

# V&V Reference Report

## L2 ASCDS Version : 10.5.2

Observation 19980 - L2 Version 1  
Chandra X-Ray Center

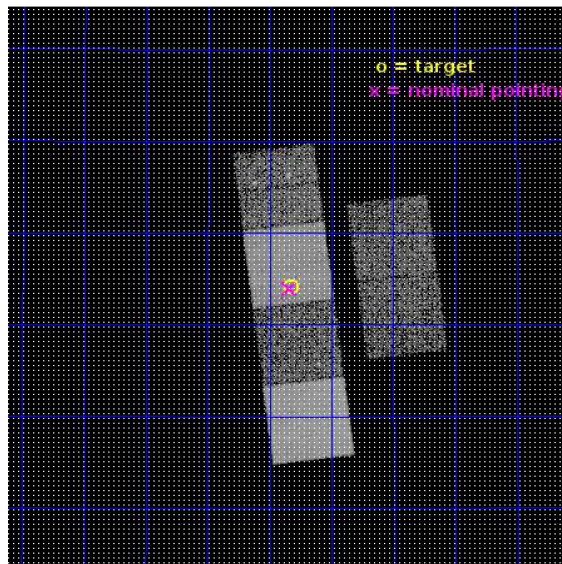
L2 Processing Date : Jan 11 2017

## 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
2.5	FID Slots . . . . .	13
2.5.1	Slot 0 . . . . .	13
2.5.2	Slot 1 . . . . .	14
2.5.3	Slot 2 . . . . .	15
<b>A</b>	<b>Summary</b>	<b>16</b>
A.1	Status . . . . .	16
A.2	Comments . . . . .	16

# 1 Front

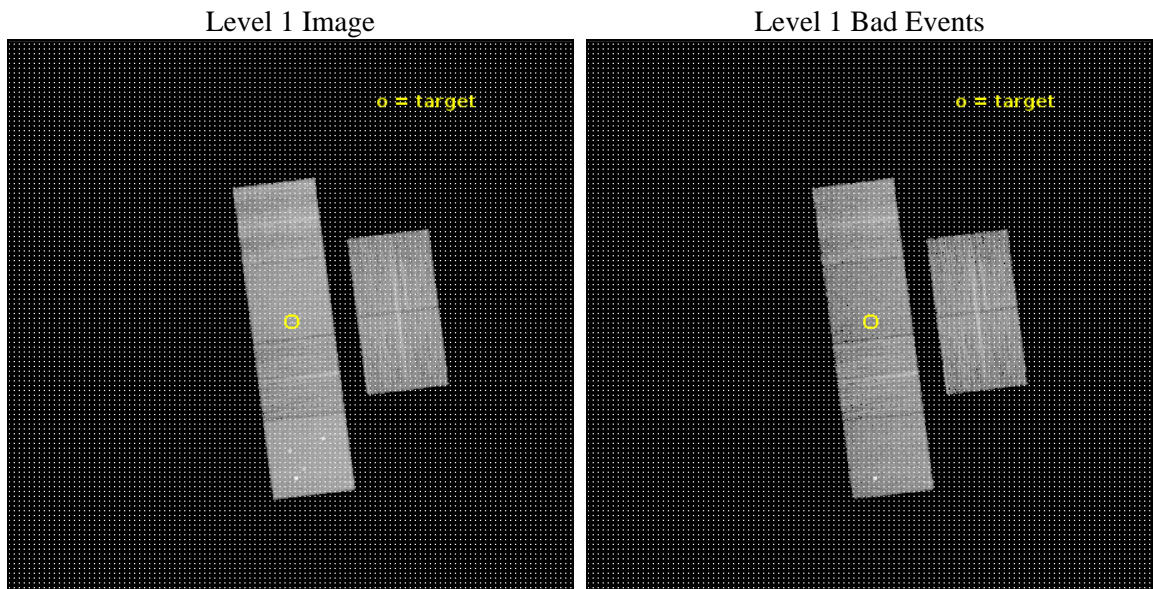
seq_num	201073	Sequence number
obs_id	19980	Observation id
title	What are the dust properties around young stars?	Proposal title
observer	Hans Guenther	Principal investigator
object	RW Aur	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	76.956542	Observer's specified target RA [deg]
dec_targ	30.401439	Observer's specified target Dec [deg]
ra_nom	76.959951016803	Nominal RA [deg]
dec_nom	30.398756642329	Nominal Dec [deg]
roll_nom	262.84492263398	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10296.665549994	Sum of GTIs [s]
livetime	10166.282970892	Livetime [s]
ontime2	10296.706589937	Sum of GTIs [s]
ontime3	10296.542429924	Sum of GTIs [s]
ontime5	10296.624509931	Sum of GTIs [s]
ontime6	10296.583469987	Sum of GTIs [s]
ontime7	10296.665549994	Sum of GTIs [s]
ontime8	10296.50138998	Sum of GTIs [s]
l2events	121562	Number of level 2 events



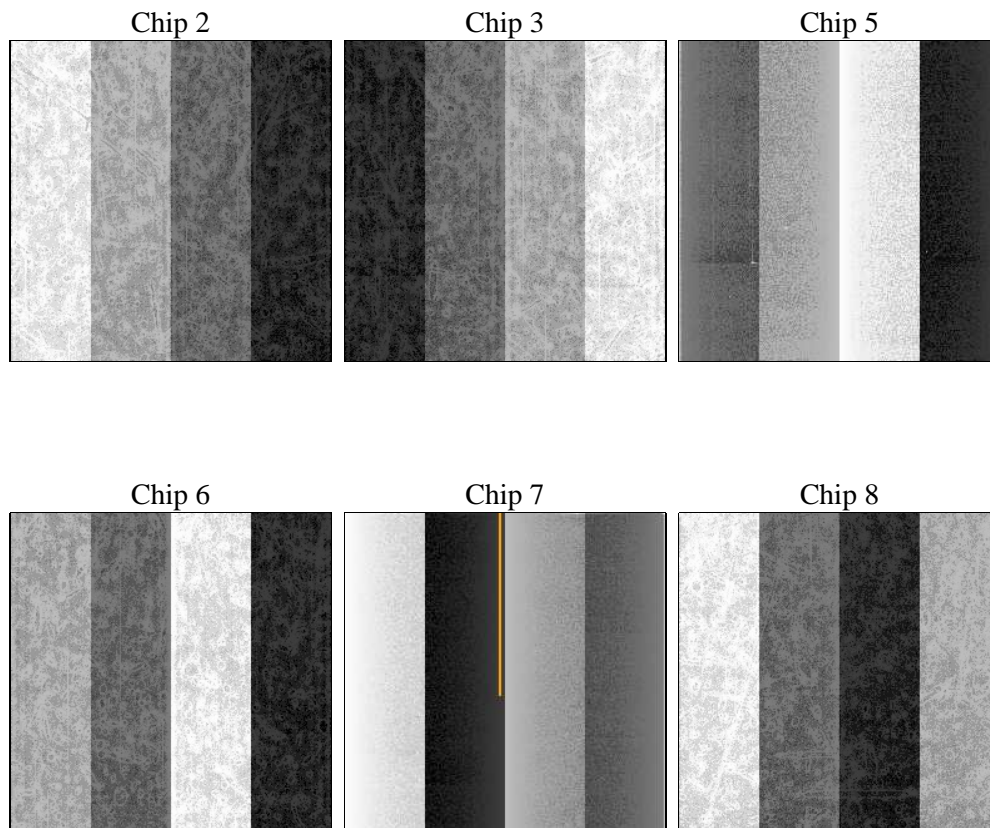
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	10296.665549994	Sum of GTIs [s]
caldbver	4.7.3	&#160	ontime2	10296.706589937	Sum of GTIs [s]
date	2017-01-11T19:41:29	Date and time of file creation	ontime3	10296.542429924	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	10296.624509931	Sum of GTIs [s]
			ontime6	10296.583469987	Sum of GTIs [s]
			ontime7	10296.665549994	Sum of GTIs [s]
			ontime8	10296.50138998	Sum of GTIs [s]
			l1events	521020	Number of level 1 events

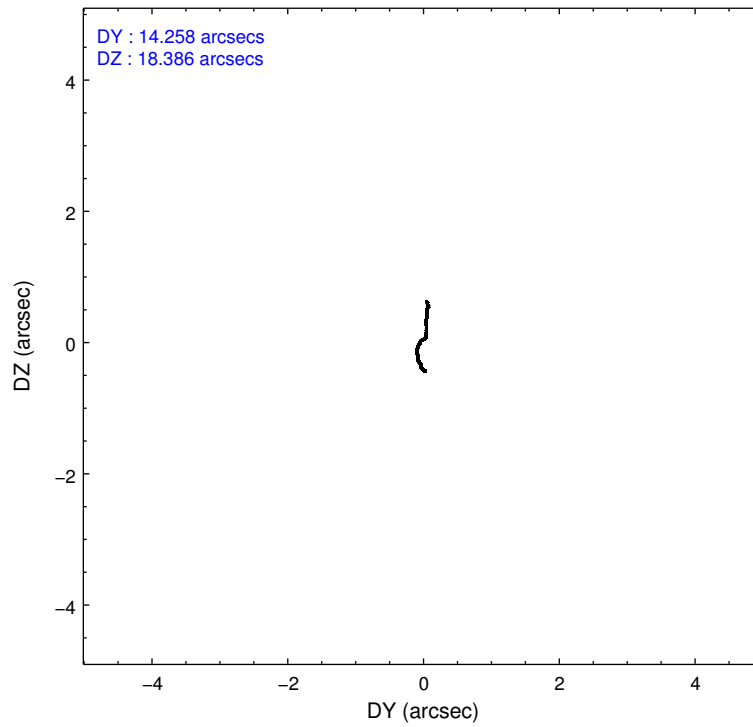
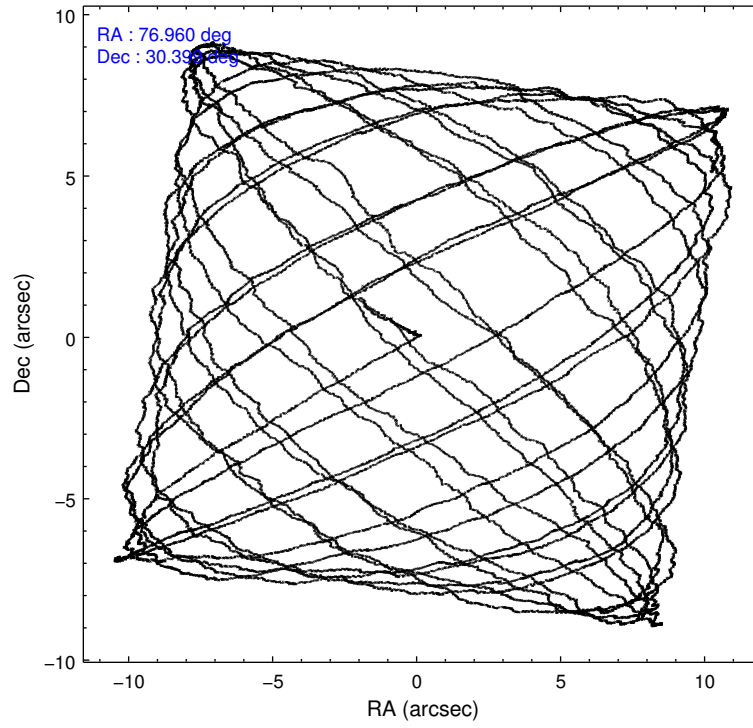
### 2.1.4 Events

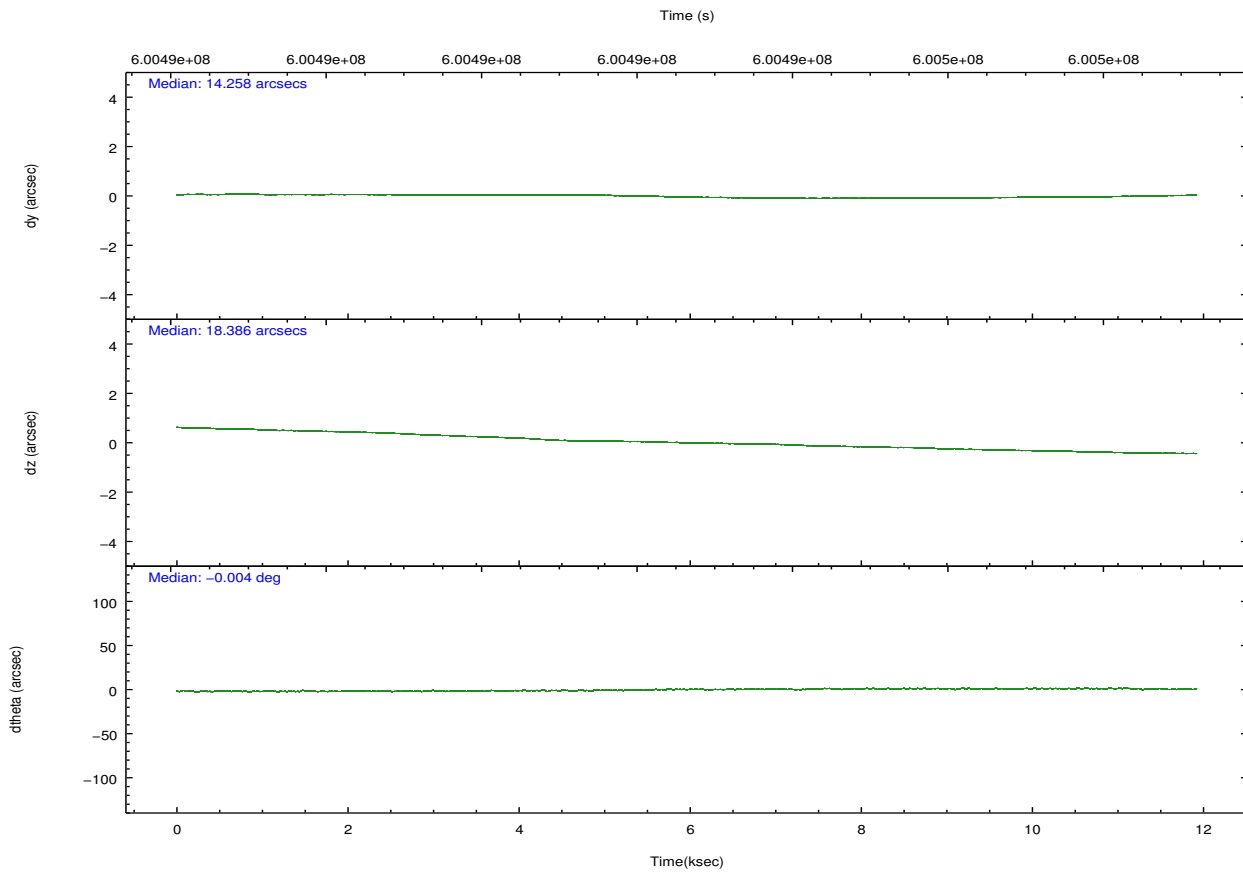
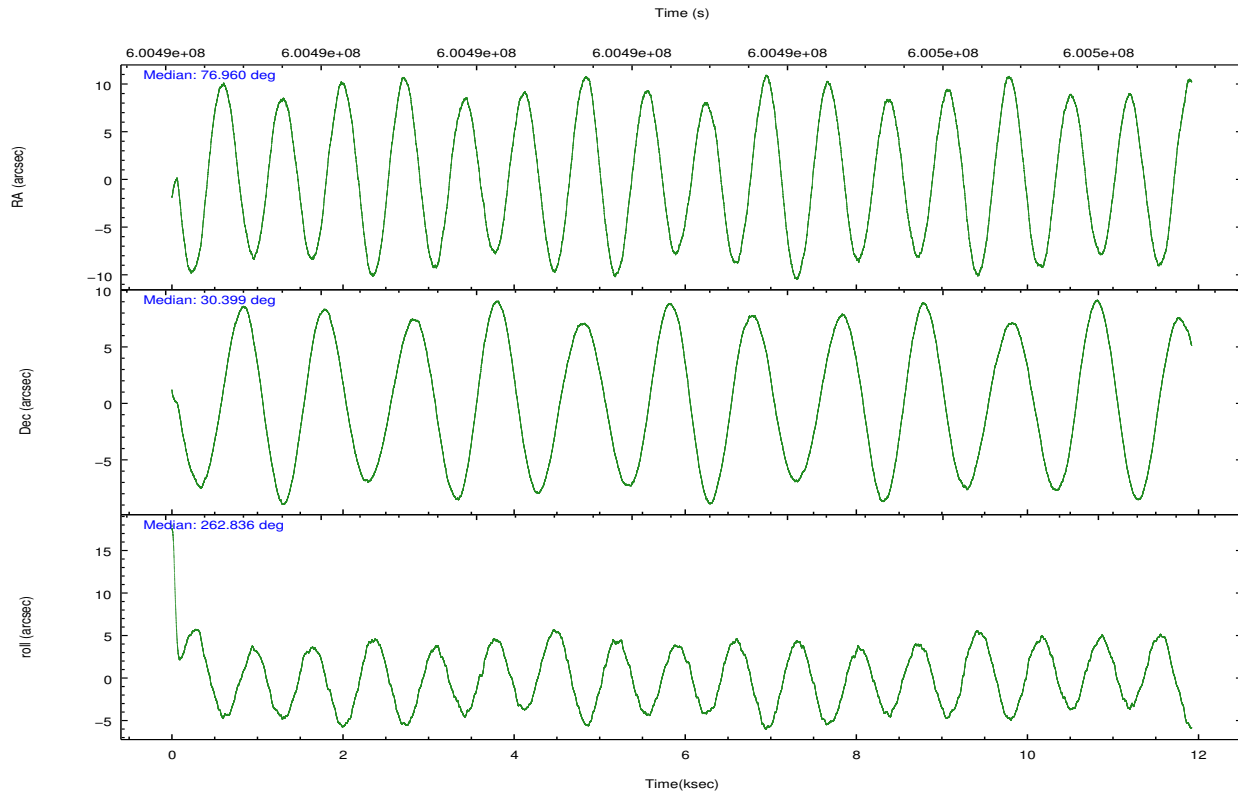
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72242	71115	119580	72588	92348	93147	grade 0 events	2736	2683	6439	2989	3562	7803
rejected events	64298	63799	61966	64281	51453	67039		3%	3%	5%	4%	3%	8%
rejected %	89%	89%	51%	88%	55%	71%	grade 1 events	35	43	246	34	123	65
								0%	0%	0%	0%	0%	0%
							grade 2 events	2022	1587	17673	1878	8700	6240
								2%	2%	14%	2%	9%	6%
							grade 3 events	779	782	1765	875	3360	2599
								1%	1%	1%	1%	3%	2%
							grade 4 events	821	769	1749	780	3363	2494
								1%	1%	1%	1%	3%	2%
							grade 5 events	3013	3399	8328	3465	9358	5136
								4%	4%	6%	4%	10%	5%
							grade 6 events	1587	1498	30014	1787	21919	7010
								2%	2%	25%	2%	23%	7%
							grade 7 events	61249	60354	53366	60780	41963	61800
								84%	84%	44%	83%	45%	66%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	76.947216	76.95995101680269	CCD I2 on	O4	Y
[deg] Pointing Dec	30.423919	30.39875664232856	CCD I3 on	O5	Y
[deg] Pointing Roll	262.694721	262.8449226339848	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	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	600487597.184000	600485506.32619	CCD S5 on	N	N
Observation start date	2017-01-11T02:05:28	2017-01-11T01:31:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	600498597.184000	600500030.06453	On-chip summing requested	N	N
Observation end date	2017-01-11T05:08:48	2017-01-11T05:33:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



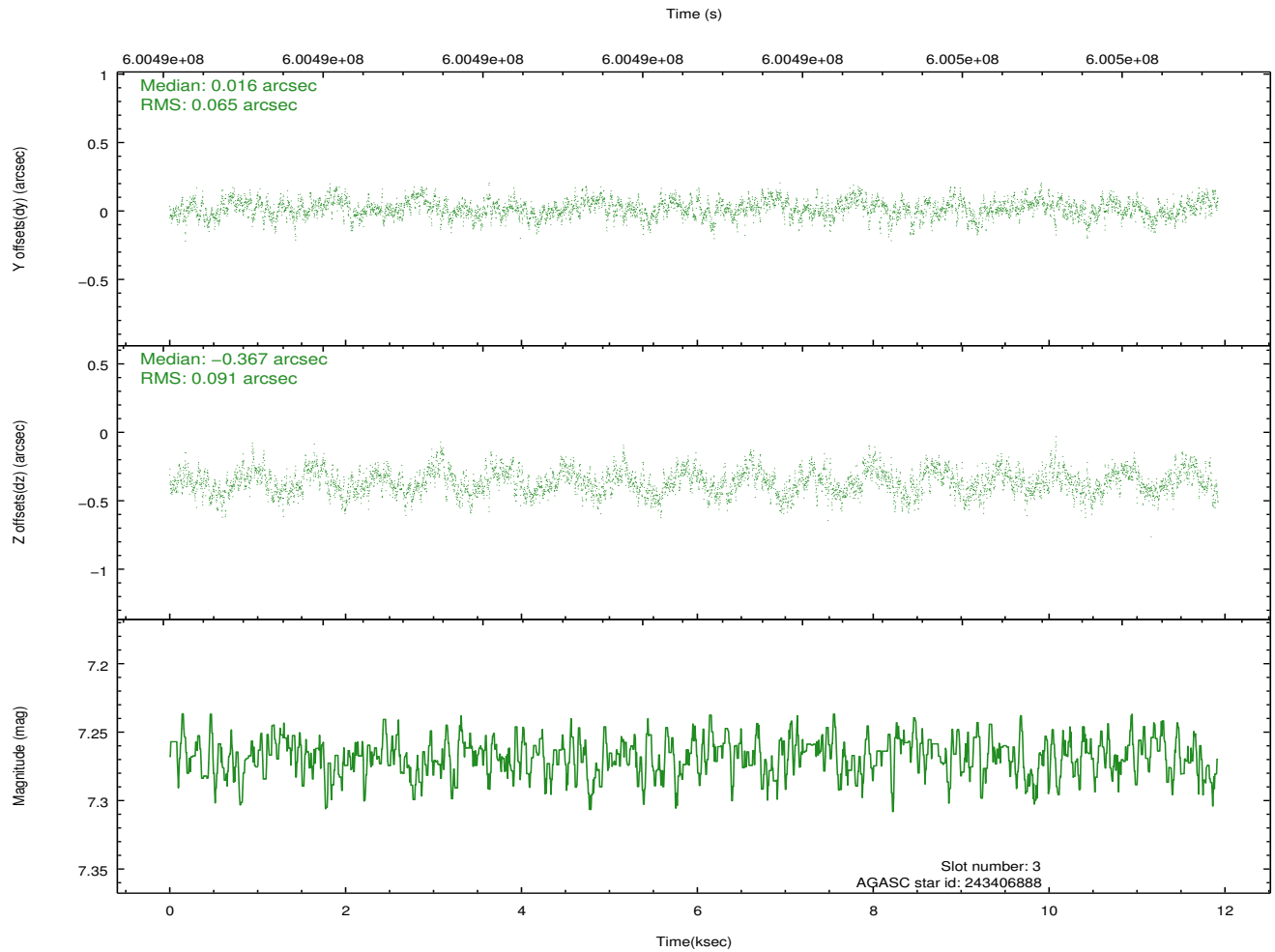
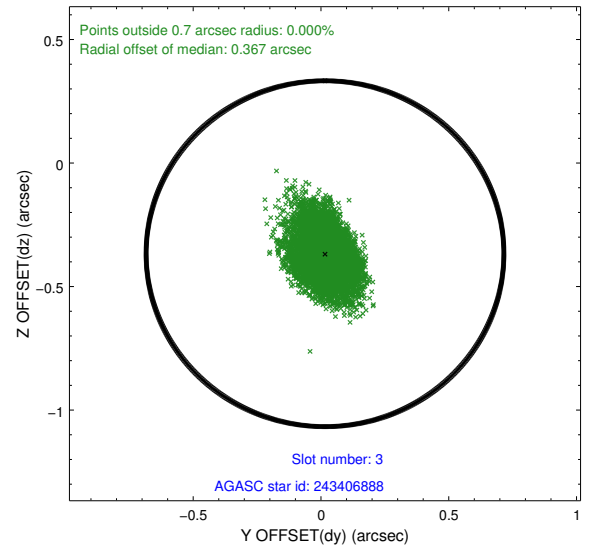
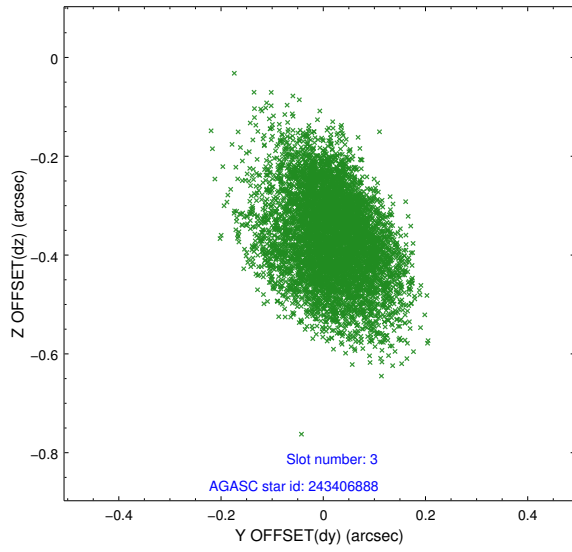


### Slot Statistics

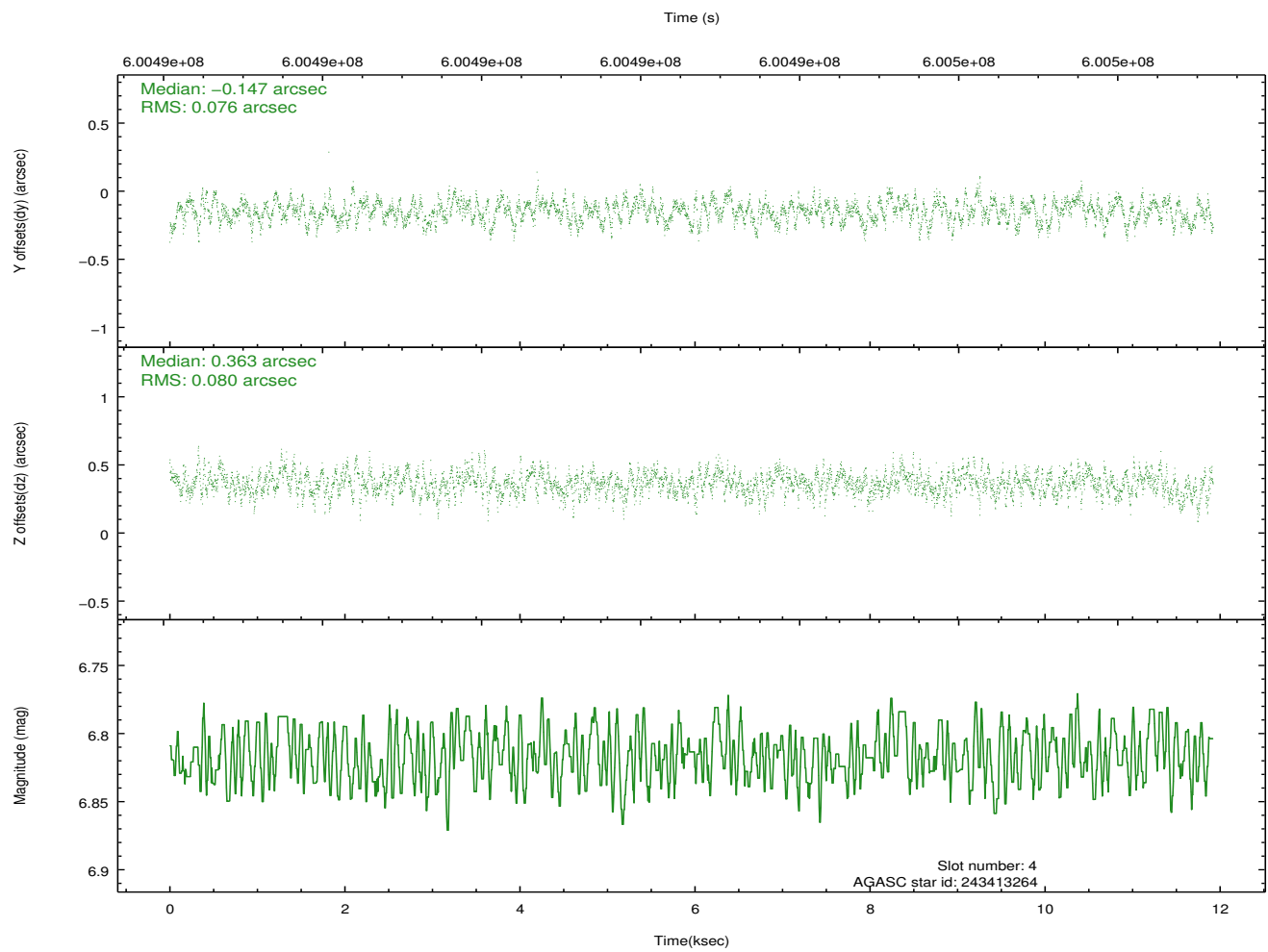
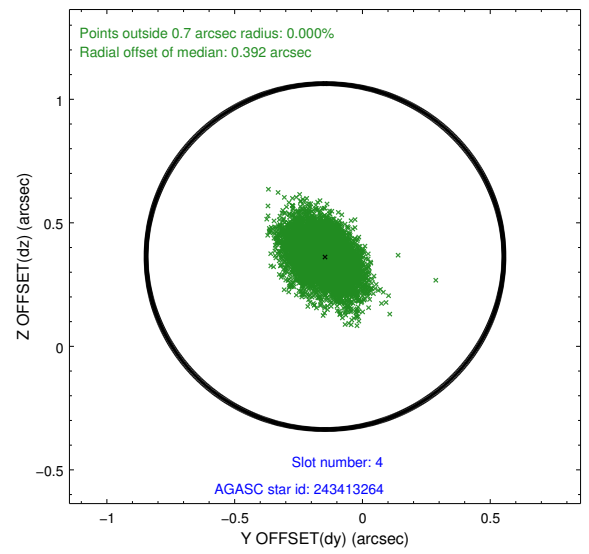
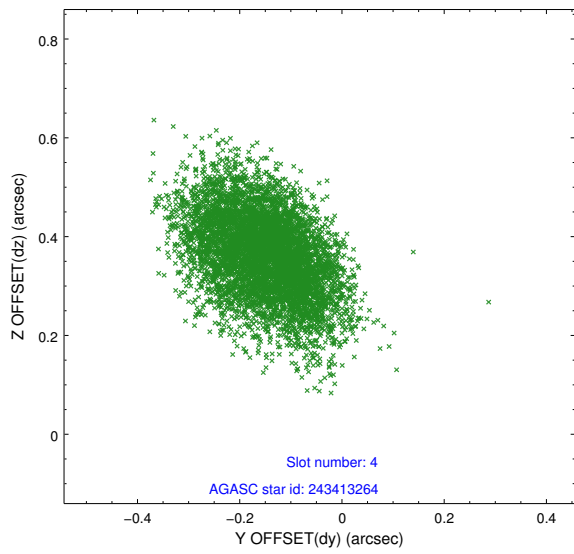
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.90	2908	-0.154	-0.092	0.012	0.021	0.000000	0.000000	-767.36	-1739.98
1	FID		ACIS-S-4	7.01	2908	0.425	0.100	0.010	0.023	0.000000	0.000000	2146.32	168.24
2	FID		ACIS-S-5	7.00	2908	-0.302	0.002	0.011	0.017	0.000000	0.000000	-1819.80	162.31
3	GUIDE	used	243406888	7.27	5814	0.016	-0.367	0.118	0.193	76.242855	29.975653	1873.72	-1974.12
4	GUIDE	used	243413264	6.82	5815	-0.147	0.363	0.117	0.193	77.432067	29.798637	2037.00	1788.99
5	GUIDE	used	313136024	6.67	5816	0.026	0.343	0.089	0.153	76.861302	30.788056	-1266.00	-429.44
6	GUIDE	used	313141456	7.90	5809	0.107	-0.340	0.096	0.172	77.560312	30.574723	-783.42	1815.96
7	MONITOR	unused		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

## 2.4 Star Slots

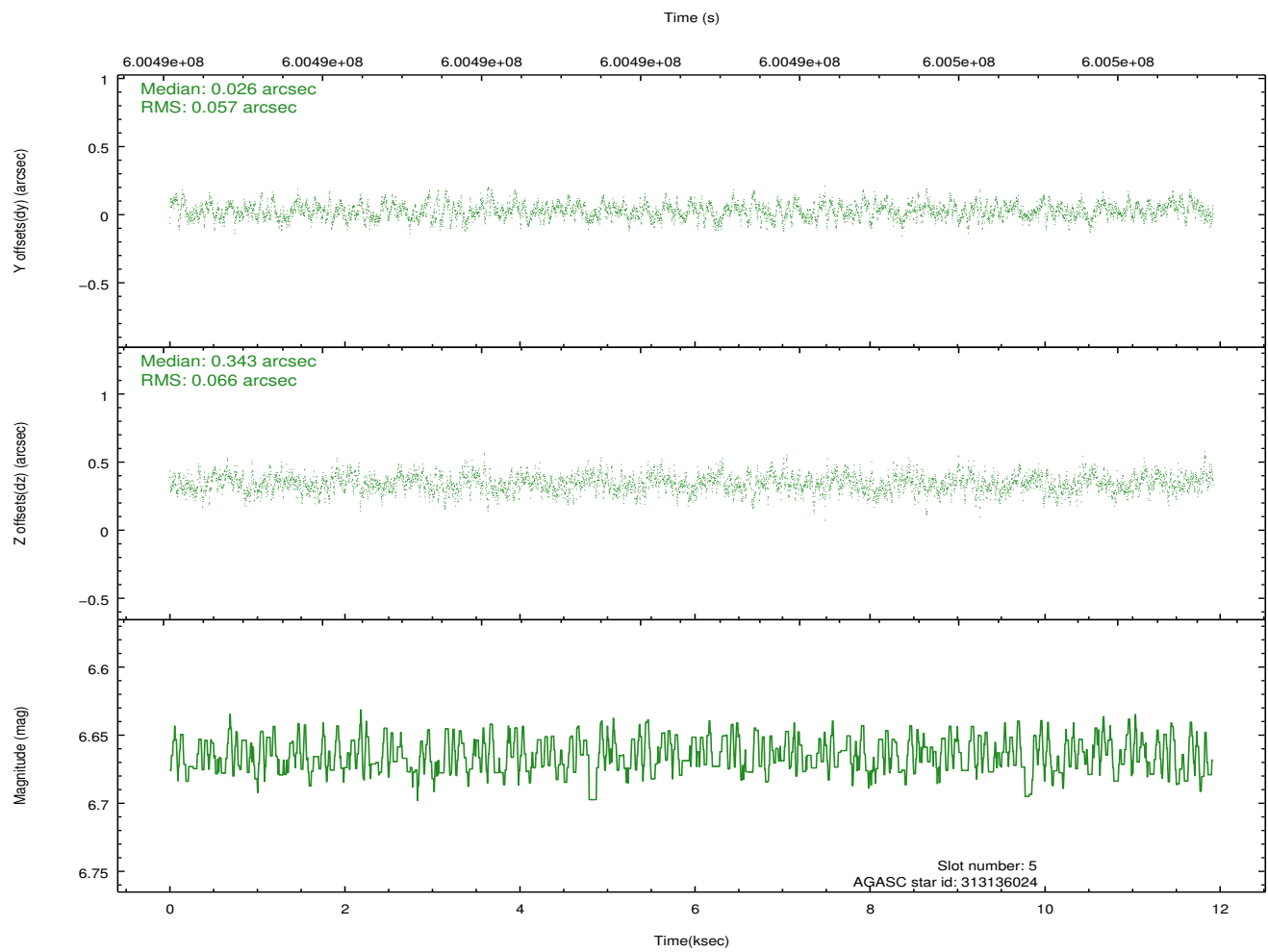
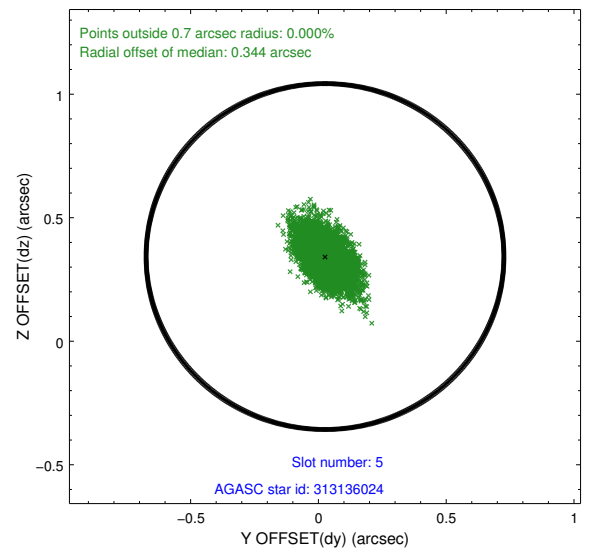
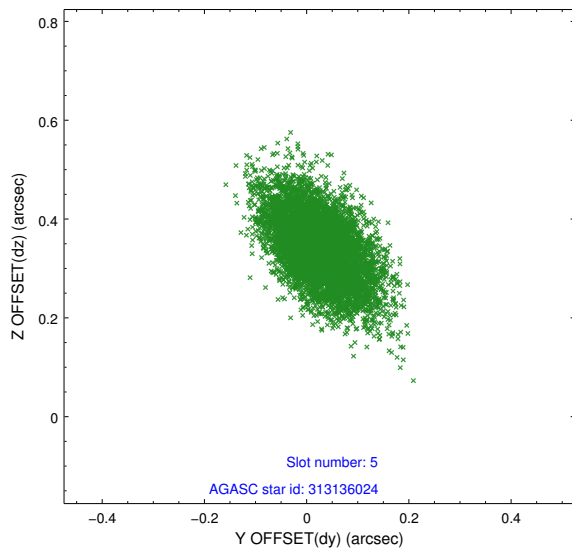
### 2.4.1 Slot 3



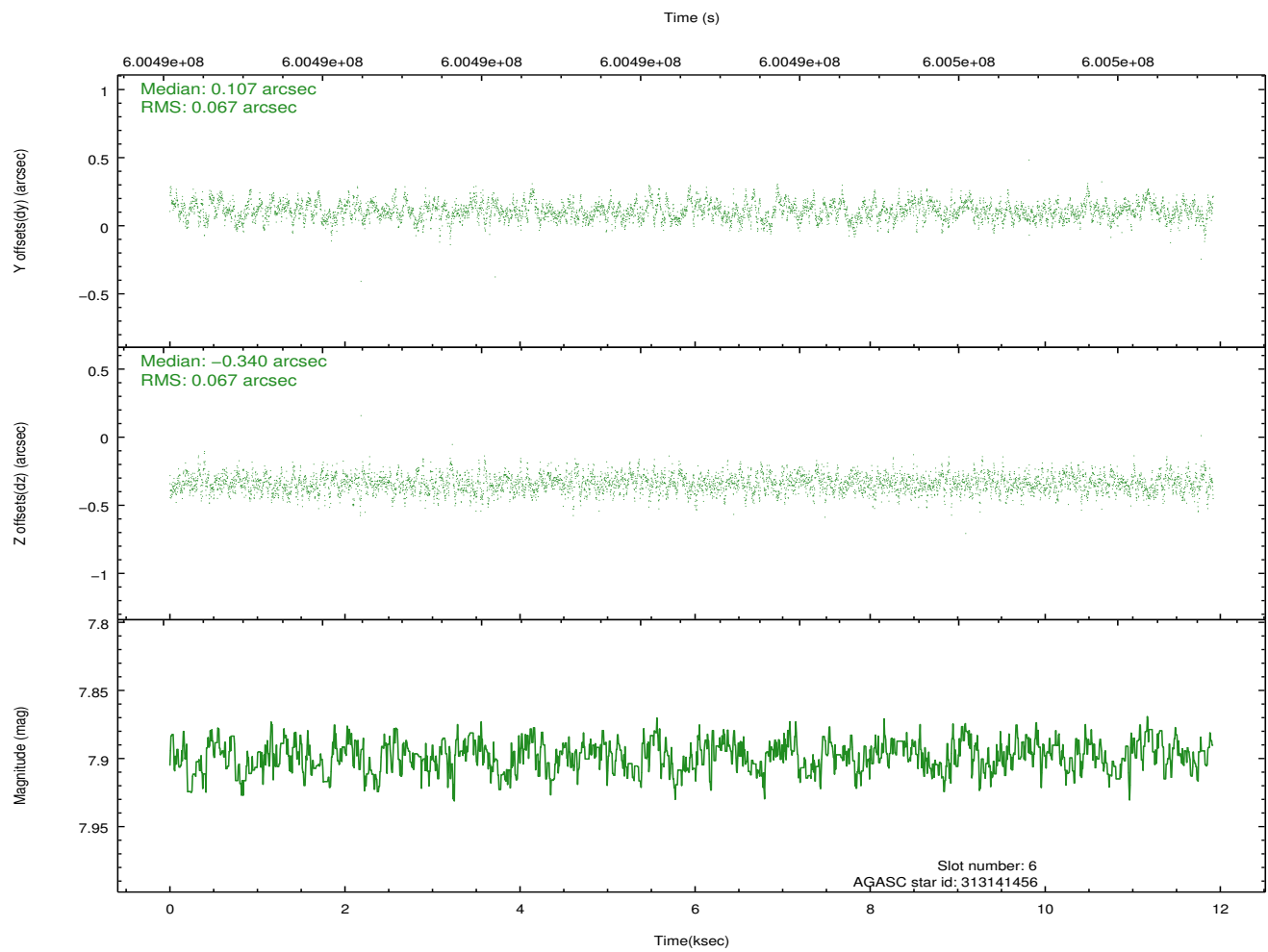
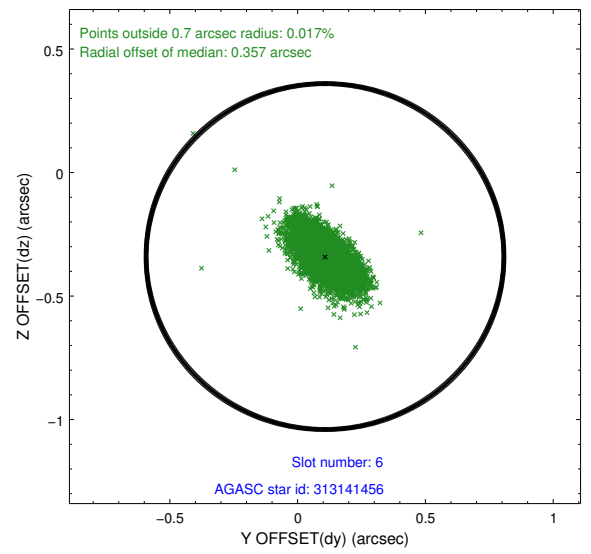
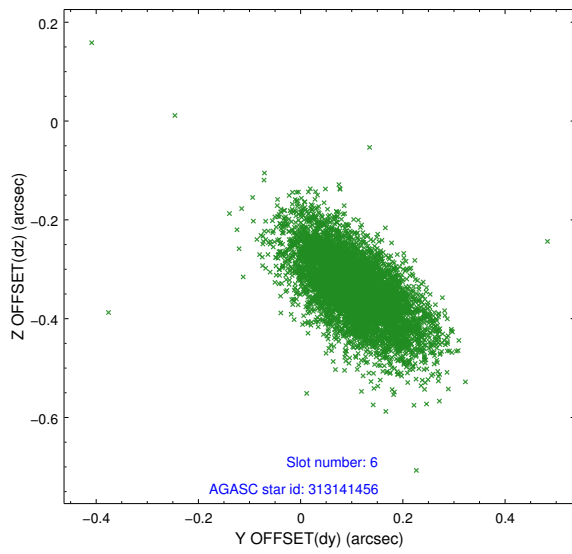
## 2.4.2 Slot 4



### 2.4.3 Slot 5

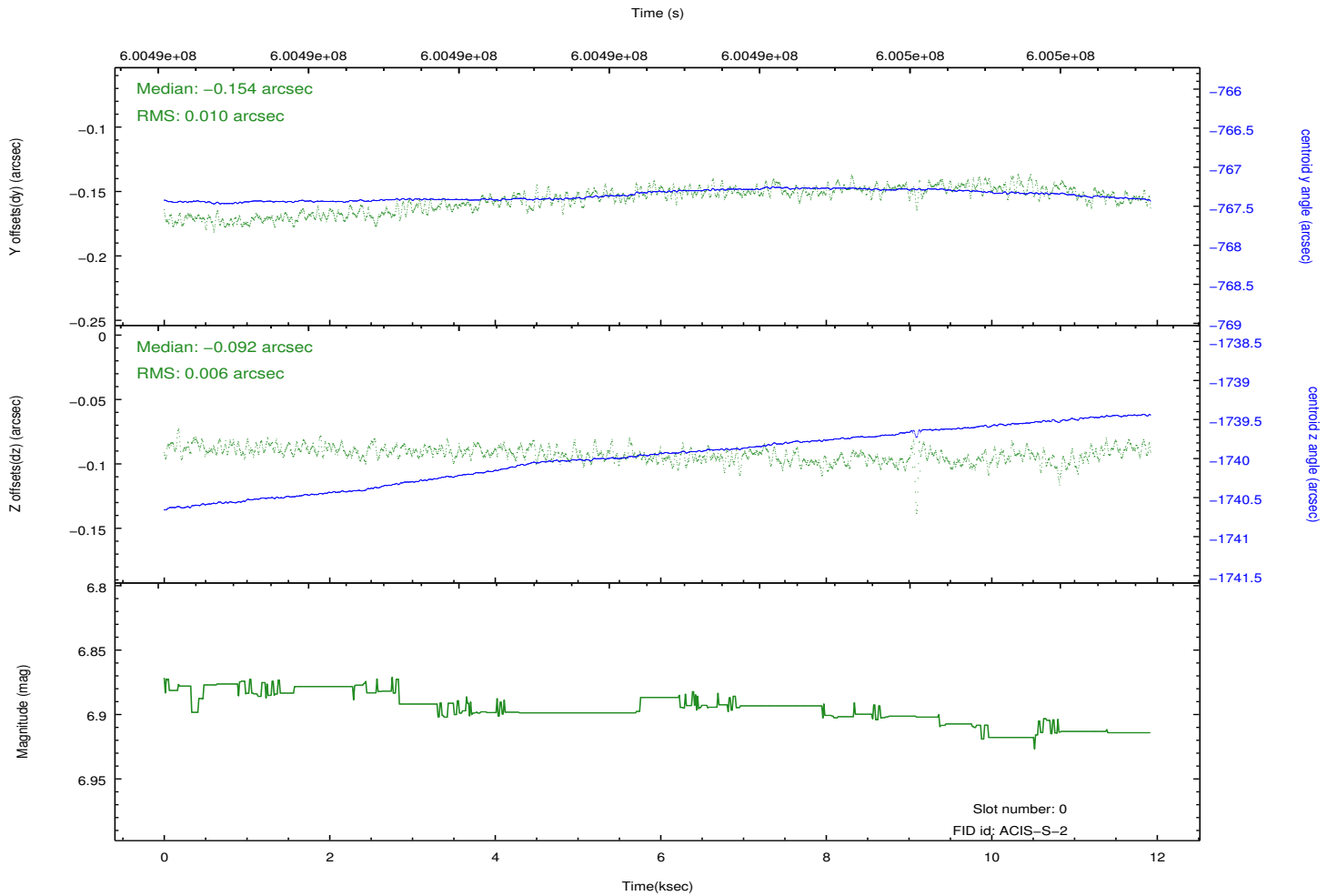
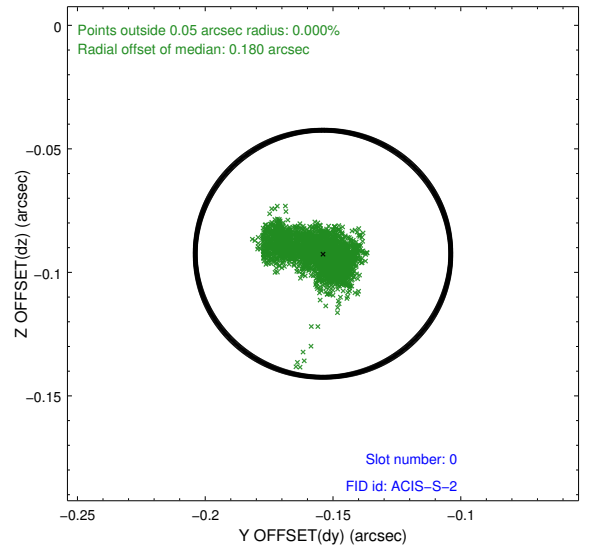
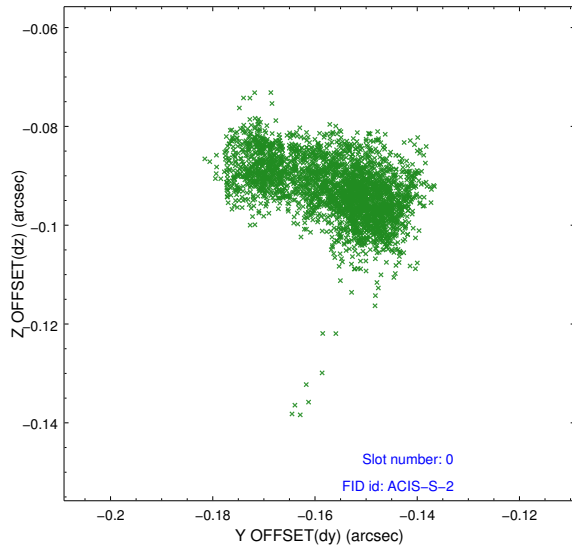


## 2.4.4 Slot 6

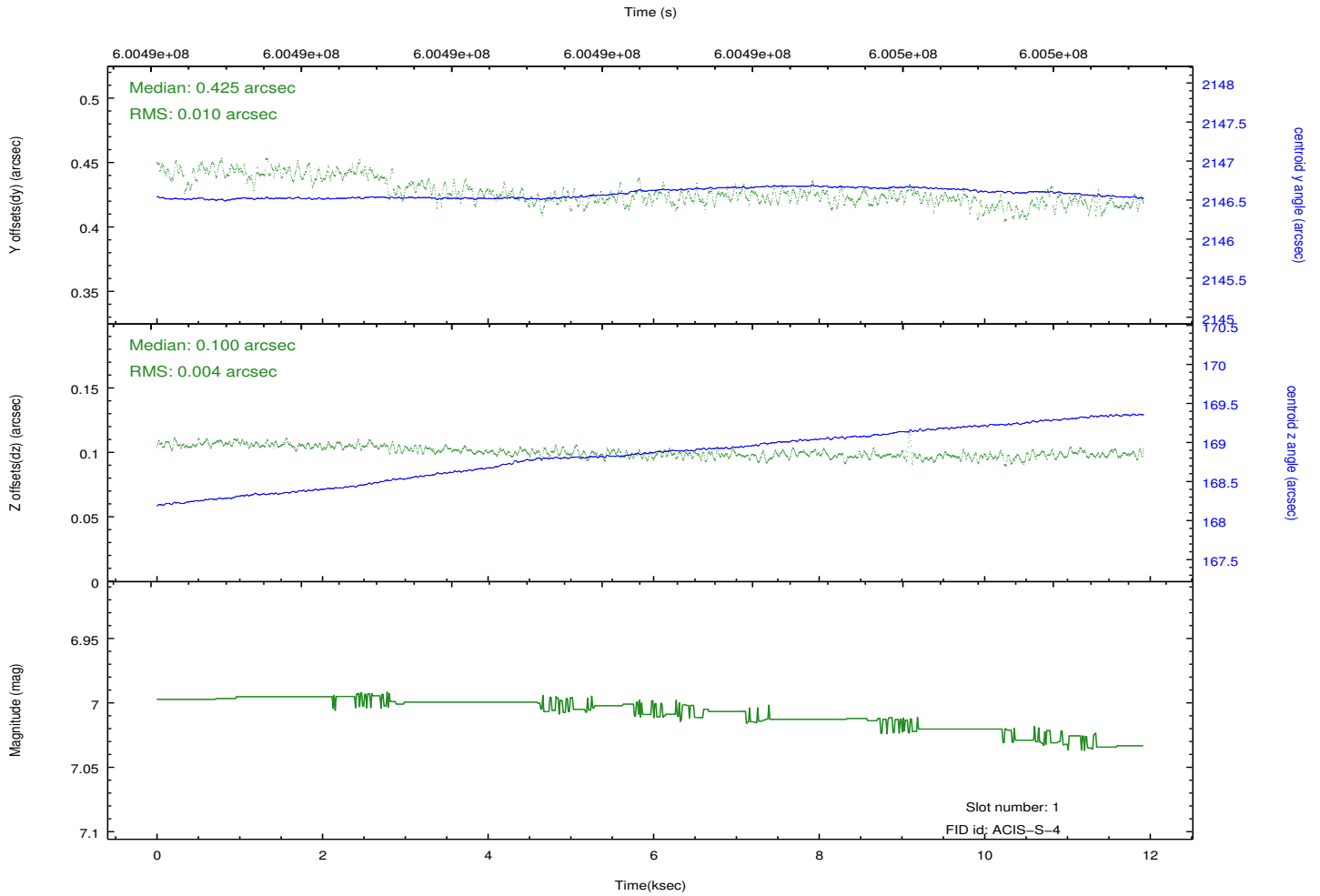
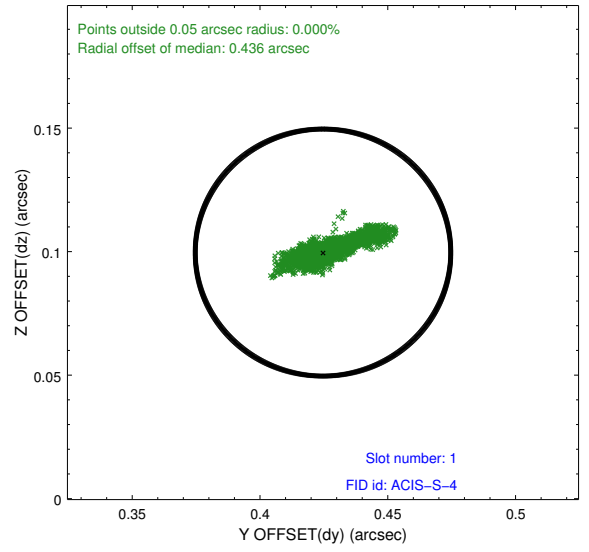
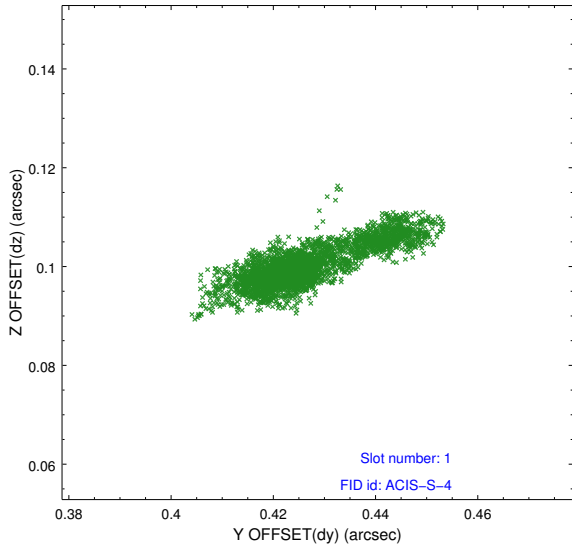


## 2.5 FID Slots

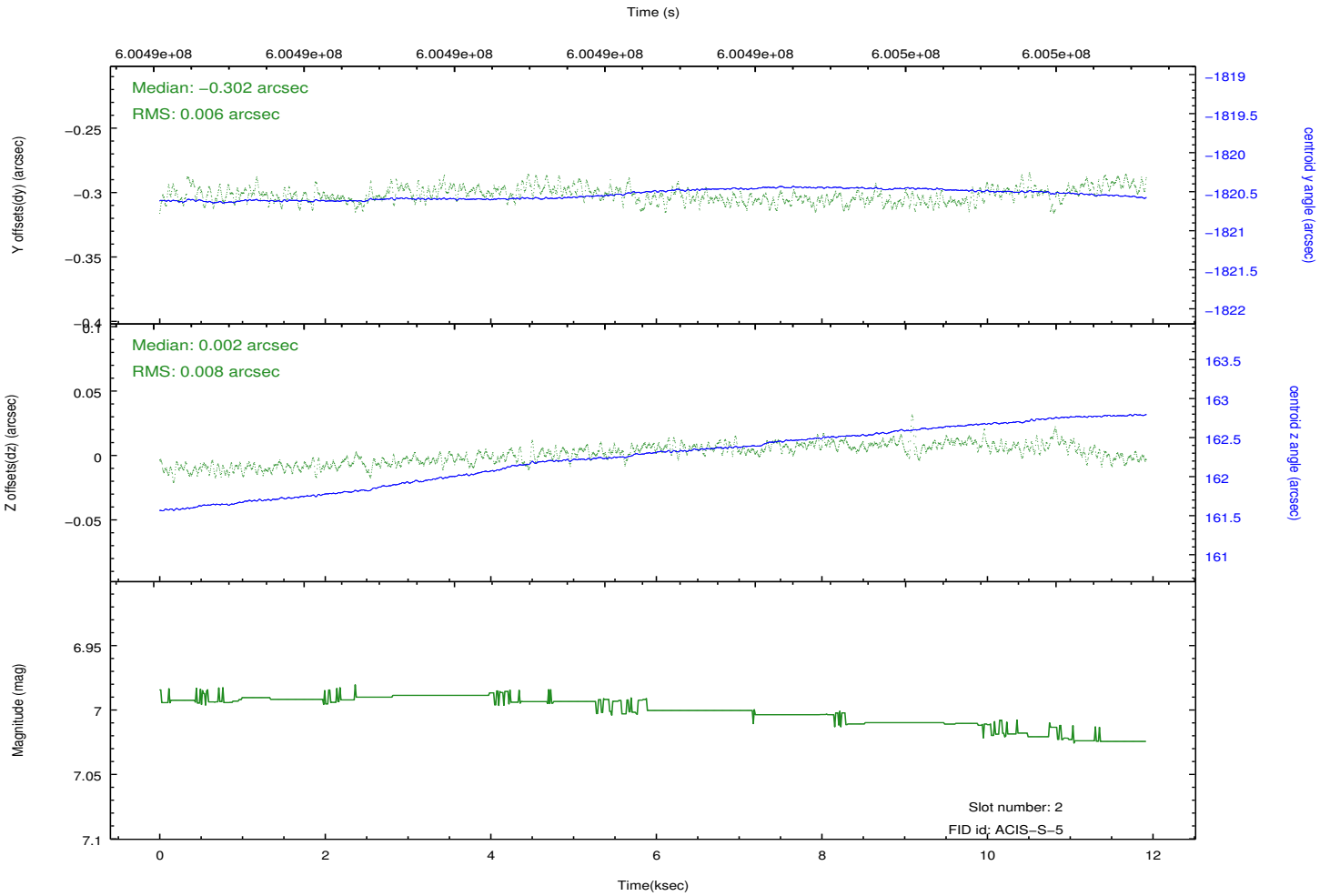
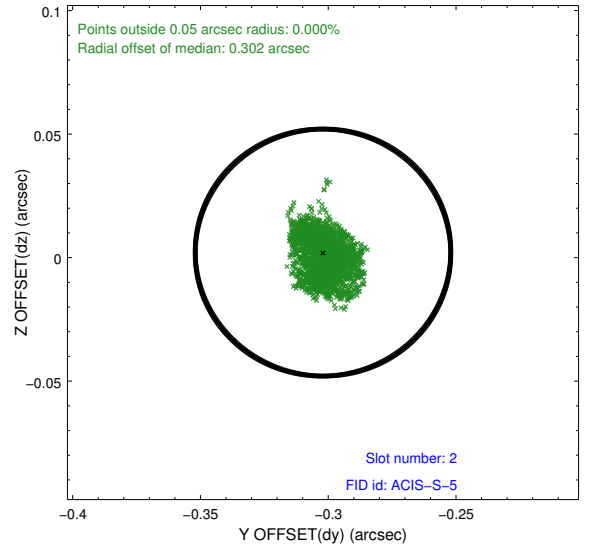
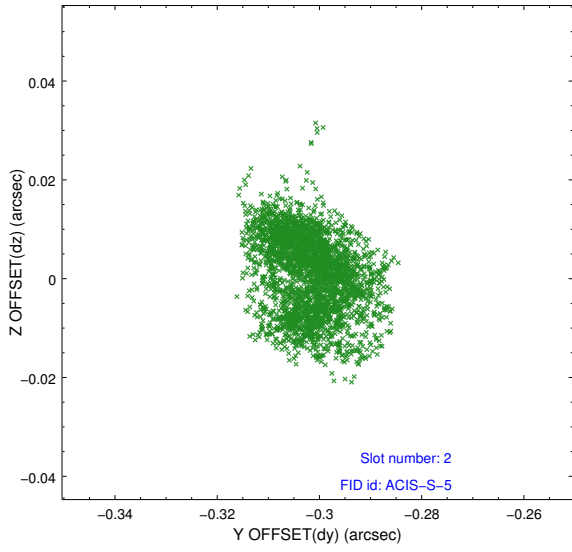
### 2.5.1 Slot 0



## 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)	2017.01.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.296665549994

## A.2 Comments