

# V&V Reference Report

## L2 ASCDS Version : 10.8.1

Observation 22572 - L2 Version 1  
Chandra X-Ray Center

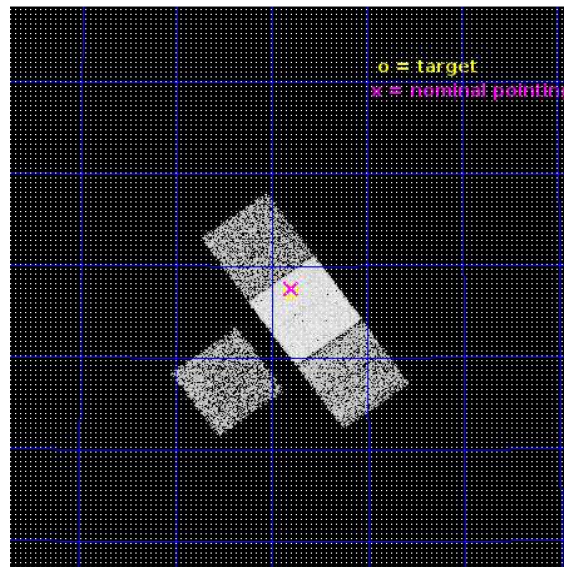
L2 Processing Date : Oct 25 2019

## 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

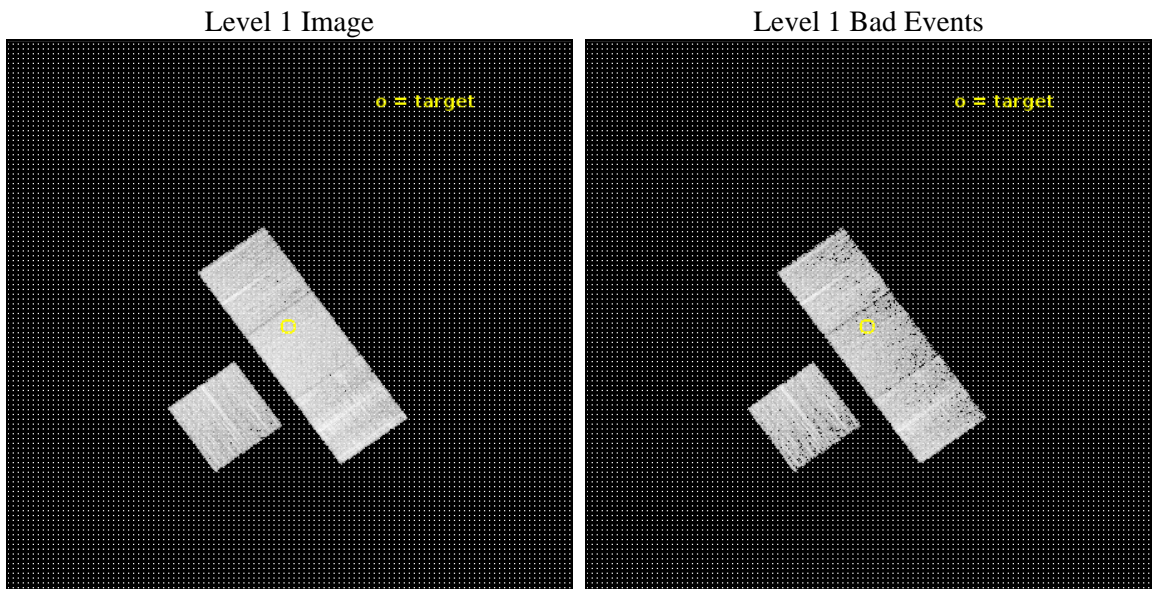
seq_num	703959	Sequence number
obs_id	22572	Observation id
title	Probing Accretion and Obscuration in Merger-Dominated, Luminous Red Quasars	Proposal title
observer	Eilat Glikman	Principal investigator
object	F2M1106+4807	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	166.70125	Observer's specified target RA [deg]
dec_targ	48.120083	Observer's specified target Dec [deg]
ra_nom	166.69903775032	Nominal RA [deg]
dec_nom	48.125363262679	Nominal Dec [deg]
roll_nom	54.158242218961	Nominal Roll [deg]
revision	1	Processing version of data
ontime	6065.5594984293	Sum of GTIs [s]
livetime	5986.3084981824	Livetime [s]
ontime3	6059.1954778433	Sum of GTIs [s]
ontime6	6065.5184584856	Sum of GTIs [s]
ontime7	6065.5594984293	Sum of GTIs [s]
ontime8	6065.436378479	Sum of GTIs [s]
l2events	40191	Number of level 2 events



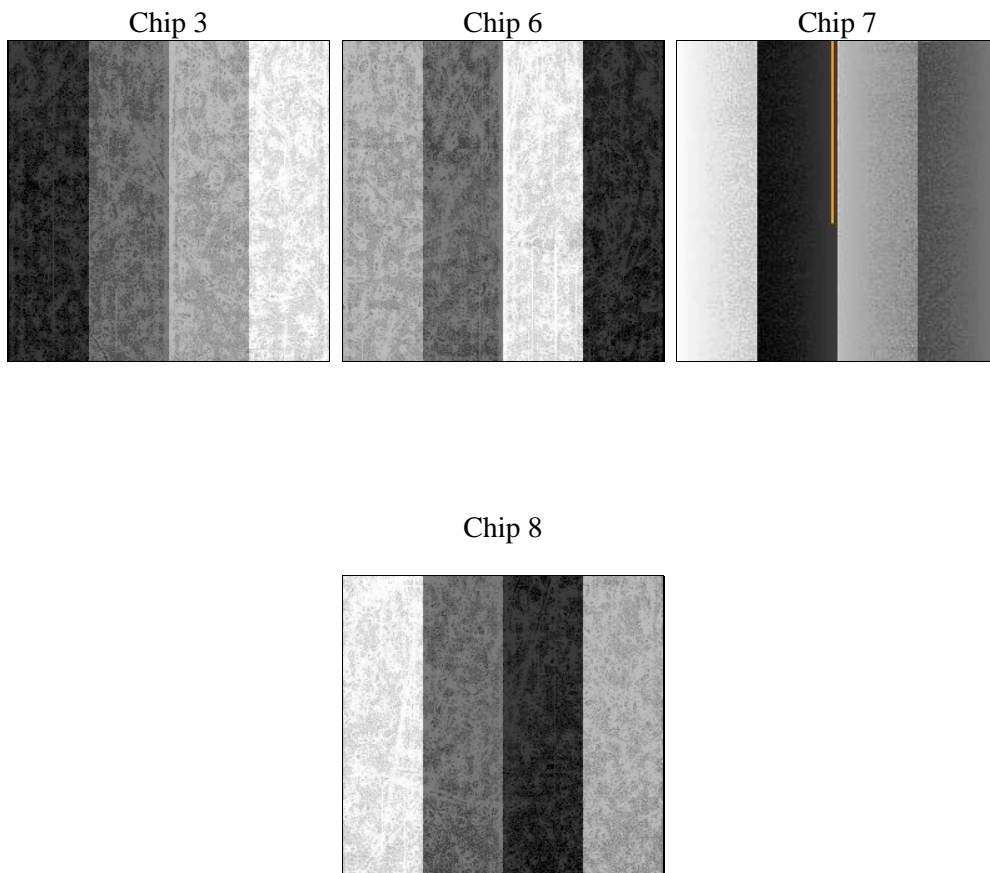
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	6065.5594984293	Sum of GTIs [s]
caldsver	4.8.4.2	&#160	ontime3	6059.1954778433	Sum of GTIs [s]
date	2019-10-25T13:27:55	Date and time of file creation	ontime6	6065.5184584856	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	6065.5594984293	Sum of GTIs [s]
			ontime8	6065.436378479	Sum of GTIs [s]
			l1events	210811	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	43262	46545	59525	61479
rejected events	38316	41278	33537	43636
rejected %	88%	88%	56%	70%

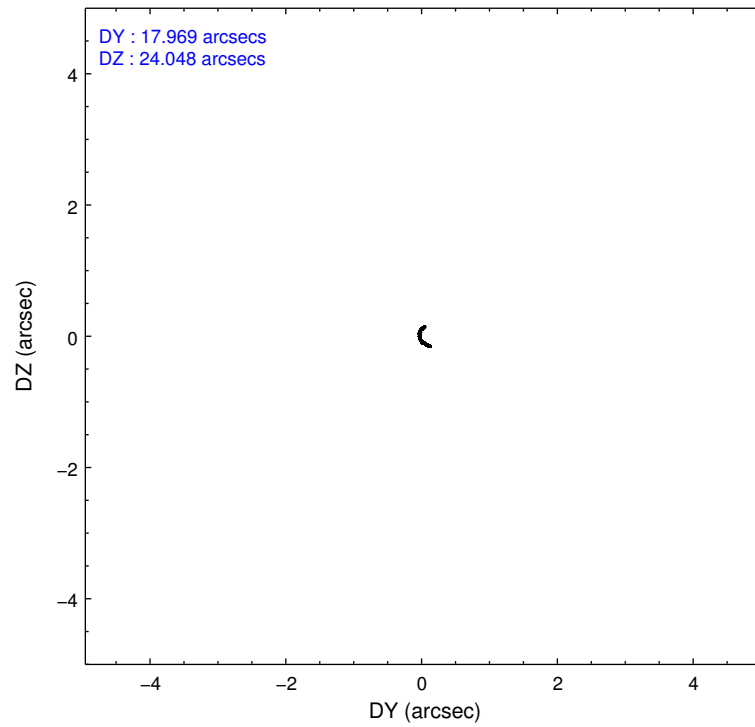
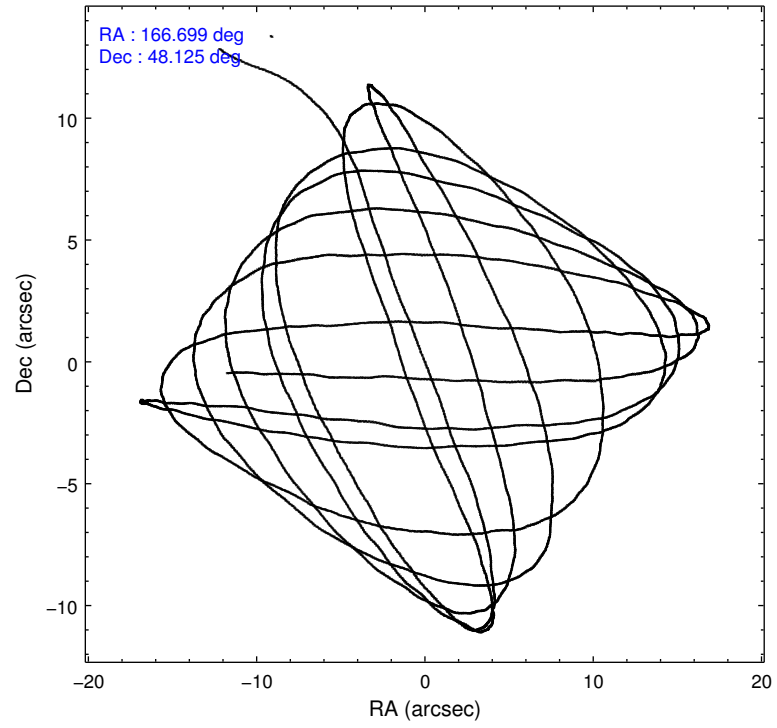
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1901	1767	2202	5300
	4%	3%	3%	8%
grade 1 events	25	24	91	43
	0%	0%	0%	0%
grade 2 events	1030	1219	5813	4364
	2%	2%	9%	7%
grade 3 events	472	502	1968	1775
	1%	1%	3%	2%
grade 4 events	533	540	2034	1651
	1%	1%	3%	2%
grade 5 events	2212	2109	5953	3294
	5%	4%	10%	5%
grade 6 events	1017	1246	13997	4760
	2%	2%	23%	7%
grade 7 events	36072	39138	27467	40292
	83%	84%	46%	65%

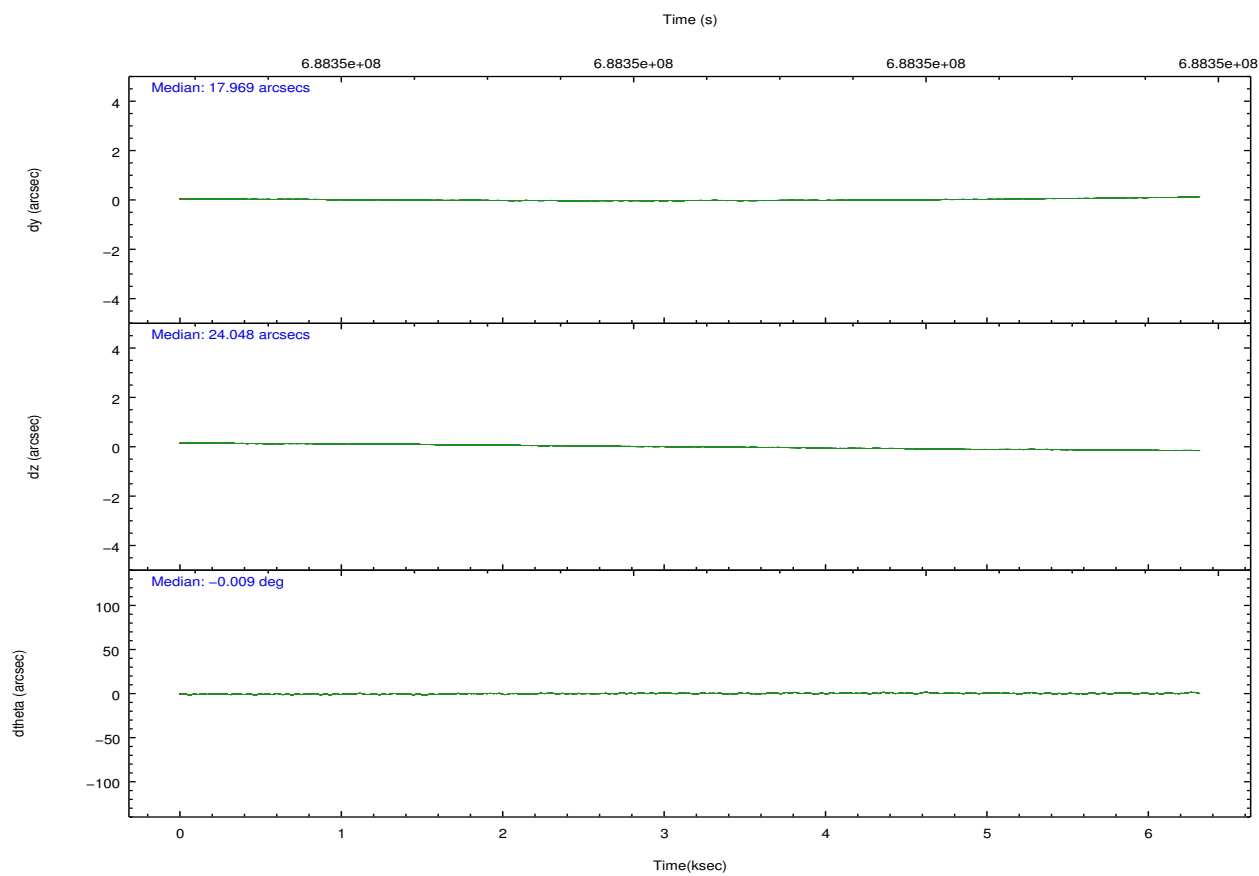
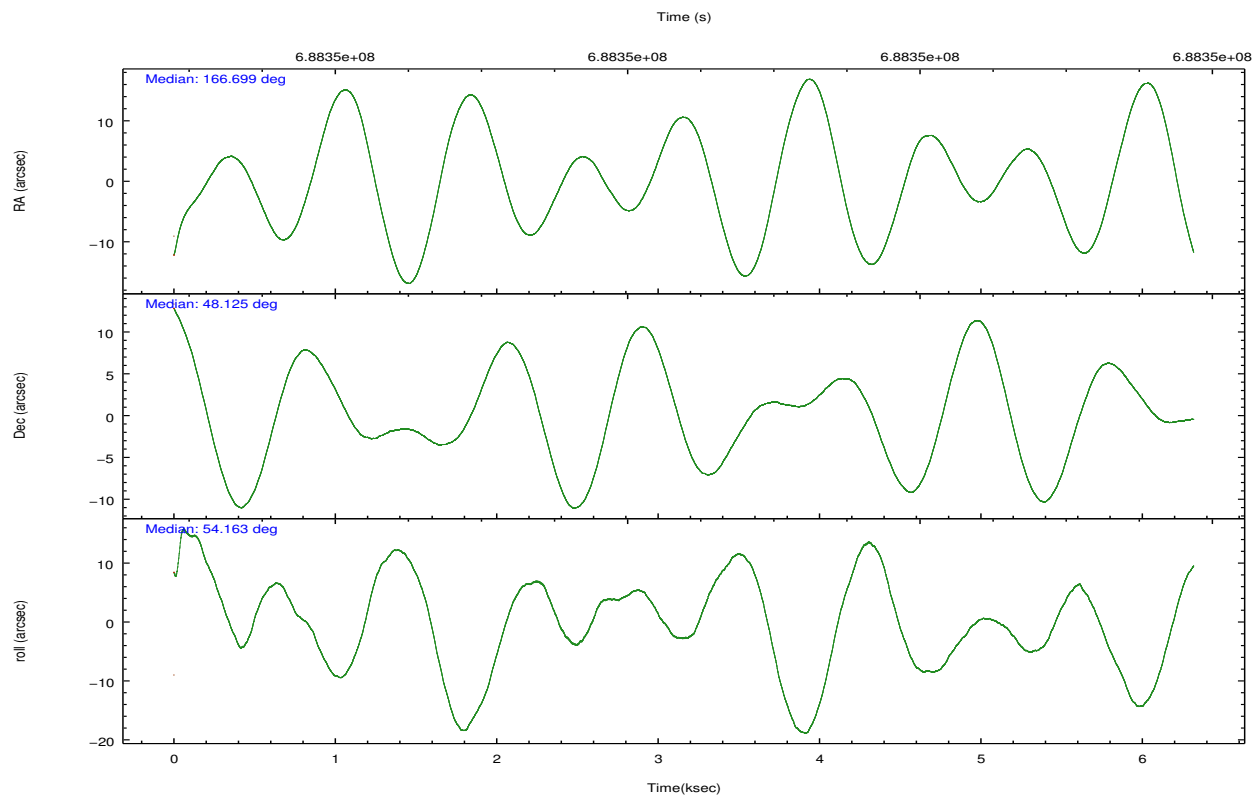


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	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	166.695374	166.6990377503213	CCD I2 on	N	N
[deg] Pointing Dec	48.098006	48.1253632626792	CCD I3 on	O1	Y
[deg] Pointing Roll	54.004375	54.15824221896109	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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)	688345557.184000	688344610.96316	CCD S5 on	N	N
Observation start date	2019-10-24T23:04:48	2019-10-24T22:50:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	688351557.184000	688352609.55114	On-chip summing requested	N	N
Observation end date	2019-10-25T00:44:48	2019-10-25T01:03:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



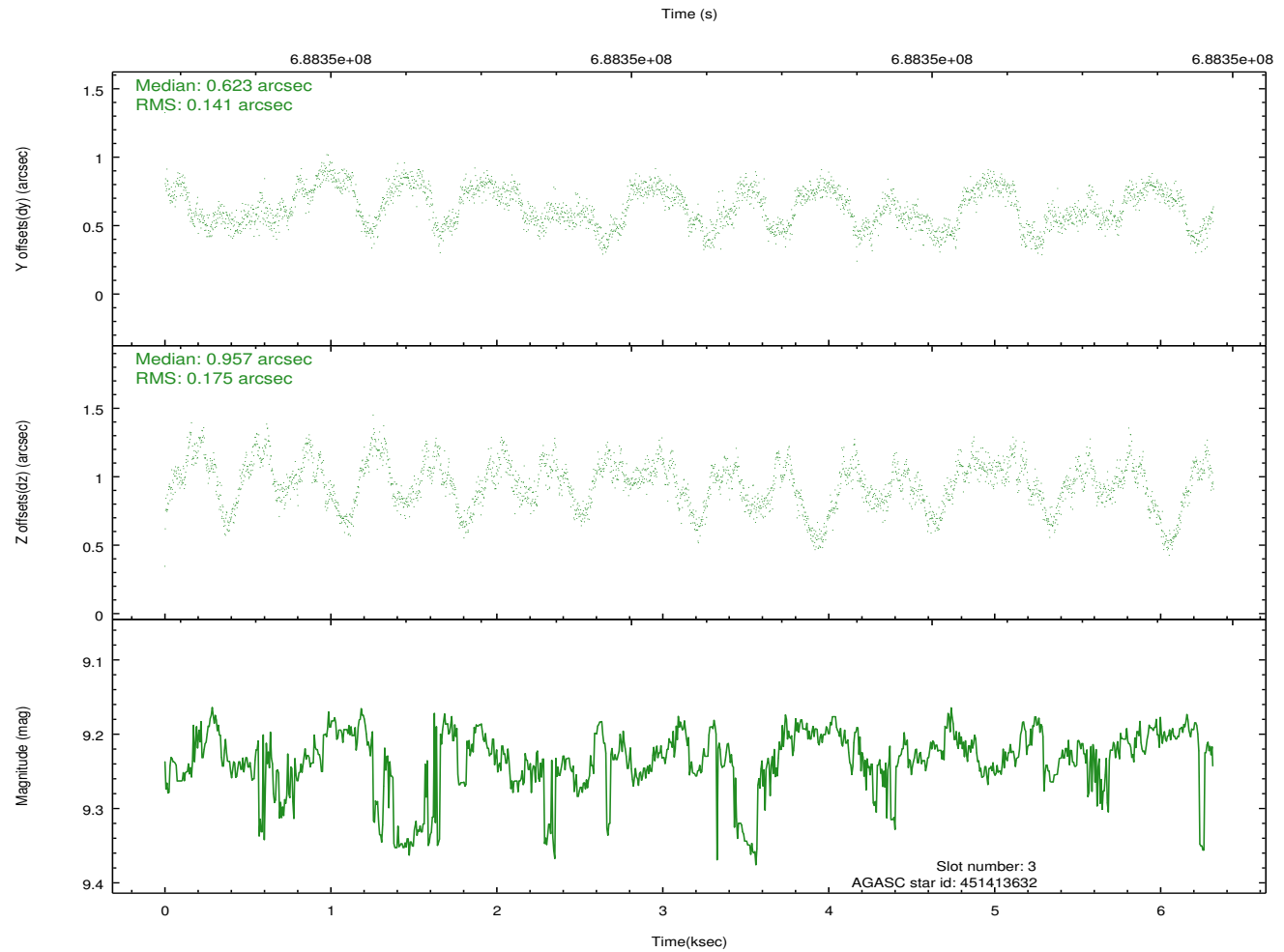
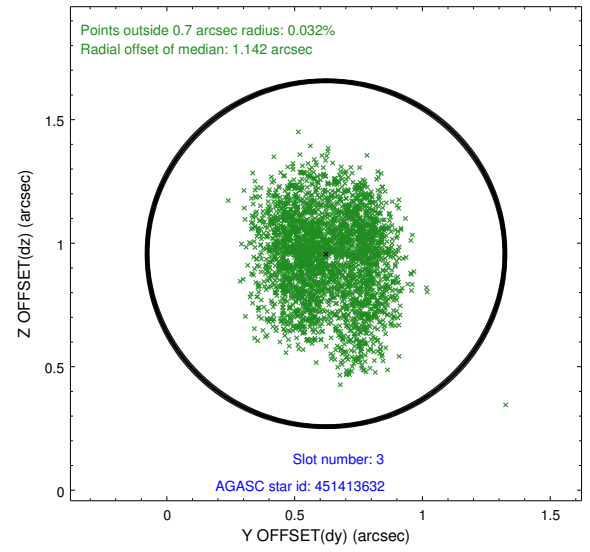
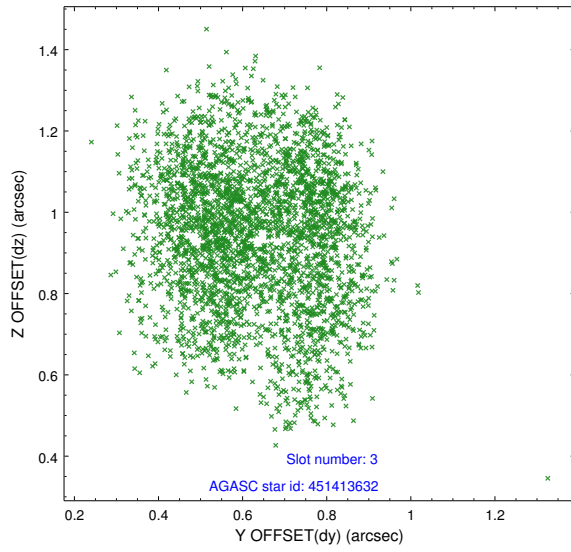


Slot Statistics

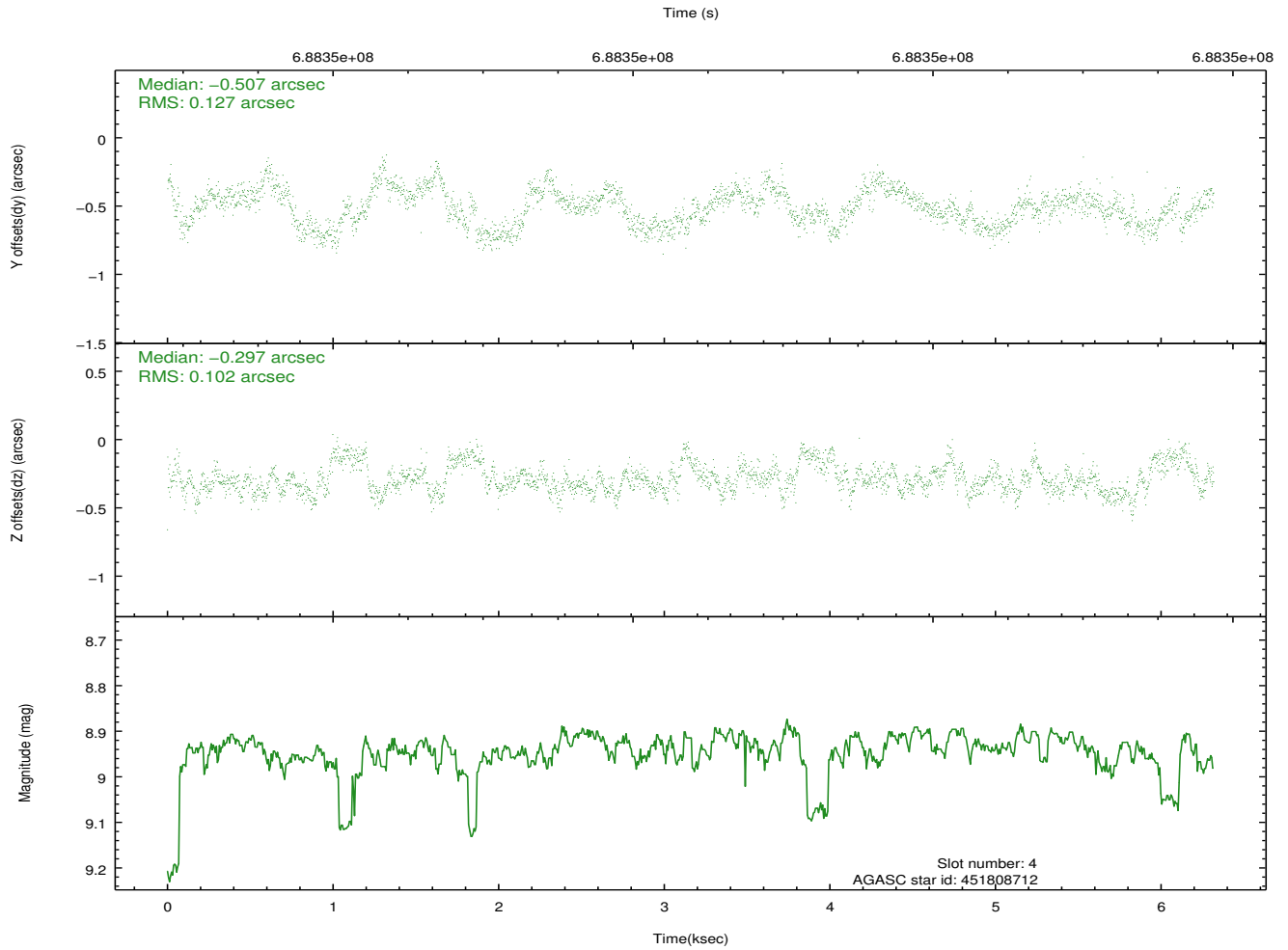
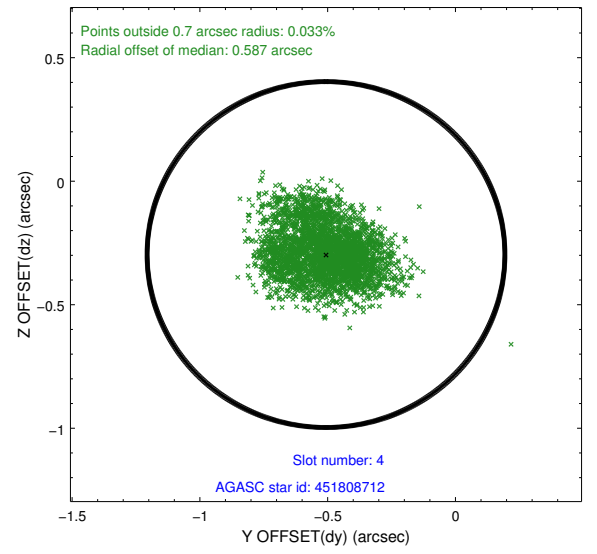
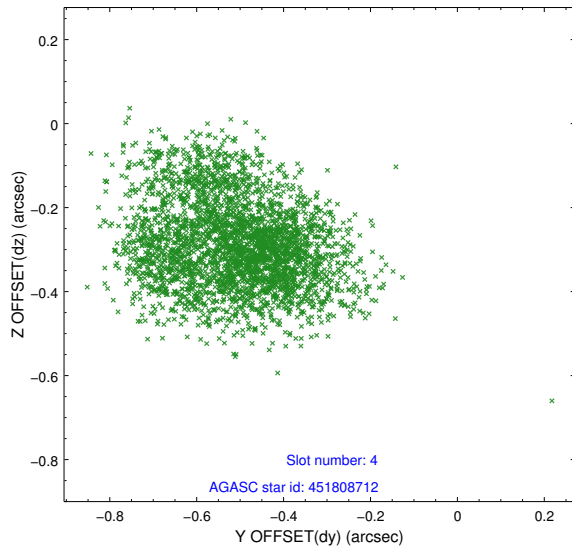
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.06	1542	1.000	0.191	-0.089	0.009	0.013	0.000000	0.000000	925.32	-1741
1	FID		ACIS-S-5	7.06	1542	1.000	-0.507	0.065	0.010	0.014	0.000000	0.000000	-1823.99	155
2	FID		ACIS-S-6	7.25	1542	1.000	0.294	0.038	0.012	0.018	0.000000	0.000000	389.79	800
3	GUIDE	used	451413632	9.23	3077	1.000	0.623	0.957	0.243	0.371	166.702247	47.421181	-1960.70	-1444
4	GUIDE	used	451808712	8.94	3076	1.000	-0.507	-0.297	0.179	0.273	166.915182	48.822739	2417.10	1111
5	GUIDE	used	451808792	8.93	3076	1.000	-0.184	-0.241	0.175	0.278	166.196190	48.265332	-213.49	1325
6	GUIDE	used	451809432	9.00	3078	1.000	-0.187	-0.328	0.203	0.322	165.646411	48.143719	-1334.10	2145
7	GUIDE	used	451811424	9.42	3081	1.000	0.258	-0.114	0.203	0.331	166.448172	48.056863	-468.59	395

## 2.4 Star Slots

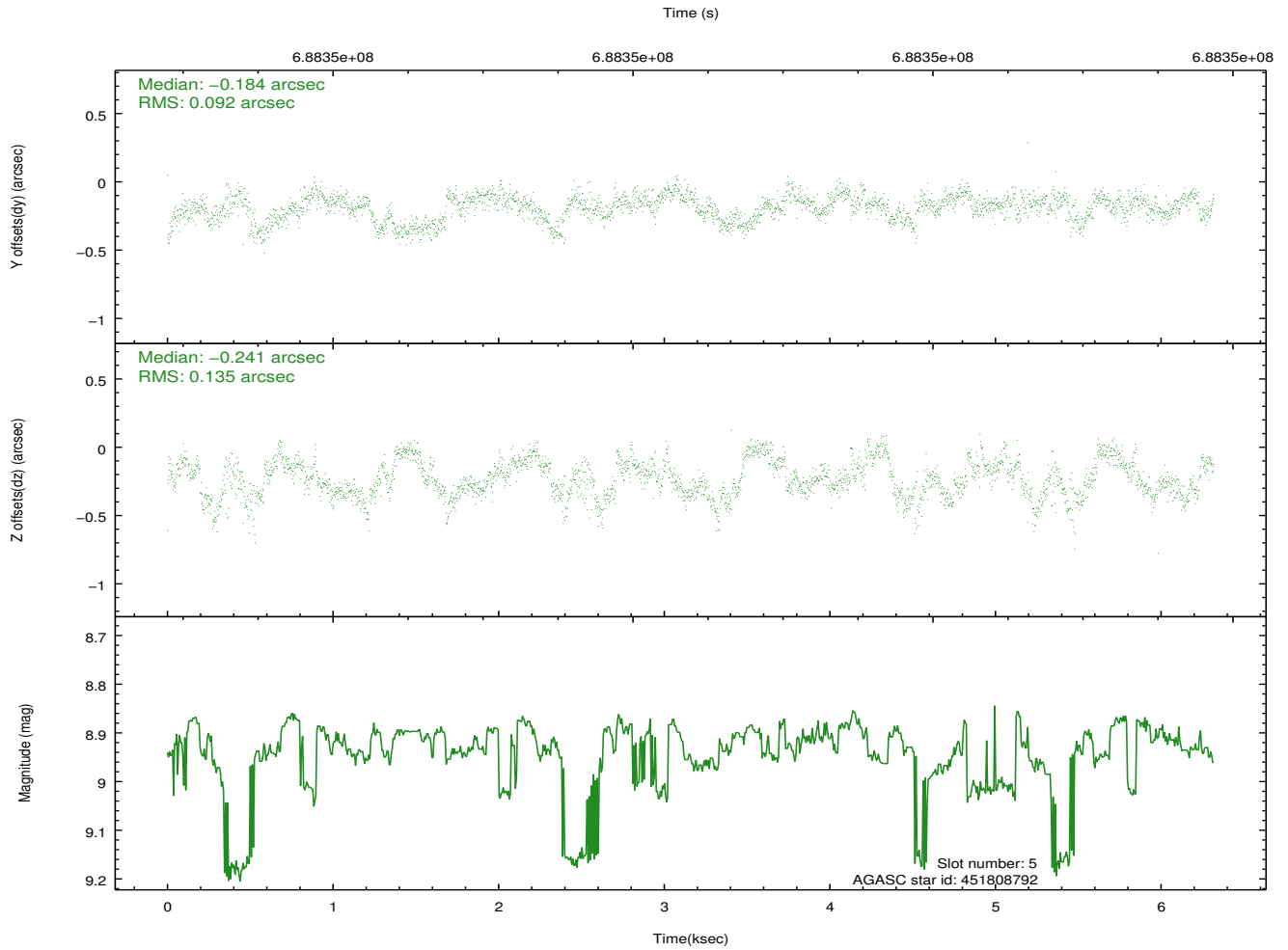
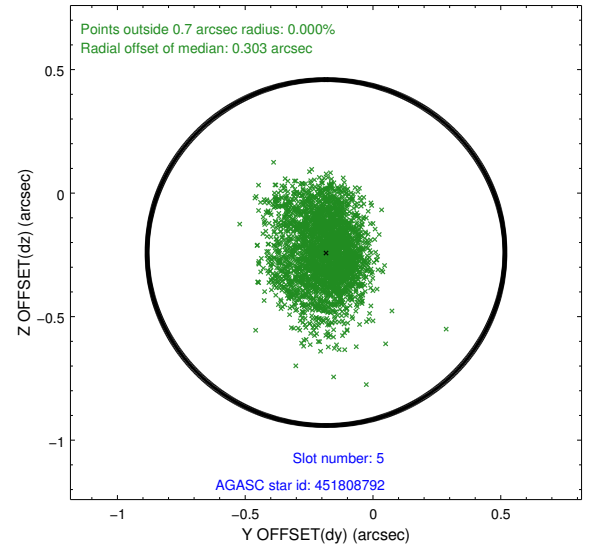
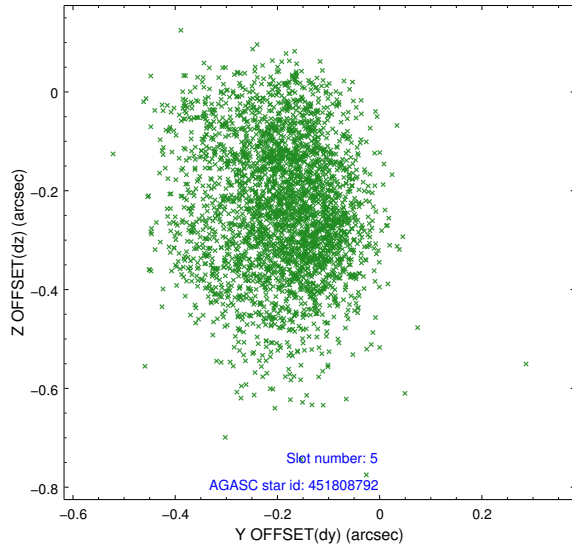
### 2.4.1 Slot 3



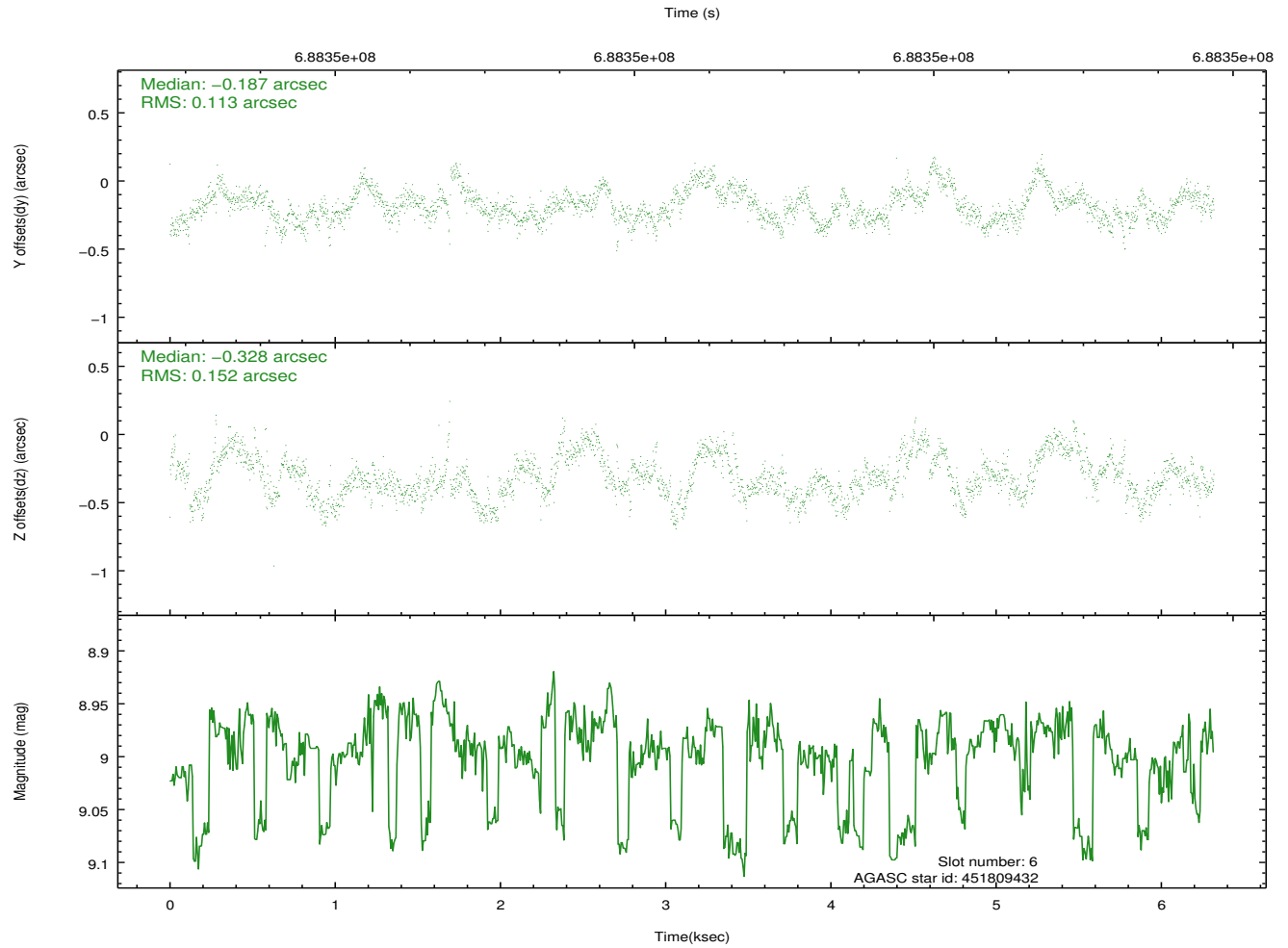
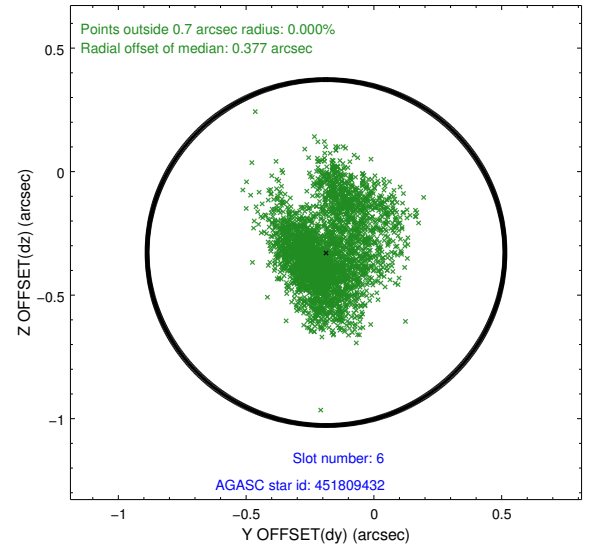
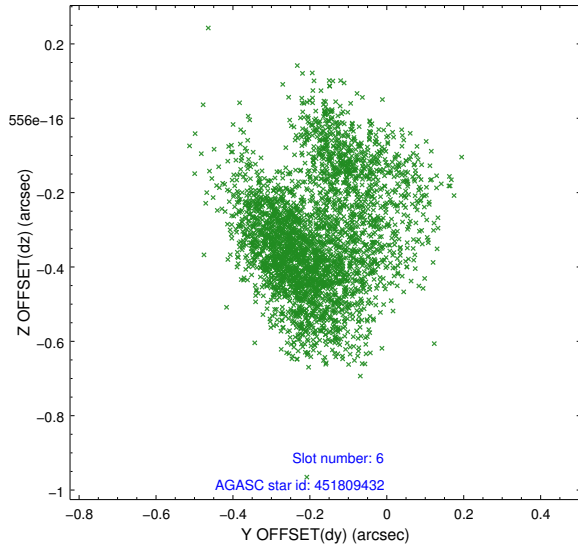
## 2.4.2 Slot 4



### 2.4.3 Slot 5

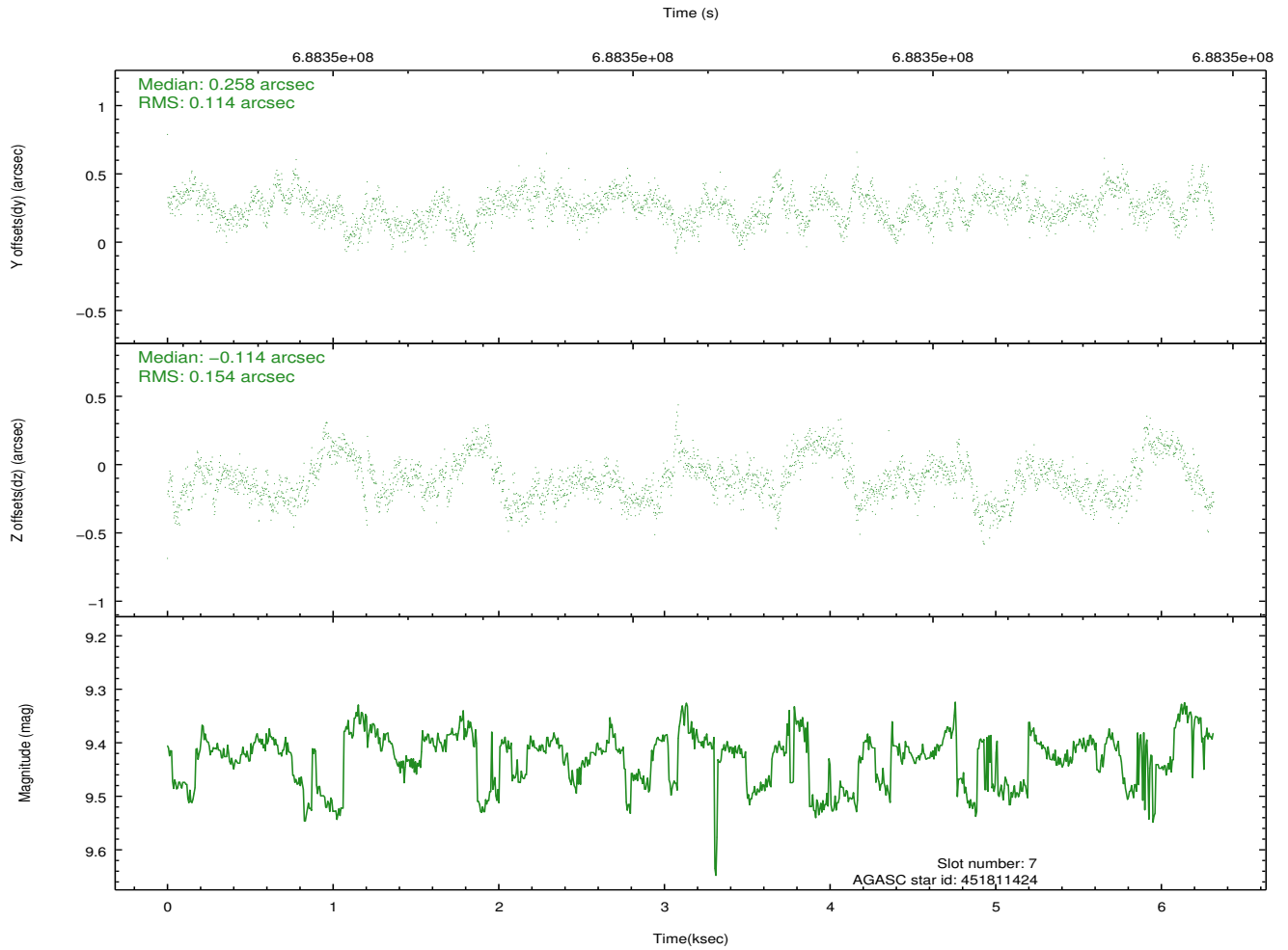
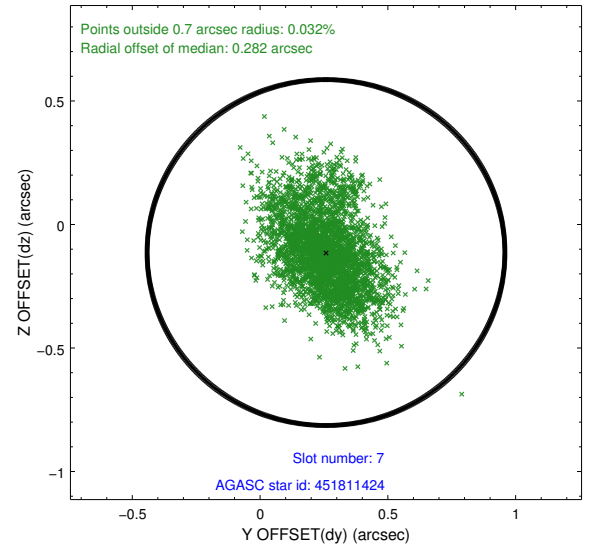
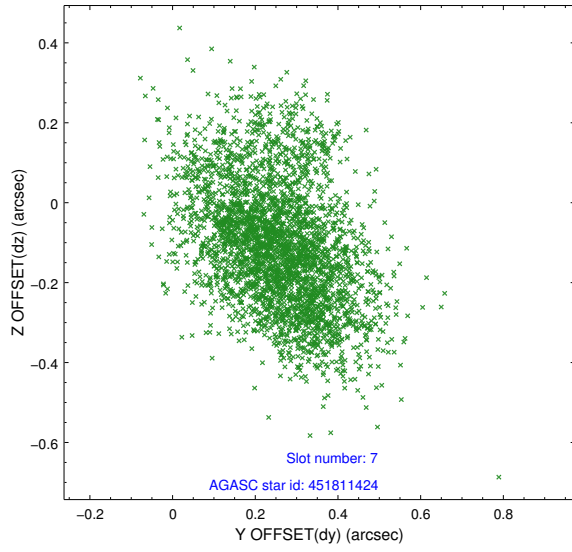


## 2.4.4 Slot 6



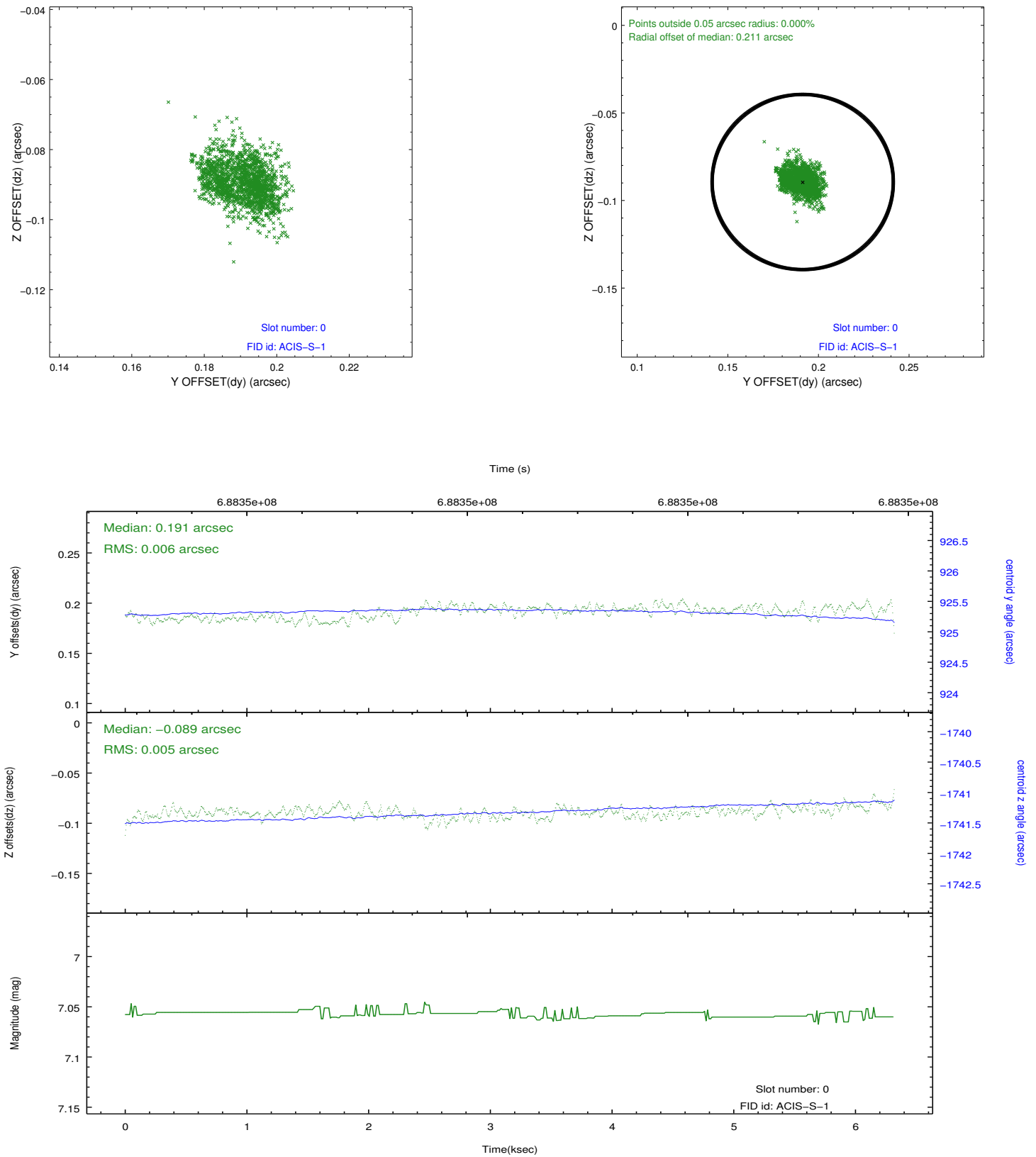


## 2.4.5 Slot 7

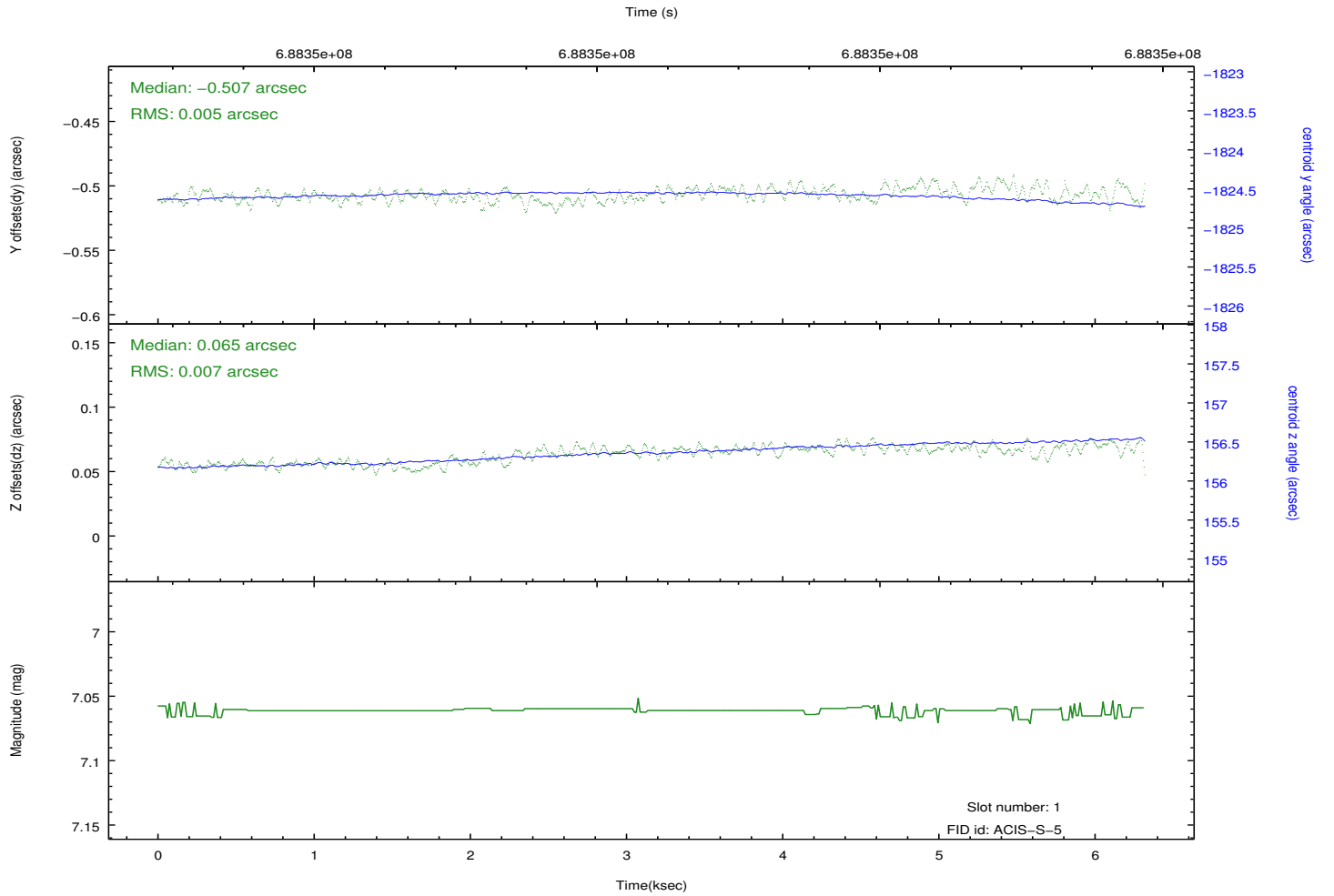
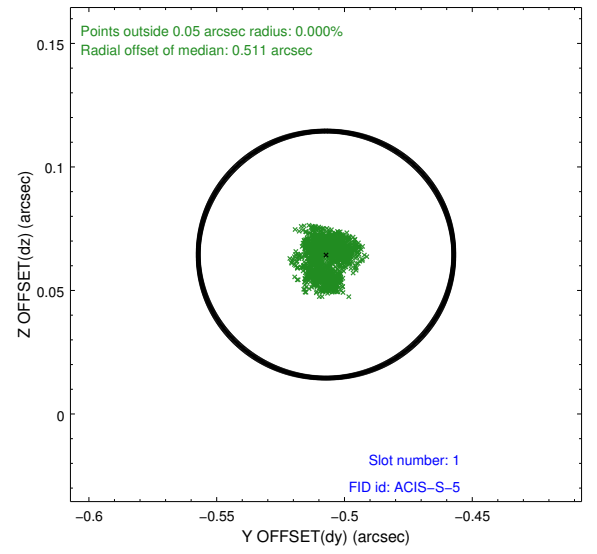
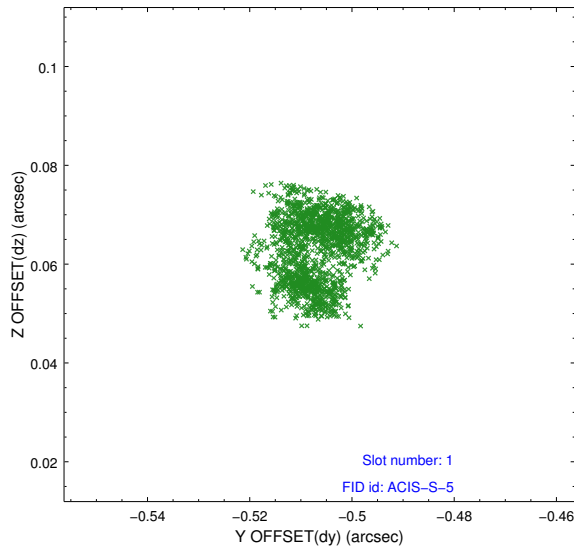


## 2.5 FID Slots

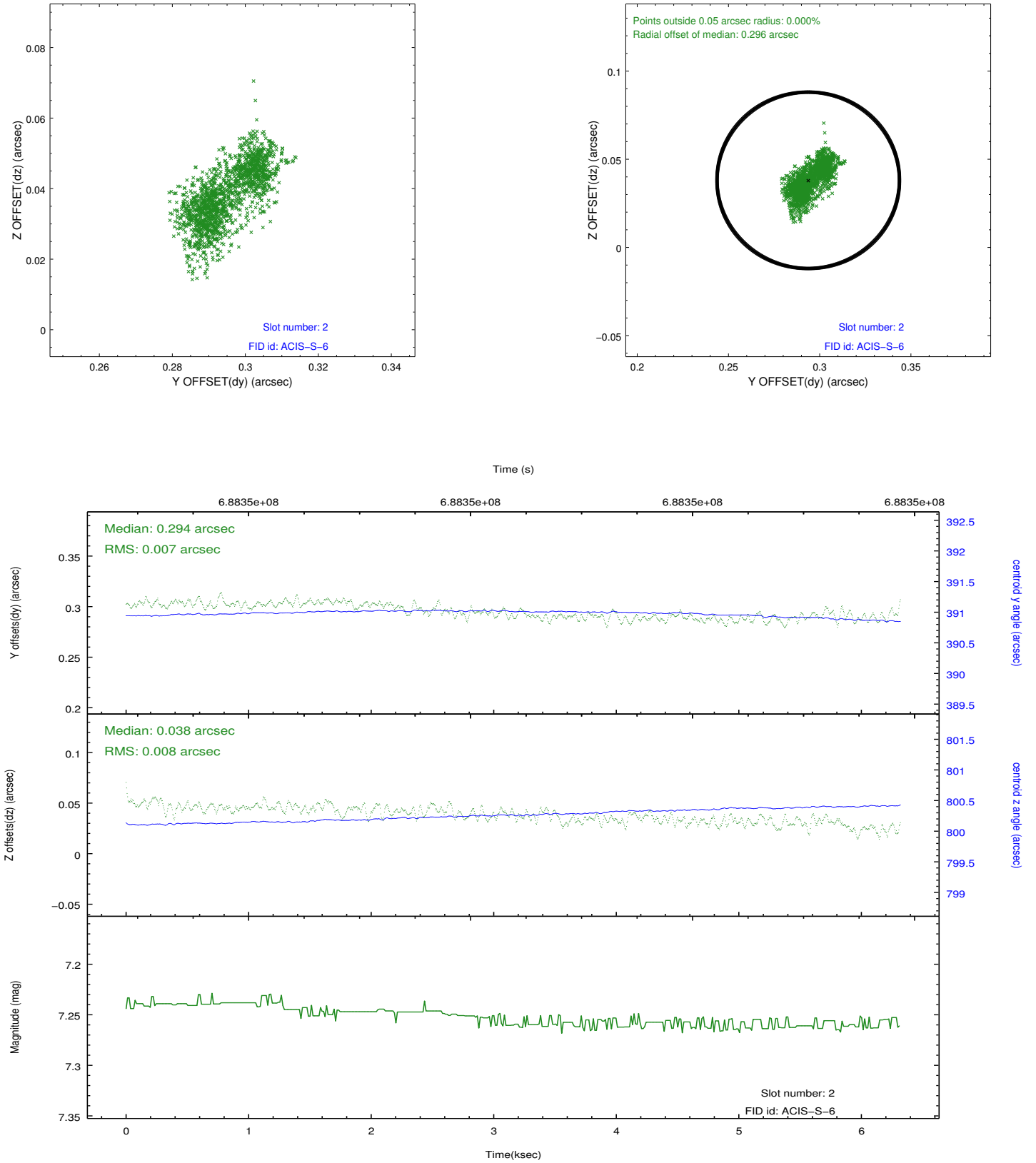
### 2.5.1 Slot 0



## 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)	2019.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.0655594984293

### A.2 Comments