

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4315 - L2 Version 6  
Chandra X-Ray Center

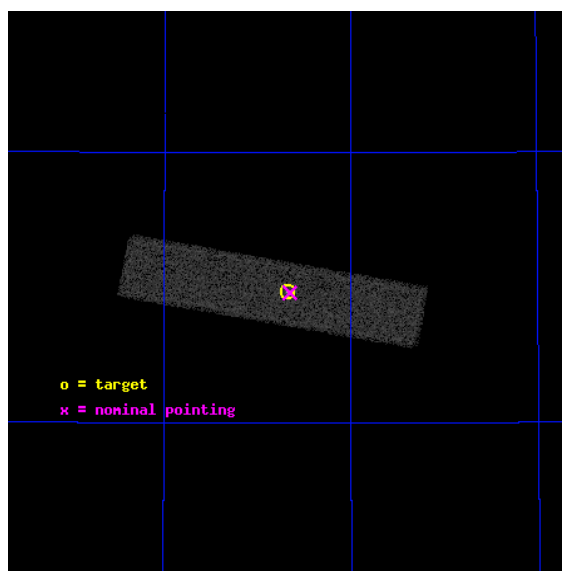
L2 Processing Date : Nov 2 2012

## 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	Parameters . . . . .	4
2.1.3	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

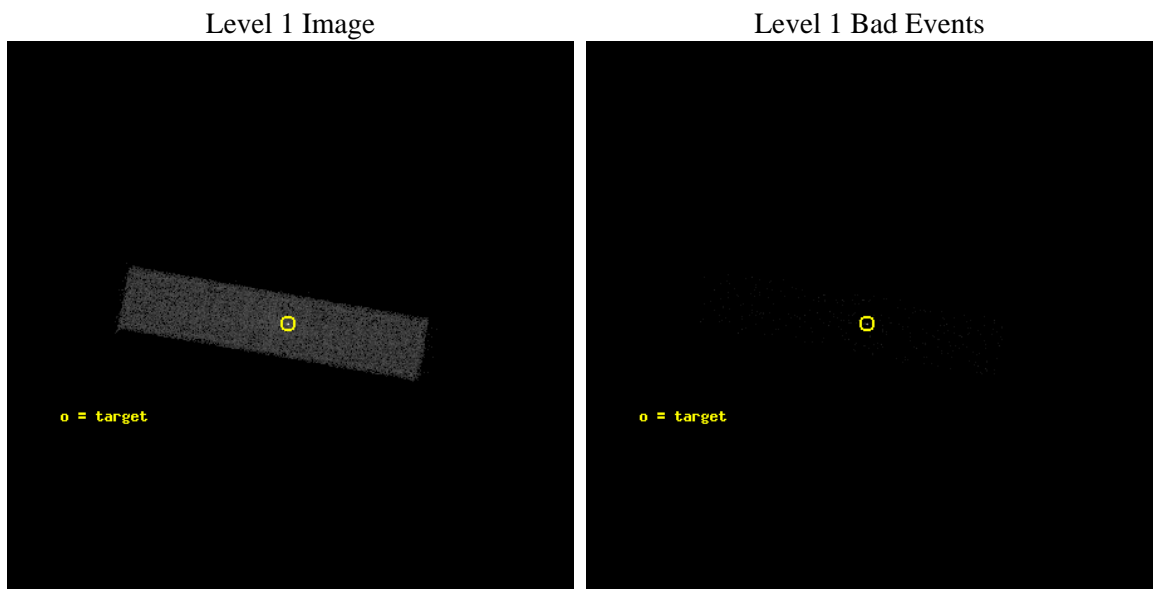
seq_num	290275	Sequence number
obs_id	4315	Observation id
title	AO4B CALIBRATION OBSERVATIONS TO MONITOR SPATIAL VARIATIONS IN THE HRC-S GAIN	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	ARLAC	Source name
ra_targ	332.17	Observer's specified target RA [deg]
dec_targ	45.742306	Observer's specified target Dec [deg]
ra_nom	332.163717	Nominal RA [deg]
dec_nom	45.740865	Nominal Dec [deg]
roll_nom	189.796208	Nominal Roll [deg]
revision	6	Processing version of data
ontime	852.80003651977	[s]
livetime	848.54209009003	Ontime multiplied by DTCOR
l2events	29491	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	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	852.80003651977	[s]
caldbver	4.5.2	&#160	l1events	39706	Number of level 1 events
date	2012-11-02T16:32:08	Date and time of file creation			
revision	6	Processing version of data			

### 2.1.3 Events

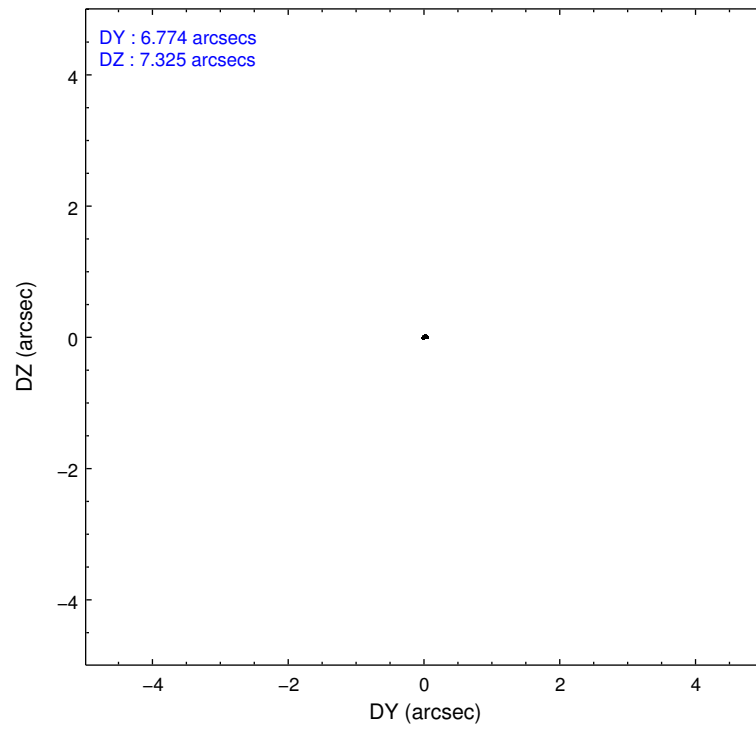
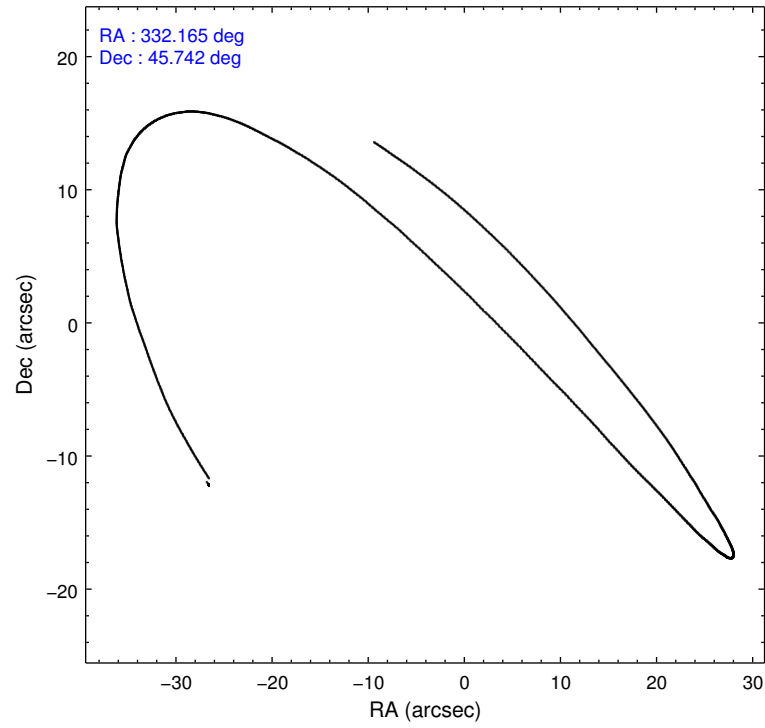
Level 1 Events

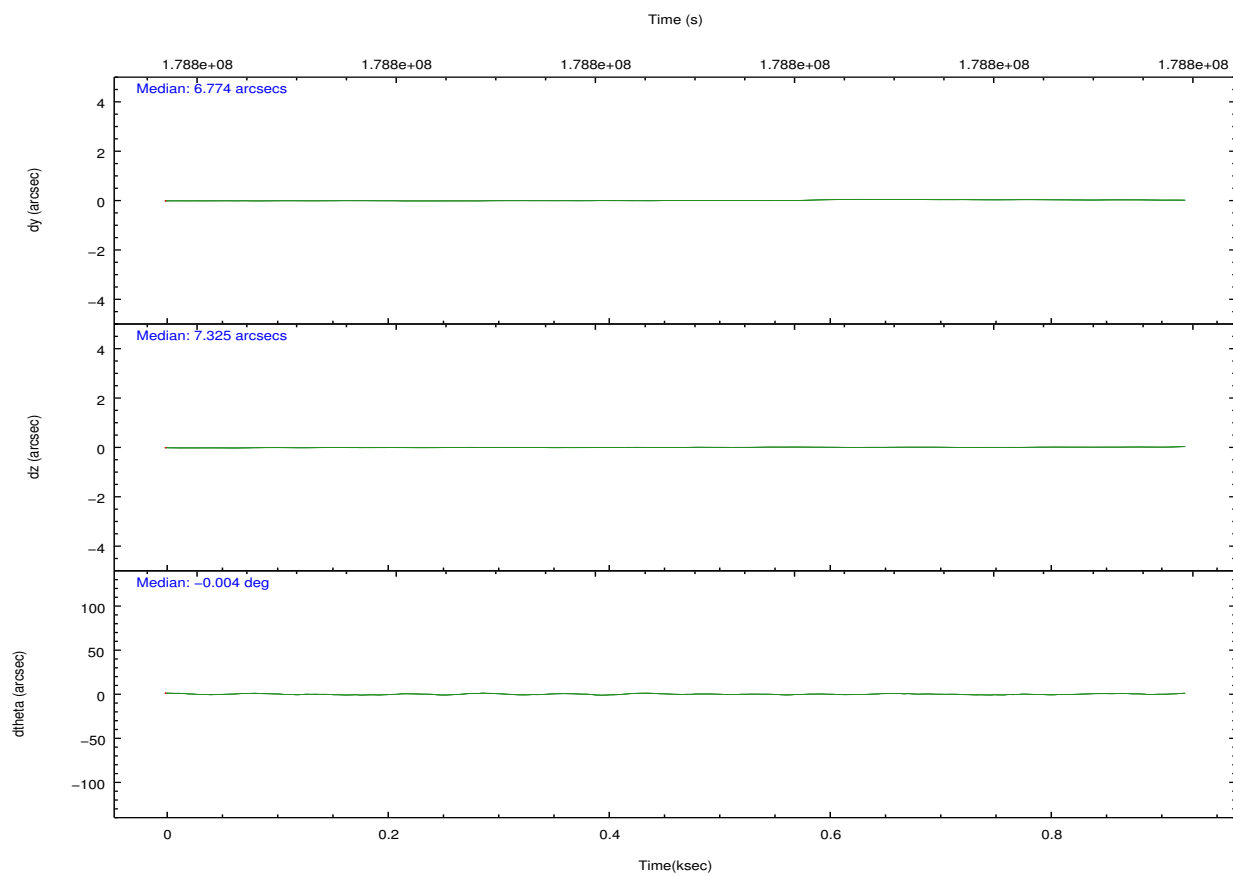
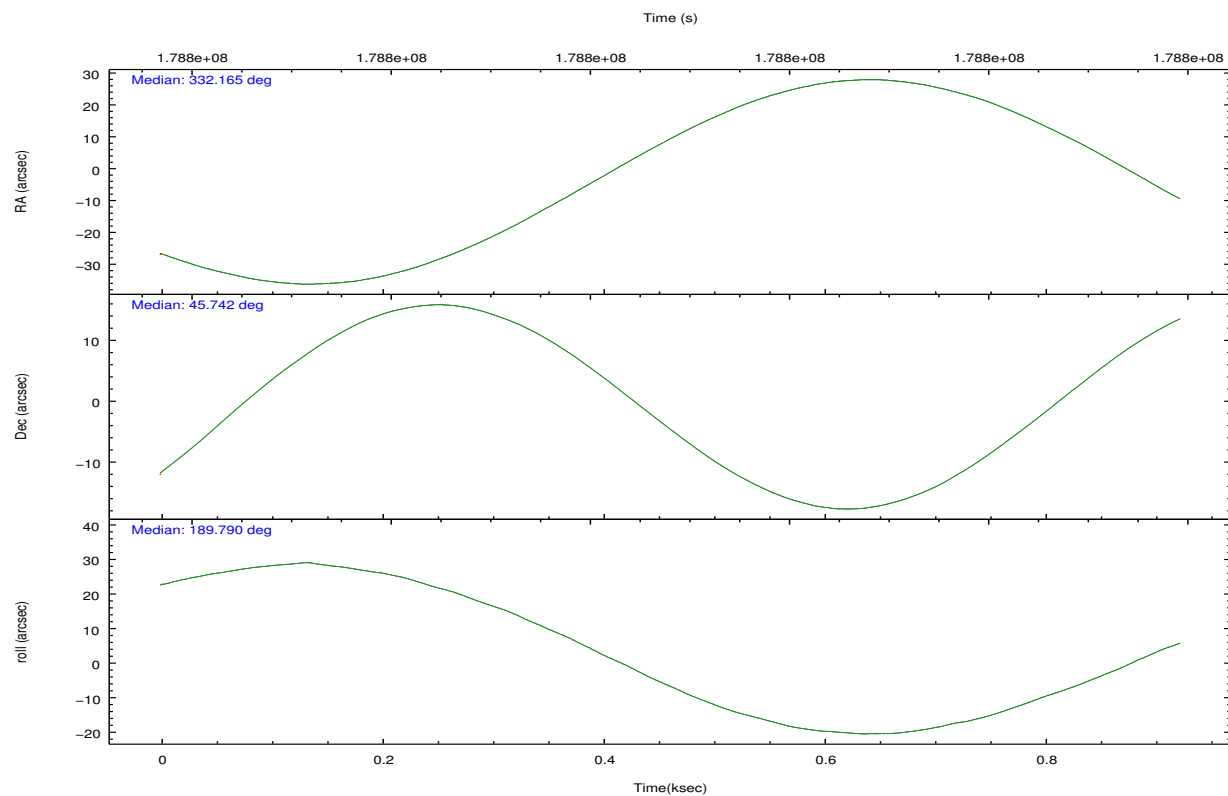
	<b>segment 1</b>	<b>segment 2</b>	<b>segment 3</b>
level 1 events	0	39706	0
rejected events	0	3041	0
rejected %	0%	7%	0%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	OVERRIDE	OVERRIDE
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	332.1637168171682	332.1636775879023			
[deg] Pointing Dec	45.74086461549308	45.74085992142696			
[deg] Pointing Roll	189.7962080300947	189.7962361332674			
[mm] SIM focus pos	-1.428180813131781	-1.428180813131781			
[mm] SIM defocus	0.1051557500239624	0.1051557500239624			
[mm] SIM translation stage pos	250.466033080201	250.466033080201			
[mm] SIM translation stage offset	-0.0100572612062706	-0.0100572612062706			
[s] Observation start time (MET)	178804013.184	178804013.184			
Observation start date	2003-09-01T11:44:34	2003-09-01T11:46:53			
[s] Observation end time (MET)	178804938.184	178804938.184			
Observation end date	2003-09-01T12:01:14	2003-09-01T12:02:18			

## 2.3 Aspect





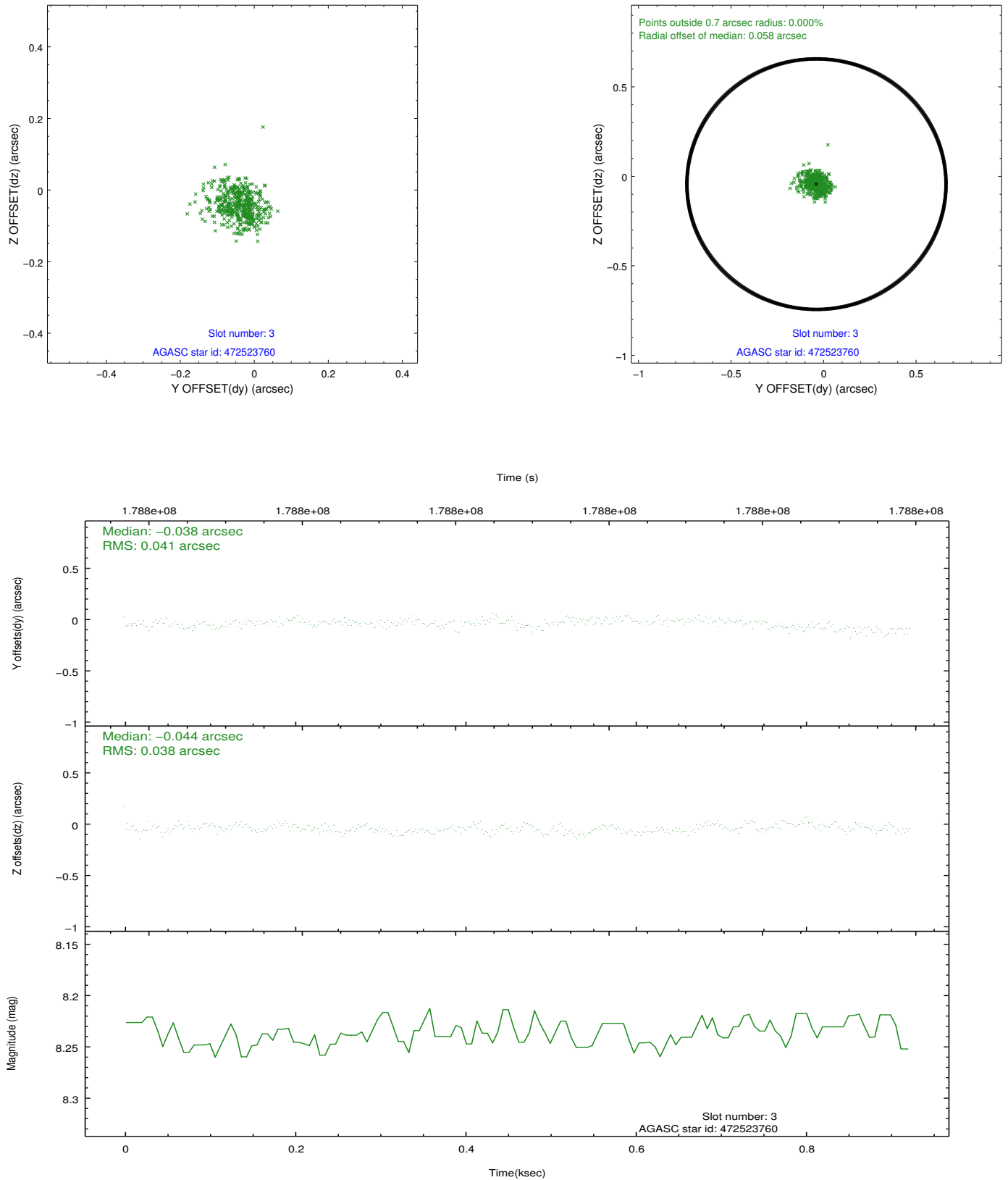
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.03	226	0.110	-0.115	0.007	0.011	0.000000	0.000000	-1160.95	-455.89
1	FID	HRC-S-2	7.03	226	0.158	-0.104	0.004	0.011	0.000000	0.000000	1233.64	-450.53
2	FID	HRC-S-3	7.04	226	0.121	-0.083	0.006	0.010	0.000000	0.000000	-1158.21	571.68
3	GUIDE	472523760	8.24	451	-0.038	-0.044	0.057	0.095	331.645363	45.403260	1583.83	1031.95
4	GUIDE	472527720	7.00	451	-0.123	-0.055	0.070	0.118	331.460205	45.112509	2233.76	1981.80
5	GUIDE	472533912	9.16	451	-0.027	0.020	0.101	0.162	331.791136	46.368695	622.94	-2322.26
6	GUIDE	472655152	9.45	451	0.134	0.048	0.092	0.149	332.504239	45.862991	-826.59	-236.49
7	GUIDE	472659832	9.46	449	0.053	0.049	0.090	0.179	332.780399	46.098139	-1649.51	-954.53

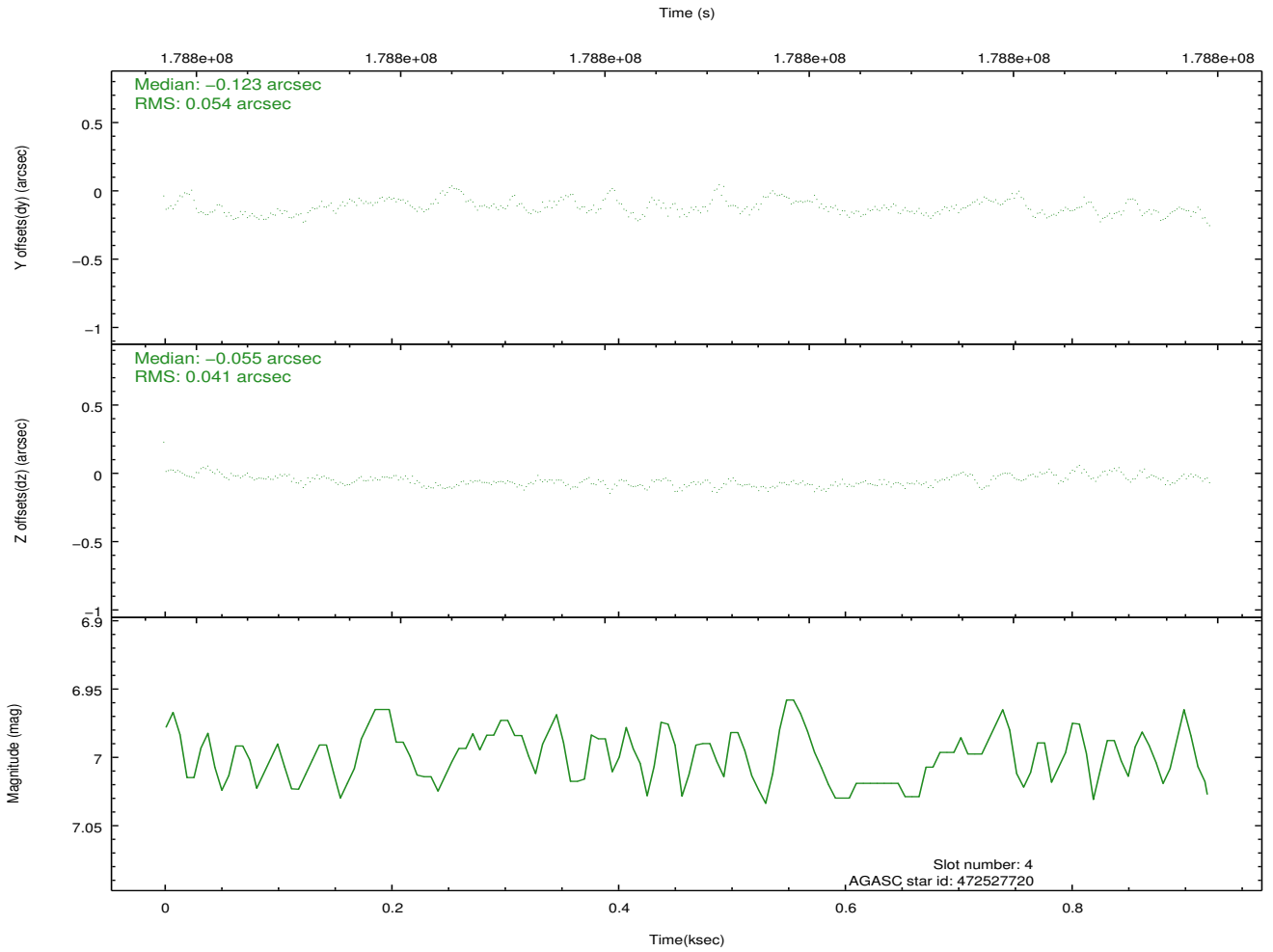
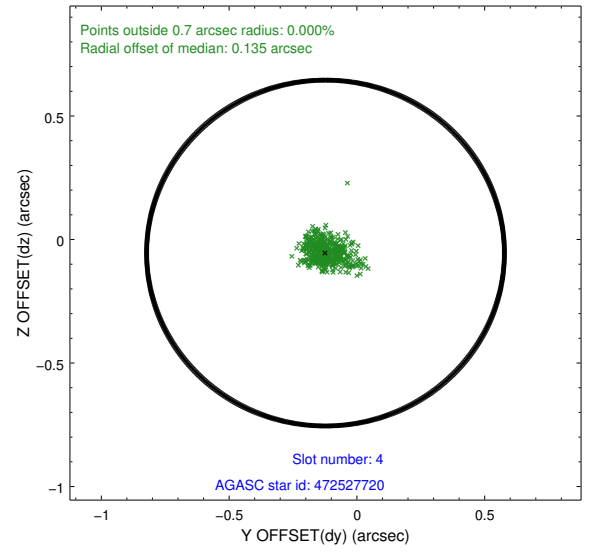
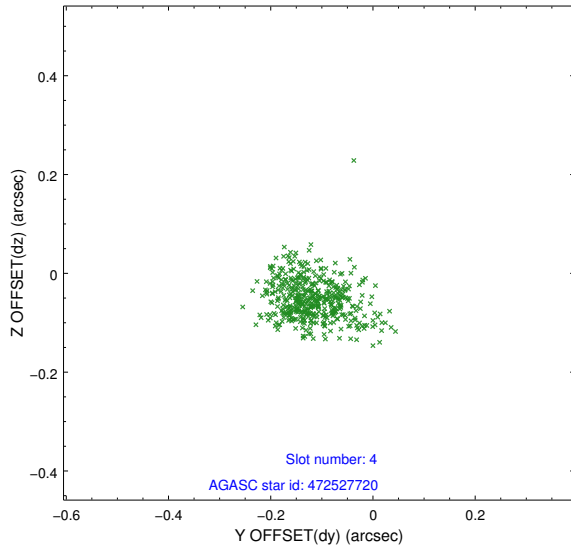


## 2.4 Star Slots

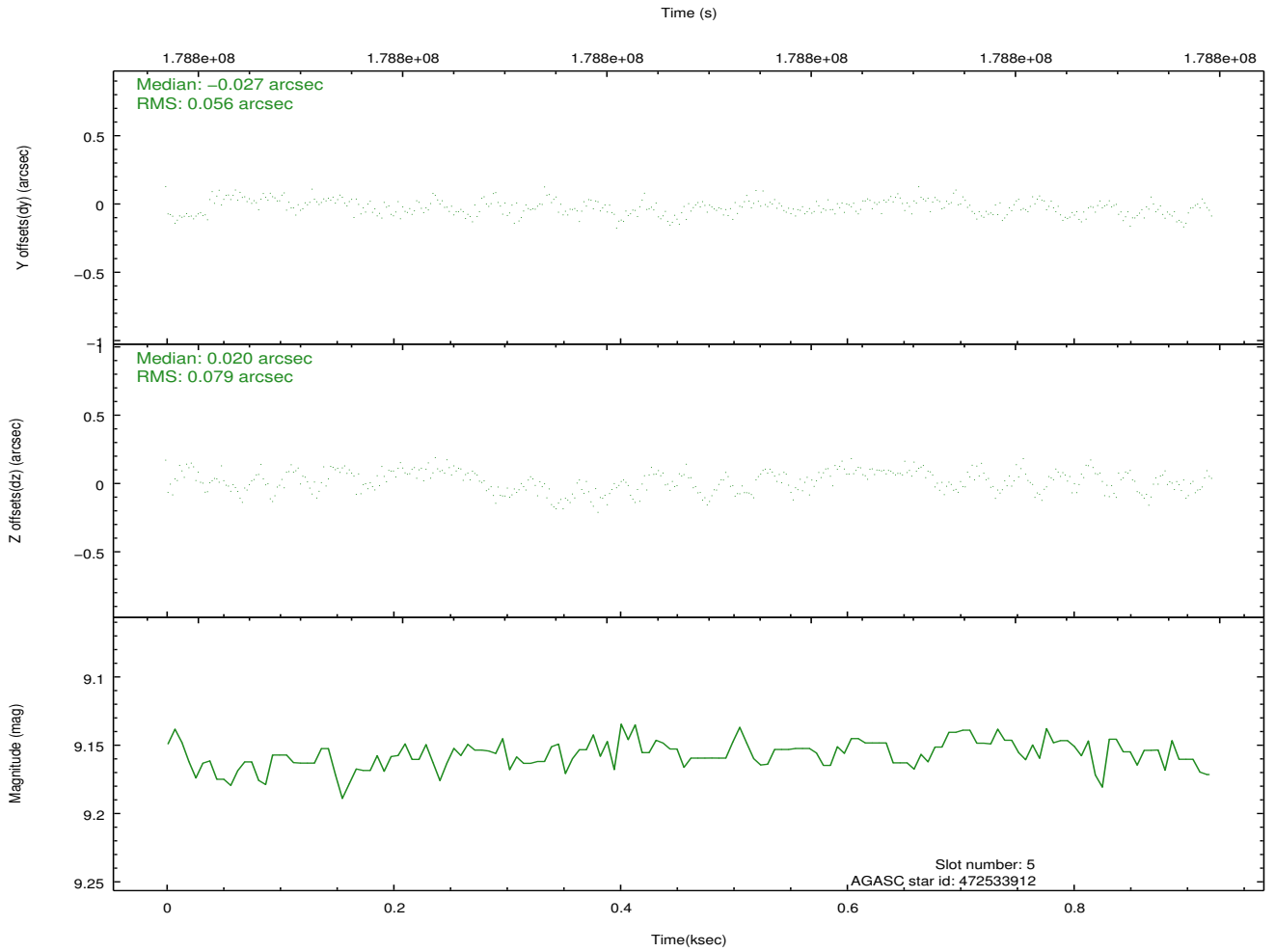
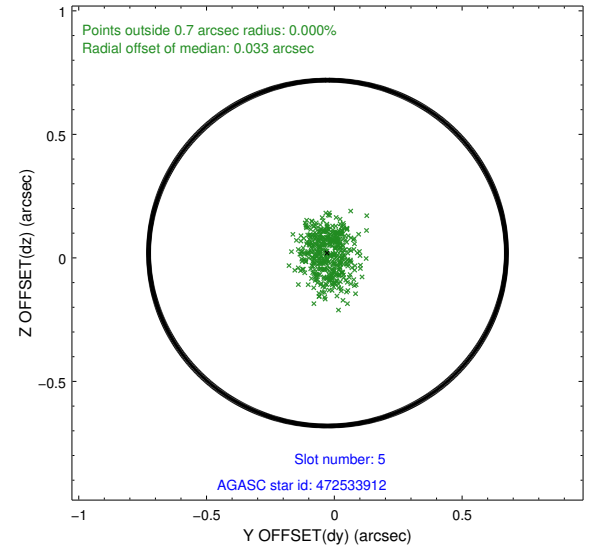
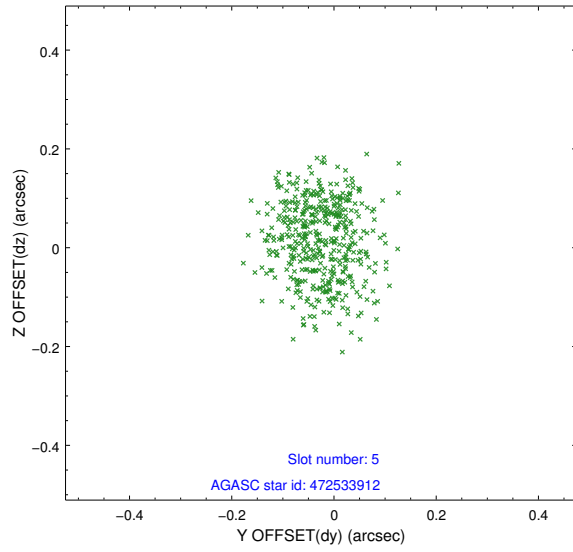
### 2.4.1 Slot 3



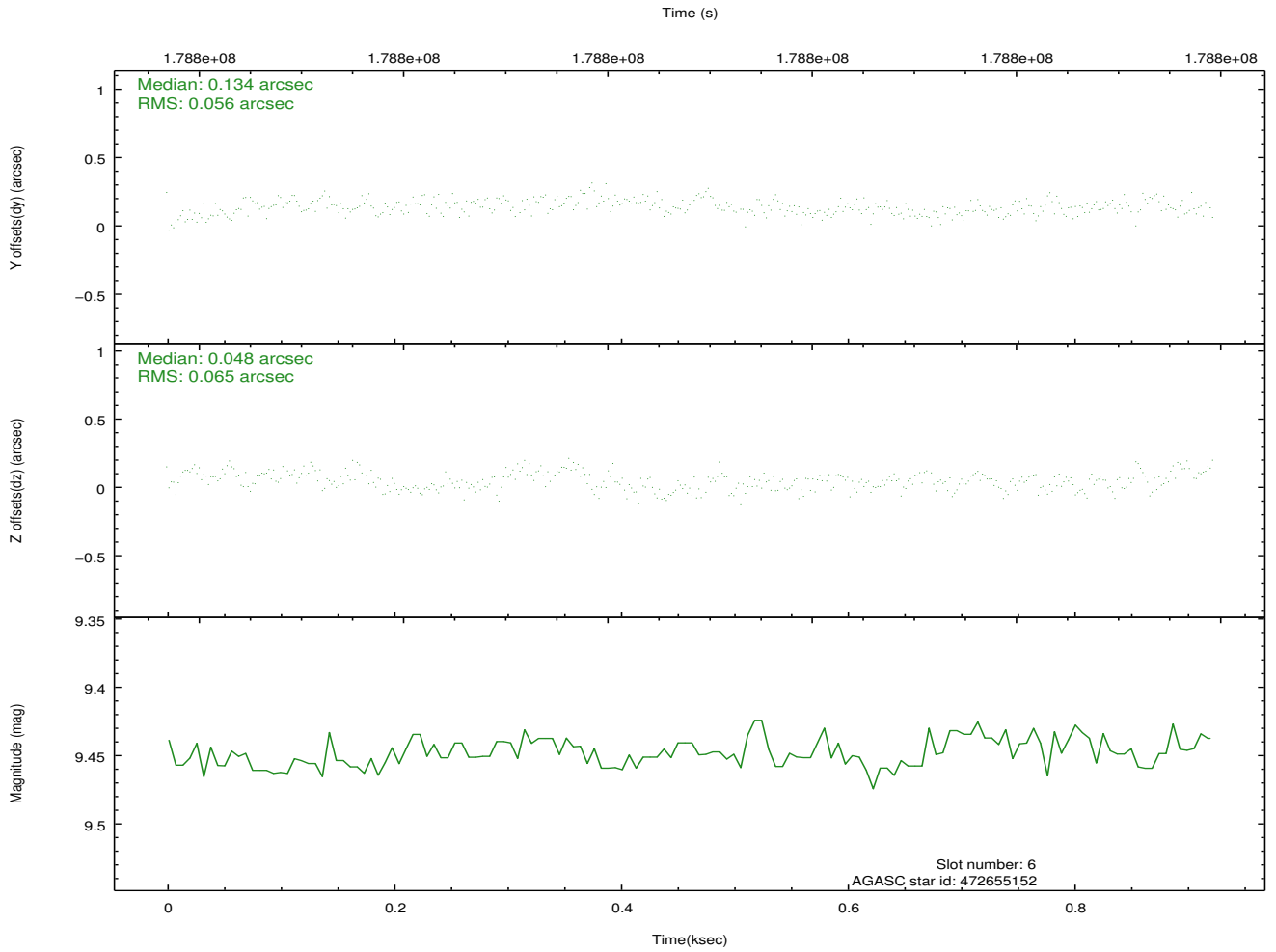
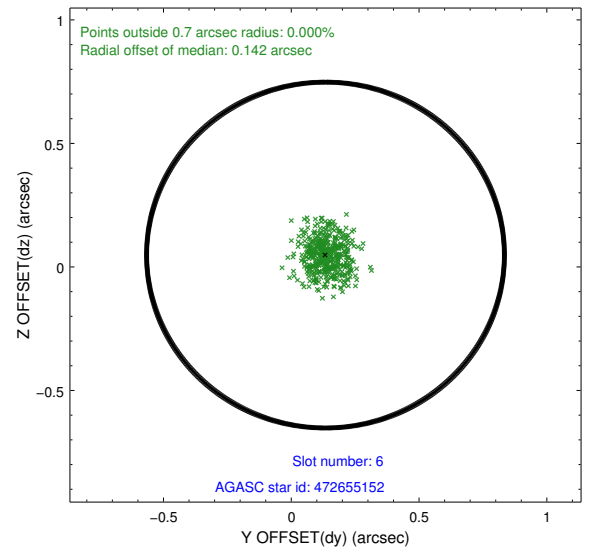
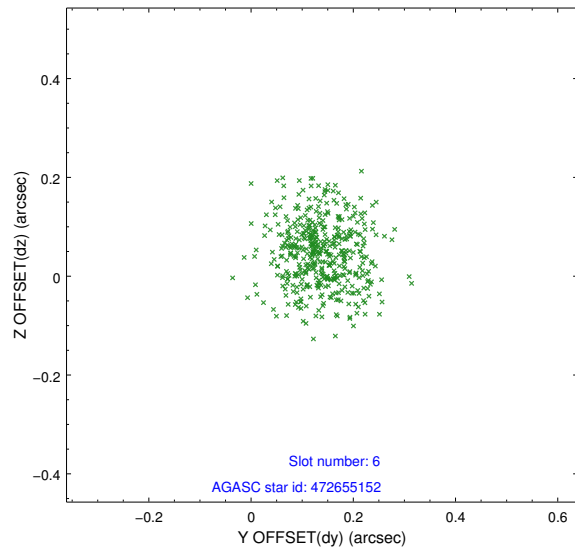
## 2.4.2 Slot 4



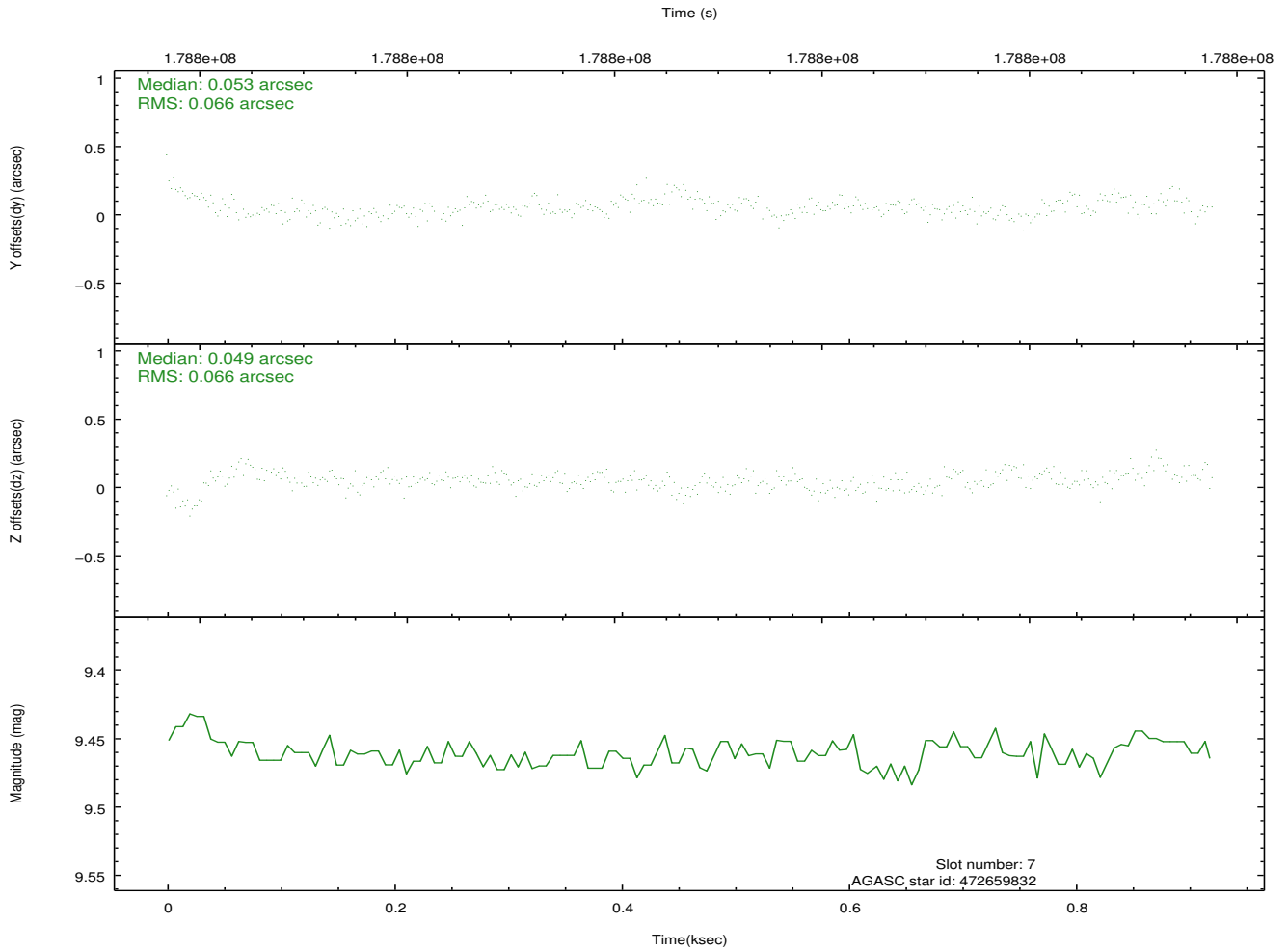
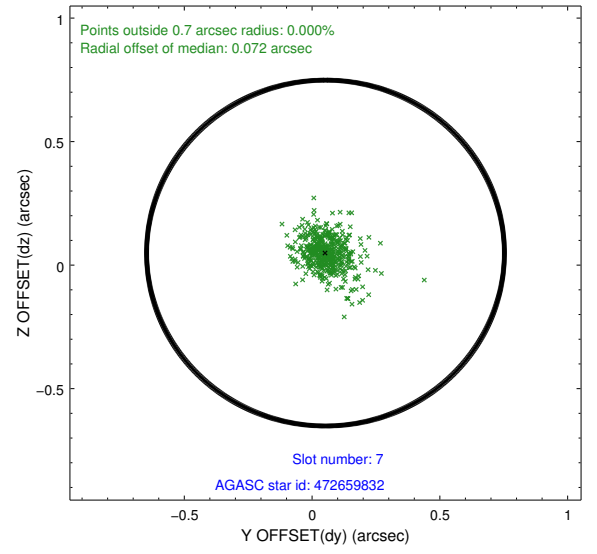
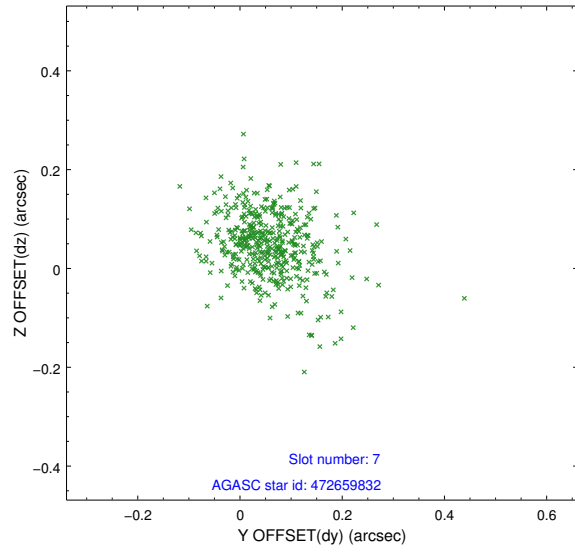
### 2.4.3 Slot 5



## 2.4.4 Slot 6

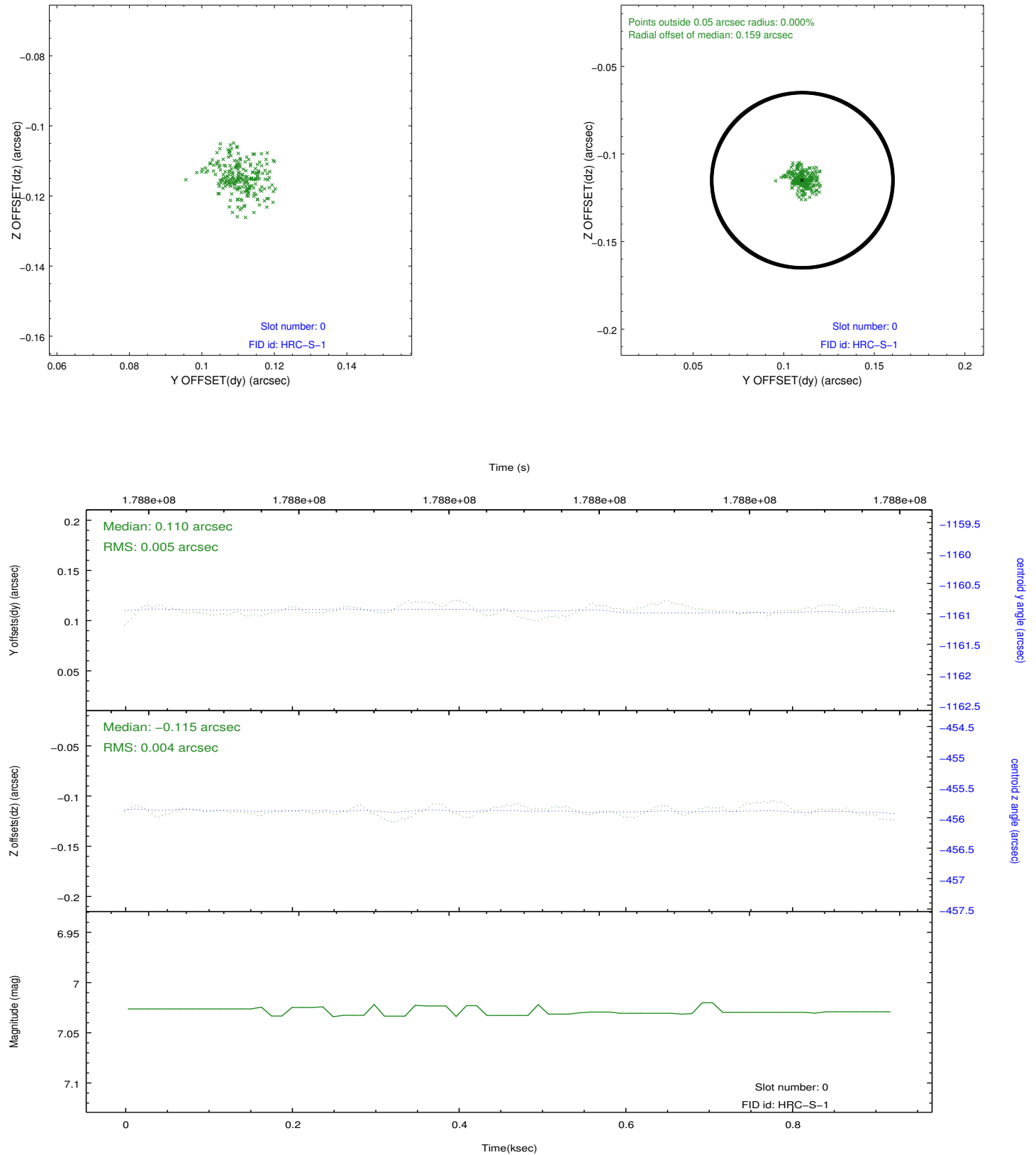


## 2.4.5 Slot 7

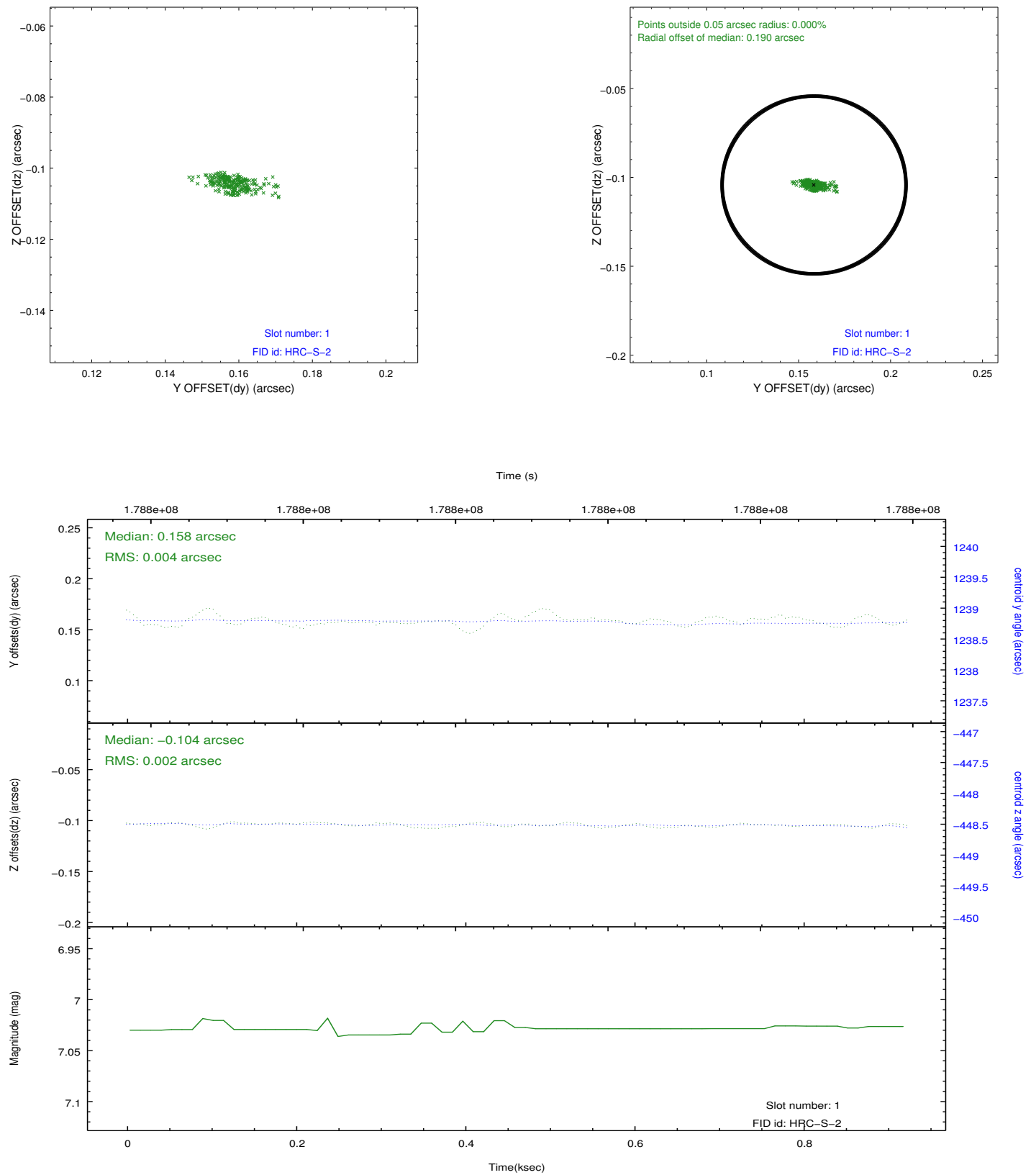


## 2.5 FID Slots

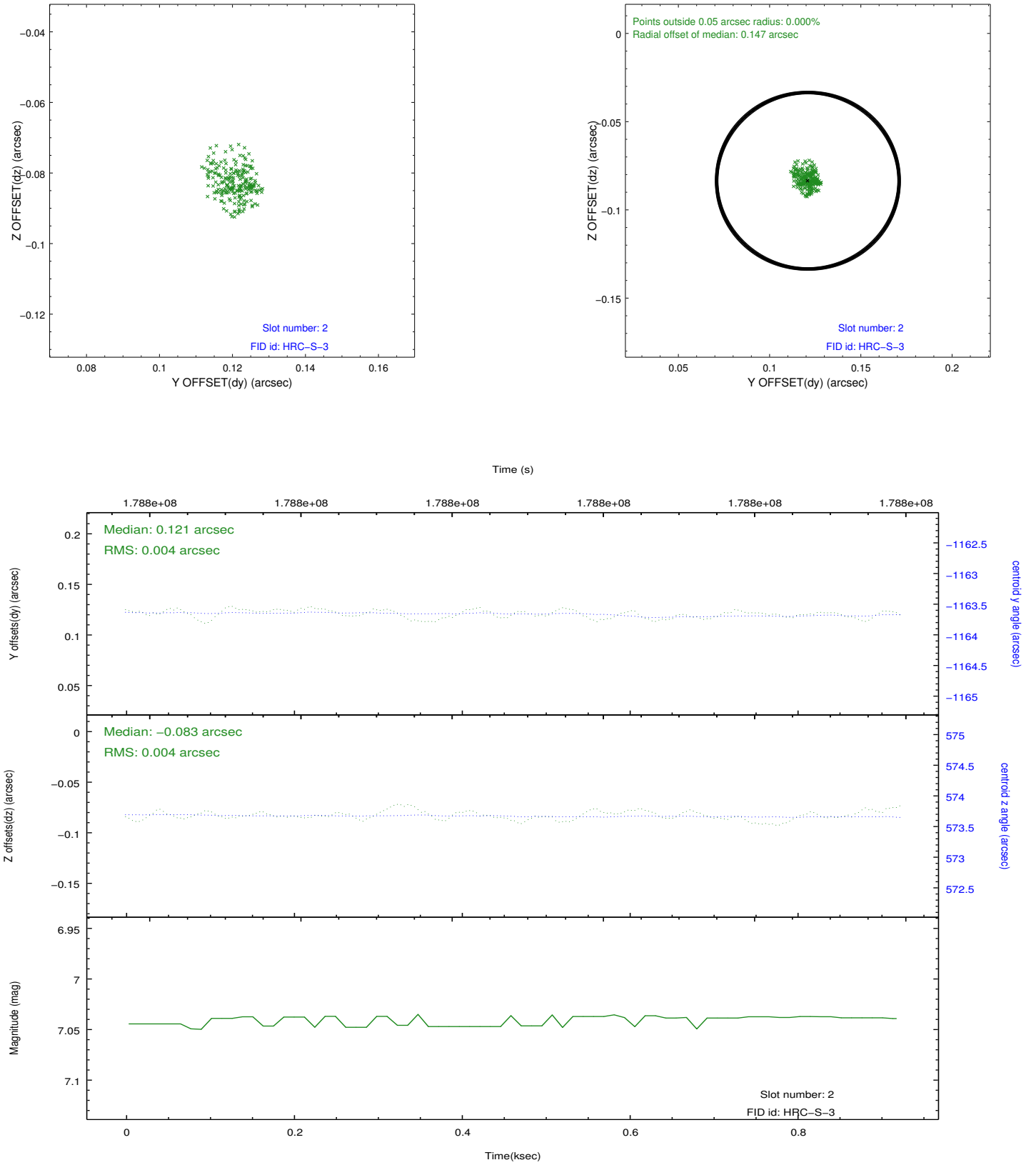
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.11.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	0.85280003

## A.2 Comments

The first 75 sec of this observation are not included in this processing. During this 75 second period, telemetry dropouts of the gyro data caused incorrect output. Eliminating the first 75 seconds of data resulted in good output products The charge time for this processing is less than the charge time used in a previously distributed version.