

KIC 008332383

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|-----|-----|-----------------------------|-----------------|------------------------|------------------------|
| 008332383-01 | OBS | No | 1.188617 | 132.391707 | 33.1 | 3.752 | 7.6 | 6.0 | 3.51 | 6567 | 2.37 | 30708.62 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|-----------------------|
| 008332383-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—MOD_NONUNIQ_DV |

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

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

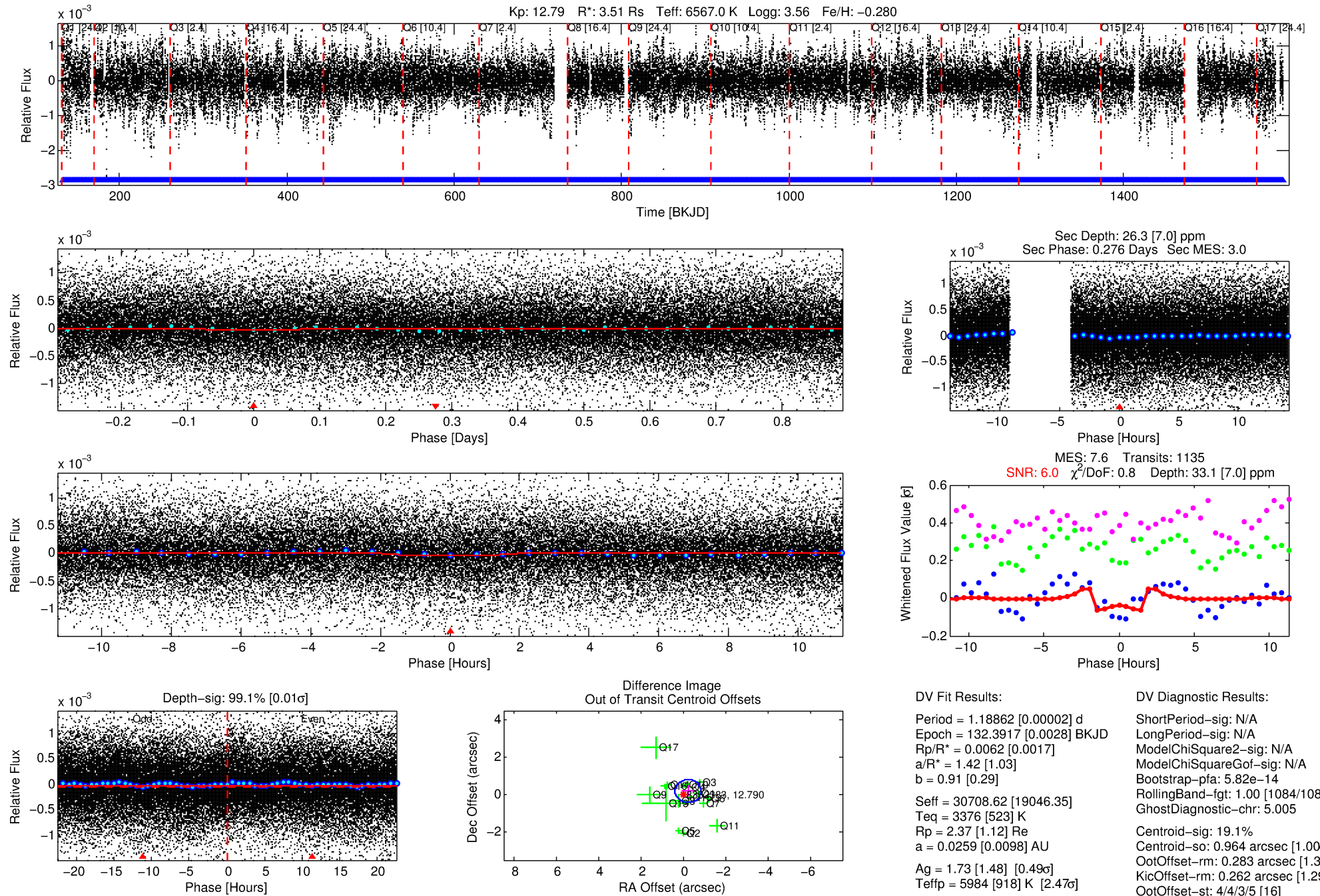
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008332383-01

No Significant Match Found

DV One-Page Summary

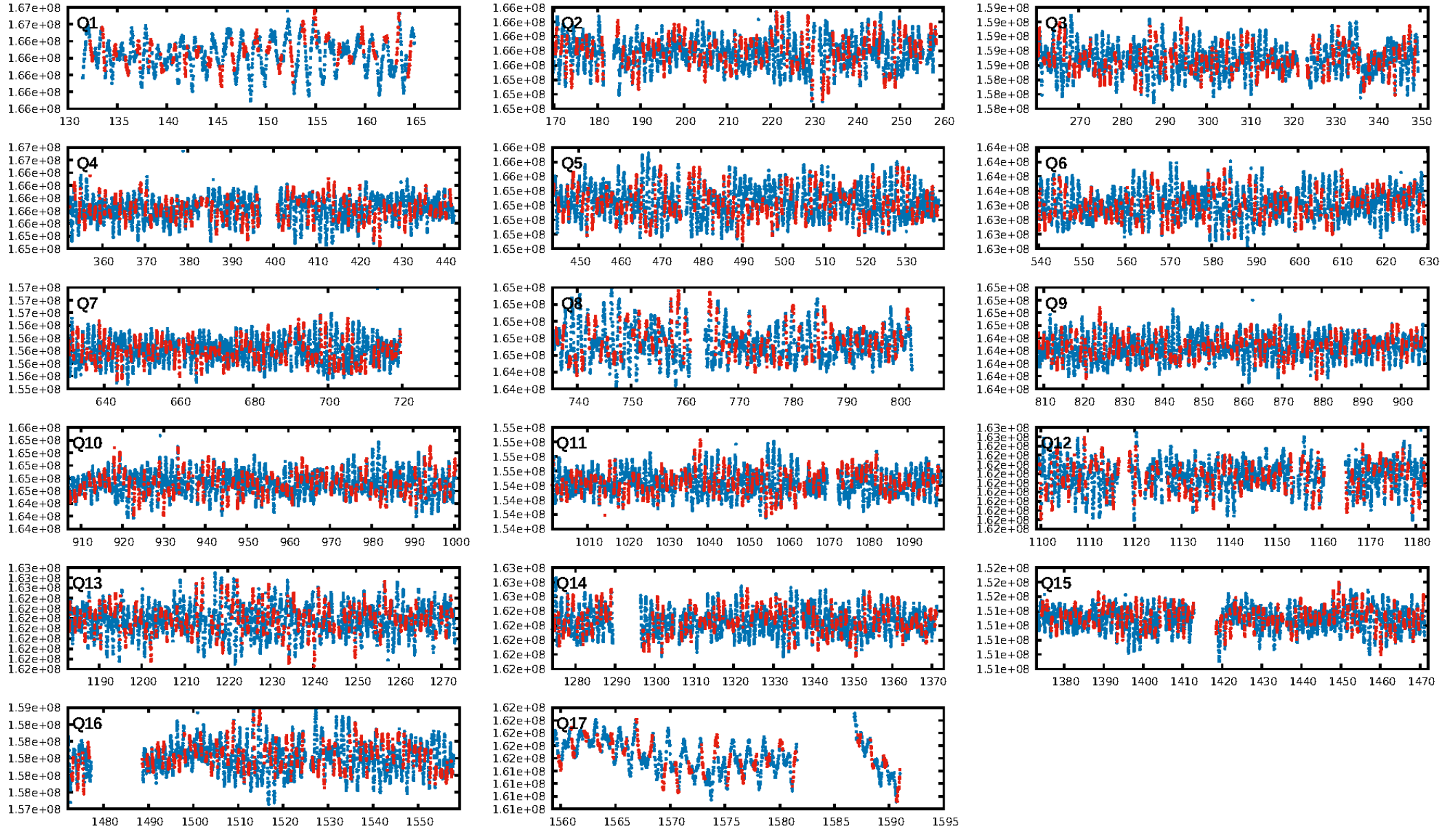
KIC: 8332383 Candidate: 1 of 1 Period: 1.189 d



Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 00:48:14 Z

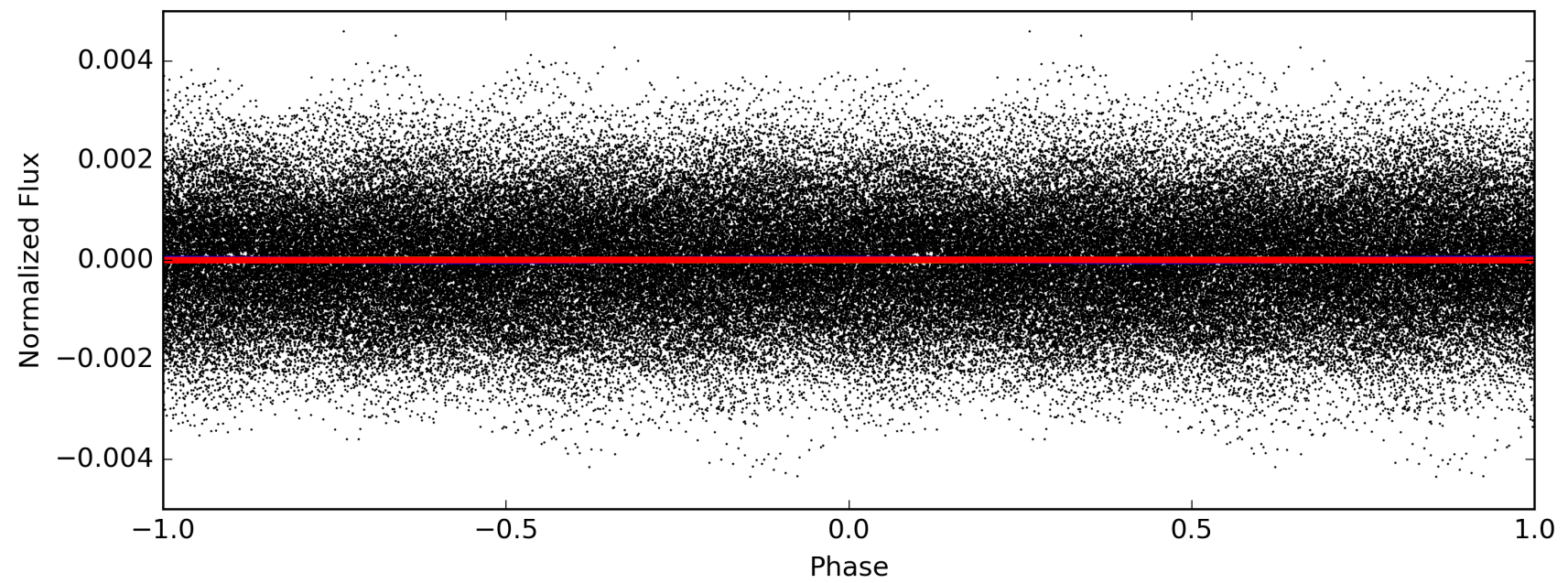
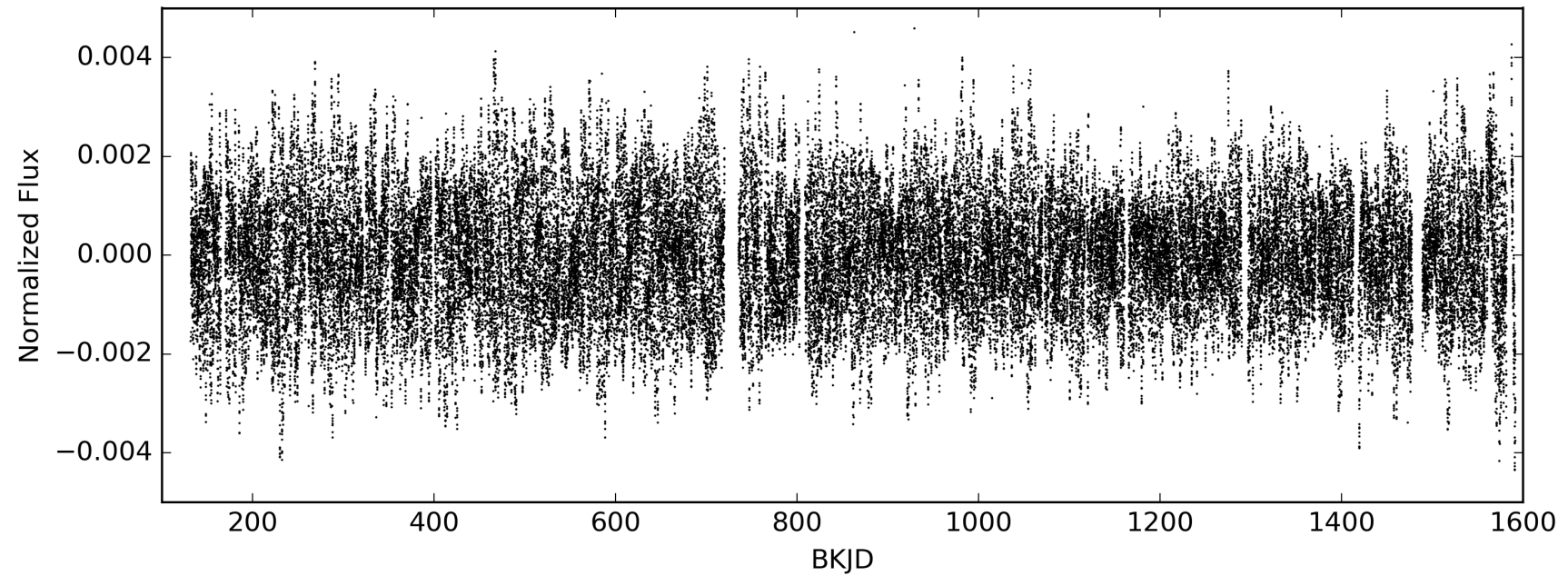
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 008332383-01, PDC Light Curves



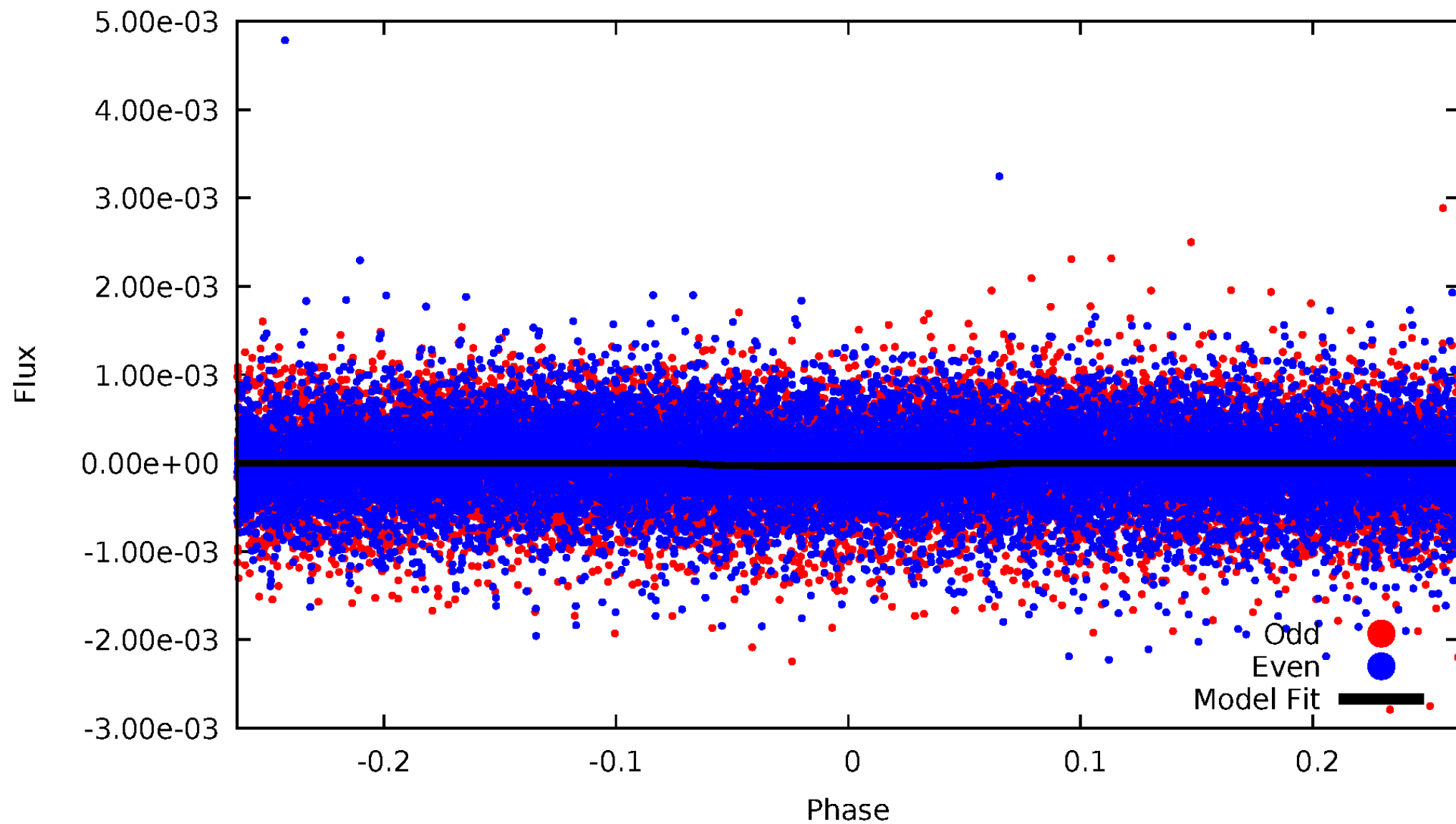
TCE 008332383-01

— P = 0.594 days — P = 1.189 days — P = 2.377 days



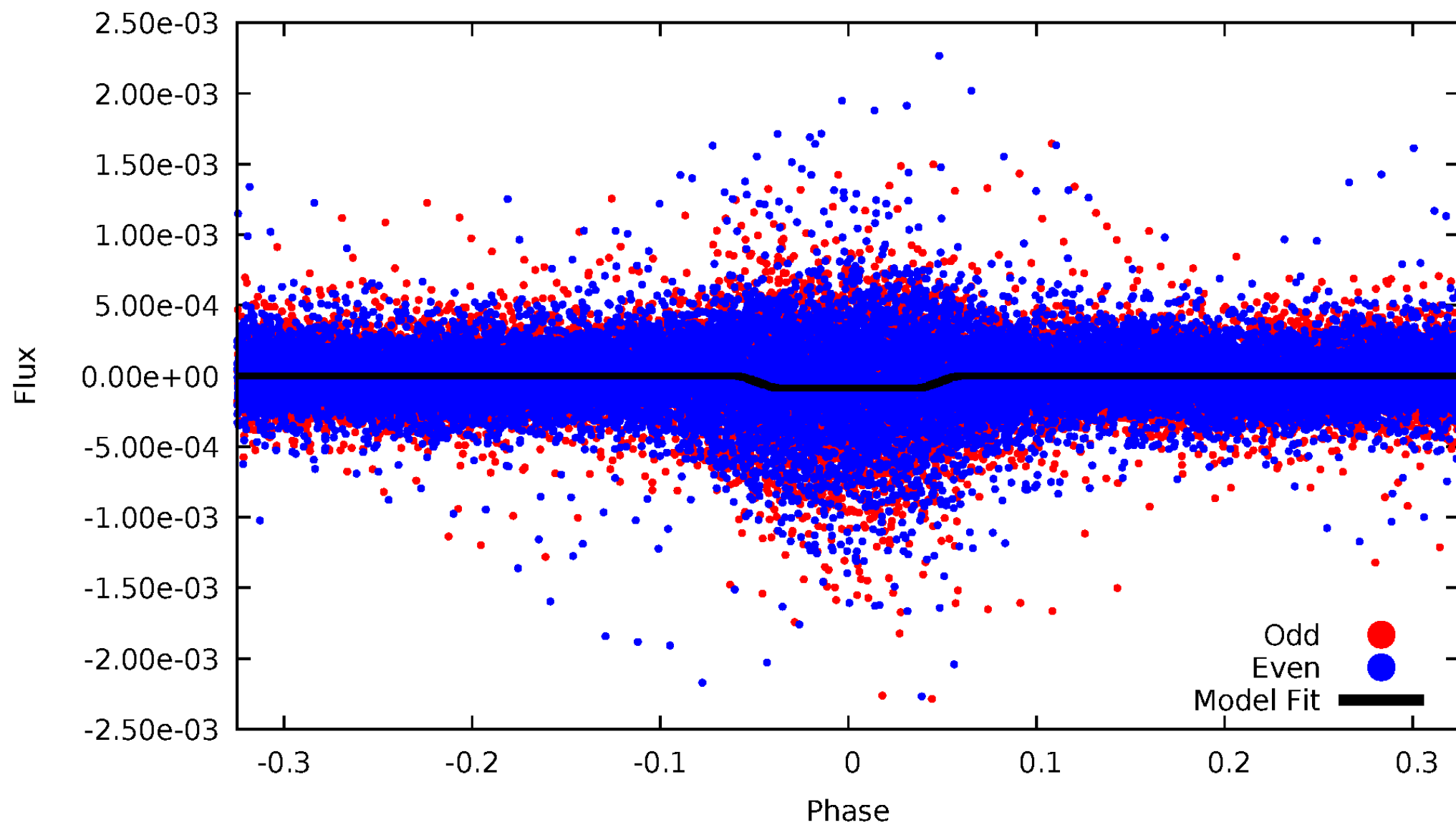
DV Odd/Even

TCE 008332383-01

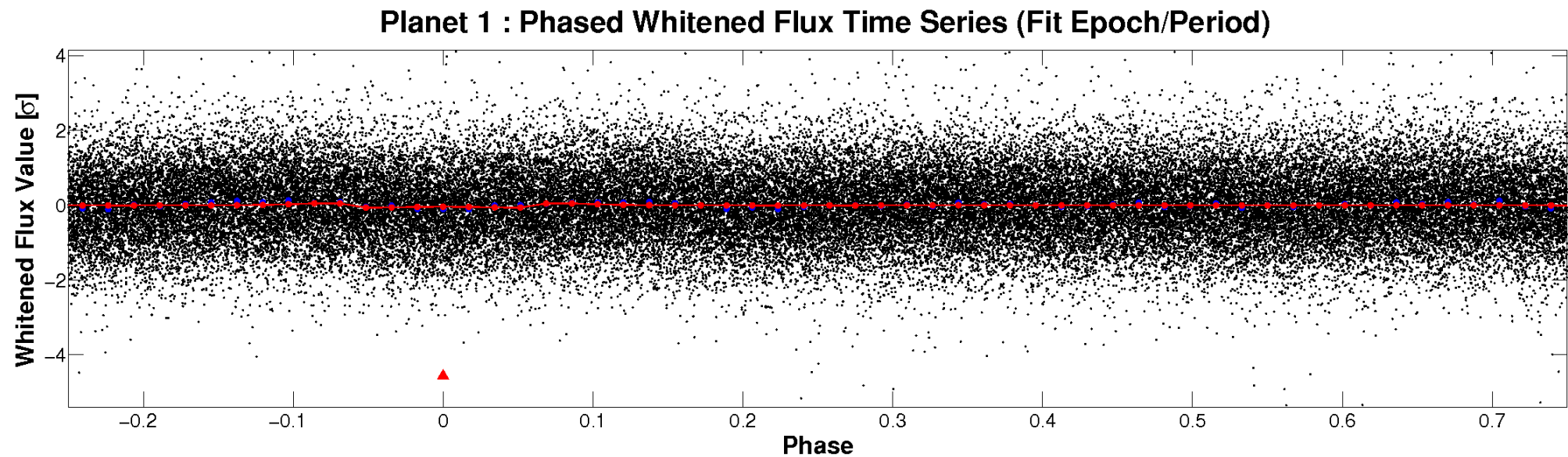
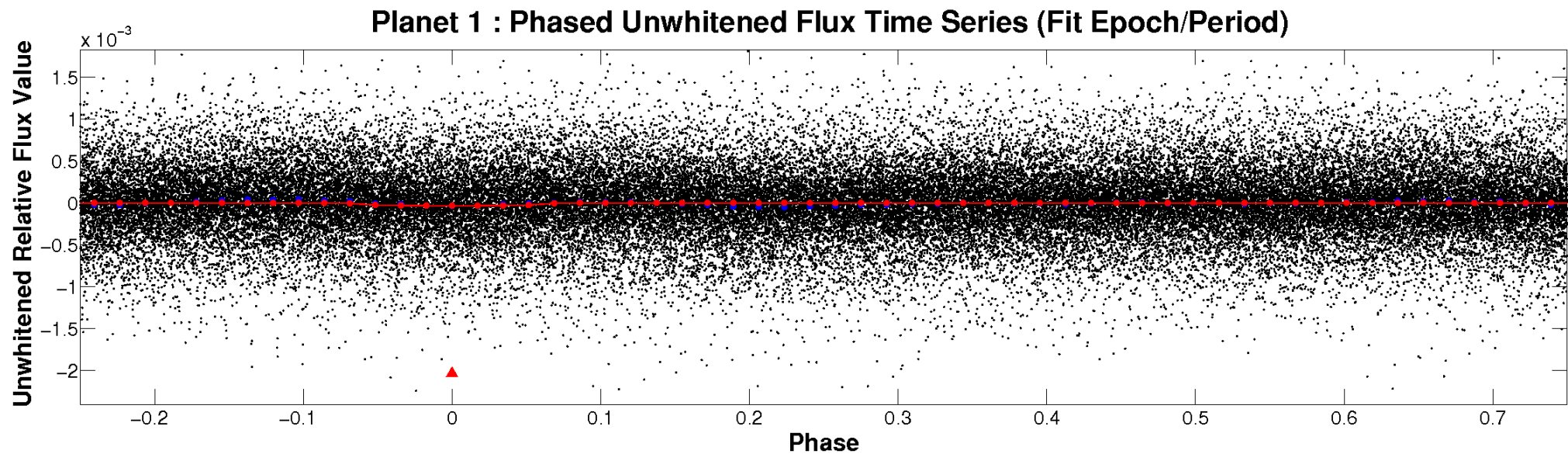


ALT Odd/Even

TCE 008332383-01

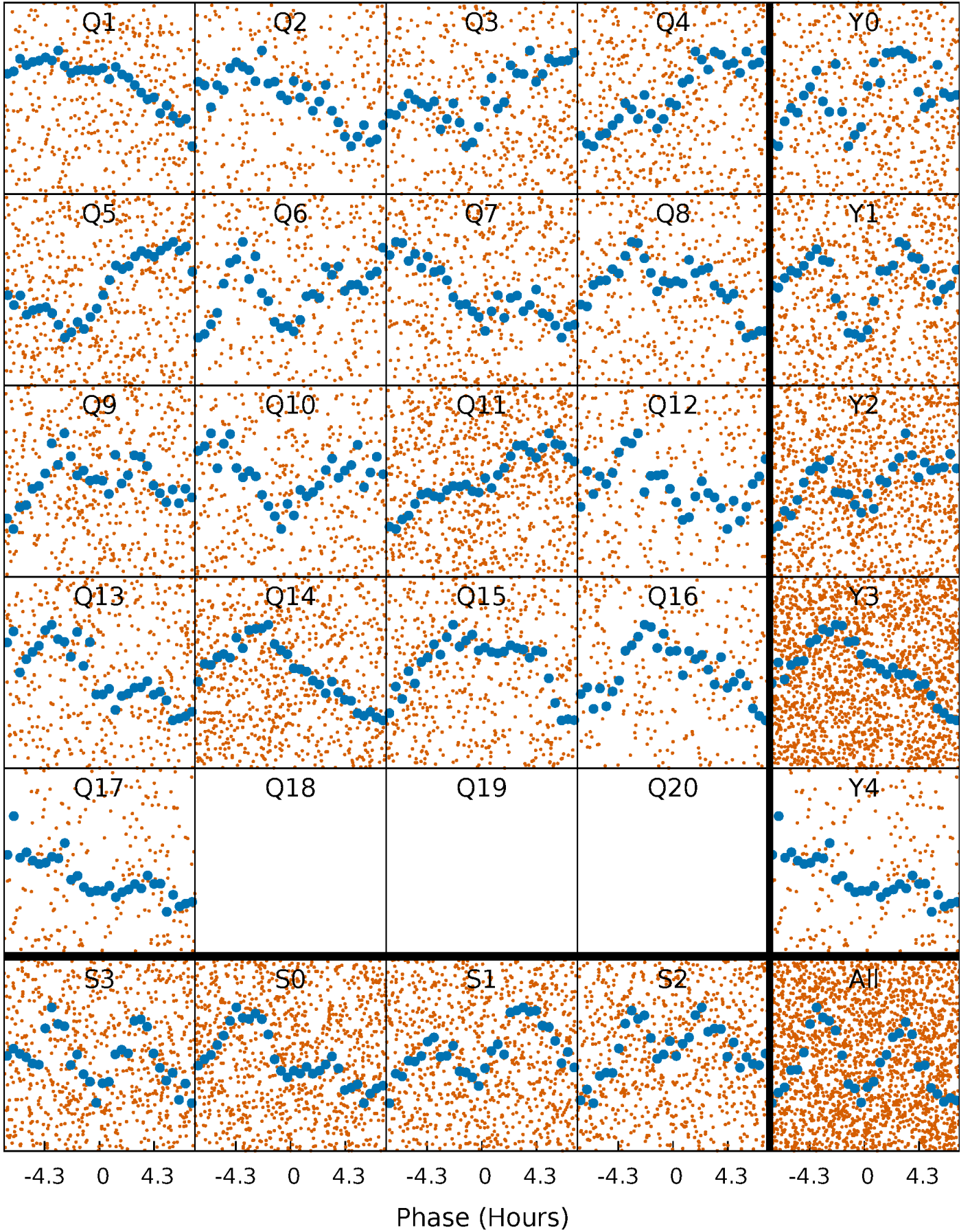


Non-Whitened Vs. Whitened Light Curve



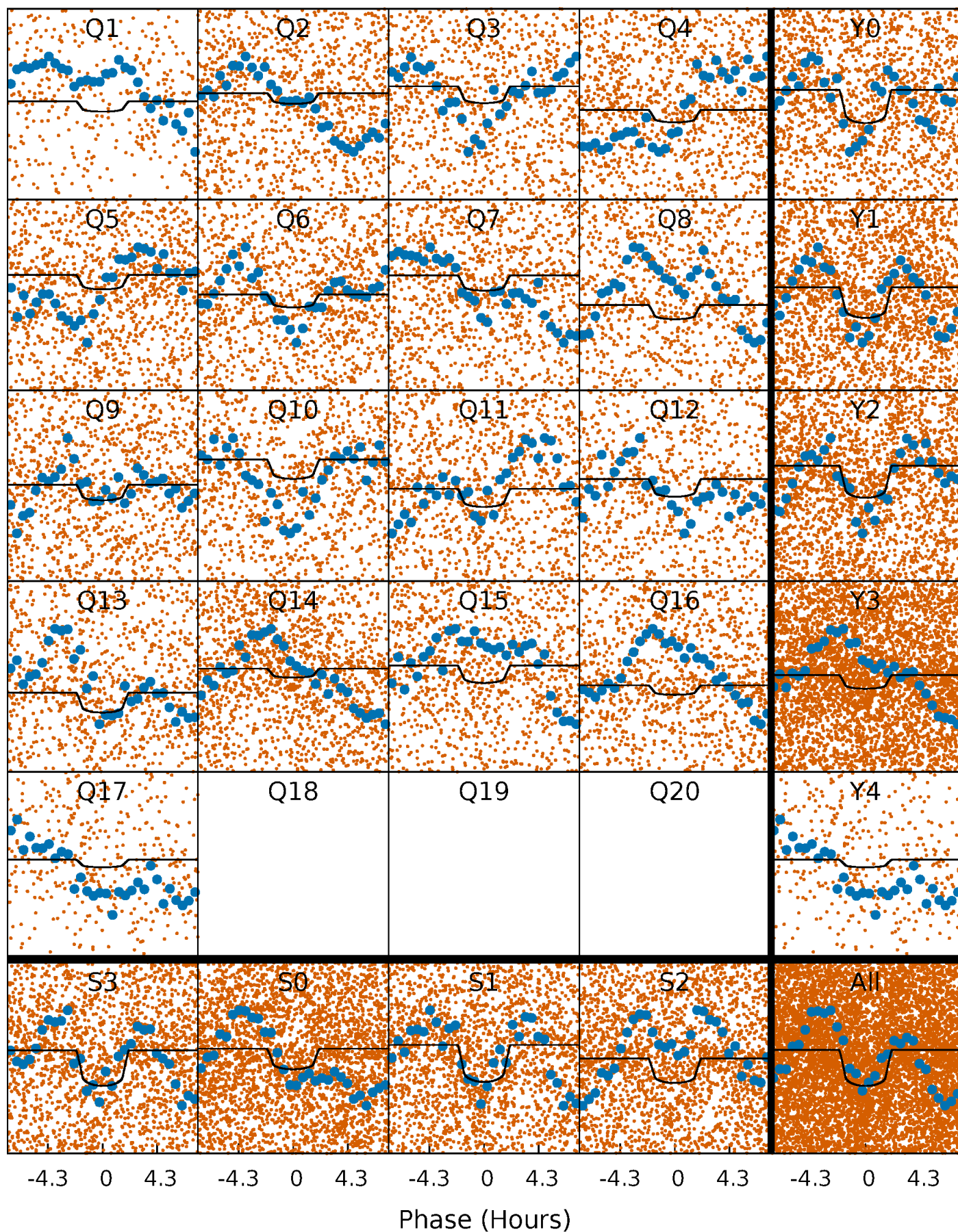
PDC Quarter-Phased Transit Curves

TCE 008332383-01 P= 1.188617 Days $T_0=132.391707$ (BKJD)



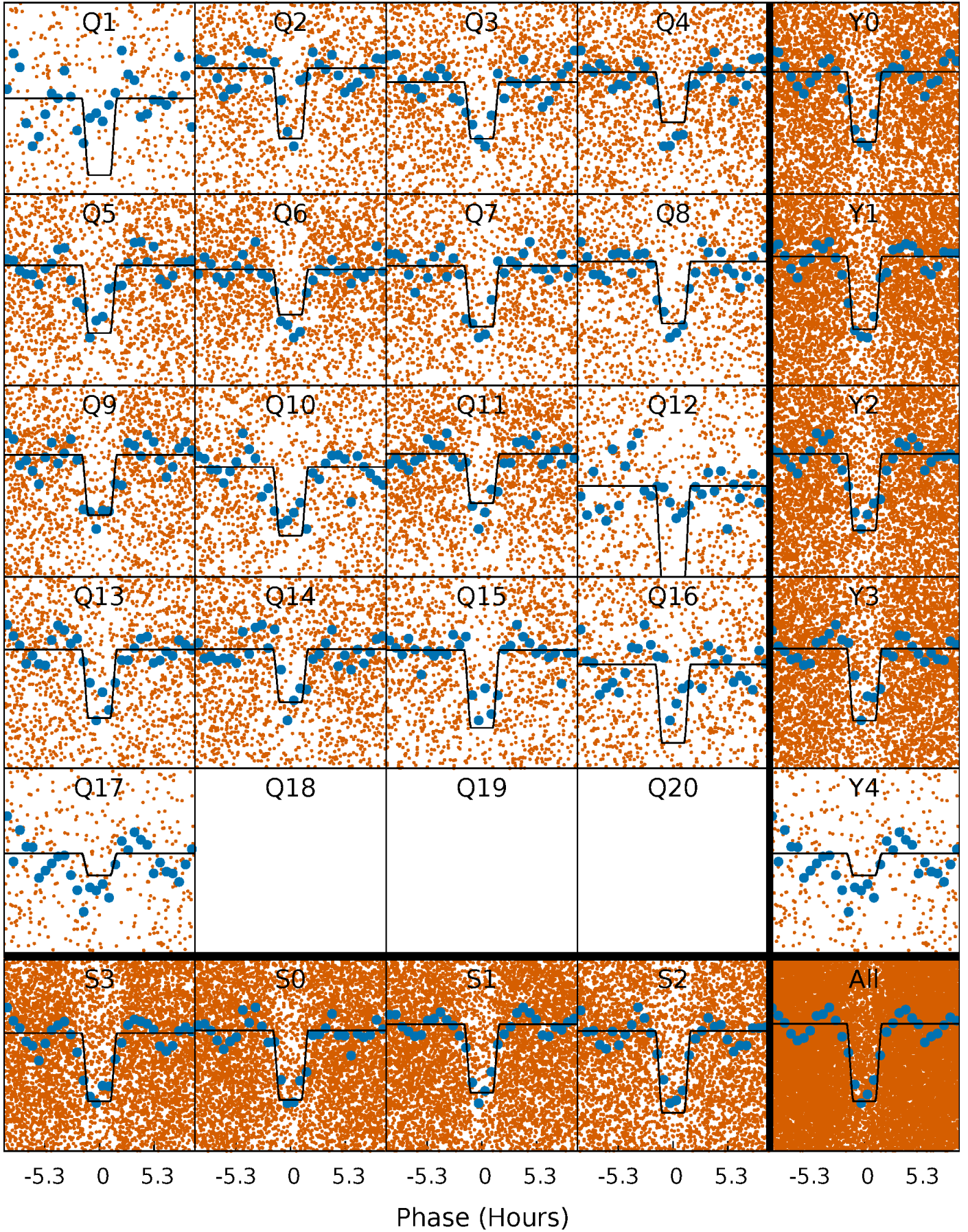
DV Quarter-Phased Transit Curves

TCE 008332383-01 P= 1.188617 Days $T_0=132.391707$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

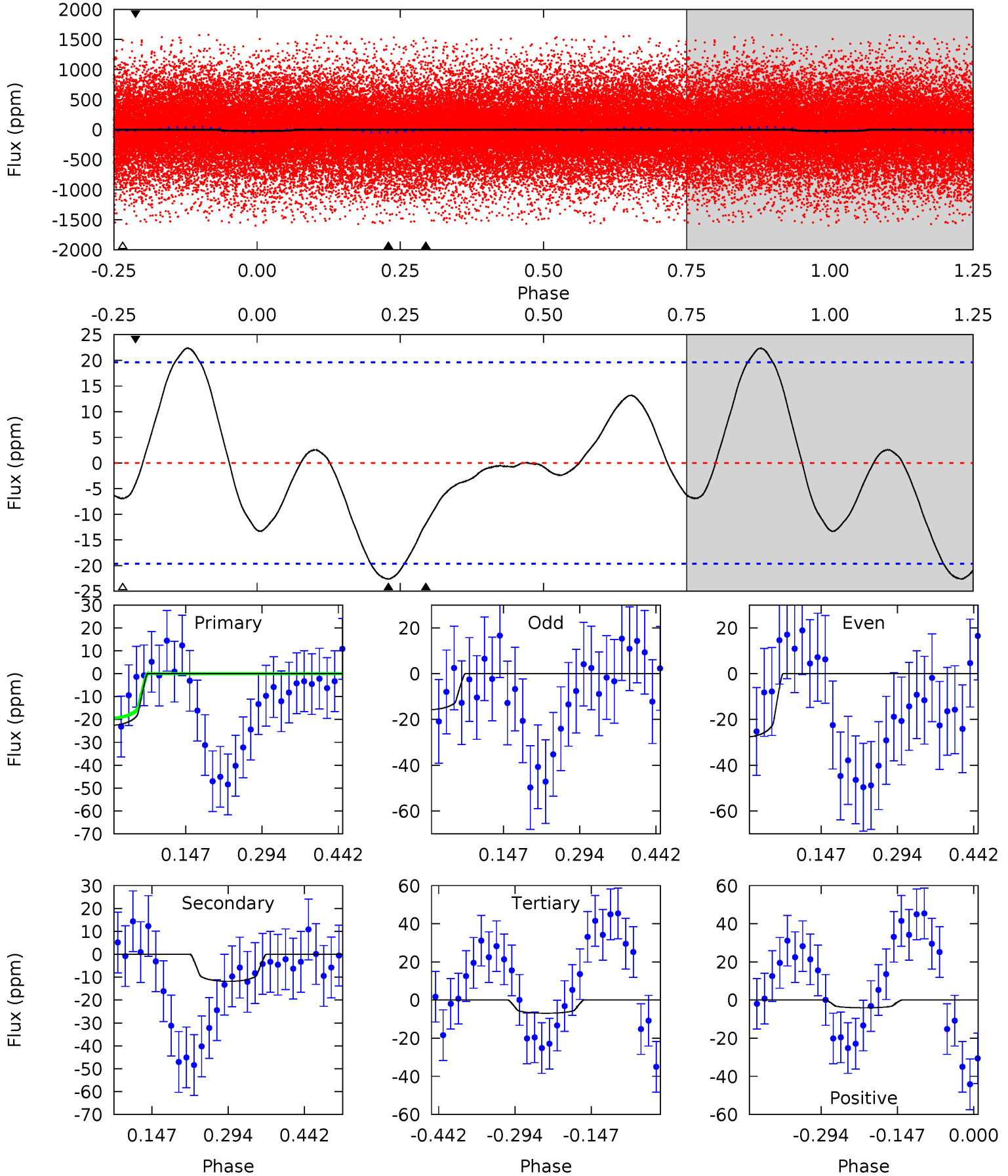
TCE 008332383-01 P= 1.188665 Days $T_0=132.356980$ (BKJD)



DV Model-Shift Uniqueness Test

008332383-01, P = 1.188617 Days, E = 131.203090 Days

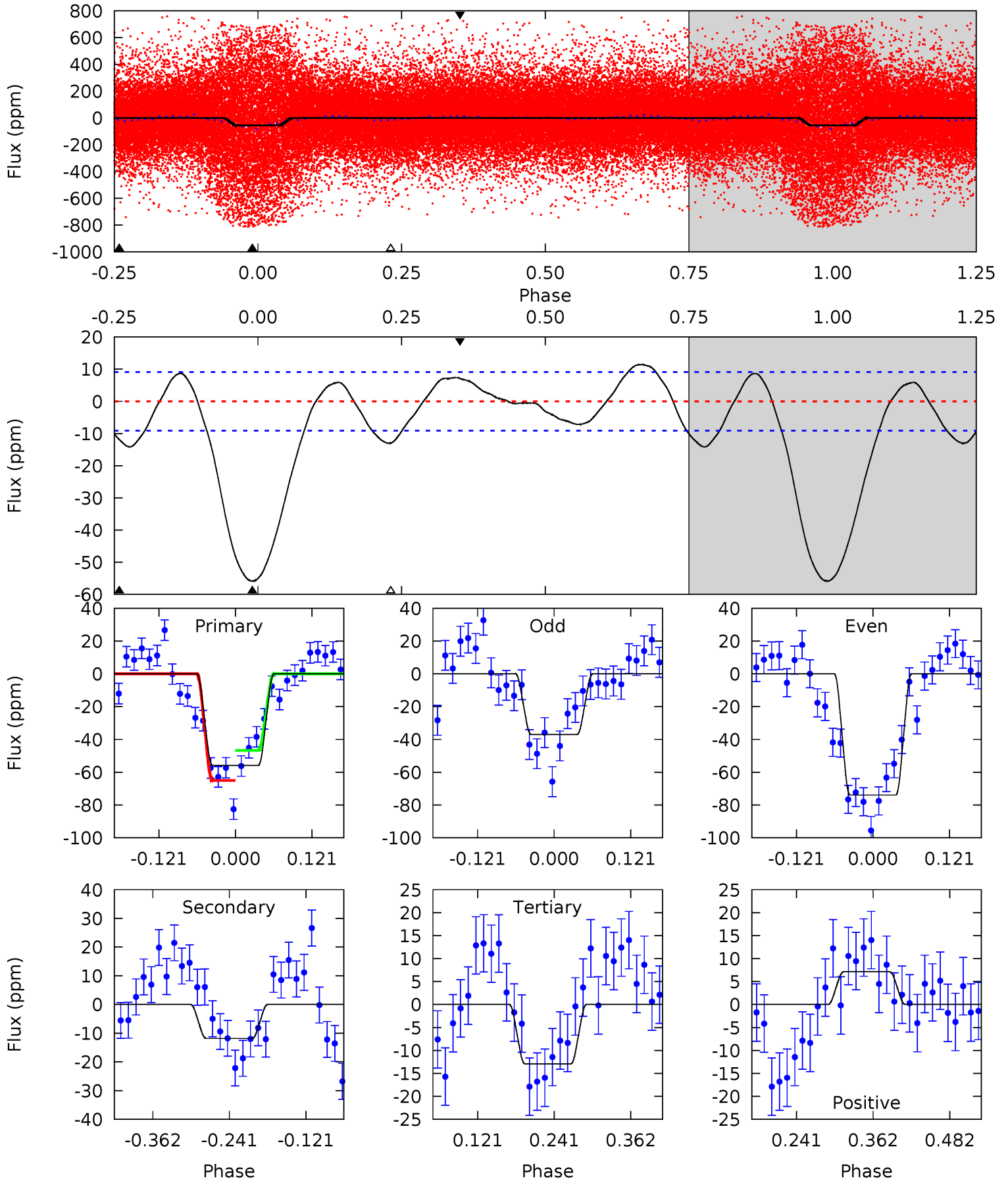
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|-------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 5.16 | 2.71 | 1.58 | -0.92 | 4.48 | 1.45 | 2.12 | 3.58 | 6.09 | 1.13 | 3.63 | 1.37 | 1.26 | 0.50 | 0.52 |



Alt Model-Shift Uniqueness Test

008332383-01, P = 1.188665 Days, E = 131.168315 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 27.7 | 5.88 | 6.42 | 3.54 | 4.53 | 1.55 | 3.15 | 21.3 | 24.2 | -0.54 | 2.34 | 9.16 | 1.29 | 0.17 | 4.57 |



Stellar Parameters For KIC 008332383

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | R (R_{\odot}) | $M(M_{\odot})$ | p_{\star} ($\text{g}\cdot\text{cm}^{-3}$) |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 6567^{+177}_{-177} | $3.560^{+0.360}_{-0.090}$ | $-0.280^{+0.350}_{-0.300}$ | $3.511^{+0.365}_{-1.370}$ | $1.633^{+0.198}_{-0.368}$ | $0.053^{+0.154}_{-0.016}$ |
| | +3%/-3% | +10%/-3% | +125%/-107% | +10%/-39% | +12%/-23% | +290%/-29% |
| 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 008332383-01 / KOI

| Detrend | Depth (ppm) | R_p (R_{\oplus}) | T_{max} (K) | T_{obs} (K) | A_{obs} |
|---------|-------------|------------------------|----------------------|------------------------|---------------------------|
| DV | -12 ± 4 | $2.19^{+0.76}_{-0.71}$ | 4611^{+271}_{-431} | 4575^{+1009}_{-1016} | $0.903^{+1.033}_{-0.464}$ |
| Alt. | -12 ± 2 | $3.32^{+0.82}_{-0.83}$ | 4631^{+249}_{-390} | 3359^{+738}_{-6490} | $0.398^{+0.290}_{-0.151}$ |

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 $A_{obs} \gg 1.0$

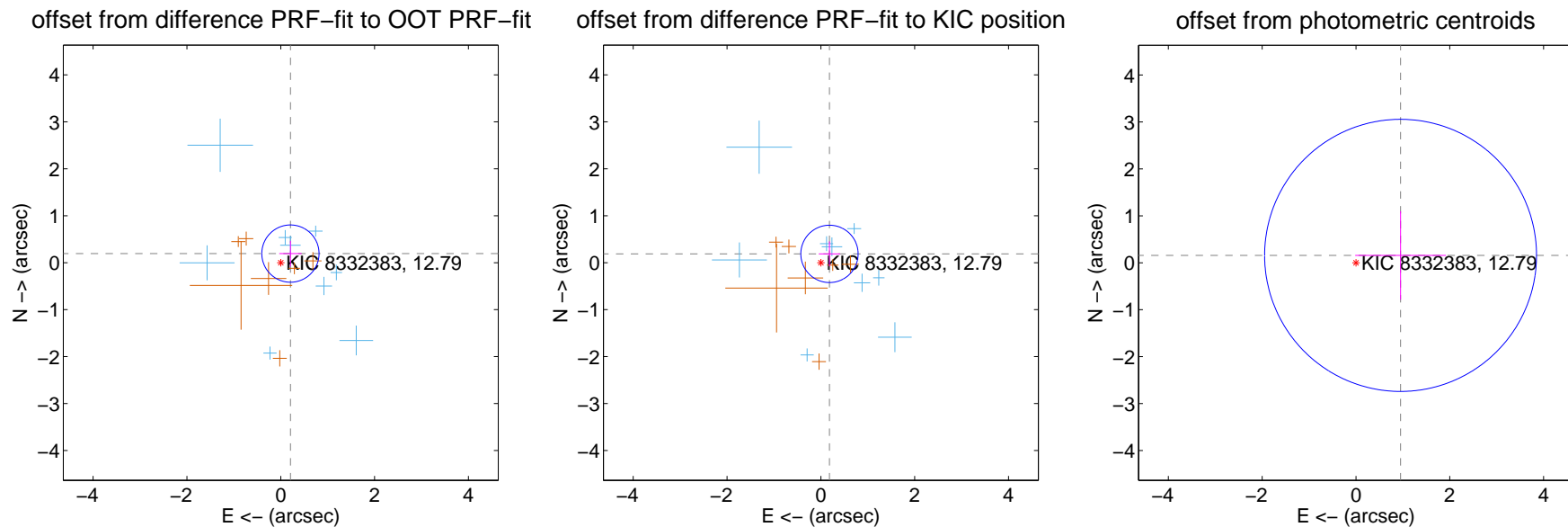
DV Centroid Data

Supplemental centroid analysis for 008332383-01. Kepler magnitude: 12.79. Transit SNR 5.99

There are 9 quarters with good PRF difference image offsets

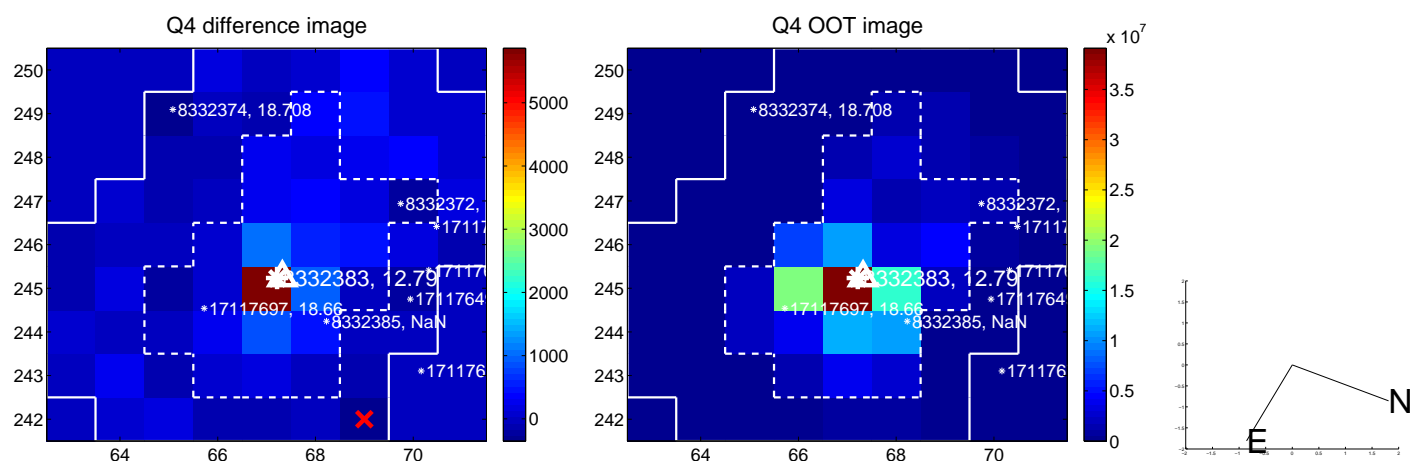
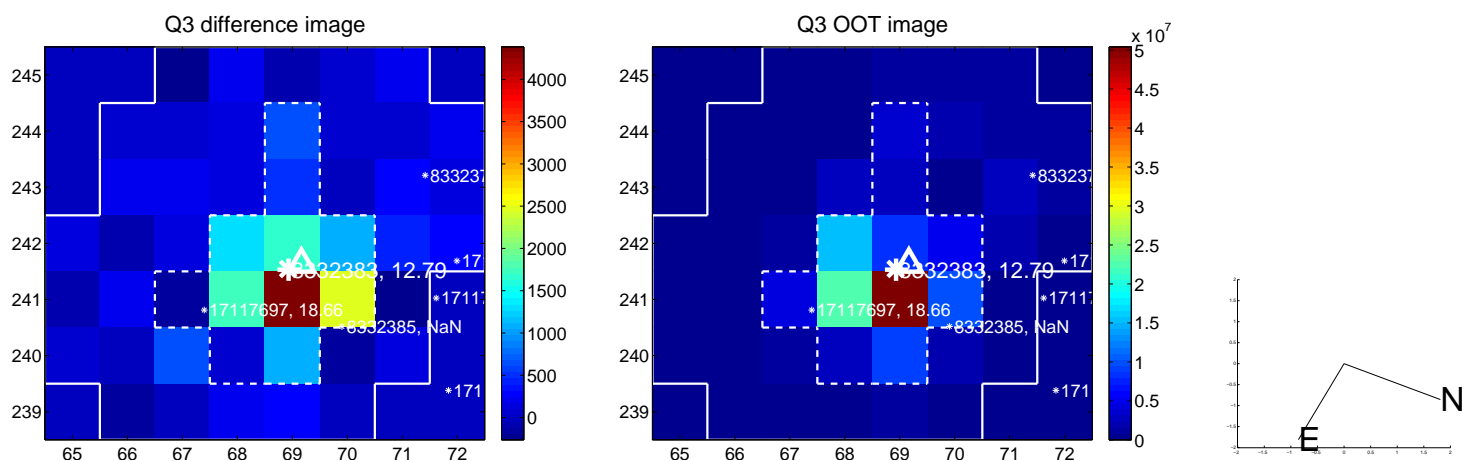
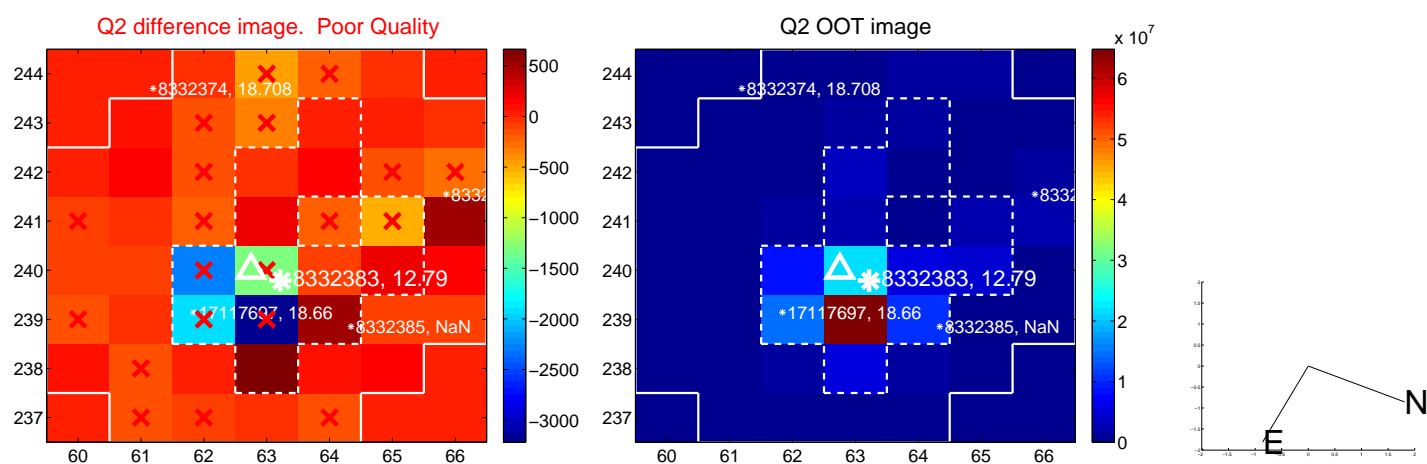
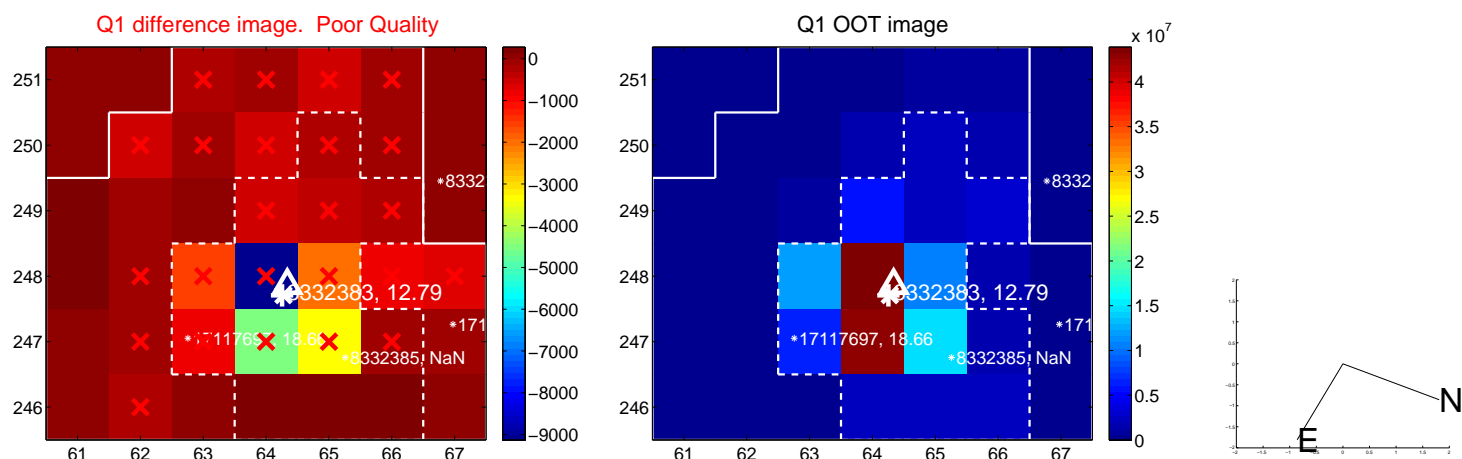
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|-------------------|
| PRF-fit source offset from OOT | 0.283 ± 0.203 | 1.39 | -0.206 ± 0.238 | 0.194 ± 0.273 |
| PRF-fit source offset from KIC position | 0.262 ± 0.203 | 1.29 | -0.183 ± 0.228 | 0.188 ± 0.265 |
| photometric centroid source offset | 0.96 ± 0.97 | 1.00 | -0.95 ± 0.97 | 0.16 ± 0.94 |

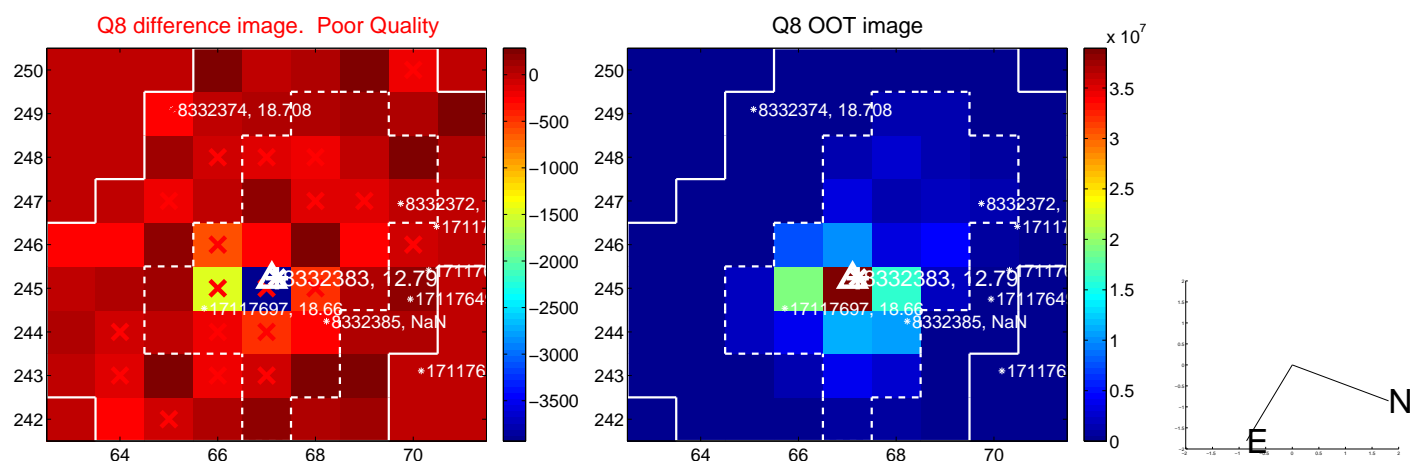
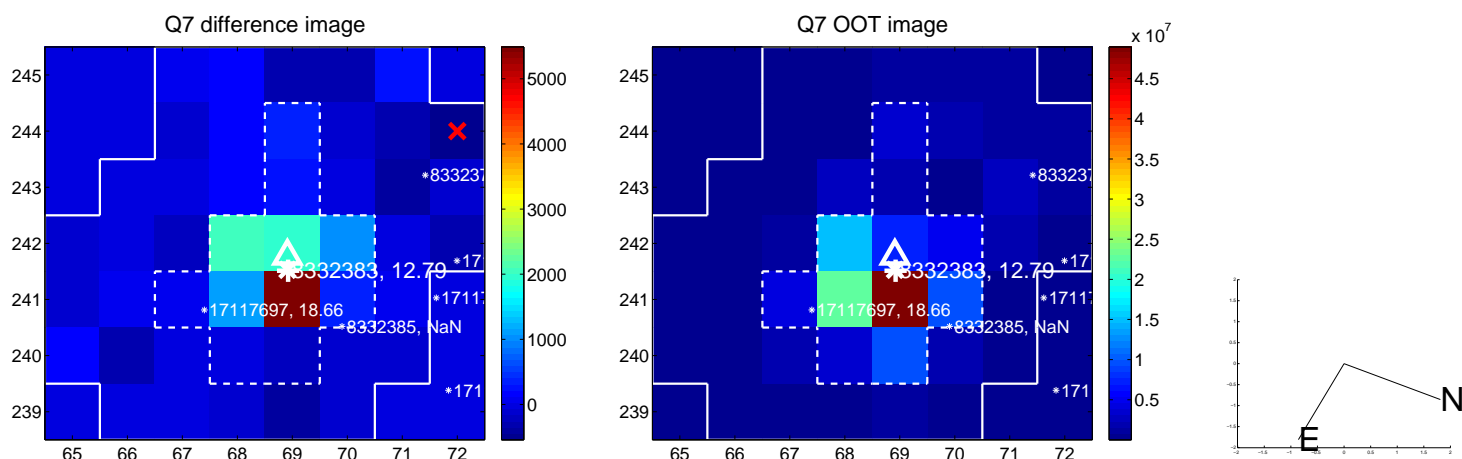
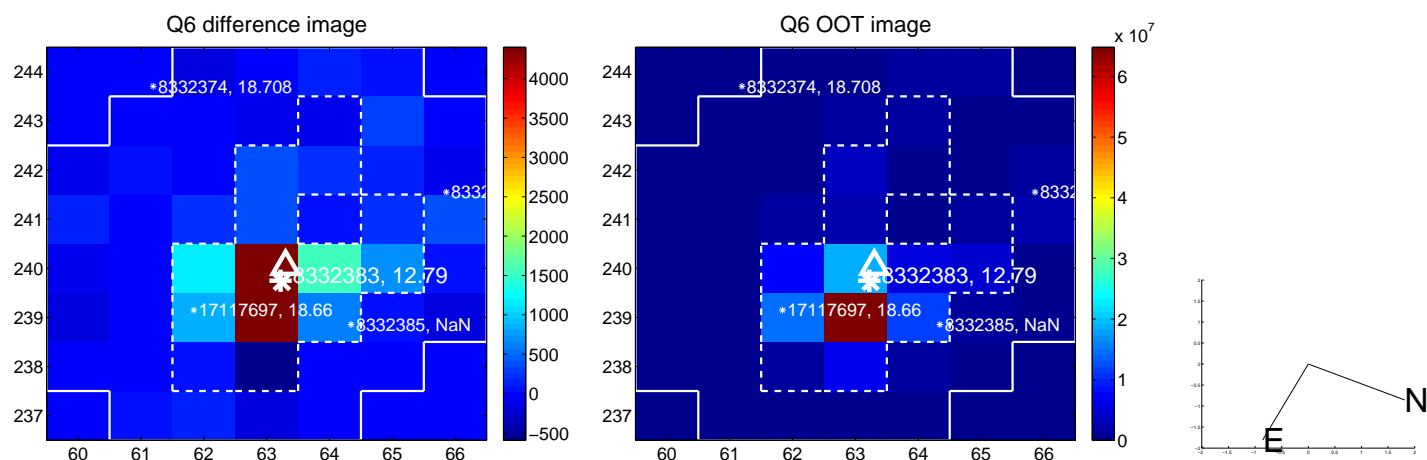
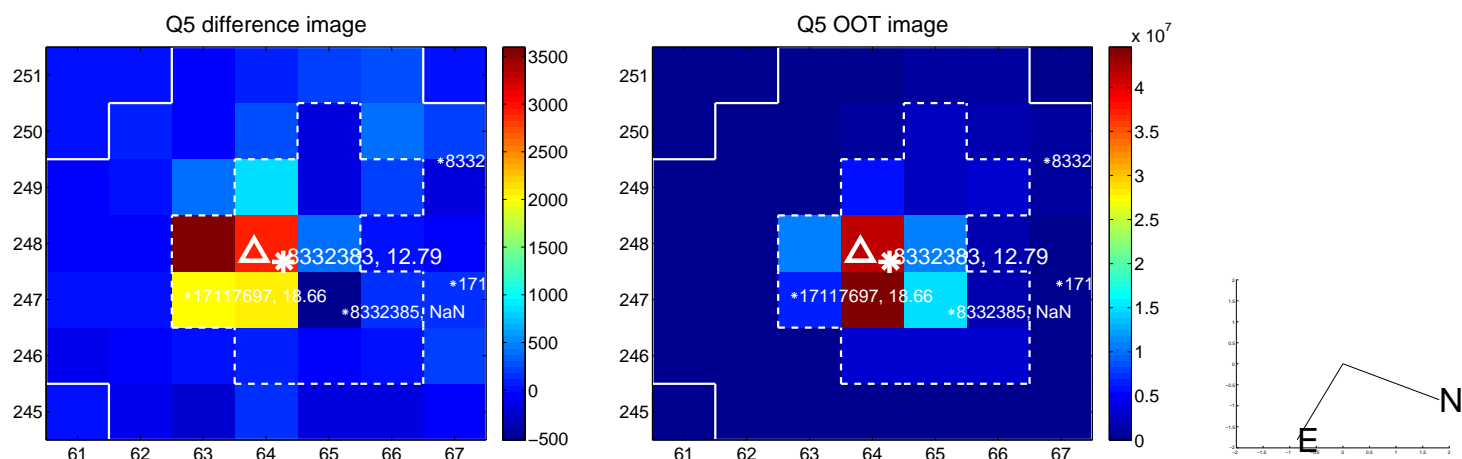


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

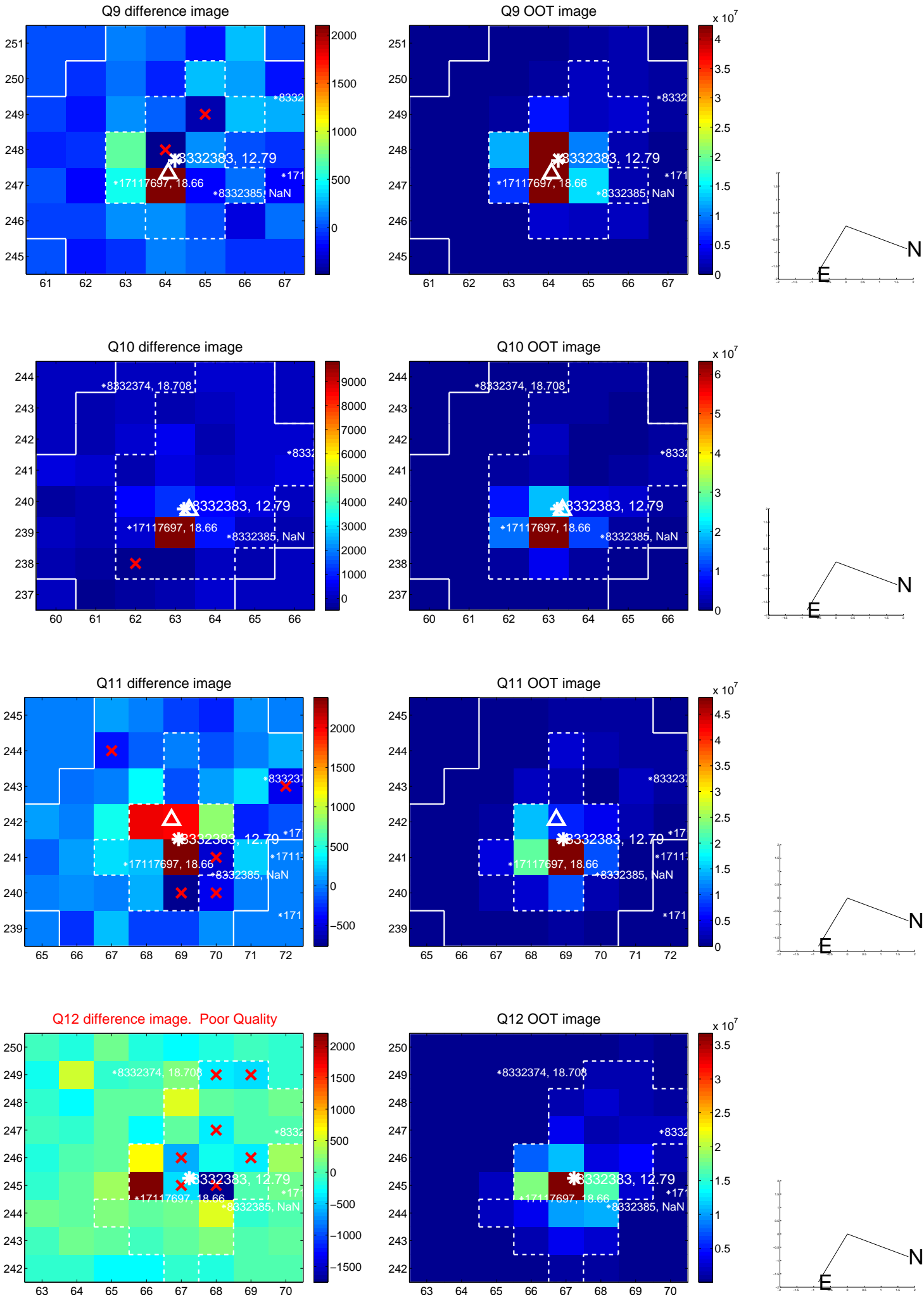
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



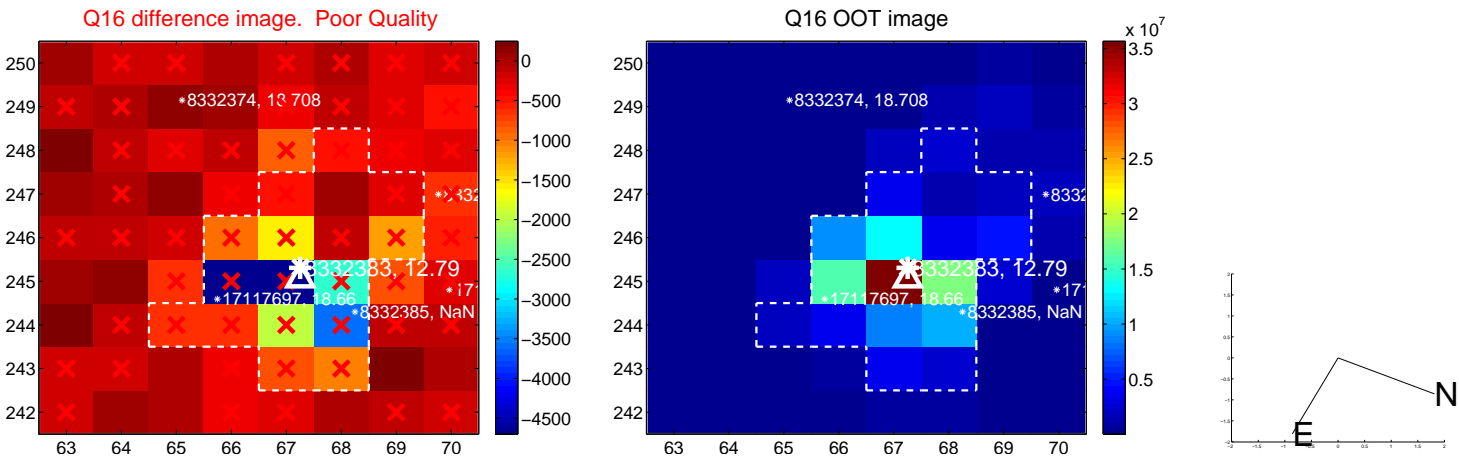
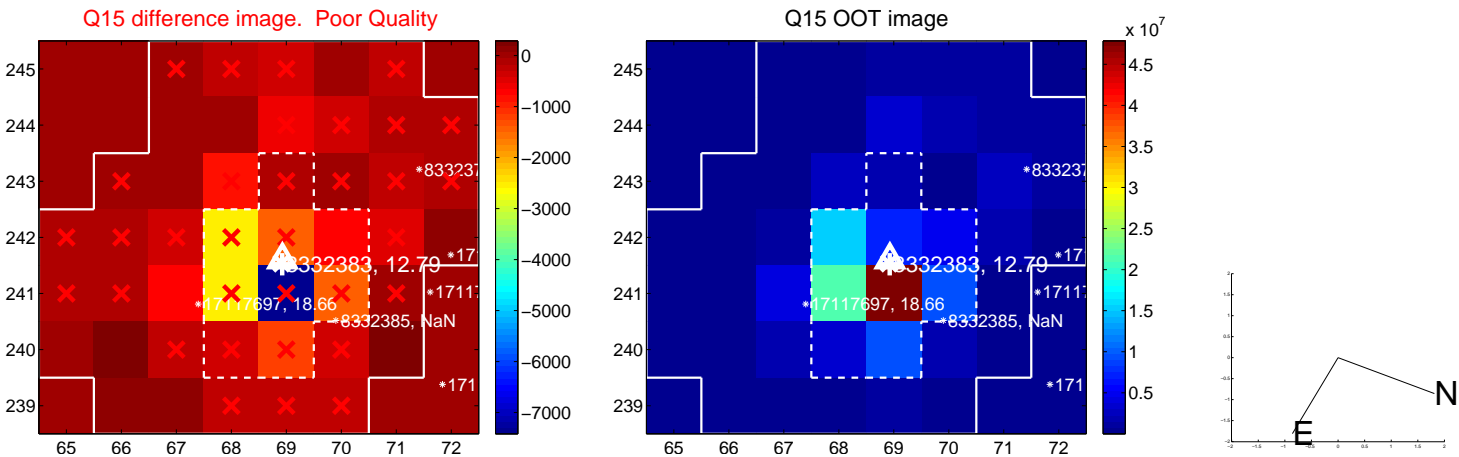
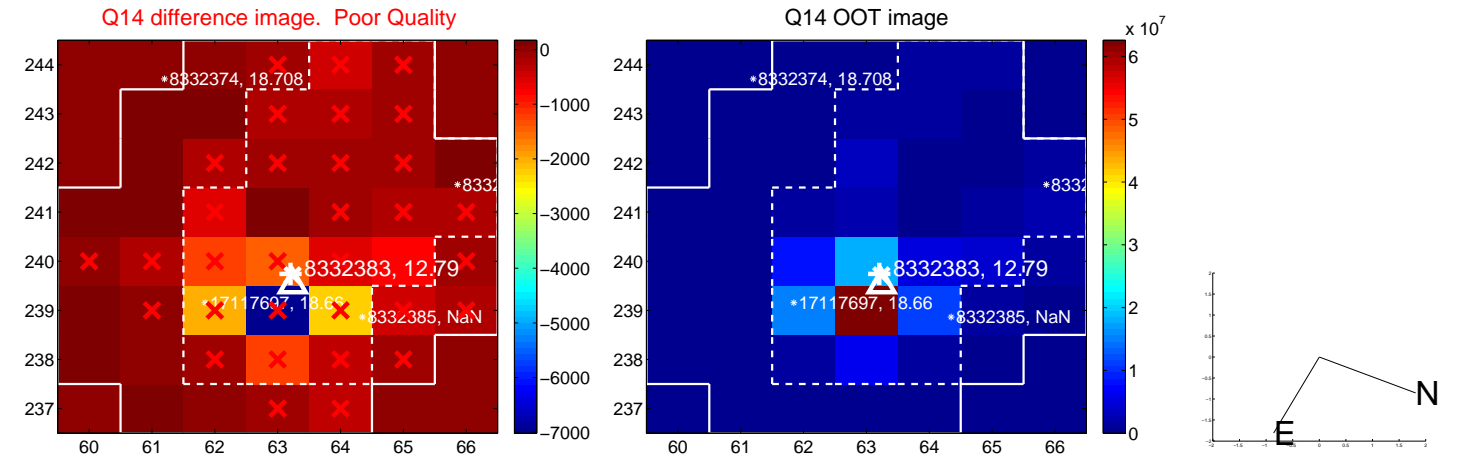
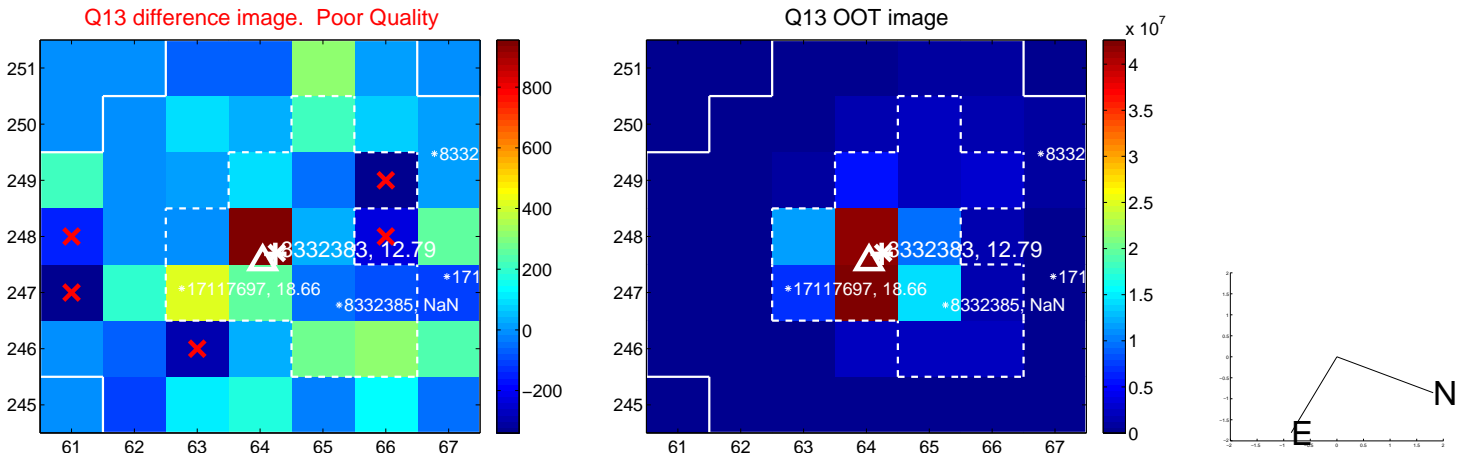
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



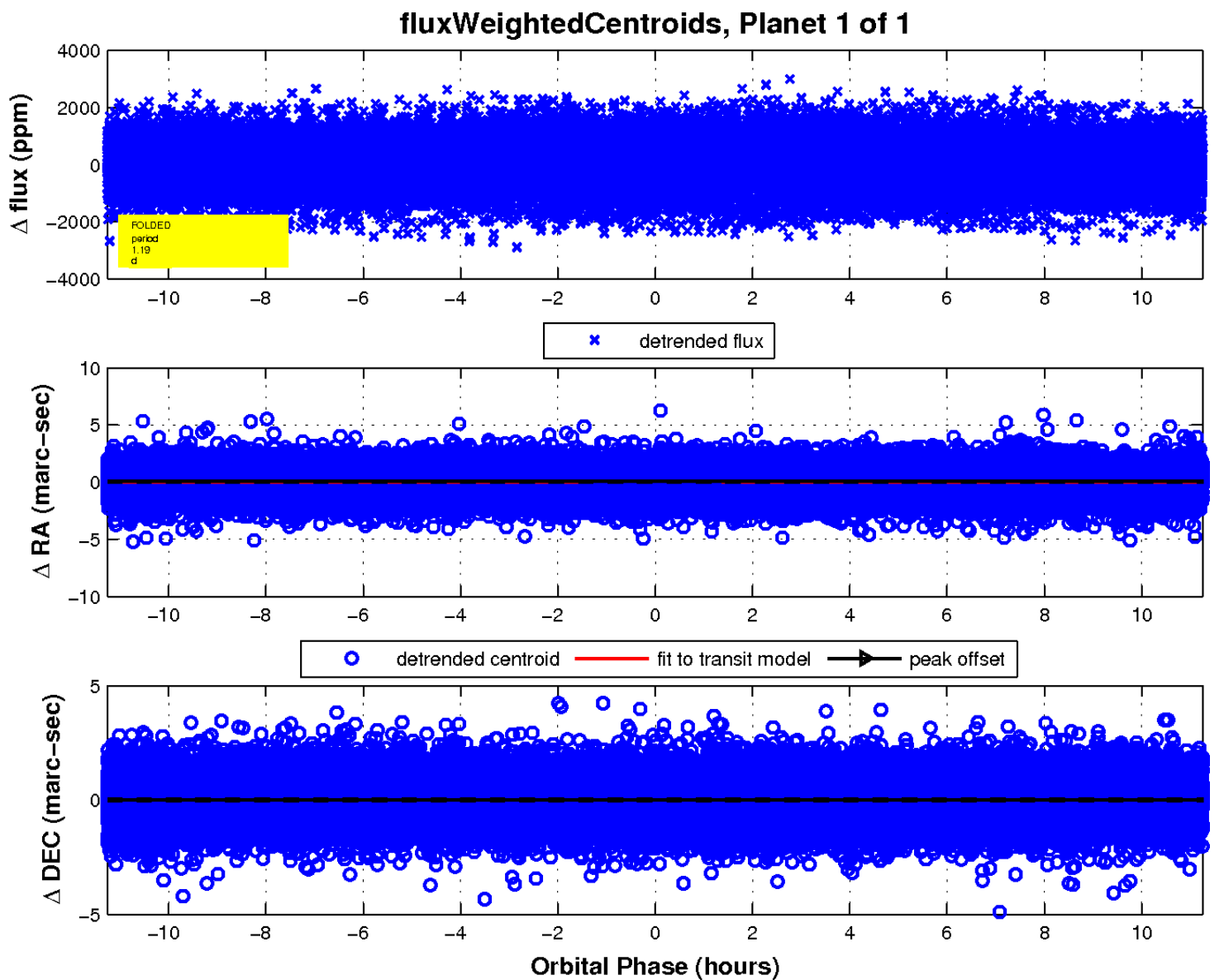
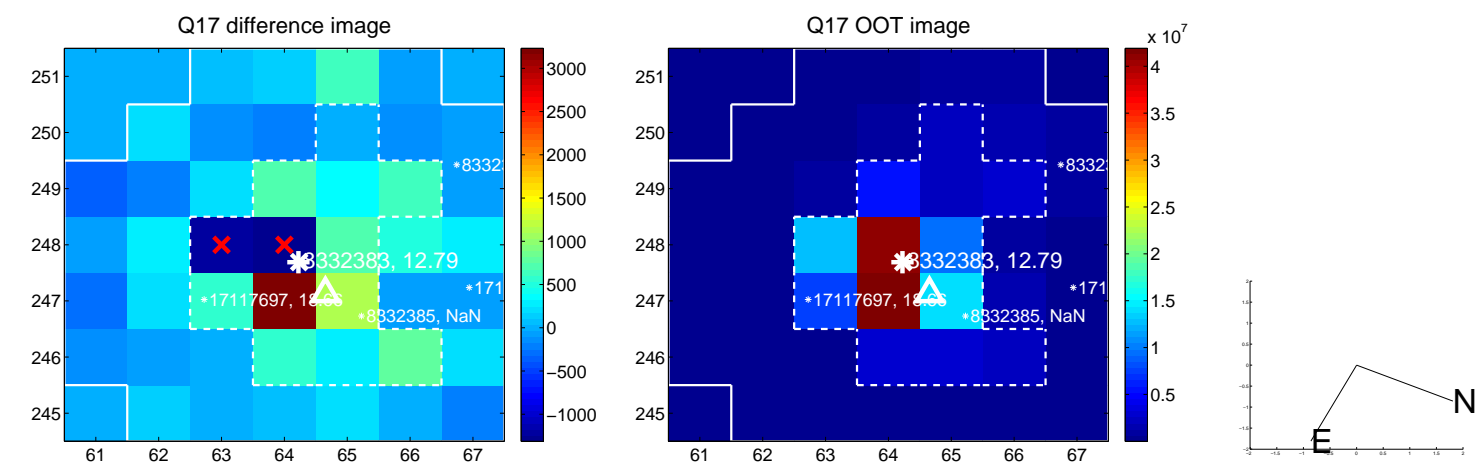
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UKIRT Image

Declination

