

KIC 011913071

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})
011913071-01	OBS	7492.01	3.747835	134.187701	188517.5	5.260	39875.9	23744.2	3.06	8529	141.68	12523.71

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011913071-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_ALT—CENT_SATURATED

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.

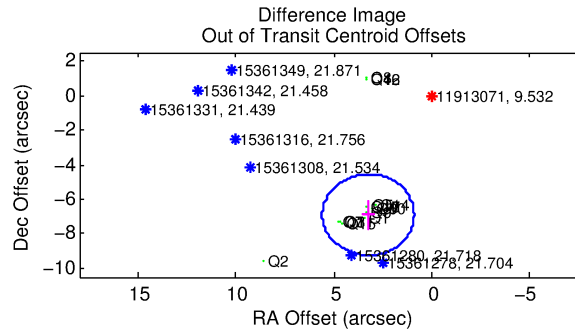
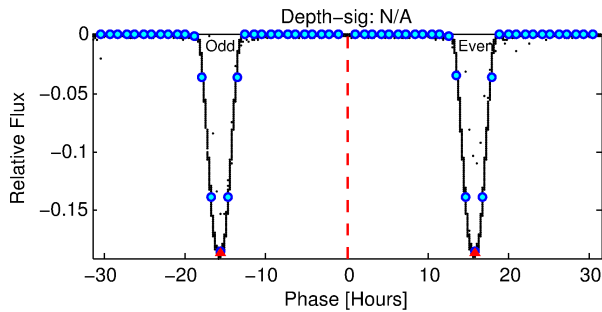
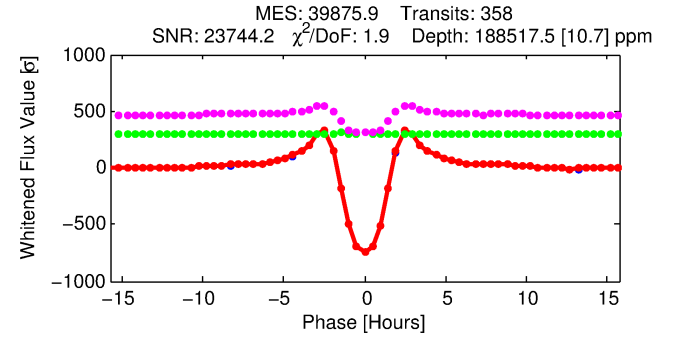
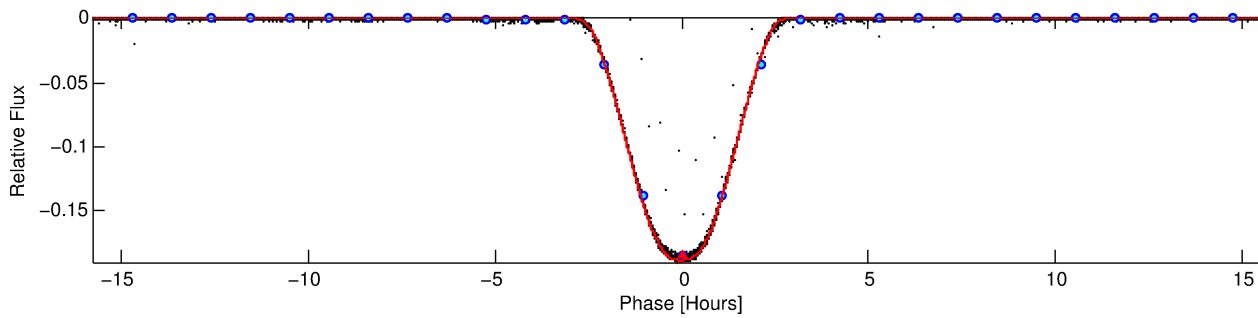
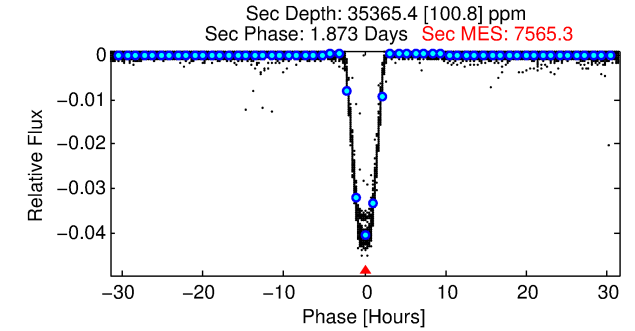
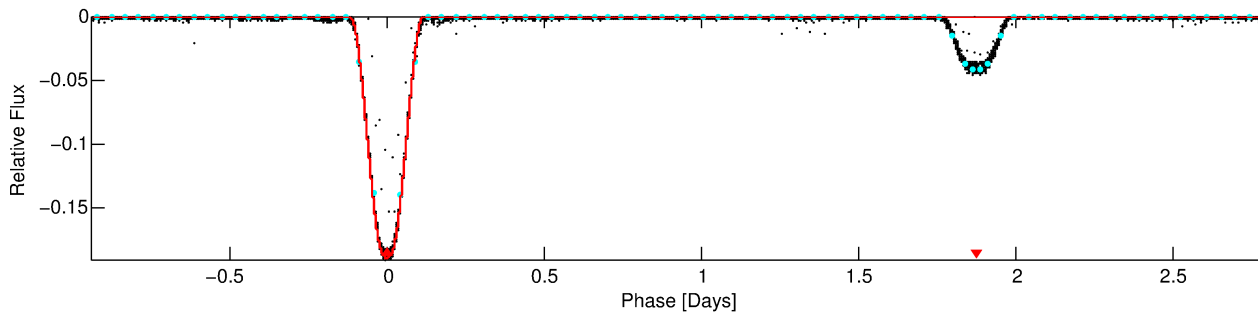
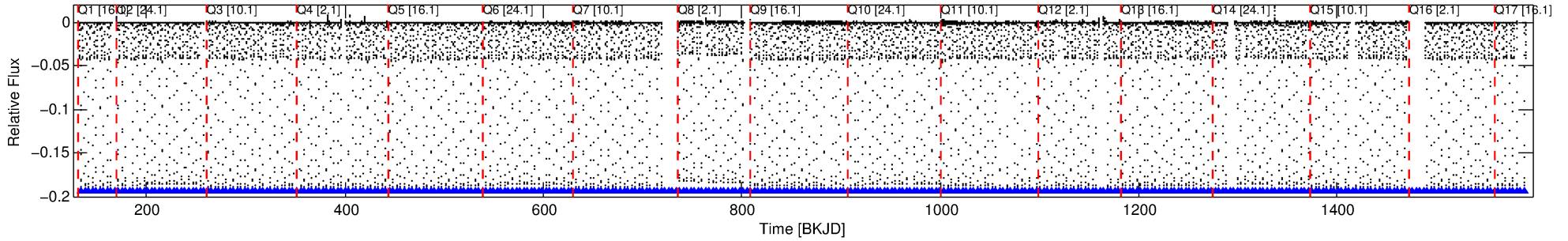
Ephemeris Match Information For 011913071-01

No Significant Match Found

DV One-Page Summary

KIC: 11913071 Candidate: 1 of 1 Period: 3.748 d
KOI: K07492.01 Corr: 0.998

Kp: 9.53 R*: 3.06 Rs Teff: 8529.0 K Logg: 3.77 Fe/H: -0.180



DV Fit Results:

Period = 3.74784 [0.00000] d
Epoch = 134.1877 [0.0000] BKJD
Rp/R* = 0.4236 [0.0000]
a/R* = 7.21 [0.00]
b = 0.55 [0.00]
Seff = 12523.71 [9169.21]
Teq = 2697 [494] K
Rp = 141.67 [63.79] Re
a = 0.0596 [0.0263] AU
Ag = 3.45 [2.45] [1.00σ]
Teffp = 5683 [247] K [5.41σ]

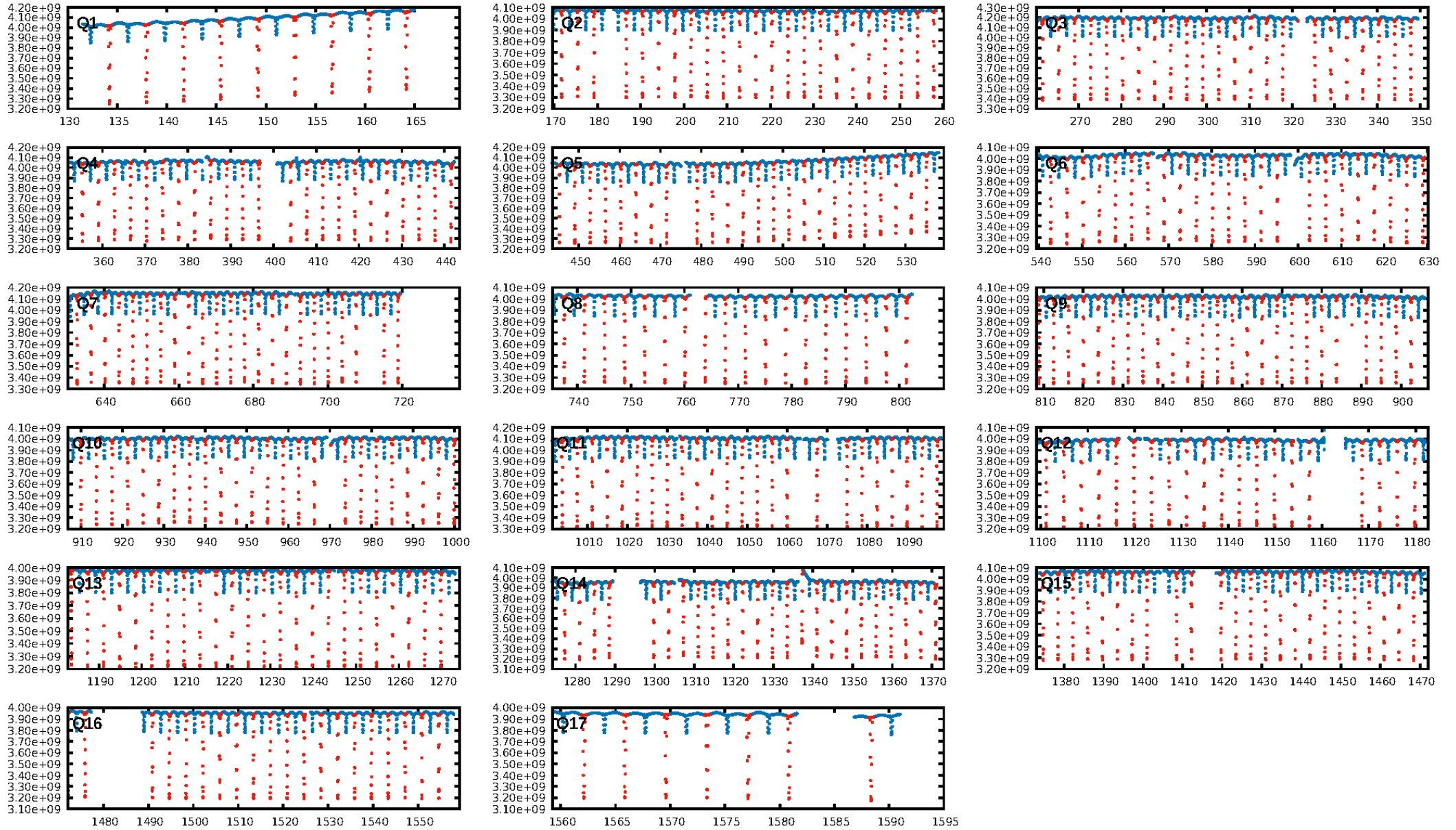
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [342/342]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 1.583 arcsec [4447.54σ]
OotOffset-rm: 7.623 arcsec [9.74σ]
KicOffset-rm: 7.916 arcsec [10.29σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 1.00 [17/17]

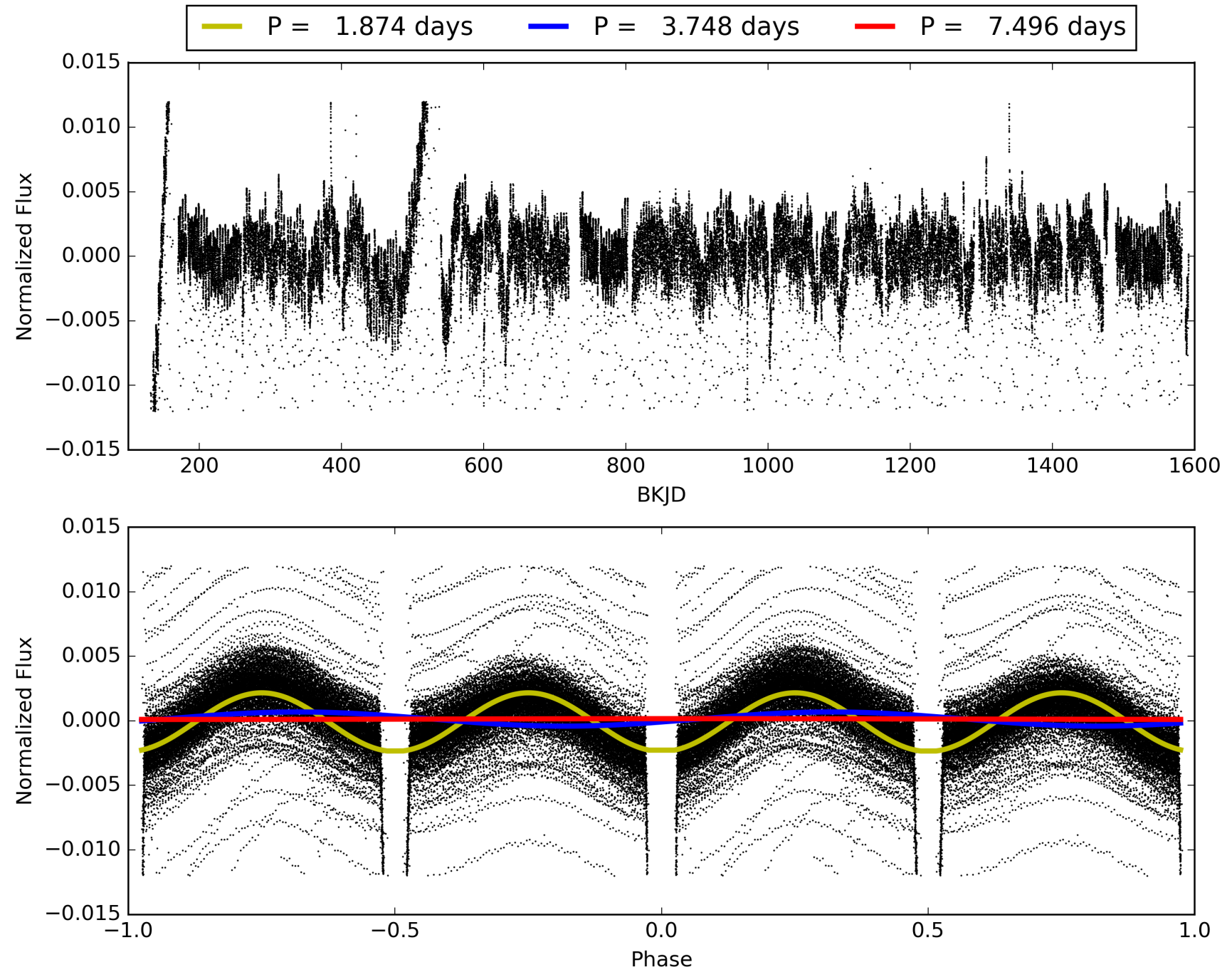
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 05:34:33 Z

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

TCE 011913071-01, PDC Light Curves

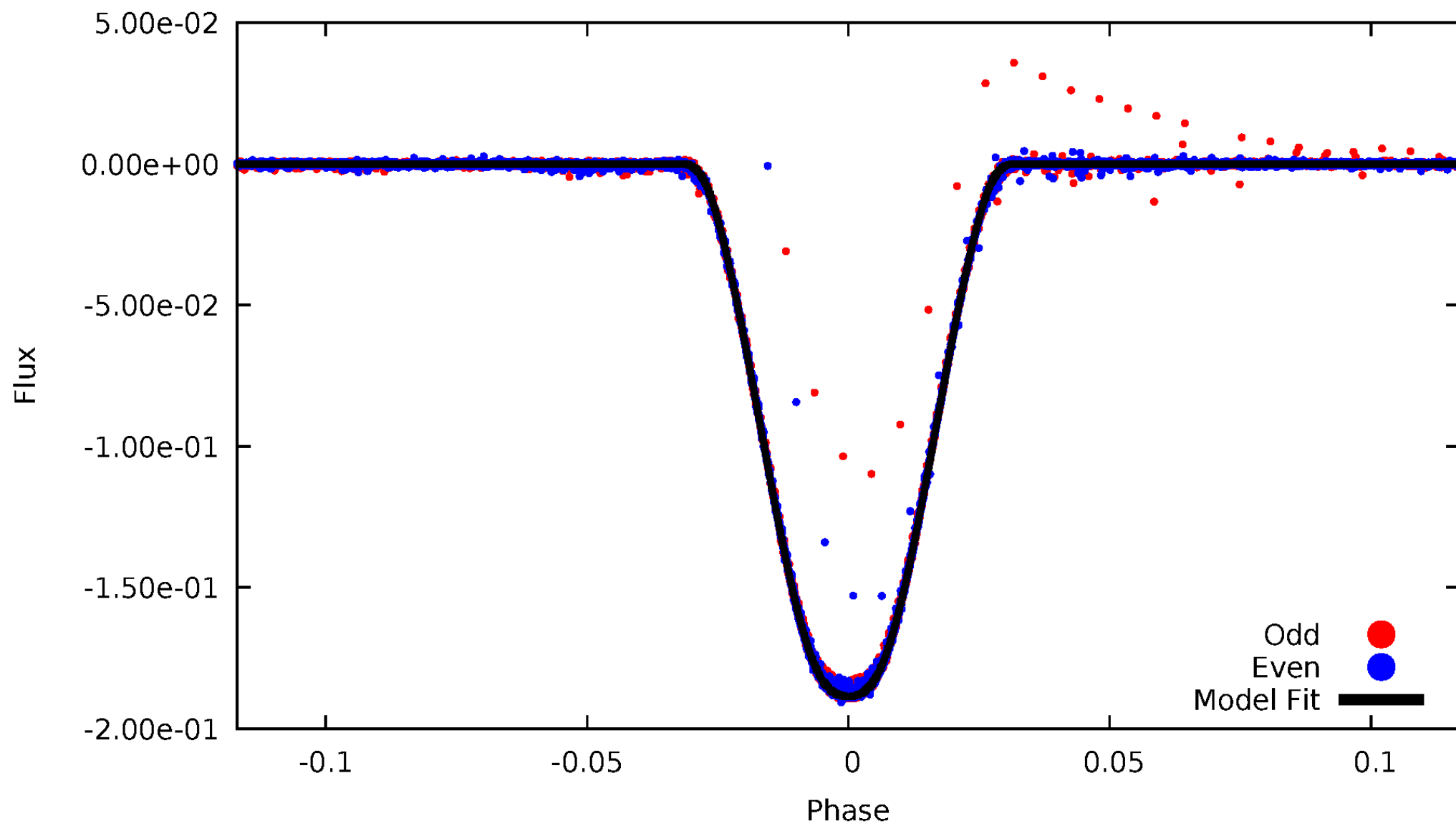


TCE 011913071-01



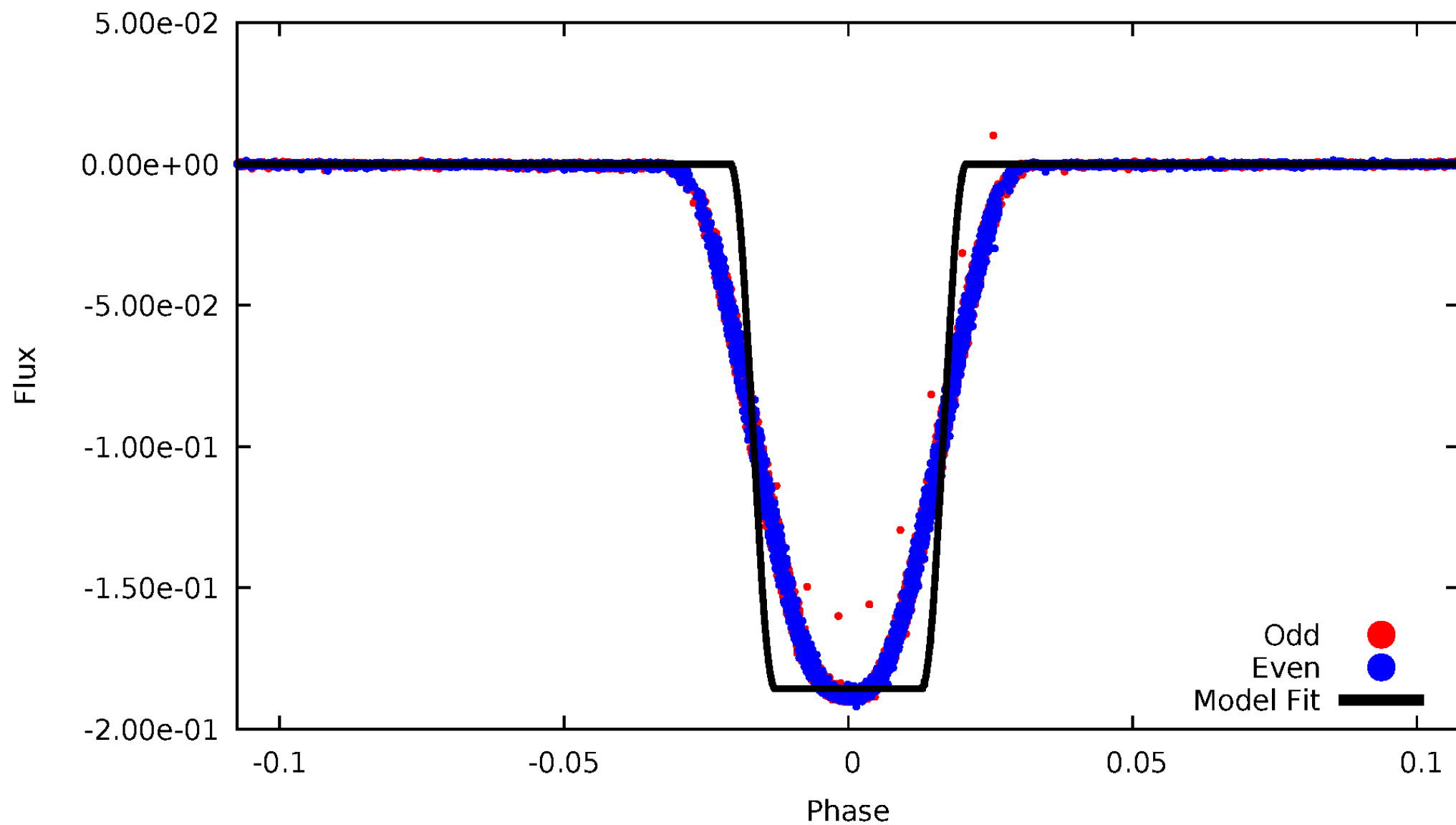
DV Odd/Even

TCE 011913071-01



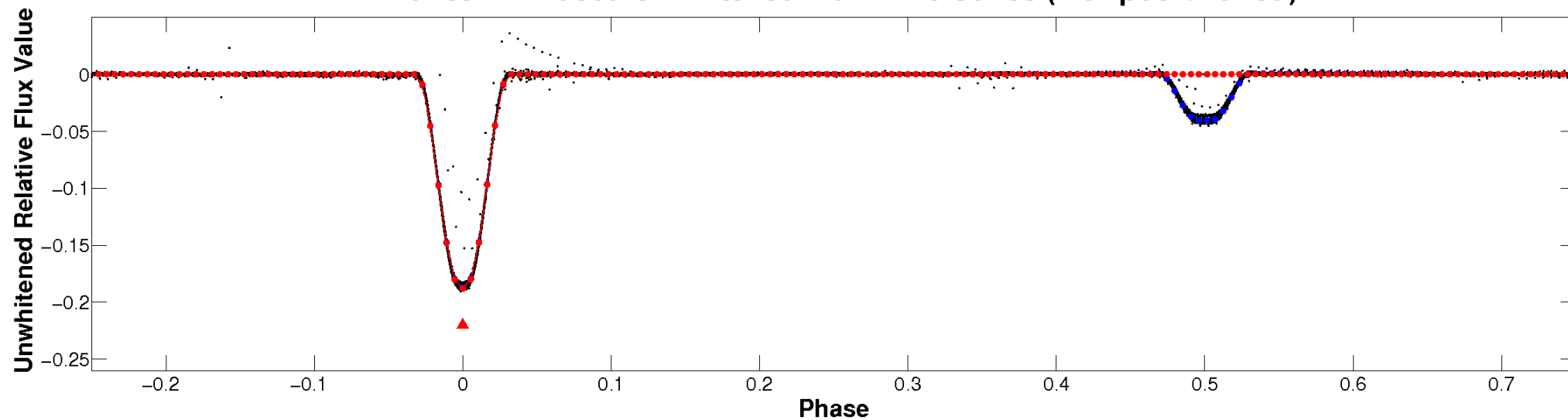
ALT Odd/Even

TCE 011913071-01

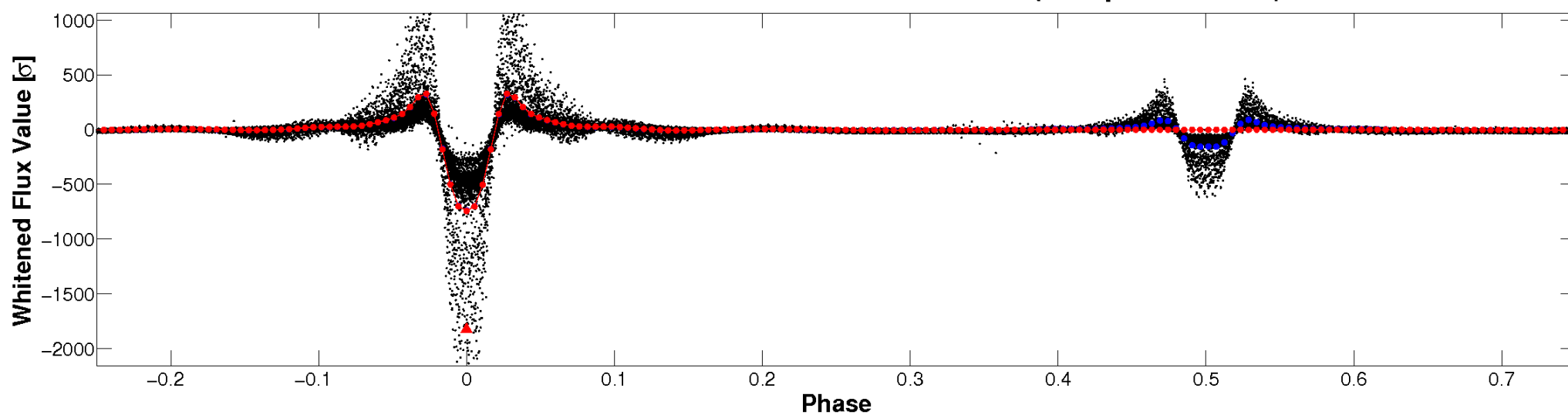


Non-Whitened Vs. Whitened Light Curve

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

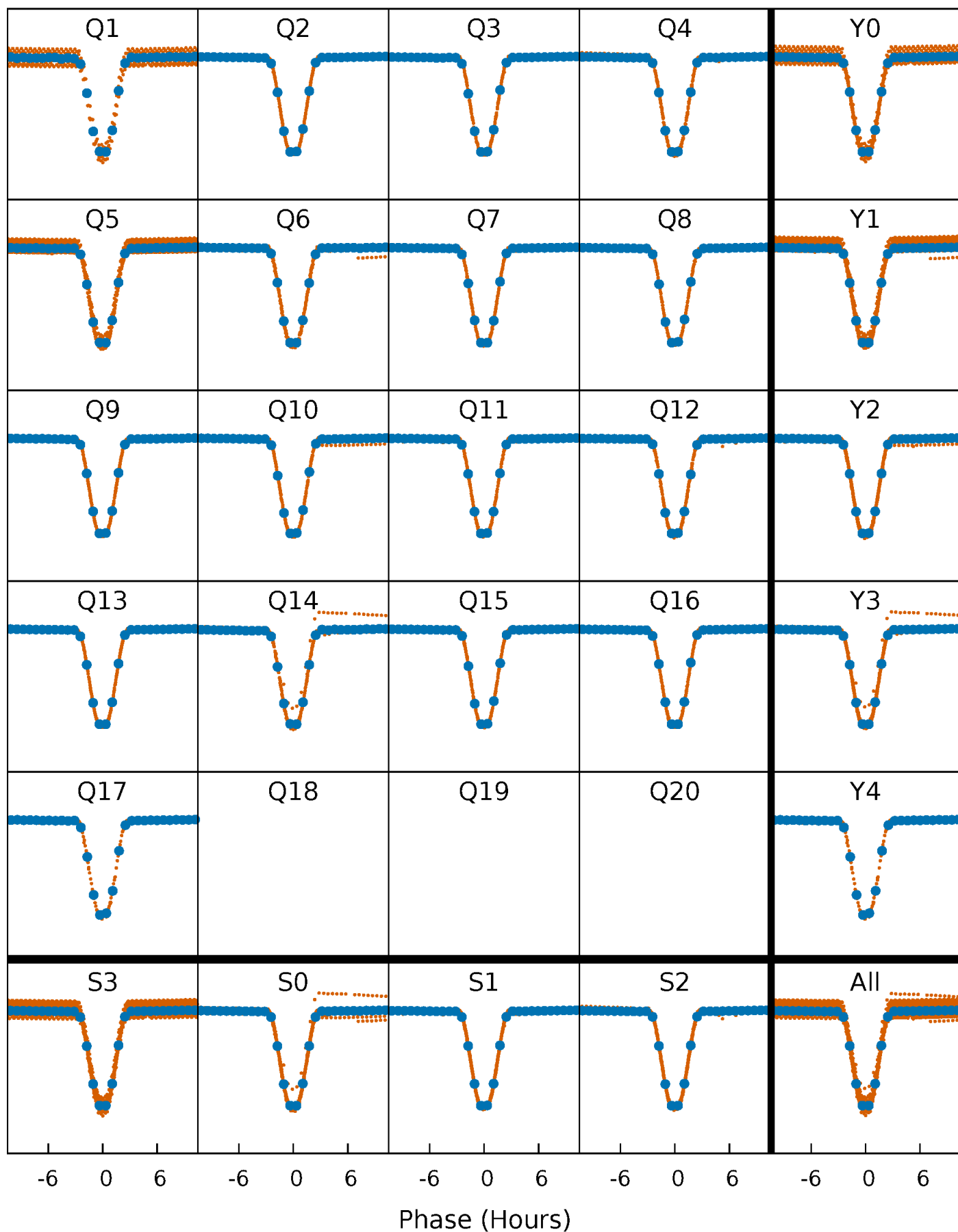


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



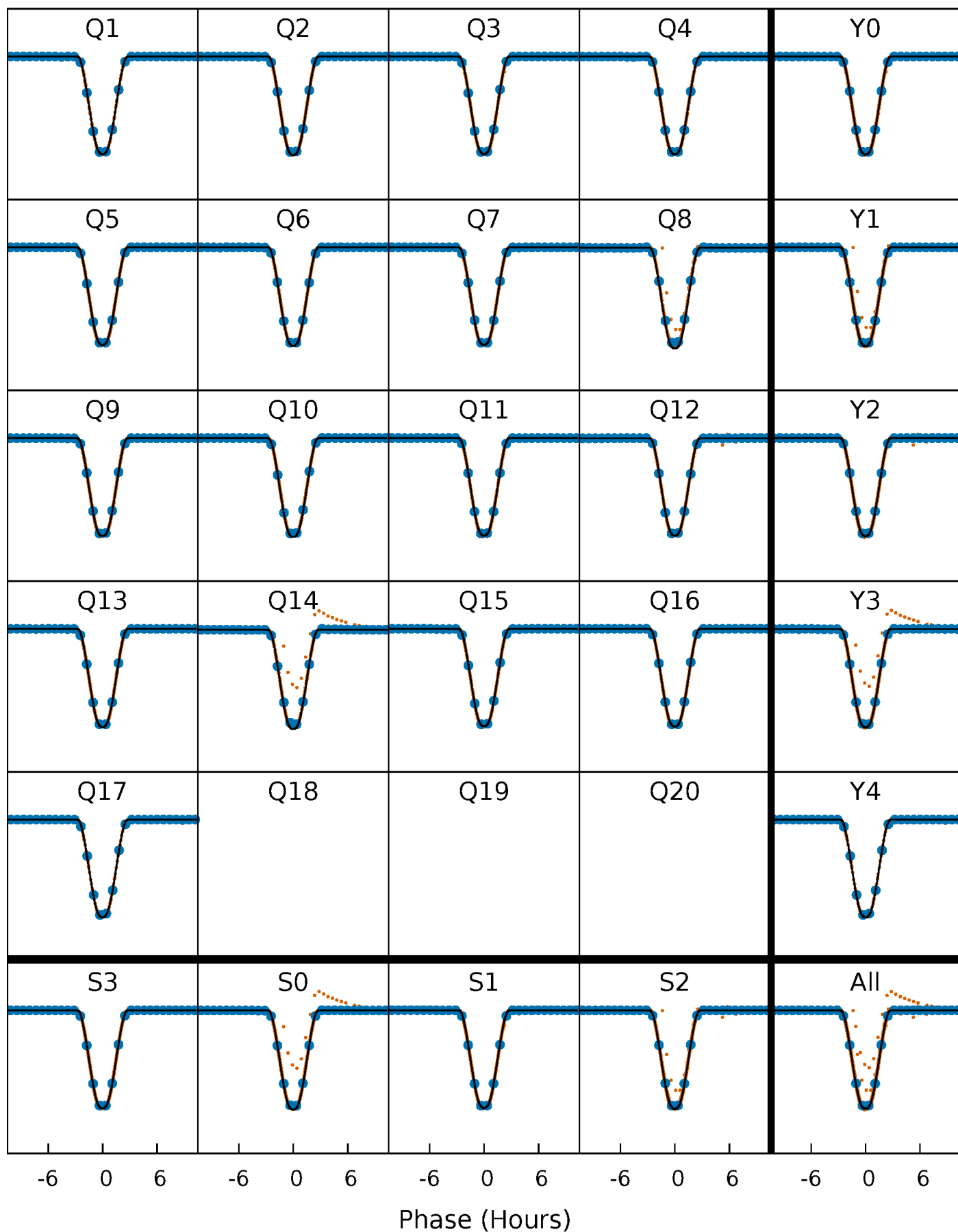
PDC Quarter-Phased Transit Curves

TCE 011913071-01 P= 3.747835 Days $T_0=134.187701$ (BKJD)



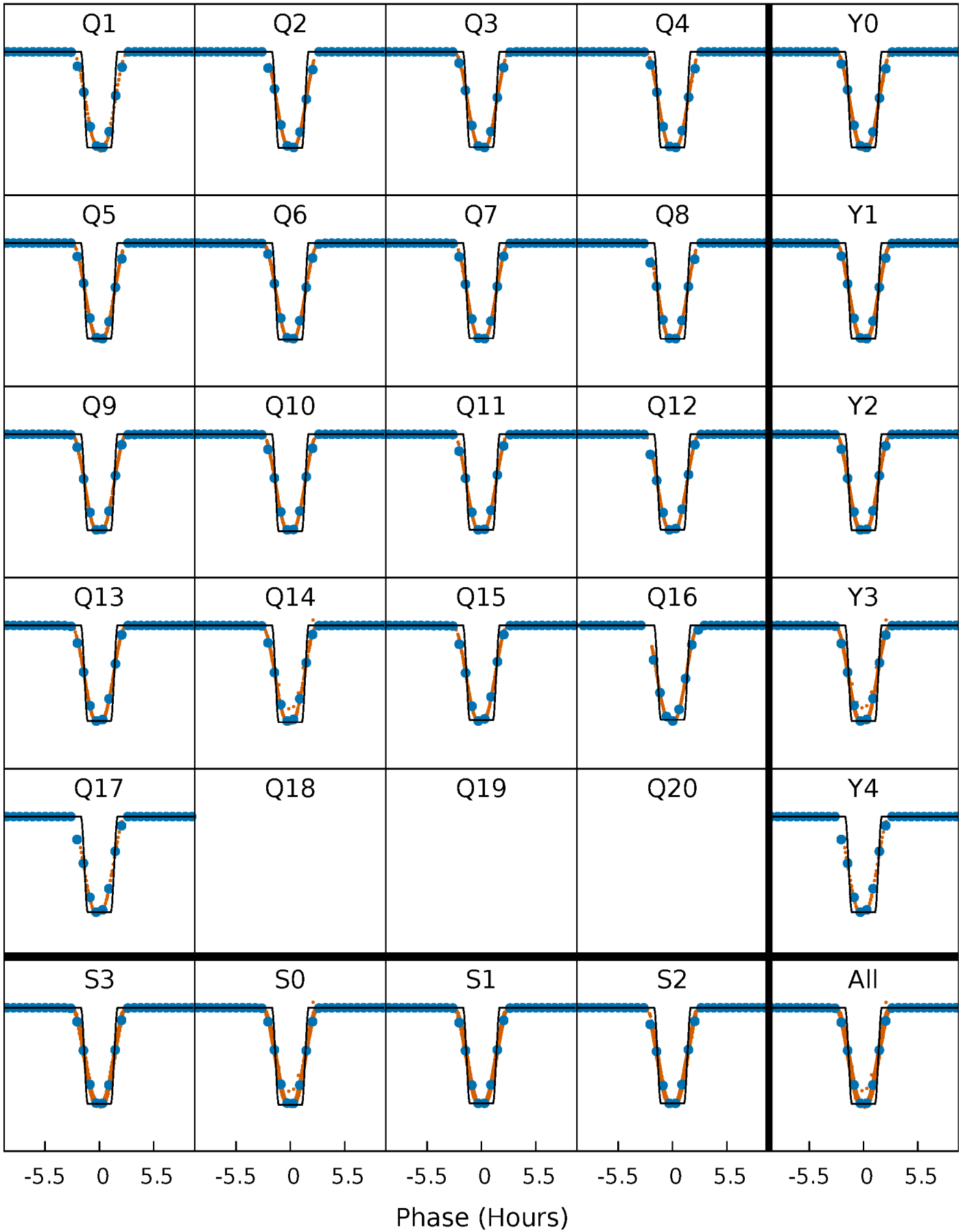
DV Quarter-Phased Transit Curves

TCE 011913071-01 P= 3.747835 Days $T_0=134.187701$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

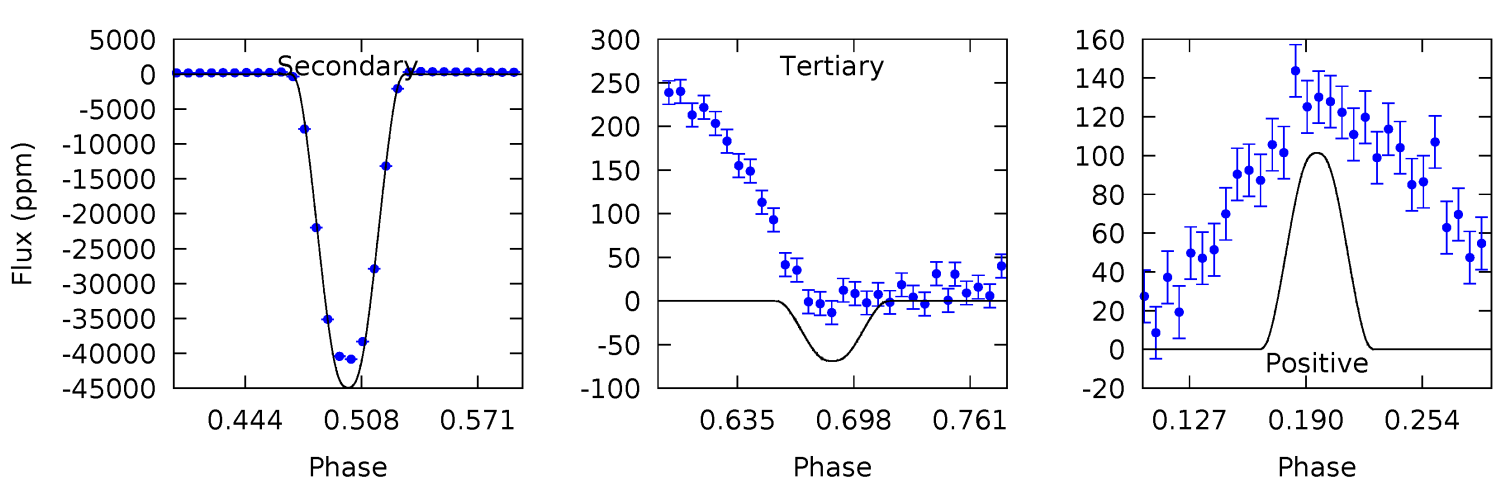
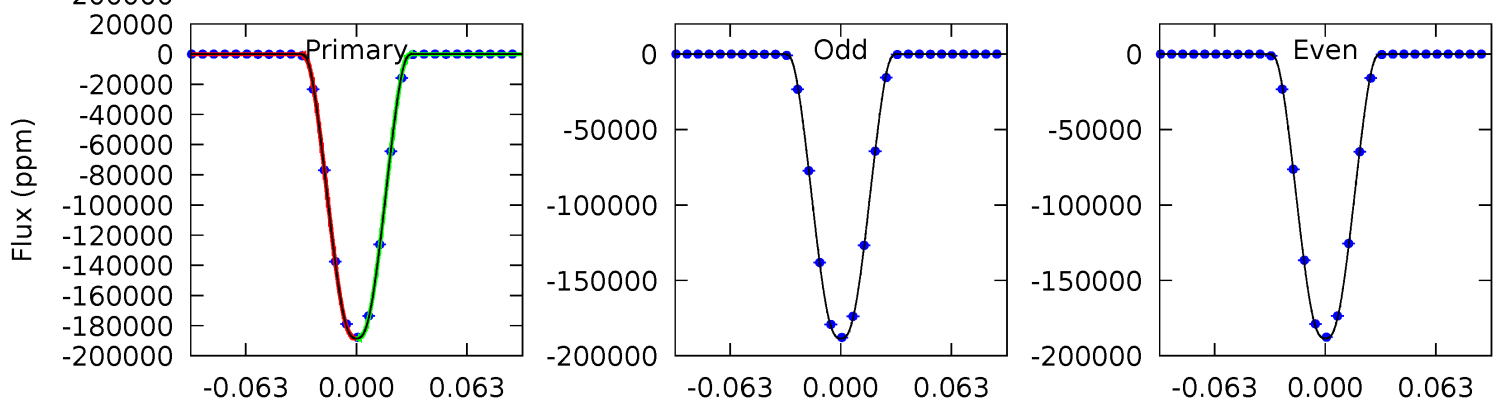
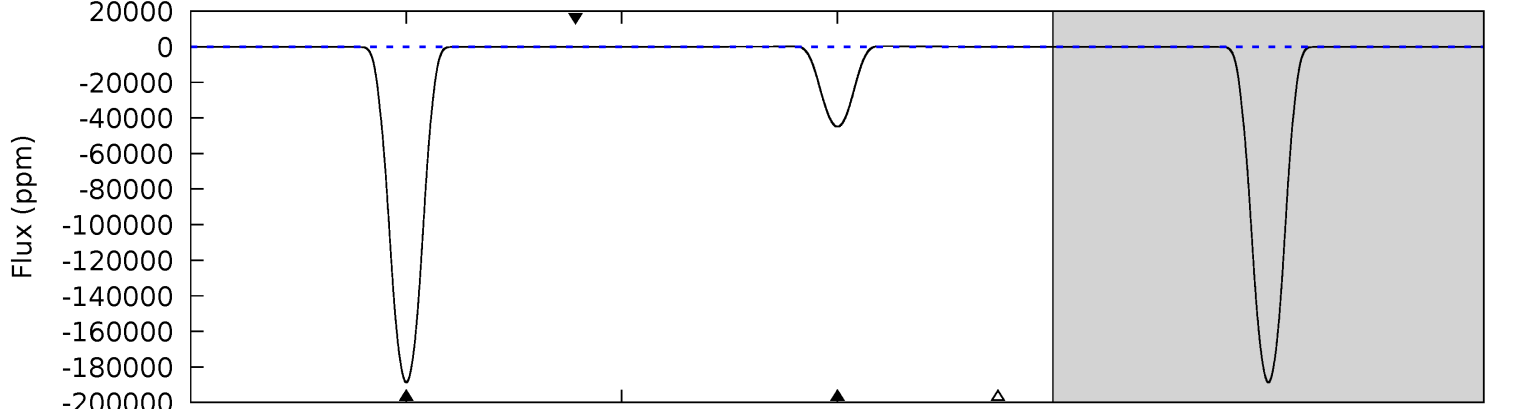
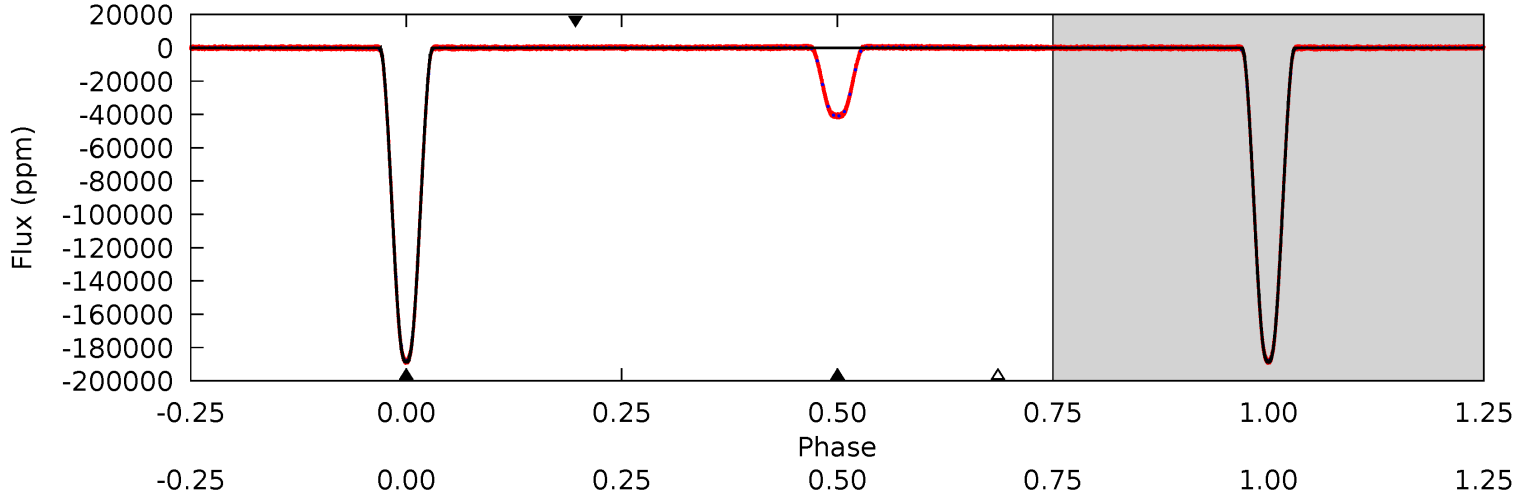
TCE 011913071-01 P= 3.747857 Days $T_0=134.183454$ (BKJD)



DV Model-Shift Uniqueness Test

011913071-01, P = 3.747835 Days, E = 130.439866 Days

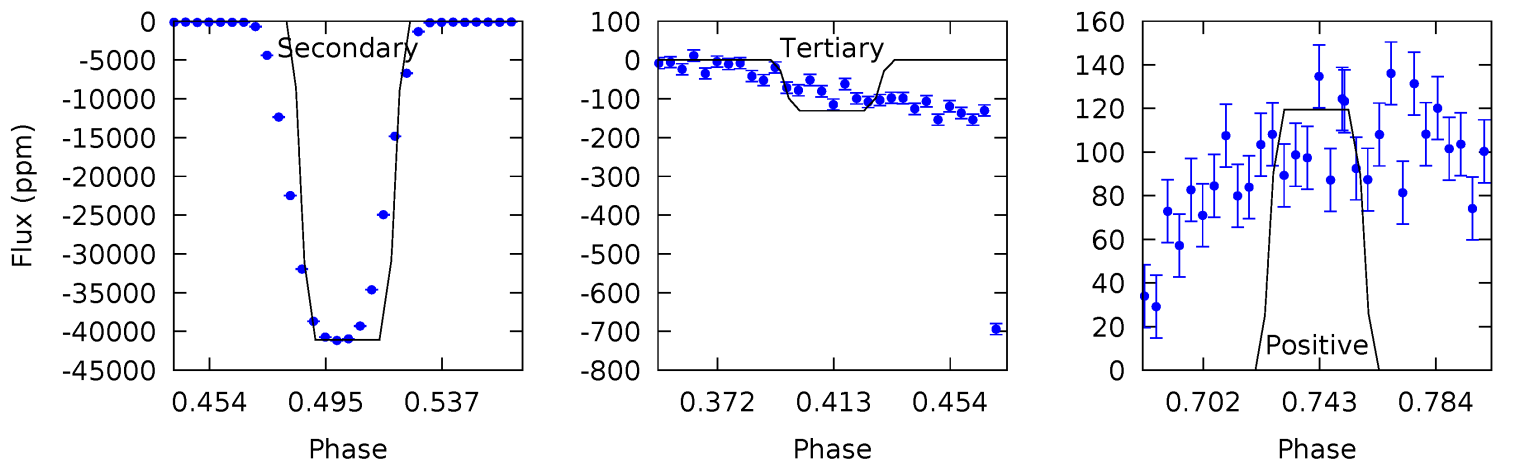
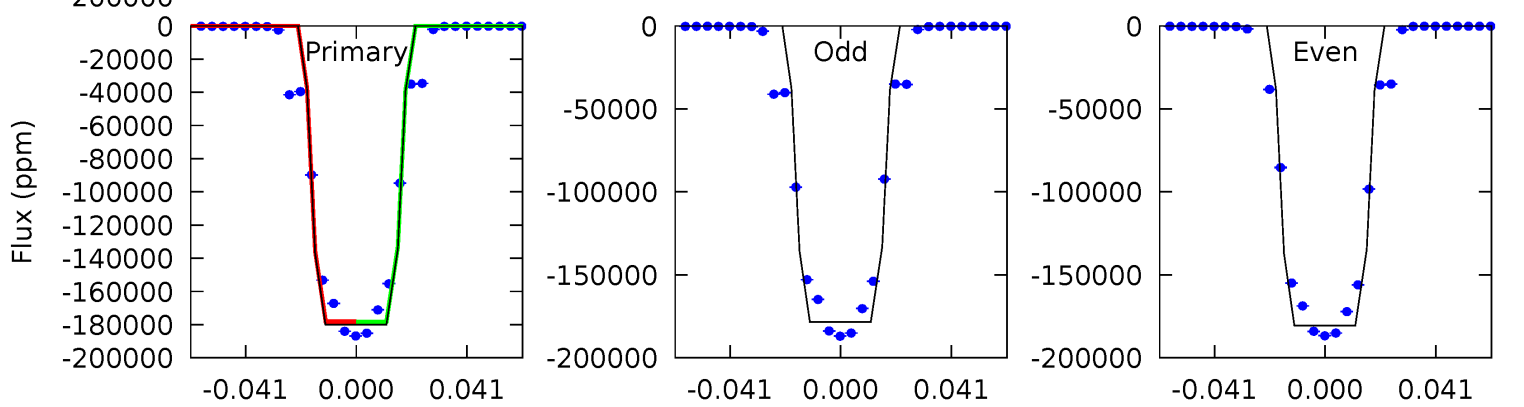
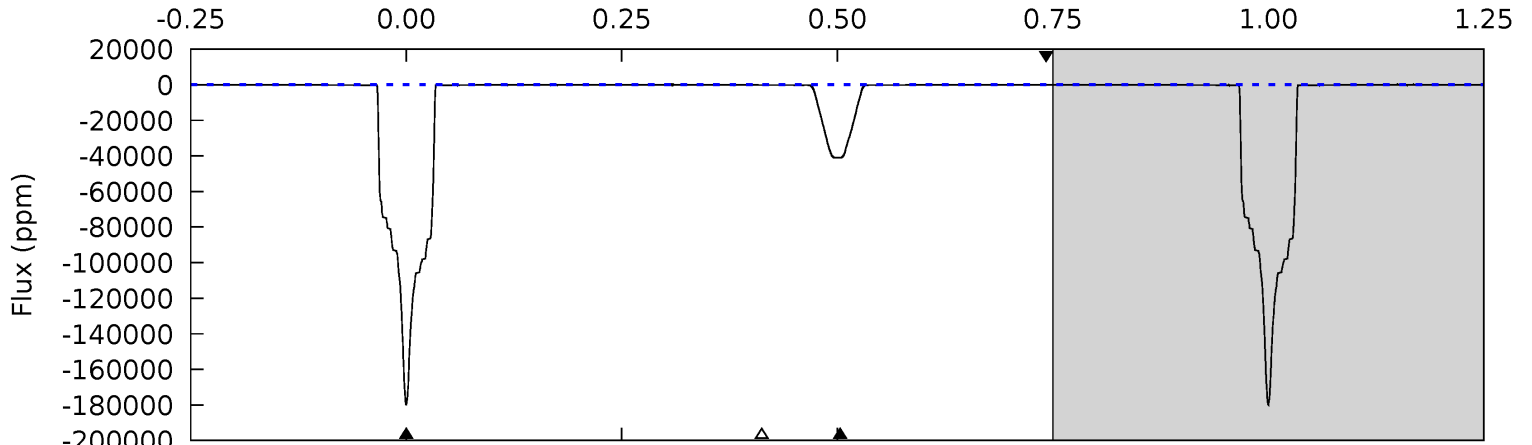
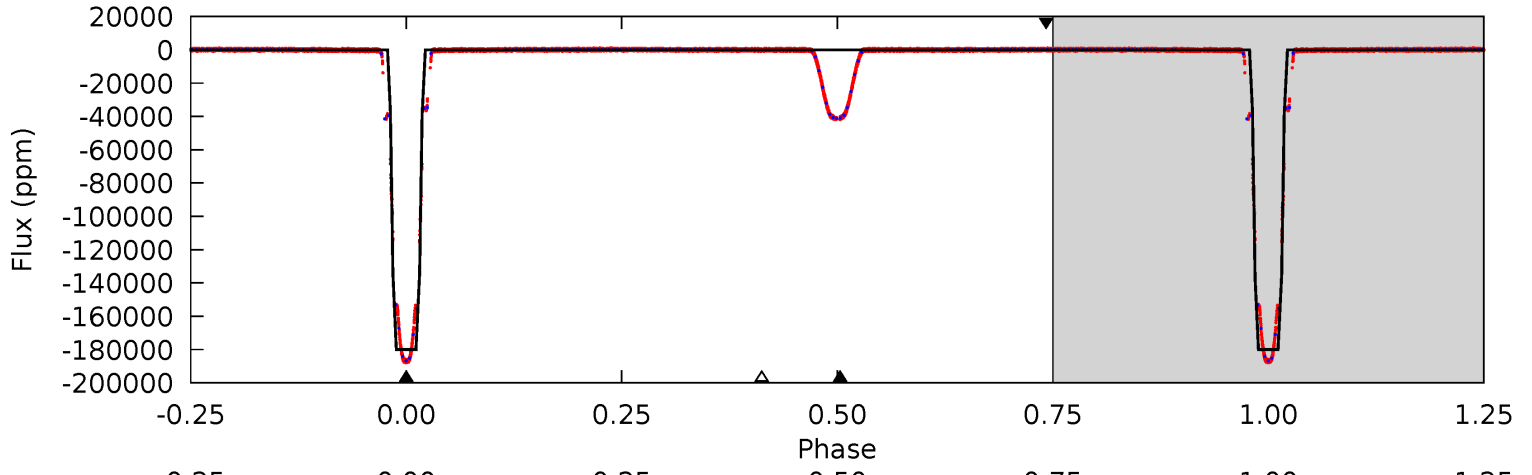
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33840	8062	12.3	18.2	4.66	1.86	17.6	33828	33822	8050	8044	6.93	0.99	0.00	1.06



Alt Model-Shift Uniqueness Test

011913071-01, P = 3.747857 Days, E = 130.435597 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13221	3017	9.62	8.77	4.75	2.04	6.49	13212	13213	3007	3008	82.2	1.00	0.00	0



Stellar Parameters For KIC 011913071

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8529^{+236}_{-371}	$3.769^{+0.420}_{-0.140}$	$-0.180^{+0.350}_{-0.400}$	$3.065^{+0.920}_{-1.380}$	$2.017^{+0.378}_{-0.462}$	$0.099^{+0.381}_{-0.046}$
	+3%/-4%	+11%/-4%	+194%/-222%	+30%/-45%	+19%/-23%	+386%/-47%
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 011913071-01 / KOI 7492.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-44943 ± 6	$135.95^{+24.73}_{-31.05}$	3653^{+323}_{-404}	5791^{+128}_{-177}	$5.054^{+2.962}_{-1.302}$
Alt.	-41074 ± 14	$140.59^{+22.19}_{-35.64}$	3677^{+306}_{-450}	5596^{+131}_{-167}	$4.319^{+3.077}_{-1.059}$

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 $A_{obs} \gg 1.0$

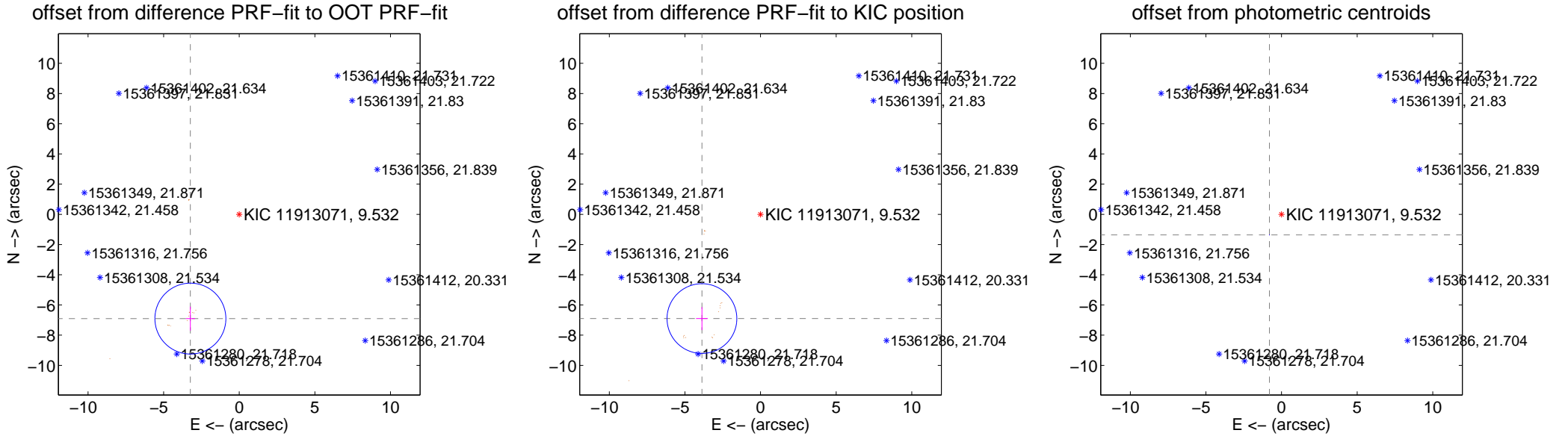
DV Centroid Data

Supplemental centroid analysis for 011913071-01. **Kepler magnitude: 9.53.** Transit SNR 23744.21

There are 0 quarters with good PRF difference image offsets

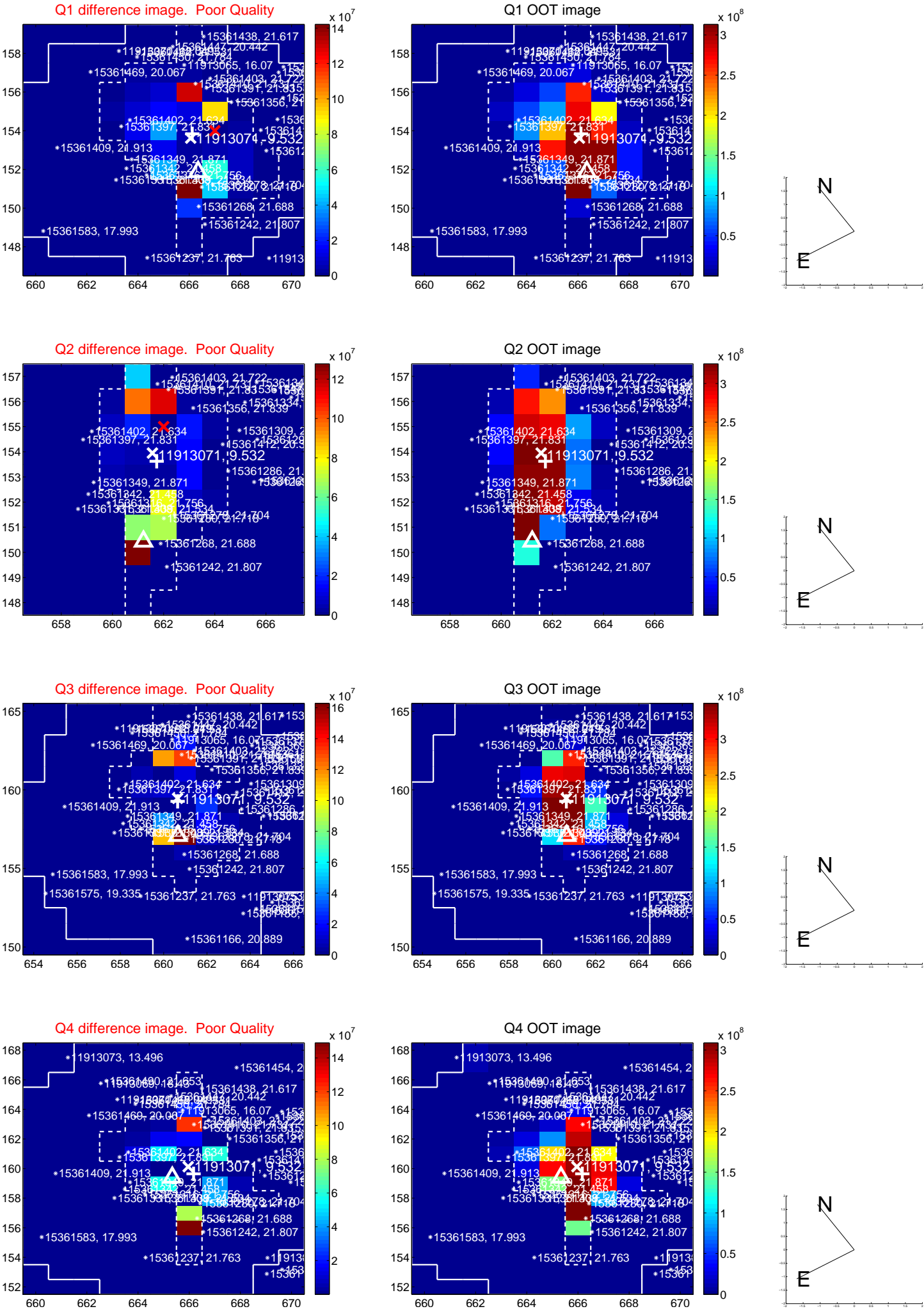
The direct PRF centroid is offset from the target star catalog position by about 0.76 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.623 ± 0.782	9.74	3.233 ± 0.298	-6.904 ± 0.791
PRF-fit source offset from KIC position	7.916 ± 0.770	10.29	3.878 ± 0.388	-6.902 ± 0.763
photometric centroid source offset	1.58 ± 0.00	4447.55	0.80 ± 0.00	-1.36 ± 0.00

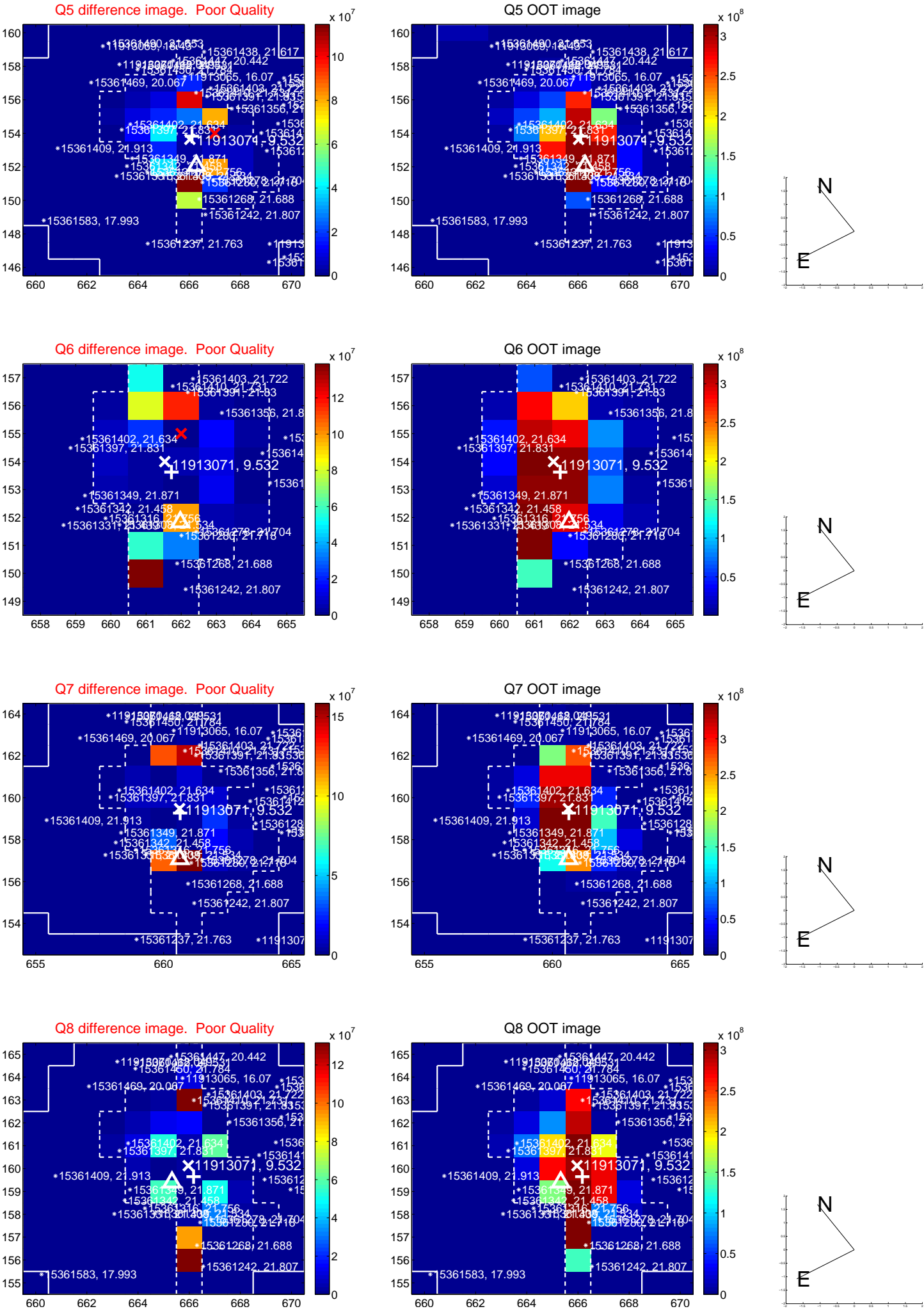


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

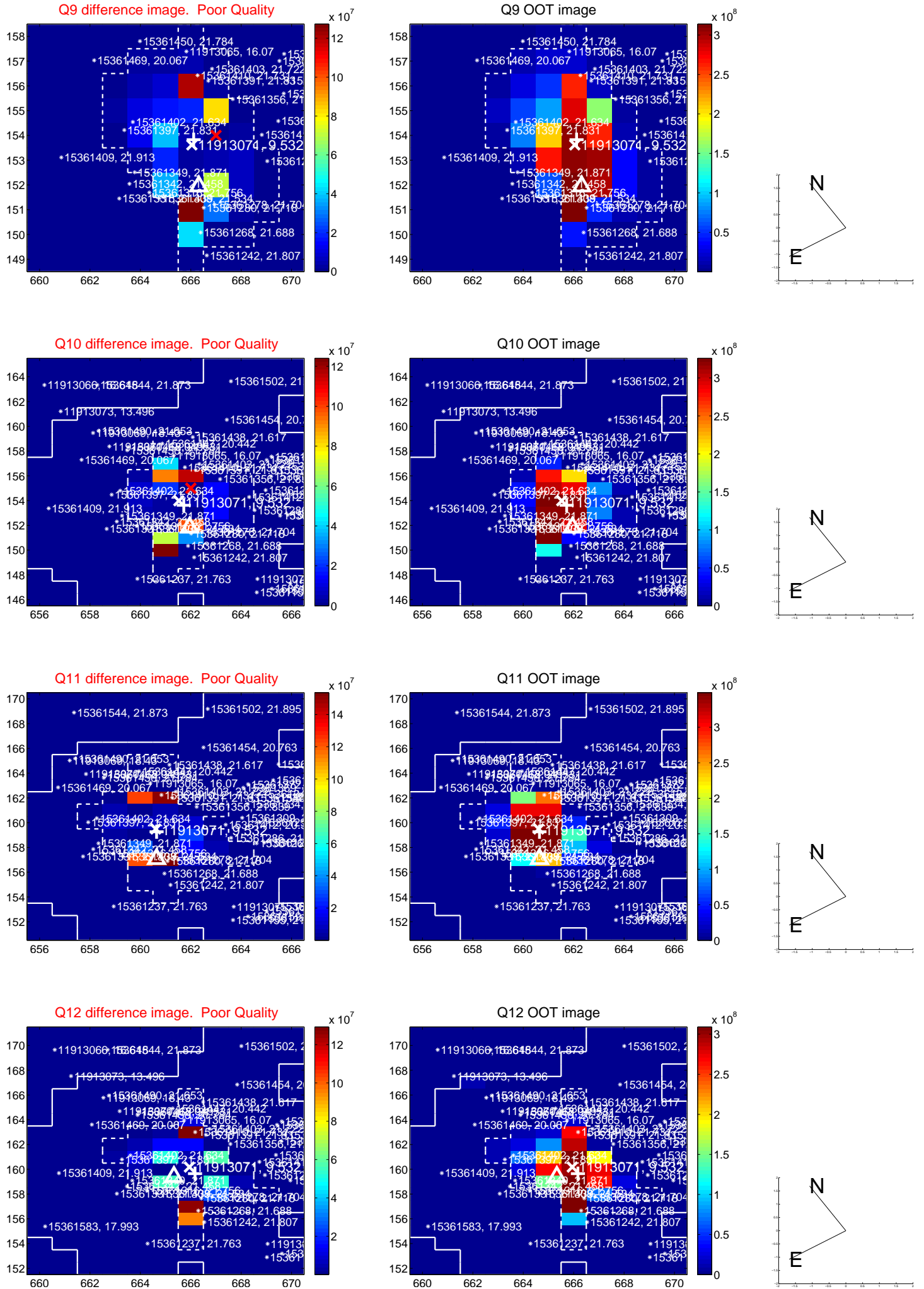
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



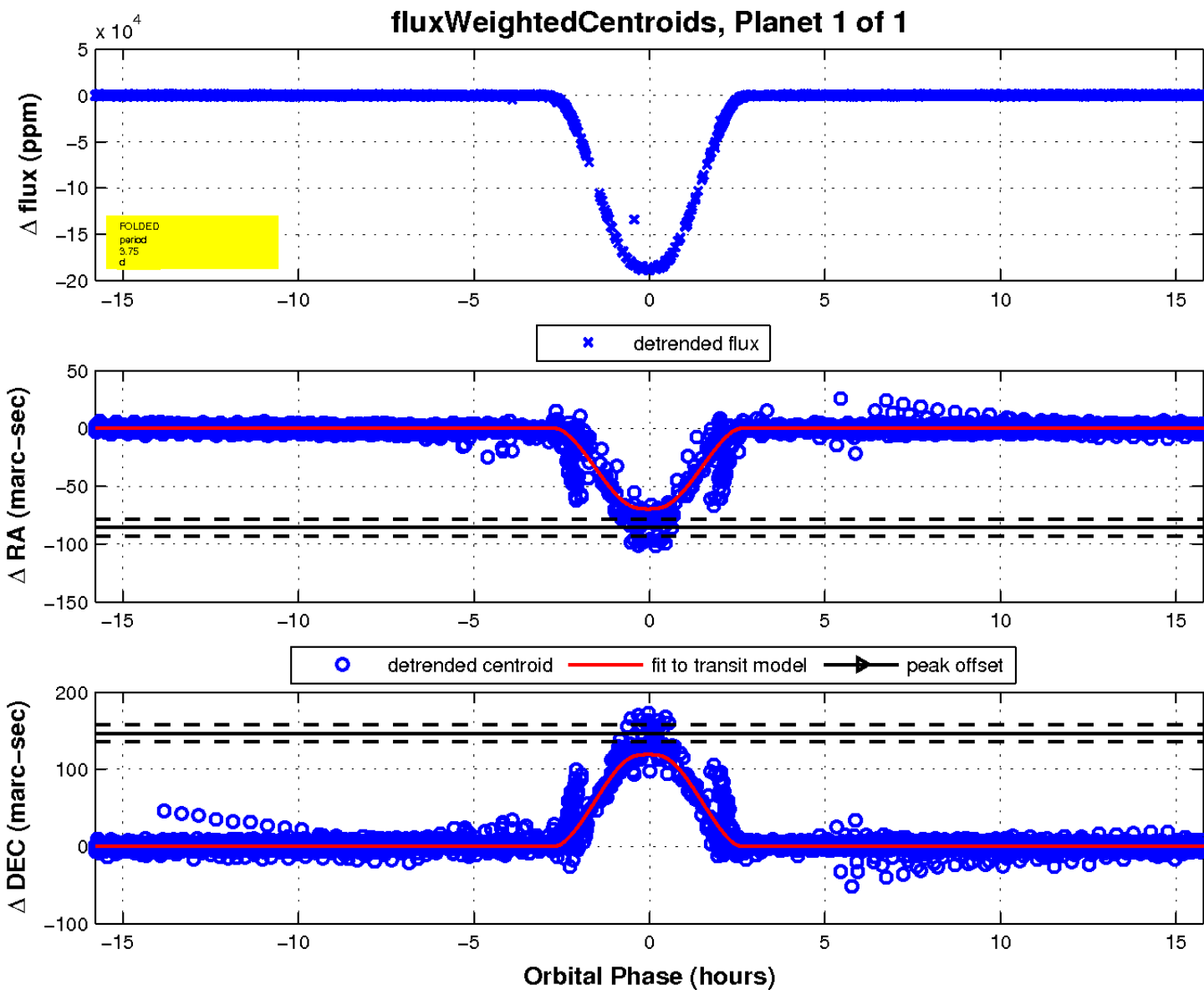
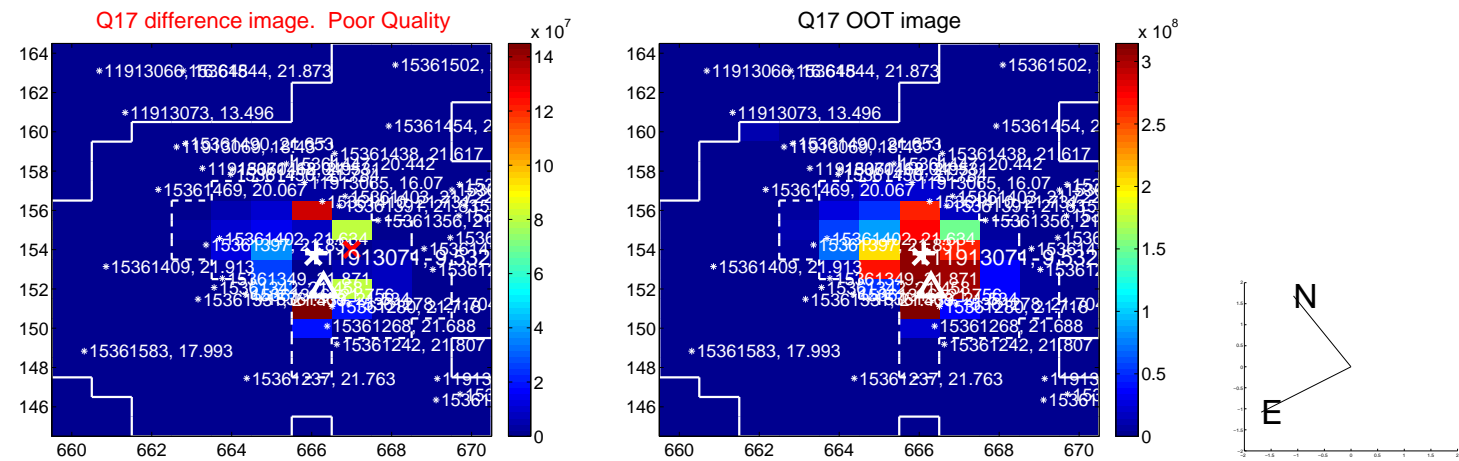
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

