

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21353 - L2 Version 2
Chandra X-Ray Center

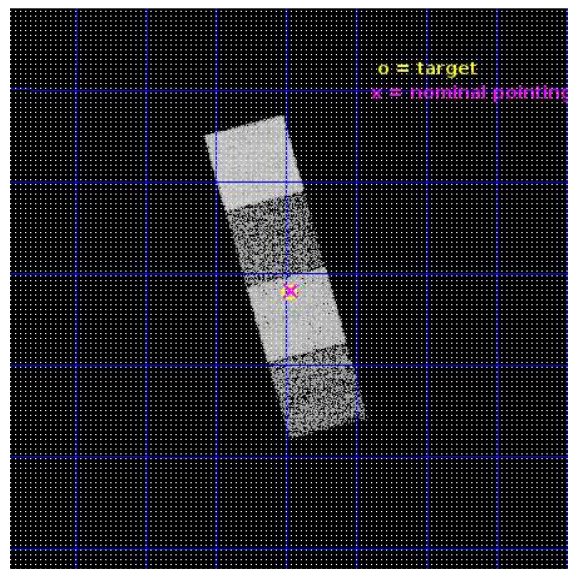
L2 Processing Date : Jan 29 2019

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1 Front

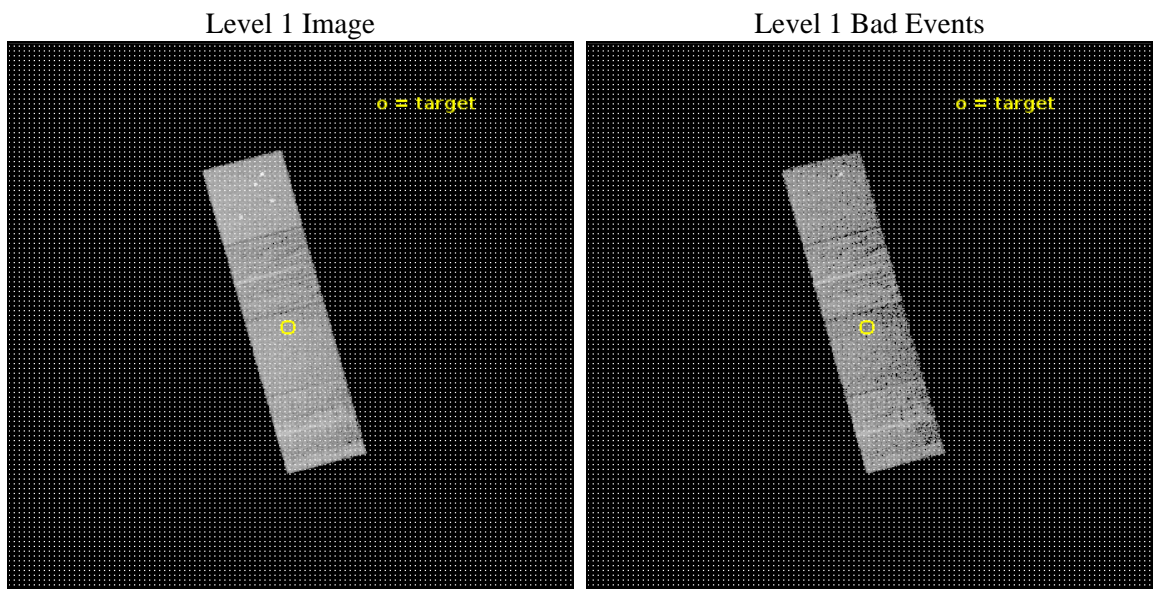
seq_num	503125	Sequence number
obs_id	21353	Observation id
title	Chandra Observations of H-alpha emitting Type I Supernovae	Proposa
observer	David Pooley	Principal investigator
object	SN 2000ew	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	175.24375	Observer's specified target RA [deg]
dec_targ	11.465528	Observer's specified target Dec [deg]
ra_nom	175.24074967802	Nominal RA [deg]
dec_nom	11.468551618211	Nominal Dec [deg]
roll_nom	74.882892439175	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5132.7886353731	Sum of GTIs [s]
livetime	5065.7249731479	Livetime [s]
ontime5	5132.7475954294	Sum of GTIs [s]
ontime6	5132.7065553665	Sum of GTIs [s]
ontime7	5132.7886353731	Sum of GTIs [s]
ontime8	5132.6655154228	Sum of GTIs [s]
l2events	58283	Number of level 2 events



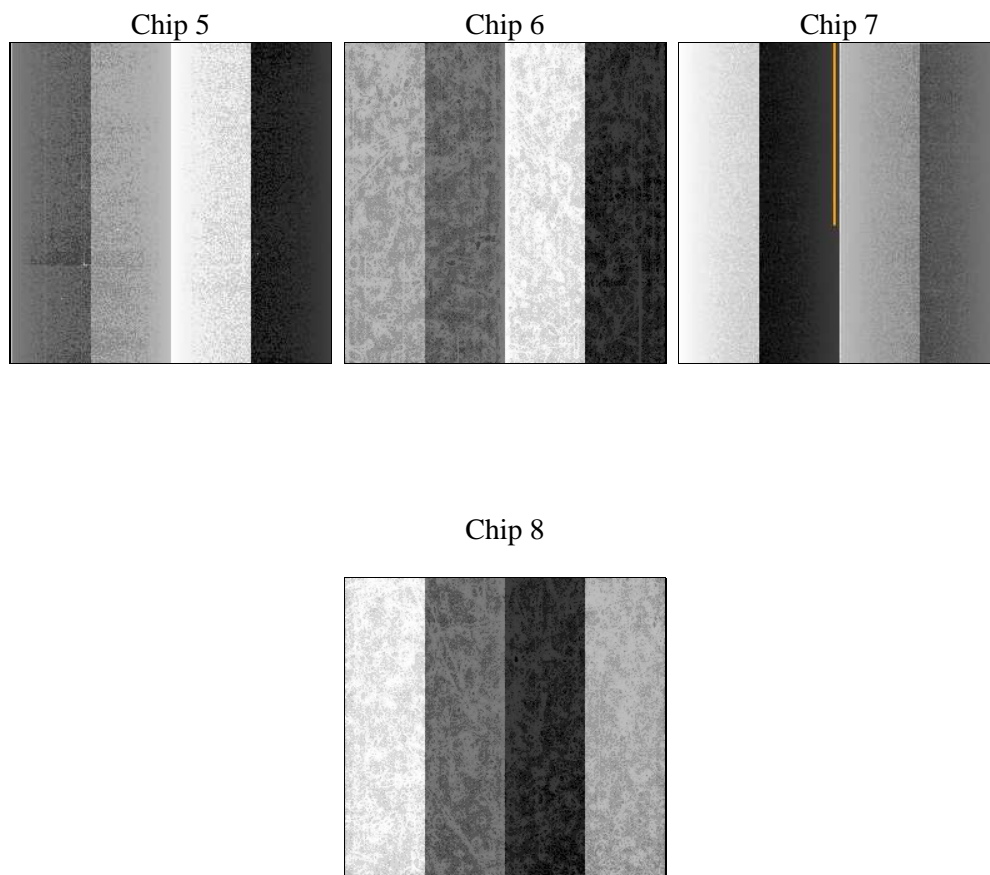
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5069.329000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	5132.7886353731	Sum of GTIs [s]
caldsver	4.8.2	 	ontime5	5132.7475954294	Sum of GTIs [s]
date	2019-01-29T20:55:18	Date and time of file creation	ontime6	5132.7065553665	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	5132.7886353731	Sum of GTIs [s]
			ontime8	5132.6655154228	Sum of GTIs [s]
			l1events	207775	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	64653	40229	49606	53287
rejected events	32350	35816	27547	38096
rejected %	50%	89%	55%	71%

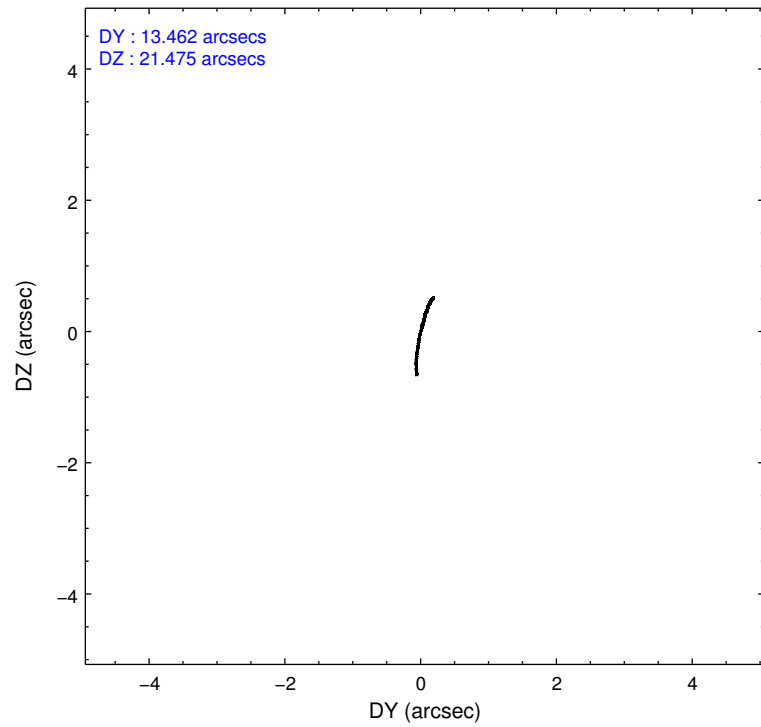
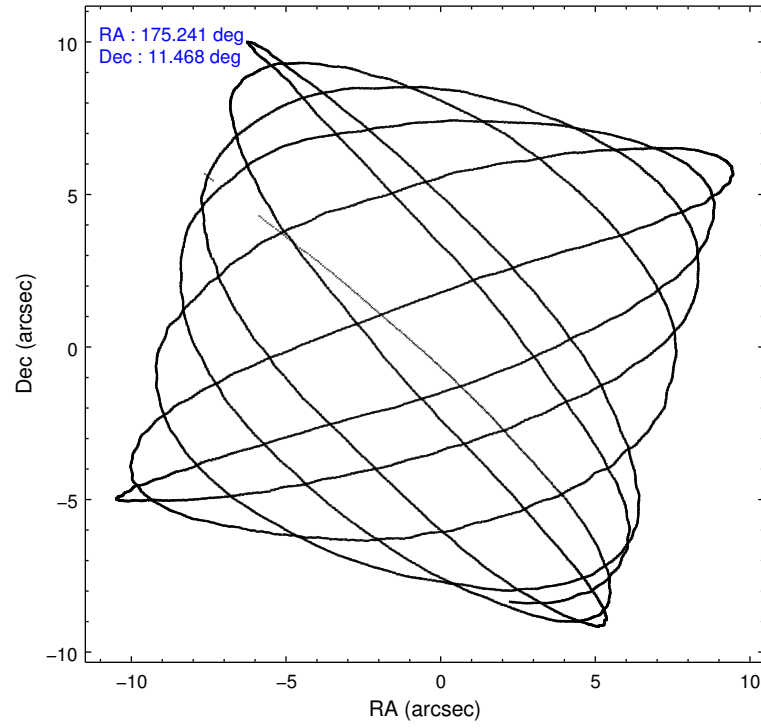
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3914	1496	1869	4444
	6%	3%	3%	8%
grade 1 events	139	16	68	44
	0%	0%	0%	0%
grade 2 events	10404	1025	4742	3578
	16%	2%	9%	6%
grade 3 events	936	461	1832	1621
	1%	1%	3%	3%
grade 4 events	943	395	1772	1551
	1%	0%	3%	2%
grade 5 events	4706	1802	4904	2812
	7%	4%	9%	5%
grade 6 events	16155	1039	11870	4010
	24%	2%	23%	7%
grade 7 events	27456	33995	22549	35227
	42%	84%	45%	66%

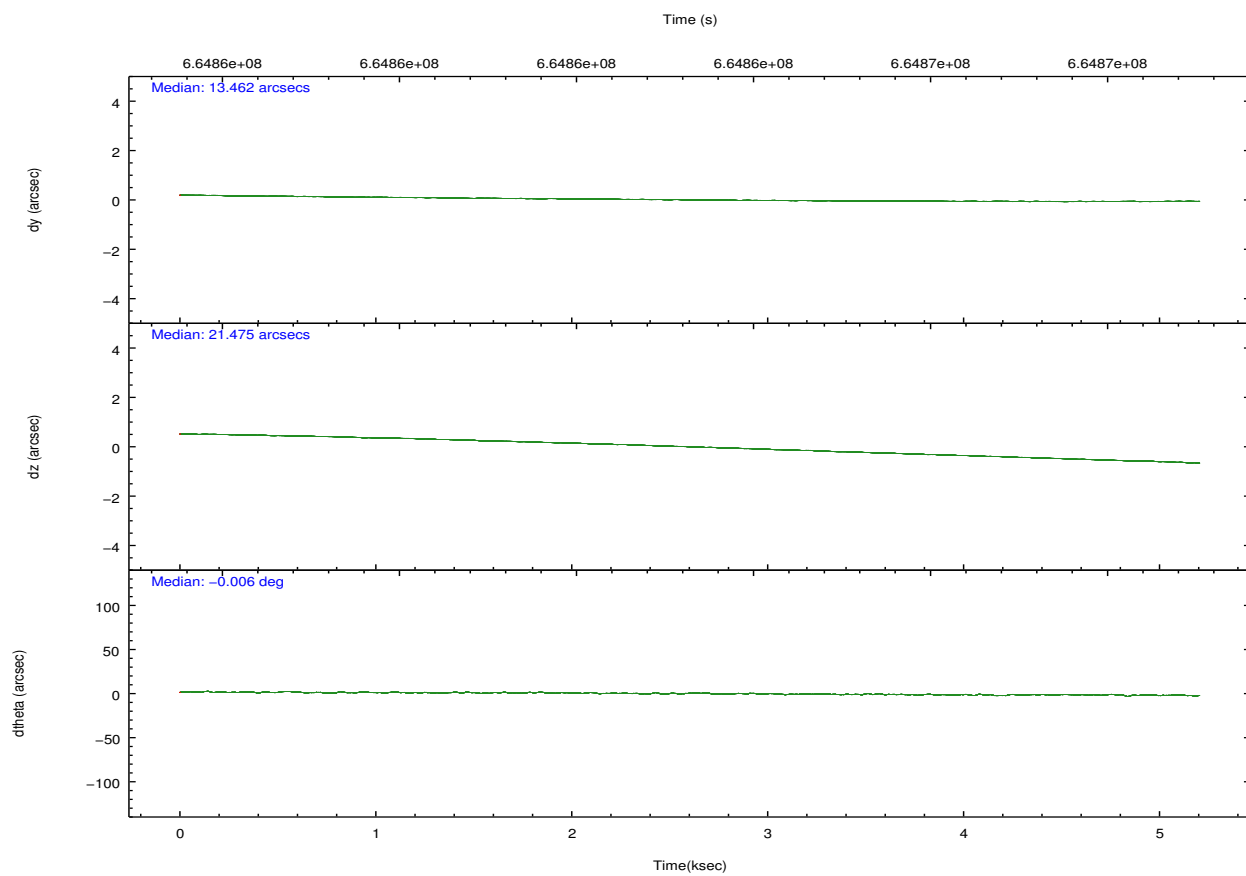
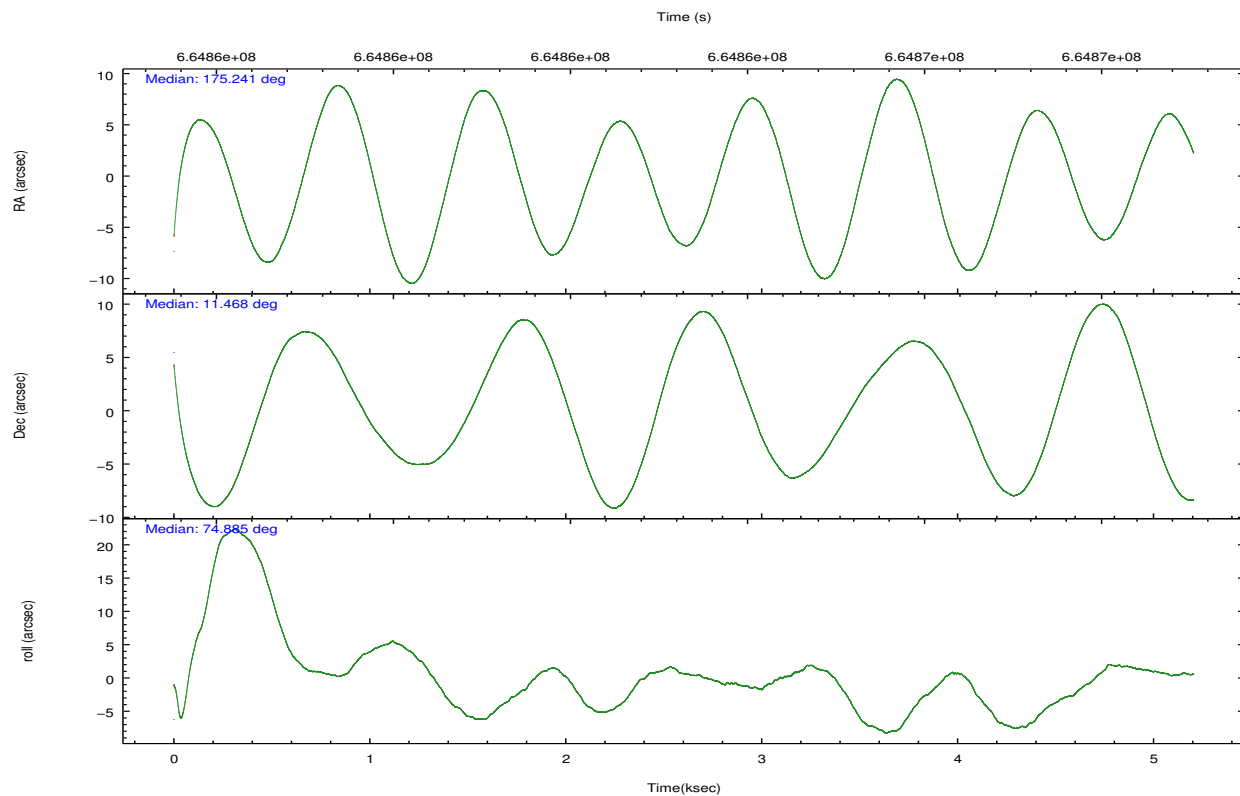
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	175.248272	175.2407496780201
[deg] Pointing Dec	11.442176	11.46855161821139
[deg] Pointing Roll	74.724799	74.88289243917453
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	664862187.184000	664860984.2043999
Observation start date	2019-01-26T03:55:18	2019-01-26T03:36:24
[s] Observation end time (MET)	664867256.184000	664867806.0923001
Observation end date	2019-01-26T05:19:47	2019-01-26T05:30:06
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	O1	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



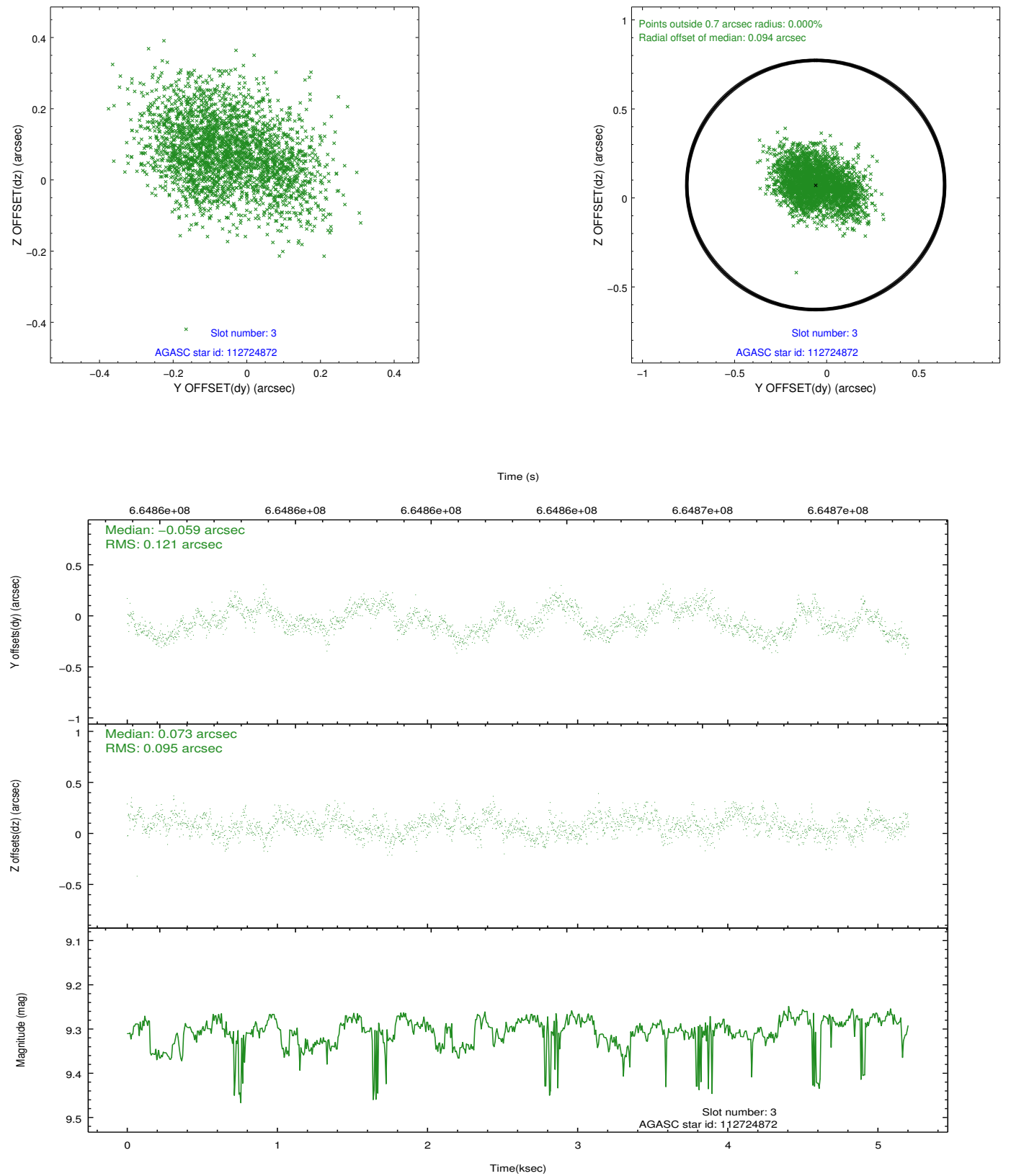


Slot Statistics

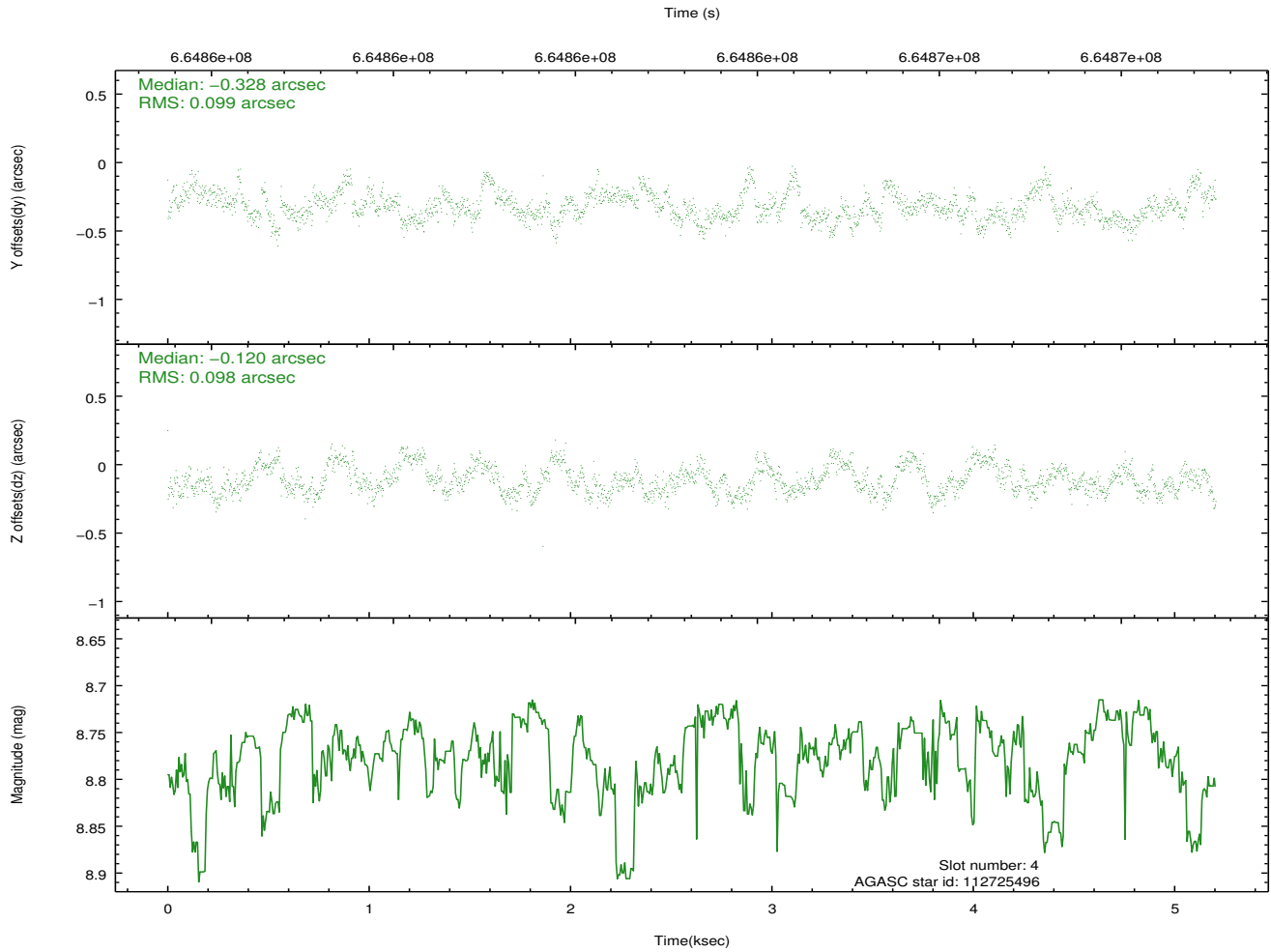
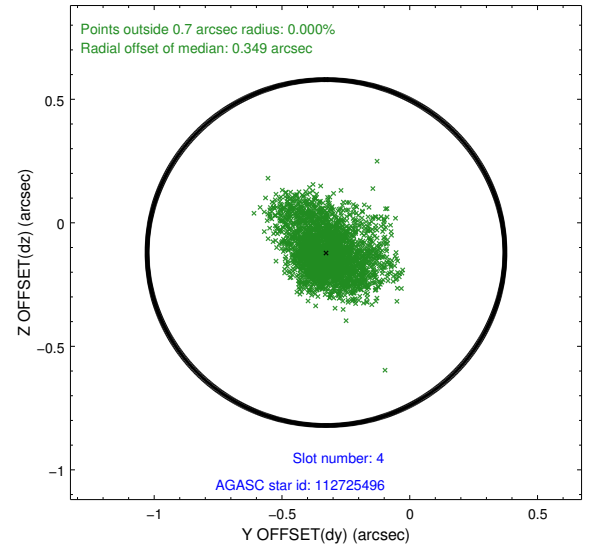
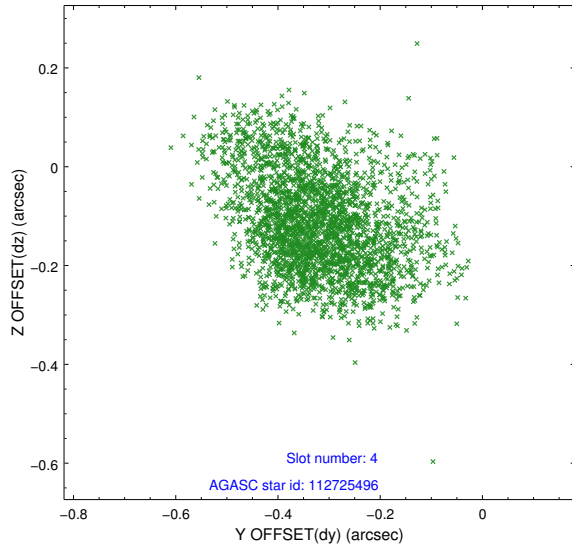
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.00	1270	1.000	-0.288	-0.154	0.017	0.026	0.000000	0.000000	-766.64	-1743
1	FID		ACIS-S-4	7.12	1270	1.000	0.704	0.180	0.009	0.013	0.000000	0.000000	2147.03	164
2	FID		ACIS-S-5	7.11	1270	1.000	-0.446	-0.017	0.014	0.020	0.000000	0.000000	-1818.21	159
3	GUIDE	used	112724872	9.30	2538	1.000	-0.059	0.073	0.166	0.261	175.756599	11.327004	73.65	-1839
4	GUIDE	used	112725496	8.77	2537	1.000	-0.328	-0.120	0.150	0.246	175.669651	11.864041	1858.26	-1032
5	GUIDE	used	112726592	8.80	2539	1.000	0.240	-0.024	0.115	0.191	175.274038	10.809053	-2173.15	-685
6	GUIDE	used	112728176	9.43	2534	1.000	-0.319	-0.261	0.223	0.373	175.511147	11.461340	311.14	-876
7	GUIDE	used	112728760	8.83	2534	1.000	0.448	0.346	0.135	0.221	175.851650	10.985149	-1022.33	-2489

2.4 Star Slots

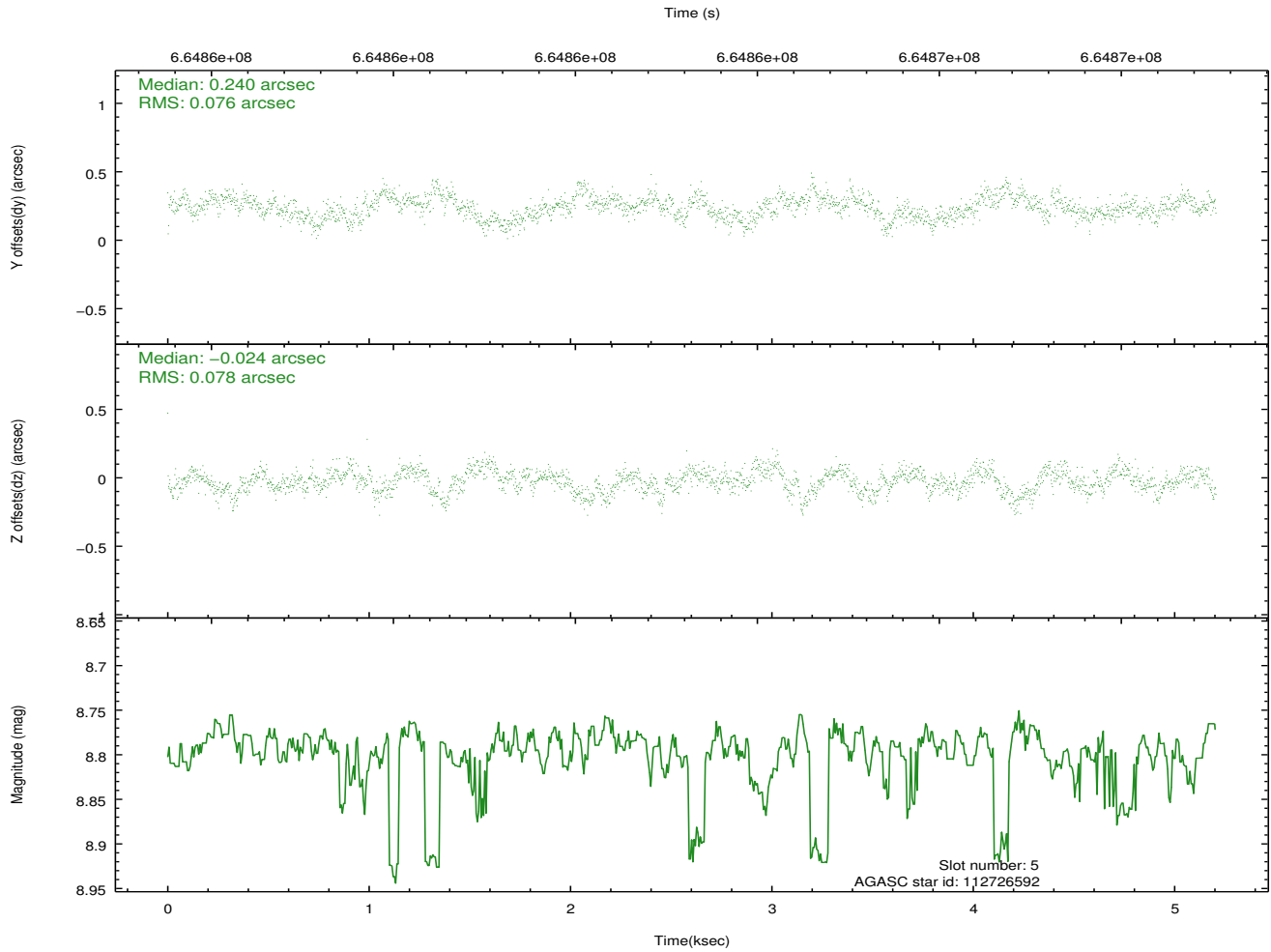
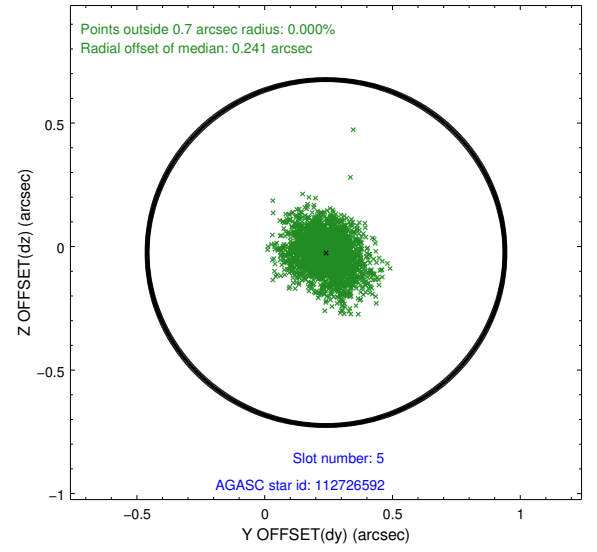
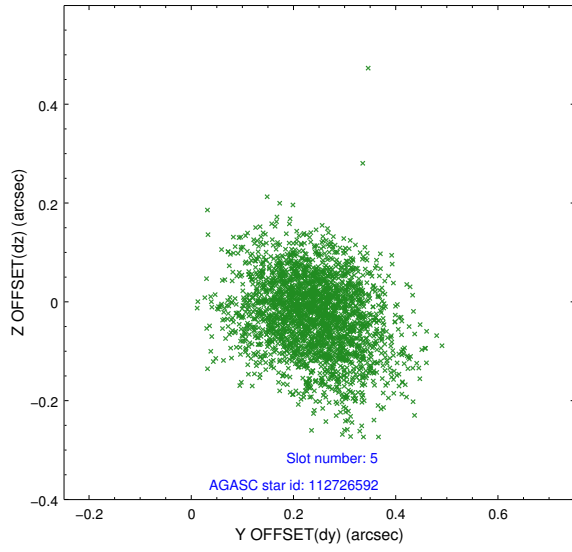
2.4.1 Slot 3



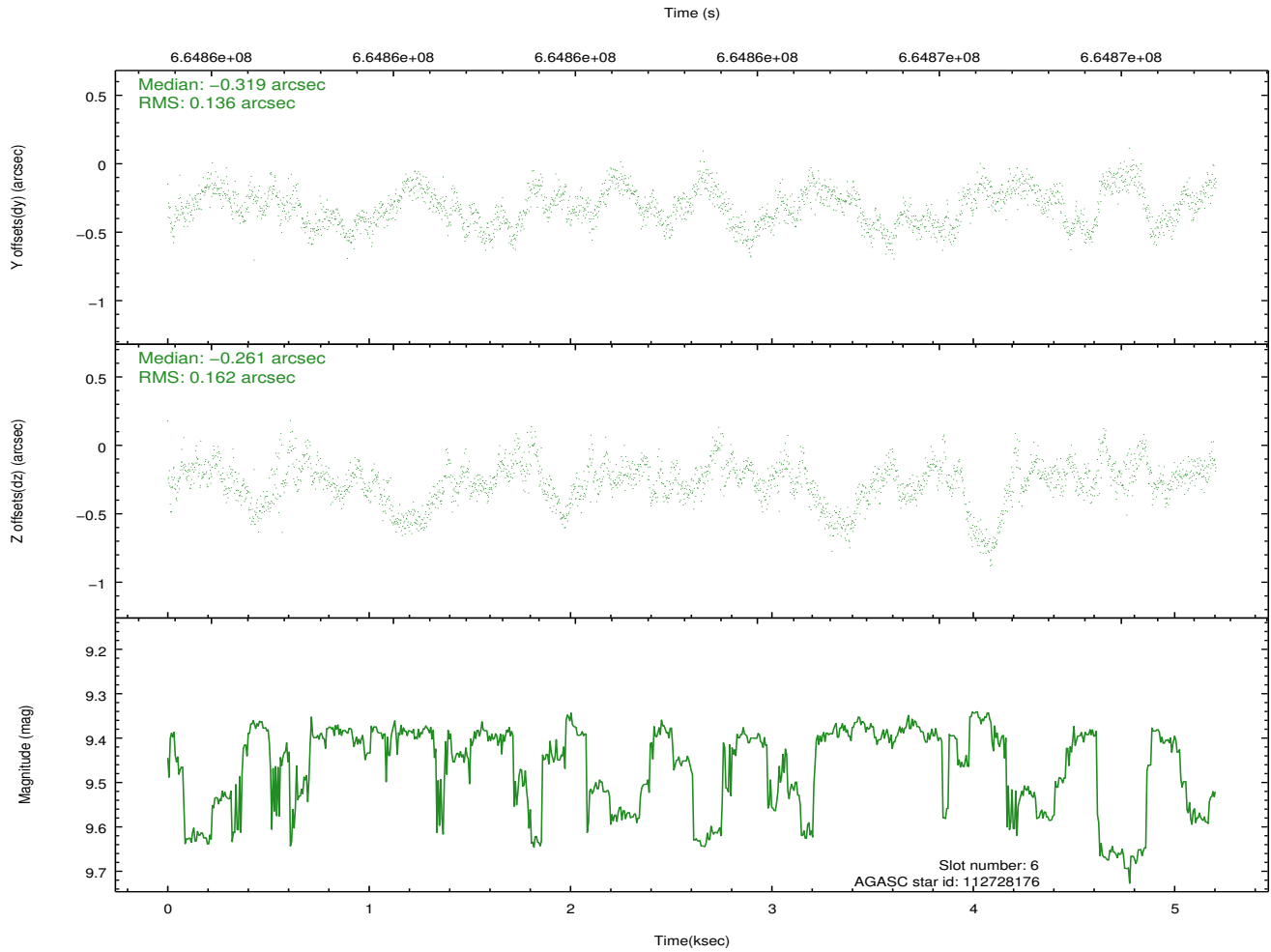
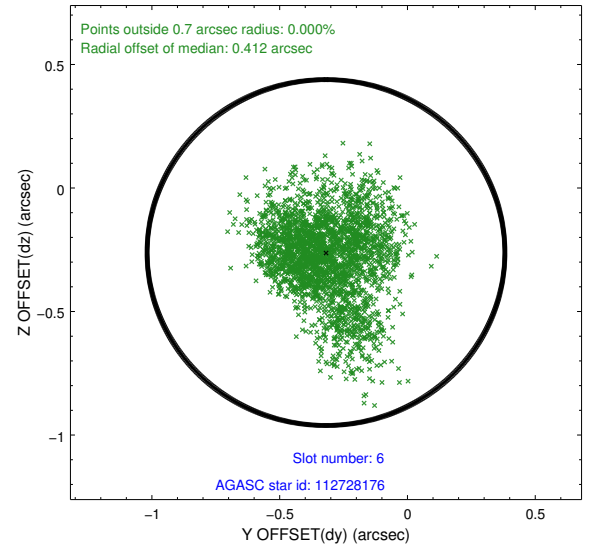
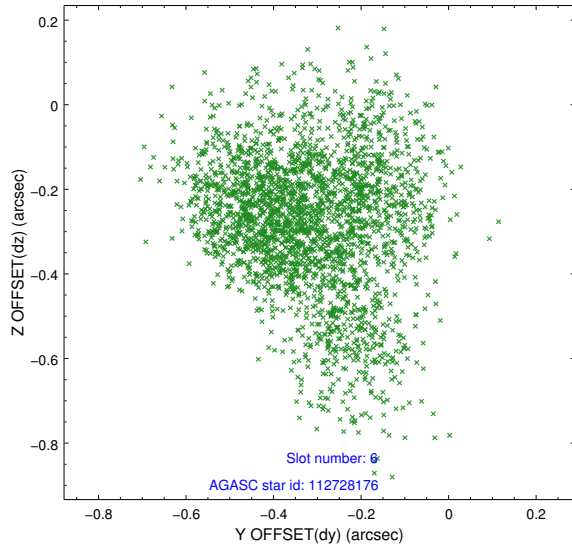
2.4.2 Slot 4



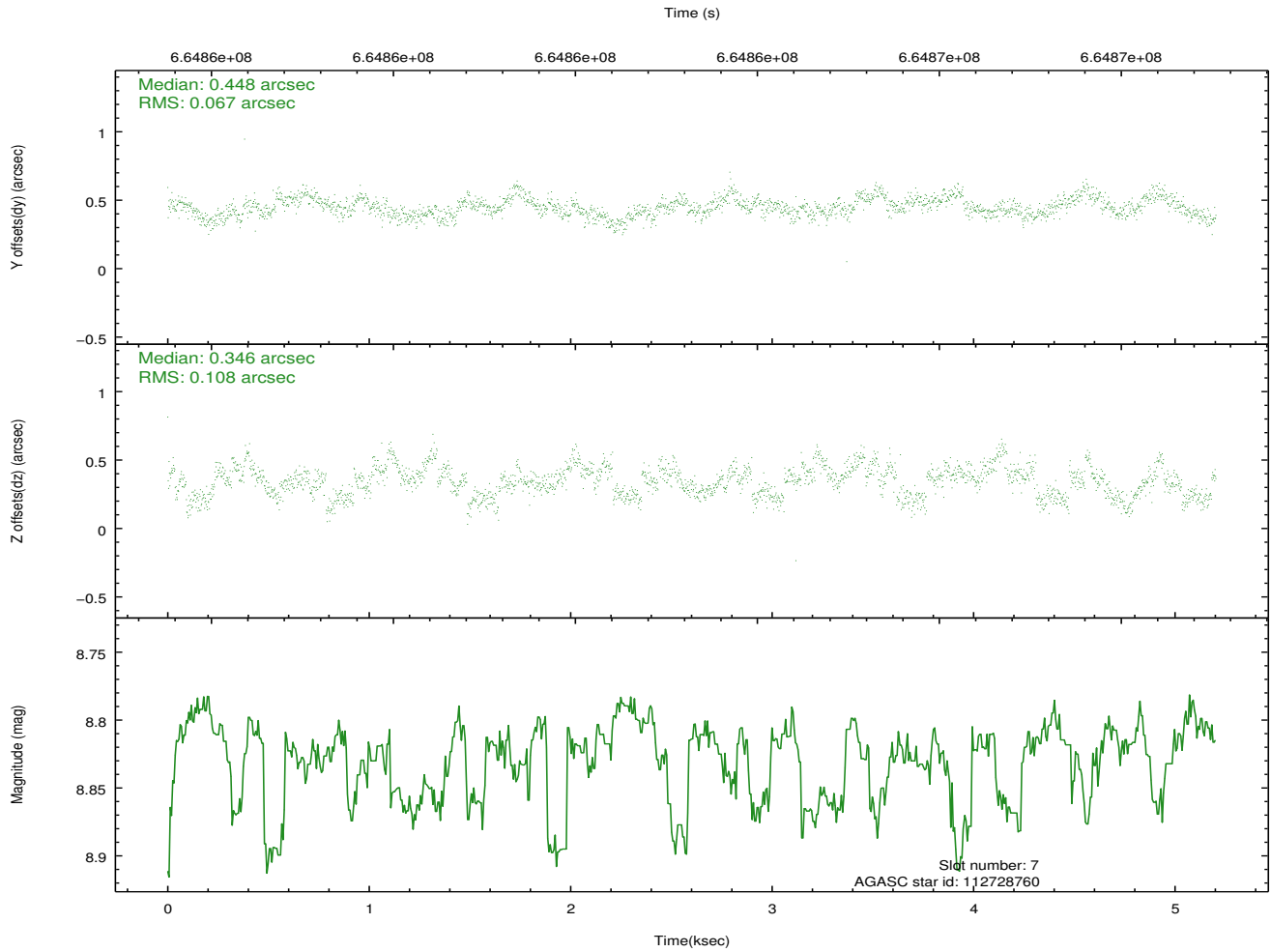
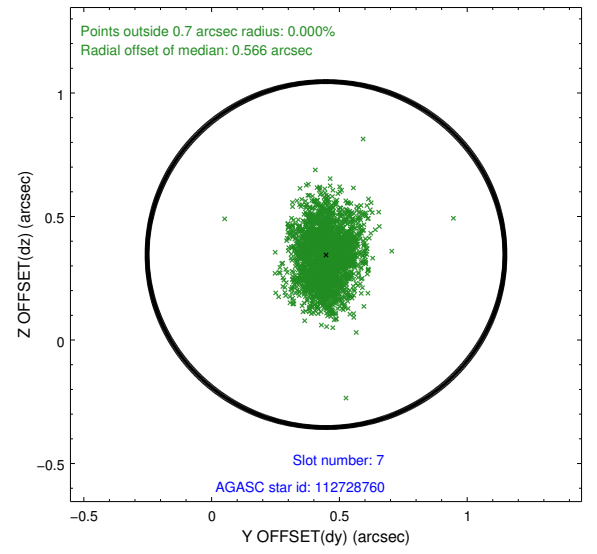
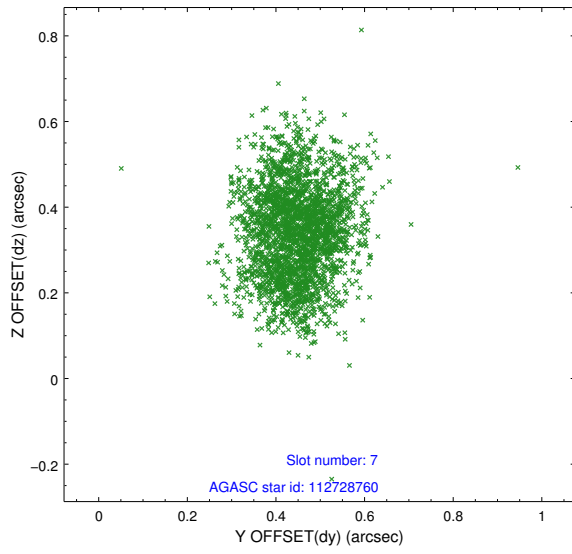
2.4.3 Slot 5



2.4.4 Slot 6

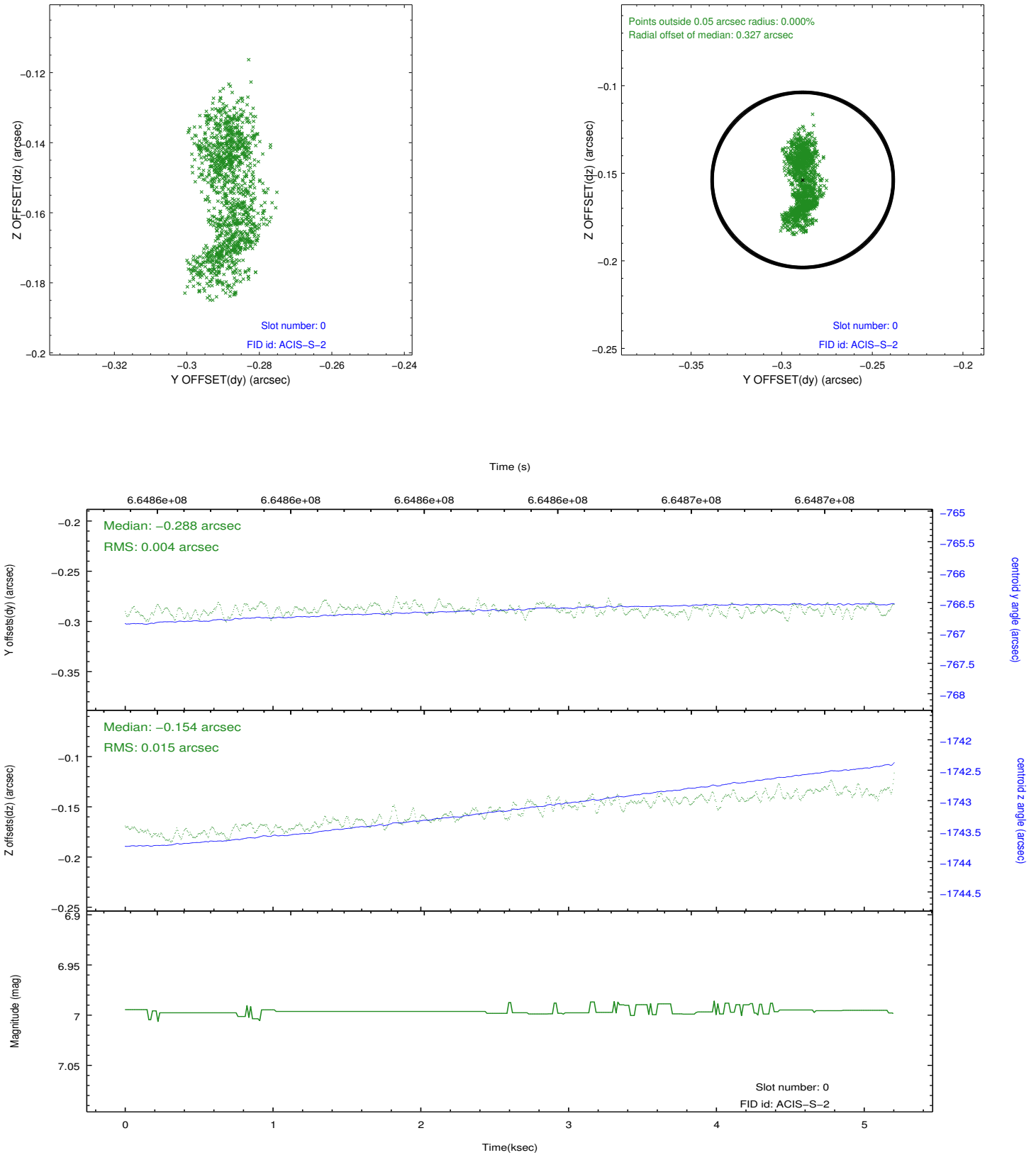


2.4.5 Slot 7

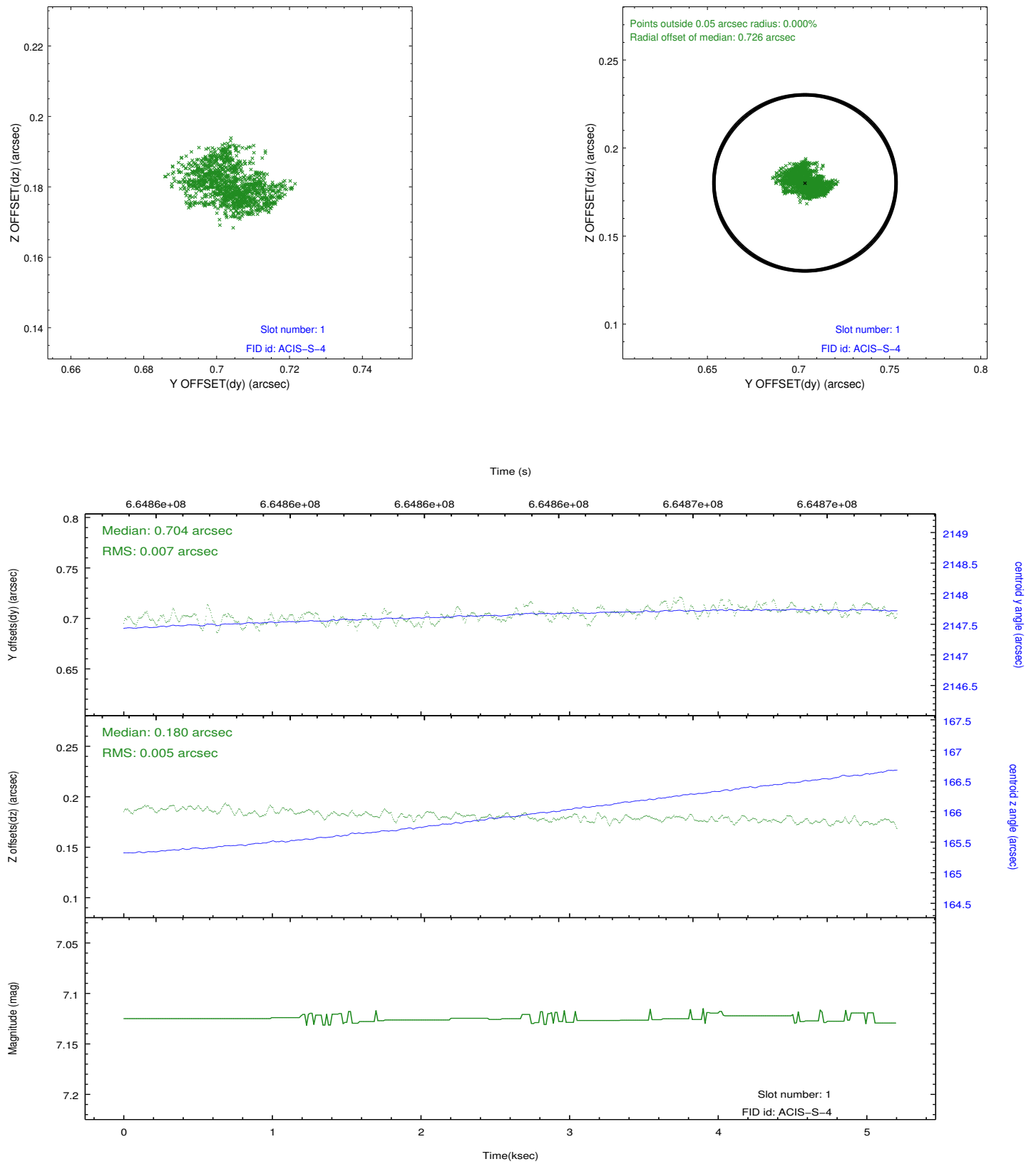


2.5 FID Slots

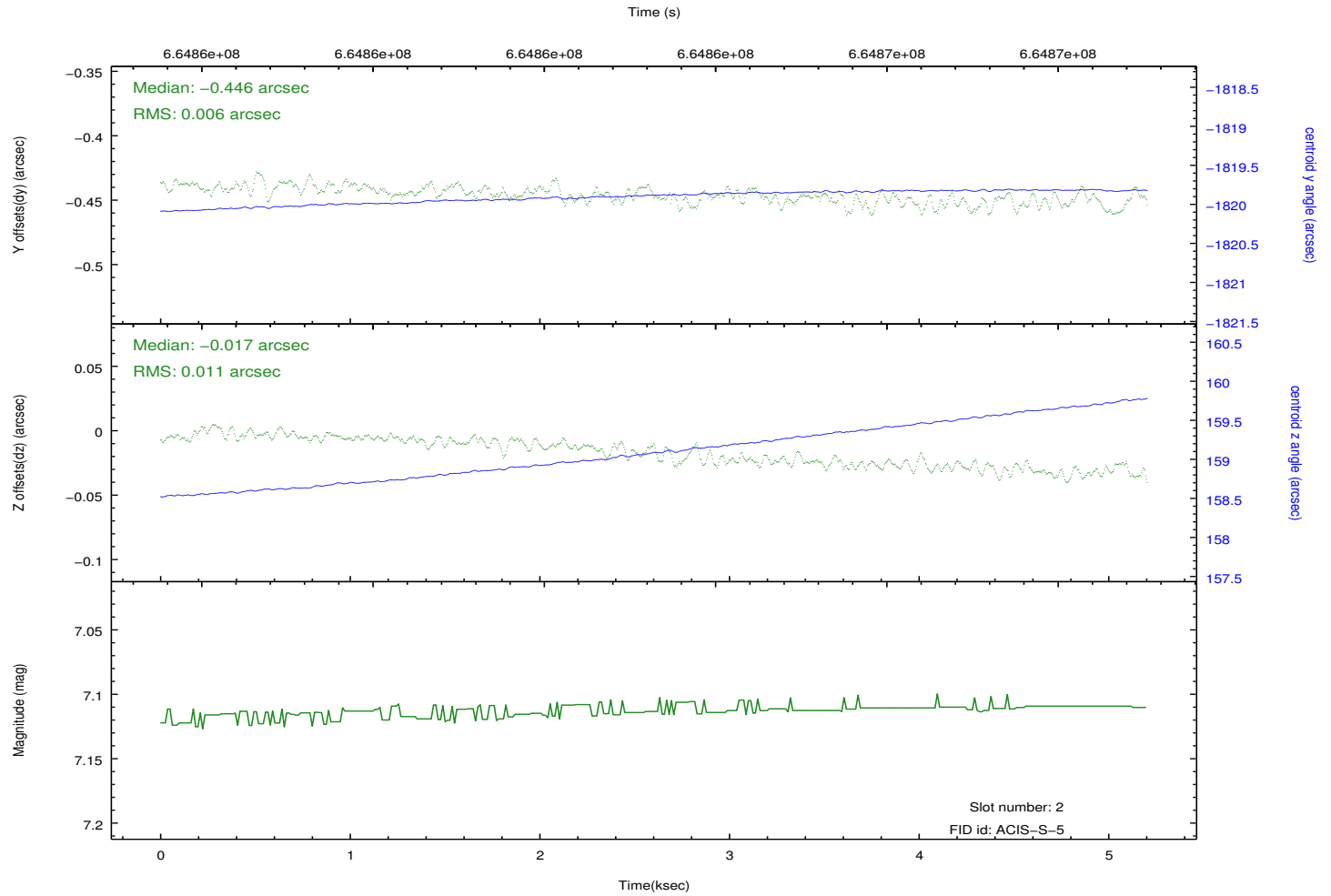
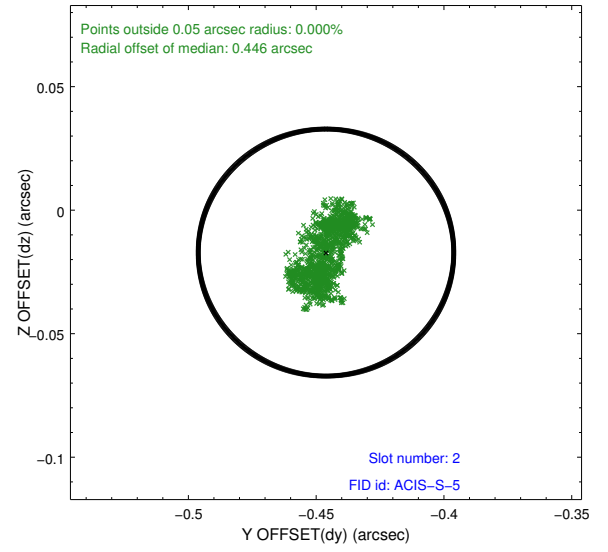
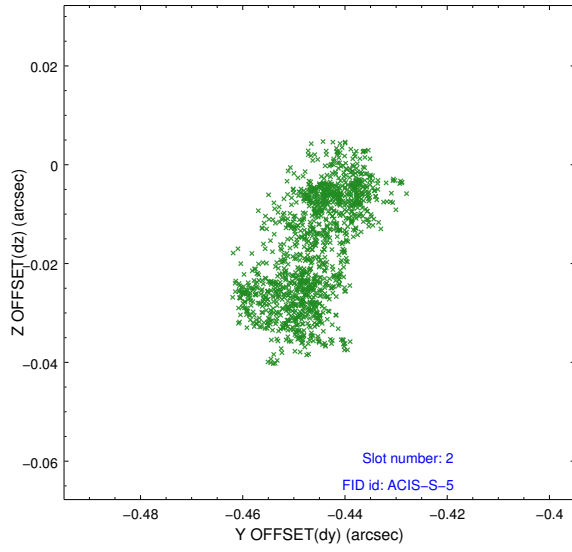
2.5.1 Slot 0



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)	2019.01.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1327886353731

A.2 Comments

Joint proposal with NRAO.

A spatial region of the original bias map for CCD = 6 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 = 6 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: (175.20259,11.58505), (175.20158,11.58136), (175.33919,11.54506), (175.34020,11.54875).