

KIC 008299947

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R _★ (R _☉)	T _★ (K)	R _p (R _⊕)	S _p (S _⊕)
008299947-01	OBS	3631.01	2.682790	131.561405	403340.9	4.639	1816.9	932.8	1.00	5780	69.51	700.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008299947-01	OBS	FP	0.00	0	1	0	0	MOD_ODDEVEN_DV—MOD_ODDEVEN_ALT—DEEP_V_SHAPED—SEASONAL_DEPTH_ALT—CENT_KIC_POS

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.

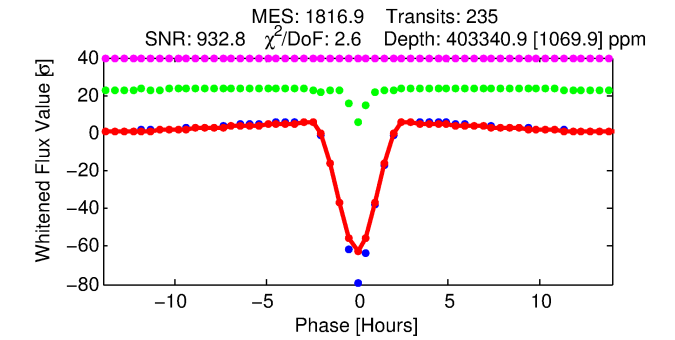
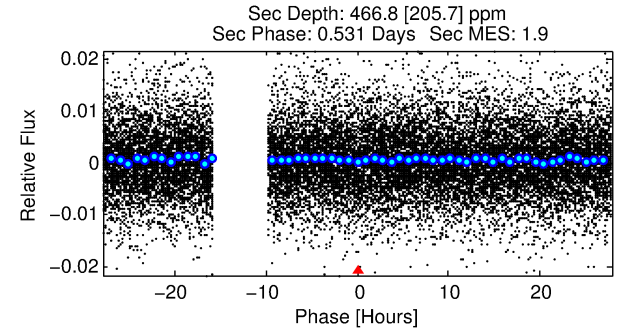
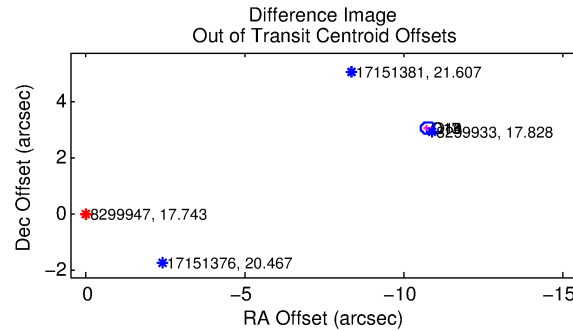
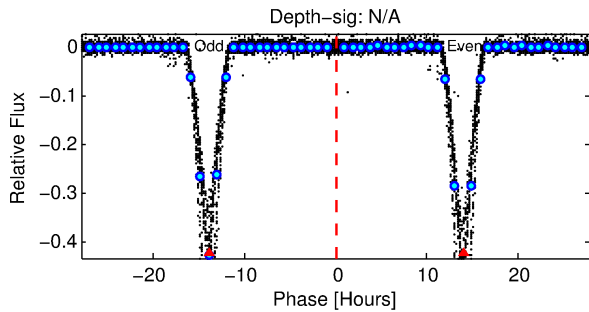
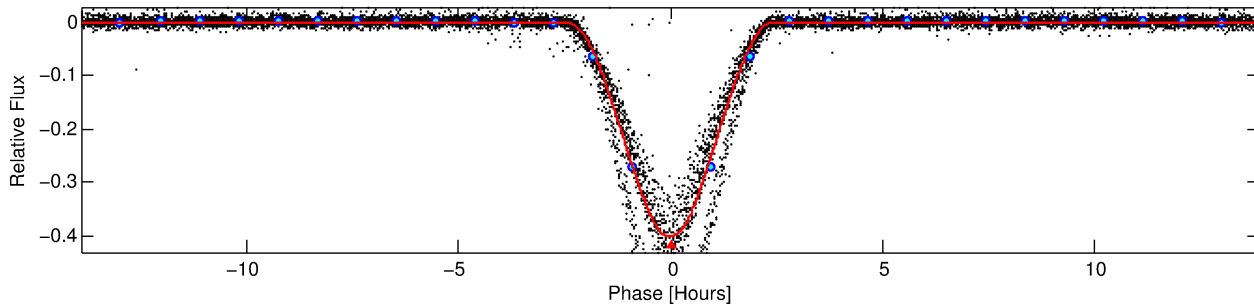
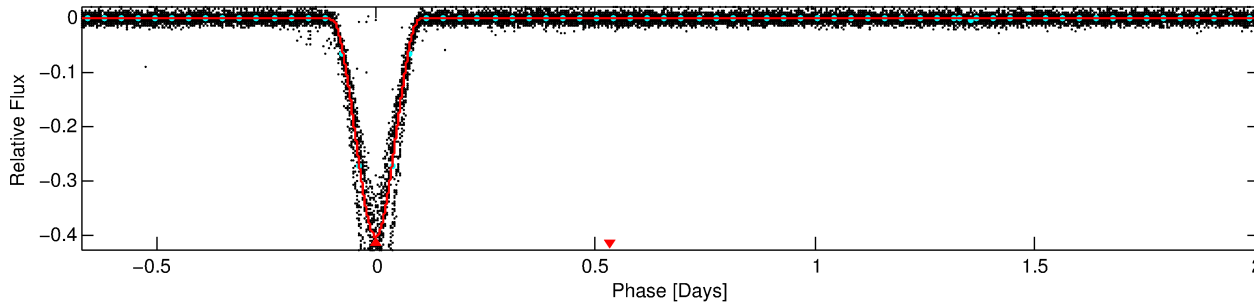
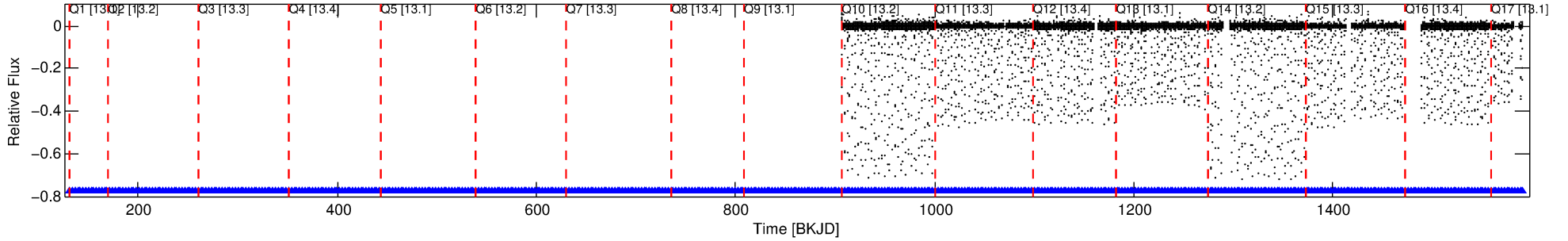
Ephemeris Match Information For 008299947-01

No Significant Match Found

DV One-Page Summary

KIC: 8299947 Candidate: 1 of 1 Period: 2.683 d
KOI: K03631.01 Corr: 0.966

Kp: 17.74 R*: 1.00 Rs Teff: 5780.0 K Logg: 4.44 Fe/H: 0.000



DV Fit Results:

Period = 2.68279 [0.00000] d
Epoch = 131.5614 [0.0001] BKJD
Rp/R* = 0.6370 [0.0212]
a/R* = 7.01 [0.04]
b = 0.47 [0.05]
Seff = 700.09 [0.00]
Teq = 1312 [0] K
Rp = 69.51 [2.31] Re
a = 0.0378 [0.0000] AU
Ag = 0.08 [0.03] [-27.31σ]
Teffp = 1064 [119] K [-2.08σ]

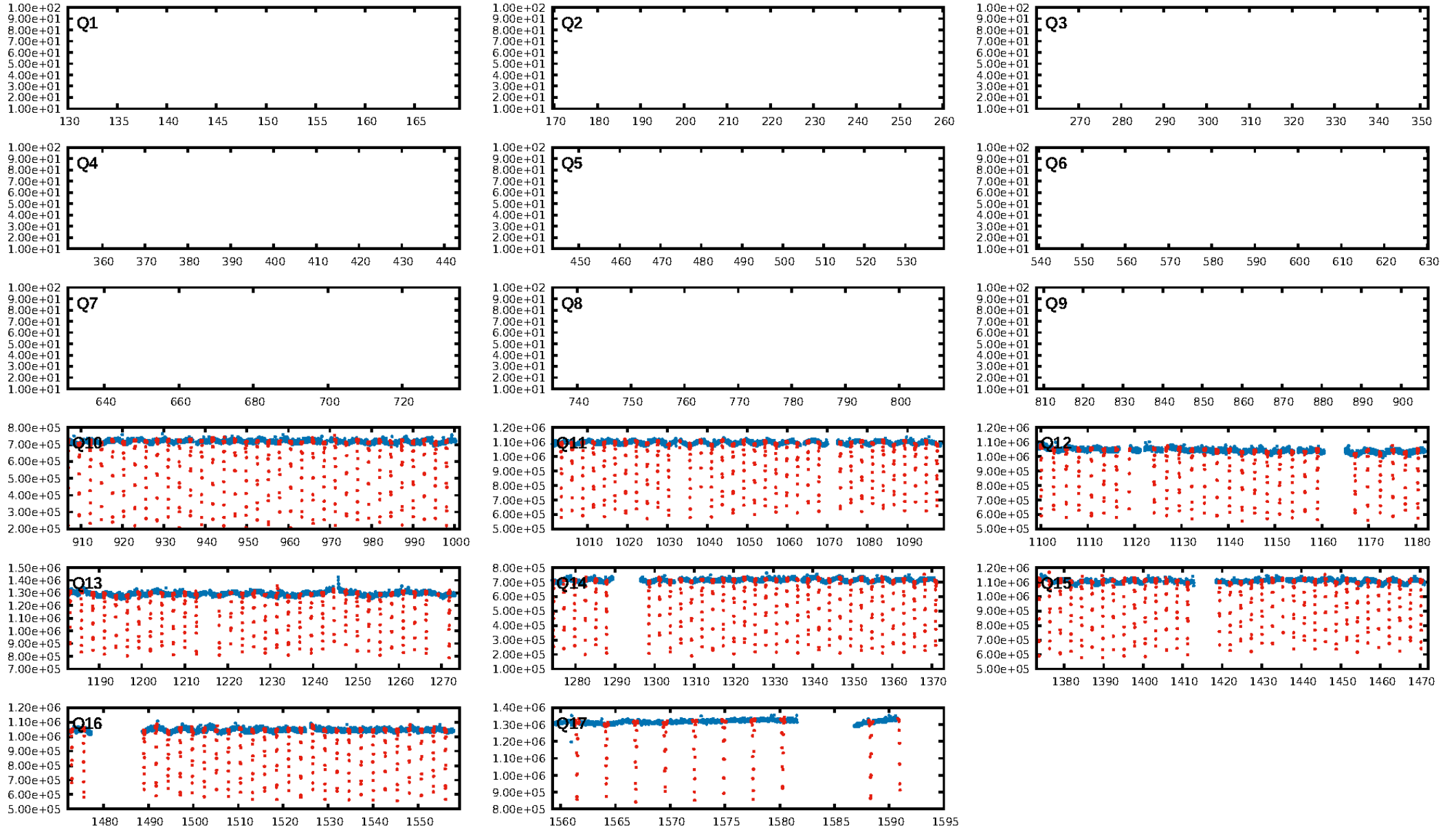
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [225/225]
GhostDiagnostic-chr: 1.838
Centroid-sig: 0.0%
Centroid-so: 4.240 arcsec [2889.36σ]
OotOffset-rm: 11.157 arcsec [159.62σ]
KicOffset-rm: 0.082 arcsec [1.22σ]
OotOffset-st: 2/0/0/2 [4]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [8/8]

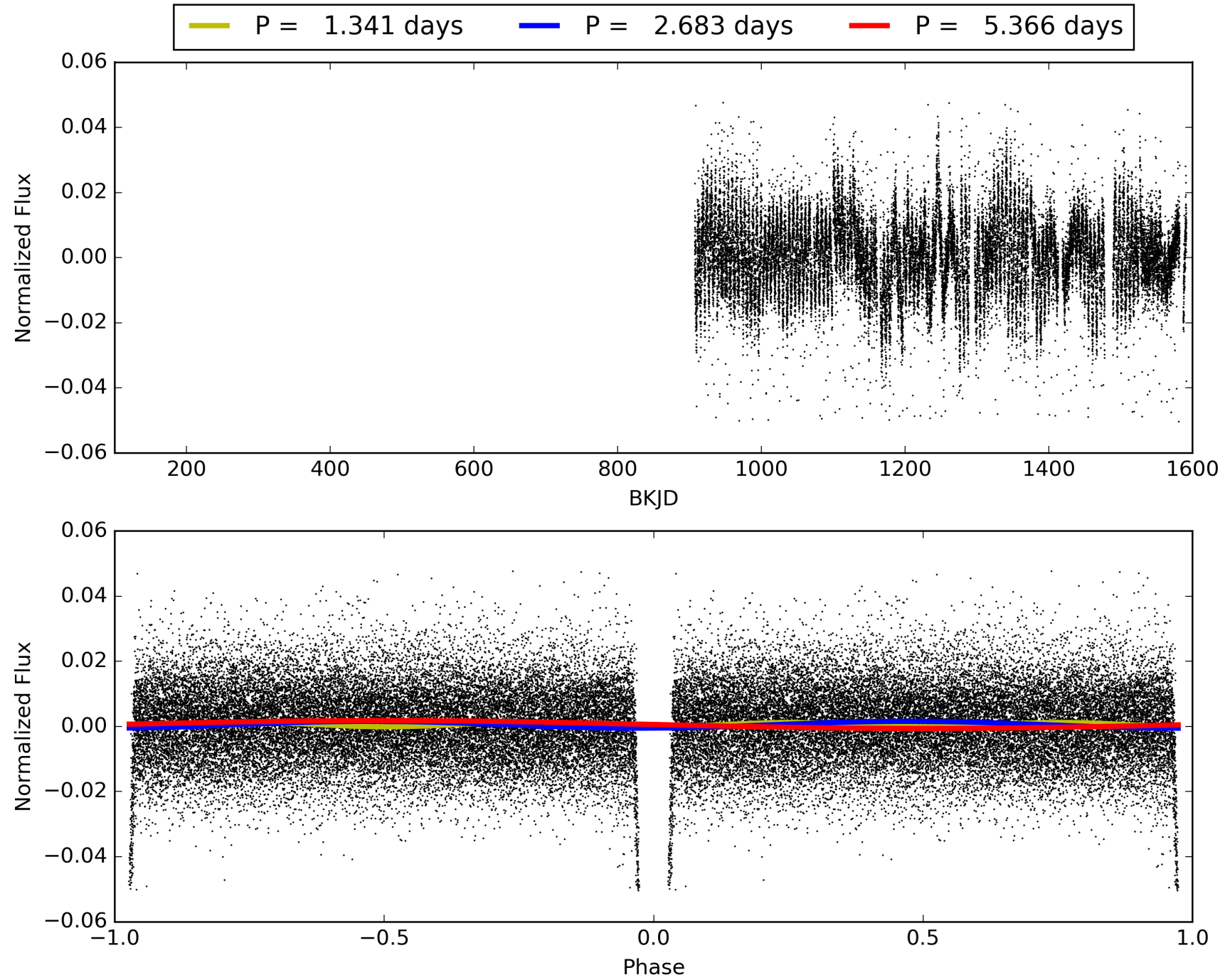
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 17:41:03 Z

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

TCE 008299947-01, PDC Light Curves

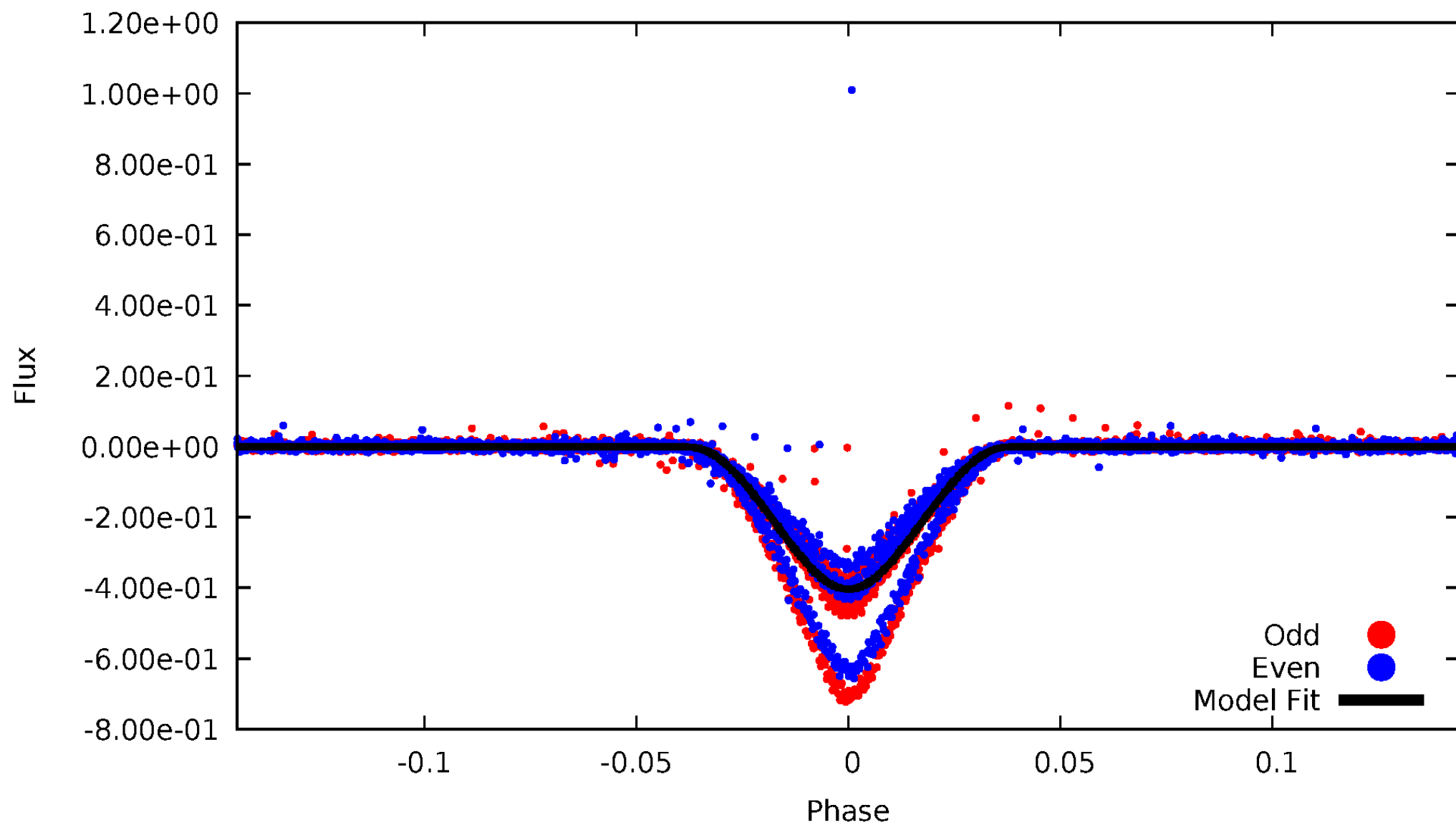


TCE 008299947-01



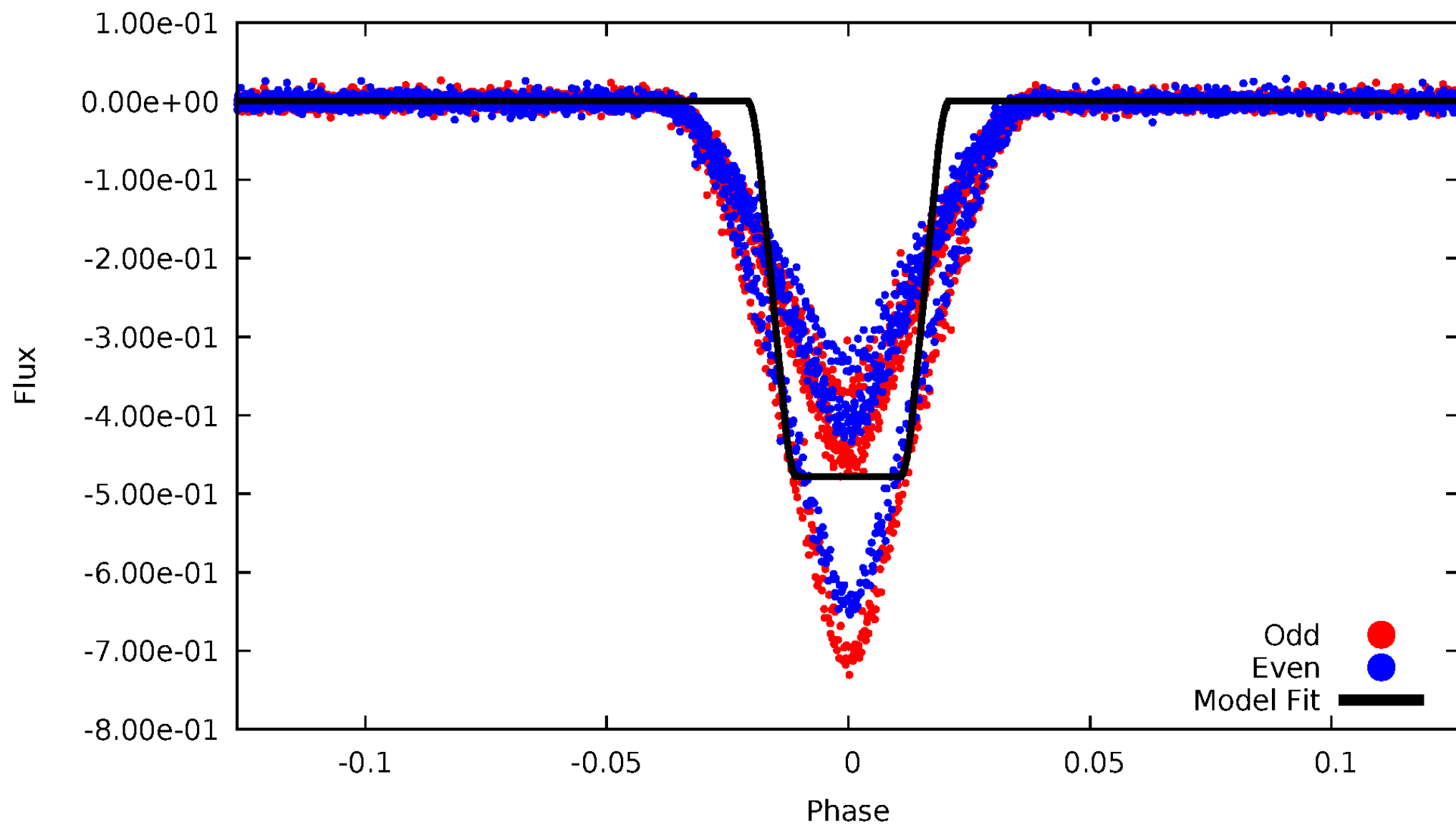
DV Odd/Even

TCE 008299947-01



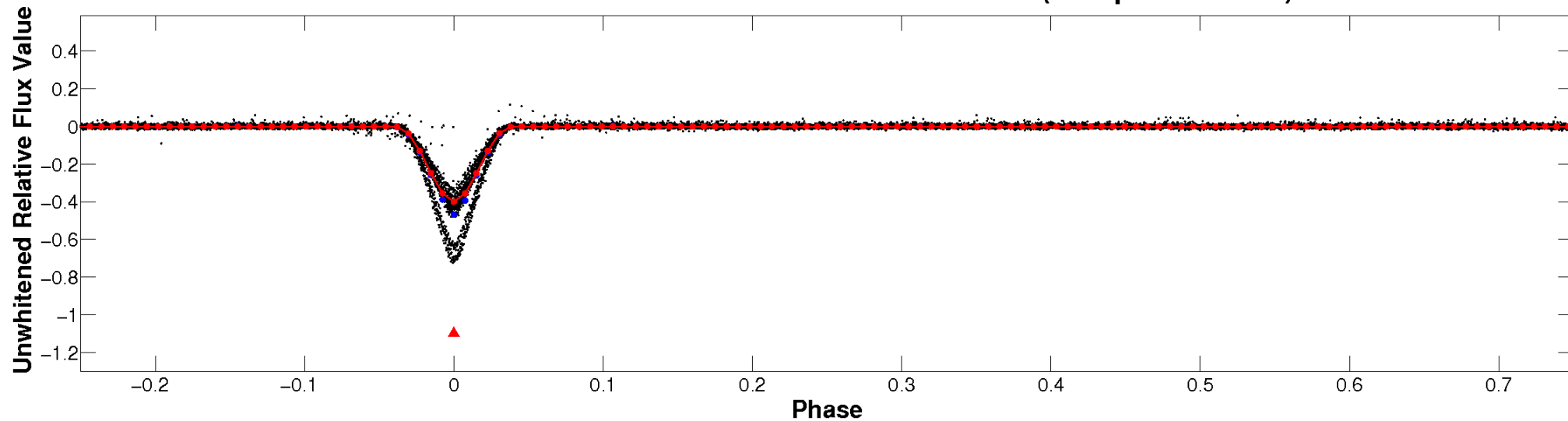
ALT Odd/Even

TCE 008299947-01

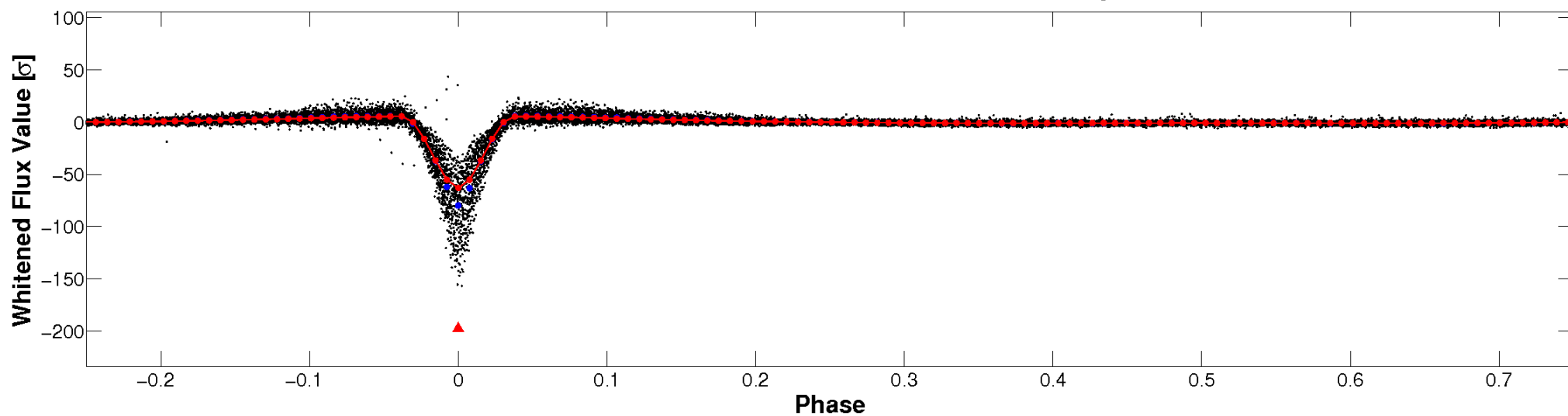


Non-Whitened Vs. Whitened Light Curve

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

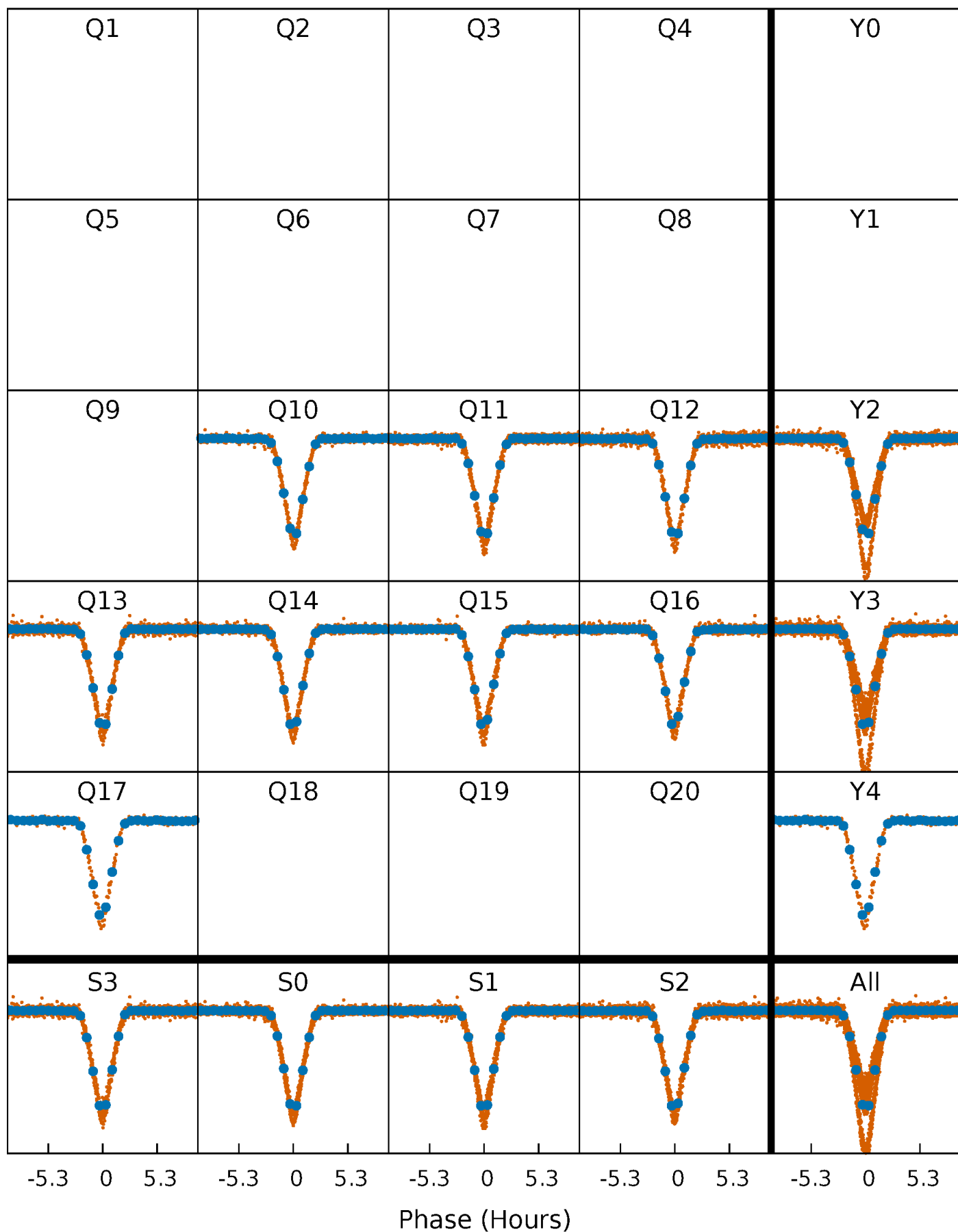


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



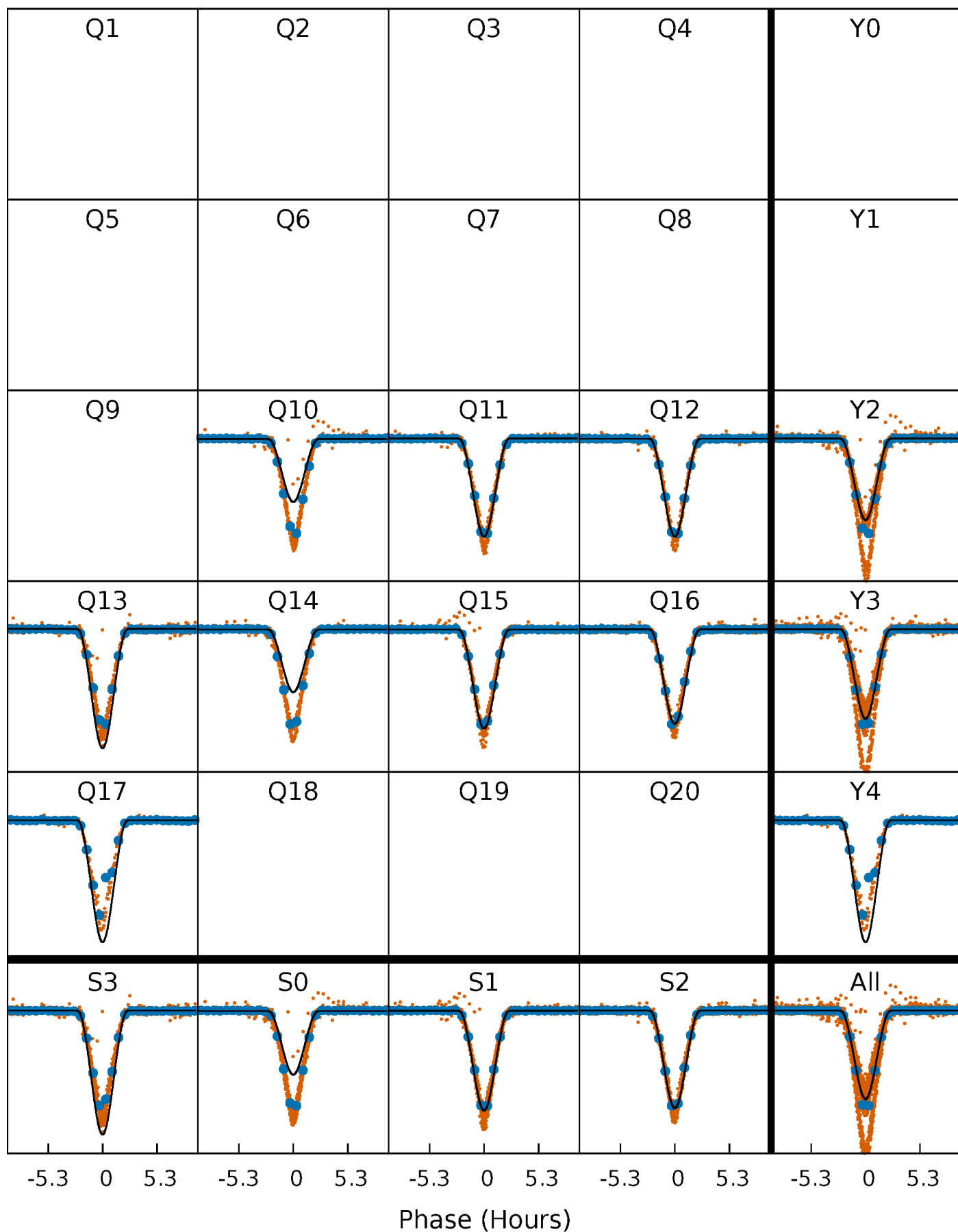
PDC Quarter-Phased Transit Curves

TCE 008299947-01 P= 2.682790 Days $T_0=131.561405$ (BKJD)



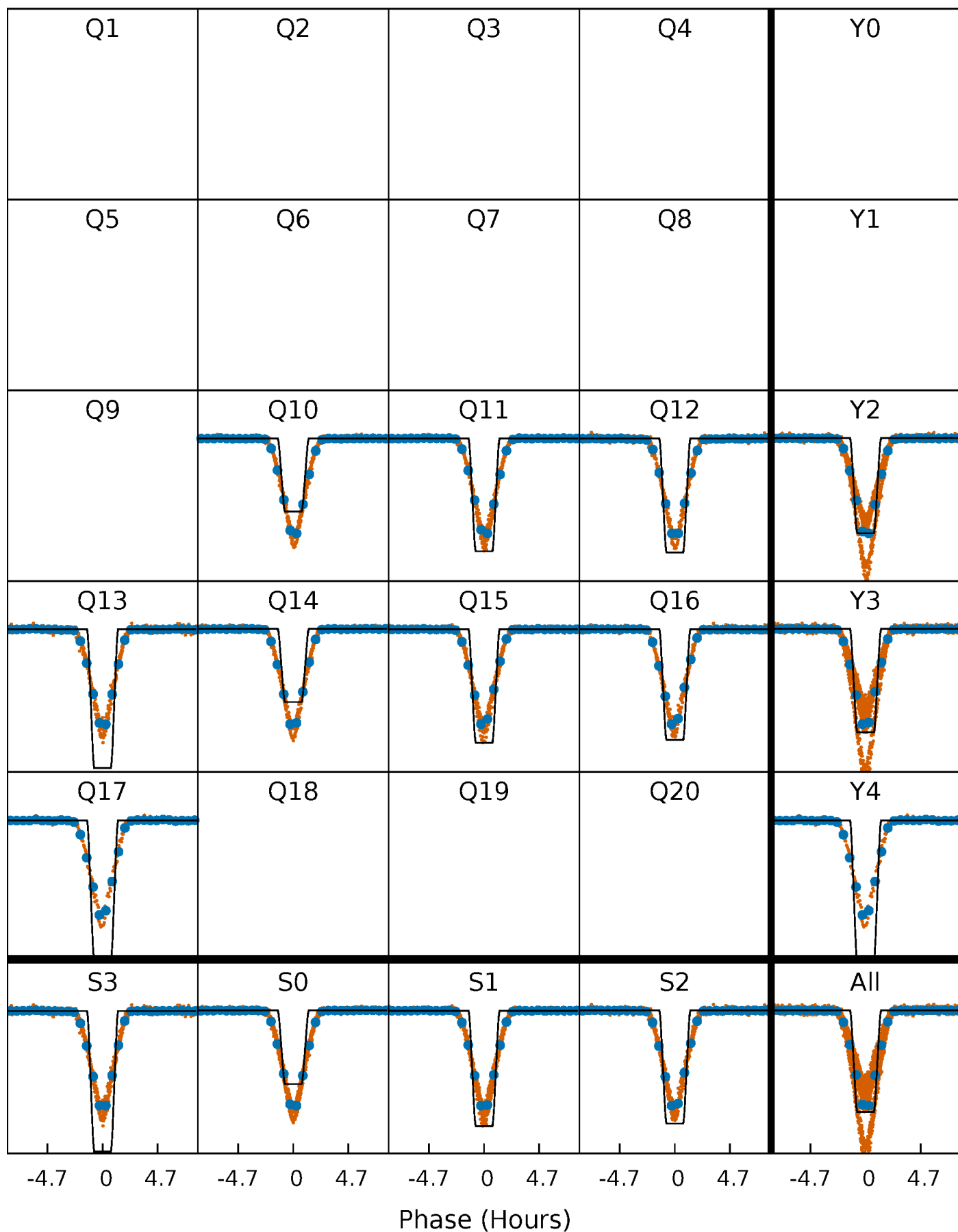
DV Quarter-Phased Transit Curves

TCE 008299947-01 P= 2.682790 Days $T_0=131.561405$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

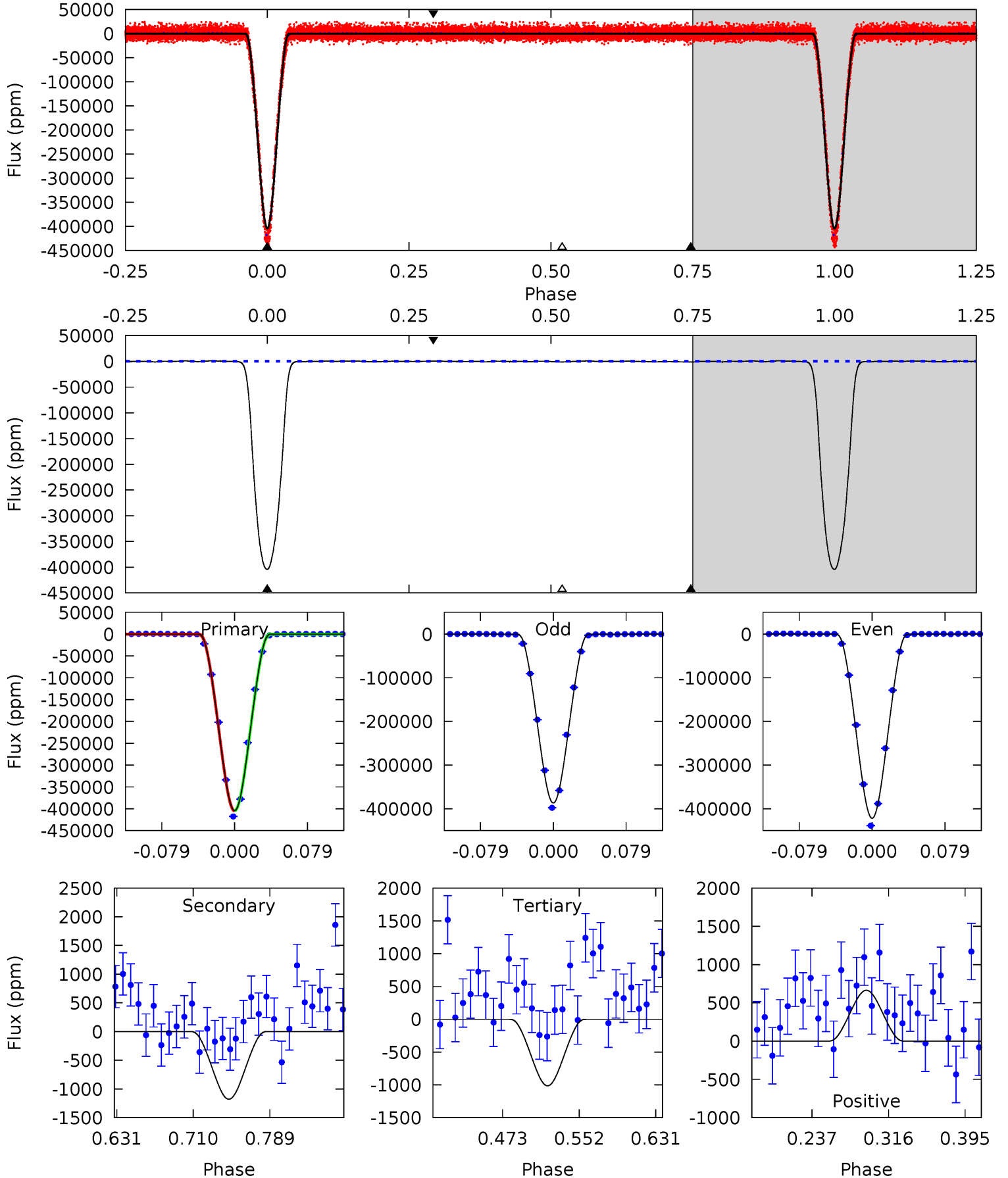
TCE 008299947-01 $P = 2.682789$ Days $T_0 = 131.561645$ (BKJD)



DV Model-Shift Uniqueness Test

008299947-01, P = 2.682790 Days, E = 131.561405 Days

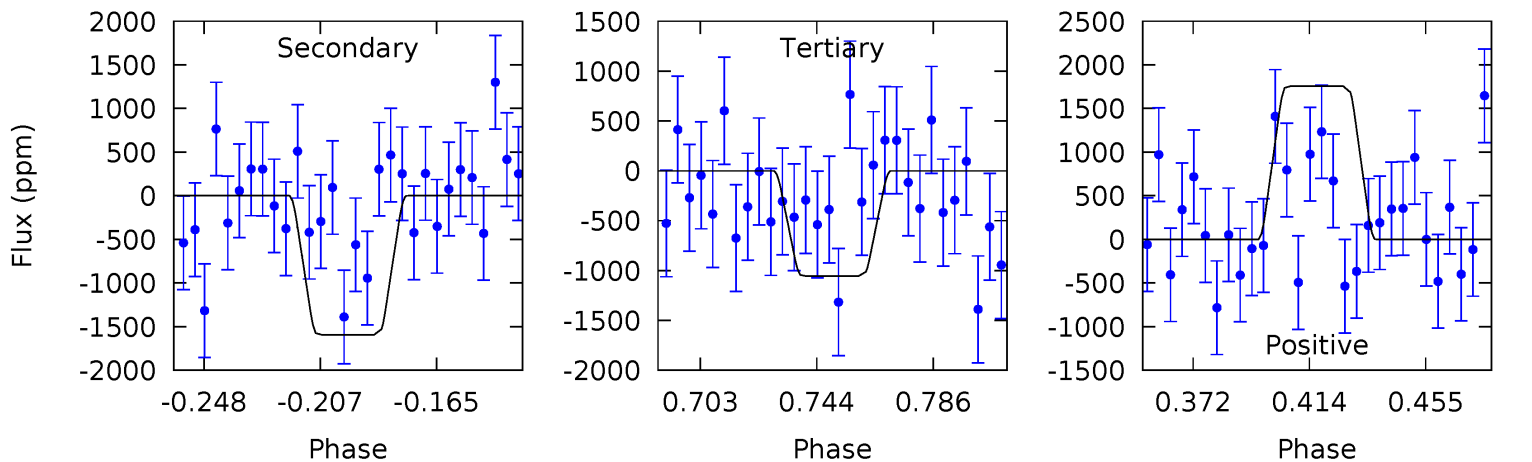
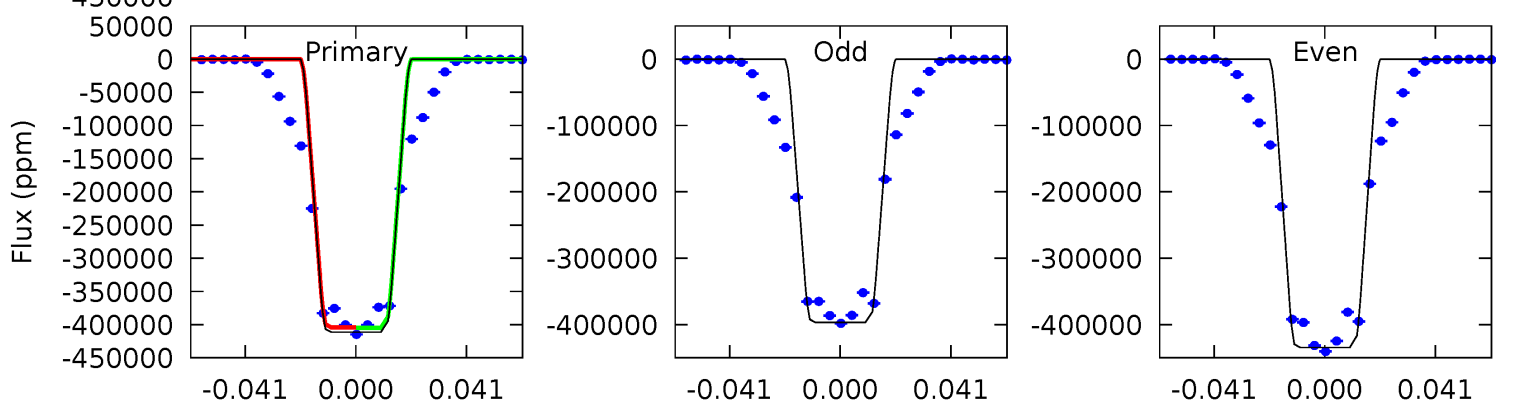
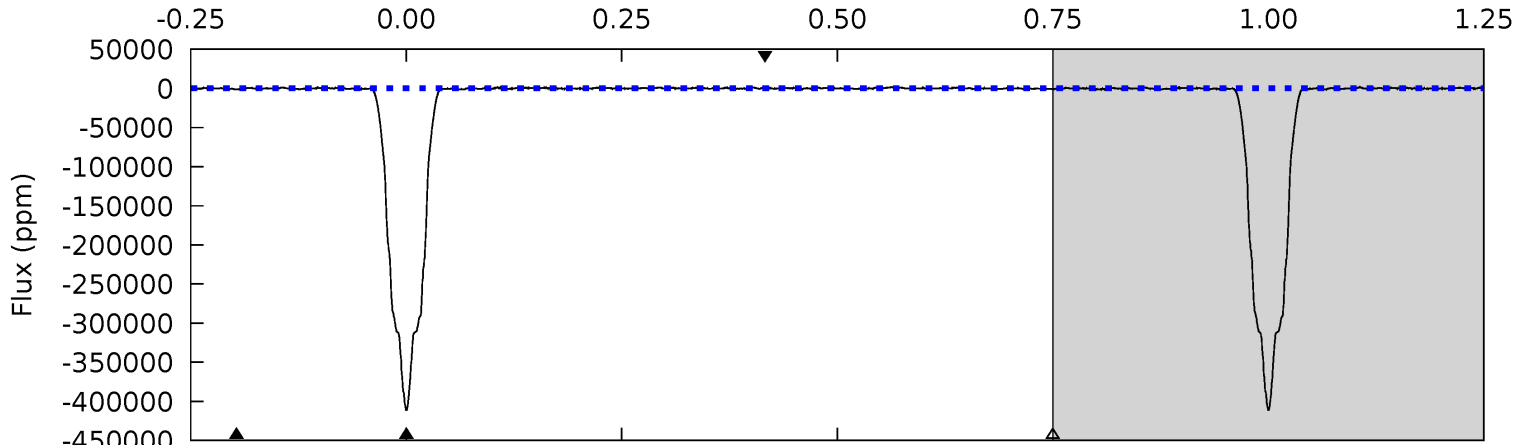
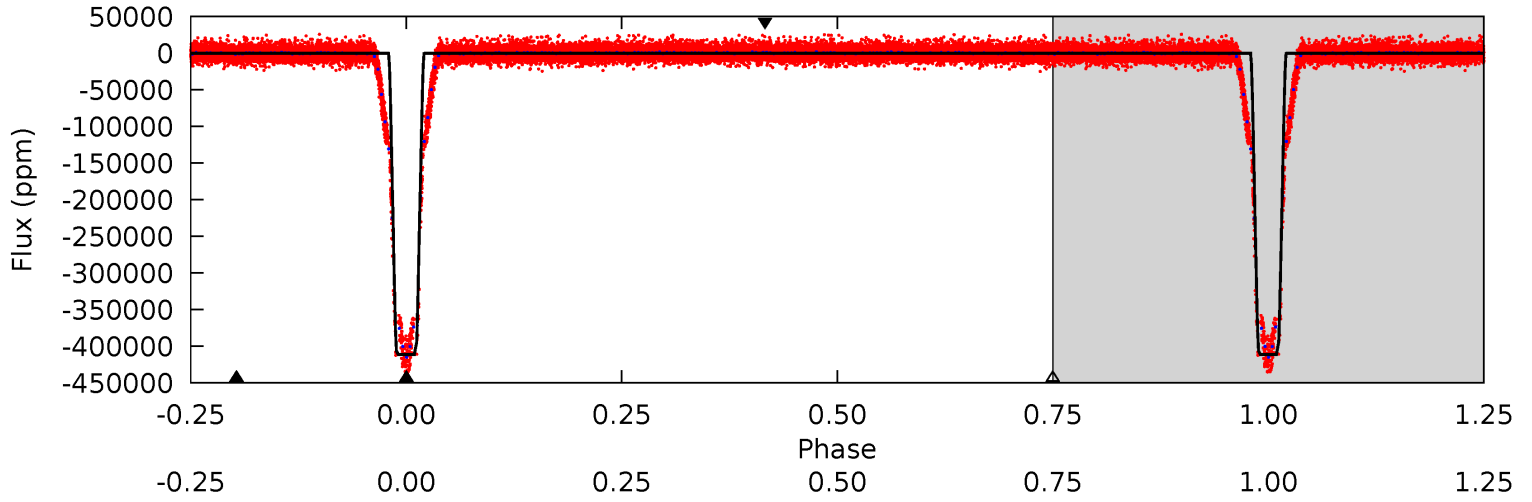
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2466	7.19	6.19	4.05	4.61	1.76	2.63	2460	2462	1.00	3.14	110.2	1.09	0.00	0



Alt Model-Shift Uniqueness Test

008299947-01, P = 2.682789 Days, E = 131.561645 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1061	4.11	2.72	4.53	4.75	2.04	1.31	1058	1056	1.39	-0.42	49.5	1.10	0.00	1.09



Stellar Parameters For KIC 008299947

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

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

Secondary Eclipse Parameters for KIC 008299947-01 / KOI 3631.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1179 ± 164	$69.58^{+5.31}_{-5.19}$	1832^{+94}_{-84}	-2134^{+132}_{-99}	$0.188^{+0.045}_{-0.035}$
Alt.	-1594 ± 388	$75.88^{+5.21}_{-5.89}$	1833^{+85}_{-84}	-2068^{+312}_{-137}	$0.221^{+0.062}_{-0.062}$

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

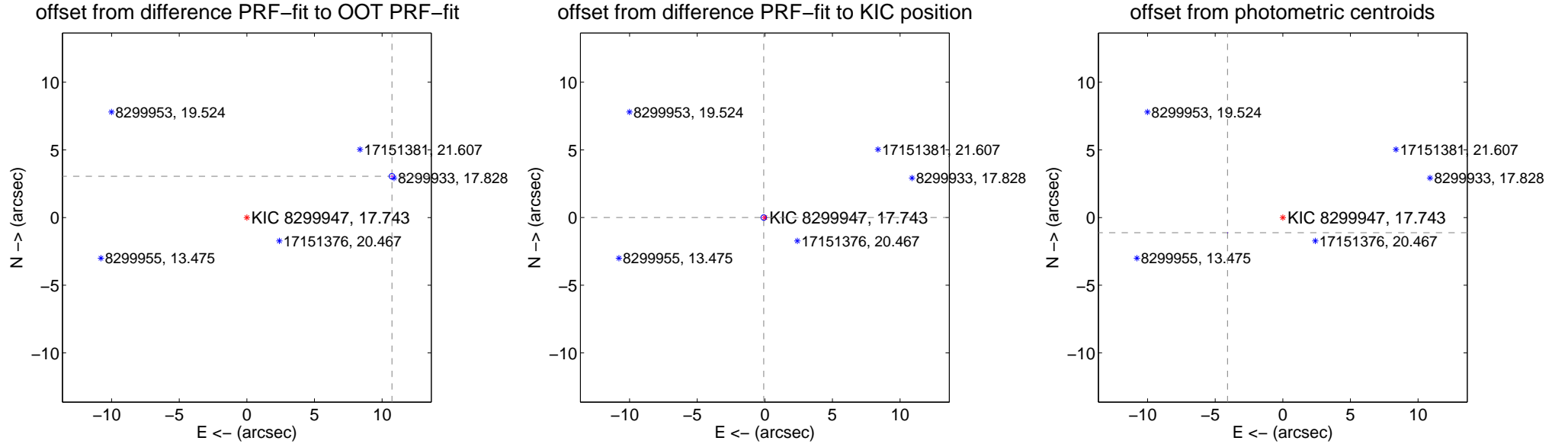
DV Centroid Data

Supplemental centroid analysis for 008299947-01. Kepler magnitude: 17.74. Transit SNR 932.76

There are 8 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 11.22 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	11.157 ± 0.070	159.62	-10.732 ± 0.070	3.049 ± 0.067
PRF-fit source offset from KIC position	0.082 ± 0.068	1.22	0.082 ± 0.068	0.000 ± 0.067
photometric centroid source offset	4.24 ± 0.00	2889.36	4.09 ± 0.00	-1.12 ± 0.00



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.

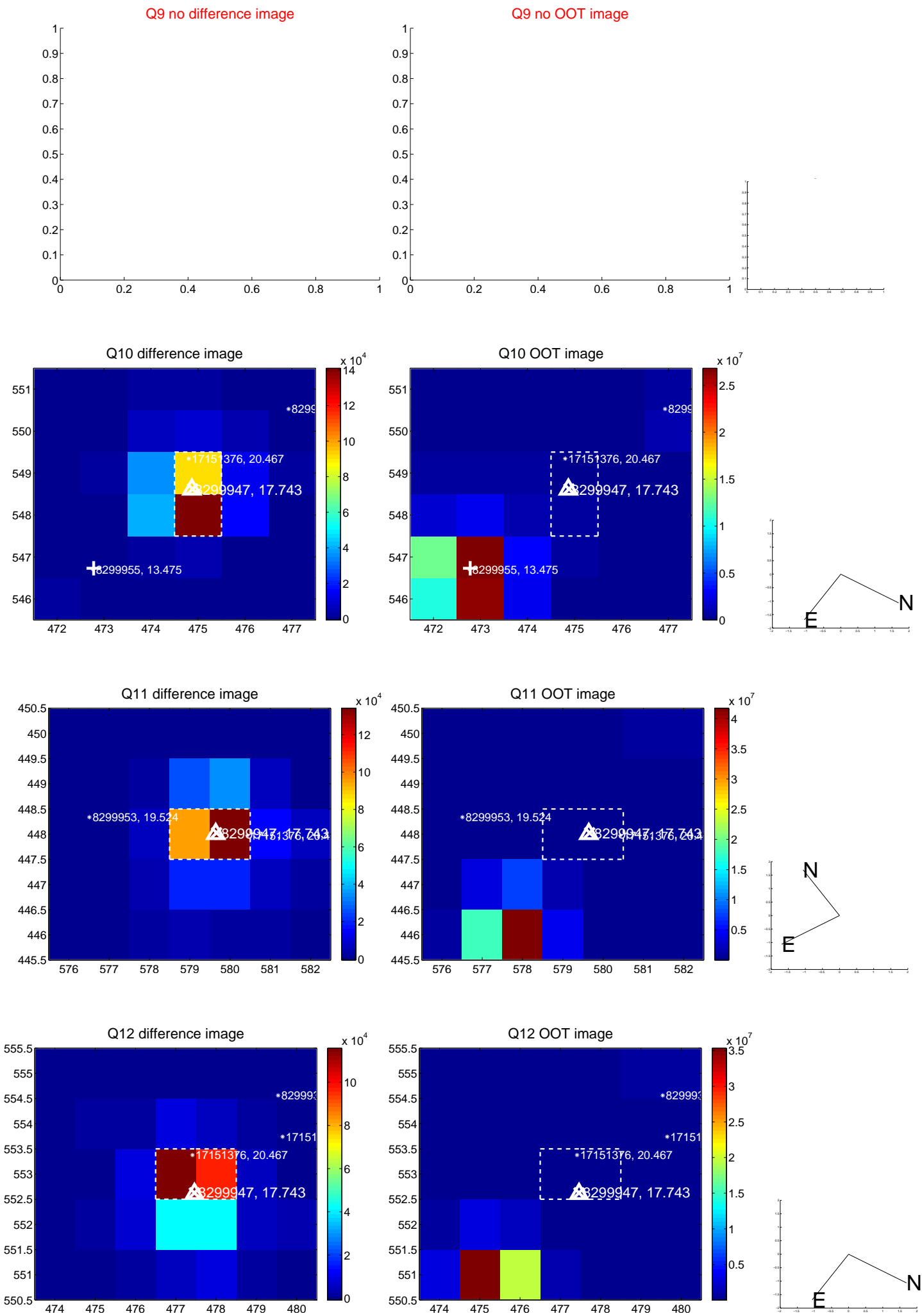
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



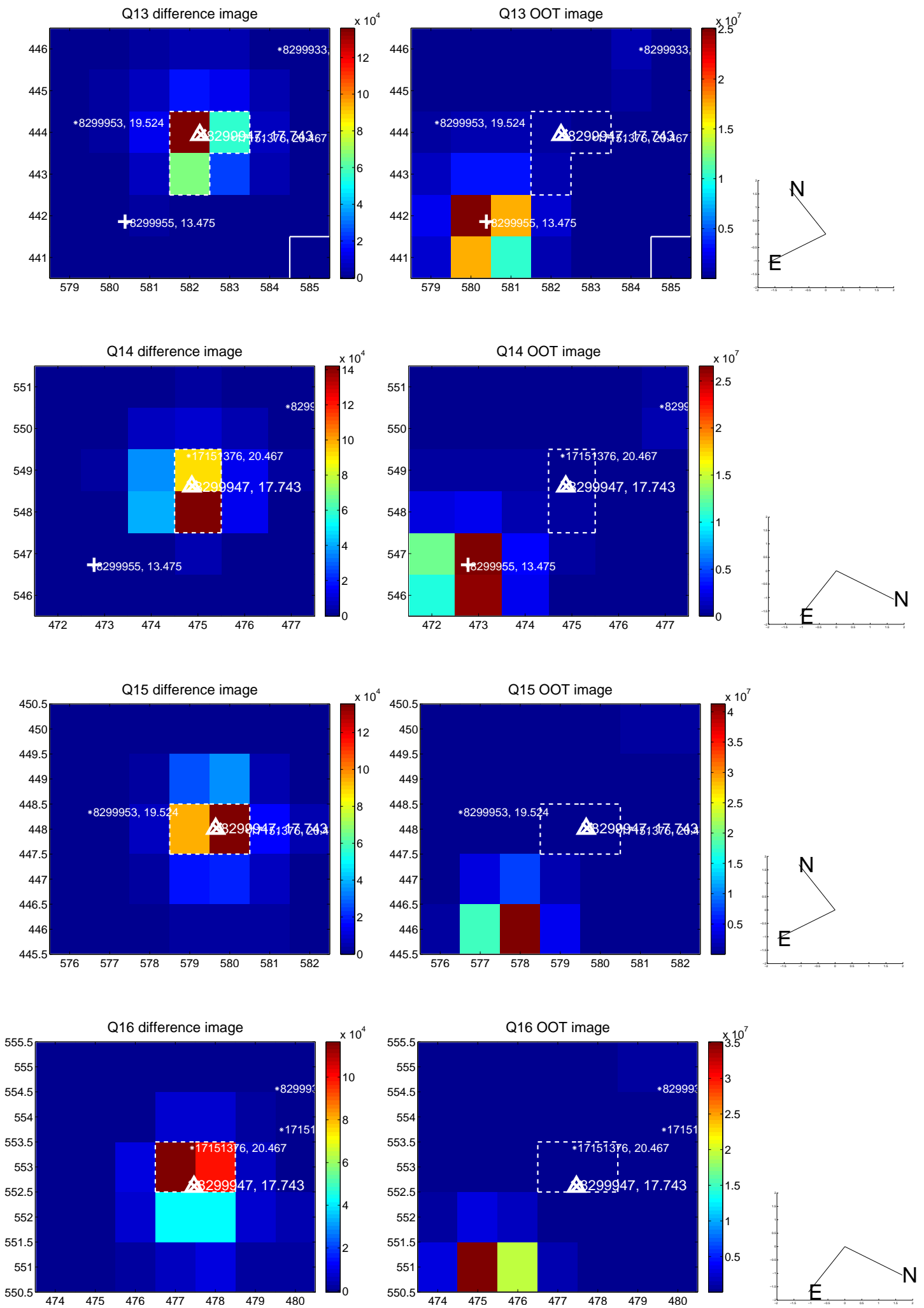
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



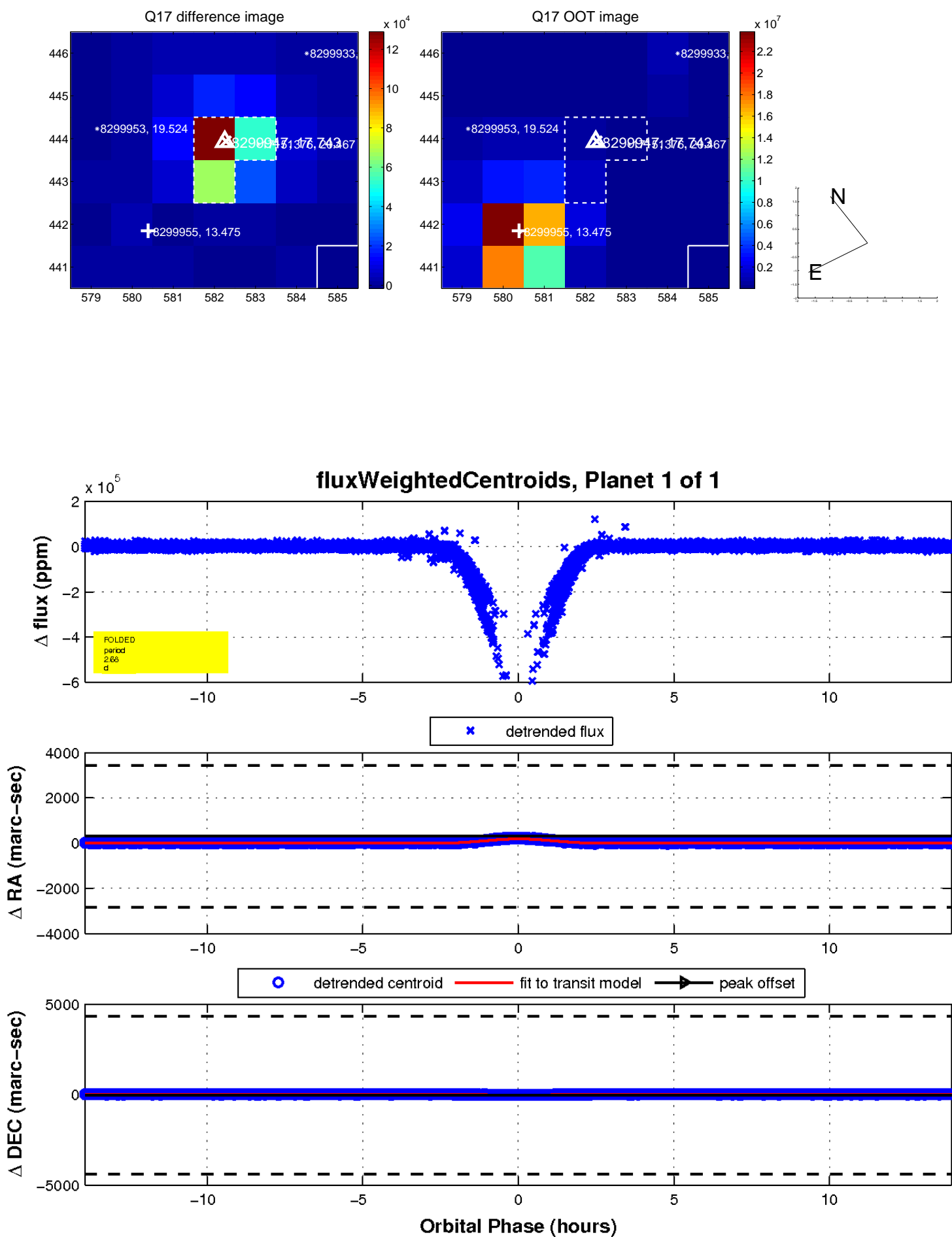
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UKIRT Image

Declination

