

KIC 005771719

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})
005771719-01	OBS	0190.01	12.264881	139.303989	11348.7	4.775	620.9	556.3	2.34	5372	28.50	318.56
005771719-02	OBS	No	12.264552	132.364893	151.8	3.619	8.1	8.9	2.34	5372	3.44	318.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005771719-01	OBS	FP	0.00	0	1	0	0	HAS_SEC_TCE
005771719-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE

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

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

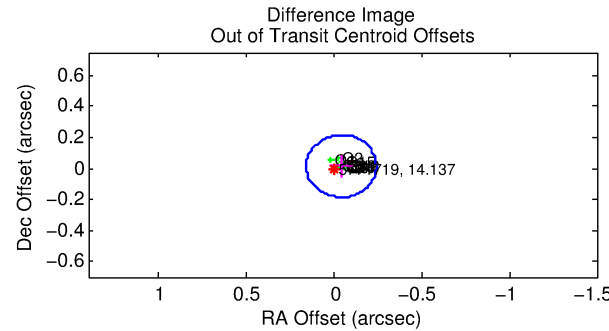
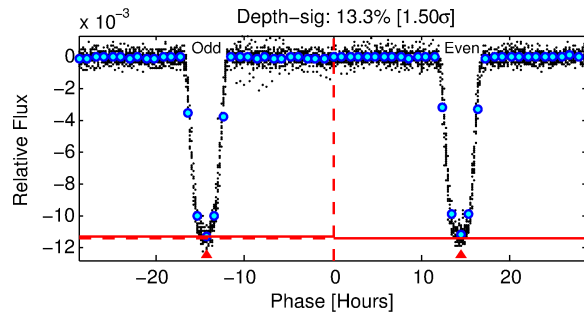
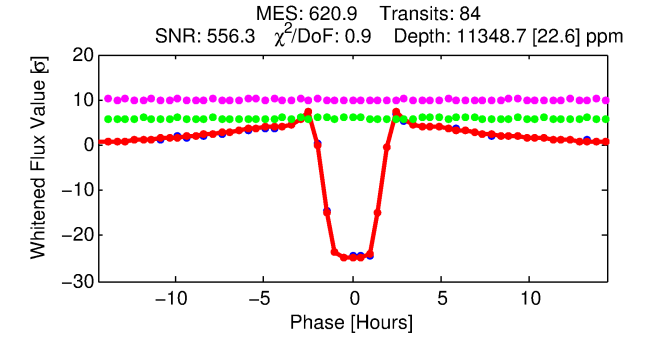
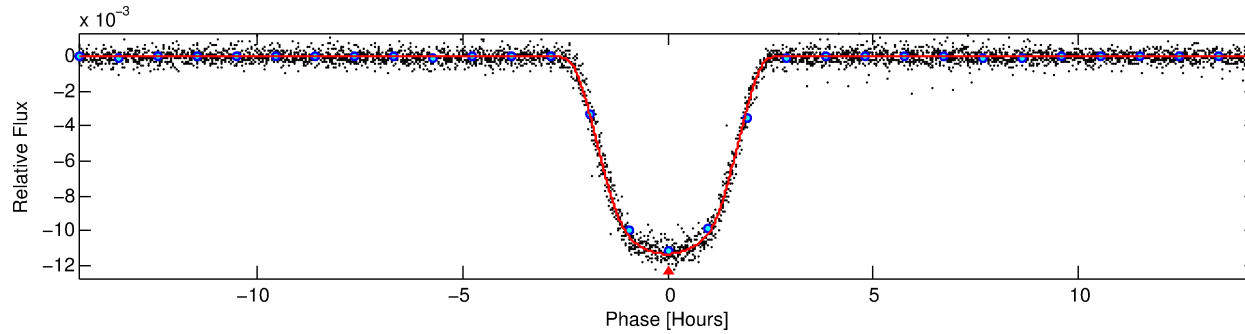
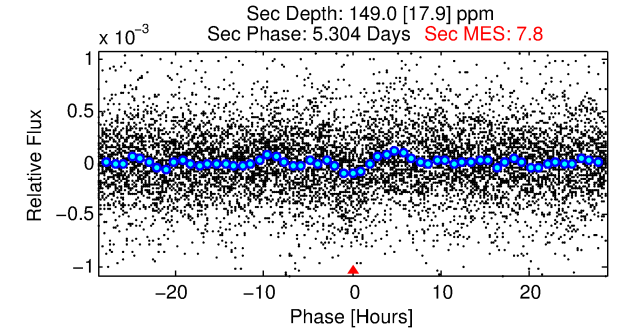
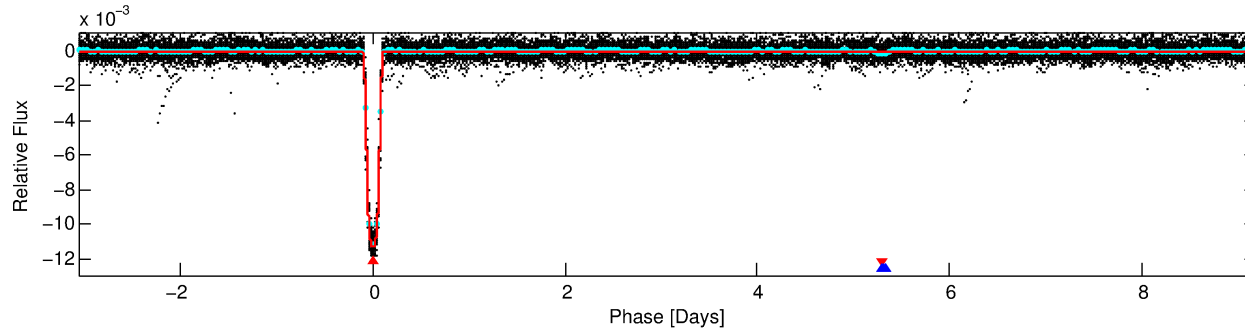
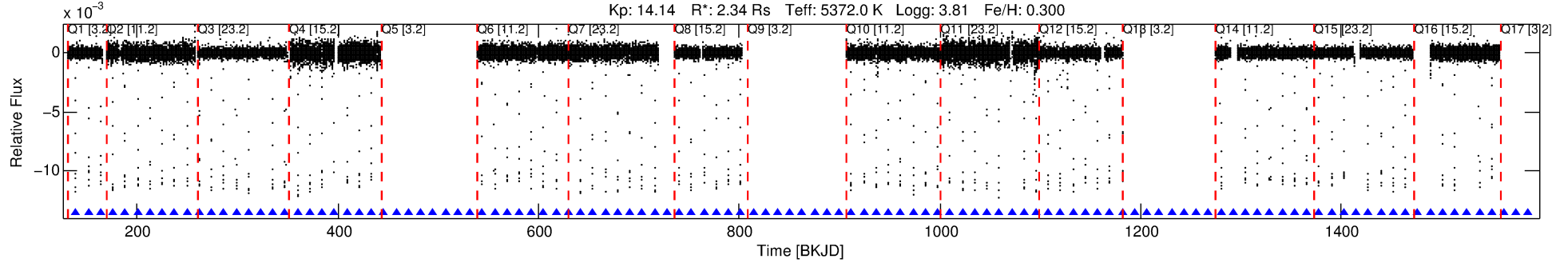
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005771719-01

No Significant Match Found

DV One-Page Summary

KIC: 5771719 Candidate: 1 of 2 Period: 12.265 d
KOI: K00190.01 Corr: 0.996



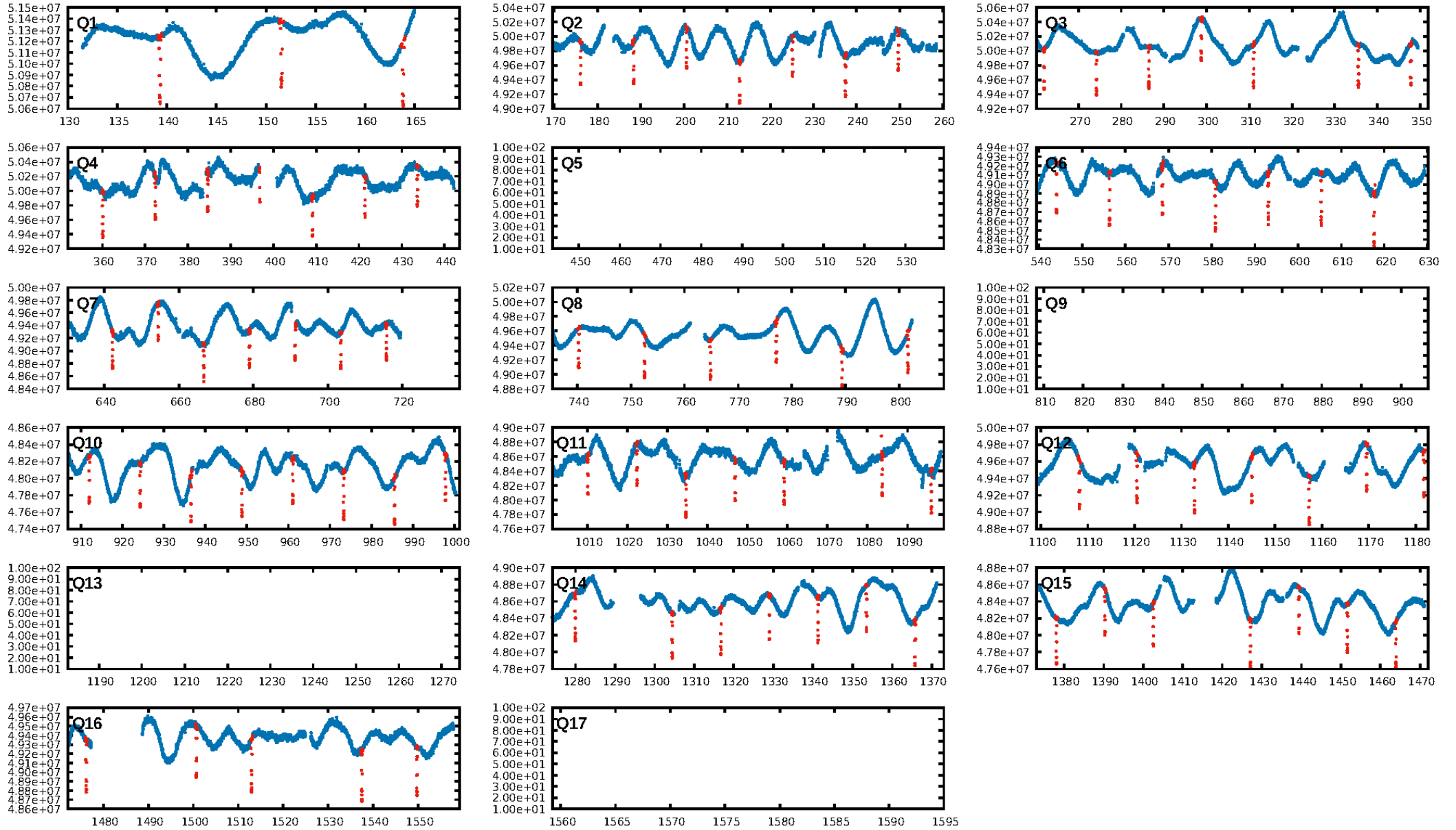
DV Fit Results:

Period = 12.26488 [0.00000] d
Epoch = 139.3040 [0.0002] BKJD
Rp/R* = 0.1114 [0.0002]
a/R* = 14.61 [0.05]
b = 0.83 [0.00]
Seff = 318.56 [133.73]
Teq = 1077 [113] K
Rp = 28.50 [9.11] Re
a = 0.1134 [0.0315] AU
Ag = 1.30 [0.56] [0.53 σ]
Teffp = 1778 [60] K [5.47 σ]

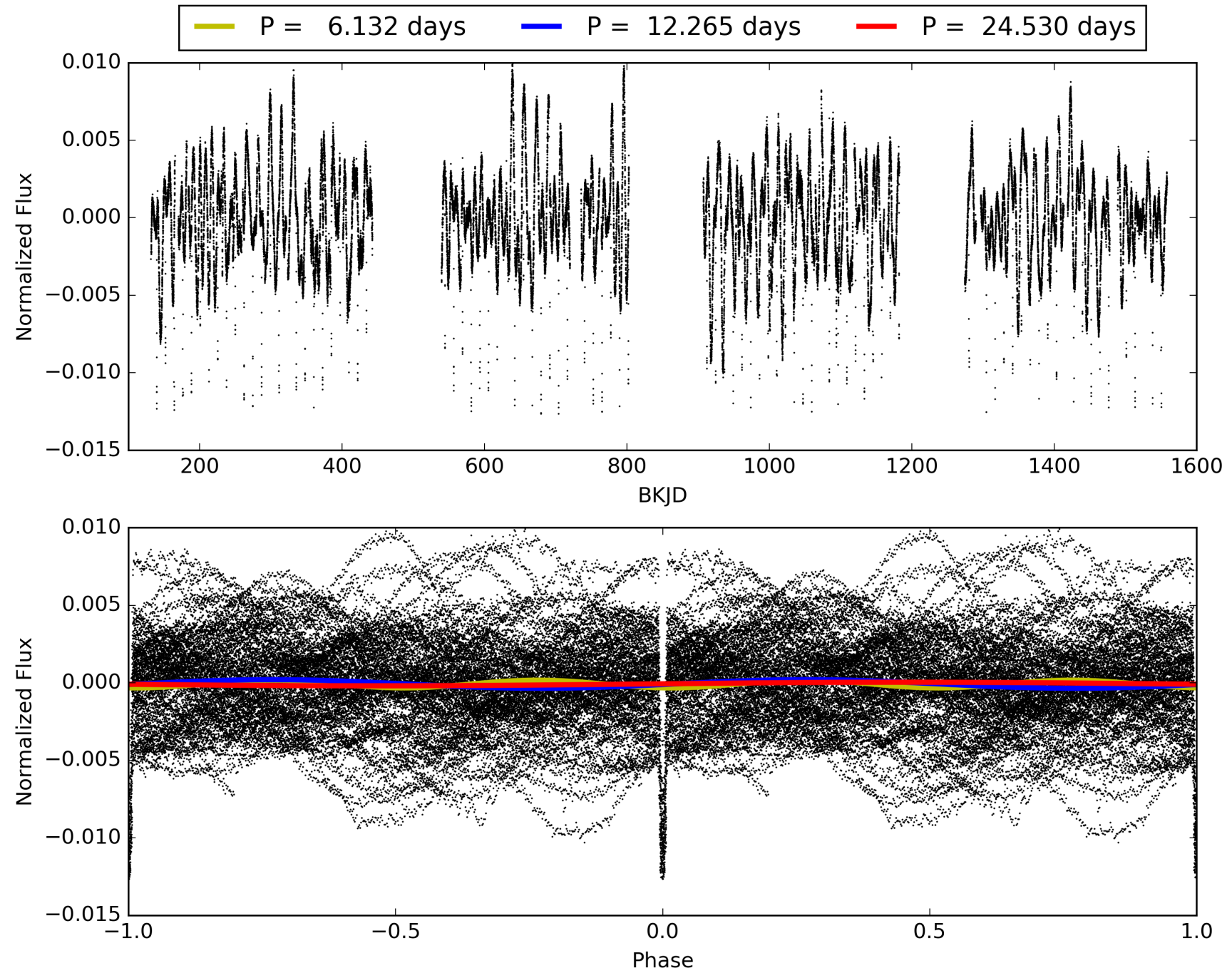
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 16.2%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [81/81]
GhostDiagnostic-chr: 2.954
Centroid-sig: 0.0%
Centroid-so: 0.138 arcsec [10.46 σ]
OotOffset-rm: 0.045 arcsec [0.67 σ]
OotOffset-st: 4/4/4/1 [13]
KicOffset-rm: 0.069 arcsec [1.01 σ]
KicOffset-st: 4/4/4/1 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 005771719-01, PDC Light Curves

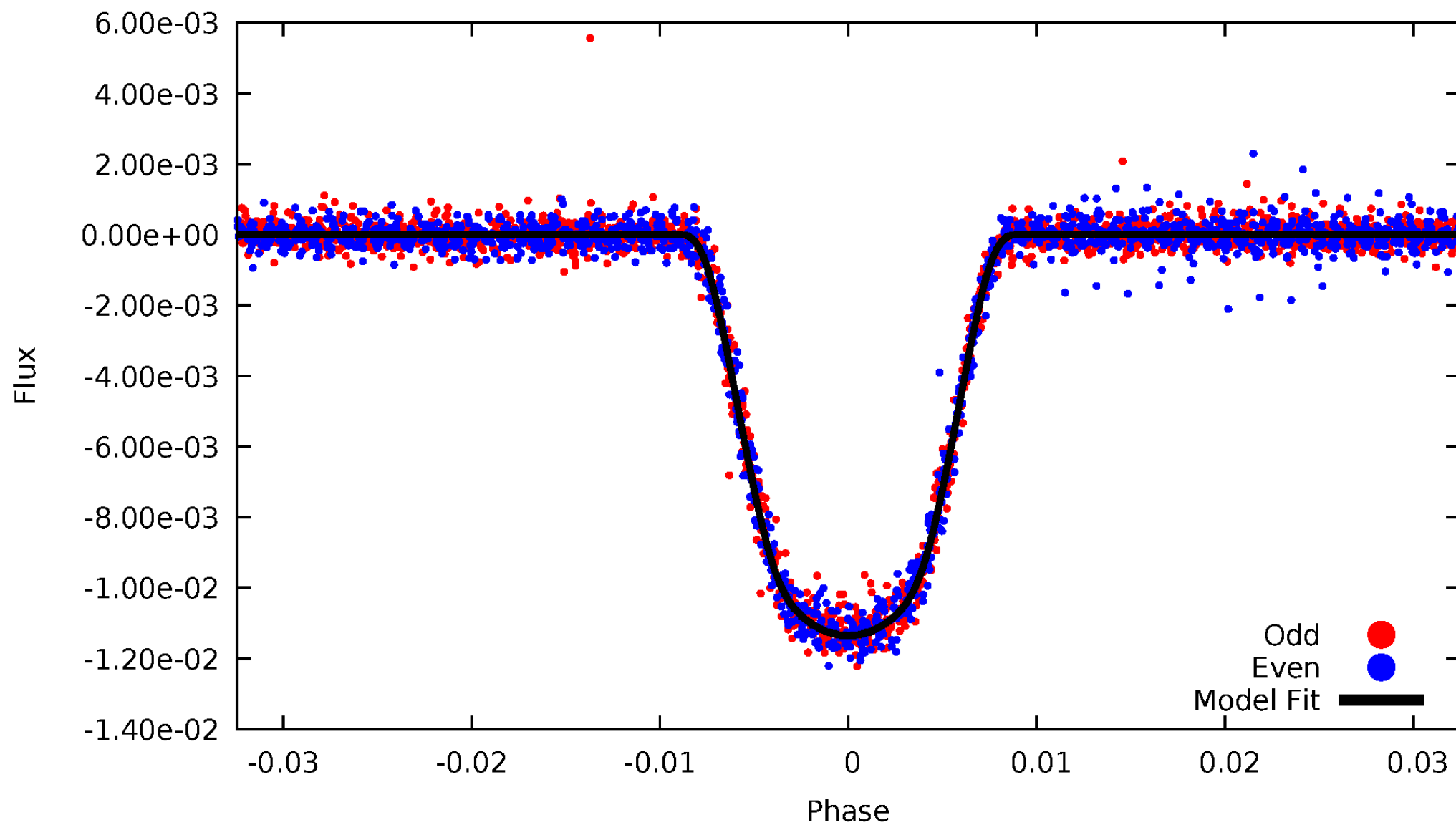


TCE 005771719-01



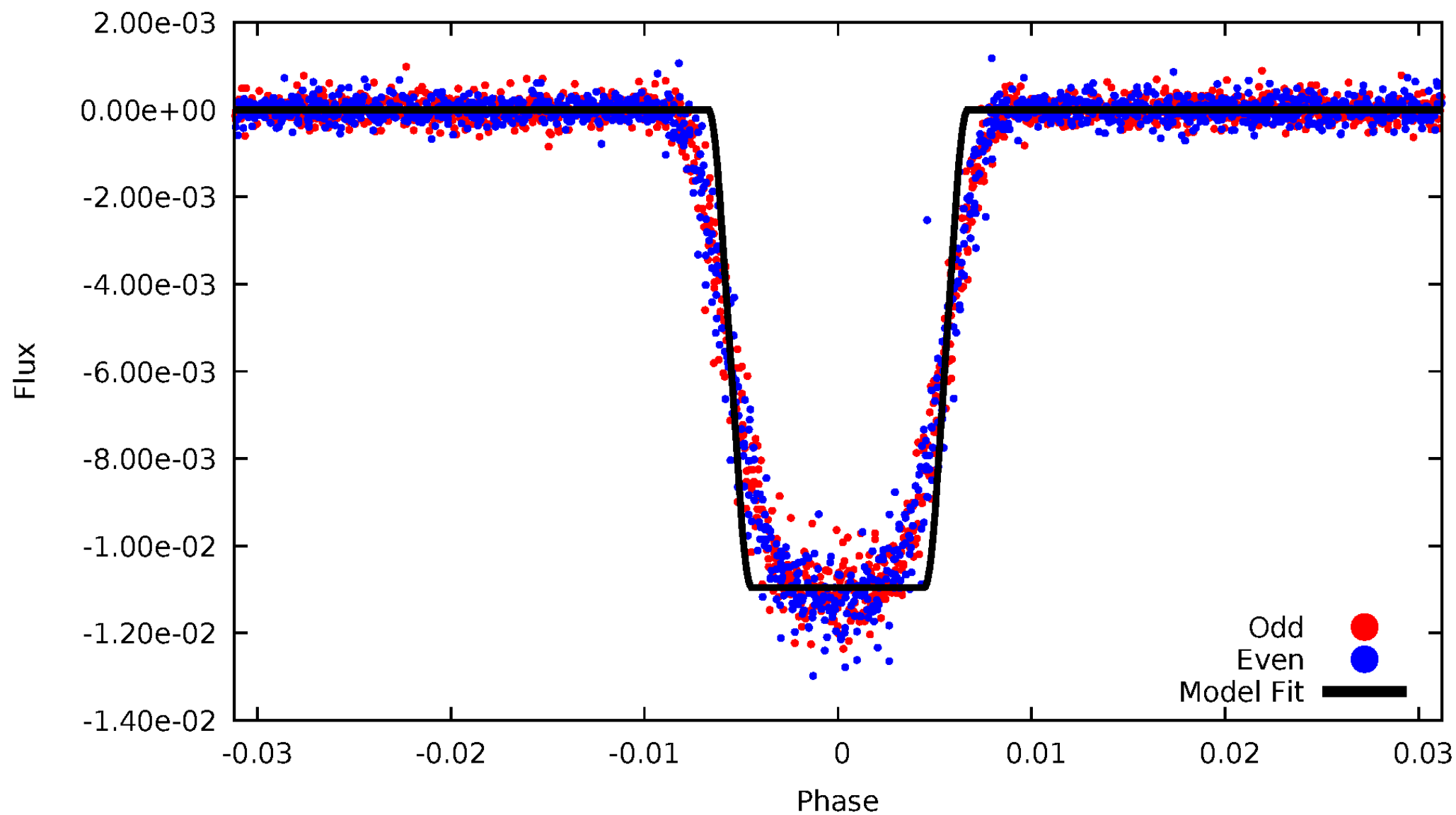
DV Odd/Even

TCE 005771719-01



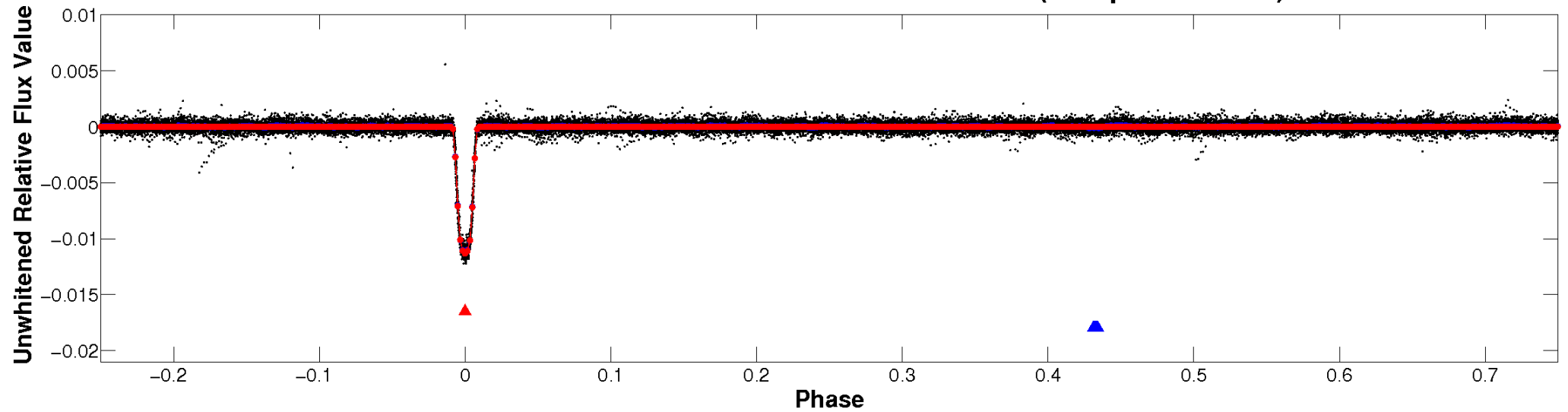
ALT Odd/Even

TCE 005771719-01

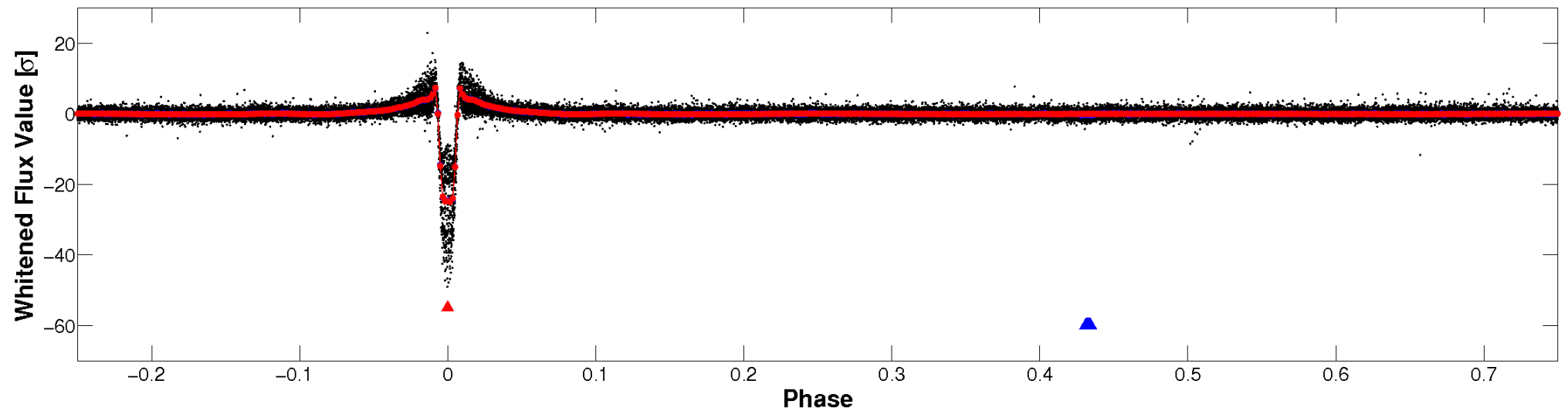


Non-Whitened Vs. Whitened Light Curve

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

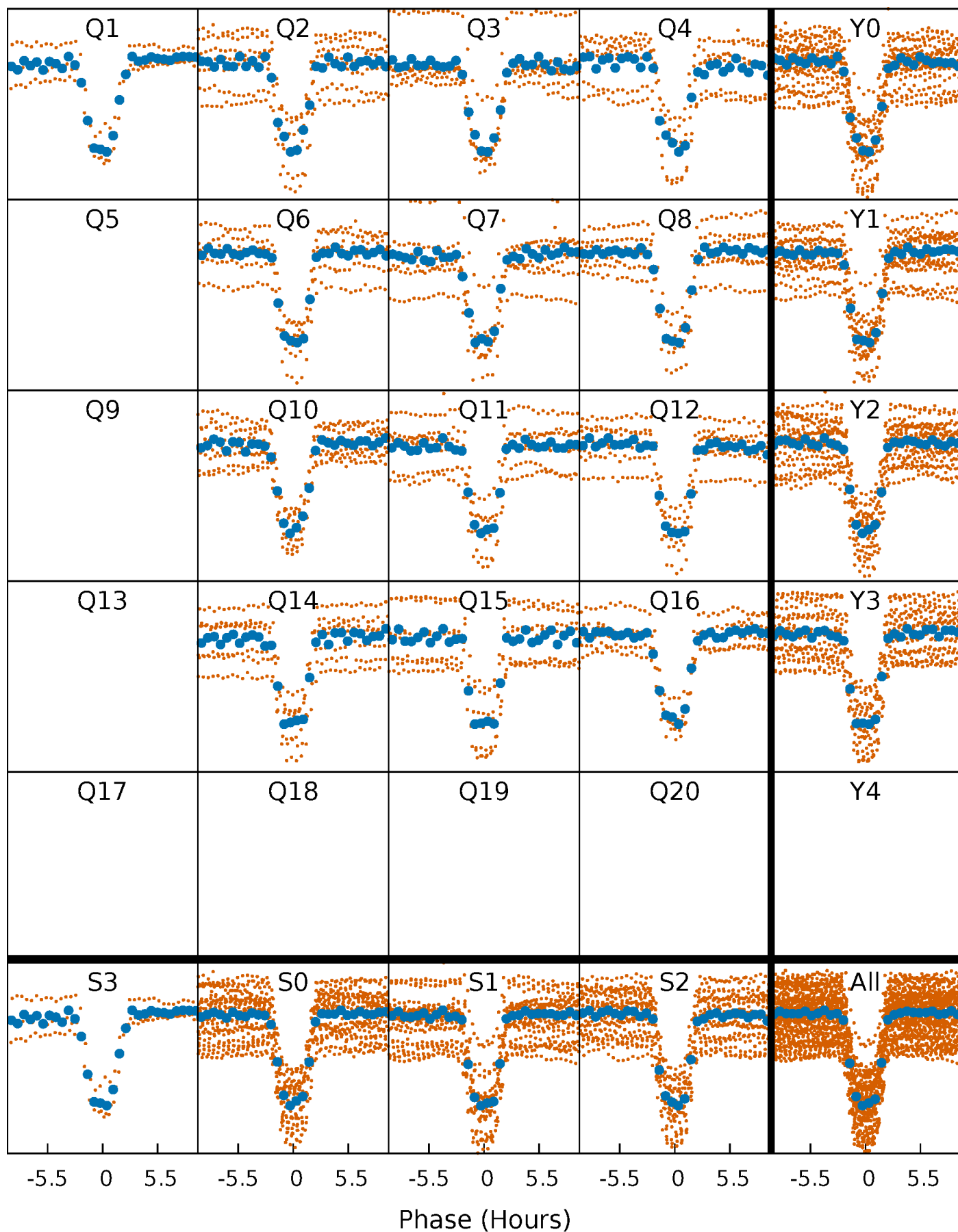


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



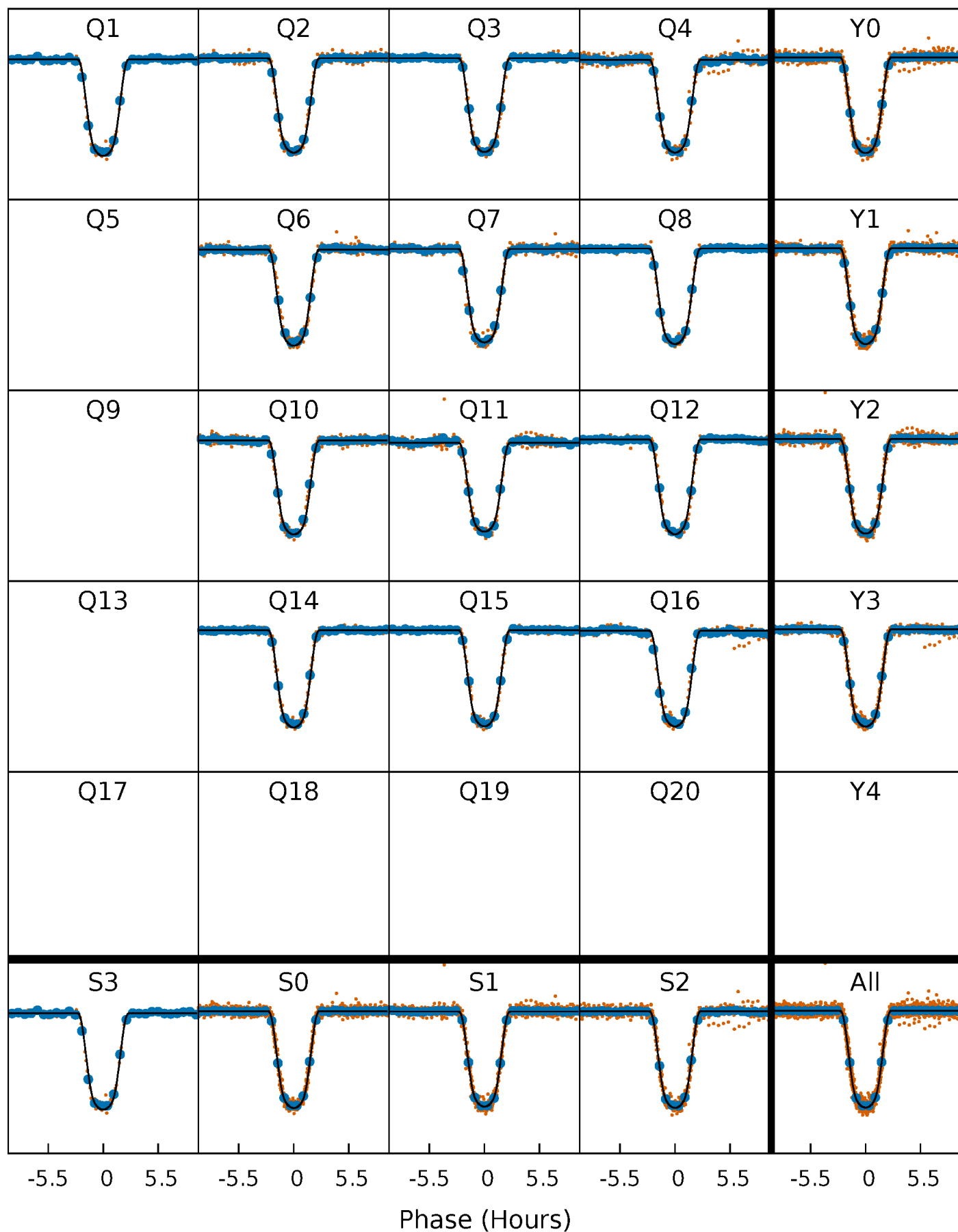
PDC Quarter-Phased Transit Curves

TCE 005771719-01 P= 12.264881 Days $T_0=139.303989$ (BKJD)



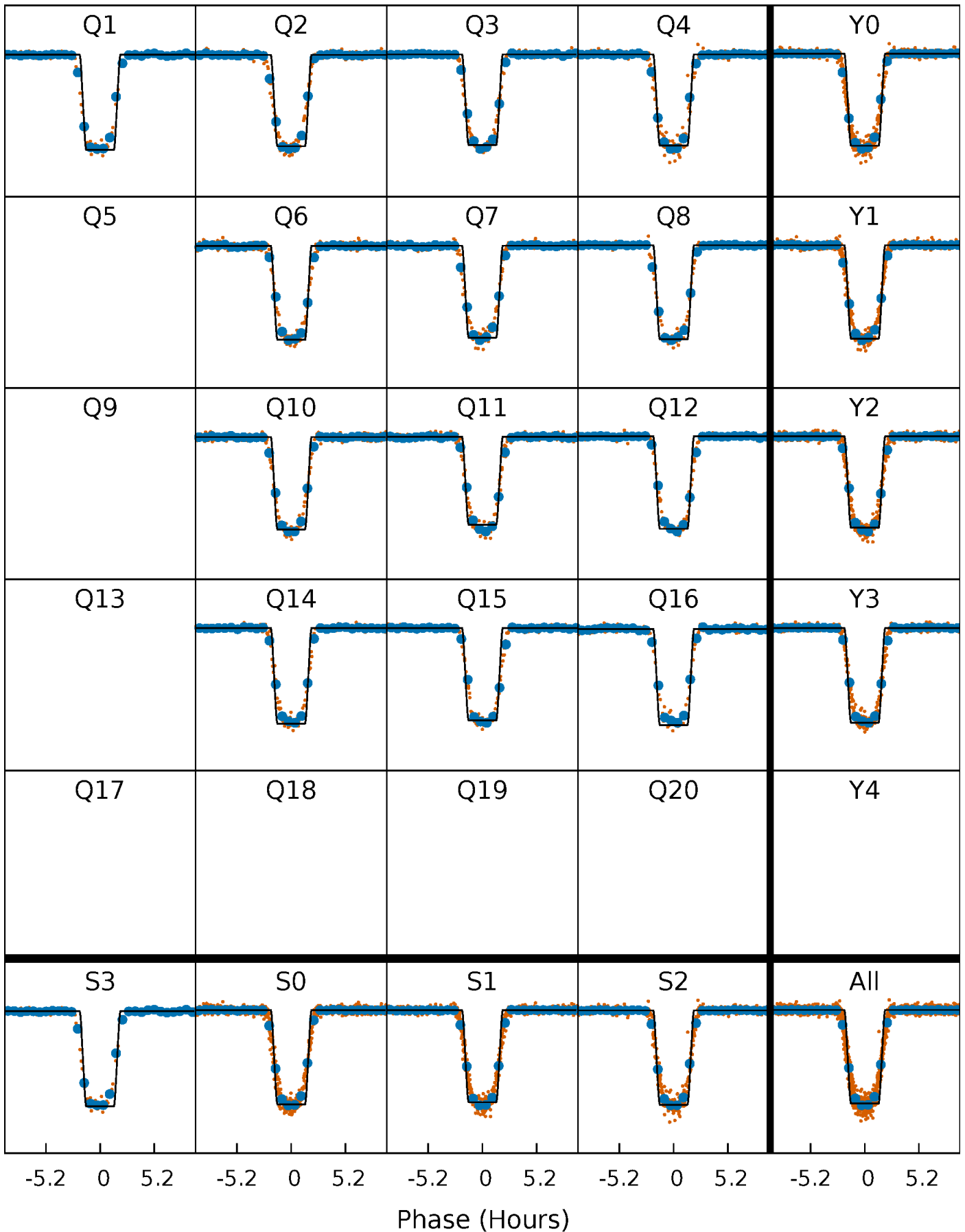
DV Quarter-Phased Transit Curves

TCE 005771719-01 P= 12.264881 Days $T_0=139.303989$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

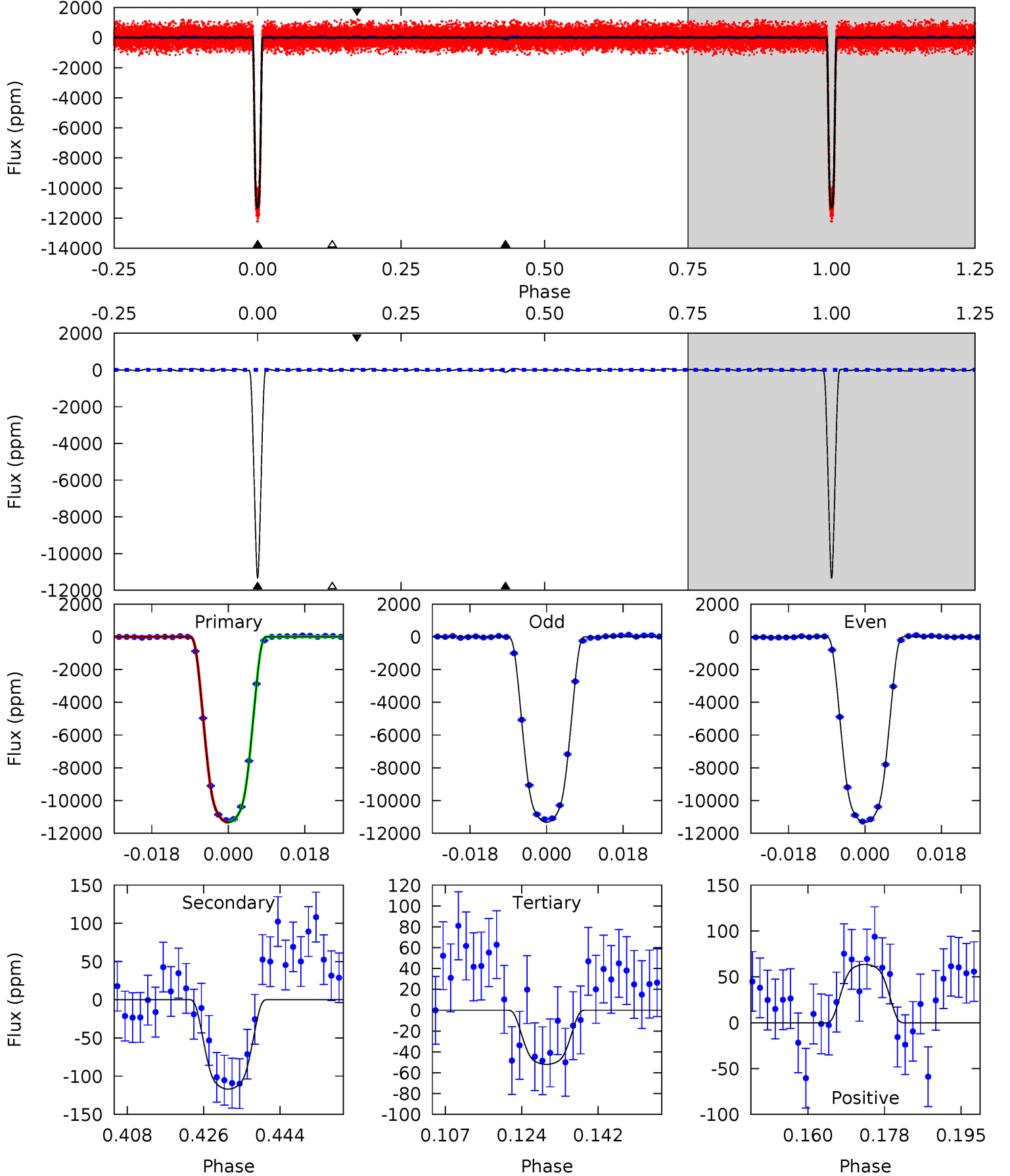
TCE 005771719-01 P= 12.264808 Days $T_0=139.308375$ (BKJD)



DV Model-Shift Uniqueness Test

005771719-01, P = 12.264881 Days, E = 127.039108 Days

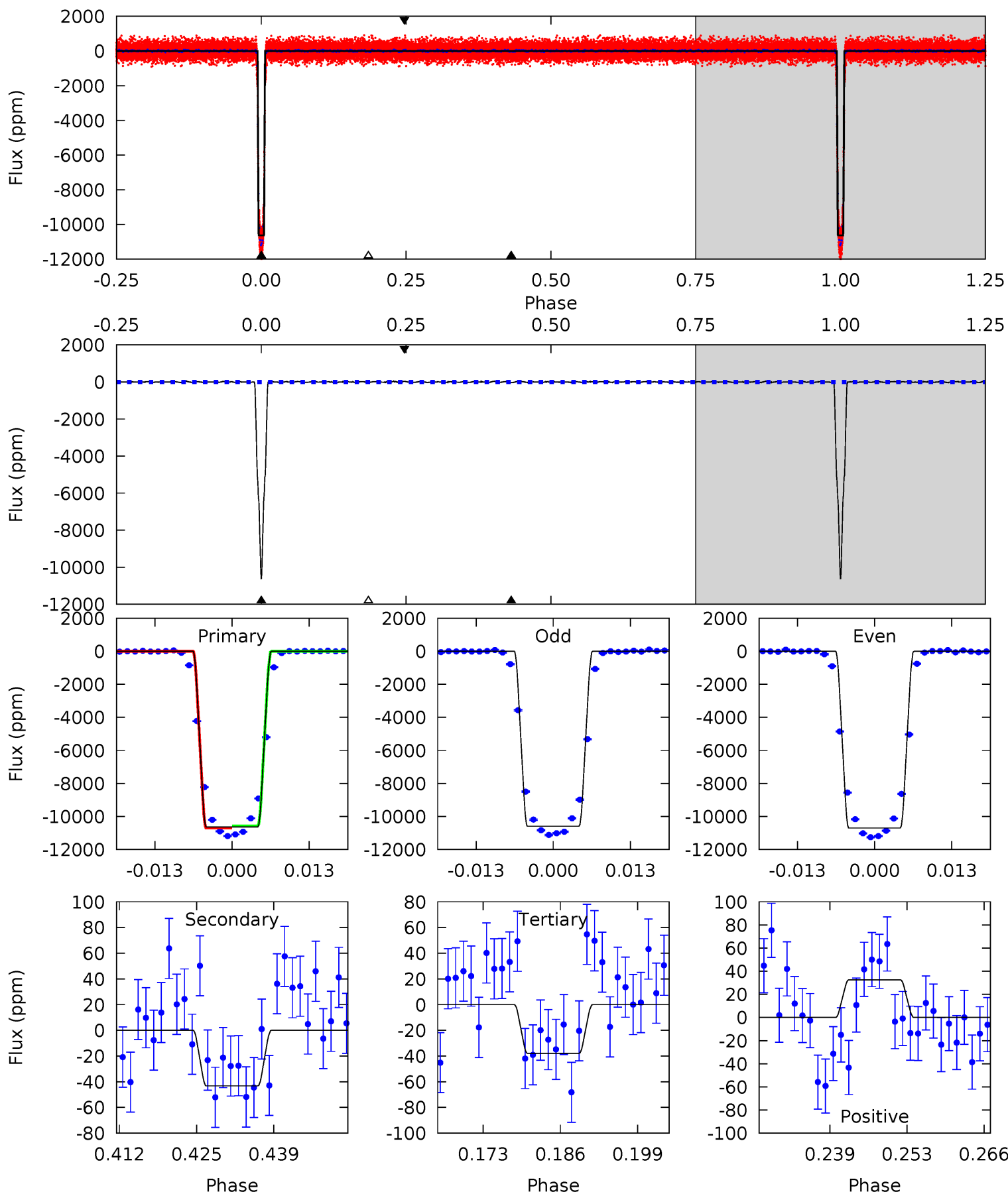
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1082	11.2	4.97	6.07	4.92	2.37	2.26	1077	1076	6.20	5.10	0.58	1.00	0.01	0.09



Alt Model-Shift Uniqueness Test

005771719-01, P = 12.264808 Days, E = 127.043567 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
992.8	4.03	3.54	3.04	4.97	2.48	1.17	989.3	989.8	0.49	0.99	4.79	1.00	0.00	5.79



Stellar Parameters For KIC 005771719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5372^{+85}_{-74}	$3.810^{+0.232}_{-0.077}$	$0.300^{+0.150}_{-0.150}$	$2.344^{+0.375}_{-0.749}$	$1.295^{+0.136}_{-0.273}$	$0.142^{+0.224}_{-0.039}$
	+2%/-1%	+6%/-2%	+50%/-50%	+16%/-32%	+11%/-21%	+158%/-27%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 005771719-01 / KOI 0190.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-117 ± 10	$28.13^{+2.56}_{-4.60}$	1488^{+64}_{-102}	2419^{+50}_{-48}	$1.068^{+0.366}_{-0.180}$
Alt.	-43 ± 11	$26.08^{+2.66}_{-4.27}$	1484^{+70}_{-106}	2041^{+130}_{-305}	$0.469^{+0.203}_{-0.138}$

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 $A_{obs} \gg 1.0$

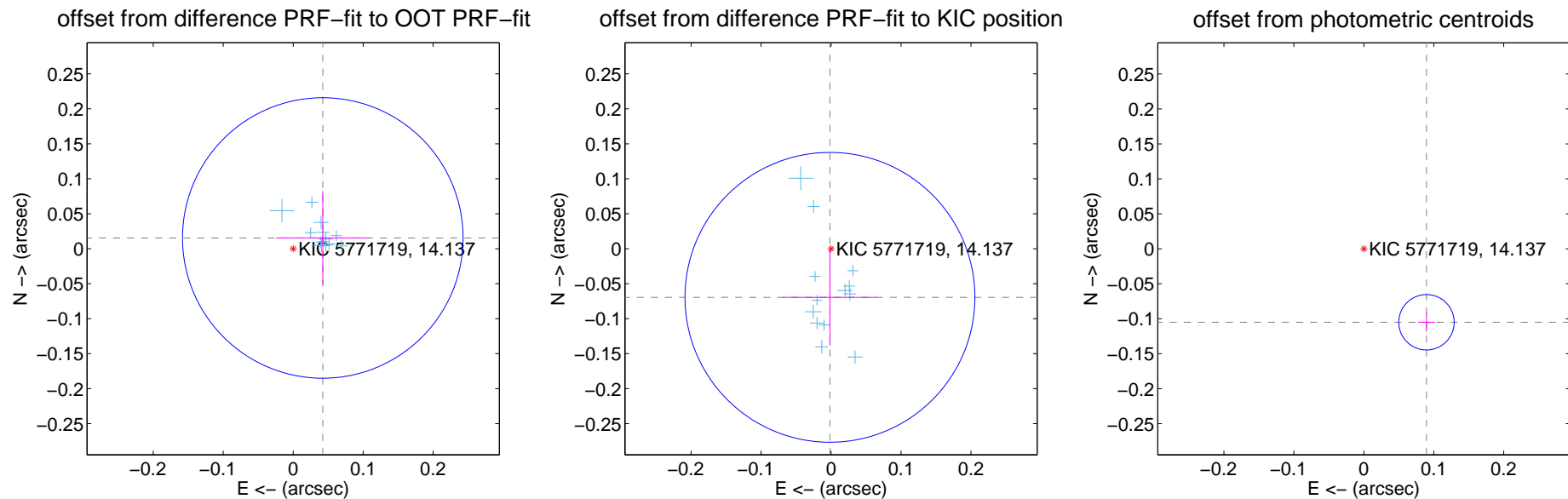
DV Centroid Data

Supplemental centroid analysis for 005771719-01. Kepler magnitude: 14.14. Transit SNR 556.26

There are 13 quarters with good PRF difference image offsets

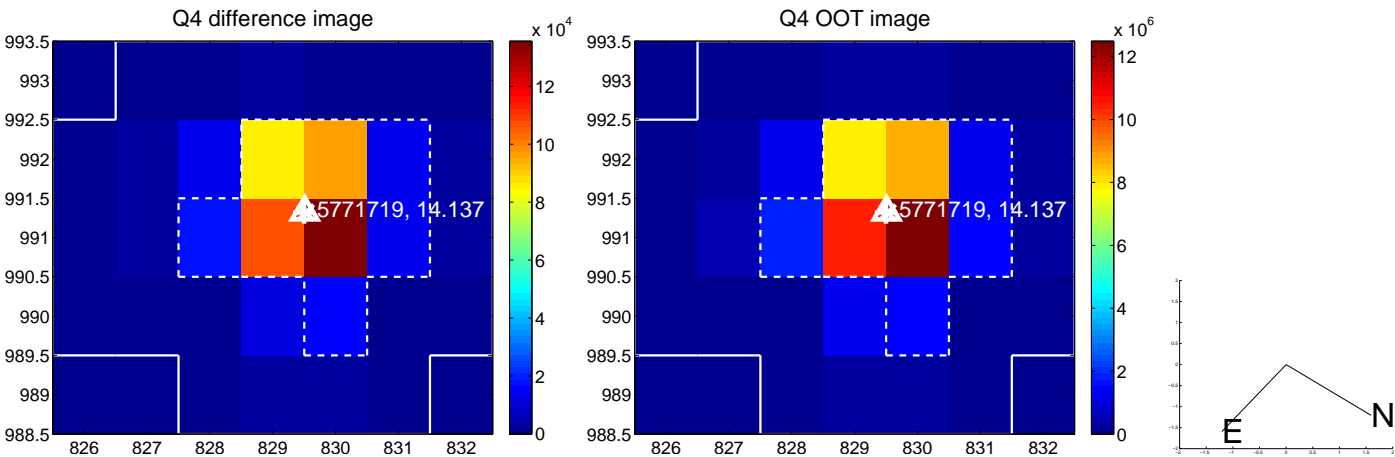
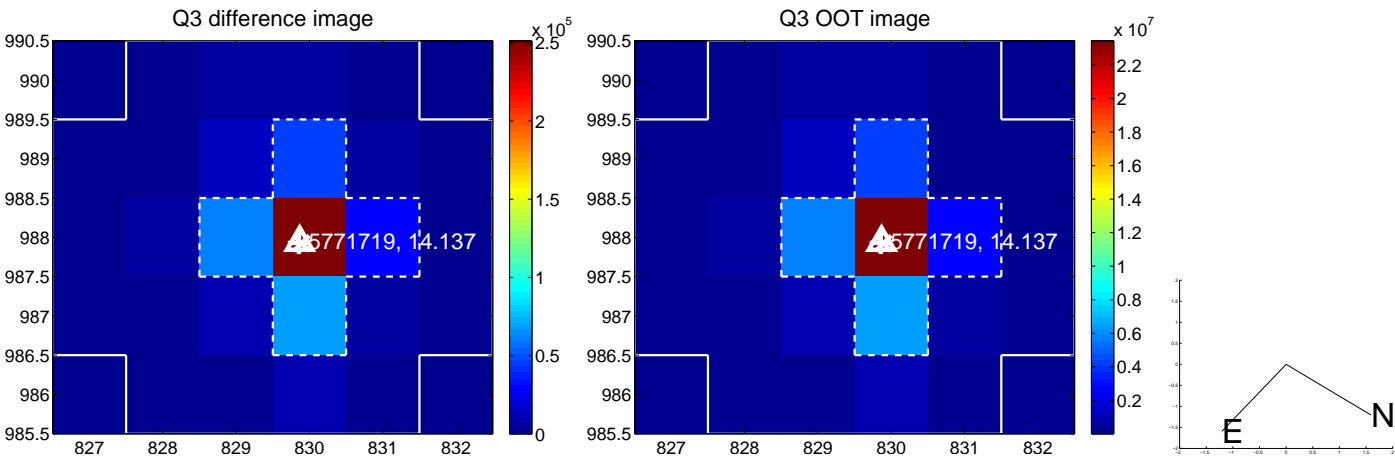
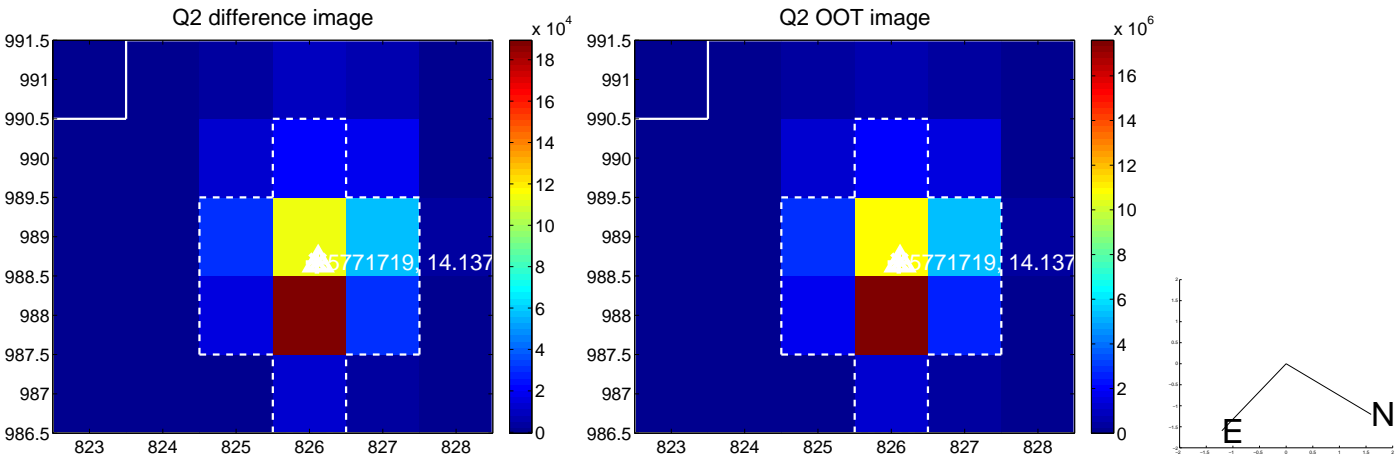
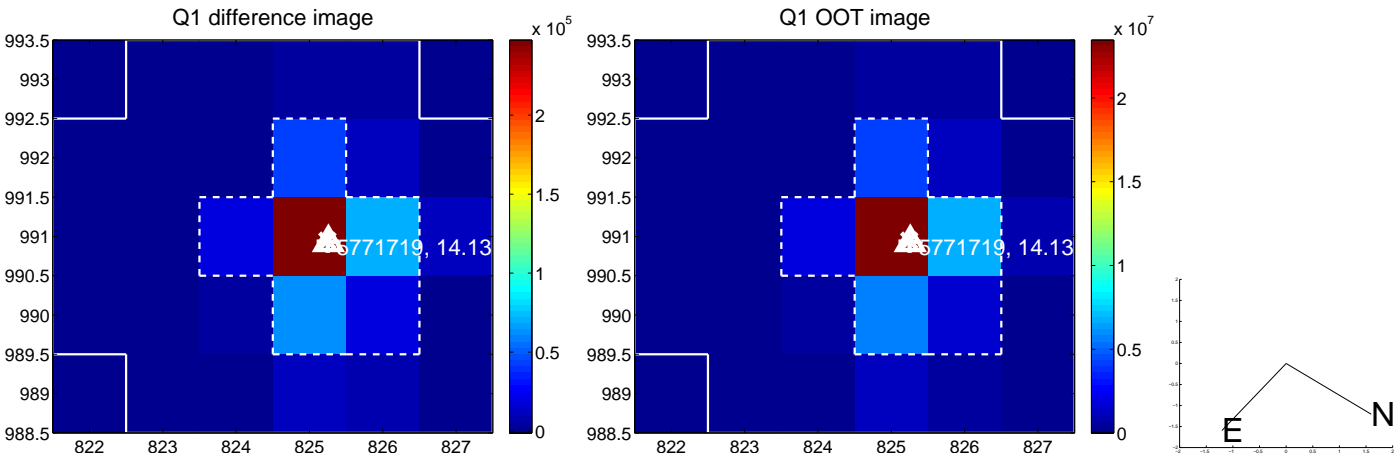
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.045 ± 0.067	0.67	-0.042 ± 0.067	0.015 ± 0.067
PRF-fit source offset from KIC position	0.069 ± 0.069	1.01	0.002 ± 0.067	-0.069 ± 0.069
photometric centroid source offset	0.14 ± 0.01	10.46	-0.09 ± 0.01	-0.11 ± 0.01

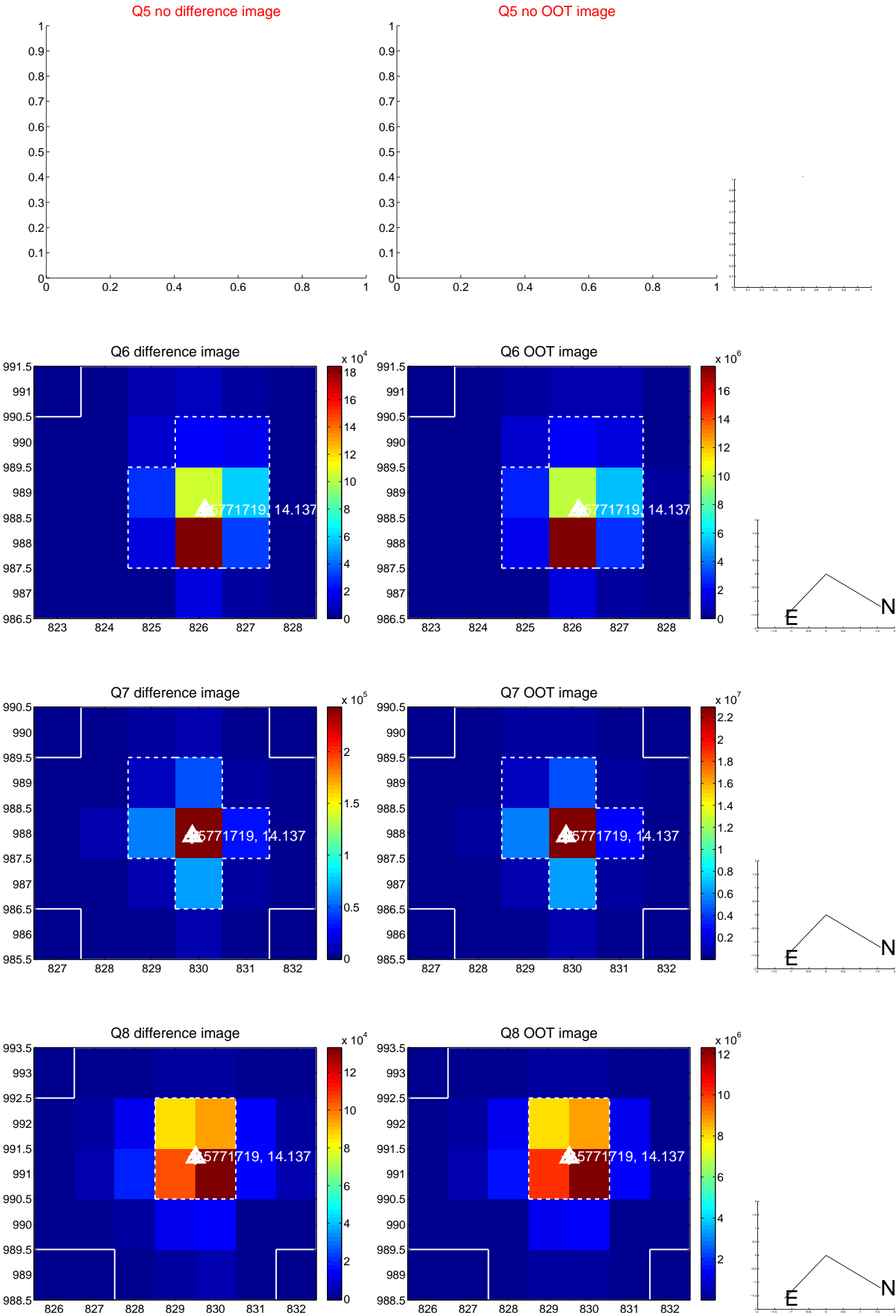


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

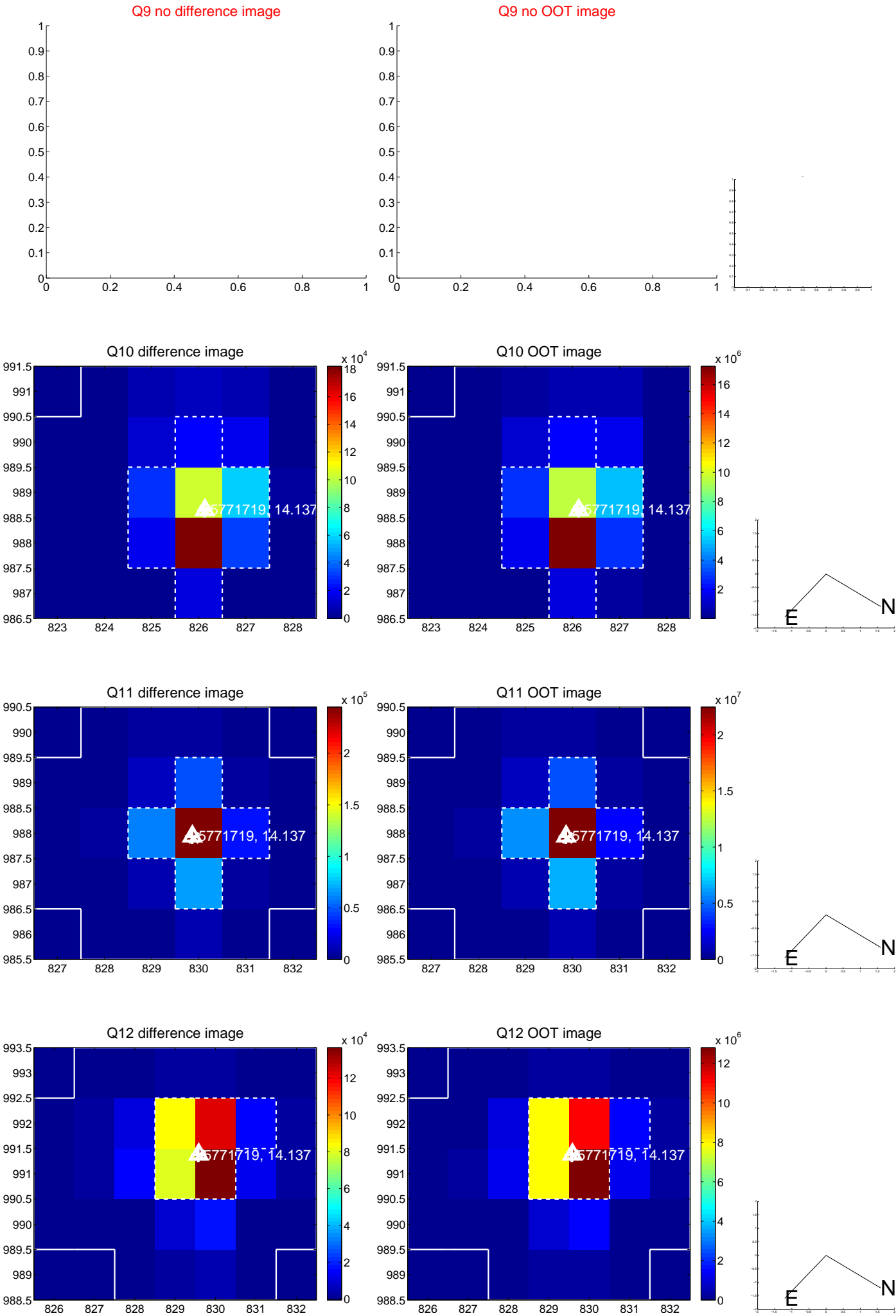
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



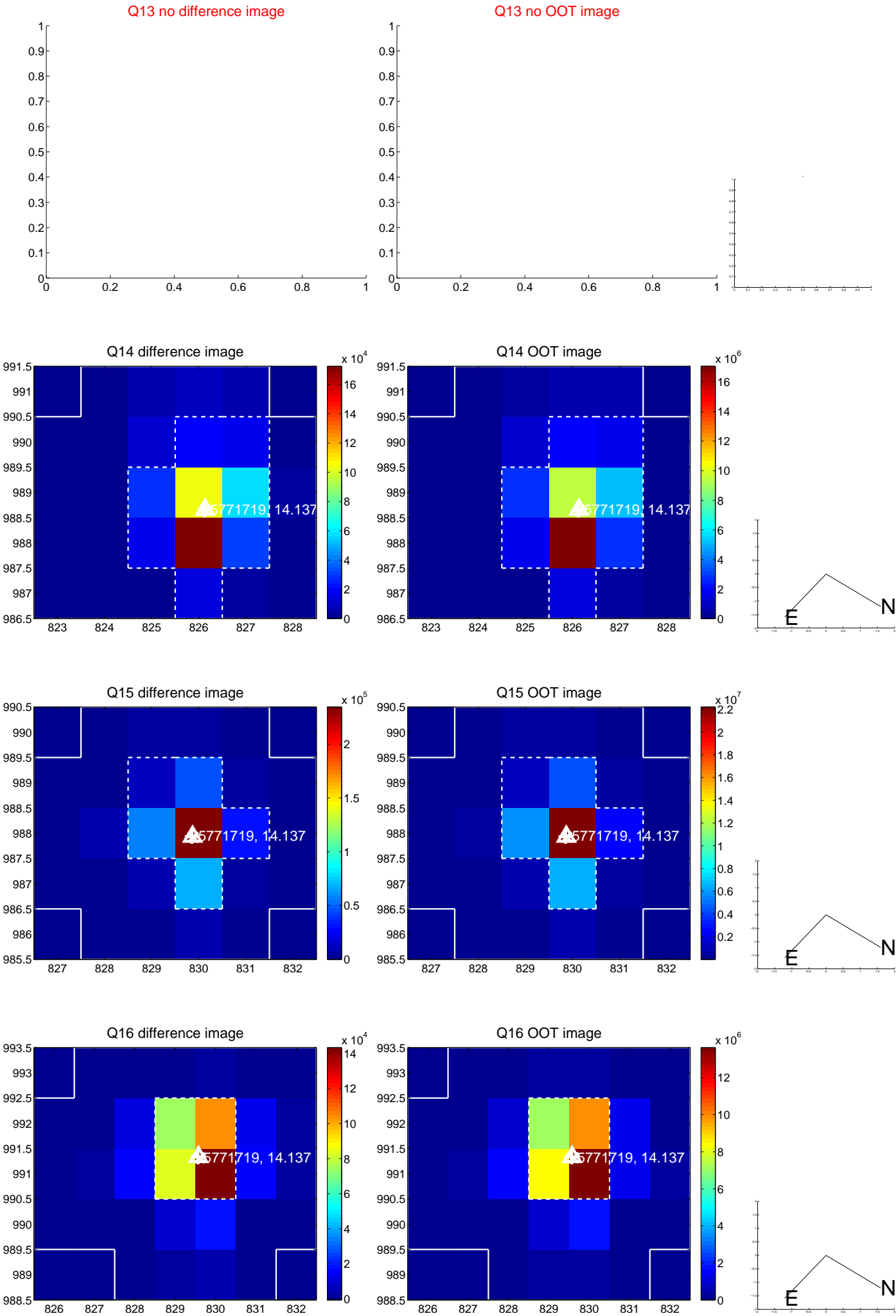
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



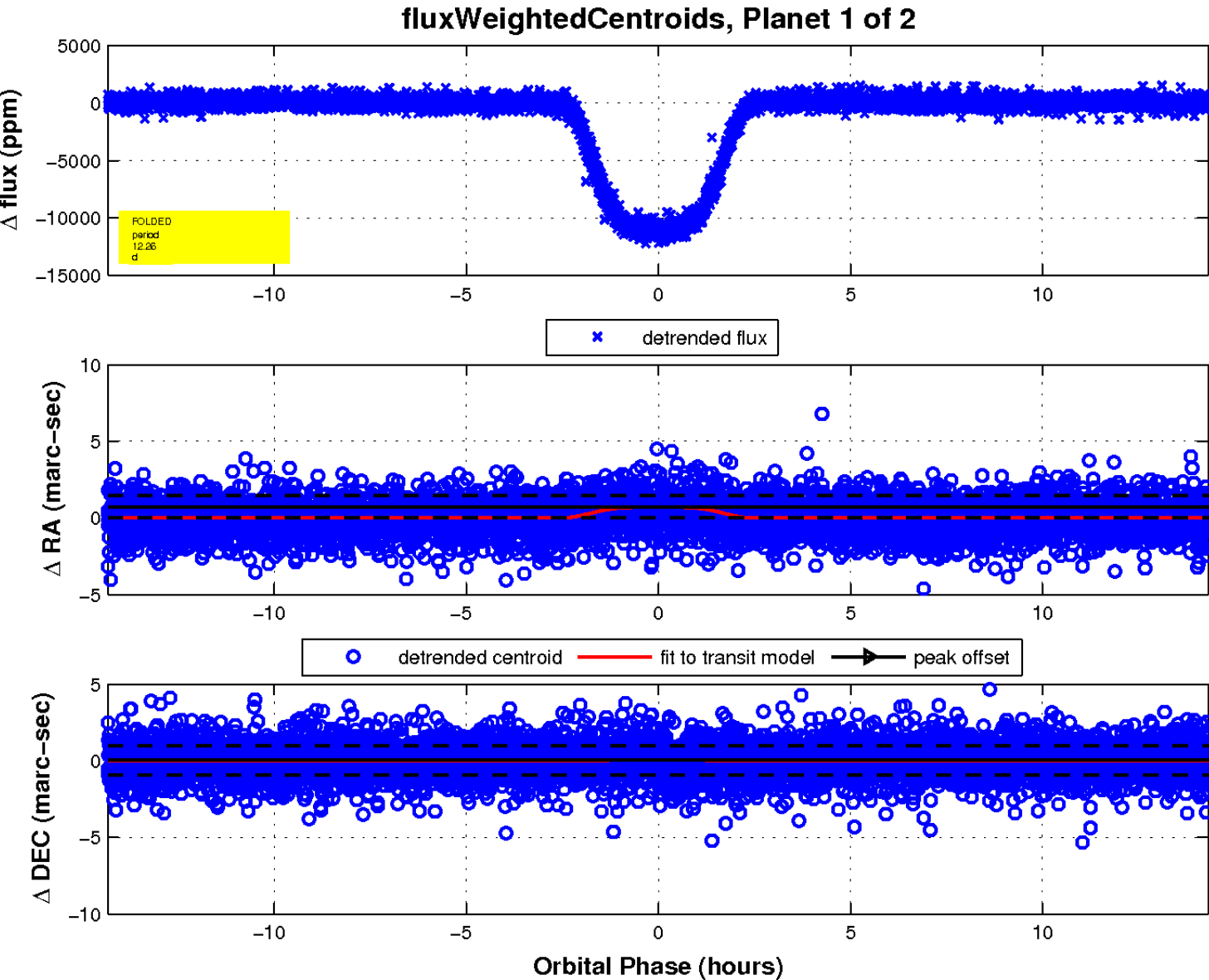
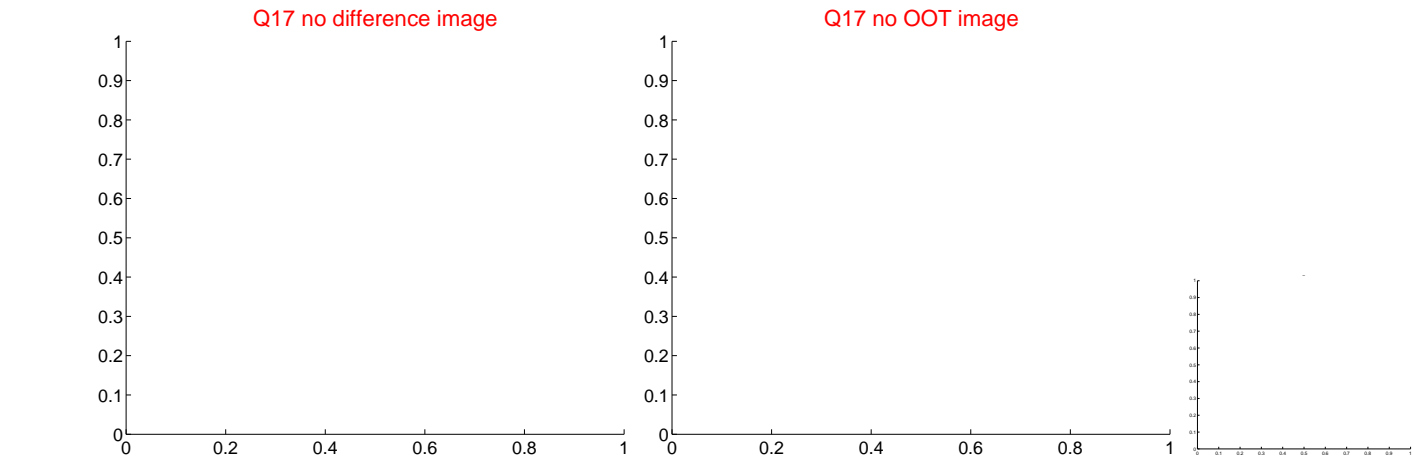
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

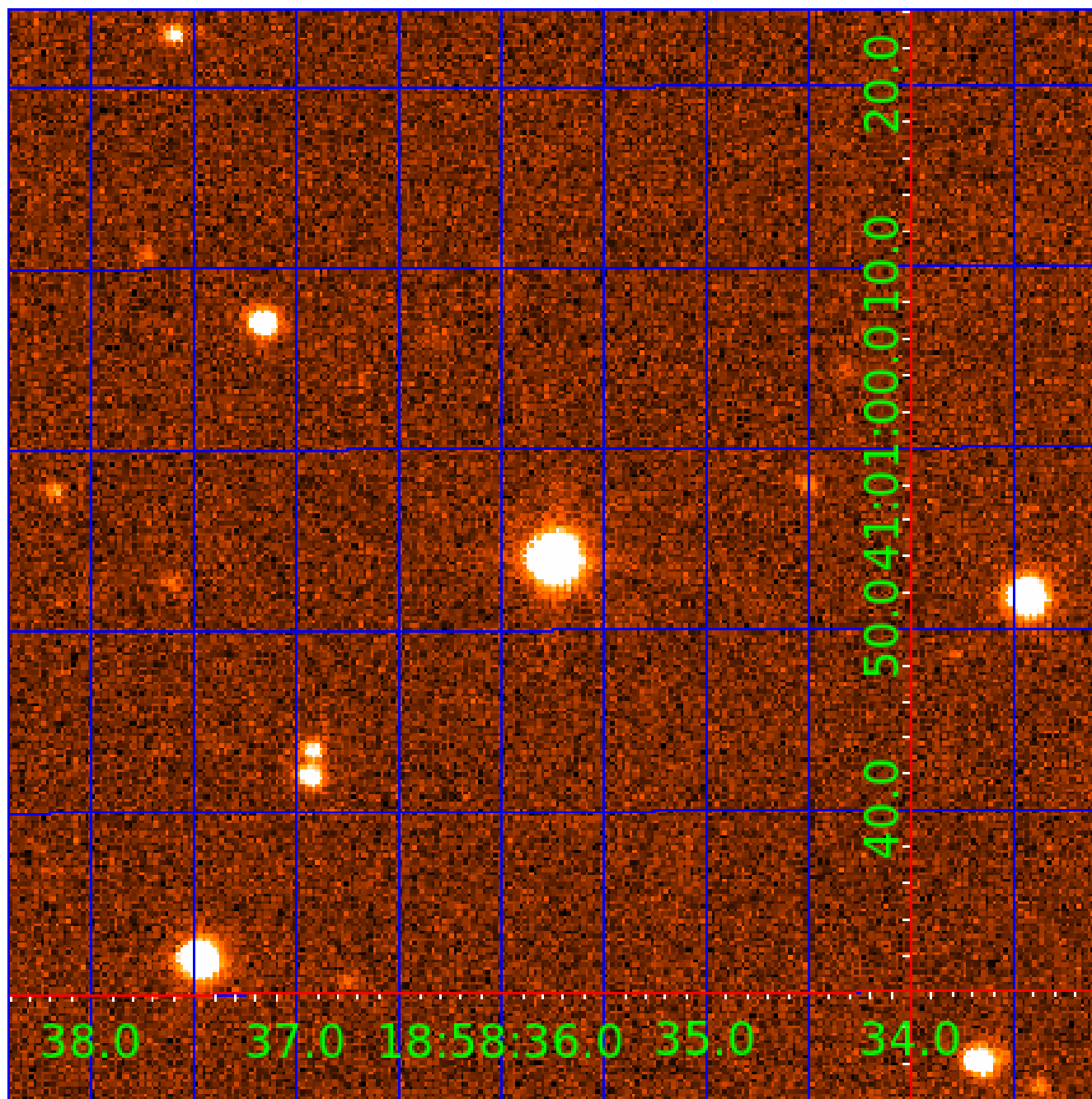


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005771719

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})
005771719-01	OBS	0190.01	12.264881	139.303989	11348.7	4.775	620.9	556.3	2.34	5372	28.50	318.56
005771719-02	OBS	No	12.264552	132.364893	151.8	3.619	8.1	8.9	2.34	5372	3.44	318.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005771719-01	OBS	FP	0.00	0	1	0	0	HAS_SEC_TCE
005771719-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE

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.

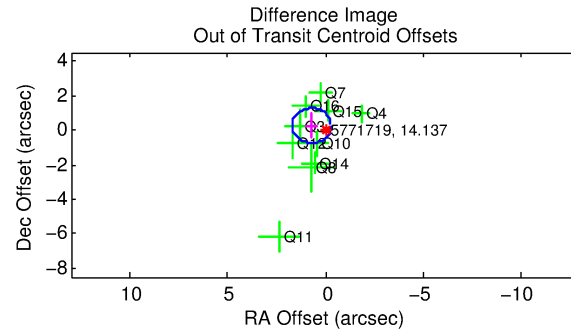
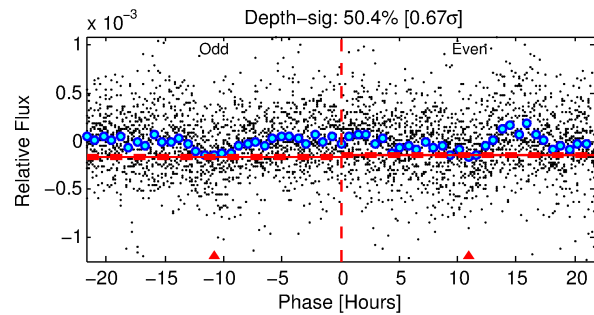
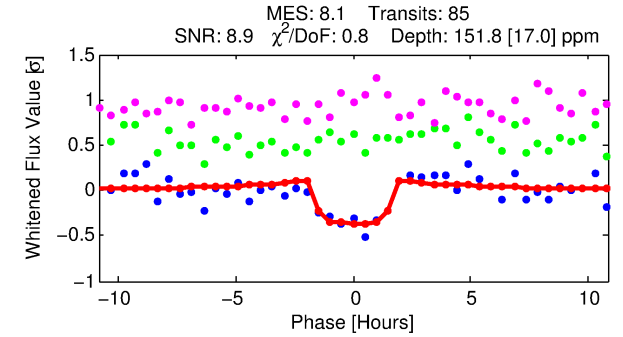
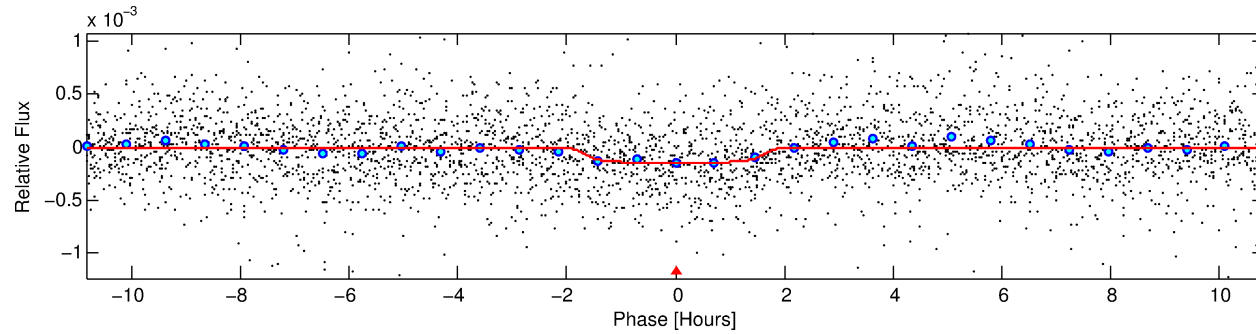
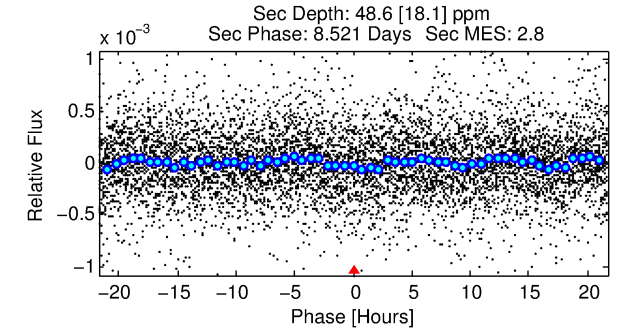
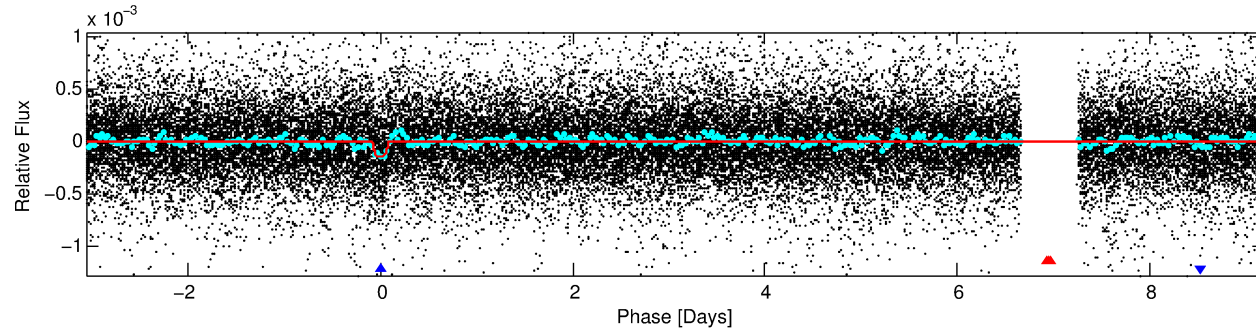
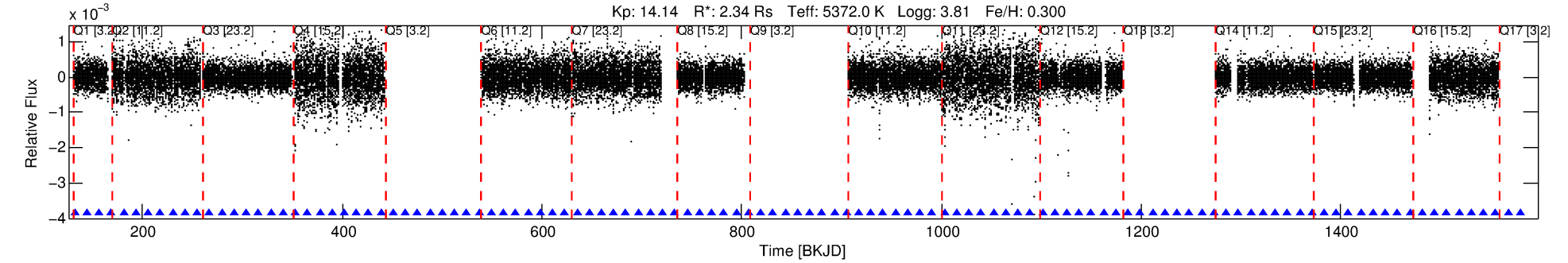
Ephemeris Match Information For 005771719-02

No Significant Match Found

DV One-Page Summary

KIC: 5771719 Candidate: 2 of 2 Period: 12.265 d

KOI: K00190 Corr: No Ephemeris Match



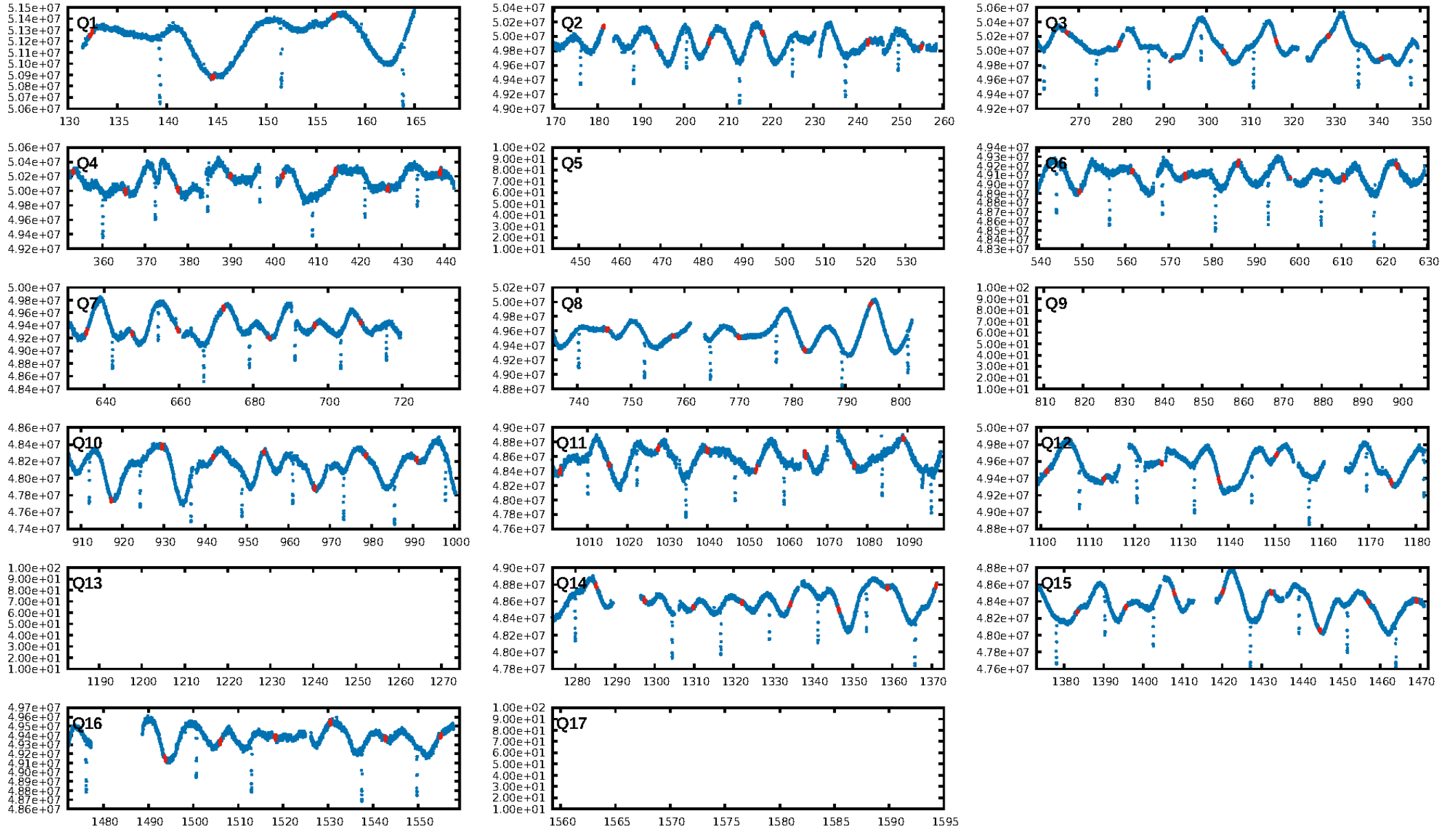
DV Fit Results:

Period = 12.26455 [0.00009] d
Epoch = 132.3649 [0.0064] BKJD
Rp/R* = 0.0134 [0.0071]
a/R* = 12.71 [28.12]
b = 0.89 [0.54]
Seff = 318.57 [133.73]
Teff = 1077 [113] K
Rp = 3.44 [2.13] Re
a = 0.1134 [0.0315] AU
Ag = 29.08 [34.89] [0.80σ]
Teffp = 3868 [1090] K [2.55σ]

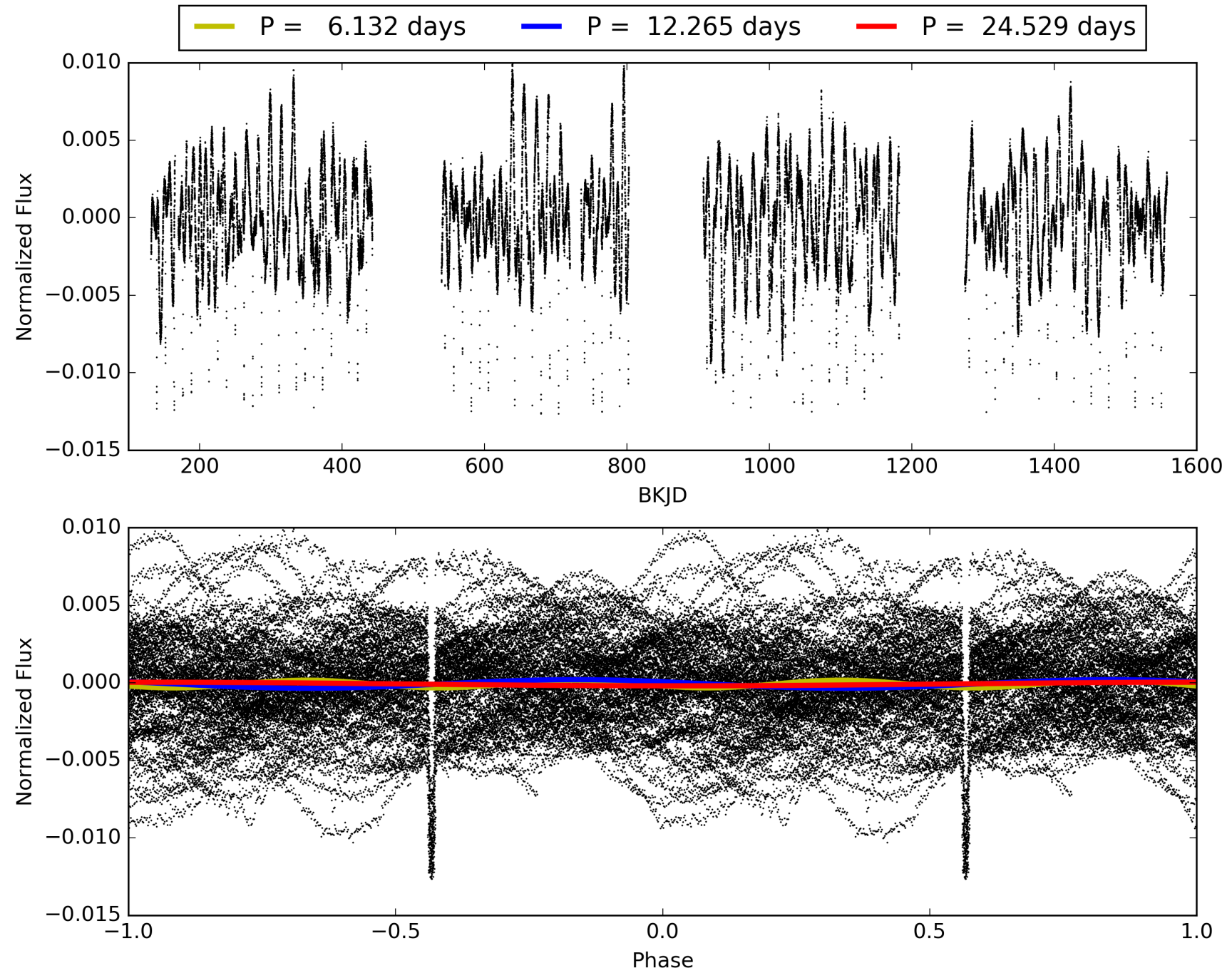
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: 99.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.96e-15
RollingBand-fgt: 1.00 [82/82]
GhostDiagnostic-chr: 0.8769
Centroid-sig: 77.7%
Centroid-so: 0.471 arcsec [0.46σ]
OotOffset-rm: 0.759 arcsec [2.27σ]
KicOffset-rm: 0.774 arcsec [2.51σ]
OotOffset-st: 2/4/4/0 [10]
KicOffset-st: 2/4/4/0 [10]
DiffImageQuality-fgm: 0.60 [6/10]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 005771719-02, PDC Light Curves

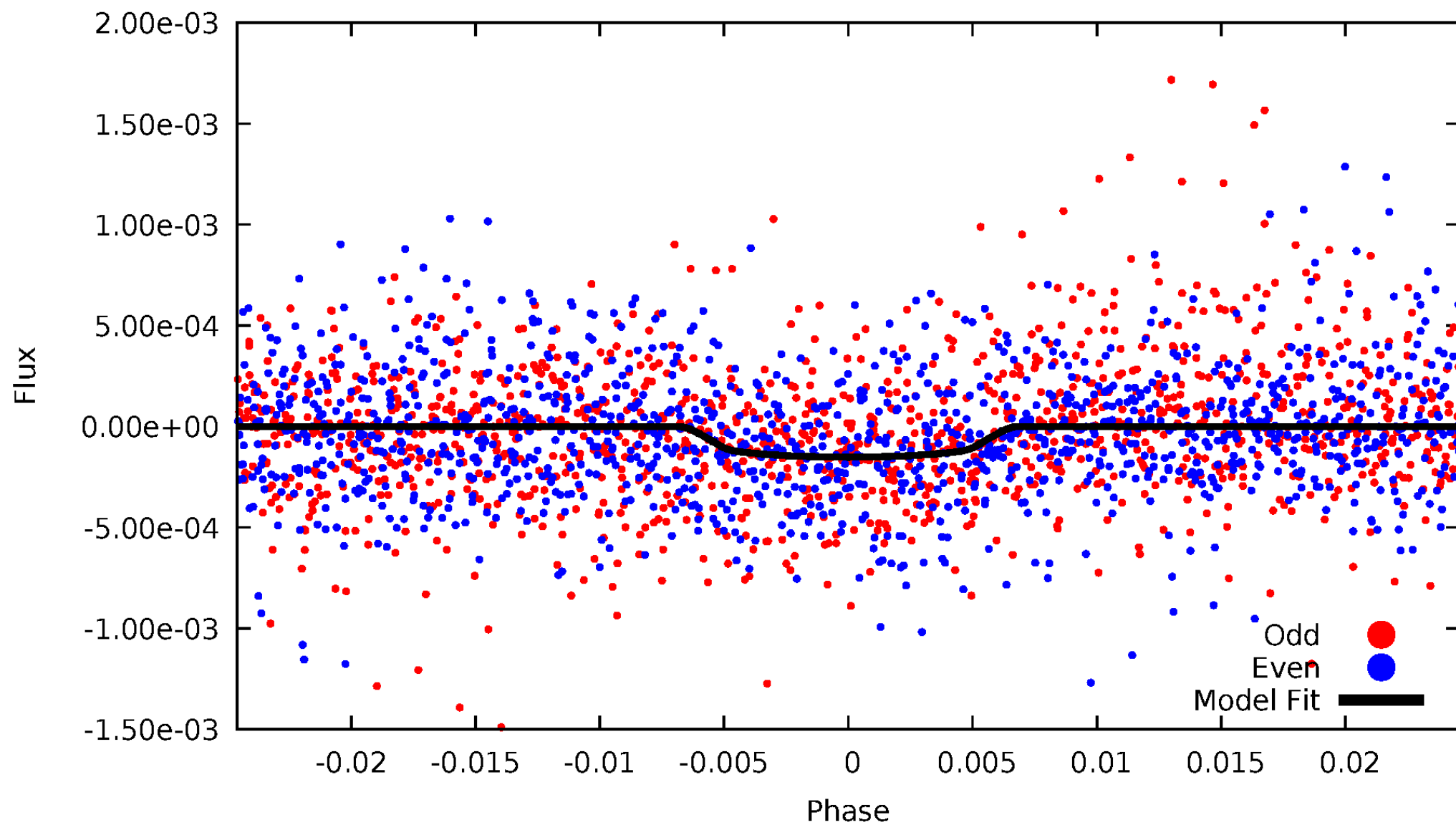


TCE 005771719-02



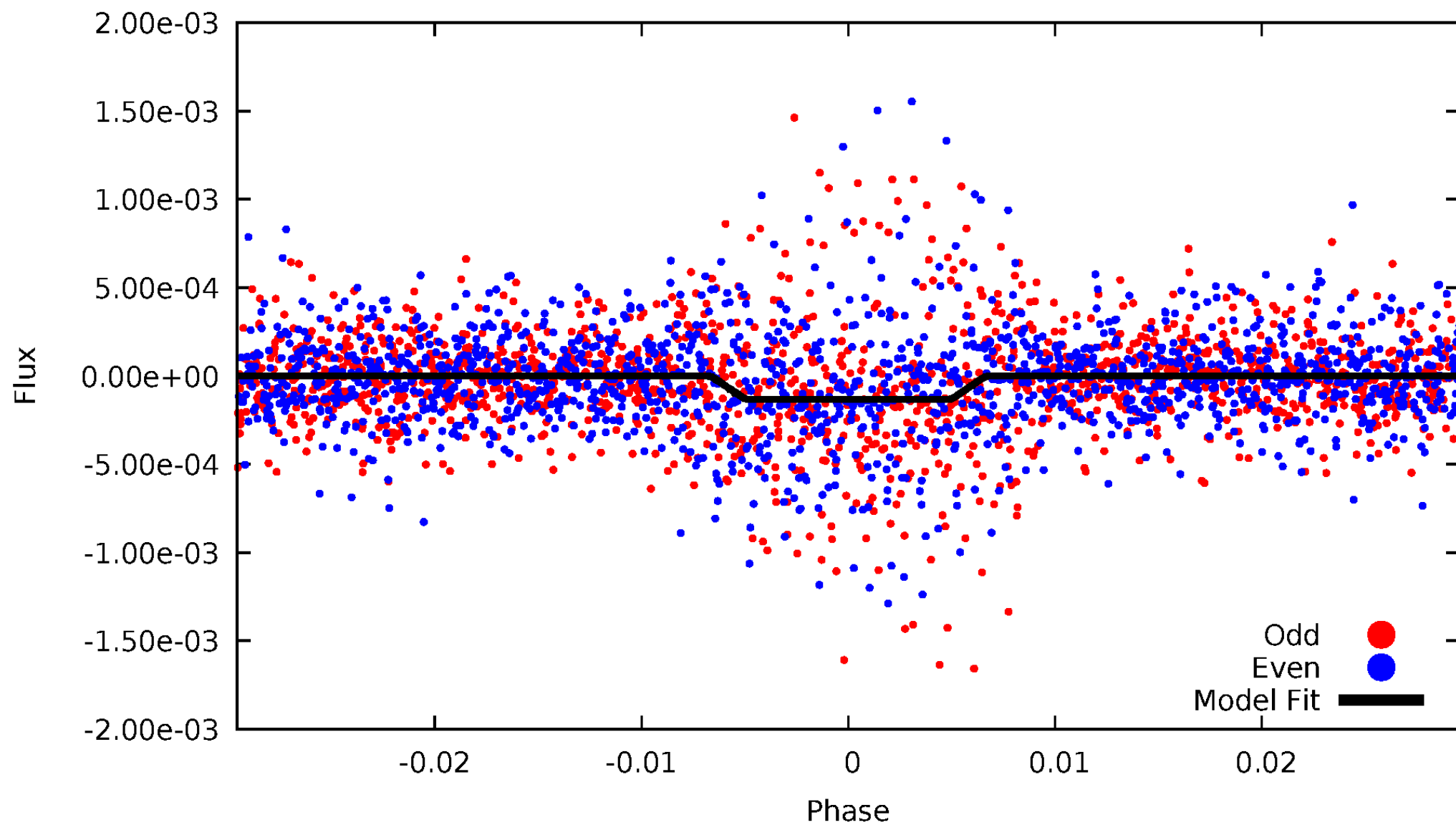
DV Odd/Even

TCE 005771719-02



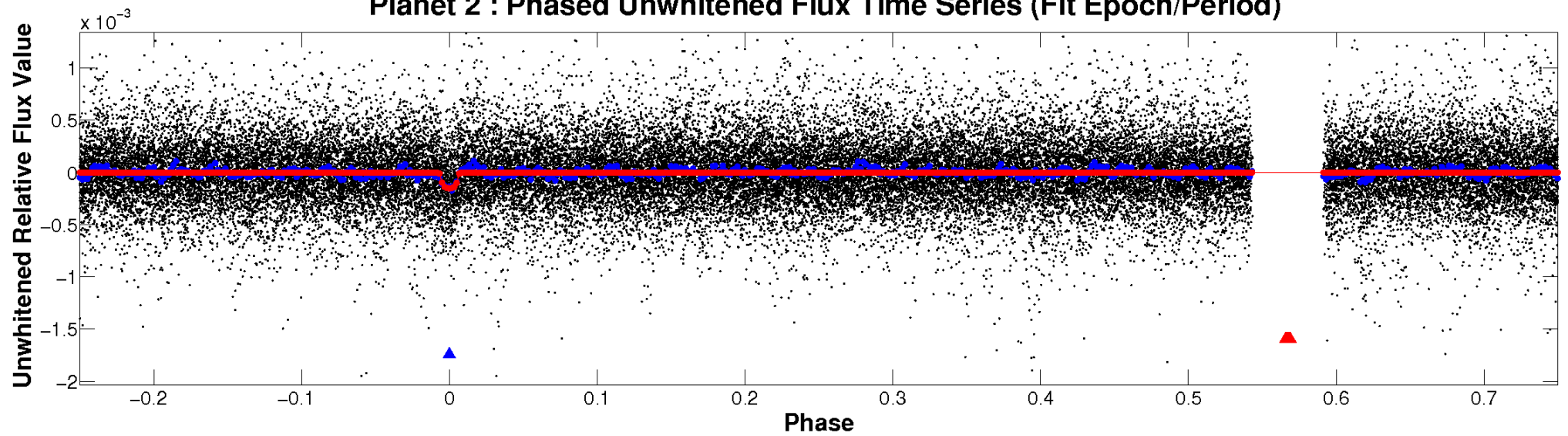
ALT Odd/Even

TCE 005771719-02

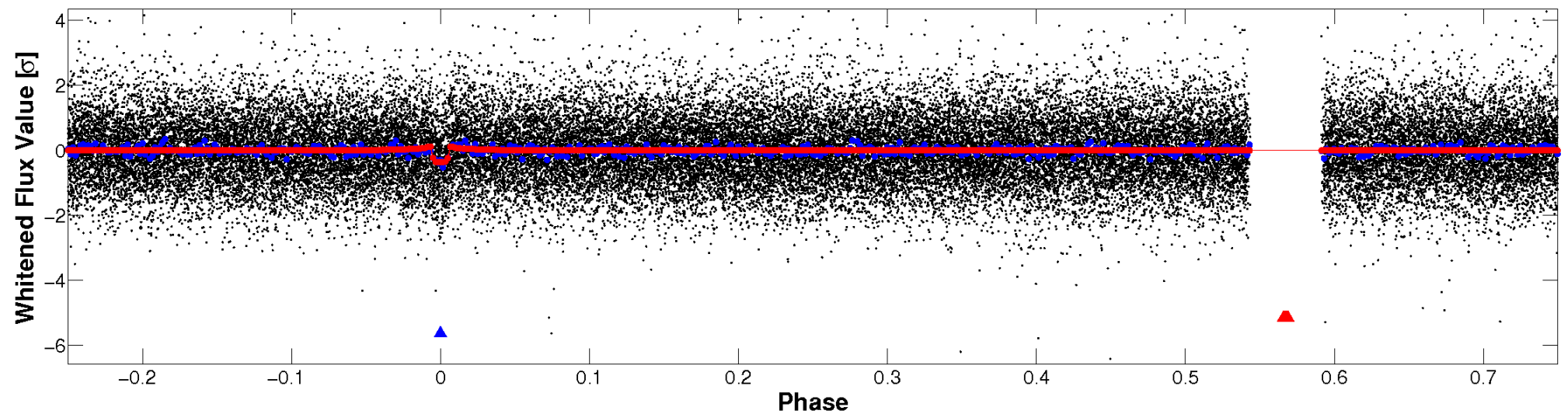


Non-Whitened Vs. Whitened Light Curve

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

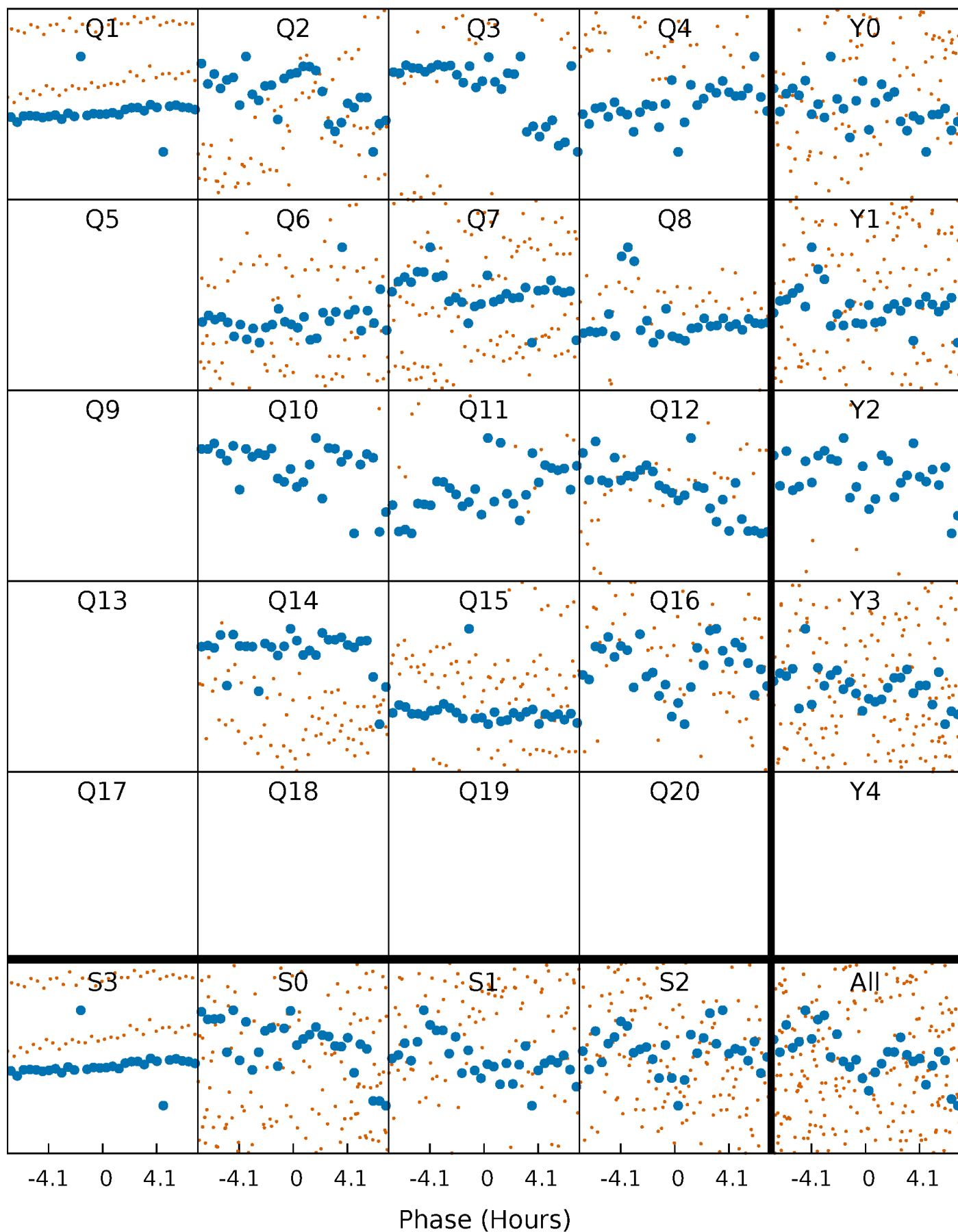


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



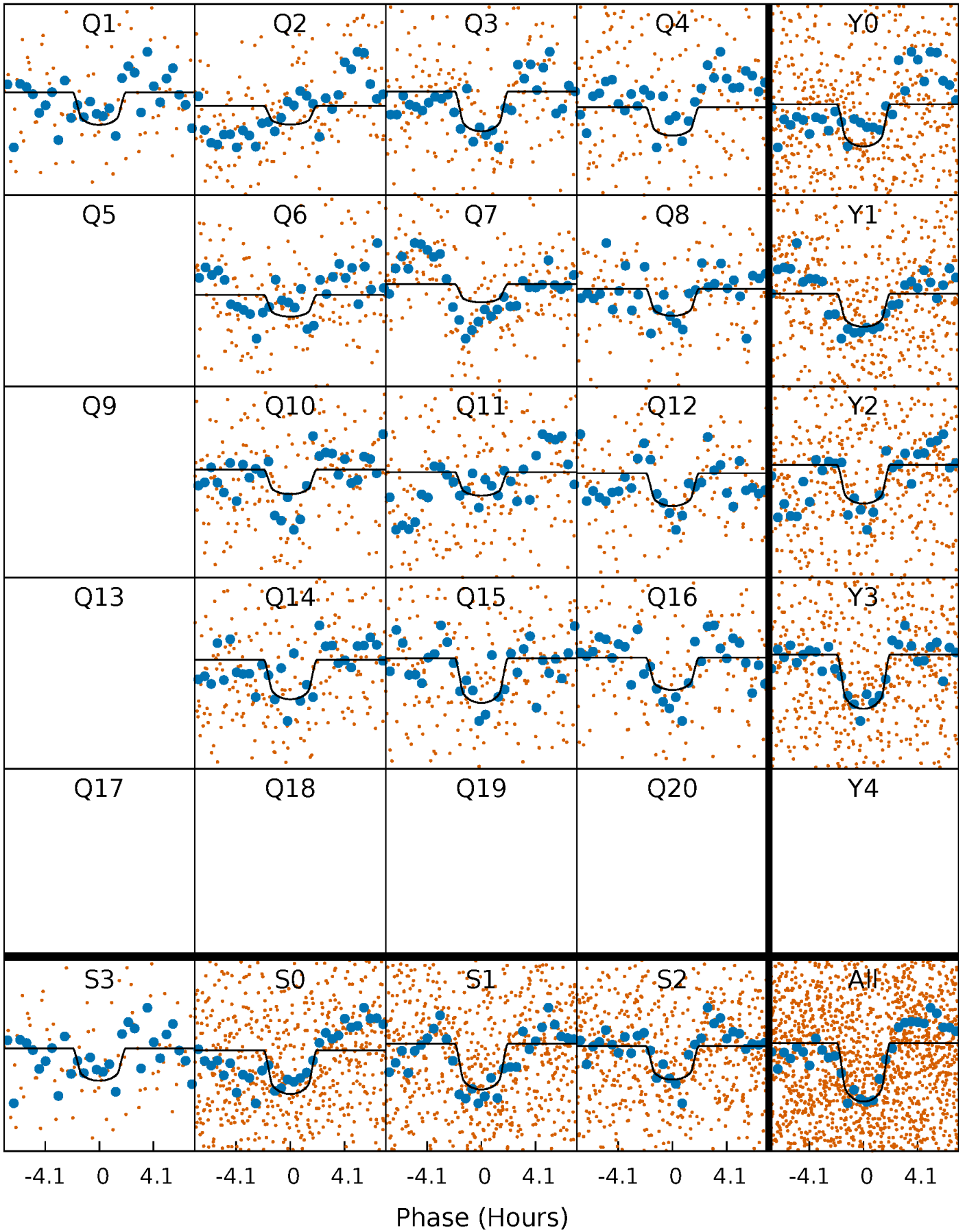
PDC Quarter-Phased Transit Curves

TCE 005771719-02 P= 12.264552 Days $T_0=132.364893$ (BKJD)



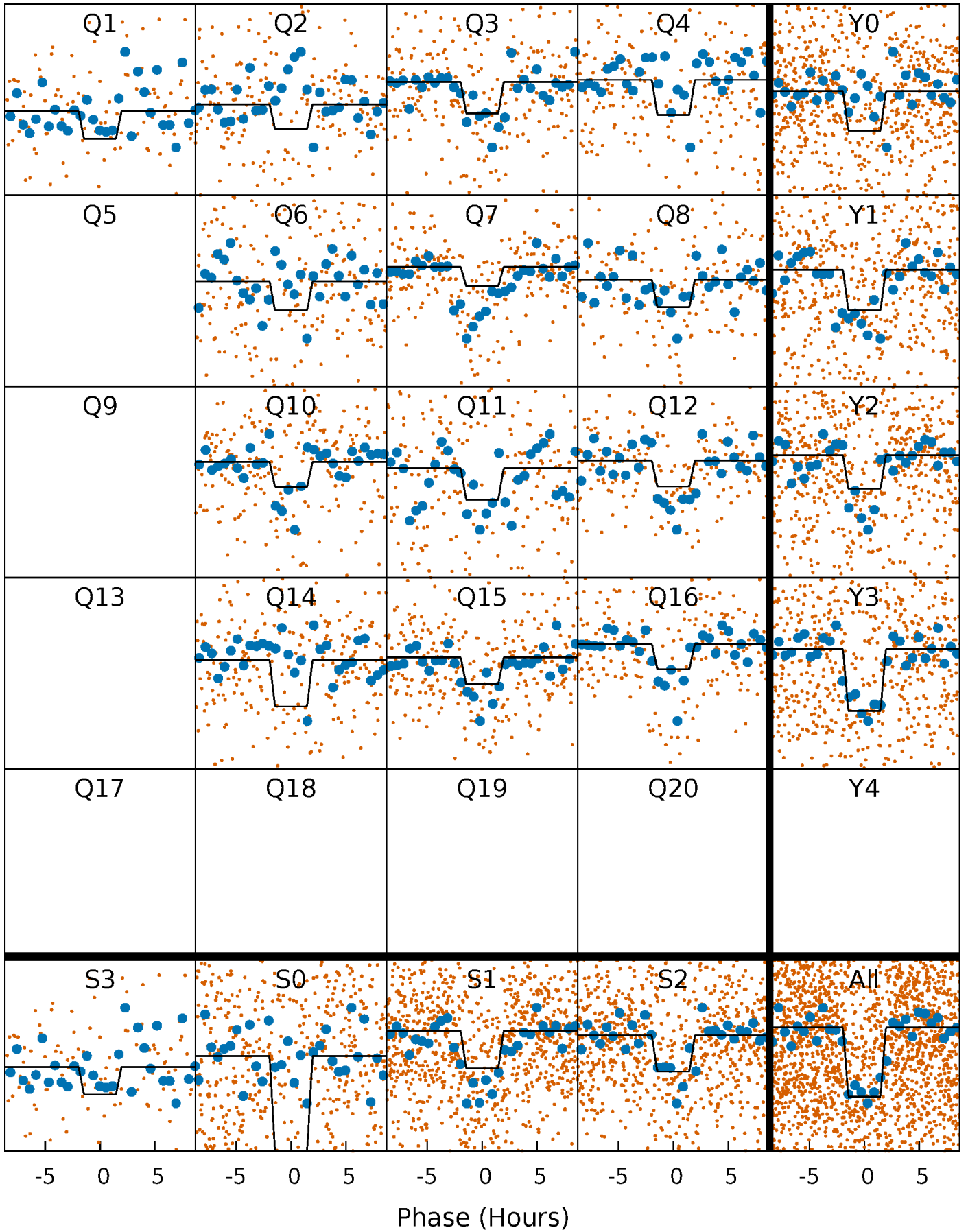
DV Quarter-Phased Transit Curves

TCE 005771719-02 P= 12.264552 Days $T_0=132.364893$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

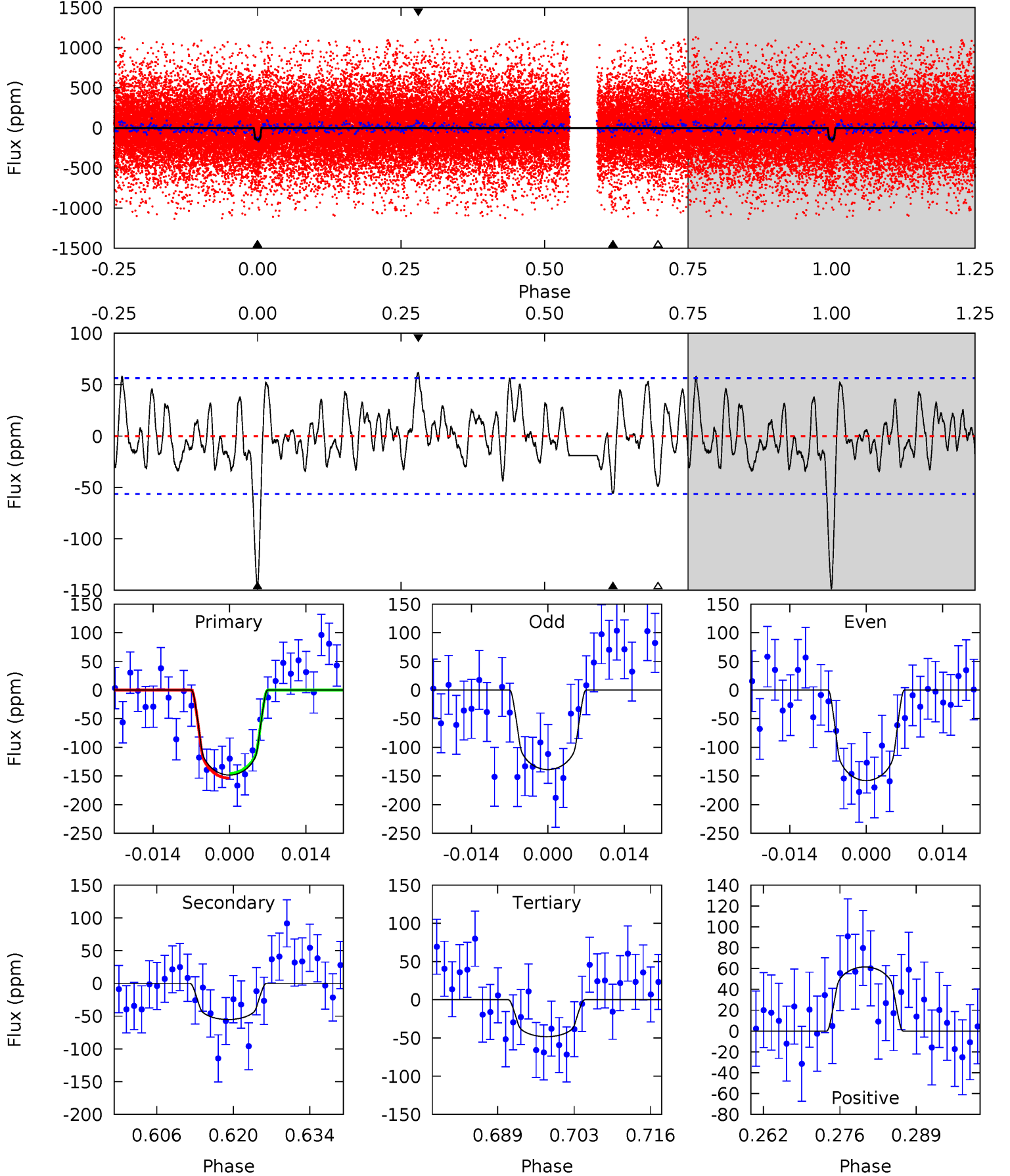
TCE 005771719-02 P= 12.264565 Days $T_0=132.367605$ (BKJD)



DV Model-Shift Uniqueness Test

005771719-02, P = 12.264552 Days, E = 120.100341 Days

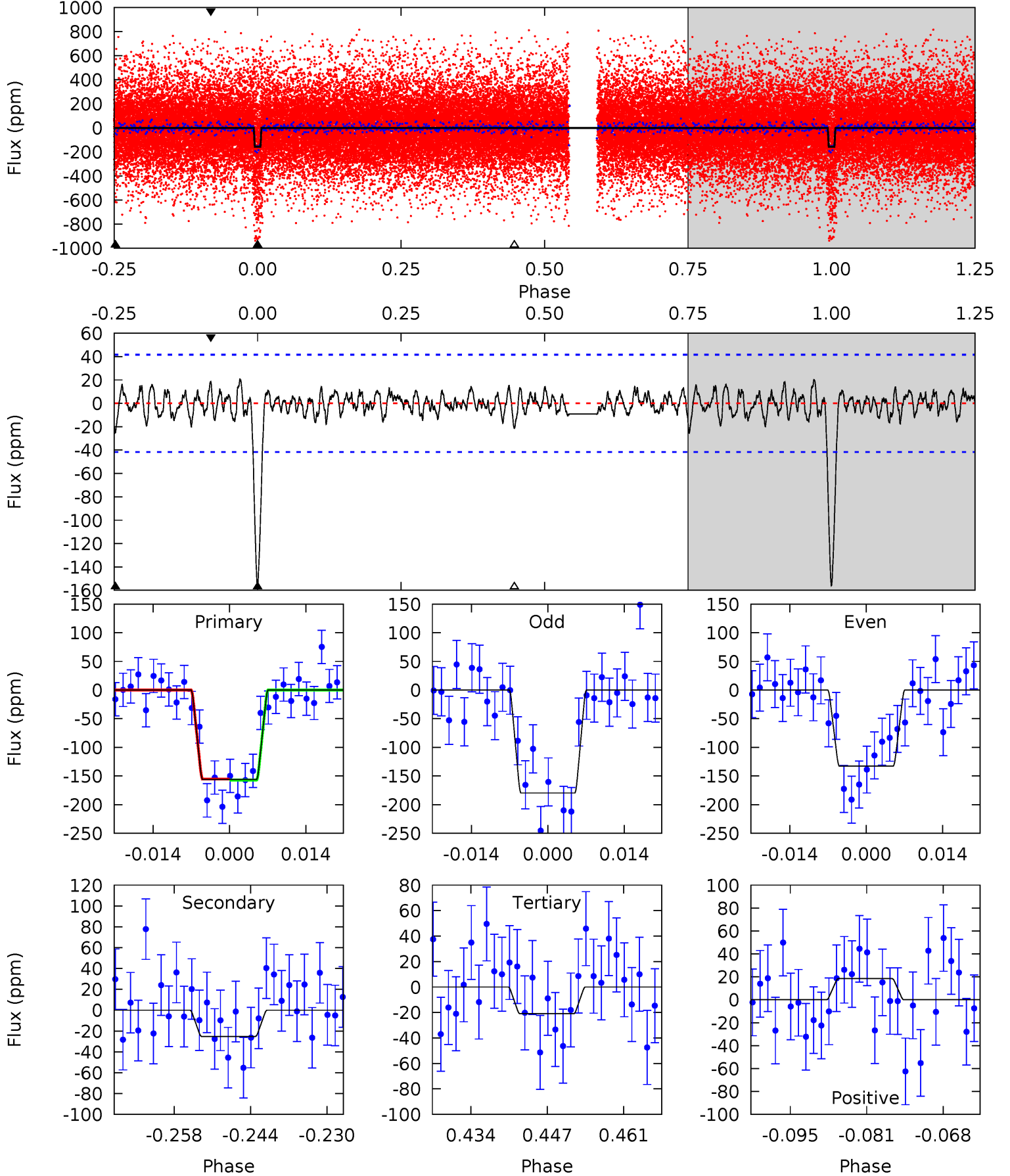
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	4.87	4.27	5.43	4.96	2.46	1.88	8.83	7.67	0.61	-0.55	0.85	0.99	0.29	0.36



Alt Model-Shift Uniqueness Test

005771719-02, P = 12.264565 Days, E = 120.103040 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.6	3.00	2.50	2.20	4.97	2.47	0.87	16.1	16.4	0.50	0.81	2.80	0.88	0.12	0.10



Stellar Parameters For KIC 005771719

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5372^{+85}_{-74}	$3.810^{+0.232}_{-0.077}$	$0.300^{+0.150}_{-0.150}$	$2.344^{+0.375}_{-0.749}$	$1.295^{+0.136}_{-0.273}$	$0.142^{+0.224}_{-0.039}$
	+2%/-1%	+6%/-2%	+50%/-50%	+16%/-32%	+11%/-21%	+158%/-27%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 005771719-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-55 ± 11	$3.22^{+1.93}_{-1.60}$	1490^{+63}_{-102}	4191^{+1358}_{-579}	37^{+114}_{-23}
Alt.	-25 ± 8	$2.87^{+1.76}_{-1.57}$	1484^{+70}_{-109}	3810^{+1414}_{-584}	21^{+81}_{-14}

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 $A_{obs} \gg 1.0$

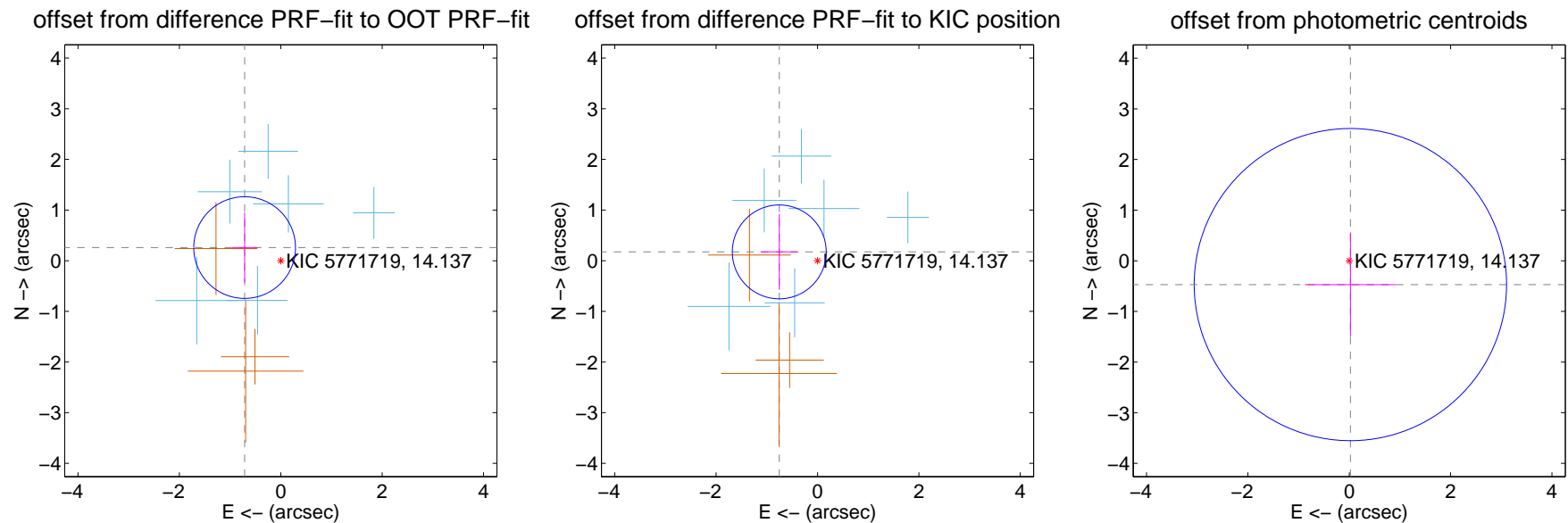
DV Centroid Data

Supplemental centroid analysis for 005771719-02. Kepler magnitude: 14.14. Transit SNR 8.88

There are 6 quarters with good PRF difference image offsets

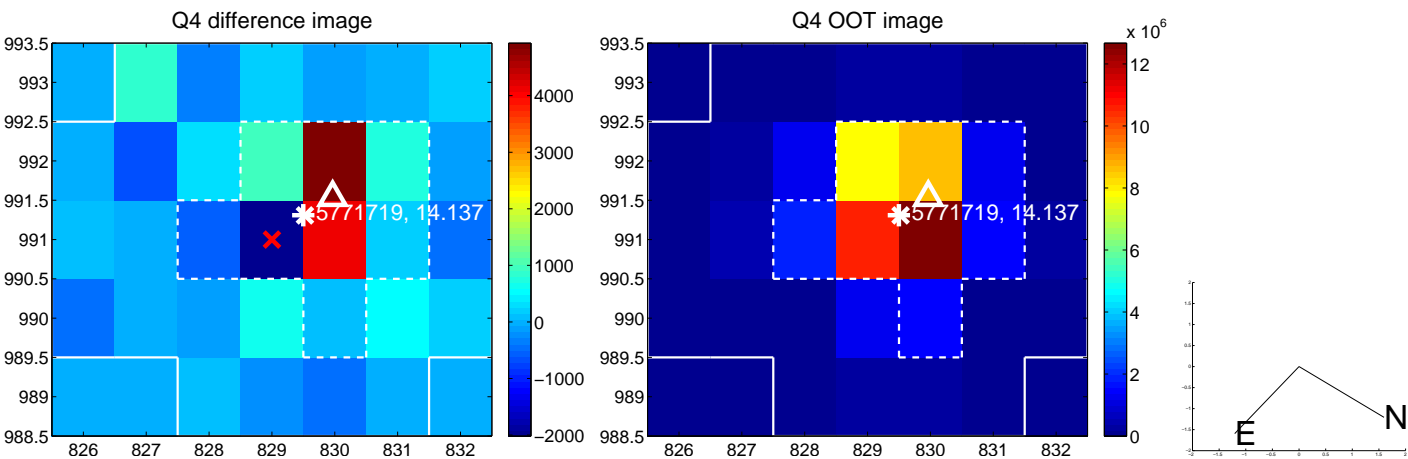
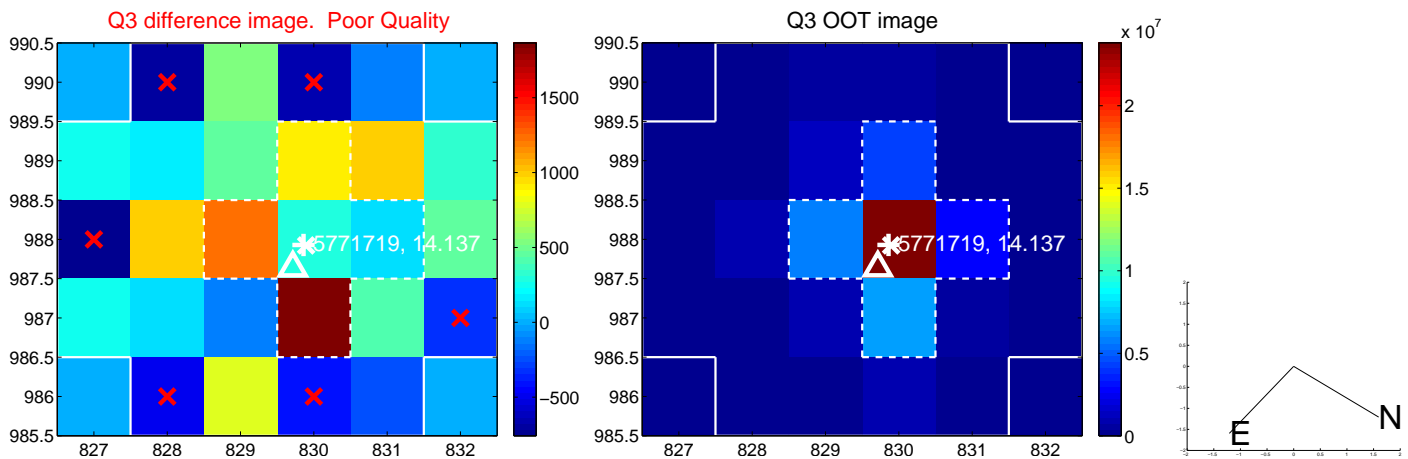
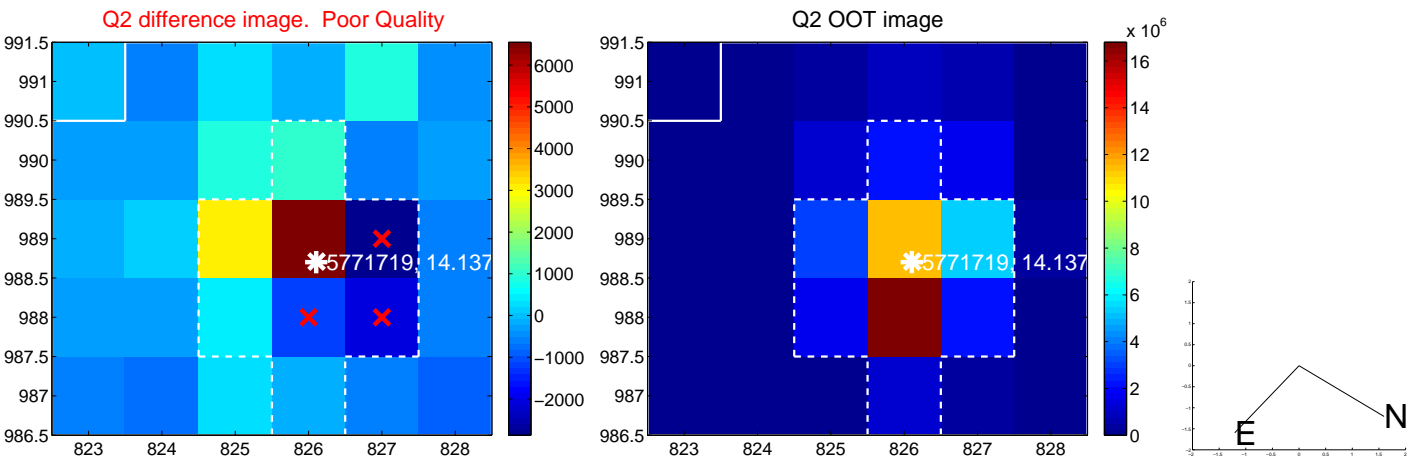
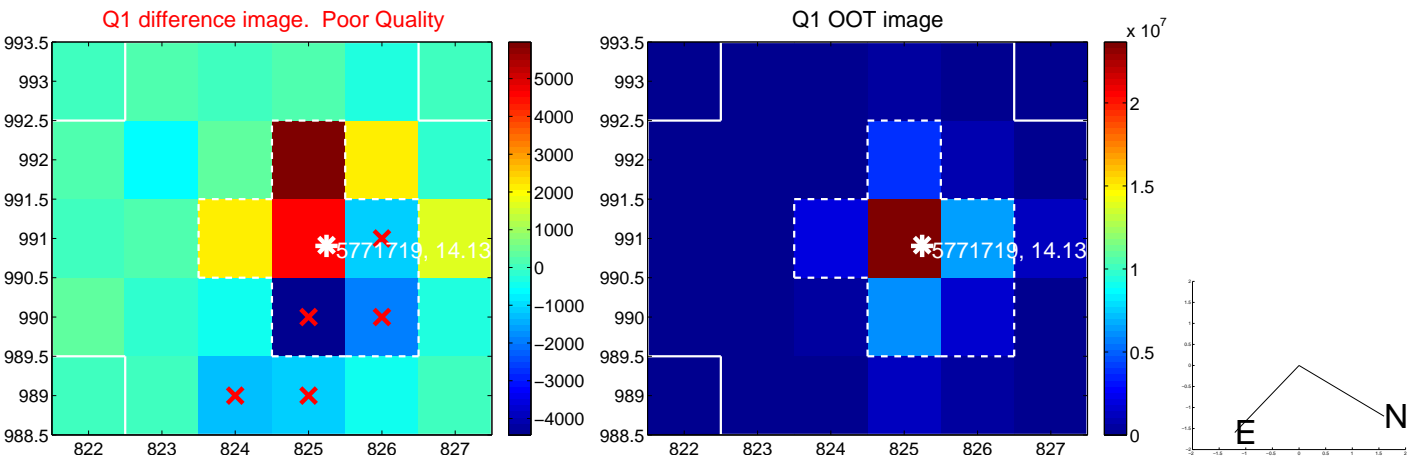
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.759 ± 0.335	2.27	0.713 ± 0.253	0.259 ± 0.690
PRF-fit source offset from KIC position	0.774 ± 0.309	2.51	0.754 ± 0.369	0.174 ± 0.749
photometric centroid source offset	0.47 ± 1.03	0.46	-0.02 ± 0.90	-0.47 ± 1.03

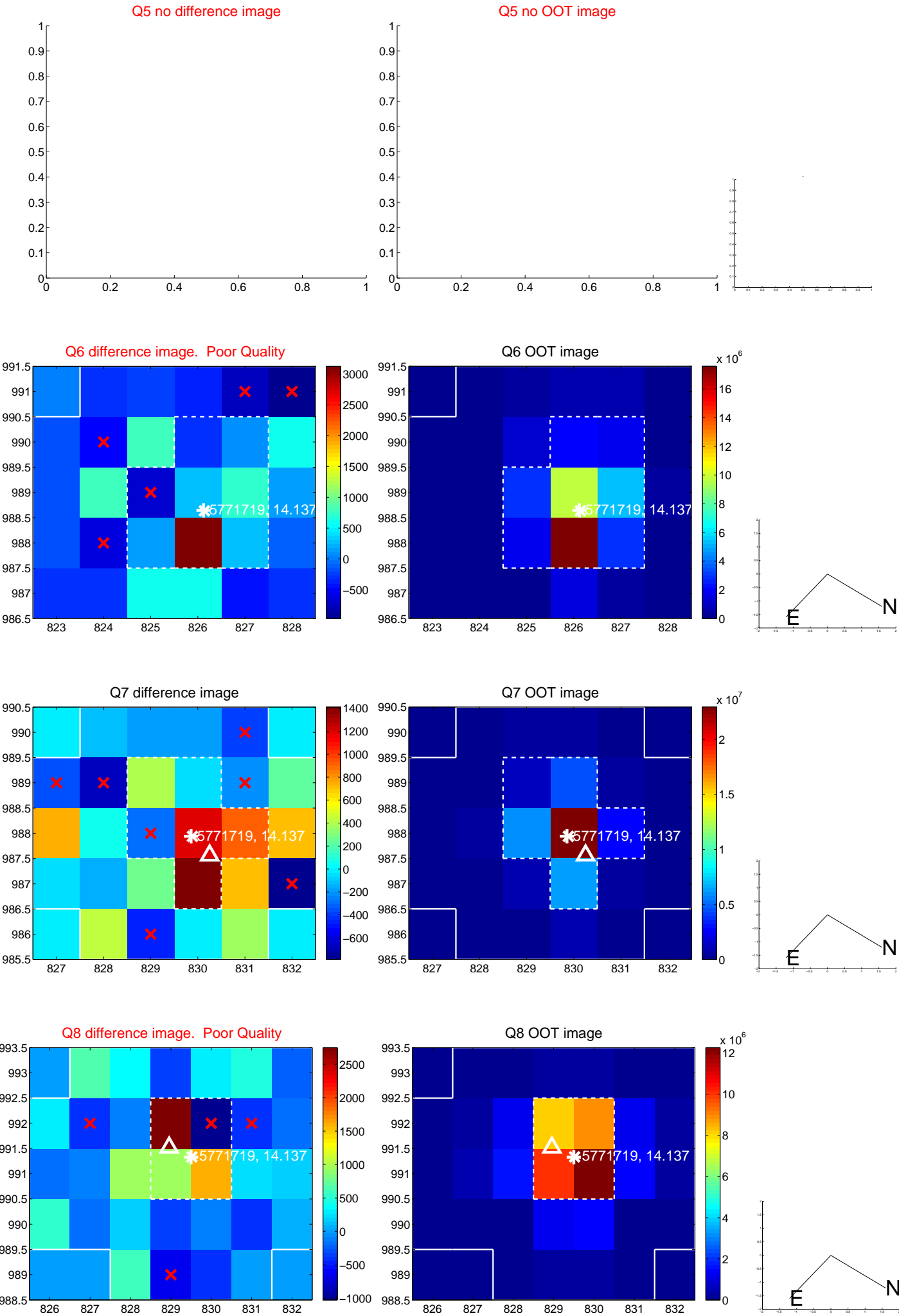


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

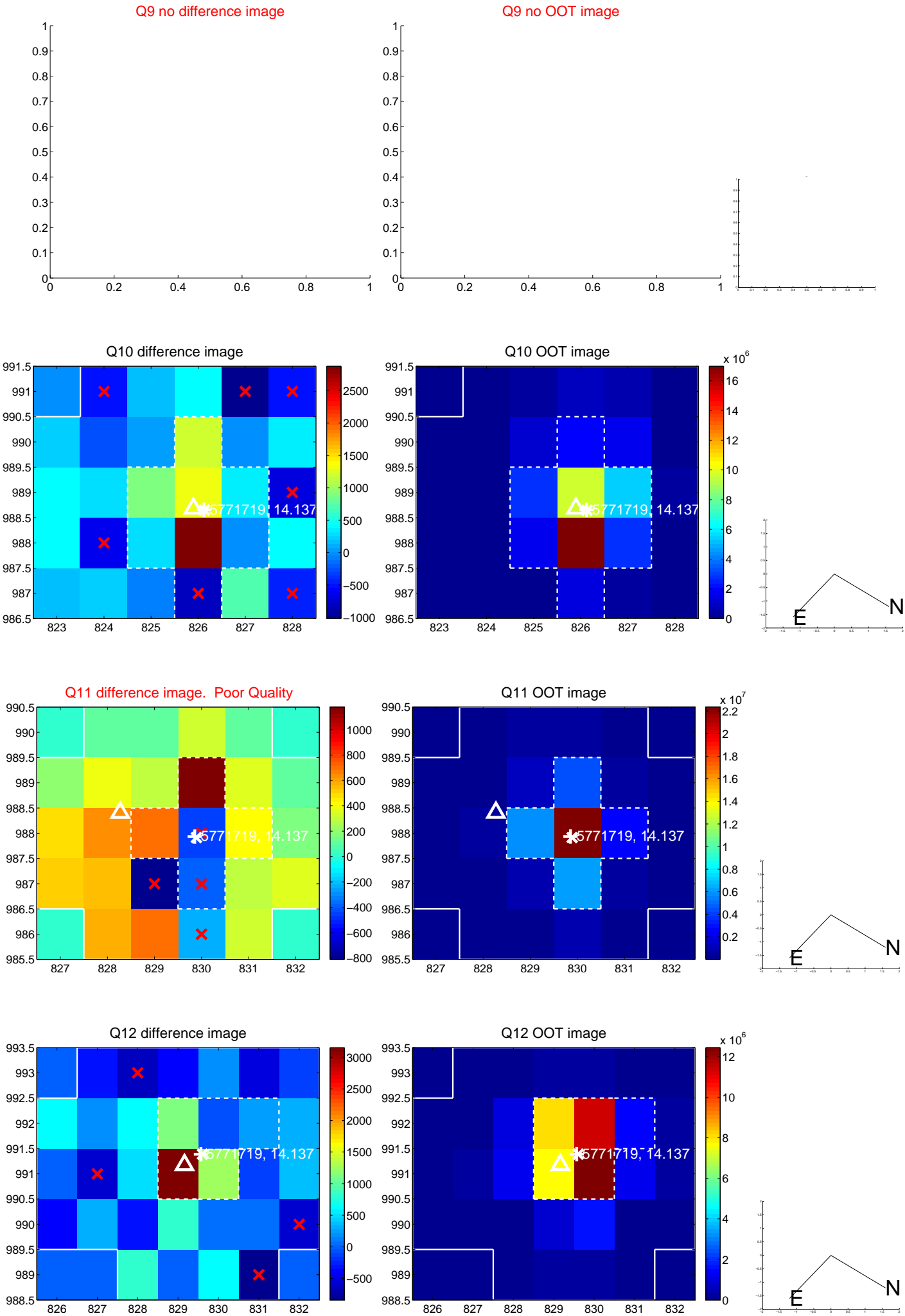
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



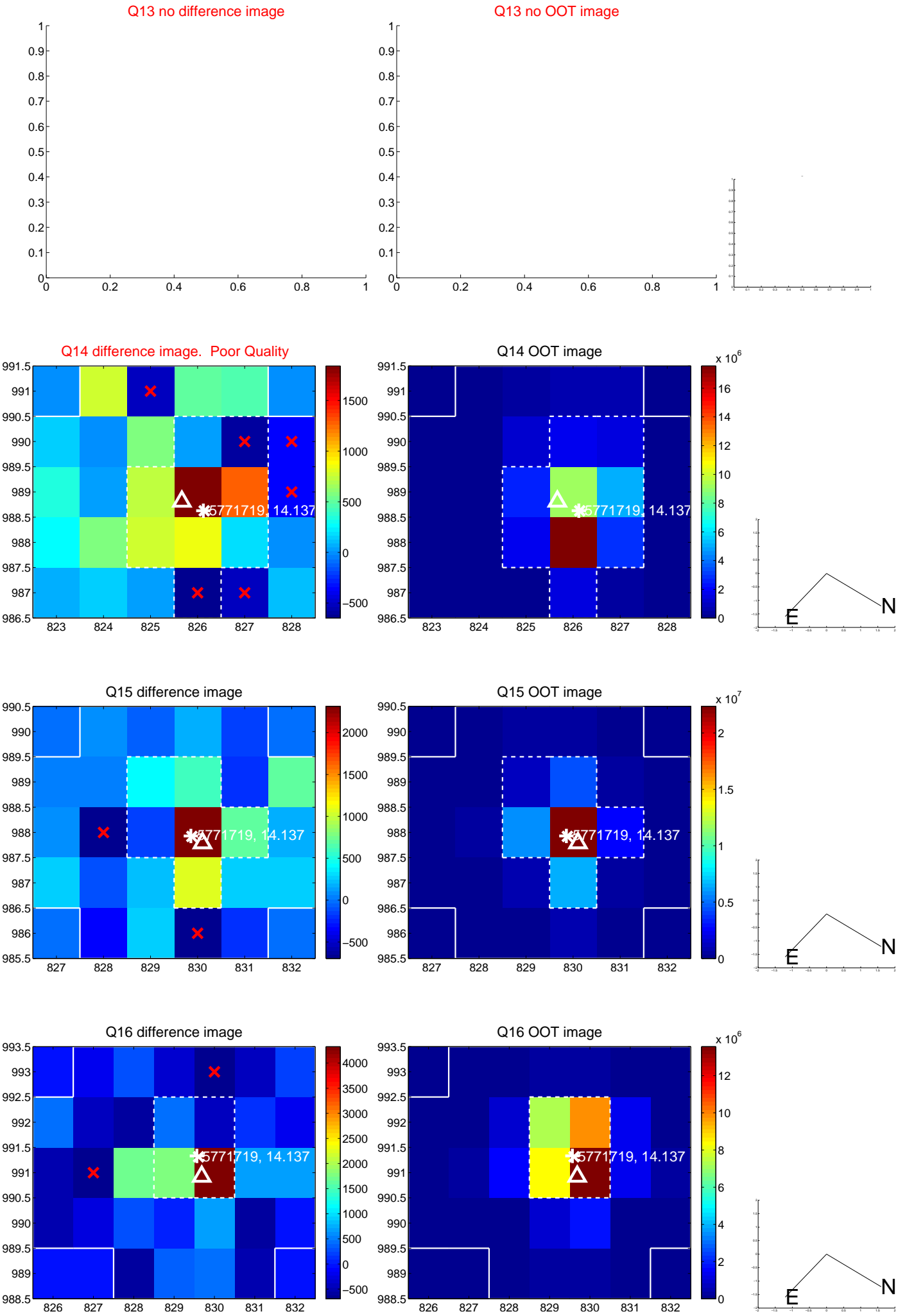
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



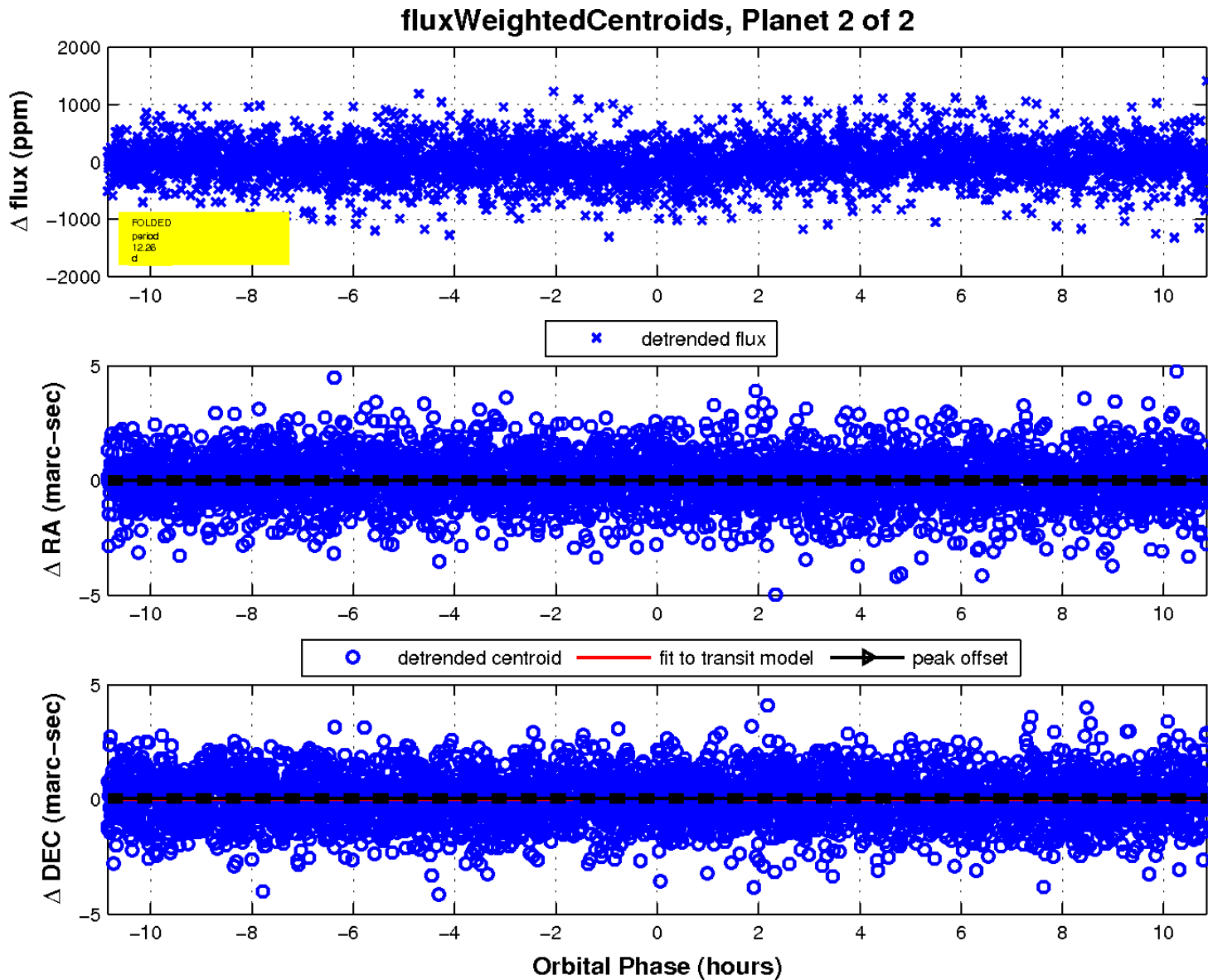
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

