

V&V Reference Report

L2 ASCDS Version : 10.3

Observation 16108 - L2 Version 1
Chandra X-Ray Center

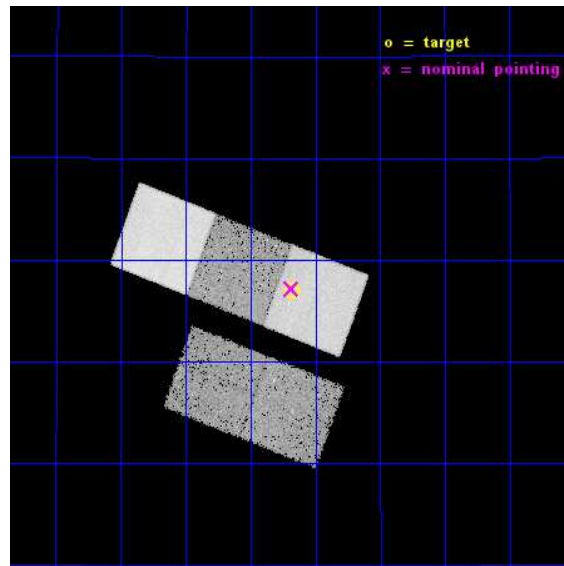
L2 Processing Date : Nov 21 2014

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

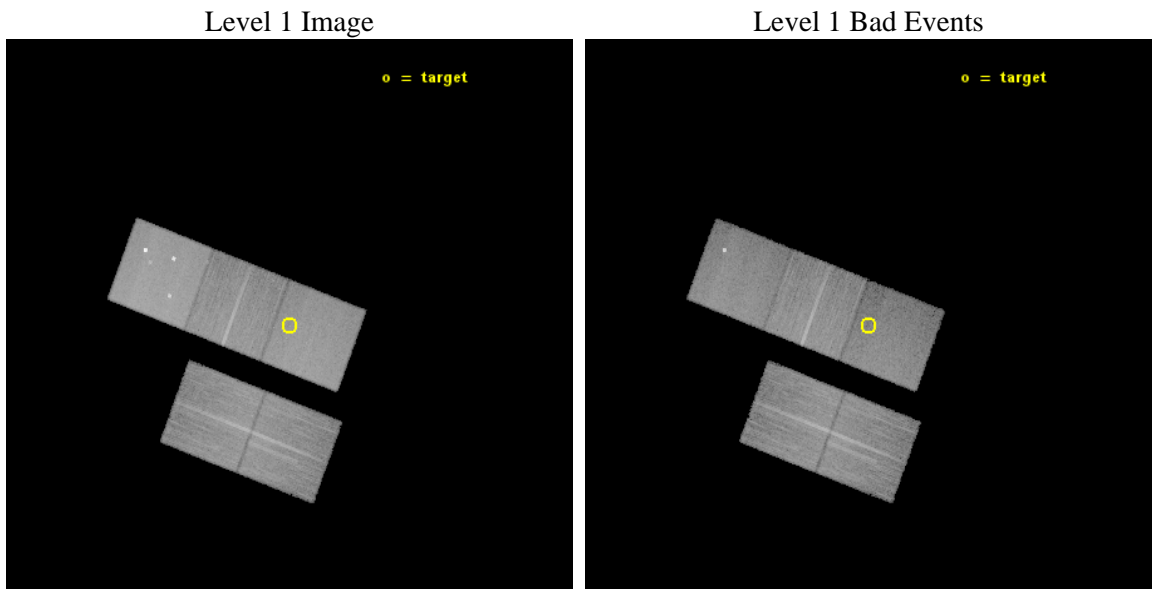
seq_num	702996	Sequence number
obs_id	16108	Observation id
title	Studying AGN evolution with ionization echoes	Proposal title
observer	Dr. Mischa Schirmer	Principal investigator
object	J144110.9+251700	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	220.295417	Observer's specified target RA [deg]
dec_targ	25.283333	Observer's specified target Dec [deg]
ra_nom	220.2961683415	Nominal RA [deg]
dec_nom	25.286369196997	Nominal Dec [deg]
roll_nom	20.783226401967	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30062.75717181	Sum of GTIs [s]
livetime	29669.96511748	Livetime [s]
ontime2	30059.452021539	Sum of GTIs [s]
ontime3	30062.6340518	Sum of GTIs [s]
ontime5	30062.716131806	Sum of GTIs [s]
ontime6	30059.534121454	Sum of GTIs [s]
ontime7	30062.75717181	Sum of GTIs [s]
l2events	239056	Number of level 2 events



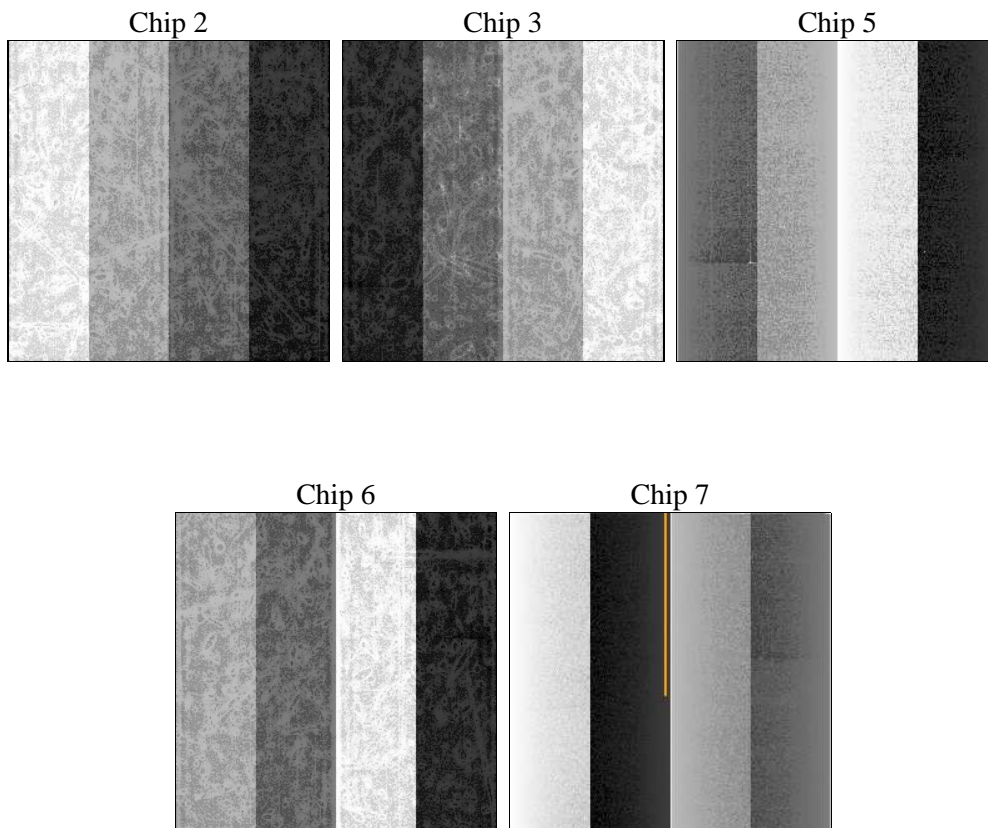
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30062.75717181	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	30059.452021539	Sum of GTIs [s]
date	2014-11-22T03:46:47	Date and time of file creation	ontime3	30062.6340518	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	30062.716131806	Sum of GTIs [s]
			ontime6	30059.534121454	Sum of GTIs [s]
			ontime7	30062.75717181	Sum of GTIs [s]
			l1events	874227	Number of level 1 events

2.1.4 Events

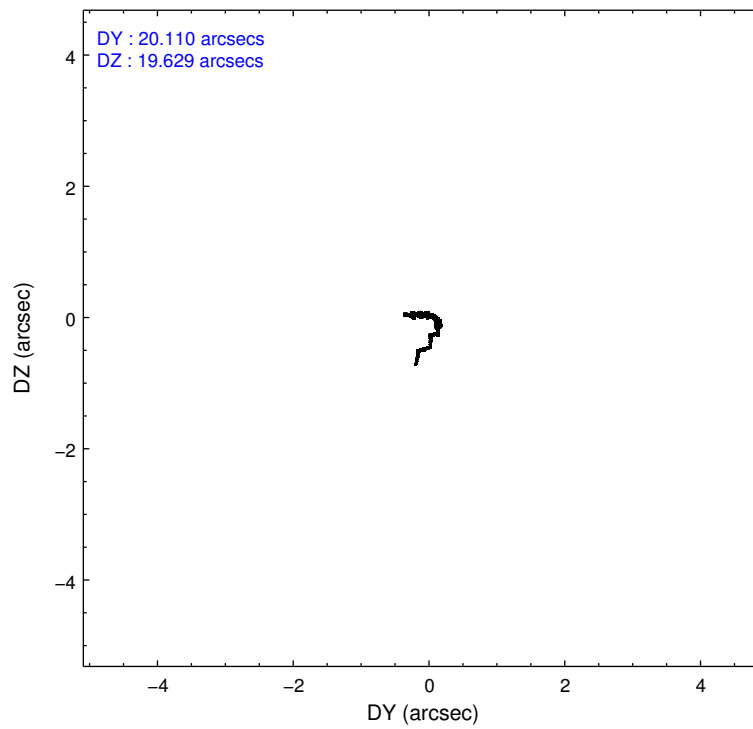
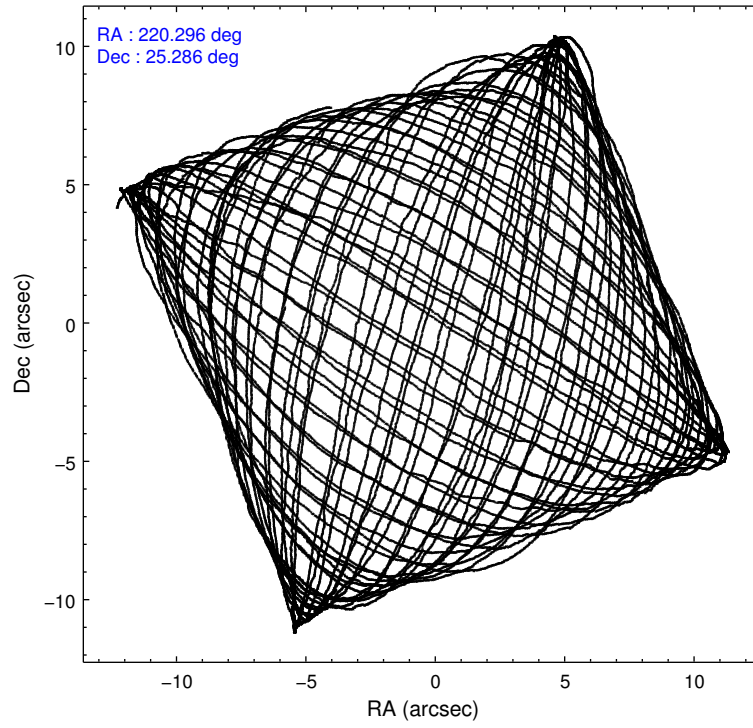
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	152034	144035	244017	155656	178485
rejected events	135023	127583	115700	137084	94494
rejected %	88%	88%	47%	88%	52%

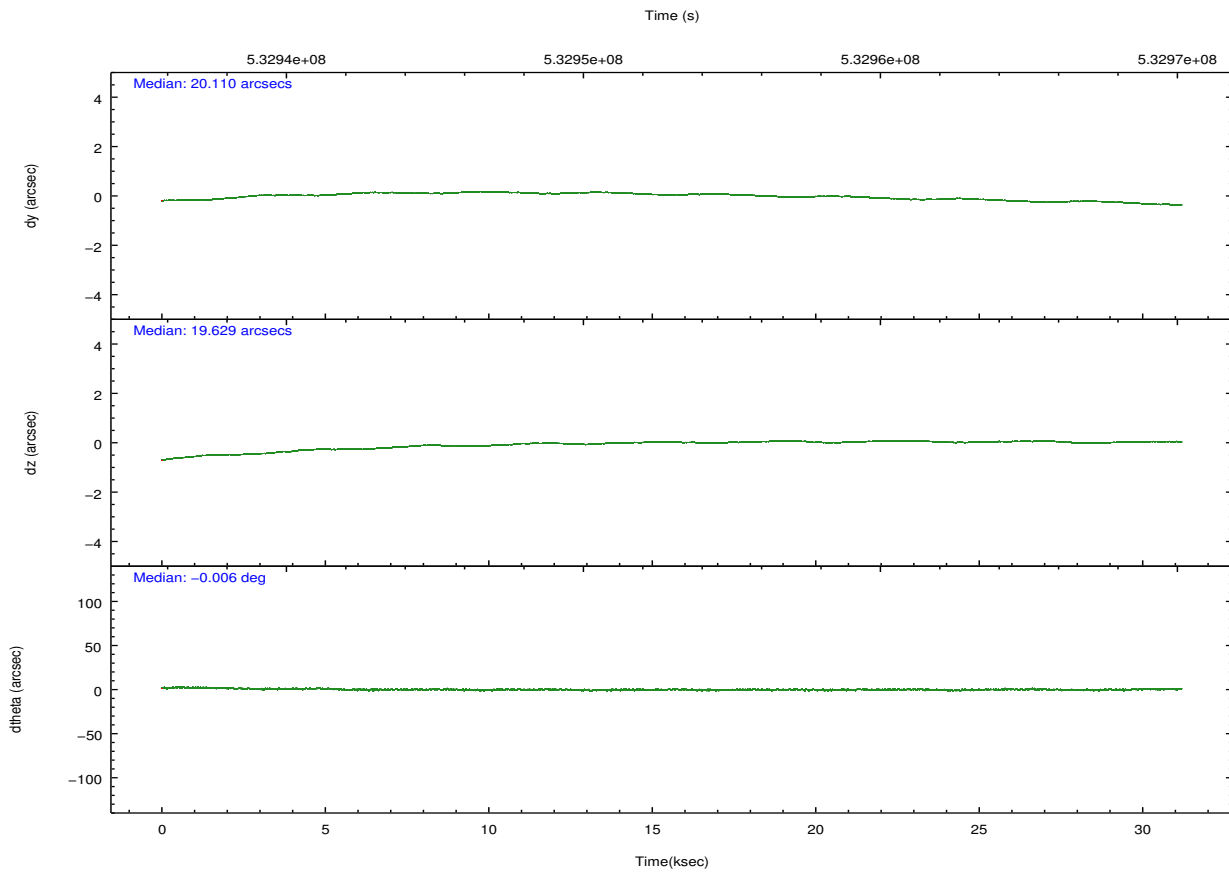
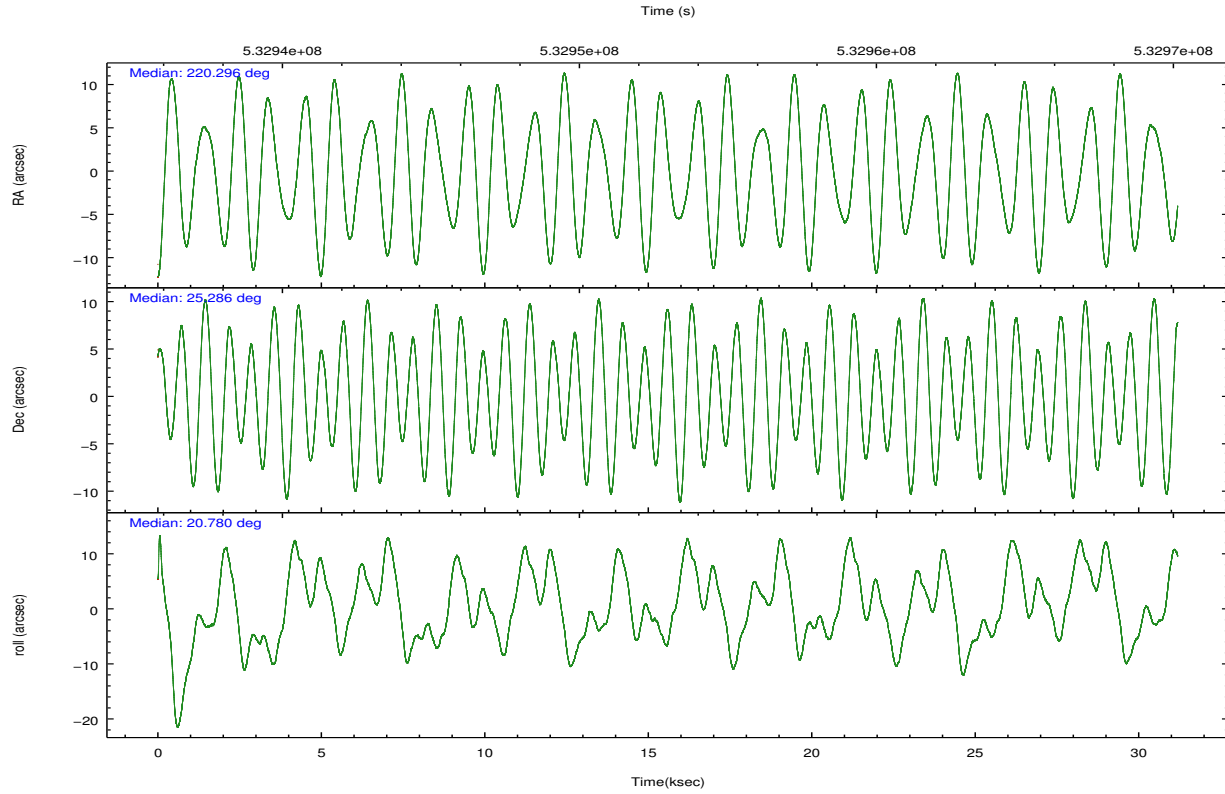
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	6170	5949	15484	6548	8083
	4%	4%	6%	4%	4%
grade 1 events	79	84	476	87	294
	0%	0%	0%	0%	0%
grade 2 events	4237	3690	42095	4239	18215
	2%	2%	17%	2%	10%
grade 3 events	1721	1767	4264	1962	7396
	1%	1%	1%	1%	4%
grade 4 events	1747	1721	4279	1906	7267
	1%	1%	1%	1%	4%
grade 5 events	5582	6597	18265	6943	18754
	3%	4%	7%	4%	10%
grade 6 events	3138	3329	62221	3923	43045
	2%	2%	25%	2%	24%
grade 7 events	129360	120898	96933	130048	75431
	85%	83%	39%	83%	42%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	220.277303	220.2961683415039	CCD I2 on	O3	Y
[deg] Pointing Dec	25.264879	25.28636919699732	CCD I3 on	O2	Y
[deg] Pointing Roll	20.634657	20.78322640196652	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	532938568.184000	532937128.46827	CCD S5 on	N	N
Observation start date	2014-11-21T06:28:21	2014-11-21T06:05:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	532968568.184000	532969179.70756	On-chip summing requested	N	N
Observation end date	2014-11-21T14:48:21	2014-11-21T14:59:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





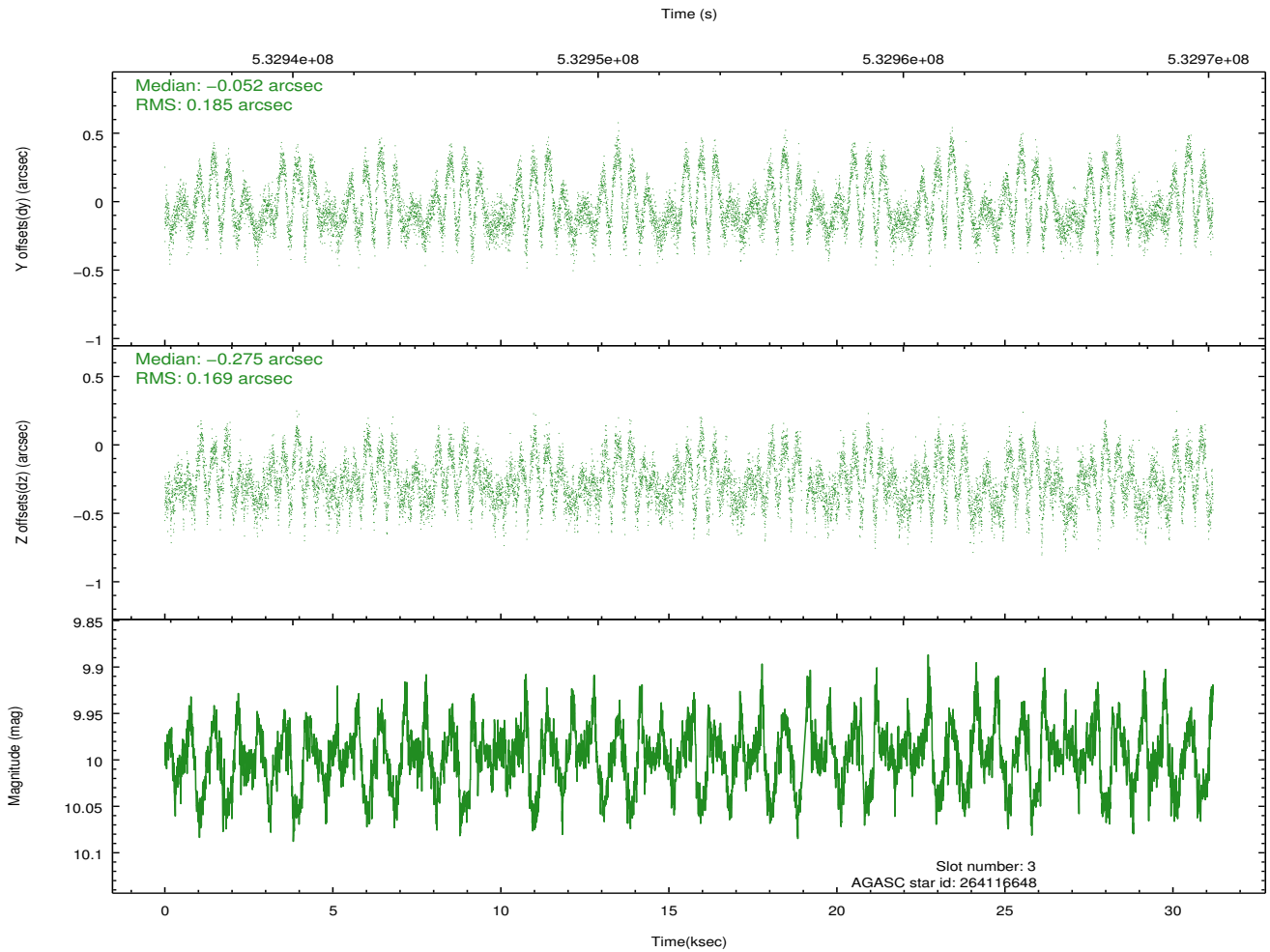
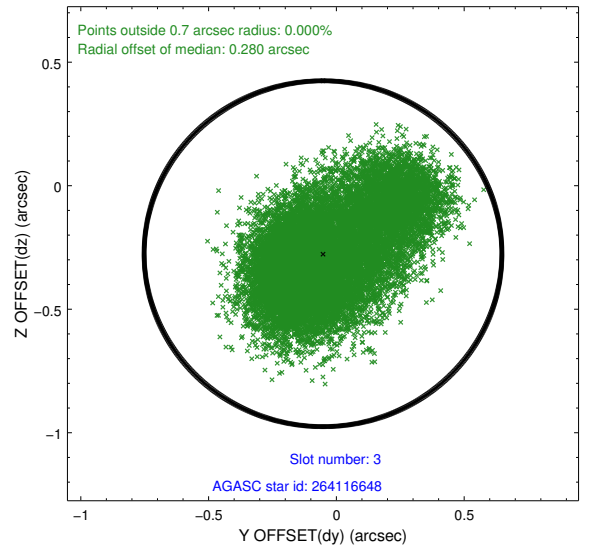
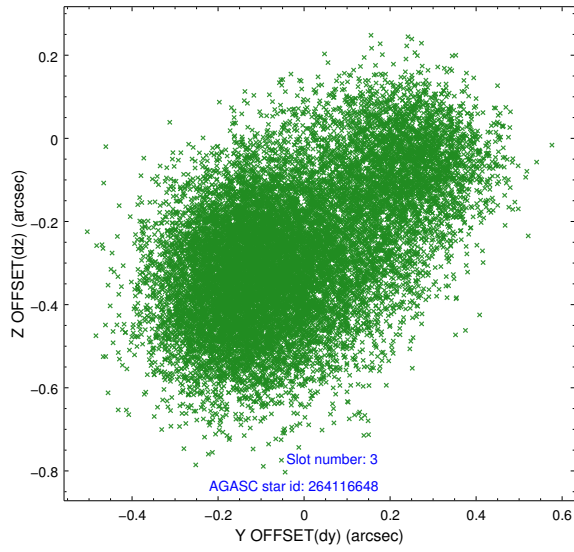
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-4	7.00	7608	0.177	0.004	0.007	0.012	0.000000	0.000000	2140.34	167.72
1	FID		ACIS-S-5	7.03	7607	-0.204	0.003	0.008	0.013	0.000000	0.000000	-1826.15	161.12
2	FID		ACIS-S-6	7.13	7607	-0.001	0.007	0.010	0.016	0.000000	0.000000	388.33	804.91
3	GUIDE	used	264116648	10.00	15127	-0.052	-0.275	0.266	0.445	220.086290	24.990908	-930.71	-703.11
4	GUIDE	used	264117464	10.10	15186	0.441	0.343	0.237	0.381	220.008257	24.680430	-1564.43	-1657.14
5	GUIDE	used	264512336	9.03	15201	-0.262	-0.416	0.168	0.279	220.082396	25.809515	99.63	2057.66
6	GUIDE	used	264512608	9.78	14912	0.189	0.362	0.185	0.289	219.953156	25.042942	-1270.12	-373.13
7	GUIDE	used	264641152	8.54	15206	-0.318	-0.026	0.088	0.142	220.825530	25.001047	1340.49	-1515.51

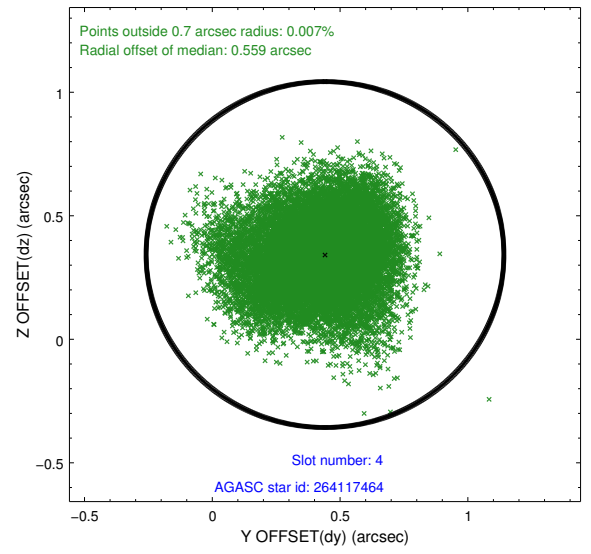
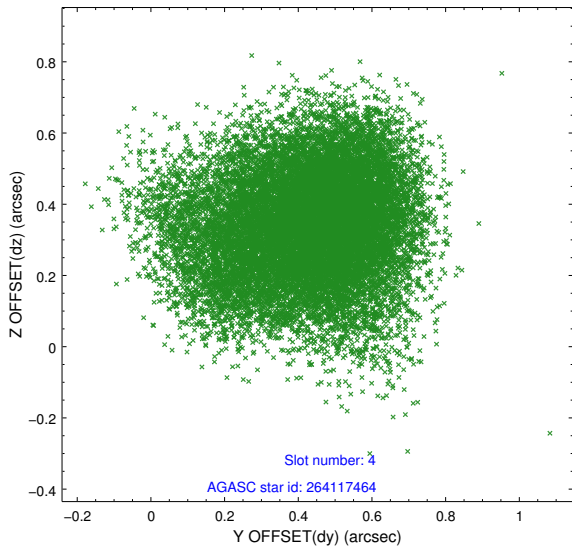
∞

2.4 Star Slots

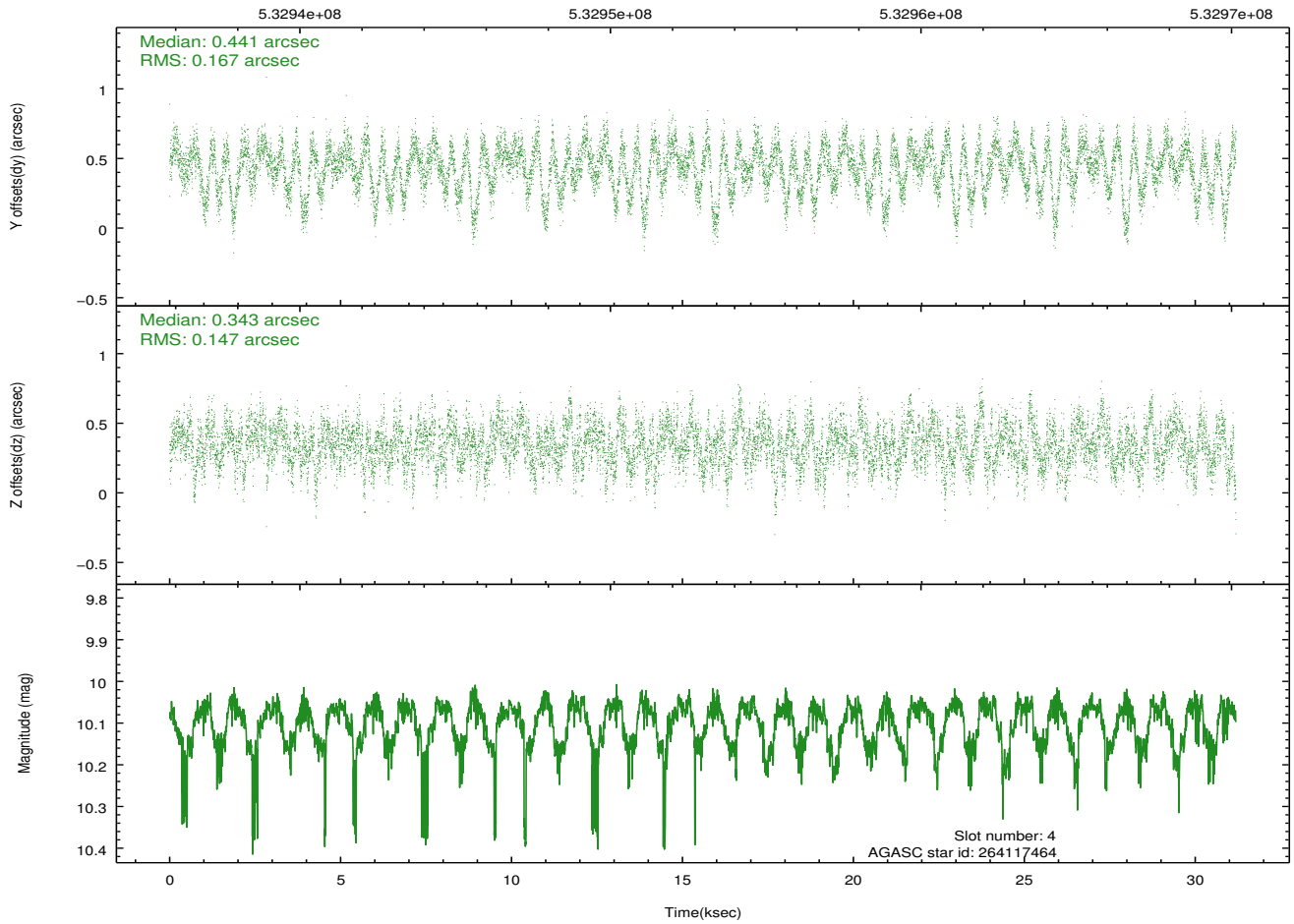
2.4.1 Slot 3



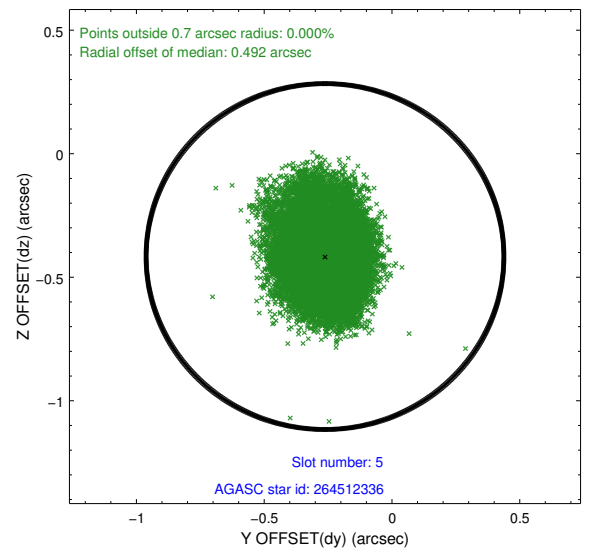
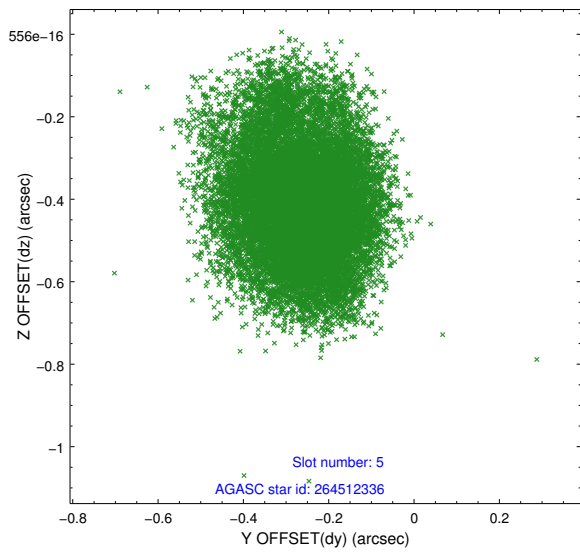
2.4.2 Slot 4



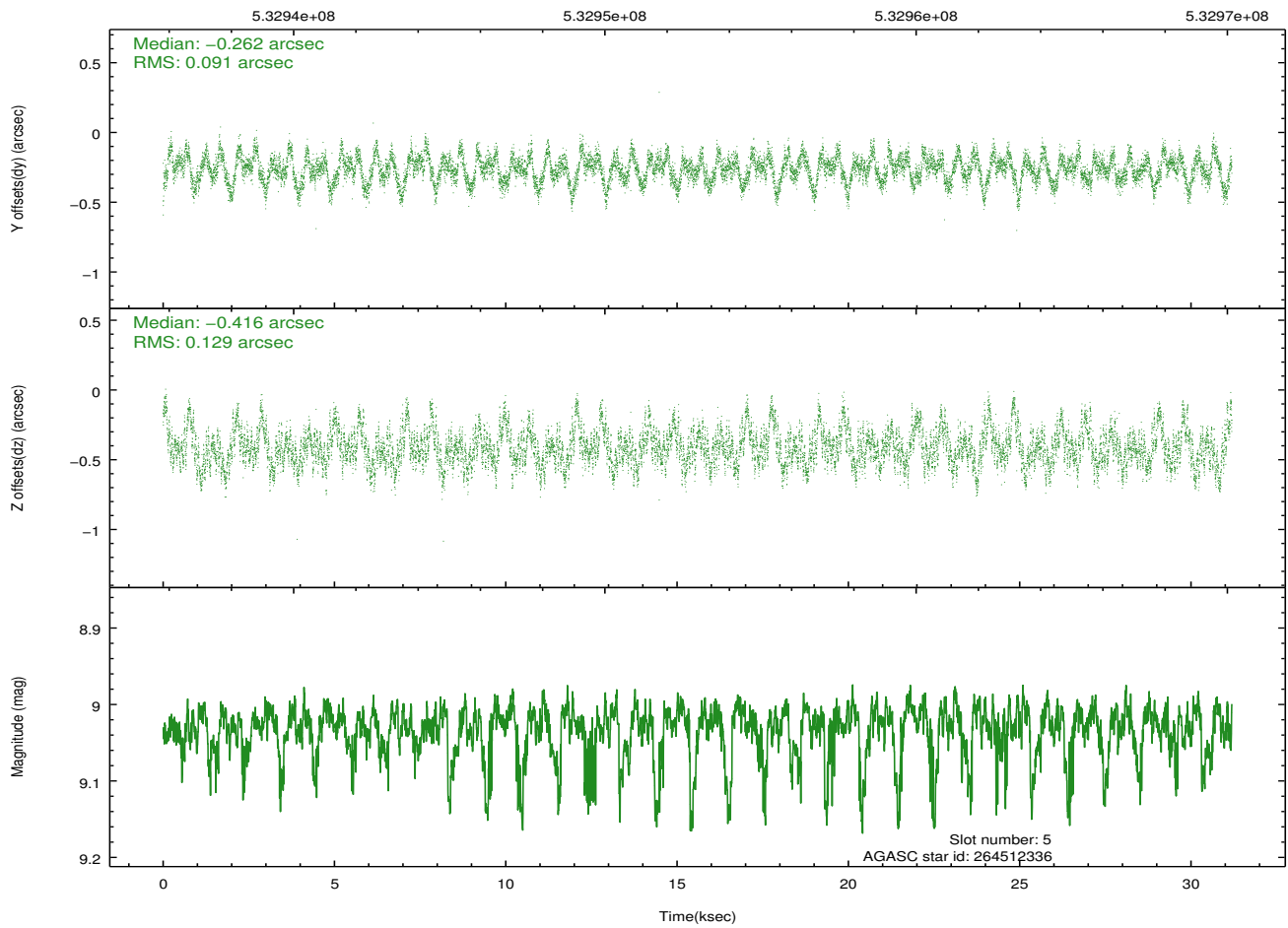
Time (s)



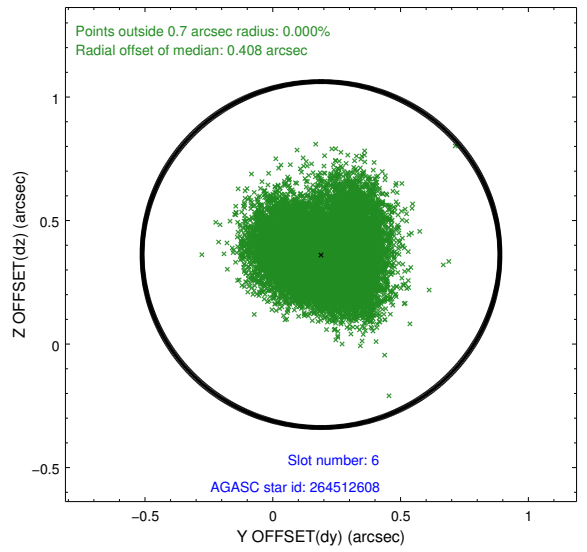
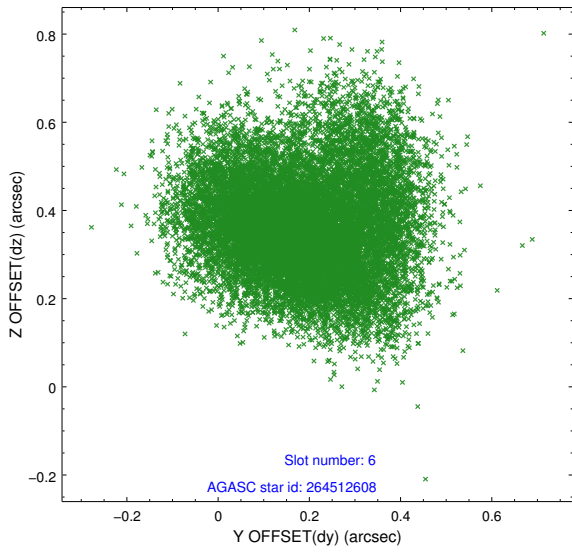
2.4.3 Slot 5



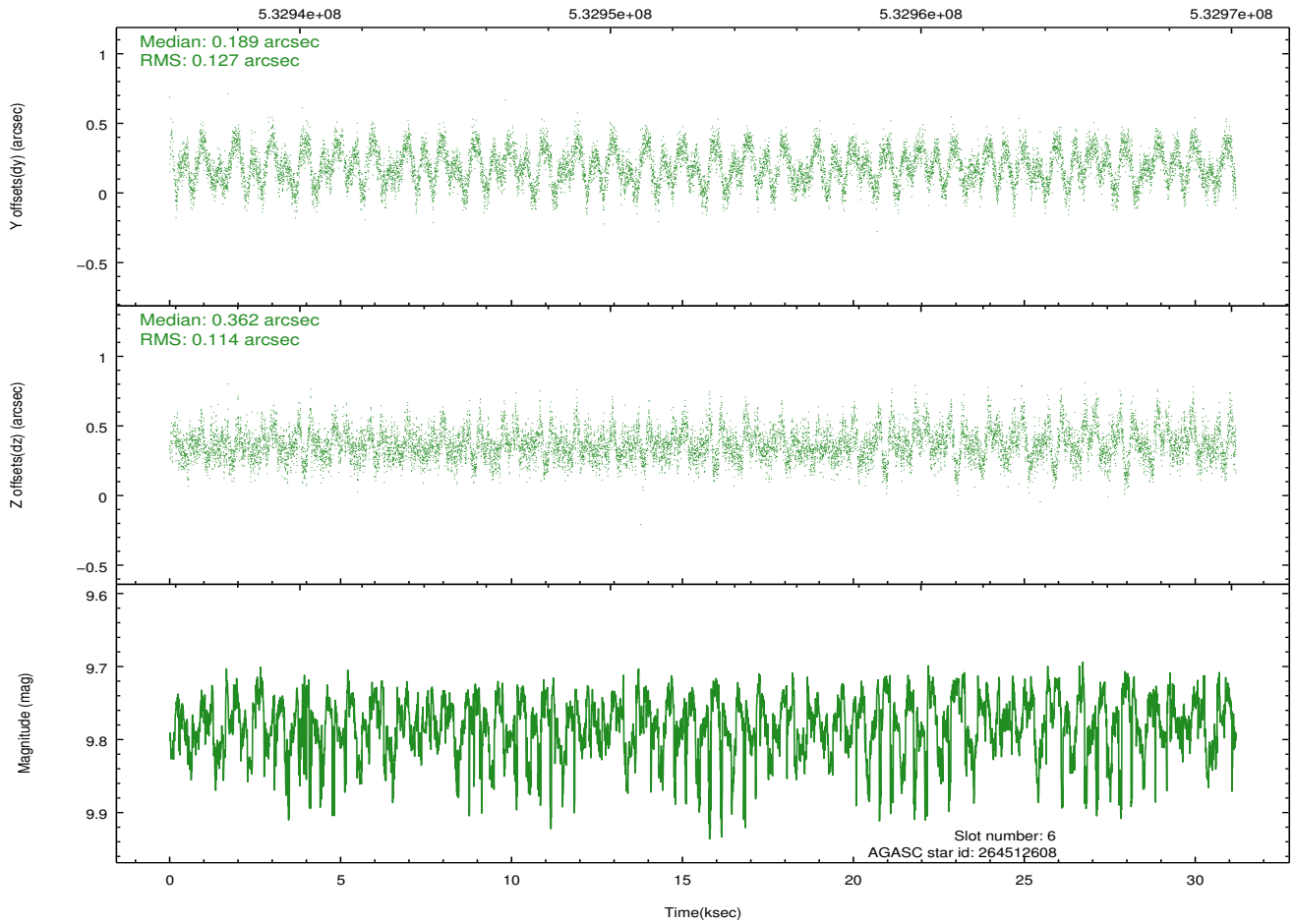
Time (s)



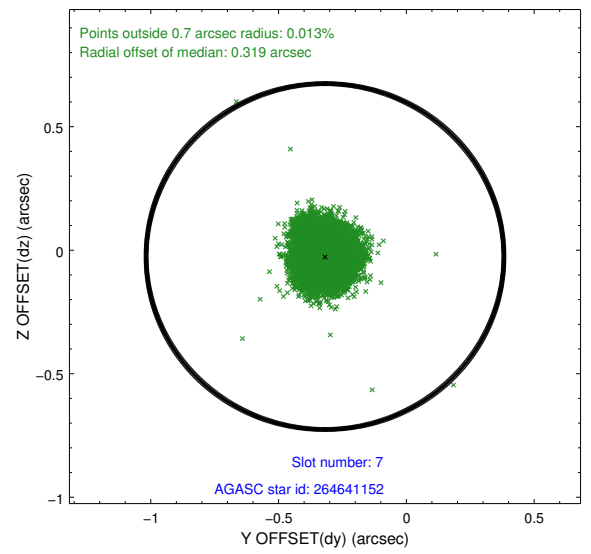
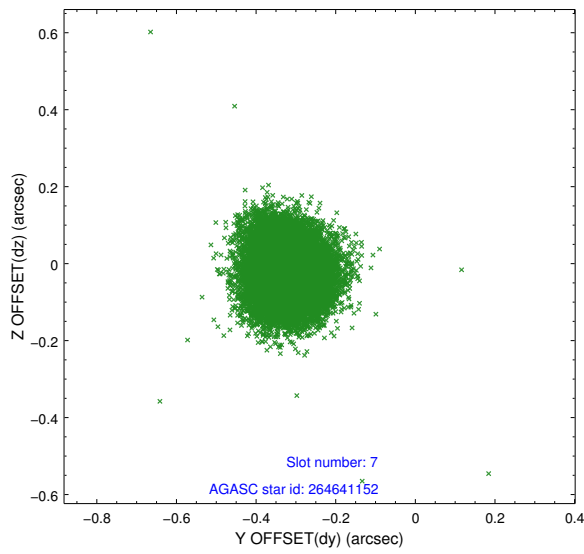
2.4.4 Slot 6



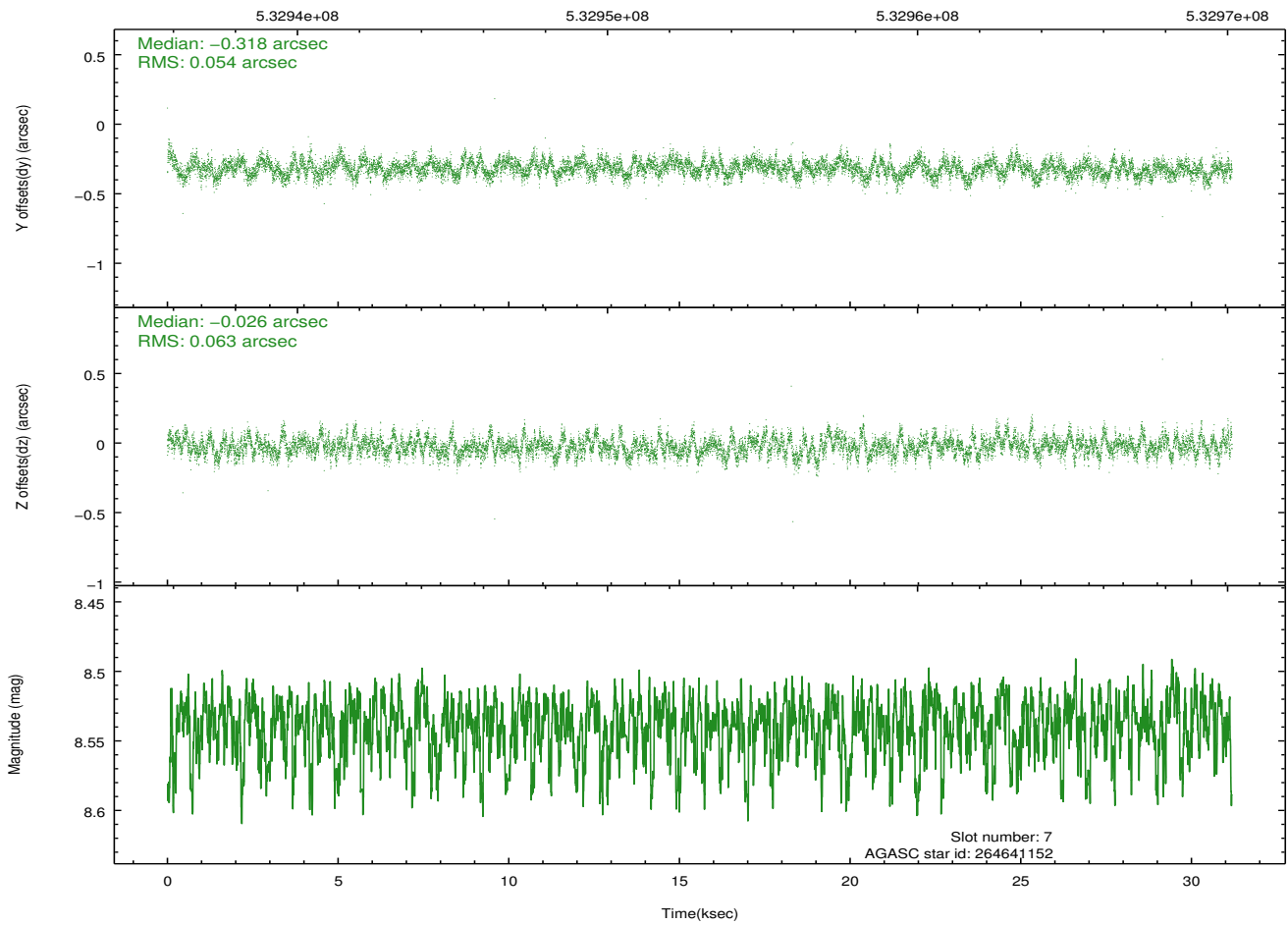
Time (s)



2.4.5 Slot 7

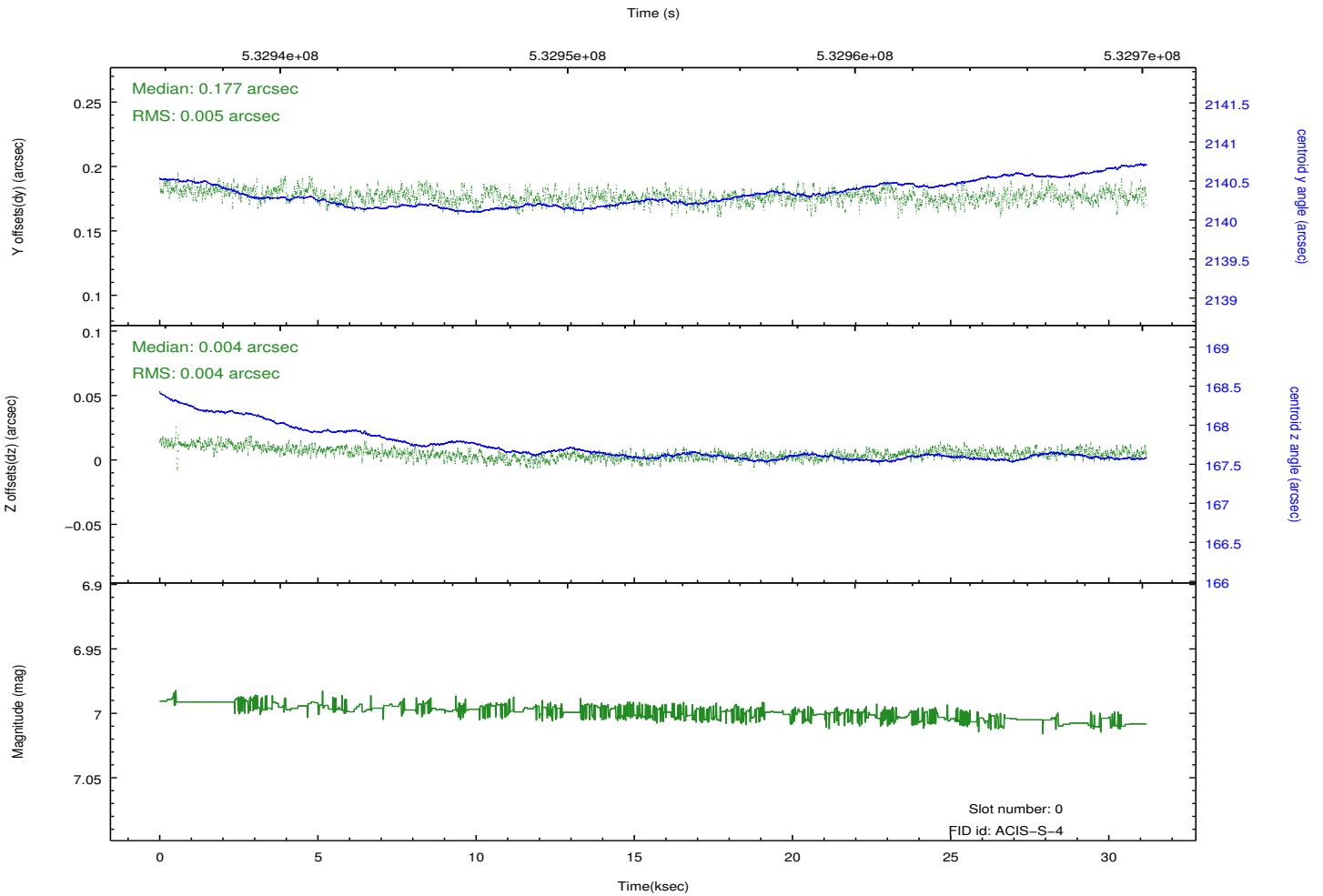
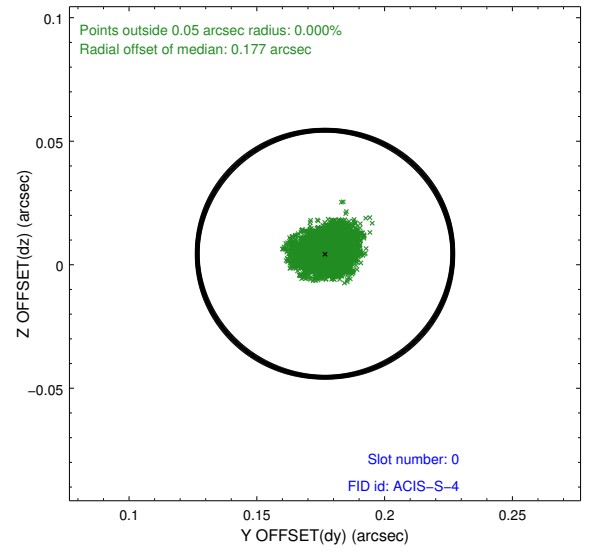
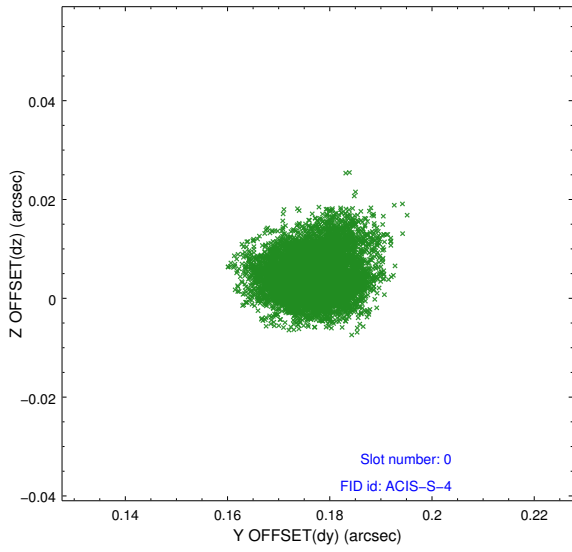


Time (s)

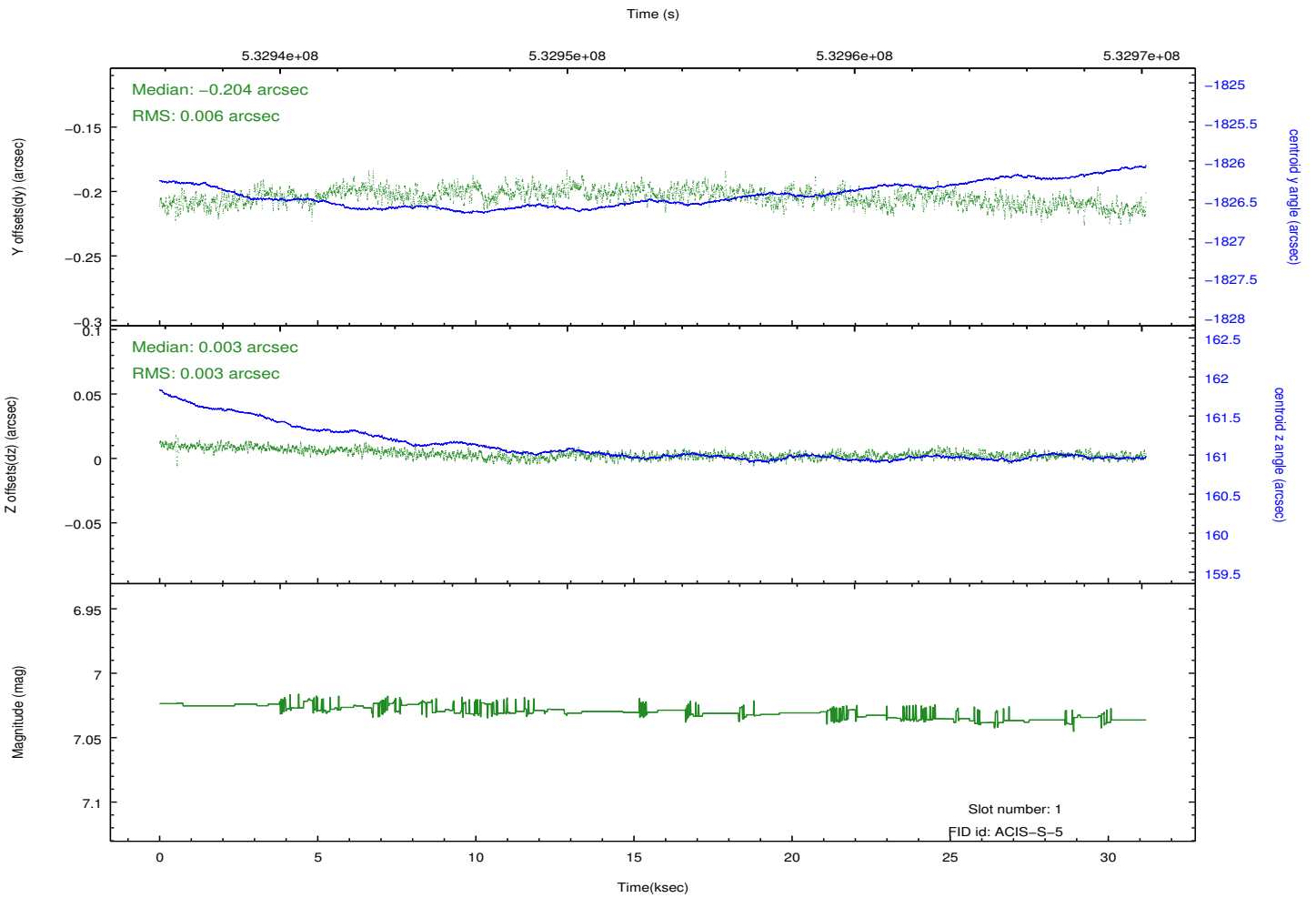
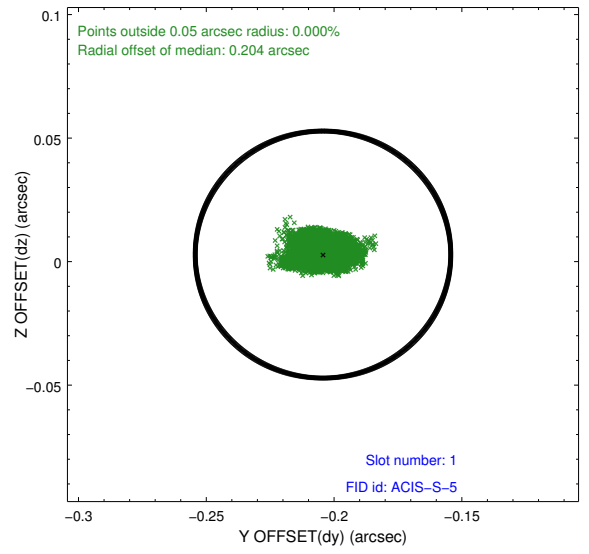
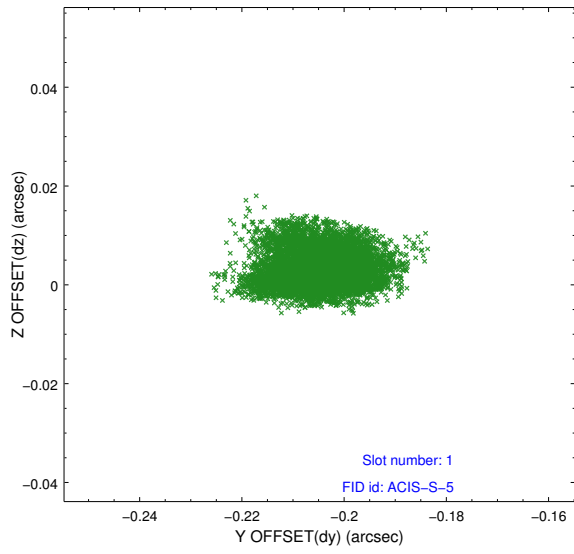


2.5 FID Slots

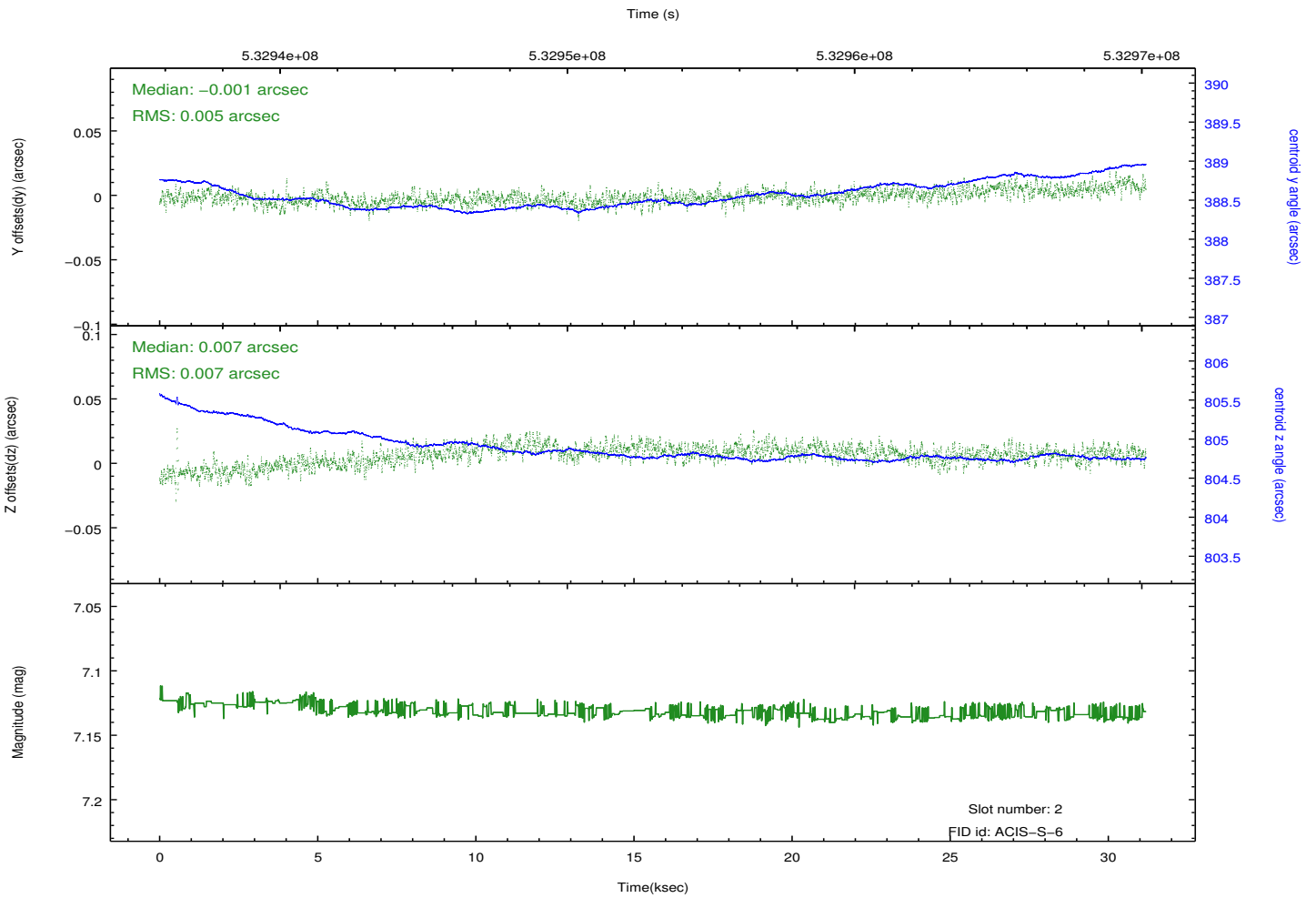
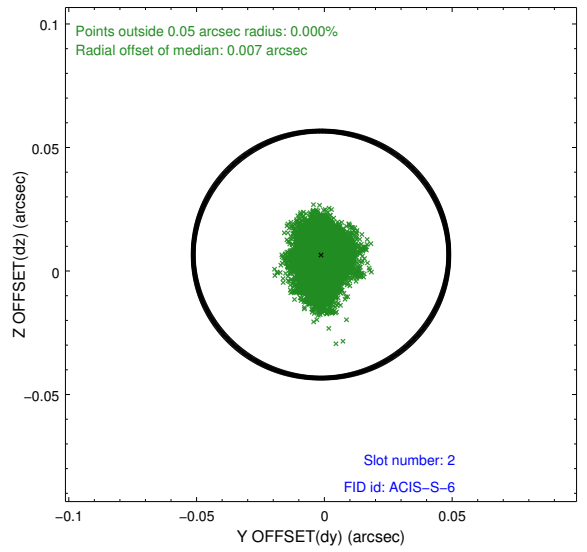
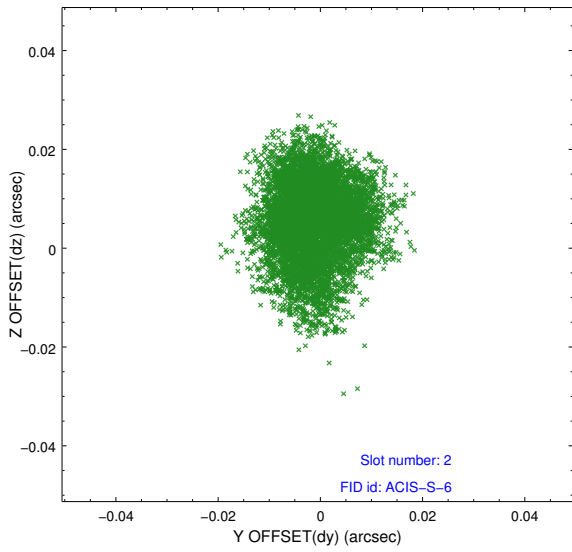
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.11.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.06275717181

A.2 Comments