

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6341 - L2 Version 5  
Chandra X-Ray Center

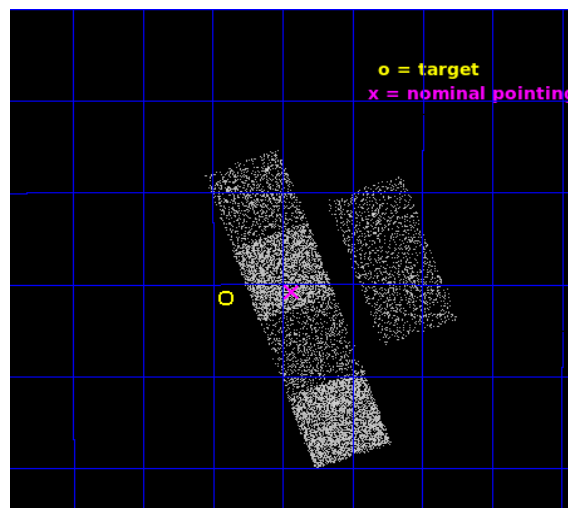
L2 Processing Date : Oct 9 2020

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# 1 Front

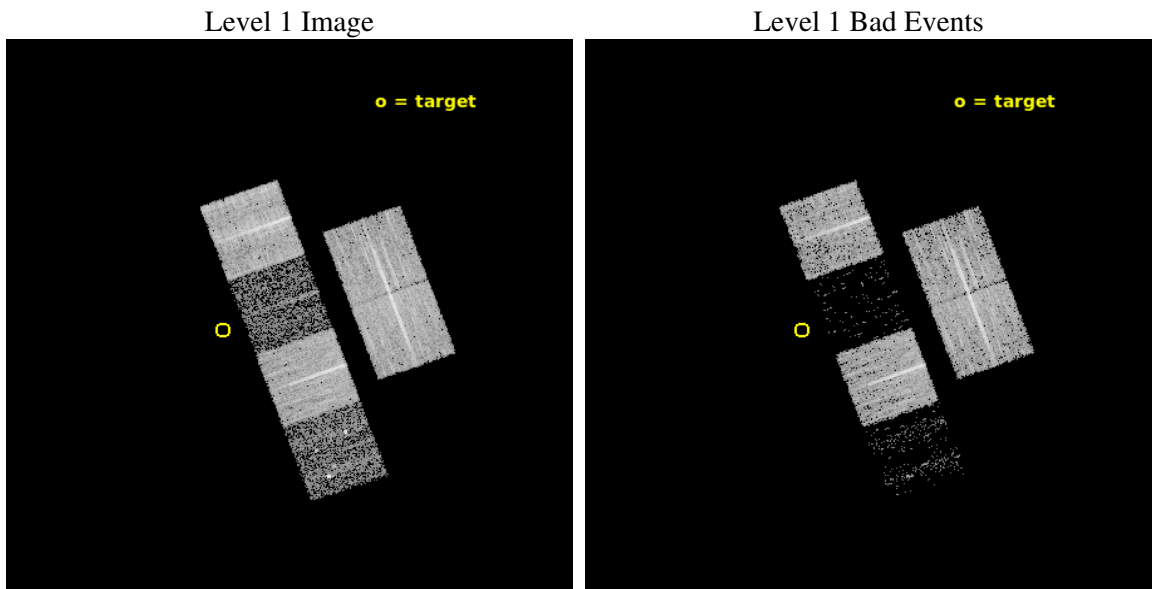
seq_num	100057	Sequence number
obs_id	6341	Observation id
title	Comet 9P/Tempel 1 During the Deep Impact Encounter	Proposal title
observer	Carey Lisse	Principal investigator
object	Comet 9P/Tempel 1	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	209.227379	Observer's specified target RA [deg]
dec_targ	-13.35904	Observer's specified target Dec [deg]
ra_nom	209.10846295582	Nominal RA [deg]
dec_nom	-13.346510627863	Nominal Dec [deg]
roll_nom	250.08783615445	Nominal Roll [deg]
revision	5	Processing version of data
ontime	8508.7999683022	Sum of GTIs [s]
livetime	8401.0564197194	Livetime [s]
ontime2	8508.7999683022	Sum of GTIs [s]
ontime3	8508.7999683022	Sum of GTIs [s]
ontime5	8508.7999683022	Sum of GTIs [s]
ontime6	8508.7999683022	Sum of GTIs [s]
ontime7	8508.7999683022	Sum of GTIs [s]
ontime8	8505.5589980185	Sum of GTIs [s]
l2events	12343	Number of level 2 events



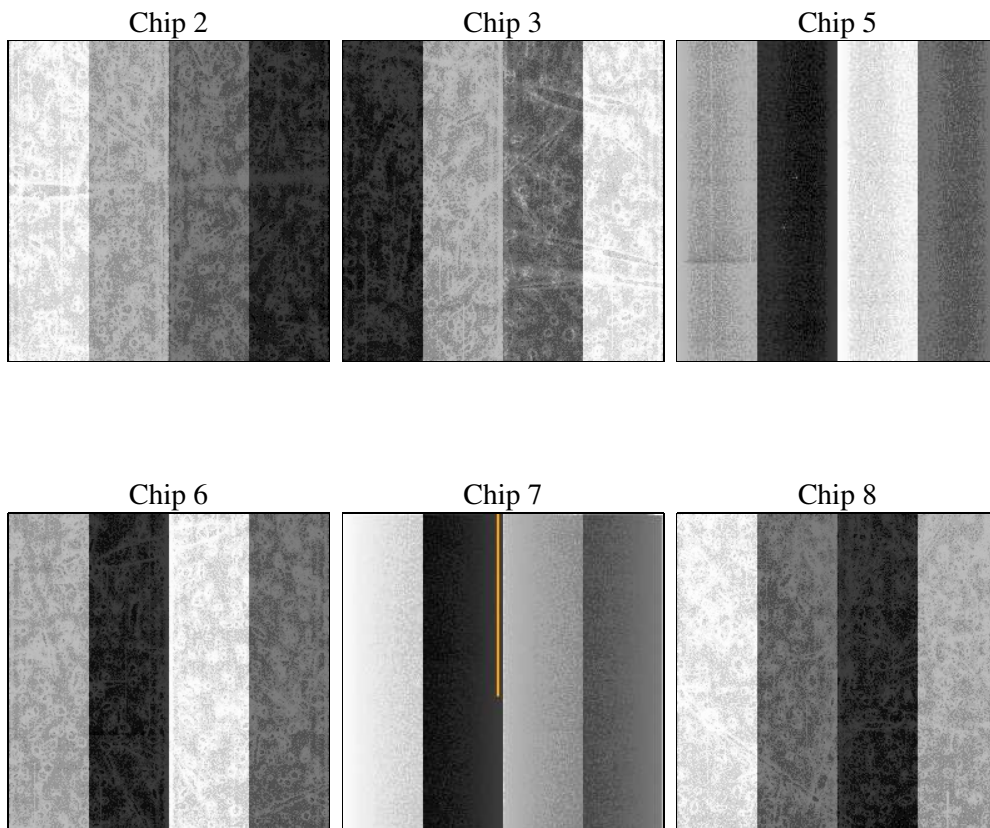
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8325.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	8508.7999683022	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	8508.7999683022	Sum of GTIs [s]
date	2020-10-09T08:53:48	Date and time of file creation	ontime3	8508.7999683022	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	8508.7999683022	Sum of GTIs [s]
			ontime6	8508.7999683022	Sum of GTIs [s]
			ontime7	8508.7999683022	Sum of GTIs [s]
			ontime8	8505.5589980185	Sum of GTIs [s]
			l1events	168184	Number of level 1 events

### 2.1.4 Events

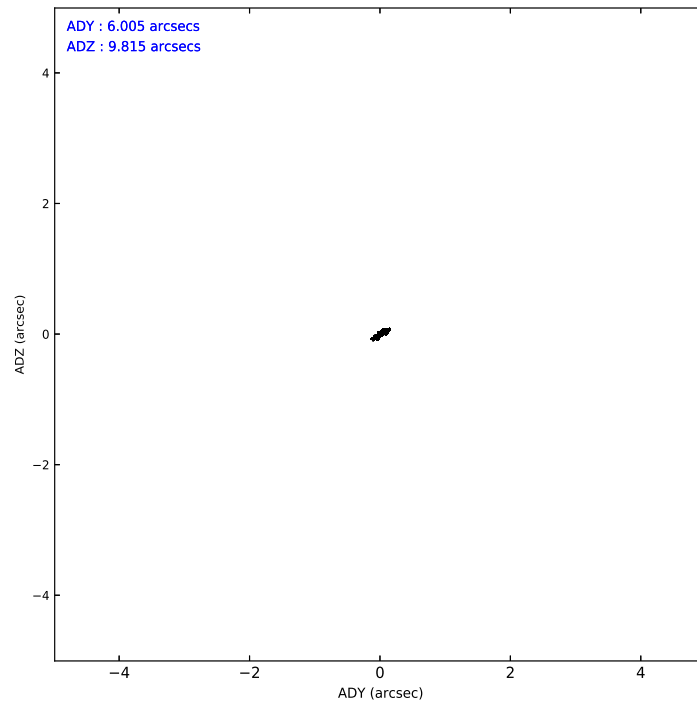
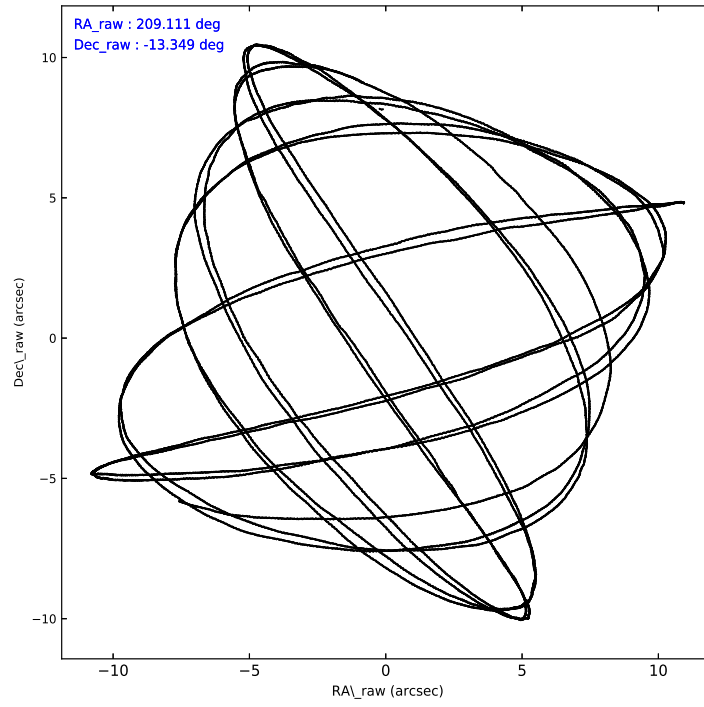
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	39771	34725	8149	36939	5295	43305
rejected events	37985	33527	2138	35357	1131	32449
rejected %	95%	96%	26%	95%	21%	74%

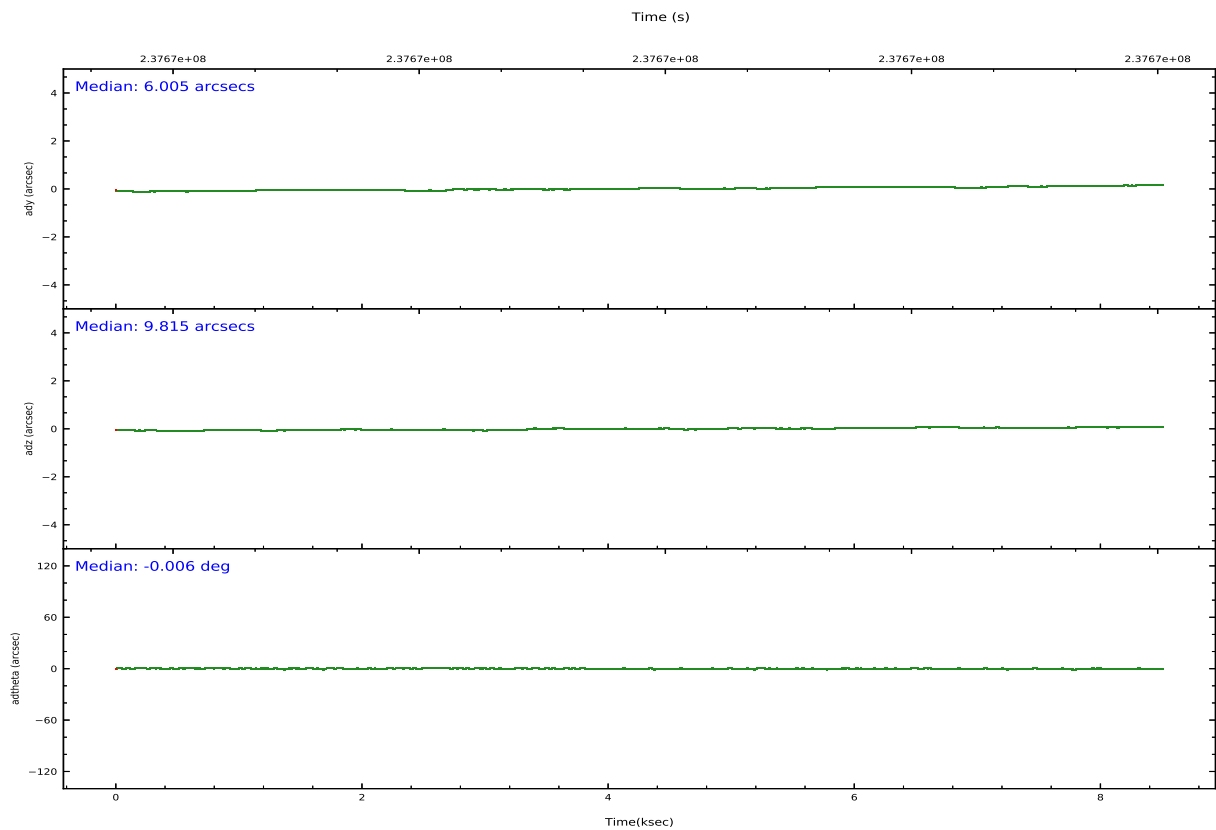
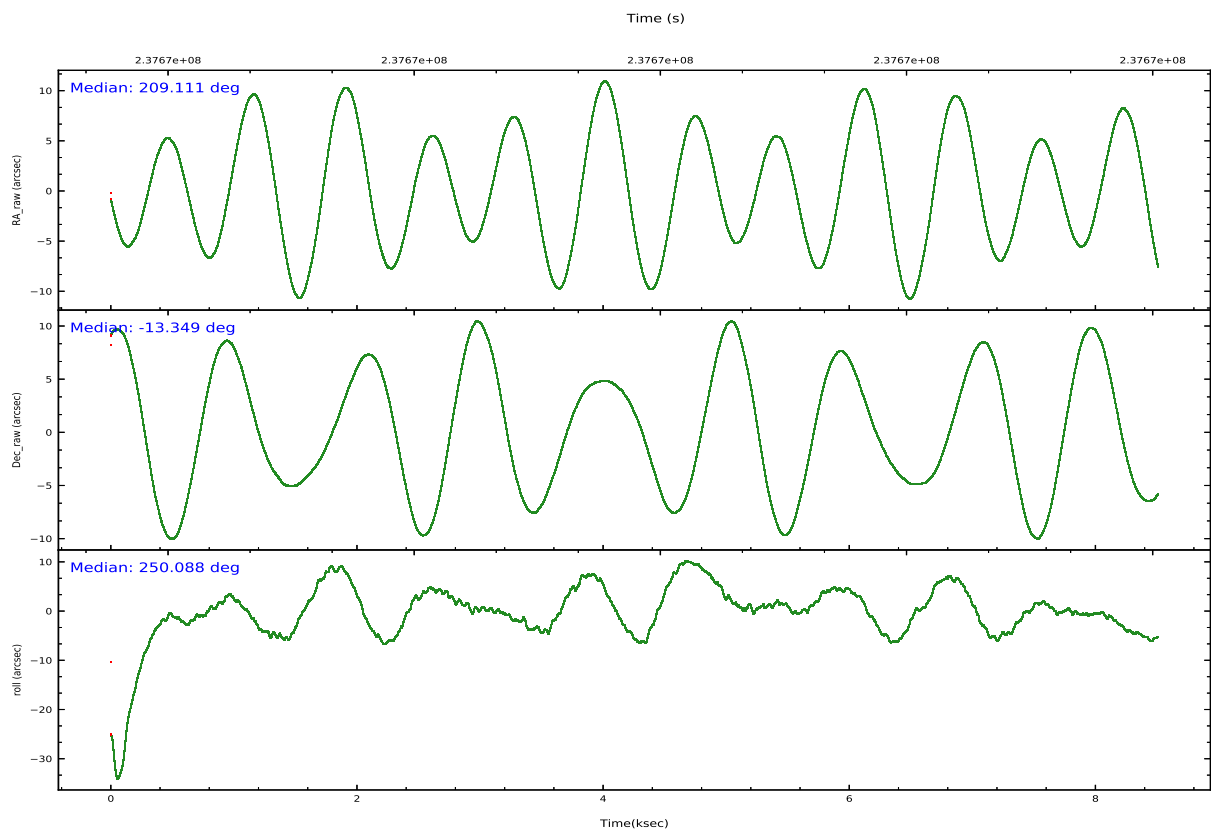
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	735	585	2436	794	1198	3226
	1%	1%	29%	2%	22%	7%
grade 1 events	4	6	76	7	25	30
	0%	0%	0%	0%	0%	0%
grade 2 events	429	137	1978	332	1291	2528
	1%	0%	24%	0%	24%	5%
grade 3 events	263	213	653	200	635	1277
	0%	0%	8%	0%	11%	2%
grade 4 events	256	185	620	203	610	1156
	0%	0%	7%	0%	11%	2%
grade 5 events	68	27	338	30	130	246
	0%	0%	4%	0%	2%	0%
grade 6 events	195	129	612	118	603	3085
	0%	0%	7%	0%	11%	7%
grade 7 events	37821	33443	1436	35255	803	31757
	95%	96%	17%	95%	15%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	8	8
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	NONE	NONE
[deg] Pointing RA	209.105339	209.10846295582	Alternating exposures requested	N	N
[deg] Pointing Dec	-13.322399	-13.346510627863	[s] Primary exposure time	0.000000	3.2
[deg] Pointing Roll	249.921606	250.08783615445			
[s] Window start time (MET)	237708064.184000	237708064.184000			
[s] Window stop time (MET)	237751264.184000	237751264.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	237665720.184000	237665343.78487			
Observation start date	2005-07-13T18:14:16	2005-07-13T18:09:03			
[s] Observation end time (MET)	237674045.184000	237674179.28528			
Observation end date	2005-07-13T20:33:01	2005-07-13T20:36:19			
Read mode	TIMED	TIMED			

## 2.3 Aspect



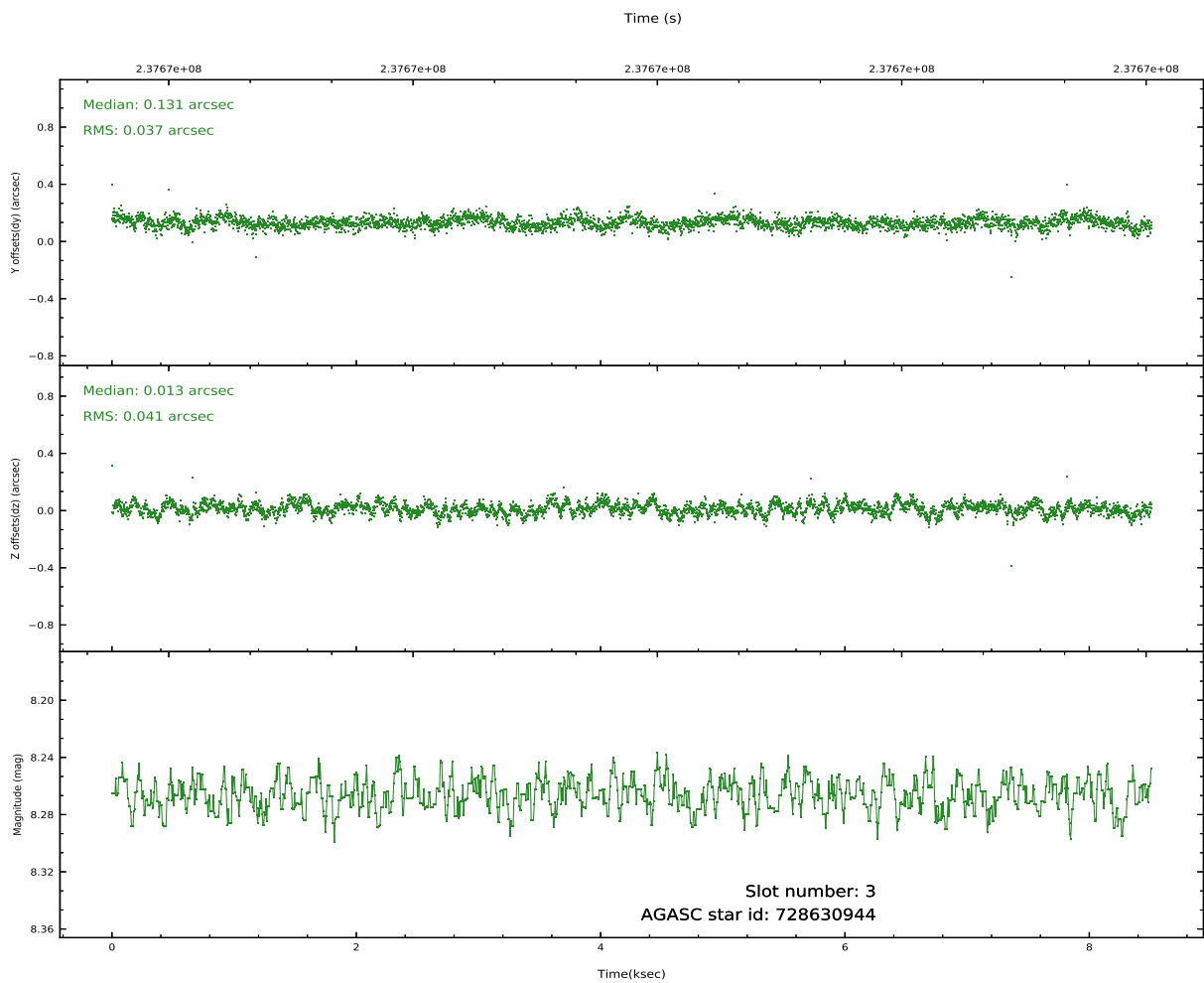
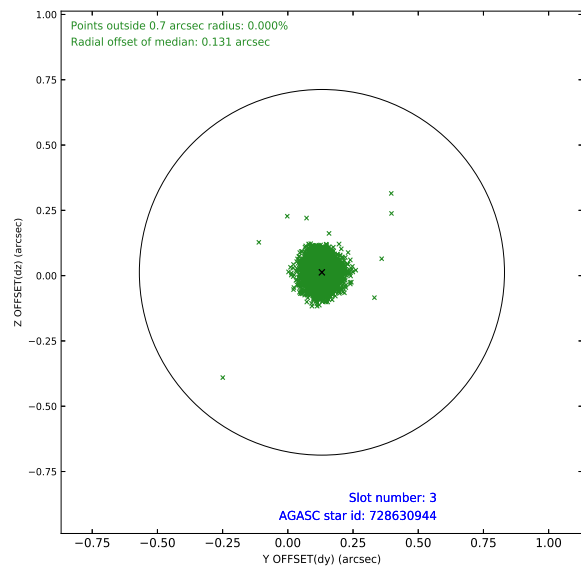
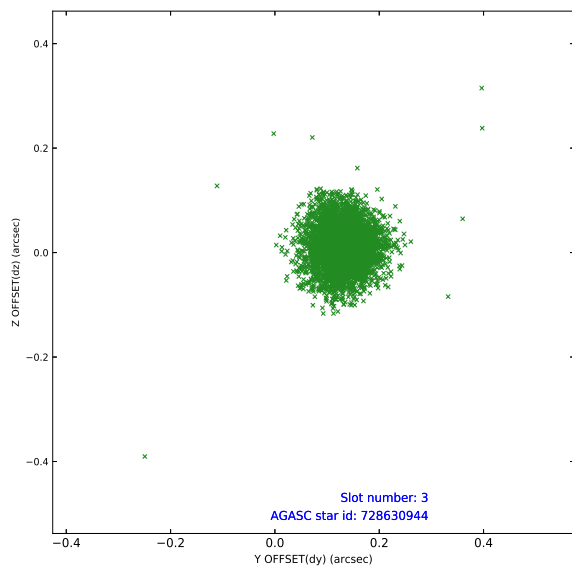


Slot Statistics

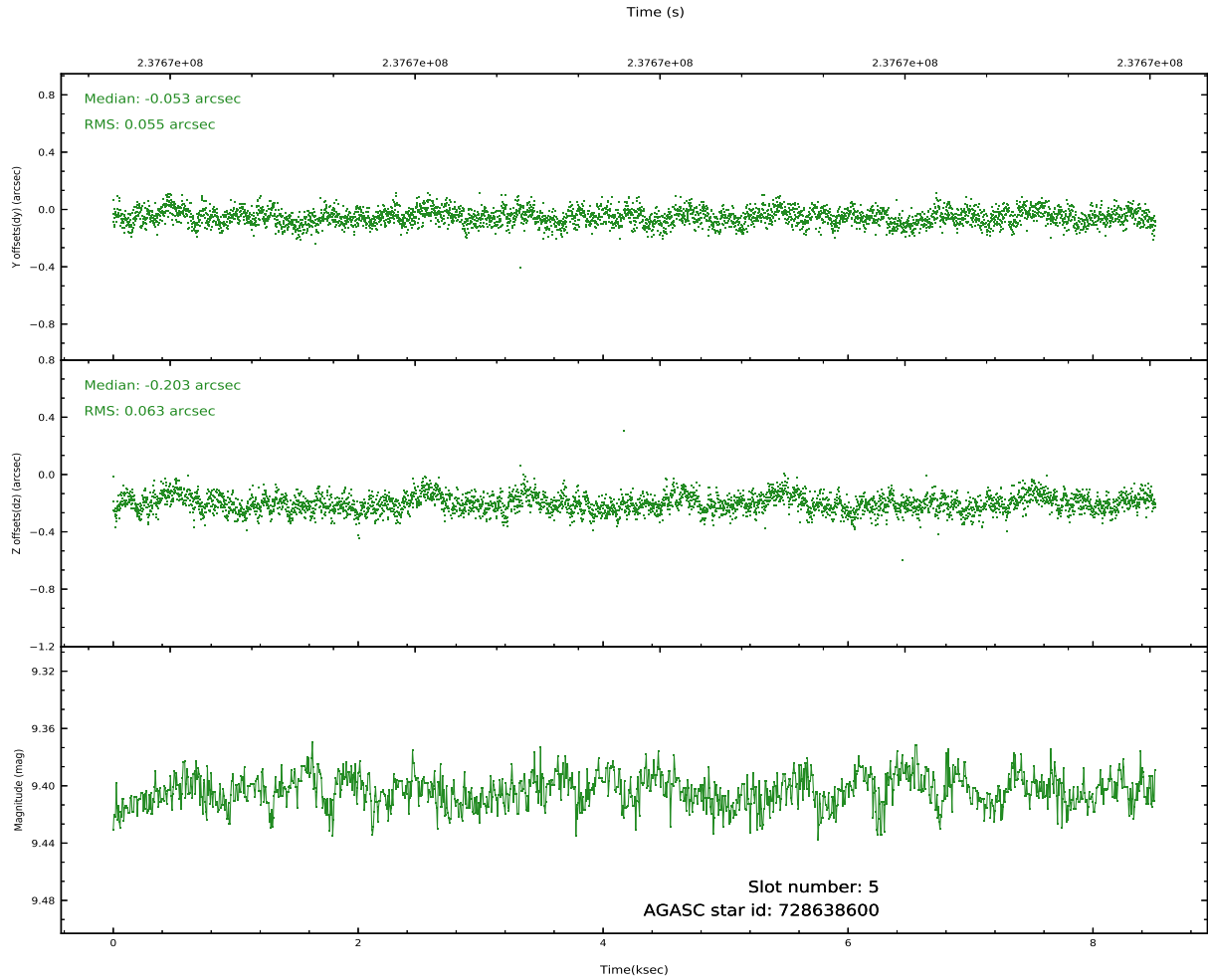
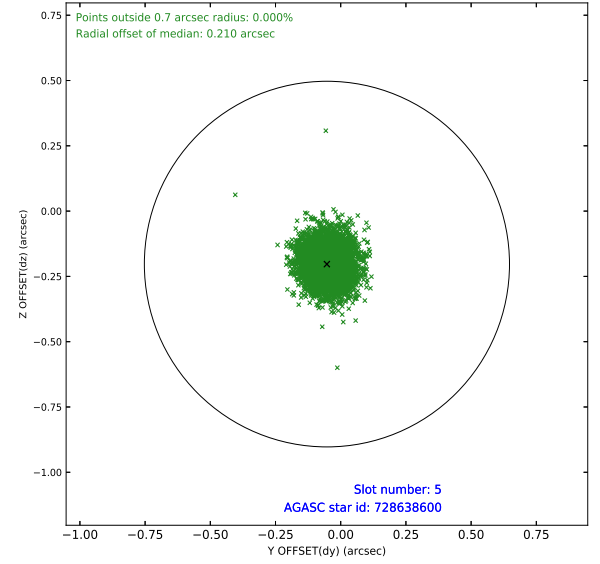
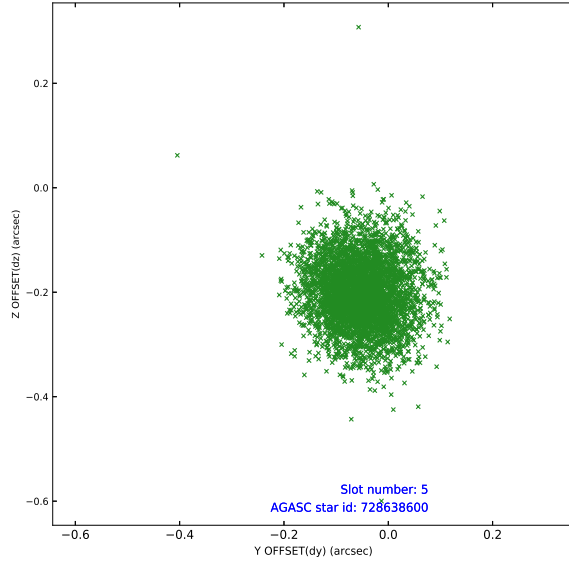
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	2076	1.000	-0.098	-0.070	0.007	0.011	0.000000	0.000000	-758.79	-1731
1	FID		ACIS-S-4	7.21	2076	1.000	0.169	0.066	0.006	0.011	0.000000	0.000000	2154.41	176
2	FID		ACIS-S-5	7.23	2076	1.000	-0.103	0.013	0.007	0.011	0.000000	0.000000	-1810.85	171
3	GUIDE	used	728630944	8.27	4152	1.000	0.131	0.013	0.057	0.094	208.923207	-13.740319	1632.48	-81
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
5	GUIDE	used	728638600	9.40	4149	1.000	-0.053	-0.203	0.088	0.143	209.320543	-13.467304	232.27	886
6	GUIDE	used	728639032	9.16	4148	1.000	0.188	0.156	0.071	0.115	209.196450	-13.877558	1768.58	985
7	GUIDE	used	728639792	9.86	4146	1.000	-0.266	0.036	0.110	0.187	209.293230	-12.690895	-2361.10	-160

## 2.4 Star Slots

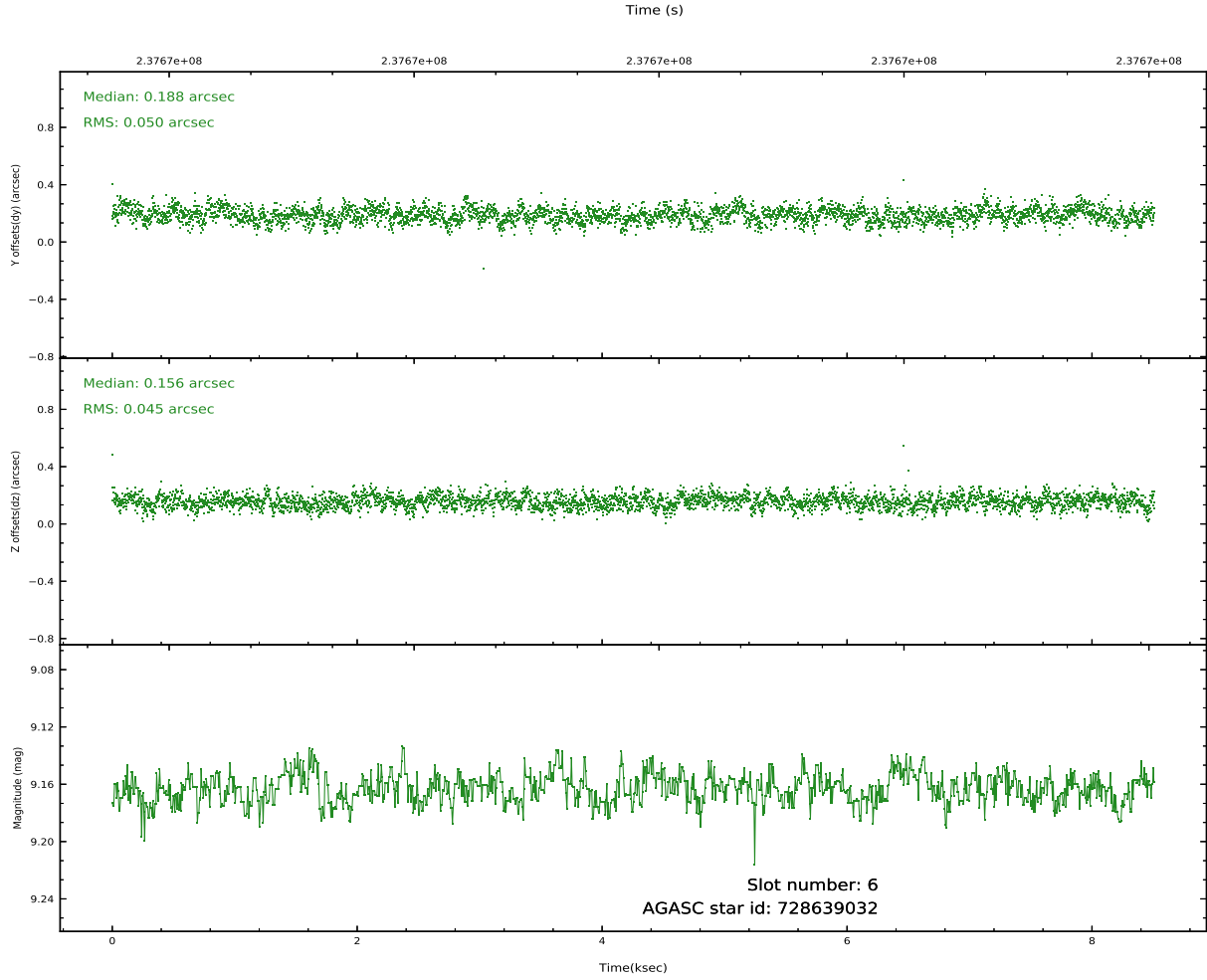
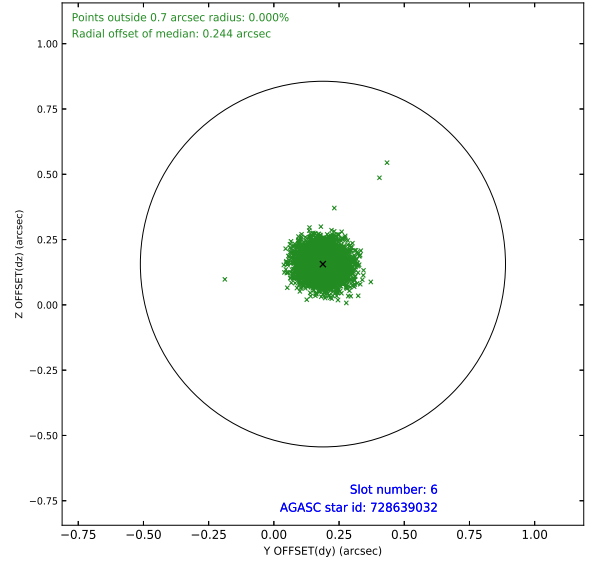
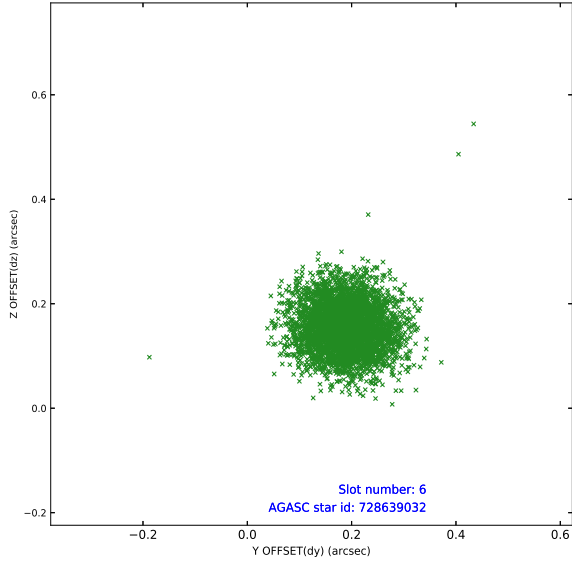
### 2.4.1 Slot 3



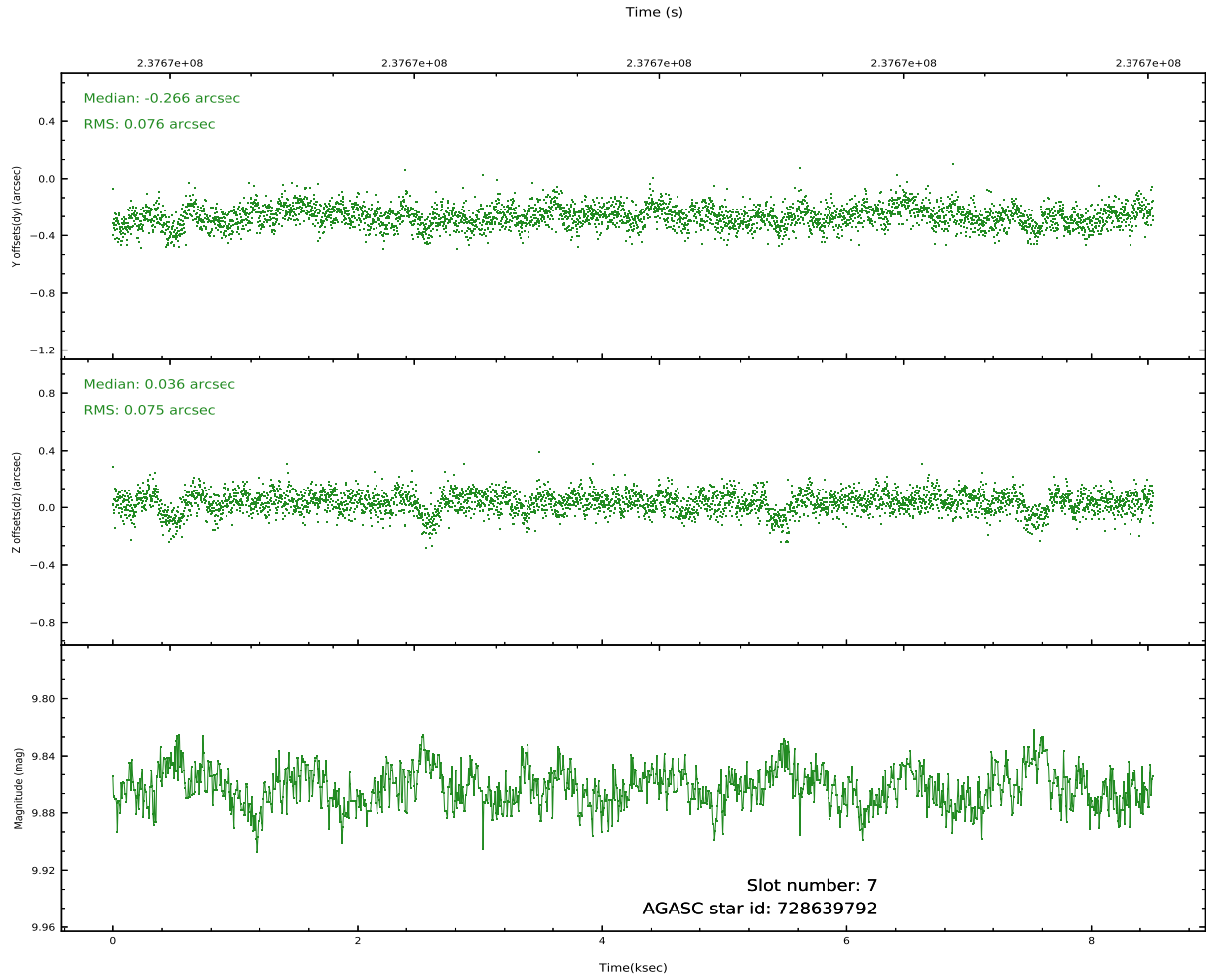
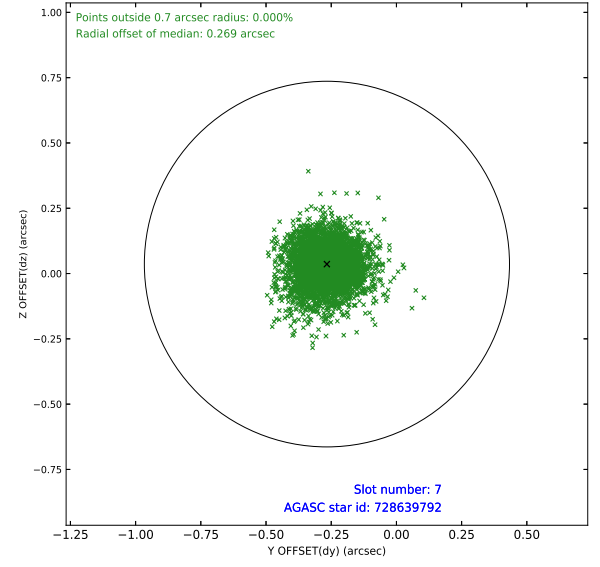
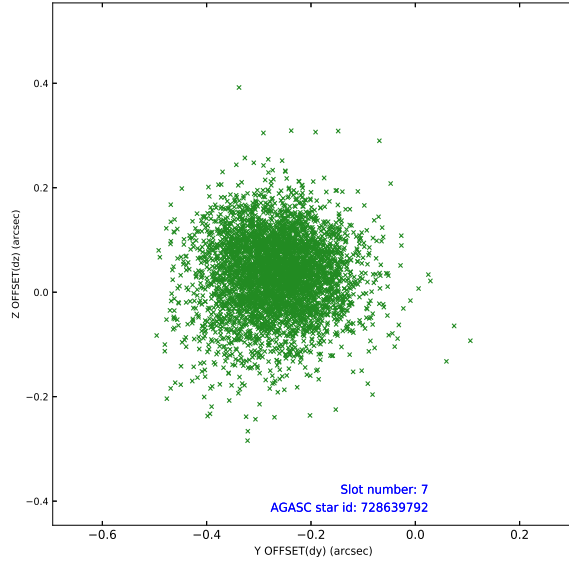
## 2.4.2 Slot 5



### 2.4.3 Slot 6

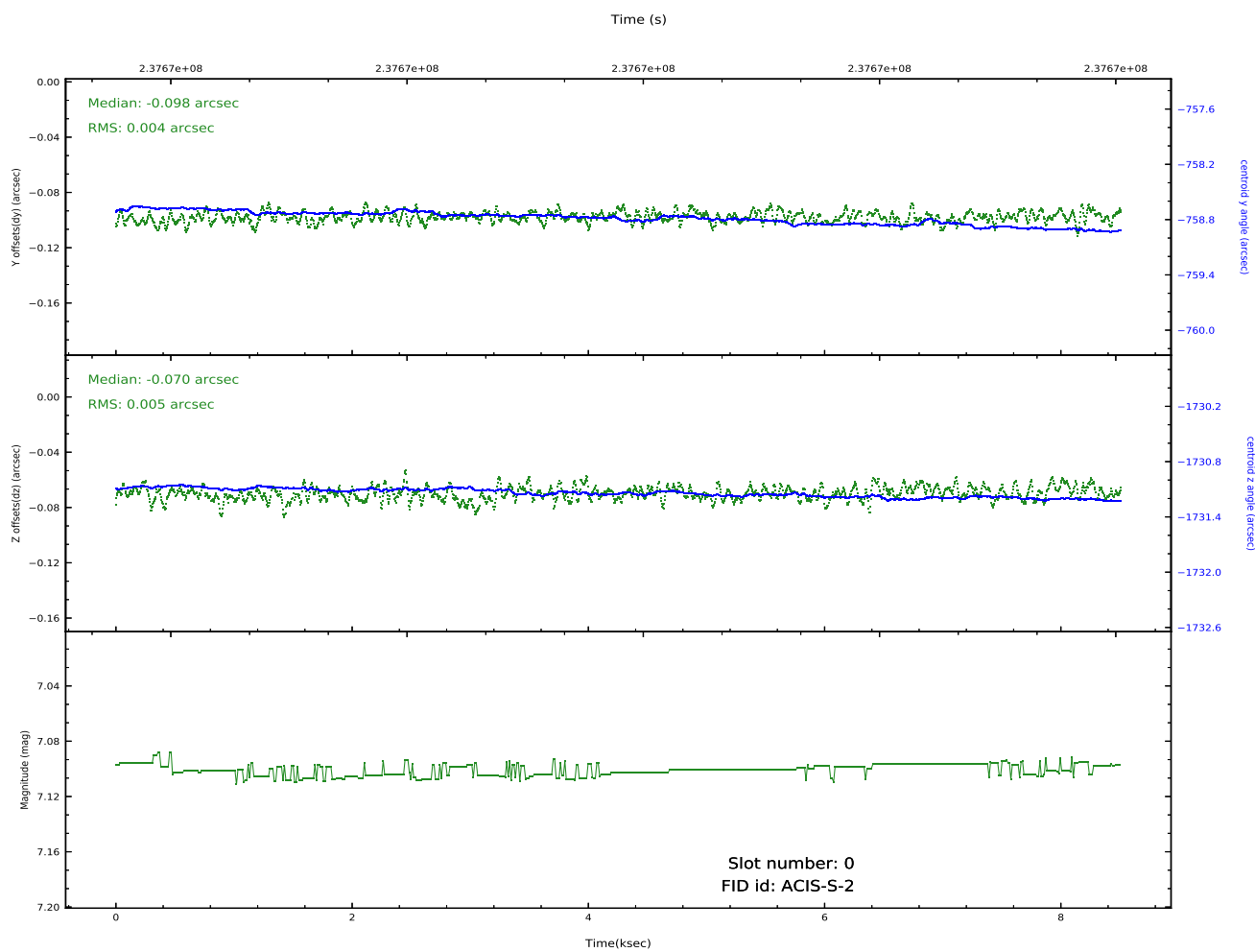
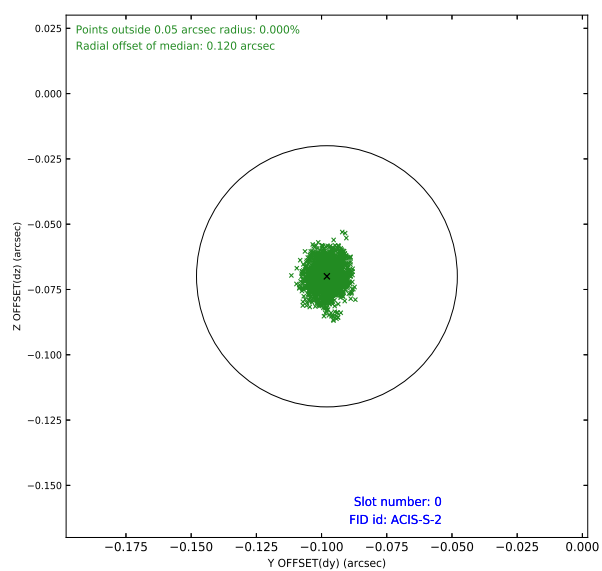
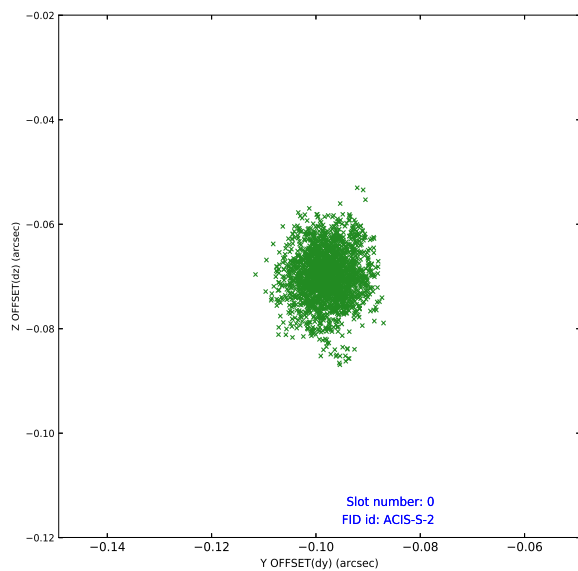


## 2.4.4 Slot 7

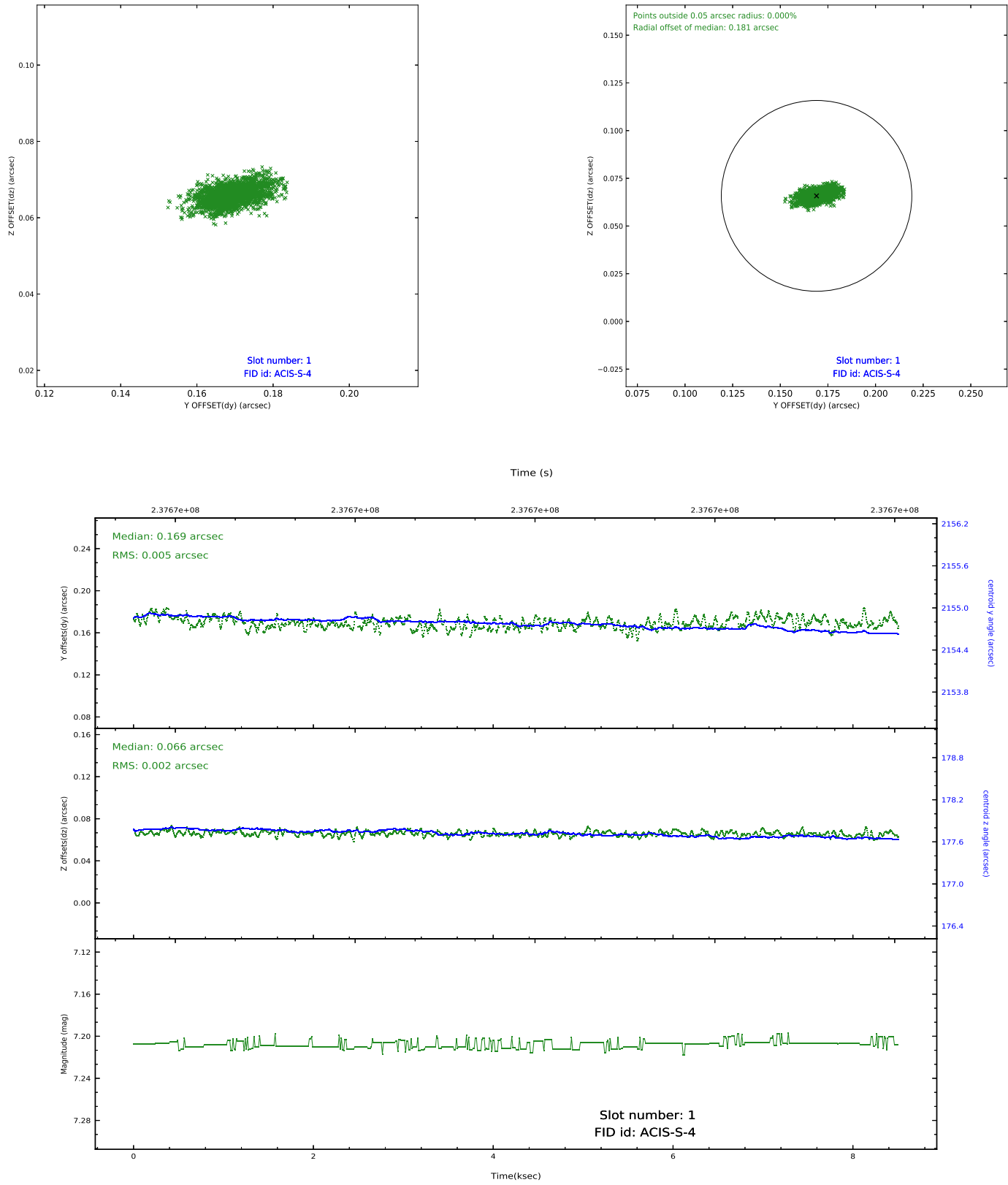


## 2.5 FID Slots

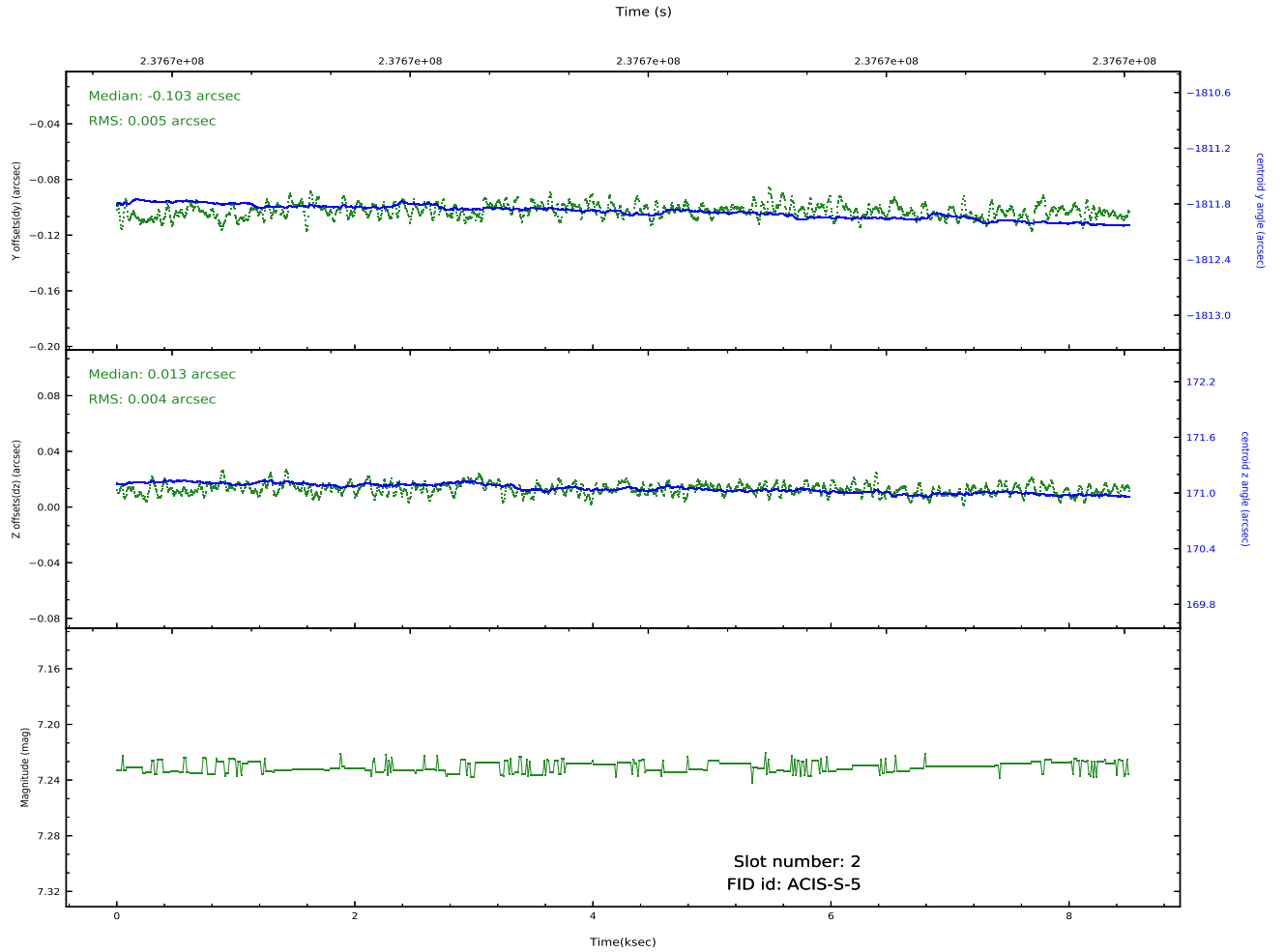
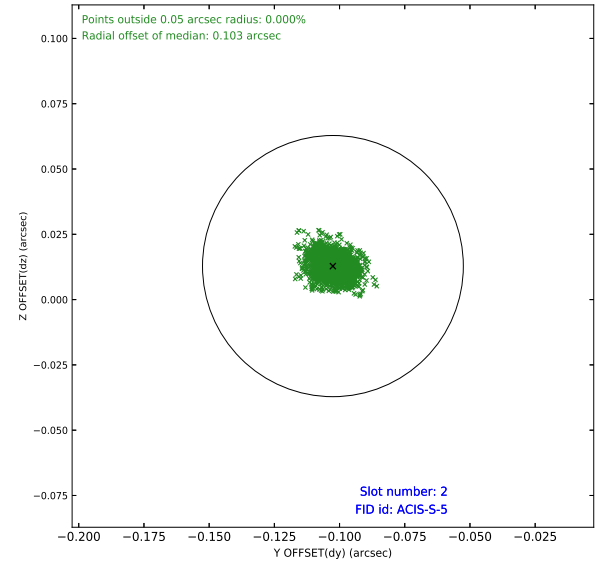
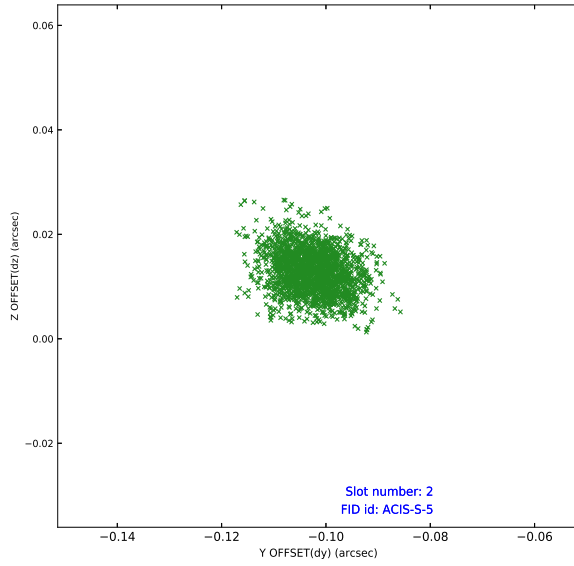
### 2.5.1 Slot 0



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)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.508799

## A.2 Comments

This is an observation of a moving target. Users will need to run sso\_freeze or similar software to position the events in the reference frame of the target.

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The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.

===

Window constraint was not met.