

KIC 005000179

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}) |
|--------------|----------|---------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
| 005000179-01 | OBS | 6485.01 | 3.632966 | 131.830485 | 245.7 | 4.193 | 22.9 | 29.6 | 2.21 | 10046 | 6.40 | 11460.00 |
| 005000179-02 | OBS | No | 1.816407 | 132.514551 | 25.3 | 0.974 | 20.5 | 3.9 | 2.21 | 10046 | 1.17 | 28879.01 |
| 005000179-03 | OBS | No | 1.816486 | 132.741590 | 112.6 | 4.537 | 19.9 | 24.3 | 2.21 | 10046 | 2.40 | 28877.34 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 005000179-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV |
| 005000179-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS |
| 005000179-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—SAME_NTL_PERIOD—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.

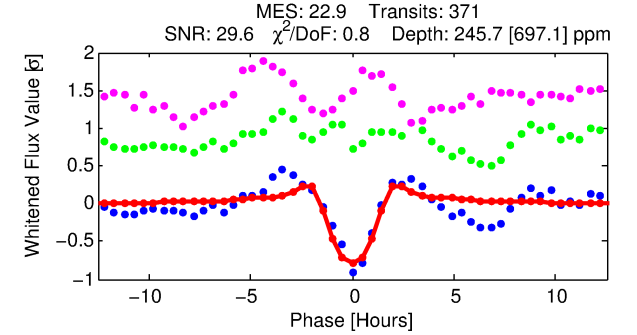
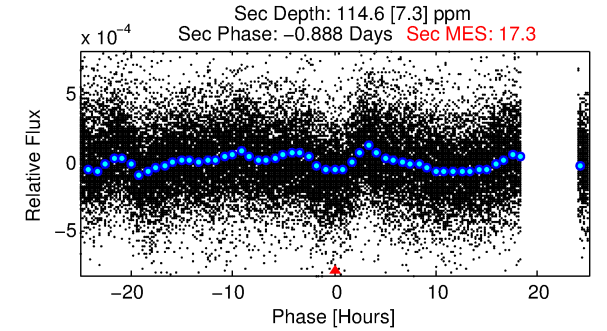
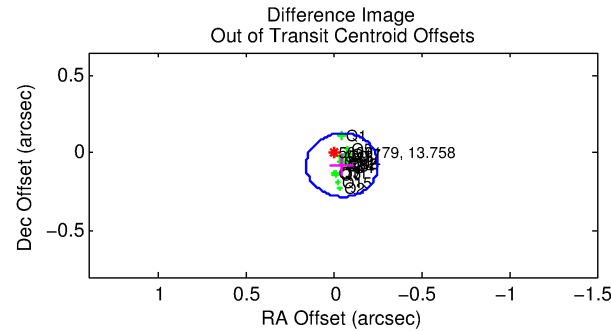
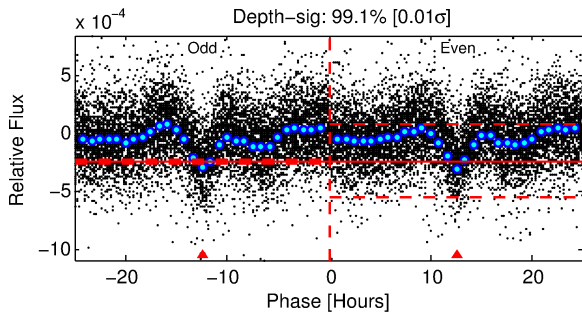
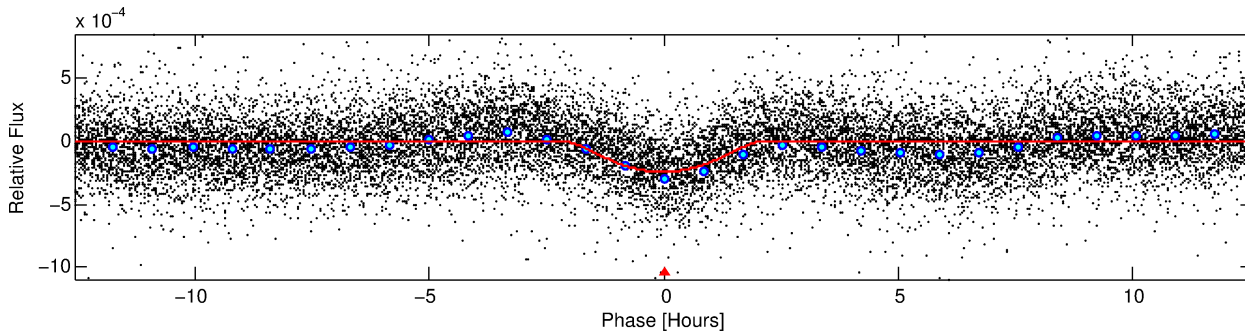
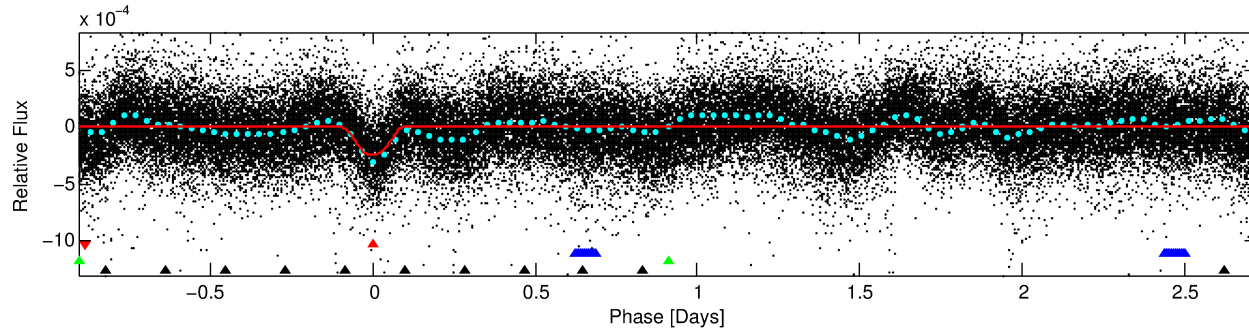
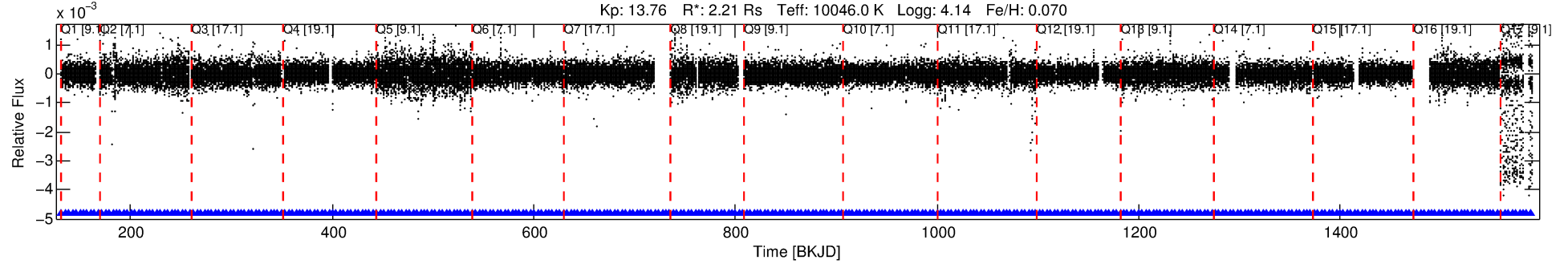
Ephemeris Match Information For 005000179-01

No Significant Match Found

DV One-Page Summary

KIC: 5000179 Candidate: 1 of 4 Period: 3.633 d
KOI: K06485 Corr: No Ephemeris Match

Kp: 13.76 R*: 2.21 Rs Teff: 10046.0 K Logg: 4.14 Fe/H: 0.070



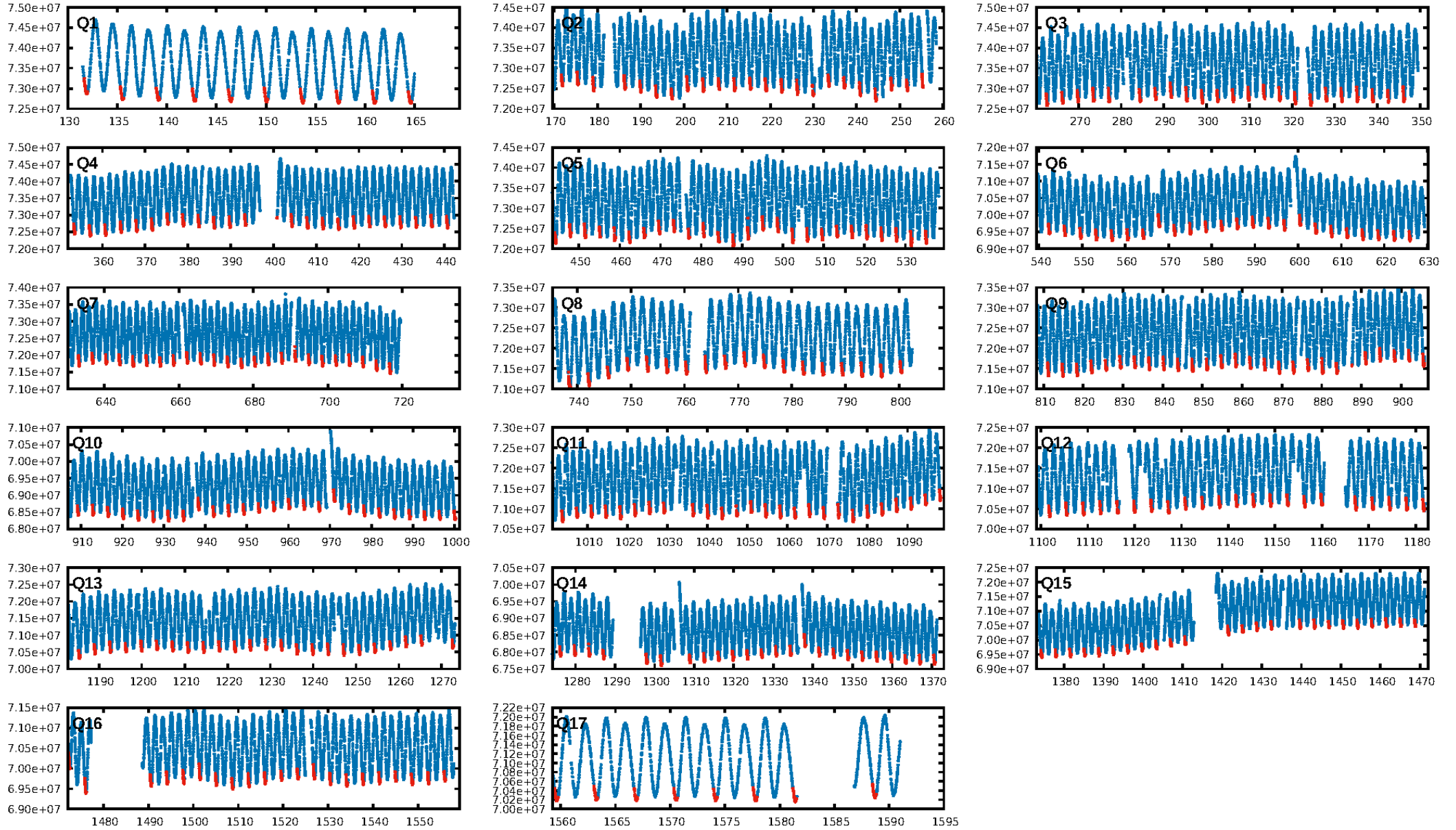
DV Fit Results:

Period = 3.63297 [0.00001] d
Epoch = 131.8305 [0.0023] BKJD
Rp/R* = 0.0265 [0.0196]
a/R* = 1.84 [0.25]
b = 1.00 [0.08]
Seff = 11460.00 [5782.86]
Teq = 2638 [333] K
Rp = 6.40 [5.46] Re
a = 0.0623 [0.0214] AU
Ag = 5.98 [9.28] [0.54σ]
Teffp = 6380 [2370] K [1.56σ]

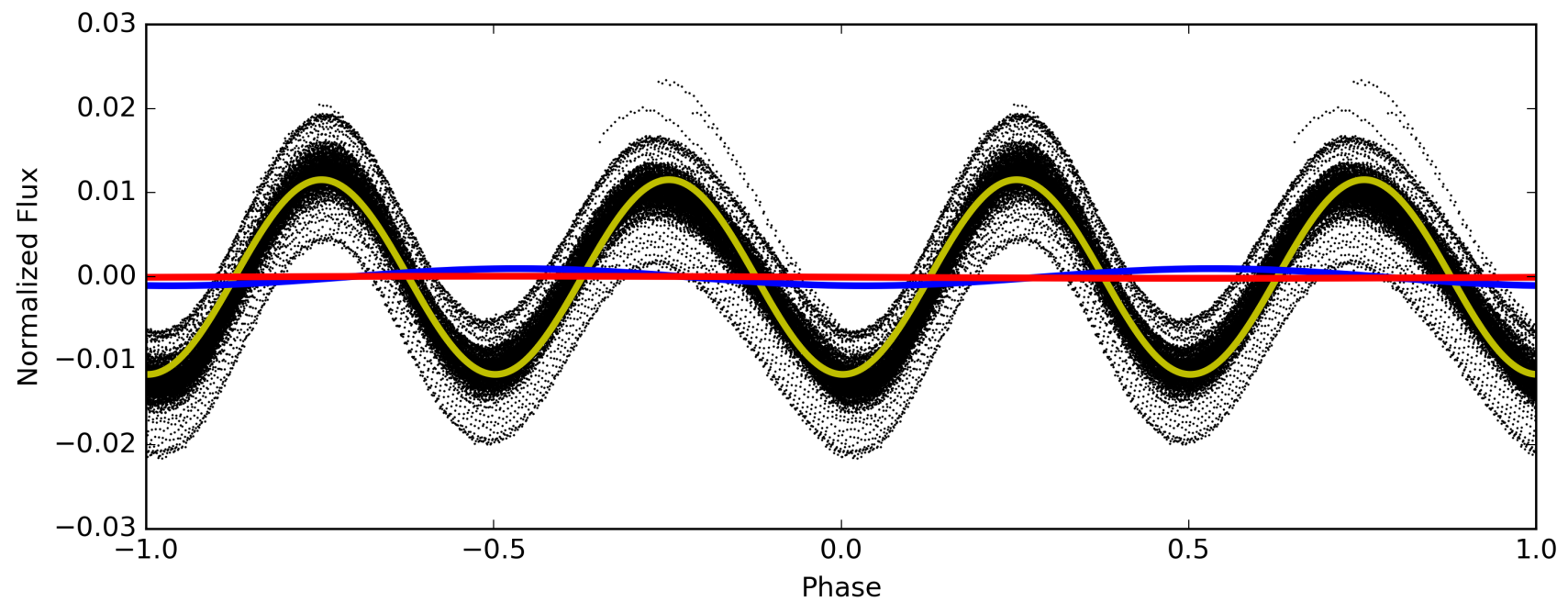
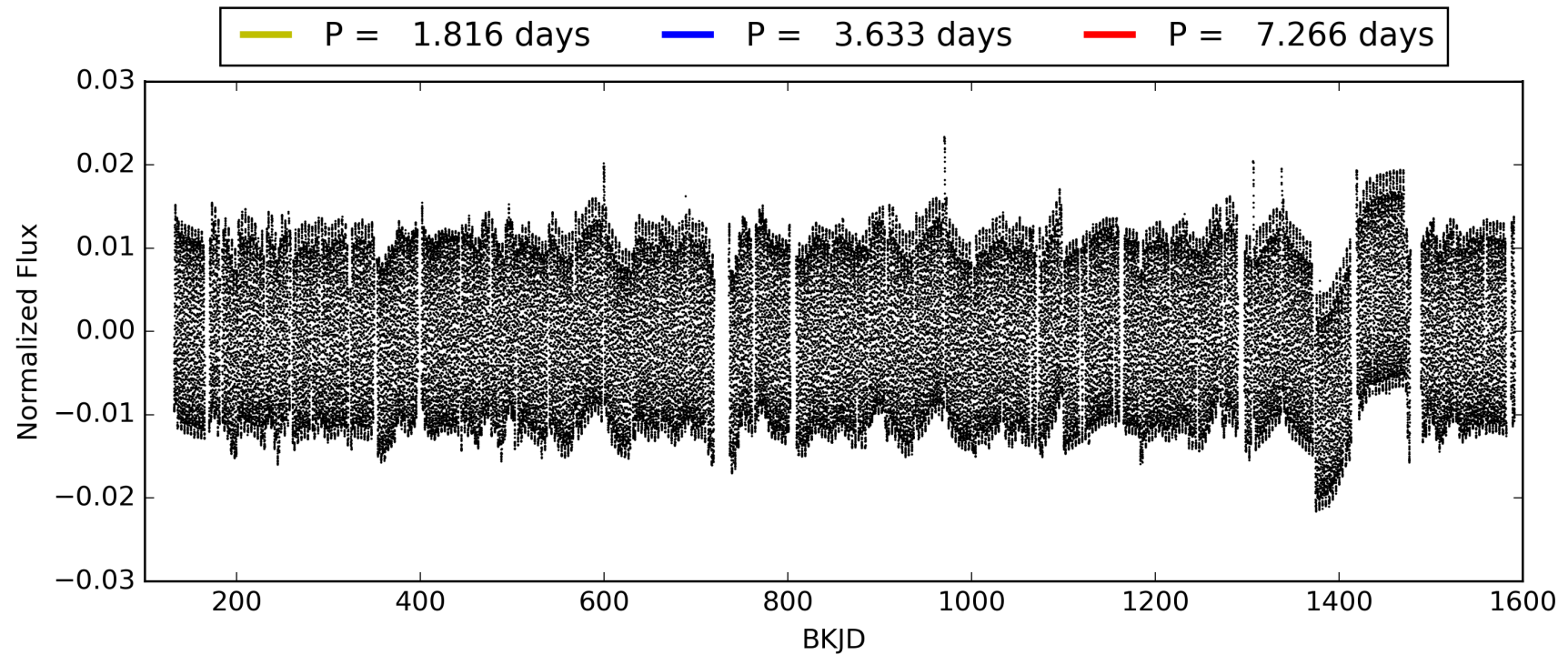
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [7.06σ]
LongPeriod-sig: 100.0% [184.45σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [353/353]
GhostDiagnostic-chr: 2.006
Centroid-sig: 0.0%
Centroid-so: 0.677 arcsec [2.83σ]
OotOffset-rm: 0.090 arcsec [1.32σ]
KicOffset-rm: 0.107 arcsec [1.56σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005000179-01, PDC Light Curves

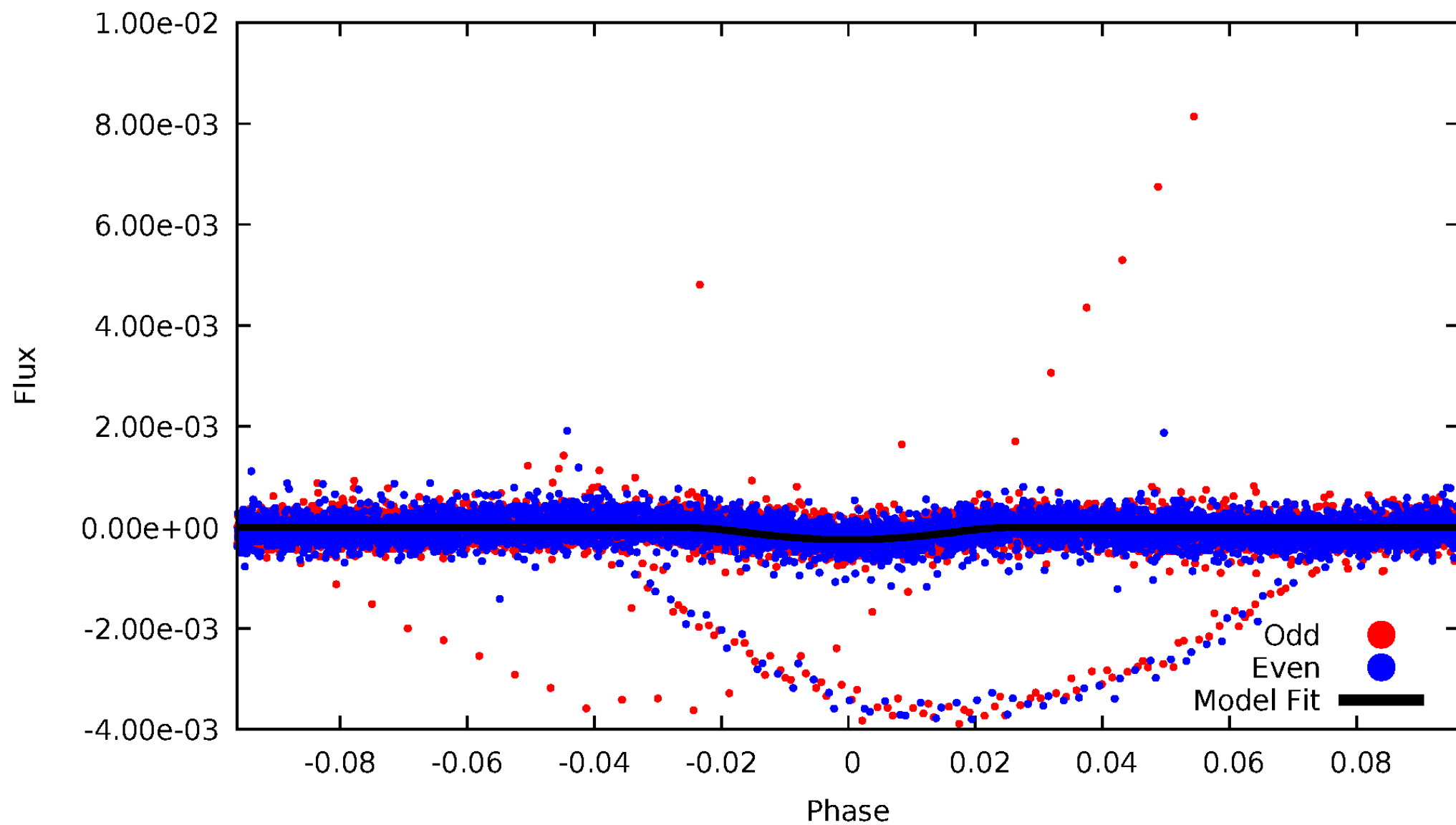


TCE 005000179-01



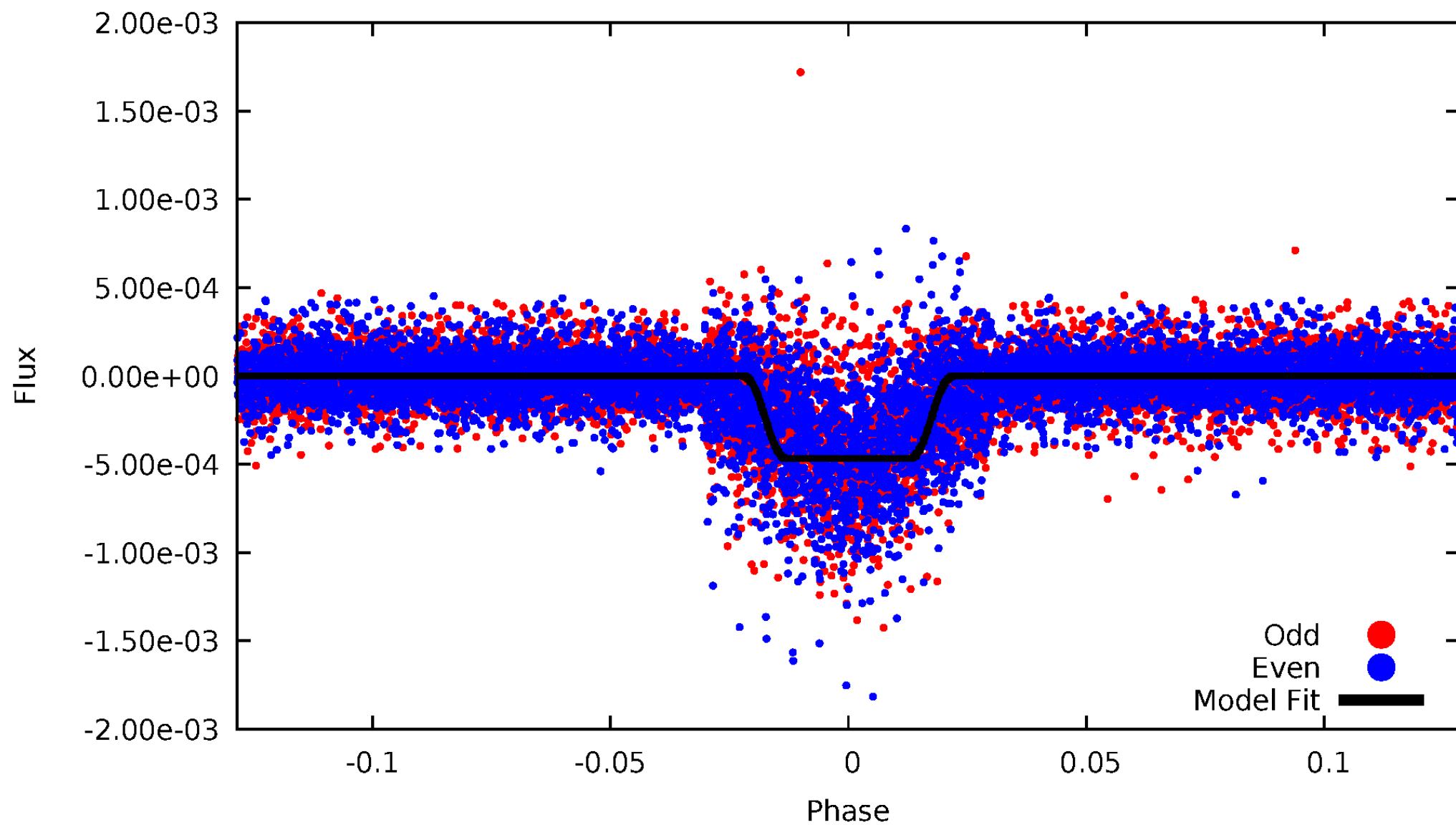
DV Odd/Even

TCE 005000179-01



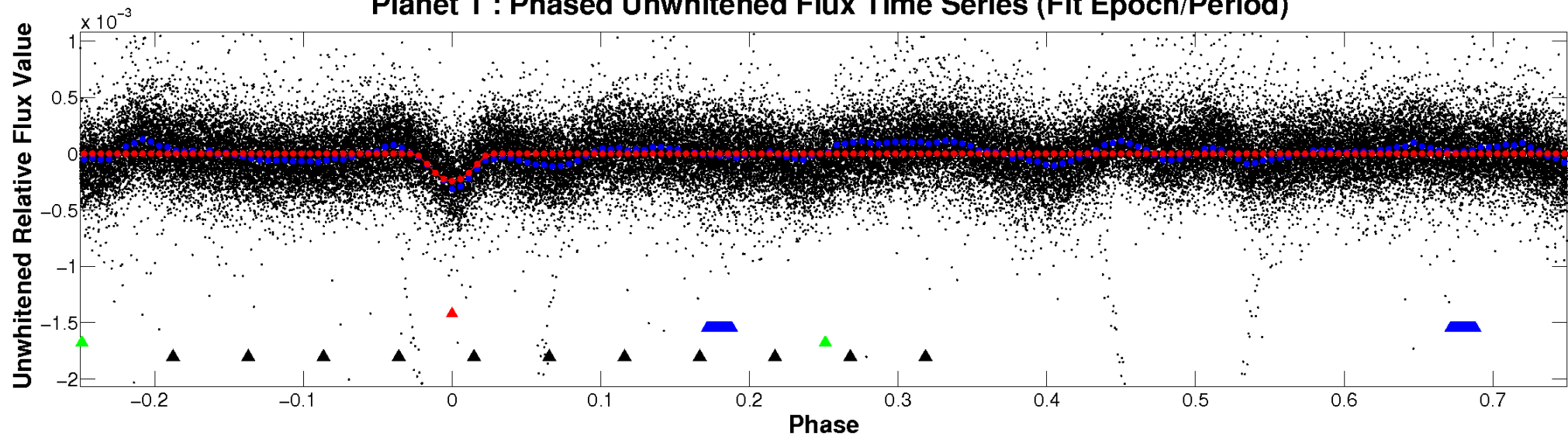
ALT Odd/Even

TCE 005000179-01

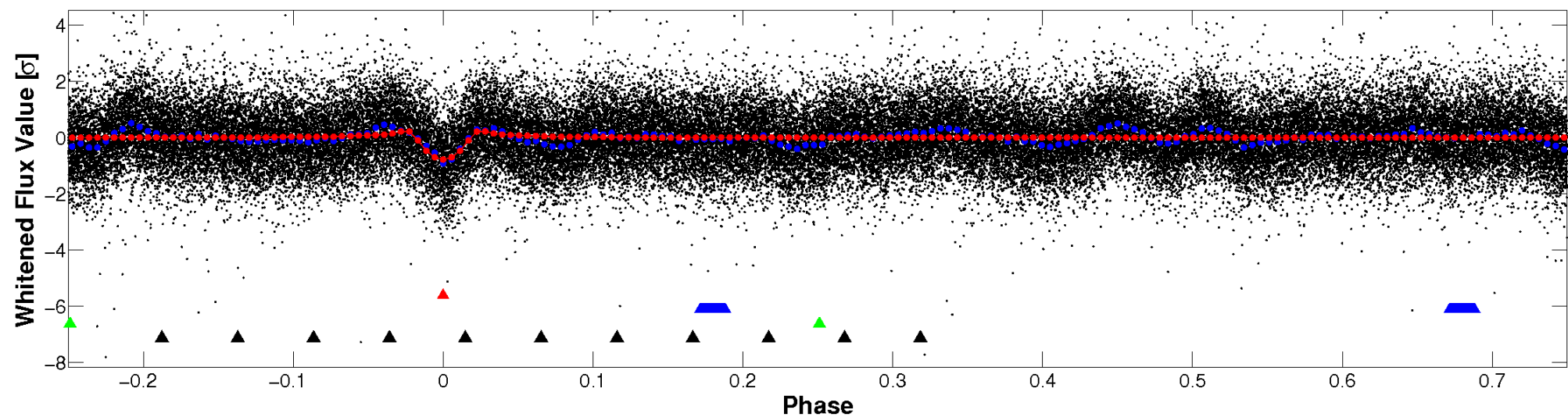


Non-Whitened Vs. Whitened Light Curve

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

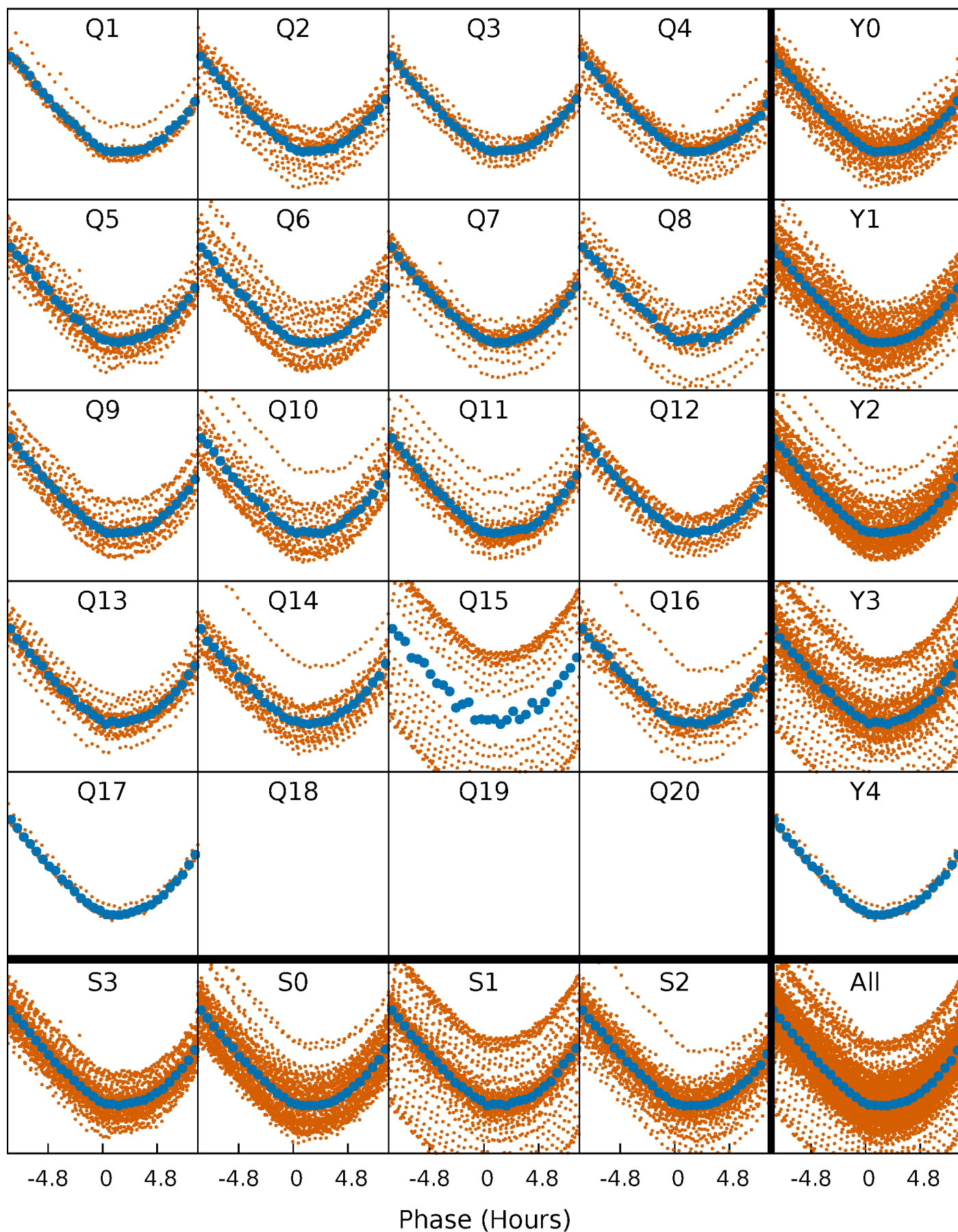


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



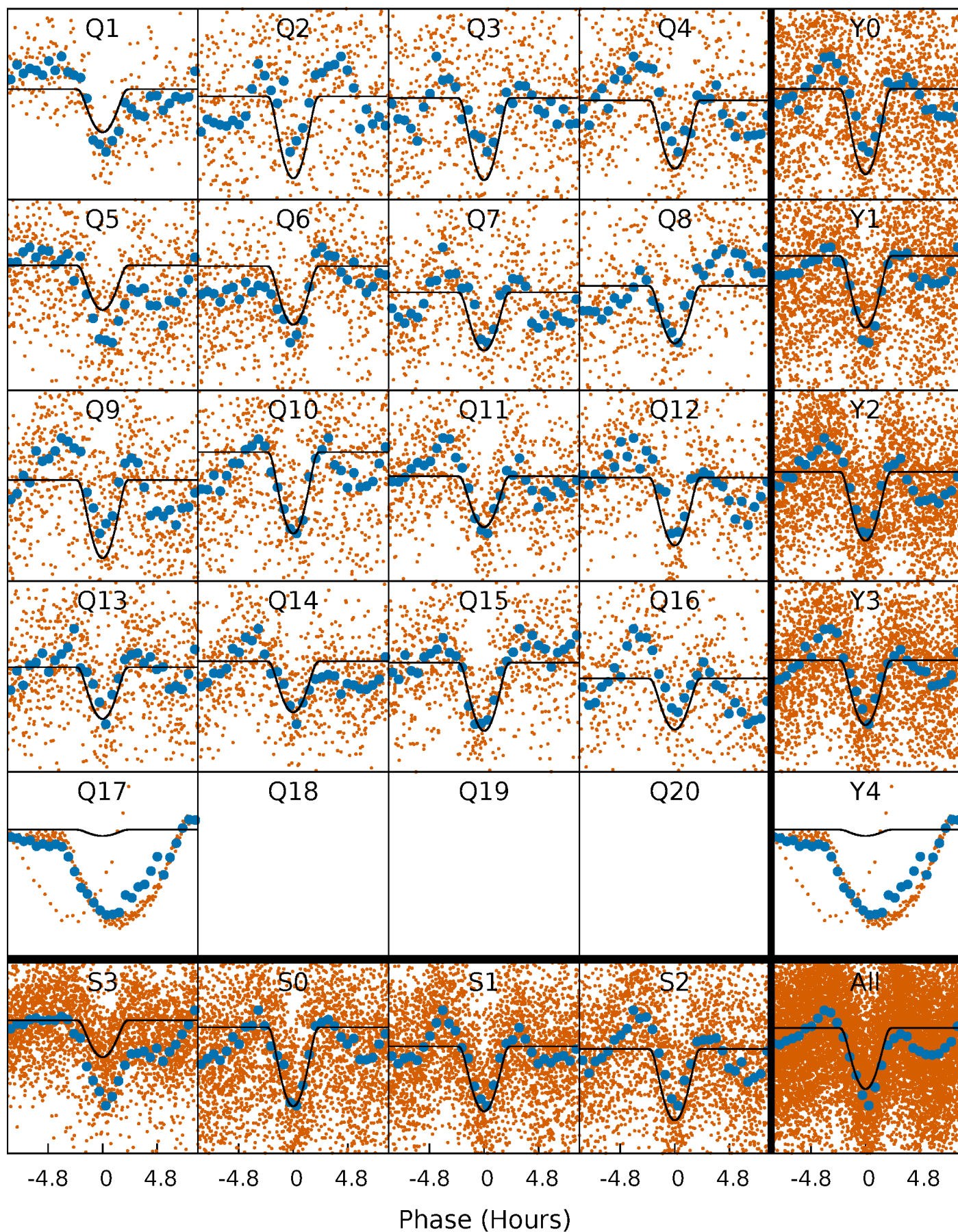
PDC Quarter-Phased Transit Curves

TCE 005000179-01 P= 3.632966 Days $T_0=131.830485$ (BKJD)



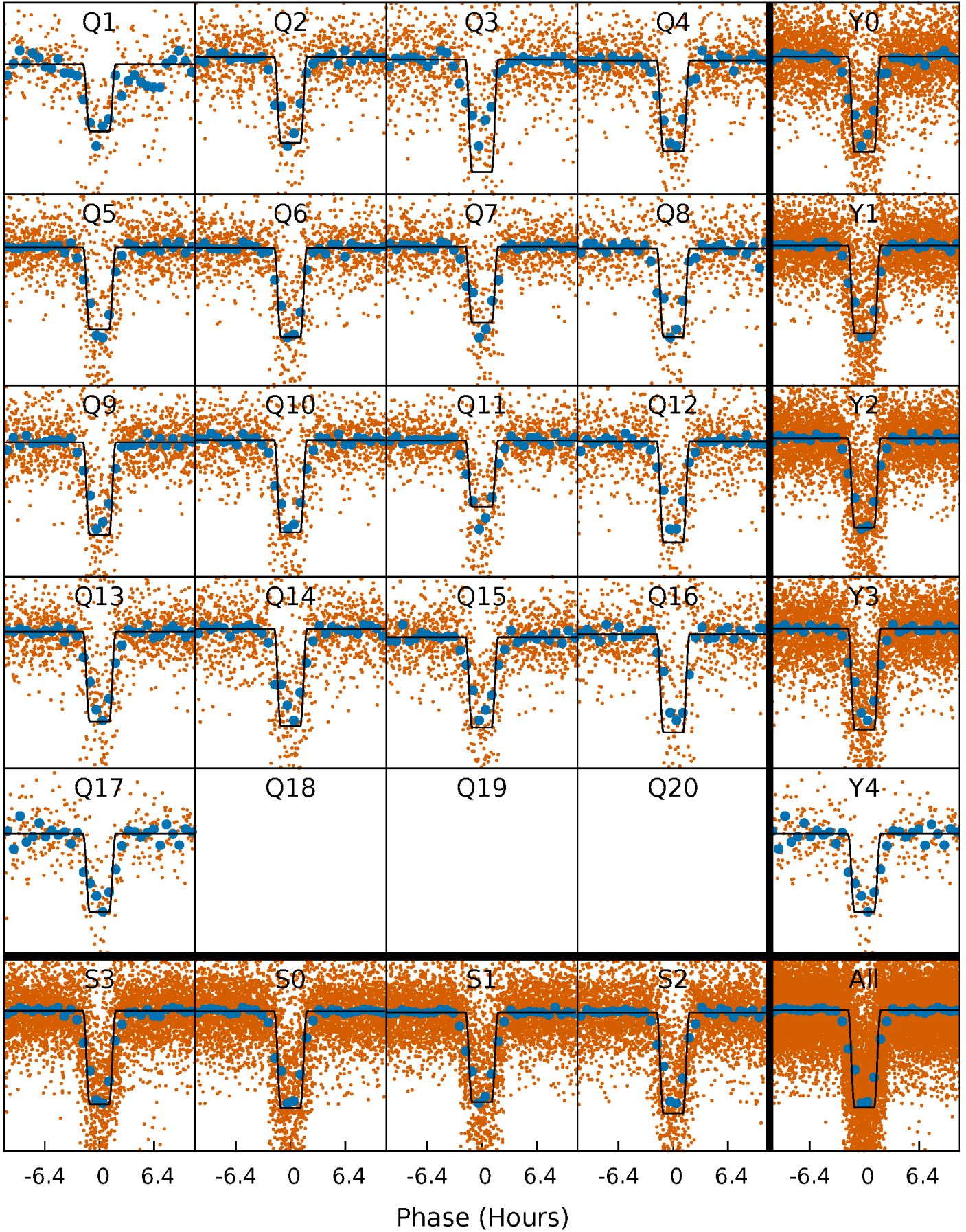
DV Quarter-Phased Transit Curves

TCE 005000179-01 P= 3.632966 Days $T_0=131.830485$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

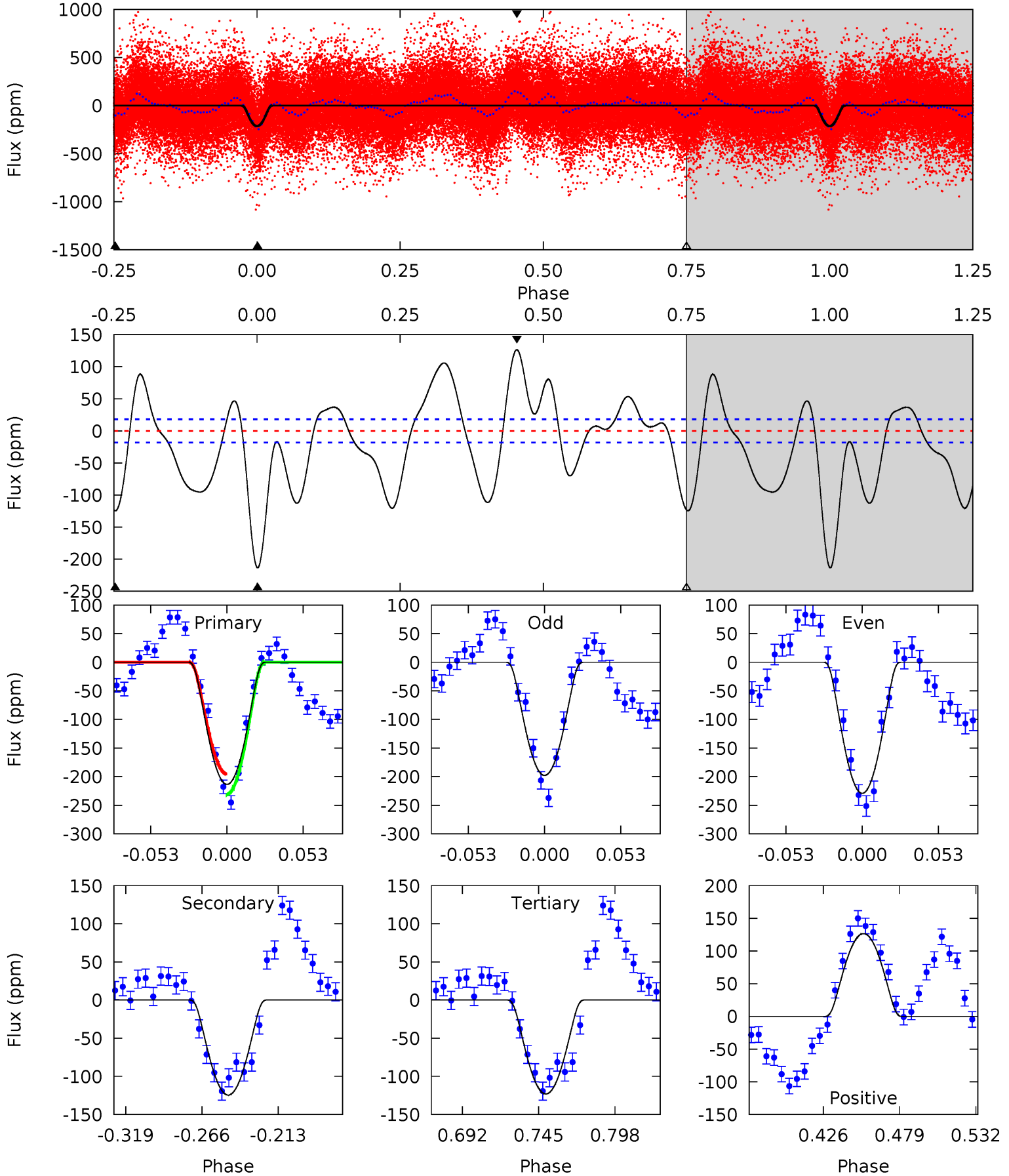
TCE 005000179-01 P= 3.632897 Days $T_0=131.844836$ (BKJD)



DV Model-Shift Uniqueness Test

005000179-01, P = 3.632966 Days, E = 128.197519 Days

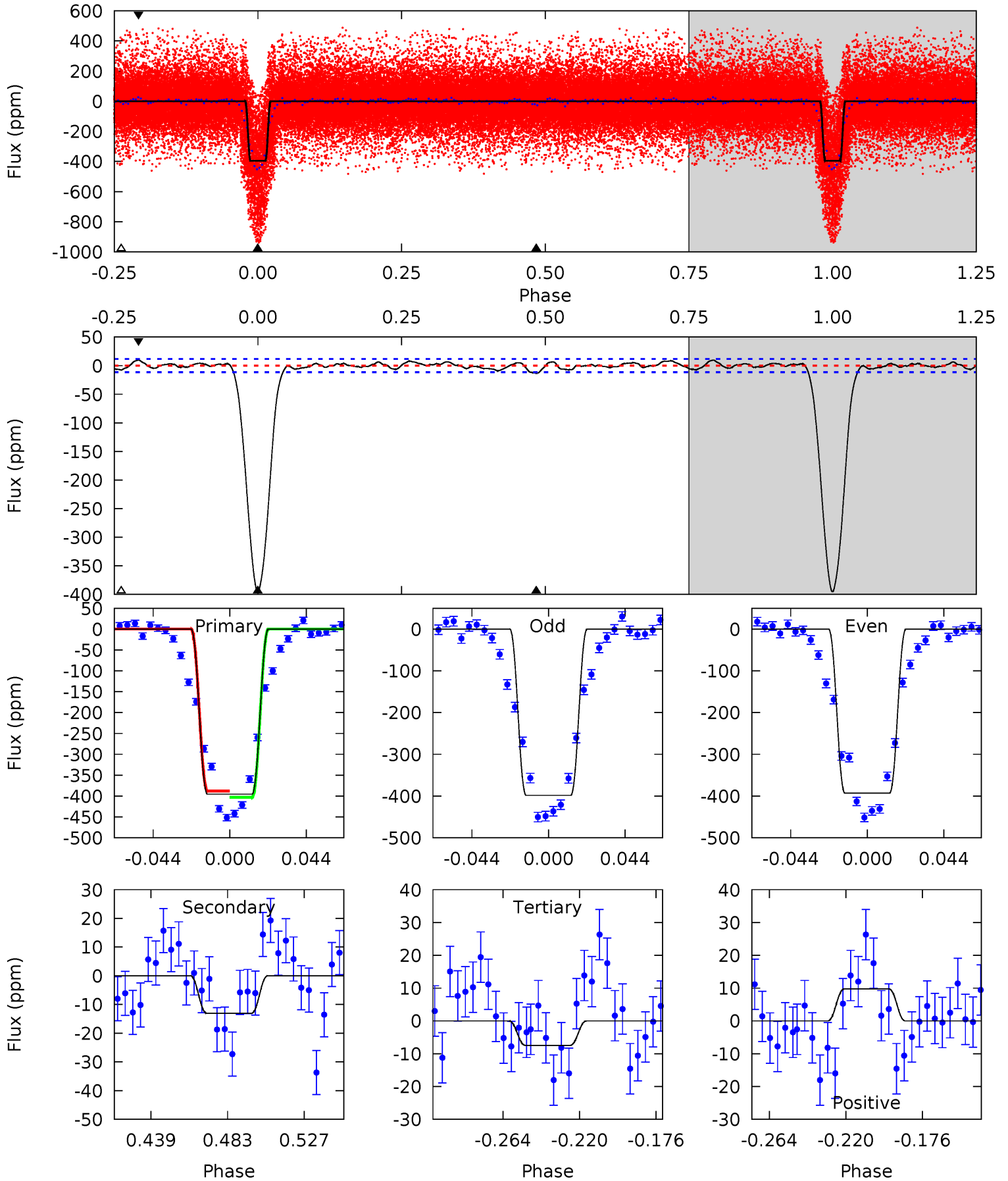
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 55.0 | 32.1 | 31.7 | 32.6 | 4.70 | 1.93 | 15.7 | 23.3 | 22.4 | 0.37 | -0.52 | 4.04 | 1.37 | 0.37 | 4.56 |



Alt Model-Shift Uniqueness Test

005000179-01, P = 3.632897 Days, E = 128.211939 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|-------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 161.0 | 5.33 | 3.04 | 3.97 | 4.73 | 2.01 | 1.59 | 158.0 | 157.1 | 2.29 | 1.36 | 1.09 | 1.04 | 0.02 | 3.05 |



Stellar Parameters For KIC 005000179

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 10046^{+248}_{-426} | $4.138^{+0.133}_{-0.247}$ | $0.070^{+0.150}_{-0.300}$ | $2.208^{+0.949}_{-0.511}$ | $2.440^{+0.424}_{-0.466}$ | $0.319^{+0.223}_{-0.202}$ |
| | +2%/-4% | +3%/-6% | +214%/-429% | +43%/-23% | +17%/-19% | +70%/-63% |
| Source | KIC0 | 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 005000179-01 / KOI 6485.01

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|--------------|------------------------|----------------------|------------------------|----------------------------|
| DV | -125 ± 4 | $7.06^{+5.03}_{-4.09}$ | 3716^{+357}_{-268} | 5658^{+3894}_{-1233} | $5.179^{+24.195}_{-3.425}$ |
| Alt. | -13 ± 2 | $6.14^{+5.19}_{-3.69}$ | 3724^{+399}_{-251} | 3498^{+2018}_{-6352} | $0.711^{+3.933}_{-0.499}$ |

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 $A_{obs} \gg 1.0$

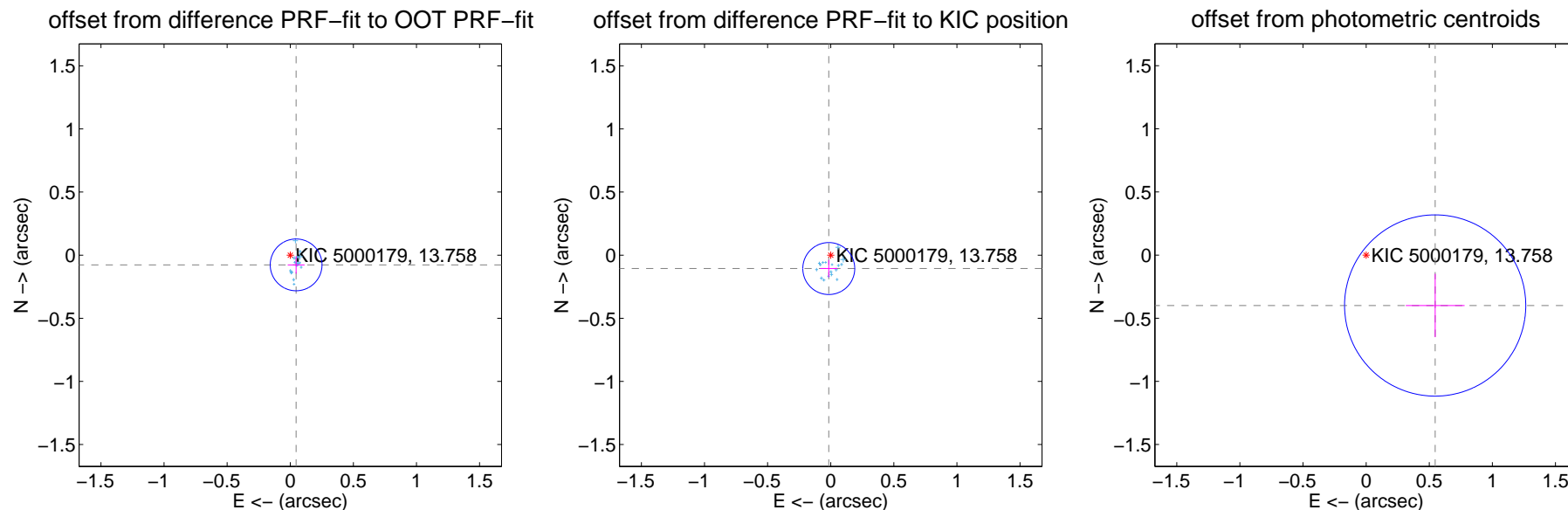
DV Centroid Data

Supplemental centroid analysis for 005000179-01. Kepler magnitude: 13.76. Transit SNR 29.64

There are 17 quarters with good PRF difference image offsets

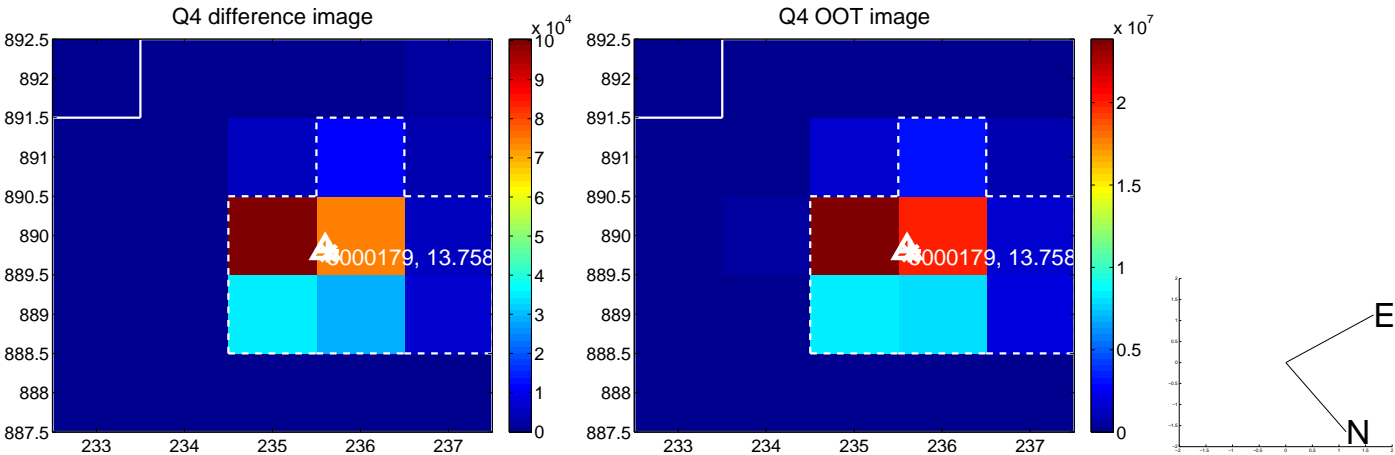
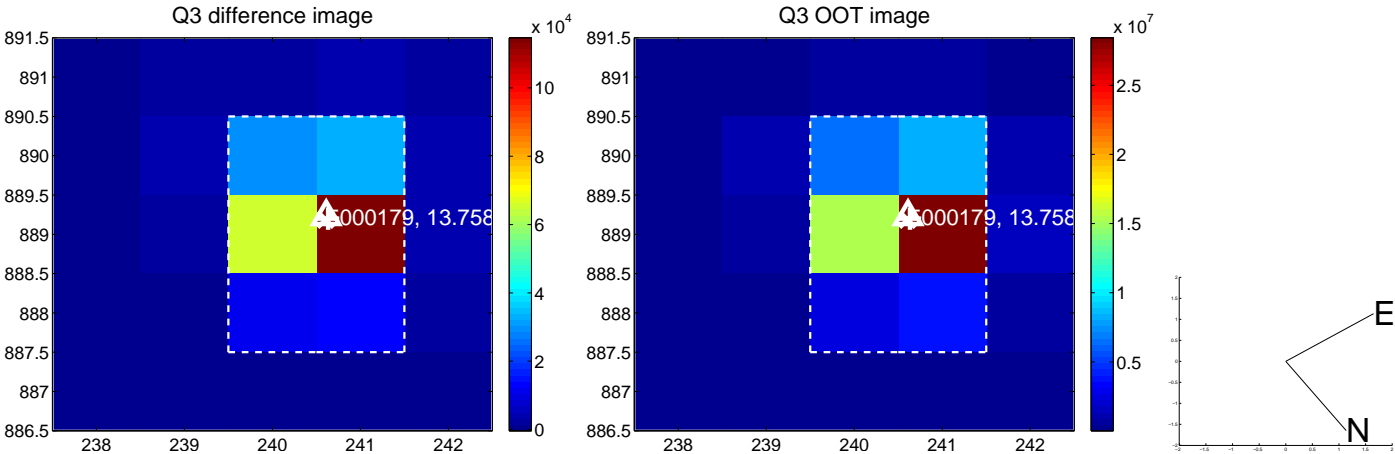
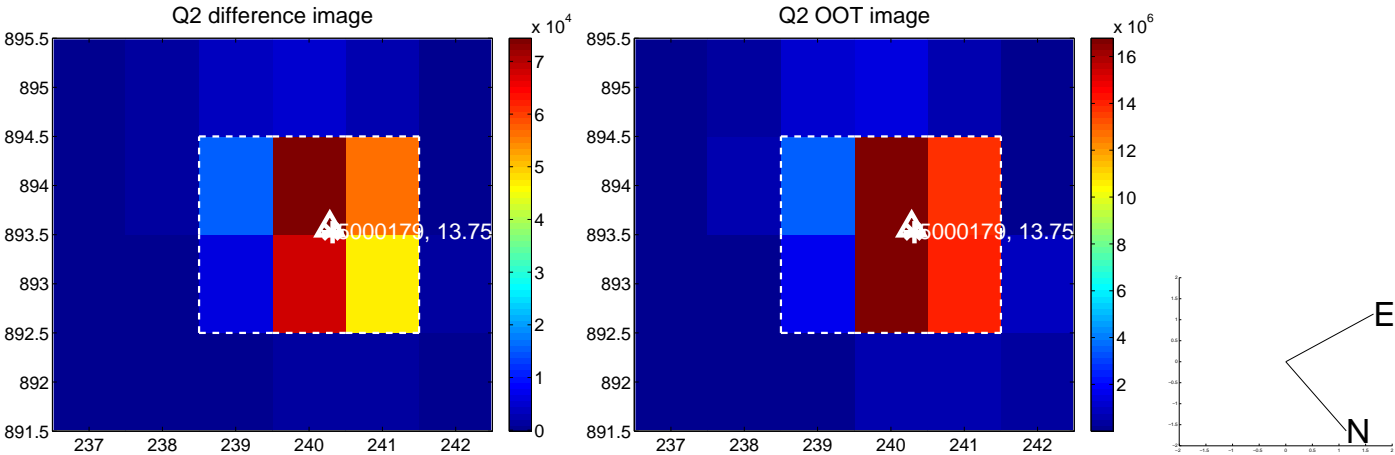
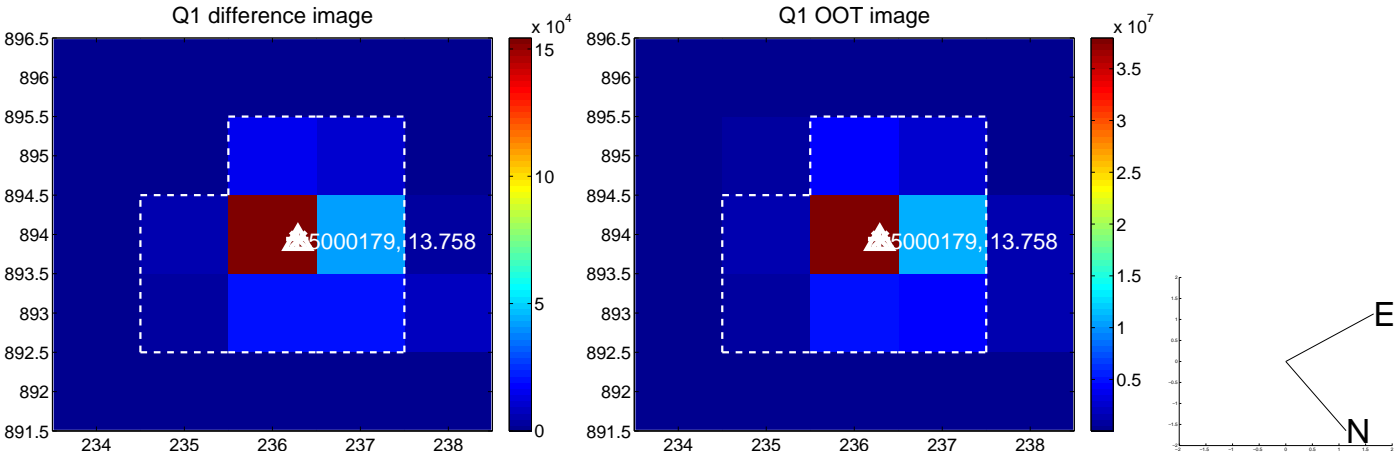
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 0.090 ± 0.068 | 1.32 | -0.046 ± 0.067 | -0.077 ± 0.069 |
| PRF-fit source offset from KIC position | 0.107 ± 0.069 | 1.56 | 0.015 ± 0.068 | -0.106 ± 0.068 |
| photometric centroid source offset | 0.68 ± 0.24 | 2.83 | -0.55 ± 0.23 | -0.40 ± 0.25 |

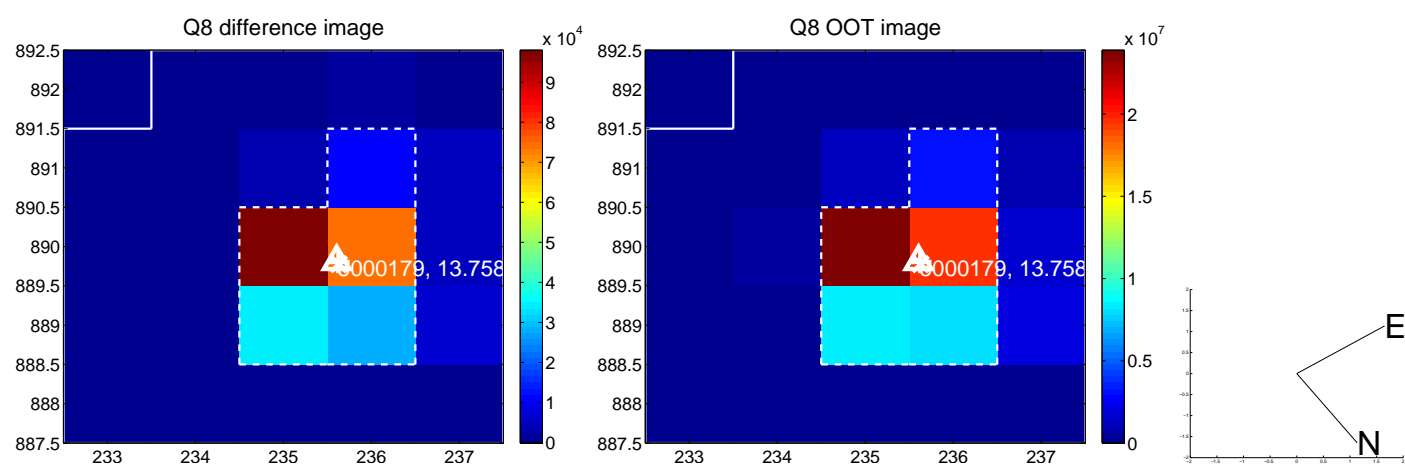
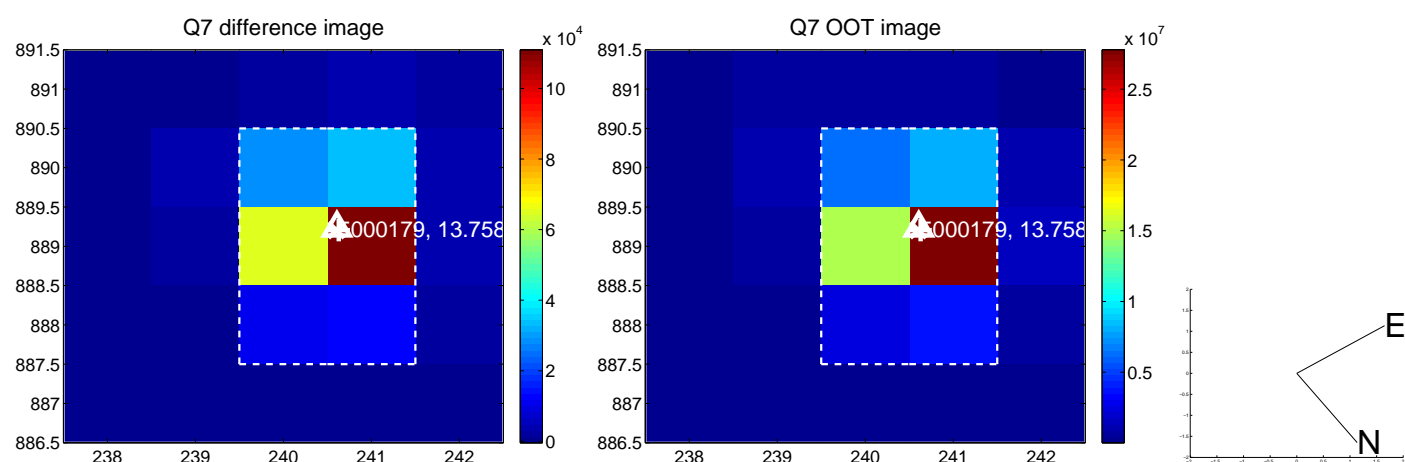
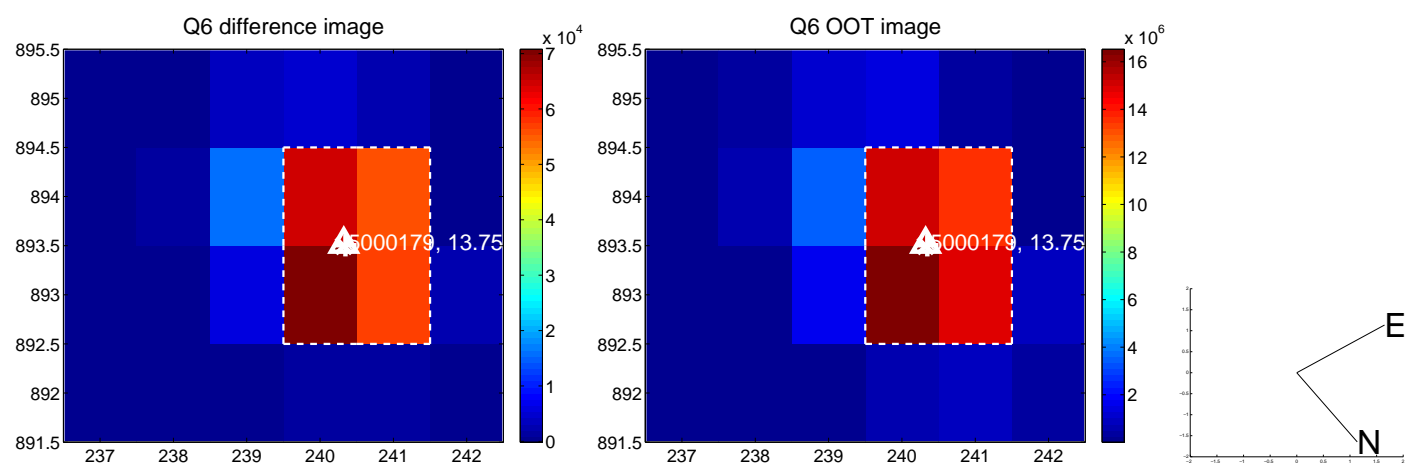
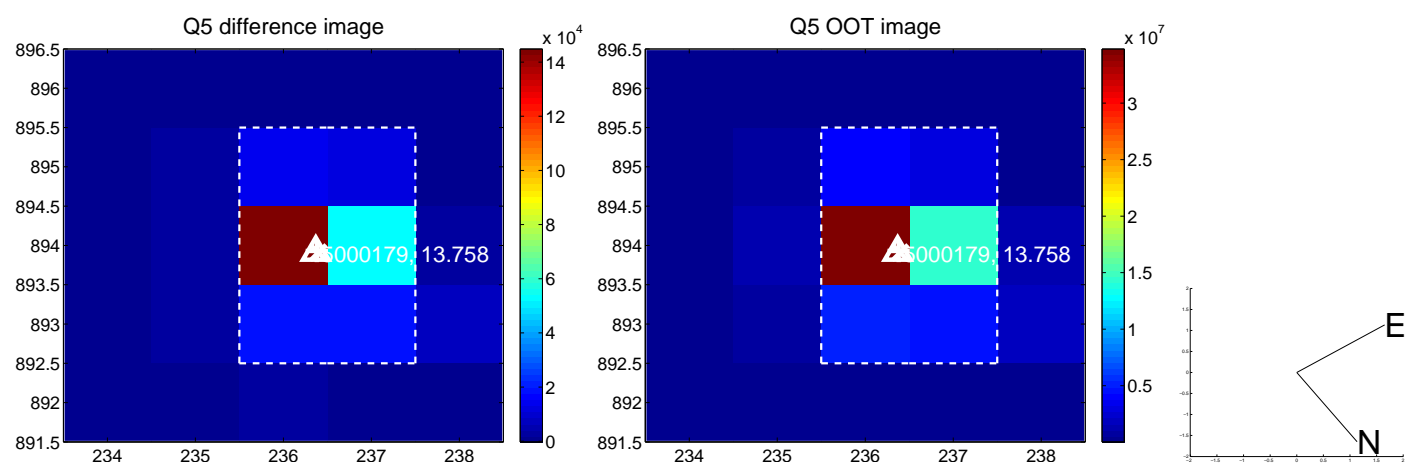


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

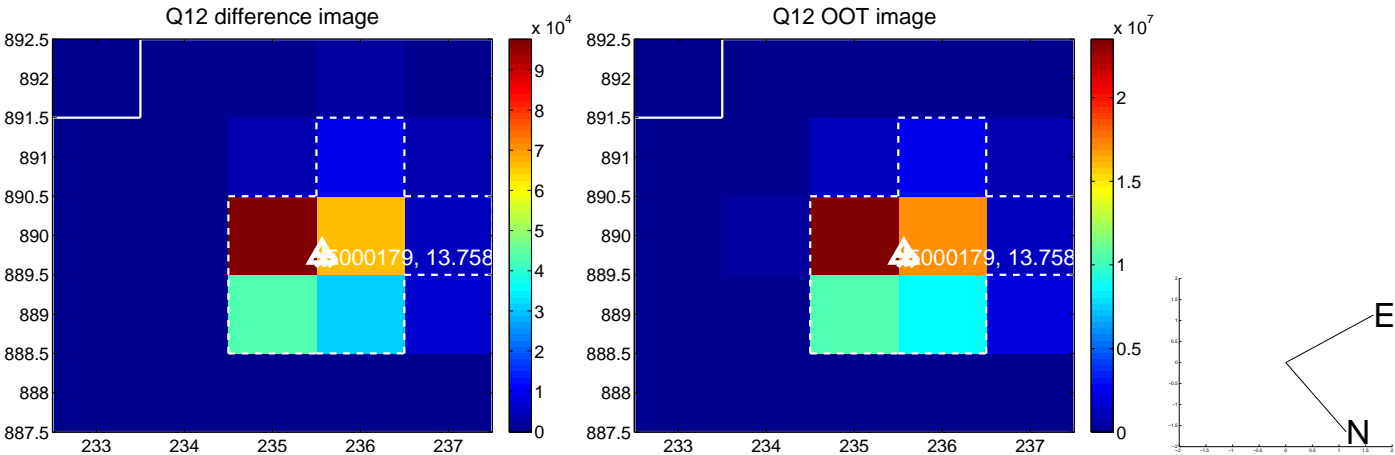
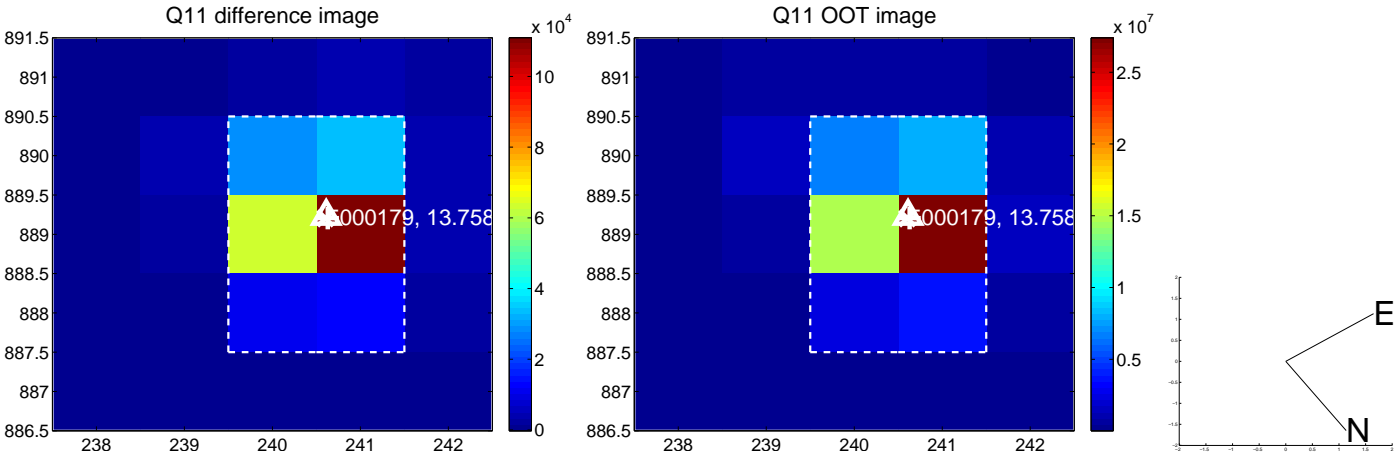
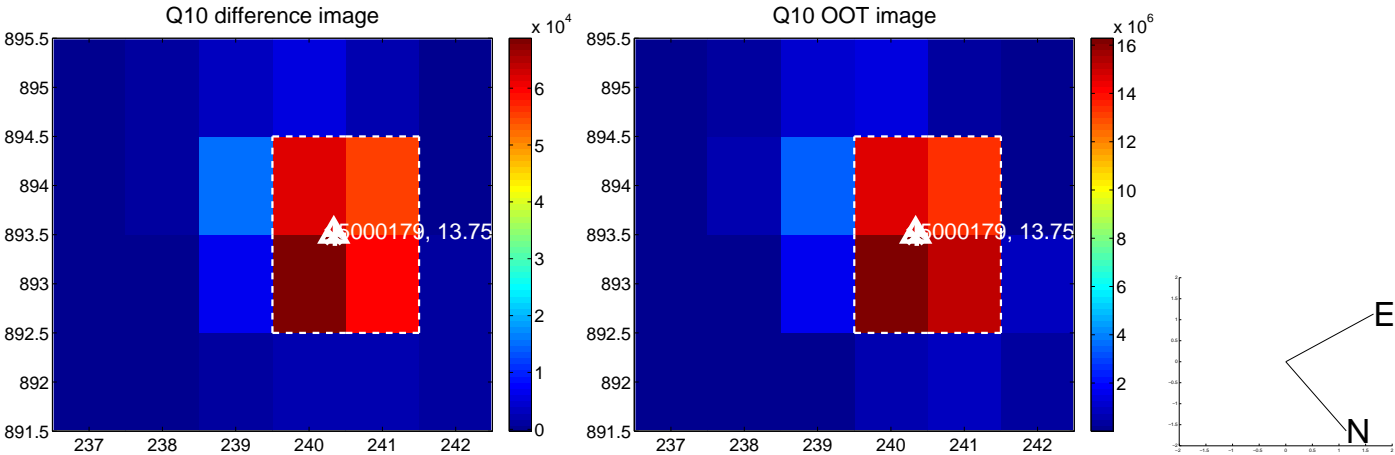
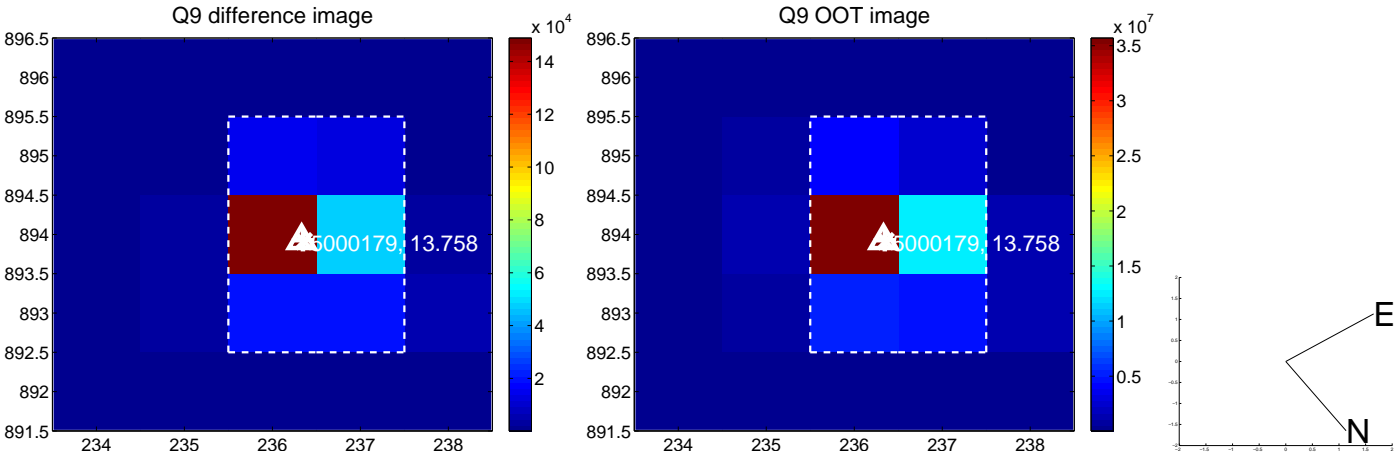
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



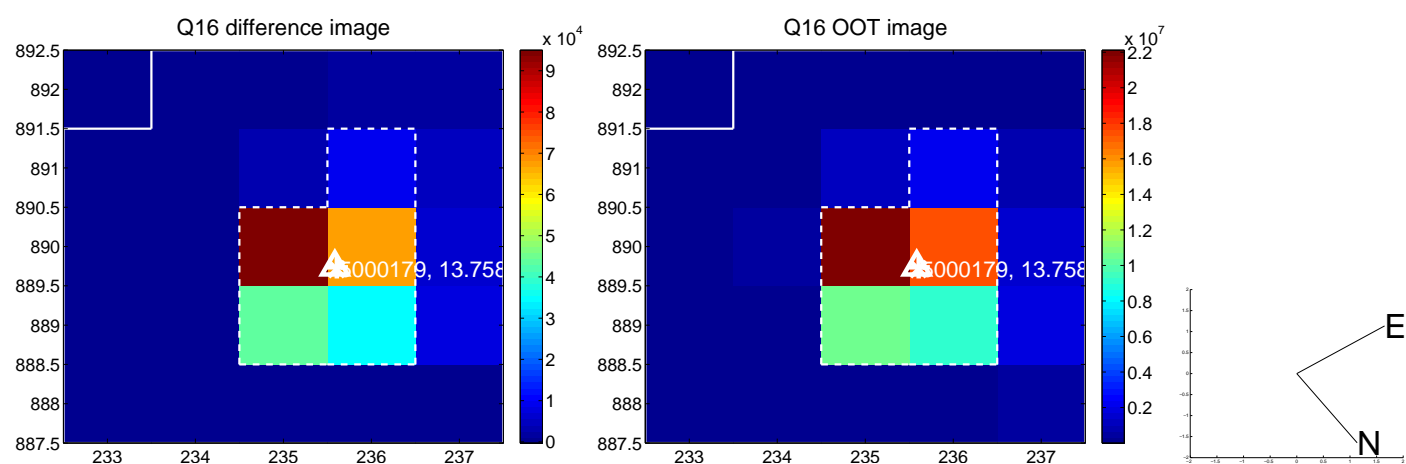
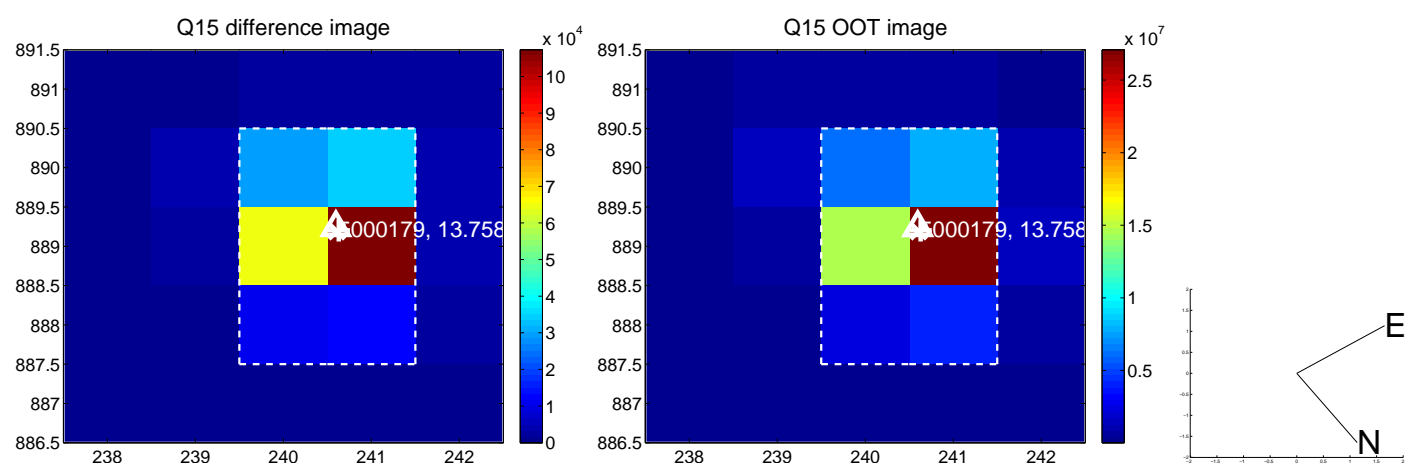
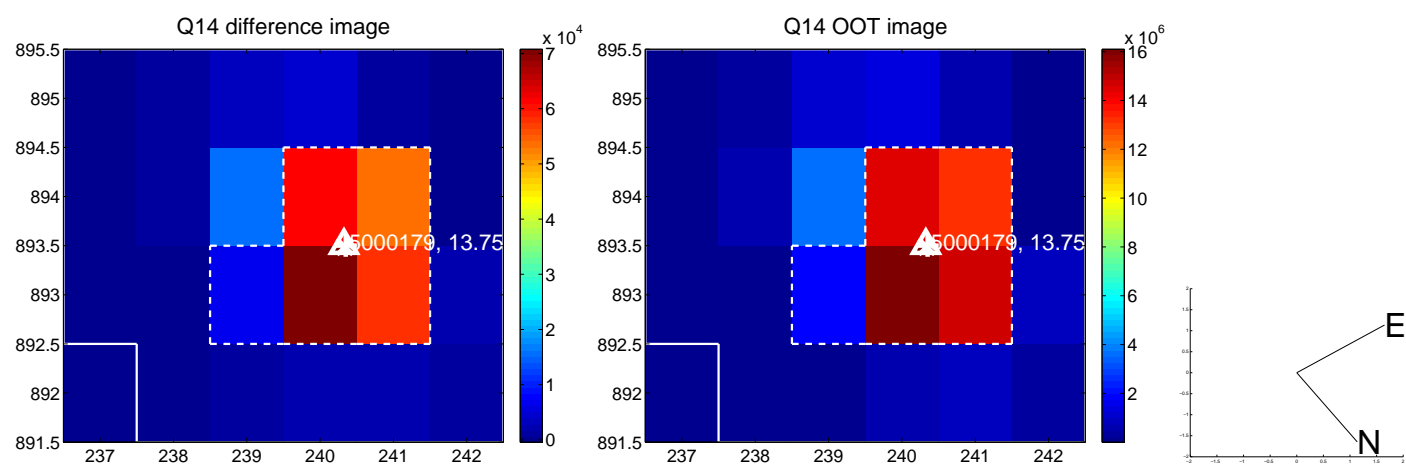
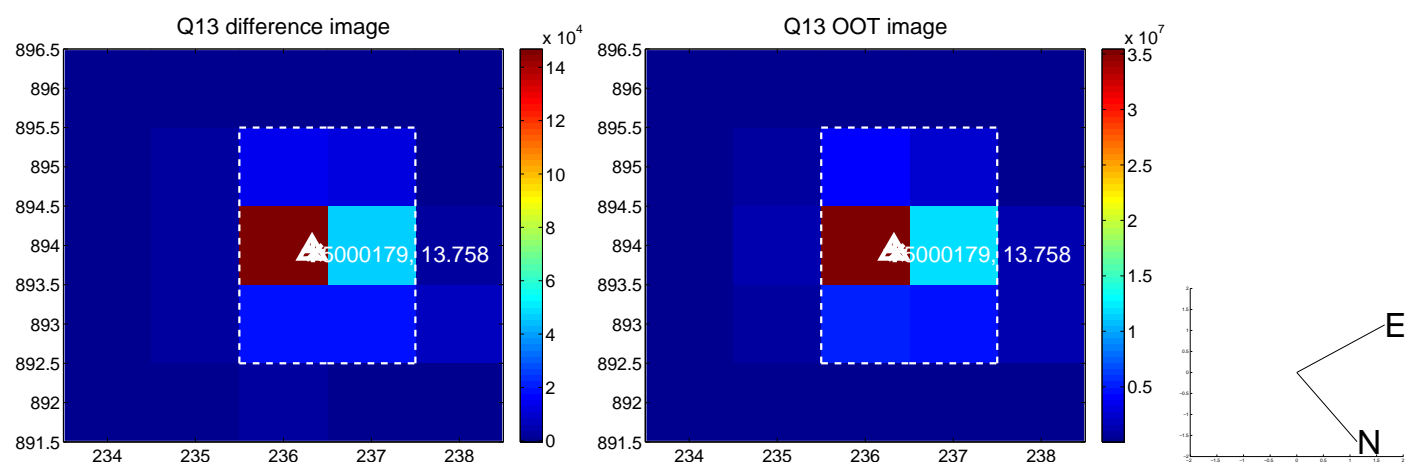
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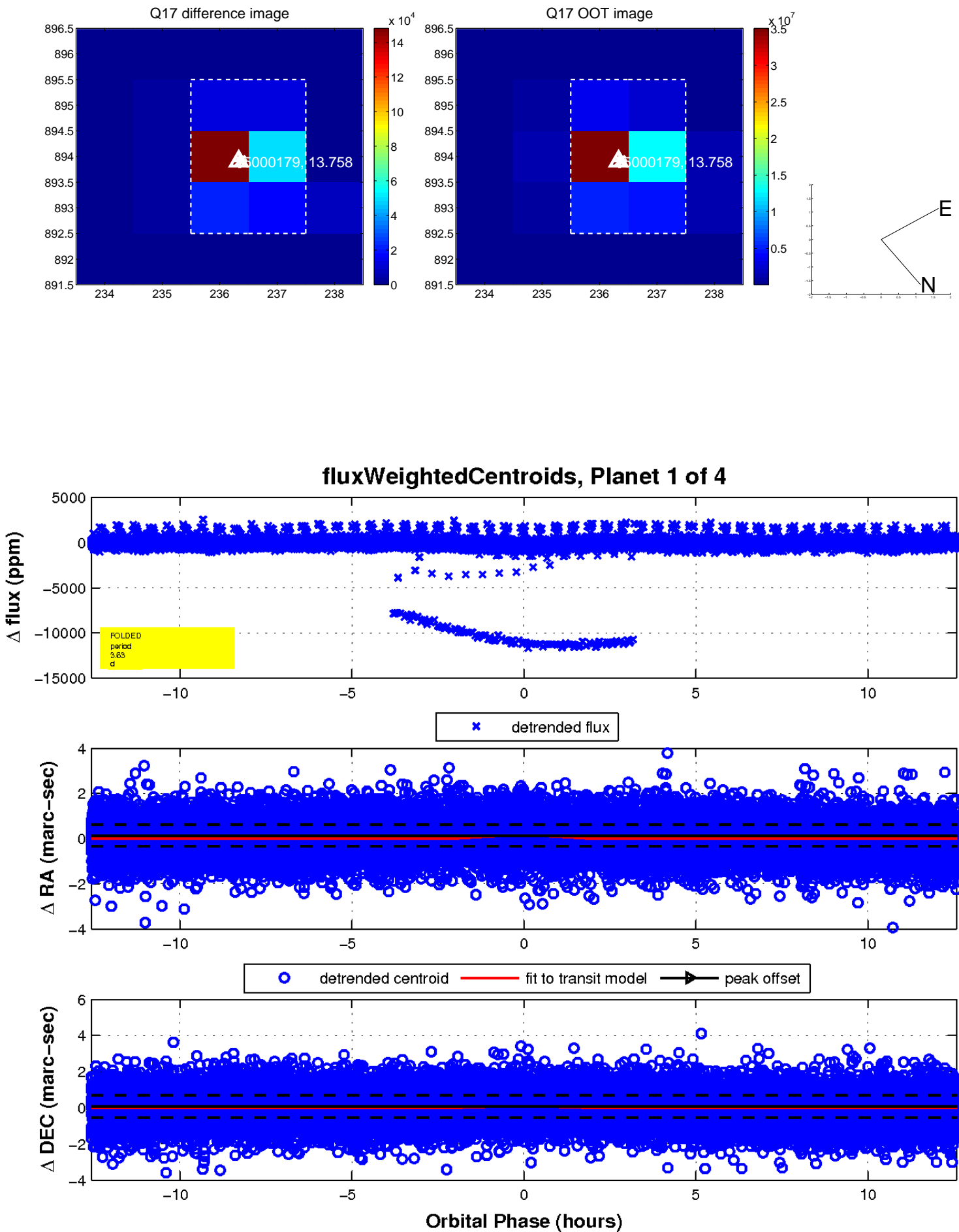
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

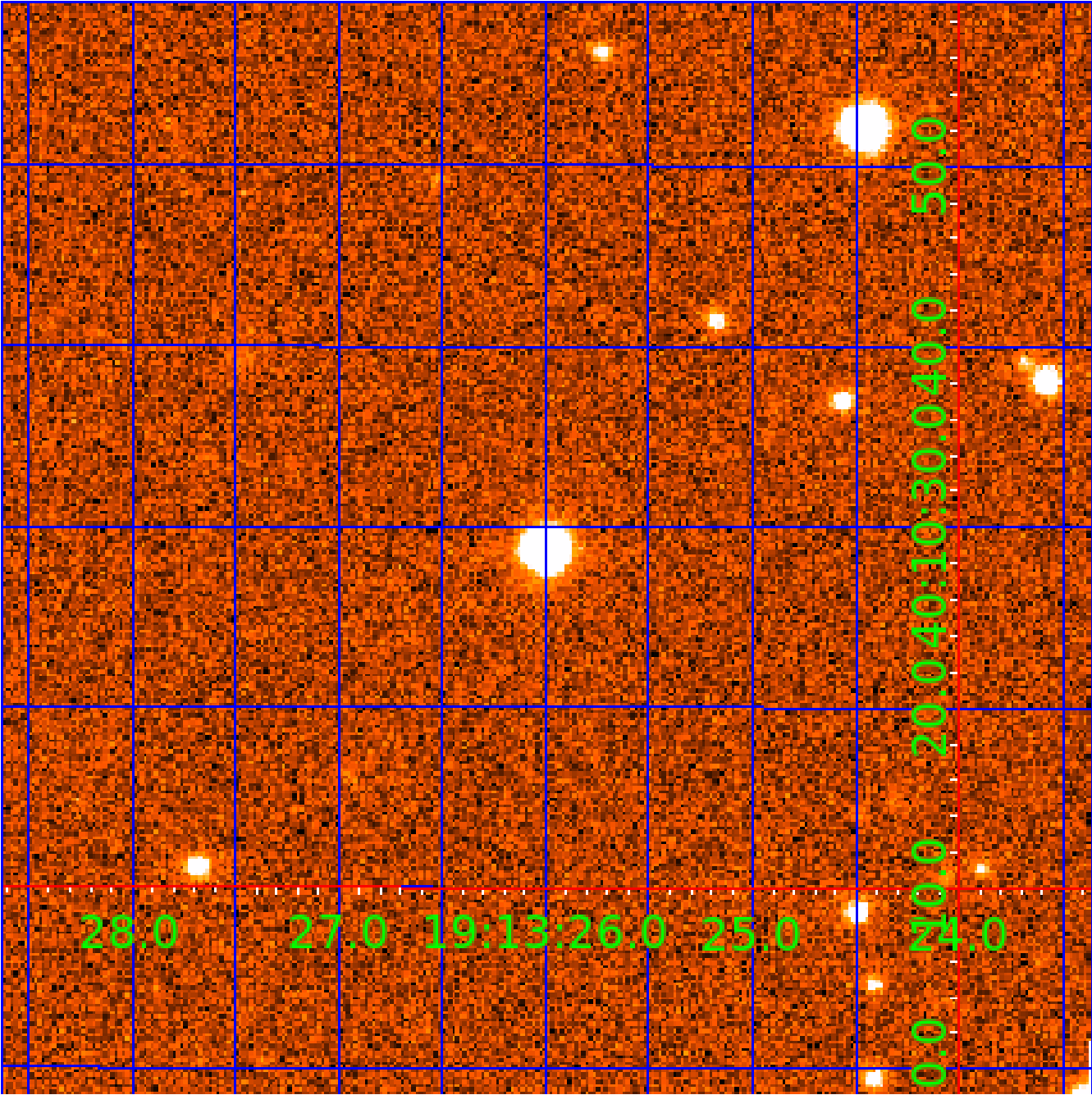


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005000179

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}) |
|--------------|----------|---------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
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| 005000179-02 | OBS | No | 1.816407 | 132.514551 | 25.3 | 0.974 | 20.5 | 3.9 | 2.21 | 10046 | 1.17 | 28879.01 |
| 005000179-03 | OBS | No | 1.816486 | 132.741590 | 112.6 | 4.537 | 19.9 | 24.3 | 2.21 | 10046 | 2.40 | 28877.34 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 005000179-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV |
| 005000179-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS |
| 005000179-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—SAME_NTL_PERIOD—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.

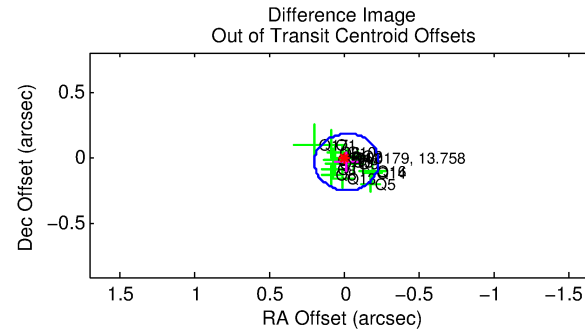
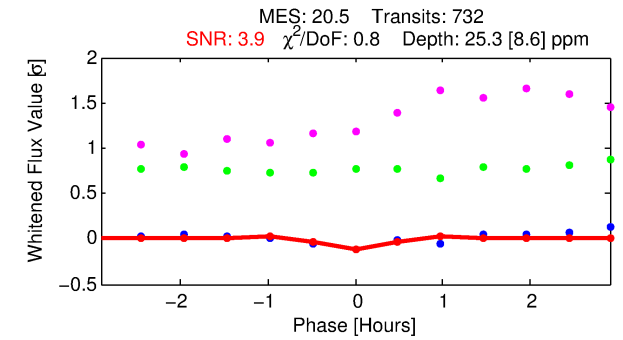
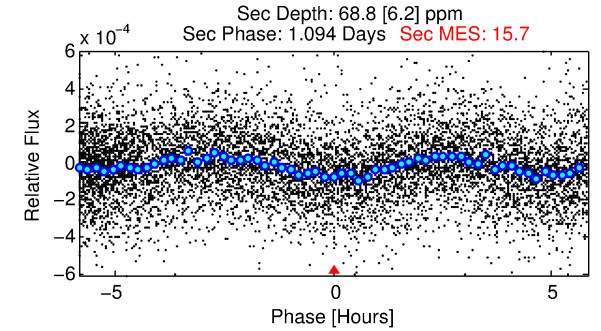
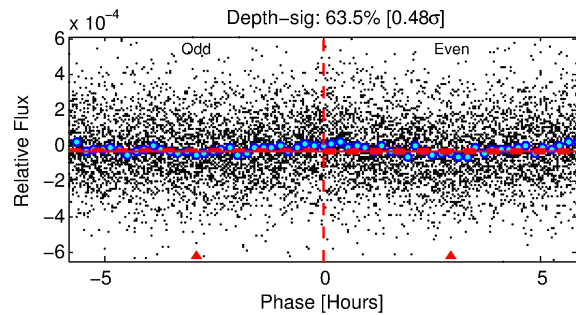
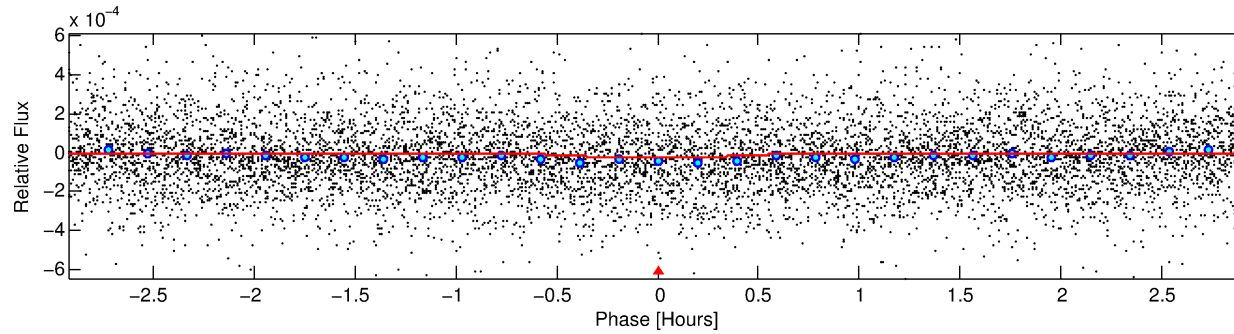
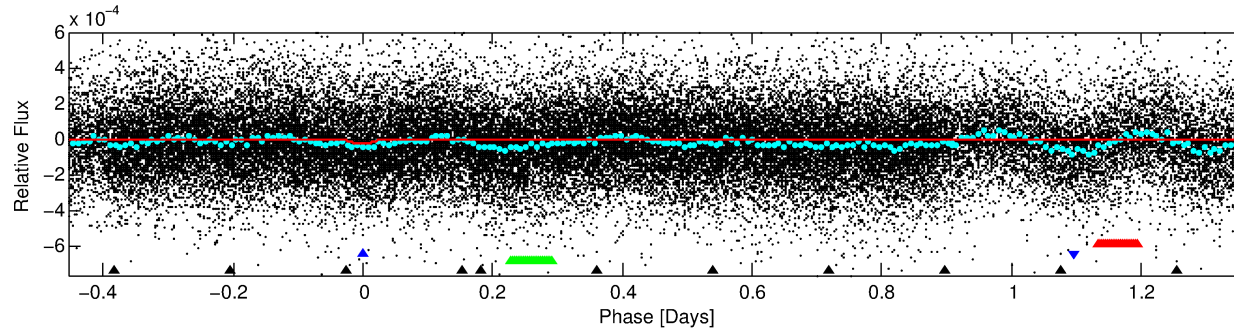
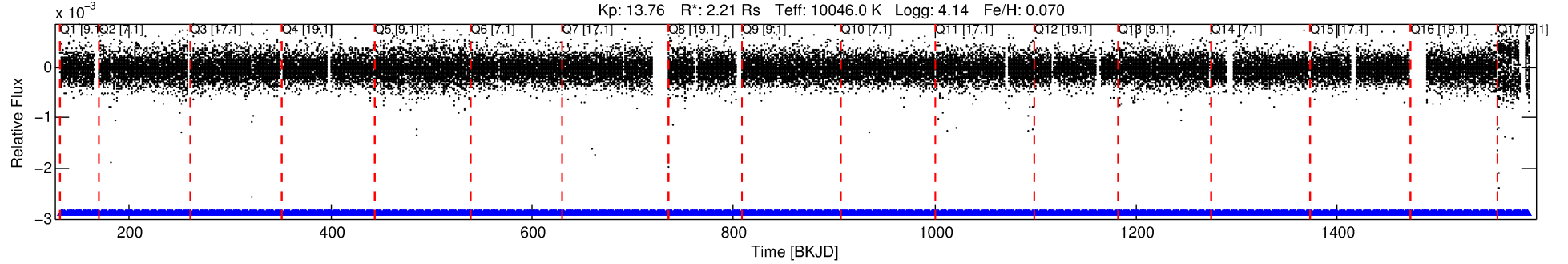
Ephemeris Match Information For 005000179-02

No Significant Match Found

DV One-Page Summary

KIC: 5000179 Candidate: 2 of 4 Period: 1.816 d
KOI: K06485 Corr: No Ephemeris Match

Kp: 13.76 R*: 2.21 Rs Teff: 10046.0 K Logg: 4.14 Fe/H: 0.070



DV Fit Results:

Period = 1.81641 [0.00003] d
Epoch = 132.5146 [0.0039] BKJD
Rp/R* = 0.0049 [0.0018]
a/R* = 12.22 [30.17]
b = 0.53 [3.43]
Seff = 28879.01 [14572.72]
Teq = 3324 [419] K
Rp = 1.17 [0.67] Re
a = 0.0392 [0.0135] AU
Ag = 42.45 [38.25] [1.08σ]
Teffp = 13119 [2571] K [3.76σ]

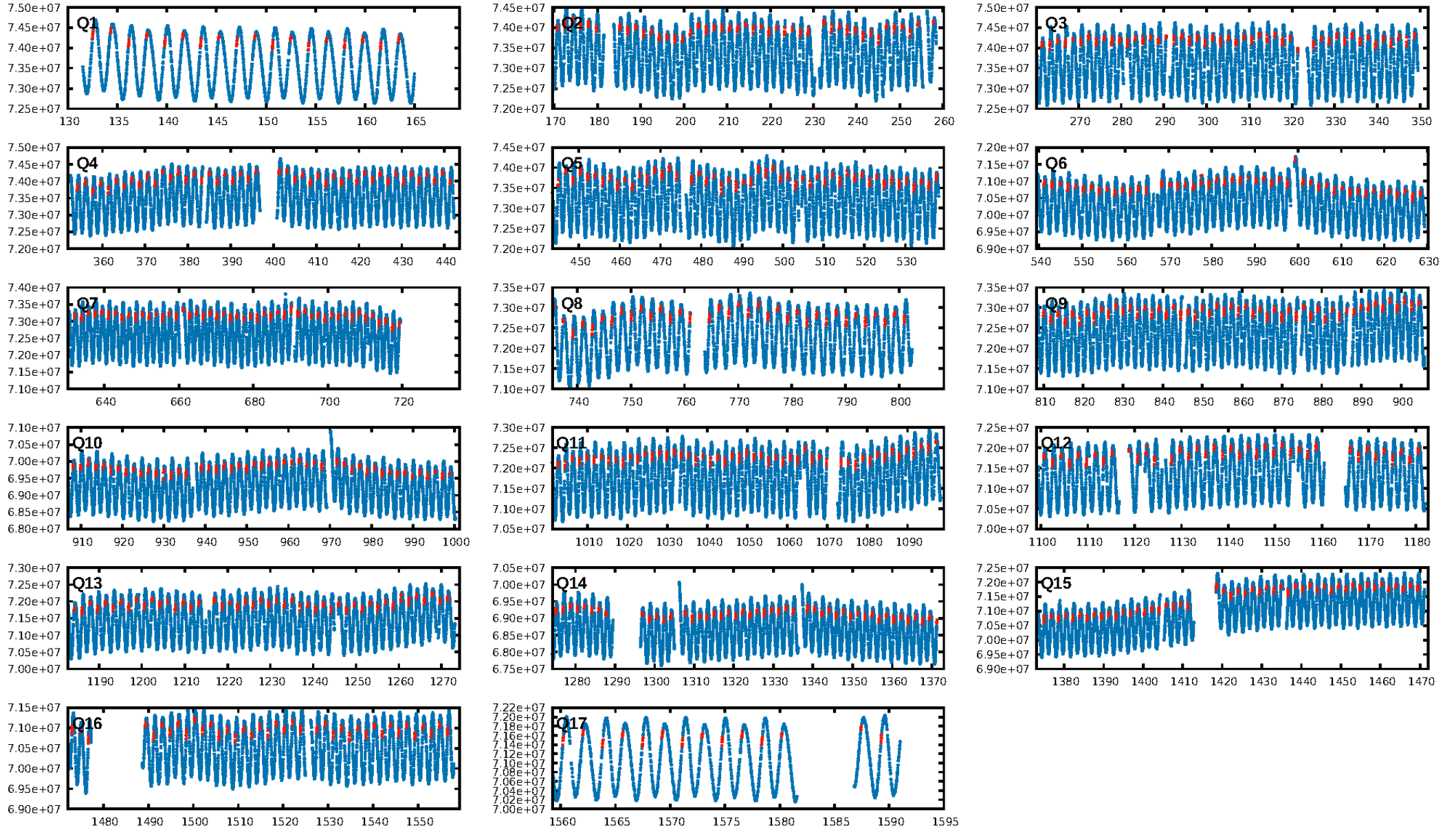
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [700/700]
GhostDiagnostic-chr: 0.745
Centroid-sig: 24.2%
Centroid-so: 2.768 arcsec [1.16σ]
OotOffset-rm: 0.037 arcsec [0.51σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.064 arcsec [0.88σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 0.00 [0/17]

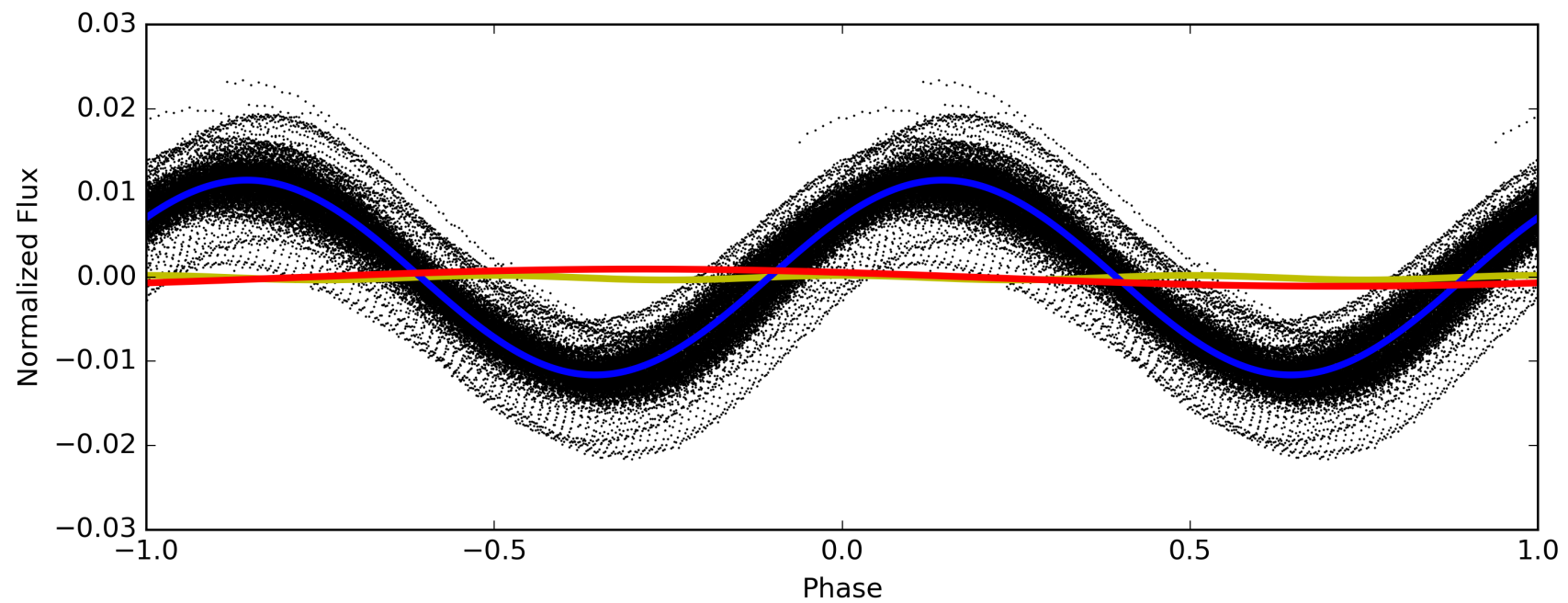
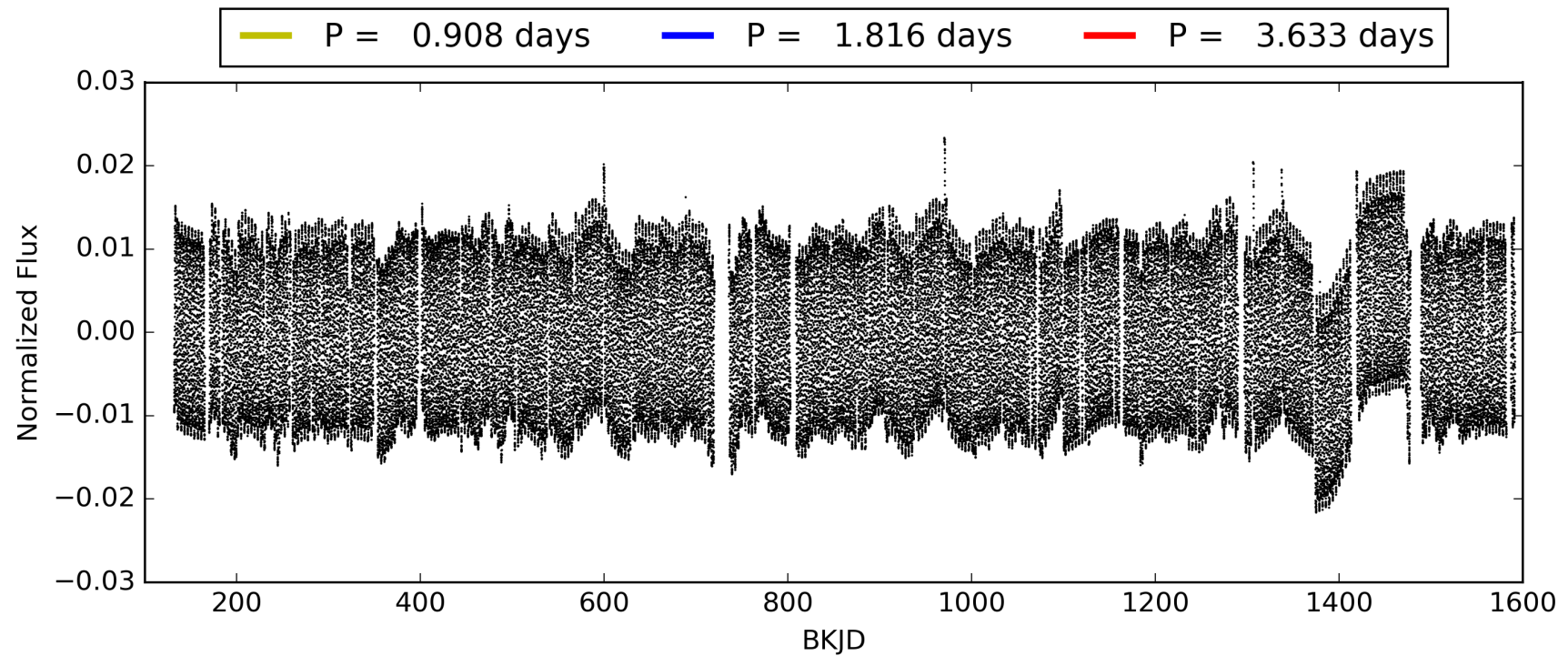
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 005000179-02, PDC Light Curves

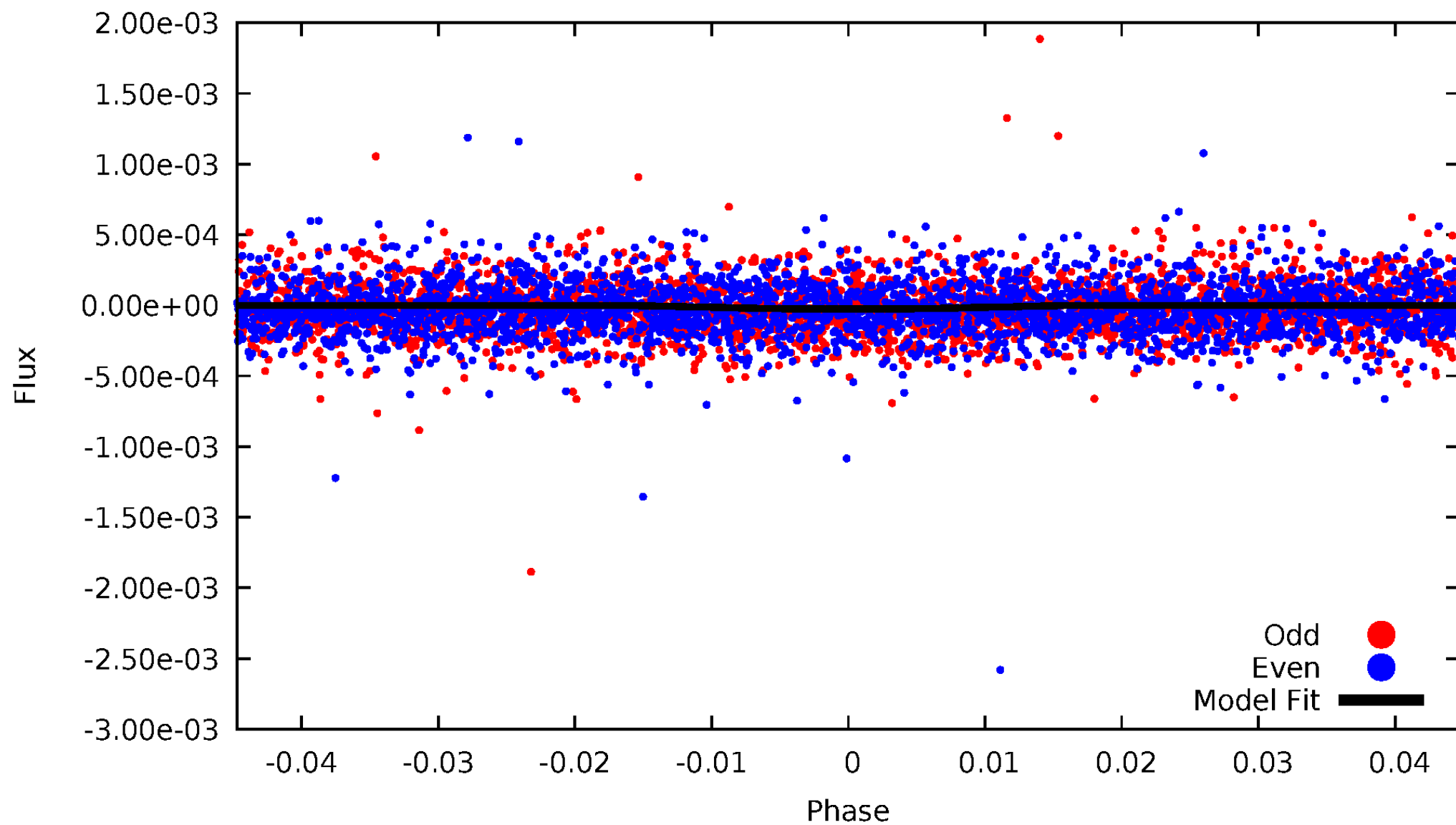


TCE 005000179-02



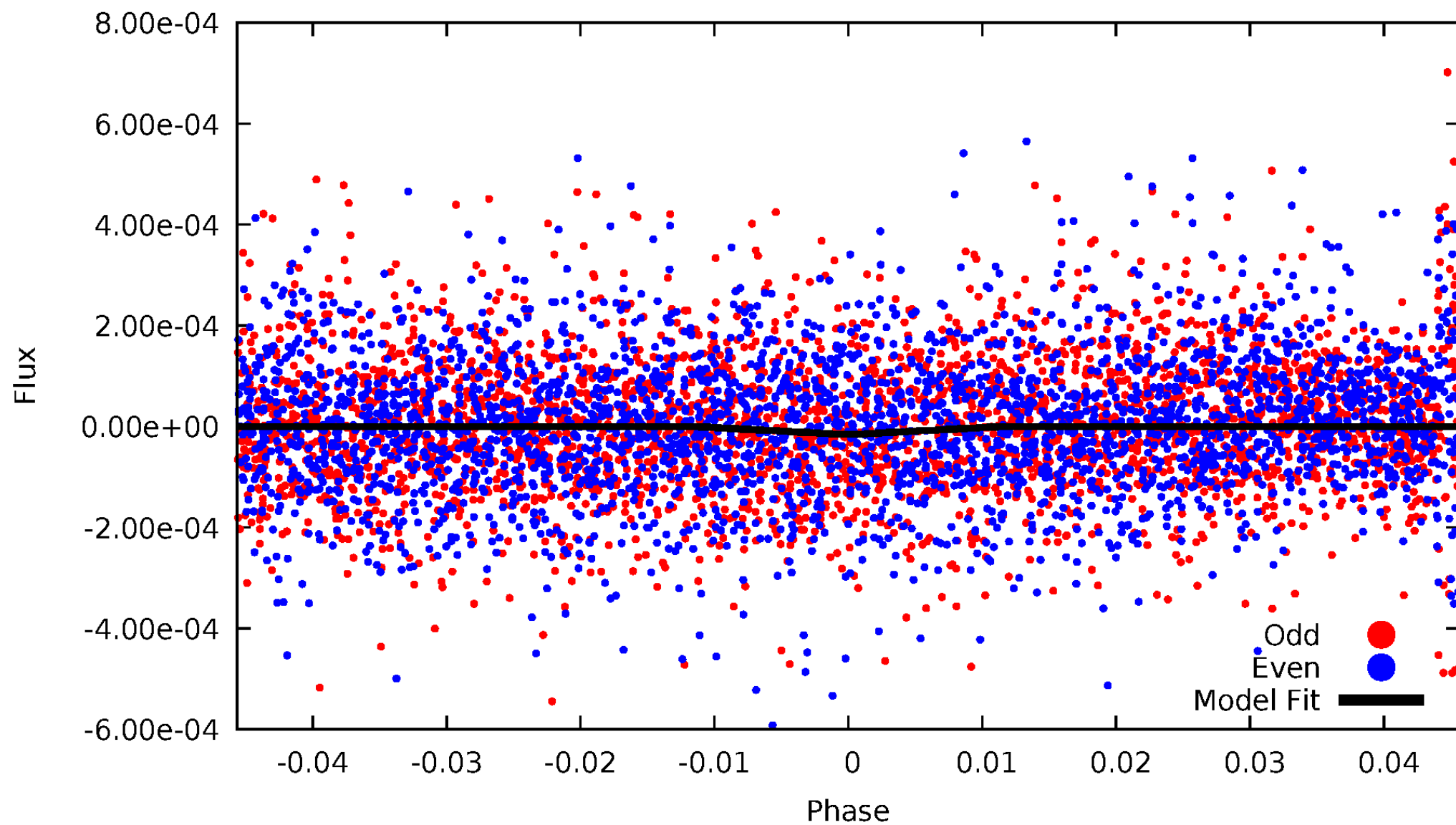
DV Odd/Even

TCE 005000179-02



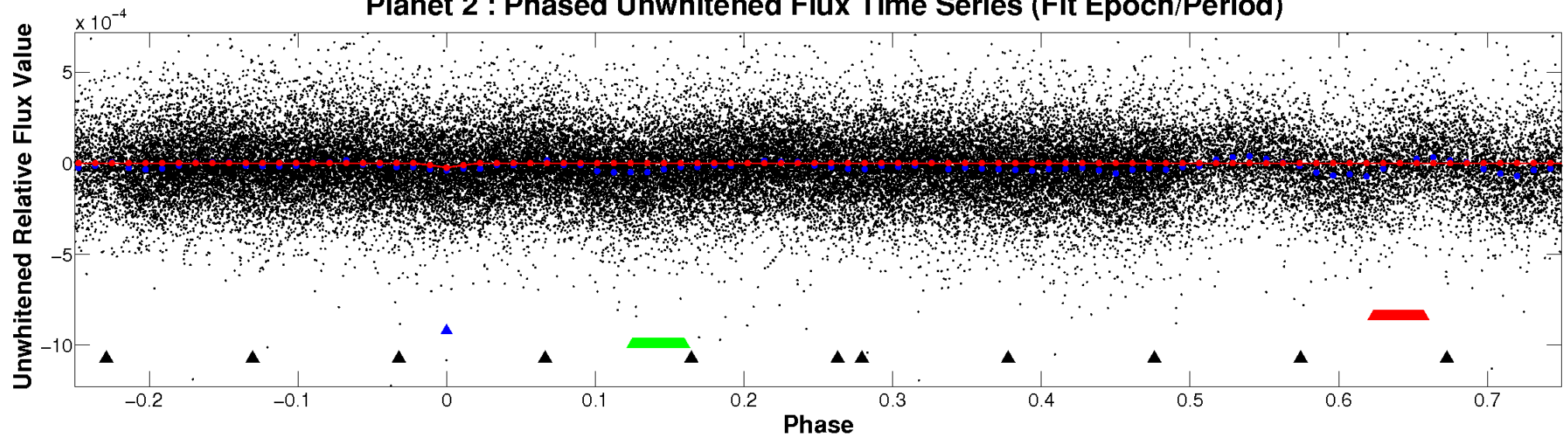
ALT Odd/Even

TCE 005000179-02

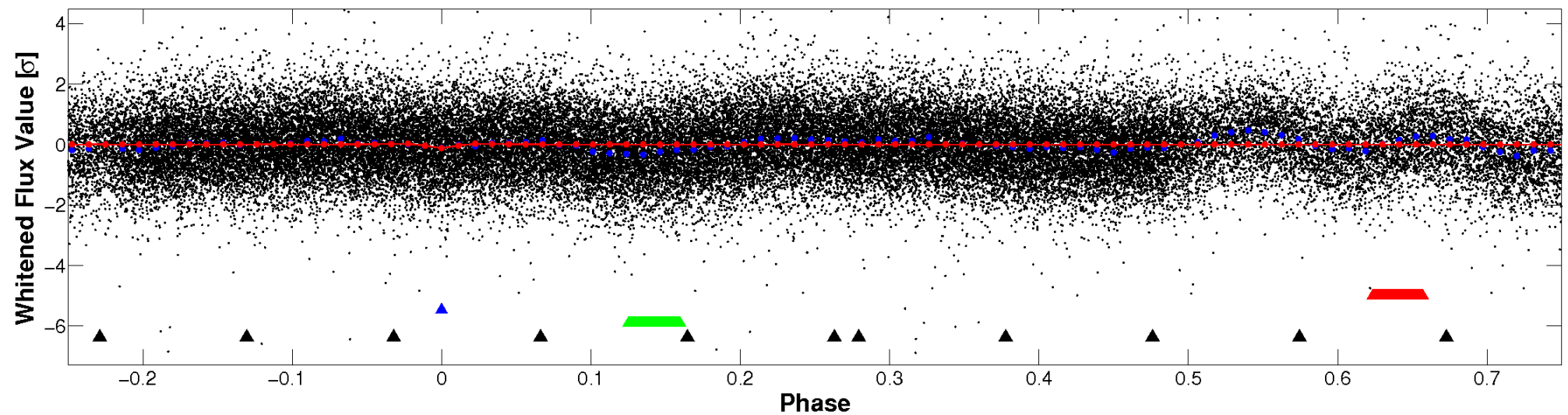


Non-Whitened Vs. Whitened Light Curve

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

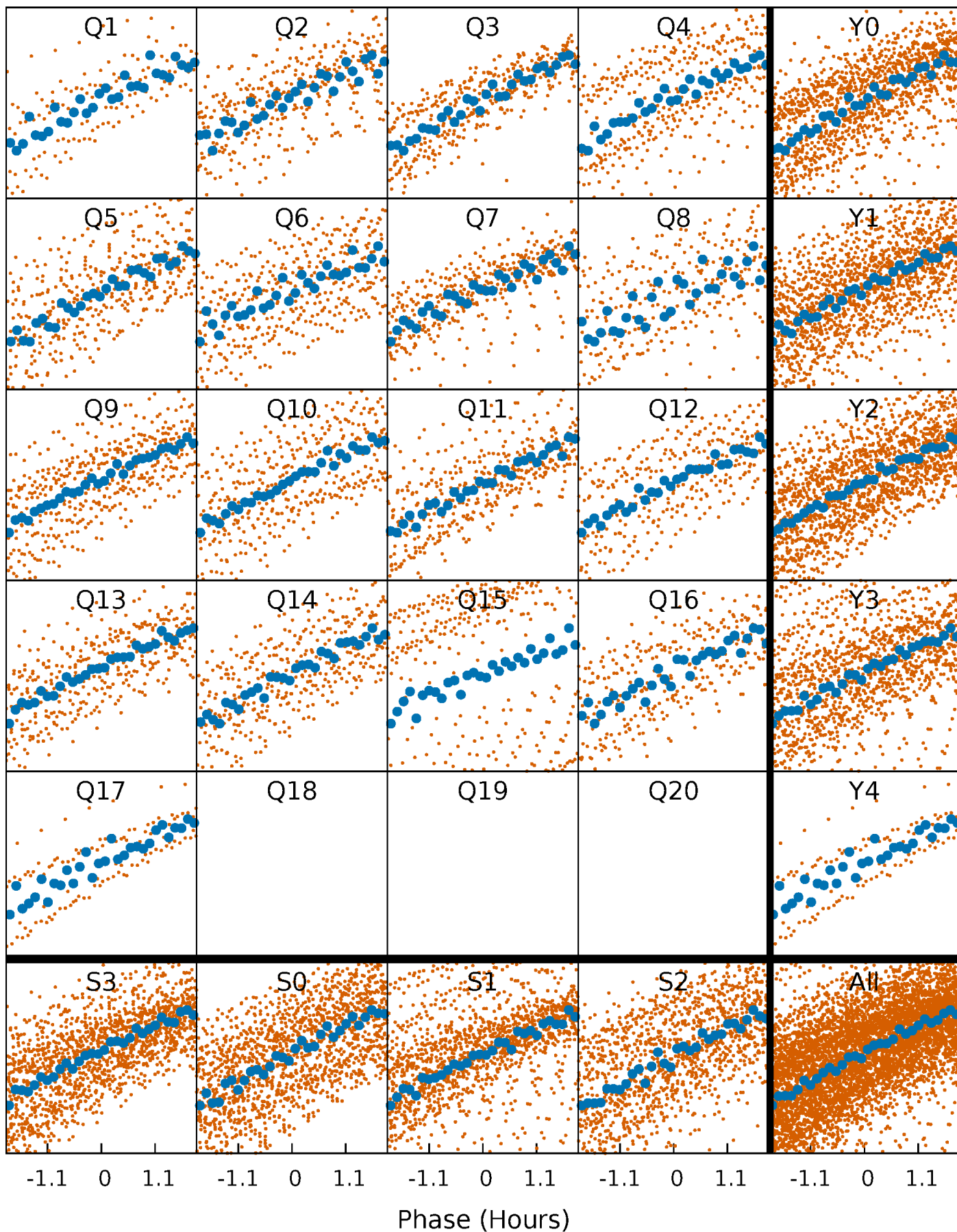


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



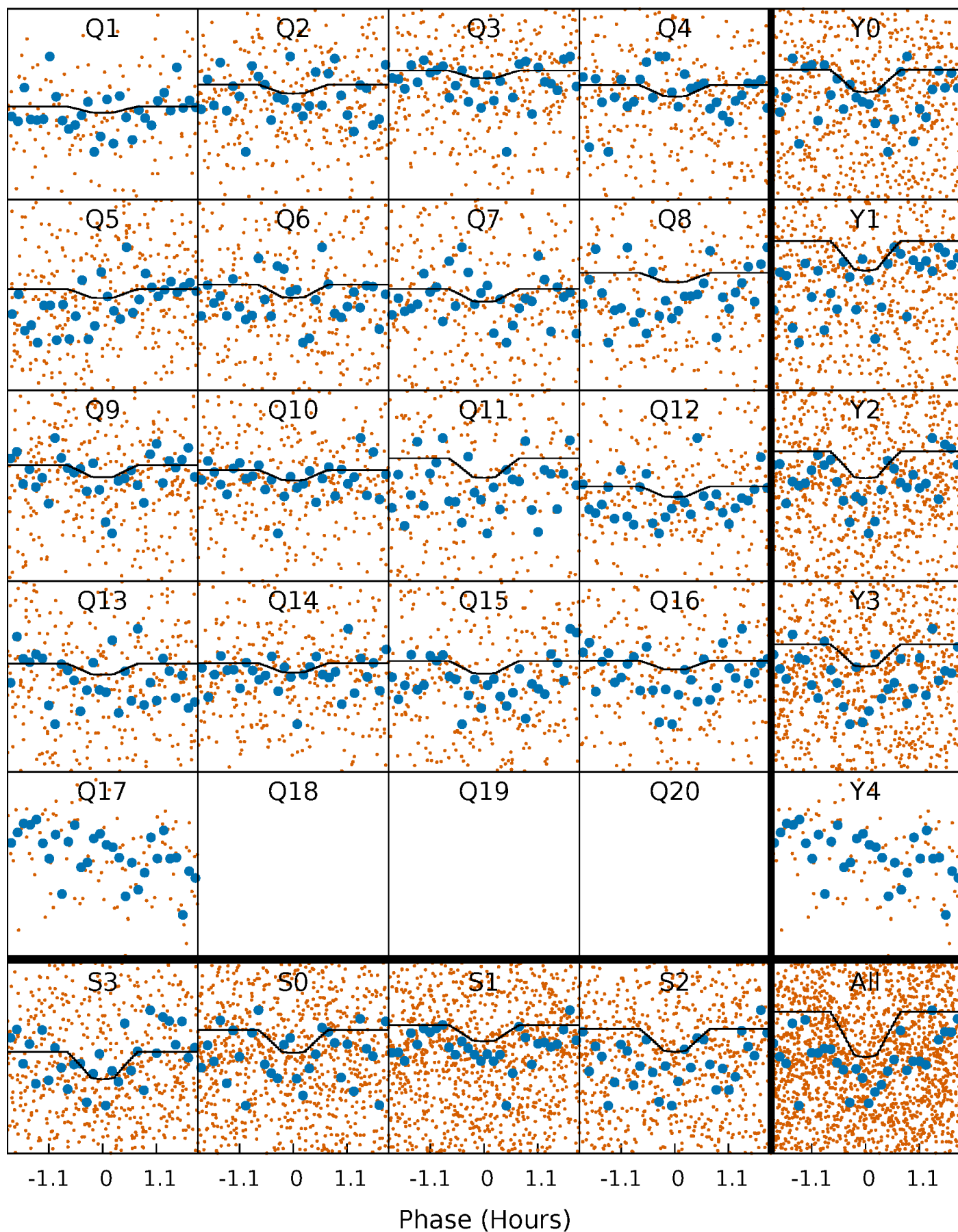
PDC Quarter-Phased Transit Curves

TCE 005000179-02 P= 1.816407 Days $T_0=132.514551$ (BKJD)



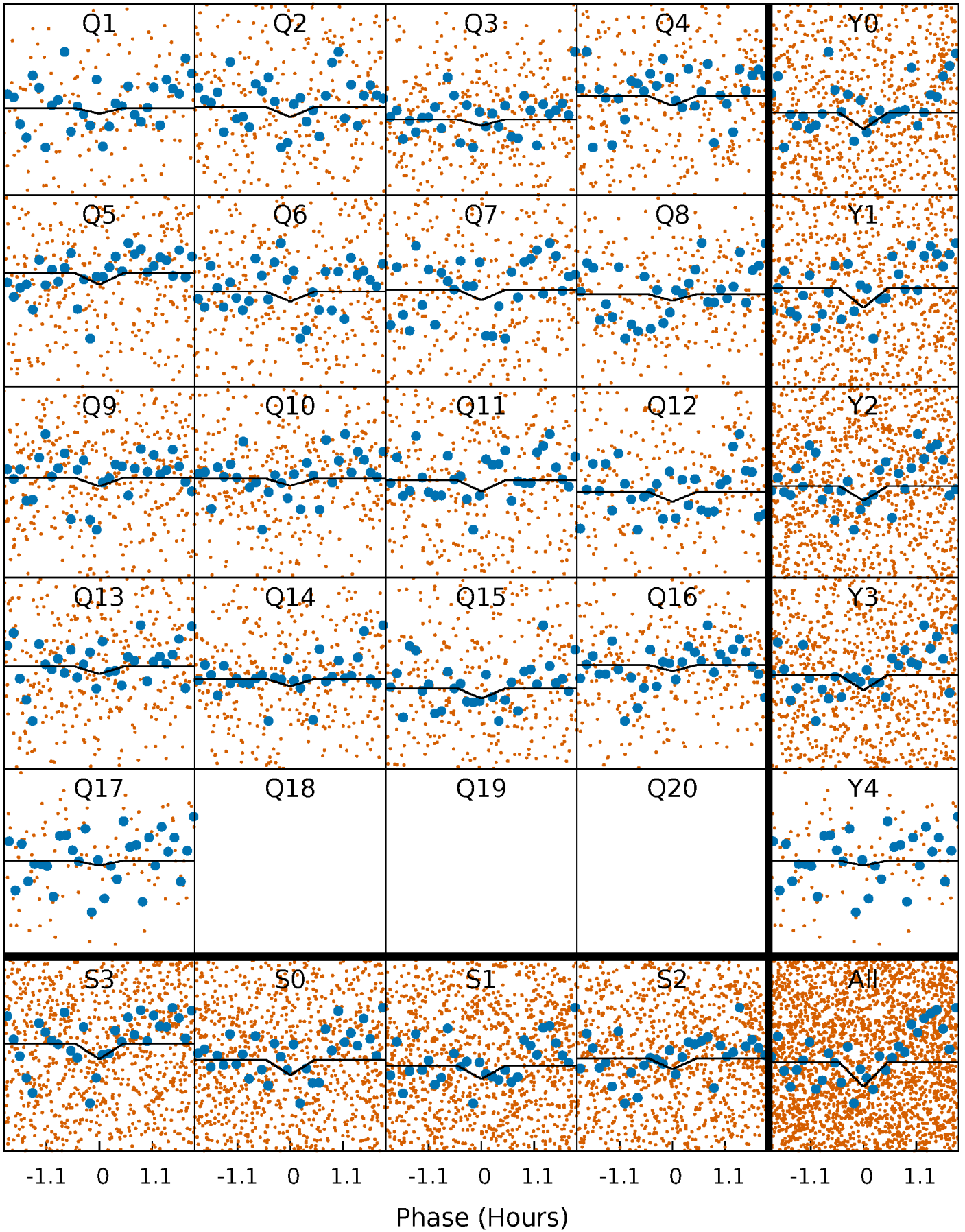
DV Quarter-Phased Transit Curves

TCE 005000179-02 P= 1.816407 Days $T_0=132.514551$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

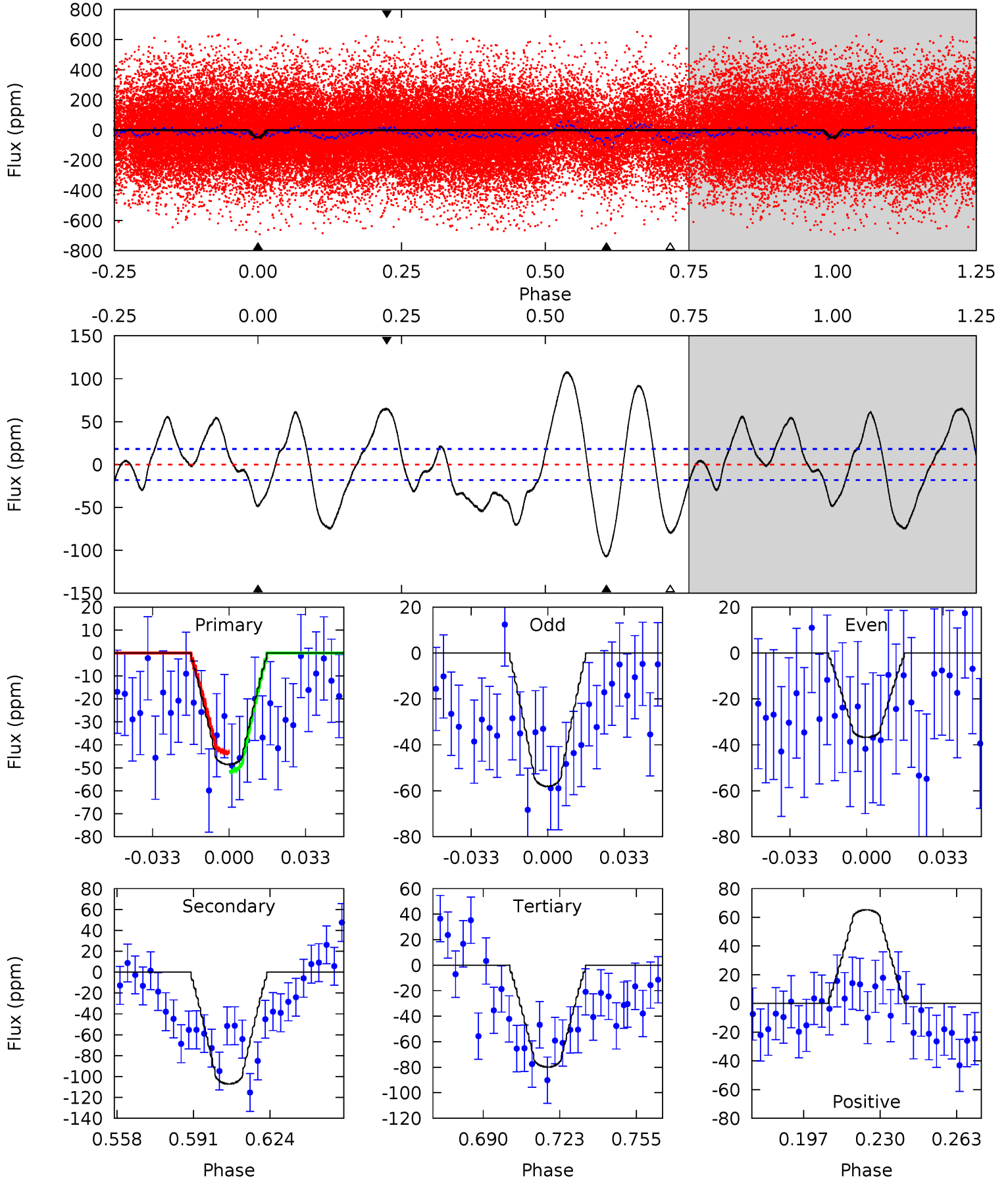
TCE 005000179-02 $P = 1.816457$ Days $T_0 = 132.502646$ (BKJD)



DV Model-Shift Uniqueness Test

005000179-02, P = 1.816407 Days, E = 130.698144 Days

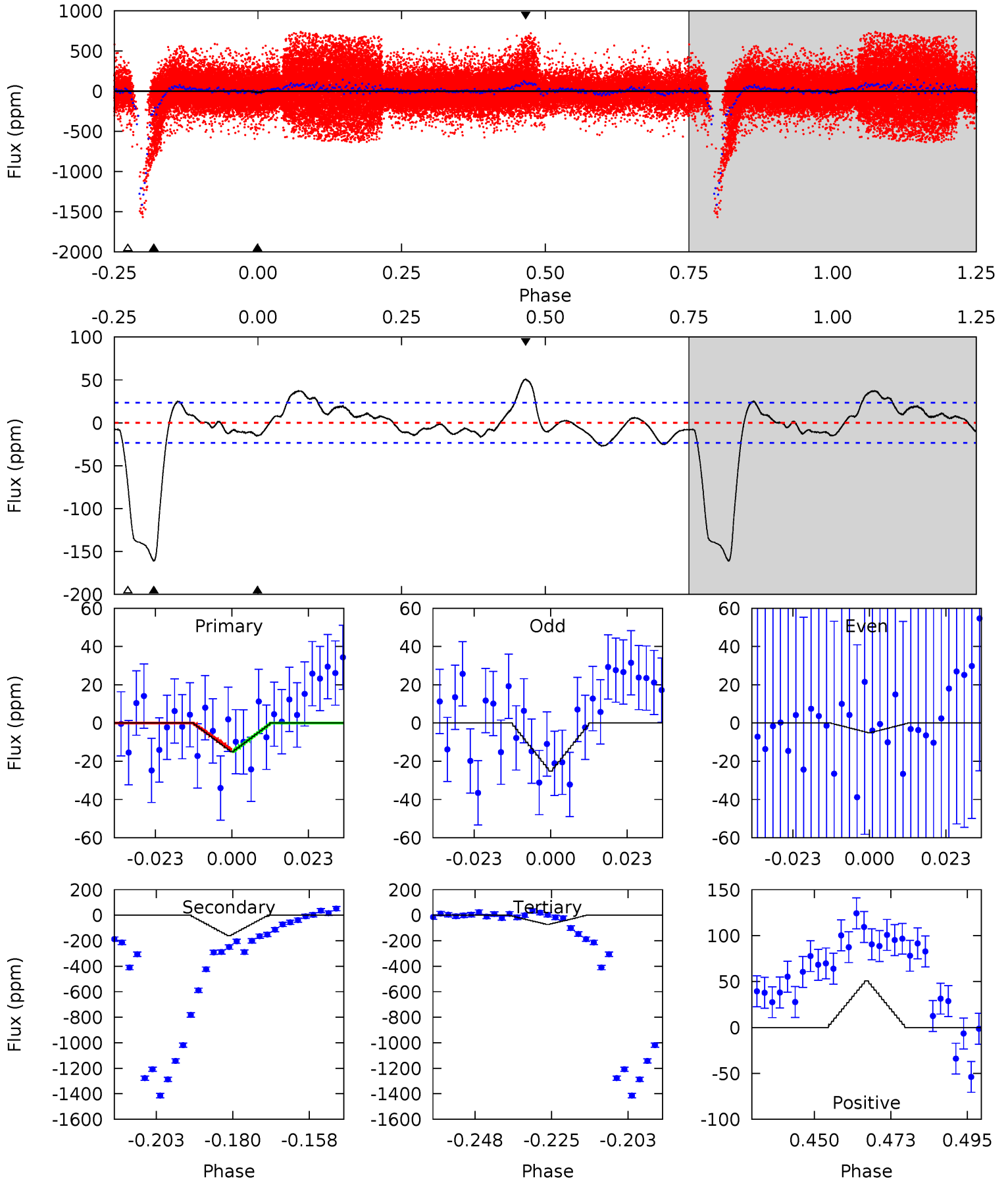
| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 12.8 | 28.3 | 21.1 | 17.2 | 4.79 | 2.13 | 11.1 | -8.27 | -4.40 | 7.19 | 11.1 | 2.84 | 0.95 | 0.50 | 1.10 |



Alt Model-Shift Uniqueness Test

005000179-02, P = 1.816457 Days, E = 130.686189 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|------|
| 3.12 | 33.4 | 15.1 | 10.5 | 4.87 | 2.28 | 3.86 | -12.0 | -7.42 | 18.4 | 22.9 | 2.08 | 1.14 | 0.24 | 0.13 |



Stellar Parameters For KIC 005000179

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 10046^{+248}_{-426} | $4.138^{+0.133}_{-0.247}$ | $0.070^{+0.150}_{-0.300}$ | $2.208^{+0.949}_{-0.511}$ | $2.440^{+0.424}_{-0.466}$ | $0.319^{+0.223}_{-0.202}$ |
| | +2%/-4% | +3%/-6% | +214%/-429% | +43%/-23% | +17%/-19% | +70%/-63% |
| Source | KIC0 | 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 005000179-02 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{\text{max}} (K)$ | $T_{\text{obs}} (K)$ | A_{obs} |
|---------|--------------|------------------------|----------------------|---------------------------|--------------------|
| DV | -107 ± 4 | $1.22^{+0.47}_{-0.48}$ | 4689^{+428}_{-316} | 19735^{+16705}_{-5552} | 61^{+104}_{-31} |
| Alt. | -161 ± 5 | $1.01^{+0.56}_{-0.47}$ | 4705^{+472}_{-333} | 31696^{+50981}_{-12448} | 131^{+333}_{-77} |

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

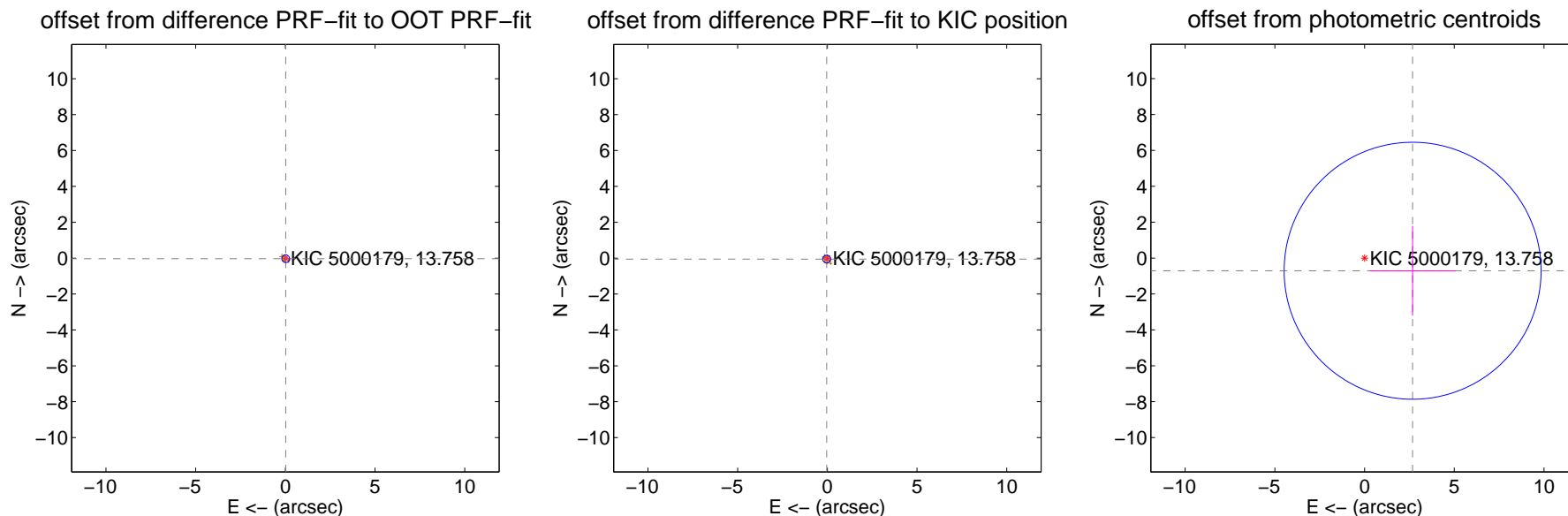
DV Centroid Data

Supplemental centroid analysis for 005000179-02. Kepler magnitude: 13.76. Transit SNR 3.94

There are 0 quarters with good PRF difference image offsets

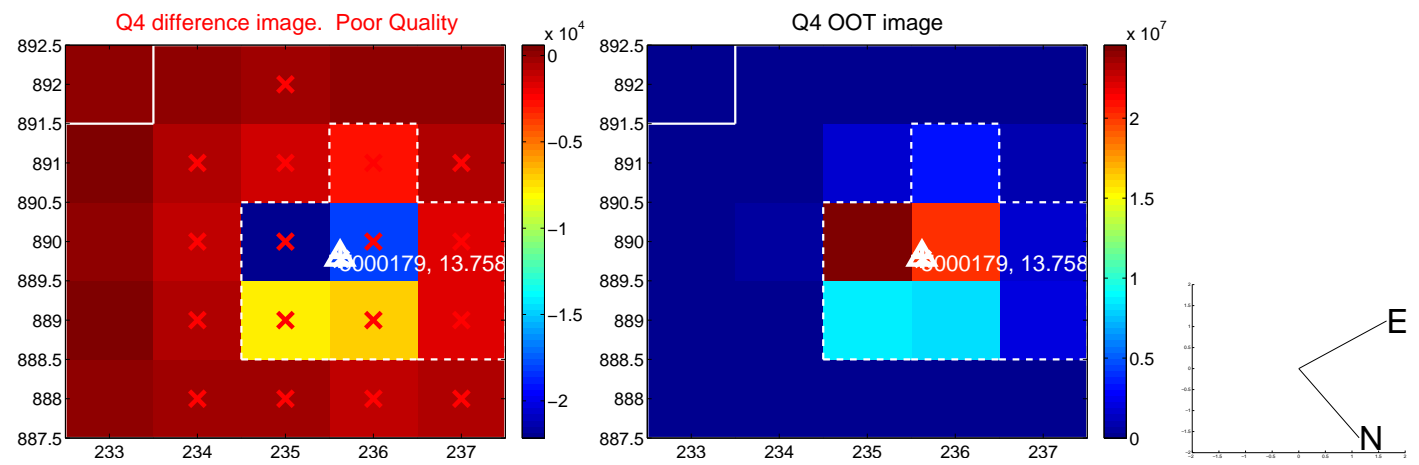
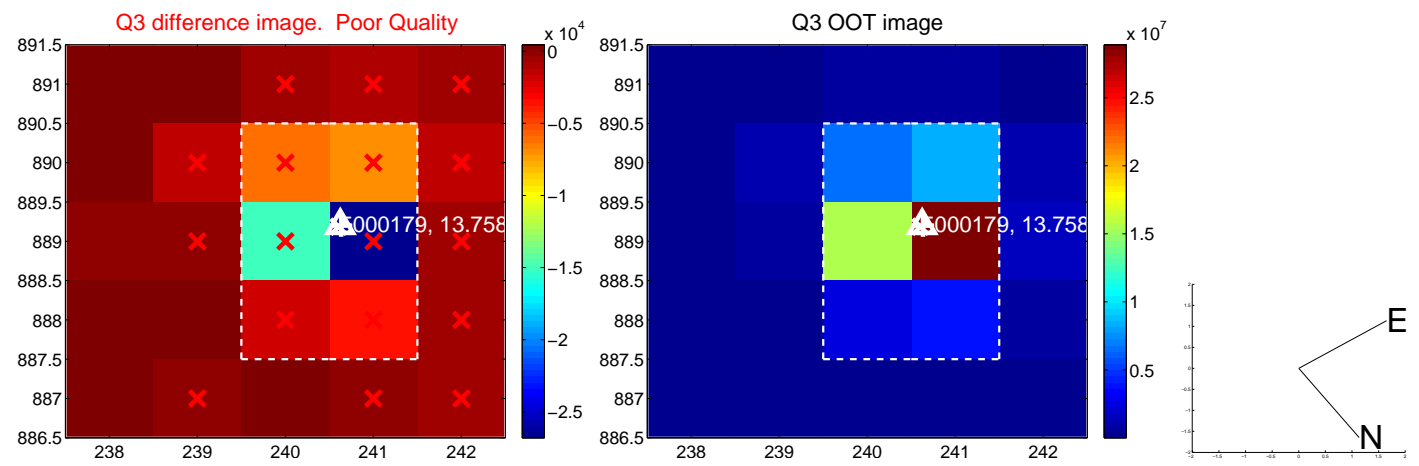
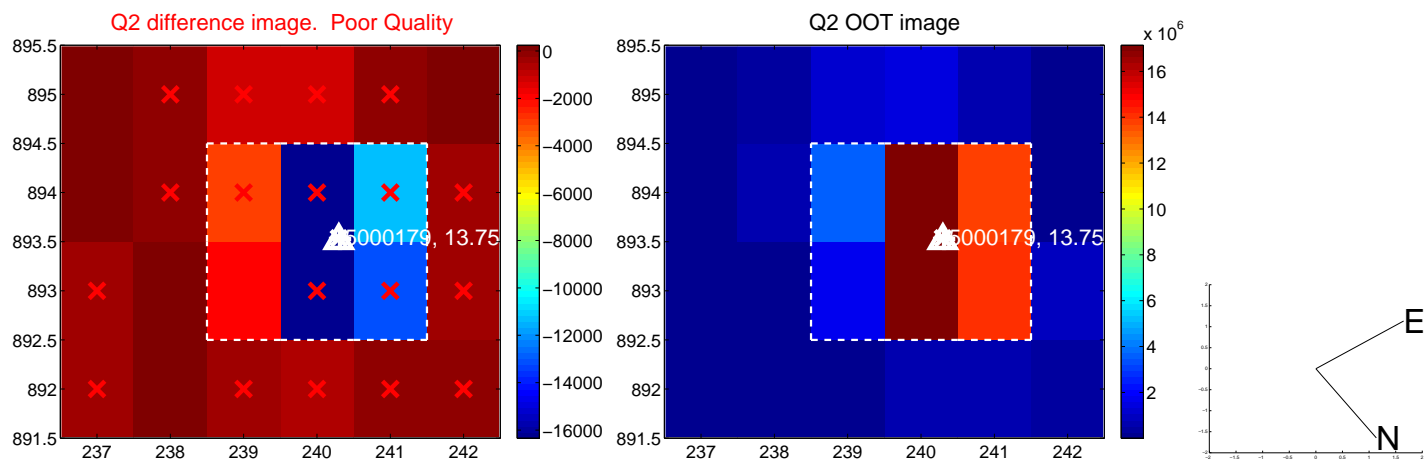
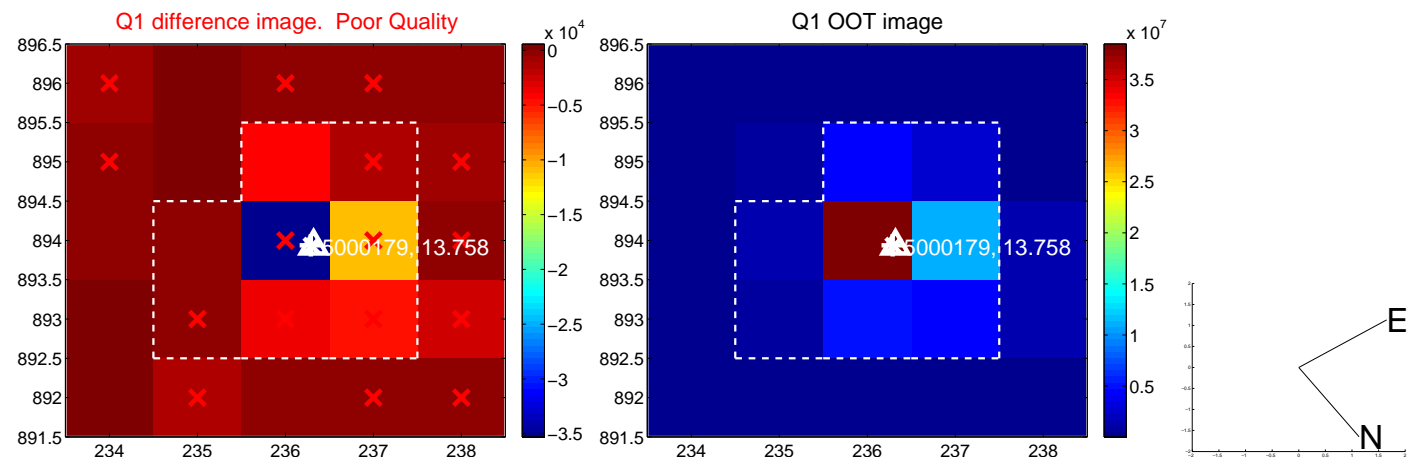
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 0.037 ± 0.072 | 0.51 | -0.020 ± 0.071 | -0.031 ± 0.070 |
| PRF-fit source offset from KIC position | 0.064 ± 0.073 | 0.88 | 0.039 ± 0.073 | -0.051 ± 0.073 |
| photometric centroid source offset | 2.77 ± 2.39 | 1.16 | -2.68 ± 2.38 | -0.71 ± 2.50 |

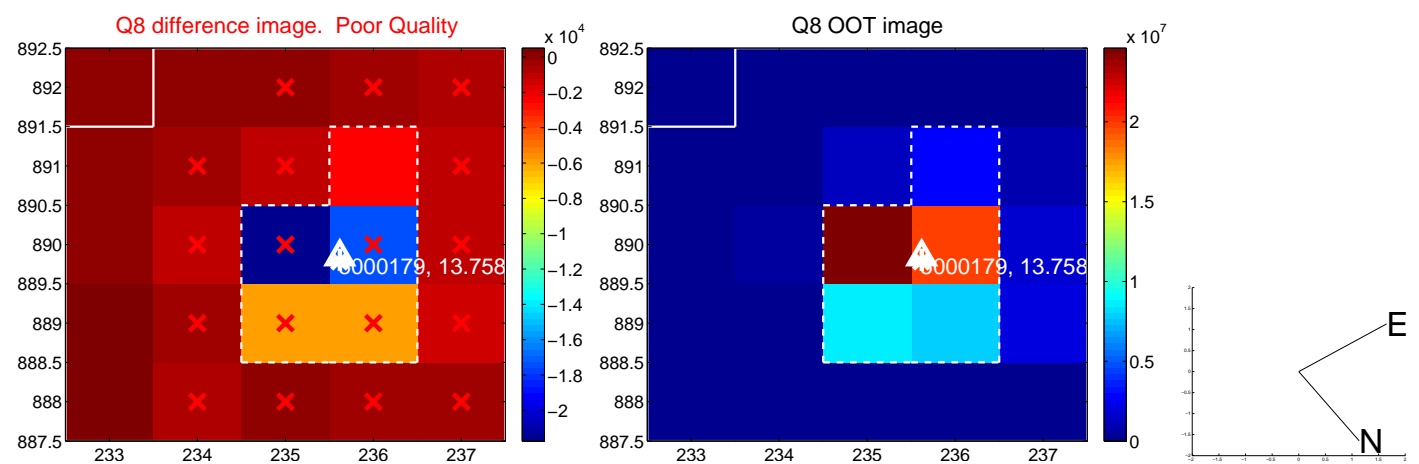
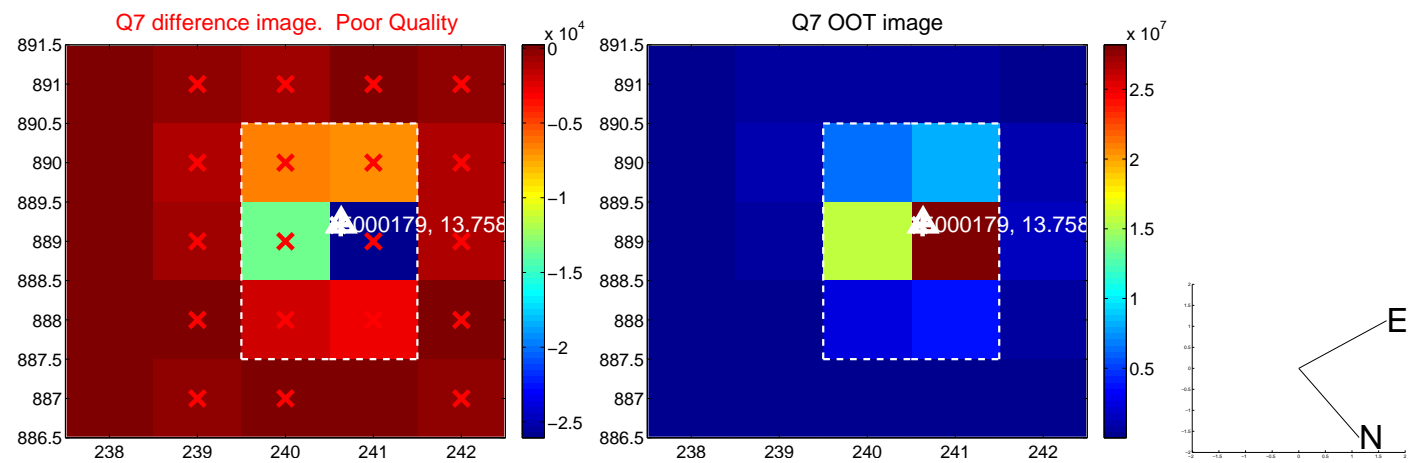
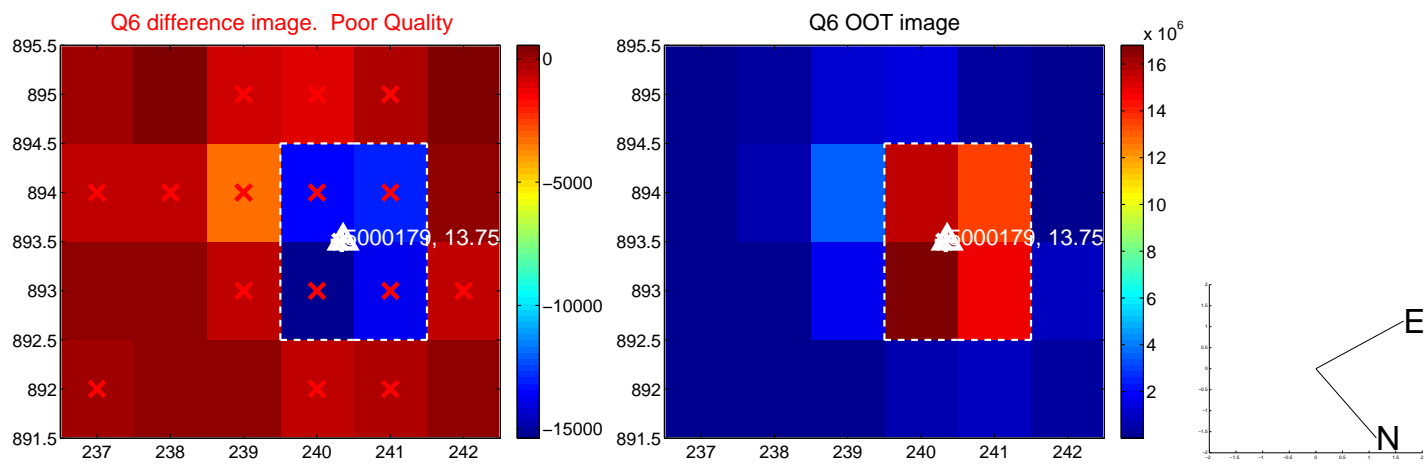
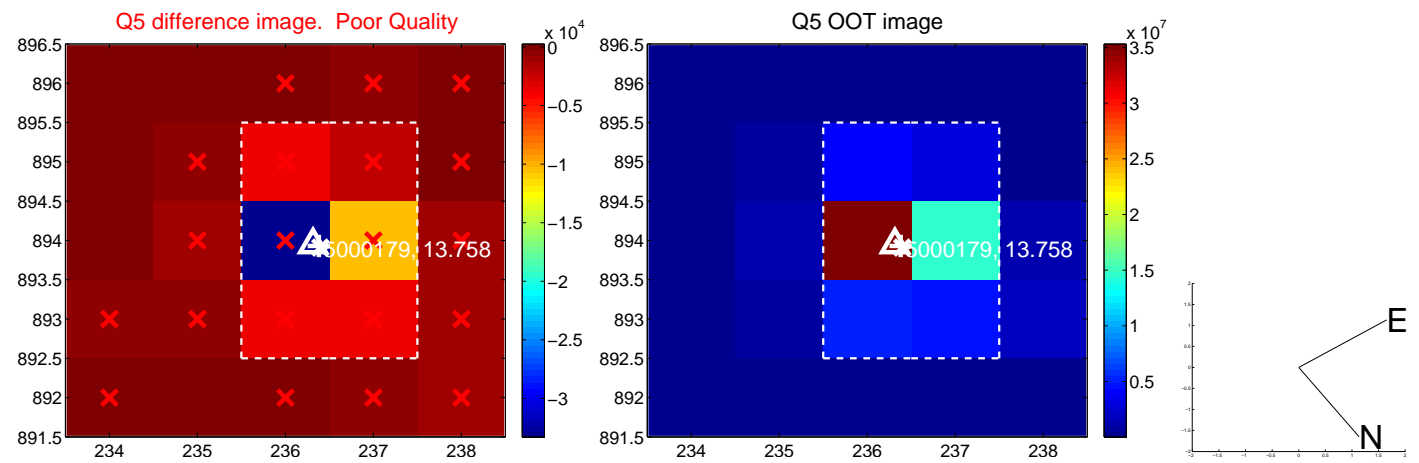


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

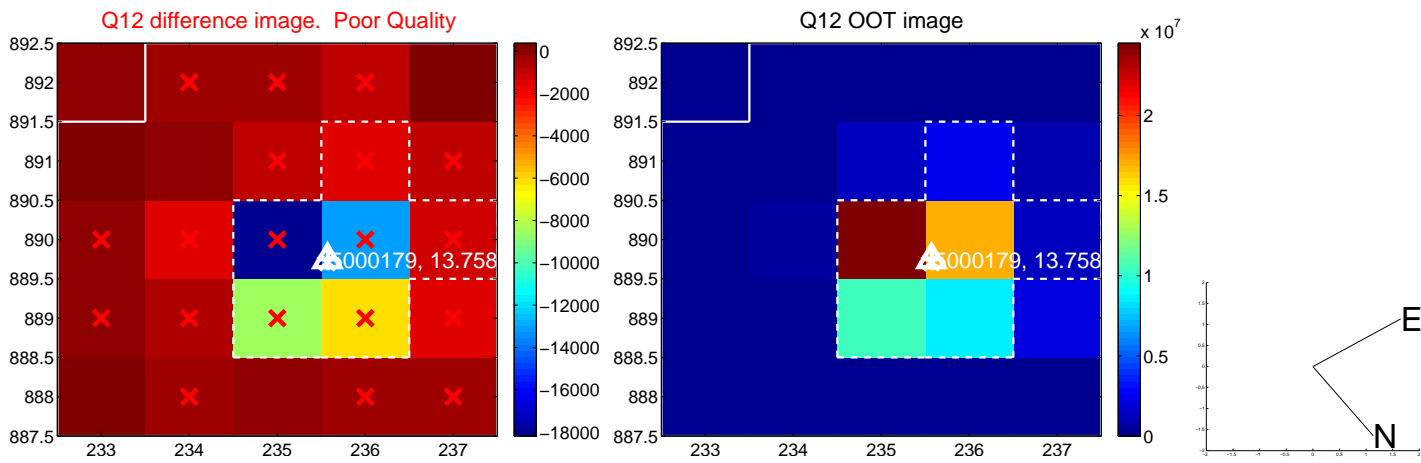
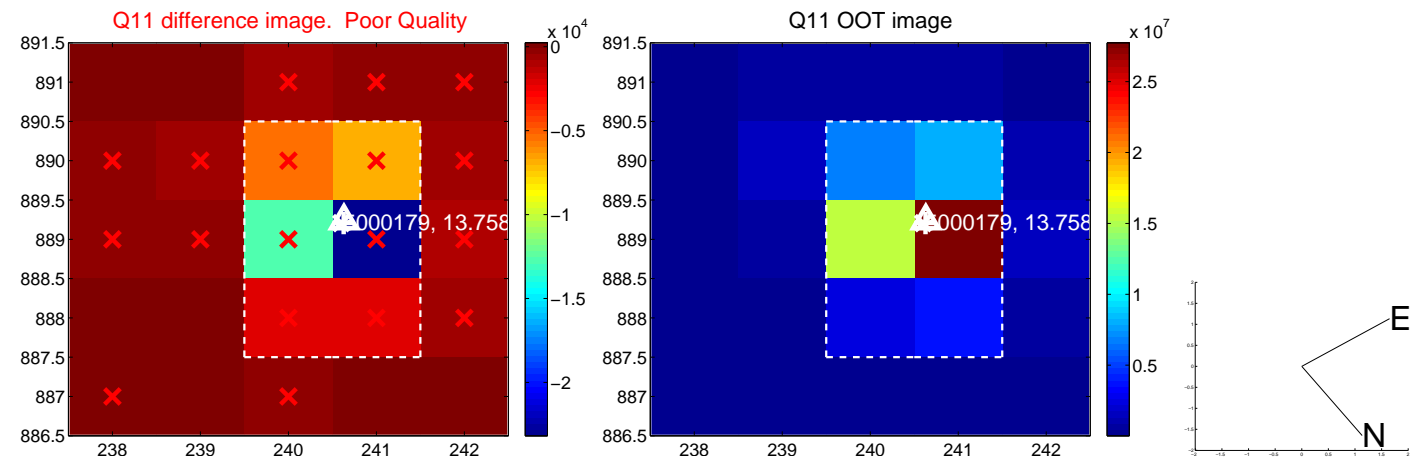
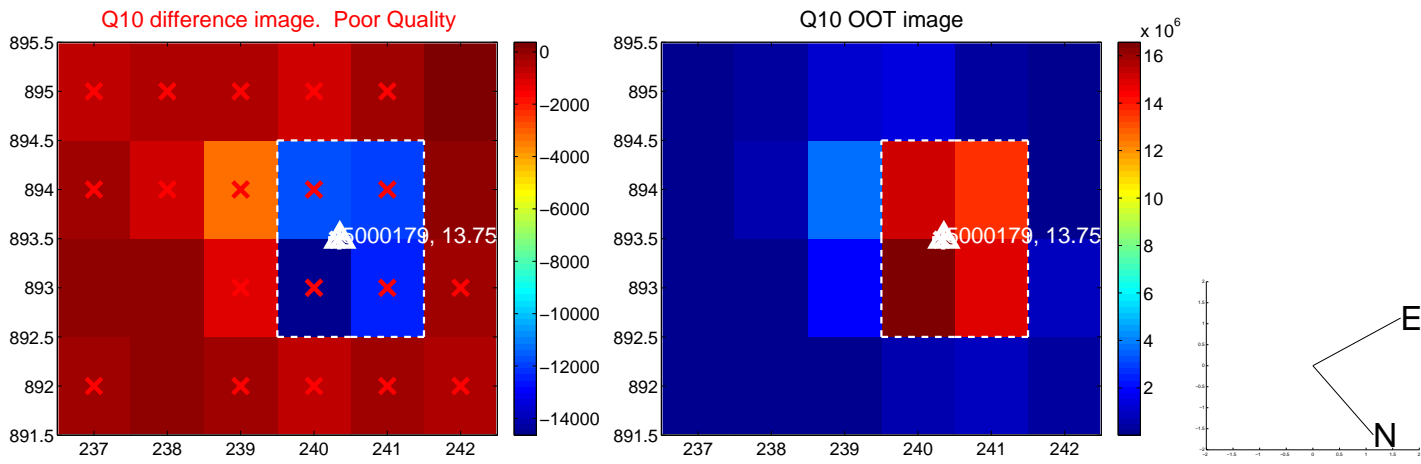
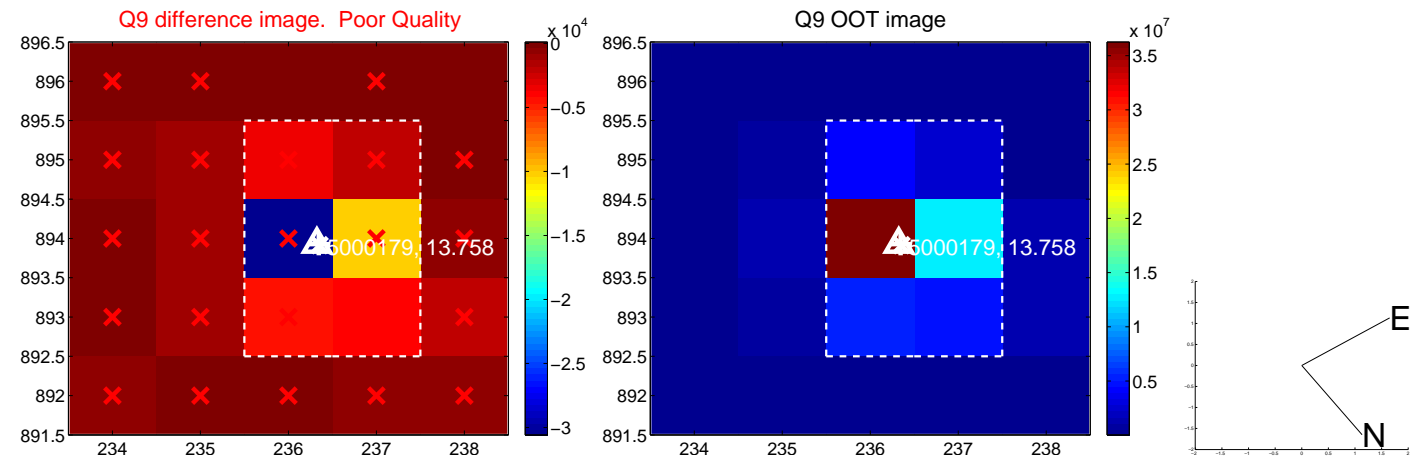
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



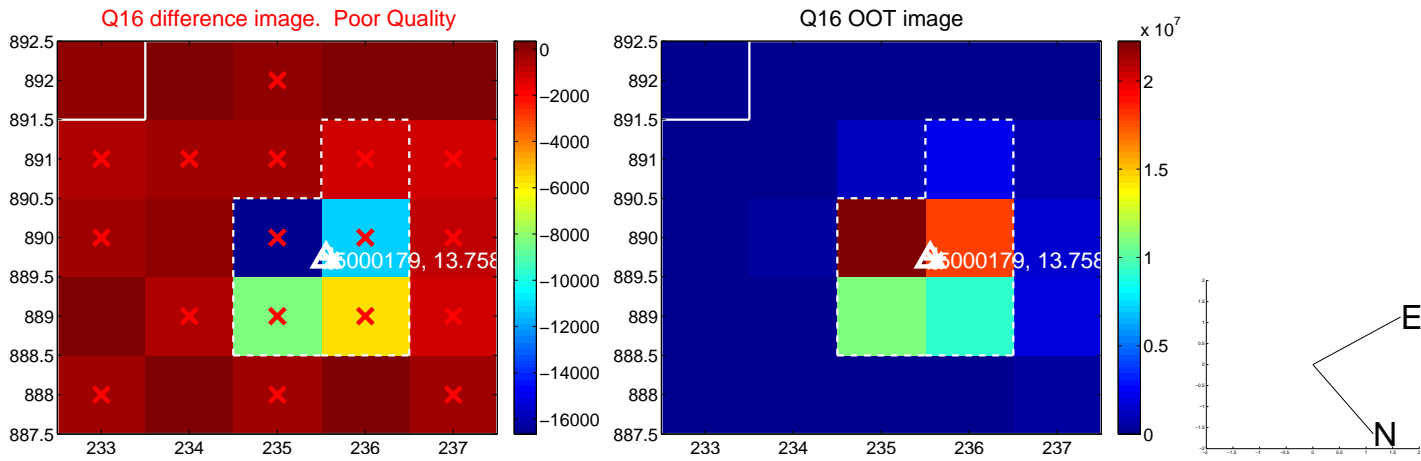
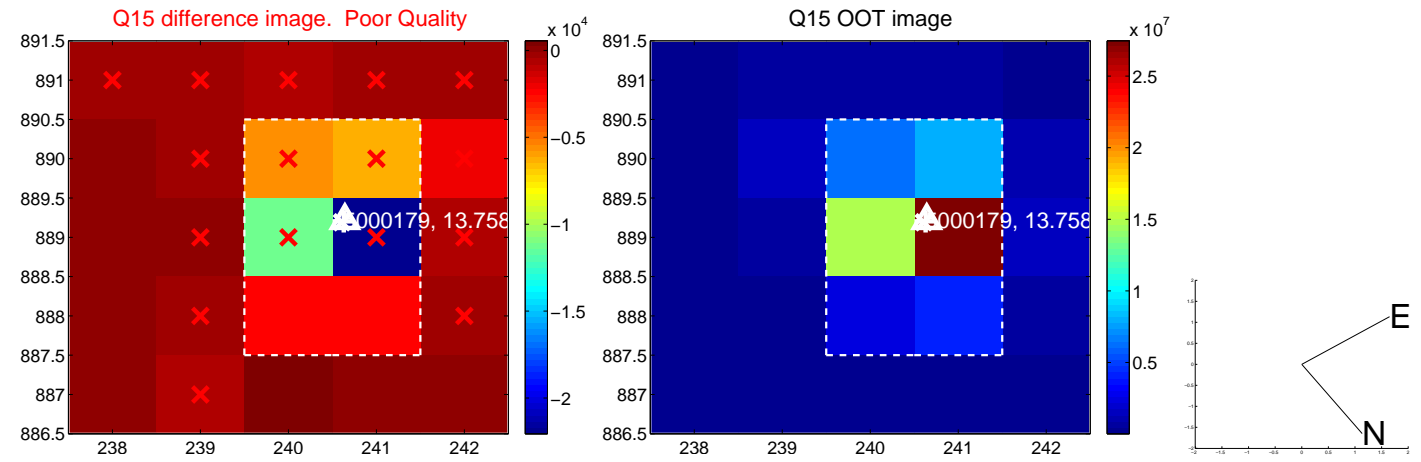
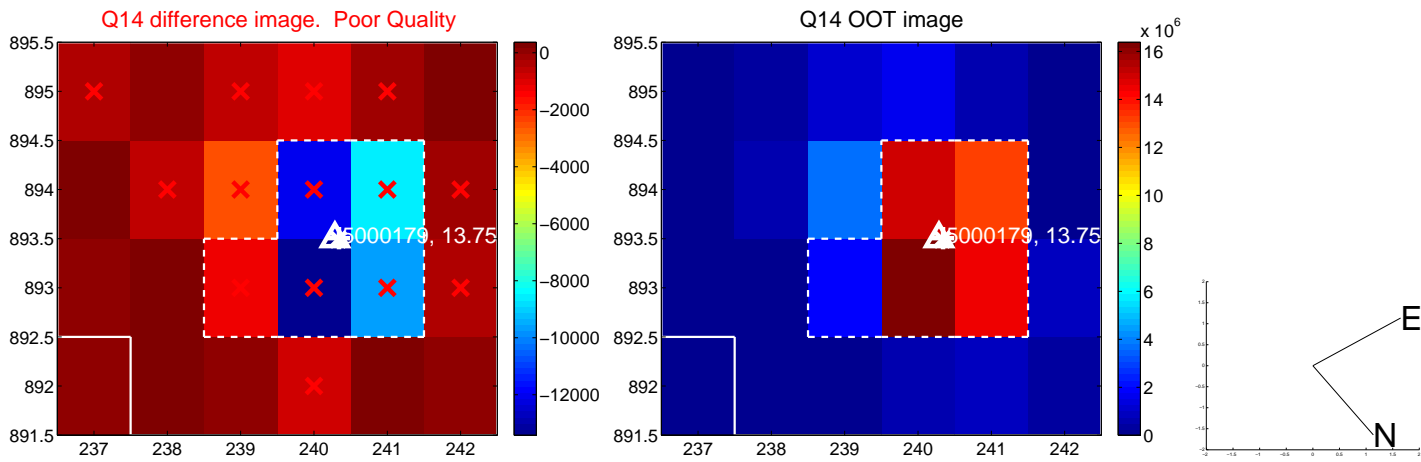
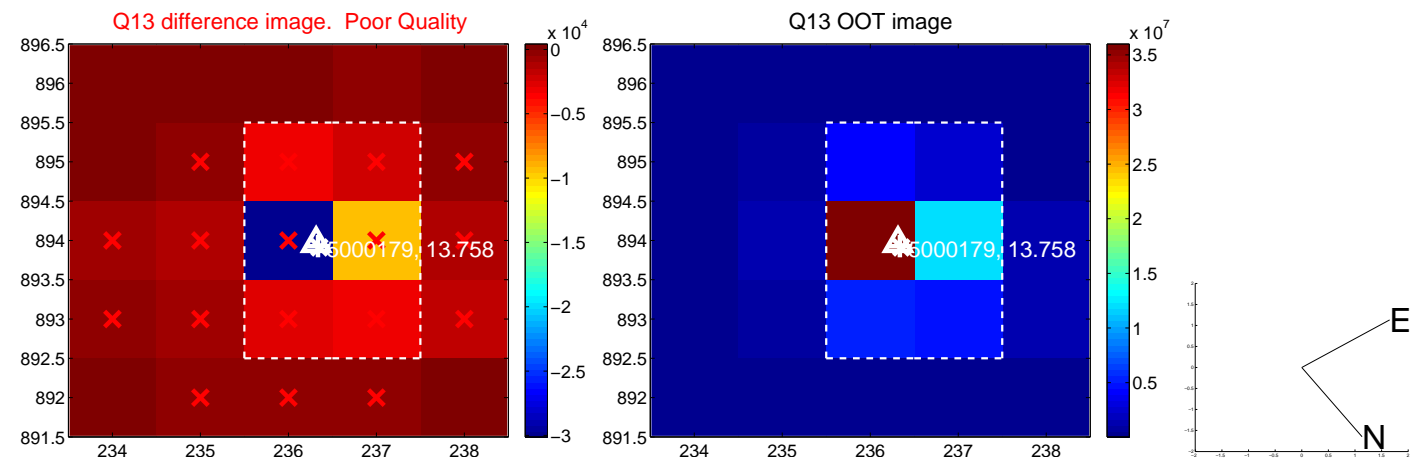
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



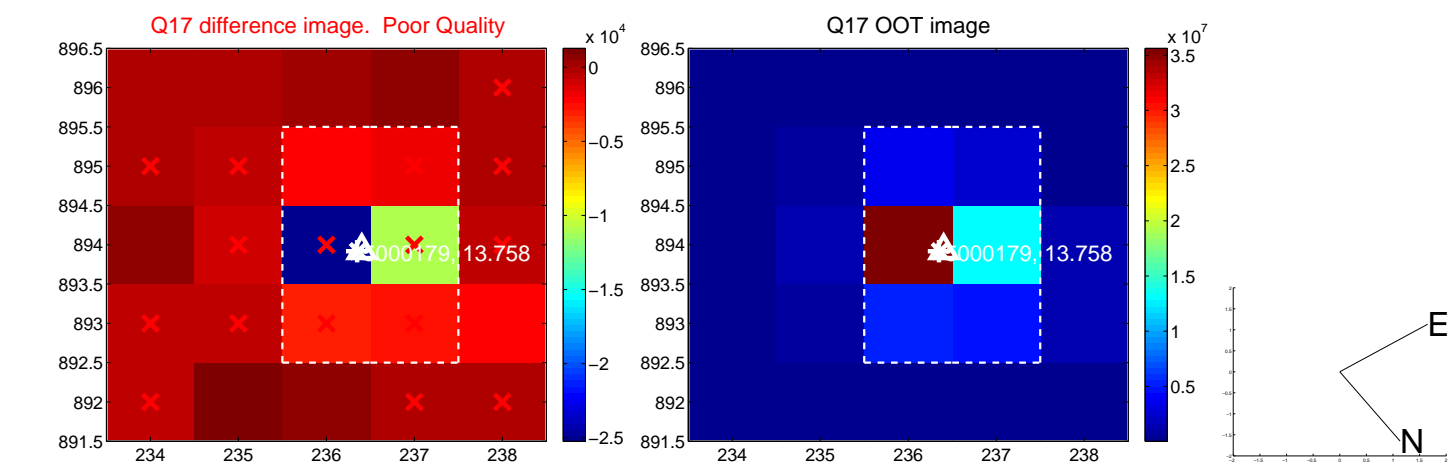
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



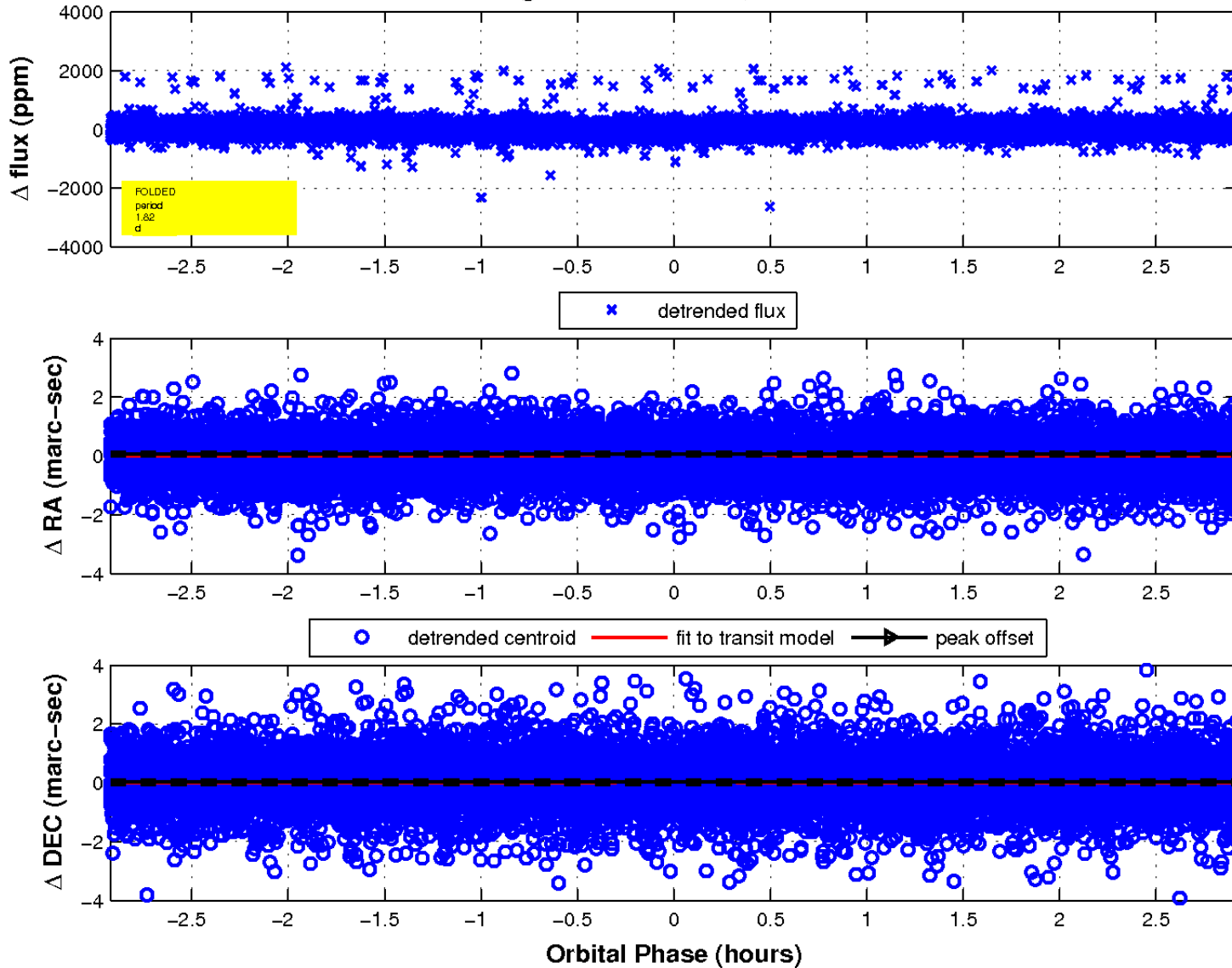
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

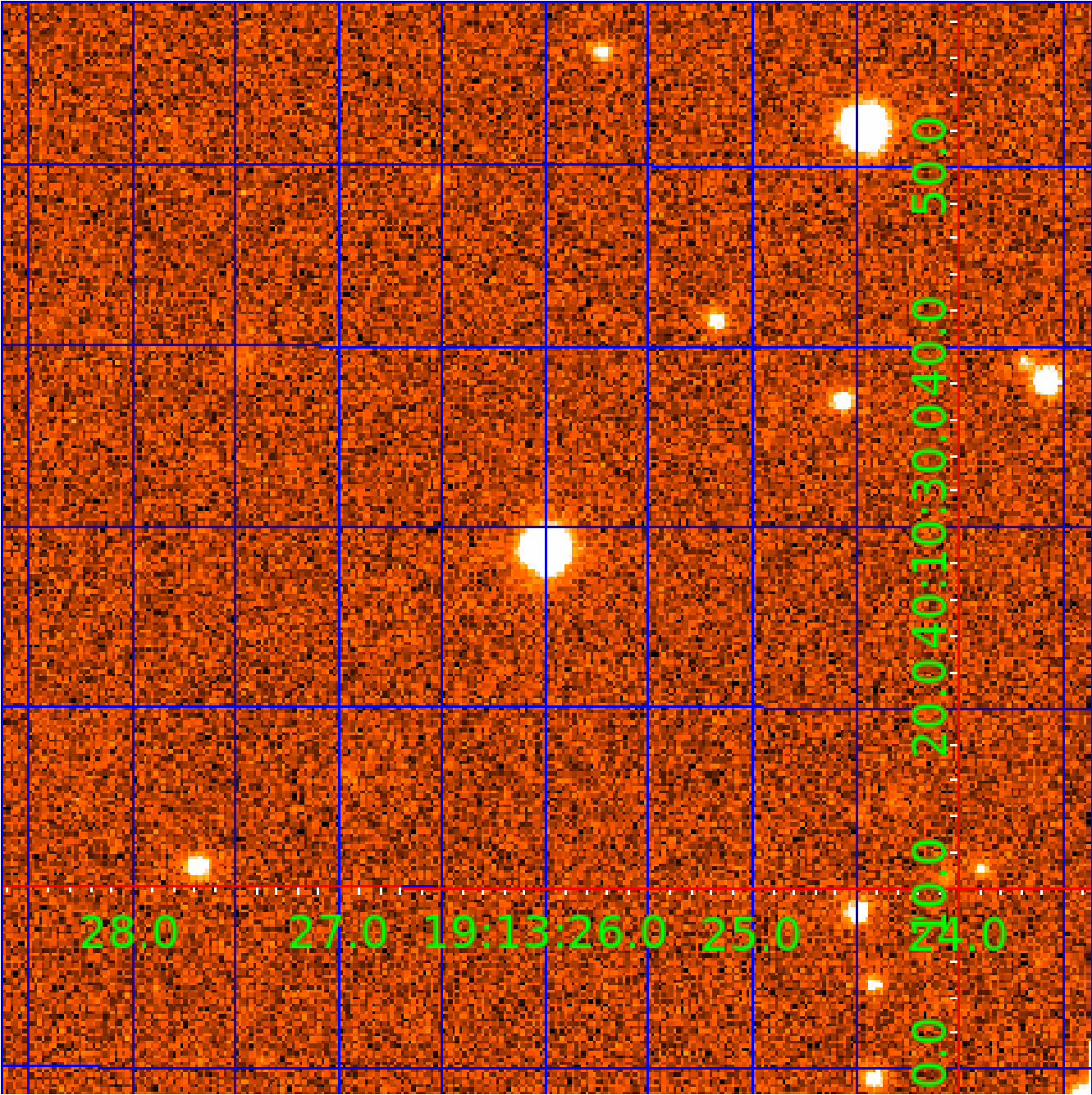


fluxWeightedCentroids, Planet 2 of 4



UKIRT Image

Declination



KIC 005000179

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}) |
|--------------|----------|---------|---------------|--------------|-------------|------------------|------|------|-----------------------------|-----------------|------------------------|------------------------|
| 005000179-01 | OBS | 6485.01 | 3.632966 | 131.830485 | 245.7 | 4.193 | 22.9 | 29.6 | 2.21 | 10046 | 6.40 | 11460.00 |
| 005000179-02 | OBS | No | 1.816407 | 132.514551 | 25.3 | 0.974 | 20.5 | 3.9 | 2.21 | 10046 | 1.17 | 28879.01 |
| 005000179-03 | OBS | No | 1.816486 | 132.741590 | 112.6 | 4.537 | 19.9 | 24.3 | 2.21 | 10046 | 2.40 | 28877.34 |

Robovetter Results

| TCE | Run Type | Disp | Score | N | S | C | E | Comments |
|--------------|----------|------|-------|---|---|---|---|---|
| 005000179-01 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV |
| 005000179-02 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—CENT_FEW_DIFFS |
| 005000179-03 | OBS | FP | 0.00 | 1 | 0 | 0 | 0 | SWEET_NTL—LPP_DV—SAME_NTL_PERIOD—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.

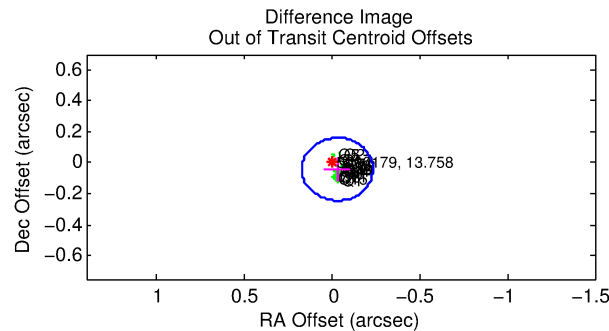
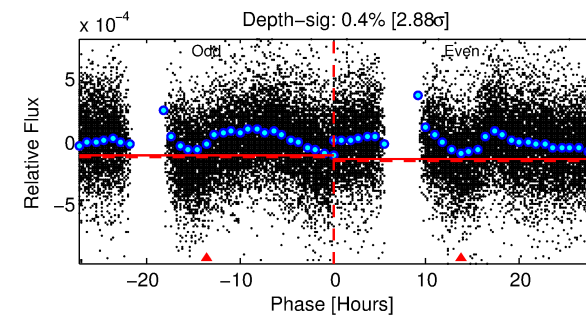
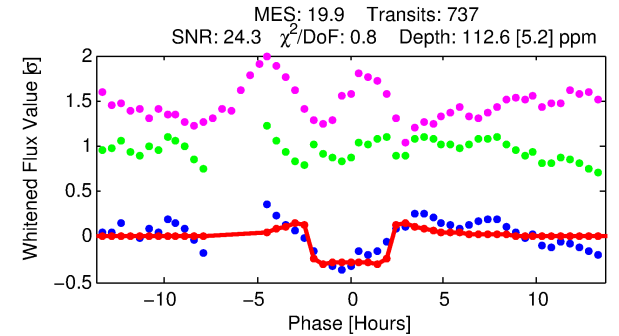
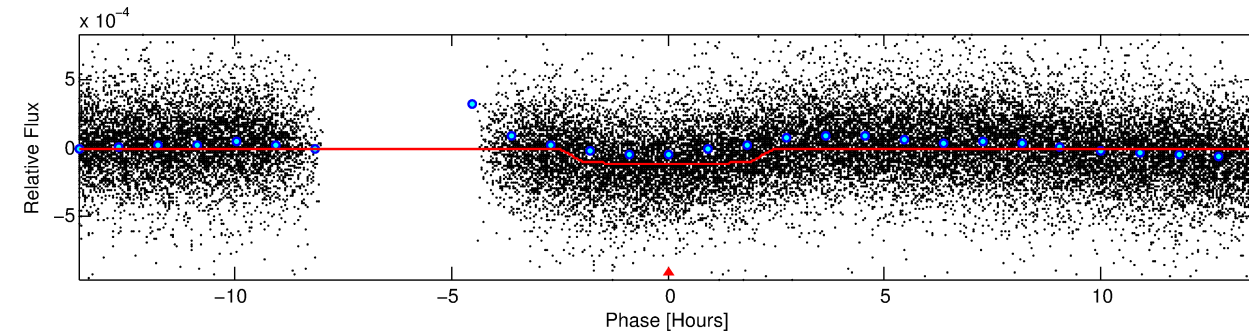
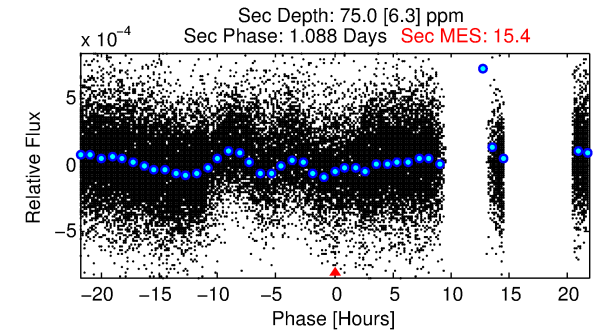
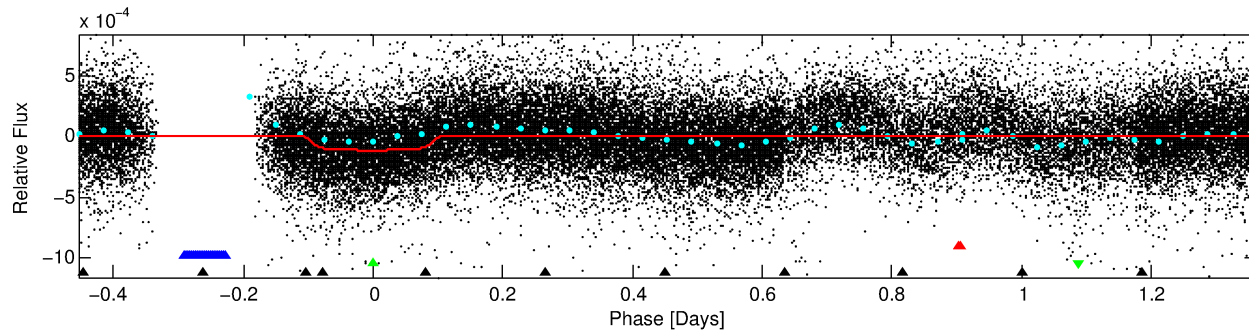
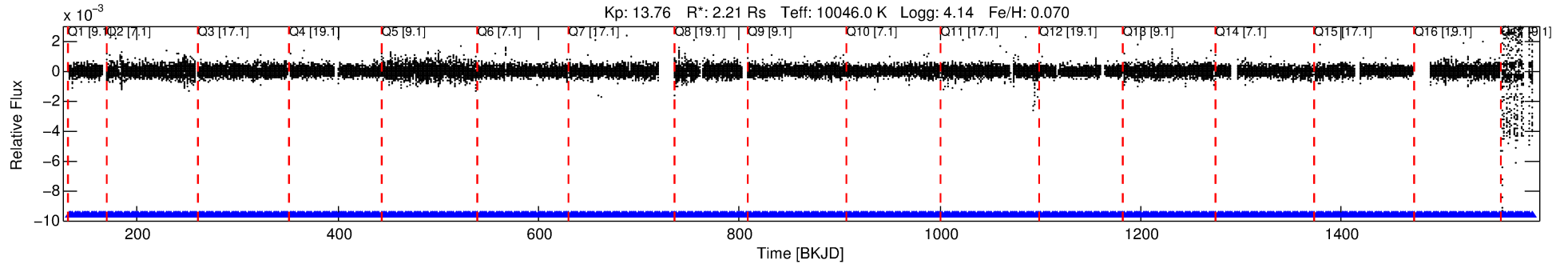
Ephemeris Match Information For 005000179-03

No Significant Match Found

DV One-Page Summary

KIC: 5000179 Candidate: 3 of 4 Period: 1.816 d
KOI: K06485 Corr: No Ephemeris Match

Kp: 13.76 R*: 2.21 Rs Teff: 10046.0 K Logg: 4.14 Fe/H: 0.070



DV Fit Results:

Period = 1.81649 [0.00001] d
Epoch = 132.7416 [0.0012] BKJD
Rp/R* = 0.0100 [0.0021]
a/R* = 3.13 [4.30]
b = 0.10 [15.23]
Seff = 28877.34 [14571.87]
Teq = 3324 [419] K
Rp = 2.40 [1.16] Re
a = 0.0393 [0.0135] AU
Ag = 10.99 [7.11] [1.41σ]
Teffp = 9358 [1099] K [5.13σ]

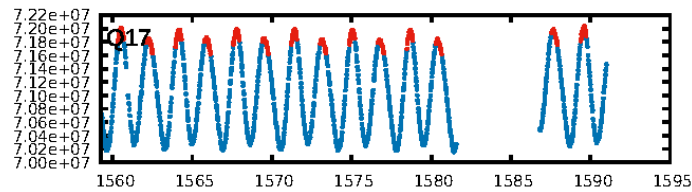
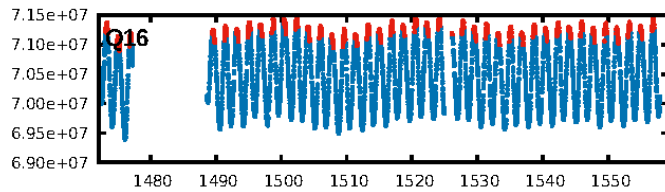
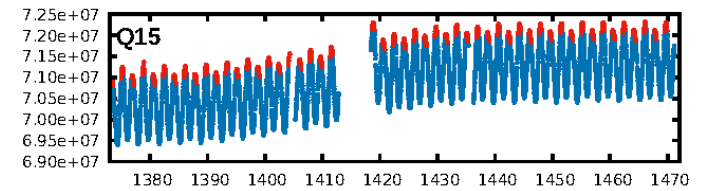
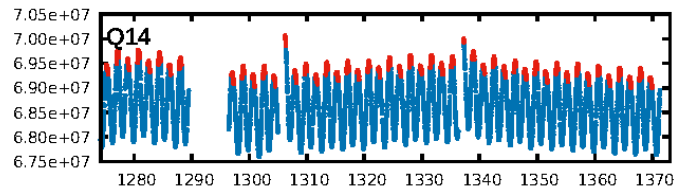
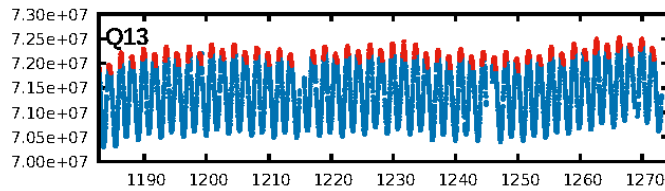
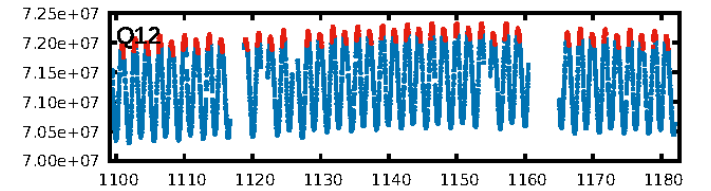
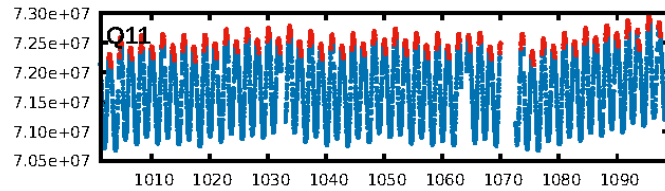
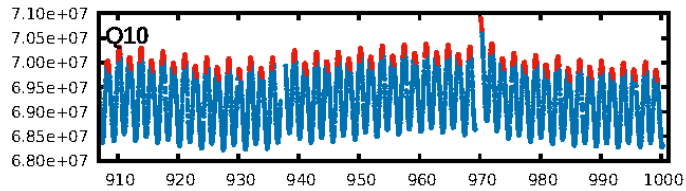
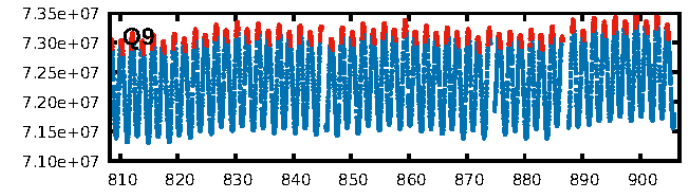
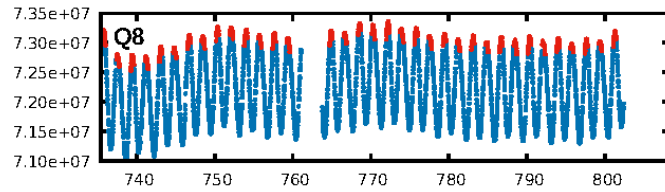
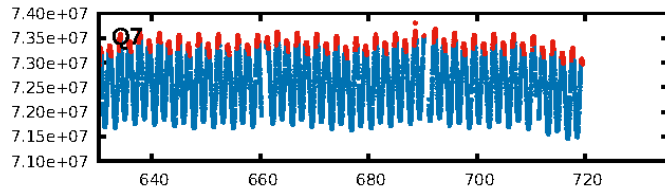
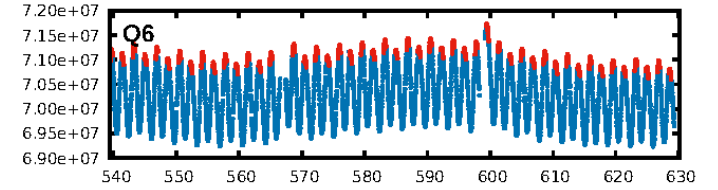
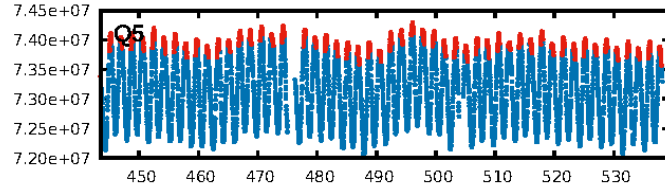
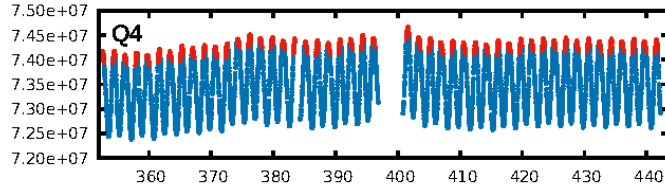
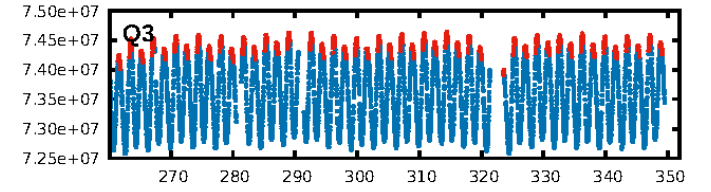
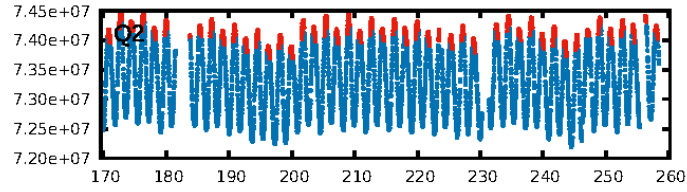
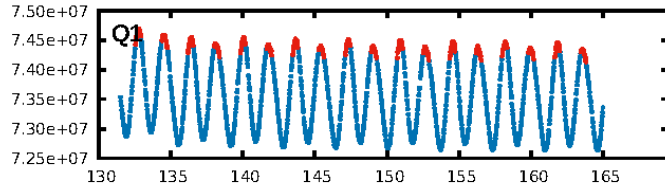
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [7.06σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [705/705]
GhostDiagnostic-chr: 2.616
Centroid-sig: 3.3%
Centroid-so: 0.468 arcsec [1.59σ]
OotOffset-rm: 0.052 arcsec [0.78σ]
KicOffset-rm: 0.081 arcsec [1.18σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 0.00 [0/17]

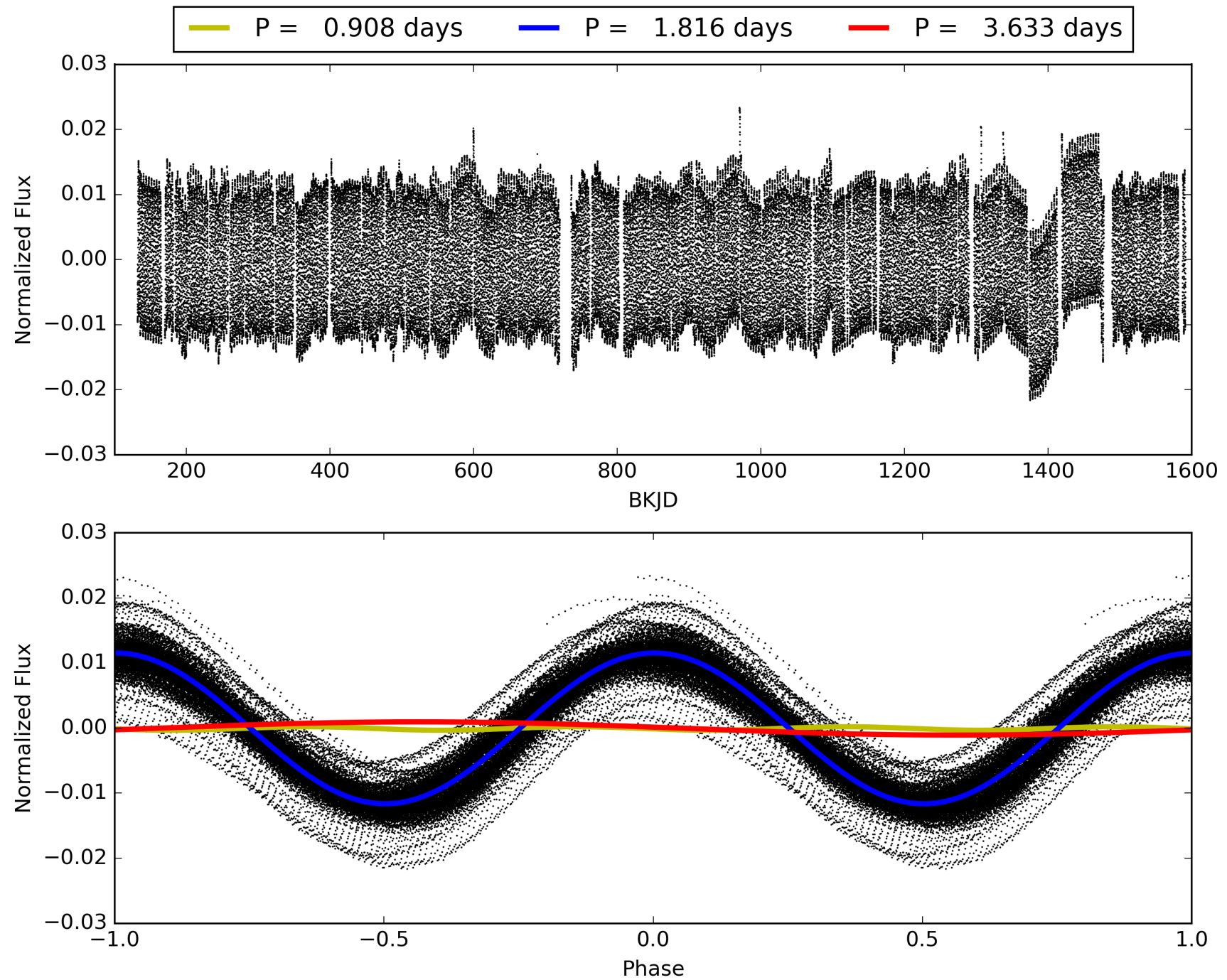
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:50:52 Z

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

TCE 005000179-03, PDC Light Curves

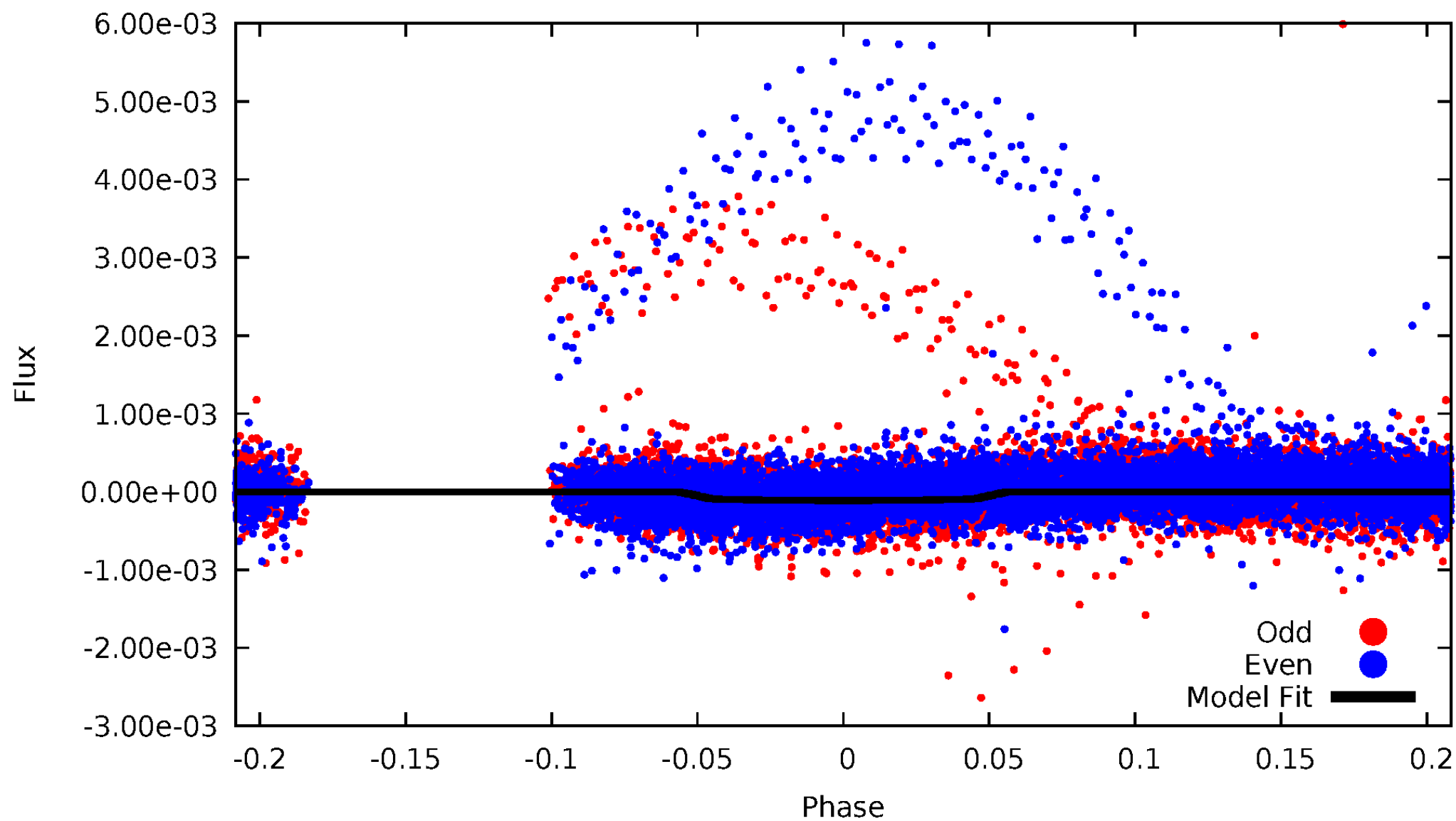


TCE 005000179-03



DV Odd/Even

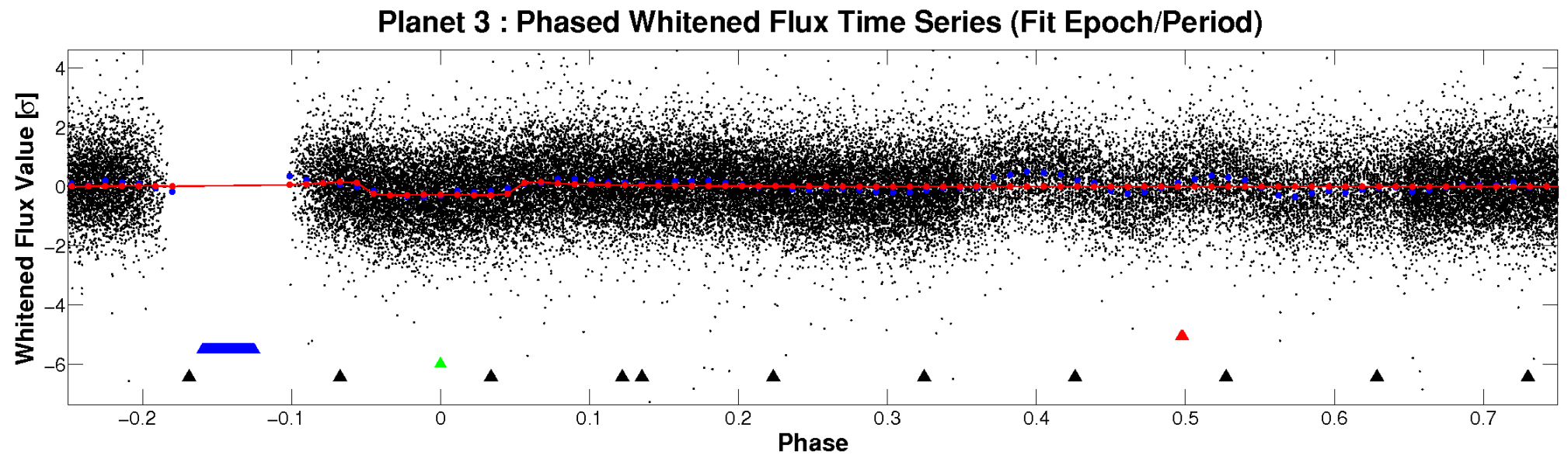
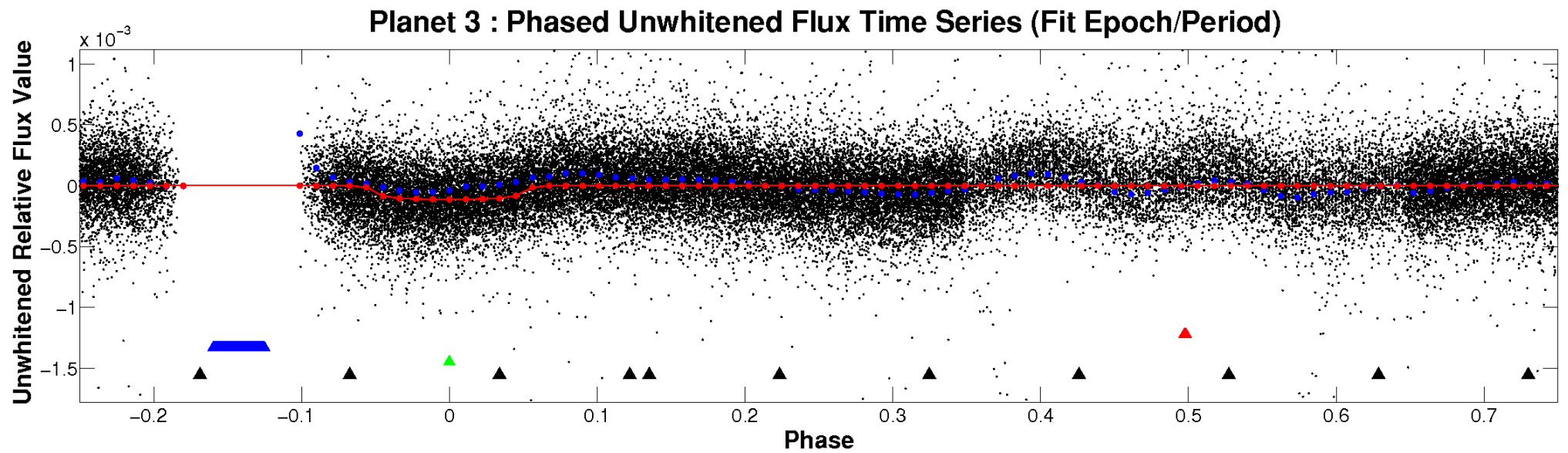
TCE 005000179-03



ALT Odd/Even

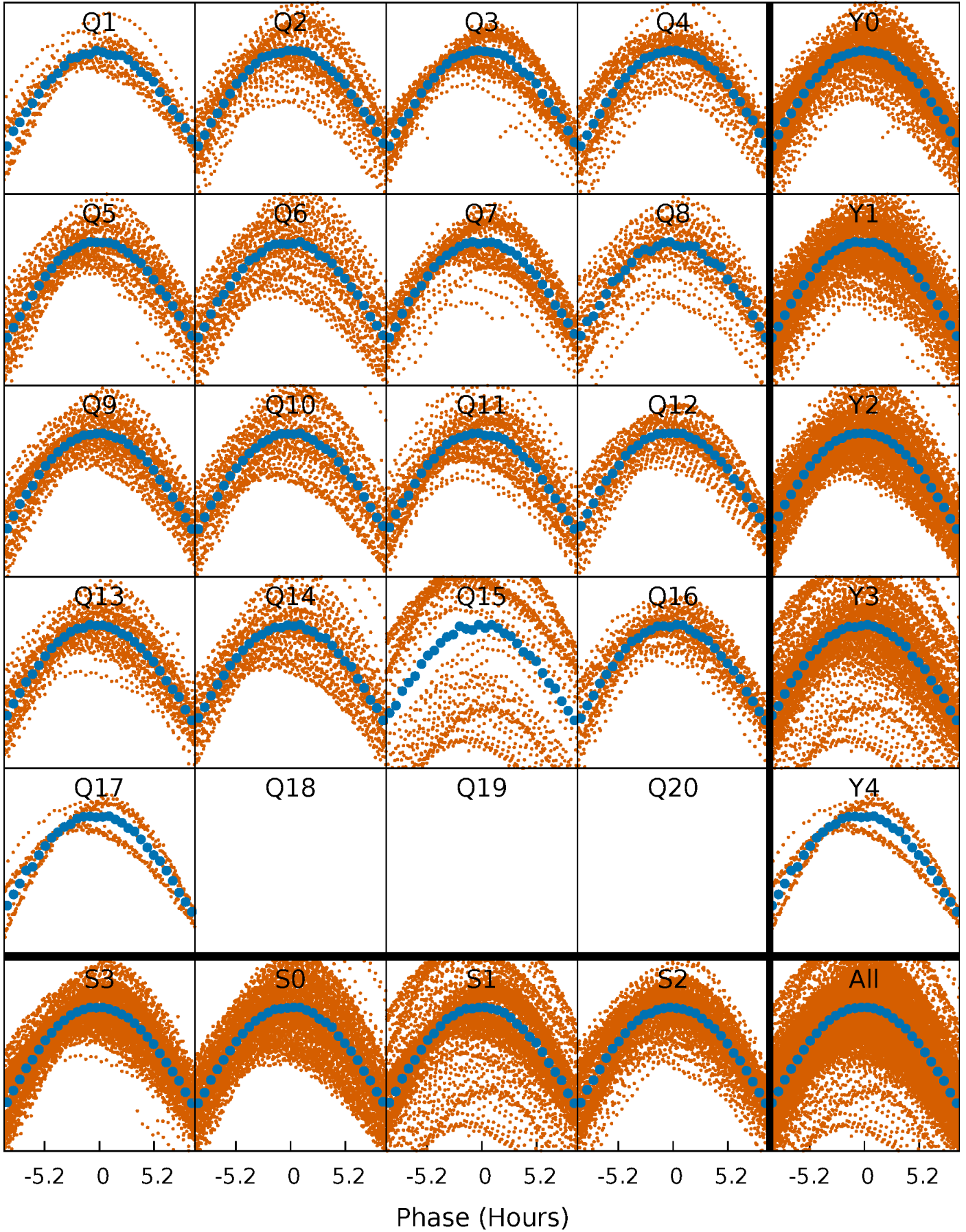
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve



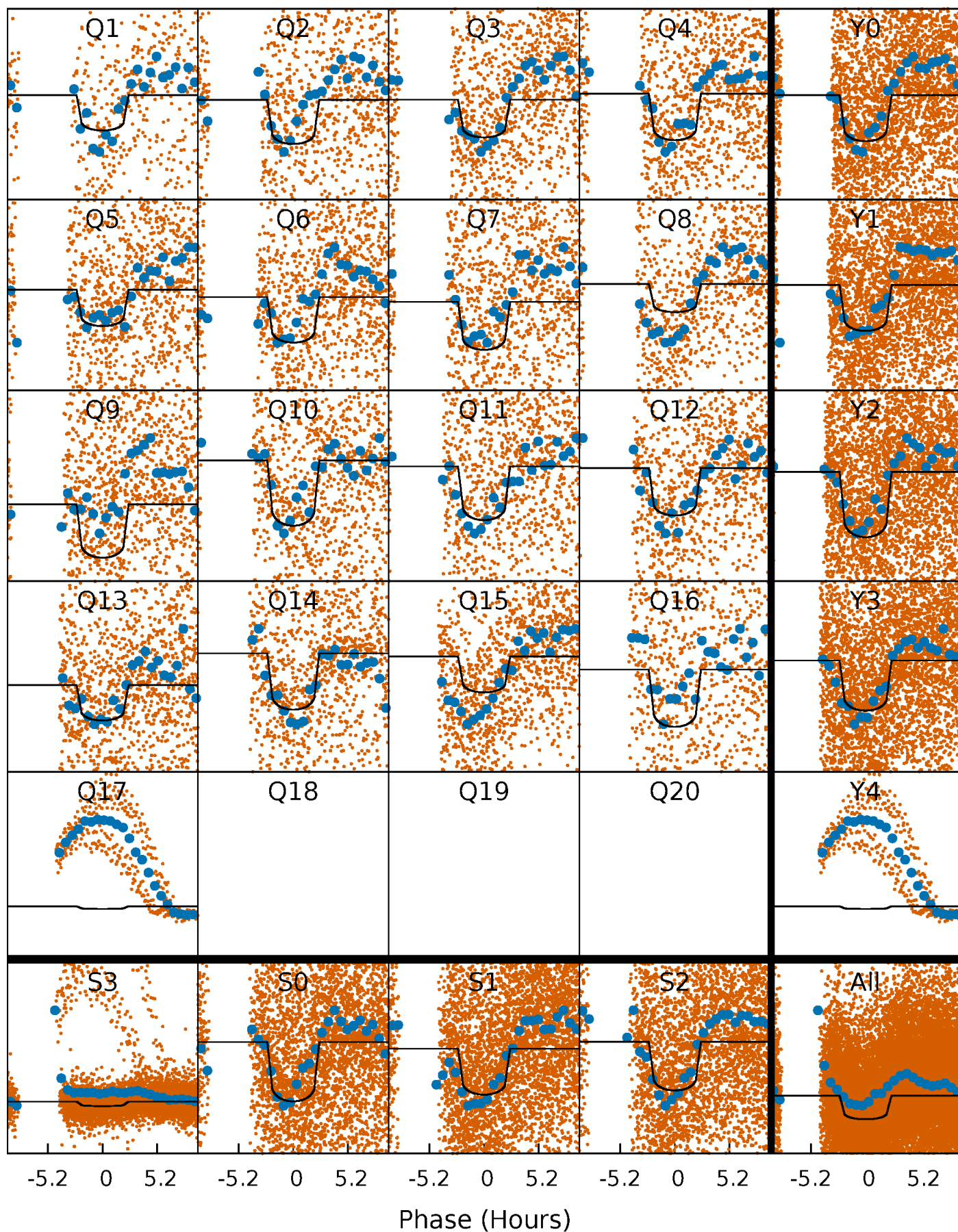
PDC Quarter-Phased Transit Curves

TCE 005000179-03 P= 1.816486 Days $T_0=132.741590$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 005000179-03 P= 1.816486 Days $T_0=132.741590$ (BKJD)

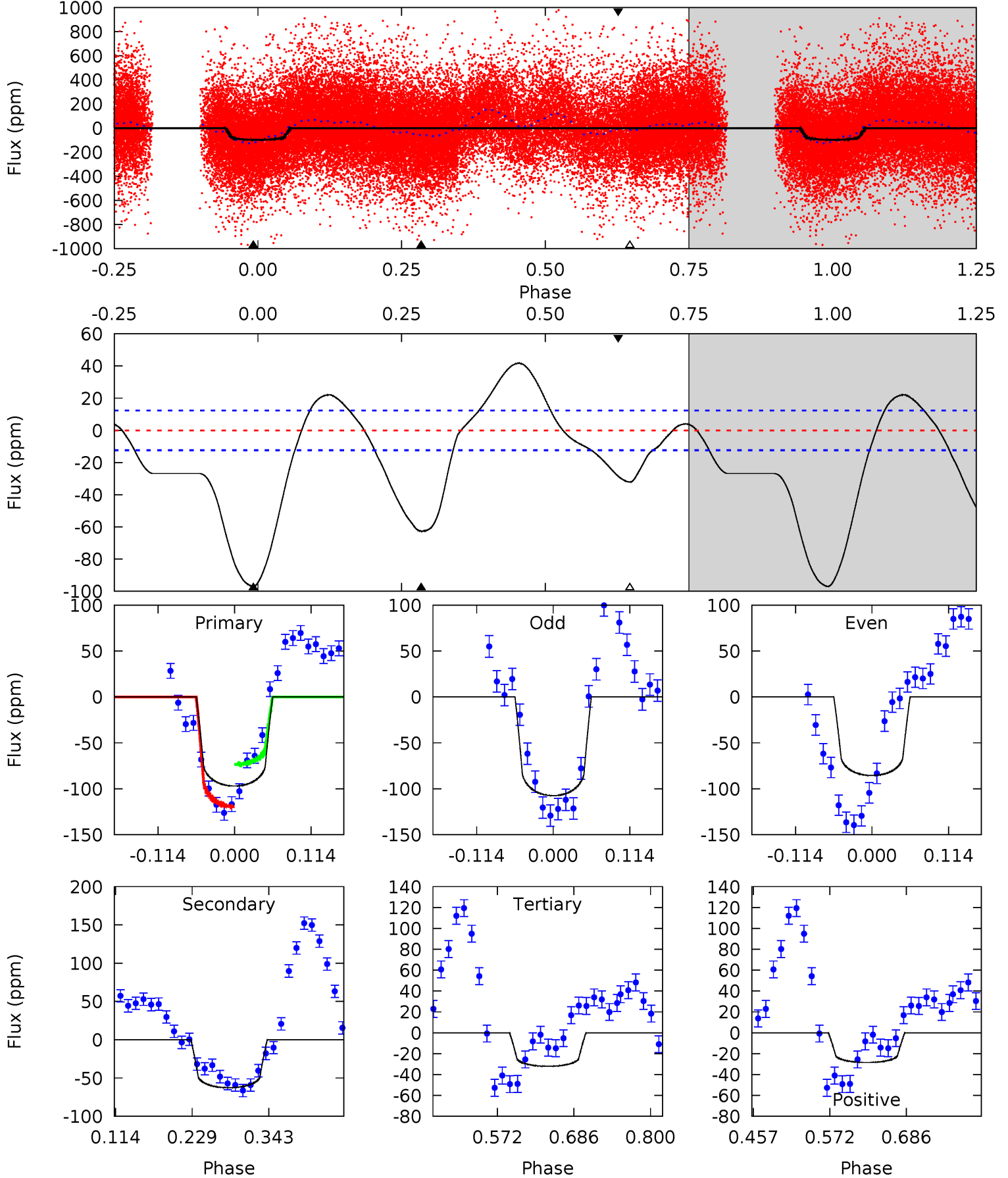


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

005000179-03, P = 1.816486 Days, E = 130.925104 Days

| Pri | Sec | Ter | Pos | FA ₁ | FA ₂ | F _{Red} | Pri-Ter | Pri-Pos | Sec-Ter | Sec-Pos | Odd-Evn | DMM | Shape | TAT |
|------|------|------|-------|-----------------|-----------------|------------------|---------|---------|---------|---------|---------|------|-------|-----|
| 35.7 | 23.0 | 11.8 | -10.5 | 4.54 | 1.58 | 7.23 | 23.9 | 46.1 | 11.2 | 33.5 | 4.07 | 0.24 | 0.30 | 0 |



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 005000179

| | $T_{\text{eff}}(K)$ | $\log(g)$ | [Fe/H] | $R (R_{\odot})$ | $M(M_{\odot})$ | $p_{\star} (\text{g}\cdot\text{cm}^{-3})$ |
|--------|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------|---|
| | 10046^{+248}_{-426} | $4.138^{+0.133}_{-0.247}$ | $0.070^{+0.150}_{-0.300}$ | $2.208^{+0.949}_{-0.511}$ | $2.440^{+0.424}_{-0.466}$ | $0.319^{+0.223}_{-0.202}$ |
| | +2%/-4% | +3%/-6% | +214%/-429% | +43%/-23% | +17%/-19% | +70%/-63% |
| Source | KIC0 | 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 005000179-03 / KOI

| Detrend | Depth (ppm) | $R_p (R_{\oplus})$ | $T_{max} (K)$ | $T_{obs} (K)$ | A_{obs} |
|---------|-------------|------------------------|----------------------|------------------------|---------------------------|
| DV | -63 ± 3 | $2.52^{+0.71}_{-0.64}$ | 4699^{+445}_{-333} | 8371^{+1607}_{-1056} | $8.288^{+6.184}_{-3.260}$ |
| Alt. | N/A | N/A | N/A | N/A | N/A |

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 $A_{obs} \gg 1.0$

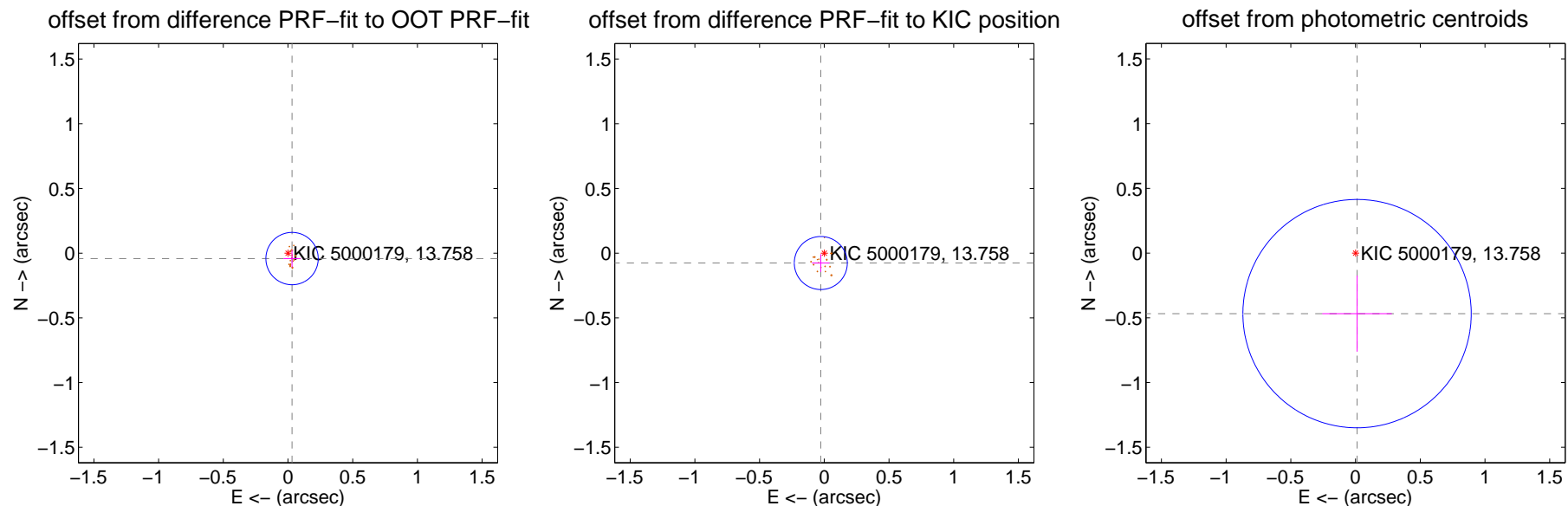
DV Centroid Data

Supplemental centroid analysis for 005000179-03. Kepler magnitude: 13.76. Transit SNR 24.34

There are 0 quarters with good PRF difference image offsets

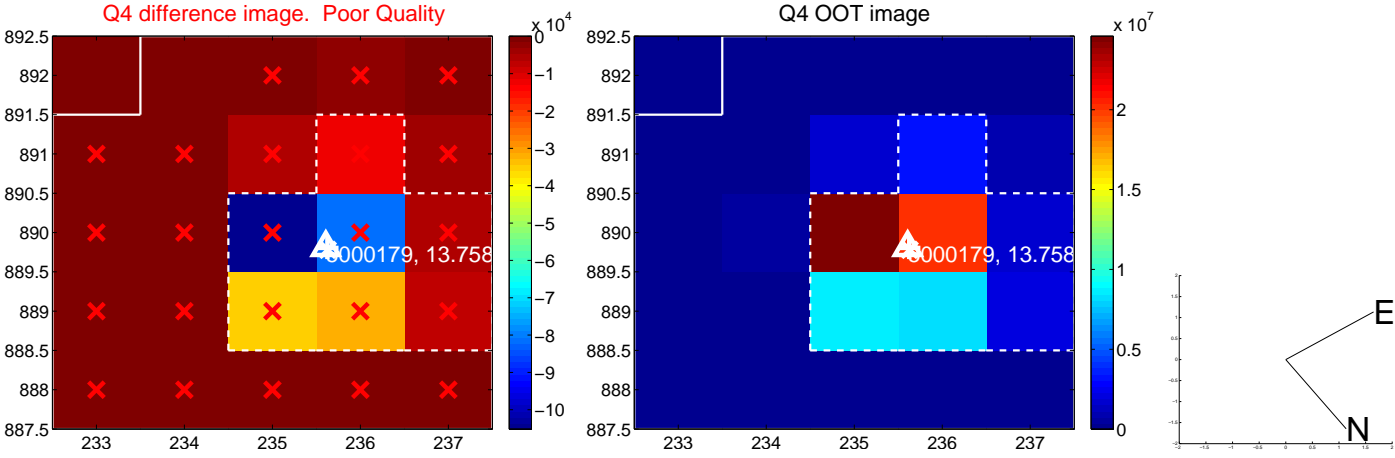
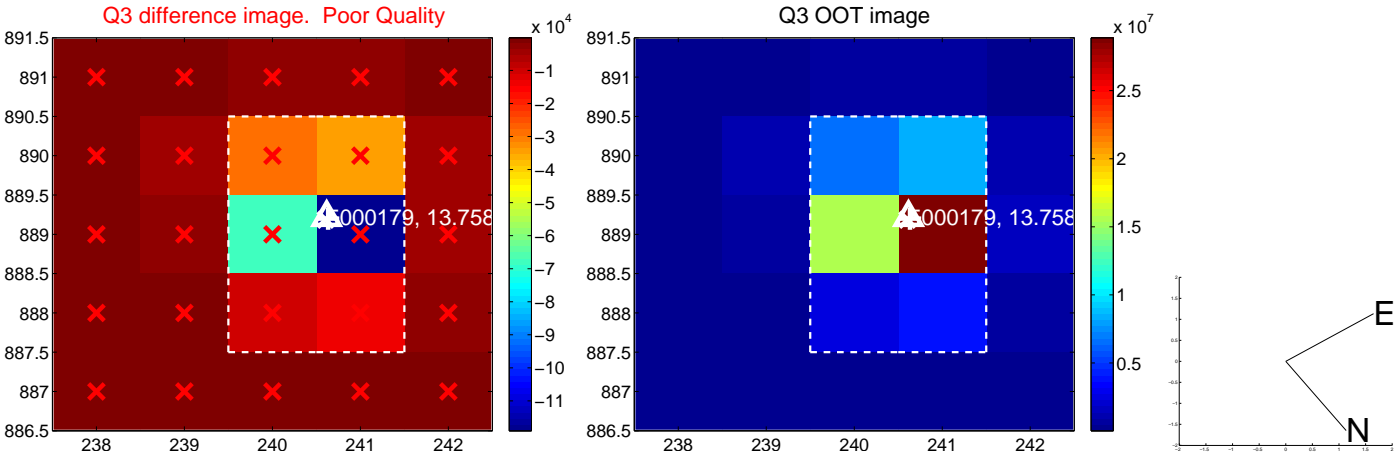
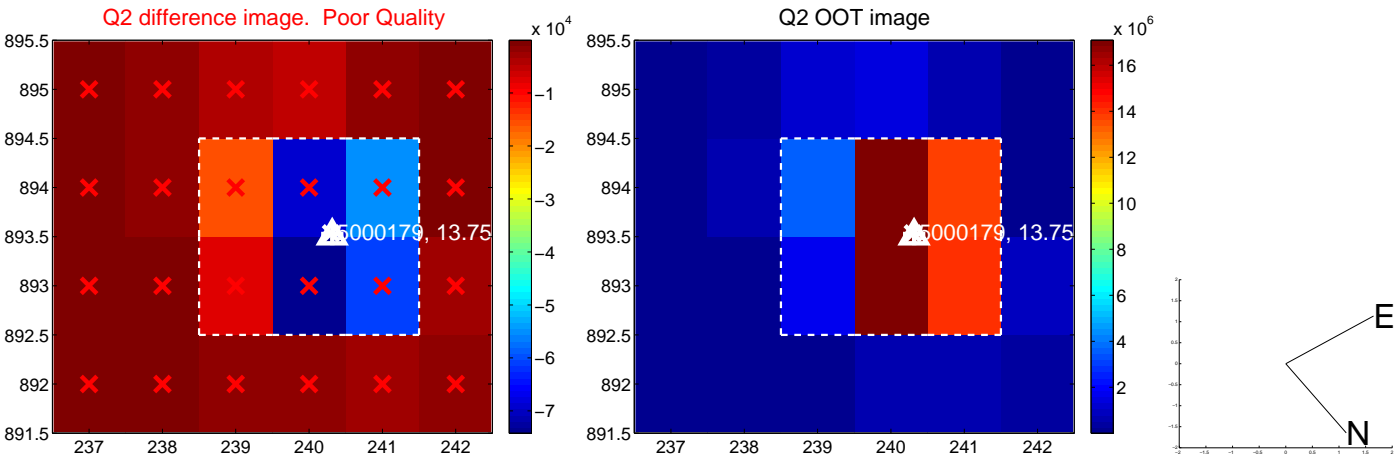
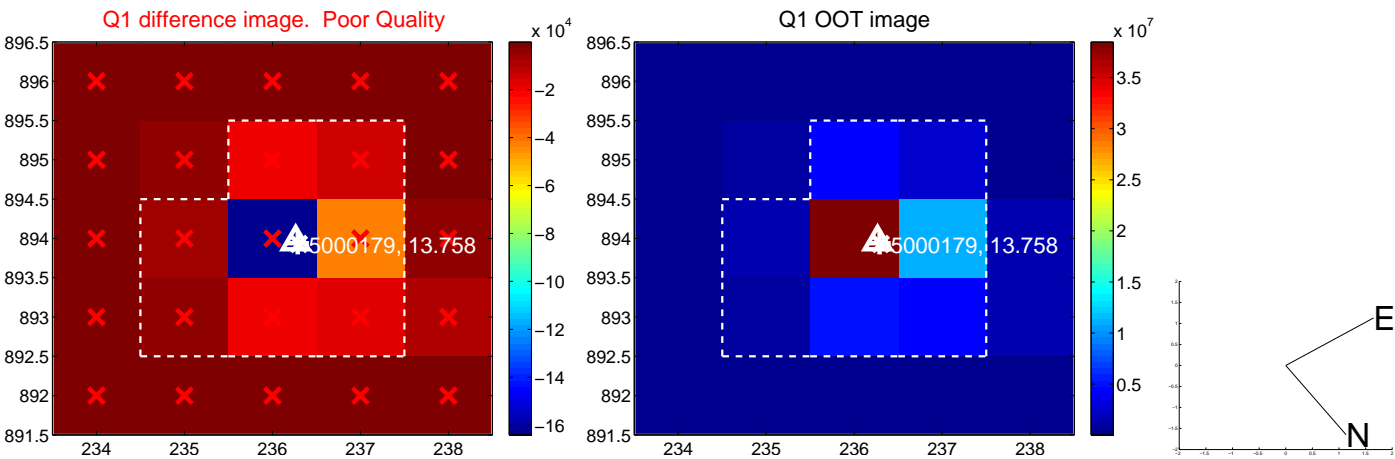
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

| | Distance in arcsec | Distance / σ | Δ RA | Δ Dec |
|---|--------------------|---------------------|--------------------|--------------------|
| PRF-fit source offset from OOT | 0.052 ± 0.067 | 0.78 | -0.031 ± 0.067 | -0.042 ± 0.068 |
| PRF-fit source offset from KIC position | 0.081 ± 0.068 | 1.18 | 0.027 ± 0.068 | -0.076 ± 0.068 |
| photometric centroid source offset | 0.47 ± 0.29 | 1.59 | -0.01 ± 0.27 | -0.47 ± 0.29 |

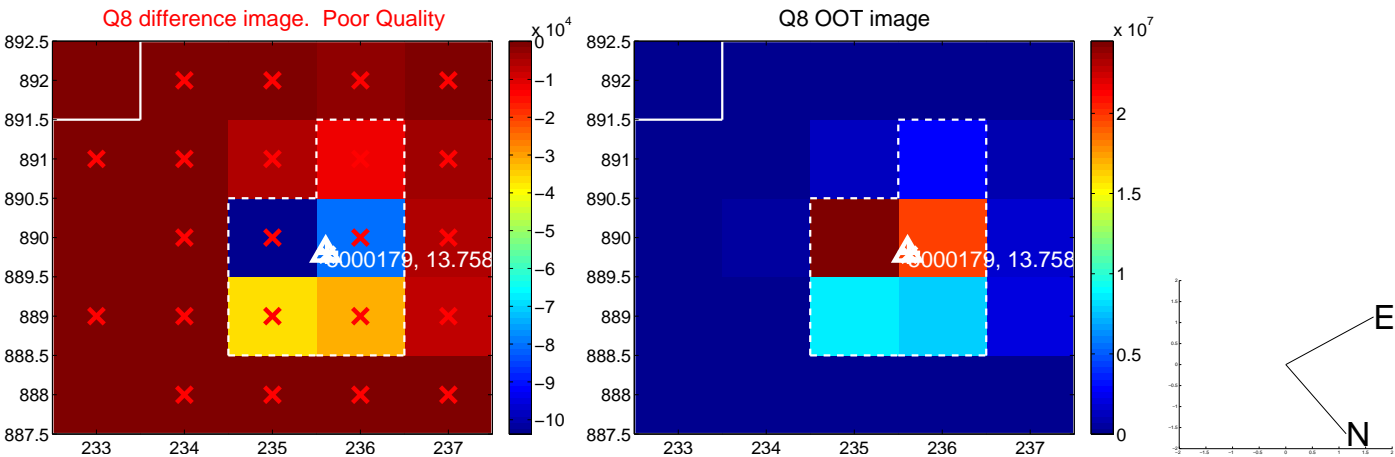
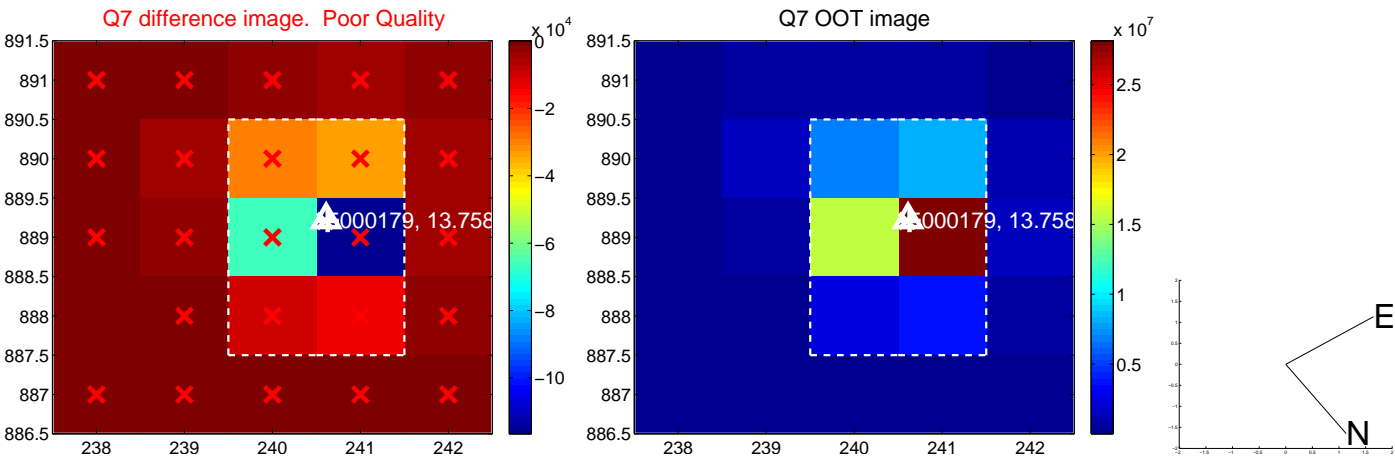
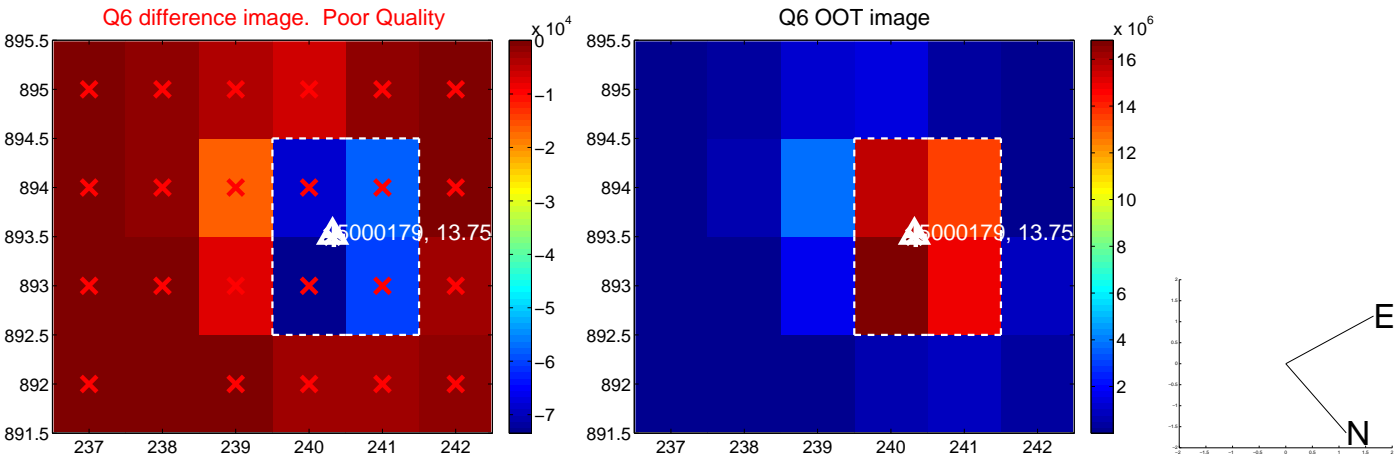
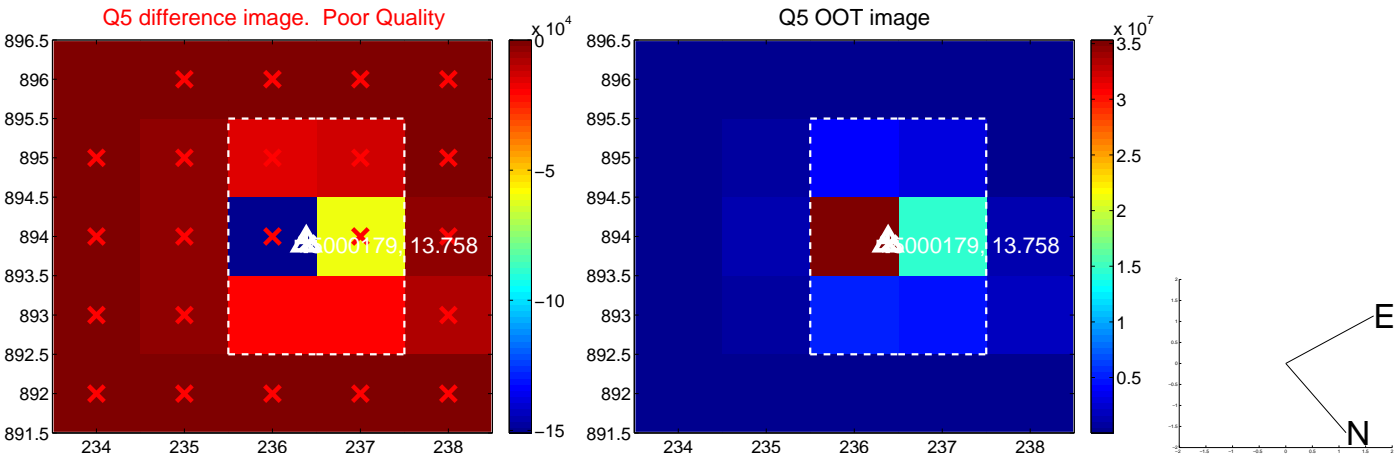


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

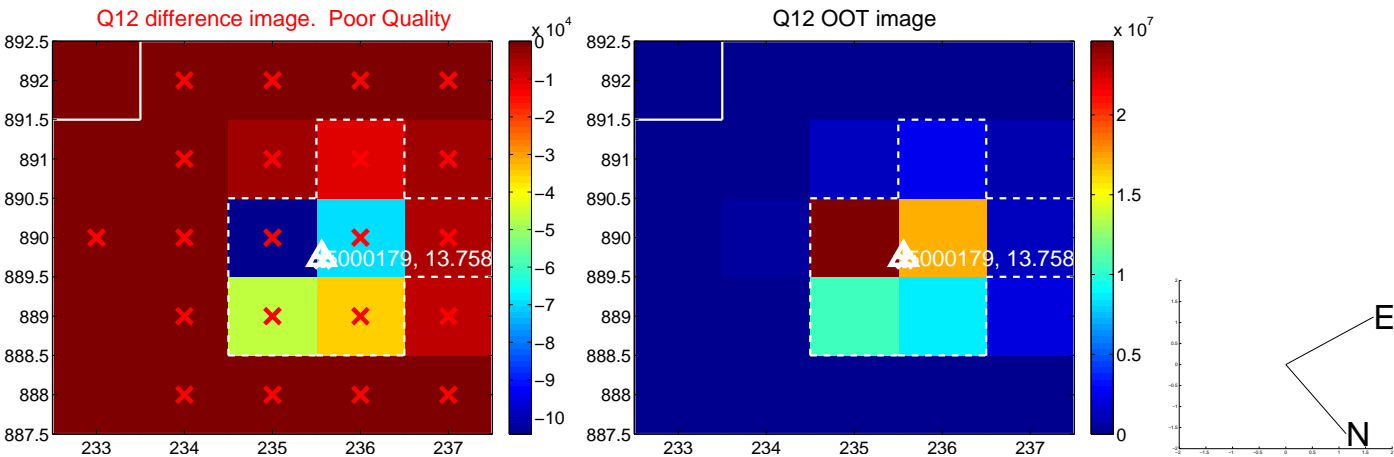
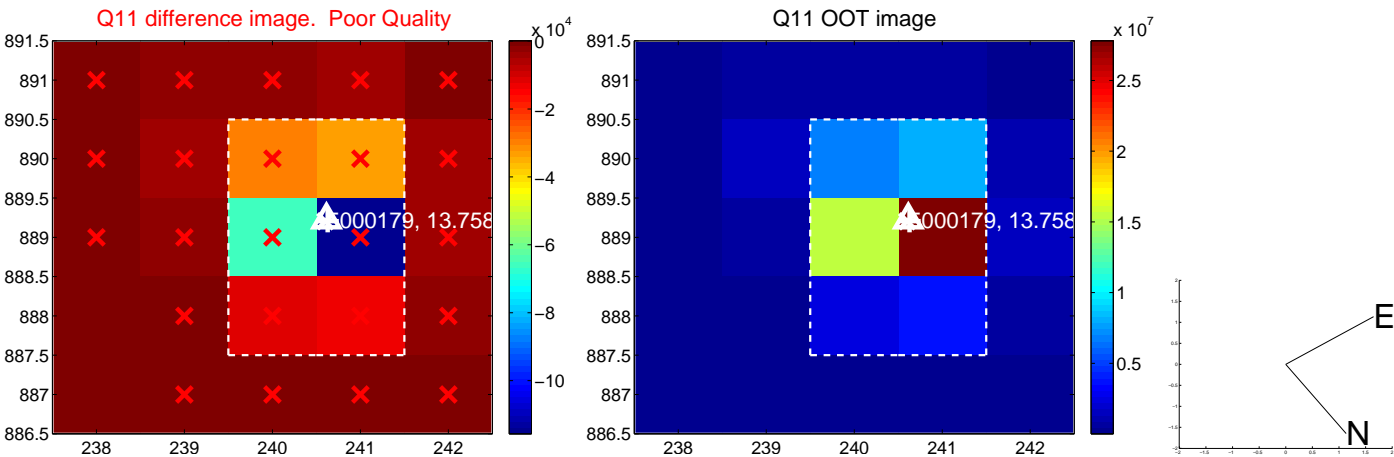
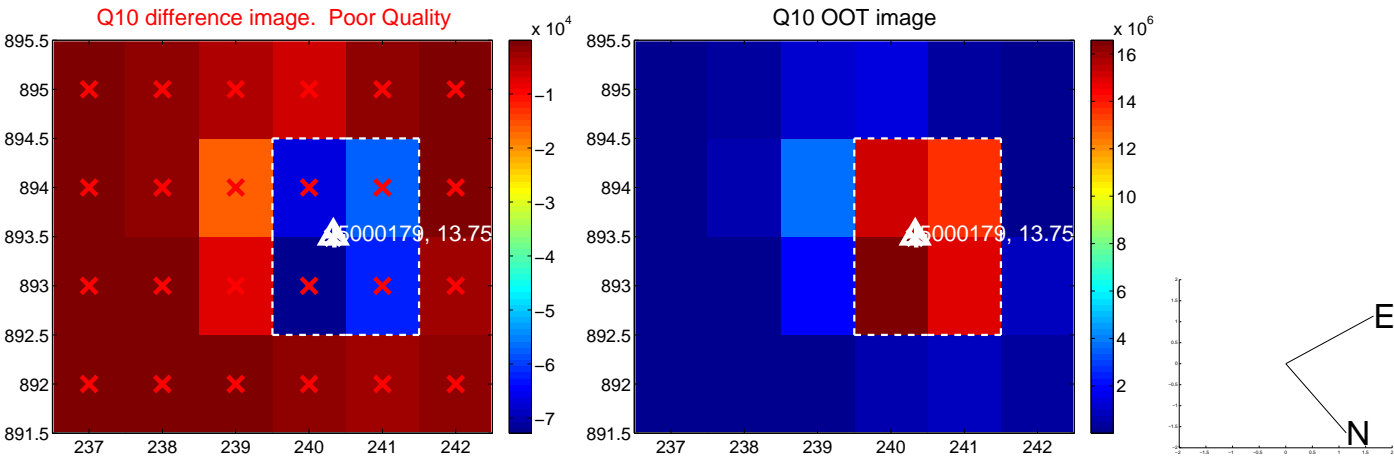
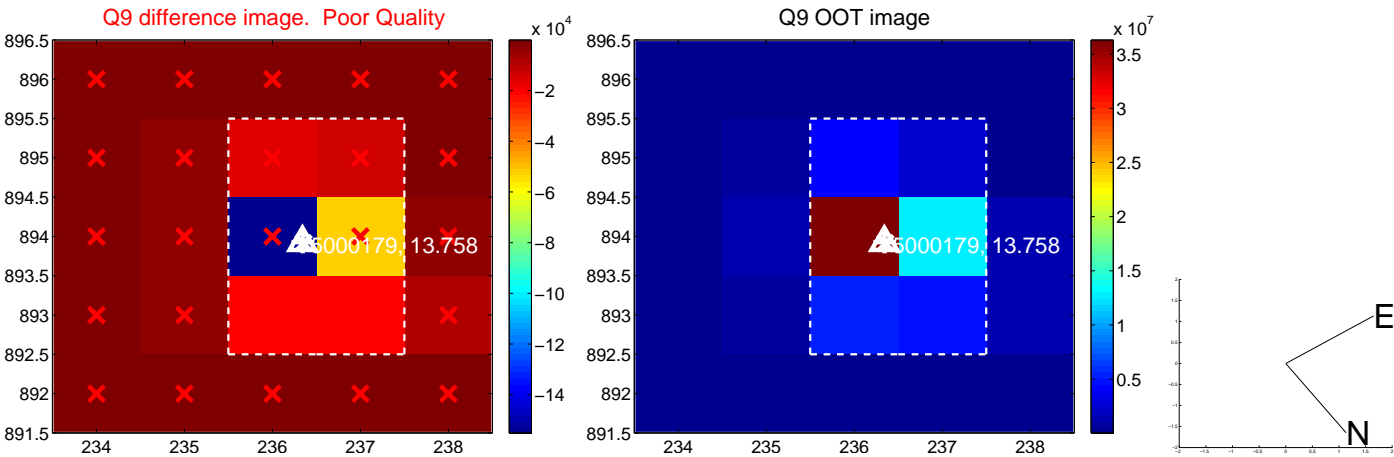
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



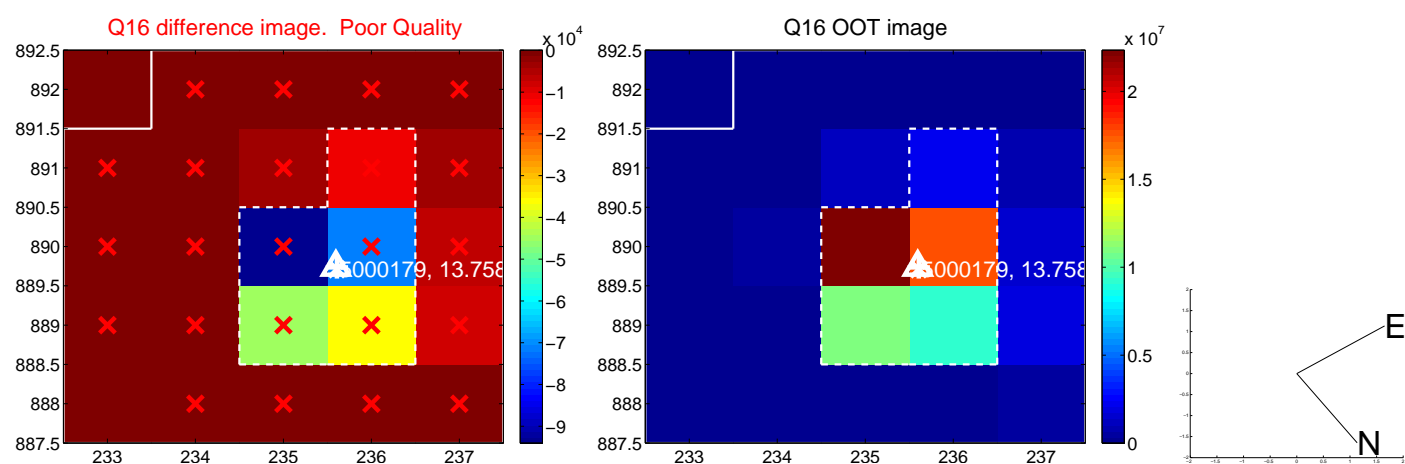
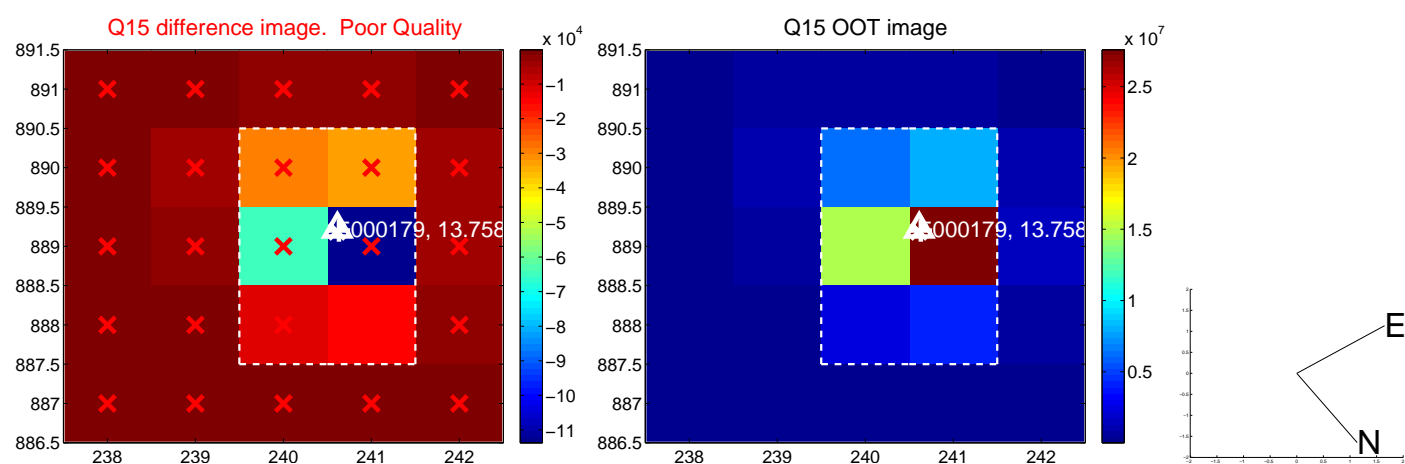
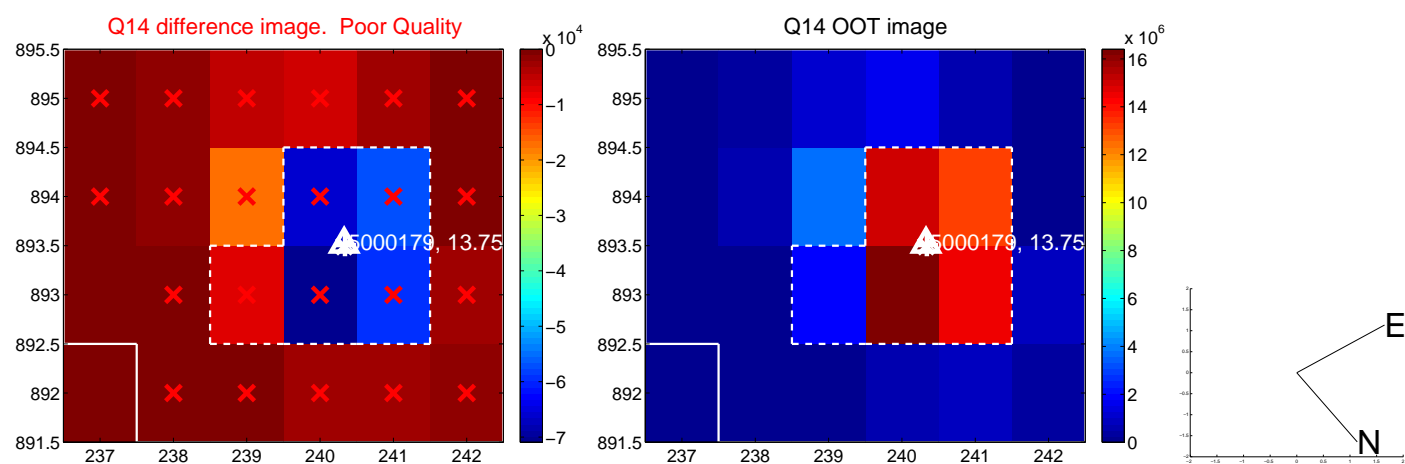
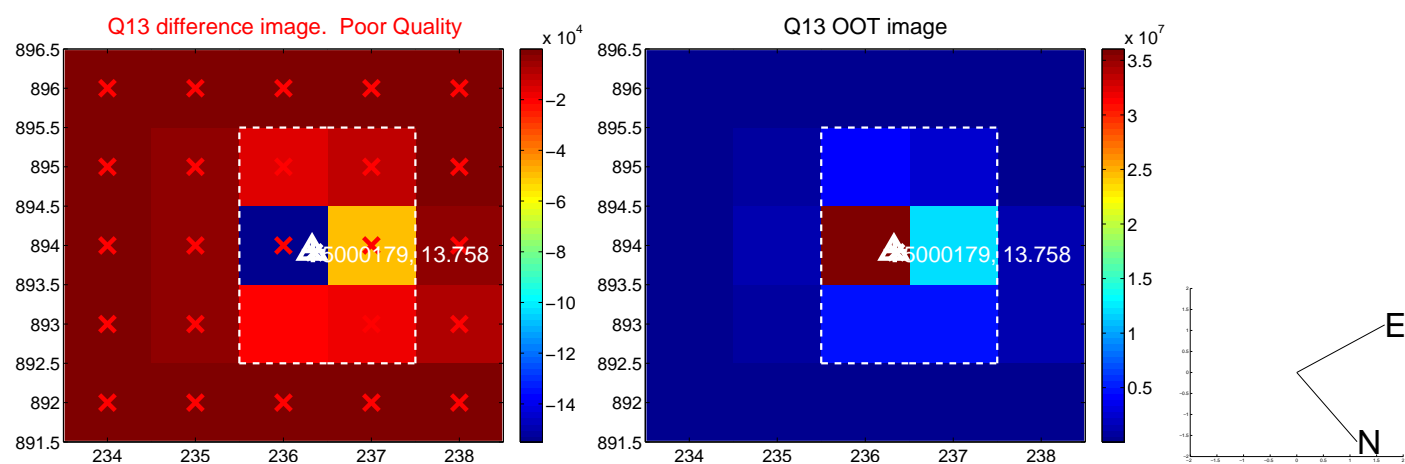
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



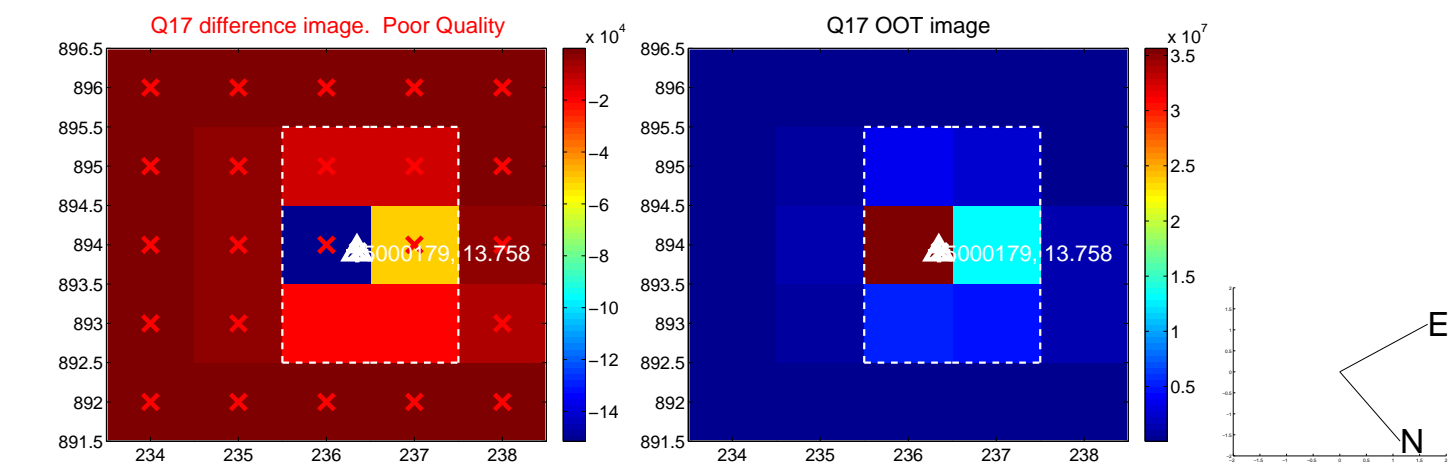
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



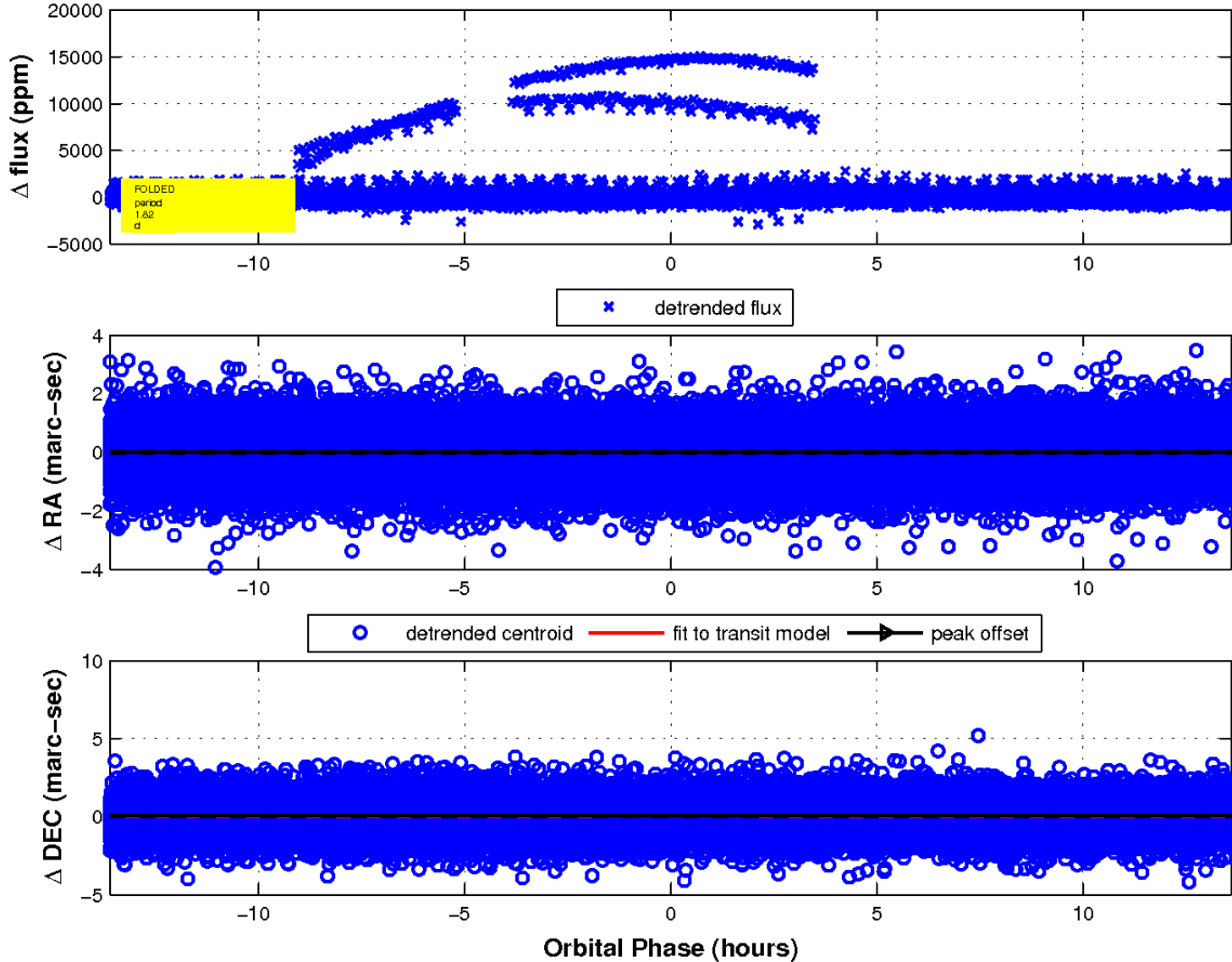
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 4



UKIRT Image

Declination

