

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16990 - L2 Version 1
Chandra X-Ray Center

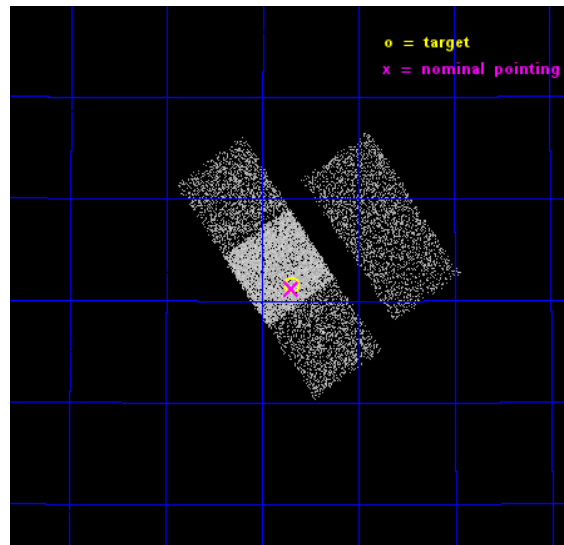
L2 Processing Date : May 24 2015

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1 Front

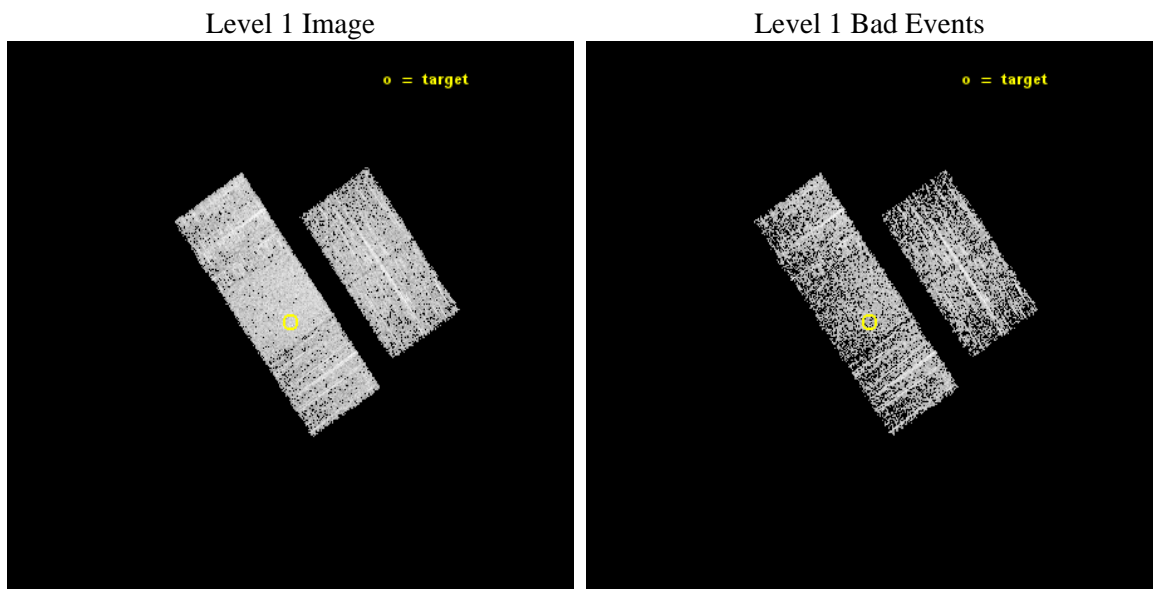
seq_num	601183	Sequence number
obs_id	16990	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC3949	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	178.42375	Observer's specified target RA [deg]
dec_targ	47.858778	Observer's specified target Dec [deg]
ra_nom	178.42450466469	Nominal RA [deg]
dec_nom	47.853390416817	Nominal Dec [deg]
roll_nom	235.59877466733	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3434.800026536	Sum of GTIs [s]
livetime	3389.9218355263	Livetime [s]
ontime2	3434.800026536	Sum of GTIs [s]
ontime3	3434.800026536	Sum of GTIs [s]
ontime6	3434.800026536	Sum of GTIs [s]
ontime7	3434.800026536	Sum of GTIs [s]
ontime8	3434.800026536	Sum of GTIs [s]
l2events	16516	Number of level 2 events



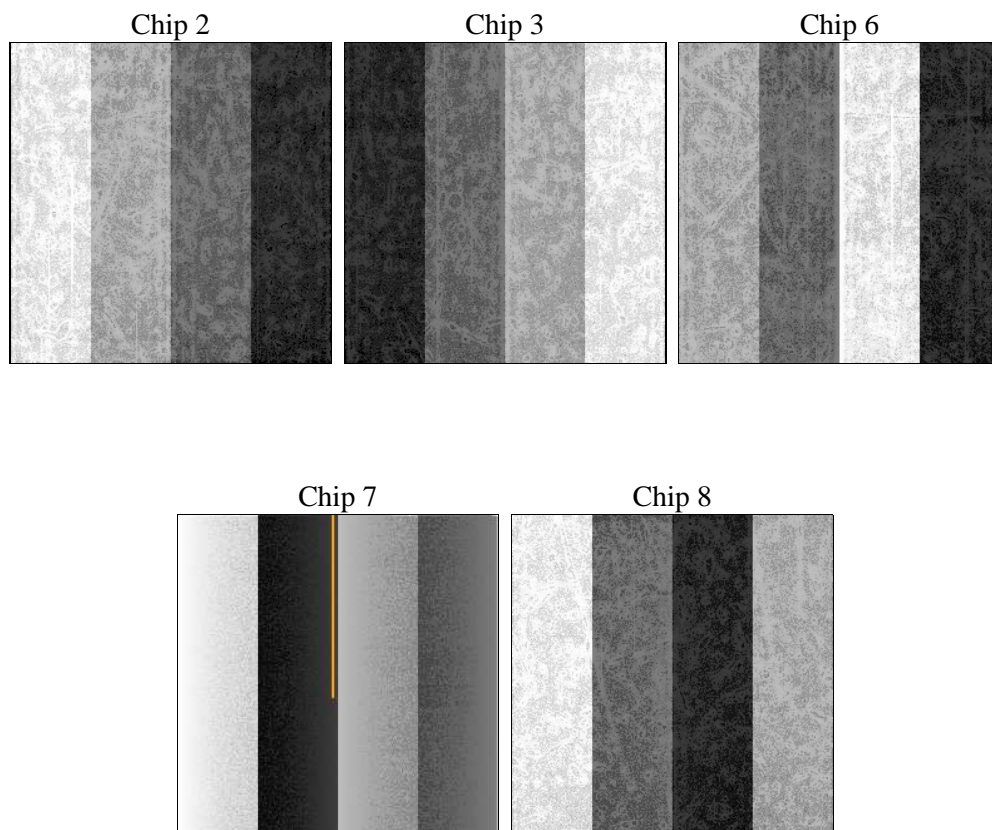
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	3400.450000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	3434.800026536	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	3434.800026536	Sum of GTIs [s]
date	2015-05-24T04:18:25	Date and time of file creation	ontime3	3434.800026536	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	3434.800026536	Sum of GTIs [s]
			ontime7	3434.800026536	Sum of GTIs [s]
			ontime8	3434.800026536	Sum of GTIs [s]
			l1events	94453	Number of level 1 events

2.1.4 Events

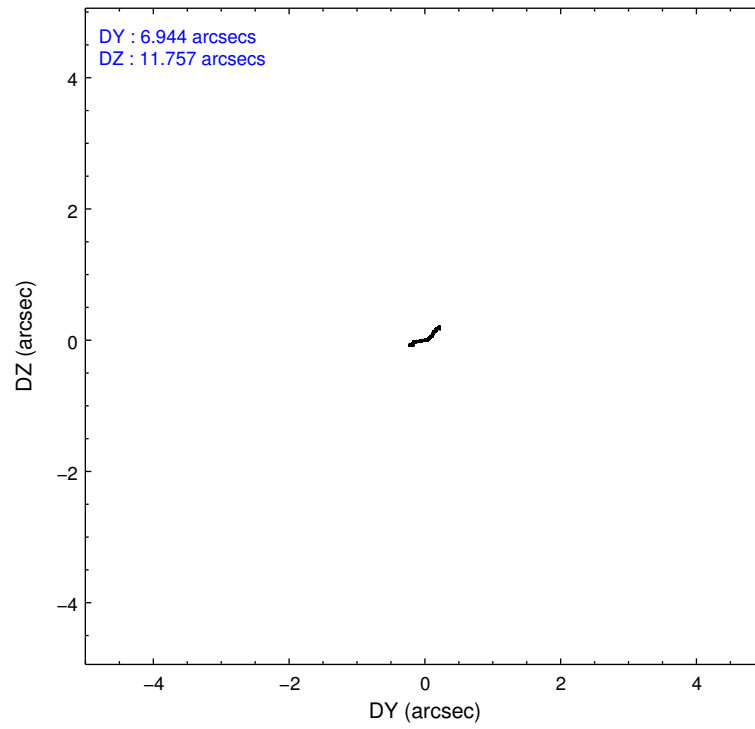
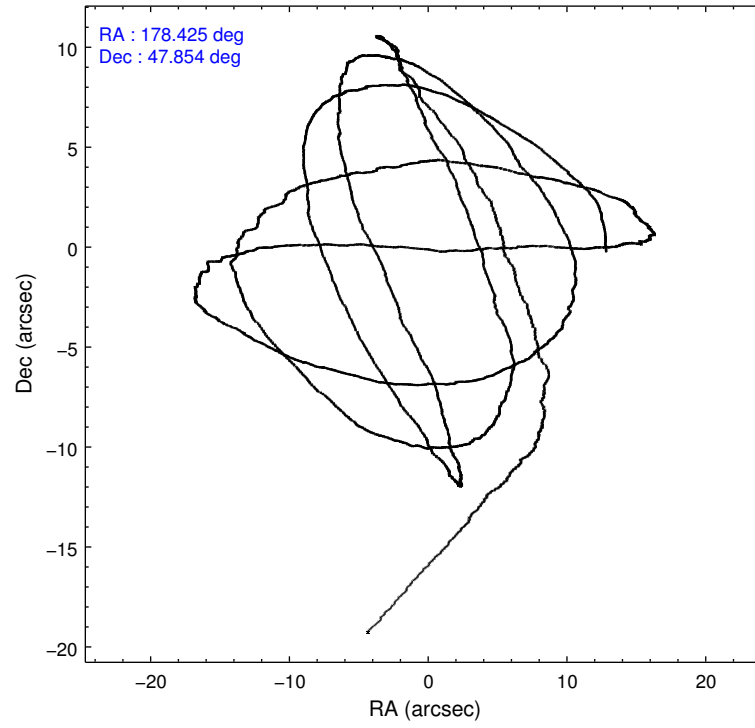
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	16527	16124	17013	22804	21985
rejected events	14758	14260	14886	13079	16487
rejected %	89%	88%	87%	57%	74%

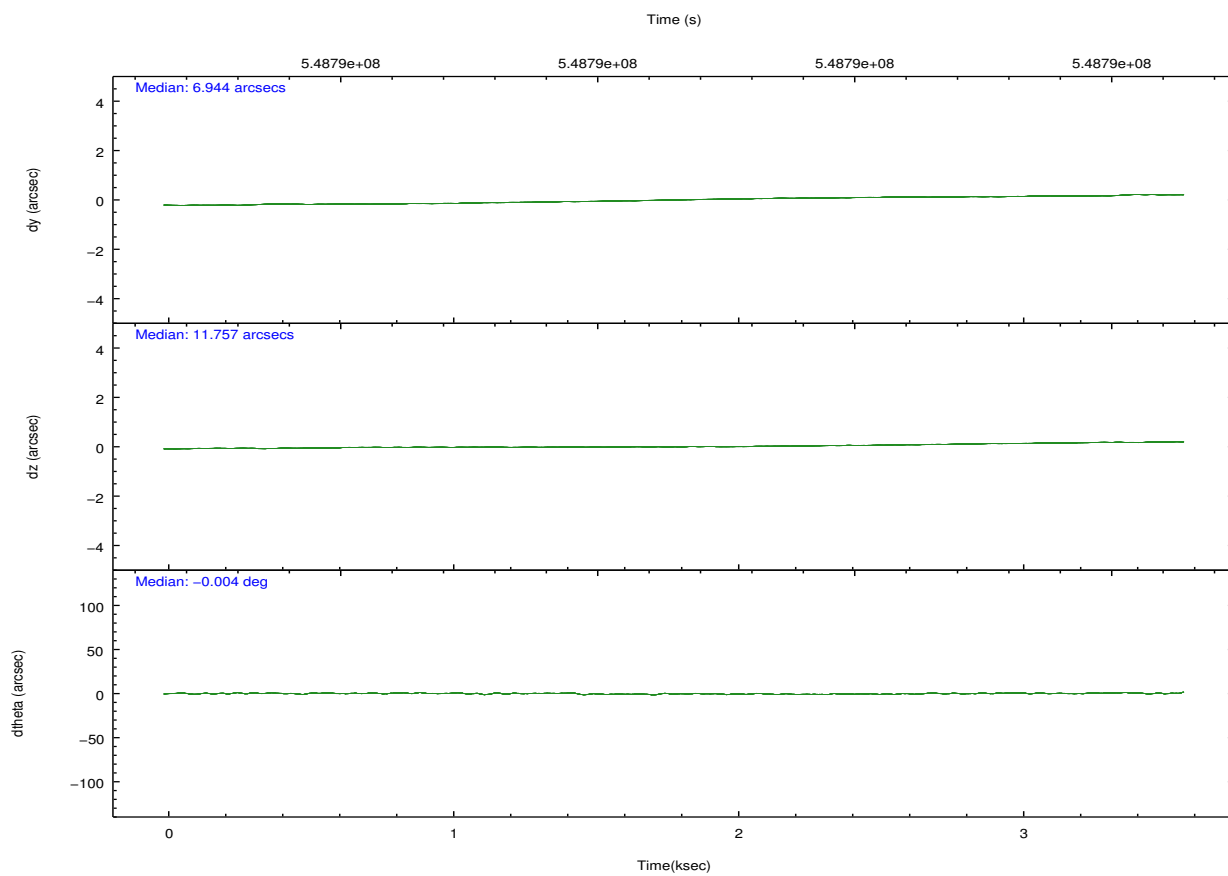
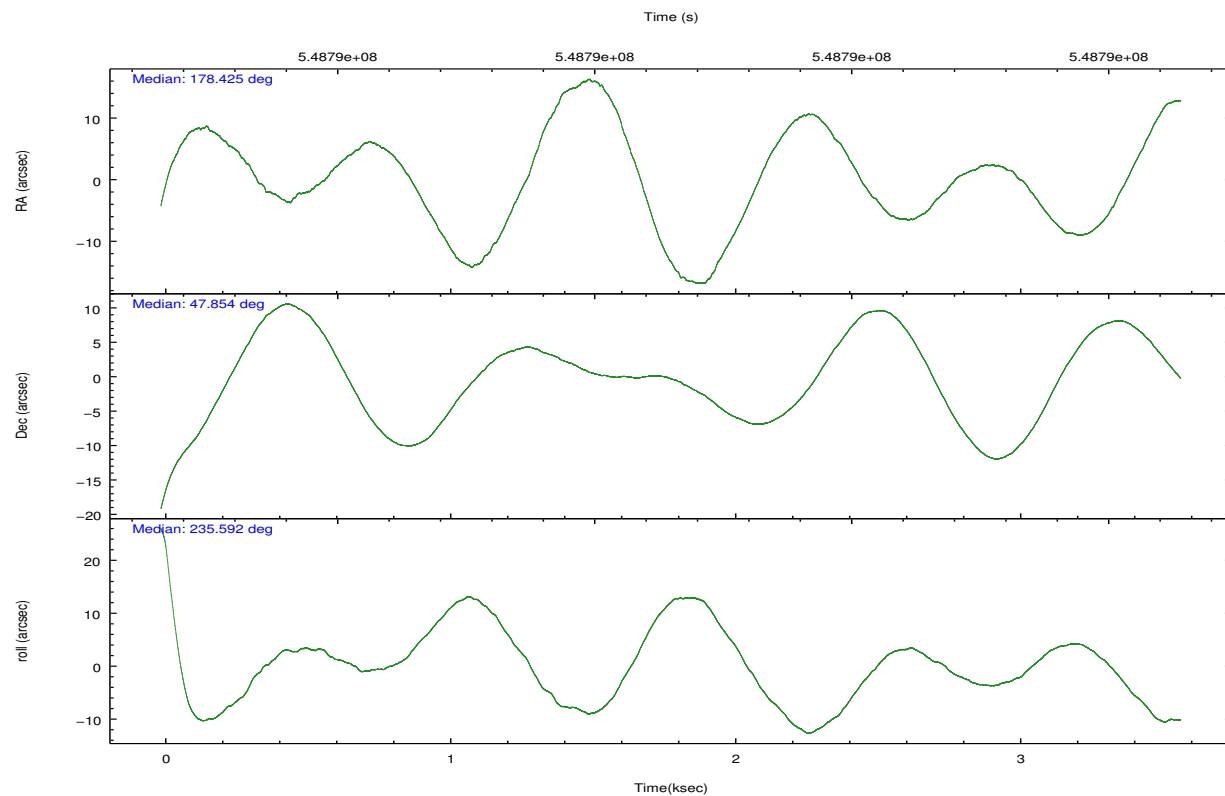
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	630	666	682	781	1637
	3%	4%	4%	3%	7%
grade 1 events	11	8	6	27	22
	0%	0%	0%	0%	0%
grade 2 events	433	397	532	2034	1262
	2%	2%	3%	8%	5%
grade 3 events	191	212	215	759	580
	1%	1%	1%	3%	2%
grade 4 events	173	200	173	783	539
	1%	1%	1%	3%	2%
grade 5 events	686	841	826	2270	1212
	4%	5%	4%	9%	5%
grade 6 events	342	391	526	5376	1483
	2%	2%	3%	23%	6%
grade 7 events	14061	13409	14053	10774	15250
	85%	83%	82%	47%	69%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	178.427000	178.4245046646869	CCD I2 on	O2	Y
[deg] Pointing Dec	47.880750	47.8533904168172	CCD I3 on	O1	Y
[deg] Pointing Roll	235.440199	235.5987746673255	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	548789664.184000	548788120.39183	CCD S5 on	N	N
Observation start date	2015-05-23T17:33:17	2015-05-23T17:08:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	548793065.184000	548793291.00462	On-chip summing requested	N	N
Observation end date	2015-05-23T18:29:58	2015-05-23T18:34:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



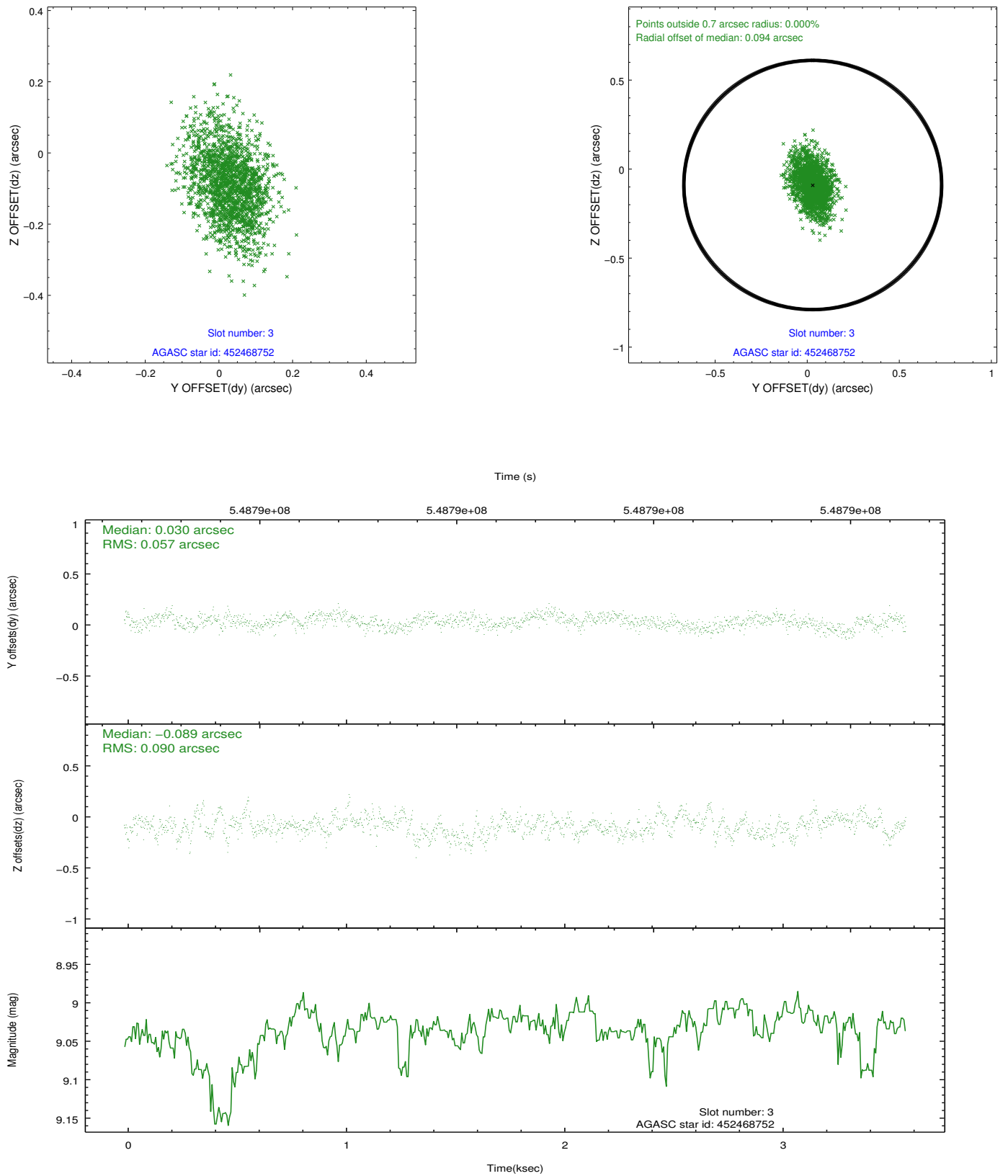


Slot Statistics

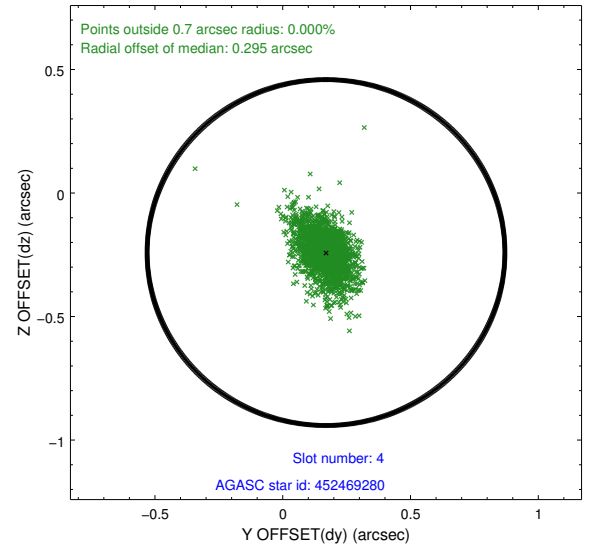
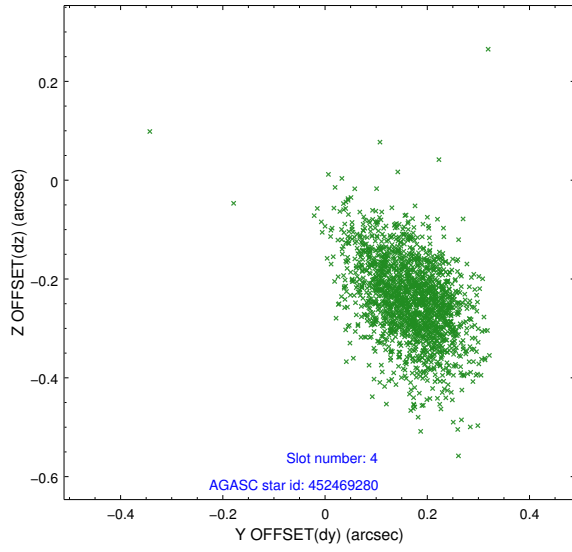
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	873	-0.077	-0.047	0.009	0.015	0.000000	0.000000	-759.76	-1733.13
1	FID		ACIS-S-4	7.19	873	0.214	0.050	0.006	0.012	0.000000	0.000000	2153.01	173.63
2	FID		ACIS-S-5	7.22	873	-0.169	0.006	0.008	0.015	0.000000	0.000000	-1810.43	169.26
3	GUIDE	used	452468752	9.03	1746	0.030	-0.089	0.109	0.192	178.498041	47.489261	1063.40	941.61
4	GUIDE	used	452469280	8.56	1747	0.169	-0.241	0.105	0.185	178.189789	47.546410	1320.22	208.25
5	GUIDE	used	452469744	8.76	1747	-0.079	0.092	0.110	0.193	179.257178	47.796250	-895.20	1822.22
6	GUIDE	used	452469808	8.13	1747	-0.239	0.208	0.100	0.181	179.371715	47.788624	-1035.12	2063.12
7	GUIDE	used	452472552	9.00	1745	0.125	0.027	0.118	0.247	178.062313	48.221427	-515.30	-1416.38

2.4 Star Slots

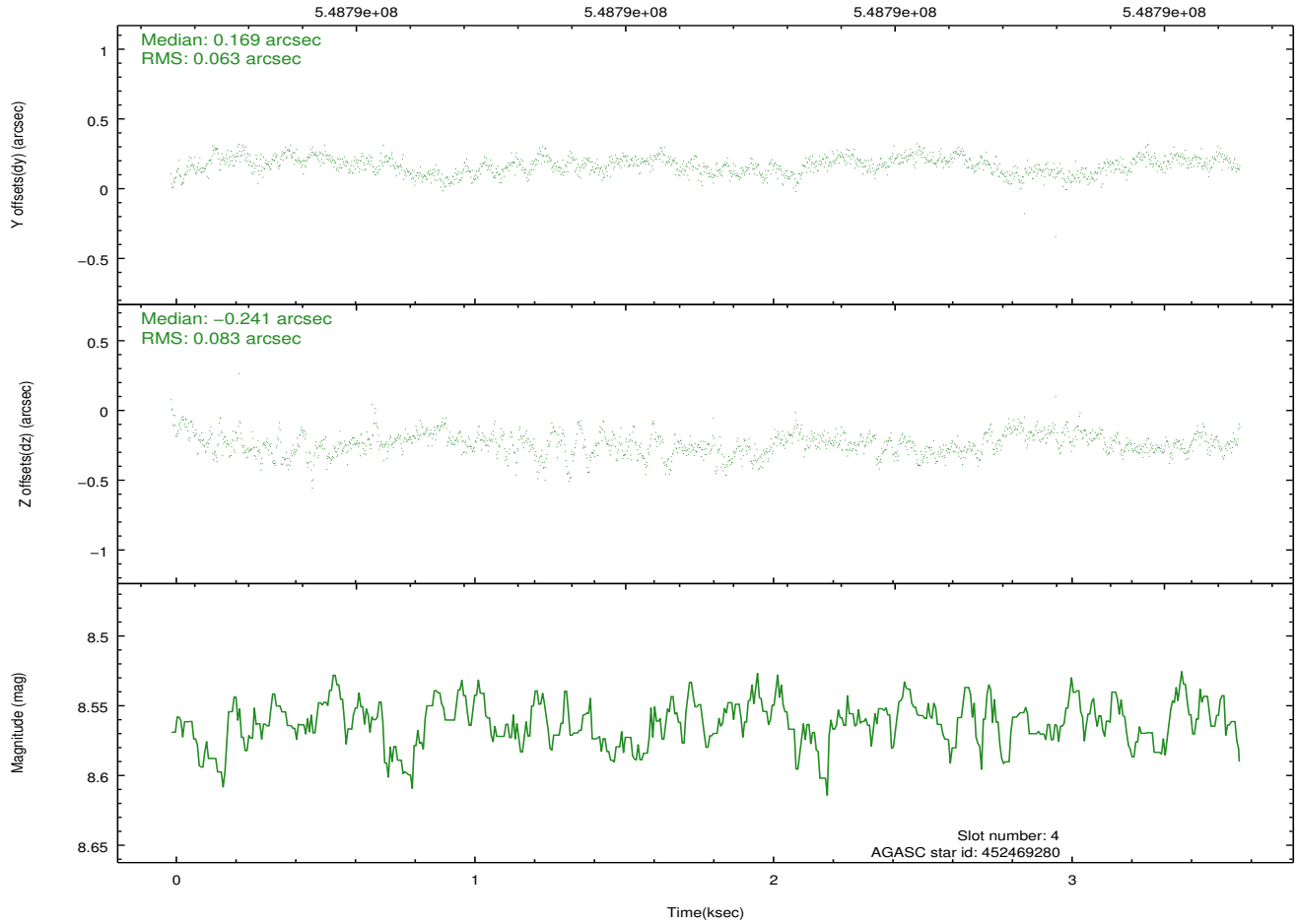
2.4.1 Slot 3



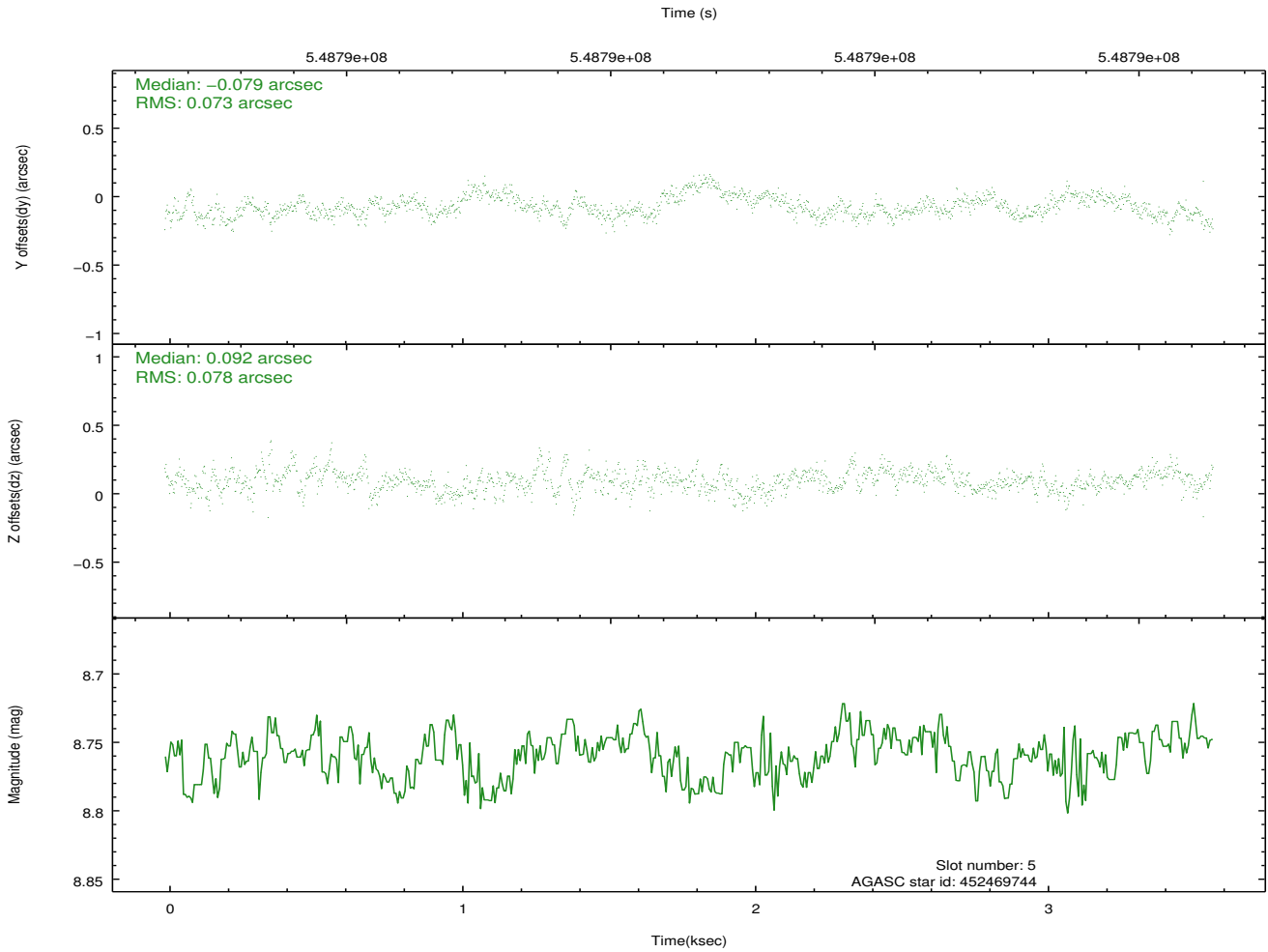
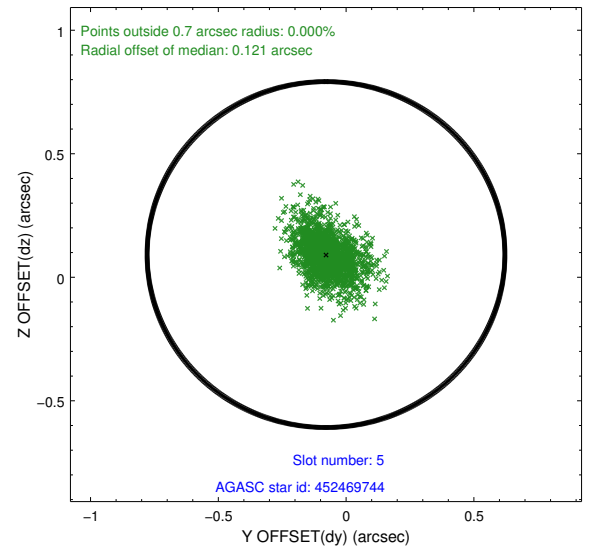
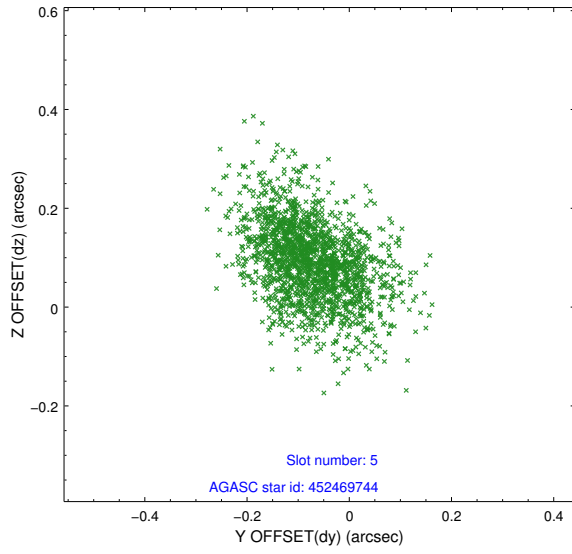
2.4.2 Slot 4



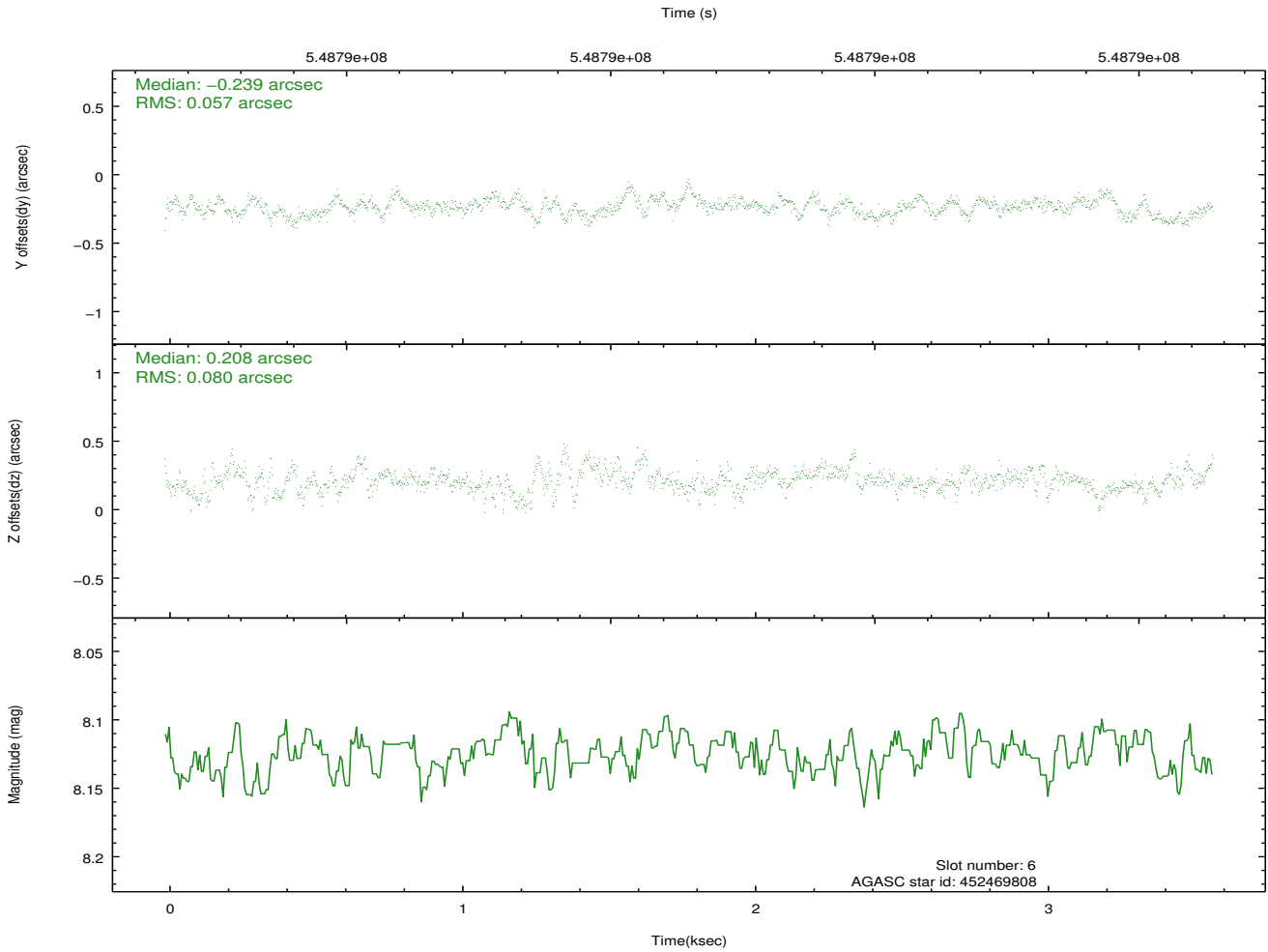
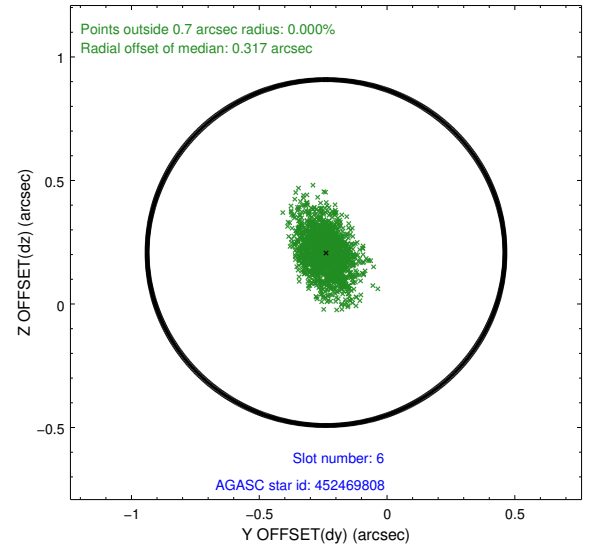
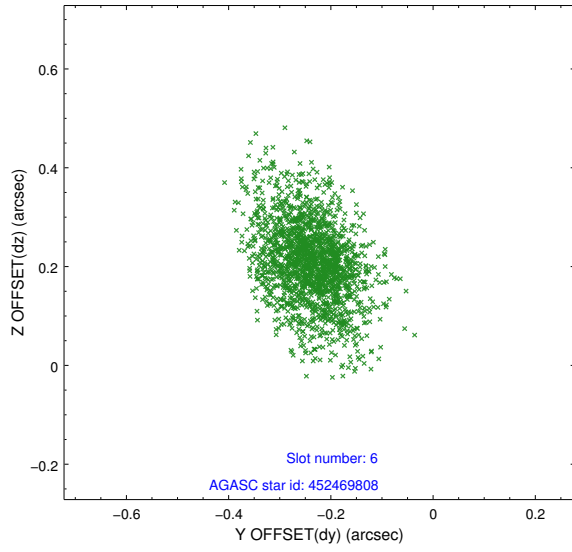
Time (s)



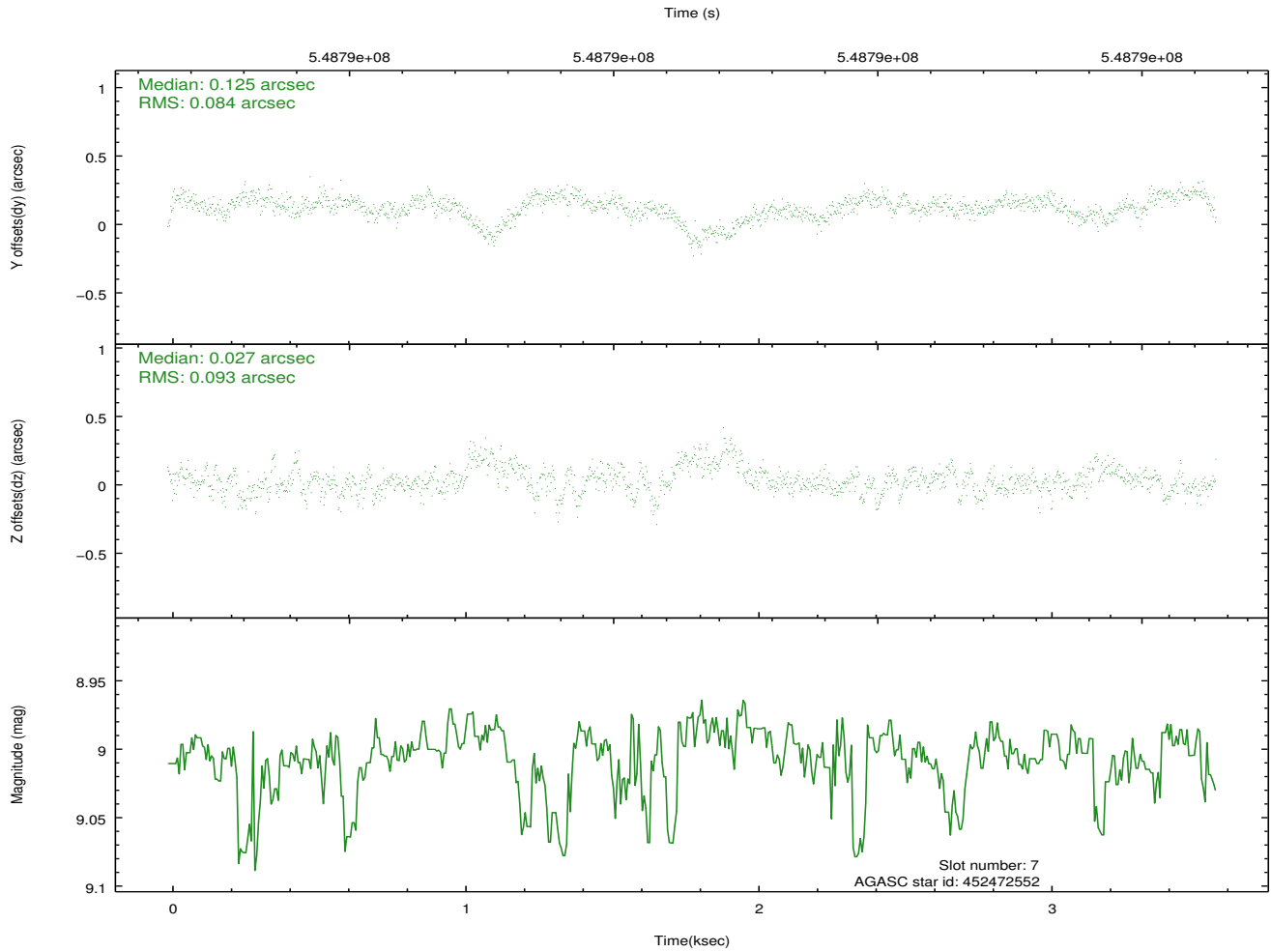
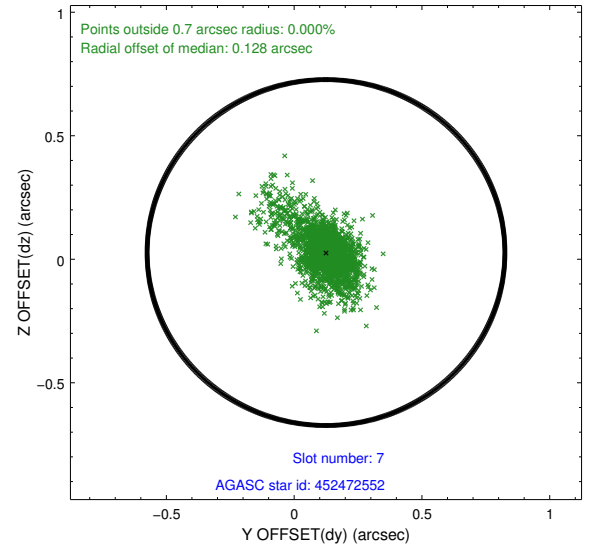
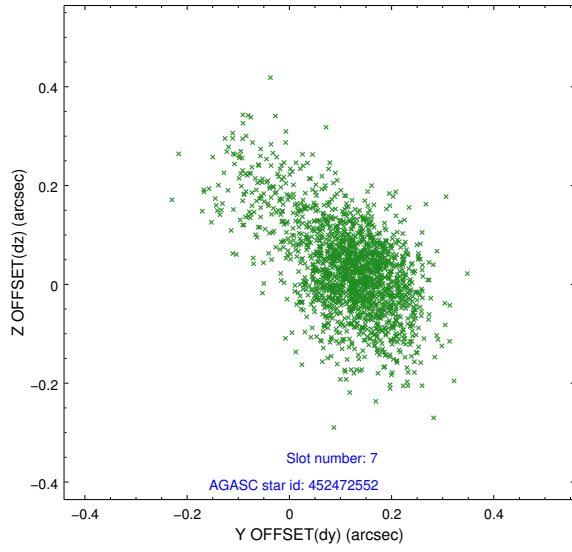
2.4.3 Slot 5



2.4.4 Slot 6

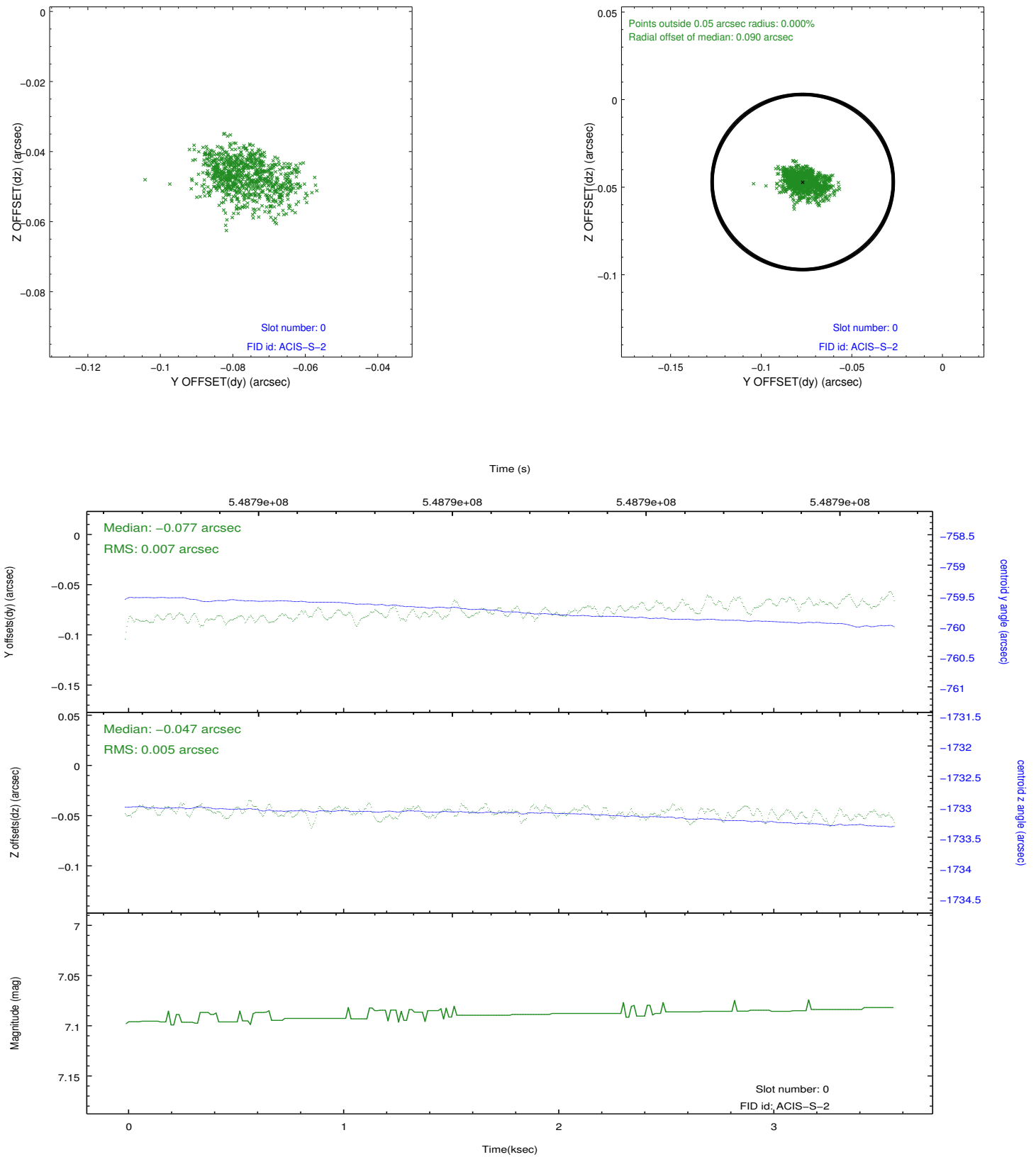


2.4.5 Slot 7

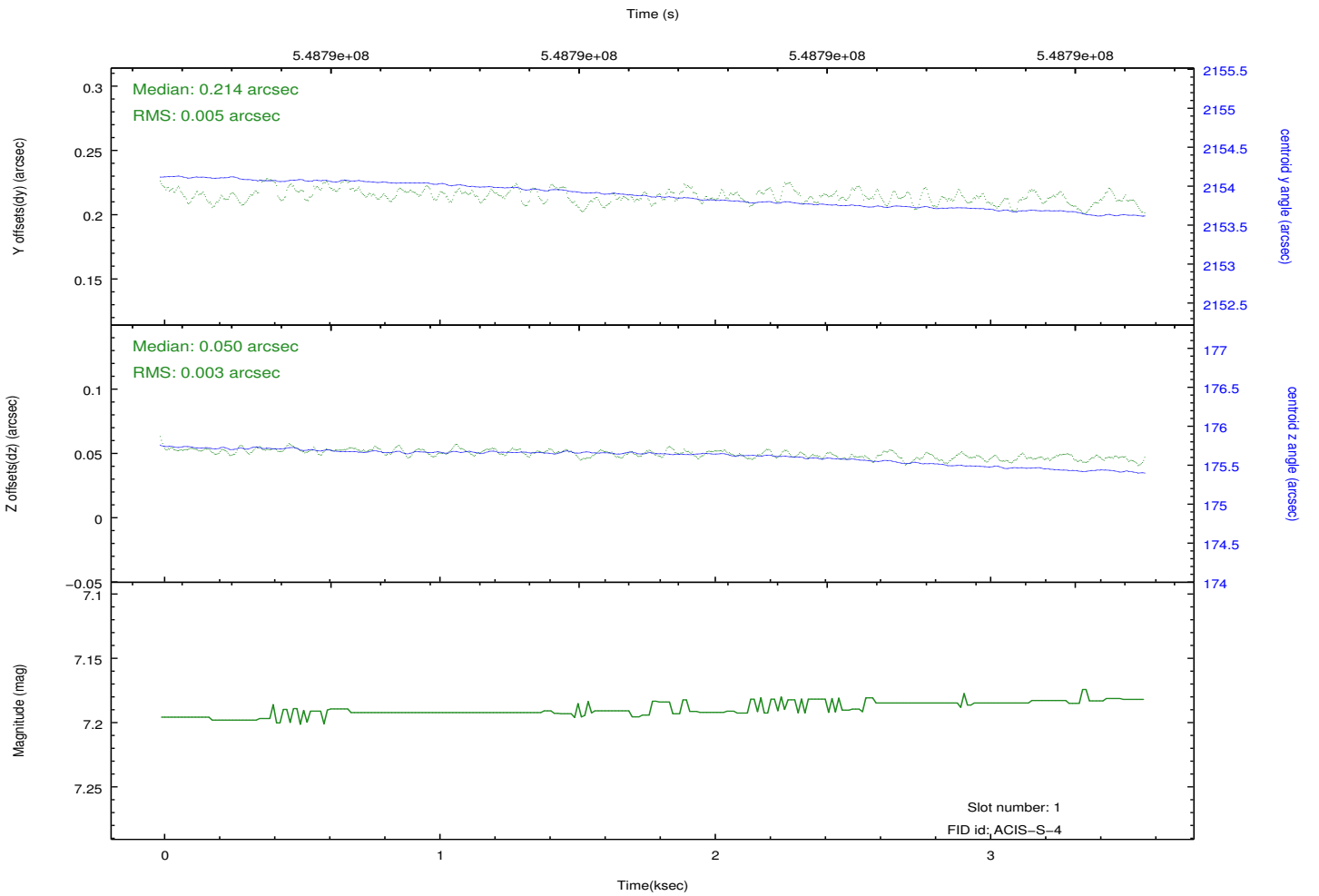
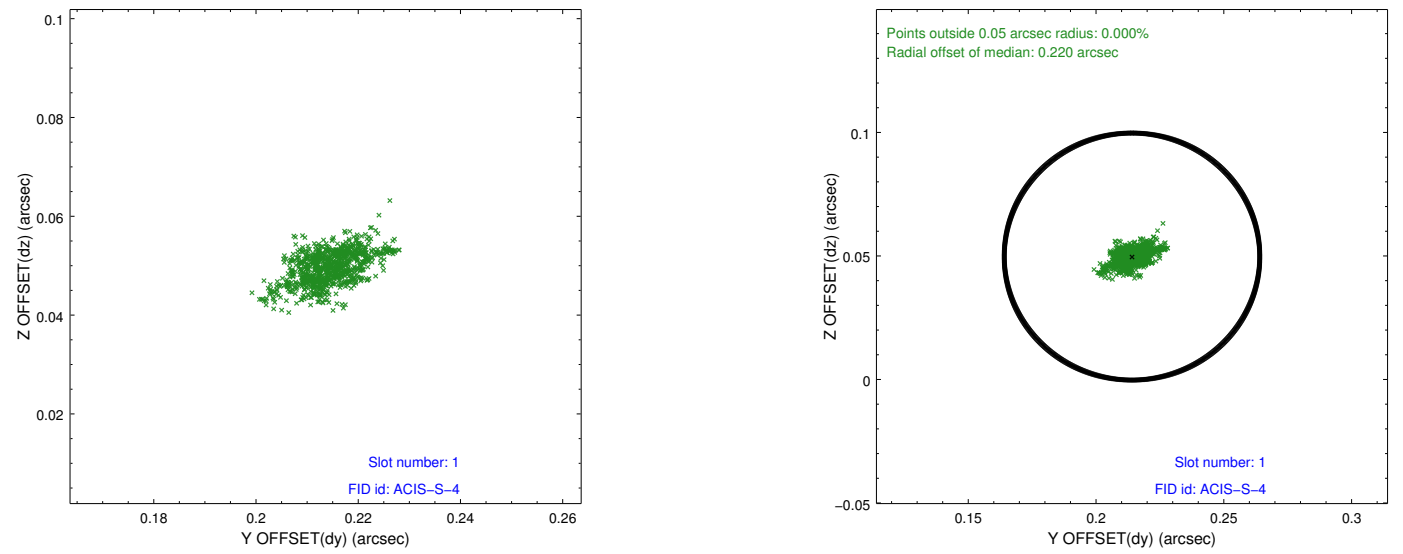


2.5 FID Slots

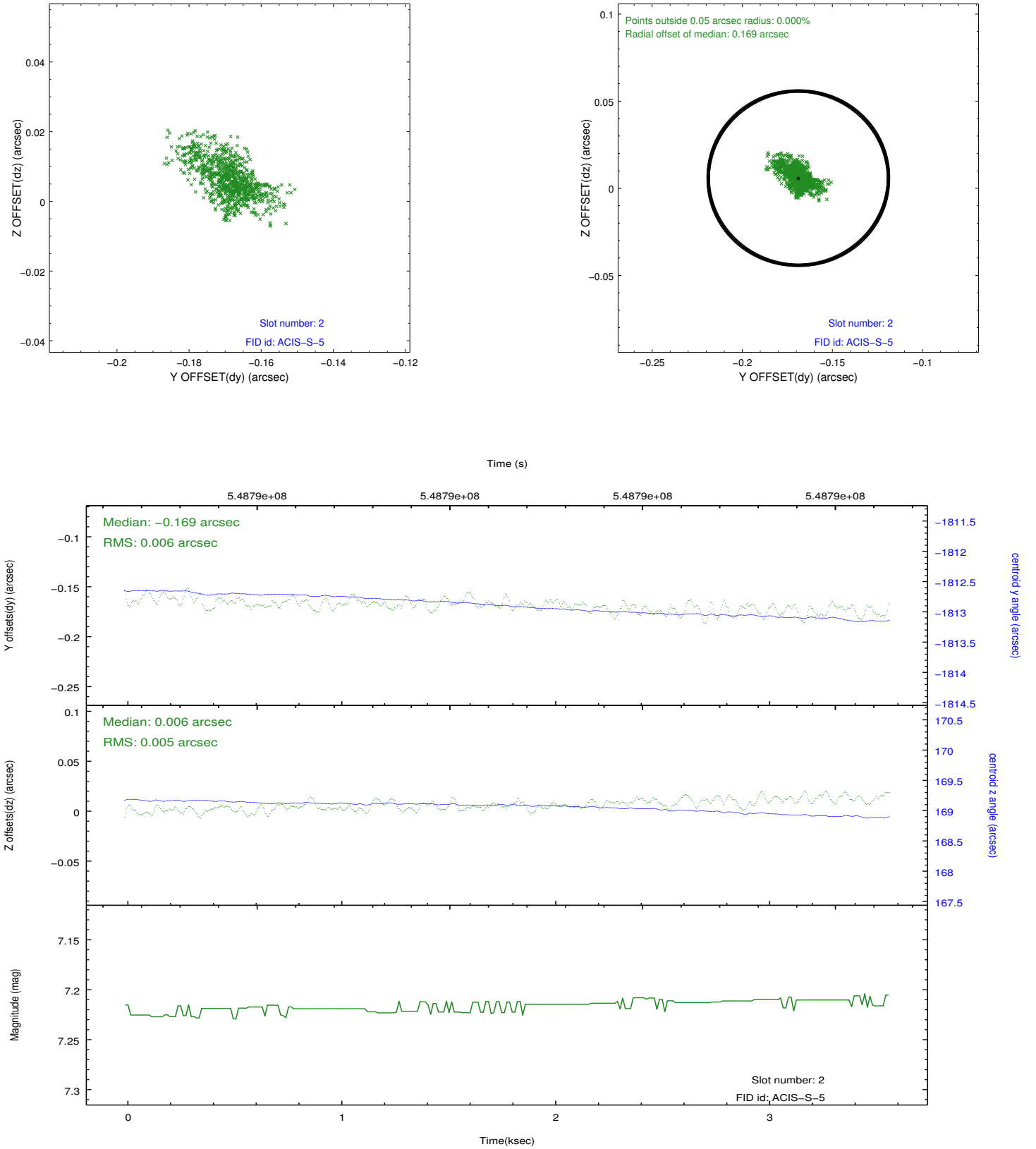
2.5.1 Slot 0



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)	2015.05.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.434800026536

A.2 Comments