

V&V Reference Report

L2 ASCDS Version : 10.4

Observation 16976 - L2 Version 2
Chandra X-Ray Center

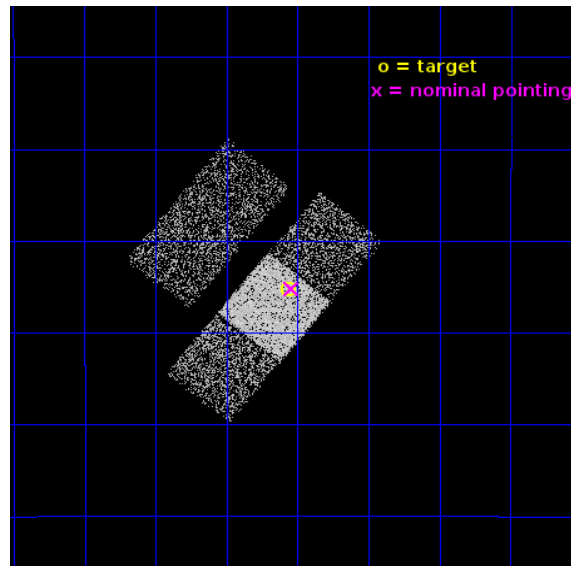
L2 Processing Date : Jun 16 2015

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1 Front

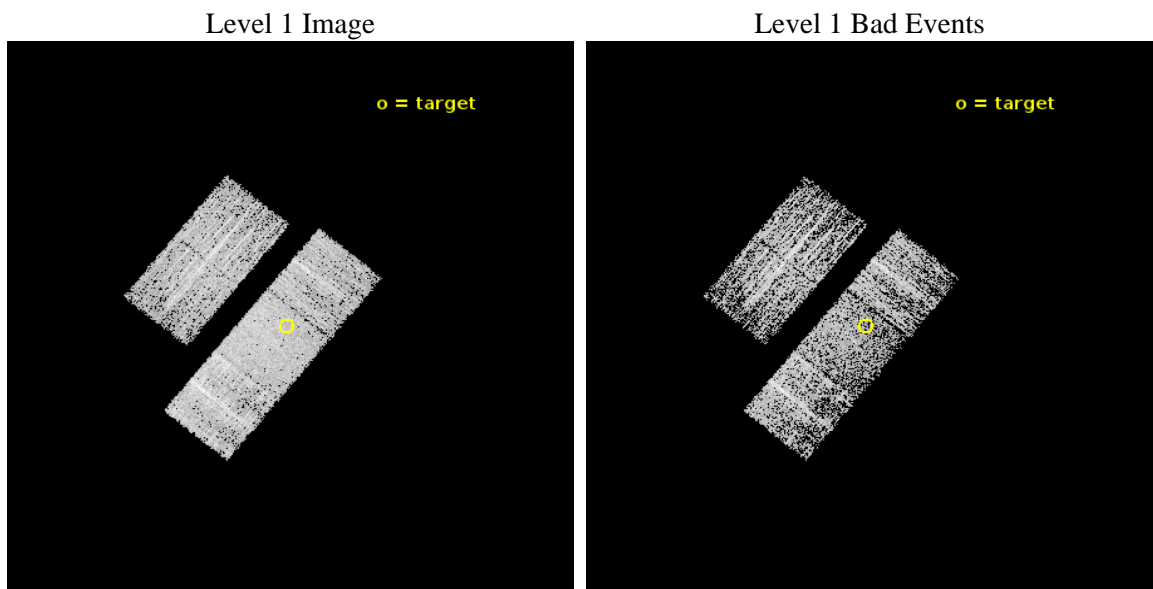
seq_num	601169	Sequence number
obs_id	16976	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC337A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.39125	Observer's specified target RA [deg]
dec_targ	-7.58825	Observer's specified target Dec [deg]
ra_nom	15.385869930596	Nominal RA [deg]
dec_nom	-7.5869221071091	Nominal Dec [deg]
roll_nom	129.15584427183	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3245.7000250816	Sum of GTIs [s]
livetime	3203.2925648043	Livetime [s]
ontime2	3245.7000250816	Sum of GTIs [s]
ontime3	3245.7000250816	Sum of GTIs [s]
ontime6	3245.7000250816	Sum of GTIs [s]
ontime7	3245.7000250816	Sum of GTIs [s]
ontime8	3245.7000250816	Sum of GTIs [s]
l2events	16743	Number of level 2 events



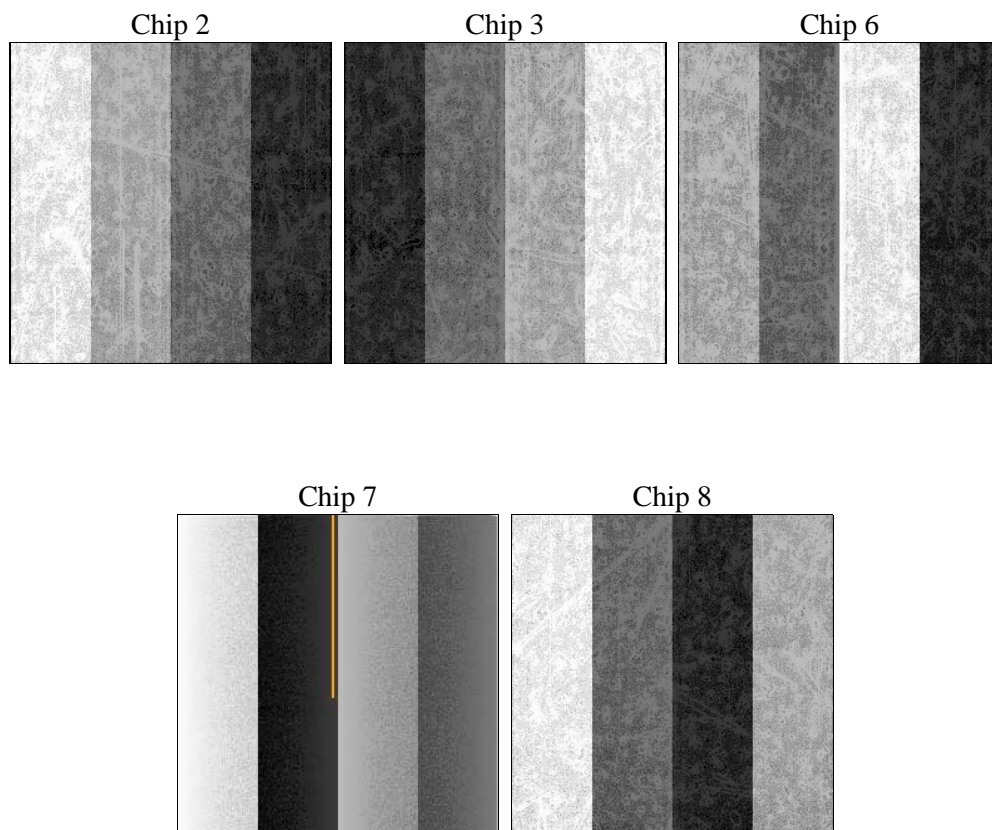
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3200.000000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	3245.7000250816	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	3245.7000250816	Sum of GTIs [s]
date	2015-06-16T17:20:15	Date and time of file creation	ontime3	3245.7000250816	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3245.7000250816	Sum of GTIs [s]
			ontime7	3245.7000250816	Sum of GTIs [s]
			ontime8	3245.7000250816	Sum of GTIs [s]
			l1events	98686	Number of level 1 events

2.1.4 Events

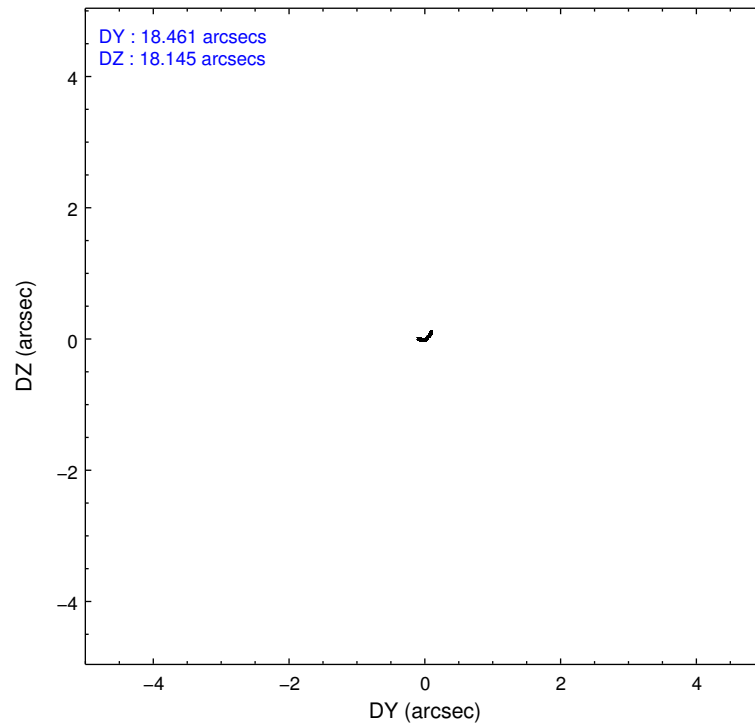
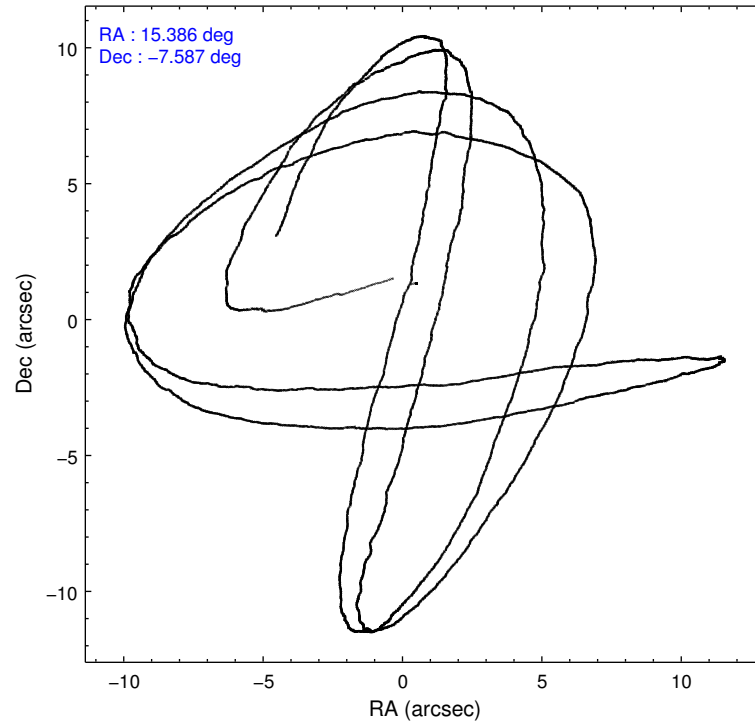
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	17907	16512	17855	22568	23844
rejected events	16024	14682	15821	12745	17174
rejected %	89%	88%	88%	56%	72%

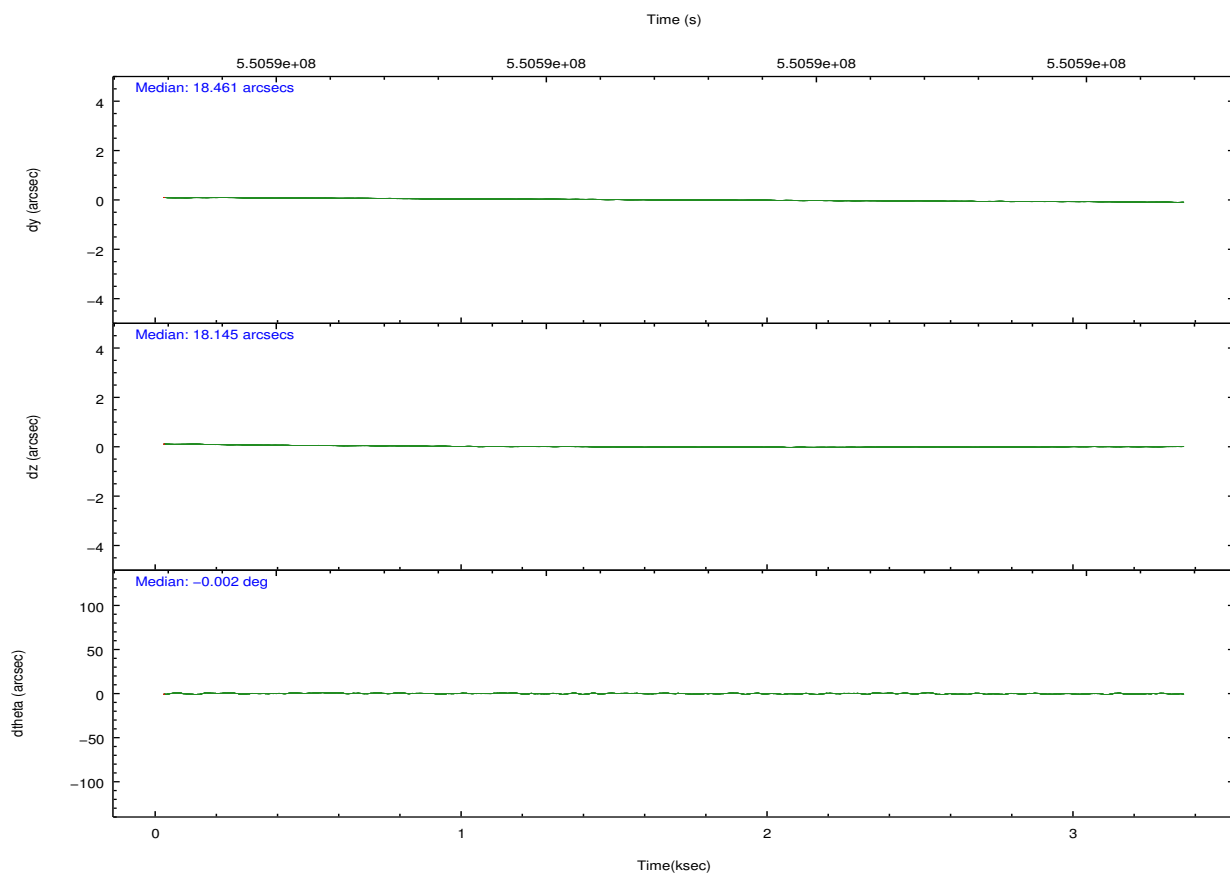
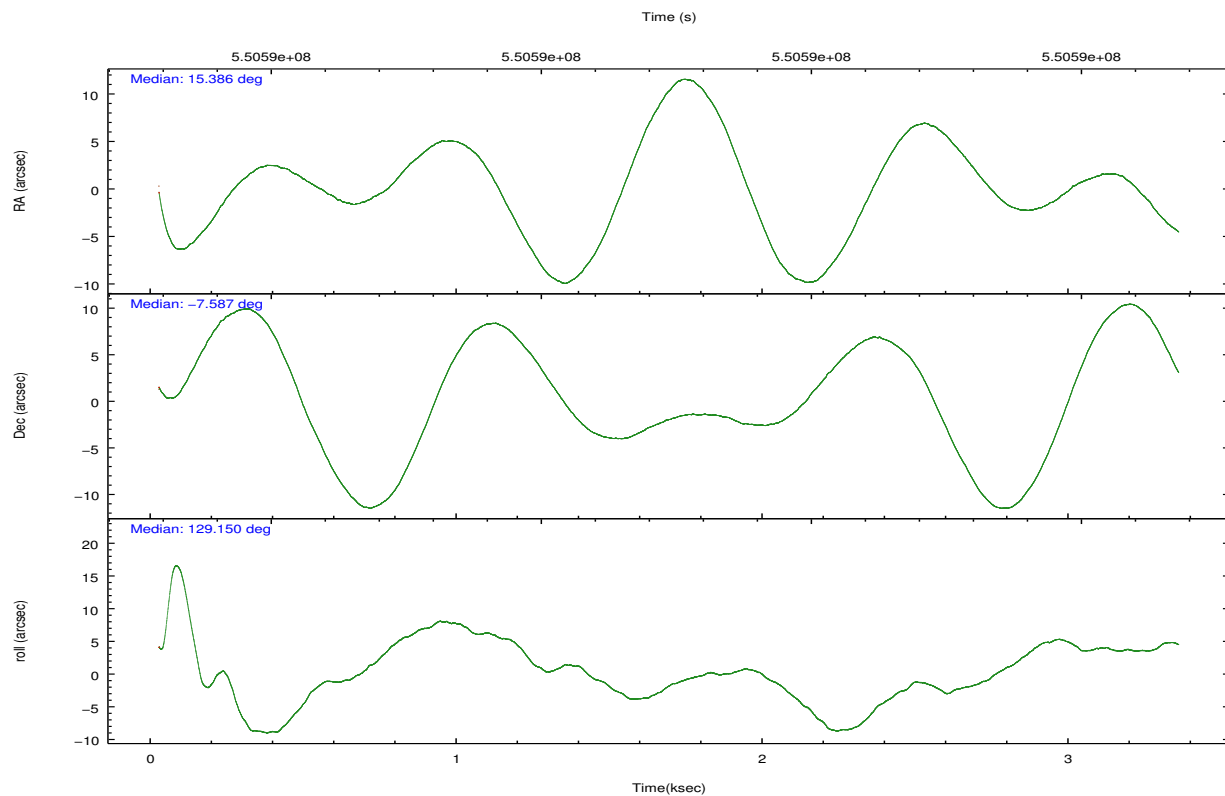
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	706	669	677	871	1860
	3%	4%	3%	3%	7%
grade 1 events	8	7	5	33	14
	0%	0%	0%	0%	0%
grade 2 events	456	388	492	2046	1580
	2%	2%	2%	9%	6%
grade 3 events	190	182	192	812	738
	1%	1%	1%	3%	3%
grade 4 events	179	207	190	808	664
	0%	1%	1%	3%	2%
grade 5 events	679	926	923	2338	1346
	3%	5%	5%	10%	5%
grade 6 events	354	388	484	5296	1830
	1%	2%	2%	23%	7%
grade 7 events	15335	13745	14892	10364	15812
	85%	83%	83%	45%	66%

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	15.411891	15.38586993059602	CCD I2 on	O2	Y
[deg] Pointing Dec	-7.596560	-7.58692210710911	CCD I3 on	O1	Y
[deg] Pointing Roll	129.002729	129.1558442718302	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)	550587939.184000	550586640.84277	CCD S5 on	N	N
Observation start date	2015-06-13T13:04:32	2015-06-13T12:44:00	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	550591139.184000	550592055.40557	On-chip summing requested	N	N
Observation end date	2015-06-13T13:57:52	2015-06-13T14:14:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



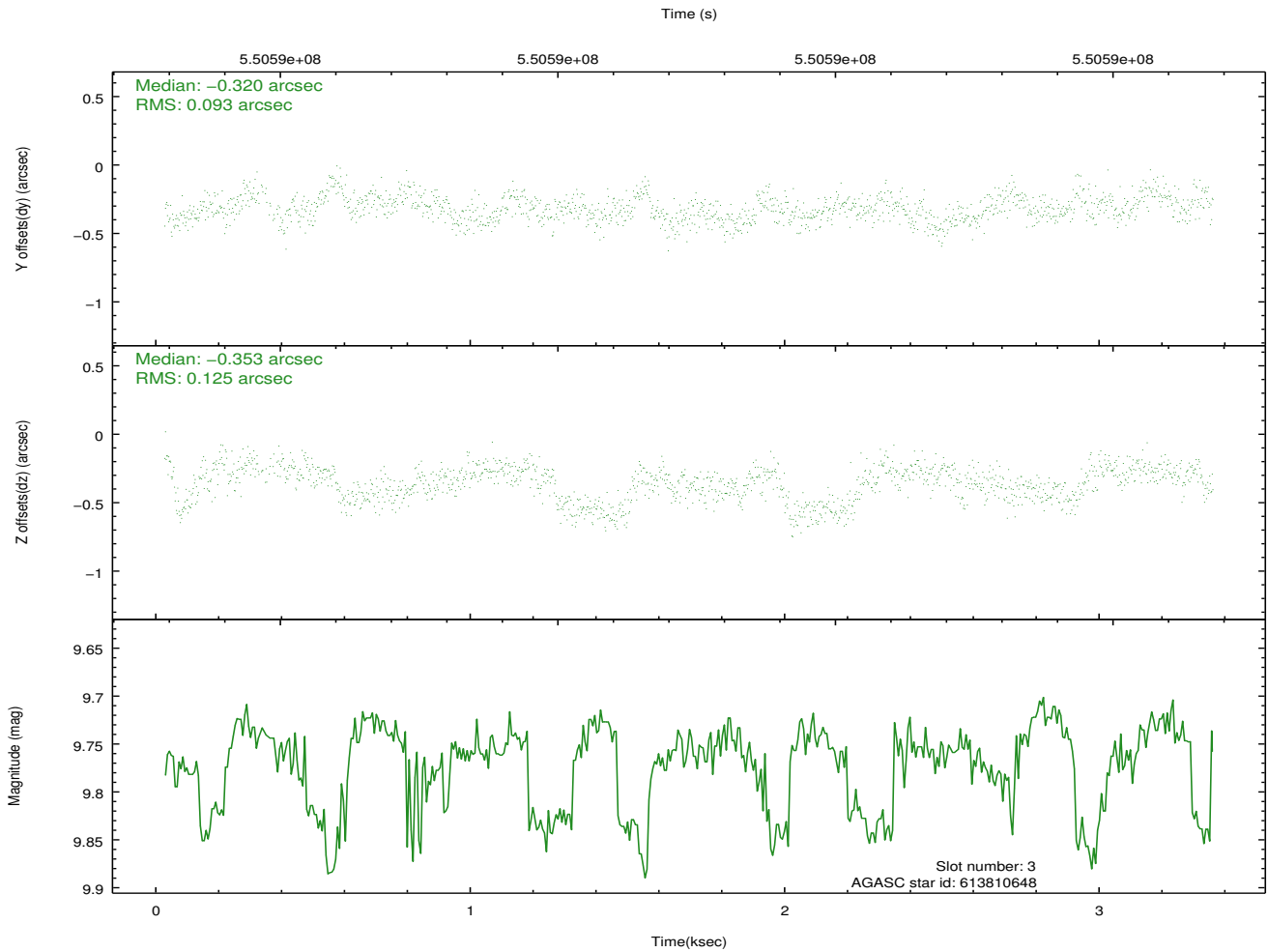
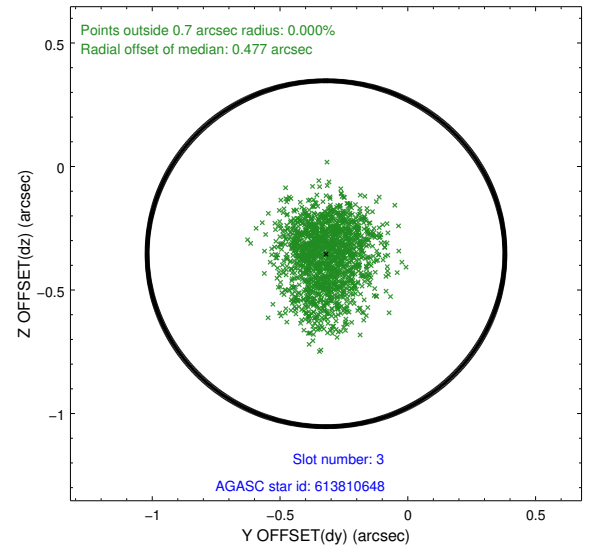
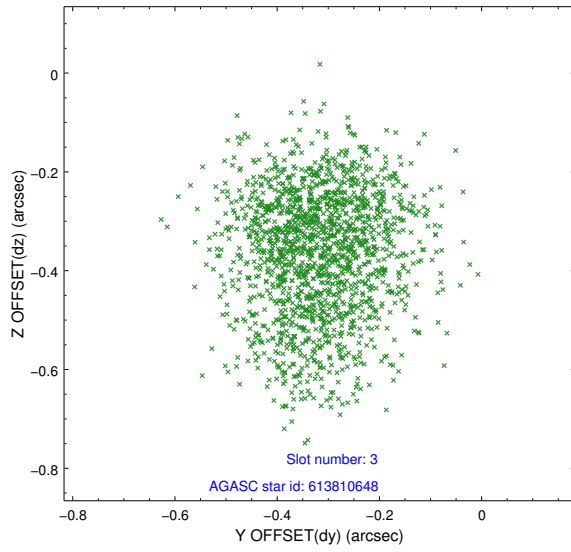


Slot Statistics

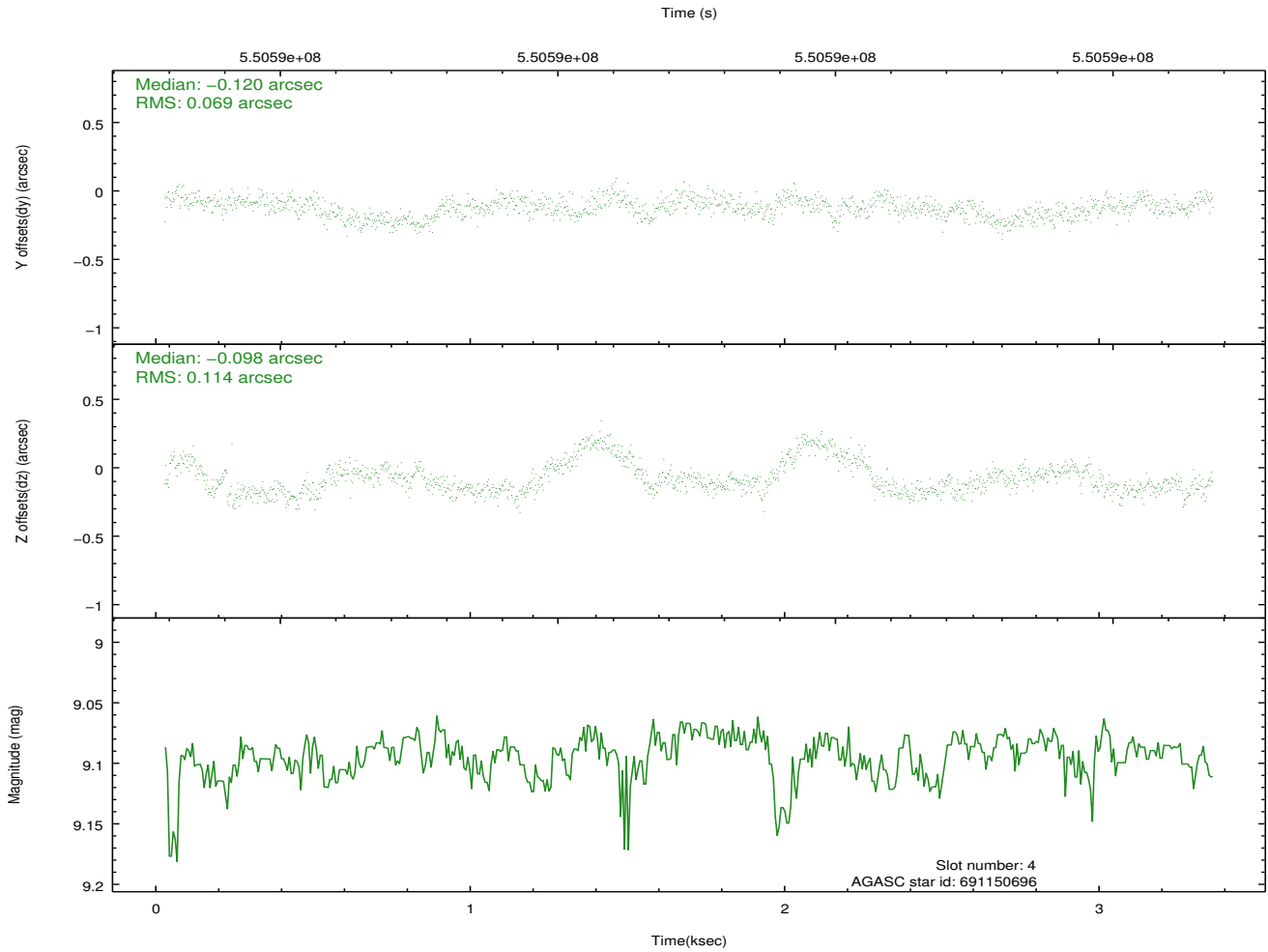
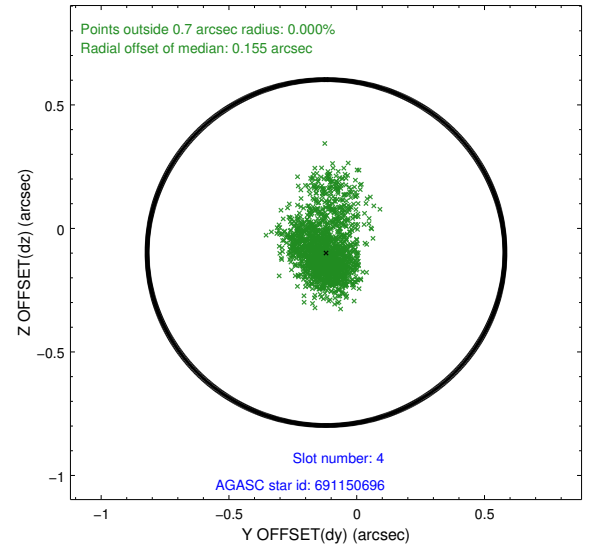
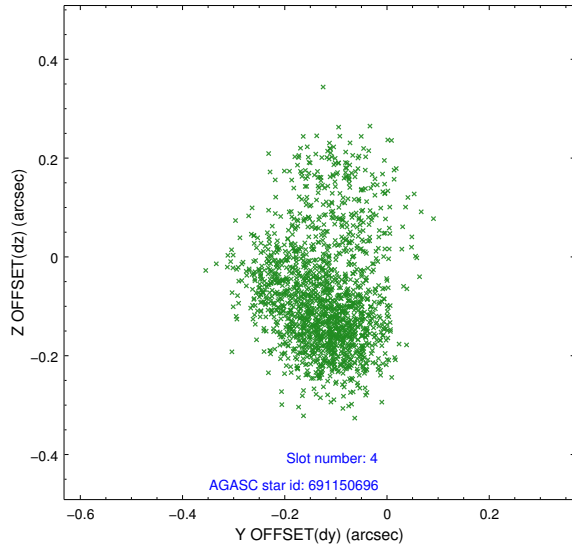
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	814	-0.204	-0.132	0.006	0.010	0.000000	0.000000	-771.79	-1739.72
1	FID		ACIS-S-4	7.06	814	0.238	0.111	0.006	0.010	0.000000	0.000000	2141.12	166.92
2	FID		ACIS-S-6	7.20	814	-0.062	0.028	0.007	0.011	0.000000	0.000000	392.85	806.46
3	GUIDE	used	613810648	9.76	1612	-0.320	-0.353	0.167	0.272	15.024099	-7.441021	1304.58	724.52
4	GUIDE	used	691150696	9.09	1625	-0.120	-0.098	0.130	0.264	15.614658	-8.025636	-1655.11	411.57
5	GUIDE	used	691159640	10.06	1578	0.170	0.152	0.186	0.309	15.734113	-7.517562	-504.62	-1071.14
6	GUIDE	used	691161072	8.54	1627	0.286	0.288	0.121	0.201	16.159084	-7.674170	-1895.89	-1895.50
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

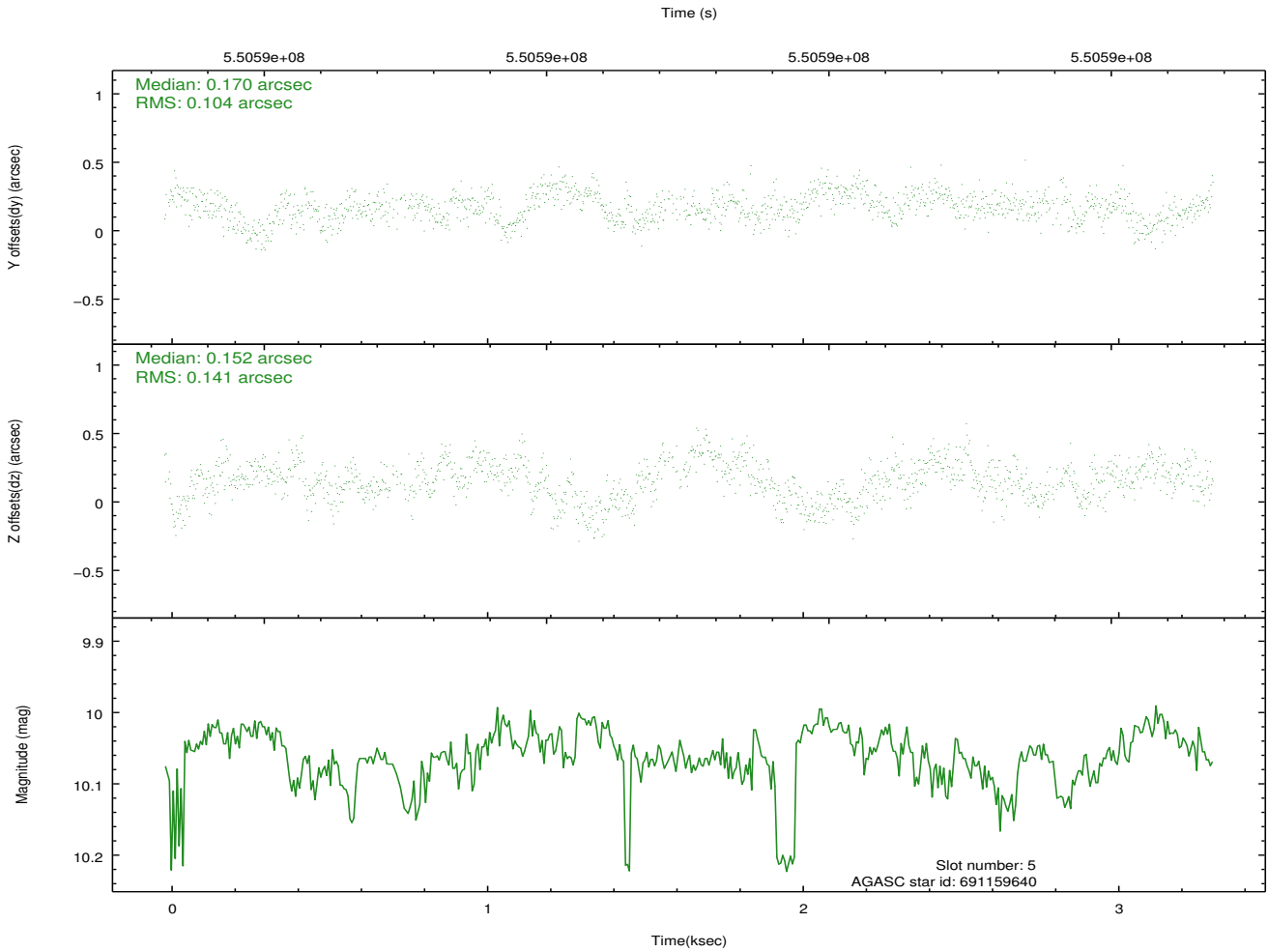
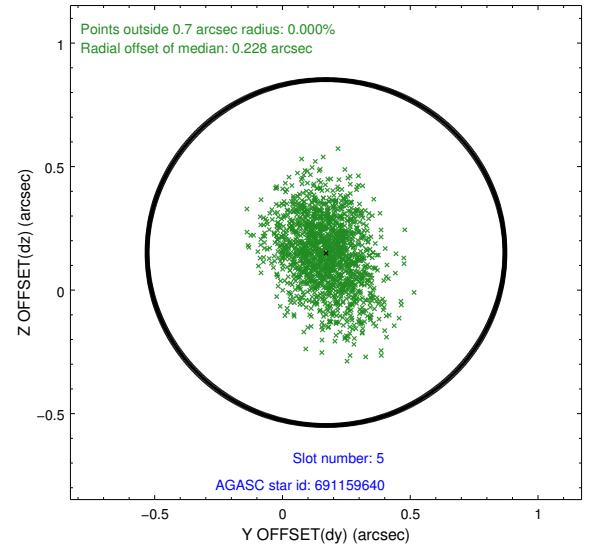
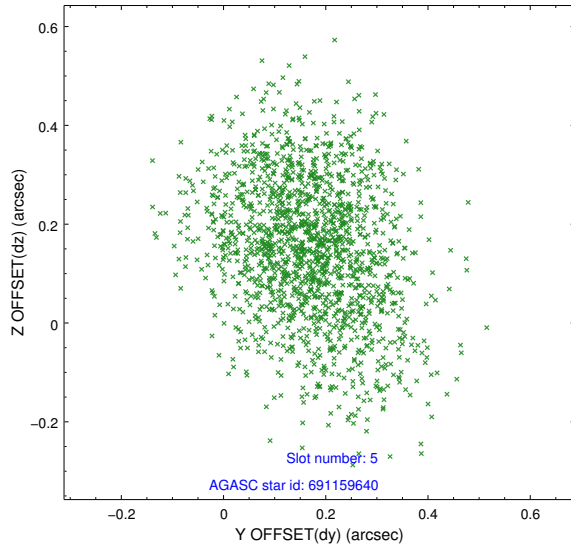
2.4.1 Slot 3



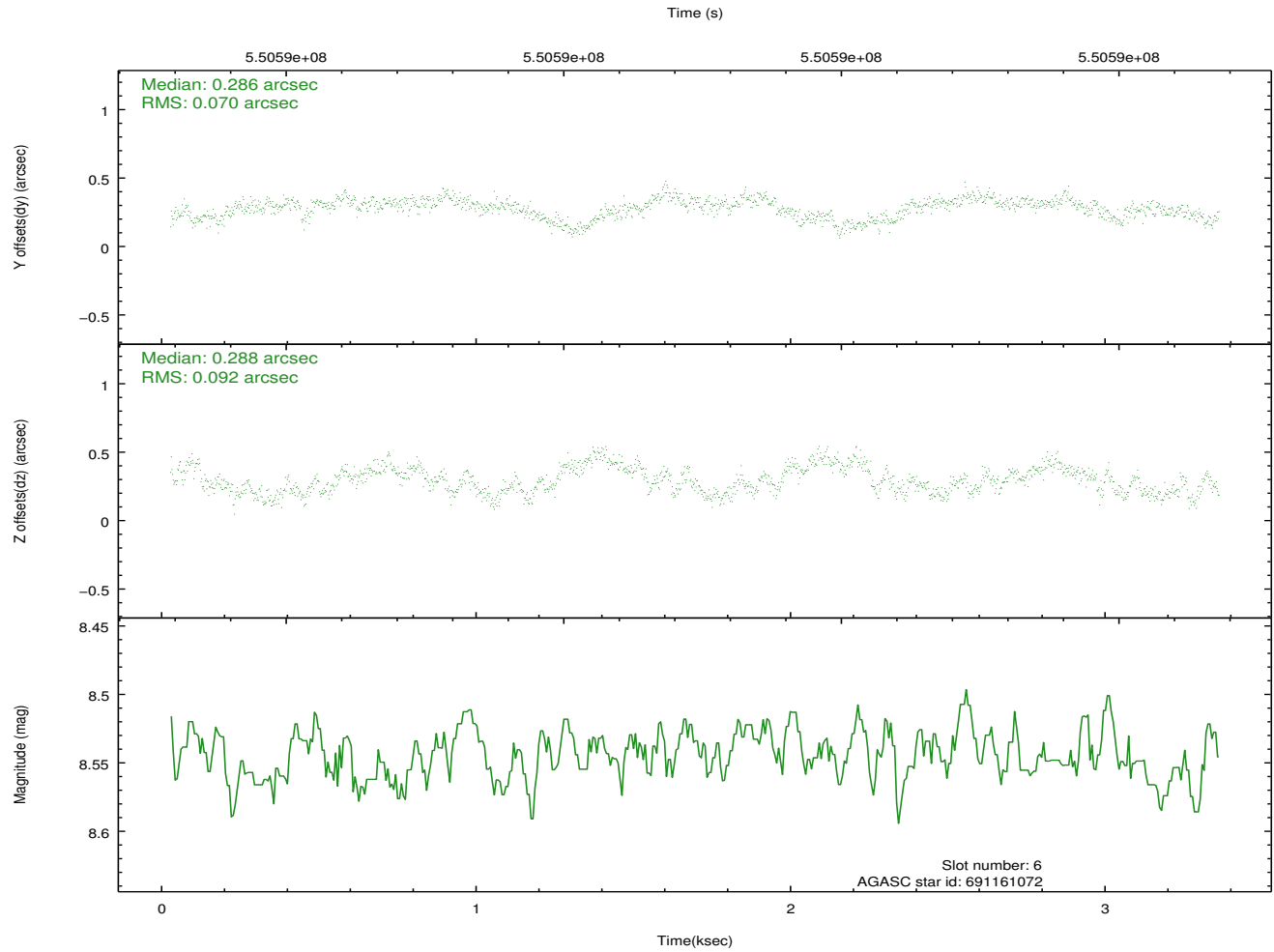
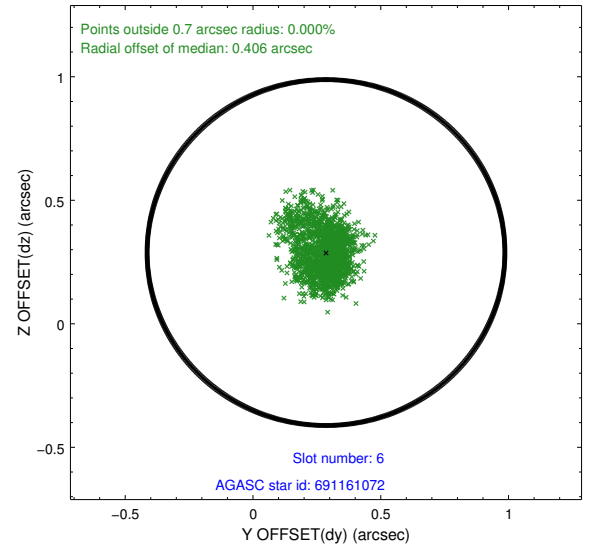
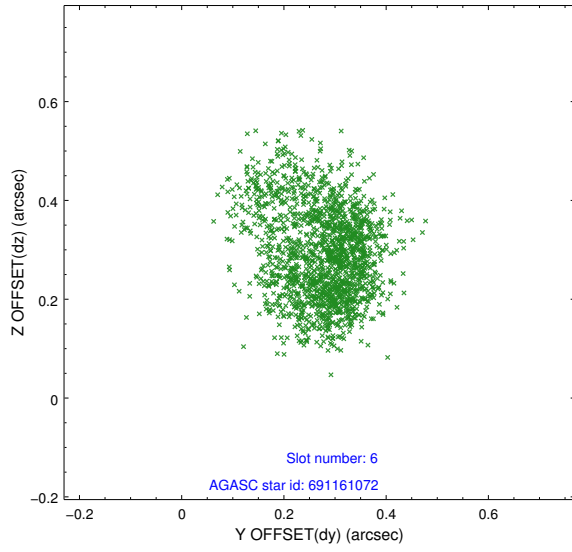
2.4.2 Slot 4



2.4.3 Slot 5

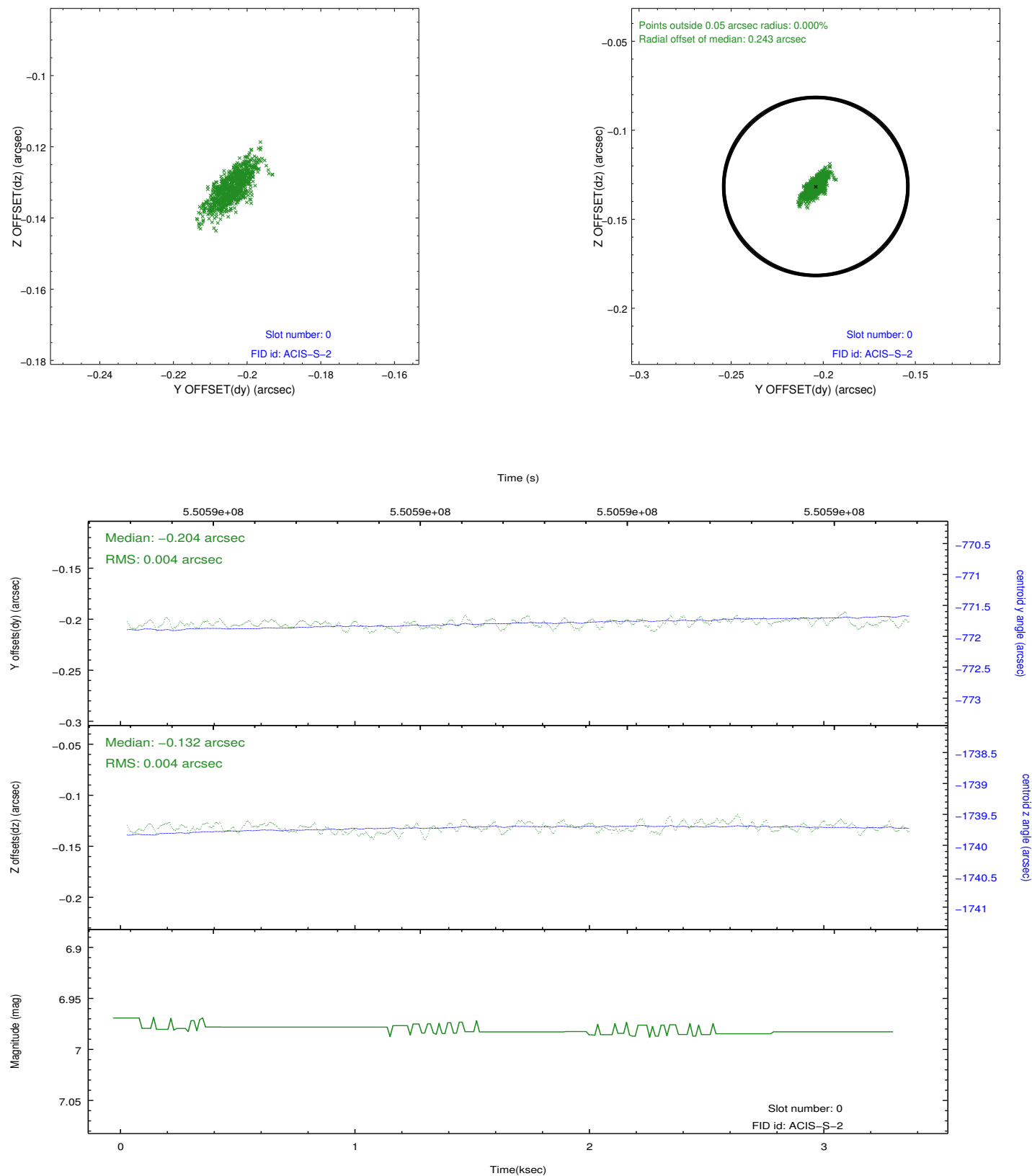


2.4.4 Slot 6

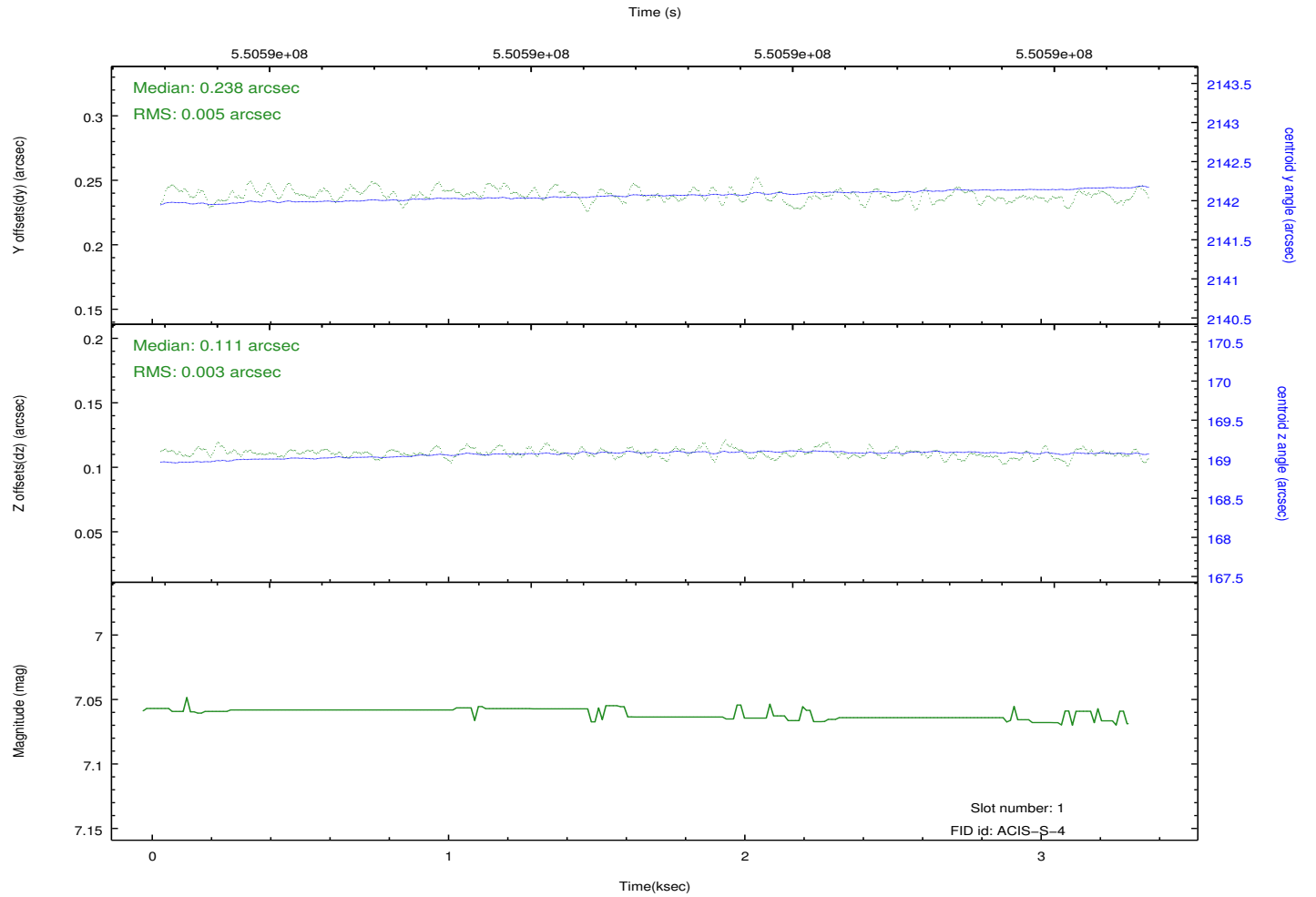
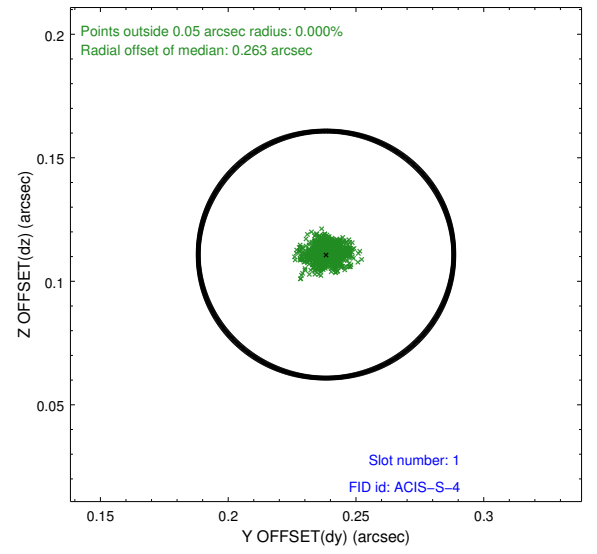
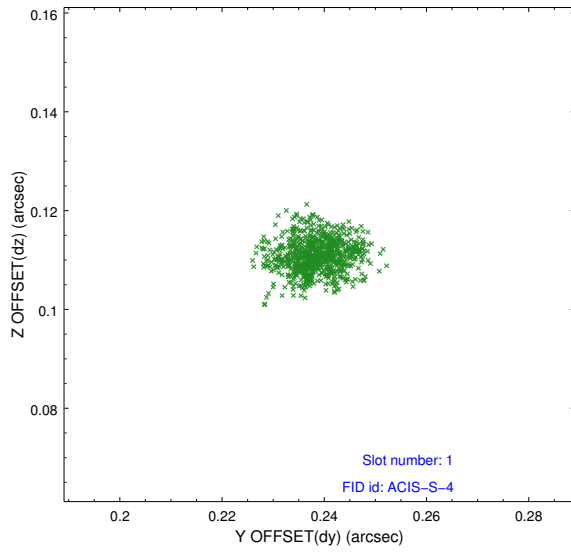


2.5 FID Slots

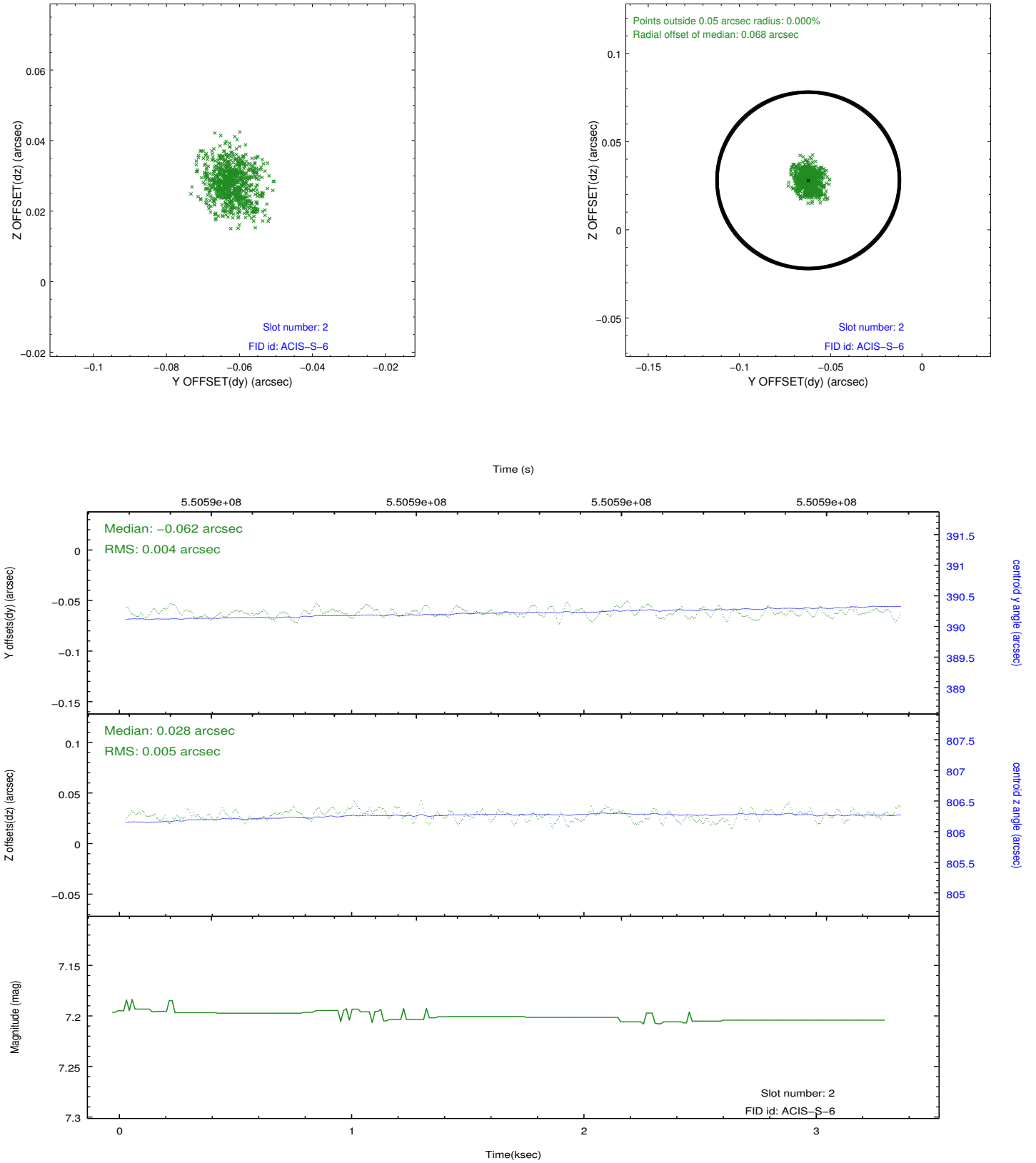
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.06.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.2457000250816

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.