

KIC 005732862

Q1-17 DR25 TCE Parameters

| TCE | Run Type | KOI? | Period (Days) | Epoch (BKJD) | Depth (ppm) | Duration (Hours) | MES | SNR | R_{\star} (R_{\odot}) | T_{\star} (K) | R_p (R_{\oplus}) | S_p (S_{\oplus}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|-----|-----|-----------------------------|-----------------|------------------------|------------------------|
| 005732862-01 | OBS | No | 2.110949 | 131.897792 | 4.8 | 23.031 | 7.3 | 4.4 | 1.72 | 6760 | 0.38 | 4352.37 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---------------------------------|
| 005732862-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—CENT_FEW_DIFFS |

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

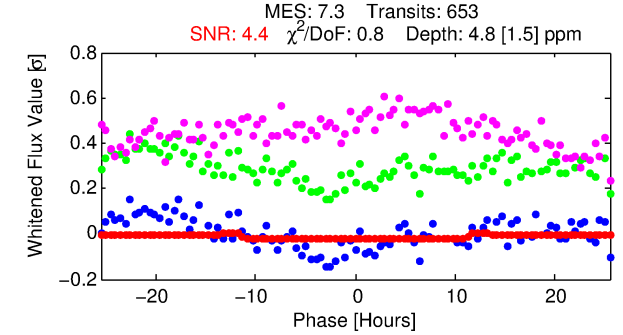
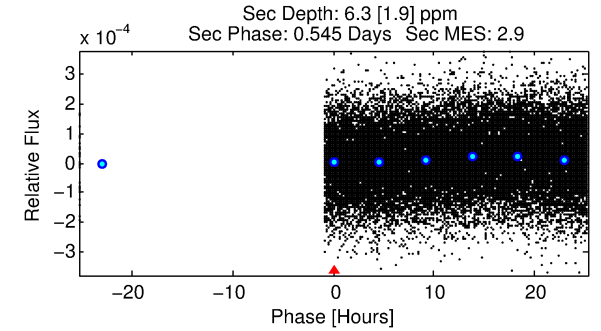
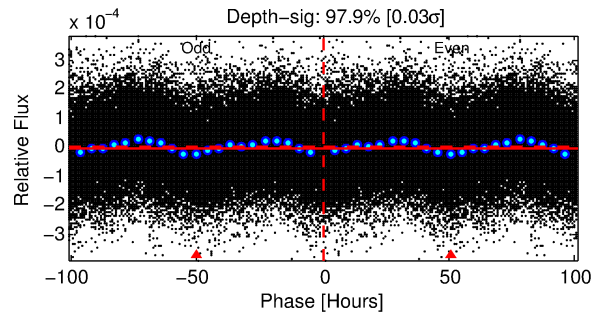
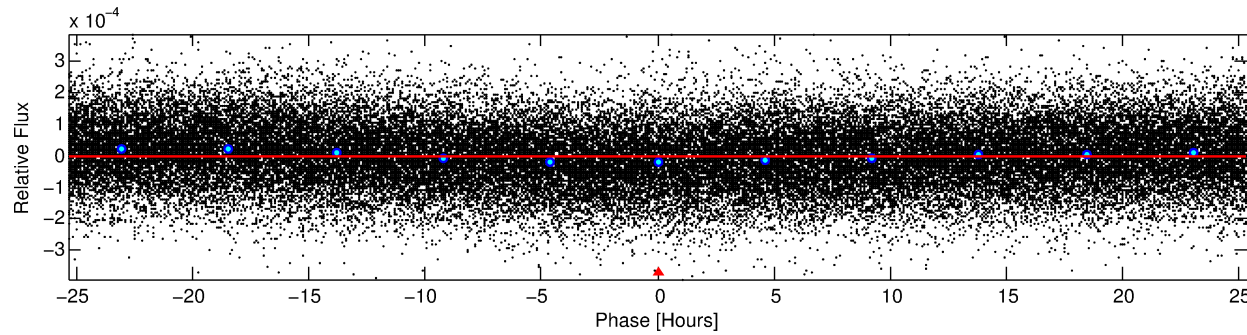
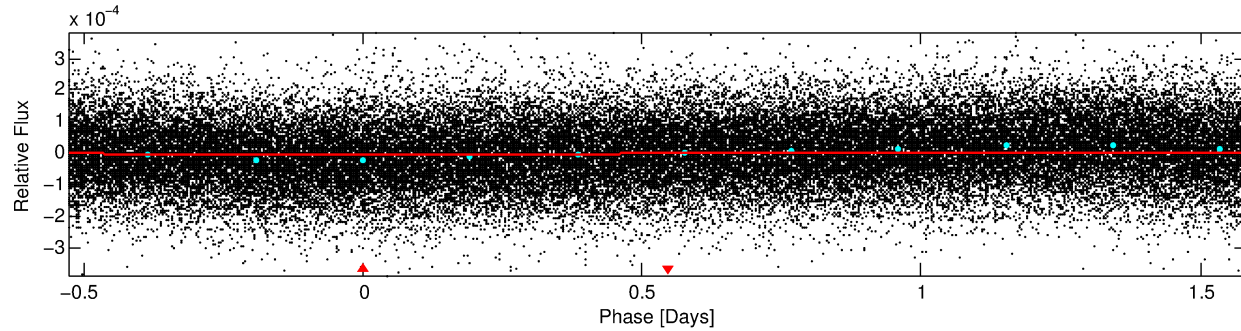
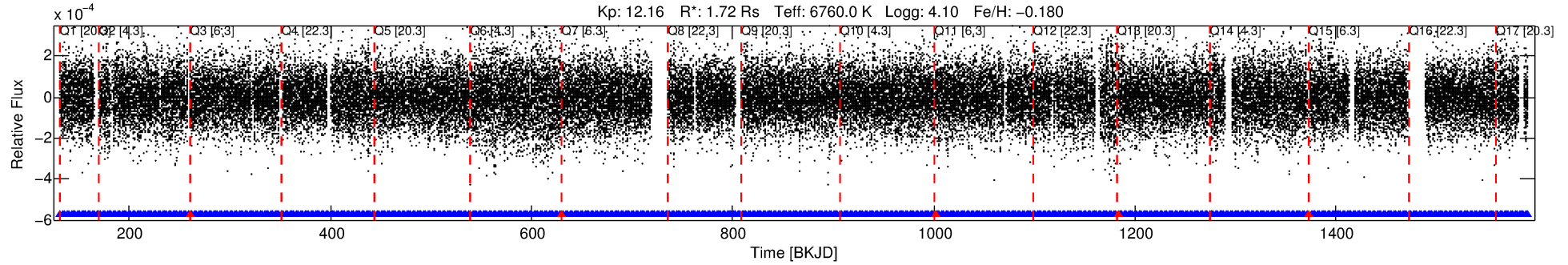
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005732862-01

No Significant Match Found

DV One-Page Summary

KIC: 5732862 Candidate: 1 of 1 Period: 2.111 d



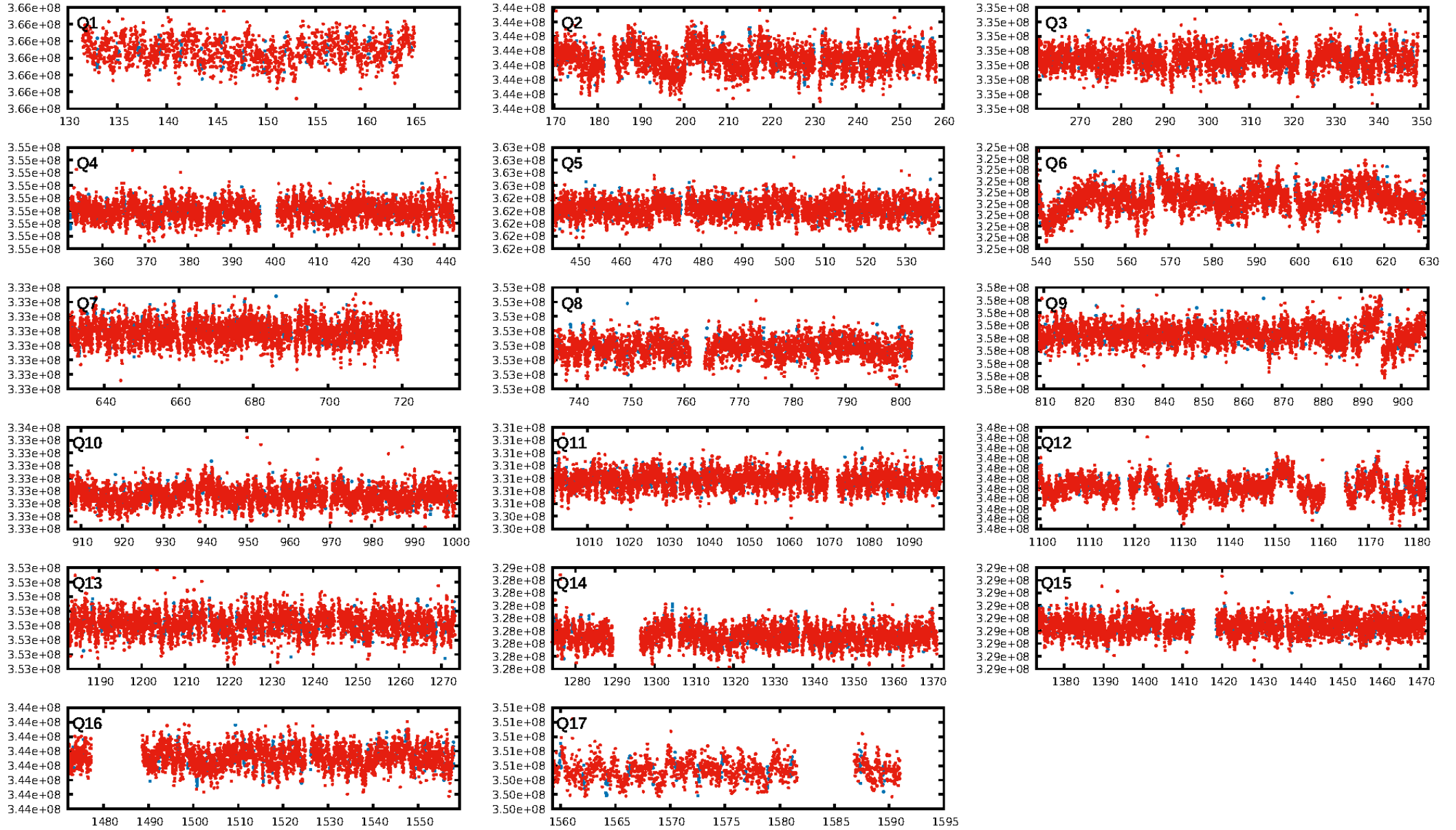
DV Fit Results:

Period = 2.11095 [0.00010] d
Epoch = 131.8978 [0.0237] BKJD
Rp/R* = 0.0020 [0.0030]
a/R* = 1.01 [0.20]
b = 0.01 [1219.67]
Seff = 4352.37 [1497.46]
Teq = 2071 [178] K
Rp = 0.38 [0.57] Re
a = 0.0356 [0.0074] AU
Ag = 30.17 [90.41] [0.32σ]
Teffp = 7505 [5600] K [0.97σ]

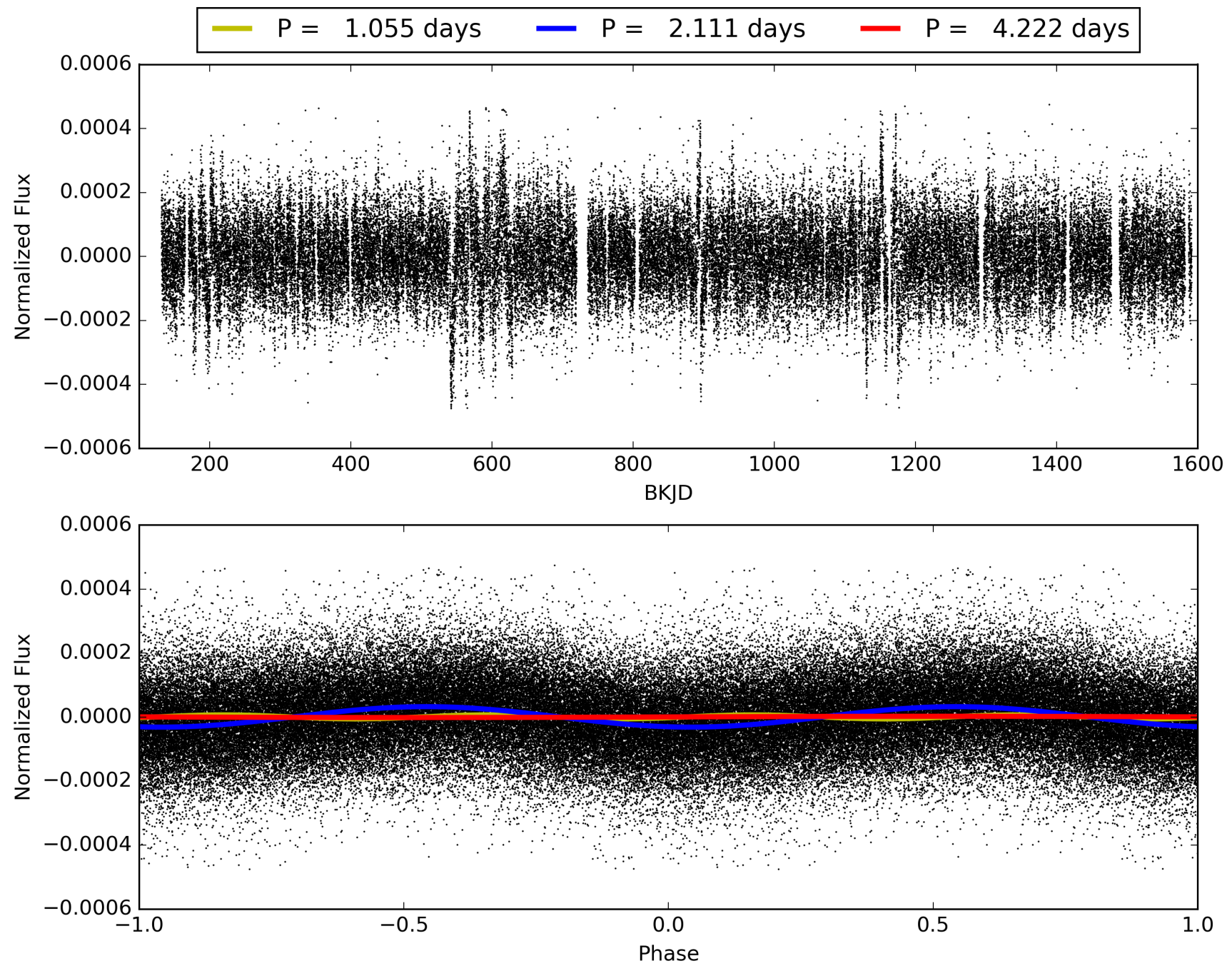
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgm: 0.99 [619/624]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005732862-01, PDC Light Curves

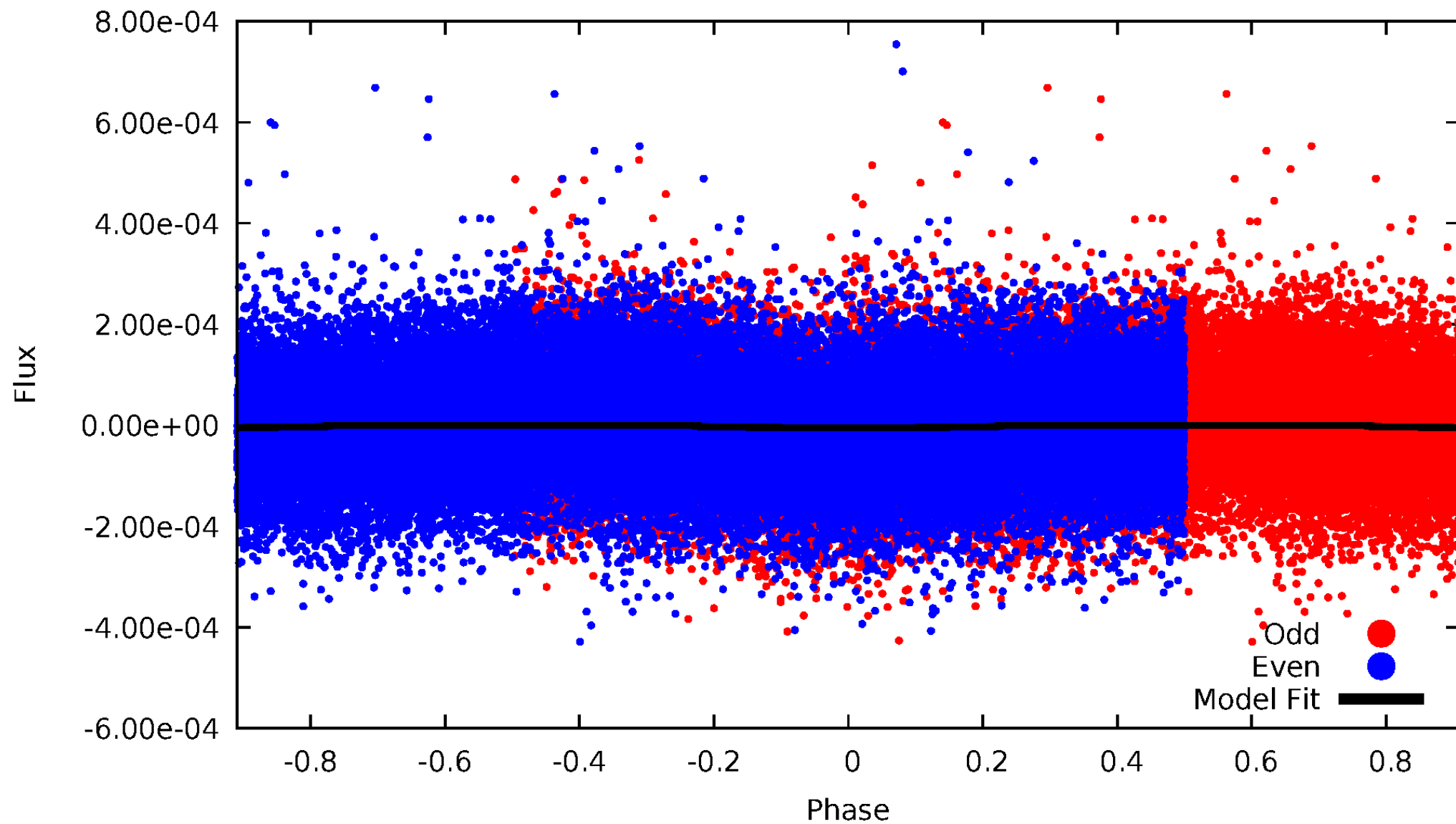


TCE 005732862-01



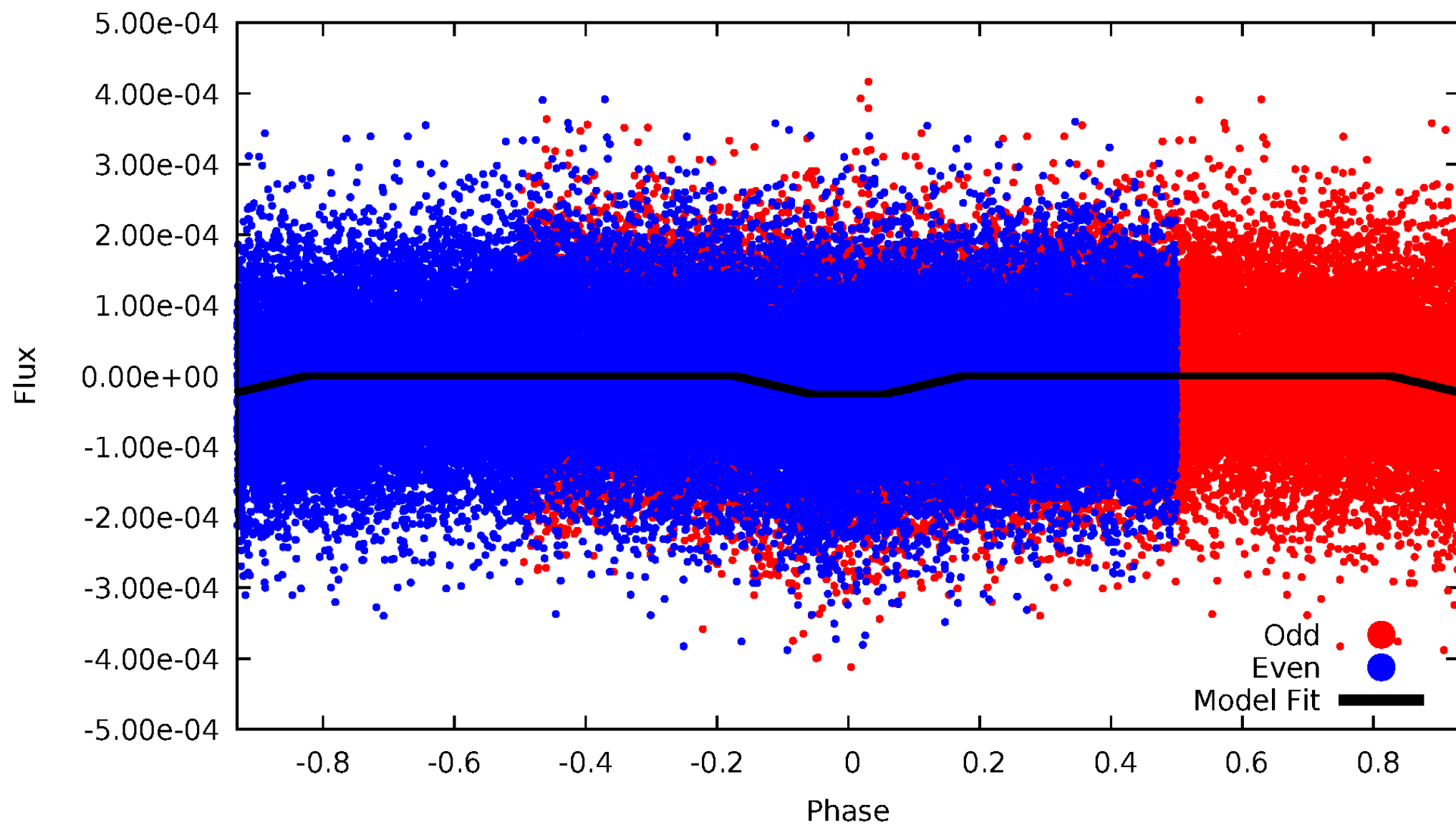
DV Odd/Even

TCE 005732862-01



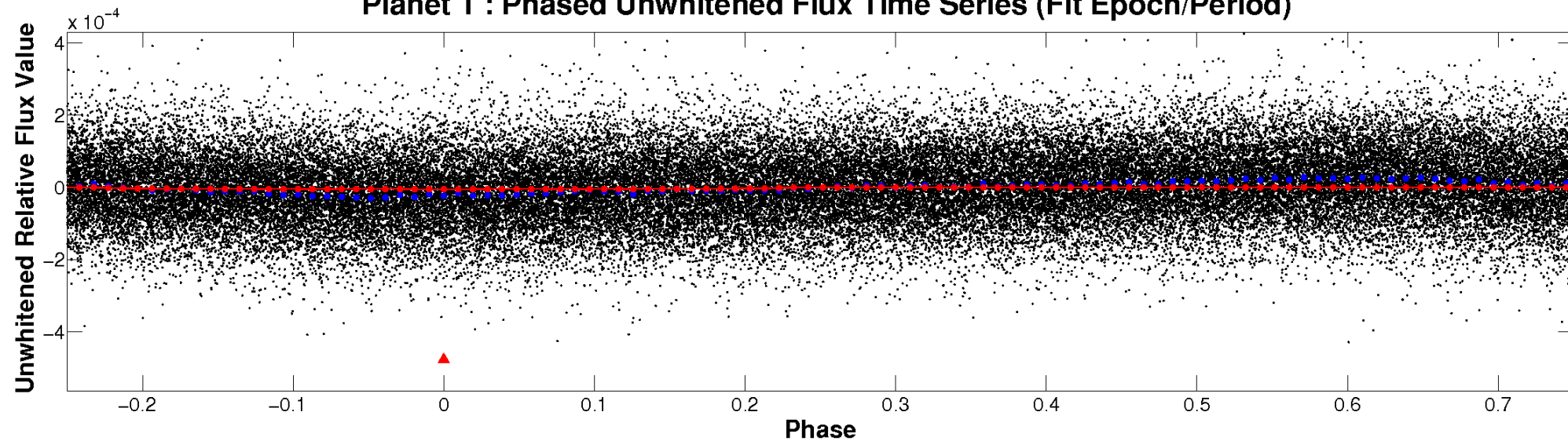
ALT Odd/Even

TCE 005732862-01

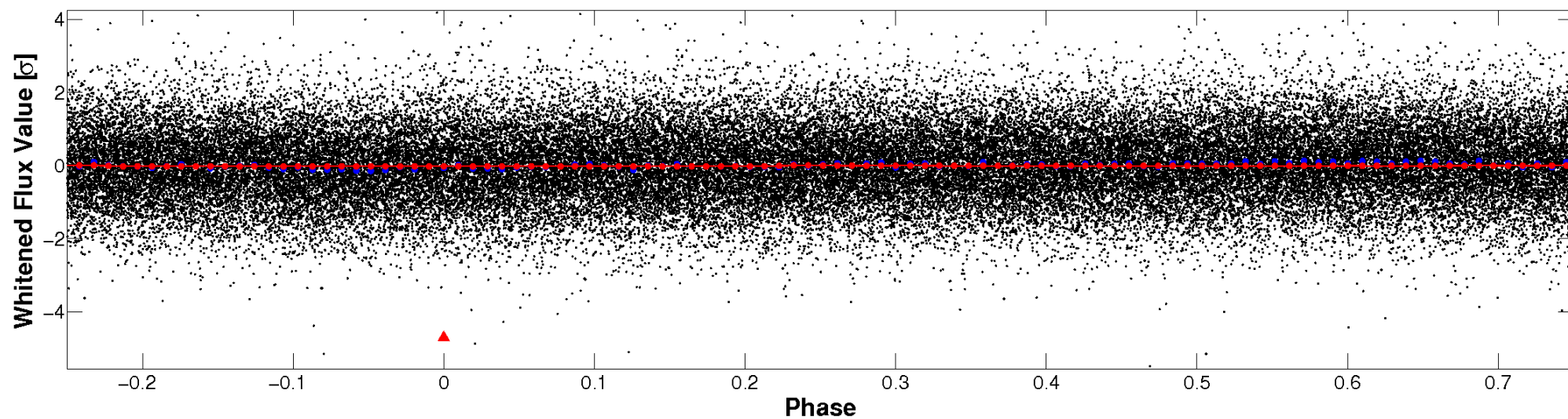


Non-Whitened Vs. Whitened Light Curve

Planet 1 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

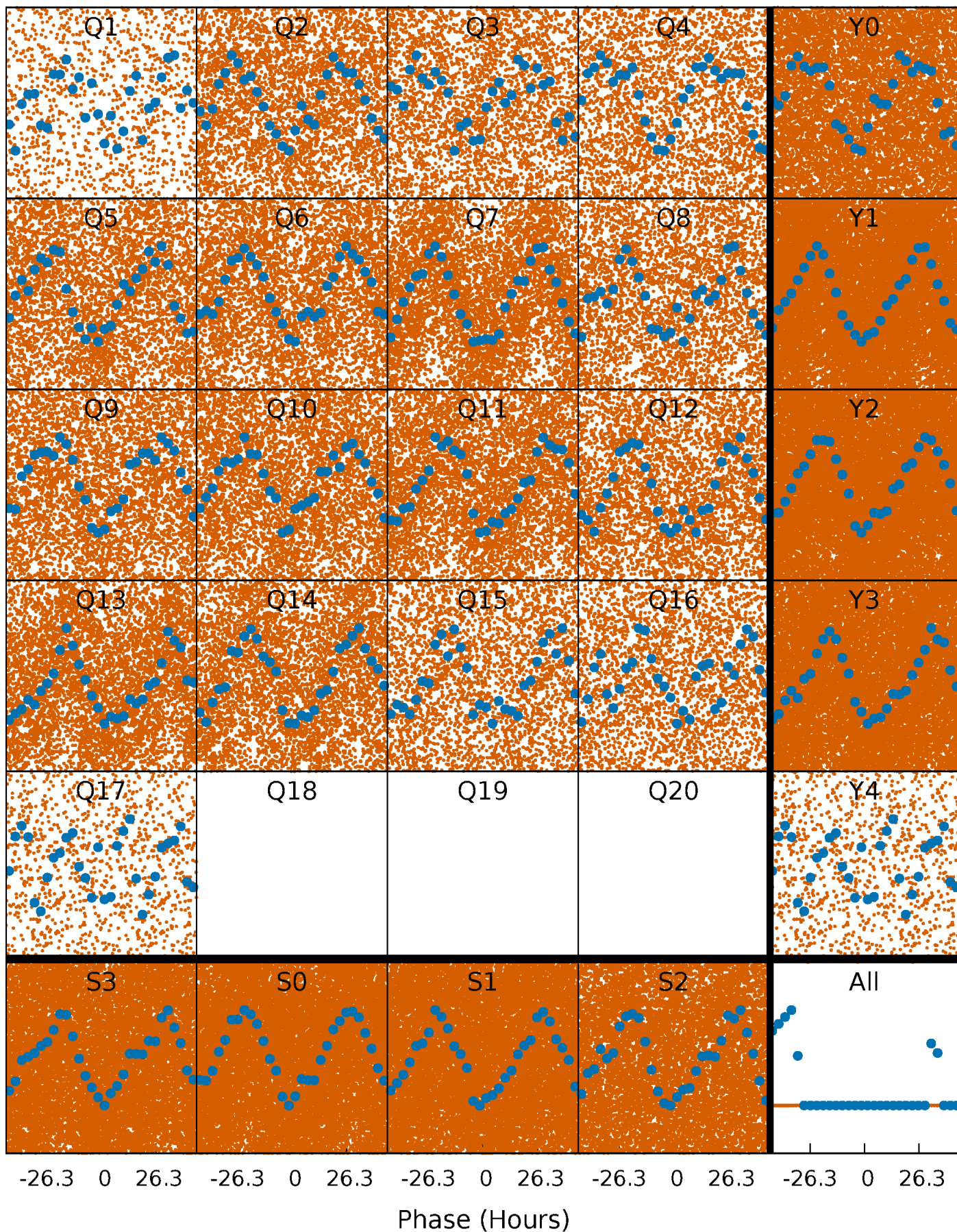


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



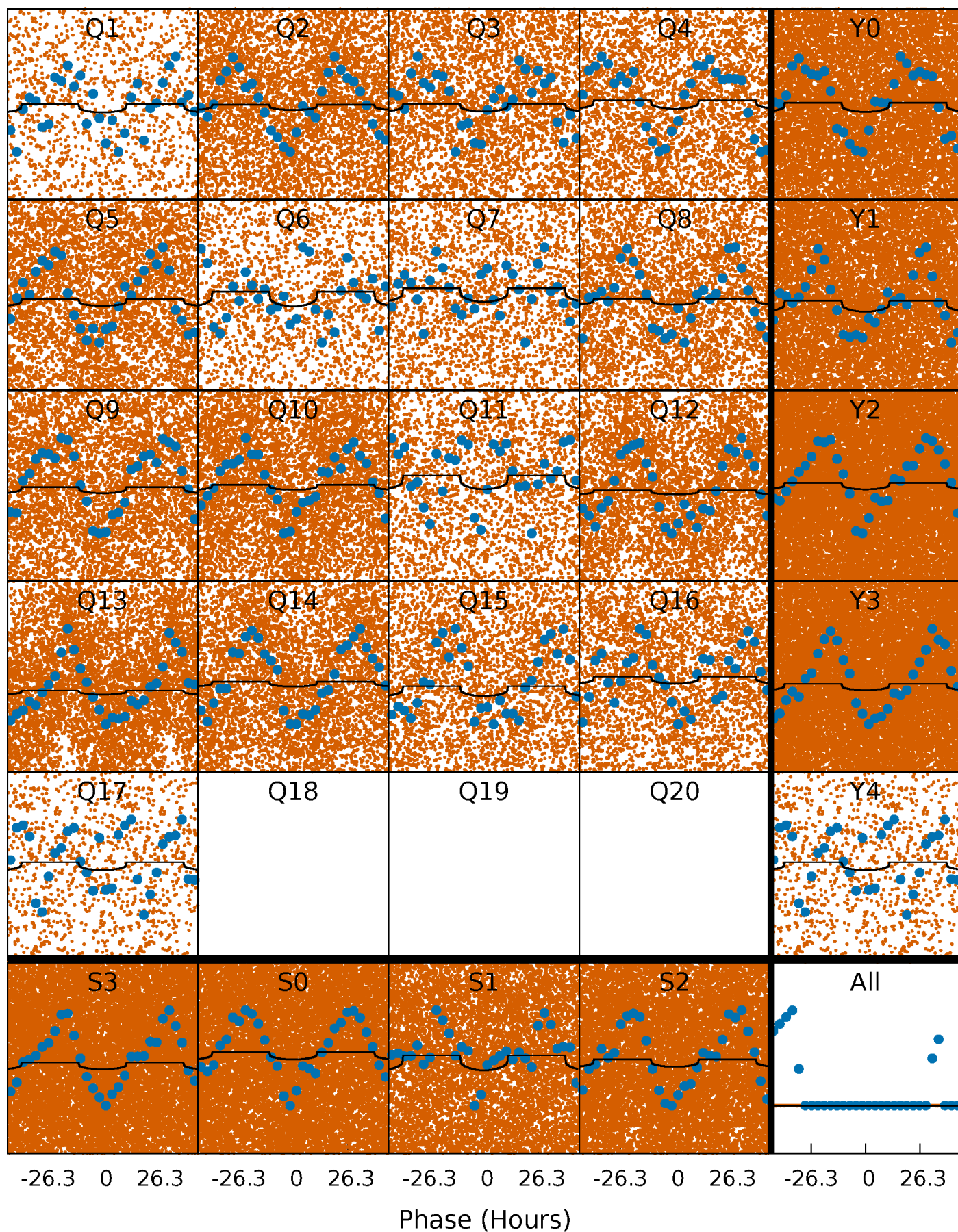
PDC Quarter-Phased Transit Curves

TCE 005732862-01 P= 2.110949 Days $T_0=131.897792$ (BKJD)



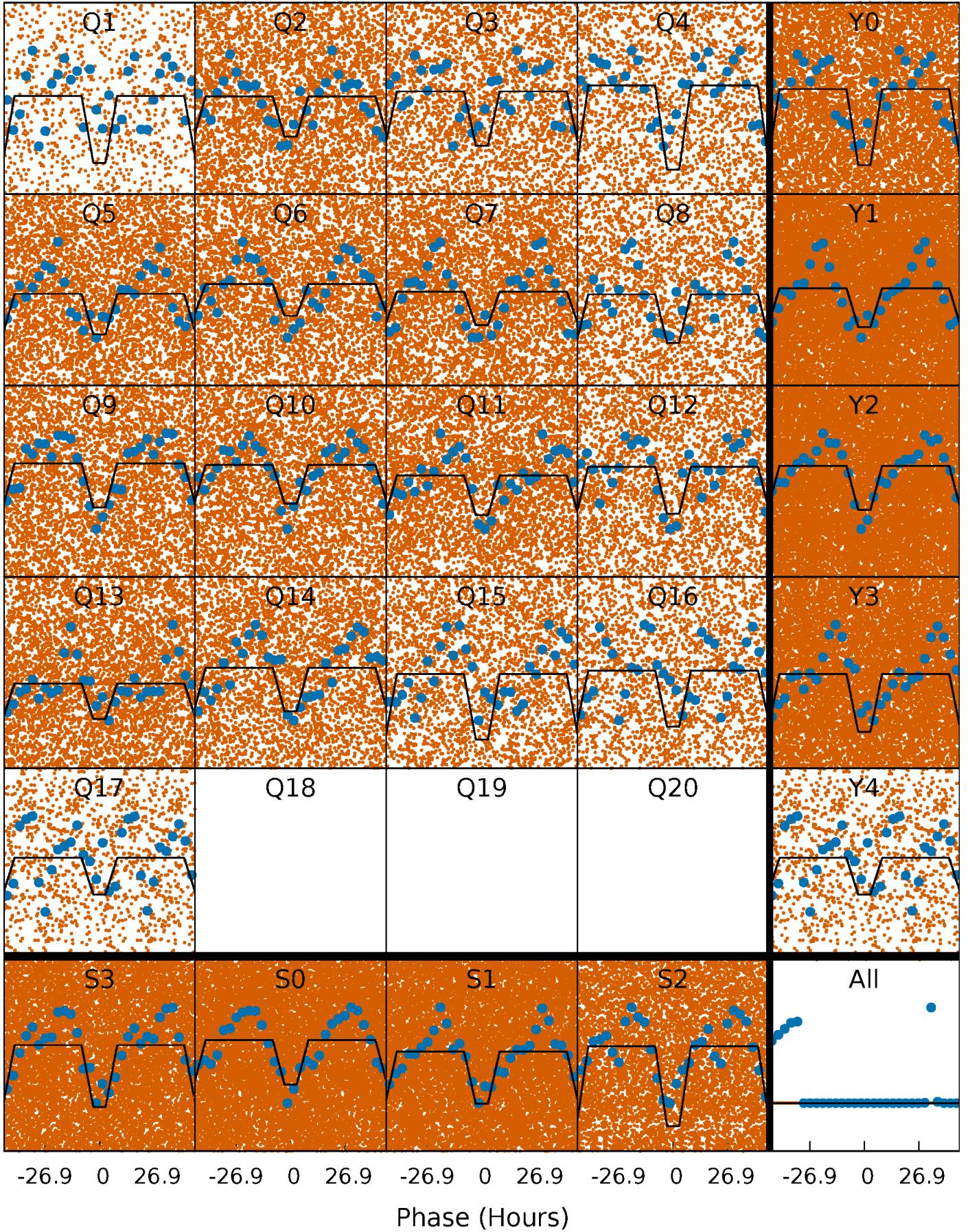
DV Quarter-Phased Transit Curves

TCE 005732862-01 P= 2.110949 Days $T_0=131.897792$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

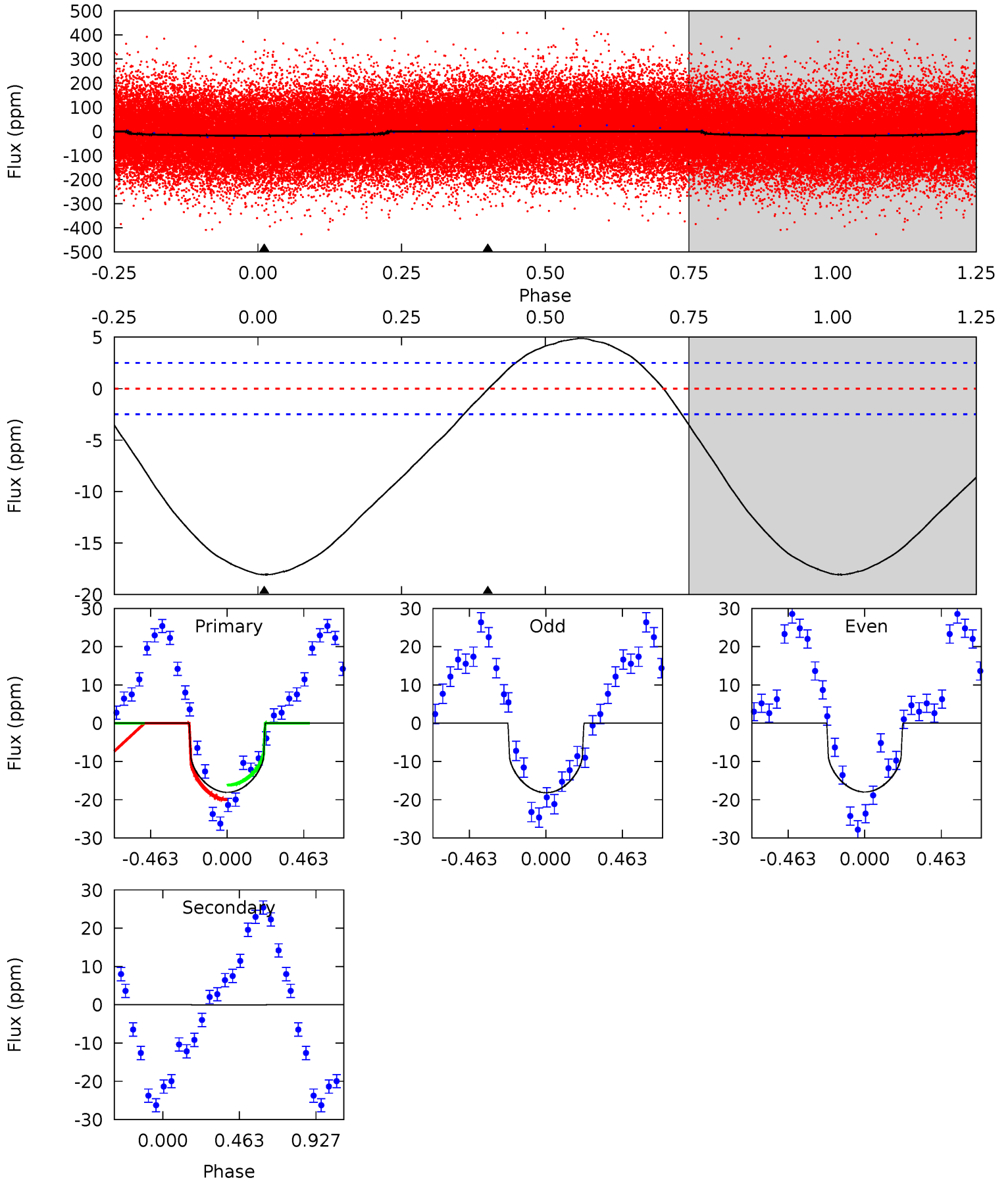
TCE 005732862-01 P= 2.110753 Days $T_0=131.901475$ (BKJD)



DV Model-Shift Uniqueness Test

005732862-01, P = 2.110949 Days, E = 129.786843 Days

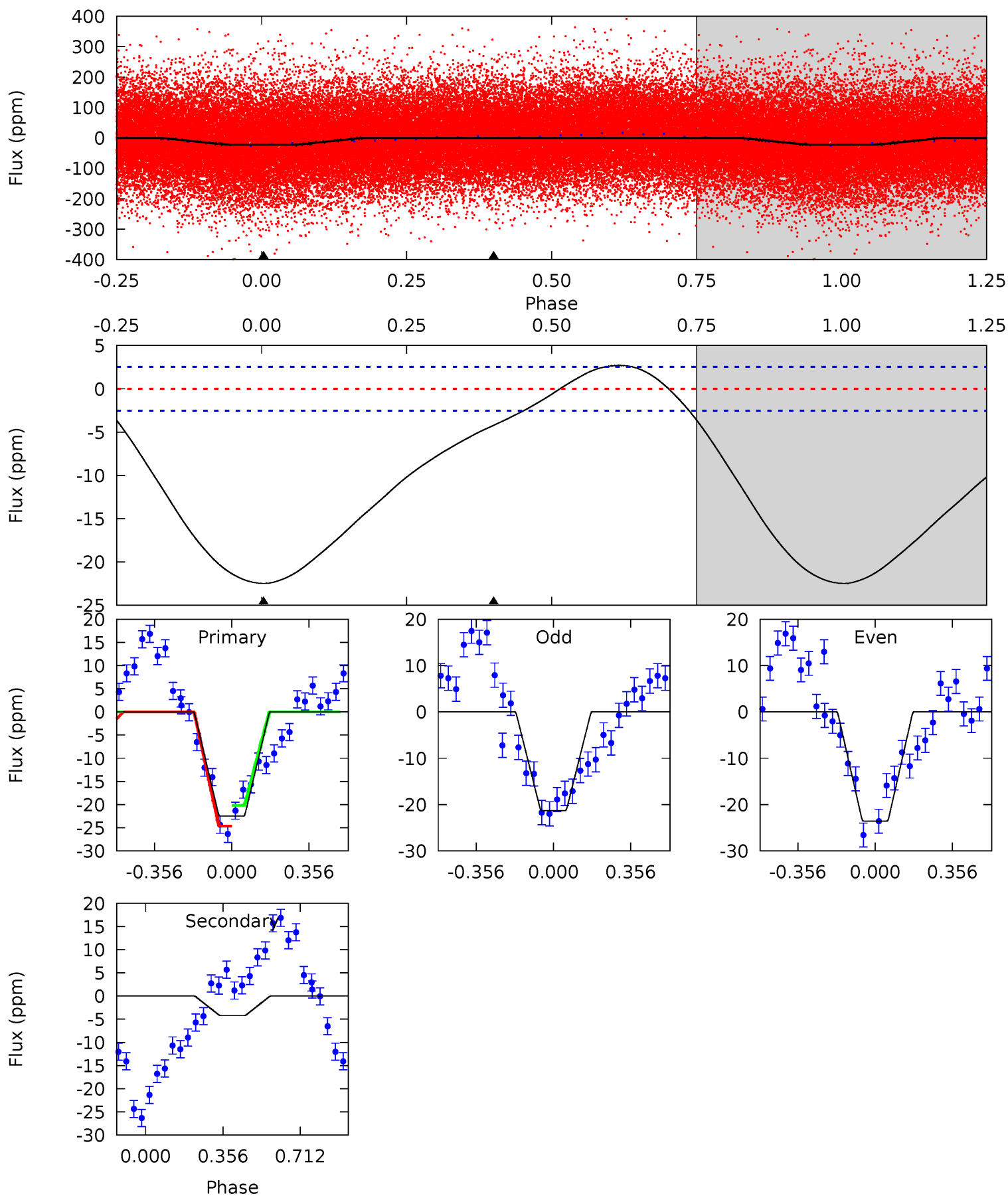
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 30.7 | 0.12 | 0 | 0 | 4.23 | 0.73 | 3.44 | 30.7 | 30.7 | 0.12 | 0.12 | 0.18 | 1.00 | 0.21 | 3.30 |



Alt Model-Shift Uniqueness Test

005732862-01, P = 2.110753 Days, E = 129.790722 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 38.2 | 7.18 | 0 | 0 | 4.29 | 0.92 | 3.06 | 38.2 | 38.2 | 7.18 | 7.18 | 1.94 | 1.10 | 0.11 | 3.70 |



Stellar Parameters For KIC 005732862

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 6760^{+190}_{-262} | $4.099^{+0.171}_{-0.124}$ | $-0.180^{+0.300}_{-0.300}$ | $1.718^{+0.370}_{-0.411}$ | $1.360^{+0.157}_{-0.236}$ | $0.378^{+0.353}_{-0.146}$ |
| | +3%/-4% | +4%/-3% | +167%/-167% | +22%/-24% | +12%/-17% | +93%/-39% |
| Source | KIC0 | FLK73 | KIC0 | DSEP | | |

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005732862-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|-------------|------------------------|----------------------|-------------------------|----------------------------|
| DV | -0 ± 1 | $0.54^{+0.52}_{-0.34}$ | 2877^{+176}_{-186} | -2972^{+7241}_{-1097} | $0.032^{+2.854}_{-1.791}$ |
| Alt. | -4 ± 1 | $0.96^{+0.60}_{-0.49}$ | 2880^{+168}_{-188} | 4359^{+1659}_{-798} | $3.212^{+10.827}_{-2.019}$ |

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

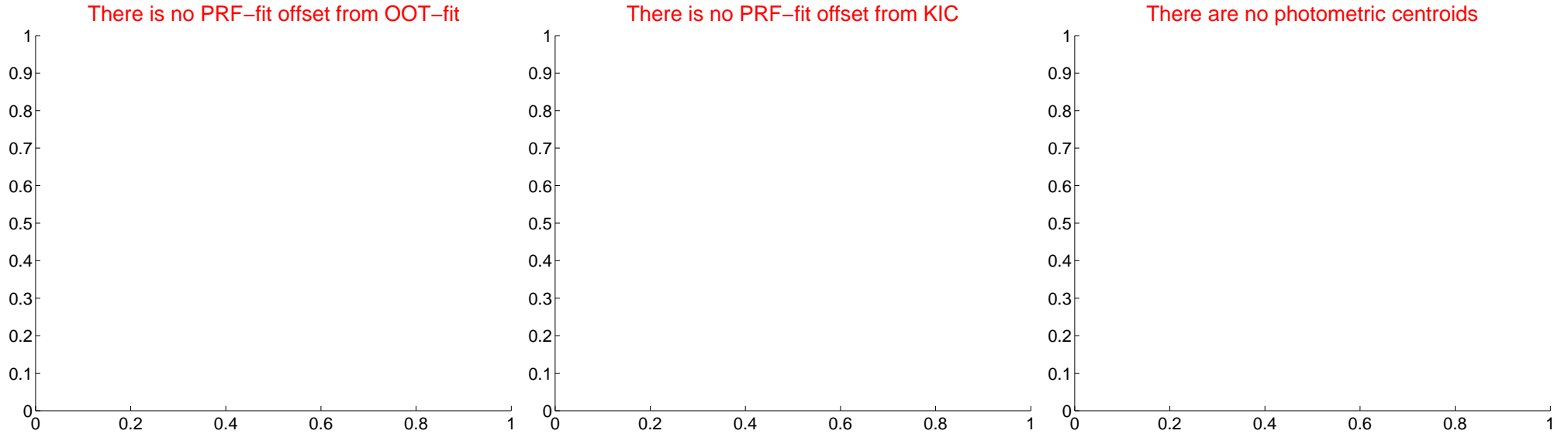
DV Centroid Data

Supplemental centroid analysis for 005732862-01. Kepler magnitude: 12.16. Transit SNR 4.39

There are 0 quarters with good PRF difference image offsets

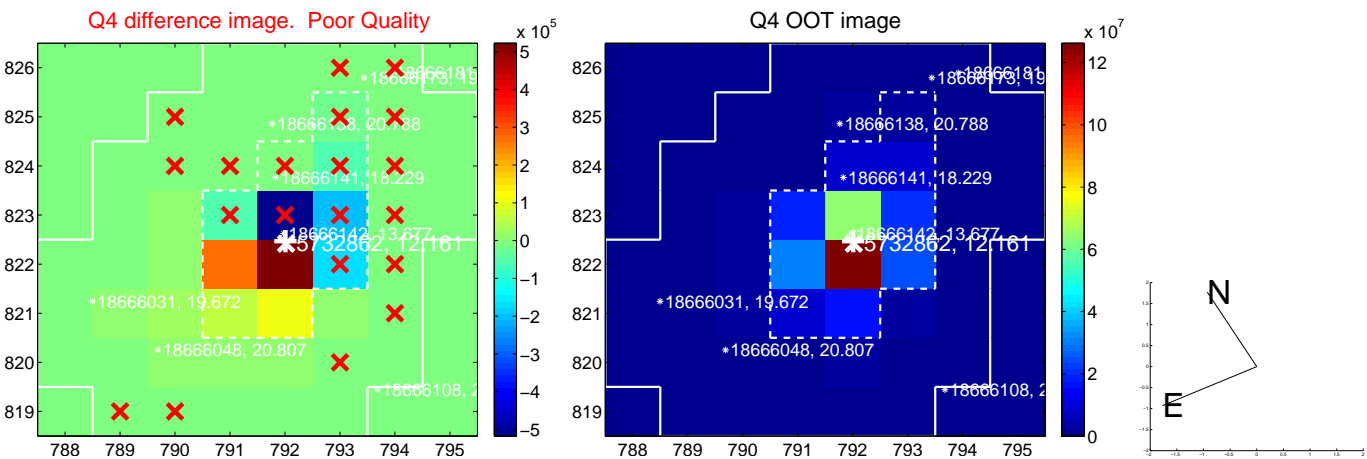
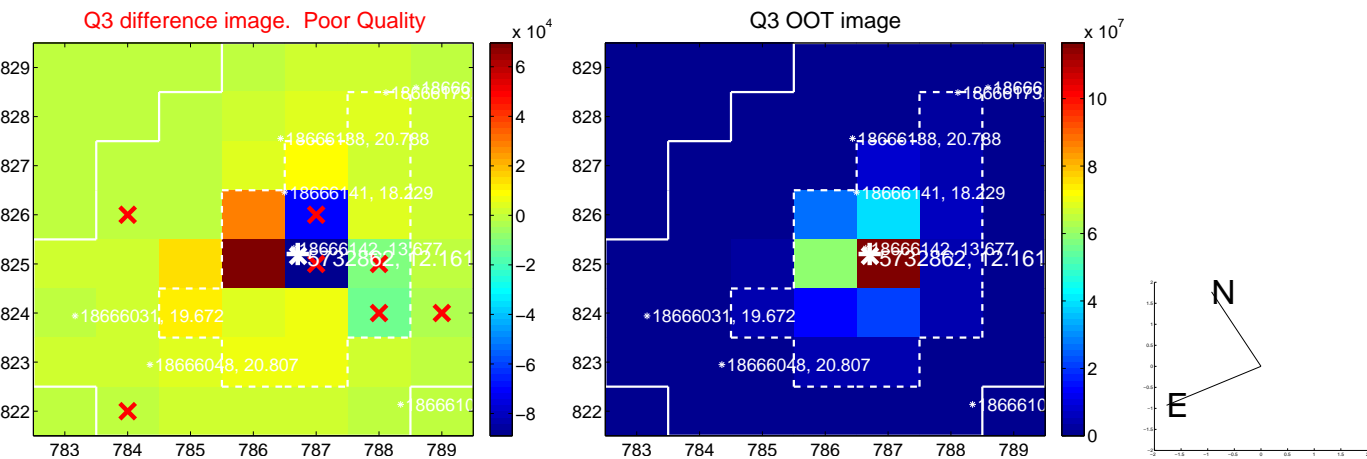
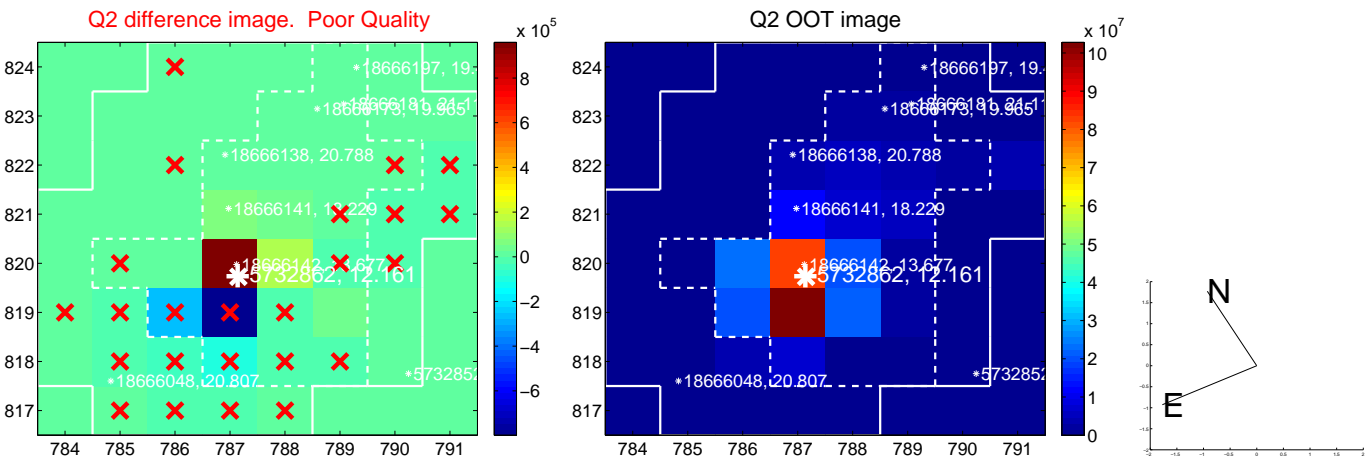
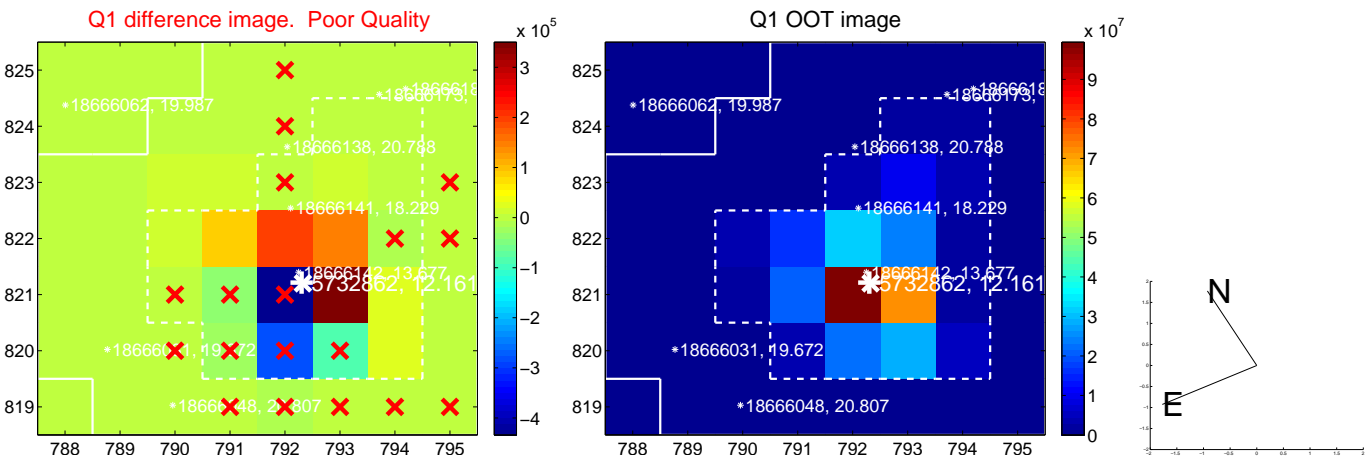
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|-------------|--------------|
| PRF-fit source offset from OOT | — | — | — | — |
| PRF-fit source offset from KIC position | — | — | — | — |
| photometric centroid source offset | — | — | — | — |

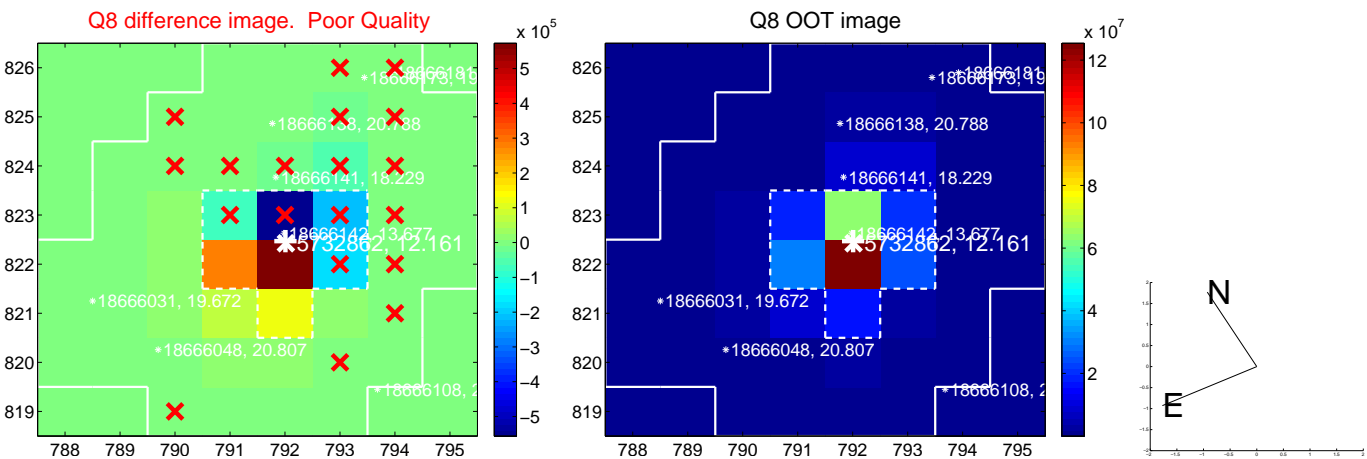
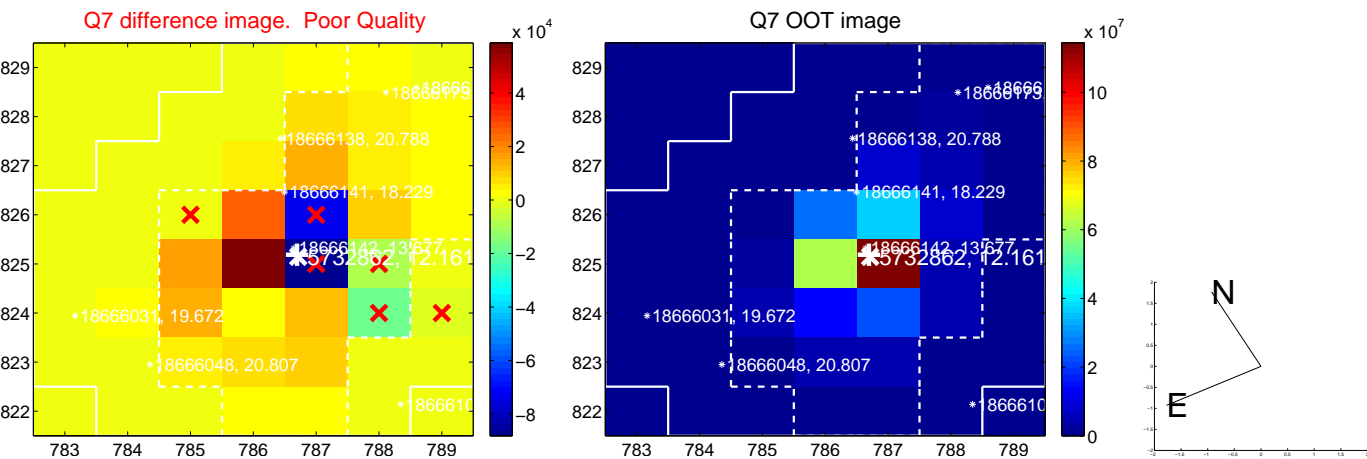
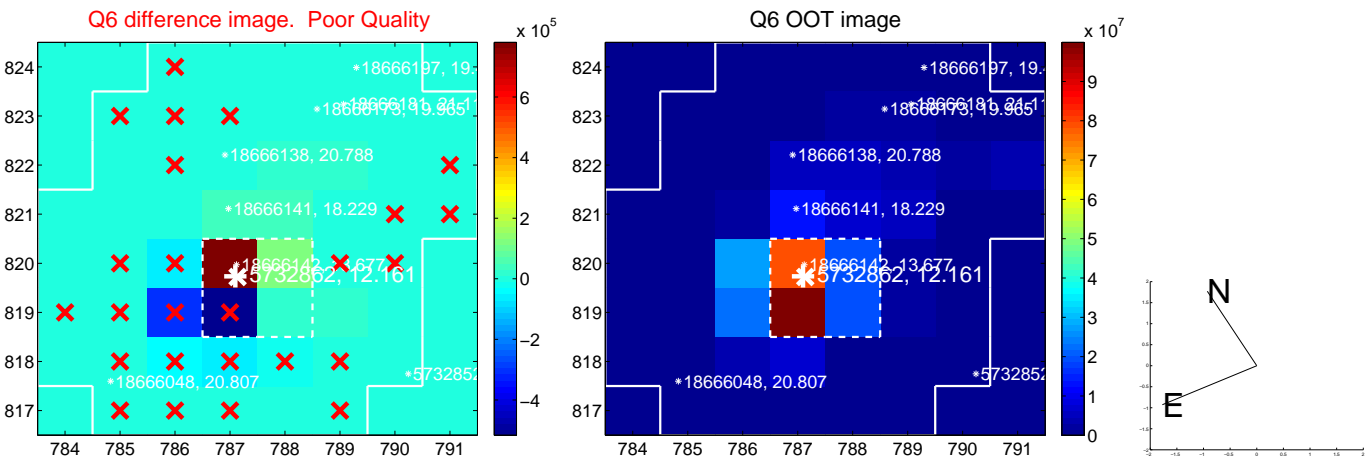
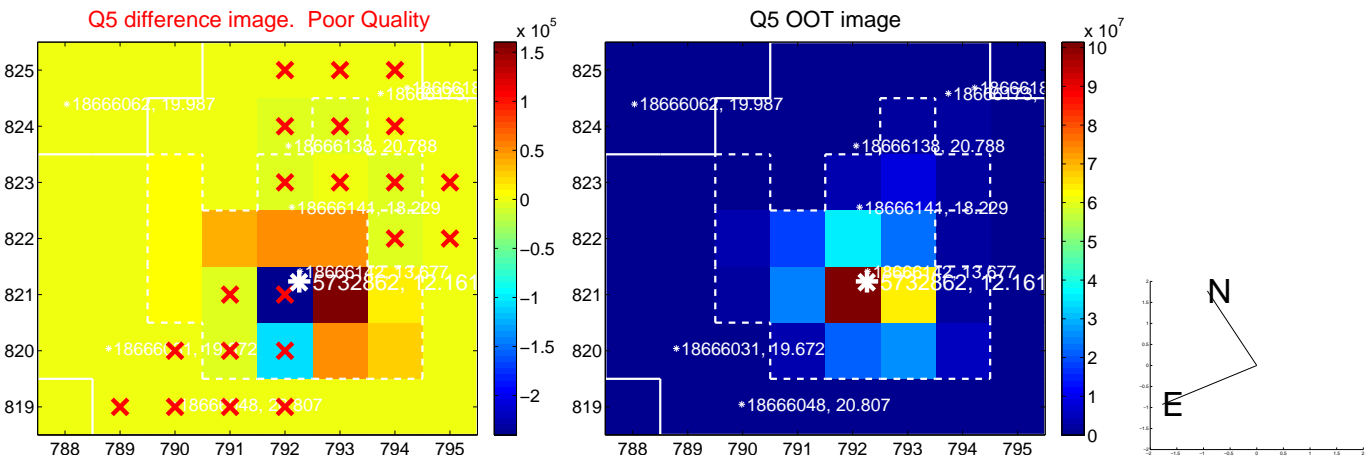


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

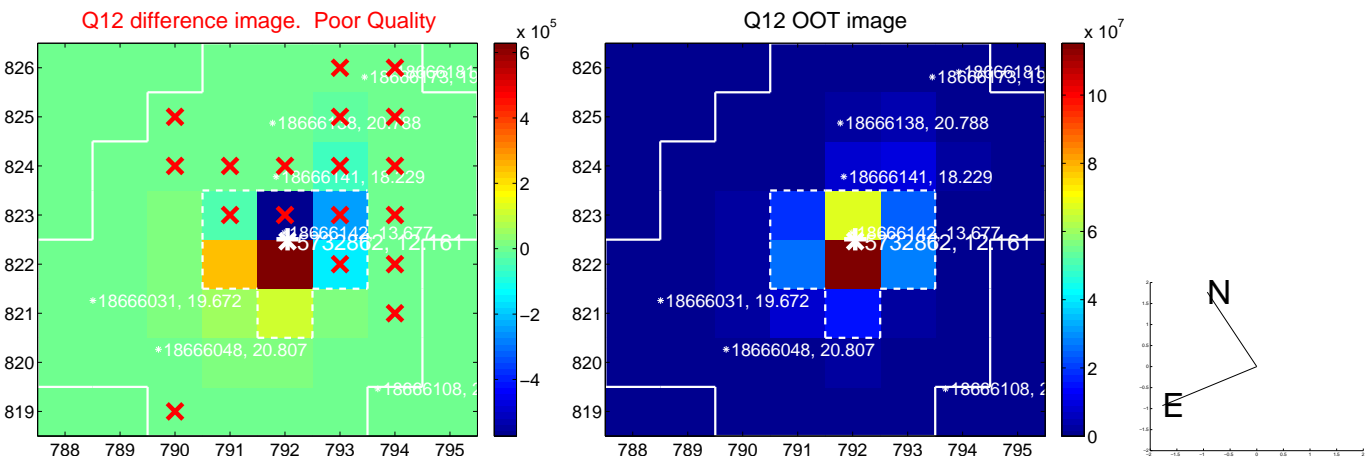
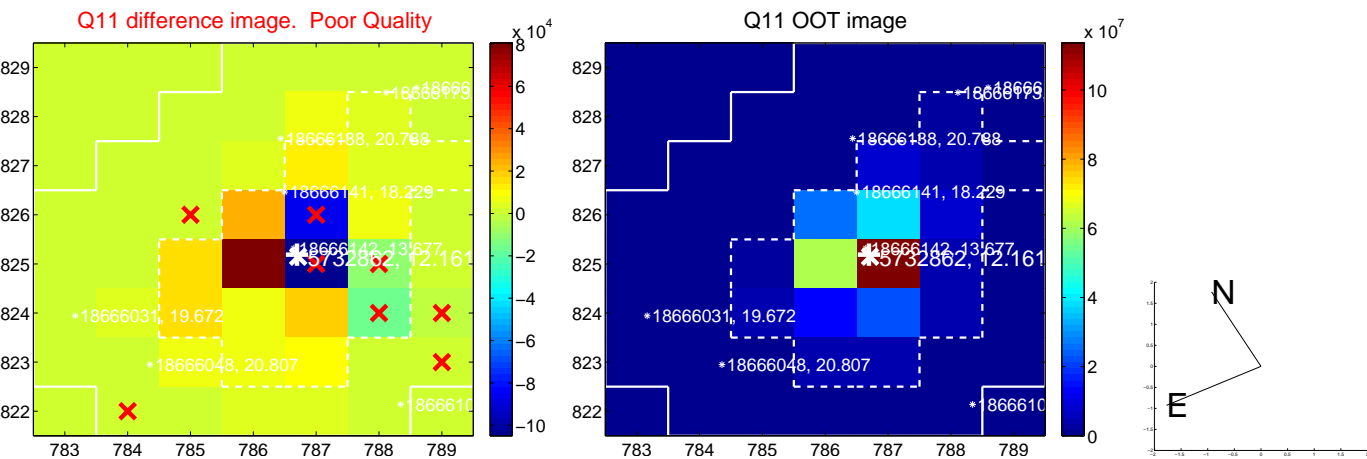
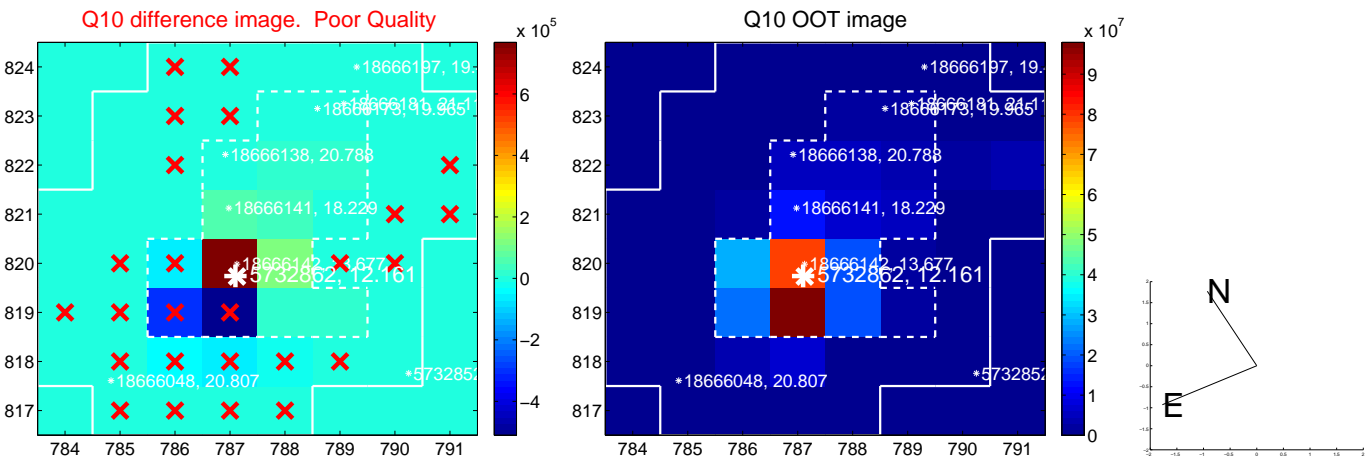
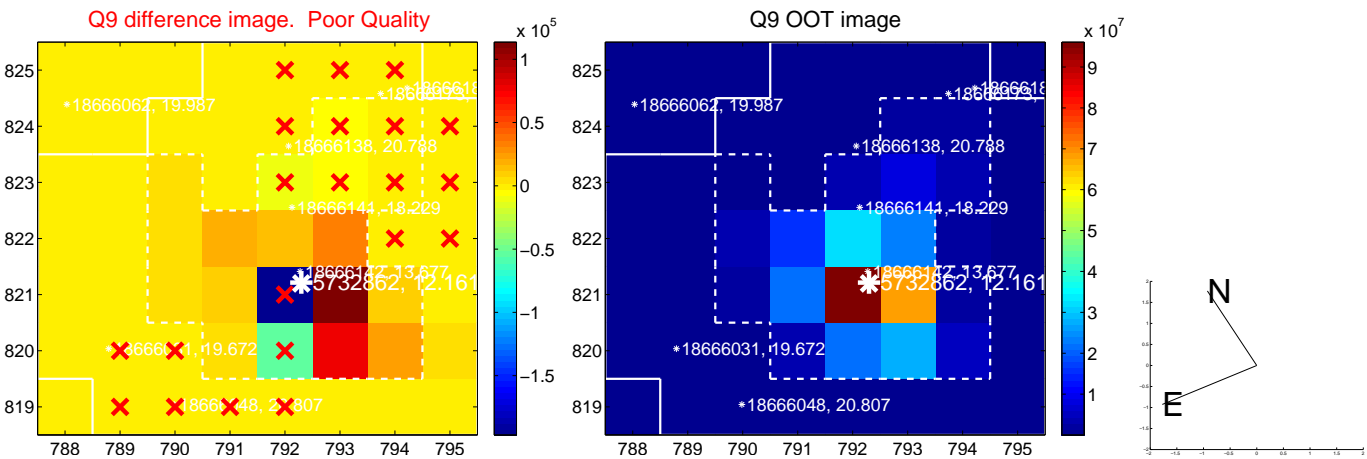
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



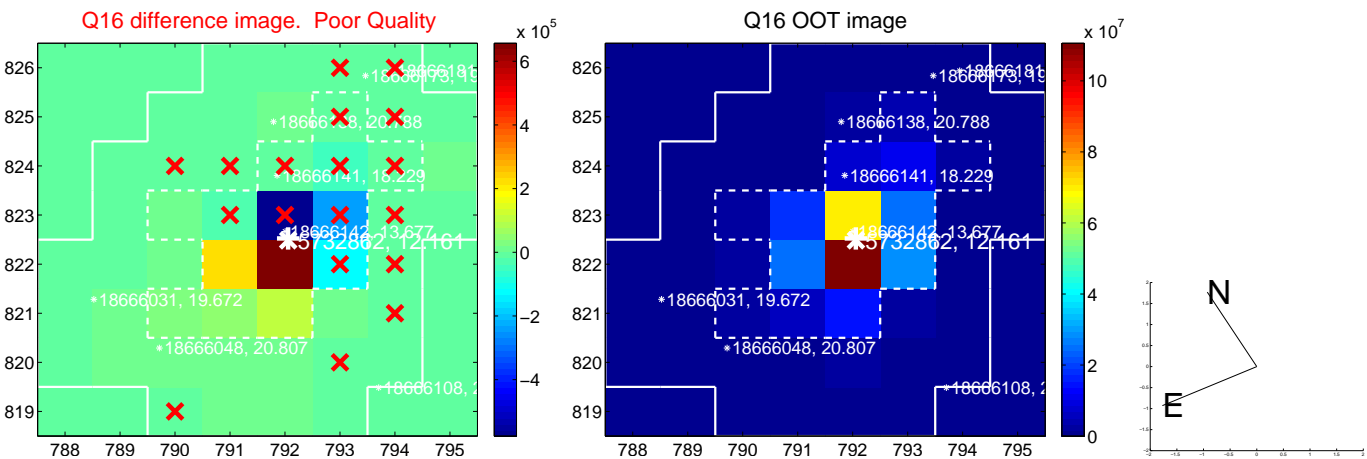
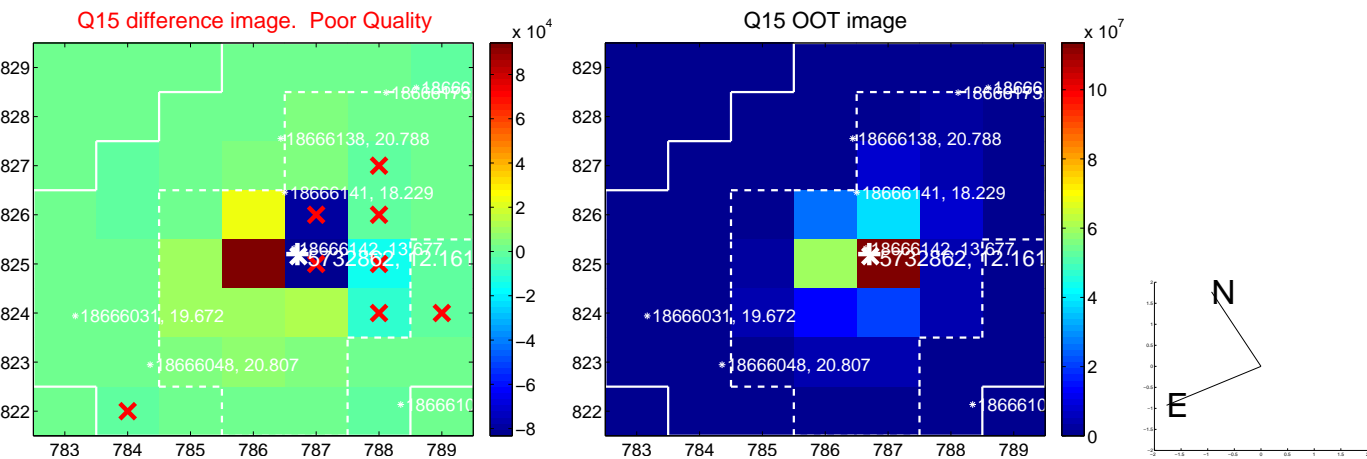
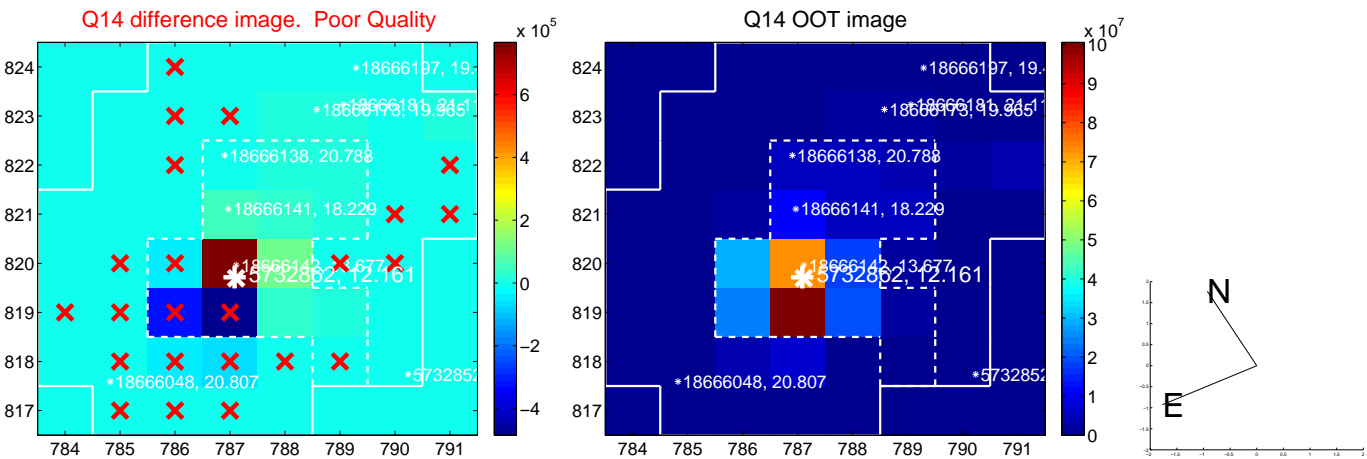
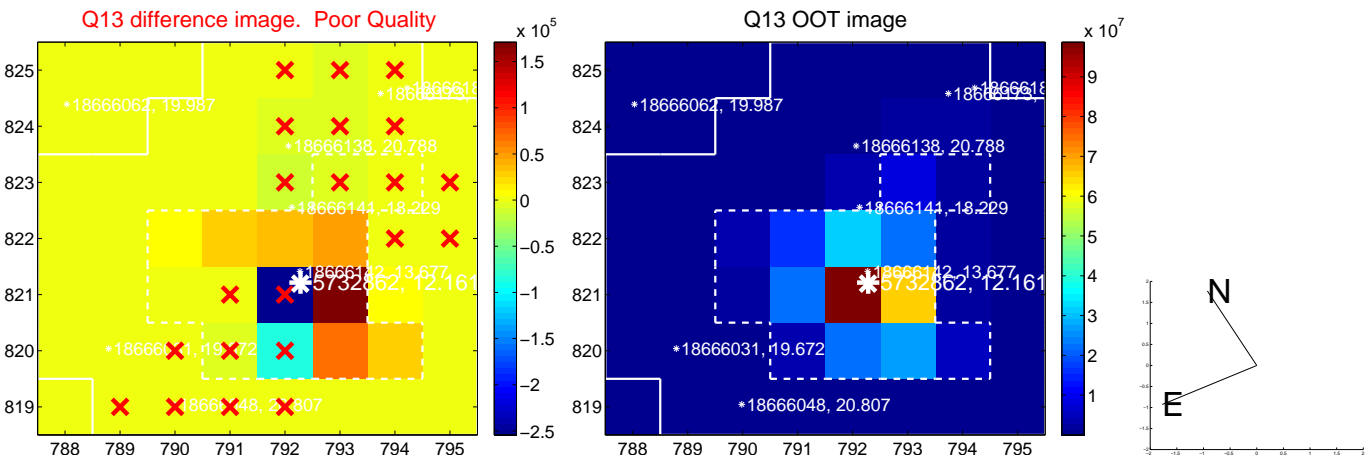
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



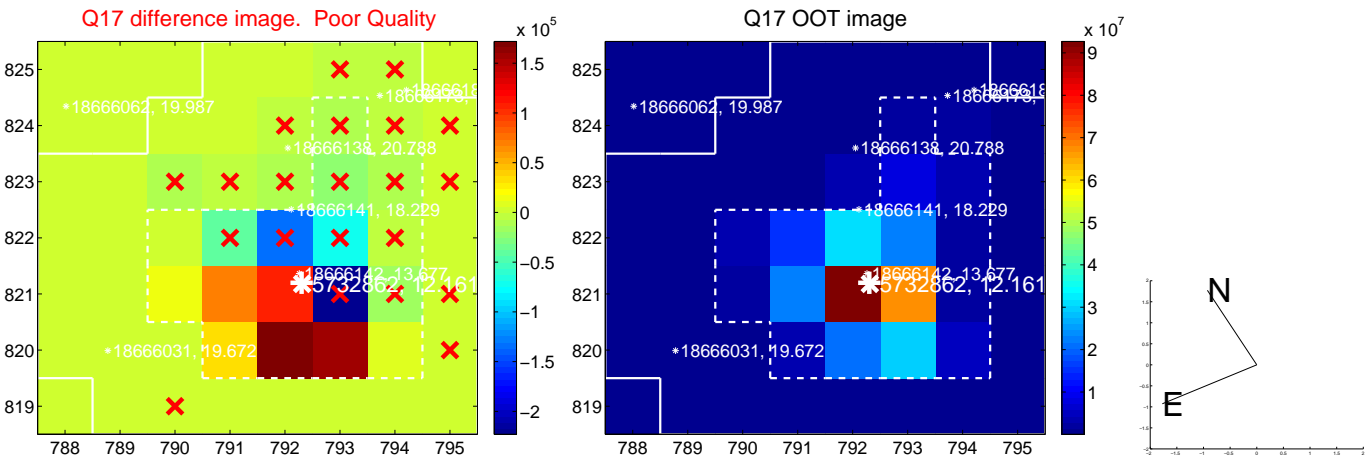
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination

