

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 20781 - L2 Version 2
Chandra X-Ray Center

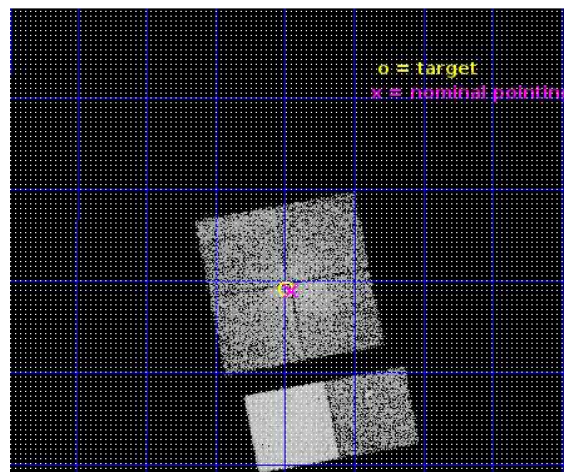
L2 Processing Date : Sep 14 2018

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1 Front

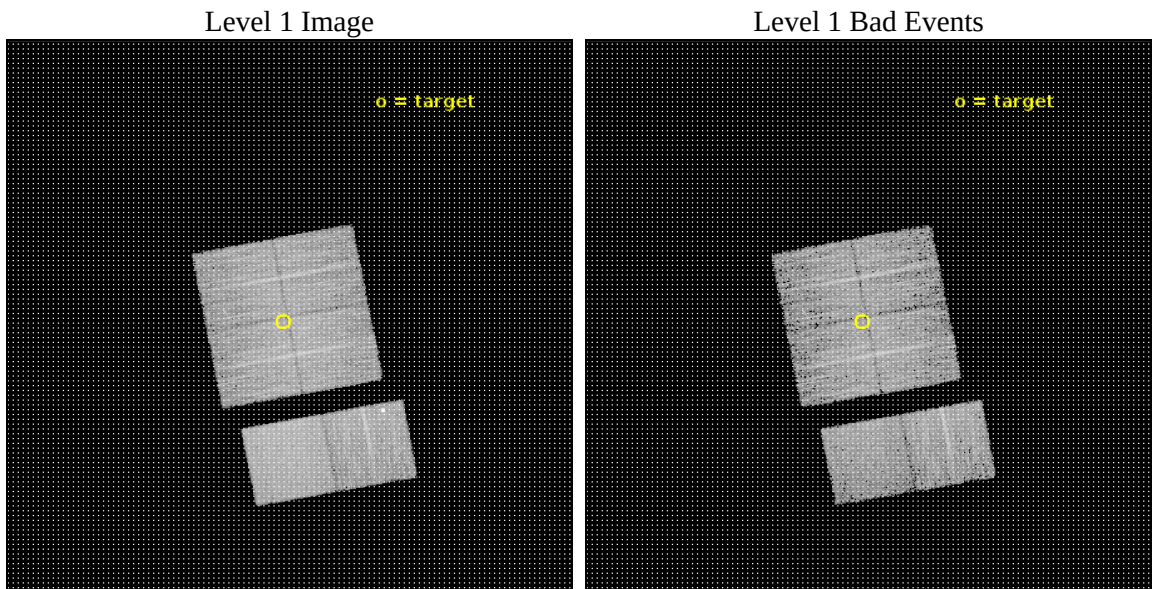
seq_num	801794	Sequence number
obs_id	20781	Observation id
title	A first characterization of galaxy clusters hosting diffuse low-frequency radio emission	Proposal title
observer	Ralph Kraft	Principal investigator
object	Abell 2593	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	351.124167	Observer's specified target RA [deg]
dec_targ	14.651833	Observer's specified target Dec [deg]
ra_nom	351.11320051555	Nominal RA [deg]
dec_nom	14.648729067307	Nominal Dec [deg]
roll_nom	169.21128366938	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6947.2001035213	Sum of GTIs [s]
livetime	6859.2304727089	Livetime [s]
ontime0	6947.2001035213	Sum of GTIs [s]
ontime1	6937.4772621393	Sum of GTIs [s]
ontime2	6947.2001035213	Sum of GTIs [s]
ontime3	6947.2001035213	Sum of GTIs [s]
ontime6	6947.2001035213	Sum of GTIs [s]
ontime7	6947.2001035213	Sum of GTIs [s]
l2events	59817	Number of level 2 events



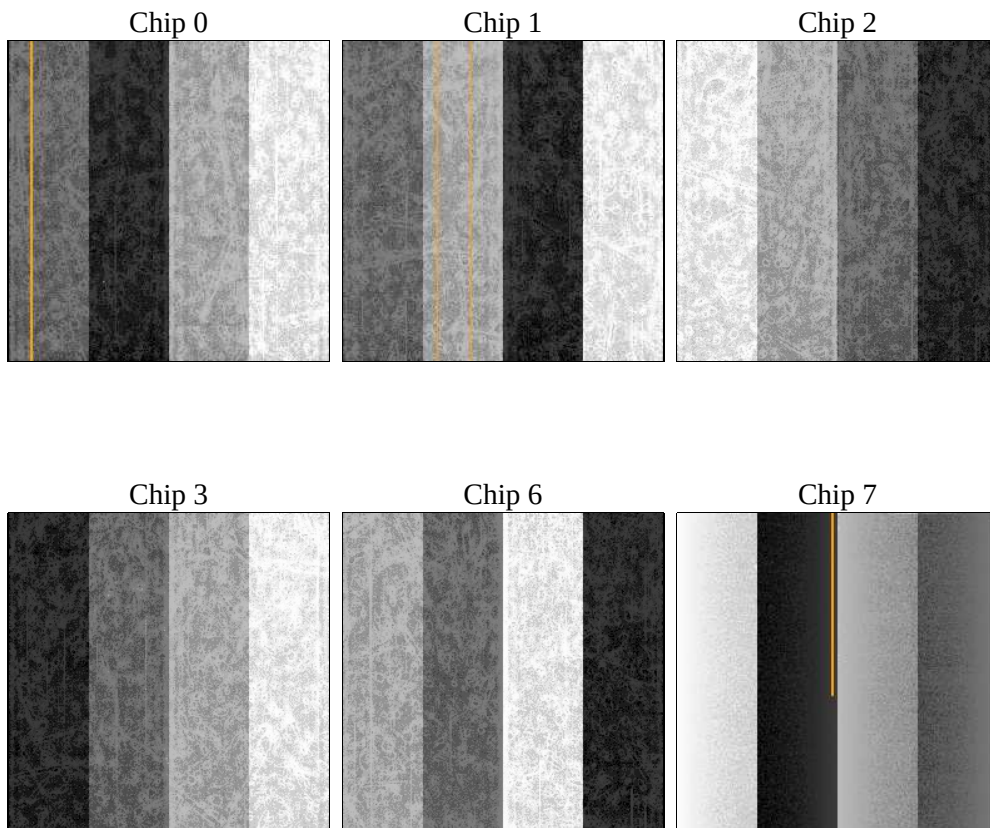
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	6947.2001035213	Sum of GTIs [s]
caldbver	4.8.0	 	ontime0	6947.2001035213	Sum of GTIs [s]
date	2018-09-14T14:38:32	Date and time of file creation	ontime1	6937.4772621393	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	6947.2001035213	Sum of GTIs [s]
			ontime3	6947.2001035213	Sum of GTIs [s]
			ontime6	6947.2001035213	Sum of GTIs [s]
			ontime7	6947.2001035213	Sum of GTIs [s]
			l1events	324648	Number of level 1 events

2.1.4 Events

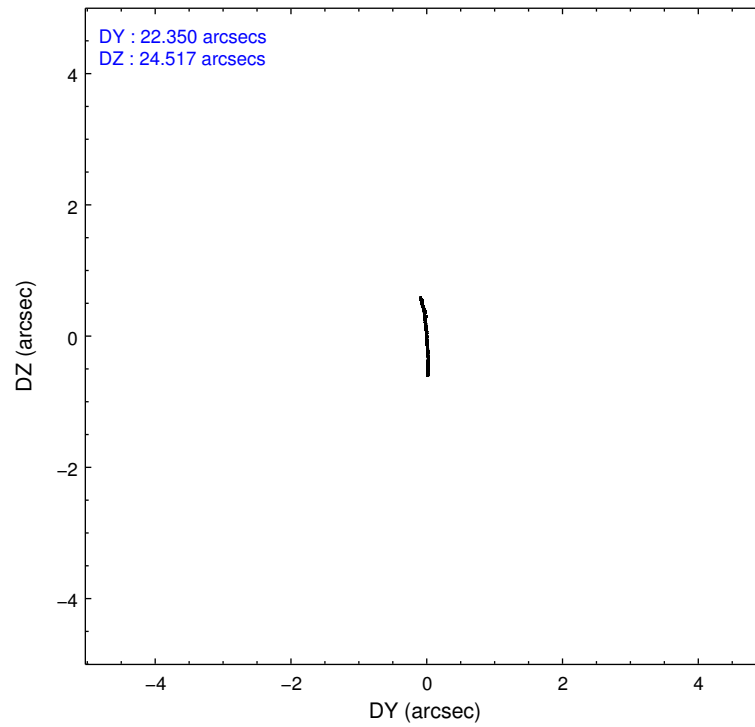
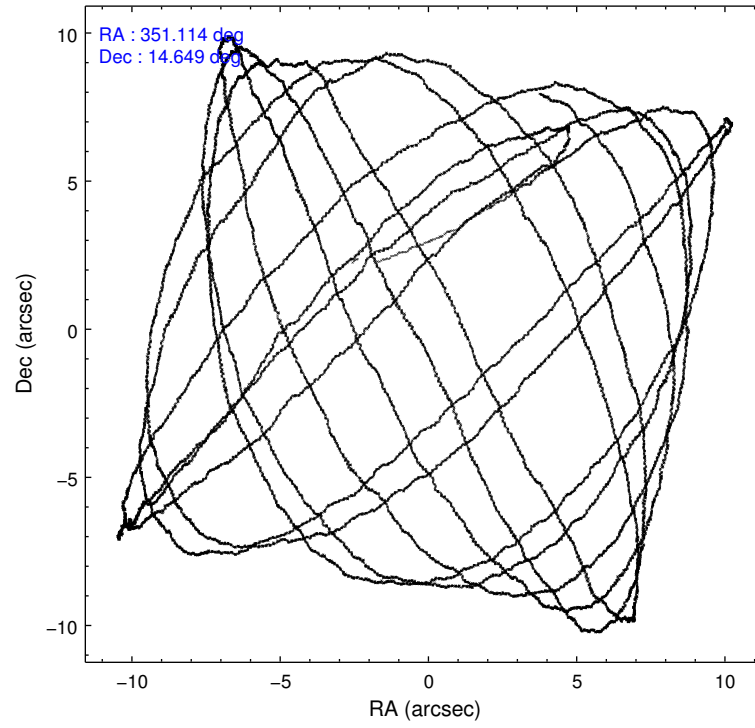
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	49072	48221	54638	51337	54104	67276	grade 0 events	3121	2869	4170	3351	2126	2571
rejected events	41870	40896	46190	44177	46198	37855		6%	5%	7%	6%	3%	3%
rejected %	85%	84%	84%	86%	85%	56%	grade 1 events	31	27	56	30	37	105
								0%	0%	0%	0%	0%	0%
							grade 2 events	1602	1718	1797	1372	3116	6385
								3%	3%	3%	2%	5%	9%
							grade 3 events	646	661	615	642	644	2389
								1%	1%	1%	1%	1%	3%
							grade 4 events	599	658	674	633	594	2264
								1%	1%	1%	1%	1%	3%
							grade 5 events	2206	2275	2120	2439	2591	6609
								4%	4%	3%	4%	4%	9%
							grade 6 events	1239	1423	1196	1163	1430	15827
								2%	2%	2%	2%	2%	23%
							grade 7 events	39628	38590	44010	41707	43566	31126
								80%	80%	80%	81%	80%	46%

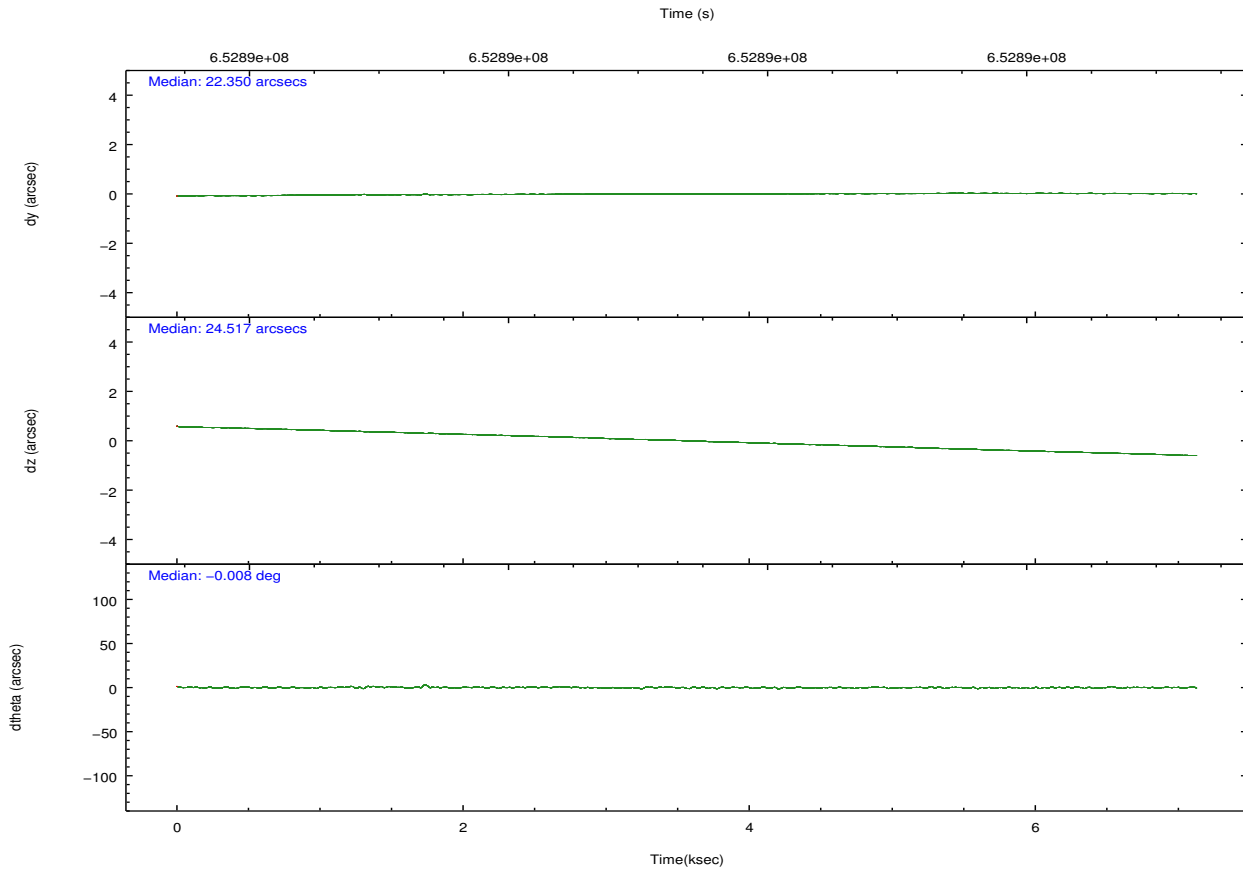
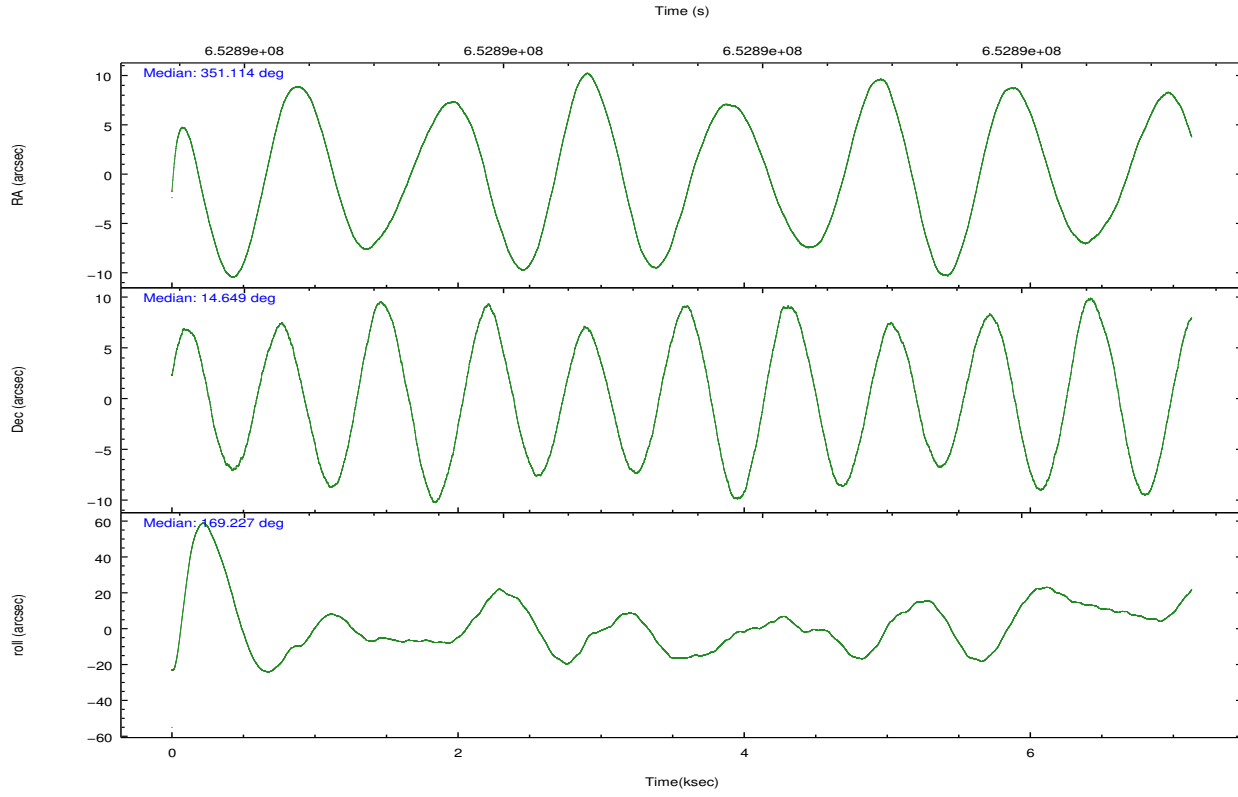
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-012367	ACIS-012367
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	351.140111	351.113200515548
[deg] Pointing Dec	14.657916	14.64872906730718
[deg] Pointing Roll	168.995962	169.2112836693781
[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)	652885931.184000	652884652.2737401
Observation start date	2018-09-09T13:11:02	2018-09-09T12:50:52
[s] Observation end time (MET)	652892931.184000	652893658.43678
Observation end date	2018-09-09T15:07:42	2018-09-09T15:20:58
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	O1	Y
CCD S4 on	N	N
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	3.2

2.3 Aspect



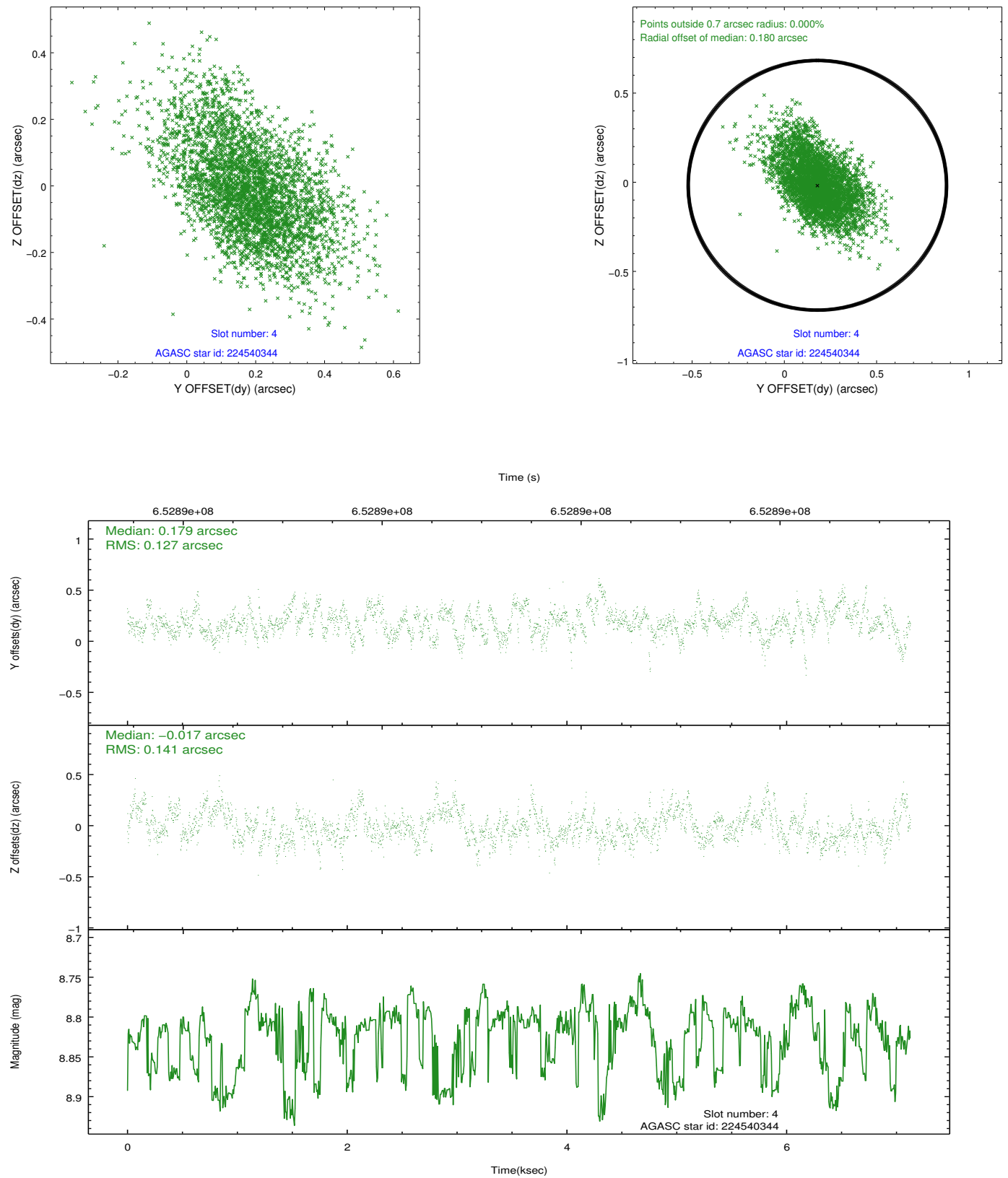


Slot Statistics

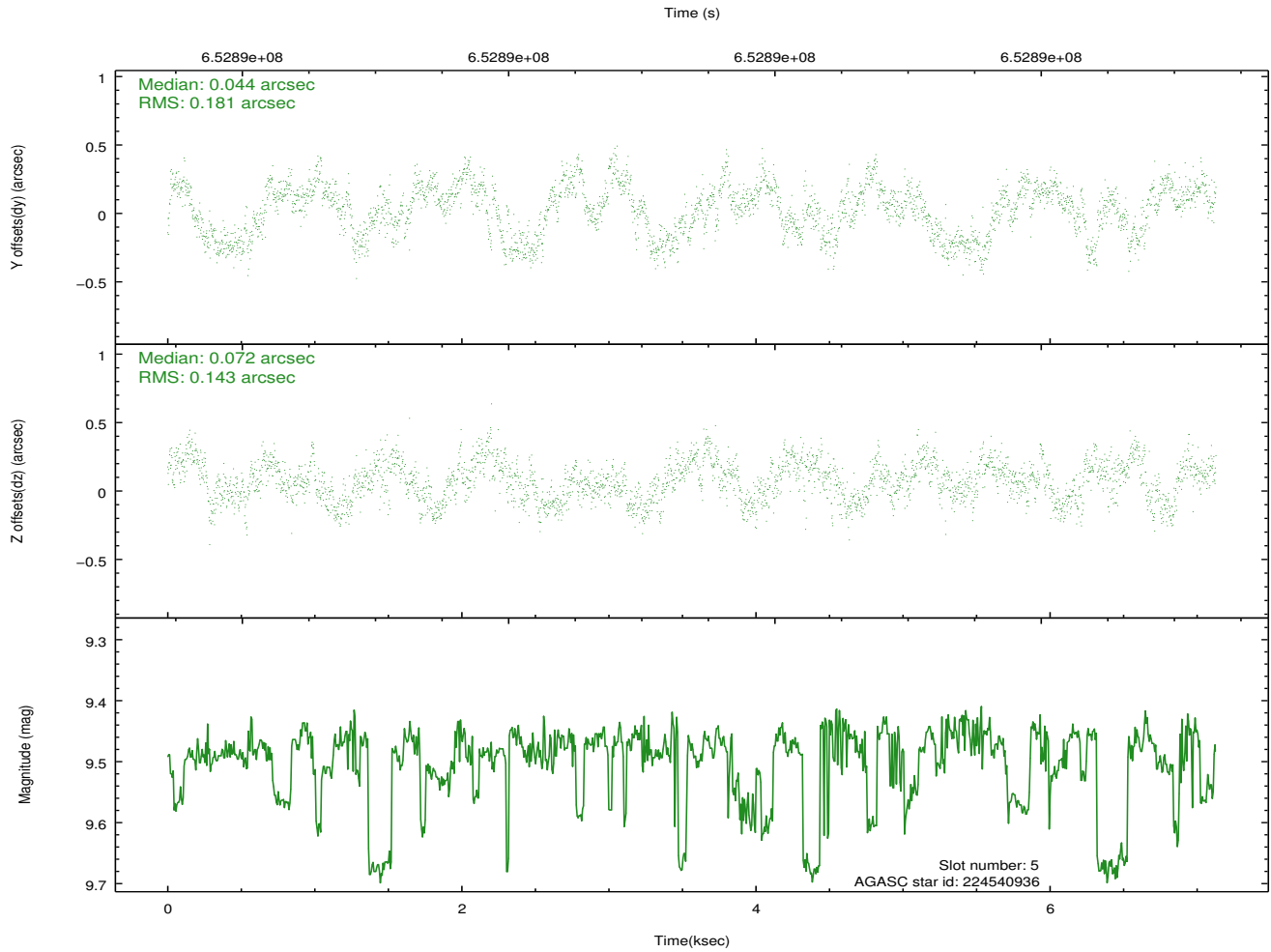
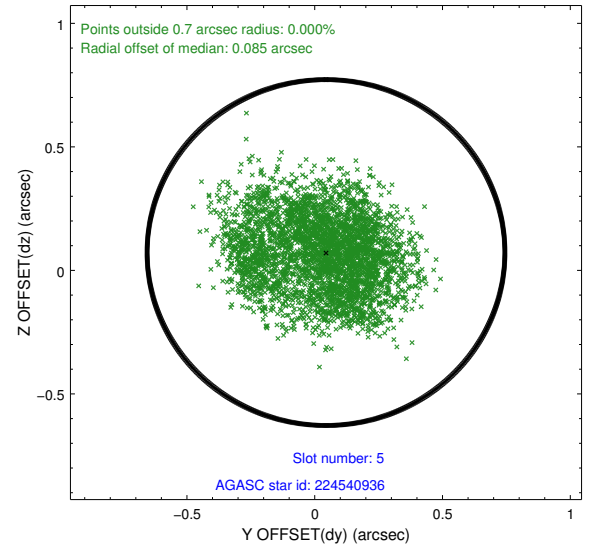
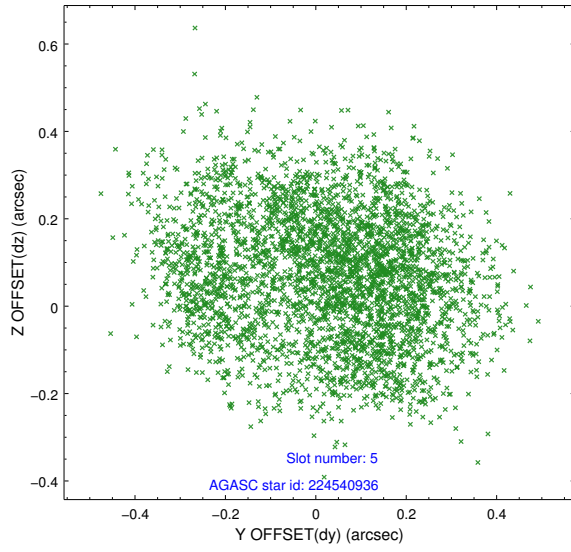
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.11	1739	1.000	-0.098	-0.012	0.018	0.032	0.000000	0.000000	916.91	-848
1	FID		ACIS-I-4	7.06	1738	1.000	0.508	0.079	0.014	0.026	0.000000	0.000000	2137.80	1051
2	FID		ACIS-I-5	7.07	1739	1.000	-0.508	0.004	0.011	0.019	0.000000	0.000000	-1830.67	1049
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	224540344	8.82	3475	1.000	0.179	-0.017	0.197	0.342	350.696533	15.371780	2003.55	-2228
5	GUIDE	used	224540936	9.49	3466	1.000	0.044	0.072	0.257	0.374	350.717312	15.322505	1899.21	-2069
6	GUIDE	used	224541336	9.45	3475	1.000	-0.149	-0.146	0.251	0.387	350.828885	15.274461	1486.08	-1973
7	GUIDE	used	224541040	9.56	3432	1.000	-0.058	0.083	0.231	0.379	351.033442	15.347136	837.06	-2364

2.4 Star Slots

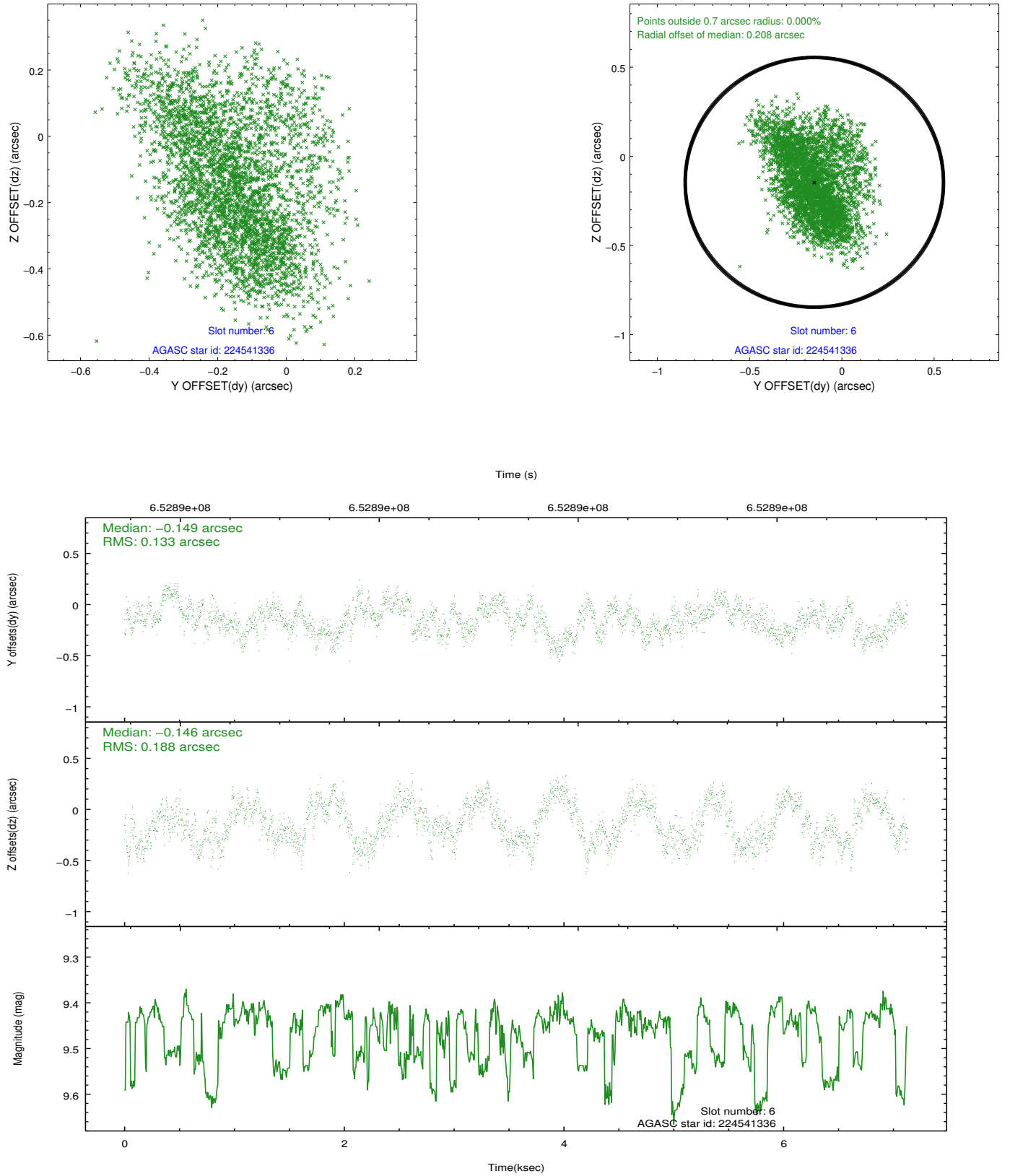
2.4.1 Slot 4



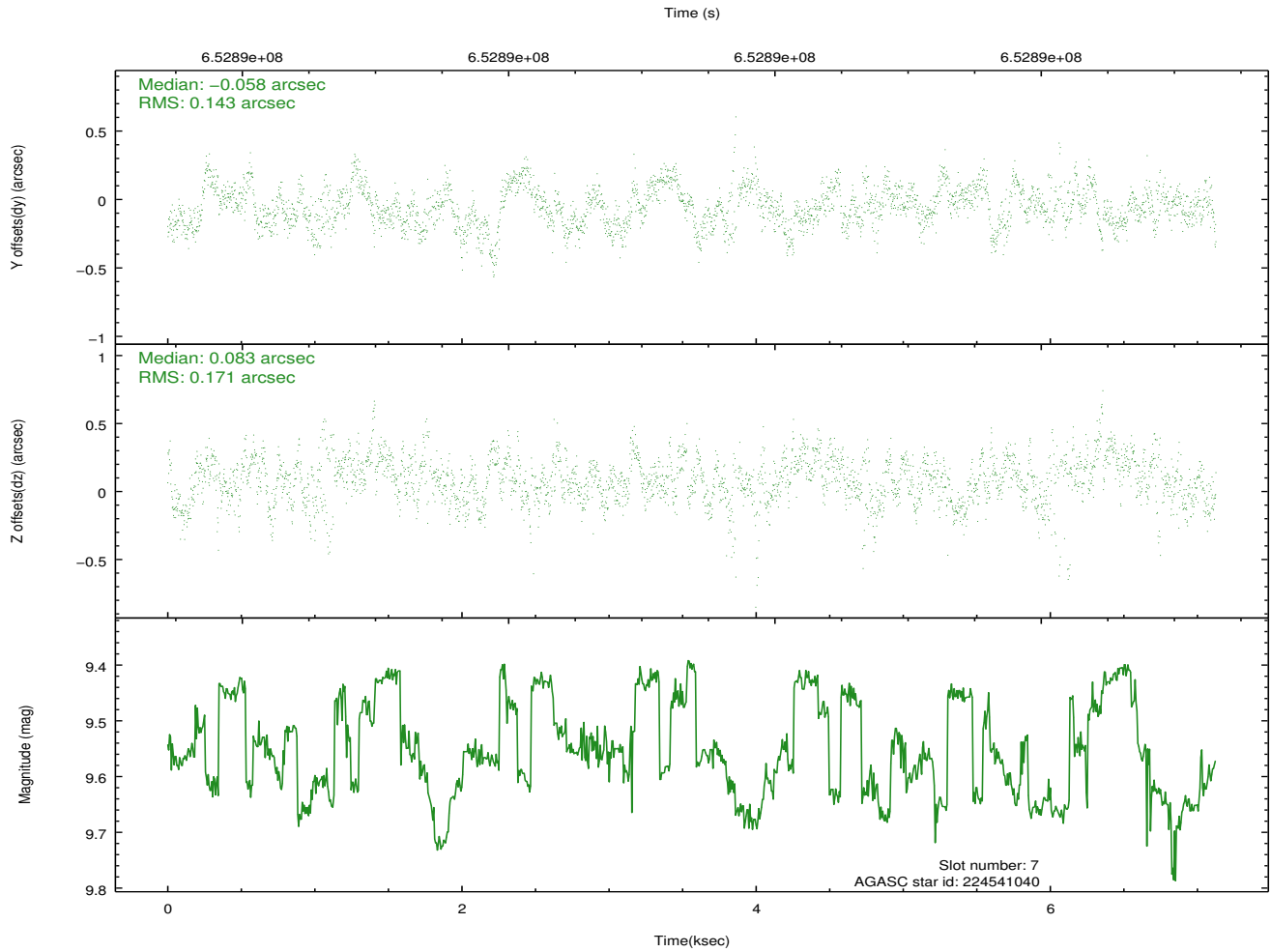
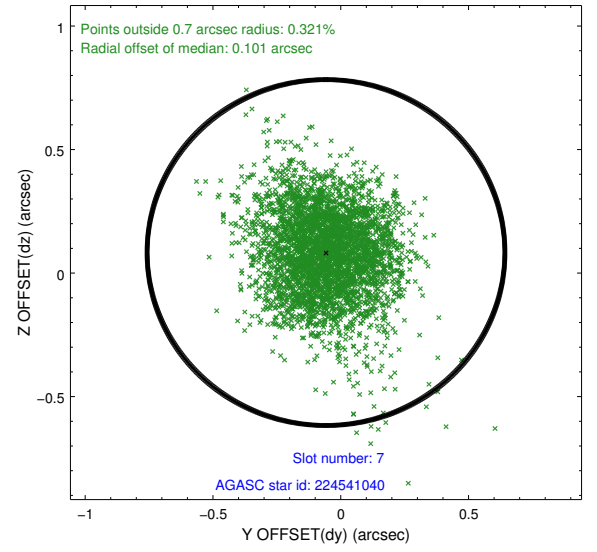
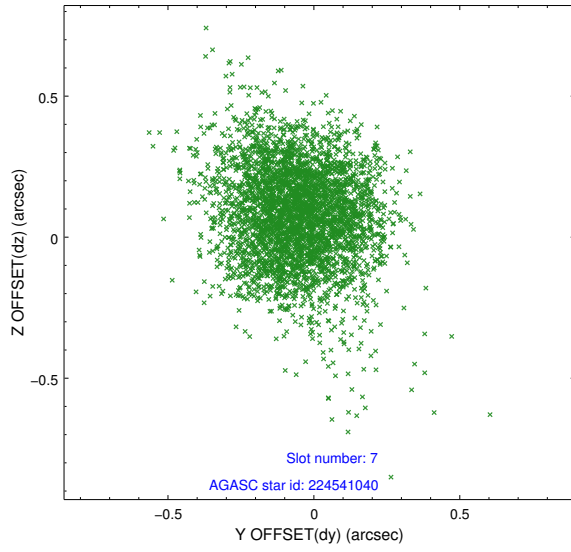
2.4.2 Slot 5



2.4.3 Slot 6

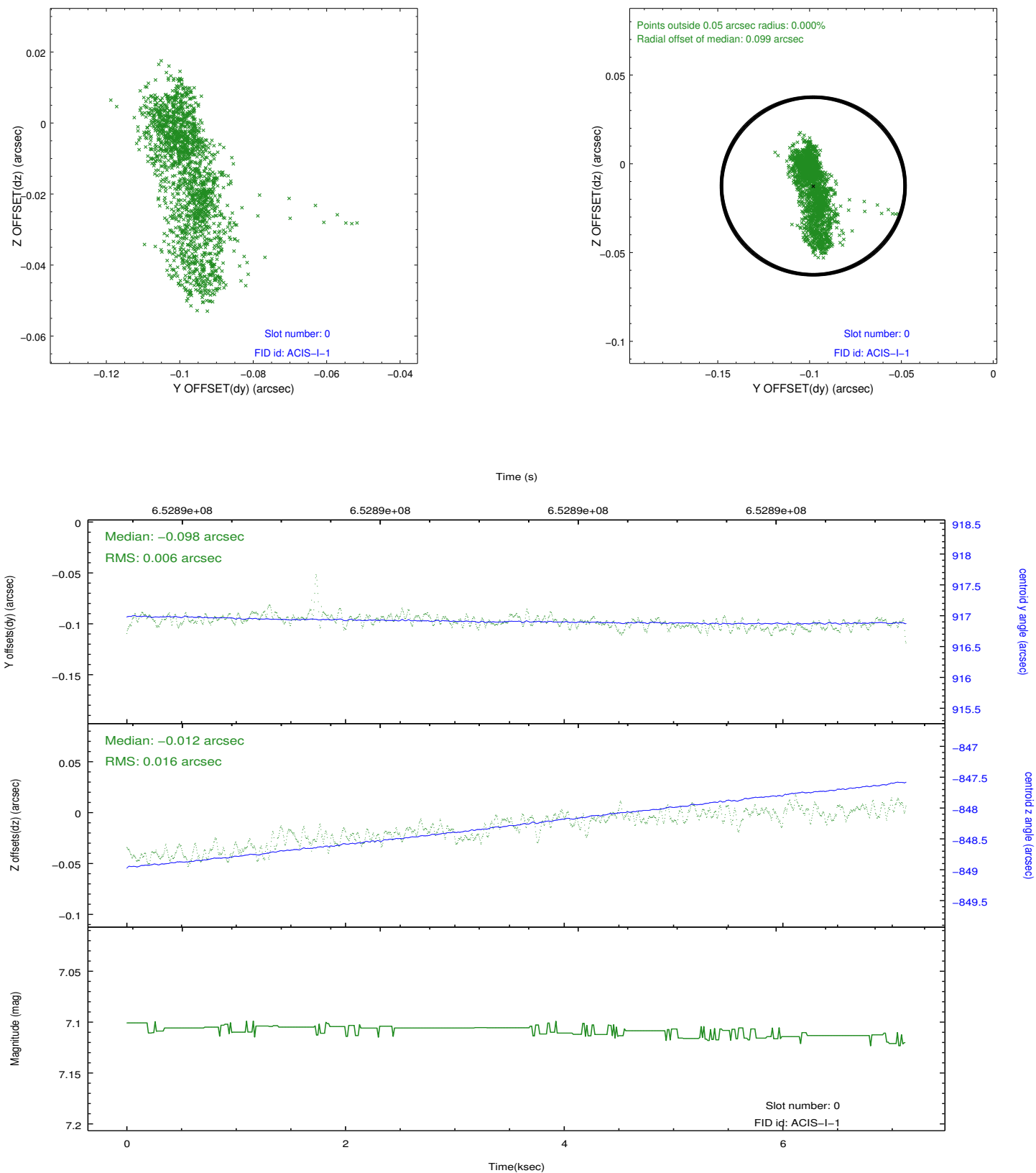


2.4.4 Slot 7

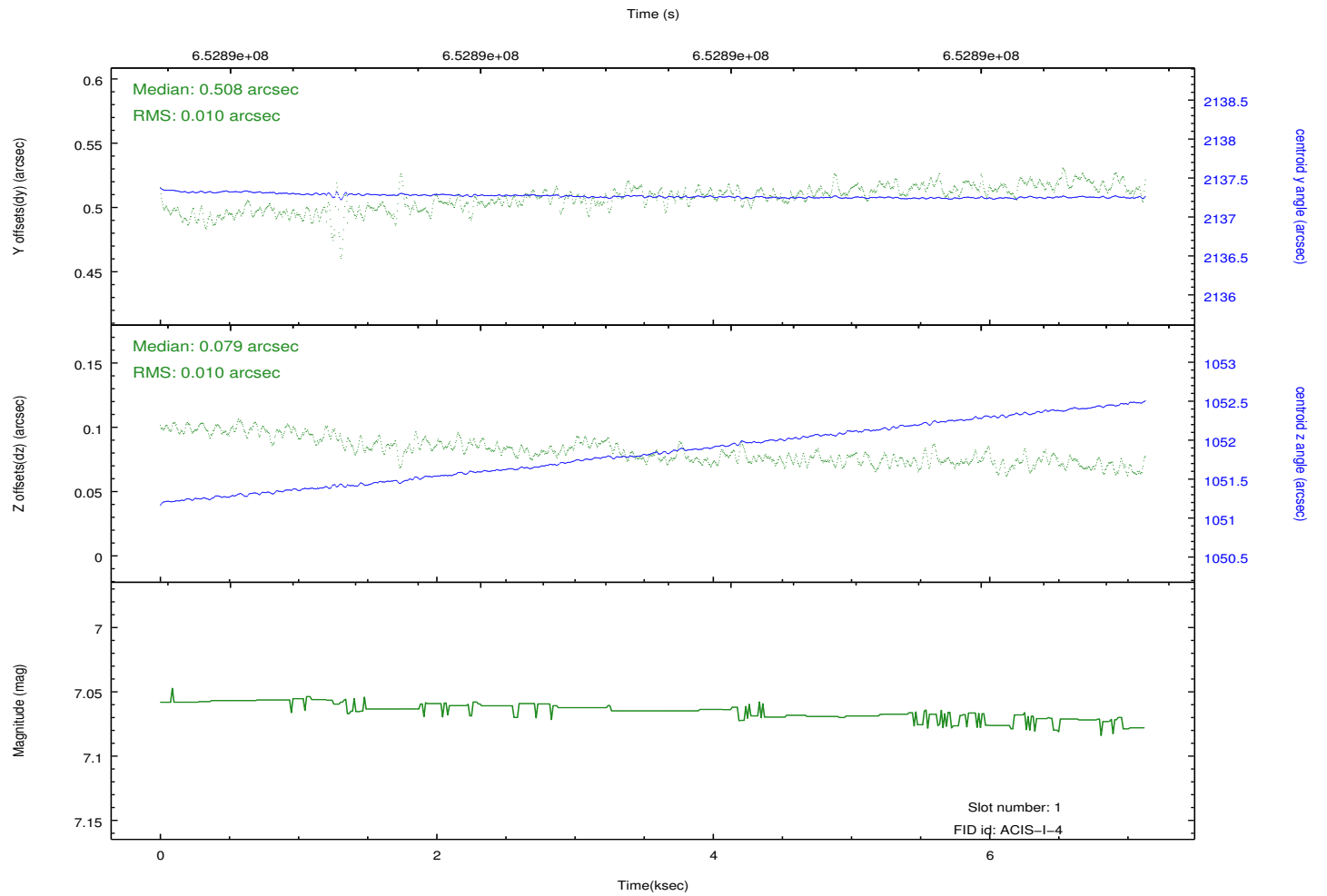
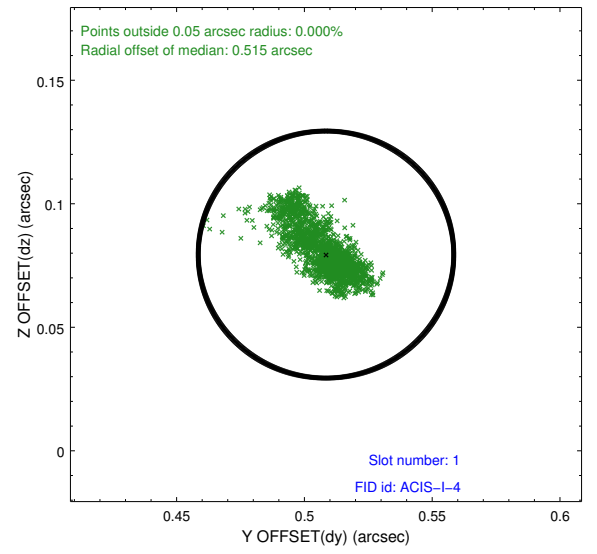
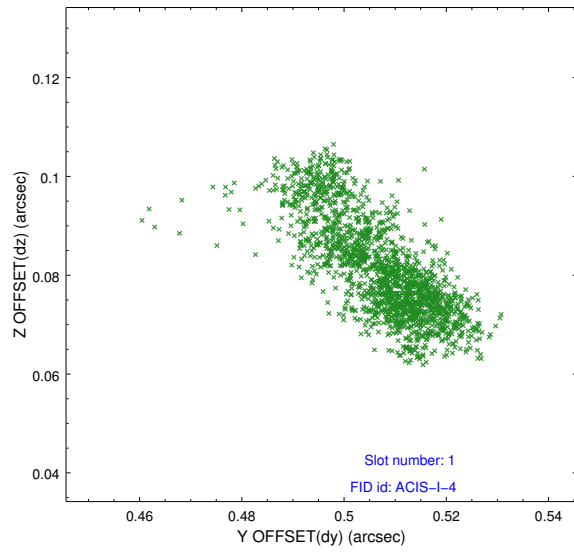


2.5 FID Slots

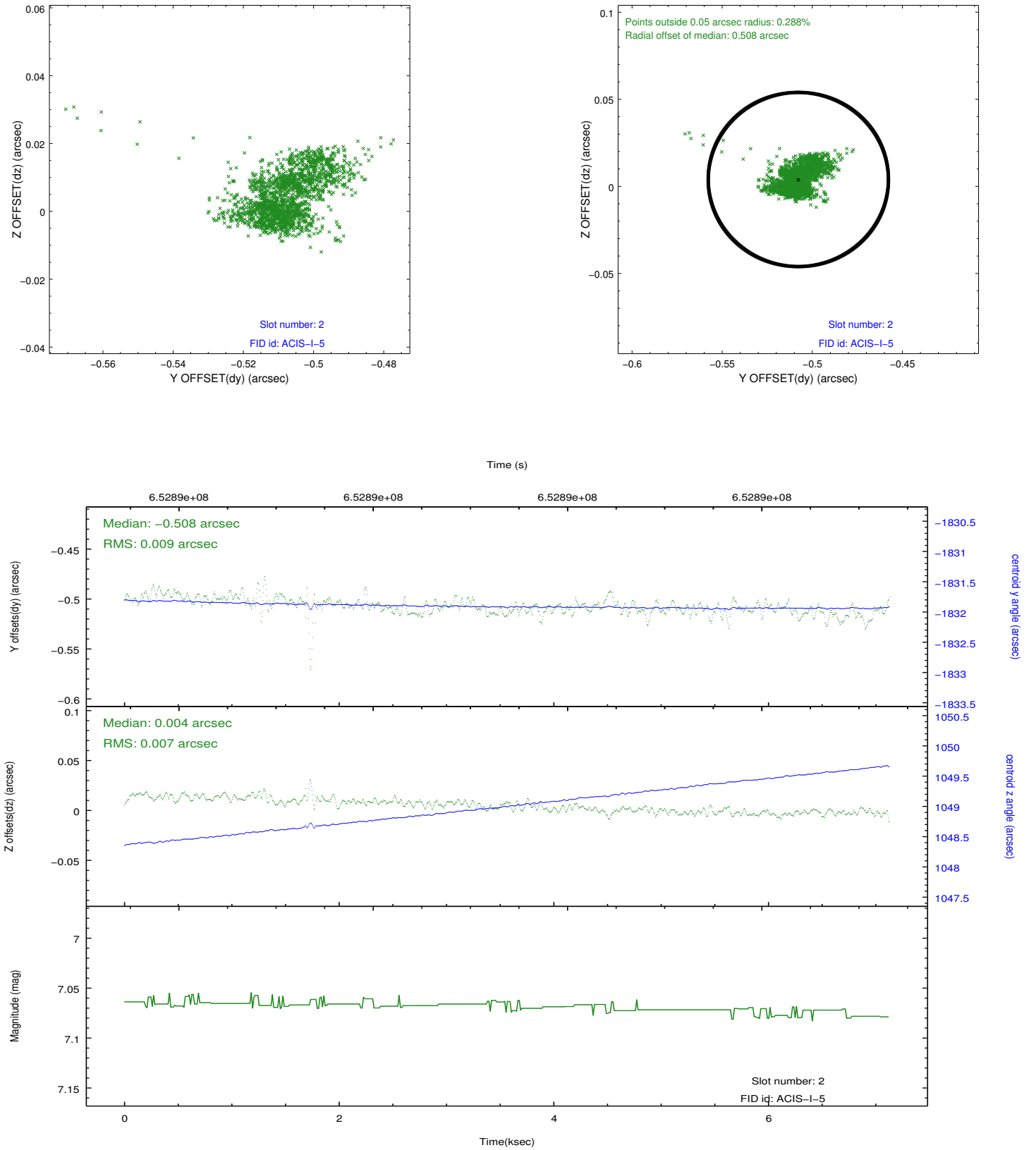
2.5.1 Slot 0



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)	2018.09.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.9472001035213

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.