

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19030 - L2 Version 2
Chandra X-Ray Center

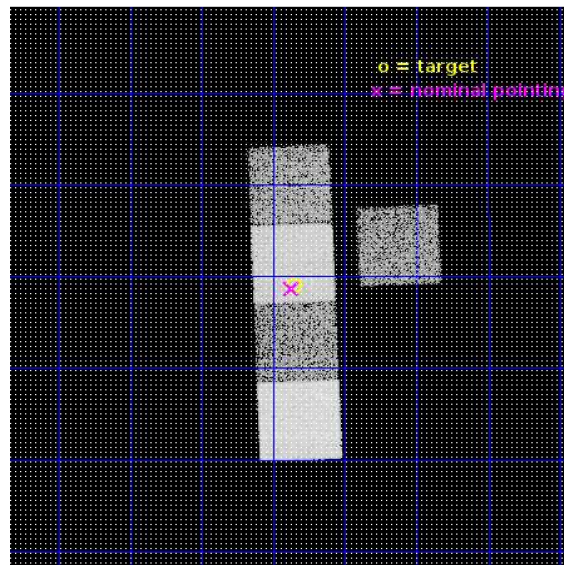
L2 Processing Date : Mar 23 2017

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1 Front

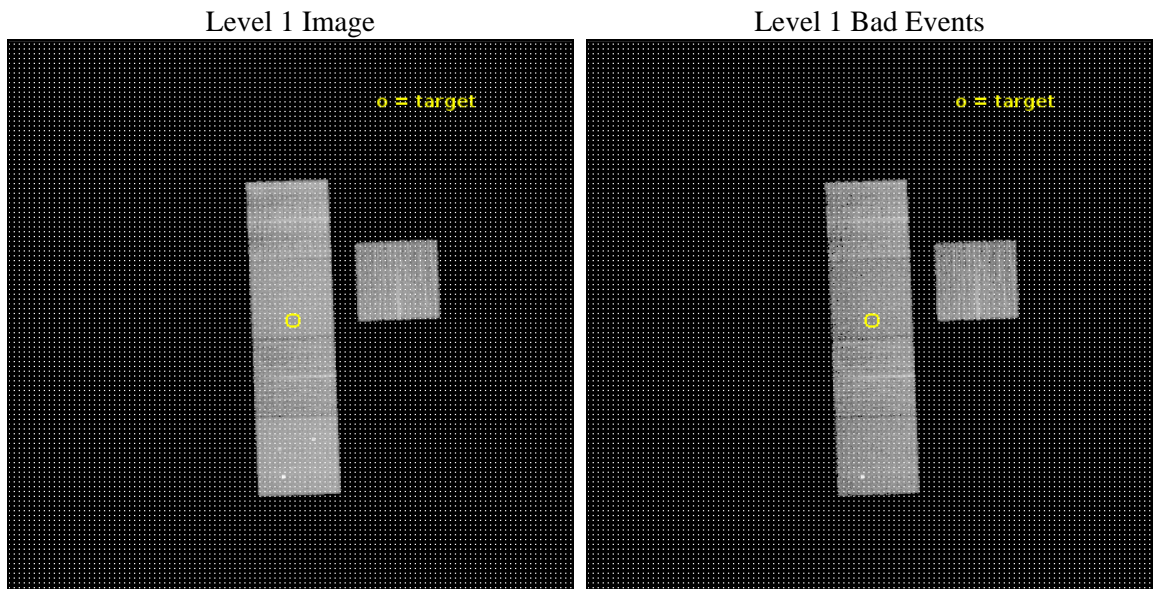
seq_num	502680	Sequence number
obs_id	19030	Observation id
title	Chandra Observations of Extreme Mass Loss from the Progenitors of Luminous Type II _n SNe	Proposal title
observer	Maria Drout	Principal investigator
object	PS12zc	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.58875	Observer's specified target RA [deg]
dec_targ	1.14925	Observer's specified target Dec [deg]
ra_nom	150.59338360863	Nominal RA [deg]
dec_nom	1.1440886297195	Nominal Dec [deg]
roll_nom	267.74448623432	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10043.632587194	Sum of GTIs [s]
livetime	9912.405133428	Livetime [s]
ontime3	10043.509467244	Sum of GTIs [s]
ontime5	10043.591547251	Sum of GTIs [s]
ontime6	10043.550507188	Sum of GTIs [s]
ontime7	10043.632587194	Sum of GTIs [s]
ontime8	10040.32742703	Sum of GTIs [s]
l2events	116407	Number of level 2 events



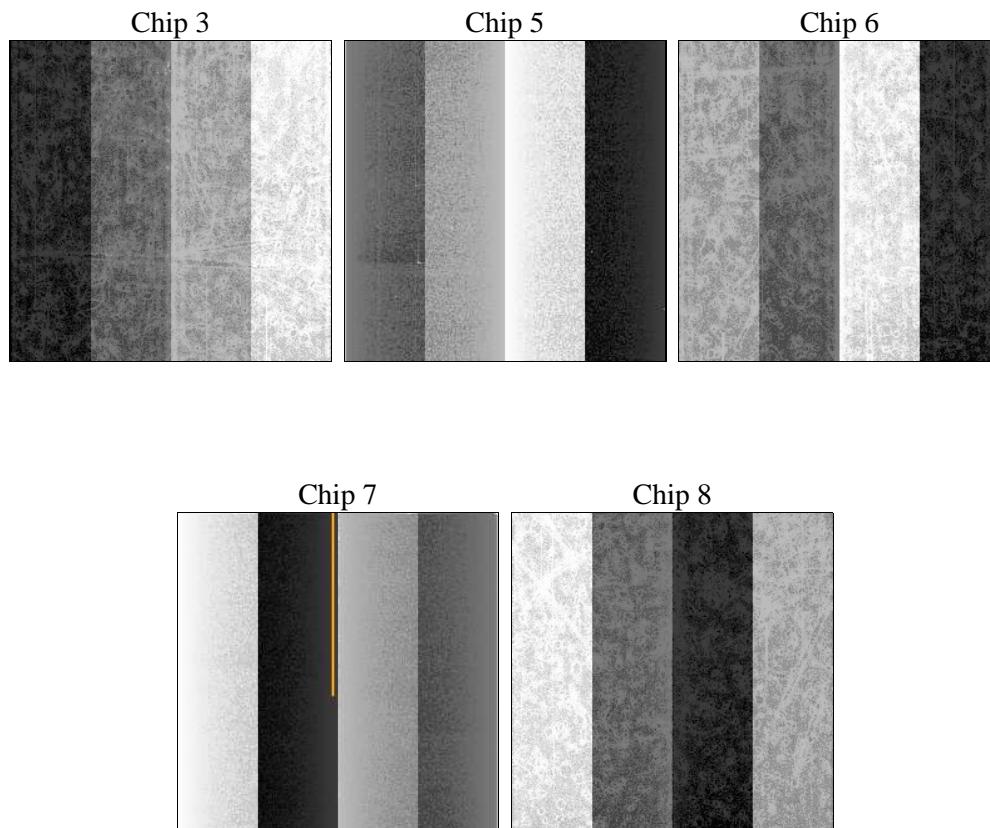
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	10043.632587194	Sum of GTIs [s]
caldbver	4.7.3	 	ontime3	10043.509467244	Sum of GTIs [s]
date	2017-03-23T17:10:41	Date and time of file creation	ontime5	10043.591547251	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10043.550507188	Sum of GTIs [s]
			ontime7	10043.632587194	Sum of GTIs [s]
			ontime8	10040.32742703	Sum of GTIs [s]
			l1events	454267	Number of level 1 events

2.1.4 Events

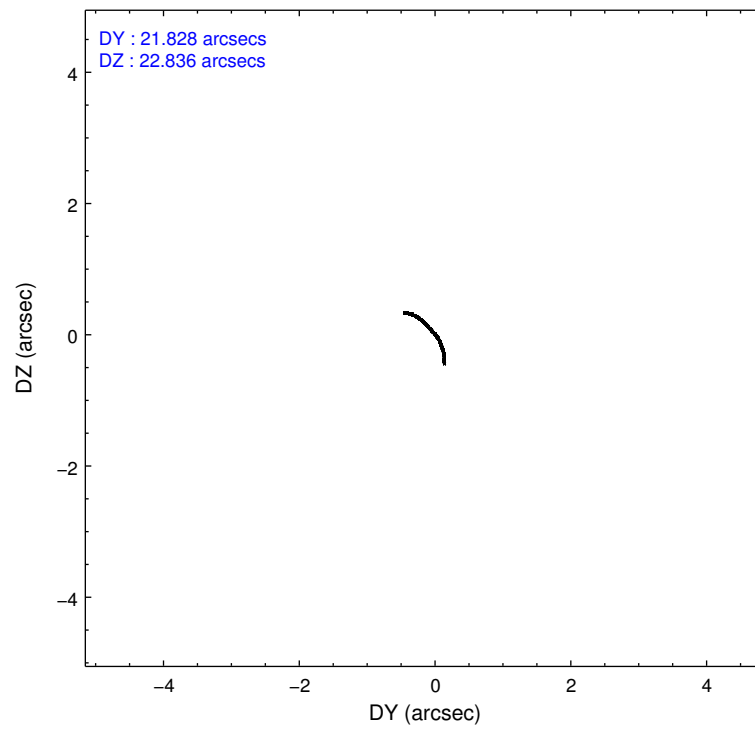
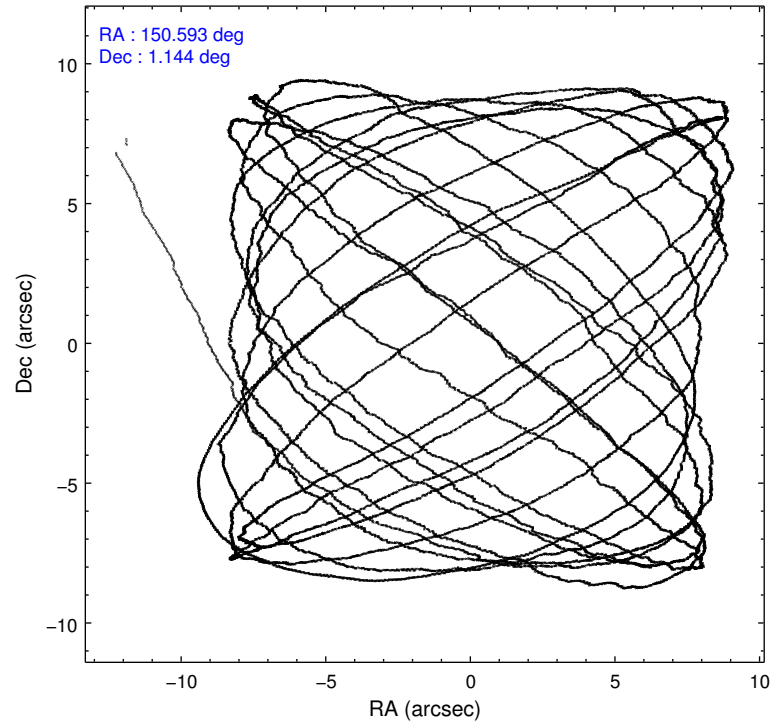
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	71546	119052	73918	93383	96368
rejected events	63811	61691	65817	52329	69450
rejected %	89%	51%	89%	56%	72%

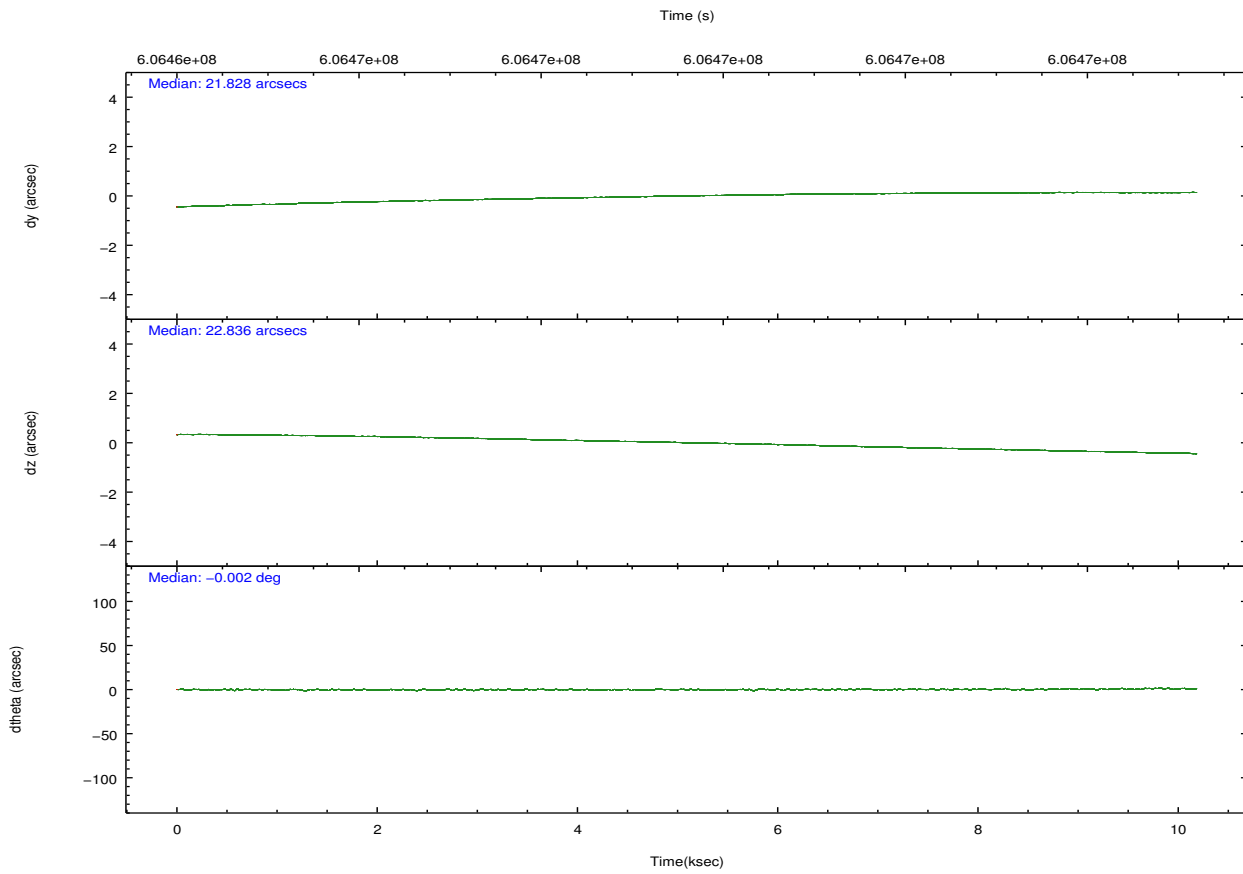
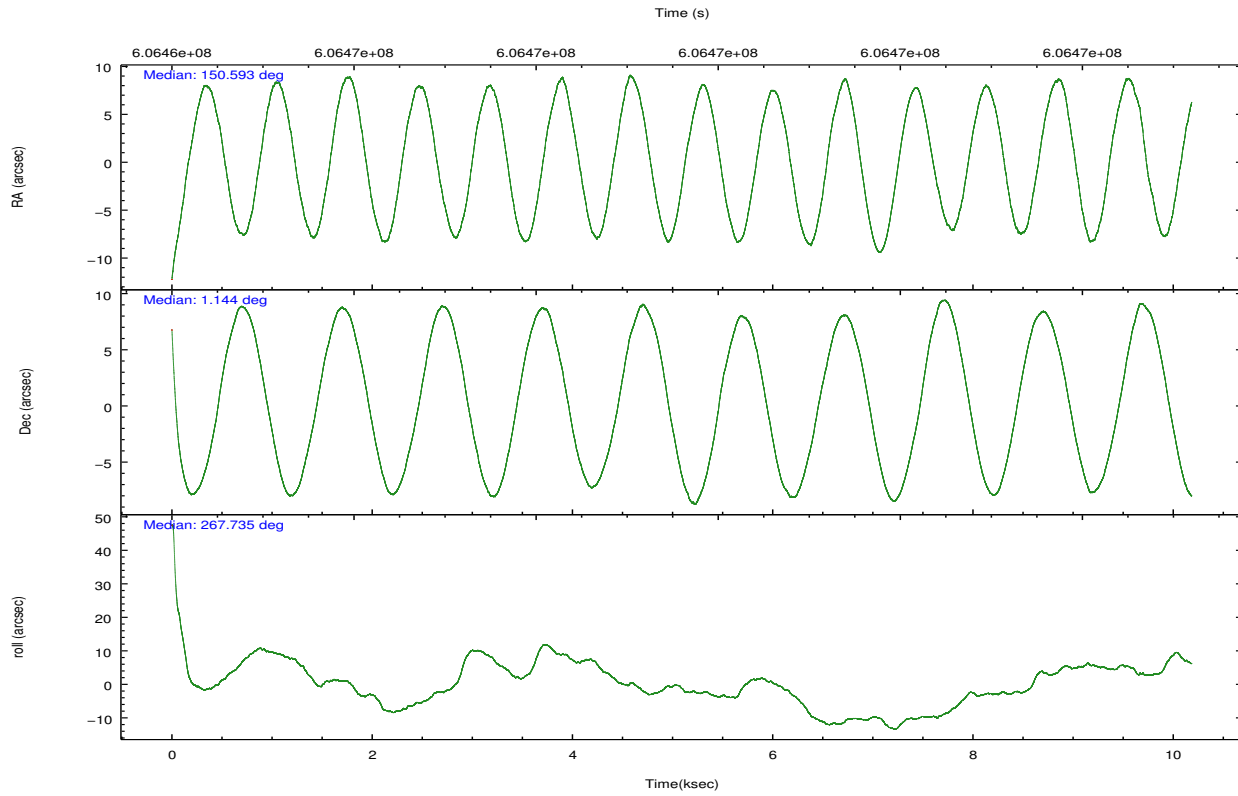
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2762	4976	2580	3667	7645
	3%	4%	3%	3%	7%
grade 1 events	37	232	31	157	76
	0%	0%	0%	0%	0%
grade 2 events	1719	18439	1971	8827	6526
	2%	15%	2%	9%	6%
grade 3 events	834	1874	842	3448	2649
	1%	1%	1%	3%	2%
grade 4 events	845	1857	791	3281	2573
	1%	1%	1%	3%	2%
grade 5 events	3471	8618	3576	9300	5218
	4%	7%	4%	9%	5%
grade 6 events	1577	30229	1921	21845	7528
	2%	25%	2%	23%	7%
grade 7 events	60301	52827	62206	42858	64153
	84%	44%	84%	45%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	150.580281	150.593383608626	CCD I2 on	N	N
[deg] Pointing Dec	1.168228	1.144088629719475	CCD I3 on	O1	Y
[deg] Pointing Roll	267.588086	267.7444862343202	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[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)	606464718.184000	606463473.23515	CCD S5 on	N	N
Observation start date	2017-03-21T06:24:09	2017-03-21T06:04:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	606474718.184000	606475810.64837	On-chip summing requested	N	N
Observation end date	2017-03-21T09:10:49	2017-03-21T09:30:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



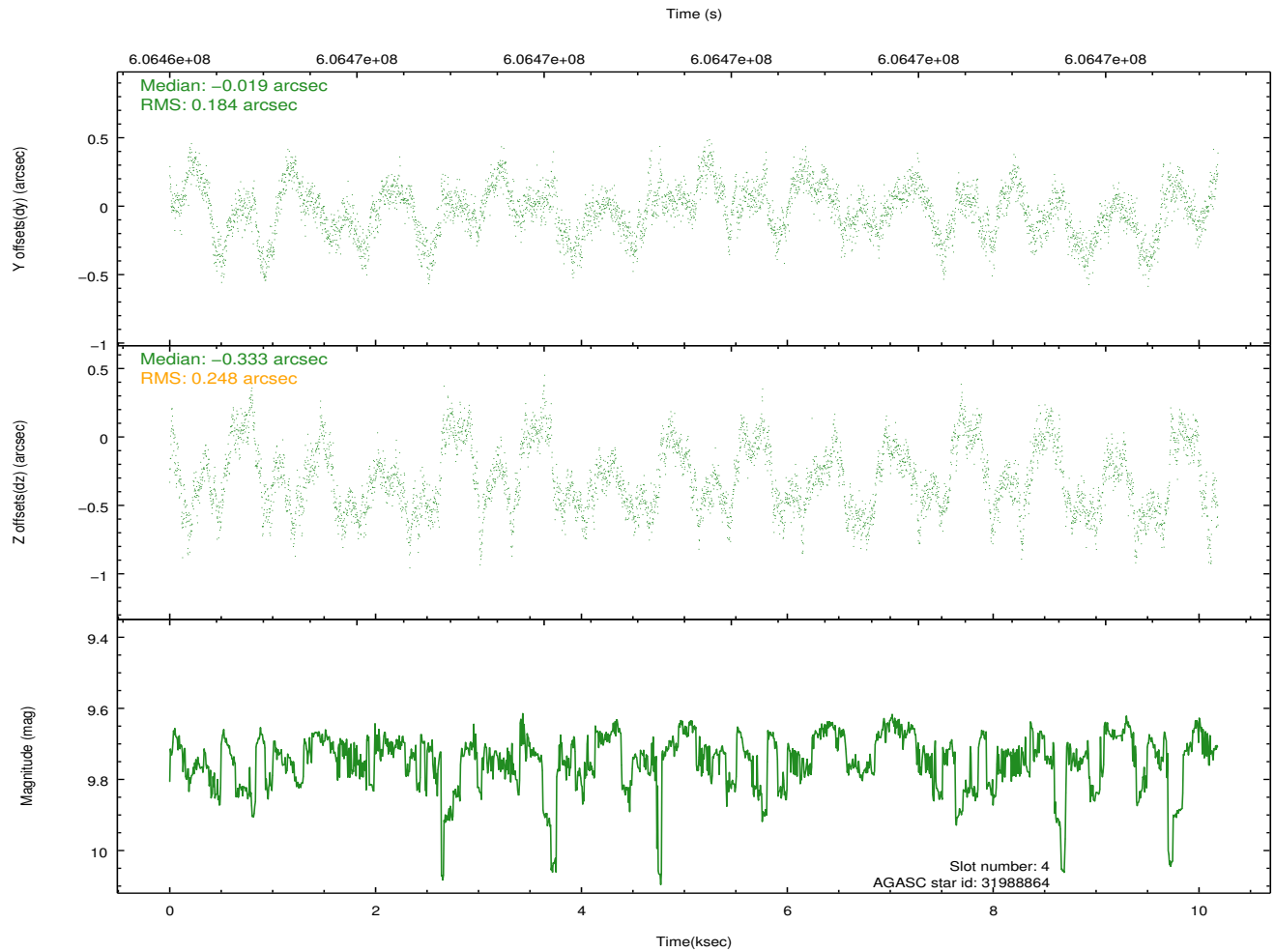
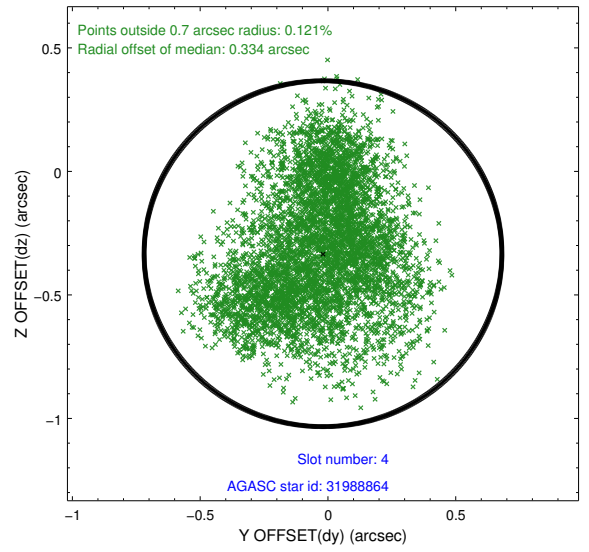
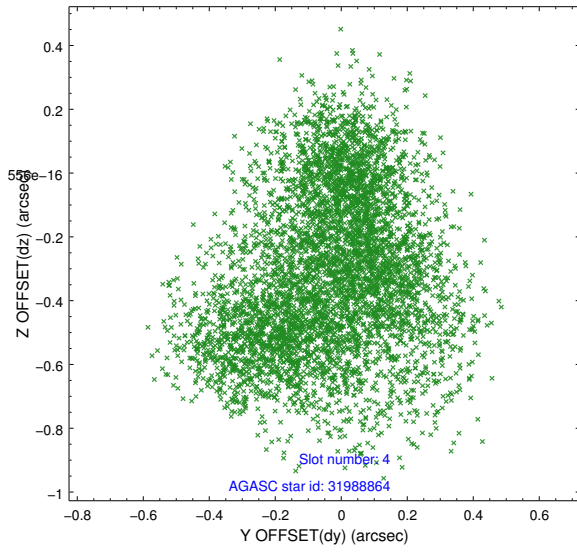


Slot Statistics

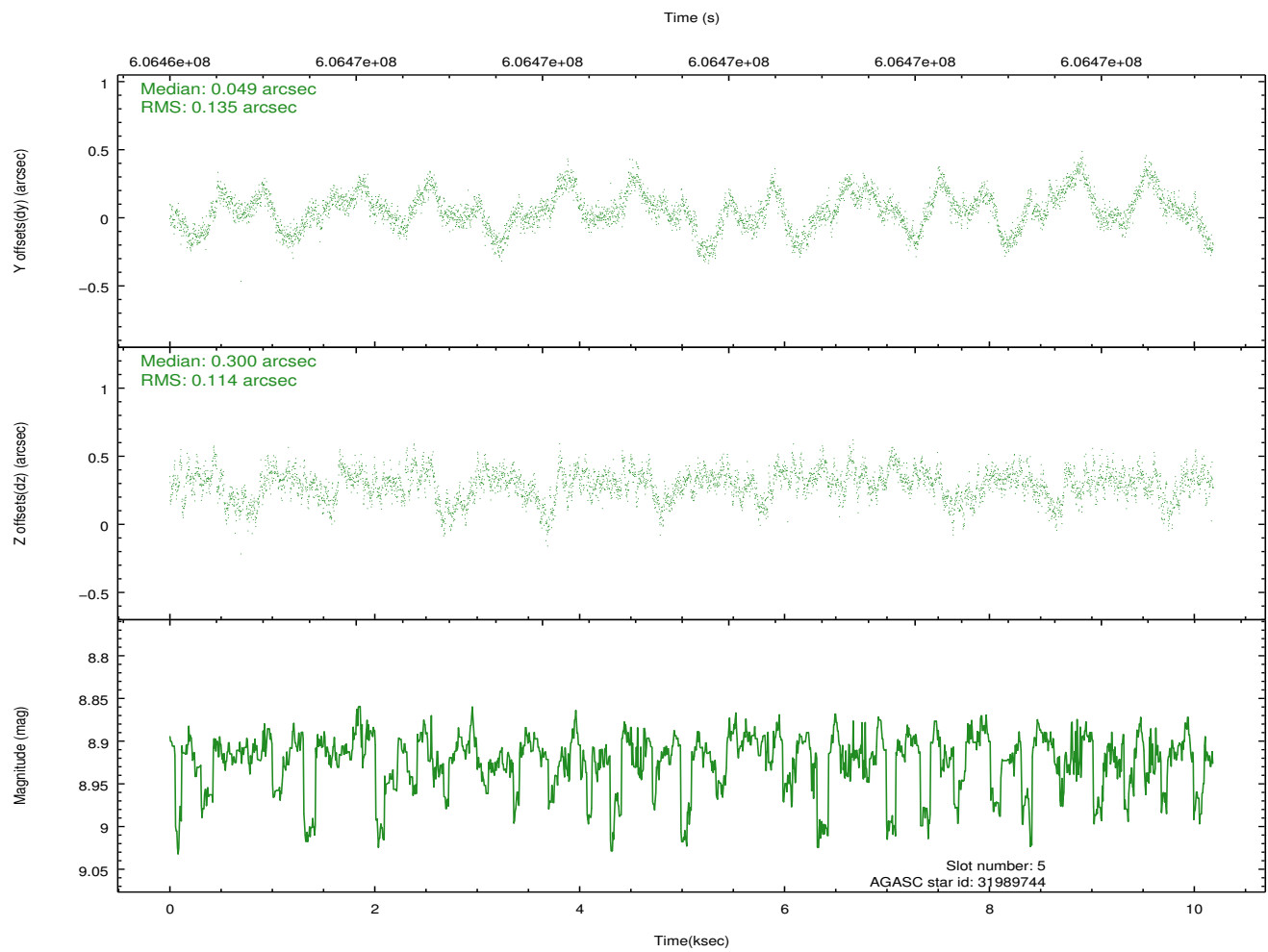
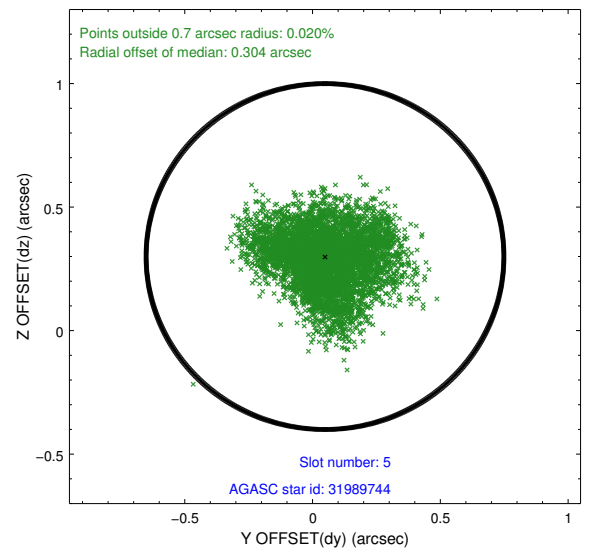
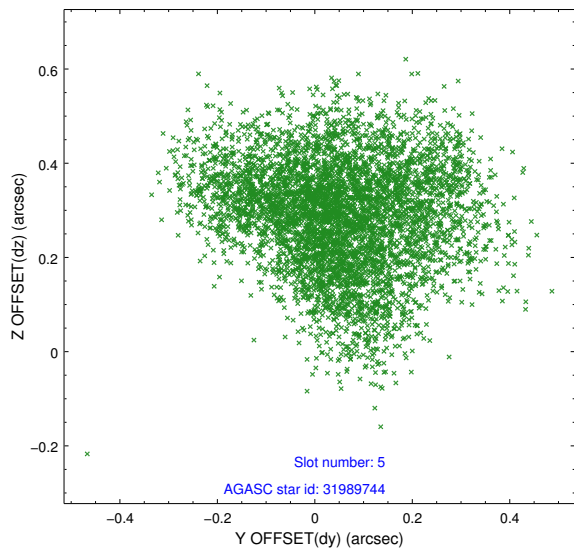
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	2485	-0.317	-0.216	0.008	0.014	0.000000	0.000000	-775.30	-1744.61
1	FID		ACIS-S-4	7.05	2484	0.342	0.182	0.009	0.015	0.000000	0.000000	2138.45	163.65
2	FID		ACIS-S-6	7.22	2485	-0.053	0.041	0.009	0.014	0.000000	0.000000	387.68	801.54
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	31988864	9.73	4947	-0.019	-0.333	0.342	0.502	151.012511	0.591625	2007.29	1638.77
5	GUIDE	used	31989744	8.92	4959	0.049	0.300	0.192	0.299	150.416962	1.131114	159.13	-581.03
6	GUIDE	used	31990800	9.69	4931	0.134	0.120	0.296	0.463	150.153109	0.829553	1285.21	-1484.11
7	GUIDE	used	31991816	8.64	4963	-0.158	-0.099	0.145	0.246	150.917113	1.006843	529.46	1235.35

2.4 Star Slots

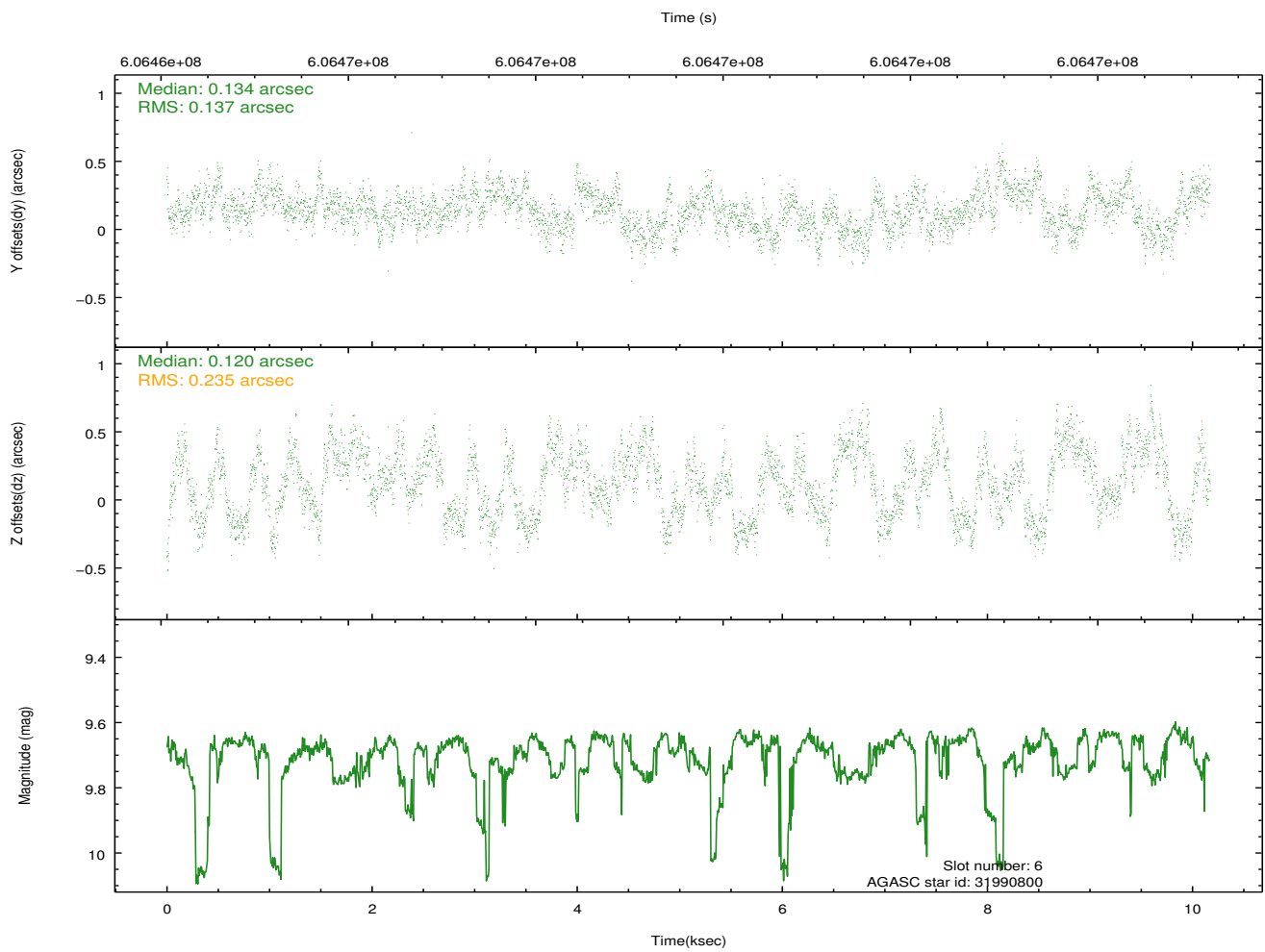
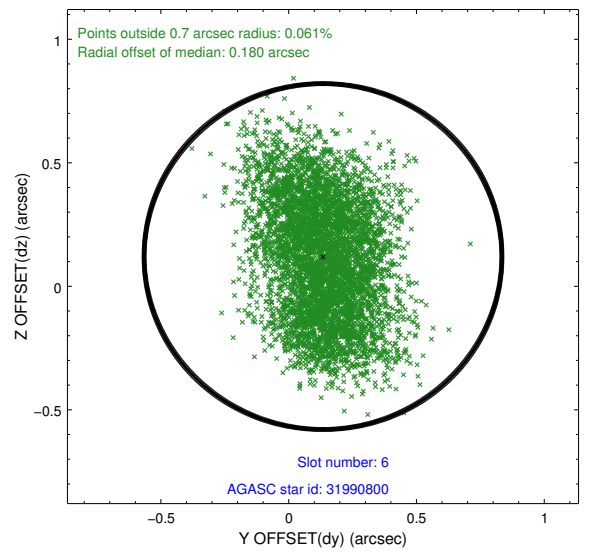
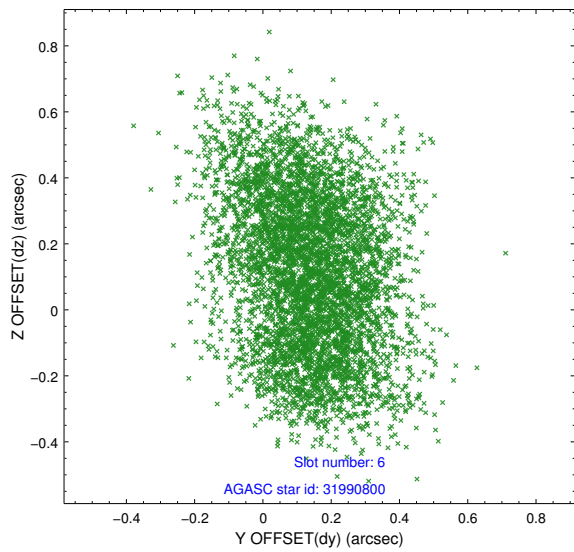
2.4.1 Slot 4



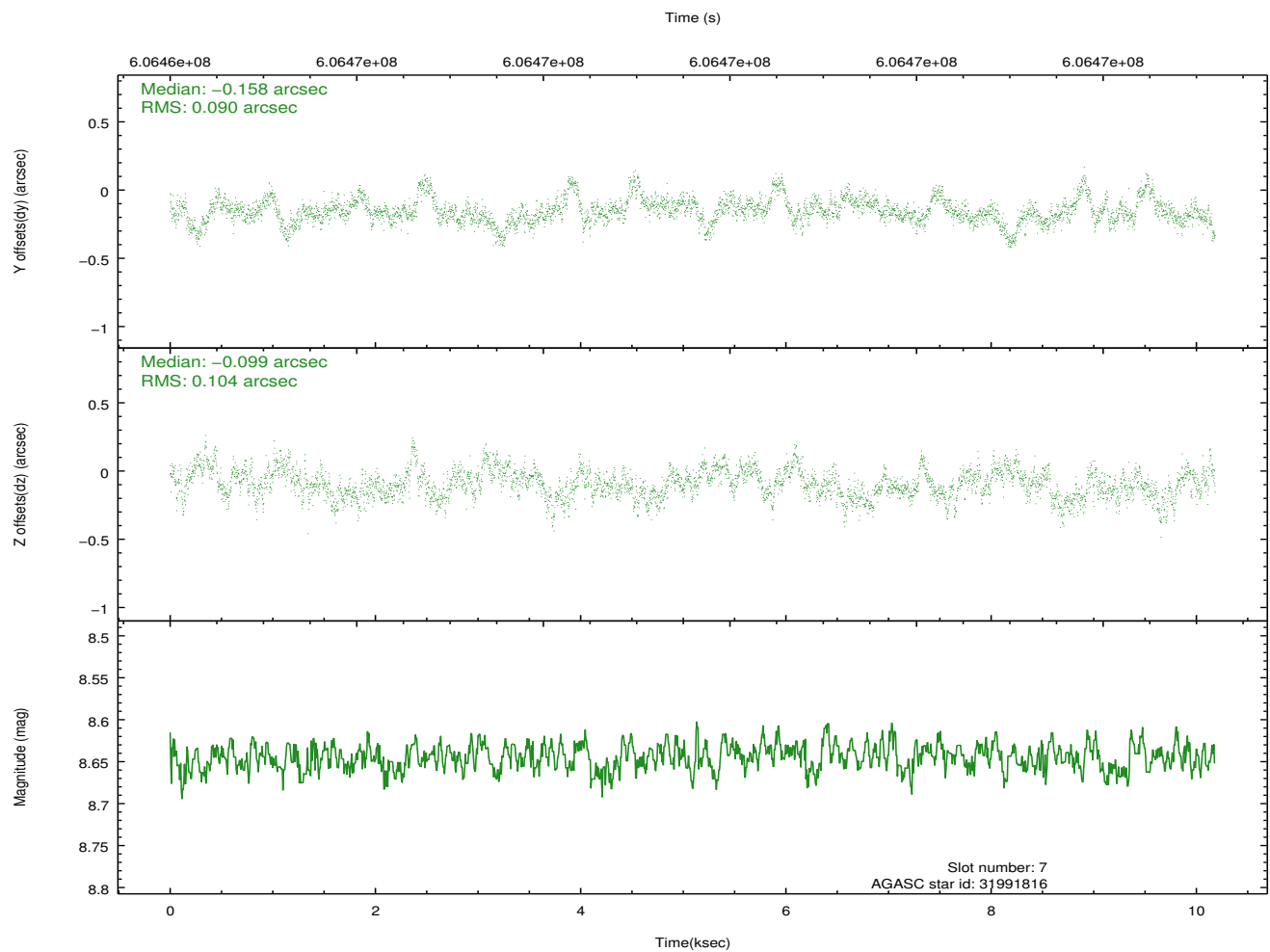
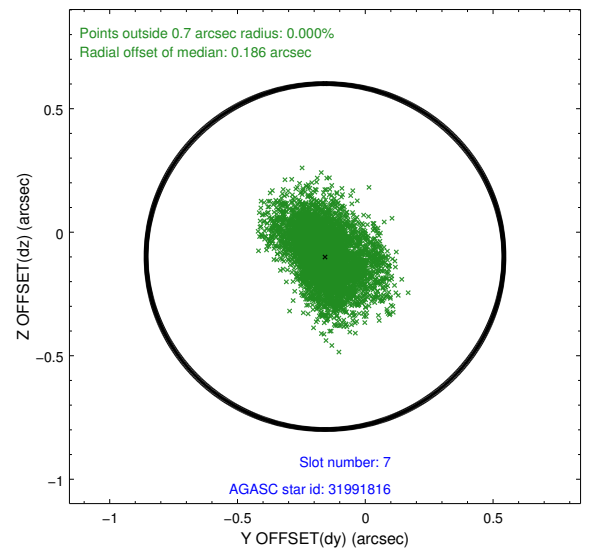
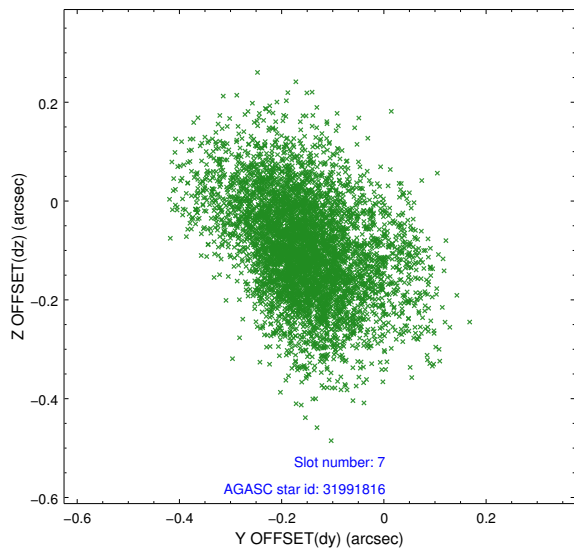
2.4.2 Slot 5



2.4.3 Slot 6

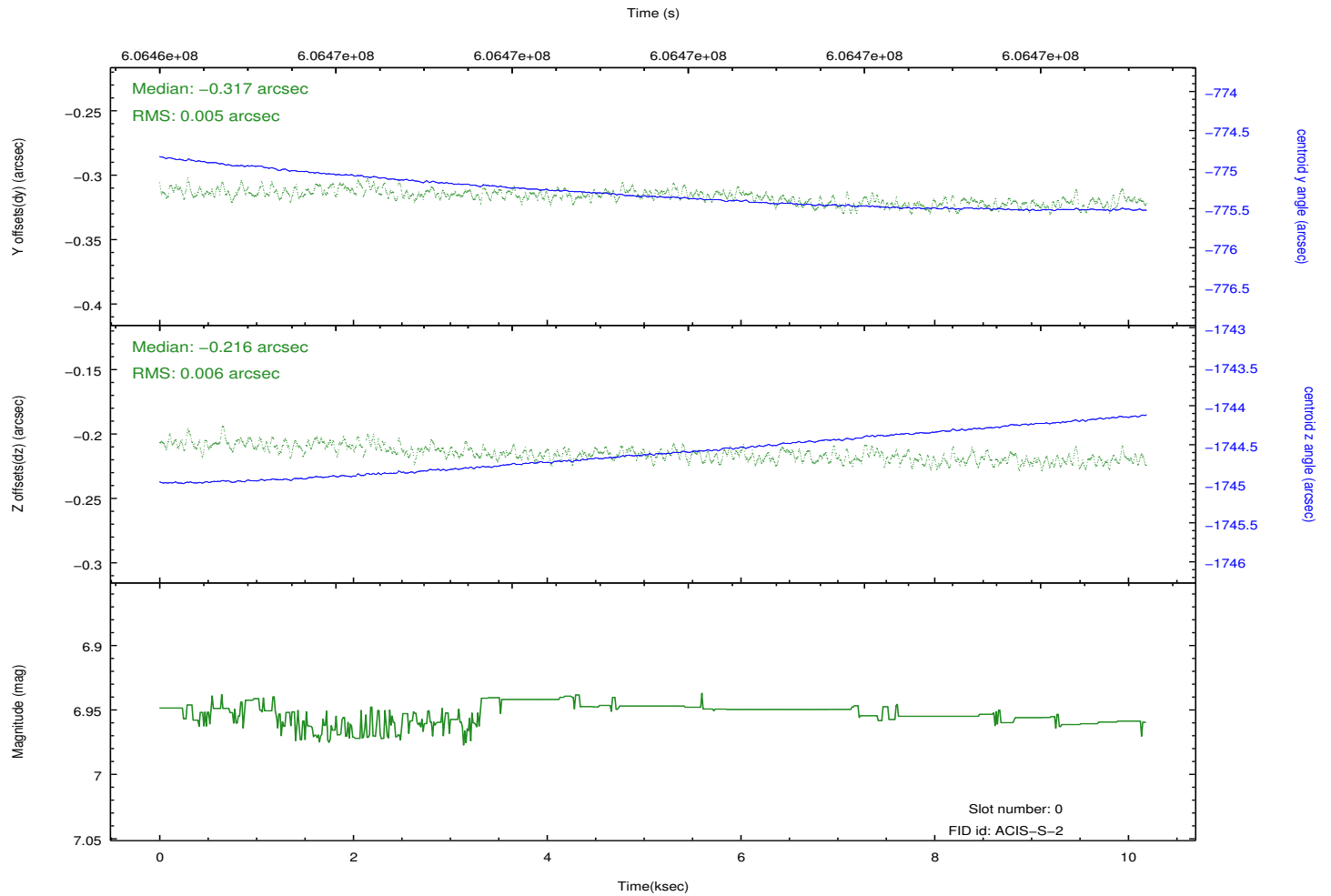
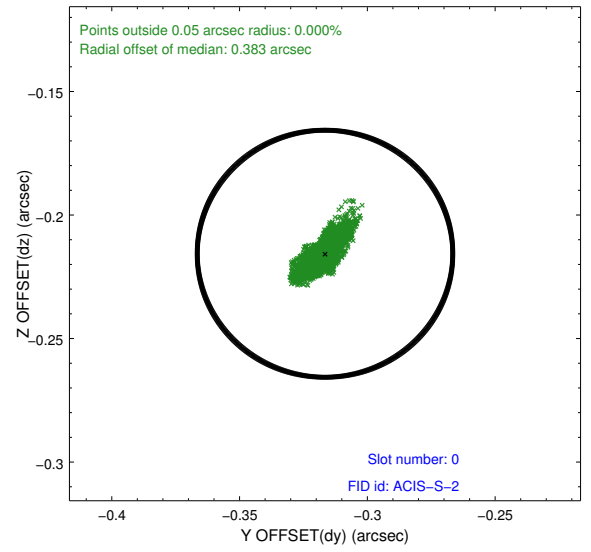
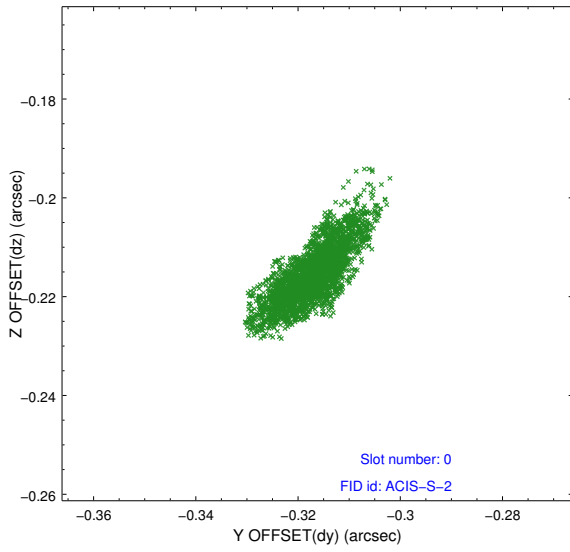


2.4.4 Slot 7

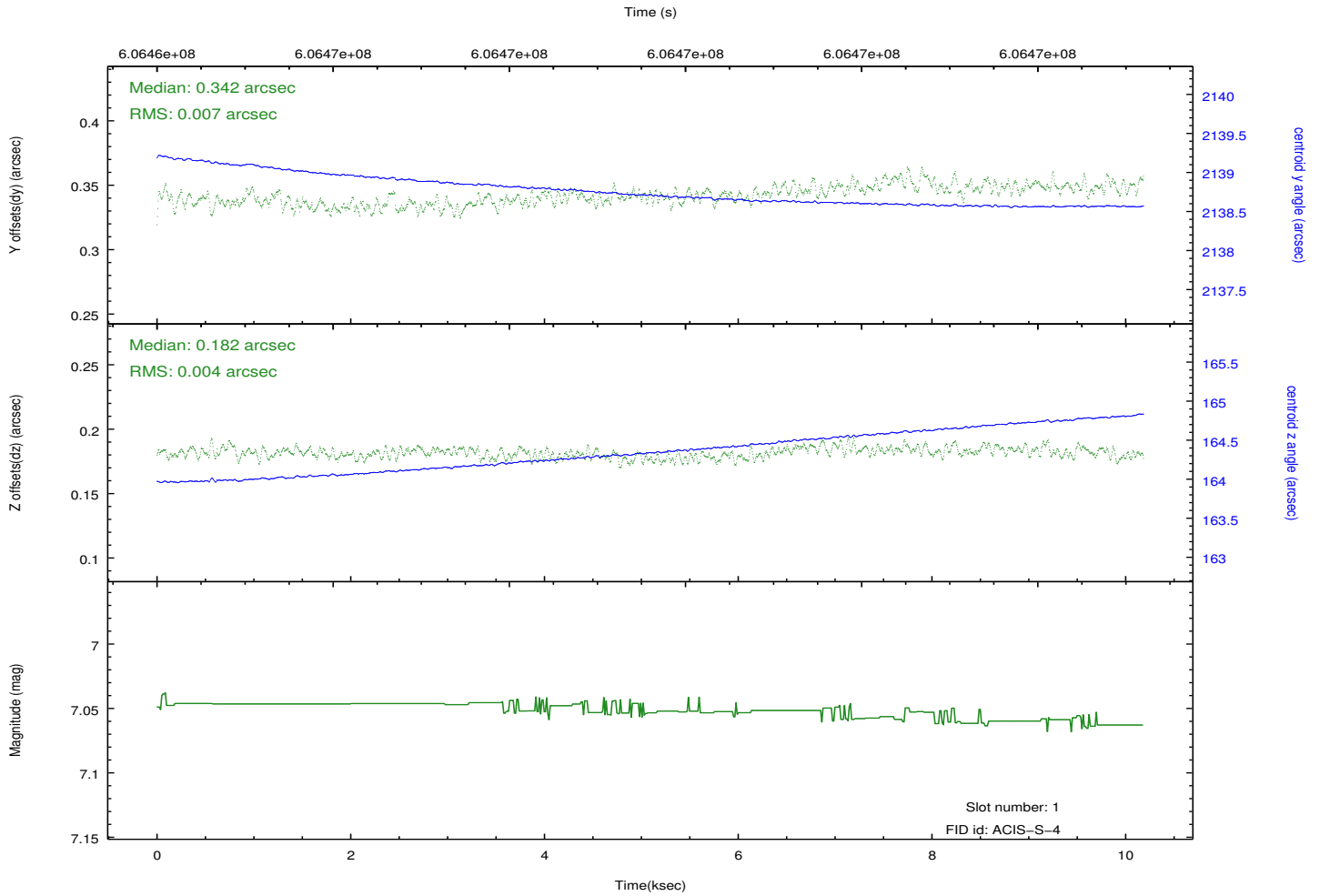
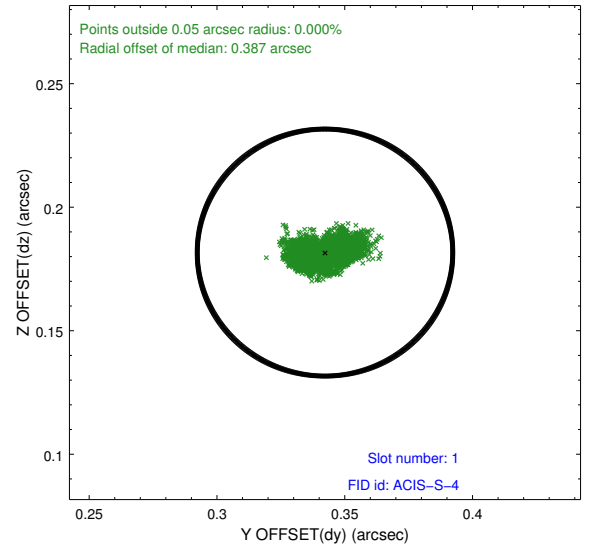
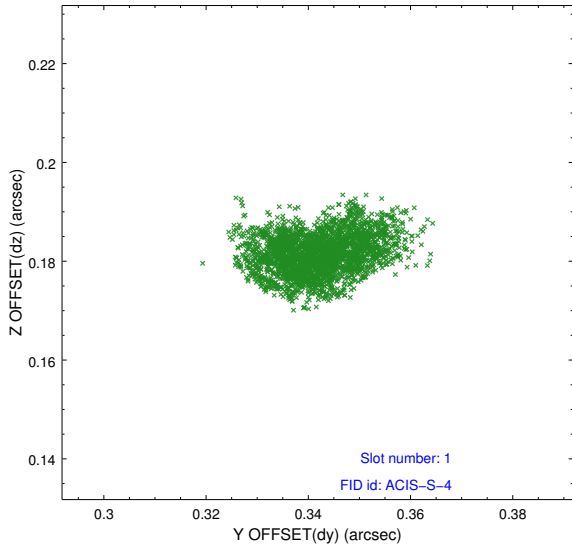


2.5 FID Slots

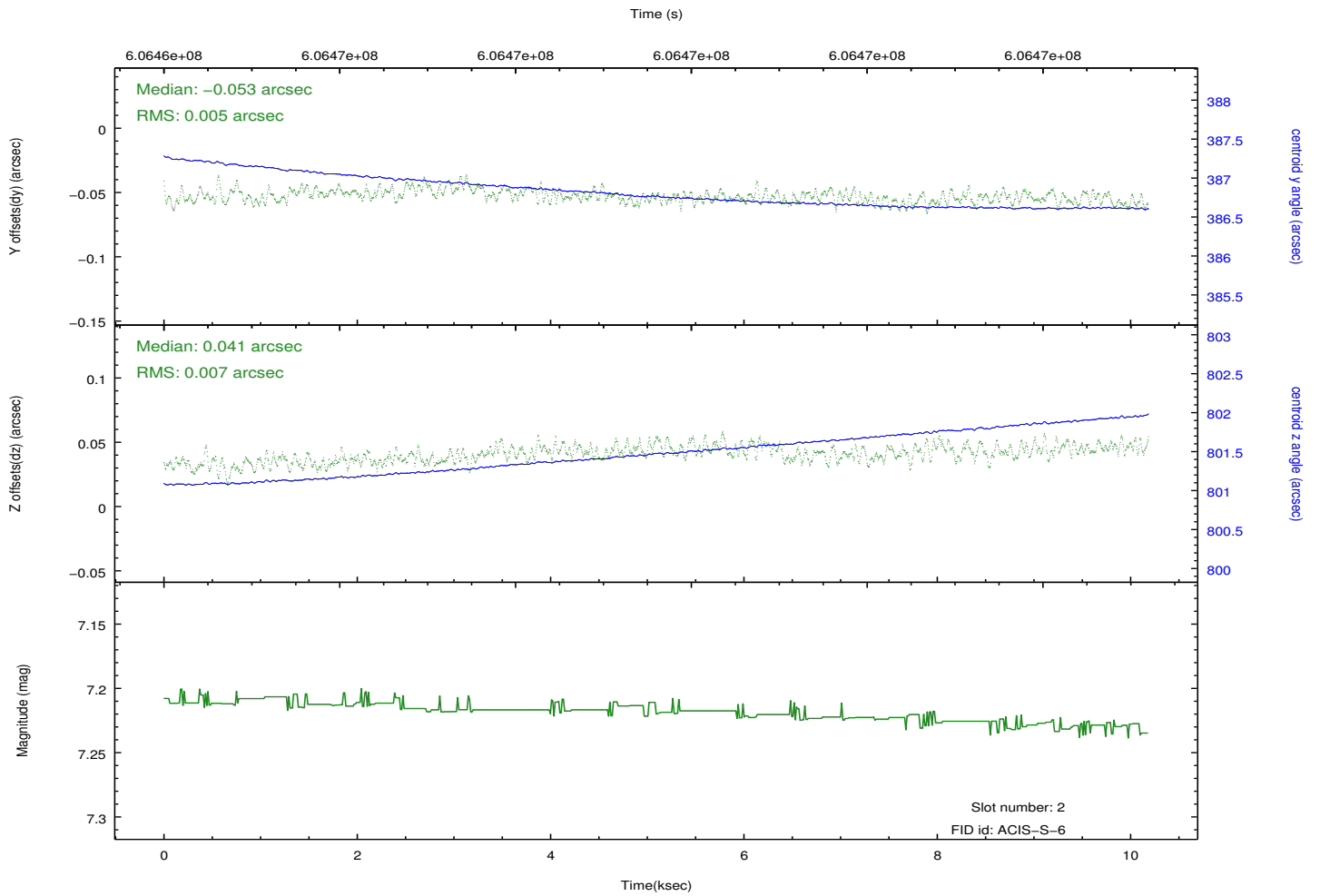
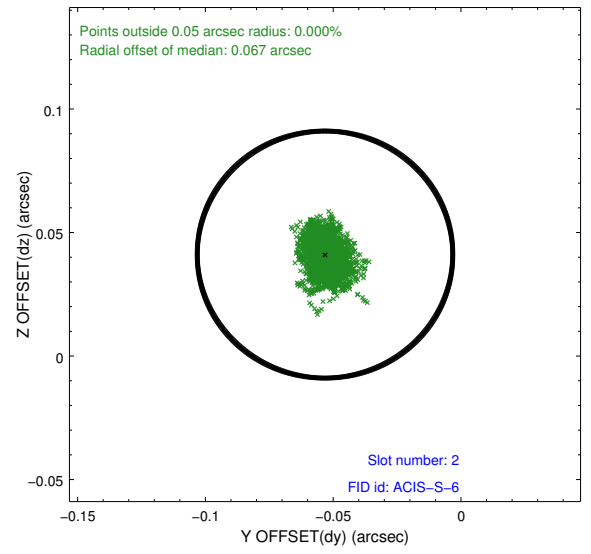
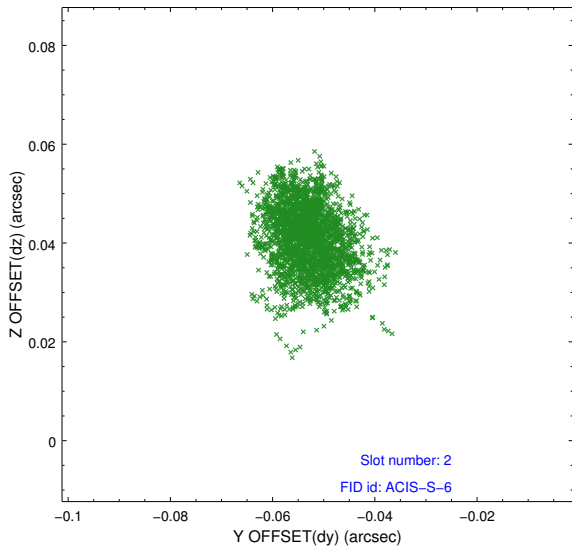
2.5.1 Slot 0



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)	2017.03.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.043632587194

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.