

KIC 003219995

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})
003219995-01	OBS	2314.01	18.870608	143.956597	588.8	3.405	25.0	27.7	0.95	6103	2.63	57.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003219995-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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.

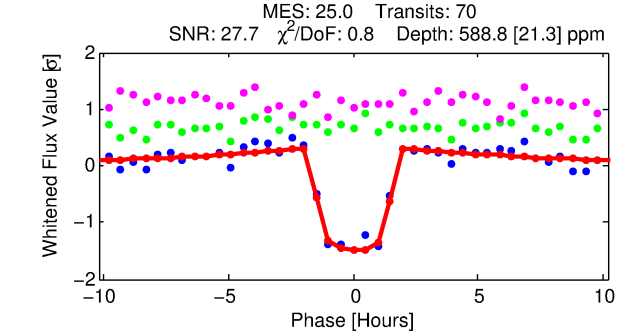
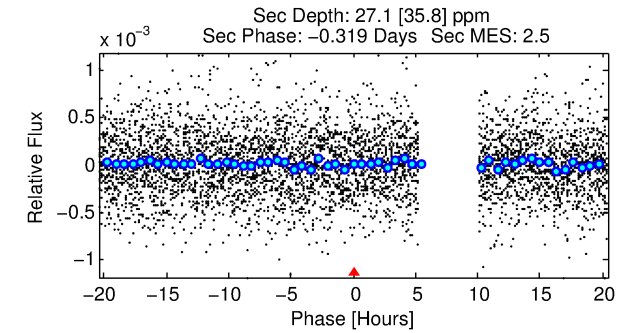
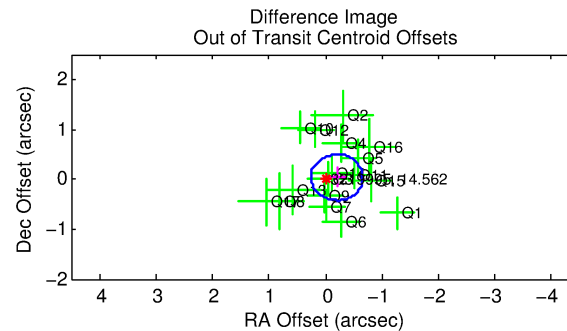
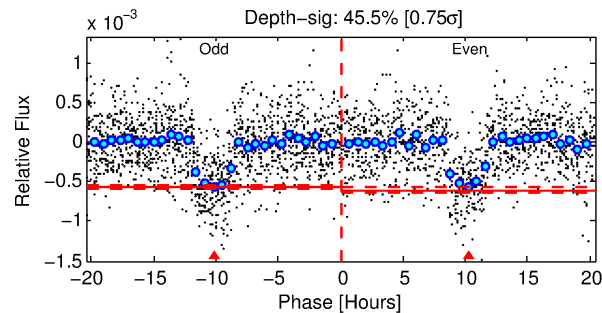
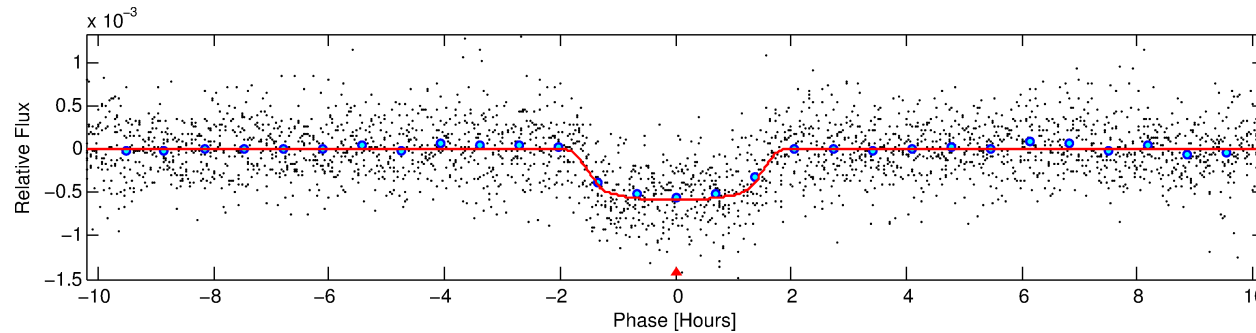
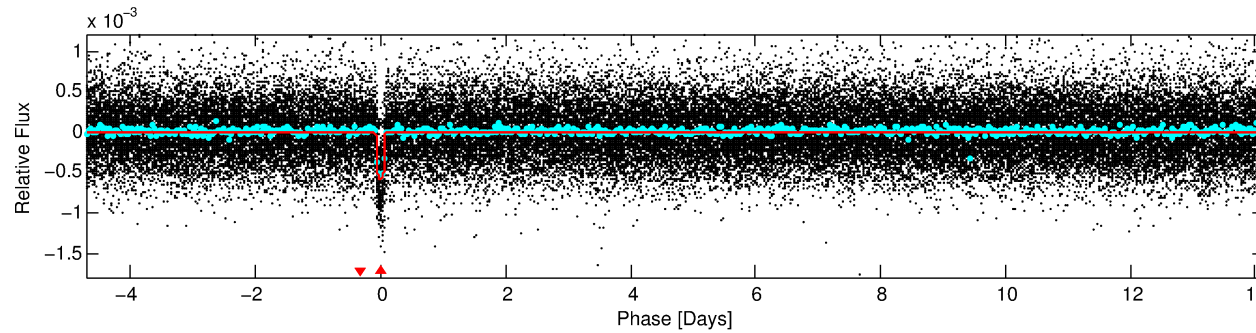
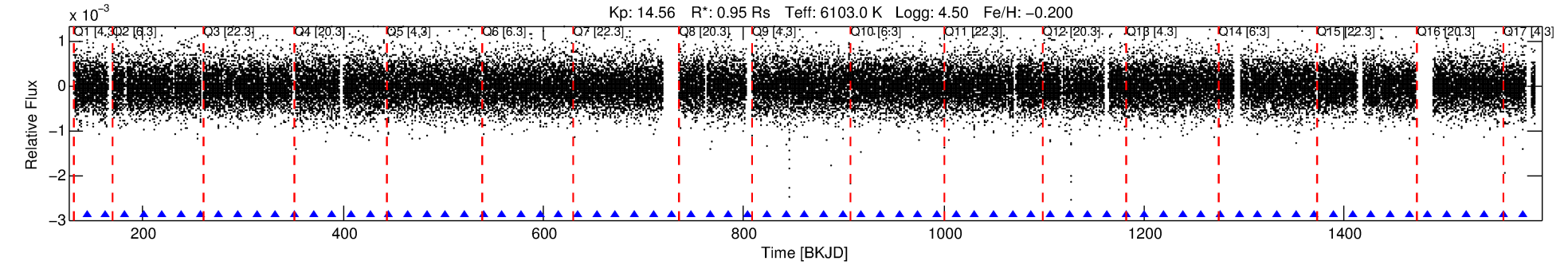
Ephemeris Match Information For 003219995-01

No Significant Match Found

DV One-Page Summary

KIC: 3219995 Candidate: 1 of 1 Period: 18.871 d

KOI: K02314.01 Corr: 0.977



DV Fit Results:

Period = 18.87061 [0.00005] d
Epoch = 143.9566 [0.0024] BKJD
Rp/R* = 0.0254 [0.0029]
a/R* = 23.57 [13.50]
b = 0.86 [0.17]
Seff = 57.04 [24.61]
Teff = 701 [76] K
Rp = 2.63 [0.89] Re
a = 0.1401 [0.0387] AU
Ag = 42.19 [59.14] [0.70 σ]
Teffp = 2761 [930] K [2.21 σ]

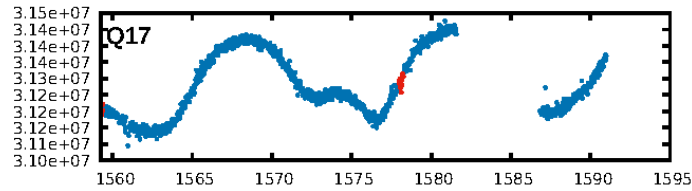
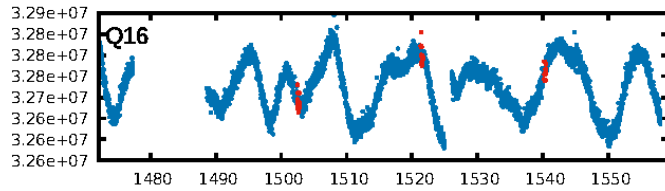
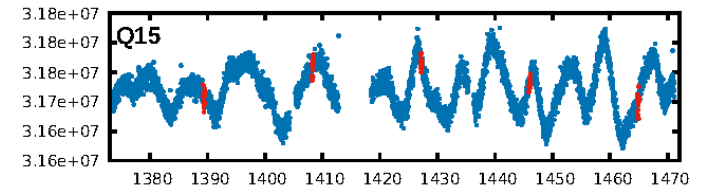
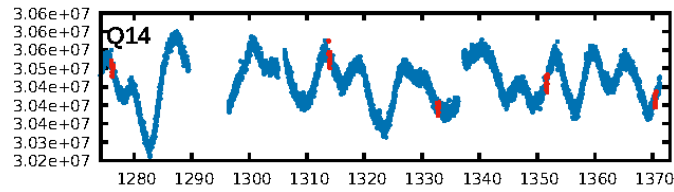
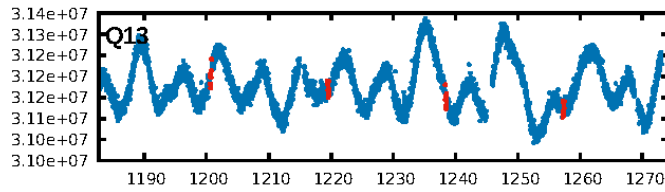
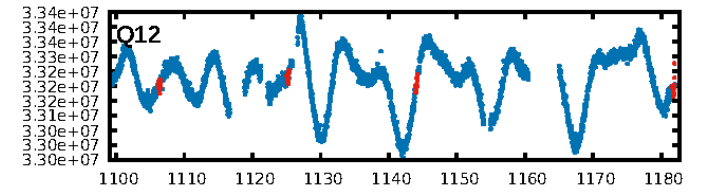
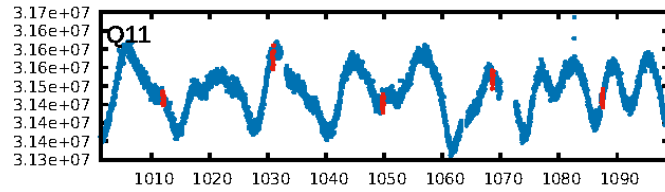
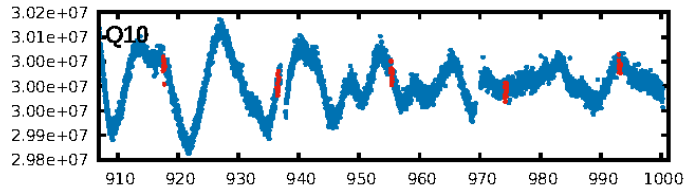
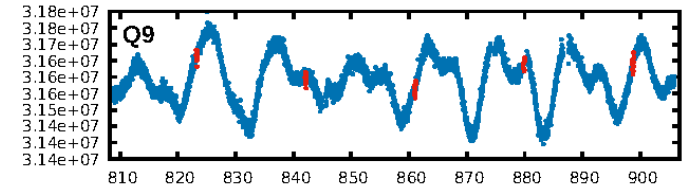
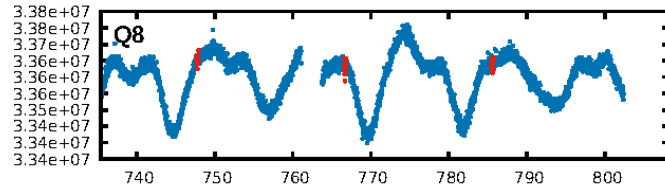
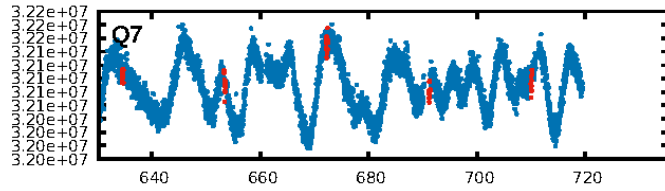
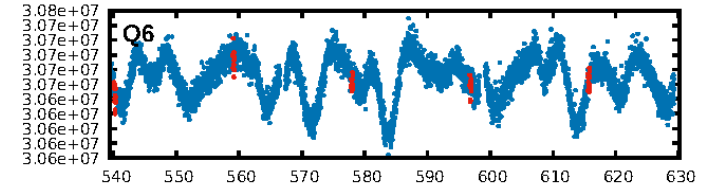
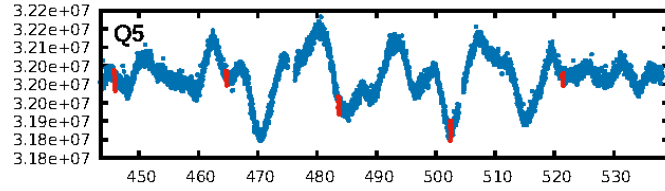
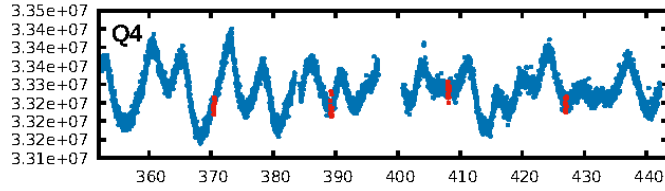
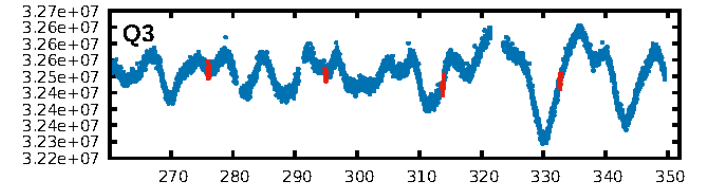
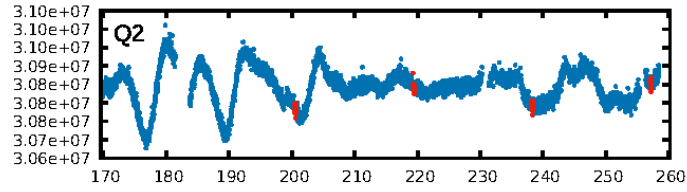
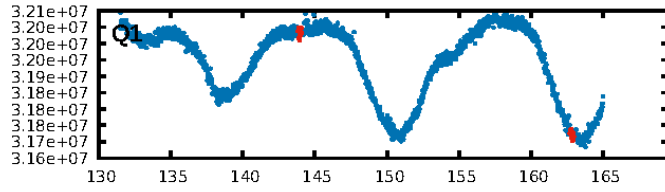
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 98.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.15e-136
RollingBand-fgt: 1.00 [66/66]
GhostDiagnostic-chr: 5.005
Centroid-sig: 40.4%
Centroid-so: 0.377 arcsec [0.92 σ]
OotOffset-rm: 0.204 arcsec [1.33 σ]
KicOffset-rm: 0.277 arcsec [1.72 σ]
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]

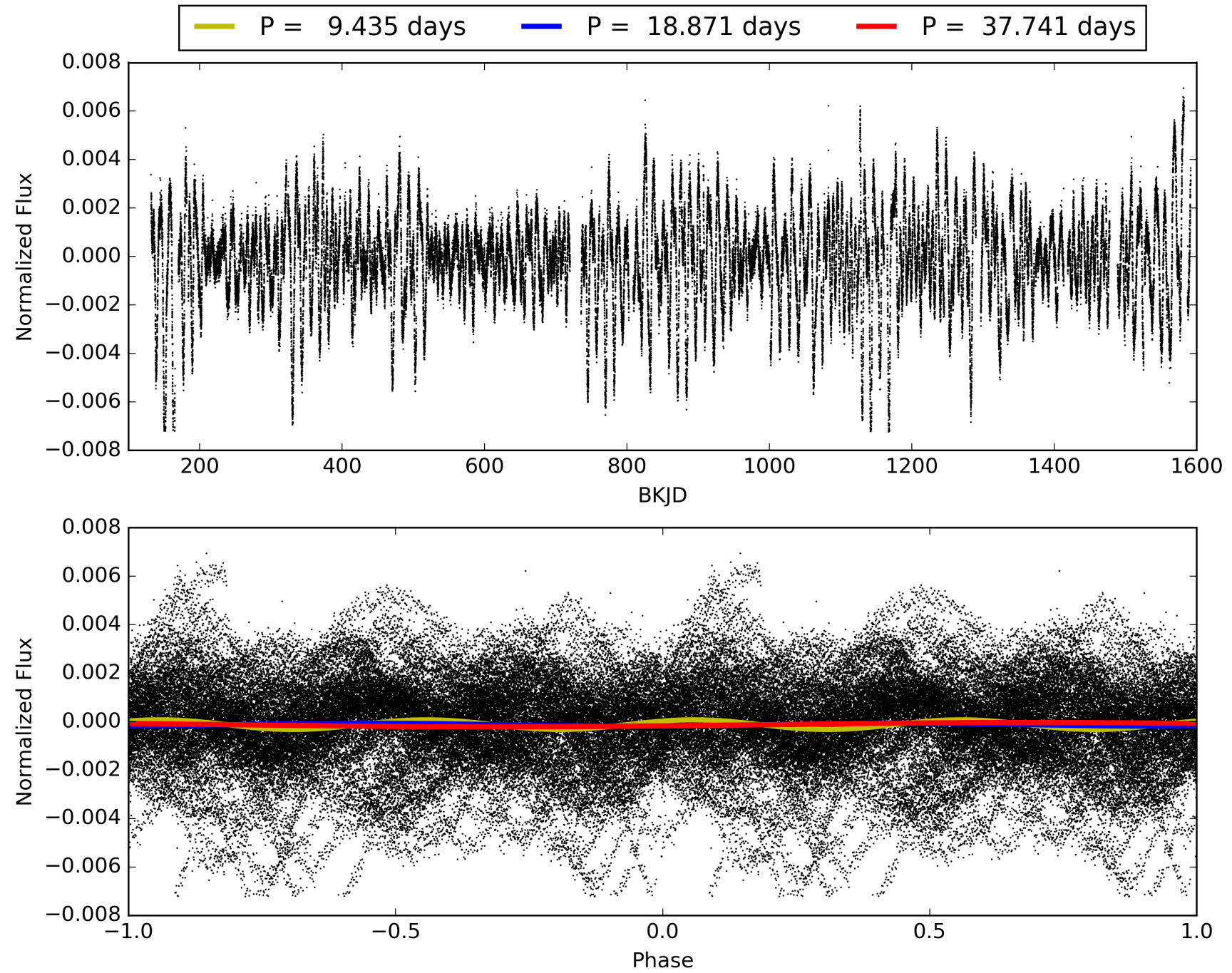
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 15:46:44 Z

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

TCE 003219995-01, PDC Light Curves

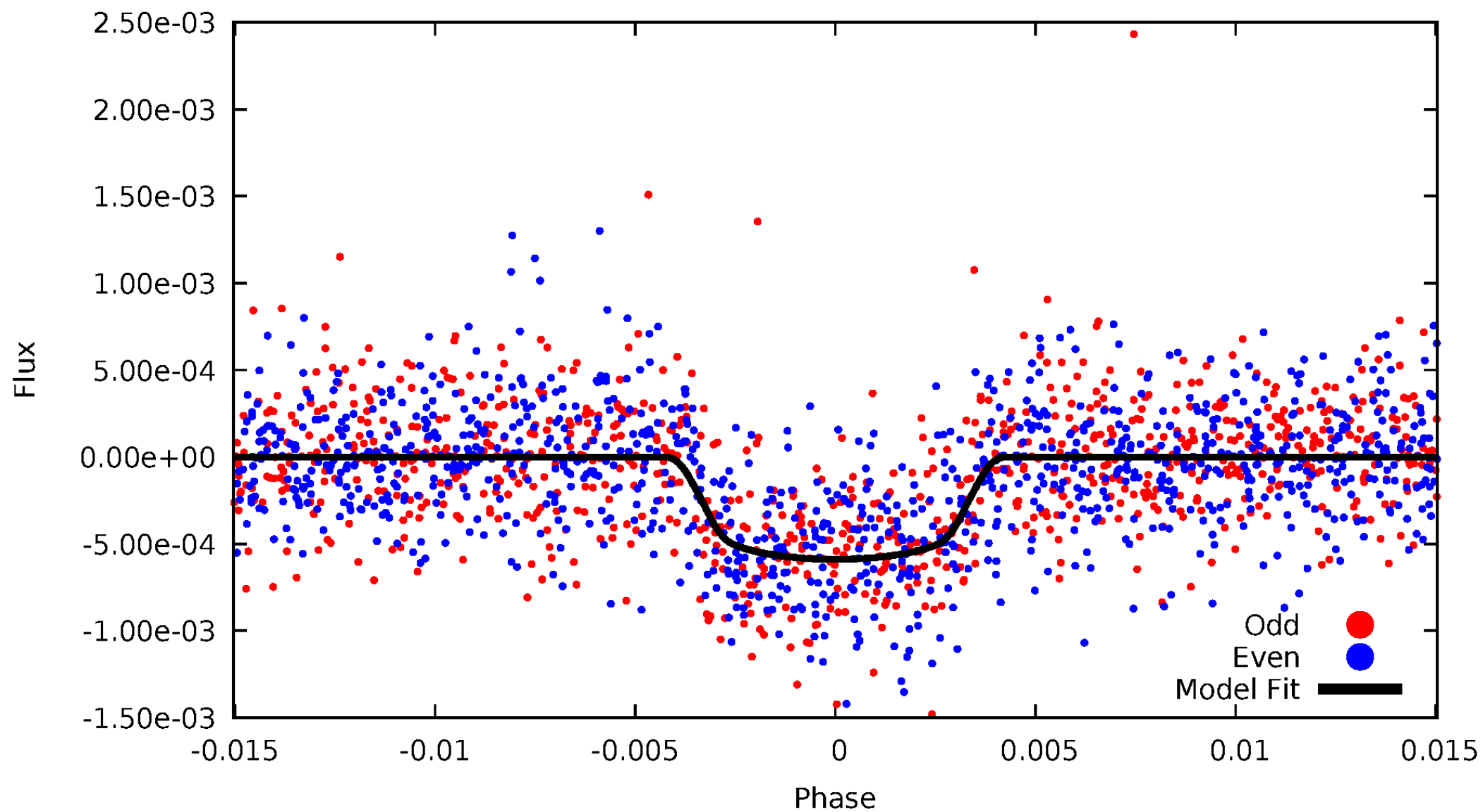


TCE 003219995-01



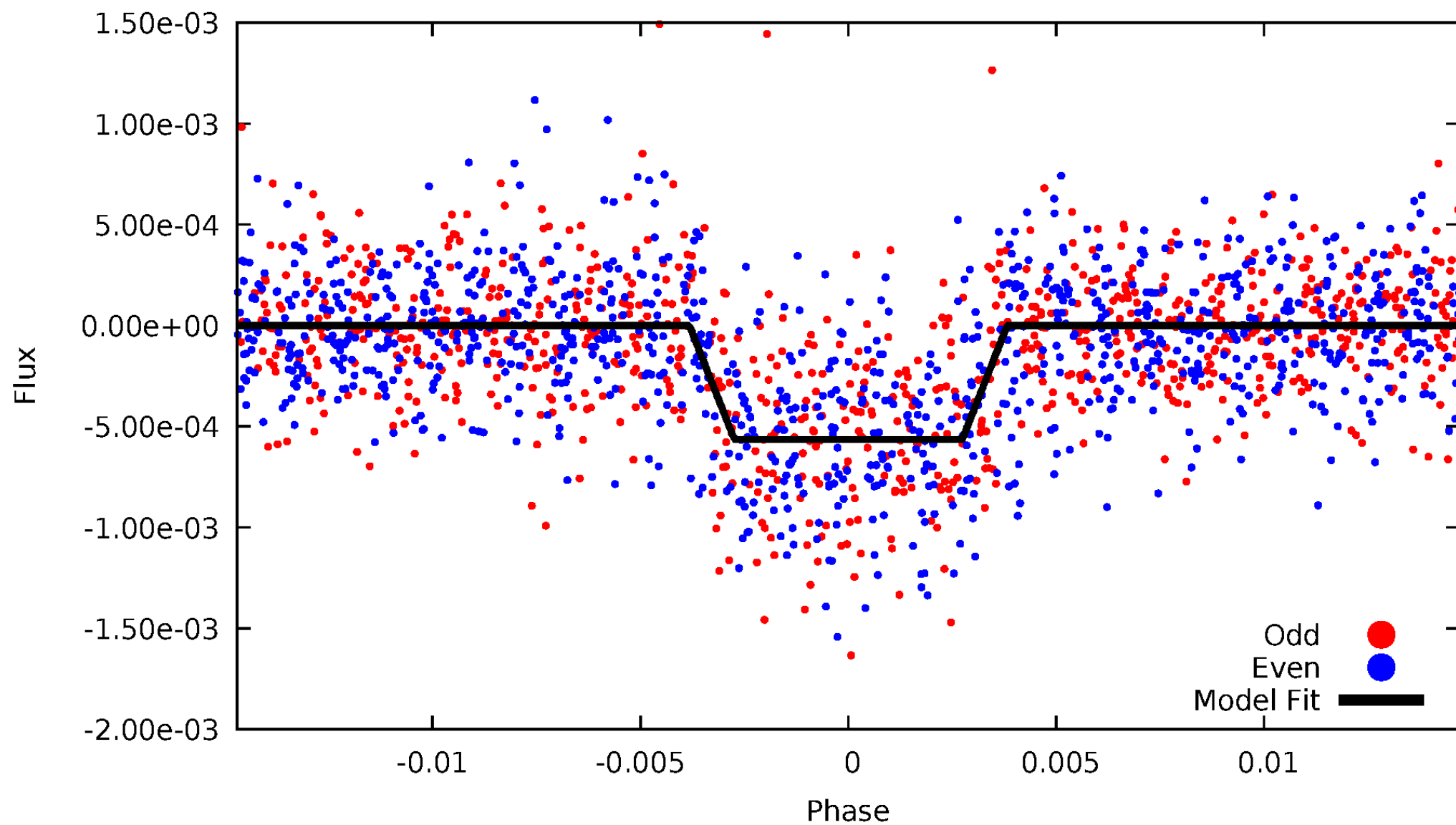
DV Odd/Even

TCE 003219995-01



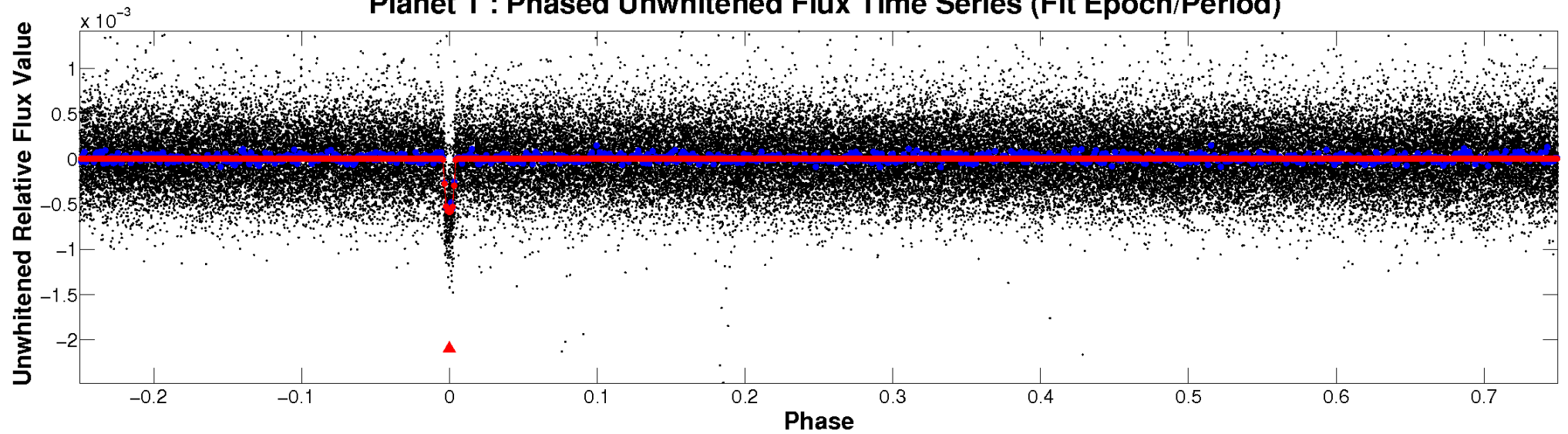
ALT Odd/Even

TCE 003219995-01

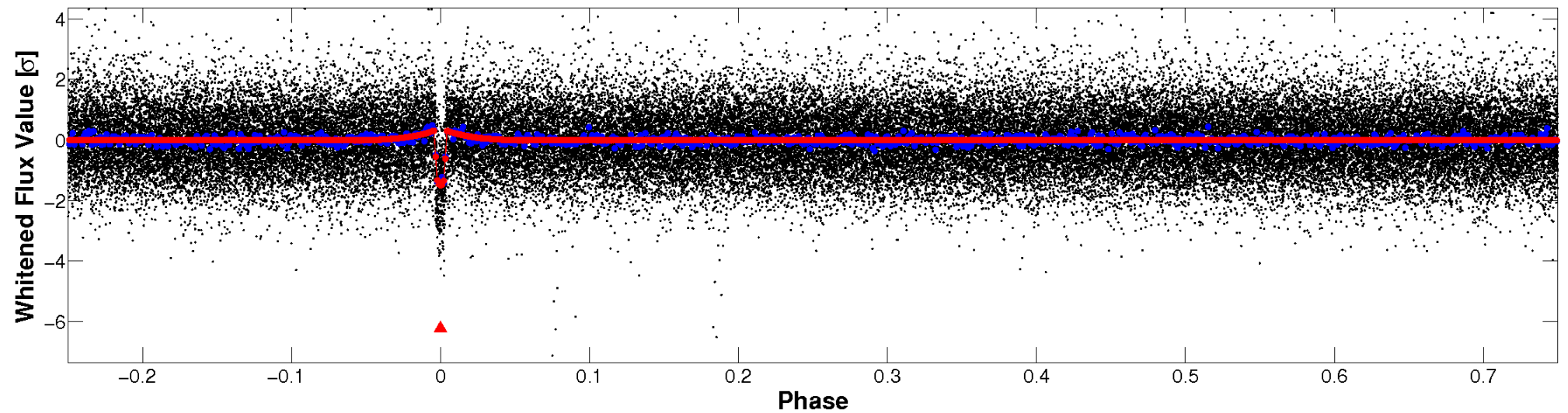


Non-Whitened Vs. Whitened Light Curve

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

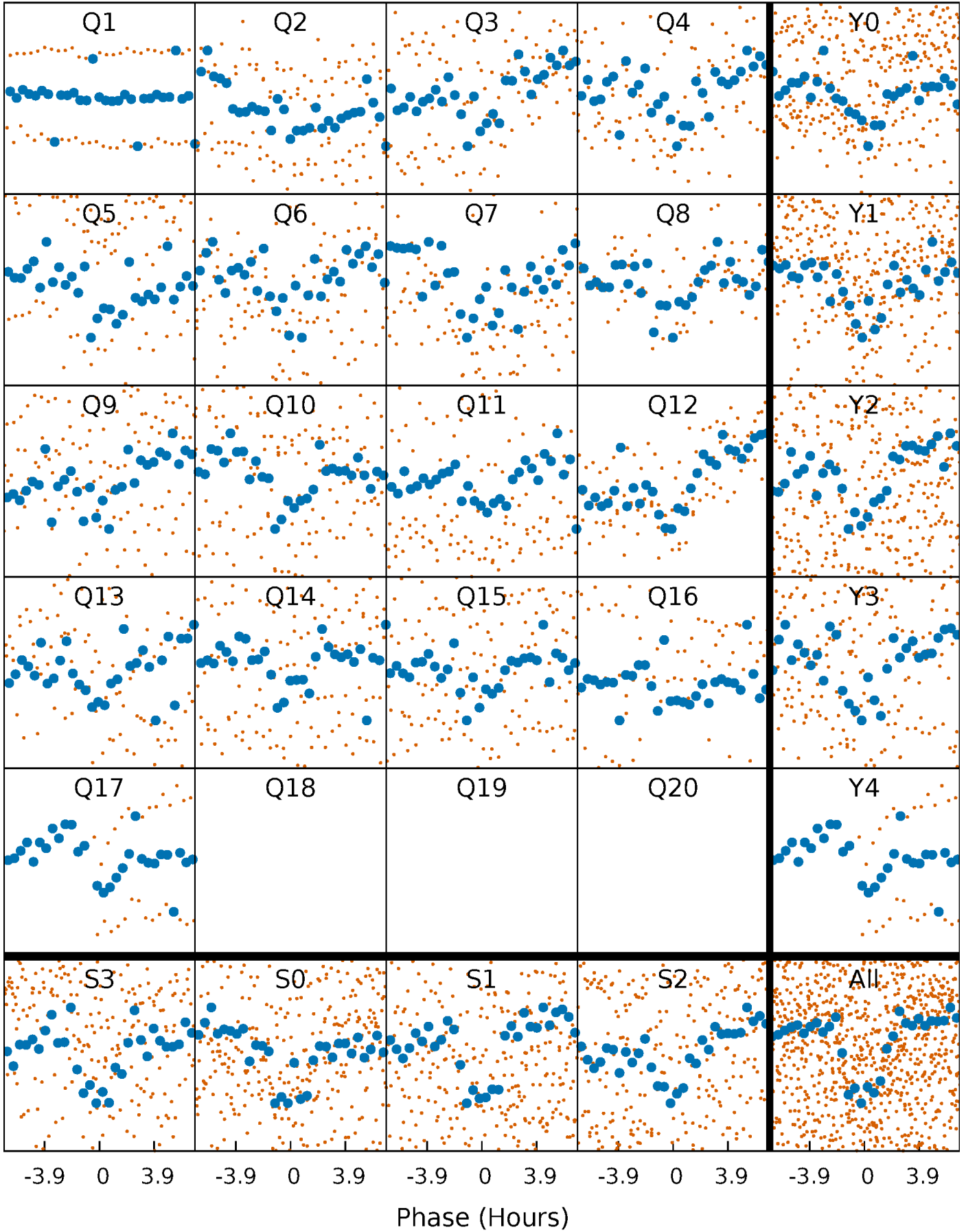


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



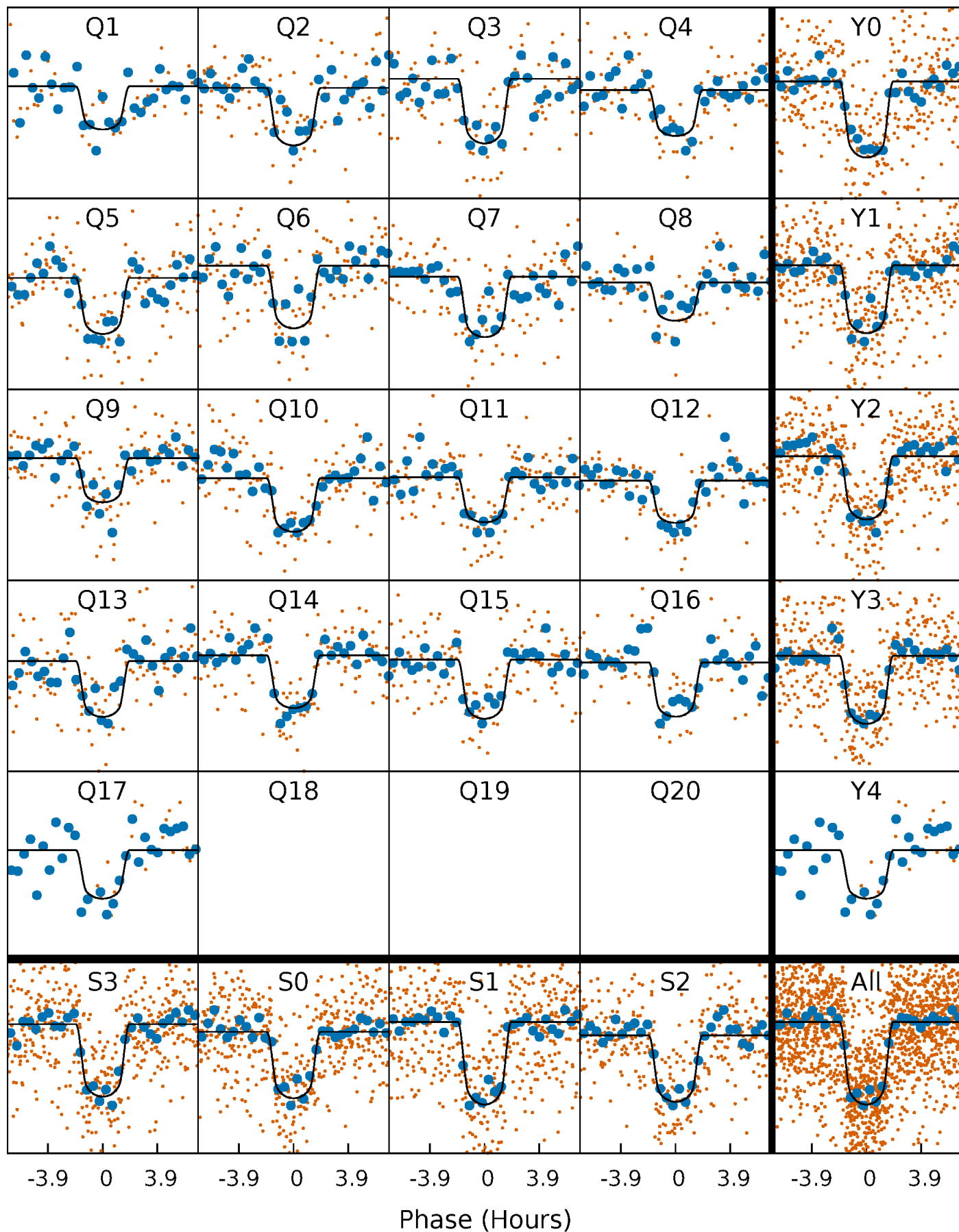
PDC Quarter-Phased Transit Curves

TCE 003219995-01 P= 18.870608 Days $T_0=143.956597$ (BKJD)



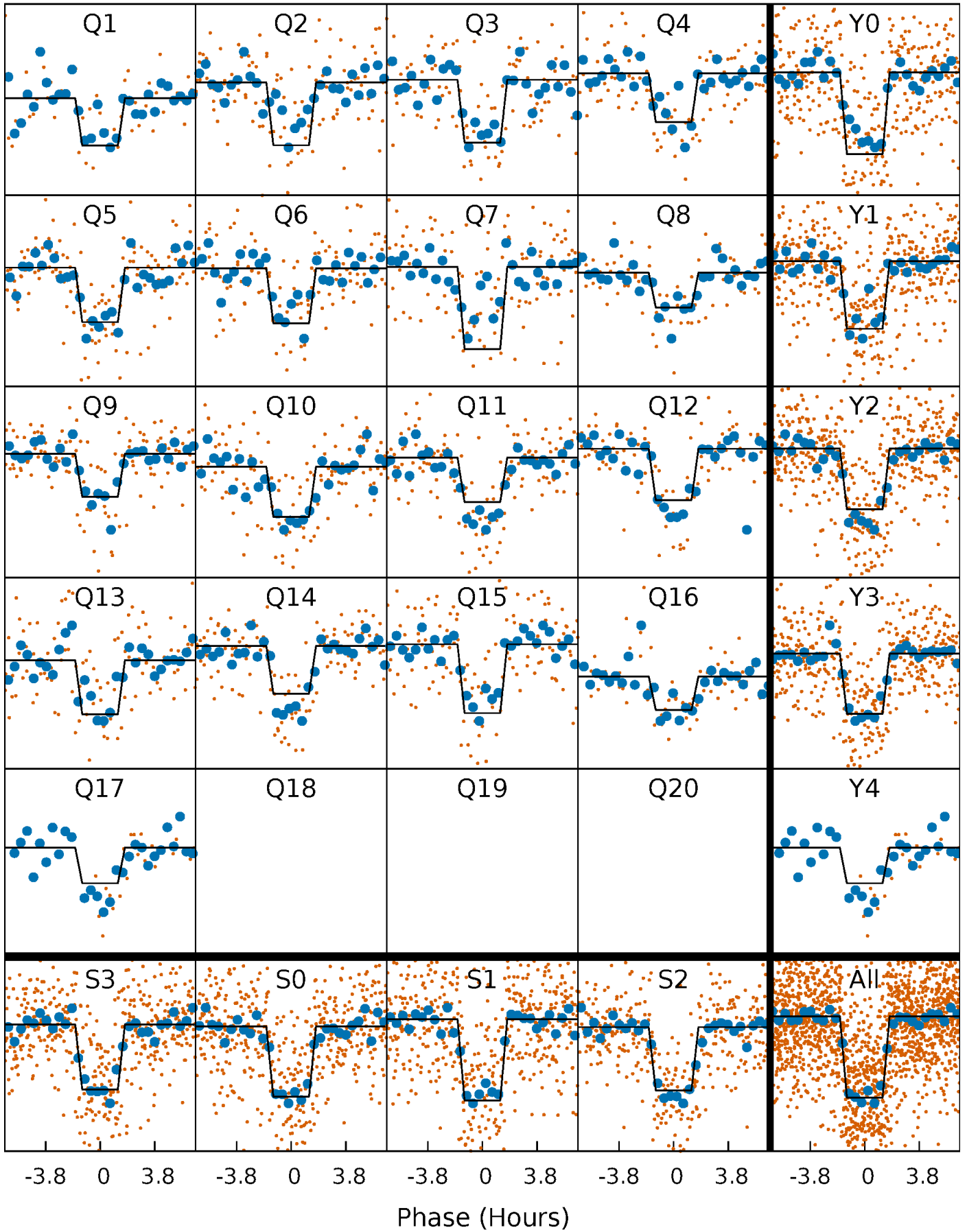
DV Quarter-Phased Transit Curves

TCE 003219995-01 P= 18.870608 Days $T_0=143.956597$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

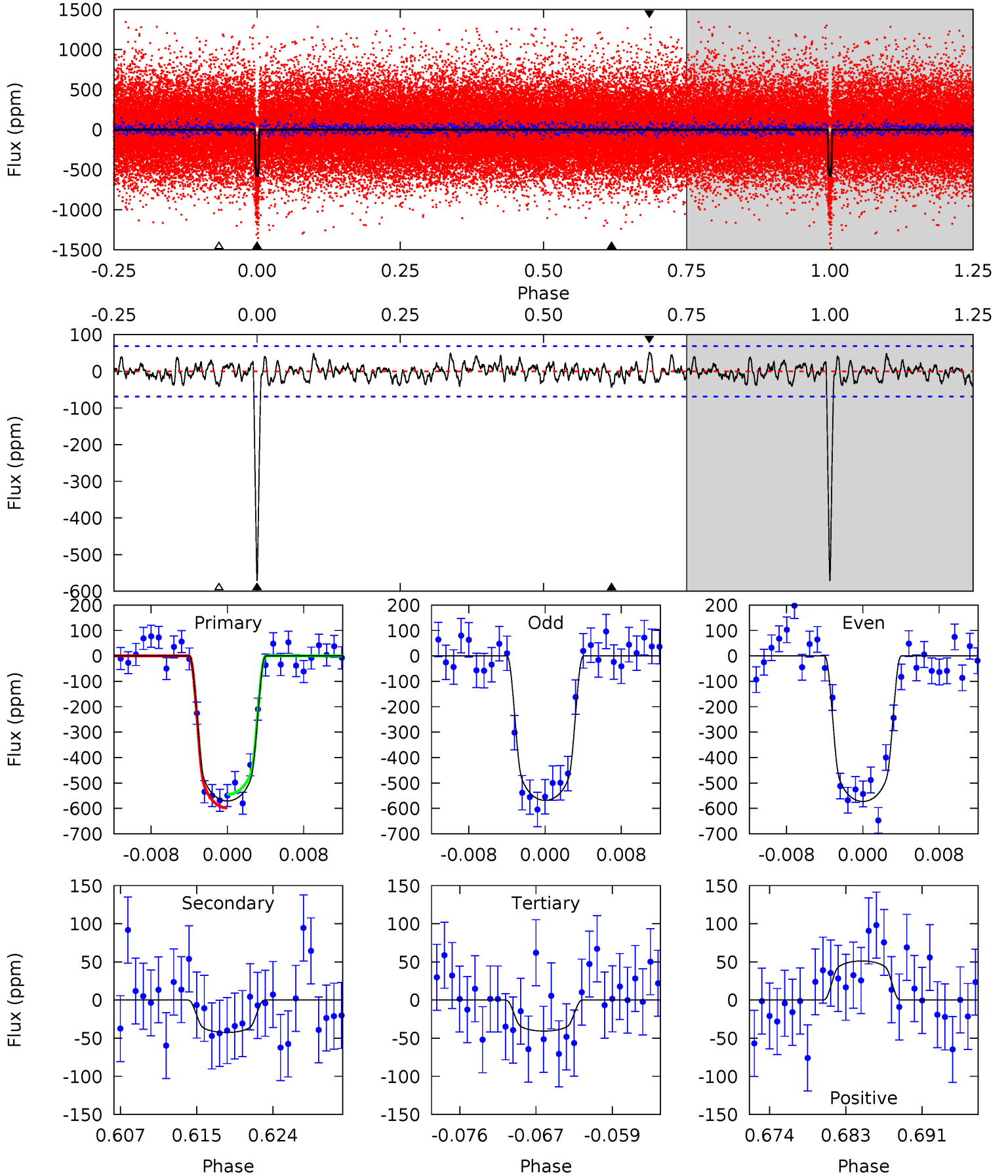
TCE 003219995-01 P= 18.870564 Days $T_0=143.957429$ (BKJD)



DV Model-Shift Uniqueness Test

003219995-01, $P = 18.870608$ Days, $E = 125.085989$ Days

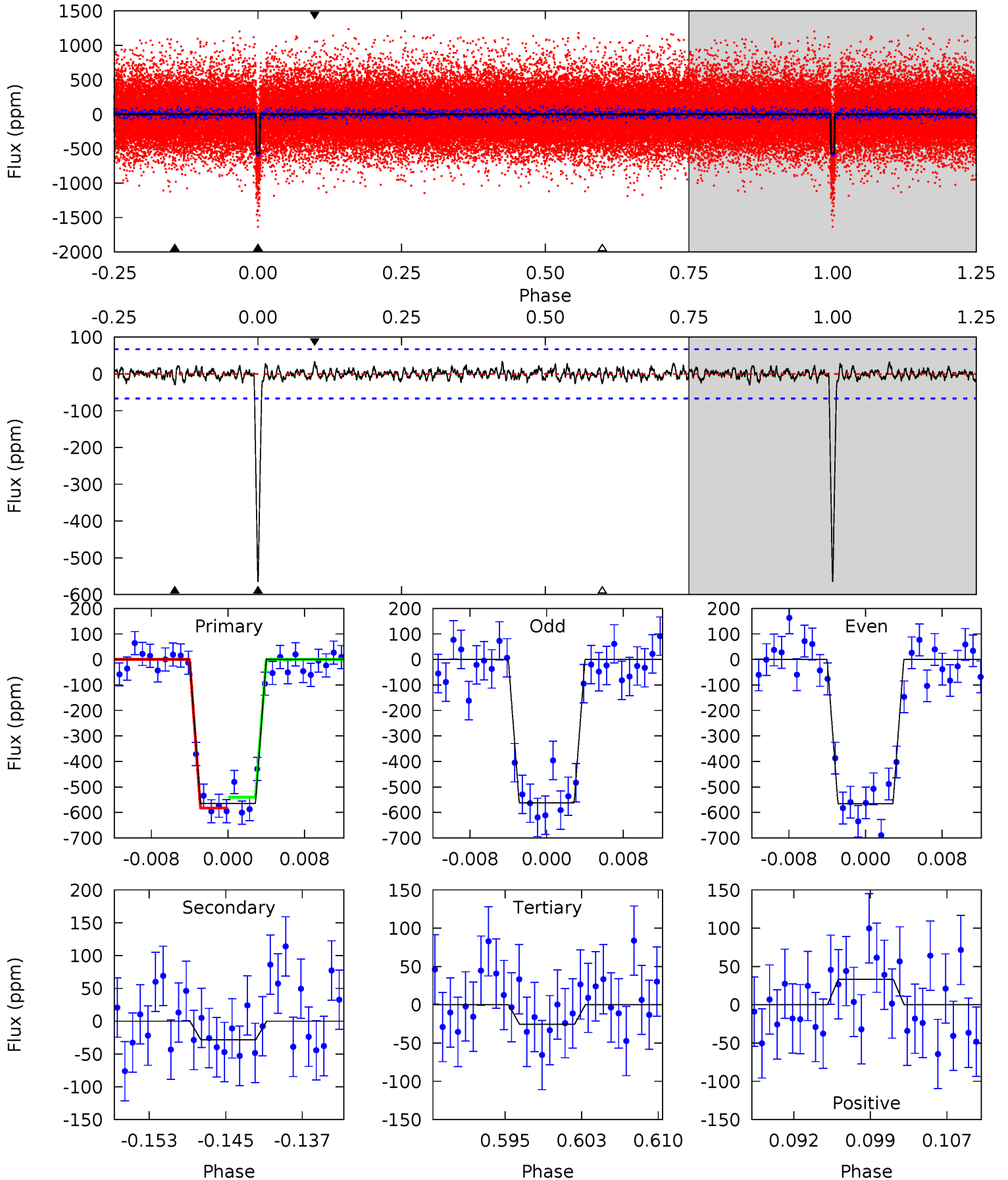
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.0	3.13	2.99	3.77	5.06	2.63	1.26	39.0	38.2	0.14	-0.64	0.16	0.98	0.08	1.95



Alt Model-Shift Uniqueness Test

003219995-01, $P = 18.870564$ Days, $E = 125.086865$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.8	2.15	1.94	2.52	5.08	2.67	0.73	40.9	40.3	0.20	-0.38	0.15	1.00	0.06	1.60



Stellar Parameters For KIC 003219995

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6103^{+181}_{-200}	$4.496^{+0.040}_{-0.229}$	$-0.200^{+0.300}_{-0.300}$	$0.949^{+0.303}_{-0.101}$	$1.028^{+0.139}_{-0.139}$	$1.697^{+0.376}_{-0.940}$
	+3%/-3%	+1%/-5%	+150%/-150%	+32%/-11%	+14%/-14%	+22%/-55%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003219995-01 / KOI 2314.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-43 ± 14	$2.79^{+0.51}_{-0.44}$	1006^{+78}_{-53}	3550^{+242}_{-249}	57^{+30}_{-21}
Alt.	-28 ± 13	$2.62^{+0.51}_{-0.43}$	1009^{+81}_{-50}	3388^{+300}_{-355}	42^{+30}_{-23}

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 $A_{obs} \gg 1.0$

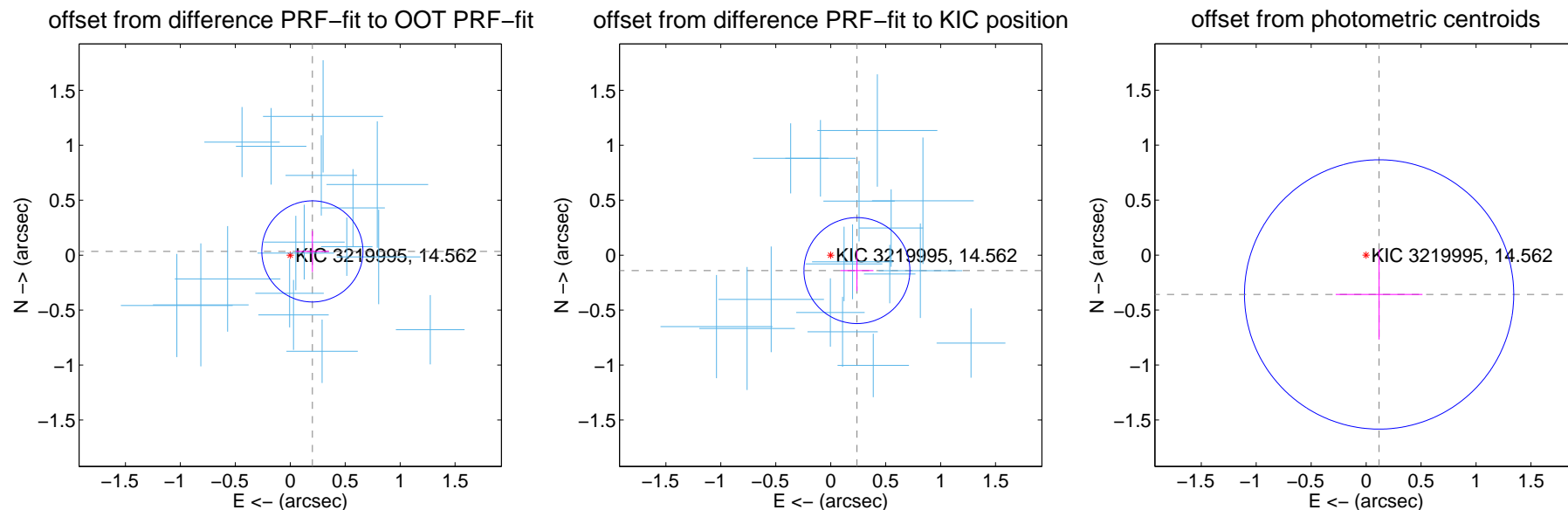
DV Centroid Data

Supplemental centroid analysis for 003219995-01. Kepler magnitude: 14.56. Transit SNR 27.74

There are 17 quarters with good PRF difference image offsets

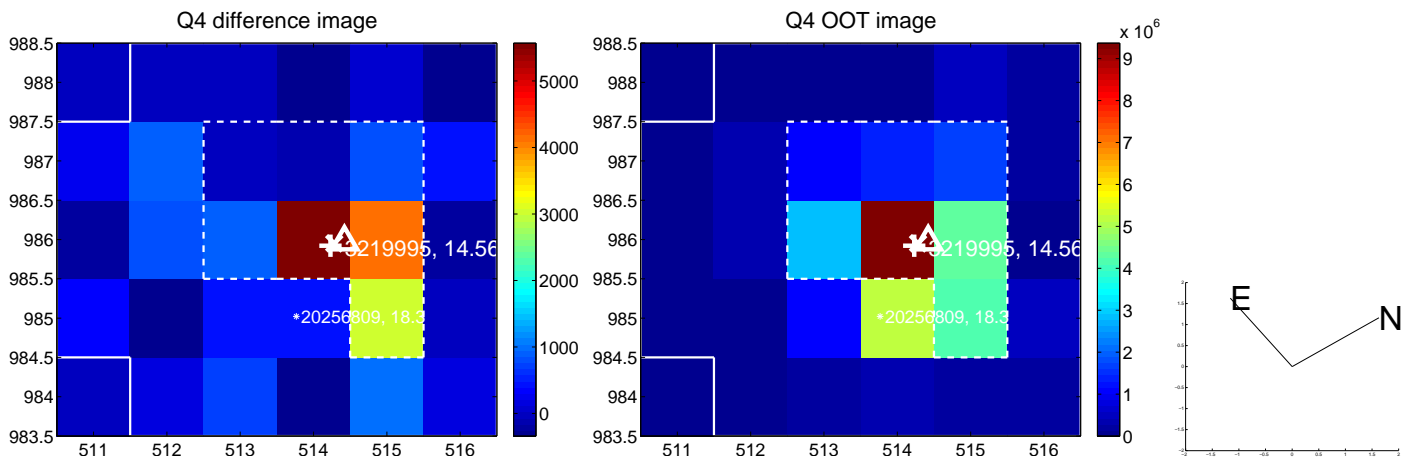
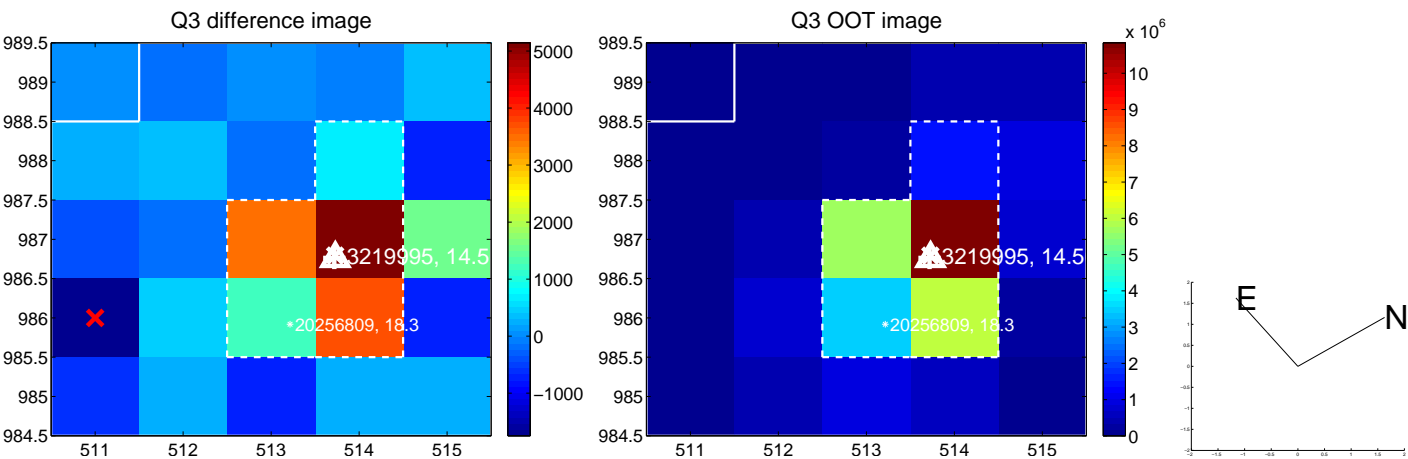
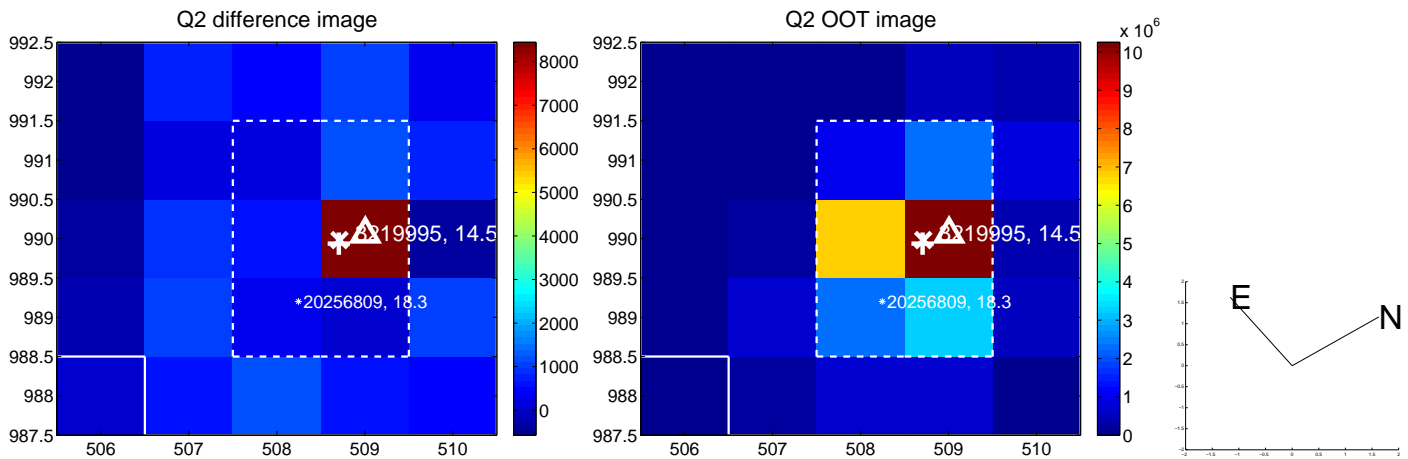
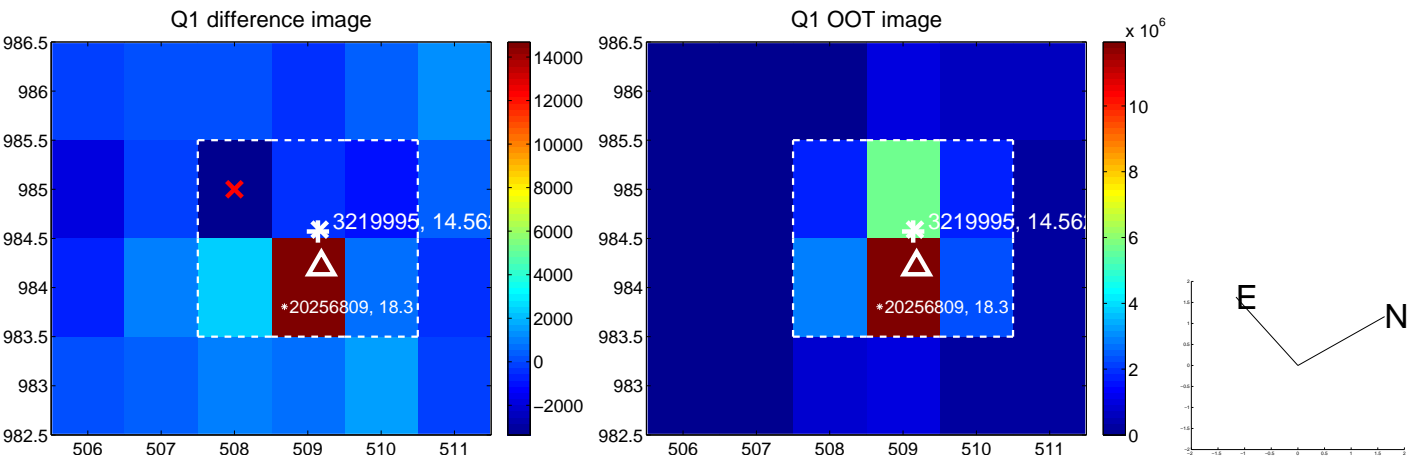
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.204 ± 0.153	1.33	-0.201 ± 0.152	0.034 ± 0.186
PRF-fit source offset from KIC position	0.277 ± 0.161	1.72	-0.238 ± 0.151	-0.140 ± 0.186
photometric centroid source offset	0.38 ± 0.41	0.92	-0.12 ± 0.39	-0.36 ± 0.41

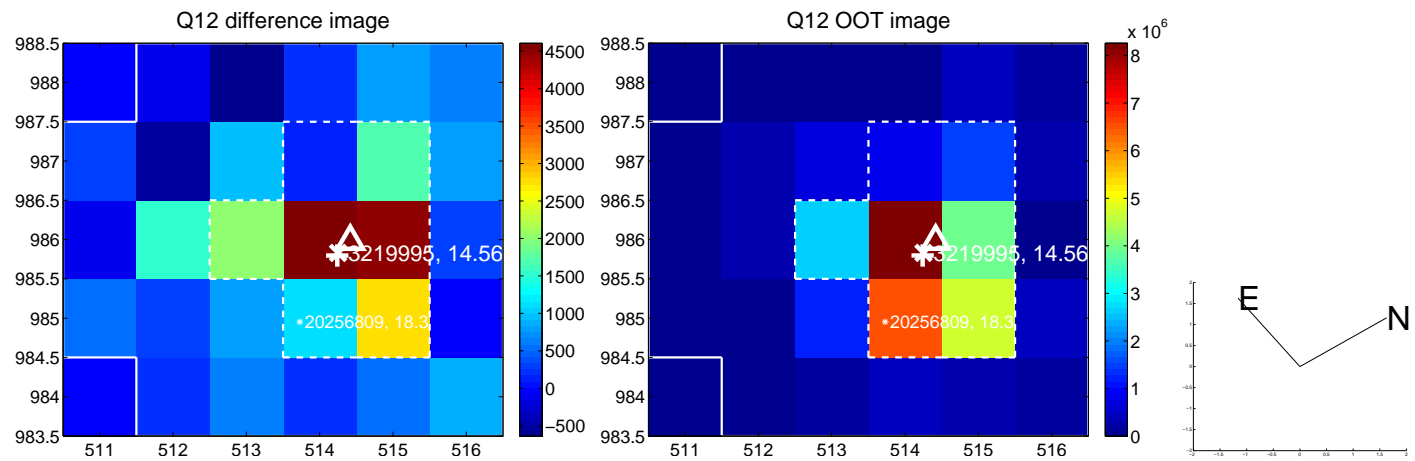
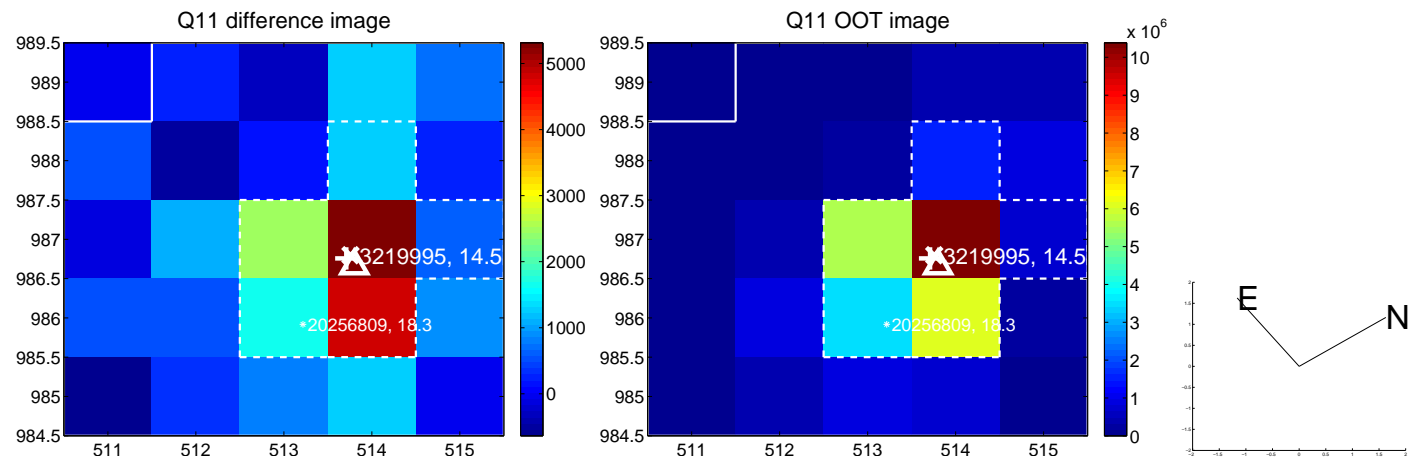
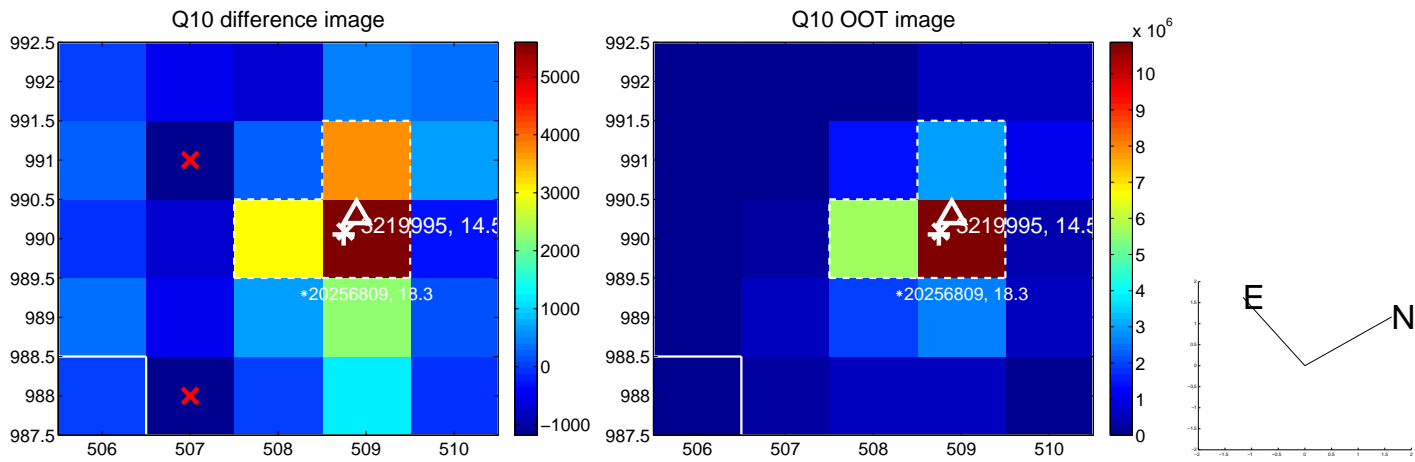
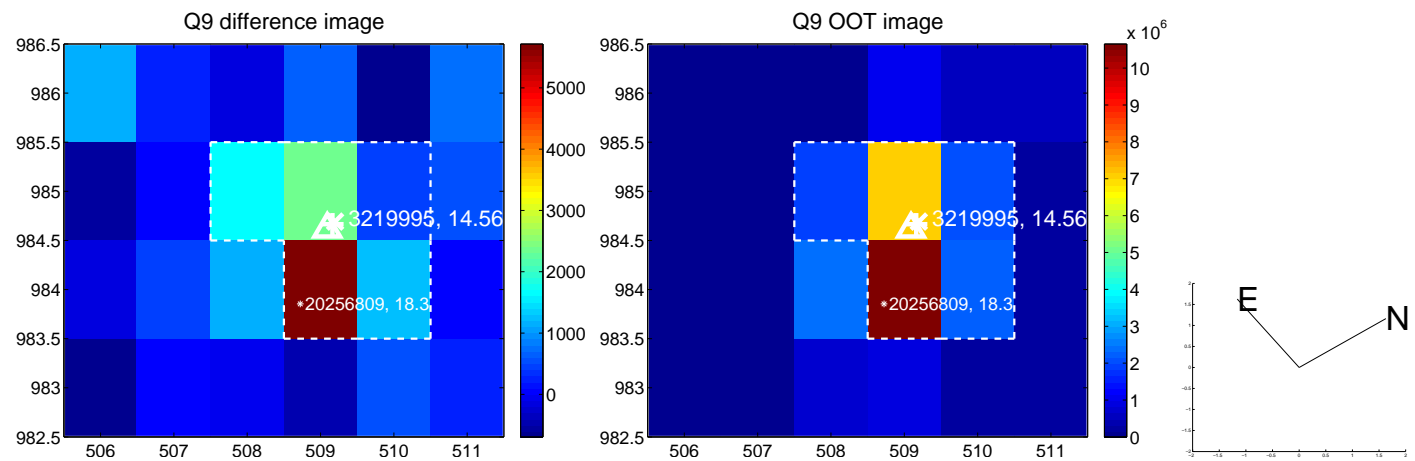


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

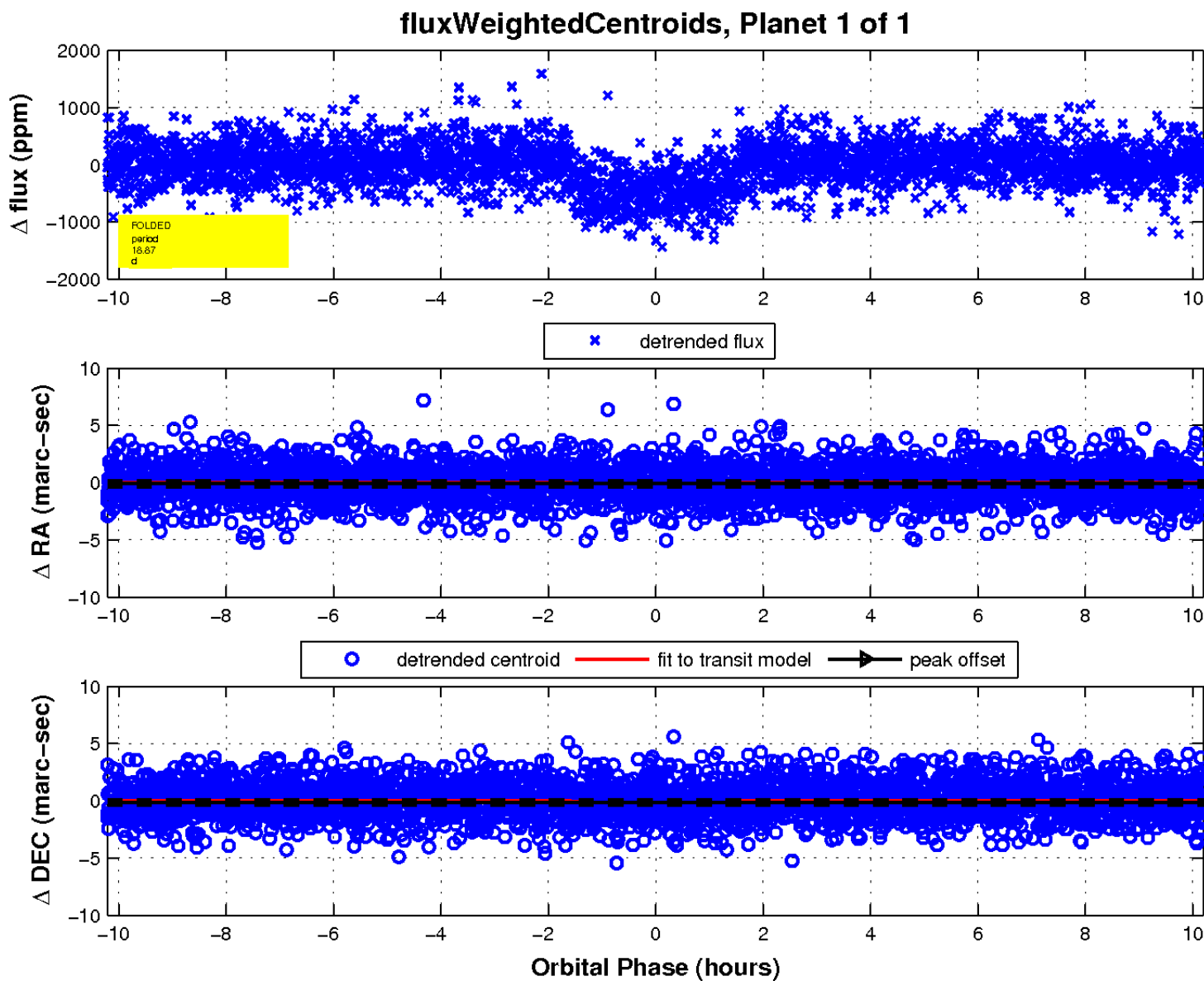
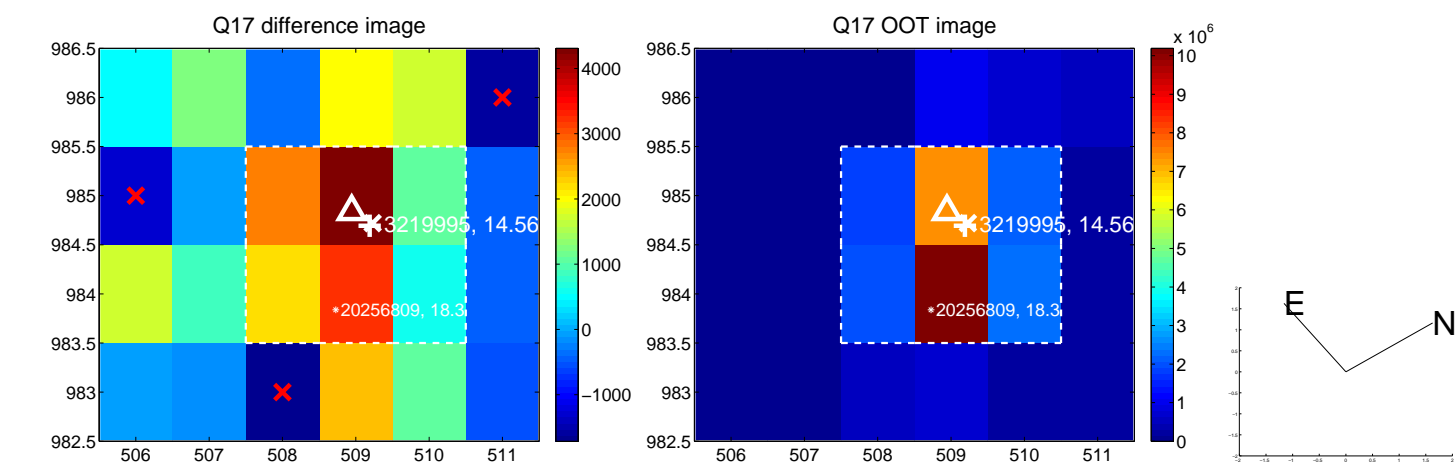
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



UKIRT Image

