

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 21270 - L2 Version 1
Chandra X-Ray Center

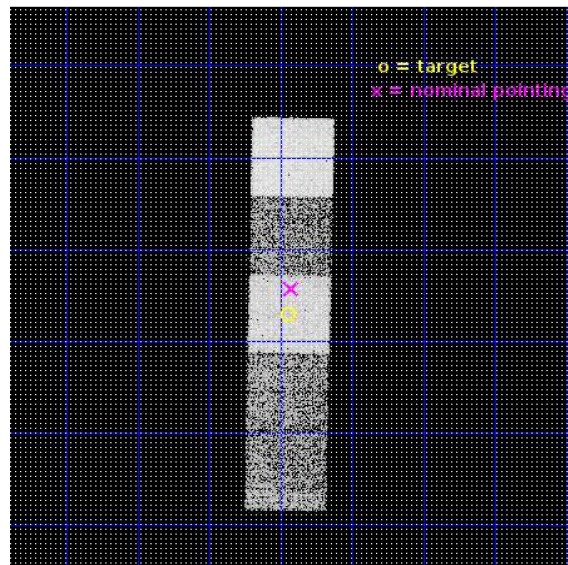
L2 Processing Date : Oct 4 2018

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1 Front

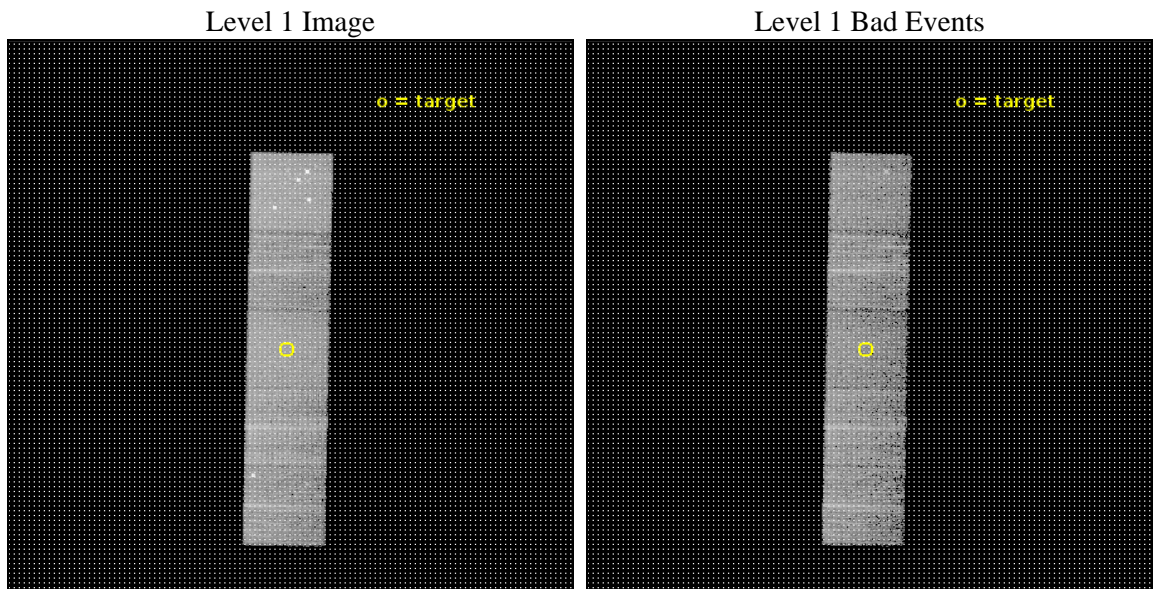
seq_num	100174	Sequence number
obs_id	21270	Observation id
title	Chandra Observations of the High-Heliospheric Latitude Comet 21P/Giacobini-Zinner	Proposal title
observer	Bradford Snios	Principal investigator
object	21P/Giacobini-Zinner	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	104.486673	Observer's specified target RA [deg]
dec_targ	-4.117557	Observer's specified target Dec [deg]
ra_nom	104.48099991957	Nominal RA [deg]
dec_nom	-4.0715645144865	Nominal Dec [deg]
roll_nom	91.1561701861	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5852.8000451326	Sum of GTIs [s]
livetime	5776.3289037743	Livetime [s]
ontime5	5852.8000451326	Sum of GTIs [s]
ontime6	5849.6589747667	Sum of GTIs [s]
ontime7	5852.8000451326	Sum of GTIs [s]
ontime8	5852.8000451326	Sum of GTIs [s]
ontime9	5852.8000451326	Sum of GTIs [s]
l2events	70383	Number of level 2 events



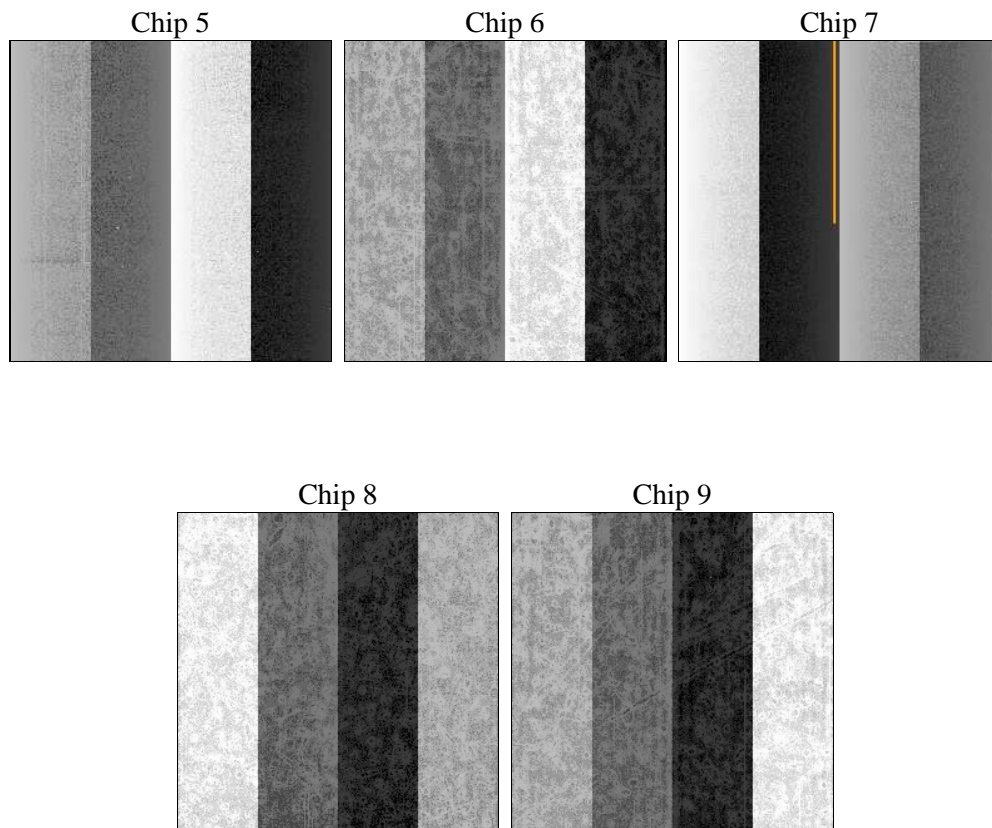
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5800.000000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	5852.8000451326	Sum of GTIs [s]
caldsver	4.8.0	 	ontime5	5852.8000451326	Sum of GTIs [s]
date	2018-10-04T18:44:26	Date and time of file creation	ontime6	5849.6589747667	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	5852.8000451326	Sum of GTIs [s]
			ontime8	5852.8000451326	Sum of GTIs [s]
			ontime9	5852.8000451326	Sum of GTIs [s]
			l1events	298436	Number of level 1 events

2.1.4 Events

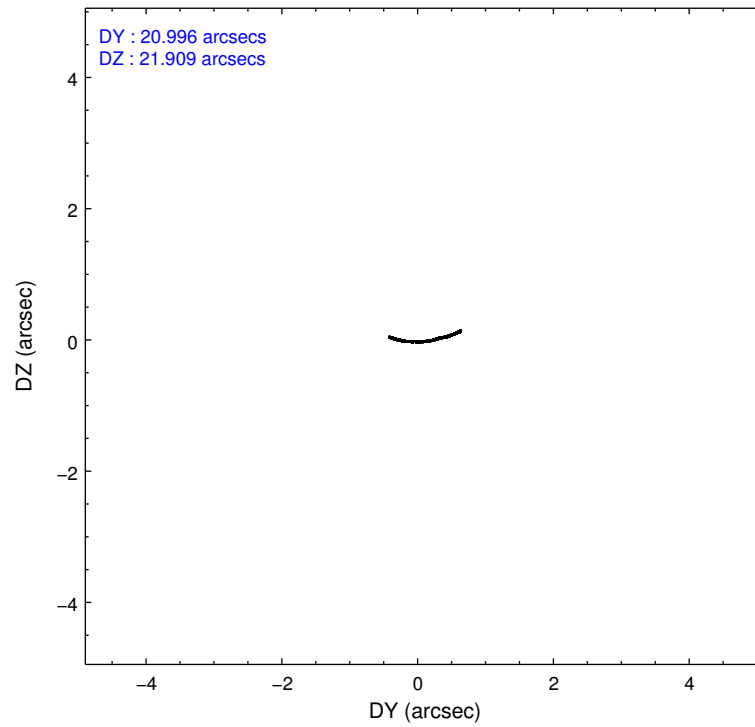
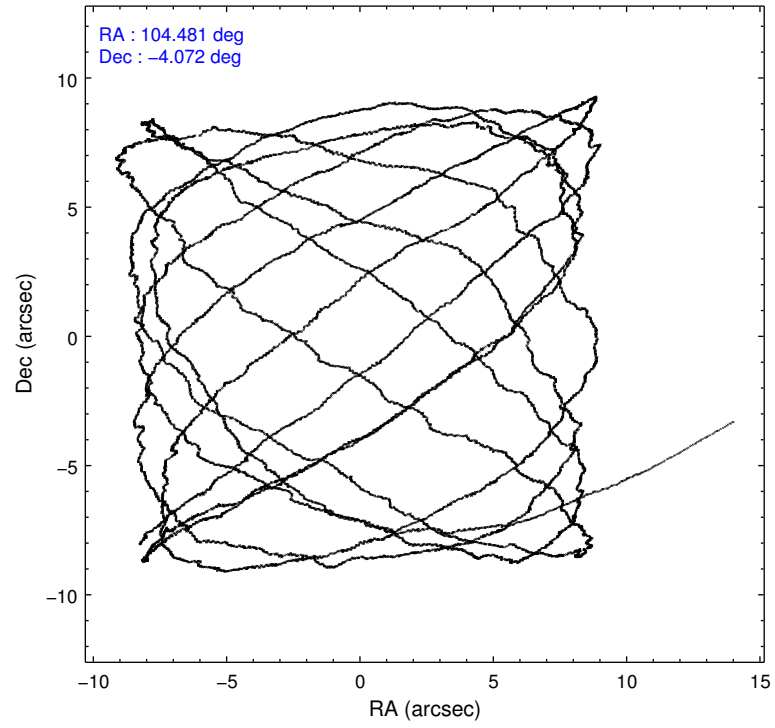
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	81037	48279	58693	61776	48651
rejected events	39699	43362	34059	46163	41680
rejected %	48%	89%	58%	74%	85%

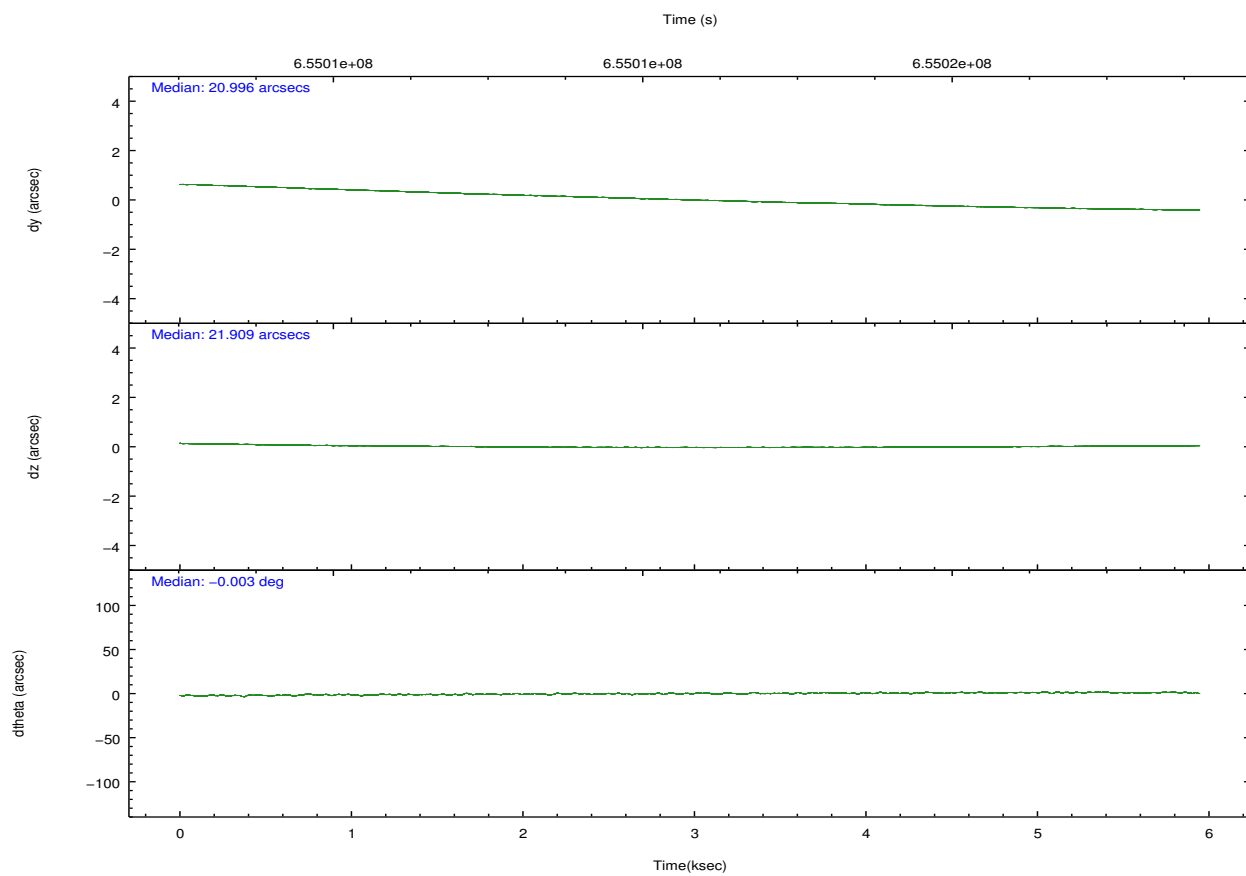
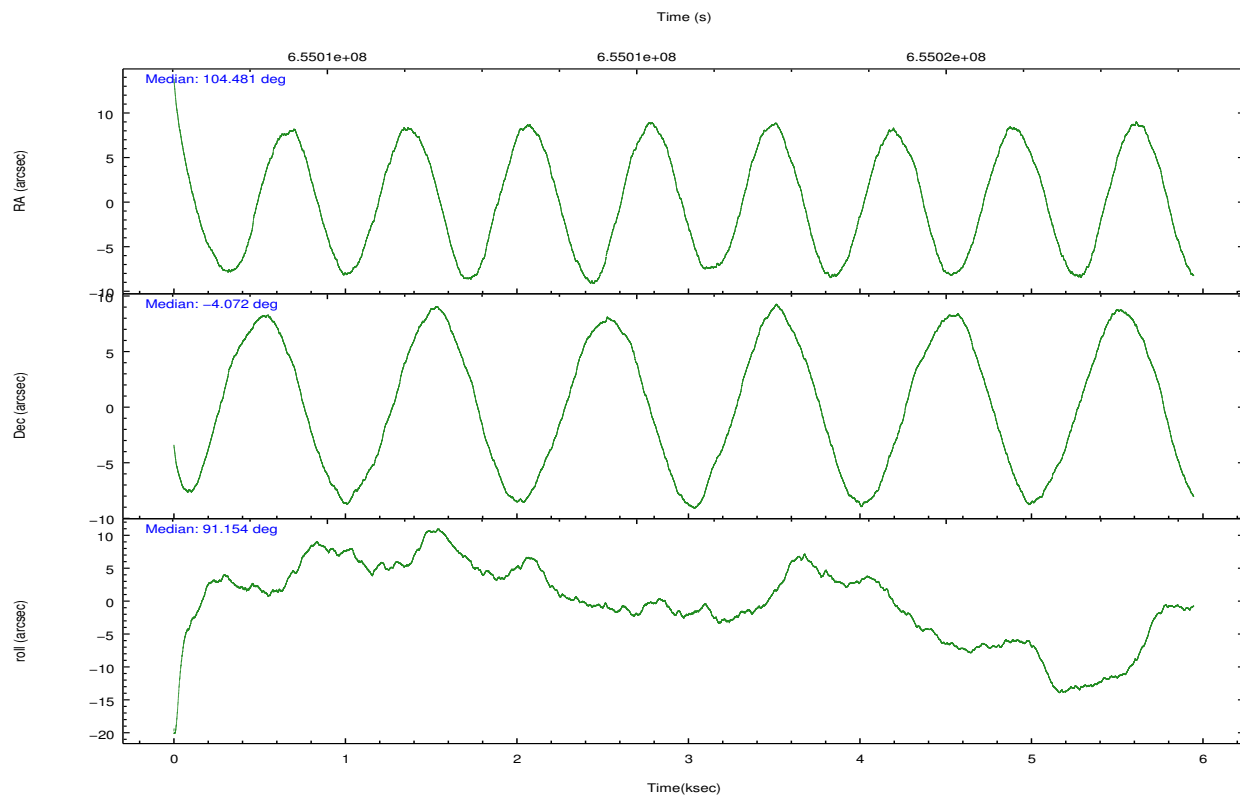
	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	8426	1599	2080	4555	3558
	10%	3%	3%	7%	7%
grade 1 events	480	22	78	49	59
	0%	0%	0%	0%	0%
grade 2 events	12133	1230	5382	3875	1248
	14%	2%	9%	6%	2%
grade 3 events	1128	436	1946	1759	592
	1%	0%	3%	2%	1%
grade 4 events	983	467	1905	1635	544
	1%	0%	3%	2%	1%
grade 5 events	4716	2061	5575	3177	2342
	5%	4%	9%	5%	4%
grade 6 events	19618	1300	13853	4238	1201
	24%	2%	23%	6%	2%
grade 7 events	33553	41164	27874	42488	39107
	41%	85%	47%	68%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-56789	ACIS-56789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	104.495554	104.4809999195673	CCD I2 on	N	N
[deg] Pointing Dec	-4.094888	-4.071564514486501	CCD I3 on	N	N
[deg] Pointing Roll	91.000628	91.15617018610003	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	655011483.184000	655010247.17505	CCD S5 on	O2	Y
Observation start date	2018-10-04T03:36:54	2018-10-04T03:17:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	655017283.184000	655017417.56297	On-chip summing requested	N	N
Observation end date	2018-10-04T05:13:34	2018-10-04T05:16:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



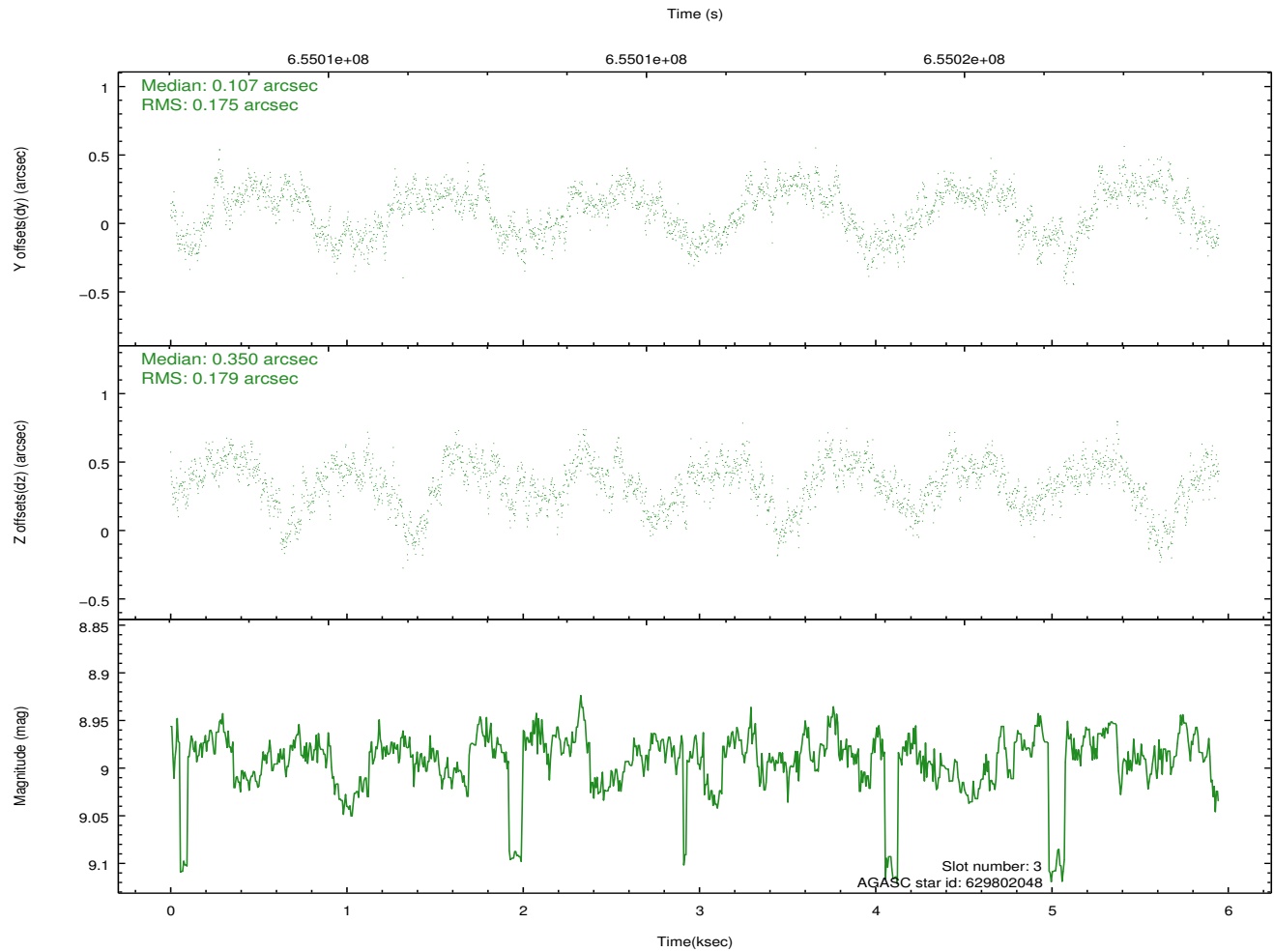
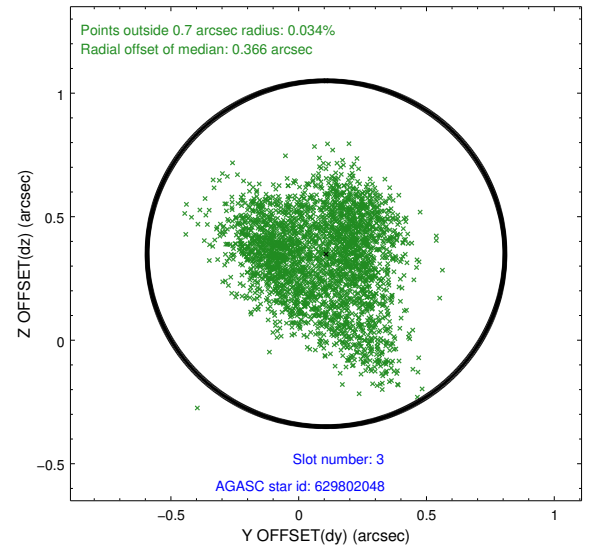
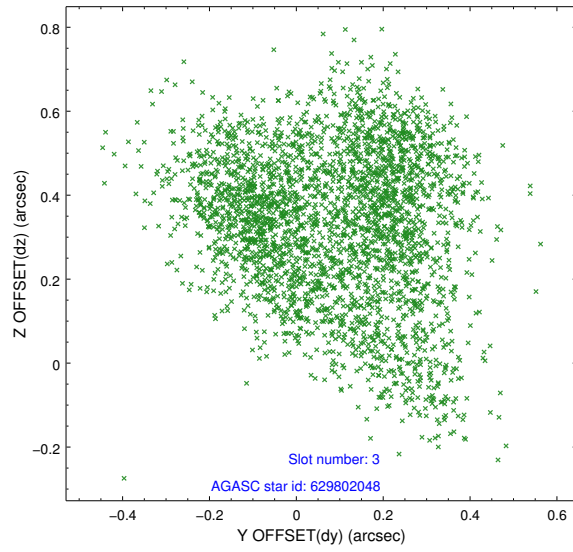


Slot Statistics

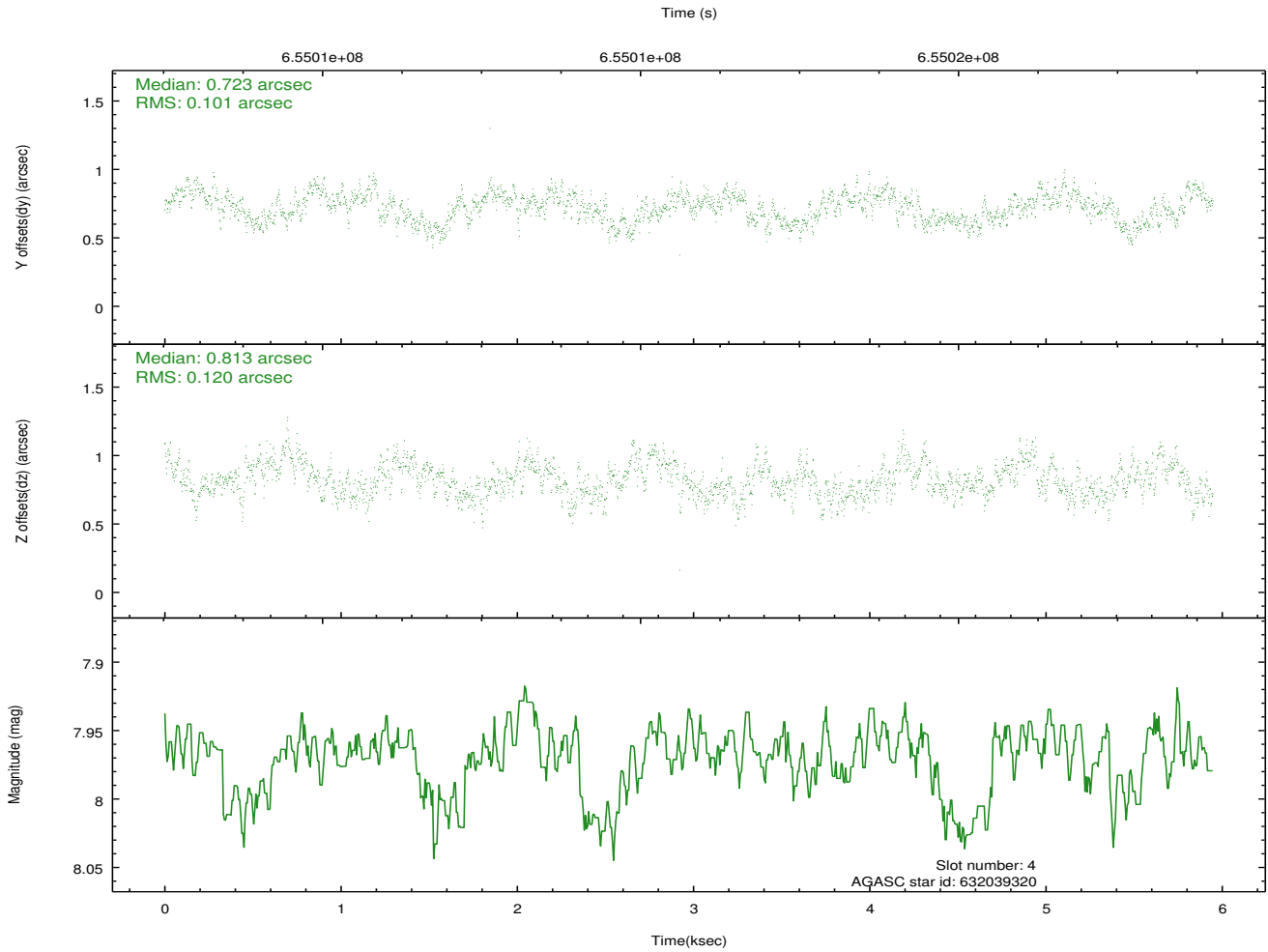
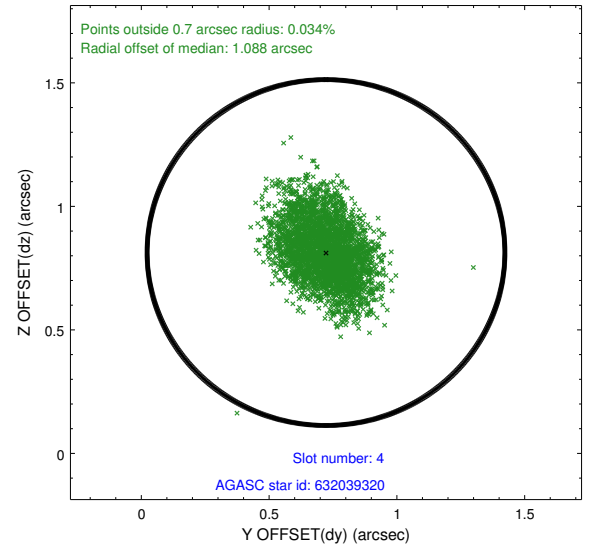
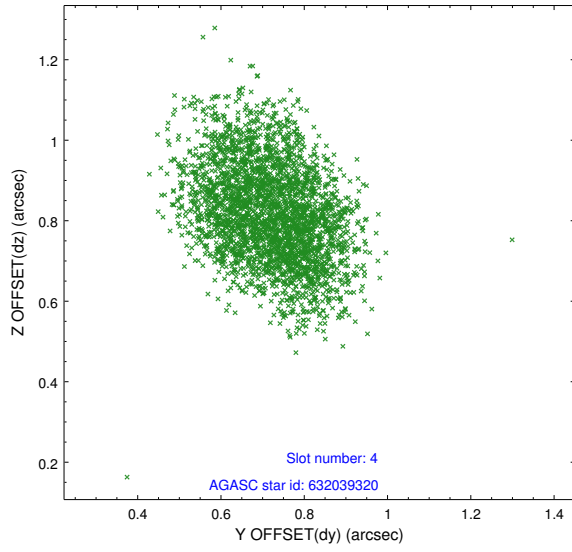
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.17	1451	1.000	0.202	0.037	0.010	0.016	0.000000	0.000000	922.00	-1739
1	FID		ACIS-S-2	7.08	1451	1.000	-0.294	-0.156	0.008	0.013	0.000000	0.000000	-773.85	-1744
2	FID		ACIS-S-6	7.37	1451	1.000	0.071	0.125	0.009	0.016	0.000000	0.000000	387.16	801
3	GUIDE	used	629802048	8.99	2900	1.000	0.107	0.350	0.266	0.422	104.930547	-3.655580	1554.00	-1589
4	GUIDE	used	632039320	7.97	2902	1.000	0.723	0.813	0.166	0.263	105.061225	-4.610052	-1888.98	-1997
5	GUIDE	used	629801688	7.34	2902	1.000	-0.272	-0.420	0.131	0.223	104.215078	-3.692396	1465.03	981
6	GUIDE	used	629801152	8.39	2901	1.000	-0.645	-0.418	0.156	0.255	104.217789	-3.466799	2278.14	958
7	GUIDE	used	630341920	9.24	2894	1.000	0.119	-0.316	0.181	0.325	103.979848	-4.428340	-1167.32	1871

2.4 Star Slots

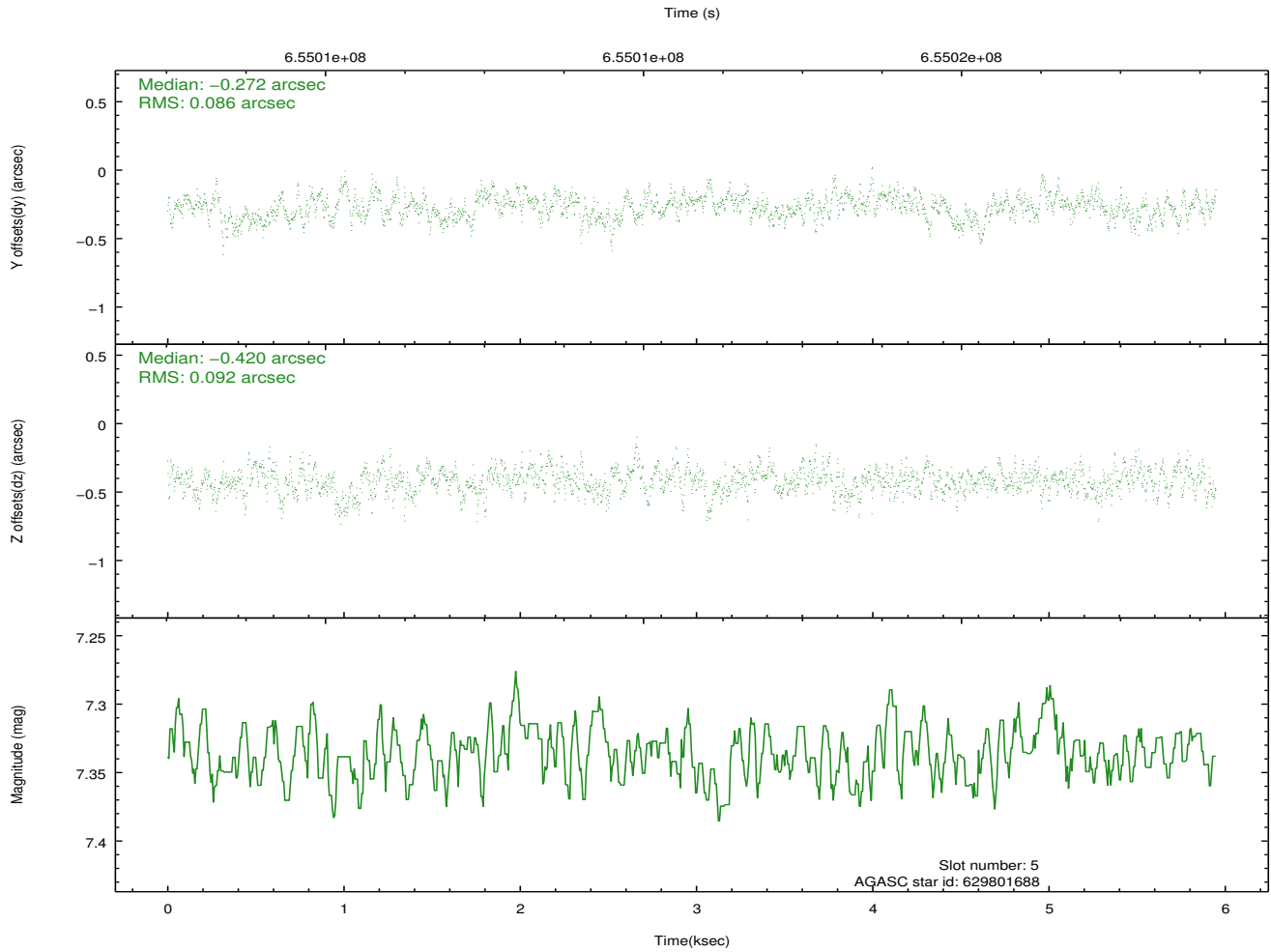
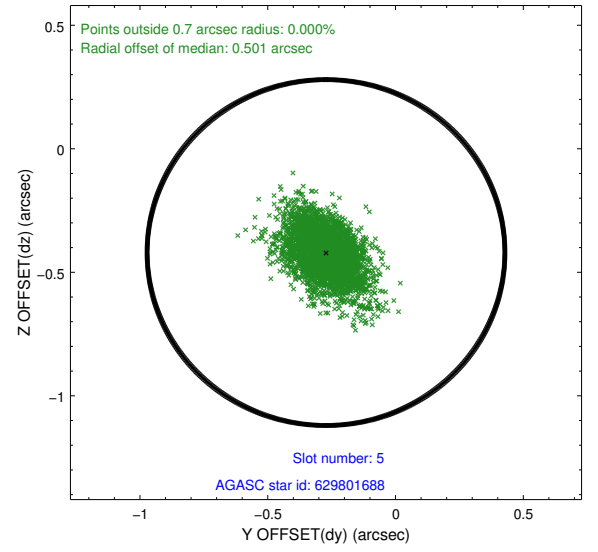
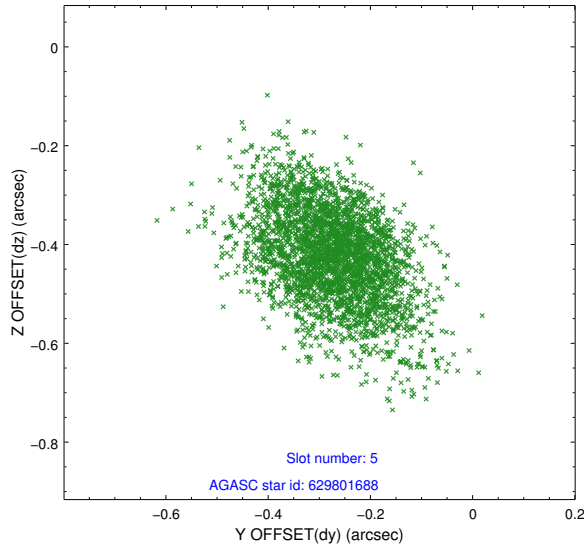
2.4.1 Slot 3



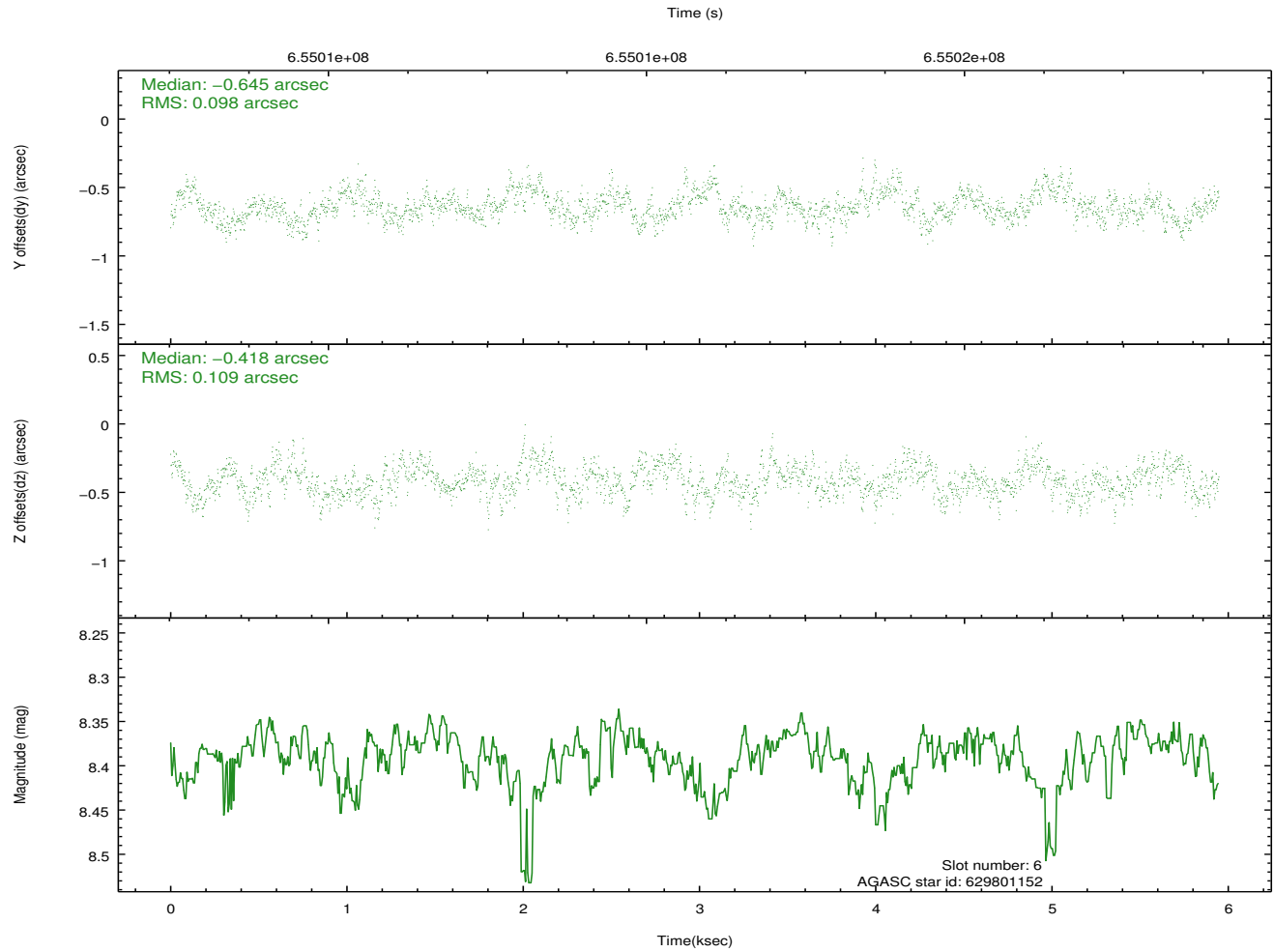
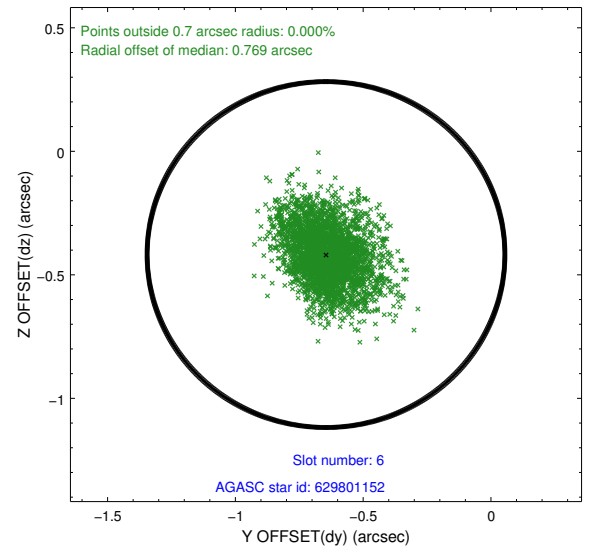
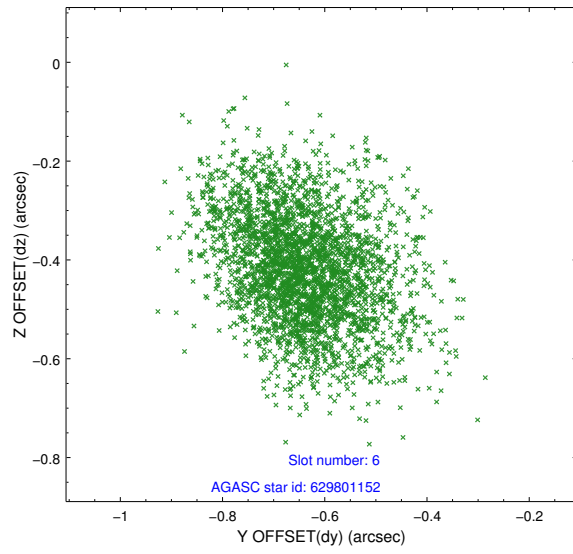
2.4.2 Slot 4



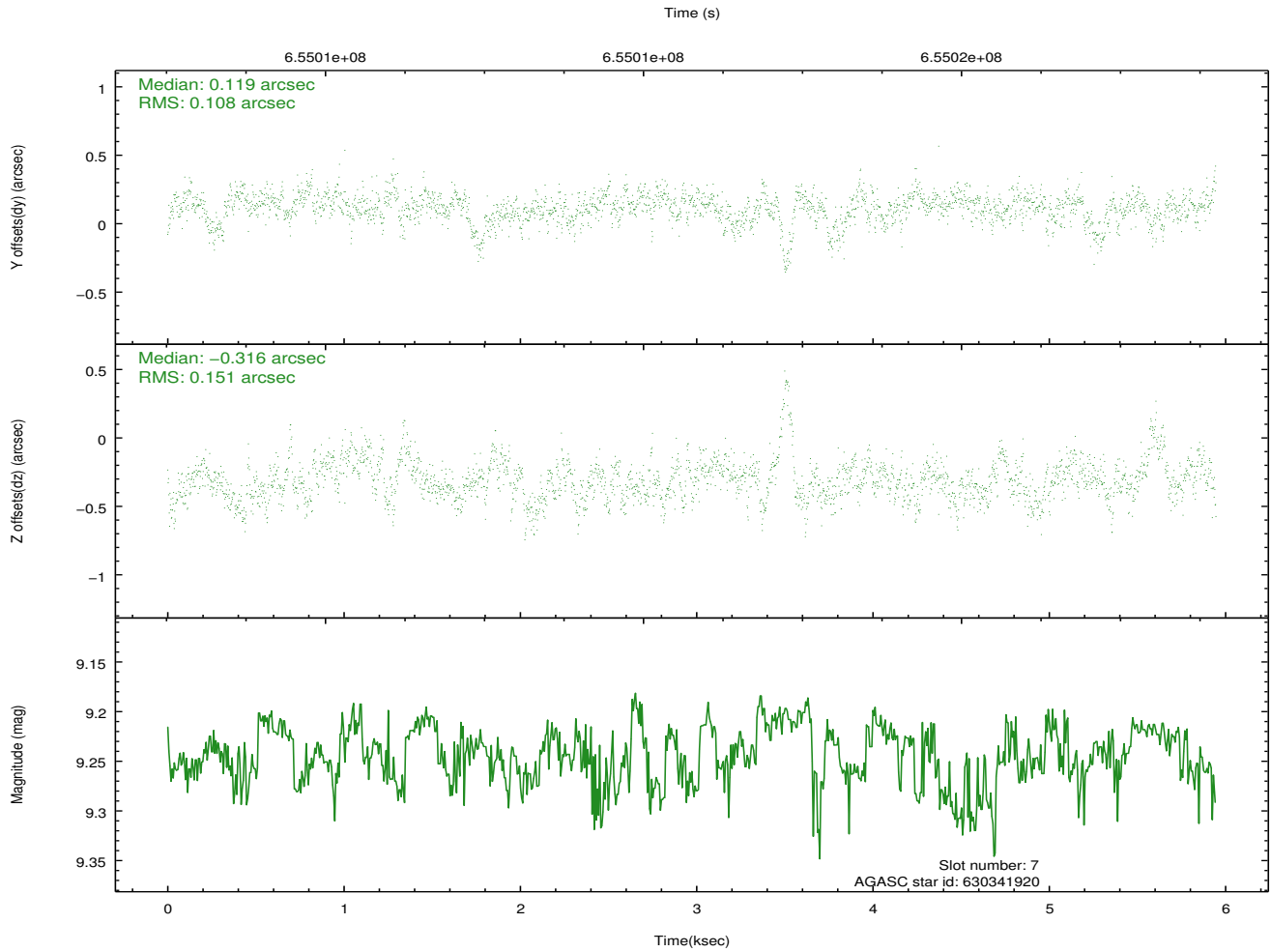
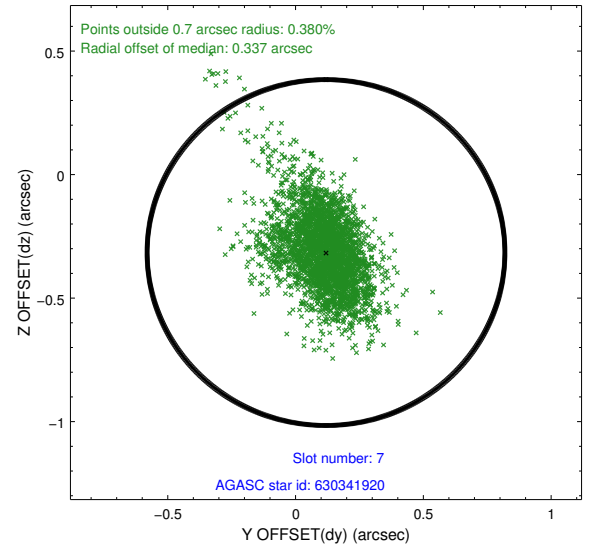
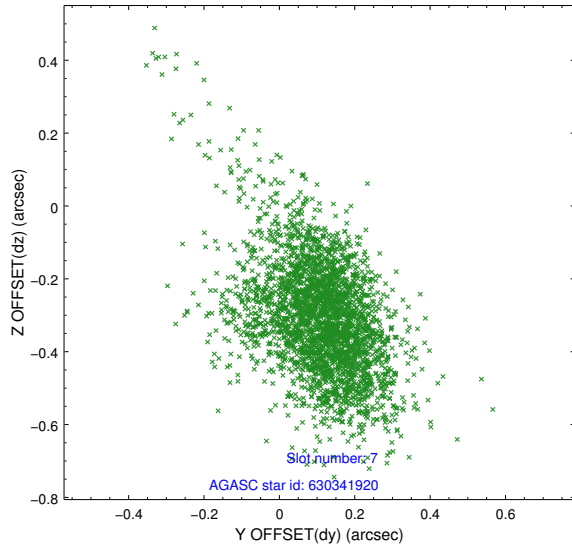
2.4.3 Slot 5



2.4.4 Slot 6

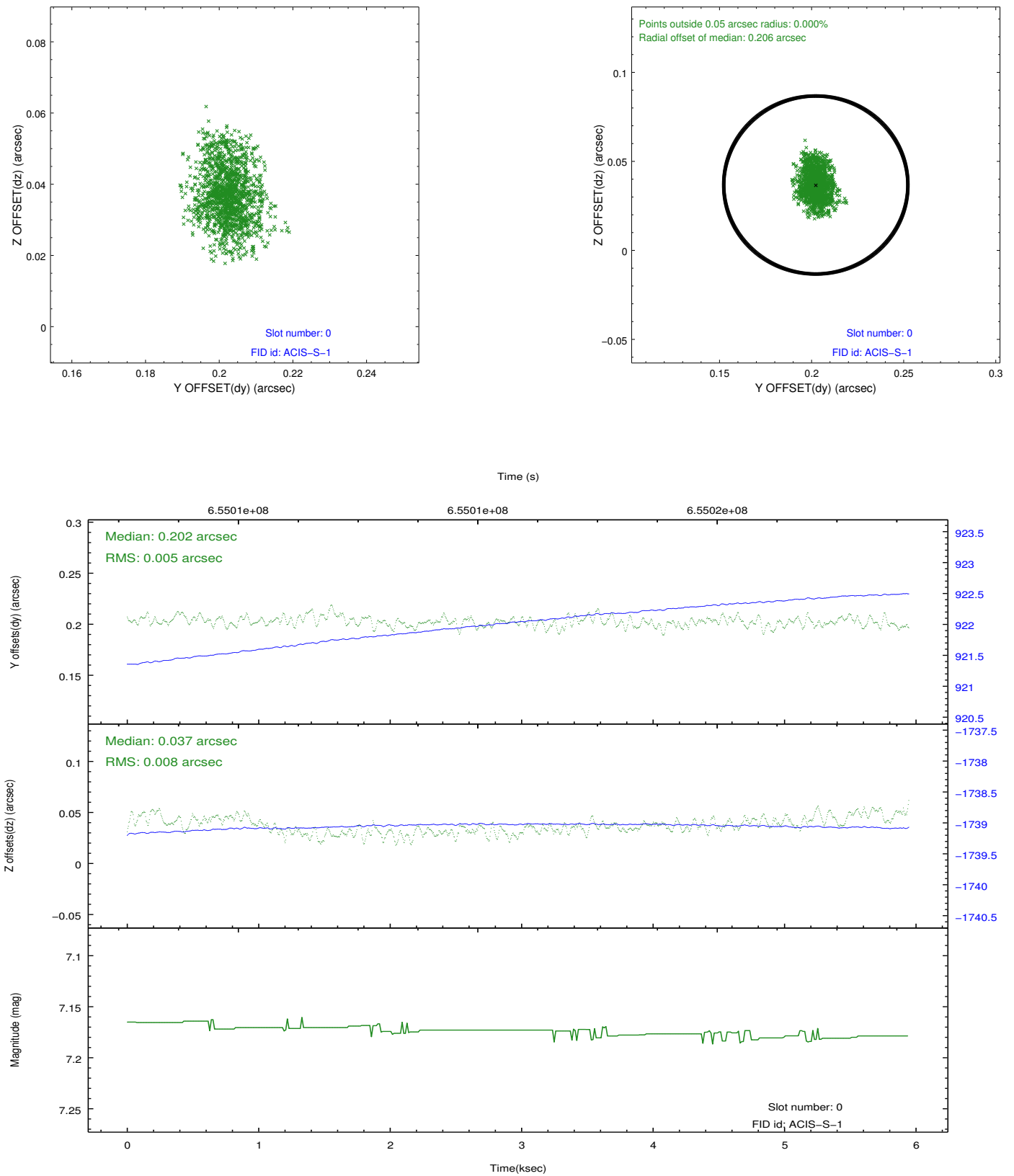


2.4.5 Slot 7

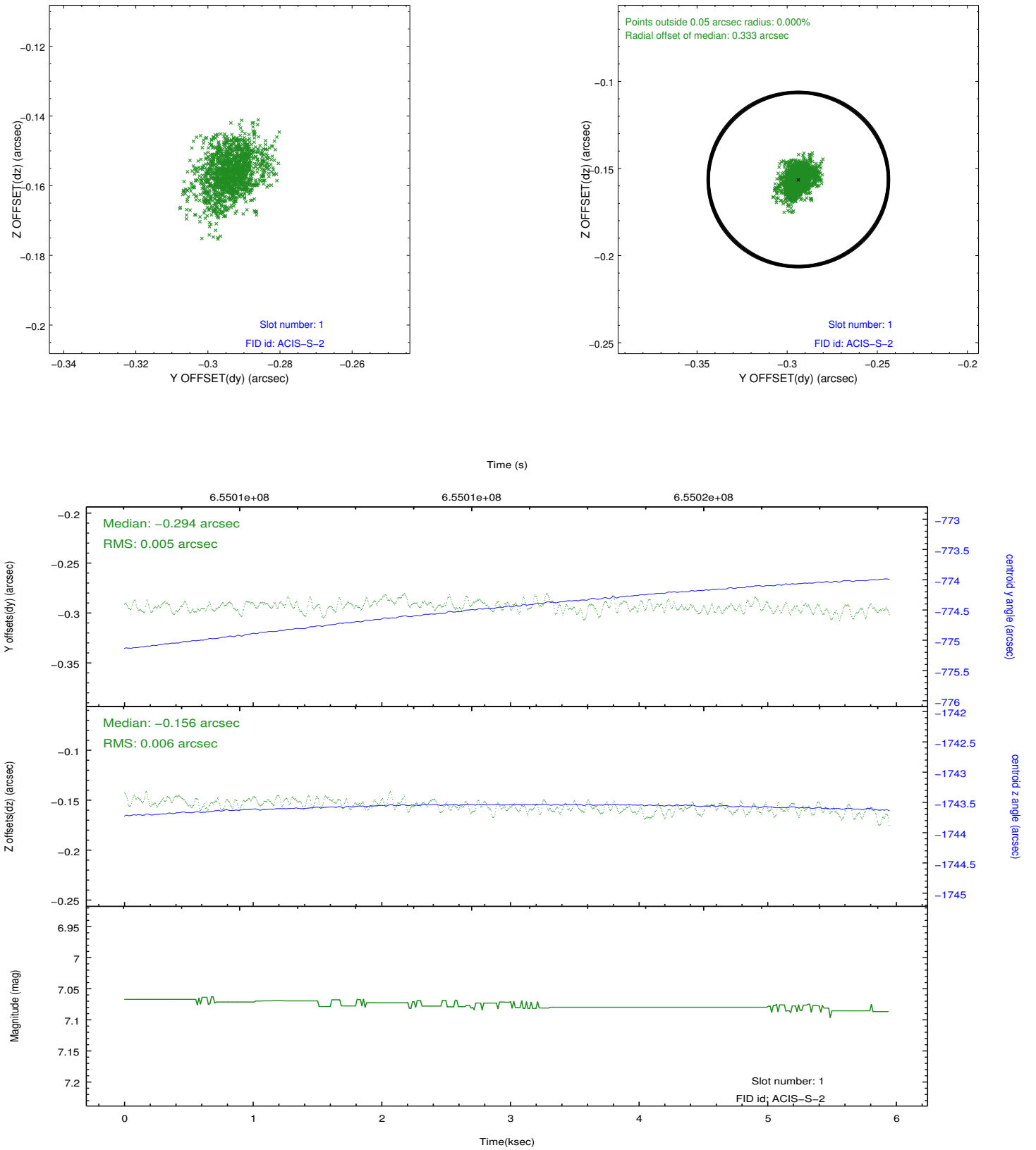


2.5 FID Slots

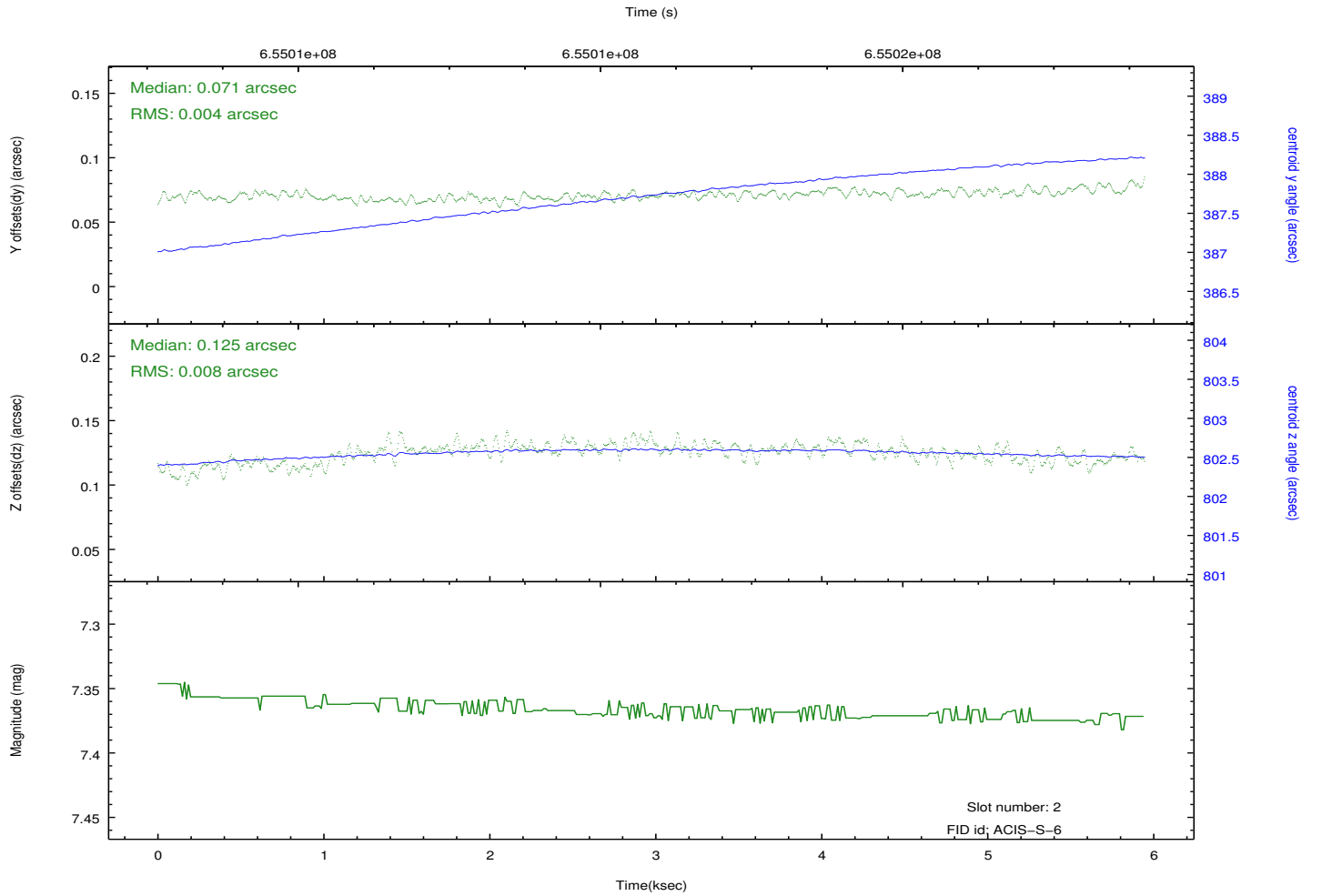
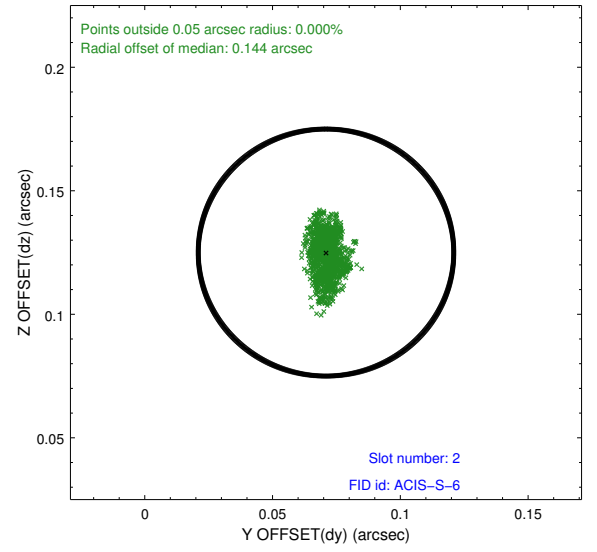
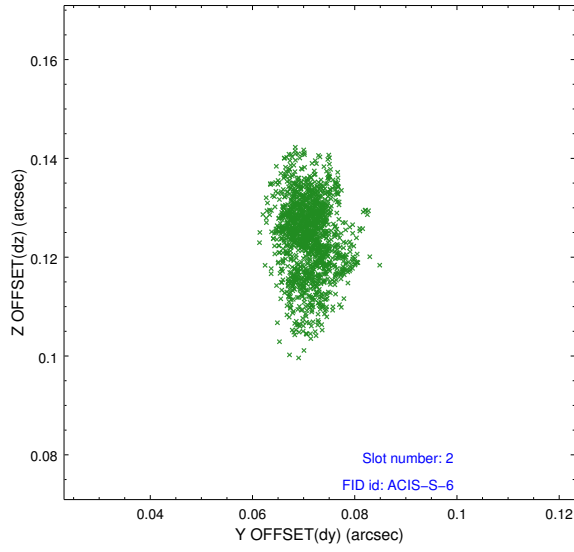
2.5.1 Slot 0



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)	2018.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.8528000451326

A.2 Comments

This is an observation of a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.