

KIC 006691169

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})
006691169-01	OBS	4890.01	63.095174	158.120720	417.5	7.127	8.5	9.9	1.32	6622	2.90	25.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006691169-01	OBS	PC	1.00	0	0	0	0	CENT_FEW_DIFFS

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

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

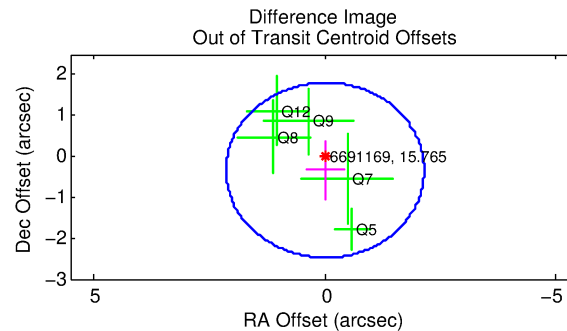
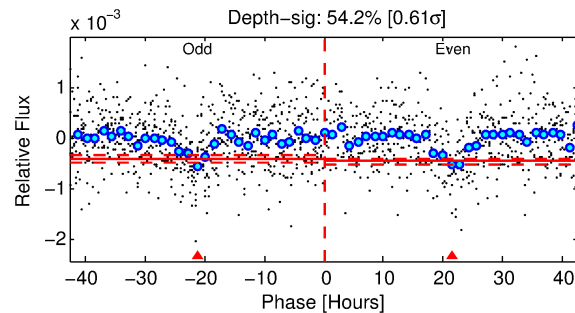
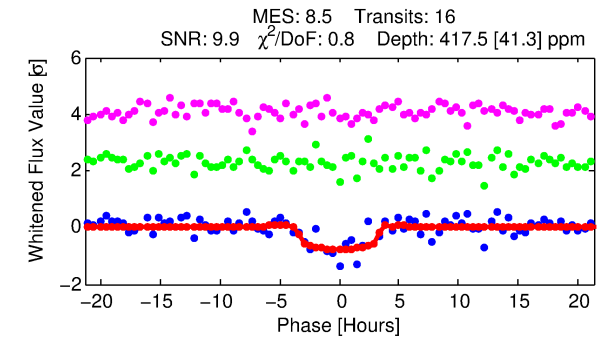
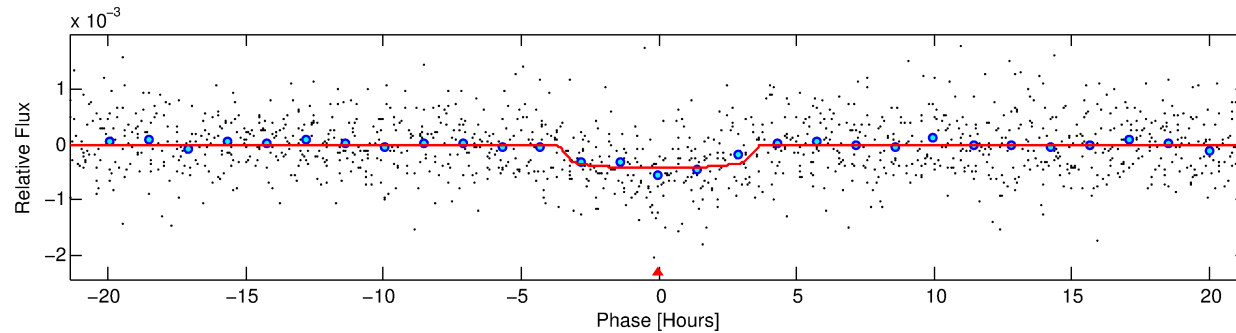
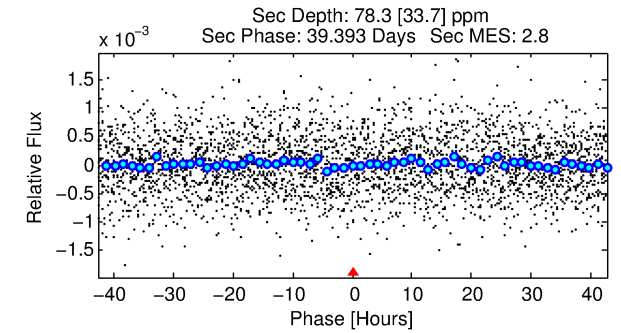
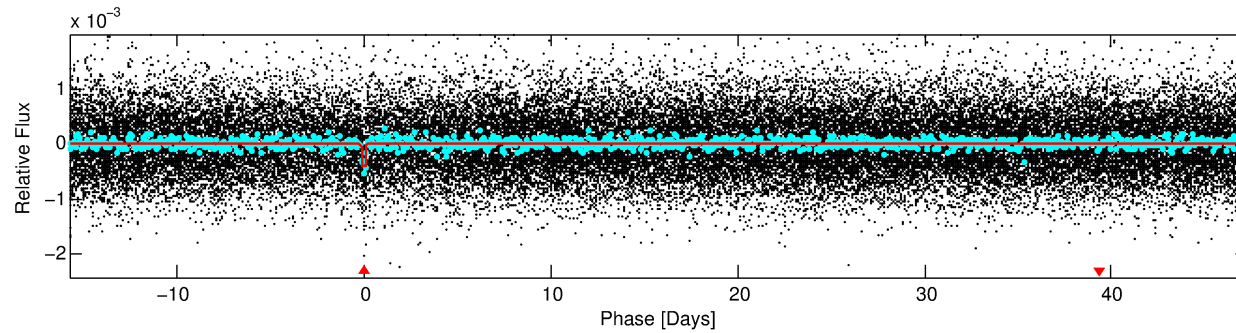
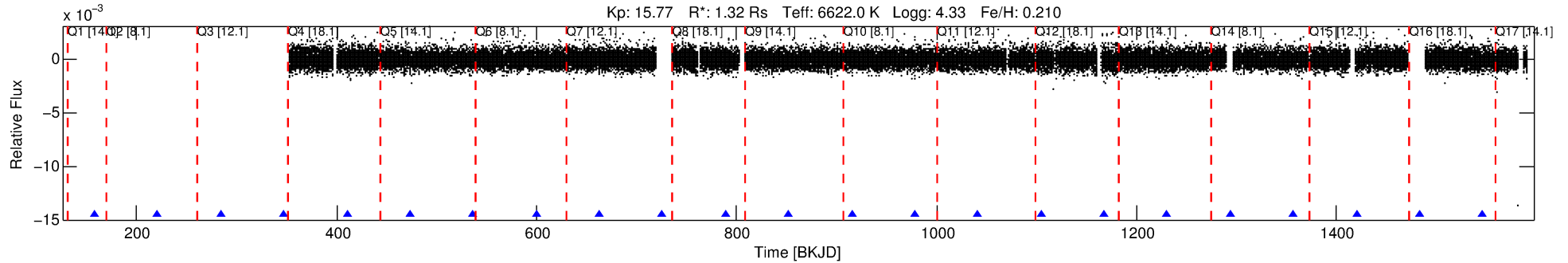
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006691169-01

No Significant Match Found

DV One-Page Summary

KIC: 6691169 Candidate: 1 of 1 Period: 63.095 d
KOI: K04890.01 Corr: 0.861



DV Fit Results:

Period = 63.09517 [0.00118] d
Epoch = 158.1207 [0.0159] BKJD
Rp/R* = 0.0201 [0.0107]
a/R* = 49.80 [142.20]
b = 0.71 [2.04]
Seff = 25.45 [10.11]
Teff = 573 [57] K
Rp = 2.90 [1.78] Re
a = 0.3448 [0.0866] AU
Ag = 608.52 [732.73] [0.83σ]
Teffp = 4398 [1276] K [2.99σ]

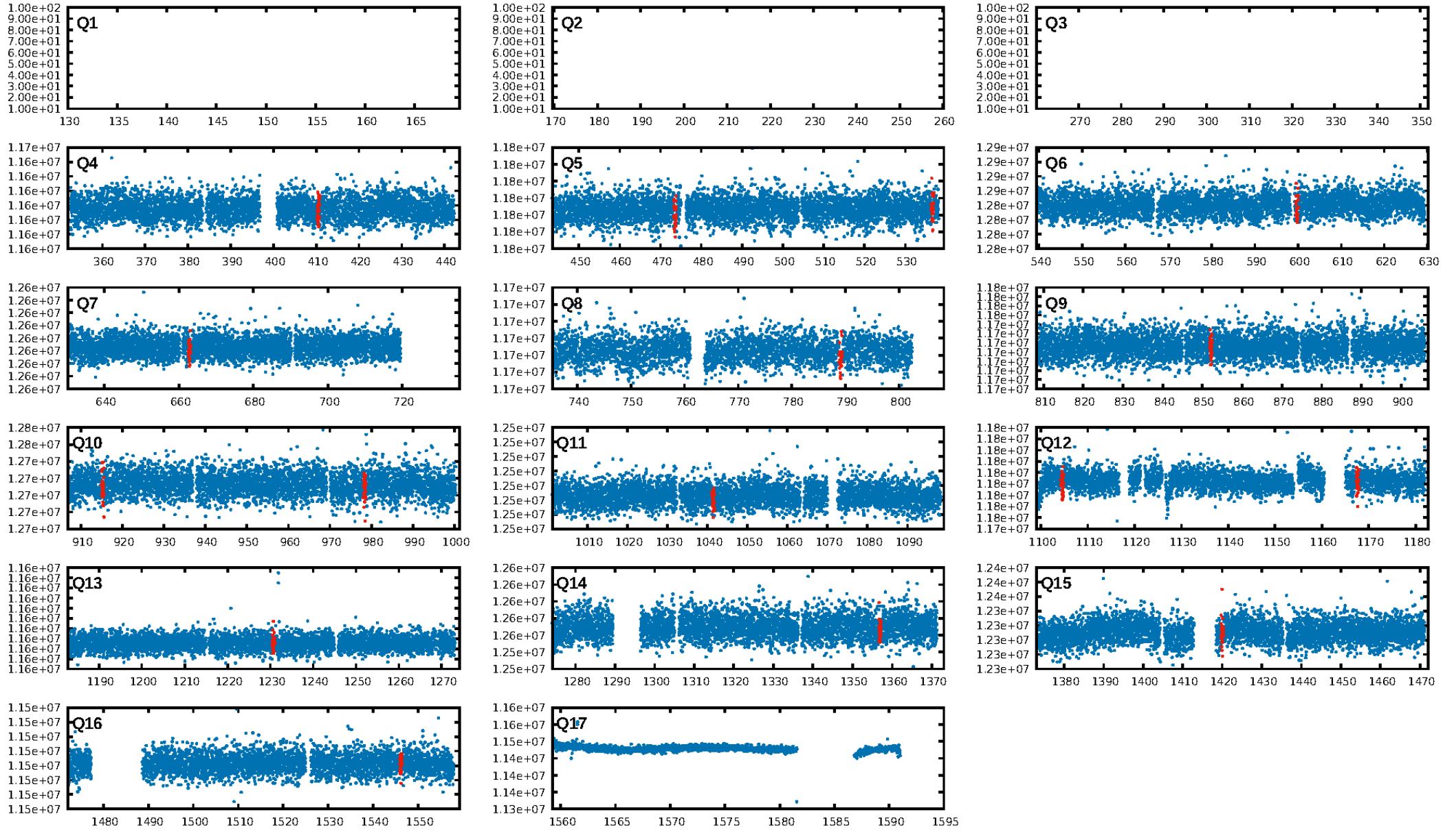
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 61.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.57e-17
RollingBand-fgt: 1.00 [16/16]
GhostDiagnostic-chr: 5.699
Centroid-sig: 0.9%
Centroid-so: 2.235 arcsec [1.82σ]
OotOffset-rm: 0.339 arcsec [0.47σ]
KicOffset-rm: 0.275 arcsec [0.39σ]
OotOffset-st: 0/1/2/2 [5]
KicOffset-st: 0/1/2/2 [5]
DiffImageQuality-fgm: 0.80 [4/5]
DiffImageOverlap-fno: 1.00 [10/10]

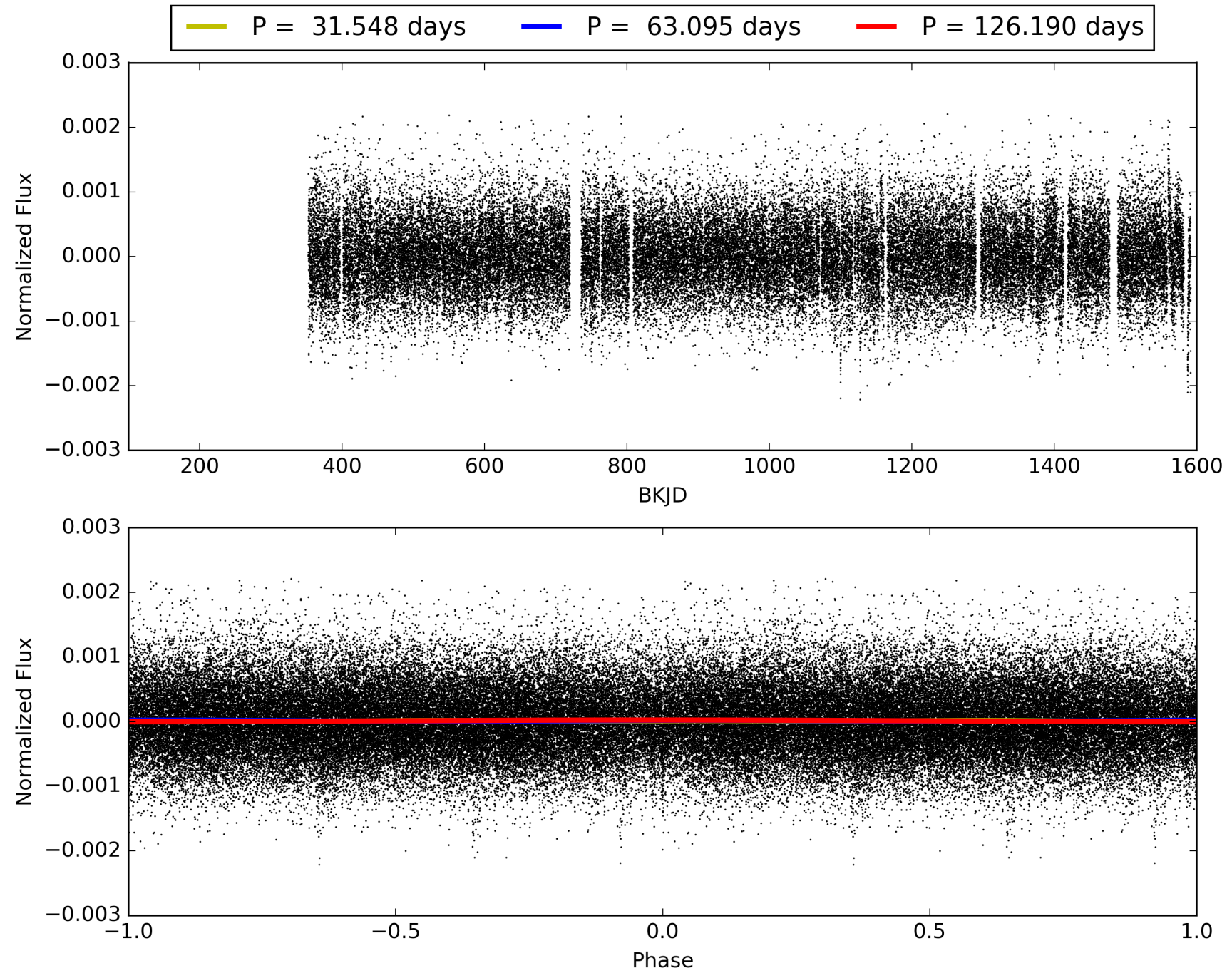
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 04:46:56 Z

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

TCE 006691169-01, PDC Light Curves

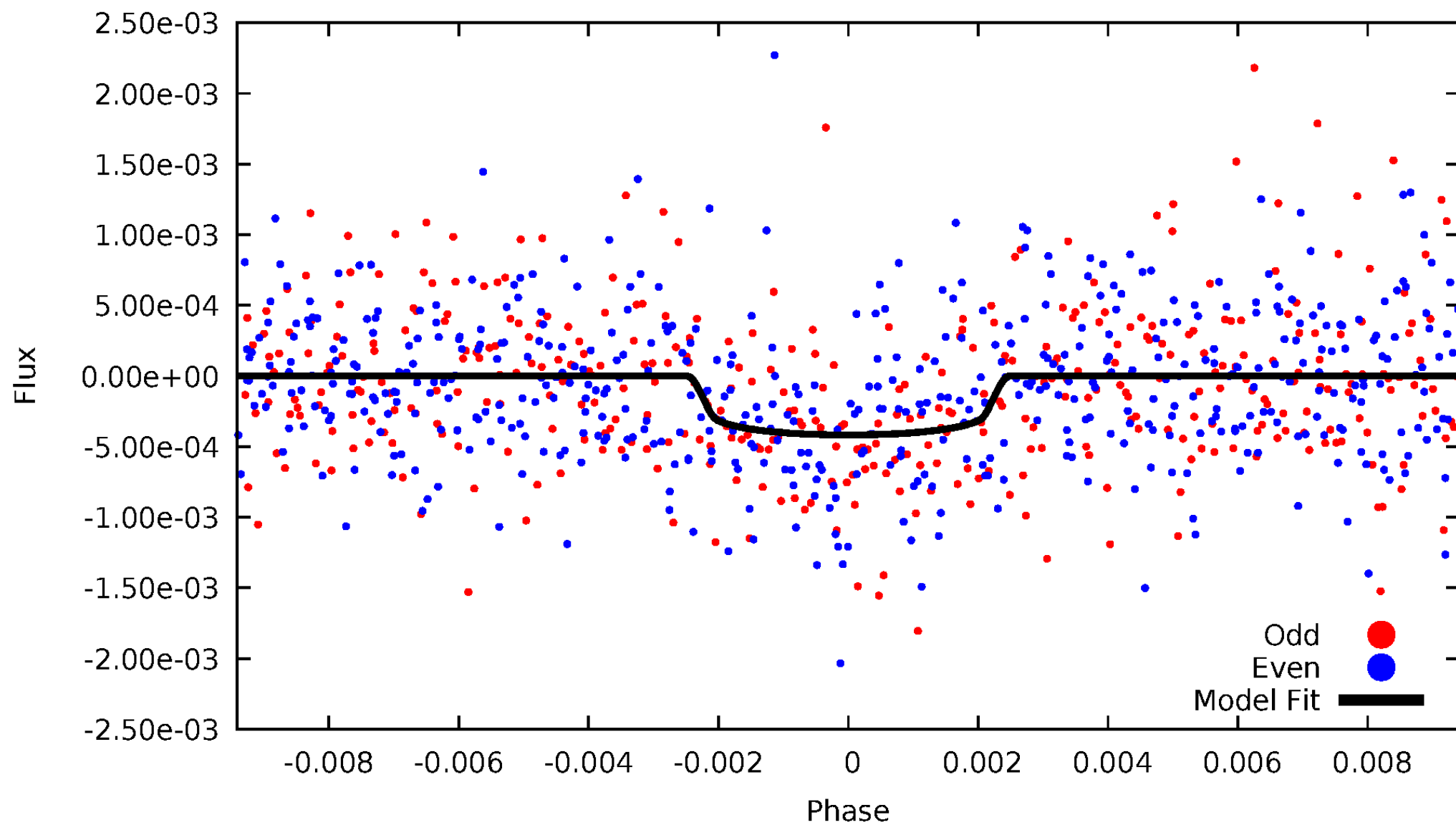


TCE 006691169-01



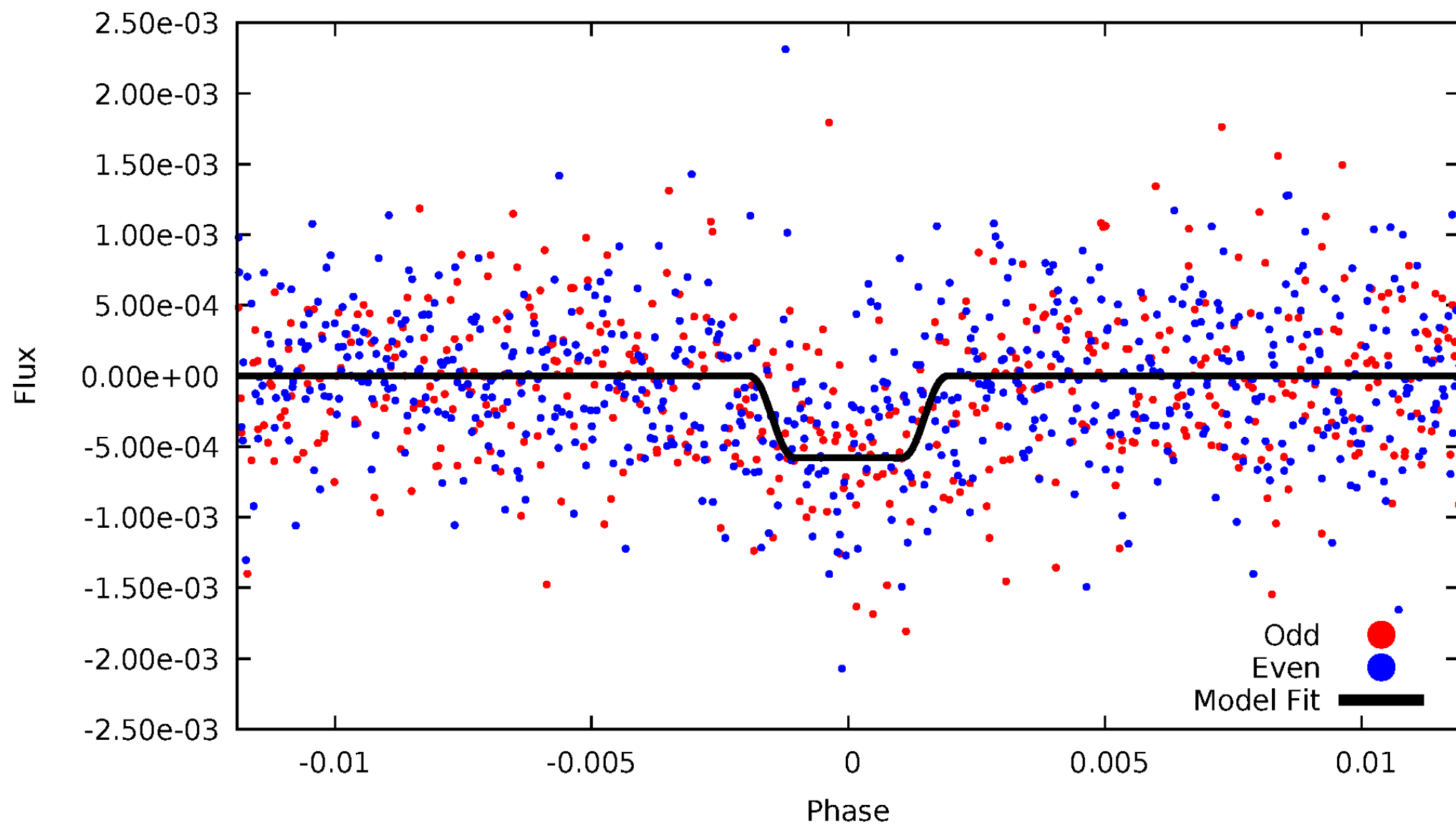
DV Odd/Even

TCE 006691169-01



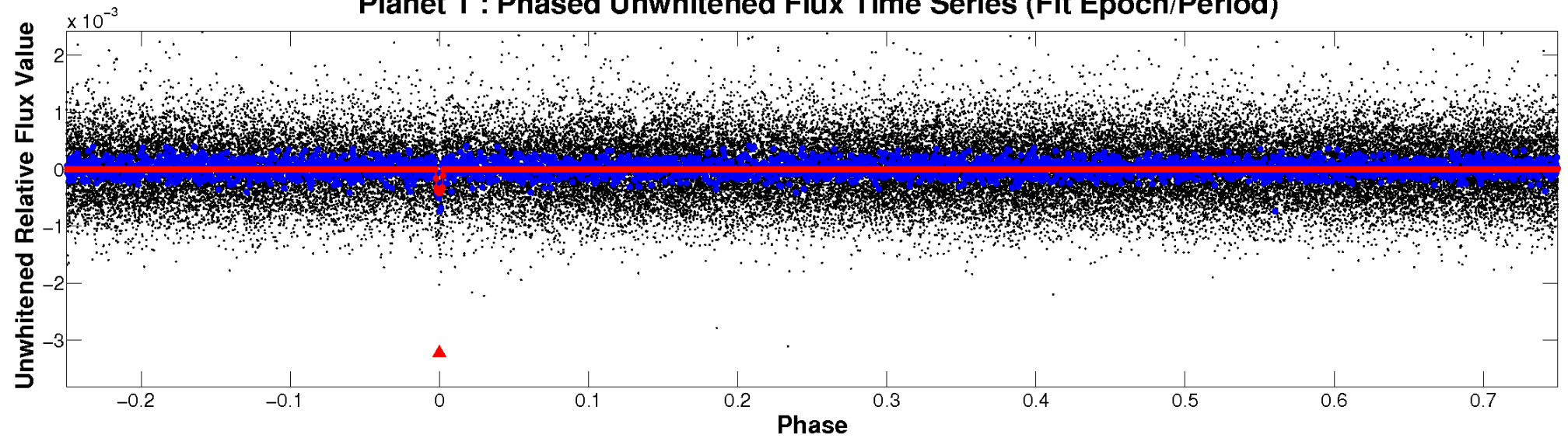
ALT Odd/Even

TCE 006691169-01

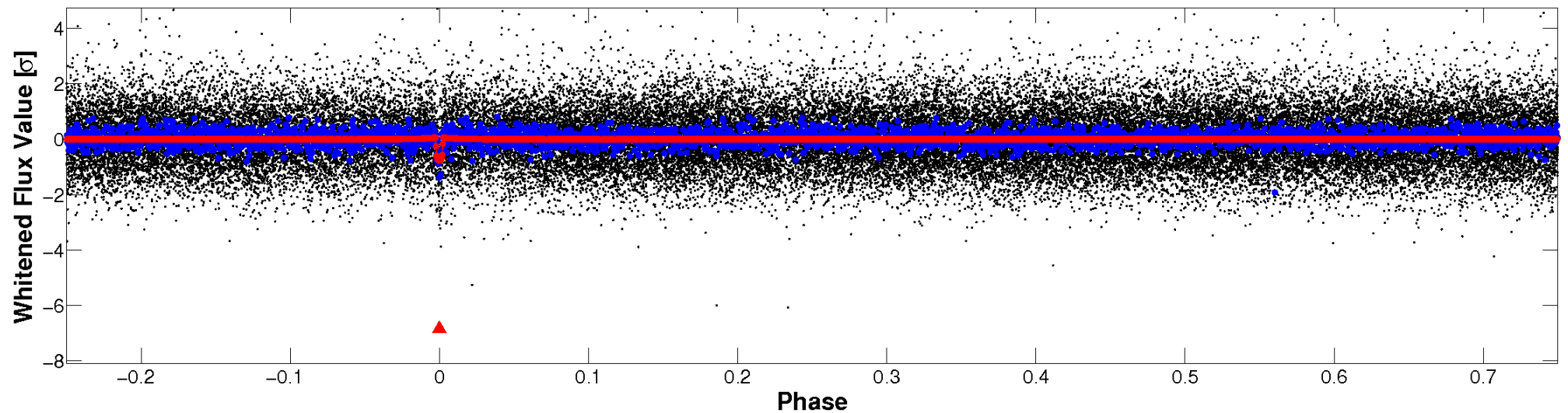


Non-Whitened Vs. Whitened Light Curve

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

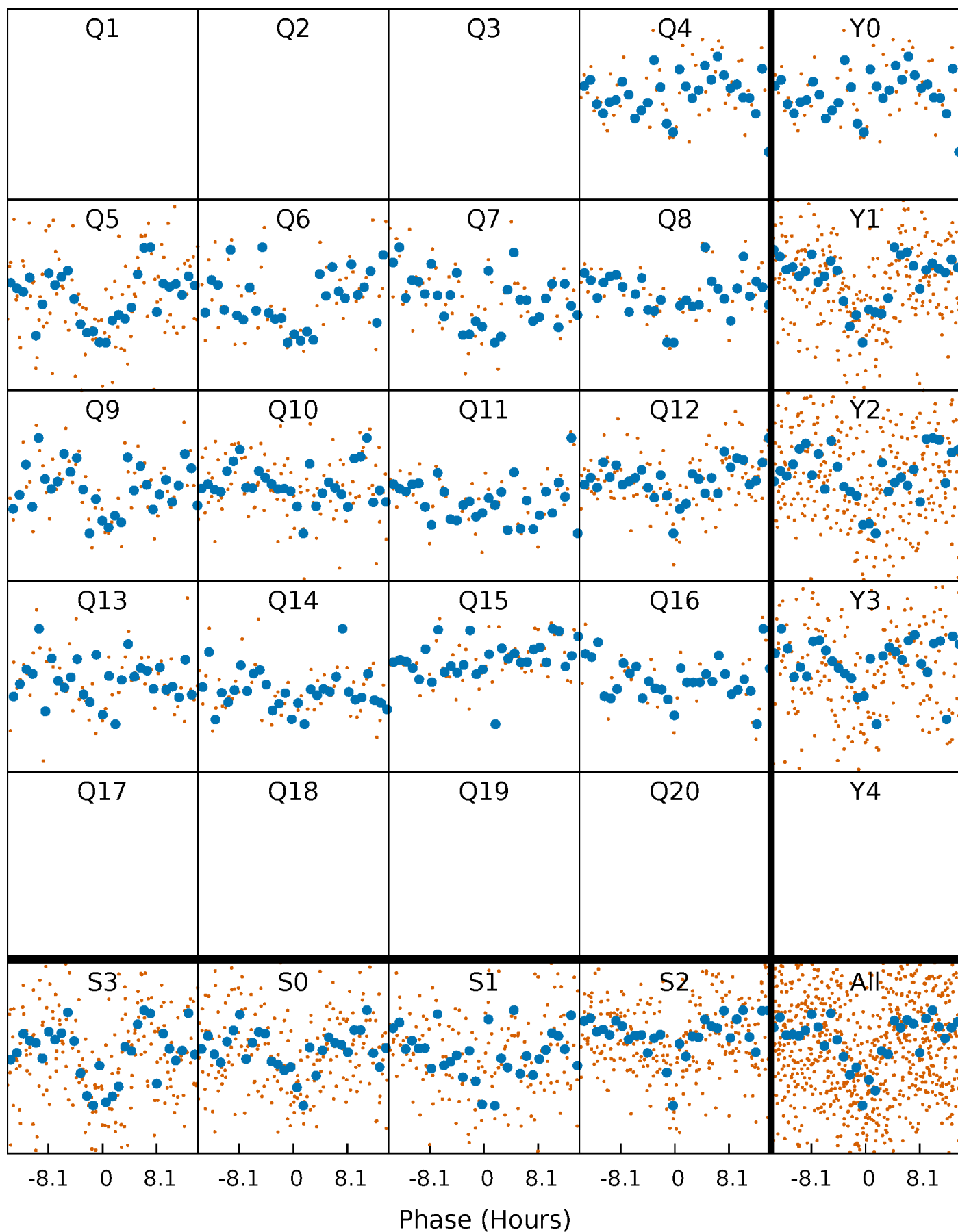


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



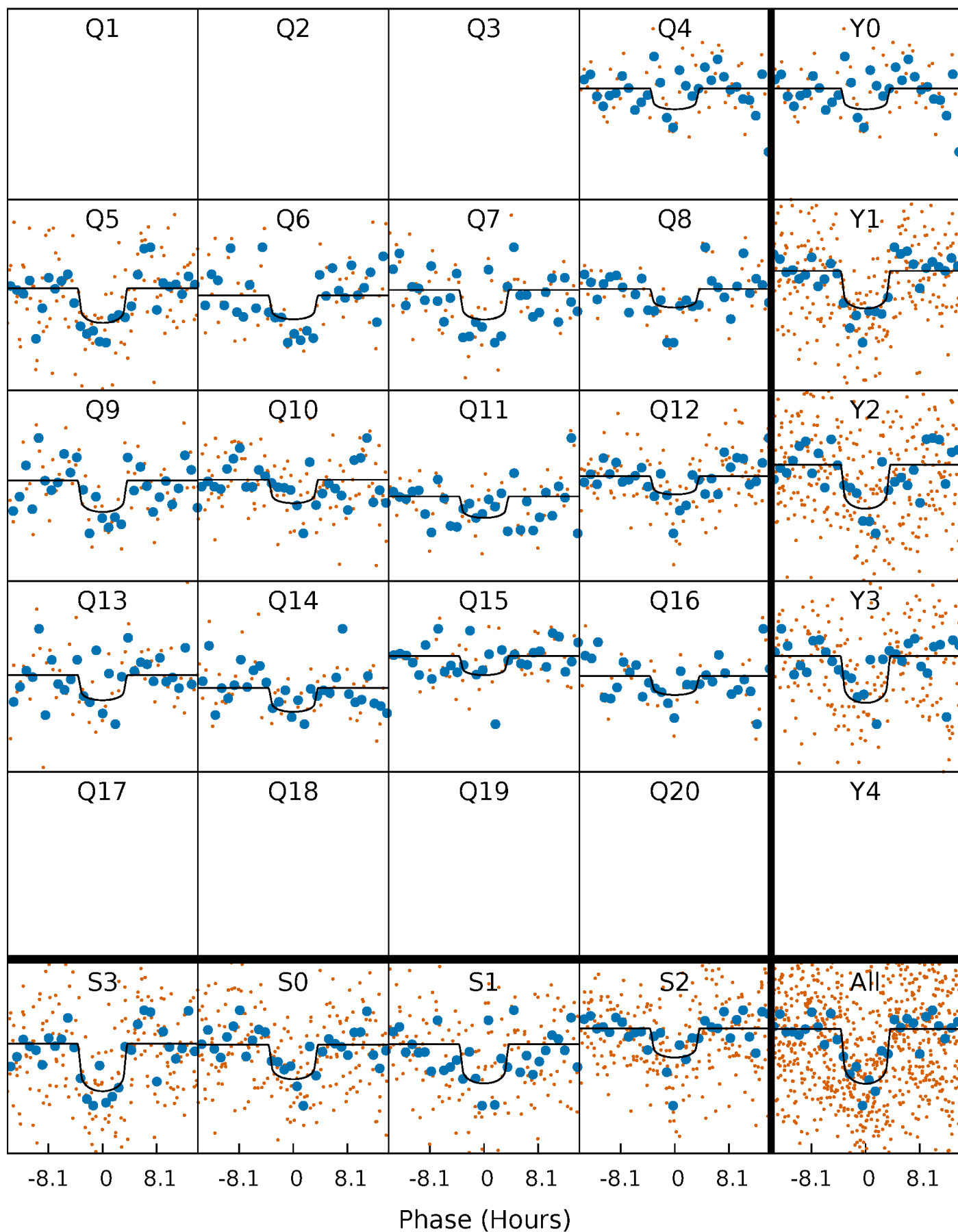
PDC Quarter-Phased Transit Curves

TCE 006691169-01 P= 63.095174 Days $T_0=158.120720$ (BKJD)



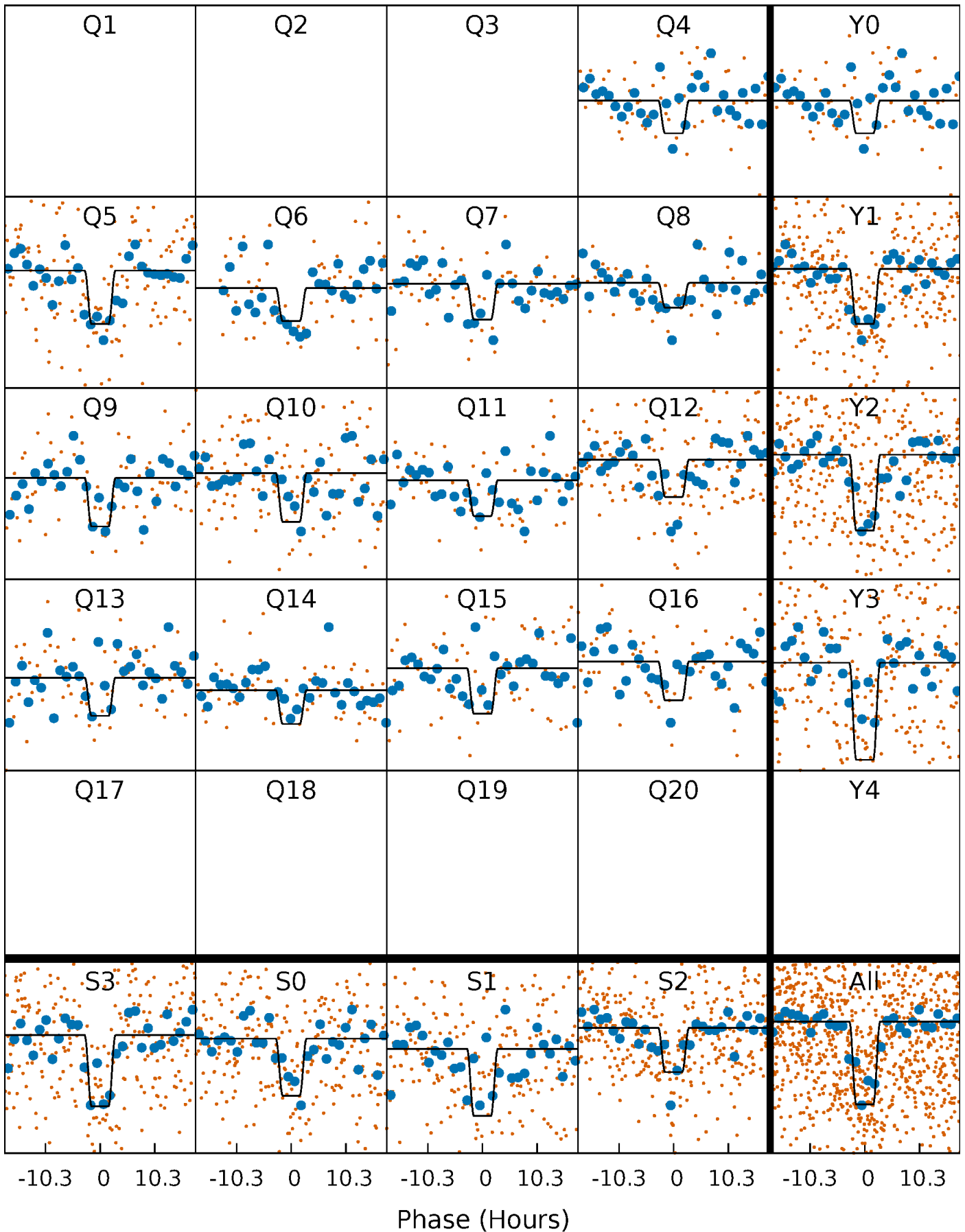
DV Quarter-Phased Transit Curves

TCE 006691169-01 P= 63.095174 Days $T_0=158.120720$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

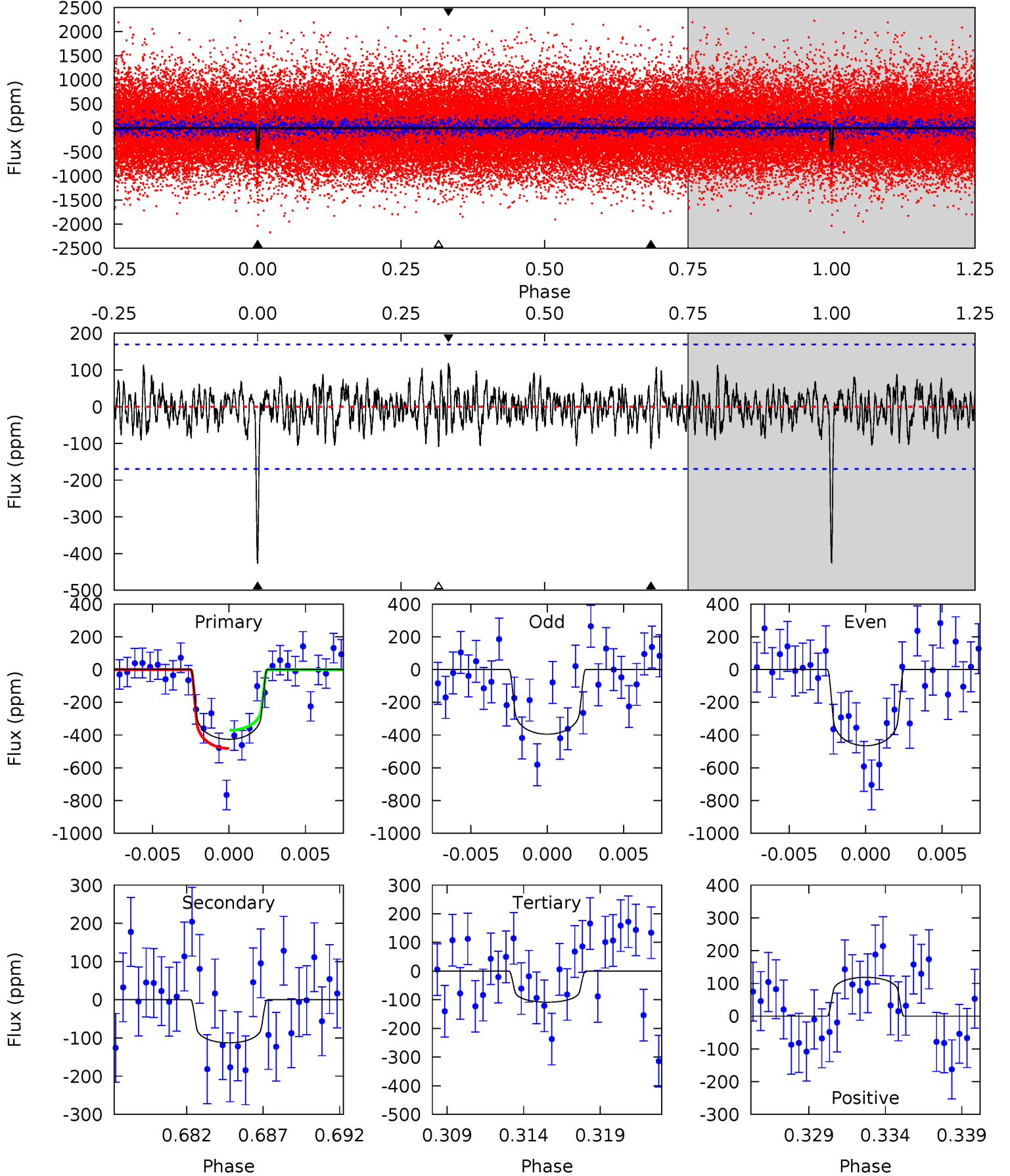
TCE 006691169-01 P= 63.096412 Days $T_0=158.101393$ (BKJD)



DV Model-Shift Uniqueness Test

006691169-01, P = 63.095174 Days, E = 158.120720 Days

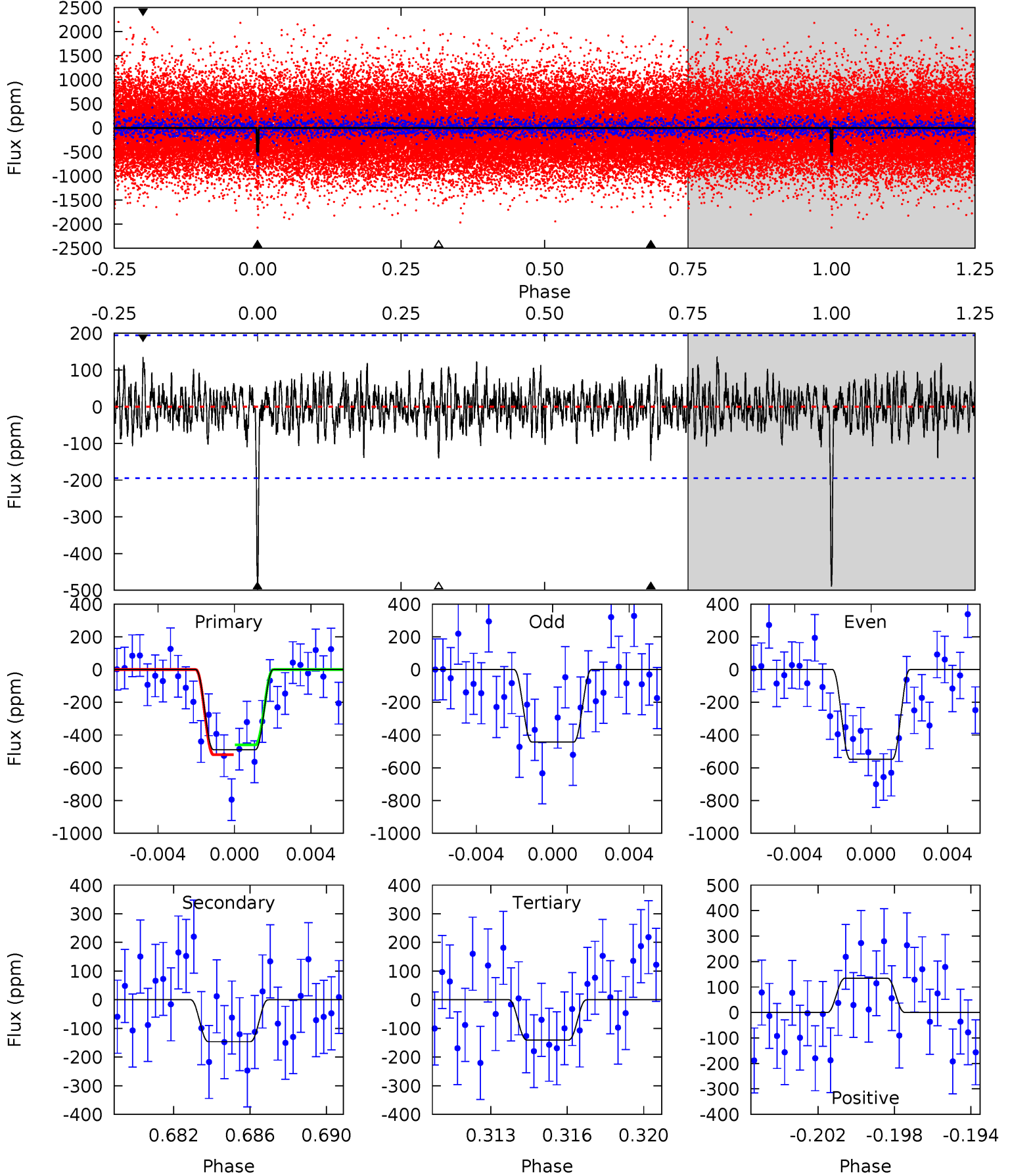
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	3.43	3.30	3.61	5.16	2.81	1.14	9.65	9.35	0.13	-0.18	1.07	0.93	0.22	1.70



Alt Model-Shift Uniqueness Test

006691169-01, P = 63.096412 Days, E = 158.101393 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	3.92	3.76	3.61	5.21	2.89	1.12	9.34	9.49	0.16	0.31	1.41	1.13	0.22	0.81



Stellar Parameters For KIC 006691169

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6622^{+160}_{-275}	$4.331^{+0.065}_{-0.195}$	$0.210^{+0.150}_{-0.350}$	$1.325^{+0.401}_{-0.172}$	$1.372^{+0.156}_{-0.215}$	$0.831^{+0.282}_{-0.408}$
	+2%/-4%	+2%/-5%	+71%/-167%	+30%/-13%	+11%/-16%	+34%/-49%
Source	KIC0	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 006691169-01 / KOI 4890.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-113 ± 33	$3.05^{+1.69}_{-1.51}$	814^{+56}_{-44}	4830^{+1807}_{-797}	730^{+2357}_{-443}
Alt.	-146 ± 37	$3.61^{+1.73}_{-1.58}$	812^{+54}_{-43}	4730^{+1373}_{-622}	697^{+1440}_{-379}

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 $A_{obs} \gg 1.0$

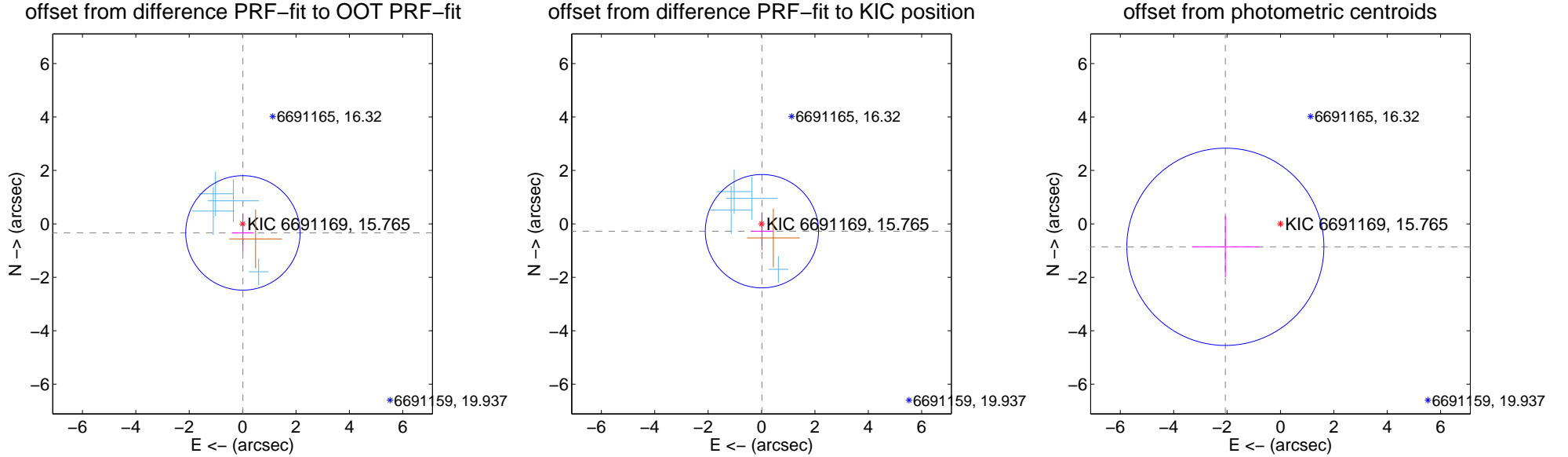
DV Centroid Data

Supplemental centroid analysis for 006691169-01. Kepler magnitude: 15.77. Transit SNR 9.88

There are 4 quarters with good PRF difference image offsets

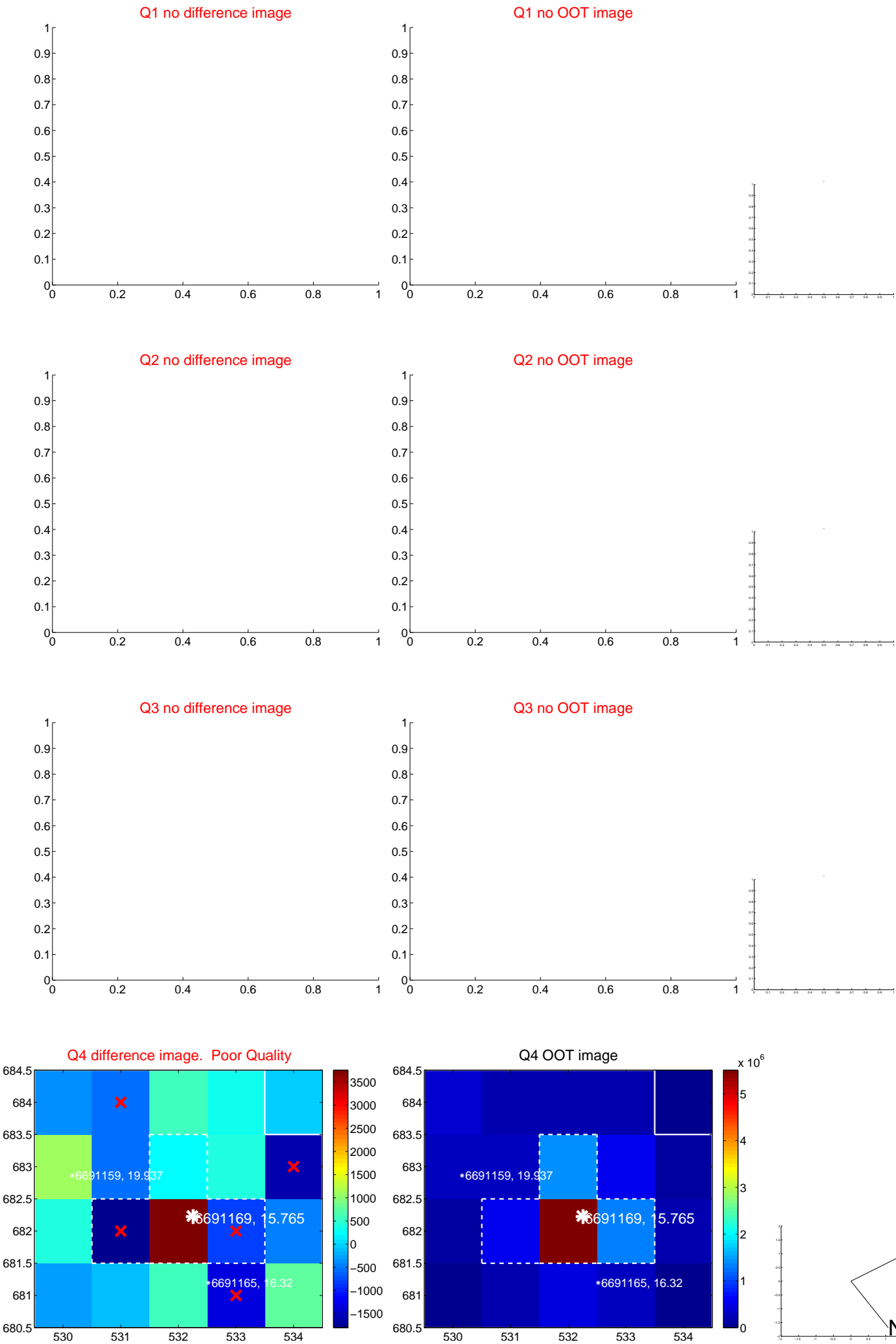
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.339 ± 0.714	0.47	-0.011 ± 0.411	-0.338 ± 0.714
PRF-fit source offset from KIC position	0.275 ± 0.707	0.39	-0.014 ± 0.421	-0.274 ± 0.708
photometric centroid source offset	2.24 ± 1.23	1.82	2.06 ± 1.25	-0.86 ± 1.14

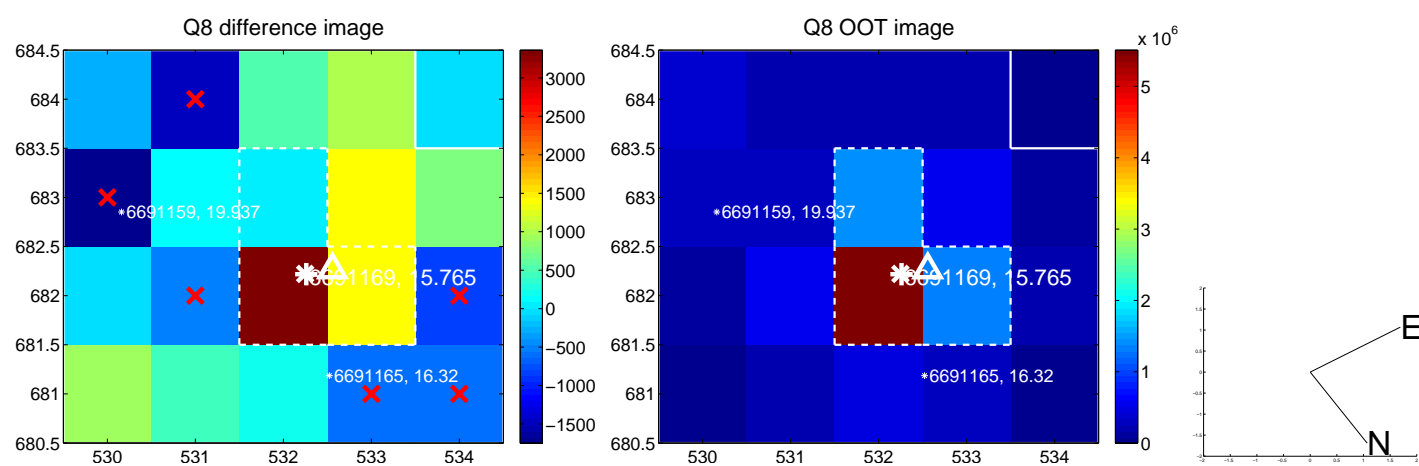
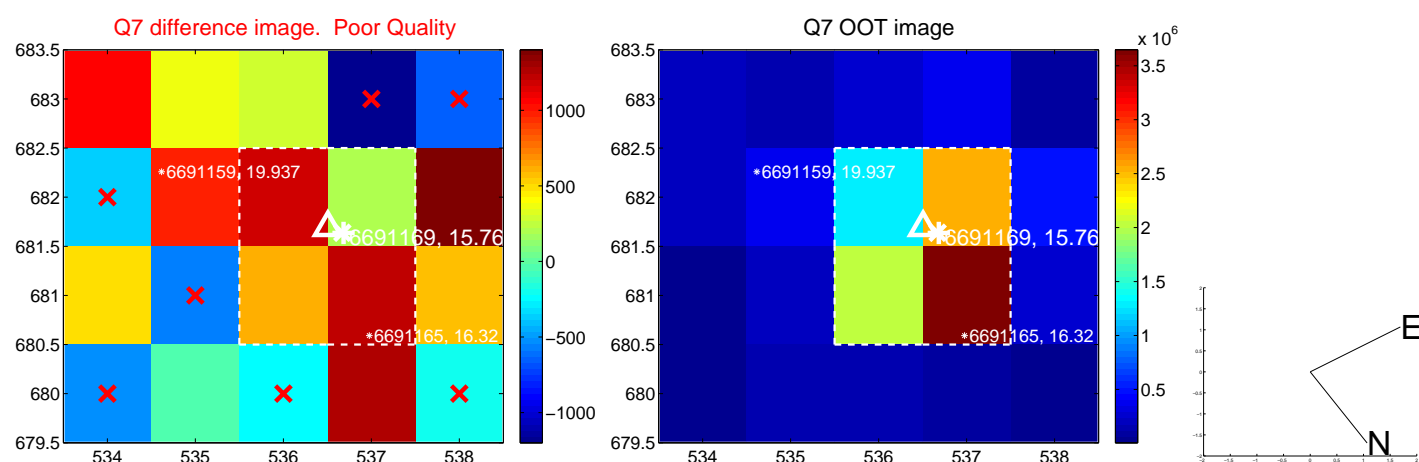
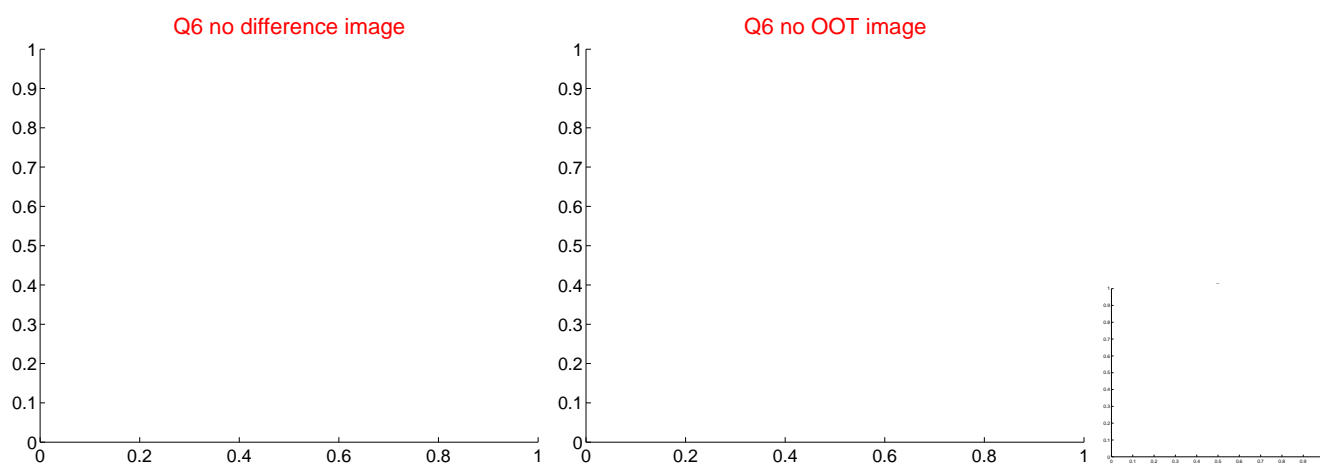
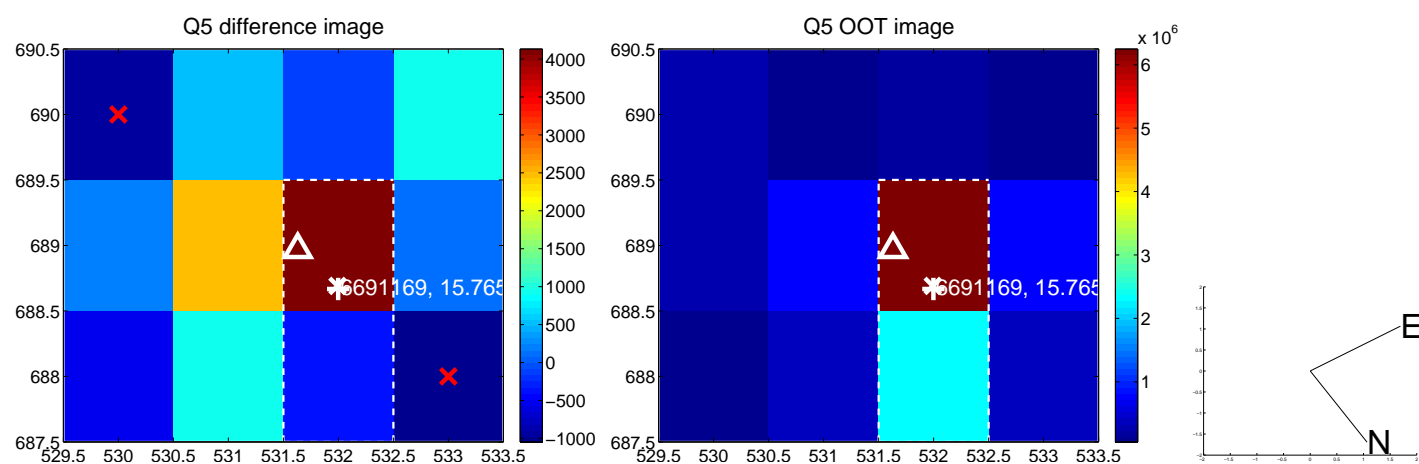


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

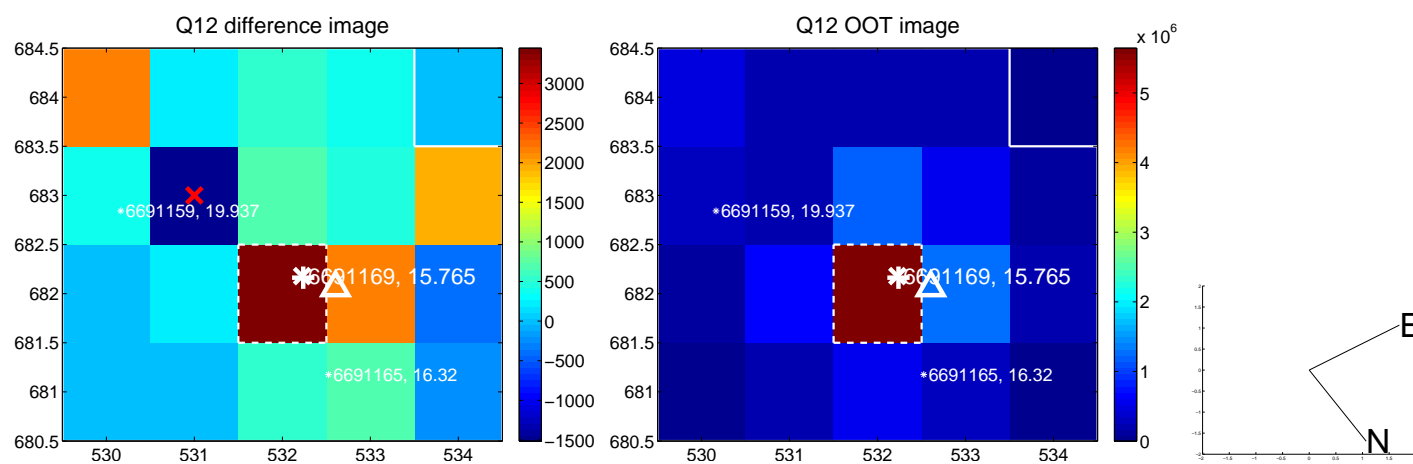
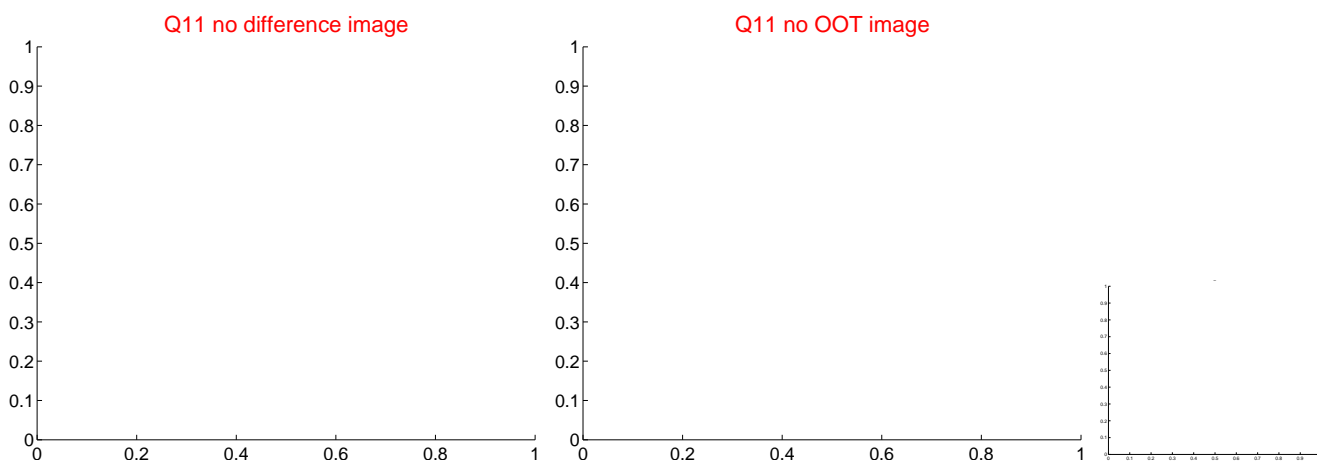
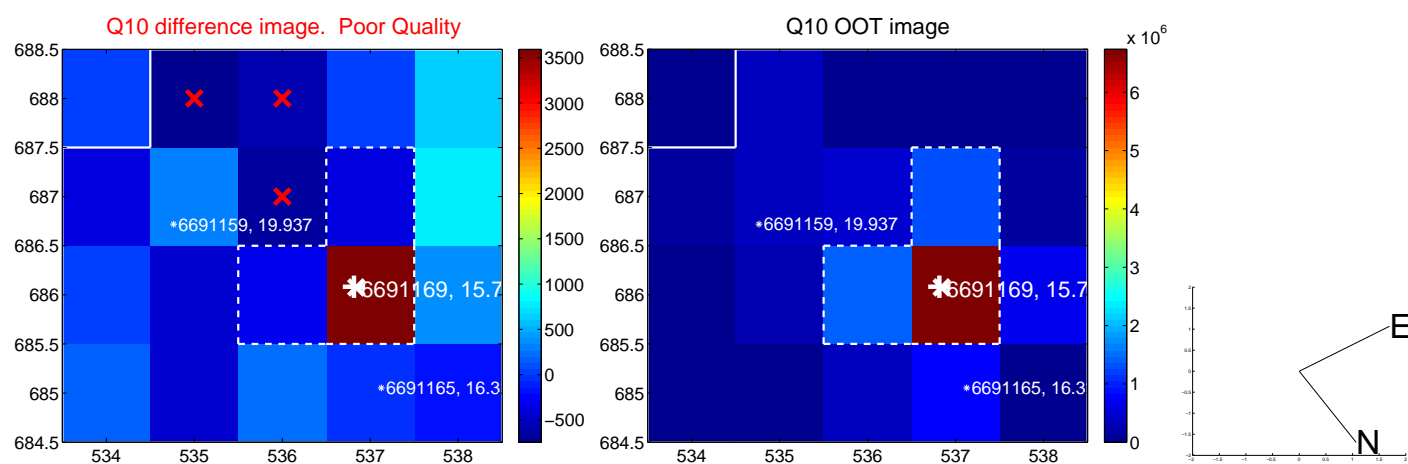
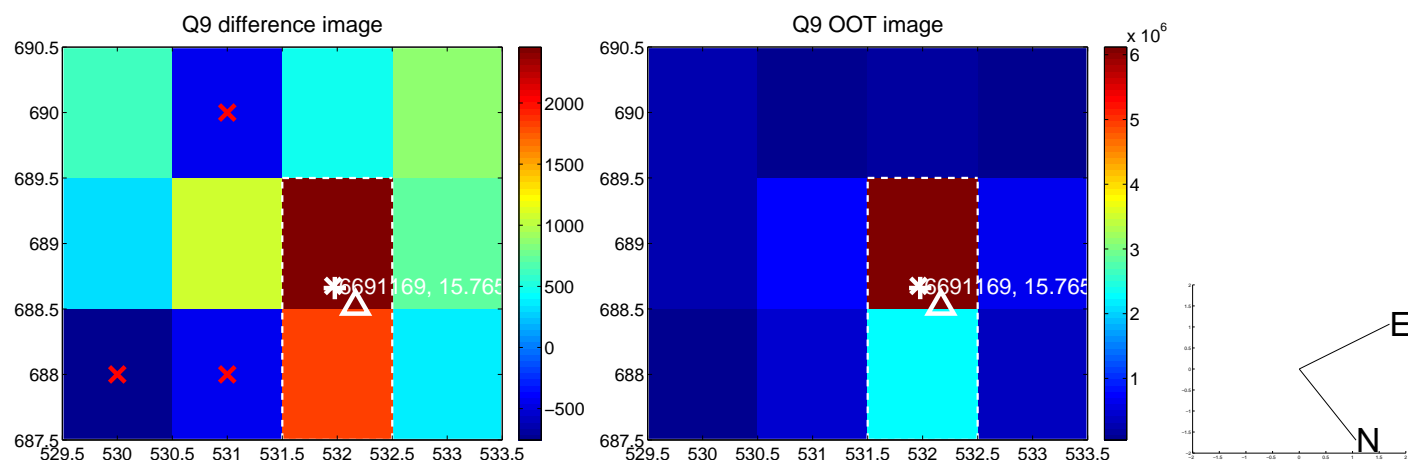
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



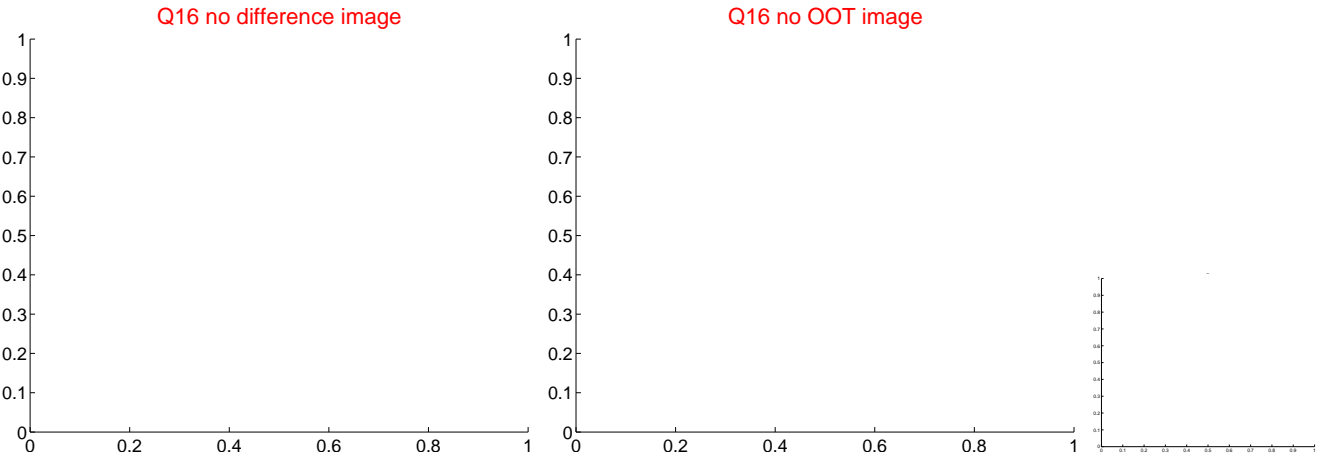
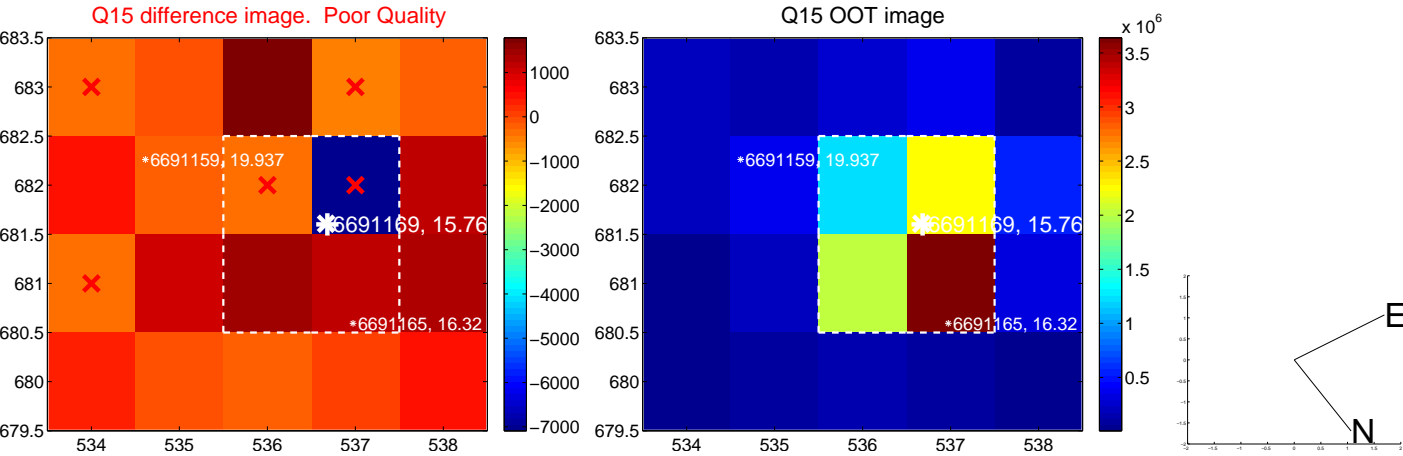
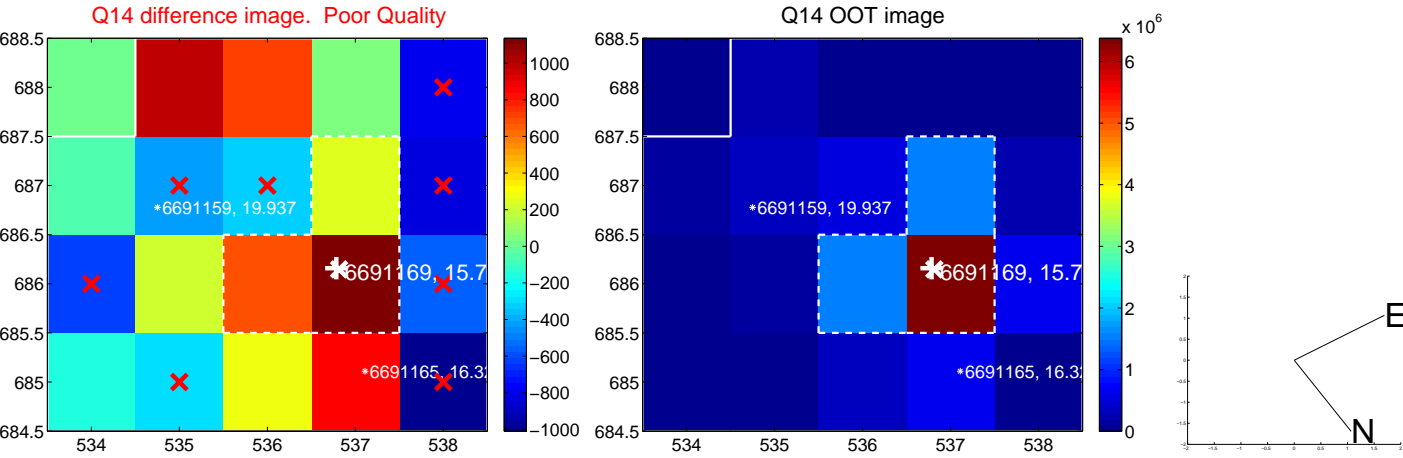
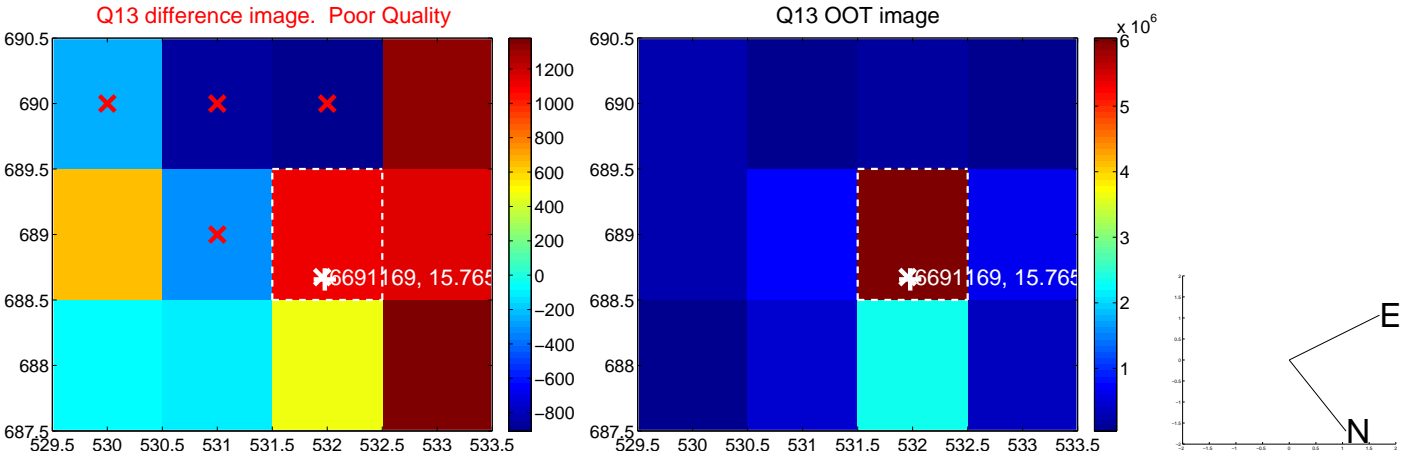
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



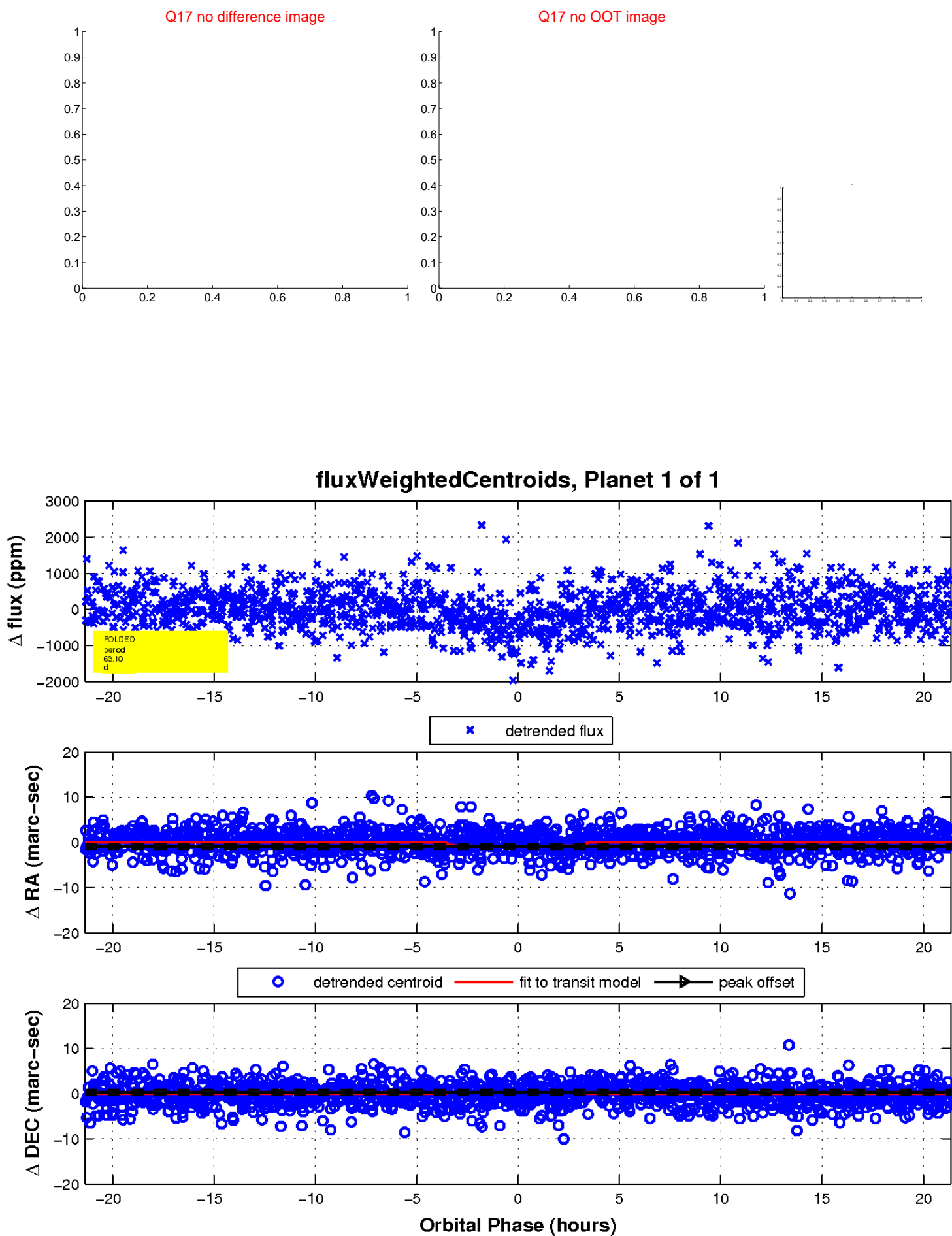
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

