

KIC 007601917

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
| 007601917-01 | OBS | No | 2.976456 | 133.479234 | 23.2 | 12.508 | 9.8 | 6.2 | 2.57 | 6227 | 1.45 | 4180.69 |
| 007601917-02 | OBS | No | 215.100452 | 267.775542 | 261.5 | 11.372 | 12.6 | 5.6 | 2.57 | 6227 | 4.47 | 13.89 |
| 007601917-03 | OBS | No | 2.976206 | 131.885609 | 98.2 | 10.500 | 11.2 | -1.0 | 2.57 | 6227 | 2.54 | 4181.16 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 007601917-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—CENT_KIC_POS |
| 007601917-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS |
| 007601917-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS |

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

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

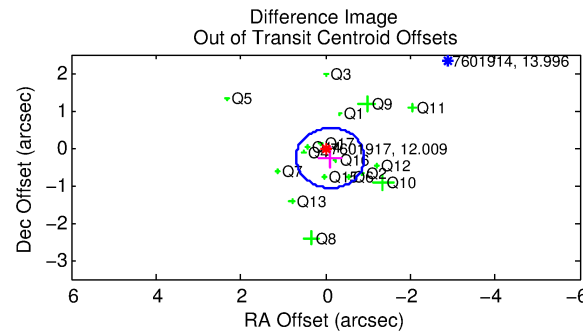
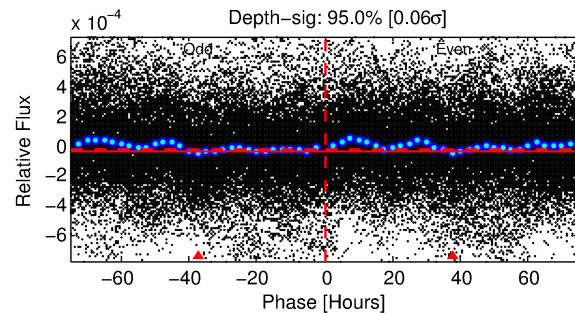
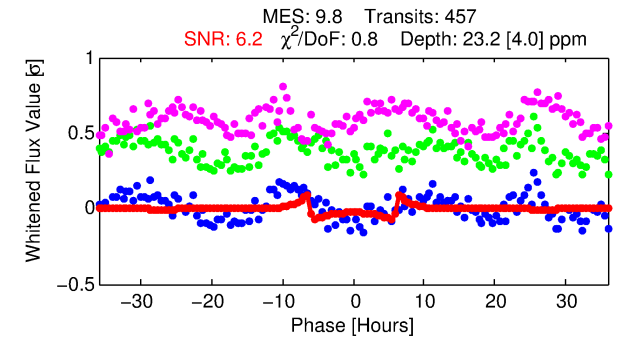
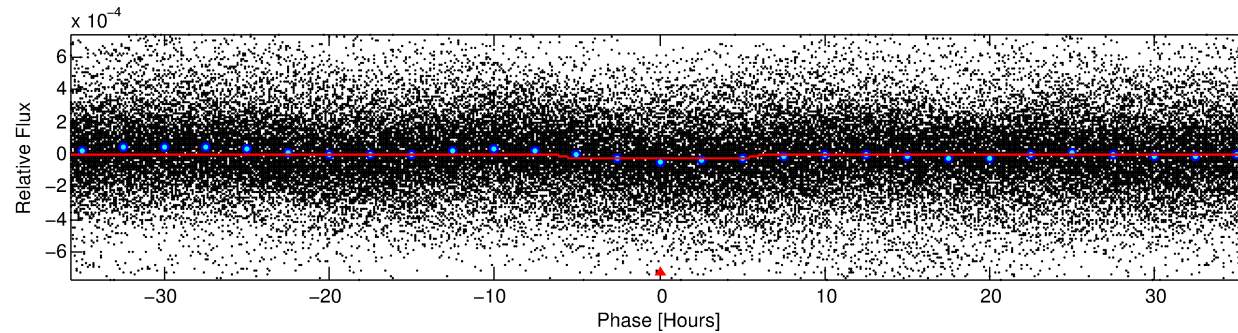
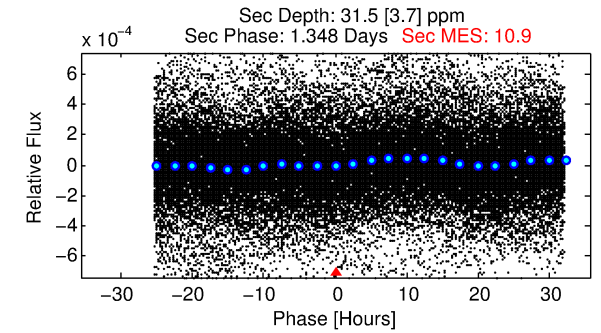
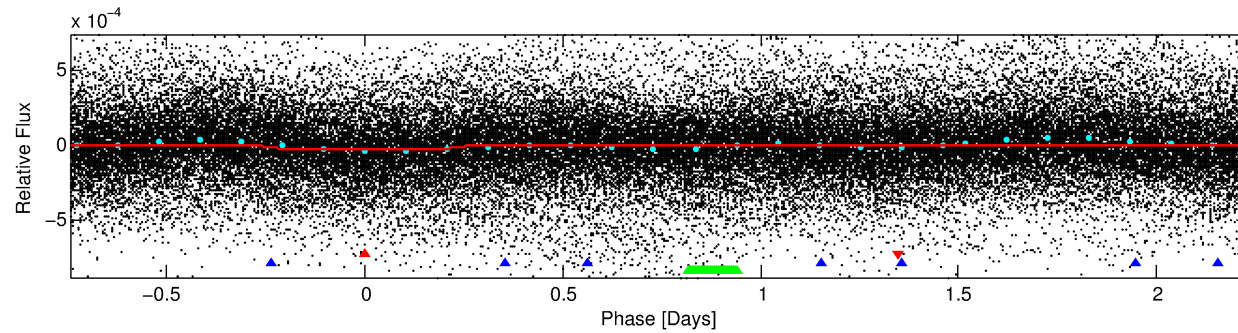
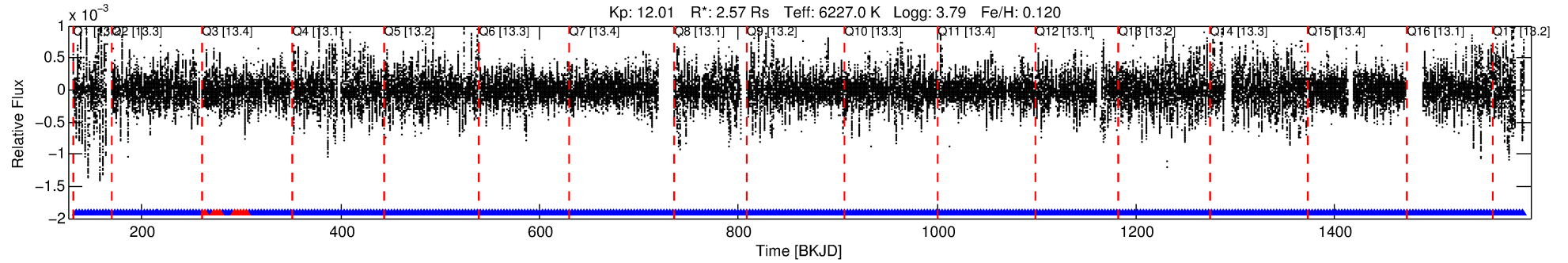
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007601917-01

No Significant Match Found

DV One-Page Summary

KIC: 7601917 Candidate: 1 of 3 Period: 2.976 d



DV Fit Results:

Period = 2.97646 [0.00003] d
Epoch = 133.4792 [0.0051] BKJD
Rp/R* = 0.0052 [0.0008]
a/R* = 1.25 [0.28]
b = 0.90 [0.14]
Seff = 4180.69 [1481.43]
Teff = 2050 [182] K
Rp = 1.45 [0.42] Re
a = 0.0461 [0.0104] AU
Ag = 17.51 [8.34] [1.98σ]
Teffp = 6485 [529] K [7.93σ]

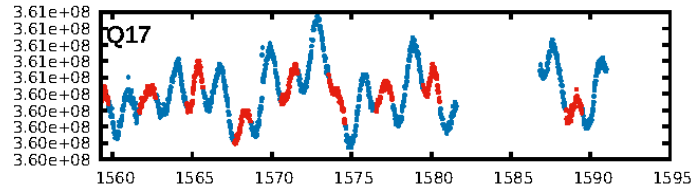
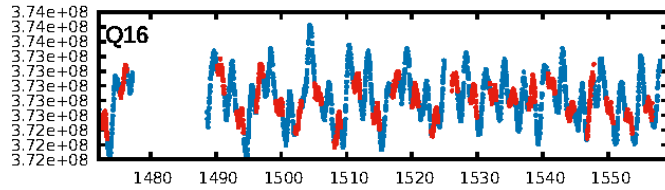
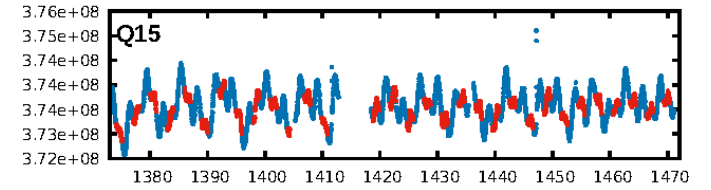
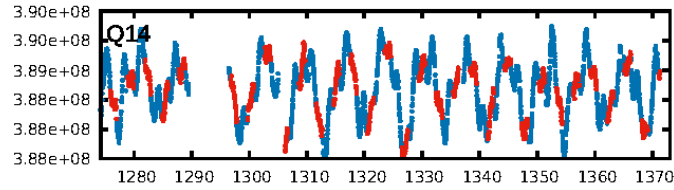
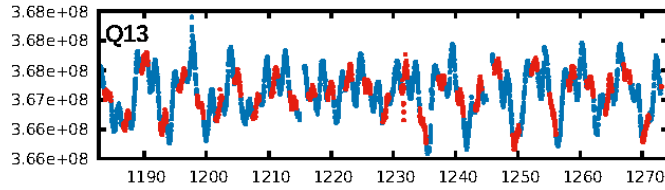
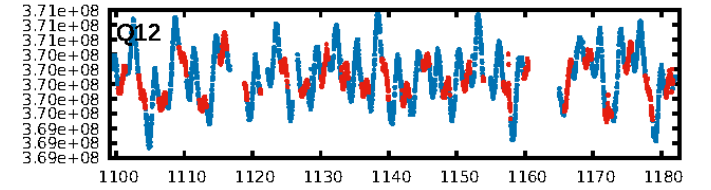
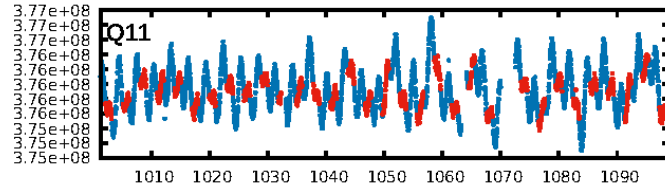
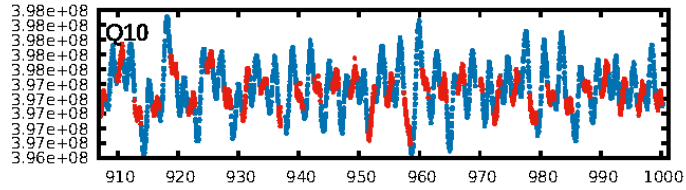
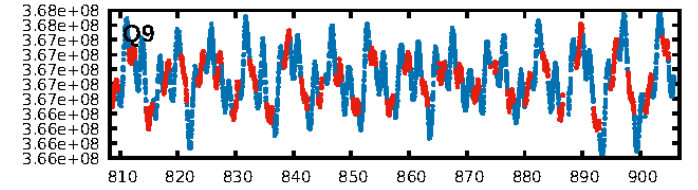
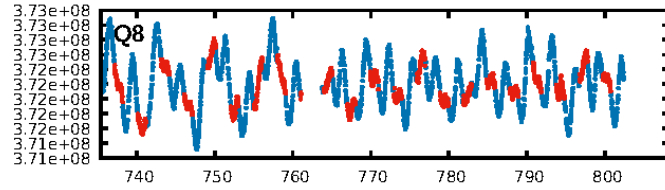
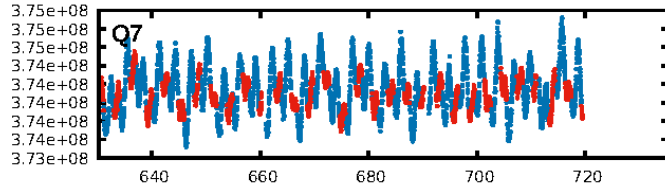
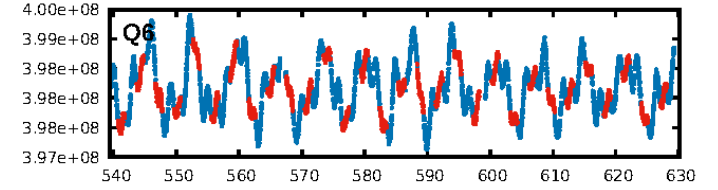
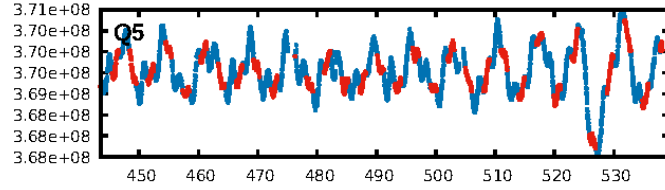
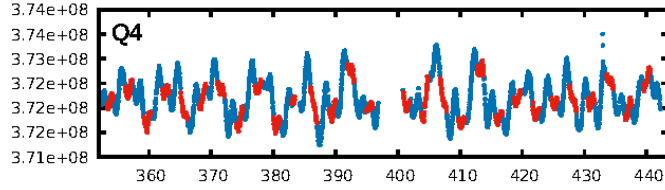
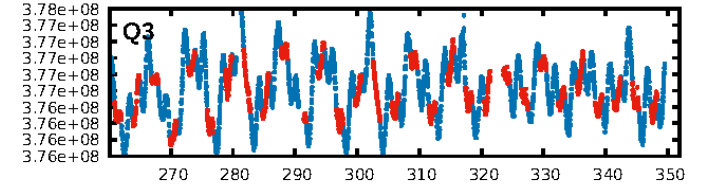
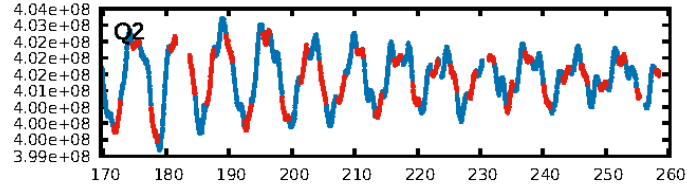
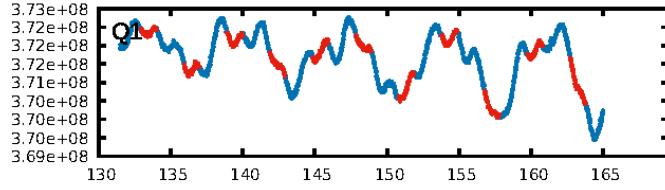
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [301.15σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [428/437]
GhostDiagnostic-chr: 2.817
Centroid-sig: 3.3%
Centroid-so: 2.555 arcsec [1.72σ]
OotOffset-rm: 0.290 arcsec [1.09σ]
KicOffset-rm: 0.412 arcsec [1.64σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 0.00 [0/17]

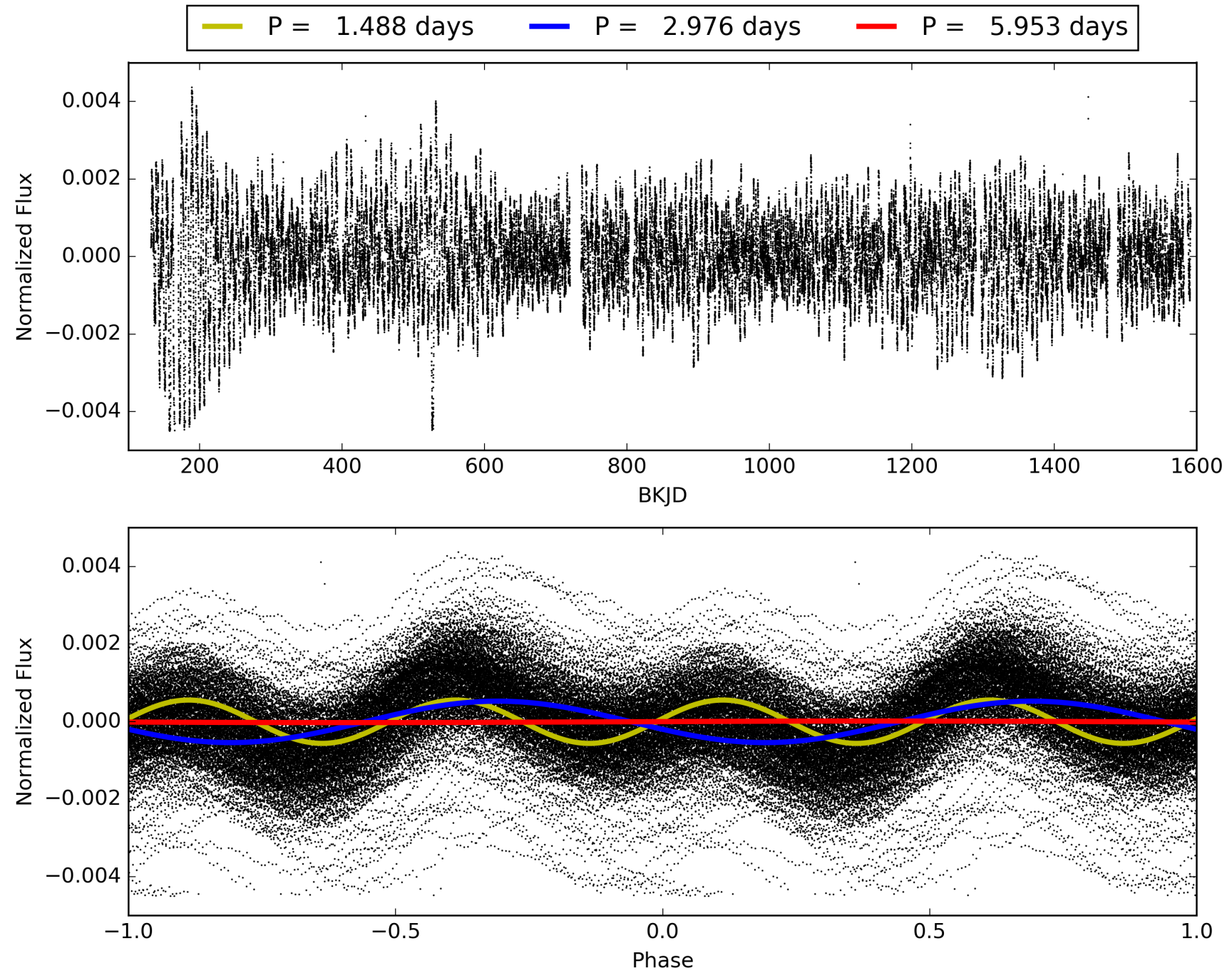
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:36:38 Z

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

TCE 007601917-01, PDC Light Curves

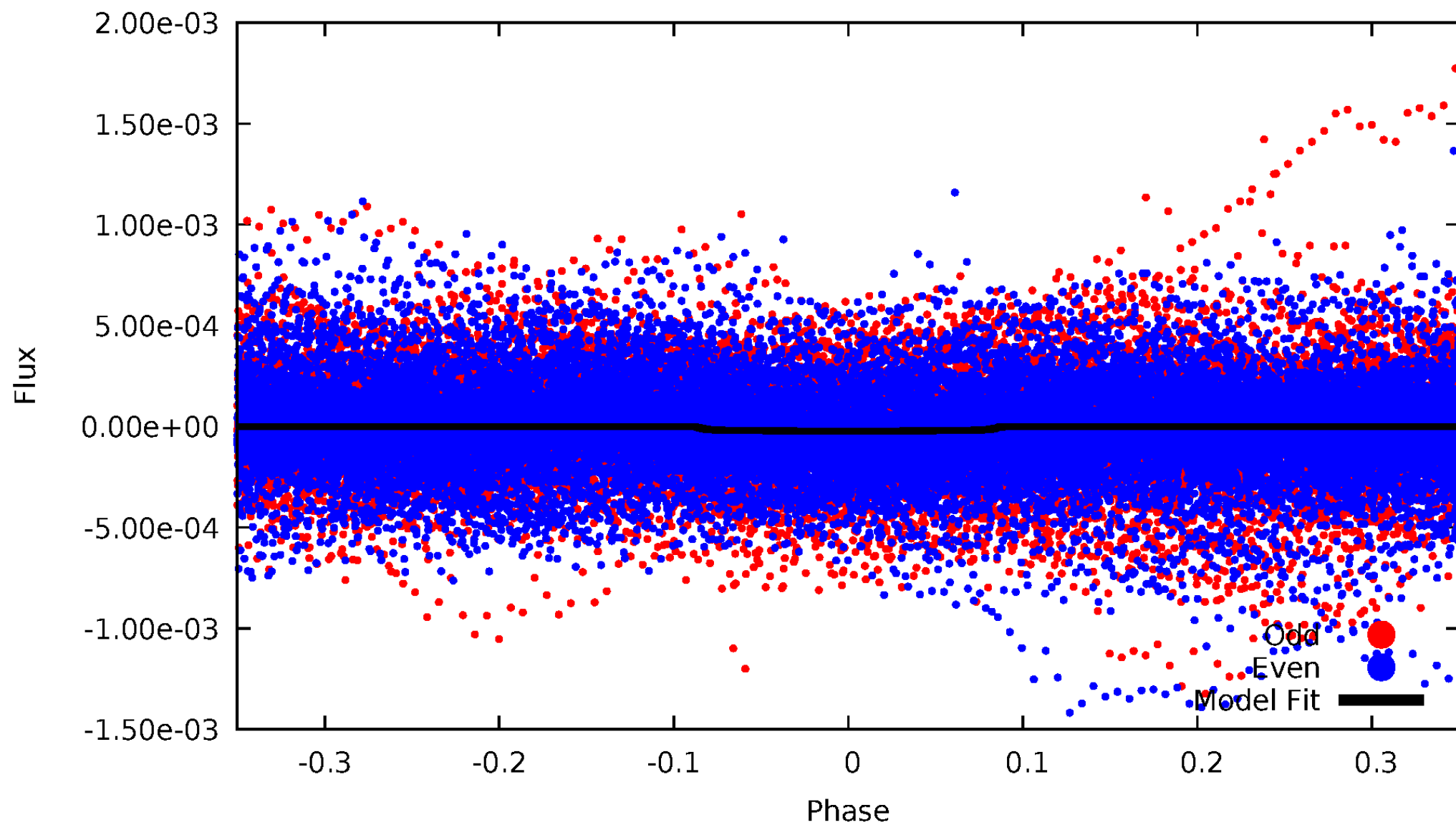


TCE 007601917-01



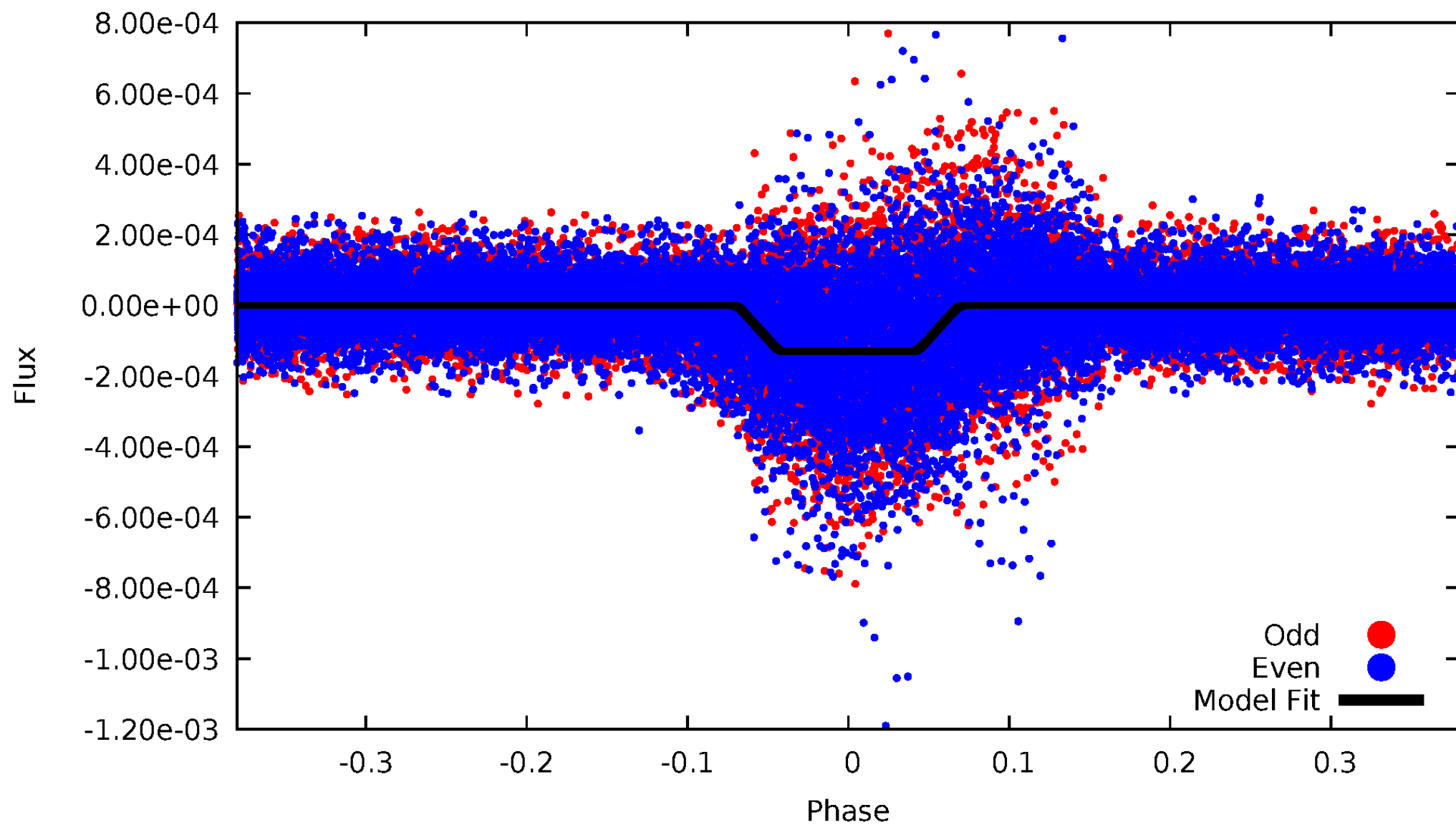
DV Odd/Even

TCE 007601917-01



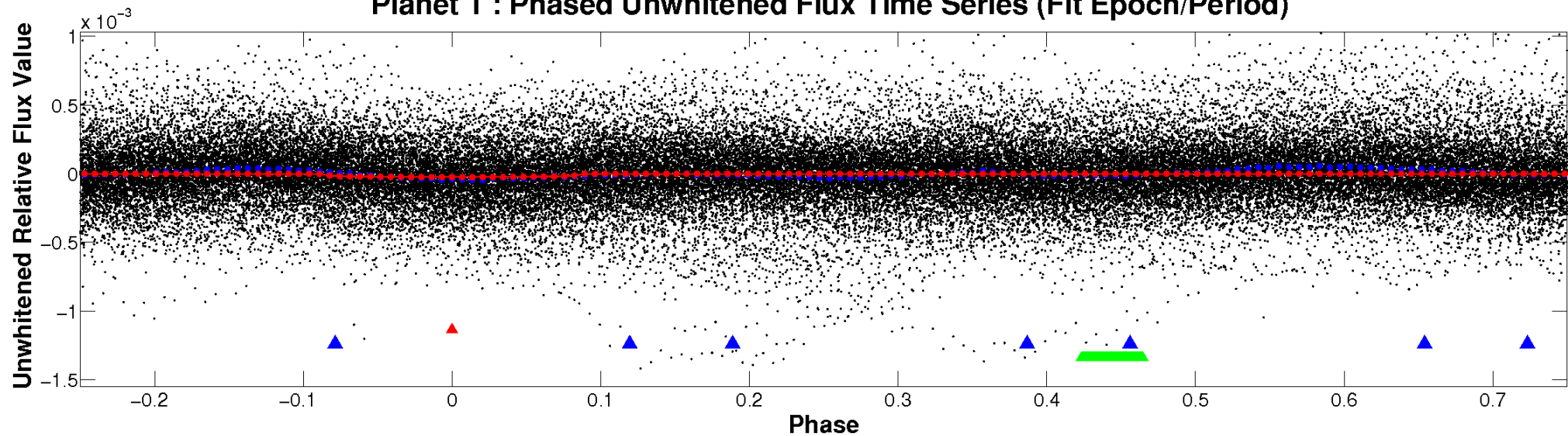
ALT Odd/Even

TCE 007601917-01

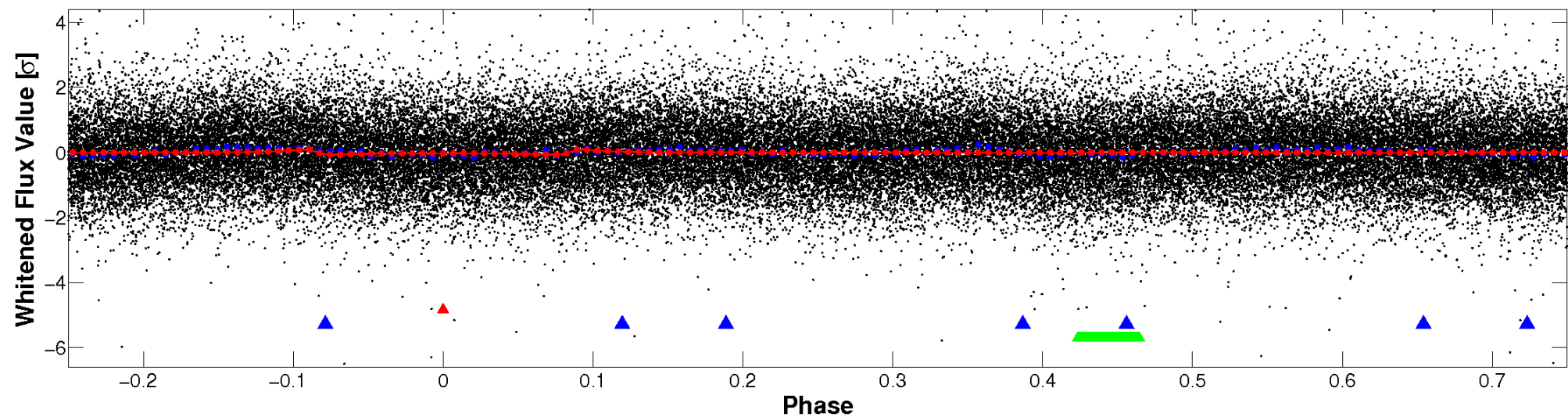


Non-Whitened Vs. Whitened Light Curve

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

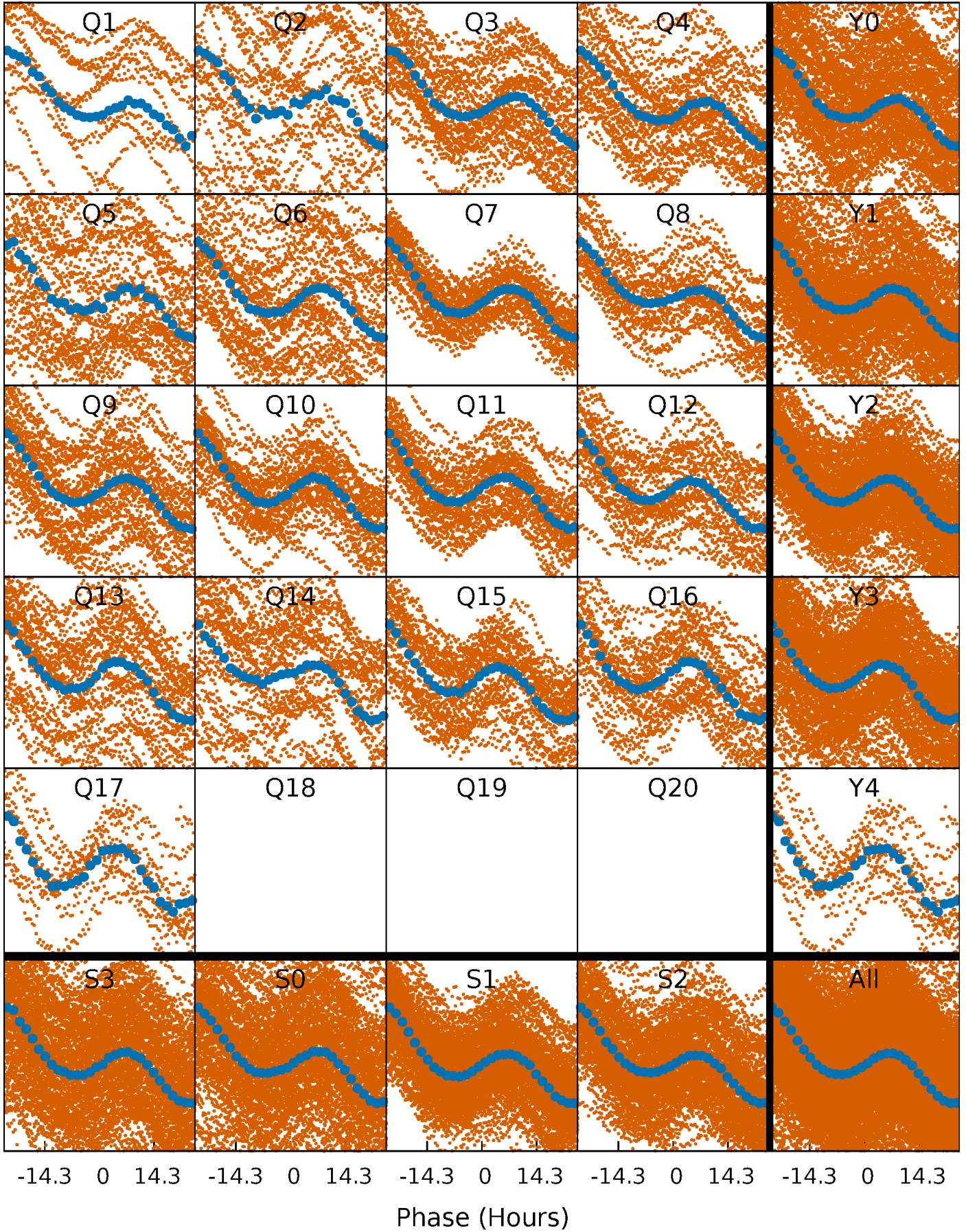


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



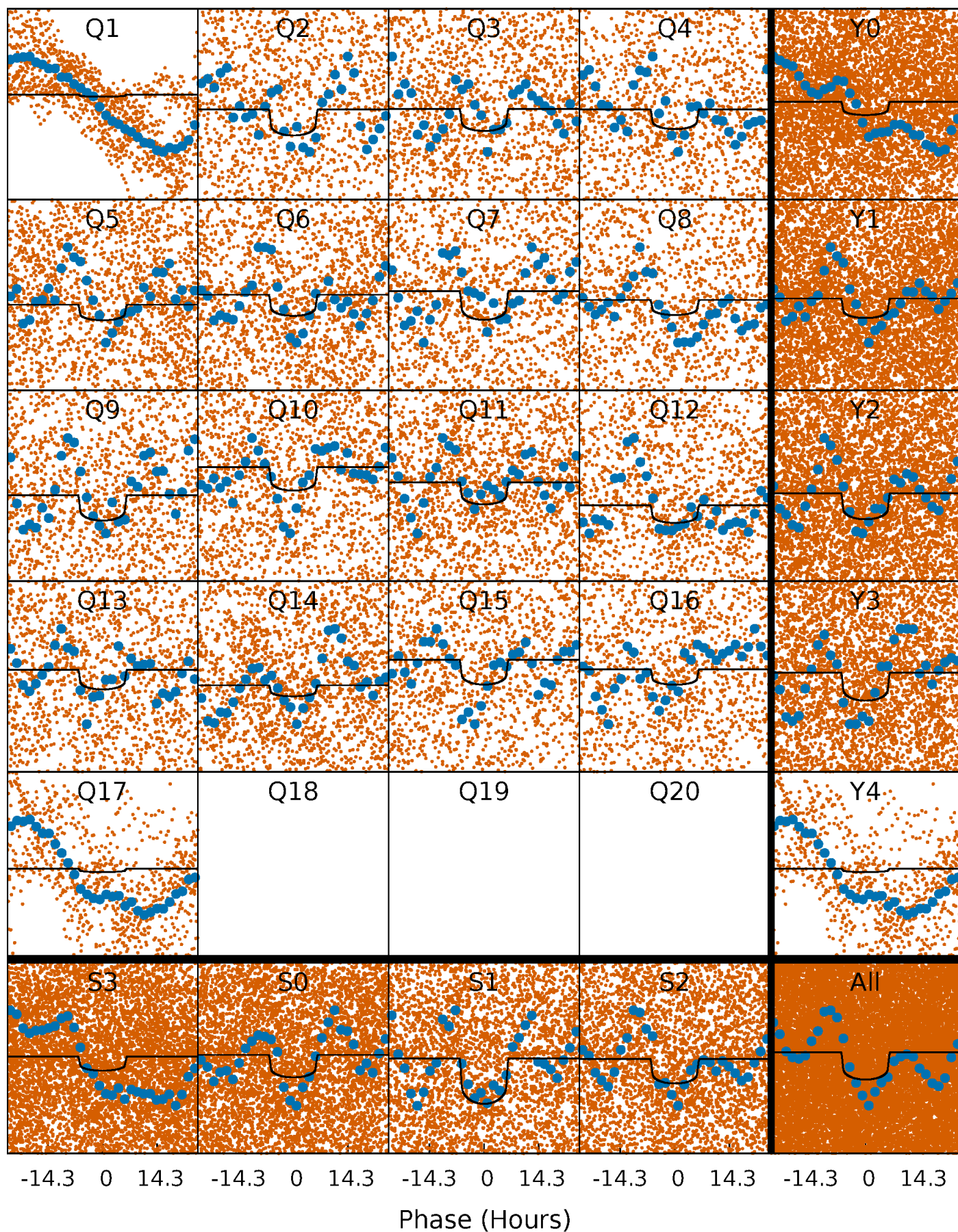
PDC Quarter-Phased Transit Curves

TCE 007601917-01 P= 2.976456 Days $T_0=133.479234$ (BKJD)



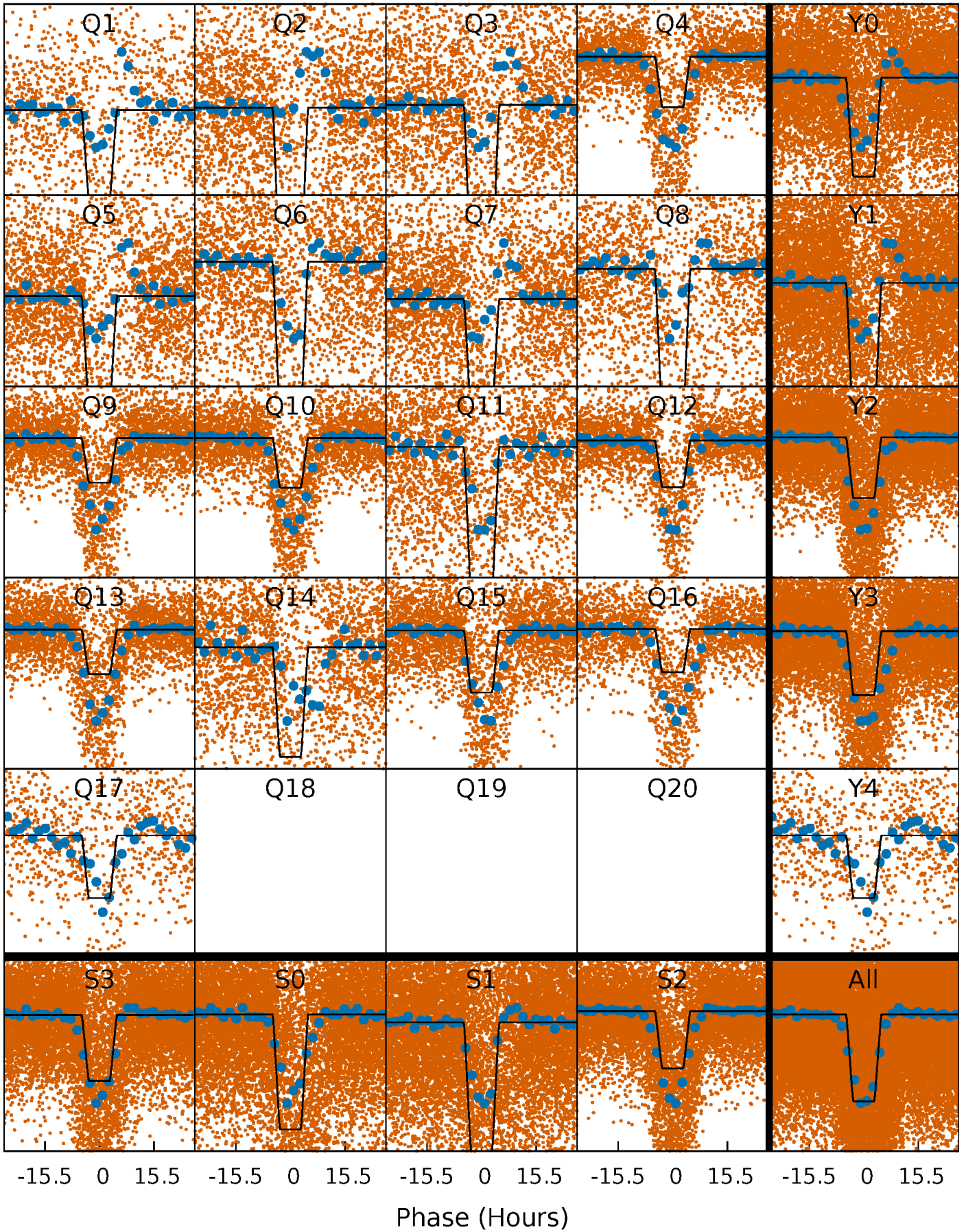
DV Quarter-Phased Transit Curves

TCE 007601917-01 P= 2.976456 Days $T_0=133.479234$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

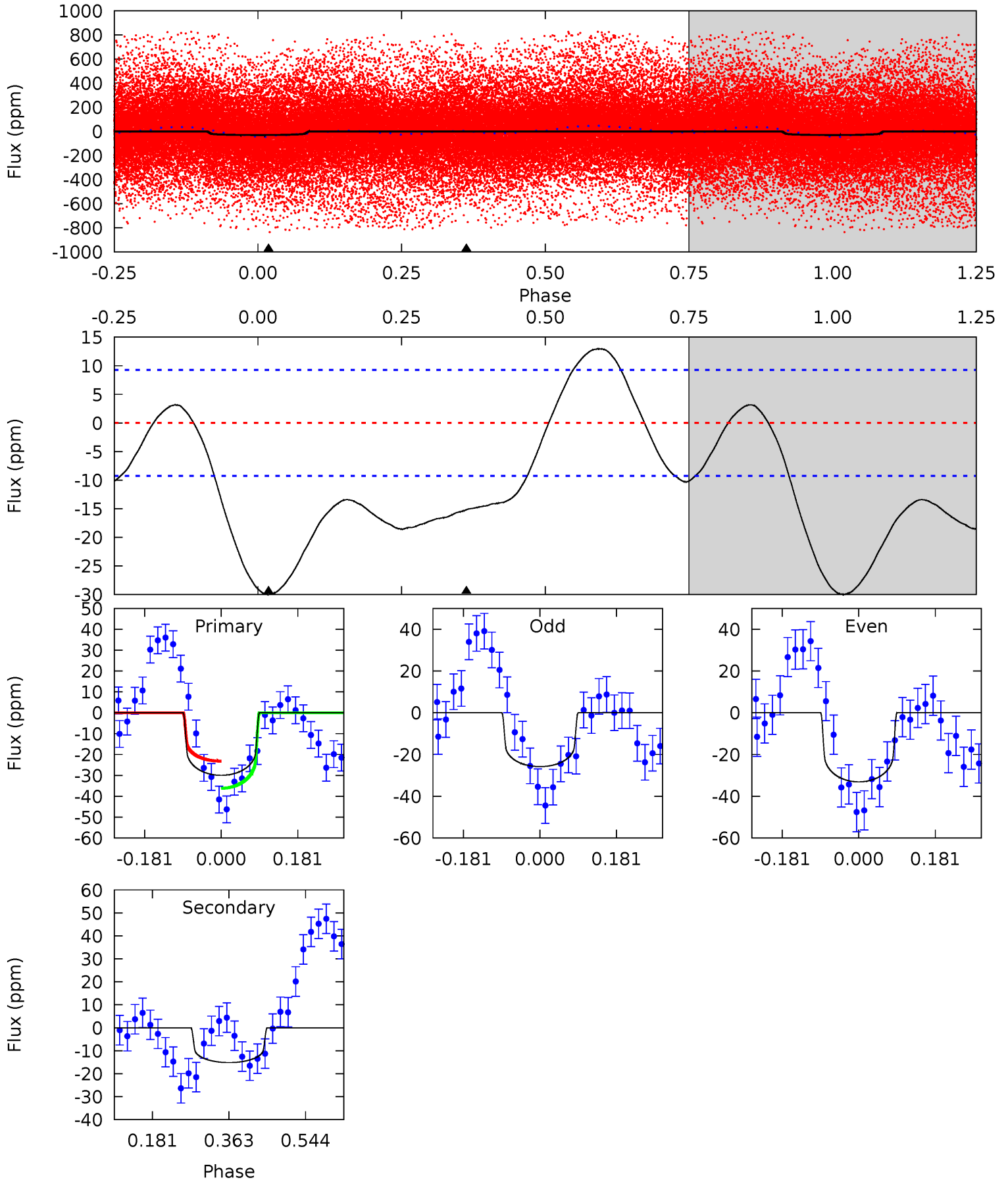
TCE 007601917-01 P= 2.975849 Days $T_0=133.473815$ (BKJD)



DV Model-Shift Uniqueness Test

007601917-01, P = 2.976456 Days, E = 130.502778 Days

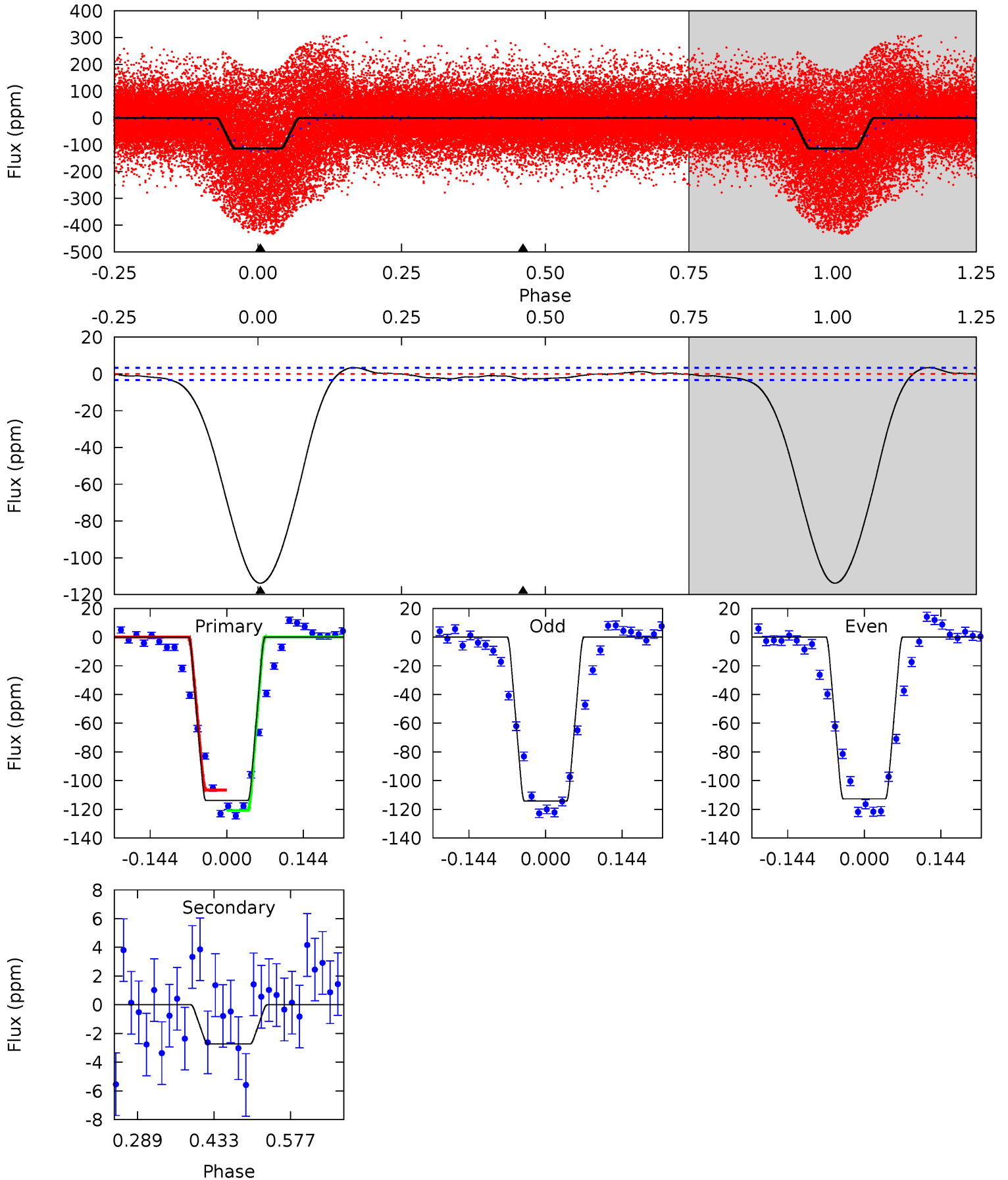
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 14.4 | 7.27 | 0 | 0 | 4.44 | 1.34 | 3.96 | 14.4 | 14.4 | 7.27 | 7.27 | 1.75 | 0.98 | 0.30 | 3.12 |



Alt Model-Shift Uniqueness Test

007601917-01, P = 2.975849 Days, E = 130.497966 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-------|------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 155.6 | 3.73 | 0 | 0 | 4.49 | 1.46 | 2.16 | 155.6 | 155.6 | 3.73 | 3.73 | 1.09 | 1.11 | 0.03 | 9.64 |



Stellar Parameters For KIC 007601917

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 6227^{+74}_{-81} | $3.787^{+0.202}_{-0.067}$ | $0.120^{+0.150}_{-0.100}$ | $2.566^{+0.339}_{-0.629}$ | $1.471^{+0.190}_{-0.190}$ | $0.123^{+0.134}_{-0.034}$ |
| | +1%/-1% | +5%/-2% | +125%/-83% | +13%/-25% | +13%/-13% | +109%/-27% |
| Source | SPE68 | SPE68 | SPE68 | DSEP | | |

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007601917-01 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|-------------|------------------------|----------------------|-----------------------|---------------------------|
| DV | -15 ± 2 | $1.40^{+0.29}_{-0.28}$ | 2825^{+108}_{-185} | 5373^{+516}_{-353} | $9.247^{+4.927}_{-2.842}$ |
| Alt. | -3 ± 1 | $3.10^{+0.38}_{-0.41}$ | 2830^{+104}_{-162} | 2316^{+433}_{-4779} | $0.341^{+0.140}_{-0.105}$ |

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

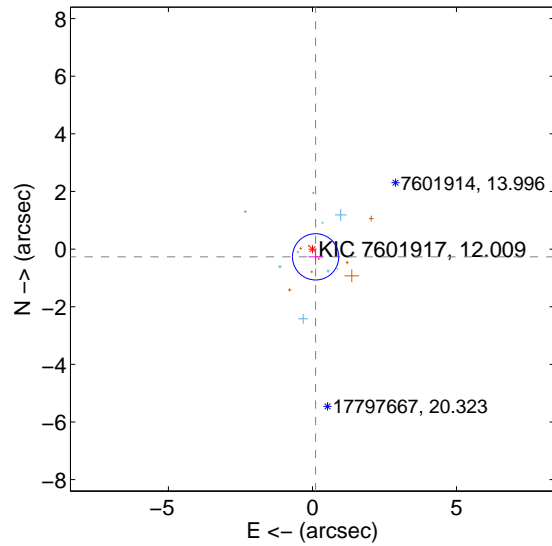
Supplemental centroid analysis for 007601917-01. Kepler magnitude: 12.01. Transit SNR 6.18

There are 9 quarters with good PRF difference image offsets

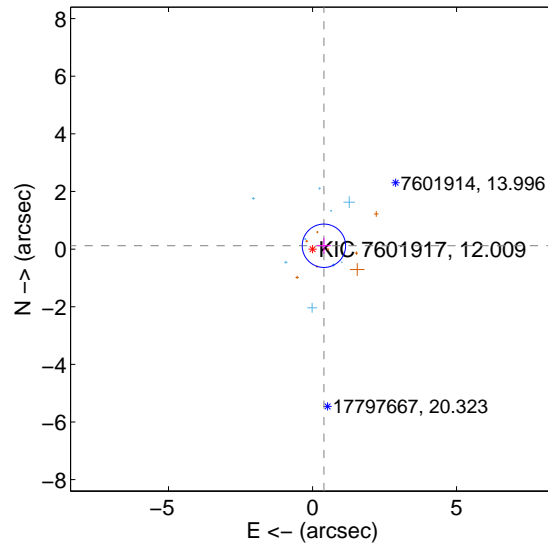
The direct PRF centroid is offset from the target star catalog position by about 0.56 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 0.290 ± 0.267 | 1.09 | -0.110 ± 0.250 | -0.269 ± 0.272 |
| PRF-fit source offset from KIC position | 0.412 ± 0.251 | 1.64 | -0.395 ± 0.244 | 0.116 ± 0.273 |
| photometric centroid source offset | 2.55 ± 1.48 | 1.72 | 2.54 ± 1.48 | 0.26 ± 1.41 |

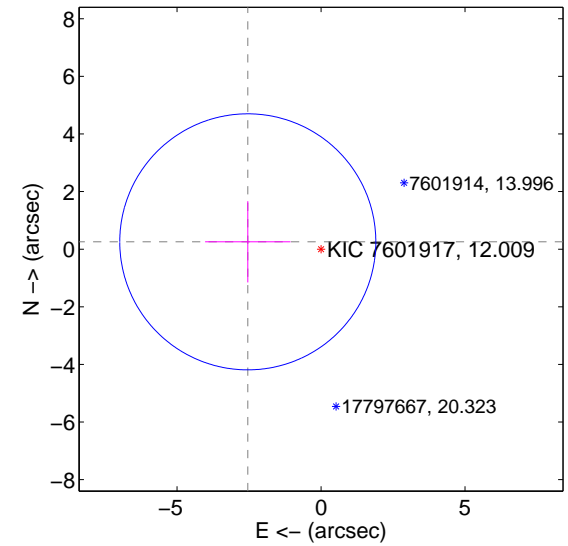
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

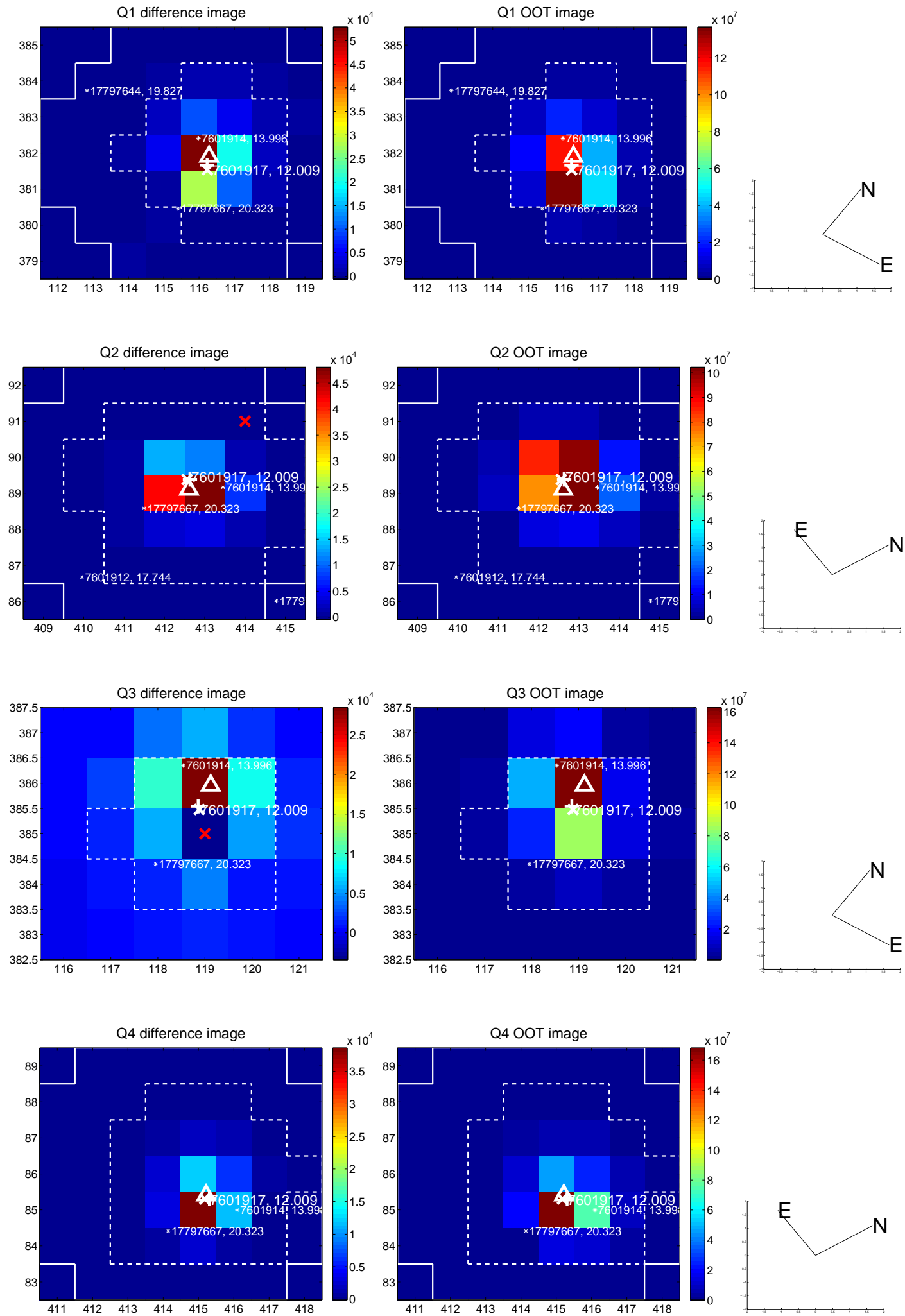


offset from photometric centroids

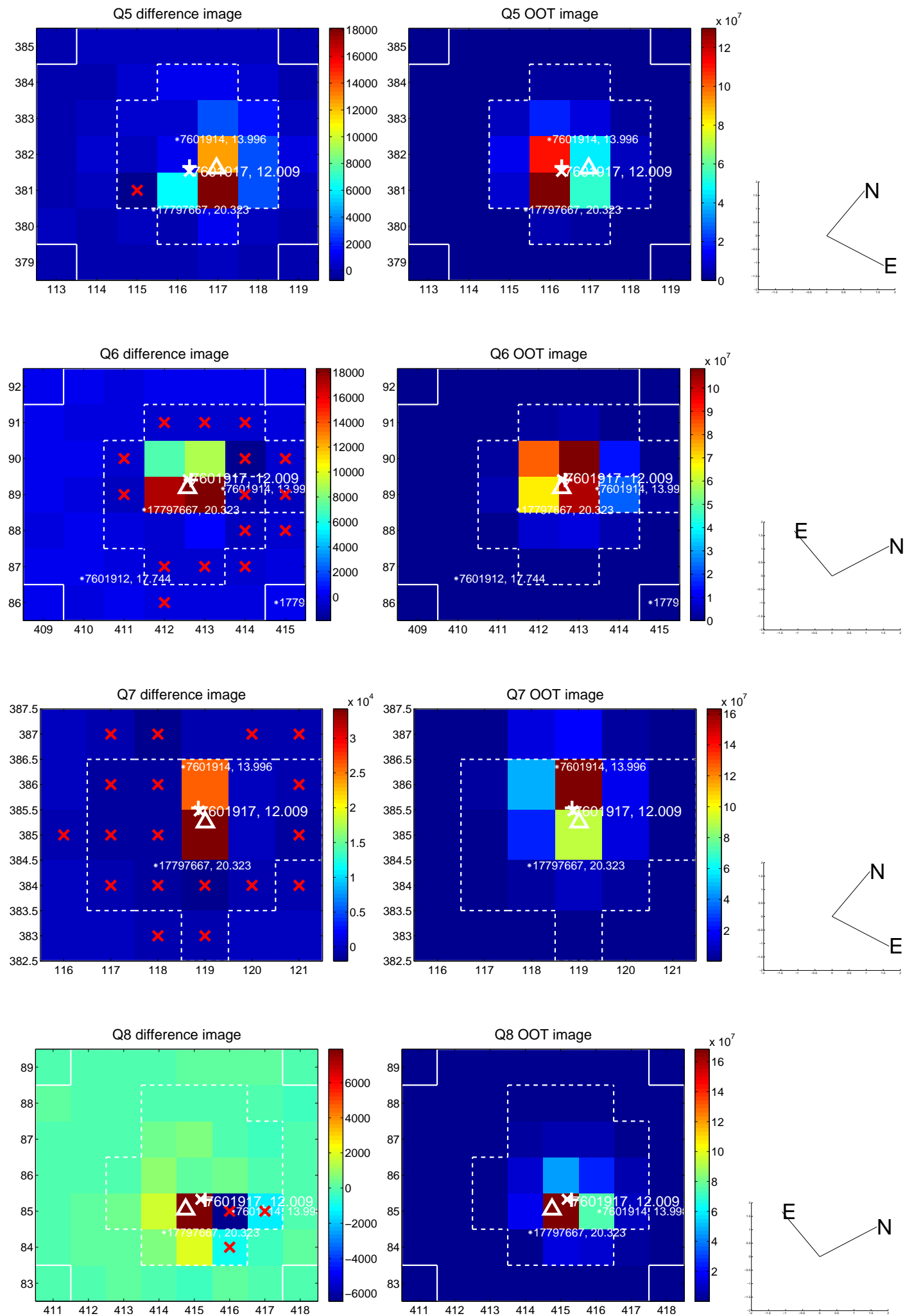


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

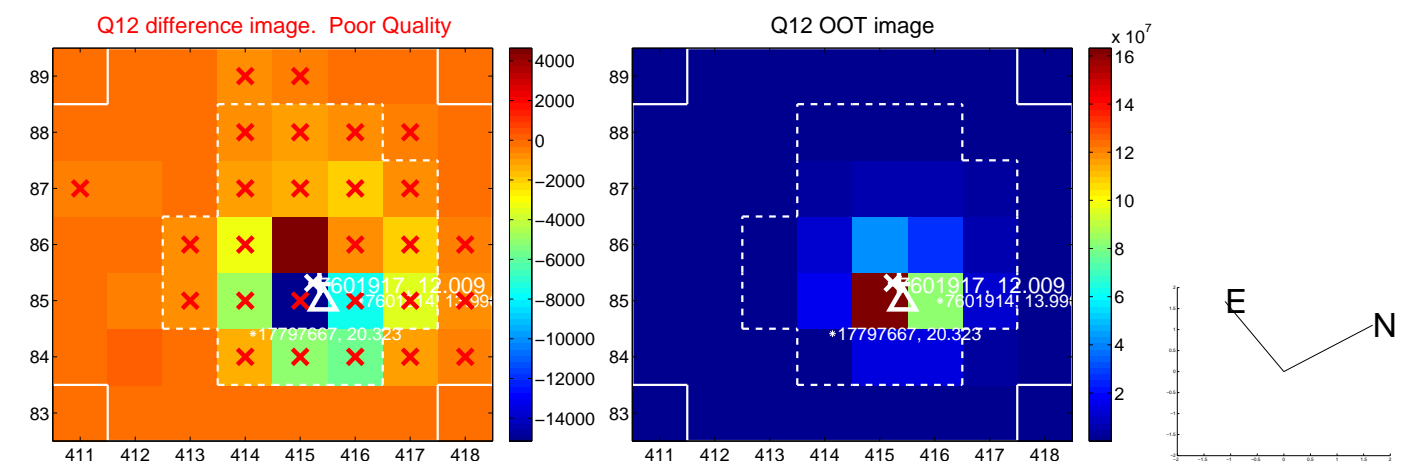
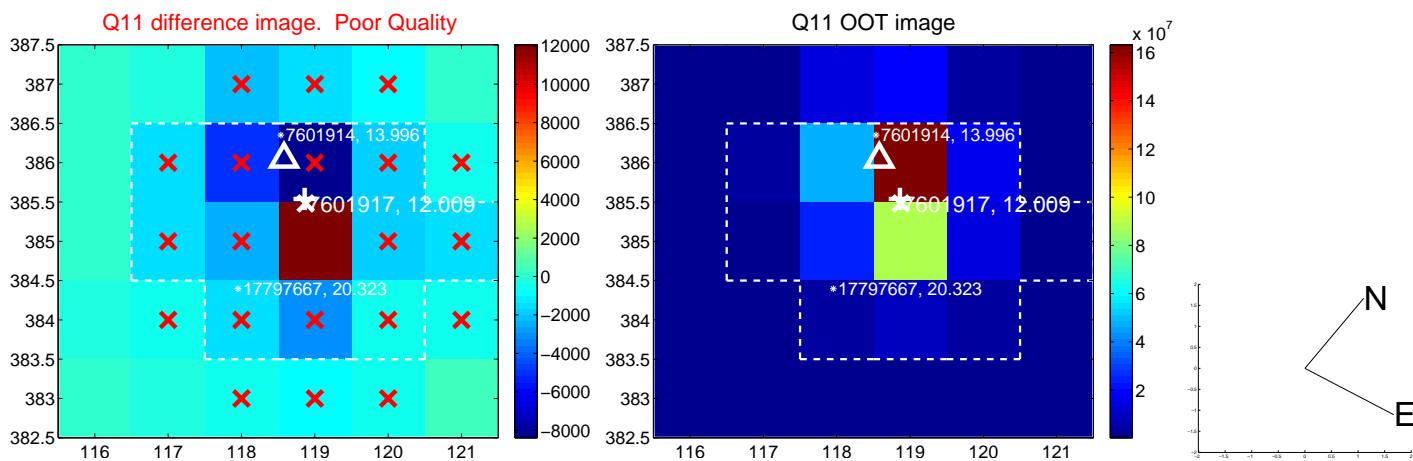
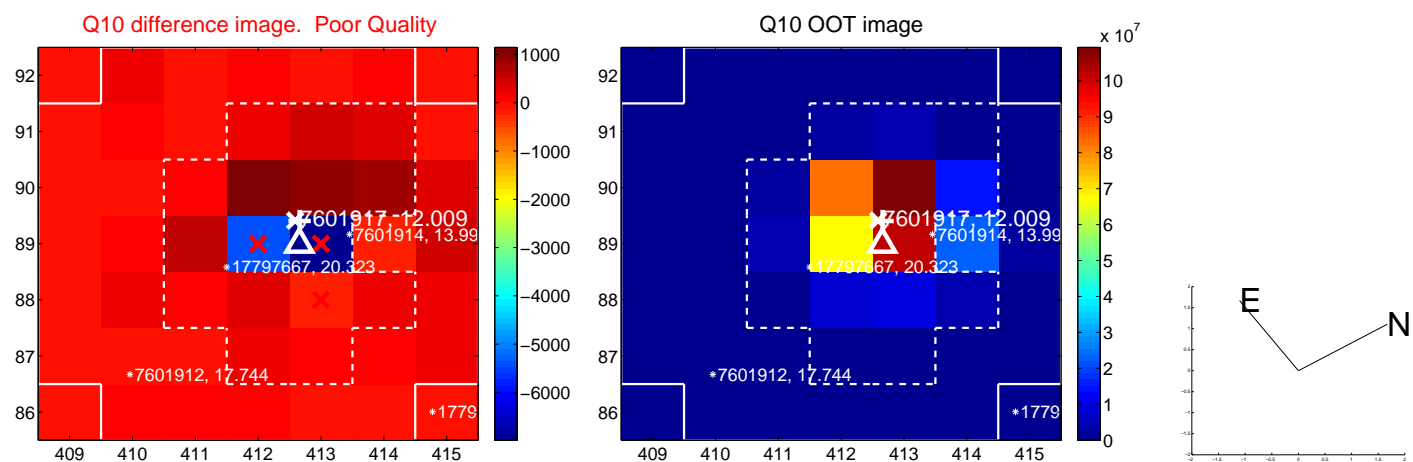
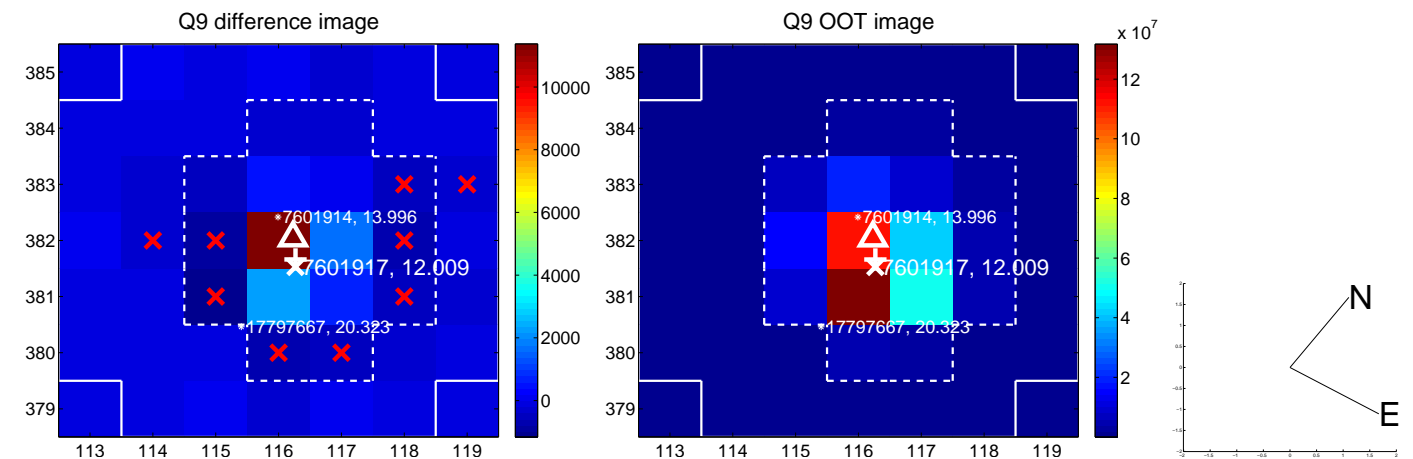
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



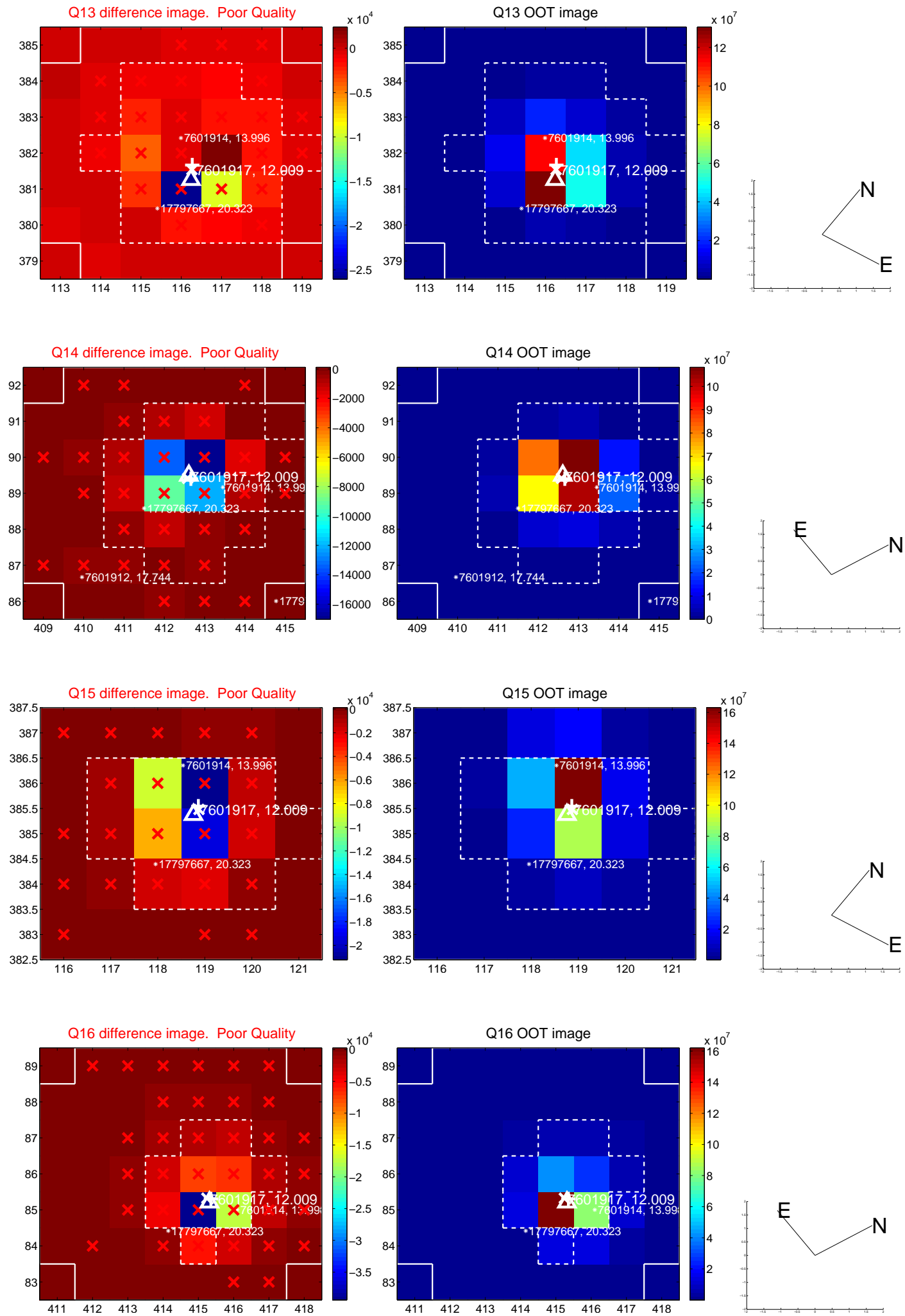
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



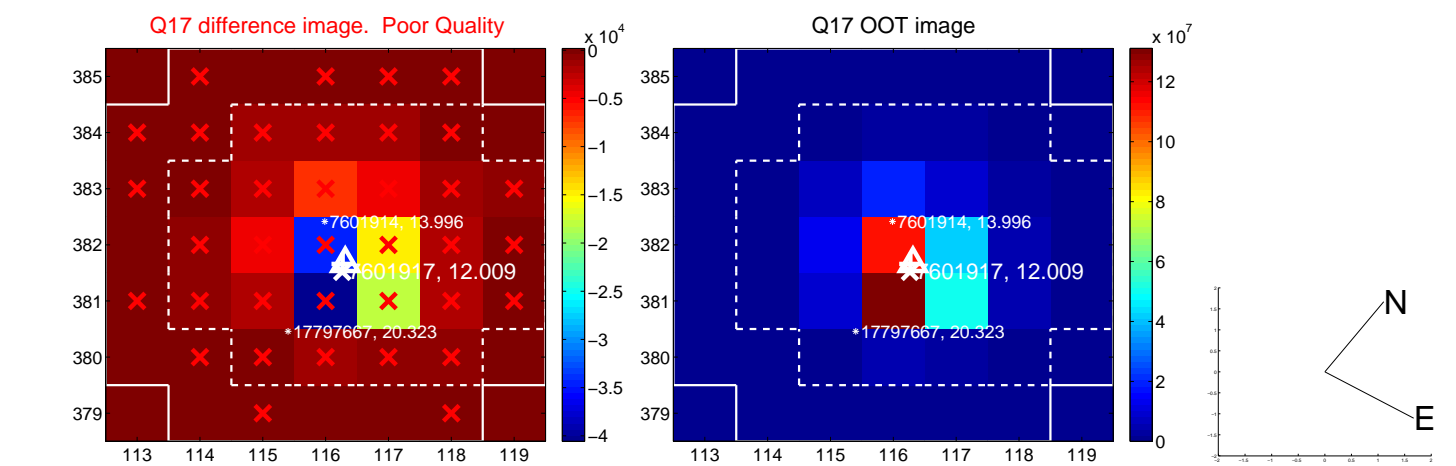
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



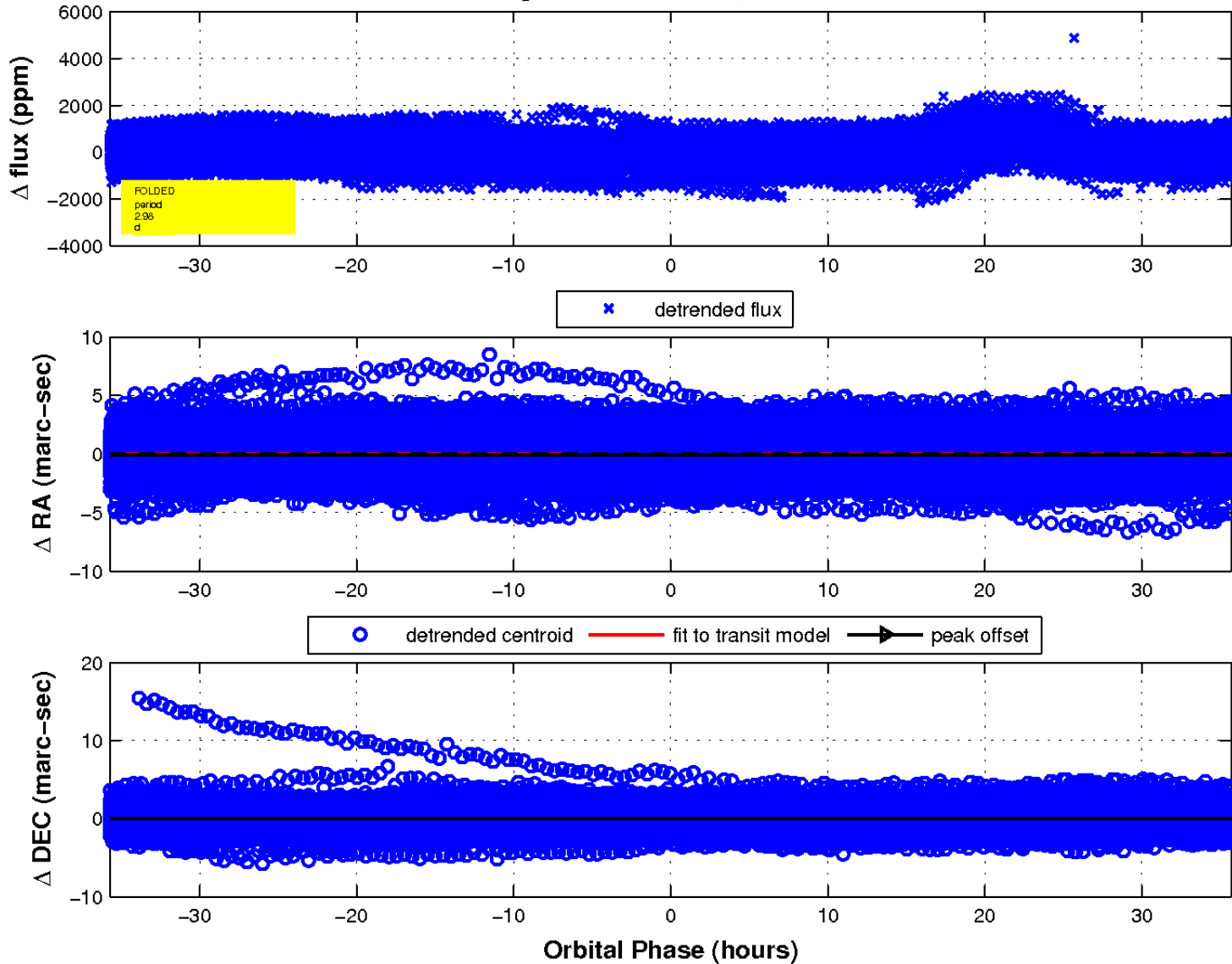
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

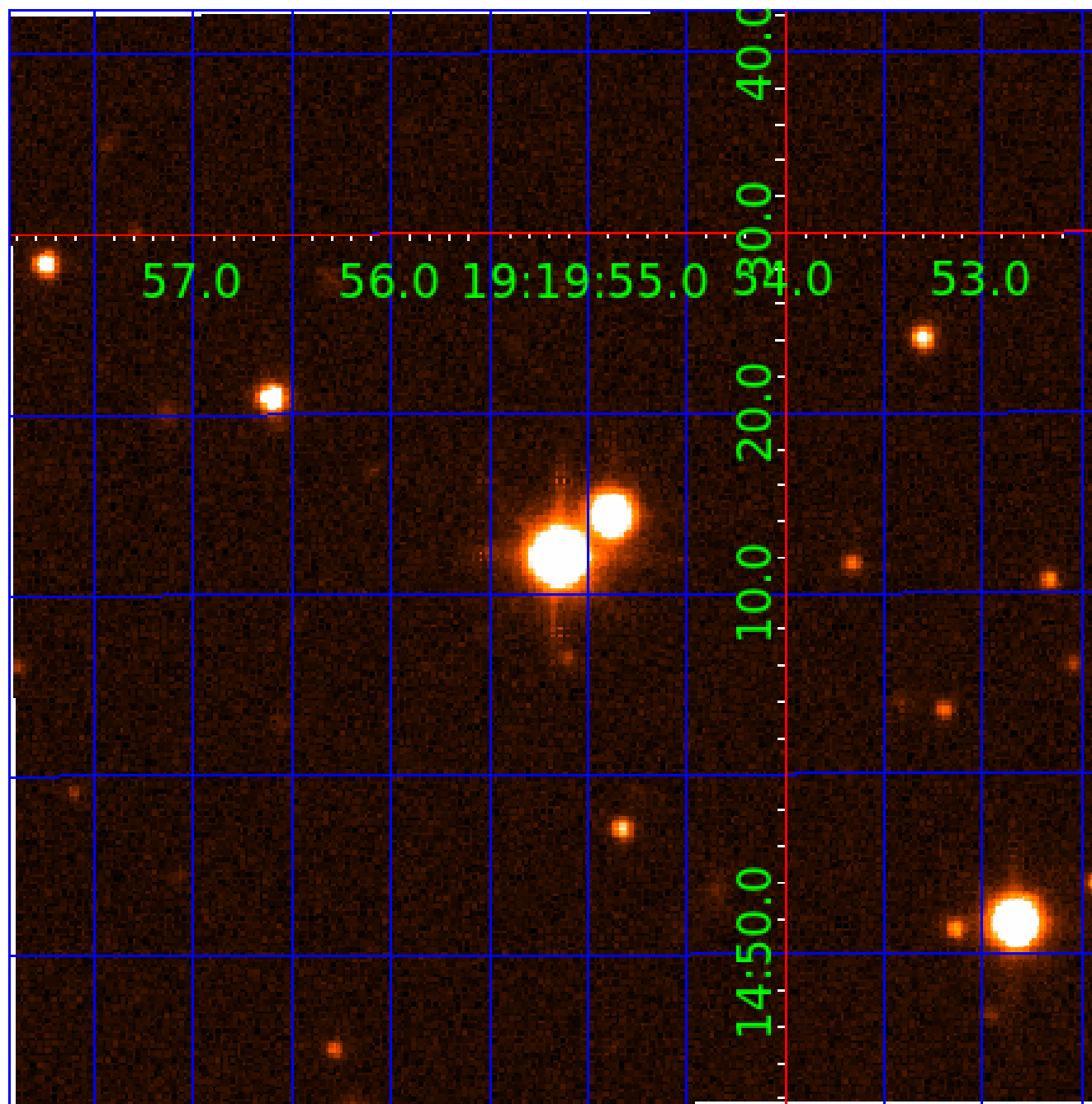


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 007601917

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
| 007601917-01 | OBS | No | 2.976456 | 133.479234 | 23.2 | 12.508 | 9.8 | 6.2 | 2.57 | 6227 | 1.45 | 4180.69 |
| 007601917-02 | OBS | No | 215.100452 | 267.775542 | 261.5 | 11.372 | 12.6 | 5.6 | 2.57 | 6227 | 4.47 | 13.89 |
| 007601917-03 | OBS | No | 2.976206 | 131.885609 | 98.2 | 10.500 | 11.2 | -1.0 | 2.57 | 6227 | 2.54 | 4181.16 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 007601917-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—CENT_KIC_POS |
| 007601917-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS |
| 007601917-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS |

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

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

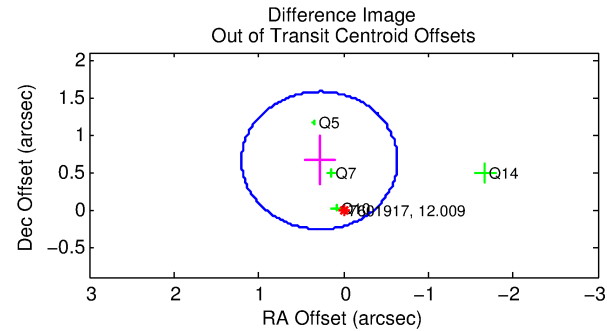
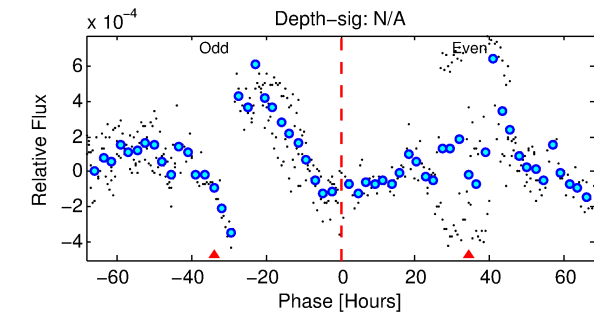
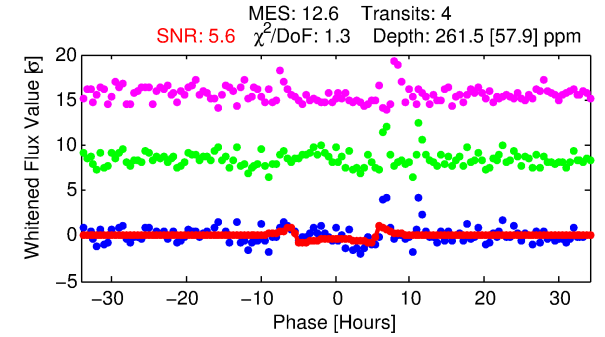
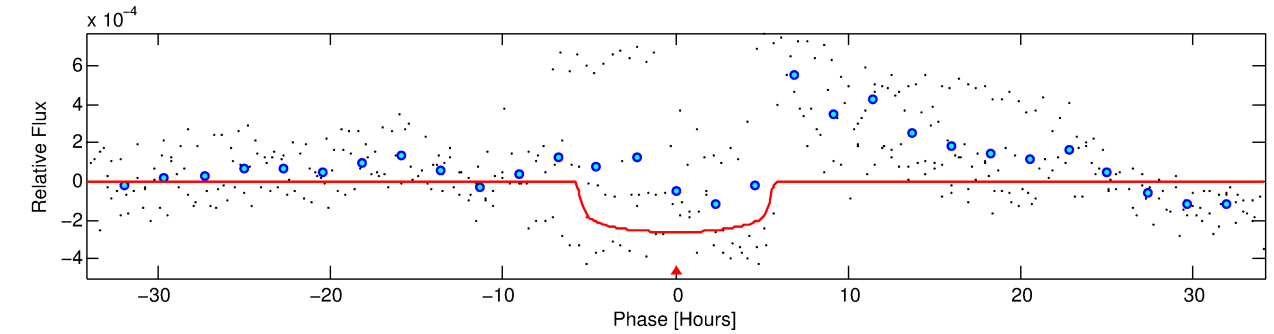
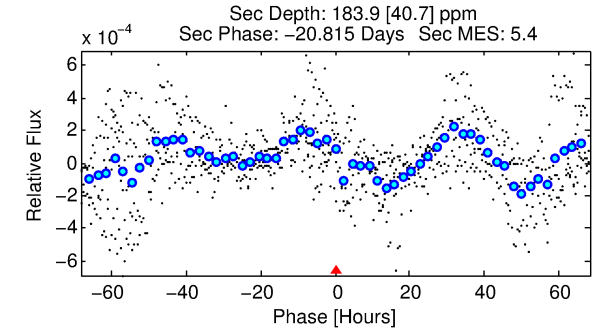
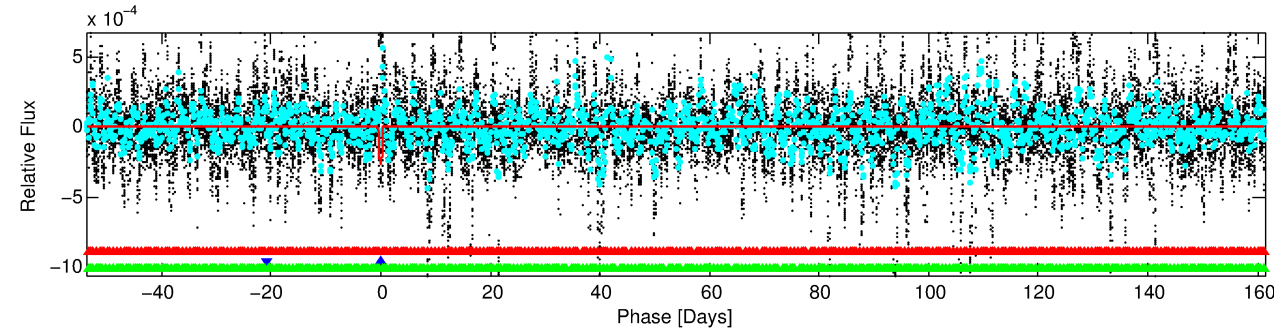
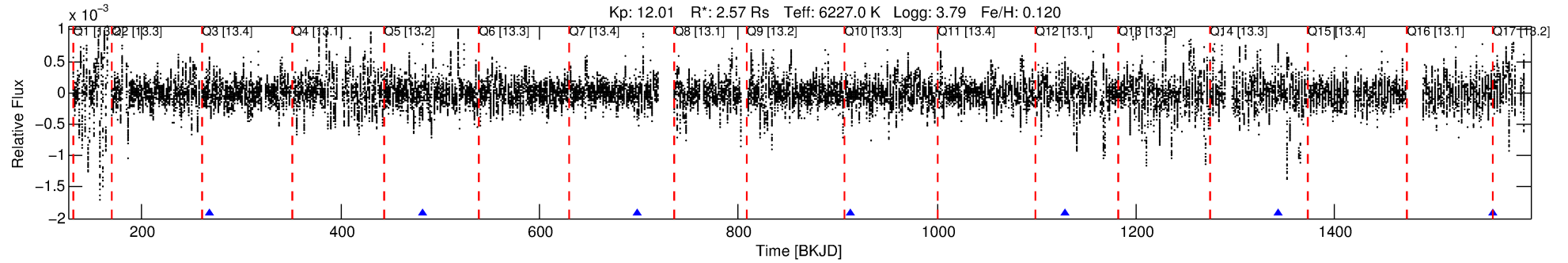
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007601917-02

No Significant Match Found

DV One-Page Summary

KIC: 7601917 Candidate: 2 of 3 Period: 215.100 d



DV Fit Results:

Period = 215.10045 [0.00426] d
Epoch = 267.7755 [0.0131] BKJD
Rp/R* = 0.0159 [0.0046]
a/R* = 103.05 [128.22]
b = 0.72 [0.83]
Seff = 13.89 [4.92]
Teff = 492 [44] K
Rp = 4.47 [1.69] Re
a = 0.7992 [0.1800] AU
Ag = 3240.15 [2304.90] [1.41] σ
Teffp = 5742 [892] K [5.88] σ

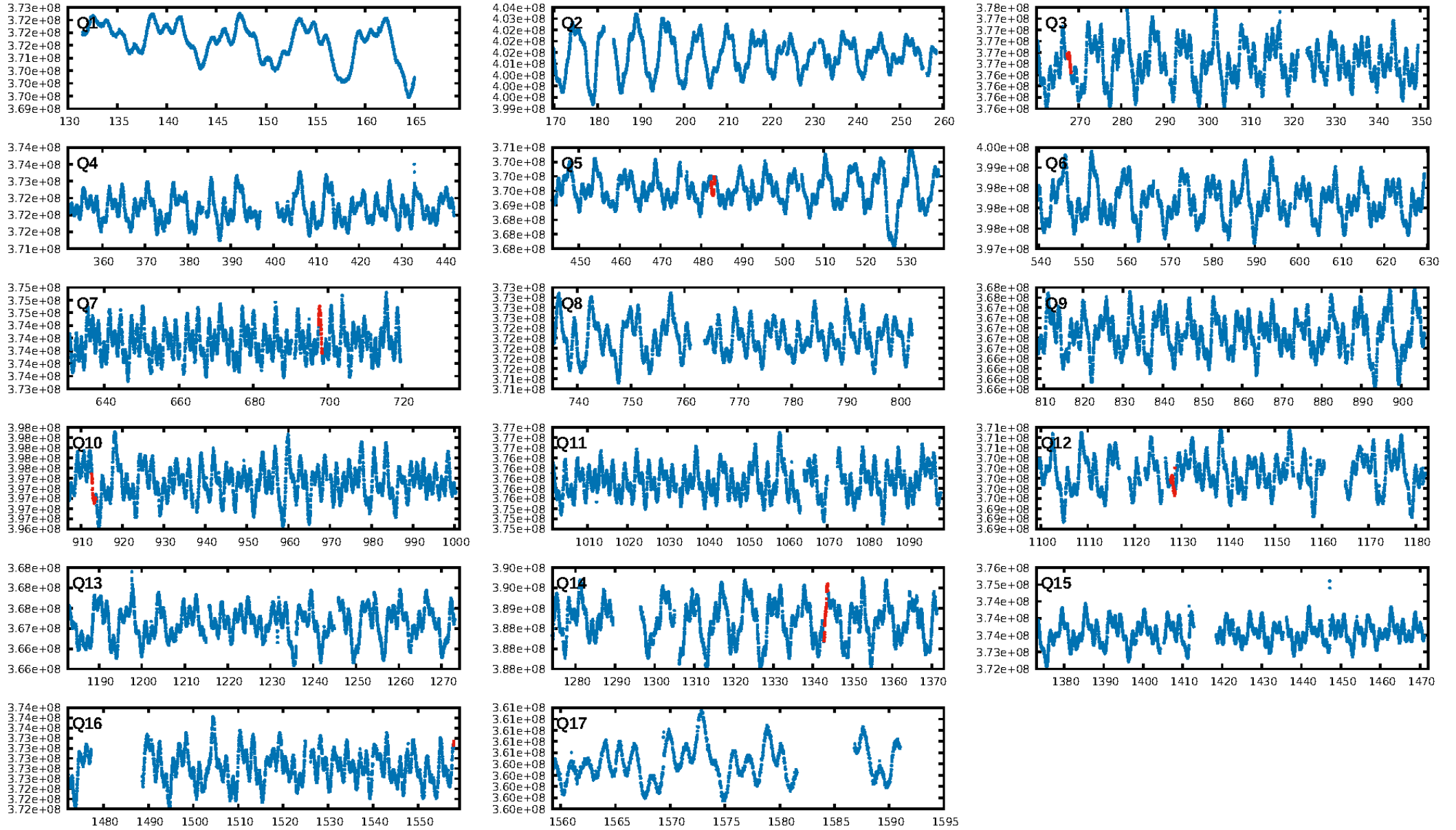
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [301.15 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 8.1%
ModelChiSquareGof-sig: 8.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 29.55
Centroid-sig: 3.6%
Centroid-so: 1.156 arcsec [1.06 σ]
OotOffset-rm: 0.714 arcsec [2.33 σ]
KicOffset-rm: 0.952 arcsec [2.35 σ]
OotOffset-st: 2/1/0/1 [4]
KicOffset-st: 2/1/0/1 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.00 [0/4]

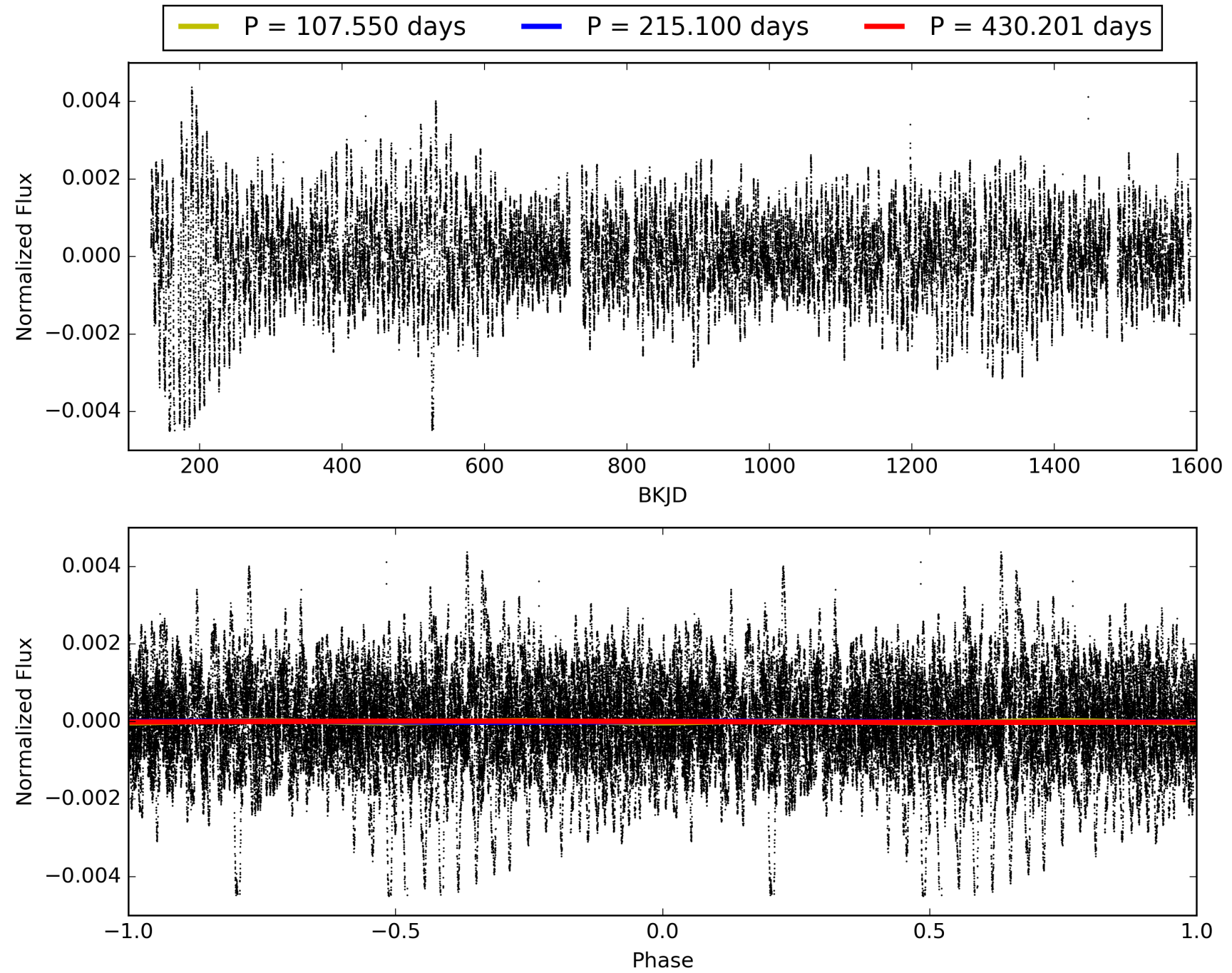
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:36:49 Z

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

TCE 007601917-02, PDC Light Curves

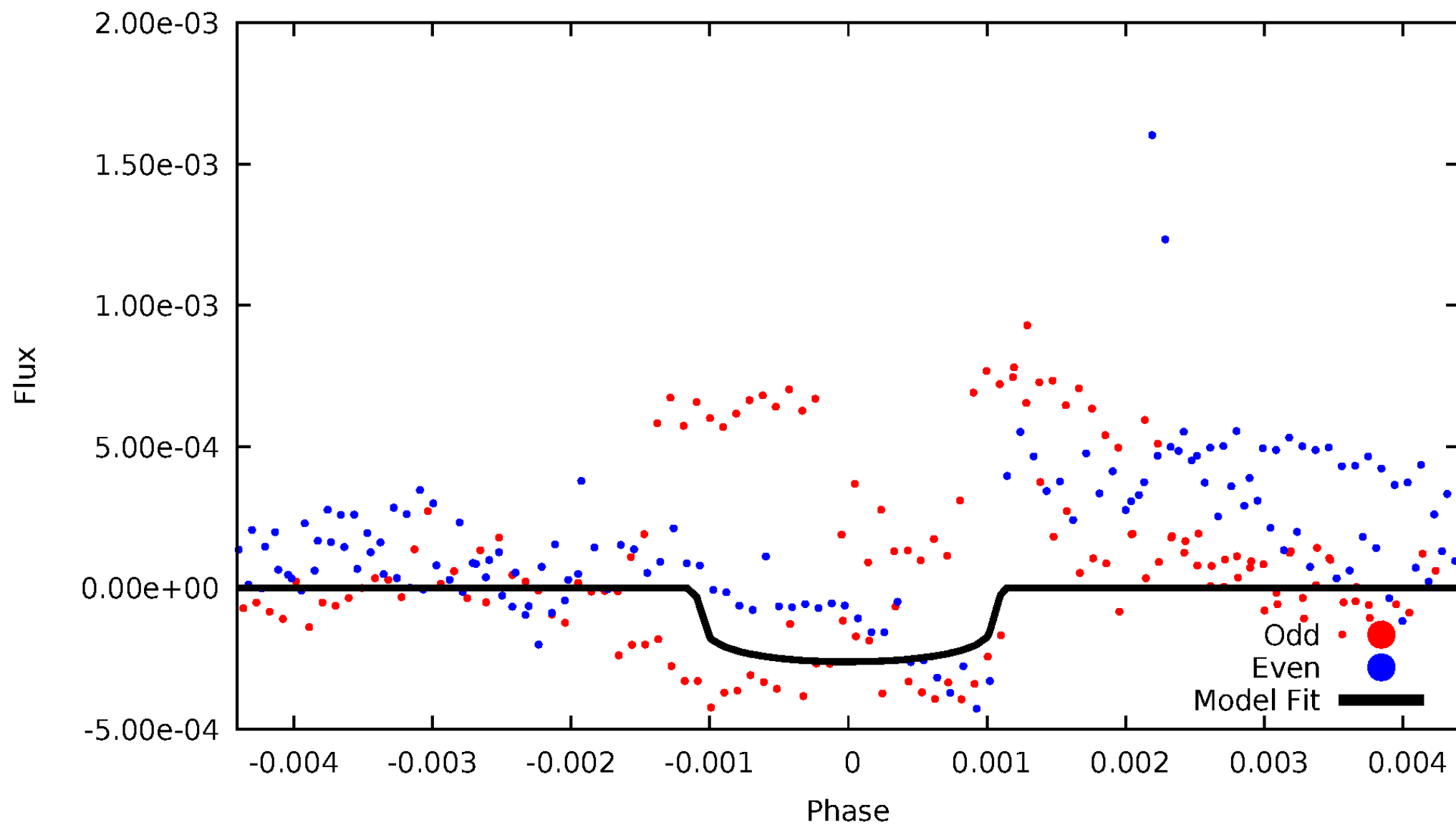


TCE 007601917-02



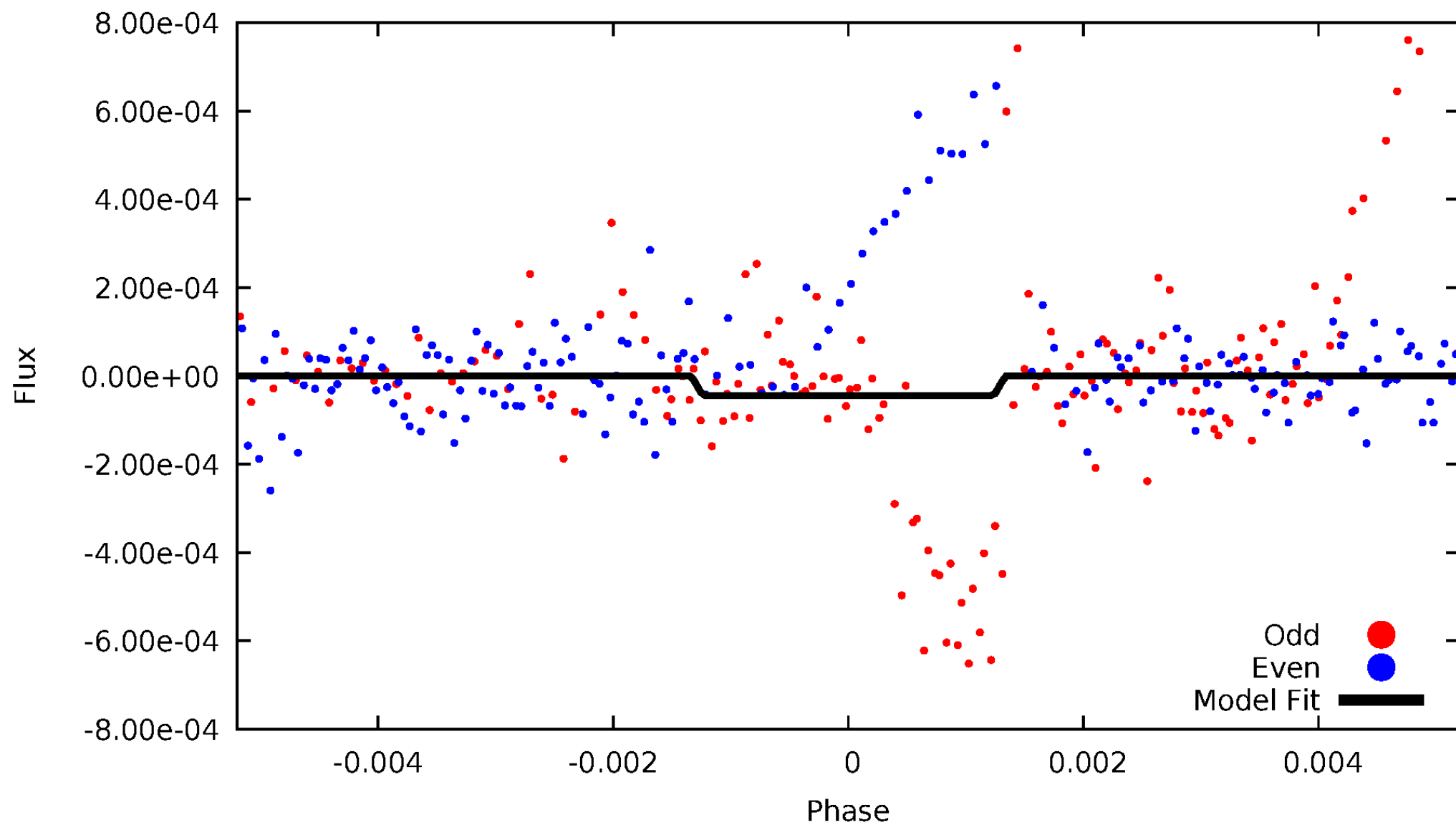
DV Odd/Even

TCE 007601917-02



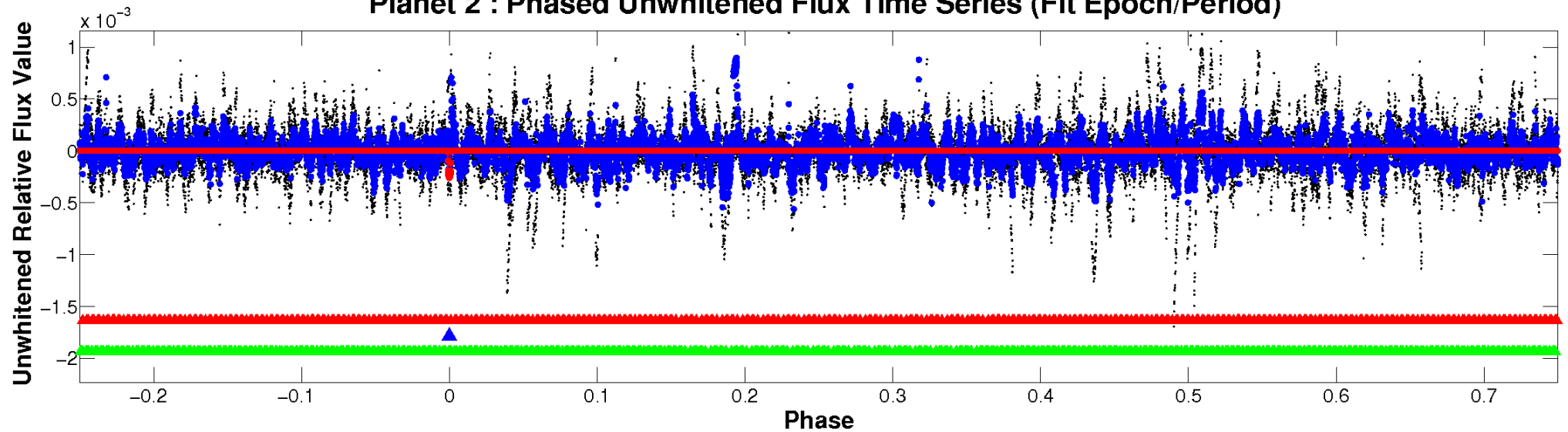
ALT Odd/Even

TCE 007601917-02

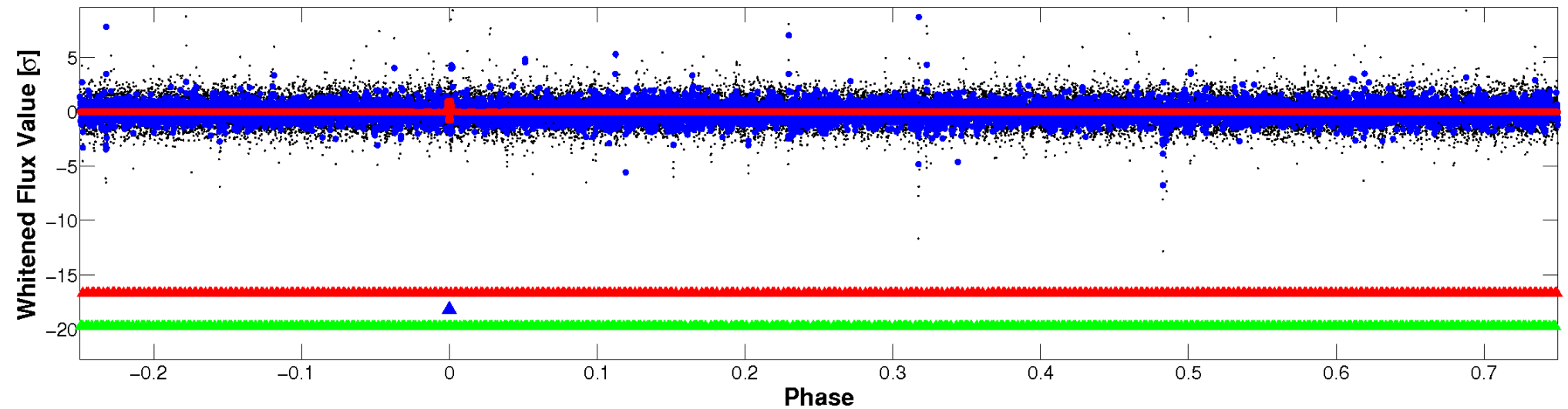


Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

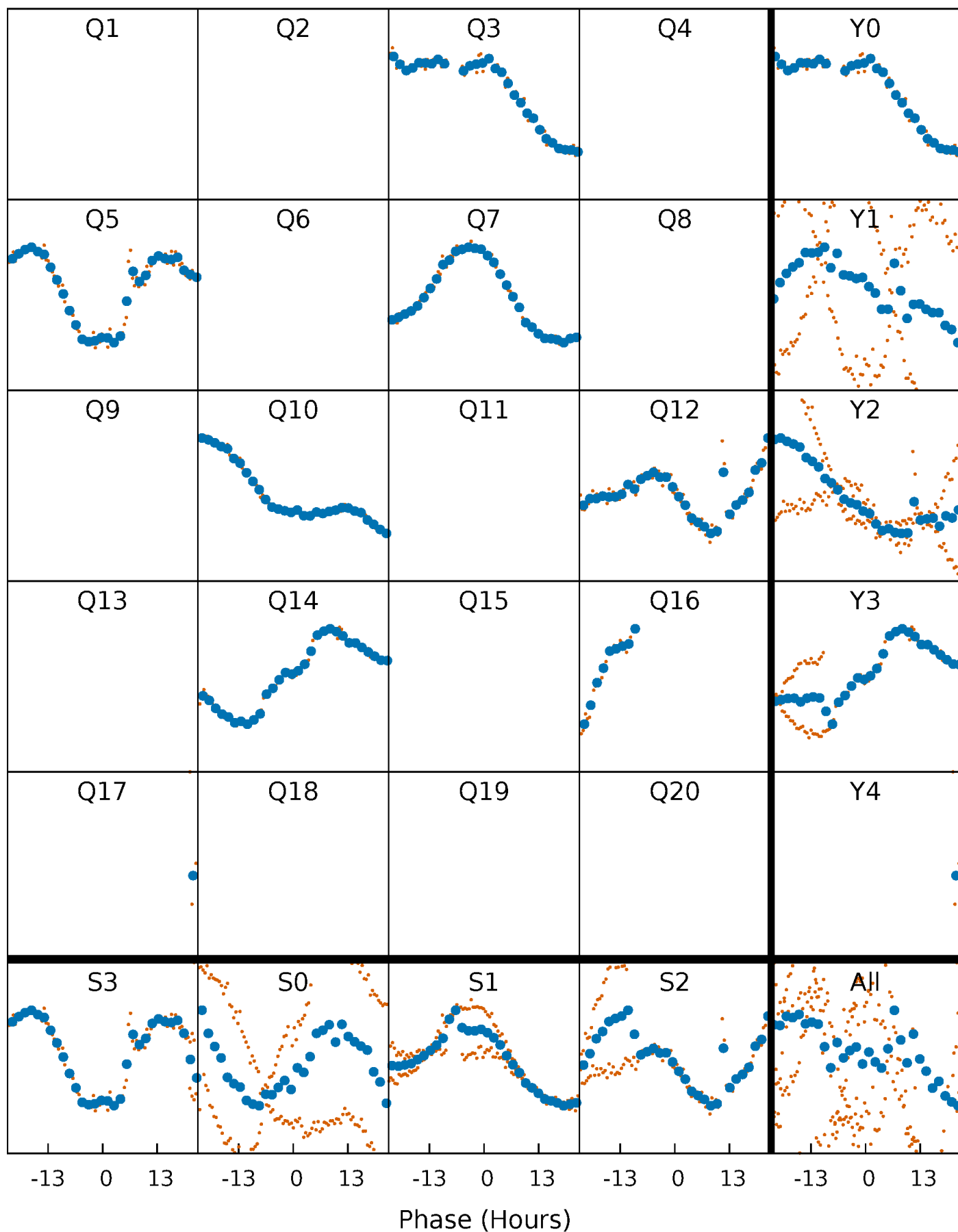


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



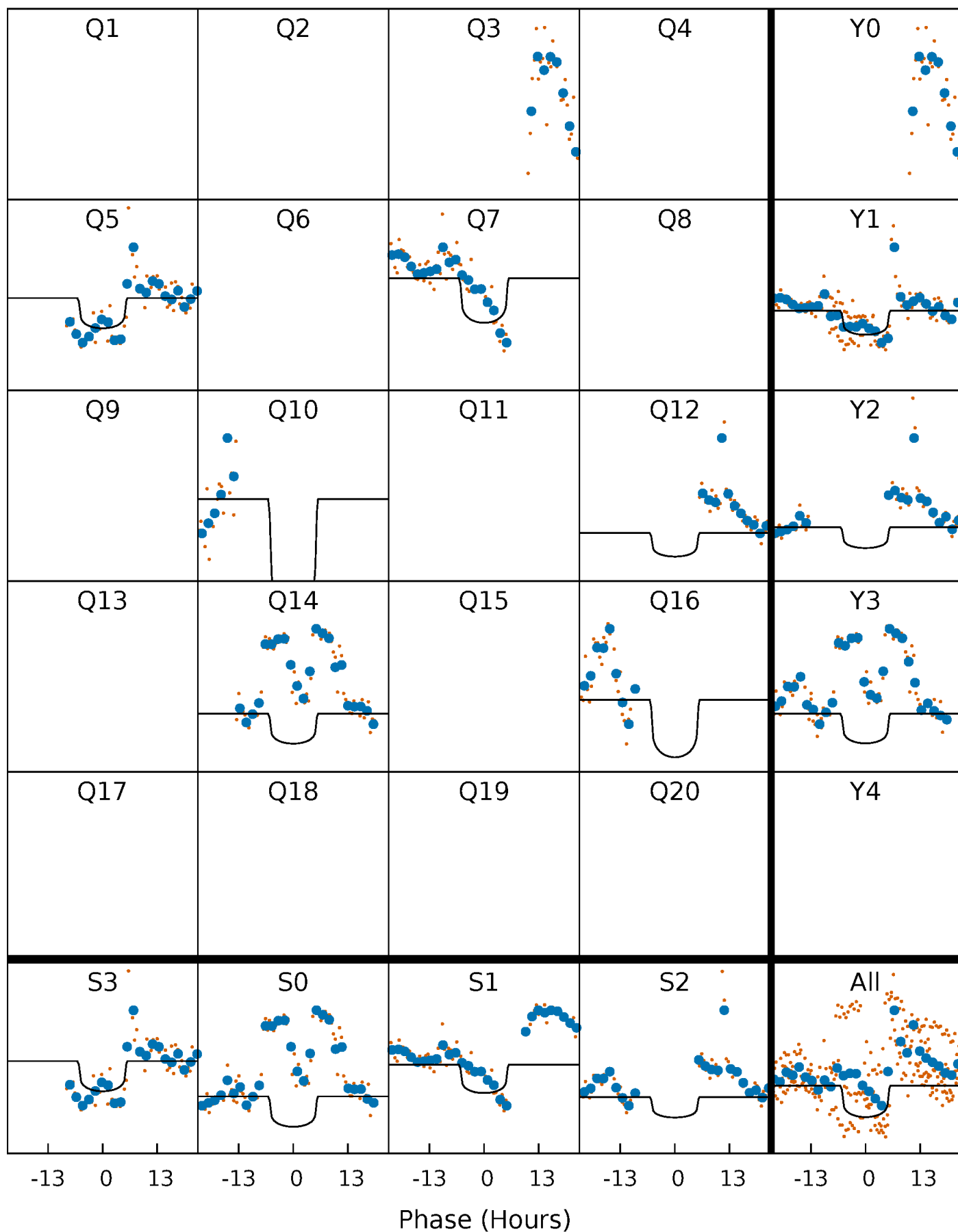
PDC Quarter-Phased Transit Curves

TCE 007601917-02 P=215.100452 Days $T_0=267.775542$ (BKJD)



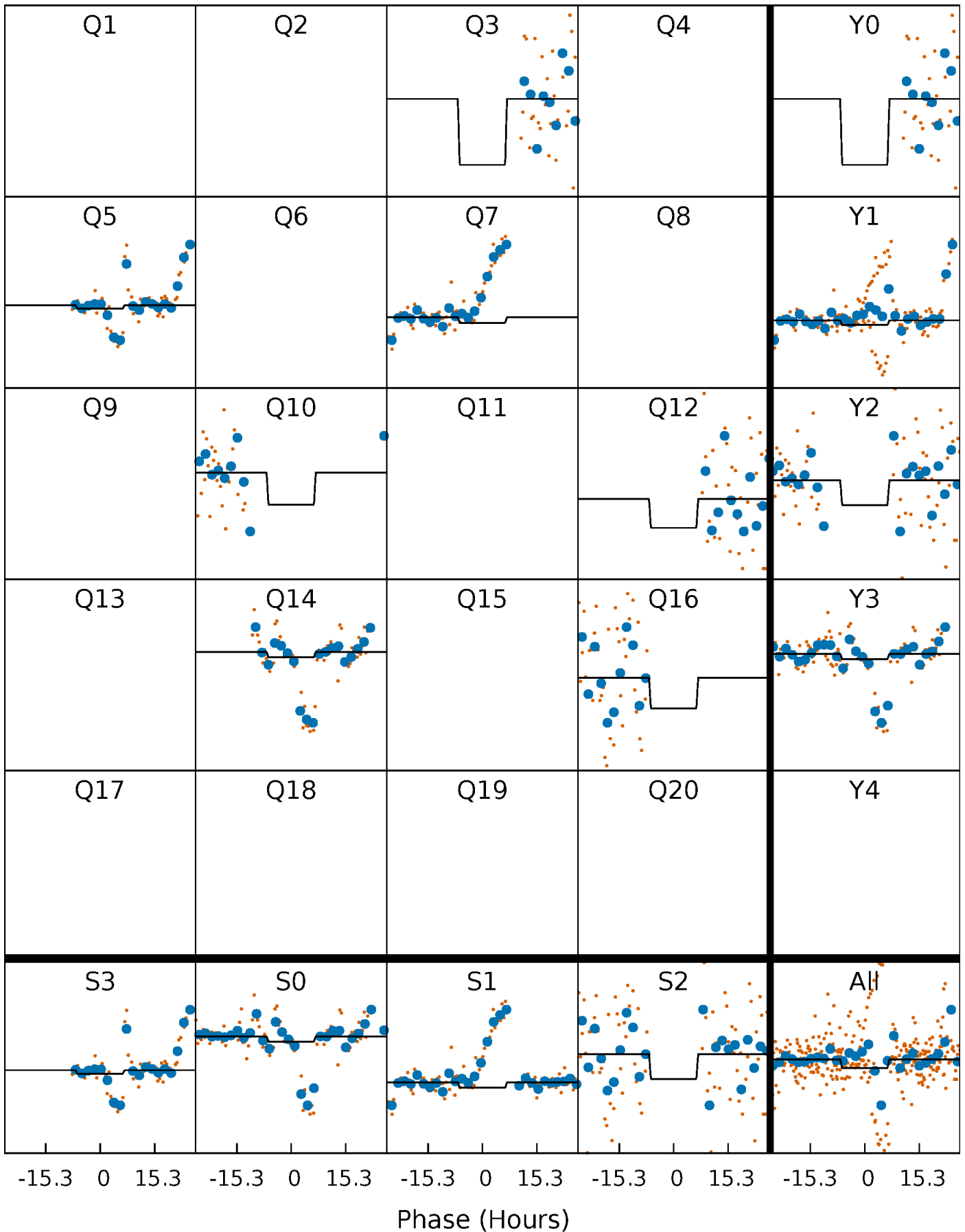
DV Quarter-Phased Transit Curves

TCE 007601917-02 $P=215.100452$ Days $T_0=267.775542$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

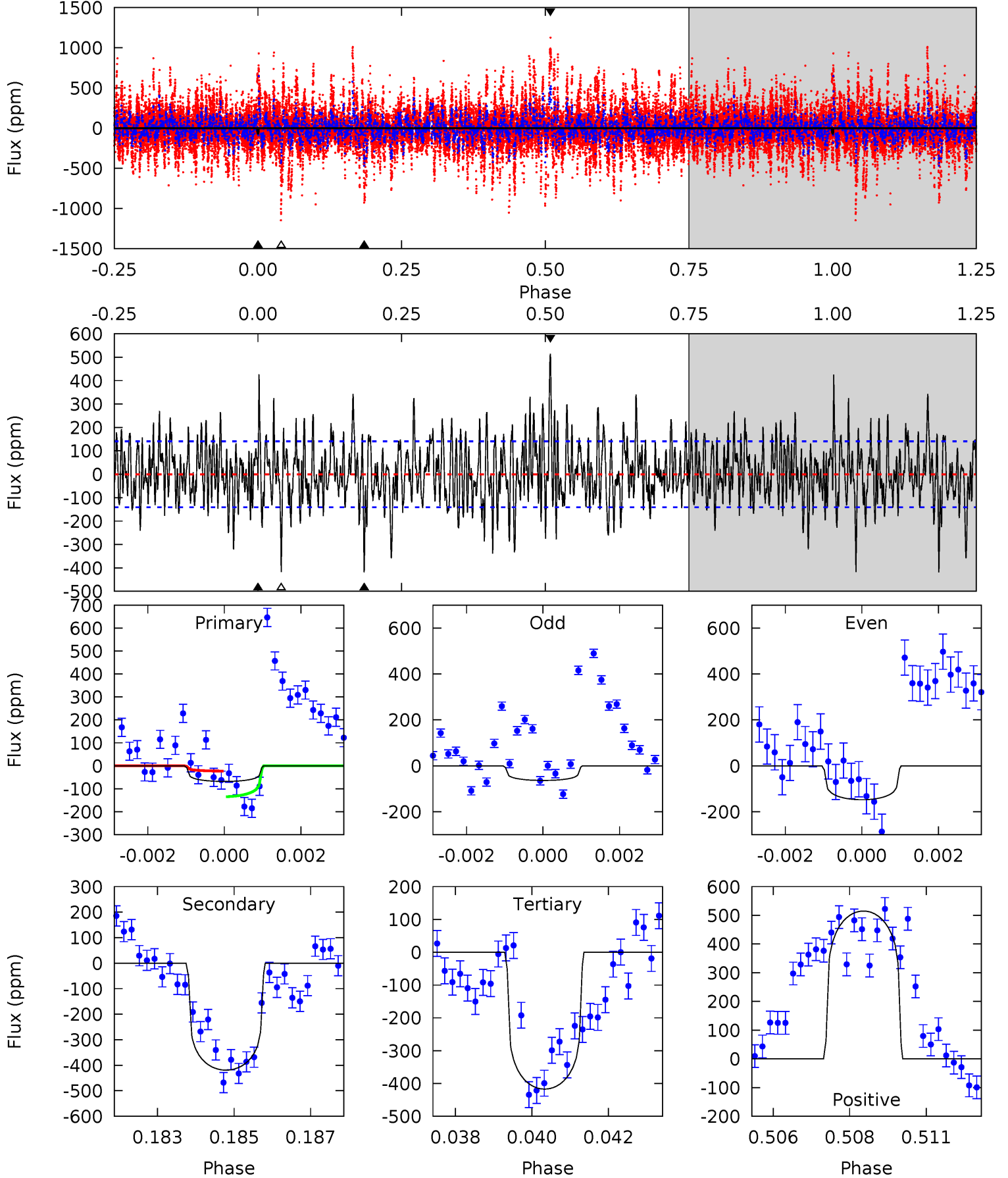
TCE 007601917-02 P=215.081454 Days $T_0=267.762454$ (BKJD)



DV Model-Shift Uniqueness Test

007601917-02, P = 215.100452 Days, E = 52.675090 Days

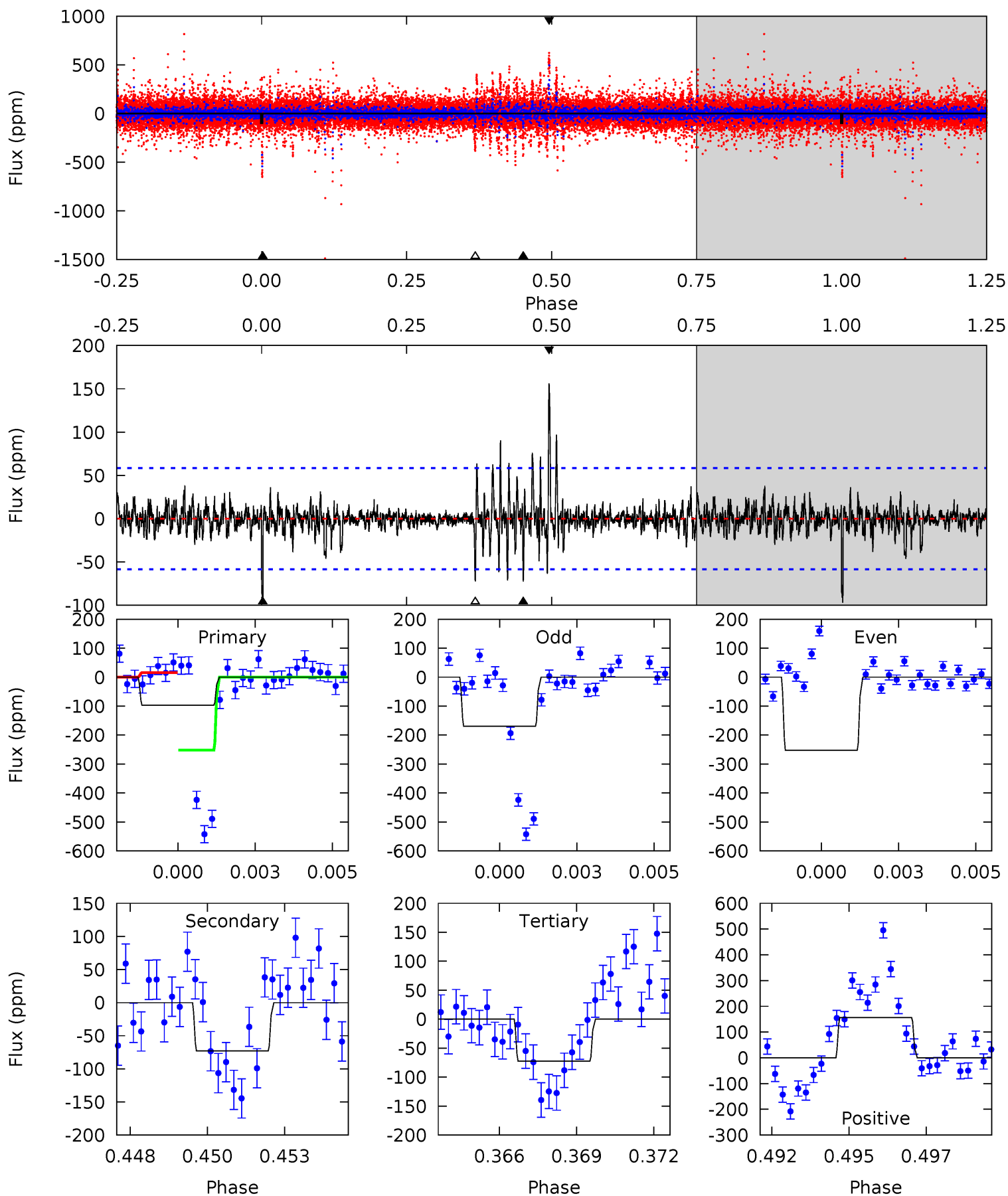
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|-------|-------|------|
| 2.57 | 15.8 | 15.7 | 19.4 | 5.31 | 3.06 | 4.32 | -13.1 | -16.8 | 0.08 | -3.61 | 1.49 | -0.00 | 0.55 | 2.10 |



Alt Model-Shift Uniqueness Test

007601917-02, $P = 215.081454$ Days, $E = 52.681000$ Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 8.75 | 6.57 | 6.55 | 14.1 | 5.28 | 3.01 | 1.32 | 2.20 | -5.35 | 0.02 | -7.53 | 3.09 | 0.21 | 0.62 | 10.6 |



Stellar Parameters For KIC 007601917

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 6227^{+74}_{-81} | $3.787^{+0.202}_{-0.067}$ | $0.120^{+0.150}_{-0.100}$ | $2.566^{+0.339}_{-0.629}$ | $1.471^{+0.190}_{-0.190}$ | $0.123^{+0.134}_{-0.034}$ |
| | +1%/-1% | +5%/-2% | +125%/-83% | +13%/-25% | +13%/-13% | +109%/-27% |
| Source | SPE68 | SPE68 | SPE68 | DSEP | | |

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007601917-02 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|-------------|------------------------|-------------------|------------------------|-------------------------|
| DV | -419±27 | $4.26^{+1.36}_{-1.27}$ | 678^{+27}_{-41} | 7077^{+1607}_{-874} | 8215^{+8190}_{-3447} |
| Alt. | -73±11 | $1.85^{+1.34}_{-1.00}$ | 680^{+25}_{-39} | 6933^{+4683}_{-1576} | 7362^{+26957}_{-4767} |

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 $A_{obs} \gg 1.0$

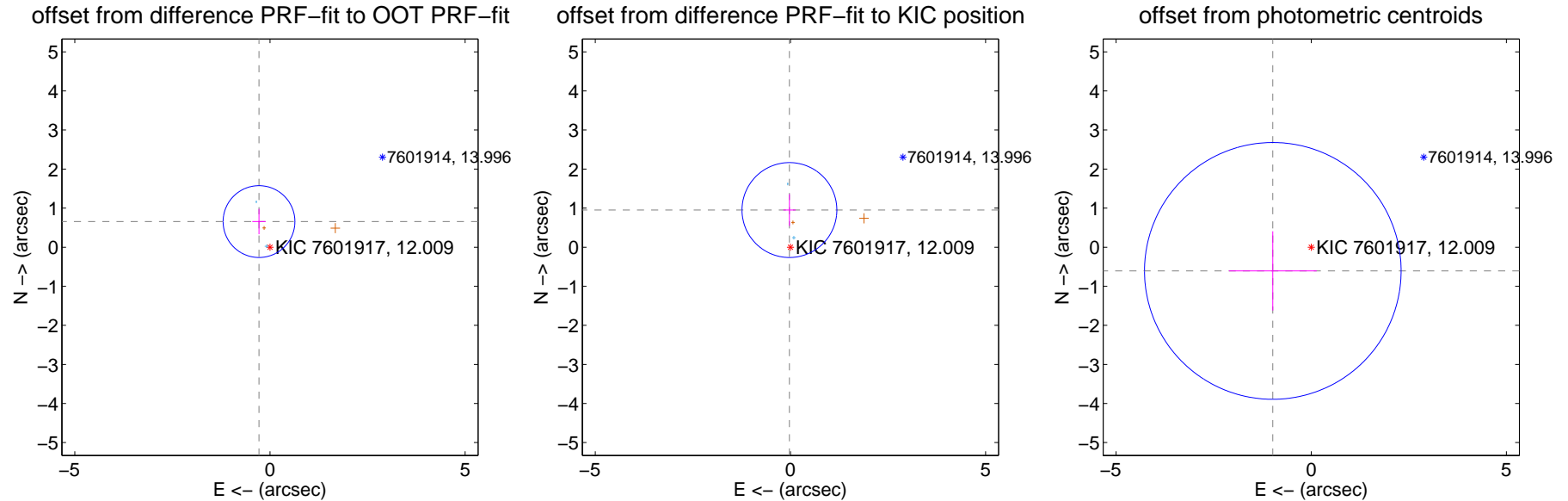
DV Centroid Data

Supplemental centroid analysis for 007601917-02. Kepler magnitude: 12.01. Transit SNR 5.60

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|-------------------|-------------------|
| PRF-fit source offset from OOT | 0.714 ± 0.306 | 2.33 | 0.281 ± 0.171 | 0.656 ± 0.325 |
| PRF-fit source offset from KIC position | 0.952 ± 0.405 | 2.35 | 0.026 ± 0.158 | 0.951 ± 0.405 |
| photometric centroid source offset | 1.16 ± 1.10 | 1.06 | 0.98 ± 1.12 | -0.61 ± 1.01 |

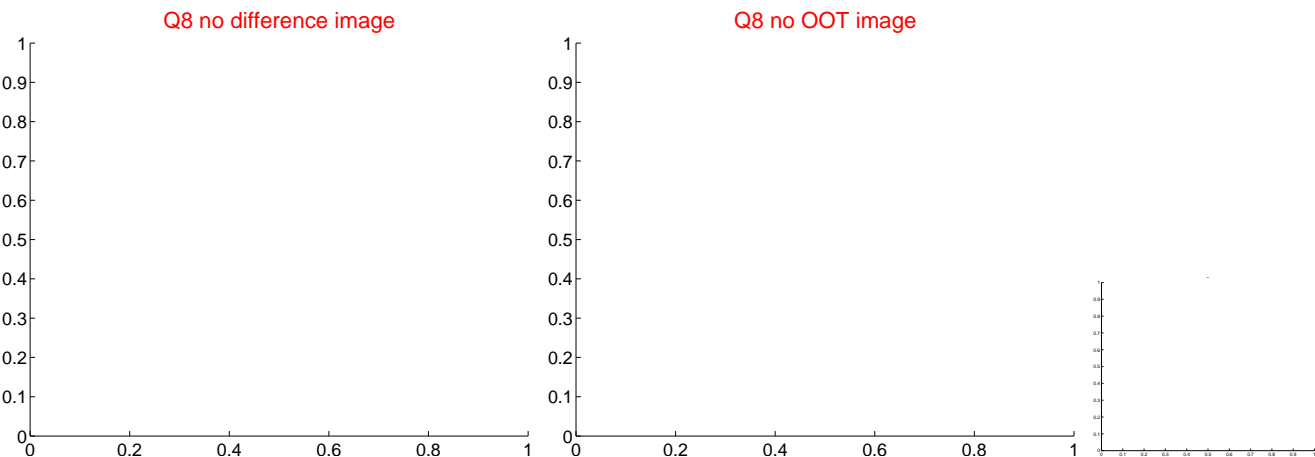
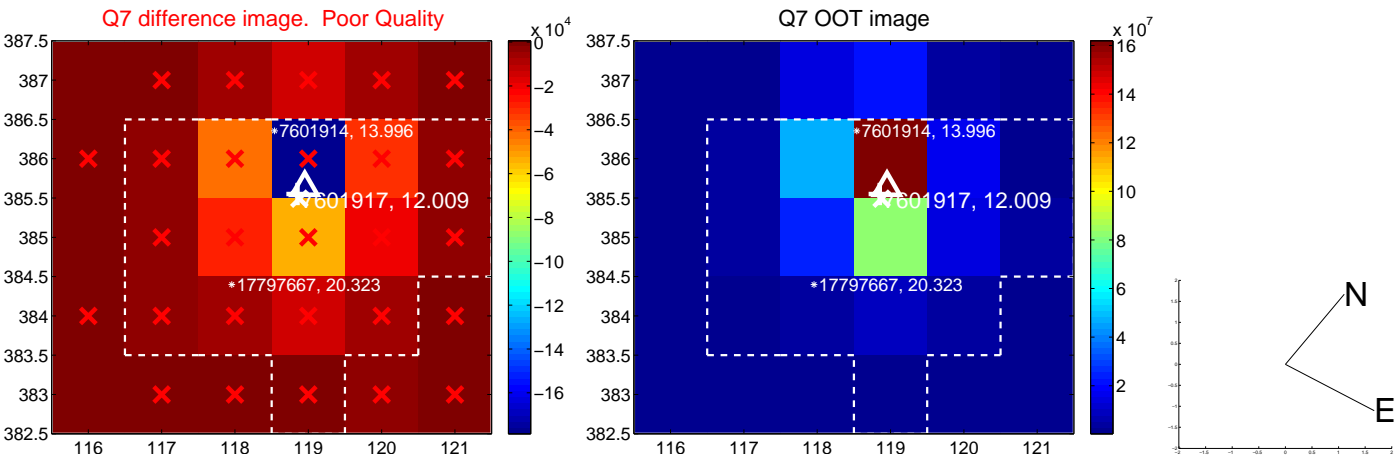
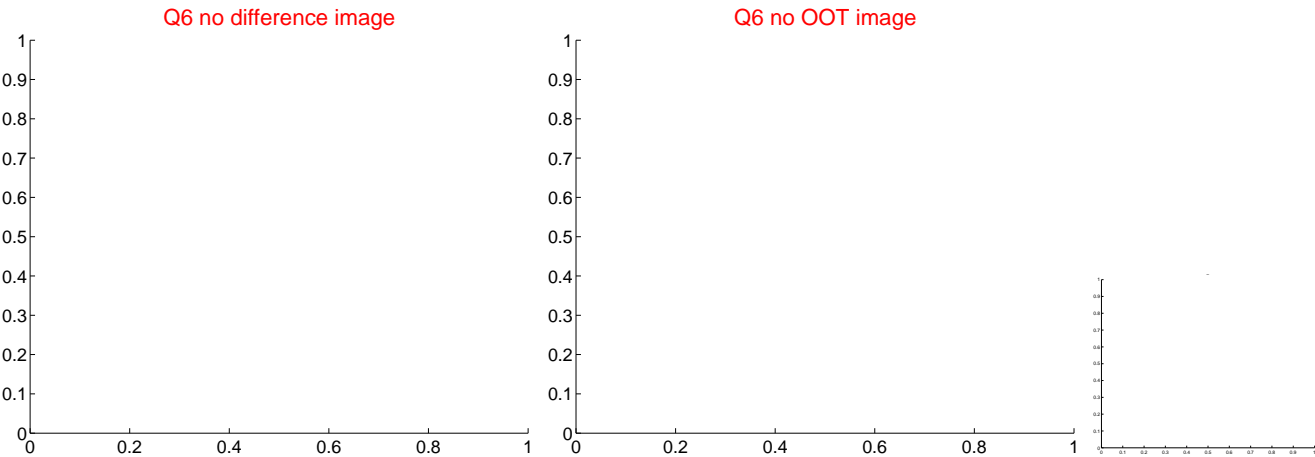
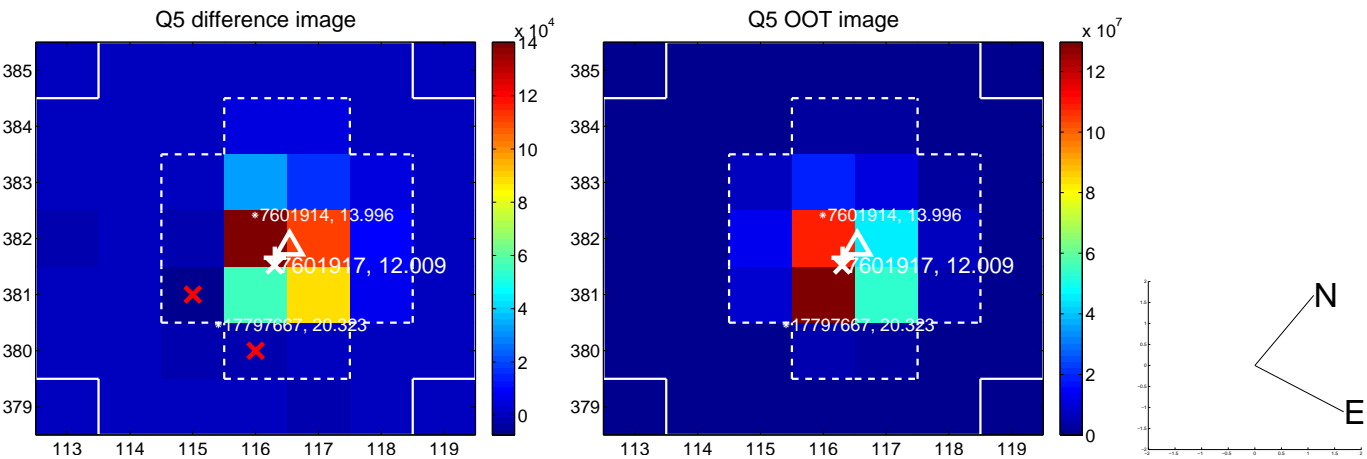


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

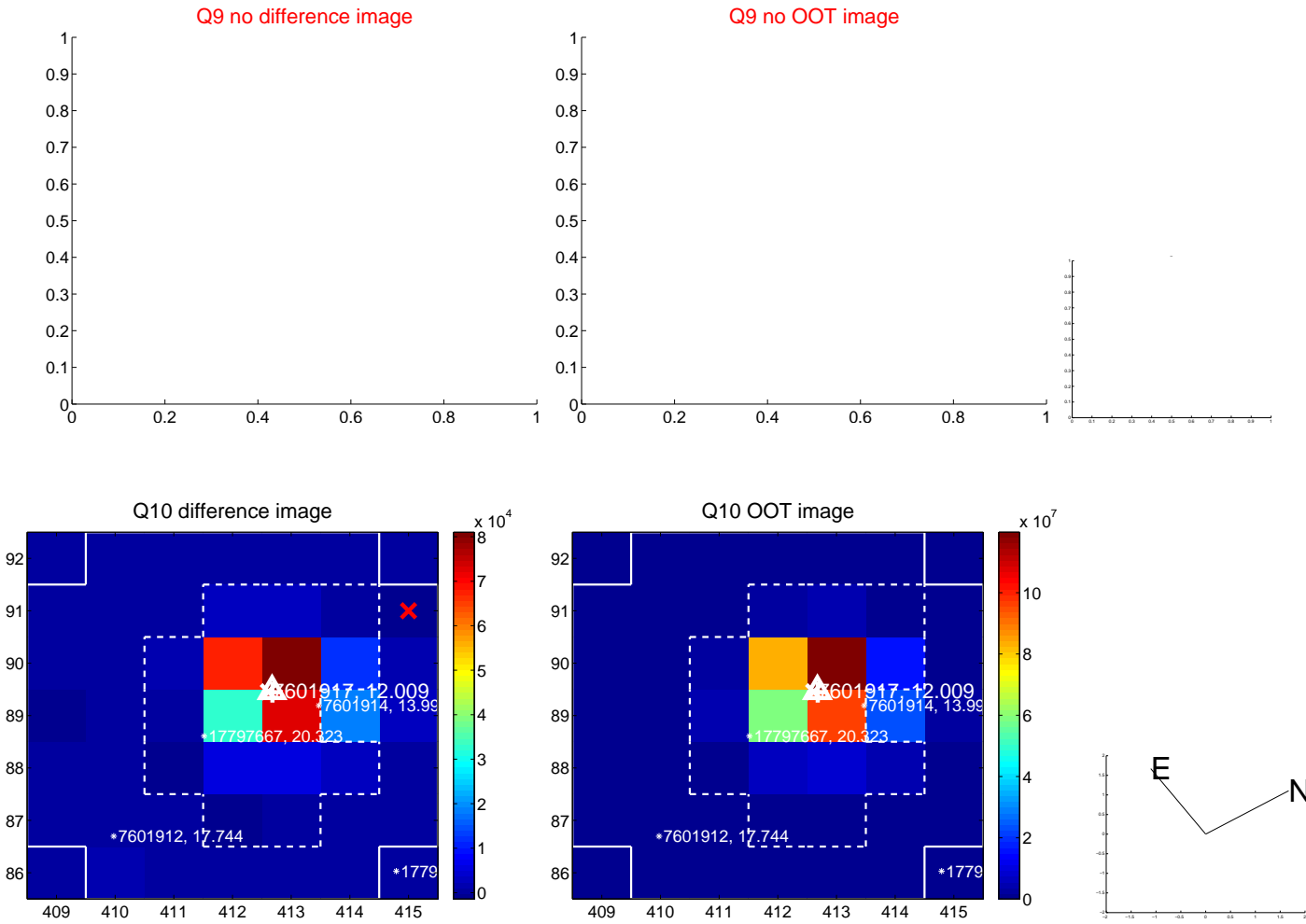
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



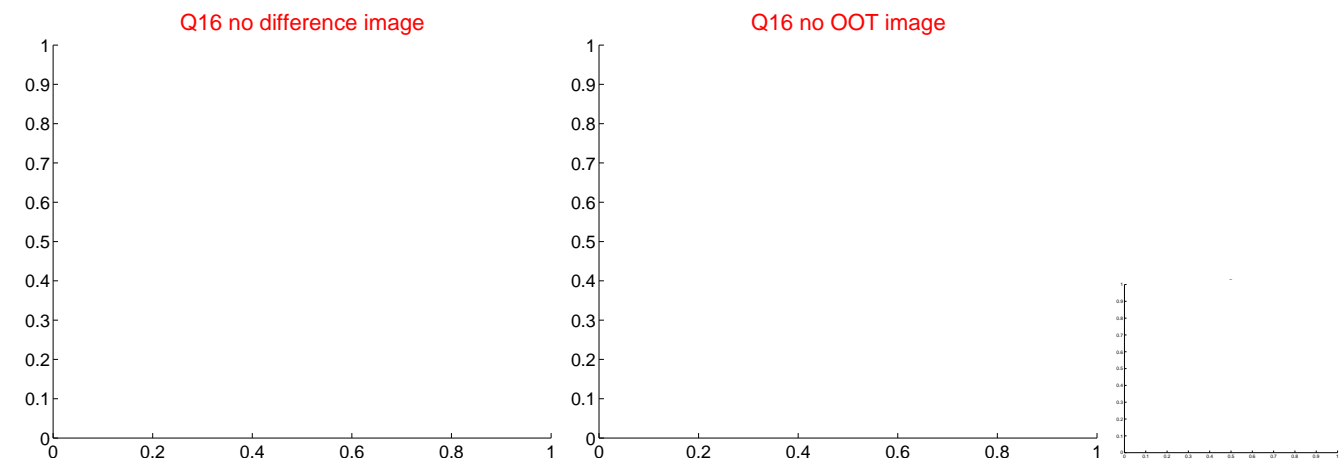
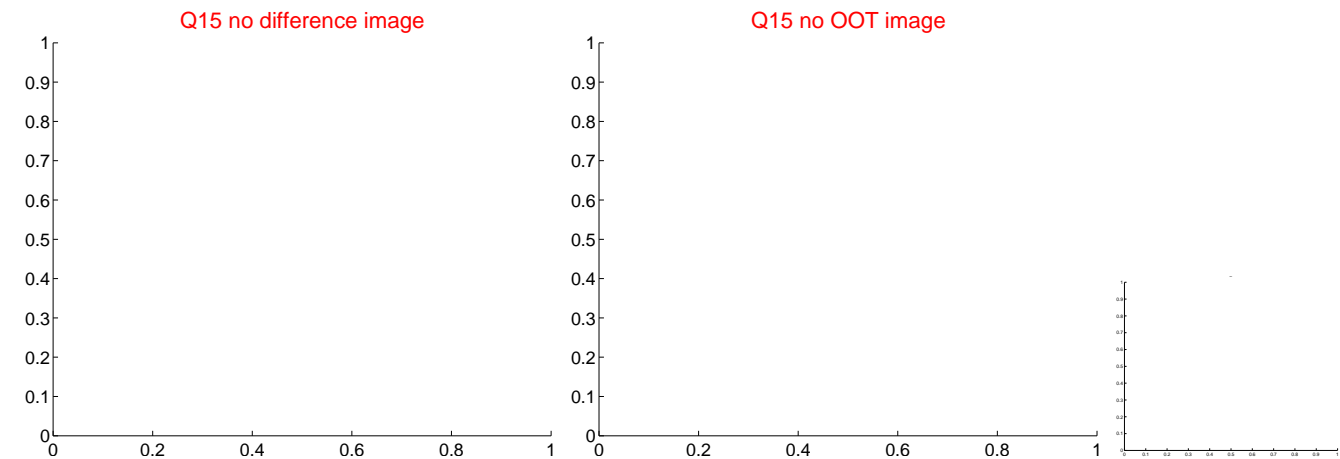
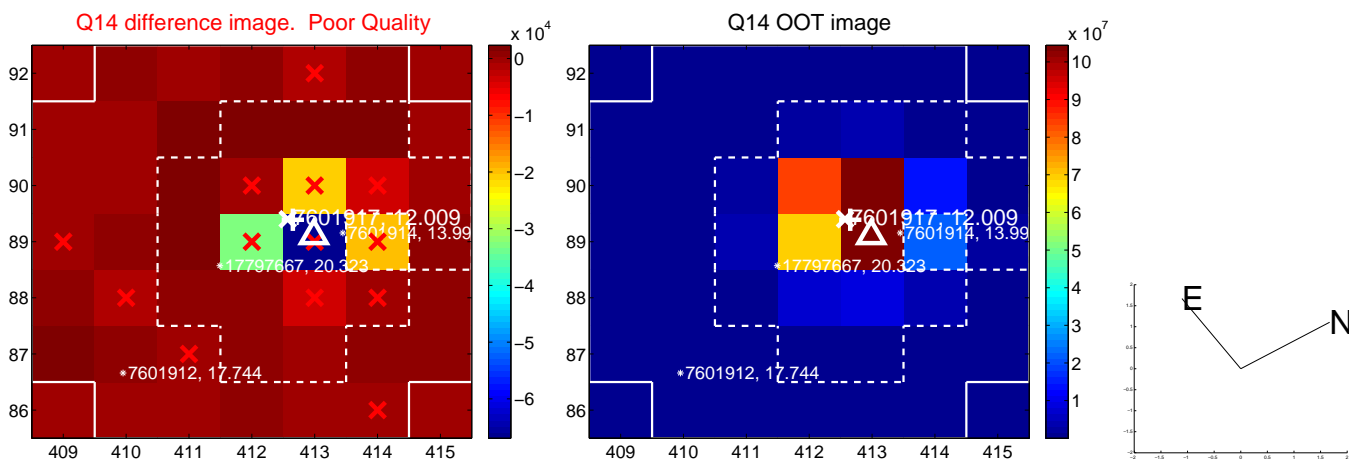
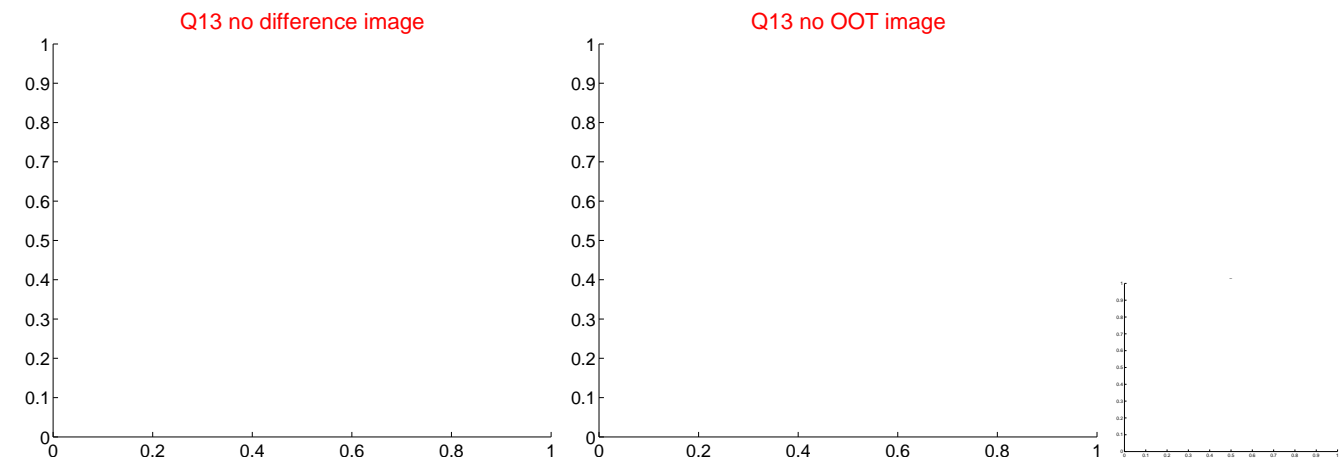
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



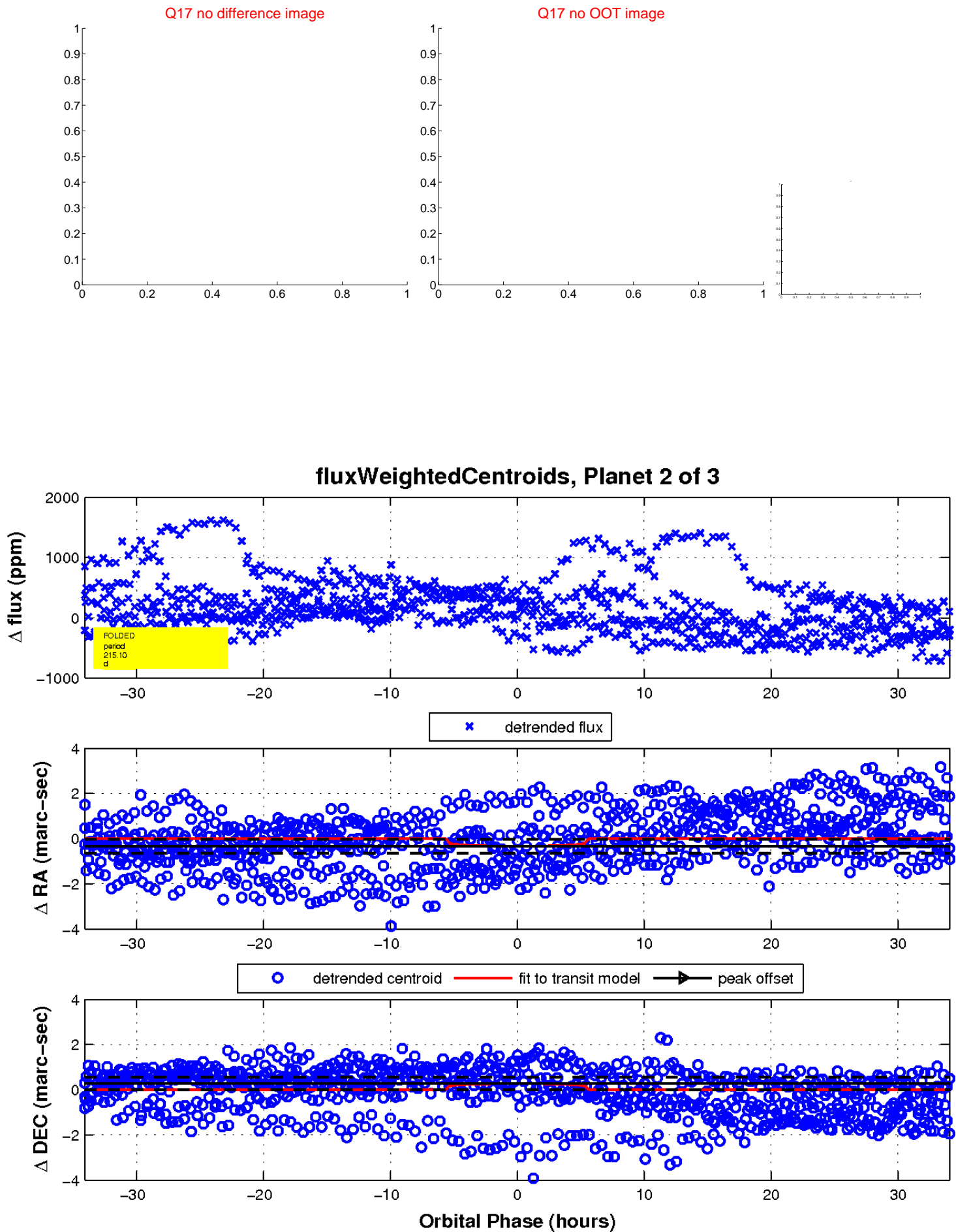
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

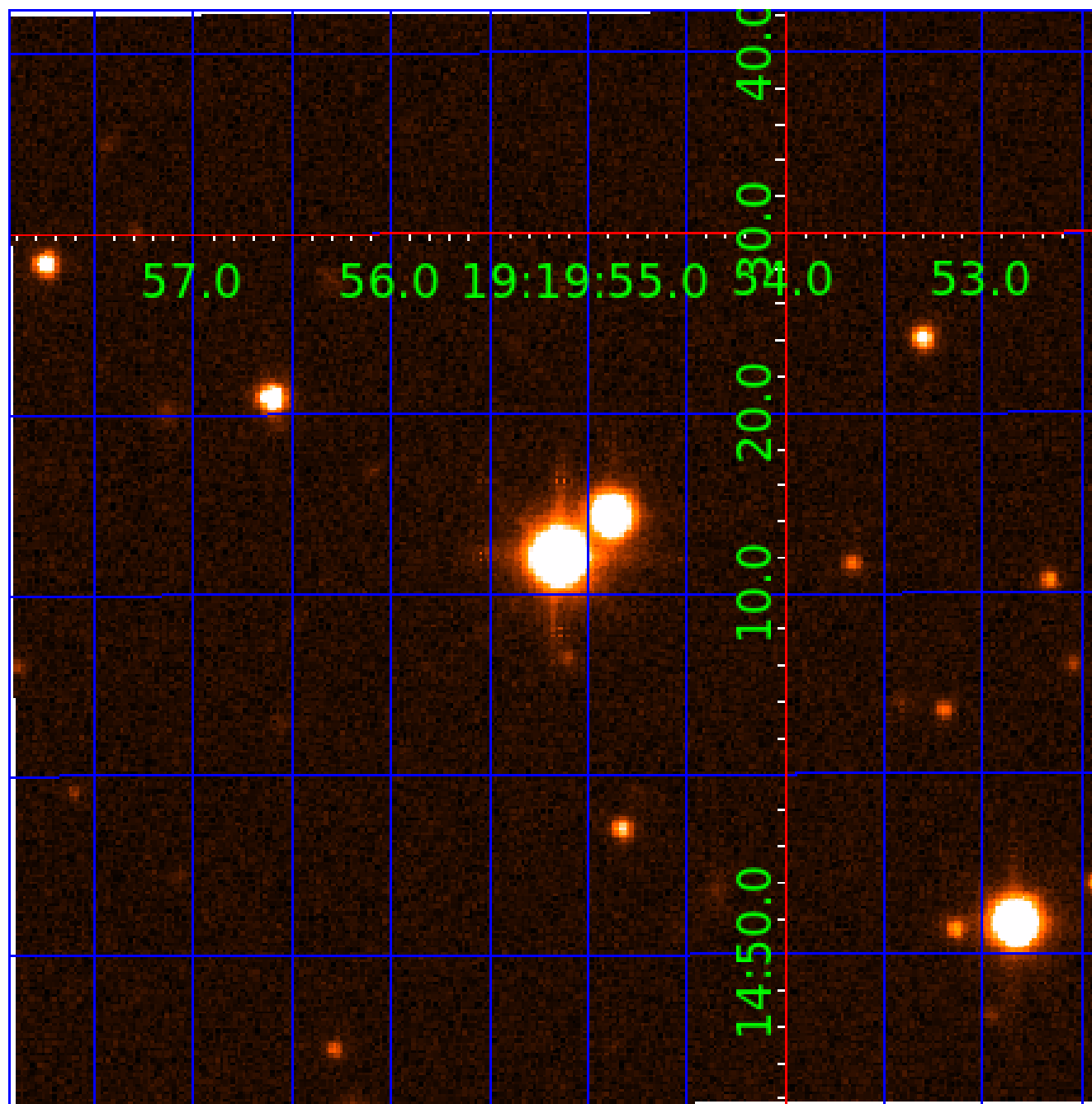


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007601917

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}) |
|--------------|----------|------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
| 007601917-01 | OBS | No | 2.976456 | 133.479234 | 23.2 | 12.508 | 9.8 | 6.2 | 2.57 | 6227 | 1.45 | 4180.69 |
| 007601917-02 | OBS | No | 215.100452 | 267.775542 | 261.5 | 11.372 | 12.6 | 5.6 | 2.57 | 6227 | 4.47 | 13.89 |
| 007601917-03 | OBS | No | 2.976206 | 131.885609 | 98.2 | 10.500 | 11.2 | -1.0 | 2.57 | 6227 | 2.54 | 4181.16 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 007601917-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—CENT_KIC_POS |
| 007601917-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS |
| 007601917-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_NOFITS |

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

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

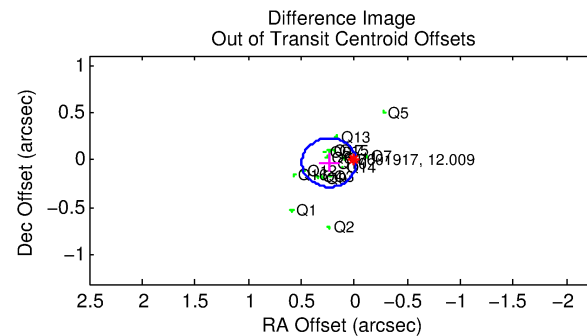
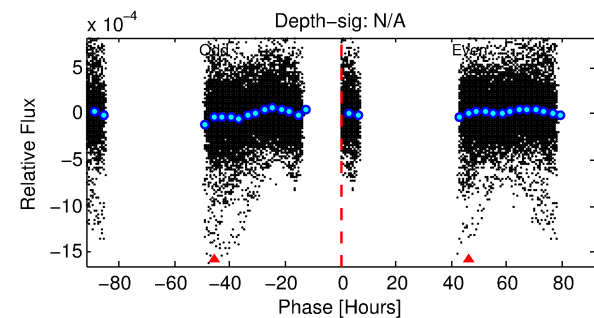
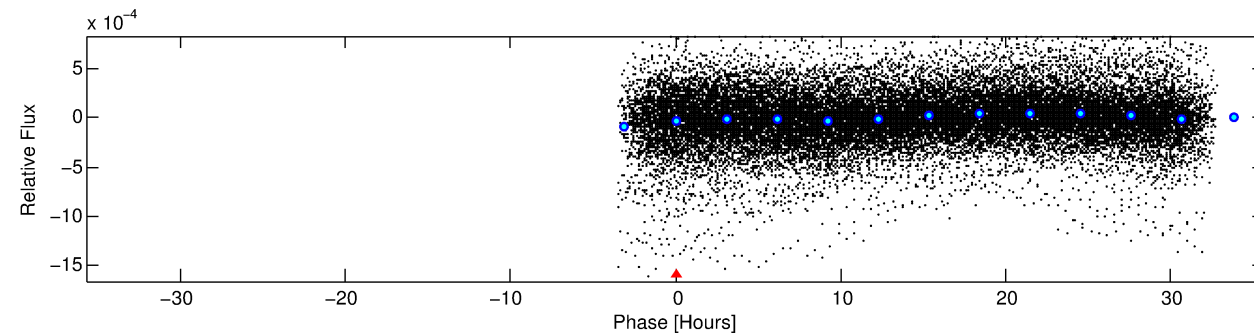
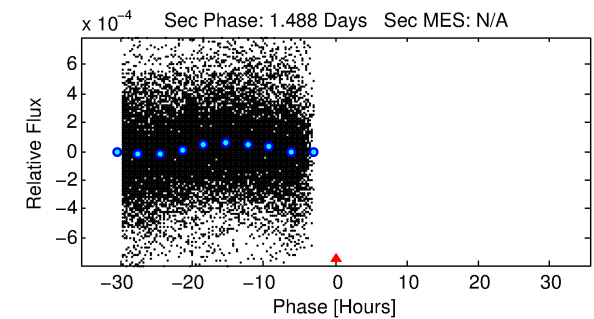
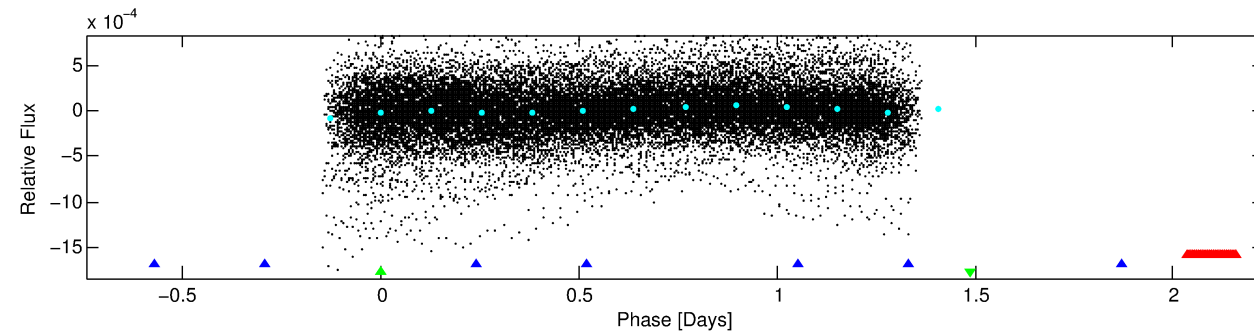
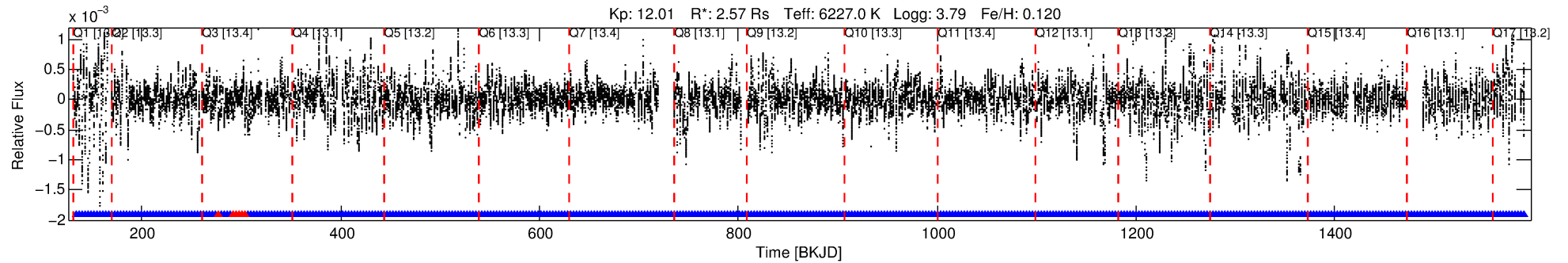
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007601917-03

No Significant Match Found

DV One-Page Summary

KIC: 7601917 Candidate: 3 of 3 Period: 2.976 d



TPS TCE Results:

Period = 2.97621 d
Epoch = 131.8856 BKJD

DV fit results are unavailable

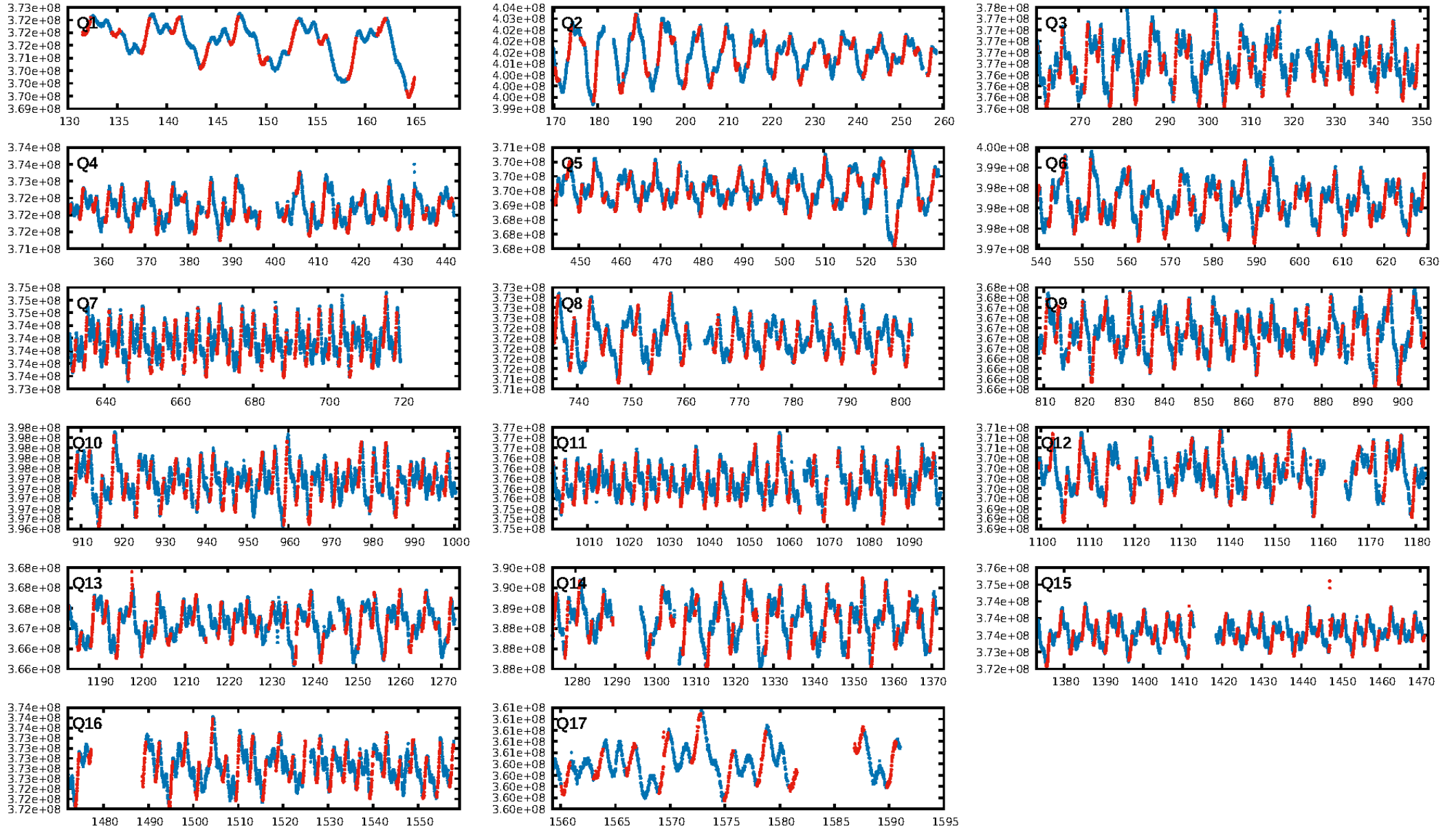
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [428/434]
GhostDiagnostic-chr: 0.4623
Centroid-sig: 8.4%
Centroid-so: 0.500 arcsec [12.59σ]
OotOffset-rm: 0.237 arcsec [2.77σ]
KicOffset-rm: 0.228 arcsec [2.30σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

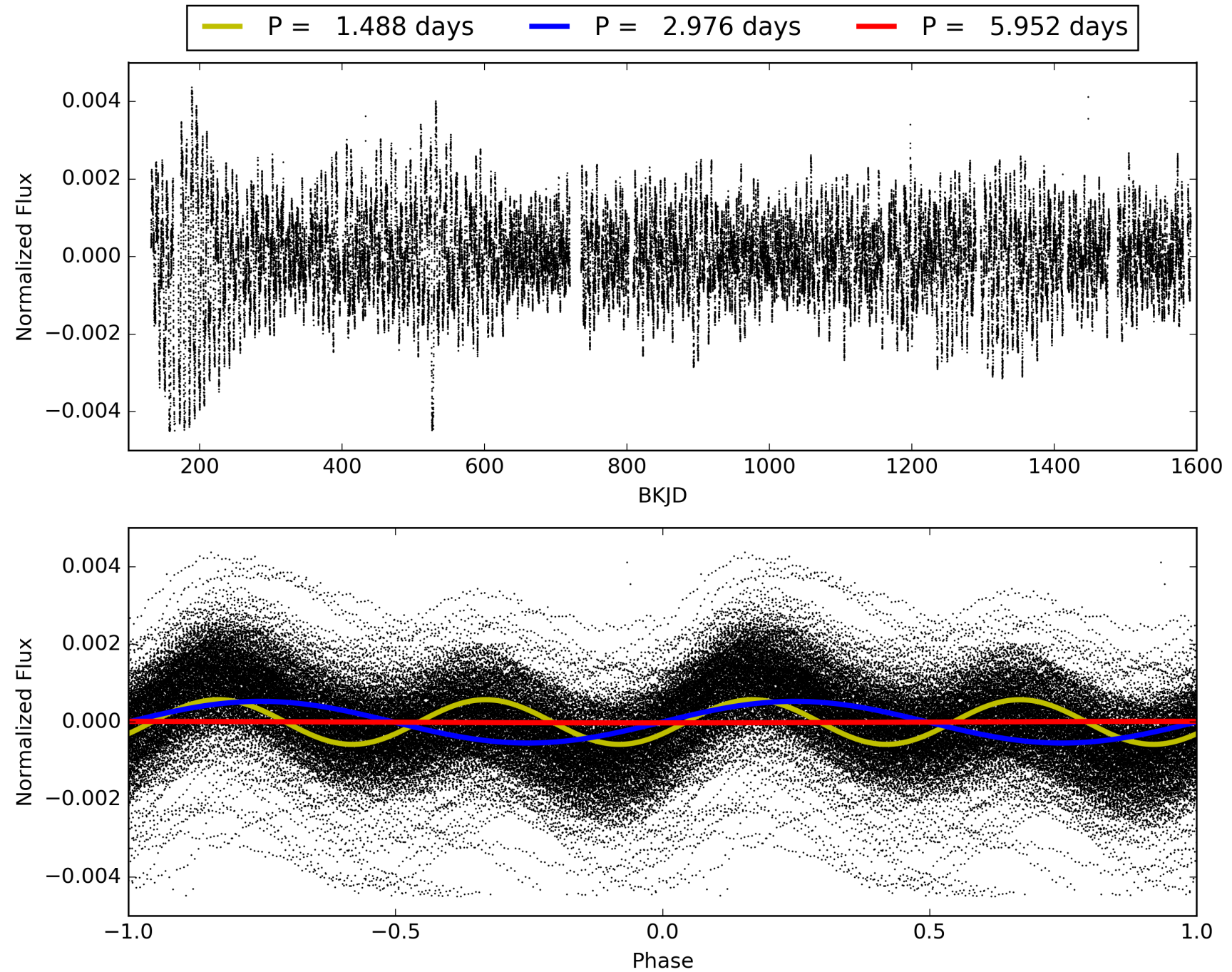
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:36:55 Z

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

TCE 007601917-03, PDC Light Curves

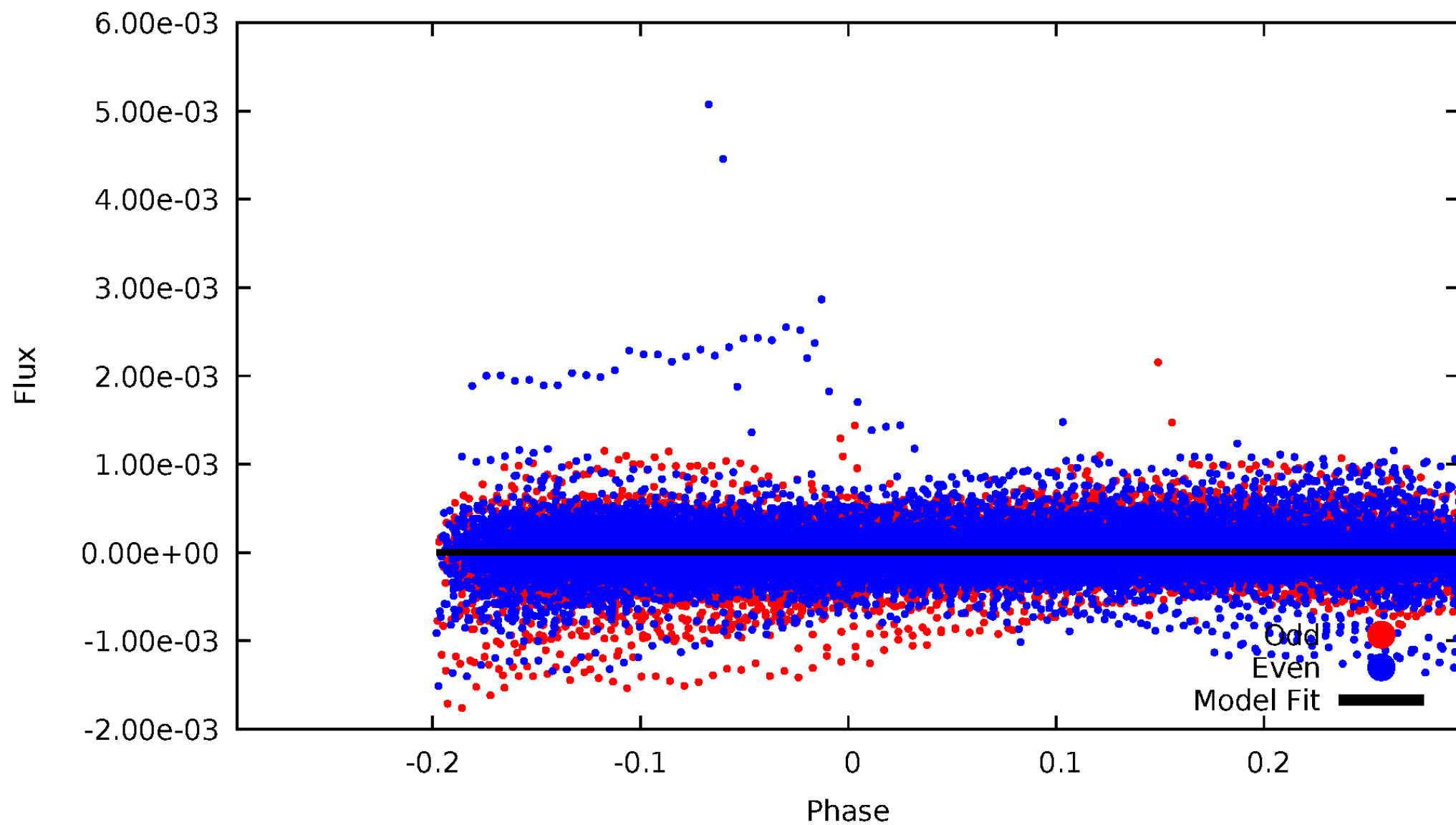


TCE 007601917-03



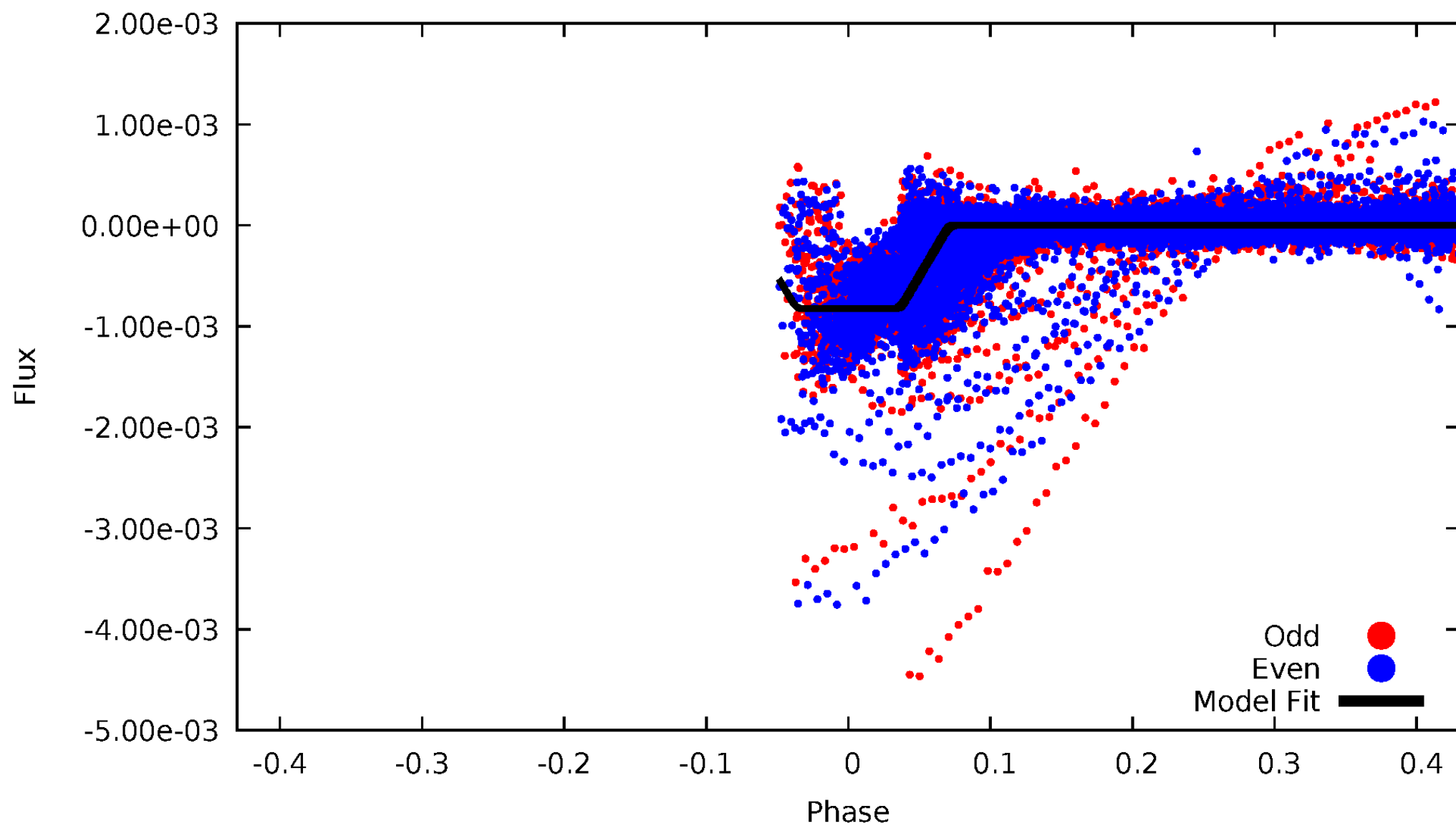
DV Odd/Even

TCE 007601917-03

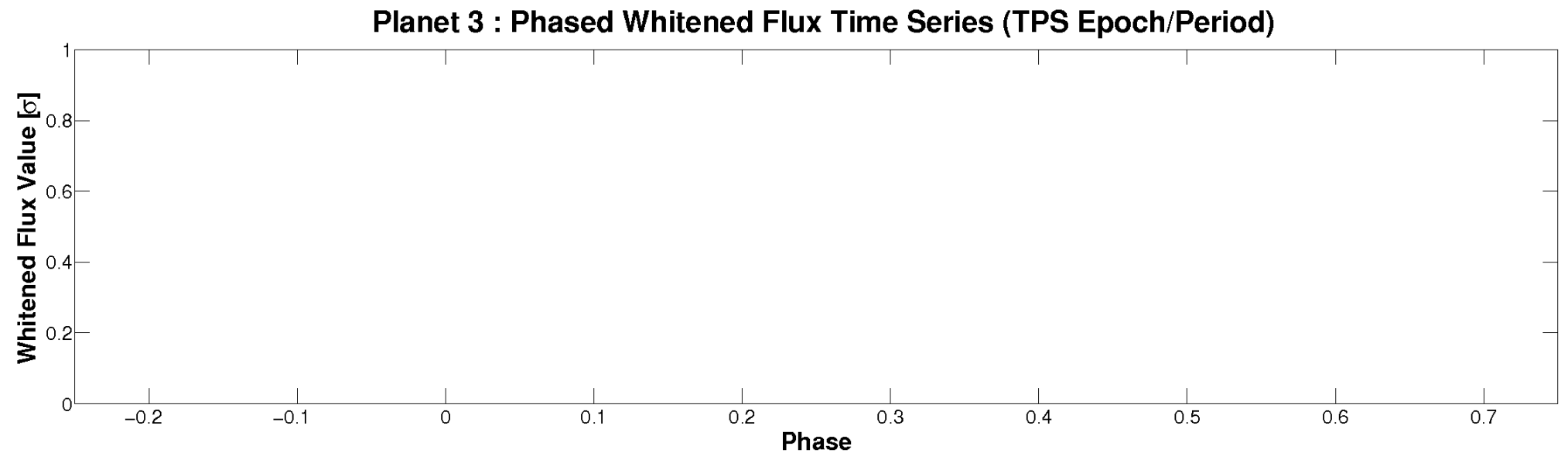
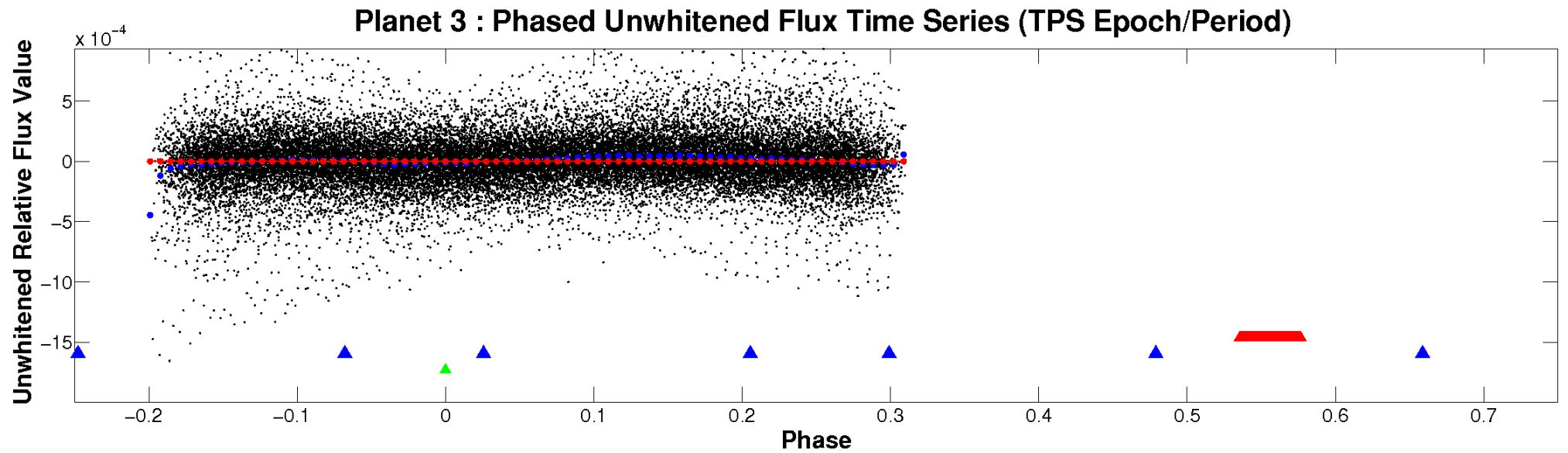


ALT Odd/Even

TCE 007601917-03

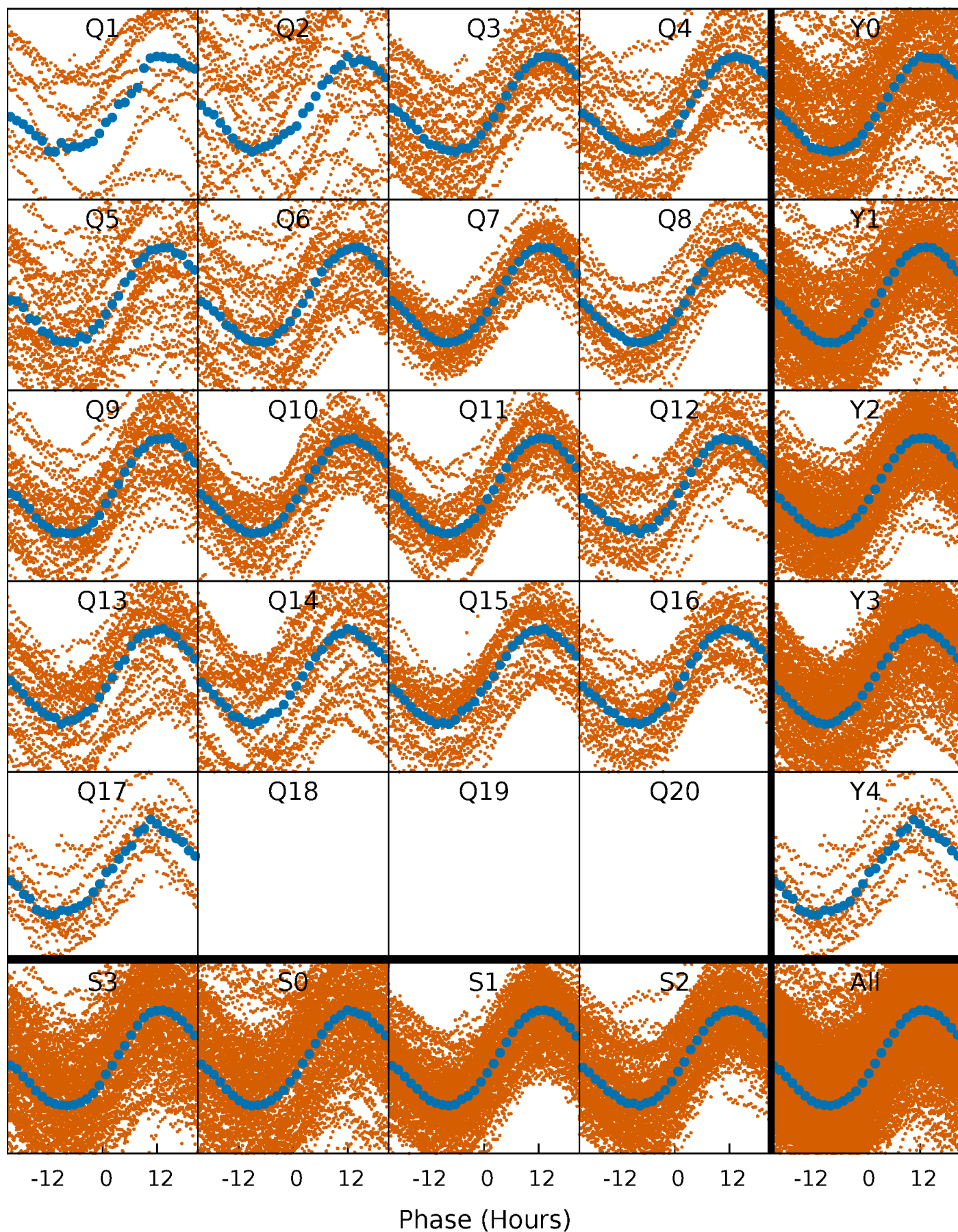


Non-Whitened Vs. Whitened Light Curve



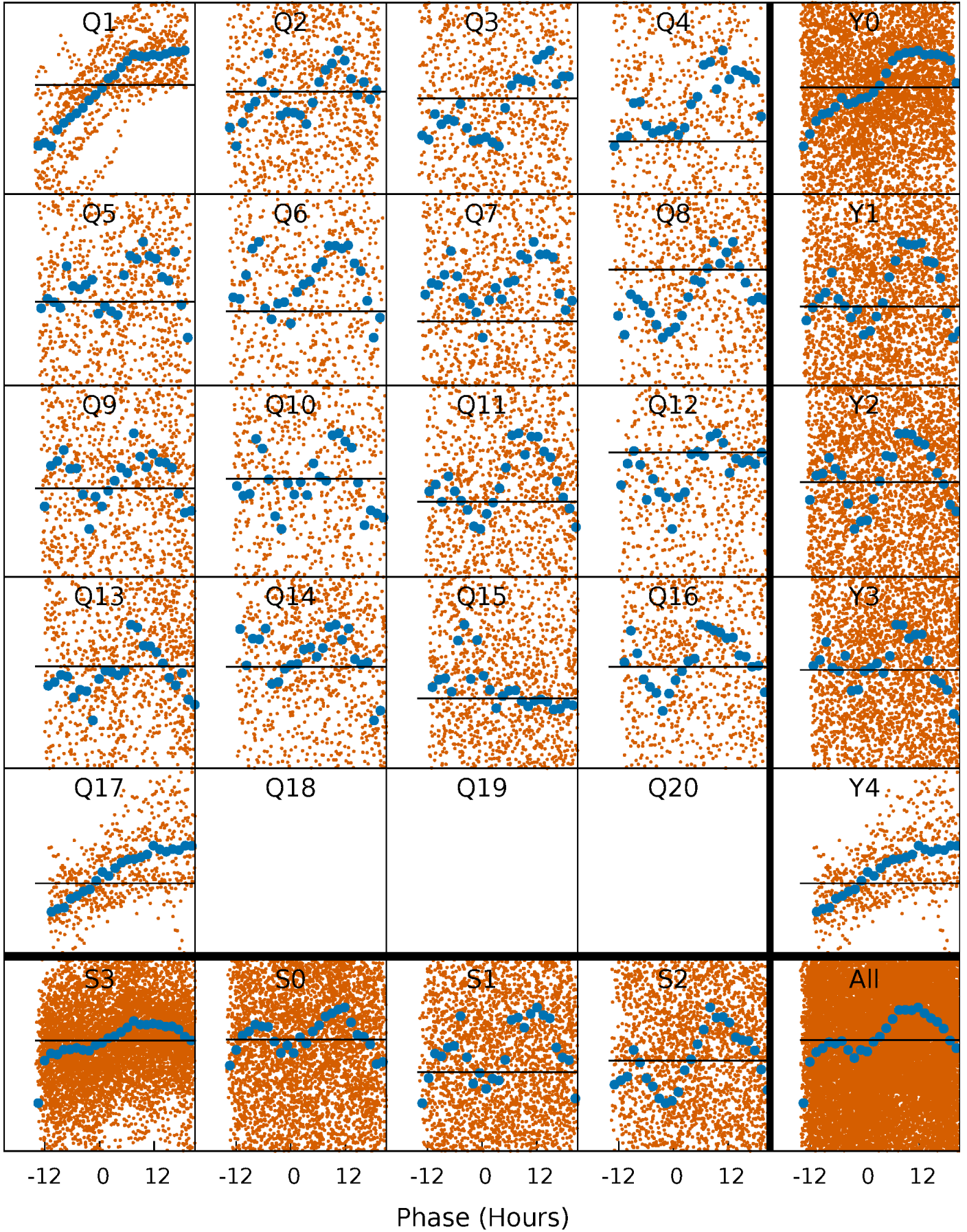
PDC Quarter-Phased Transit Curves

TCE 007601917-03 P= 2.976206 Days $T_0=131.885609$ (BKJD)



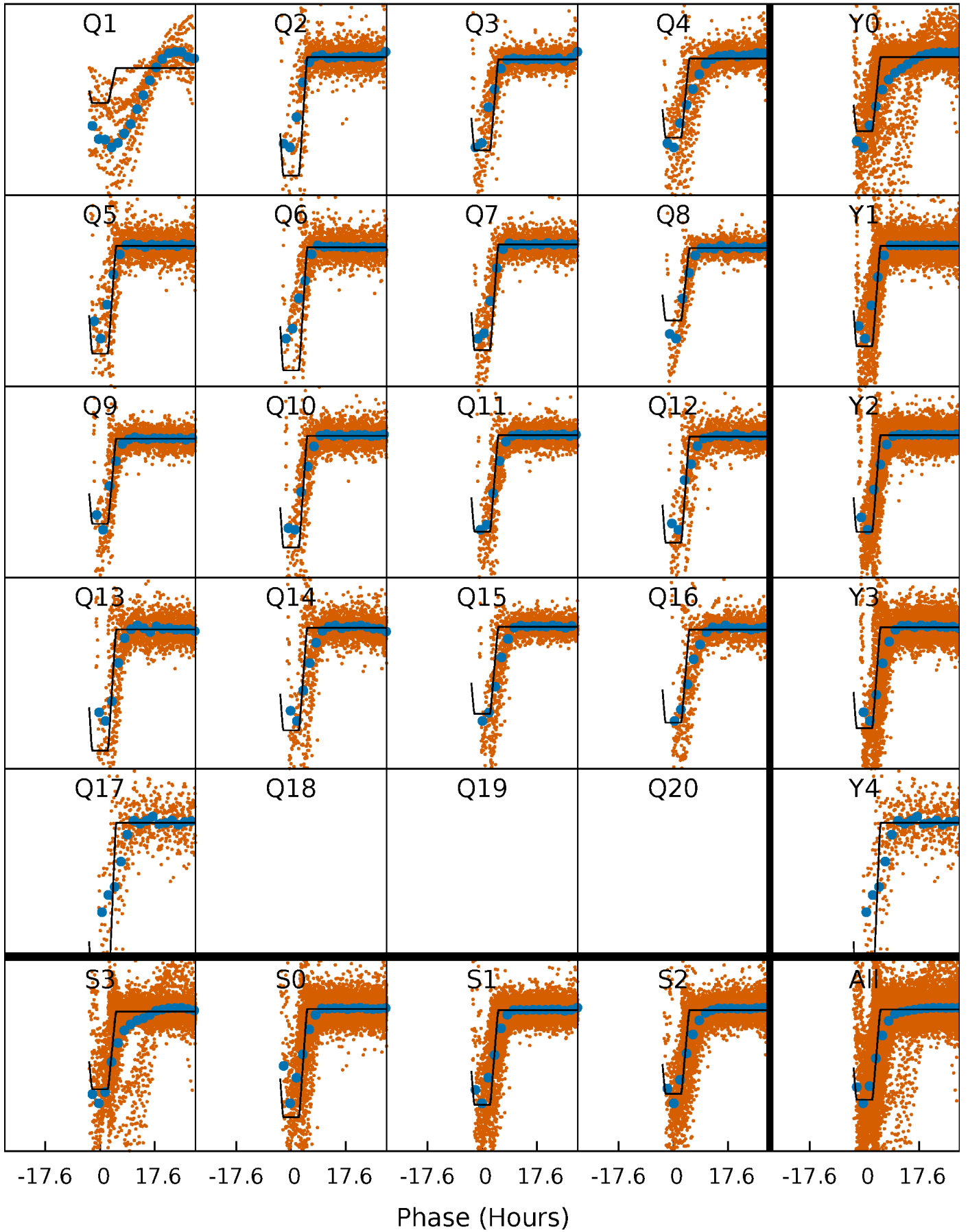
DV Quarter-Phased Transit Curves

TCE 007601917-03 P= 2.976206 Days $T_0=131.885609$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

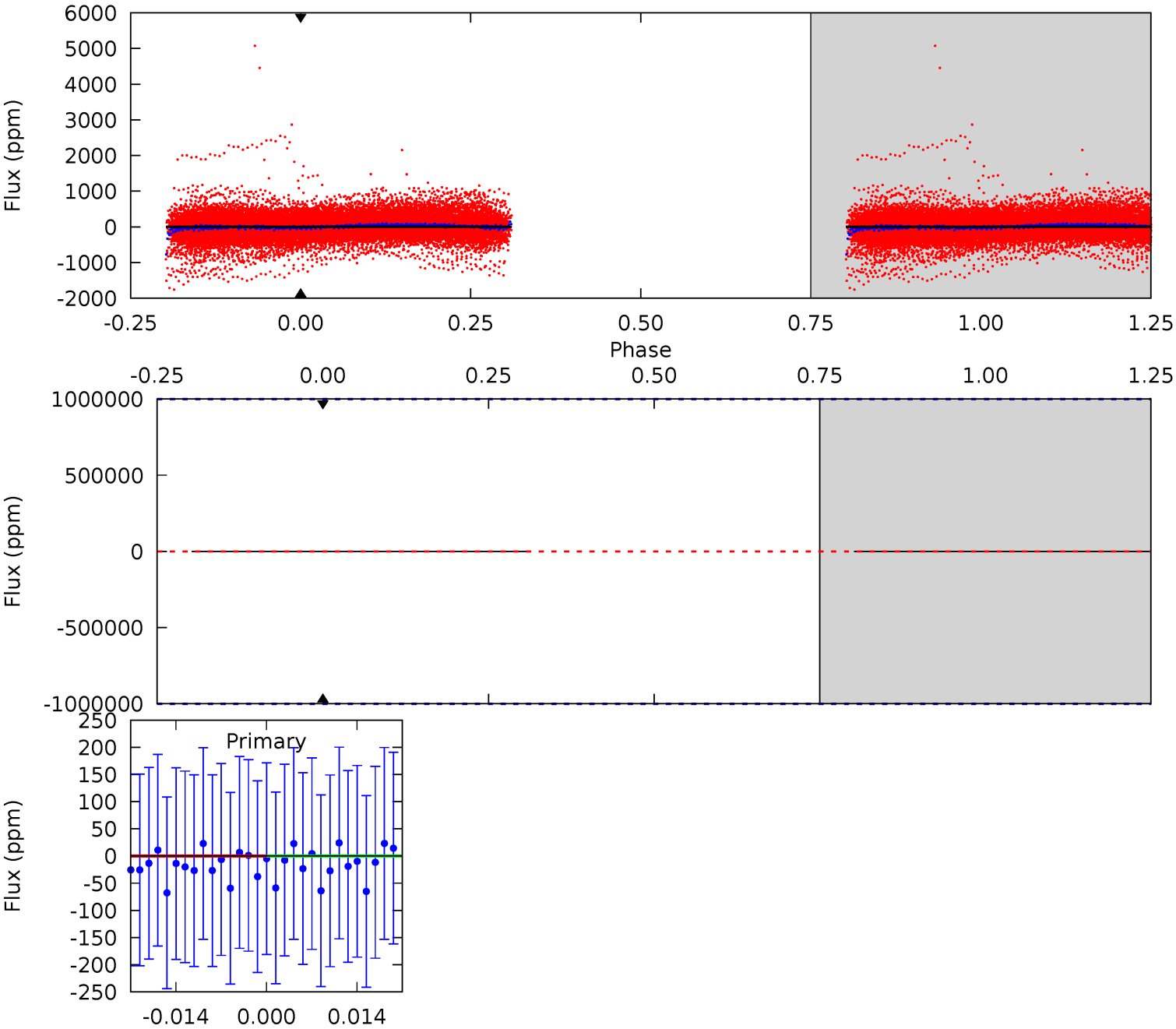
TCE 007601917-03 P= 2.976206 Days $T_0=134.418747$ (BKJD)



DV Model-Shift Uniqueness Test

007601917-03, P = 2.976206 Days, E = 128.909403 Days

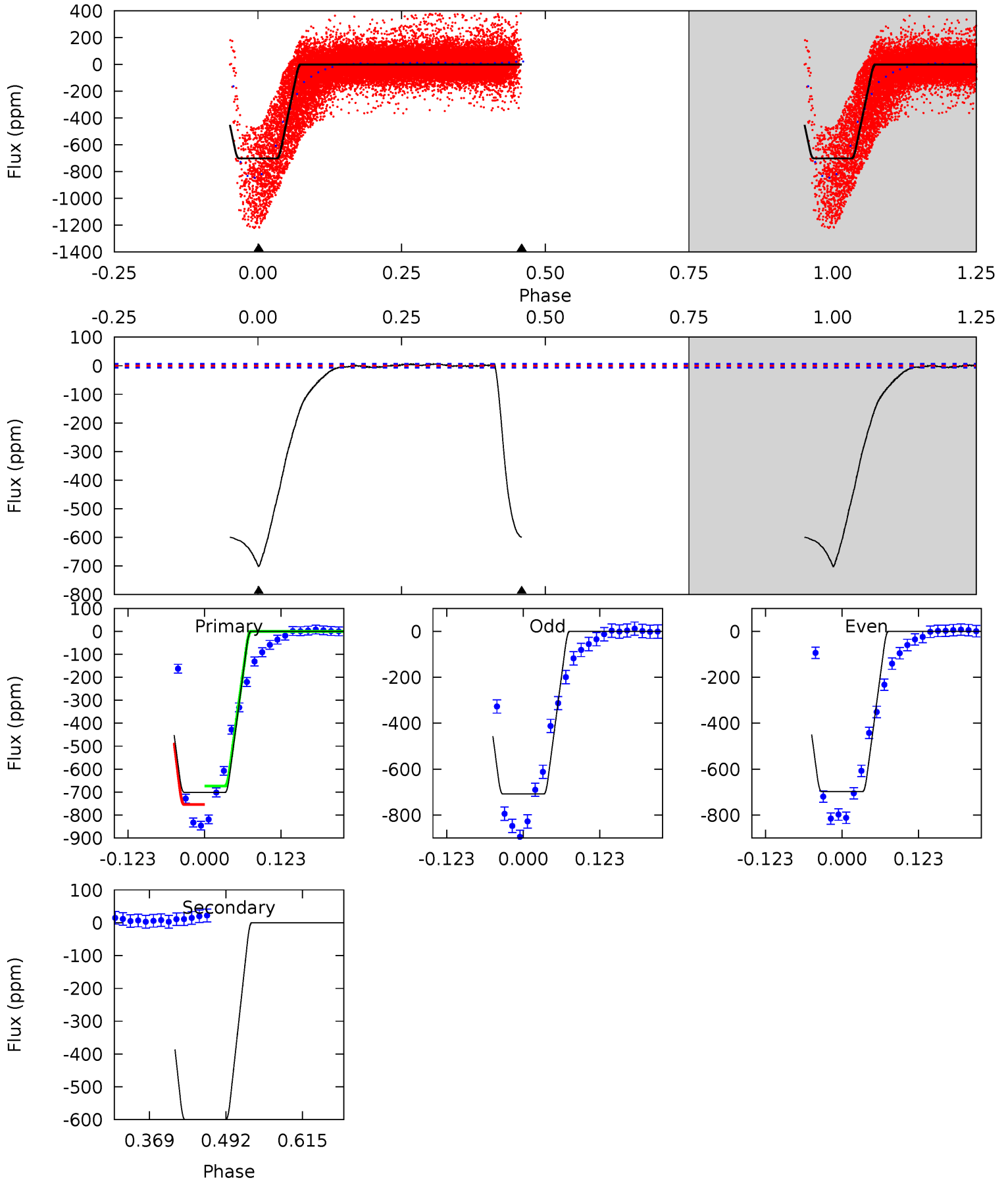
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-----|-----|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|-----|-------|-----|
| 0 | 0 | 0 | 0 | 1.00 | 1.00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



Alt Model-Shift Uniqueness Test

007601917-03, P = 2.976206 Days, E = 131.442541 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-------|-------|-----|-----|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 457.4 | 391.0 | 0 | 0 | 4.52 | 1.54 | 2.14 | 457.4 | 457.4 | 391.0 | 391.0 | 3.53 | 1.03 | 0.01 | 3.02 |



Stellar Parameters For KIC 007601917

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|---------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 6227^{+74}_{-81} | $3.787^{+0.202}_{-0.067}$ | $0.120^{+0.150}_{-0.100}$ | $2.566^{+0.339}_{-0.629}$ | $1.471^{+0.190}_{-0.190}$ | $0.123^{+0.134}_{-0.034}$ |
| | +1%/-1% | +5%/-2% | +125%/-83% | +13%/-25% | +13%/-13% | +109%/-27% |
| Source | SPE68 | SPE68 | SPE68 | DSEP | | |

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007601917-03 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|-----------------|---------------------------|----------------------|--------------------------|-------------------------------|
| DV | 0 ± 1000000 | $18.83^{+21.46}_{-13.30}$ | 2827^{+114}_{-173} | 5449^{+30135}_{-27553} | $9.307^{+905.294}_{-426.883}$ |
| Alt. | -599 ± 2 | $22.47^{+22.06}_{-15.41}$ | 2827^{+113}_{-176} | 3622^{+2367}_{-1200} | $1.405^{+13.114}_{-1.044}$ |

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 $A_{obs} \gg 1.0$

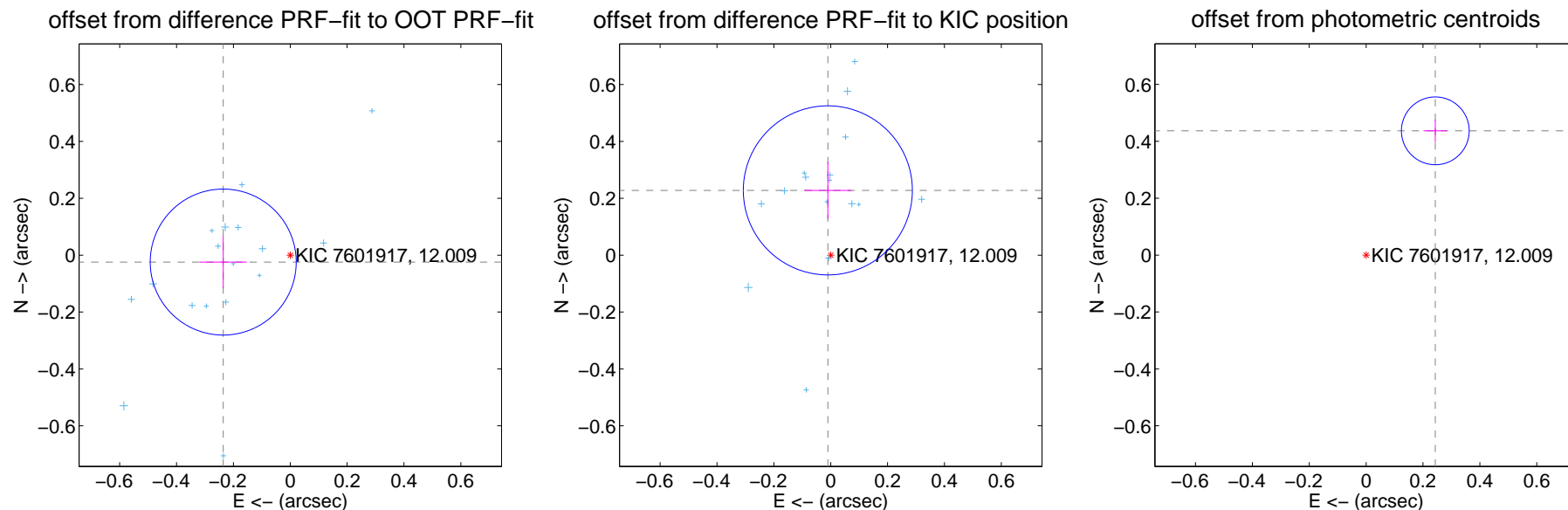
DV Centroid Data

Supplemental centroid analysis for 007601917-03. Kepler magnitude: 12.01. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

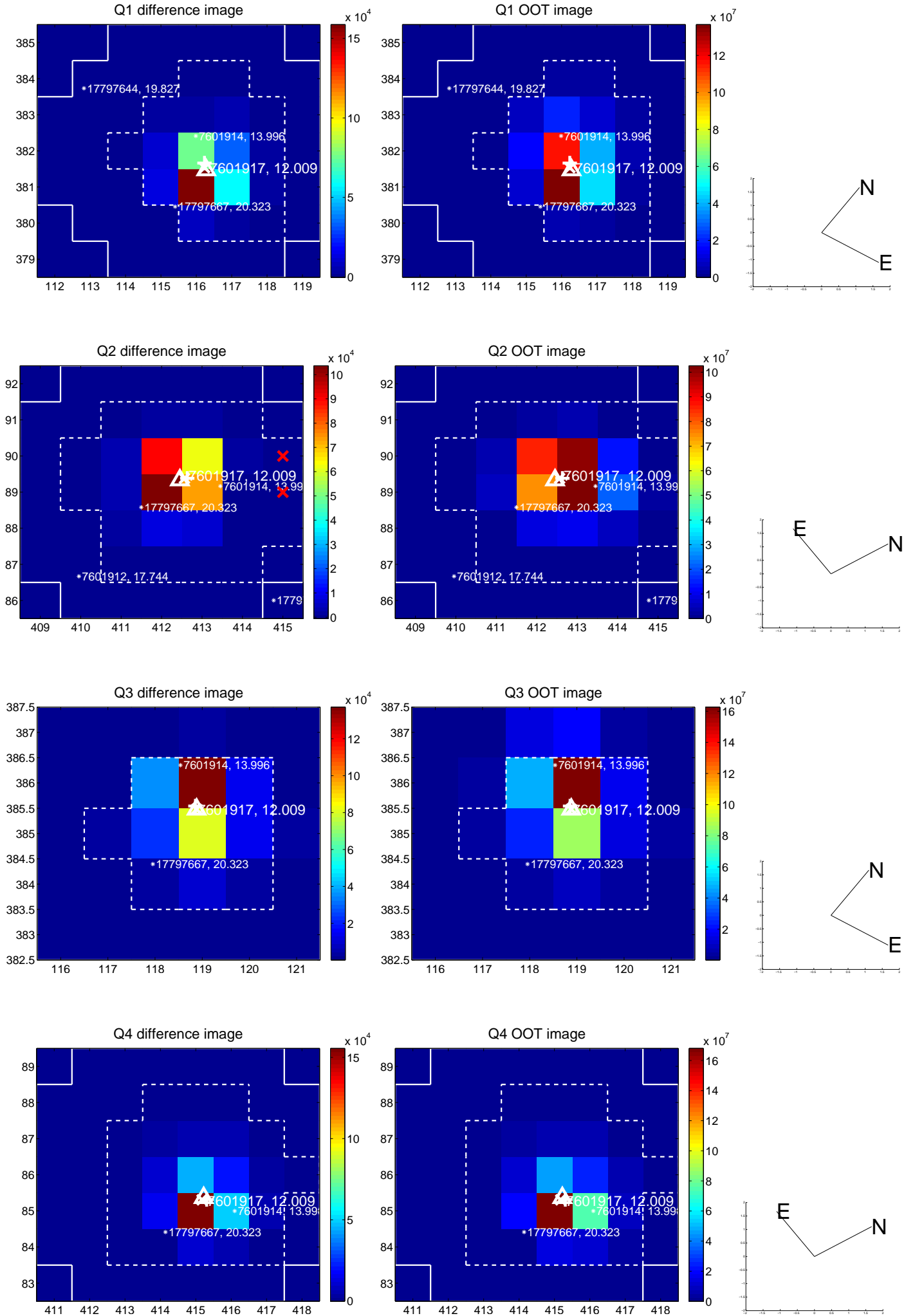
The direct PRF centroid is offset from the target star catalog position by about 0.56 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|-------------------|--------------------|
| PRF-fit source offset from OOT | 0.237 ± 0.086 | 2.77 | 0.236 ± 0.083 | -0.024 ± 0.092 |
| PRF-fit source offset from KIC position | 0.228 ± 0.099 | 2.30 | 0.010 ± 0.083 | 0.228 ± 0.100 |
| photometric centroid source offset | 0.50 ± 0.04 | 12.59 | -0.24 ± 0.04 | 0.44 ± 0.04 |

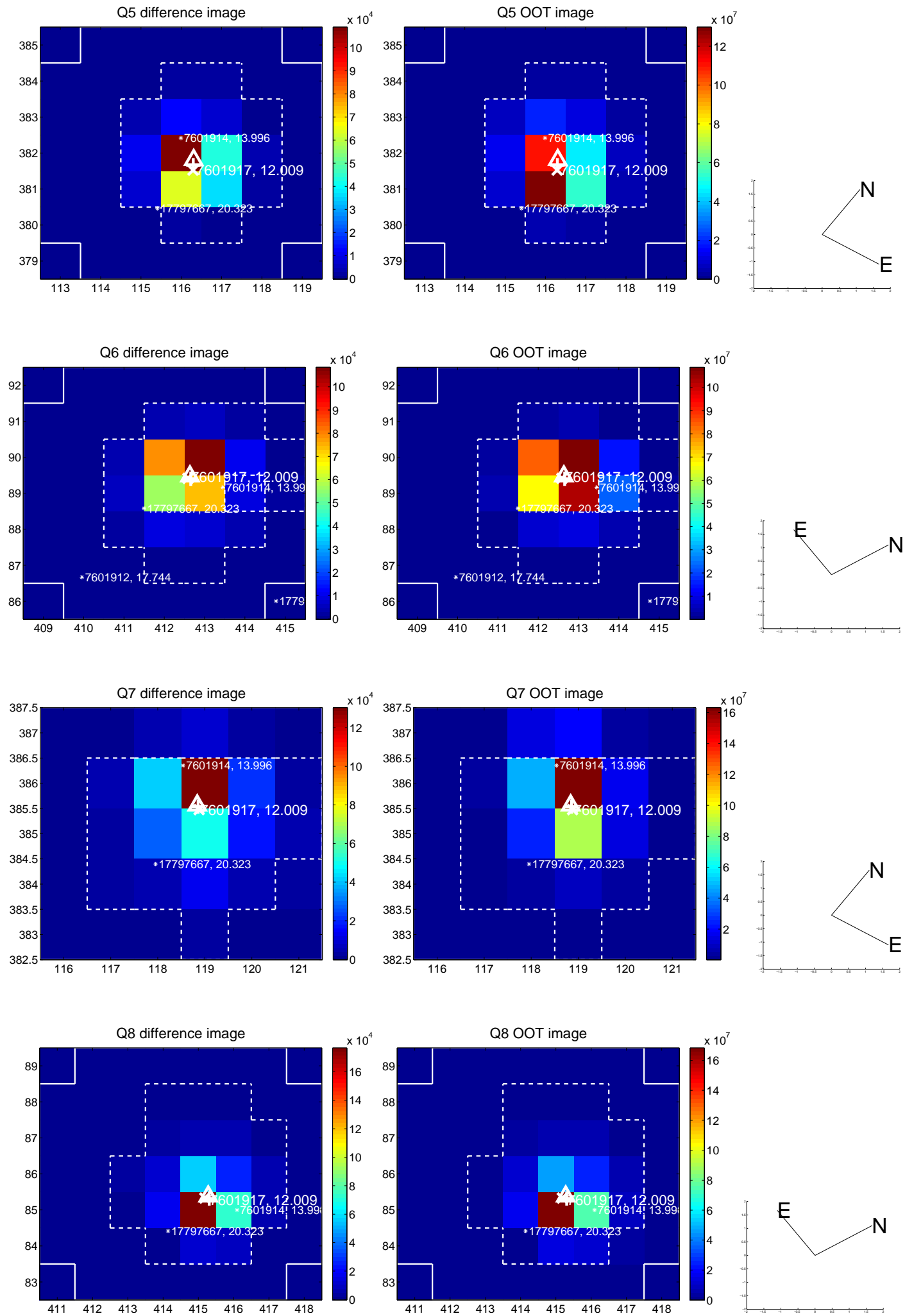


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

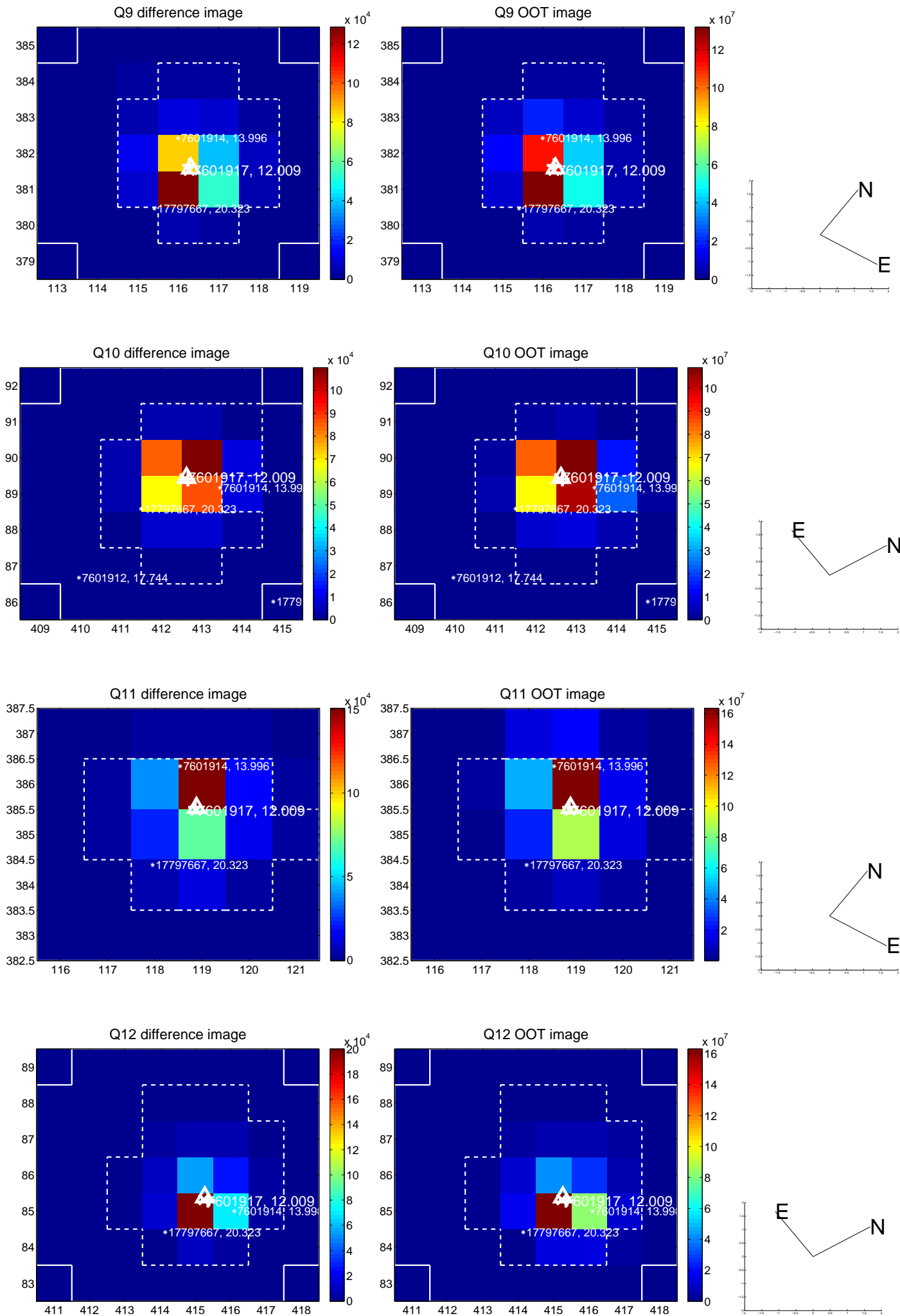
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



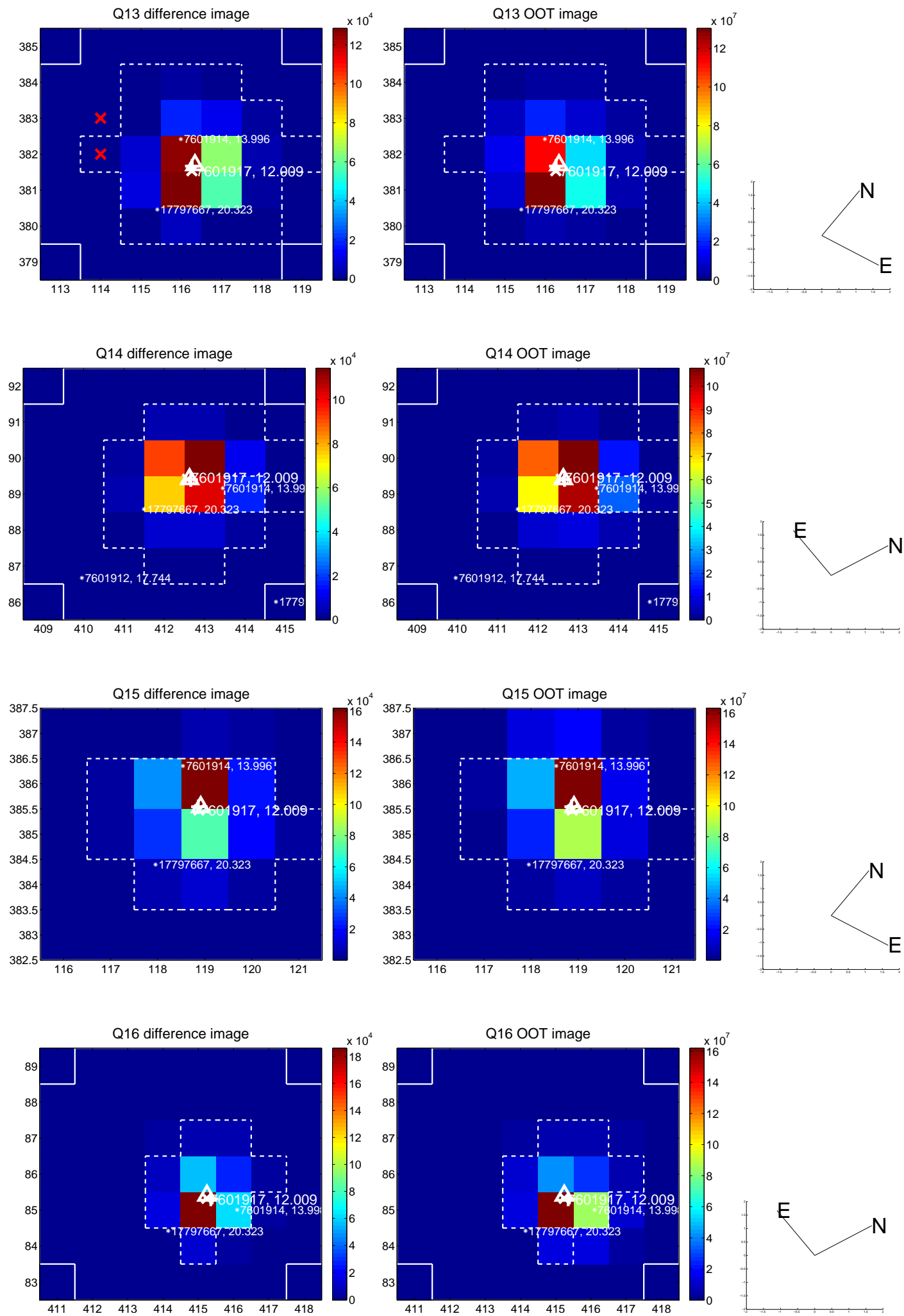
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



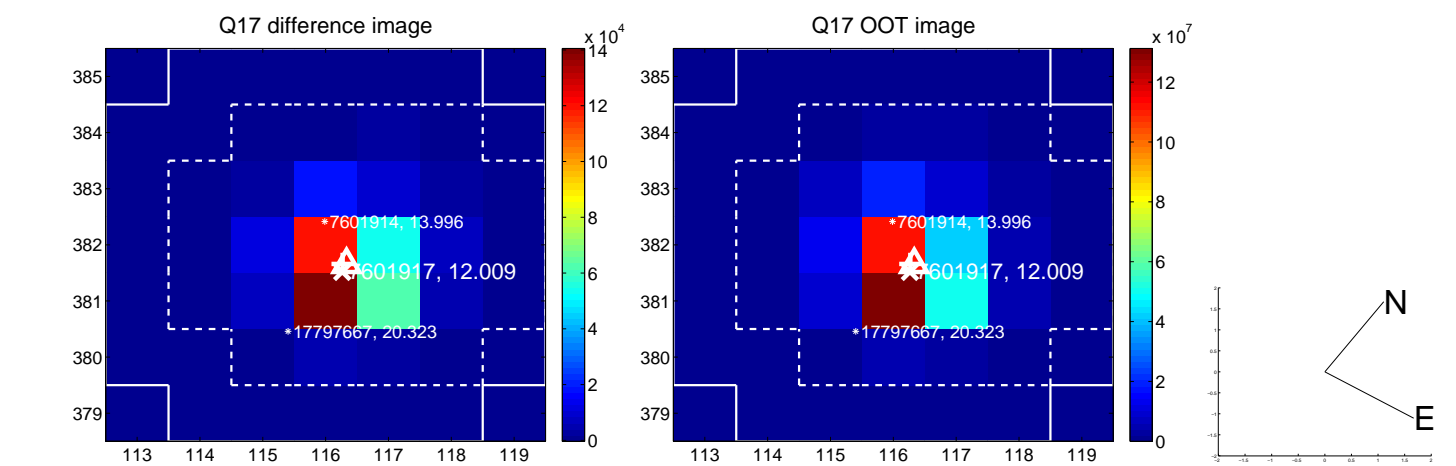
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



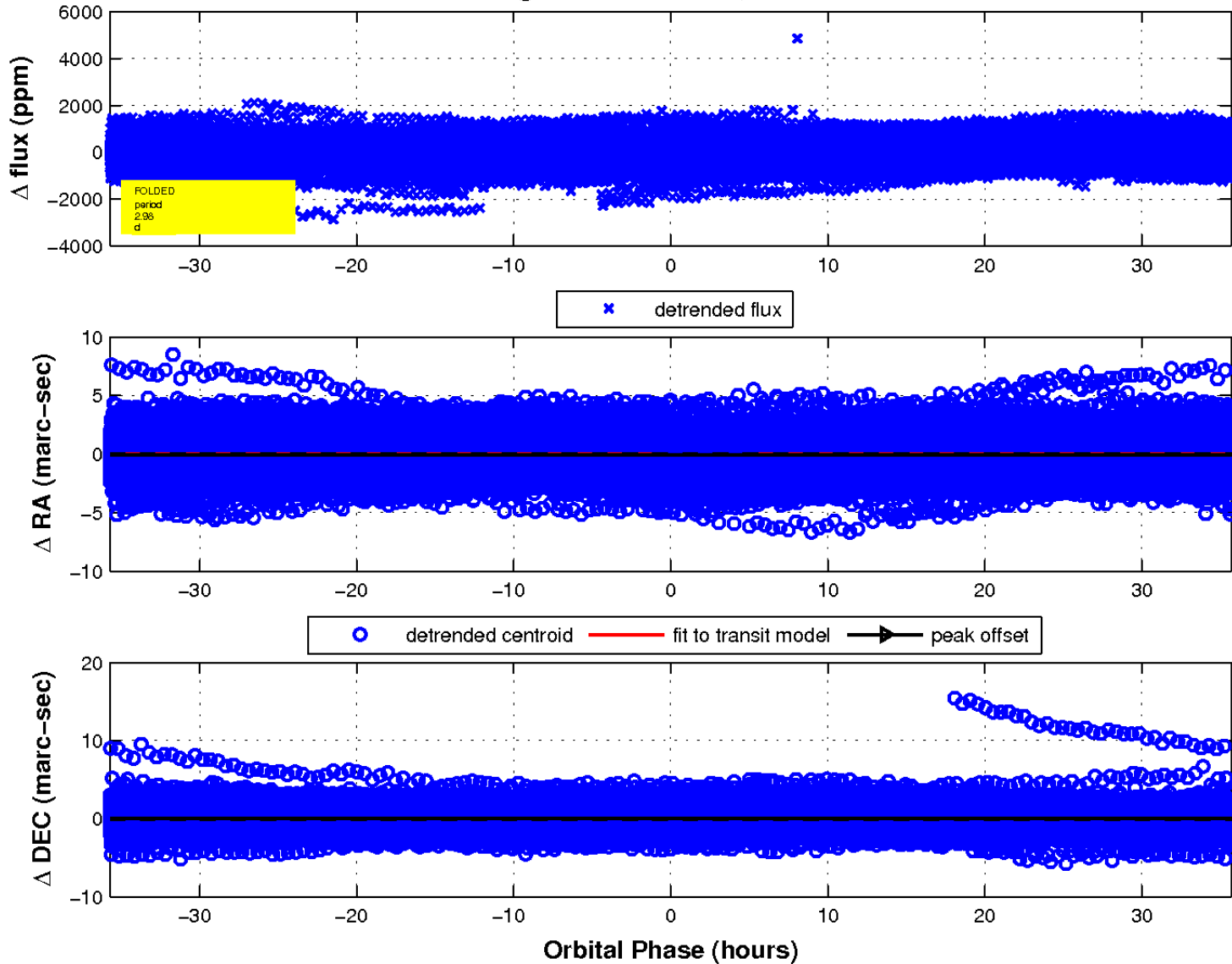
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

