

KIC 011925804

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})
011925804-01	OBS	No	527.429560	496.601189	1216.9	23.549	12.3	10.1	0.44	3722	1.56	0.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011925804-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—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.

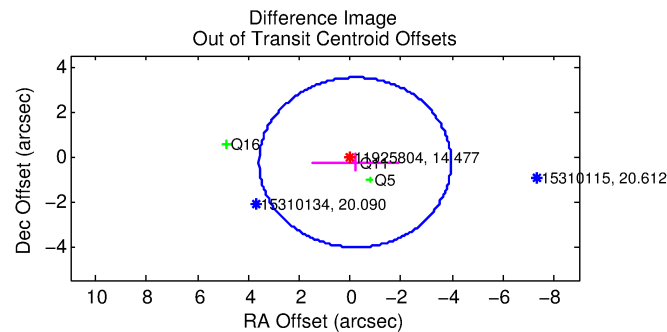
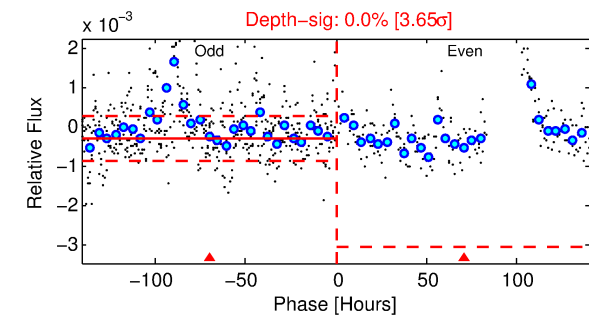
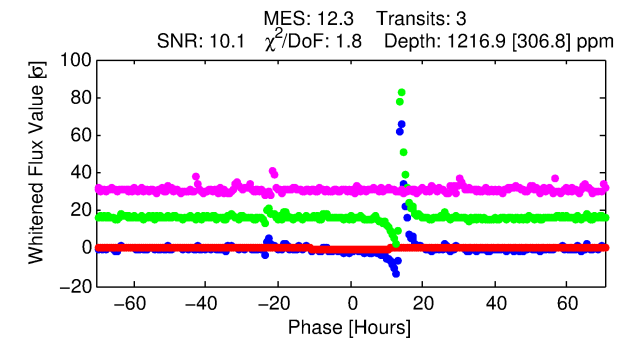
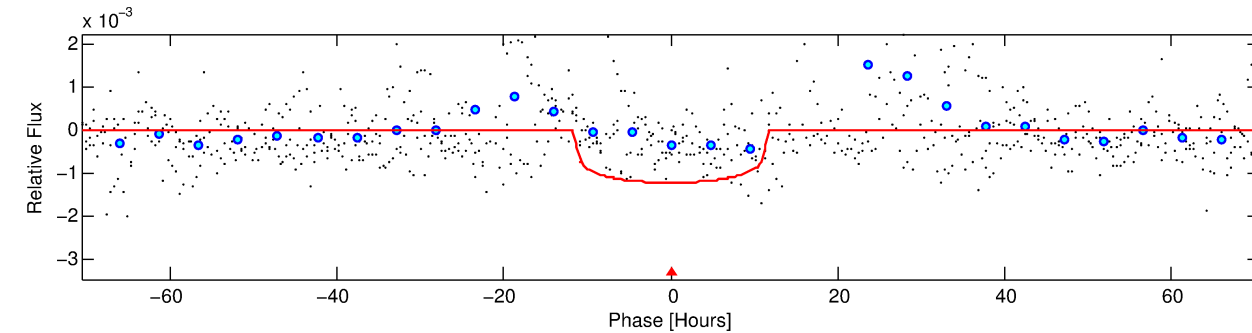
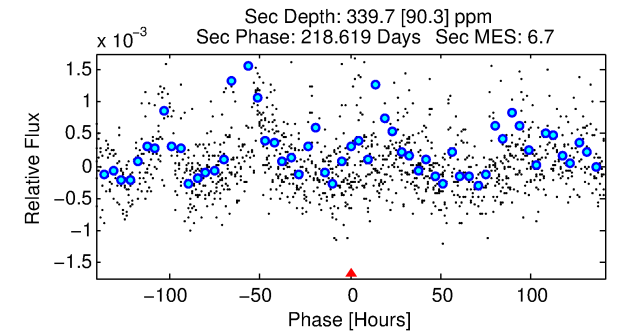
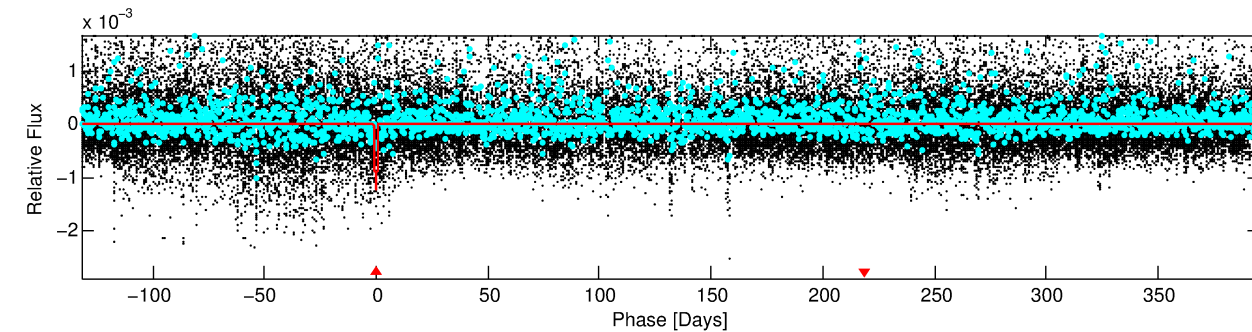
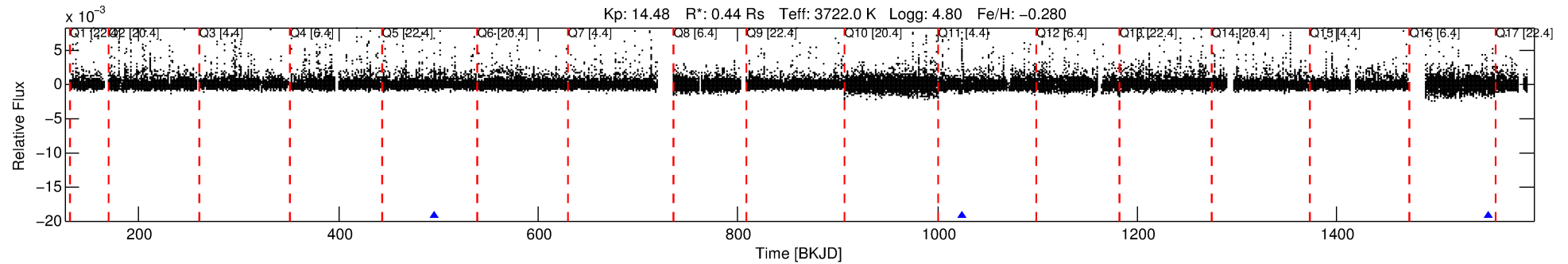
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011925804-01

No Significant Match Found

DV One-Page Summary

KIC: 11925804 Candidate: 1 of 1 Period: 527.430 d



DV Fit Results:

Period = 527.42956 [0.02633] d
Epoch = 496.6012 [0.0276] BKJD
Rp/R* = 0.0324 [0.0133]
a/R* = 163.42 [298.74]
b = 0.39 [3.95]
Seff = 0.03 [0.01]
Teq = 110 [8] K
Rp = 1.56 [0.74] Re
a = 0.9797 [0.1793] AU
Ag = 73447.97 [65832.43] [1.12σ]
Teffp = 2807 [614] K [4.39σ]

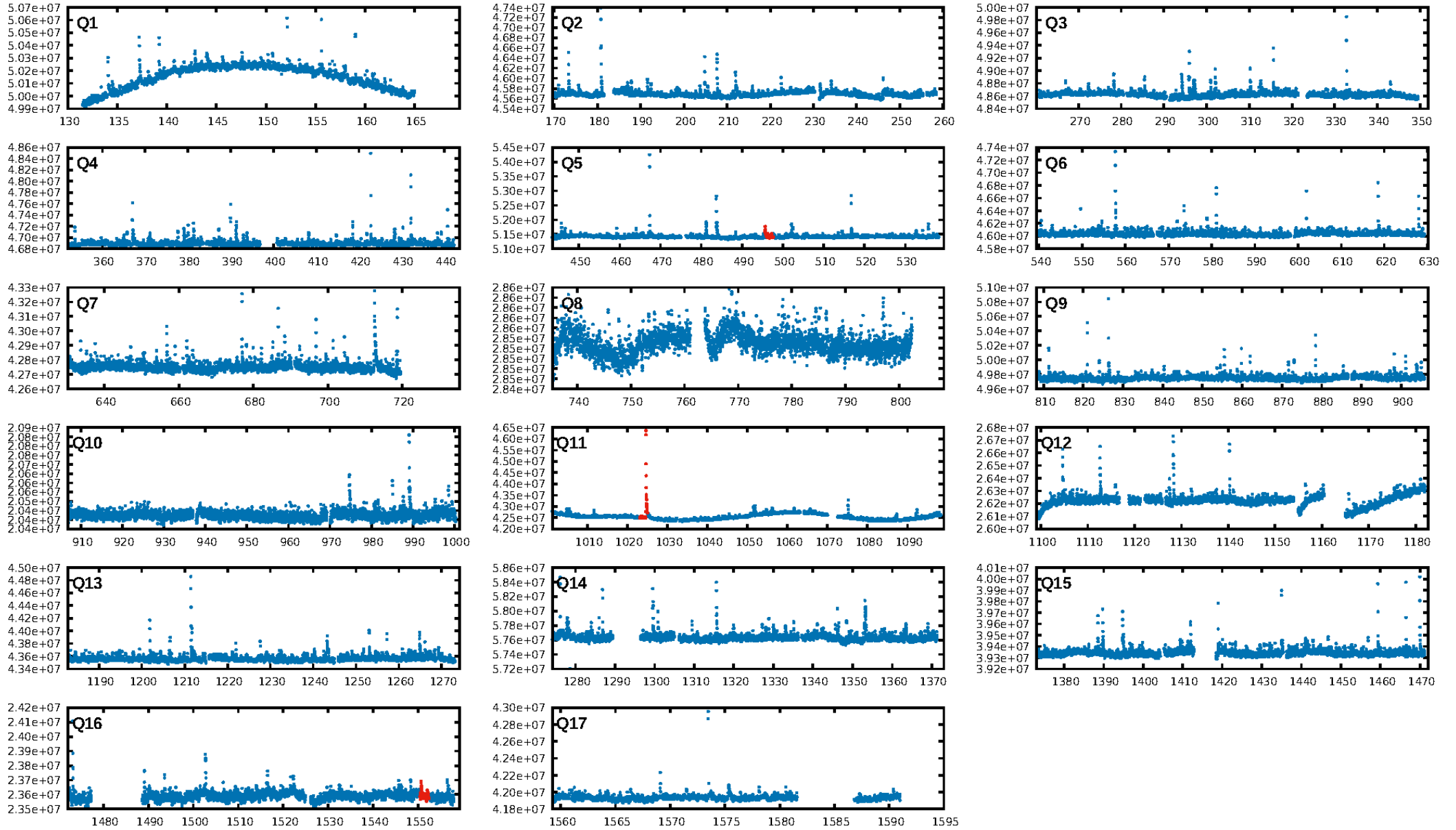
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 3.6%
Bootstrap-pfa: 4.37e-15
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.138
Centroid-sig: 57.1%
Centroid-so: 1.367 arcsec [3.99σ]
OotOffset-rm: 0.332 arcsec [0.26σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-rm: 2.621 arcsec [8.18σ]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

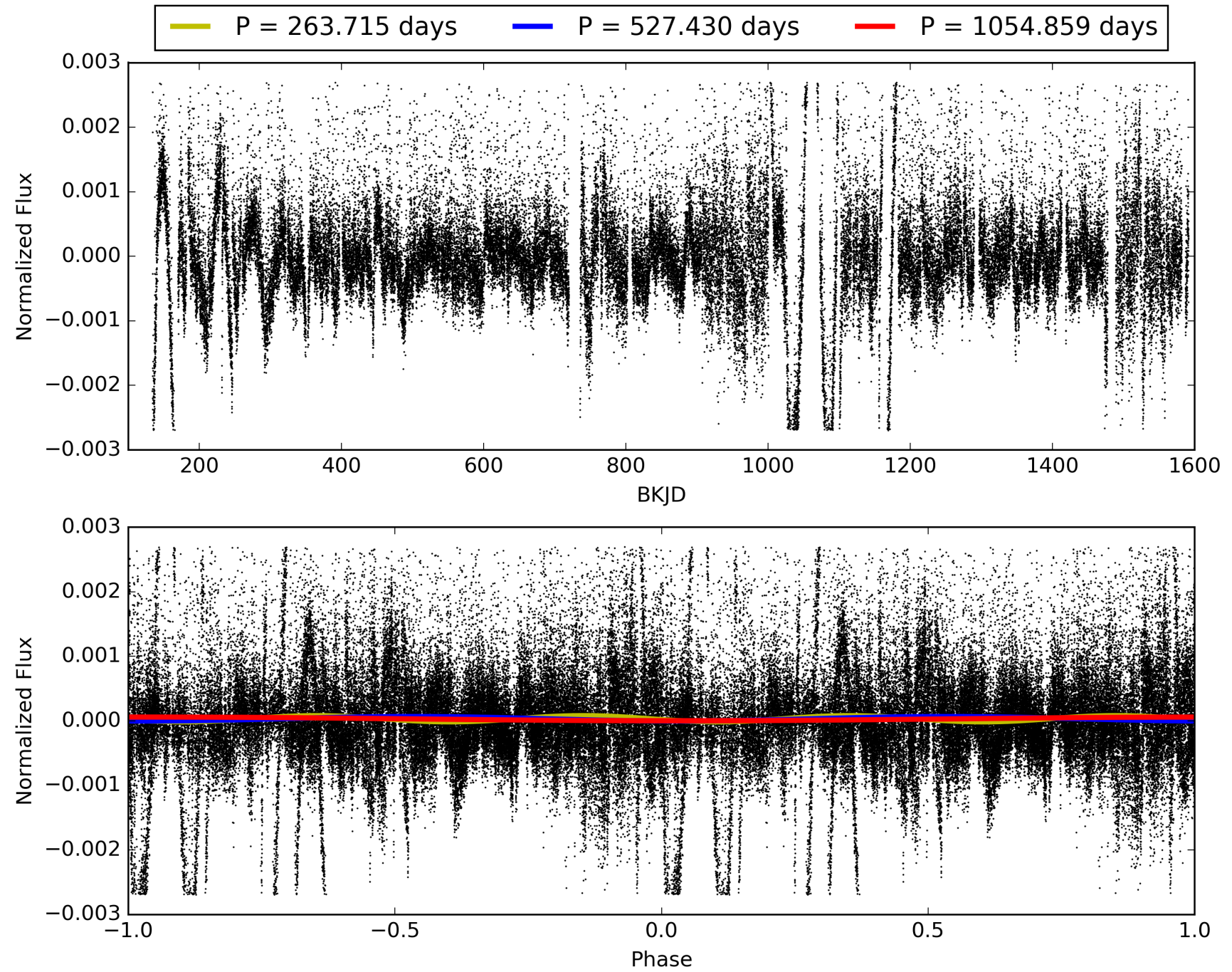
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:47:39 Z

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

TCE 011925804-01, PDC Light Curves

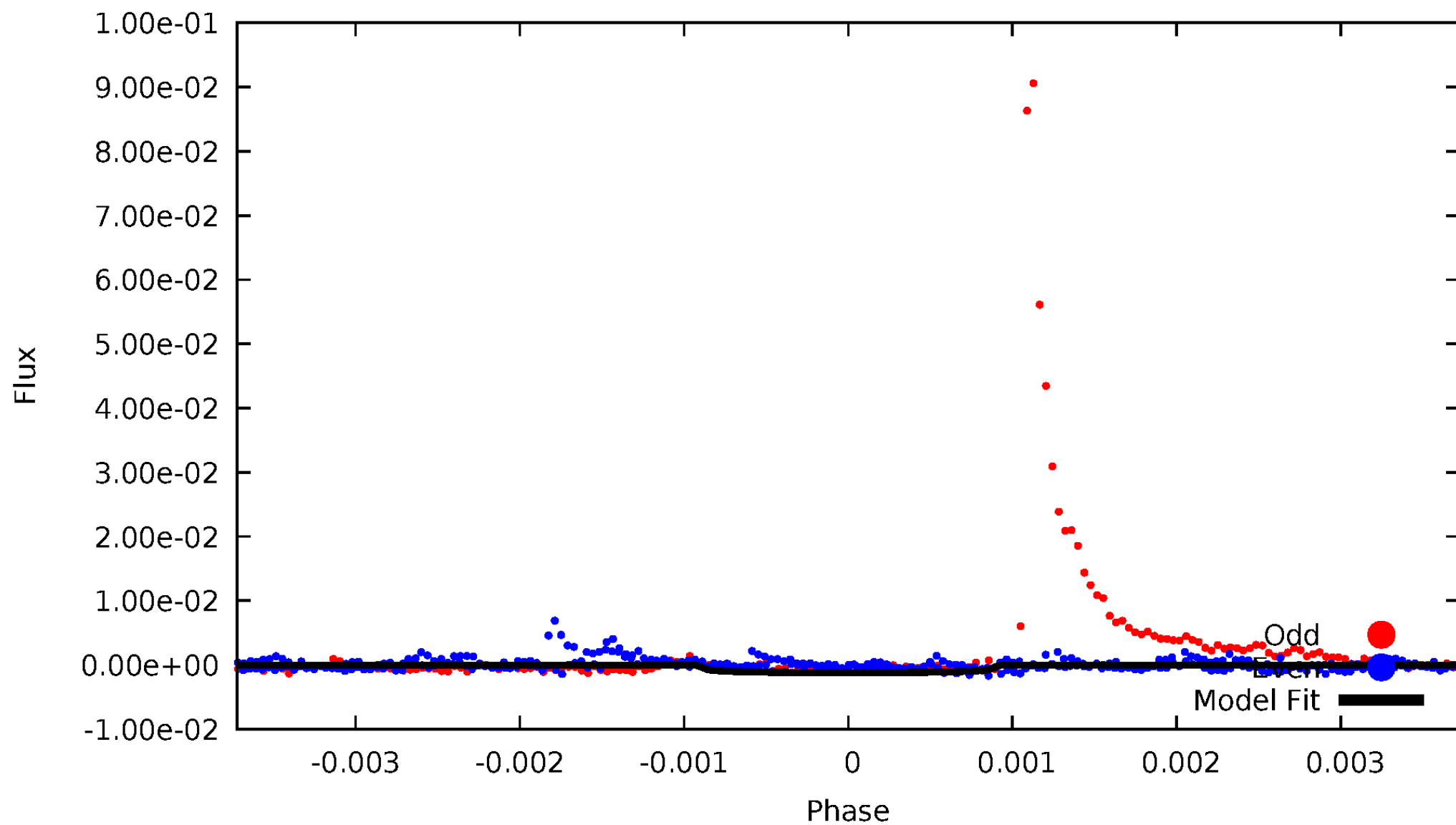


TCE 011925804-01



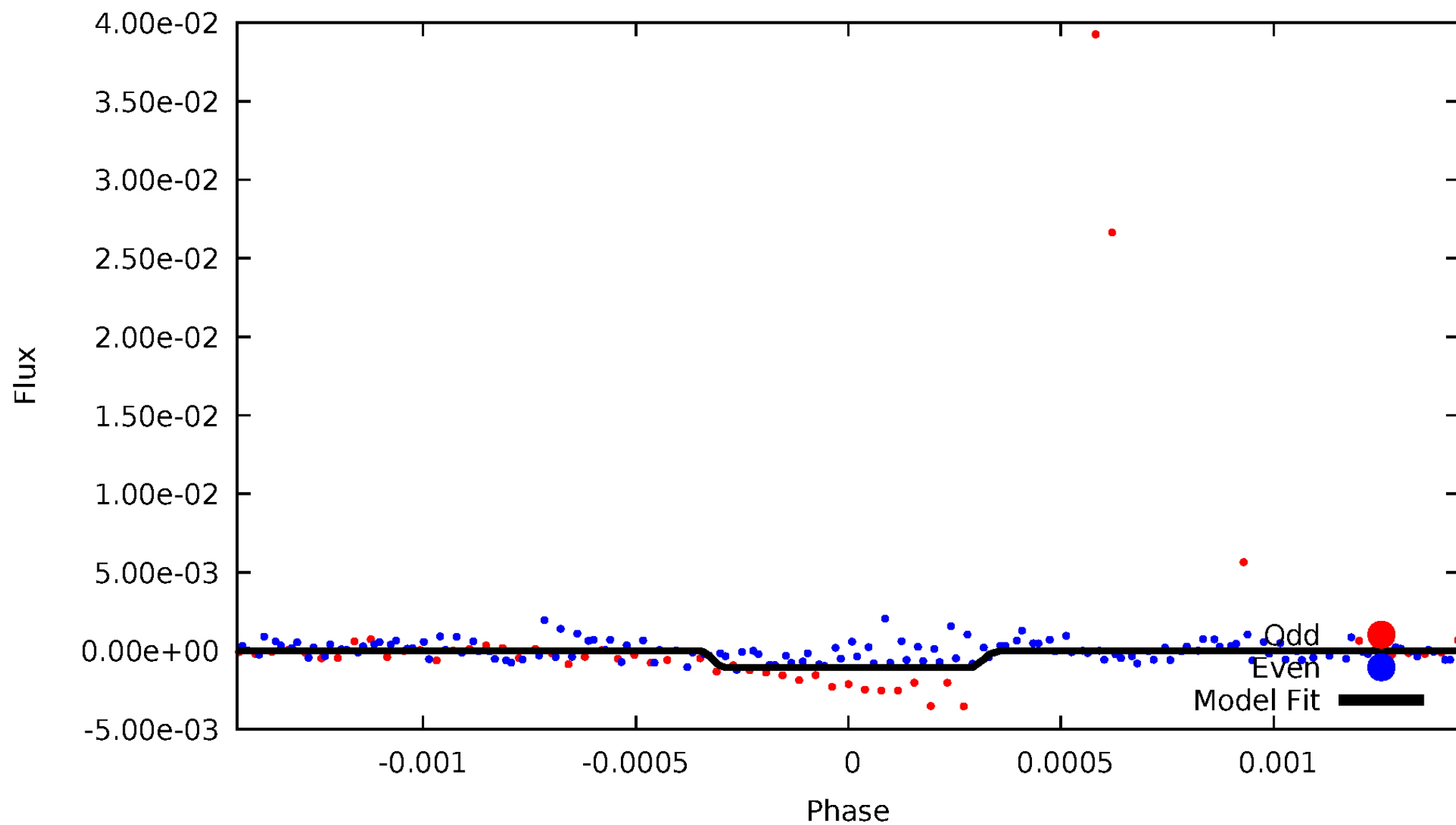
DV Odd/Even

TCE 011925804-01



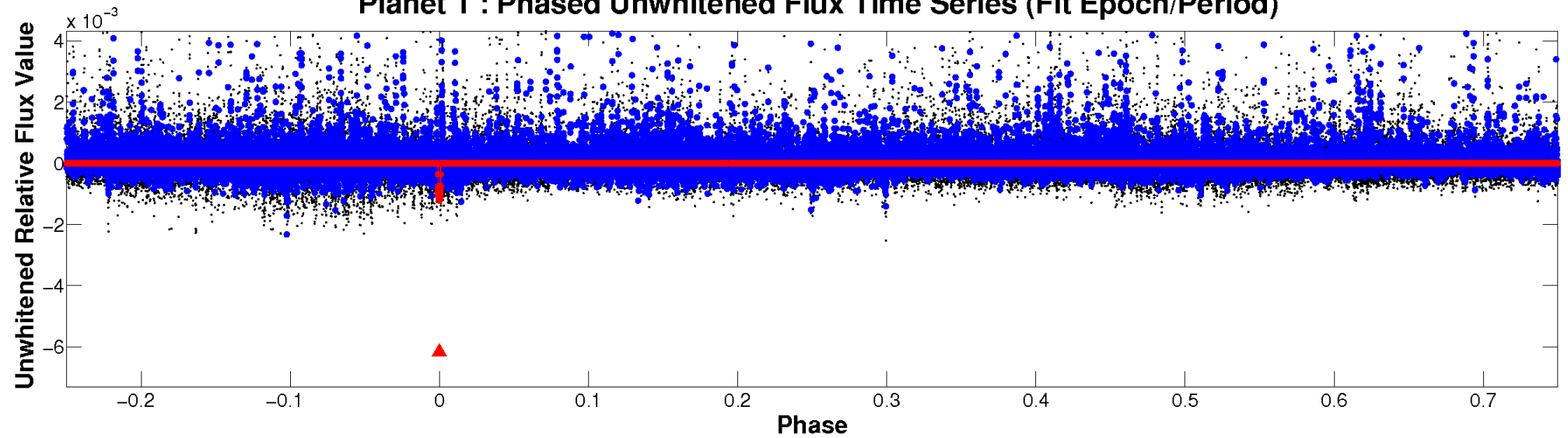
ALT Odd/Even

TCE 011925804-01

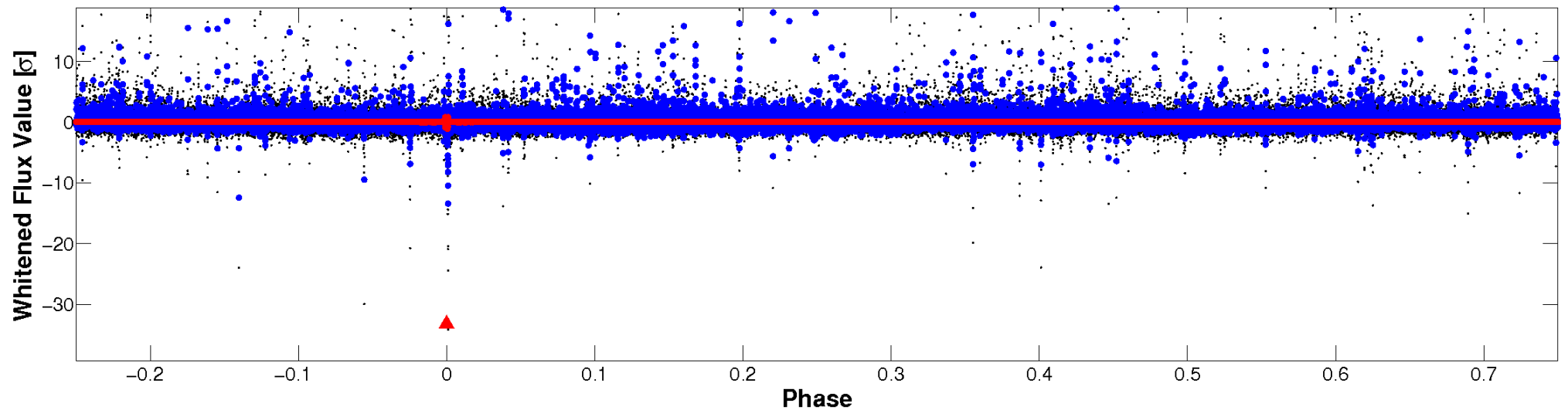


Non-Whitened Vs. Whitened Light Curve

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

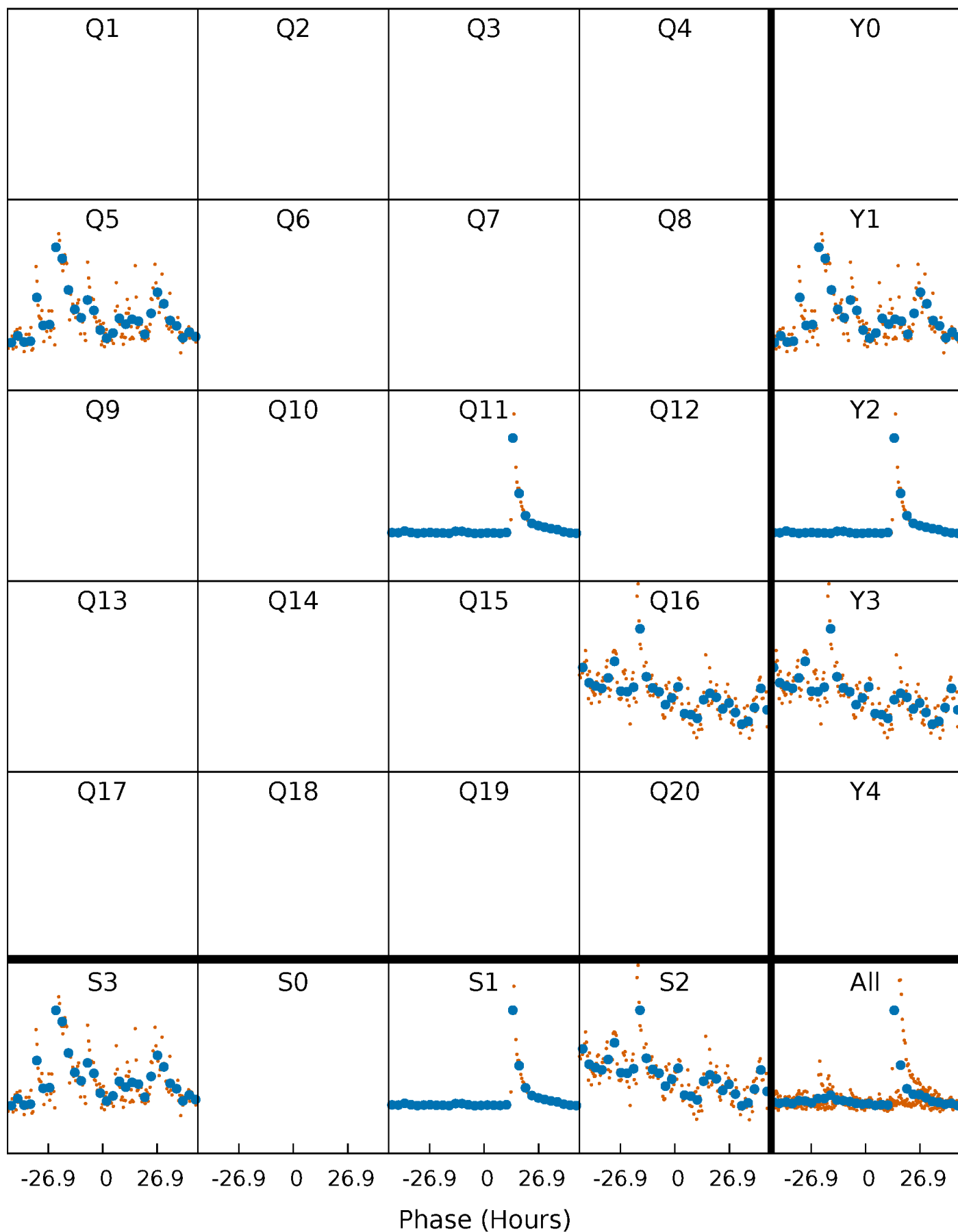


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



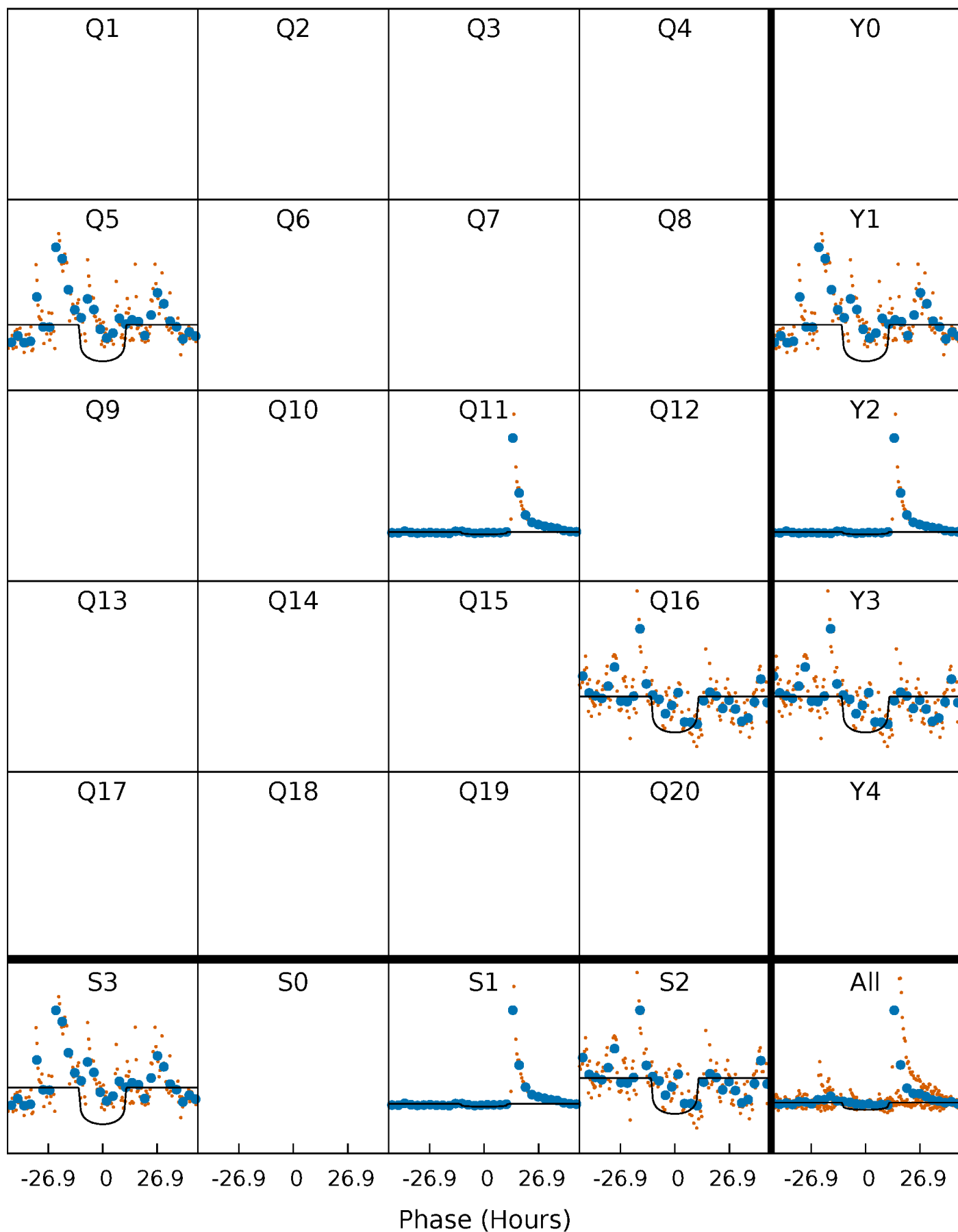
PDC Quarter-Phased Transit Curves

TCE 011925804-01 P=527.429559 Days $T_0=496.601189$ (BKJD)



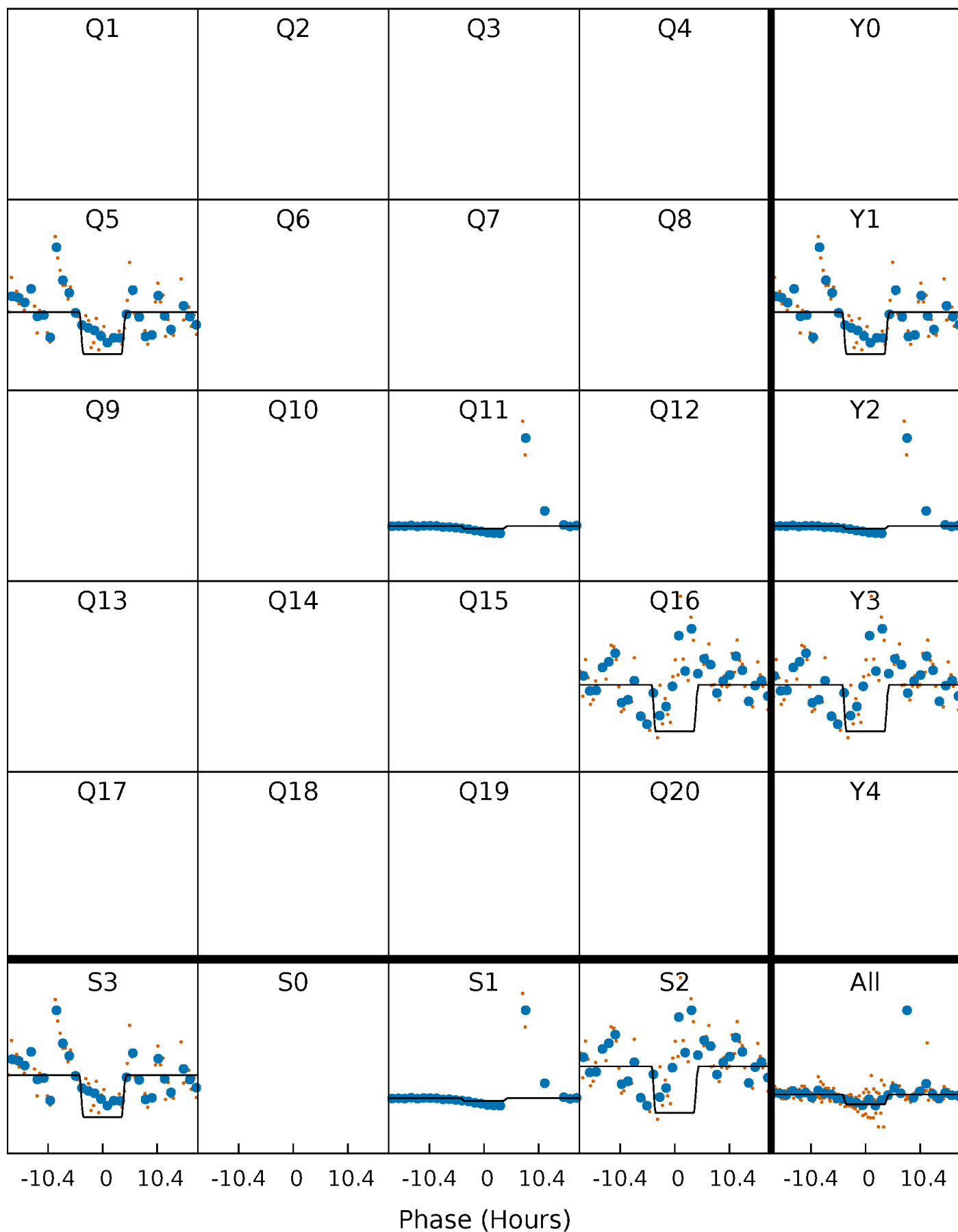
DV Quarter-Phased Transit Curves

TCE 011925804-01 P=527.429559 Days $T_0=496.601189$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

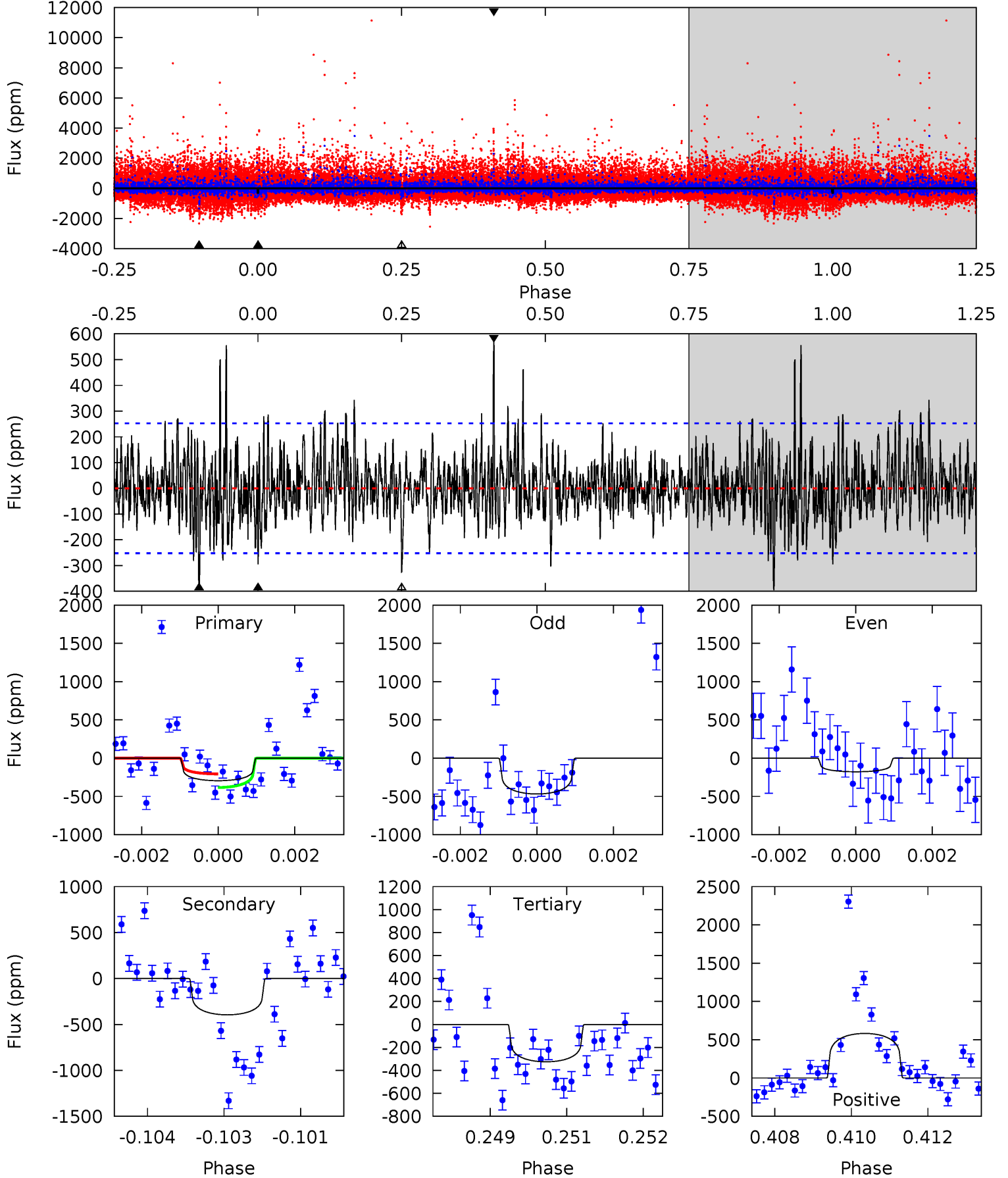
TCE 011925804-01 P=527.689876 Days $T_0=496.669220$ (BKJD)



DV Model-Shift Uniqueness Test

011925804-01, P = 527.429559 Days, E = 496.601189 Days

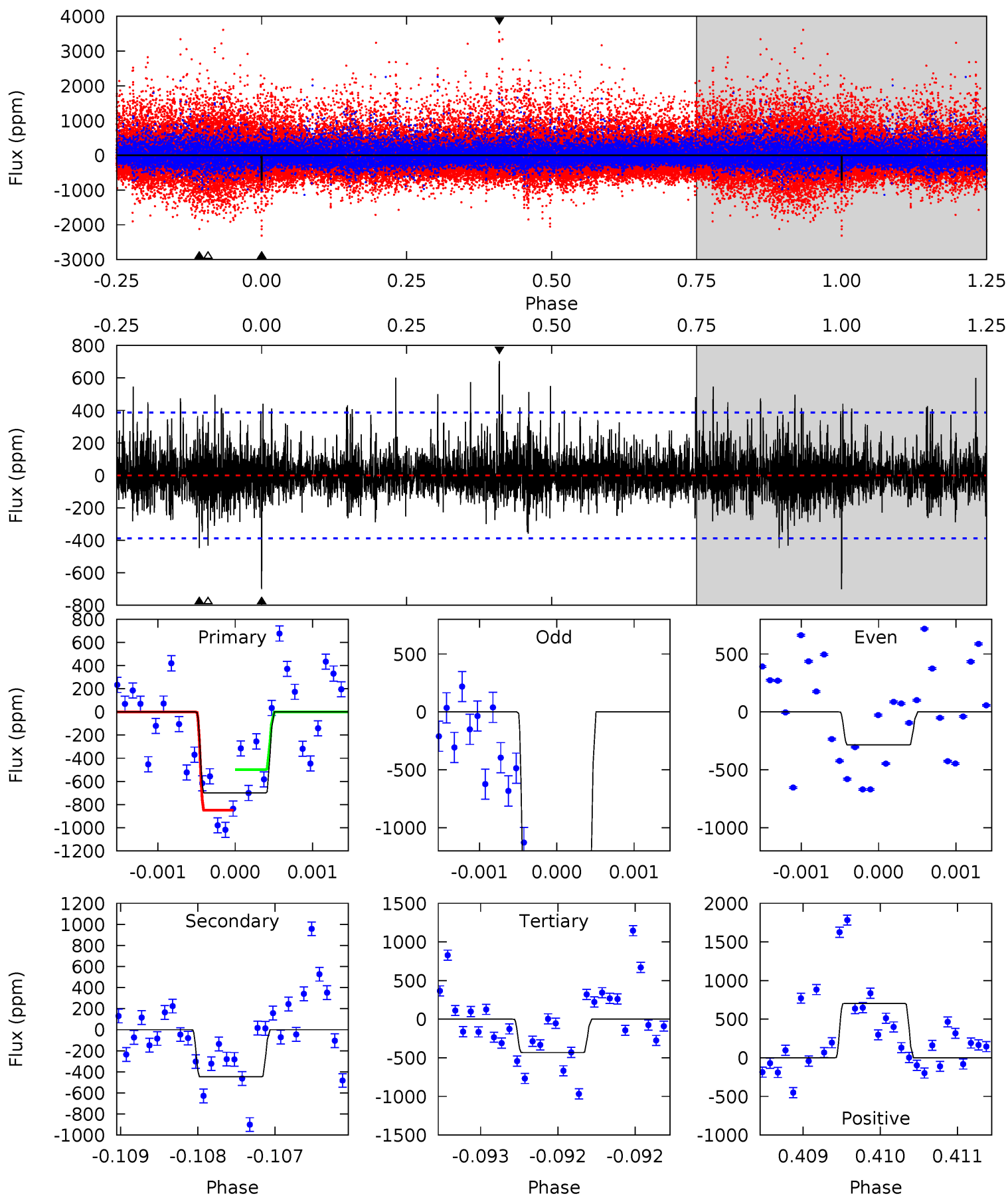
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.23	8.36	6.88	12.3	5.34	3.11	2.12	-0.65	-6.09	1.48	-3.96	1.63	0.62	0.60	1.88



Alt Model-Shift Uniqueness Test

011925804-01, P = 527.689876 Days, E = 496.669220 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.97	6.37	6.15	10.0	5.51	3.39	1.54	3.83	-0.03	0.23	-3.63	11.4	1.45	0.50	2.50



Stellar Parameters For KIC 011925804

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3722^{+116}_{-141}	$4.801^{+0.126}_{-0.054}$	$-0.280^{+0.250}_{-0.300}$	$0.442^{+0.069}_{-0.103}$	$0.452^{+0.070}_{-0.105}$	$7.357^{+5.317}_{-1.875}$
	+3%/-4%	+3%/-1%	+89%/-107%	+16%/-23%	+15%/-23%	+72%/-25%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011925804-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-395 ± 47	$1.47^{+0.63}_{-0.62}$	151^{+7}_{-8}	3197^{+546}_{-320}	$96551^{+175159}_{-49995}$
Alt.	-447 ± 70	$1.57^{+0.62}_{-0.68}$	152^{+7}_{-8}	3216^{+649}_{-306}	$97283^{+211906}_{-48496}$

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

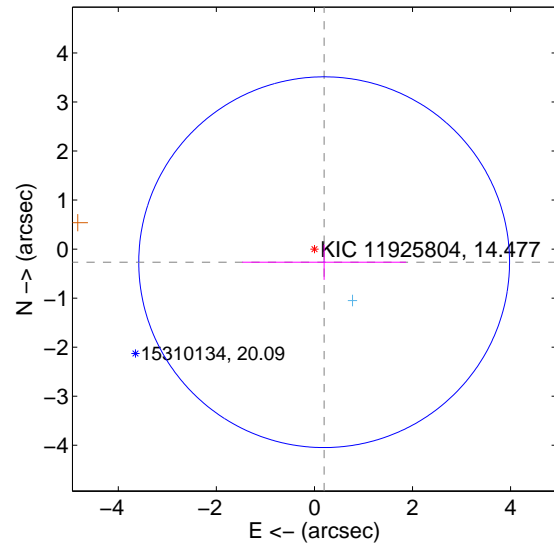
Supplemental centroid analysis for 011925804-01. Kepler magnitude: 14.48. Transit SNR 10.10

There are 2 quarters with good PRF difference image offsets

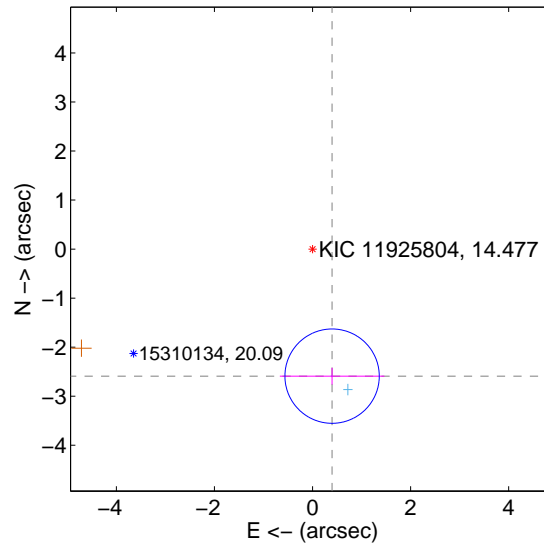
The OOT PRF centroid is offset from the target star catalog position by about 2.56 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.332 ± 1.260	0.26	-0.198 ± 1.671	-0.267 ± 0.359
PRF-fit source offset from KIC position	2.621 ± 0.321	8.18	-0.399 ± 1.067	-2.591 ± 0.170
photometric centroid source offset	1.37 ± 0.34	3.99	0.09 ± 0.32	-1.36 ± 0.34

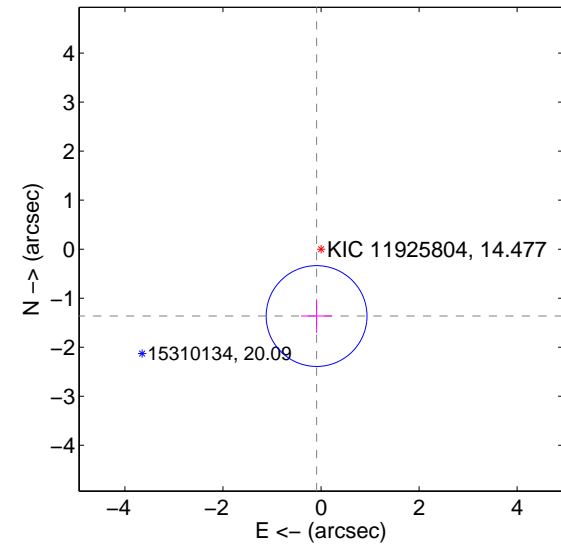
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids

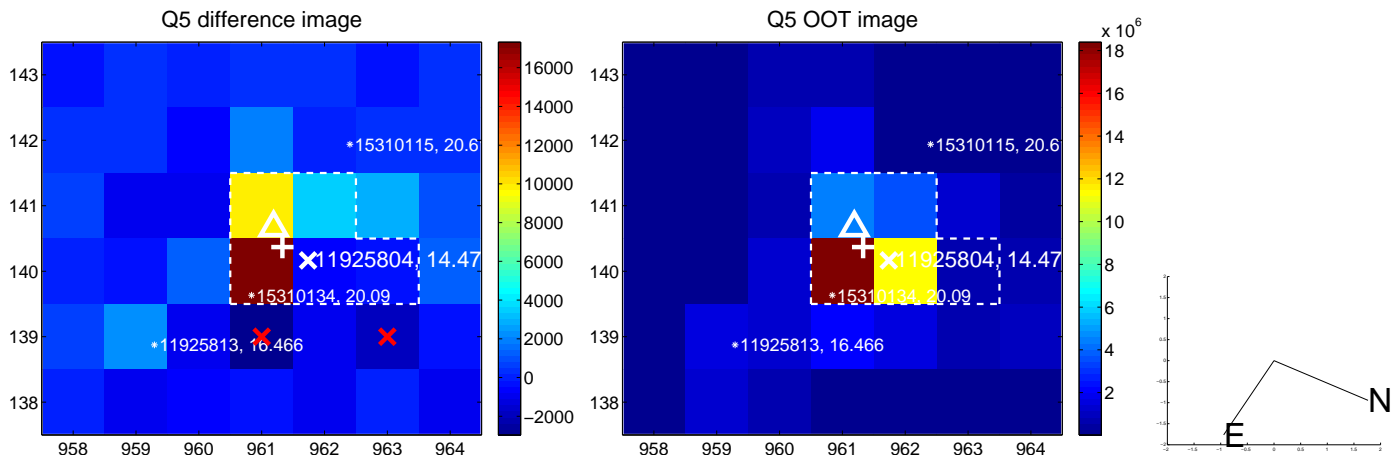


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

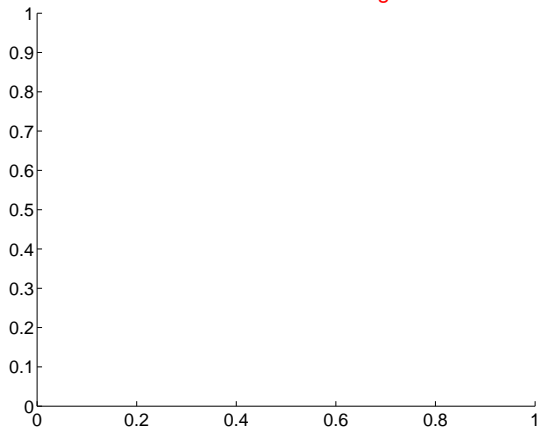
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



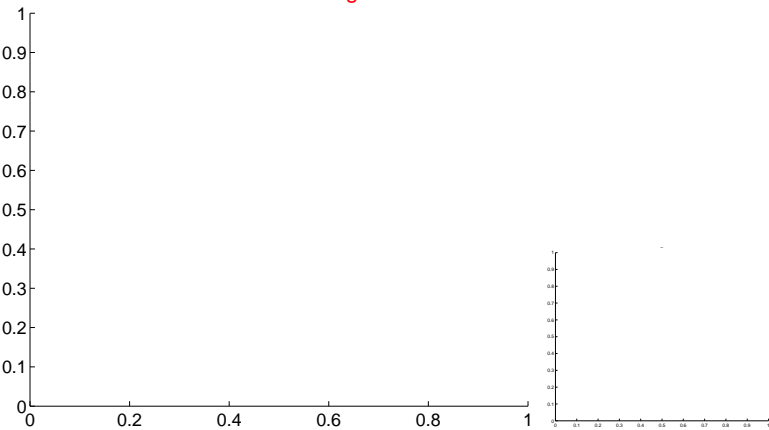
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



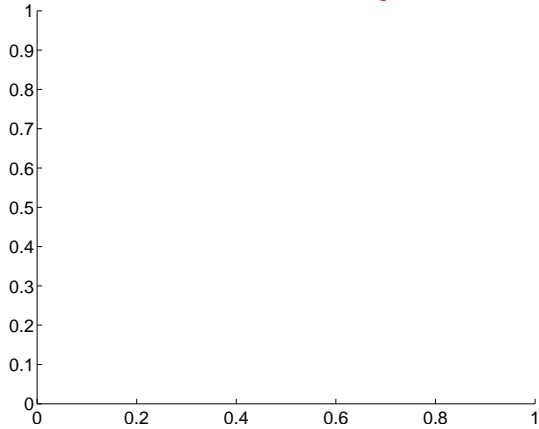
Q6 no difference image



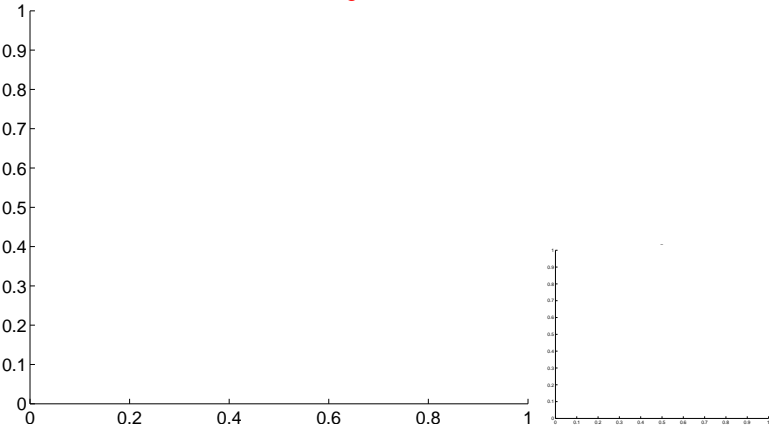
Q6 no OOT image



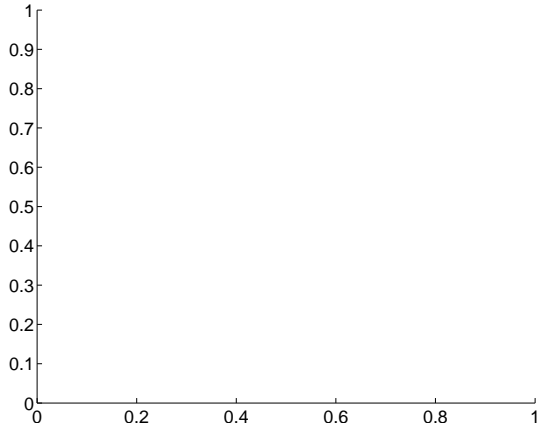
Q7 no difference image



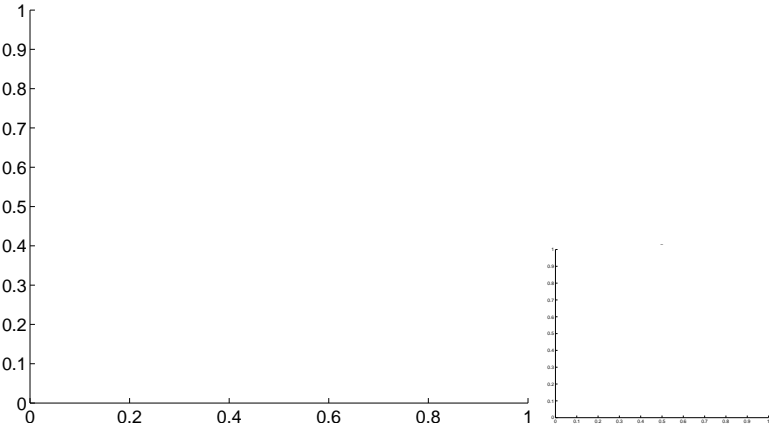
Q7 no OOT image



Q8 no difference image



Q8 no OOT image



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

Q9 no difference image



Q9 no OOT image



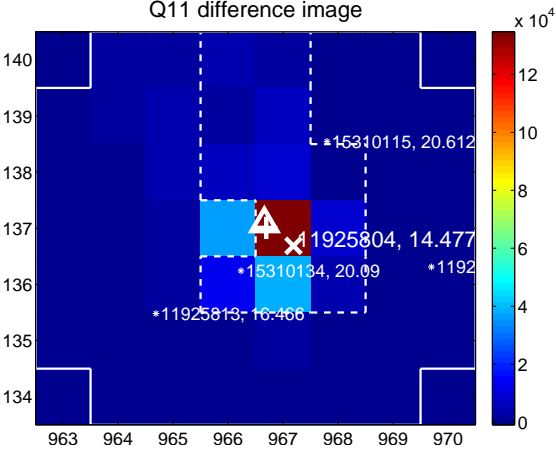
Q10 no difference image



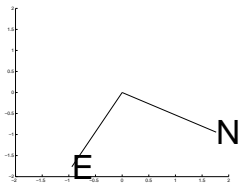
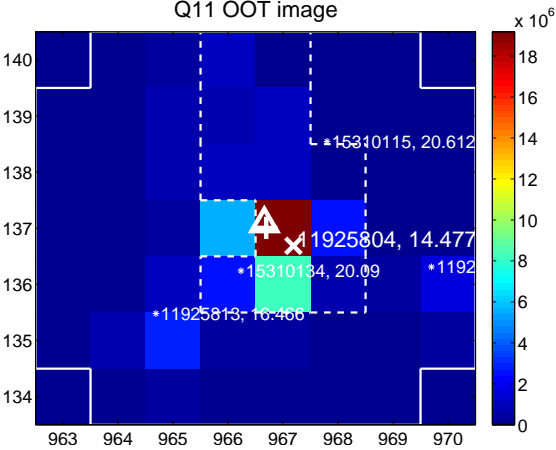
Q10 no OOT image



Q11 difference image



Q11 OOT image



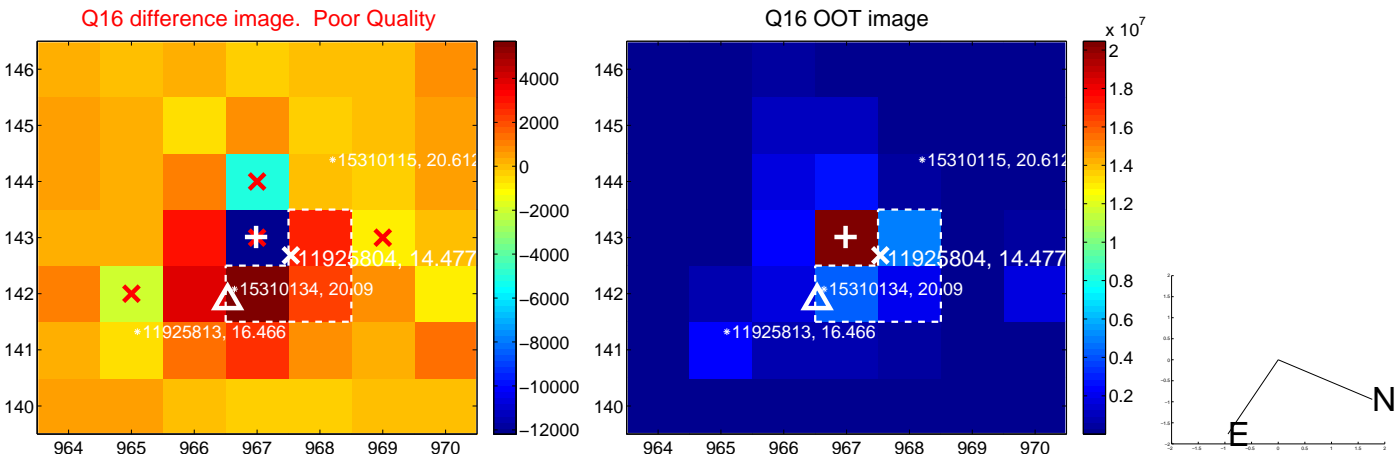
Q12 no difference image



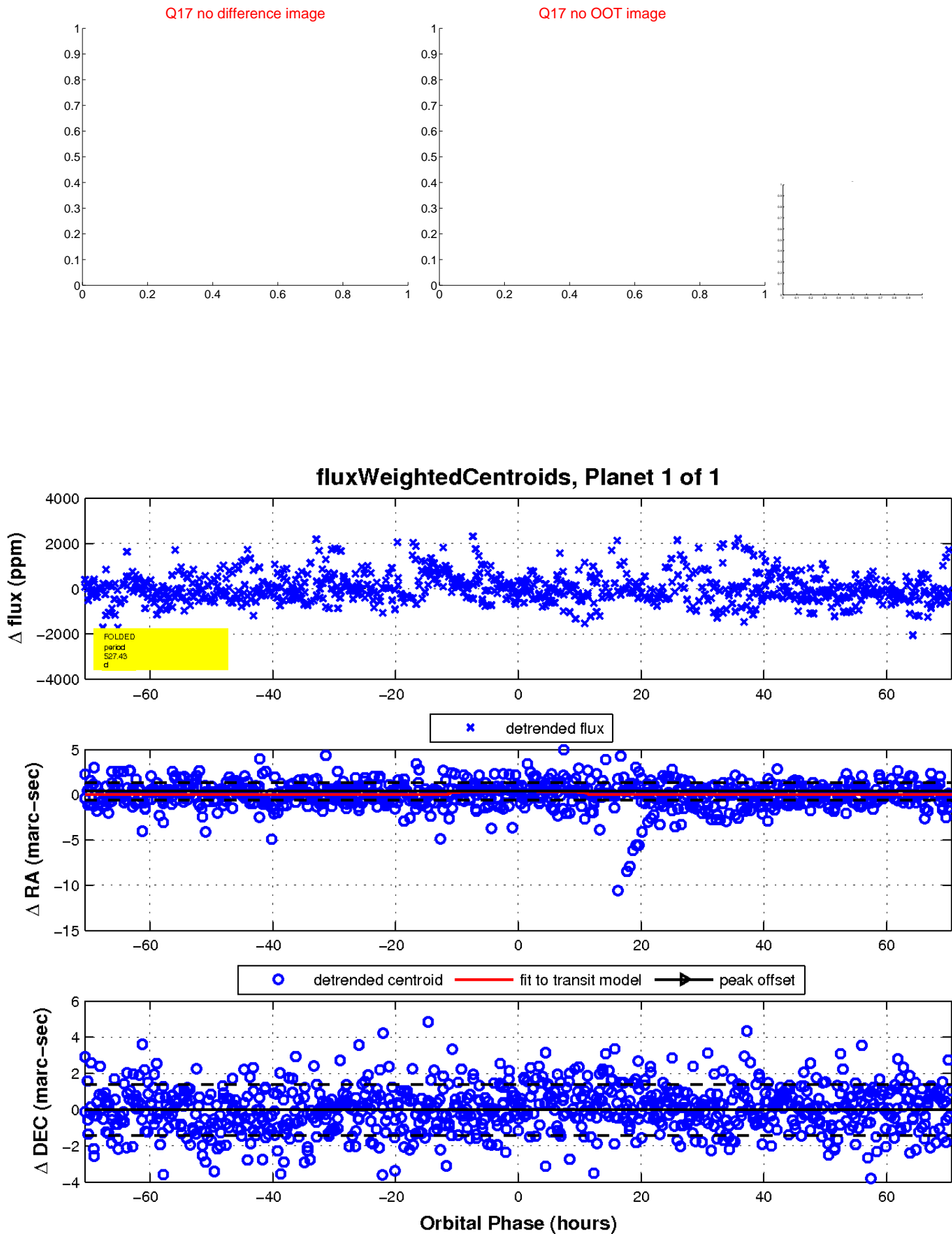
Q12 no OOT image



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

