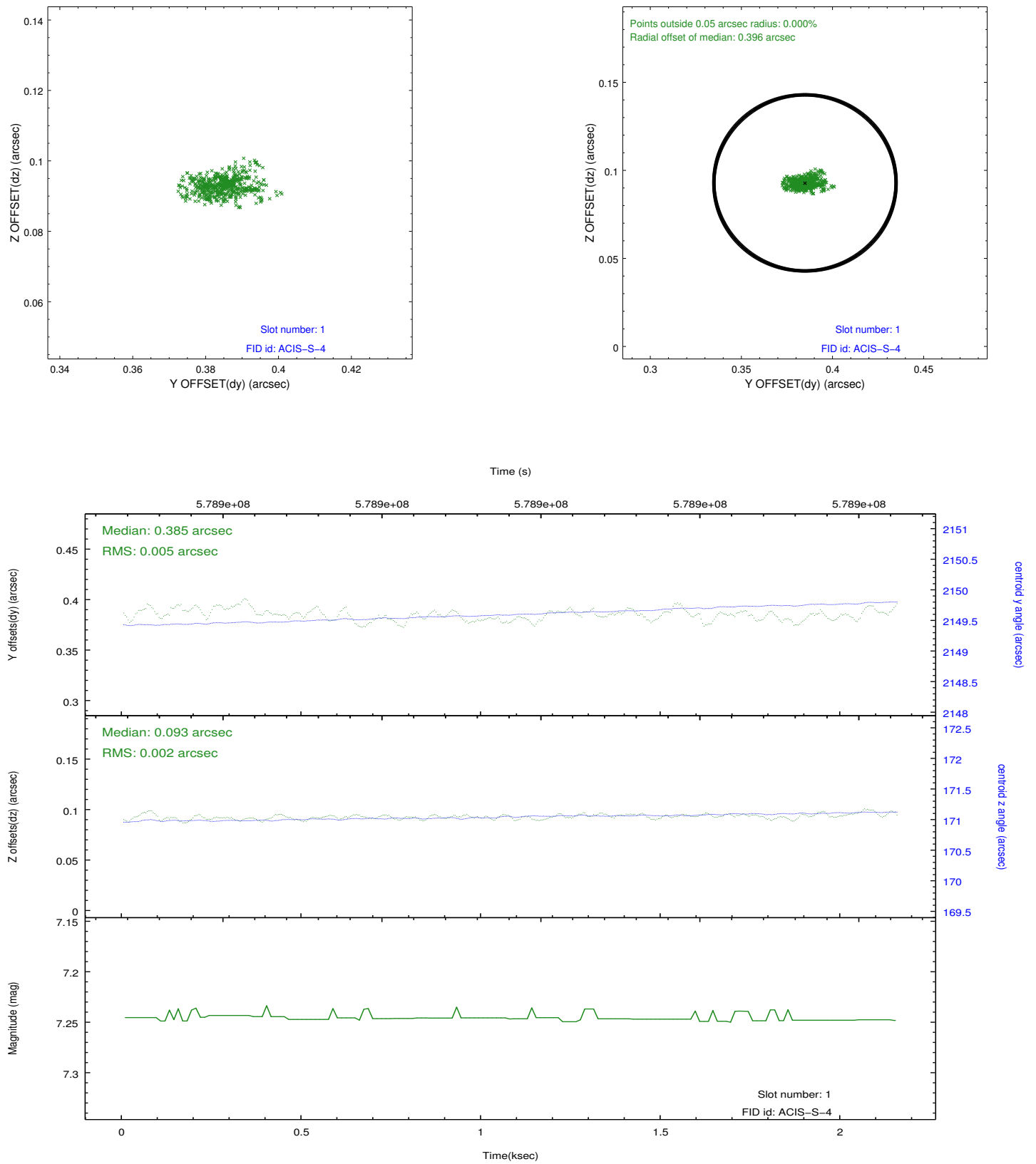


2.5 FID Slots

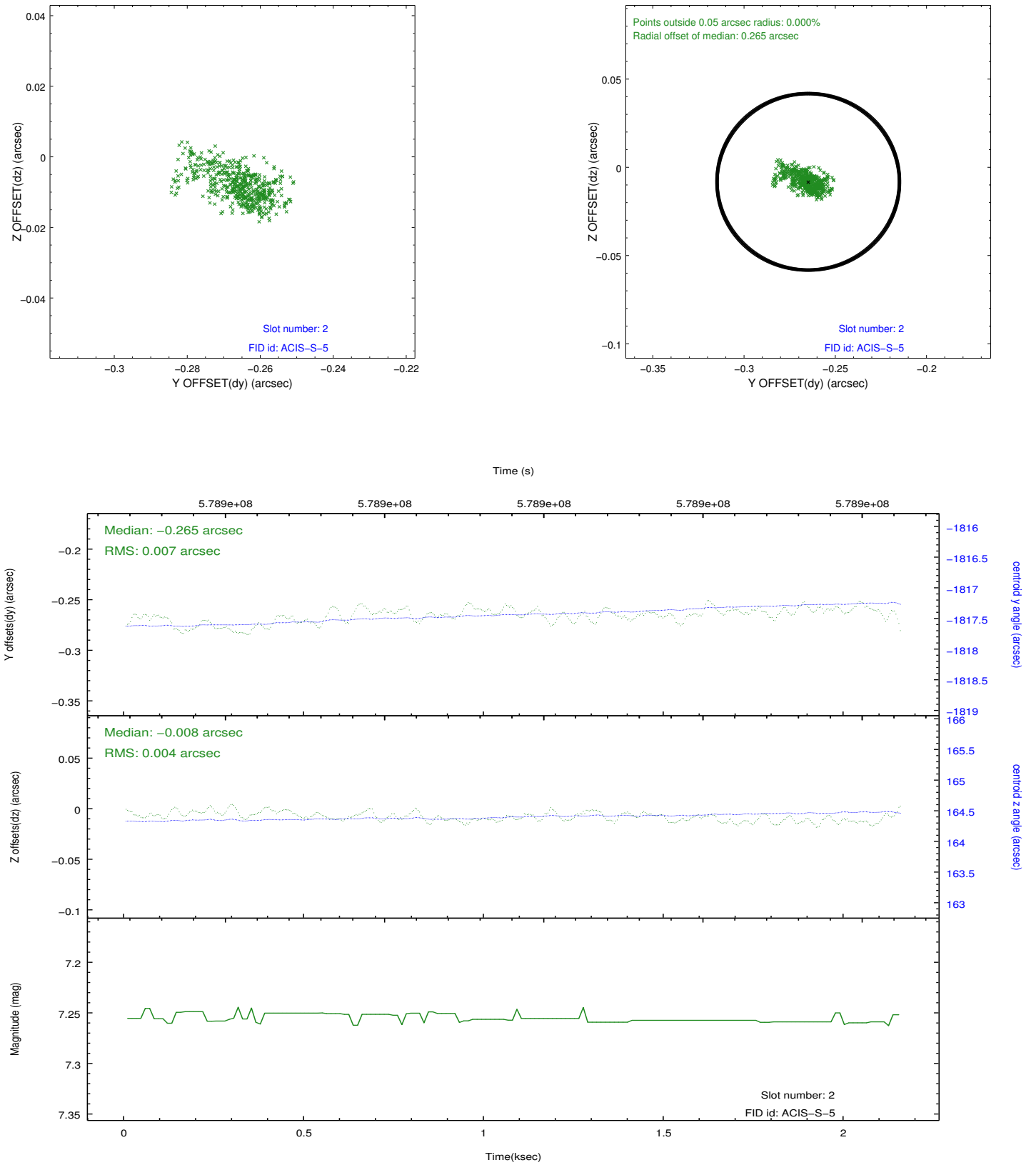
2.5.1 Slot 0



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)	2016.05.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0274000157118

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.