

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12136 - L2 Version 2  
Chandra X-Ray Center

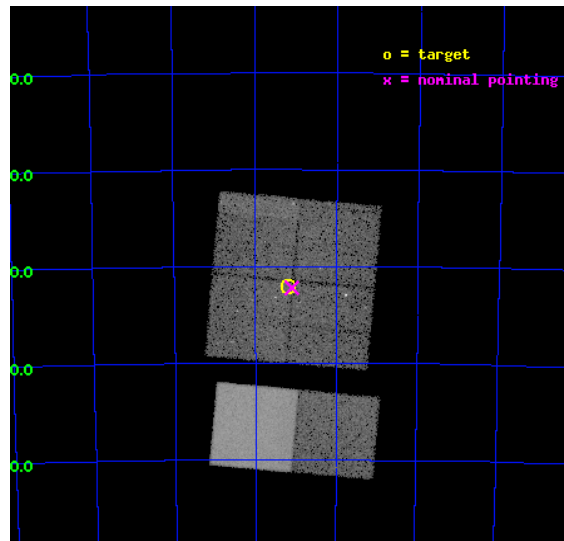
L2 Processing Date : Jun 23 2012

## 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	12136	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	22.2753150677	Nominal RA [deg]
dec_nom	-73.536879206219	Nominal Dec [deg]
roll_nom	185.18341202024	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20745.102381766	Sum of GTIs [s]
livetime	20482.415404207	Livetime [s]
ontime0	20744.979261756	Sum of GTIs [s]
ontime1	20745.020301759	Sum of GTIs [s]
ontime2	20745.061341763	Sum of GTIs [s]
ontime3	20745.102381766	Sum of GTIs [s]
ontime6	20745.184461772	Sum of GTIs [s]
ontime7	20745.143421769	Sum of GTIs [s]
l2events	152559	Number of level 2 events

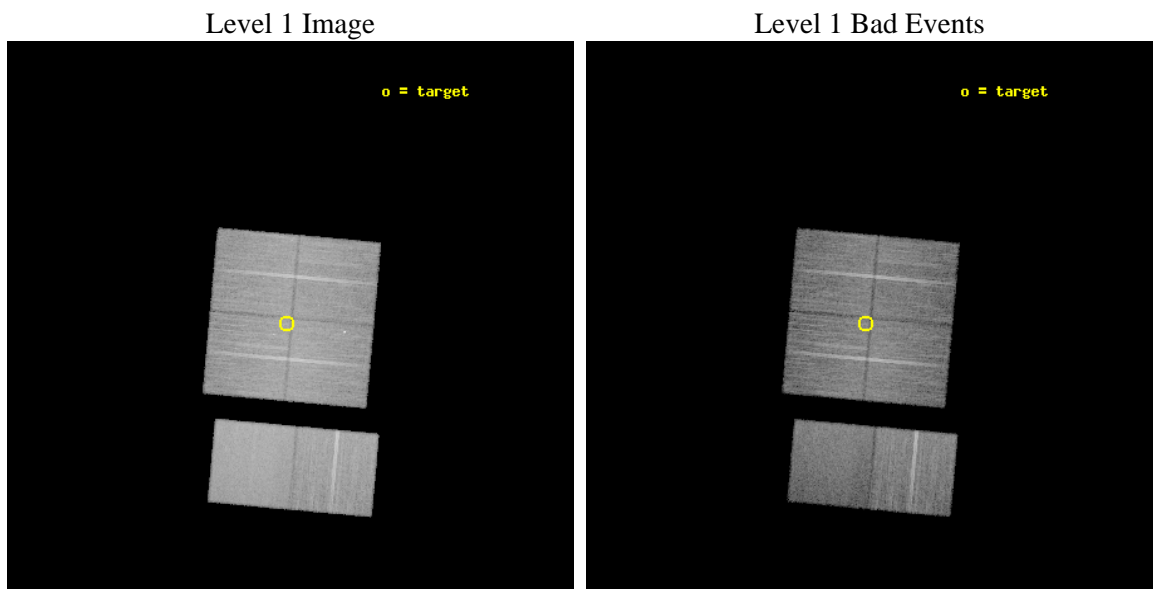




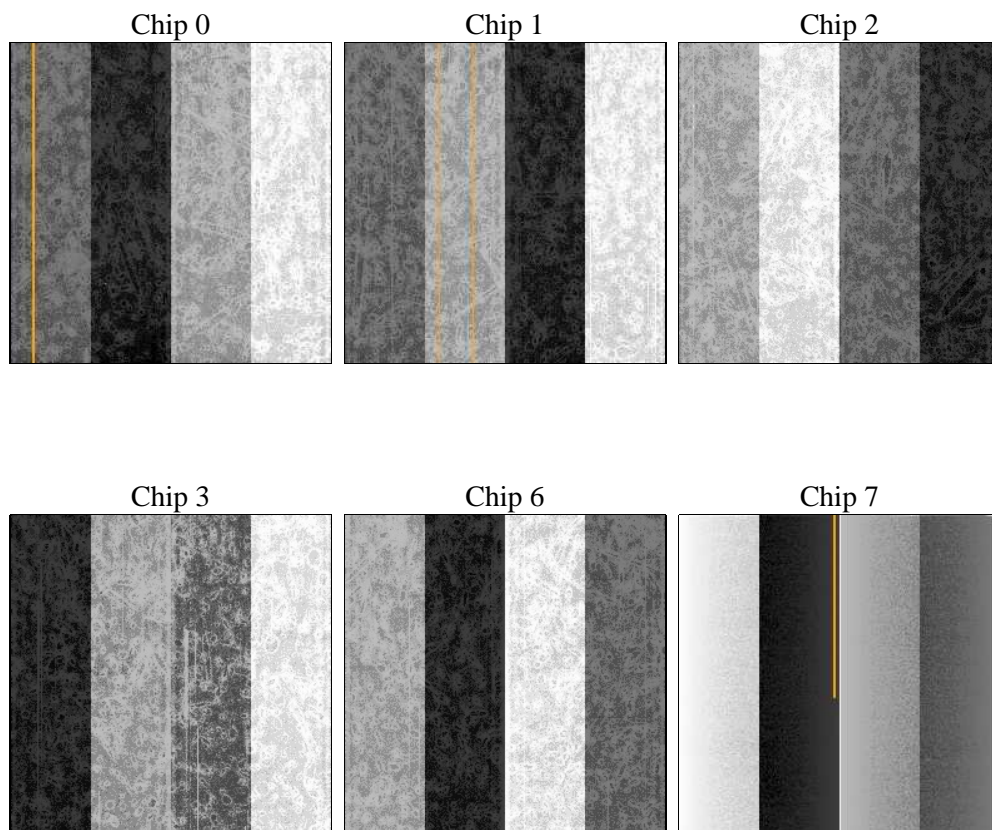
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20689.980000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	20745.102381766	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime0	20744.979261756	Sum of GTIs [s]
date	2012-06-23T19:55:16	Date and time of file creation	ontime1	20745.020301759	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	20745.061341763	Sum of GTIs [s]
			ontime3	20745.102381766	Sum of GTIs [s]
			ontime6	20745.184461772	Sum of GTIs [s]
			ontime7	20745.143421769	Sum of GTIs [s]
			l1events	924847	Number of level 1 events

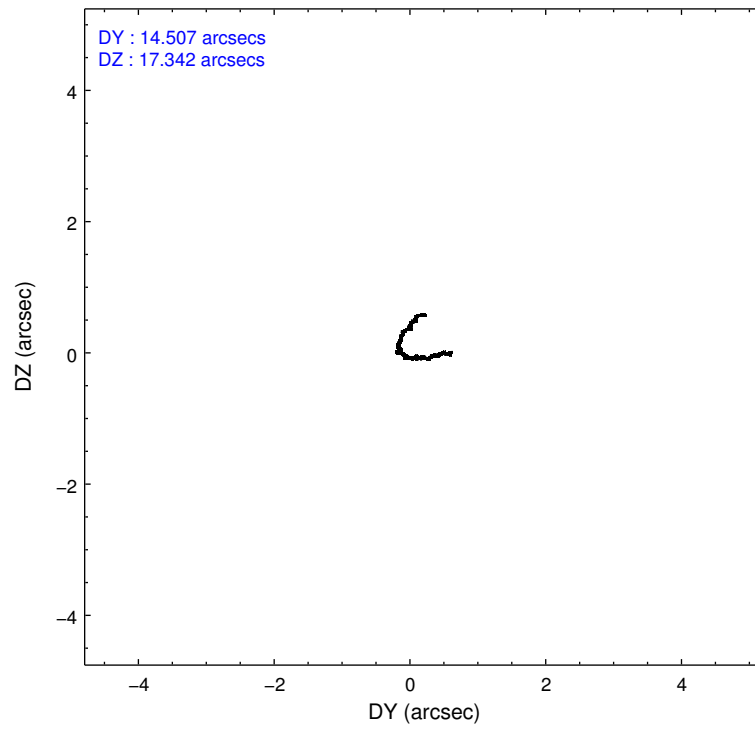
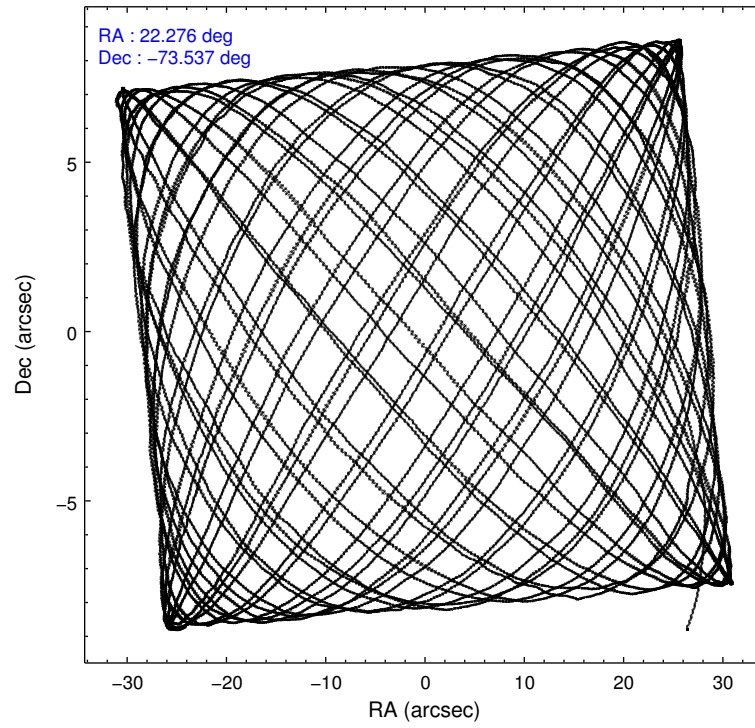
### 2.1.4 Events

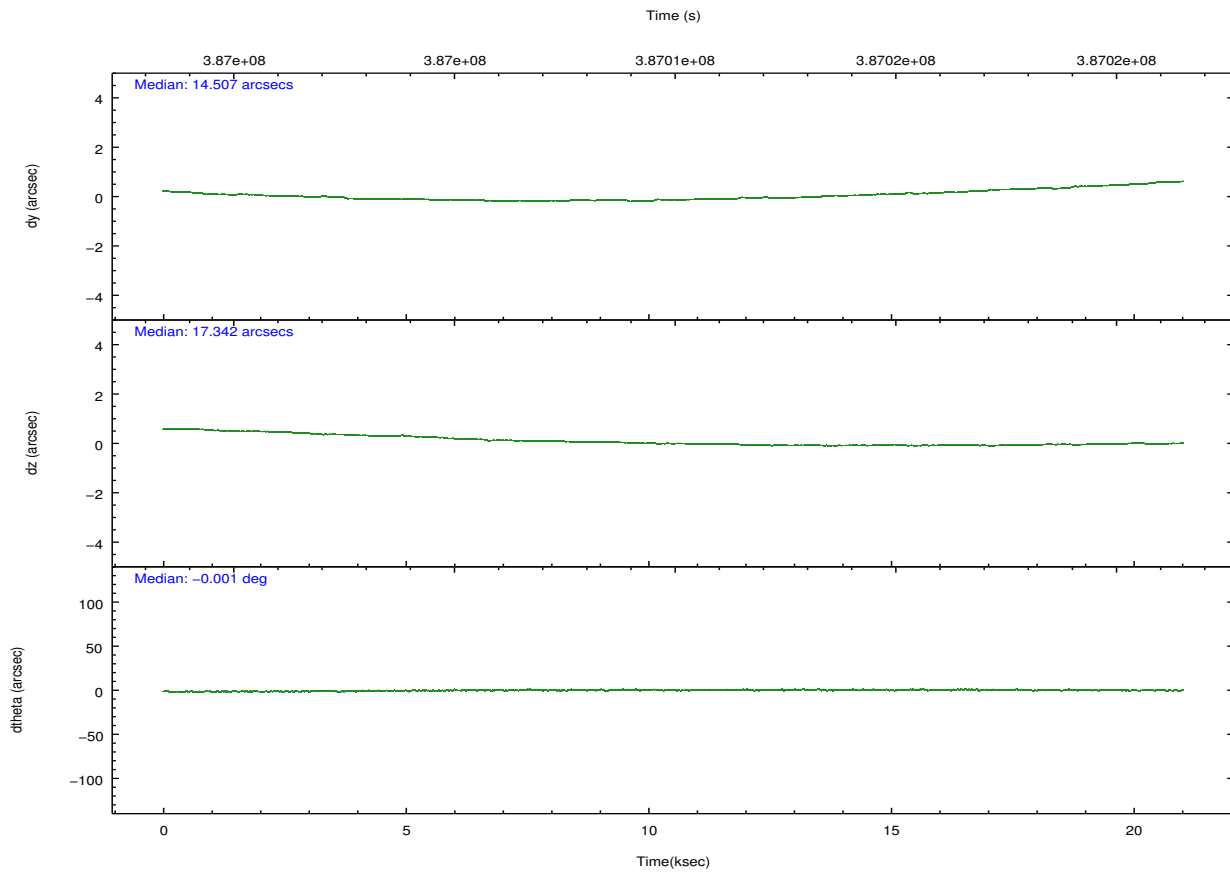
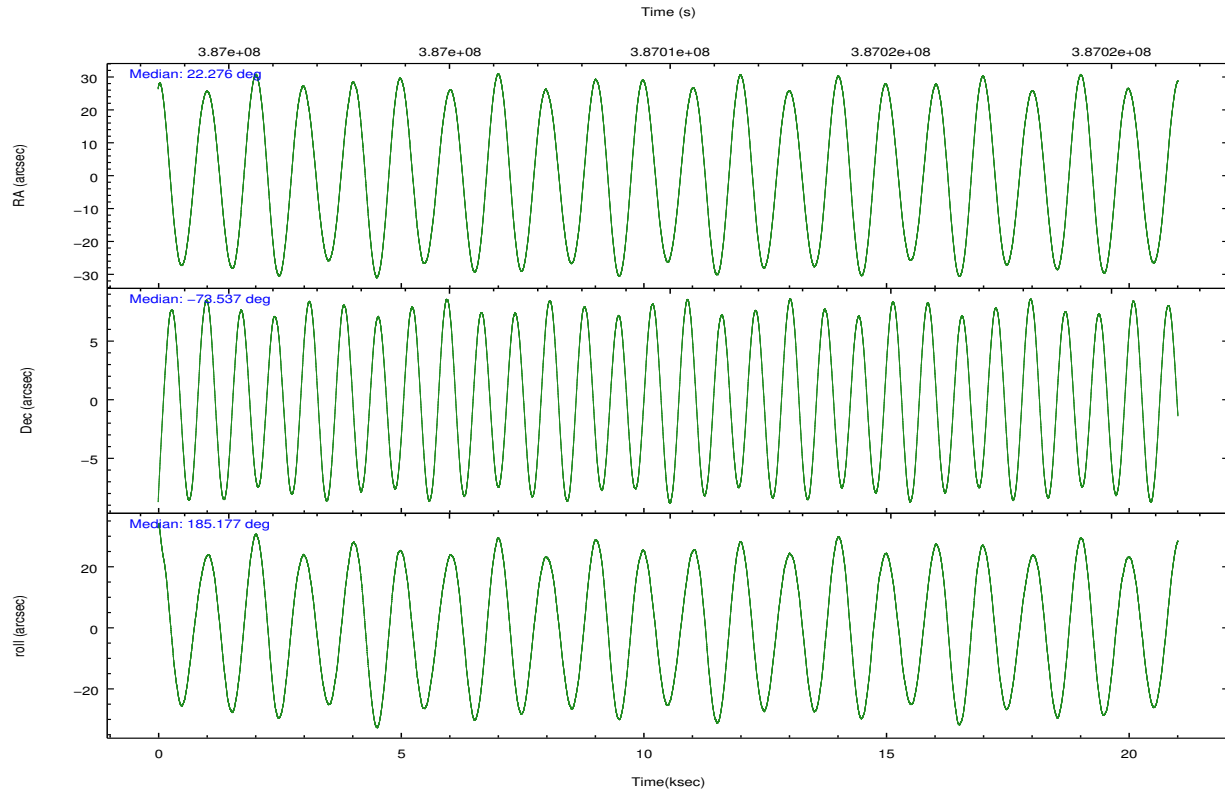
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	138308	144409	152596	148272	156615	184647	grade 0 events	5834	6604	6635	5618	5850	7671
rejected events	121652	126062	135135	132597	139508	101458		4%	4%	4%	3%	3%	4%
rejected %	87%	87%	88%	89%	89%	54%	grade 1 events	80	78	101	78	74	238
								0%	0%	0%	0%	0%	0%
							grade 2 events	4136	4212	4036	3437	3878	17105
								2%	2%	2%	2%	2%	9%
							grade 3 events	1742	1905	1761	1701	1764	7472
								1%	1%	1%	1%	1%	4%
							grade 4 events	1679	1884	1799	1698	1830	7458
								1%	1%	1%	1%	1%	4%
							grade 5 events	5996	6389	5797	6961	6891	19436
								4%	4%	3%	4%	4%	10%
							grade 6 events	3267	3744	3233	3225	3785	43494
								2%	2%	2%	2%	2%	23%
							grade 7 events	115574	119593	129234	125554	132543	81773
								83%	82%	84%	84%	84%	44%

## 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	22.27531506769994	CCD I2 on	Y	Y
[deg] Pointing Dec	-73.520938	-73.53687920621915	CCD I3 on	Y	Y
[deg] Pointing Roll	185.050478	185.1834120202428	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)	386999772.184000	386998694.44531	CCD S5 on	N	N
Observation start date	2010-04-07T03:55:06	2010-04-07T03:38:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	387020462.184000	387020703.24642	On-chip summing requested	N	N
Observation end date	2010-04-07T09:39:56	2010-04-07T09:45:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



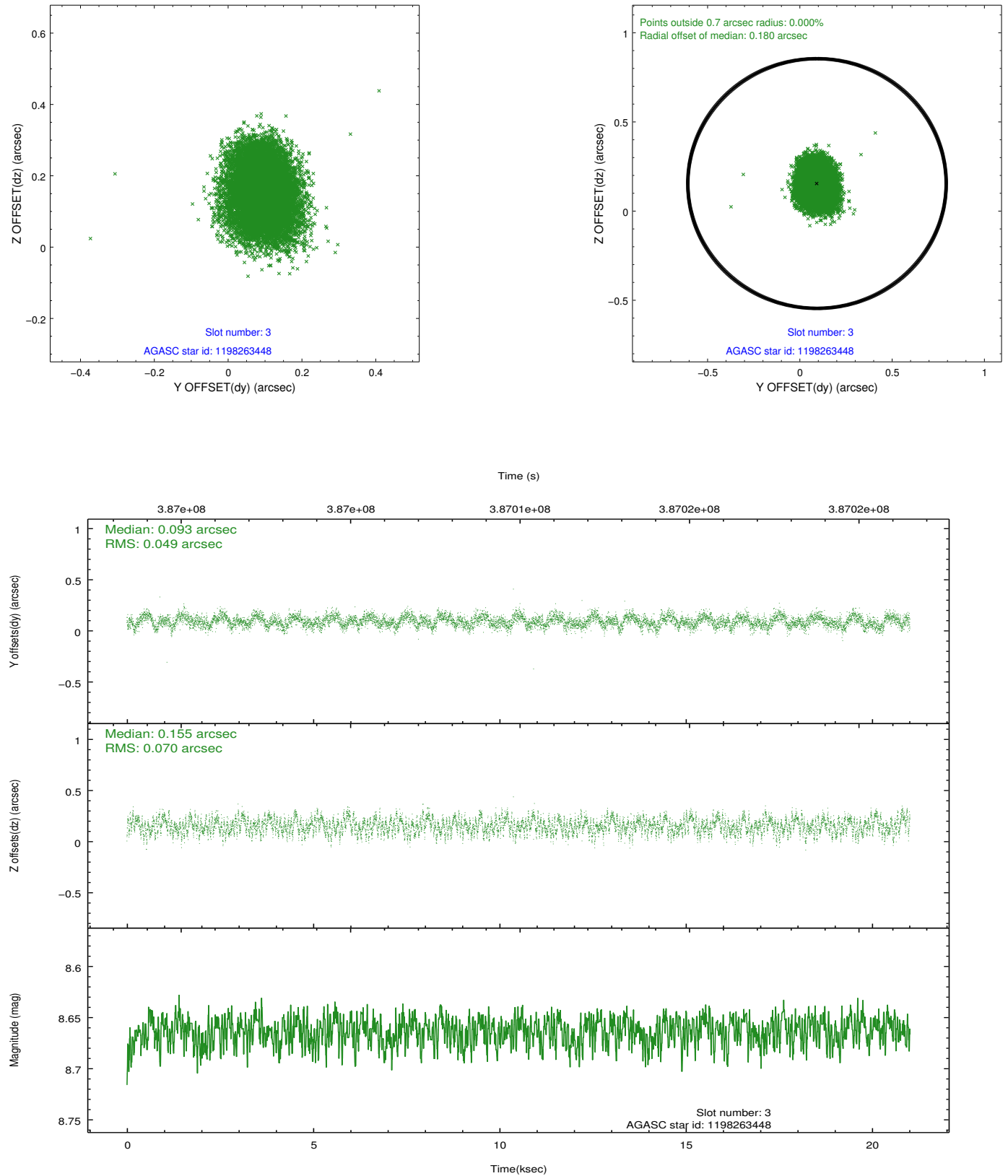


### Slot Statistics

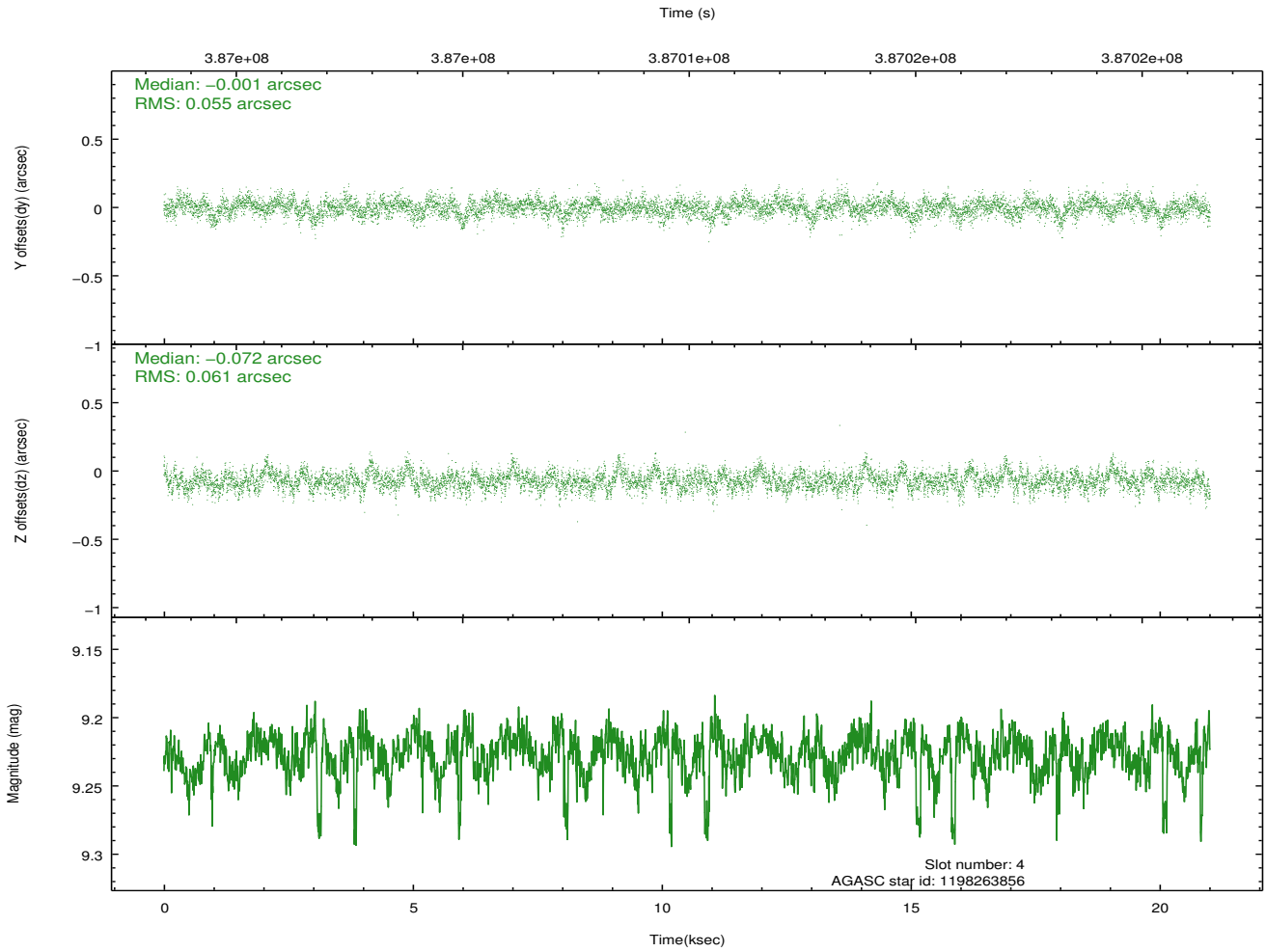
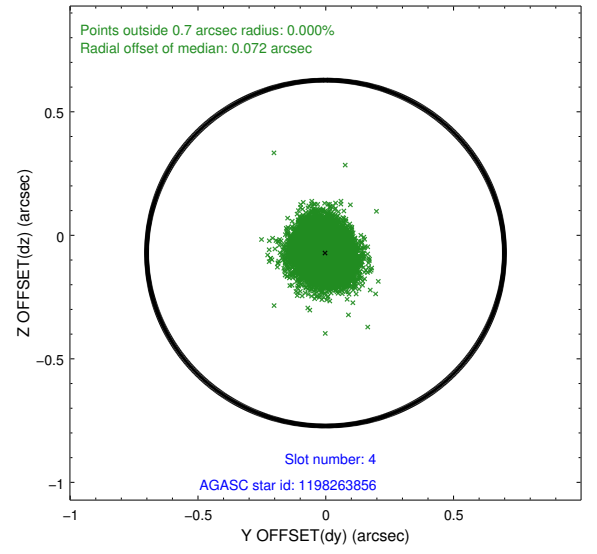
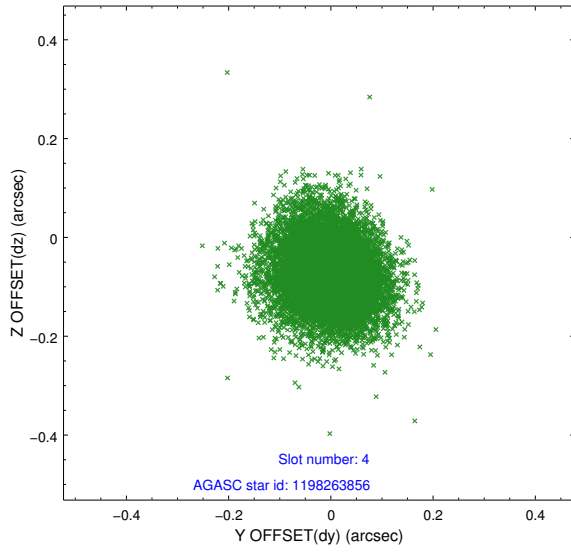
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.00	5126	0.063	-0.013	0.010	0.023	0.000000	0.000000	924.96	-841.14
1	FID	ACIS-I-5	6.99	5126	-0.217	0.069	0.006	0.011	0.000000	0.000000	-1823.31	1056.38
2	FID	ACIS-I-6	7.00	5126	0.063	0.014	0.010	0.016	0.000000	0.000000	390.35	1700.99
3	GUIDE	1198263448	8.66	10247	0.093	0.155	0.092	0.144	23.988893	-72.831877	-1946.01	-2294.62
4	GUIDE	1198263856	9.23	10240	-0.001	-0.072	0.086	0.144	23.344483	-73.858921	-879.29	1307.24
5	GUIDE	1198264032	8.00	10251	0.081	-0.042	0.067	0.104	22.563131	-73.173817	-325.84	-1224.71
6	GUIDE	1198269920	8.27	10244	-0.024	0.115	0.091	0.146	20.316466	-73.033728	1981.13	-1898.95
7	GUIDE	1198272400	9.16	10180	-0.149	-0.150	0.083	0.137	20.411923	-73.620598	1998.65	215.84

## 2.4 Star Slots

### 2.4.1 Slot 3

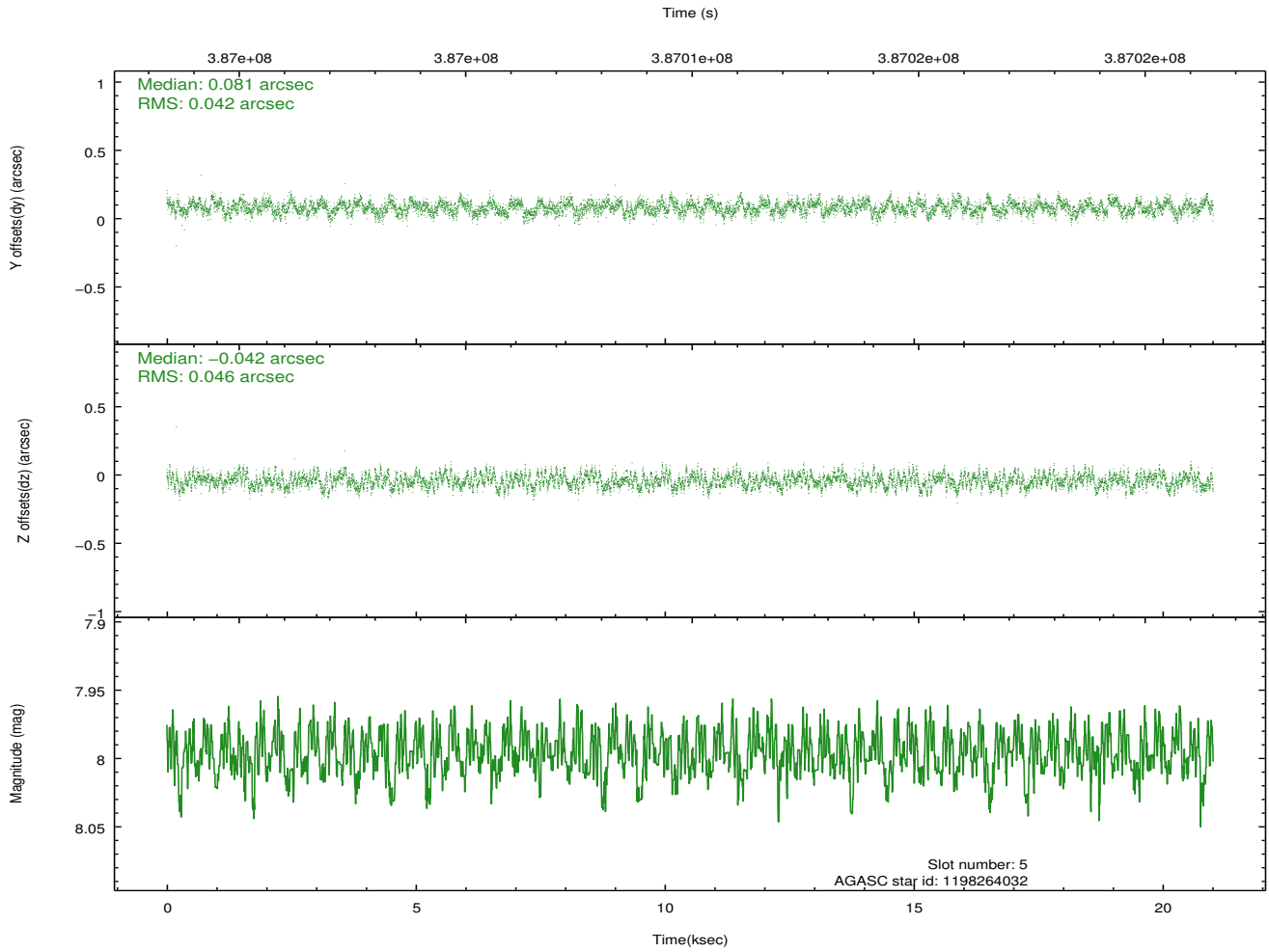
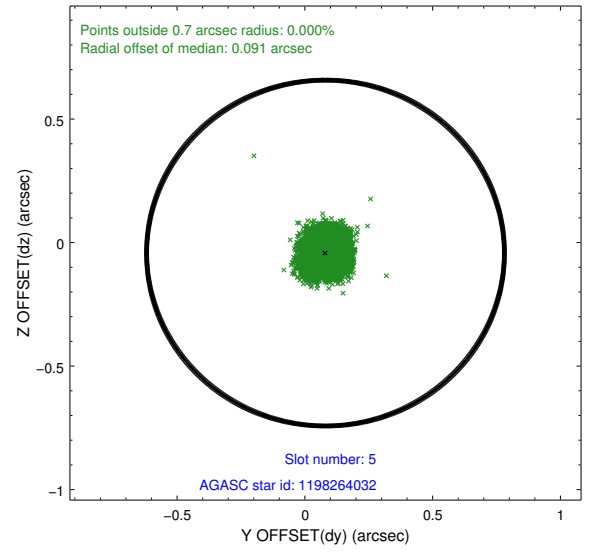
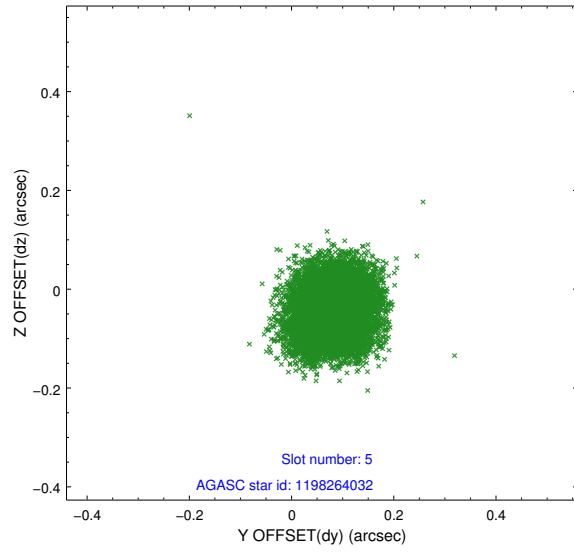


## 2.4.2 Slot 4

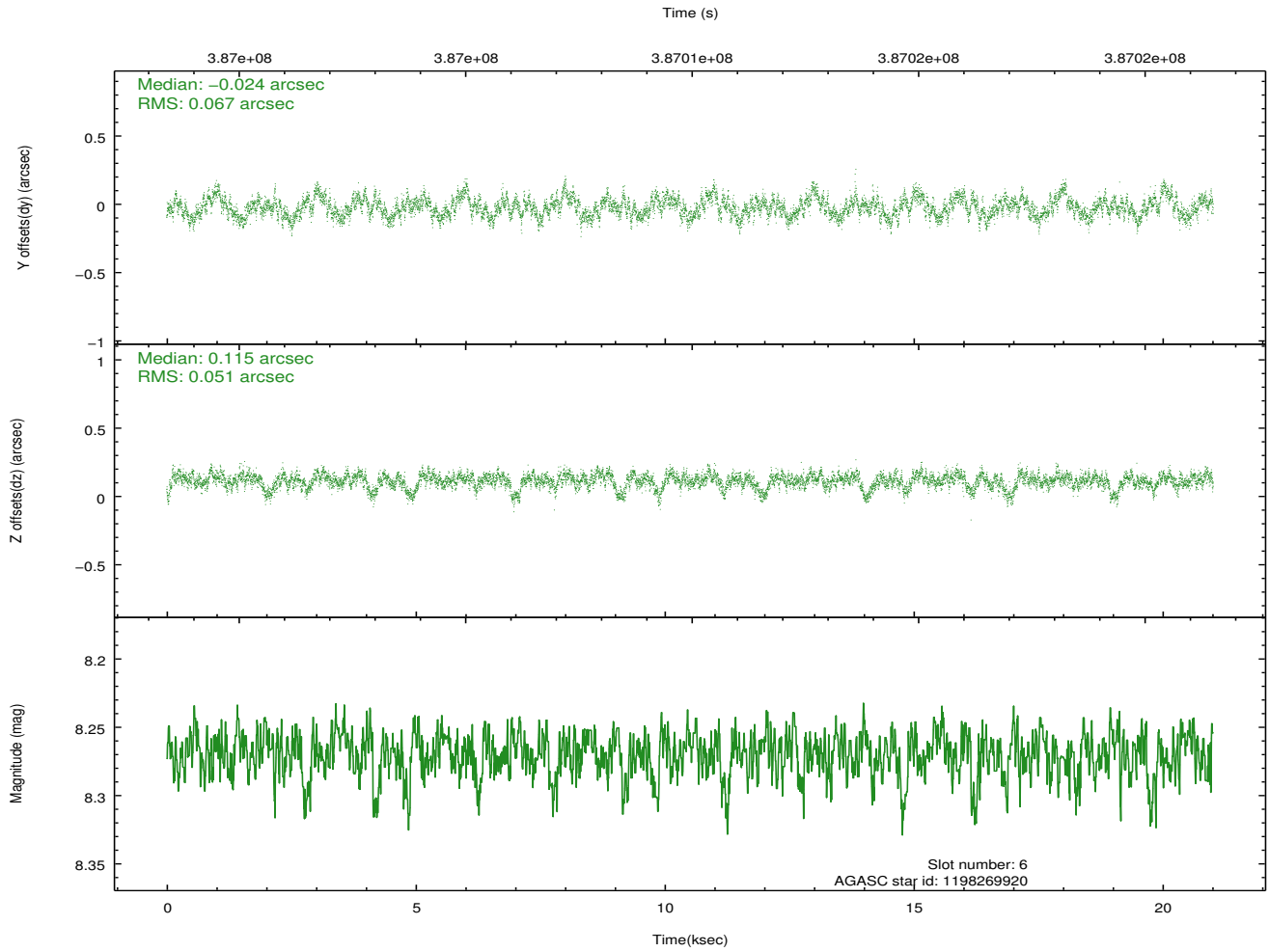
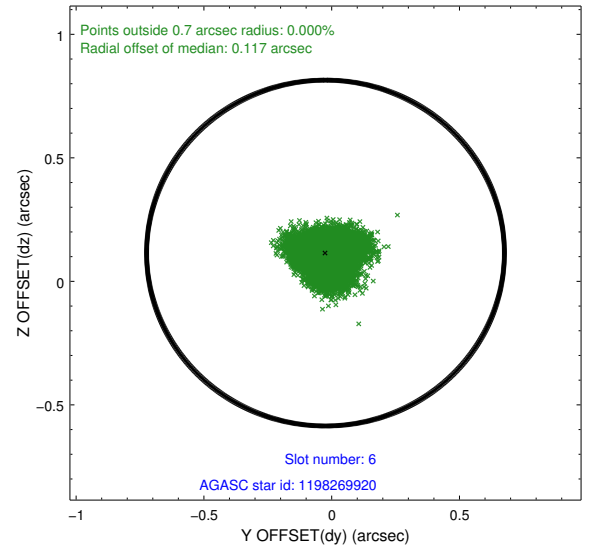
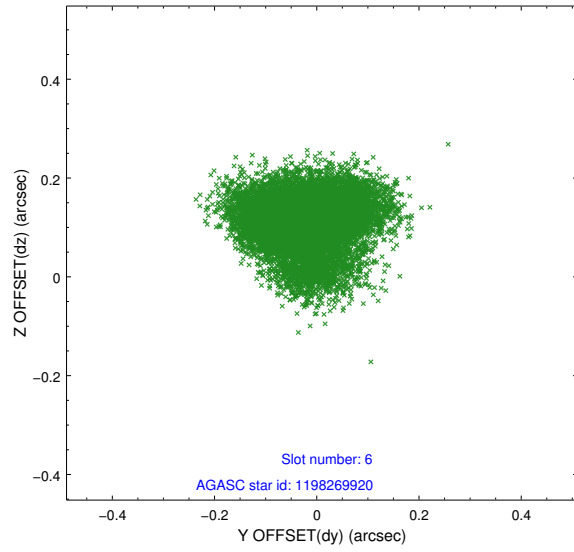




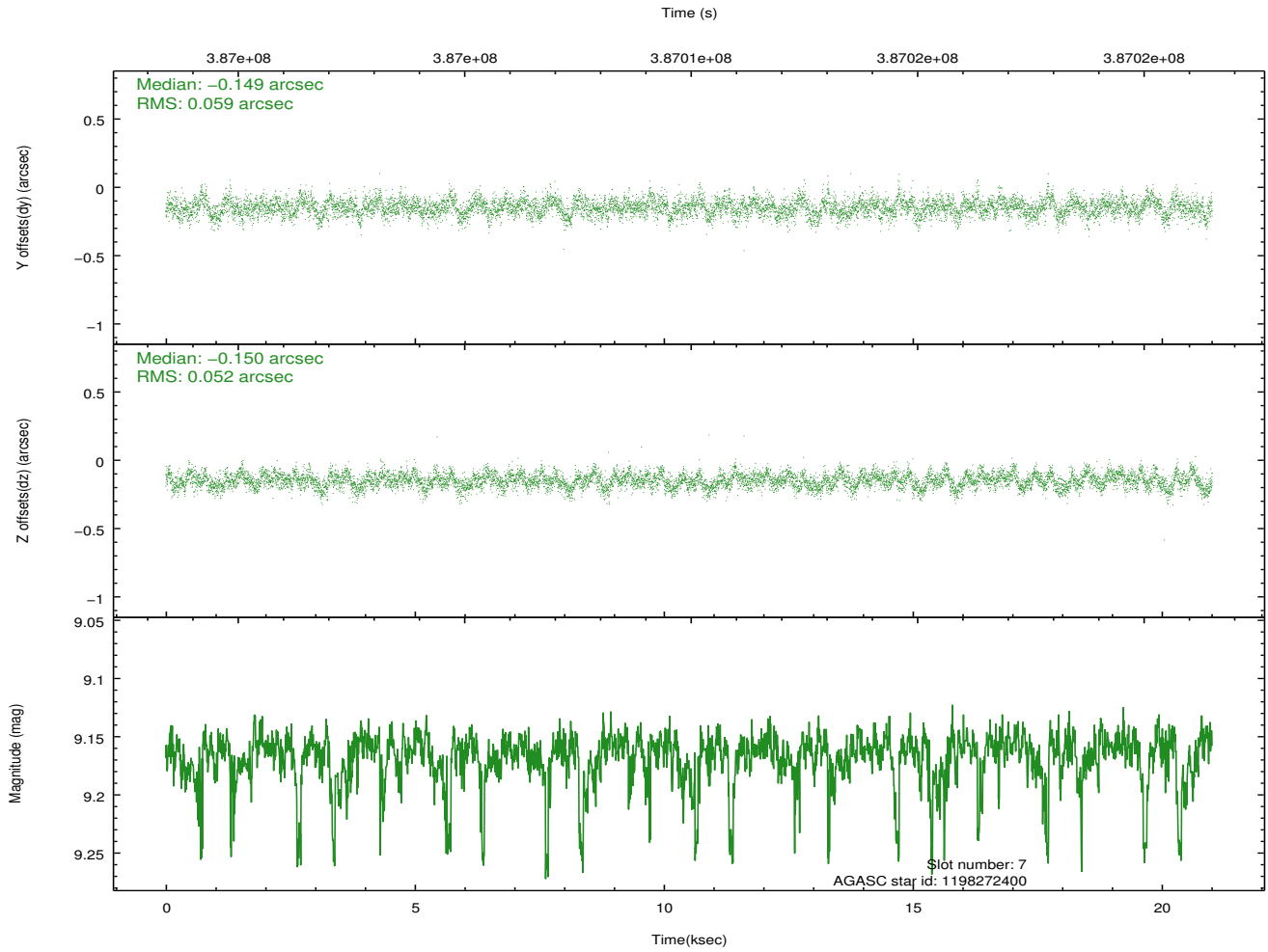
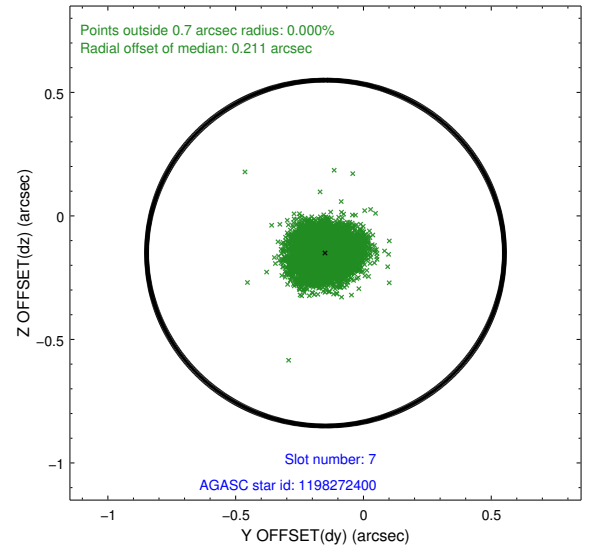
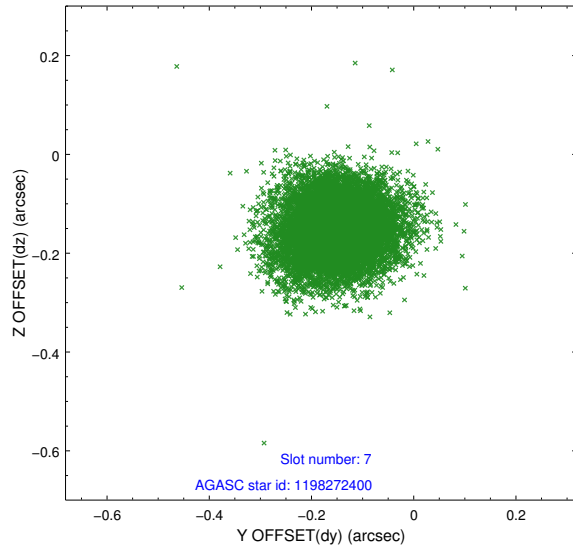
### 2.4.3 Slot 5



## 2.4.4 Slot 6

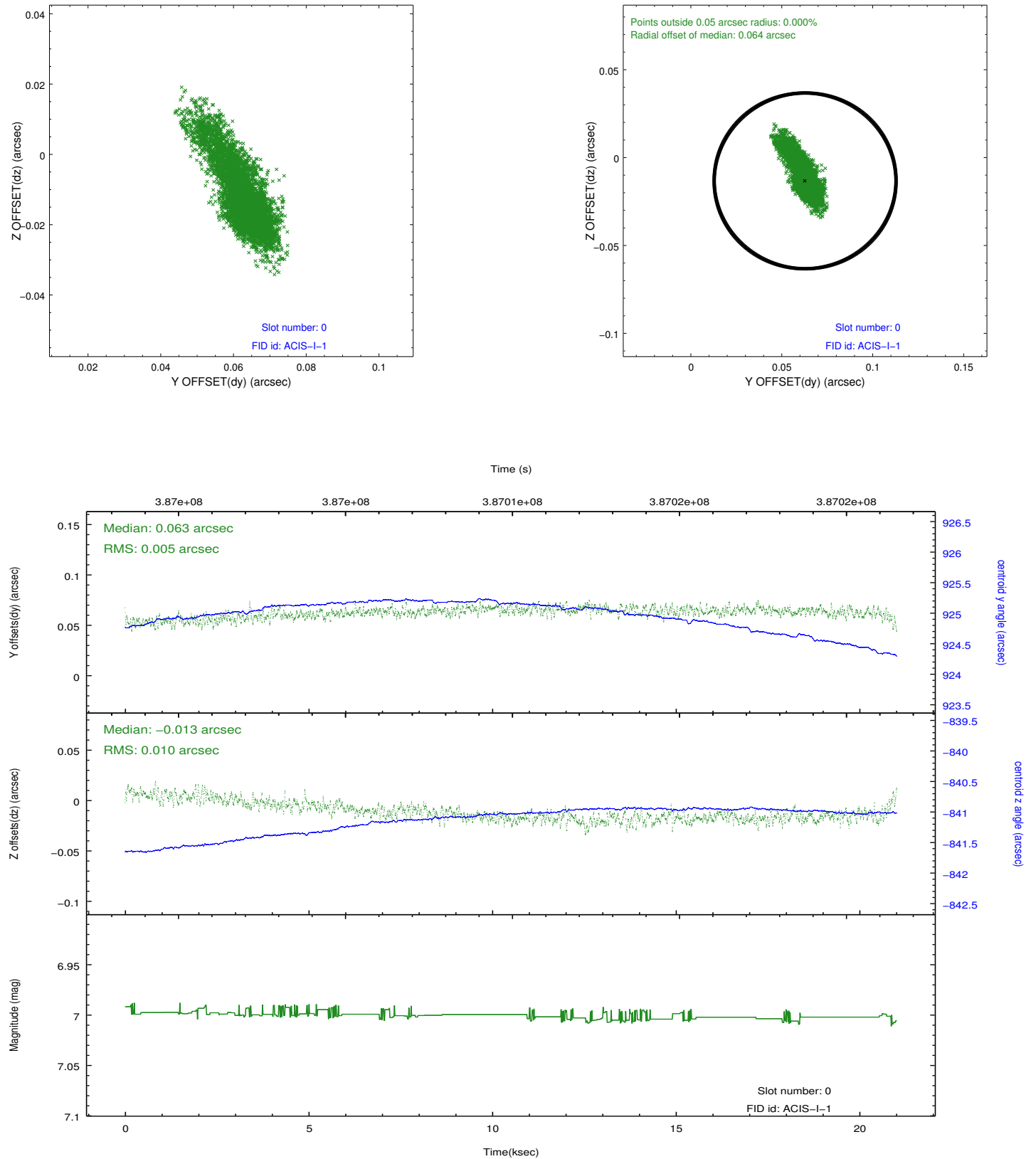


## 2.4.5 Slot 7

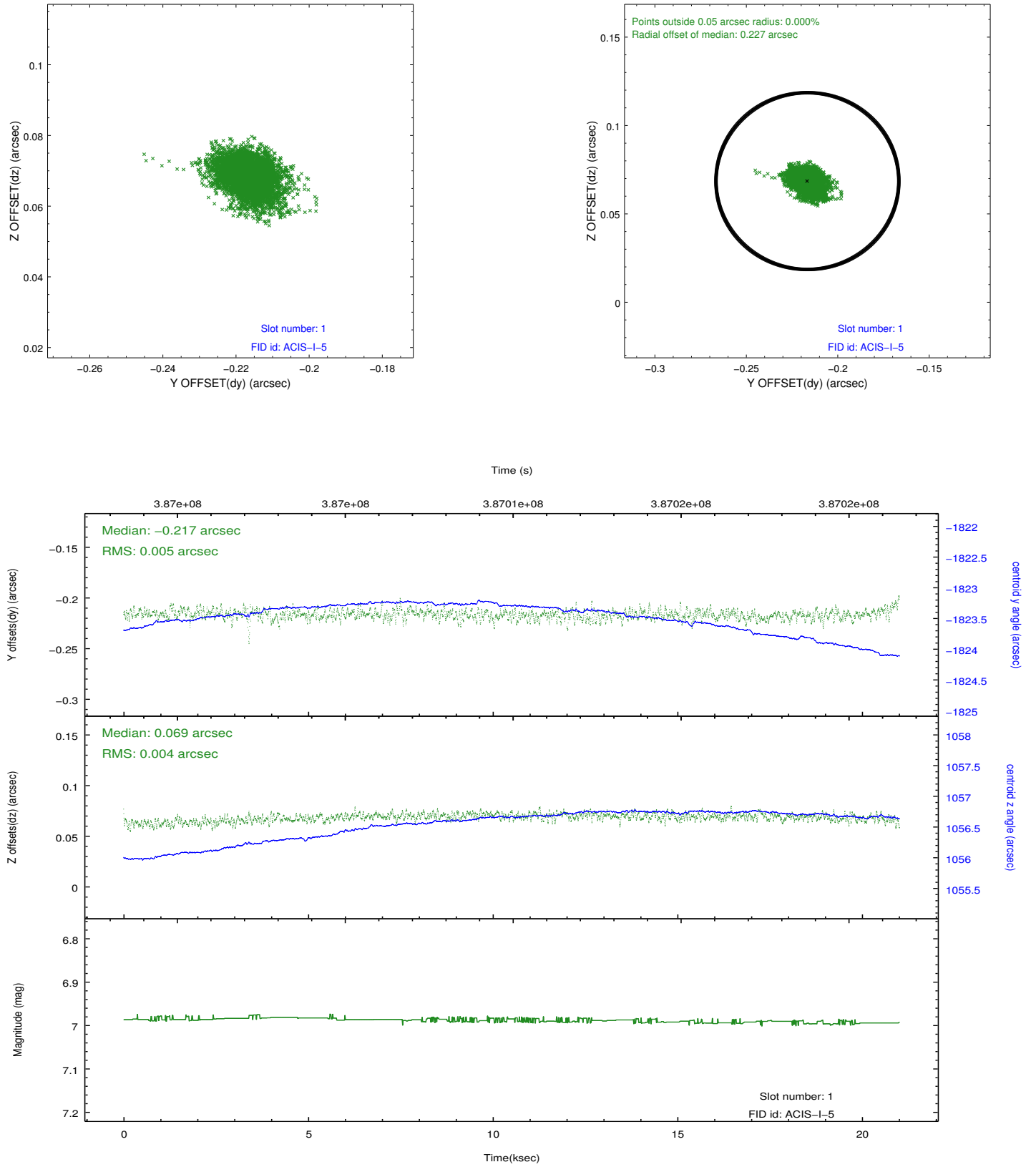


## 2.5 FID Slots

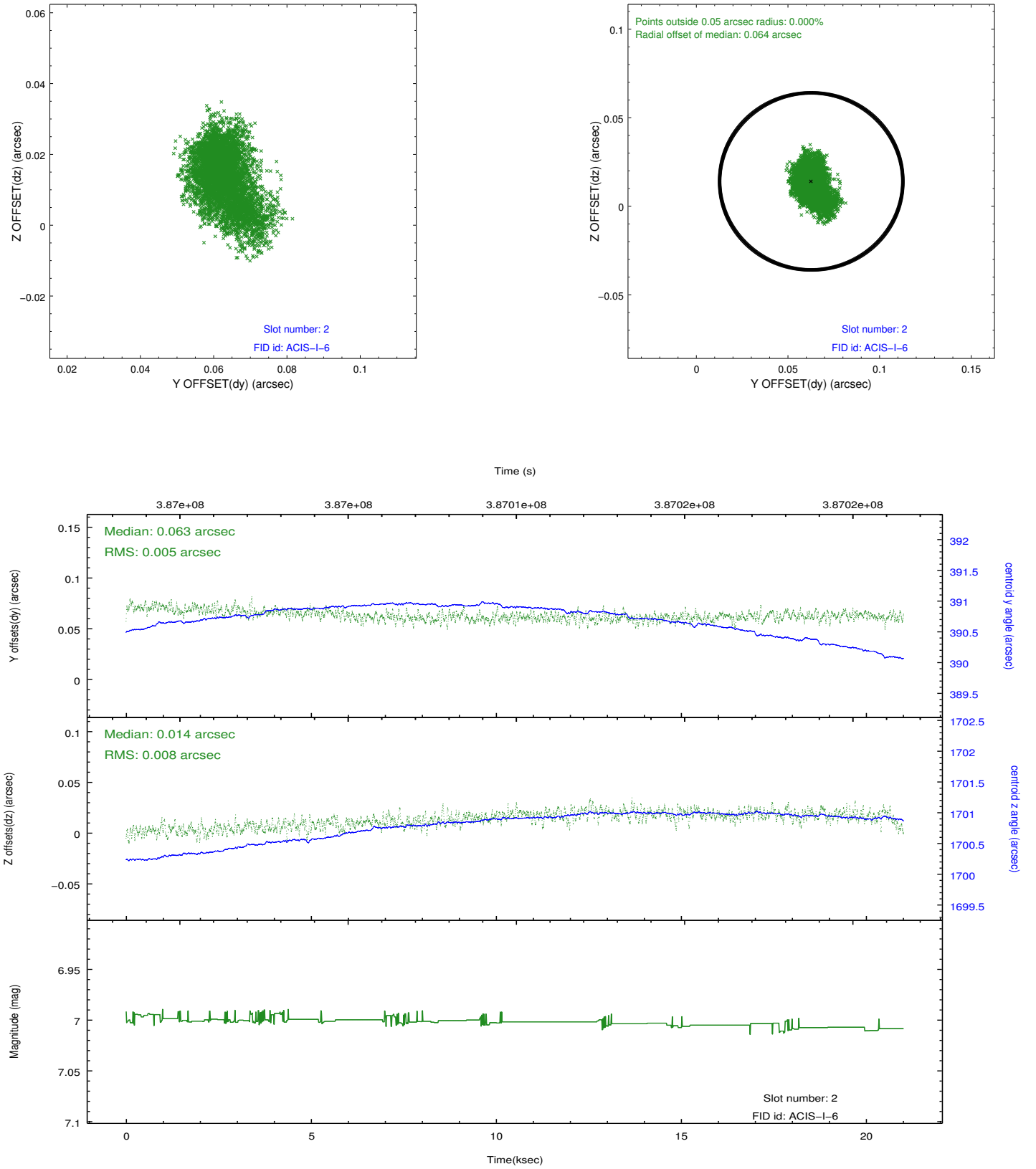
### 2.5.1 Slot 0



## 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)	2012.06.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.745102376163

### A.2 Comments