

# V&V Reference Report

## L2 ASCDS Version : 10.7

Observation 21352 - L2 Version 1  
Chandra X-Ray Center

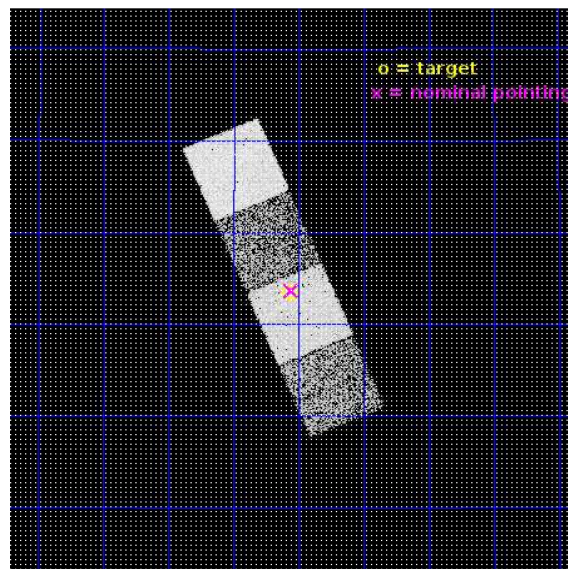
L2 Processing Date : Nov 24 2018

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# 1 Front

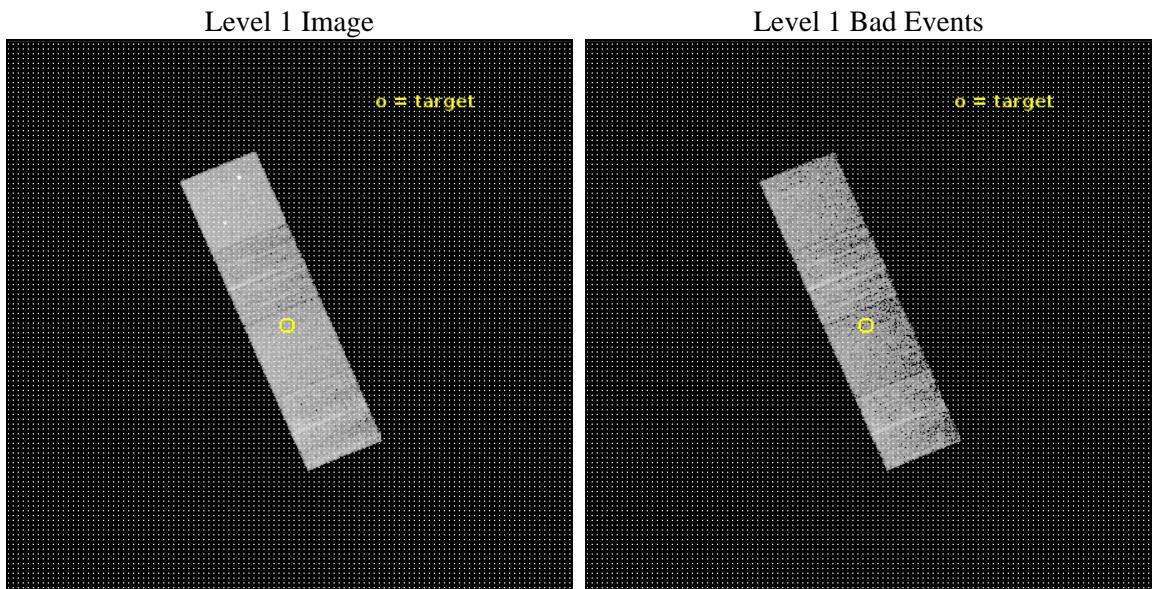
seq_num	503124	Sequence number
obs_id	21352	Observation id
title	Chandra Observations of H-alpha emitting Type I Supernovae	Proposa
observer	David Pooley	Principal investigator
object	SN 2012fh	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	160.891667	Observer's specified target RA [deg]
dec_targ	24.891389	Observer's specified target Dec [deg]
ra_nom	160.88897999801	Nominal RA [deg]
dec_nom	24.894000642653	Nominal Dec [deg]
roll_nom	66.959543158845	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4565.2971593142	Sum of GTIs [s]
livetime	4505.6481910048	Livetime [s]
ontime5	4565.2561193705	Sum of GTIs [s]
ontime6	4565.2150793076	Sum of GTIs [s]
ontime7	4565.2971593142	Sum of GTIs [s]
ontime8	4565.1740393639	Sum of GTIs [s]
l2events	52232	Number of level 2 events



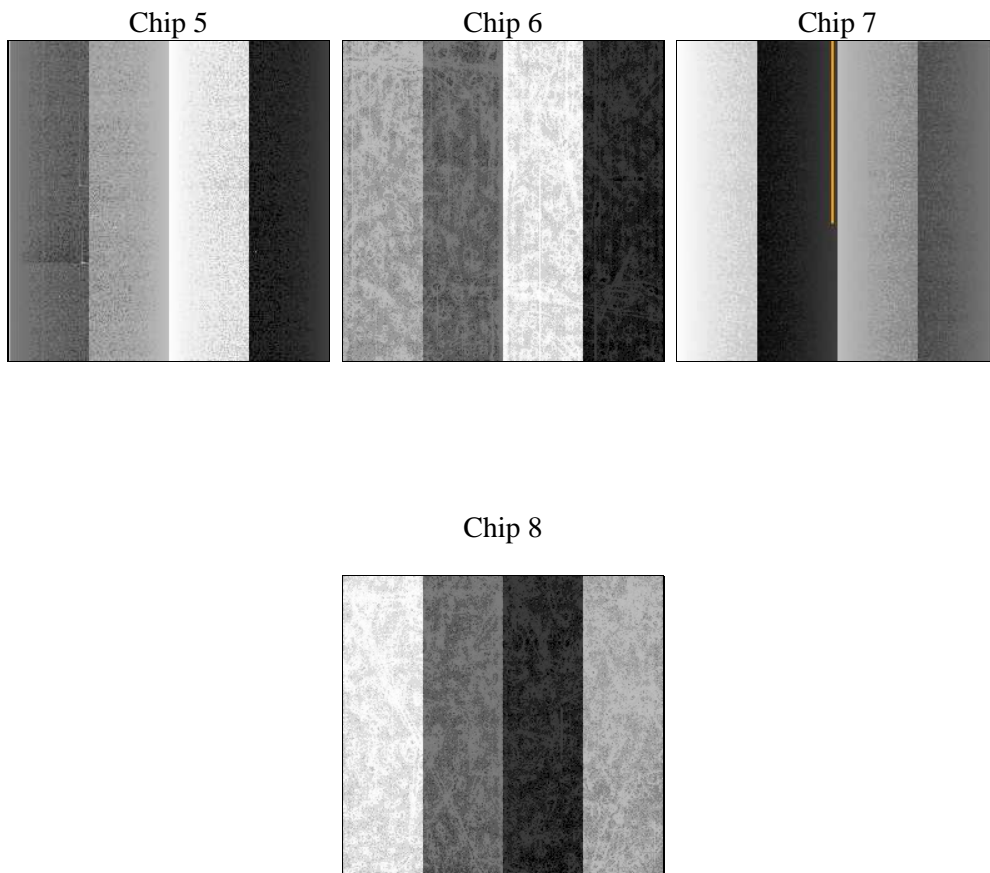
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4500.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	4565.2971593142	Sum of GTIs [s]
caldsver	4.8.0.1	&#160	ontime5	4565.2561193705	Sum of GTIs [s]
date	2018-11-25T00:14:59	Date and time of file creation	ontime6	4565.2150793076	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	4565.2971593142	Sum of GTIs [s]
			ontime8	4565.1740393639	Sum of GTIs [s]
			l1events	184953	Number of level 1 events

### 2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	56774	36210	44907	47062
rejected events	28609	32147	25331	33711
rejected %	50%	88%	56%	71%

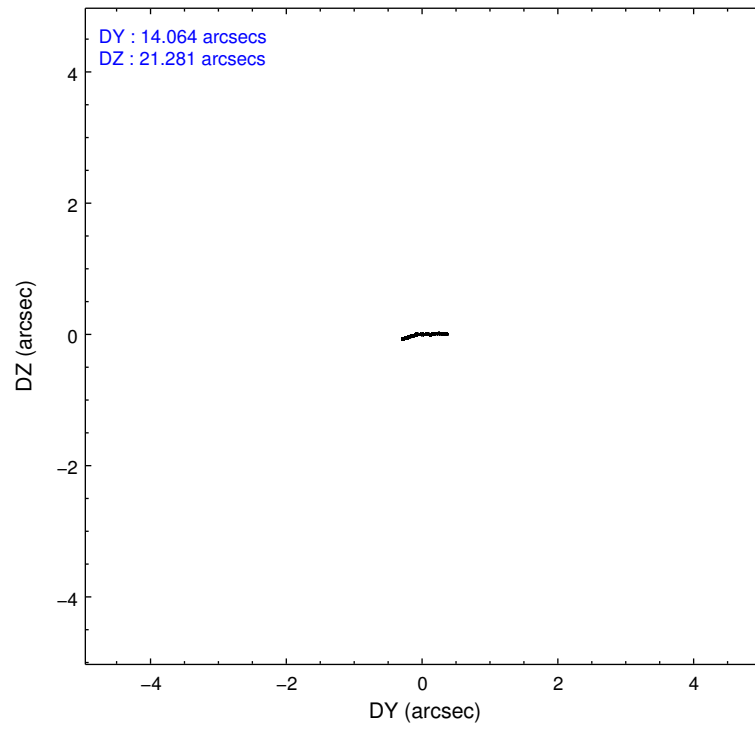
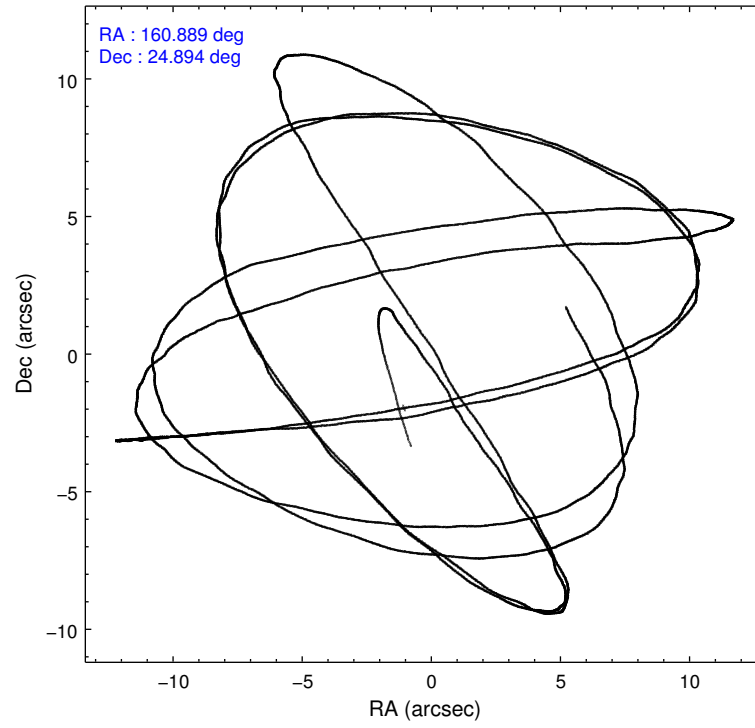
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3037	1364	1622	3836
	5%	3%	3%	8%
grade 1 events	199	25	58	42
	0%	0%	0%	0%
grade 2 events	8903	937	4259	3290
	15%	2%	9%	6%
grade 3 events	886	432	1558	1308
	1%	1%	3%	2%
grade 4 events	894	418	1547	1254
	1%	1%	3%	2%
grade 5 events	3972	1641	4473	2463
	6%	4%	9%	5%
grade 6 events	14496	920	10619	3669
	25%	2%	23%	7%
grade 7 events	24387	30473	20771	31200
	42%	84%	46%	66%

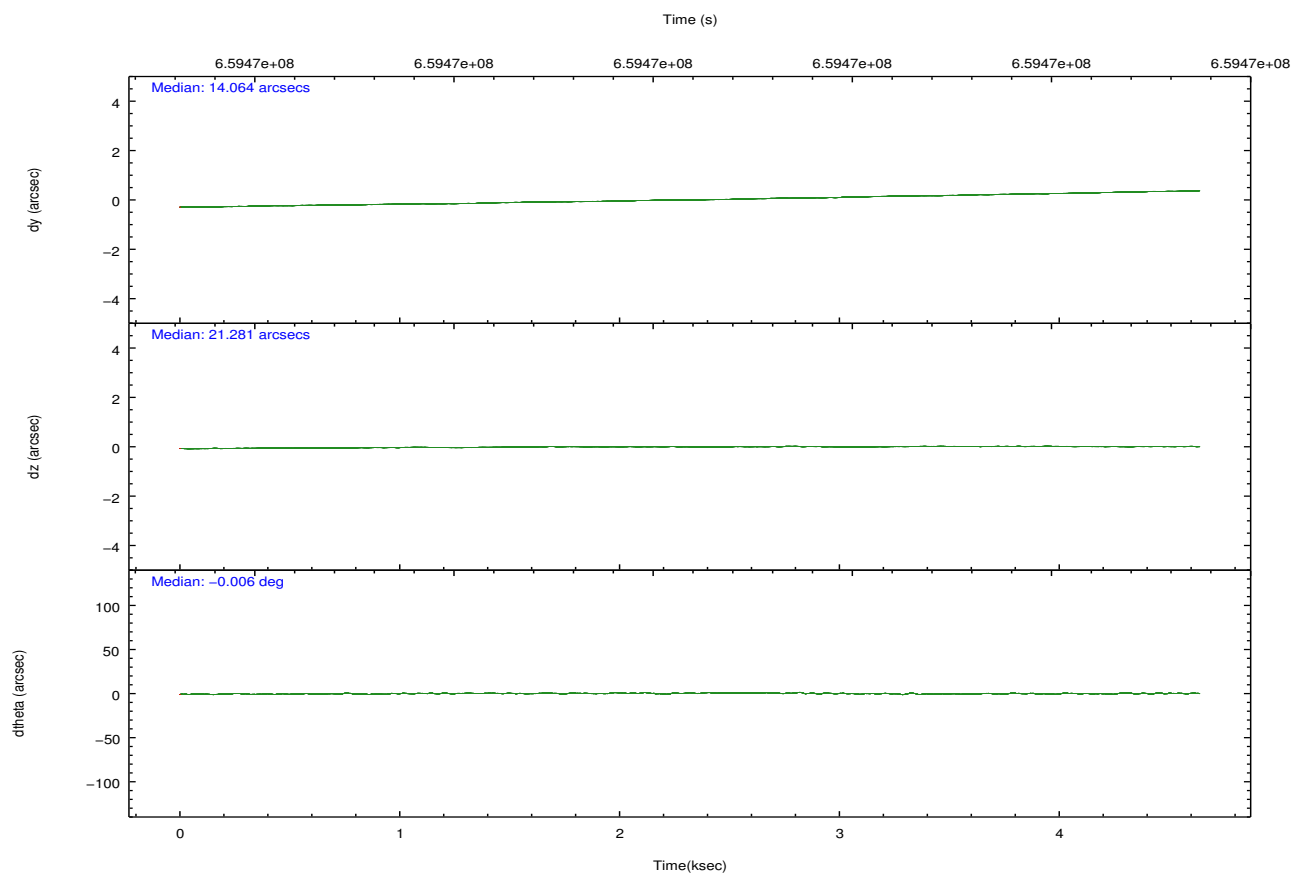
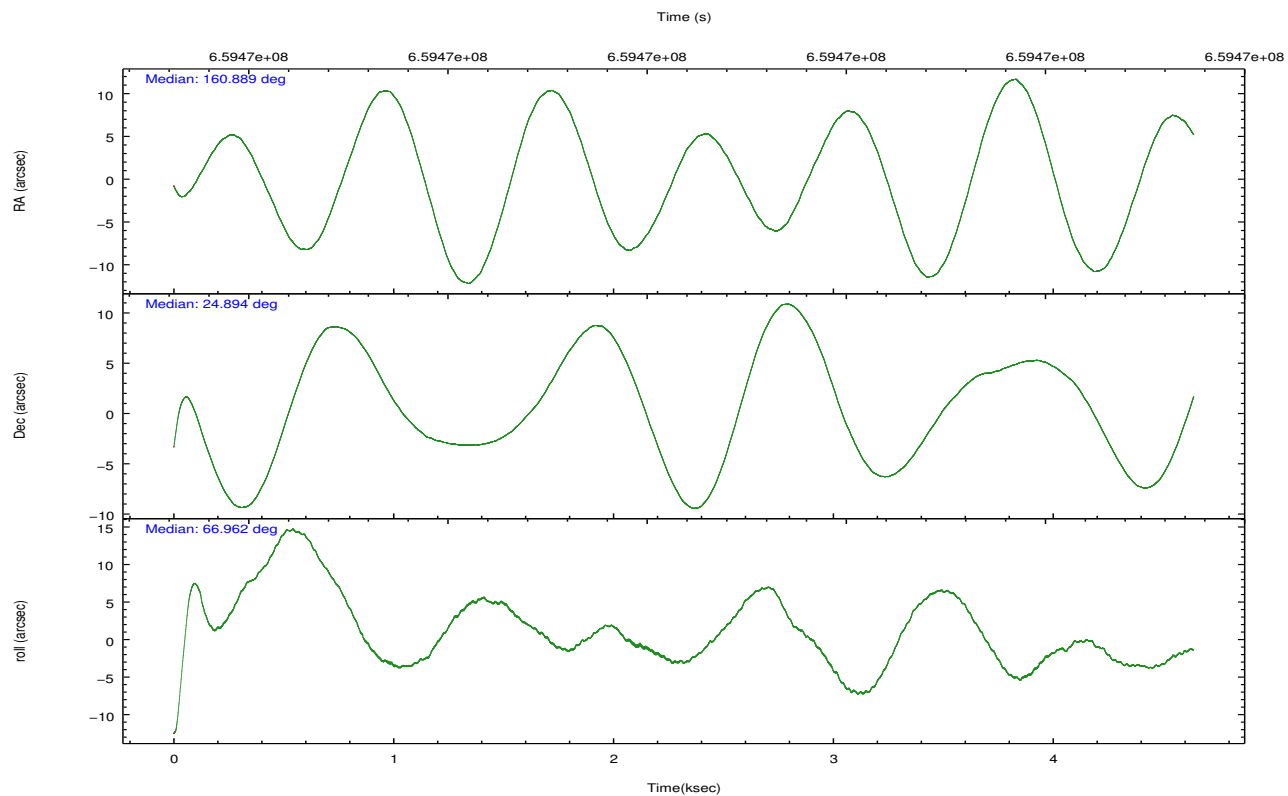


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	160.893019	160.8889799980073	CCD I2 on	N	N
[deg] Pointing Dec	24.866980	24.89400064265264	CCD I3 on	N	N
[deg] Pointing Roll	66.801291	66.95954315884518	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	O2	Y
[s] Observation start time (MET)	659466988.184000	659465911.24506	CCD S5 on	N	N
Observation start date	2018-11-24T17:15:19	2018-11-24T16:58:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	659471488.184000	659472319.03295	On-chip summing requested	N	N
Observation end date	2018-11-24T18:30:19	2018-11-24T18:45:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



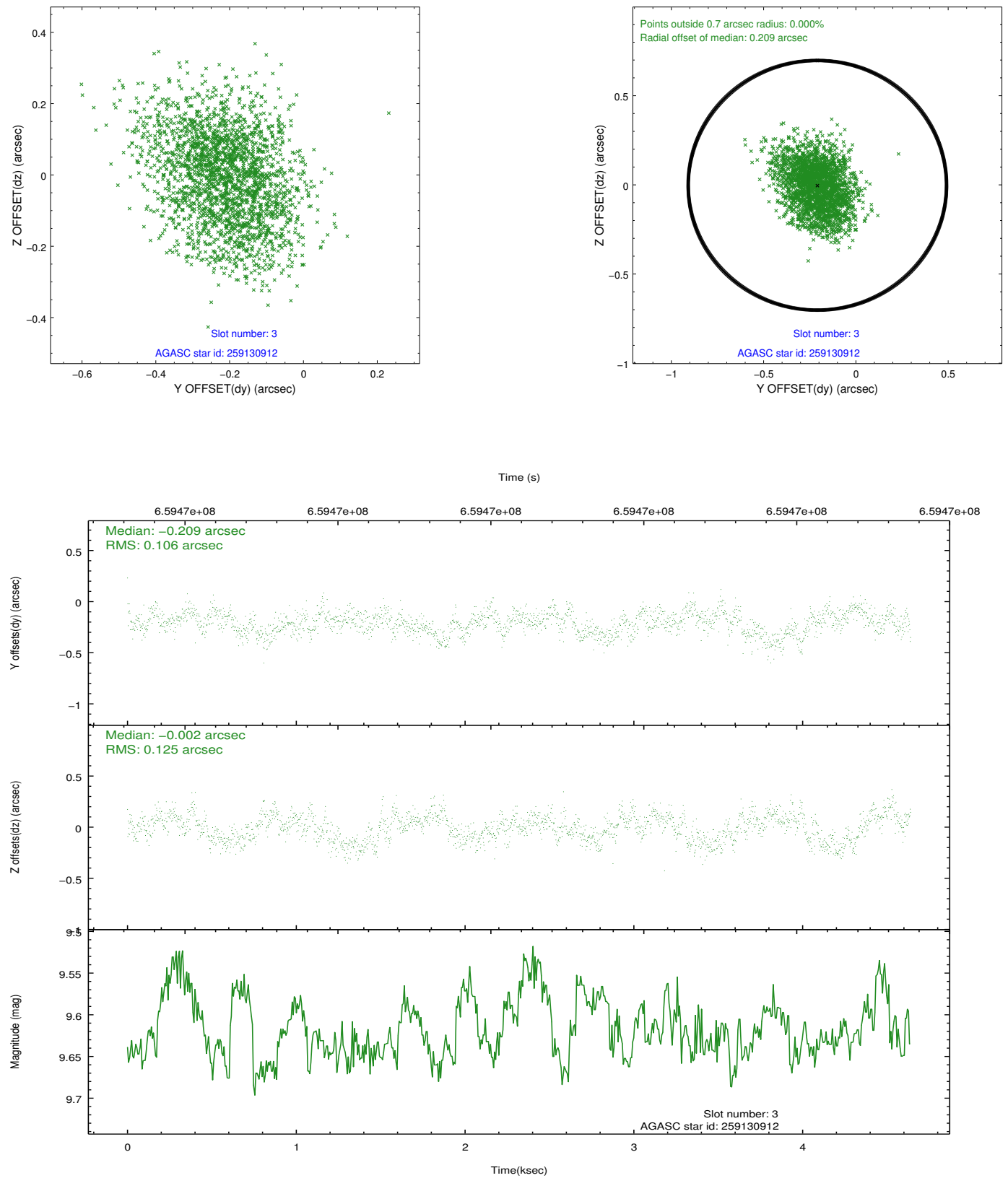


Slot Statistics

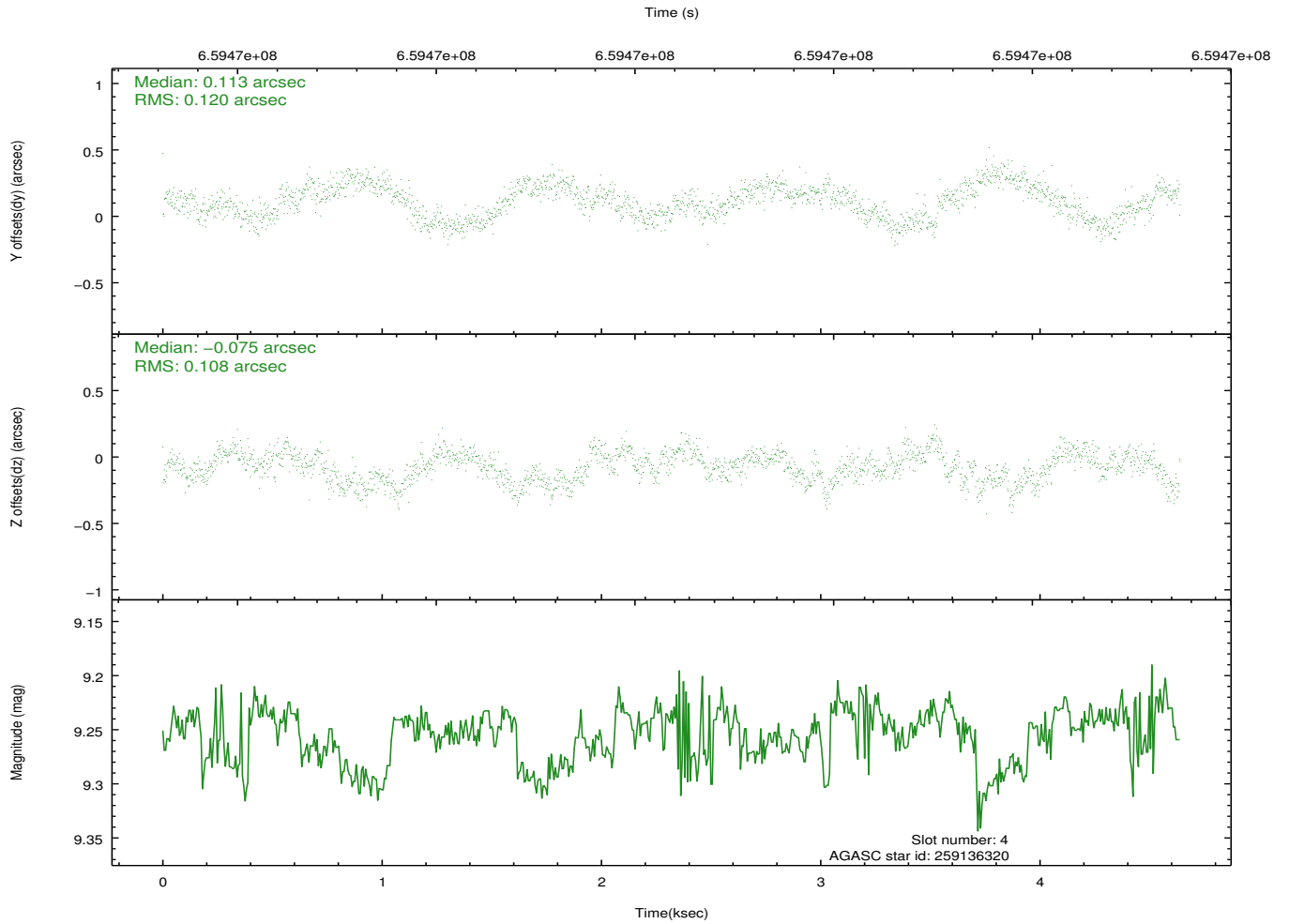
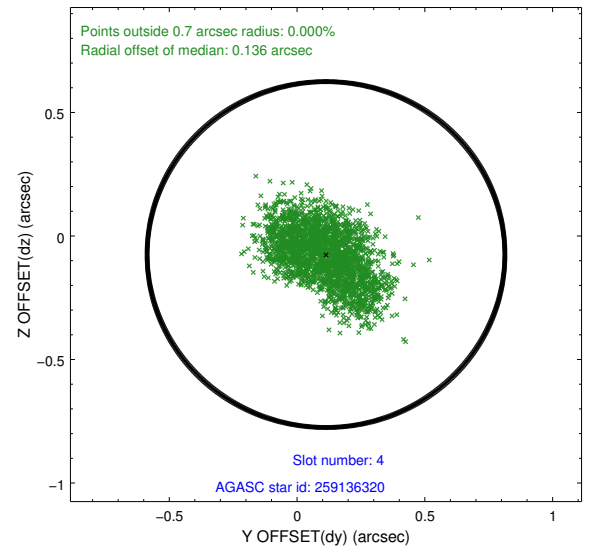
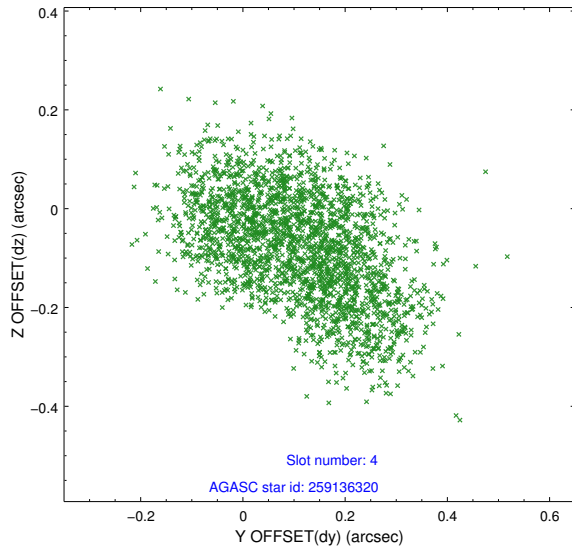
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.98	1132	1.000	-0.302	-0.155	0.014	0.023	0.000000	0.000000	-767.27	-1742
1	FID		ACIS-S-4	7.10	1131	1.000	0.714	0.188	0.011	0.018	0.000000	0.000000	2146.36	164
2	FID		ACIS-S-5	7.09	1132	1.000	-0.440	-0.025	0.008	0.014	0.000000	0.000000	-1818.62	159
3	GUIDE	used	259130912	9.62	2260	1.000	-0.209	-0.002	0.176	0.278	161.197803	25.068476	1059.72	-626
4	GUIDE	used	259136320	9.25	2257	1.000	0.113	-0.075	0.174	0.274	160.427058	24.371434	-2237.72	703
5	GUIDE	used	259137808	9.66	2263	1.000	0.376	0.507	0.152	0.257	161.419456	24.482959	-588.33	-2127
6	GUIDE	used	259139512	9.26	2258	1.000	0.436	0.602	0.181	0.295	161.268113	24.286072	-1435.41	-1952
7	GUIDE	used	259131192	8.68	2262	1.000	-0.722	-1.026	0.122	0.207	160.476309	25.672299	2133.93	2384

## 2.4 Star Slots

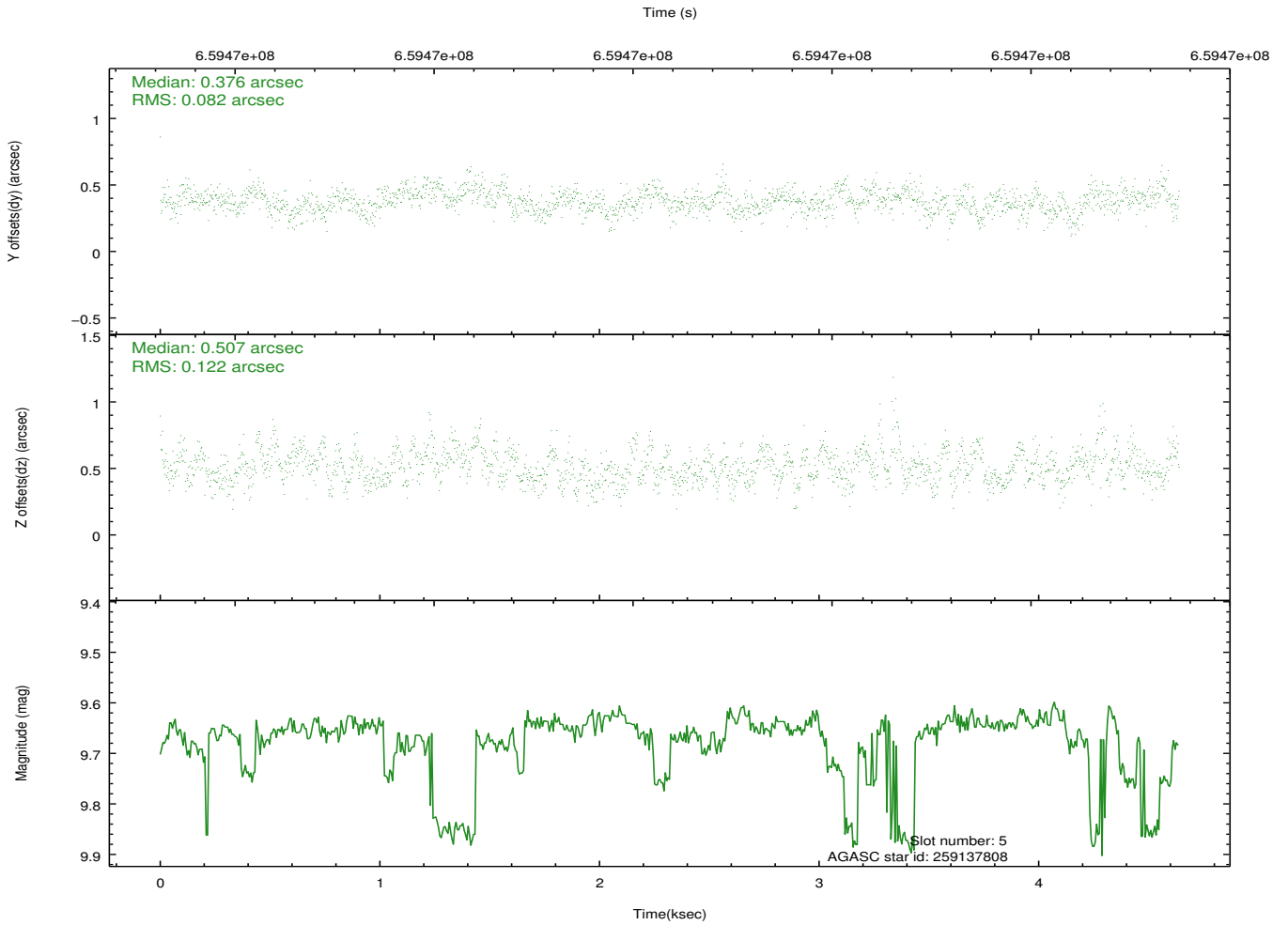
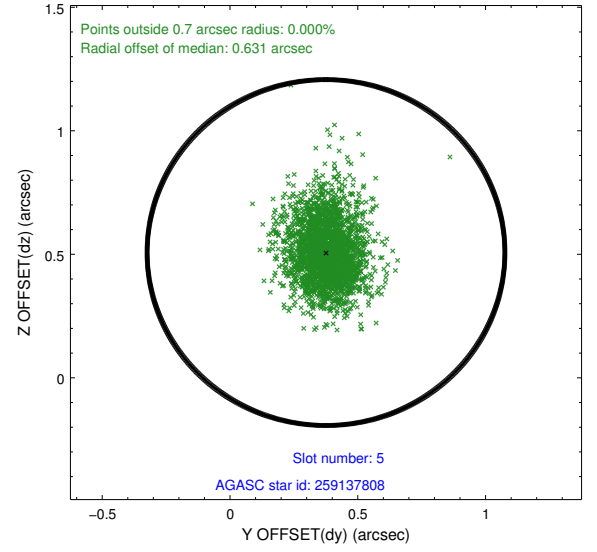
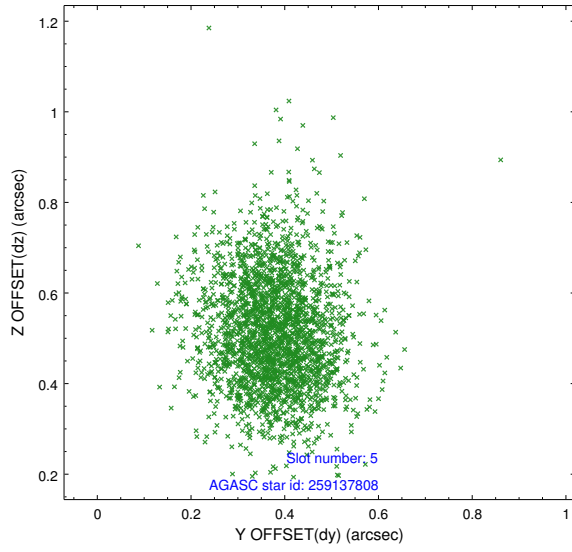
### 2.4.1 Slot 3



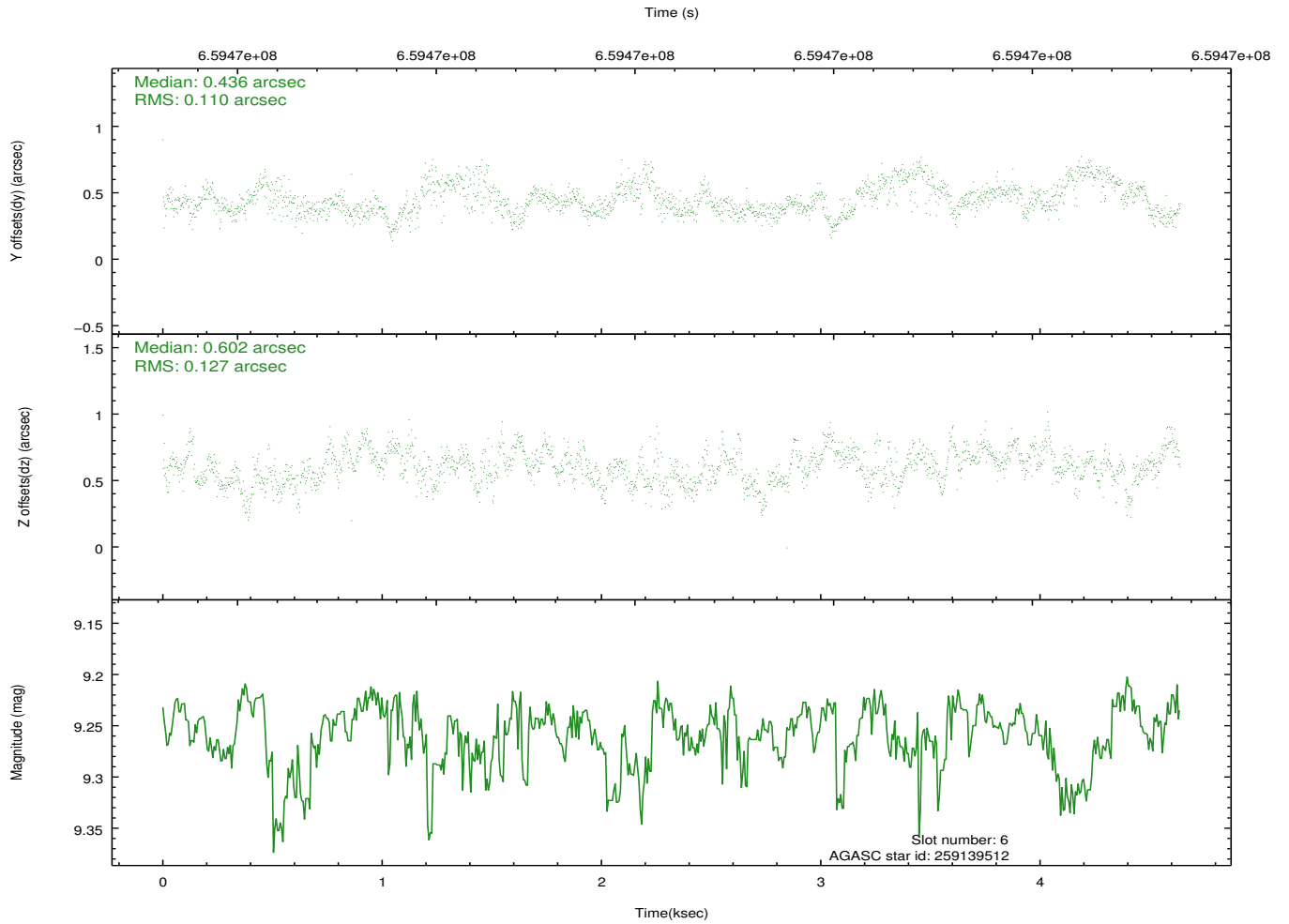
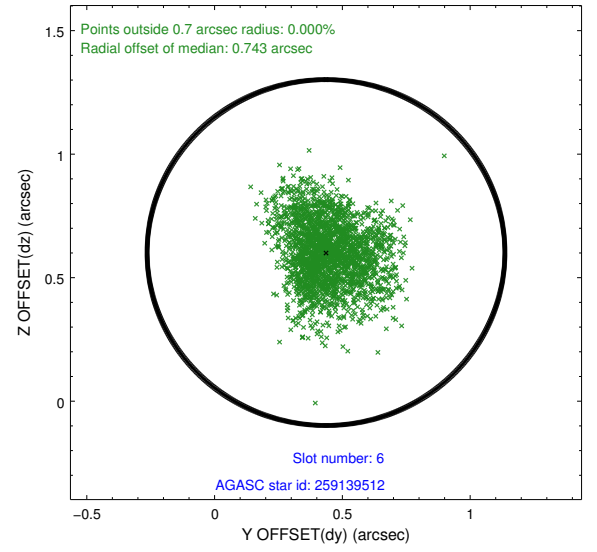
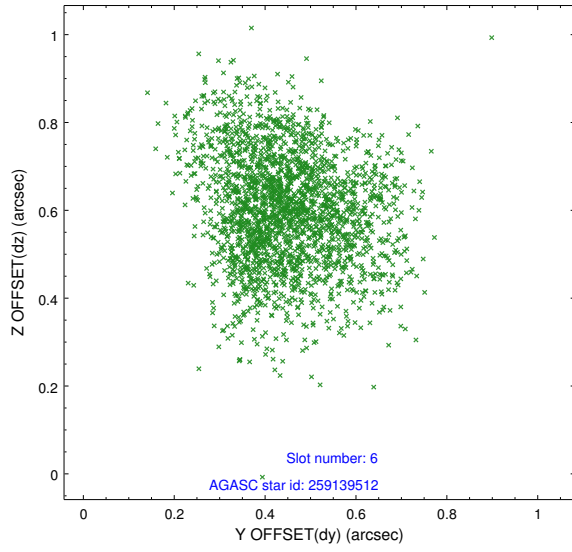
## 2.4.2 Slot 4



### 2.4.3 Slot 5

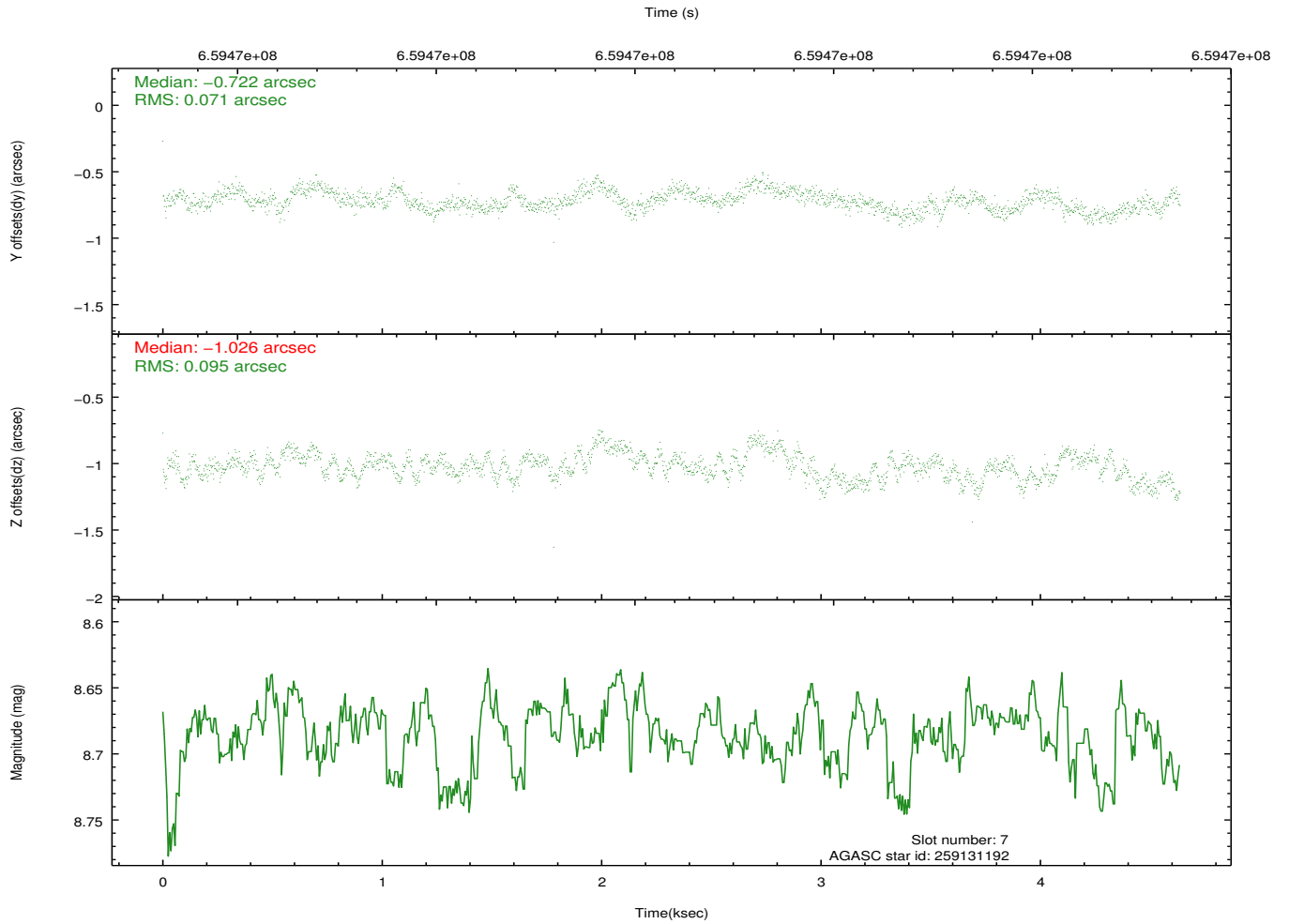
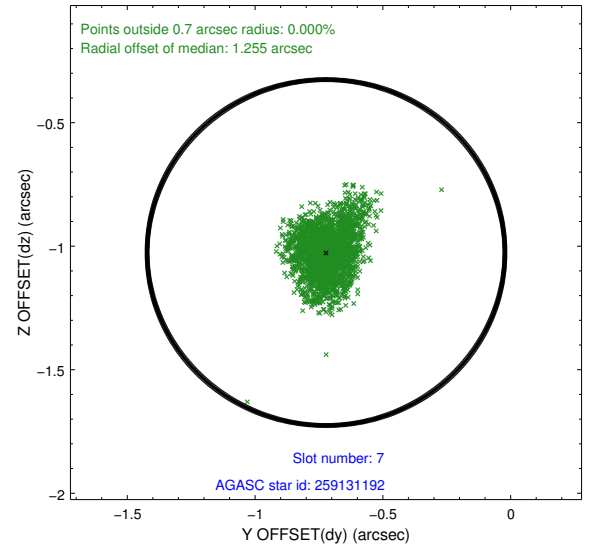
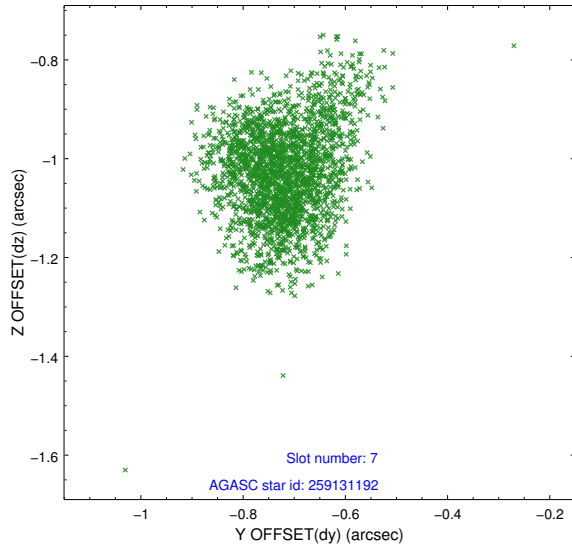


## 2.4.4 Slot 6



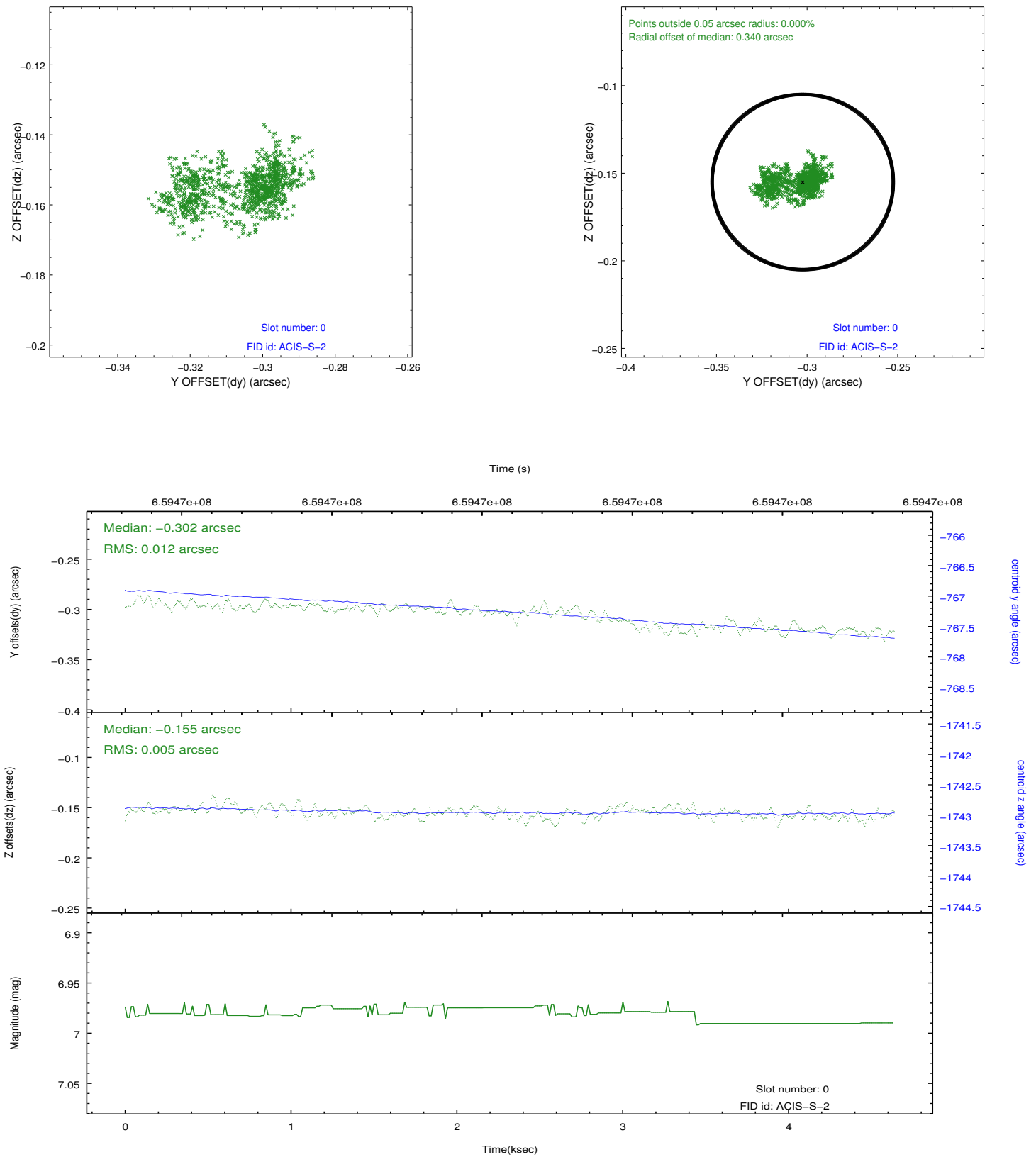


## 2.4.5 Slot 7

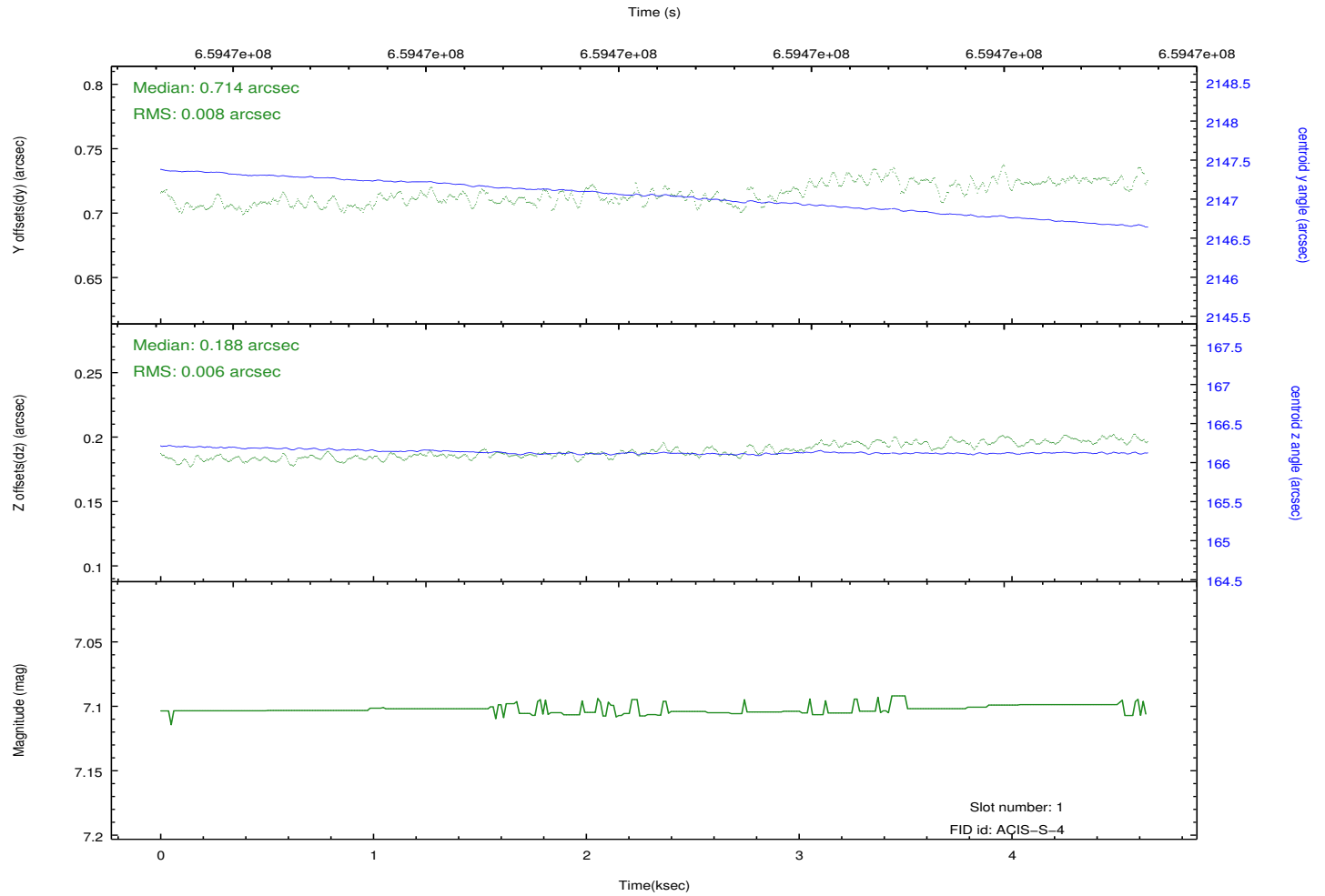
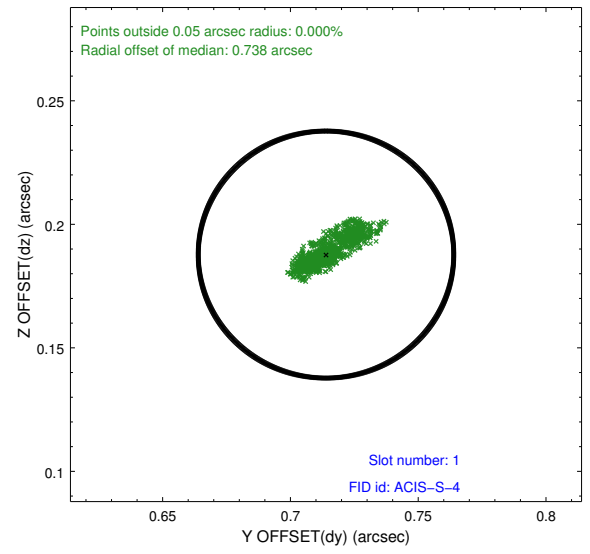
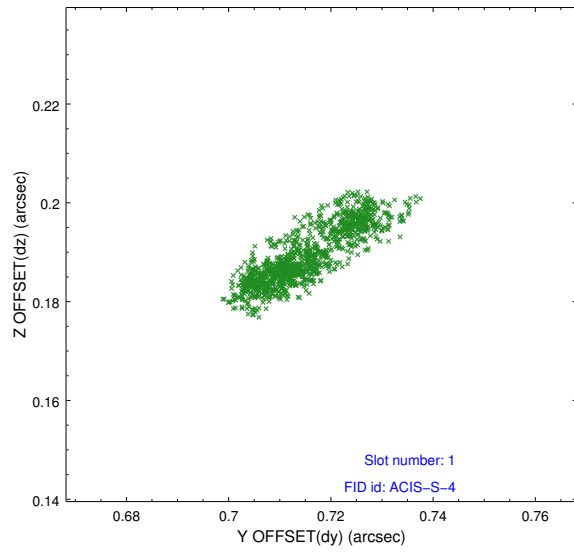


## 2.5 FID Slots

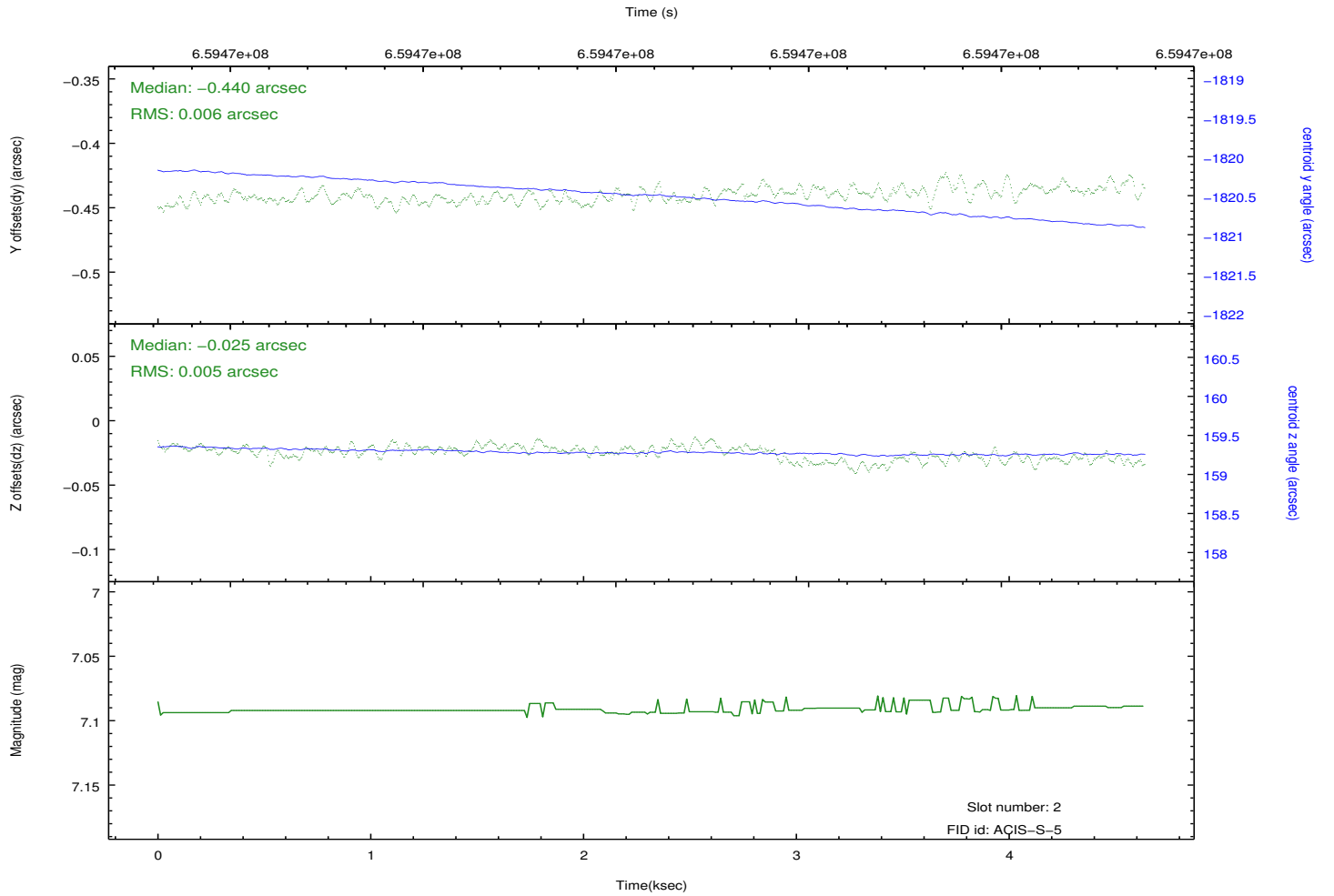
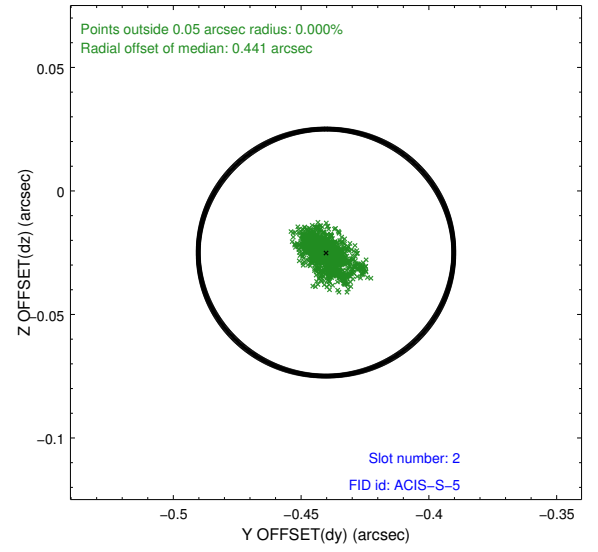
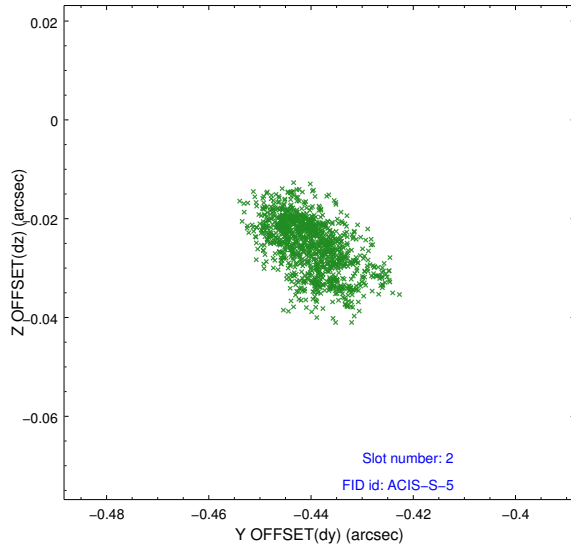
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.11.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.5652971593142

### A.2 Comments