

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18805 - L2 Version 2
Chandra X-Ray Center

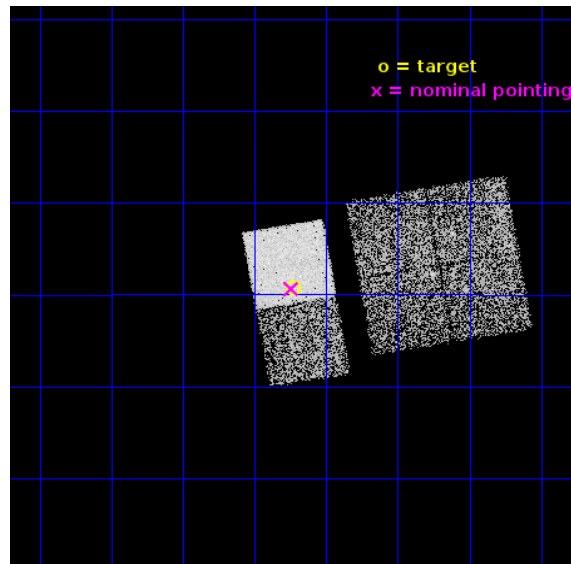
L2 Processing Date : Apr 4 2016

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1 Front

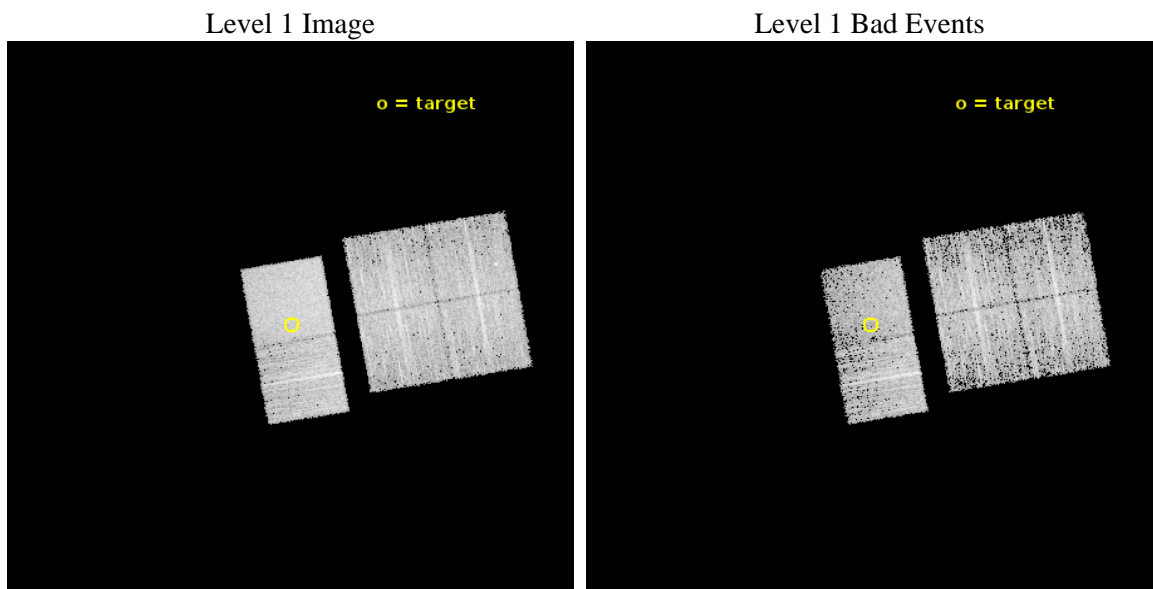
seq_num	201039	Sequence number
obs_id	18805	Observation id
title	The rotation/activity relation of M dwarfs	Proposal title
observer	Beate Stelzer	Principal investigator
object	201364753	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.308333	Observer's specified target RA [deg]
dec_targ	-1.487778	Observer's specified target Dec [deg]
ra_nom	174.3107607003	Nominal RA [deg]
dec_nom	-1.4890882649917	Nominal Dec [deg]
roll_nom	260.15681661268	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5951.0487236977	Sum of GTIs [s]
livetime	5875.6929614669	Livetime [s]
ontime0	5951.0897636414	Sum of GTIs [s]
ontime1	5950.8845636845	Sum of GTIs [s]
ontime2	5950.9256036282	Sum of GTIs [s]
ontime3	5950.9666436911	Sum of GTIs [s]
ontime6	5951.0076836348	Sum of GTIs [s]
ontime7	5951.0487236977	Sum of GTIs [s]
l2events	37642	Number of level 2 events



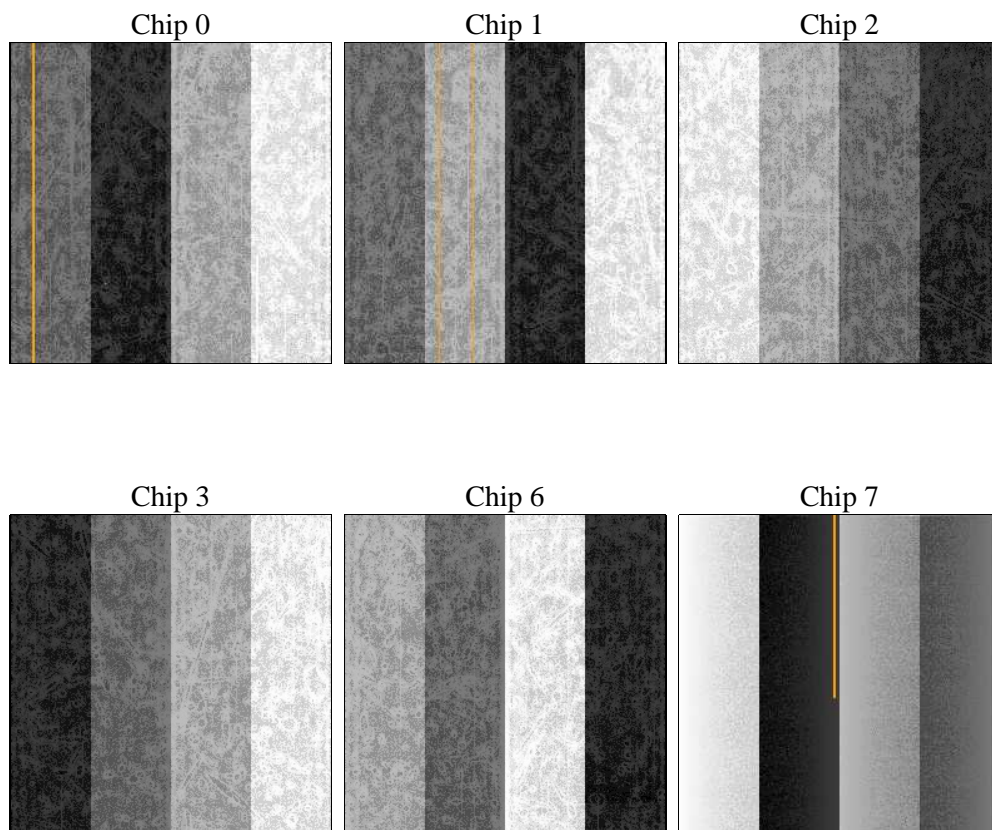
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	5951.0487236977	Sum of GTIs [s]
caldsver	4.7.1	 	ontime0	5951.0897636414	Sum of GTIs [s]
date	2016-04-04T21:44:29	Date and time of file creation	ontime1	5950.8845636845	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5950.9256036282	Sum of GTIs [s]
			ontime3	5950.9666436911	Sum of GTIs [s]
			ontime6	5951.0076836348	Sum of GTIs [s]
			ontime7	5951.0487236977	Sum of GTIs [s]
			l1events	221595	Number of level 1 events

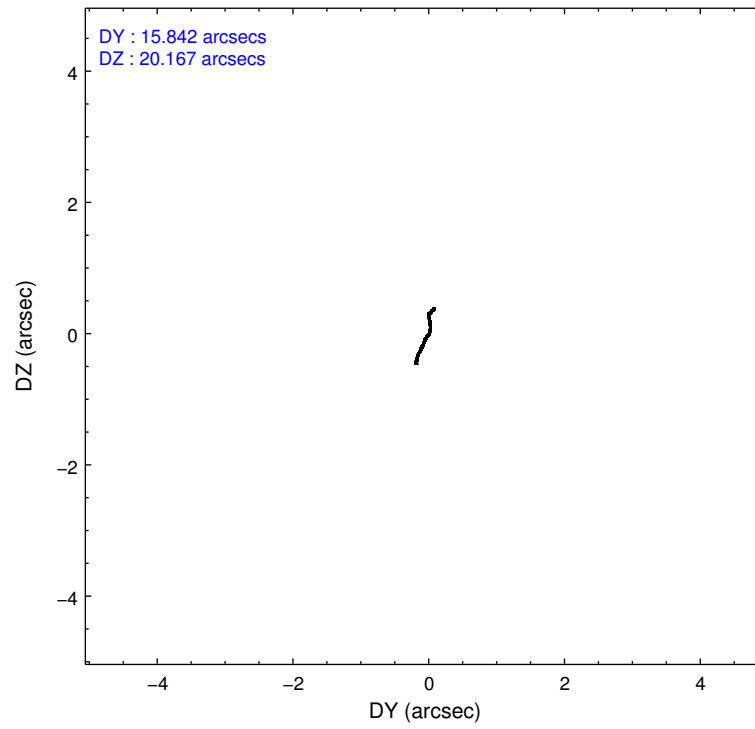
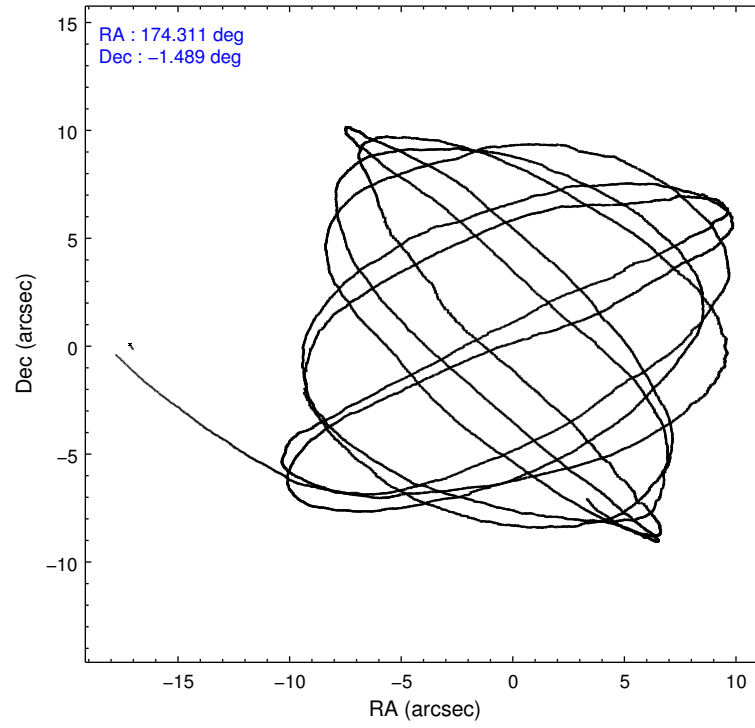
2.1.4 Events

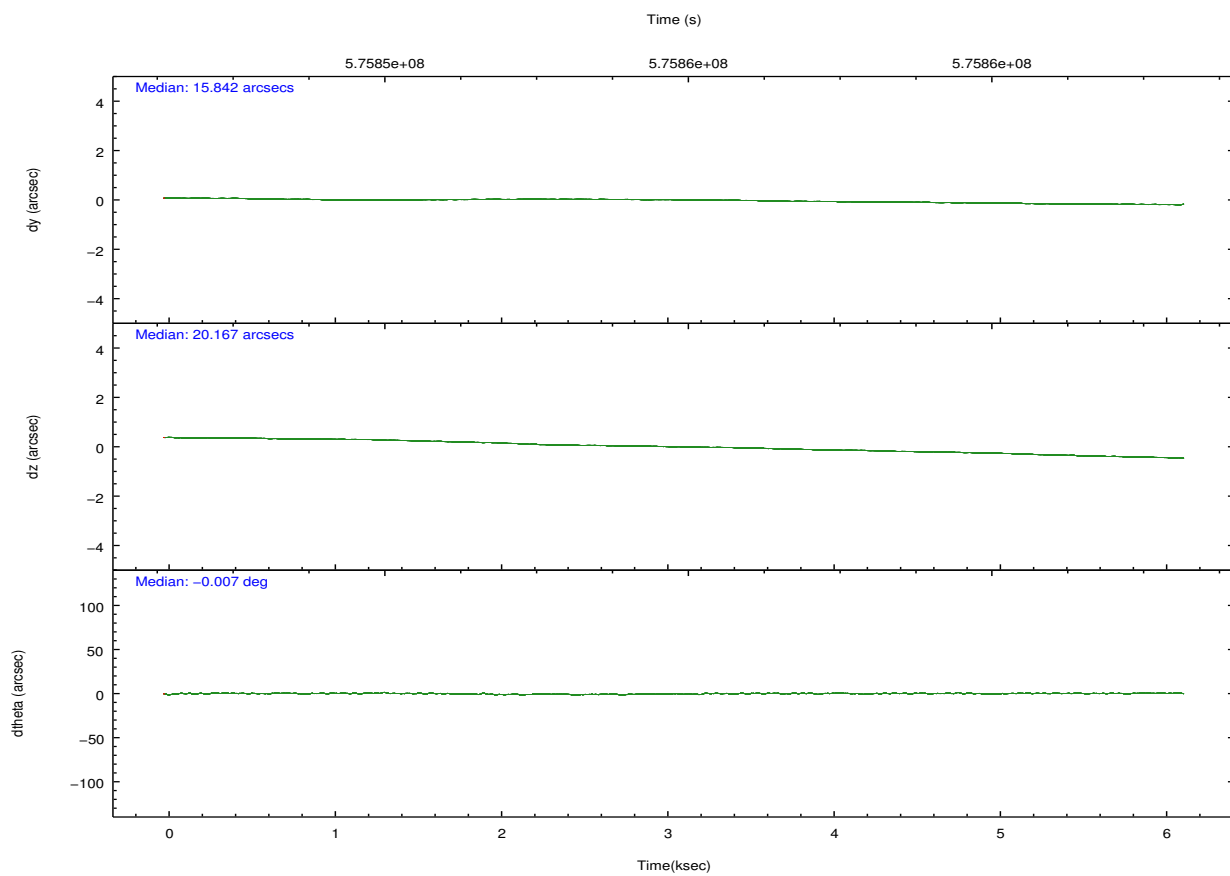
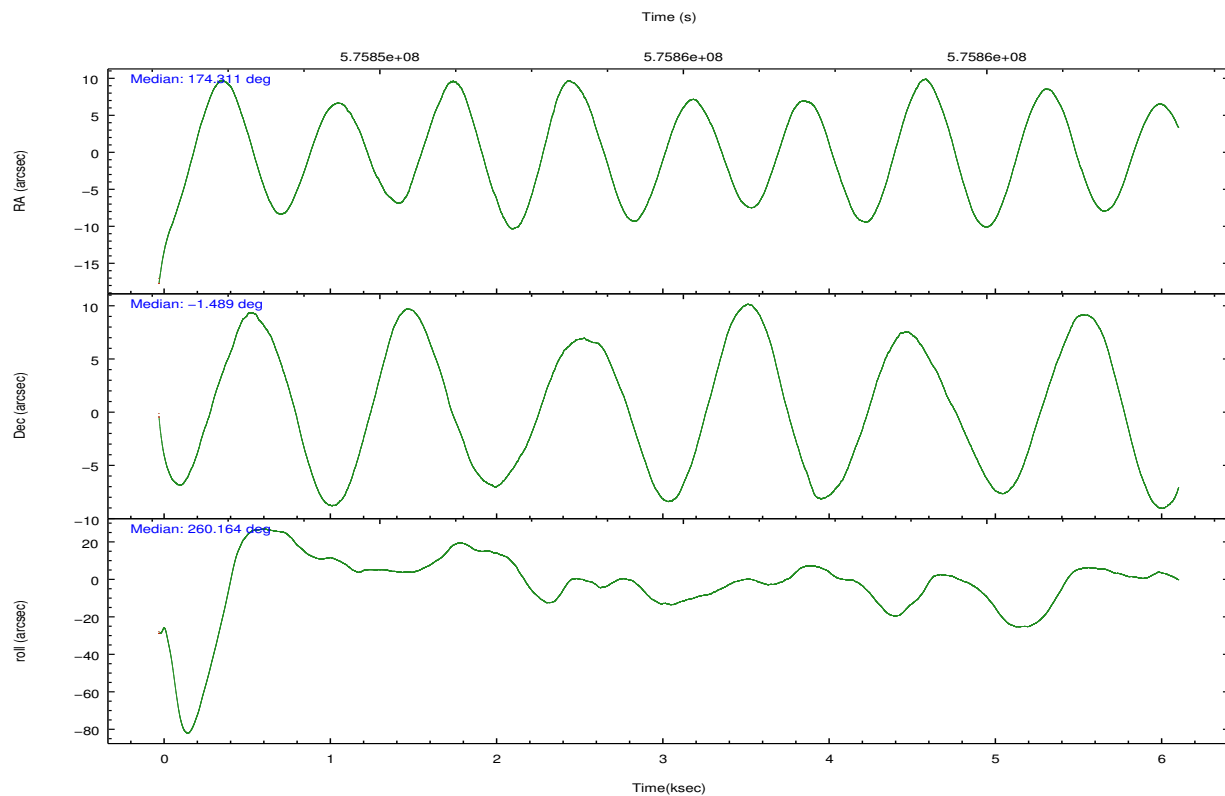
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	34790	31894	34540	34959	38294	47118	grade 0 events	1348	1715	1375	1385	1364	1846
rejected events	30788	27182	30568	31088	34072	26272		3%	5%	3%	3%	3%	3%
rejected %	88%	85%	88%	88%	88%	55%	grade 1 events	25	14	28	22	17	74
								0%	0%	0%	0%	0%	0%
							grade 2 events	1009	1106	977	849	1001	4355
								2%	3%	2%	2%	2%	9%
							grade 3 events	406	445	412	428	448	1732
								1%	1%	1%	1%	1%	3%
							grade 4 events	369	451	428	402	439	1729
								1%	1%	1%	1%	1%	3%
							grade 5 events	1703	1740	1394	1809	1883	4902
								4%	5%	4%	5%	4%	10%
							grade 6 events	872	1003	784	811	975	11211
								2%	3%	2%	2%	2%	23%
							grade 7 events	29058	25420	29142	29253	32167	21269
								83%	79%	84%	83%	84%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	O1	Y
Observation mode	POINTING	POINTING	CCD I1 on	O2	Y
[deg] Pointing RA	174.300939	174.3107607002963	CCD I2 on	O3	Y
[deg] Pointing Dec	-1.463411	-1.489088264991651	CCD I3 on	O4	Y
[deg] Pointing Roll	259.999811	260.1568166126838	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	O5	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)	575852968.184000	575851633.27265	CCD S5 on	N	N
Observation start date	2016-03-31T23:08:20	2016-03-31T22:47:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	575858968.184000	575859700.02311	On-chip summing requested	N	N
Observation end date	2016-04-01T00:48:20	2016-04-01T01:01:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



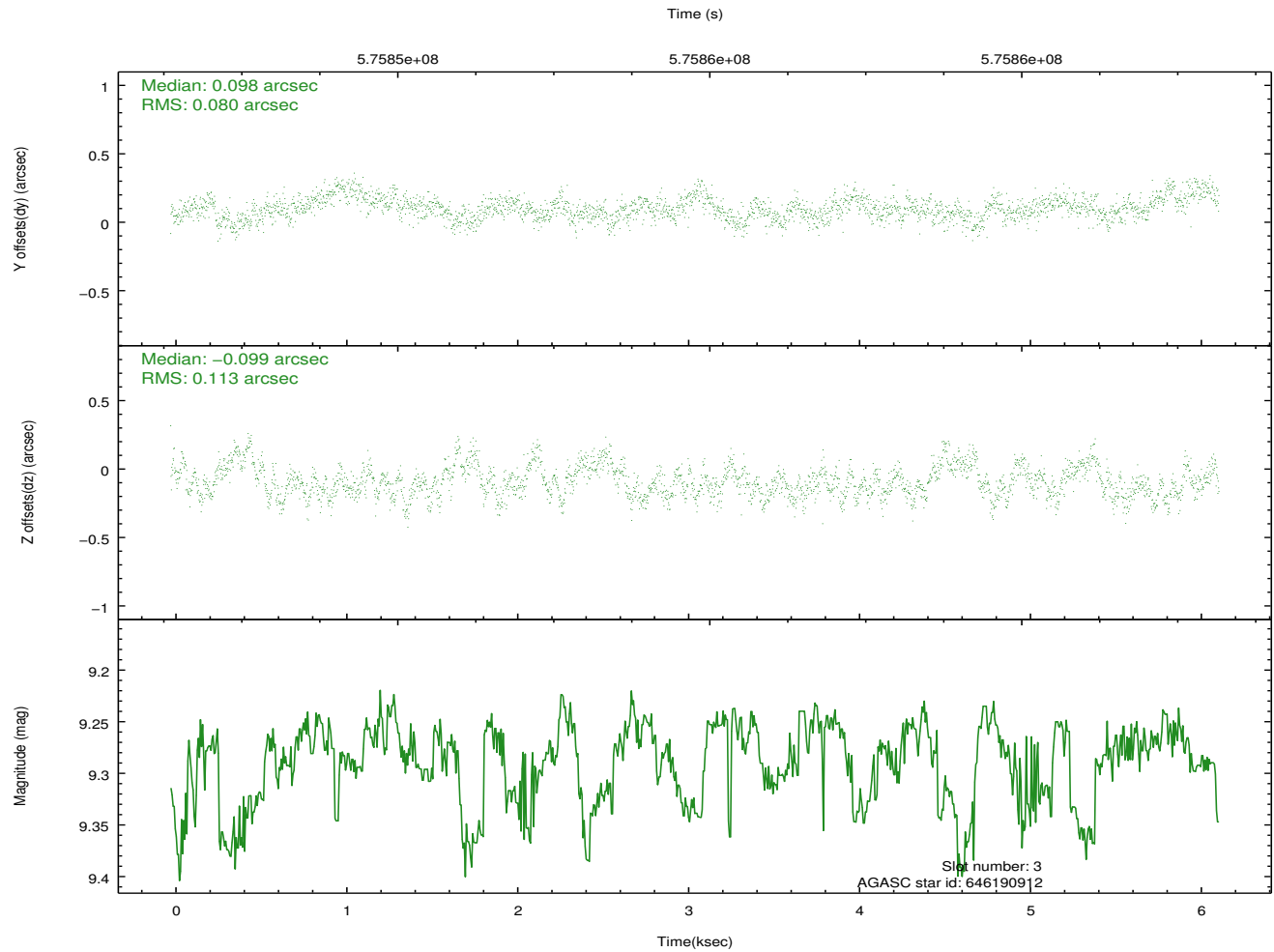
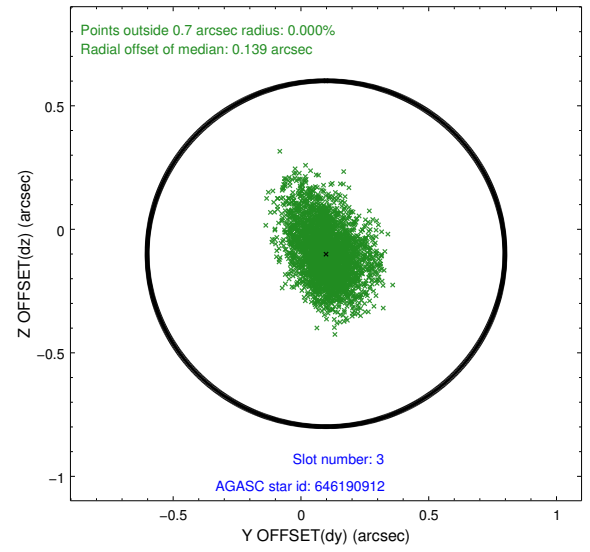
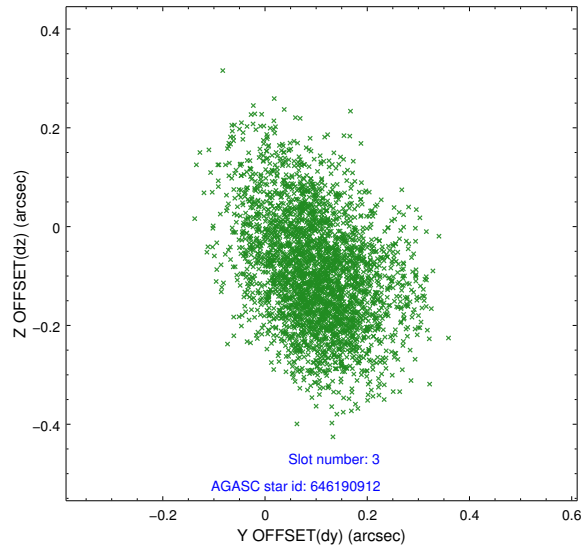


Slot Statistics

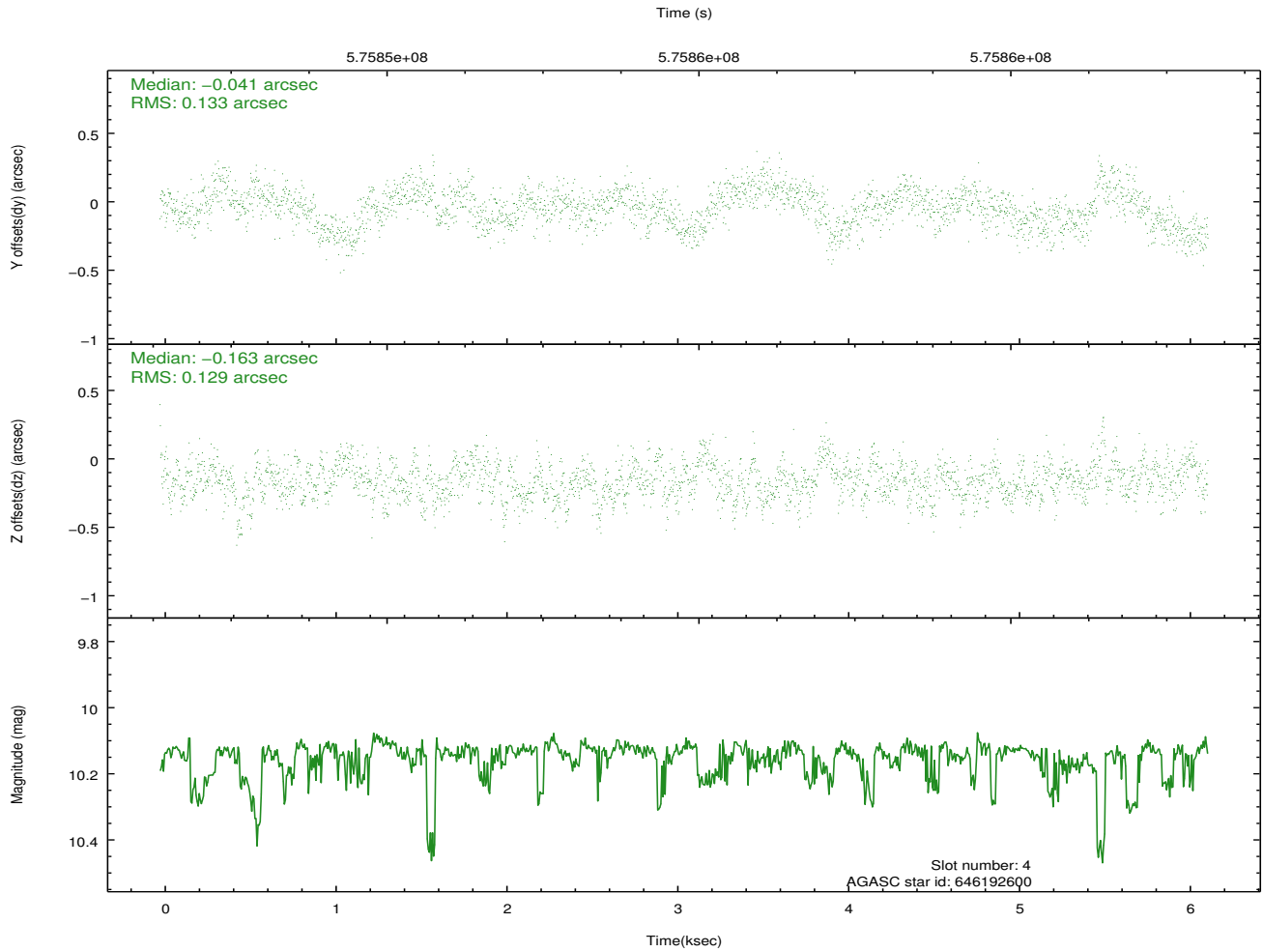
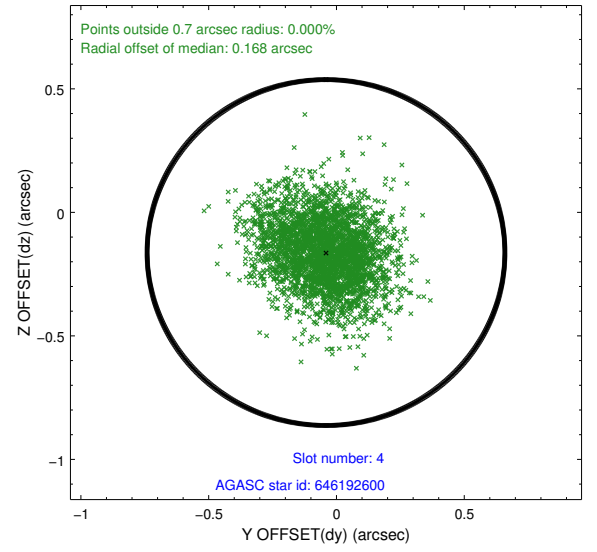
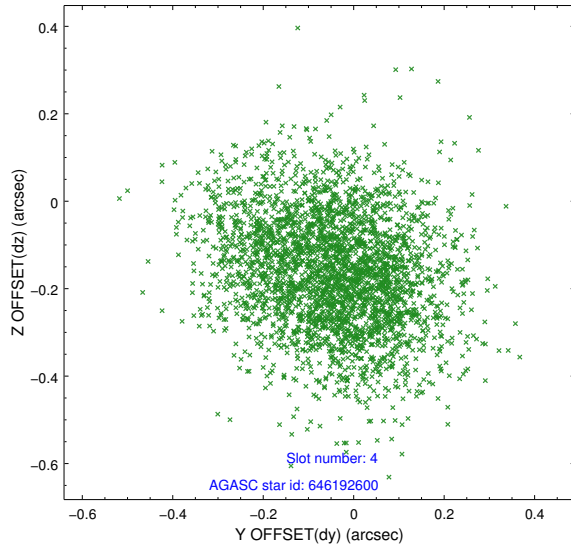
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.20	1497	0.016	-0.089	0.015	0.025	0.000000	0.000000	927.30	-1737.33
1	FID		ACIS-S-4	7.22	1497	0.346	0.059	0.012	0.020	0.000000	0.000000	2145.51	166.02
2	FID		ACIS-S-5	7.23	1497	-0.389	0.042	0.009	0.015	0.000000	0.000000	-1820.80	160.56
3	GUIDE	used	646190912	9.28	2991	0.098	-0.099	0.145	0.242	173.906681	-1.575883	645.74	-1327.41
4	GUIDE	used	646192600	10.14	2991	-0.041	-0.163	0.195	0.322	174.489014	-1.041720	-1611.86	401.03
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	646190288	9.59	2990	-0.046	0.262	0.158	0.279	174.319821	-1.082555	-1359.89	-172.30
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

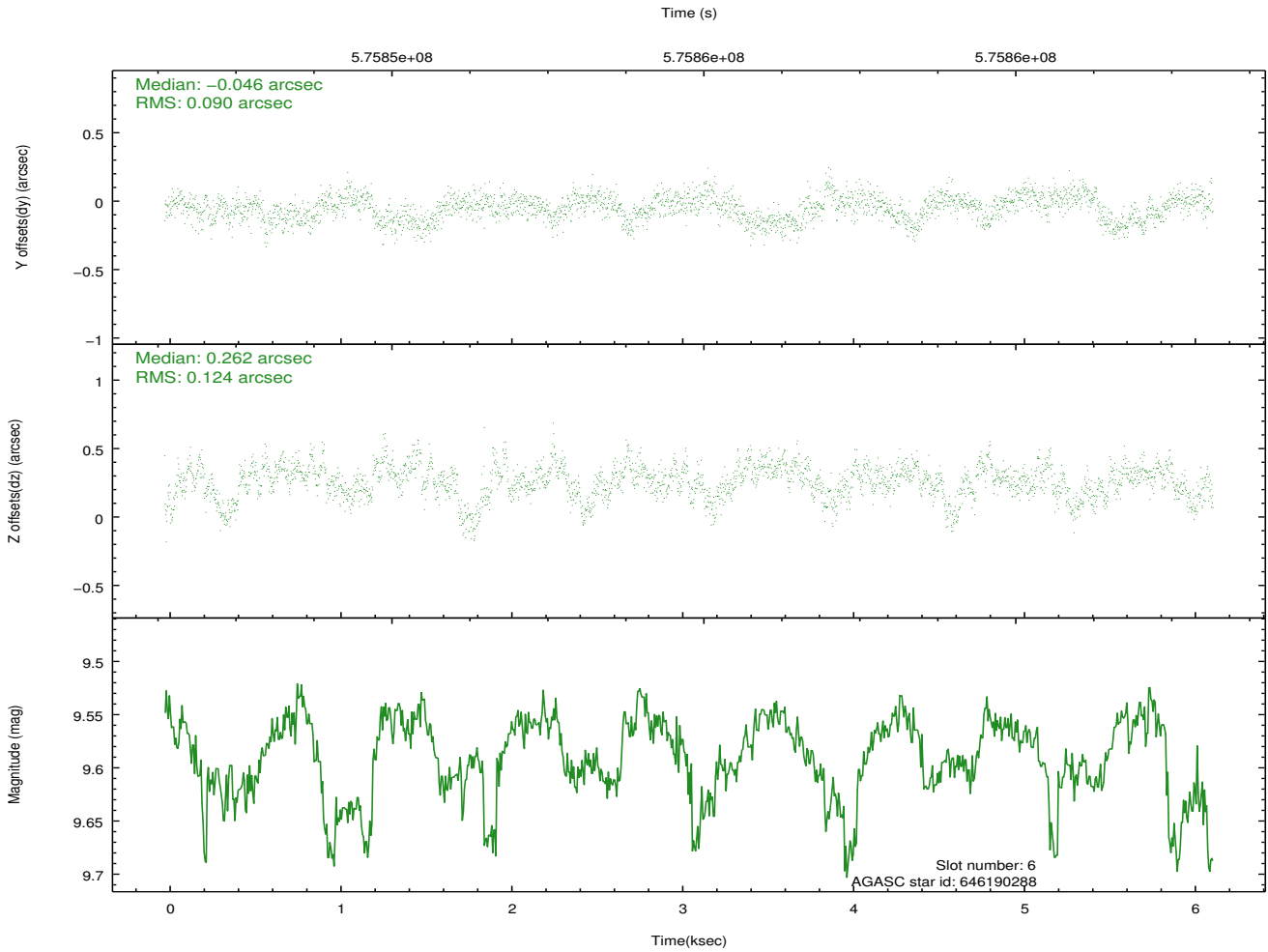
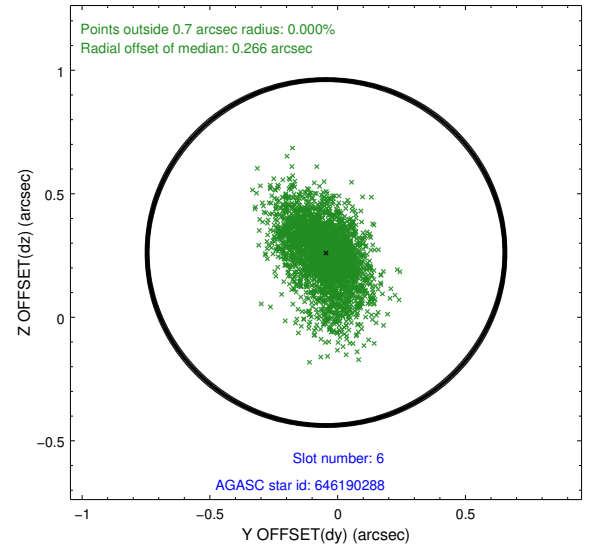
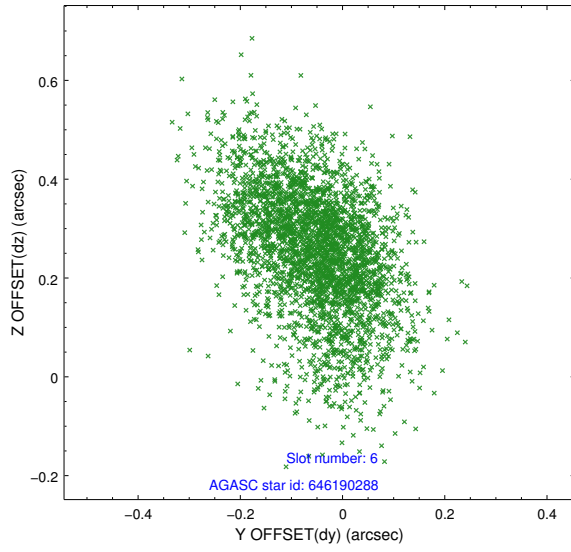
2.4.1 Slot 3



2.4.2 Slot 4

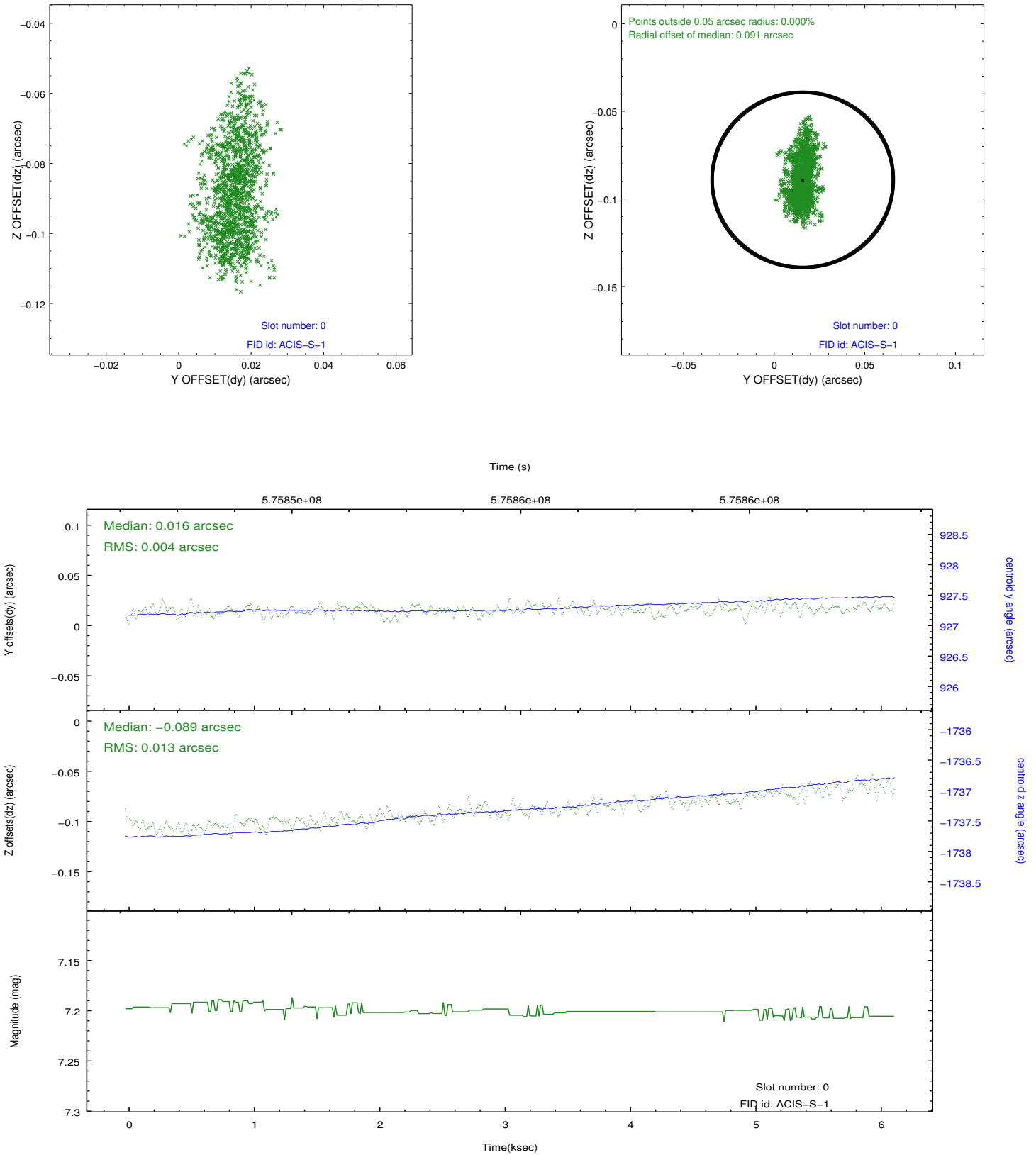


2.4.3 Slot 6

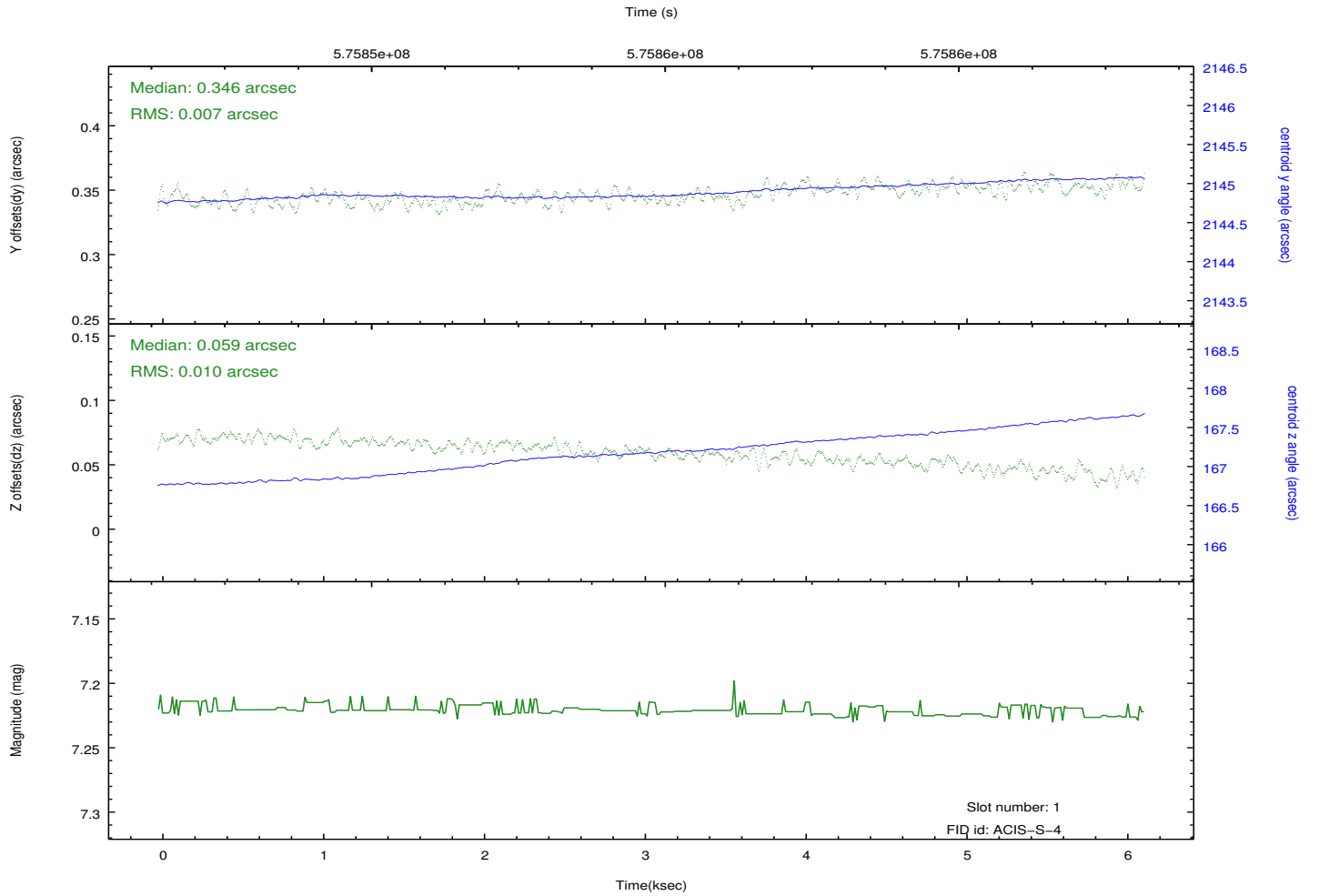
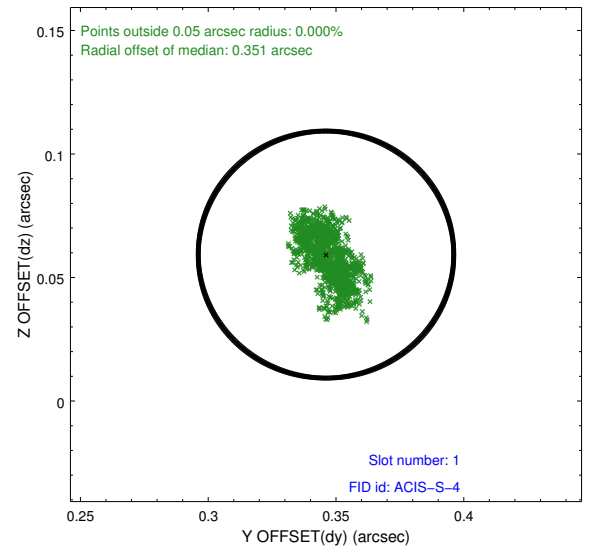
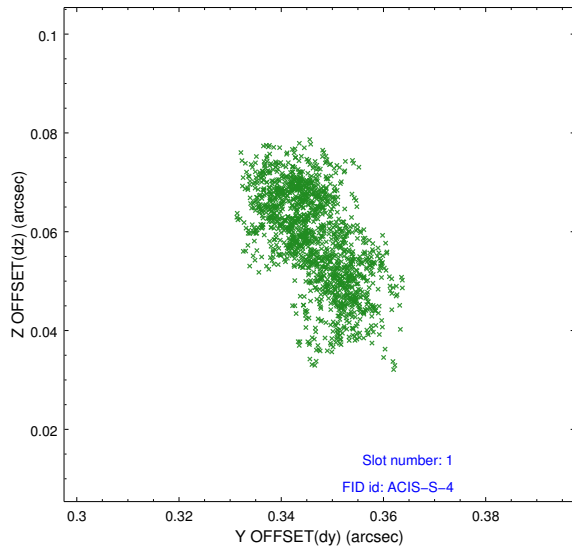


2.5 FID Slots

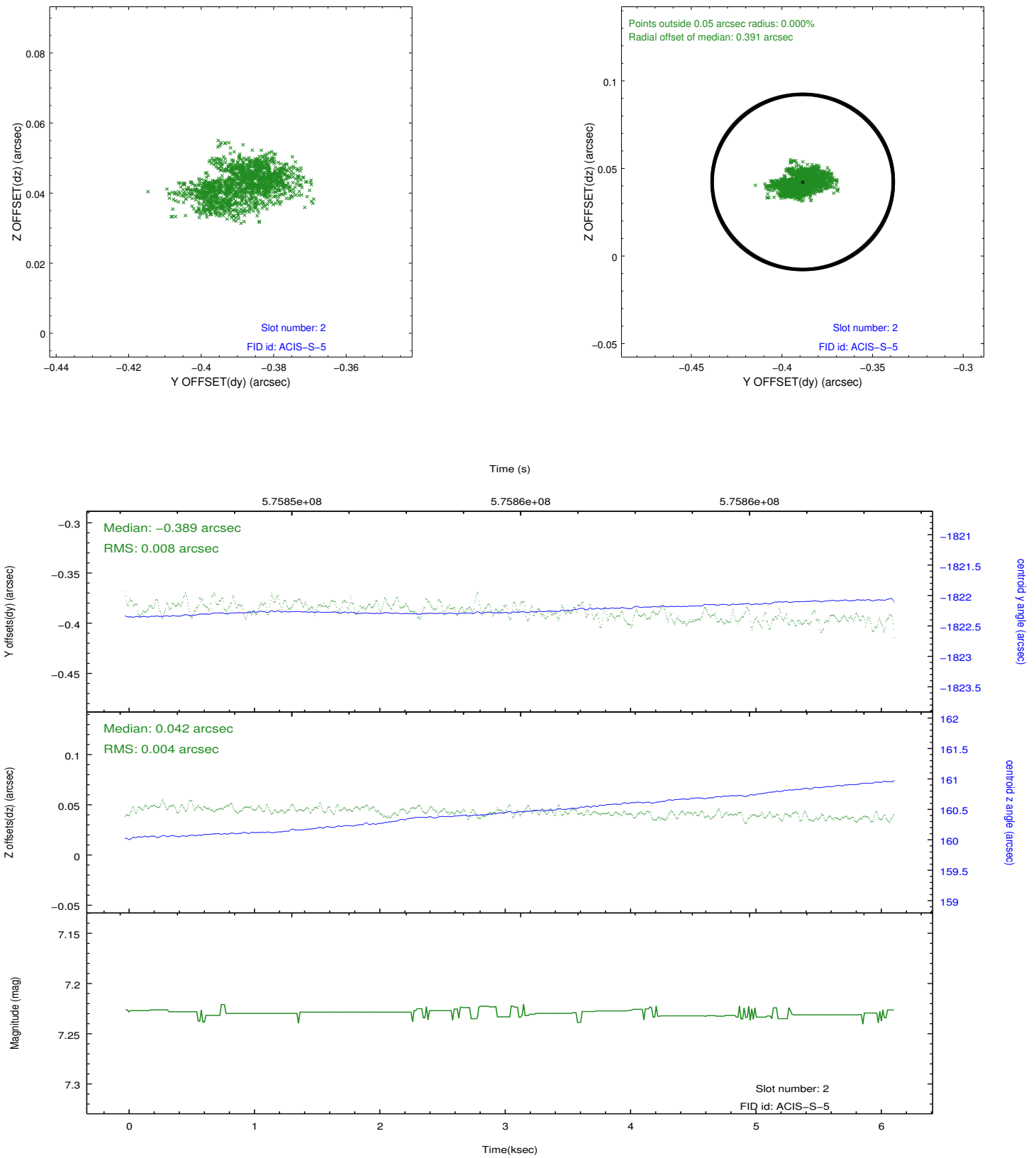
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2016.04.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.9510487236977

A.2 Comments

The guide stars in slots 5 and 7 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these guide stars from the solution.