

KIC 003656700

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})
003656700-01	OBS	6350.01	0.738527	132.024882	192.8	0.600	24.3	42.4	2.31	5869	3.91	18625.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003656700-01	OBS	FP	0.00	0	1	1	0	MOD_SEC_ALT—CENT_RESOLVED_OFFSET—HALO_GHOST

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.

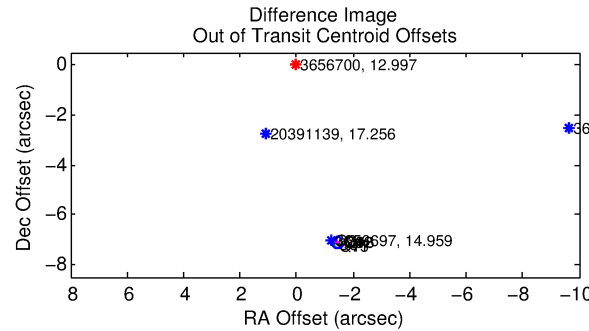
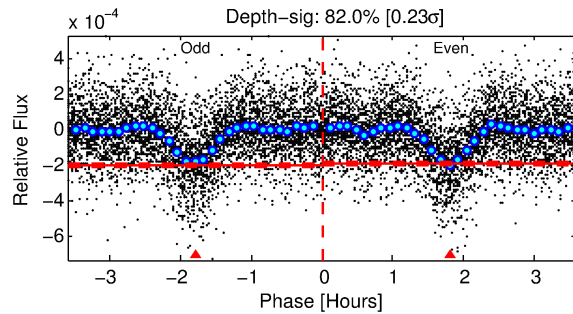
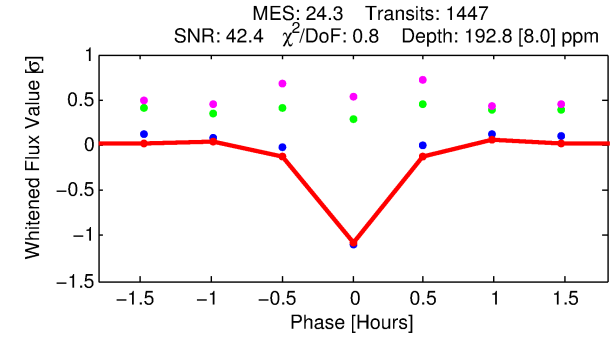
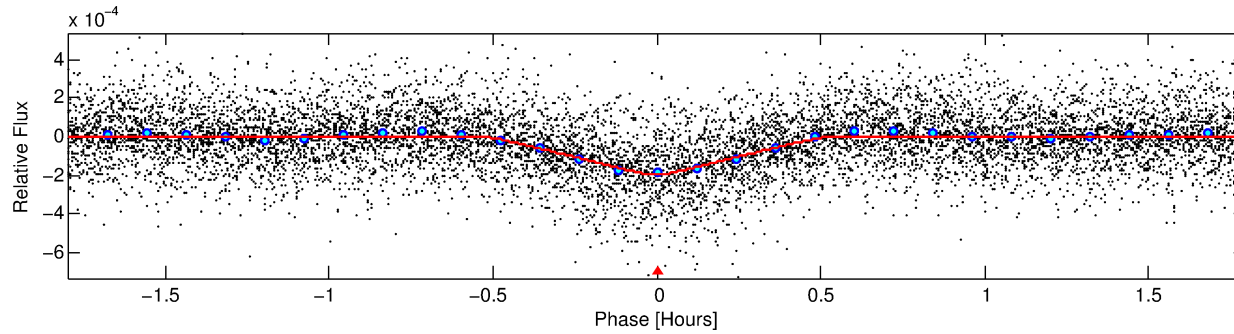
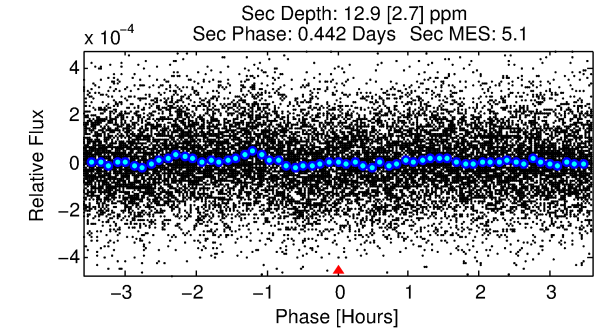
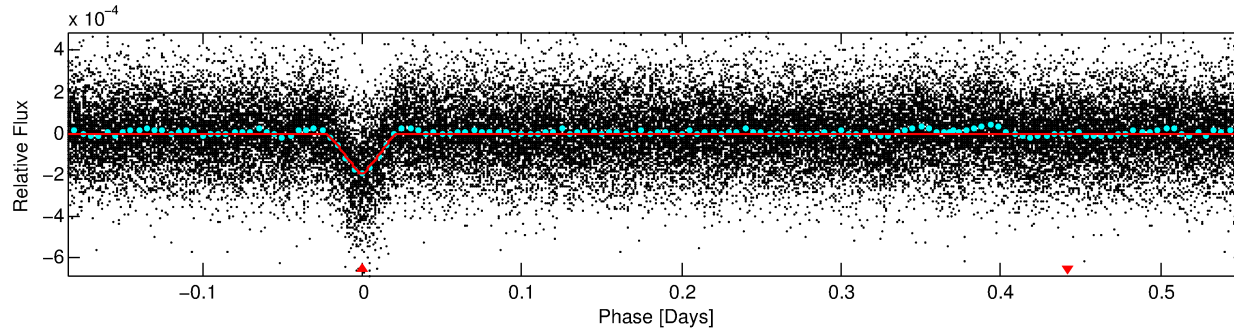
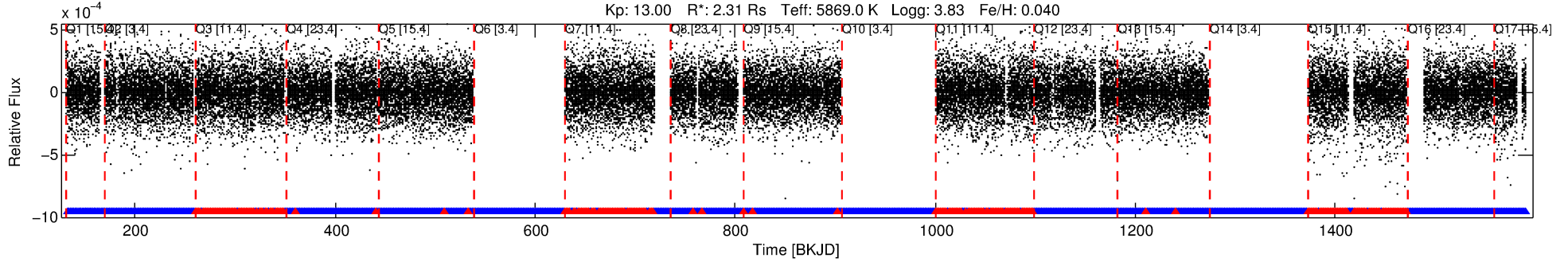
Ephemeris Match Information For 003656700-01

No Significant Match Found

DV One-Page Summary

KIC: 3656700 Candidate: 1 of 1 Period: 0.739 d
KOI: K06350 Corr: No Ephemeris Match

Kp: 13.00 R*: 2.31 Rs Teff: 5869.0 K Logg: 3.83 Fe/H: 0.040



DV Fit Results:

Period = 0.73853 [0.00000] d
Epoch = 132.0249 [0.0003] BKJD
Rp/R* = 0.0155 [0.0014]
a/R* = 4.62 [1.81]
b = 0.89 [0.09]
Seff = 18625.70 [7659.51]
Teq = 2979 [306] K
Rp = 3.91 [1.23] Re
a = 0.0175 [0.0047] AU
Ag = 0.14 [0.07] [-12.36σ]
Teffp = 2824 [198] K [-0.43σ]

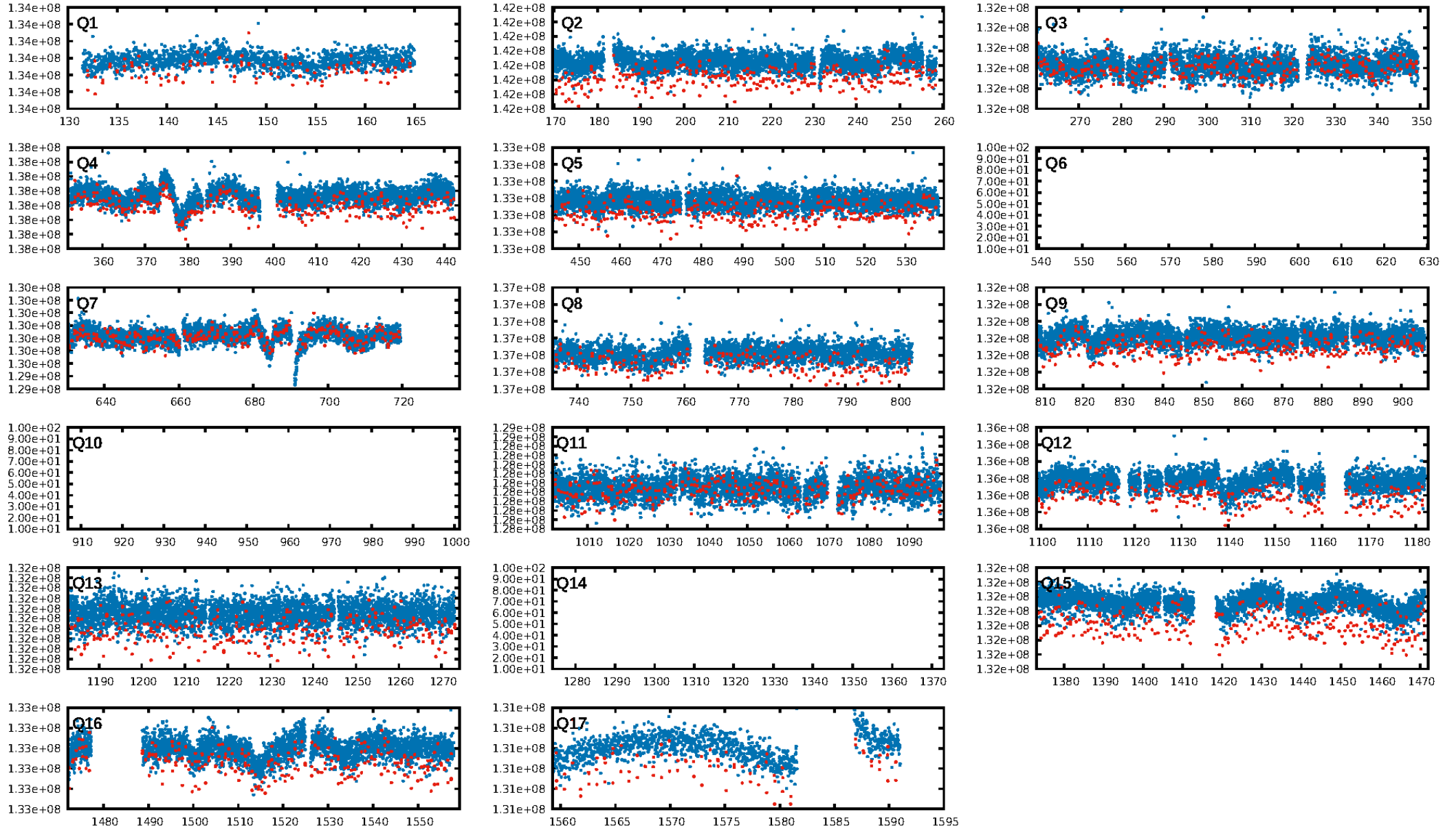
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.84e-114
RollingBand-fgt: 0.74 [1015/1366]
GhostDiagnostic-chr: -0.1941
Centroid-sig: 0.0%
Centroid-so: 79.783 arcsec [290.32σ]
OotOffset-rm: 7.271 arcsec [99.84σ]
KicOffset-rm: 7.569 arcsec [110.06σ]
OotOffset-st: 1/4/4/0 [9]
KicOffset-st: 1/4/4/0 [9]
DiffImageQuality-fgm: 1.00 [9/9]
DiffImageOverlap-fno: 1.00 [14/14]

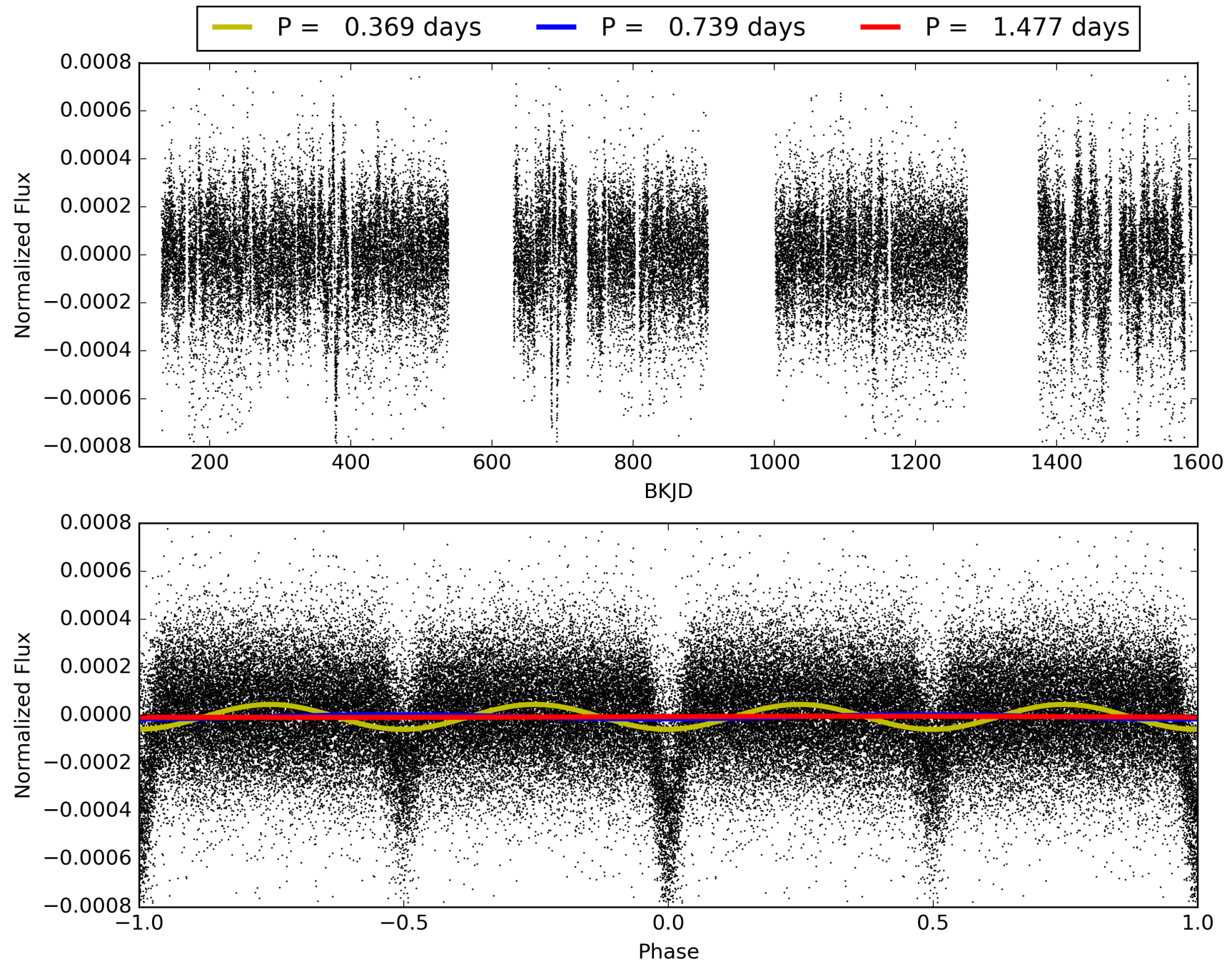
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 22:38:09 Z

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

TCE 003656700-01, PDC Light Curves

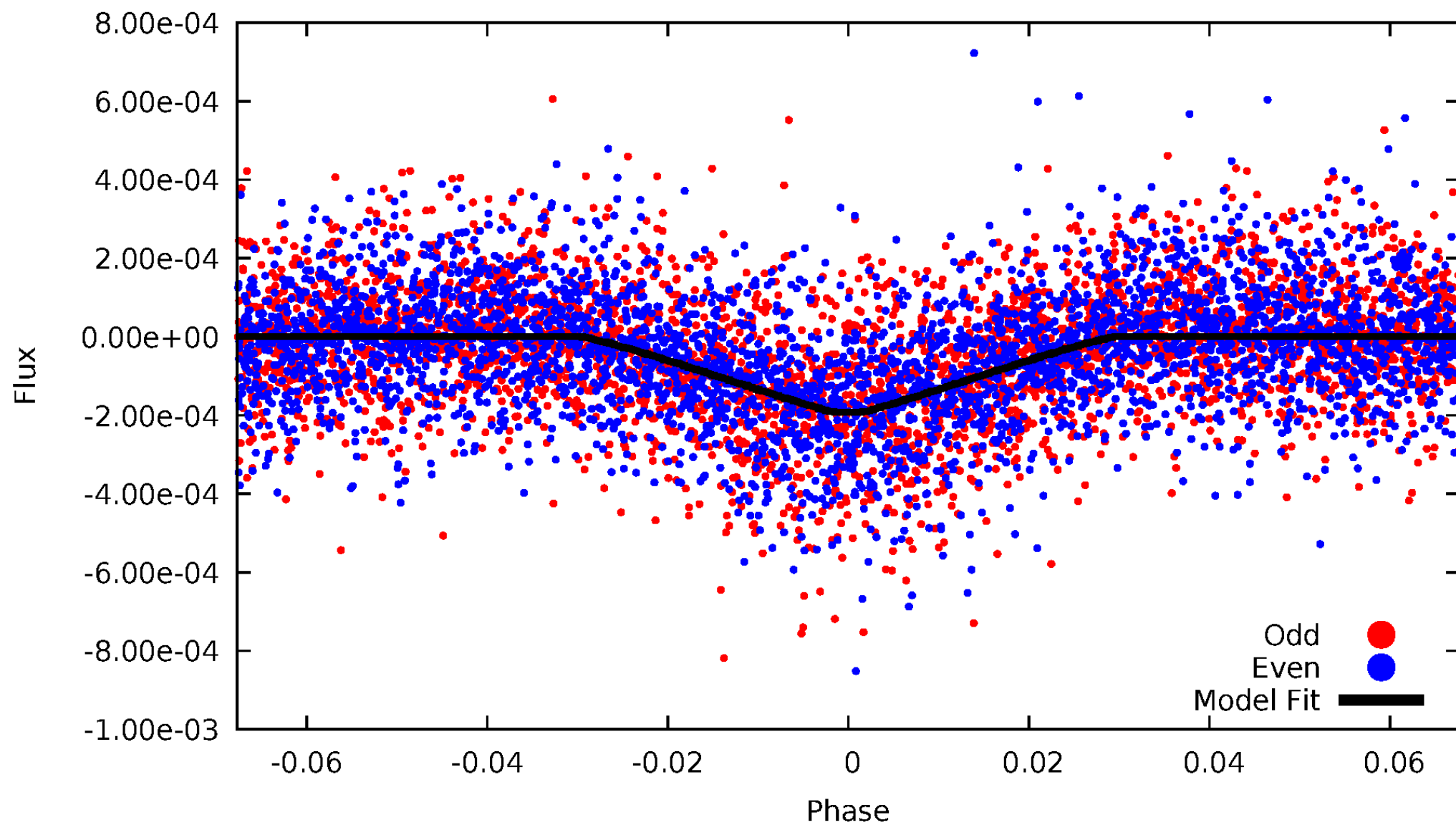


TCE 003656700-01



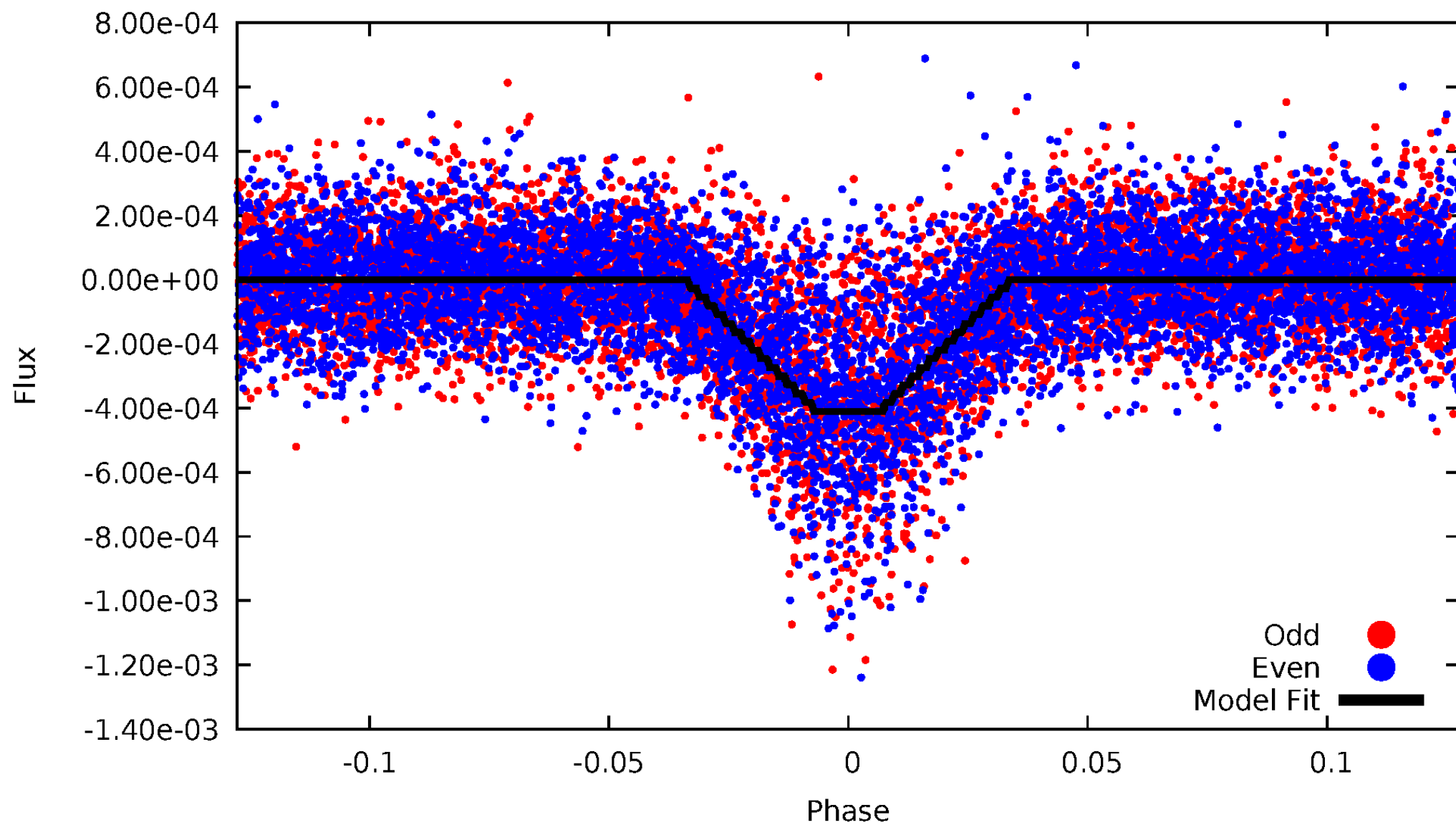
DV Odd/Even

TCE 003656700-01



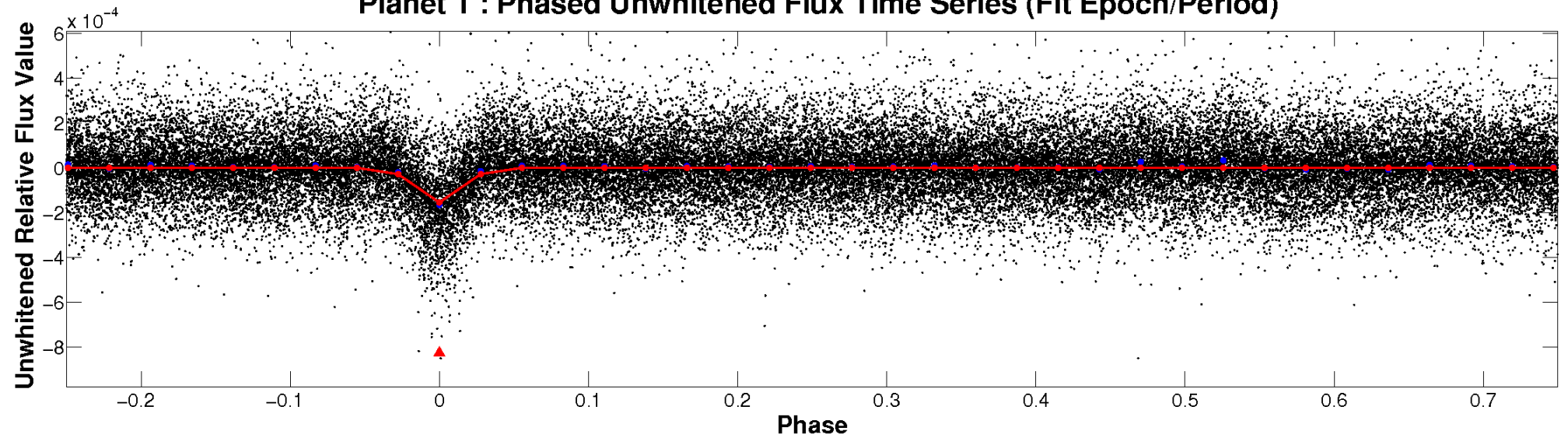
ALT Odd/Even

TCE 003656700-01

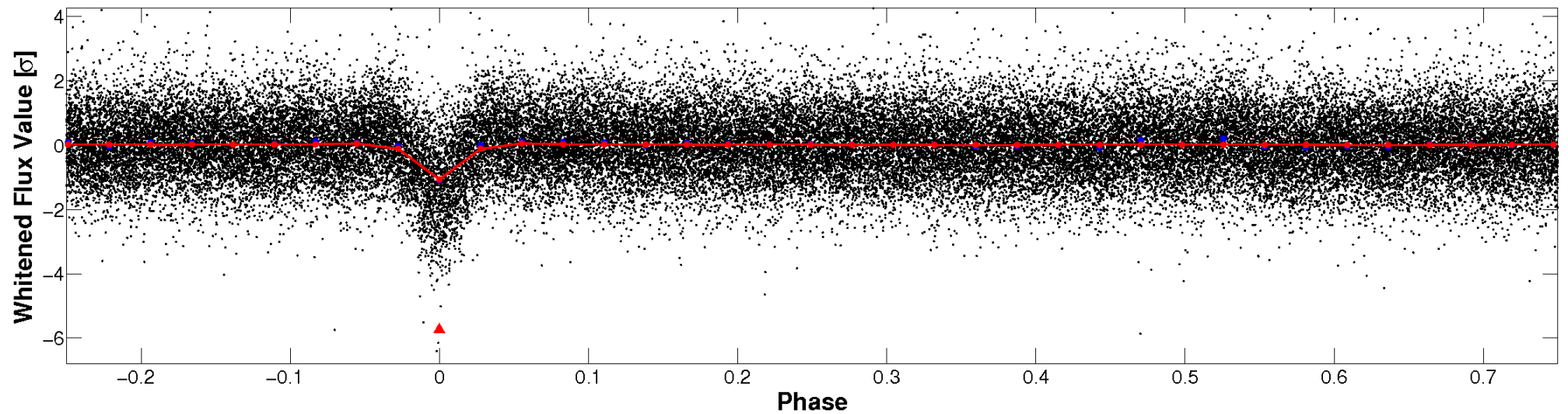


Non-Whitened Vs. Whitened Light Curve

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

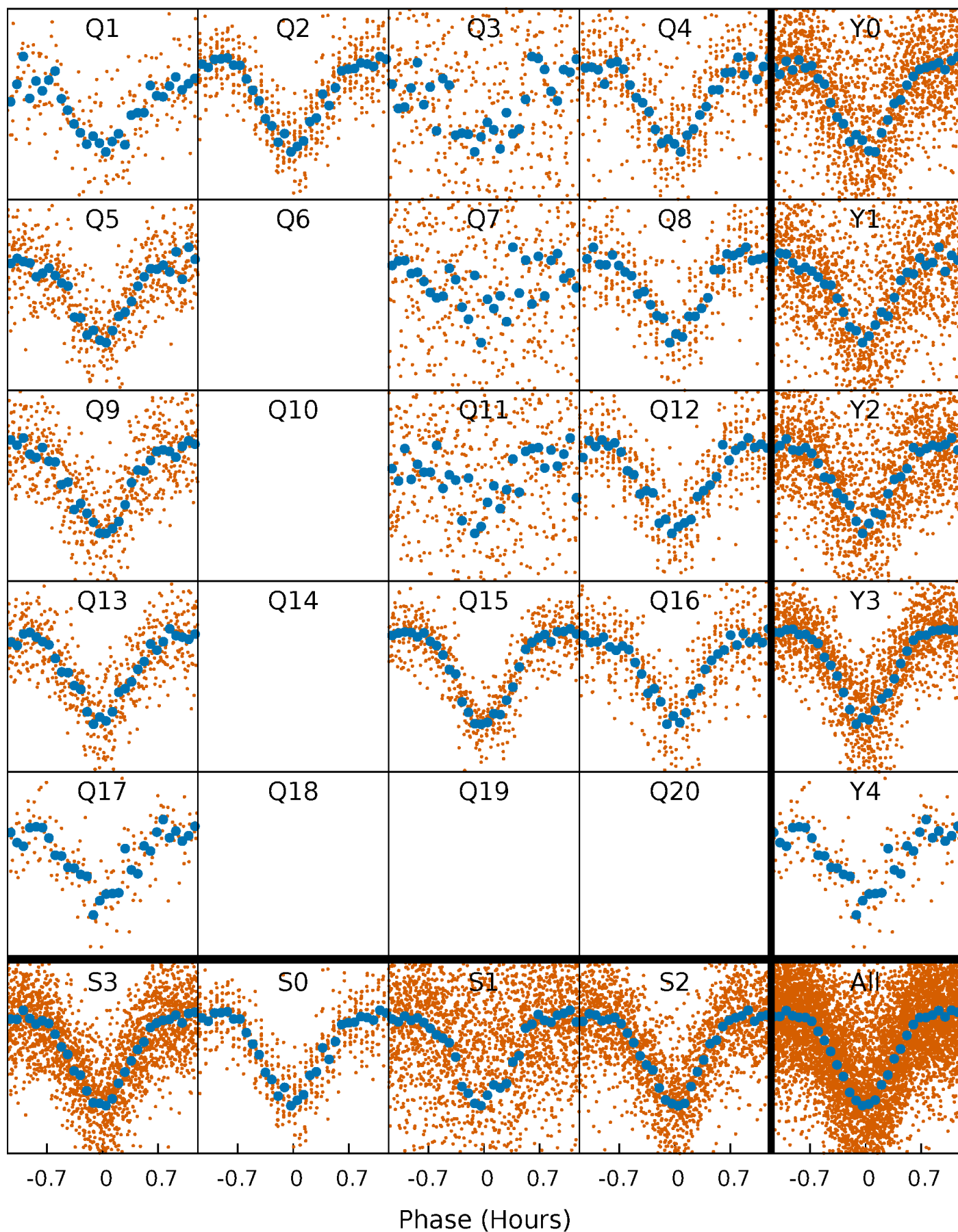


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



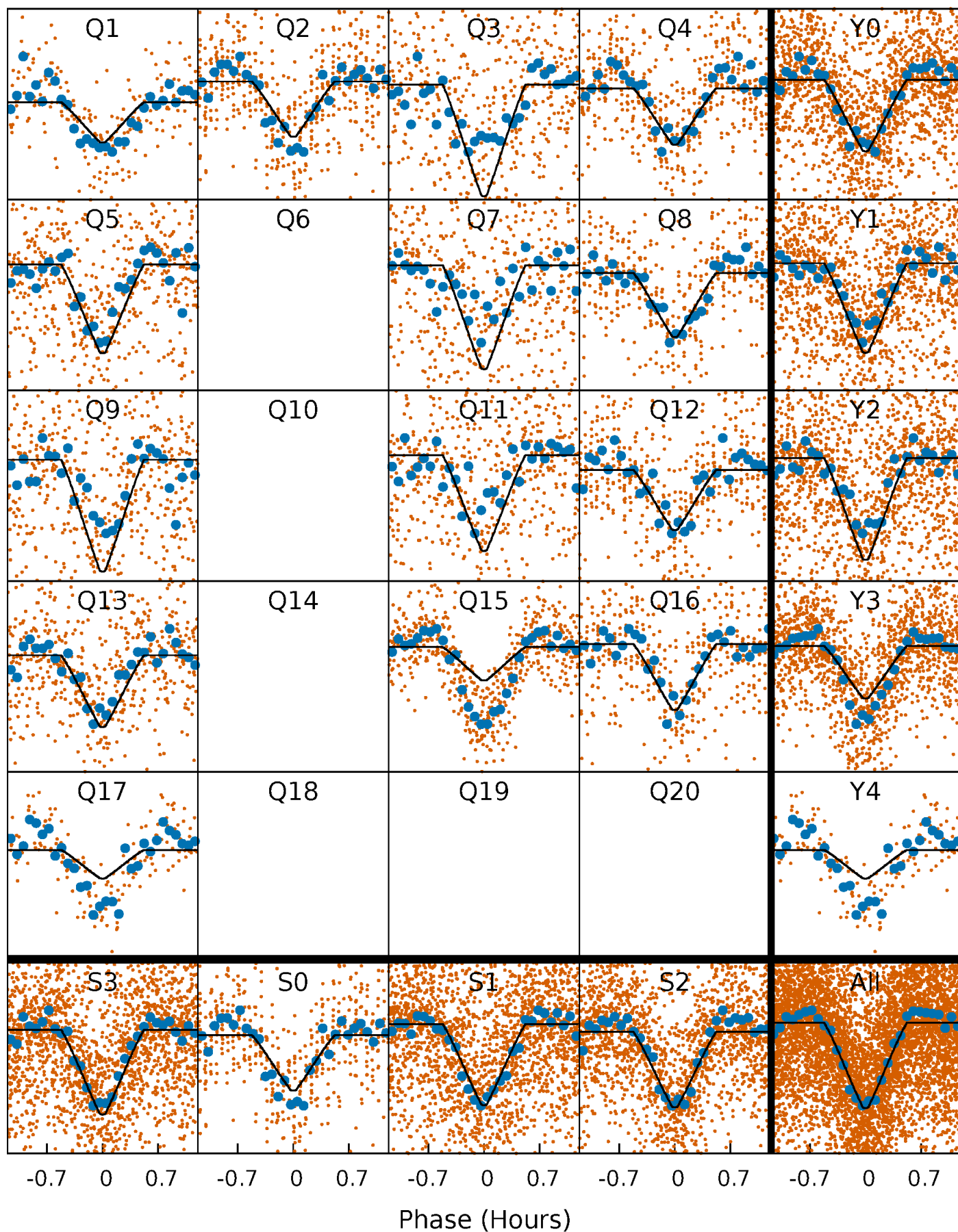
PDC Quarter-Phased Transit Curves

TCE 003656700-01 P= 0.738527 Days $T_0=132.024882$ (BKJD)



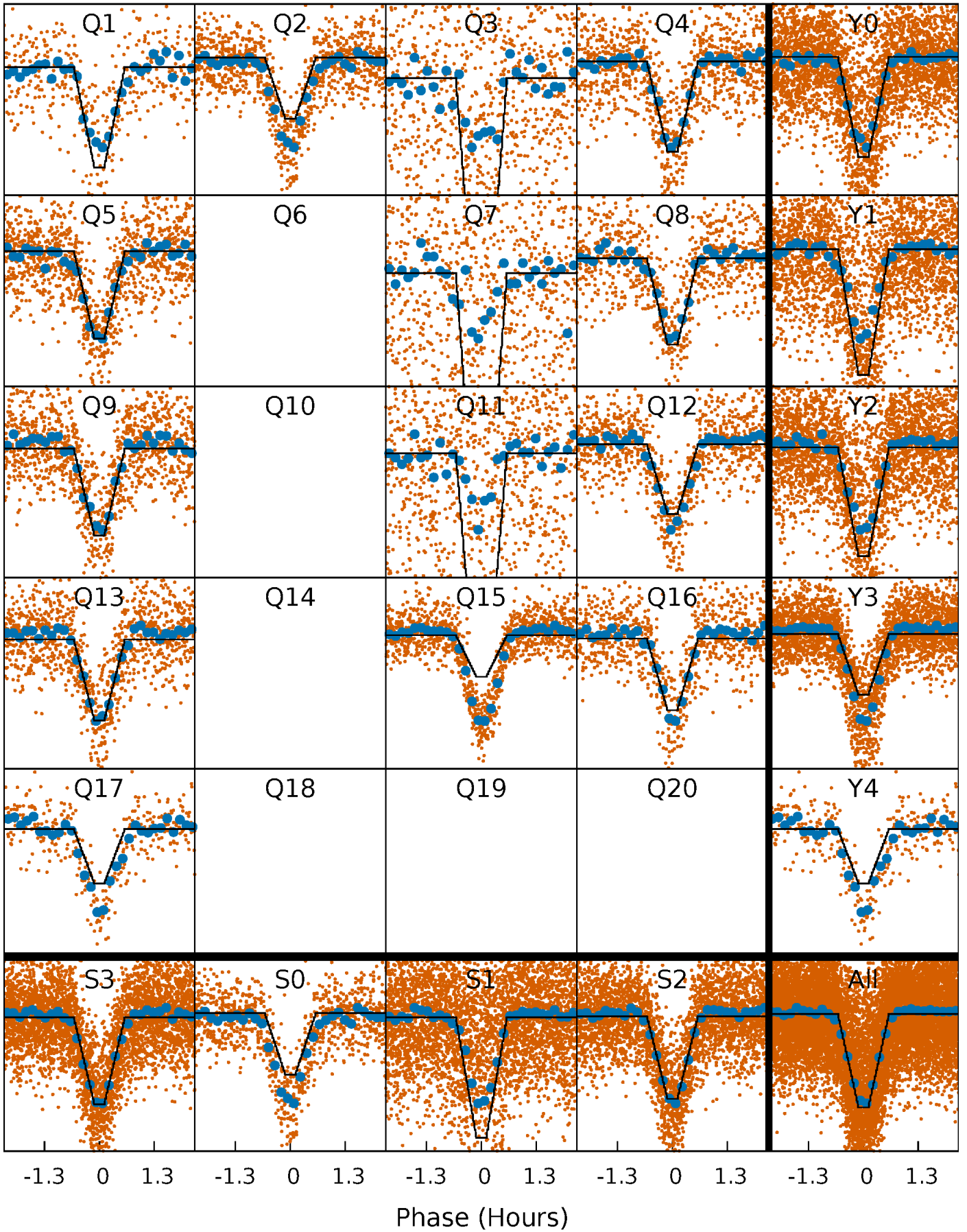
DV Quarter-Phased Transit Curves

TCE 003656700-01 P= 0.738527 Days $T_0=132.024882$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

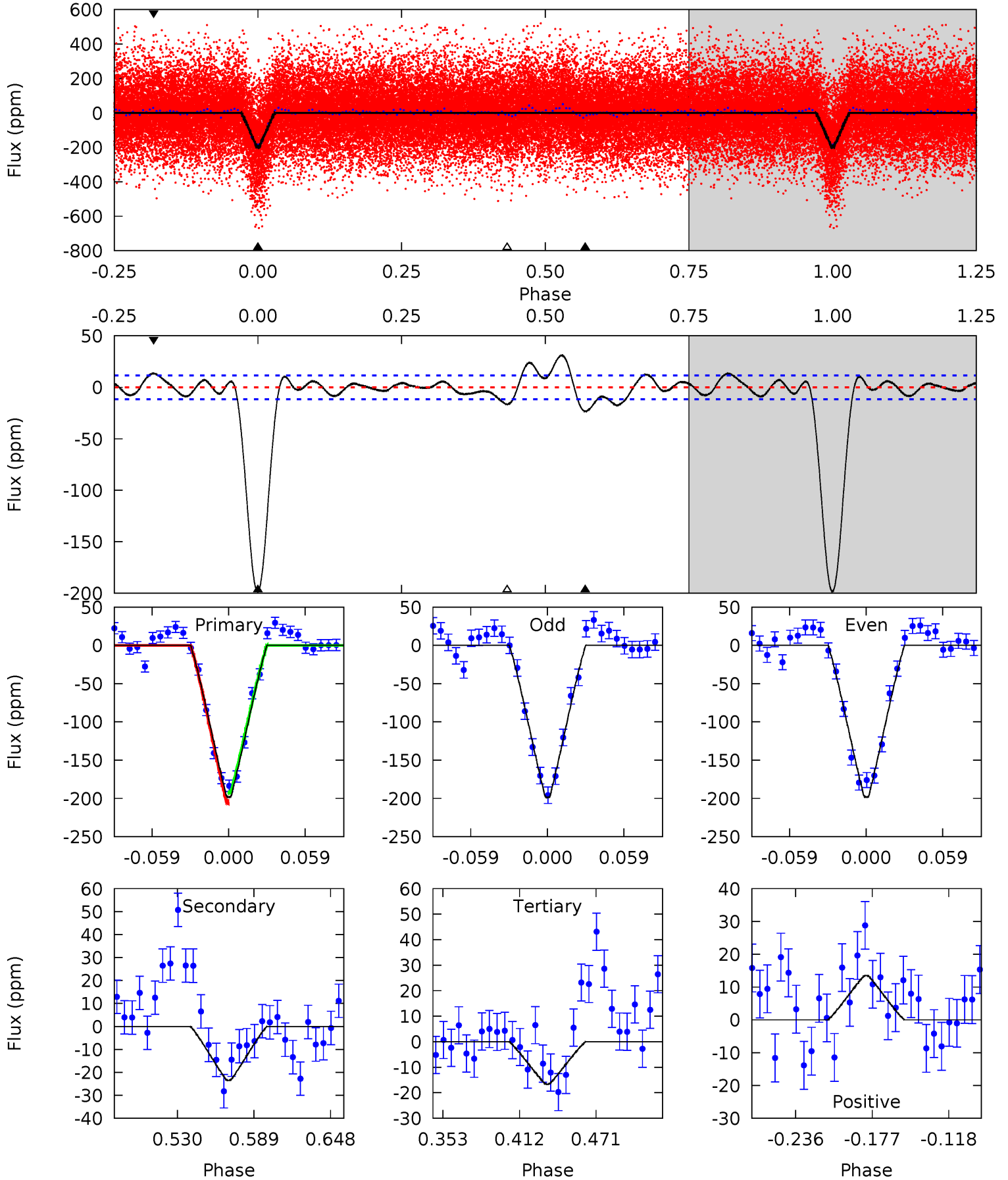
TCE 003656700-01 P= 0.738526 Days $T_0=132.025409$ (BKJD)



DV Model-Shift Uniqueness Test

003656700-01, P = 0.738527 Days, E = 131.286355 Days

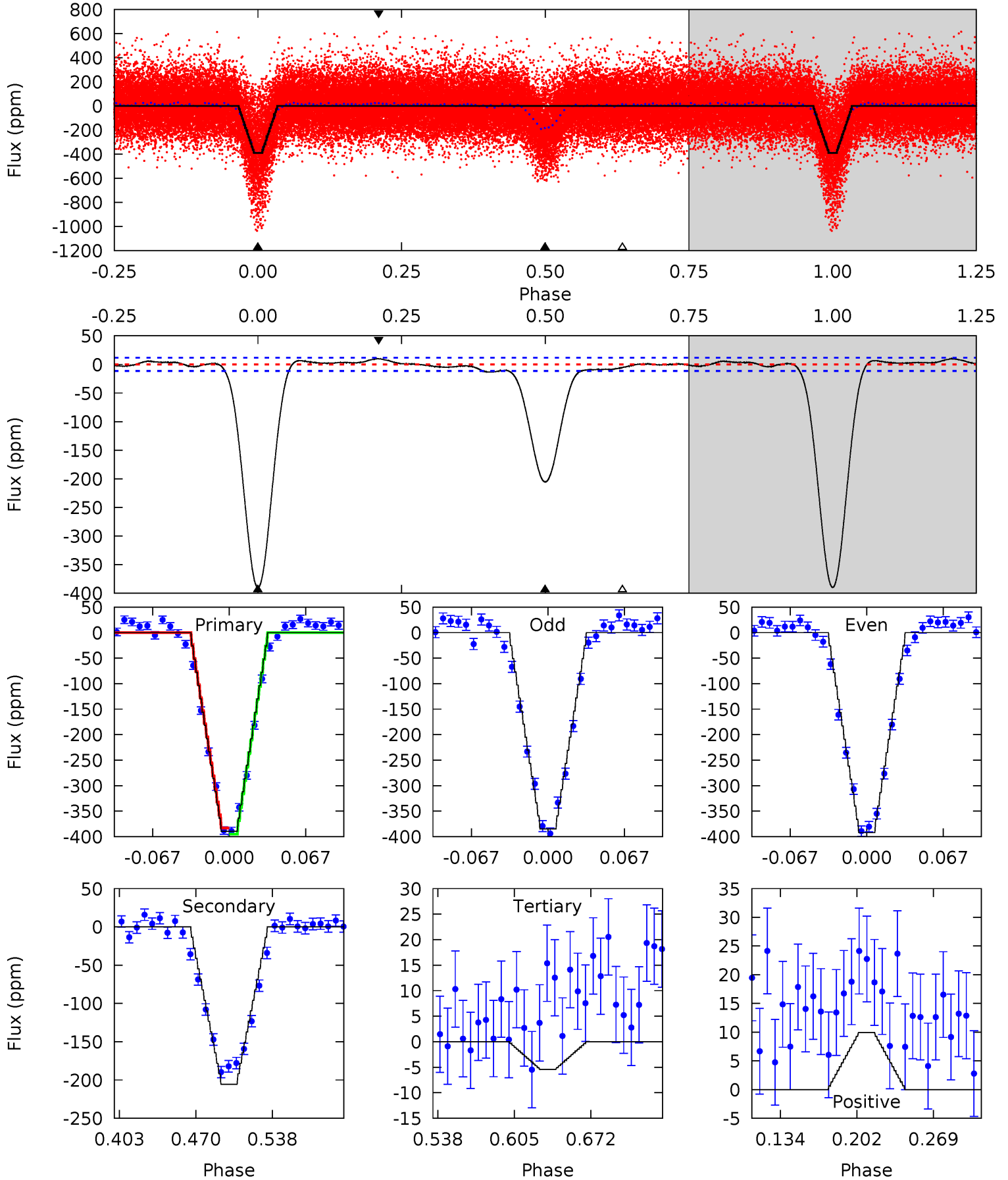
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
80.1	9.47	6.71	5.43	4.67	1.89	2.98	73.4	74.7	2.76	4.03	0.09	1.06	0.14	2.73



Alt Model-Shift Uniqueness Test

003656700-01, P = 0.738526 Days, E = 131.286883 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
156.4	82.5	2.18	3.99	4.65	1.83	2.09	154.2	152.4	80.3	78.5	1.49	1.00	0.02	2.45



Stellar Parameters For KIC 003656700

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5869^{+79}_{-79}	$3.825^{+0.231}_{-0.099}$	$0.040^{+0.150}_{-0.150}$	$2.313^{+0.376}_{-0.698}$	$1.302^{+0.122}_{-0.226}$	$0.148^{+0.204}_{-0.046}$
	+1%/-1%	+6%/-3%	+375%/-375%	+16%/-30%	+9%/-17%	+137%/-31%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 003656700-01 / KOI 6350.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-23 ± 2	$3.81^{+0.54}_{-0.64}$	4139^{+185}_{-300}	-2692^{+5697}_{-520}	$0.271^{+0.121}_{-0.067}$
Alt.	-206 ± 2	$4.97^{+0.66}_{-0.73}$	4131^{+185}_{-292}	4766^{+190}_{-178}	$1.389^{+0.482}_{-0.292}$

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

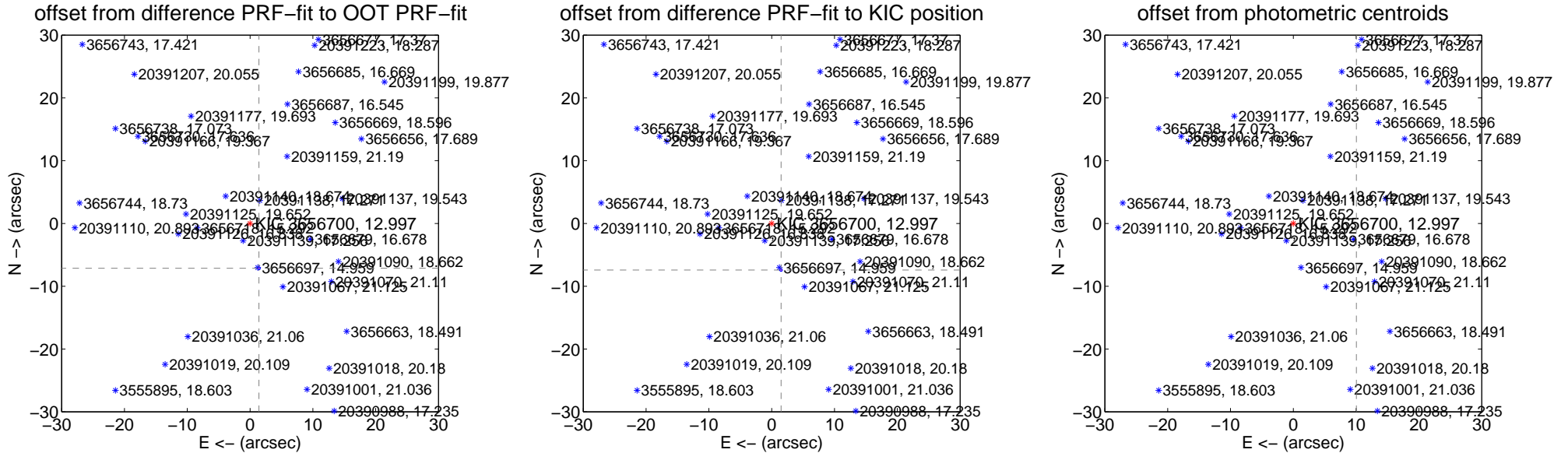
DV Centroid Data

Supplemental centroid analysis for 003656700-01. Kepler magnitude: 13.00. Transit SNR 42.40

There are 9 quarters with good PRF difference image offsets

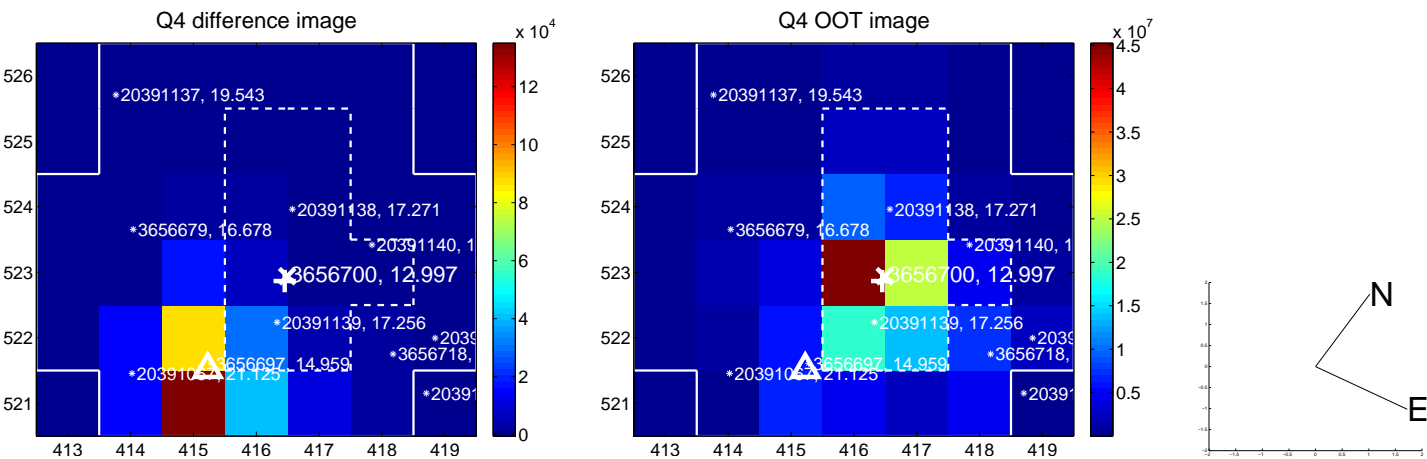
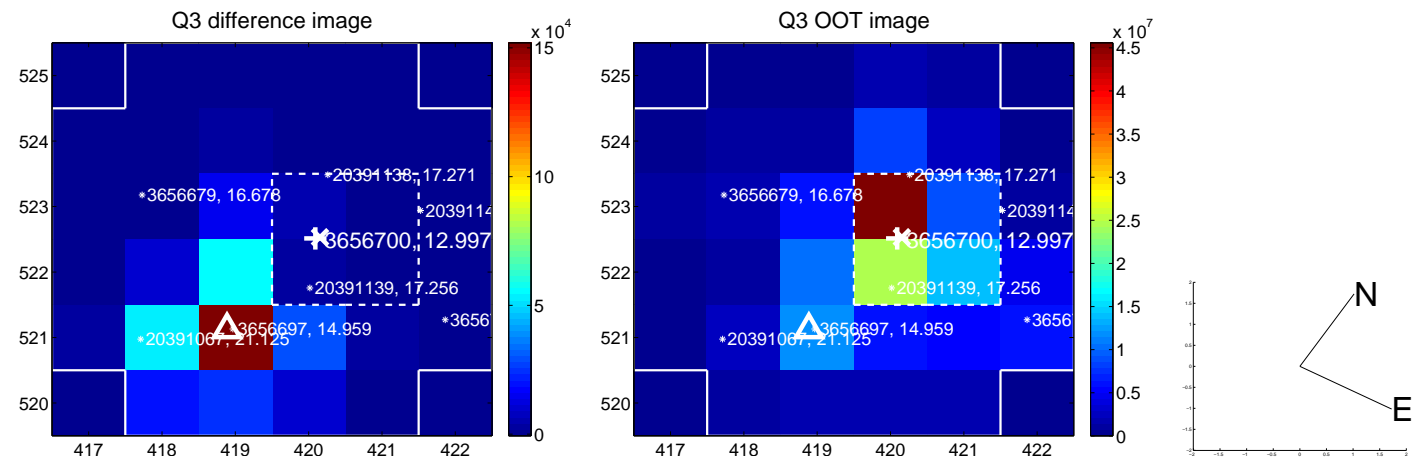
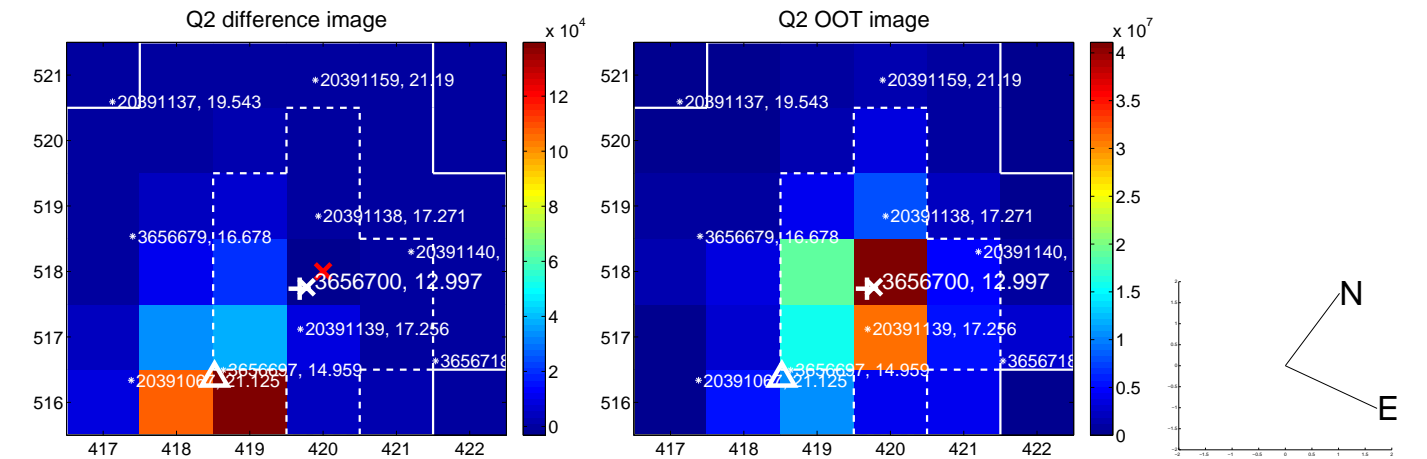
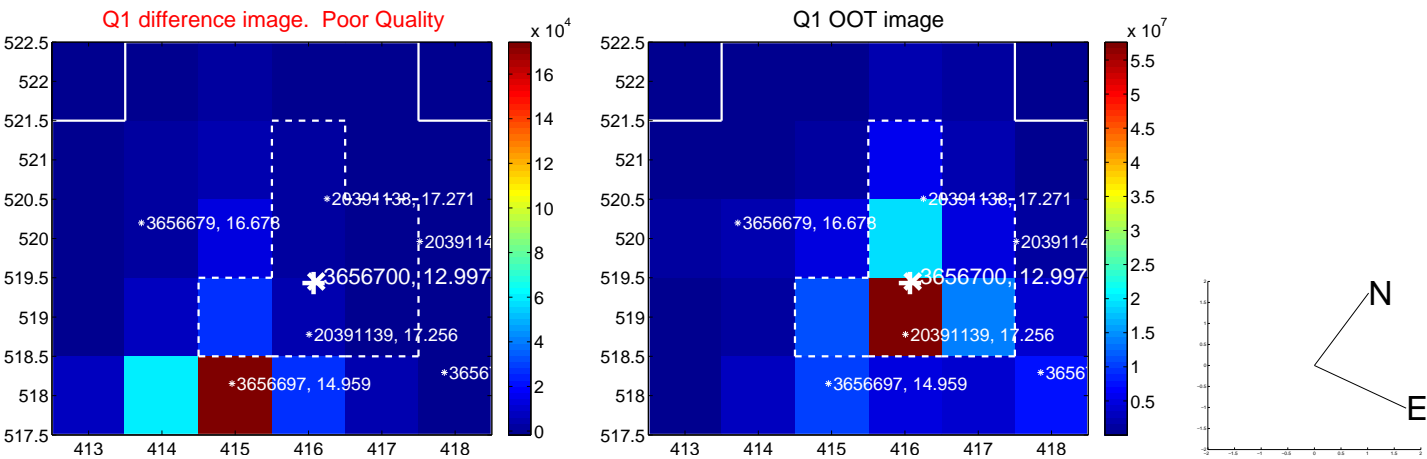
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.271 ± 0.073	99.84	-1.411 ± 0.080	-7.132 ± 0.073
PRF-fit source offset from KIC position	7.569 ± 0.069	110.06	-1.492 ± 0.069	-7.420 ± 0.068
photometric centroid source offset	79.78 ± 0.27	290.32	-10.04 ± 0.20	-79.15 ± 0.28

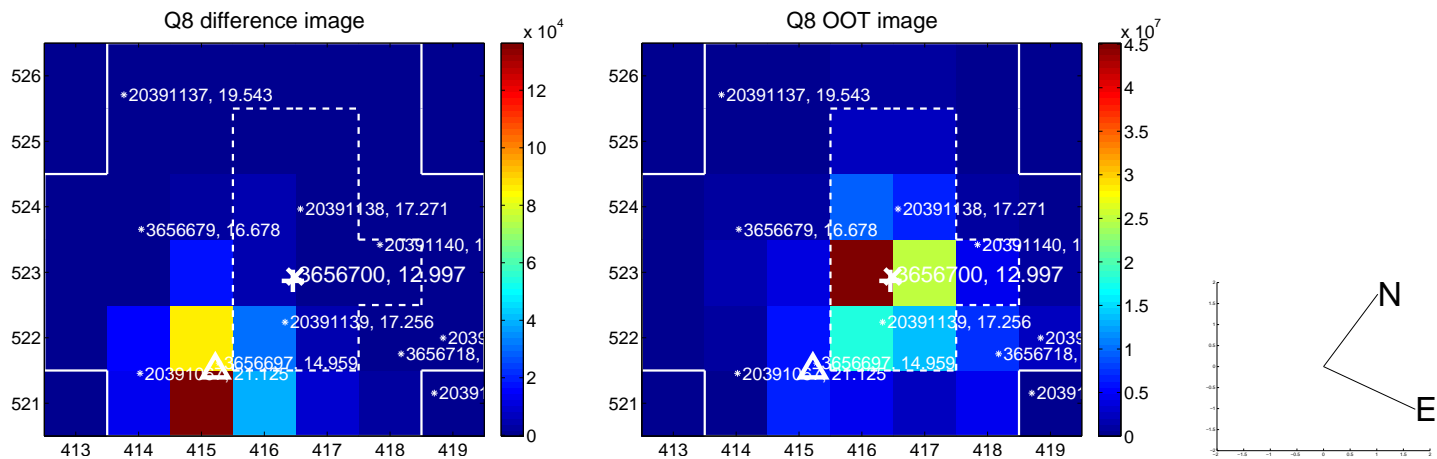
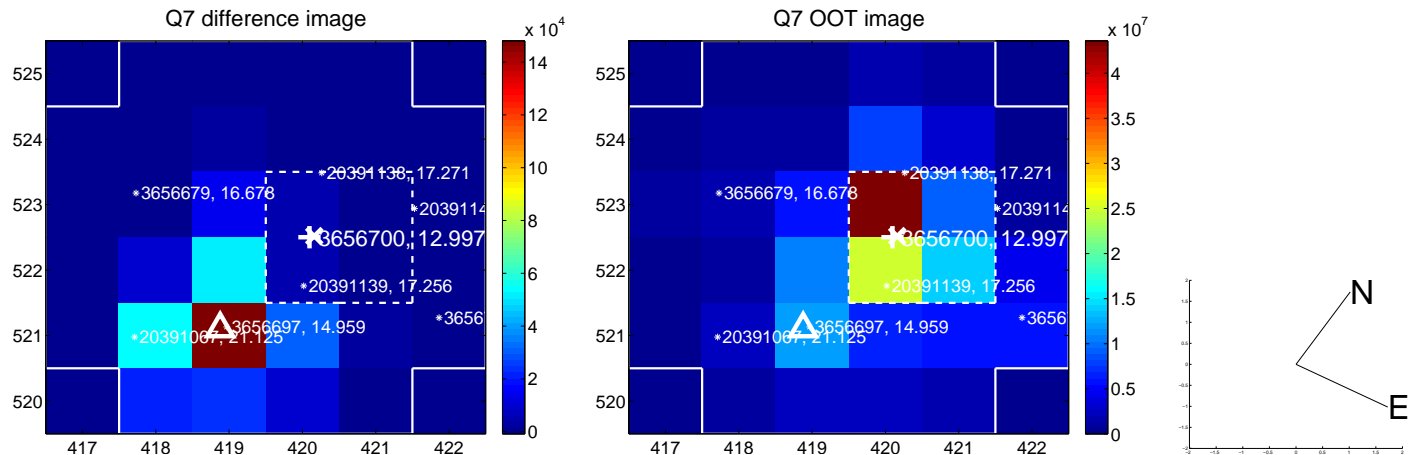
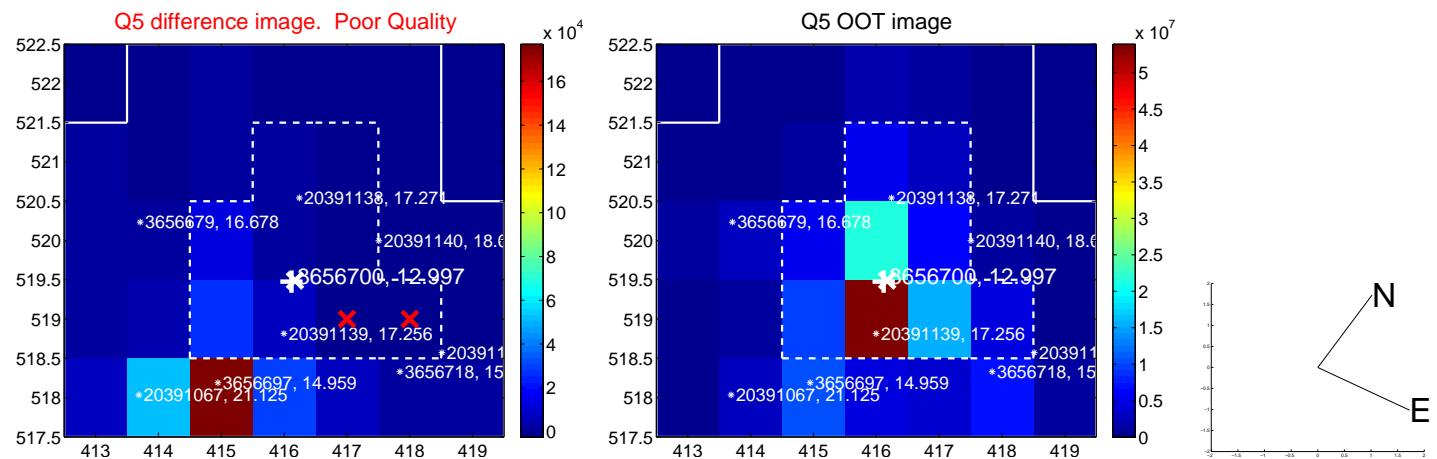


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

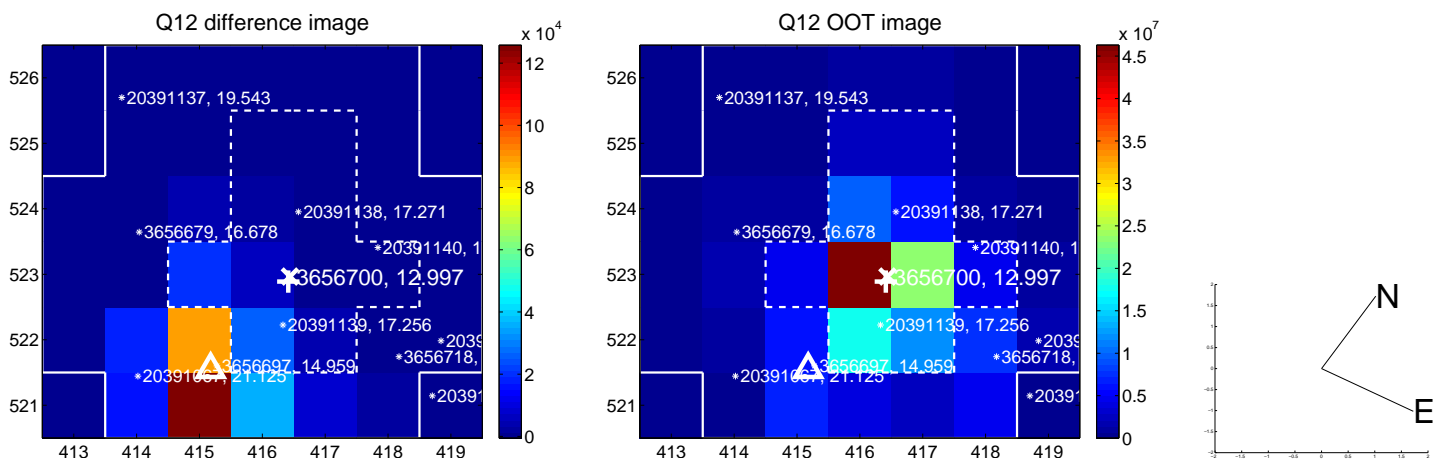
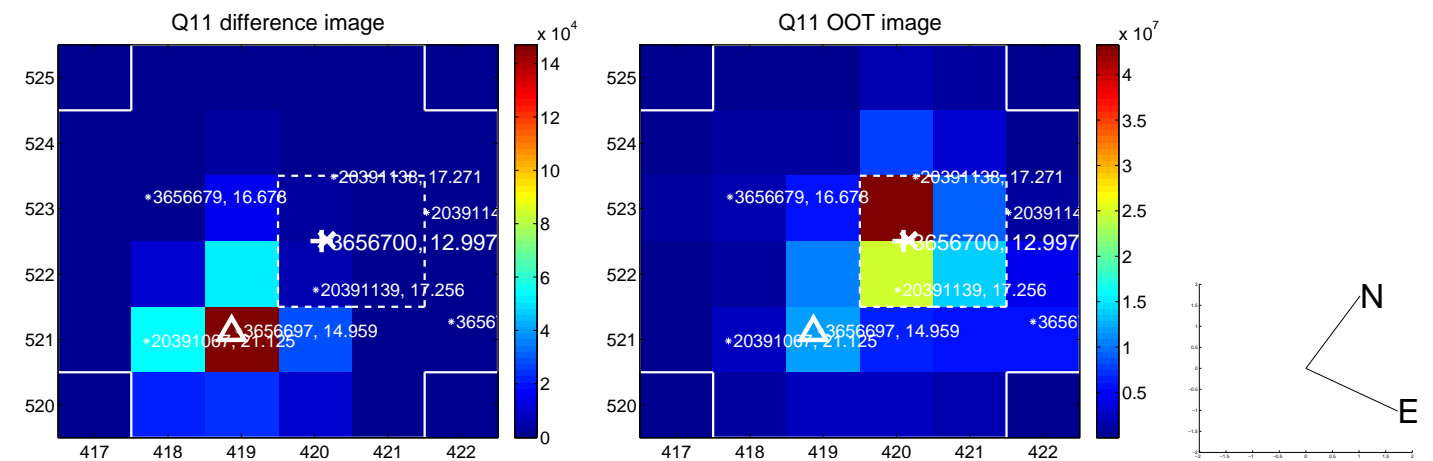
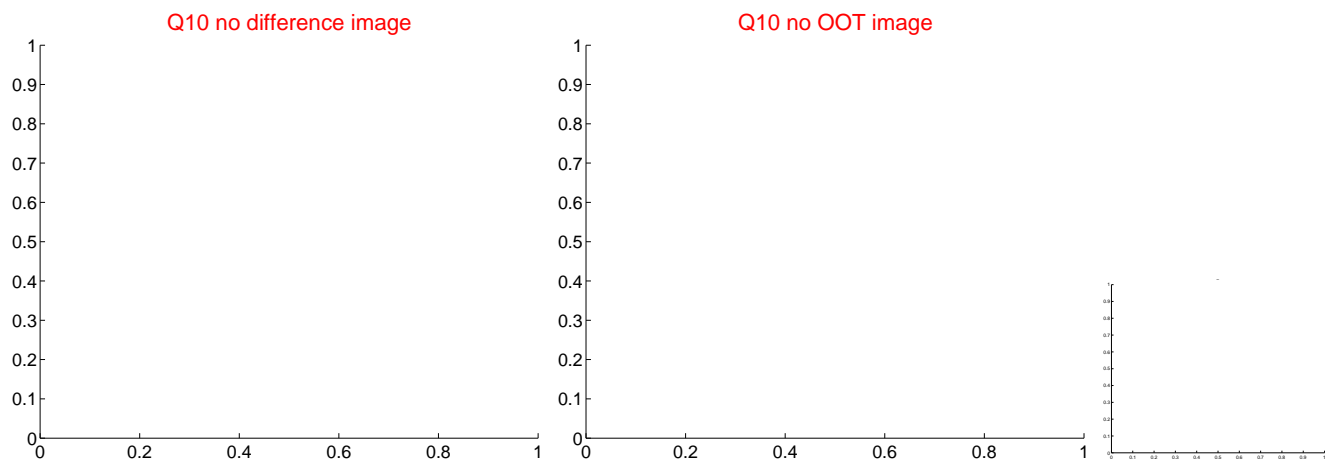
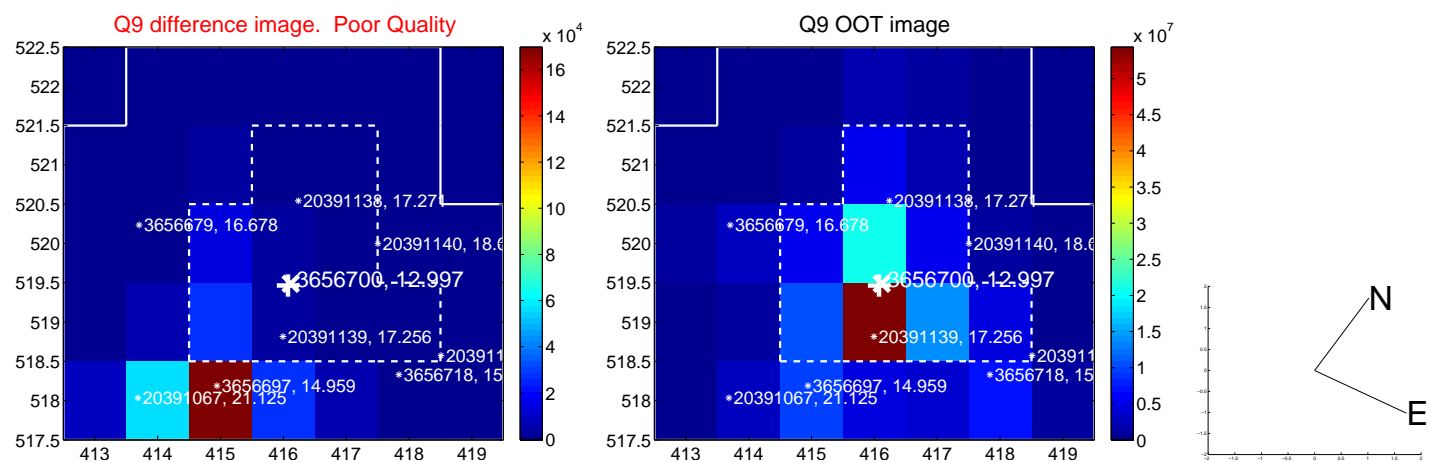
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



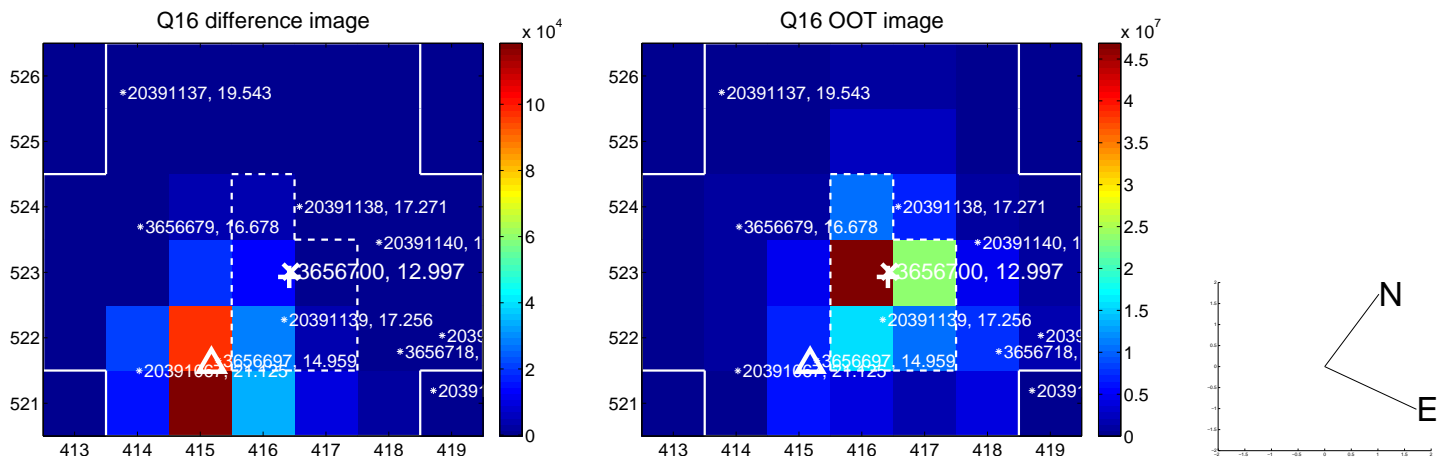
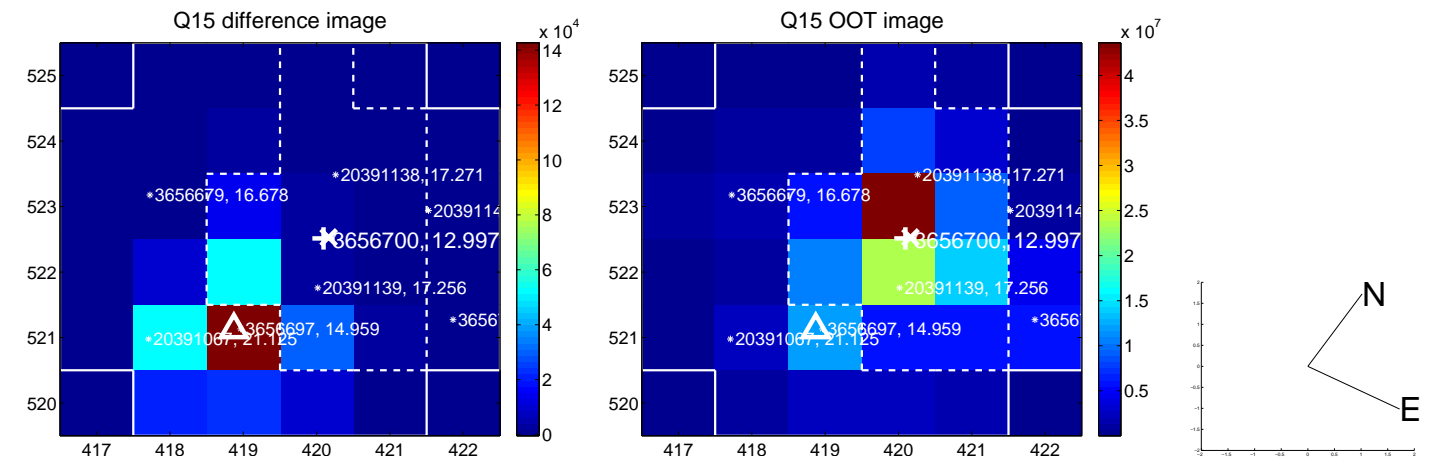
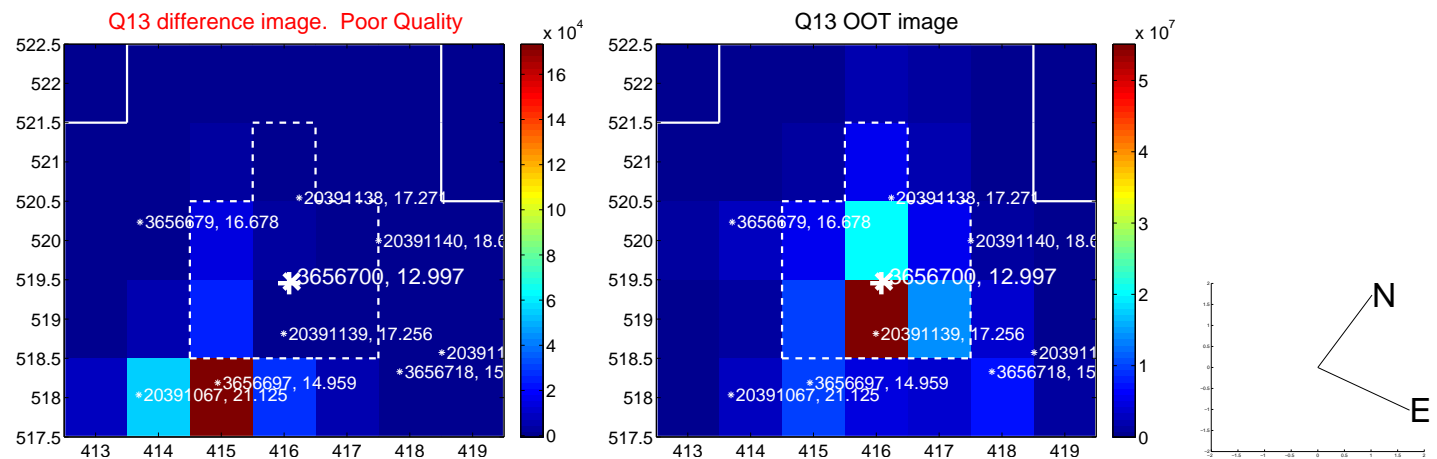
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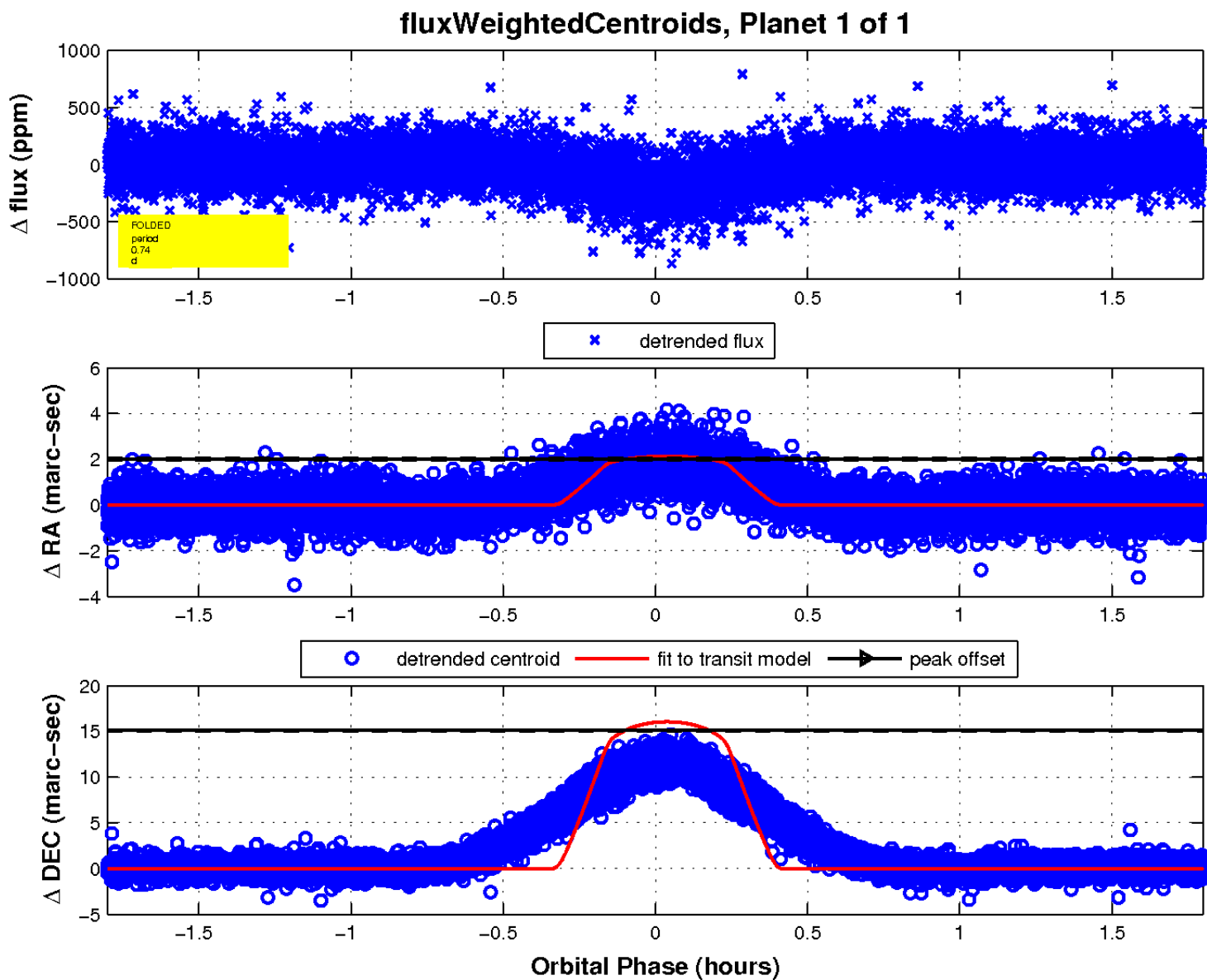
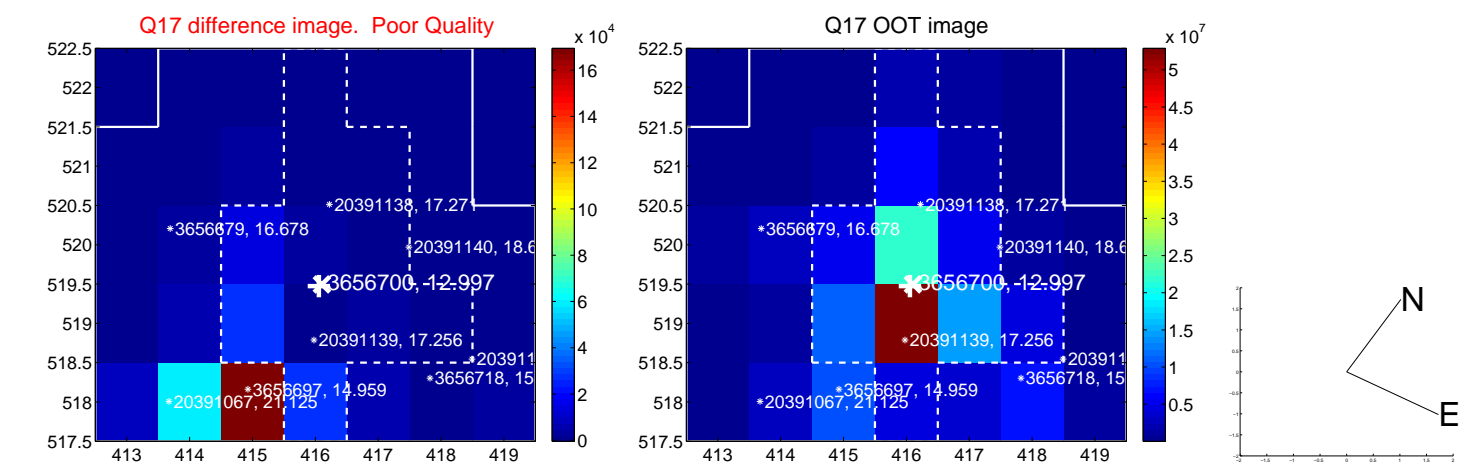
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

