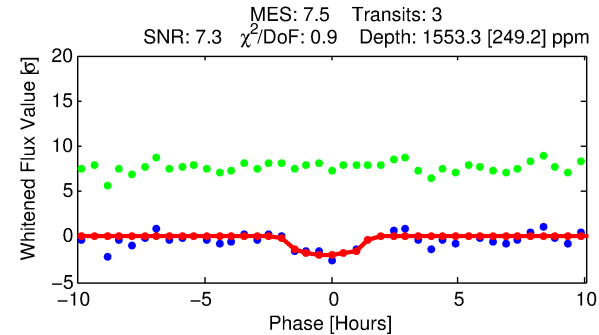
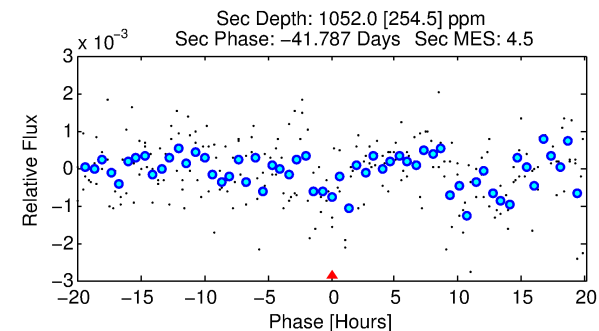
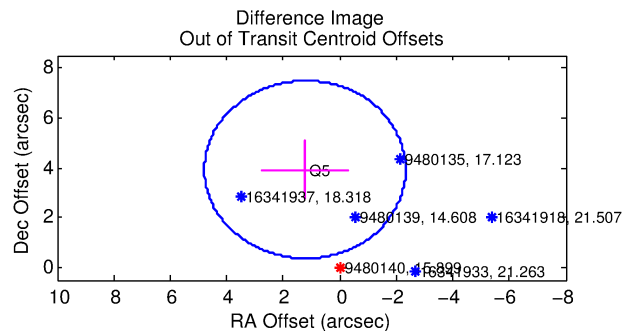
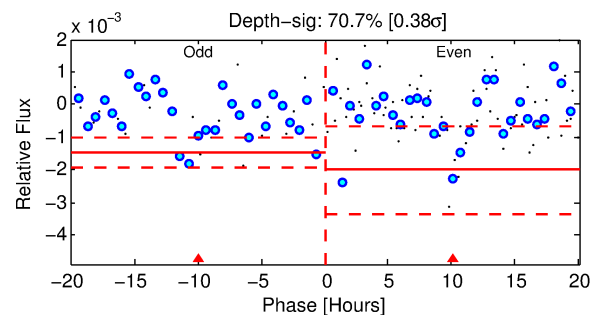
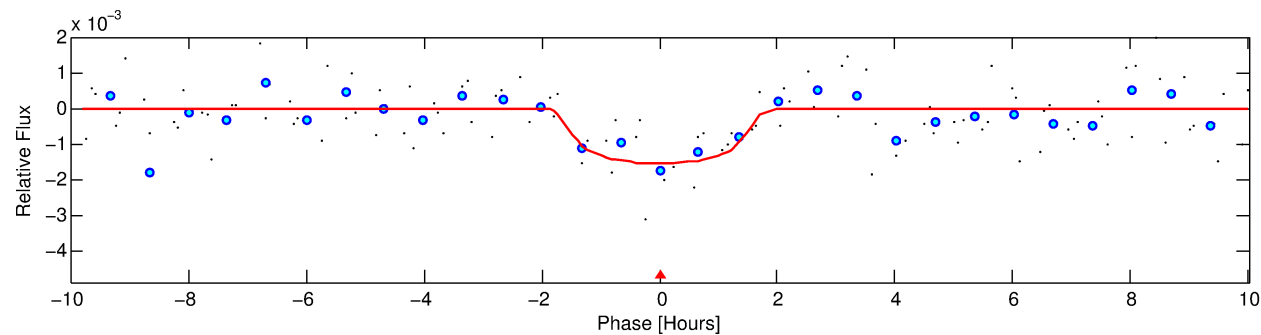
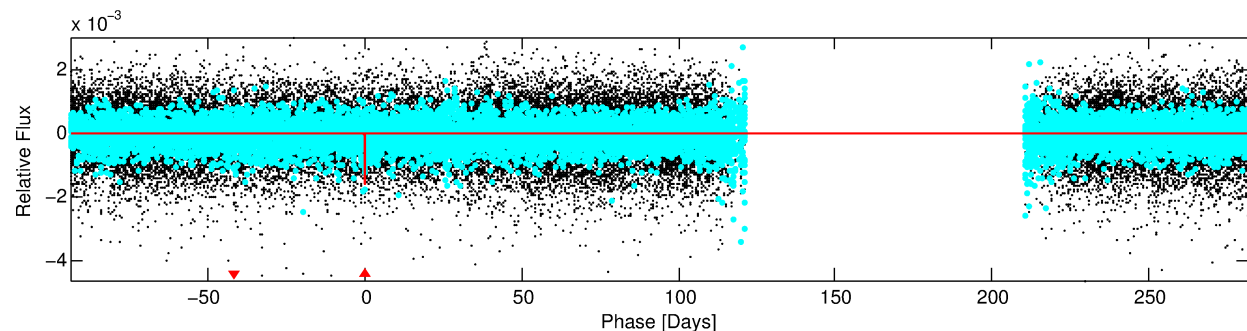
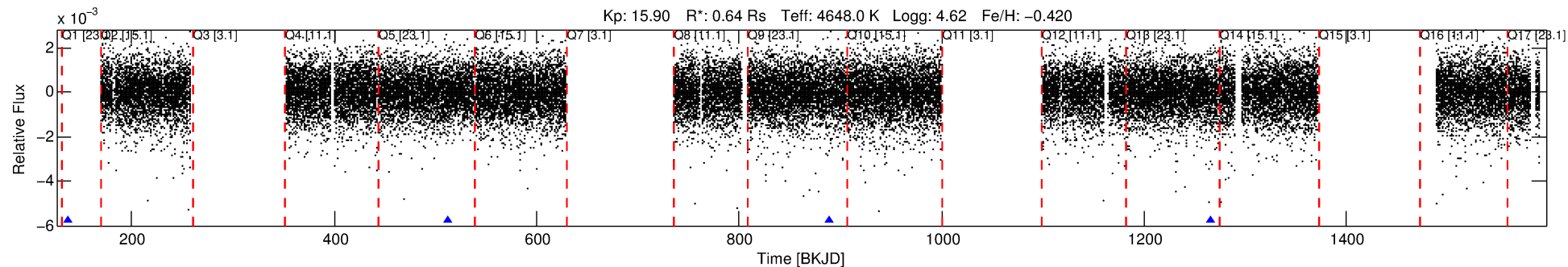


**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**

DV One-Page Summary

KIC: 9480140 Candidate: 1 of 1 Period: 375.975 d

**WARNING: THIS DATA IS
SIMULATED, NOT OBSERVED**



DV Fit Results:

Period = 375.97512 [0.00717] d
Epoch = 137.0697 [0.0136] BKJD
Rp/R* = 0.0373 [0.0778]
a/R* = 728.67 [5008.58]
b = 0.60 [7.51]
Seff = 0.22 [0.04]
Teq = 176 [7] K
Rp = 2.60 [5.43] Re
a = 0.8712 [0.0632] AU
Ag = 65051.33 [272264.88] [0.24 σ]
Teff = 4336 [4538] K [0.92 σ]

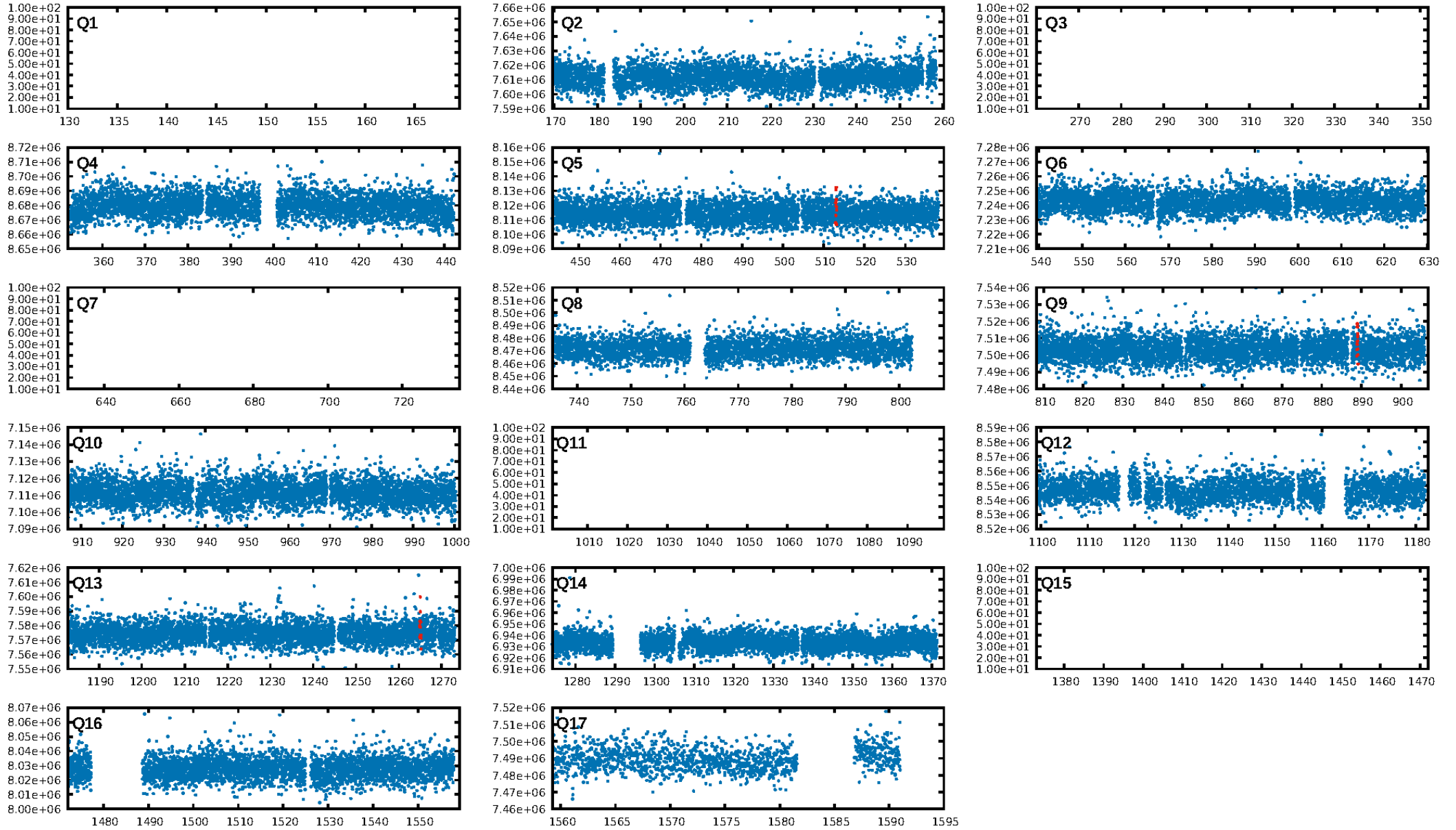
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 98.5%
Bootstrap-pfa: 3.47e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -9.787
Centroid-sig: 0.0%
Centroid-so: 4.156 arcsec [2.82 σ]
OotOffset-rm: 4.111 arcsec [3.47 σ]
KicOffset-rm: 4.958 arcsec [4.21 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

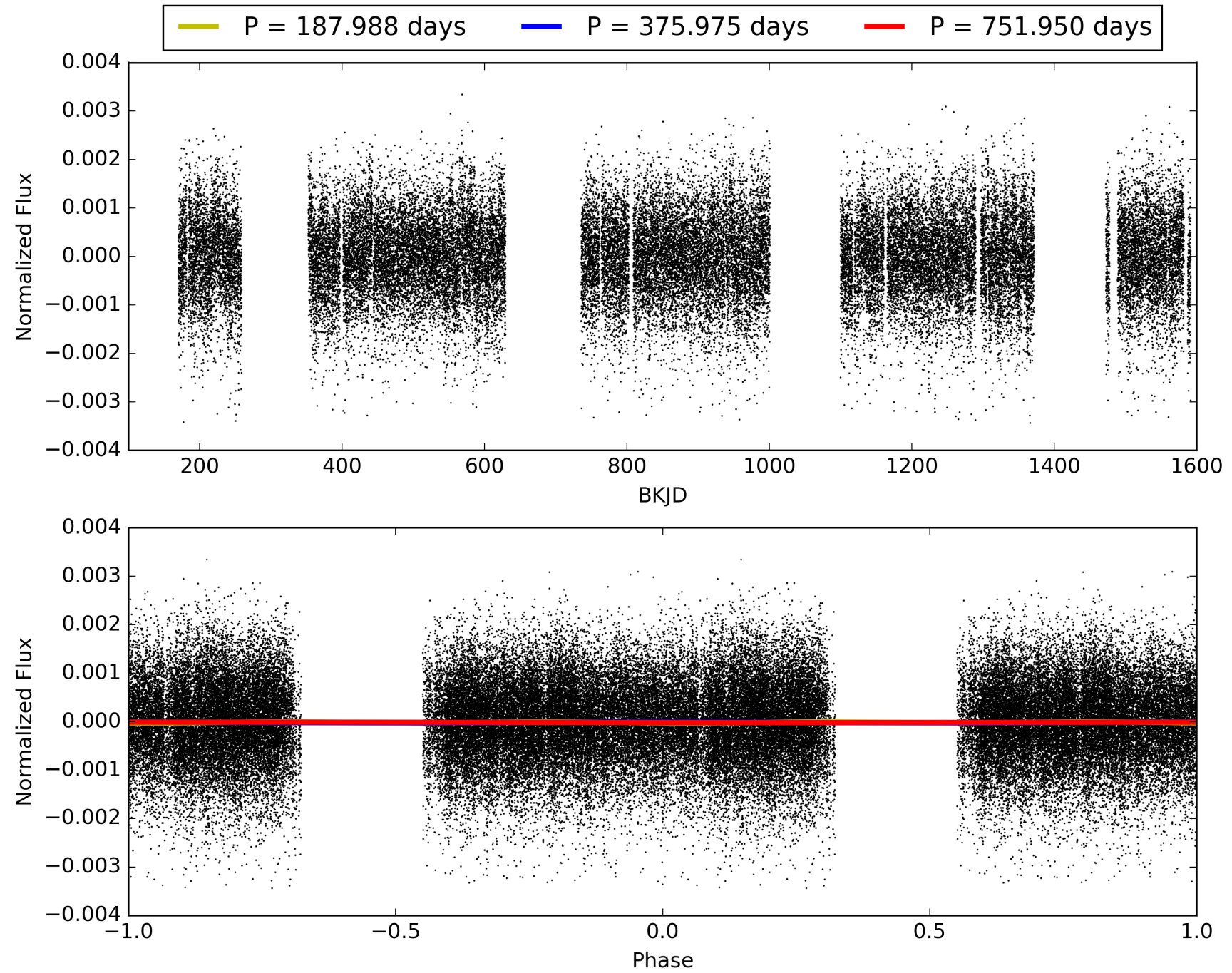
Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop-2320@61025 -- Date Generated: 04-Mar-2016 00:40:12 Z

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

TCE 009480140-01, PDC Light Curves

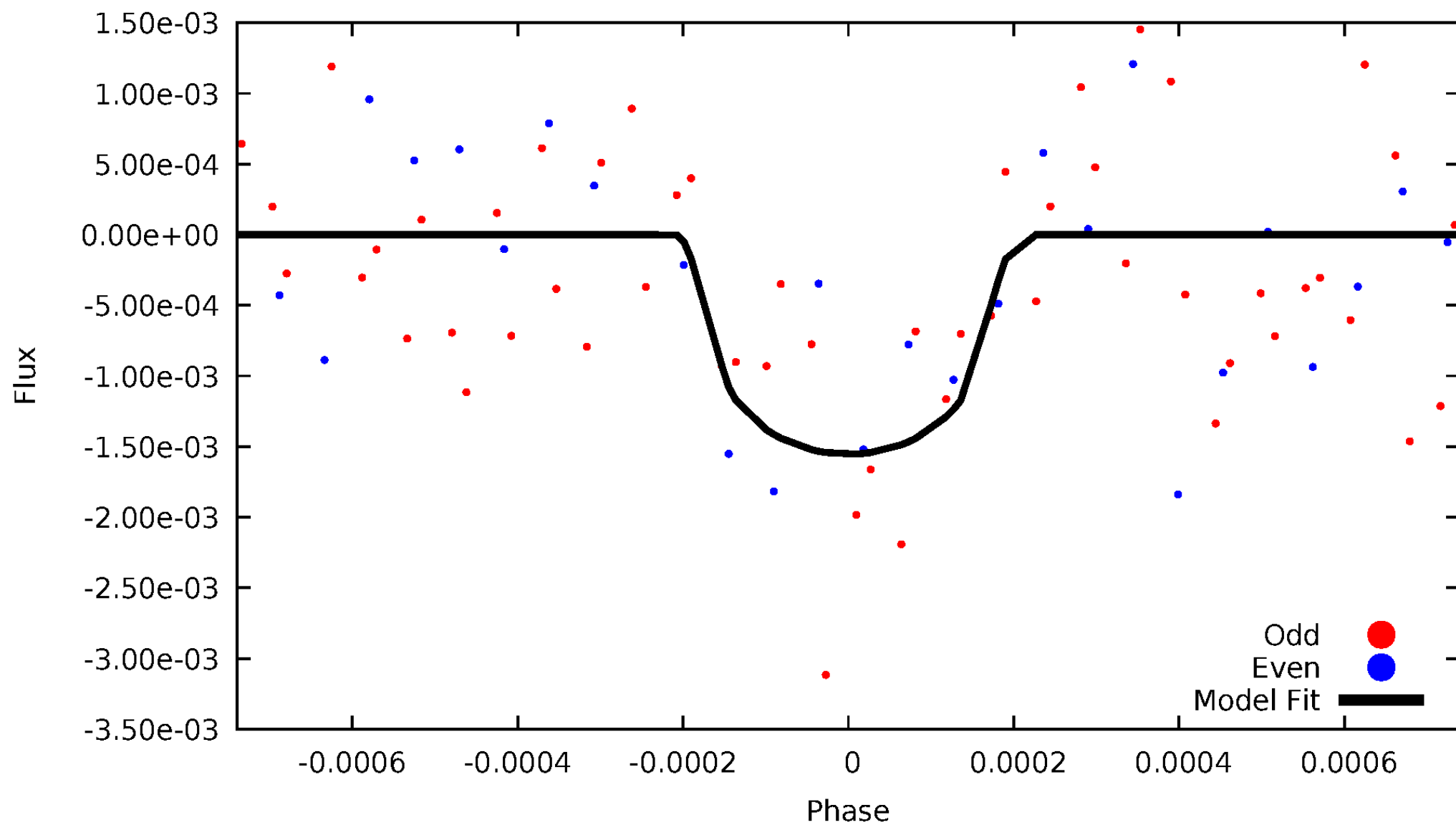


TCE 009480140-01



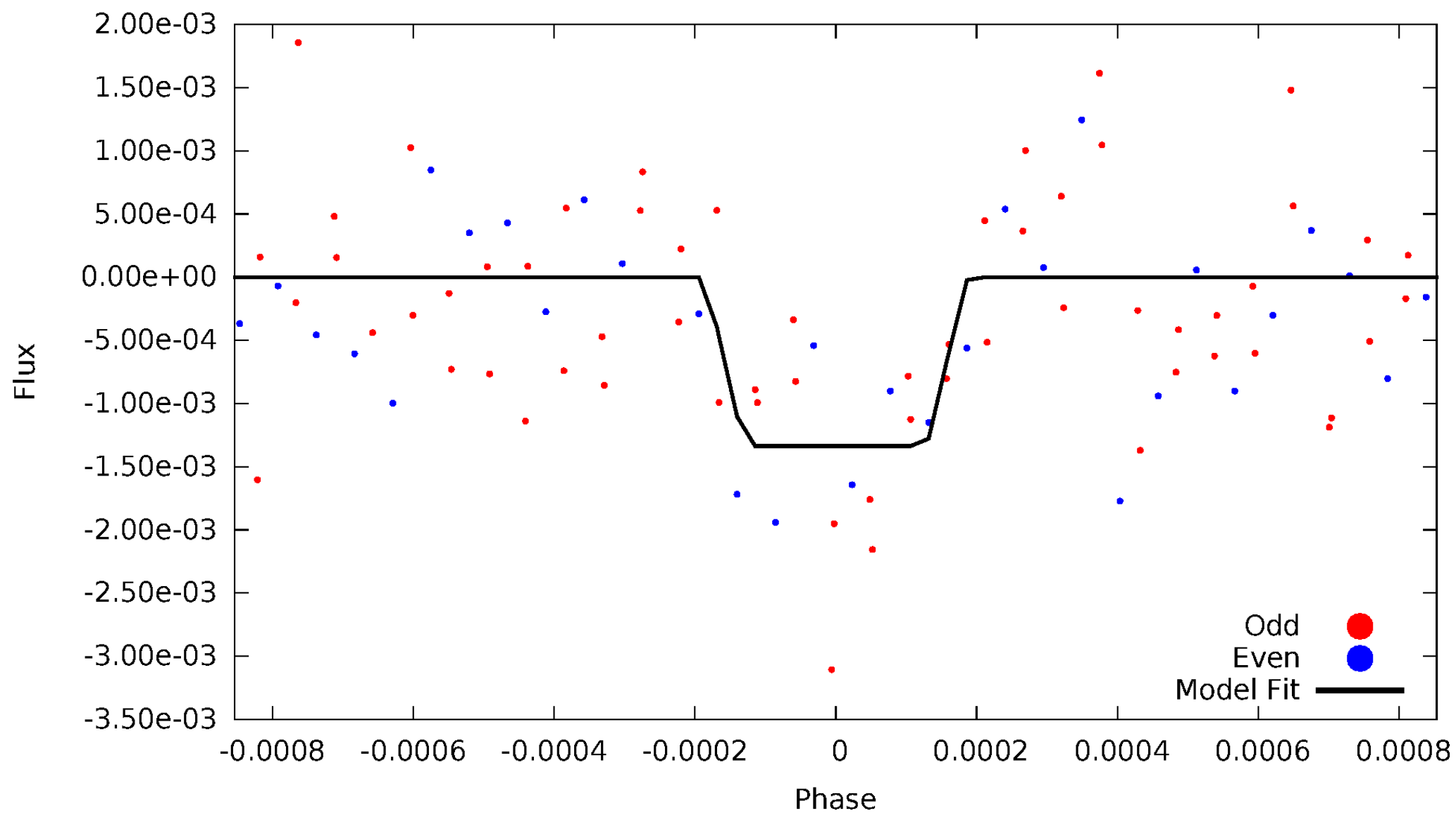
DV Odd/Even

TCE 009480140-01



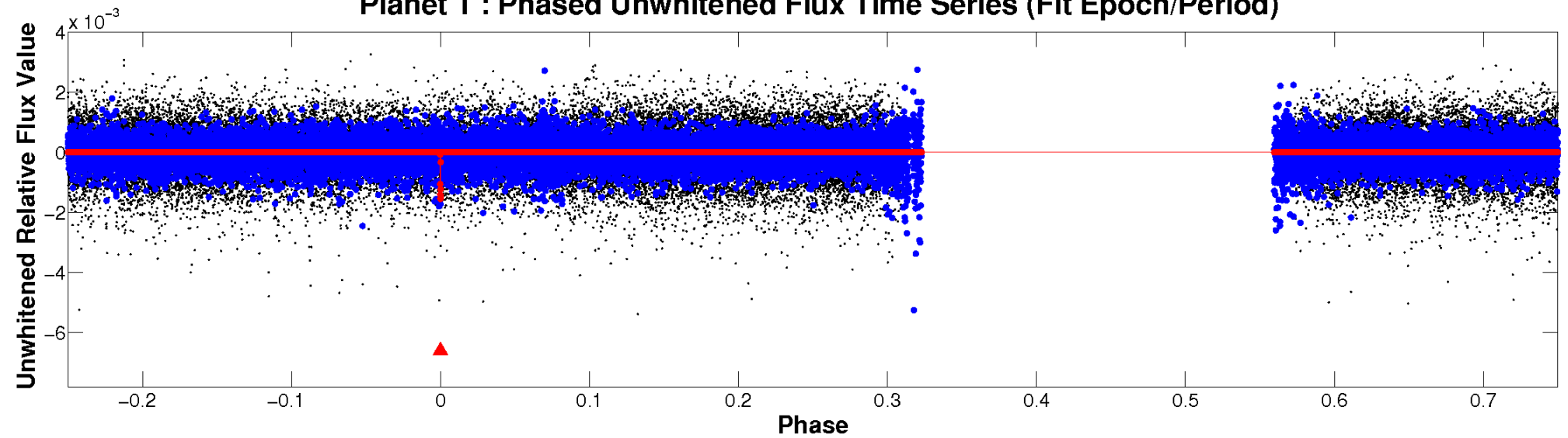
ALT Odd/Even

TCE 009480140-01

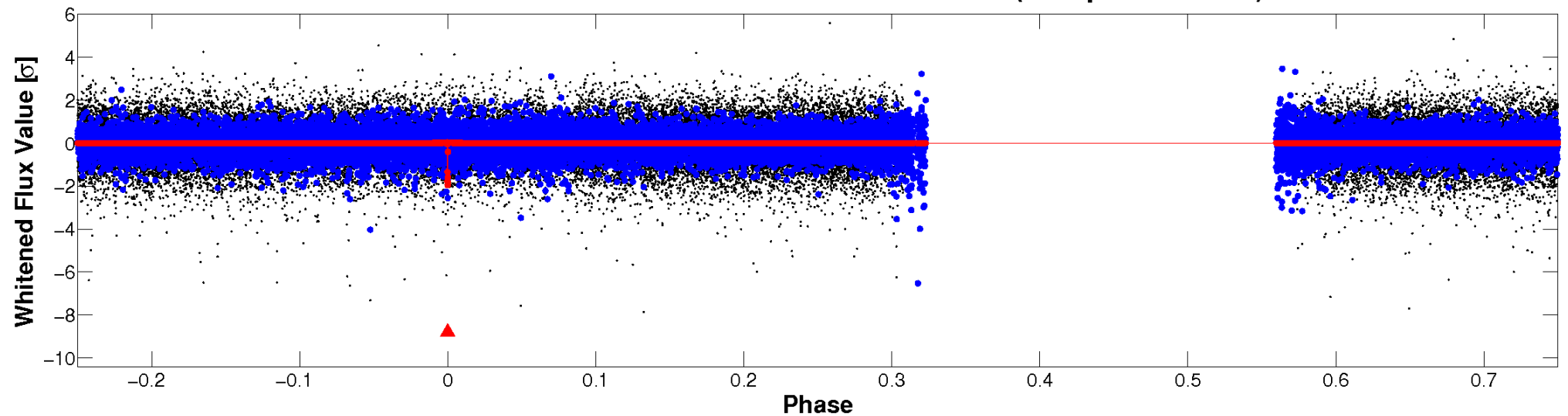


Non-Whitened Vs. Whitened Light Curve

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

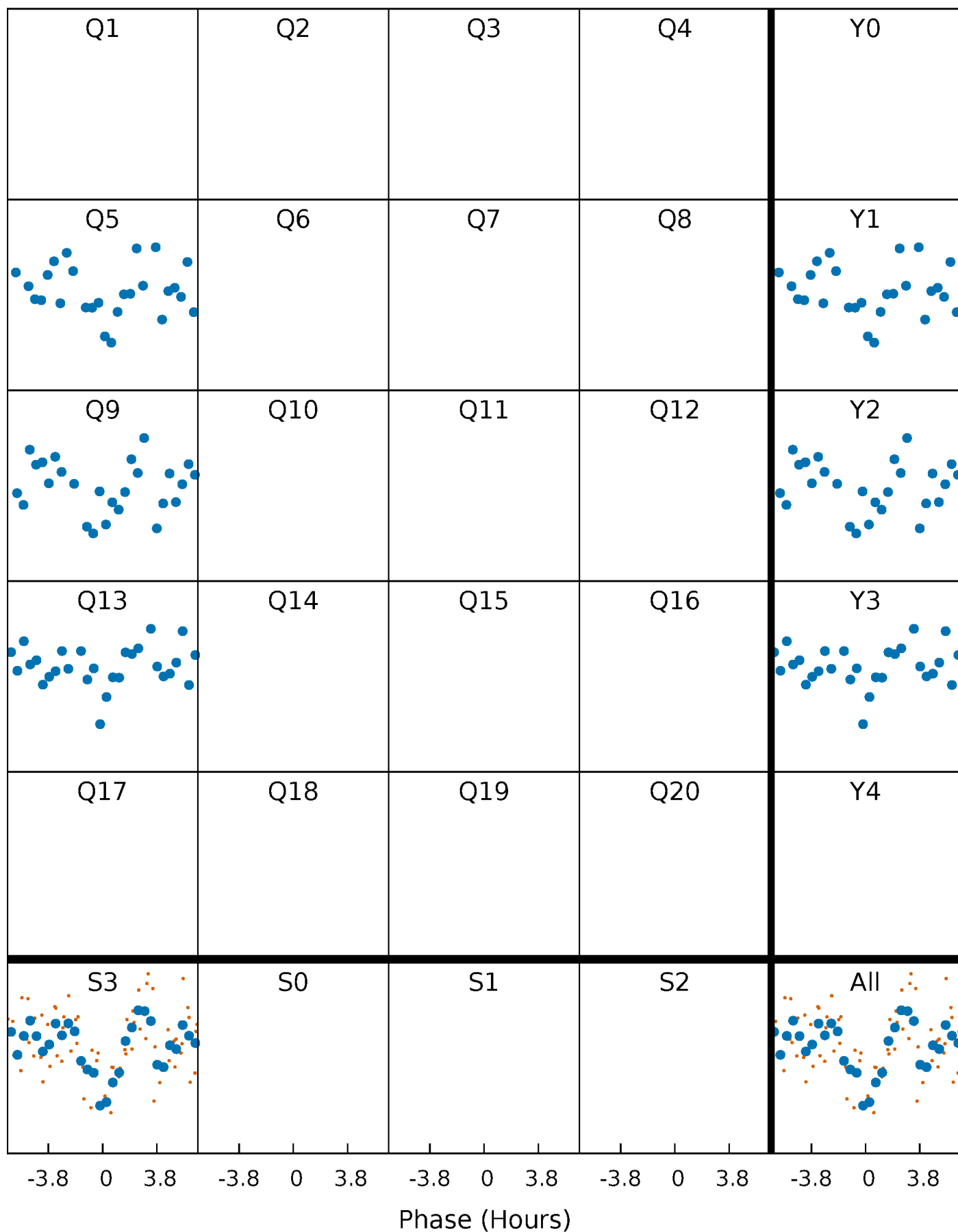


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



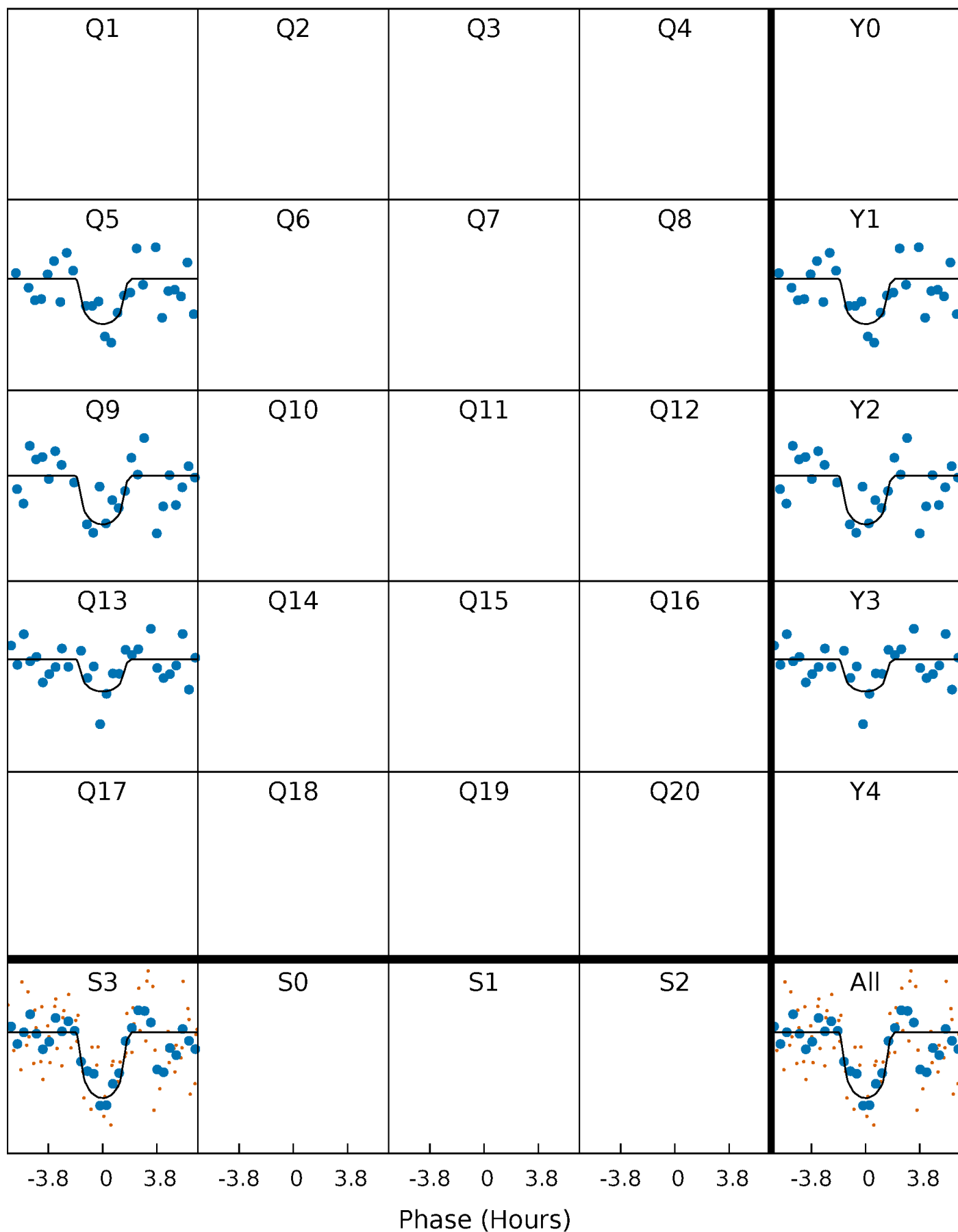
PDC Quarter-Phased Transit Curves

TCE 009480140-01 P=375.975123 Days $T_0=137.069677$ (BKJD)



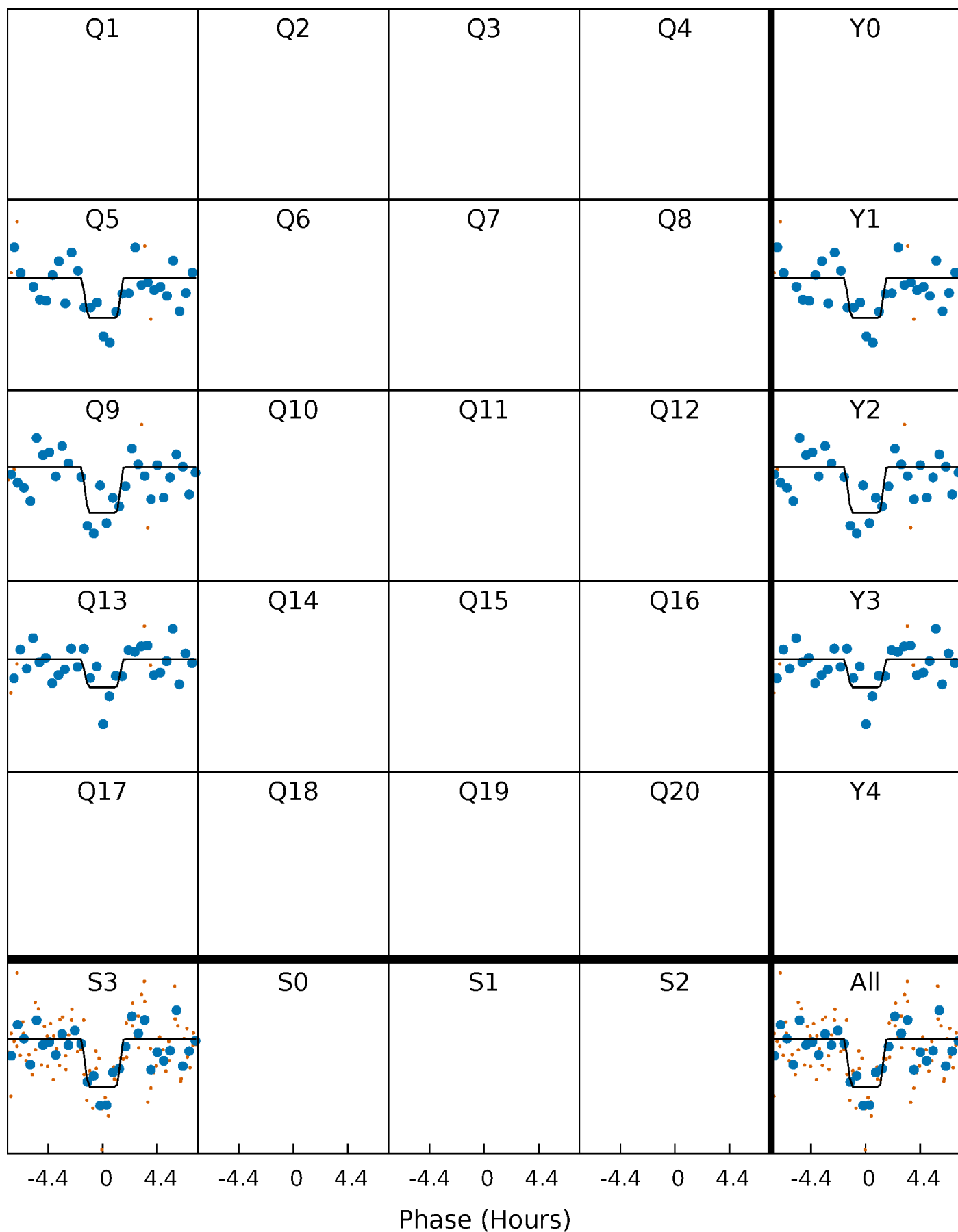
DV Quarter-Phased Transit Curves

TCE 009480140-01 P=375.975123 Days $T_0=137.069677$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

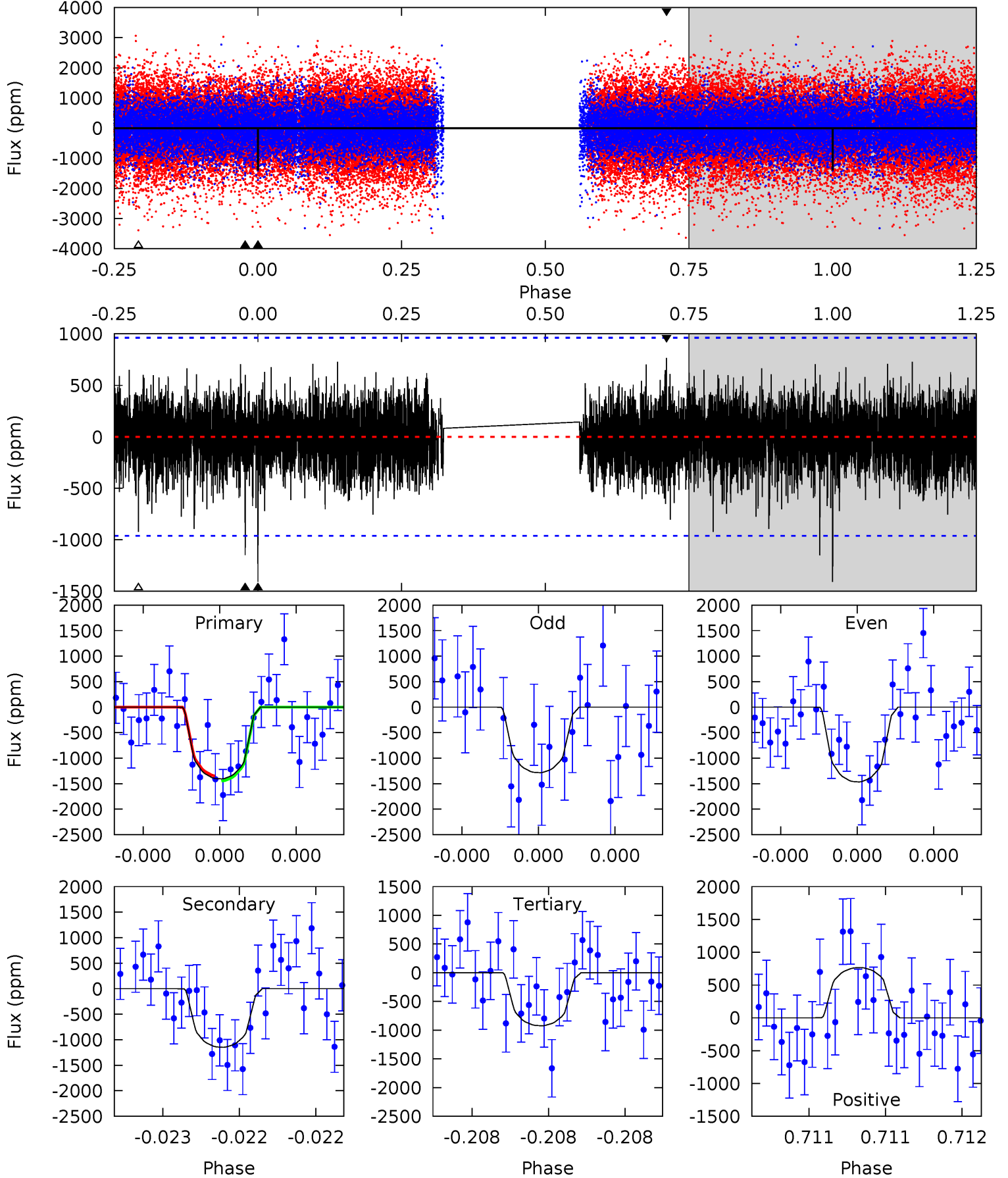
TCE 009480140-01 P=375.968789 Days $T_0=137.080601$ (BKJD)



DV Model-Shift Uniqueness Test

009480140-01, P = 375.975123 Days, E = 137.069677 Days

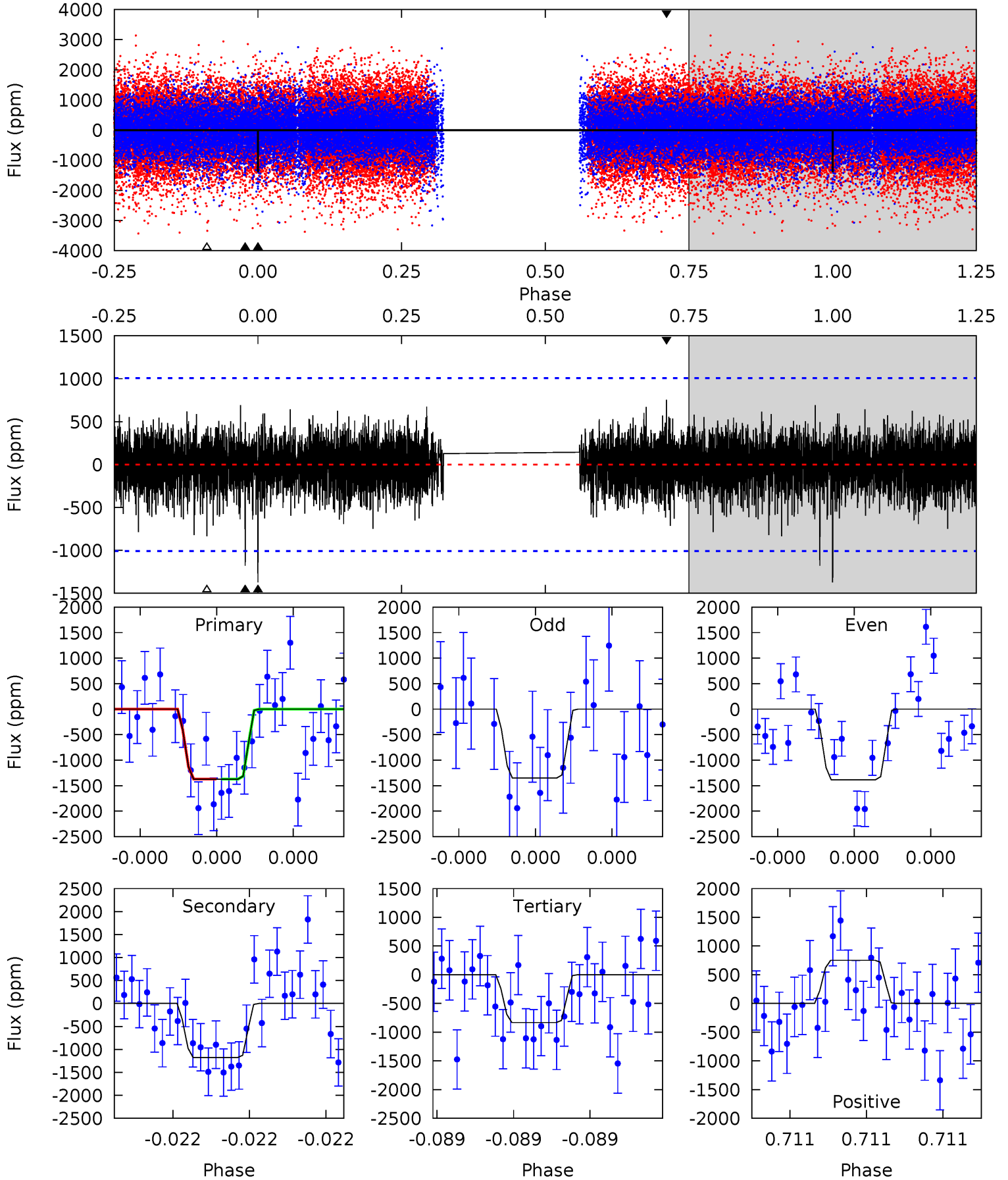
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.19	6.69	5.38	4.46	5.60	3.52	1.23	2.81	3.73	1.31	2.23	0.49	1.00	0.35	0.29



Alt Model-Shift Uniqueness Test

009480140-01, P = 375.968789 Days, E = 137.080601 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.65	6.57	4.65	4.19	5.62	3.55	1.10	3.00	3.45	1.93	2.38	0.09	1.02	0.35	0.01



Stellar Parameters For KIC 009480140

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4648^{+139}_{-139}	$4.622^{+0.054}_{-0.032}$	$-0.420^{+0.350}_{-0.300}$	$0.639^{+0.057}_{-0.057}$	$0.624^{+0.080}_{-0.040}$	$3.366^{+0.769}_{-0.431}$
	+3%/-3%	+1%/-1%	+83%/-71%	+9%/-9%	+13%/-6%	+23%/-13%
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 009480140-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1149 ± 172	$4.86^{+4.53}_{-3.21}$	245^{+8}_{-9}	3558^{+1852}_{-612}	$20204^{+163135}_{-14820}$
Alt.	-1179 ± 179	$4.76^{+4.33}_{-3.22}$	244^{+9}_{-9}	3603^{+2029}_{-617}	$21408^{+186739}_{-15293}$

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 $A_{obs} \gg 1.0$

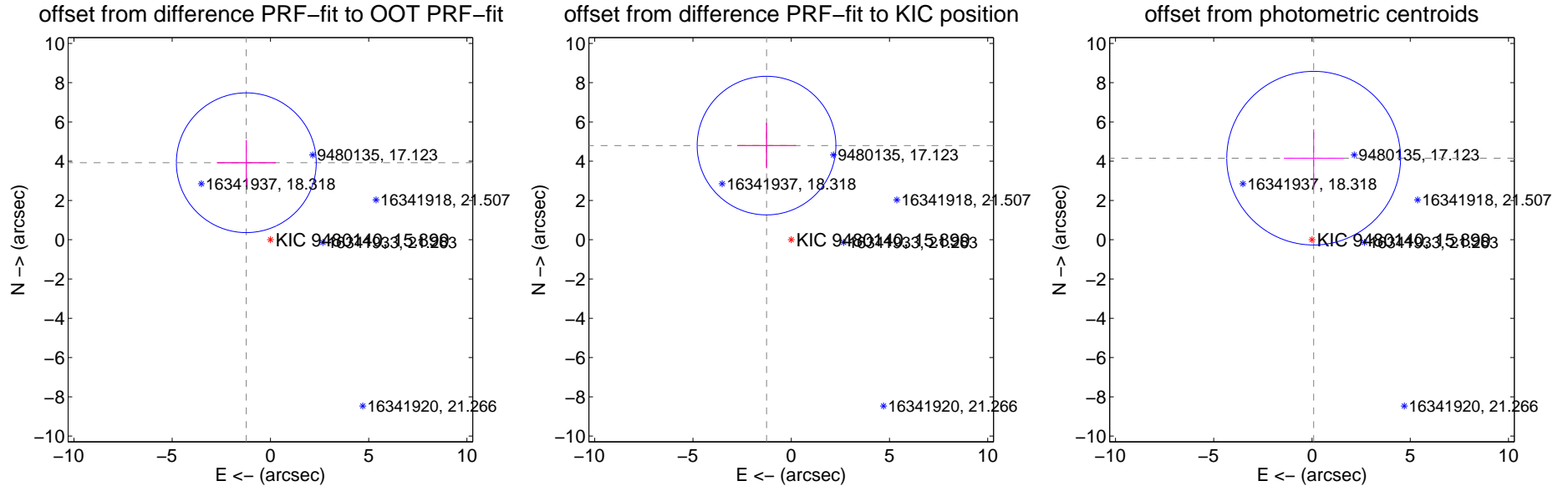
DV Centroid Data

Supplemental centroid analysis for 009480140-01. Kepler magnitude: 15.90. Transit SNR 7.30

There are 0 quarters with good PRF difference image offsets

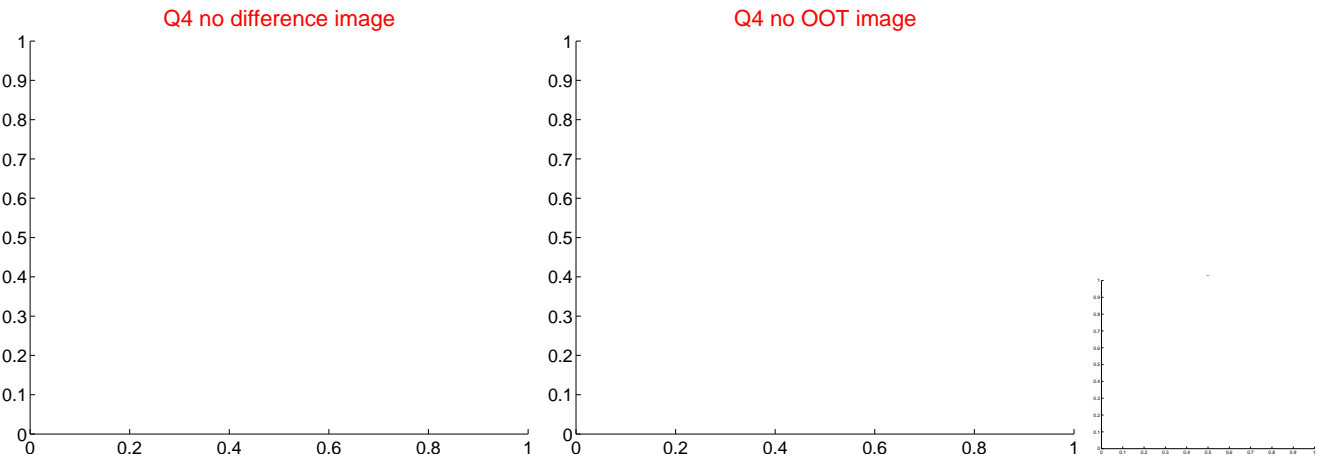
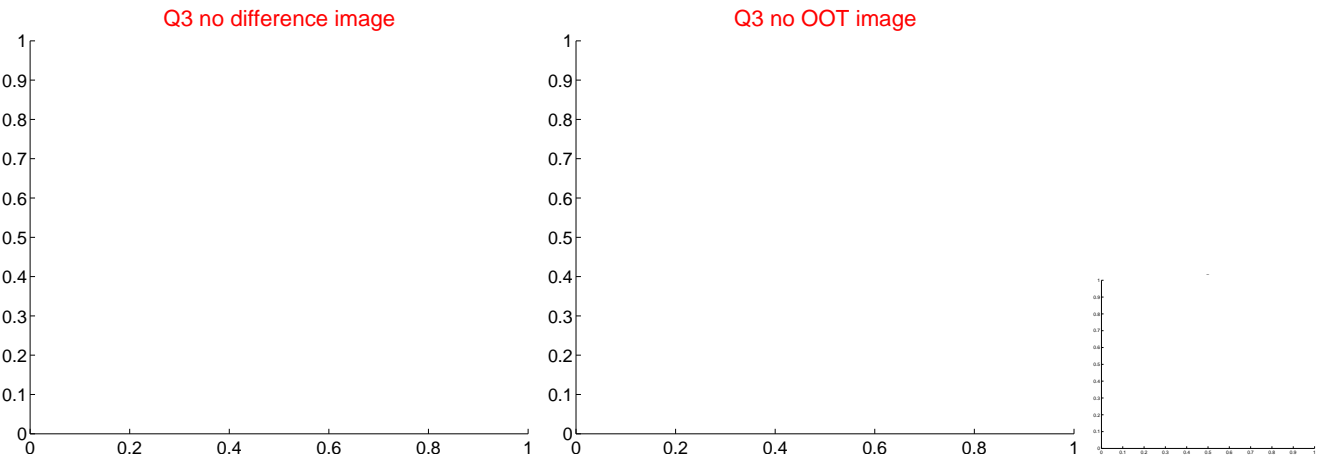
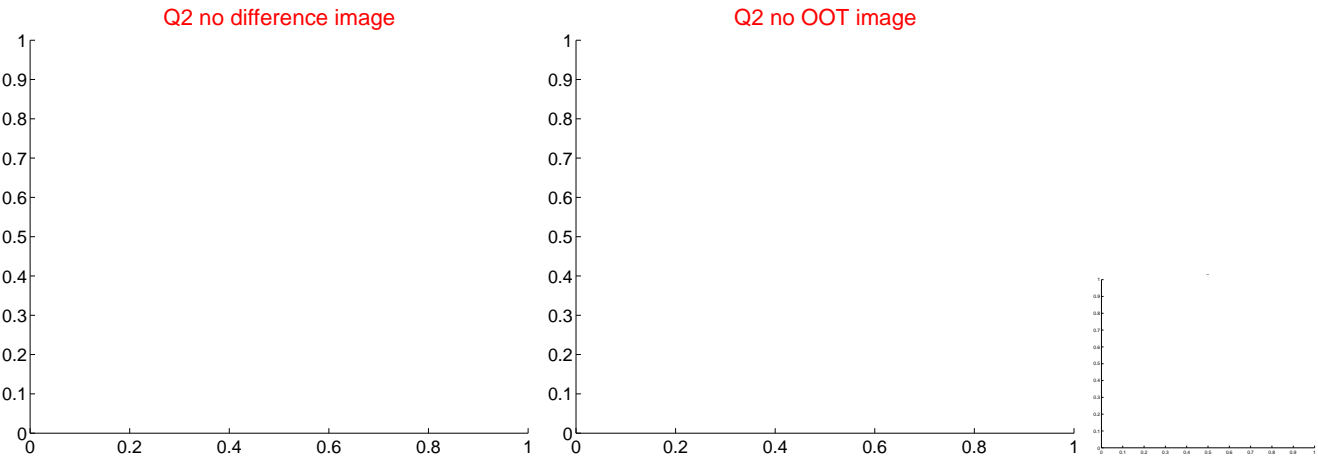
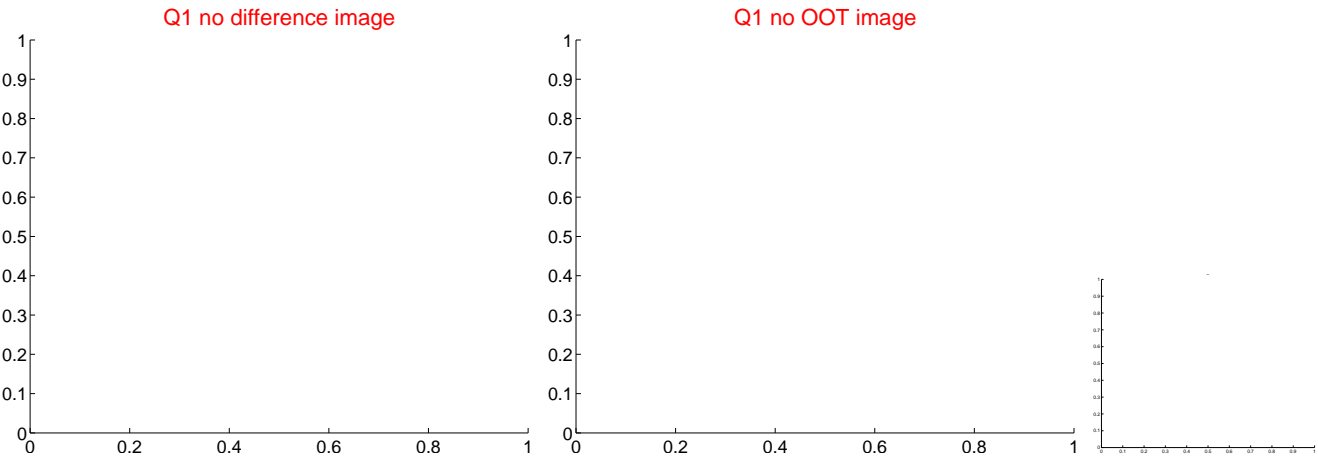
The direct PRF centroid is offset from the target star catalog position by about 0.87 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.111 ± 1.186	3.47	1.228 ± 1.496	3.923 ± 1.151
PRF-fit source offset from KIC position	4.958 ± 1.177	4.21	1.257 ± 1.496	4.796 ± 1.151
photometric centroid source offset	4.16 ± 1.47	2.82	-0.09 ± 1.51	4.15 ± 1.47

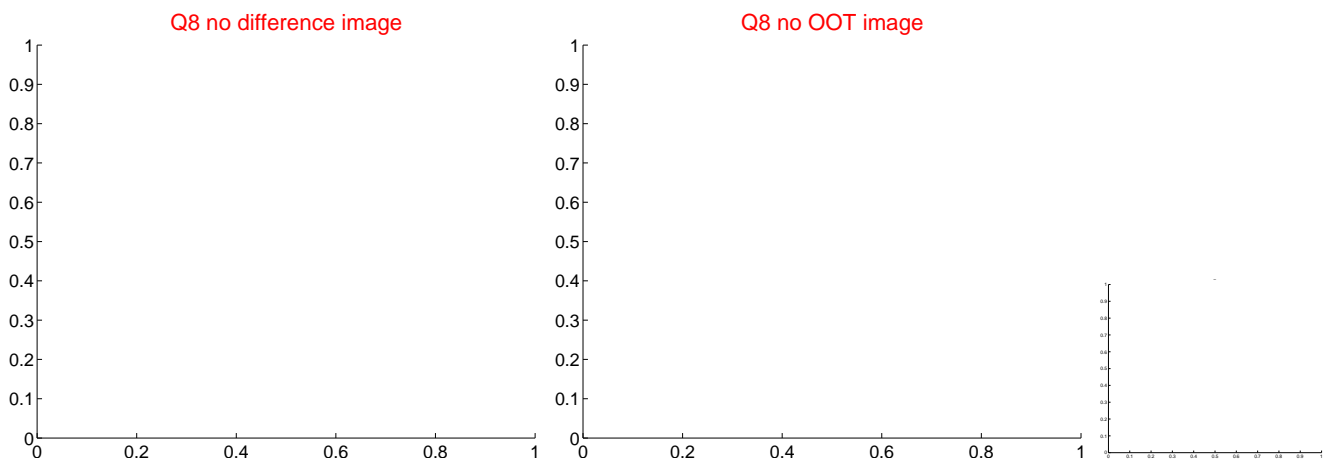
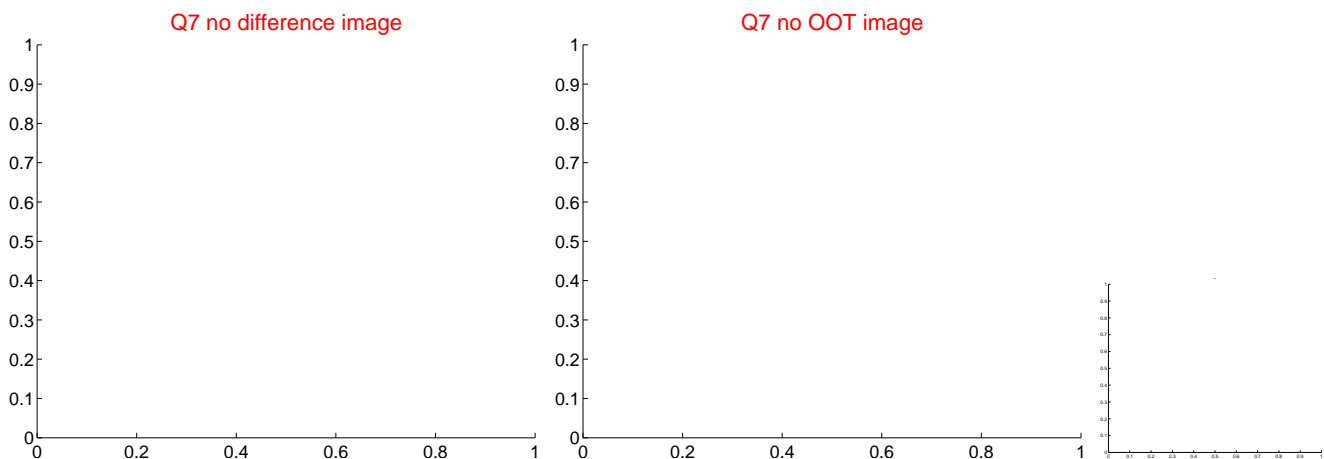
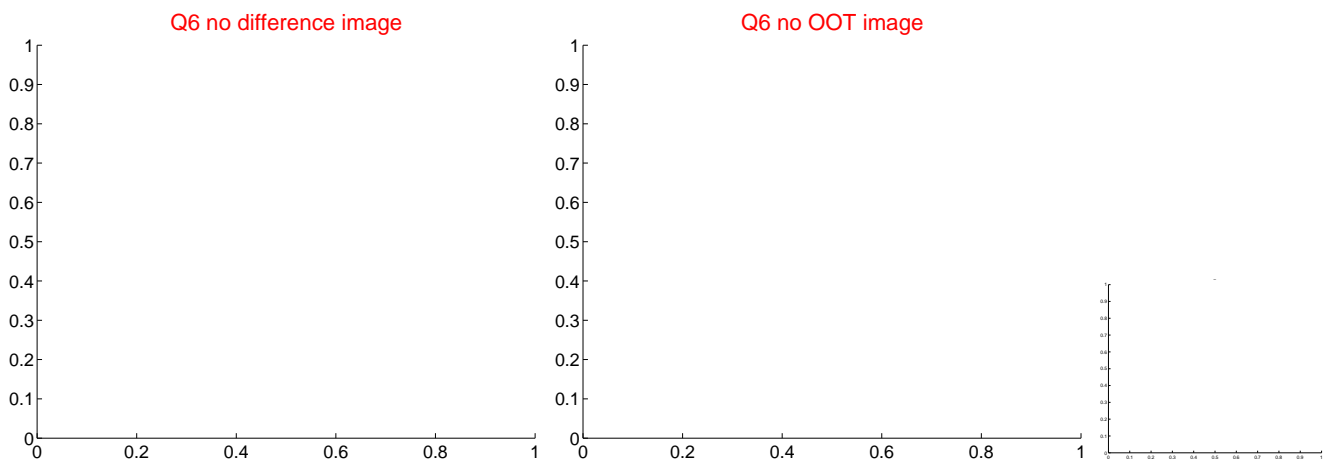
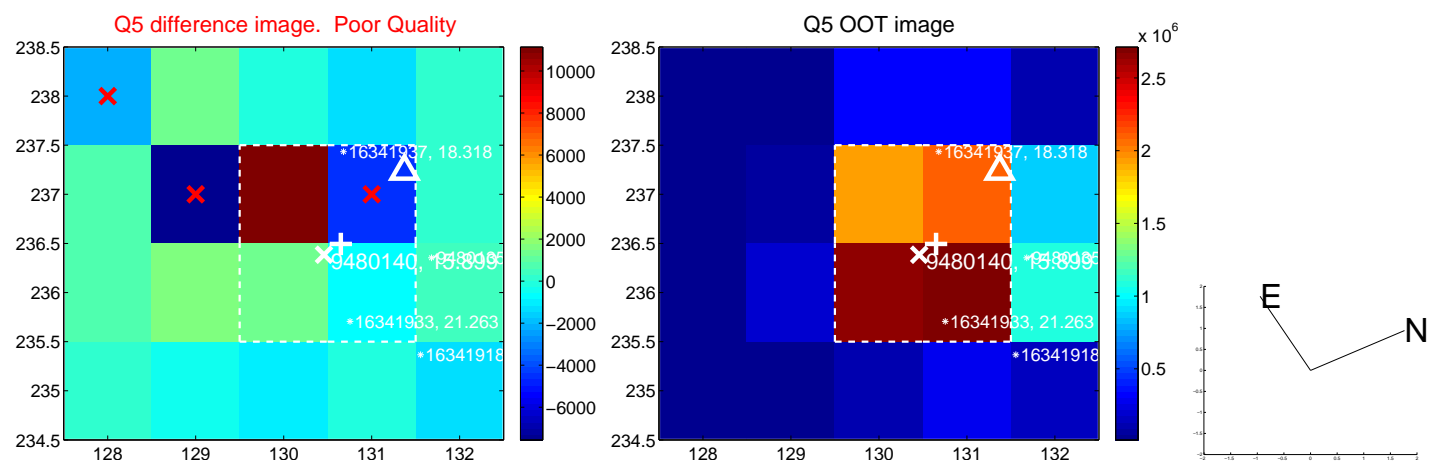


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

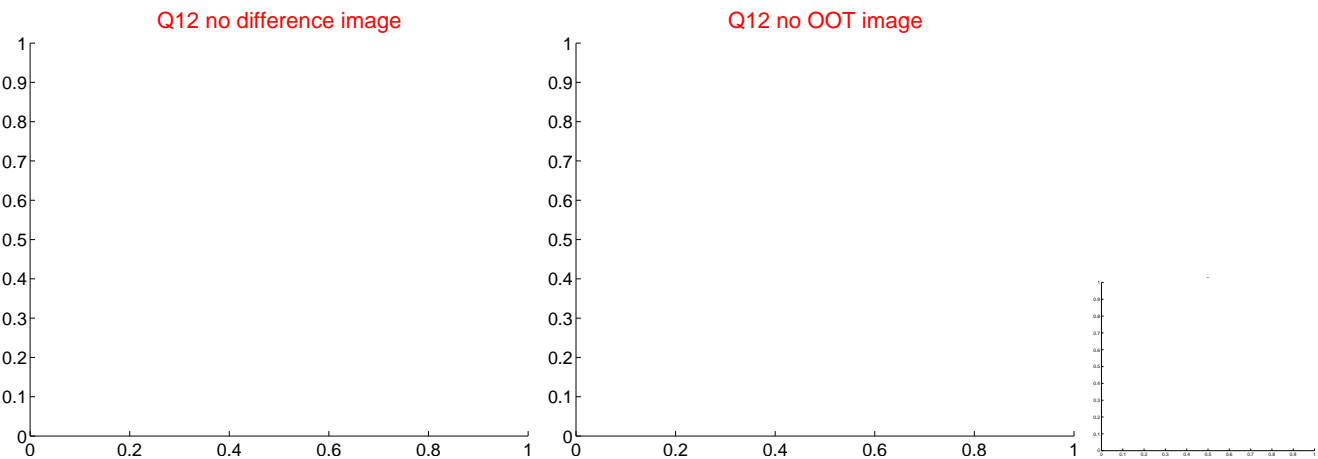
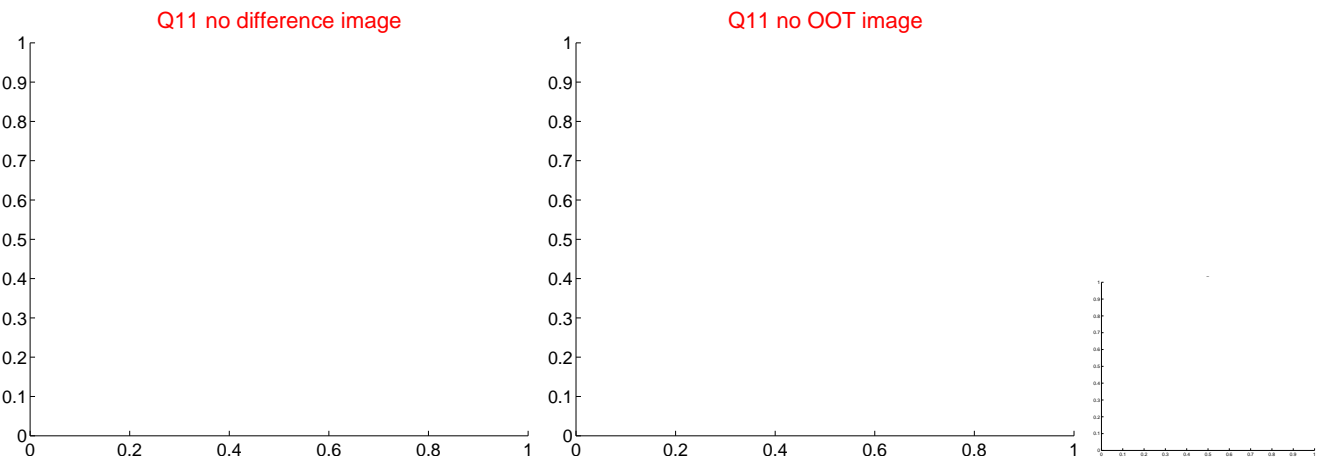
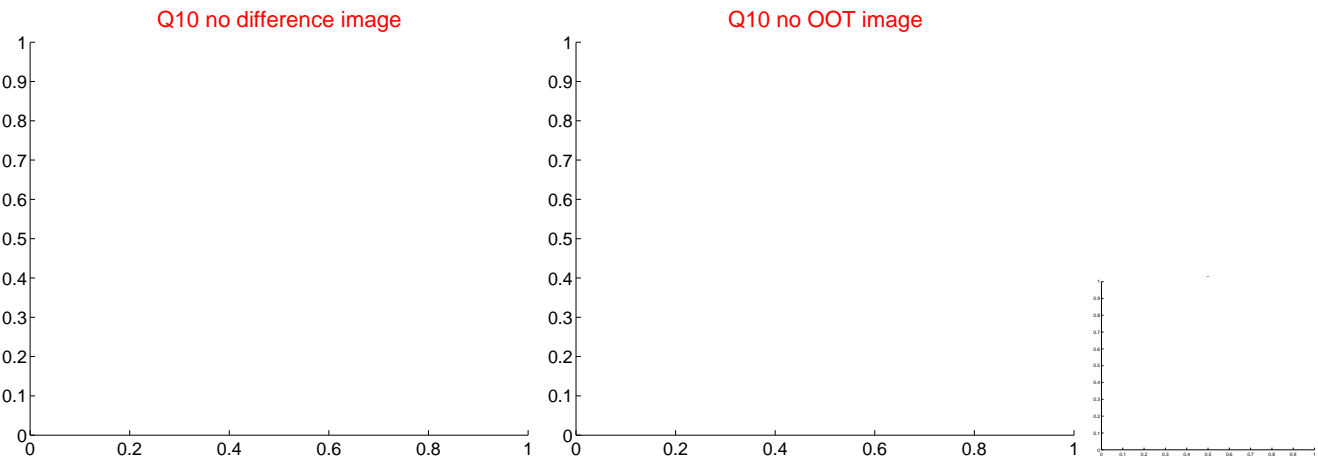
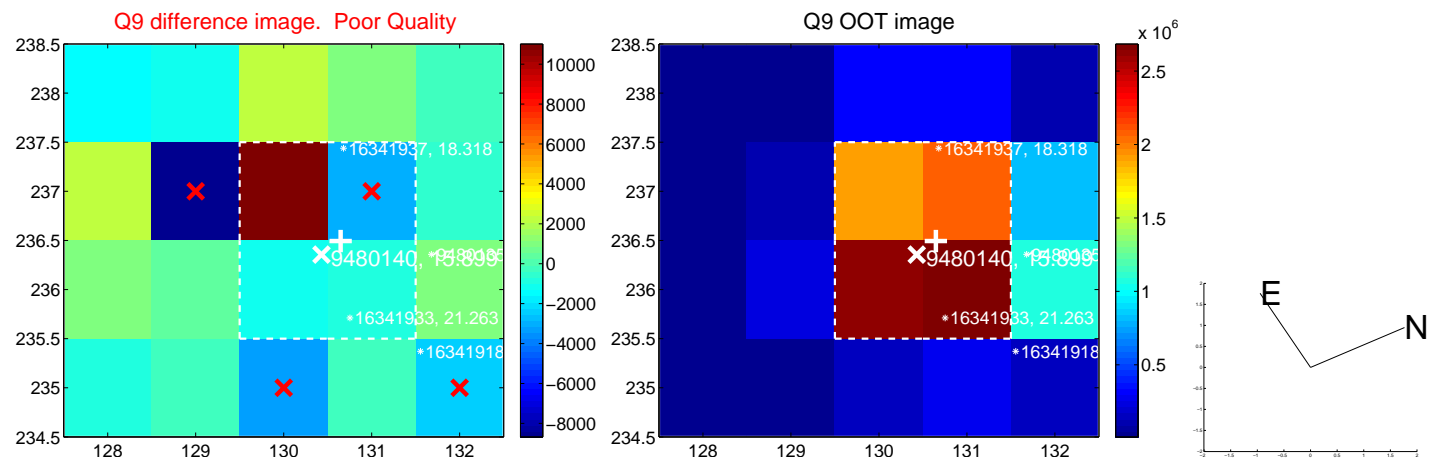
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



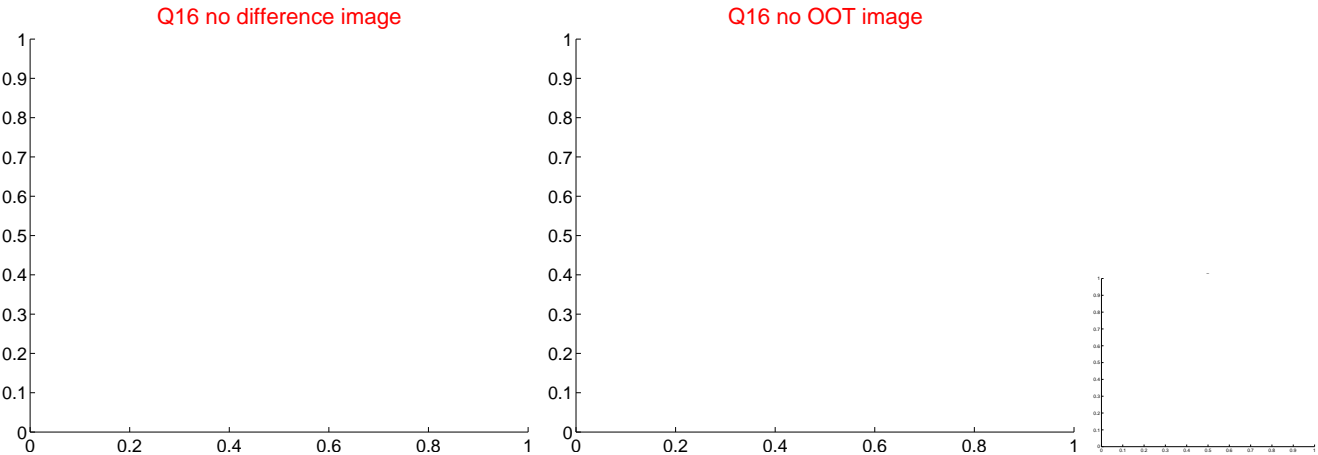
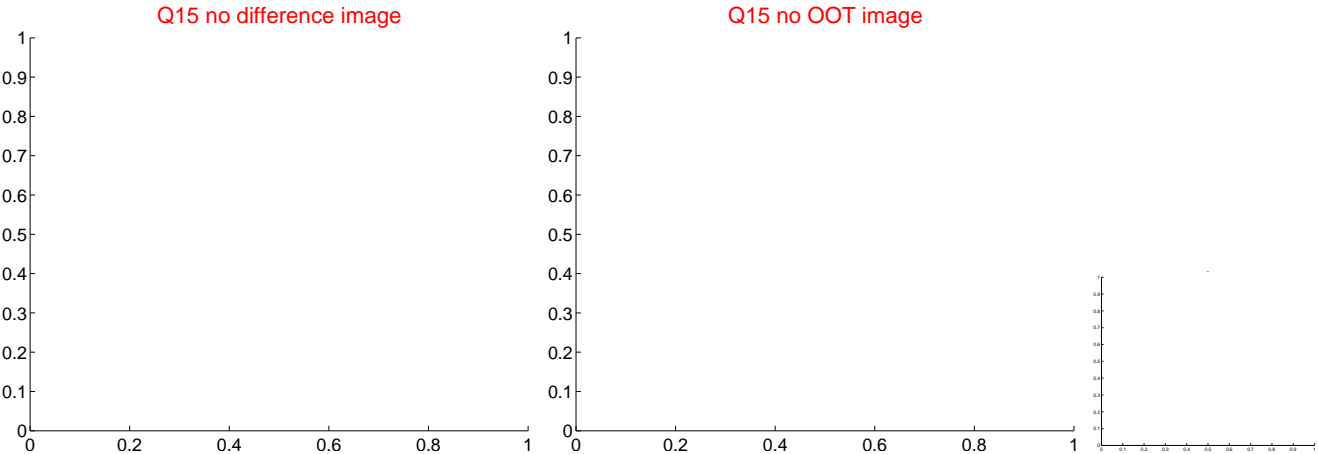
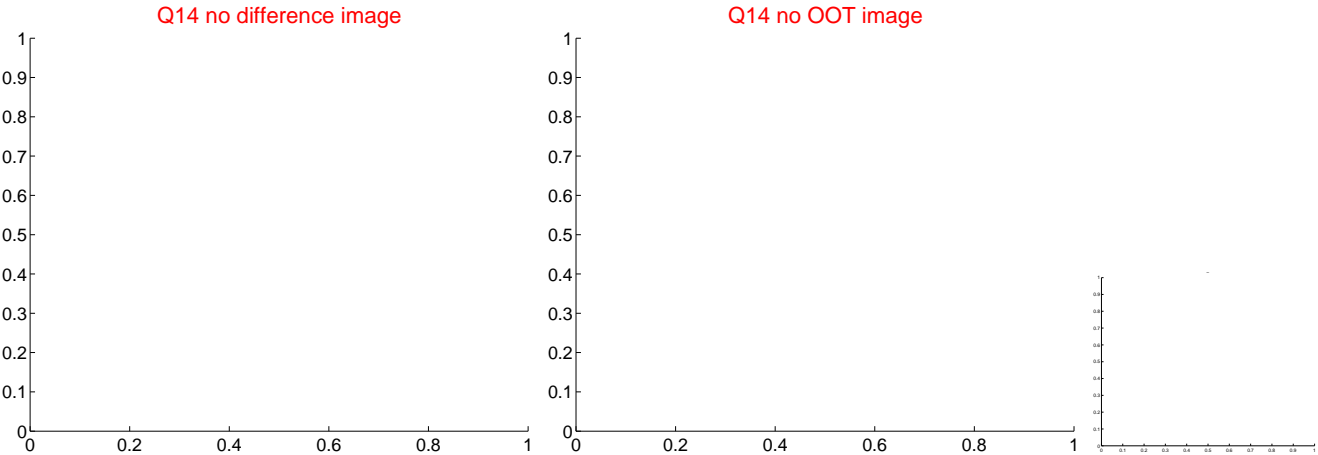
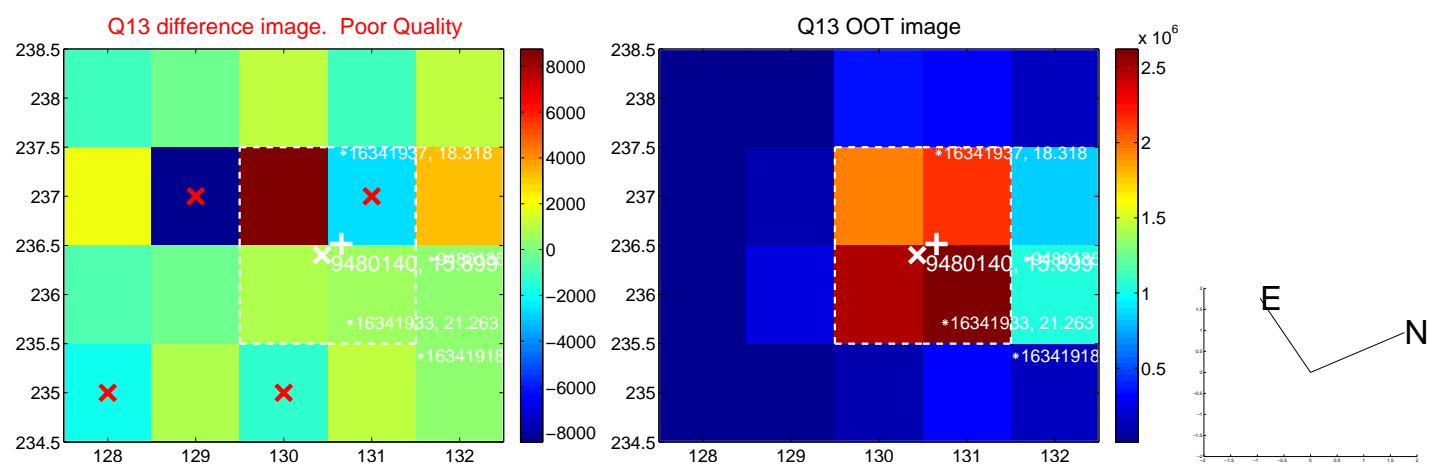
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



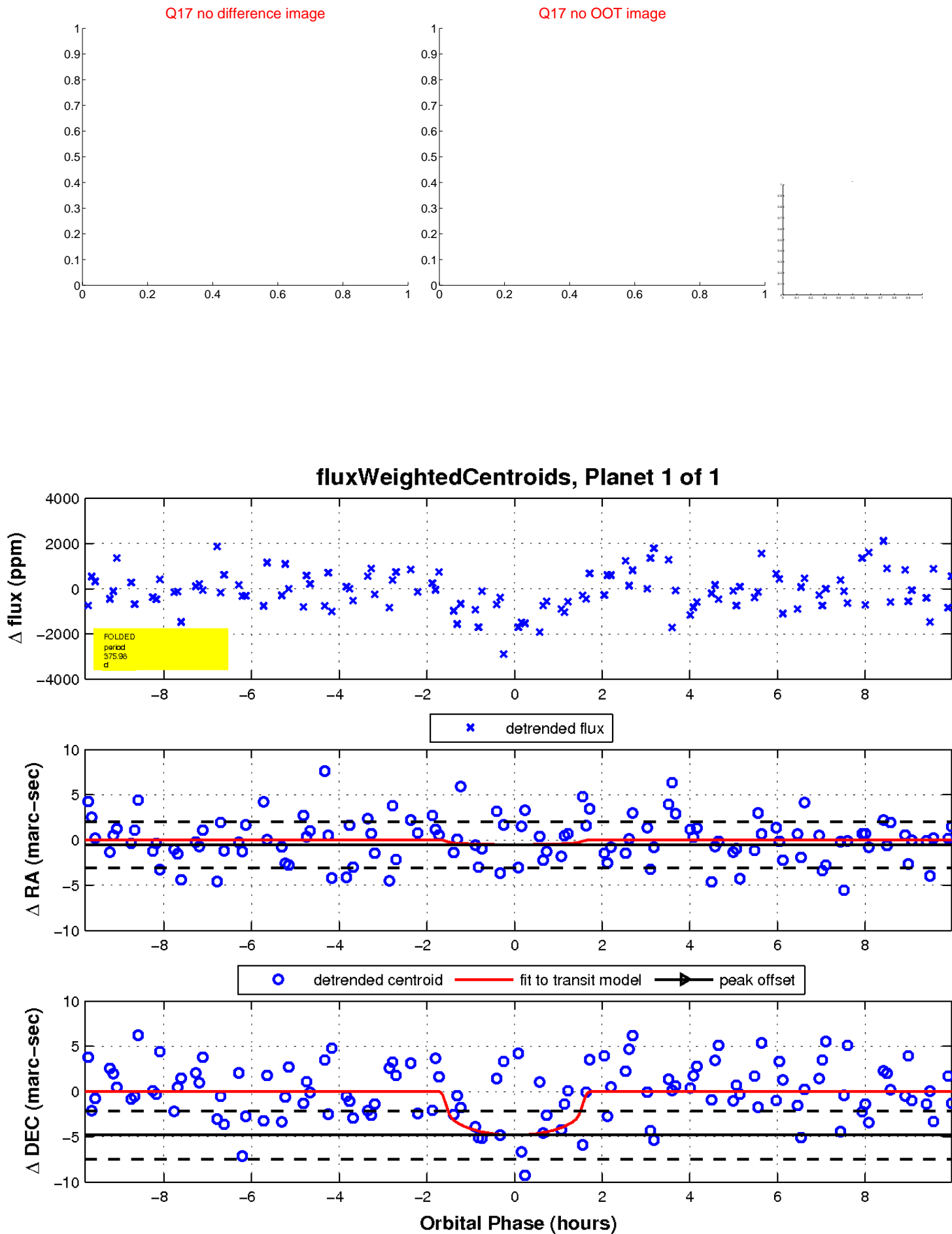
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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

