

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14435 - L2 Version 2
Chandra X-Ray Center

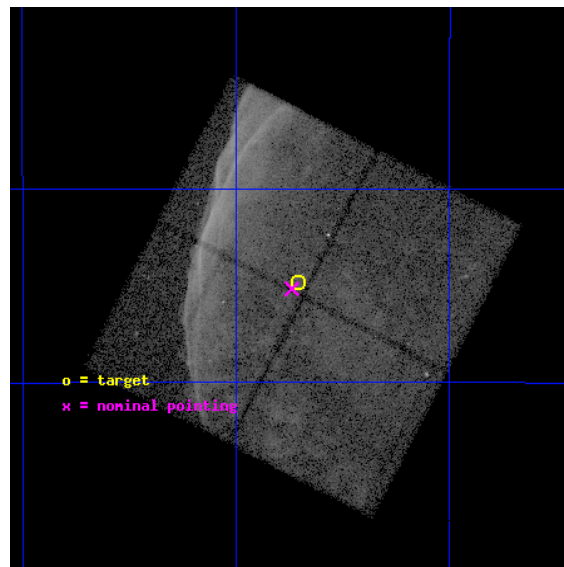
L2 Processing Date : Jun 11 2012

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1 Front

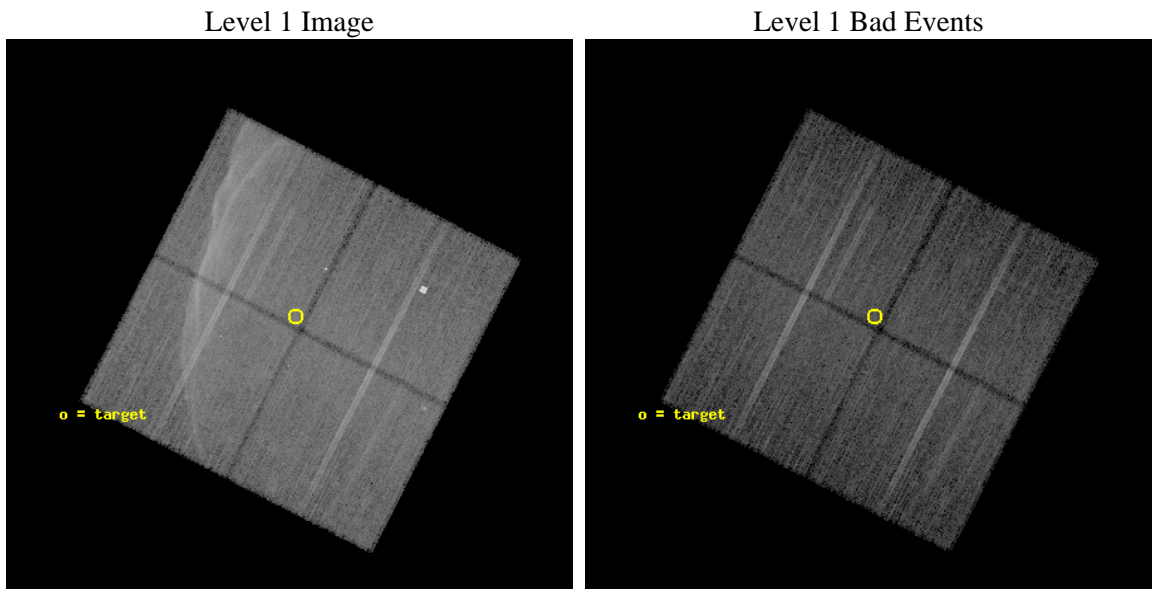
seq_num	501798	Sequence number
obs_id	14435	Observation id
title	SN1006: SHOCK PHYSICS, COSMIC-RAY ACCELERATION, AND SN IA EXPLOSIONS	
observer	Dr. P. Winkler	Principal investigator
object	SN1006_Ctr-E	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	225.92701	Observer's specified target RA [deg]
dec_targ	-41.913681	Observer's specified target Dec [deg]
ra_nom	225.93462414799	Nominal RA [deg]
dec_nom	-41.919450765509	Nominal Dec [deg]
roll_nom	297.25339846124	Nominal Roll [deg]
revision	2	Processing version of data
ontime	38829.772289395	Sum of GTIs [s]
livetime	38322.432728372	Livetime [s]
ontime0	38829.649169385	Sum of GTIs [s]
ontime1	38826.54918915	Sum of GTIs [s]
ontime2	38832.872279763	Sum of GTIs [s]
ontime3	38829.772289395	Sum of GTIs [s]
l2events	294020	Number of level 2 events



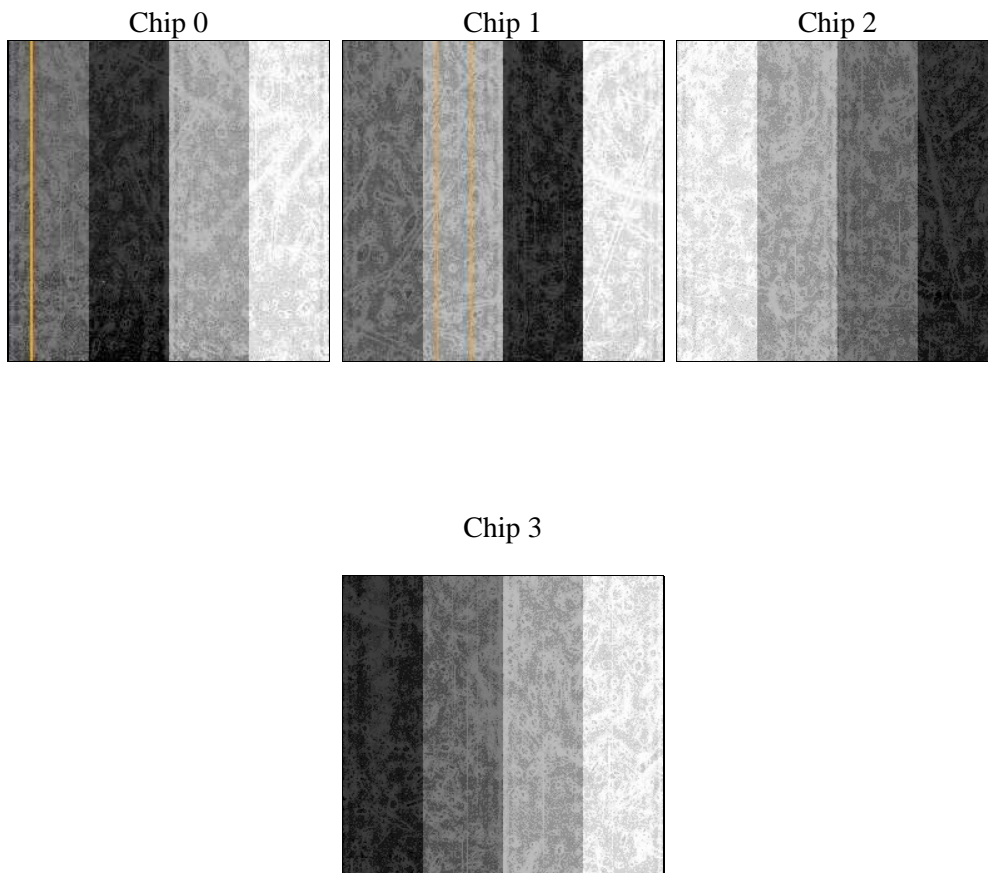
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38745.011000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	38829.772289395	Sum of GTIs [s]
caldsver	4.4.10	 	ontime0	38829.649169385	Sum of GTIs [s]
date	2012-06-11T18:59:02	Date and time of file creation	ontime1	38826.54918915	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	38832.872279763	Sum of GTIs [s]
			ontime3	38829.772289395	Sum of GTIs [s]
			l1events	1046186	Number of level 1 events

2.1.4 Events

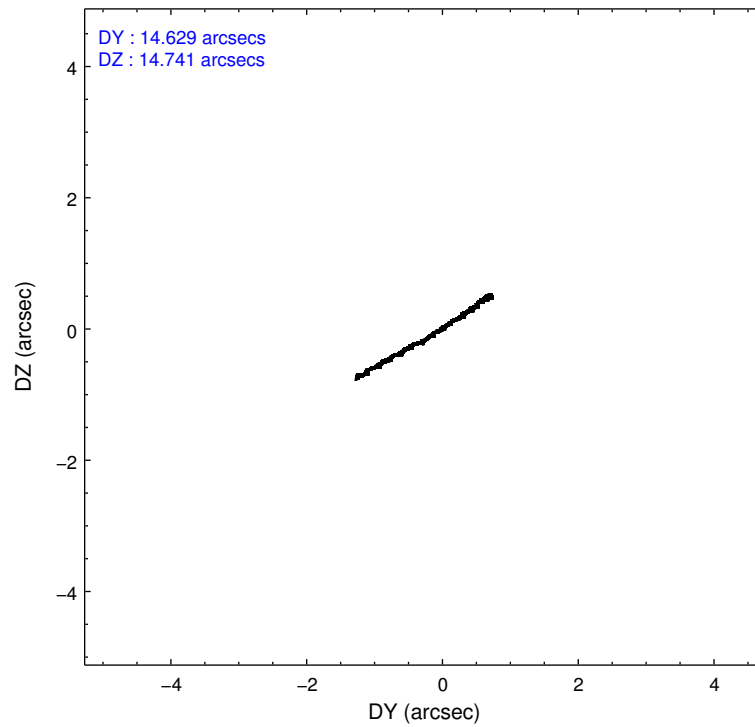
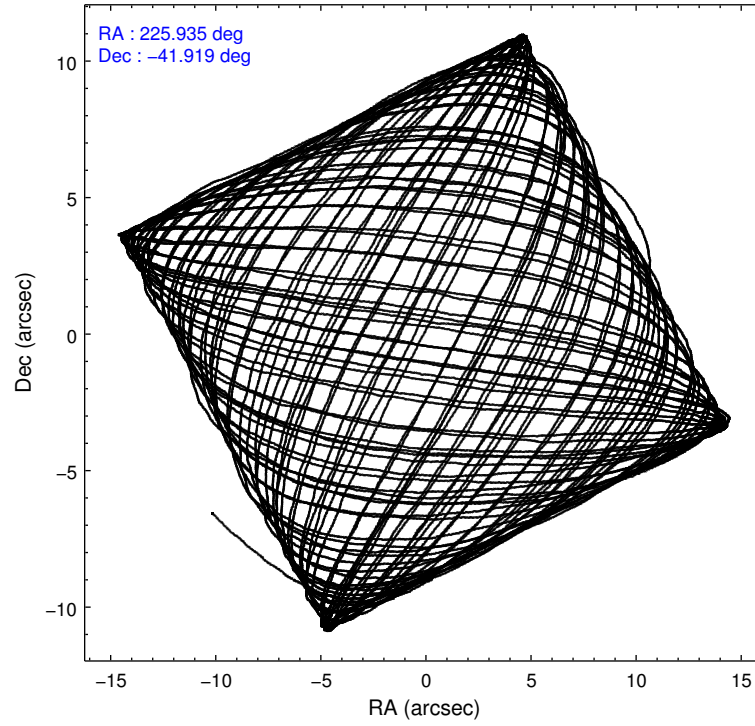
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	225432	229625	266129	325000
rejected events	170332	169586	187647	185543
rejected %	75%	73%	70%	57%

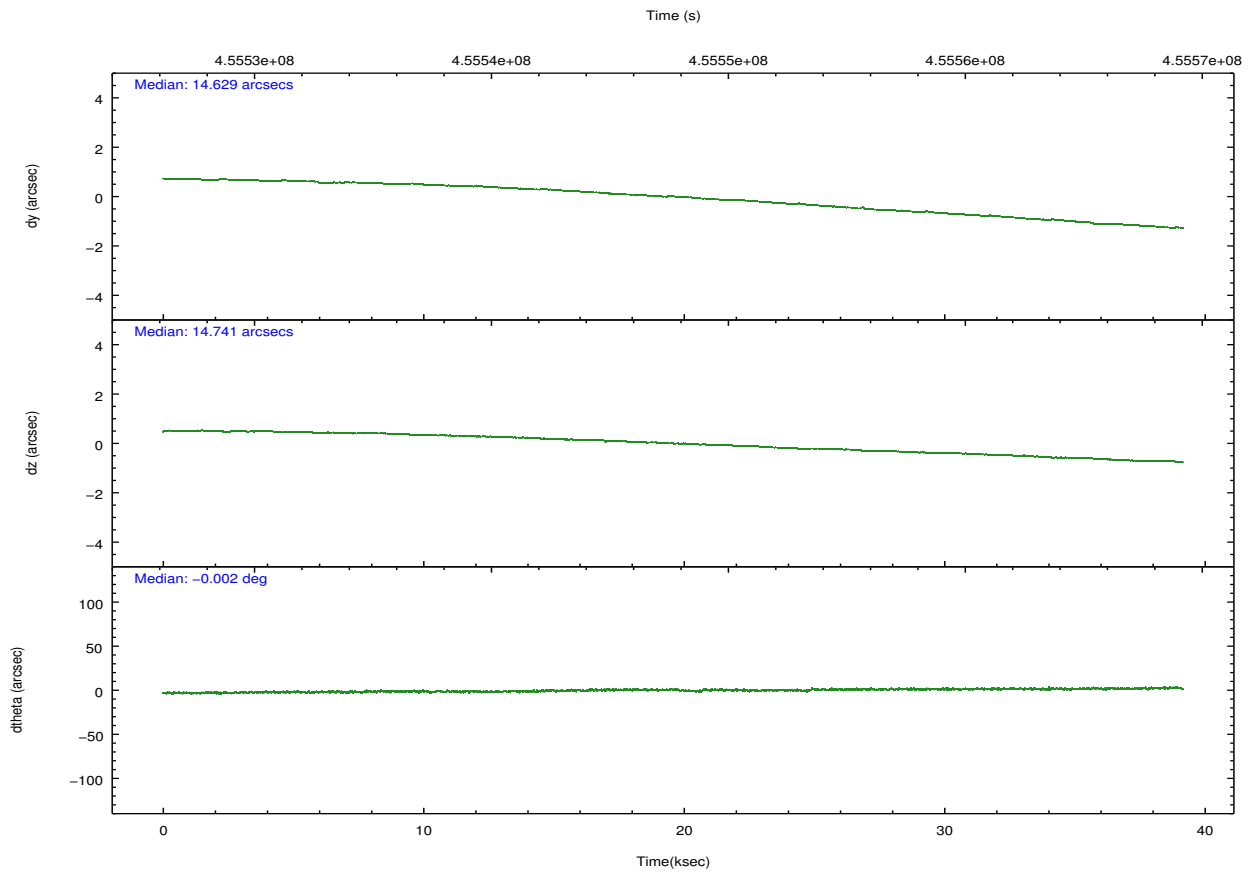
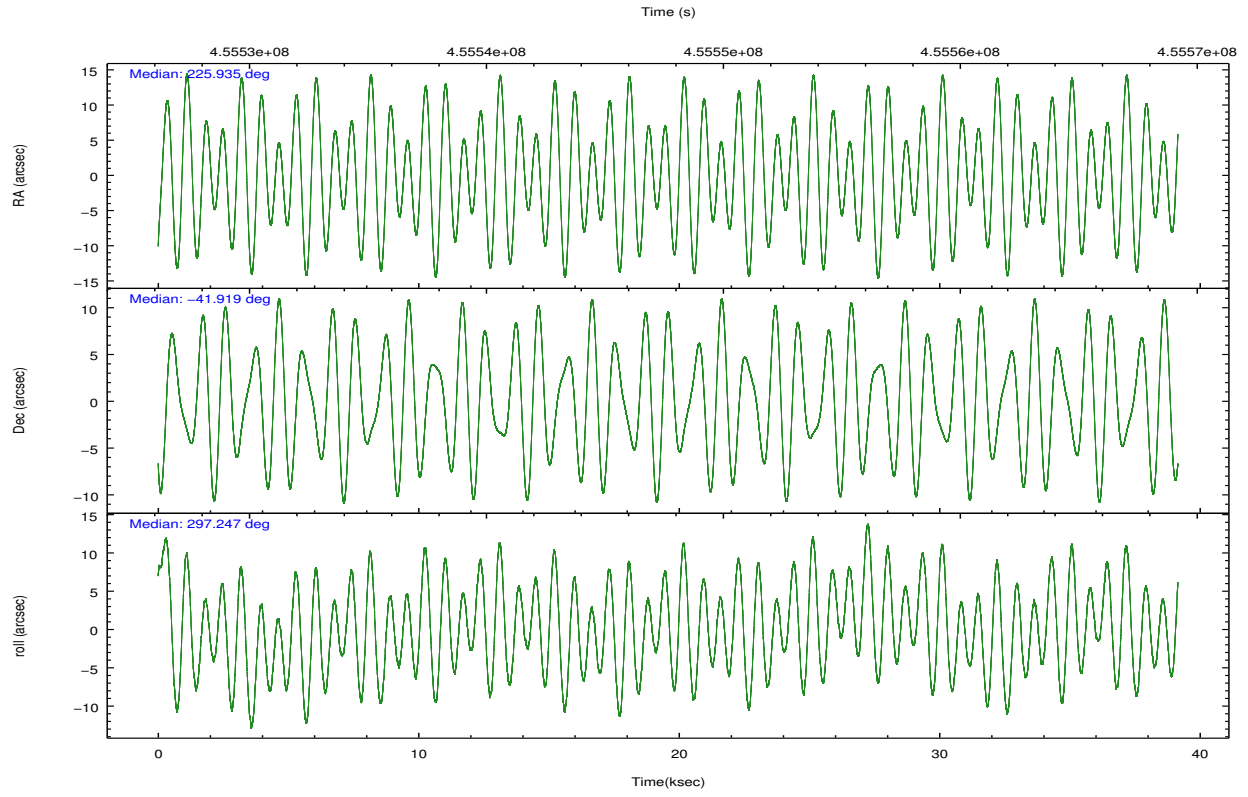
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	35182	39660	55873	106373
	15%	17%	20%	32%
grade 1 events	208	200	329	551
	0%	0%	0%	0%
grade 2 events	8297	8039	10138	15360
	3%	3%	3%	4%
grade 3 events	3217	3118	3657	5550
	1%	1%	1%	1%
grade 4 events	3023	3061	3492	5442
	1%	1%	1%	1%
grade 5 events	10091	10394	9250	11196
	4%	4%	3%	3%
grade 6 events	5384	6172	5339	6757
	2%	2%	2%	2%
grade 7 events	160030	158981	178051	173771
	70%	69%	66%	53%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	225.903468	225.9346241479918	Subarray requested	NONE	NONE
[deg] Pointing Dec	-41.904663	-41.91945076550941	Alternating exposures requested	N	N
[deg] Pointing Roll	297.023903	297.2533984612406	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	455528495.184000	455527450.4218			
Observation start date	2012-06-08T07:40:29	2012-06-08T07:24:10			
[s] Observation end time (MET)	455567240.184000	455567477.18648			
Observation end date	2012-06-08T18:26:14	2012-06-08T18:31:17			
Read mode	TIMED	TIMED			

2.3 Aspect



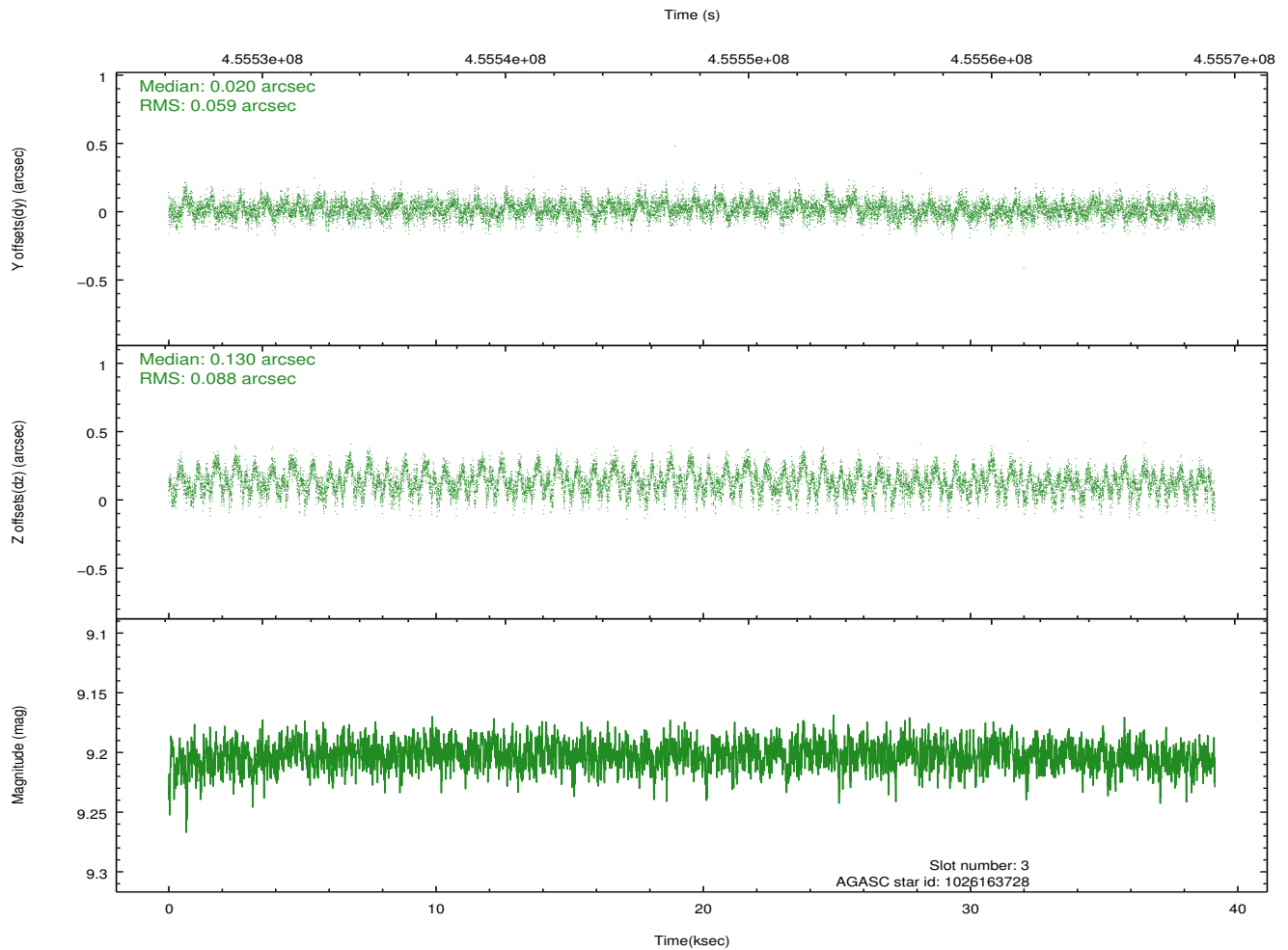
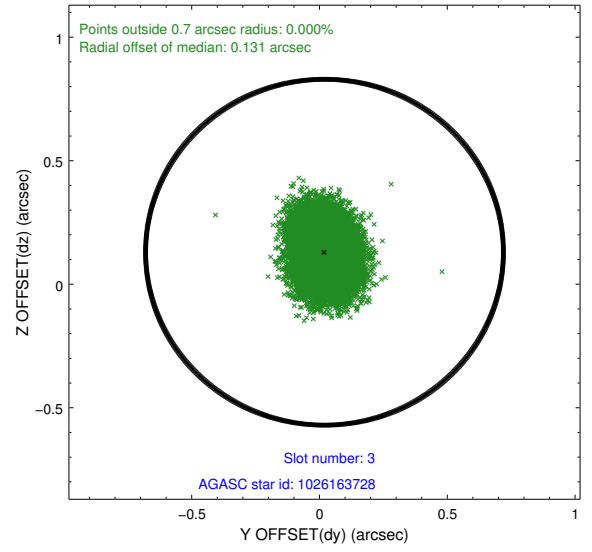
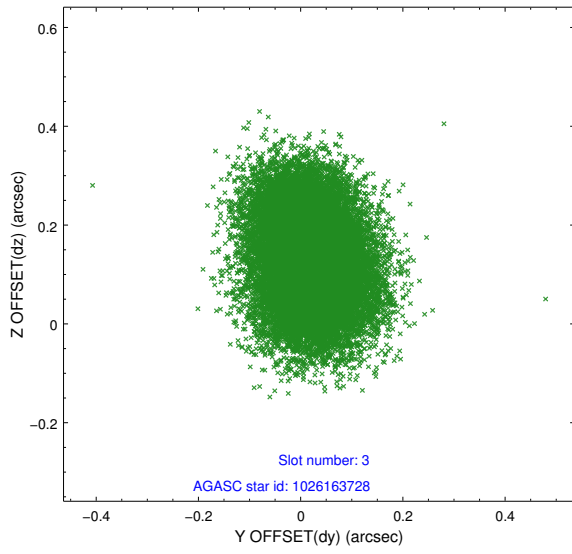


Slot Statistics

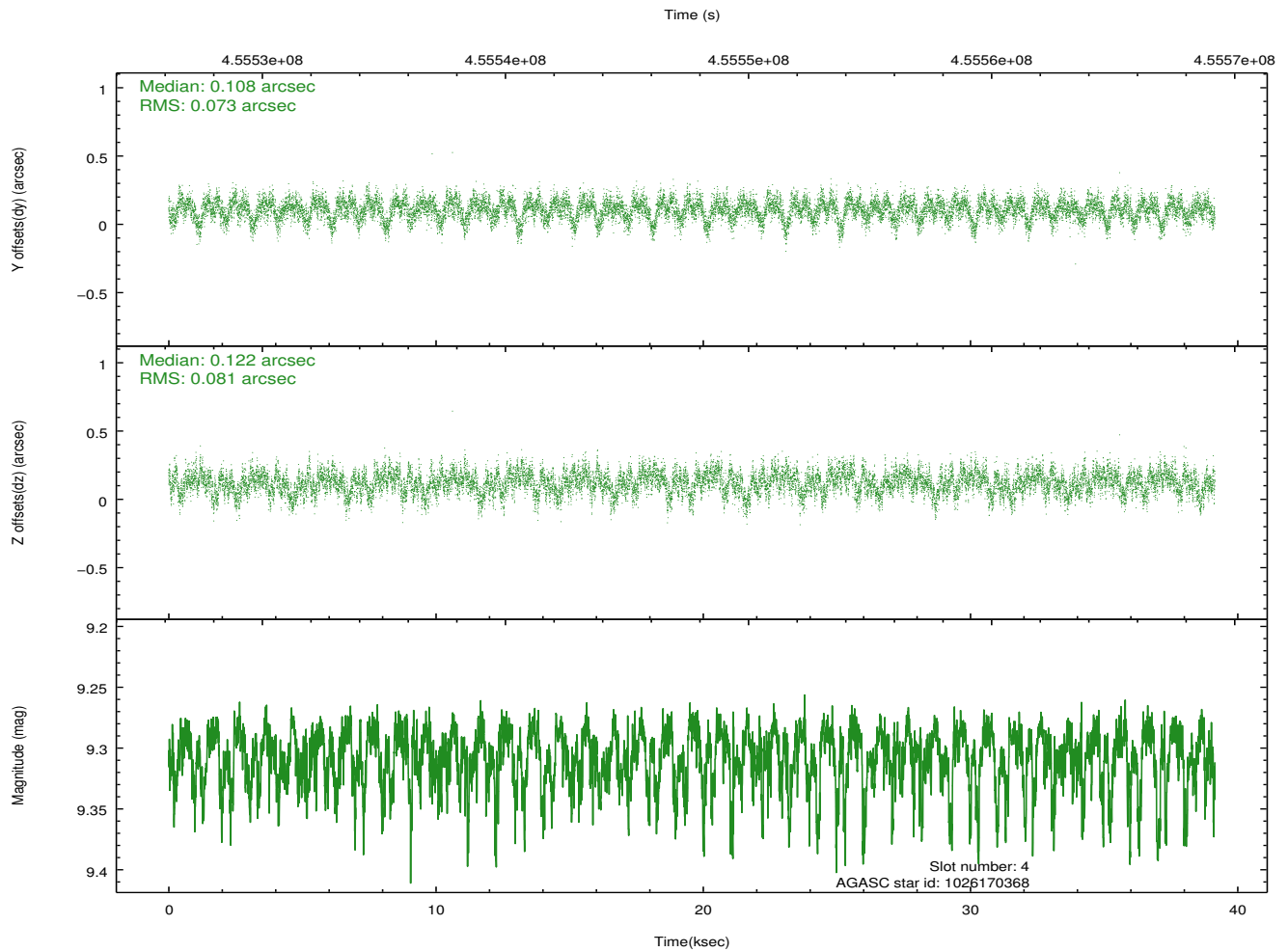
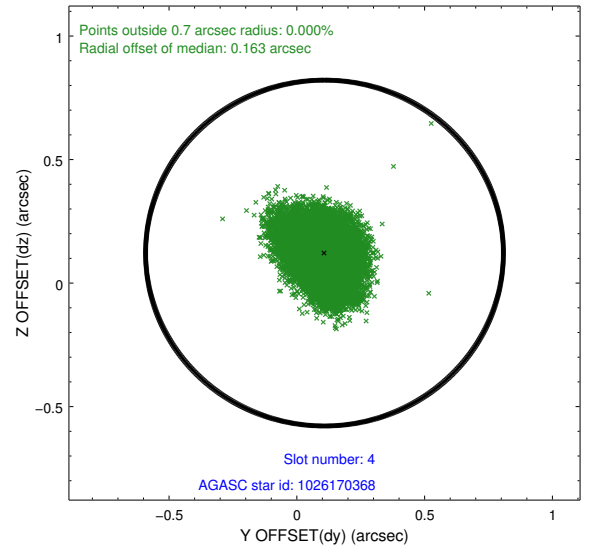
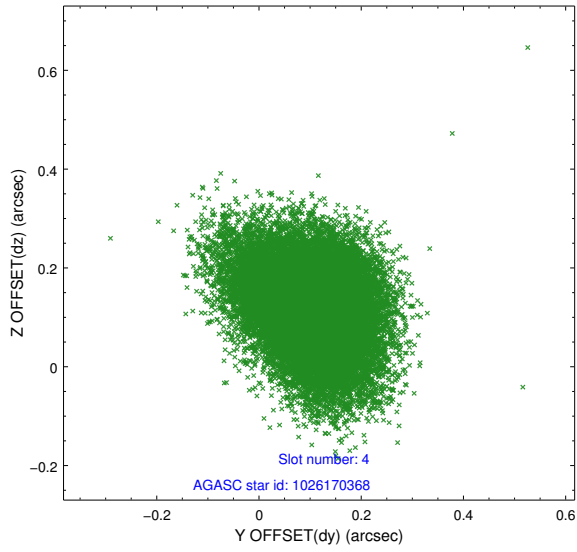
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.02	9549	-0.122	-0.106	0.020	0.035	0.000000	0.000000	-769.36	-844.77
1	FID	ACIS-I-4	7.02	9547	0.257	0.098	0.025	0.040	0.000000	0.000000	2145.08	1061.59
2	FID	ACIS-I-5	7.09	9549	-0.239	0.074	0.021	0.028	0.000000	0.000000	-1823.27	1059.44
3	GUIDE	1026163728	9.20	19080	0.020	0.130	0.114	0.181	225.377558	-41.568164	-1718.20	-713.74
4	GUIDE	1026170368	9.31	19050	0.108	0.122	0.115	0.190	225.763429	-42.291155	1070.78	-964.27
5	GUIDE	1026170800	9.03	19086	0.057	0.057	0.111	0.179	225.400024	-42.381702	925.82	-1974.71
6	GUIDE	1026173472	7.42	19099	0.014	-0.146	0.081	0.128	227.021961	-42.191055	2291.53	2180.42
7	GUIDE	1026183784	9.16	19082	-0.202	-0.167	0.111	0.172	226.363370	-41.841537	361.07	1200.59

2.4 Star Slots

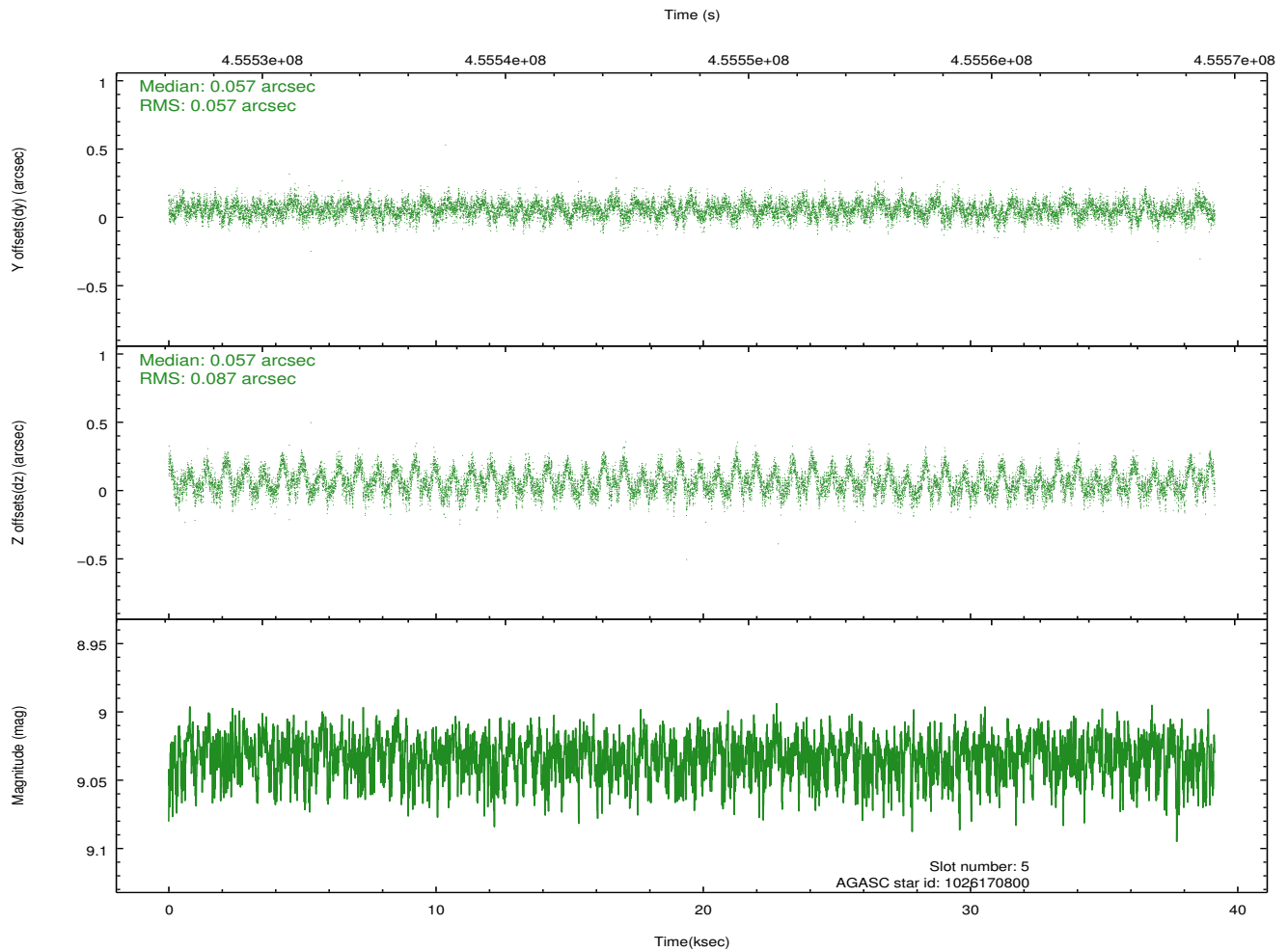
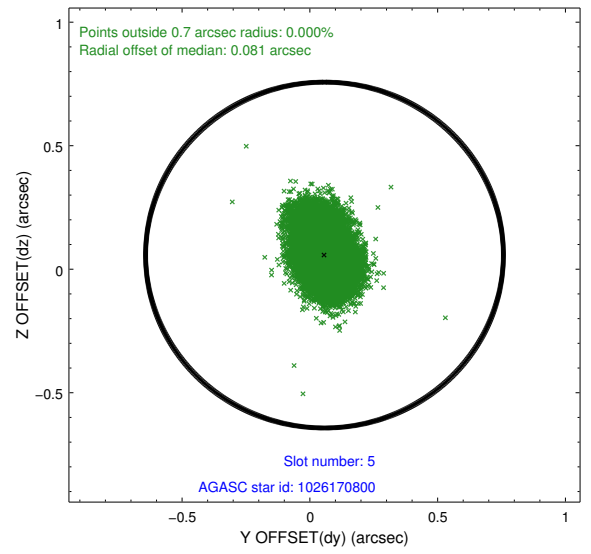
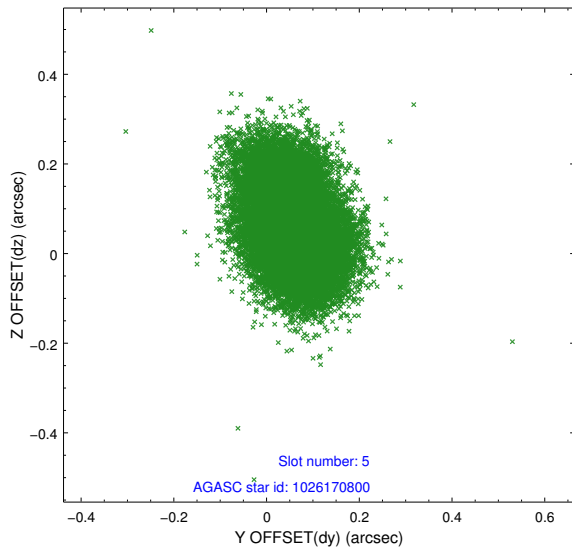
2.4.1 Slot 3



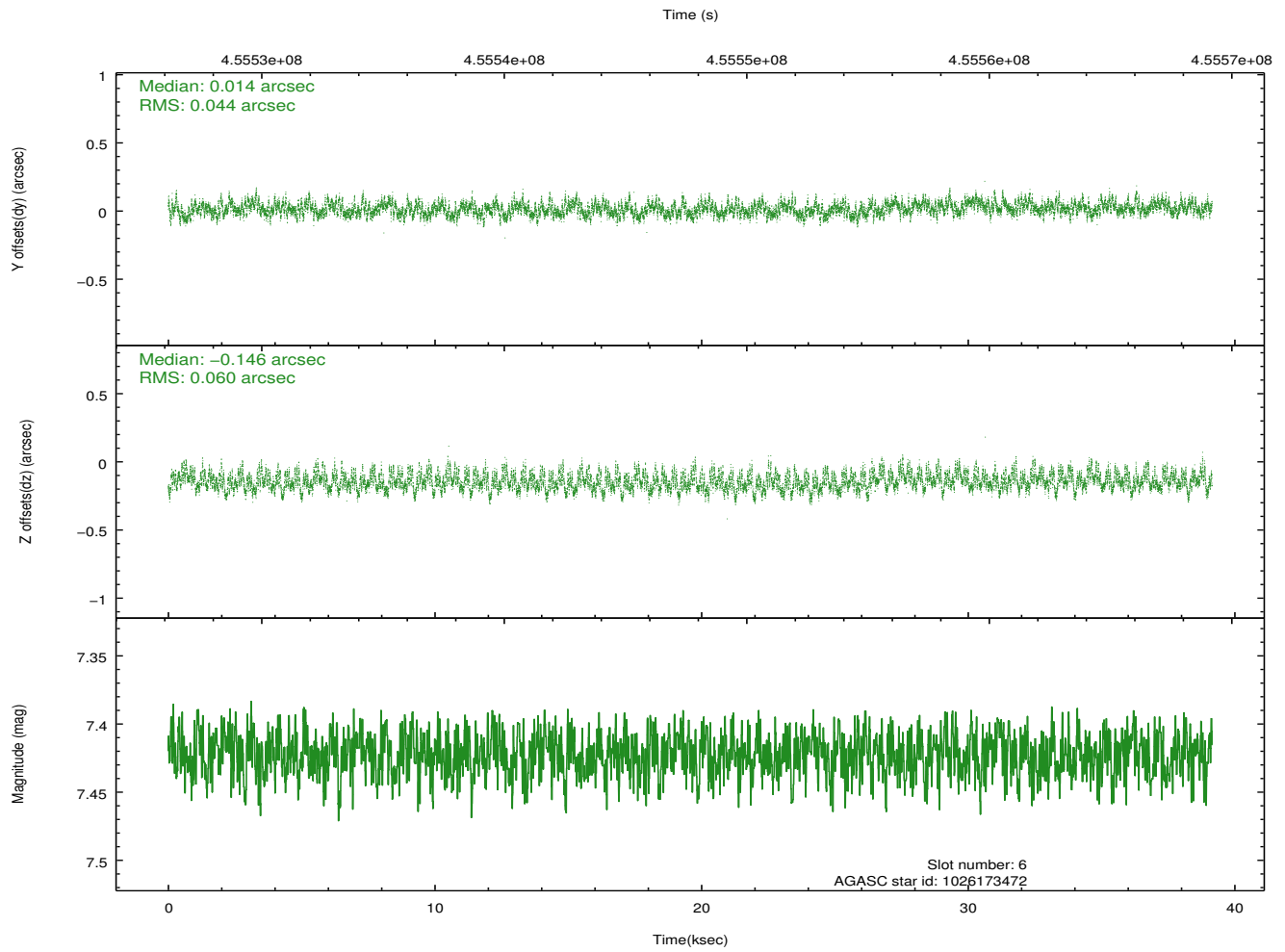
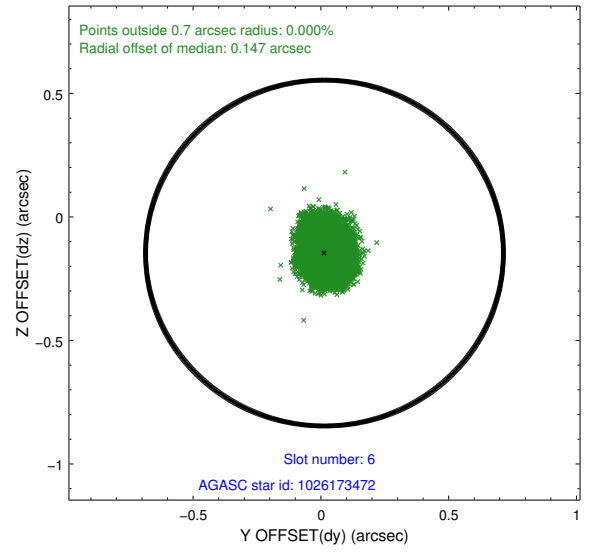
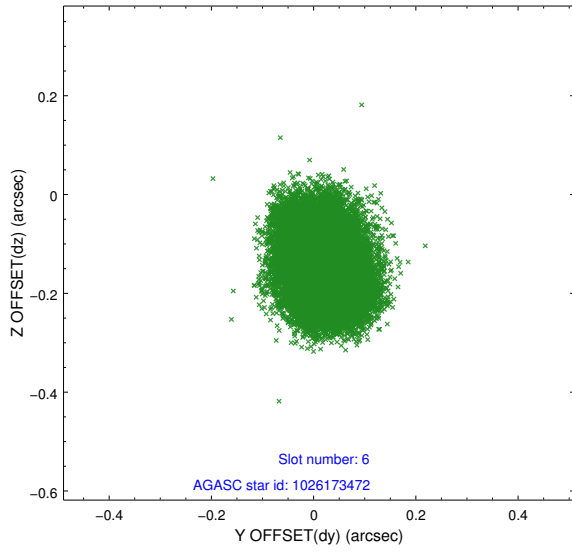
2.4.2 Slot 4



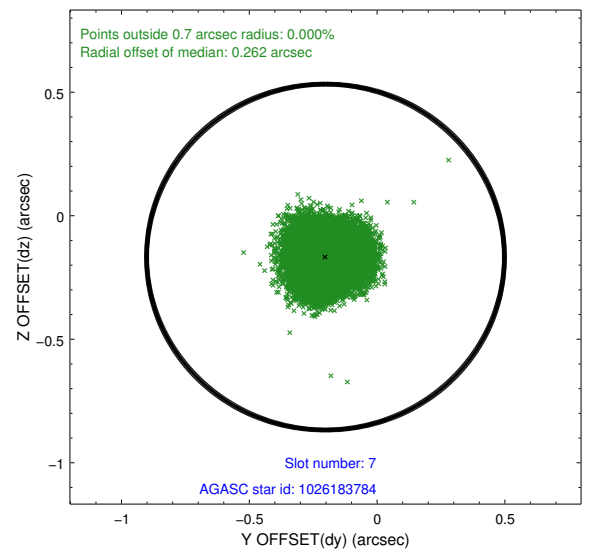
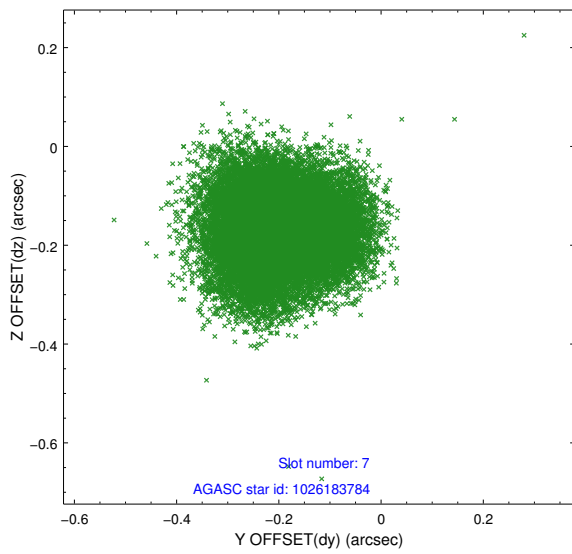
2.4.3 Slot 5



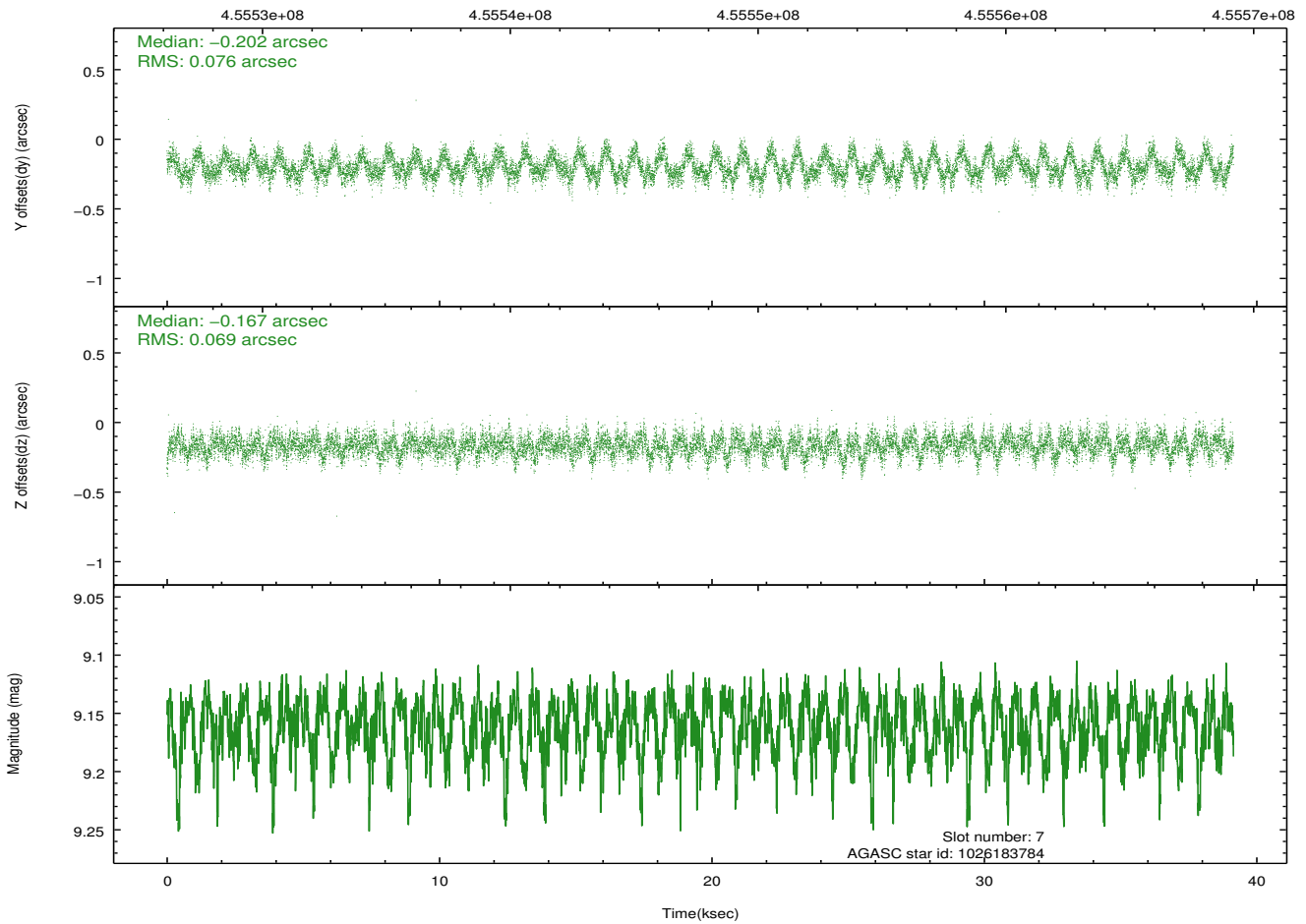
2.4.4 Slot 6



2.4.5 Slot 7

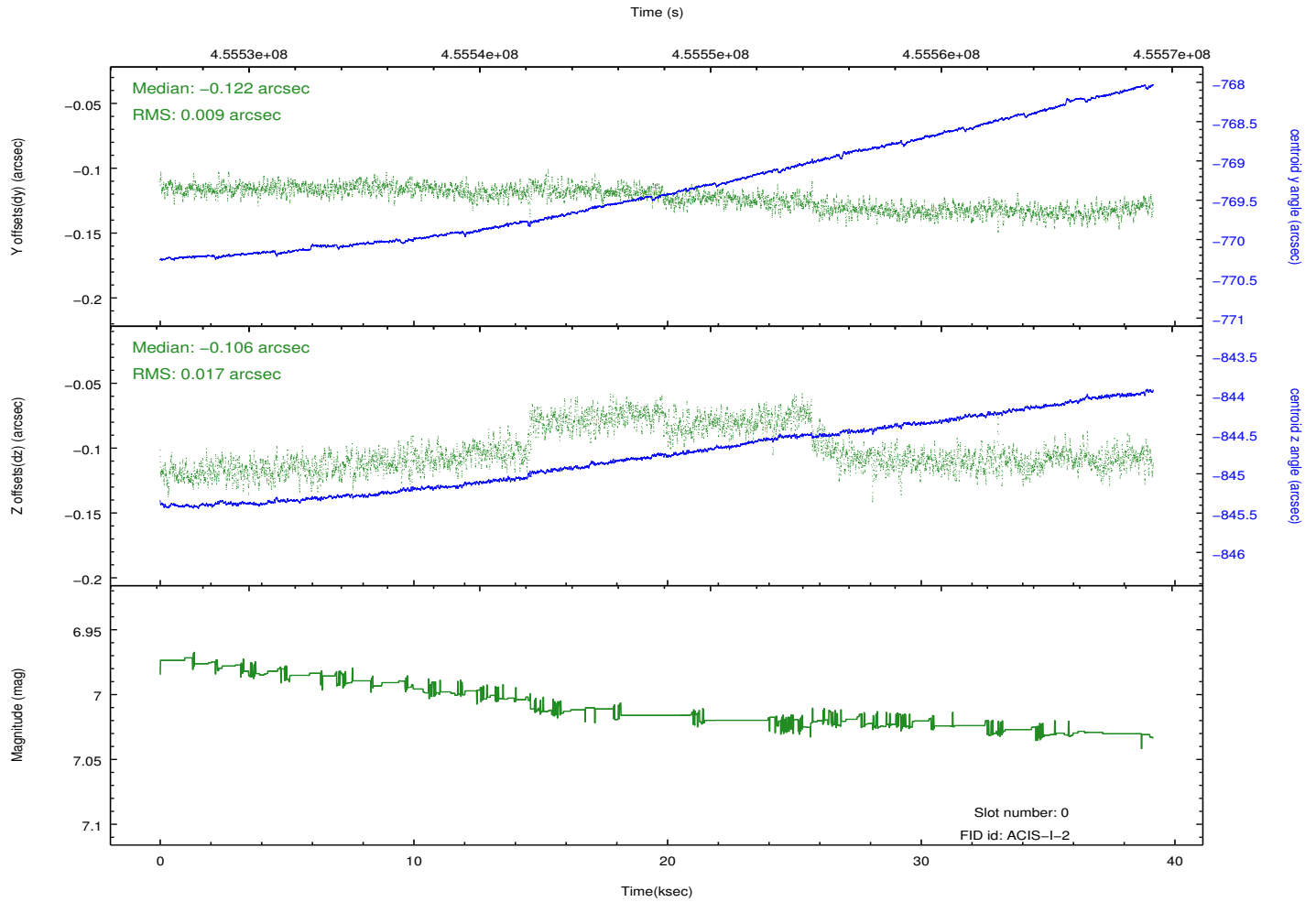
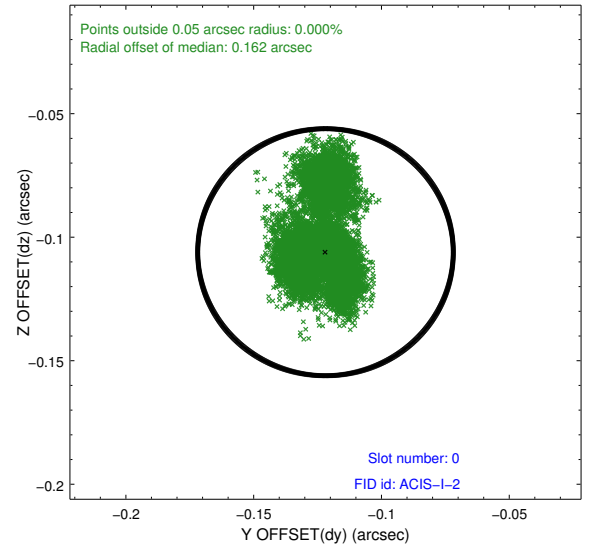
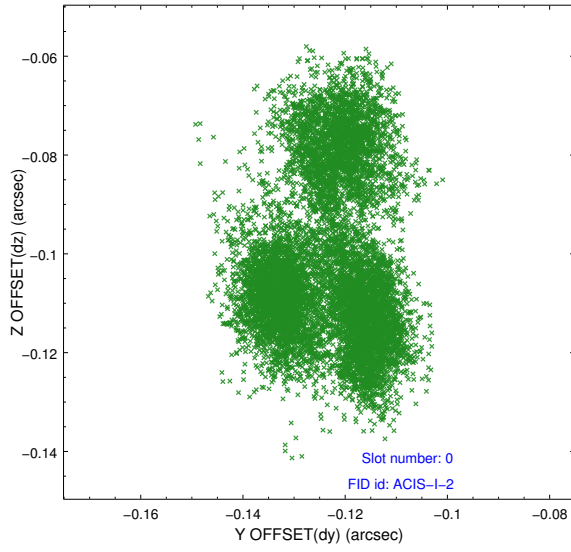


Time (s)

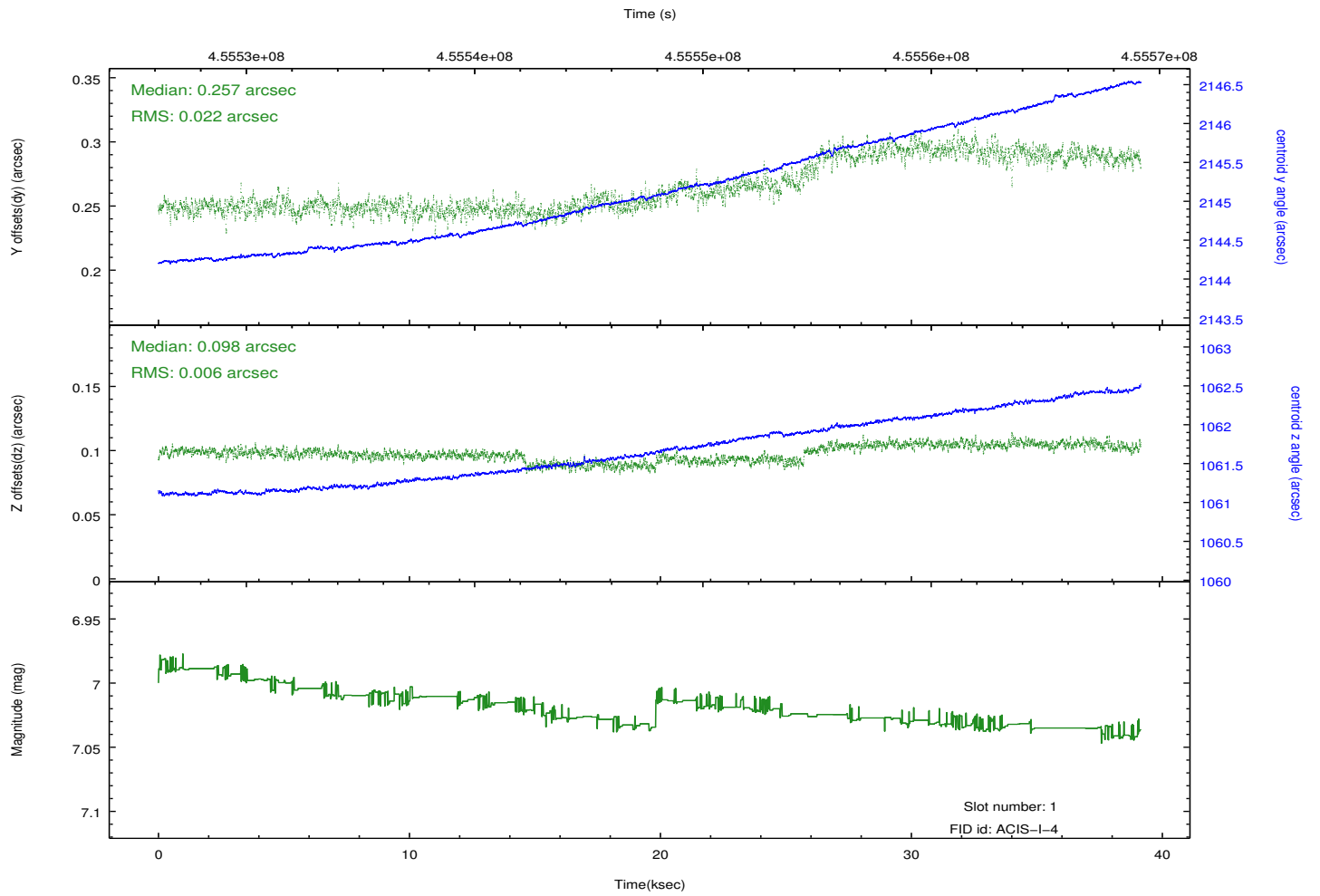
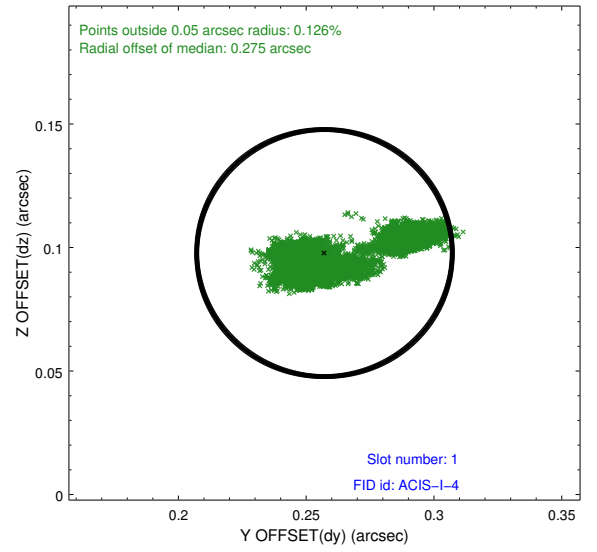
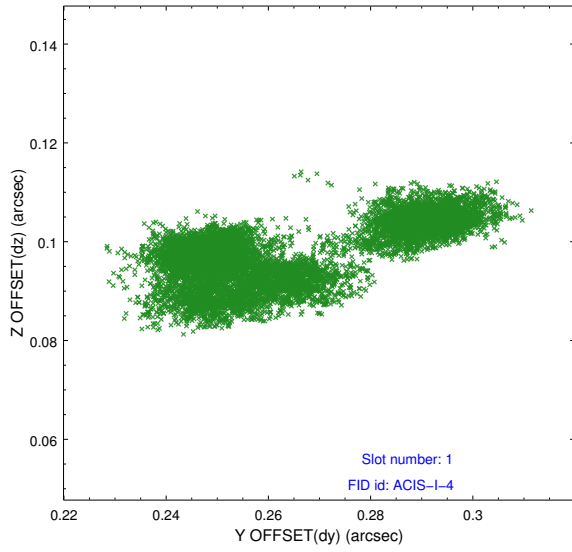


2.5 FID Slots

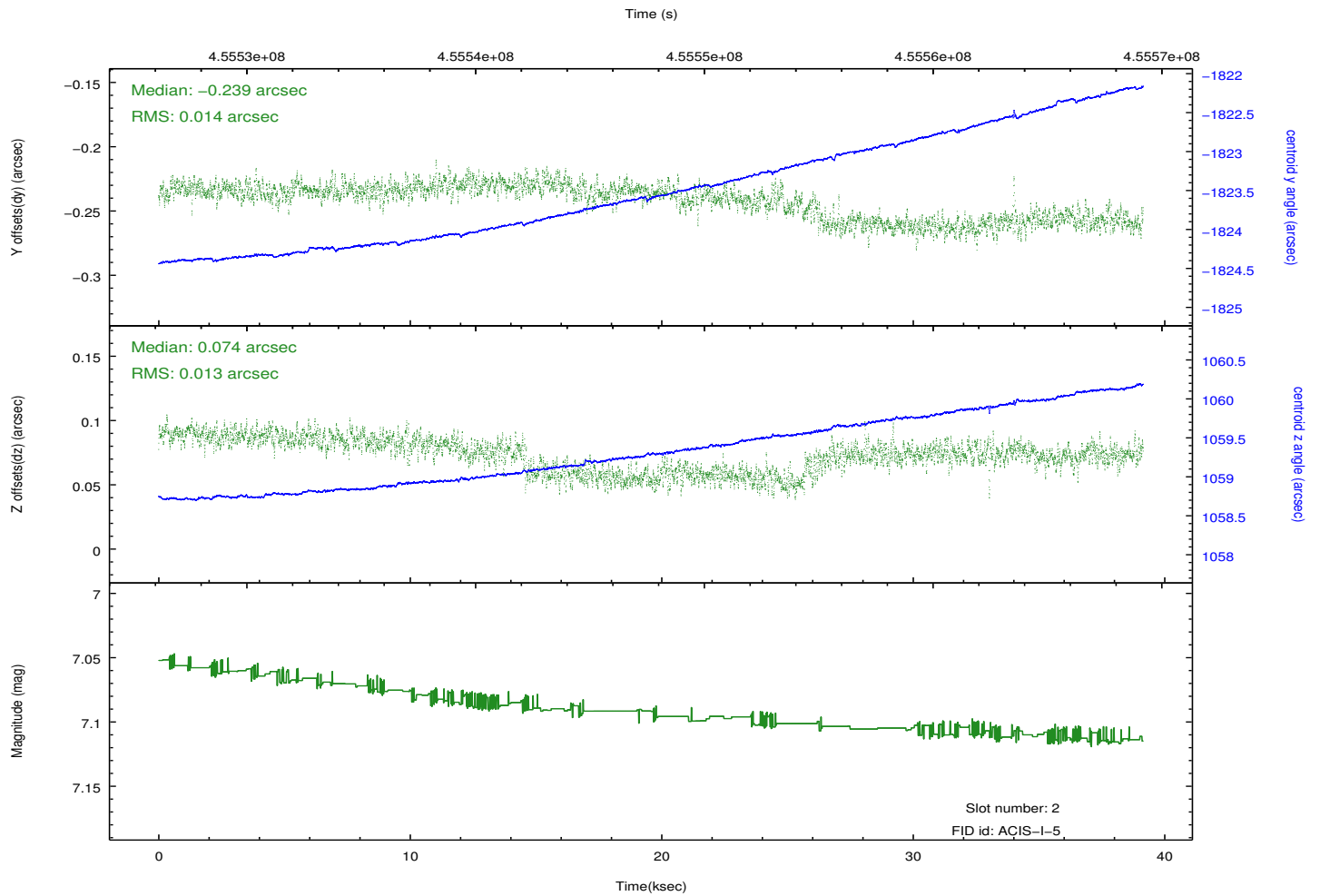
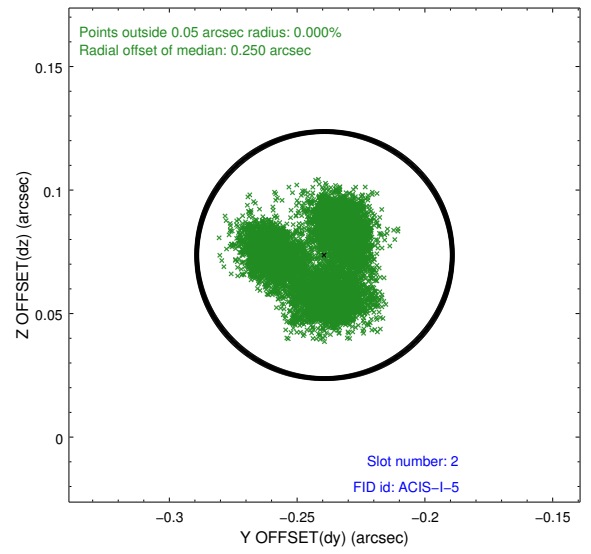
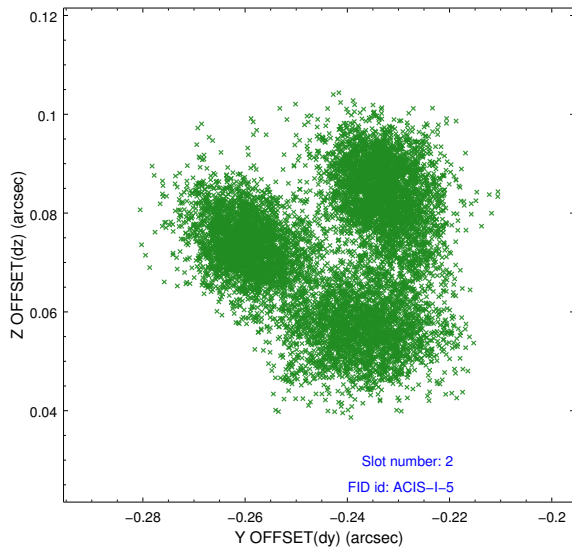
2.5.1 Slot 0



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)	2012.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	38.829772289395

A.2 Comments

A spatial region of the original bias map for CCD = 3 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 = 3 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:

(225.98856, -41.74199), (225.98010, -41.74522), (225.99778, -41.77079), (226.00188, -41.76125)