

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16748 - L2 Version 1
Chandra X-Ray Center

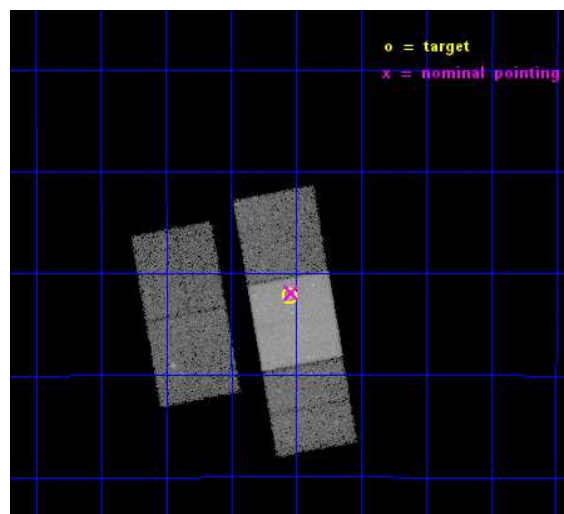
L2 Processing Date : May 31 2015

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

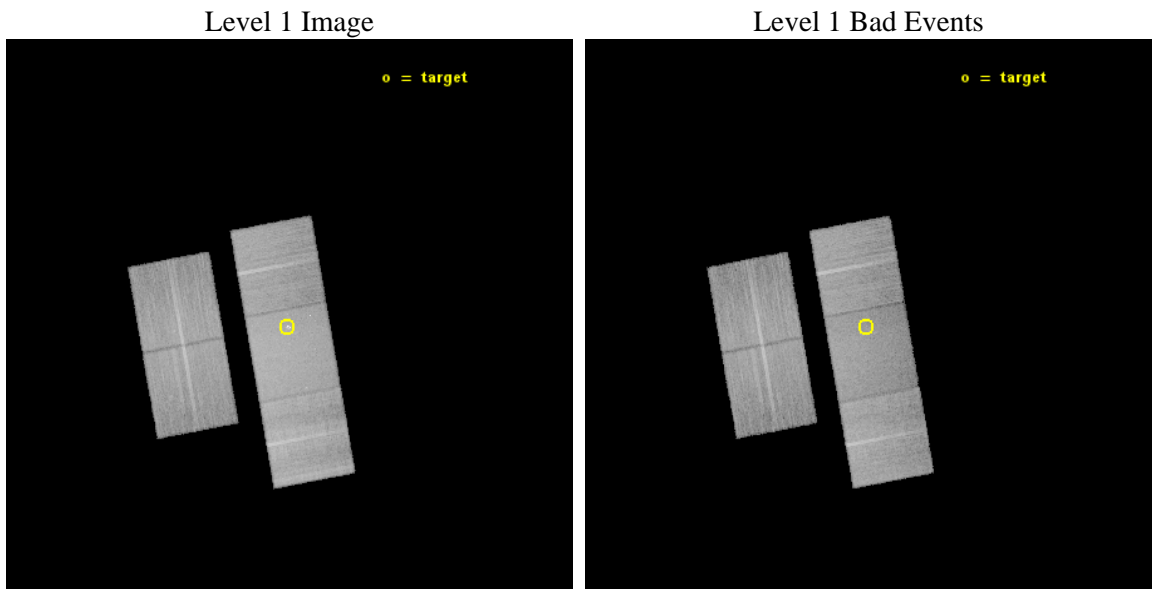
seq_num	401670	Sequence number
obs_id	16748	Observation id
title	Spying on millisecond pulsar paradise: Chandra+GBT monitoring of M28	
observer	Dr Manuel Linares	Principal investigator
object	M28	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	276.137083	Observer's specified target RA [deg]
dec_targ	-24.869833	Observer's specified target Dec [deg]
ra_nom	276.13421629379	Nominal RA [deg]
dec_nom	-24.865056205182	Nominal Dec [deg]
roll_nom	79.655429676129	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30048.300231218	Sum of GTIs [s]
livetime	29655.697067461	Livetime [s]
ontime2	30045.159191012	Sum of GTIs [s]
ontime3	30045.159170985	Sum of GTIs [s]
ontime6	30045.159180999	Sum of GTIs [s]
ontime7	30048.300231218	Sum of GTIs [s]
ontime8	30045.159200907	Sum of GTIs [s]
l2events	166708	Number of level 2 events



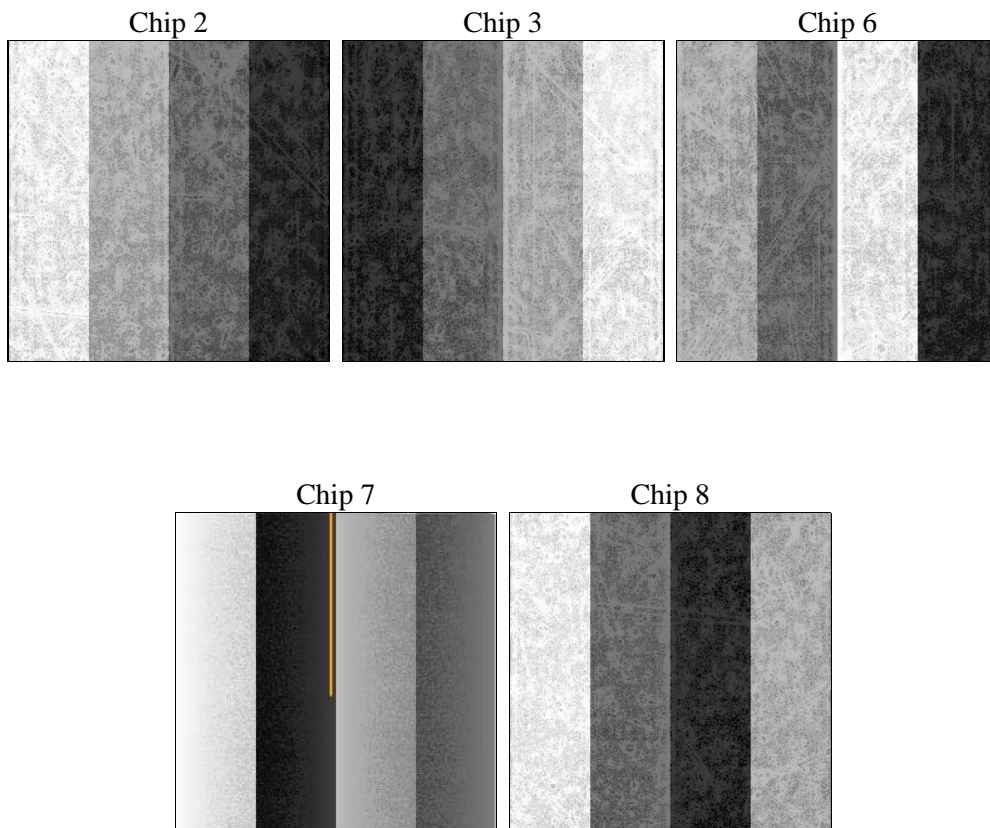
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	30048.300231218	Sum of GTIs [s]
caldbver	4.6.7	 	ontime2	30045.159191012	Sum of GTIs [s]
date	2015-05-31T05:25:02	Date and time of file creation	ontime3	30045.159170985	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	30045.159180999	Sum of GTIs [s]
			ontime7	30048.300231218	Sum of GTIs [s]
			ontime8	30045.159200907	Sum of GTIs [s]
			l1events	899065	Number of level 1 events

2.1.4 Events

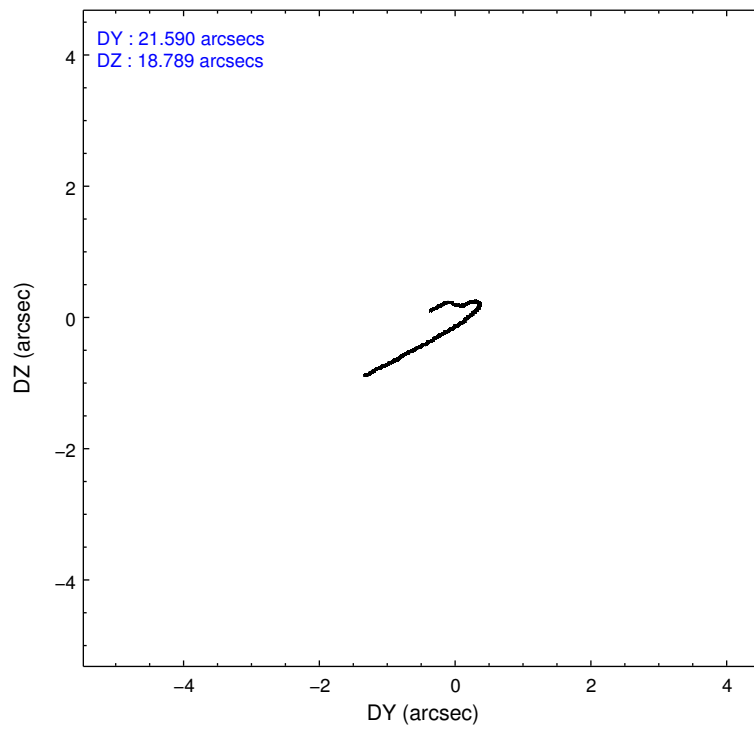
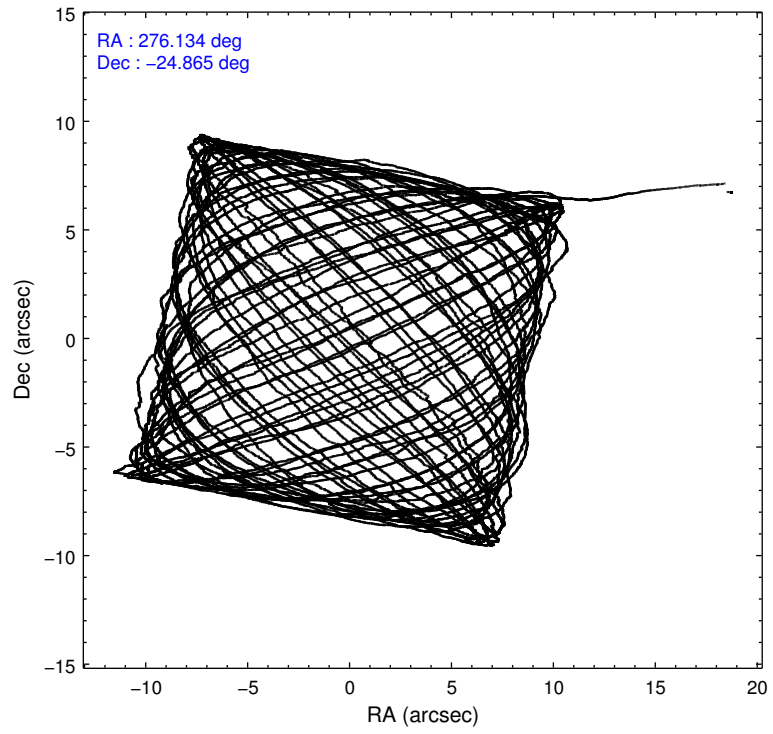
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	153666	150334	164299	219349	211417
rejected events	135396	131812	143630	120503	155477
rejected %	88%	87%	87%	54%	73%

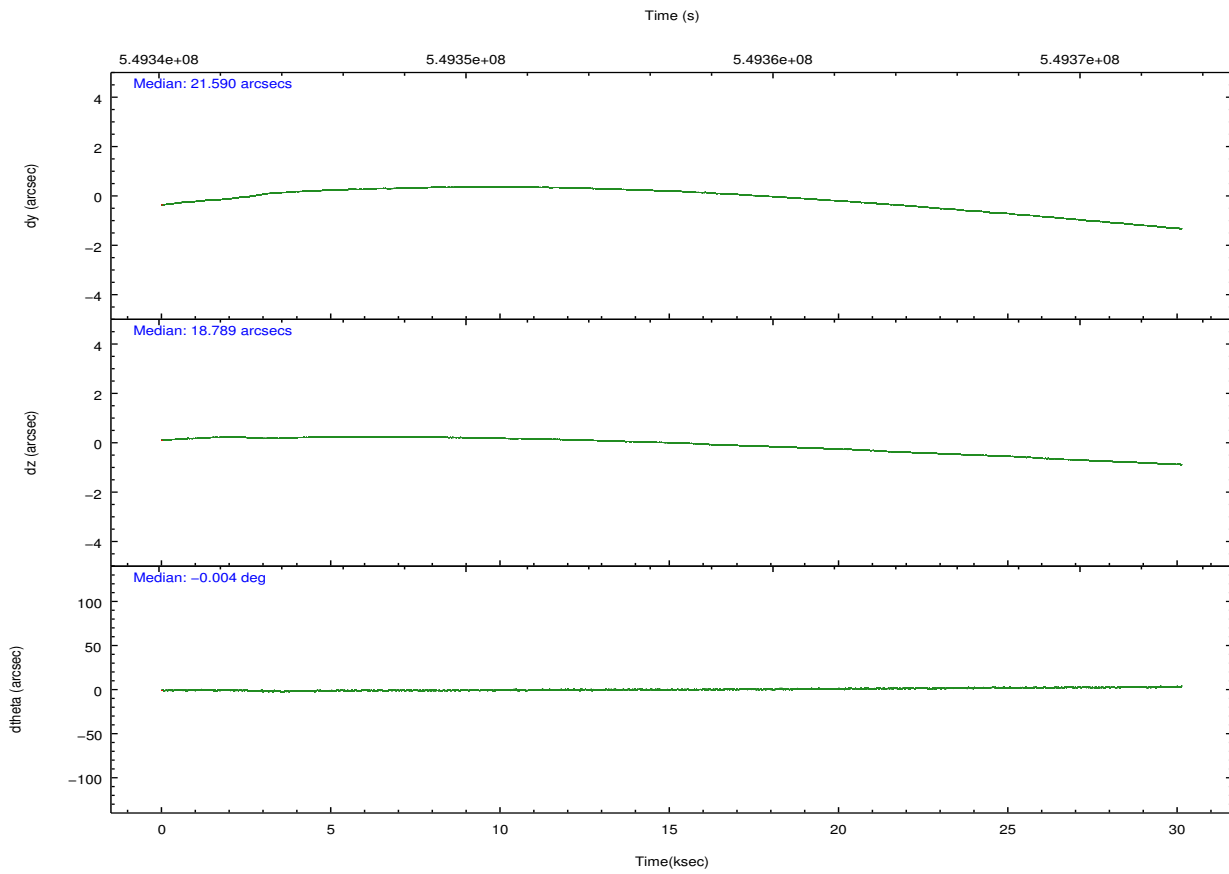
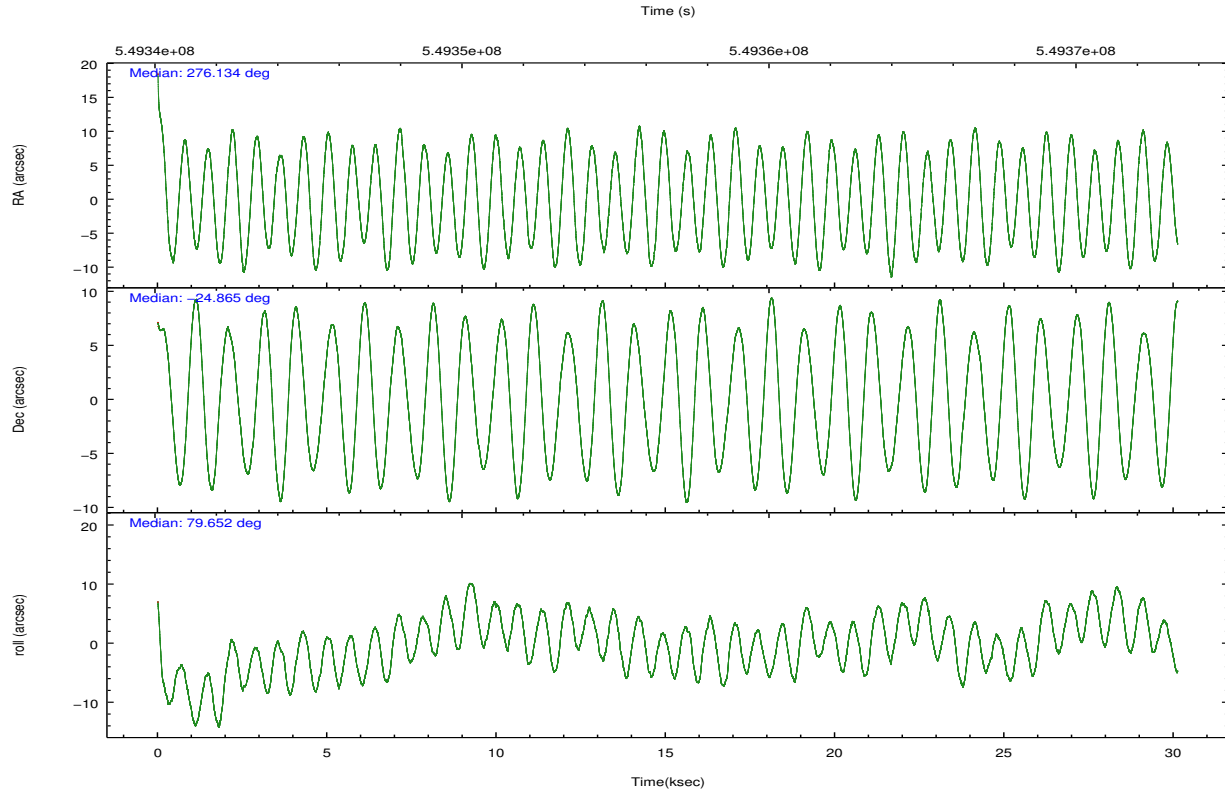
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6977	6999	7793	9816	16544
	4%	4%	4%	4%	7%
grade 1 events	76	85	95	261	170
	0%	0%	0%	0%	0%
grade 2 events	4281	3970	4663	20707	13327
	2%	2%	2%	9%	6%
grade 3 events	1795	1919	1991	8522	5682
	1%	1%	1%	3%	2%
grade 4 events	1858	1913	1895	8508	5411
	1%	1%	1%	3%	2%
grade 5 events	6390	8324	8231	21951	11867
	4%	5%	5%	10%	5%
grade 6 events	3359	3721	4329	51299	14977
	2%	2%	2%	23%	7%
grade 7 events	128930	123403	135302	98285	143439
	83%	82%	82%	44%	67%

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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	276.144764	276.1342162937888	CCD I2 on	Y	Y
[deg] Pointing Dec	-24.890791	-24.86505620518206	CCD I3 on	Y	Y
[deg] Pointing Roll	79.503238	79.65542967612944	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	549341767.184000	549340540.07284	CCD S5 on	N	N
Observation start date	2015-05-30T02:55:00	2015-05-30T02:35:40	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	549371767.184000	549372946.47466	On-chip summing requested	N	N
Observation end date	2015-05-30T11:15:00	2015-05-30T11:35:46	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





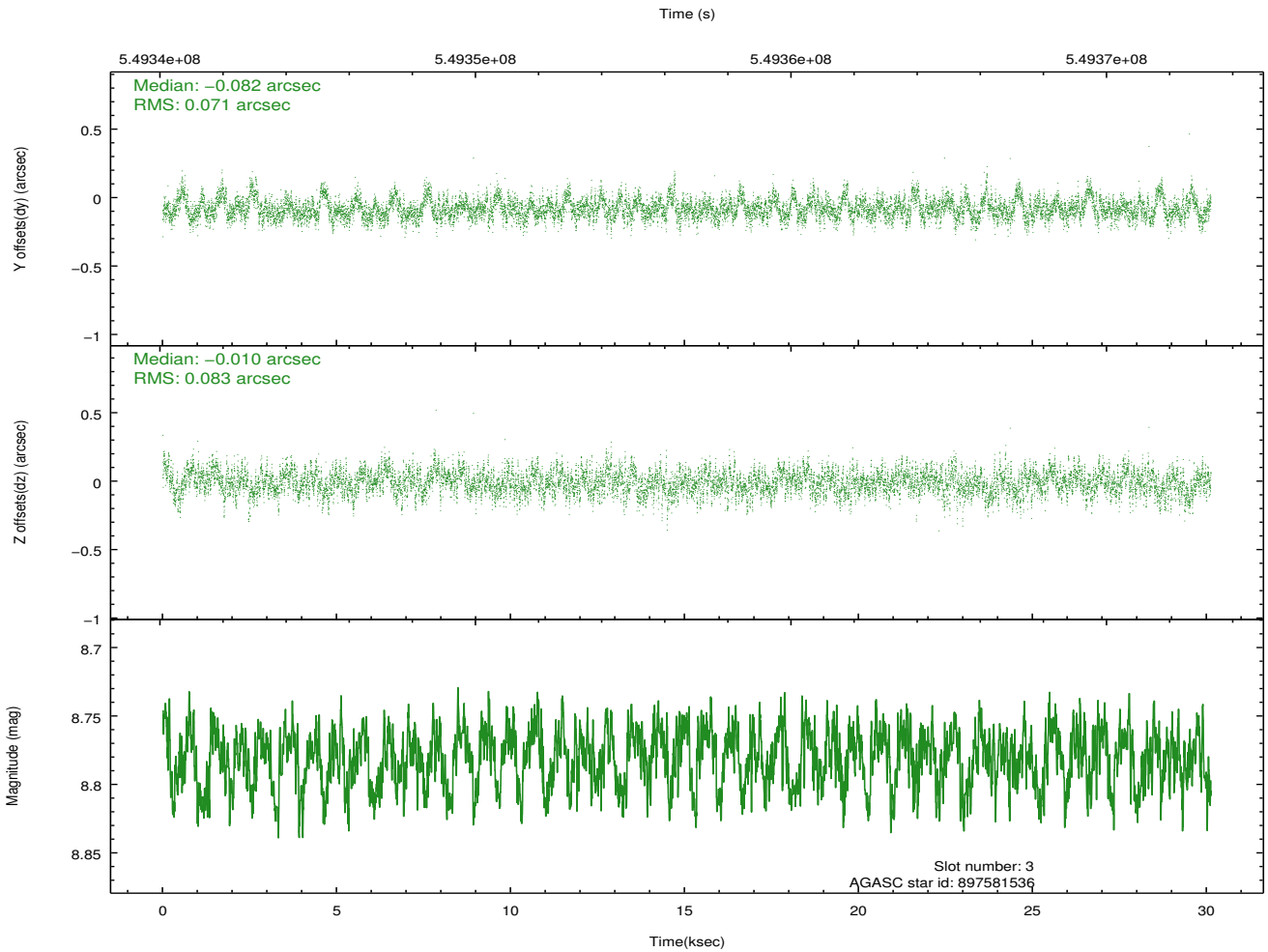
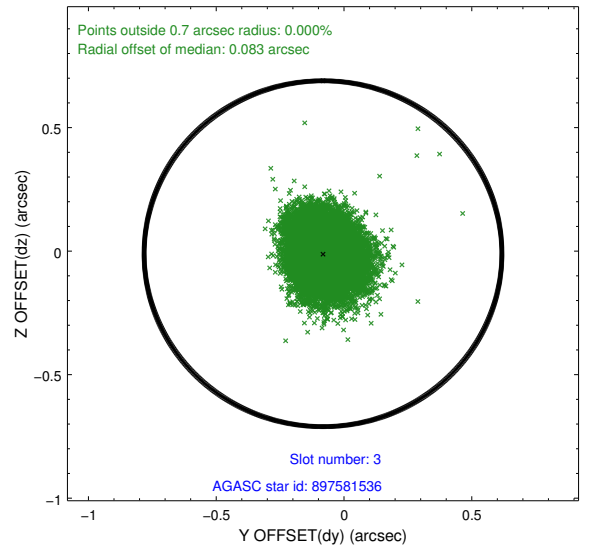
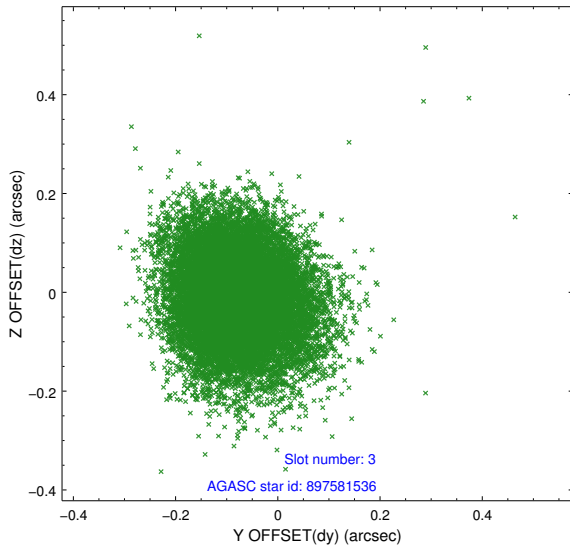
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	7347	-0.147	-0.096	0.010	0.017	0.000000	0.000000	-774.74	-1740.18
1	FID		ACIS-S-4	7.05	7345	0.341	0.097	0.008	0.015	0.000000	0.000000	2139.00	168.41
2	FID		ACIS-S-5	7.06	7347	-0.225	0.008	0.011	0.018	0.000000	0.000000	-1827.56	162.09
3	GUIDE	used	897581536	8.78	14683	-0.082	-0.010	0.116	0.190	276.270189	-24.414428	1761.05	-91.55
4	GUIDE	used	897585408	8.90	14688	-0.152	-0.265	0.123	0.198	276.128475	-24.385394	1779.07	383.68
5	GUIDE	used	897607632	9.05	14687	-0.052	-0.136	0.131	0.212	275.528210	-25.239953	-1606.35	1744.58
6	GUIDE	used	899295912	9.14	14681	0.301	0.564	0.122	0.193	276.702891	-25.456161	-1673.98	-2154.55
7	GUIDE	used	897610120	8.47	14691	-0.014	-0.154	0.117	0.195	275.375820	-25.427247	-2361.53	2105.00

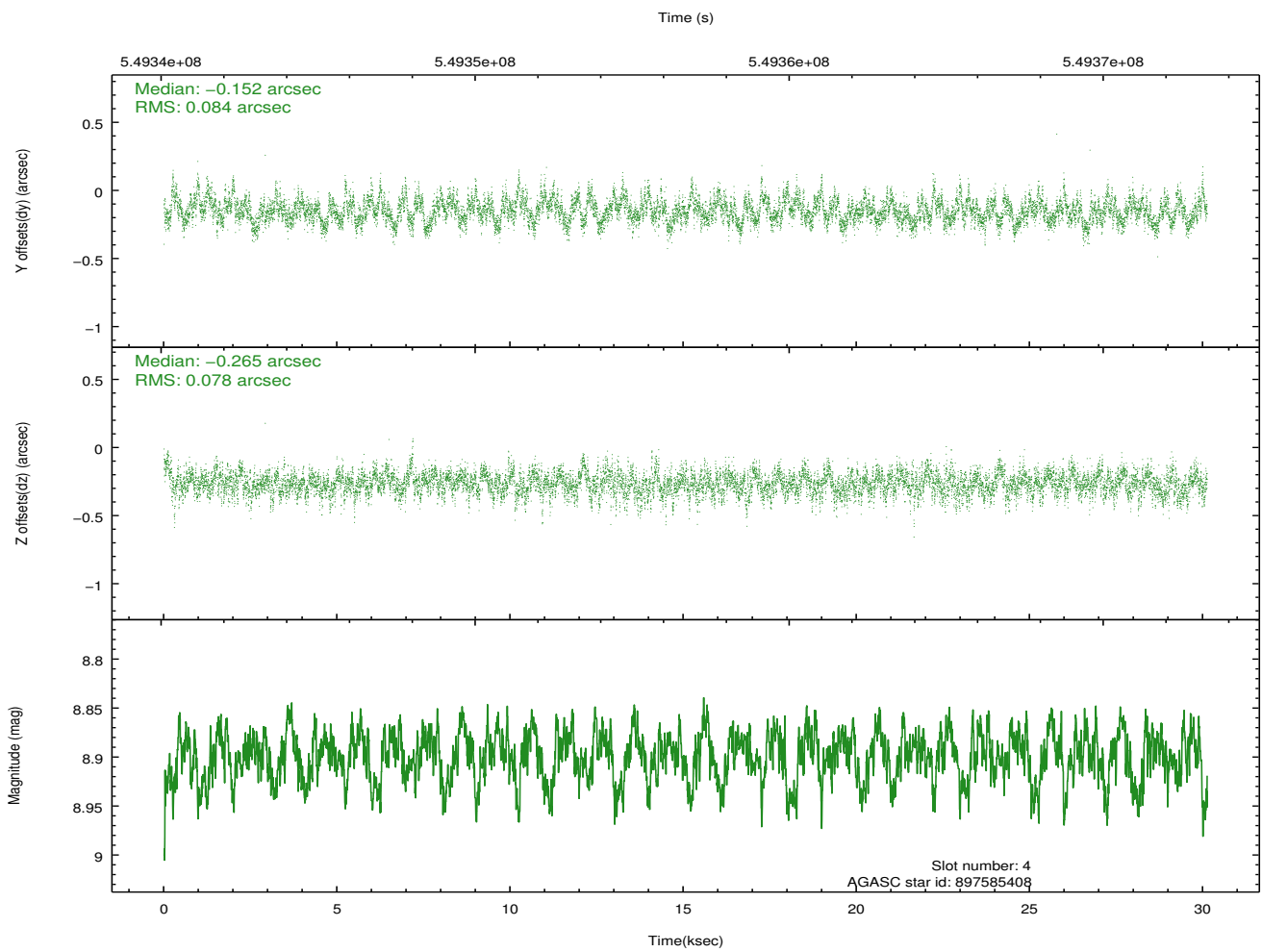
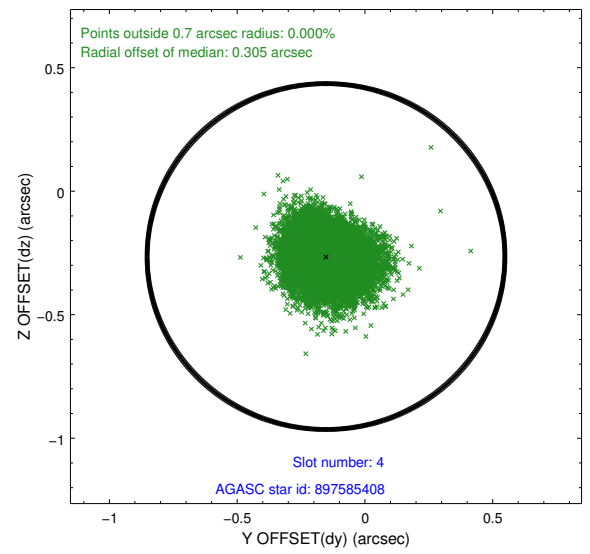
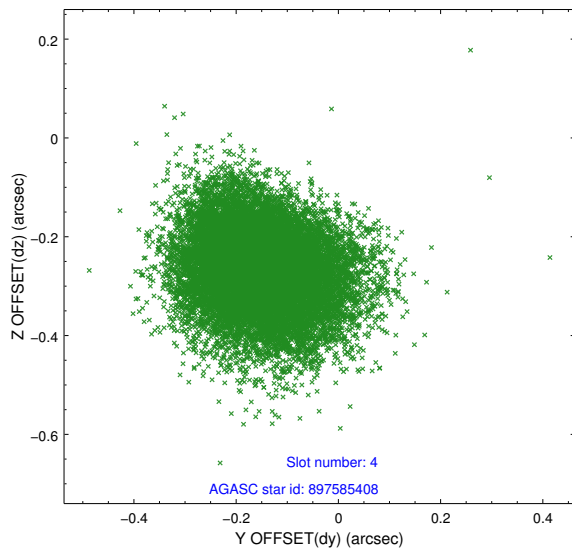
∞

2.4 Star Slots

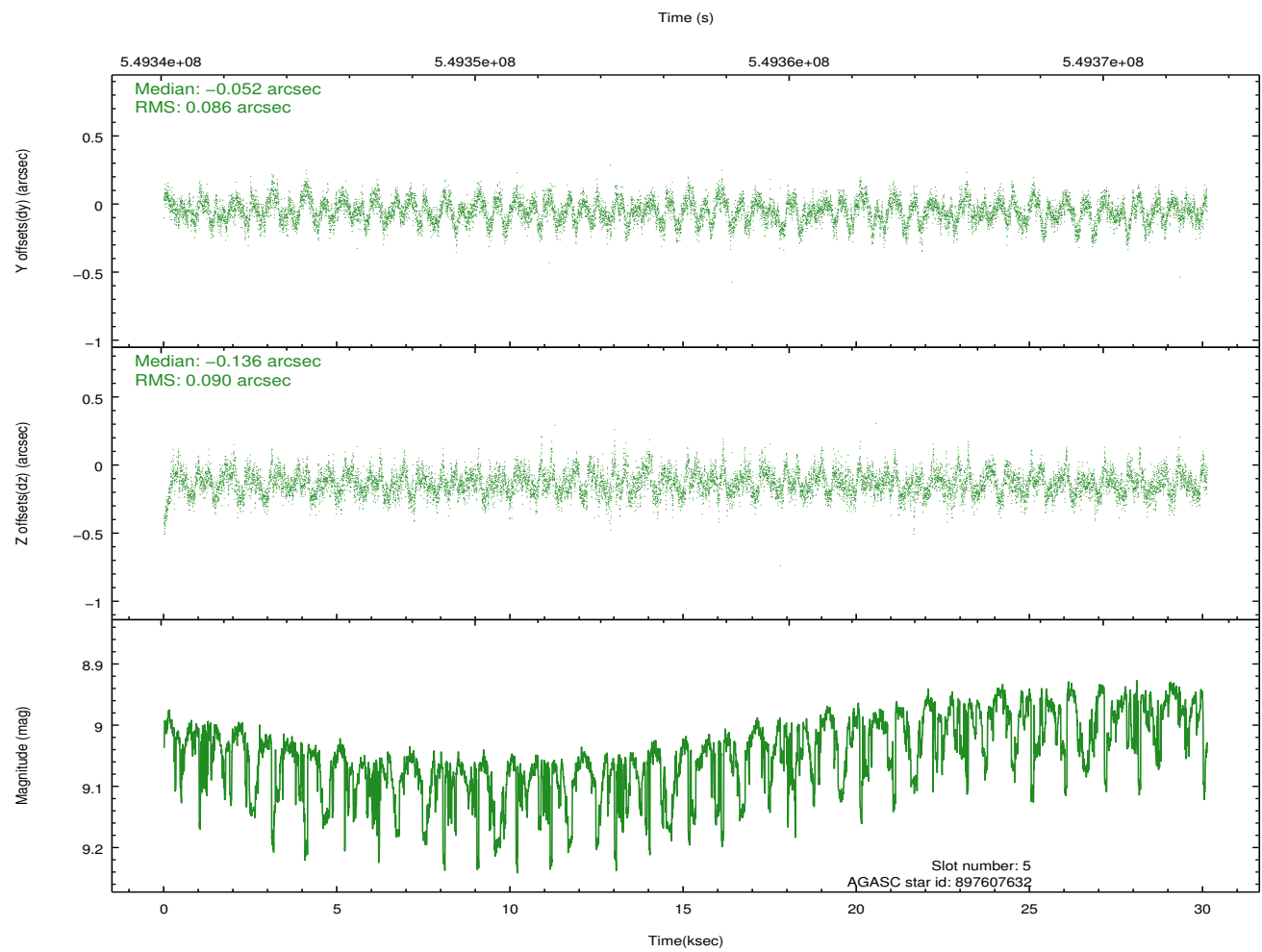
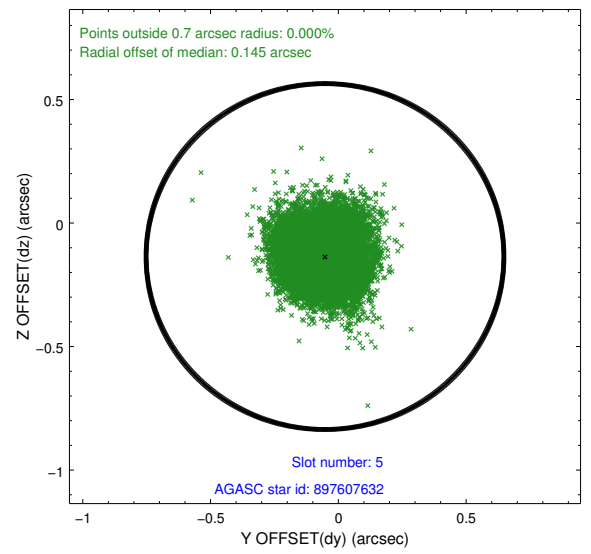
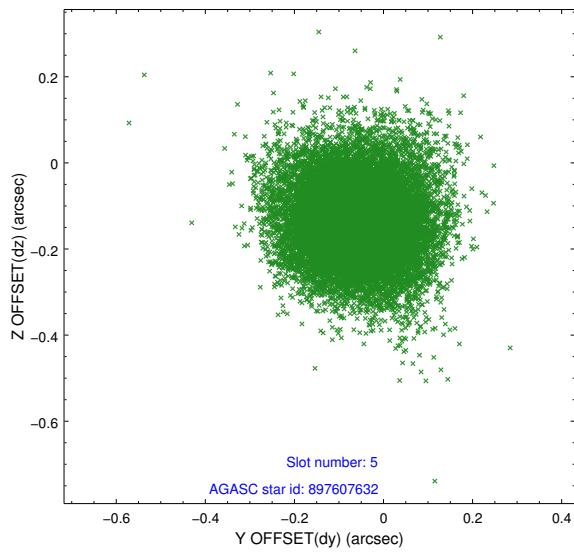
2.4.1 Slot 3



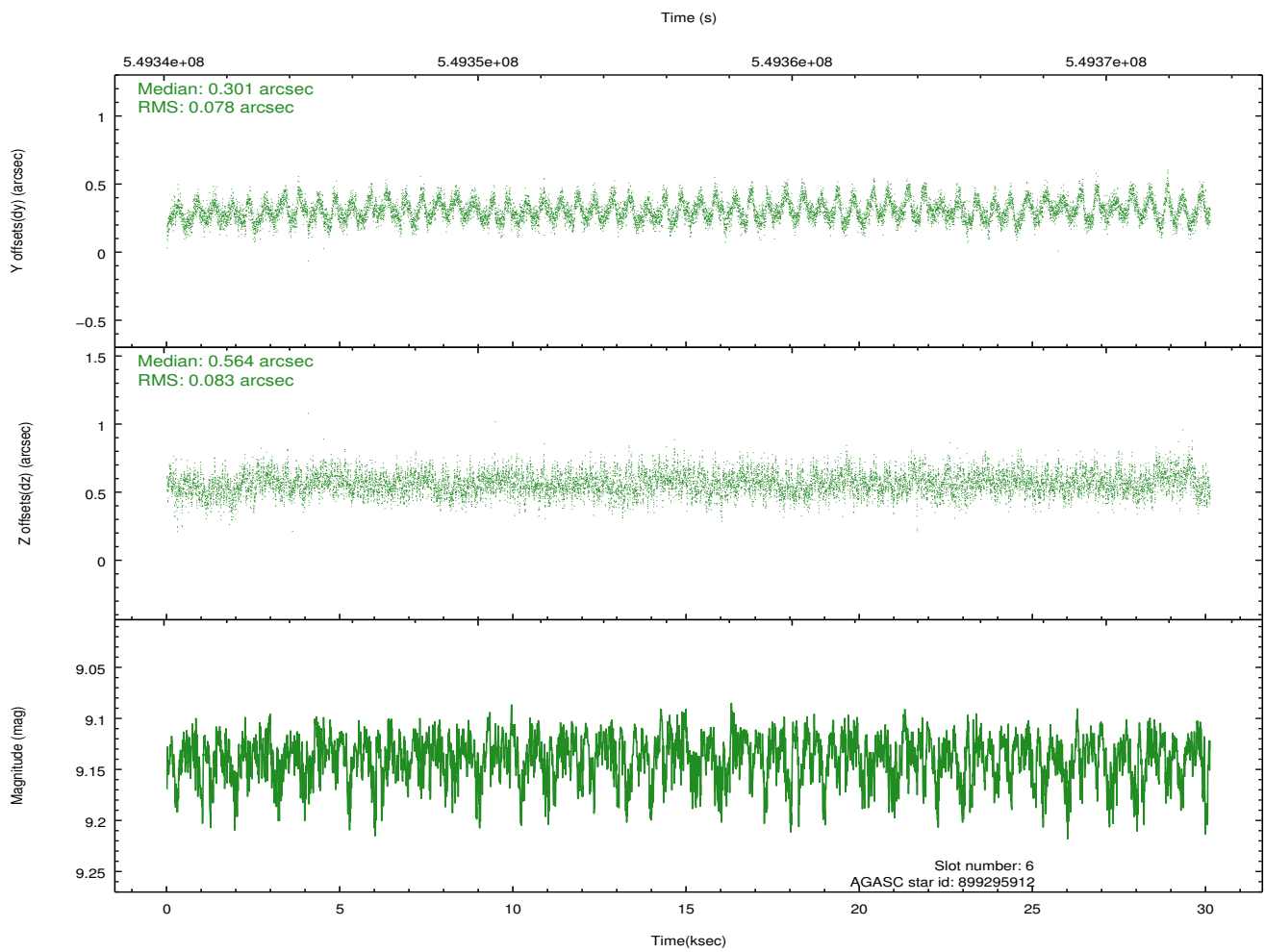
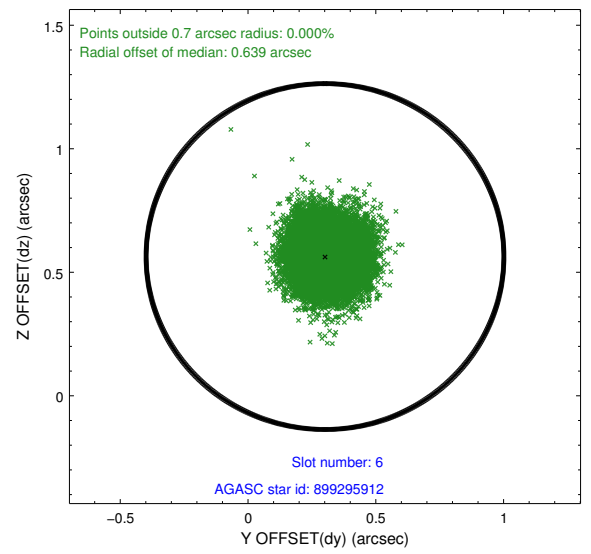
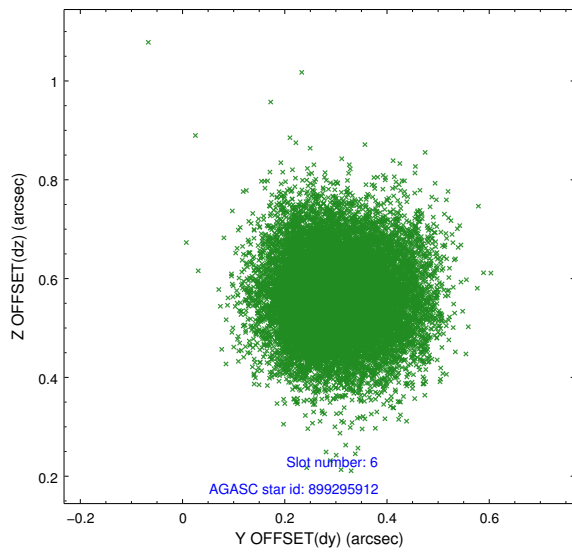
2.4.2 Slot 4



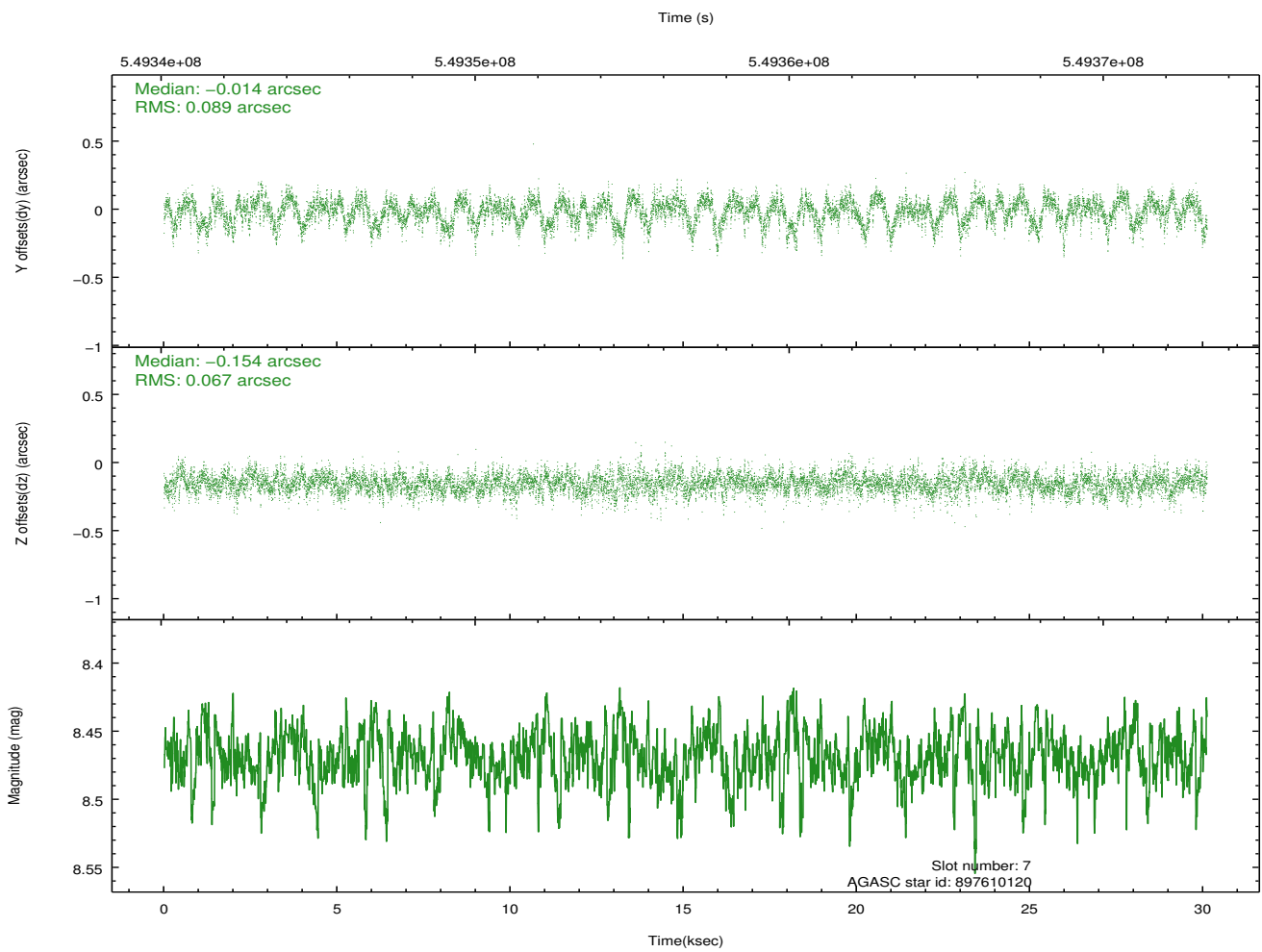
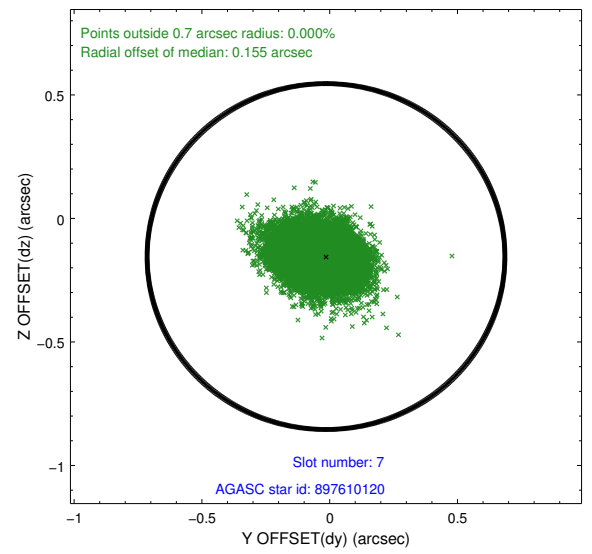
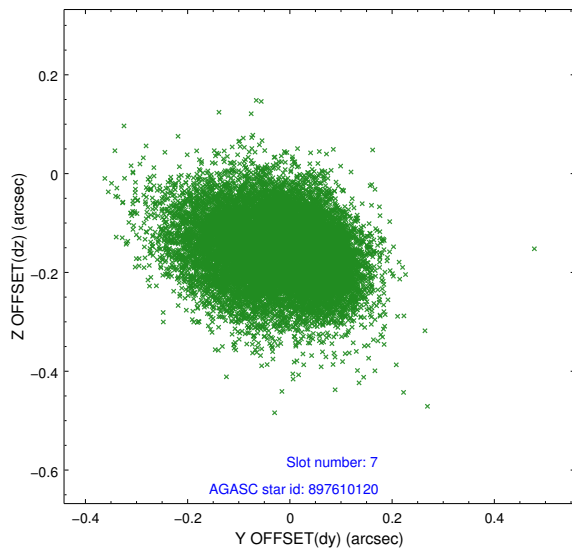
2.4.3 Slot 5



2.4.4 Slot 6

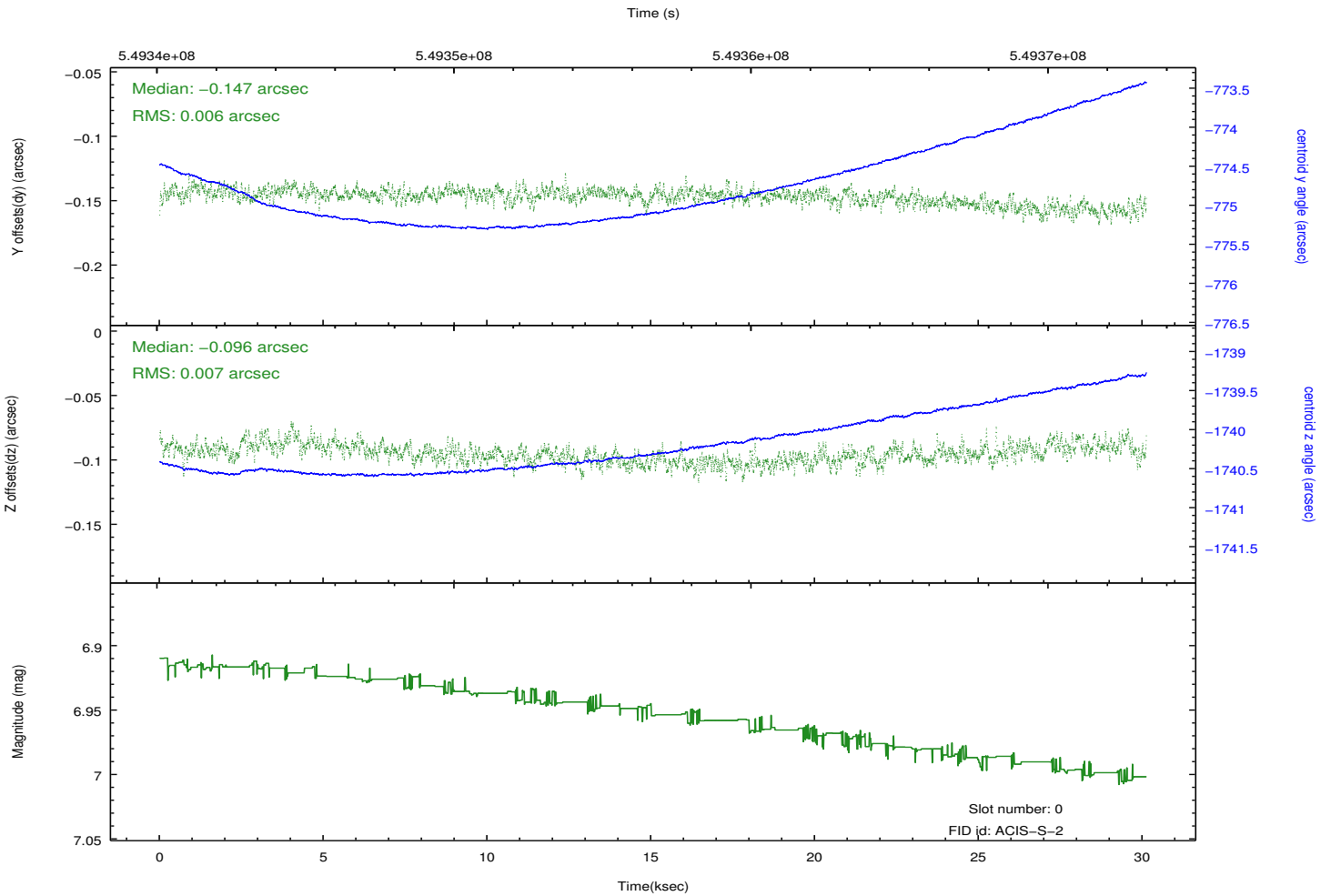
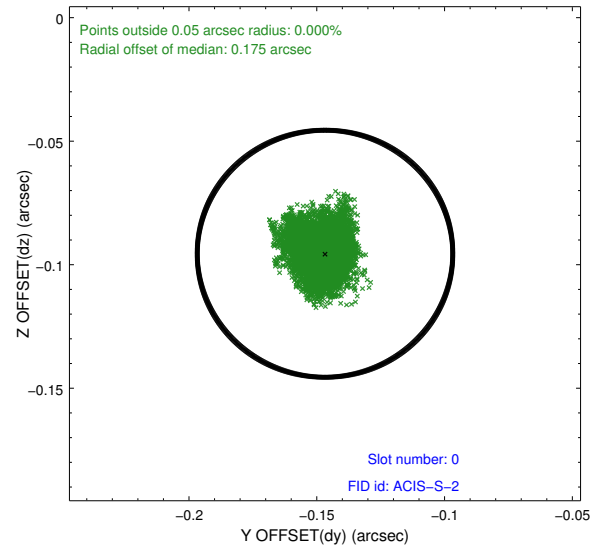
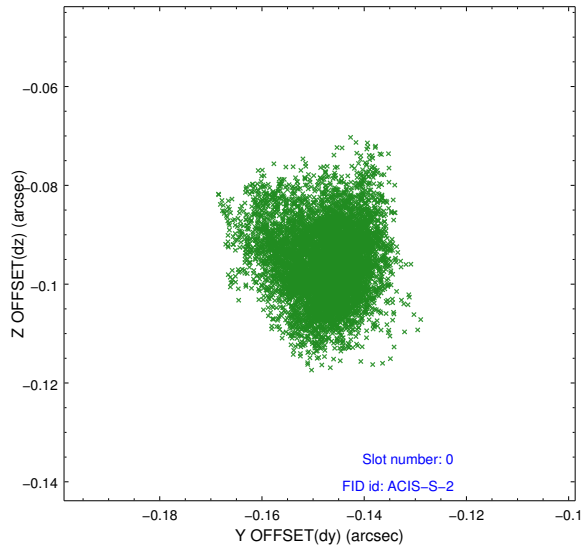


2.4.5 Slot 7

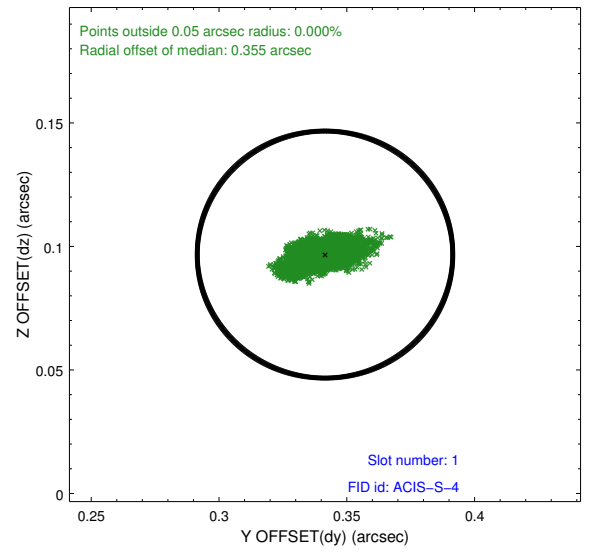
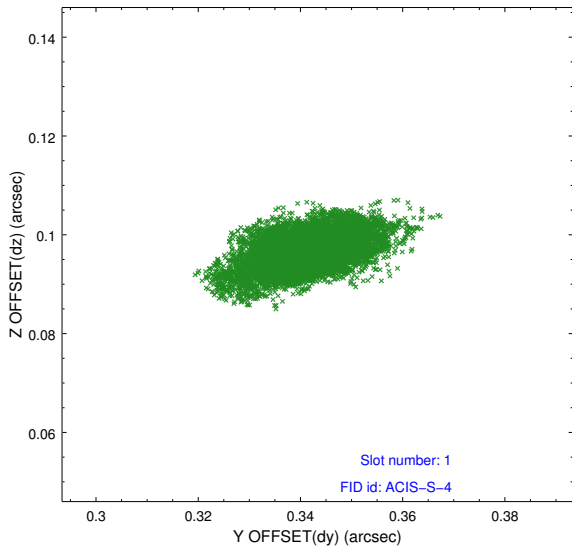


2.5 FID Slots

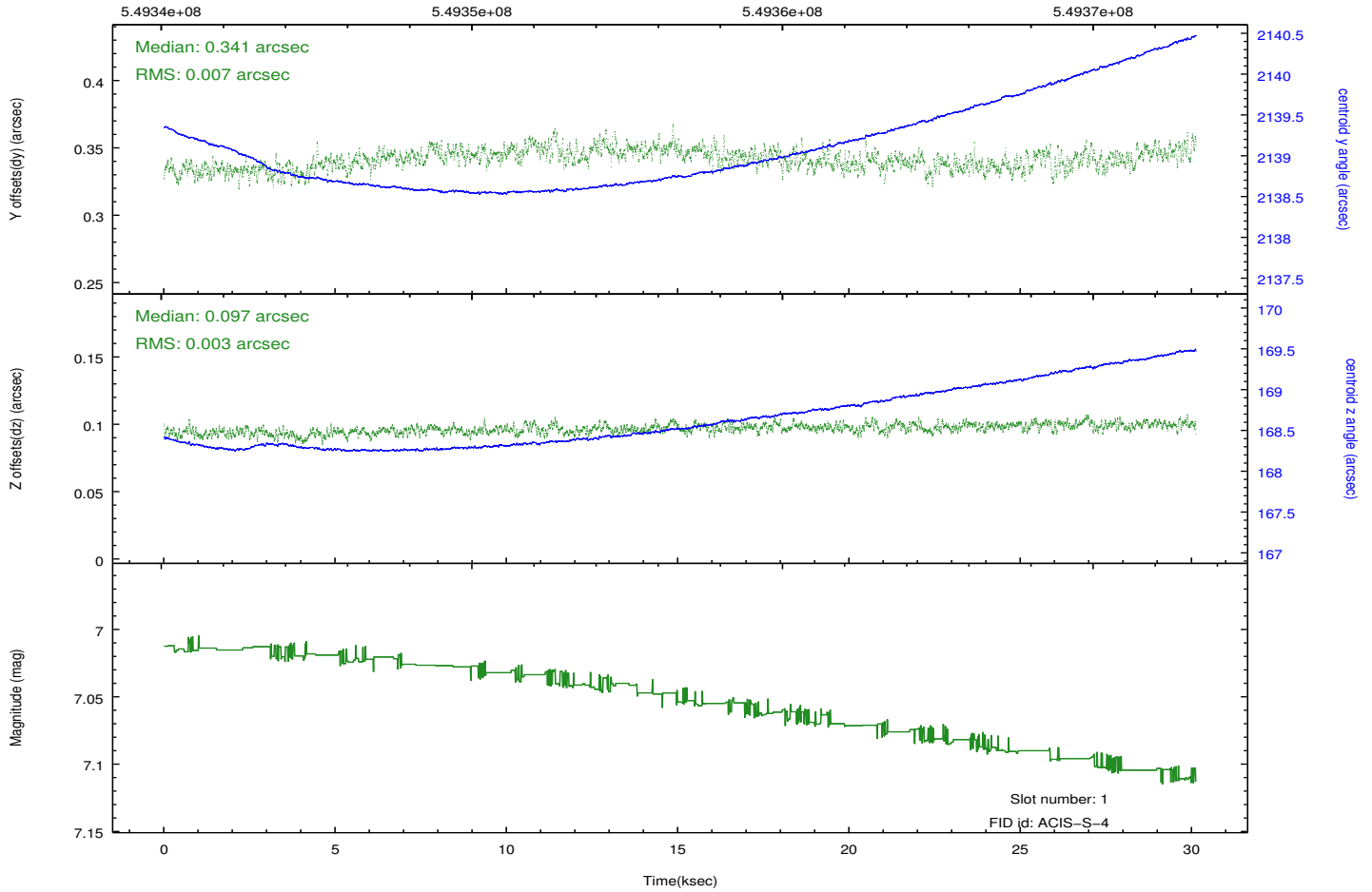
2.5.1 Slot 0



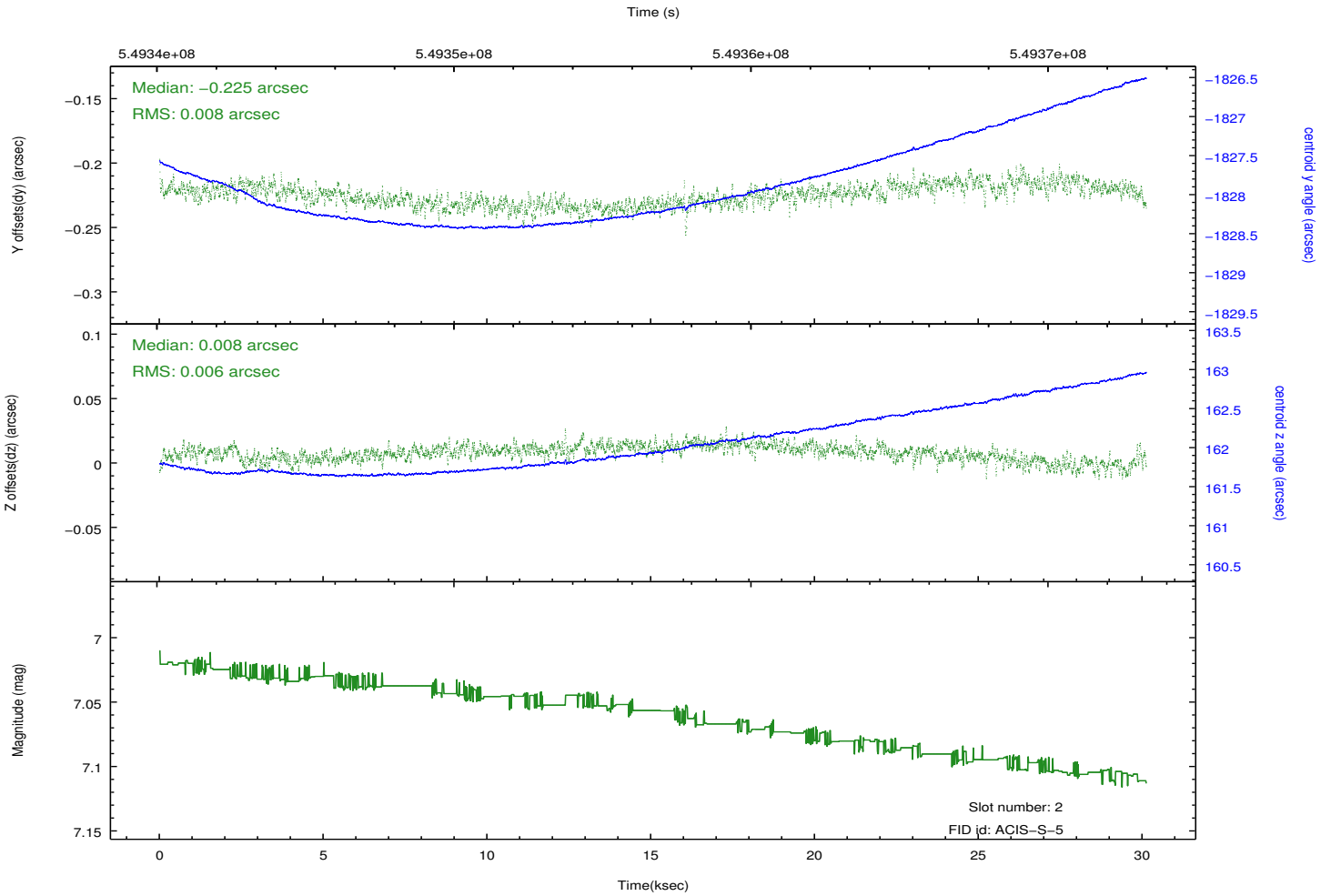
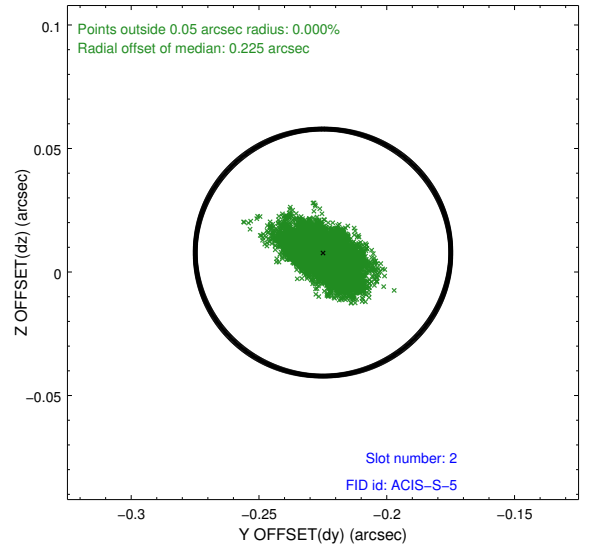
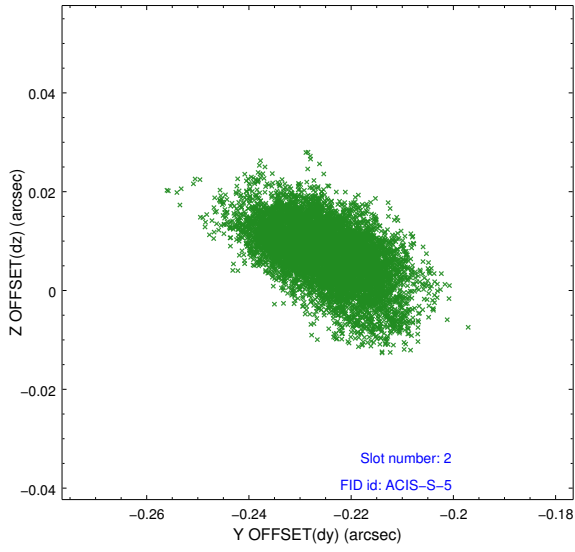
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.05.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.048300231218

A.2 Comments

Joint proposal with NRAO.

Observation coordinated with NRAO-GBT.

Optional chip S1 was dropped.