

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 5057 - L2 Version 4  
Chandra X-Ray Center

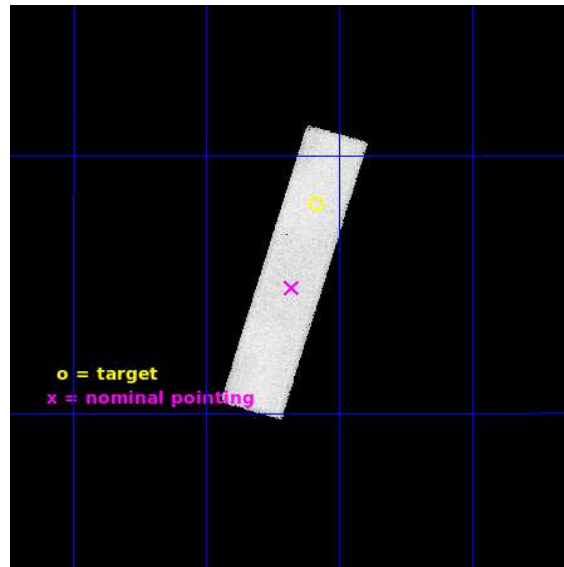
L2 Processing Date : Sep 22 2020

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# 1 Front

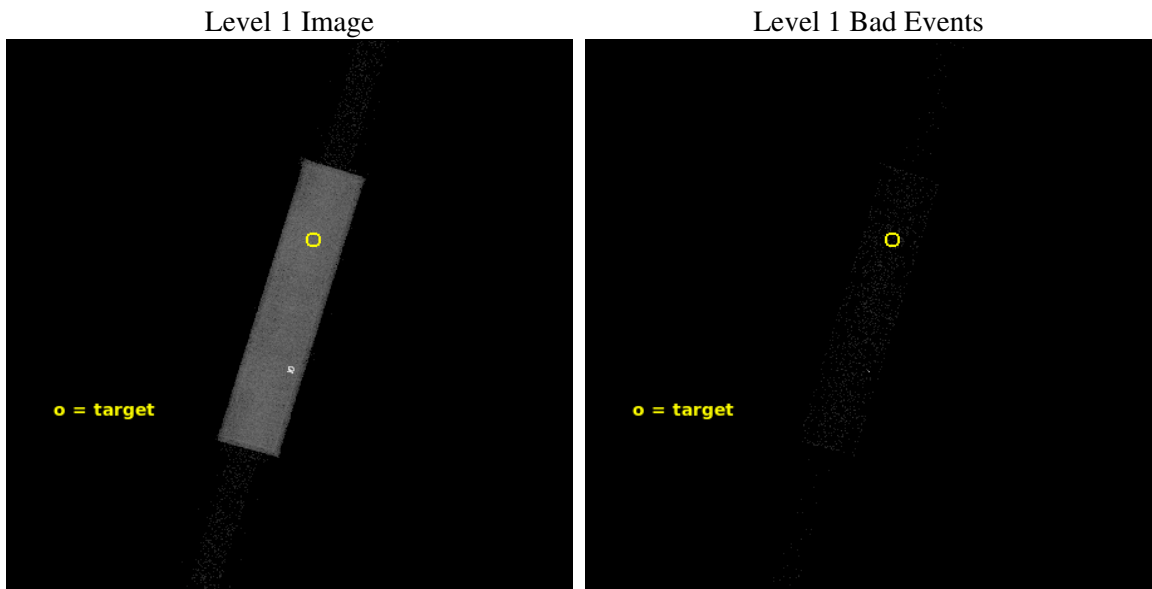
seq_num	290330	Sequence number
obs_id	5057	Observation id
title	AO5 Measurements of the optical/UV Transmission of the HRC and ACIS Filters.	Proposal title
observer	CXC Calibration	Principal investigator
object	Betelgeuse	Source name
ra_targ	88.792917	Observer's specified target RA [deg]
dec_targ	7.407056	Observer's specified target Dec [deg]
ra_nom	88.838755525699	Nominal RA [deg]
dec_nom	7.2440497330064	Nominal Dec [deg]
roll_nom	286.60259649342	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2243.9813480675	[s]
livetime	2188.3851676115	Ontime multiplied by DTCOR
l2events	124946	Number of level 2 events



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



### 2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	2102.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2243.9813480675	[s]
caldsver	4.9.2	&#160	l1events	191200	Number of level 1 events
date	2020-09-23T01:32:58	Date and time of file creation			
revision	4	Processing version of data			

### 2.1.3 Events

Level 1 Events

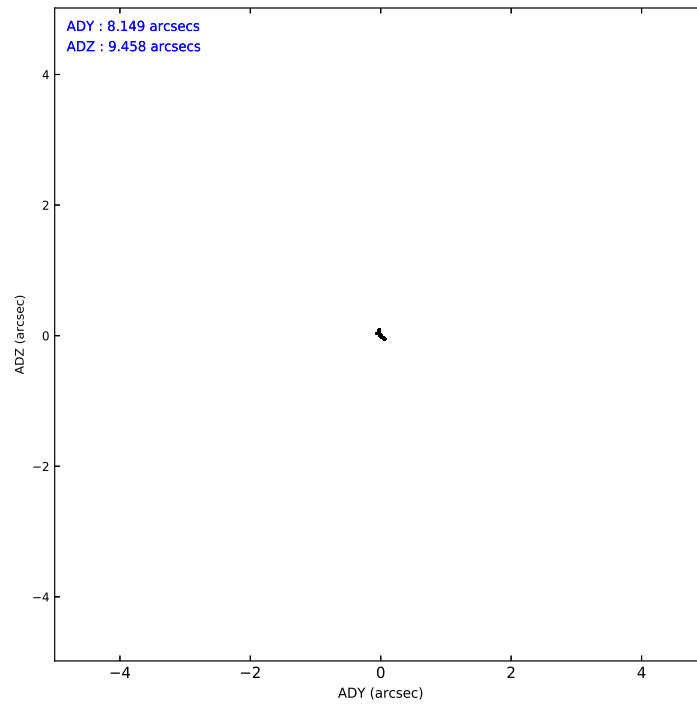
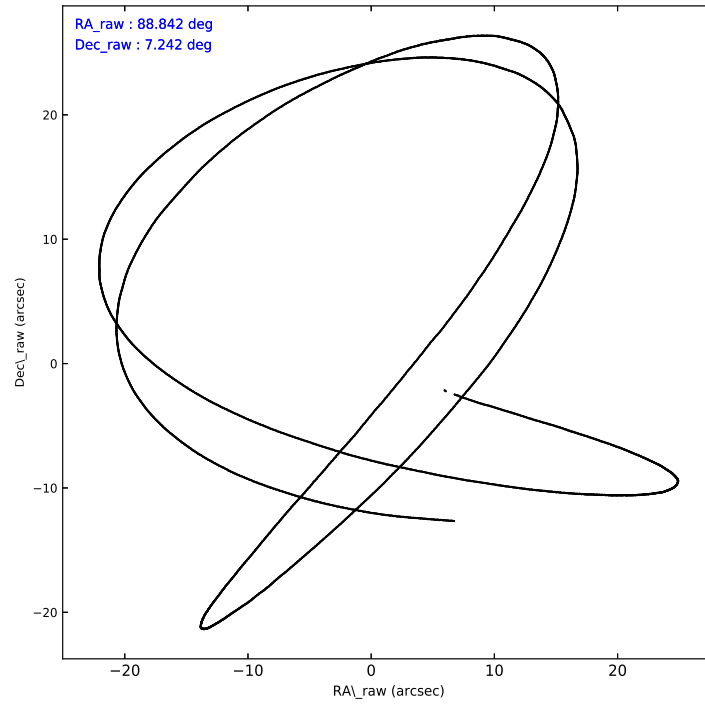
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	1086	189060	1054
rejected events	1086	16571	1054
rejected %	100%	8%	100%

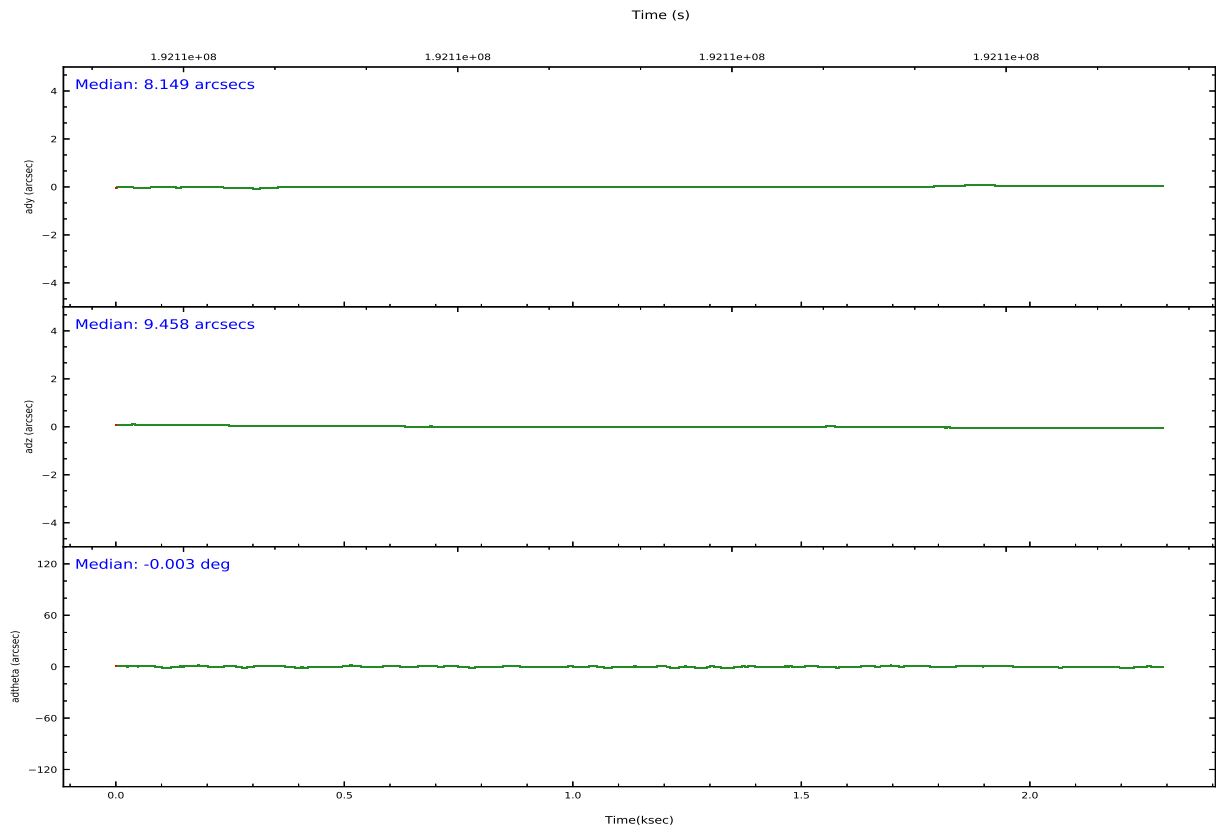
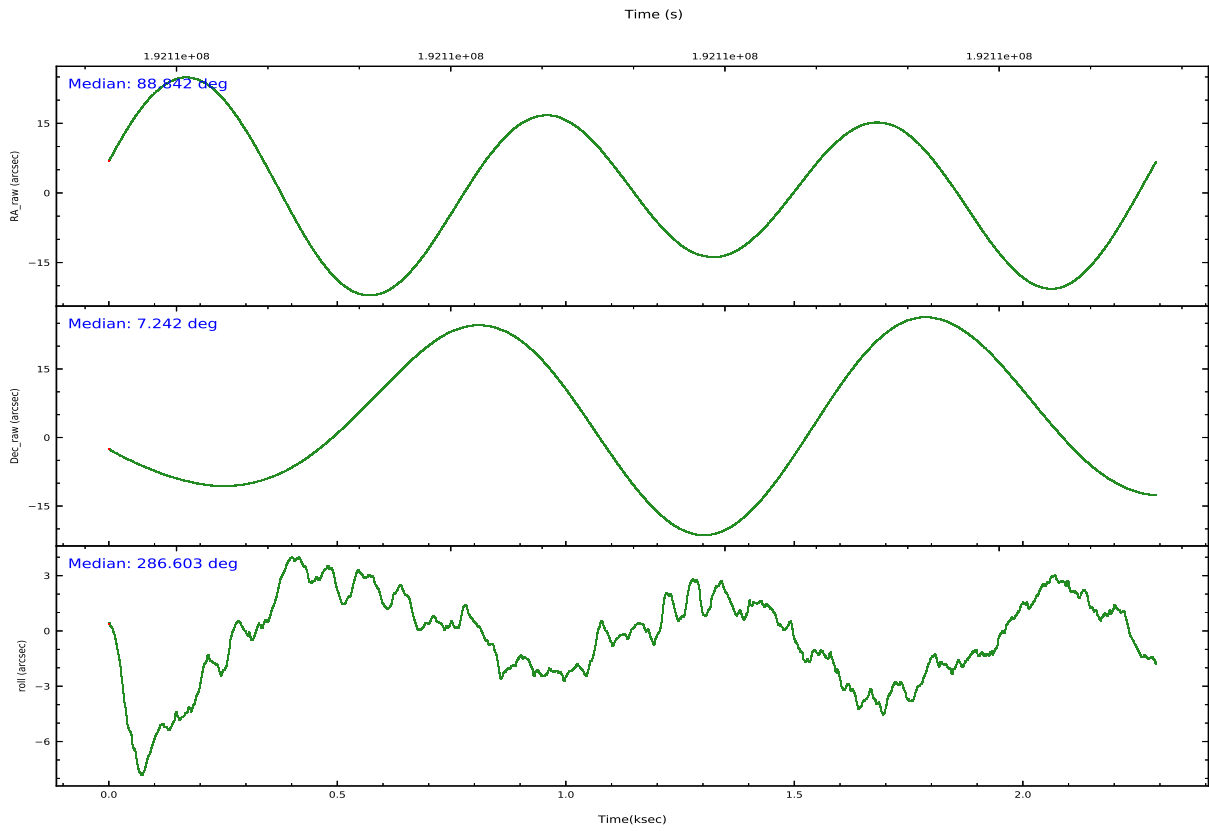
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-S	HRC-S
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	88.820063	88.838755525699
[deg] Pointing Dec	7.261364	7.2440497330064
[deg] Pointing Roll	286.537725	286.60259649342
[s] Window start time (MET)	191980864.184000	191980864.184000
[s] Window stop time (MET)	197078464.184000	197078464.184000
[mm] SIM focus pos	-1.429586	-1.428180813131781
[mm] SIM defocus	0.1037507710433287	0.1051558262725154
[mm] SIM translation stage pos	250.455976	250.466033080201
[mm] SIM translation stage offset	0	-0.01005468664627074
[s] Observation start time (MET)	192108443.184000	192108066.69527
Observation start date	2004-02-02T11:26:19	2004-02-02T11:21:06
[s] Observation end time (MET)	192110545.184000	192110678.39539
Observation end date	2004-02-02T12:01:21	2004-02-02T12:04:38

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

## 2.3 Aspect





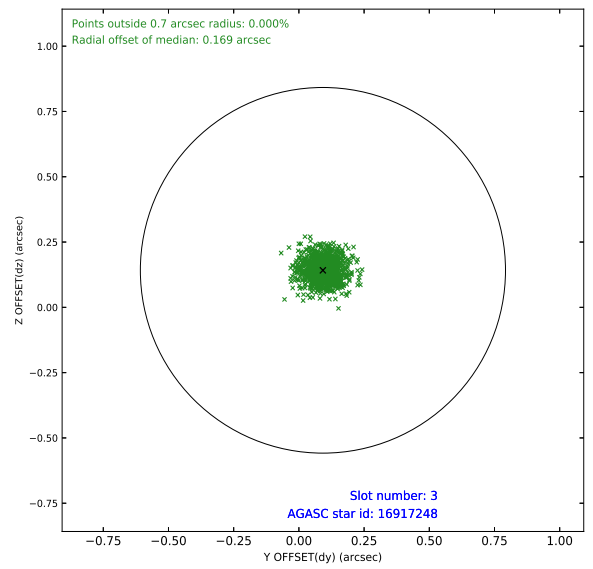
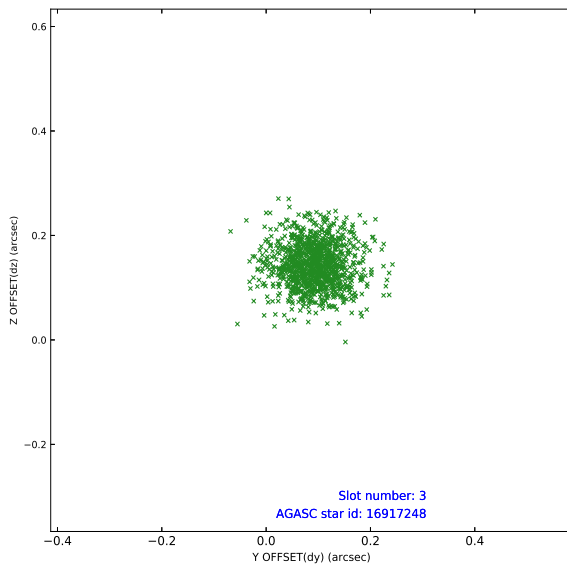
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		HRC-S-1	7.09	560	1.000	0.138	-0.220	0.007	0.011	0.000000	0.000000	-1162.33	-458
1	FID		HRC-S-2	7.08	560	1.000	0.161	-0.117	0.005	0.010	0.000000	0.000000	1235.30	-451
2	FID		HRC-S-3	7.08	560	1.000	0.092	0.035	0.006	0.011	0.000000	0.000000	-1162.88	570
3	GUIDE	used	16917248	8.72	1118	1.000	0.092	0.142	0.065	0.109	89.306967	6.774731	2173.63	1170
4	GUIDE	used	16918912	8.65	1116	1.000	0.161	0.052	0.060	0.096	89.257075	6.922287	1615.71	1151
5	GUIDE	used	93854800	7.57	1119	1.000	-0.156	-0.135	0.056	0.089	88.376308	7.655454	-1810.37	-1112
6	GUIDE	used	93855160	8.49	1119	1.000	-0.133	0.020	0.062	0.096	88.514904	7.713359	-1872.20	-581
7	GUIDE	used	16910592	8.98	1117	1.000	0.035	-0.078	0.068	0.110	88.532936	6.726769	1550.51	-1532

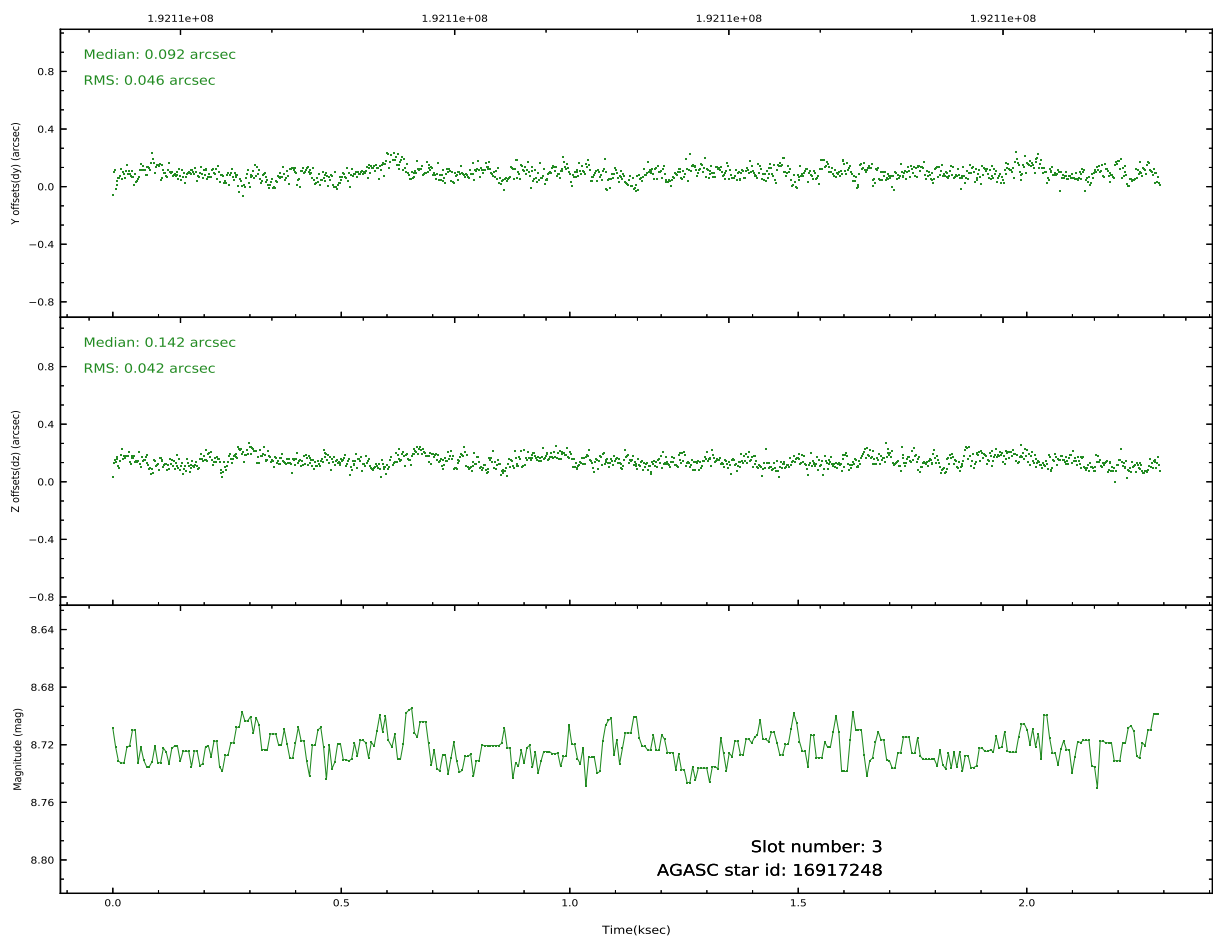
∞

## 2.4 Star Slots

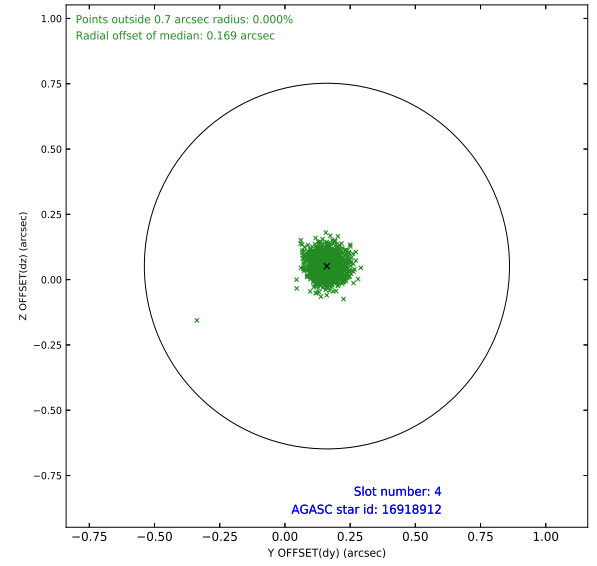
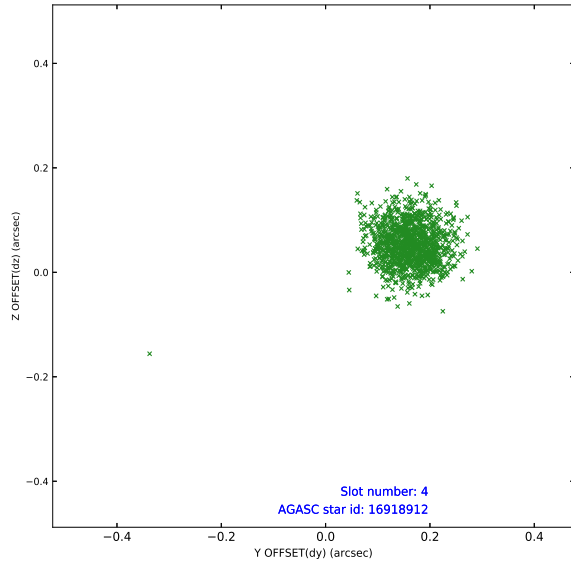
### 2.4.1 Slot 3



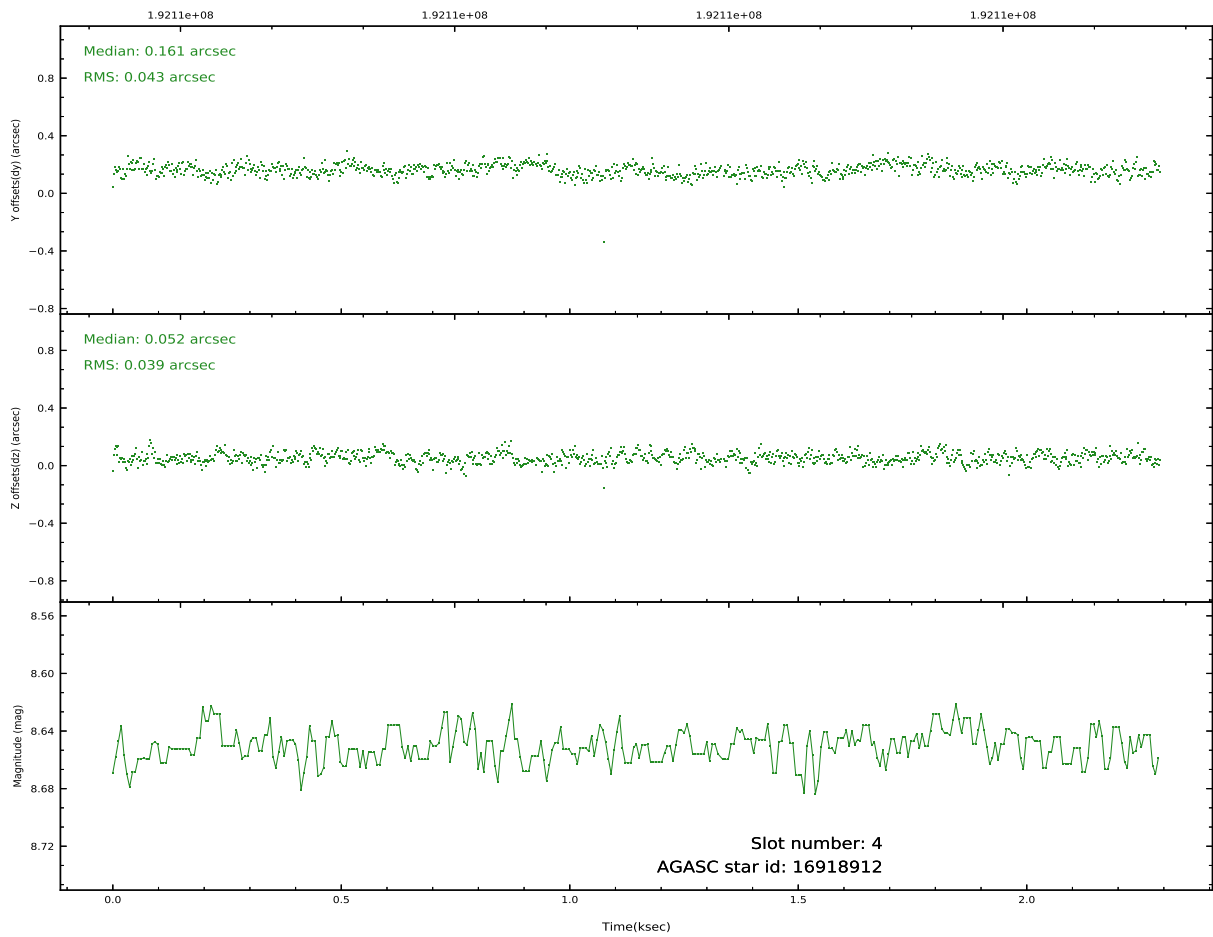
Time (s)



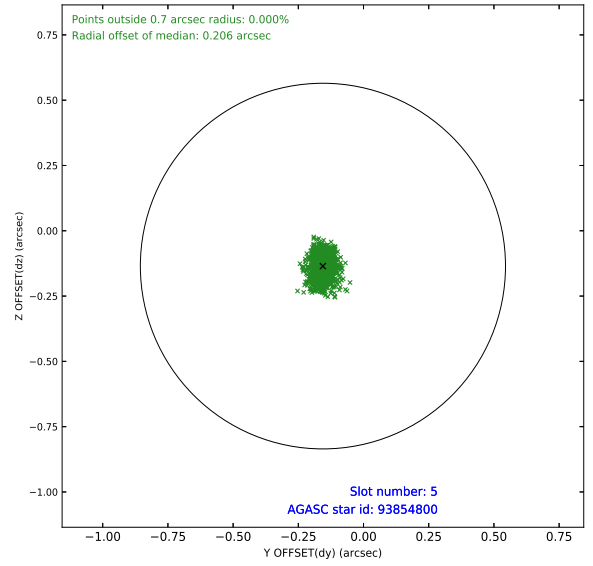
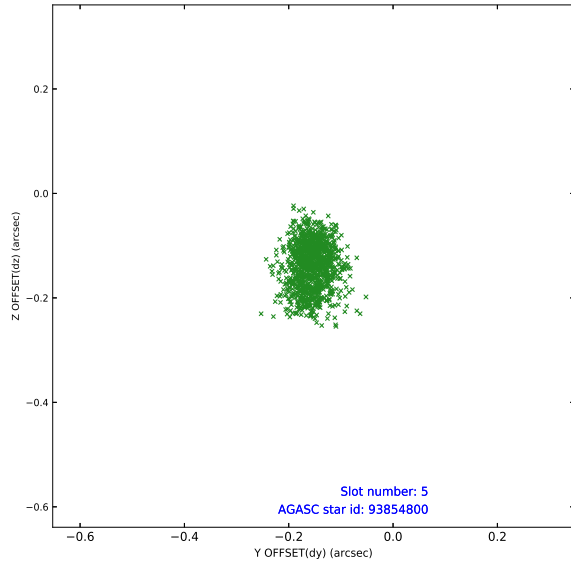
## 2.4.2 Slot 4



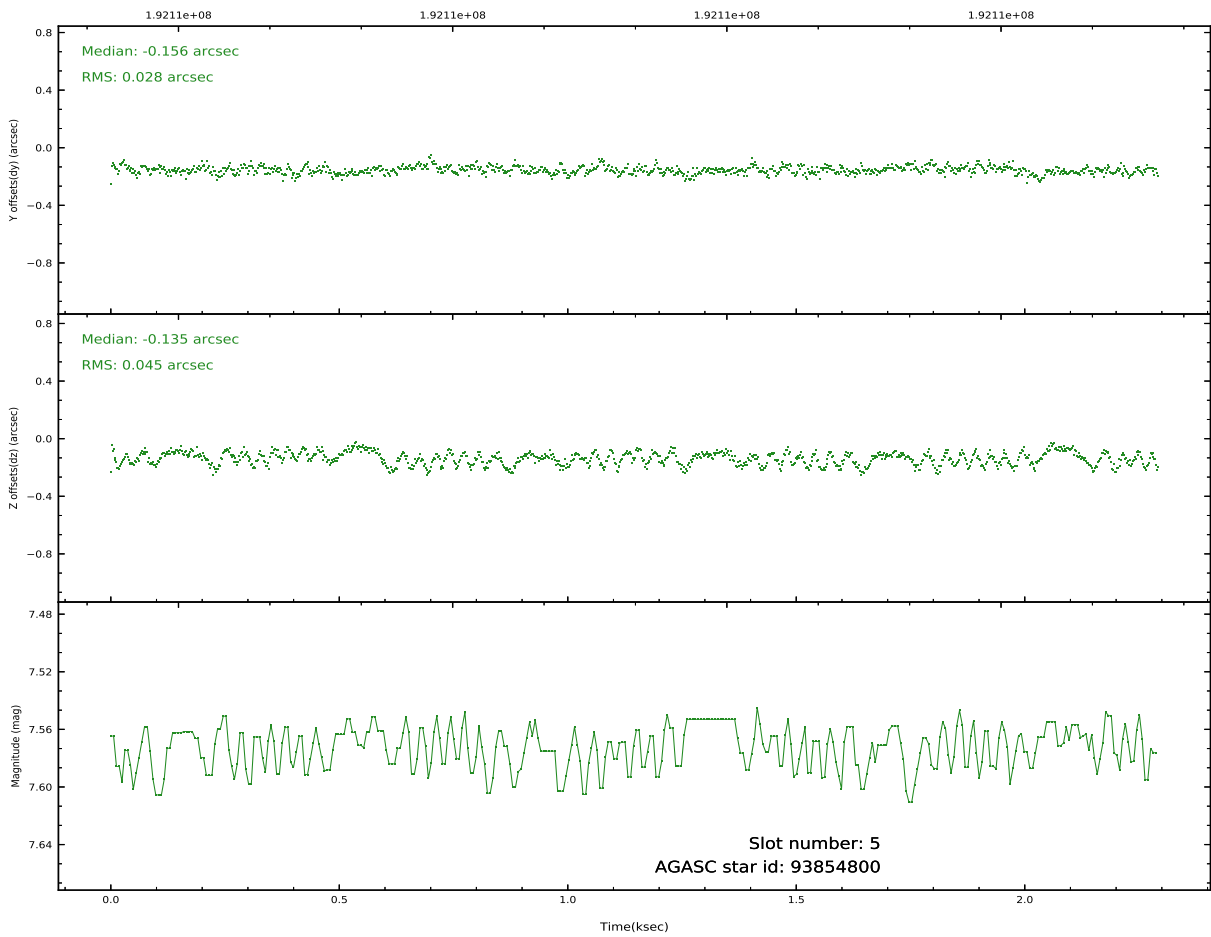
Time (s)



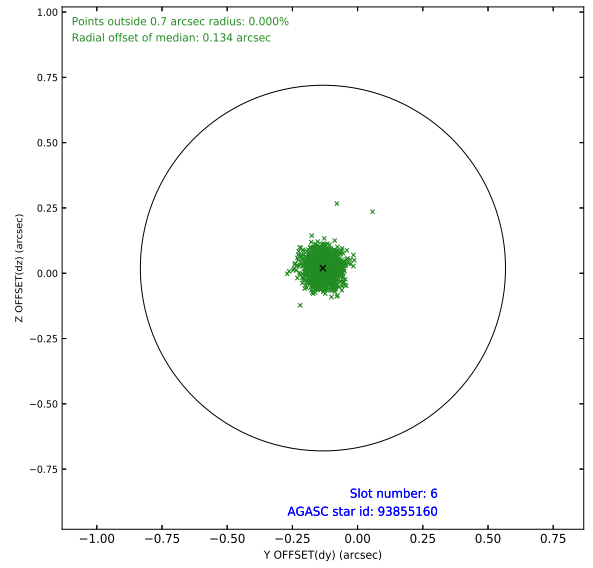
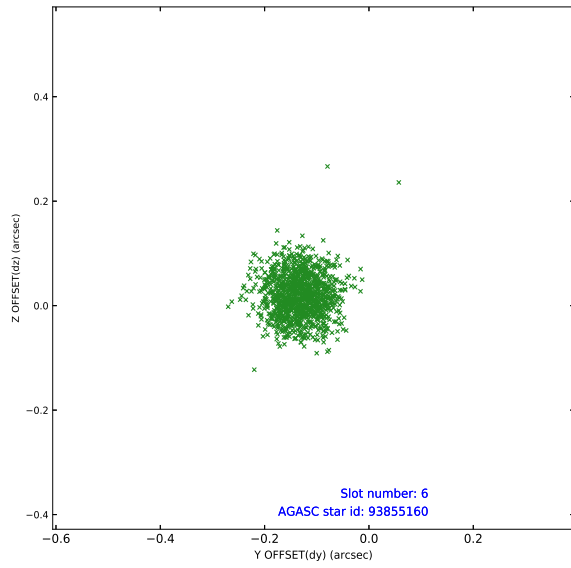
### 2.4.3 Slot 5



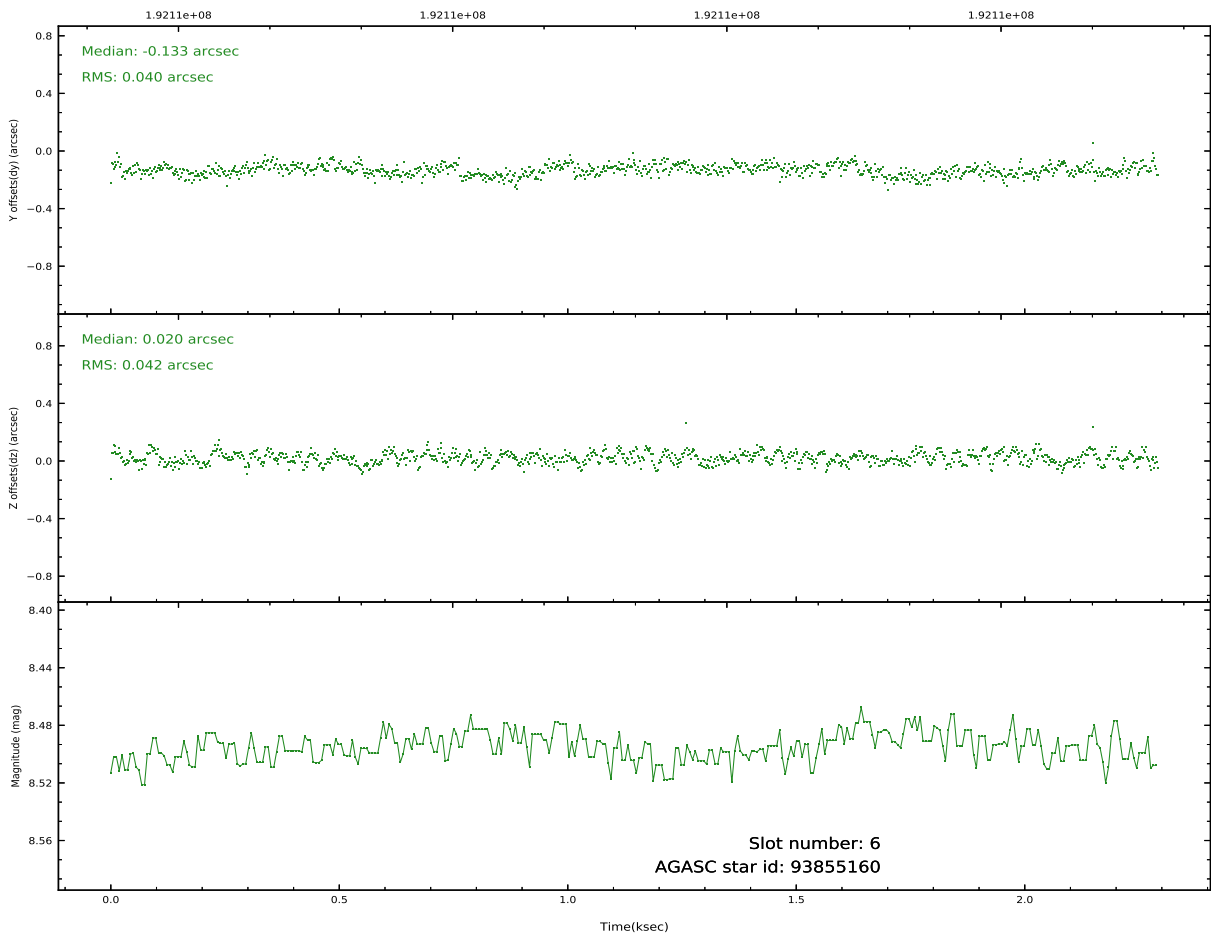
Time (s)



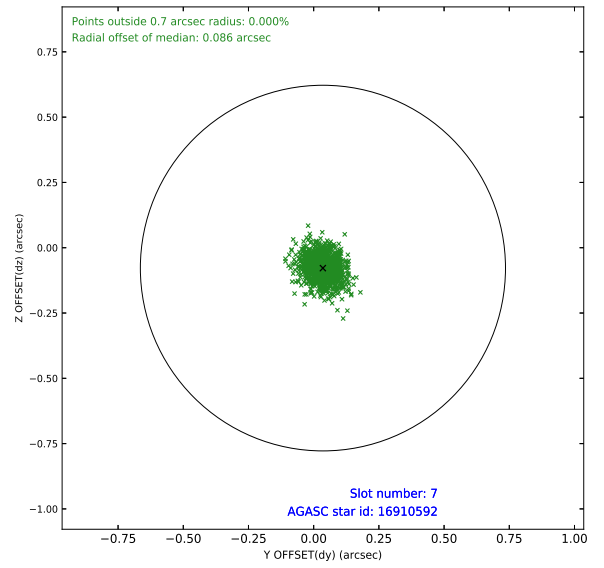
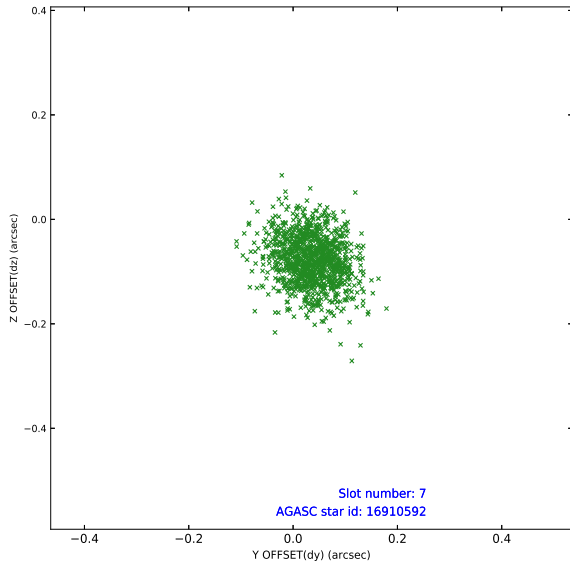
## 2.4.4 Slot 6



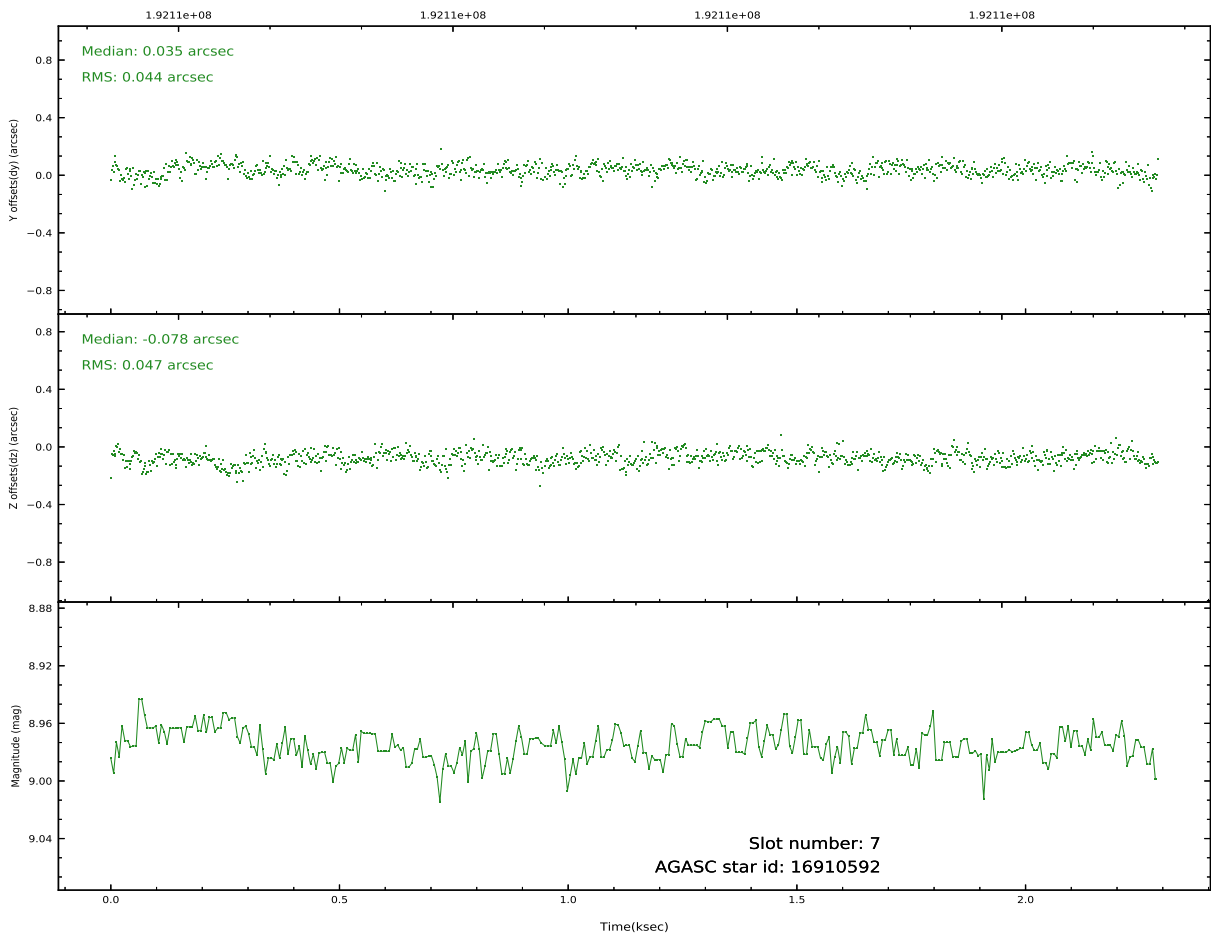
Time (s)



## 2.4.5 Slot 7

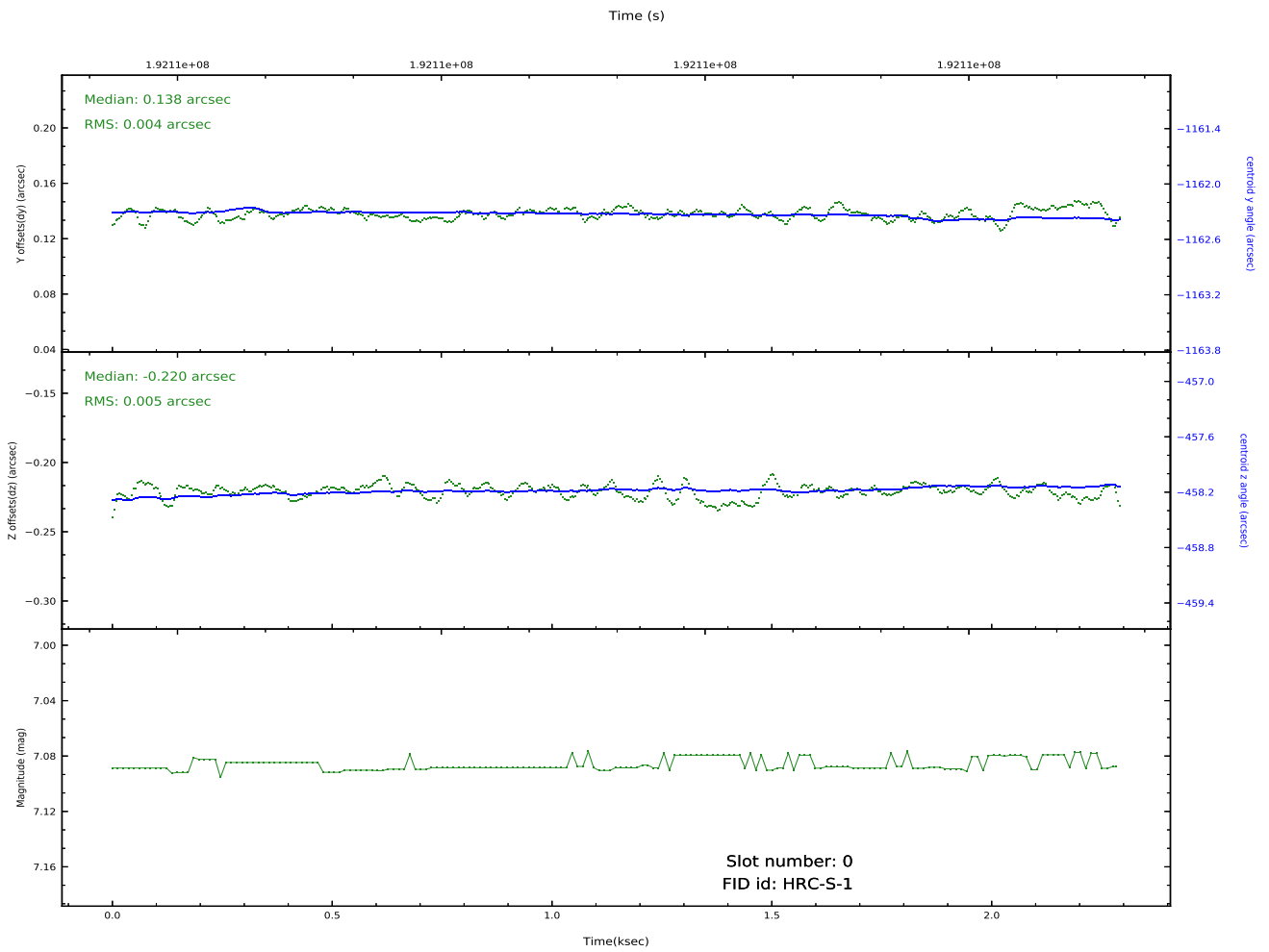
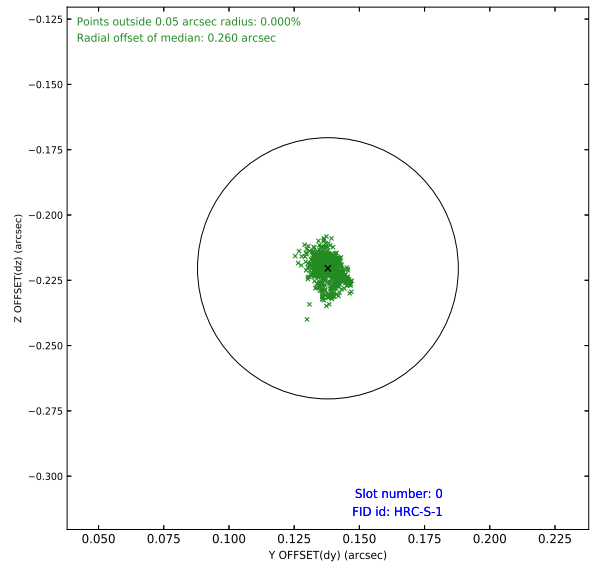
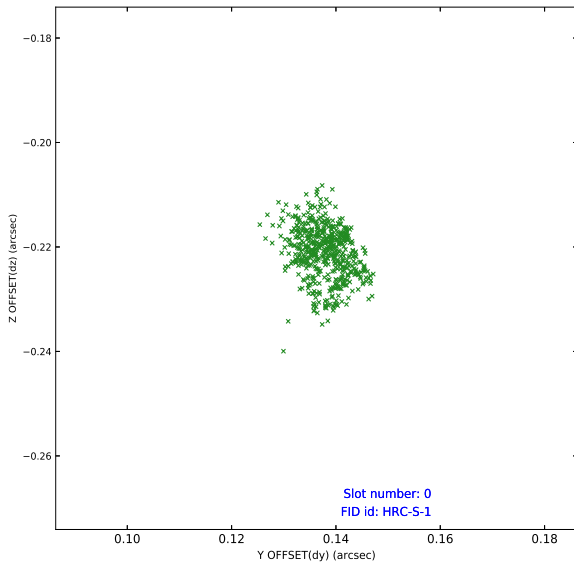


Time (s)

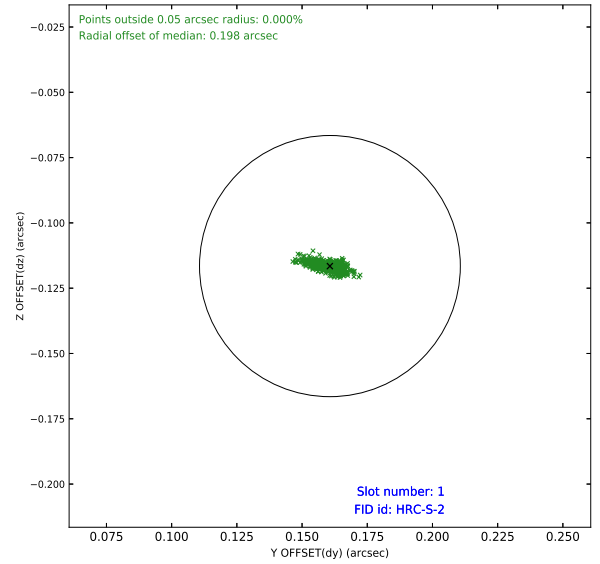
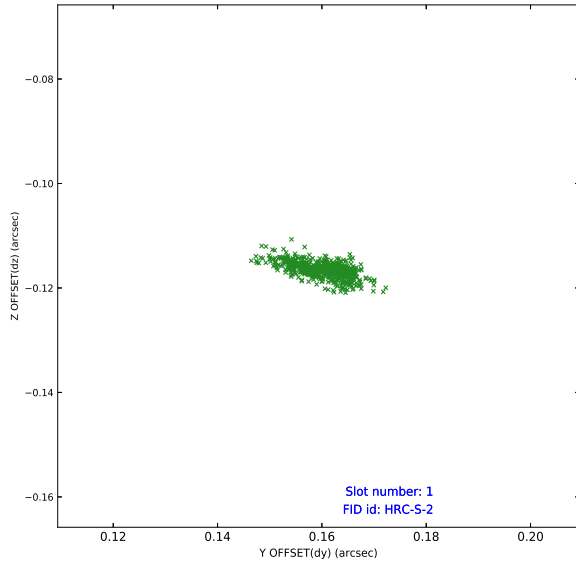


## 2.5 FID Slots

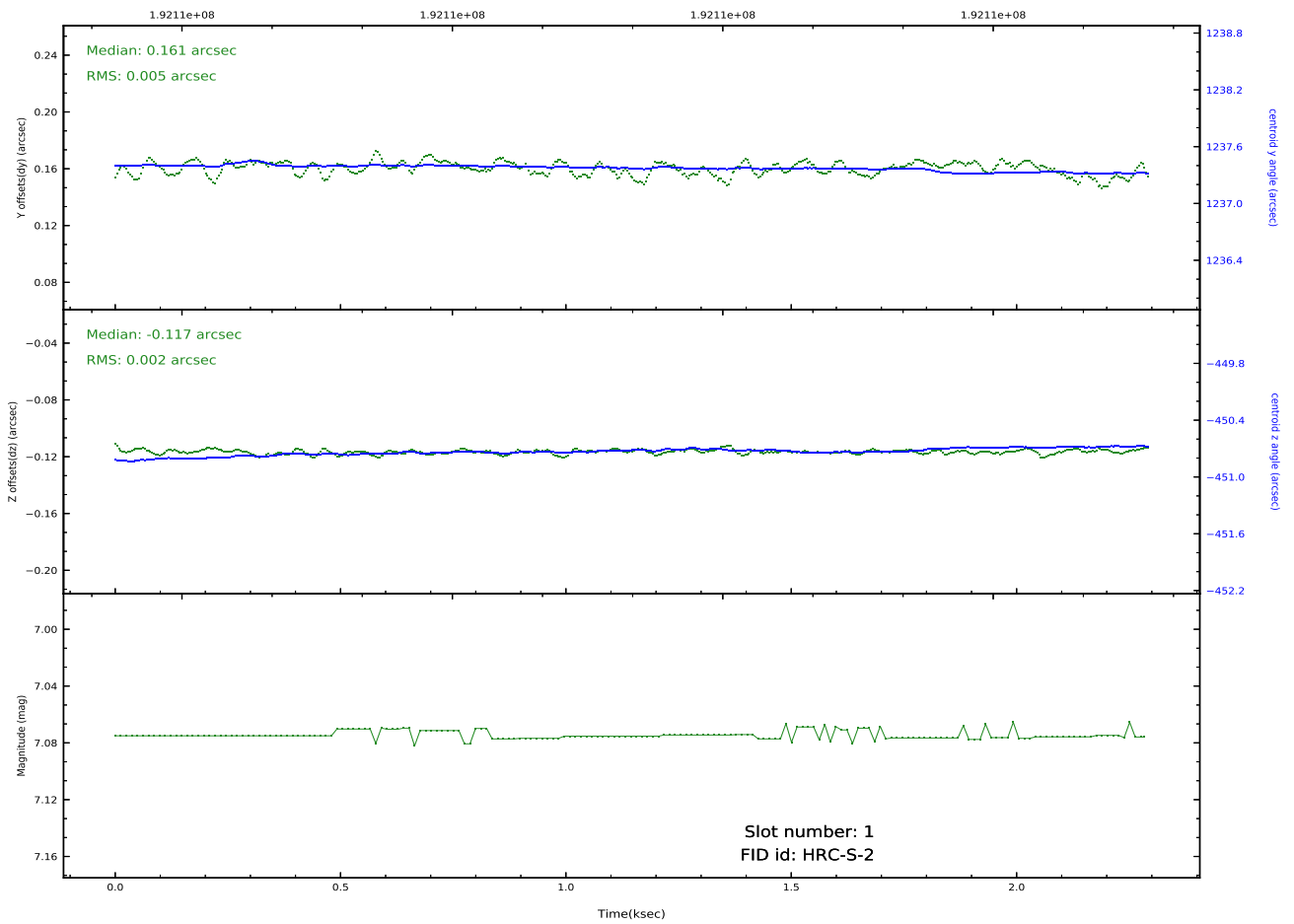
### 2.5.1 Slot 0



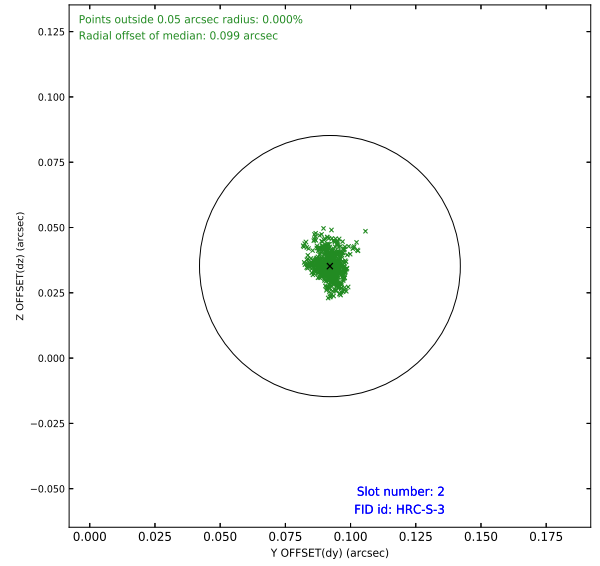
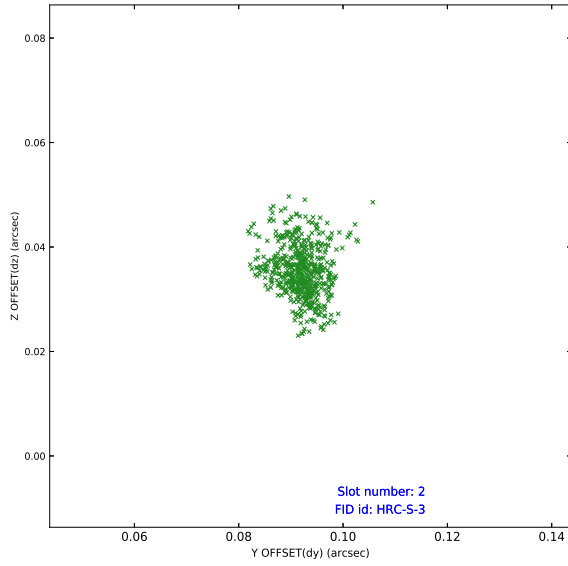
## 2.5.2 Slot 1



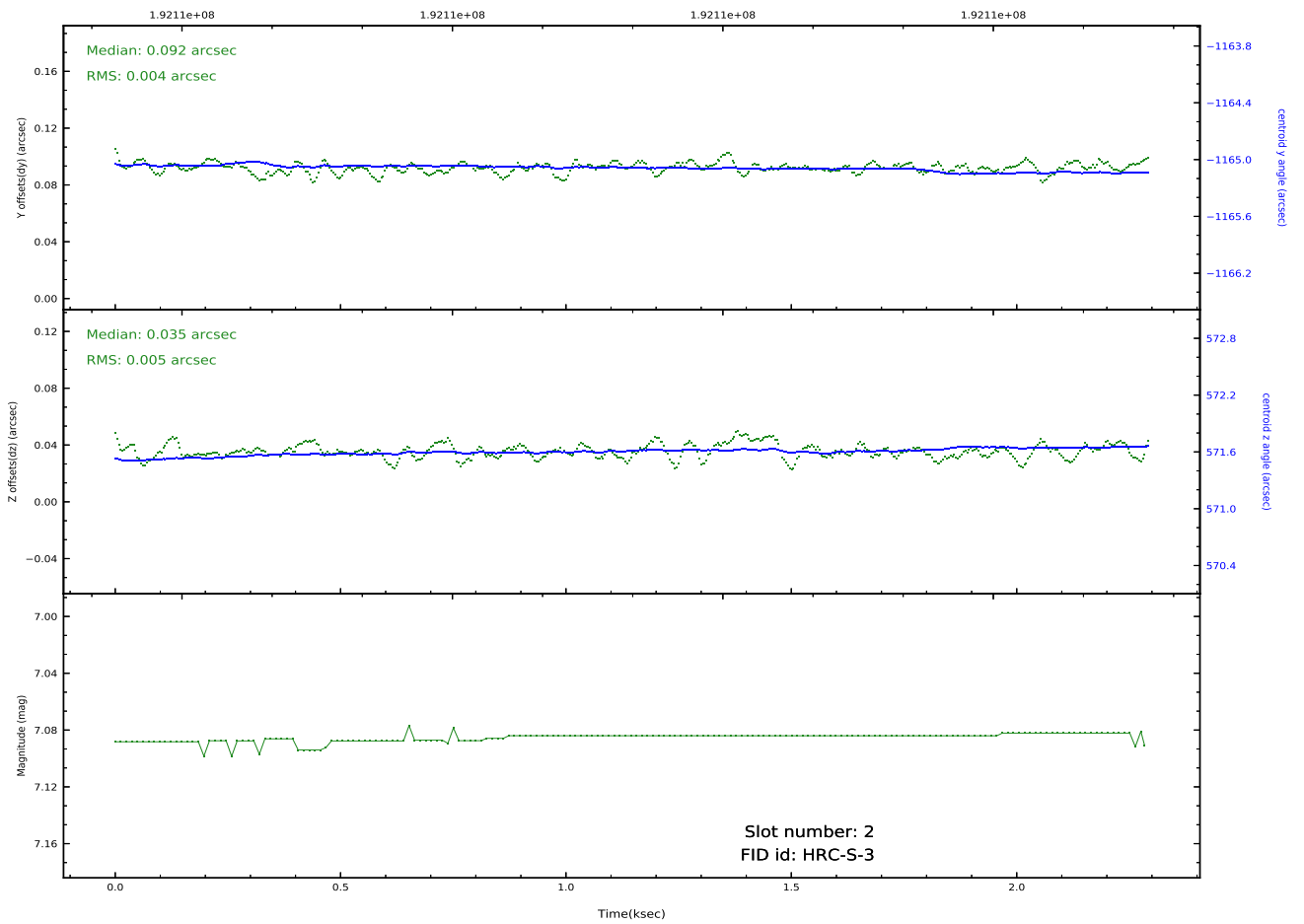
Time (s)



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.244

## A.2 Comments

Window constraint satisfied.