

KIC 000892667

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|-----|------|-----------------------------|-----------------|------------------------|------------------------|
| 000892667-01 | OBS | No | 2.262005 | 132.193569 | 30.4 | 8.278 | 9.6 | 10.1 | 1.65 | 6609 | 0.96 | 3503.24 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|----------|
| 000892667-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV |

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

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

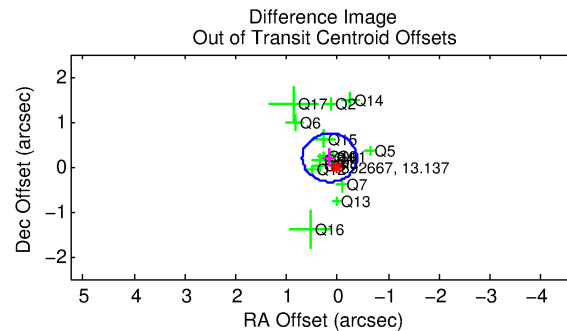
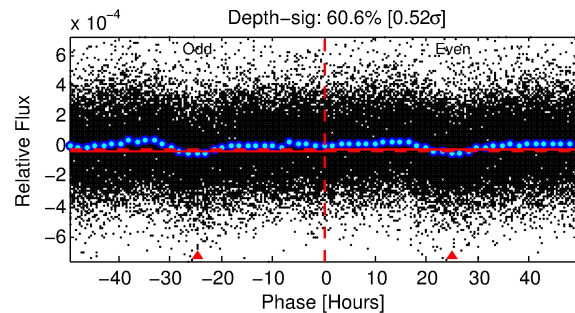
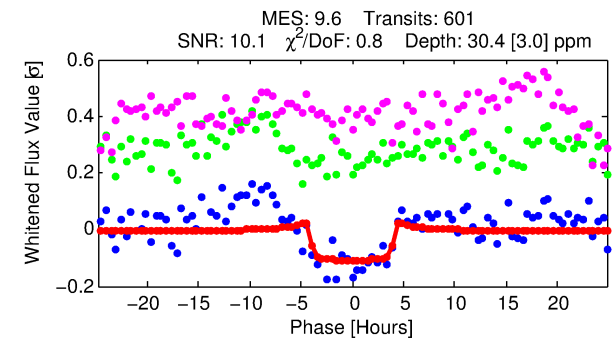
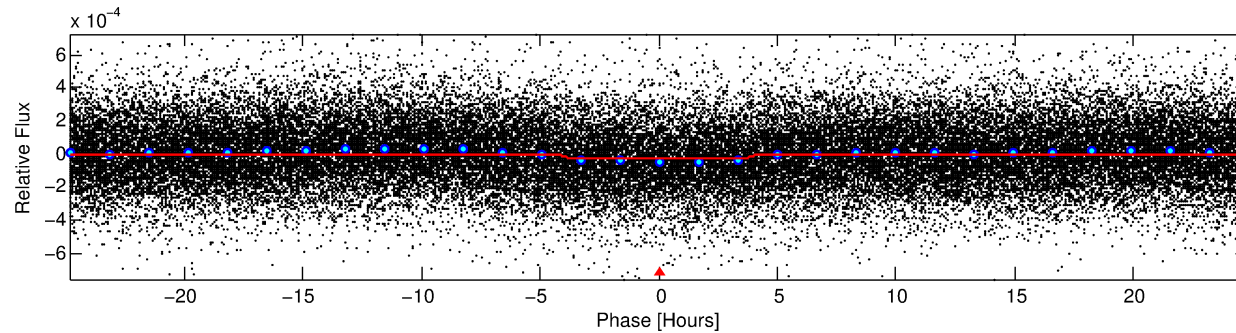
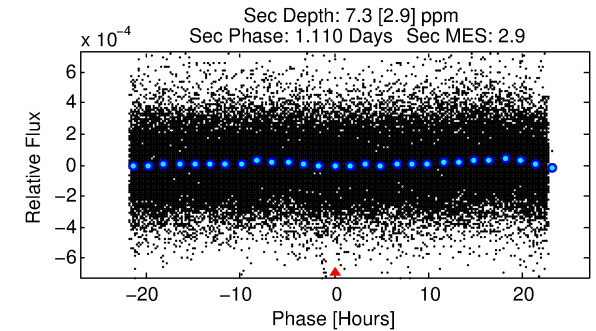
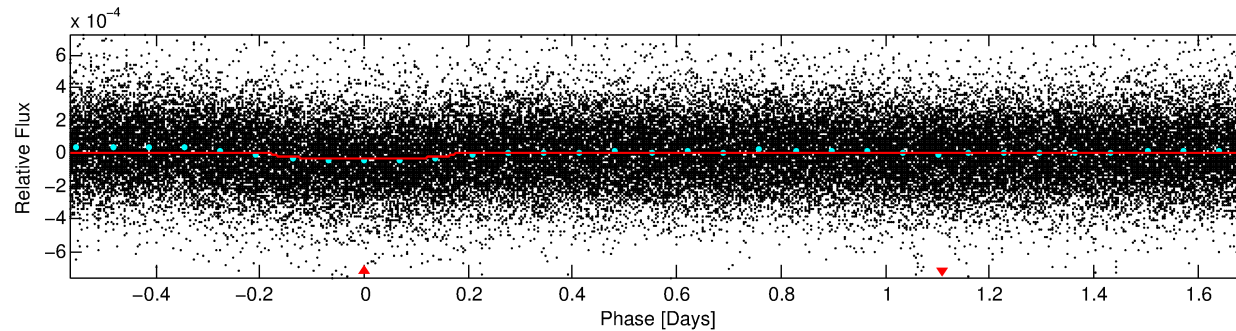
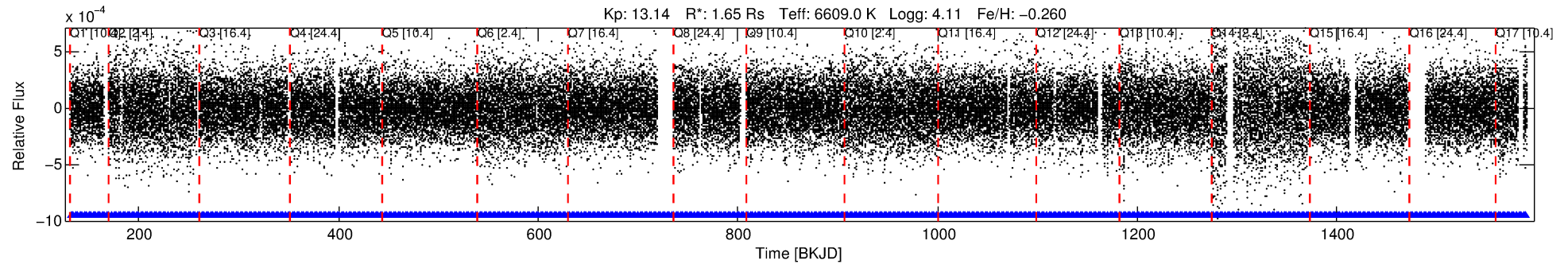
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 000892667-01

No Significant Match Found

DV One-Page Summary

KIC: 892667 Candidate: 1 of 1 Period: 2.262 d



DV Fit Results:

Period = 2.26201 [0.00003] d
Epoch = 132.1936 [0.0060] BKJD
Rp/R* = 0.0053 [0.0017]
a/R* = 1.85 [2.30]
b = 0.60 [1.88]
Seff = 3503.24 [1589.69]
Teff = 1962 [223] K
Rp = 0.96 [0.43] Re
a = 0.0365 [0.0103] AU
Ag = 5.88 [5.09] [0.96σ]
Teffp = 4723 [900] K [2.98σ]

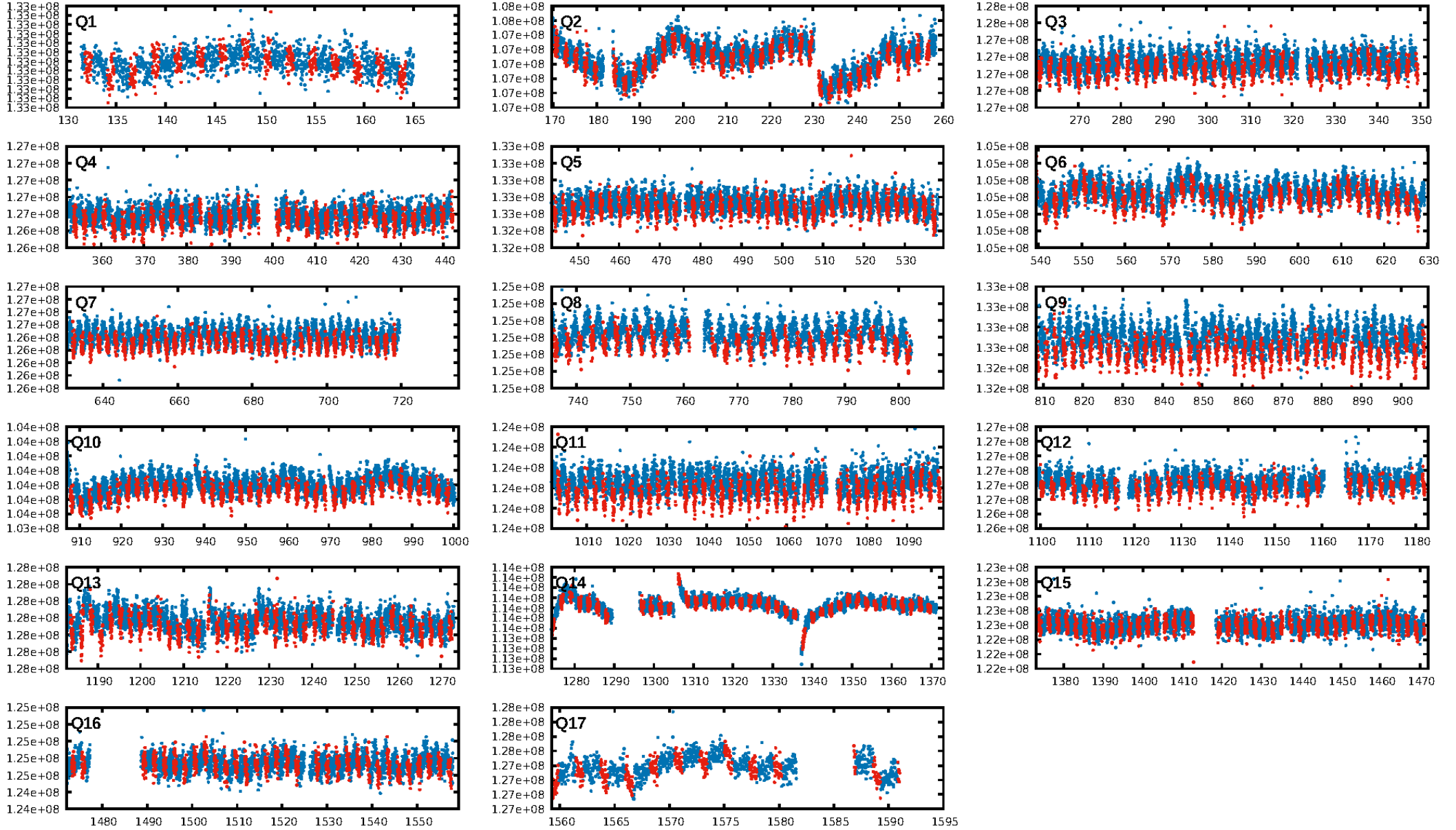
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 6.09e-16
RollingBand-fgt: 1.00 [574/574]
GhostDiagnostic-chr: 0.8486
Centroid-sig: 1.7%
Centroid-so: 2.031 arcsec [2.37σ]
OotOffset-rm: 0.253 arcsec [1.41σ]
KicOffset-rm: 0.008 arcsec [0.04σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

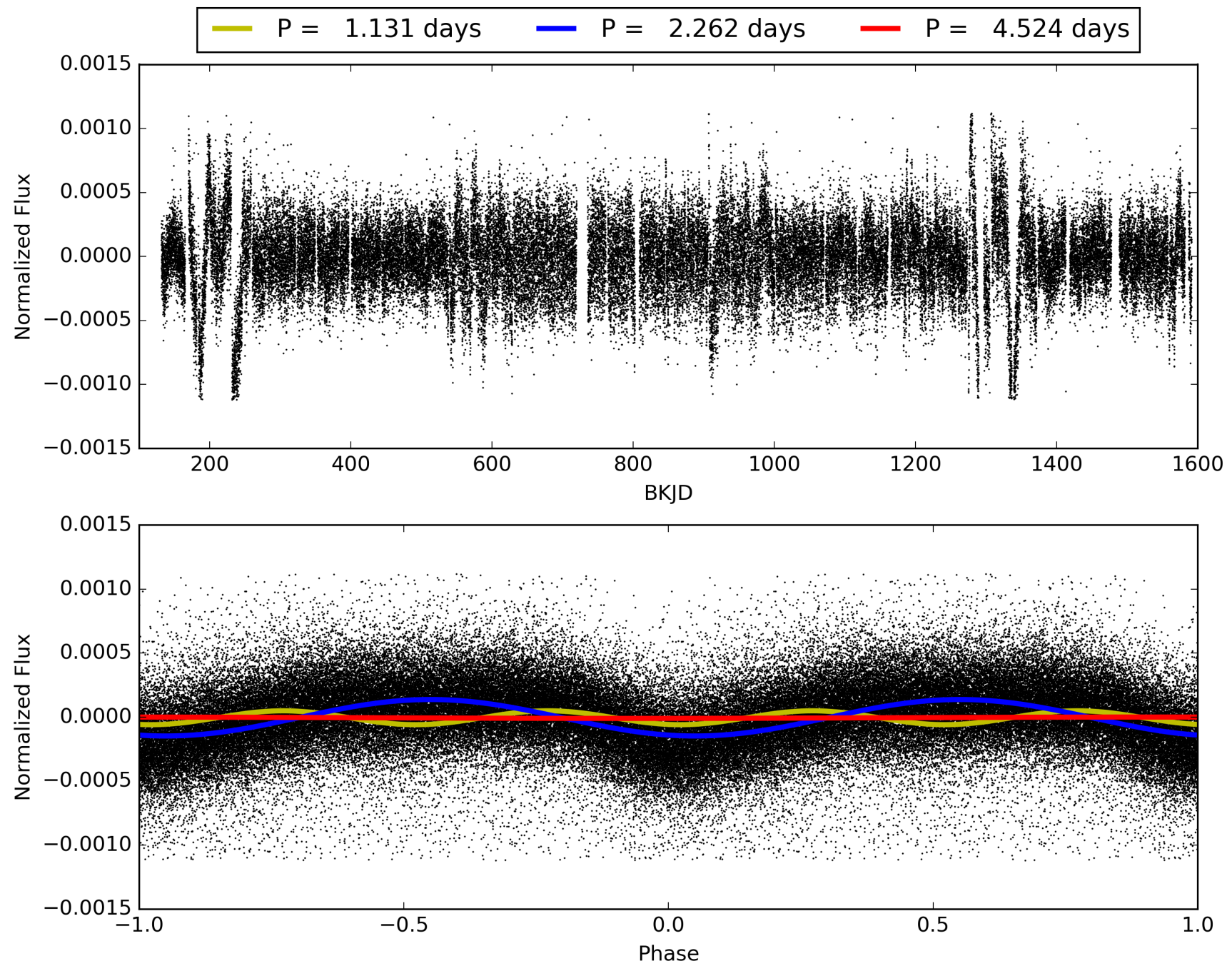
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 20:12:45 Z

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

TCE 000892667-01, PDC Light Curves

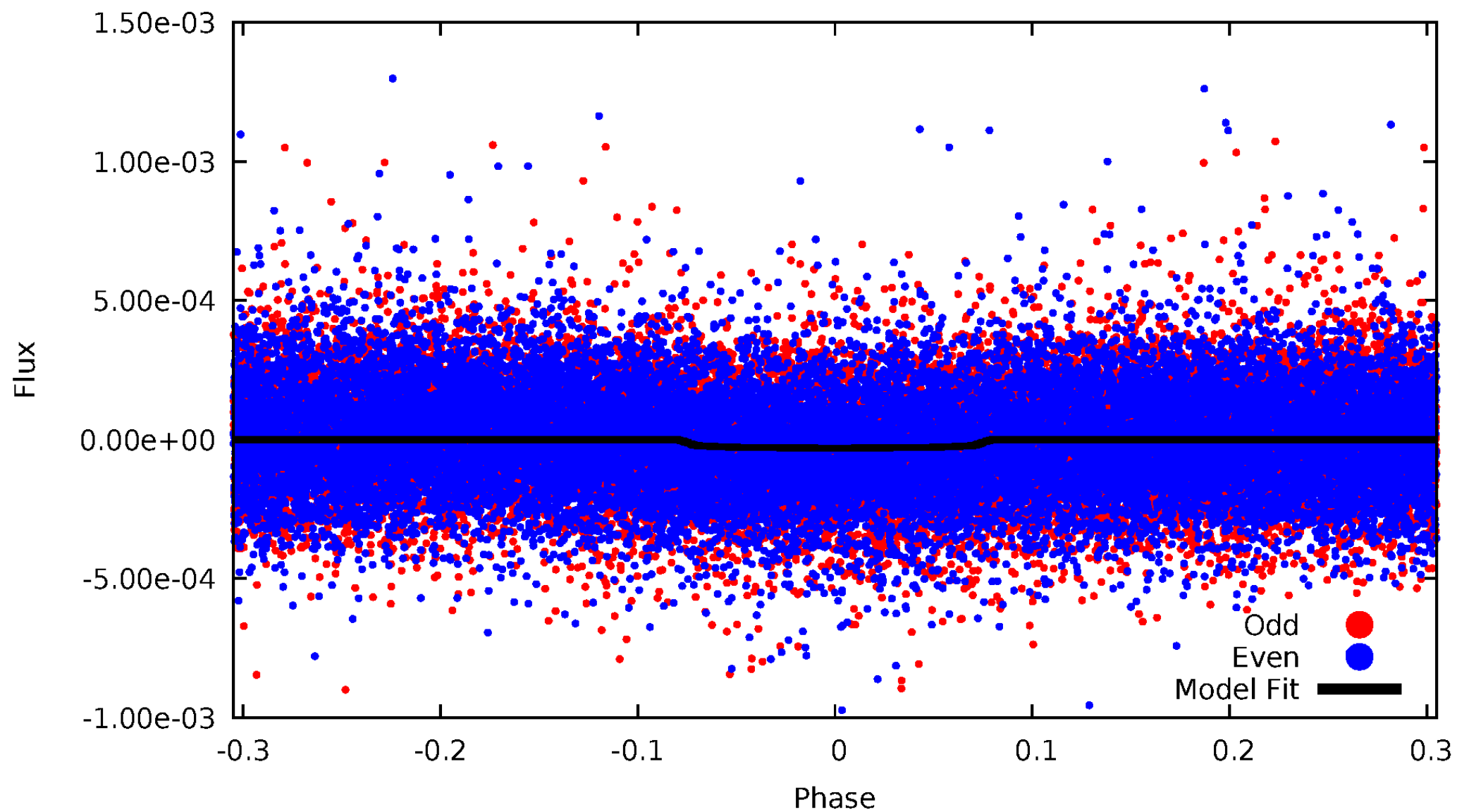


TCE 000892667-01



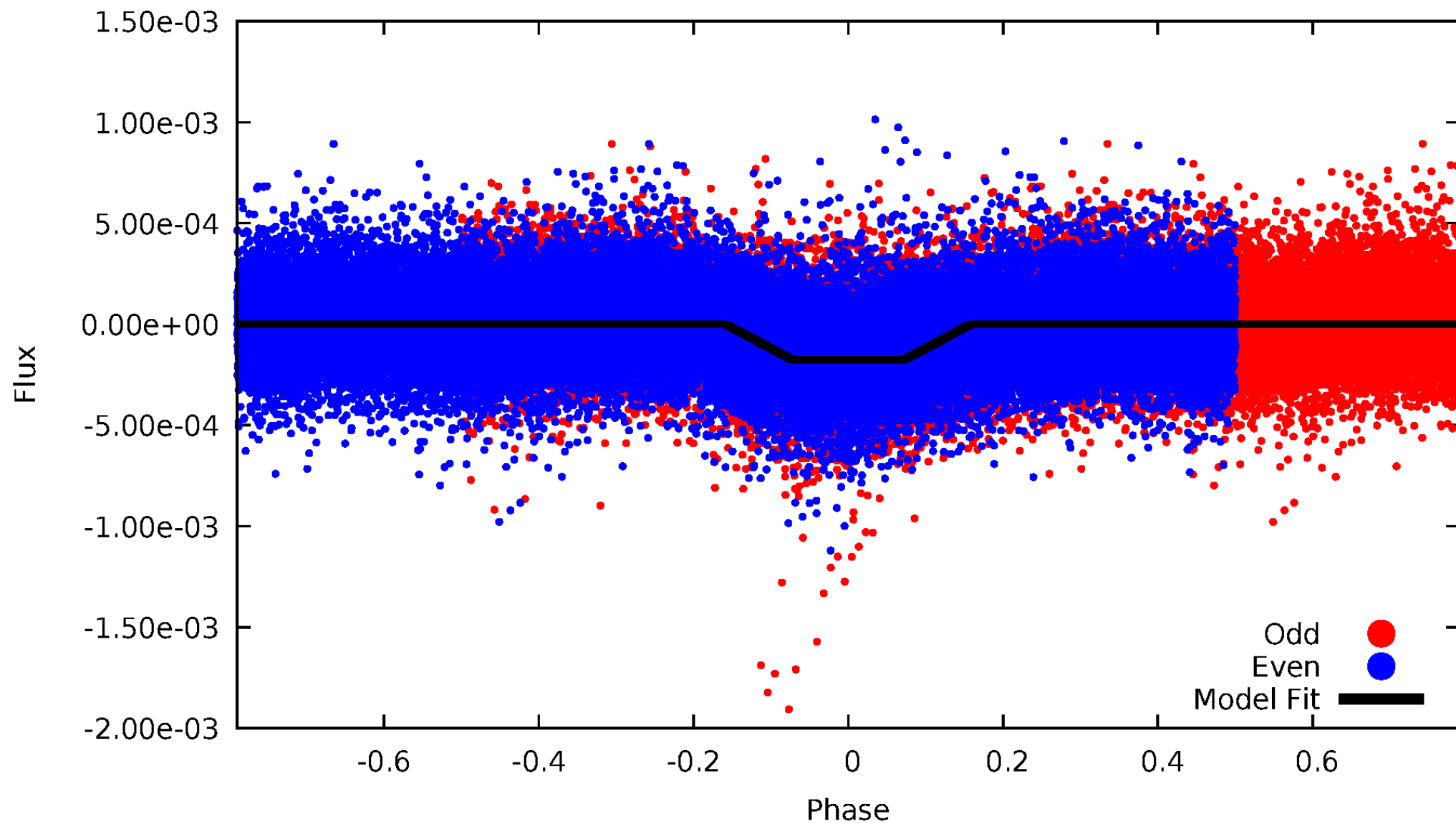
DV Odd/Even

TCE 000892667-01

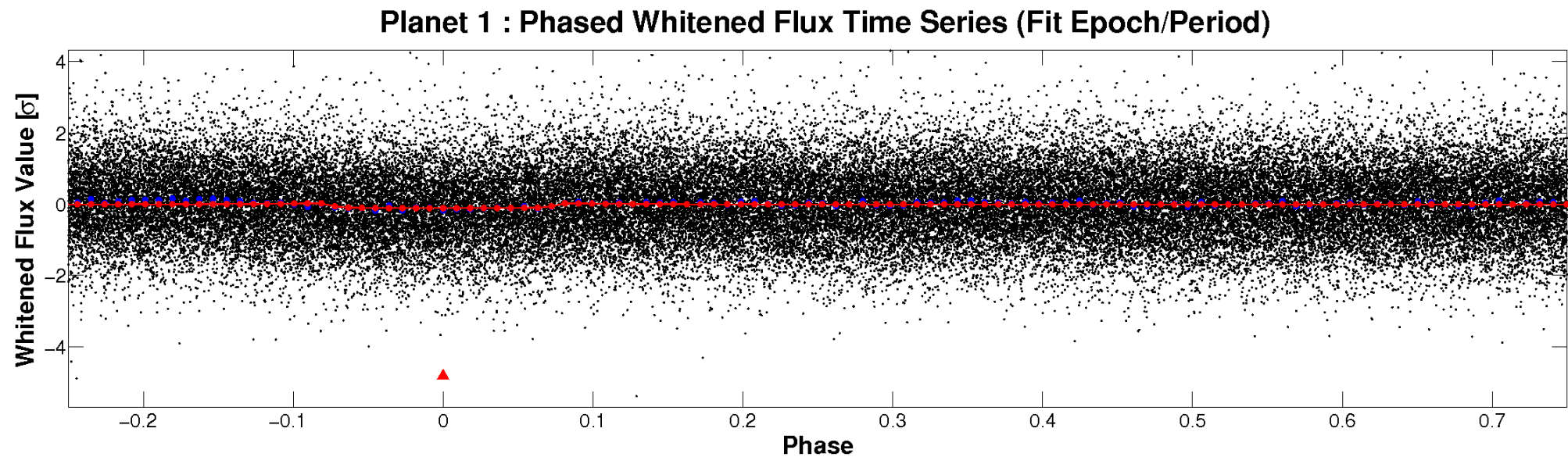
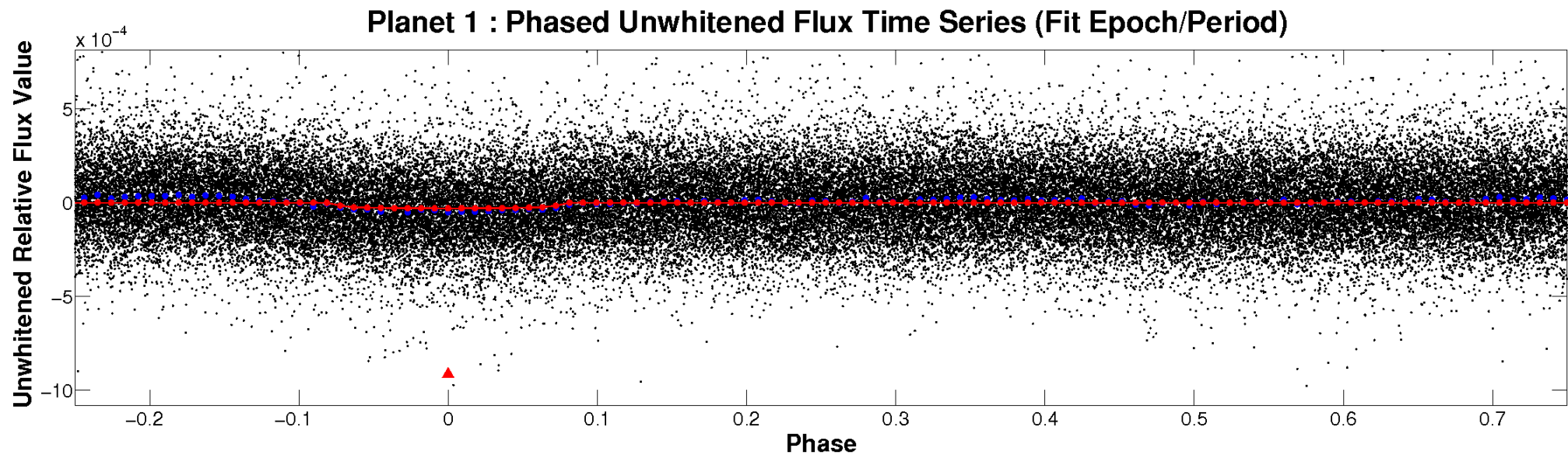


ALT Odd/Even

TCE 000892667-01

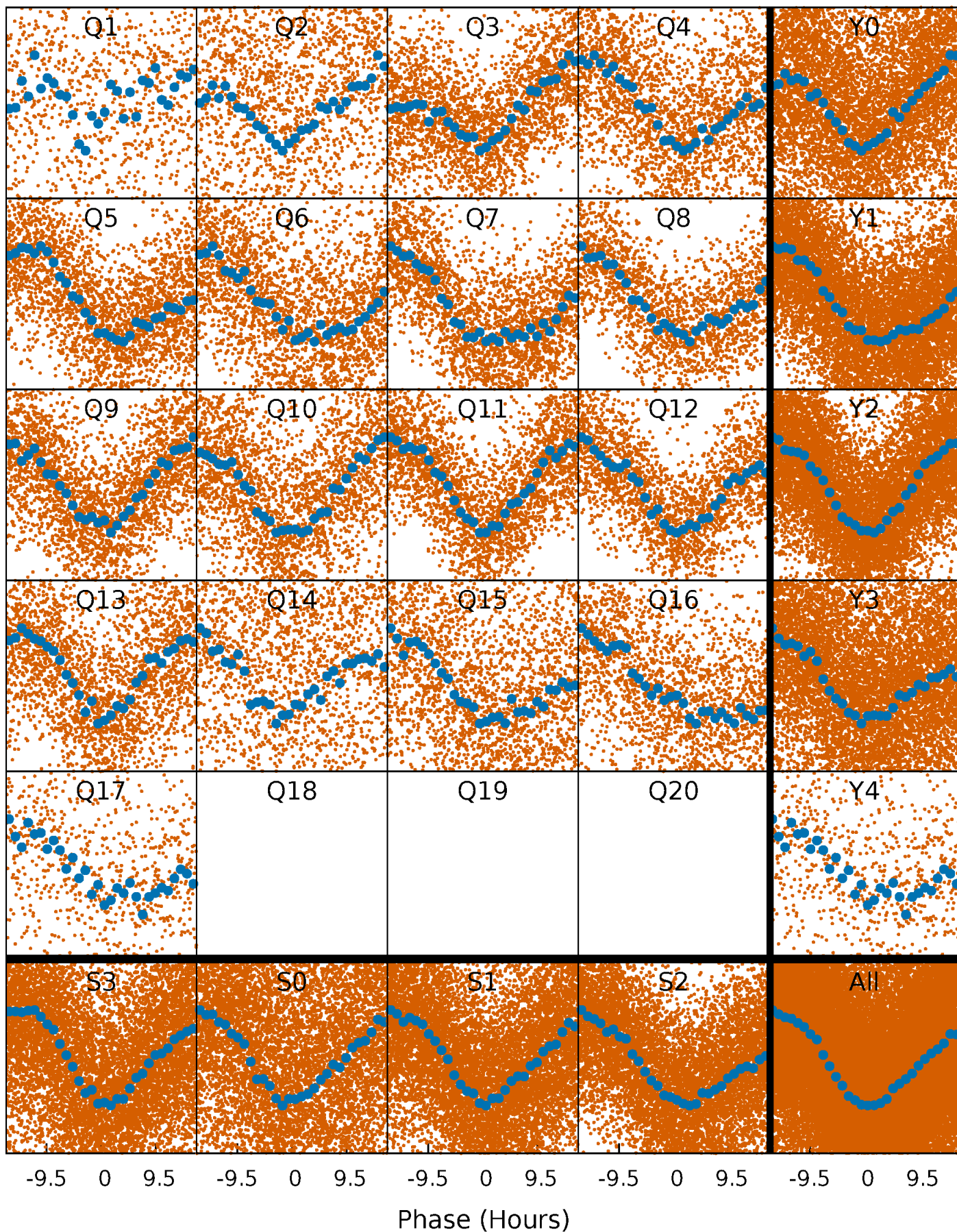


Non-Whitened Vs. Whitened Light Curve



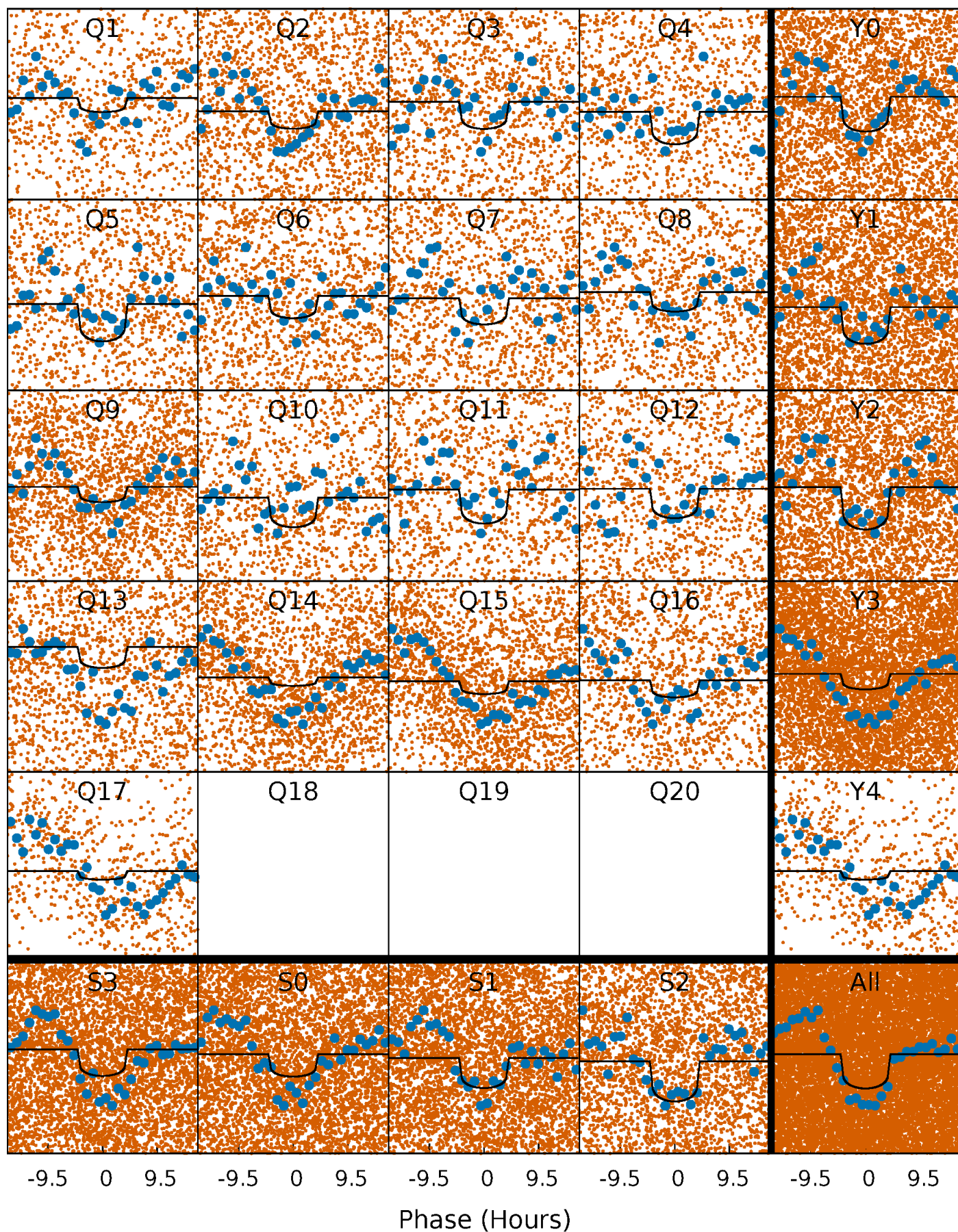
PDC Quarter-Phased Transit Curves

TCE 000892667-01 P= 2.262005 Days $T_0=132.193569$ (BKJD)



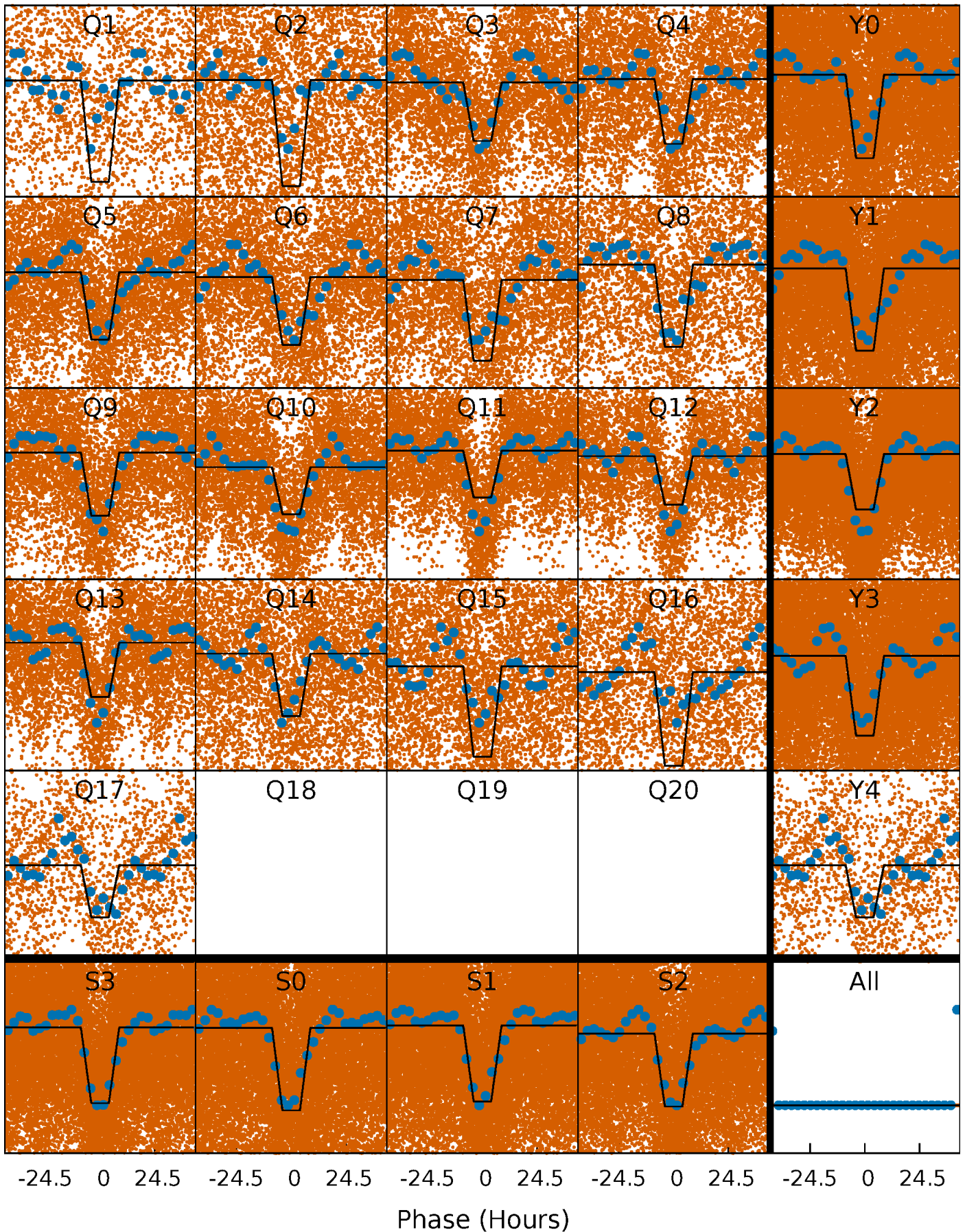
DV Quarter-Phased Transit Curves

TCE 000892667-01 P= 2.262005 Days $T_0=132.193569$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

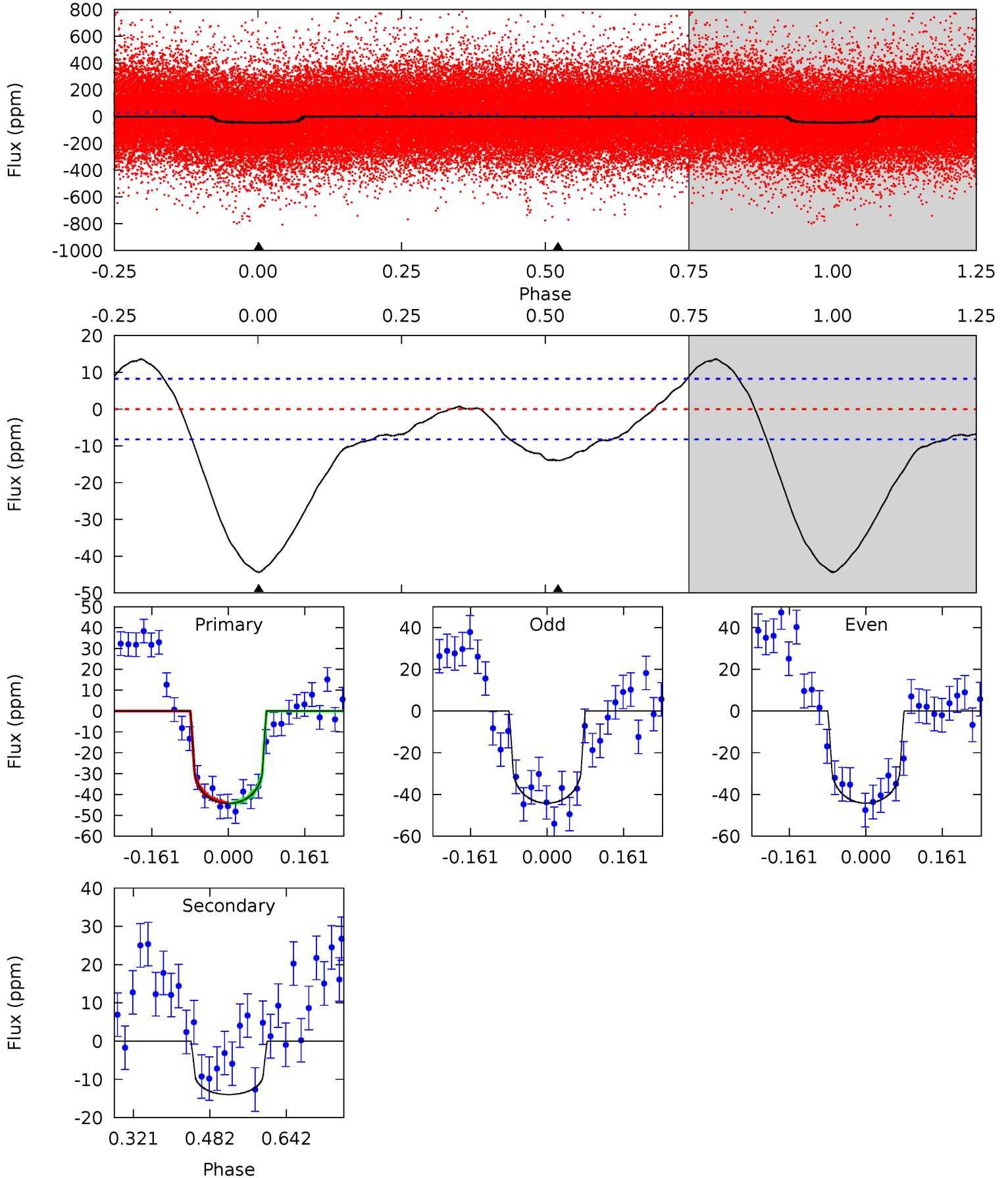
TCE 000892667-01 P= 2.262090 Days $T_0=132.210837$ (BKJD)



DV Model-Shift Uniqueness Test

000892667-01, P = 2.262005 Days, E = 129.931564 Days

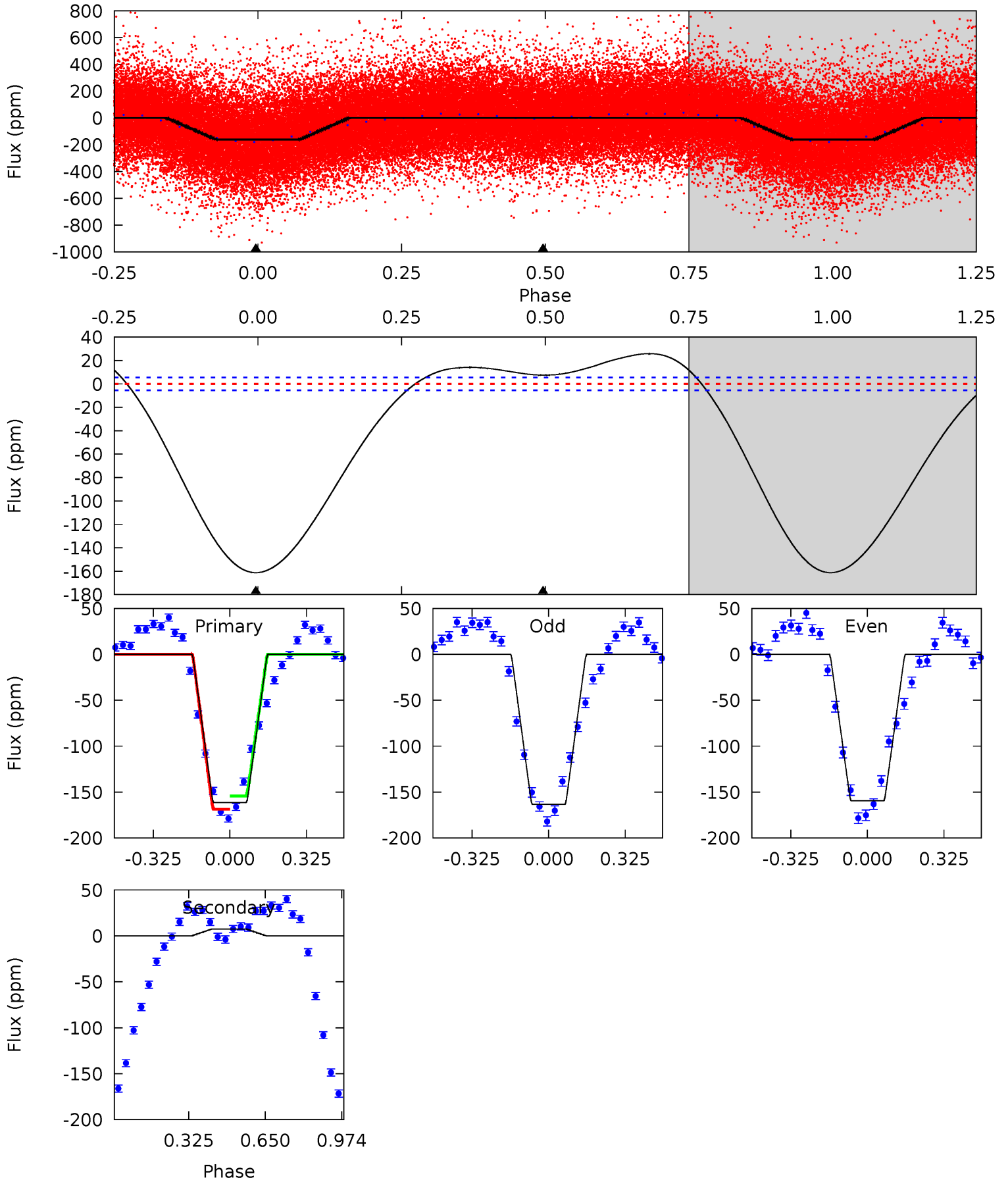
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 24.0 | 7.57 | 0 | 0 | 4.46 | 1.40 | 4.09 | 24.0 | 24.0 | 7.57 | 7.57 | 0.00 | 1.02 | 0.23 | 0.11 |



Alt Model-Shift Uniqueness Test

000892667-01, P = 2.262090 Days, E = 129.948747 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-------|-------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 127.4 | -5.93 | 0 | 0 | 4.31 | 0.98 | 11.1 | 127.4 | 127.4 | -5.93 | -5.93 | 1.58 | 1.01 | 0.14 | 5.67 |



Stellar Parameters For KIC 000892667

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
| | 6609^{+159}_{-227} | $4.105^{+0.246}_{-0.164}$ | $-0.260^{+0.250}_{-0.300}$ | $1.654^{+0.475}_{-0.523}$ | $1.280^{+0.172}_{-0.236}$ | $0.398^{+0.588}_{-0.180}$ |
| | +2%/-3% | +6%/-4% | +96%/-115% | +29%/-32% | +13%/-18% | +148%/-45% |
| 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 000892667-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{\text{max}} (K)$ | $T_{\text{obs}} (K)$ | A_{obs} |
|---------|-------------|------------------------|----------------------|-----------------------|----------------------------|
| DV | -14 ± 2 | $0.91^{+0.36}_{-0.32}$ | 2711^{+201}_{-213} | 5488^{+1348}_{-655} | 12^{+19}_{-6} |
| Alt. | 8 ± 1 | $2.34^{+0.52}_{-0.48}$ | 2710^{+205}_{-212} | -3641^{+158}_{-178} | $-1.007^{+0.331}_{-0.592}$ |

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 $A_{\text{obs}} \gg 1.0$

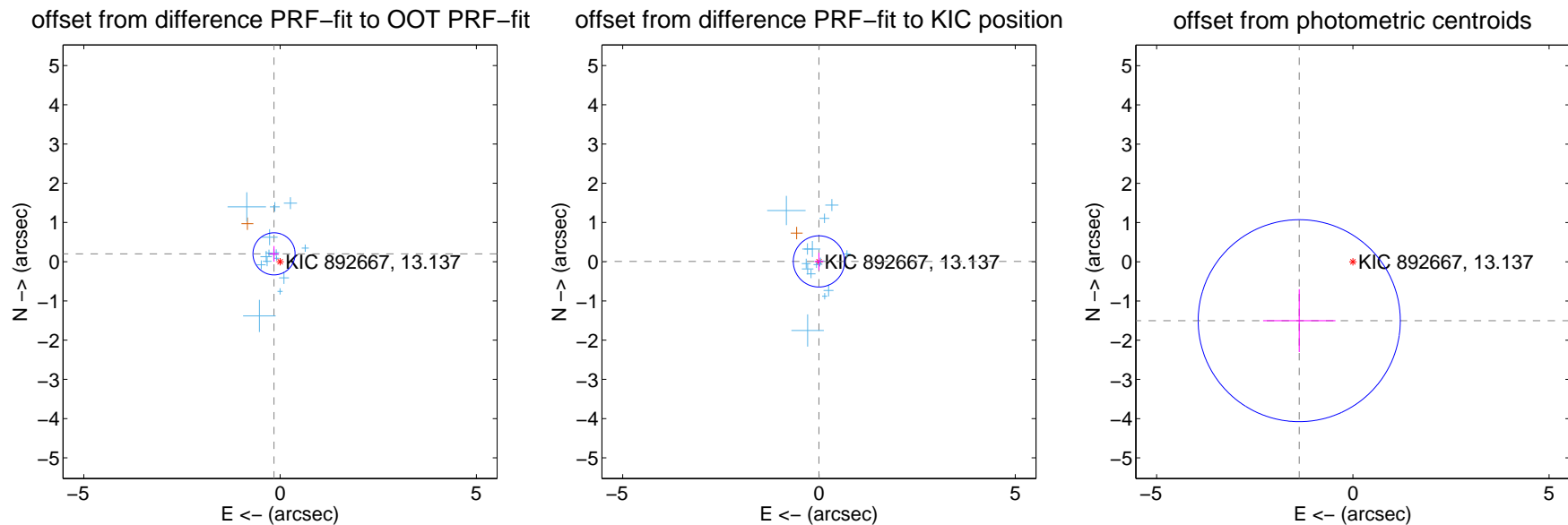
DV Centroid Data

Supplemental centroid analysis for 000892667-01. Kepler magnitude: 13.14. Transit SNR 10.10

There are 15 quarters with good PRF difference image offsets

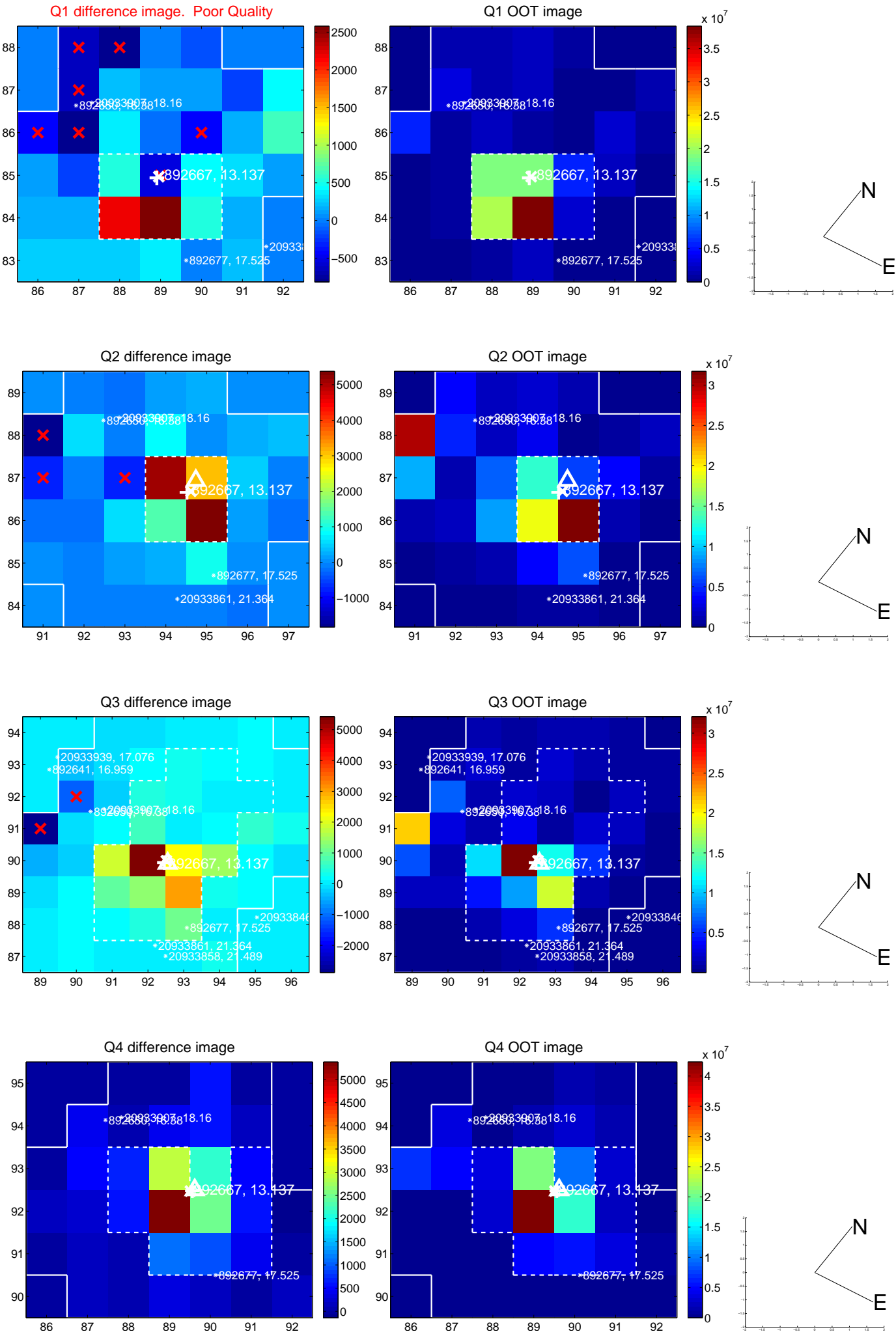
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|-------------------|-------------------|
| PRF-fit source offset from OOT | 0.253 ± 0.179 | 1.41 | 0.155 ± 0.118 | 0.200 ± 0.200 |
| PRF-fit source offset from KIC position | 0.008 ± 0.218 | 0.04 | 0.002 ± 0.113 | 0.007 ± 0.219 |
| photometric centroid source offset | 2.03 ± 0.86 | 2.37 | 1.37 ± 0.92 | -1.50 ± 0.80 |

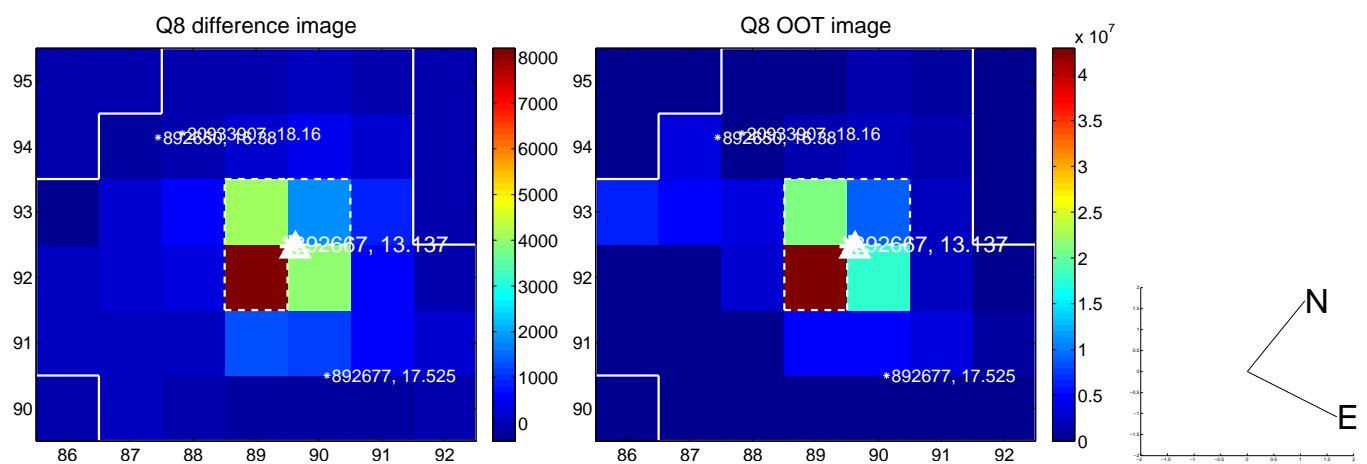
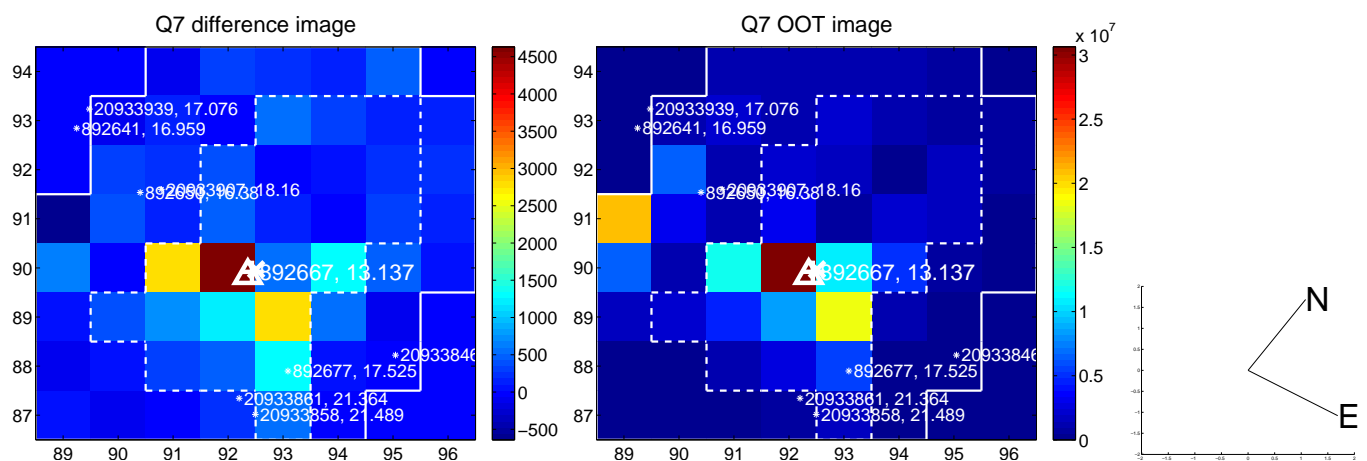
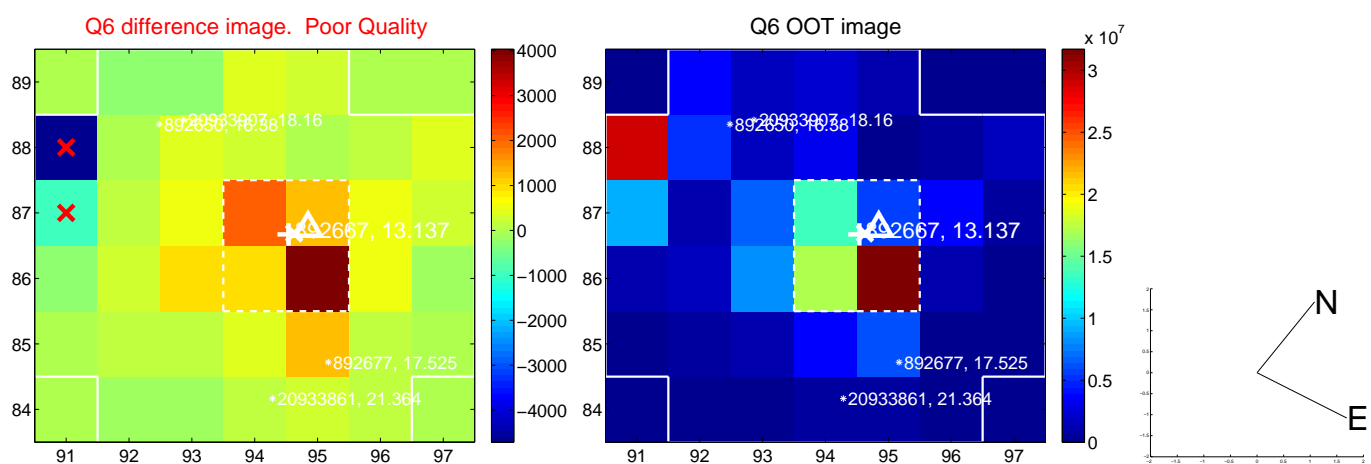
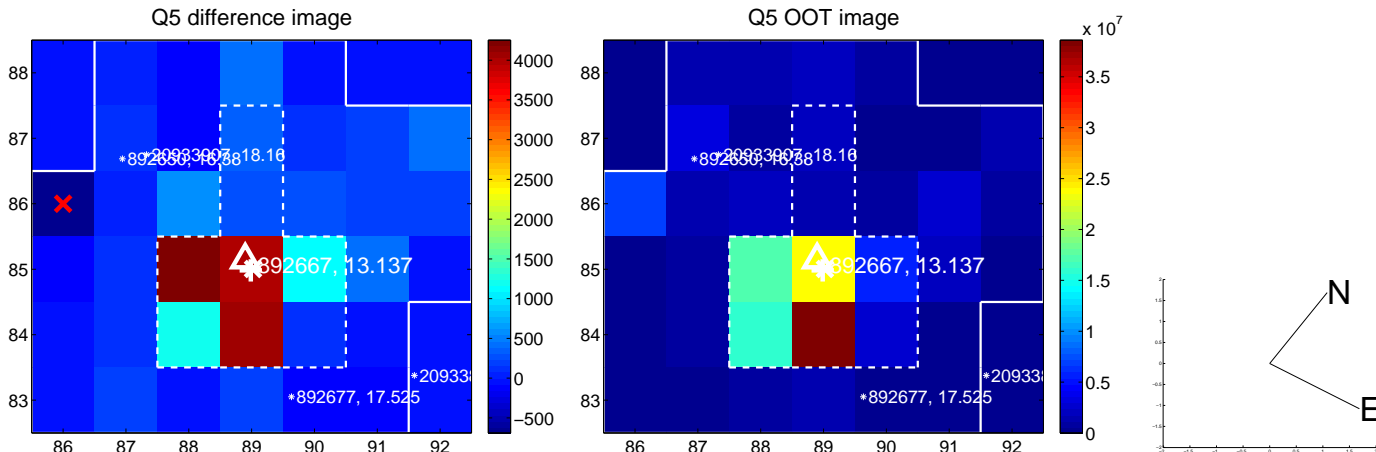


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

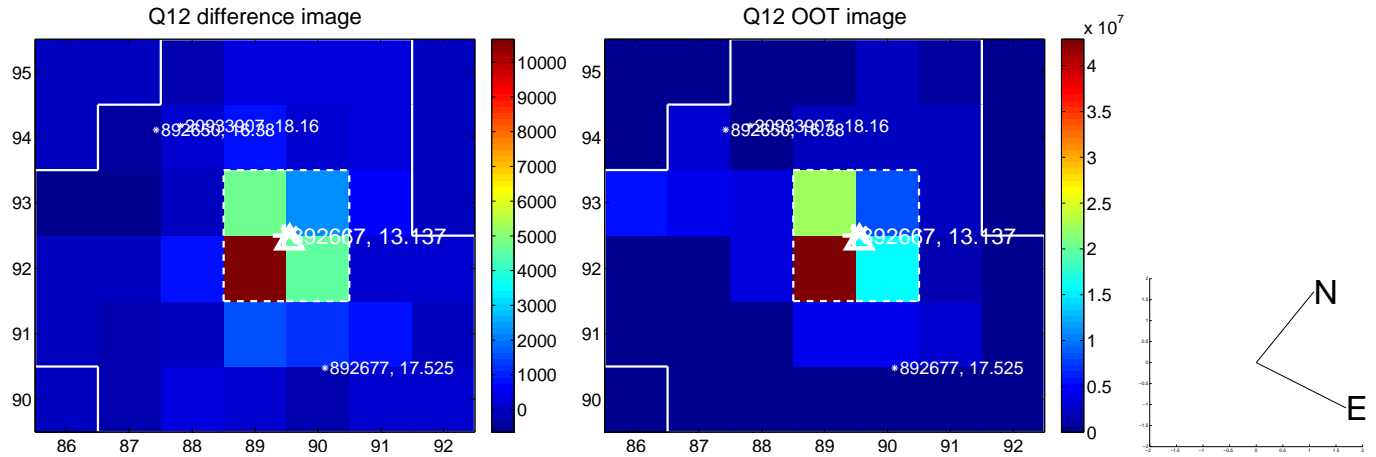
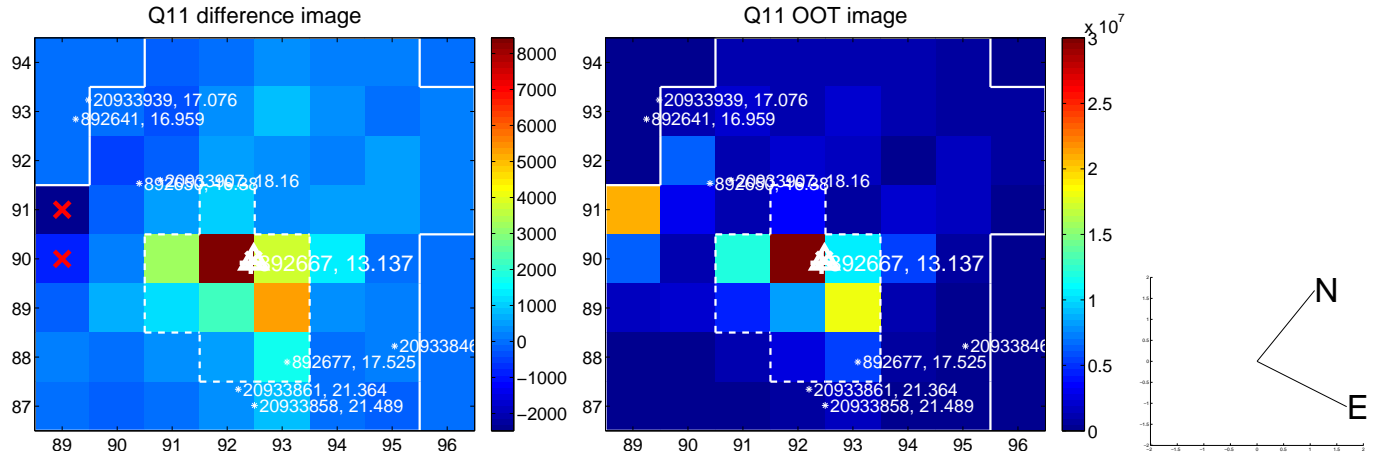
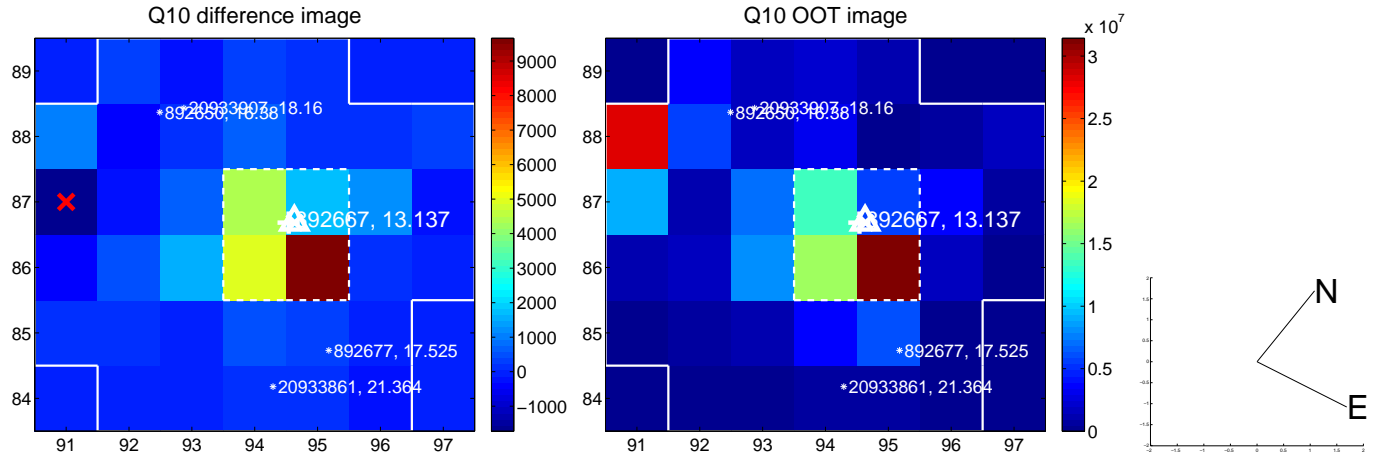
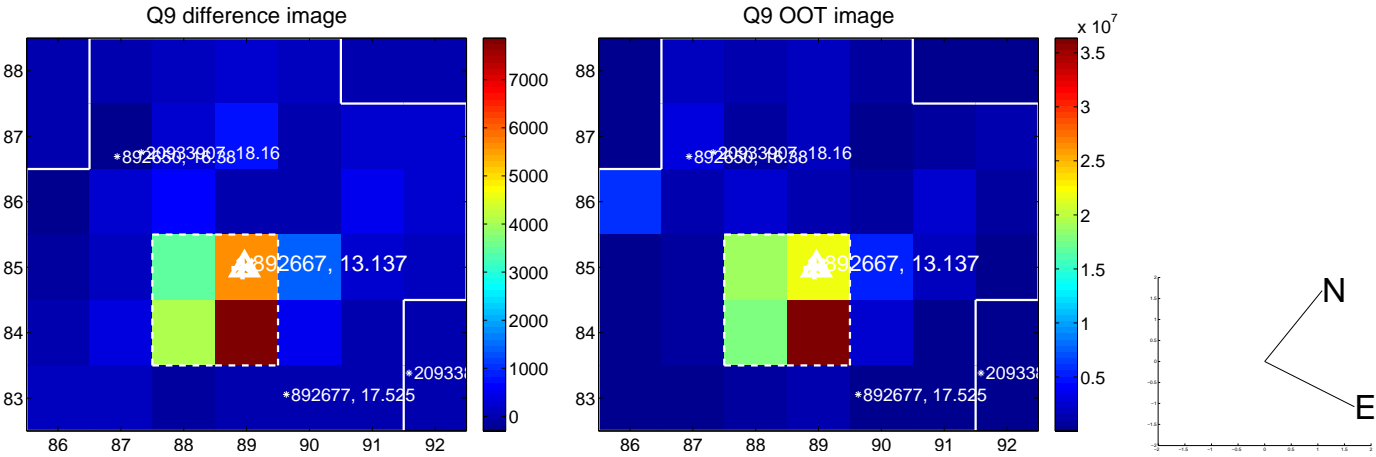
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



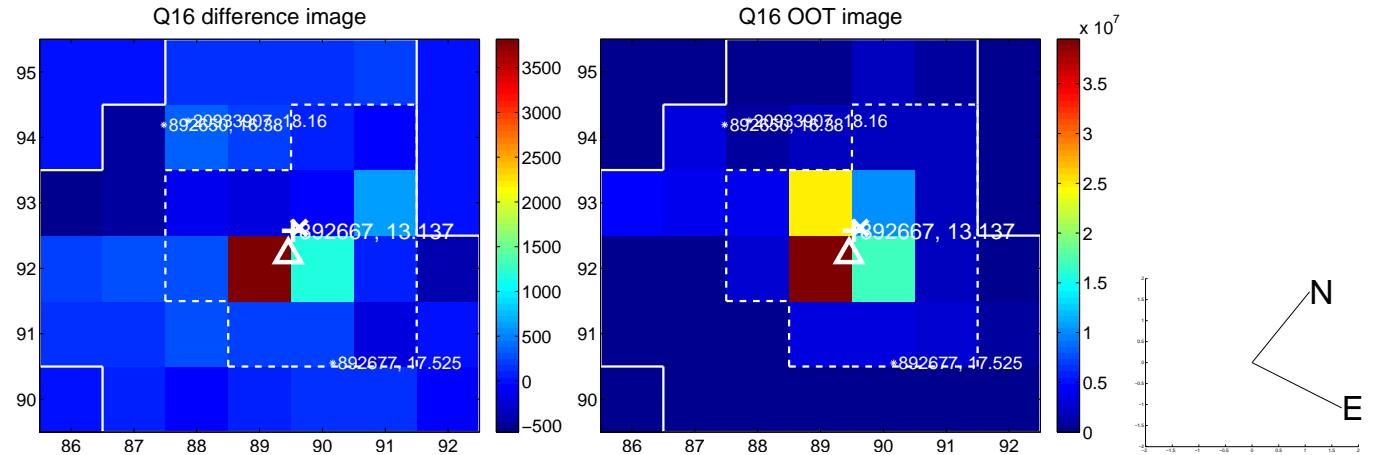
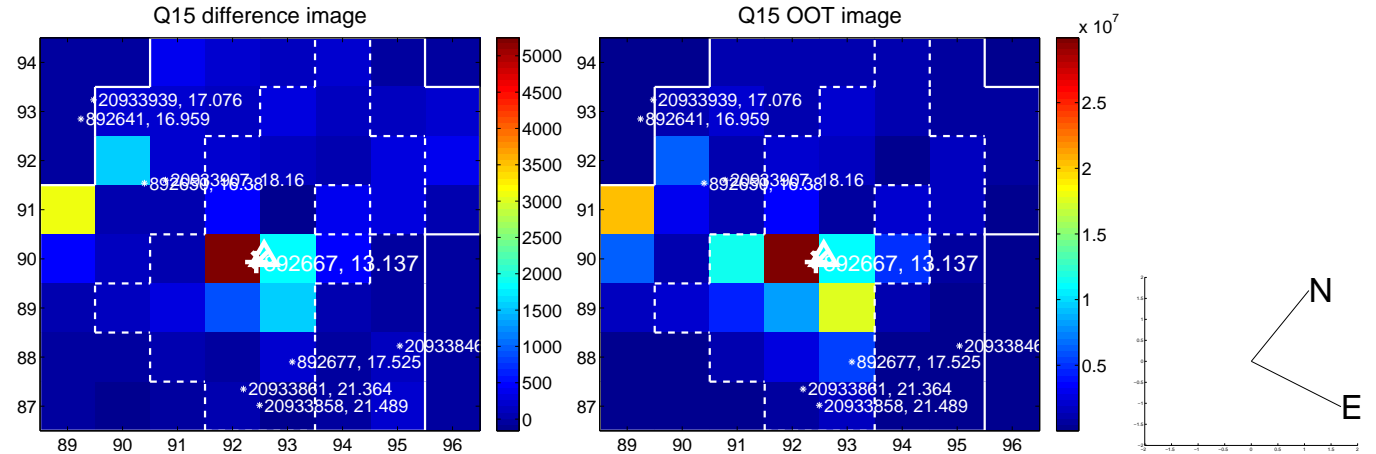
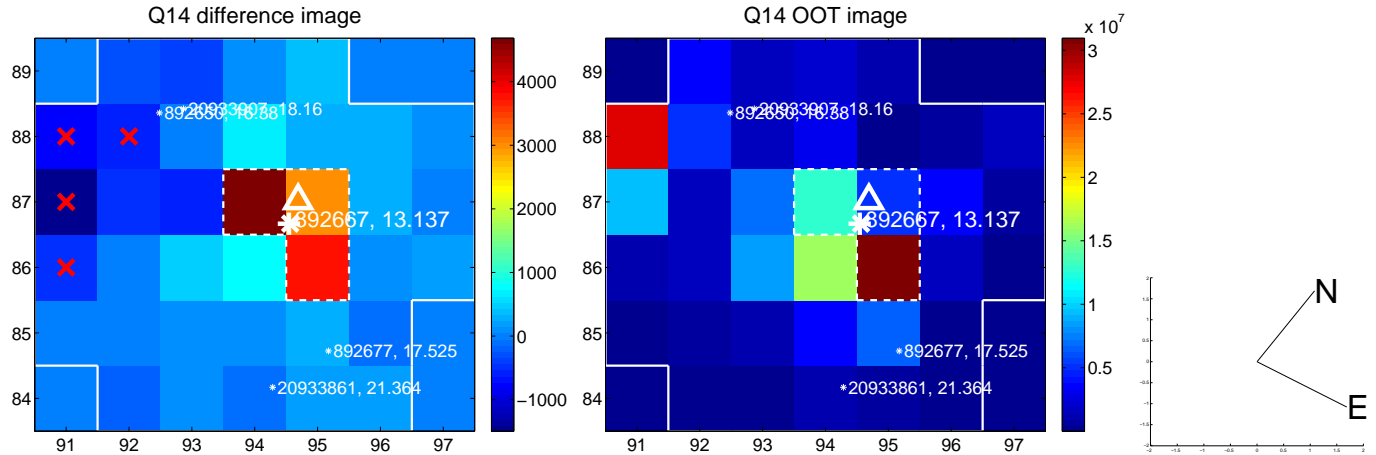
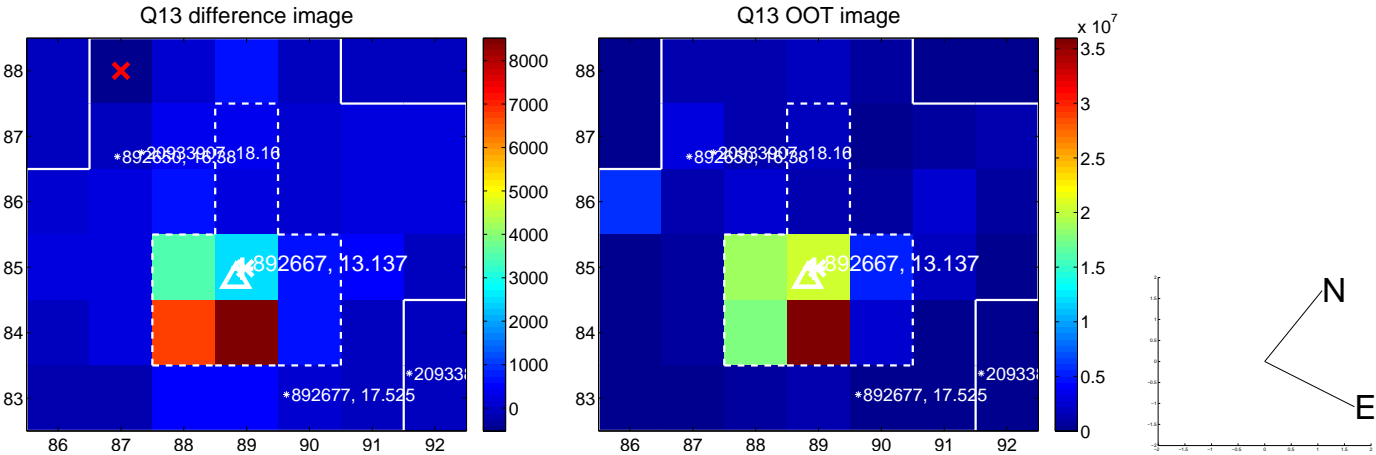
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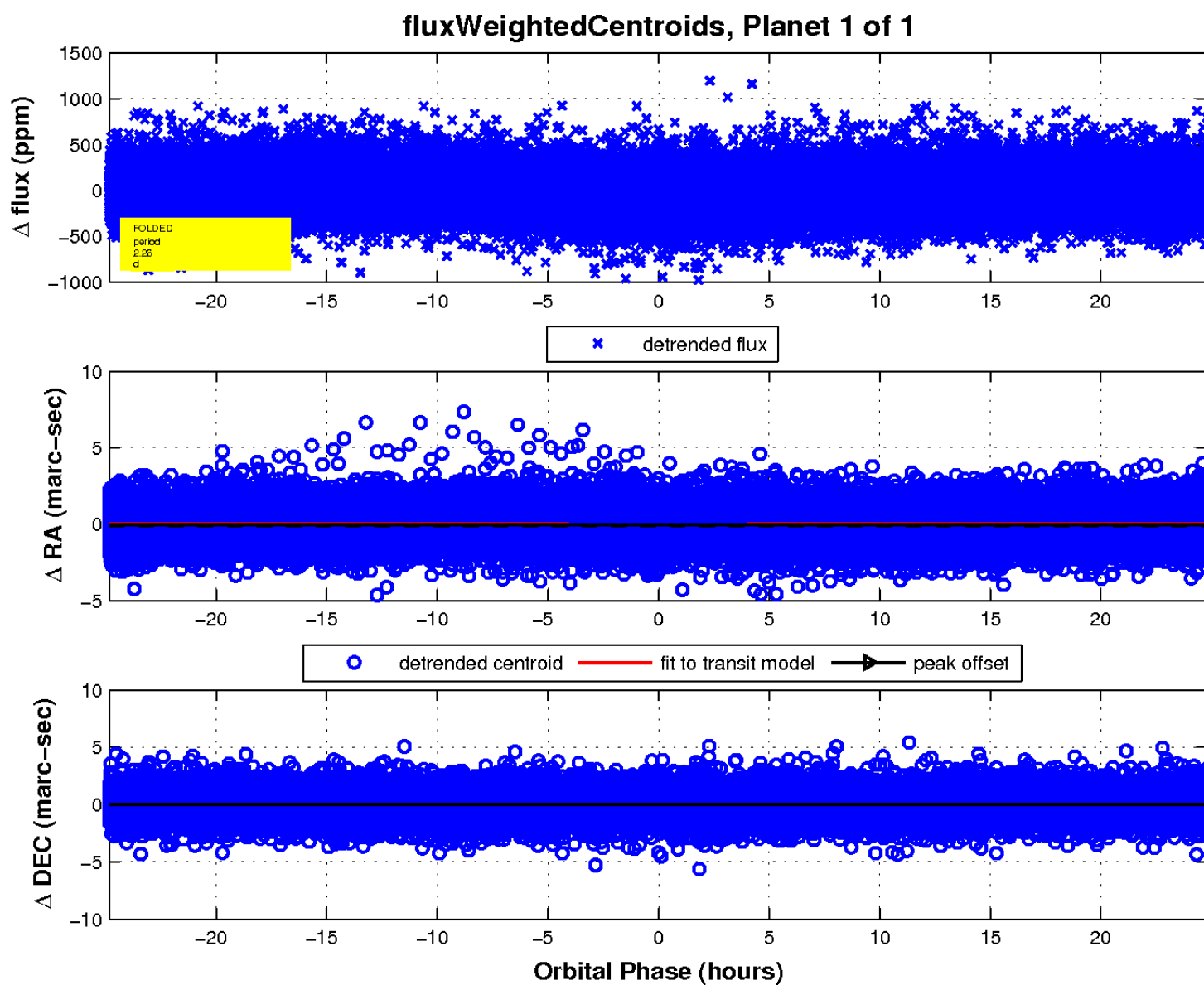
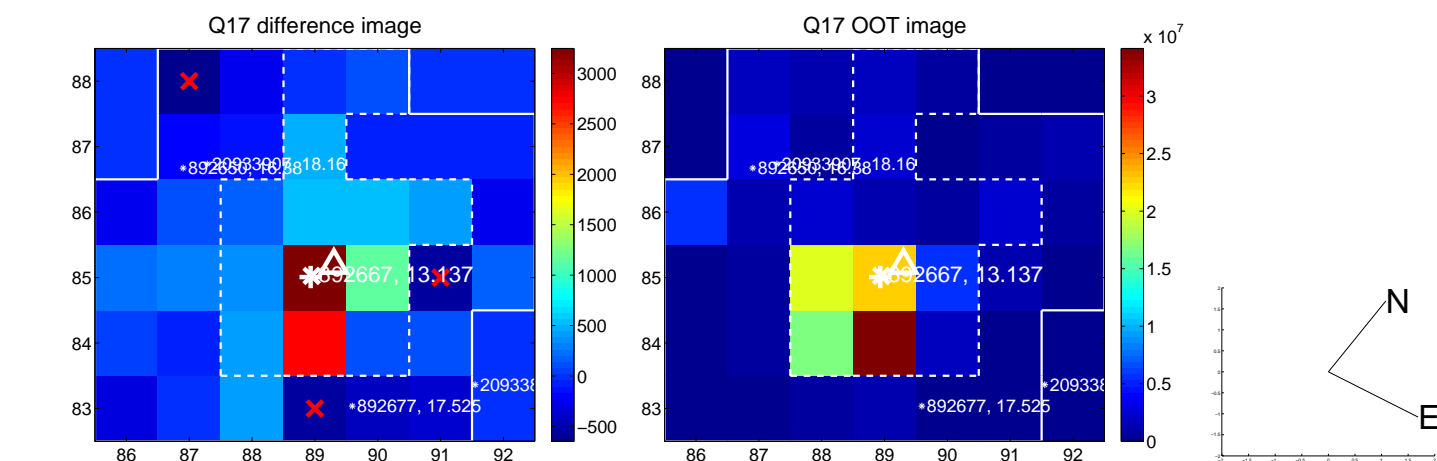
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

