

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4627 - L2 Version 4
Chandra X-Ray Center

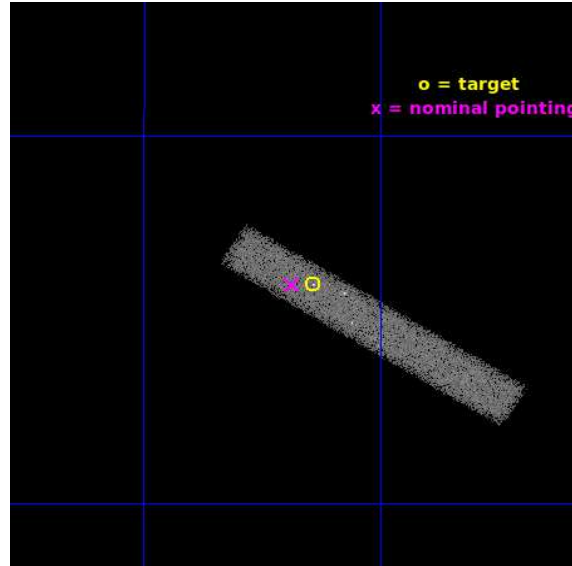
L2 Processing Date : Sep 28 2020

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1 Front

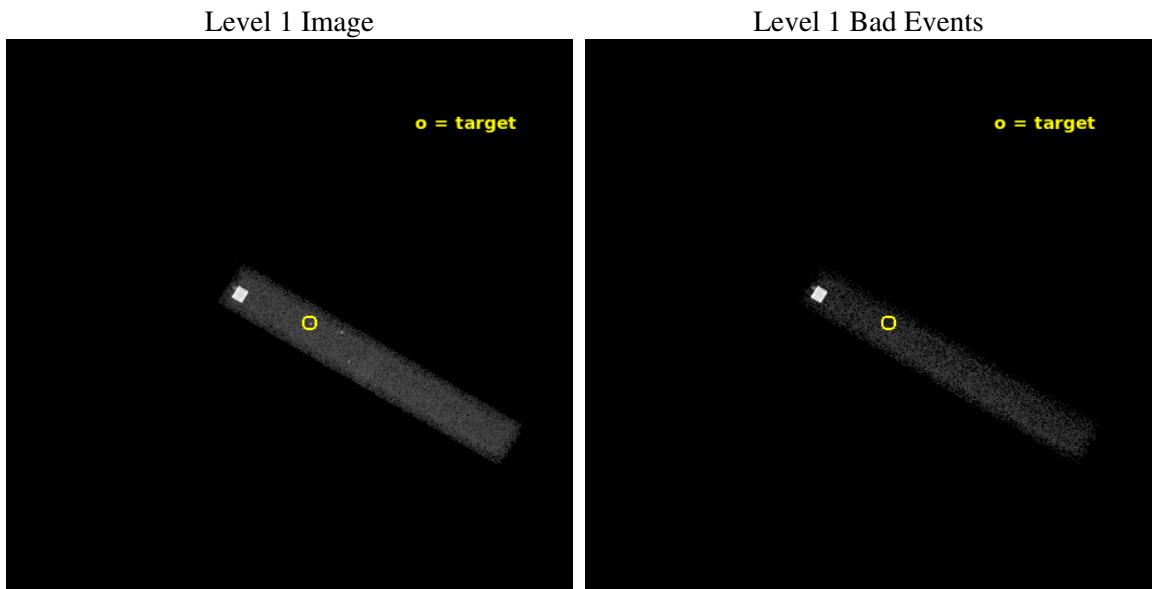
| | | |
|----------|--|---|
| seq_num | 500452 | Sequence number |
| obs_id | 4627 | Observation id |
| title | Prompt Chandra Observations of Nearby Supernovae | Proposal title |
| observer | Prof. Walter Lewin | Principal investigator |
| object | SN 2004dj | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 114.32125 | Observer's specified target RA [deg] |
| dec_targ | 65.599528 | Observer's specified target Dec [deg] |
| ra_nom | 114.34344285539 | Nominal RA [deg] |
| dec_nom | 65.599284489089 | Nominal Dec [deg] |
| roll_nom | 31.031685596108 | Nominal Roll [deg] |
| revision | 4 | Processing version of data |
| ontime | 45123.600672364 | Sum of GTIs [s] |
| livetime | 40924.723990898 | Livetime [s] |
| ontime7 | 45123.600672364 | Sum of GTIs [s] |
| l2events | 28081 | Number of level 2 events |



2 OBI

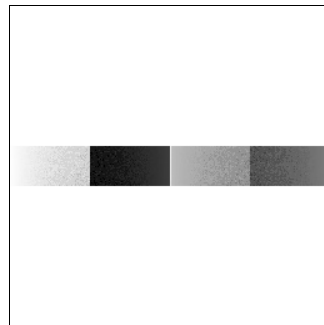
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 45000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.9.1 | Processing system revision | ontime | 45123.600672364 | Sum of GTIs [s] |
| caldbver | 4.9.2 | | ontime7 | 45123.600672364 | Sum of GTIs [s] |
| date | 2020-09-28T09:59:09 | Date and time of file creation | l1events | 374252 | Number of level 1 events |
| revision | 4 | Processing version of data | | | |

2.1.4 Events

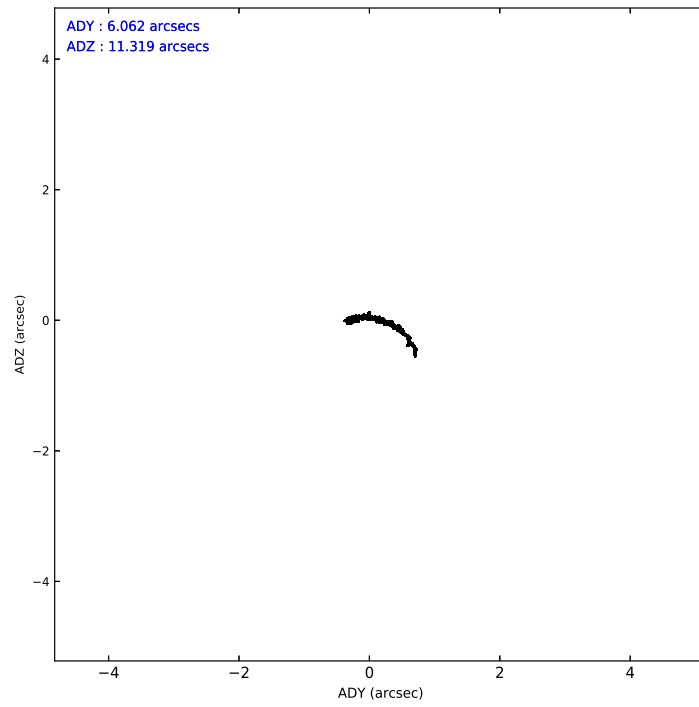
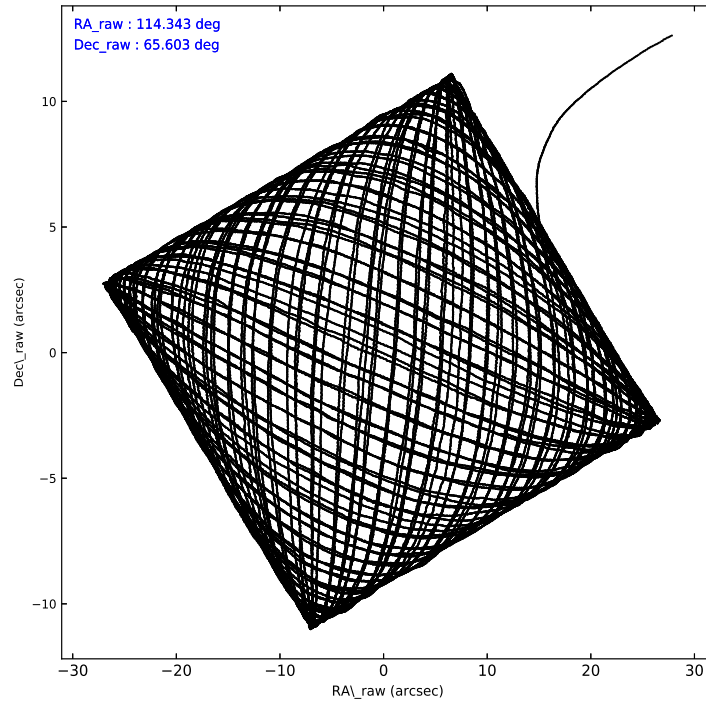
| | ccd 7 |
|-----------------|--------------|
| level 1 events | 374252 |
| rejected events | 344979 |
| rejected % | 92% |

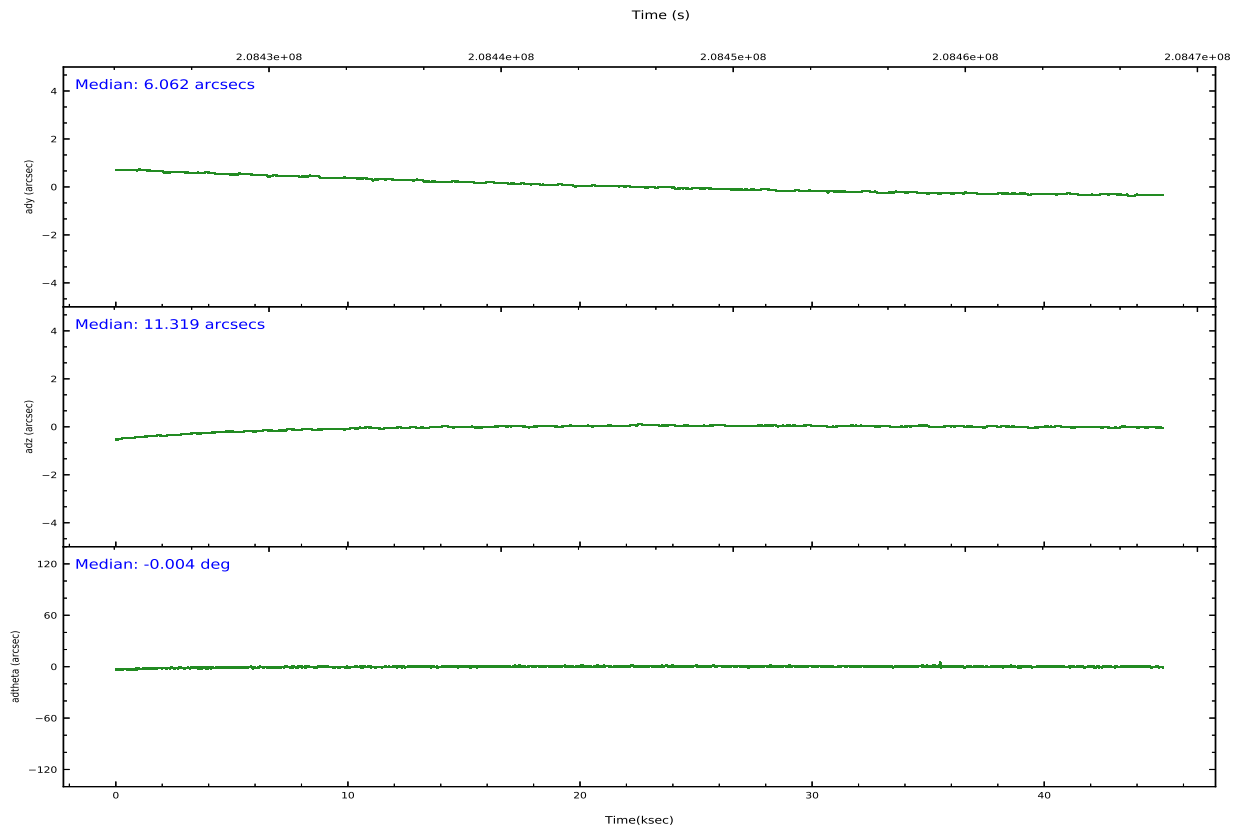
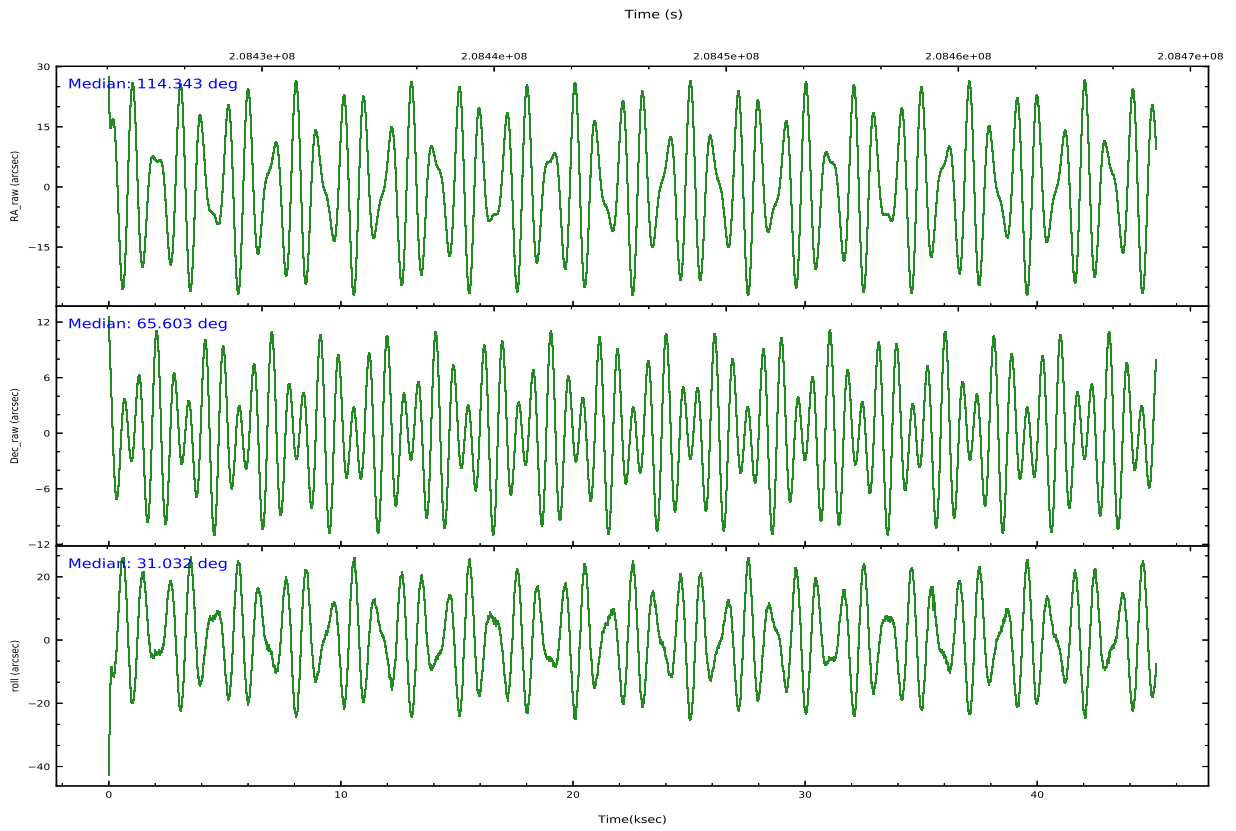
| | ccd 7 |
|----------------|--------------|
| grade 0 events | 3445 |
| | 0% |
| grade 1 events | 105144 |
| | 28% |
| grade 2 events | 5911 |
| | 1% |
| grade 3 events | 3873 |
| | 1% |
| grade 4 events | 3845 |
| | 1% |
| grade 5 events | 5803 |
| | 1% |
| grade 6 events | 13075 |
| | 3% |
| grade 7 events | 233156 |
| | 62% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar version number | 8 | 8 |
| Detector | ACIS-7 | ACIS-7 | 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 | 114.312013 | 114.34344285539 | Subarray requested | CUSTOM | 1/8 |
| [deg] Pointing Dec | 65.578978 | 65.599284489089 | Subarray start row | 449 | 449 |
| [deg] Pointing Roll | 30.904645 | 31.031685596108 | Subarray row count | 128 | 128 |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | Alternating exposures requested | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | [s] Primary exposure time | 0.000000 | 0.4 |
| [mm] SIM translation stage pos | -190.132523 | -190.1400660498719 | | | |
| [mm] SIM translation stage offset | 0 | 0.00754346686406393 | | | |
| [s] Observation start time (MET) | 208423522.184000 | 208422025.32722 | | | |
| Observation start date | 2004-08-09T07:24:18 | 2004-08-09T07:00:25 | | | |
| [s] Observation end time (MET) | 208468522.184000 | 208469311.14182 | | | |
| Observation end date | 2004-08-09T19:54:18 | 2004-08-09T20:08:31 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect





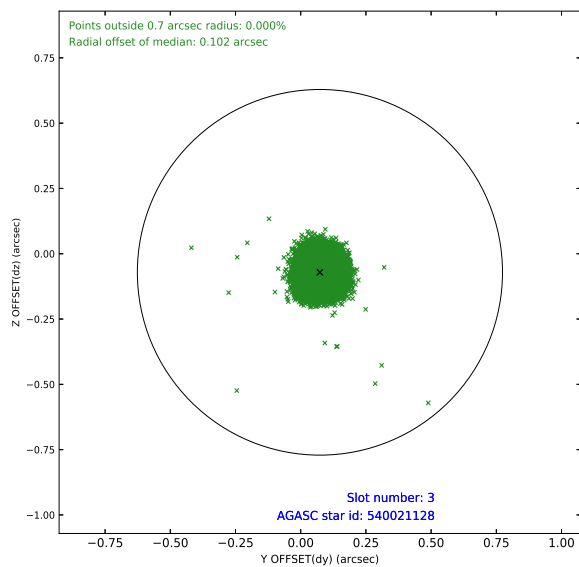
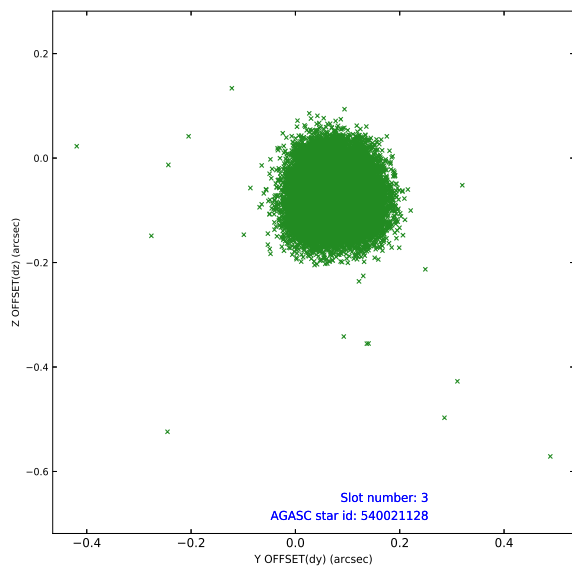
Slot Statistics

| slot | status | used | id | mag | n_pts | frac_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_x |
|------|--------|------|-----------|------|-------|----------|--------|--------|-------|-------|------------|-----------|----------|--------|
| 0 | FID | | ACIS-S-1 | 7.18 | 11006 | 1.000 | 0.086 | -0.042 | 0.007 | 0.012 | 0.000000 | 0.000000 | 937.23 | -1728 |
| 1 | FID | | ACIS-S-2 | 7.10 | 11005 | 1.000 | -0.039 | 0.005 | 0.007 | 0.011 | 0.000000 | 0.000000 | -758.80 | -1732 |
| 2 | FID | | ACIS-S-5 | 7.23 | 11006 | 1.000 | -0.071 | 0.043 | 0.007 | 0.012 | 0.000000 | 0.000000 | -1812.04 | 169 |
| 3 | GUIDE | used | 540021128 | 8.40 | 22002 | 1.000 | 0.074 | -0.071 | 0.067 | 0.103 | 114.291258 | 65.330448 | -485.73 | -751 |
| 4 | GUIDE | used | 540021904 | 8.73 | 22002 | 1.000 | 0.078 | -0.006 | 0.084 | 0.137 | 114.203372 | 65.242134 | -762.93 | -956 |
| 5 | GUIDE | used | 540152256 | 7.77 | 22010 | 1.000 | -0.176 | 0.119 | 0.055 | 0.090 | 116.023663 | 65.438119 | 1955.15 | -1720 |
| 6 | GUIDE | used | 540543672 | 9.06 | 21998 | 1.000 | 0.037 | 0.027 | 0.082 | 0.133 | 114.975339 | 66.278476 | 2120.43 | 1671 |
| 7 | GUIDE | used | 540541056 | 8.91 | 22006 | 1.000 | -0.009 | -0.064 | 0.066 | 0.107 | 114.633382 | 66.183962 | 1520.12 | 1629 |

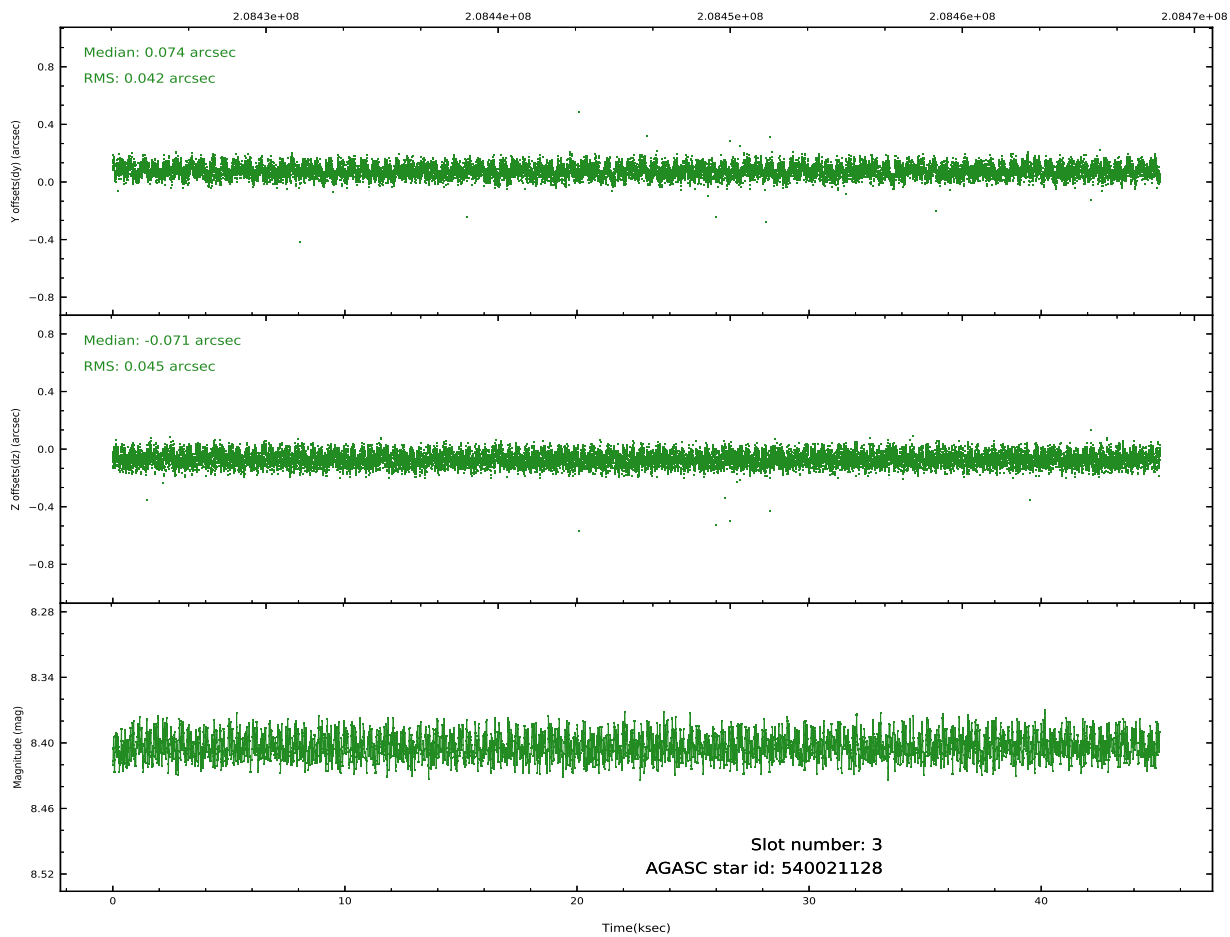
∞

2.4 Star Slots

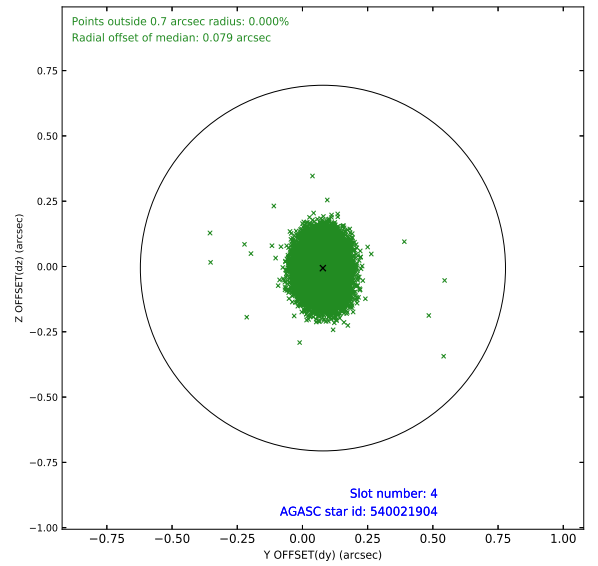
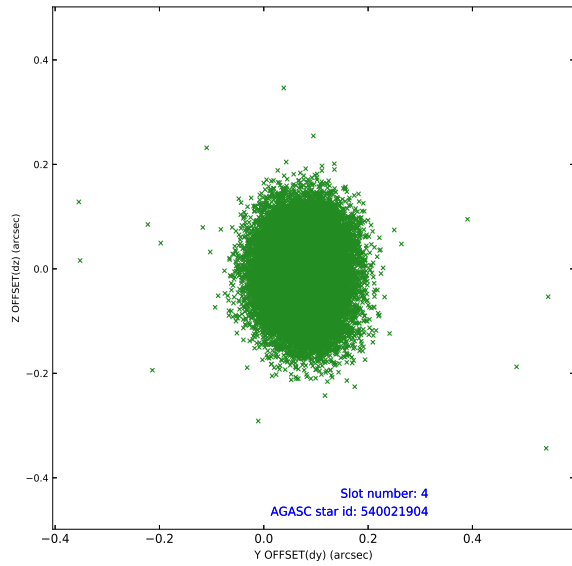
2.4.1 Slot 3



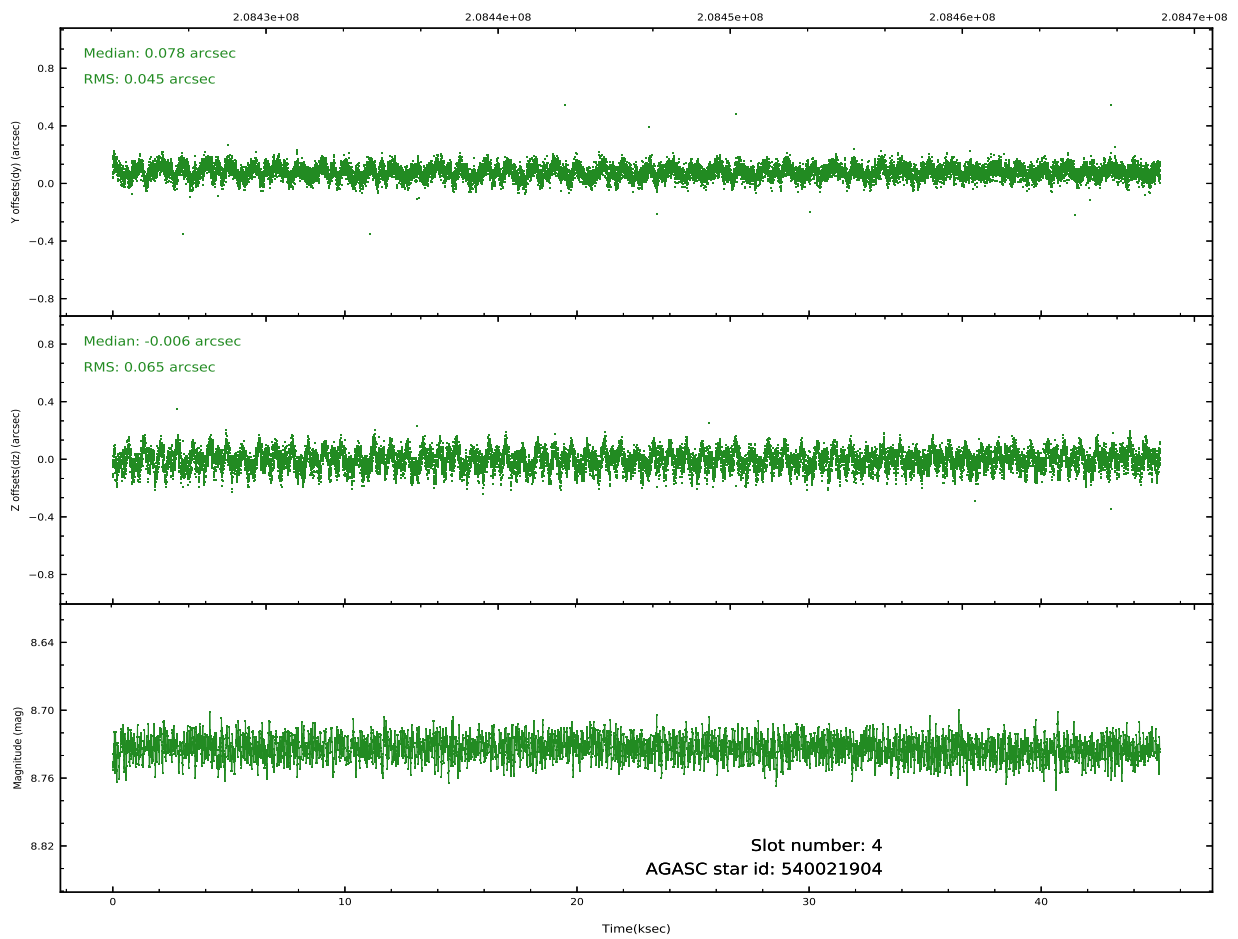
Time (s)



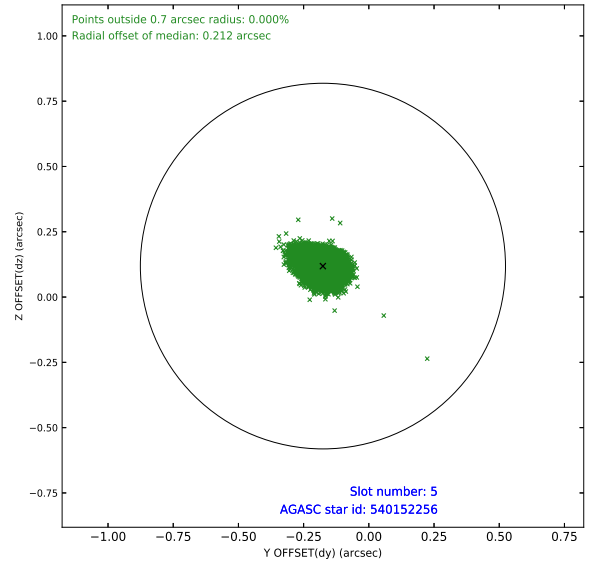
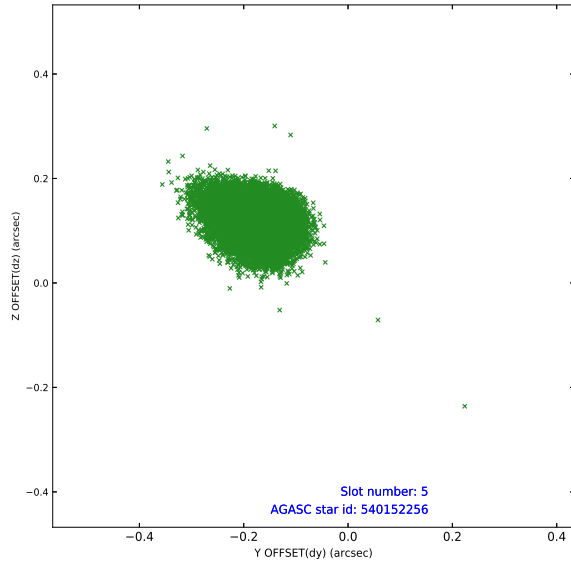
2.4.2 Slot 4



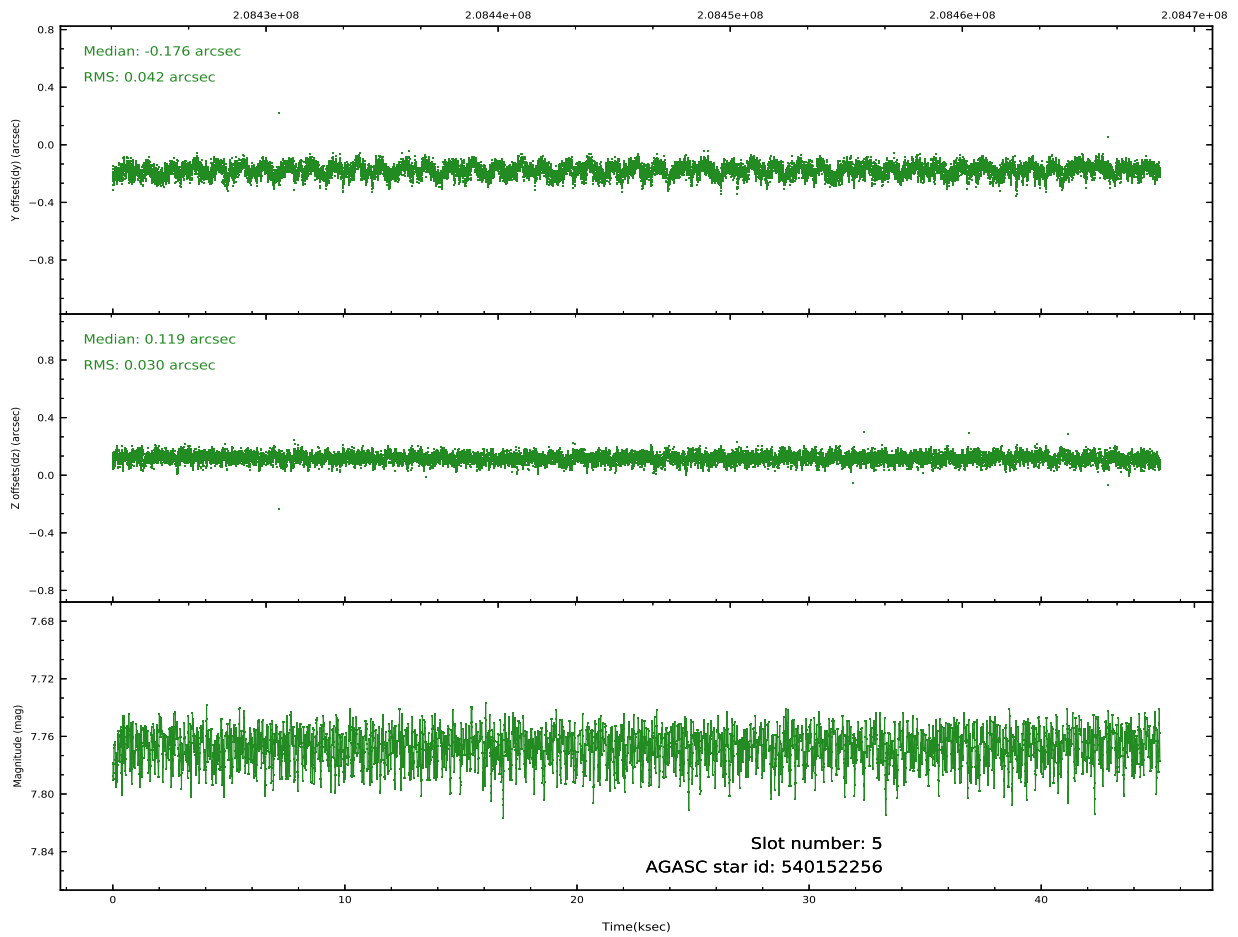
Time (s)



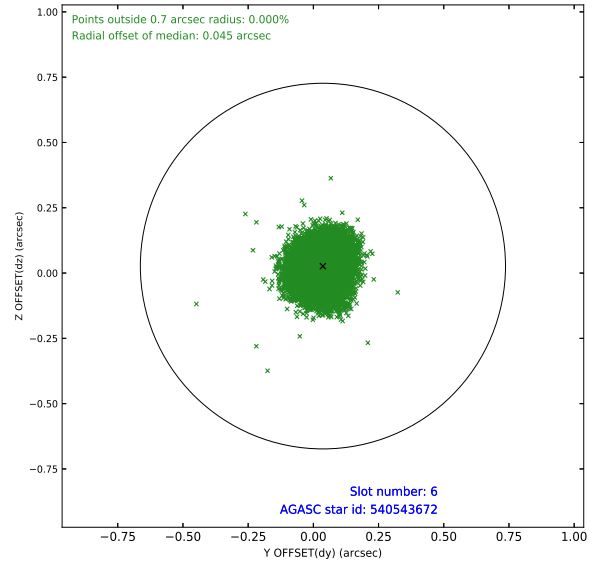
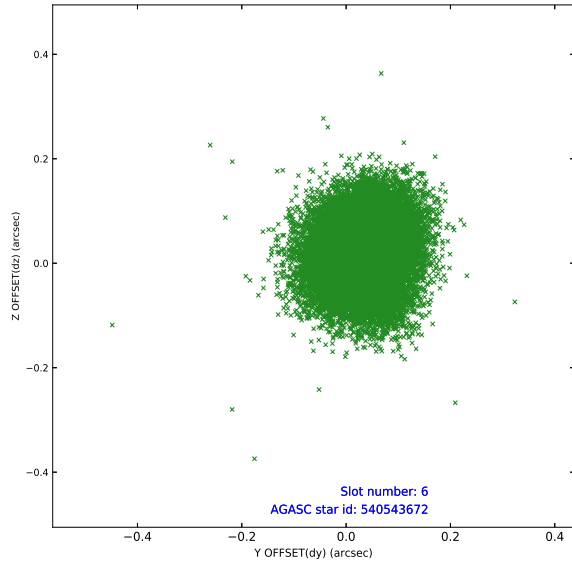
2.4.3 Slot 5



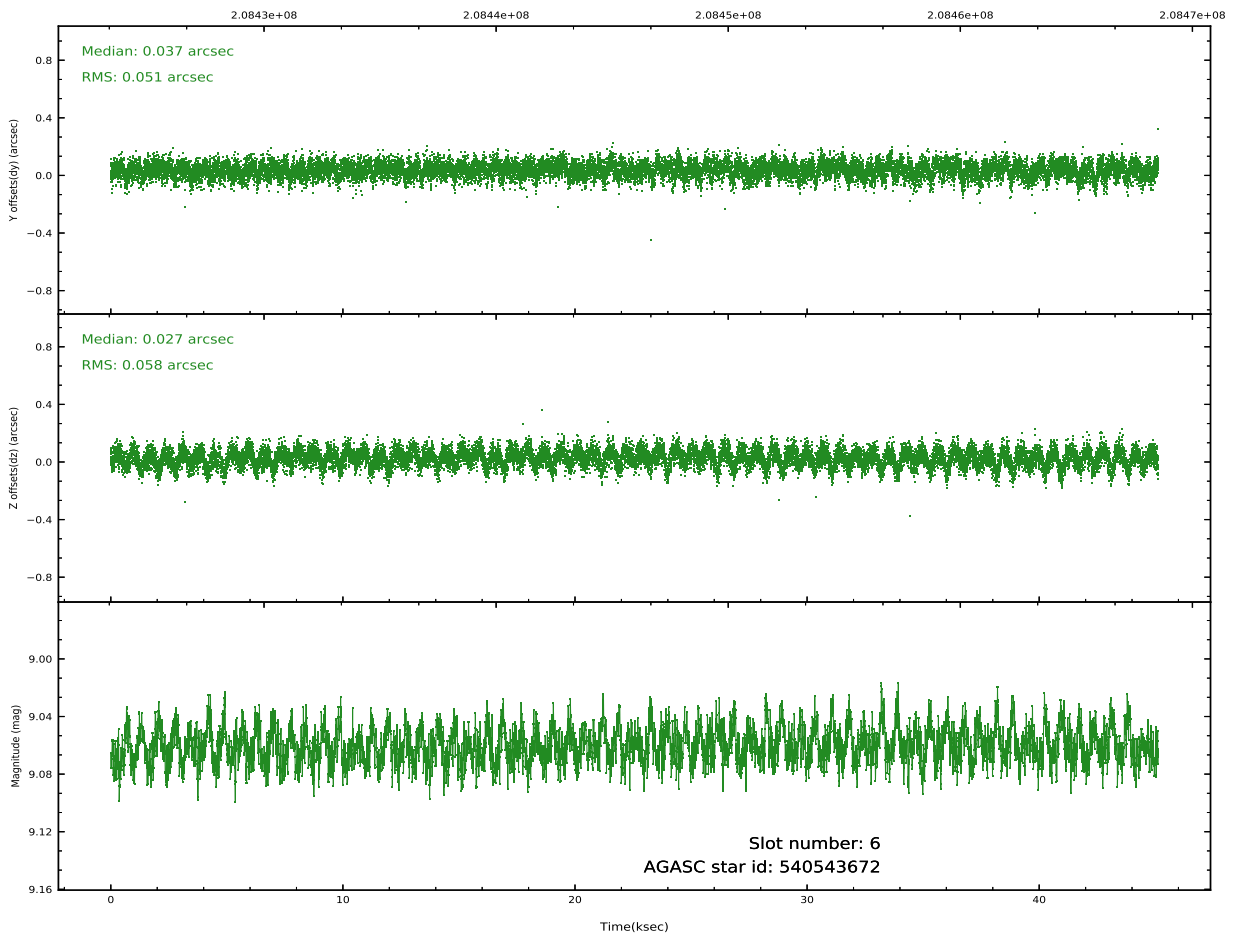
Time (s)



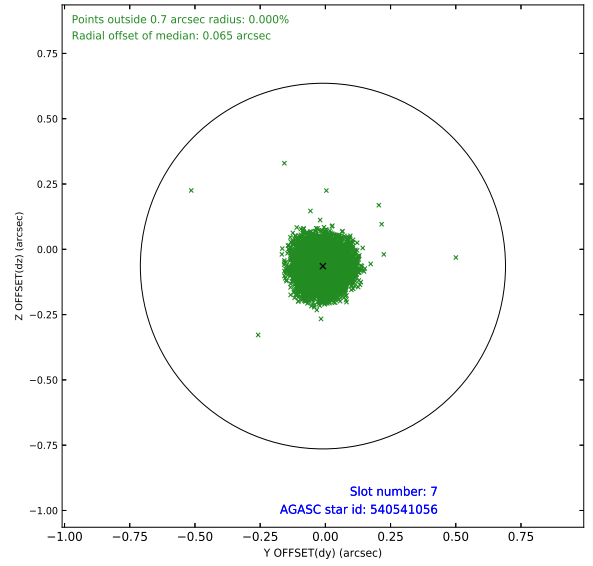
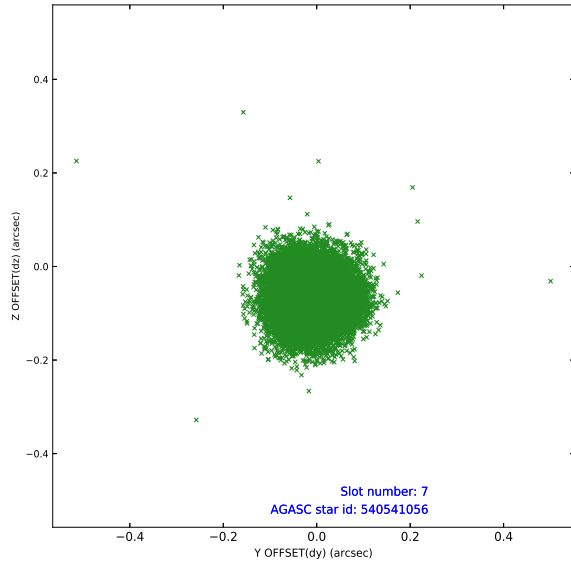
2.4.4 Slot 6



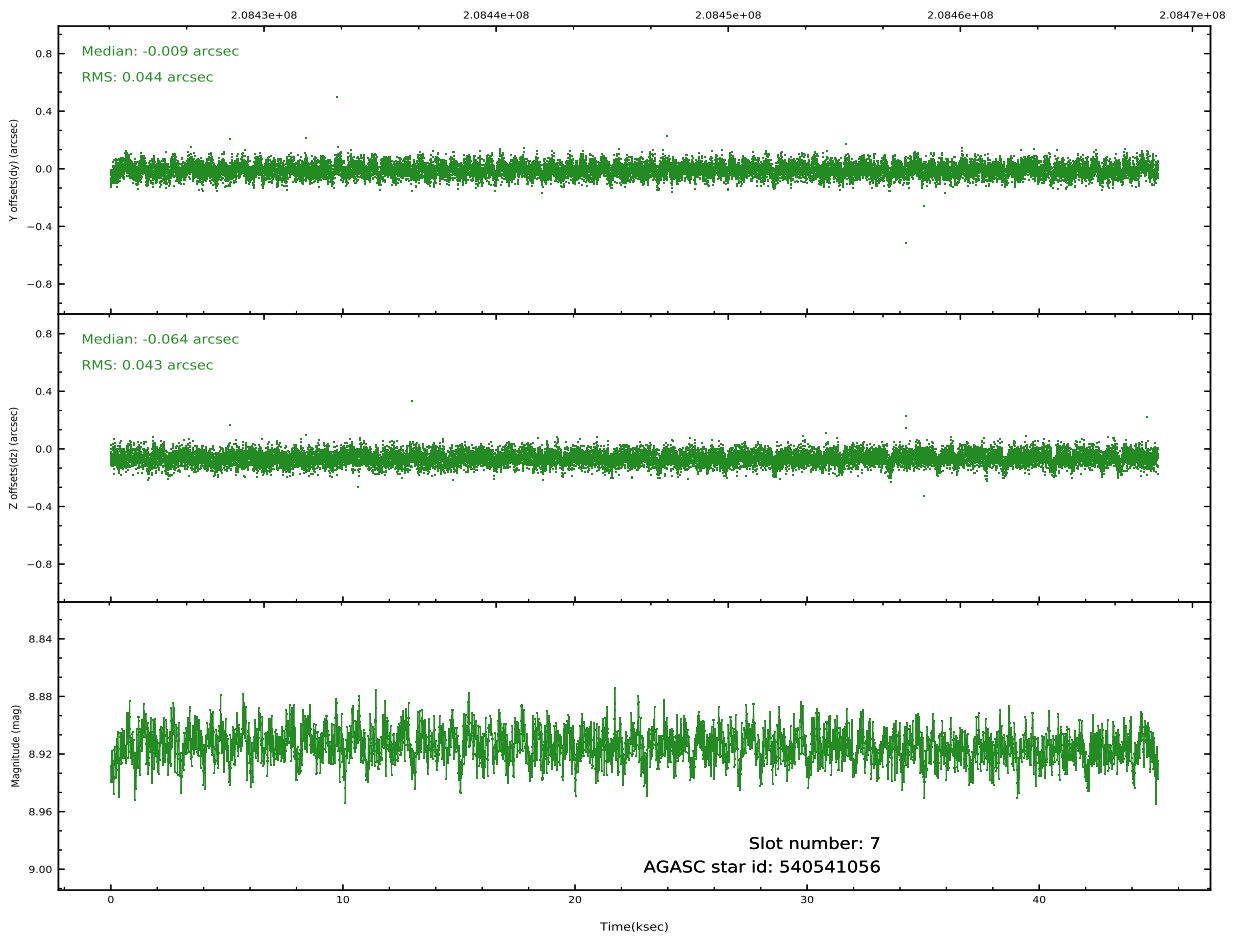
Time (s)



2.4.5 Slot 7

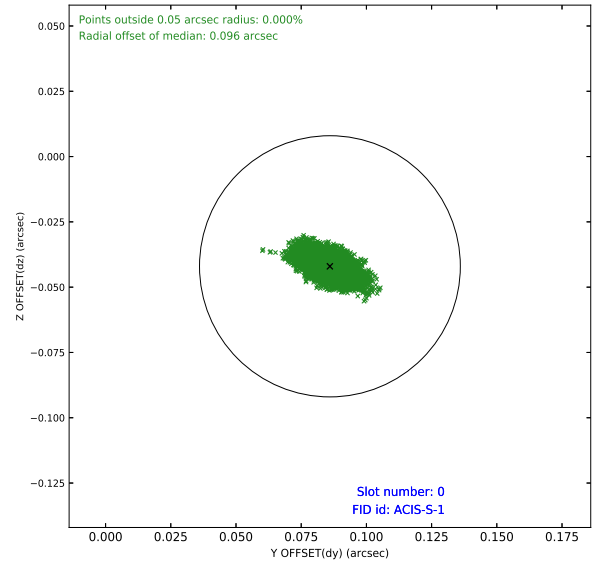
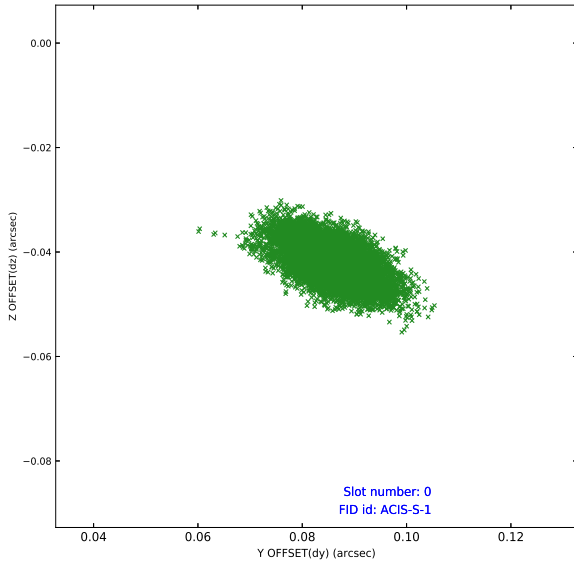


Time (s)

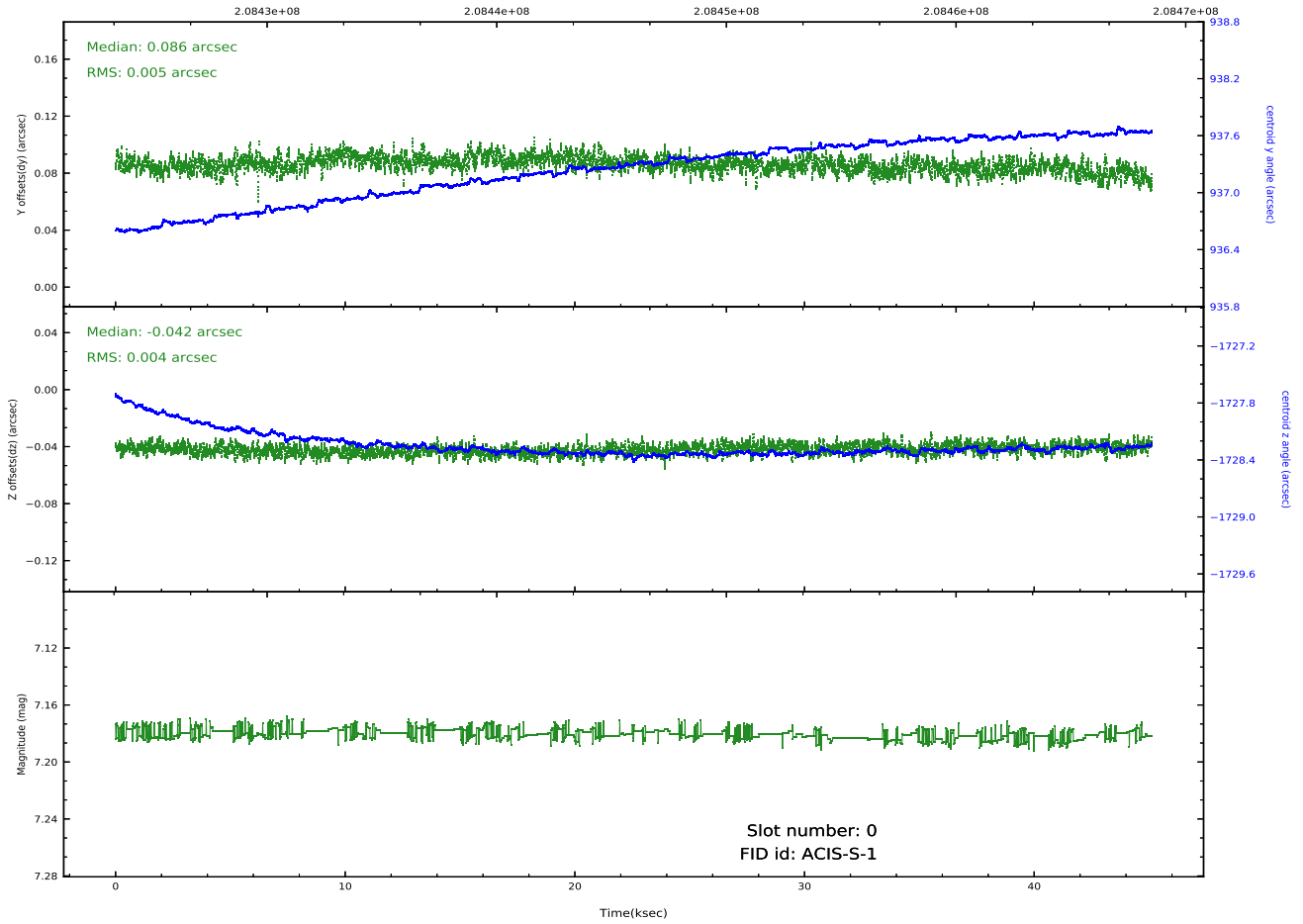


2.5 FID Slots

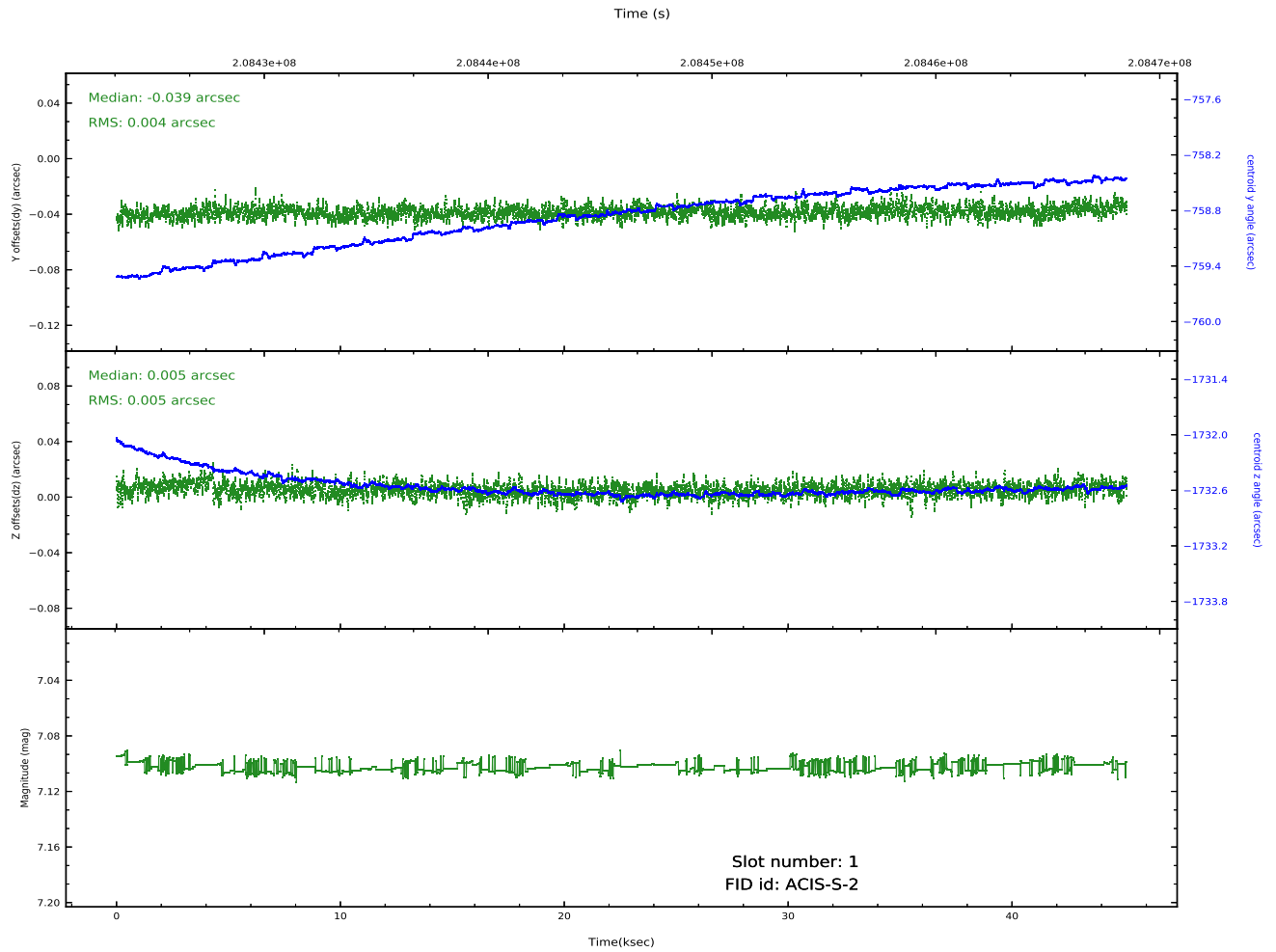
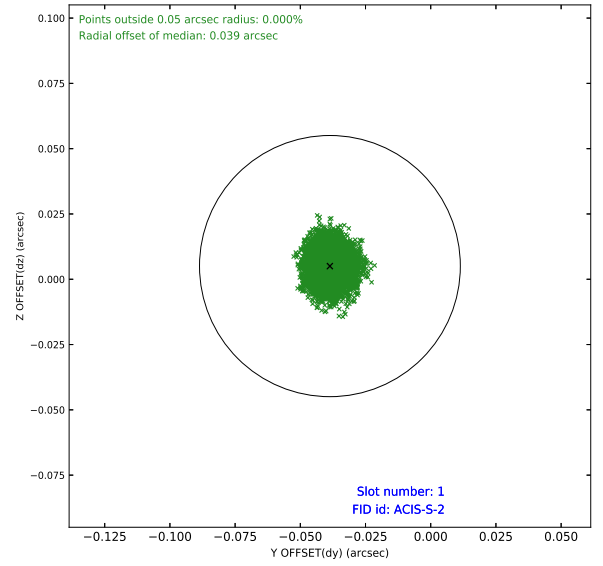
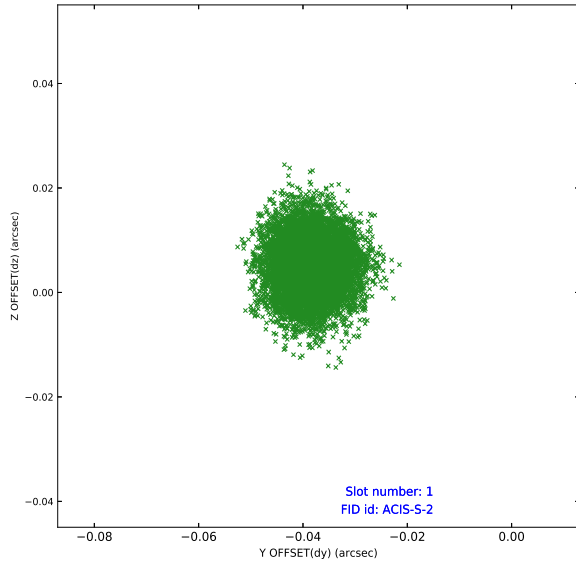
2.5.1 Slot 0



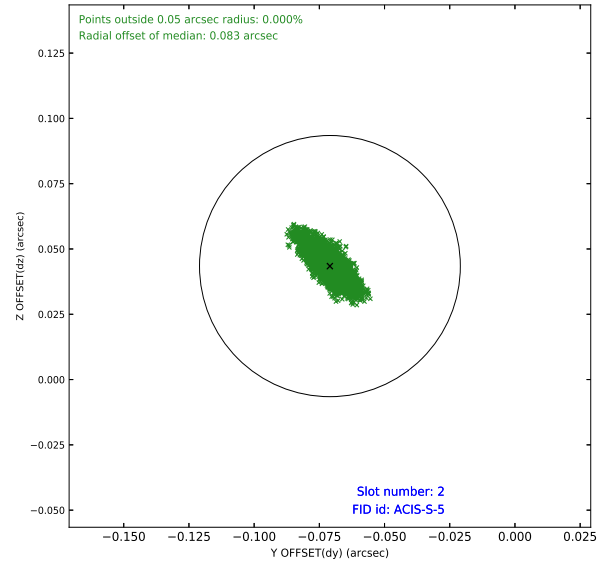
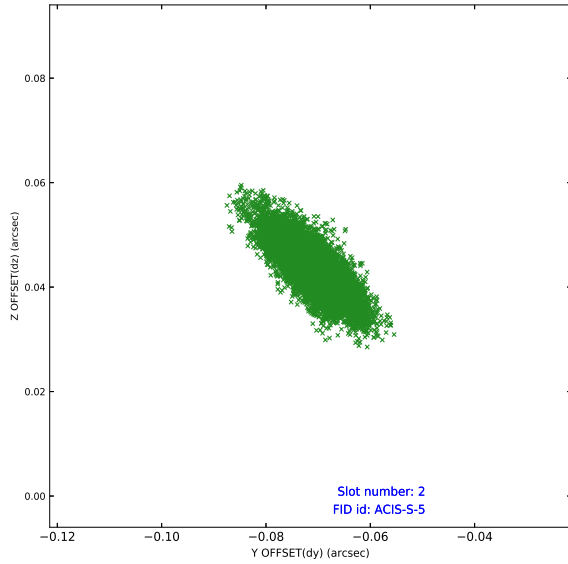
Time (s)



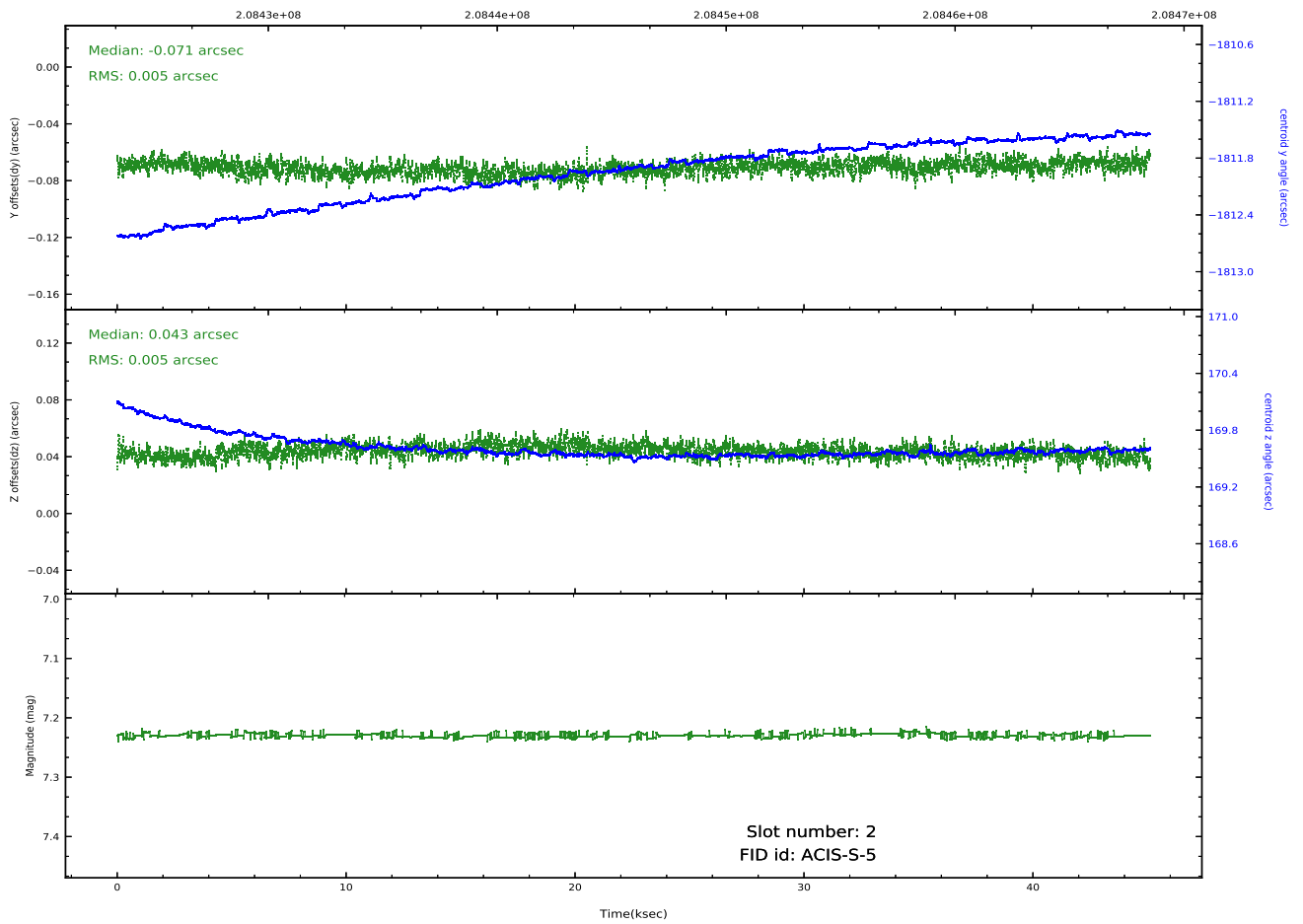
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2020.09.28 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 45.123 |

A.2 Comments