

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 14345 - L2 Version 4
Chandra X-Ray Center

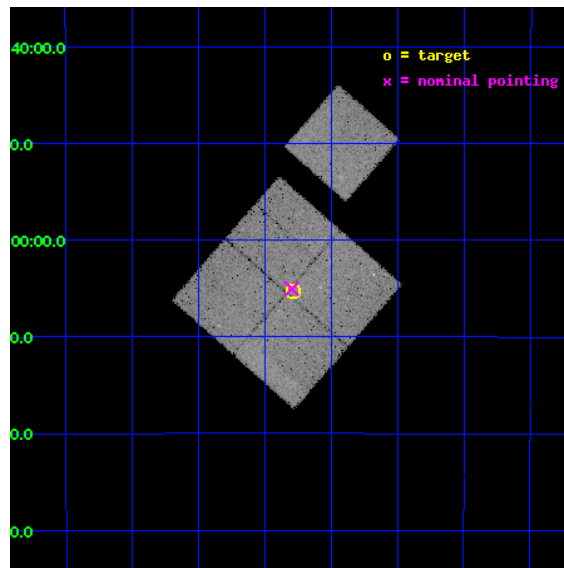
L2 Processing Date : Mar 5 2012

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 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	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

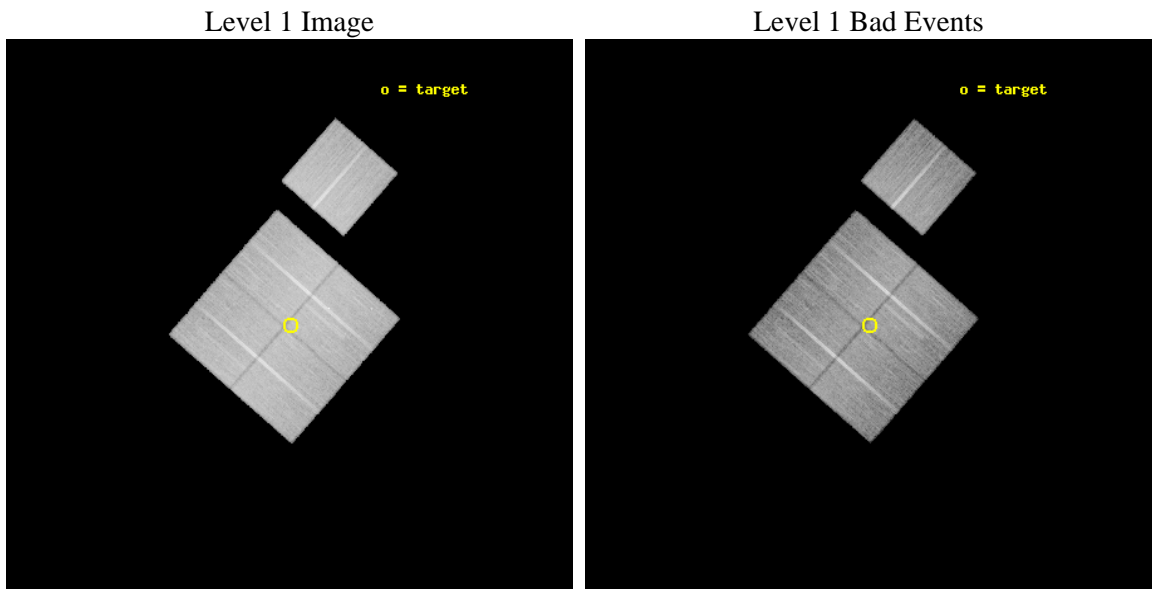
seq_num	801099	Sequence number
obs_id	14345	Observation id
title	CHANDRA EXPLORATION OF THE COSMIC MELTING POT IN THE VIRIALIZATION REGION OF A RICH GALAXY CLUSTER	Proposal title
observer	Dr. Alexey Vikhlinin	Principal investigator
object	A133-6	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	15.321657	Observer's specified target RA [deg]
dec_targ	-22.089482	Observer's specified target Dec [deg]
ra_nom	15.324186088707	Nominal RA [deg]
dec_nom	-22.084226142526	Nominal Dec [deg]
roll_nom	41.209633489242	Nominal Roll [deg]
revision	4	Processing version of data
ontime	34186.759222746	Sum of GTIs [s]
livetime	33740.084045575	Livetime [s]
ontime0	34189.900262952	Sum of GTIs [s]
ontime1	34186.7592327	Sum of GTIs [s]
ontime2	34189.900262952	Sum of GTIs [s]
ontime3	34186.759222746	Sum of GTIs [s]
ontime6	34183.618192077	Sum of GTIs [s]
l2events	111085	Number of level 2 events



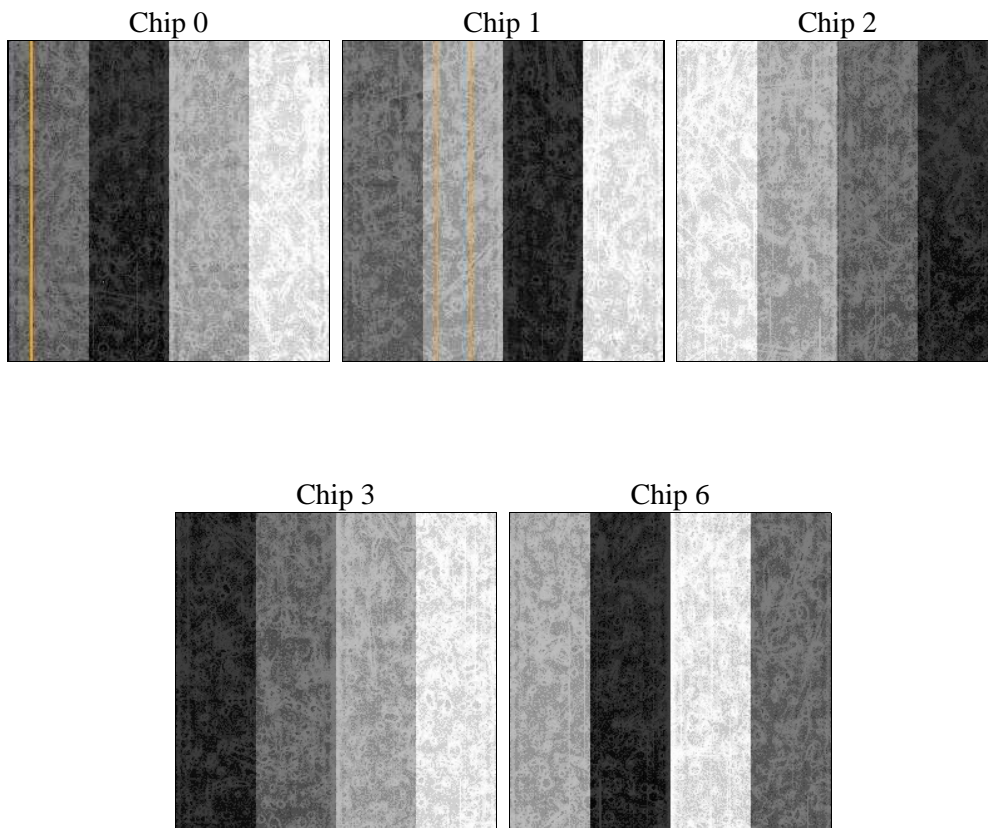
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34135.701000	[s] Scheduled observation exposure time
ascdsver	8.4.3.1	Processing system revision	ontime	34186.759222746	Sum of GTIs [s]
caldsver	4.4.8	 	ontime0	34189.900262952	Sum of GTIs [s]
date	2012-03-05T23:17:42	Date and time of file creation	ontime1	34186.7592327	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	34189.900262952	Sum of GTIs [s]
			ontime3	34186.759222746	Sum of GTIs [s]
			ontime6	34183.618192077	Sum of GTIs [s]
			l1events	1110144	Number of level 1 events

2.1.4 Events

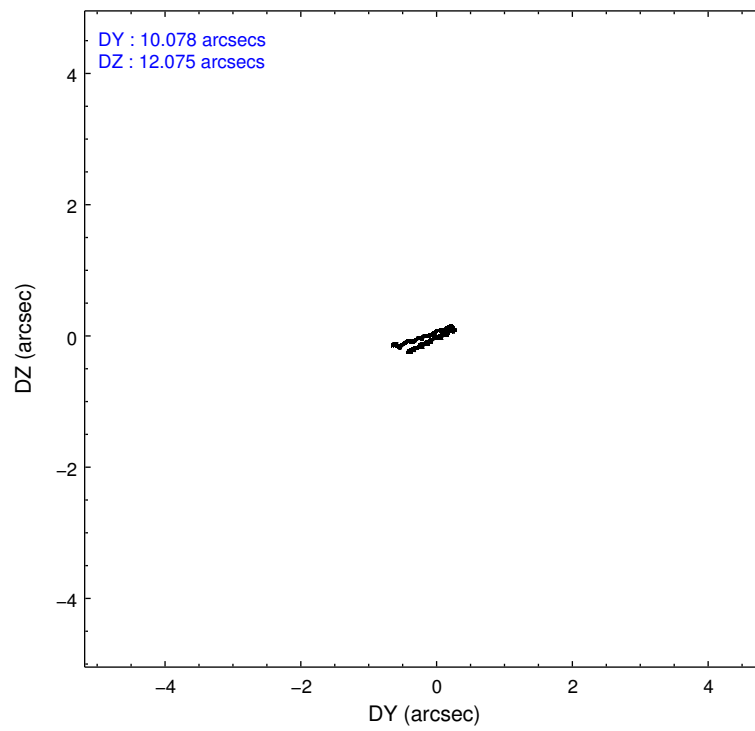
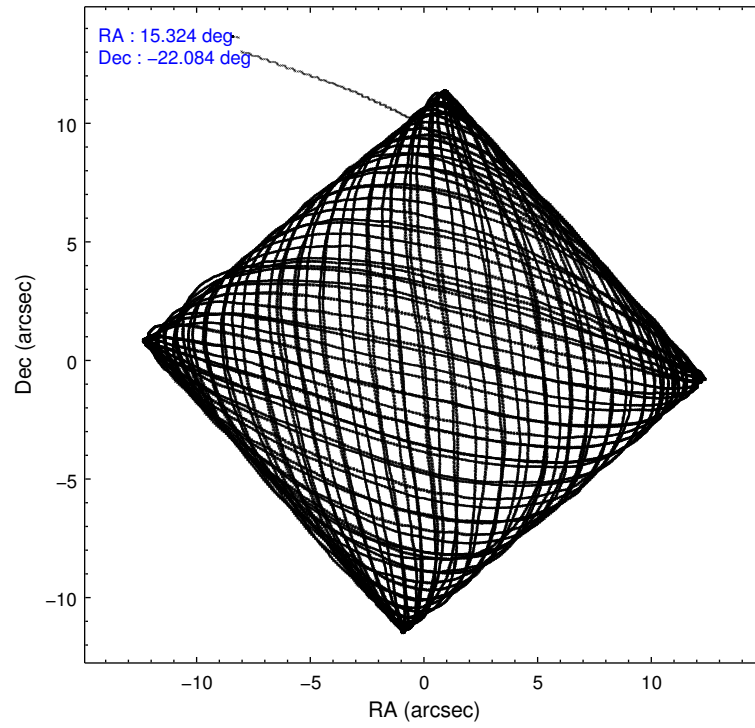
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	207733	215662	234242	225375	227132
rejected events	181158	187122	208280	200398	200802
rejected %	87%	86%	88%	88%	88%

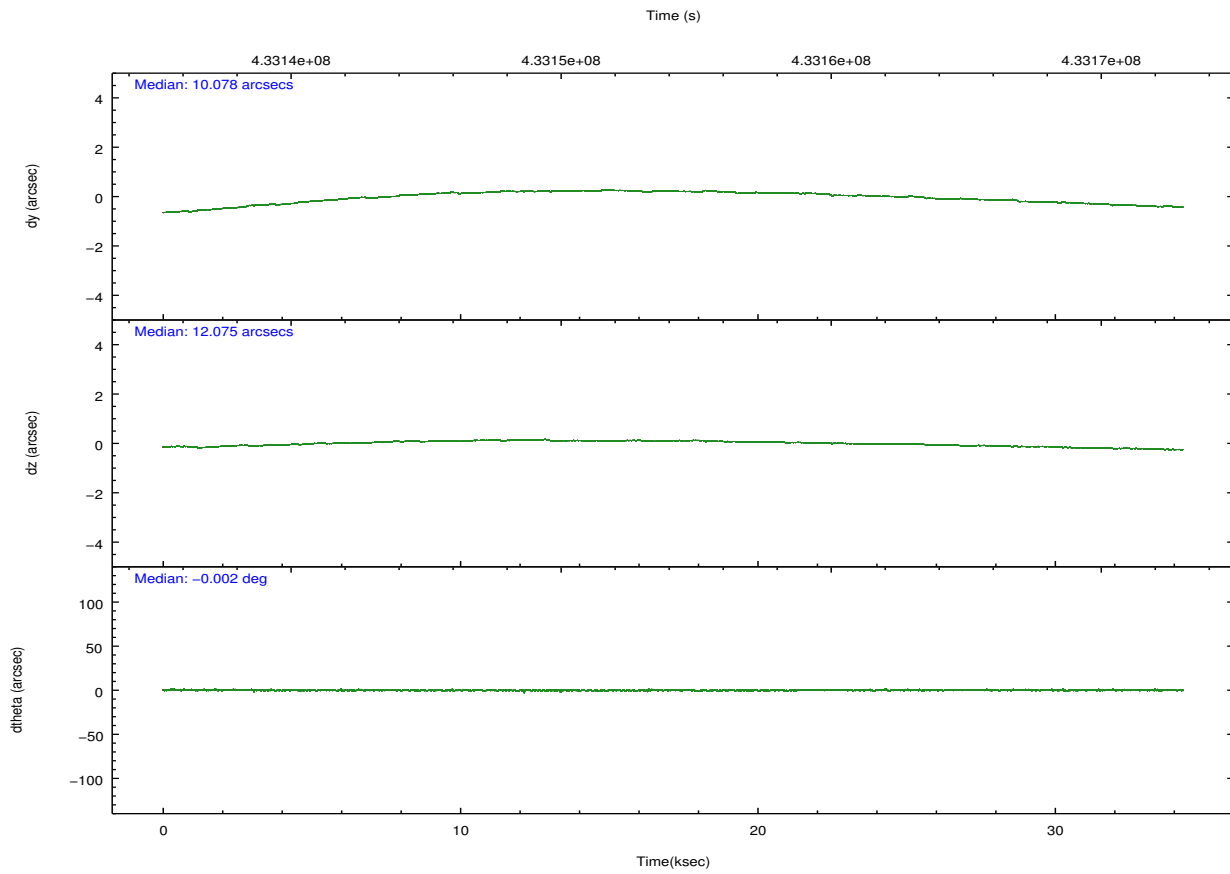
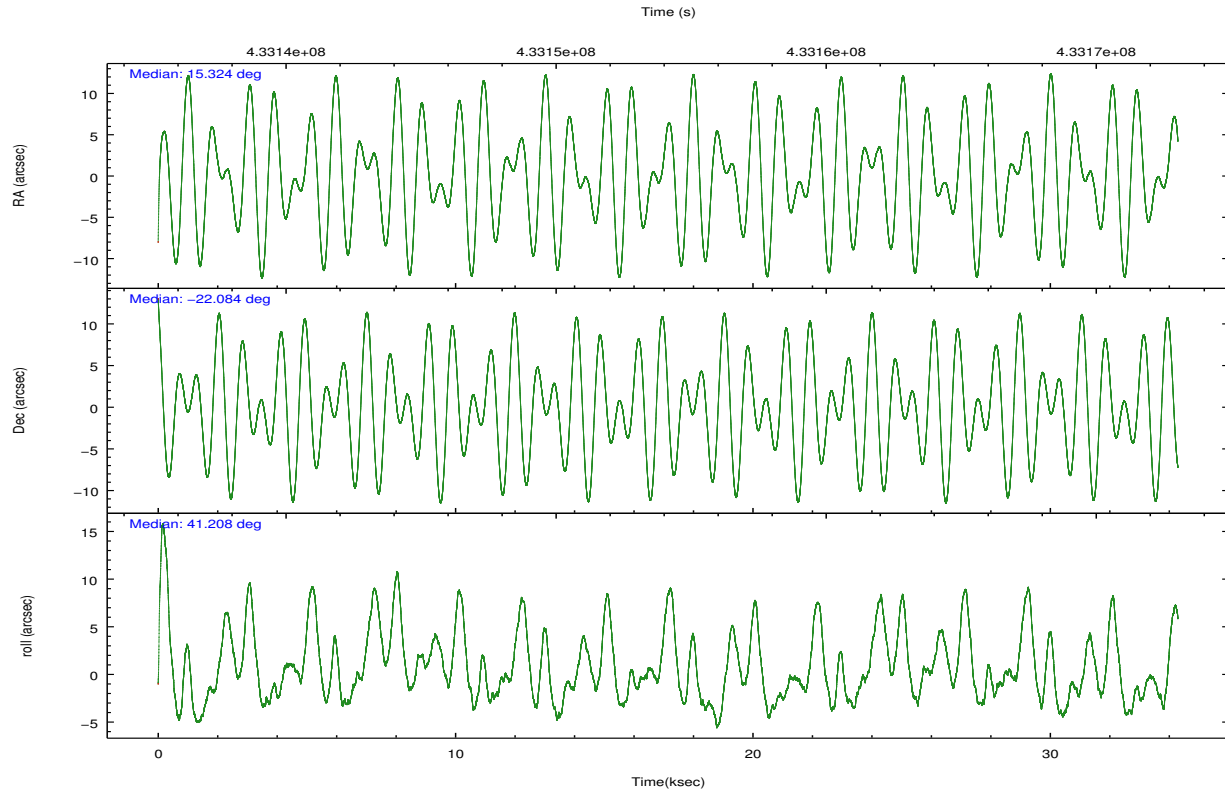
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9597	10530	9568	9237	9307
	4%	4%	4%	4%	4%
grade 1 events	126	134	126	153	119
	0%	0%	0%	0%	0%
grade 2 events	6401	6304	6113	5549	5738
	3%	2%	2%	2%	2%
grade 3 events	2774	2811	2671	2644	2786
	1%	1%	1%	1%	1%
grade 4 events	2609	2900	2665	2565	2683
	1%	1%	1%	1%	1%
grade 5 events	9320	9909	8855	10308	9941
	4%	4%	3%	4%	4%
grade 6 events	5200	5999	4950	4989	5820
	2%	2%	2%	2%	2%
grade 7 events	171706	177075	199294	189930	190738
	82%	82%	85%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	15.314725	15.32418608870735	CCD I2 on	Y	Y
[deg] Pointing Dec	-22.110297	-22.08422614252561	CCD I3 on	Y	Y
[deg] Pointing Roll	40.997388	41.20963348924215	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	433137147.184000	433136214.77939	CCD S5 on	N	N
Observation start date	2011-09-23T03:51:21	2011-09-23T03:36:54	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	433171283.184000	433171519.88125	On-chip summing requested	N	N
Observation end date	2011-09-23T13:20:17	2011-09-23T13:25:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



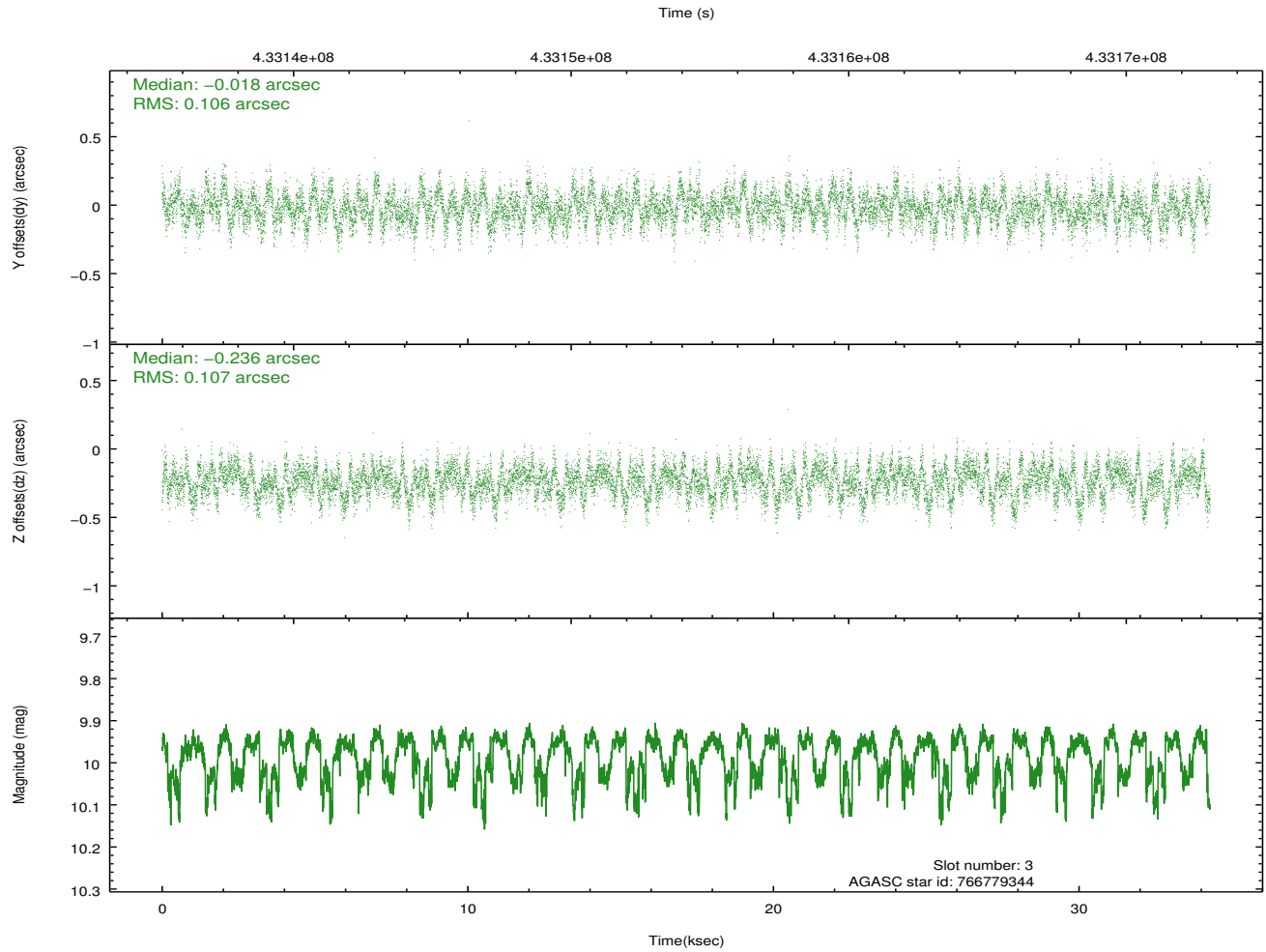
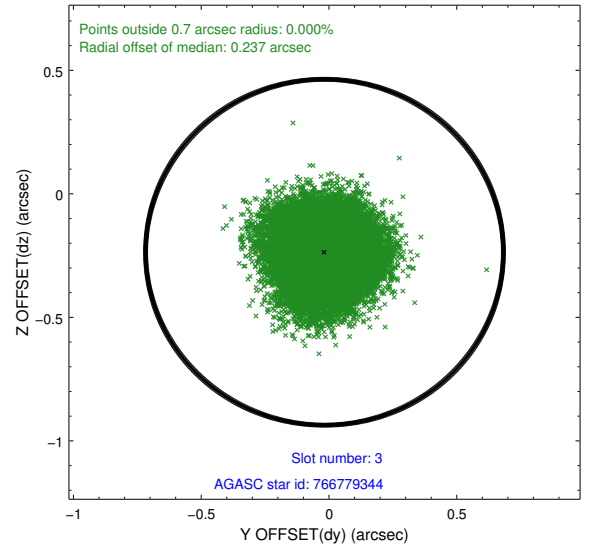
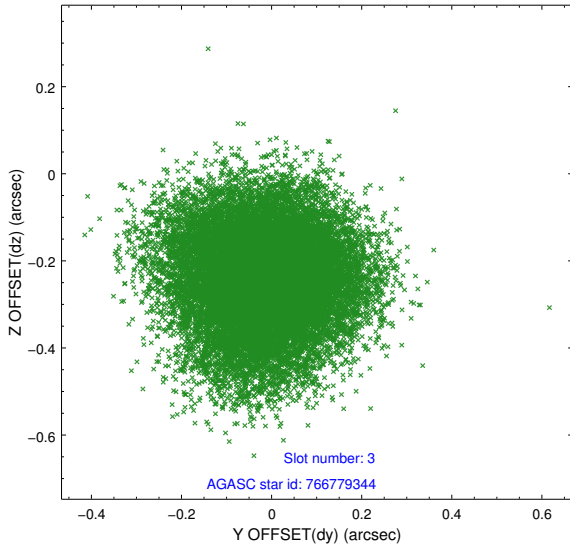


Slot Statistics

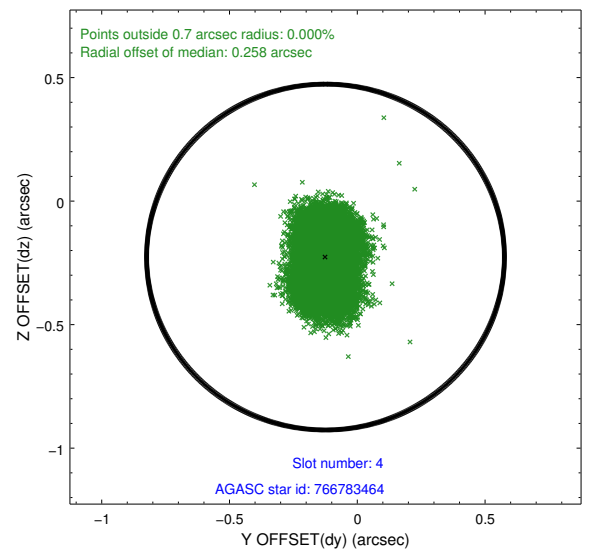
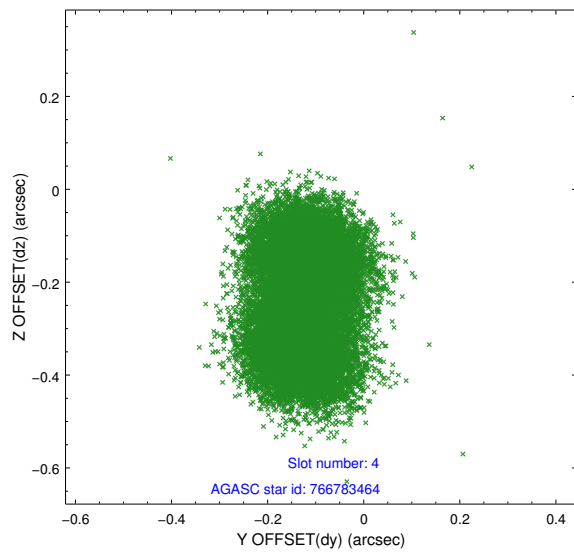
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.10	8364	0.102	-0.068	0.008	0.026	0.000000	0.000000	929.67	-835.66
1	FID	ACIS-I-5	7.08	8364	-0.248	0.091	0.007	0.018	0.000000	0.000000	-1818.76	1061.98
2	FID	ACIS-I-6	7.09	8365	0.055	0.048	0.008	0.014	0.000000	0.000000	395.13	1706.48
3	GUIDE	766779344	9.98	16646	-0.018	-0.236	0.164	0.255	15.380905	-21.452302	1721.69	1642.03
4	GUIDE	766783464	9.23	16711	-0.124	-0.227	0.140	0.211	15.041422	-22.197983	-894.81	358.48
5	GUIDE	767171568	9.96	16699	0.118	0.247	0.210	0.323	16.035890	-22.108834	1815.60	-1578.11
6	GUIDE	841744920	10.60	16709	0.042	0.216	0.337	0.493	14.927520	-22.605734	-2141.86	-503.20
7	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

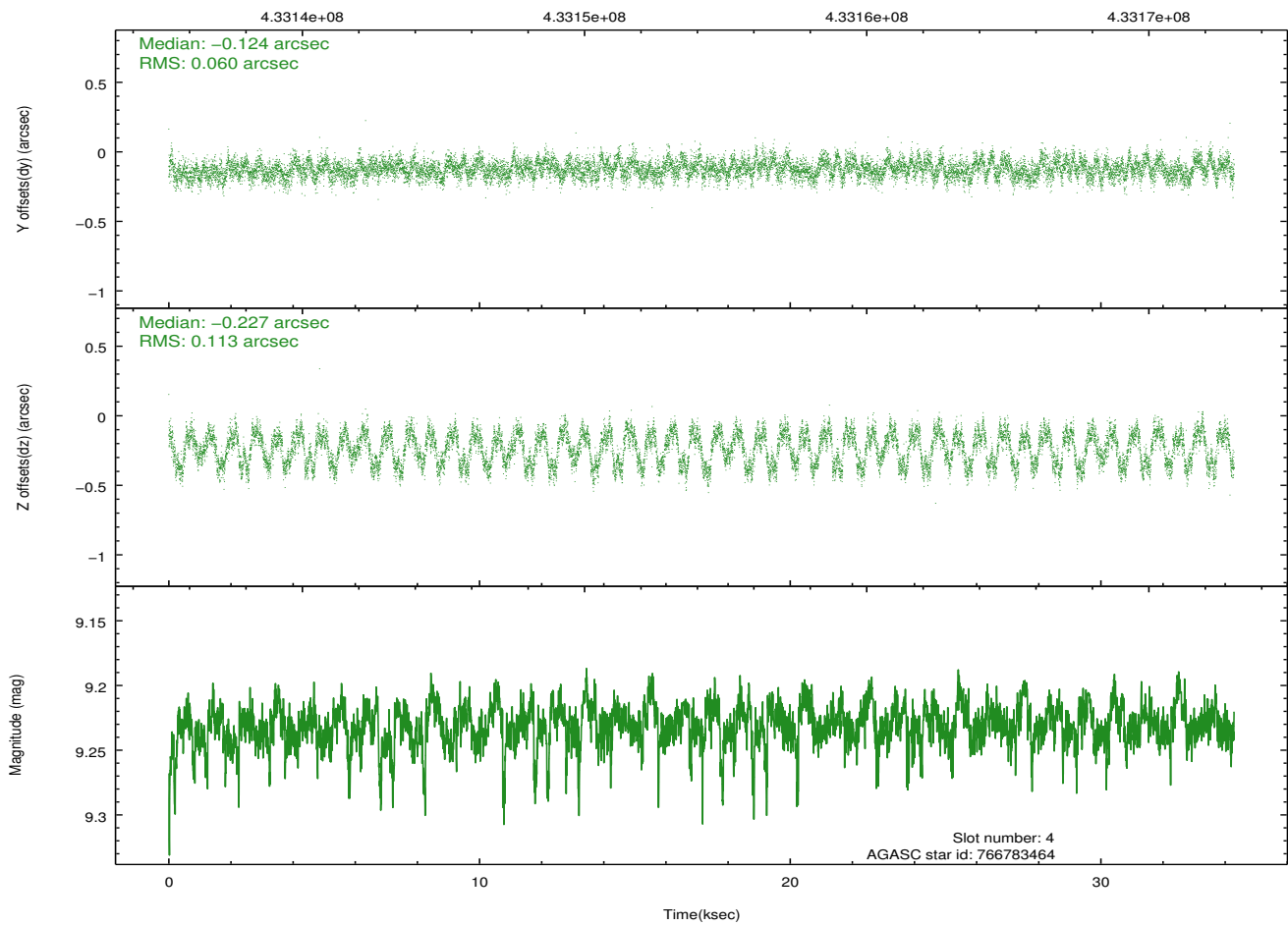
2.4.1 Slot 3



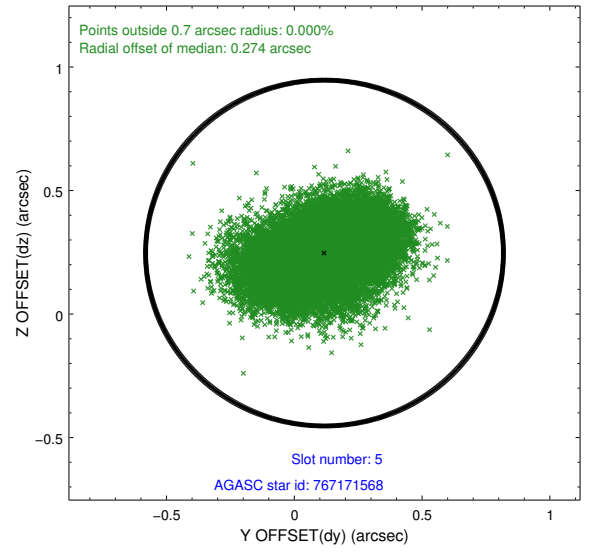
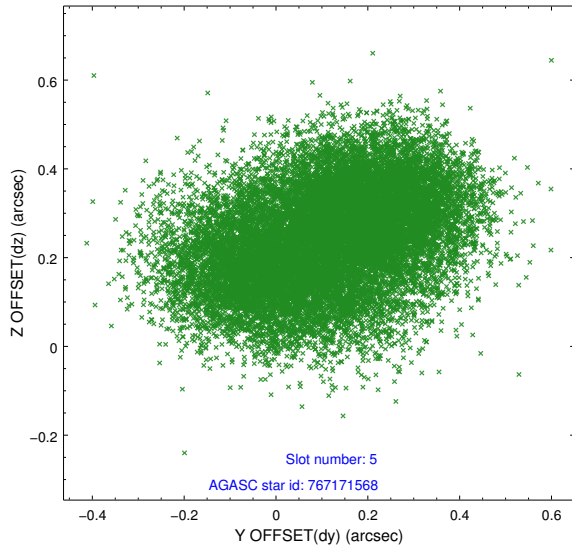
2.4.2 Slot 4



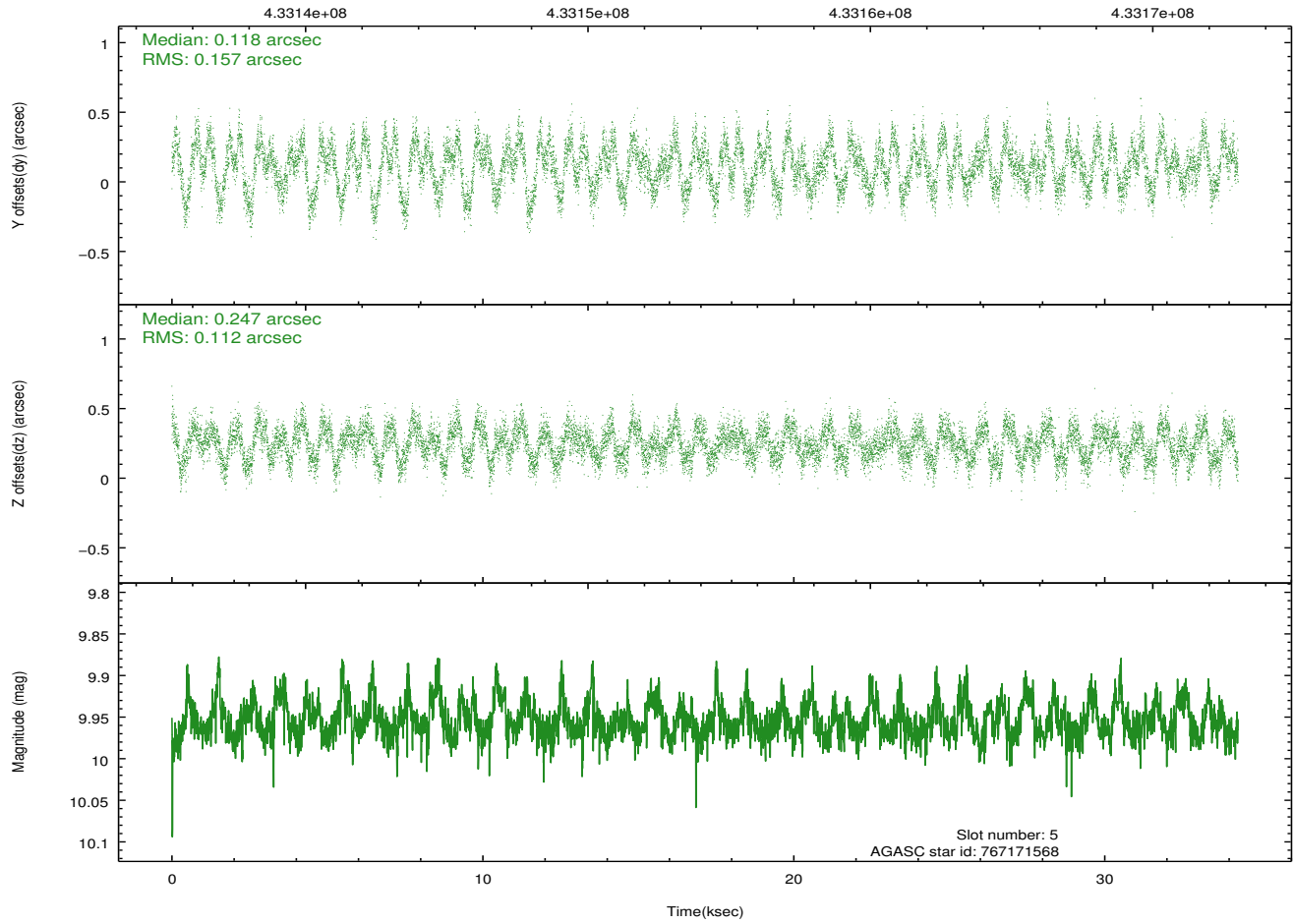
Time (s)



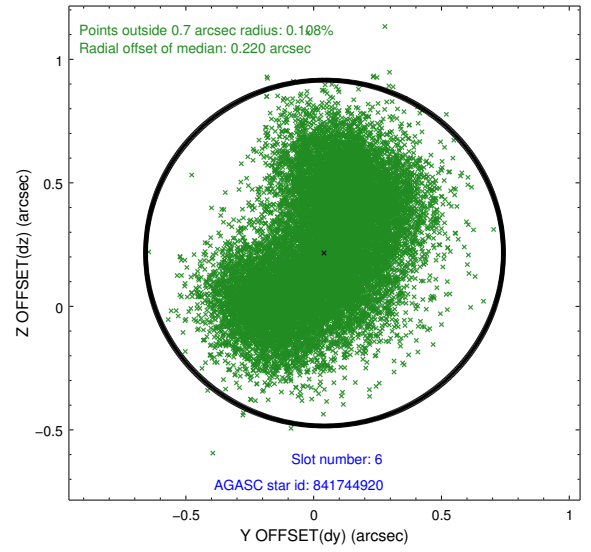
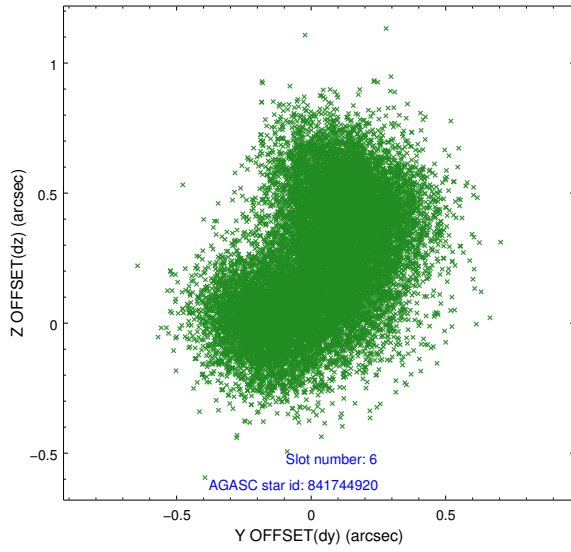
2.4.3 Slot 5



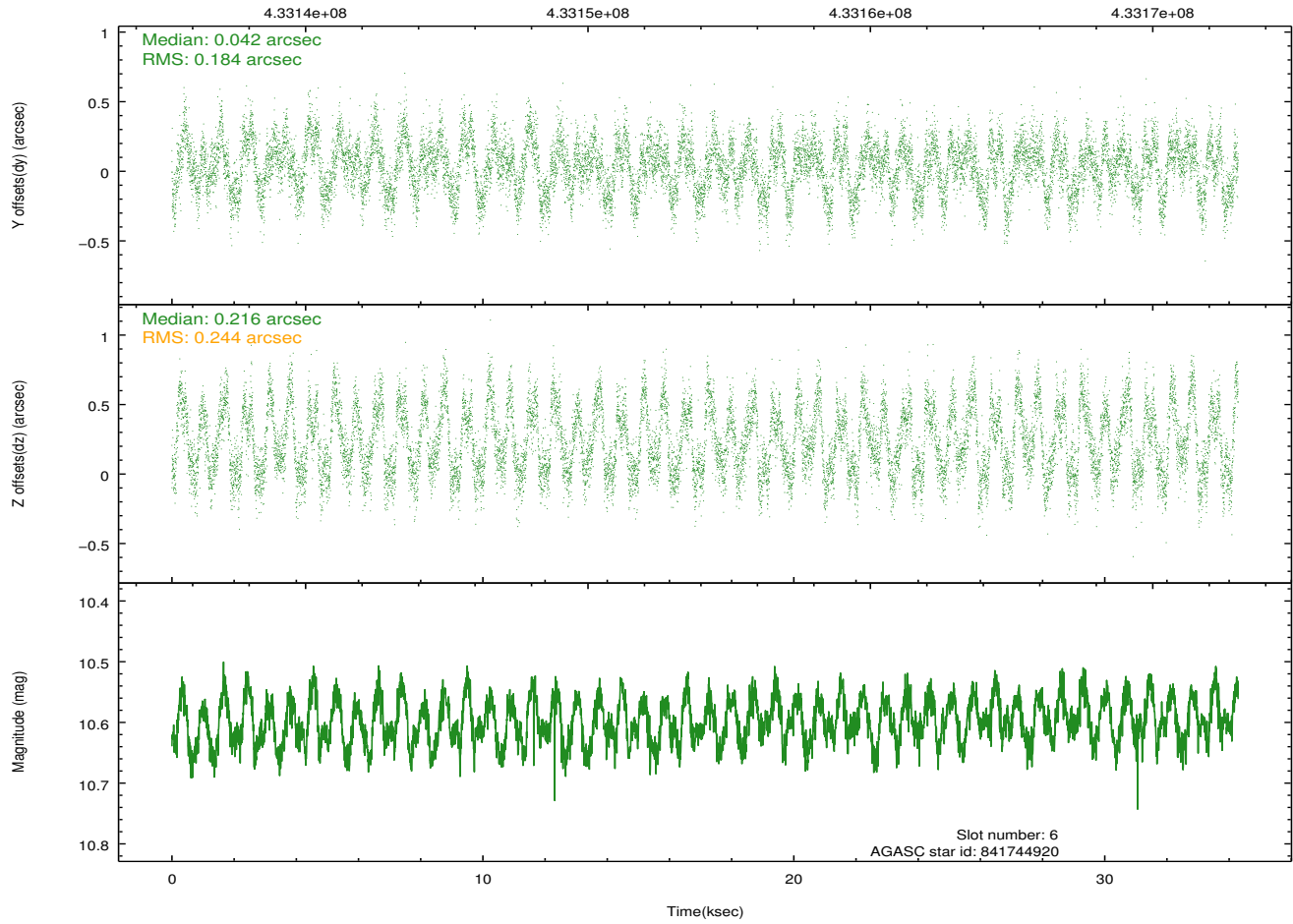
Time (s)



2.4.4 Slot 6

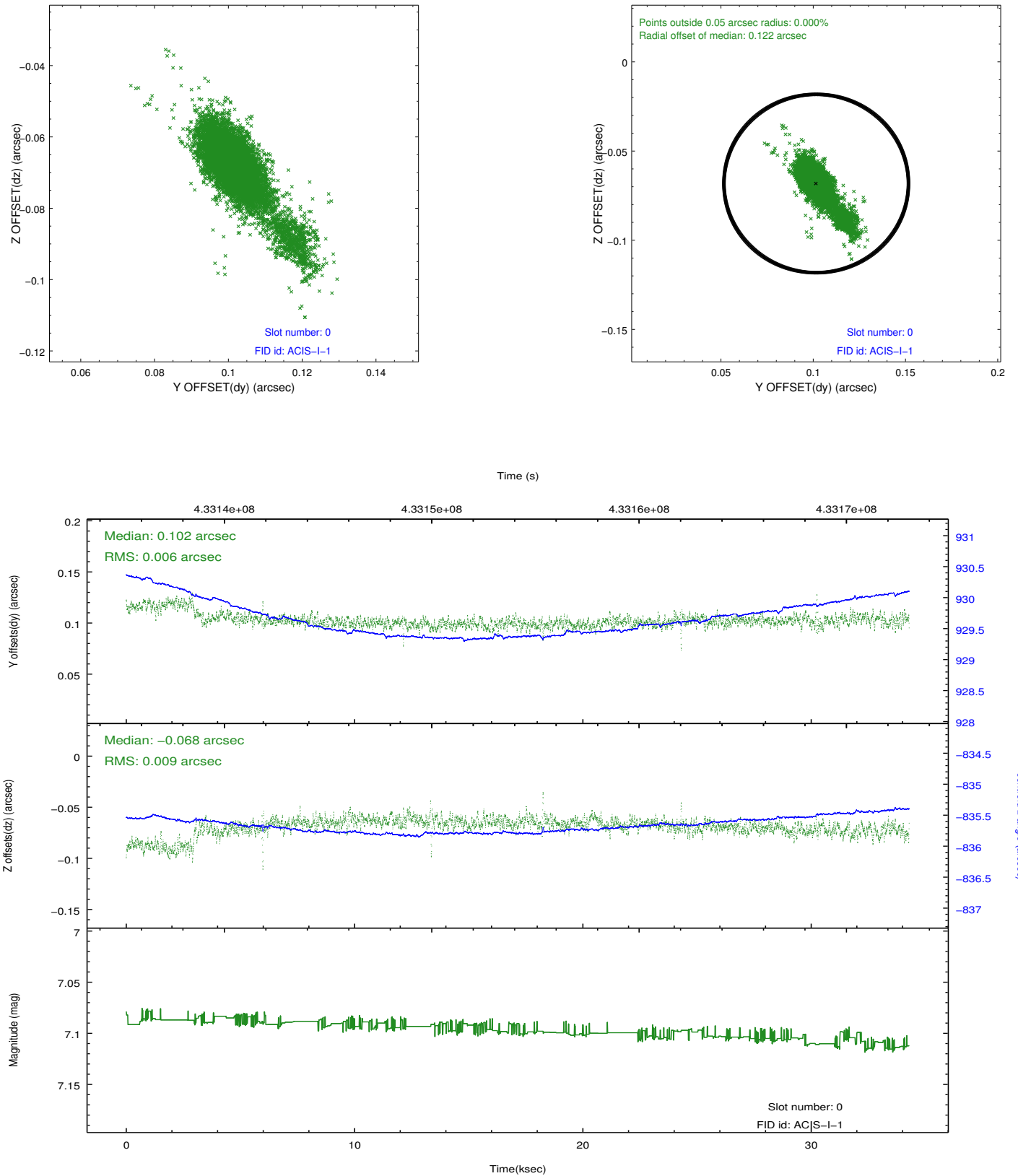


Time (s)

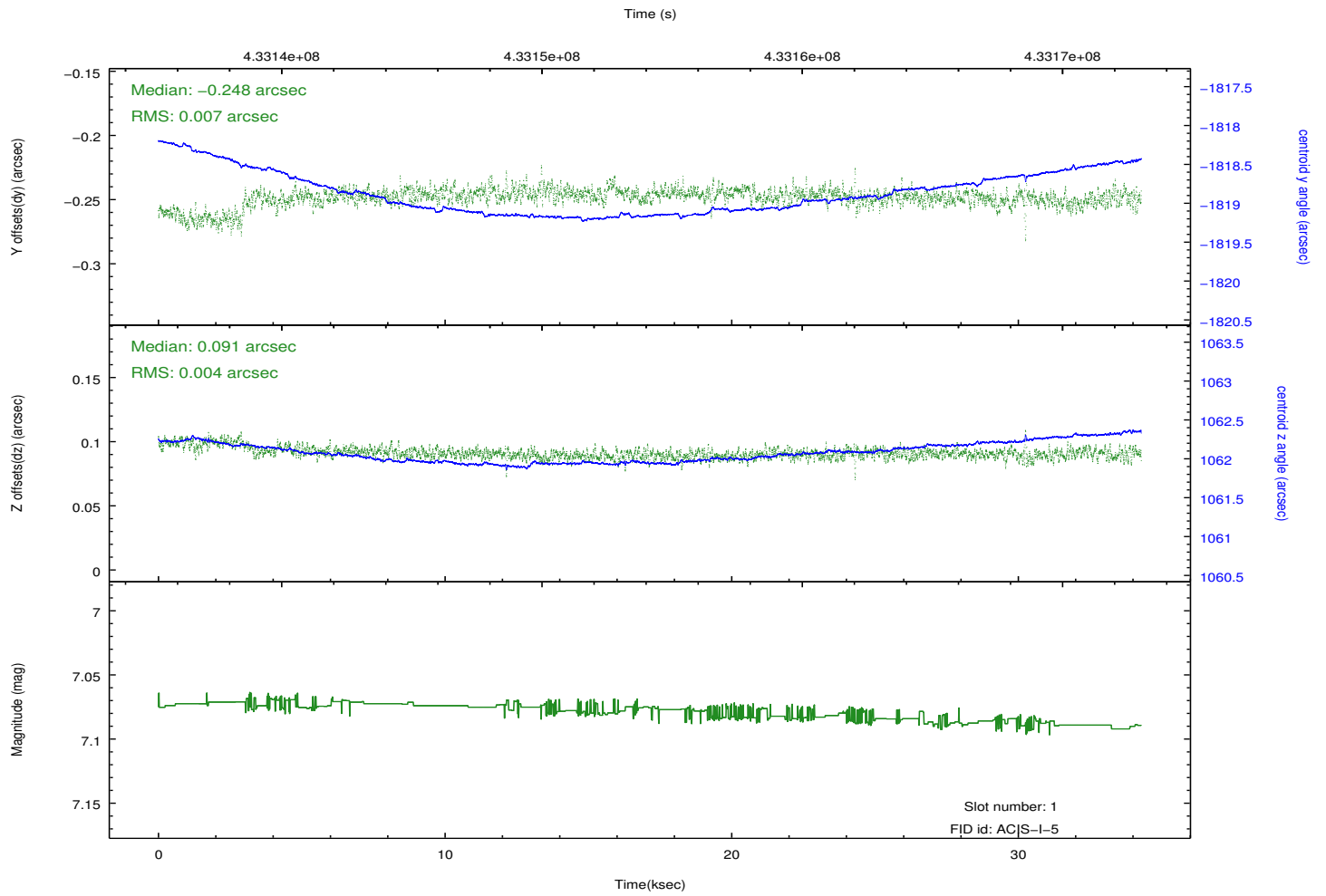
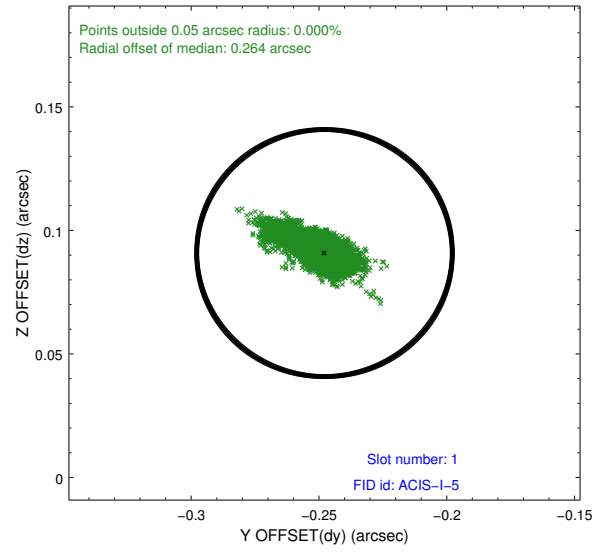
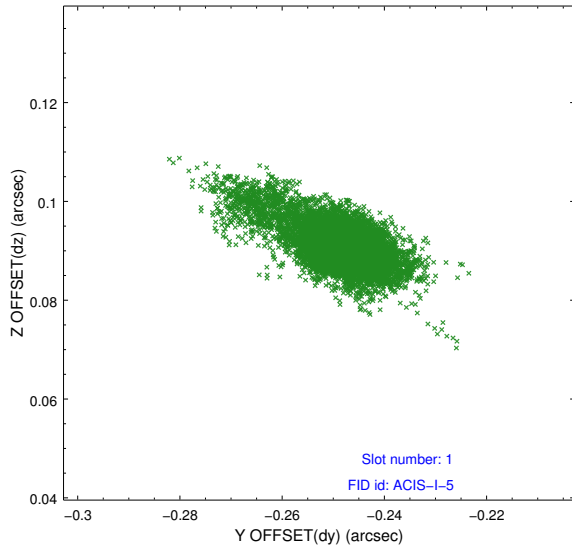


2.5 FID Slots

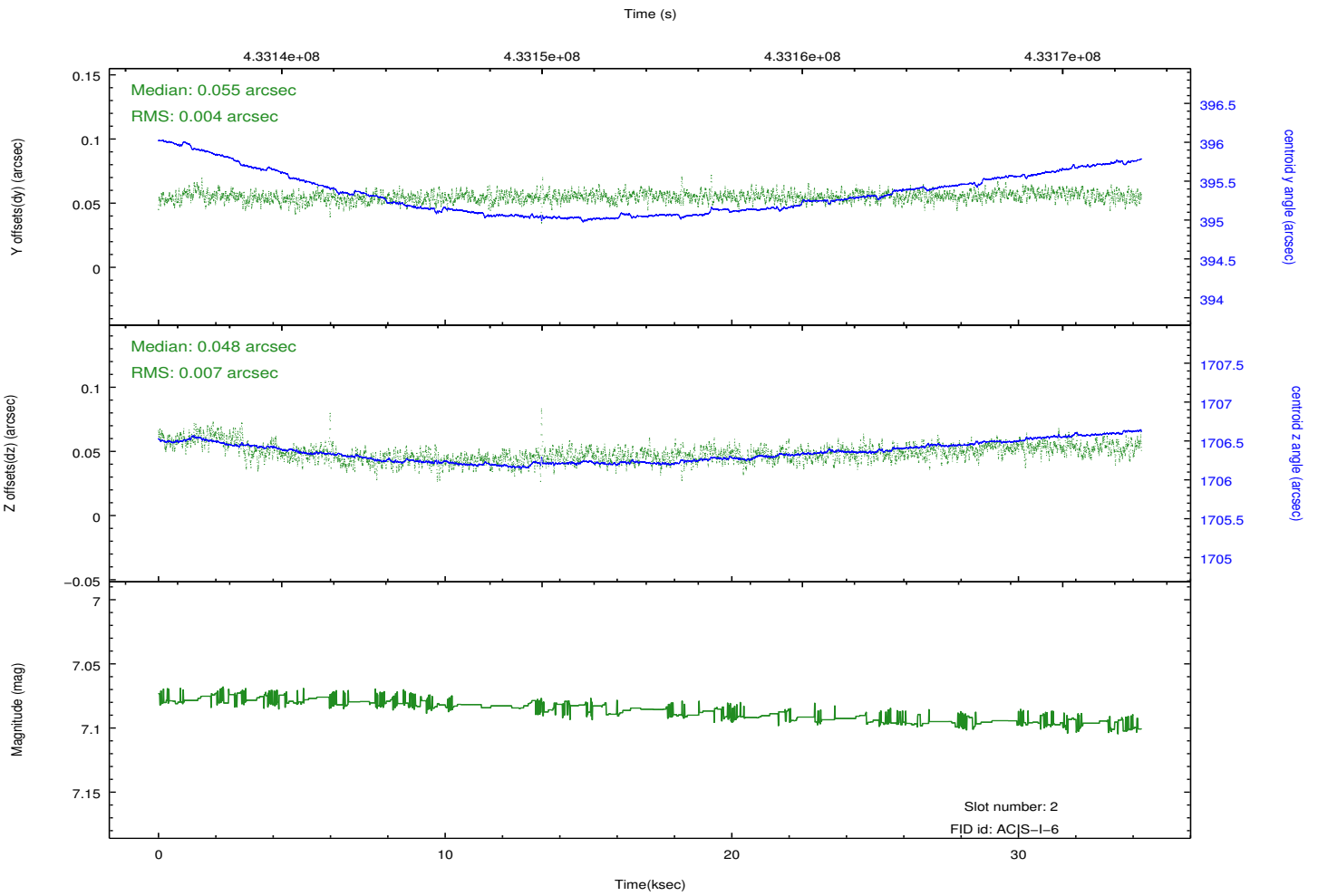
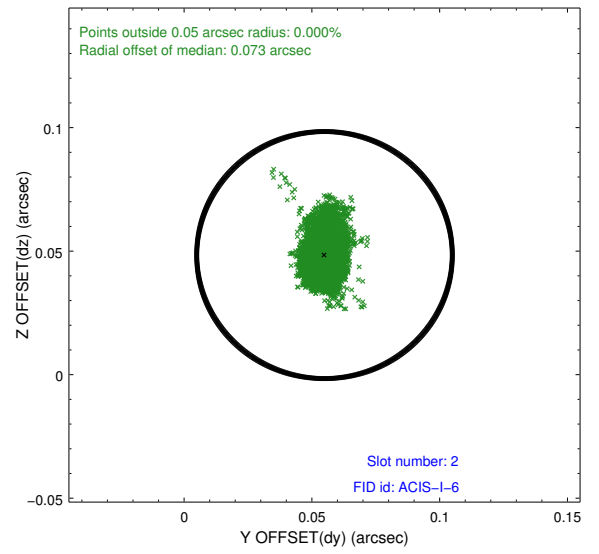
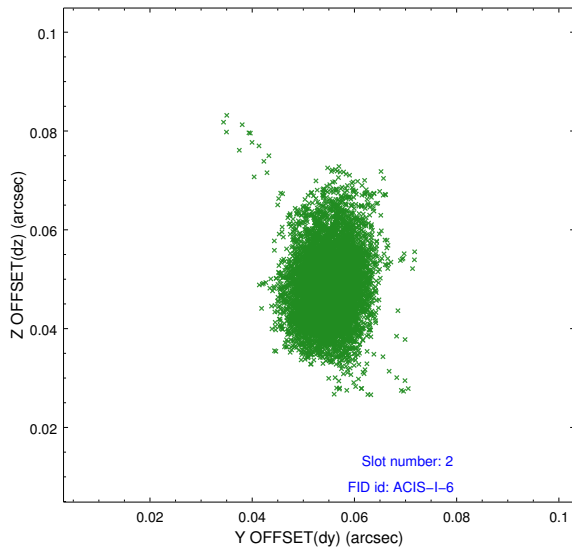
2.5.1 Slot 0



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)	2012.03.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.186759222746

A.2 Comments

The guide star in slot 7 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.