

V&V Reference Report

L2 ASCDS Version : 8.3.4

Observation 378 - L2 Version 5
Chandra X-Ray Center

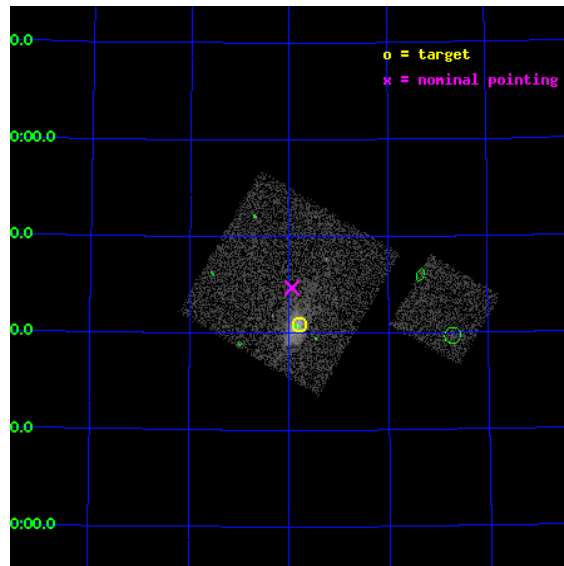
L2 Processing Date : Dec 17 2010

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1 Front

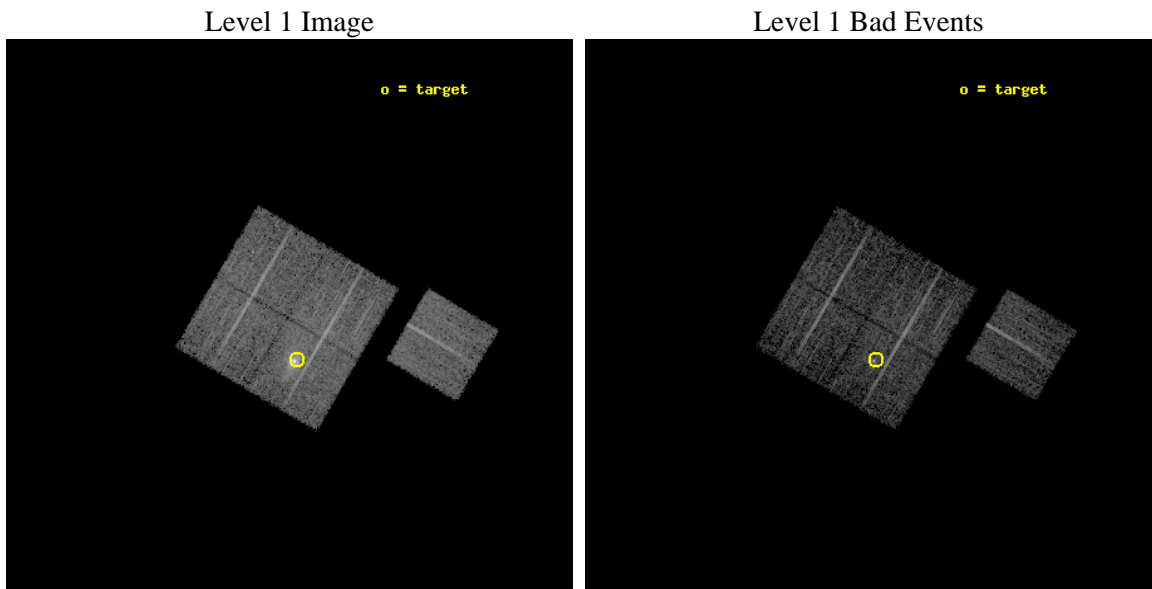
seq_num	700050	Sequence number
obs_id	378	Observation id
title	THE ORIGIN OF HARD X-RAYS FROM M82	Proposal title
observer	Dr Steve Murray	Principal investigator
object	M82	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.945833	Observer's specified target RA
dec_targ	69.682778	Observer's specified target Dec
ra_nom	148.98693601432	Nominal RA
dec_nom	69.745019205172	Nominal Dec
roll_nom	120.47251338414	Nominal Roll
revision	5	Processing version of data
ontime	4168.3813335896	Sum of GTIs [s]
livetime	4115.5987792457	Livetime [s]
ontime0	4168.5454935879	Sum of GTIs [s]
ontime1	4168.5044236556	Sum of GTIs [s]
ontime2	4165.2224035114	Sum of GTIs [s]
ontime3	4168.3813335896	Sum of GTIs [s]
ontime6	4168.4223735854	Sum of GTIs [s]
l2events	28894	Number of level 2 events



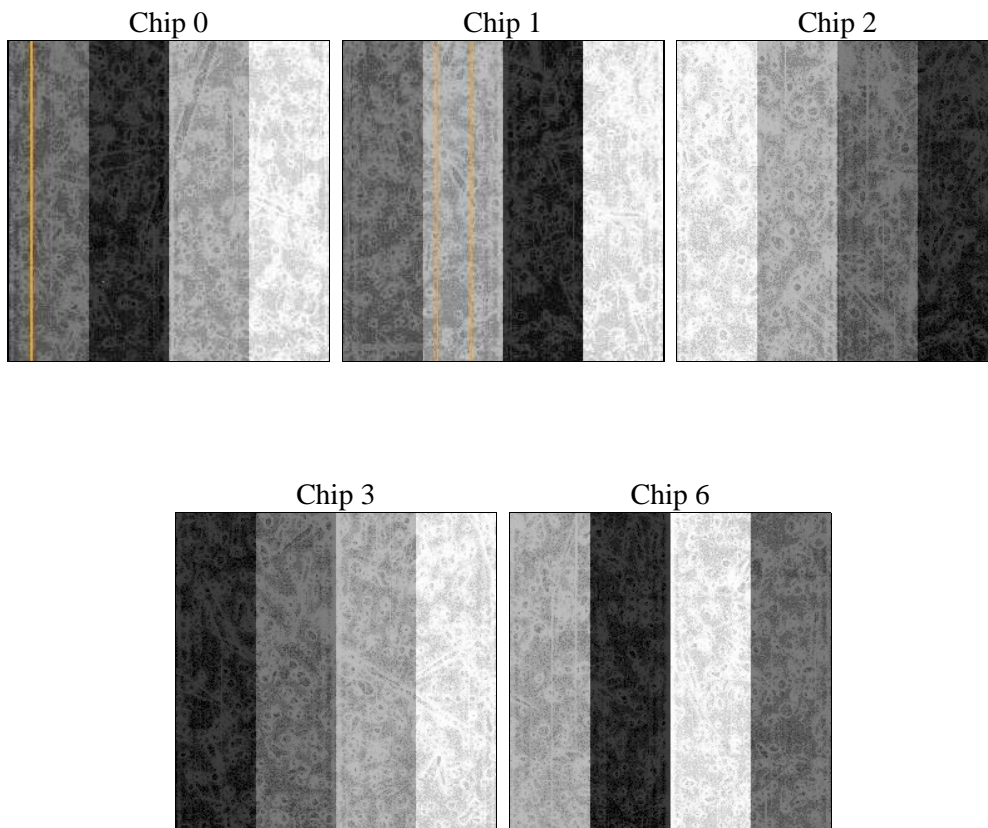
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.3.4	ASCDS version number	ontime	4168.3813335896	Sum of GTIs [s]
caldsver	4.4.0	 	ontime0	4168.5454935879	Sum of GTIs [s]
date	2010-12-17T19:48:17	Date and time of file creation	ontime1	4168.5044236556	Sum of GTIs [s]
revision	5	Processing version of data	ontime2	4165.2224035114	Sum of GTIs [s]
			ontime3	4168.3813335896	Sum of GTIs [s]
			ontime6	4168.4223735854	Sum of GTIs [s]
			l1events	184615	Number of level 1 events

2.1.4 Events

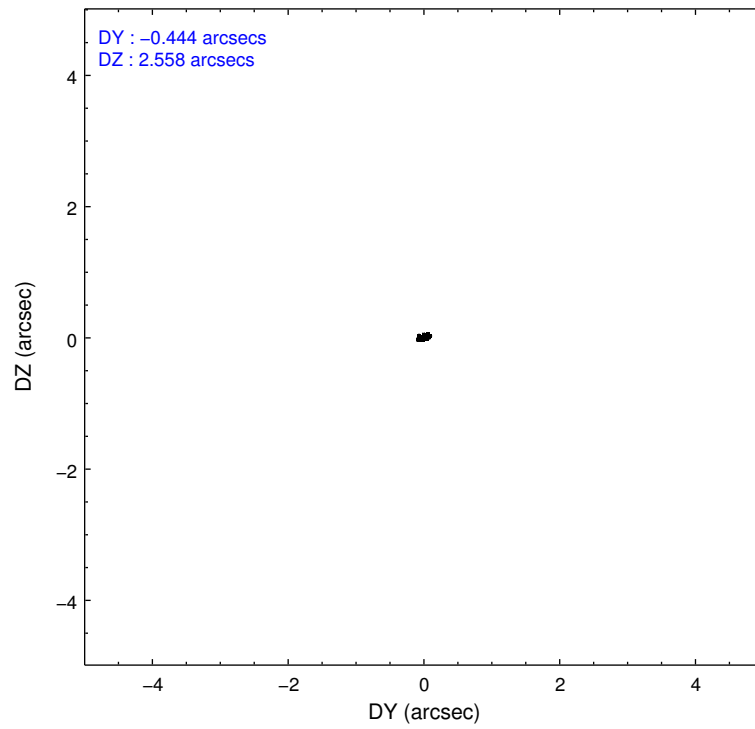
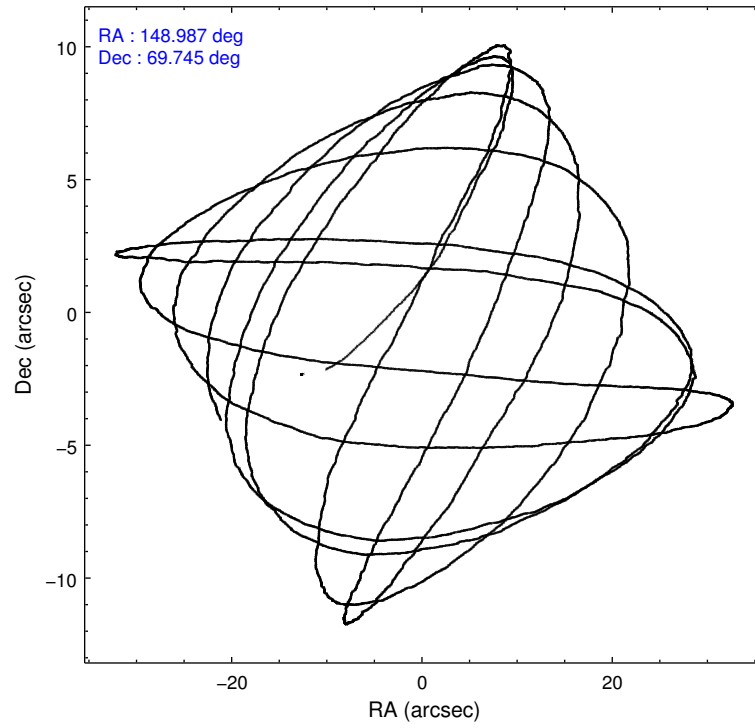
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	32013	32660	37378	46967	35597
rejected events	28448	29004	33692	30670	32252
rejected %	88%	88%	90%	65%	90%

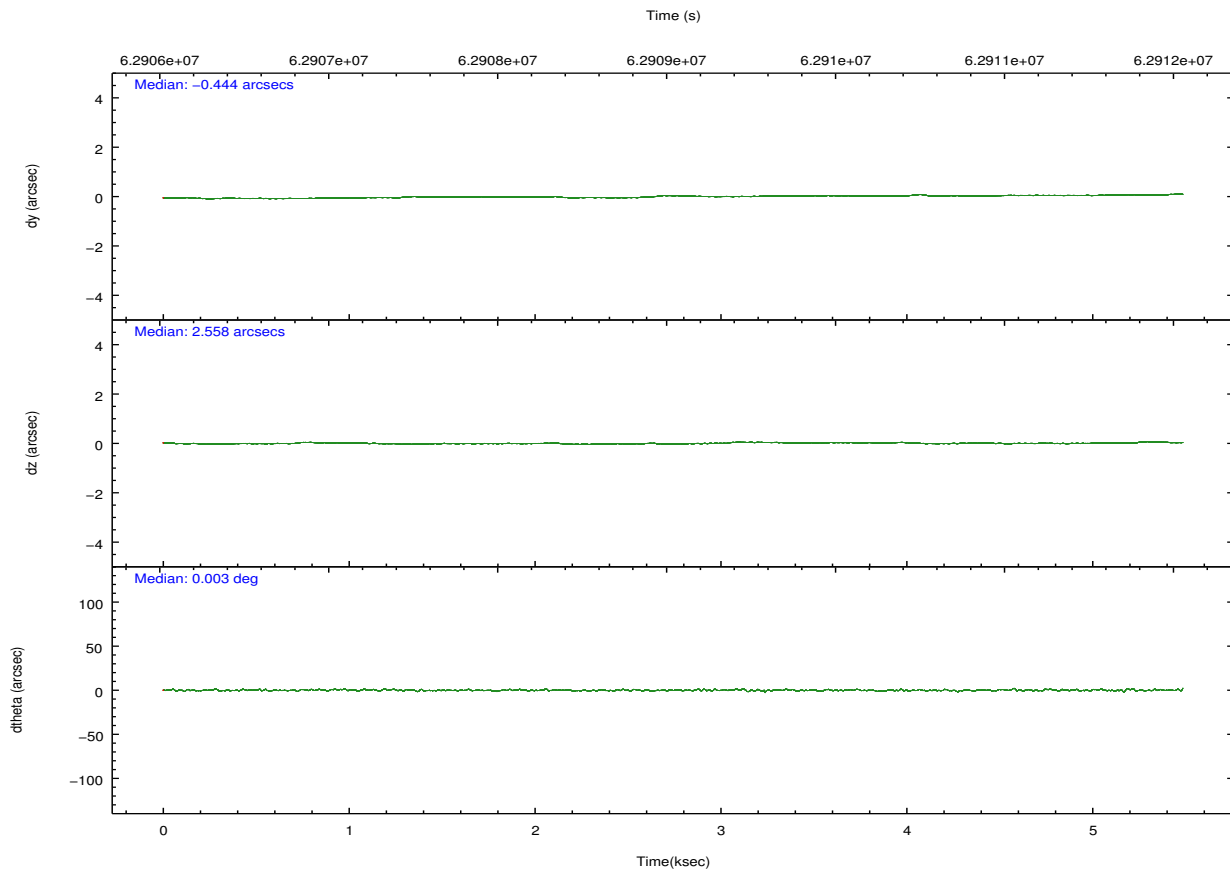
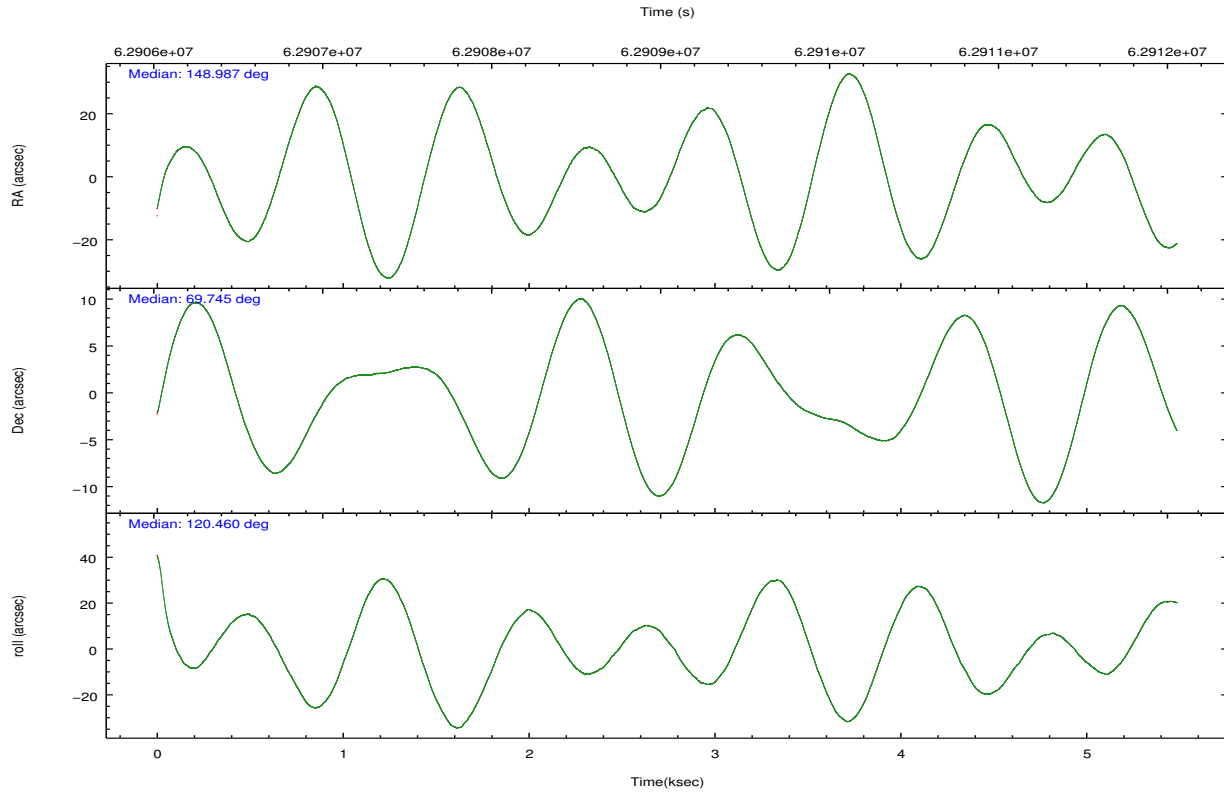
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	927	898	1009	9316	694
	2%	2%	2%	19%	1%
grade 1 events	11	11	8	166	5
	0%	0%	0%	0%	0%
grade 2 events	1336	1331	1422	4603	1293
	4%	4%	3%	9%	3%
grade 3 events	293	282	218	451	210
	0%	0%	0%	0%	0%
grade 4 events	227	270	248	460	206
	0%	0%	0%	0%	0%
grade 5 events	645	692	698	1000	779
	2%	2%	1%	2%	2%
grade 6 events	788	879	793	1491	943
	2%	2%	2%	3%	2%
grade 7 events	27786	28297	32982	29480	31467
	86%	86%	88%	62%	88%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	149.056187	148.9869360143155	Subarray requested	NONE	NONE
Pointing Dec	69.730945	69.74501920517228	Alternating exposures requested	N	N
Pointing Roll	120.198797	120.4725133841417	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	62906781.184000	62905909.466866			
Observation start date	1999-12-30T02:05:17	1999-12-30T01:51:49			
Observation end time	62911781.184000	62912424.367102			
Observation end date	1999-12-30T03:28:37	1999-12-30T03:40:24			
Read mode	TIMED	TIMED			

2.3 Aspect



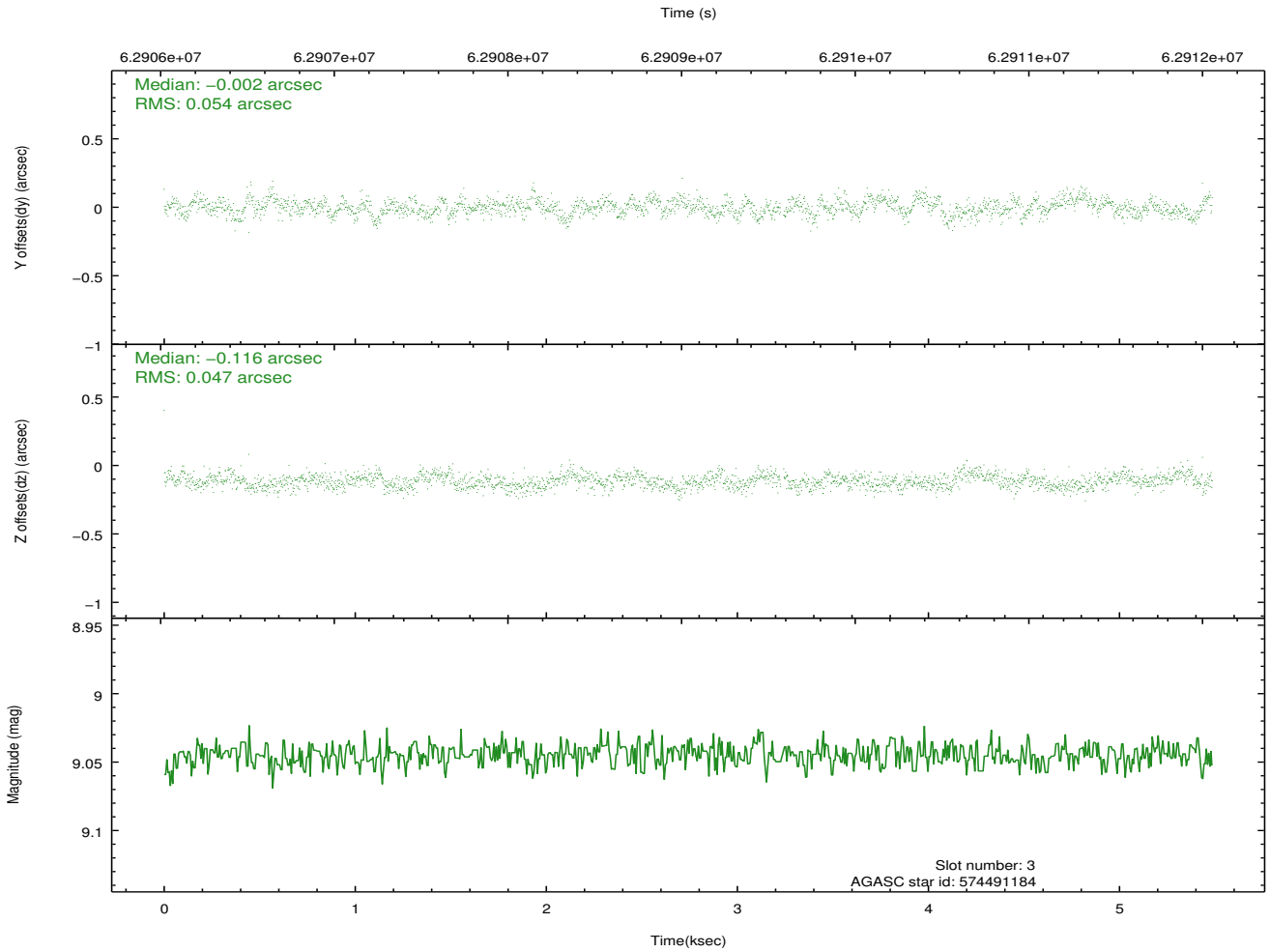
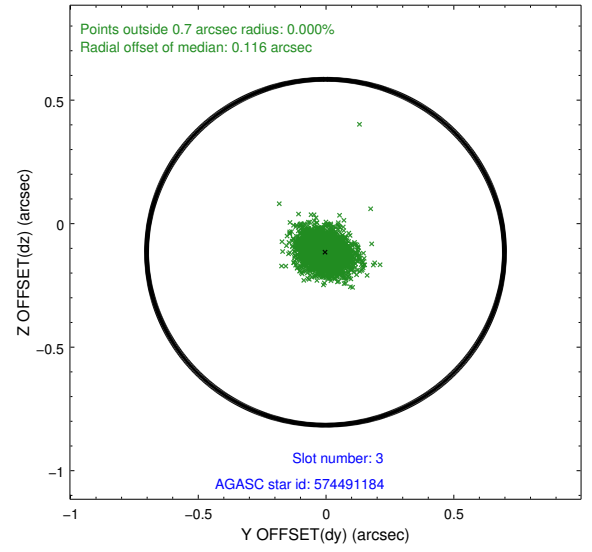
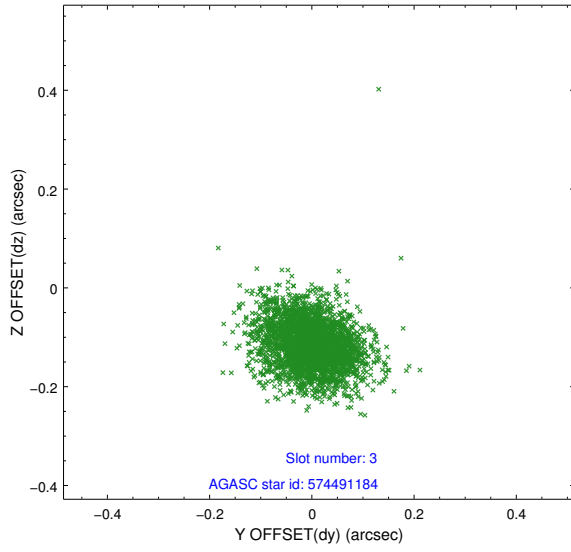


Slot Statistics

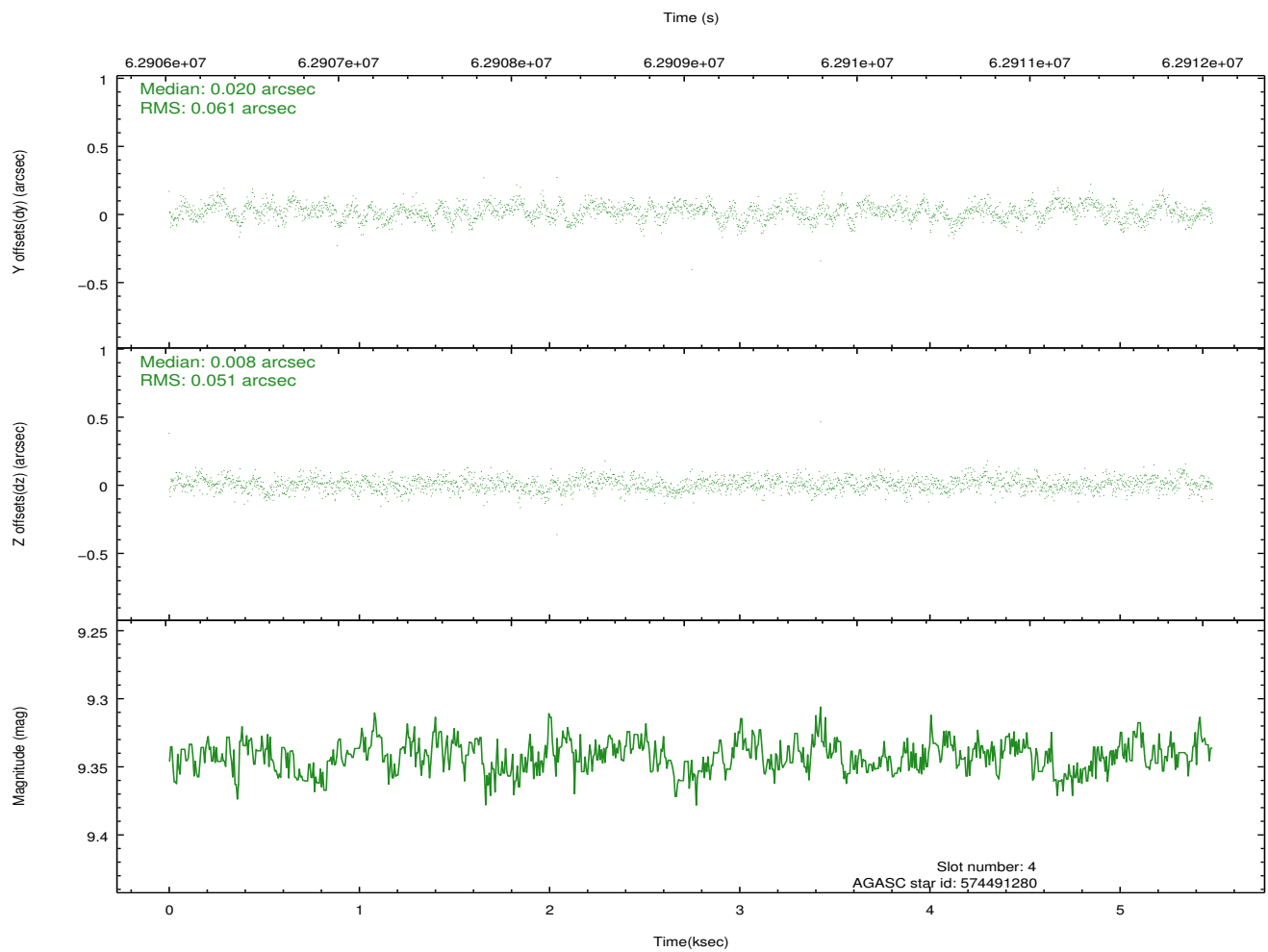
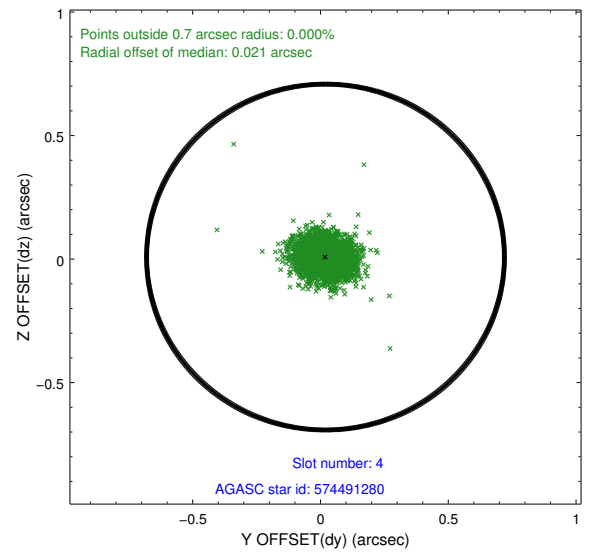
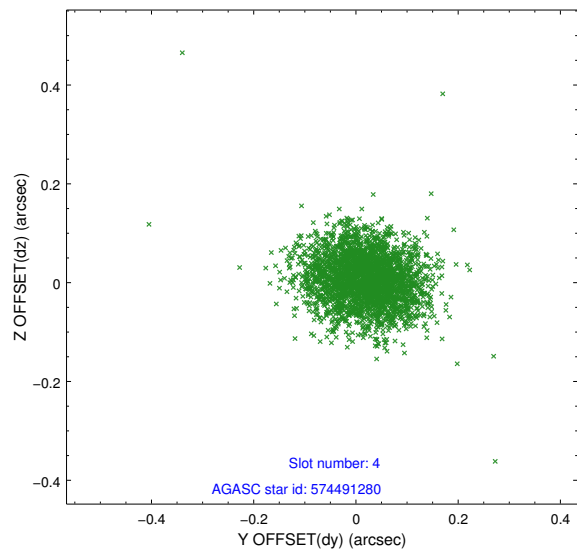
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	2670	-0.031	0.063	0.009	0.016	0.000000	0.000000	-753.95	-832.06
1	FID	ACIS-I-4	7.23	2669	0.096	0.010	0.006	0.010	0.000000	0.000000	2160.20	1073.56
2	FID	ACIS-I-5	7.23	2669	-0.165	-0.004	0.009	0.014	0.000000	0.000000	-1807.13	1072.29
3	GUIDE	574491184	9.04	2669	-0.002	-0.116	0.075	0.123	148.582453	69.768699	416.43	440.07
4	GUIDE	574491280	9.34	2668	0.020	0.008	0.083	0.131	148.611567	69.450135	-588.95	993.02
5	GUIDE	574886464	9.80	2669	-0.023	0.080	0.102	0.168	149.898674	70.203982	961.85	-1747.36
6	GUIDE	574886288	9.82	2668	0.001	0.029	0.118	0.201	149.952718	70.139627	728.18	-1692.33
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

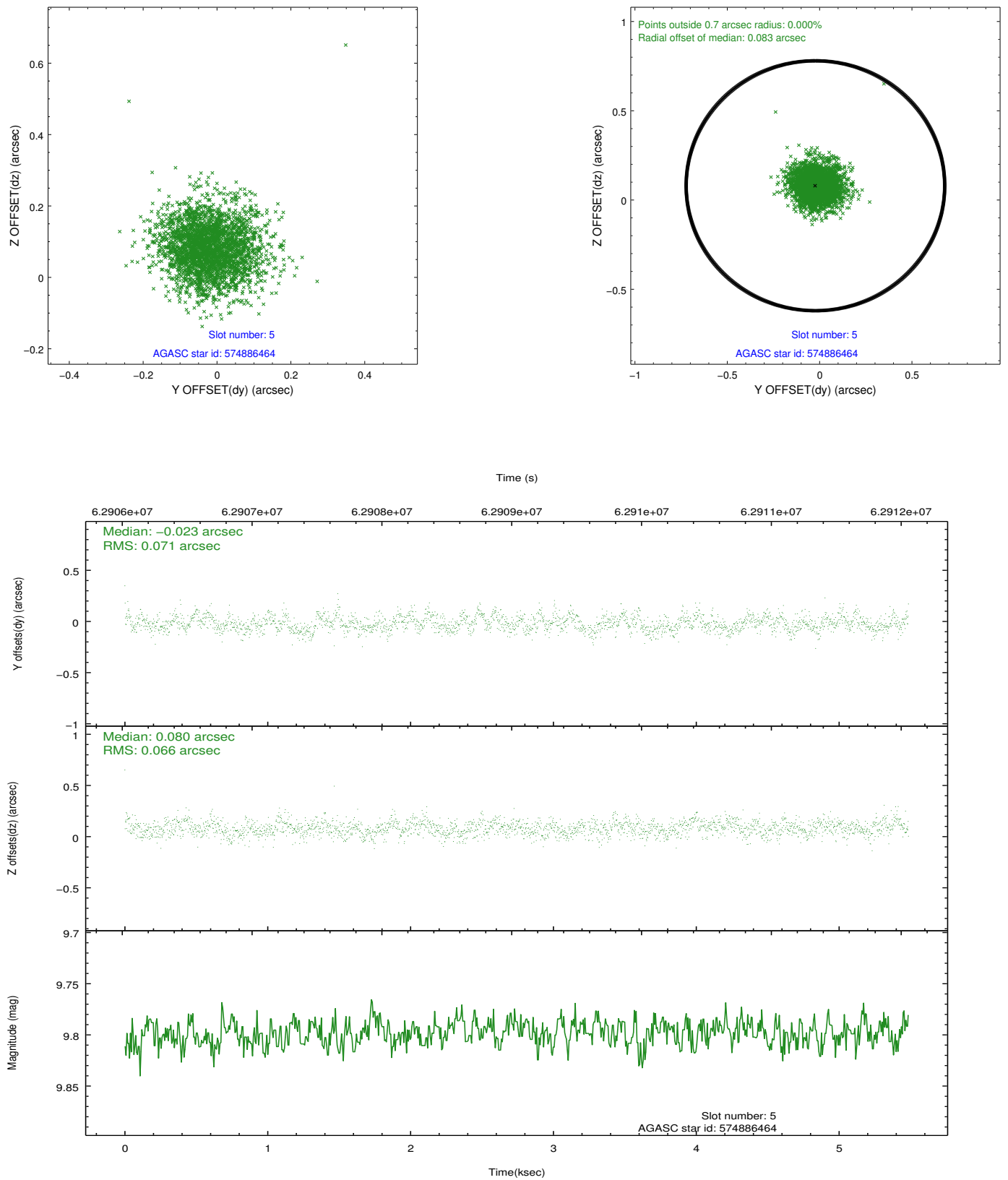
2.4.1 Slot 3



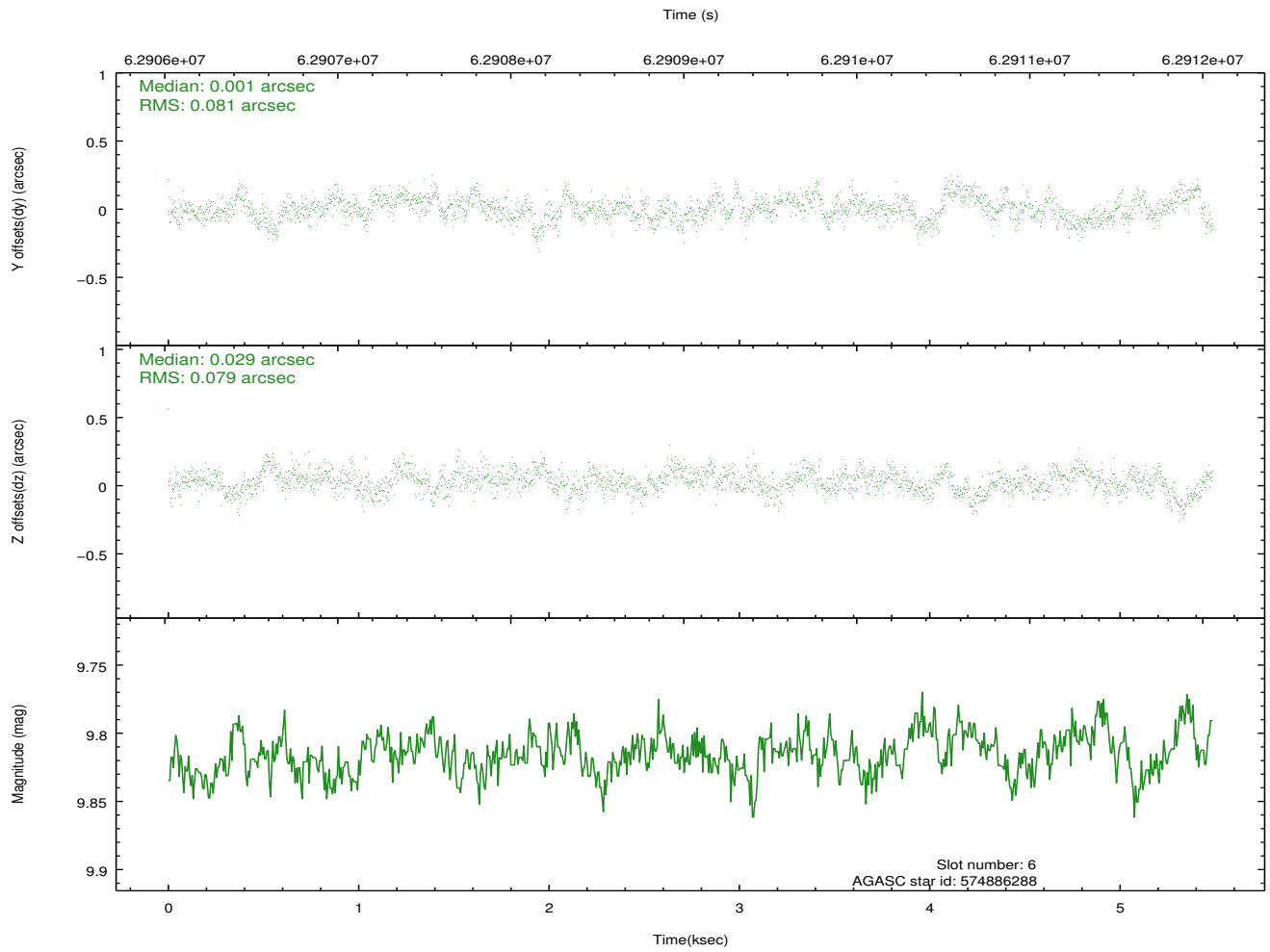
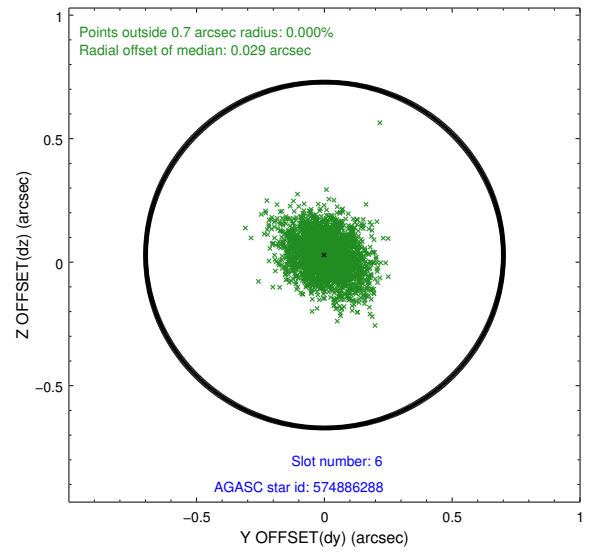
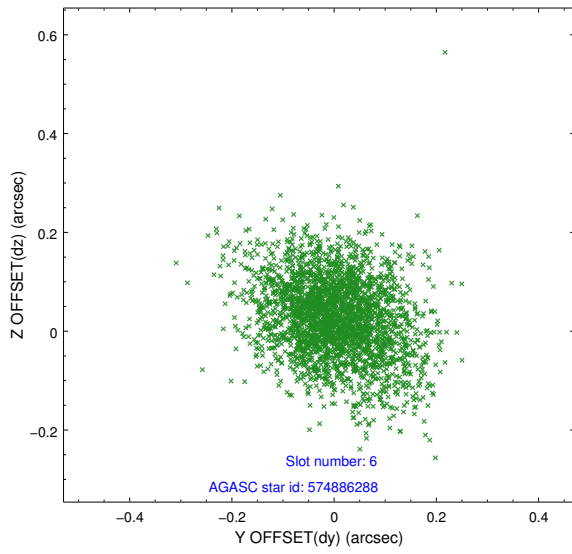
2.4.2 Slot 4



2.4.3 Slot 5

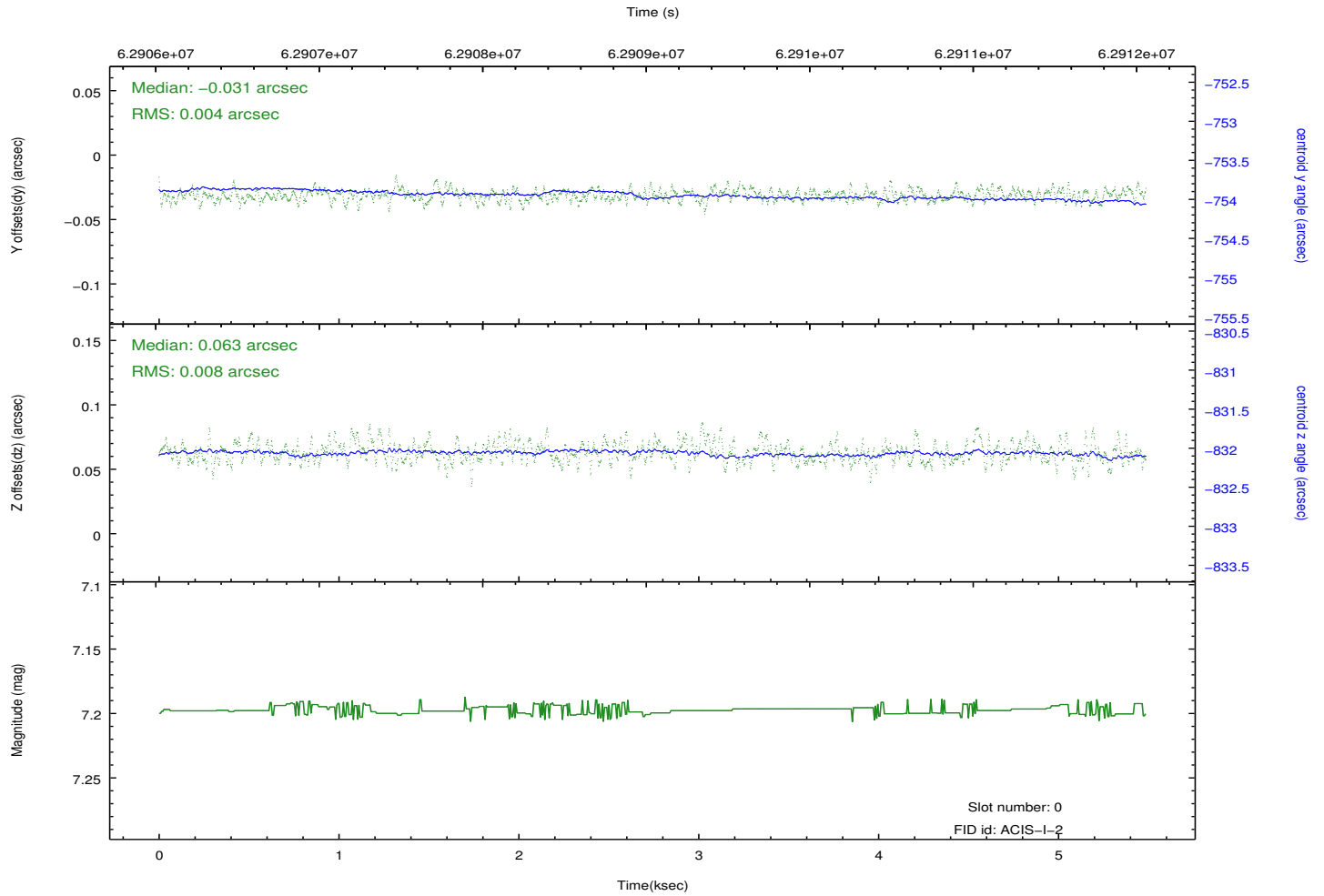
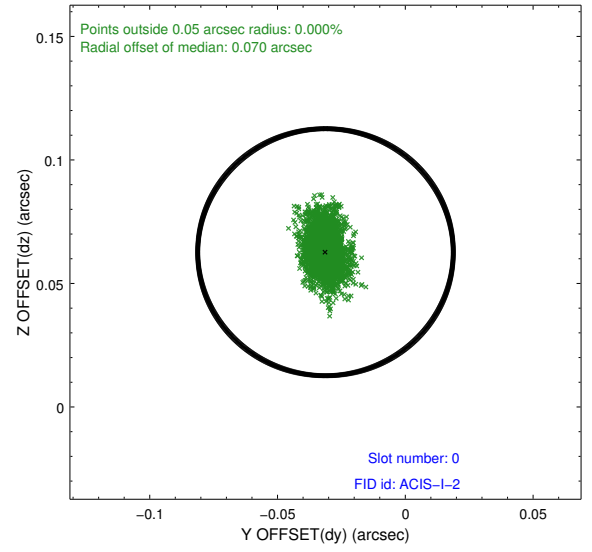
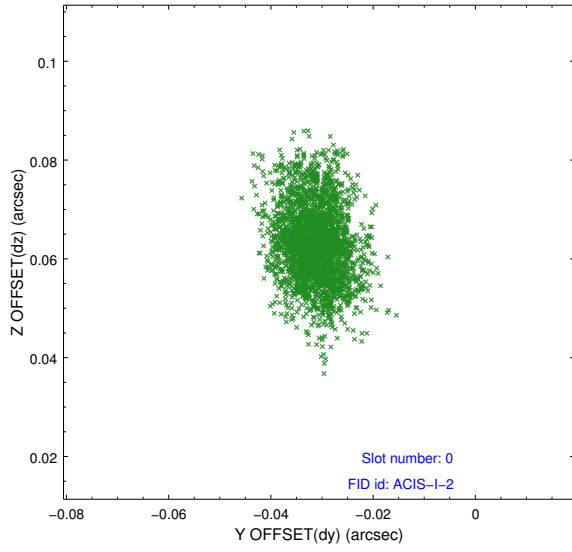


2.4.4 Slot 6

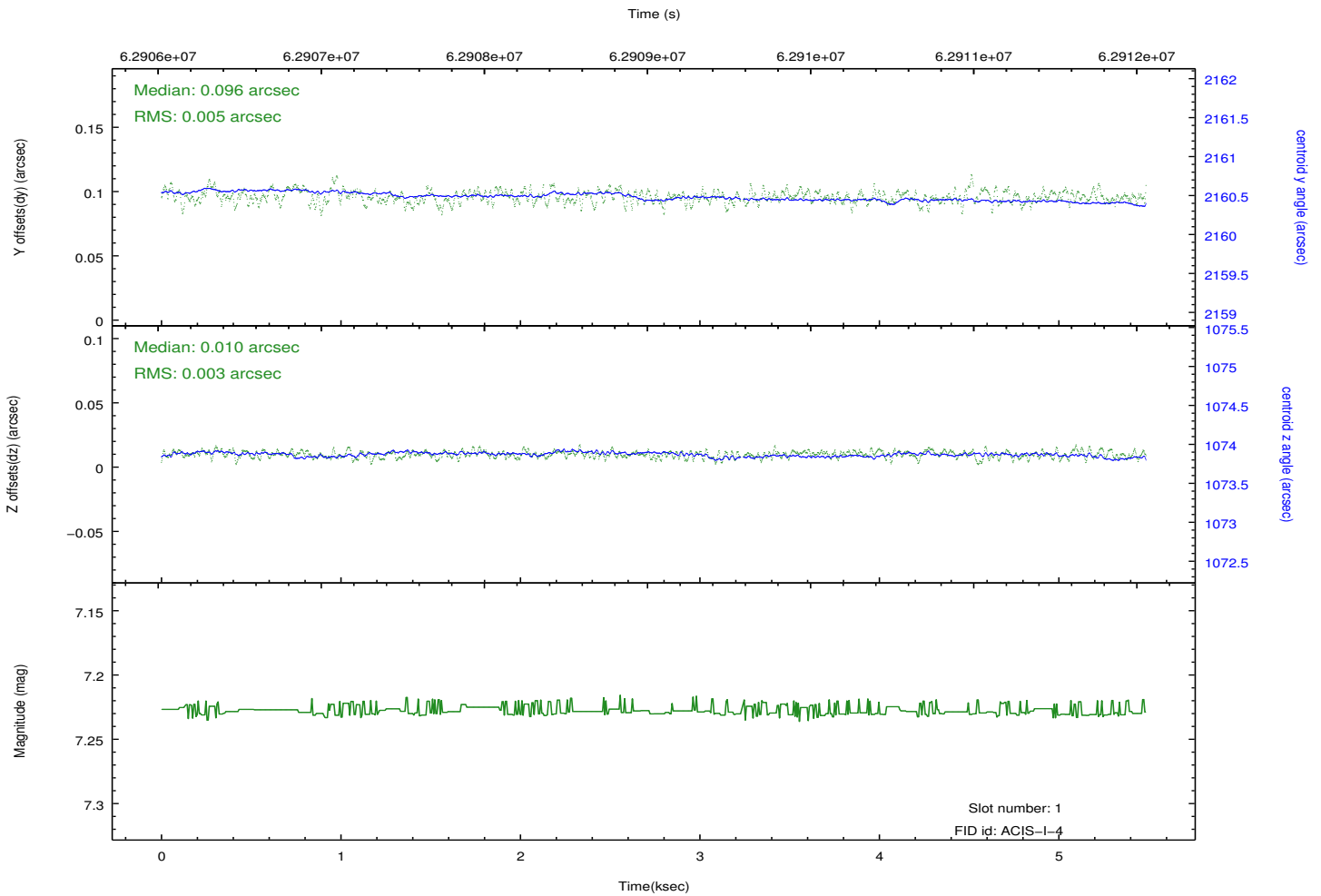
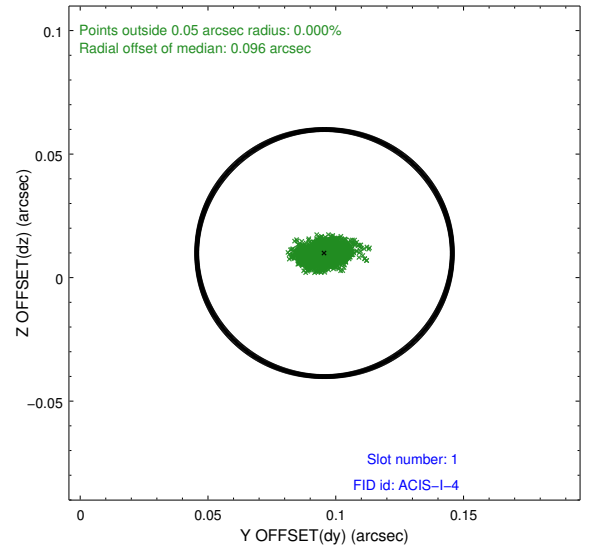
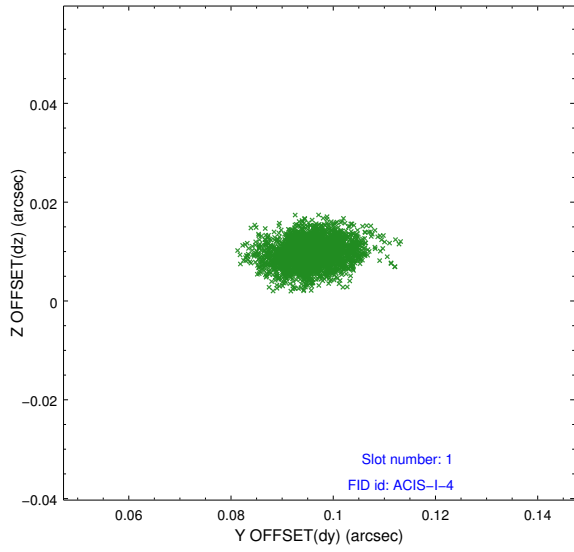


2.5 FID Slots

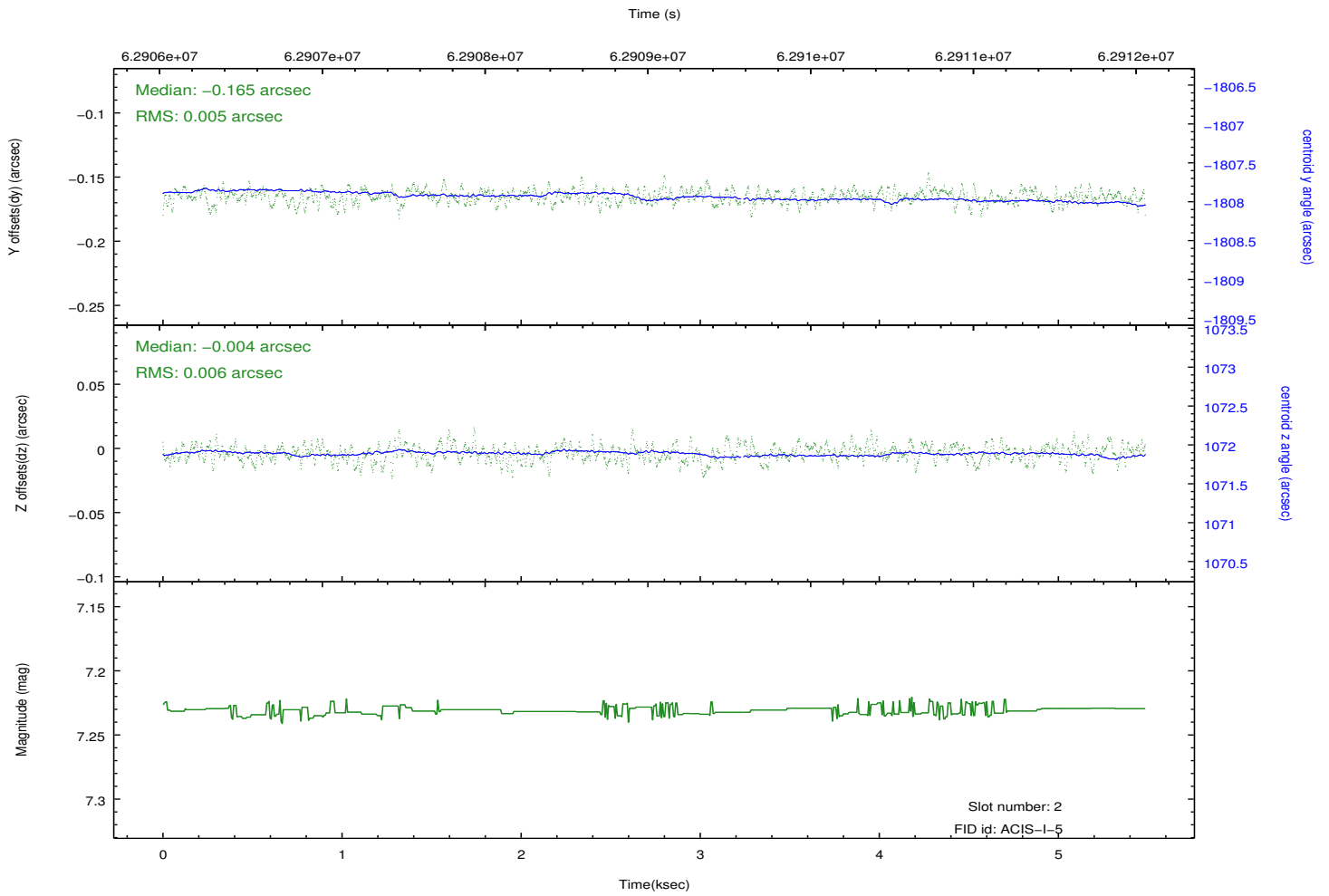
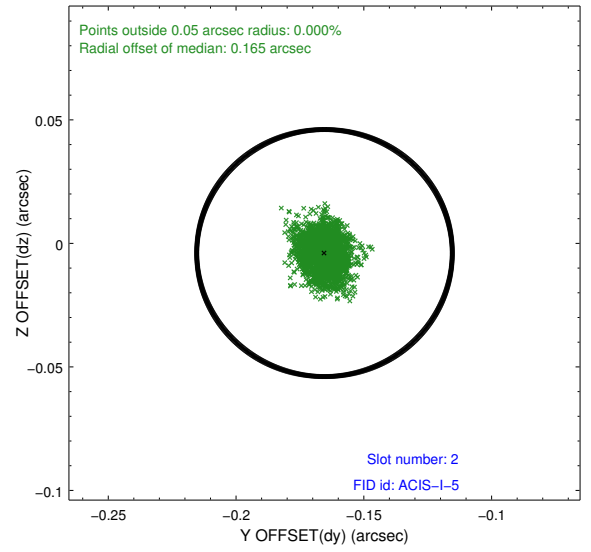
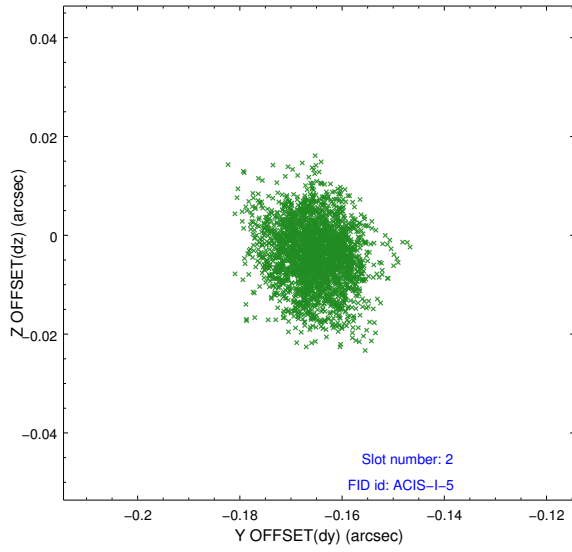
2.5.1 Slot 0



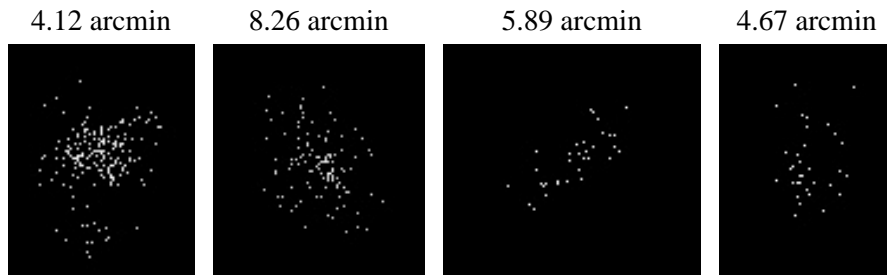
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2011.01.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.169

A.2 Comments

A spatial region of the original bias map for CCD = 1 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 1 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(149.20086,69.63697), (149.54771,69.70723), (149.54398,69.70947), (149.19711,69.63921)

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The guide star in slot 7 was manually excluded from the processing due to poor data quality.

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Monitor constraint not met: Requested: 45.1389 to 75.2315 days after ObsID 361 Actual: 101