

KIC 001726231

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|-----|-----|-----------------------------|-----------------|------------------------|------------------------|
| 001726231-01 | OBS | No | 359.622555 | 373.947211 | 535.5 | 25.656 | 8.6 | 8.3 | 1.68 | 6406 | 4.15 | 4.00 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 001726231-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | INDIV_TRANS_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—INCONSISTENT_TRANS—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.

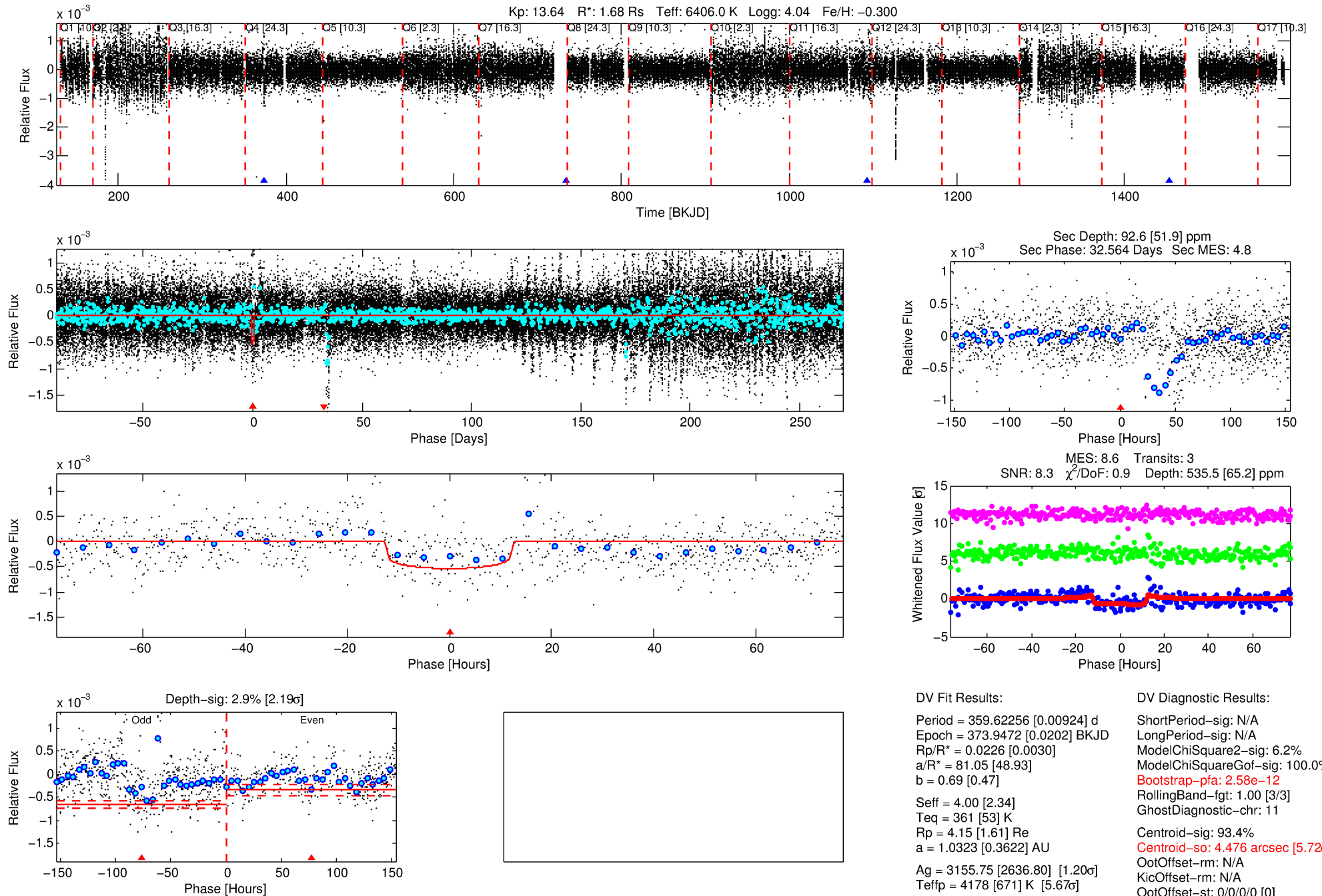
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001726231-01

No Significant Match Found

DV One-Page Summary

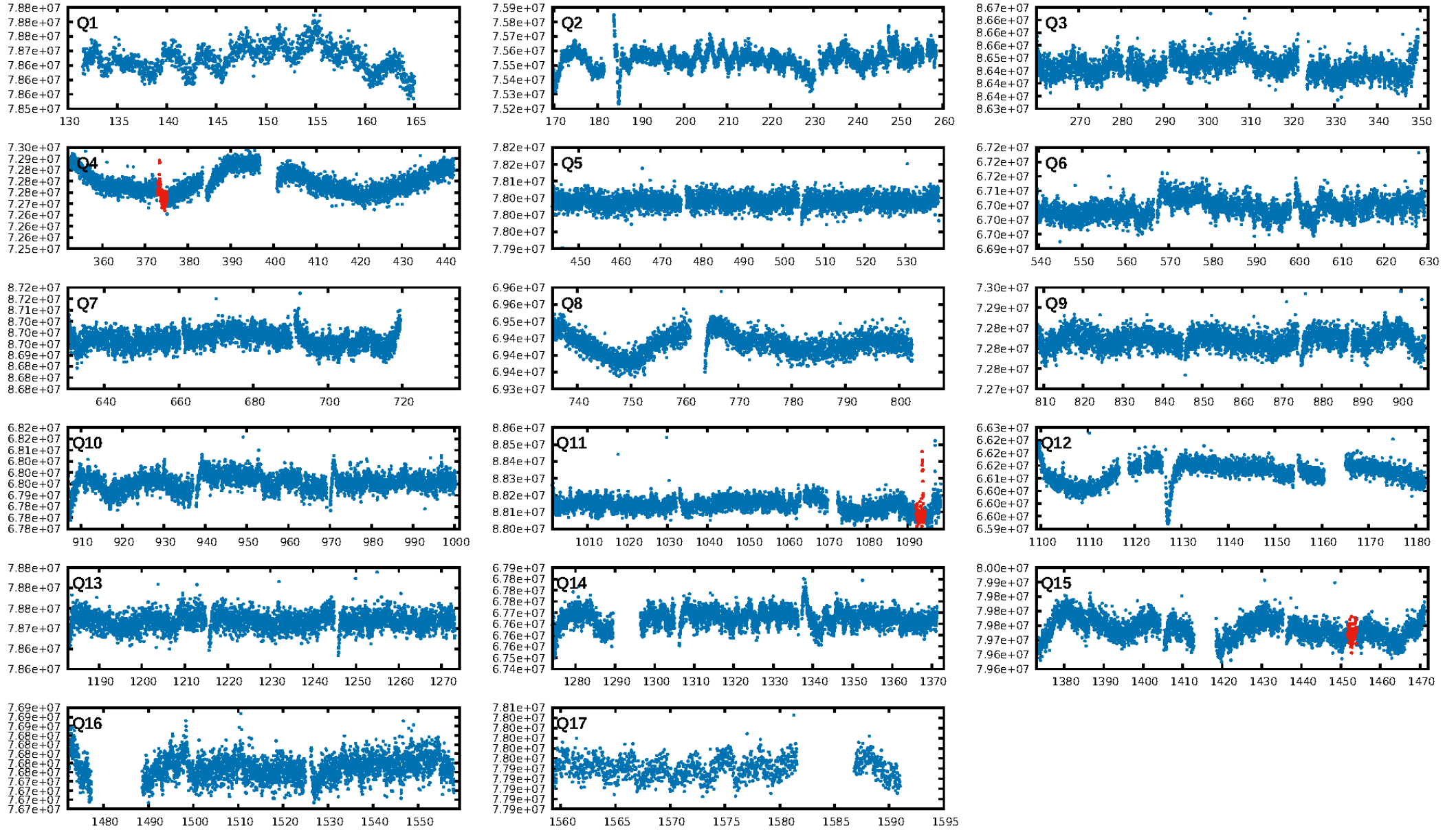
KIC: 1726231 Candidate: 1 of 1 Period: 359.623 d



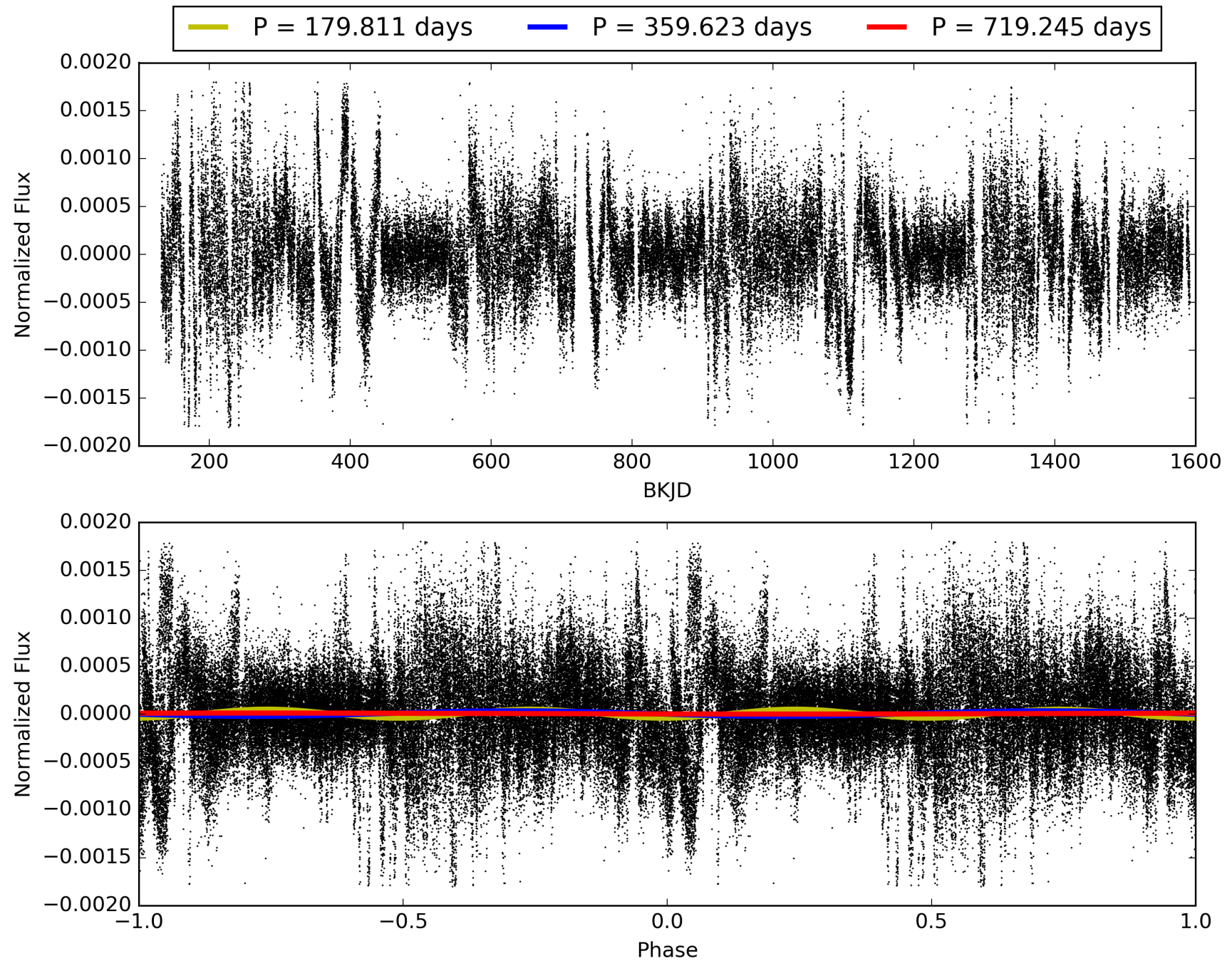
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 22:52:47 Z

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

TCE 001726231-01, PDC Light Curves

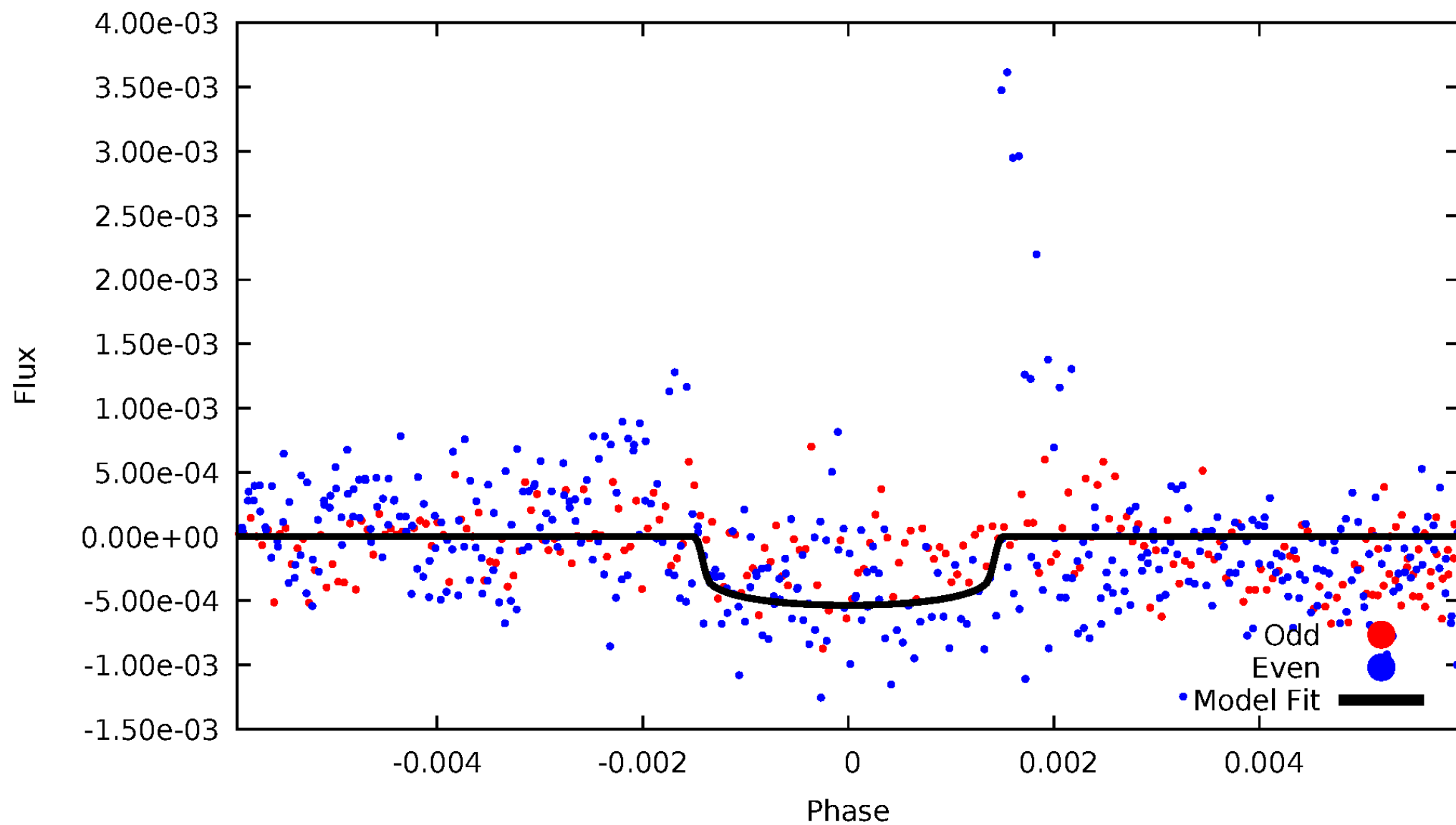


TCE 001726231-01



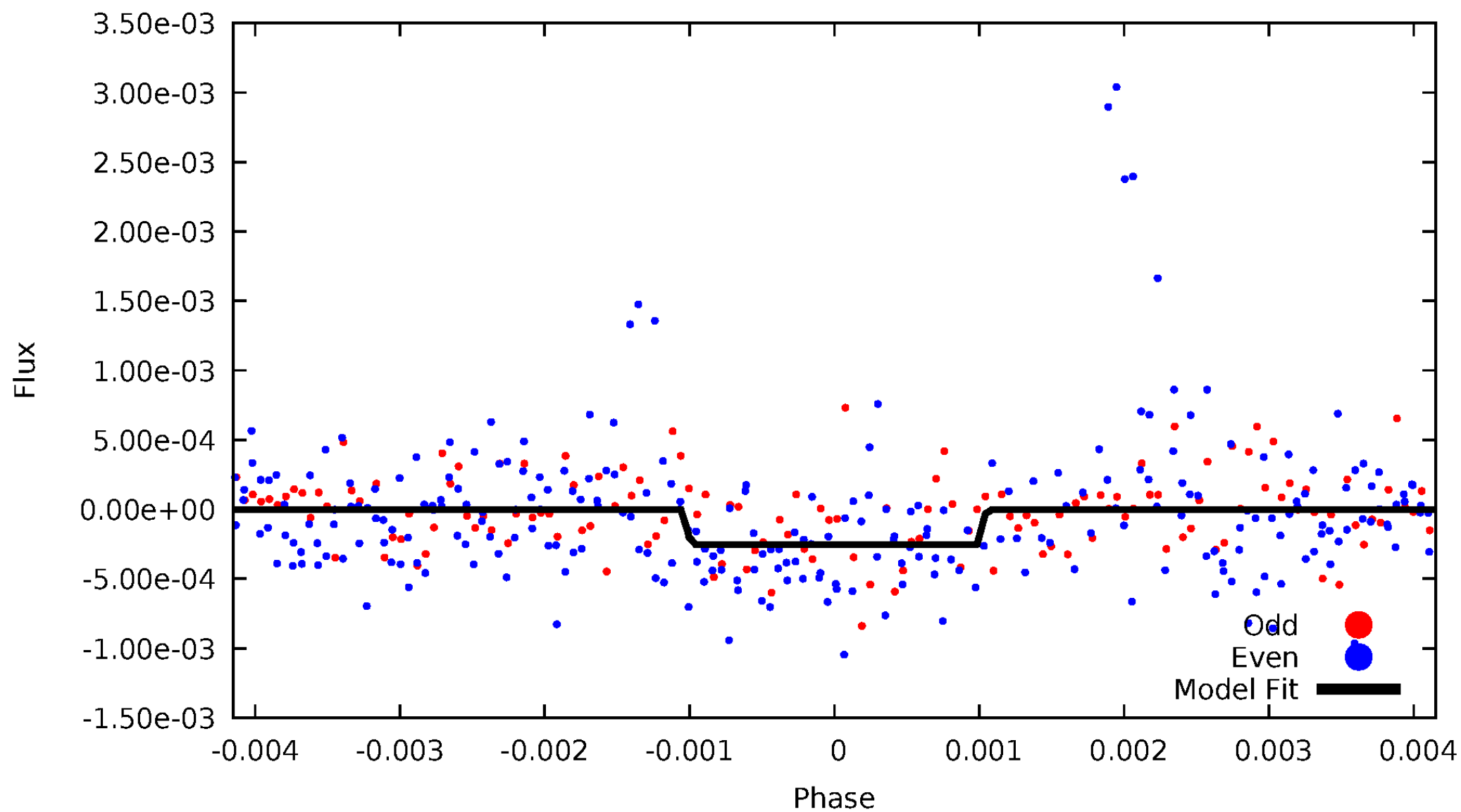
DV Odd/Even

TCE 001726231-01



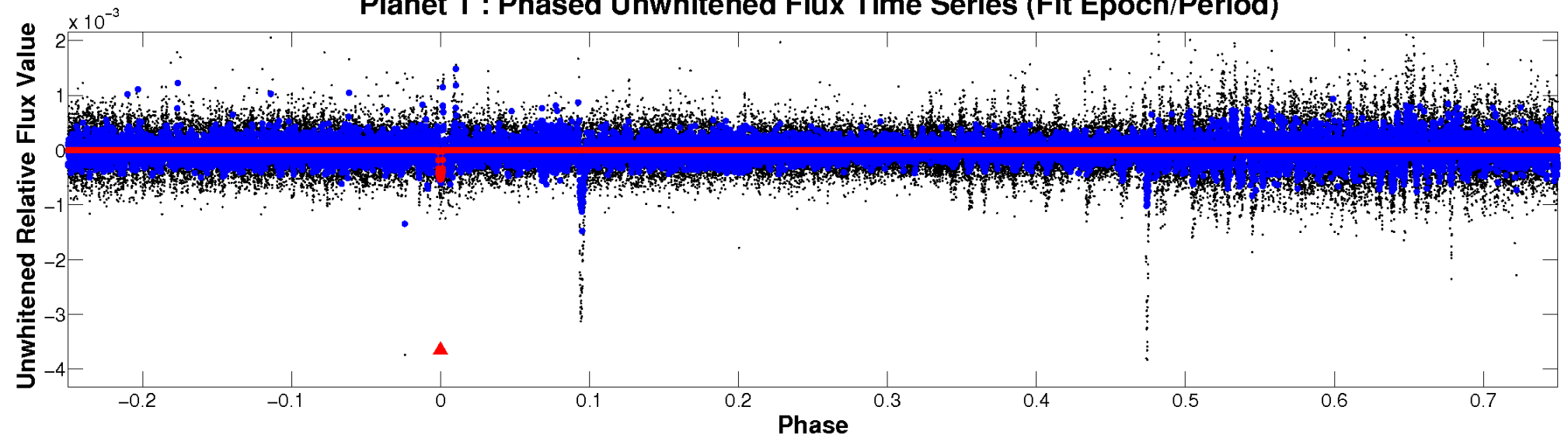
ALT Odd/Even

TCE 001726231-01

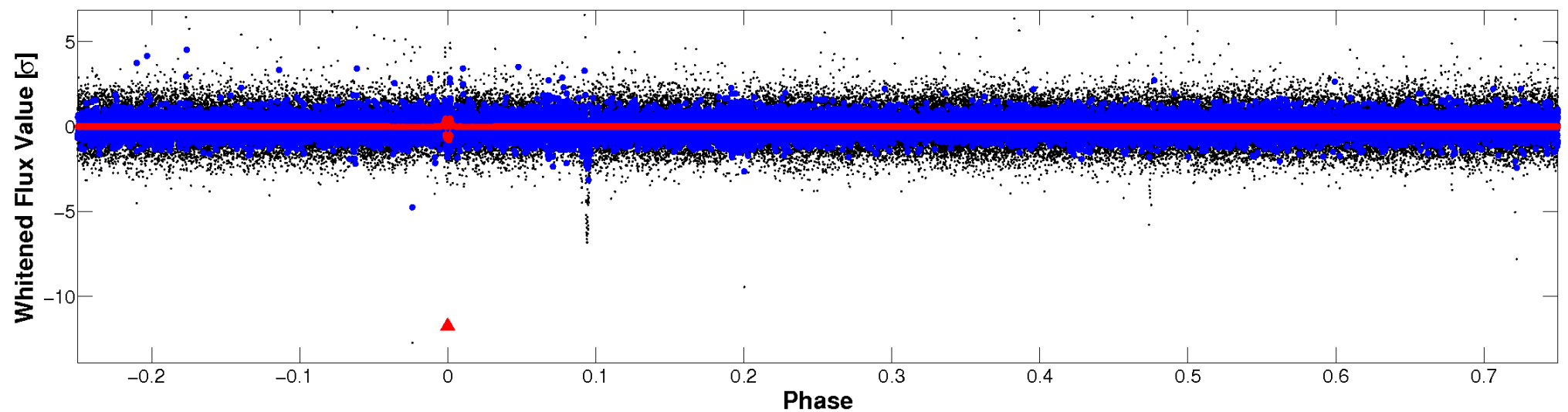


Non-Whitened Vs. Whitened Light Curve

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

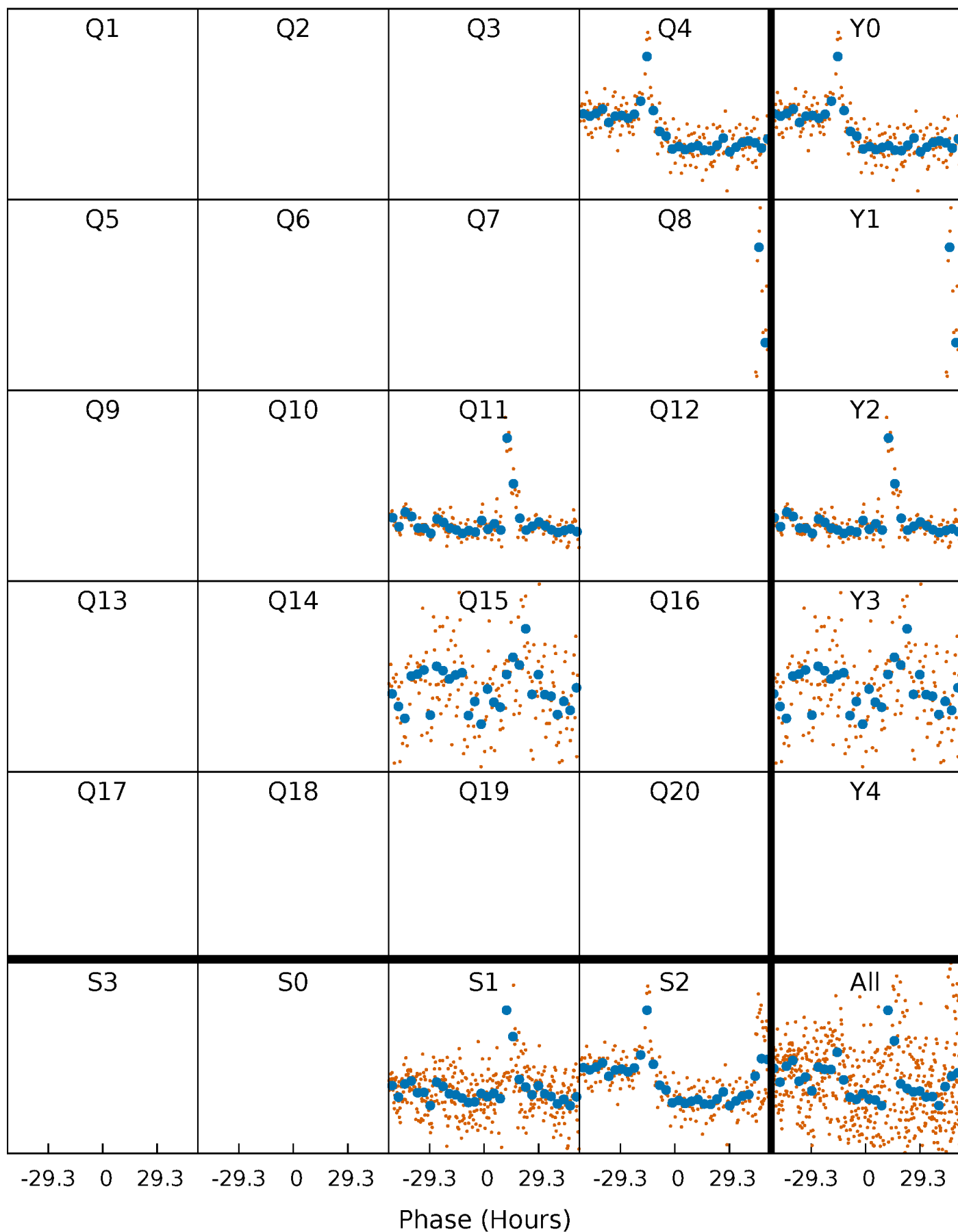


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



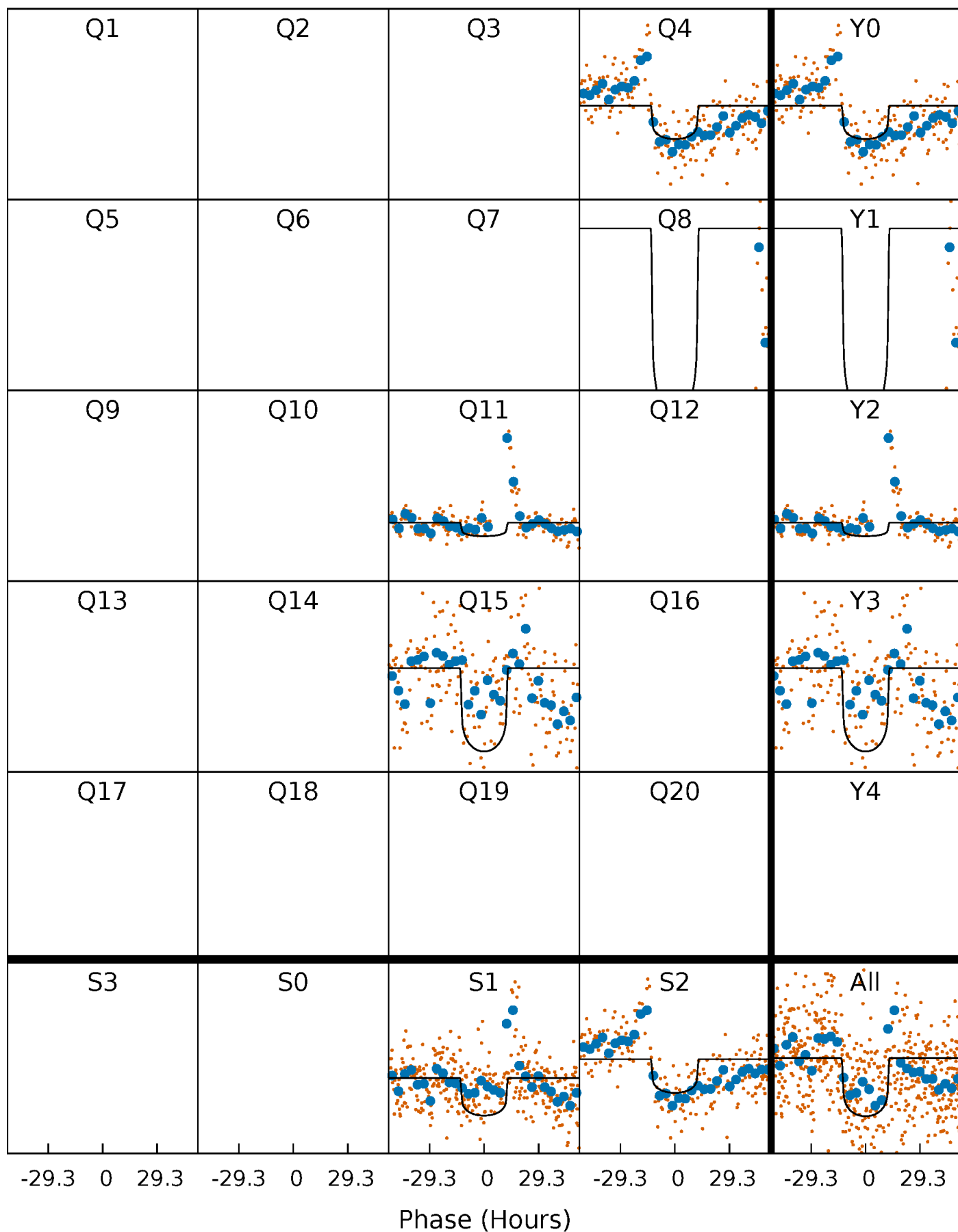
PDC Quarter-Phased Transit Curves

TCE 001726231-01 P=359.622555 Days $T_0=373.947211$ (BKJD)



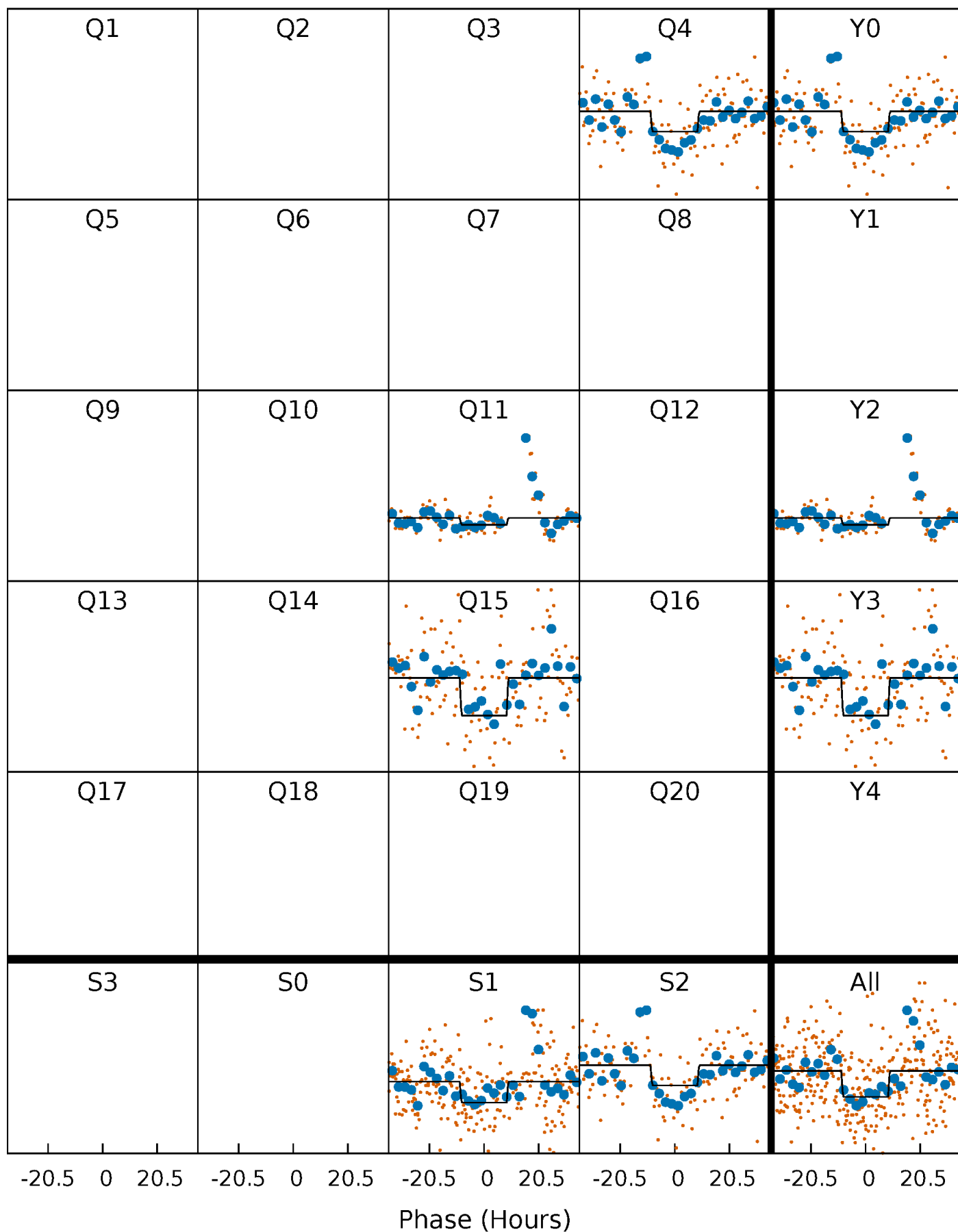
DV Quarter-Phased Transit Curves

TCE 001726231-01 P=359.622555 Days $T_0=373.947211$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

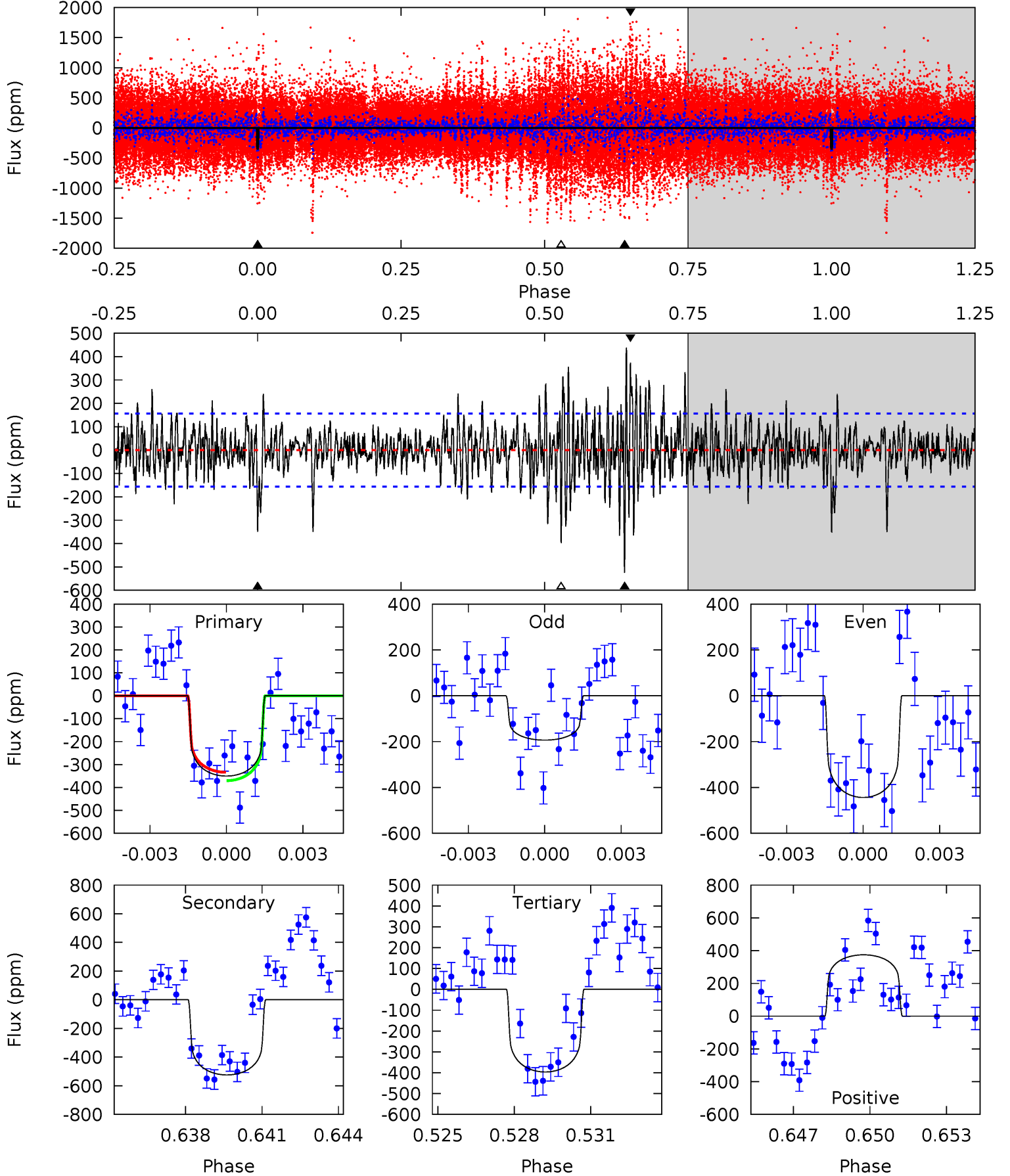
TCE 001726231-01 P=359.610222 Days $T_0=373.827311$ (BKJD)



DV Model-Shift Uniqueness Test

001726231-01, P = 359.622555 Days, E = 14.324656 Days

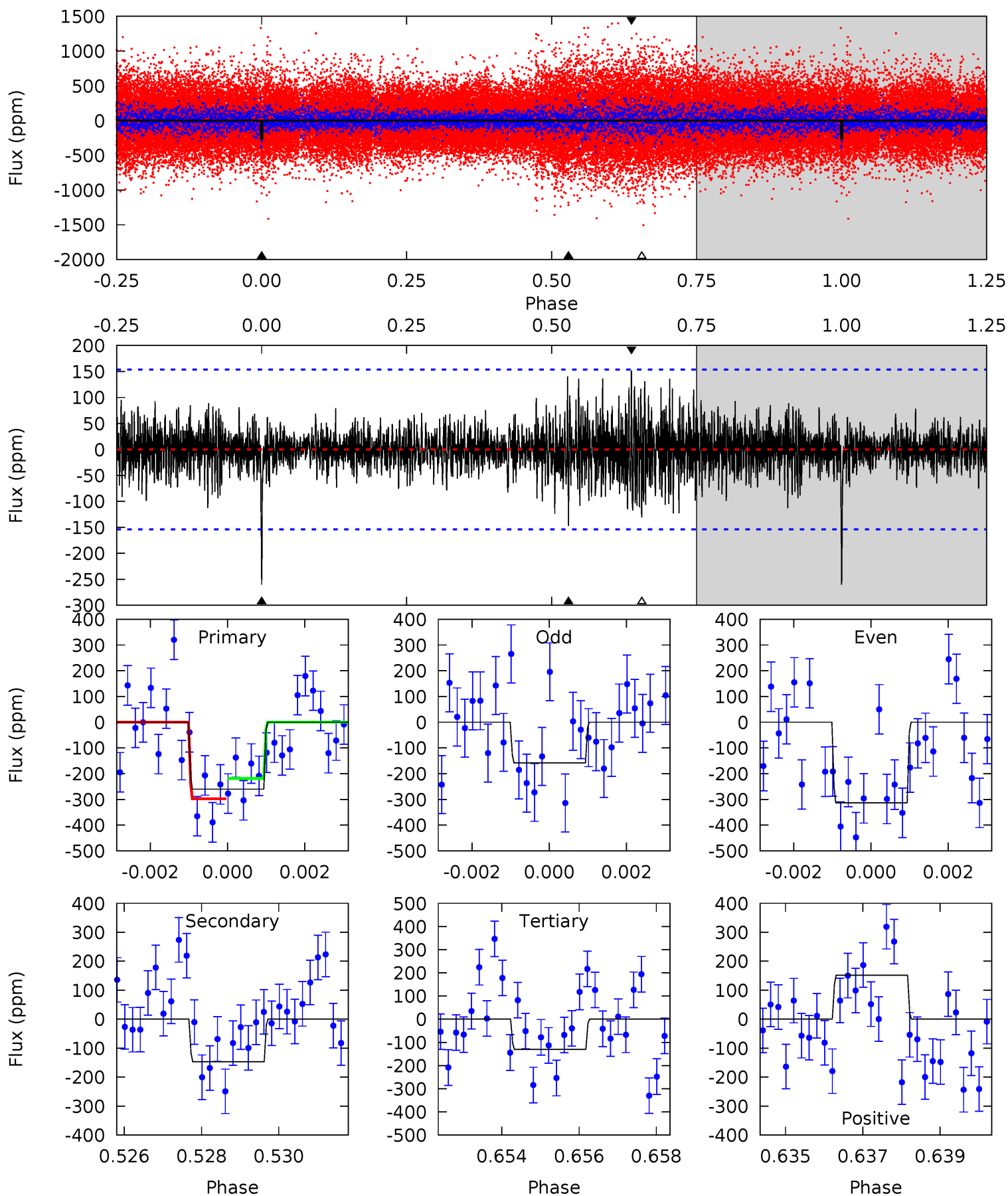
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 11.8 | 17.6 | 13.3 | 12.6 | 5.25 | 2.97 | 3.15 | -1.55 | -0.81 | 4.30 | 5.05 | 4.03 | 1.69 | 0.45 | 0.62 |



Alt Model-Shift Uniqueness Test

001726231-01, P = 359.610222 Days, E = 14.217089 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 8.99 | 5.08 | 4.52 | 5.25 | 5.32 | 3.08 | 1.15 | 4.47 | 3.74 | 0.57 | -0.16 | 2.57 | 1.28 | 0.37 | 1.37 |



Stellar Parameters For KIC 001726231

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 6406^{+204}_{-272} | $4.042^{+0.329}_{-0.165}$ | $-0.300^{+0.250}_{-0.300}$ | $1.680^{+0.461}_{-0.614}$ | $1.133^{+0.188}_{-0.188}$ | $0.336^{+0.779}_{-0.148}$ |
| | +3%/-4% | +8%/-4% | +83%/-100% | +27%/-37% | +17%/-17% | +232%/-44% |
| Source | PHO1 | KIC0 | 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 001726231-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|---------------|------------------------|-------------------|----------------------|--------------------------|
| DV | -525 ± 30 | $4.05^{+0.96}_{-0.88}$ | 500^{+39}_{-57} | 6408^{+581}_{-475} | 18544^{+12357}_{-6121} |
| Alt. | -147 ± 29 | $2.83^{+0.78}_{-0.72}$ | 495^{+40}_{-51} | 5577^{+610}_{-524} | 10877^{+8855}_{-4463} |

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 $A_{obs} \gg 1.0$

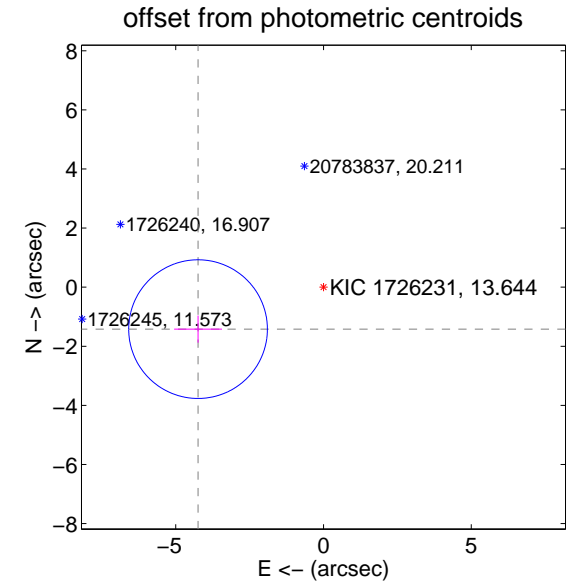
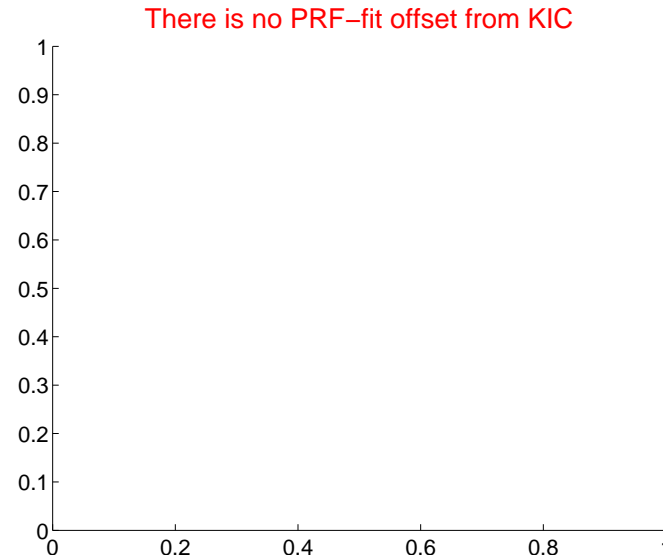
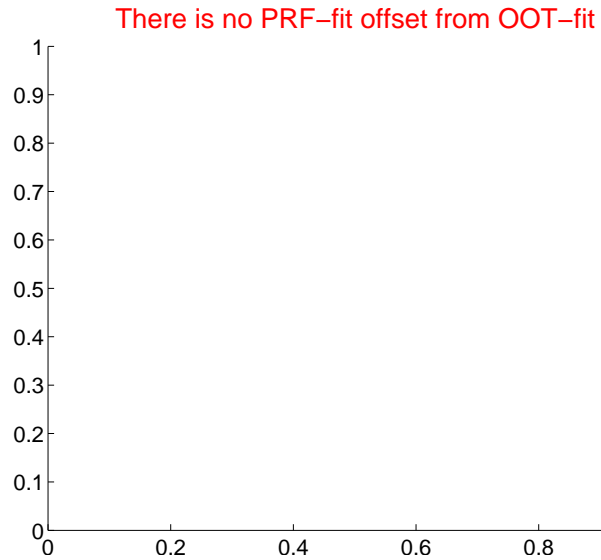
DV Centroid Data

Supplemental centroid analysis for 001726231-01. Kepler magnitude: 13.64. Transit SNR 8.35

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 | 4.48 ± 0.78 | 5.72 | 4.24 ± 0.81 | -1.42 ± 0.46 |



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.



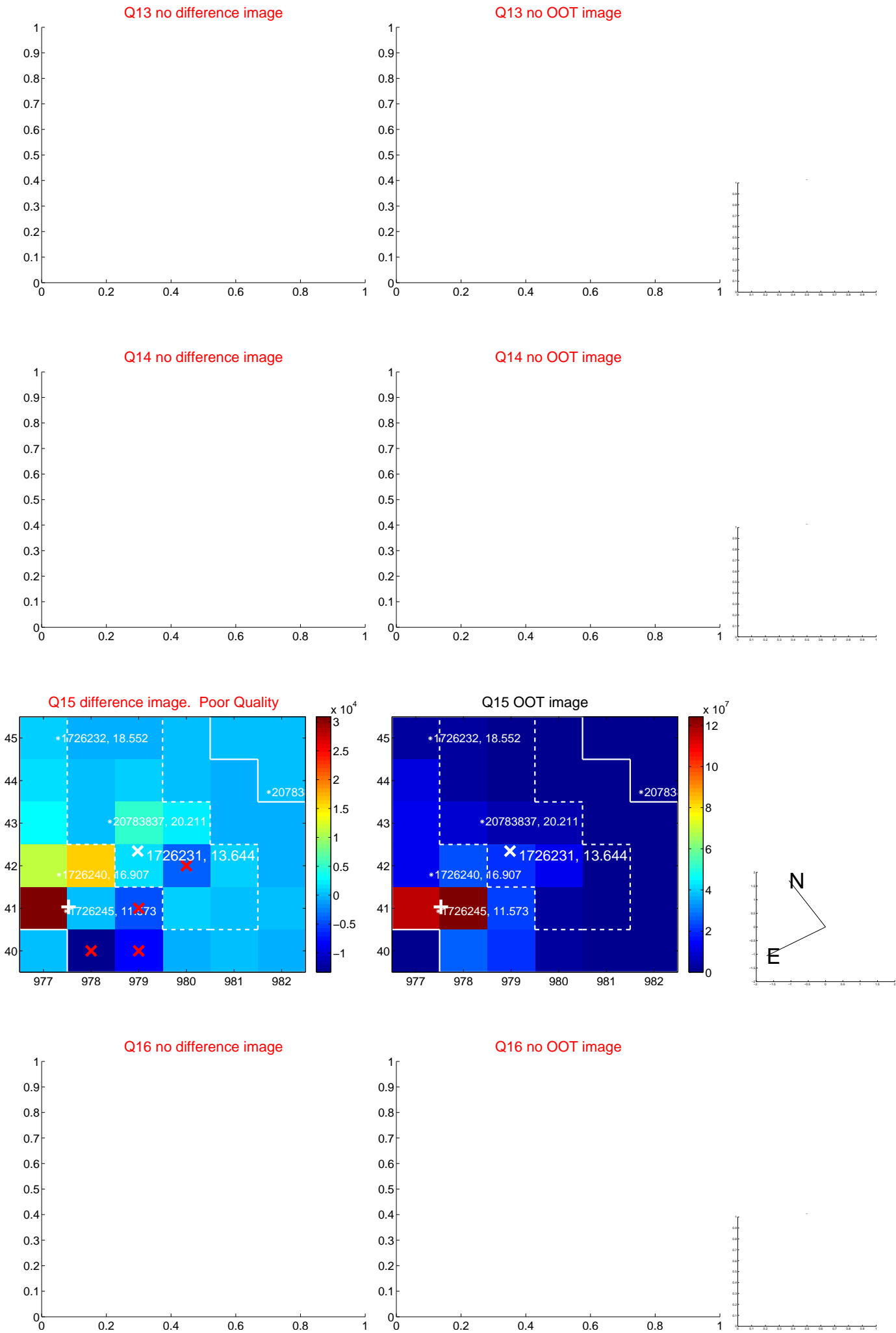
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



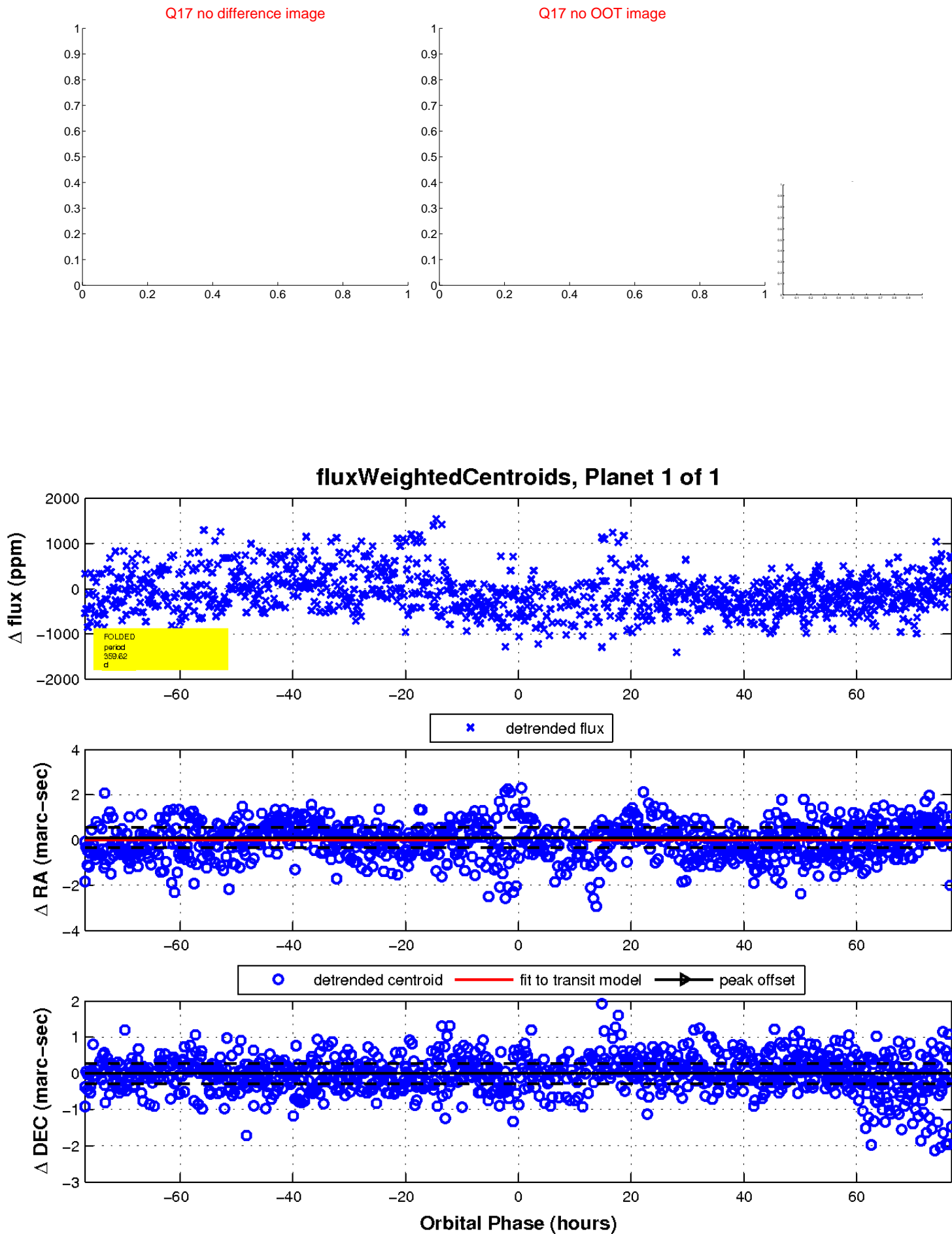
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

