

# KIC 006526875

## 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) | $R_p$ ( $R_{\oplus}$ ) | $S_p$ ( $S_{\oplus}$ ) |
|--------------|----------|------|---------------|--------------|-------------|------------------|------|-----|-----------------------------|-----------------|------------------------|------------------------|
| 006526875-01 | OBS      | No   | 3.629677      | 132.967807   | 0.0         | 20.452           | 12.4 | 0.0 | 2.46                        | 6993            | 0.01                   | 4911.45                |

## Robovetter Results

| TCE          | Run Type | Disp | Score | N | S | C | E | Comments   |
|--------------|----------|------|-------|---|---|---|---|--|
| 006526875-01 | OBS      | FP   | 0.00  | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED |

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

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

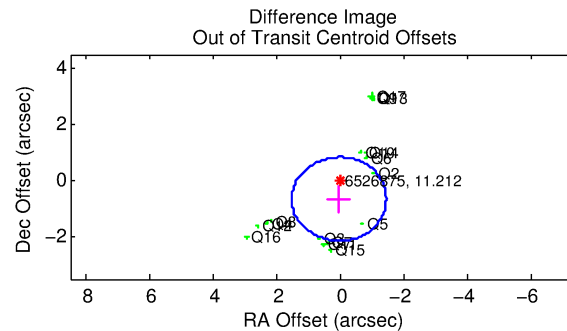
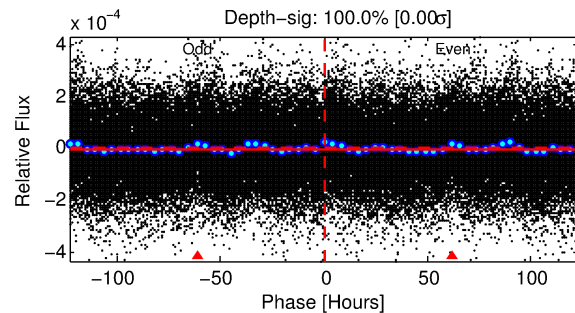
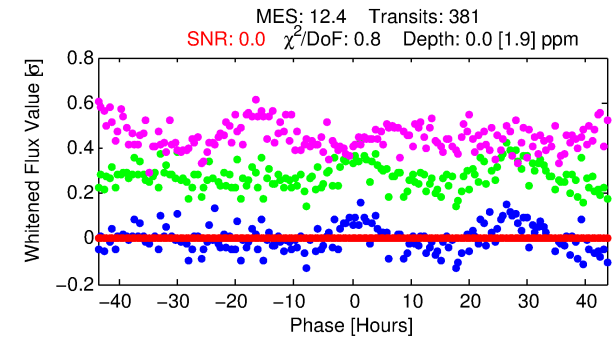
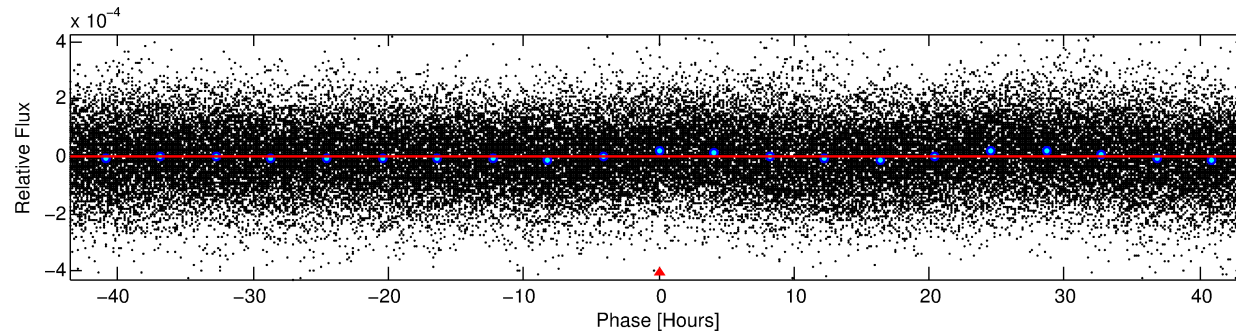
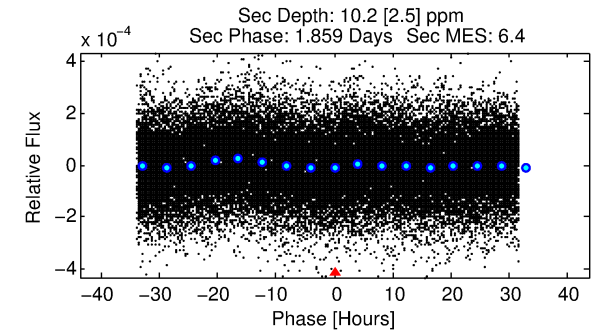
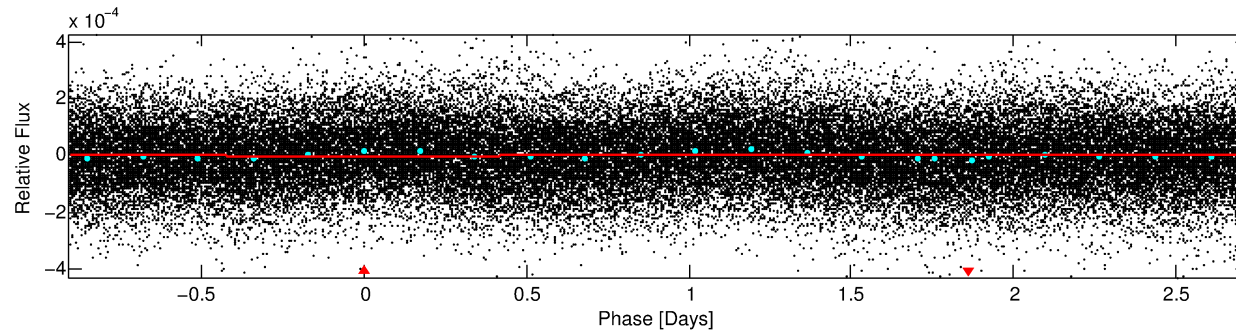
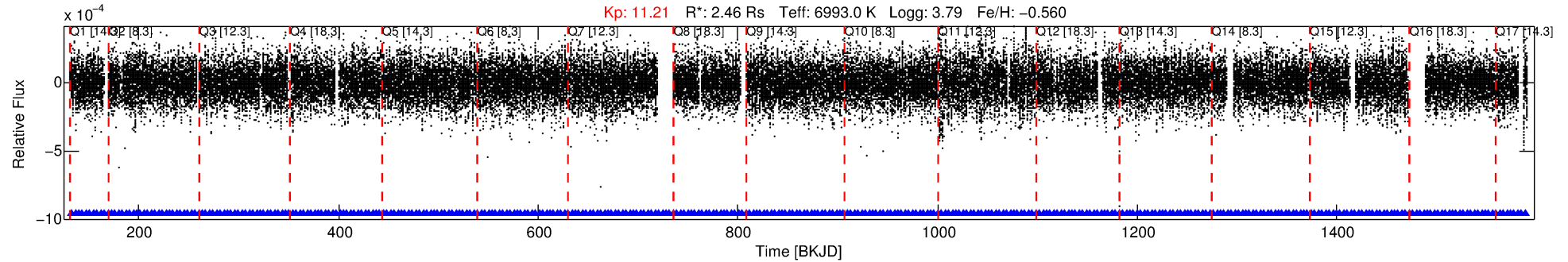
See [http://exoplanetarchive.ipac.caltech.edu/docs/API\\_kepcandidate\\_columns.html#proj\\_disp\\_col](http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col) for comment definitions.

## Ephemeris Match Information For 006526875-01

No Significant Match Found

# DV One-Page Summary

KIC: 6526875 Candidate: 1 of 1 Period: 3.630 d



## DV Fit Results:

Period = 3.62968 [1.92895] d  
Epoch = 132.9678 [301.4216] BKJD  
Rp/R\* = 0.0000 [0.0445]  
a/R\* = 1.46 [271.91]  
b = 0.26 [1598.30]  
Seff = 4911.45 [4318.90]  
Teq = 2135 [469] K  
Rp = 0.01 [11.93] Re  
a = 0.0513 [0.0247] AU  
Ag = 587658.45 [2799522810.24] [0.00σ]  
Teffp = 91380 [108832607] K [0.00σ]

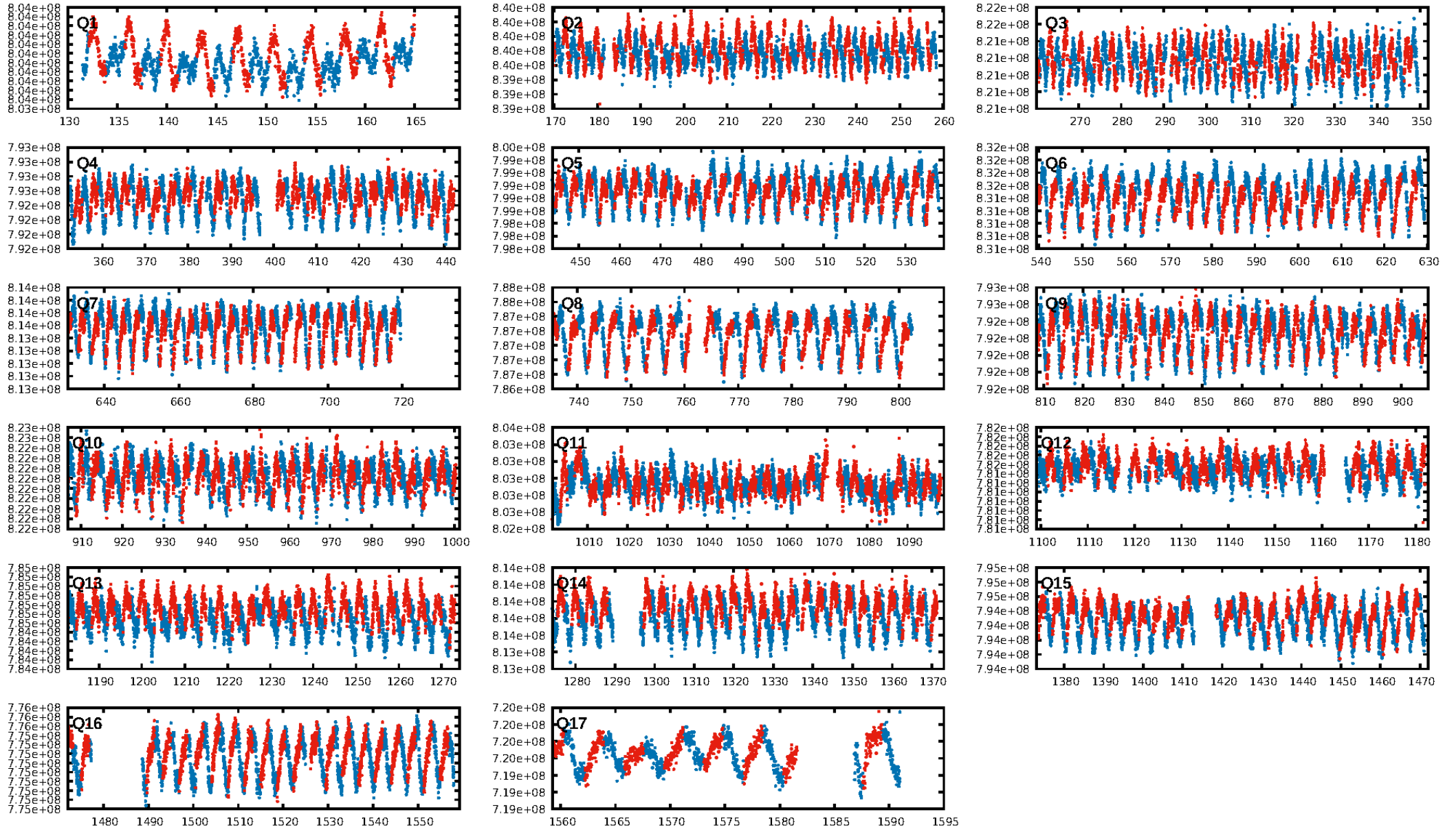
## DV Diagnostic Results:

ShortPeriod-sig: N/A  
LongPeriod-sig: N/A  
ModelChiSquare2-sig: N/A  
ModelChiSquareGof-sig: N/A  
Bootstrap-pfa: 9.59e-31  
RollingBand-fgt: 1.00 [364/364]  
GhostDiagnostic-chr: N/A  
Centroid-sig: N/A  
Centroid-so: N/A  
QotOffset-rm: 0.655 arcsec [1.32σ]  
KicOffset-rm: 0.577 arcsec [1.05σ]  
QotOffset-st: 4/4/4/4 [16]  
KicOffset-st: 4/4/4/4 [16]  
DiffImageQuality-fgm: 0.00 [0/16]  
DiffImageOverlap-fno: 1.00 [17/17]

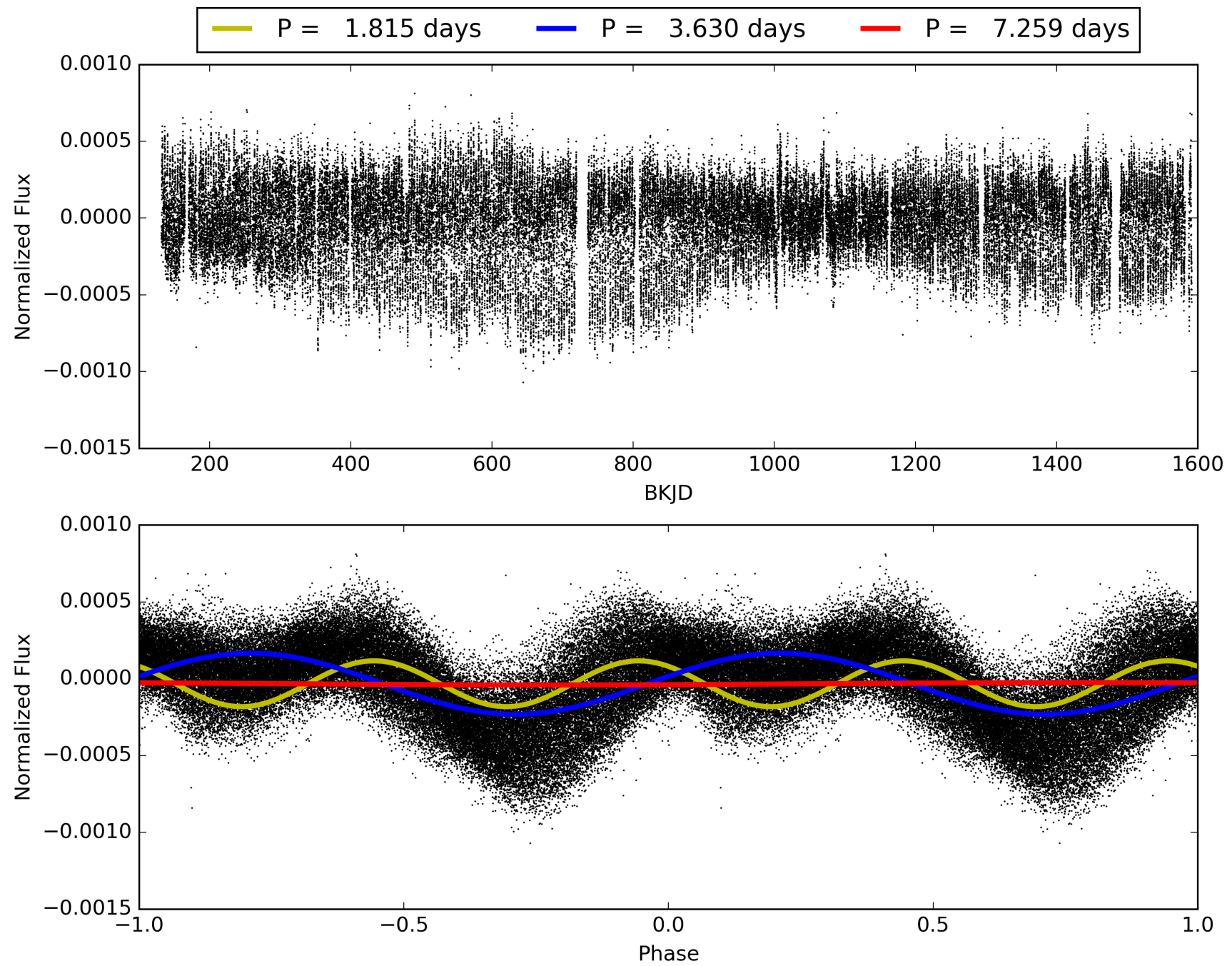
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:36:55 Z

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

# TCE 006526875-01, PDC Light Curves

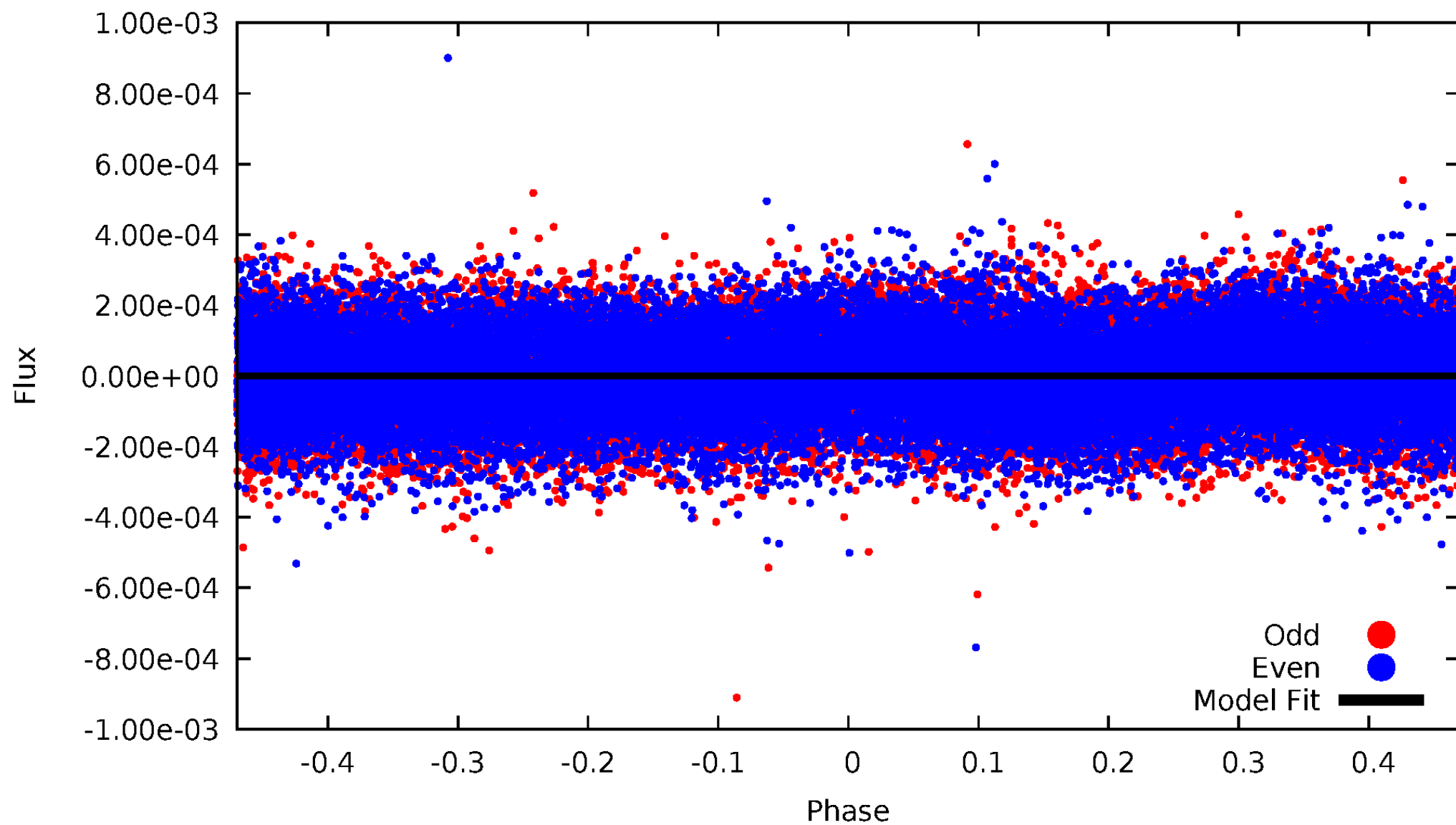


TCE 006526875-01



# DV Odd/Even

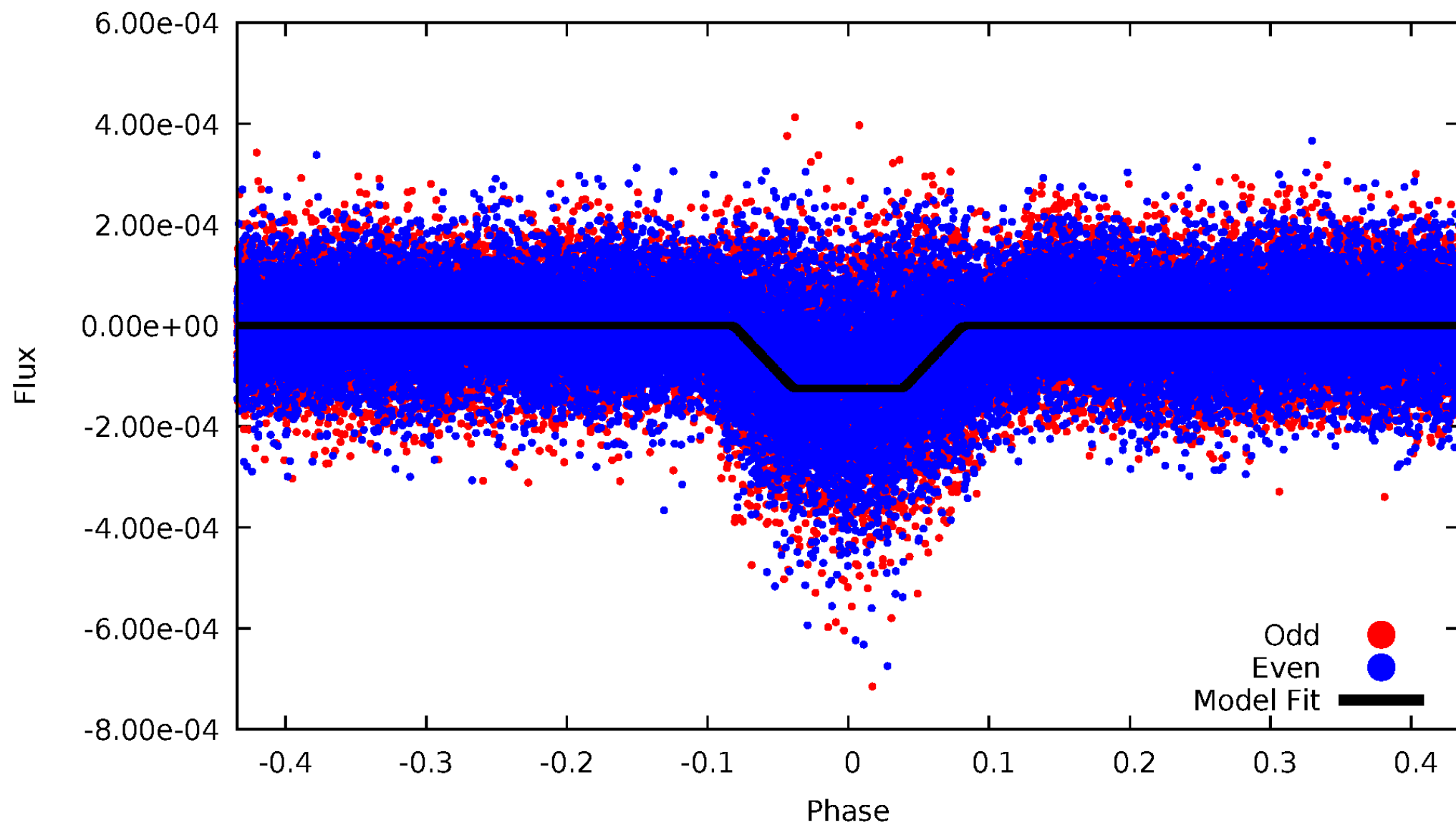
TCE 006526875-01



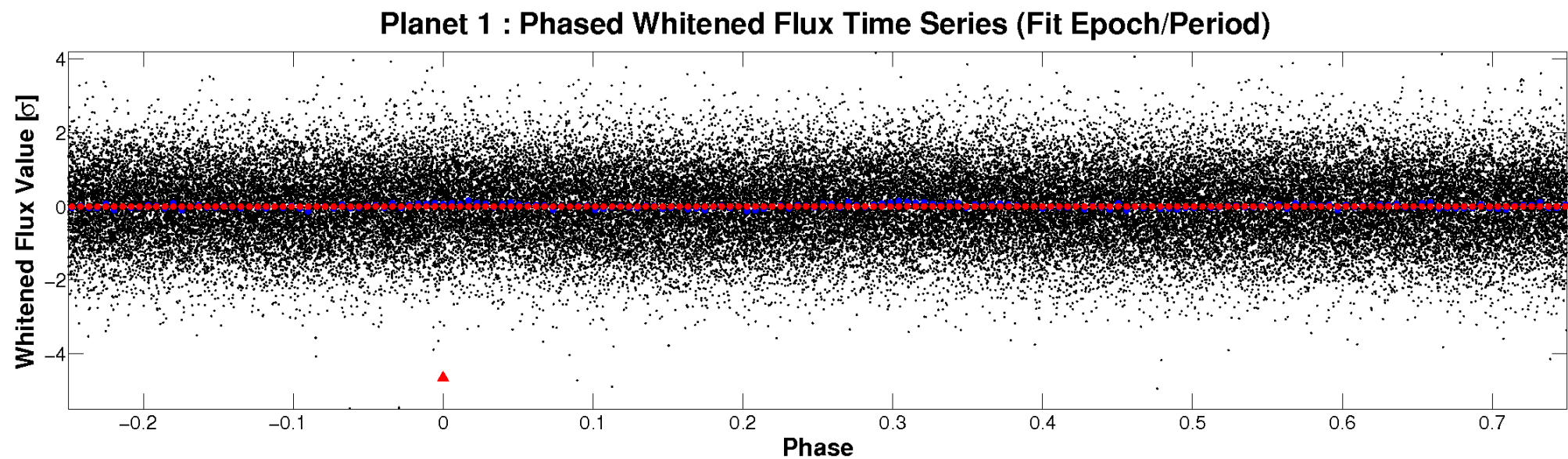
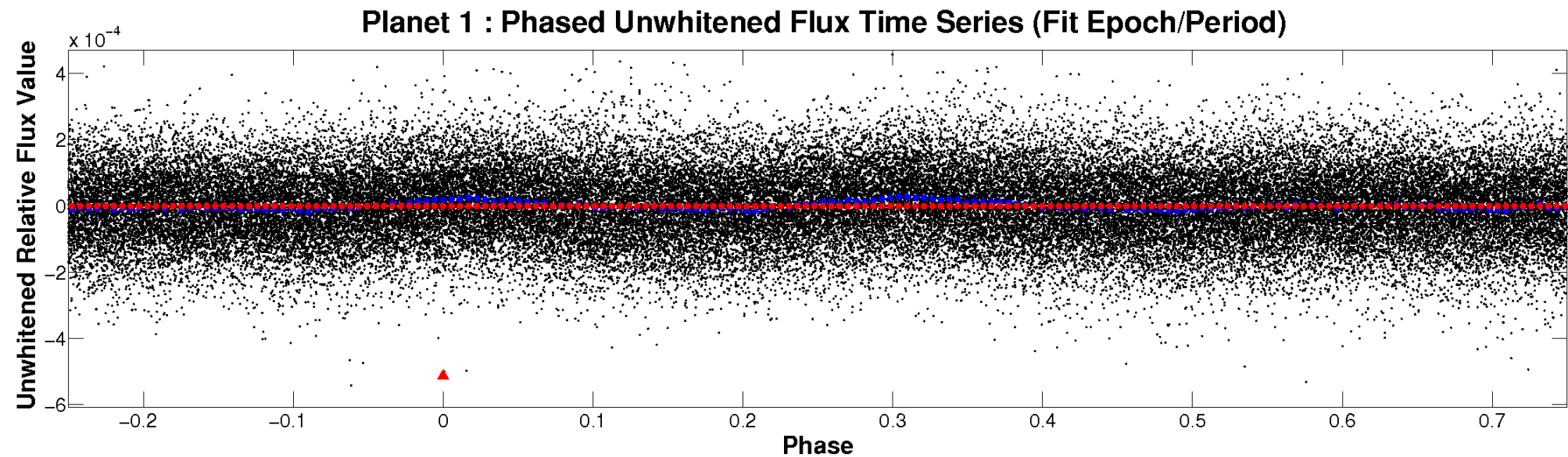


# ALT Odd/Even

TCE 006526875-01

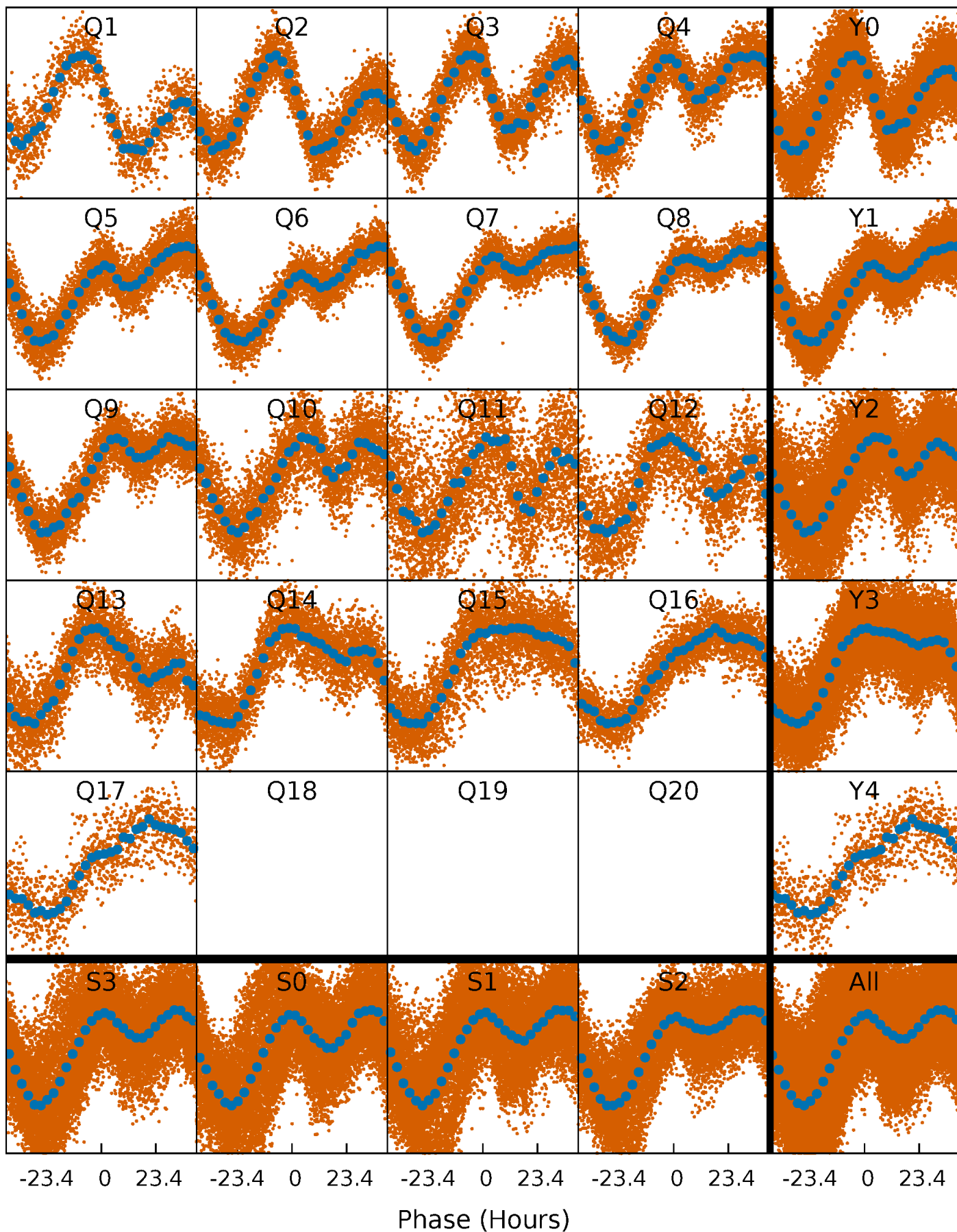


# Non-Whitened Vs. Whitened Light Curve



# PDC Quarter-Phased Transit Curves

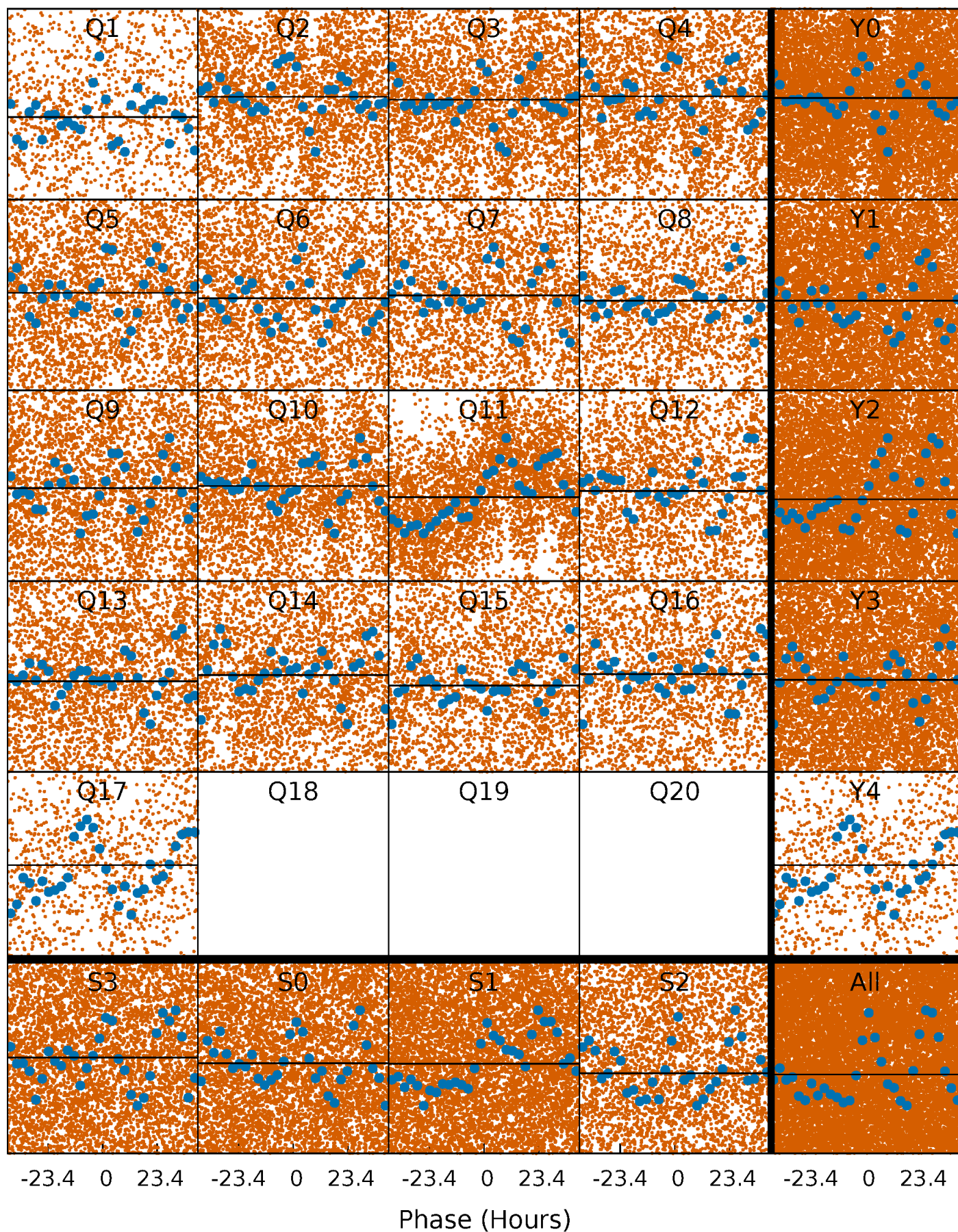
TCE 006526875-01   P= 3.629677 Days    $T_0=132.967807$  (BKJD)





# DV Quarter-Phased Transit Curves

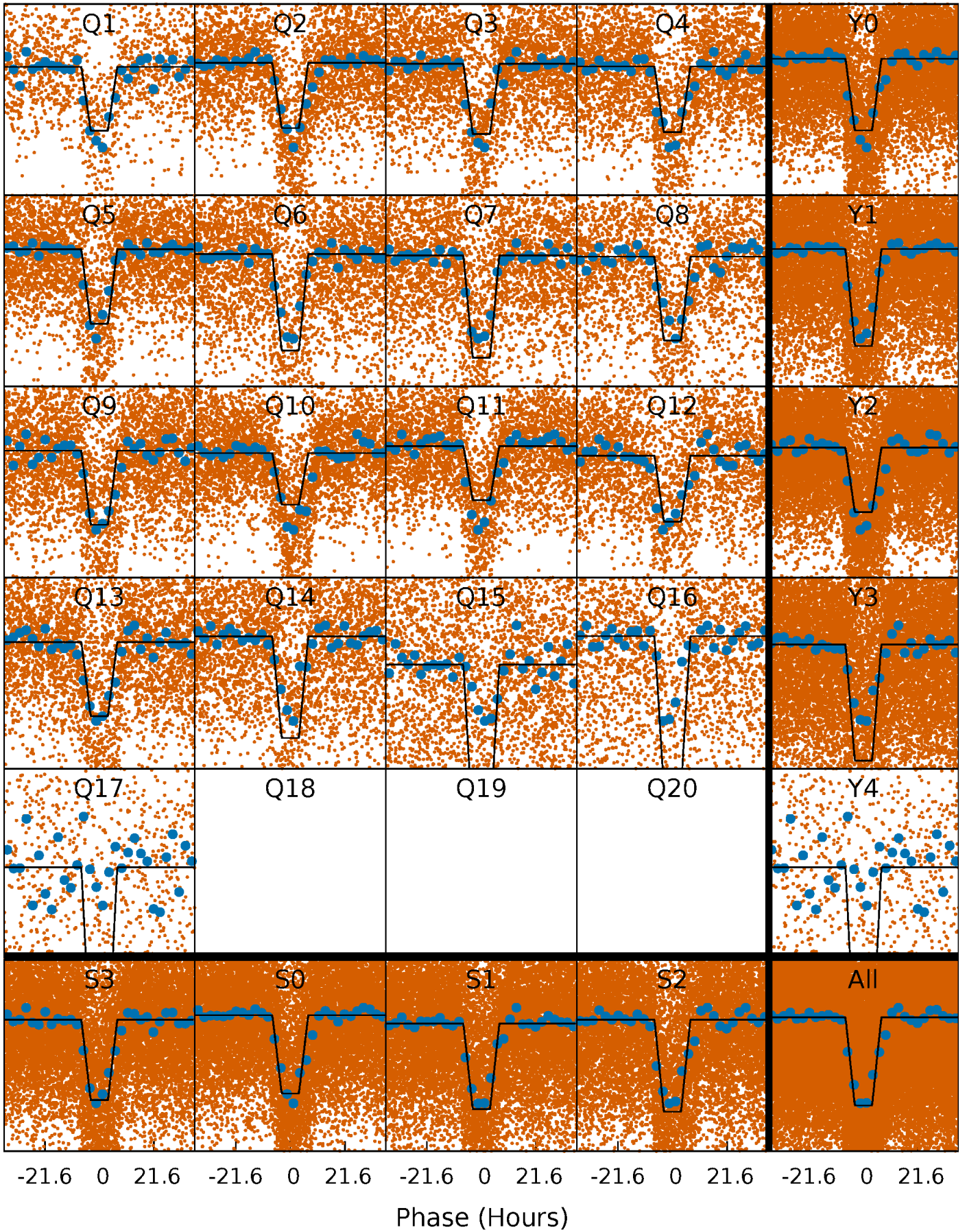
TCE 006526875-01 P= 3.629677 Days  $T_0=132.967807$  (BKJD)





# Alt. Detrend Quarter-Phased Transit Curves

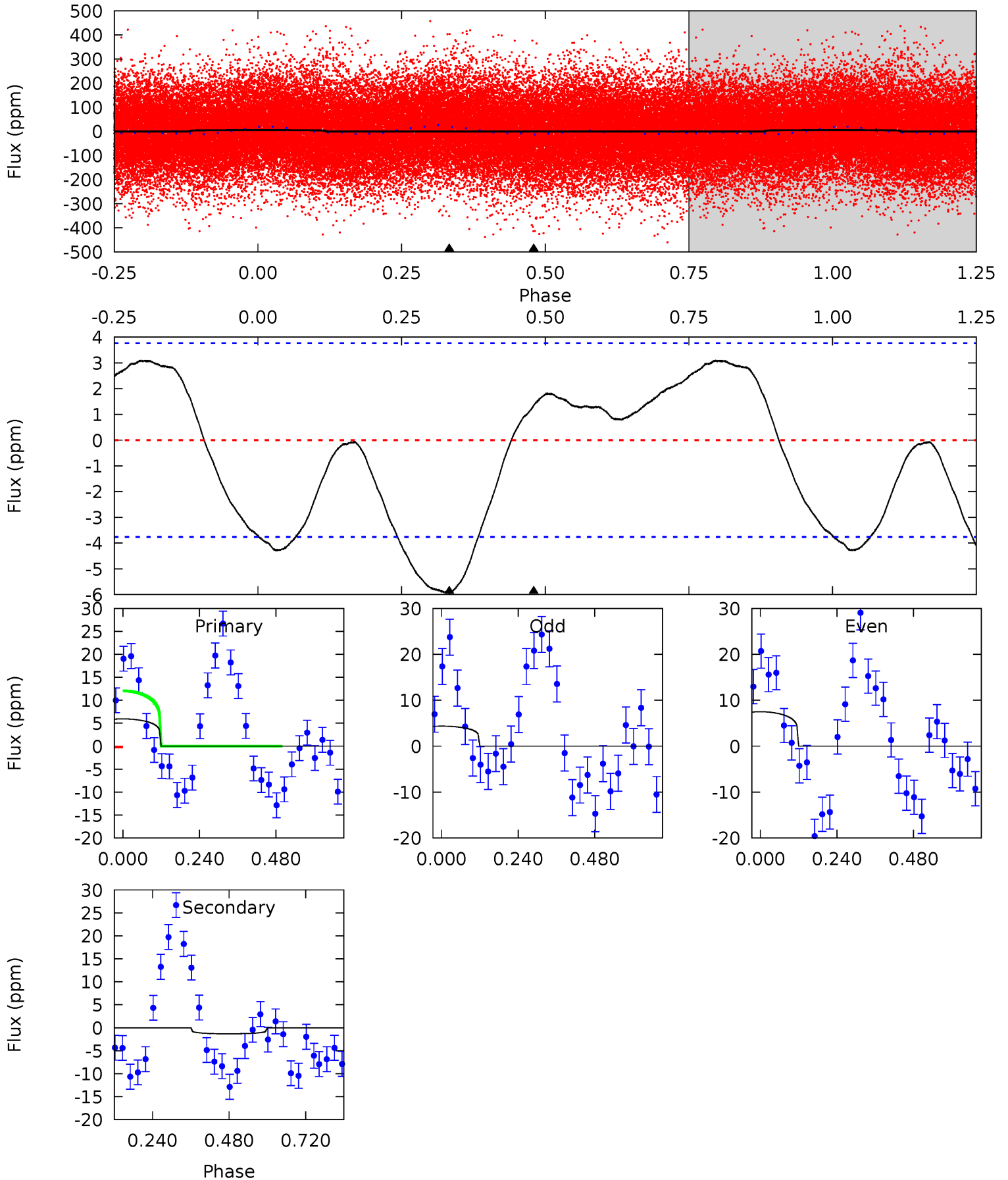
TCE 006526875-01 P= 3.631690 Days  $T_0=133.240168$  (BKJD)



# DV Model-Shift Uniqueness Test

006526875-01, P = 3.629677 Days, E = 129.338130 Days

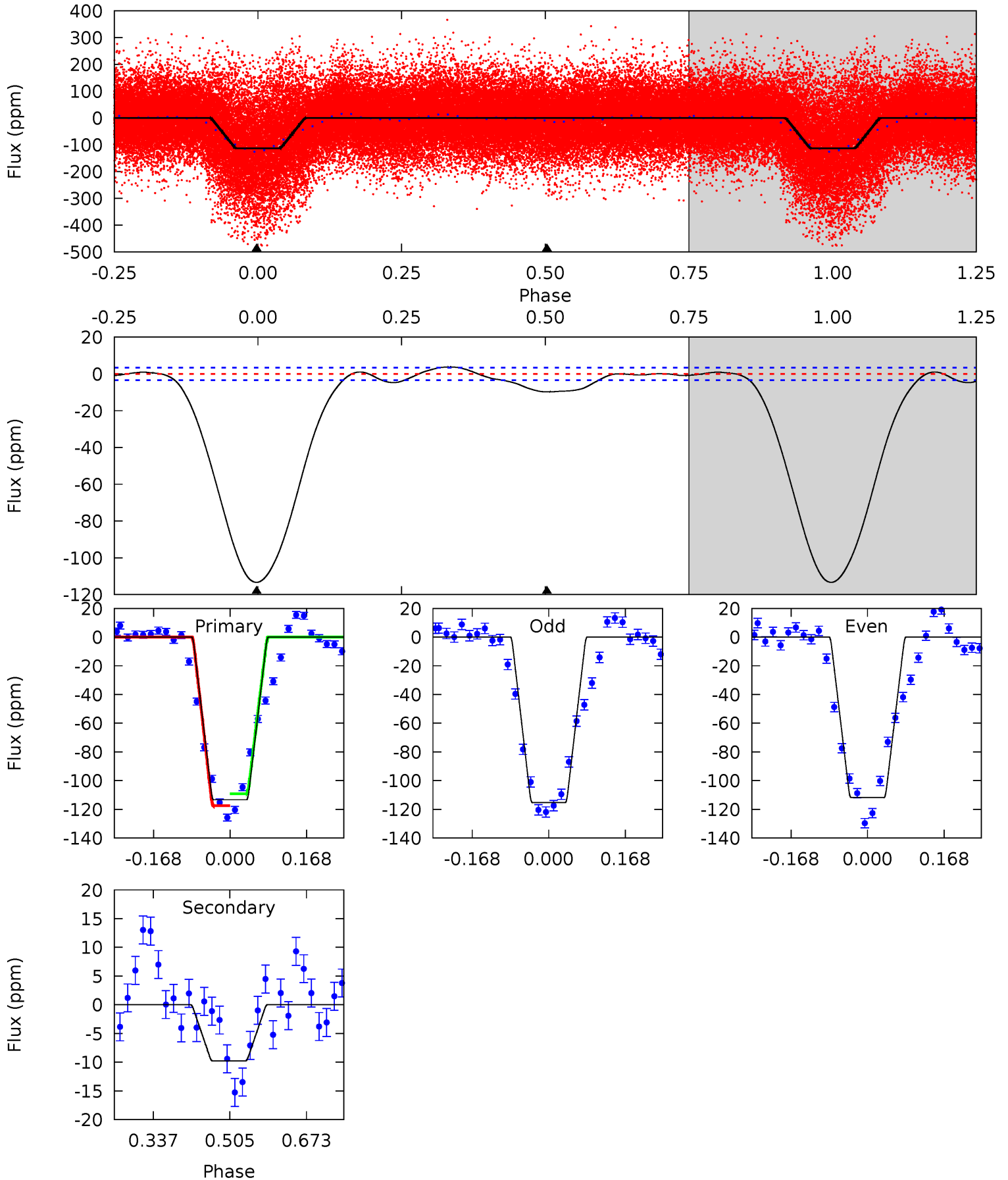
| Pri  | Sec   | Ter | Pos | FA <sub>1</sub> | FA <sub>2</sub> | F <sub>Red</sub> | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM  | Shape | TAT  |
|------|-------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 6.91 | -1.56 | 0   | 0   | 4.38            | 1.18            | 3.36             | 6.91    | 6.91    | -1.56   | -1.56   | 1.83    | 0.74 | 0.34  | 6.79 |



# Alt Model-Shift Uniqueness Test

006526875-01, P = 3.631690 Days, E = 129.608478 Days

| Pri   | Sec  | Ter | Pos | FA <sub>1</sub> | FA <sub>2</sub> | F <sub>Red</sub> | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM  | Shape | TAT  |
|-------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 148.1 | 12.8 | 0   | 0   | 4.45            | 1.38            | 2.66             | 148.1   | 148.1   | 12.8    | 12.8    | 2.28    | 1.05 | 0.03  | 5.46 |



### Stellar Parameters For KIC 006526875

|        | $T_{\text{eff}}(K)$  | $\log(g)$                 | [Fe/H]                     | $R (R_{\odot})$           | $M(M_{\odot})$            | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|----------------------|---------------------------|----------------------------|---------------------------|---------------------------|---|
|        | $6993^{+183}_{-204}$ | $3.793^{+0.293}_{-0.098}$ | $-0.560^{+0.300}_{-0.250}$ | $2.456^{+0.433}_{-0.866}$ | $1.365^{+0.243}_{-0.243}$ | $0.130^{+0.261}_{-0.040}$                 |
|        | +3%/-3%              | +8%/-3%                   | +54%/-45%                  | +18%/-35%                 | +18%/-18%                 | +201%/-31%                                |
| 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 006526875-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$     | $T_{max} (K)$        | $T_{obs} (K)$          | $A_{obs}$                  |
|---------|-------------|------------------------|----------------------|------------------------|----------------------------|
| DV      | $1\pm1$     | $7.66^{+8.79}_{-5.33}$ | $2880^{+676}_{-442}$ | $-3136^{+290}_{-595}$  | $-0.026^{+0.023}_{-0.301}$ |
| Alt.    | $-10\pm1$   | $8.93^{+9.28}_{-6.37}$ | $2906^{+820}_{-447}$ | $-2584^{+6613}_{-669}$ | $0.176^{+2.102}_{-0.143}$  |

$T_{max}$  = 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  $A_{obs} \gg 1.0$



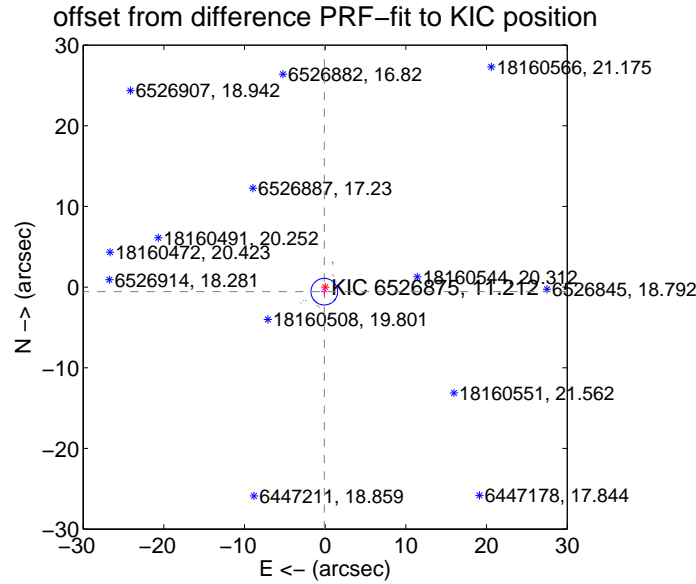
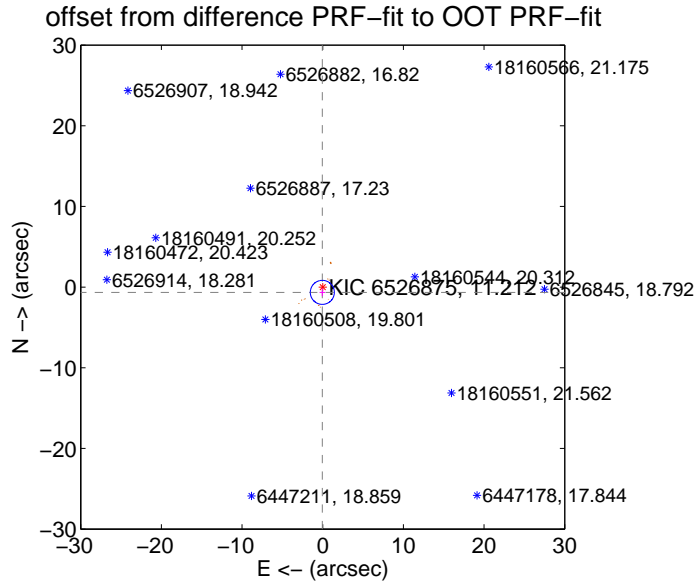
## DV Centroid Data

Supplemental centroid analysis for 006526875-01. **Kepler magnitude: 11.21.** Transit SNR 0.00

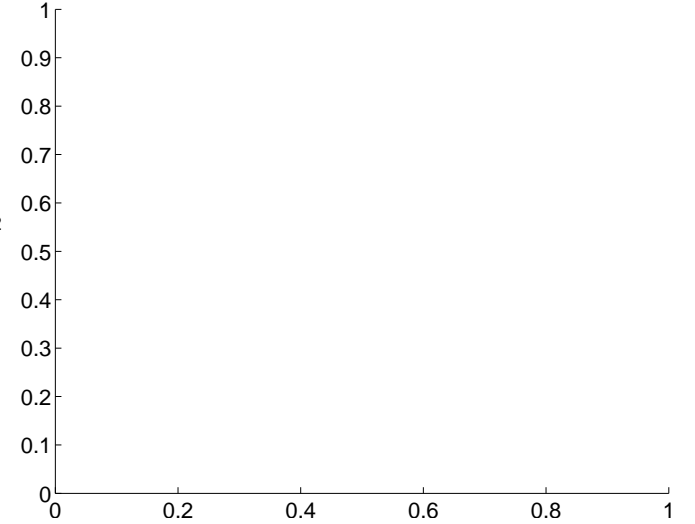
**There are 0 quarters with good PRF difference image offsets**

The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

|   | Distance in arcsec | Distance / $\sigma$ | $\Delta$ RA       | $\Delta$ Dec       |
|---|--------------------|---------------------|-------------------|--------------------|
| PRF-fit source offset from OOT          | $0.655 \pm 0.497$  | 1.32                | $0.047 \pm 0.346$ | $-0.654 \pm 0.482$ |
| PRF-fit source offset from KIC position | $0.577 \pm 0.550$  | 1.05                | $0.112 \pm 0.386$ | $-0.566 \pm 0.504$ |
| photometric centroid source offset      | —                  | —                   | —                 | —                  |

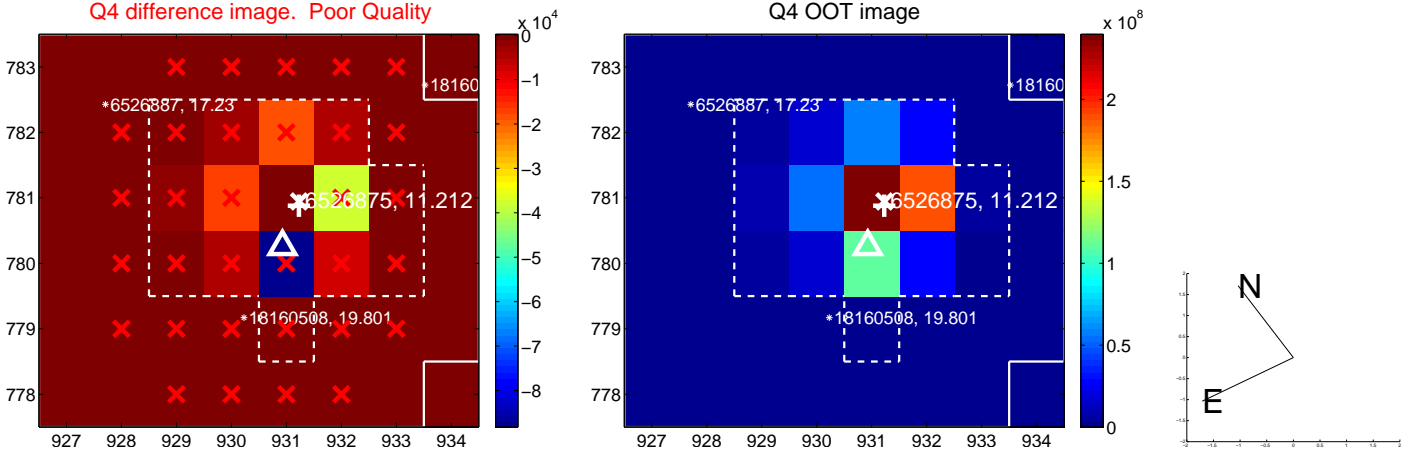
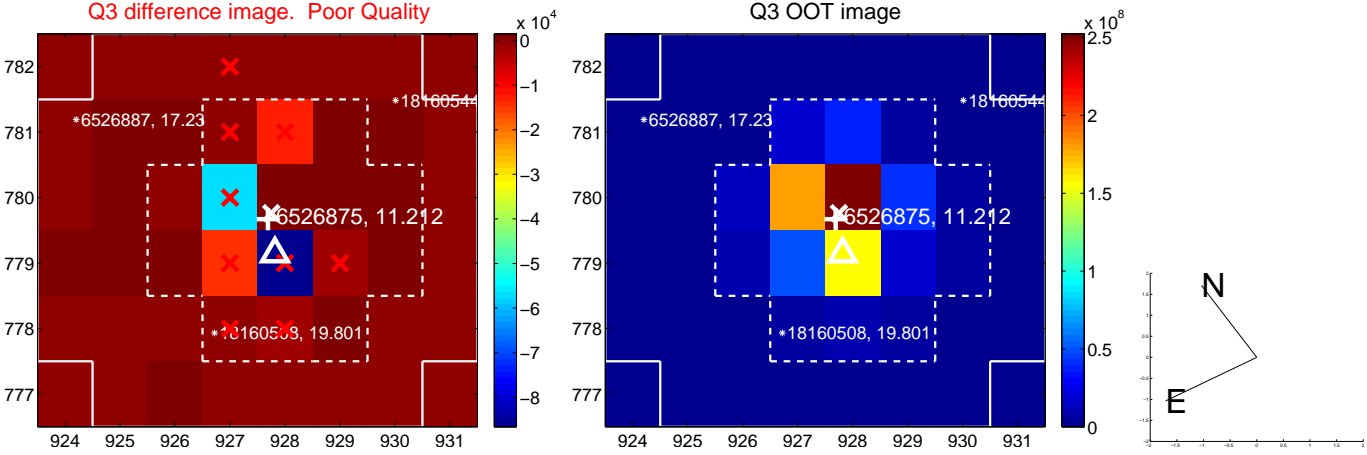
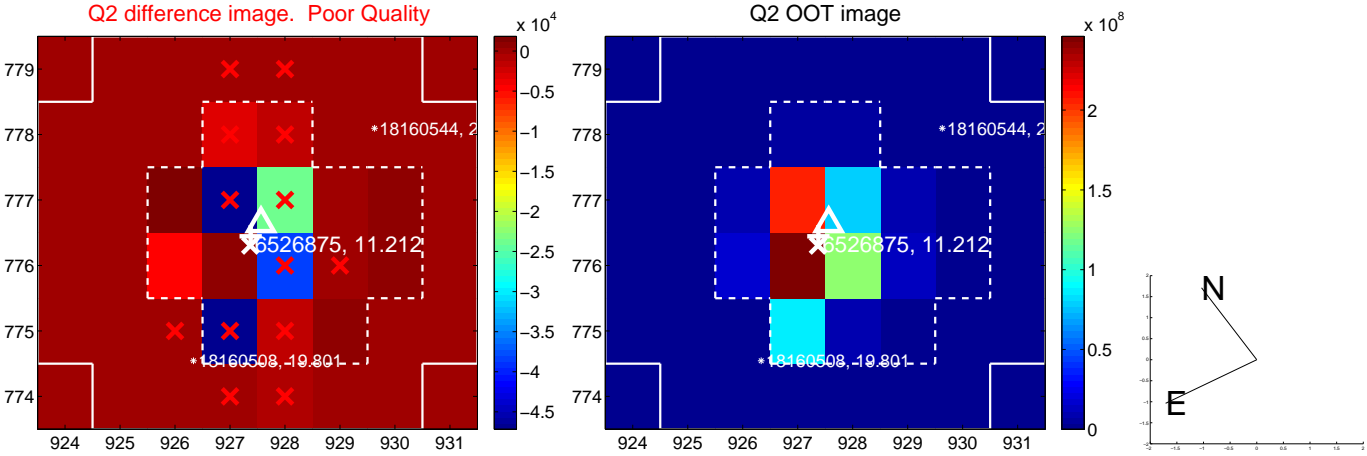
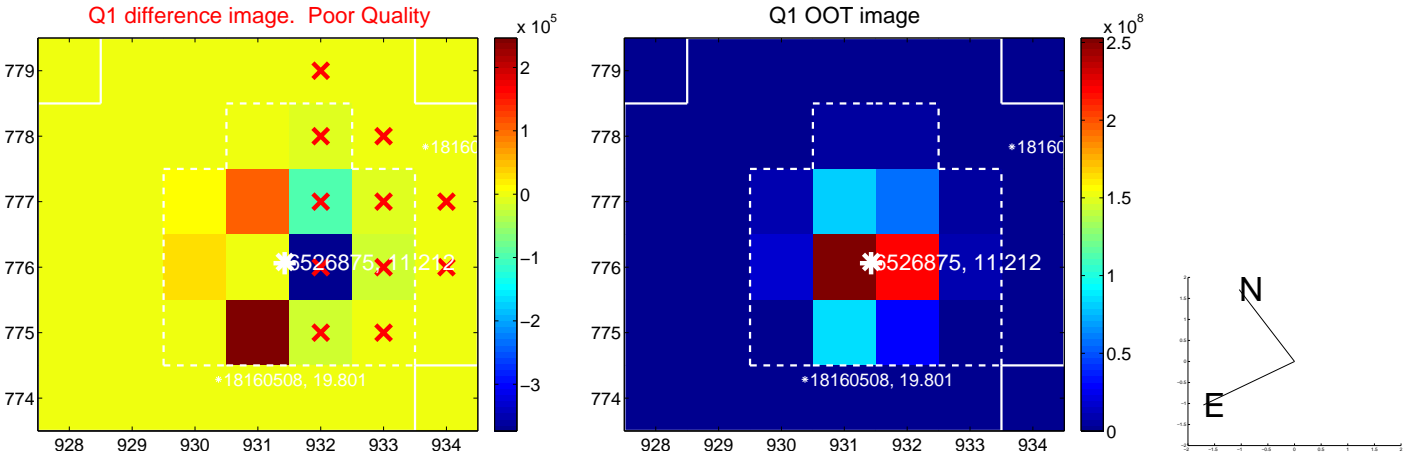


**There are no photometric centroids**

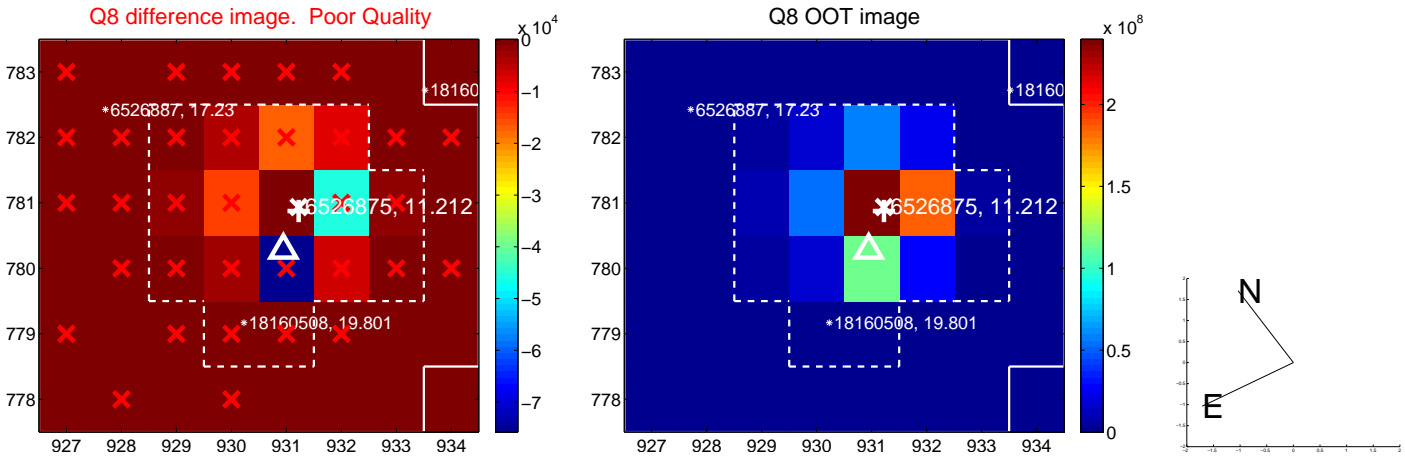
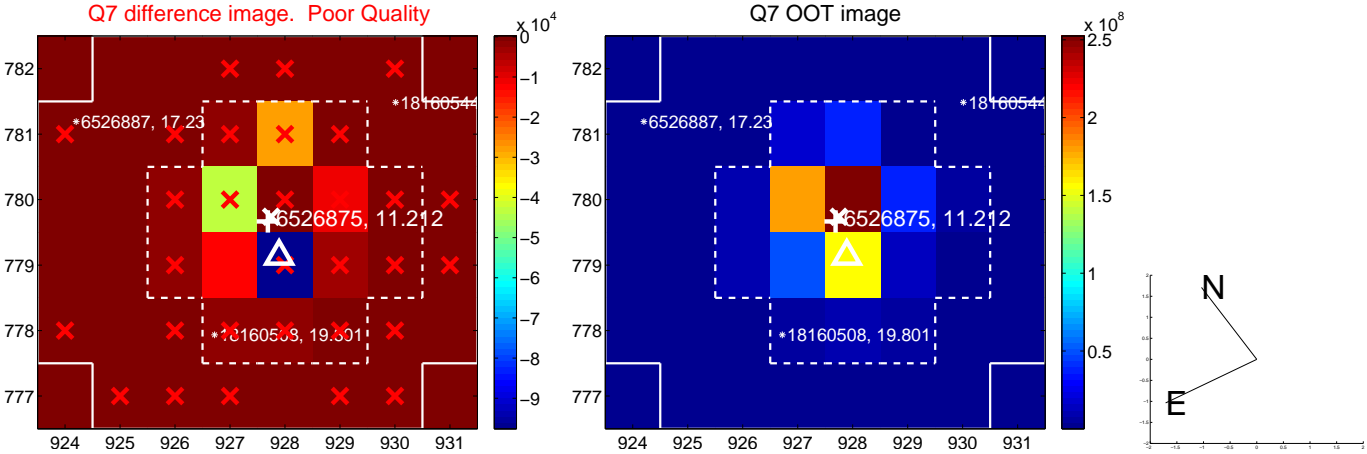
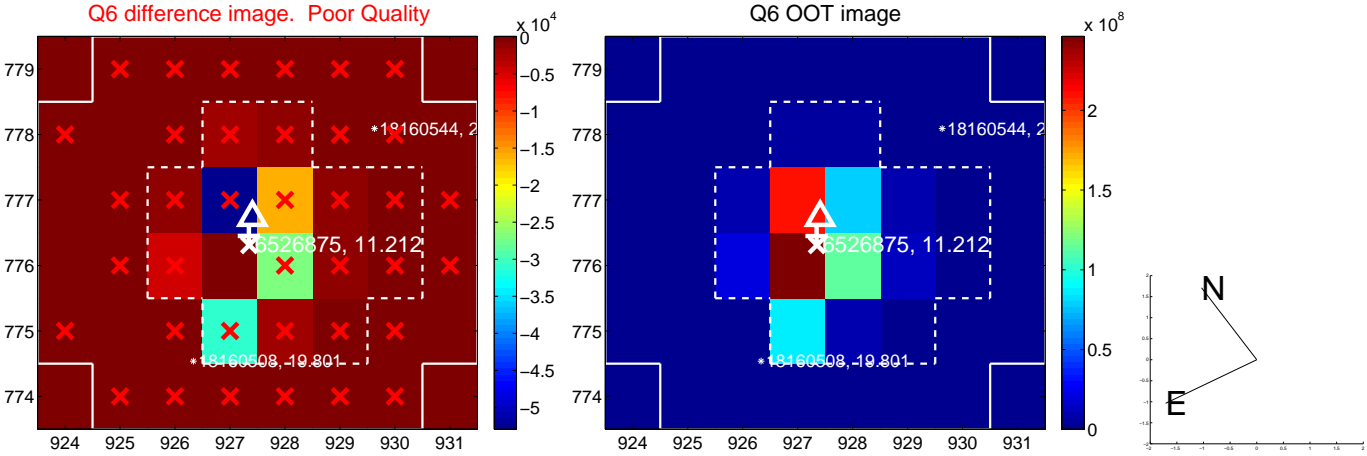
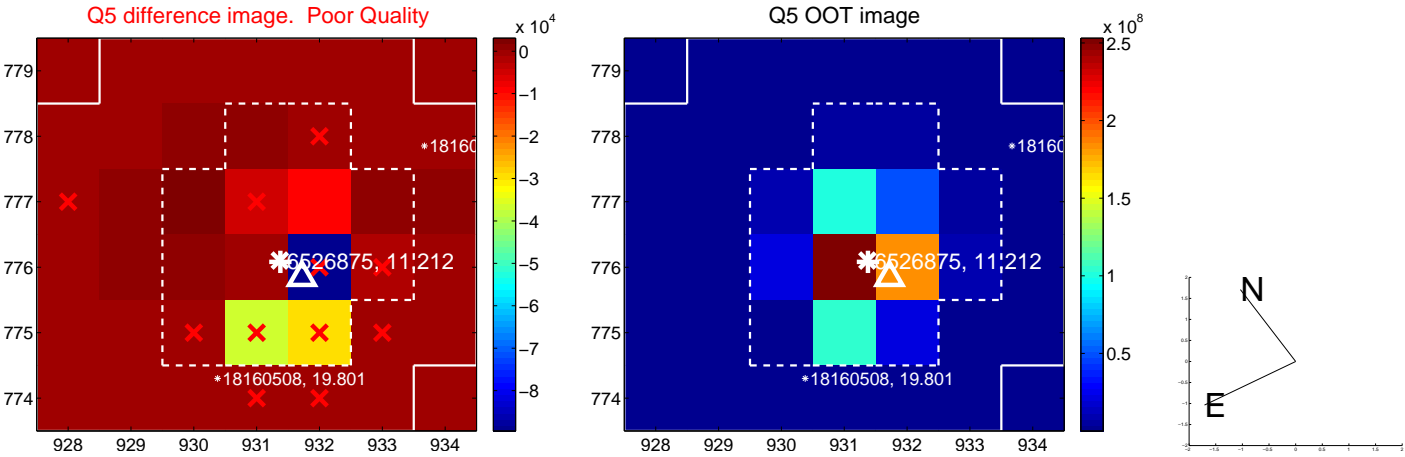


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- $\sigma$  uncertainty. Blue circle: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

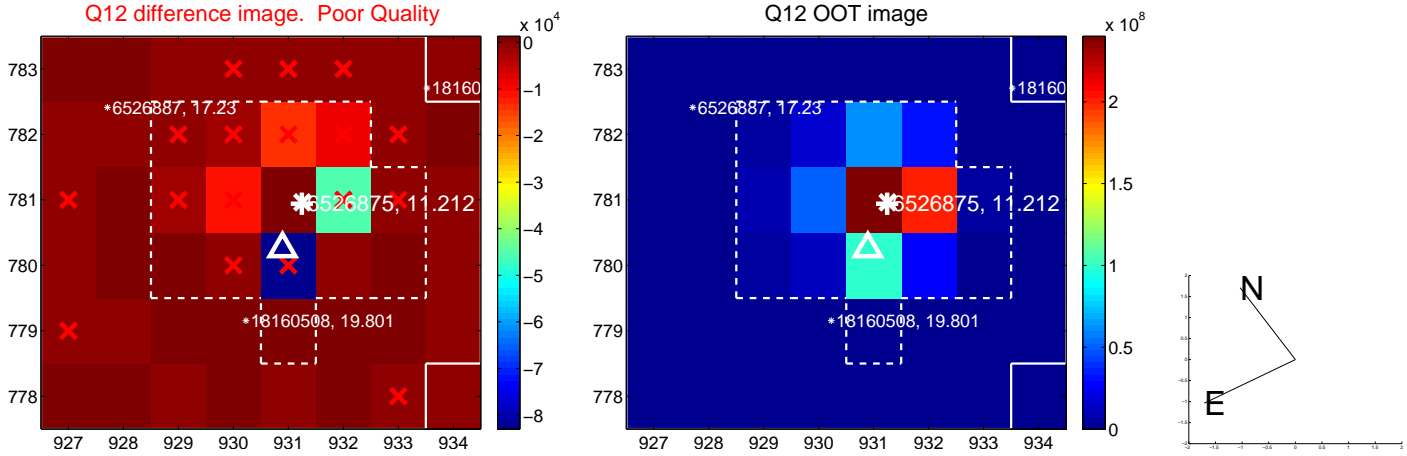
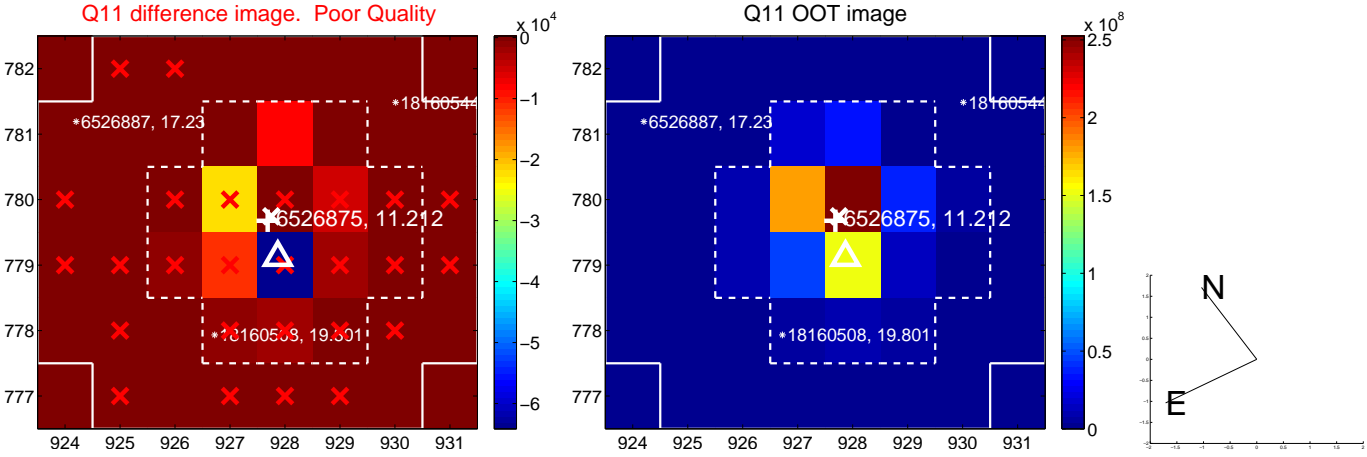
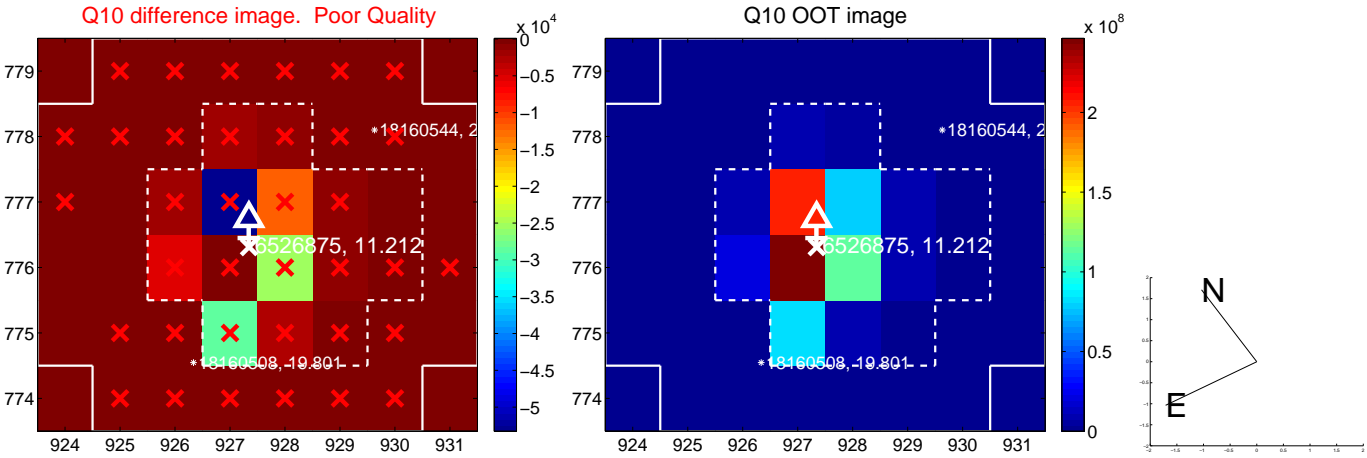
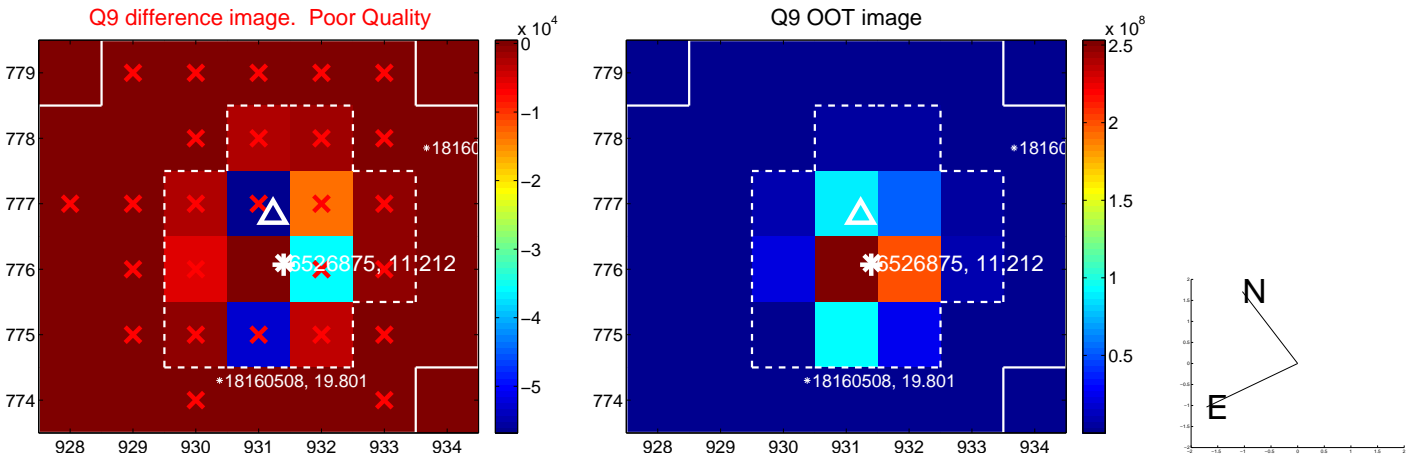
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



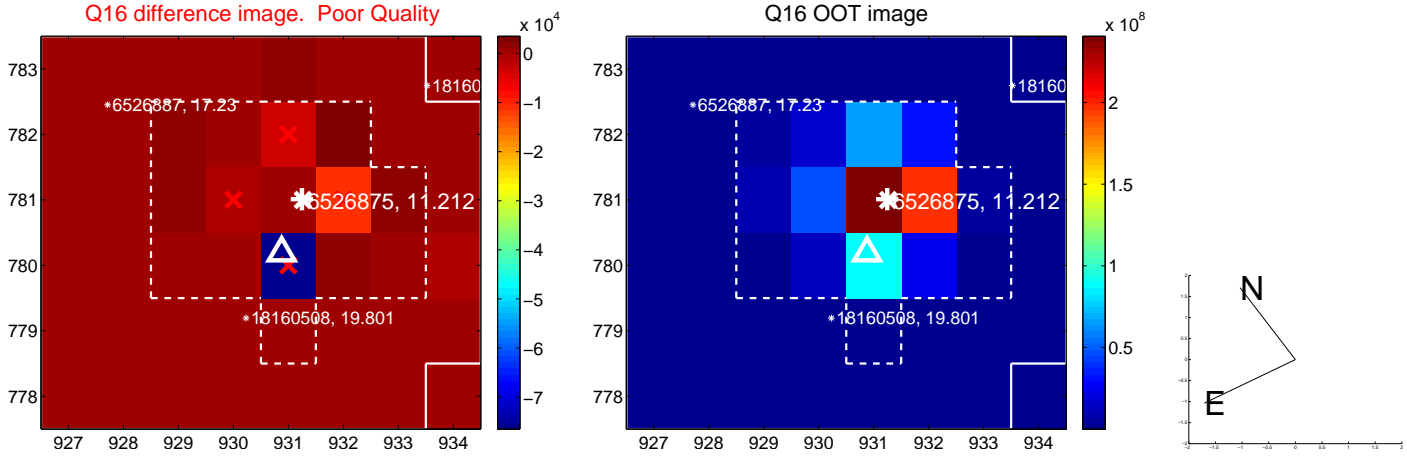
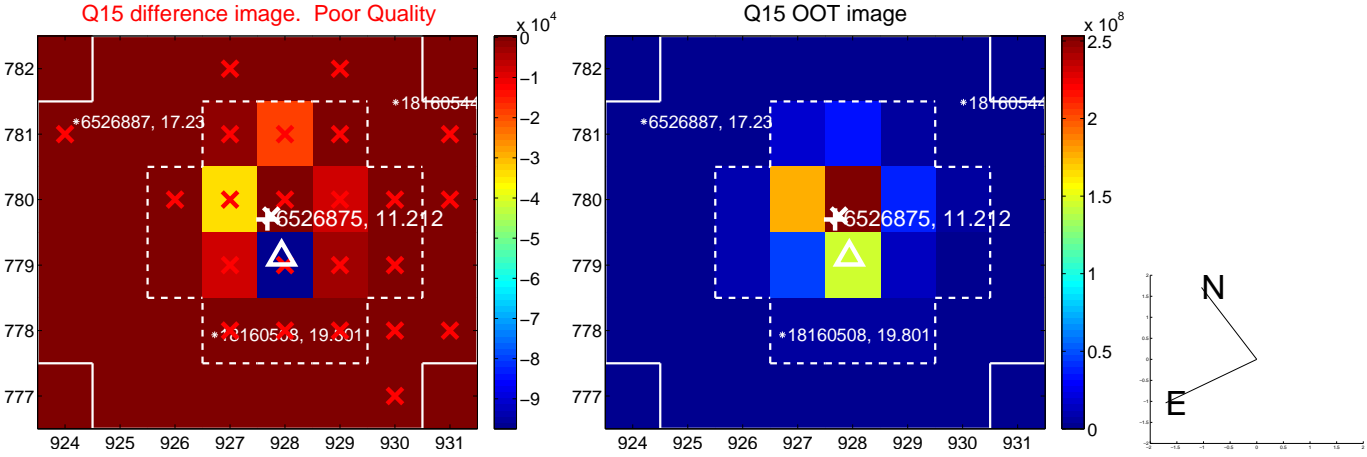
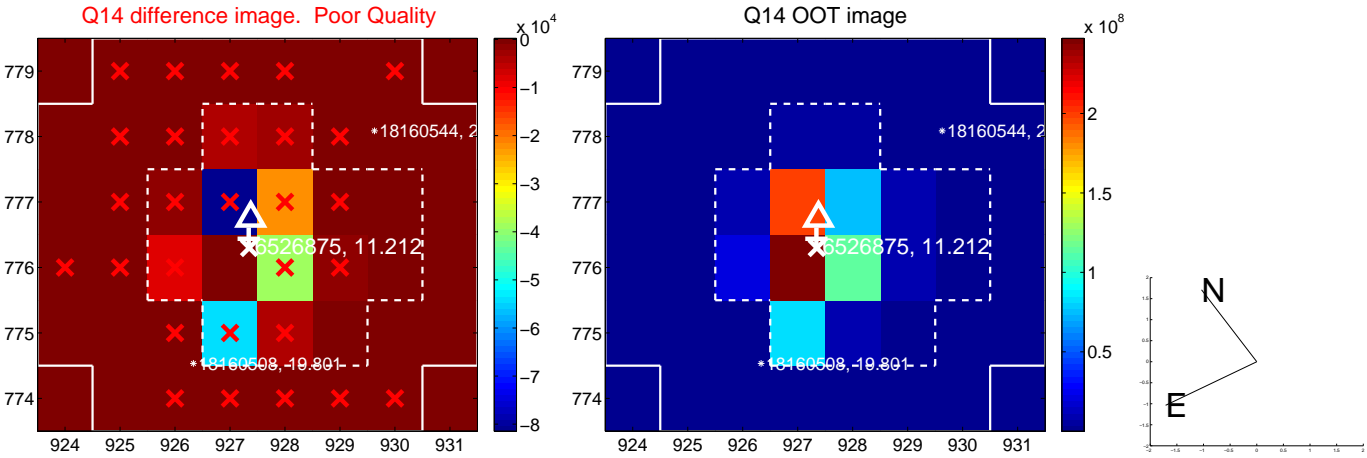
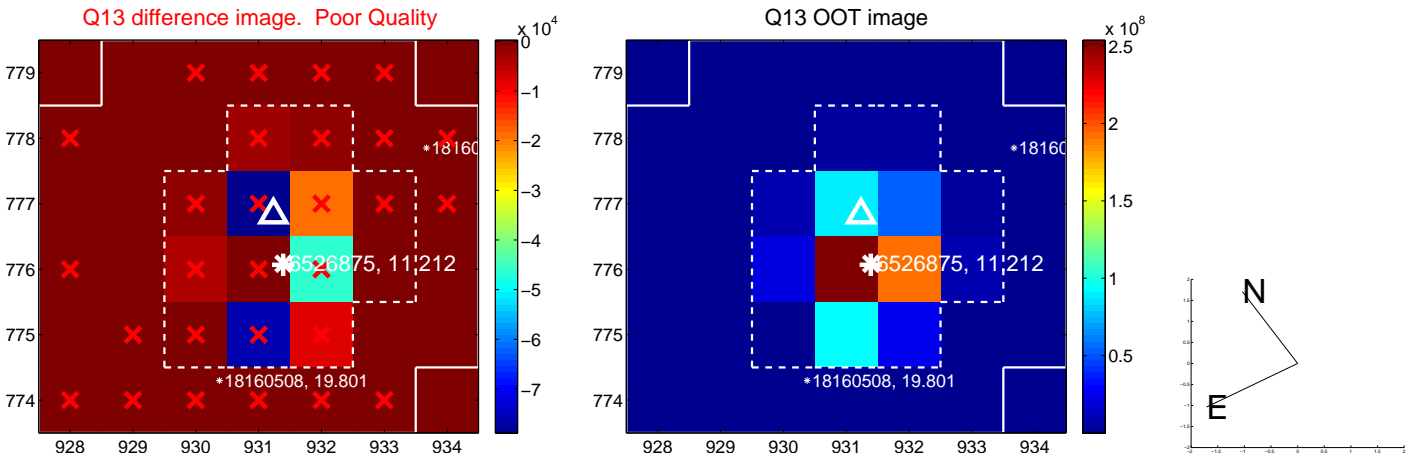
white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.



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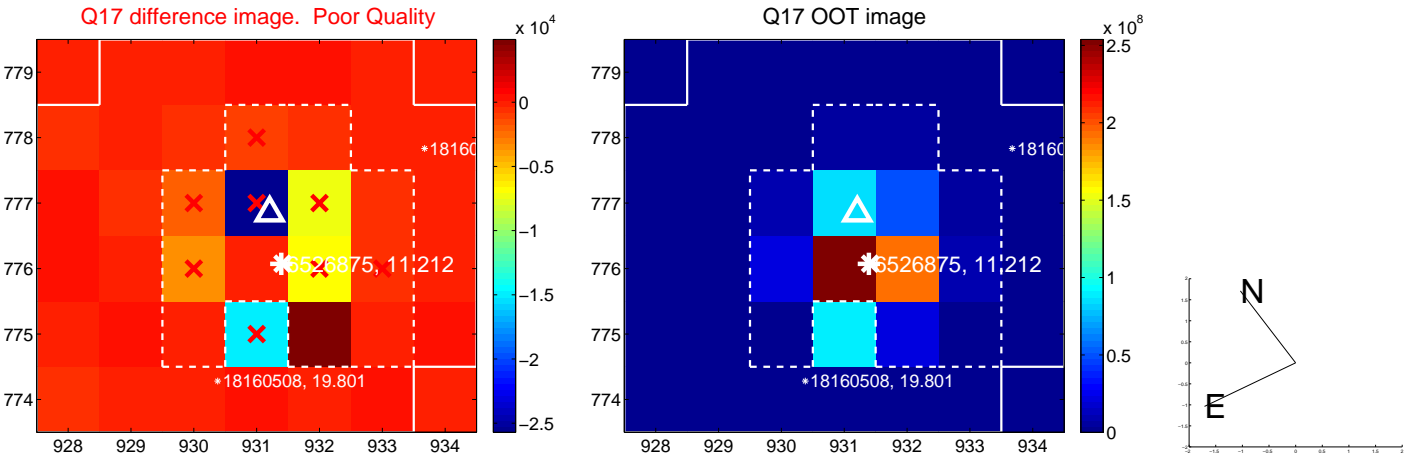


white  $\times$ : KIC target position; +: OOT centroid;  $\triangle$ : difference centroid. red  $\times$ : large negative pixel value.





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



folded centroid time series figure for this object.

UKIRT Image

Declination

