

KIC 011773300

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})
011773300-01	OBS	No	398.171229	488.326222	253.5	6.675	7.4	7.7	2.87	5445	5.18	4.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011773300-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_ALT—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

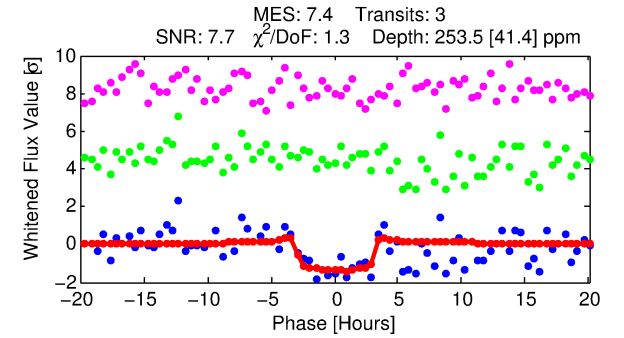
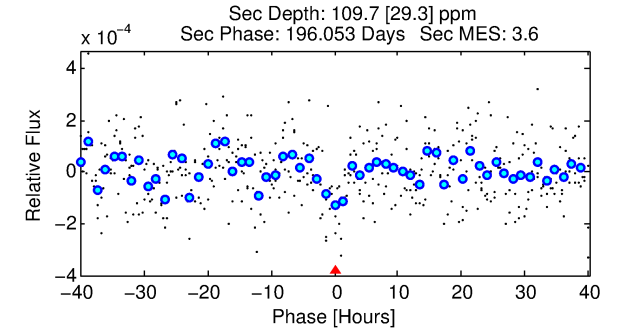
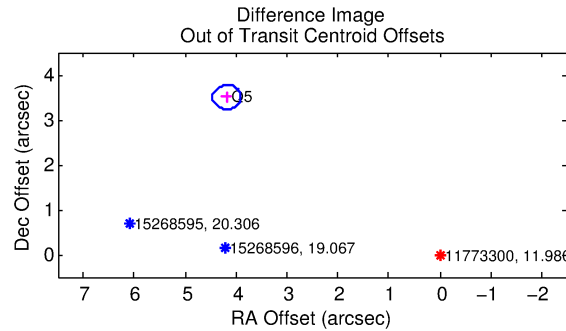
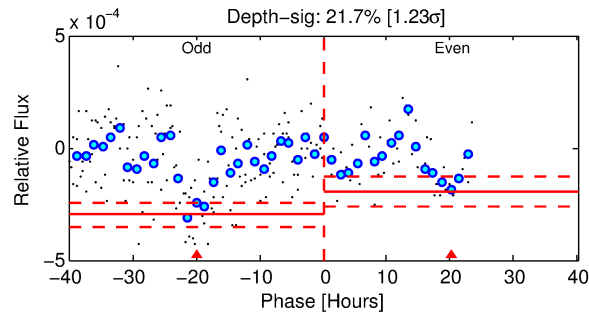
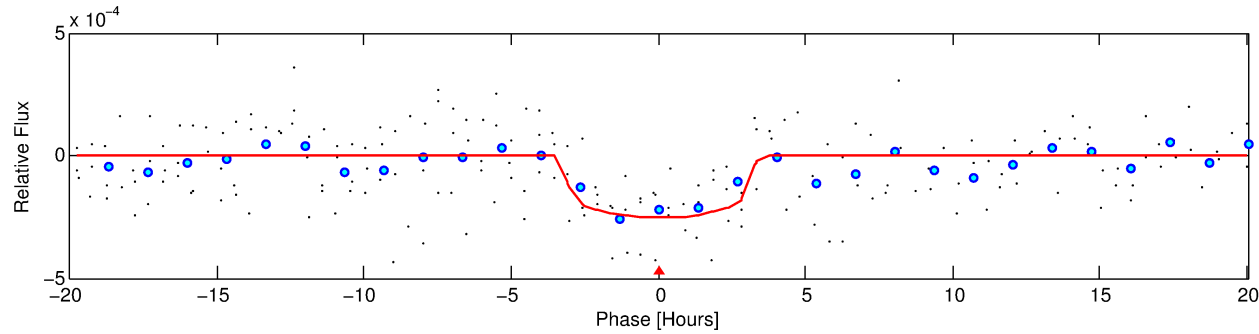
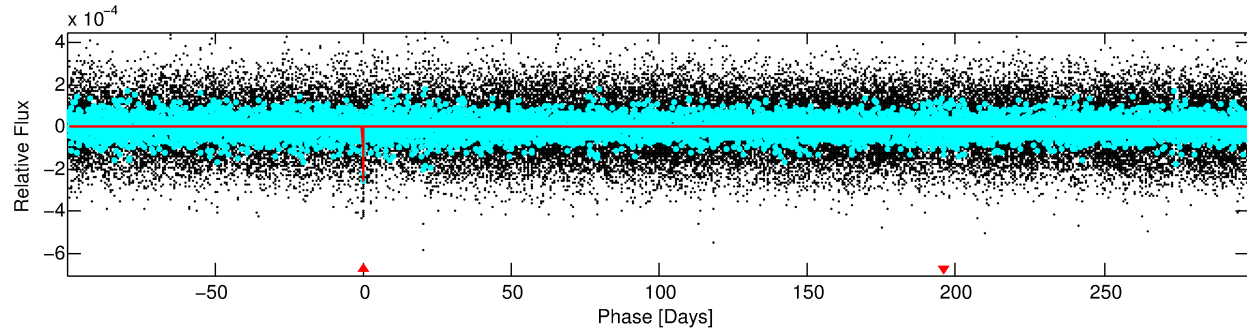
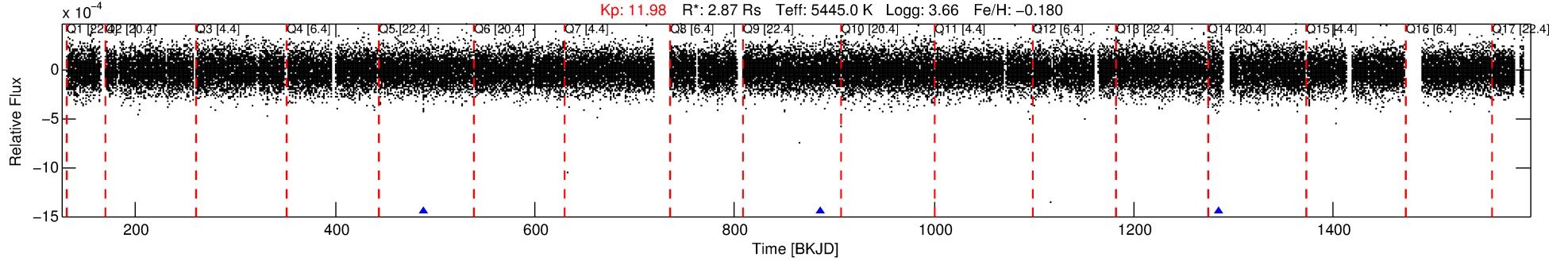
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011773300-01

No Significant Match Found

DV One-Page Summary

KIC: 11773300 Candidate: 1 of 1 Period: 398.171 d



DV Fit Results:

Period = 398.17123 [0.01009] d
Epoch = 488.3262 [0.0125] BKJD
Rp/R* = 0.0166 [0.0109]
a/R* = 263.46 [739.13]
b = 0.84 [1.03]
Seff = 4.70 [2.20]
Teq = 375 [44] K
Rp = 5.18 [3.85] Re
a = 1.1738 [0.3527] AU
Ag = 3097.47 [4395.92] [0.70 σ]
Teffp = 4329 [1463] K [2.70 σ]

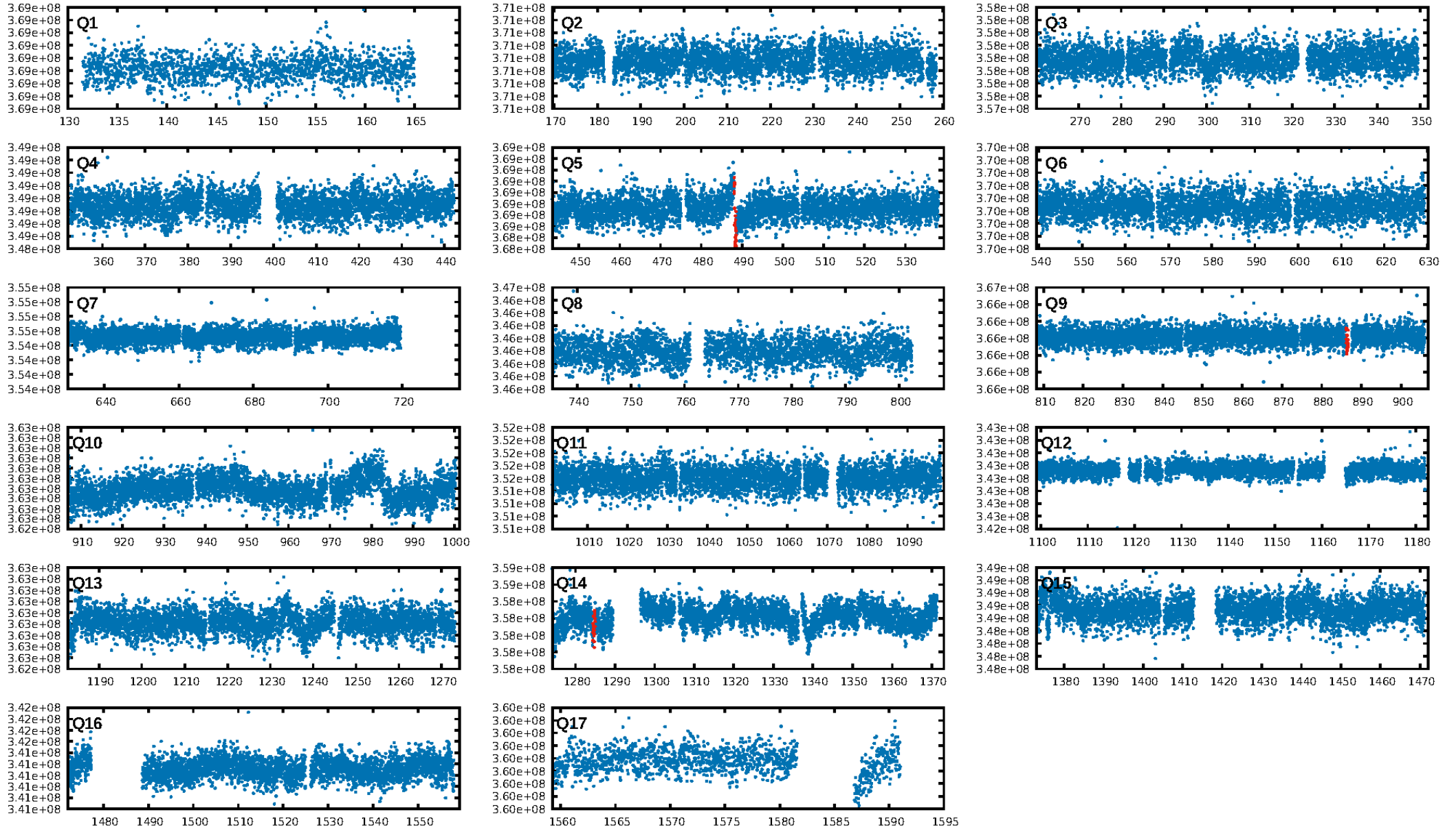
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 21.5%
ModelChiSquareGof-sig: 94.2%
Bootstrap-pfa: 4.10e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.9729
Centroid-sig: 1.4%
Centroid-so: 2.717 arcsec [3.10 σ]
OotOffset-rm: 5.457 arcsec [60.05 σ]
KicOffset-rm: 5.570 arcsec [61.29 σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

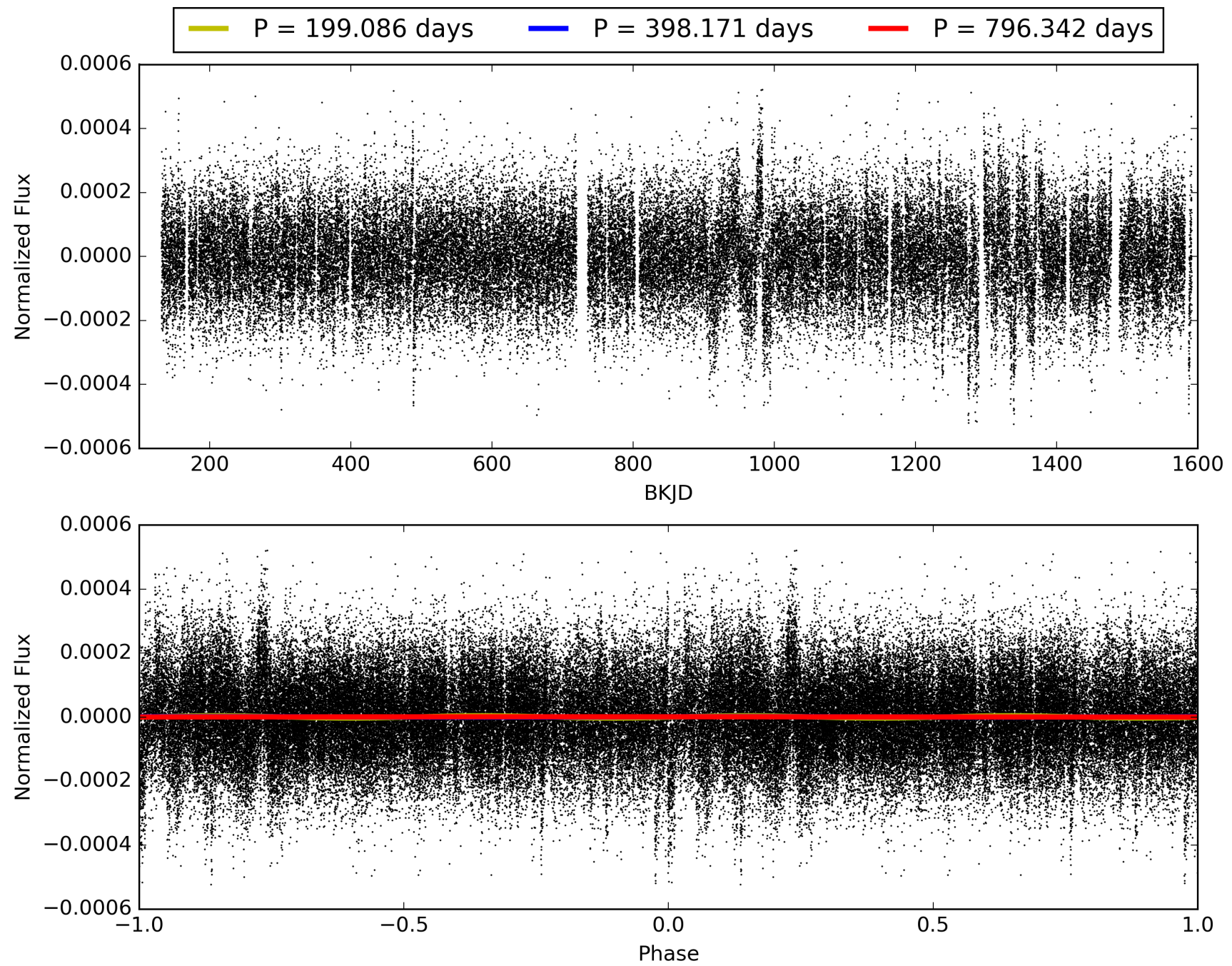
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:37:25 Z

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

TCE 011773300-01, PDC Light Curves

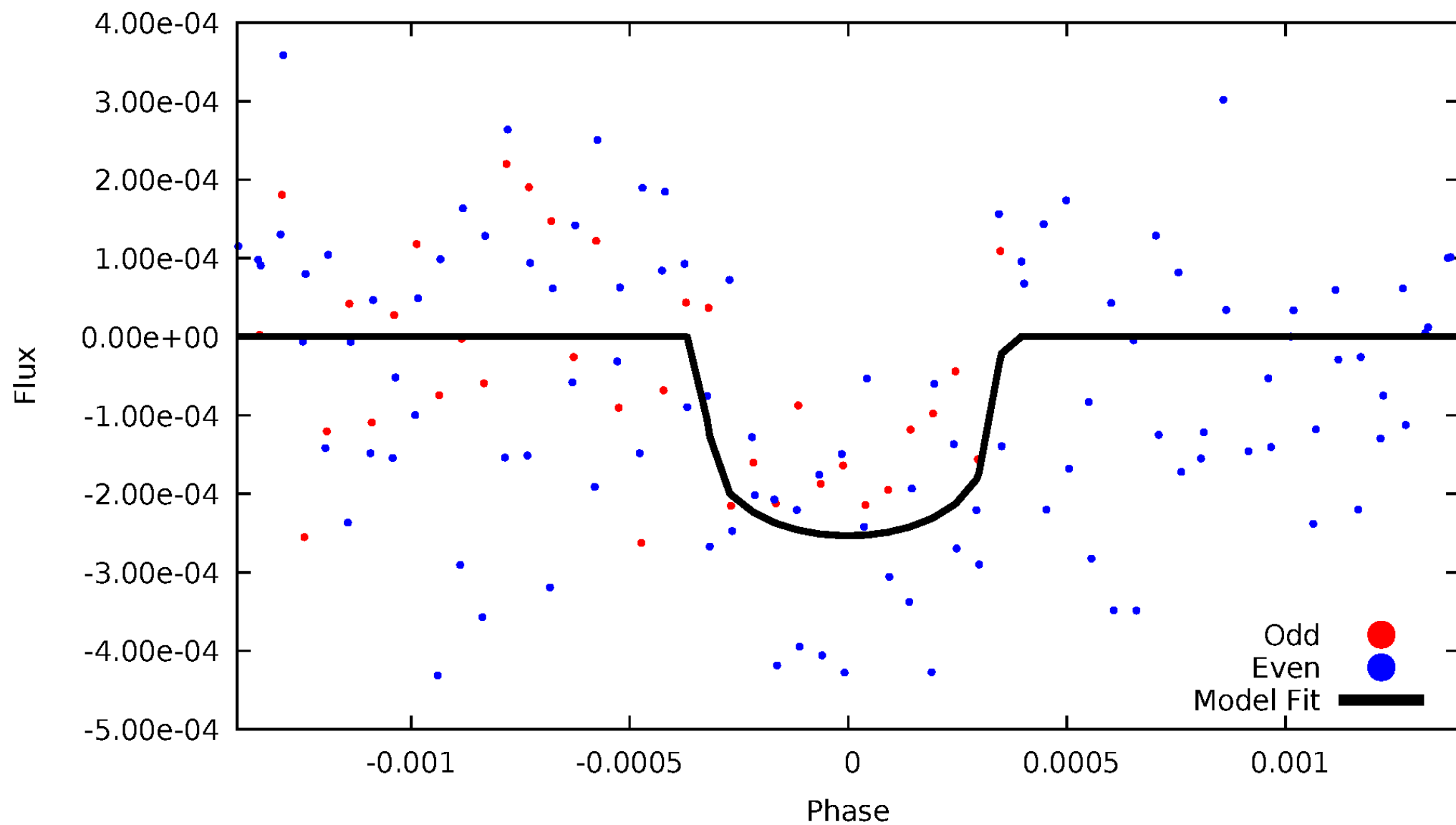


TCE 011773300-01



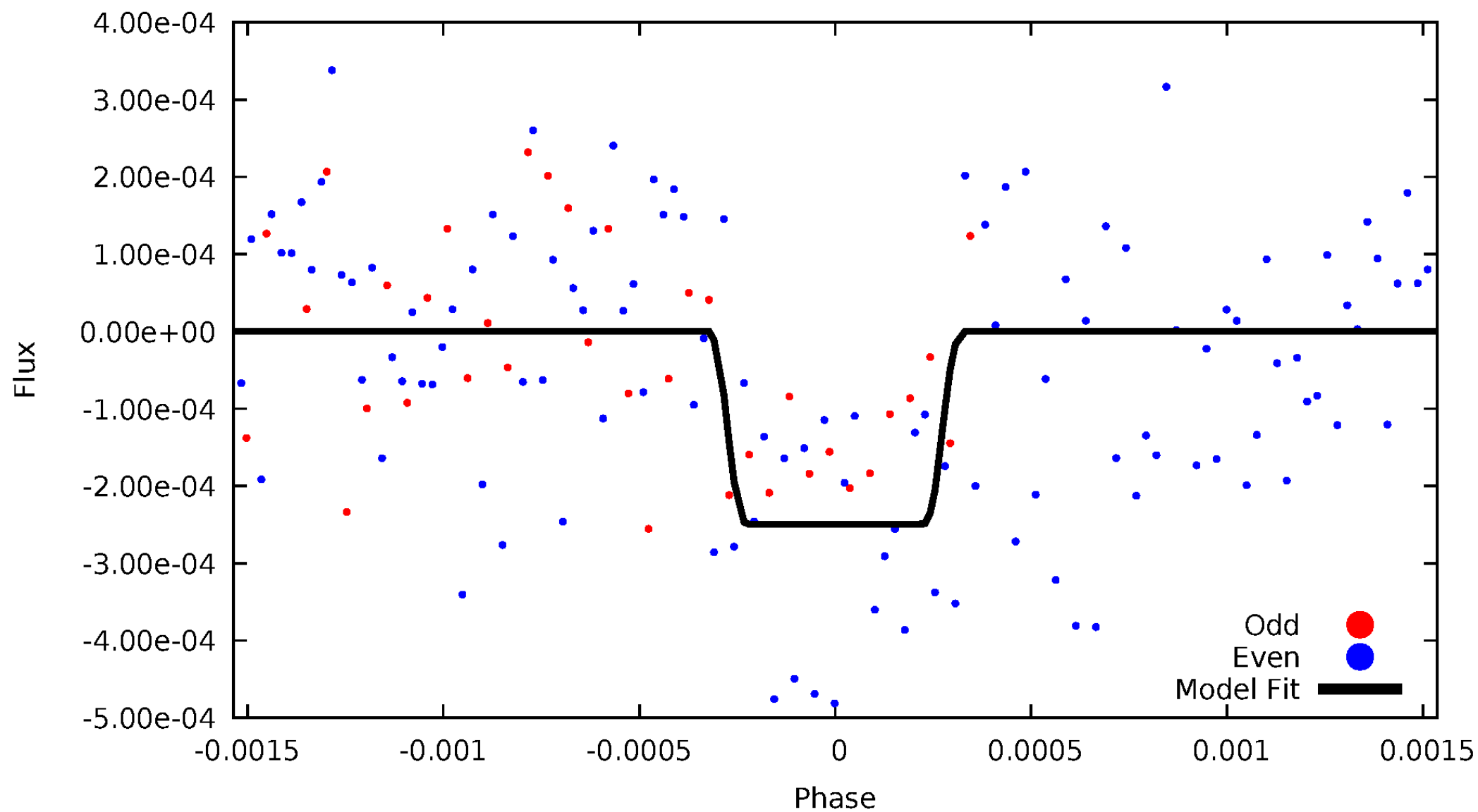
DV Odd/Even

TCE 011773300-01

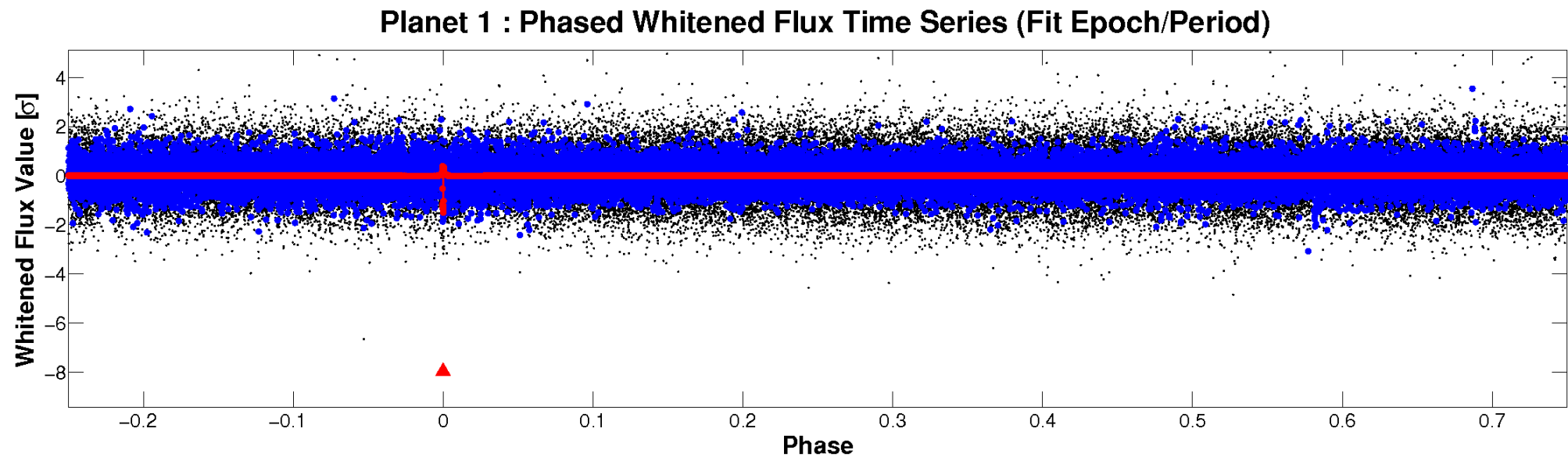
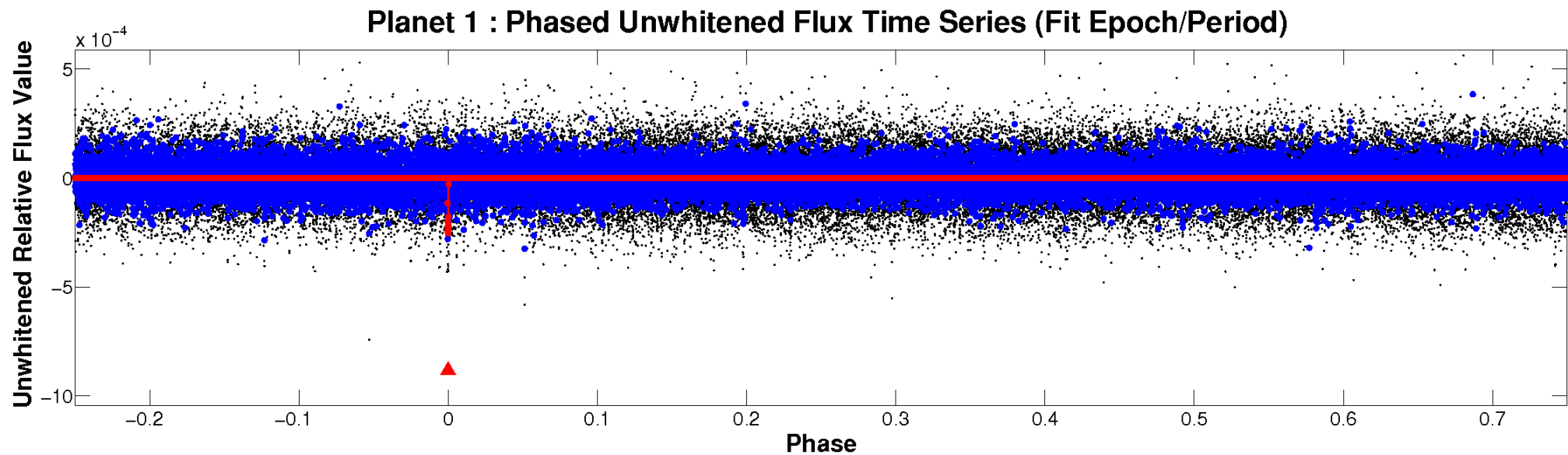


ALT Odd/Even

TCE 011773300-01

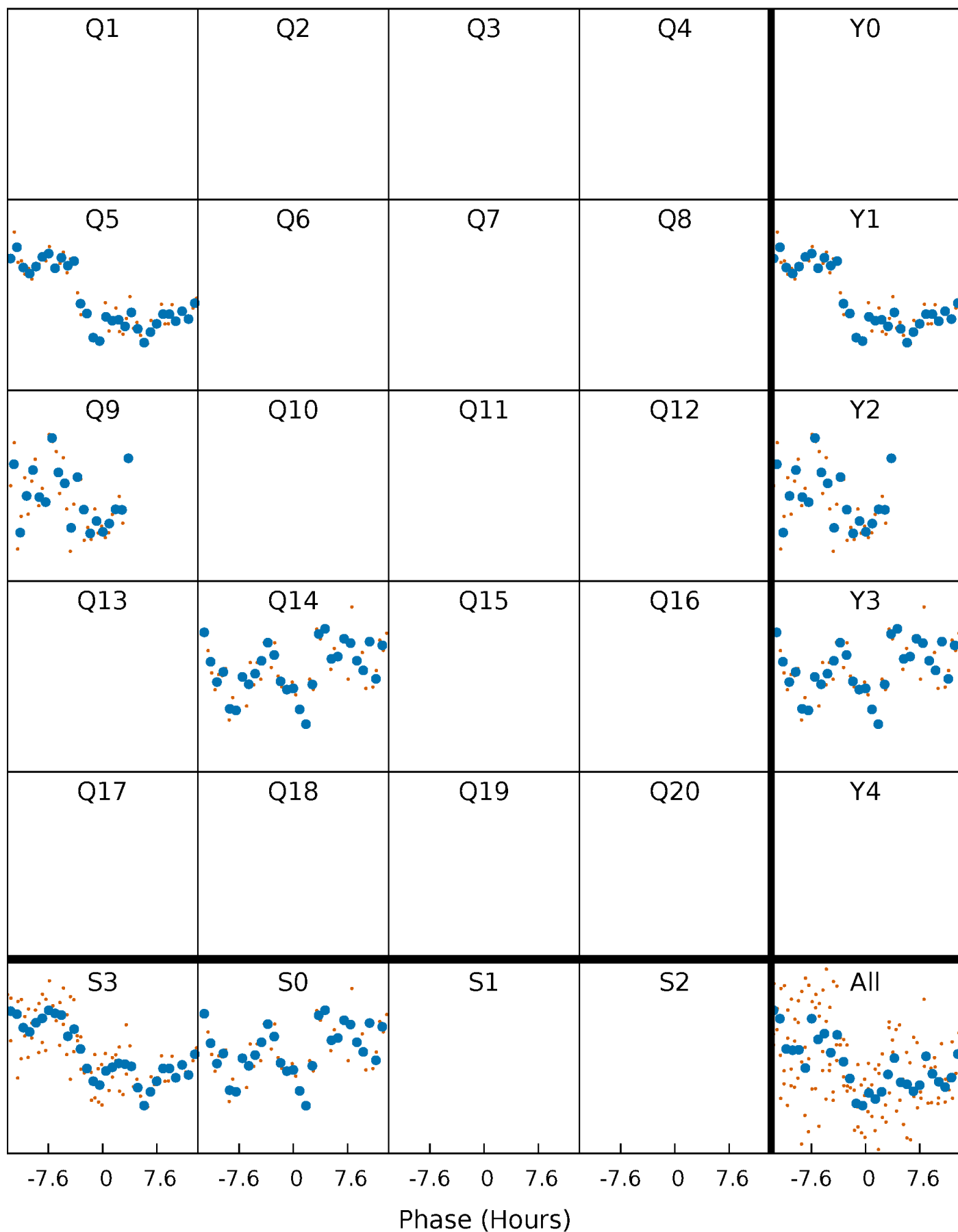


Non-Whitened Vs. Whitened Light Curve



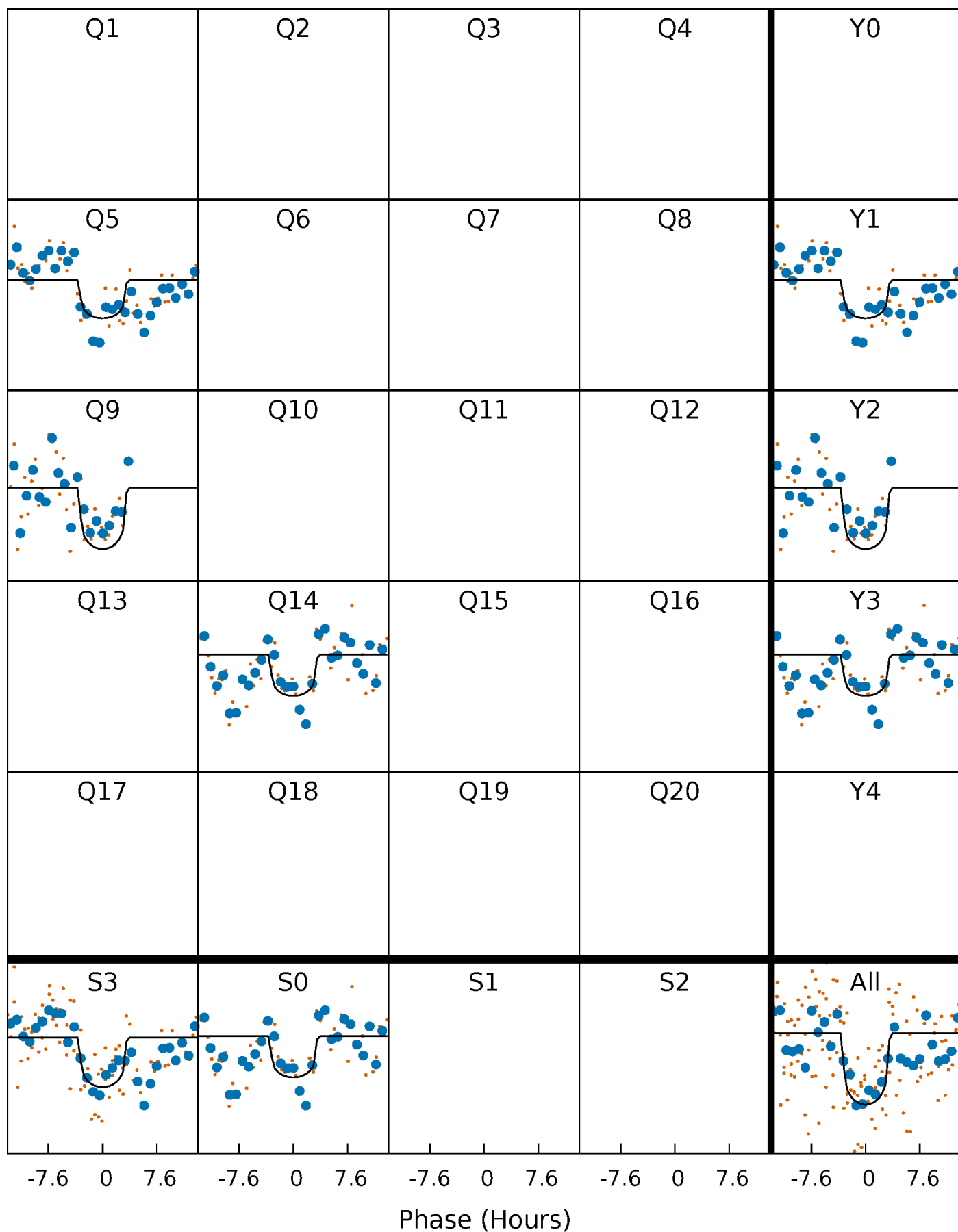
PDC Quarter-Phased Transit Curves

TCE 011773300-01 $P=398.171229$ Days $T_0=488.326222$ (BKJD)



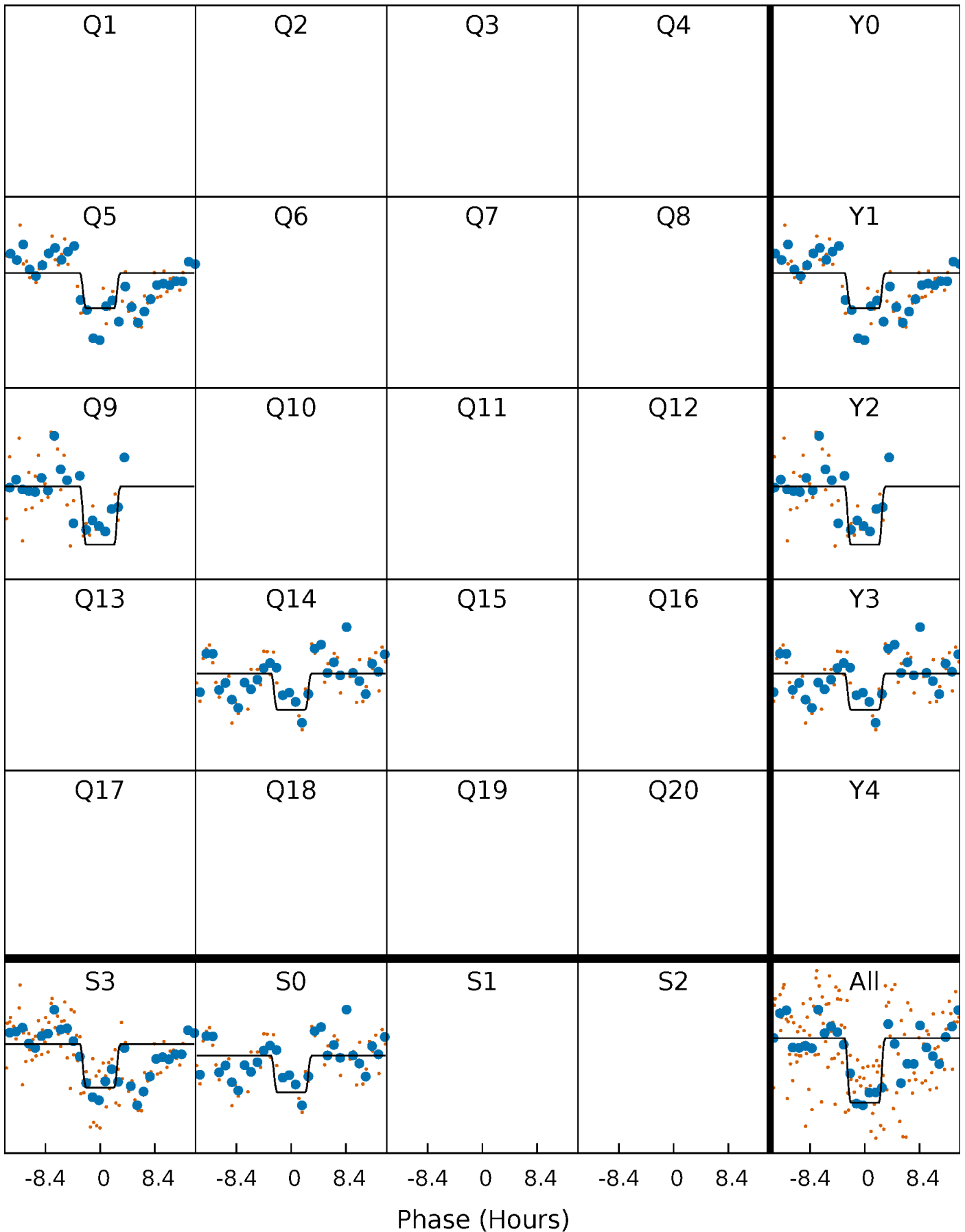
DV Quarter-Phased Transit Curves

TCE 011773300-01 $P=398.171229$ Days $T_0=488.326222$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

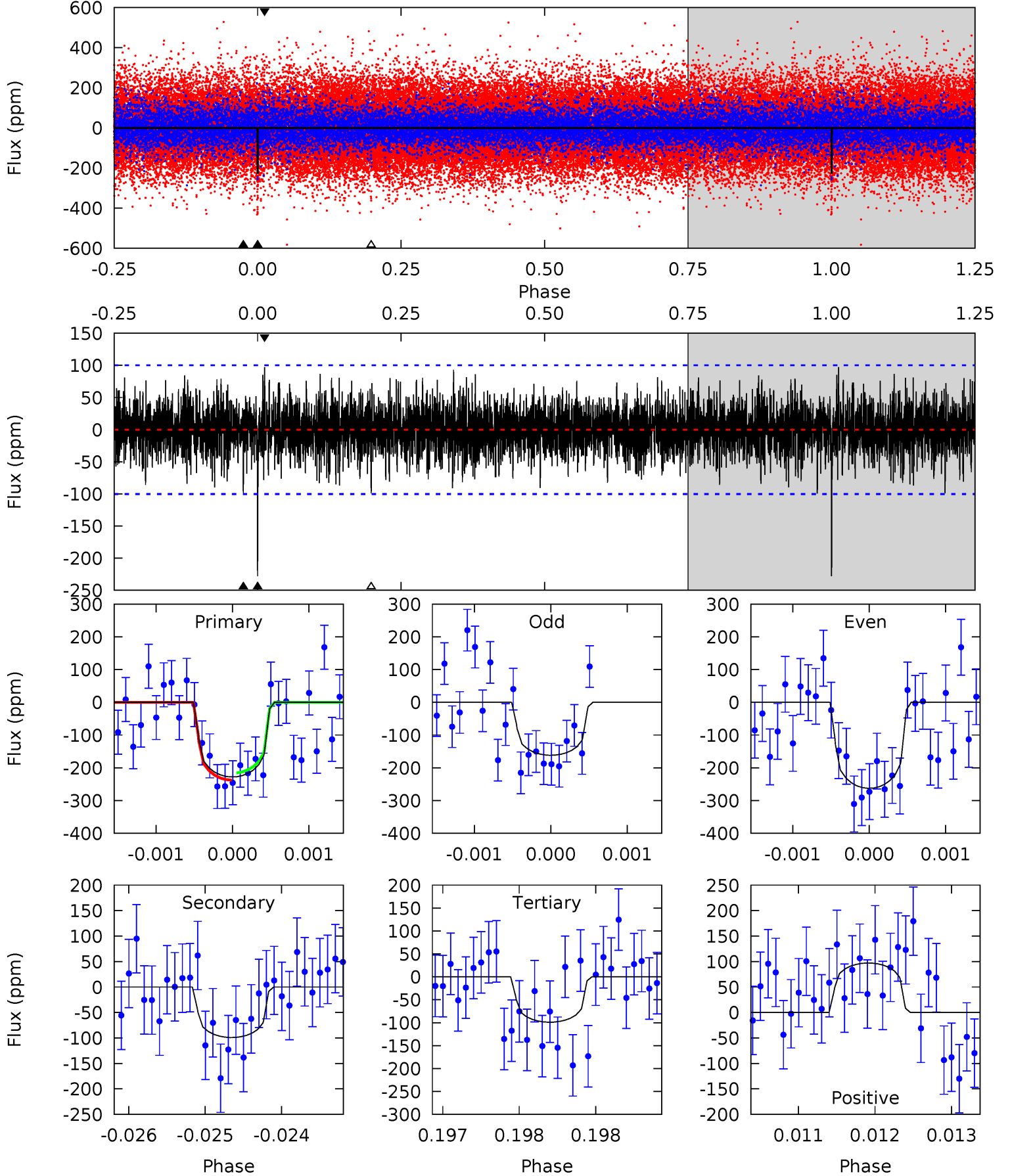
TCE 011773300-01 P=398.175161 Days $T_0=488.323392$ (BKJD)



DV Model-Shift Uniqueness Test

011773300-01, $P = 398.171229$ Days, $E = 90.154993$ Days

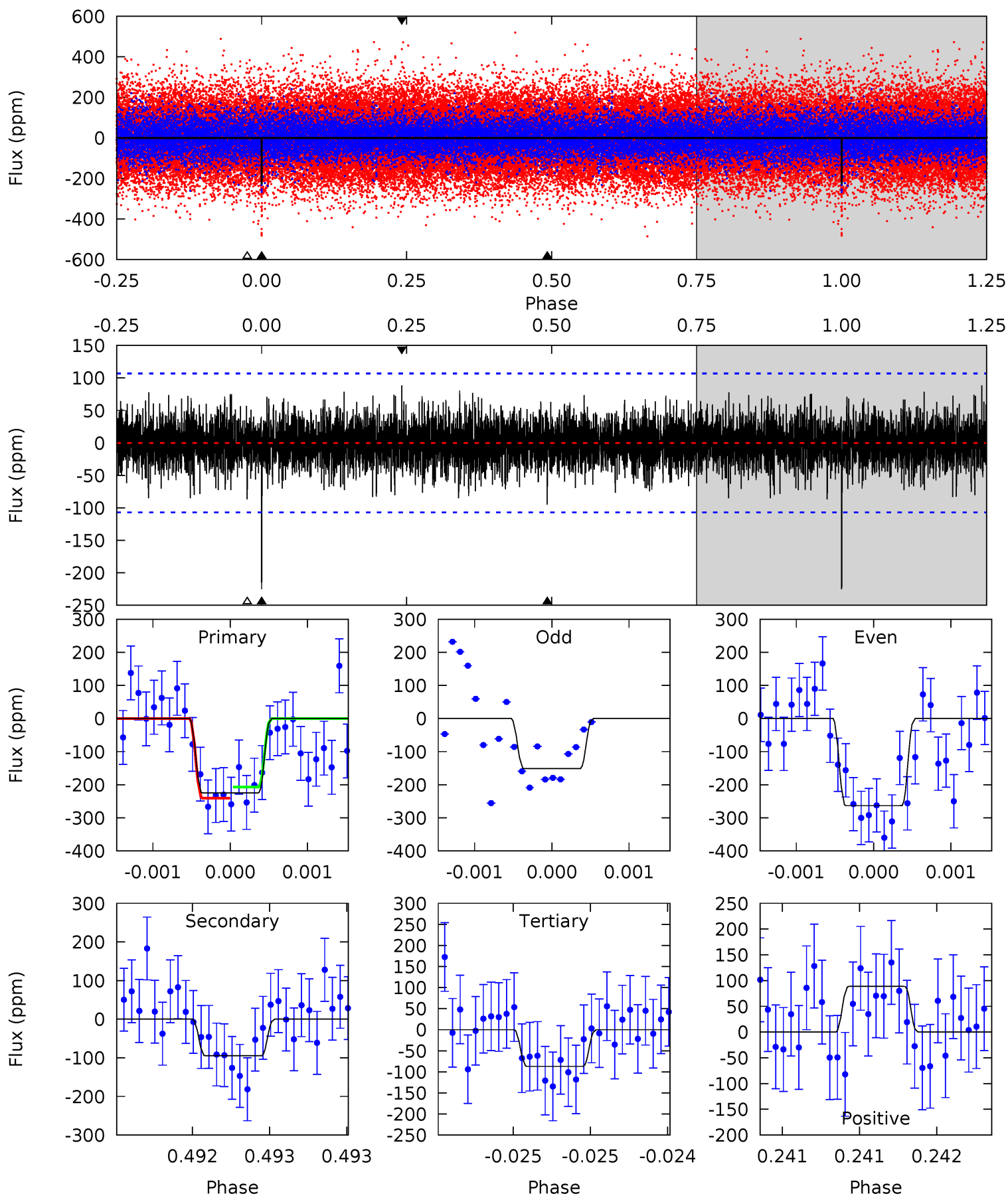
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.5	5.46	5.44	5.34	5.51	3.38	1.51	7.09	7.19	0.01	0.11	2.67	1.05	0.30	0.61



Alt Model-Shift Uniqueness Test

011773300-01, P = 398.175161 Days, E = 90.148231 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	4.91	4.51	4.59	5.54	3.42	1.27	7.14	7.06	0.41	0.32	2.78	1.26	0.28	0.86



Stellar Parameters For KIC 011773300

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5445^{+146}_{-178}	$3.657^{+0.253}_{-0.136}$	$-0.180^{+0.300}_{-0.300}$	$2.866^{+0.531}_{-0.986}$	$1.362^{+0.161}_{-0.376}$	$0.082^{+0.131}_{-0.033}$
	+3%/-3%	+7%/-4%	+167%/-167%	+19%/-34%	+12%/-28%	+161%/-40%
Source	PHO1	FLK73	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 011773300-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-99 ± 18	$5.24^{+3.50}_{-2.89}$	522^{+34}_{-40}	4288^{+1718}_{-670}	2735^{+10456}_{-1800}
Alt.	-95 ± 19	$4.95^{+3.34}_{-2.80}$	520^{+32}_{-44}	4328^{+1778}_{-692}	2761^{+12122}_{-1782}

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 $A_{obs} \gg 1.0$

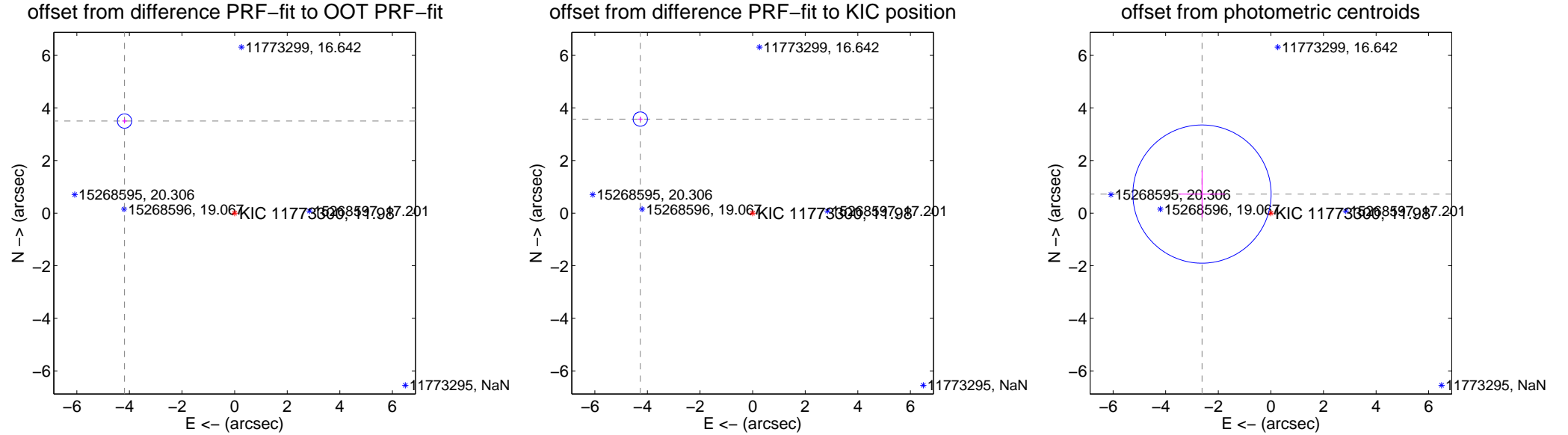
DV Centroid Data

Supplemental centroid analysis for 011773300-01. **Kepler magnitude: 11.98.** Transit SNR 7.75

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.457 ± 0.091	60.05	4.185 ± 0.089	3.502 ± 0.093
PRF-fit source offset from KIC position	5.570 ± 0.091	61.29	4.271 ± 0.089	3.576 ± 0.093
photometric centroid source offset	2.72 ± 0.88	3.10	2.62 ± 0.87	0.72 ± 0.89

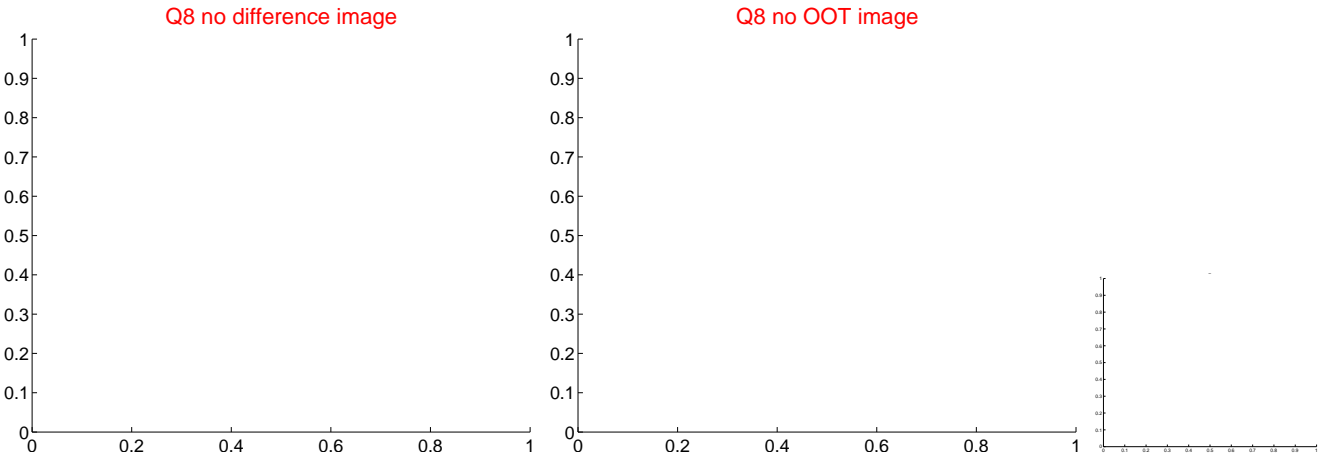
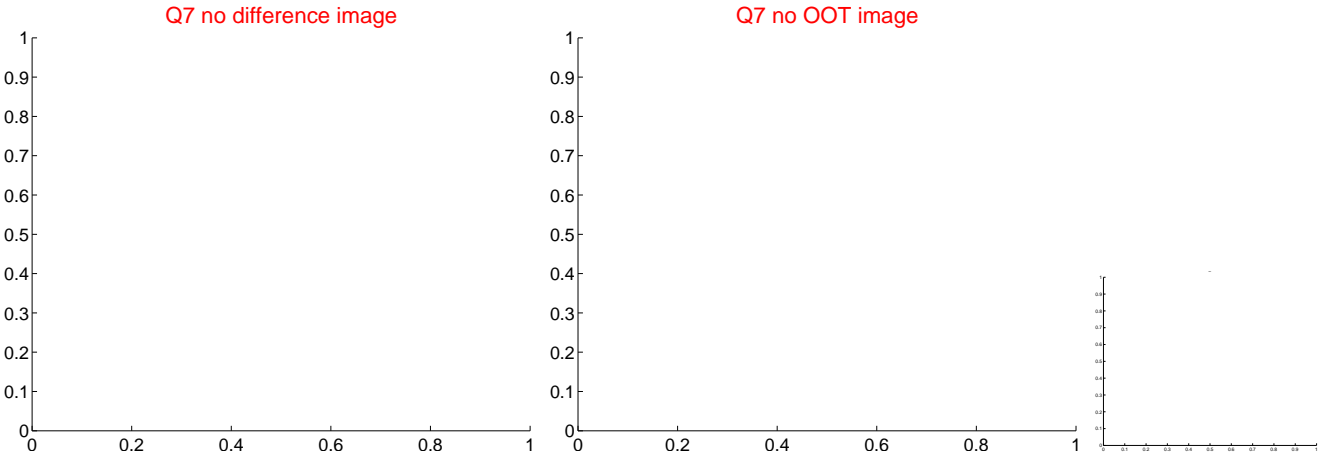
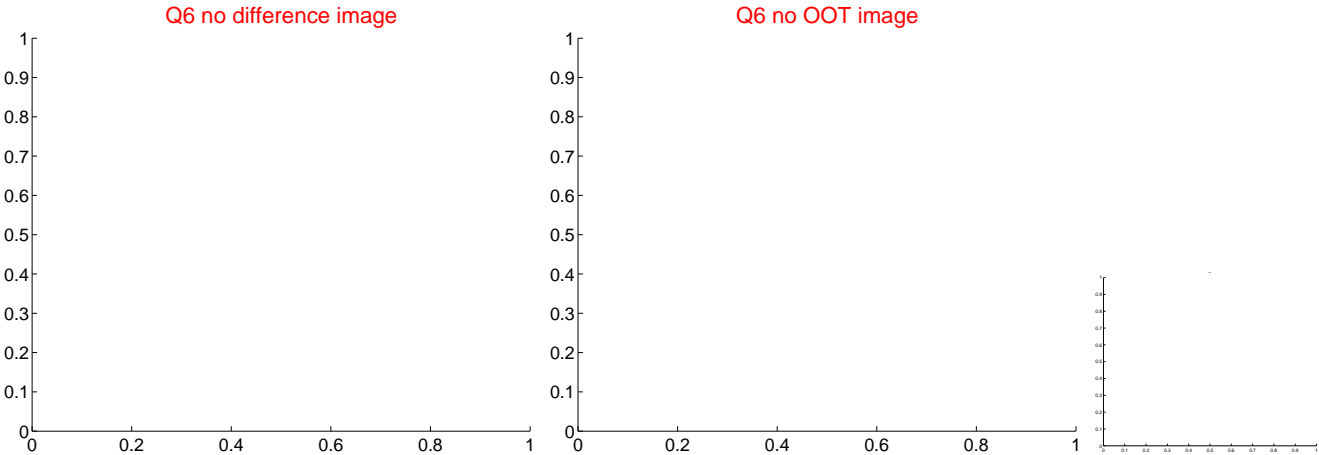
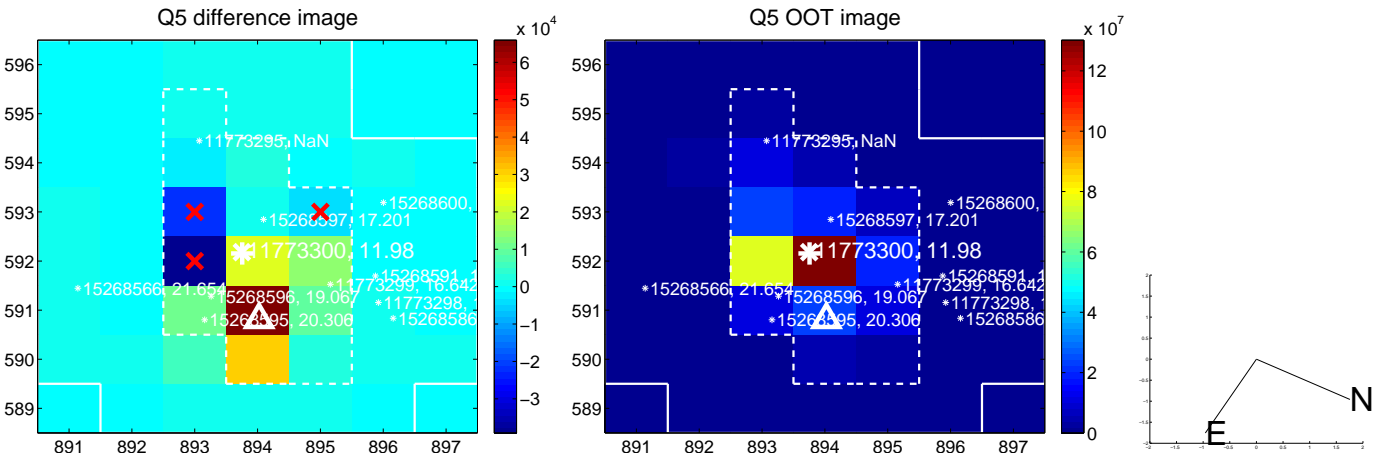


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

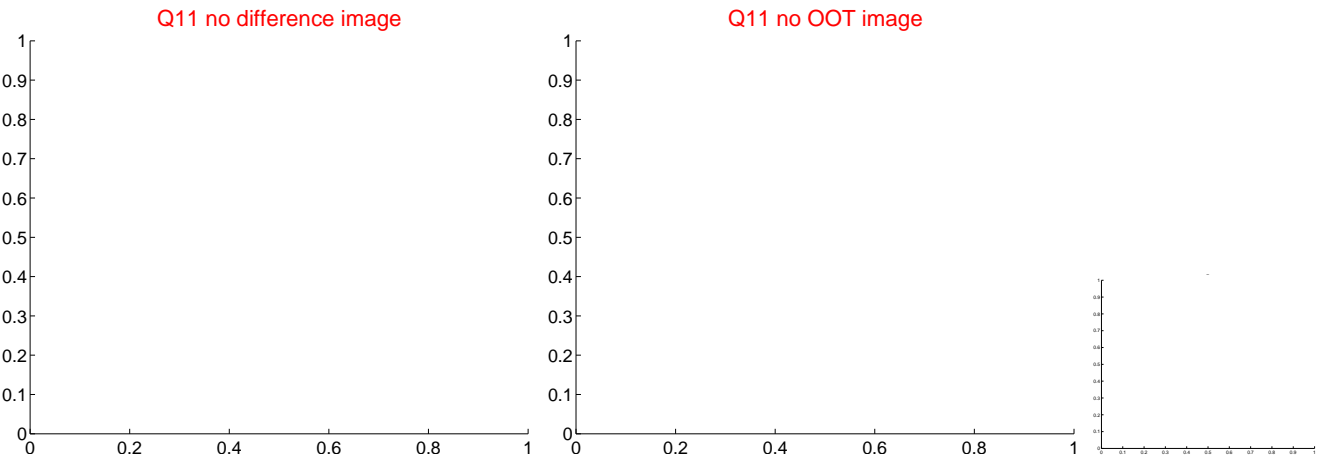
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



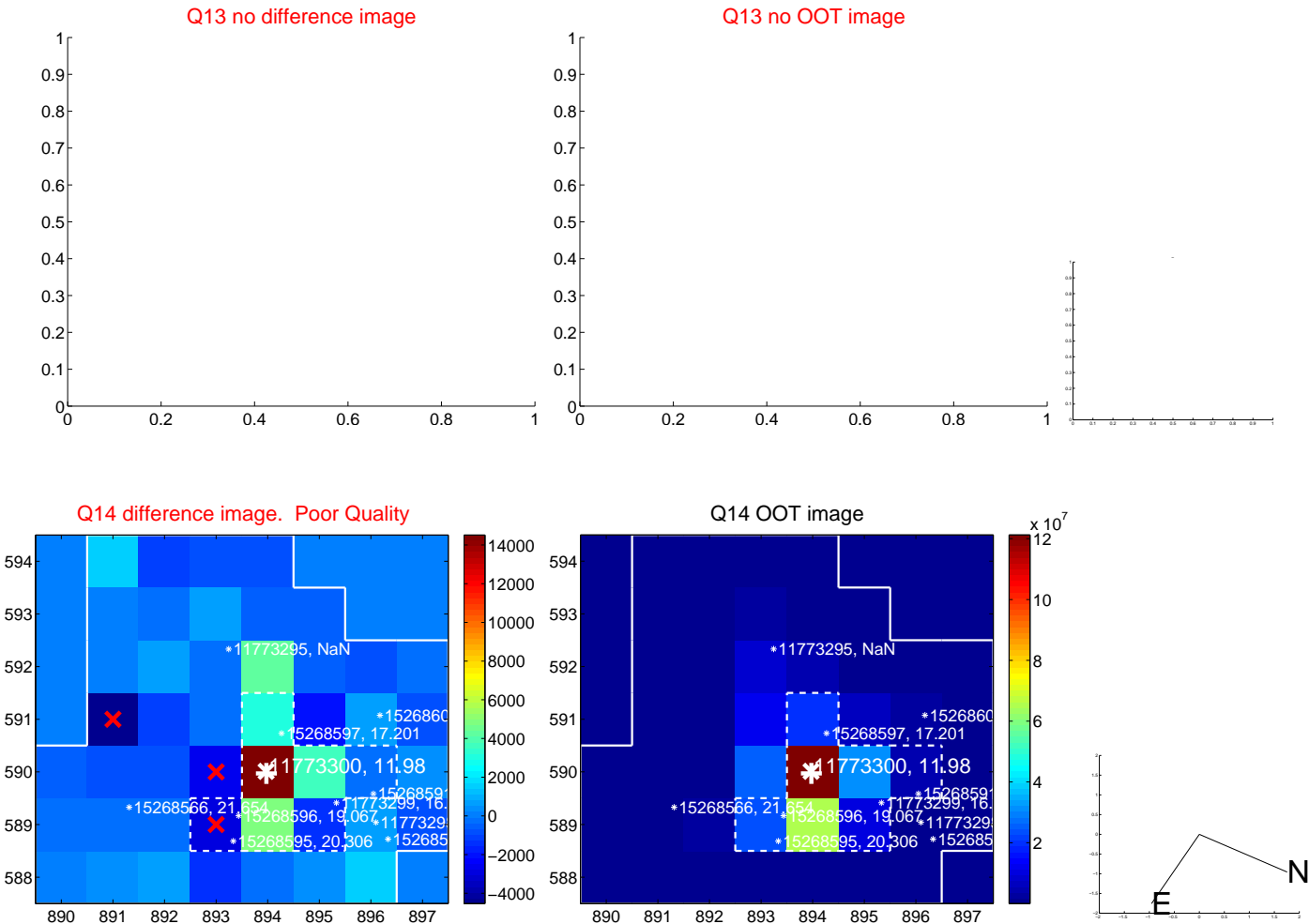
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



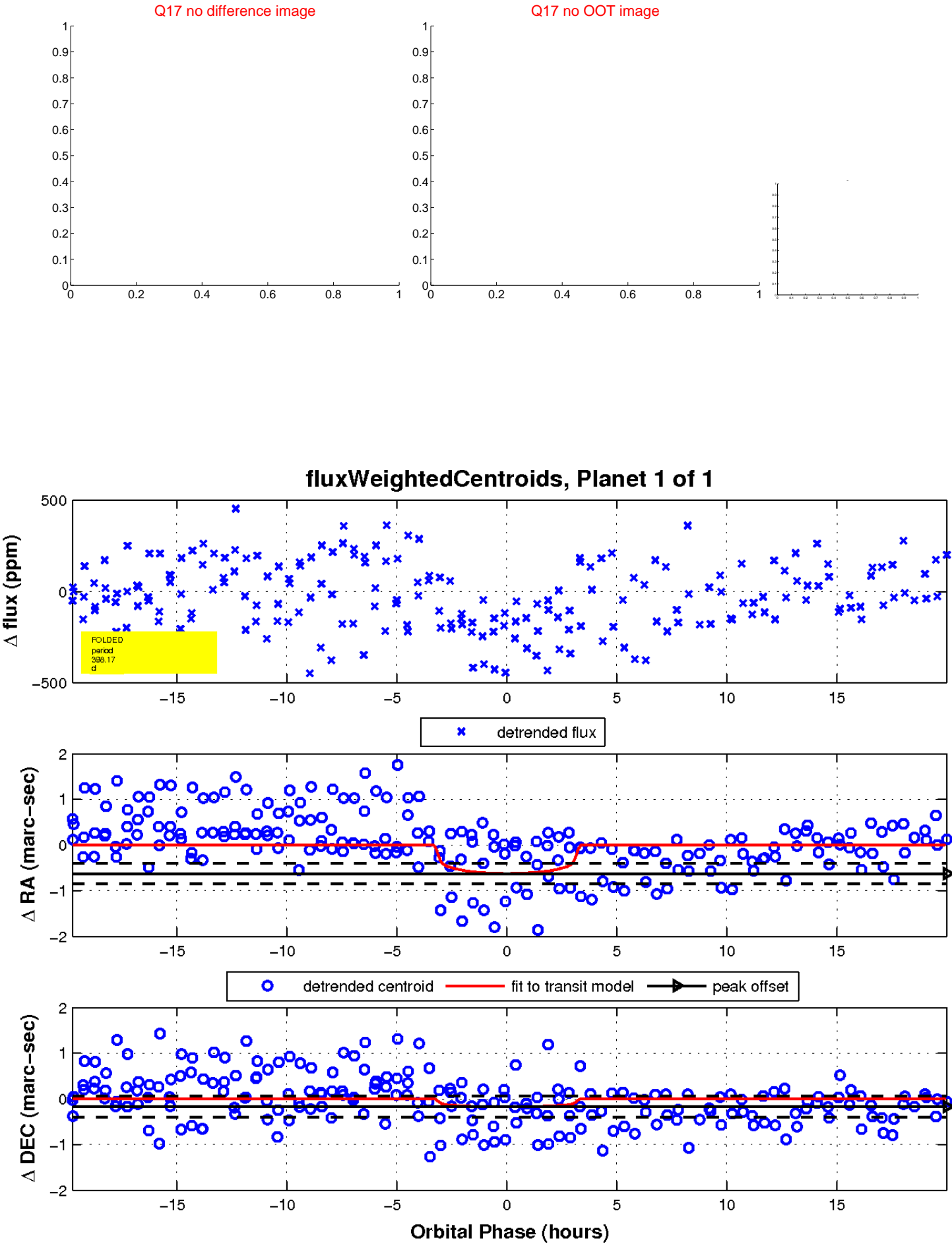
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

