

V&V Reference Report

L2 ASCDS Version : 7.6.9

Observation 2503 - L2 Version 001
Chandra X-Ray Center

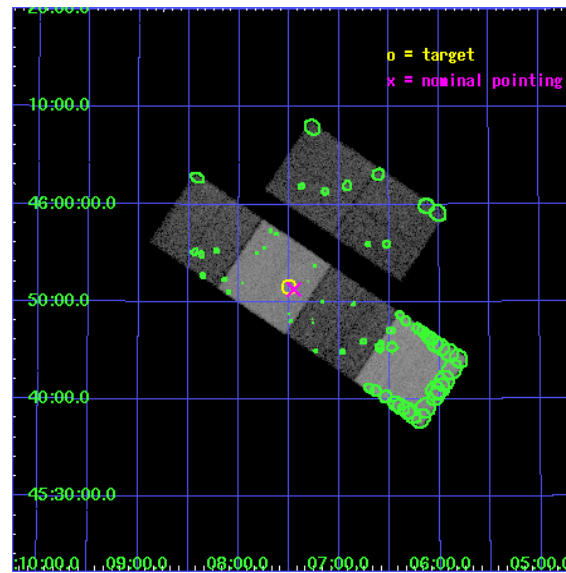
L2 Processing Date : Dec 15 2006

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 |
| 3 | Point Sources | 17 |
| A | Summary | 18 |
| A.1 | Status | 18 |
| A.2 | Comments | 18 |

1 Front

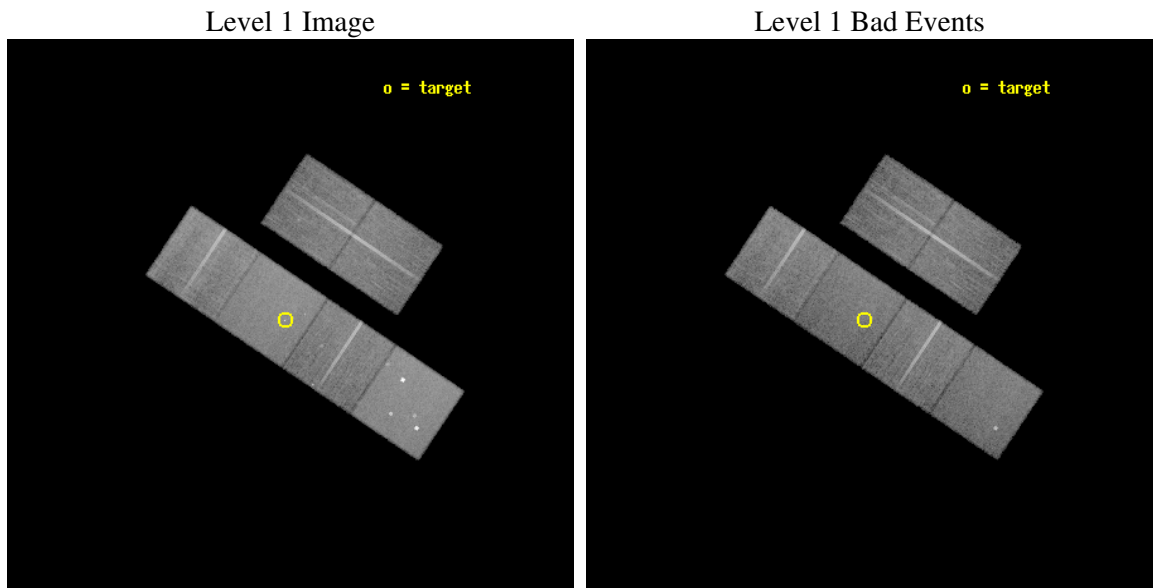
| | |
|----------|--|
| seq_num | 300047 |
| obs_id | 2503 |
| title | THE ORIGIN OF SOFT X-RAYS IN DQ HERCULIS |
| observer | Dr KOJI MUKAI |
| object | DQ HERCULIS |
| dtcycle | 0 |
| cycle | P |
| ra_targ | 271.875833 |
| dec_targ | 45.858889 |
| ra_nom | 271.86299259414 |
| dec_nom | 45.854992802072 |
| roll_nom | 213.84045552424 |
| revision | 2 |
| ontime | 21868.800020367 |
| livetime | 21591.884106699 |
| ontime2 | 21868.800020367 |
| ontime3 | 21868.800020367 |
| ontime5 | 21868.800020367 |
| ontime6 | 21868.800020367 |
| ontime7 | 21868.800020367 |
| ontime8 | 21868.800020367 |
| l2events | 213988 |



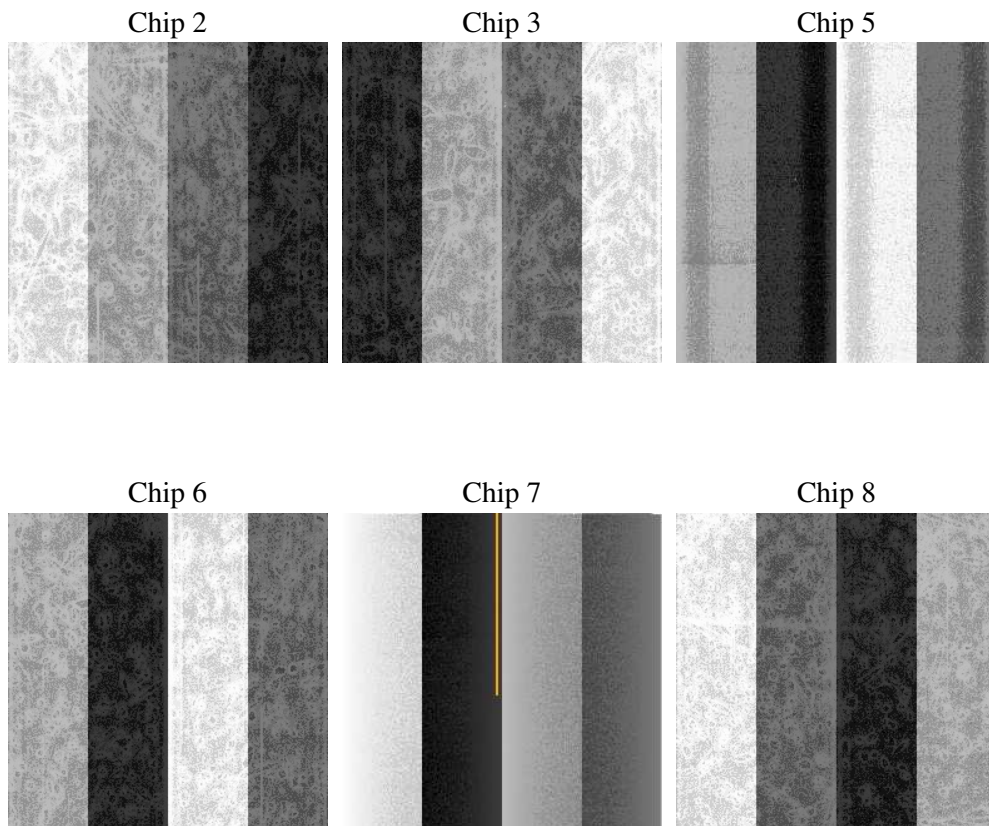
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

| | |
|----------|---------------------|
| obi_num | 0 |
| ascdsver | 7.6.9 |
| caldsver | 3.2.4 |
| date | 2006-12-15T22:25:30 |
| revision | 2 |

| | |
|----------------|-----------------|
| sched_exp_time | 21960.000000 |
| ontime | 21873.501540244 |
| ontime2 | 21873.501540244 |
| ontime3 | 21873.501540244 |
| ontime5 | 21873.501540244 |
| ontime6 | 21873.501540244 |
| ontime7 | 21873.501540244 |
| ontime8 | 21873.501540244 |
| l1events | 1027134 |

2.1.4 Events

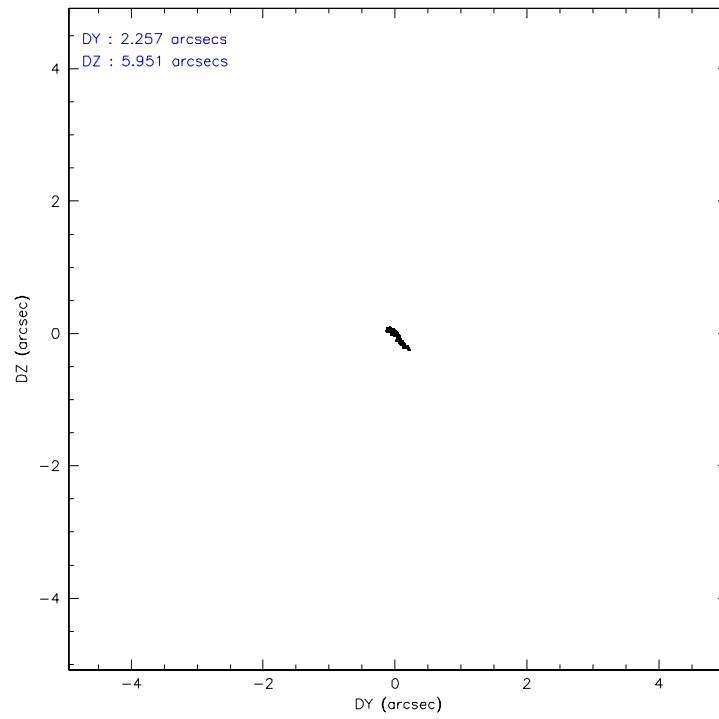
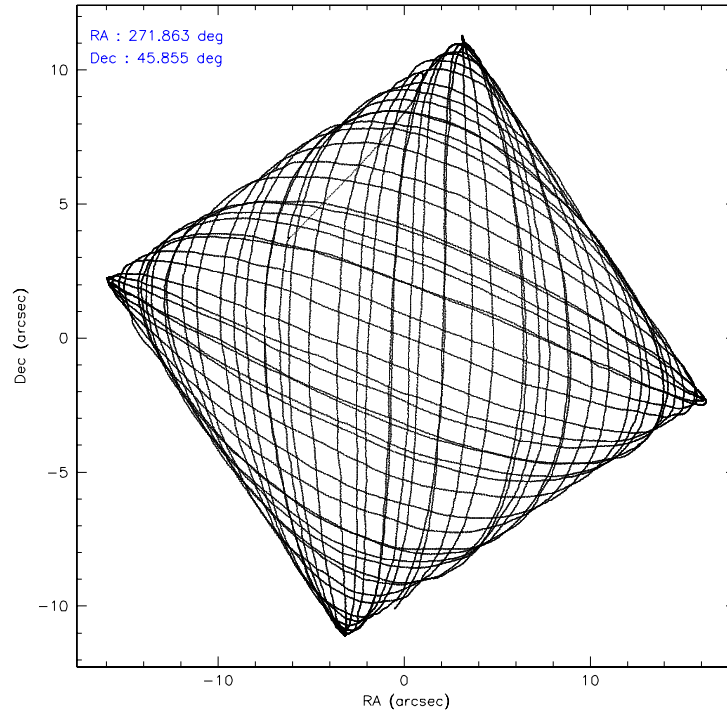
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|-----------------|--------|--------|--------|--------|--------|--------|
| level 1 events | 148016 | 142839 | 213480 | 150676 | 186618 | 185505 |
| rejected events | 131958 | 126599 | 114349 | 133495 | 114563 | 149076 |
| rejected % | 89% | 88% | 53% | 88% | 61% | 80% |

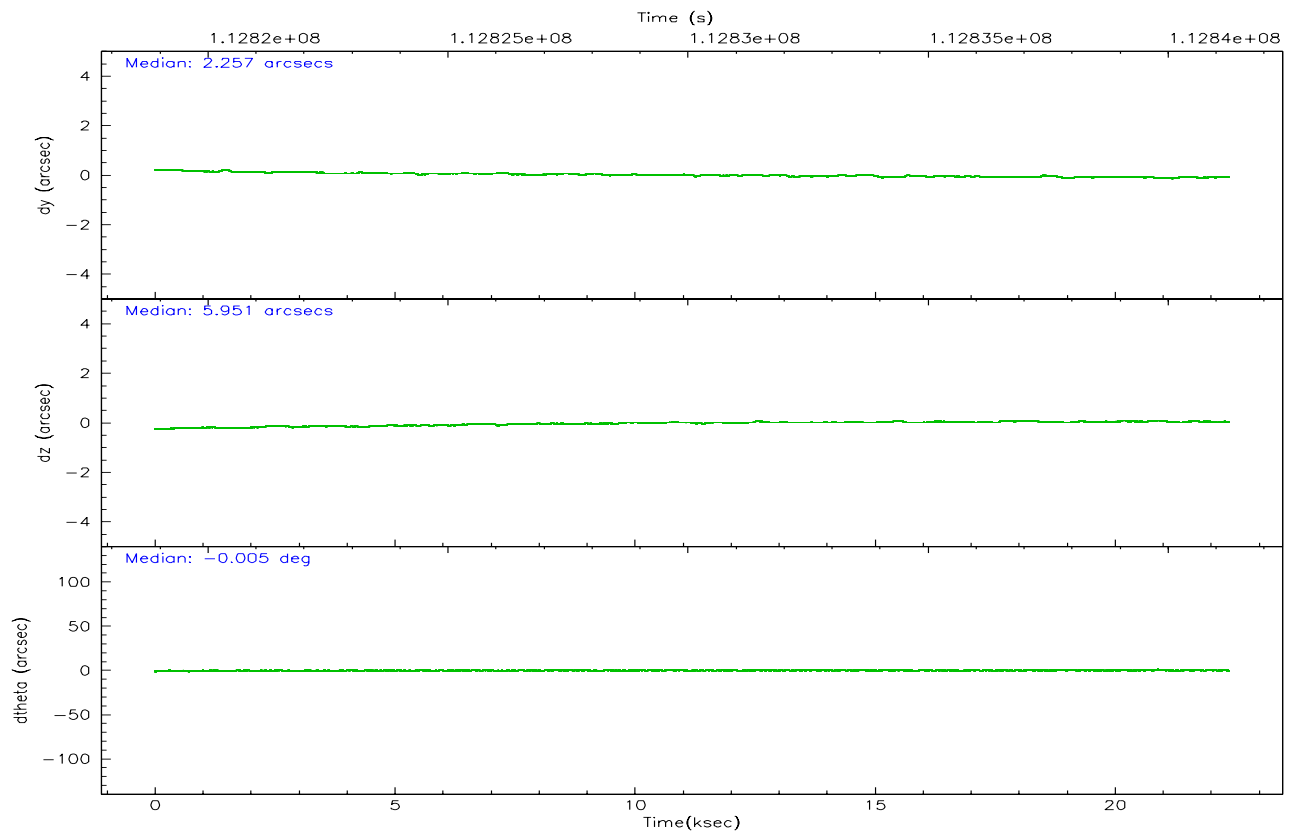
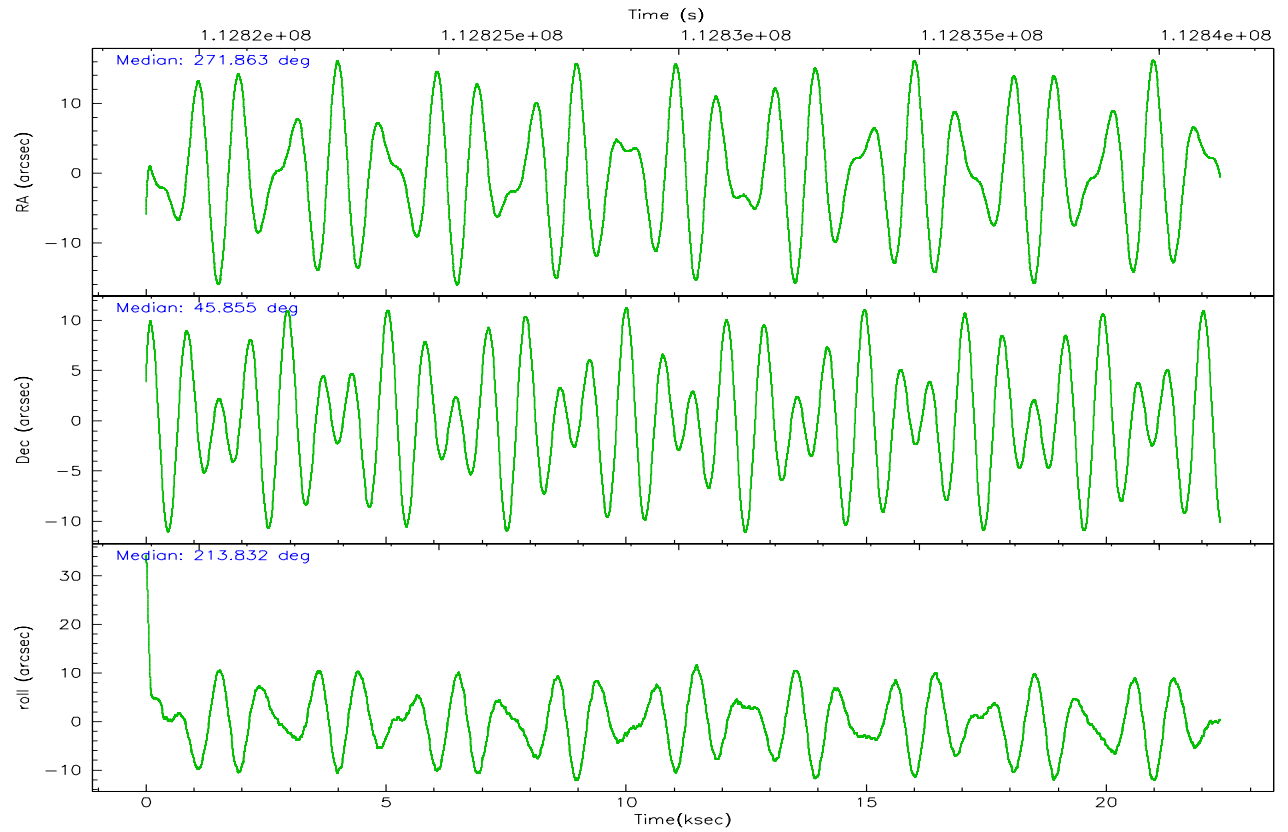
| | ccd 2 | ccd 3 | ccd 5 | ccd 6 | ccd 7 | ccd 8 |
|----------------|--------|--------|--------|--------|--------|--------|
| grade 0 events | 6691 | 7051 | 14046 | 7260 | 4774 | 11186 |
| | 4% | 4% | 6% | 4% | 2% | 6% |
| grade 1 events | 67 | 65 | 1328 | 89 | 119 | 98 |
| | 0% | 0% | 0% | 0% | 0% | 0% |
| grade 2 events | 3576 | 3246 | 29583 | 3327 | 17650 | 8065 |
| | 2% | 2% | 13% | 2% | 9% | 4% |
| grade 3 events | 1508 | 1661 | 2200 | 1701 | 4079 | 3720 |
| | 1% | 1% | 1% | 1% | 2% | 2% |
| grade 4 events | 1471 | 1574 | 2048 | 1615 | 3732 | 3450 |
| | 0% | 1% | 0% | 1% | 1% | 1% |
| grade 5 events | 5150 | 5517 | 9910 | 6231 | 12361 | 7835 |
| | 3% | 3% | 4% | 4% | 6% | 4% |
| grade 6 events | 2823 | 2712 | 51287 | 3281 | 41849 | 10022 |
| | 1% | 1% | 24% | 2% | 22% | 5% |
| grade 7 events | 126730 | 121013 | 103078 | 127172 | 102054 | 141129 |
| | 85% | 84% | 48% | 84% | 54% | 76% |

2.2 Compared Parameters

| Parameter | Planned | Actual | Parameter | Planned | Actual |
|-----------------------------------|---------------------|----------------------|---------------------------------------|-----------|---------|
| Instrument | ACIS | ACIS | Obspar format version number | 6 | 6 |
| Detector | ACIS-235678 | ACIS-235678 | 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 |
| Pointing RA | 271.879892 | 271.8629925941446 | Subarray requested | NONE | NONE |
| Pointing Dec | 45.879602 | 45.85499280207164 | Alternating exposures requested | N | N |
| Pointing Roll | 213.671689 | 213.8404555242405 | Primary exposure time | 0.000000 | 3.2 |
| SIM focus pos (mm) | -0.684267 | -0.6828225247311905 | | | |
| SIM defocus (mm) | 0 | 0.001444936568705701 | | | |
| SIM translation stage pos (mm) | -190.132523 | -190.1400660498719 | | | |
| SIM translation stage offset (mm) | 0 | 0.00754346686406393 | | | |
| Observation start time | 112819311.184000 | 112818226.95398 | | | |
| Observation start date | 2001-07-29T18:40:47 | 2001-07-29T18:23:46 | | | |
| Observation end time | 112841271.184000 | 112842047.44242 | | | |
| Observation end date | 2001-07-30T00:46:47 | 2001-07-30T01:00:47 | | | |
| Read mode | TIMED | TIMED | | | |

2.3 Aspect



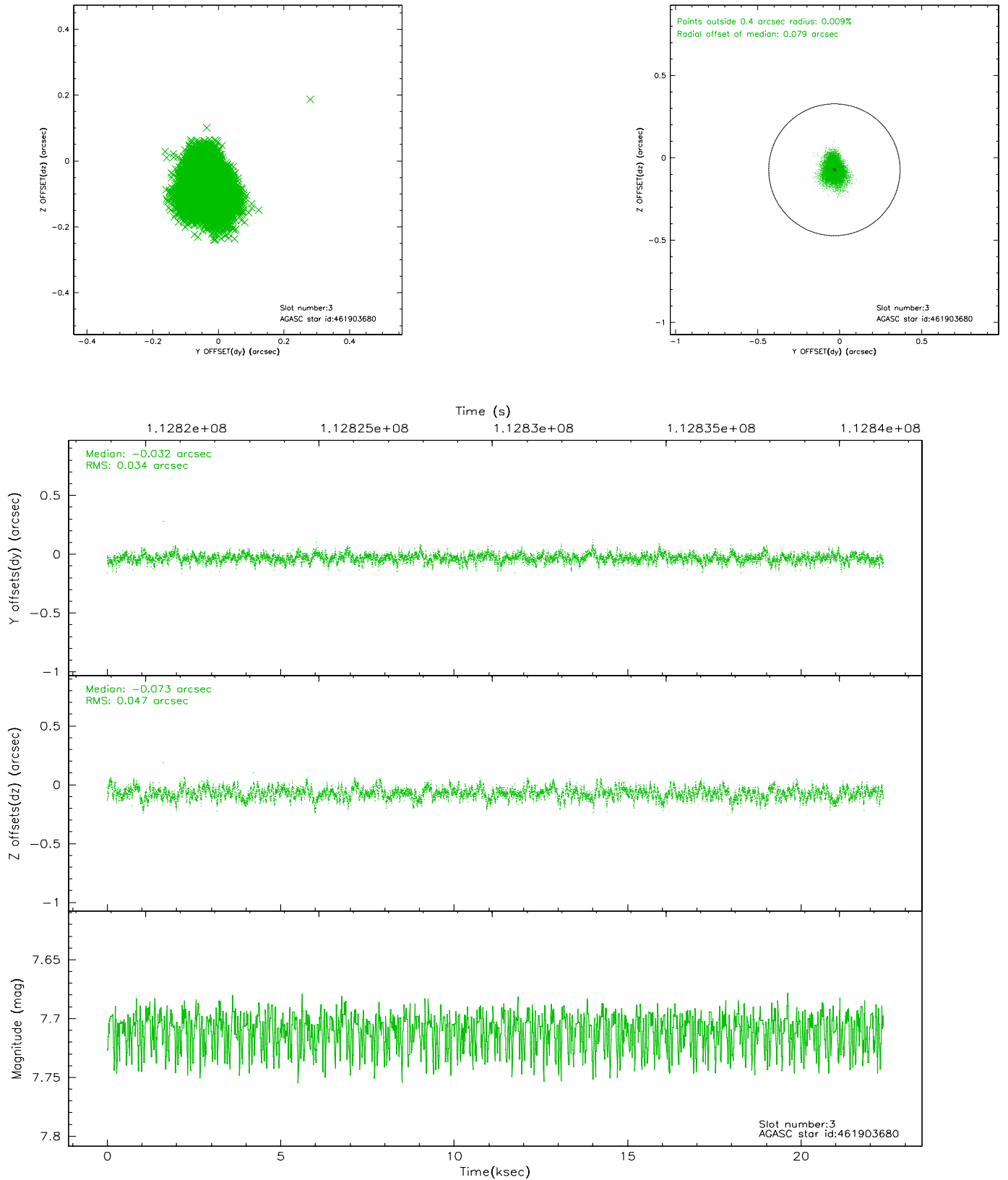


Slot Statistics

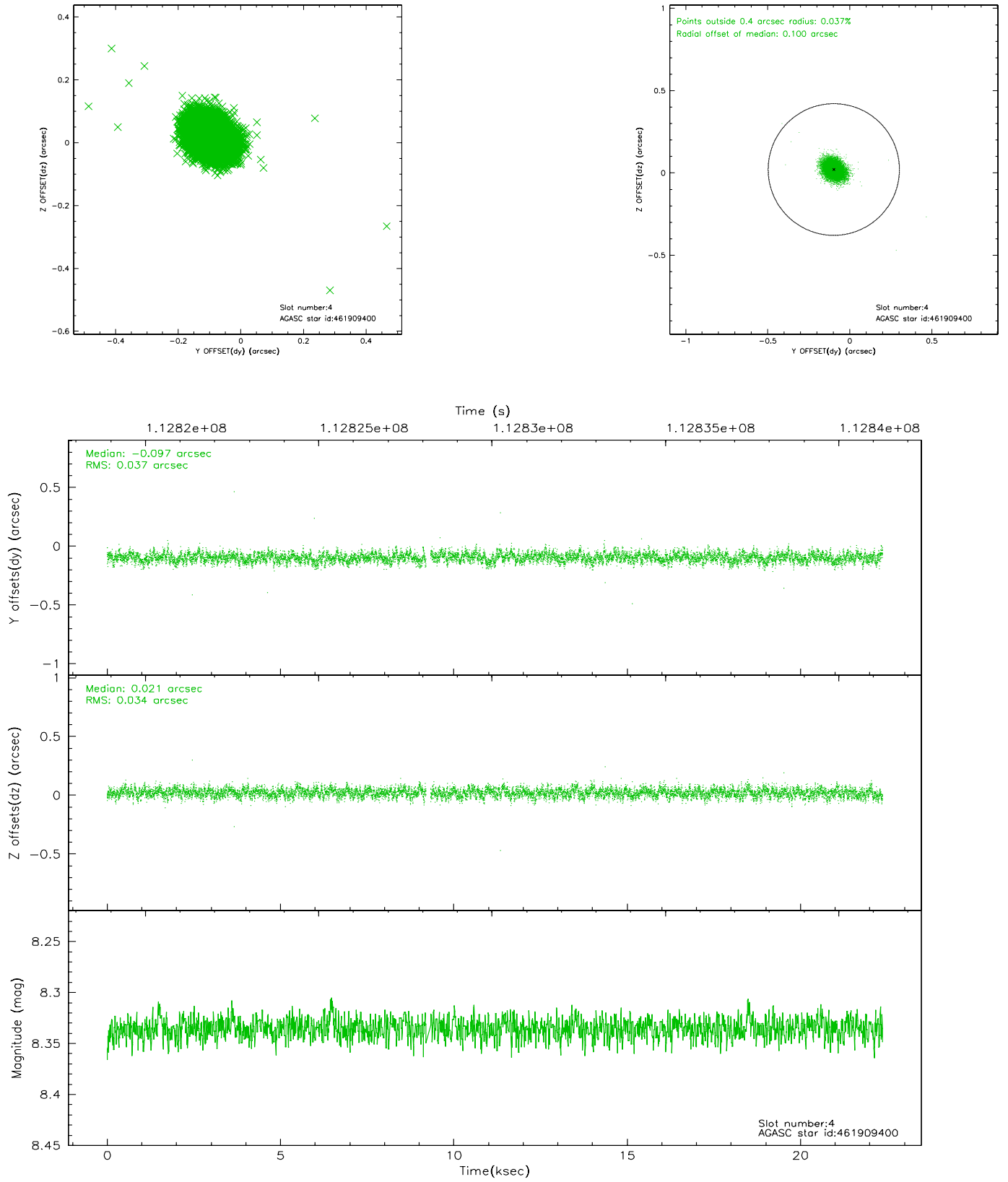
| slot | status | id | mag | n_pts | med_dy | med_dz | dr1 | dr2 | ra | dec | mean_y | mean_z |
|------|--------|-----------|------|-------|--------|--------|-------|-------|------------|-----------|----------|----------|
| 0 | FID | ACIS-S-2 | 7.11 | 5458 | -0.031 | 0.021 | 0.006 | 0.010 | 0.000000 | 0.000000 | -754.88 | -1727.05 |
| 1 | FID | ACIS-S-4 | 7.20 | 5457 | -0.065 | 0.009 | 0.005 | 0.009 | 0.000000 | 0.000000 | 2158.25 | 181.33 |
| 2 | FID | ACIS-S-5 | 7.24 | 5458 | 0.065 | -0.021 | 0.006 | 0.011 | 0.000000 | 0.000000 | -1807.48 | 175.05 |
| 3 | GUIDE | 461903680 | 7.71 | 10913 | -0.032 | -0.073 | 0.060 | 0.103 | 271.661765 | 46.273277 | -334.26 | -1480.94 |
| 4 | GUIDE | 461909400 | 8.33 | 10850 | -0.097 | 0.021 | 0.052 | 0.085 | 272.212627 | 45.772711 | -483.17 | 782.00 |
| 5 | GUIDE | 461910784 | 8.69 | 10914 | -0.018 | -0.122 | 0.056 | 0.092 | 271.578651 | 45.658398 | 1071.44 | 241.60 |
| 6 | GUIDE | 461911872 | 8.78 | 10911 | 0.124 | 0.091 | 0.064 | 0.103 | 271.267939 | 45.702917 | 1630.08 | -328.03 |
| 7 | GUIDE | 461904776 | 9.15 | 10909 | 0.025 | 0.085 | 0.087 | 0.141 | 272.396559 | 45.830962 | -983.74 | 860.94 |

2.4 Star Slots

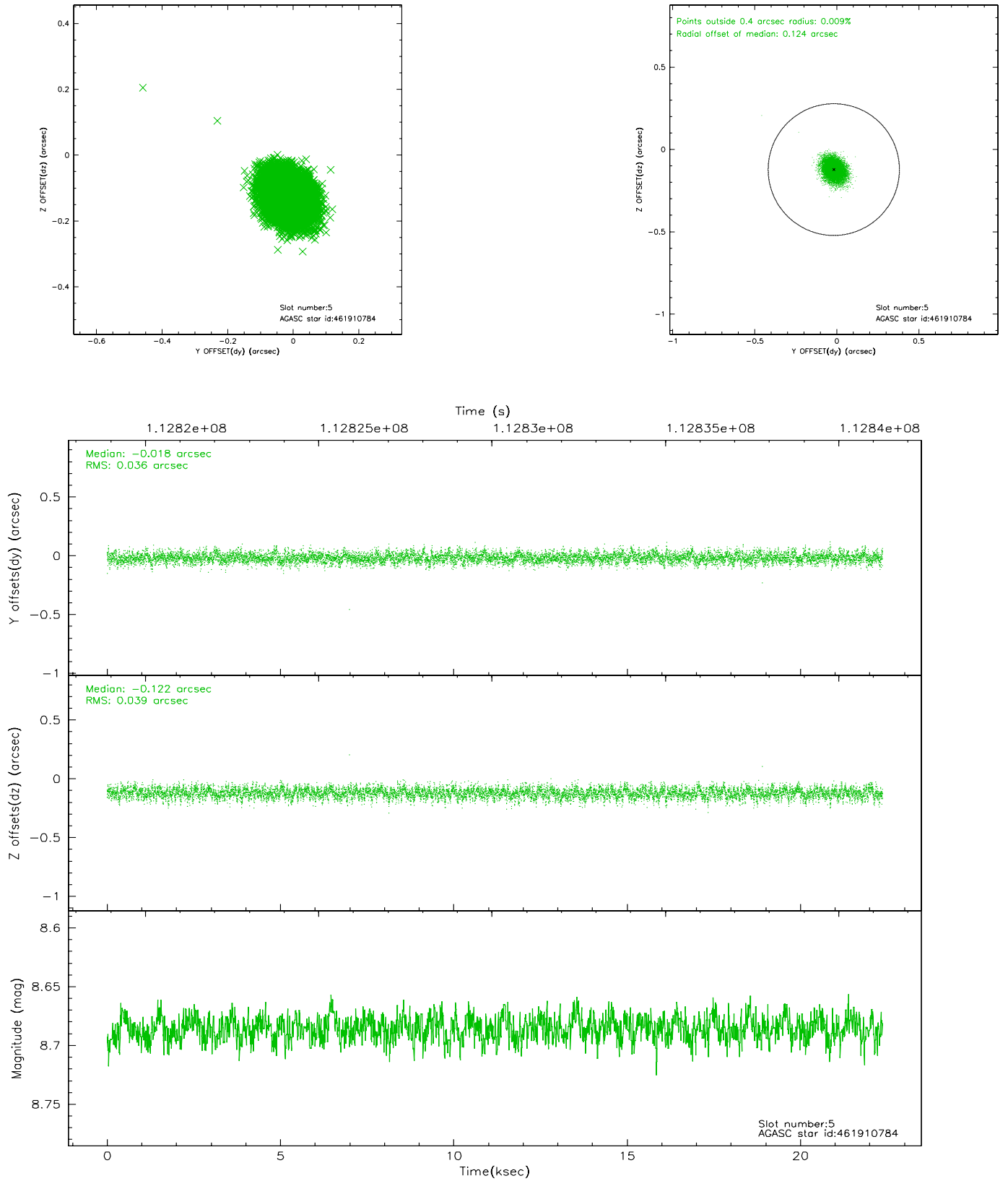
2.4.1 Slot 3



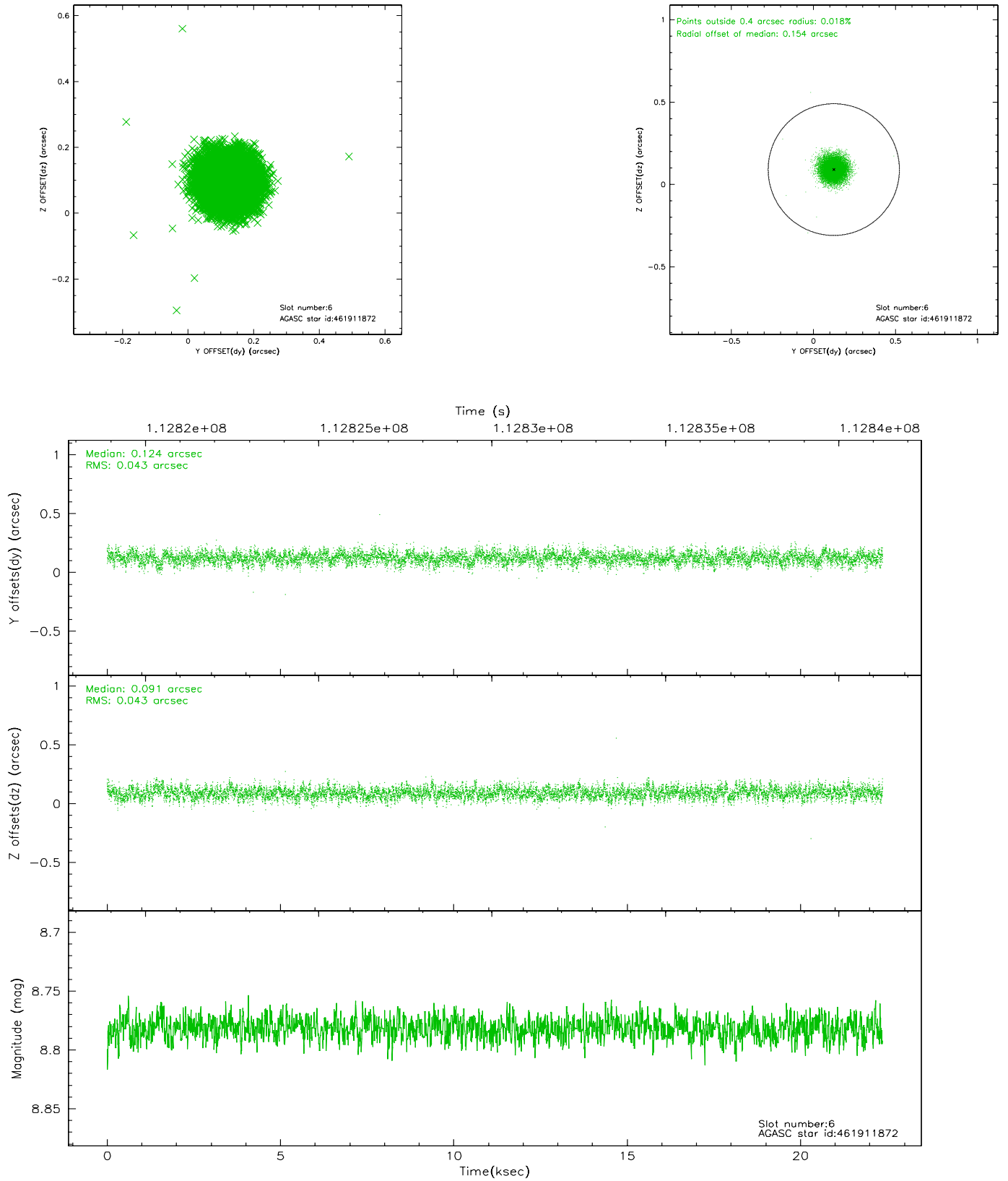
2.4.2 Slot 4



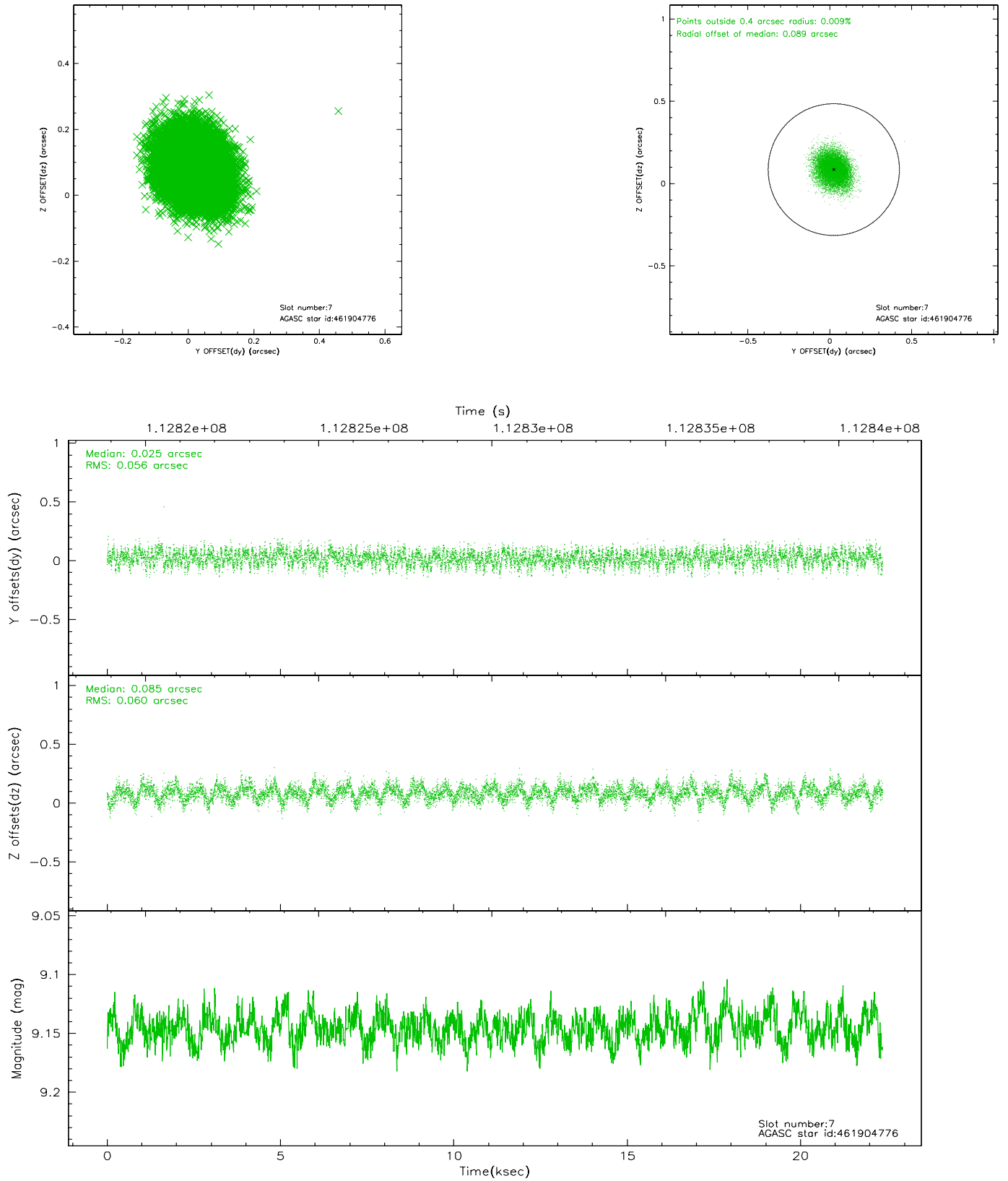
2.4.3 Slot 5



2.4.4 Slot 6

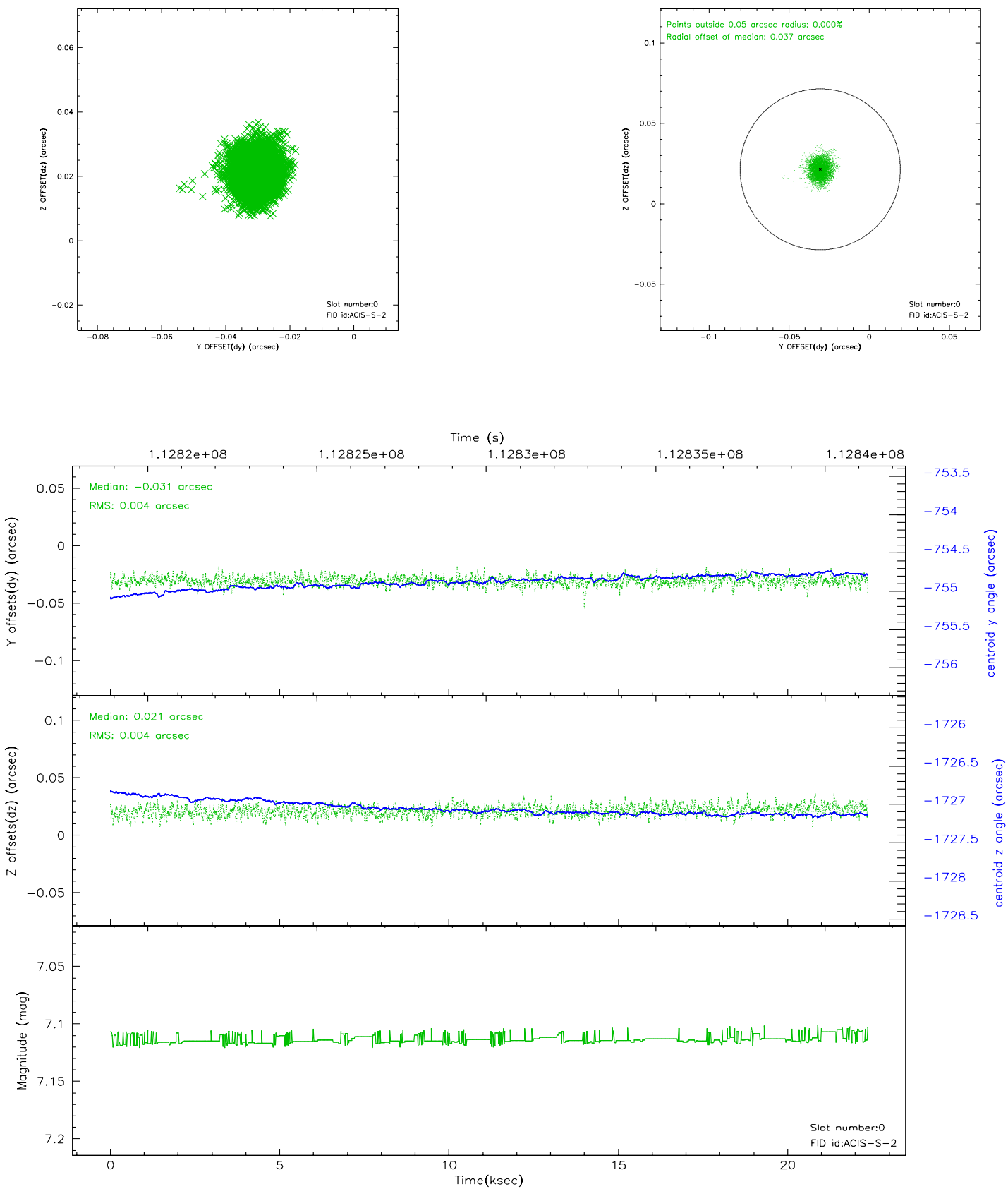


2.4.5 Slot 7

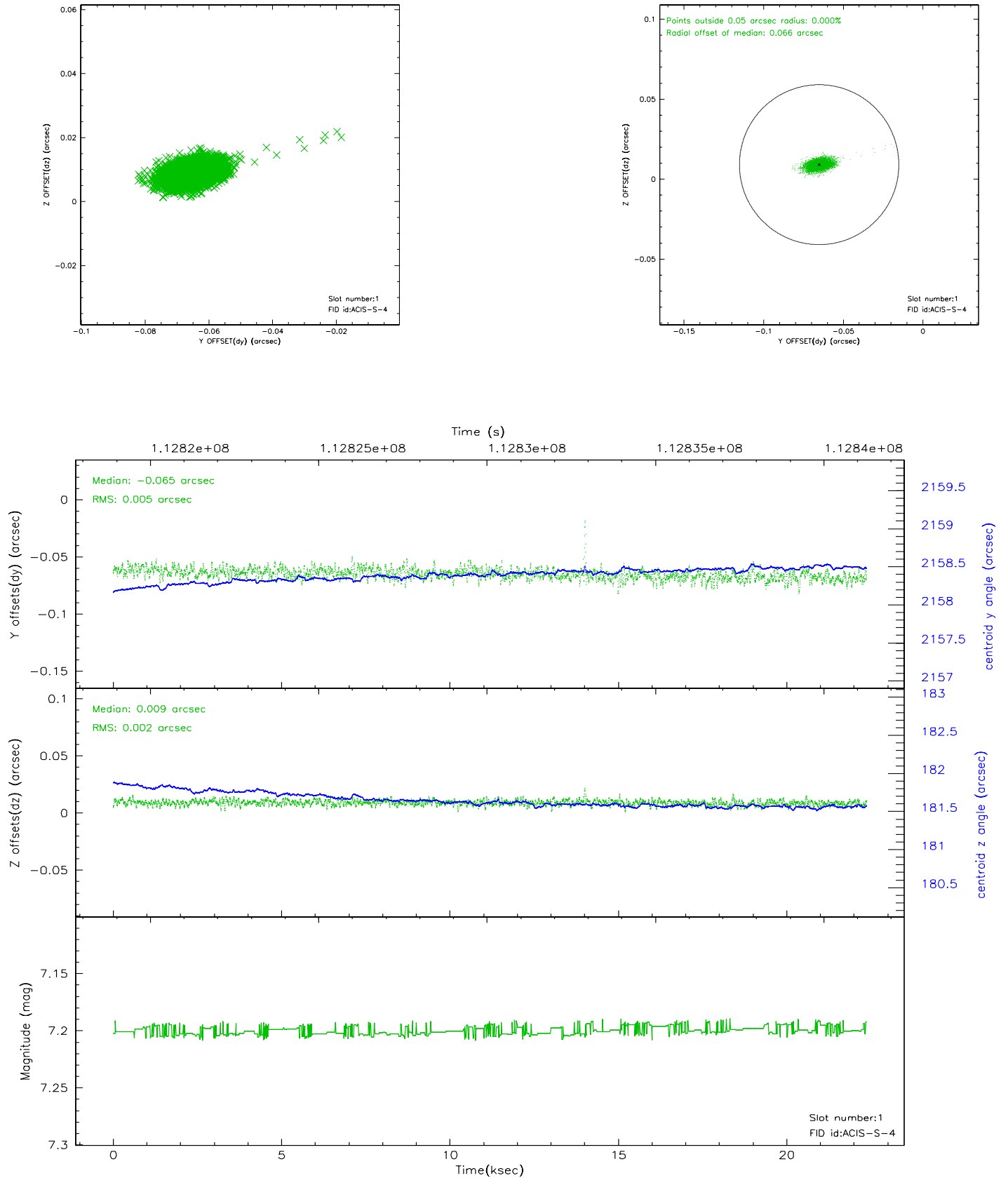


2.5 FID Slots

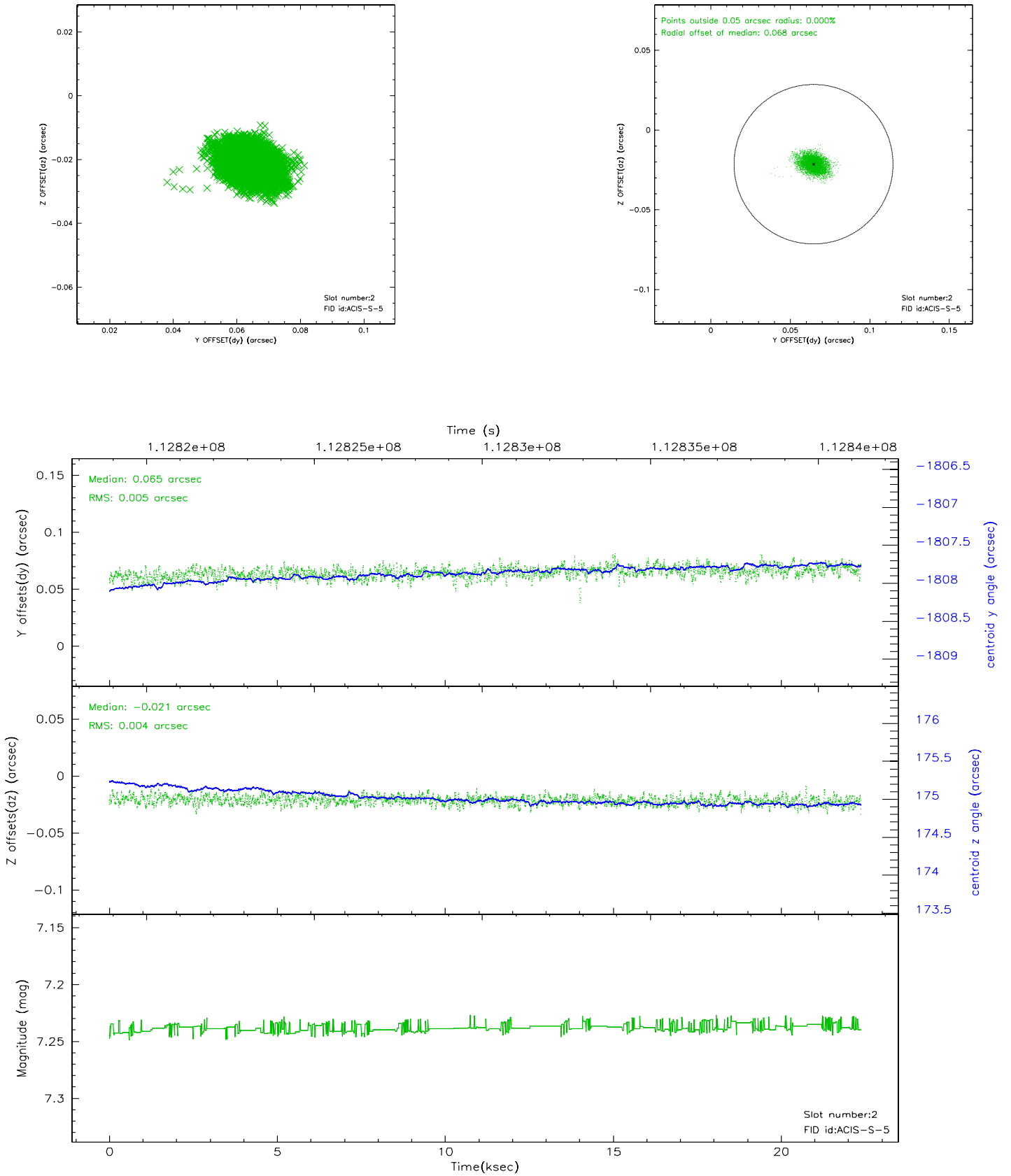
2.5.1 Slot 0



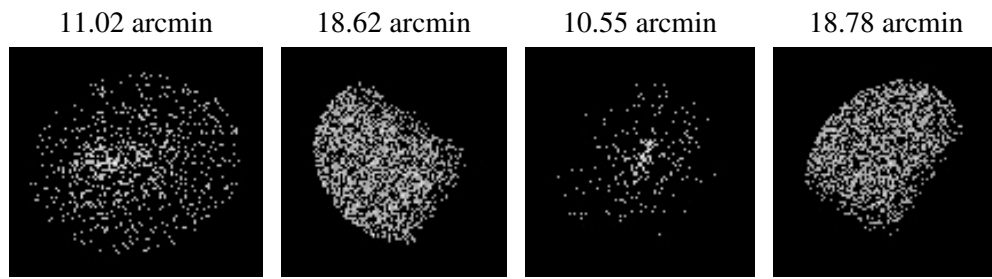
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

| | |
|----------------------------|---------------|
| V&V Scientist | Beth Sundheim |
| V&V Date (YYYY-MM-DD) | 2006.12.17 |
| V&V Edition | 1 |
| V&V Disposition and Status | OK |
| V&V Charge Time | 22 |

A.2 Comments