

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4478 - L2 Version 4
Chandra X-Ray Center

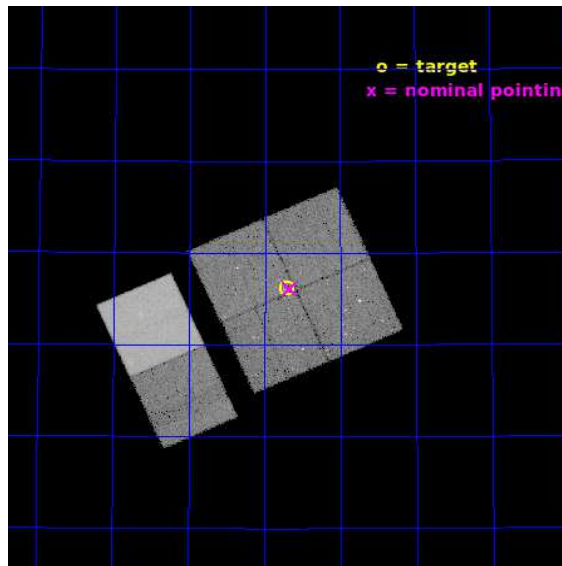
L2 Processing Date : Oct 3 2020

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
2.4.5	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
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

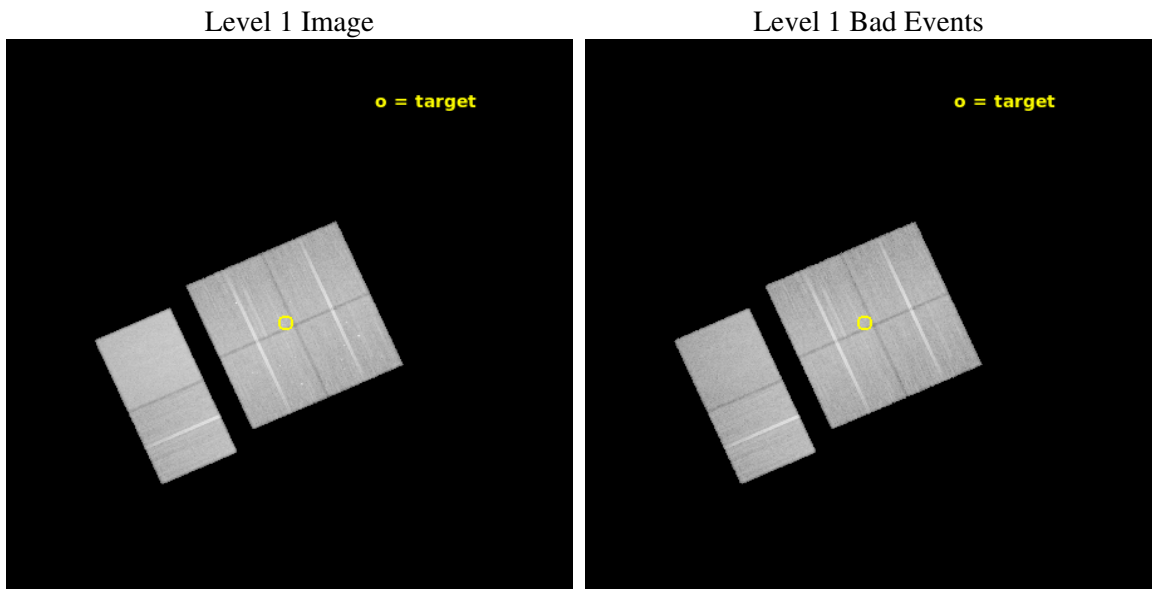
seq_num	200247	Sequence number
obs_id	4478	Observation id
title	Chandra study of the IC 1396-N globule and its neighborhood	Propos
observer	Gordon Garmire	Principal investigator
object	IC 1396	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	325.176667	Observer's specified target RA [deg]
dec_targ	58.269361	Observer's specified target Dec [deg]
ra_nom	325.16687650013	Nominal RA [deg]
dec_nom	58.268524393378	Nominal Dec [deg]
roll_nom	245.86984665759	Nominal Roll [deg]
revision	4	Processing version of data
ontime	29985.641466767	Sum of GTIs [s]
livetime	29605.945219329	Livetime [s]
ontime0	29985.518346786	Sum of GTIs [s]
ontime1	29982.318406463	Sum of GTIs [s]
ontime2	29982.359426588	Sum of GTIs [s]
ontime3	29985.641466767	Sum of GTIs [s]
ontime6	29985.723546773	Sum of GTIs [s]
ontime7	29985.68250677	Sum of GTIs [s]
l2events	252699	Number of level 2 events



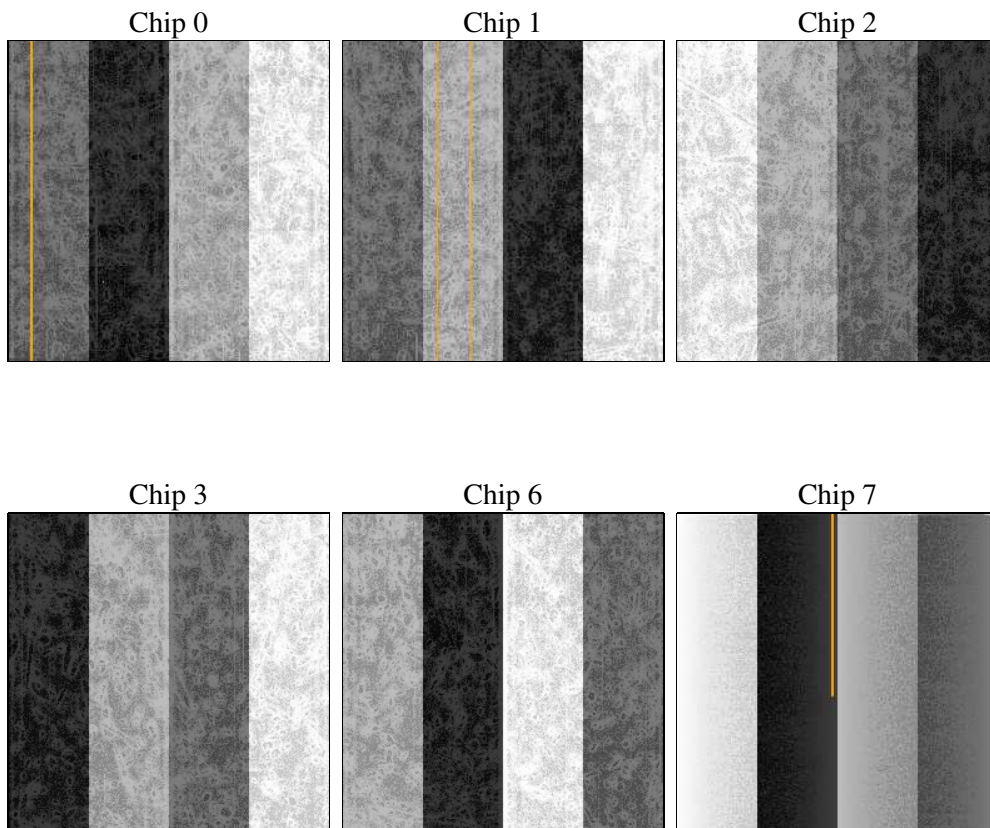
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	29985.641466767	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	29985.518346786	Sum of GTIs [s]
date	2020-10-03T16:00:20	Date and time of file creation	ontime1	29982.318406463	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	29982.359426588	Sum of GTIs [s]
			ontime3	29985.641466767	Sum of GTIs [s]
			ontime6	29985.723546773	Sum of GTIs [s]
			ontime7	29985.68250677	Sum of GTIs [s]
			l1events	1481207	Number of level 1 events

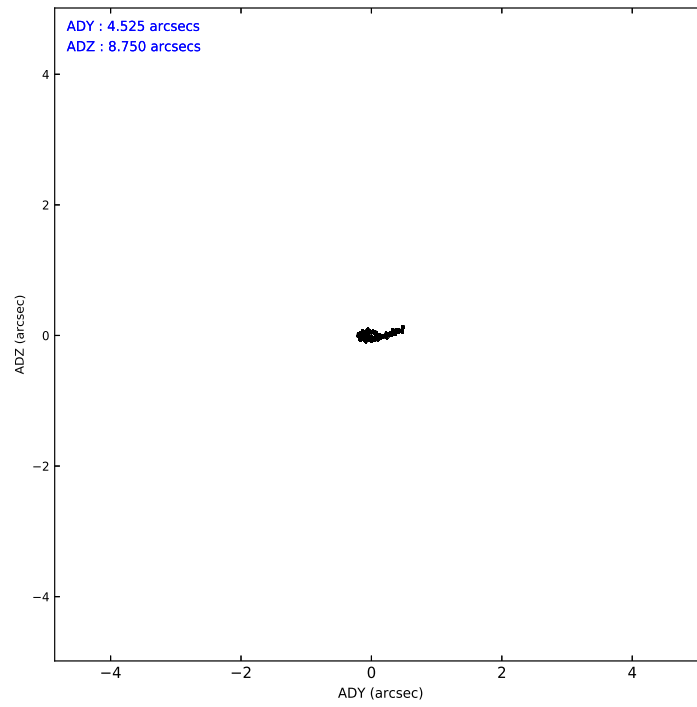
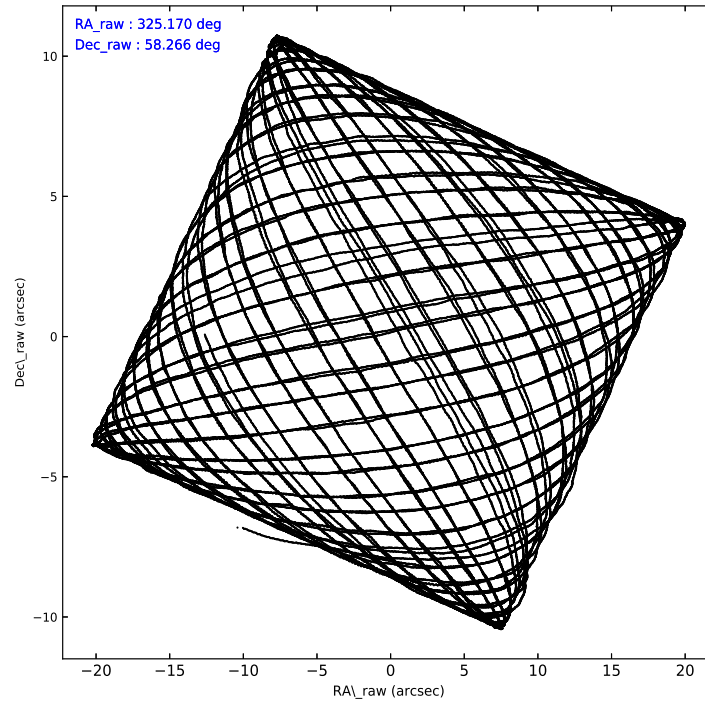
2.1.4 Events

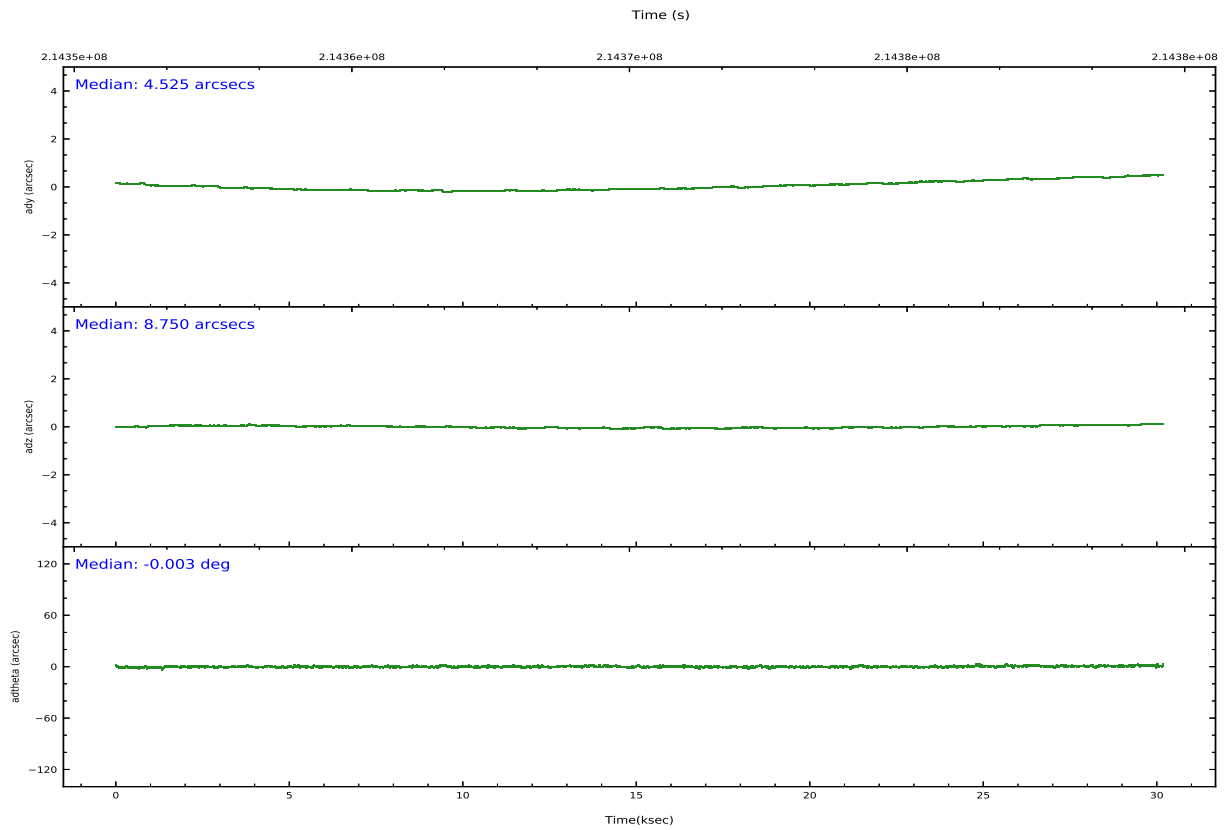
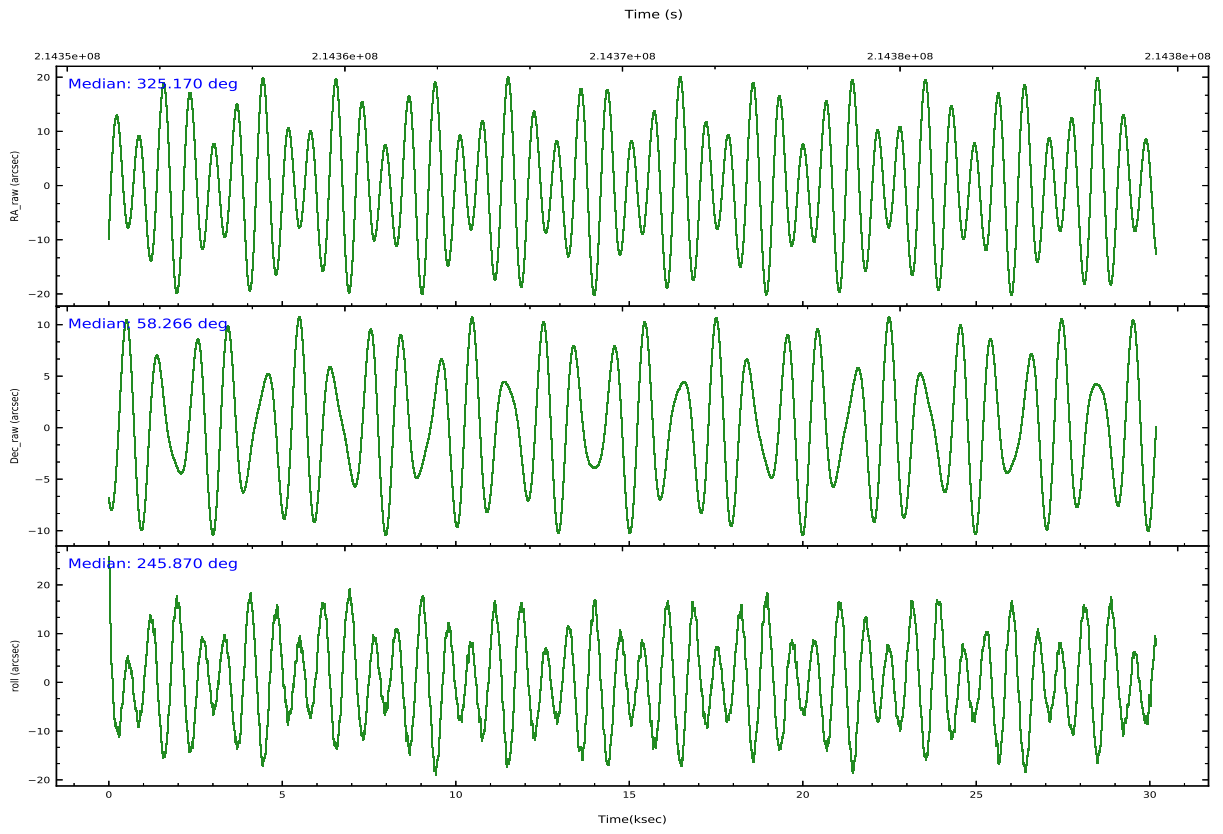
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	222222	218246	241468	234138	246397	318736	grade 0 events	13807	11577	12847	12790	10794	11511
rejected events	191849	188810	213111	205604	218399	186831		6%	5%	5%	5%	4%	3%
rejected %	86%	86%	88%	87%	88%	58%	grade 1 events	140	107	160	155	127	313
								0%	0%	0%	0%	0%	0%
							grade 2 events	6150	6463	5822	5413	6090	26383
								2%	2%	2%	2%	2%	8%
							grade 3 events	2848	2865	2540	2756	2731	11775
								1%	1%	1%	1%	1%	3%
							grade 4 events	2696	2780	2697	2704	2607	11544
								1%	1%	1%	1%	1%	3%
							grade 5 events	9646	10155	9117	10476	10886	30587
								4%	4%	3%	4%	4%	9%
							grade 6 events	4876	5755	4452	4872	5782	70709
								2%	2%	1%	2%	2%	22%
							grade 7 events	182059	178544	203833	194972	207380	155914
								81%	81%	84%	83%	84%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-012367	ACIS-012367	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	325.164671	325.16687650013	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.293432	58.268524393378	Alternating exposures requested	N	N
[deg] Pointing Roll	245.669347	245.86984665759	[s] Primary exposure time	0.000000	3.2
[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)	214353380.184000	214352406.0168			
Observation start date	2004-10-16T22:35:16	2004-10-16T22:20:06			
[s] Observation end time (MET)	214383380.184000	214384162.56822			
Observation end date	2004-10-17T06:55:16	2004-10-17T07:09:22			
Read mode	TIMED	TIMED			

2.3 Aspect



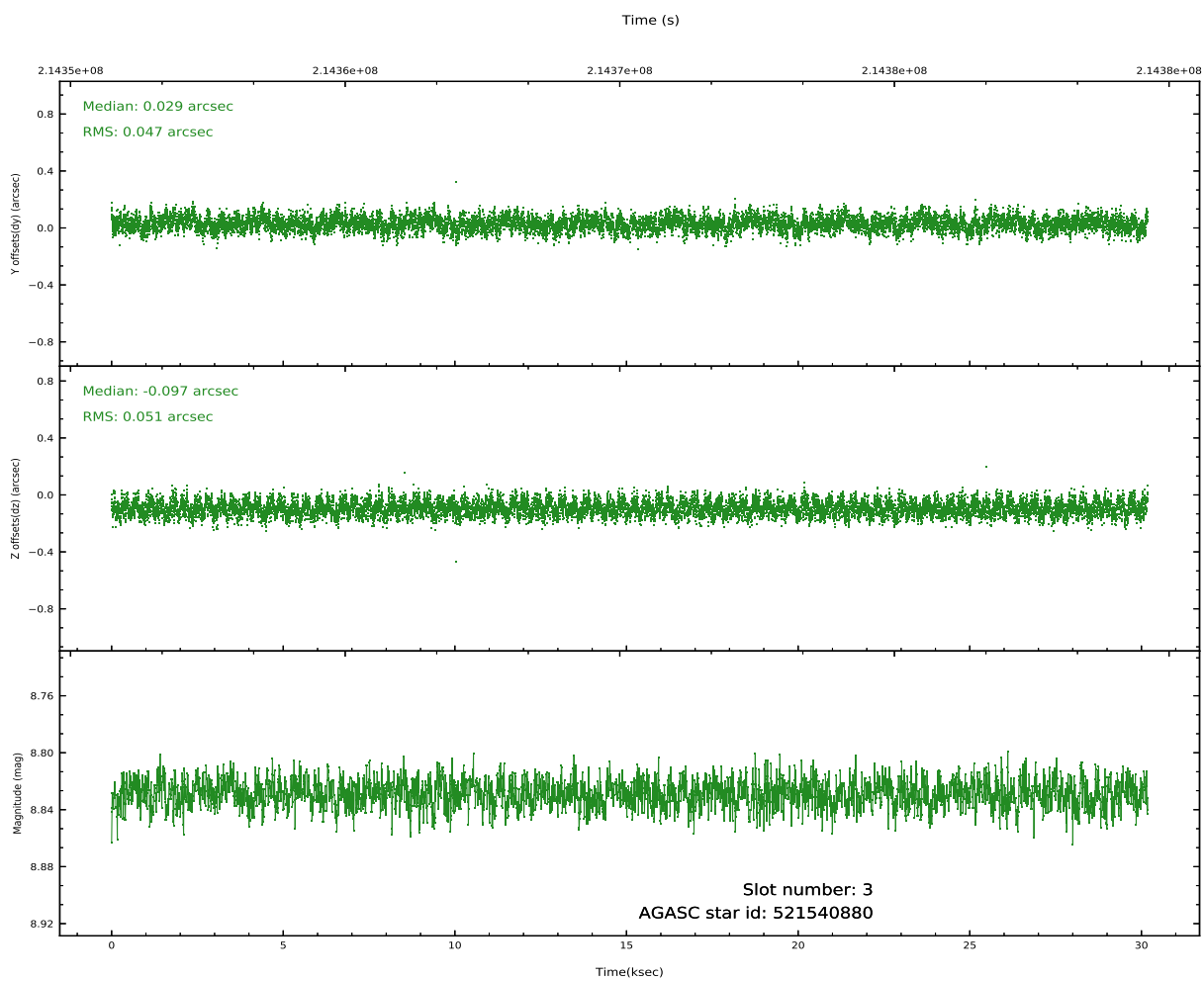
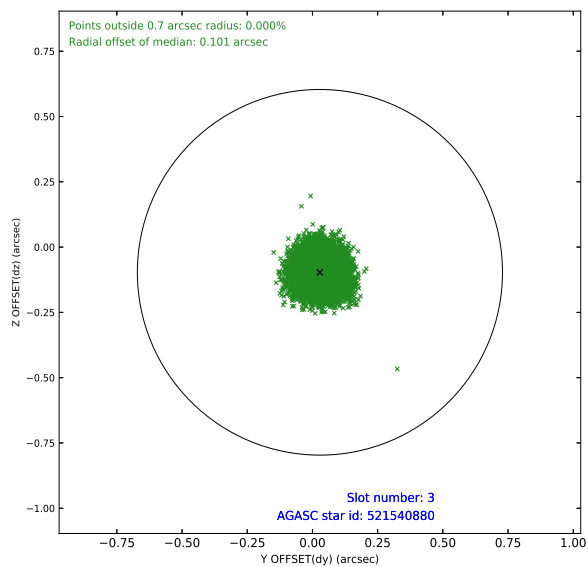
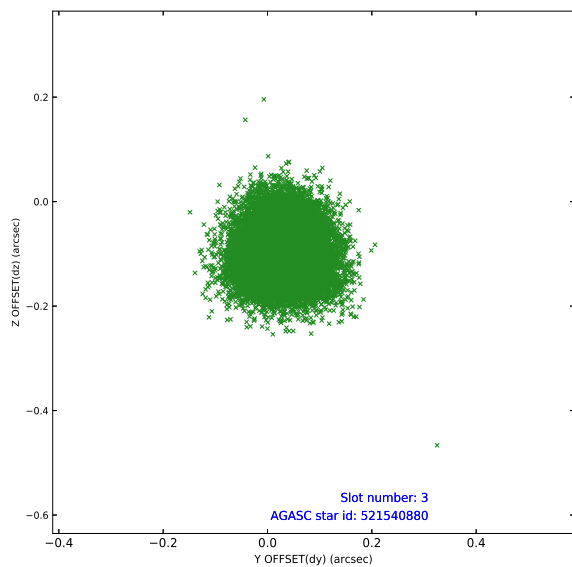


Slot Statistics

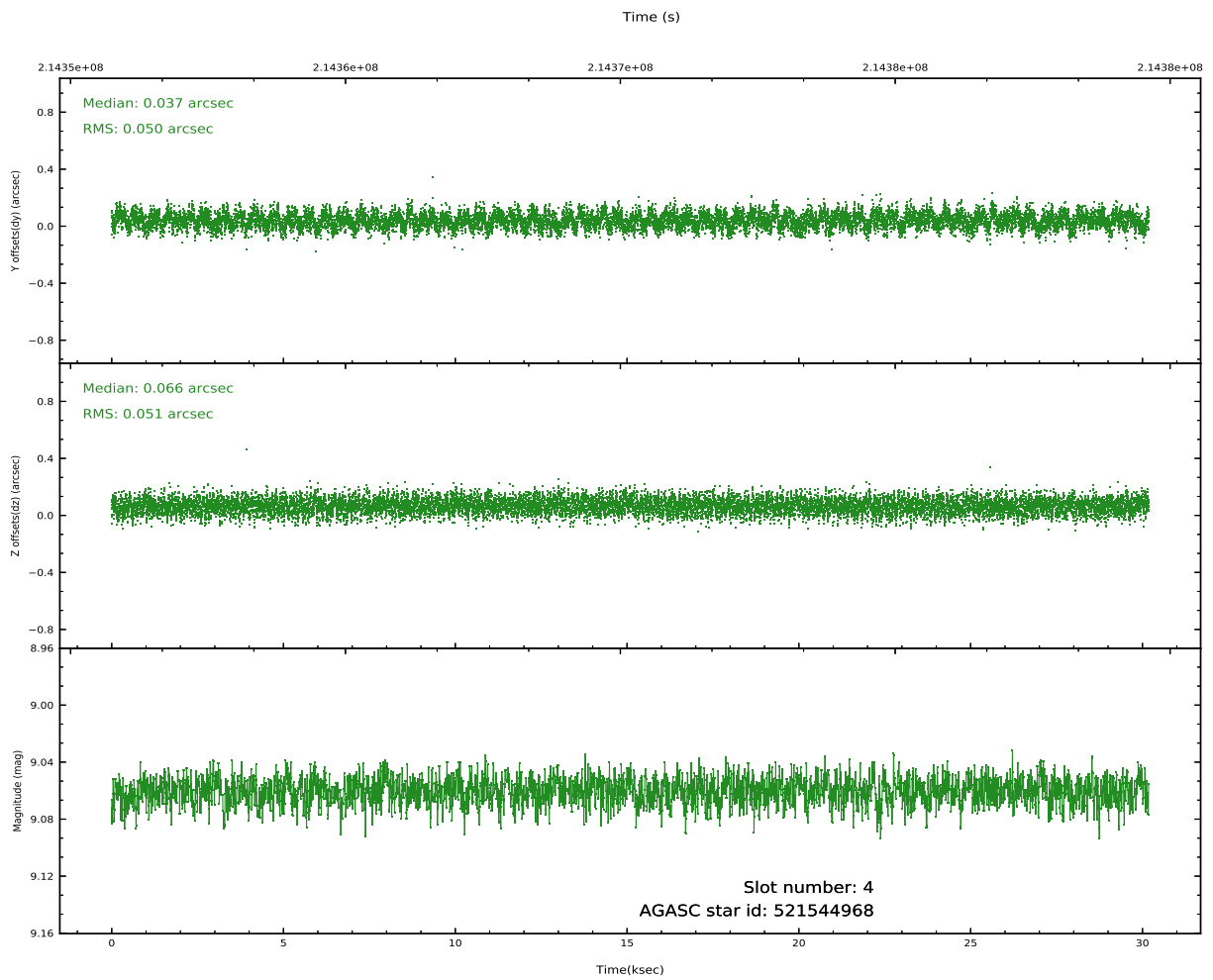
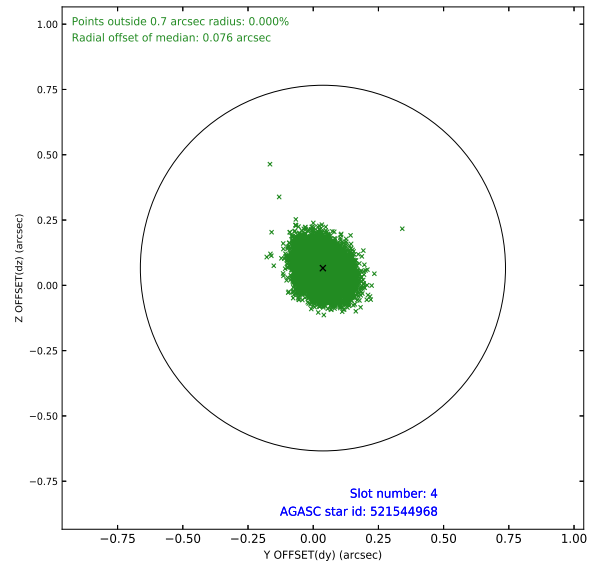
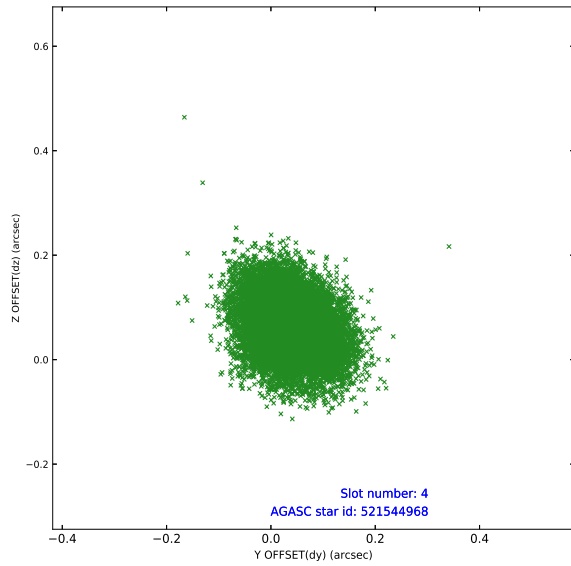
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-2	7.13	7359	1.000	-0.092	-0.093	0.010	0.019	0.000000	0.000000	-759.08	-838
1	FID		ACIS-I-4	7.17	7362	1.000	0.199	0.081	0.012	0.023	0.000000	0.000000	2155.22	1067
2	FID		ACIS-I-5	7.22	7363	1.000	-0.206	0.081	0.012	0.018	0.000000	0.000000	-1812.95	1065
3	GUIDE	used	521540880	8.83	14718	1.000	0.029	-0.097	0.075	0.117	325.493874	58.500057	-933.87	257
4	GUIDE	used	521544968	9.06	14719	1.000	0.037	0.066	0.076	0.124	325.922077	58.239799	-422.49	1384
5	GUIDE	used	521012392	9.11	14717	1.000	0.197	0.038	0.099	0.160	323.590514	58.057896	1976.80	-2396
6	GUIDE	used	521011352	8.96	14719	1.000	0.031	0.056	0.071	0.114	324.841297	57.653322	2355.54	381
7	GUIDE	used	521543600	7.99	14722	1.000	-0.293	-0.065	0.071	0.112	324.133316	58.710999	-588.24	-2382

2.4 Star Slots

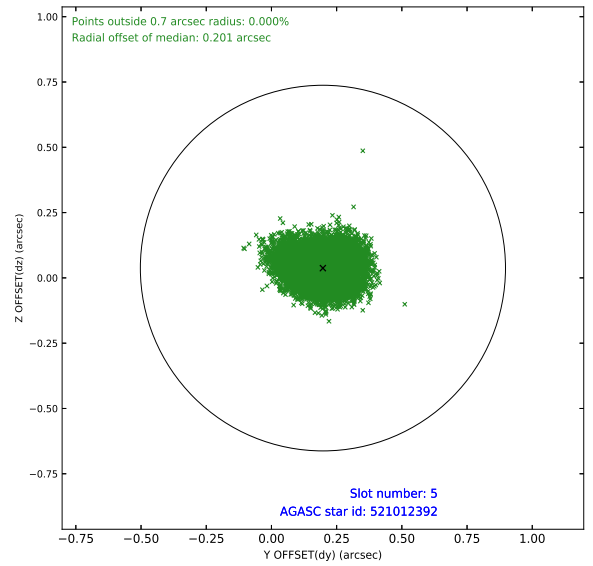
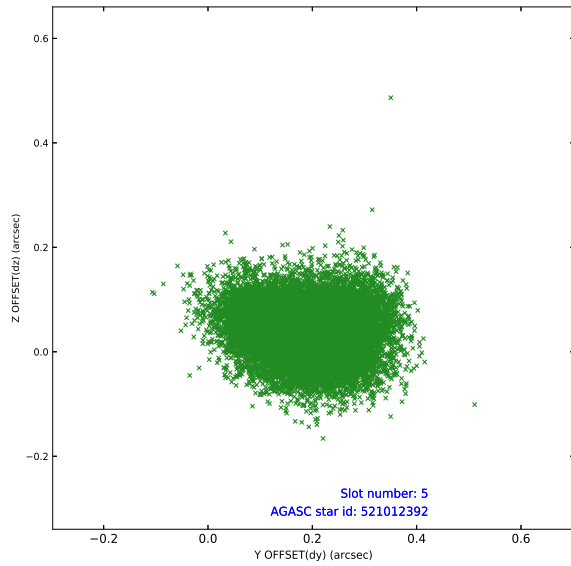
2.4.1 Slot 3



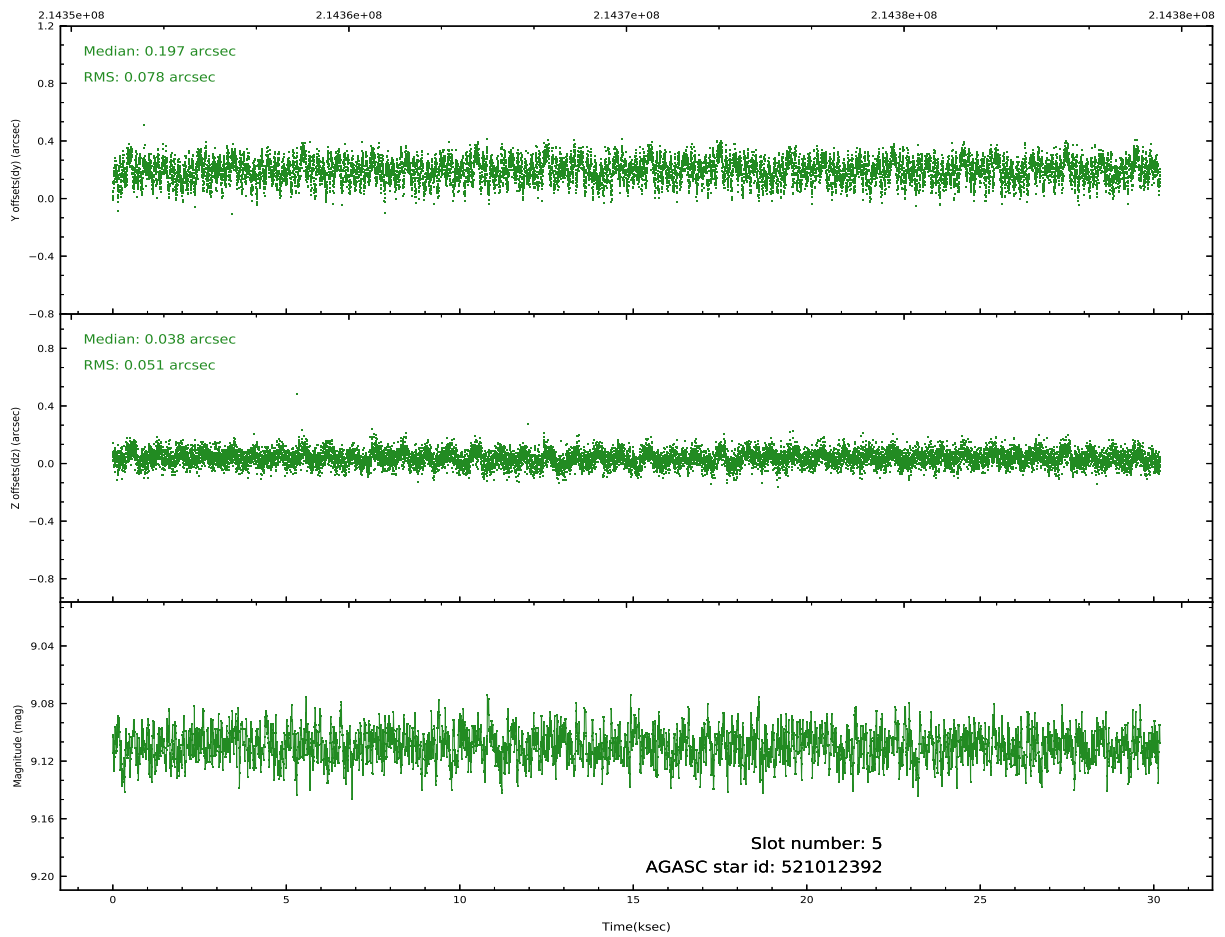
2.4.2 Slot 4



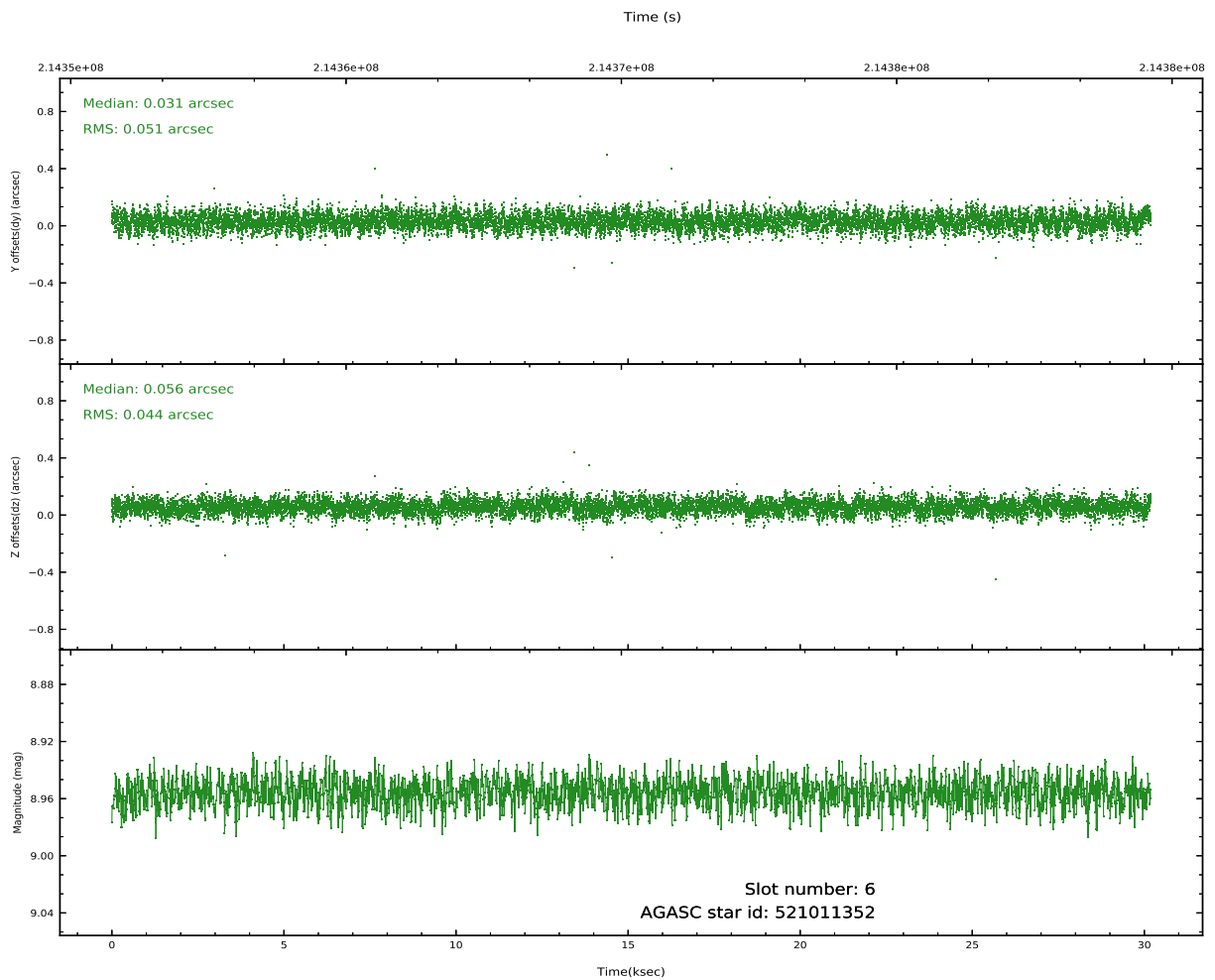
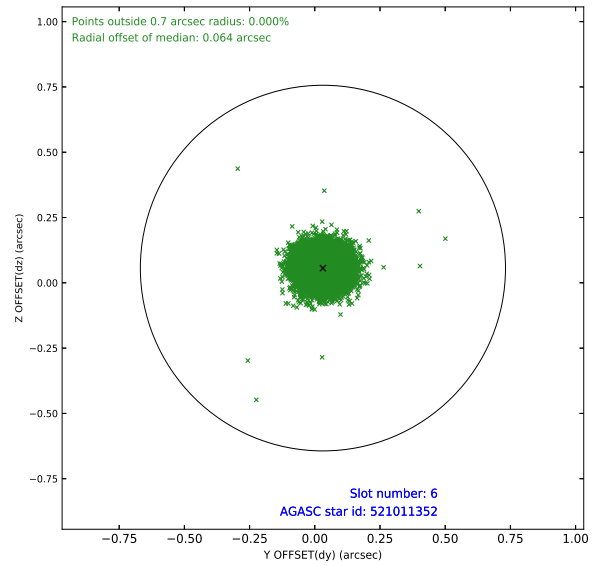
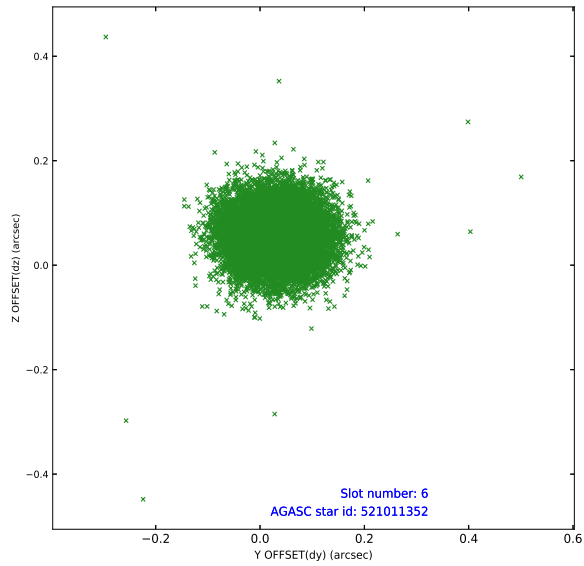
2.4.3 Slot 5



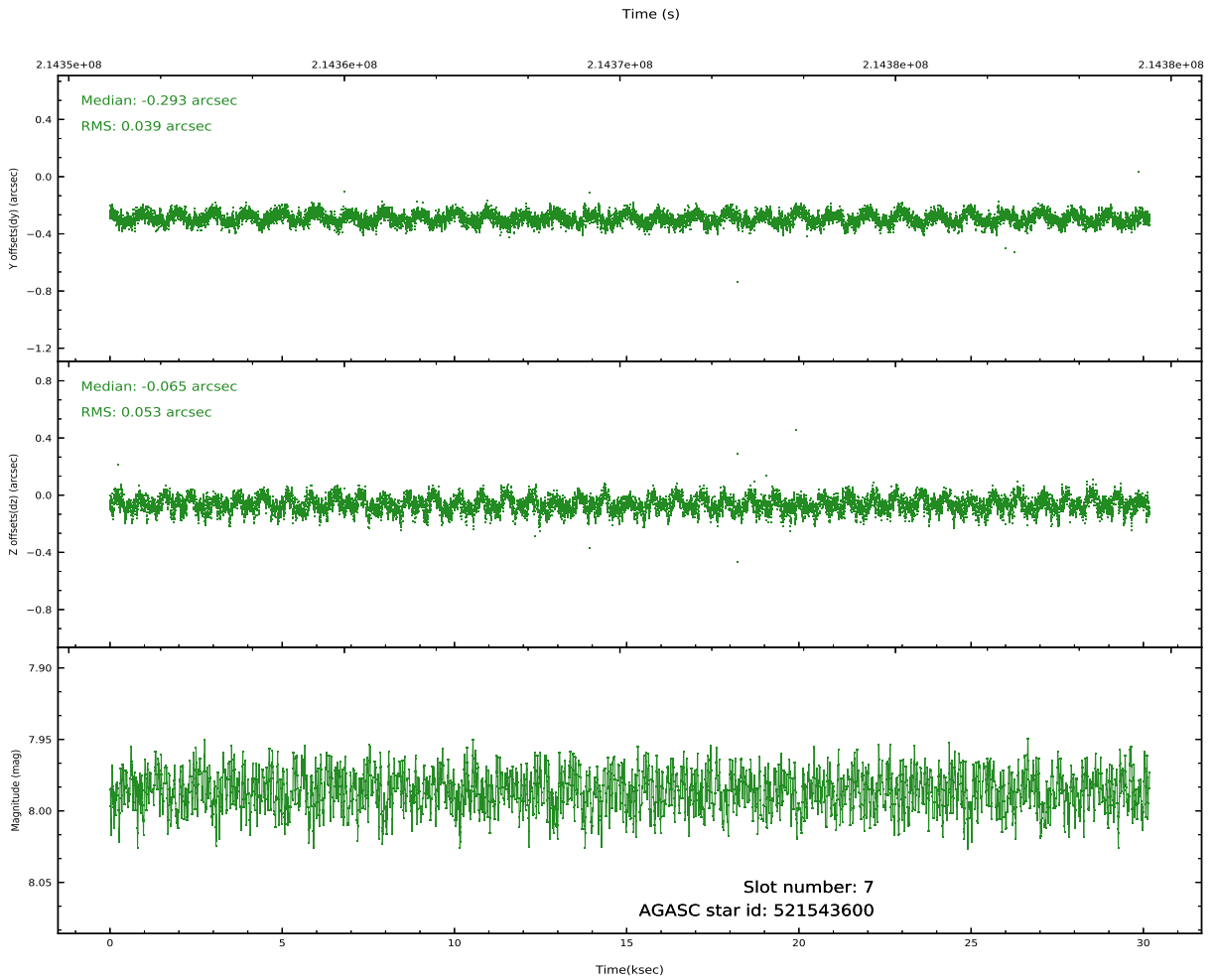
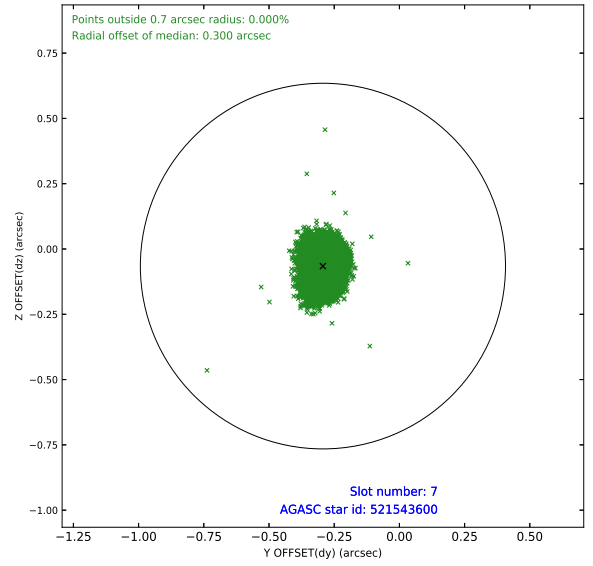
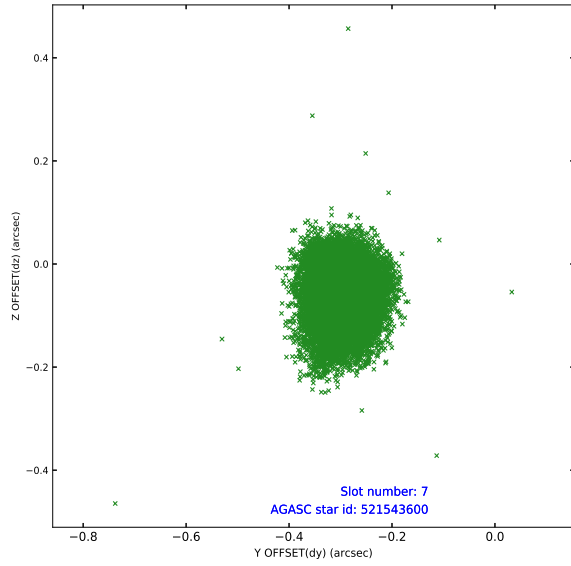
Time (s)



2.4.4 Slot 6

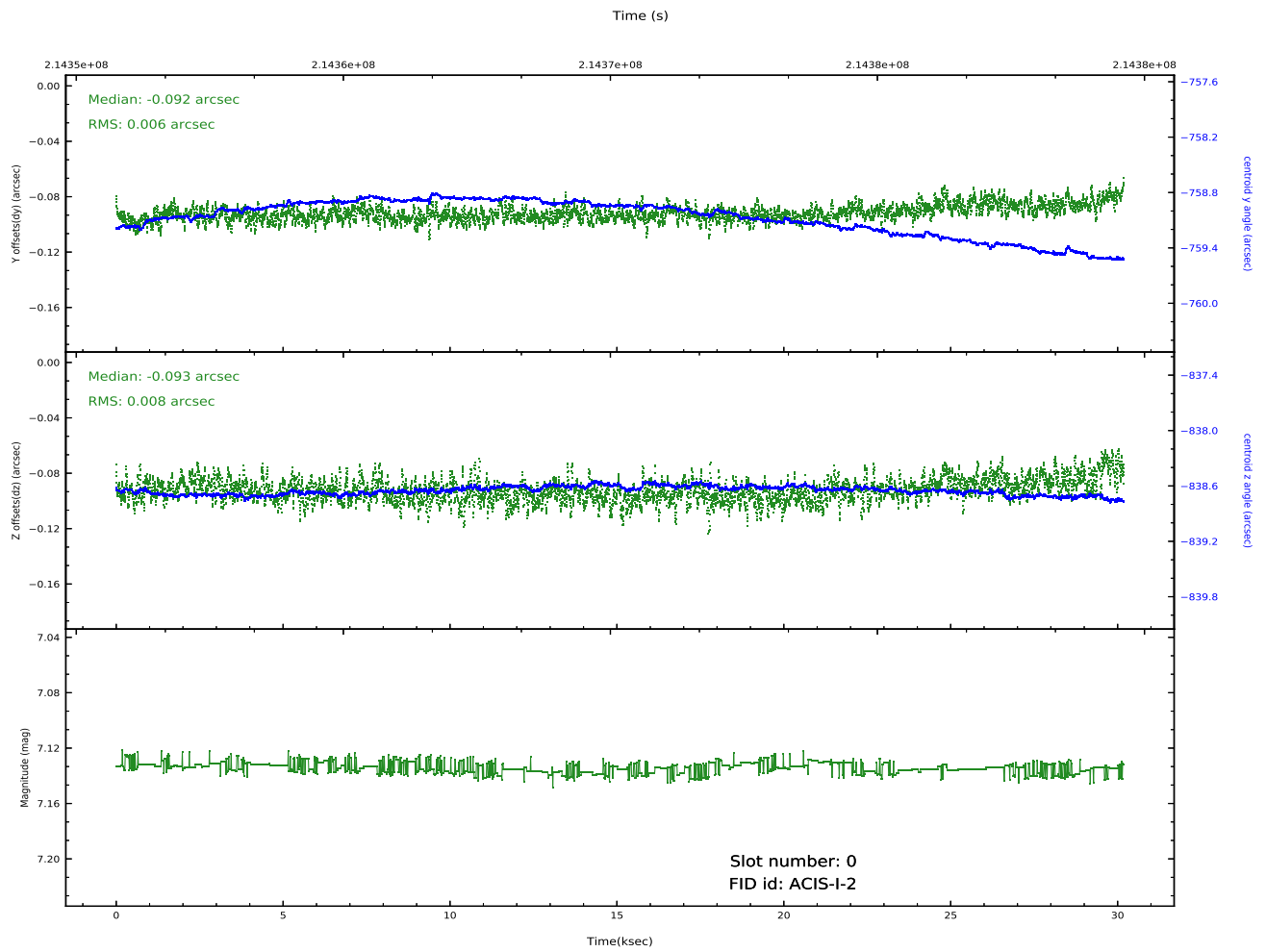
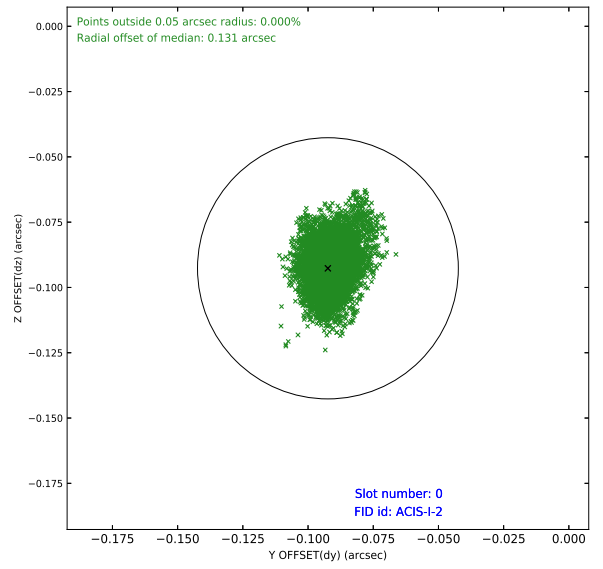
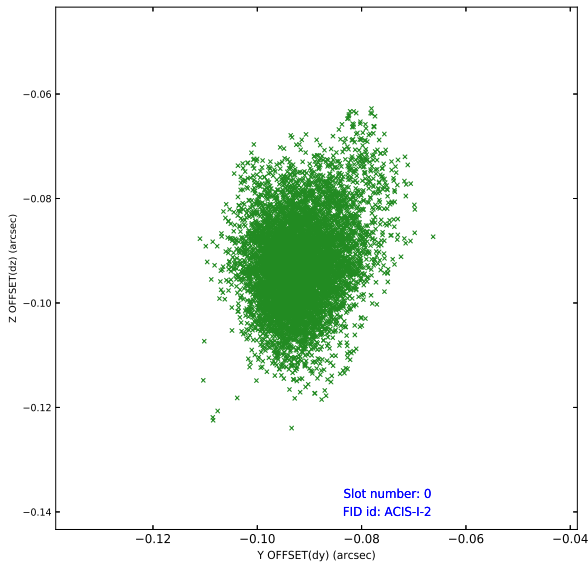


2.4.5 Slot 7

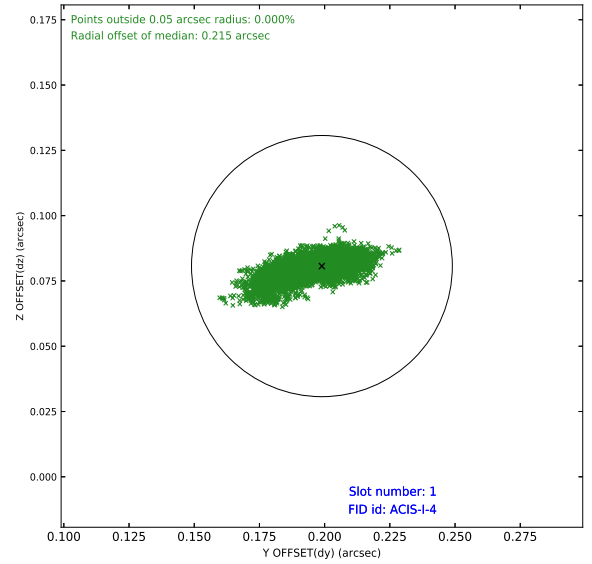
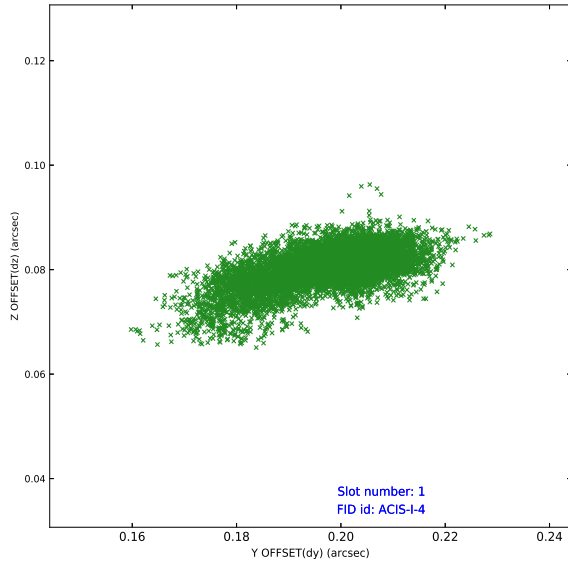


2.5 FID Slots

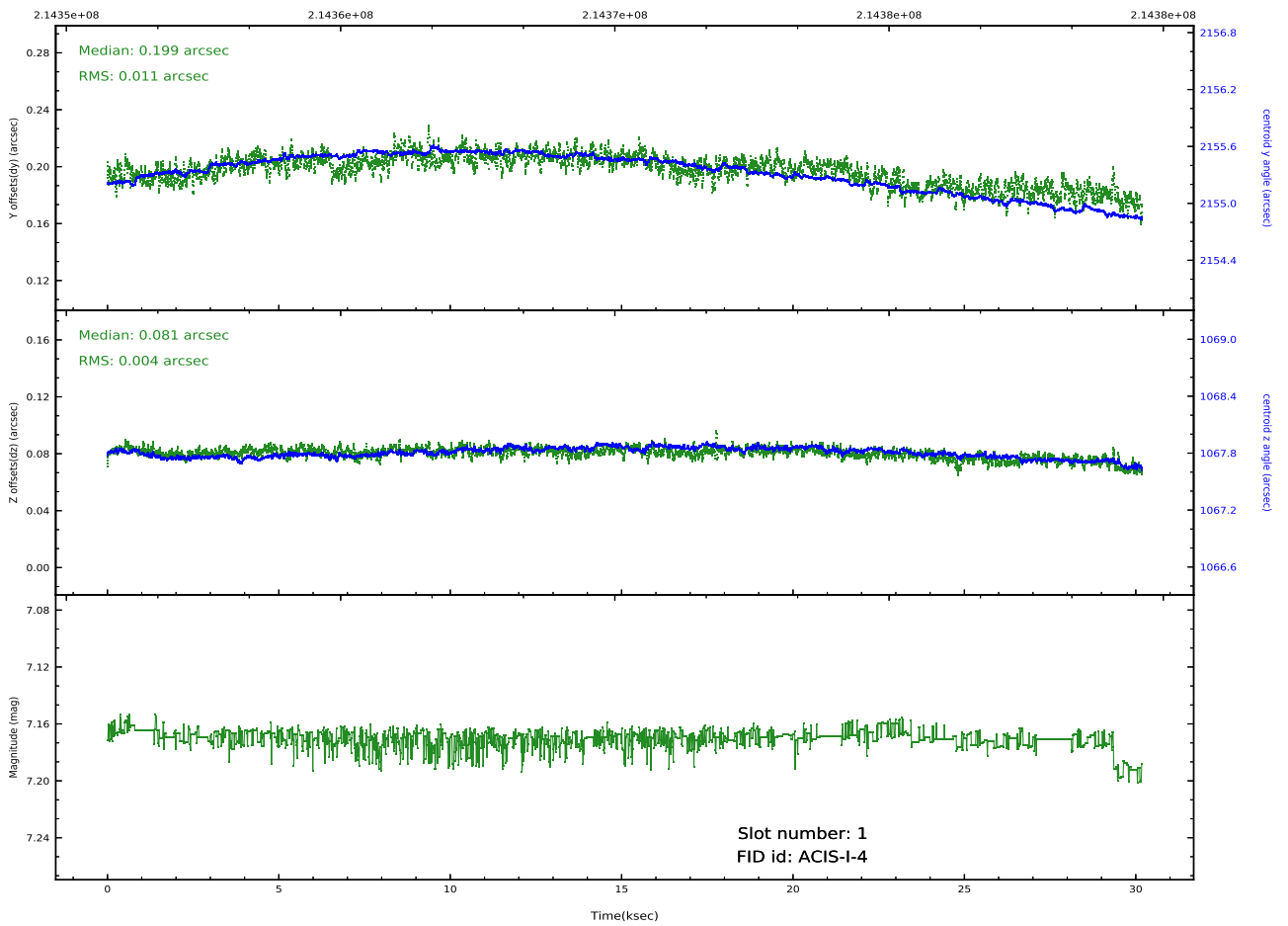
2.5.1 Slot 0



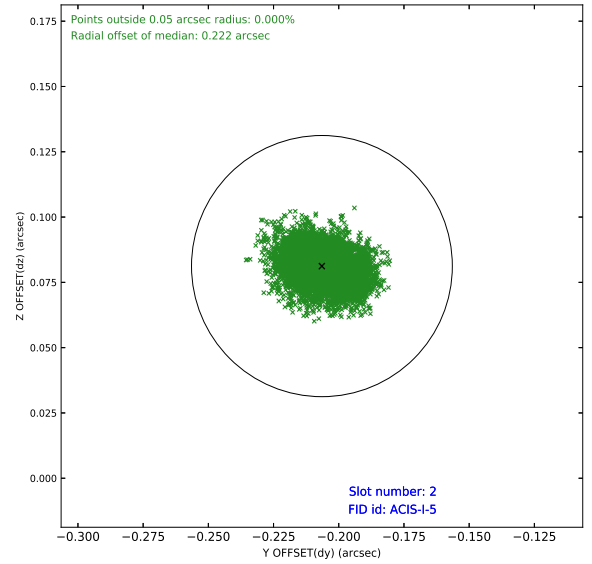
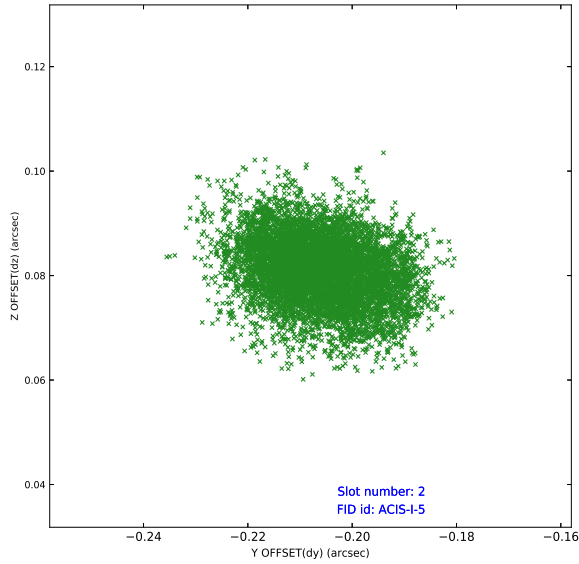
2.5.2 Slot 1



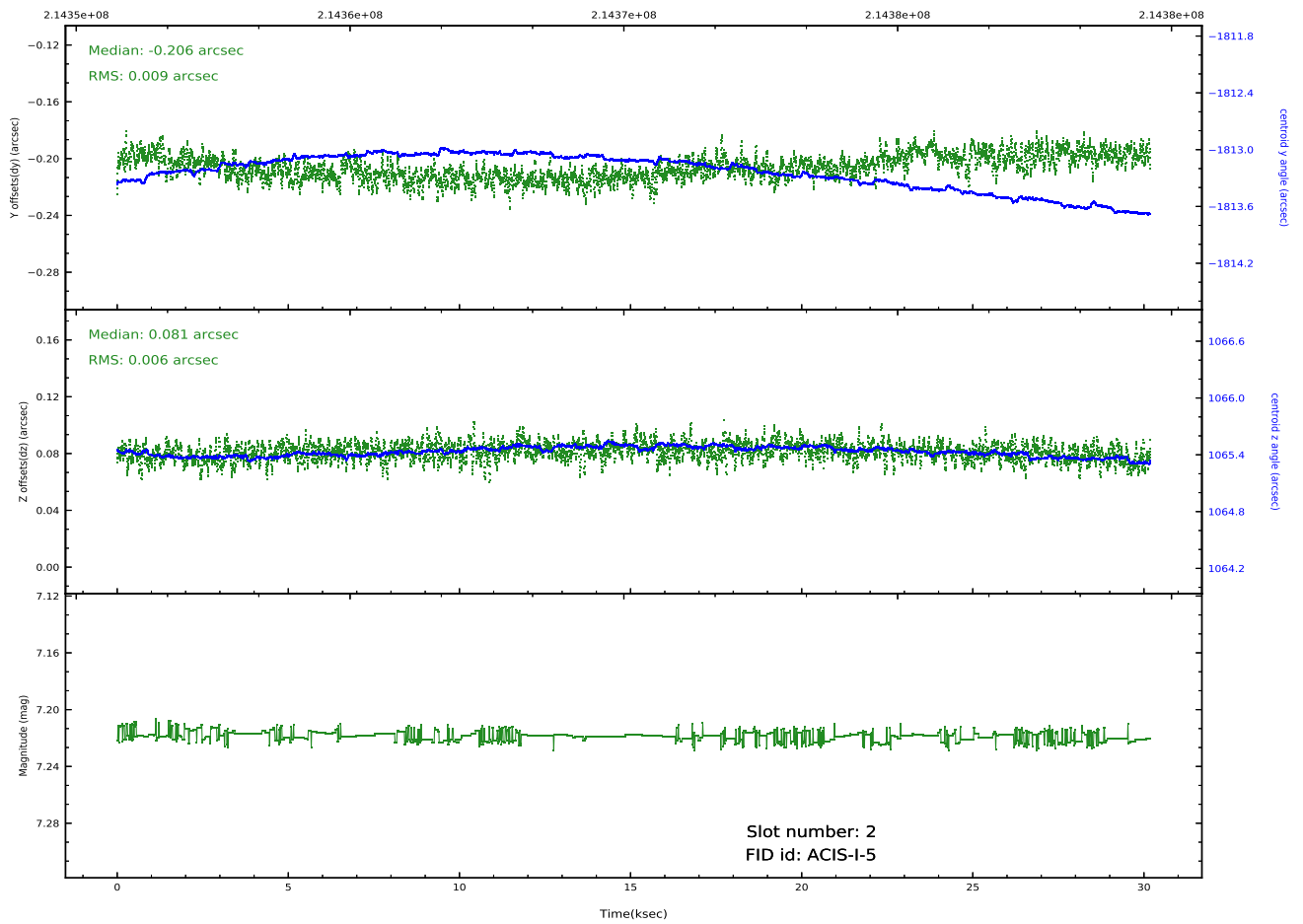
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.987

A.2 Comments