

V&V Reference Report

L2 ASCDS Version : 8.5

Observation 6104 - L2 Version 3
Chandra X-Ray Center

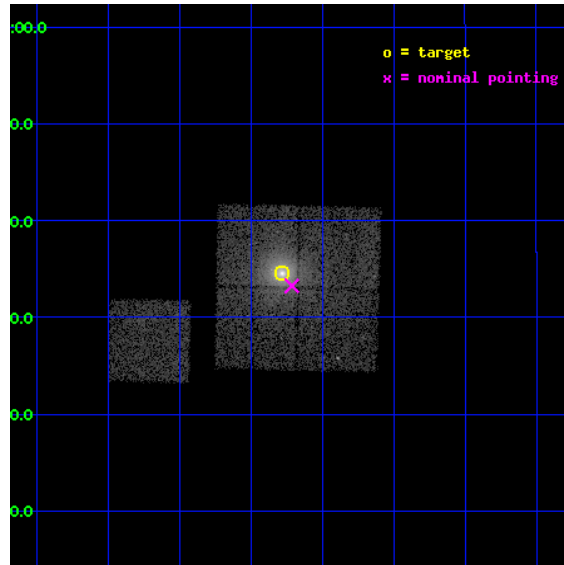
L2 Processing Date : Dec 8 2012

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1 Front

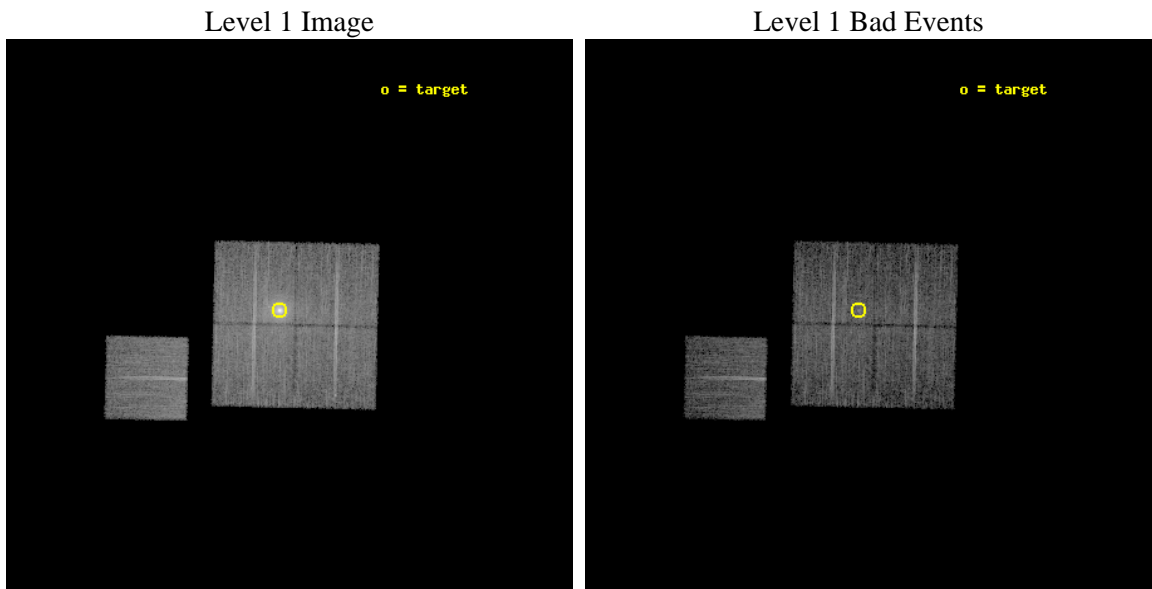
seq_num	800552	Sequence number
obs_id	6104	Observation id
title	Probing dark energy using the X-ray gas mass fraction in dynamically relaxed galaxy clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	Abell 2204	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	248.196667	Observer's specified target RA [deg]
dec_targ	5.575583	Observer's specified target Dec [deg]
ra_nom	248.17850735663	Nominal RA [deg]
dec_nom	5.5543343944034	Nominal Dec [deg]
roll_nom	271.29407493506	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9735.9434104264	Sum of GTIs [s]
livetime	9608.7361422719	Livetime [s]
ontime0	9735.8202904165	Sum of GTIs [s]
ontime1	9735.8613304198	Sum of GTIs [s]
ontime2	9735.9023704231	Sum of GTIs [s]
ontime3	9735.9434104264	Sum of GTIs [s]
ontime6	9729.4972701073	Sum of GTIs [s]
l2events	66968	Number of level 2 events



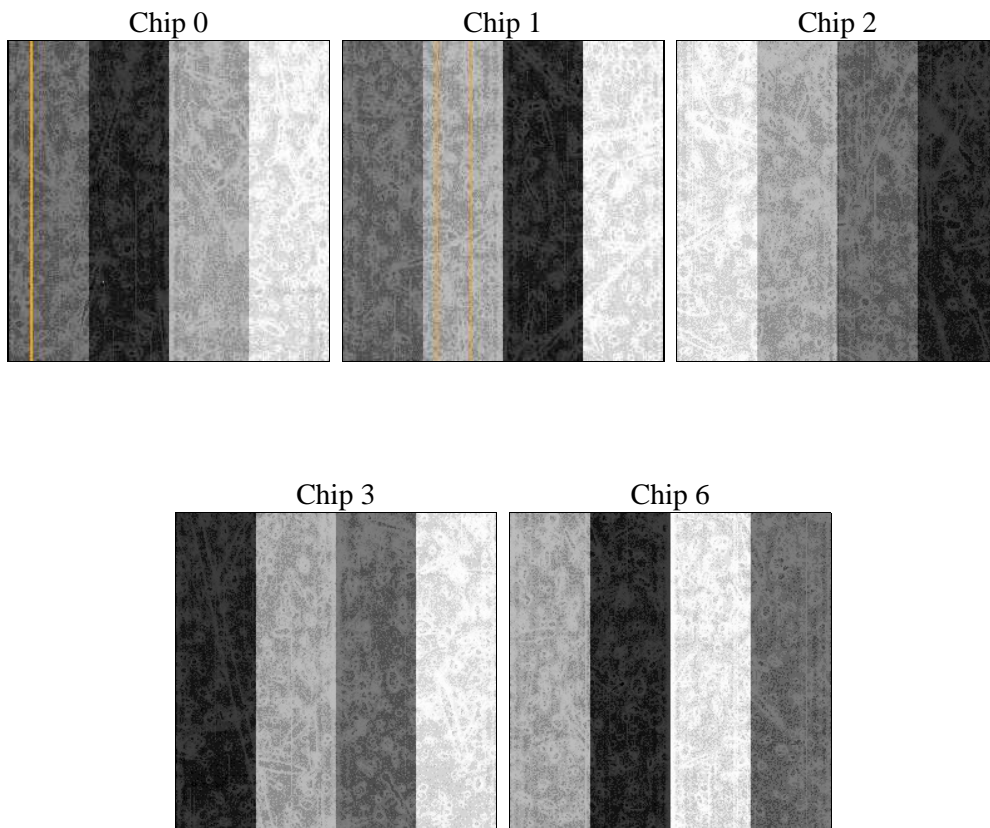
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9685.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	9735.9434104264	Sum of GTIs [s]
caldsver	4.5.4	 	ontime0	9735.8202904165	Sum of GTIs [s]
date	2012-12-09T01:13:27	Date and time of file creation	ontime1	9735.8613304198	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	9735.9023704231	Sum of GTIs [s]
			ontime3	9735.9434104264	Sum of GTIs [s]
			ontime6	9729.4972701073	Sum of GTIs [s]
			l1events	358524	Number of level 1 events

2.1.4 Events

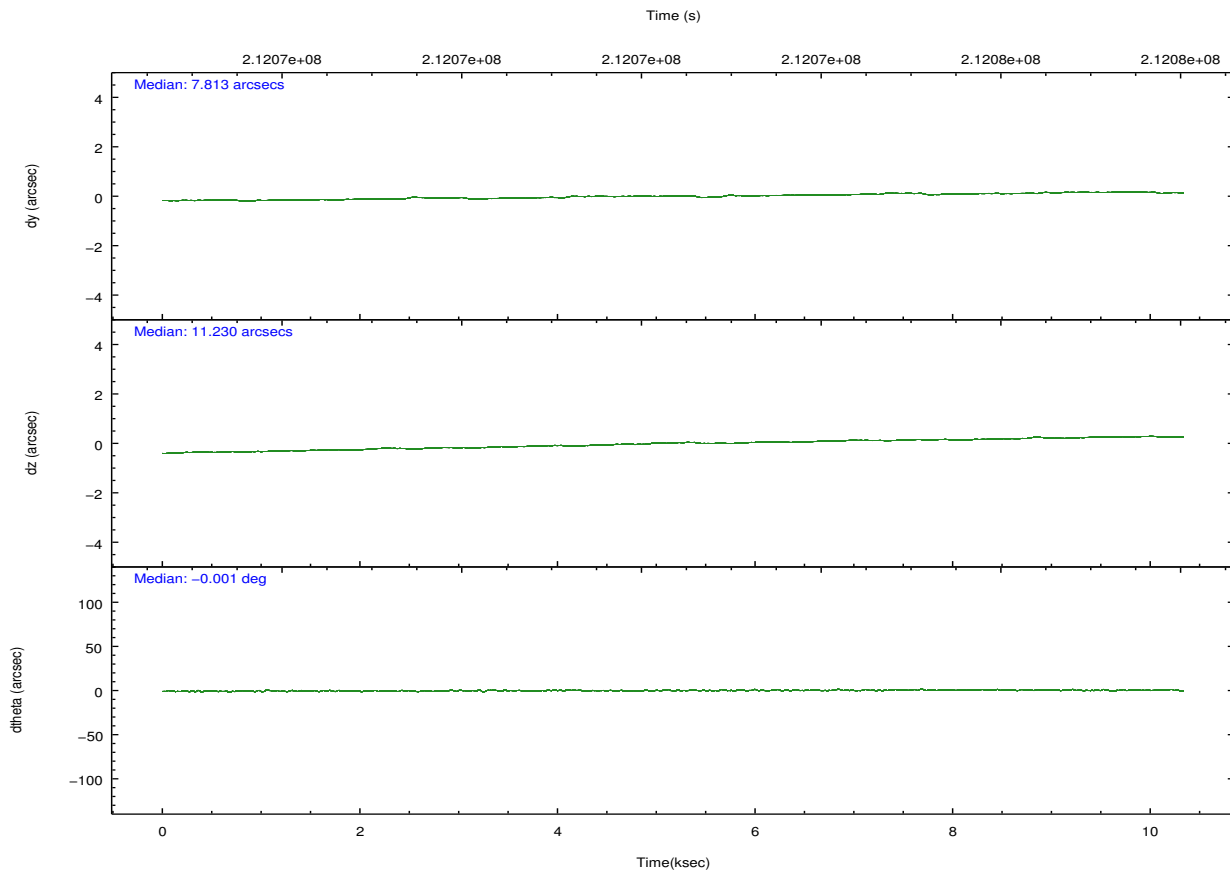
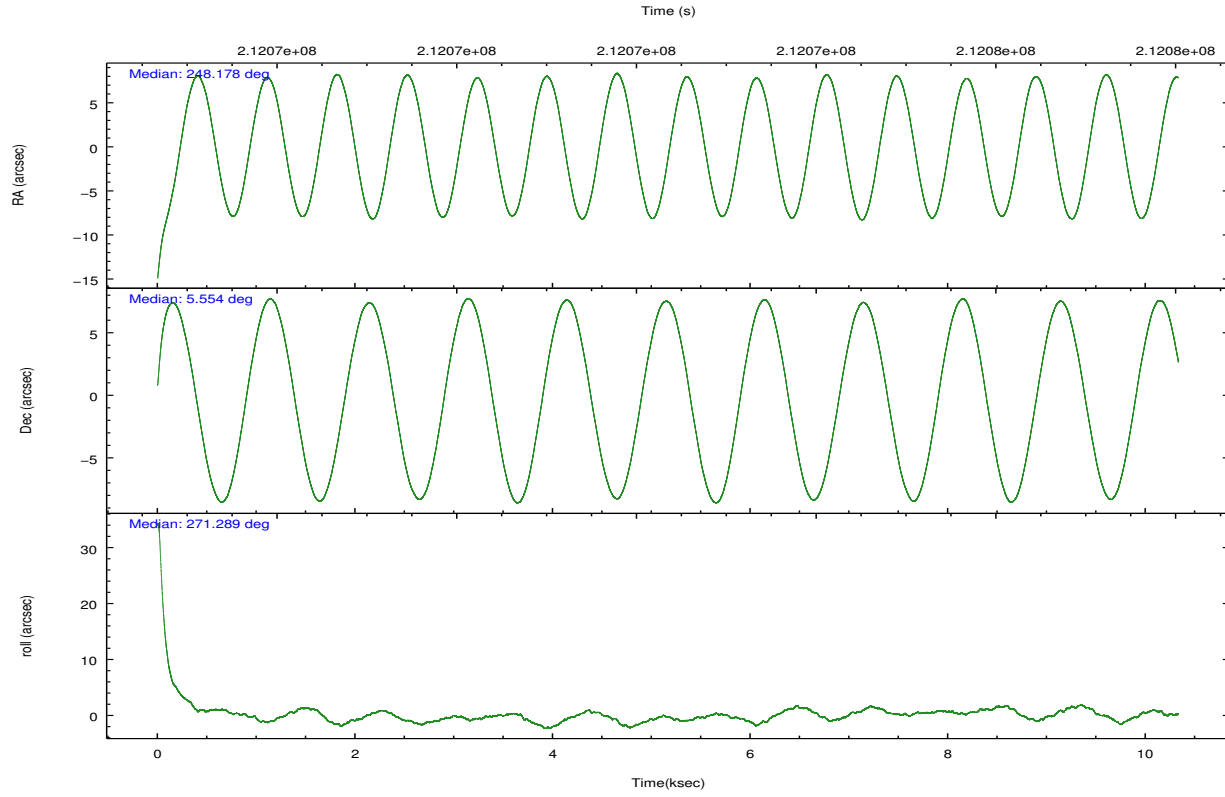
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	59543	62709	71954	99179	65139
rejected events	51696	52985	62403	59027	57786
rejected %	86%	84%	86%	59%	88%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3509	4814	4822	30190	3028
	5%	7%	6%	30%	4%
grade 1 events	38	28	38	226	27
	0%	0%	0%	0%	0%
grade 2 events	1790	1795	1998	4576	1557
	3%	2%	2%	4%	2%
grade 3 events	744	831	741	1664	691
	1%	1%	1%	1%	1%
grade 4 events	657	782	752	1701	694
	1%	1%	1%	1%	1%
grade 5 events	1984	2239	1960	2435	2276
	3%	3%	2%	2%	3%
grade 6 events	1147	1505	1238	2031	1383
	1%	2%	1%	2%	2%
grade 7 events	49674	50715	60405	56356	55483
	83%	80%	83%	56%	85%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	248.164137	248.1785073566299	Subarray requested	NONE	NONE
[deg] Pointing Dec	5.577641	5.554334394403375	Alternating exposures requested	N	N
[deg] Pointing Roll	271.086756	271.2940749350646	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	212067836.184000	212066672.82713			
Observation start date	2004-09-20T11:42:52	2004-09-20T11:24:32			
[s] Observation end time (MET)	212077521.184000	212078498.76516			
Observation end date	2004-09-20T14:24:17	2004-09-20T14:41:38			
Read mode	TIMED	TIMED			

2.3 Aspect

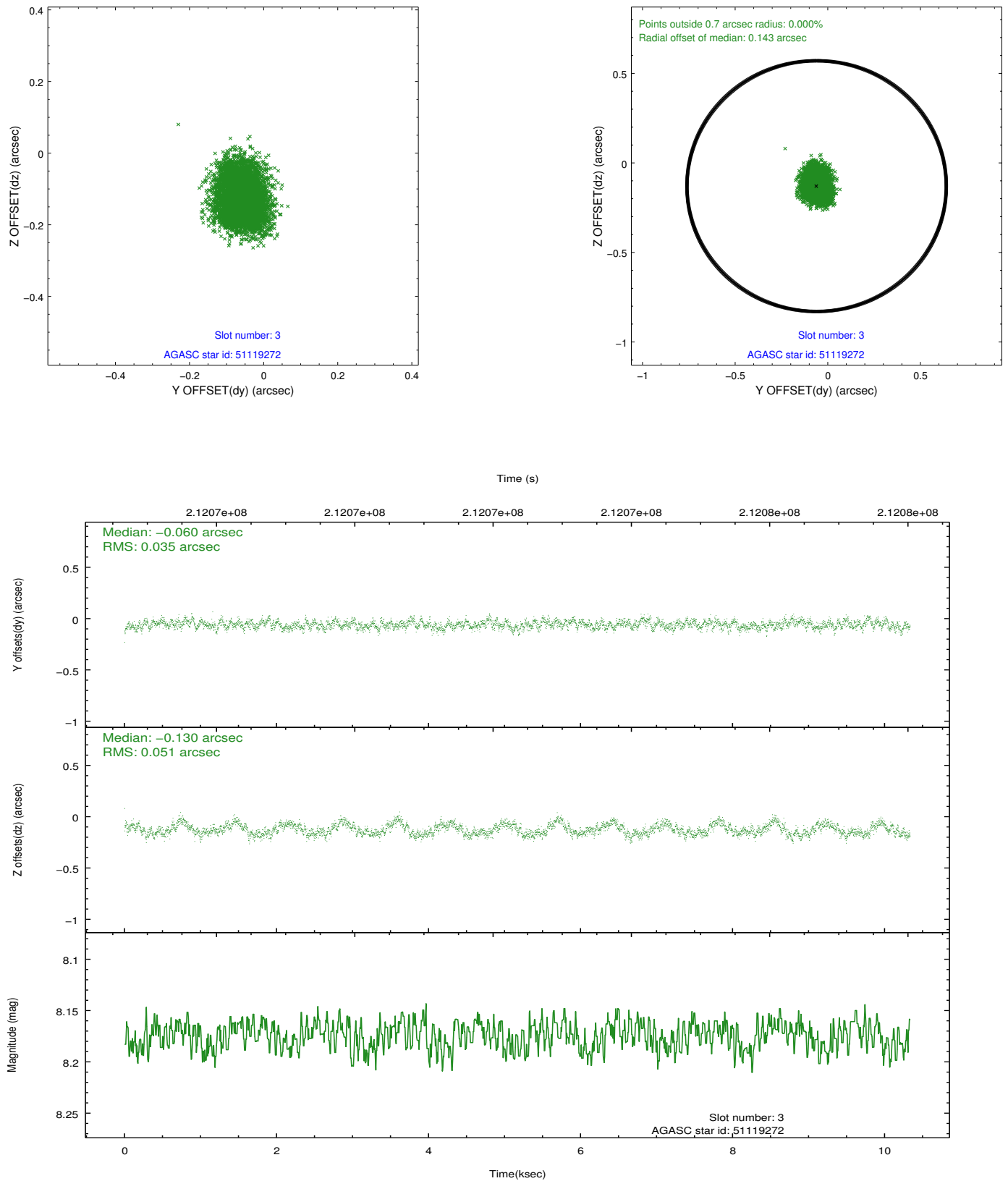


Slot Statistics

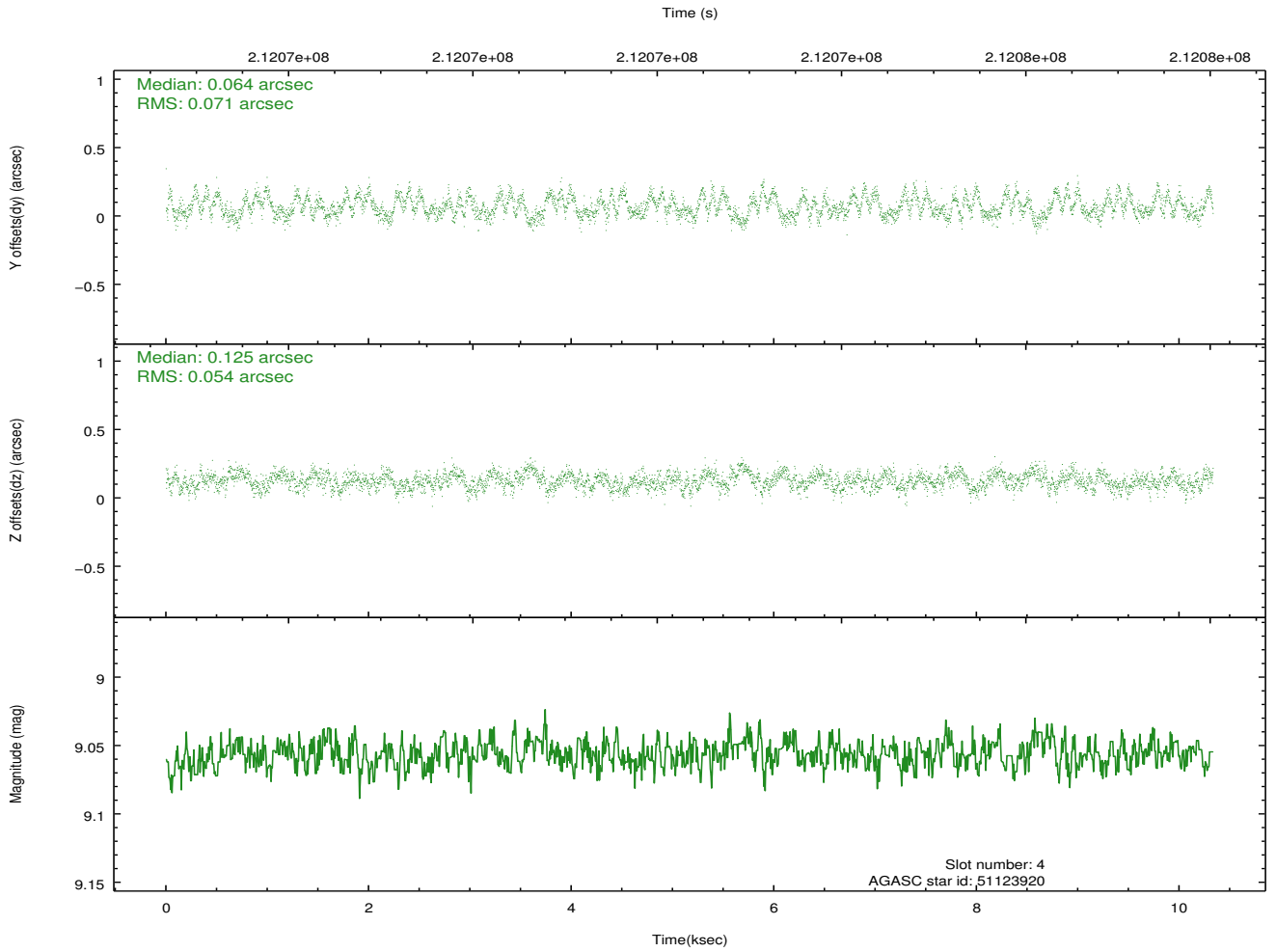
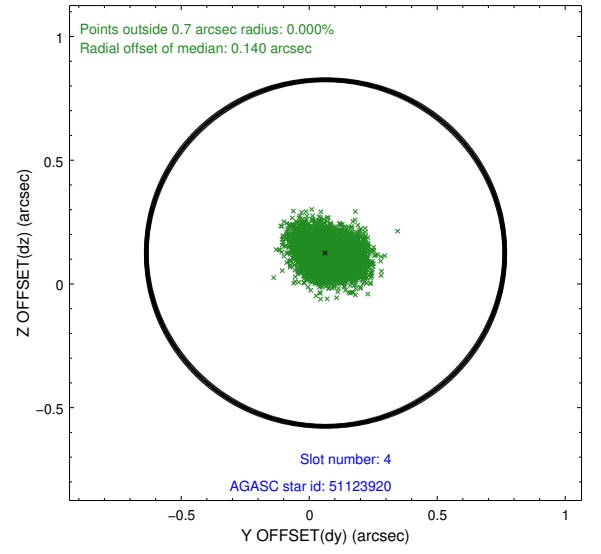
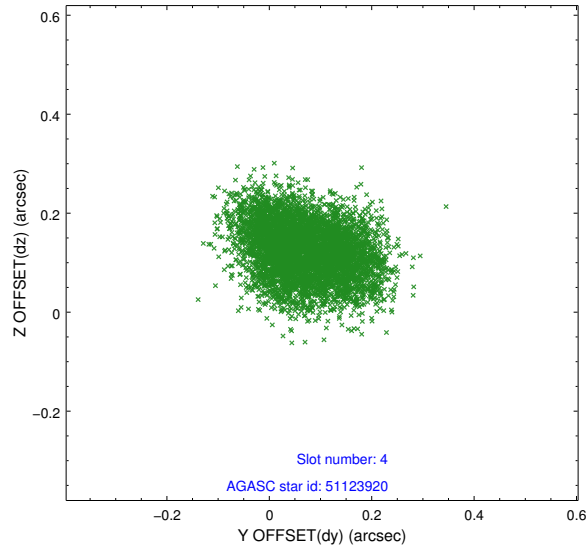
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	2521	0.032	-0.010	0.011	0.019	0.000000	0.000000	931.86	-834.73
1	FID	ACIS-I-5	7.23	2521	-0.169	0.048	0.010	0.016	0.000000	0.000000	-1816.12	1062.62
2	FID	ACIS-I-6	7.25	2521	0.045	0.032	0.008	0.013	0.000000	0.000000	396.92	1707.64
3	GUIDE	51119272	8.17	5041	-0.060	-0.130	0.066	0.106	247.573996	5.444578	438.28	-2123.48
4	GUIDE	51123920	9.06	5041	0.064	0.125	0.096	0.152	248.739818	5.153526	1565.01	2034.94
5	GUIDE	51645232	9.42	5041	-0.070	-0.037	0.082	0.132	248.578272	6.115031	-1906.23	1519.33
6	GUIDE	51653824	9.04	5037	-0.022	-0.019	0.085	0.137	248.663501	6.113421	-1895.57	1824.19
7	GUIDE	51124904	9.12	5034	0.089	0.058	0.091	0.149	248.832815	5.226203	1309.24	2372.64

2.4 Star Slots

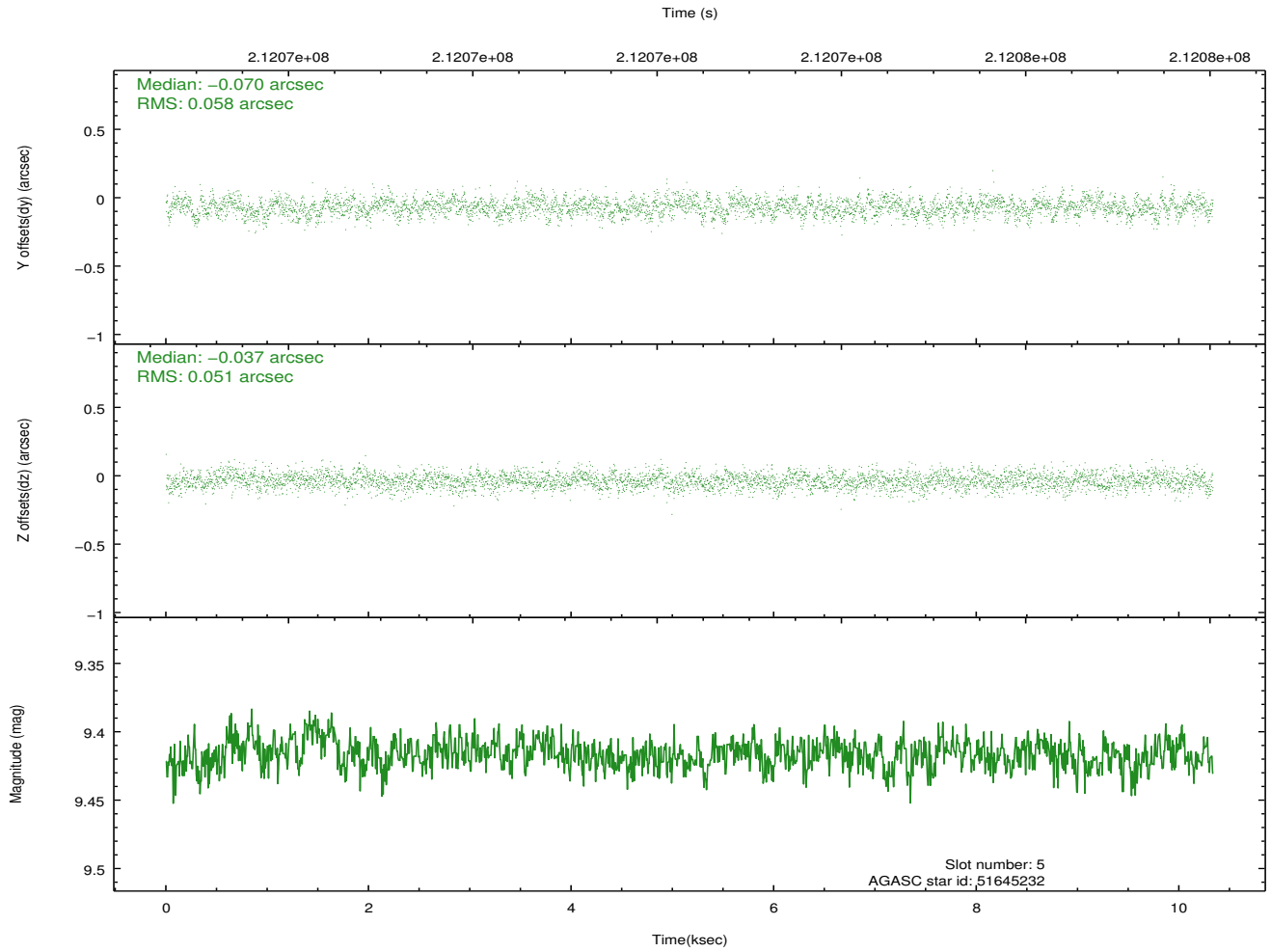
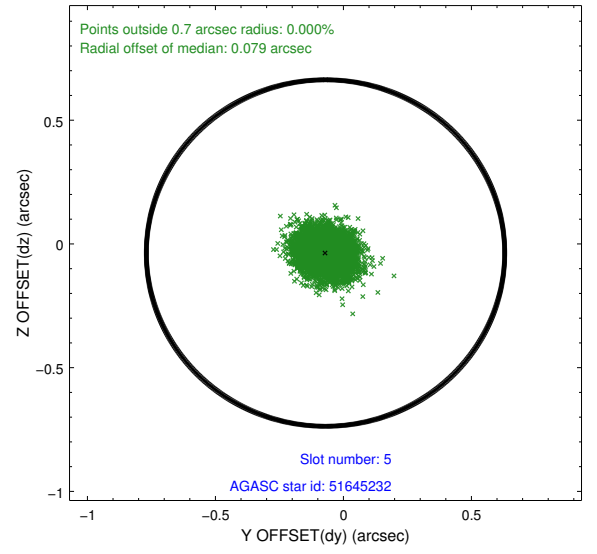
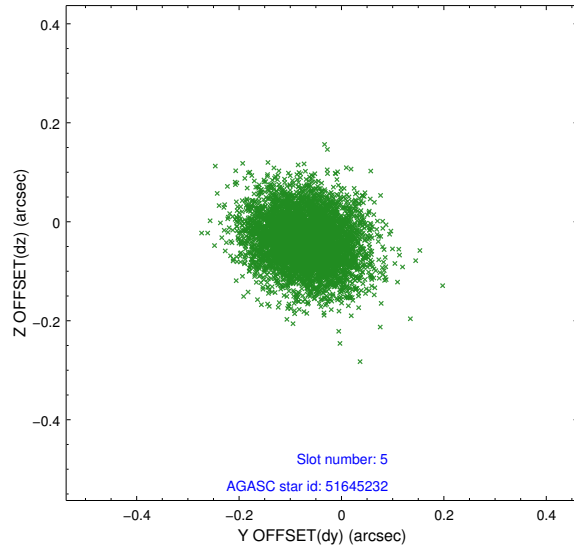
2.4.1 Slot 3



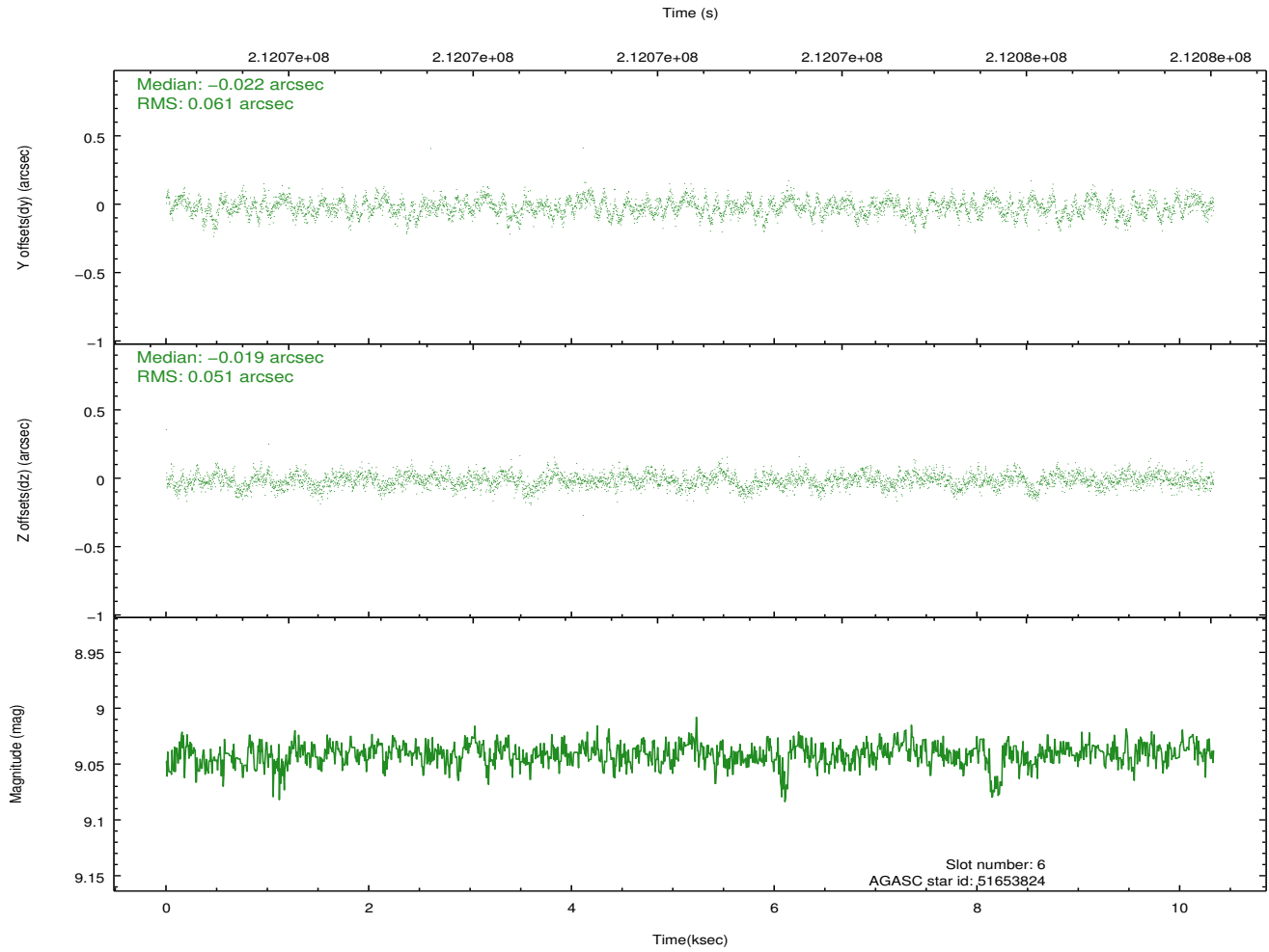
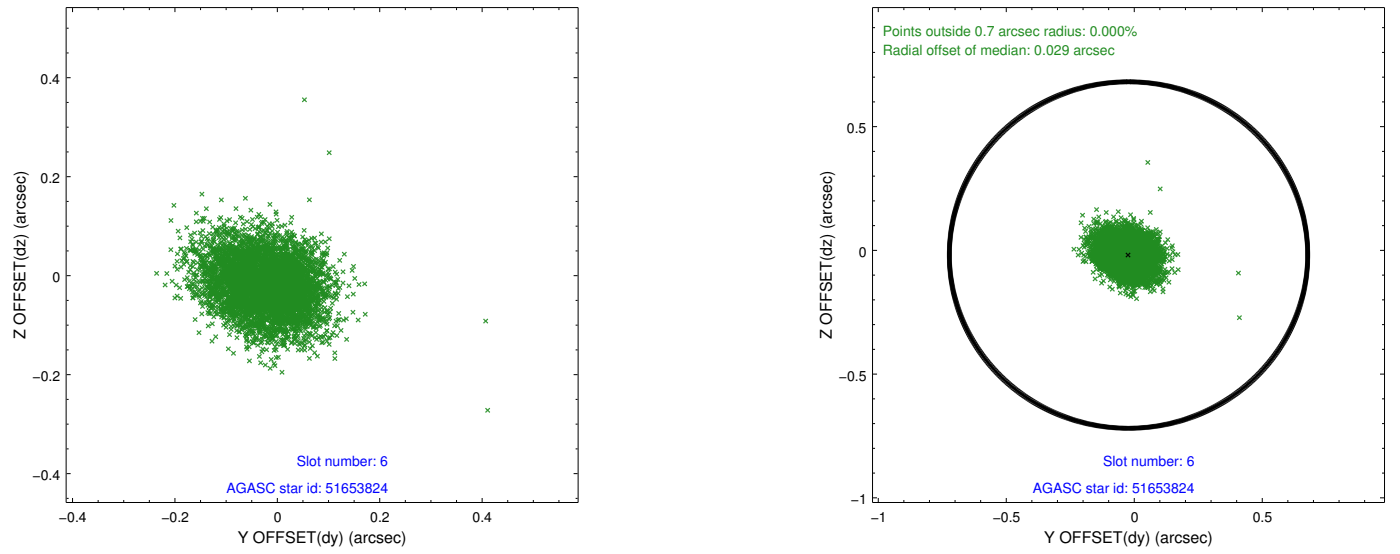
2.4.2 Slot 4



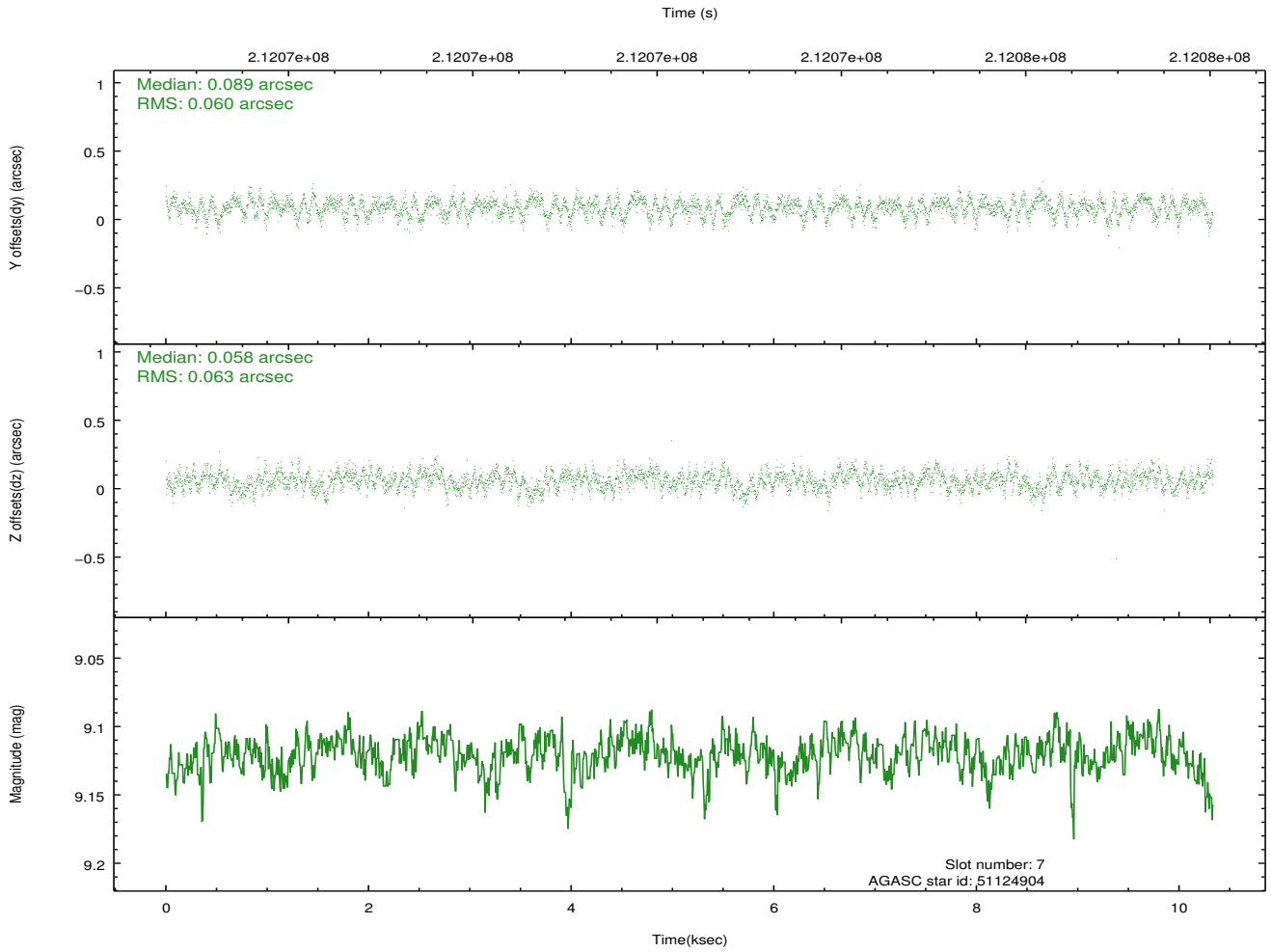
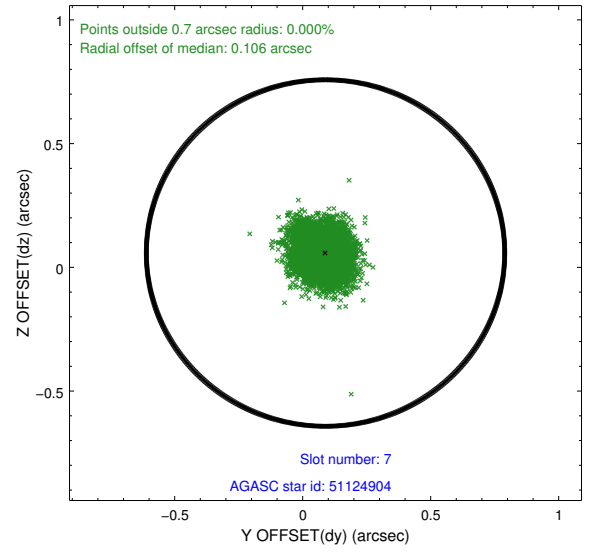
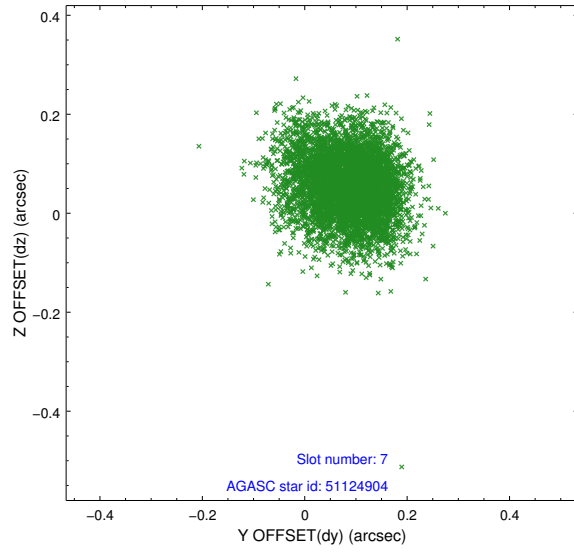
2.4.3 Slot 5



2.4.4 Slot 6

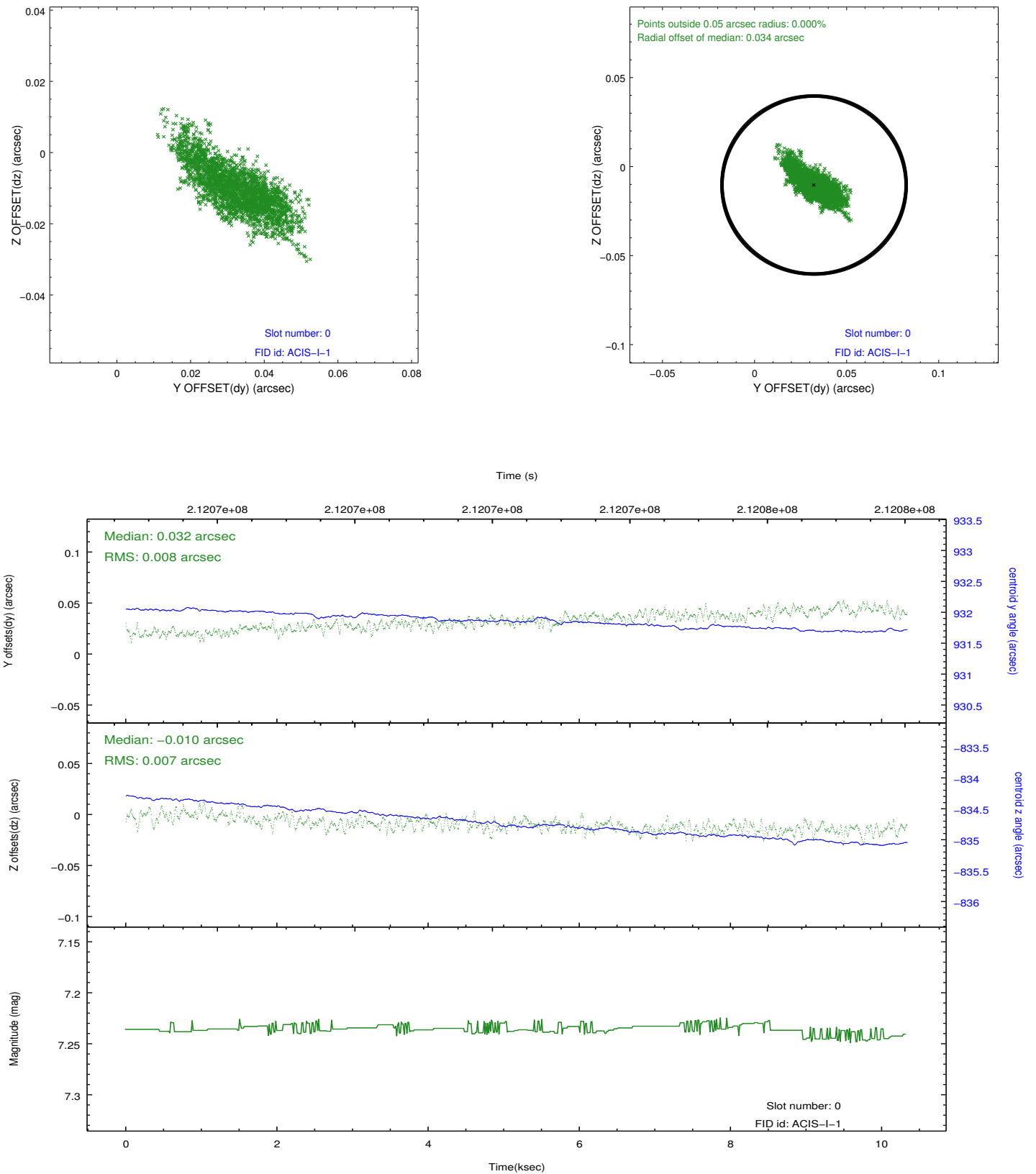


2.4.5 Slot 7

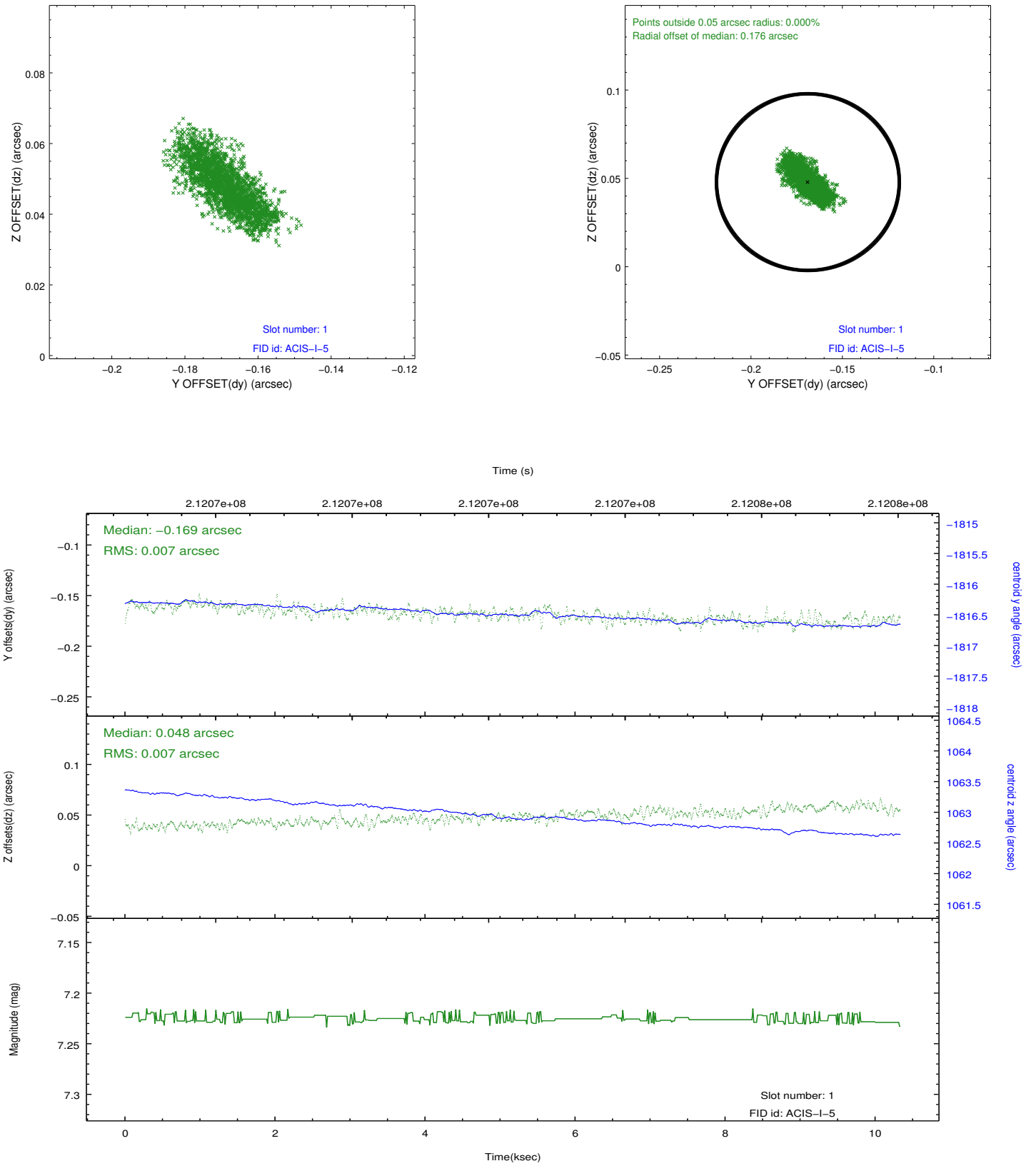


2.5 FID Slots

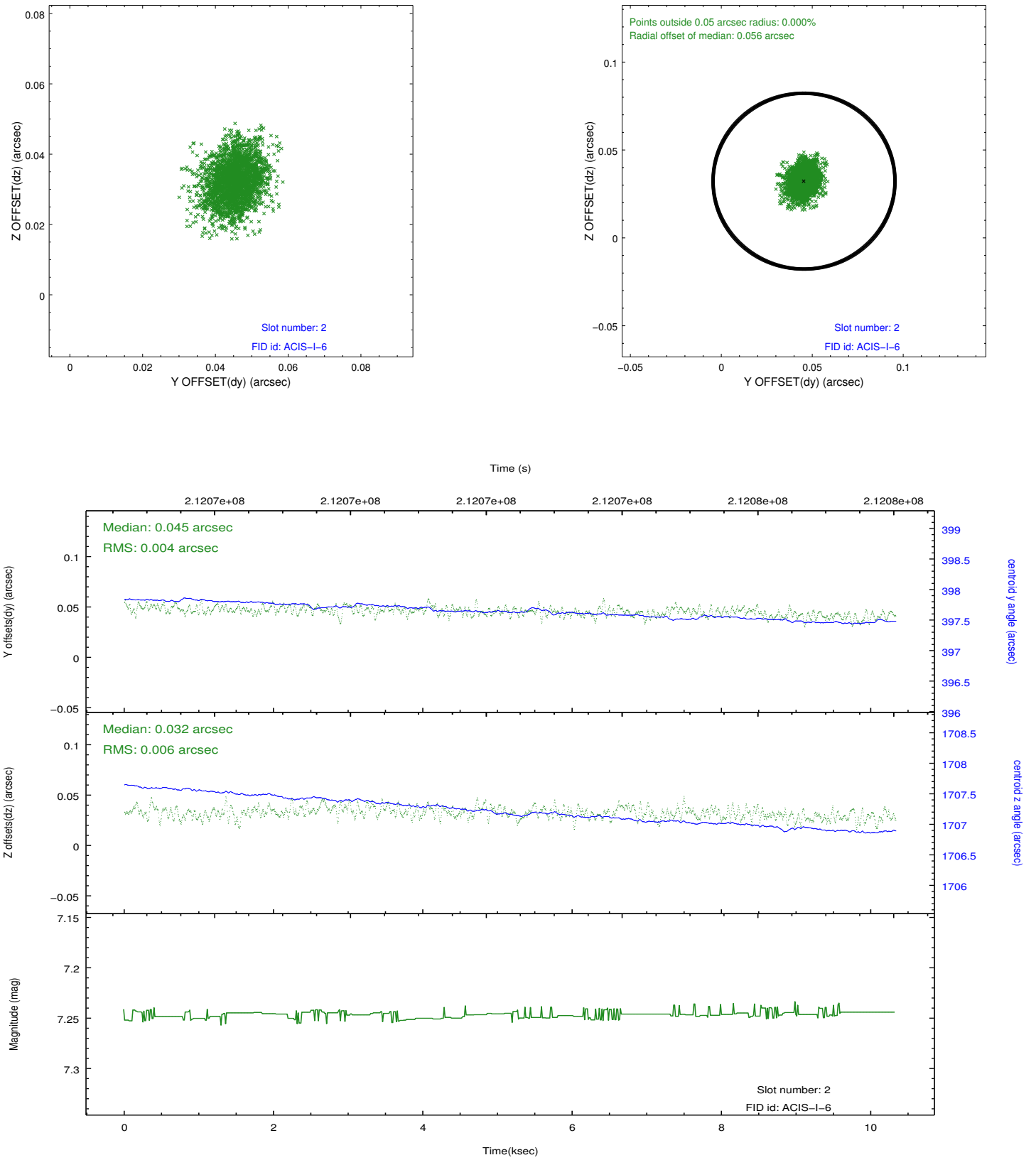
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.12.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.737

A.2 Comments