

KIC 007969948

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})
007969948-01	OBS	No	369.087042	232.476667	586.8	18.679	8.6	10.0	1.00	6122	3.05	1.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007969948-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—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.

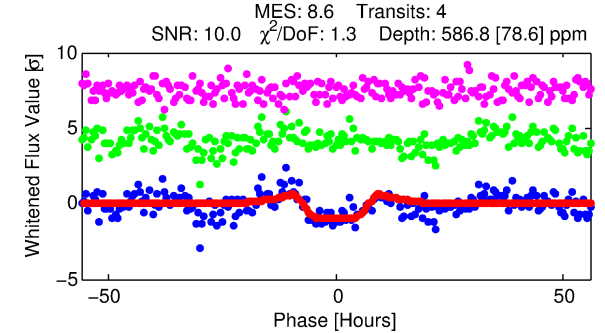
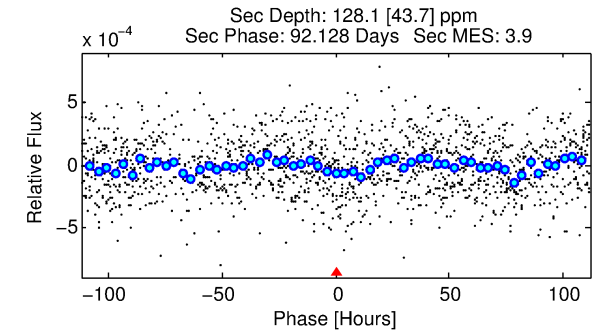
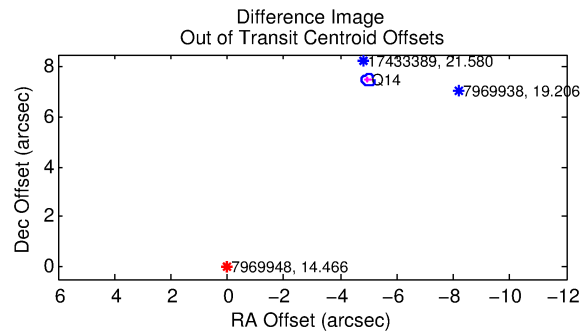
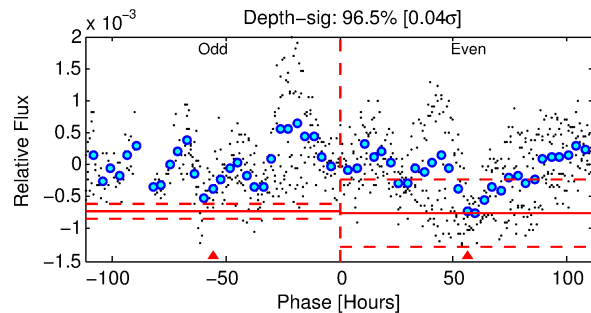
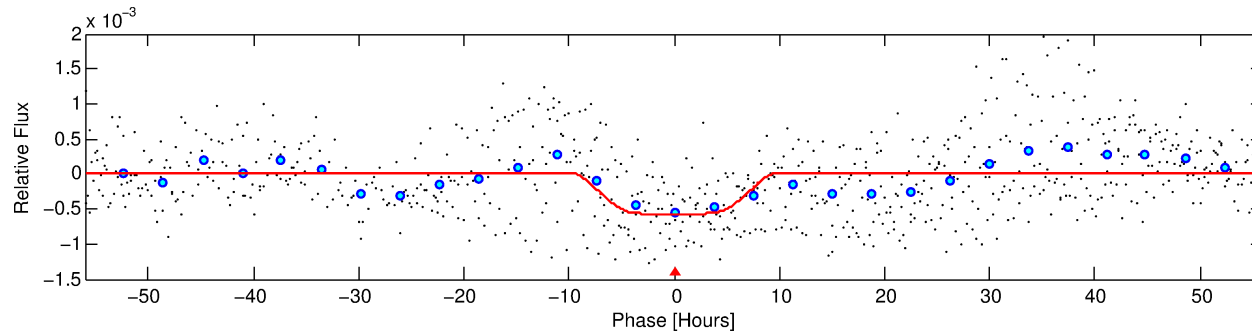
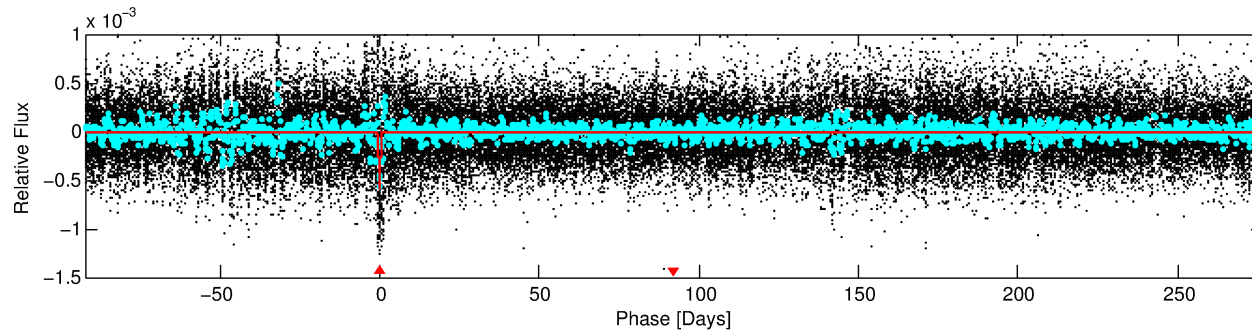
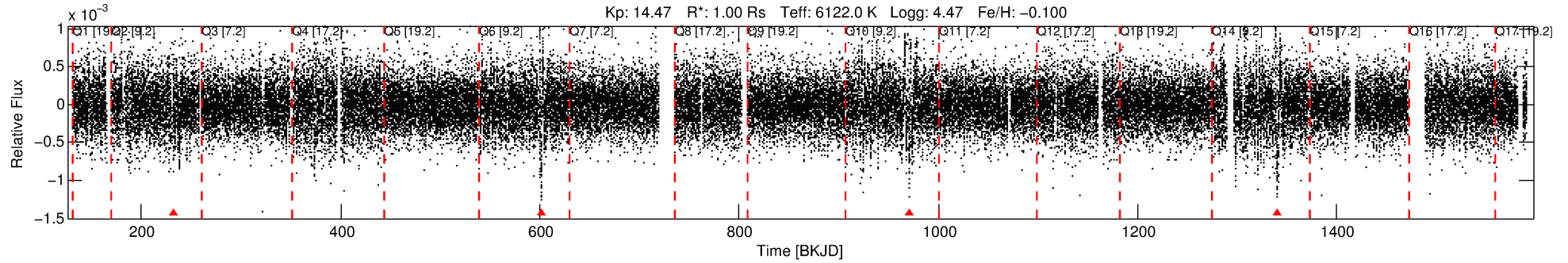
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007969948-01

No Significant Match Found

DV One-Page Summary

KIC: 7969948 Candidate: 1 of 1 Period: 369.087 d



DV Fit Results:

Period = 369.08704 [0.01562] d
Epoch = 232.4767 [0.0293] BKJD
Rp/R* = 0.0281 [0.0023]
a/R* = 57.20 [9.91]
b = 0.96 [0.02]
Seff = 1.18 [0.47]
Teq = 266 [27] K
Rp = 3.05 [0.99] Re
a = 1.0303 [0.2708] AU
Ag = 8022.76 [4310.86] [1.86σ]
Teffp = 3886 [387] K [9.33σ]

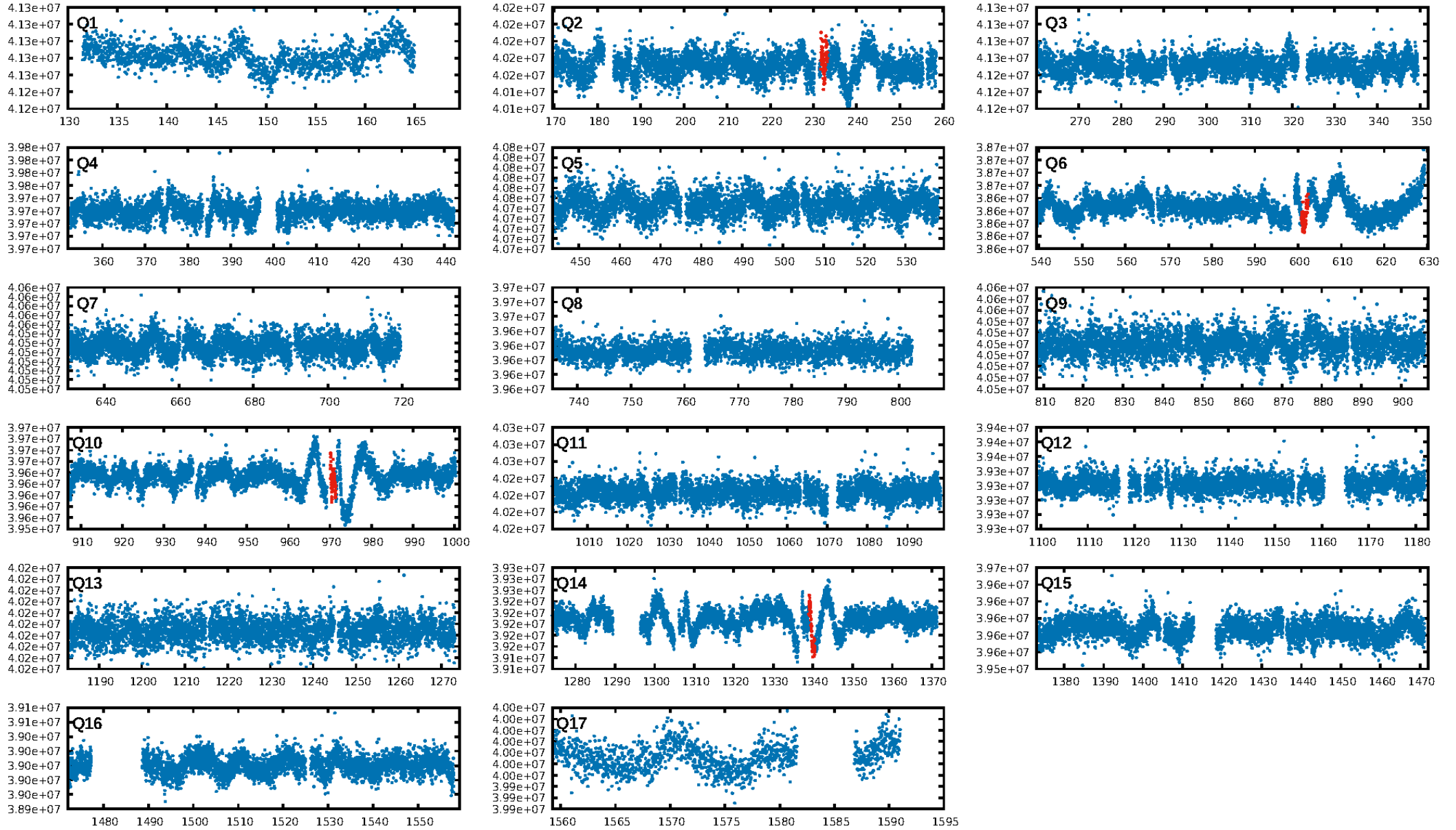
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 92.2%
ModelChiSquareGof-sig: 99.1%
Bootstrap-pfa: 2.08e-12
RollingBand-fgt: 0.00 [0/4]
GhostDiagnostic-chr: 0.5406
Centroid-sig: 12.6%
Centroid-so: 2.683 arcsec [1.56σ]
OotOffset-rm: 8.974 arcsec [112.70σ]
KicOffset-rm: 9.154 arcsec [114.96σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

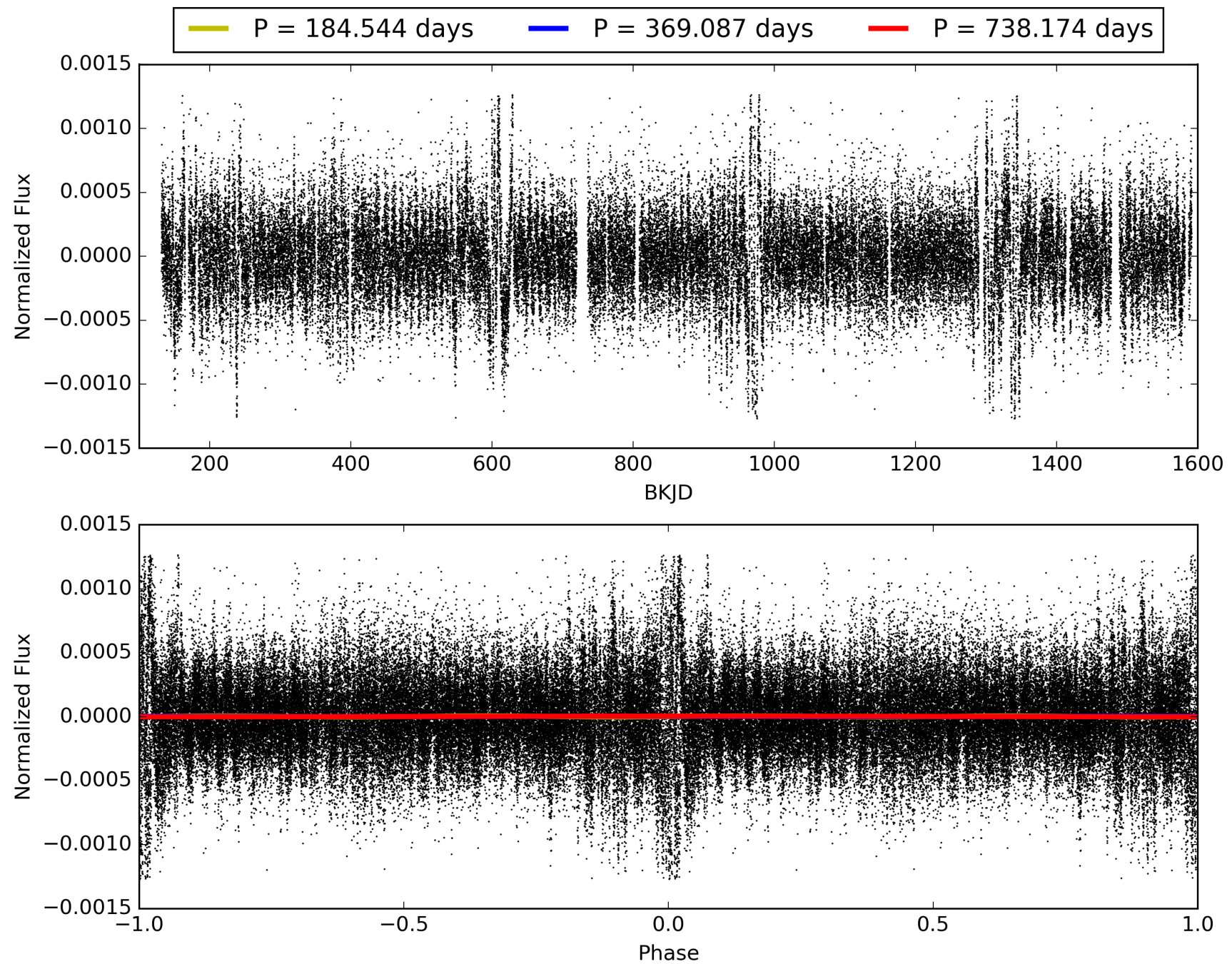
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:33:17 Z

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

TCE 007969948-01, PDC Light Curves

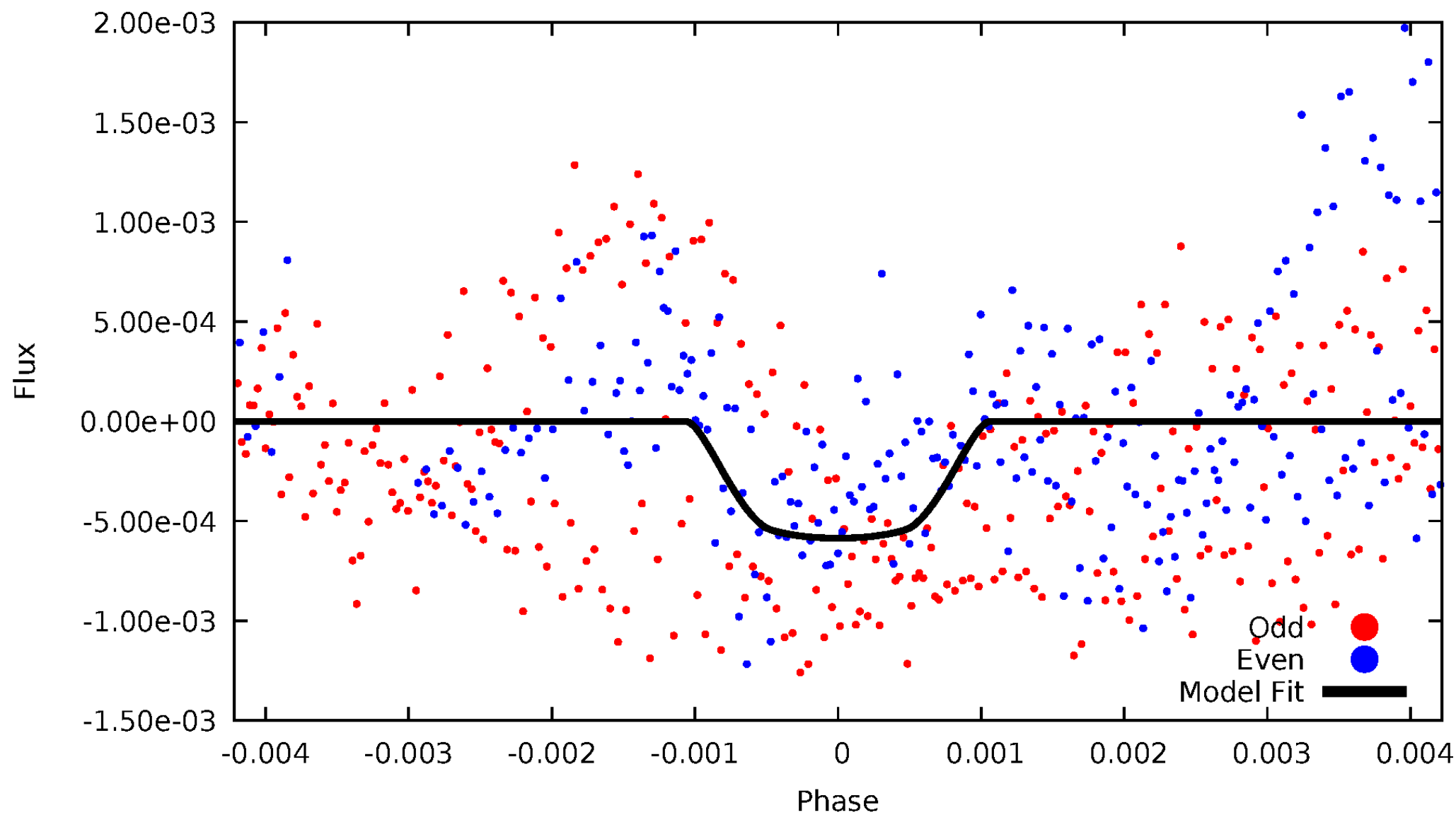


TCE 007969948-01



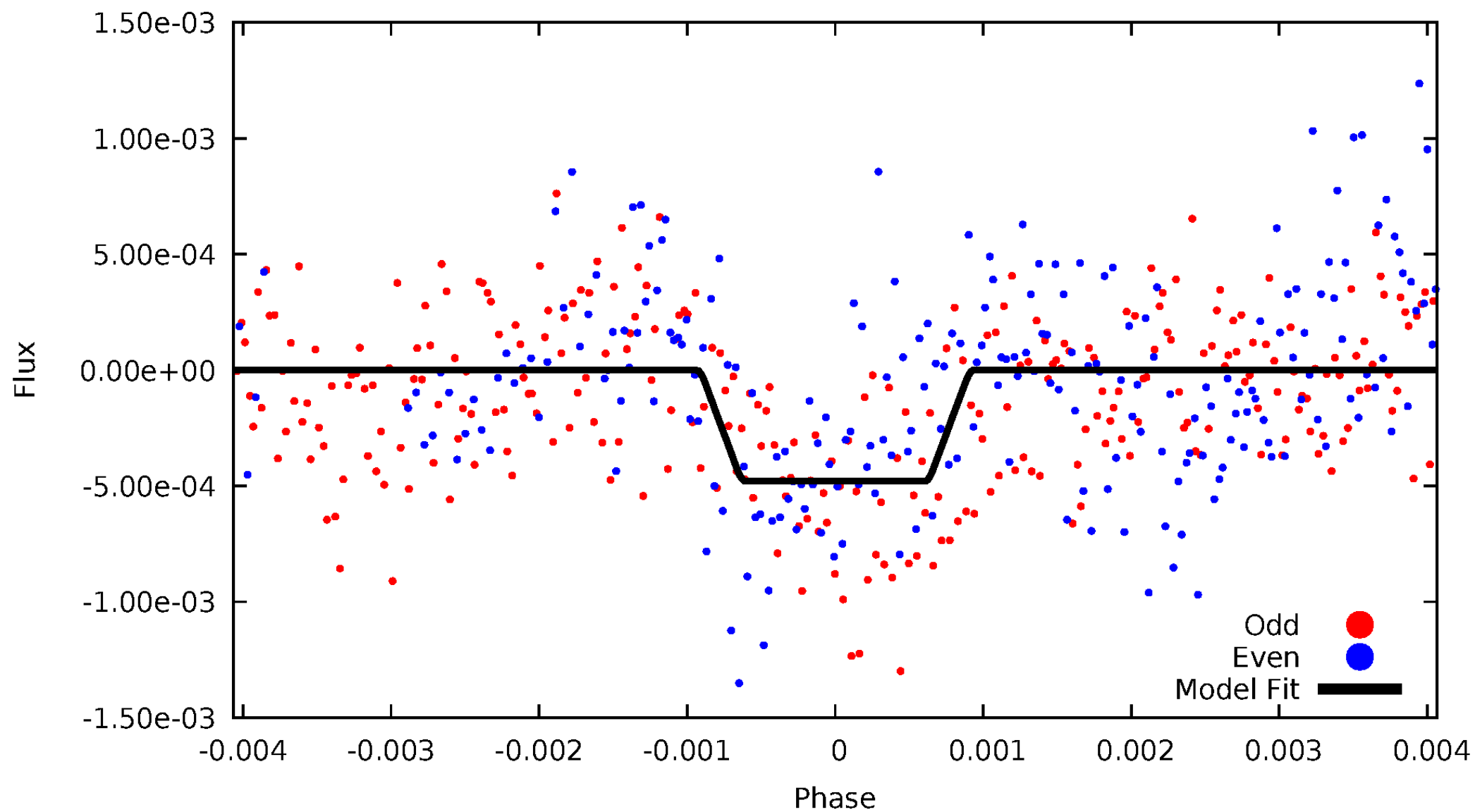
DV Odd/Even

TCE 007969948-01



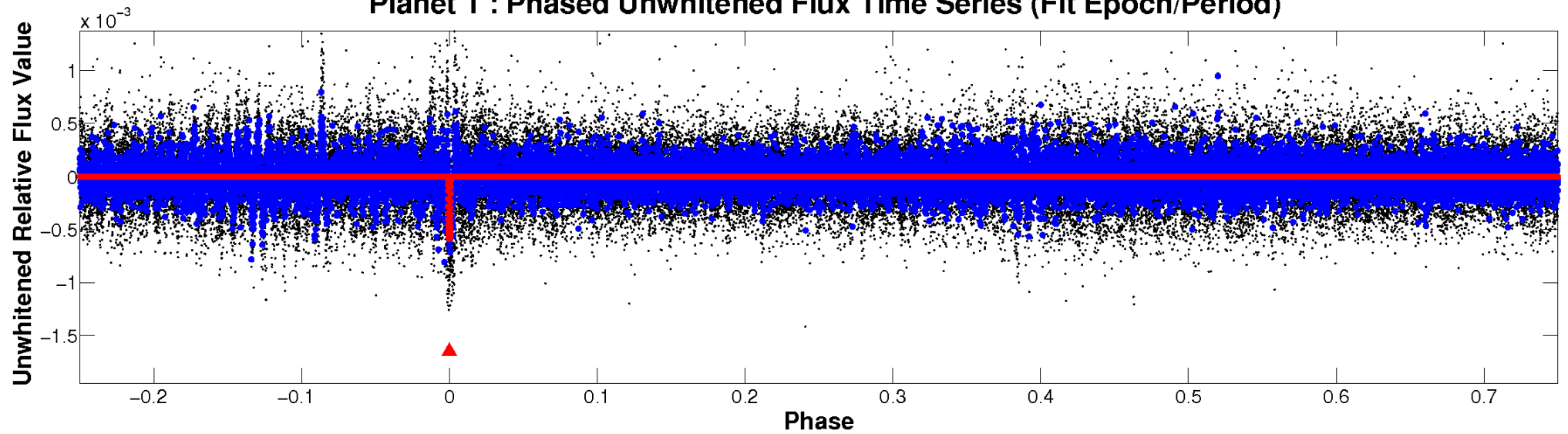
ALT Odd/Even

TCE 007969948-01

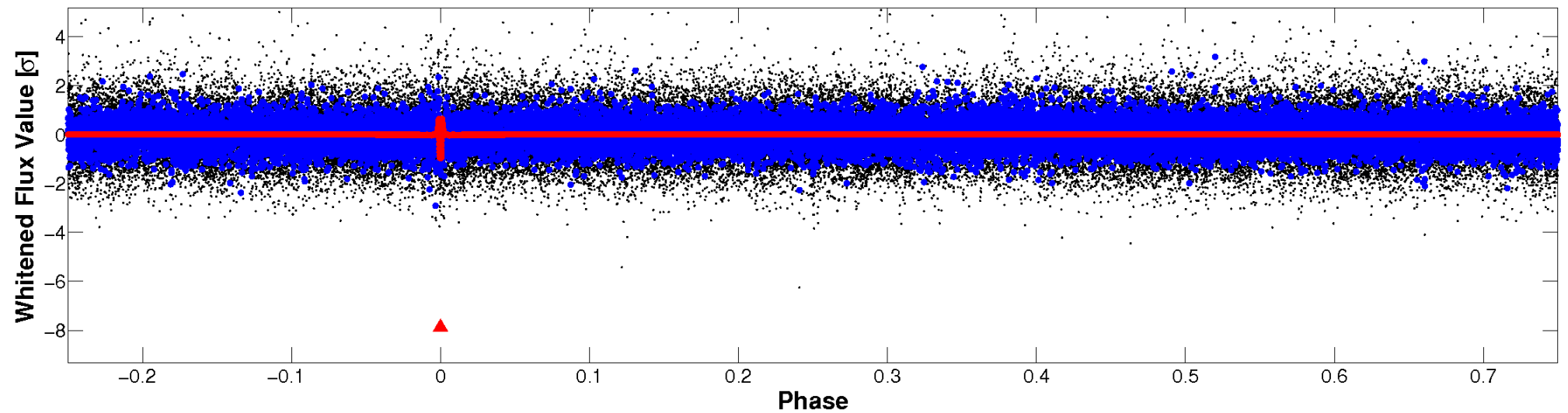


Non-Whitened Vs. Whitened Light Curve

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

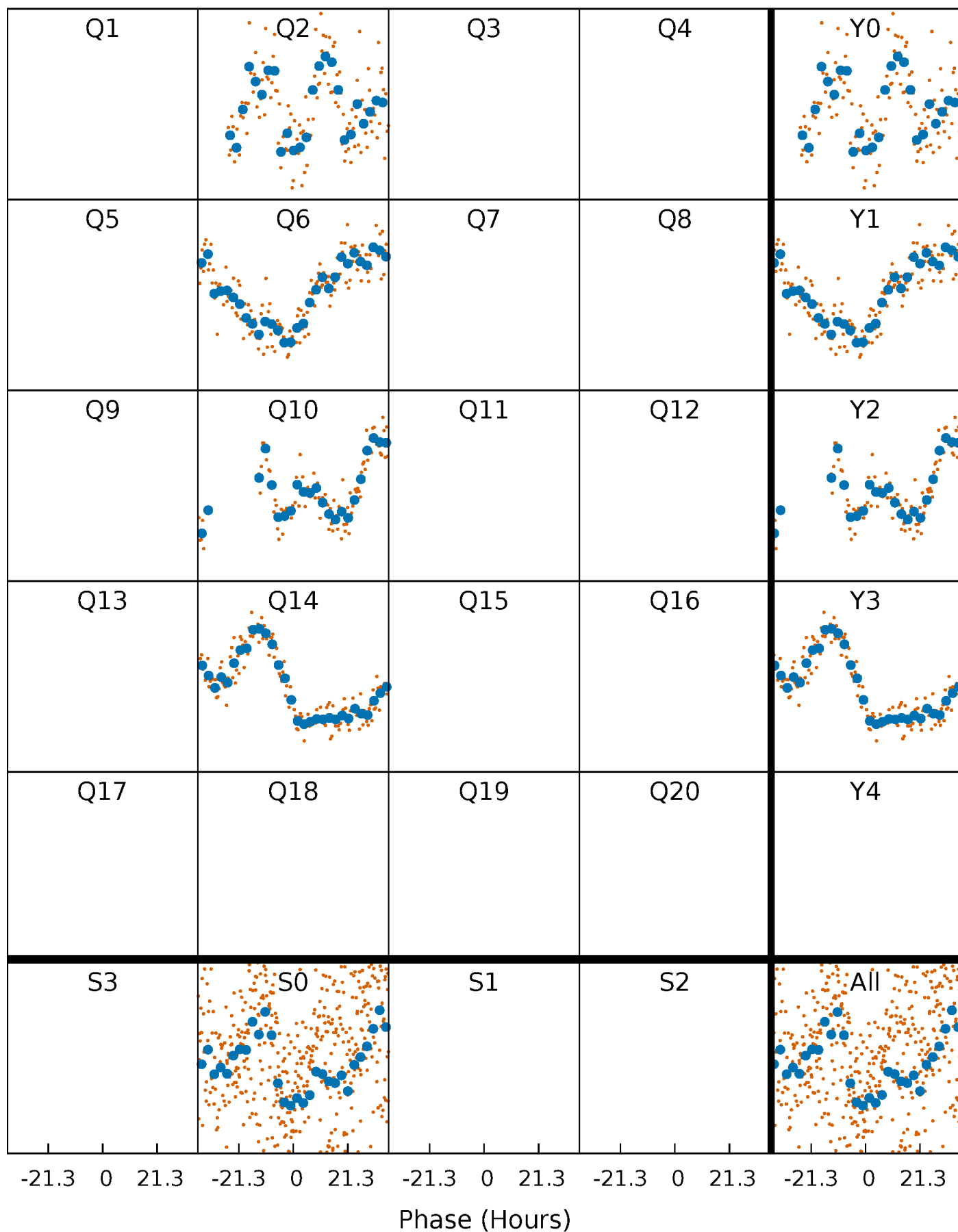


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



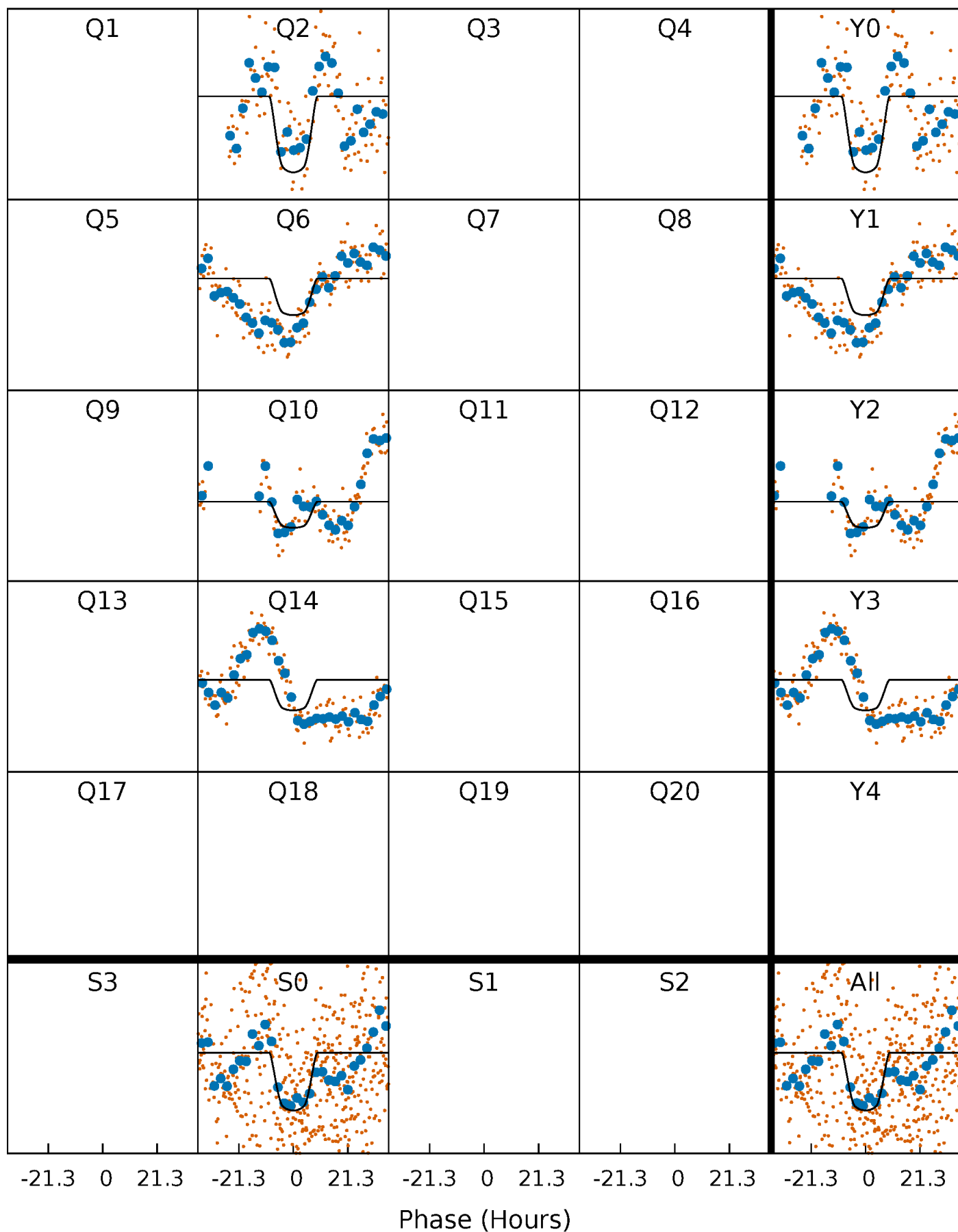
PDC Quarter-Phased Transit Curves

TCE 007969948-01 P=369.087042 Days $T_0=232.476667$ (BKJD)



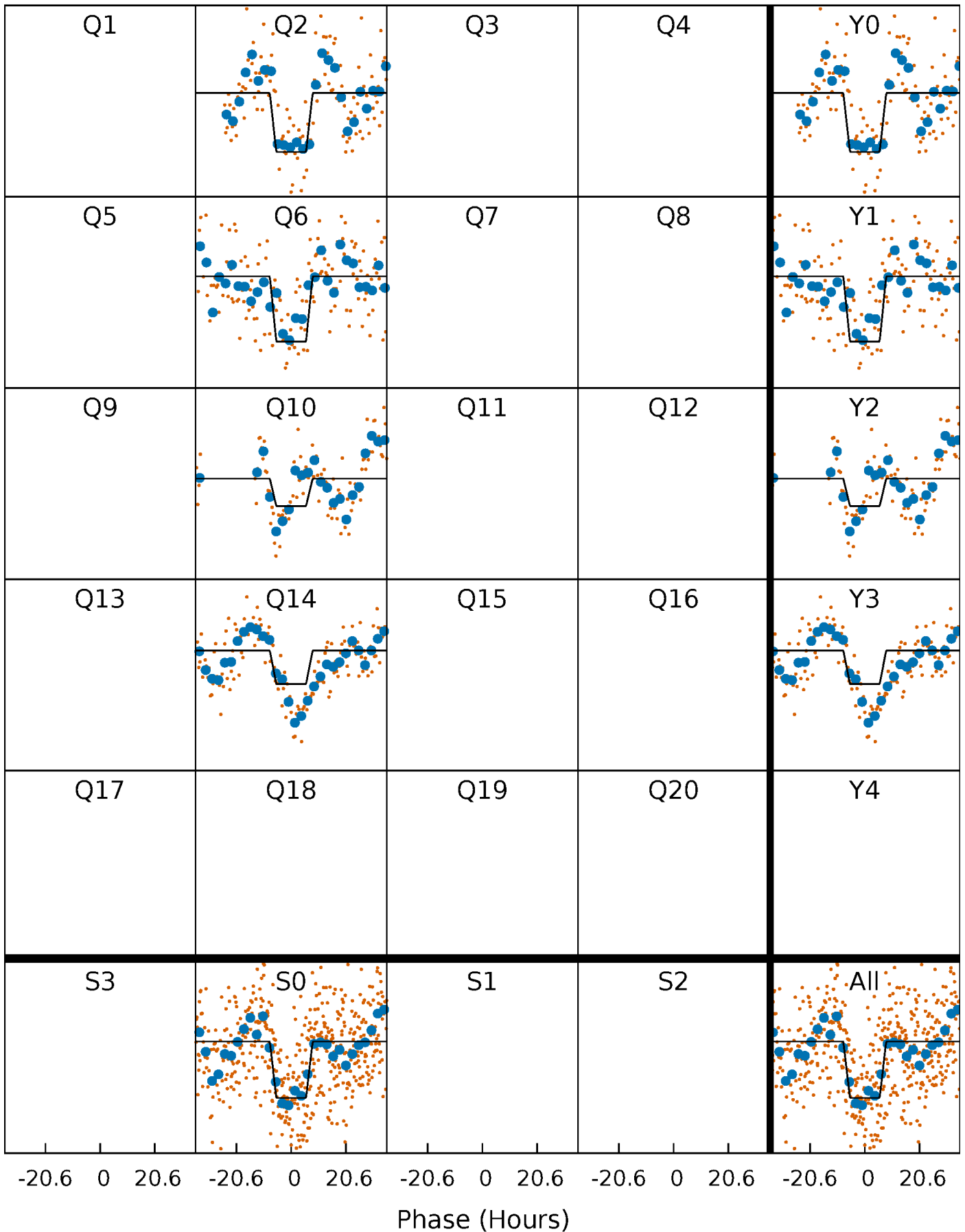
DV Quarter-Phased Transit Curves

TCE 007969948-01 P=369.087042 Days $T_0=232.476667$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

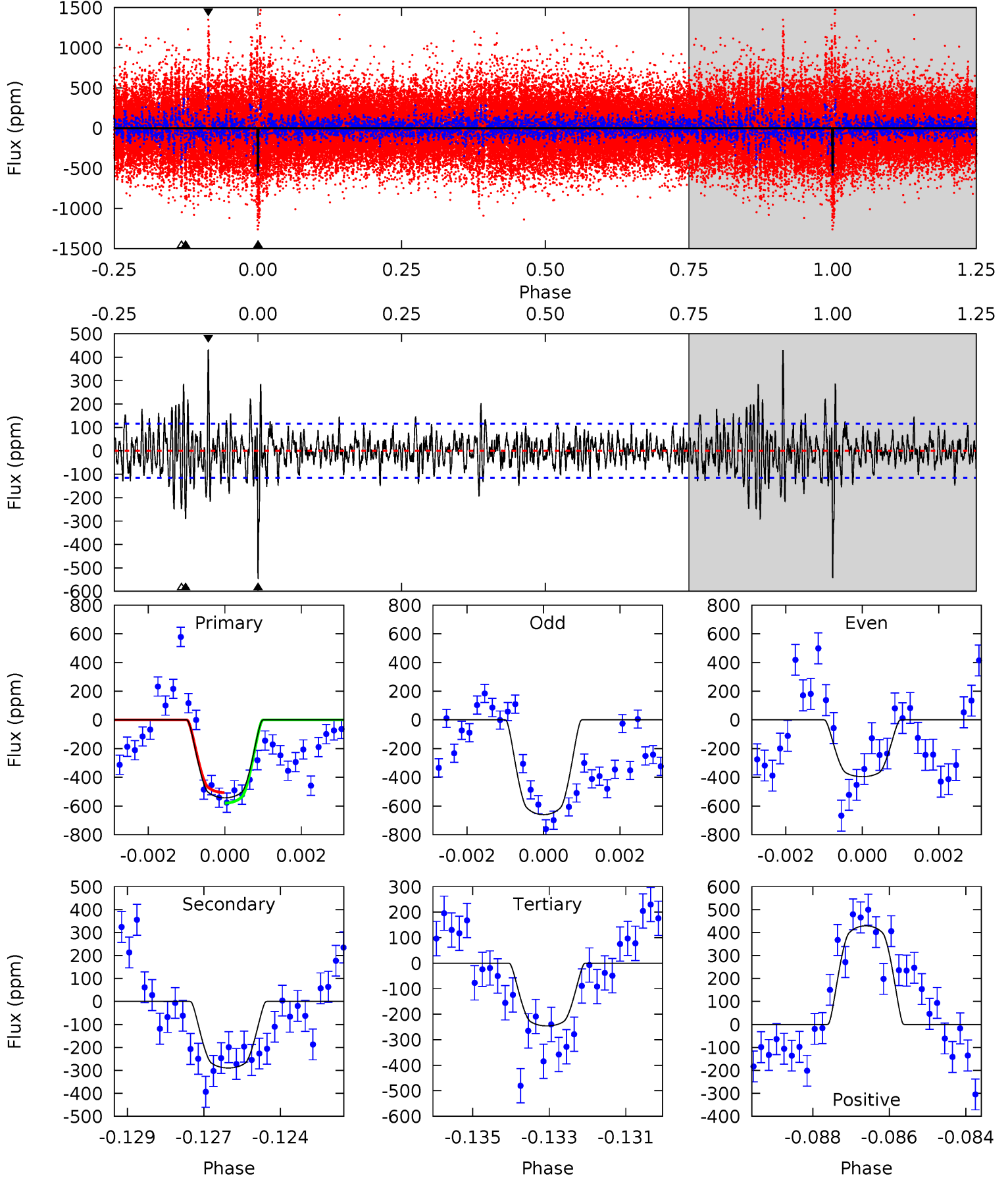
TCE 007969948-01 P=369.098206 Days $T_0=232.458820$ (BKJD)



DV Model-Shift Uniqueness Test

007969948-01, P = 369.087042 Days, E = 232.476667 Days

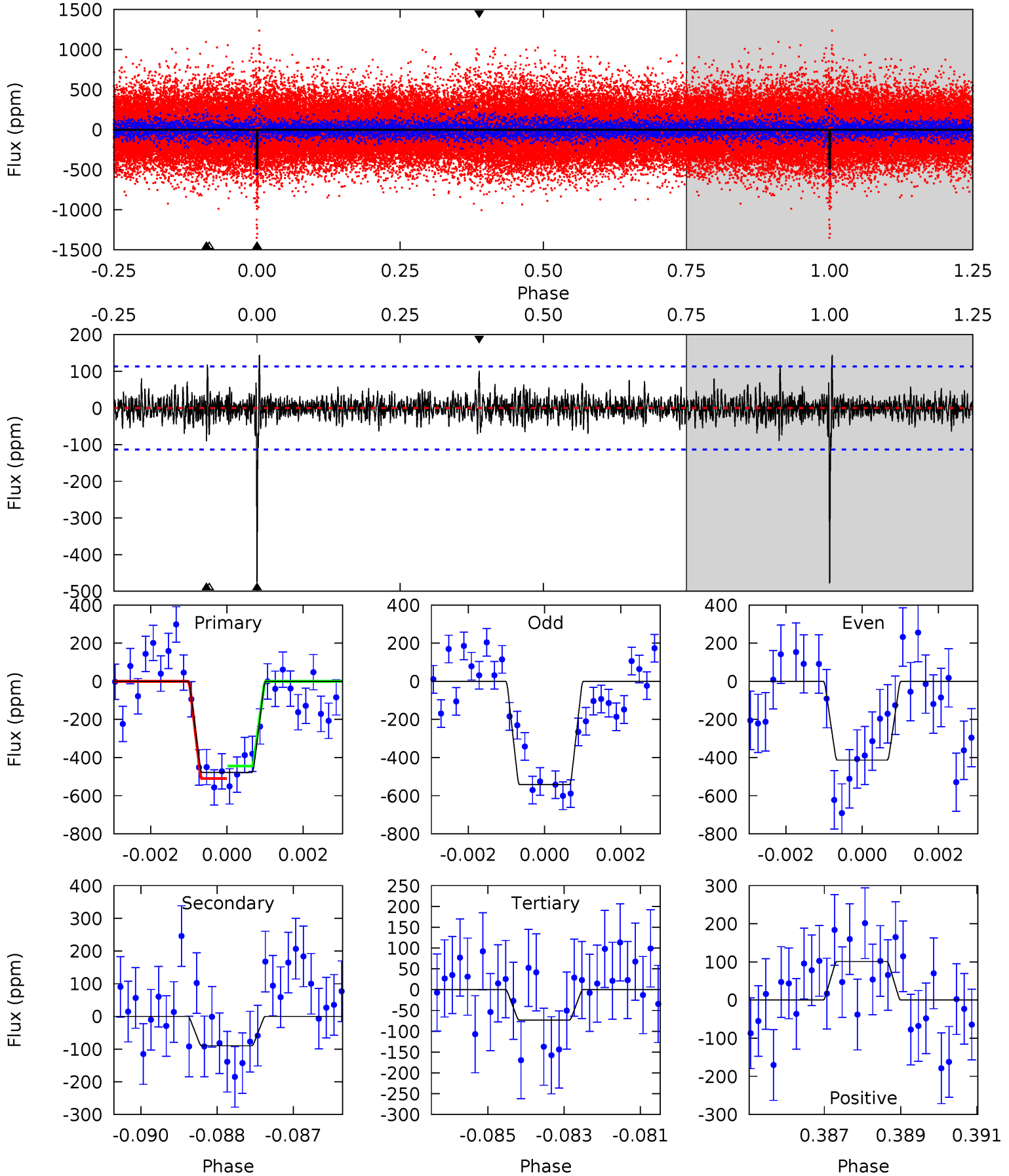
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.0	13.3	11.3	19.7	5.31	3.07	2.96	13.7	5.24	2.00	-6.41	6.08	1.31	0.44	1.68



Alt Model-Shift Uniqueness Test

007969948-01, P = 369.098206 Days, E = 232.458820 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.5	4.23	3.44	4.76	5.34	3.11	1.05	19.1	17.7	0.78	-0.53	3.04	1.20	0.23	1.56



Stellar Parameters For KIC 007969948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6122^{+171}_{-192}	$4.471^{+0.052}_{-0.208}$	$-0.100^{+0.250}_{-0.350}$	$0.996^{+0.312}_{-0.104}$	$1.070^{+0.137}_{-0.137}$	$1.526^{+0.408}_{-0.770}$
	+3%/-3%	+1%/-5%	+250%/-350%	+31%/-10%	+13%/-13%	+27%/-50%
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 007969948-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-290 ± 22	$3.20^{+0.57}_{-0.38}$	380^{+28}_{-19}	4867^{+241}_{-199}	16341^{+4623}_{-4466}
Alt.	-90 ± 21	$2.49^{+0.45}_{-0.33}$	379^{+27}_{-19}	4263^{+277}_{-273}	8349^{+3414}_{-2775}

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

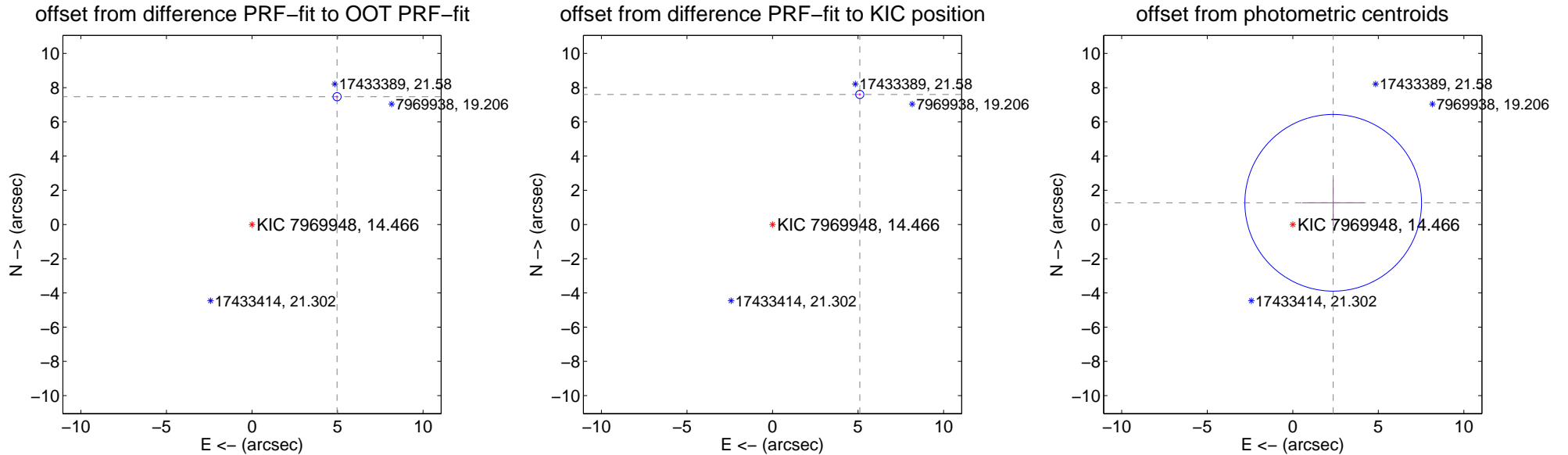
DV Centroid Data

Supplemental centroid analysis for 007969948-01. Kepler magnitude: 14.47. Transit SNR 10.03

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.974 ± 0.080	112.70	-4.976 ± 0.079	7.469 ± 0.080
PRF-fit source offset from KIC position	9.154 ± 0.080	114.96	-5.102 ± 0.079	7.600 ± 0.080
photometric centroid source offset	2.68 ± 1.72	1.56	-2.36 ± 1.81	1.27 ± 1.36

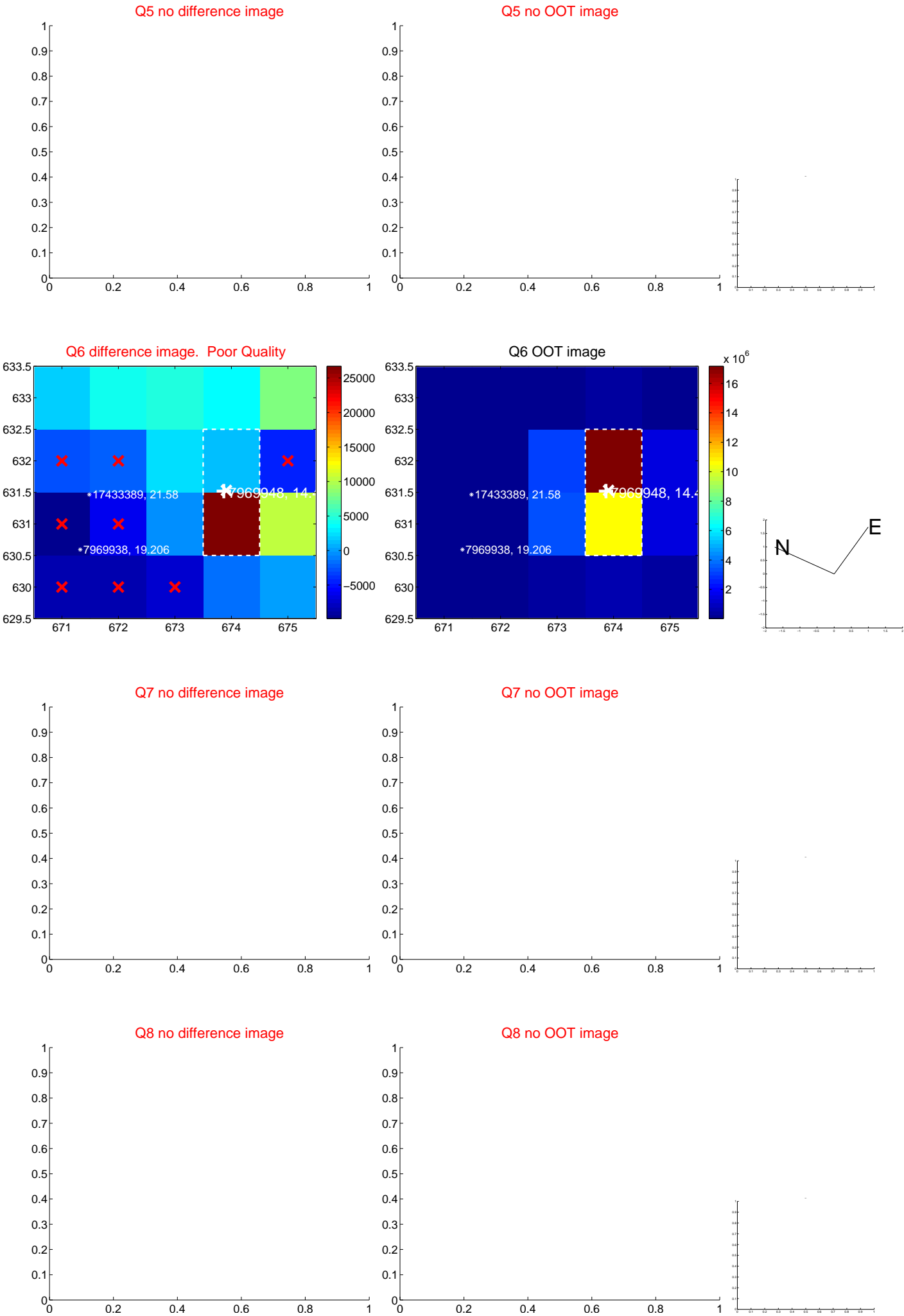


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



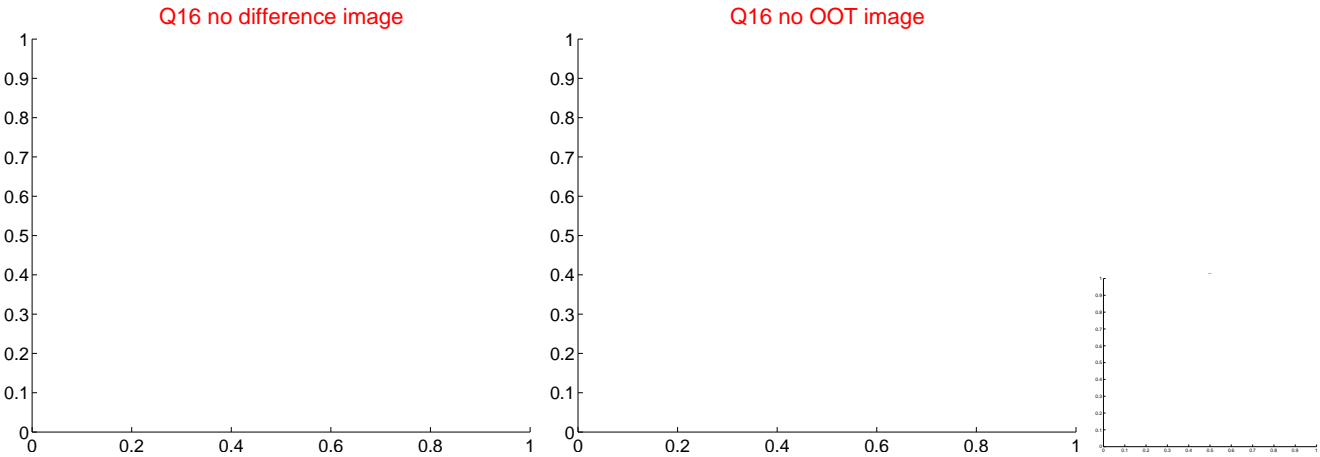
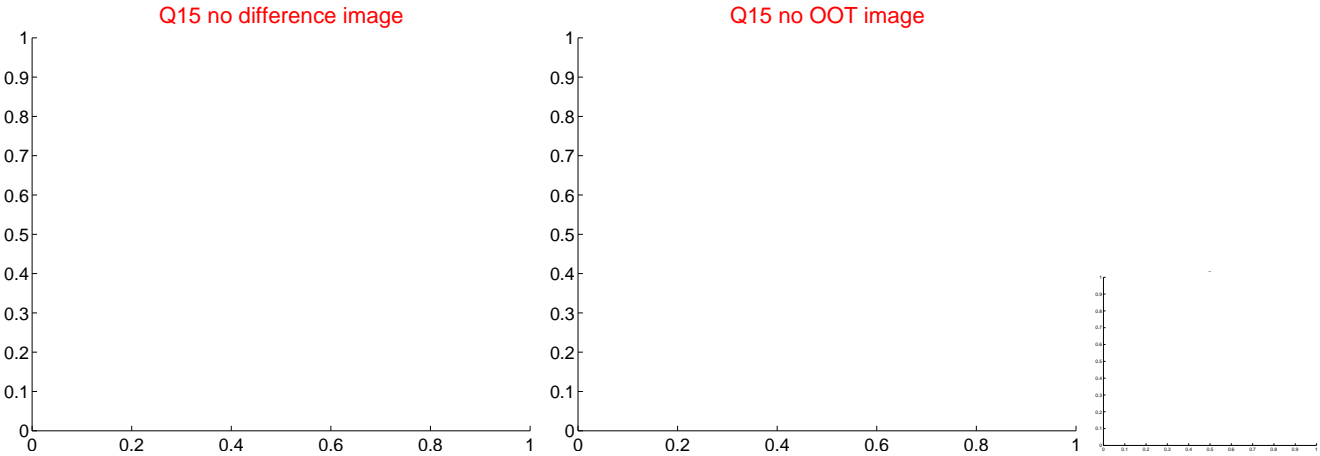
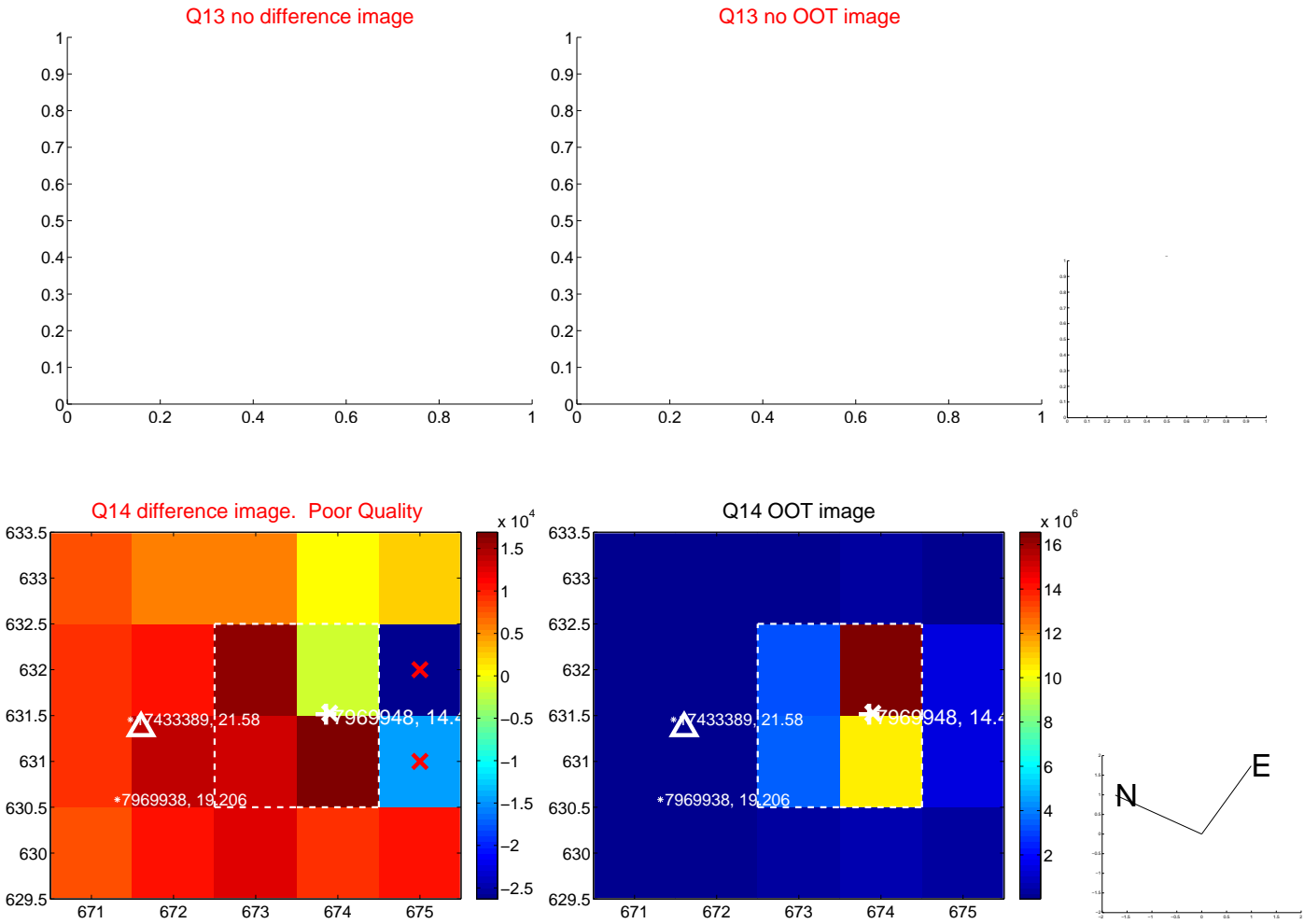
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



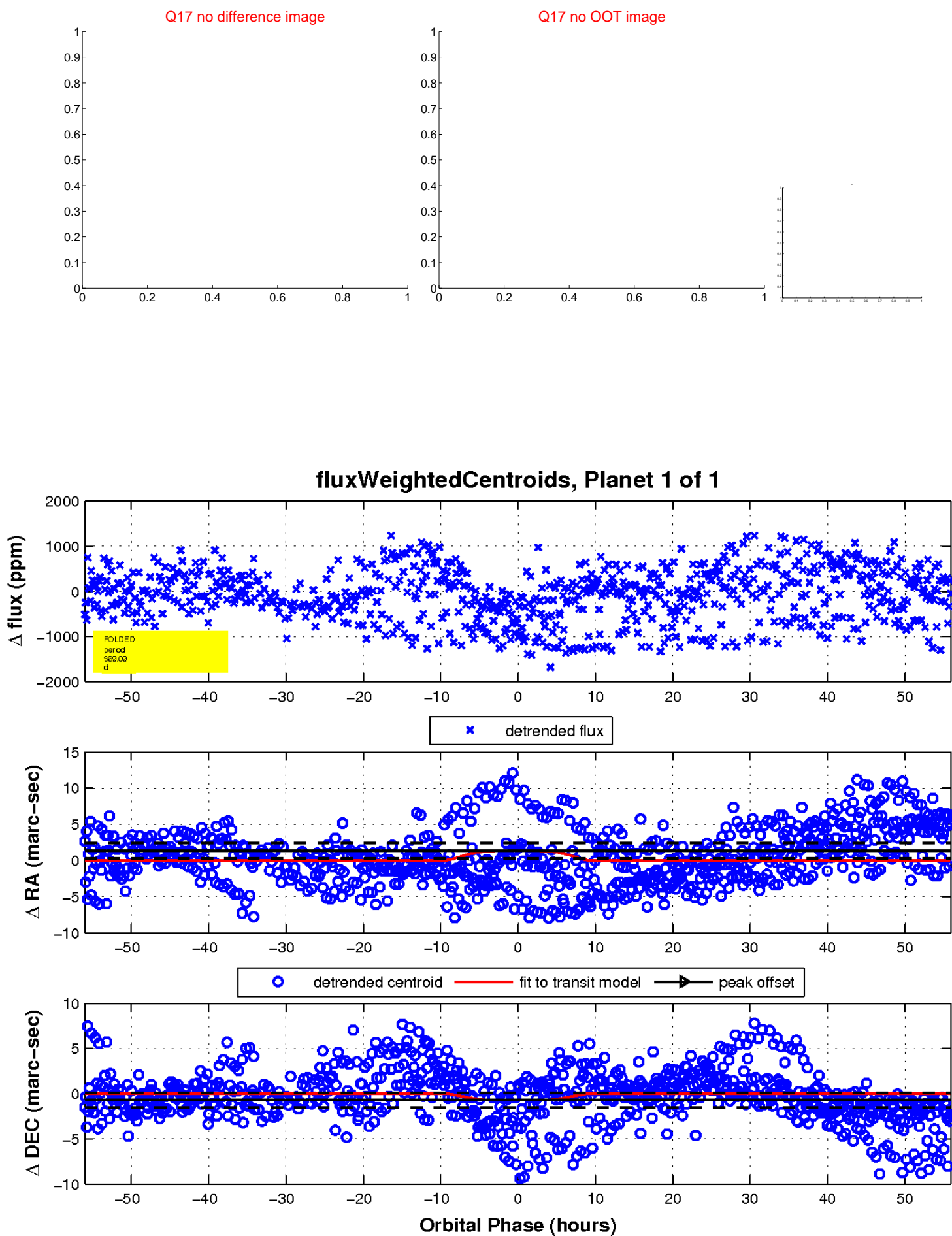
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UKIRT Image

Declination

