

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9923 - L2 Version 3
Chandra X-Ray Center

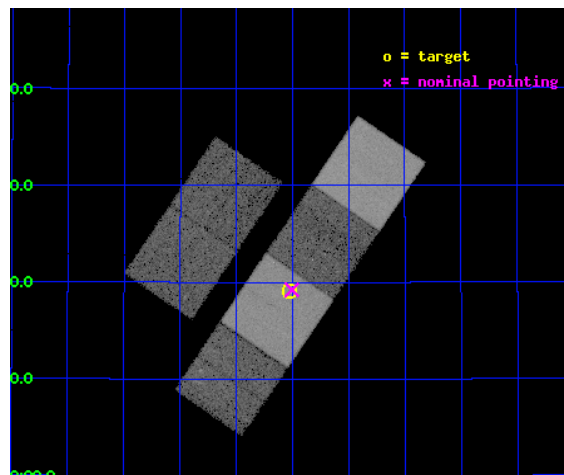
L2 Processing Date : Jun 8 2012

Contents

1	Front	2
2	OBI	3
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 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

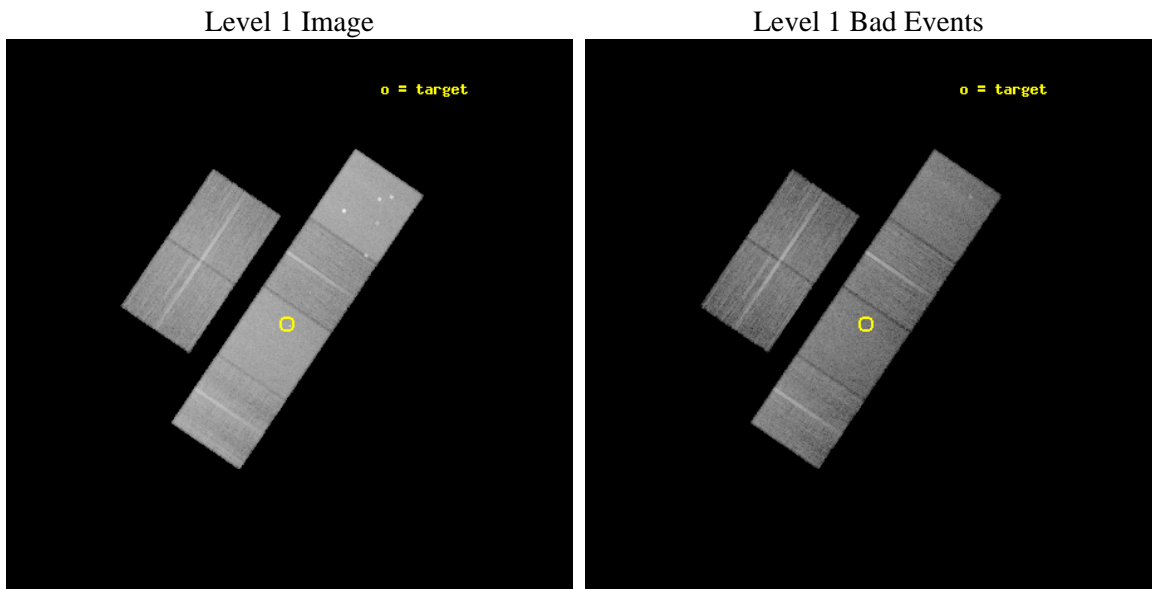
seq_num	200539	Sequence number
obs_id	9923	Observation id
title	X-ray emission from the magnetic star alpha ^2 Canum Venaticorum ?	
observer	Prof. Jurgen Schmitt	Principal investigator
object	Alpha CVn	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.007083	Observer's specified target RA [deg]
dec_targ	38.318361	Observer's specified target Dec [deg]
ra_nom	194.00142334898	Nominal RA [deg]
dec_nom	38.320352299936	Nominal Dec [deg]
roll_nom	124.16015570108	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14931.199944437	Sum of GTIs [s]
livetime	14742.132100251	Livetime [s]
ontime2	14931.199944437	Sum of GTIs [s]
ontime3	14931.199944437	Sum of GTIs [s]
ontime5	14931.199944437	Sum of GTIs [s]
ontime6	14931.199944437	Sum of GTIs [s]
ontime7	14931.199944437	Sum of GTIs [s]
ontime8	14931.199944437	Sum of GTIs [s]
l2events	255329	Number of level 2 events



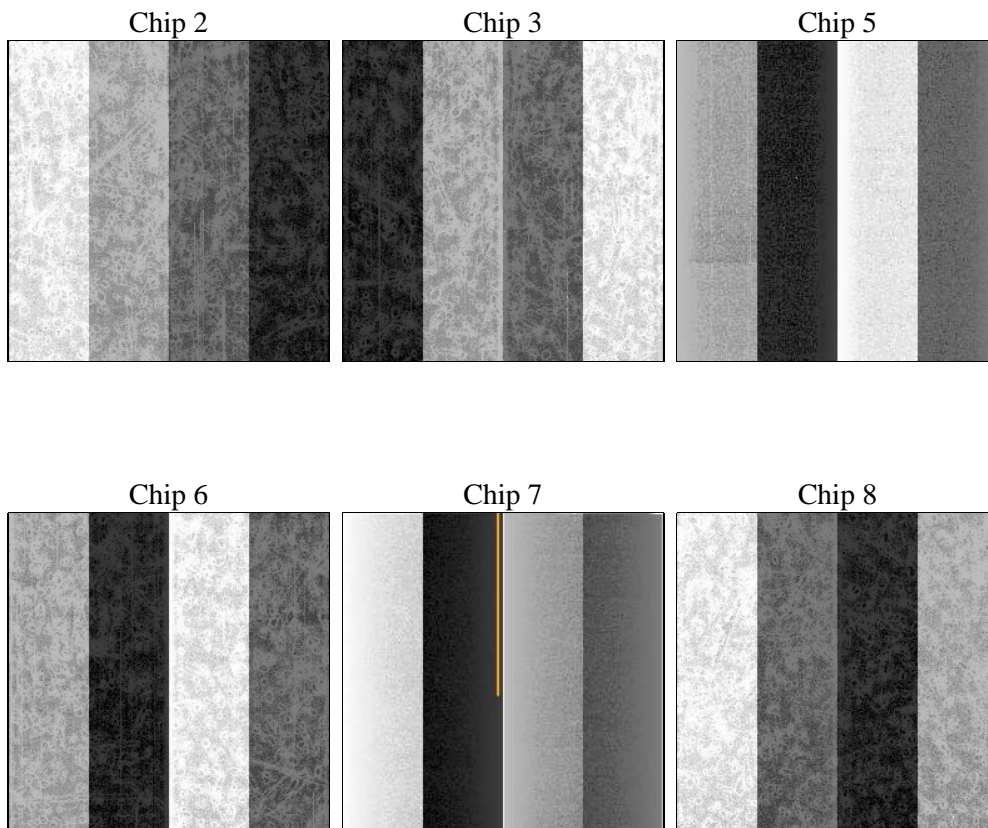
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	14766.410000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14931.199944437	Sum of GTIs [s]
caldbver	4.4.10	 	ontime2	14931.199944437	Sum of GTIs [s]
date	2012-06-08T22:32:07	Date and time of file creation	ontime3	14931.199944437	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	14931.199944437	Sum of GTIs [s]
			ontime6	14931.199944437	Sum of GTIs [s]
			ontime7	14931.199944437	Sum of GTIs [s]
			ontime8	14931.199944437	Sum of GTIs [s]
			l1events	1167121	Number of level 1 events

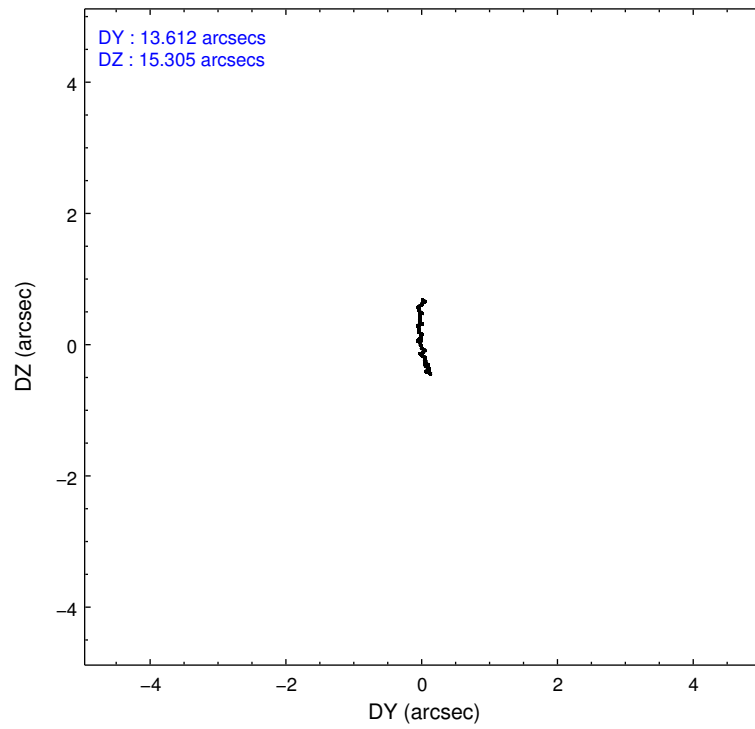
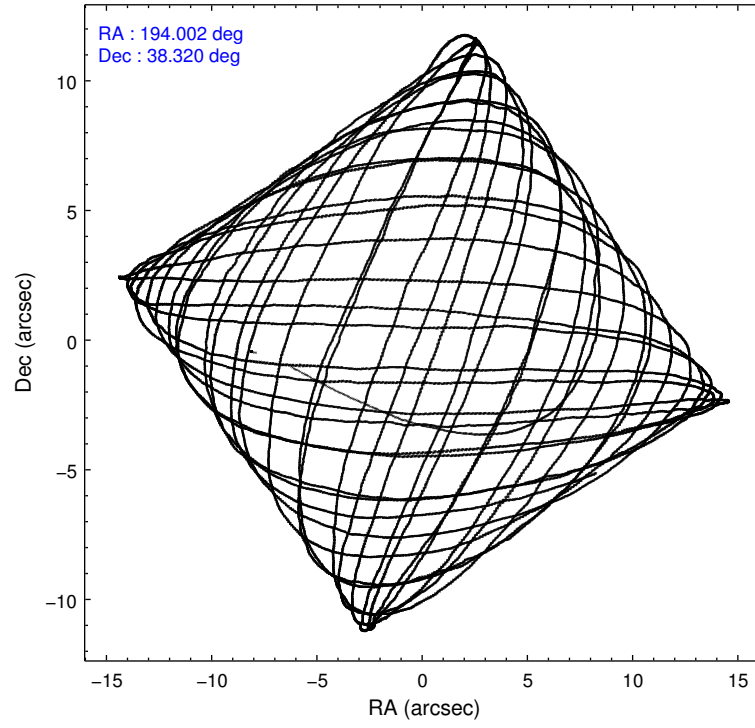
2.1.4 Events

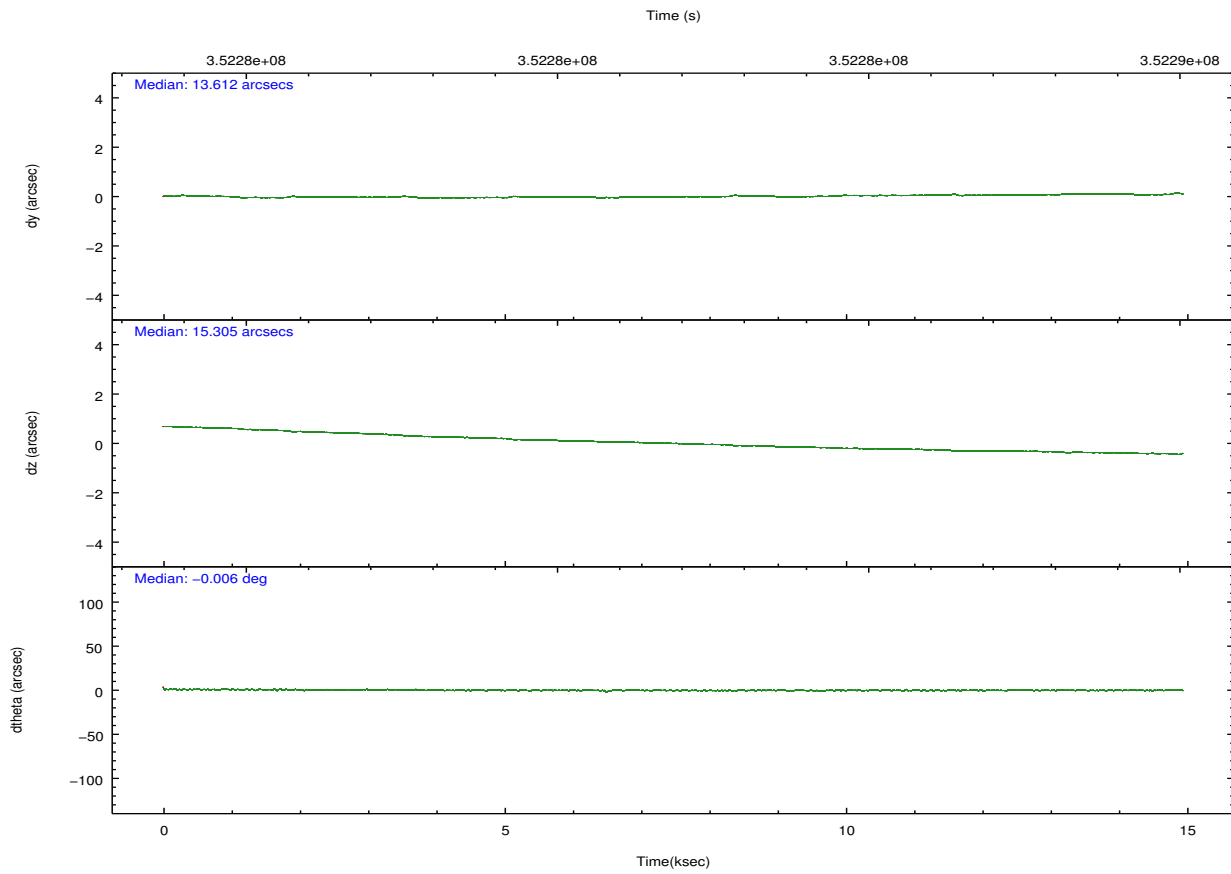
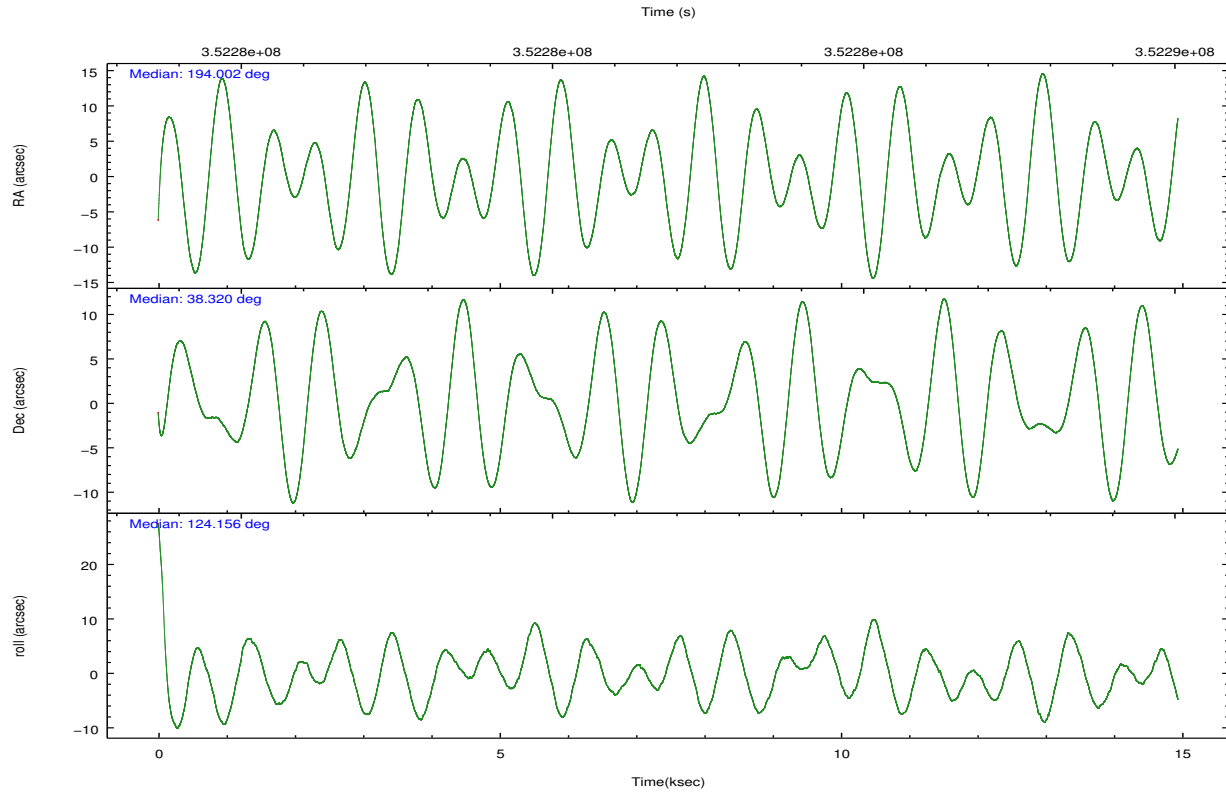
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	158507	156061	257902	159986	226865	207800	grade 0 events	7938	8300	14559	7693	8258	15640
rejected events	140695	137990	144715	141367	137827	161527		5%	5%	5%	4%	3%	7%
rejected %	88%	88%	56%	88%	60%	77%	grade 1 events	108	102	462	89	249	171
								0%	0%	0%	0%	0%	0%
							grade 2 events	4147	3713	36323	4438	19601	11188
								2%	2%	14%	2%	8%	5%
							grade 3 events	1790	1848	3999	1805	7981	5030
								1%	1%	1%	1%	3%	2%
							grade 4 events	1759	1727	3743	1799	7955	4679
								1%	1%	1%	1%	3%	2%
							grade 5 events	6582	7500	17688	7649	21115	10374
								4%	4%	6%	4%	9%	4%
							grade 6 events	3295	3556	61675	4036	50822	12848
								2%	2%	23%	2%	22%	6%
							grade 7 events	132888	129315	119453	132477	110884	147870
								83%	82%	46%	82%	48%	71%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	194.033007	194.0014233489753	CCD I2 on	O1	Y
[deg] Pointing Dec	38.308757	38.32035229993636	CCD I3 on	O2	Y
[deg] Pointing Roll	123.983927	124.160155701082	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	352274561.184000	352273033.40123	CCD S5 on	N	N
Observation start date	2009-03-01T06:01:35	2009-03-01T05:37:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	352289328.184000	352289552.81455	On-chip summing requested	N	N
Observation end date	2009-03-01T10:07:42	2009-03-01T10:12:32	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



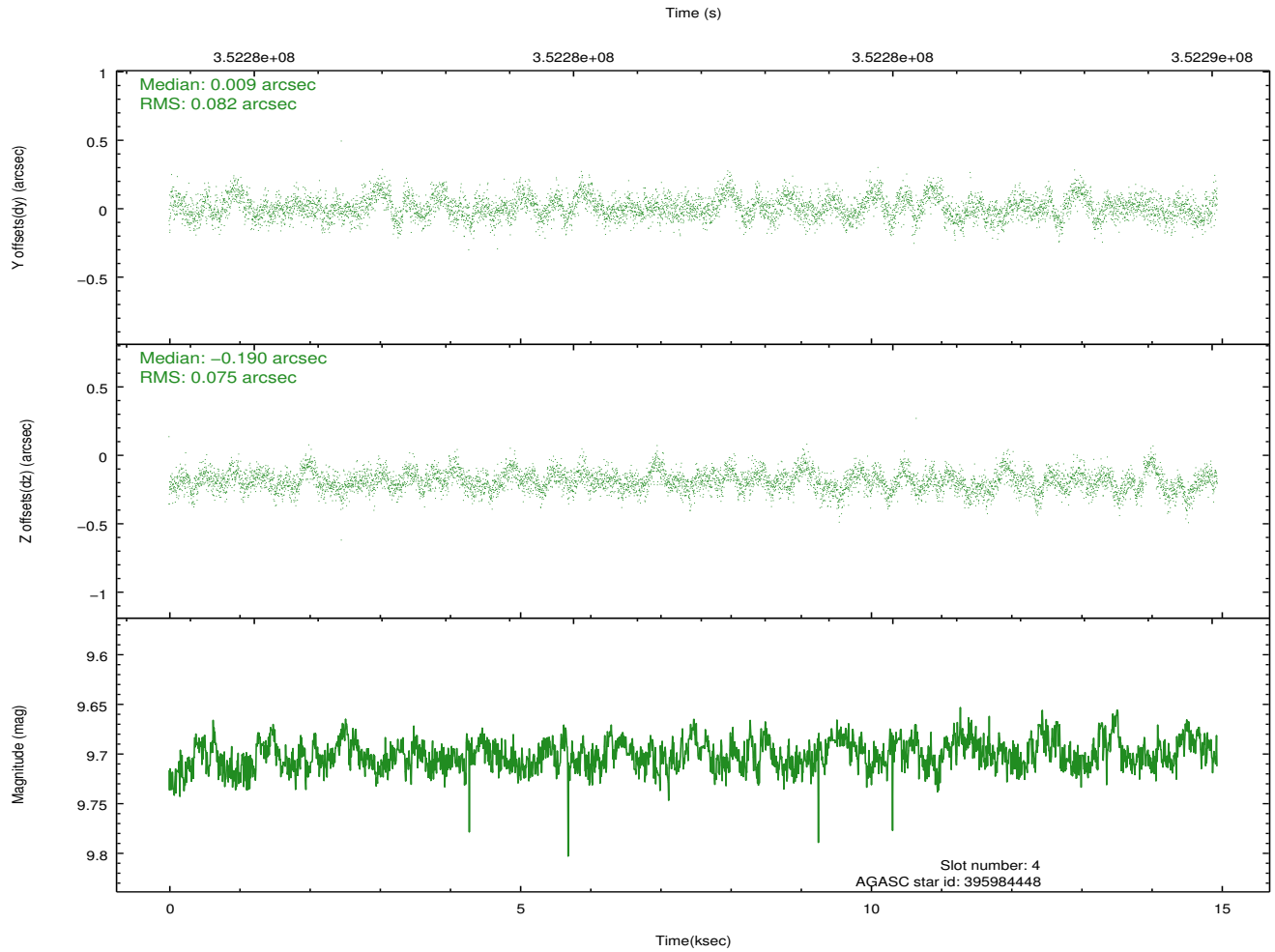
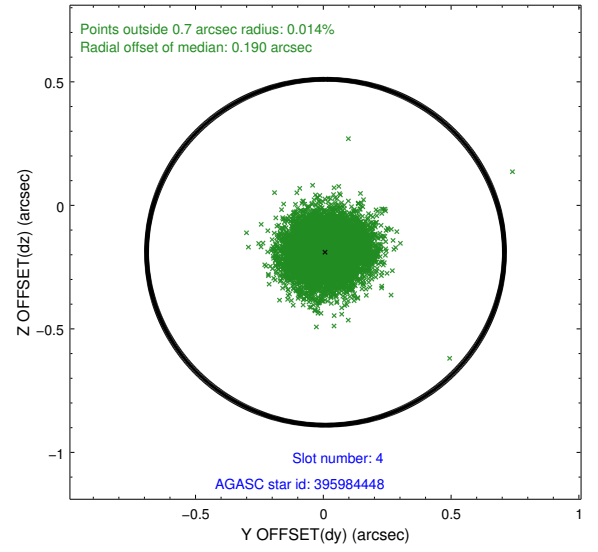
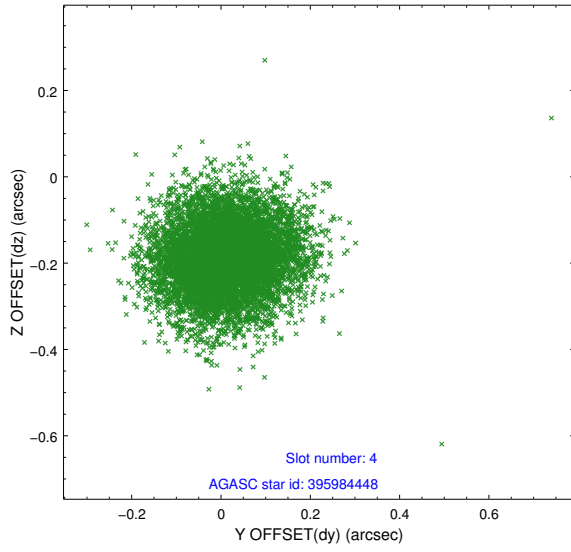


Slot Statistics

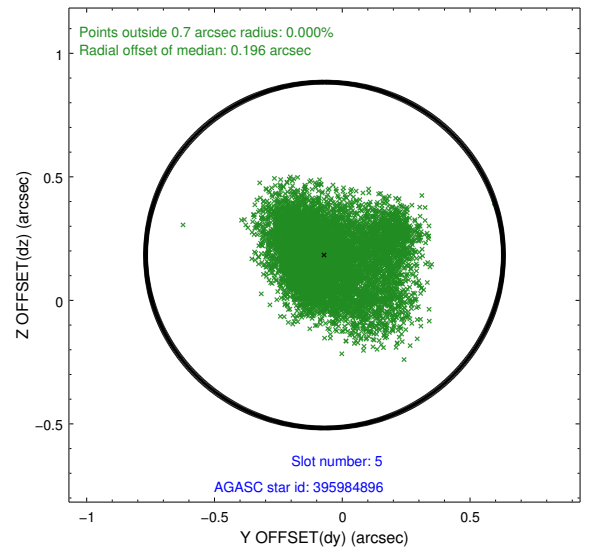
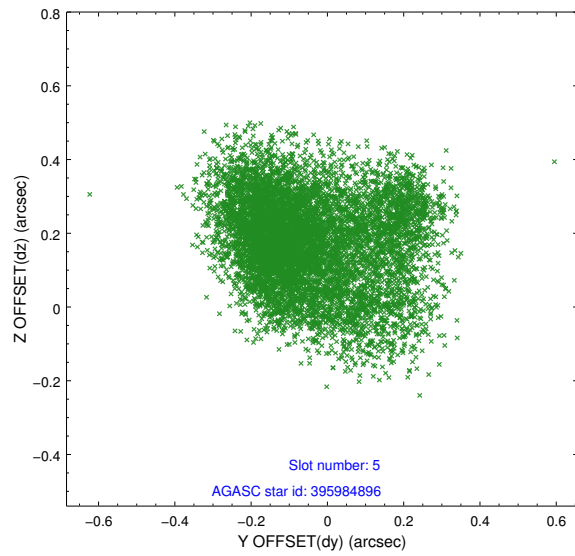
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.01	3645	0.031	-0.022	0.016	0.031	0.000000	0.000000	929.52	-1732.28
1	FID	ACIS-S-4	7.01	3644	0.124	0.005	0.012	0.019	0.000000	0.000000	2147.17	171.61
2	FID	ACIS-S-5	7.04	3645	-0.182	0.029	0.010	0.015	0.000000	0.000000	-1819.20	165.53
3	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	395984448	9.70	7279	0.009	-0.190	0.118	0.191	193.677896	38.676324	1657.02	86.99
5	GUIDE	395984896	9.84	7277	-0.070	0.183	0.208	0.334	194.631115	38.410482	-634.25	-1606.42
6	GUIDE	395985080	9.95	7278	0.148	-0.022	0.146	0.241	194.467139	38.385617	-452.65	-1172.20
7	GUIDE	395972152	10.33	7272	-0.107	0.037	0.212	0.350	193.008715	38.545784	2332.48	1905.63

2.4 Star Slots

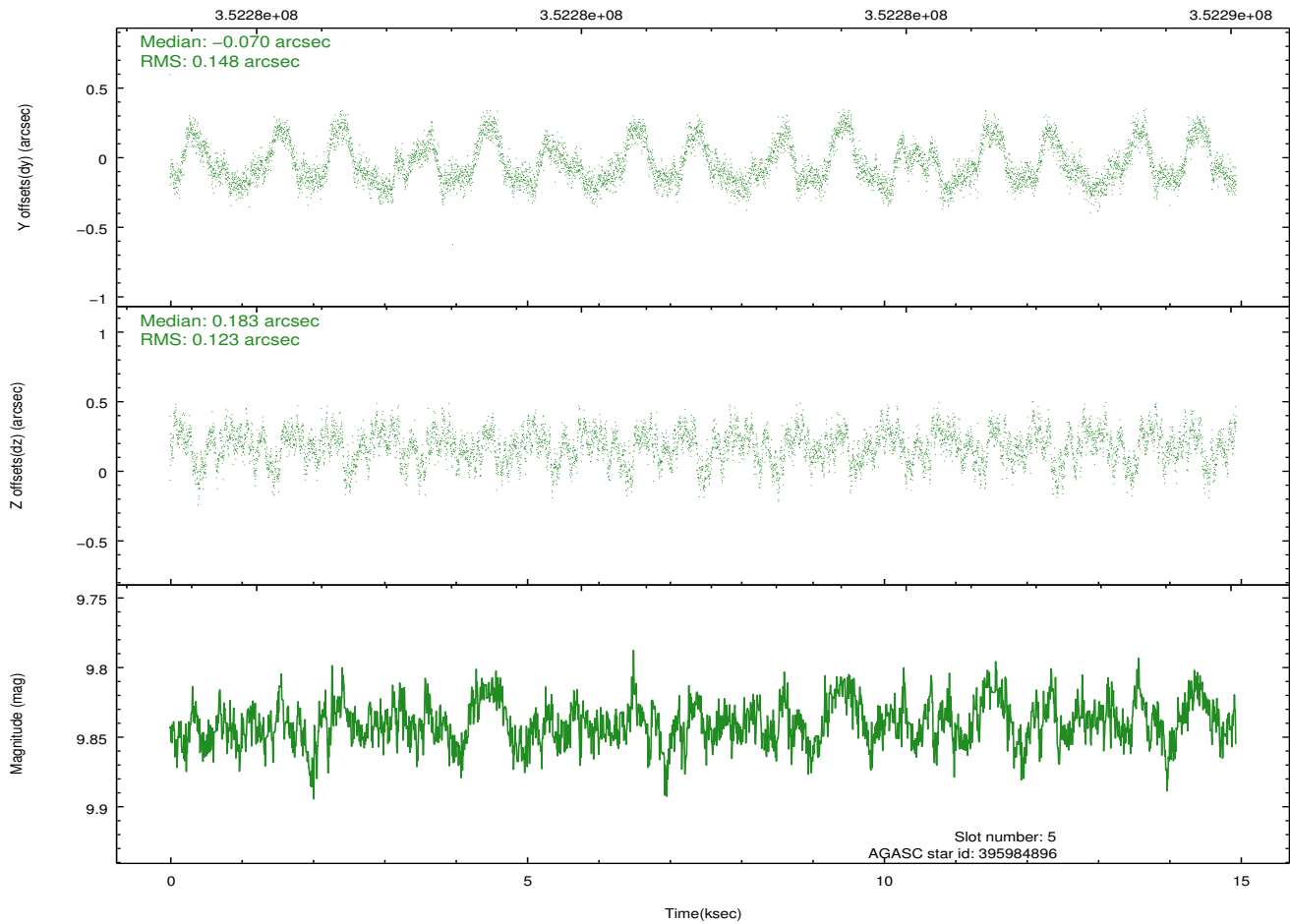
2.4.1 Slot 4



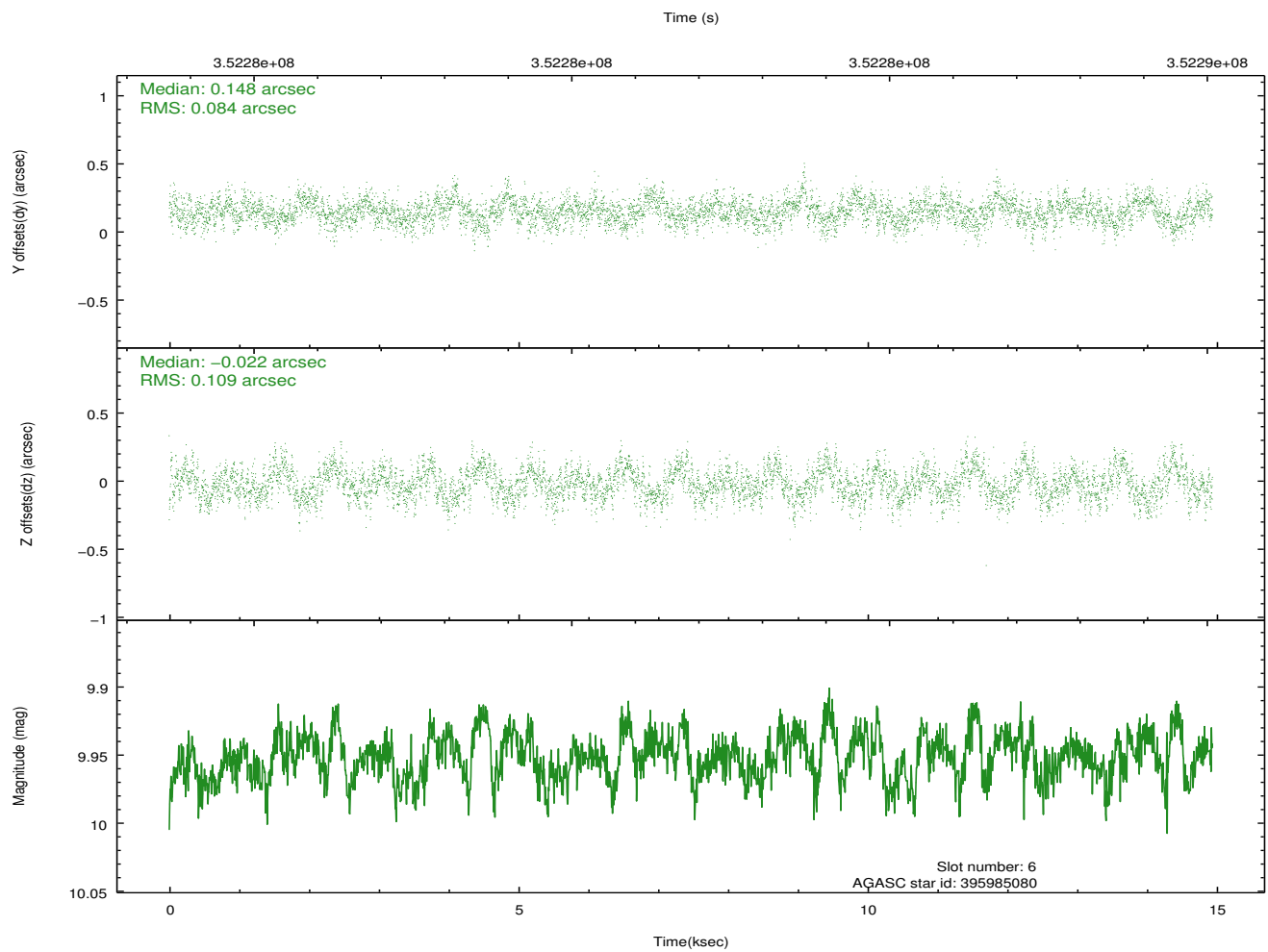
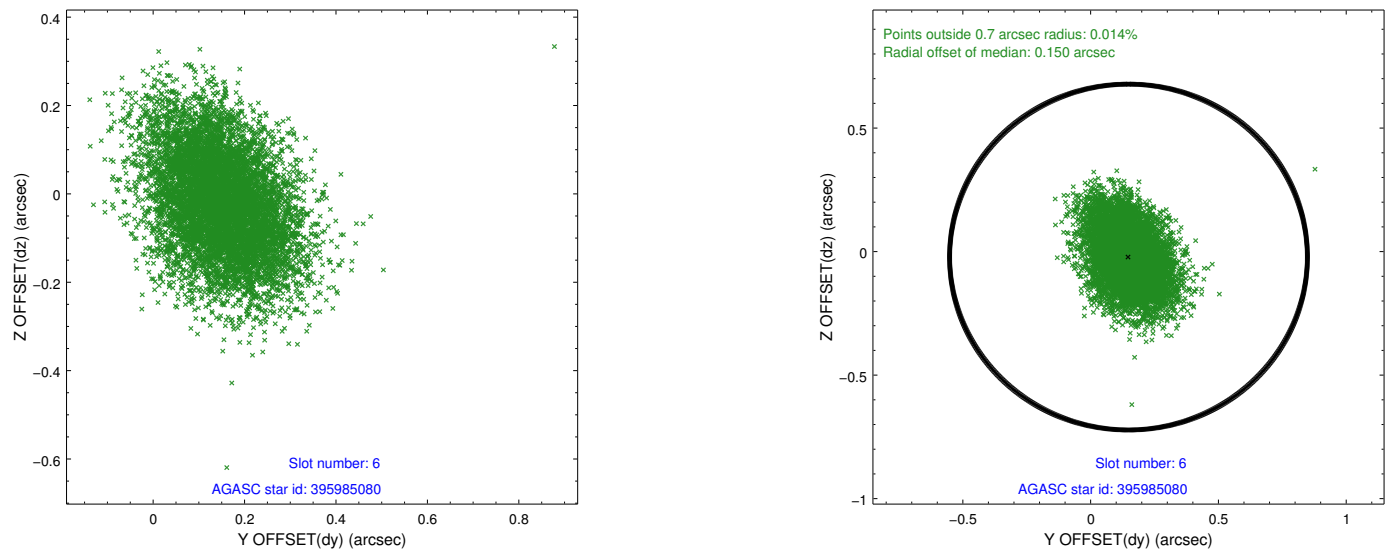
2.4.2 Slot 5



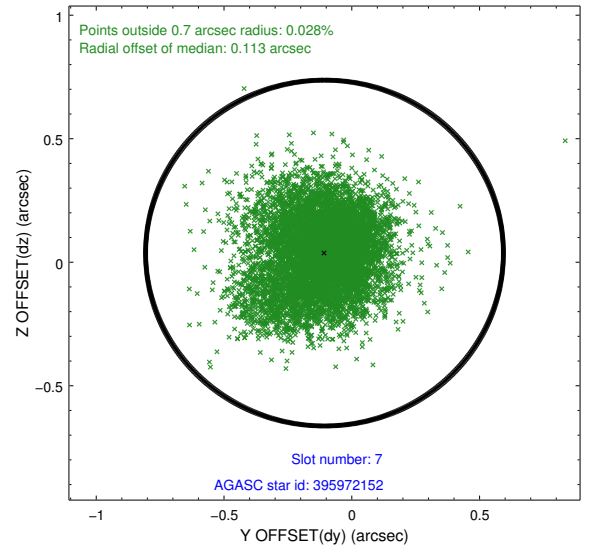
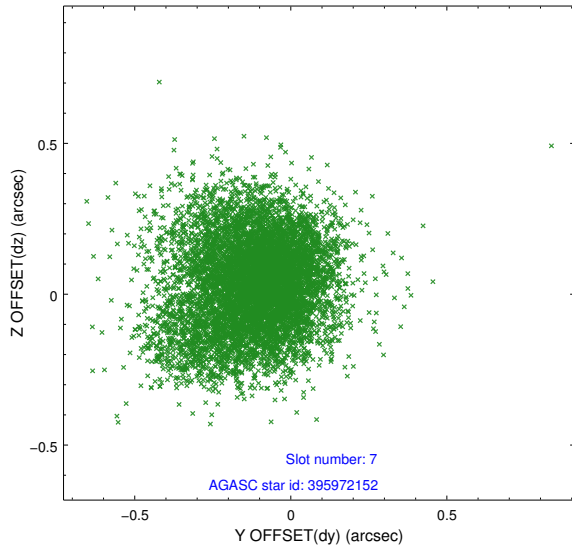
Time (s)



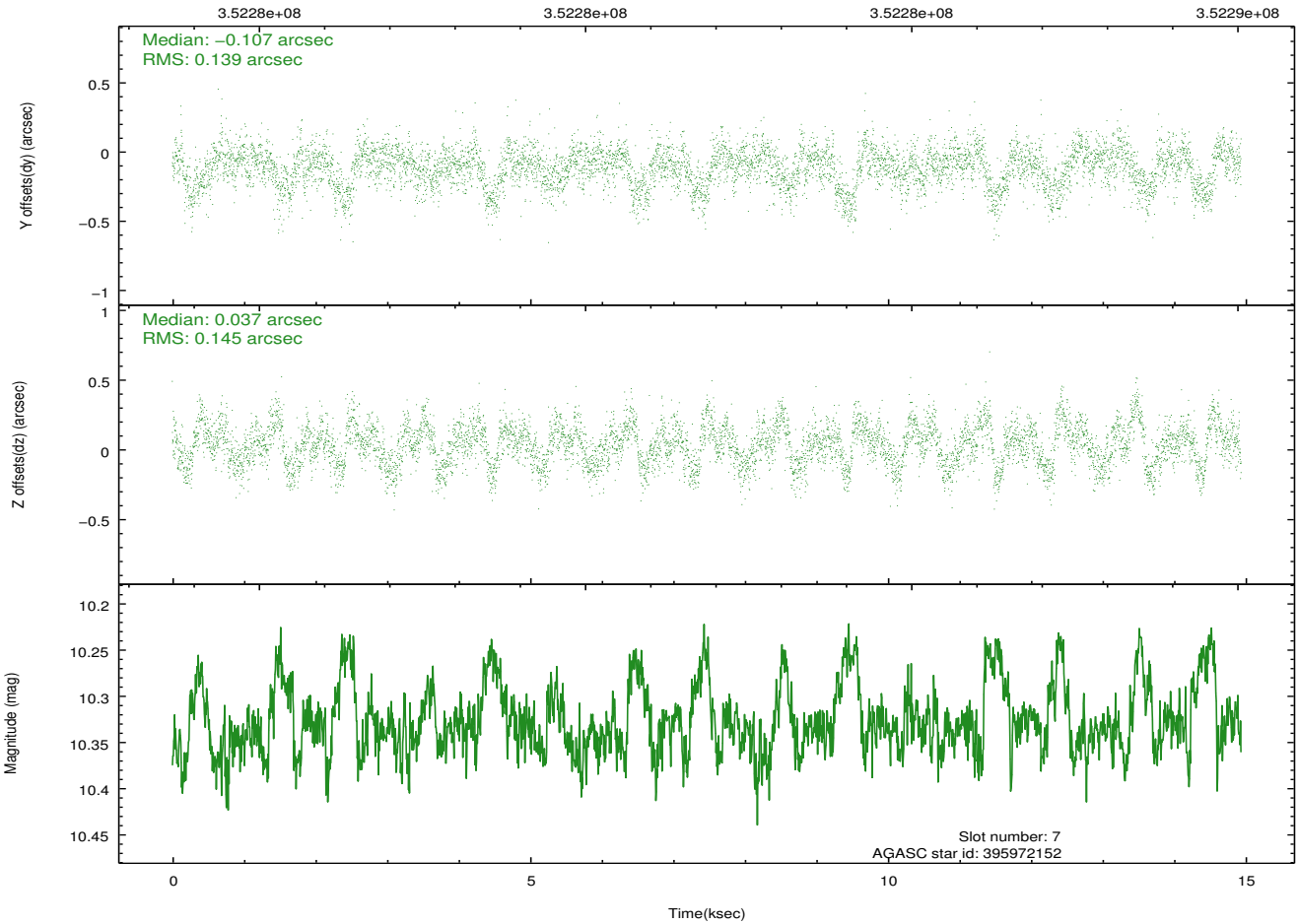
2.4.3 Slot 6



2.4.4 Slot 7

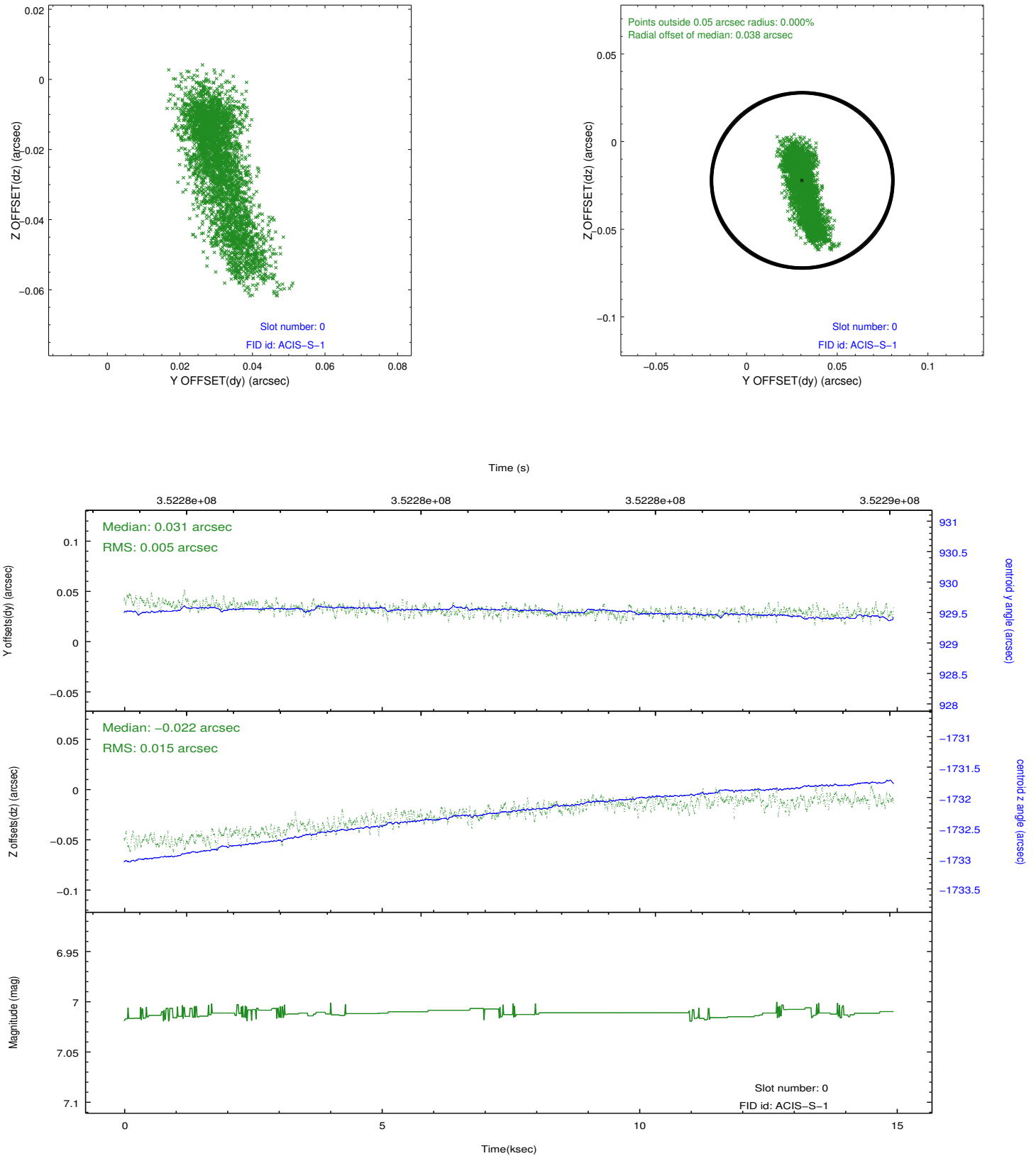


Time (s)

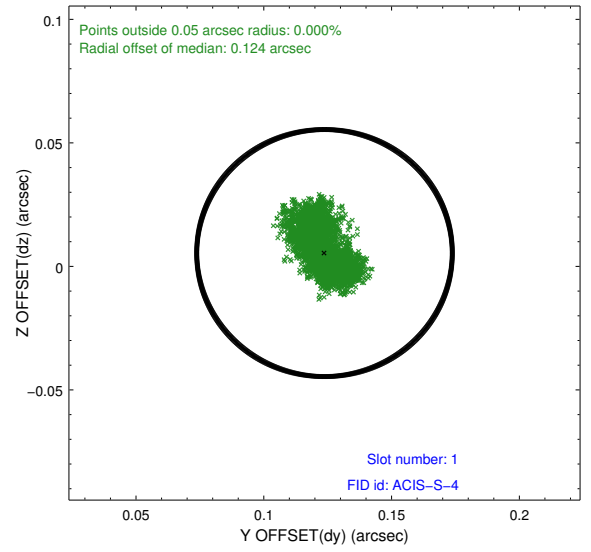
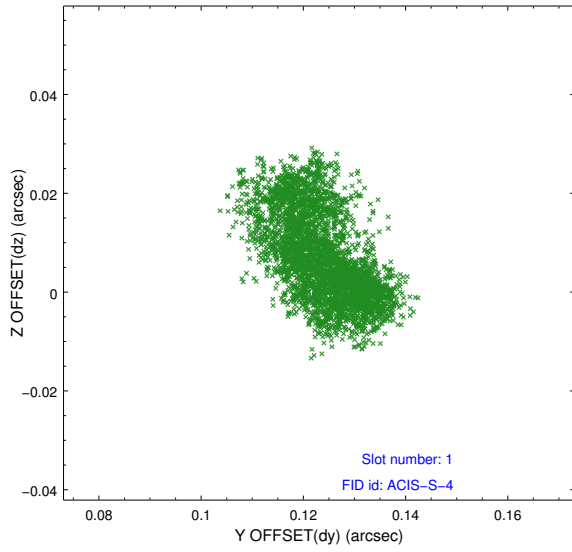


2.5 FID Slots

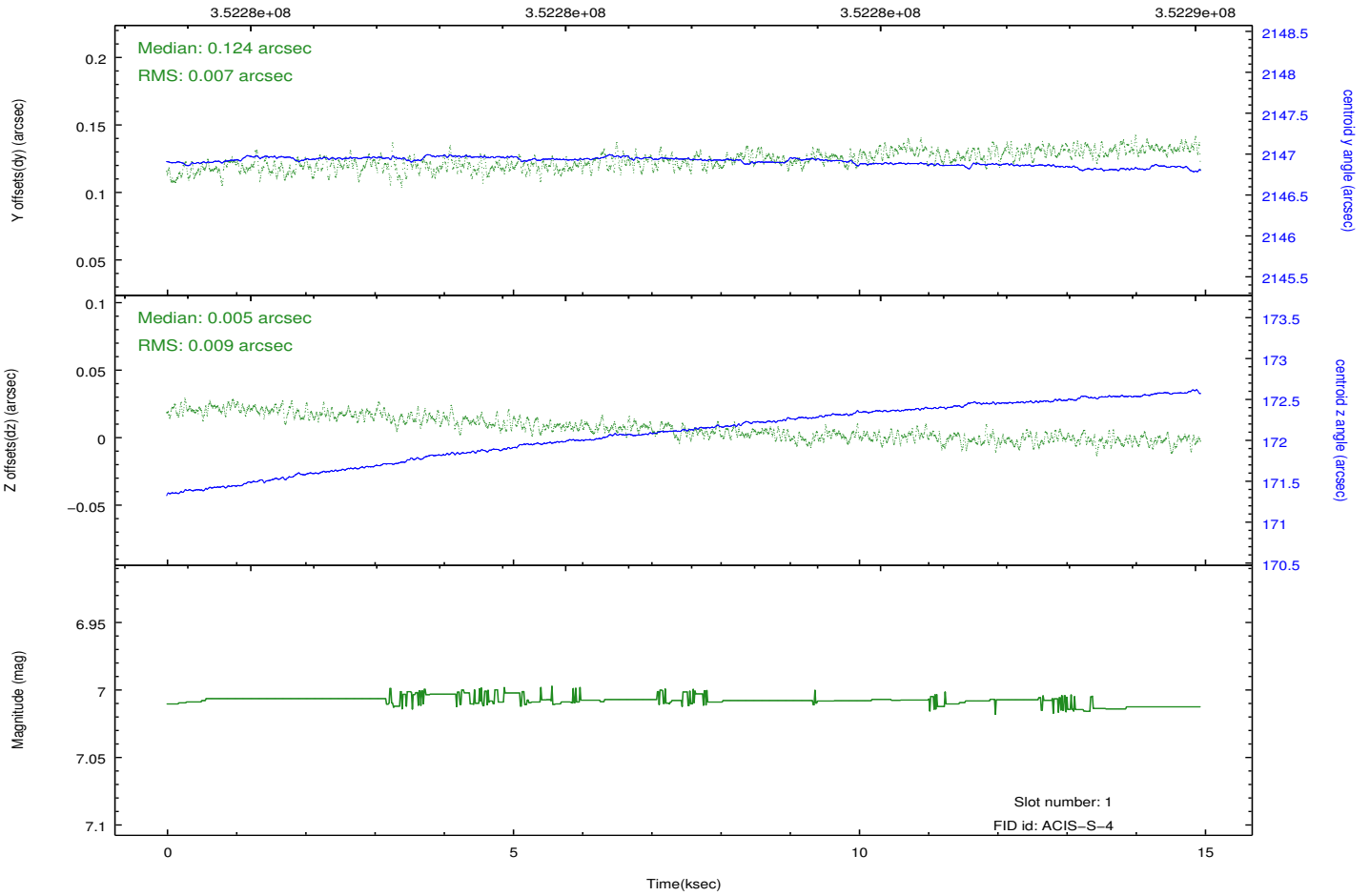
2.5.1 Slot 0



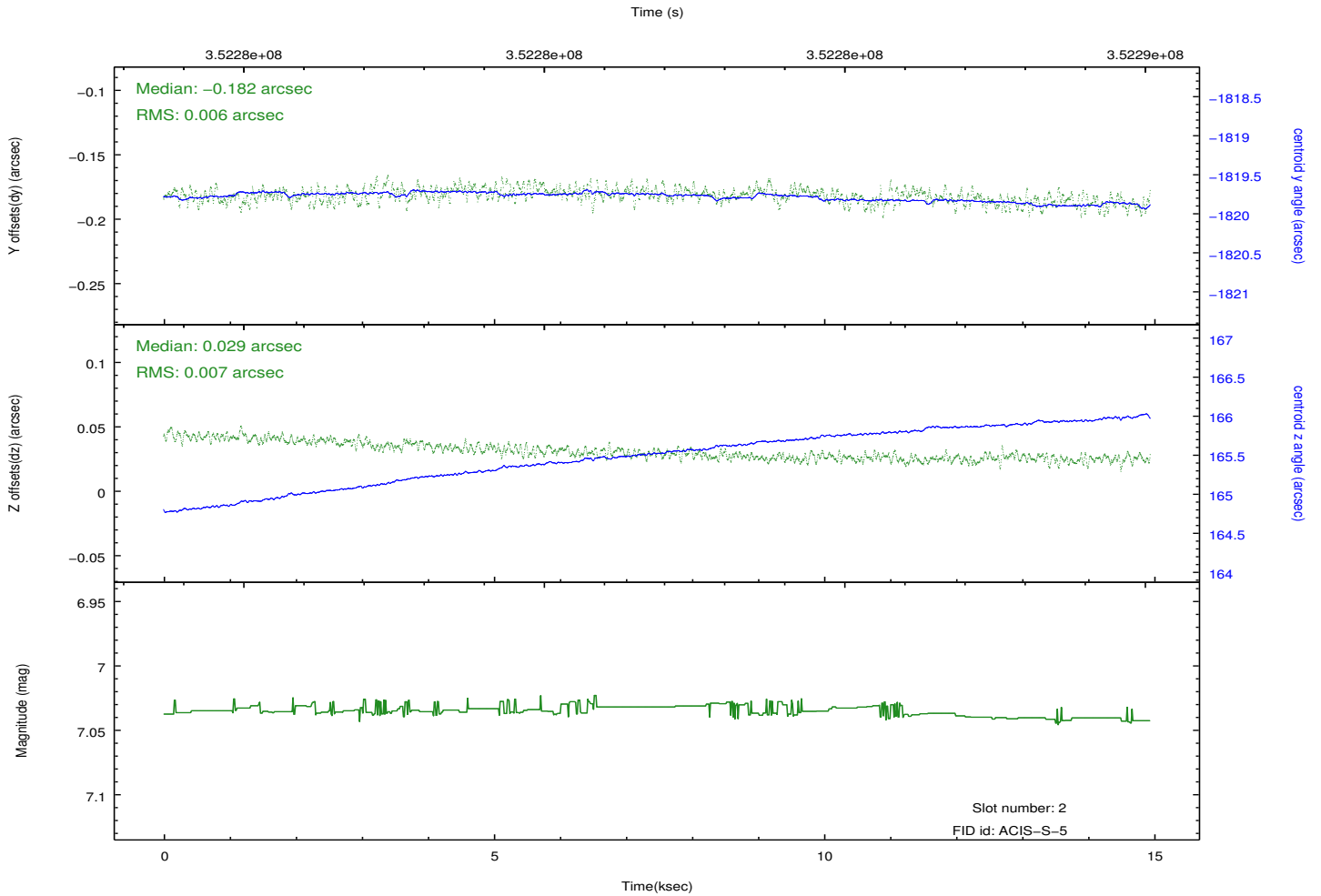
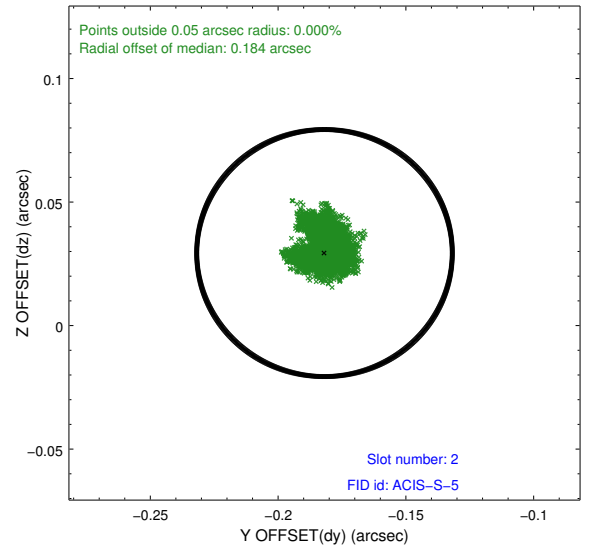
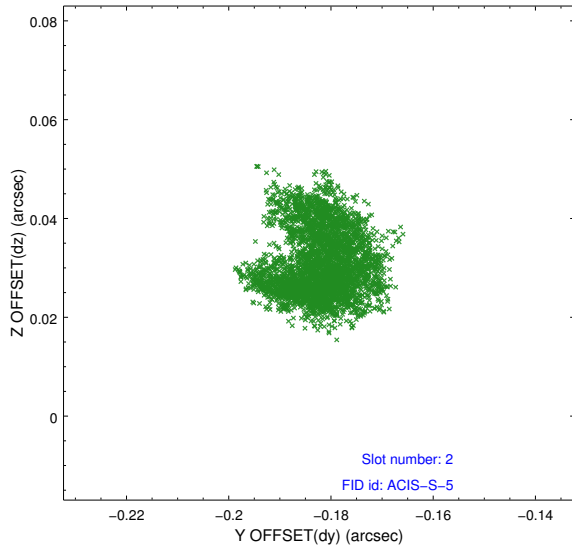
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.931

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.