

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 631 - L2 Version 4
Chandra X-Ray Center

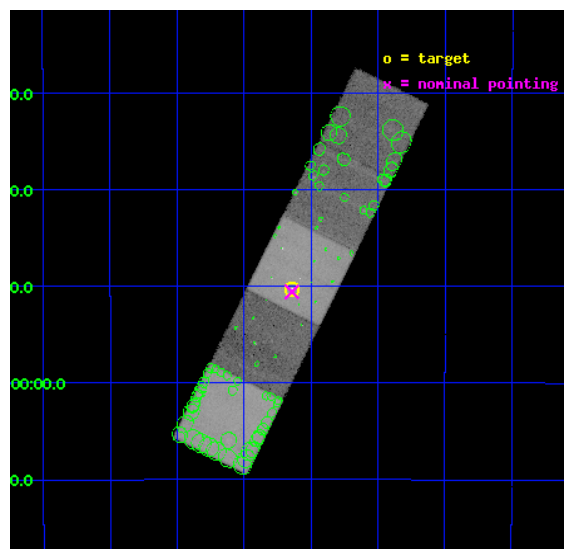
L2 Processing Date : Jul 10 2010

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1 Front

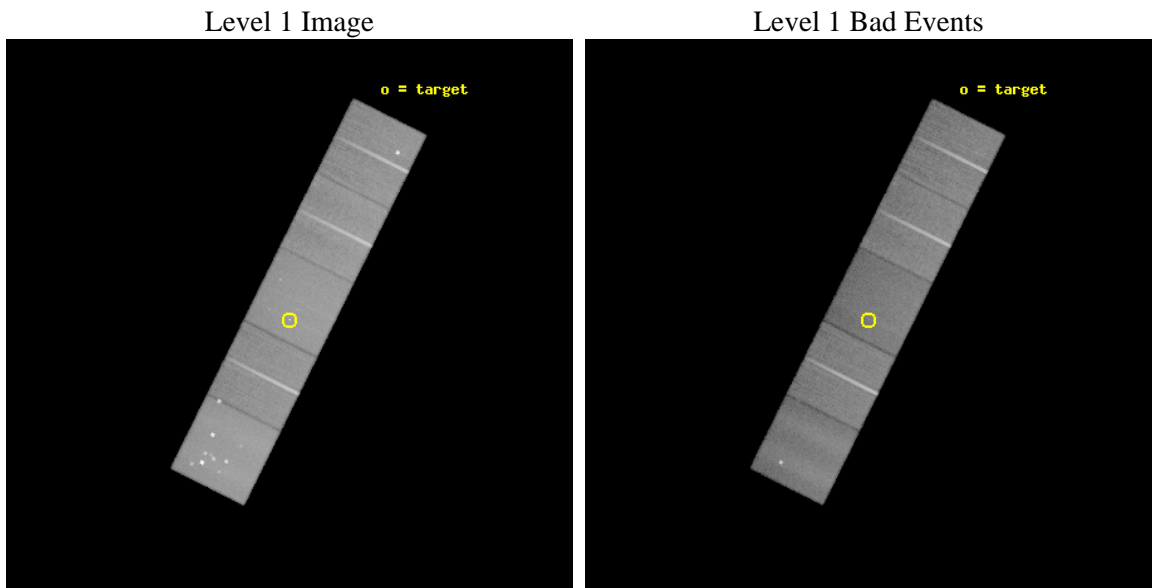
seq_num	200056	Sequence number
obs_id	631	Observation id
title	SHOCKED STELLAR WINDS IN PLANETARY NEBULAE	Proposal title
observer	Prof. You-Hua Chu	Principal investigator
object	NGC 7293	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	337.410417	Observer's specified target RA
dec_targ	-20.838333	Observer's specified target Dec
ra_nom	337.41075064082	Nominal RA
dec_nom	-20.843283438197	Nominal Dec
roll_nom	296.4967564857	Nominal Roll
revision	4	Processing version of data
ontime	37164.595832668	Sum of GTIs [s]
livetime	36693.995342402	Livetime [s]
ontime5	37164.554792665	Sum of GTIs [s]
ontime6	37164.513752669	Sum of GTIs [s]
ontime7	37164.595832668	Sum of GTIs [s]
ontime8	37161.231762446	Sum of GTIs [s]
ontime9	37161.190692529	Sum of GTIs [s]
l2events	424206	Number of level 2 events



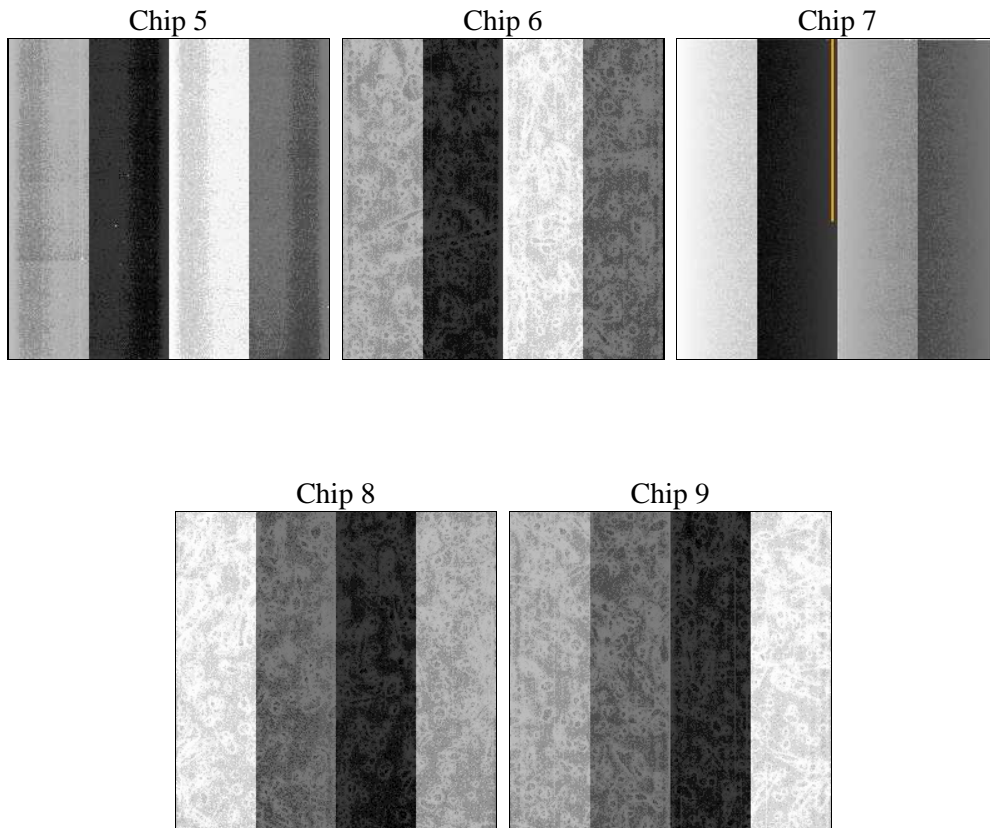
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	38000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	37164.595832668	Sum of GTIs [s]
caldbver	4.1.4	 	ontime5	37164.554792665	Sum of GTIs [s]
date	2009-11-24T12:53:15	Date and time of file creation	ontime6	37164.513752669	Sum of GTIs [s]
revision	4	Processing version of data	ontime7	37164.595832668	Sum of GTIs [s]
			ontime8	37161.231762446	Sum of GTIs [s]
			ontime9	37161.190692529	Sum of GTIs [s]
			l1events	1847520	Number of level 1 events

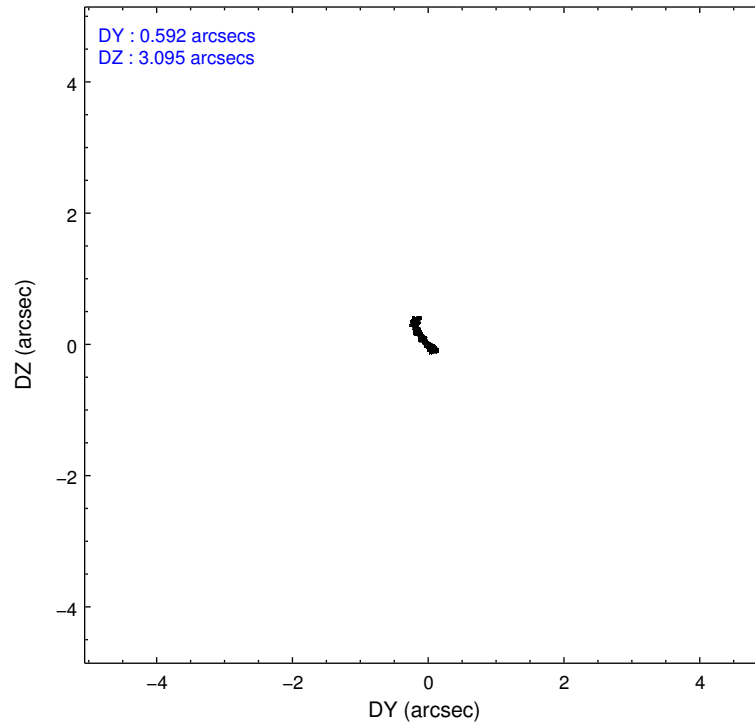
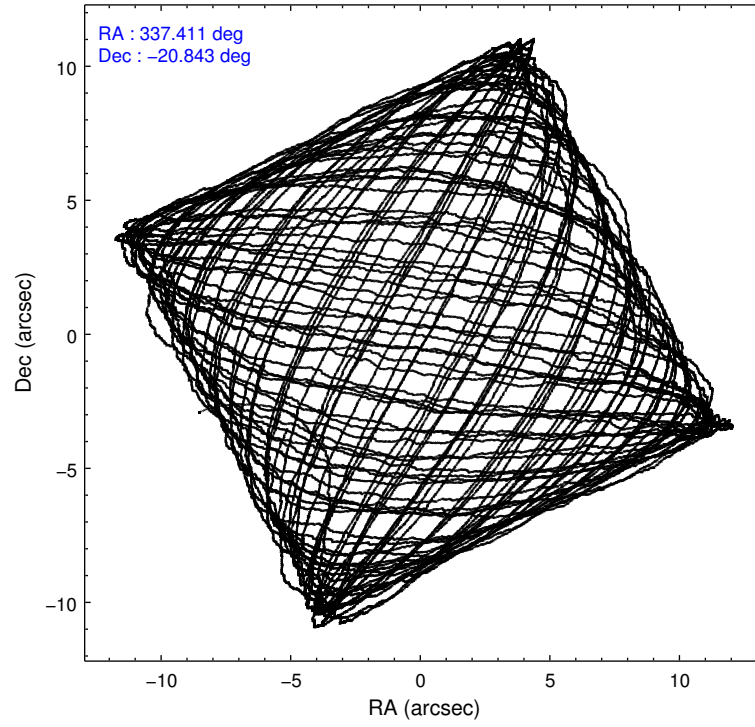
2.1.4 Events

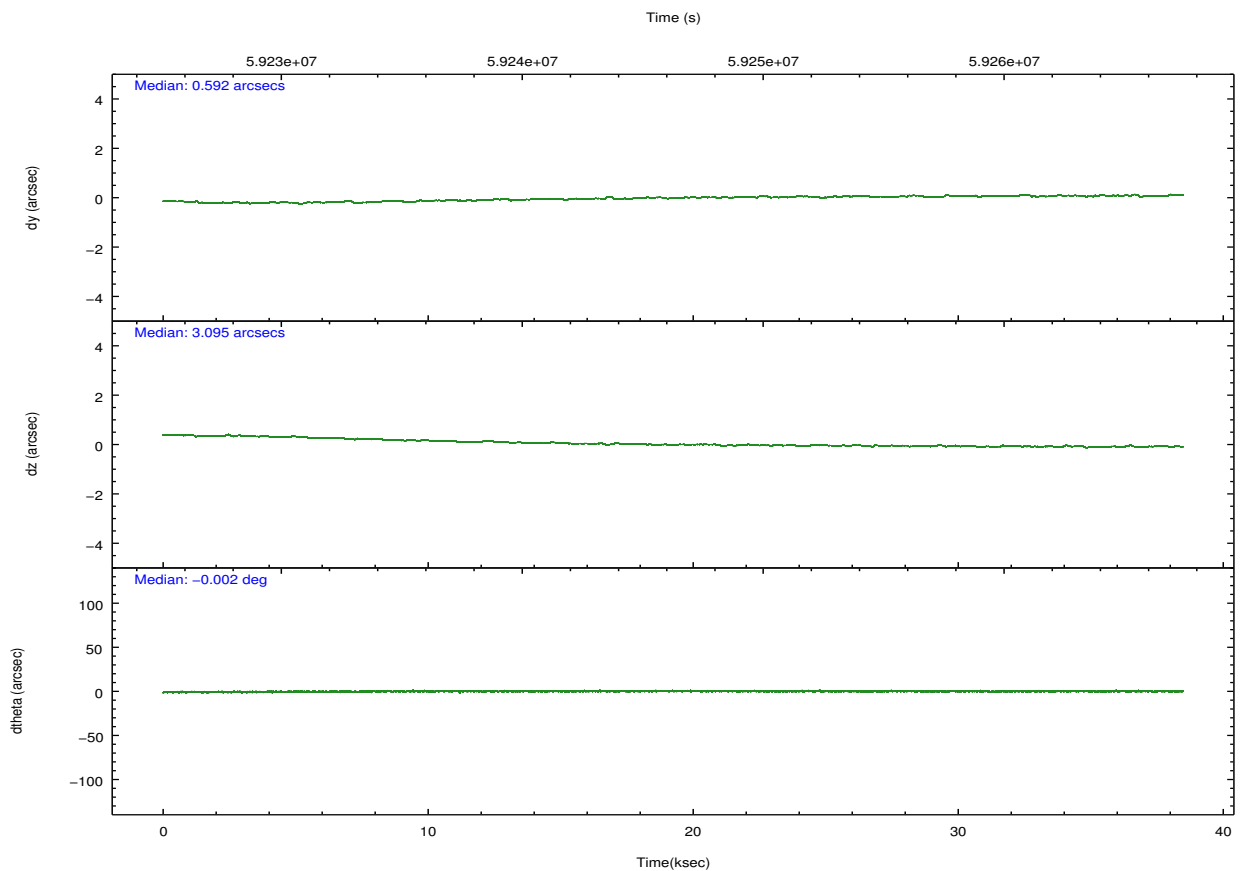
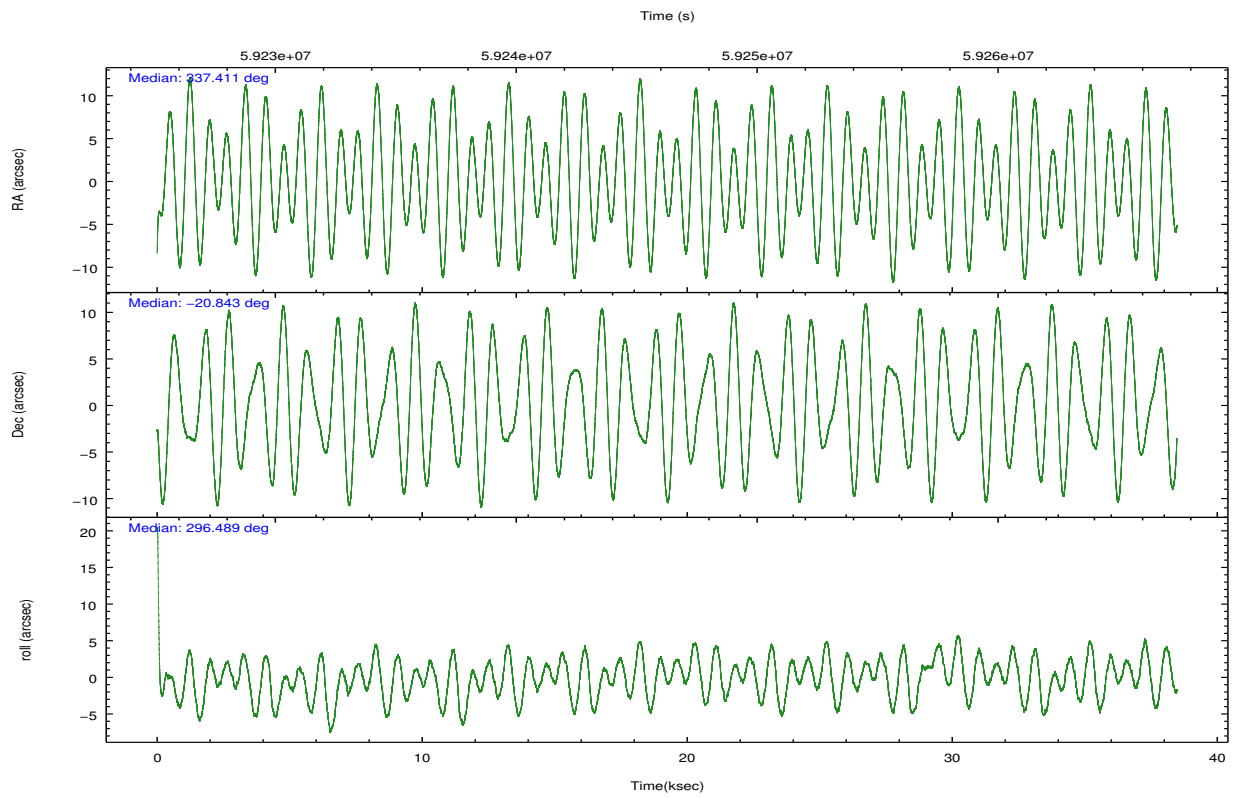
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	452963	322634	370981	376206	324736	grade 0 events	48004	6484	14048	14919	17213
rejected events	232263	290978	209270	311995	281900		10%	2%	3%	3%	5%
rejected %	51%	90%	56%	82%	86%	grade 1 events	3177	57	194	121	100
							0%	0%	0%	0%	0%
						grade 2 events	46842	12360	34722	20721	12897
							10%	3%	9%	5%	3%
						grade 3 events	8134	1994	10386	5209	1963
							1%	0%	2%	1%	0%
						grade 4 events	7275	2087	9495	4875	2096
							1%	0%	2%	1%	0%
						grade 5 events	16093	6588	20363	8967	6778
							3%	2%	5%	2%	2%
						grade 6 events	110484	8737	93088	18490	8671
							24%	2%	25%	4%	2%
						grade 7 events	212954	284327	188685	302904	275018
							47%	88%	50%	80%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-56789	ACIS-56789	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
Pointing RA	337.386216	337.4107506408241	Subarray requested	NONE	NONE
Pointing Dec	-20.827958	-20.84328343819676	Alternating exposures requested	N	N
Pointing Roll	296.331396	296.4967564857027	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	59227499.184000	59226578.558733			
Observation start date	1999-11-17T12:03:55	1999-11-17T11:49:38			
Observation end time	59265499.184000	59265748.935149			
Observation end date	1999-11-17T22:37:15	1999-11-17T22:42:28			
Read mode	TIMED	TIMED			

2.3 Aspect



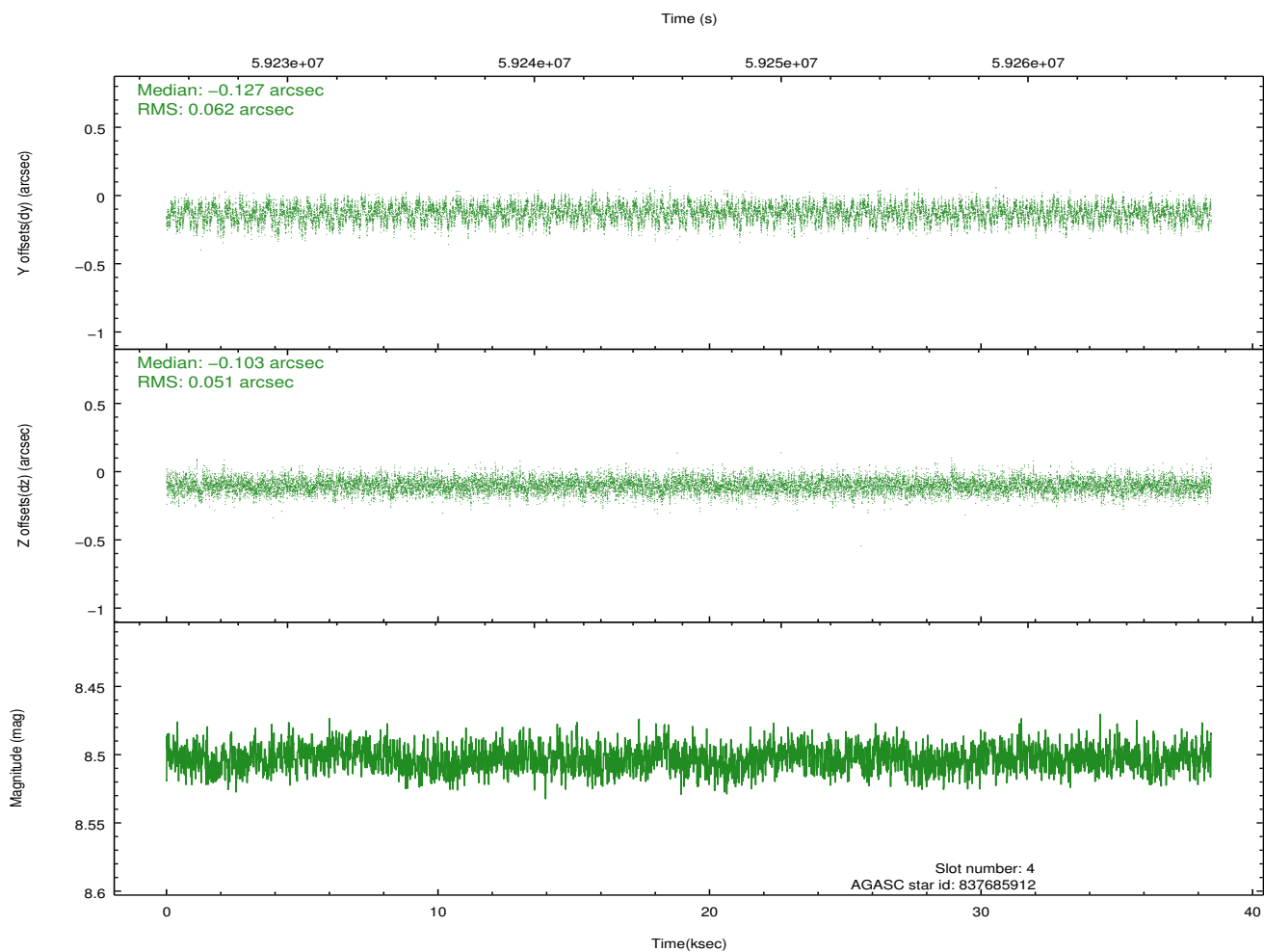
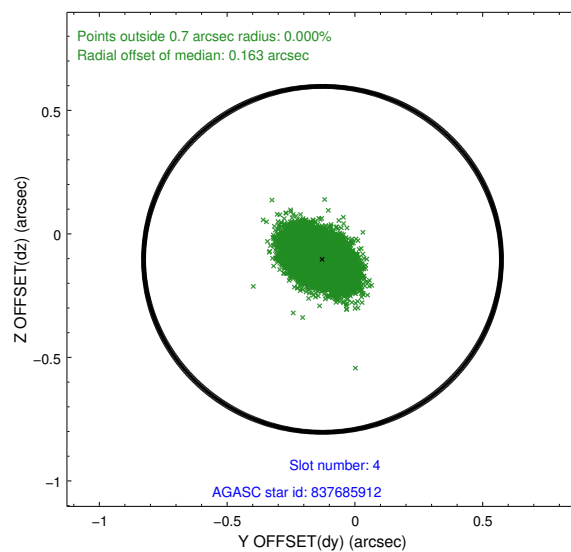
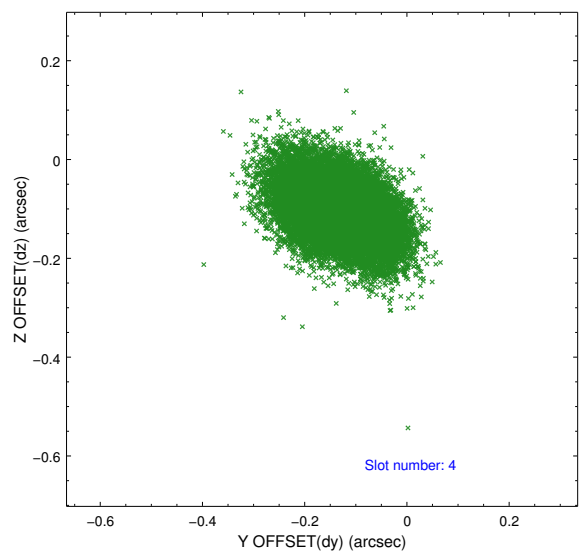


Slot Statistics

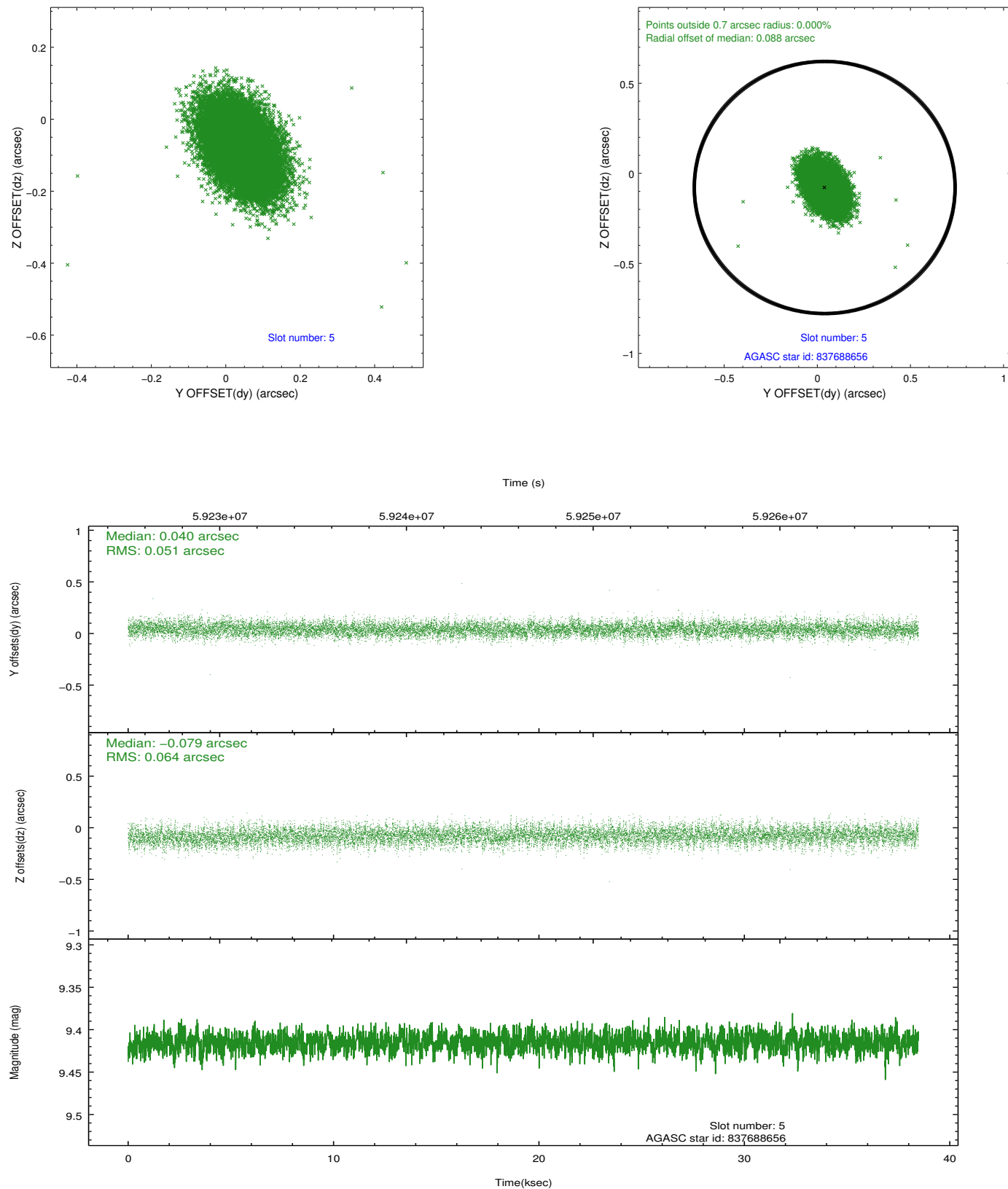
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	18771	0.008	-0.005	0.009	0.023	0.000000	0.000000	-753.19	-1724.20
1	FID	ACIS-S-4	7.22	18770	0.016	-0.003	0.010	0.039	0.000000	0.000000	2160.20	184.26
2	FID	ACIS-S-5	7.24	18771	-0.056	0.017	0.010	0.027	0.000000	0.000000	-1806.11	178.01
3	UNUSED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	837685912	8.50	18767	-0.127	-0.103	0.085	0.140	337.276797	-20.408873	-1516.43	337.52
5	GUIDE	837688656	9.41	18764	0.040	-0.079	0.085	0.145	337.295219	-21.231018	1164.74	-917.70
6	GUIDE	837693112	9.77	18679	0.010	0.087	0.099	0.164	337.289315	-20.768729	-336.04	-198.25
7	GUIDE	837686440	10.01	18756	0.077	0.096	0.130	0.210	338.100150	-20.711147	693.57	2338.53

2.4 Star Slots

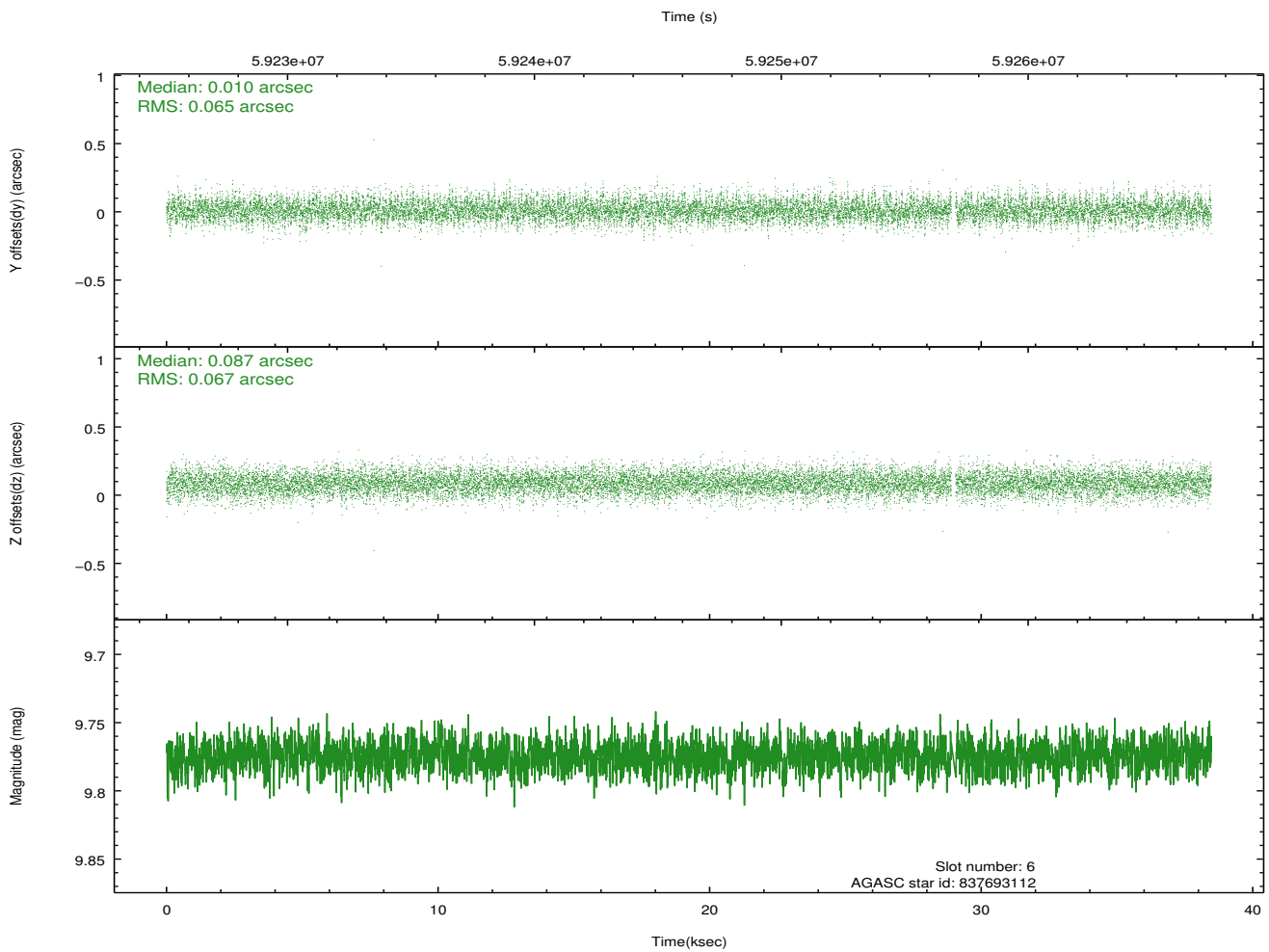
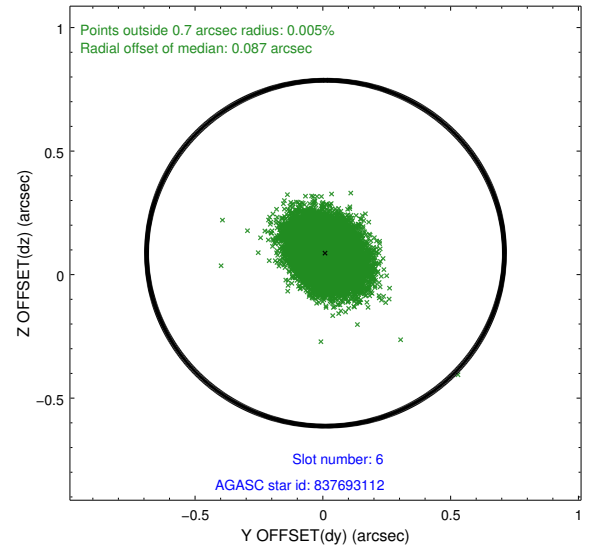
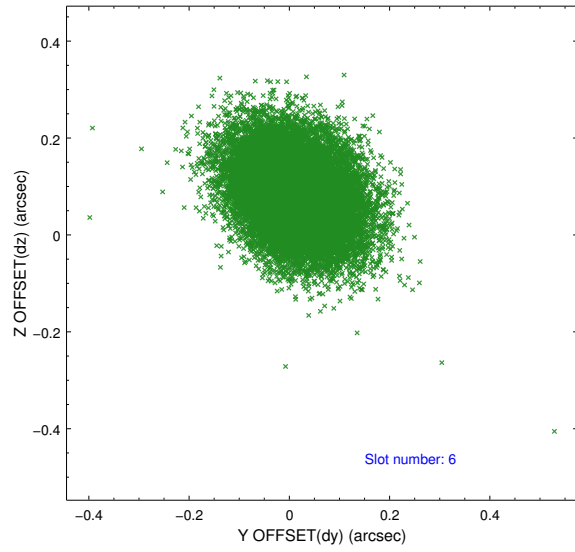
2.4.1 Slot 4



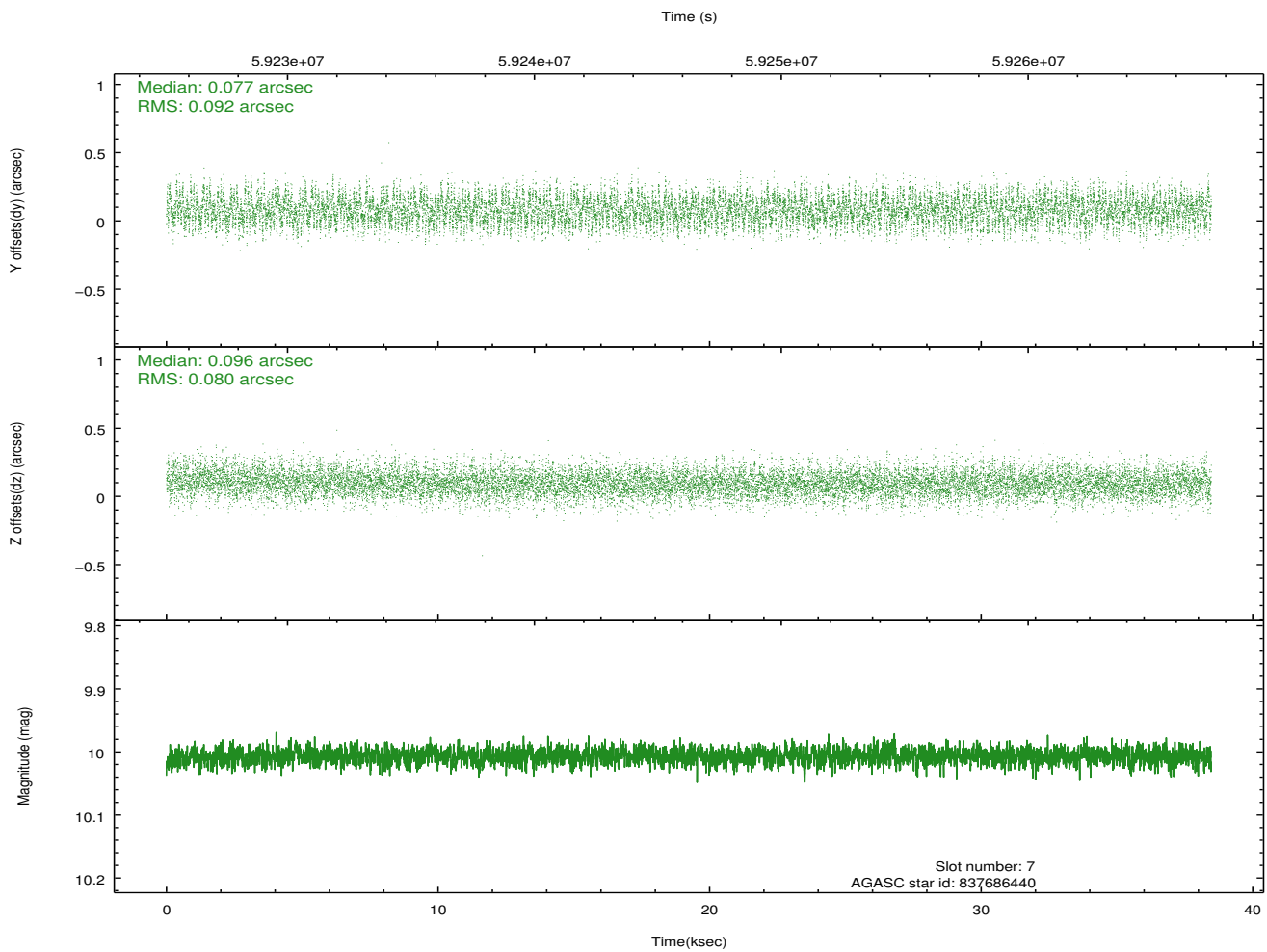
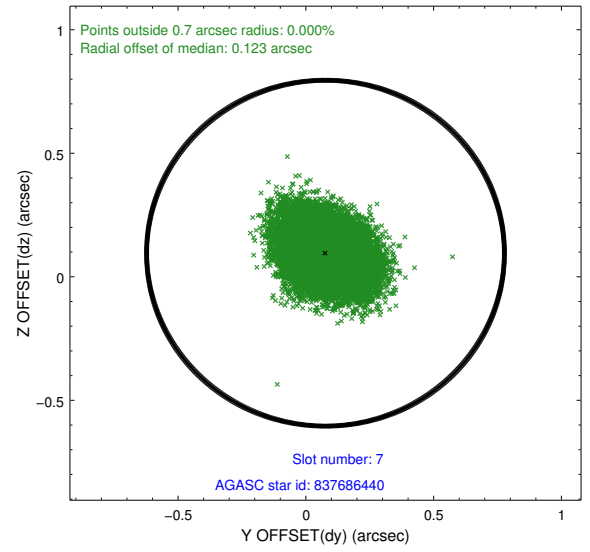
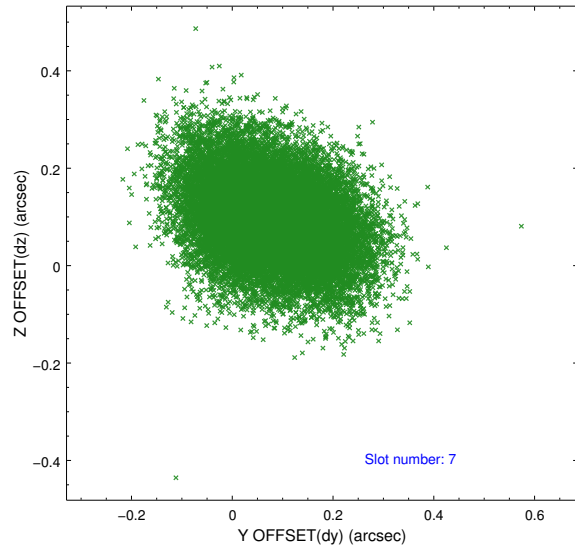
2.4.2 Slot 5



2.4.3 Slot 6

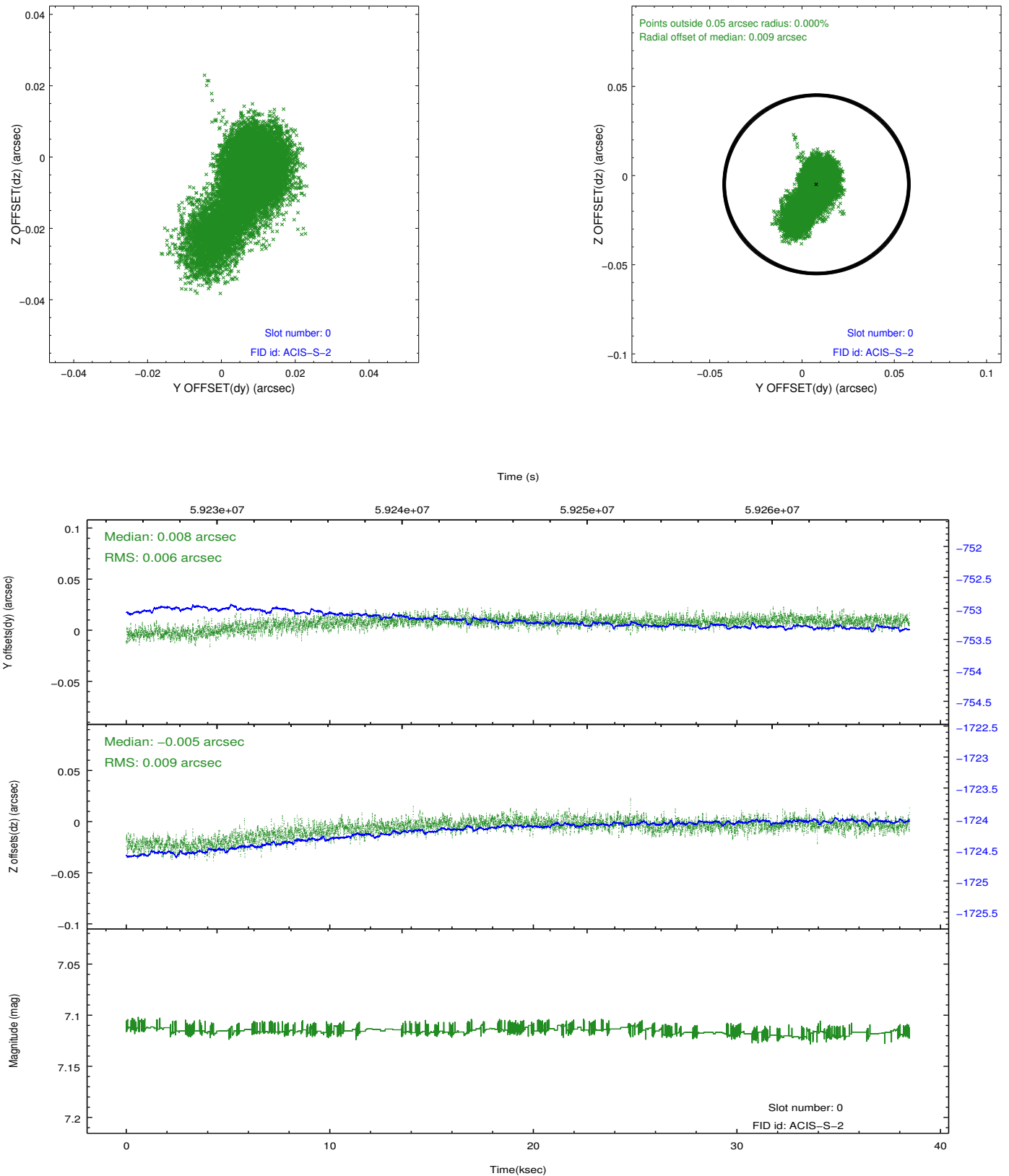


2.4.4 Slot 7

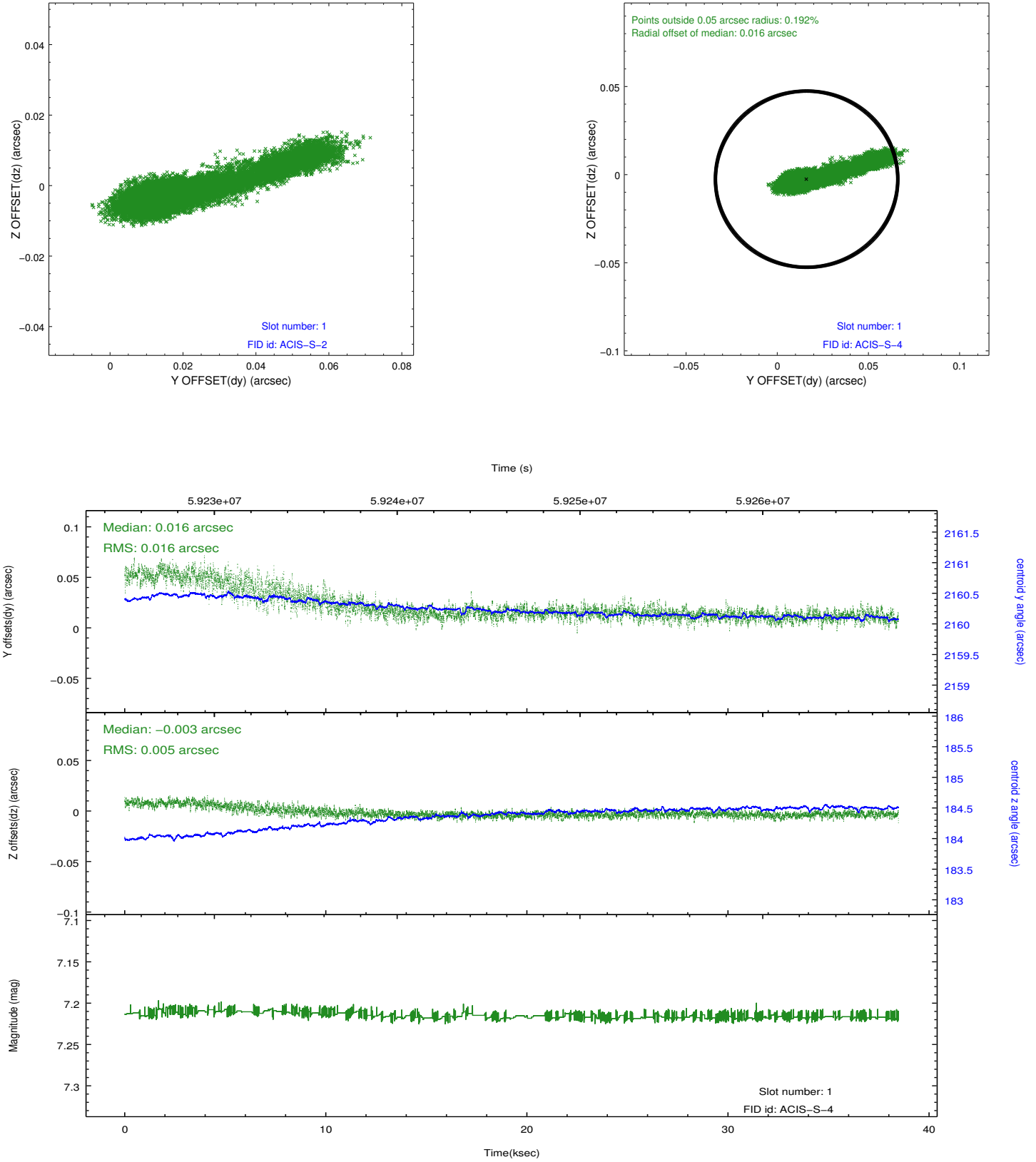


2.5 FID Slots

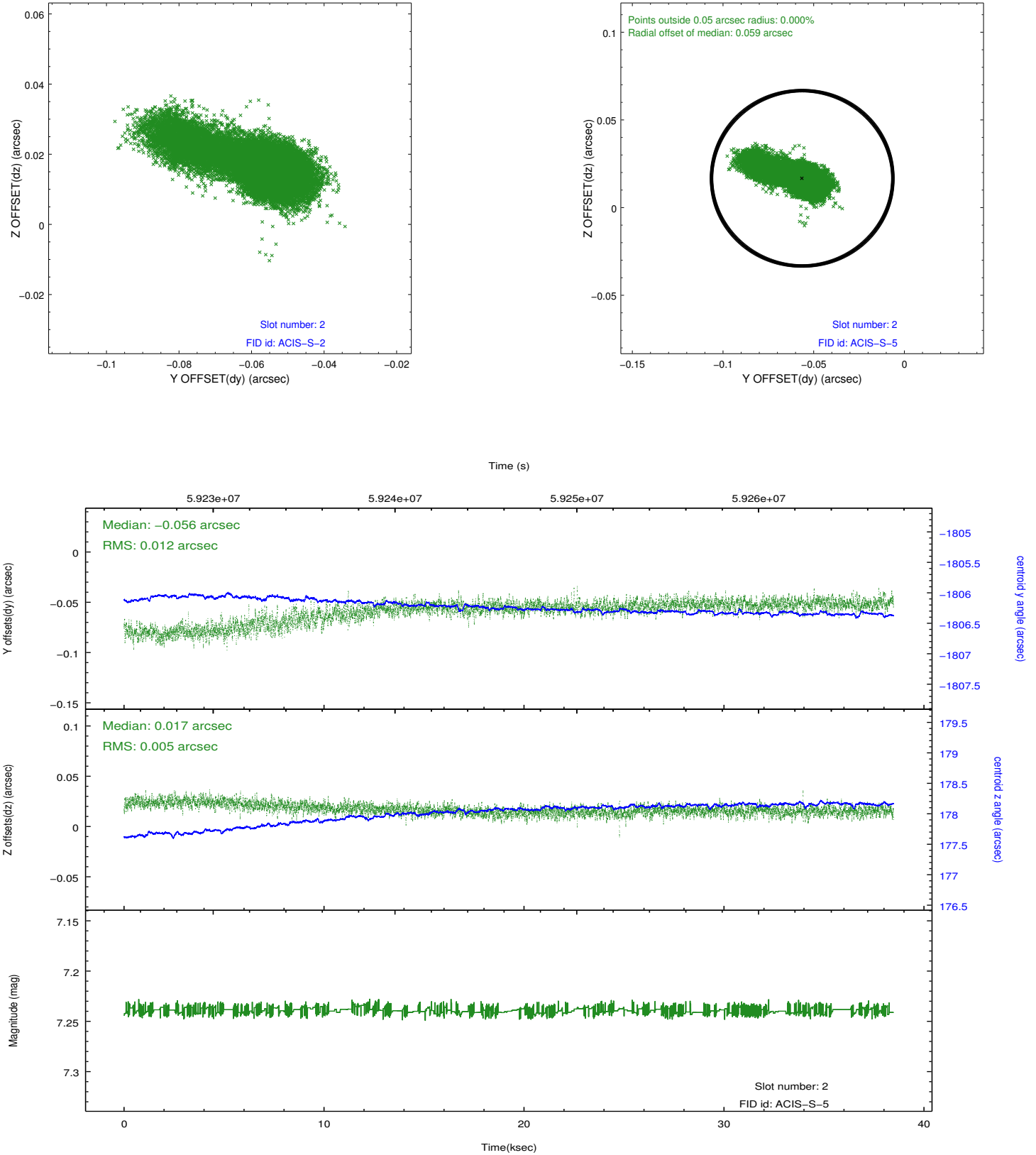
2.5.1 Slot 0



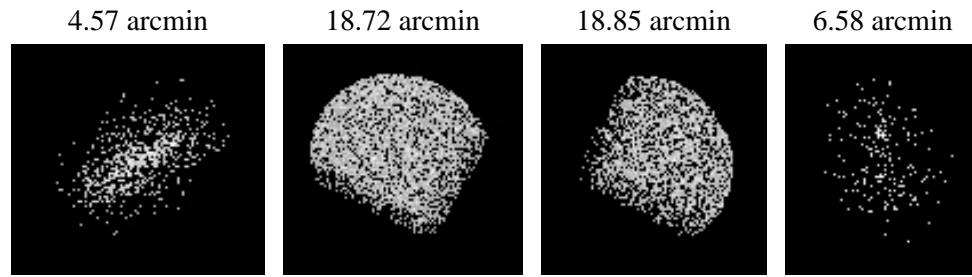
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.126

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is not expected to be degraded by

removing one guide star from the solution.

===

Charge time for this ObsId remains at previous value of 37.126 ks, although with the current processing the charge time would have been 37.165 ksec.

===

A high radiation environment persisted throughout this observations.

===

The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.