

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 5590 - L2 Version 3  
Chandra X-Ray Center

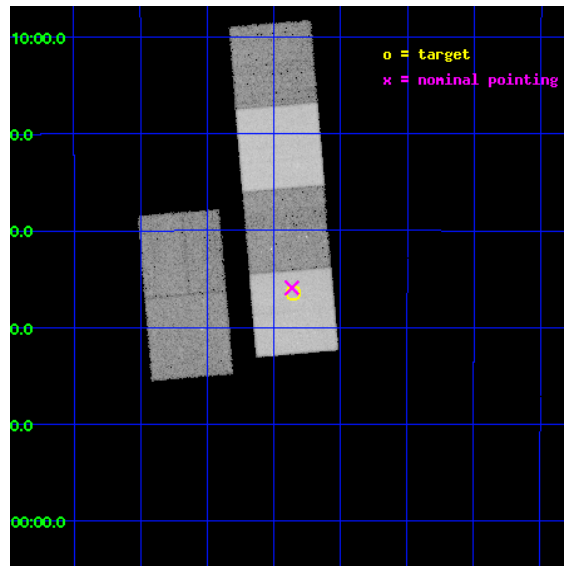
L2 Processing Date : Dec 23 2012

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# 1 Front

seq_num	500579	Sequence number
obs_id	5590	Observation id
title	Vela-like PSR B1800-21 and its environment	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PSR B1800-21	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	270.96375	Observer's specified target RA [deg]
dec_targ	-21.608056	Observer's specified target Dec [deg]
ra_nom	270.96643374299	Nominal RA [deg]
dec_nom	-21.598686698843	Nominal Dec [deg]
roll_nom	85.157618544924	Nominal Roll [deg]
revision	3	Processing version of data
ontime	30623.999885917	Sum of GTIs [s]
livetime	30236.220359802	Livetime [s]
ontime2	30620.758995265	Sum of GTIs [s]
ontime3	30623.999885917	Sum of GTIs [s]
ontime4	30623.999885917	Sum of GTIs [s]
ontime5	30623.999885917	Sum of GTIs [s]
ontime6	30623.999885917	Sum of GTIs [s]
ontime7	30623.999885917	Sum of GTIs [s]
l2events	391993	Number of level 2 events

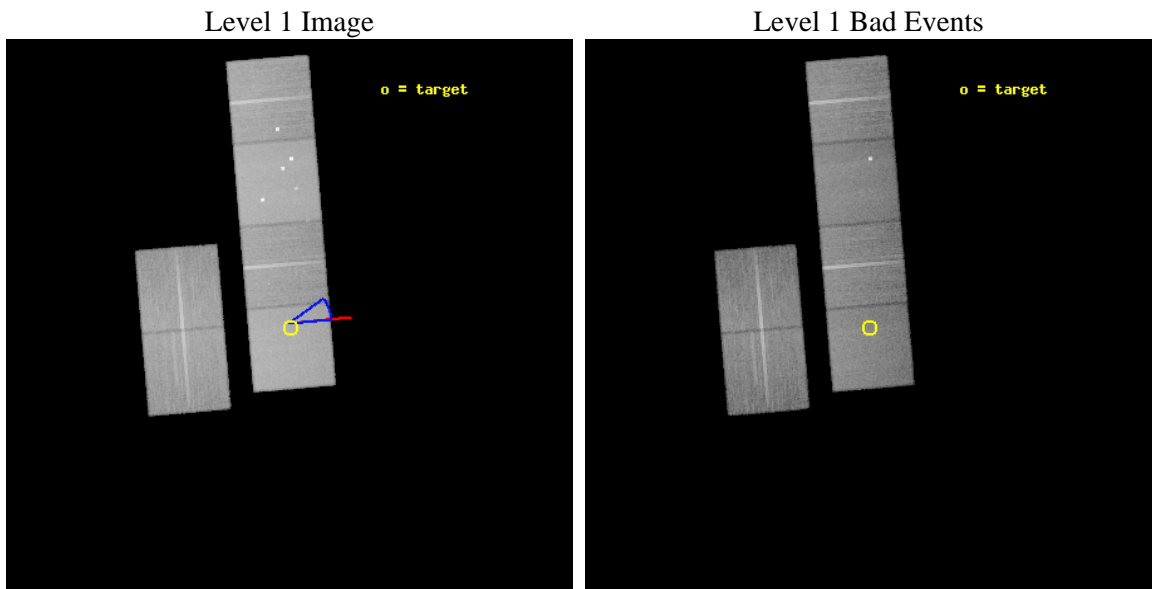




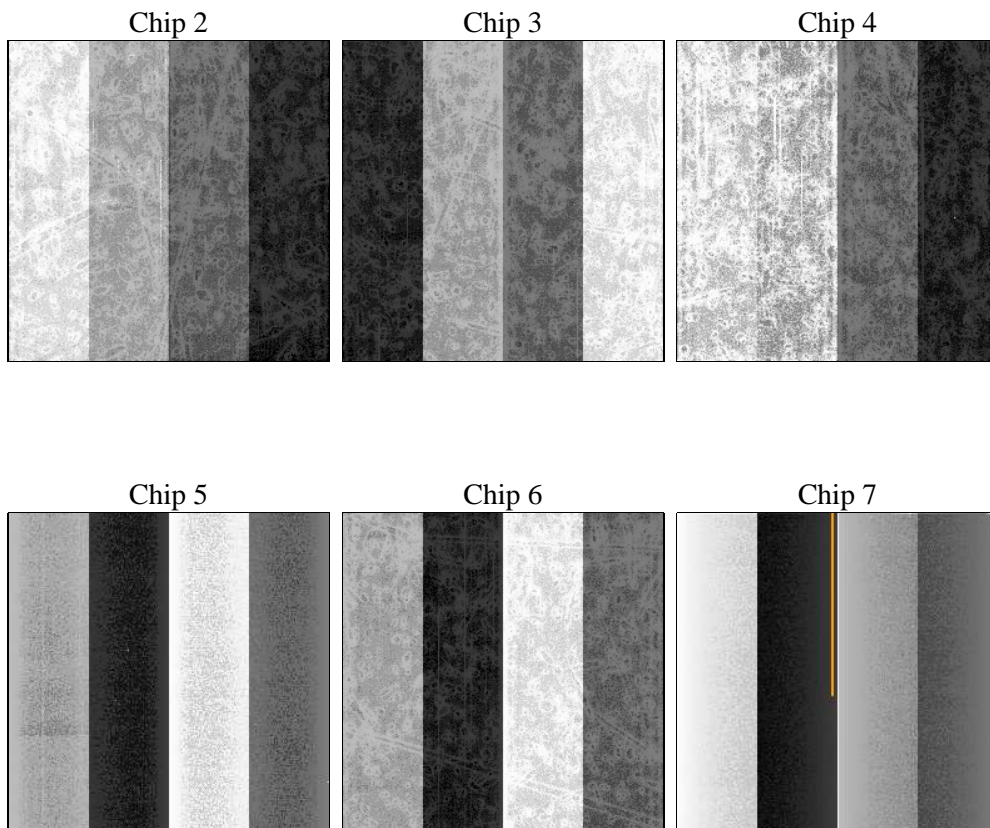
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30500.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	30623.999885917	Sum of GTIs [s]
caldsver	4.5.5	&#160	ontime2	30620.758995265	Sum of GTIs [s]
date	2012-12-23T03:16:24	Date and time of file creation	ontime3	30623.999885917	Sum of GTIs [s]
revision	3	Processing version of data	ontime4	30623.999885917	Sum of GTIs [s]
			ontime5	30623.999885917	Sum of GTIs [s]
			ontime6	30623.999885917	Sum of GTIs [s]
			ontime7	30623.999885917	Sum of GTIs [s]
			l1events	1735931	Number of level 1 events

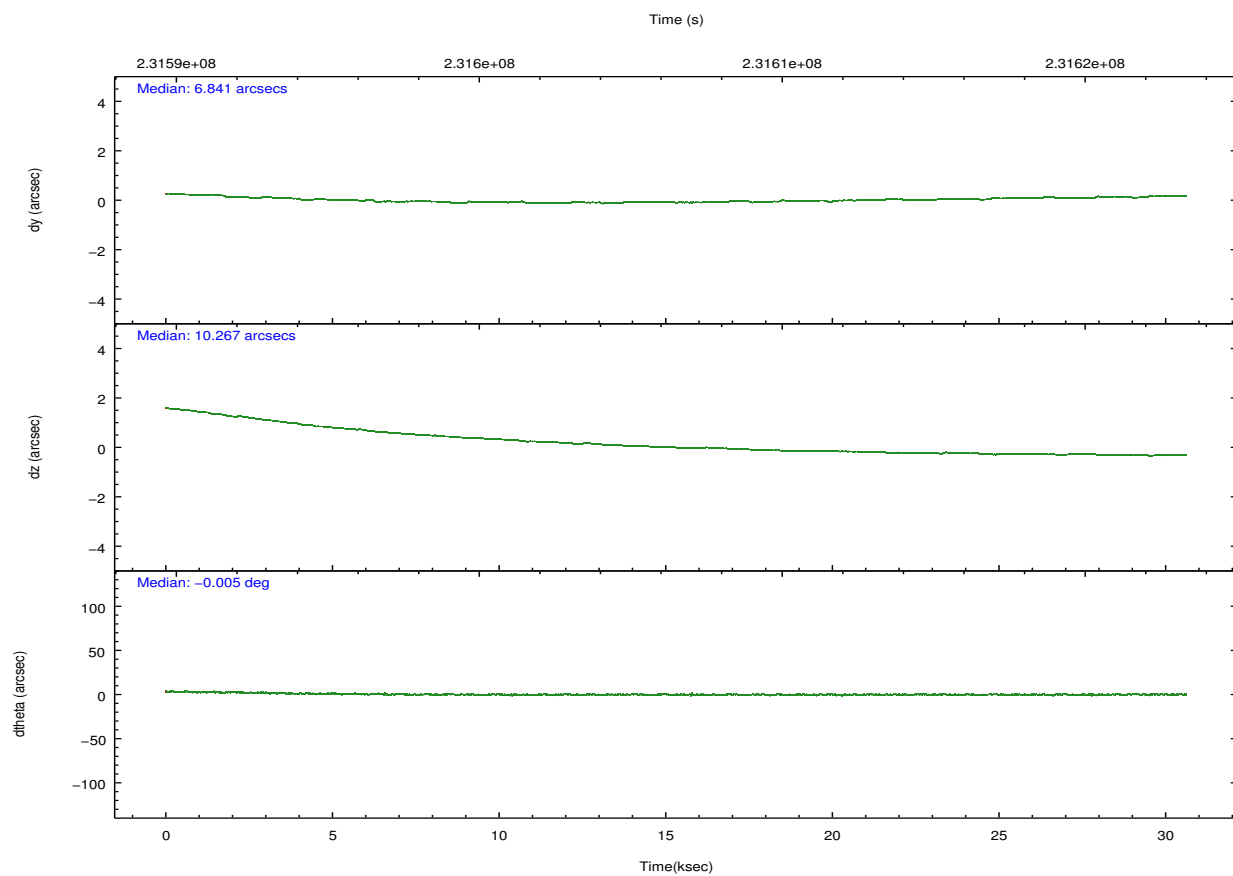
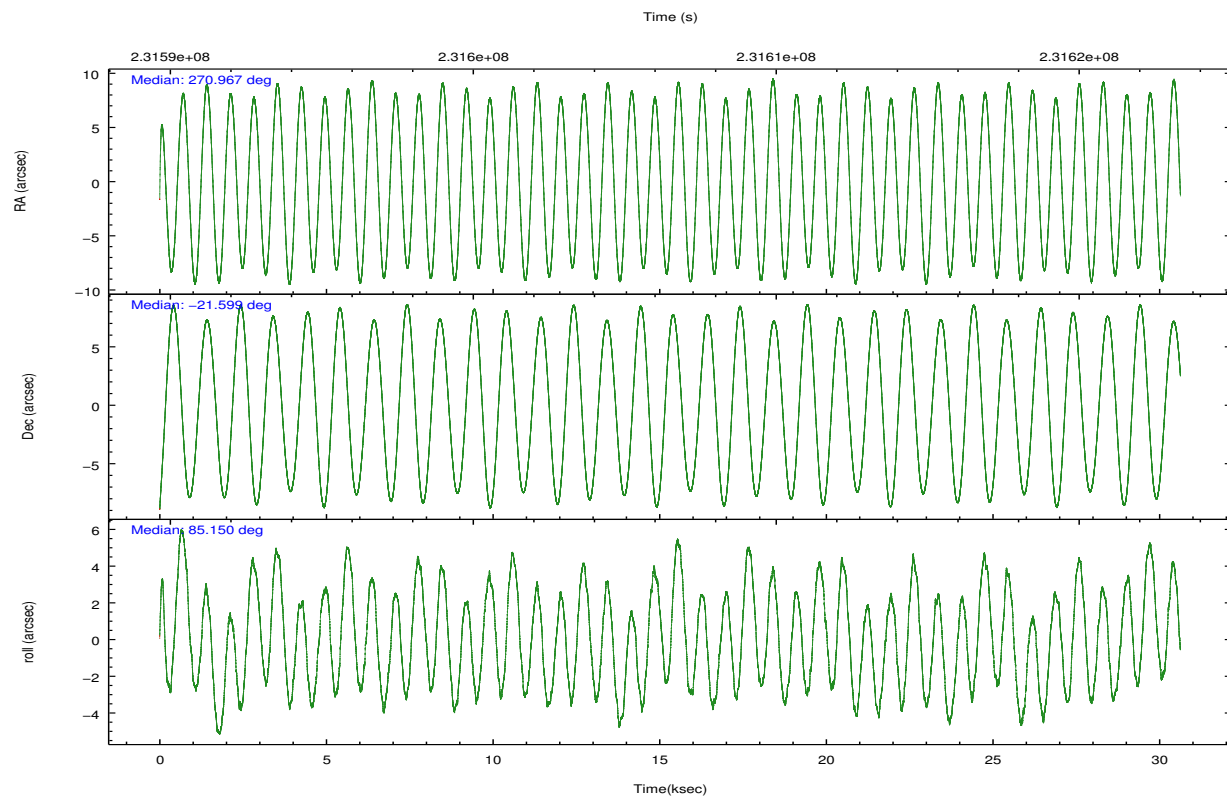
### 2.1.4 Events

	ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7		ccd 2	ccd 3	ccd 4	ccd 5	ccd 6	ccd 7
level 1 events	239333	239563	282084	384795	249436	340720	grade 0 events	14521	14355	21917	24510	15345	13543
rejected events	210006	209987	244212	212102	217942	203554		6%	5%	7%	6%	6%	3%
rejected %	87%	87%	86%	55%	87%	59%	grade 1 events	176	159	296	442	306	350
								0%	0%	0%	0%	0%	0%
							grade 2 events	5953	5775	6615	54068	6930	29421
								2%	2%	2%	14%	2%	8%
							grade 3 events	2740	2814	3248	6537	3065	12879
								1%	1%	1%	1%	1%	3%
							grade 4 events	2736	2872	2919	6195	2987	12761
								1%	1%	1%	1%	1%	3%
							grade 5 events	9560	10904	11102	27008	11374	31697
								3%	4%	3%	7%	4%	9%
							grade 6 events	4747	5198	4799	89472	6145	75829
								1%	2%	1%	23%	2%	22%
							grade 7 events	198900	197486	231188	176563	203284	164240
								83%	82%	81%	45%	81%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-234567	ACIS-234567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	270.979244	270.9664337429929	Subarray requested	NONE	NONE
[deg] Pointing Dec	-21.623205	-21.59868669884295	Alternating exposures requested	N	N
[deg] Pointing Roll	85.005713	85.15761854492388	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	70.000000	70.000000			
[deg] Roll tolerance	15.000000	15.000000			
Roll constraint allows 180D rotation	N	N			
[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)	231591309.184000	231589561.70762			
Observation start date	2005-05-04T10:54:05	2005-05-04T10:26:01			
[s] Observation end time (MET)	231621809.184000	231622426.79662			
Observation end date	2005-05-04T19:22:25	2005-05-04T19:33:46			
Read mode	TIMED	TIMED			

## 2.3 Aspect

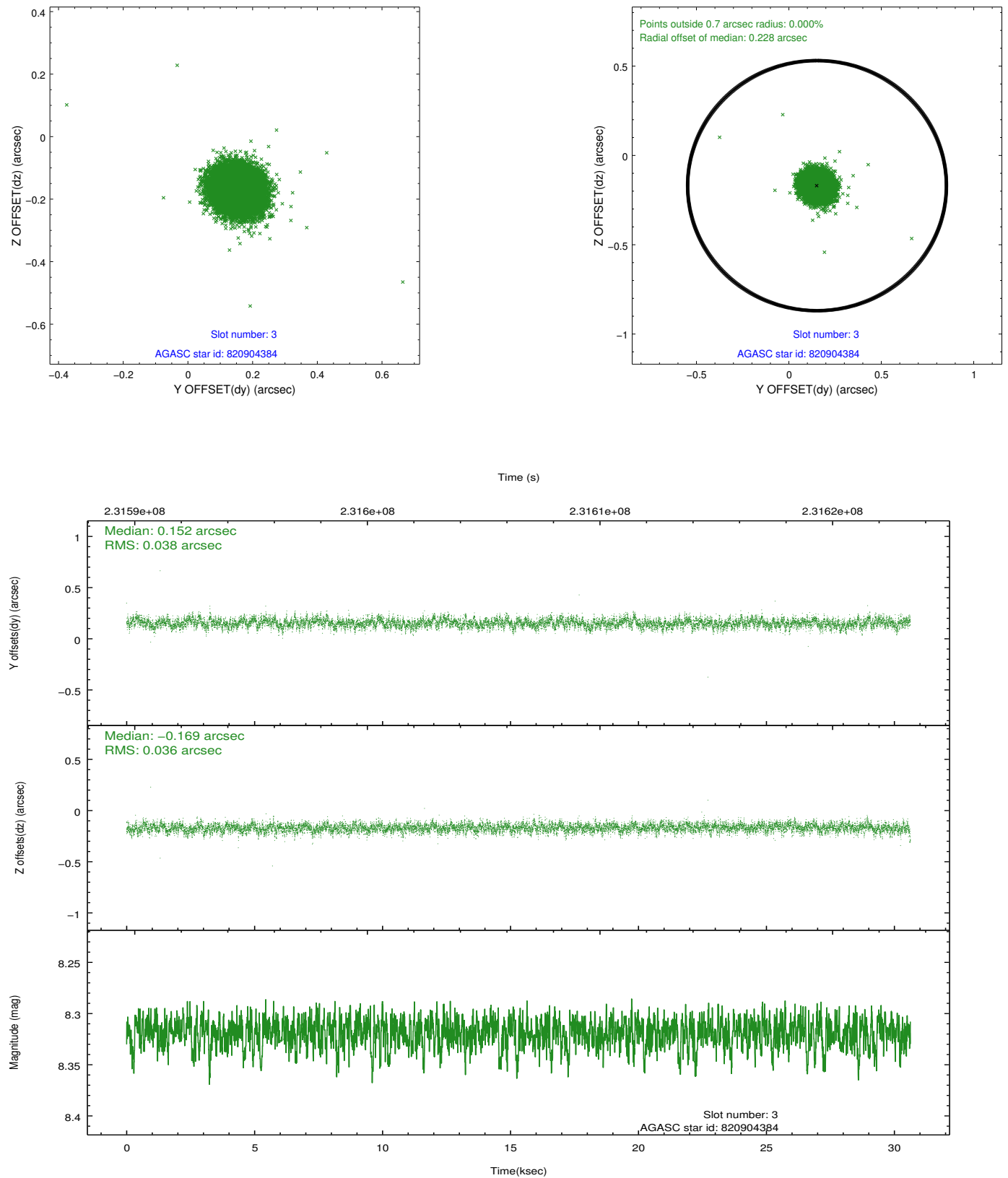


### Slot Statistics

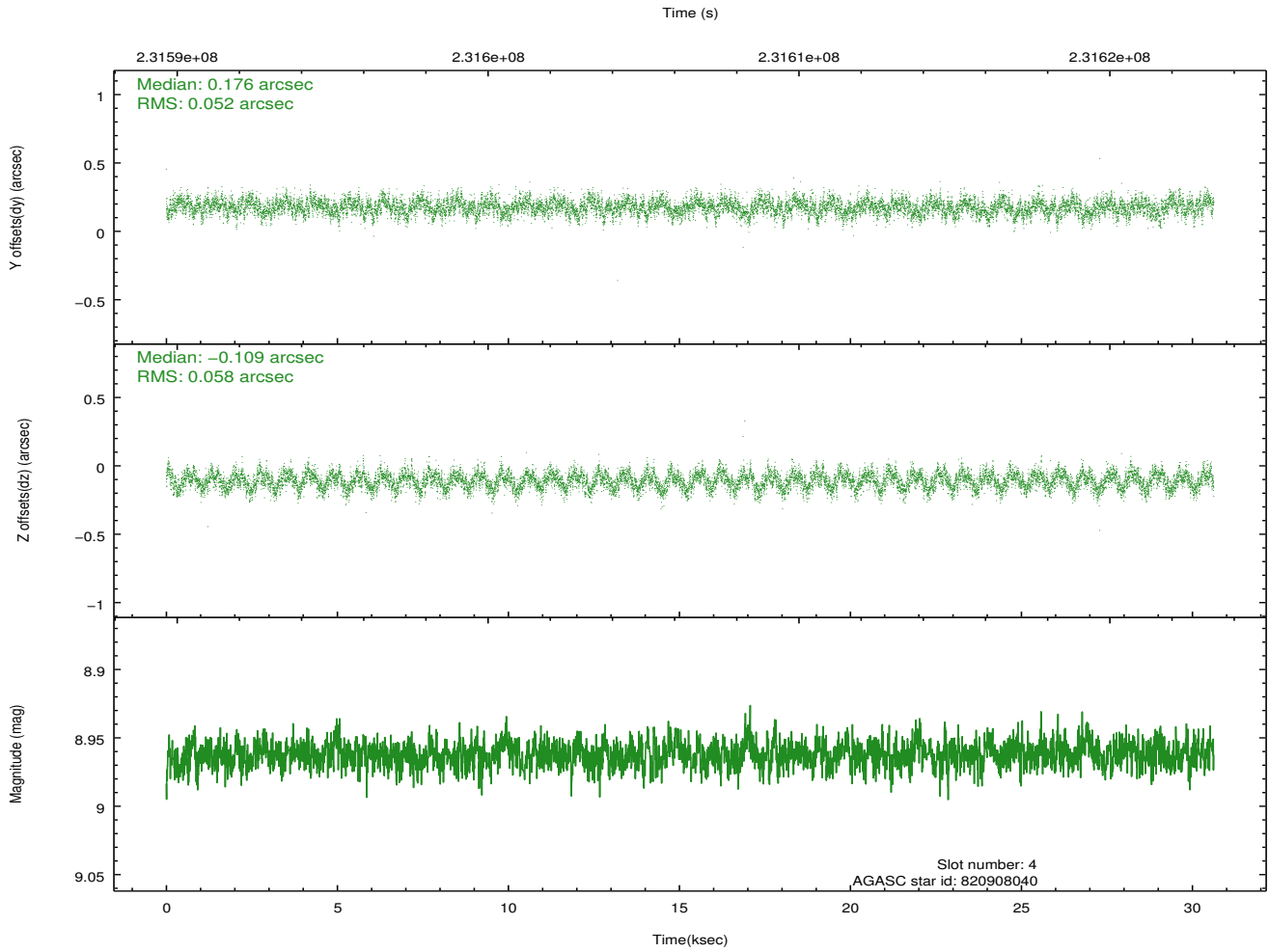
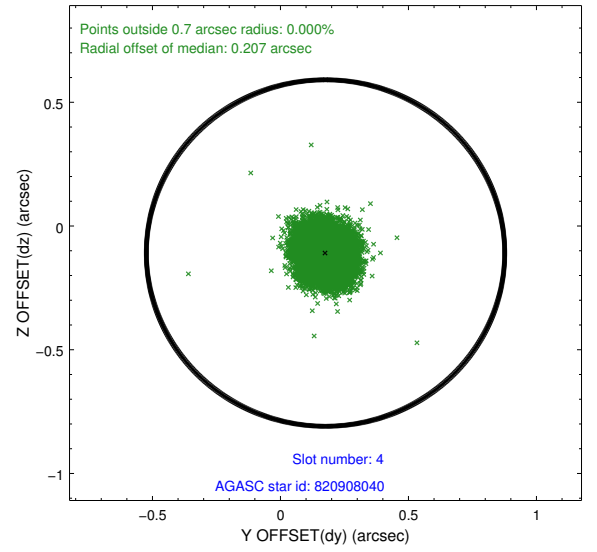
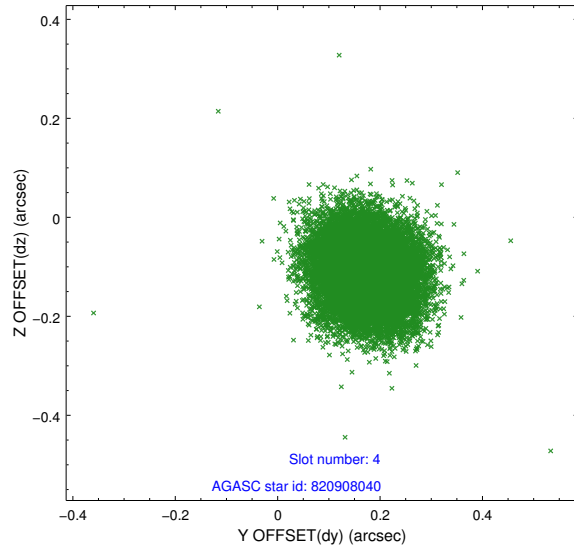
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	7471	-0.060	-0.028	0.011	0.023	0.000000	0.000000	-759.63	-1731.77
1	FID	ACIS-S-4	7.21	7471	0.099	0.037	0.013	0.026	0.000000	0.000000	2153.74	176.75
2	FID	ACIS-S-5	7.23	7471	-0.069	0.001	0.011	0.017	0.000000	0.000000	-1812.43	170.40
3	GUIDE	820904384	8.32	14931	0.152	-0.169	0.055	0.090	270.591600	-21.963127	-1333.19	1182.55
4	GUIDE	820908040	8.96	14938	0.176	-0.109	0.083	0.132	270.888554	-22.202158	-2102.47	119.60
5	GUIDE	820924960	8.25	14936	-0.022	-0.089	0.062	0.101	270.663174	-21.508592	317.69	1090.60
6	GUIDE	820910656	8.88	14935	-0.080	0.123	0.072	0.117	271.369896	-21.142203	1837.89	-1155.49
7	GUIDE	820909640	7.95	14937	-0.229	0.248	0.060	0.097	271.713313	-21.505332	631.43	-2412.43

## 2.4 Star Slots

### 2.4.1 Slot 3

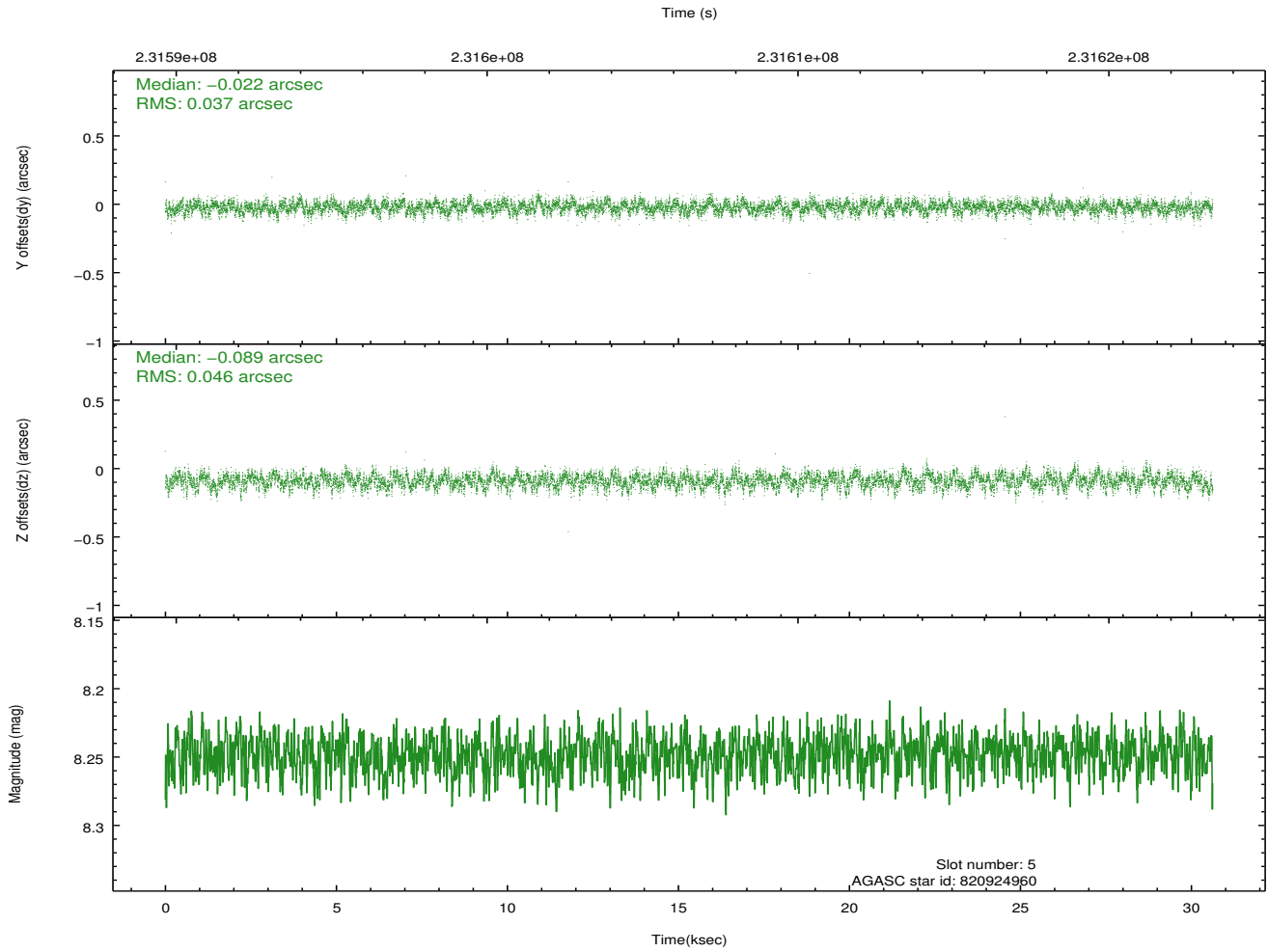
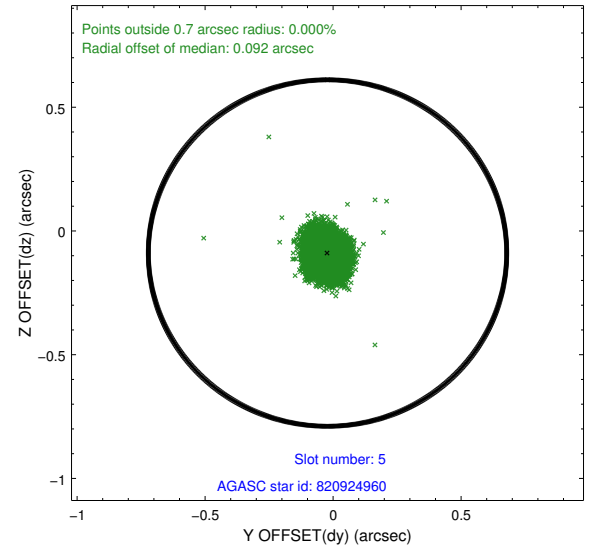
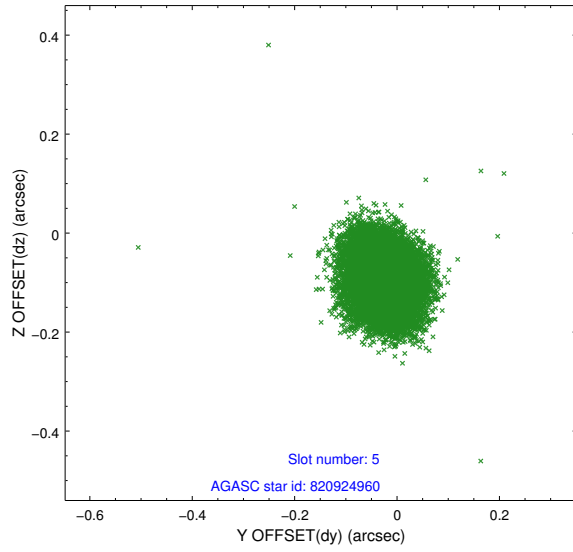


## 2.4.2 Slot 4

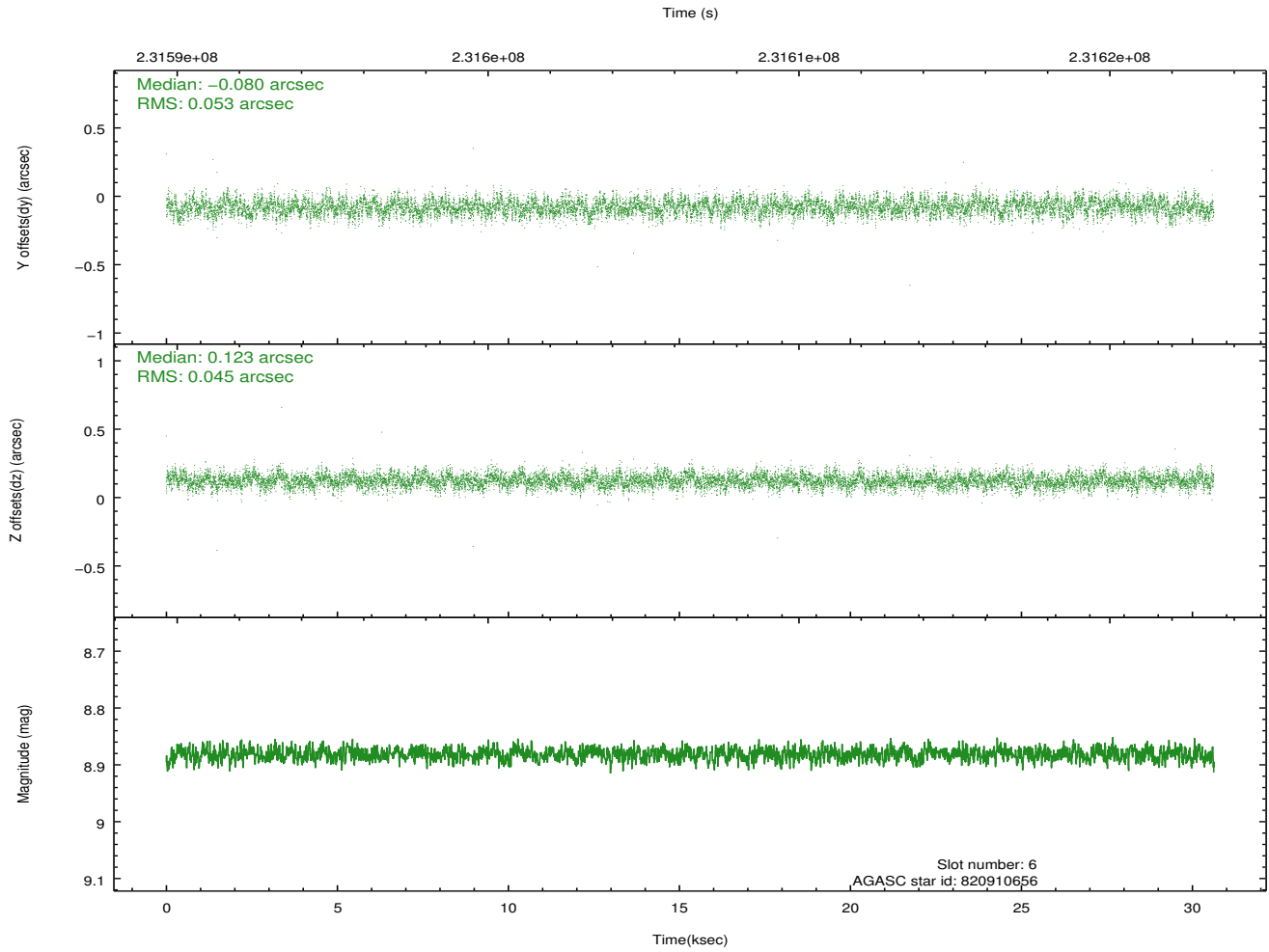
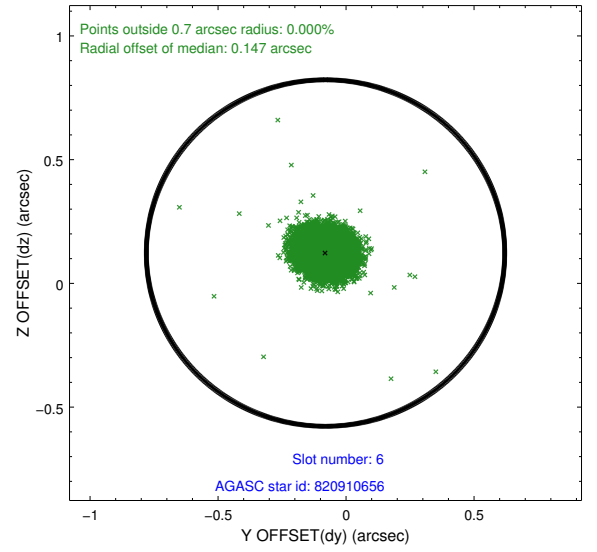
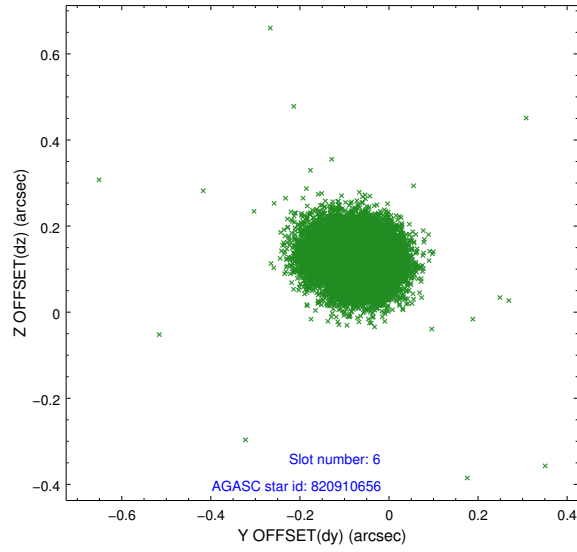




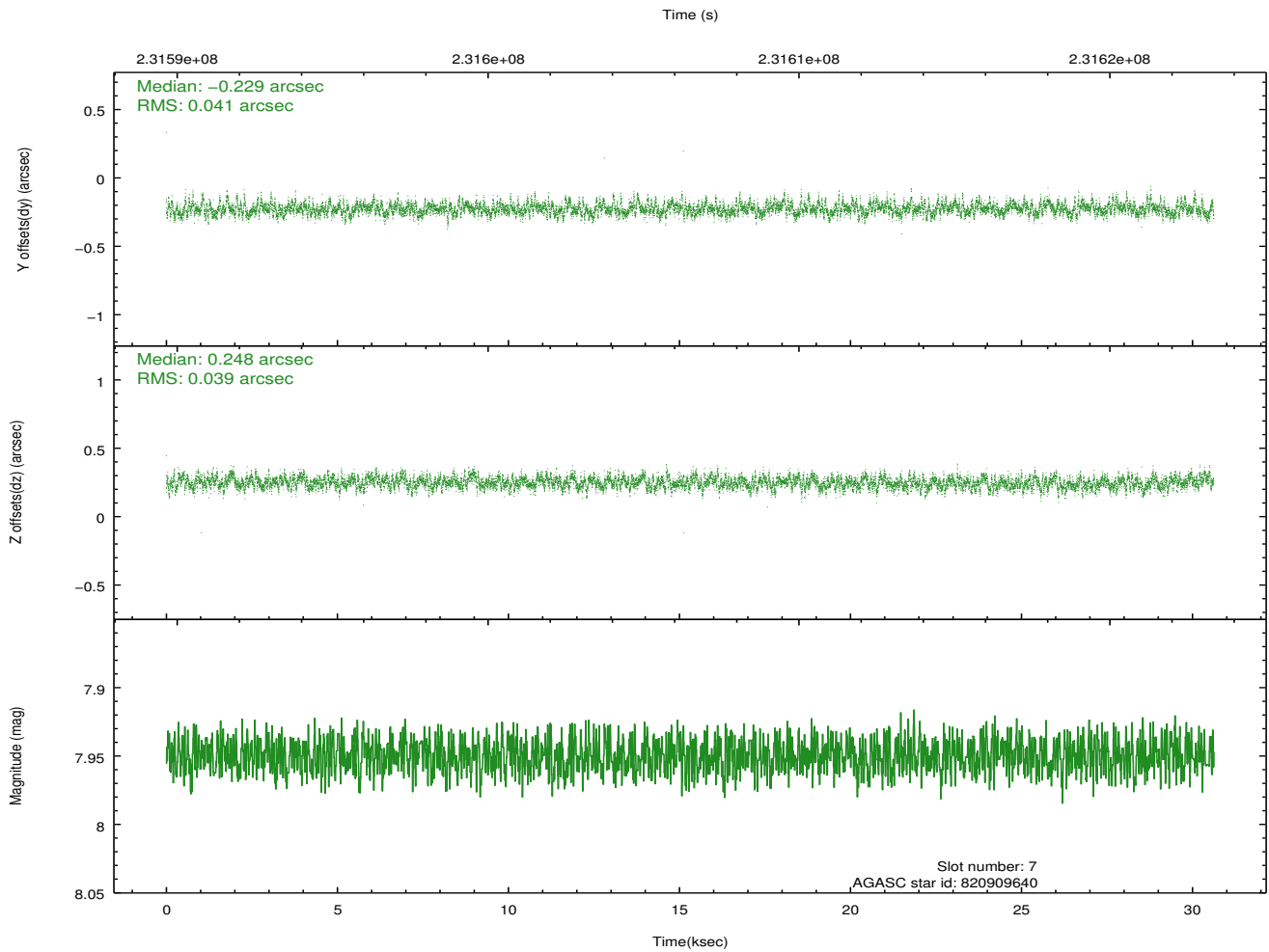
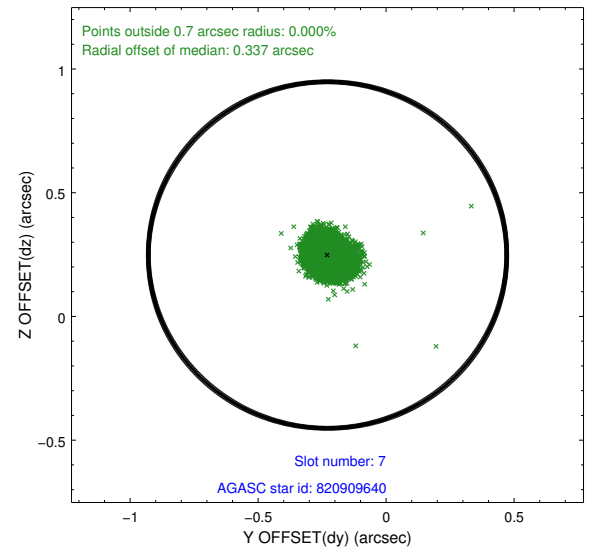
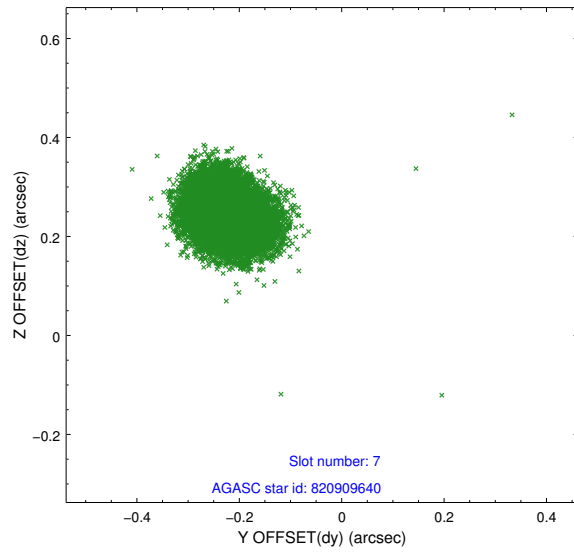
### 2.4.3 Slot 5



## 2.4.4 Slot 6

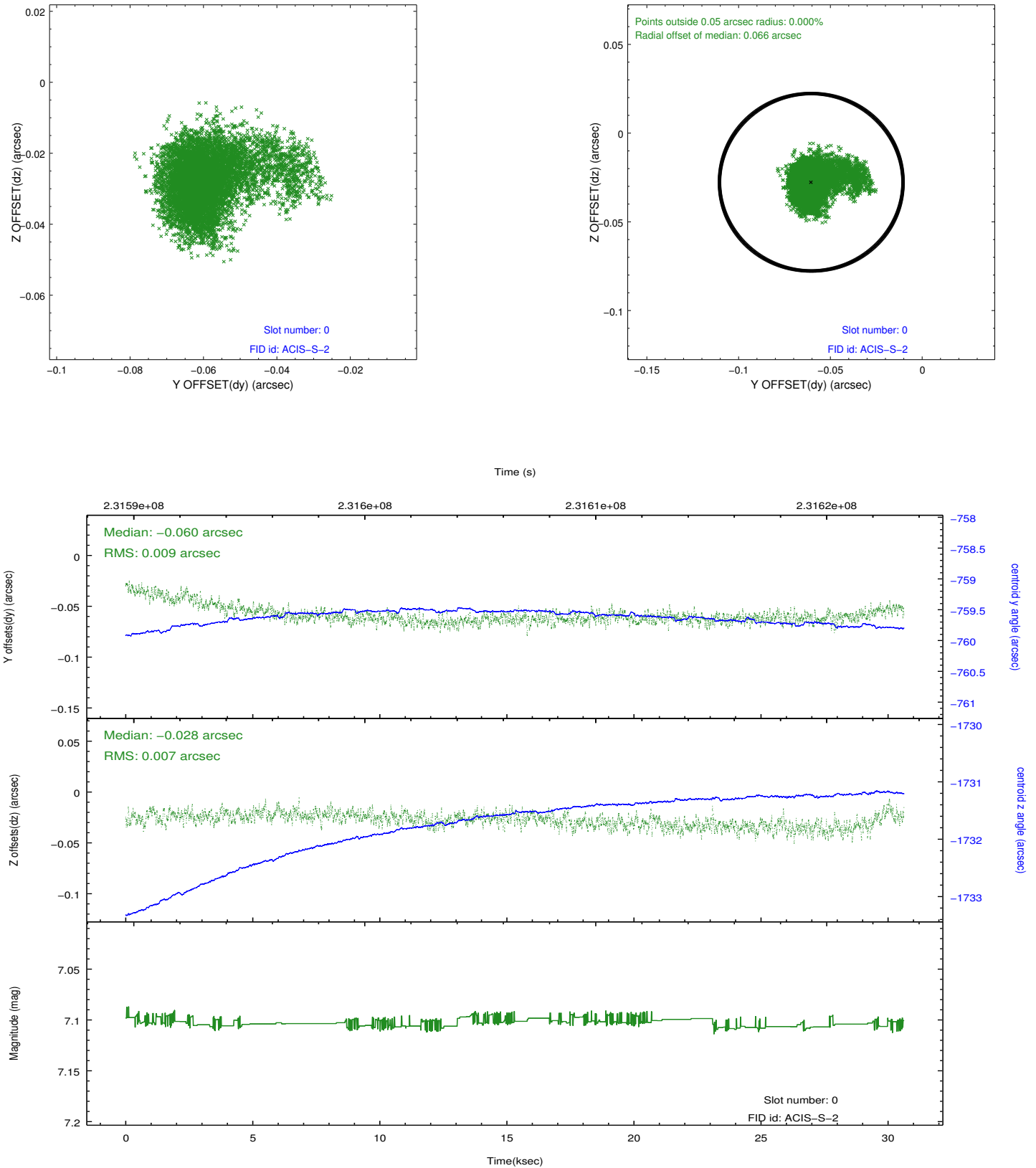


## 2.4.5 Slot 7

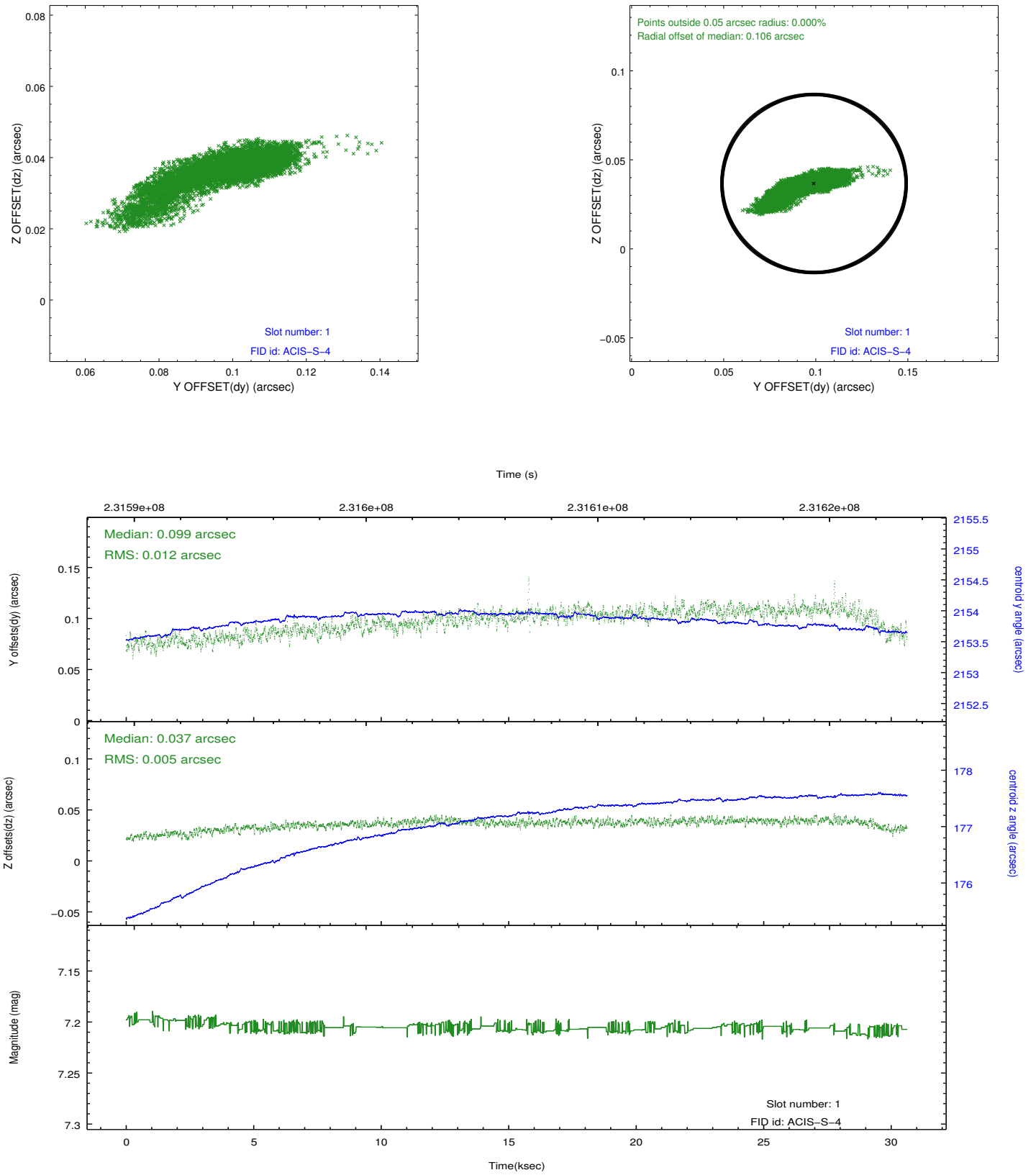


## 2.5 FID Slots

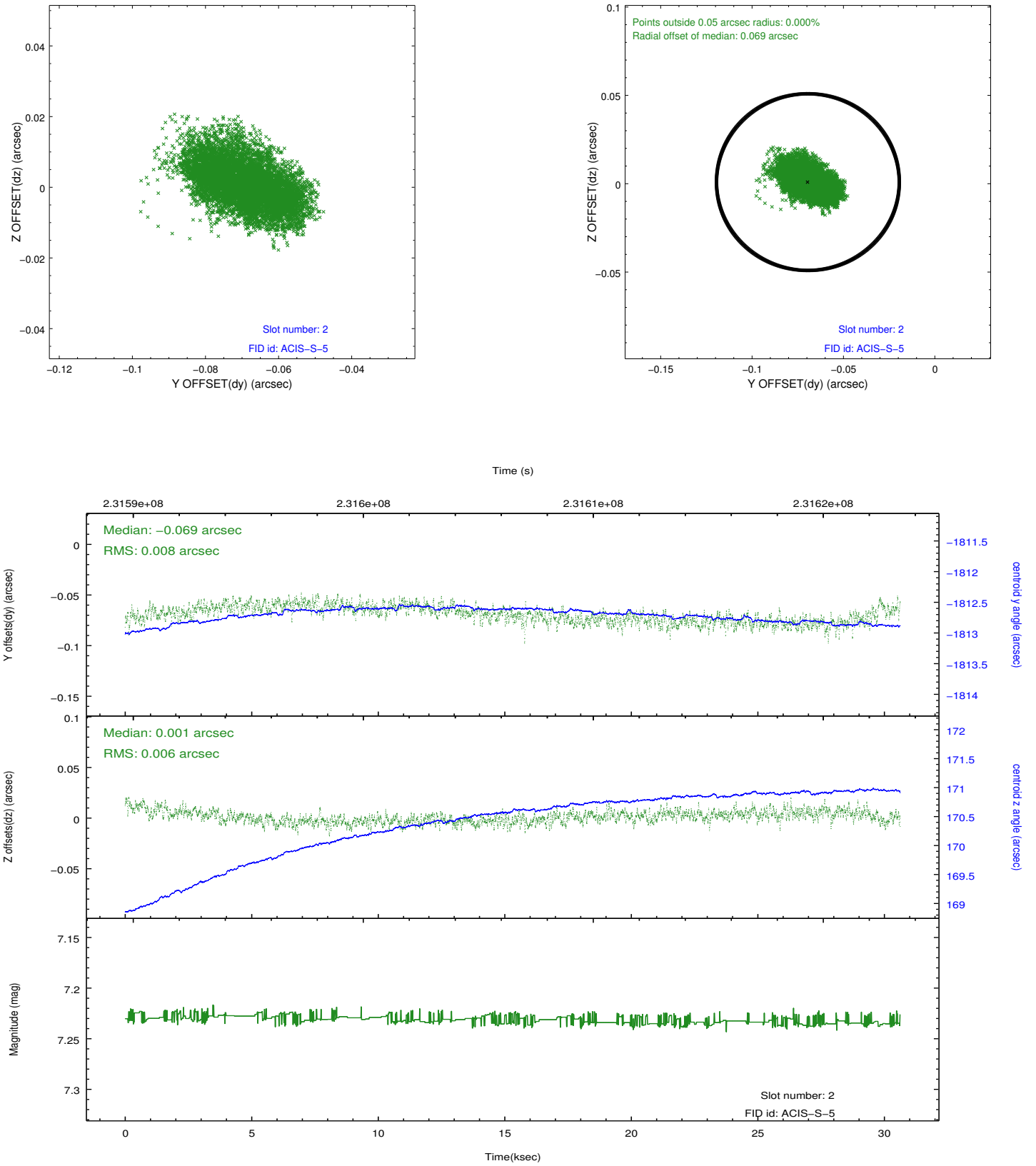
### 2.5.1 Slot 0



## 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)	2013.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.62399

### A.2 Comments

Roll constraint not satisfied: roll is a fraction of a degree outside  
roll constraint tolerance.