

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11978 - L2 Version 2  
Chandra X-Ray Center

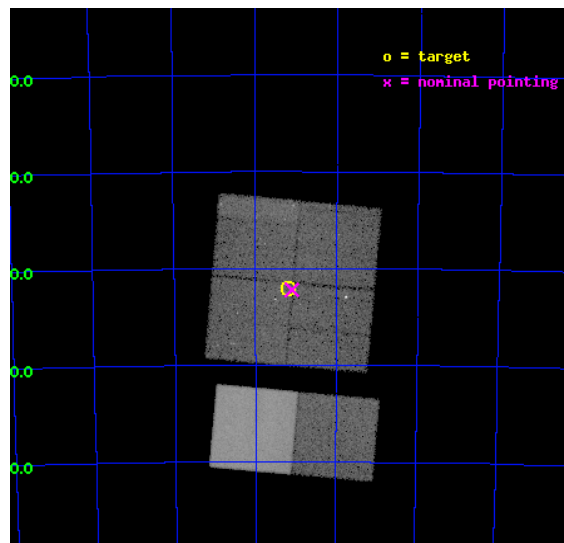
L2 Processing Date : Jun 24 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

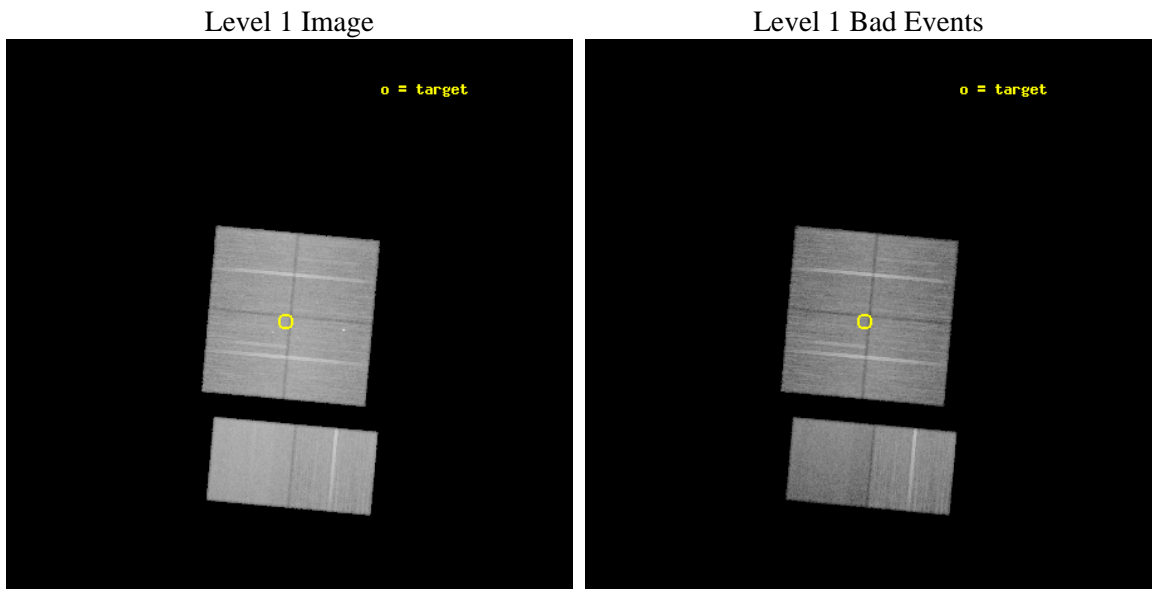
seq_num	200617	Sequence number
obs_id	11978	Observation id
title	Cosmic archaeology with Chandra: from a supergiant shell to young stellar objects in NGC 602	Proposal title
observer	Dr. Lidia Oskinova	Principal investigator
object	NGC 602	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	22.301667	Observer's specified target RA [deg]
dec_targ	-73.533806	Observer's specified target Dec [deg]
ra_nom	22.275290637389	Nominal RA [deg]
dec_nom	-73.536901541714	Nominal Dec [deg]
roll_nom	185.18338979227	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32156.396442294	Sum of GTIs [s]
livetime	31749.212788284	Livetime [s]
ontime0	32156.273322284	Sum of GTIs [s]
ontime1	32153.073391914	Sum of GTIs [s]
ontime2	32156.355402291	Sum of GTIs [s]
ontime3	32156.396442294	Sum of GTIs [s]
ontime6	32153.237522066	Sum of GTIs [s]
ontime7	32156.437482297	Sum of GTIs [s]
l2events	238401	Number of level 2 events



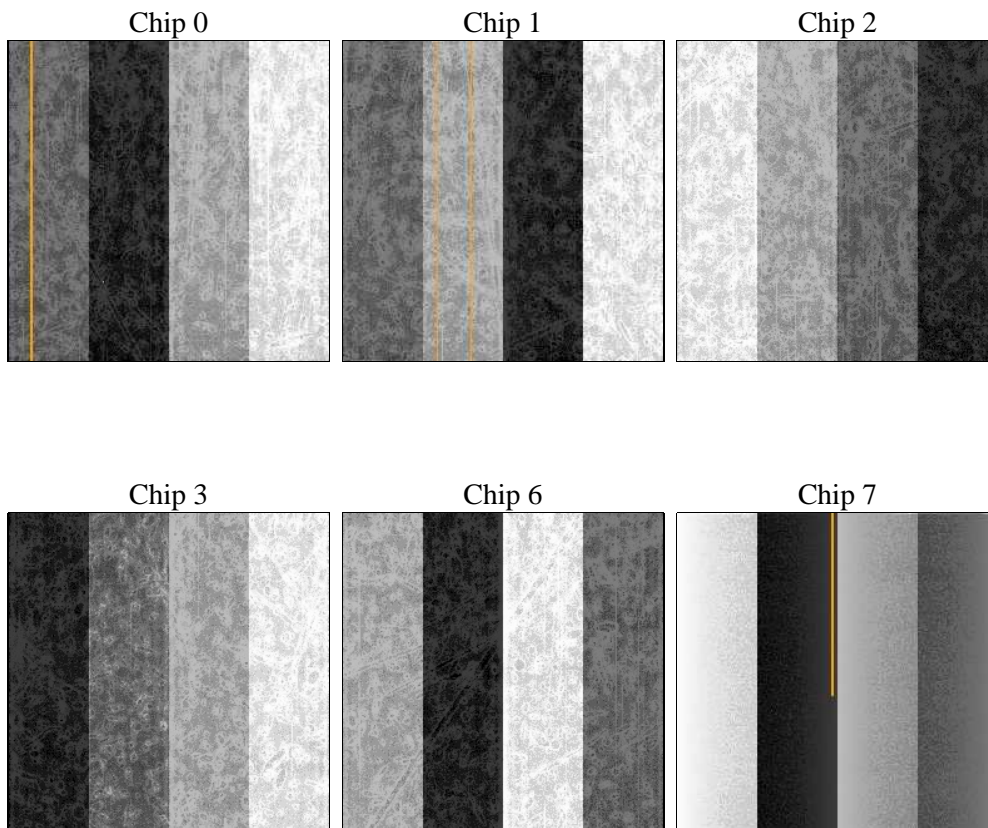
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	32156.396442294	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	32156.273322284	Sum of GTIs [s]
date	2012-06-24T09:07:58	Date and time of file creation	ontime1	32153.073391914	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	32156.355402291	Sum of GTIs [s]
			ontime3	32156.396442294	Sum of GTIs [s]
			ontime6	32153.237522066	Sum of GTIs [s]
			ontime7	32156.437482297	Sum of GTIs [s]
			l1events	1455932	Number of level 1 events

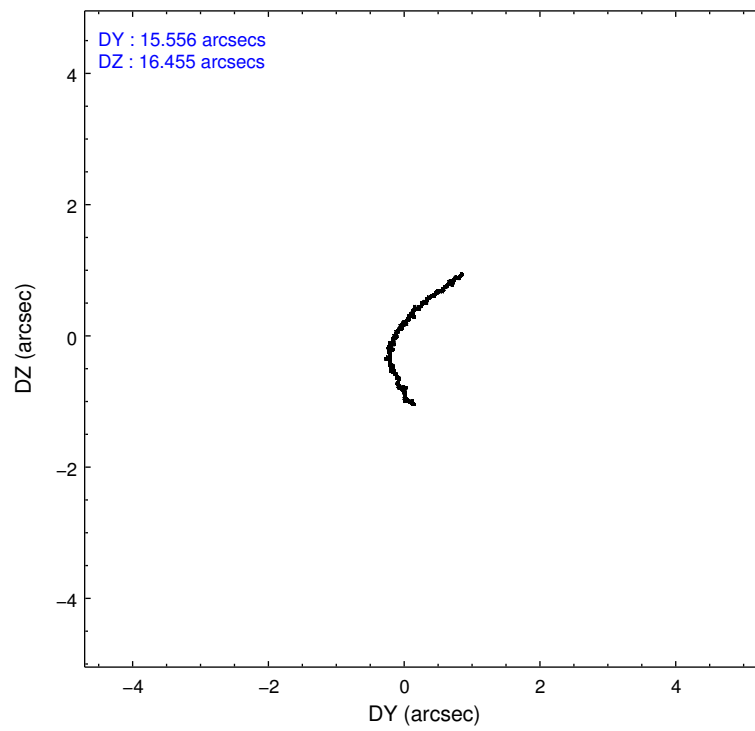
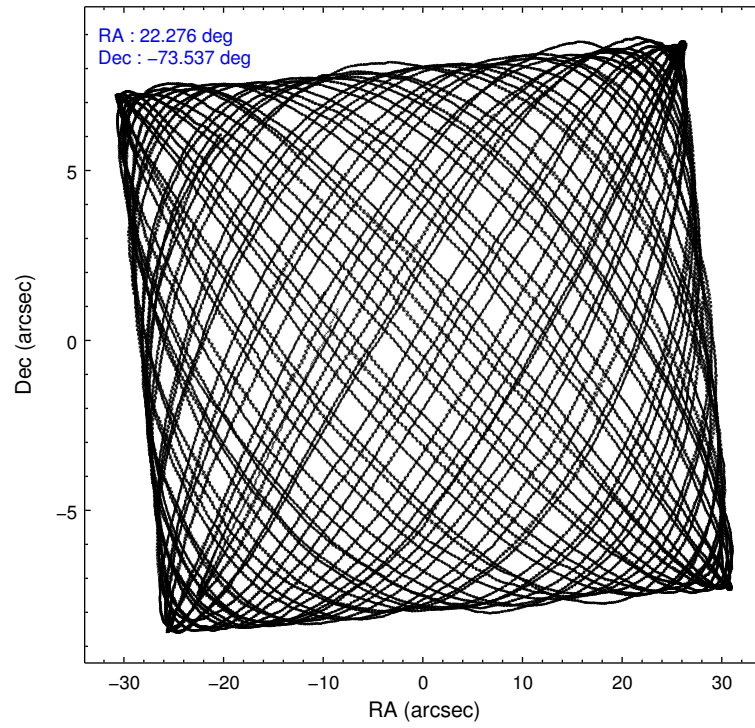
### 2.1.4 Events

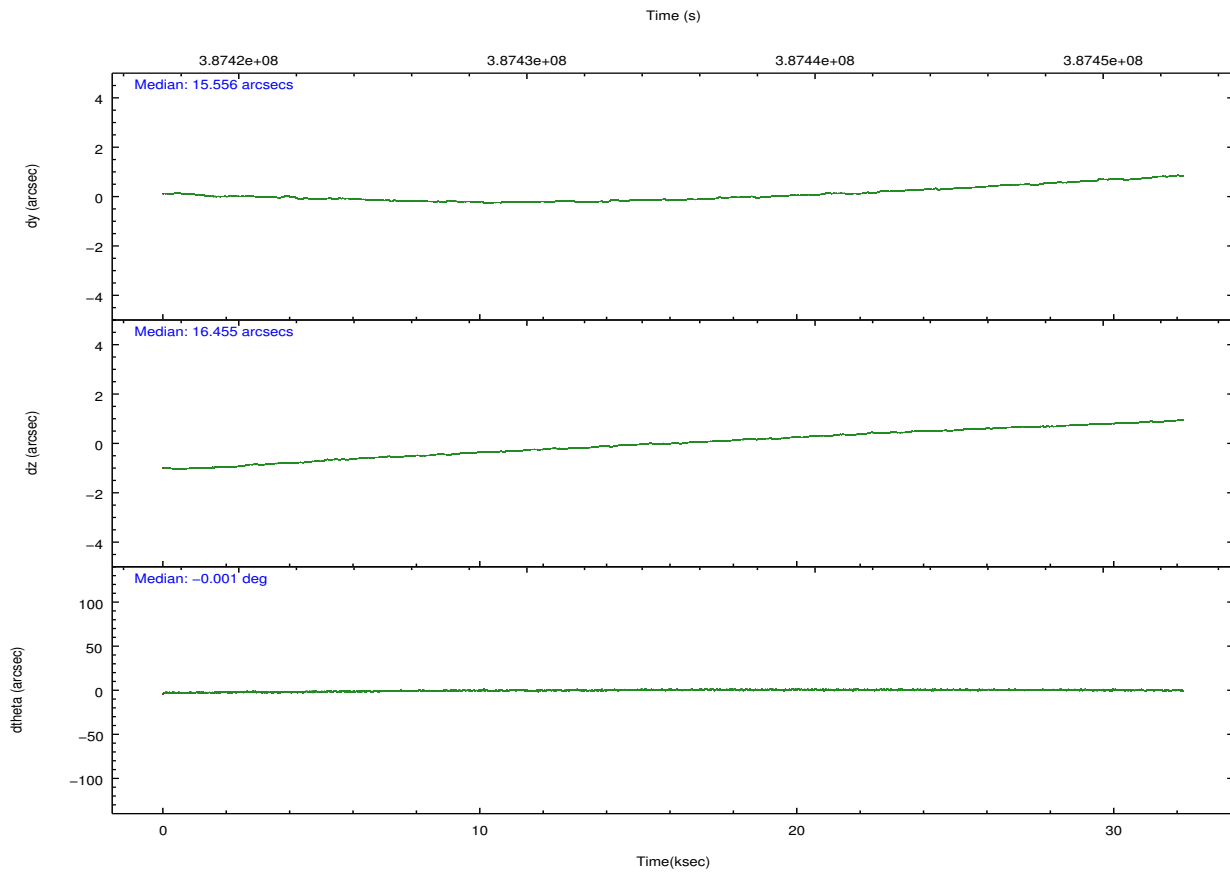
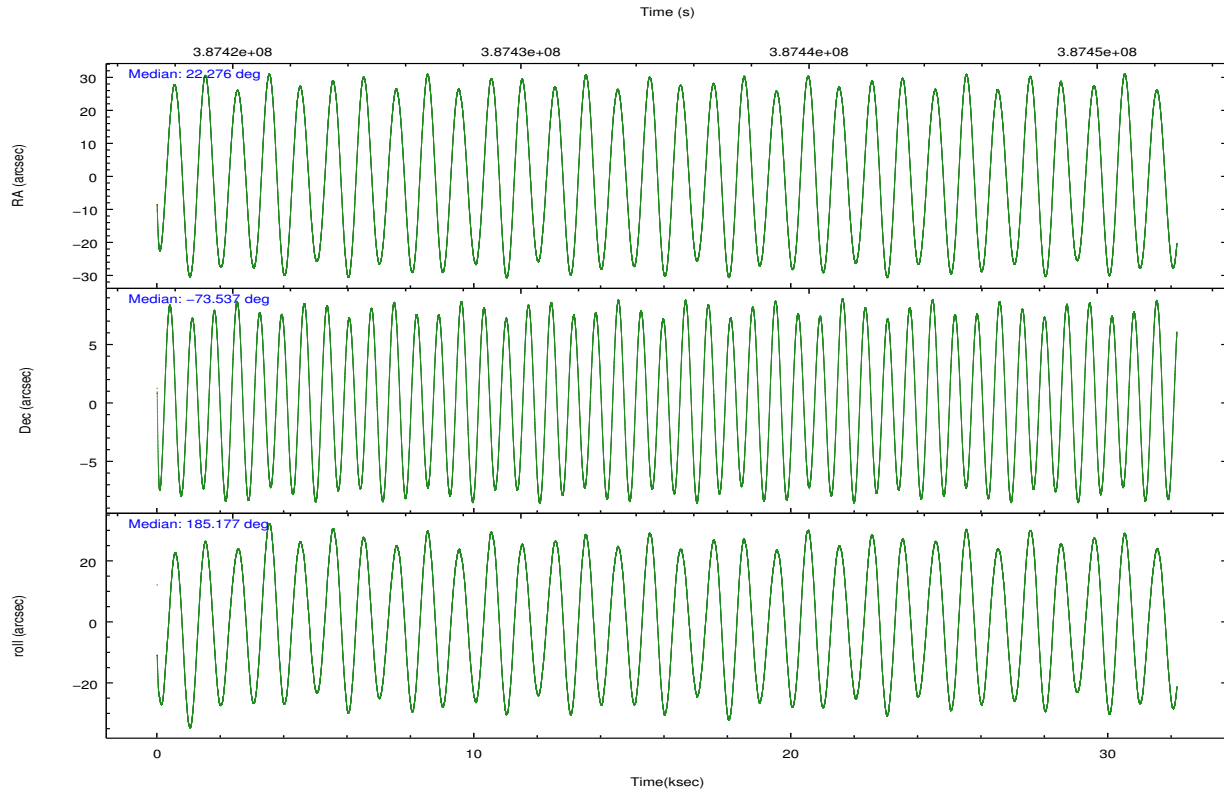
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	213749	220694	243672	234818	254973	288026	grade 0 events	9078	10223	10511	8787	9001	12007
rejected events	188052	192154	216379	210387	228410	157279		4%	4%	4%	3%	3%	4%
rejected %	87%	87%	88%	89%	89%	54%	grade 1 events	135	104	160	150	146	374
								0%	0%	0%	0%	0%	0%
							grade 2 events	6351	6546	6537	5420	6010	27055
								2%	2%	2%	2%	2%	9%
							grade 3 events	2774	3000	2691	2589	2930	11936
								1%	1%	1%	1%	1%	4%
							grade 4 events	2514	2963	2745	2645	2730	11675
								1%	1%	1%	1%	1%	4%
							grade 5 events	9424	9962	8870	10654	10677	30199
								4%	4%	3%	4%	4%	10%
							grade 6 events	4982	5810	4811	4991	5892	68089
								2%	2%	1%	2%	2%	23%
							grade 7 events	178491	182086	207347	199582	217587	126691
								83%	82%	85%	84%	85%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	22.354307	22.2752906373895	CCD I2 on	Y	Y
[deg] Pointing Dec	-73.520938	-73.53690154171352	CCD I3 on	Y	Y
[deg] Pointing Roll	185.050478	185.183389792269	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	387419160.184000	387418101.40412	CCD S5 on	N	N
Observation start date	2010-04-12T00:24:54	2010-04-12T00:08:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	387451160.184000	387452589.06837	On-chip summing requested	N	N
Observation end date	2010-04-12T09:18:14	2010-04-12T09:43:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



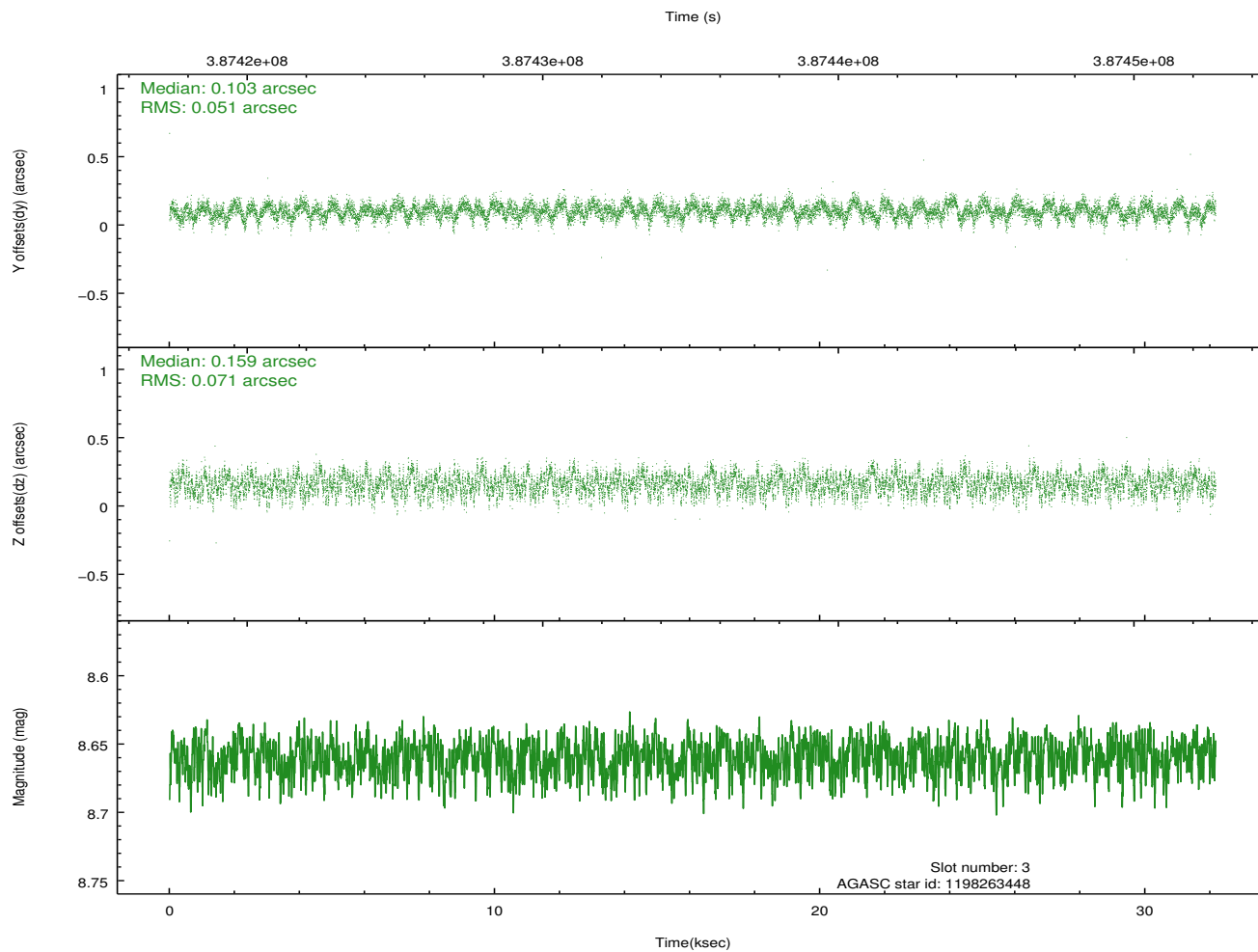
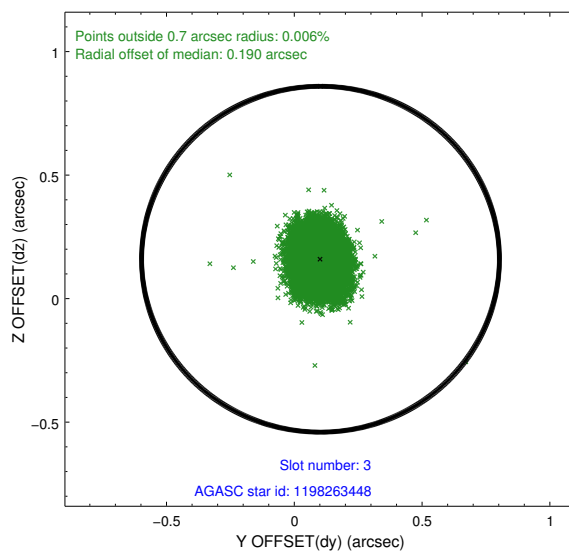
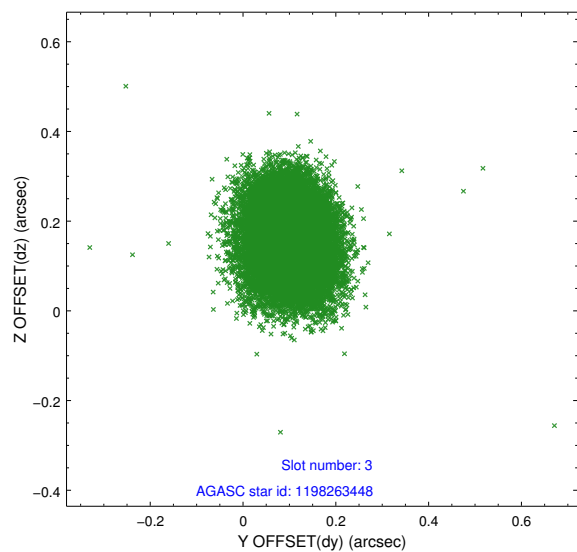


### Slot Statistics

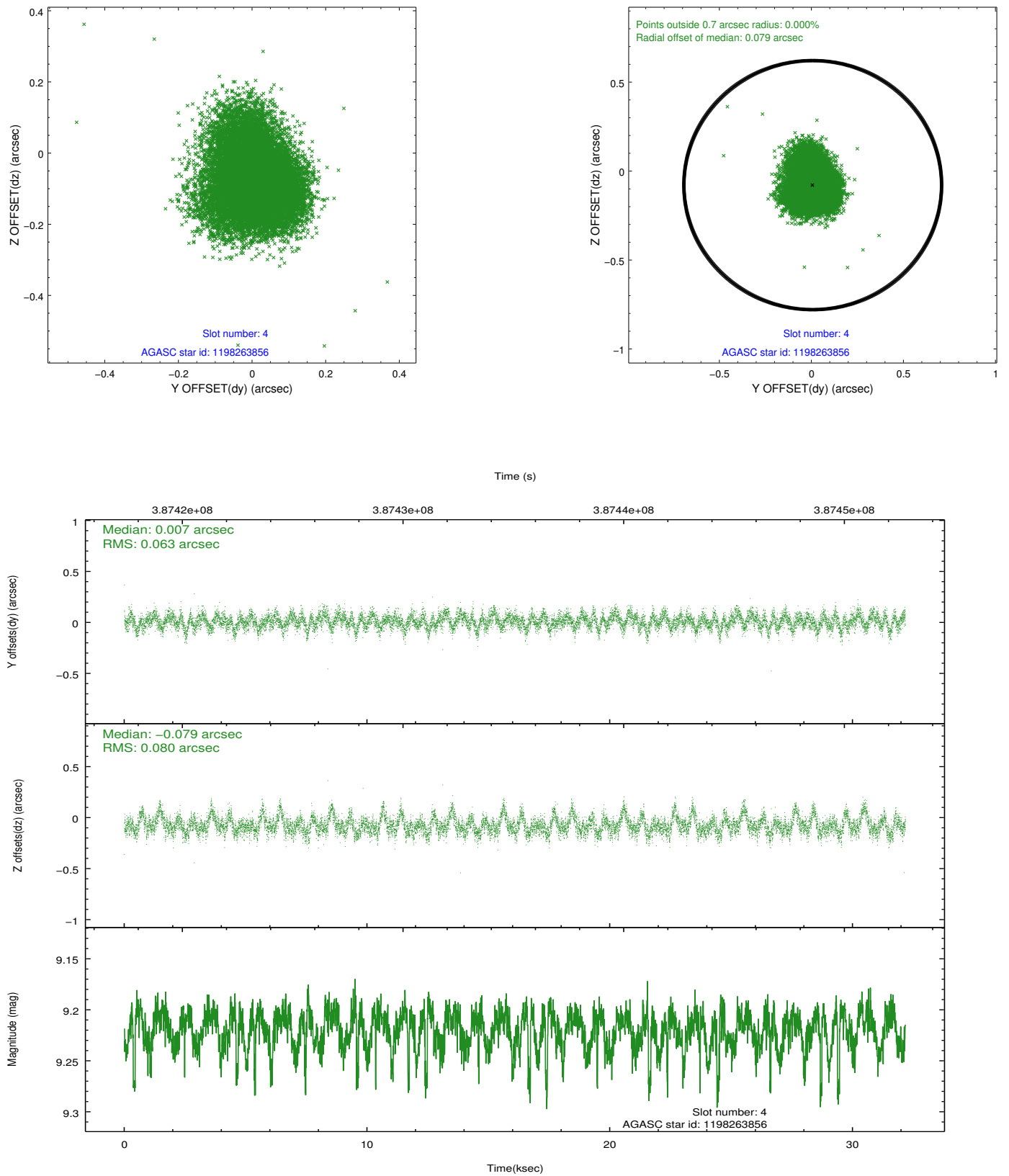
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.06	7847	0.064	-0.040	0.012	0.023	0.000000	0.000000	923.84	-840.13
1	FID	ACIS-I-5	7.06	7848	-0.224	0.062	0.011	0.023	0.000000	0.000000	-1824.50	1057.46
2	FID	ACIS-I-6	7.06	7848	0.069	0.052	0.017	0.024	0.000000	0.000000	389.36	1702.00
3	GUIDE	1198263448	8.66	15687	0.103	0.159	0.093	0.148	23.988893	-72.831877	-1946.03	-2294.69
4	GUIDE	1198263856	9.22	15664	0.007	-0.079	0.107	0.178	23.344483	-73.858921	-879.23	1307.23
5	GUIDE	1198264032	8.00	15693	0.080	-0.043	0.068	0.106	22.563131	-73.173817	-325.84	-1224.83
6	GUIDE	1198269920	8.27	15689	-0.022	0.124	0.093	0.151	20.316466	-73.033728	1981.11	-1898.99
7	GUIDE	1198272400	9.17	15587	-0.168	-0.162	0.087	0.142	20.411923	-73.620598	1998.54	215.80

## 2.4 Star Slots

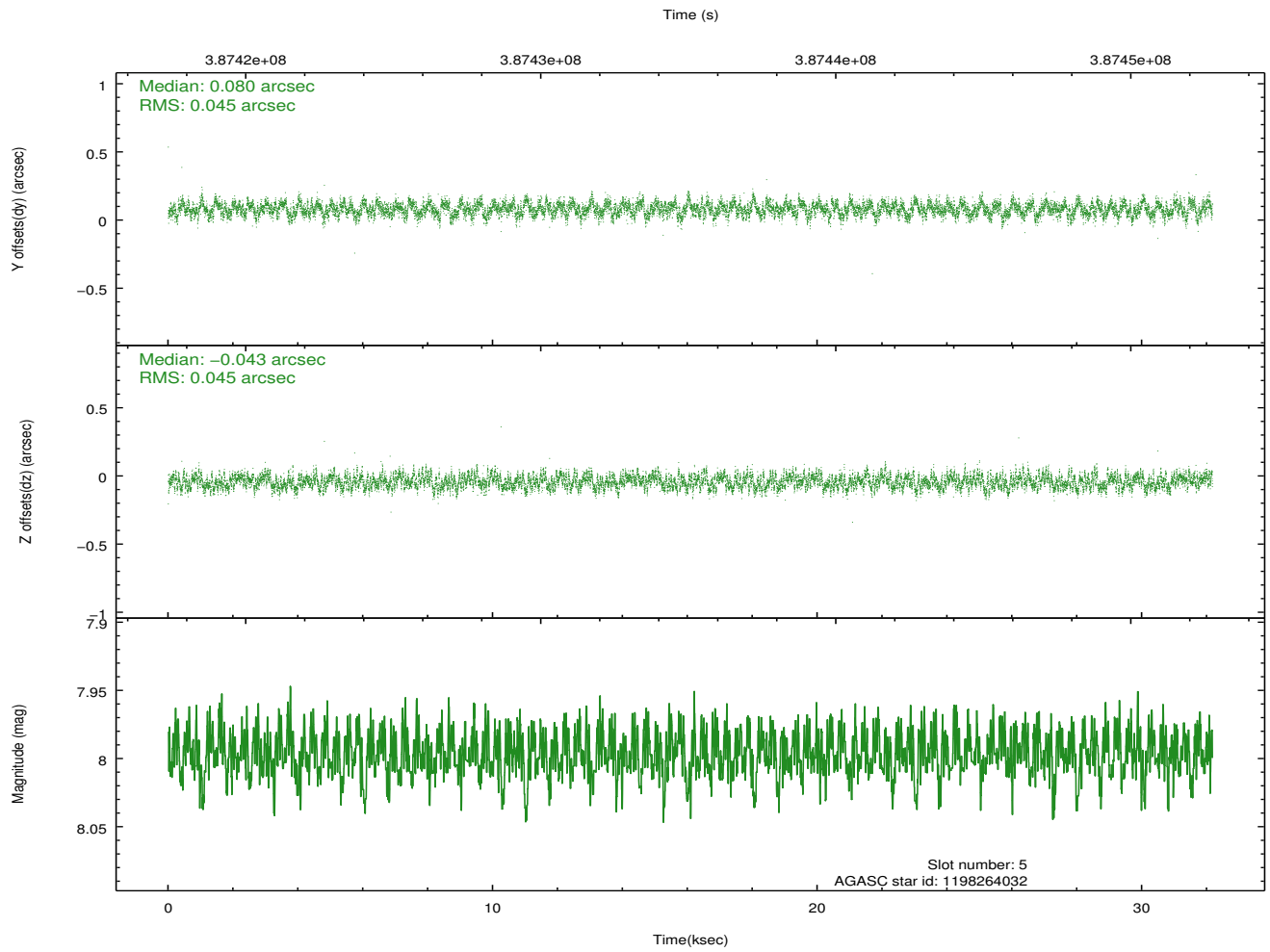
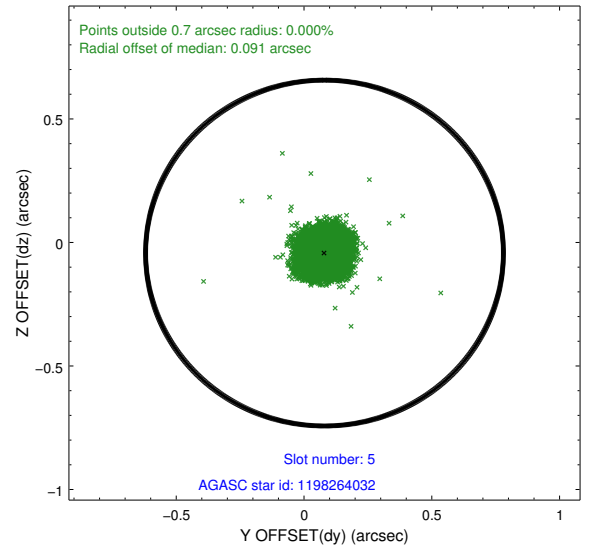
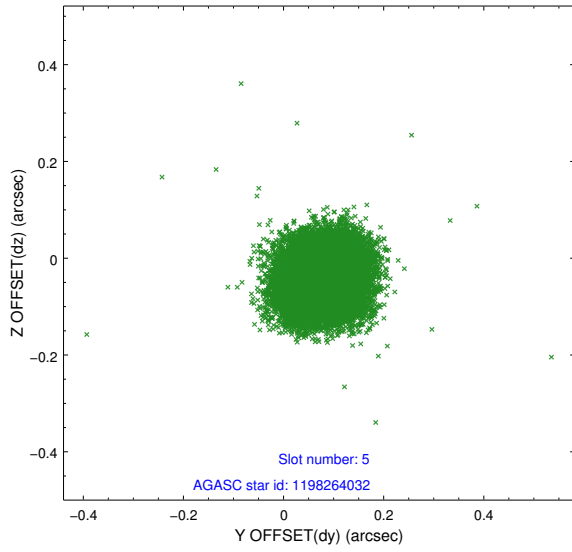
### 2.4.1 Slot 3



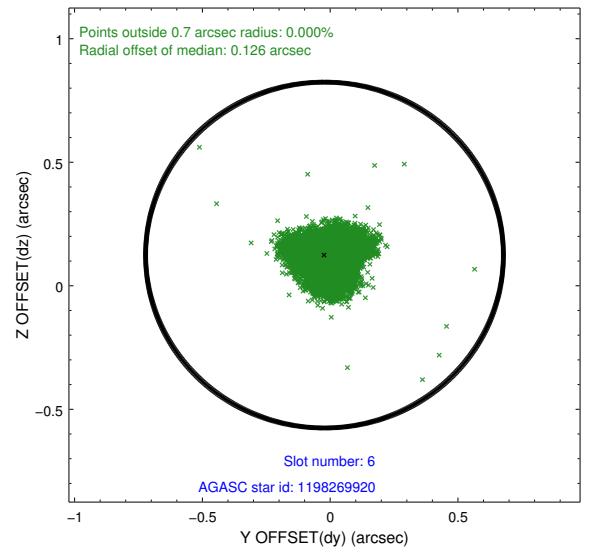
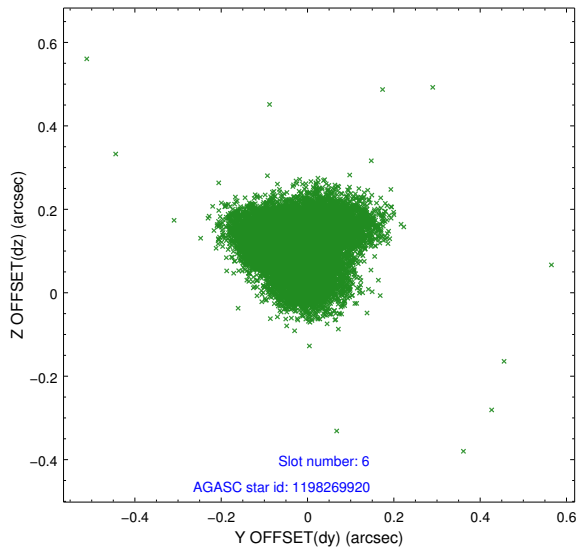
## 2.4.2 Slot 4



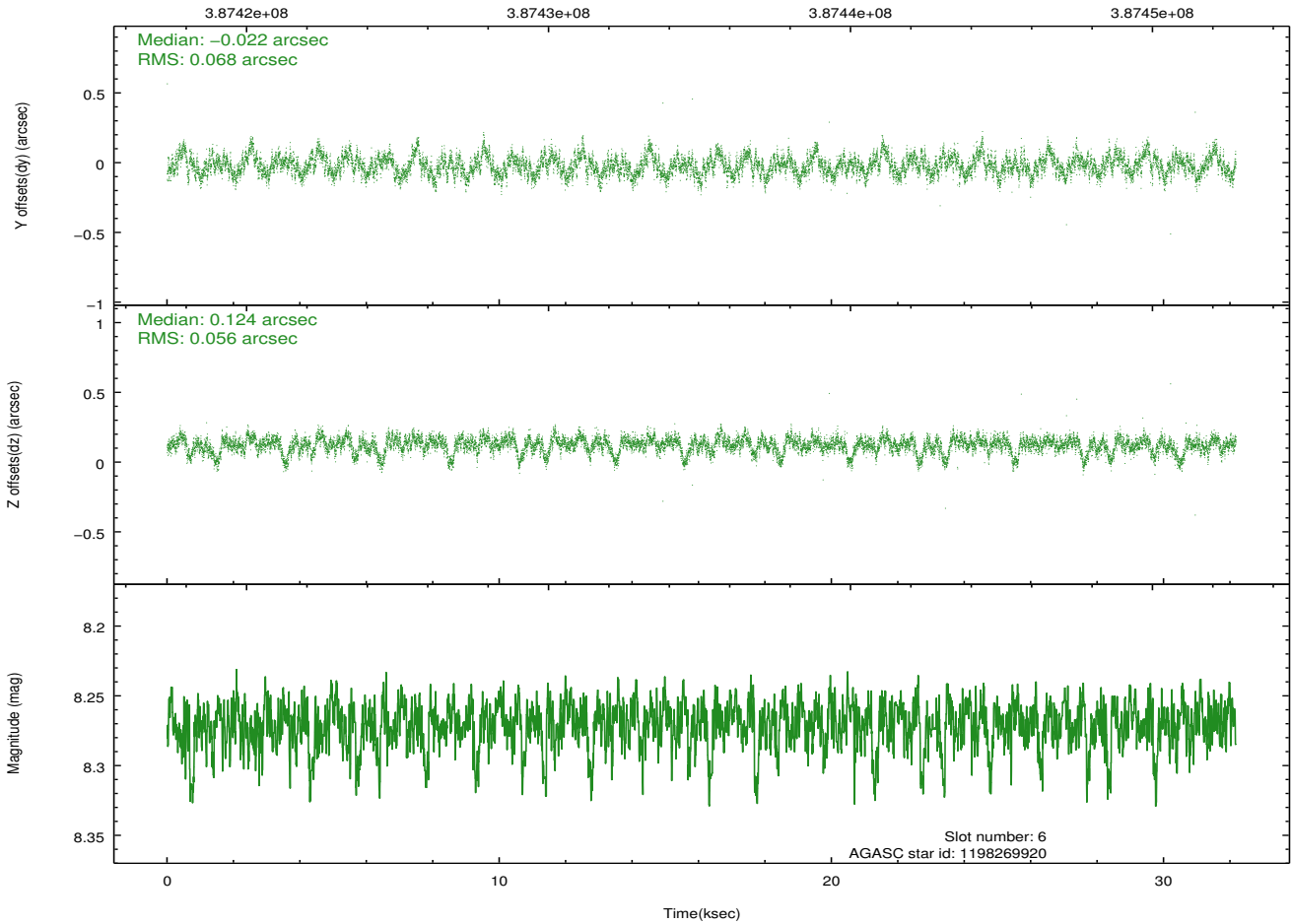
### 2.4.3 Slot 5



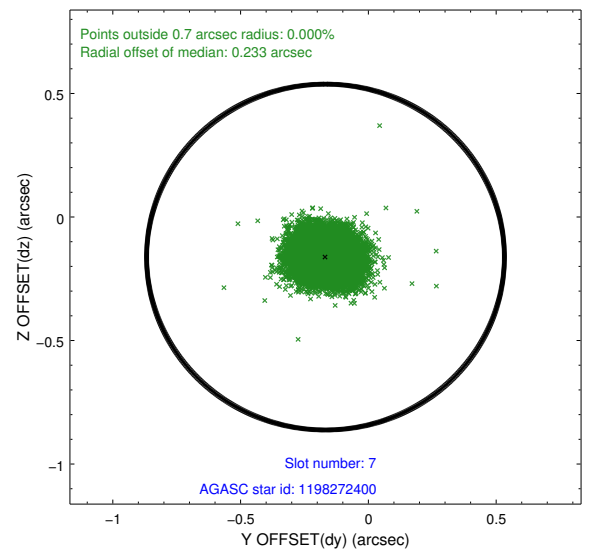
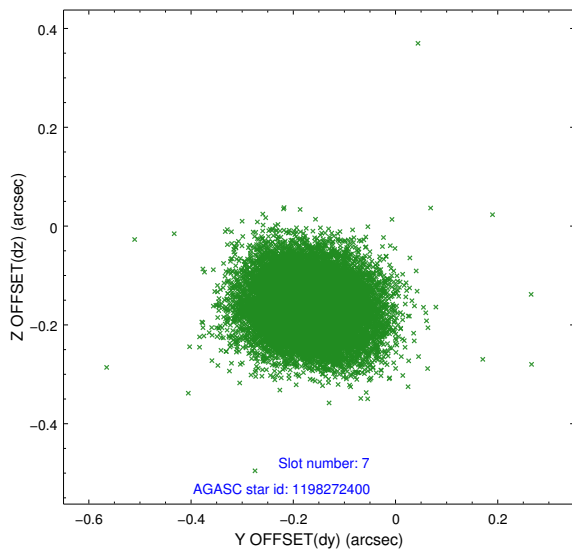
## 2.4.4 Slot 6



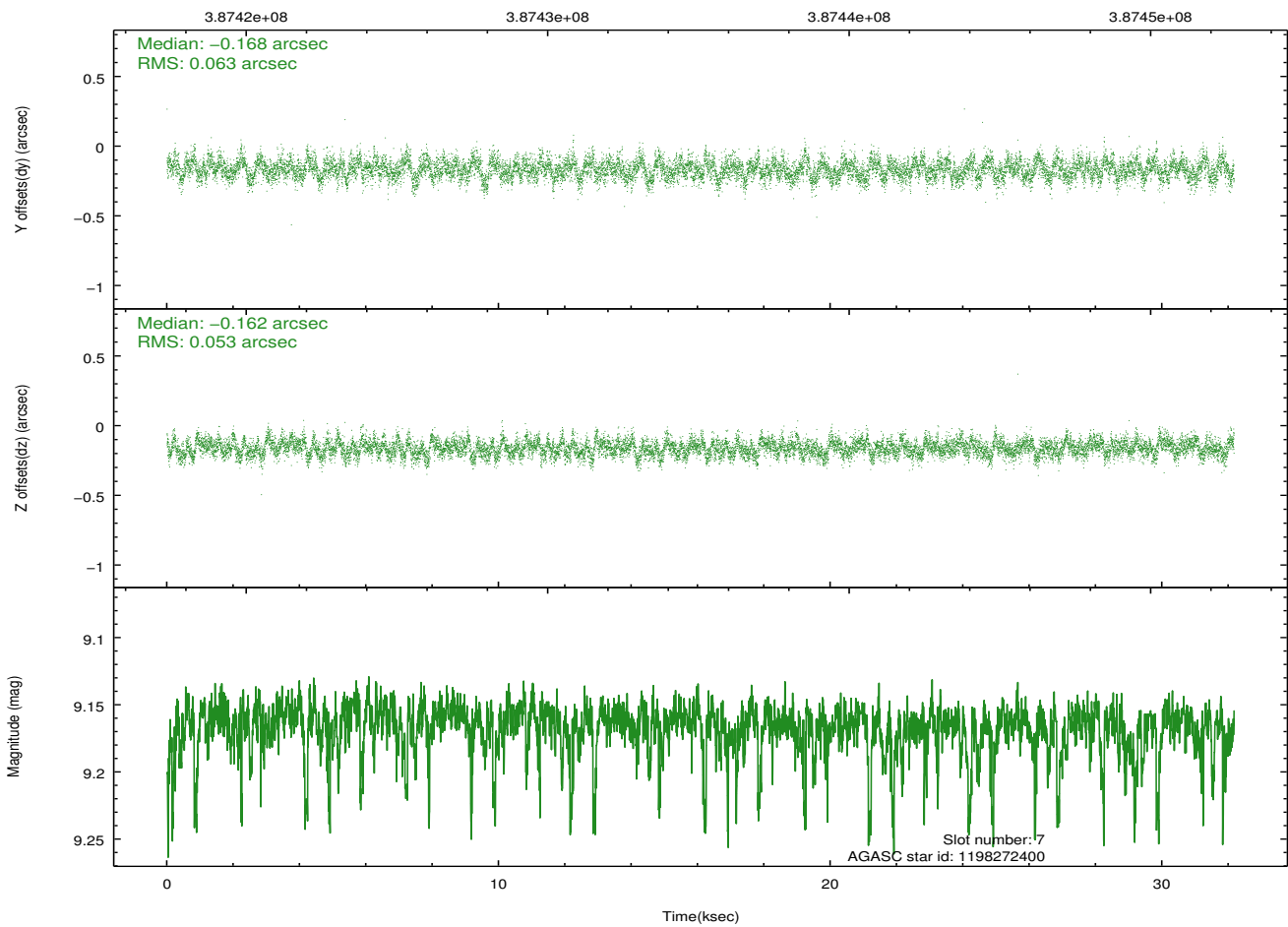
Time (s)



## 2.4.5 Slot 7

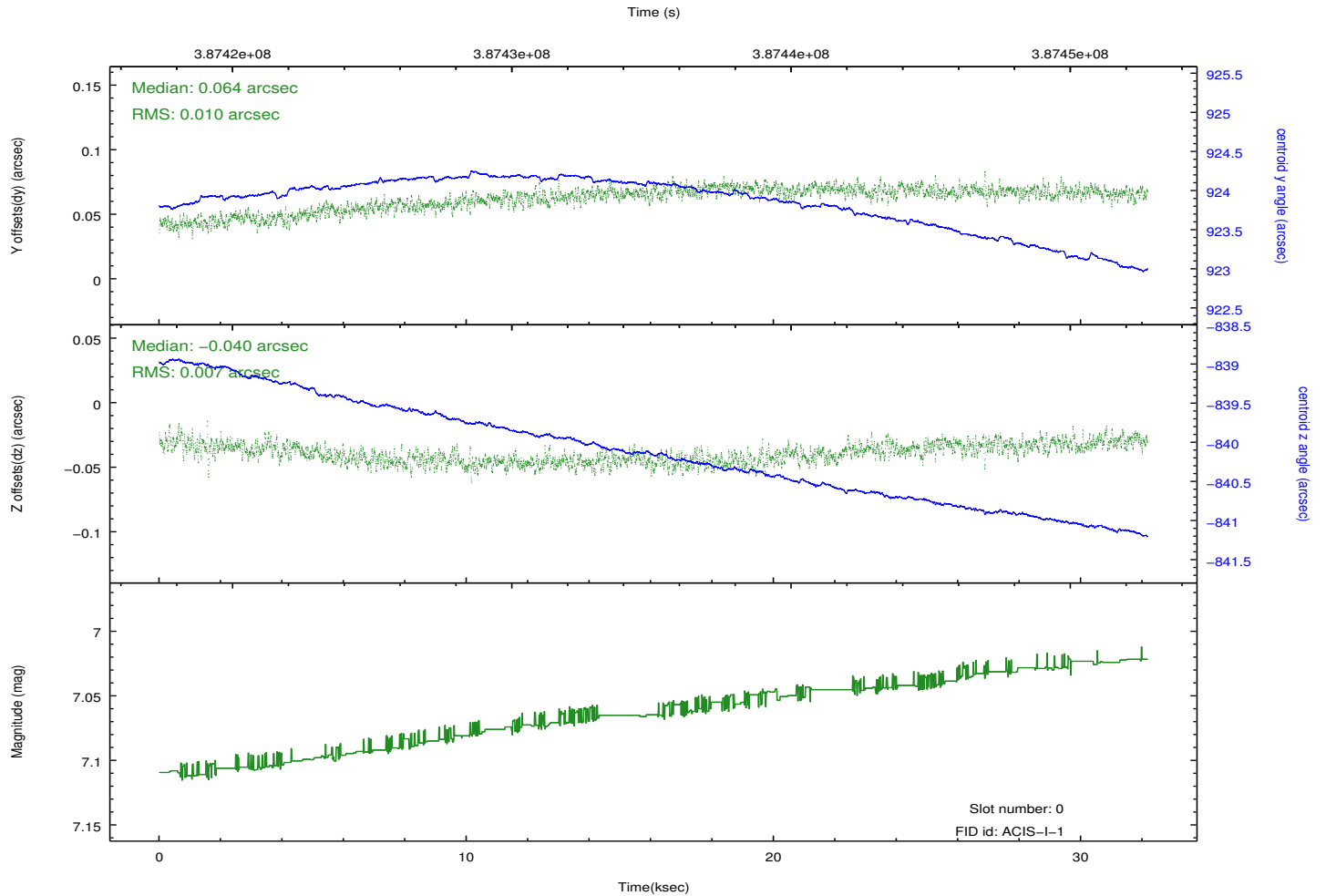
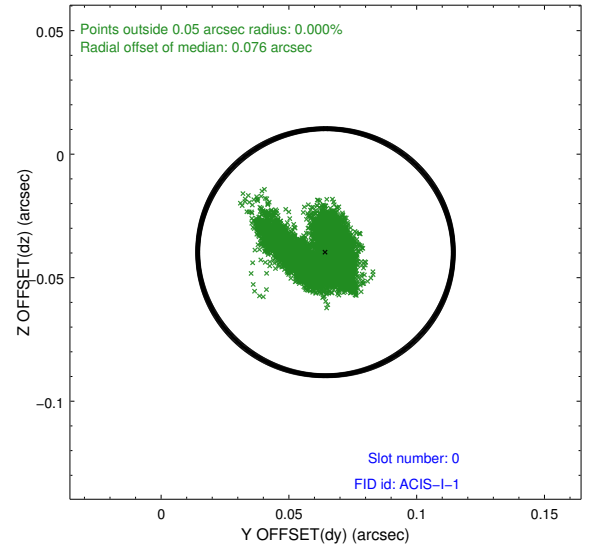
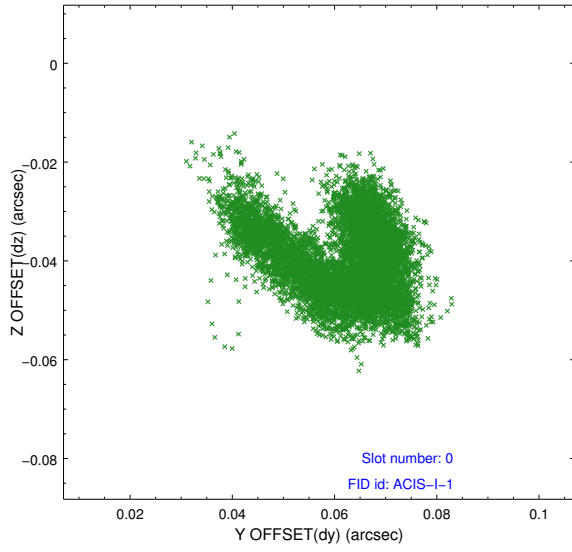


Time (s)

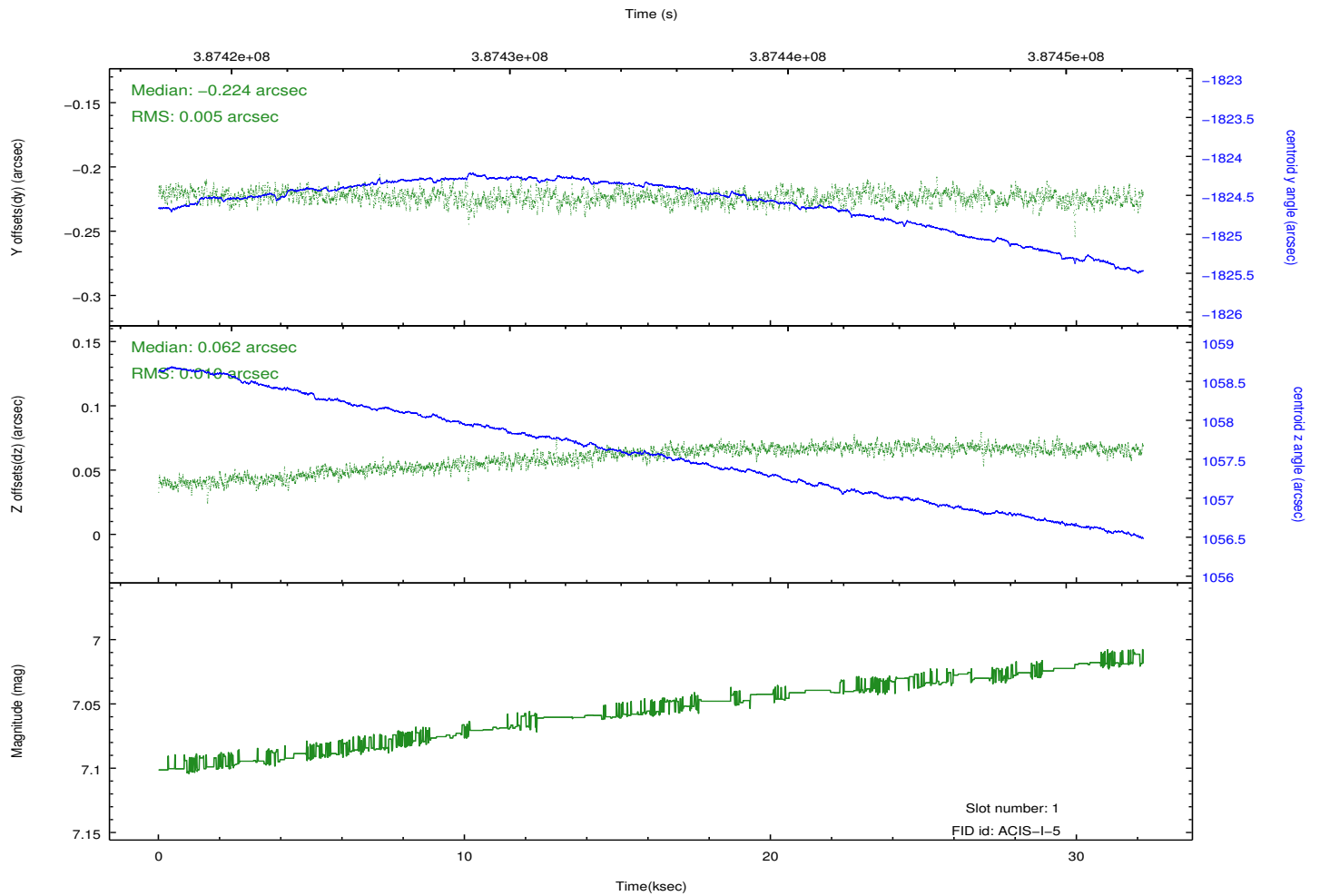
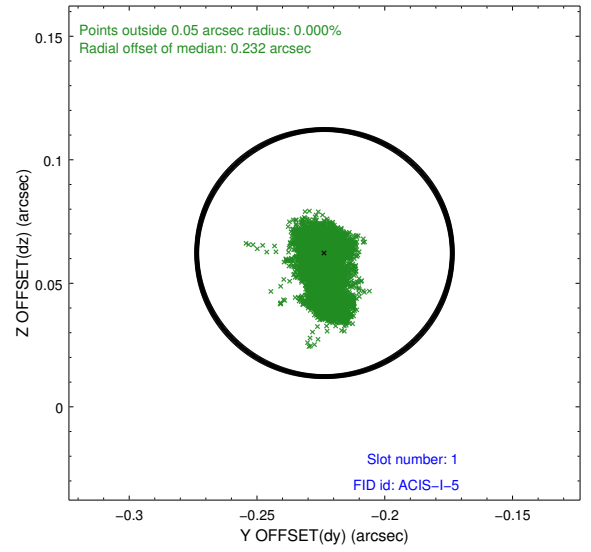
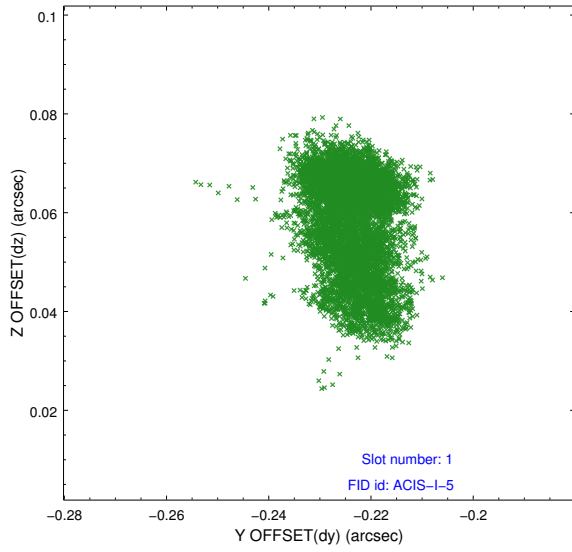


## 2.5 FID Slots

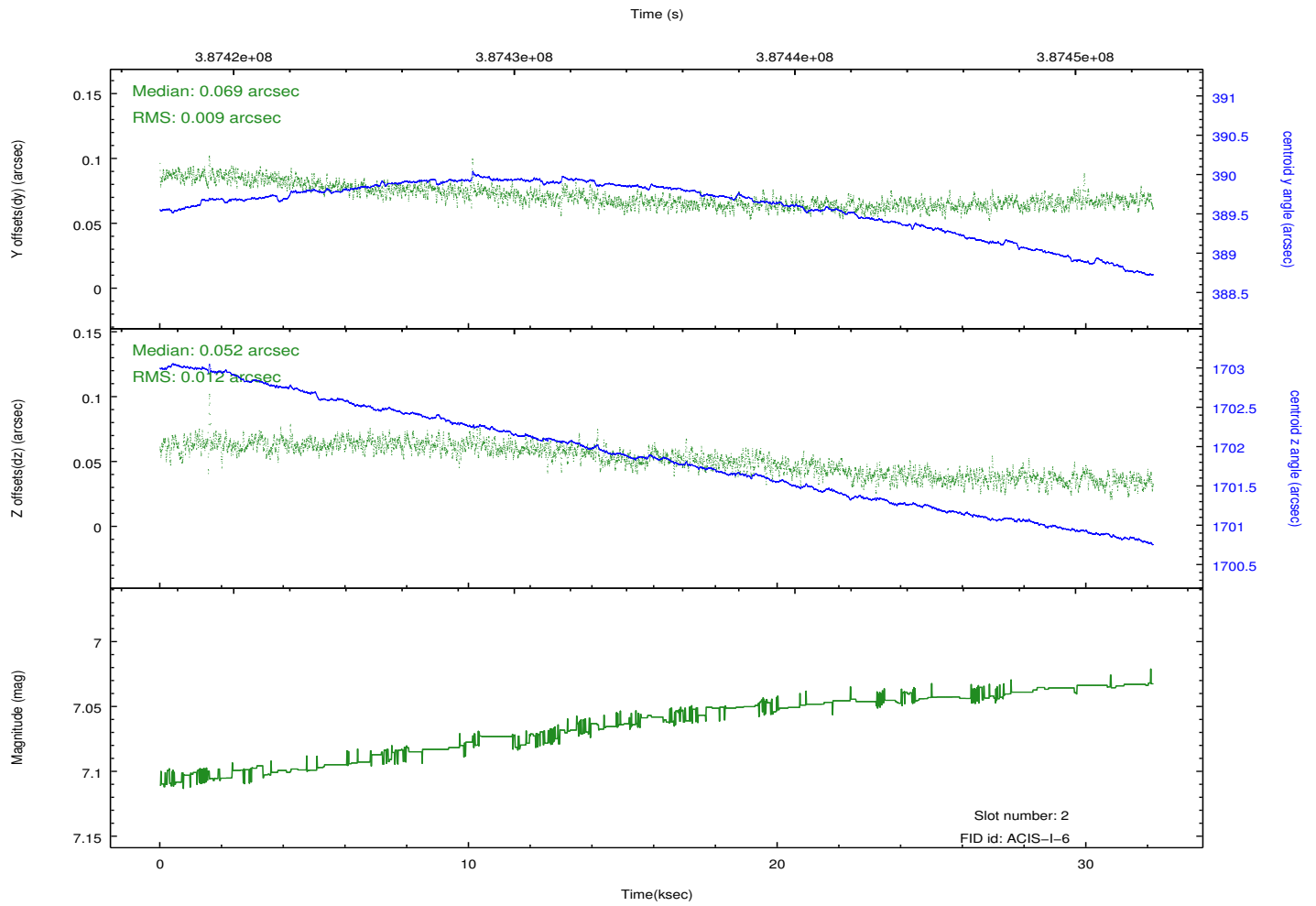
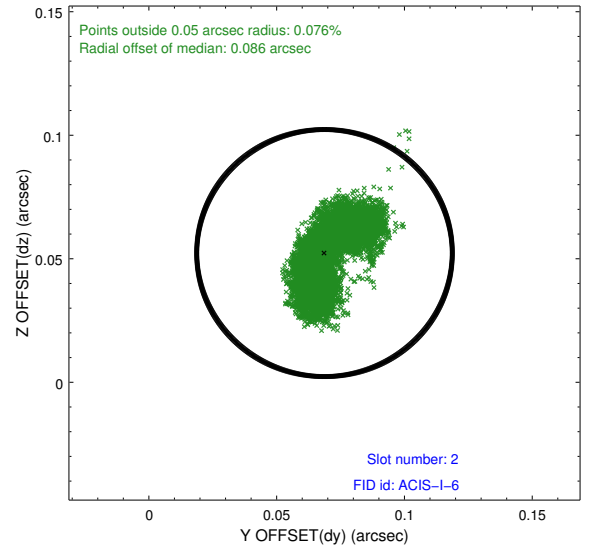
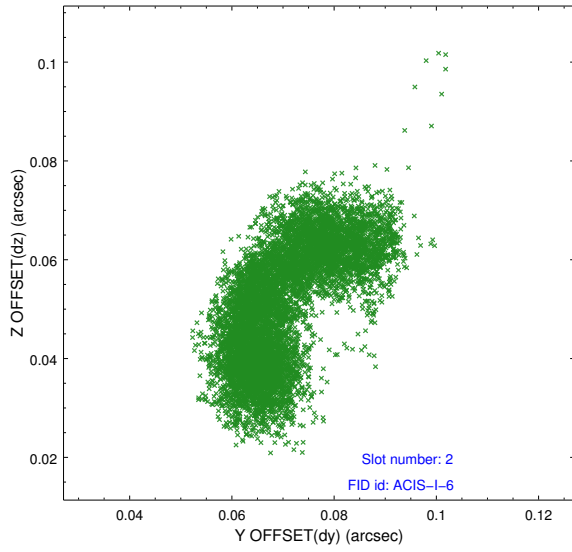
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.07.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.156396443725

### A.2 Comments