

KIC 004928203

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|-----|------|-----------------------------|-----------------|------------------------|------------------------|
| 004928203-01 | OBS | No | 1.295776 | 132.052661 | 54.1 | 2.500 | 8.3 | -1.0 | 3.40 | 7014 | 2.53 | 32337.28 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|-------------------------------|
| 004928203-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—LPP_ALT—CENT_SATURATED |

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

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

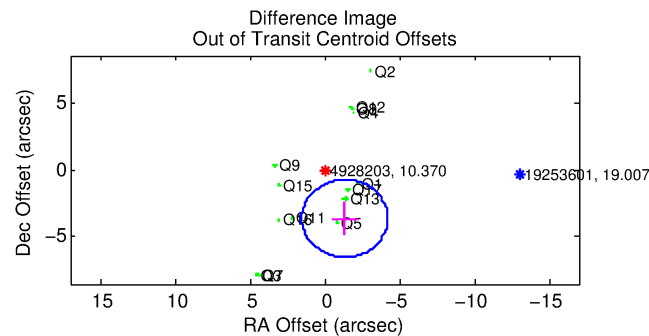
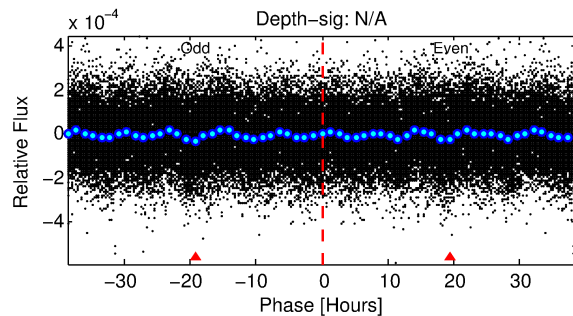
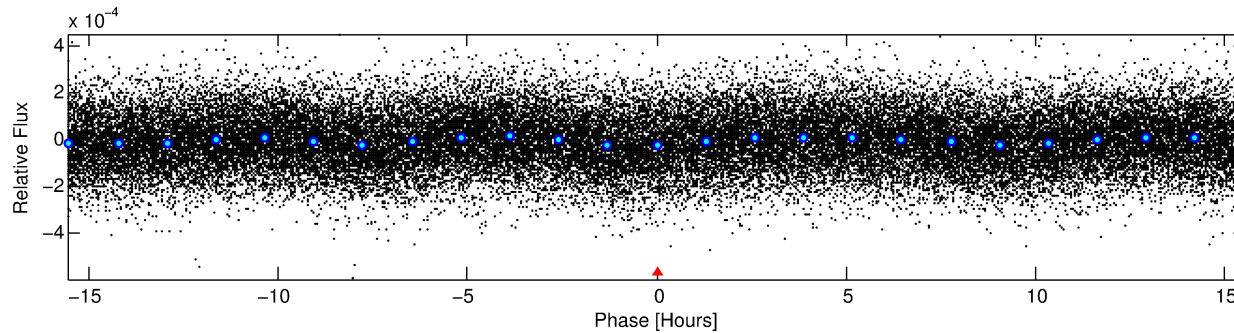
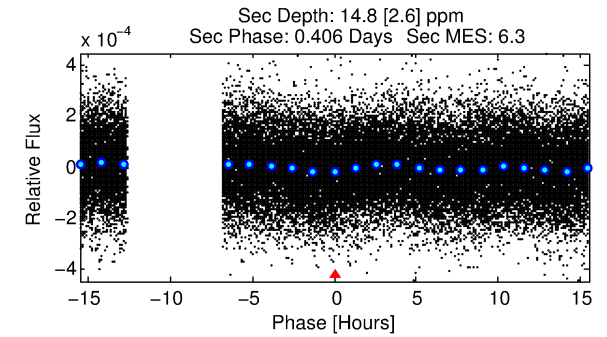
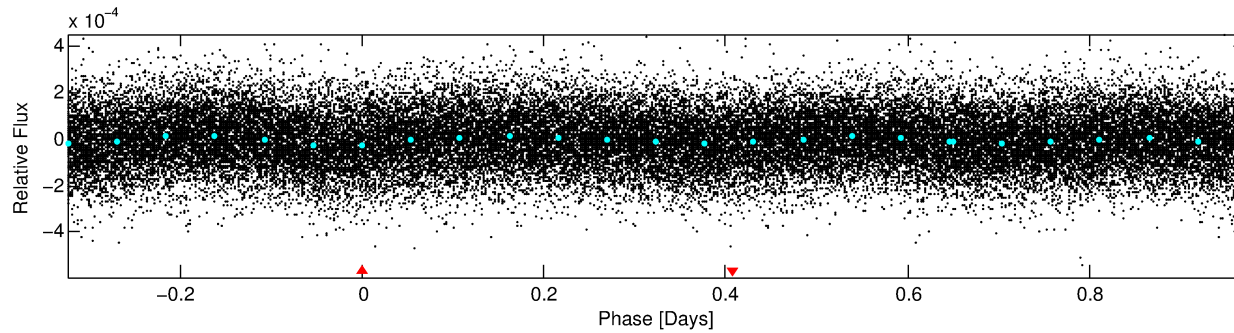
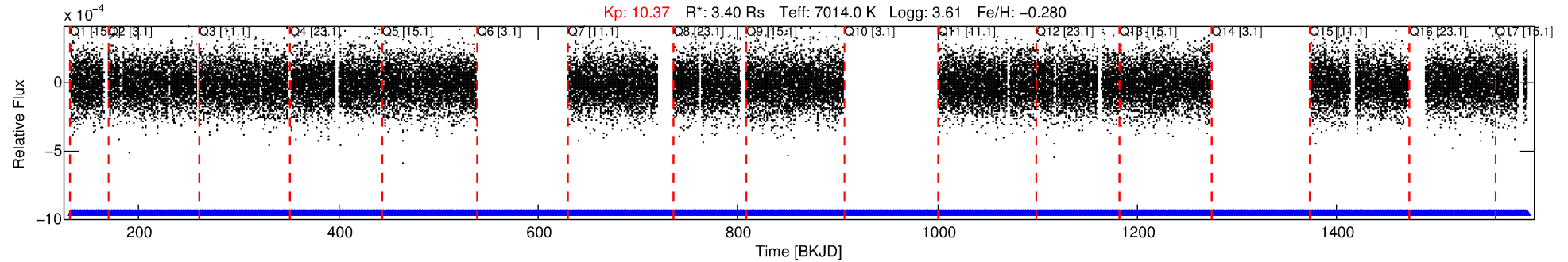
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004928203-01

No Significant Match Found

DV One-Page Summary

KIC: 4928203 Candidate: 1 of 1 Period: 1.296 d



TPS TCE Results:

Period = 1.29578 d
Epoch = 132.0527 BKJD

DV fit results are unavailable

DV Diagnostic Results:

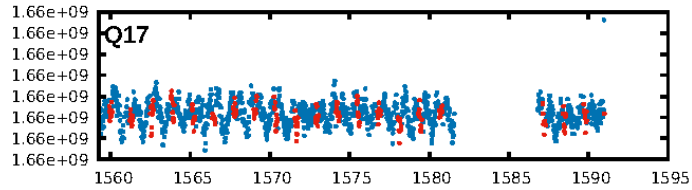
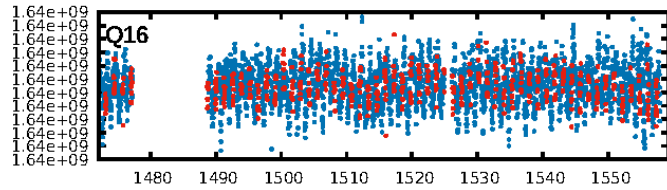
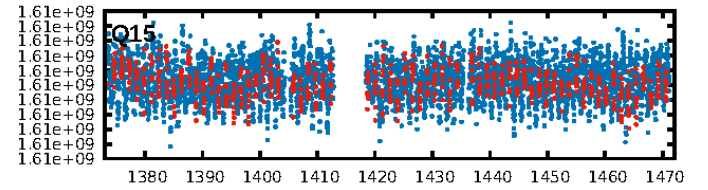
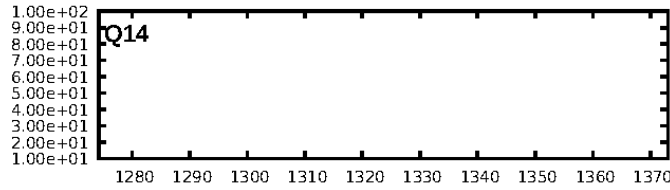
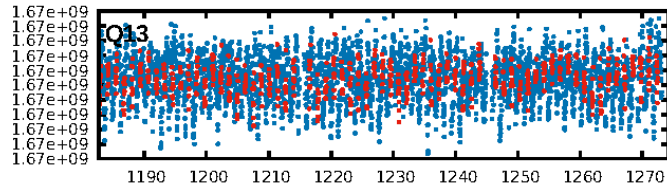
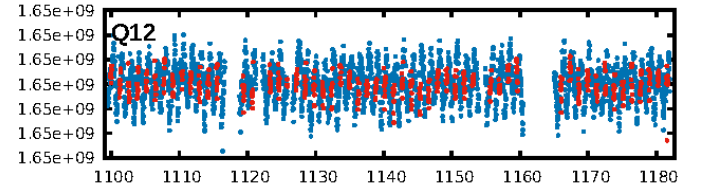
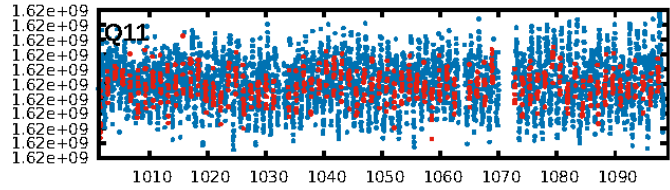
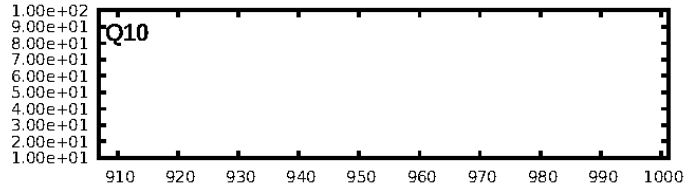
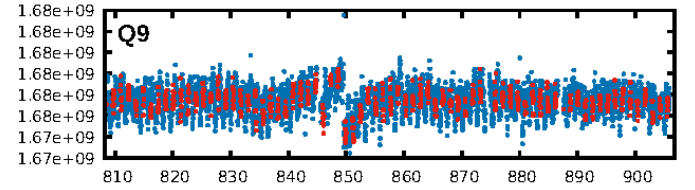
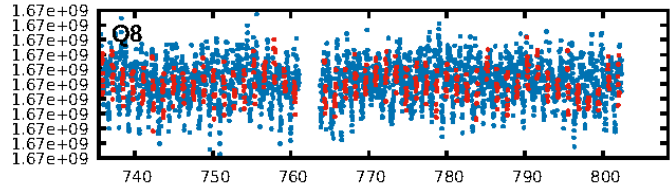
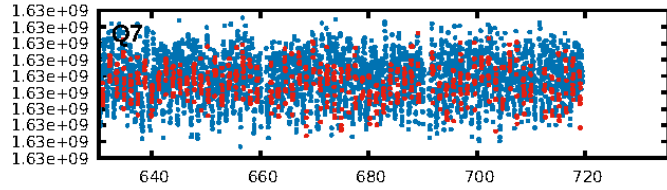
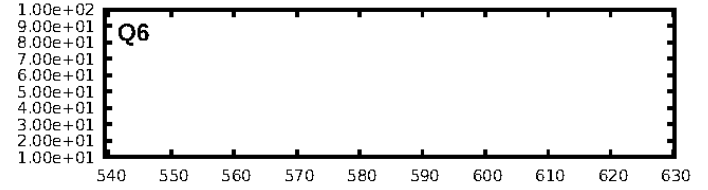
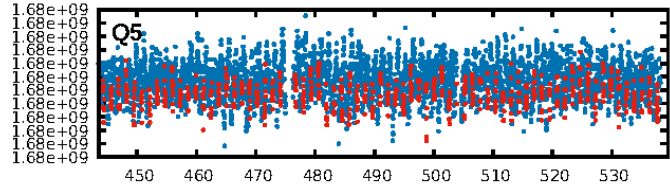
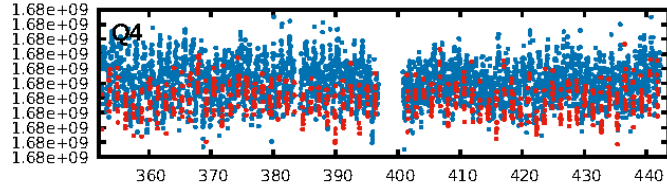
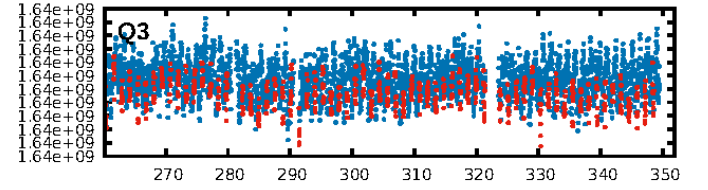
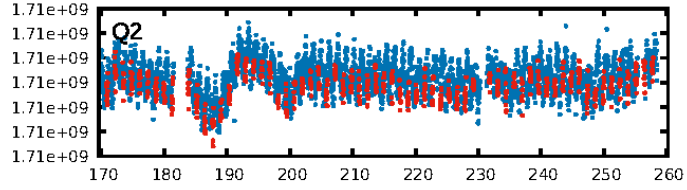
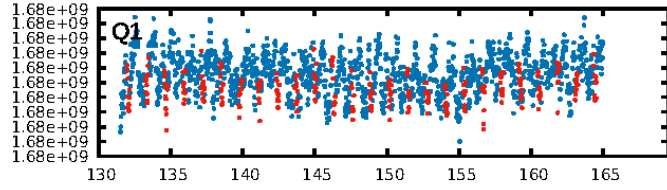
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.32e-14
RollingBand-fgt: 1.00 [783/783]
GhostDiagnostic-chr: 0.8027

Centroid-sig: 72.4%
Centroid-so: 0.286 arcsec [3.31 σ]
OotOffset-rm: 3.865 arcsec [4.03 σ]
KicOffset-rm: 3.182 arcsec [4.08 σ]
OotOffset-st: 1/4/4/5 [14]
KicOffset-st: 1/4/4/5 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 1.00 [14/14]

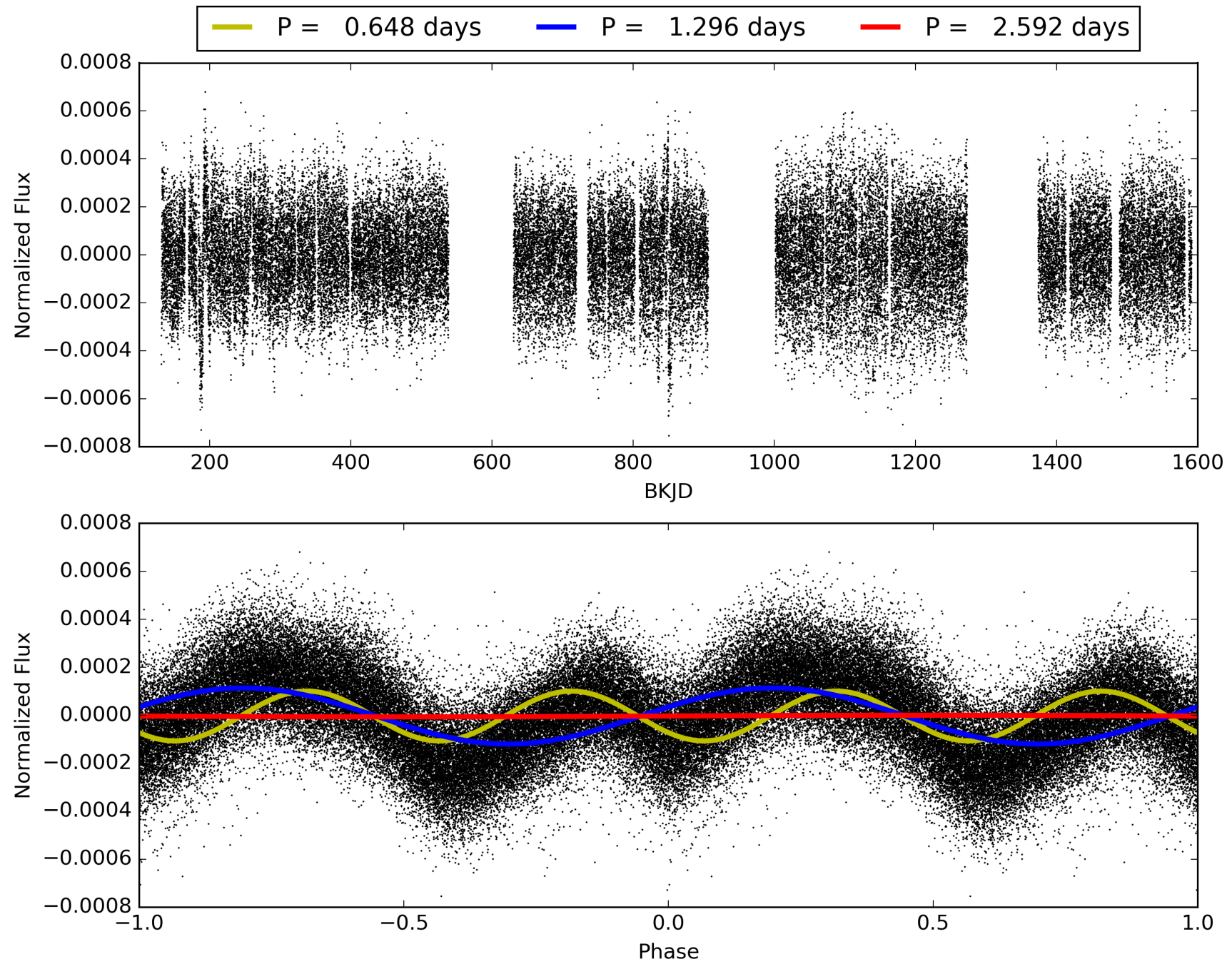
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 05:43:23 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 004928203-01, PDC Light Curves

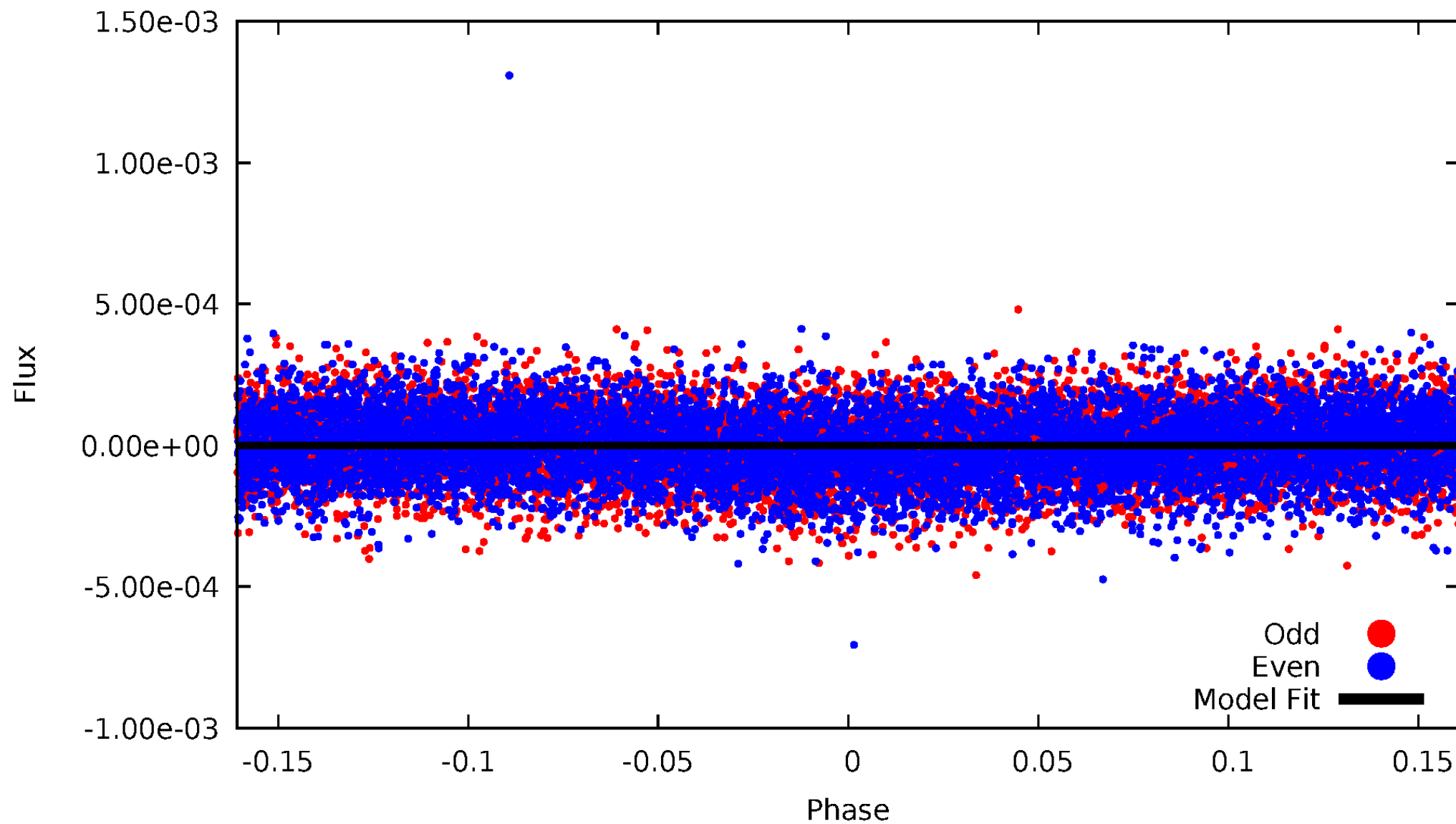


TCE 004928203-01



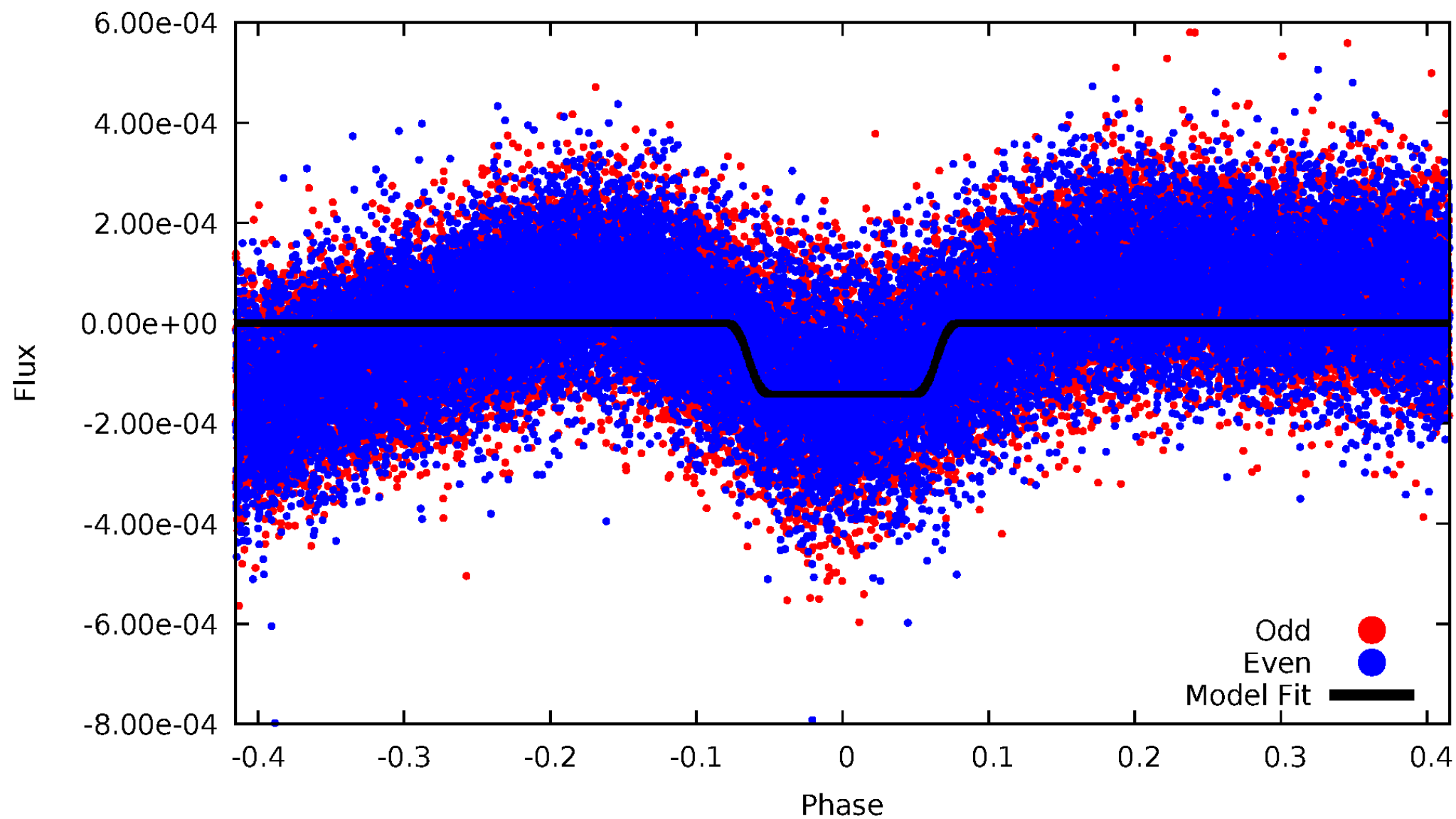
DV Odd/Even

TCE 004928203-01

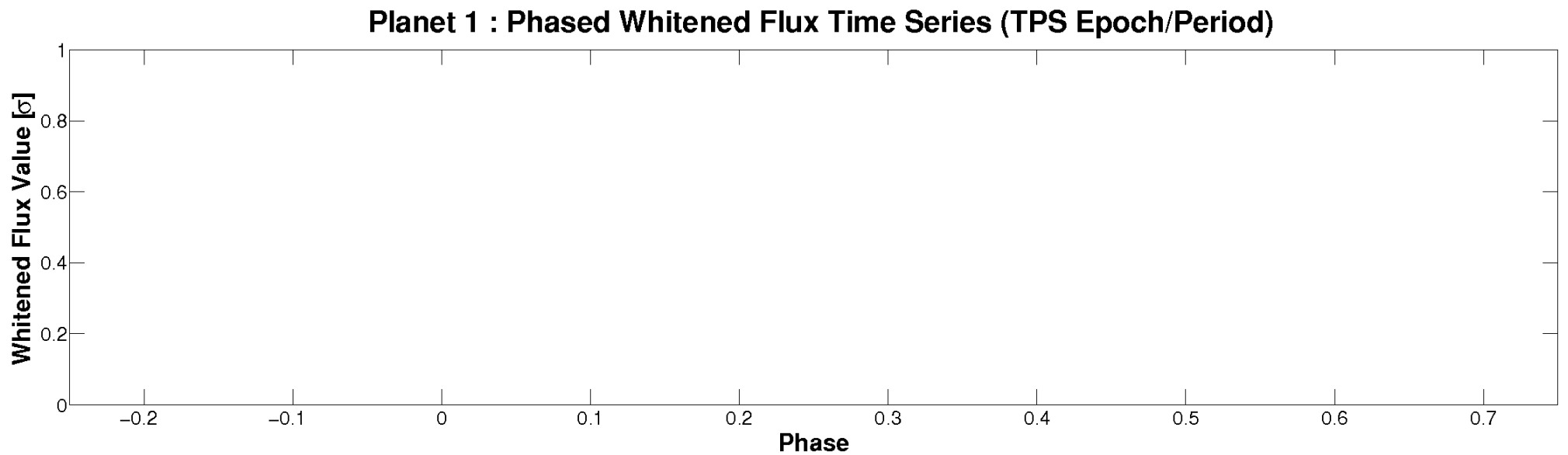
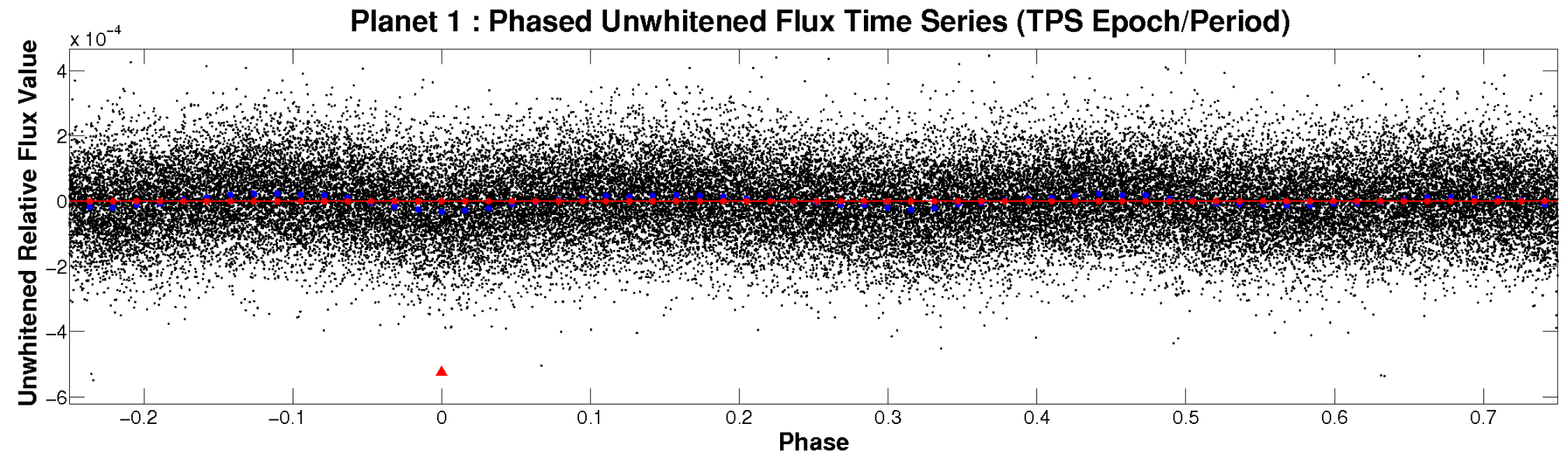


ALT Odd/Even

TCE 004928203-01

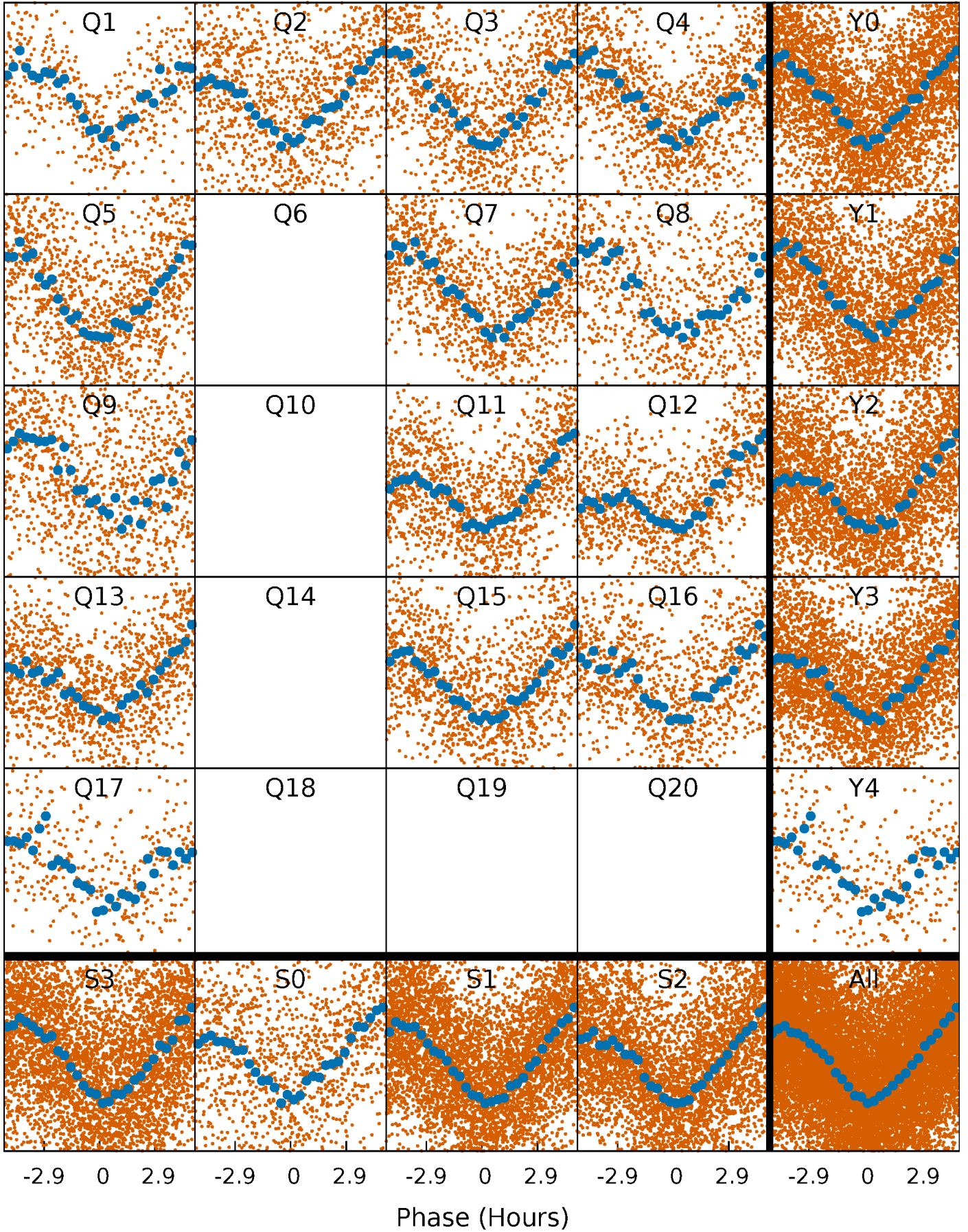


Non-Whitened Vs. Whitened Light Curve



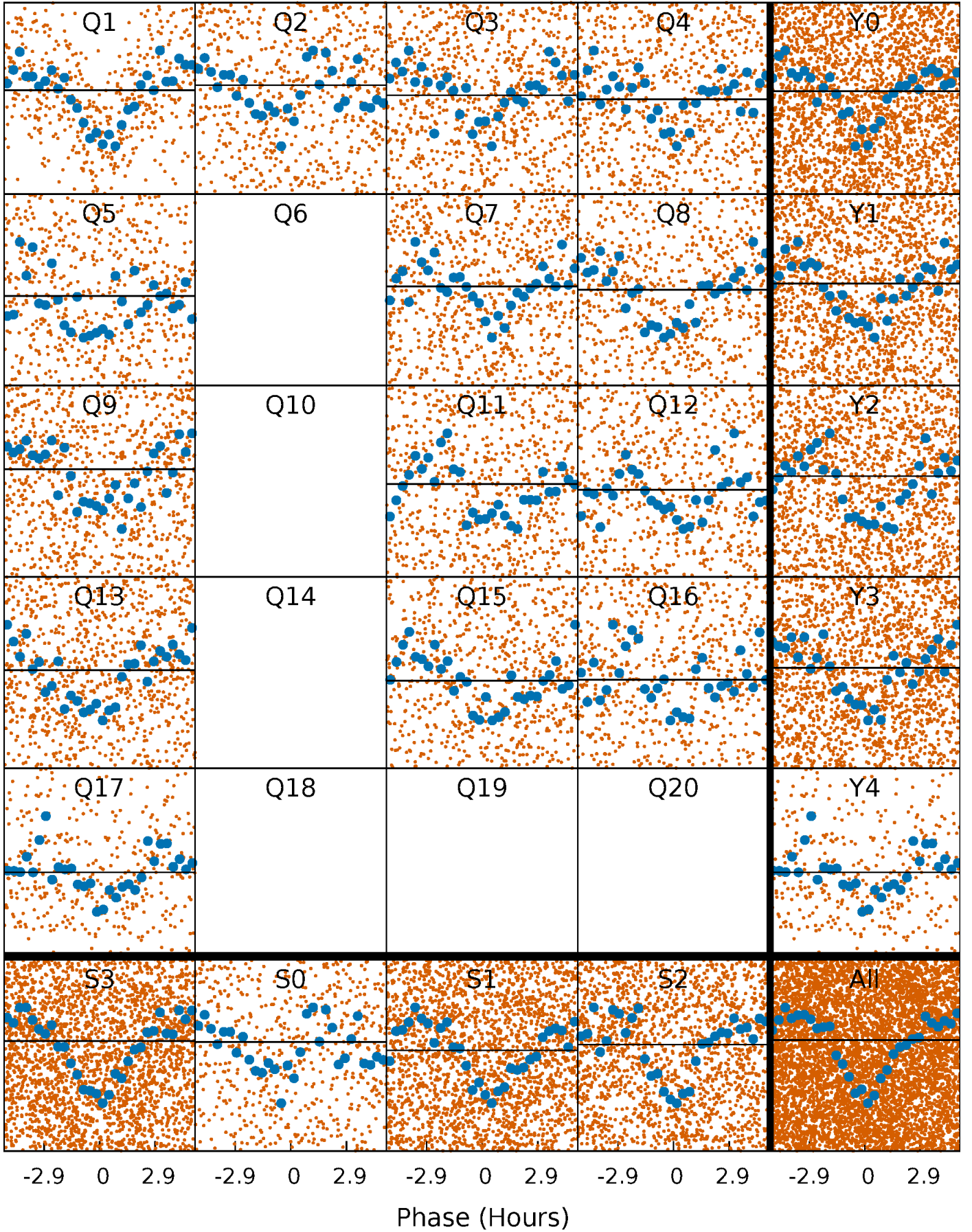
PDC Quarter-Phased Transit Curves

TCE 004928203-01 P= 1.295776 Days $T_0=132.052661$ (BKJD)



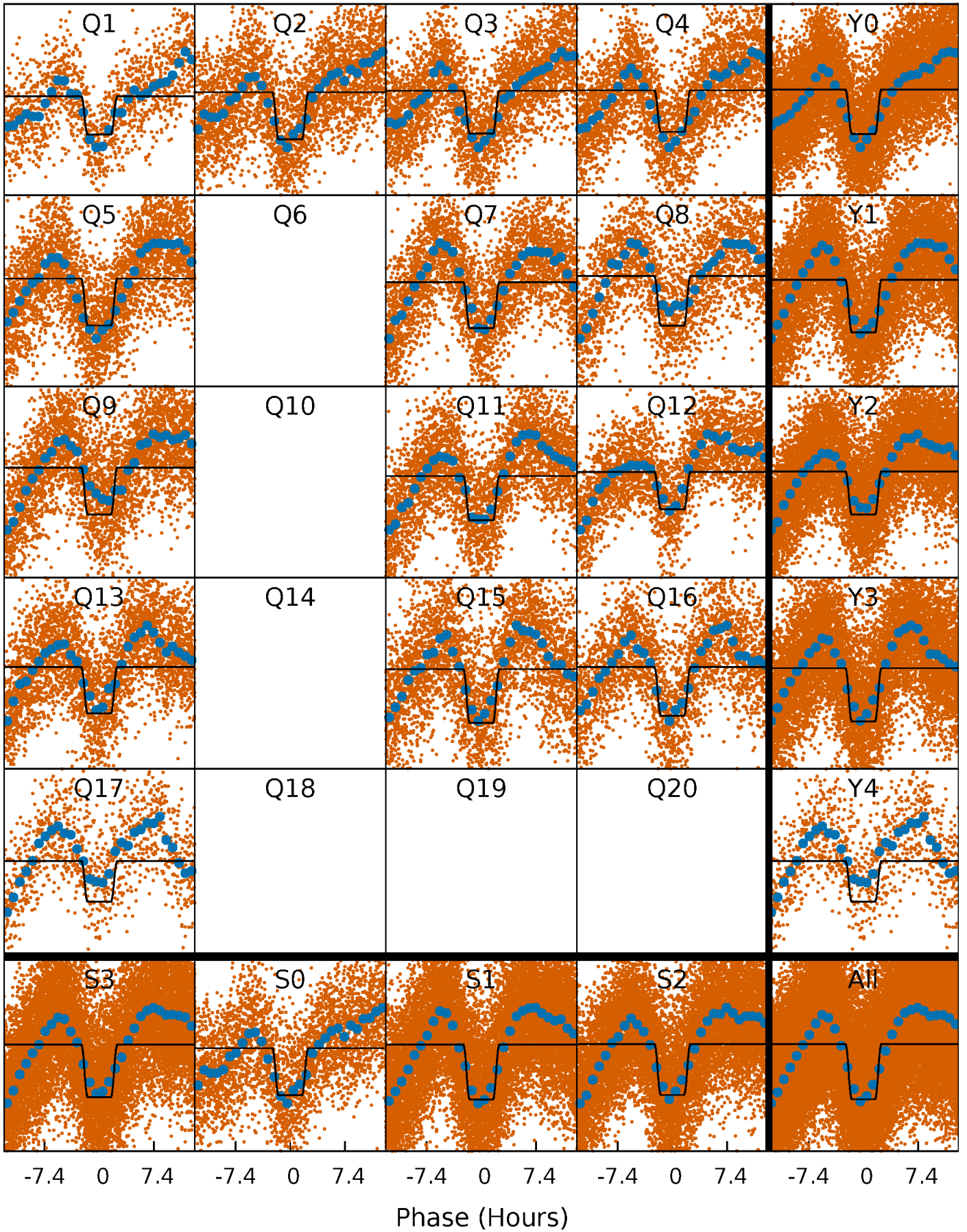
DV Quarter-Phased Transit Curves

TCE 004928203-01 P= 1.295776 Days $T_0=132.052661$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

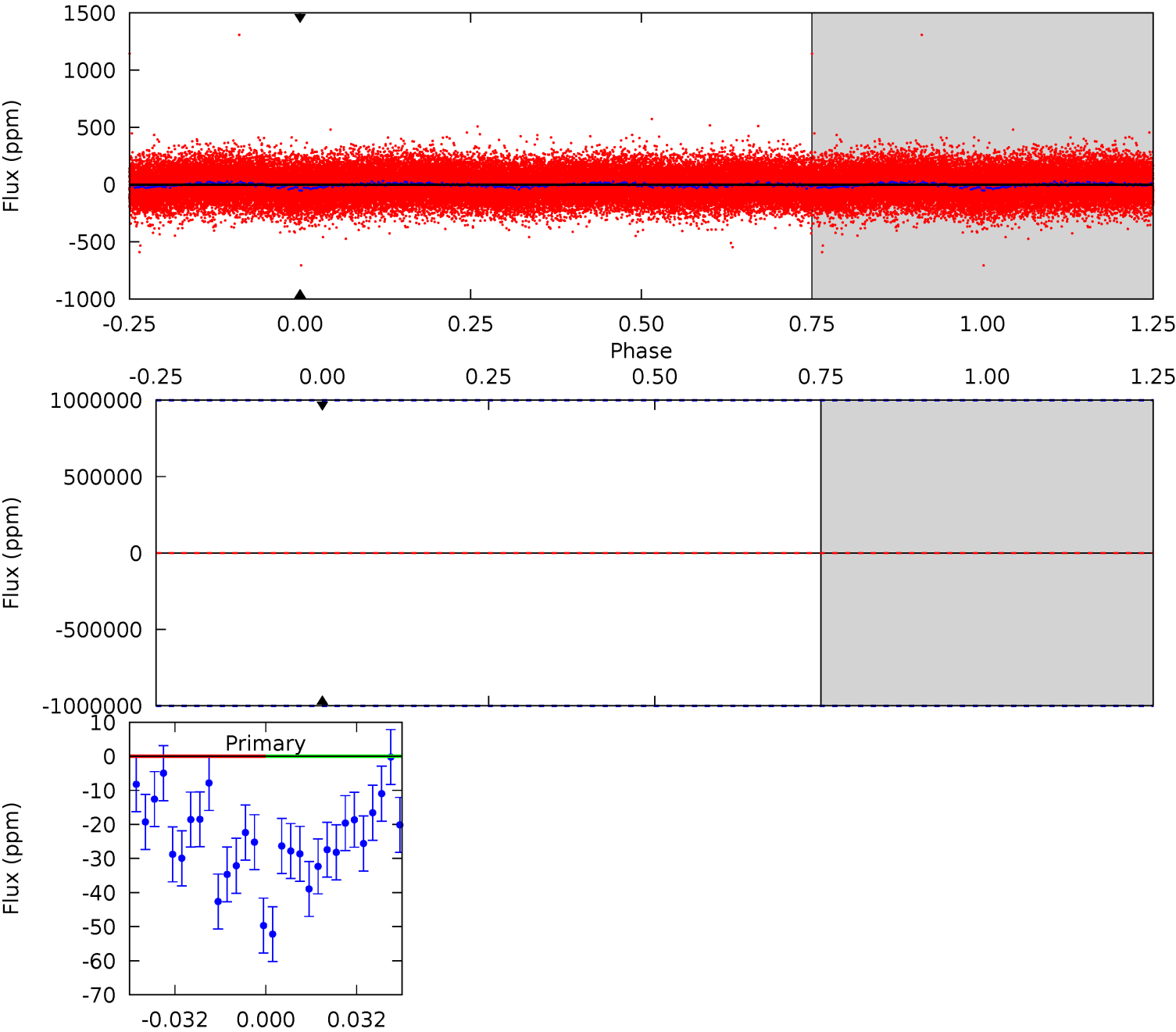
TCE 004928203-01 P= 1.295776 Days $T_0=132.081426$ (BKJD)



DV Model-Shift Uniqueness Test

004928203-01, P = 1.295776 Days, E = 130.756885 Days

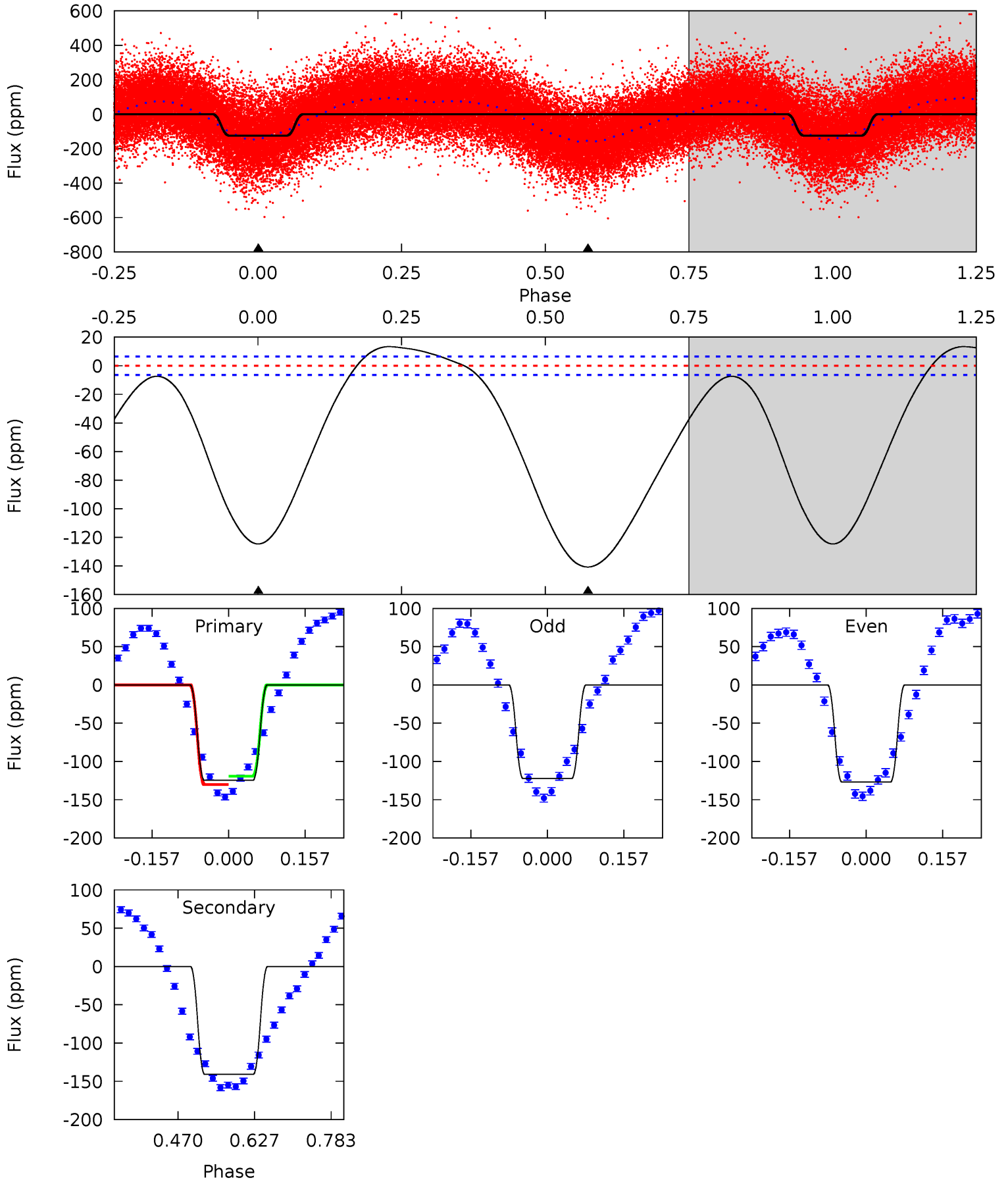
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-----|-----|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|-----|-------|-----|
| 0 | 0 | 0 | 0 | 1.00 | 1.00 | 1.00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Alt Model-Shift Uniqueness Test

004928203-01, P = 1.295776 Days, E = 130.785650 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 86.4 | 97.6 | 0 | 0 | 4.47 | 1.42 | 10.9 | 86.4 | 86.4 | 97.6 | 97.6 | 1.62 | 0.99 | 0.09 | 3.74 |



Stellar Parameters For KIC 004928203

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 7014^{+168}_{-231} | $3.609^{+0.323}_{-0.057}$ | $-0.280^{+0.300}_{-0.250}$ | $3.400^{+0.405}_{-1.214}$ | $1.716^{+0.181}_{-0.310}$ | $0.061^{+0.137}_{-0.011}$ |
| | +2%/-3% | +9%/-2% | +107%/-89% | +12%/-36% | +11%/-18% | +223%/-18% |
| Source | PHO1 | 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 004928203-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{\text{max}} (K)$ | $T_{\text{obs}} (K)$ | A_{obs} |
|---------|-----------------|---------------------------|----------------------|--------------------------|-------------------------------|
| DV | 0 ± 1000000 | $24.70^{+27.07}_{-18.74}$ | 4657^{+240}_{-425} | 4384^{+34094}_{-37670} | $0.680^{+133.510}_{-124.117}$ |
| Alt. | -141 ± 1 | $27.77^{+27.26}_{-18.88}$ | 4640^{+257}_{-366} | -3761^{+8177}_{-331} | $0.079^{+0.677}_{-0.059}$ |

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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

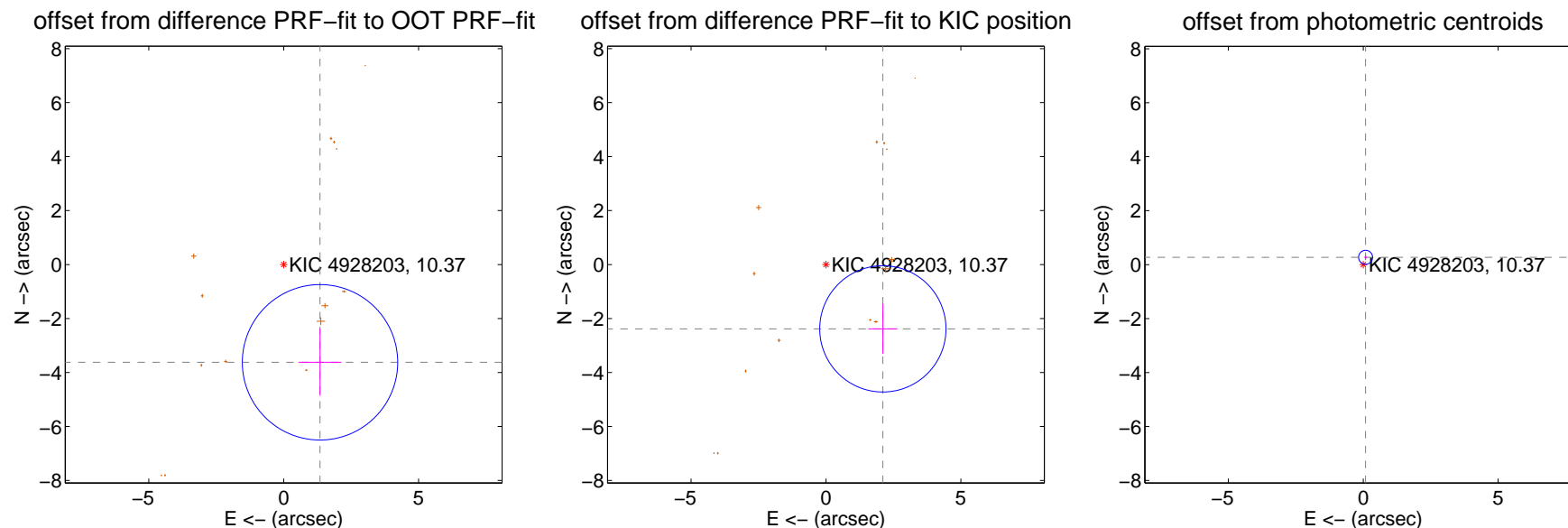
DV Centroid Data

Supplemental centroid analysis for 004928203-01. **Kepler magnitude: 10.37.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

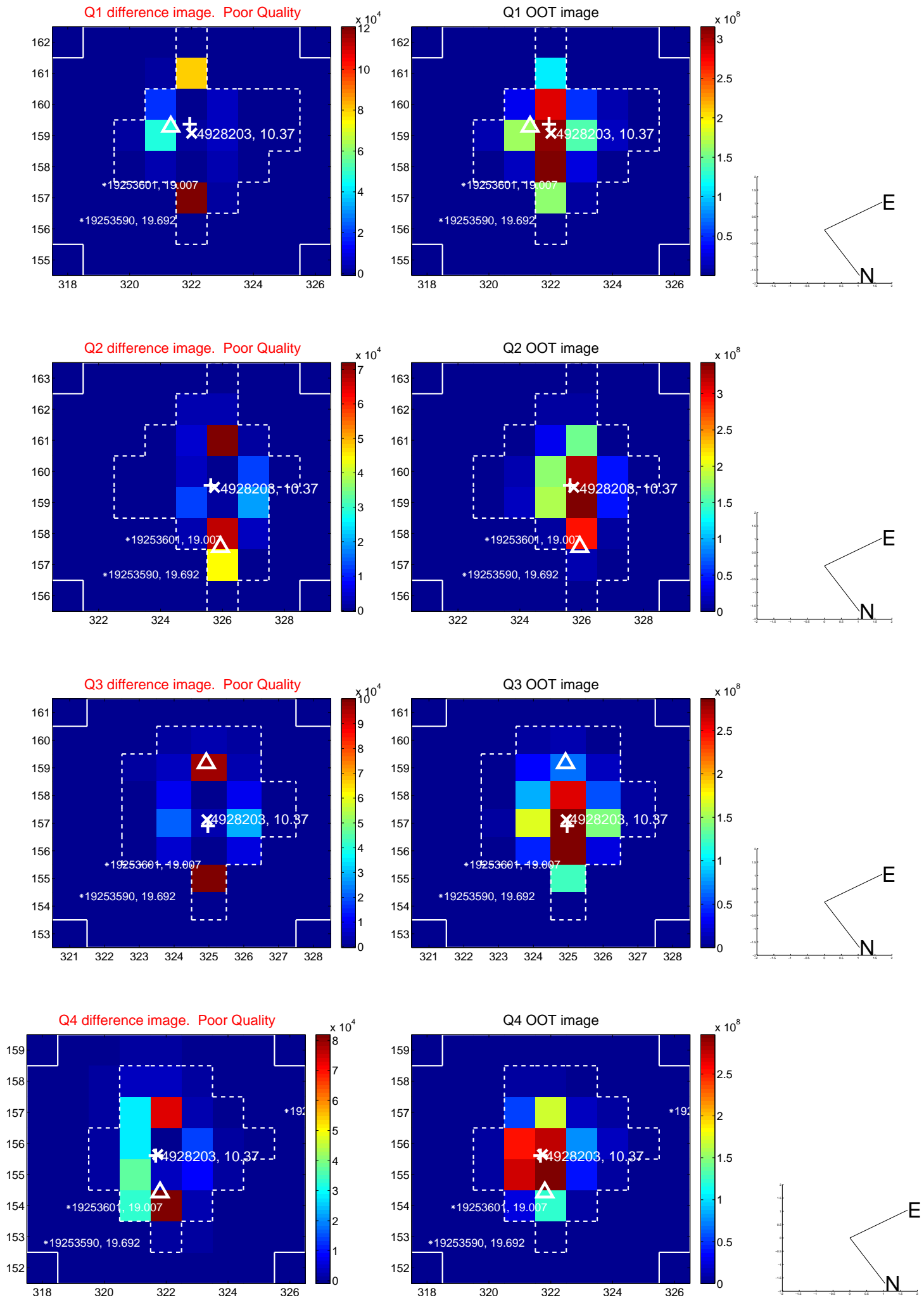
The direct PRF centroid is offset from the target star catalog position by about 1.94 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|-------------------------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 3.865 ± 0.960 | 4.03 | -1.347 ± 0.798 | -3.623 ± 1.241 |
| PRF-fit source offset from KIC position | 3.182 ± 0.780 | 4.08 | -2.109 ± 0.539 | -2.383 ± 0.926 |
| photometric centroid source offset | 0.29 ± 0.09 | 3.31 | -0.09 ± 0.06 | 0.27 ± 0.09 |

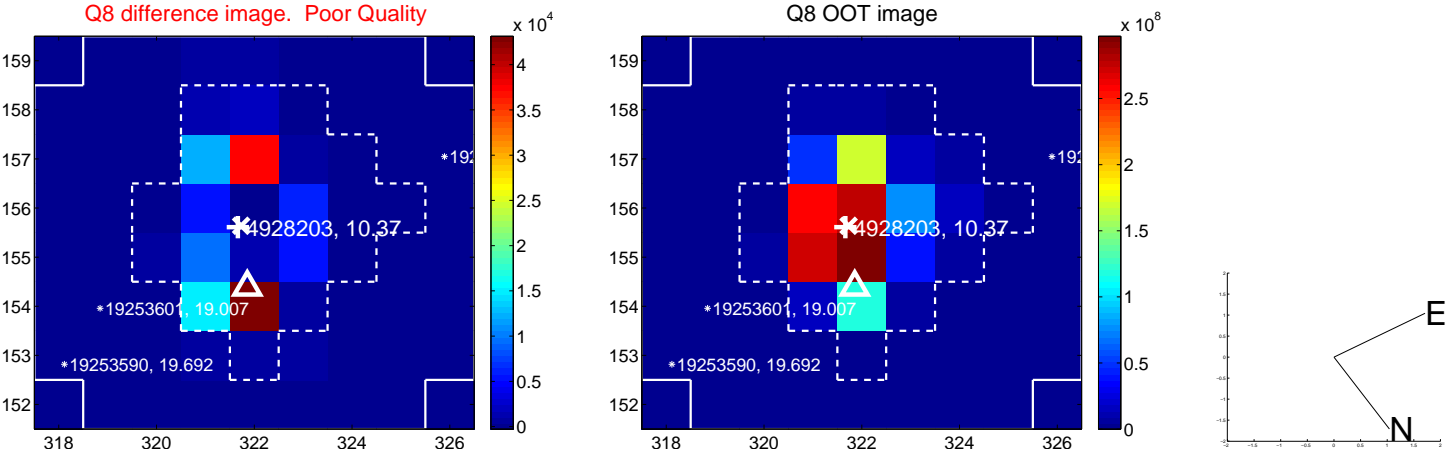
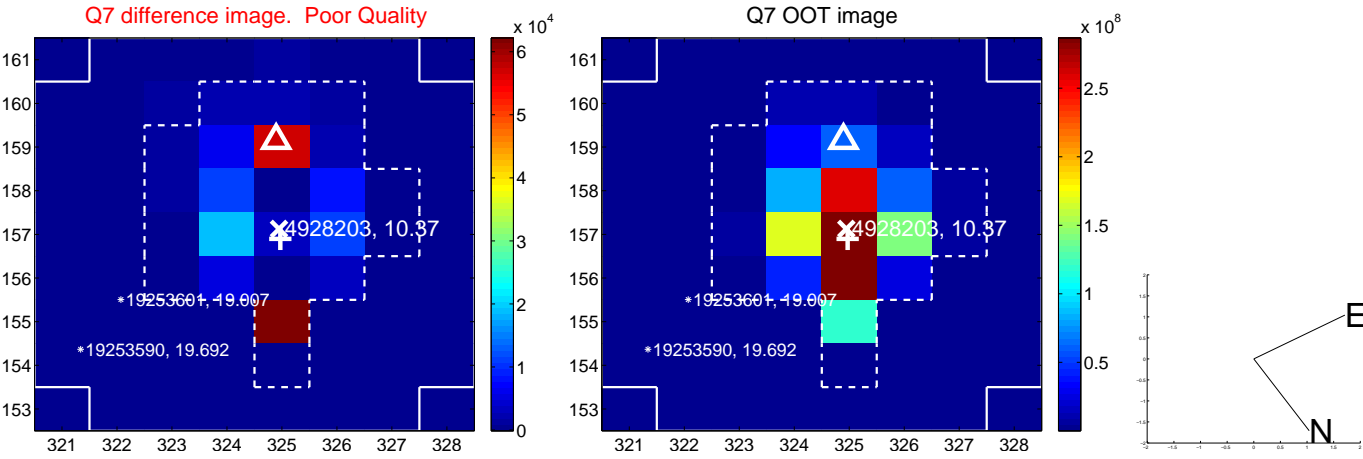
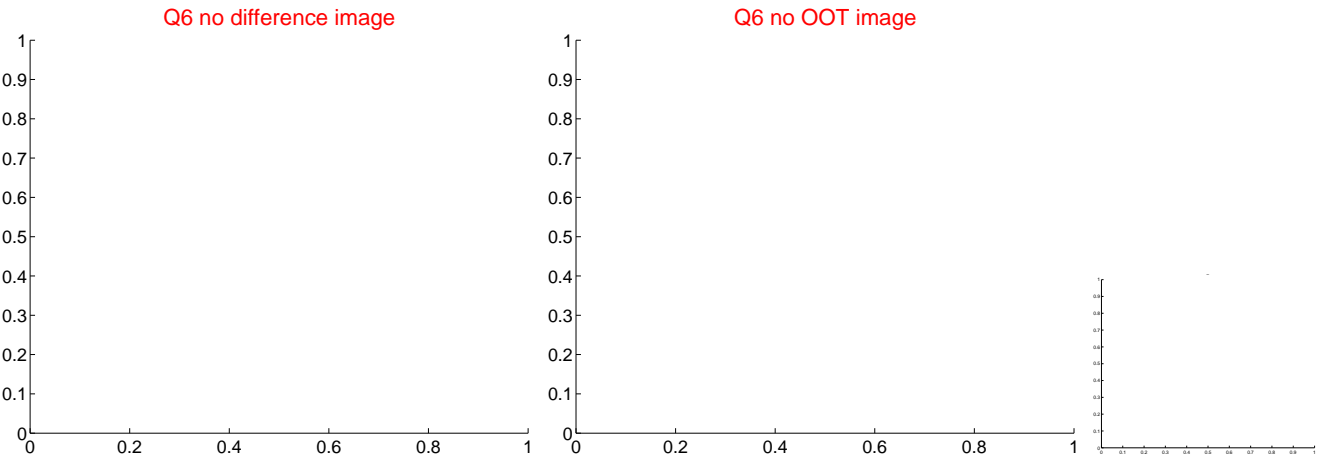
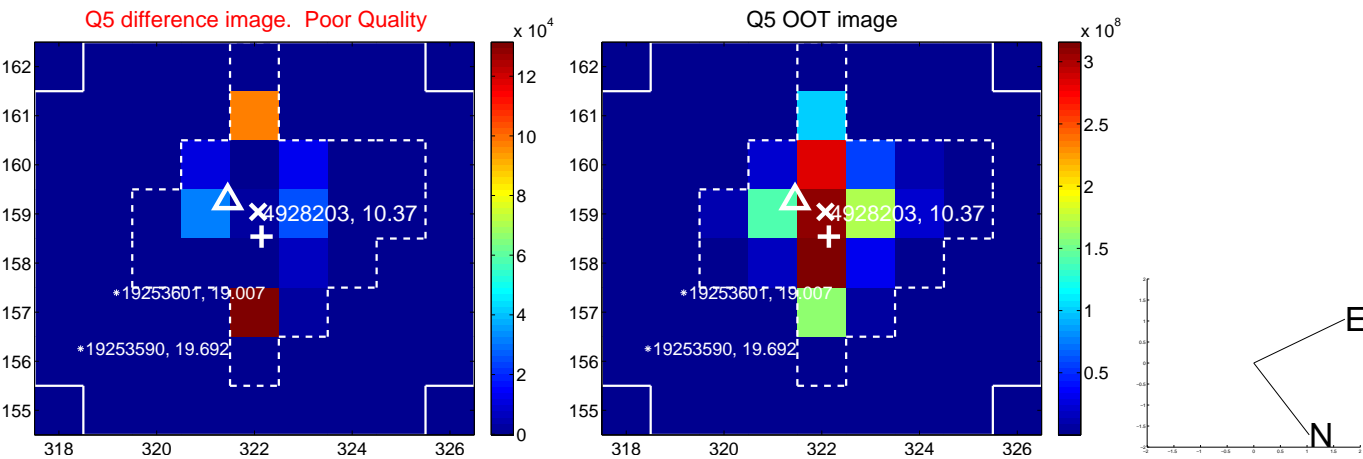


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- 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.

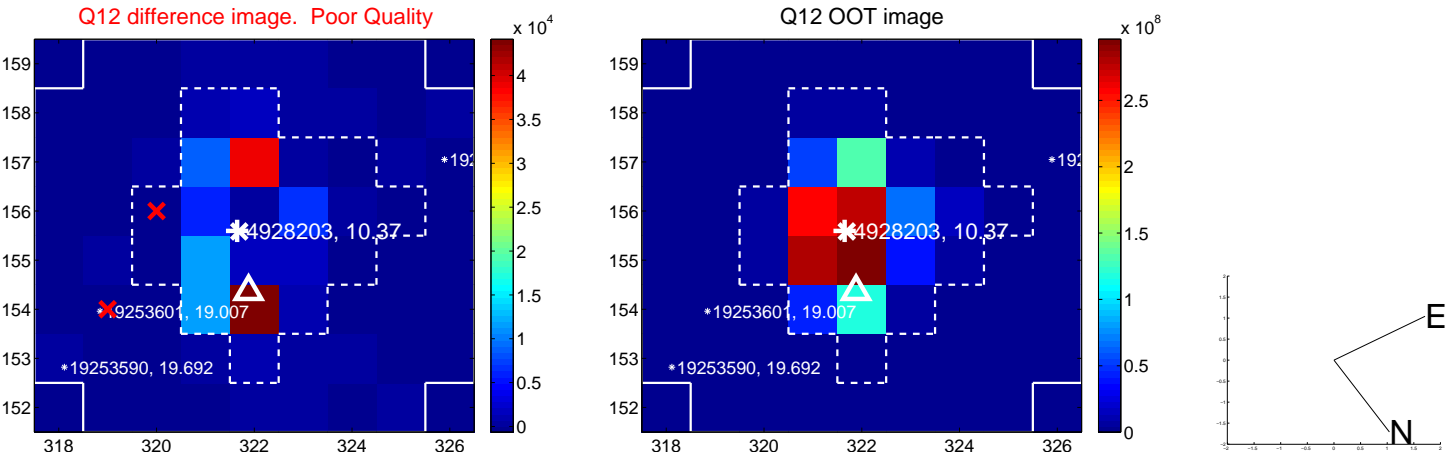
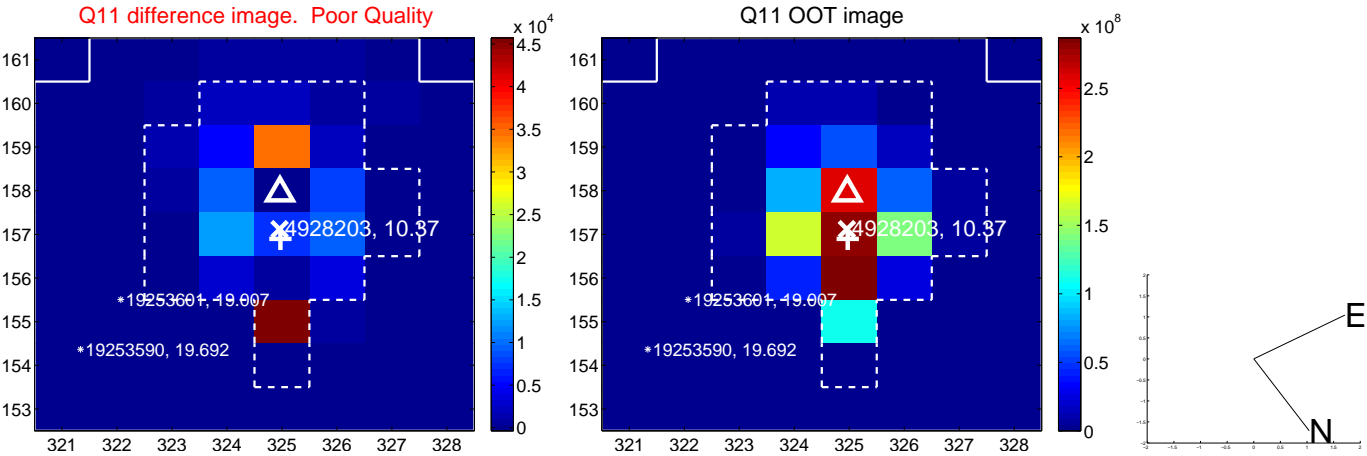
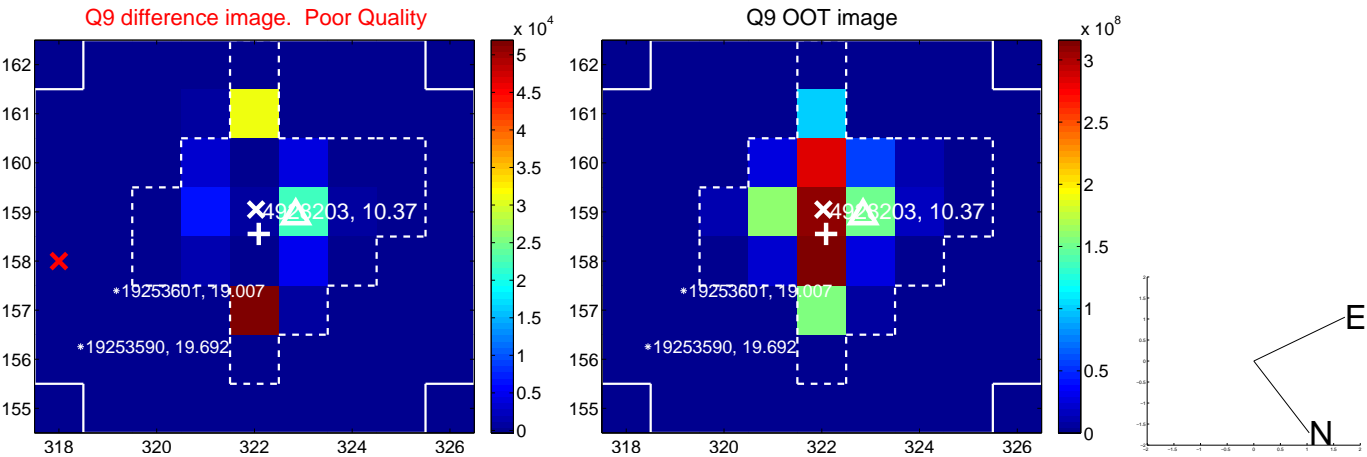
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



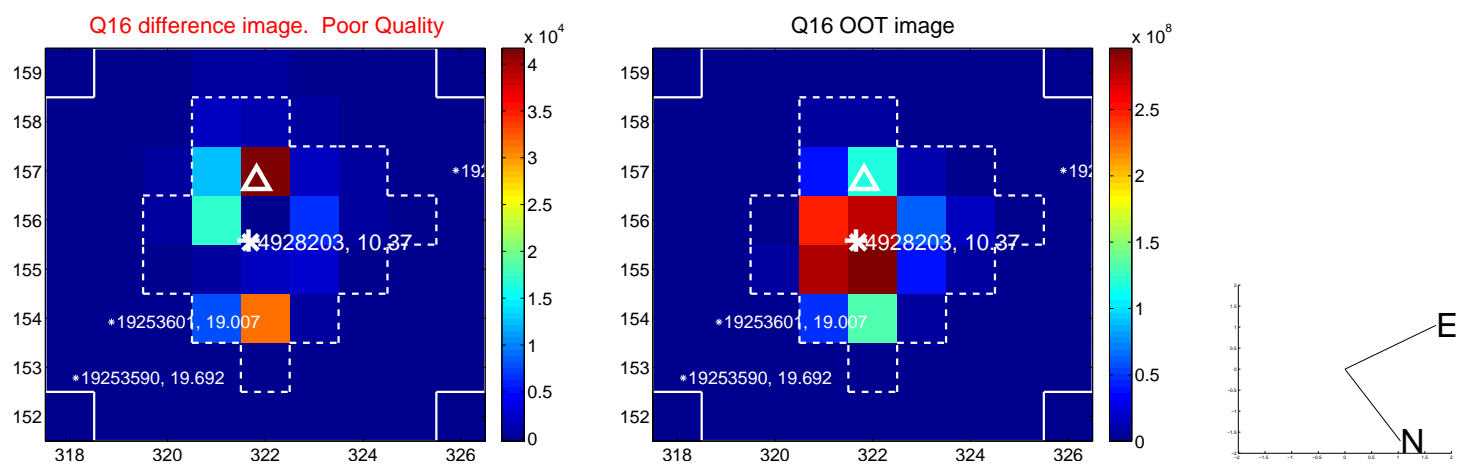
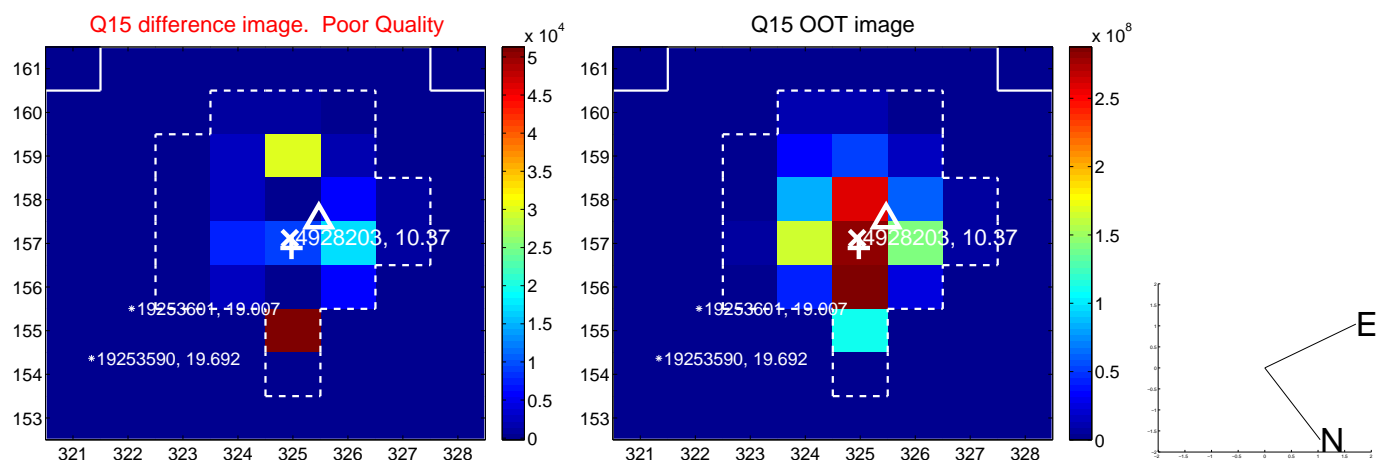
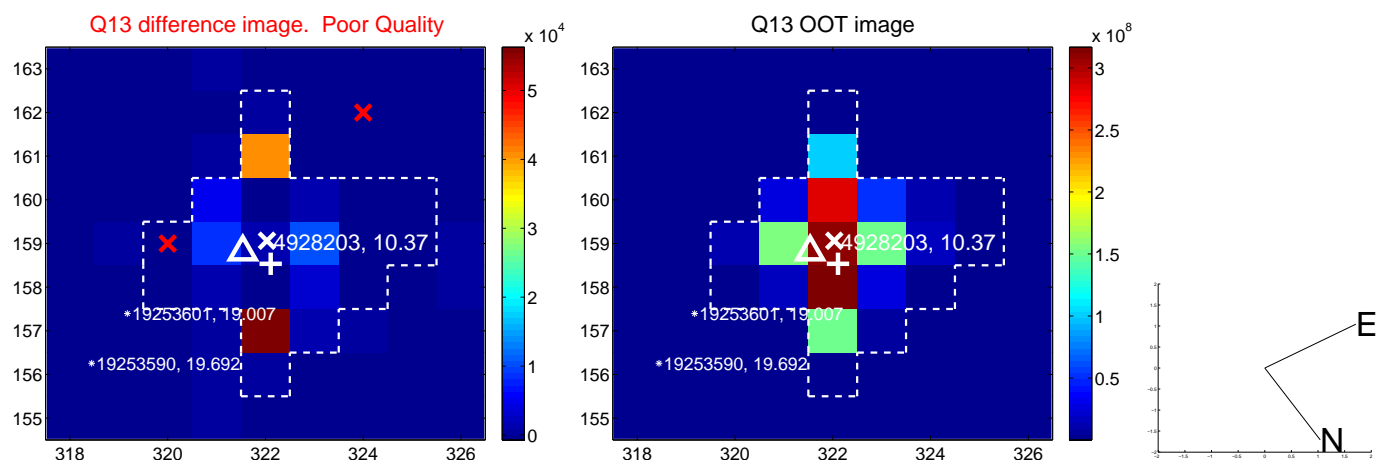
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



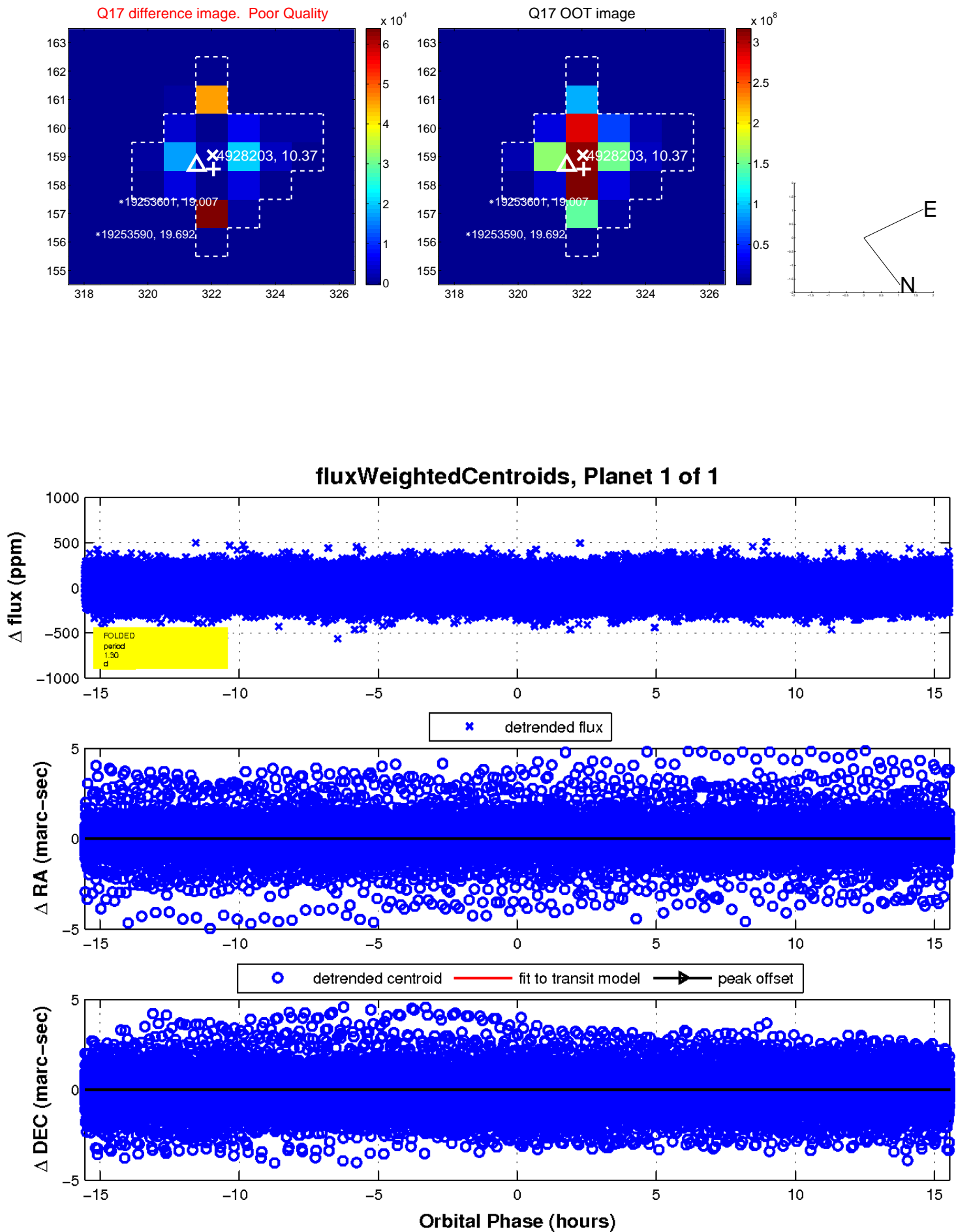
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

