

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18097 - L2 Version 1
Chandra X-Ray Center

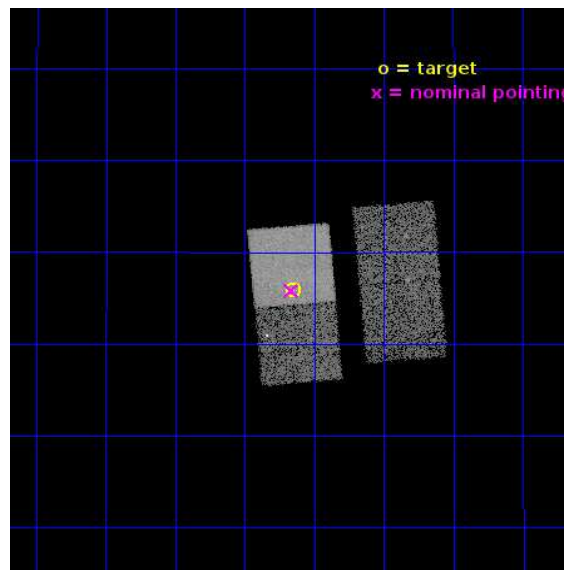
L2 Processing Date : Mar 1 2016

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1 Front

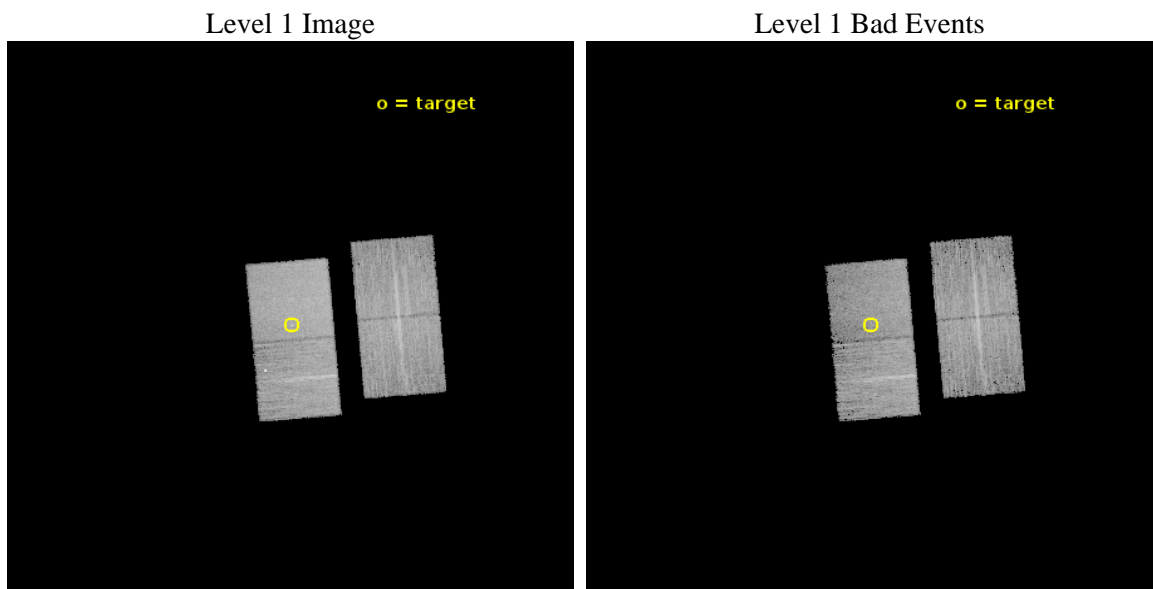
| | | |
|----------|---|---|
| seq_num | 703163 | Sequence number |
| obs_id | 18097 | Observation id |
| title | Extending the Extragalactic 3CR Chandra Survey to z=1.5 | Proposal t |
| observer | Francesco Massaro | Principal investigator |
| object | 3CR 208.1 | Source name |
| dtcycle | 0 | |
| cycle | P | events from which exps? Prim/Second/Both |
| ra_targ | 133.66375 | Observer's specified target RA [deg] |
| dec_targ | 14.097806 | Observer's specified target Dec [deg] |
| ra_nom | 133.6663694184 | Nominal RA [deg] |
| dec_nom | 14.096783176796 | Nominal Dec [deg] |
| roll_nom | 265.15602889335 | Nominal Roll [deg] |
| revision | 1 | Processing version of data |
| ontime | 12071.400092959 | Sum of GTIs [s] |
| livetime | 11913.678363909 | Livetime [s] |
| ontime2 | 12065.11807251 | Sum of GTIs [s] |
| ontime3 | 12071.400092959 | Sum of GTIs [s] |
| ontime6 | 12071.400092959 | Sum of GTIs [s] |
| ontime7 | 12071.400092959 | Sum of GTIs [s] |
| l2events | 62048 | Number of level 2 events |



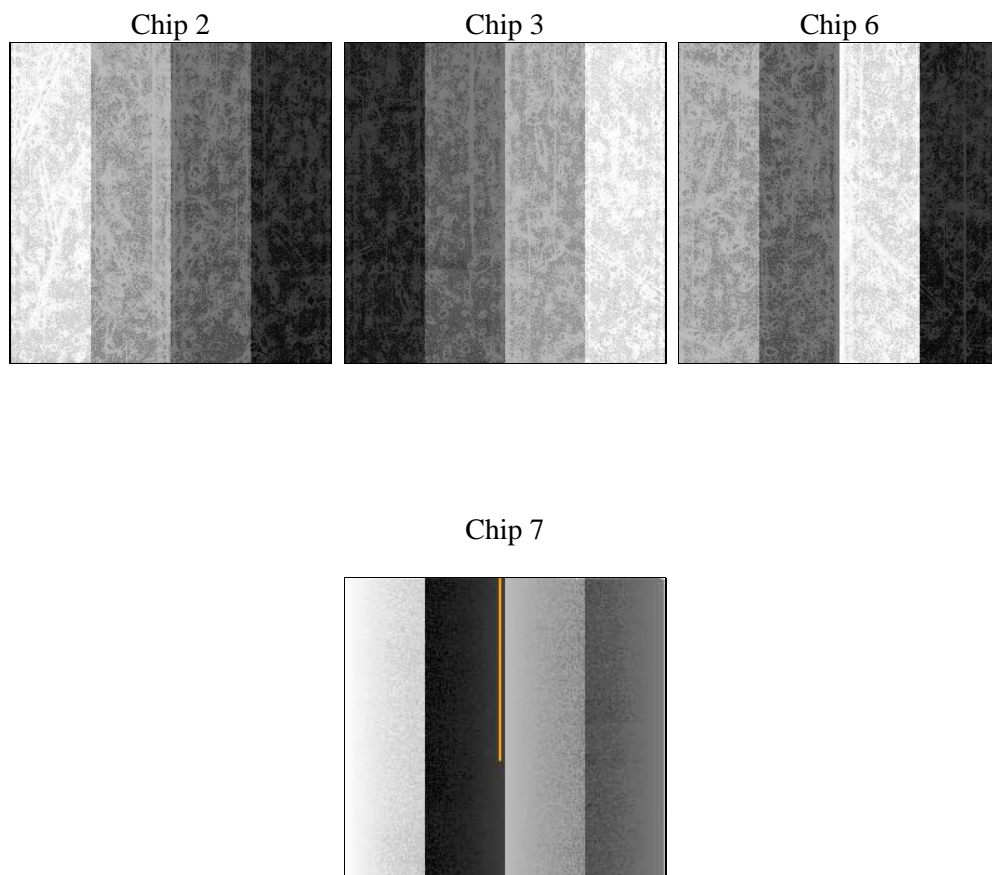
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | | | | | |
|----------|---------------------|--------------------------------|----------------|-----------------|---|
| obi_num | 0 | Obi number | sched_exp_time | 12000.000000 | [s] Scheduled observation exposure time |
| ascdsver | 10.4.3.1 | Processing system revision | ontime | 12071.400092959 | Sum of GTIs [s] |
| caldsver | 4.7.0 | | ontime2 | 12065.11807251 | Sum of GTIs [s] |
| date | 2016-03-01T05:54:31 | Date and time of file creation | ontime3 | 12071.400092959 | Sum of GTIs [s] |
| revision | 1 | Processing version of data | ontime6 | 12071.400092959 | Sum of GTIs [s] |
| | | | ontime7 | 12071.400092959 | Sum of GTIs [s] |
| | | | l1events | 308938 | Number of level 1 events |

2.1.4 Events

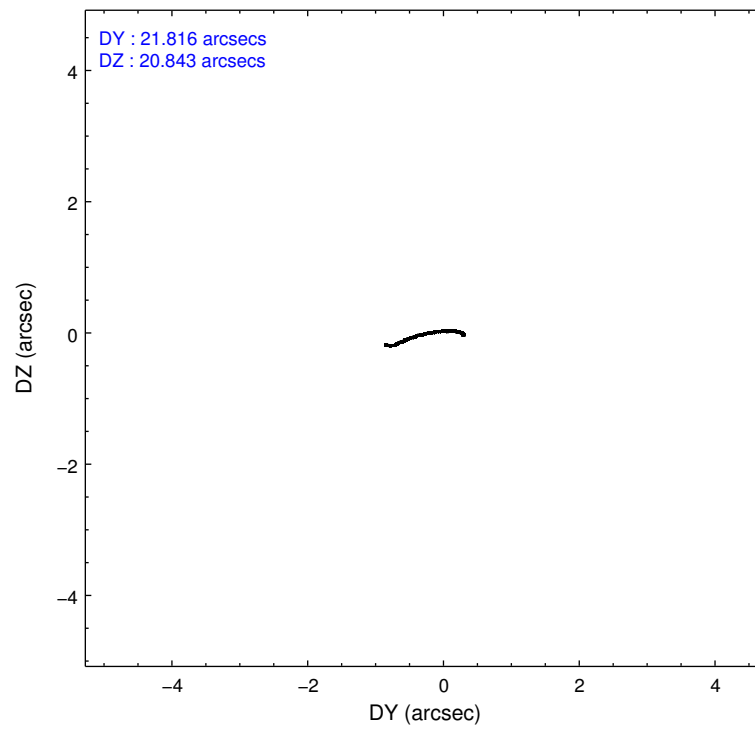
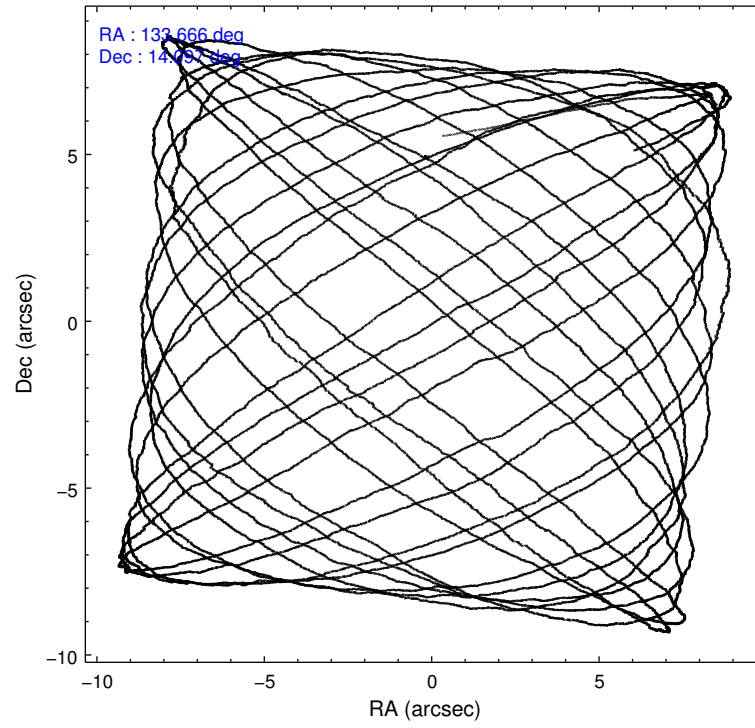
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|-----------------|-------|-------|-------|-------|
| level 1 events | 68937 | 68958 | 76397 | 94646 |
| rejected events | 61066 | 61363 | 66807 | 53346 |
| rejected % | 88% | 88% | 87% | 56% |

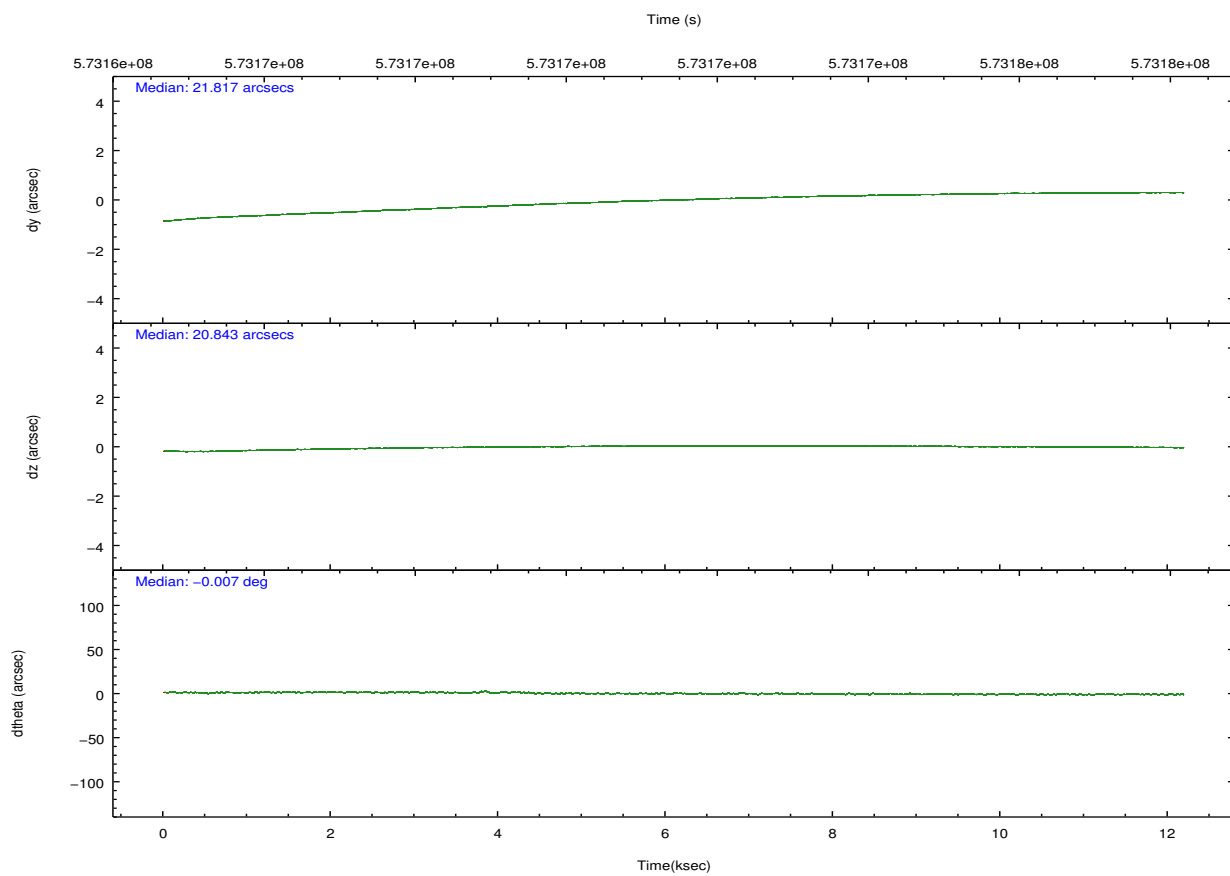
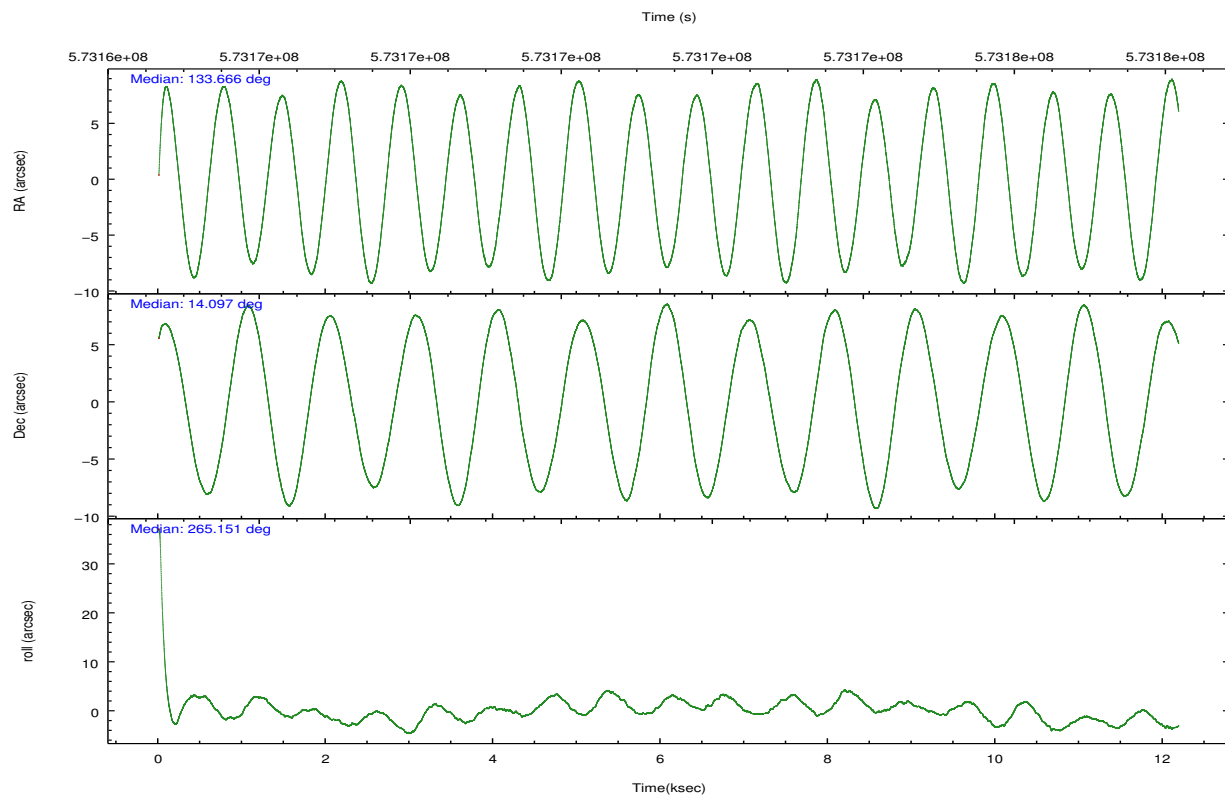
| | ccd 2 | ccd 3 | ccd 6 | ccd 7 |
|----------------|-------|-------|-------|-------|
| grade 0 events | 2757 | 2707 | 3730 | 3610 |
| | 3% | 3% | 4% | 3% |
| grade 1 events | 39 | 55 | 53 | 130 |
| | 0% | 0% | 0% | 0% |
| grade 2 events | 1958 | 1698 | 2030 | 8595 |
| | 2% | 2% | 2% | 9% |
| grade 3 events | 809 | 826 | 885 | 3335 |
| | 1% | 1% | 1% | 3% |
| grade 4 events | 810 | 815 | 923 | 3374 |
| | 1% | 1% | 1% | 3% |
| grade 5 events | 3094 | 3514 | 3672 | 9465 |
| | 4% | 5% | 4% | 10% |
| grade 6 events | 1538 | 1554 | 2022 | 22407 |
| | 2% | 2% | 2% | 23% |
| grade 7 events | 57932 | 57789 | 63082 | 43730 |
| | 84% | 83% | 82% | 46% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 7 | 7 |
| Detector | ACIS-2367 | ACIS-2367 | Obspar file type | PREDICTED | ACTUAL |
| Grating | NONE | NONE | Obspar update status | NONE | UPDATED |
| Data mode | VFAINT | VFAINT | CCD I0 on | N | N |
| Observation mode | POINTING | POINTING | CCD I1 on | N | N |
| [deg] Pointing RA | 133.653966 | 133.666369418398 | CCD I2 on | O1 | Y |
| [deg] Pointing Dec | 14.121442 | 14.09678317679613 | CCD I3 on | O2 | Y |
| [deg] Pointing Roll | 265.002381 | 265.1560288933478 | CCD S0 on | N | N |
| [mm] SIM focus pos | -0.684267 | -0.6828225247311905 | CCD S1 on | N | N |
| [mm] SIM defocus | 0 | 0.001444936568705701 | CCD S2 on | Y | Y |
| [mm] SIM translation stage pos | -190.132523 | -190.1425803651734 | CCD S3 on | Y | Y |
| [mm] SIM translation stage offset | 0 | 0.01005778216563158 | CCD S4 on | N | N |
| [s] Observation start time (MET) | 573165510.184000 | 573164361.47114 | CCD S5 on | N | N |
| Observation start date | 2016-02-29T20:37:22 | 2016-02-29T20:19:21 | Number of optional ACIS chips dropped | 0 | 0 |
| [s] Observation end time (MET) | 573177510.184000 | 573178527.48445 | On-chip summing requested | N | N |
| Observation end date | 2016-02-29T23:57:22 | 2016-03-01T00:15:27 | Subarray requested | NONE | NONE |
| Read mode | TIMED | TIMED | Alternating exposures requested | N | N |
| | | | [s] Primary exposure time | 0.000000 | 3.1 |

2.3 Aspect



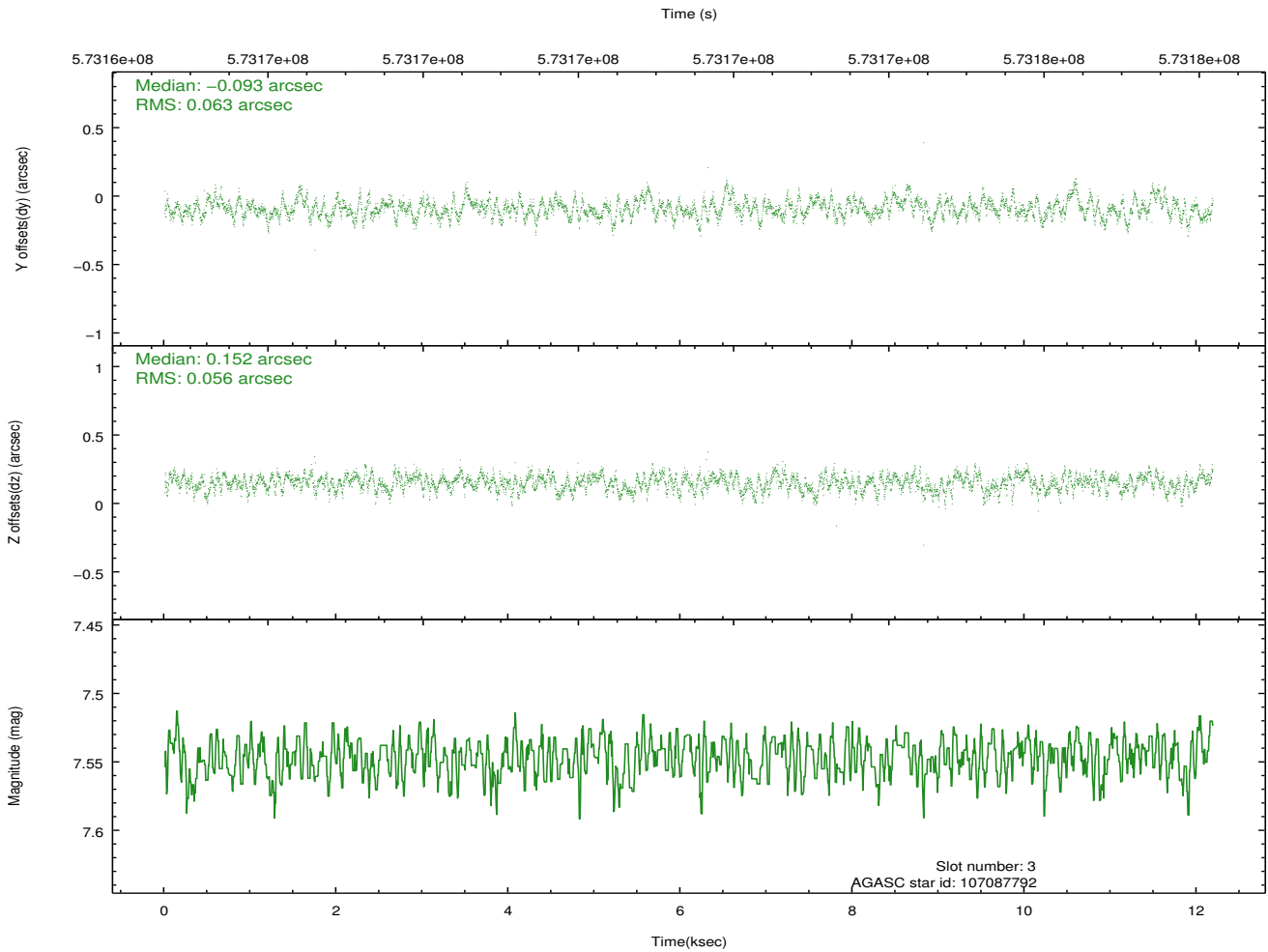
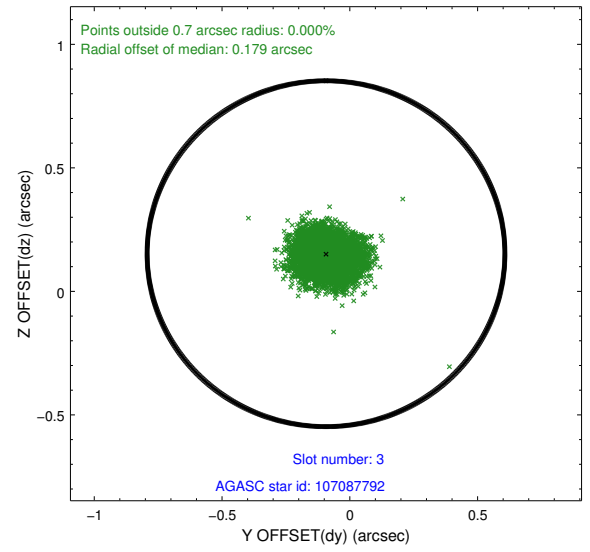
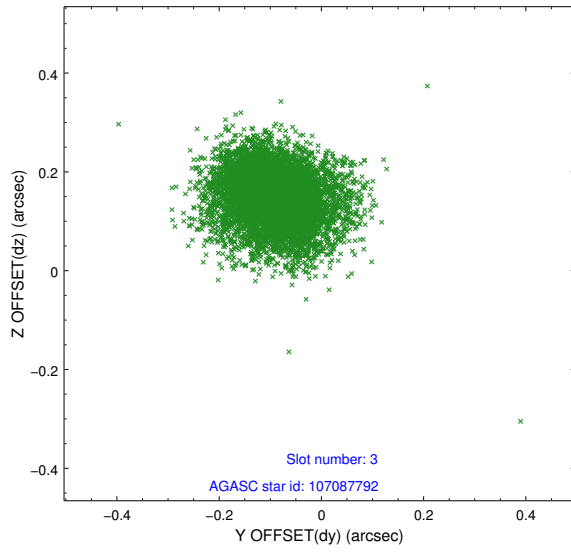


Slot Statistics

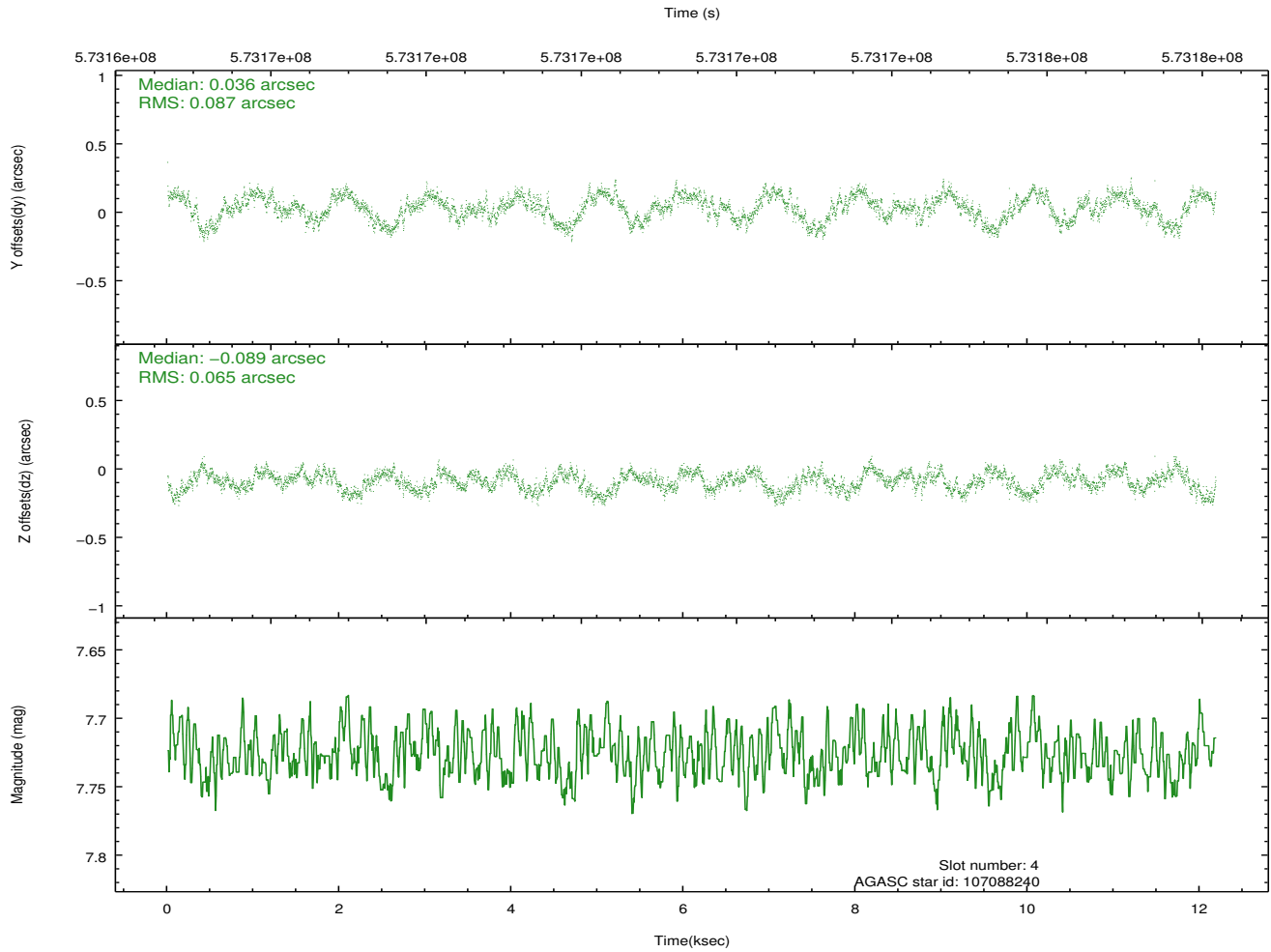
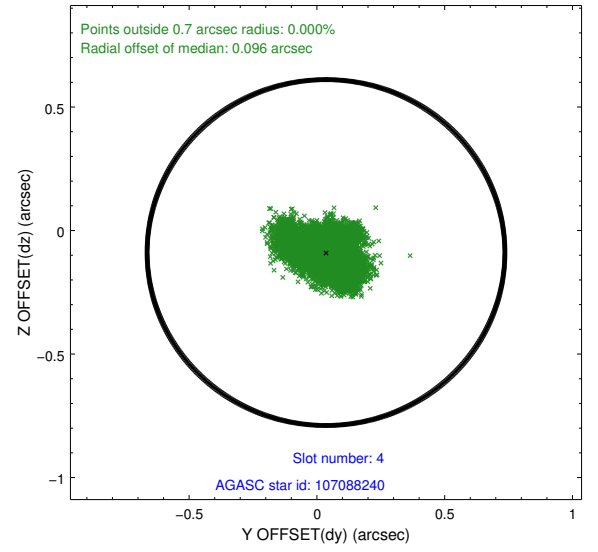
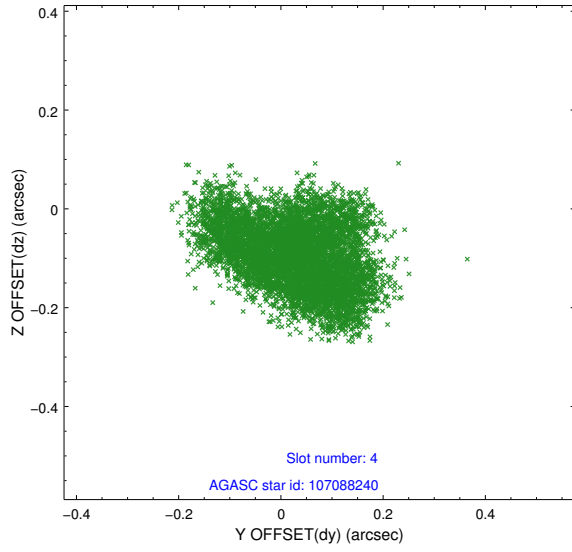
| slot | status | used | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | | ACIS-S-1 | 7.20 | 2972 | 0.149 | -0.132 | 0.014 | 0.023 | 0.000000 | 0.000000 | 921.35 | -1738.04 |
| 1 | FID | | ACIS-S-5 | 7.23 | 2972 | -0.301 | 0.064 | 0.016 | 0.025 | 0.000000 | 0.000000 | -1827.91 | 159.22 |
| 2 | FID | | ACIS-S-6 | 7.36 | 2972 | 0.132 | 0.080 | 0.011 | 0.017 | 0.000000 | 0.000000 | 386.39 | 803.71 |
| 3 | GUIDE | used | 107087792 | 7.55 | 5943 | -0.093 | 0.152 | 0.089 | 0.146 | 133.614255 | 14.244973 | -430.91 | -176.60 |
| 4 | GUIDE | used | 107088240 | 7.73 | 5944 | 0.036 | -0.089 | 0.118 | 0.182 | 133.750485 | 14.728115 | -2204.51 | 144.43 |
| 5 | GUIDE | used | 107093384 | 8.96 | 5938 | 0.206 | 0.175 | 0.127 | 0.196 | 133.086298 | 14.119240 | 178.79 | -1973.40 |
| 6 | GUIDE | used | 107095288 | 9.09 | 5938 | -0.123 | -0.292 | 0.133 | 0.218 | 133.692143 | 13.561449 | 1997.48 | 307.90 |
| 7 | GUIDE | used | 107097400 | 8.47 | 5939 | -0.029 | 0.058 | 0.115 | 0.195 | 133.246537 | 13.982399 | 622.66 | -1374.15 |

2.4 Star Slots

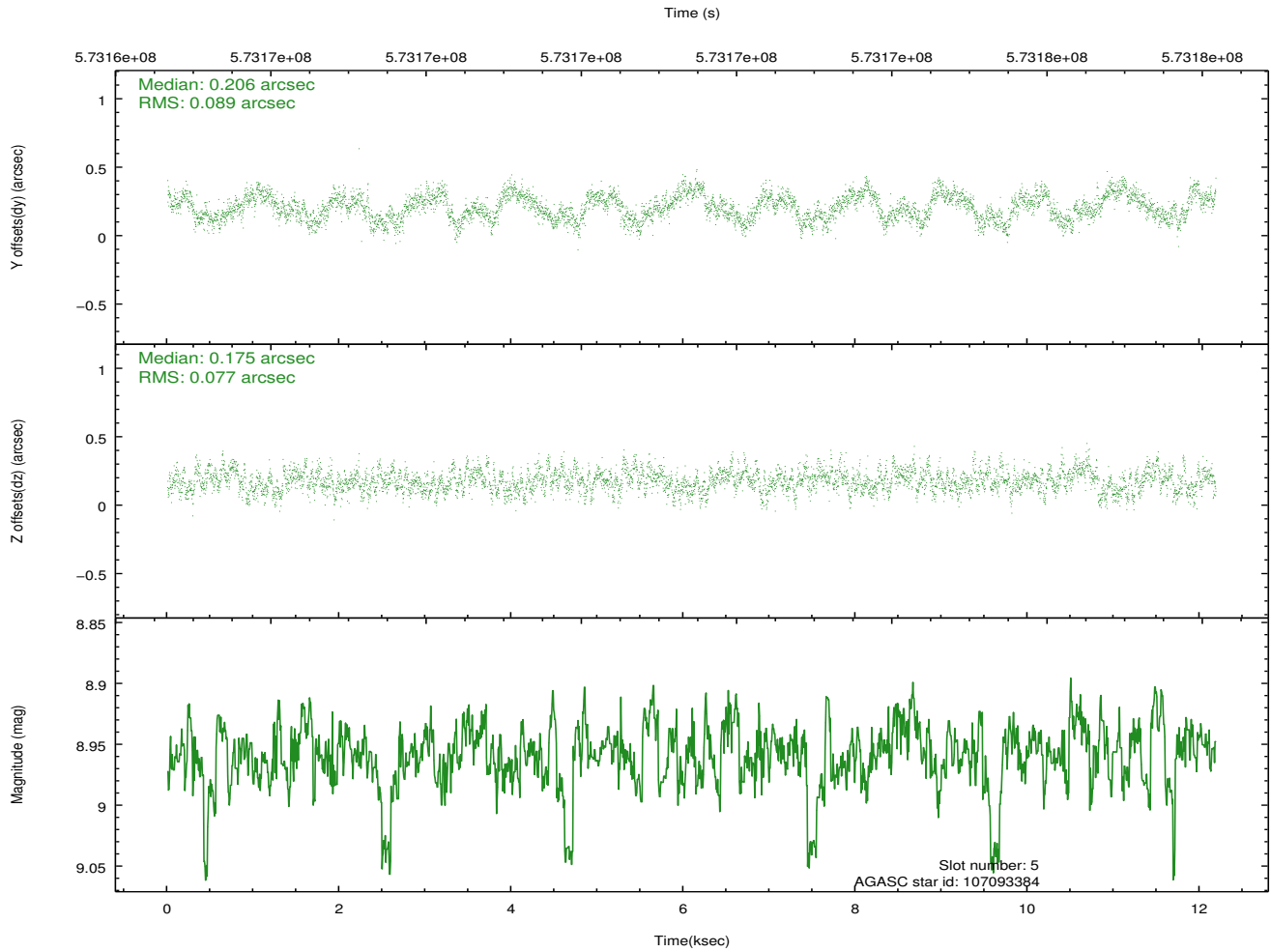
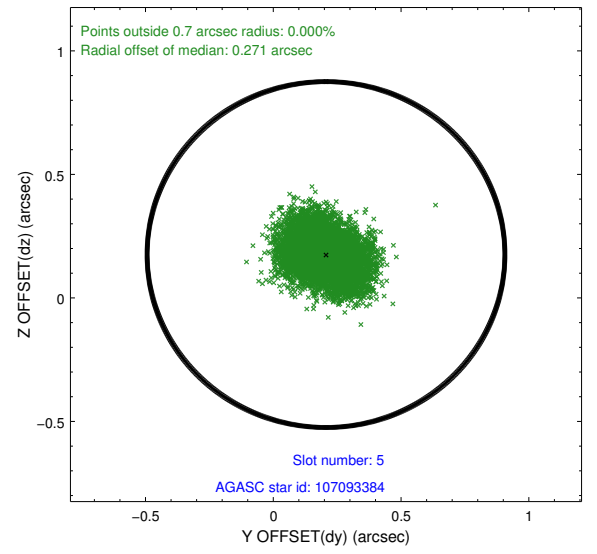
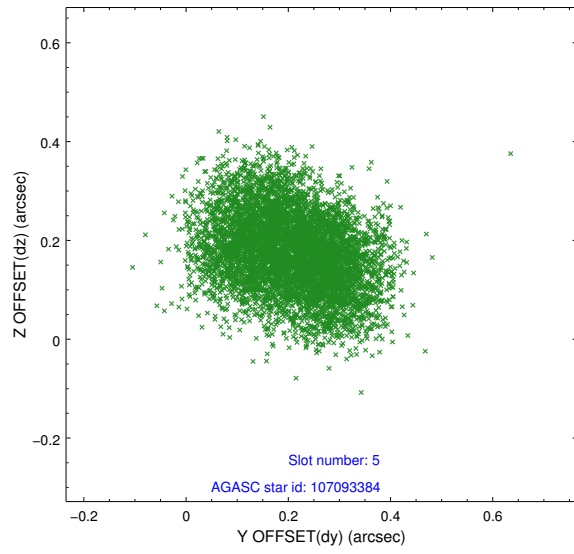
2.4.1 Slot 3



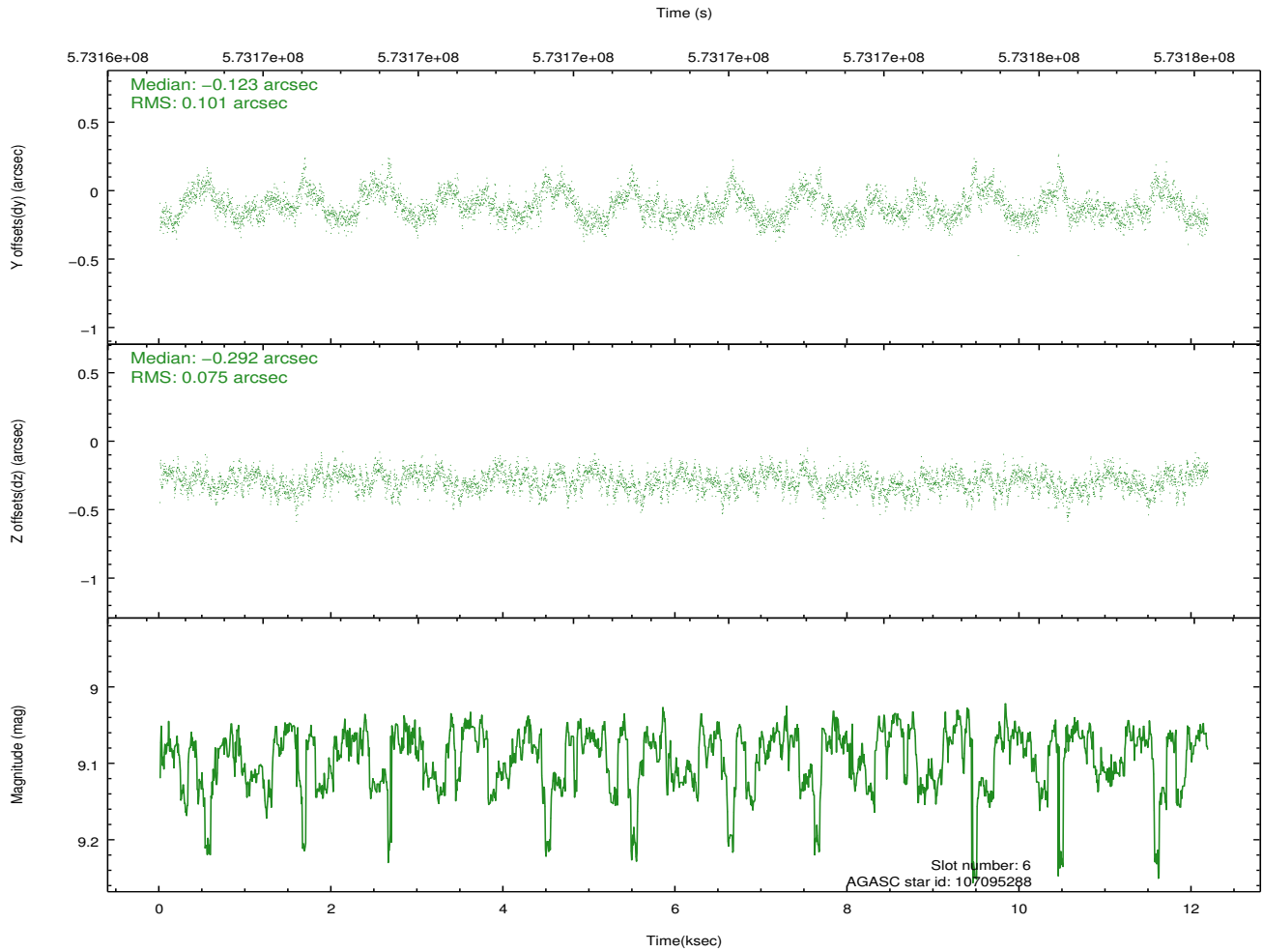
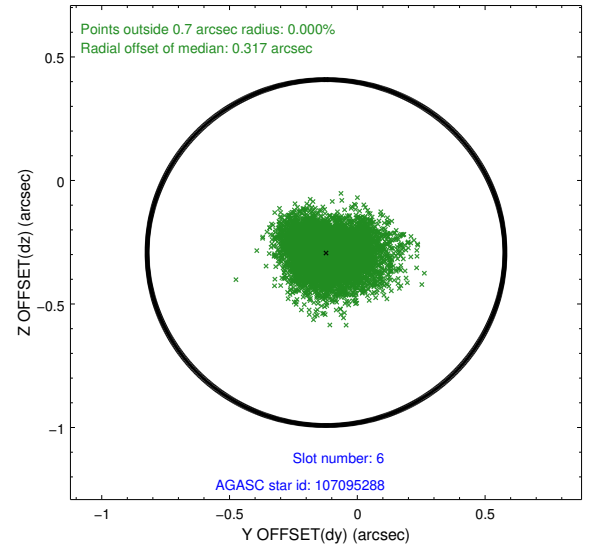
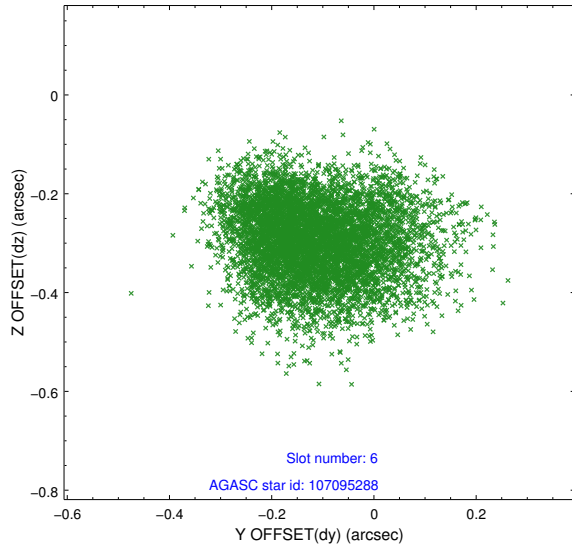
2.4.2 Slot 4



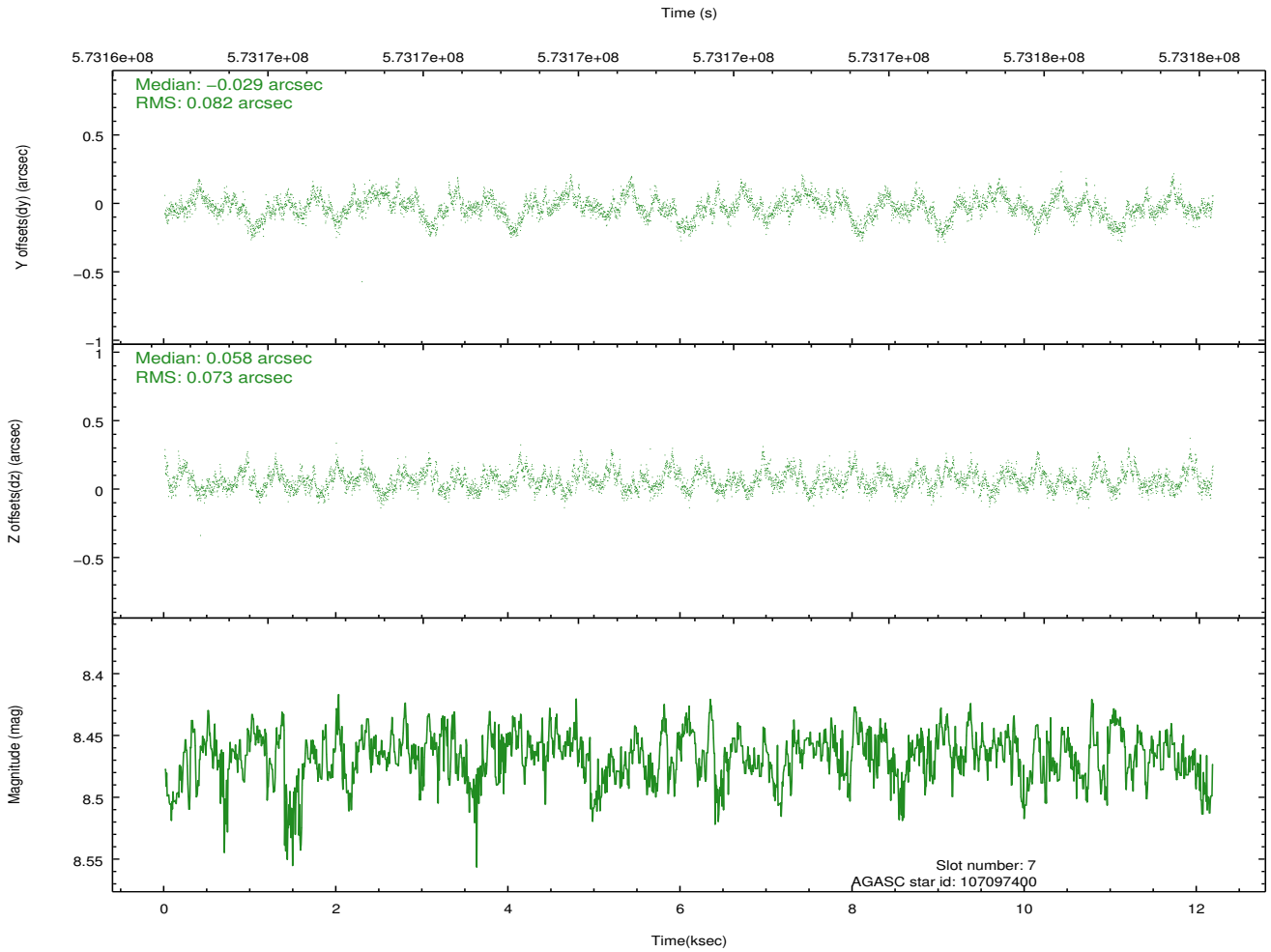
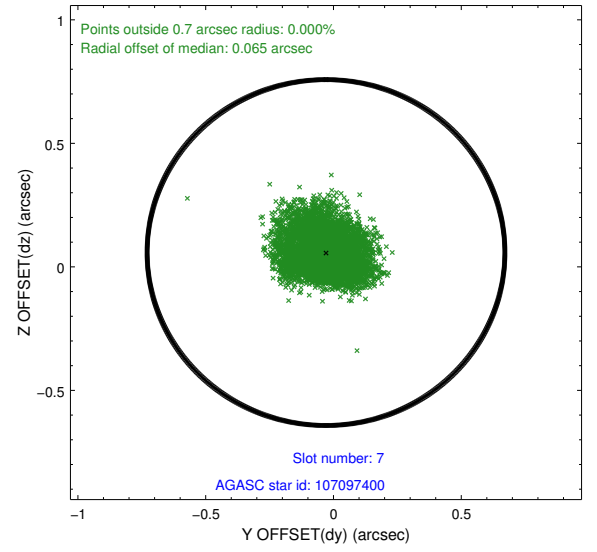
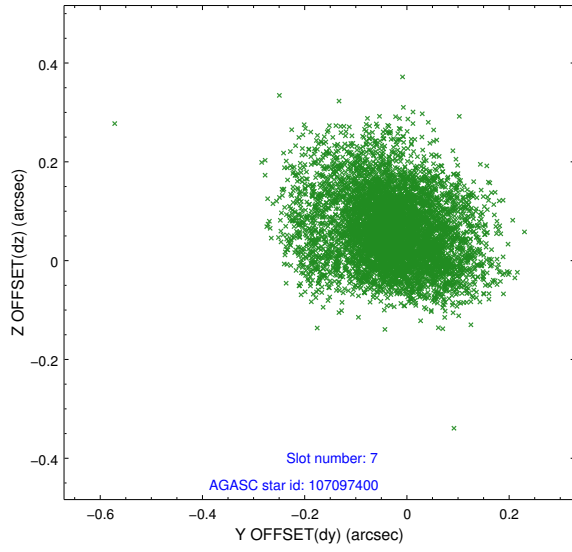
2.4.3 Slot 5



2.4.4 Slot 6

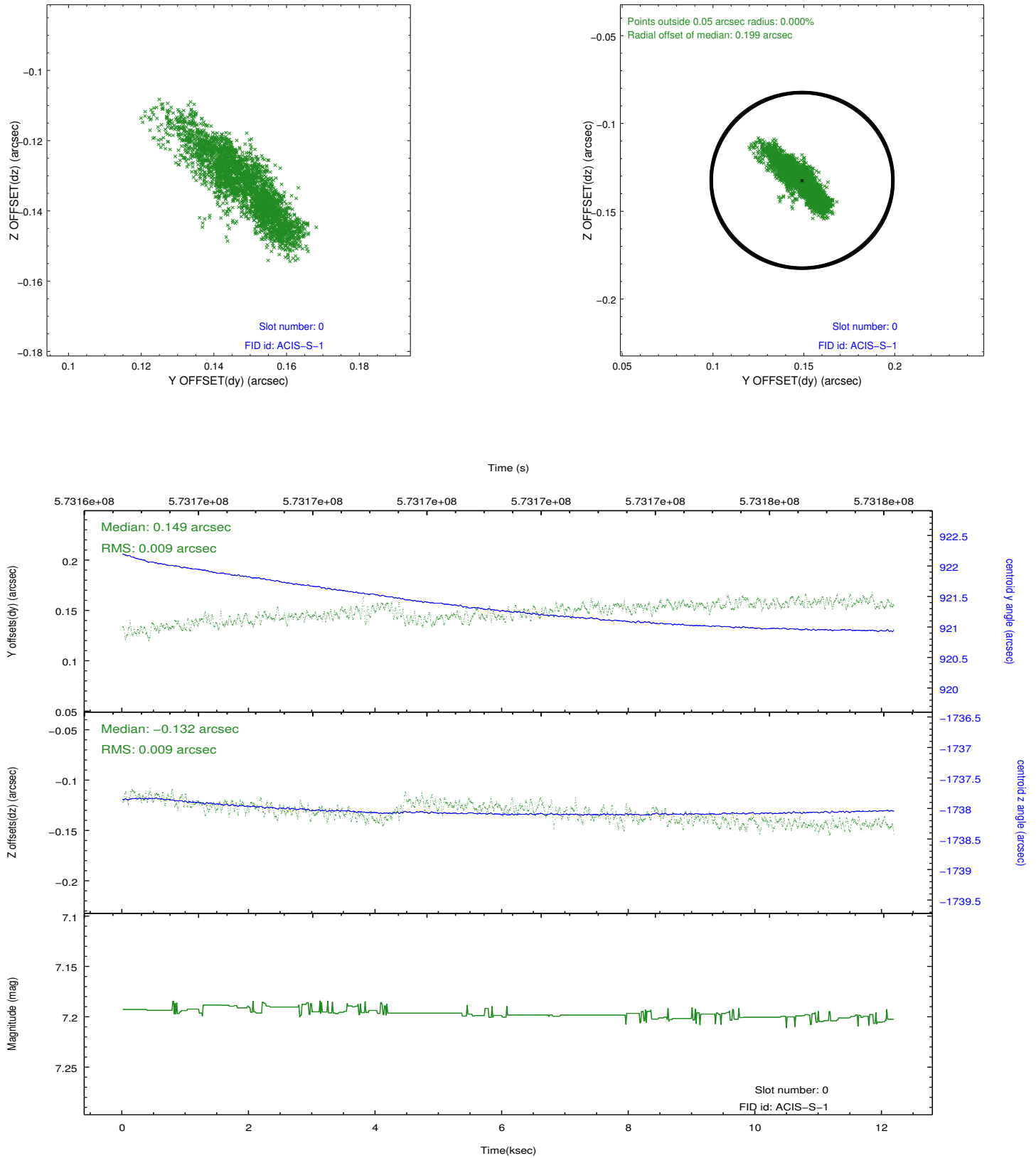


2.4.5 Slot 7

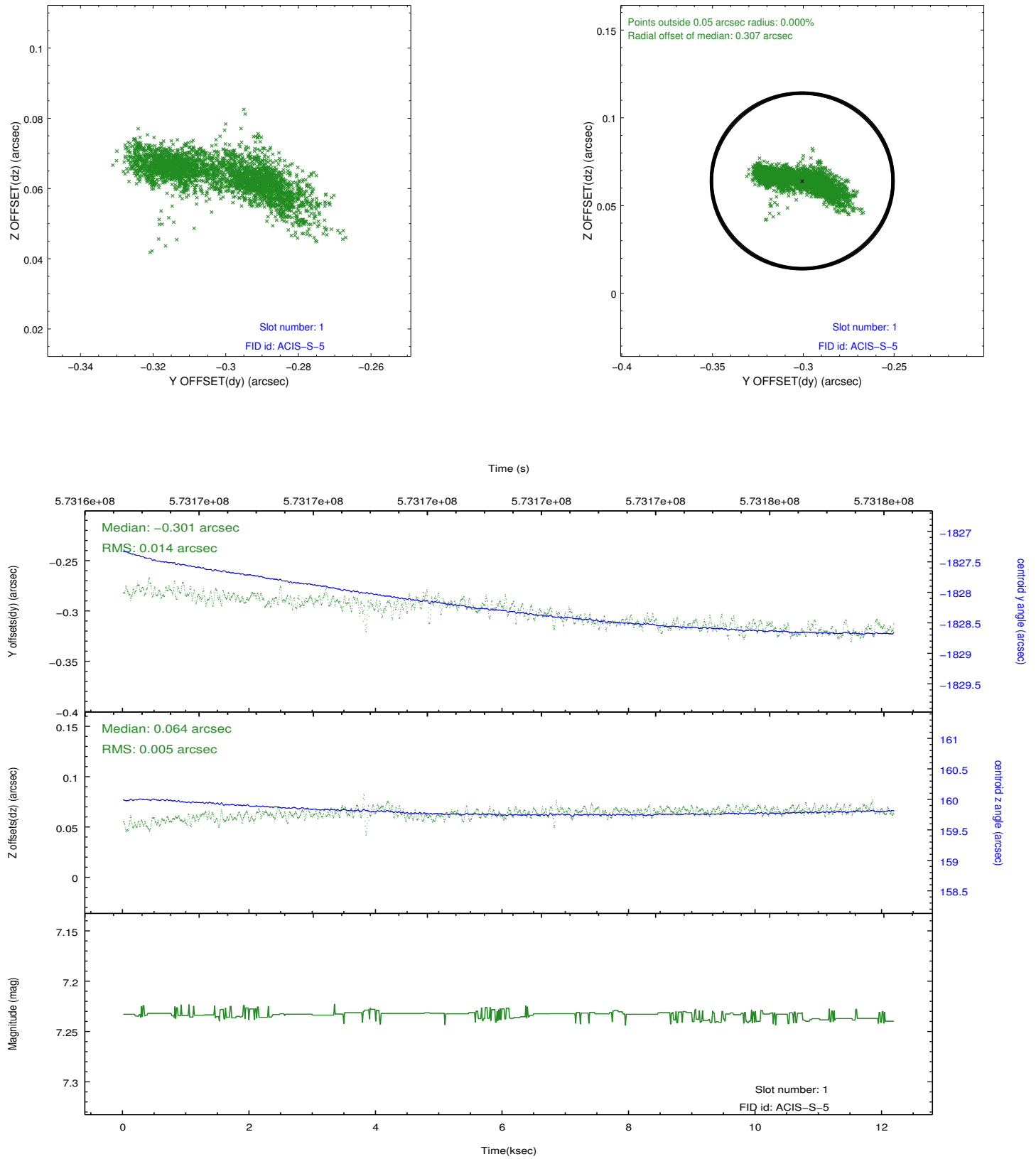


2.5 FID Slots

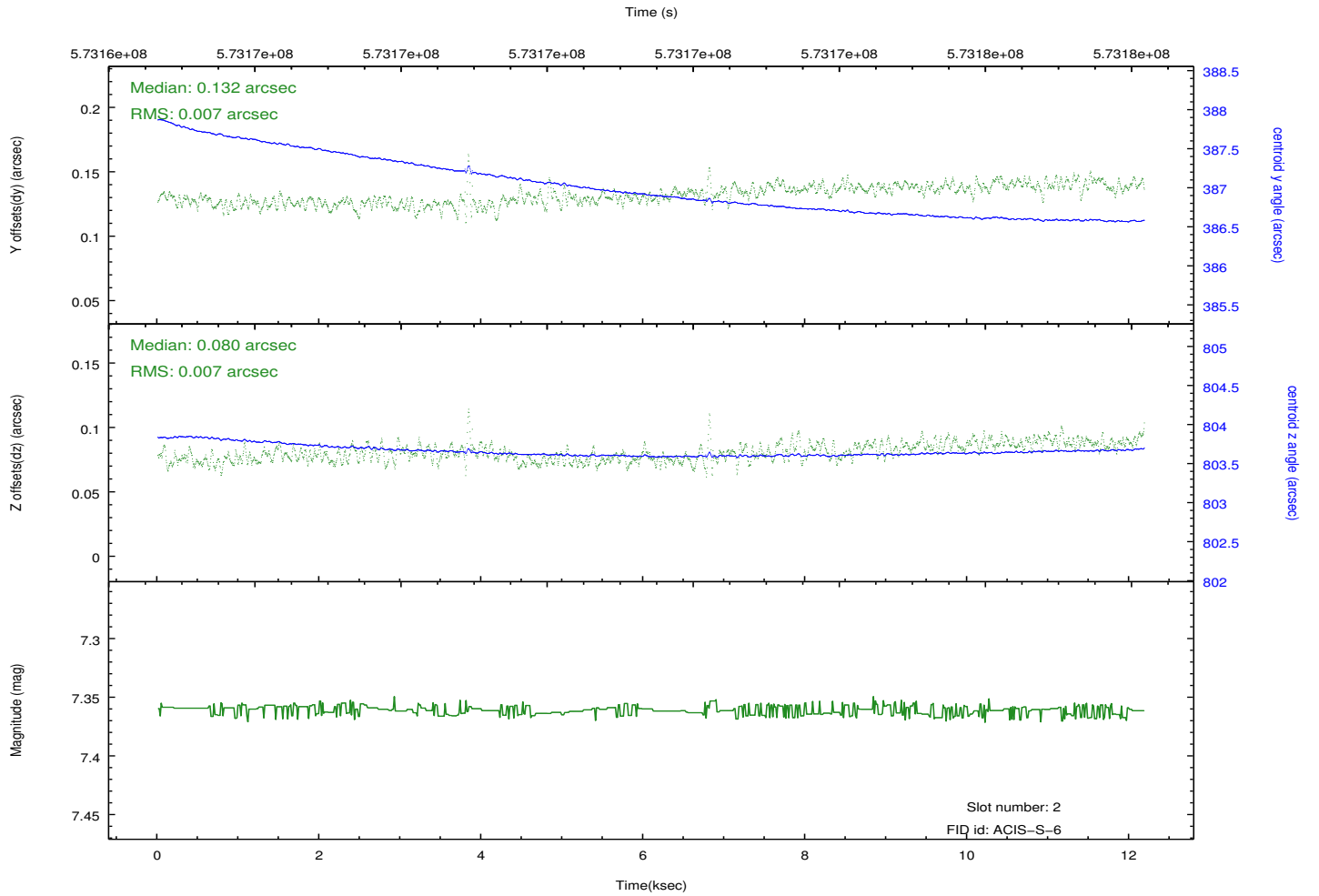
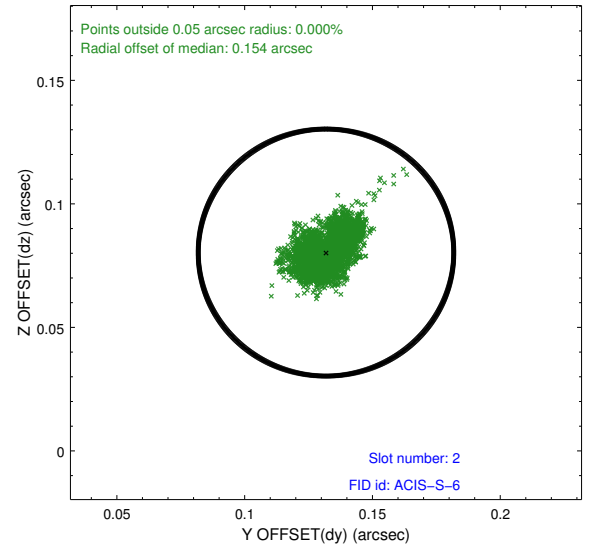
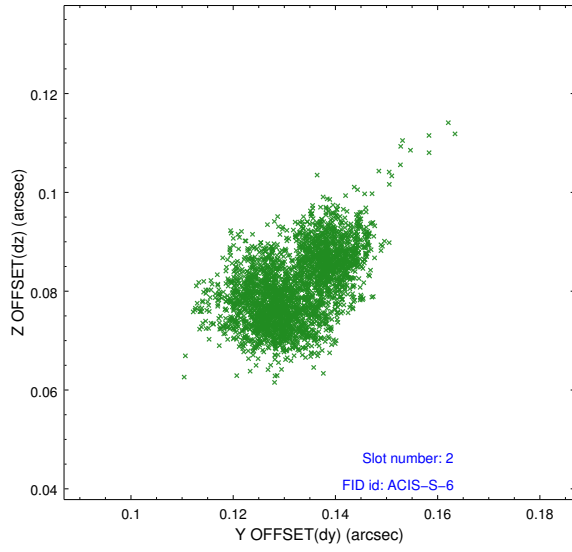
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

| | |
|----------------------------|-----------------|
| V&V Scientist | Joy Nichols |
| V&V Date (YYYY-MM-DD) | 2016.03.01 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 12.071400092959 |

A.2 Comments