

KIC 011176026

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})
011176026-01	OBS	No	383.466356	417.260486	935.1	12.603	9.0	8.6	0.70	5056	2.15	0.32

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011176026-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—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.

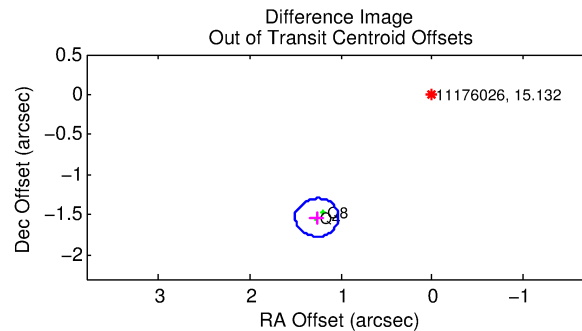
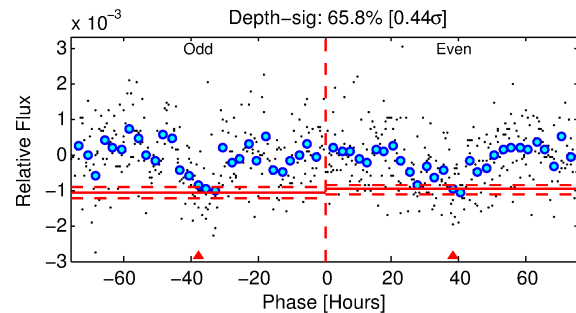
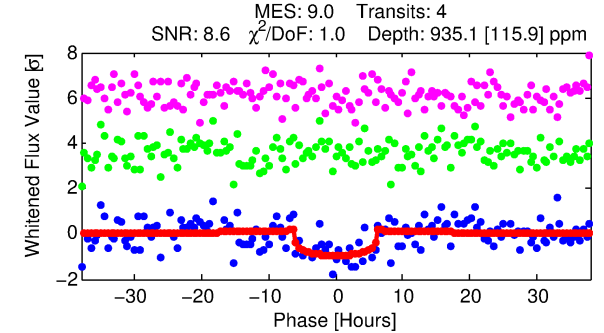
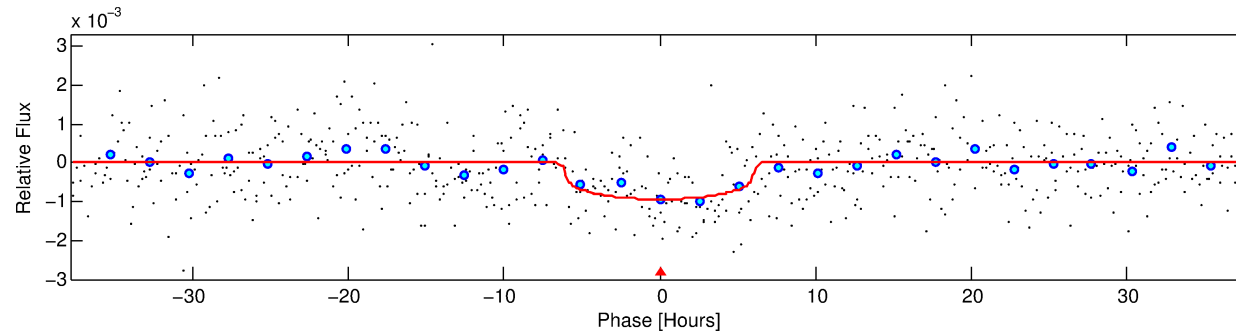
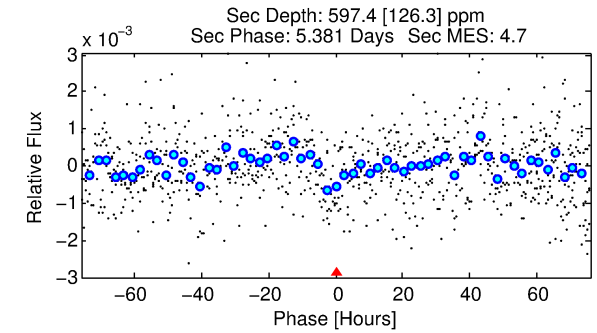
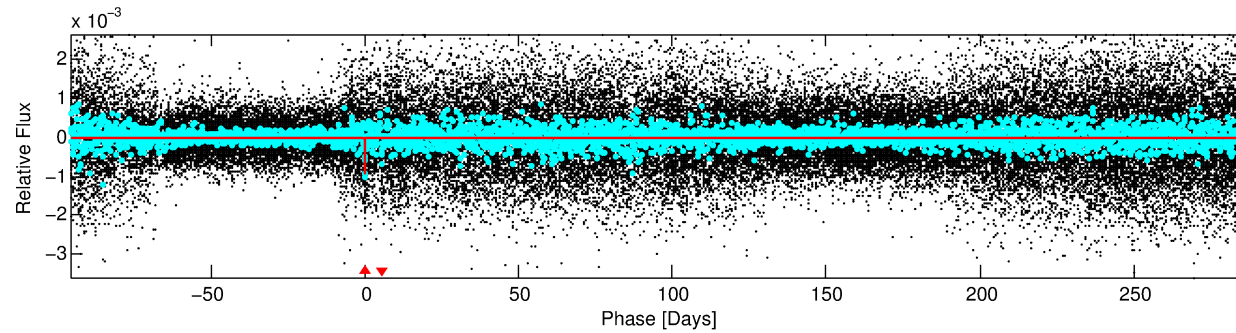
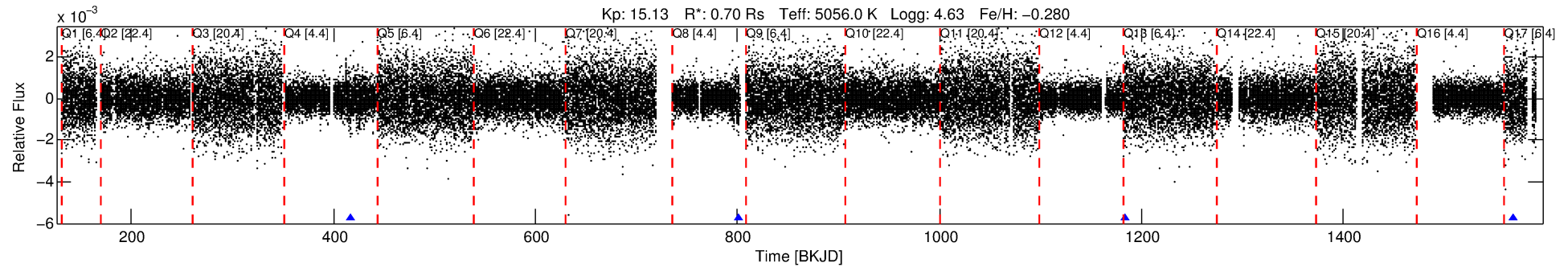
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011176026-01

No Significant Match Found

DV One-Page Summary

KIC: 11176026 Candidate: 1 of 1 Period: 383.466 d



DV Fit Results:

Period = 383.46636 [0.01082] d
Epoch = 417.2605 [0.0142] BKJD
Rp/R* = 0.0283 [0.0185]
a/R* = 210.32 [493.88]
b = 0.49 [3.70]
Seff = 0.32 [0.06]
Teq = 192 [8] K
Rp = 2.15 [1.44] Re
a = 0.9399 [0.0907] AU
Ag = 62618.53 [83611.42] [0.75σ]
Teff = 4701 [1568] K [2.88σ]

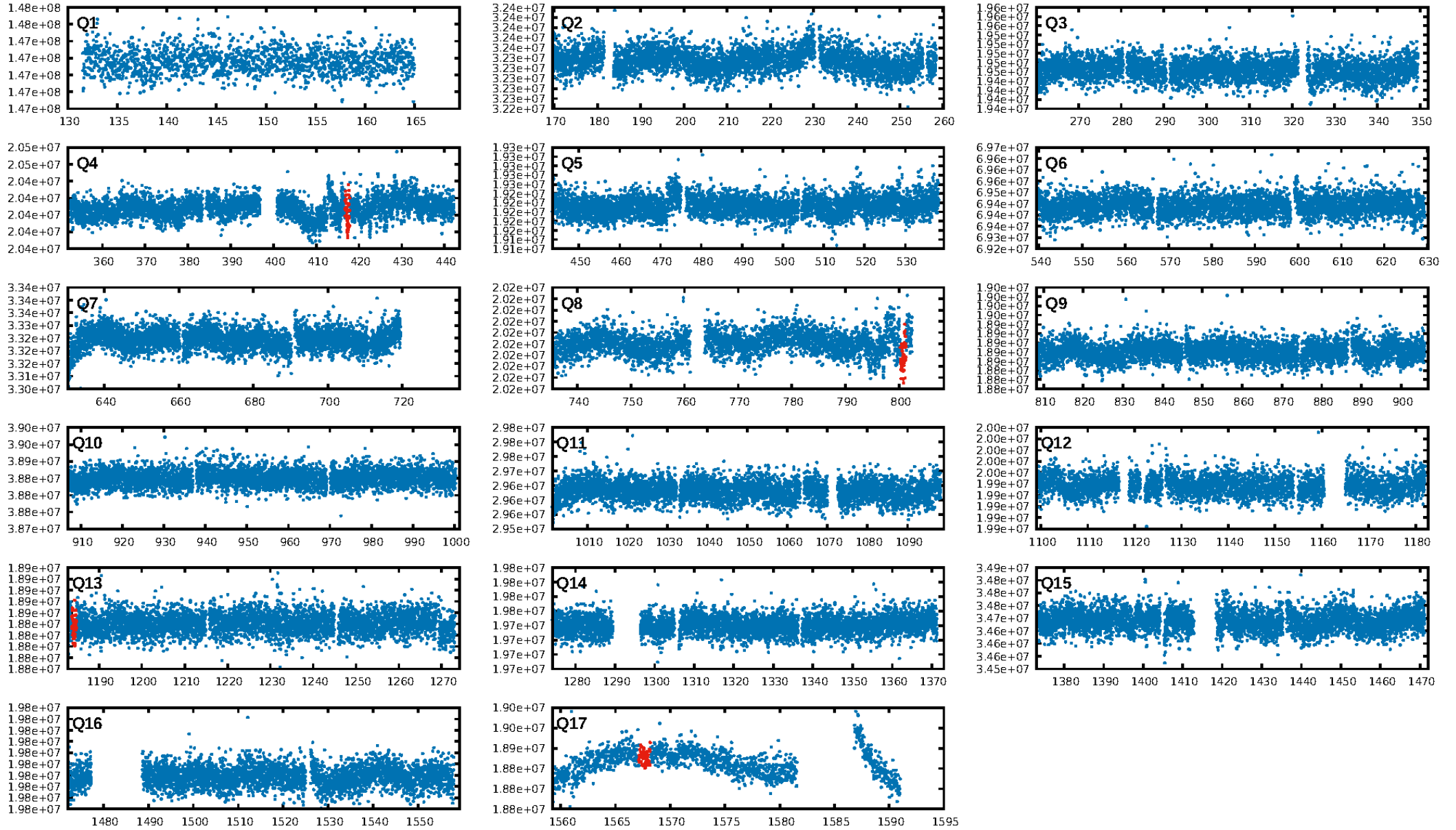
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 79.9%
ModelChiSquareGoF-sig: 99.9%
Bootstrap-pfa: 2.46e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.5715
Centroid-sig: N/A
Centroid-so: 2.921 arcsec [1.61σ]
OotOffset-rm: 1.986 arcsec [25.06σ]
KicOffset-rm: 3.580 arcsec [42.04σ]
OotOffset-st: 0/0/2/0 [2]
KicOffset-st: 0/0/2/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

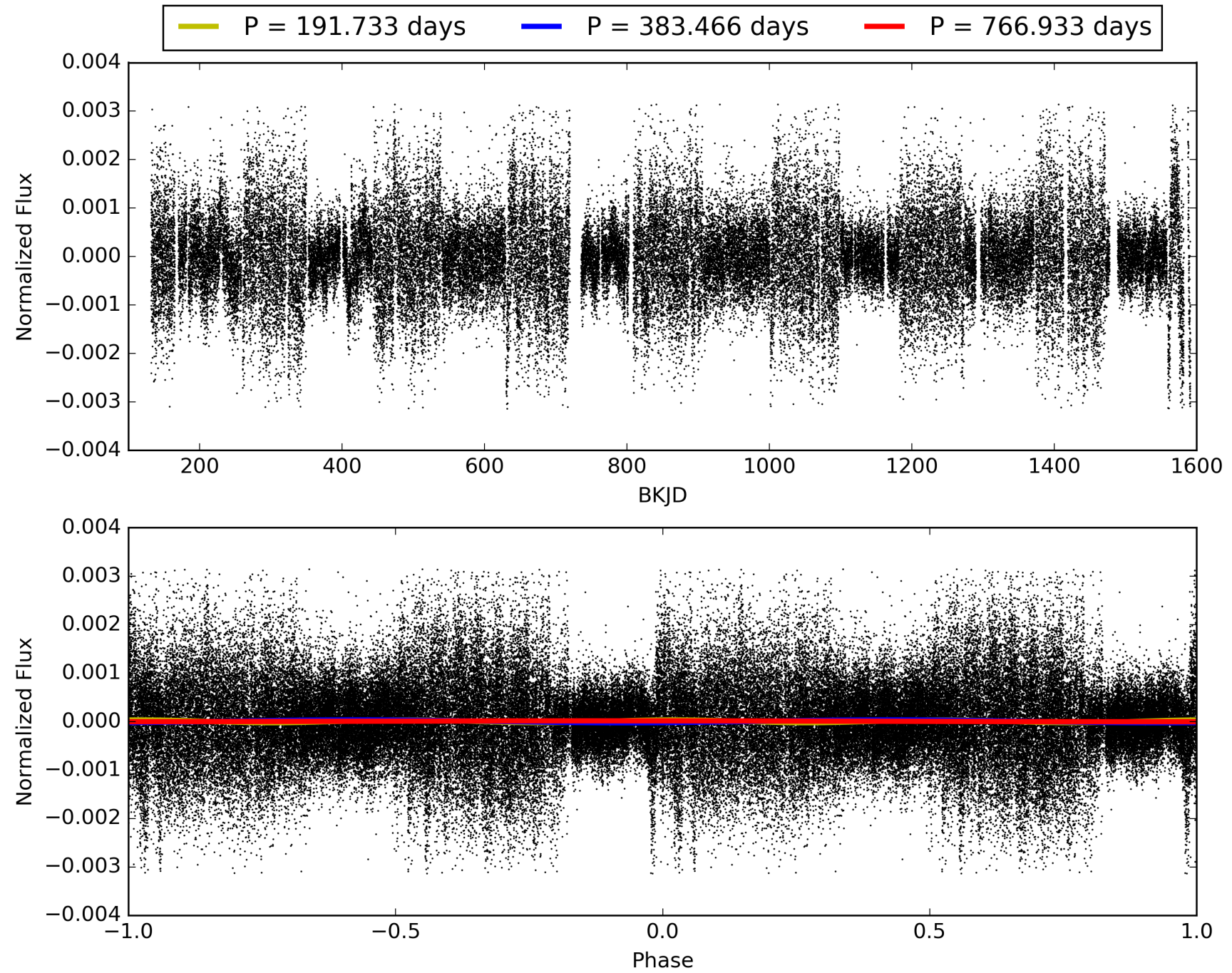
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:09:31 Z

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

TCE 011176026-01, PDC Light Curves

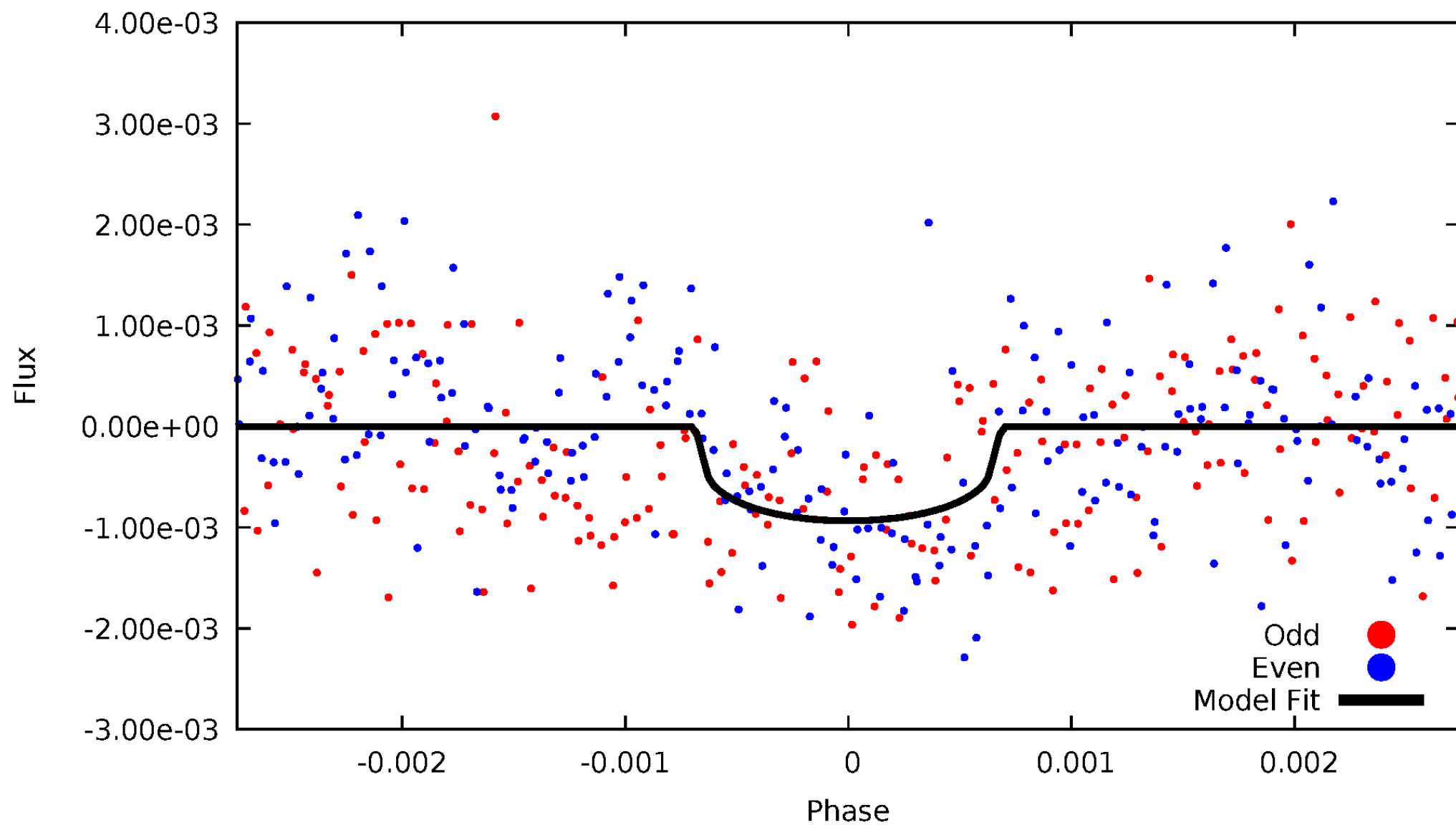


TCE 011176026-01



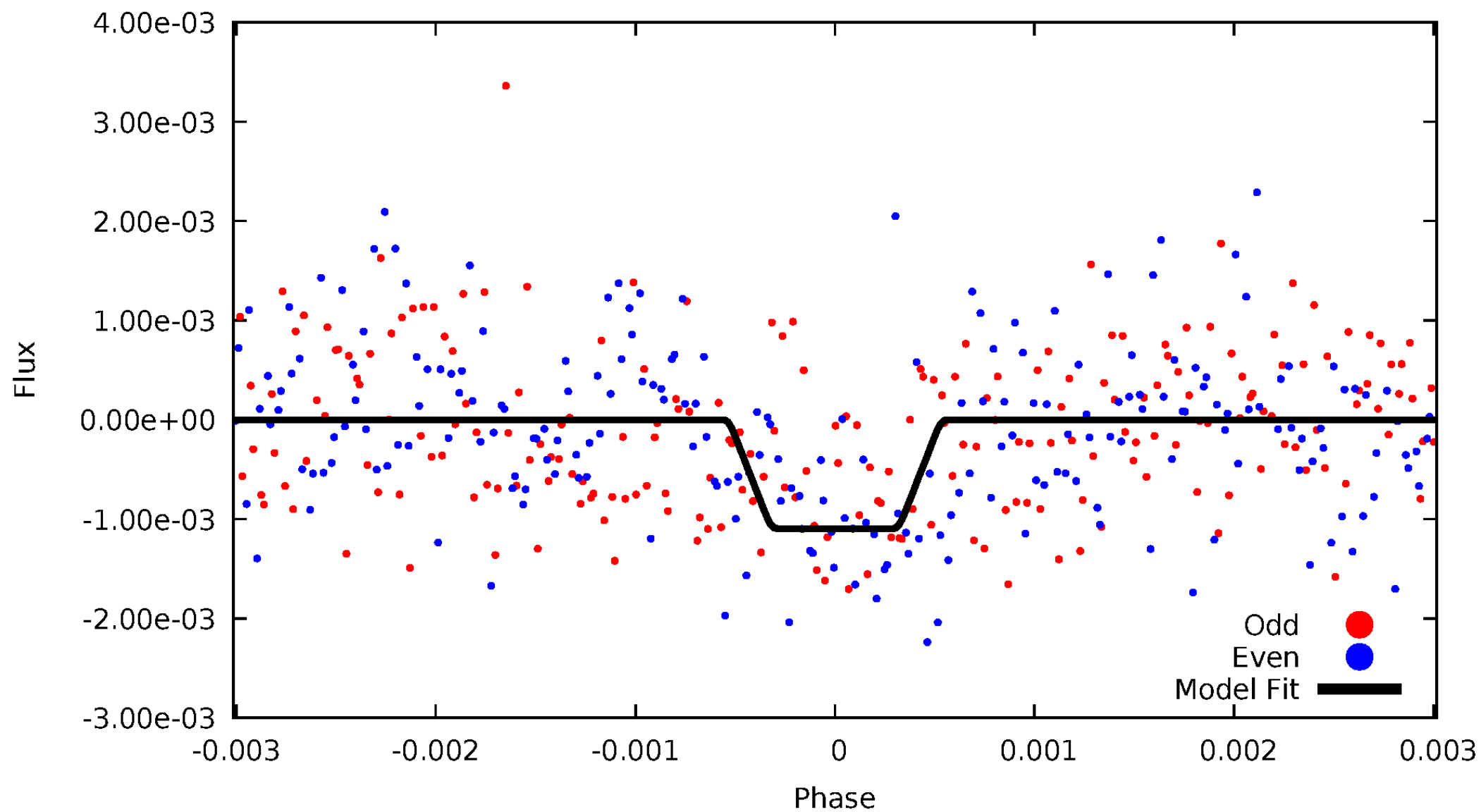
DV Odd/Even

TCE 011176026-01



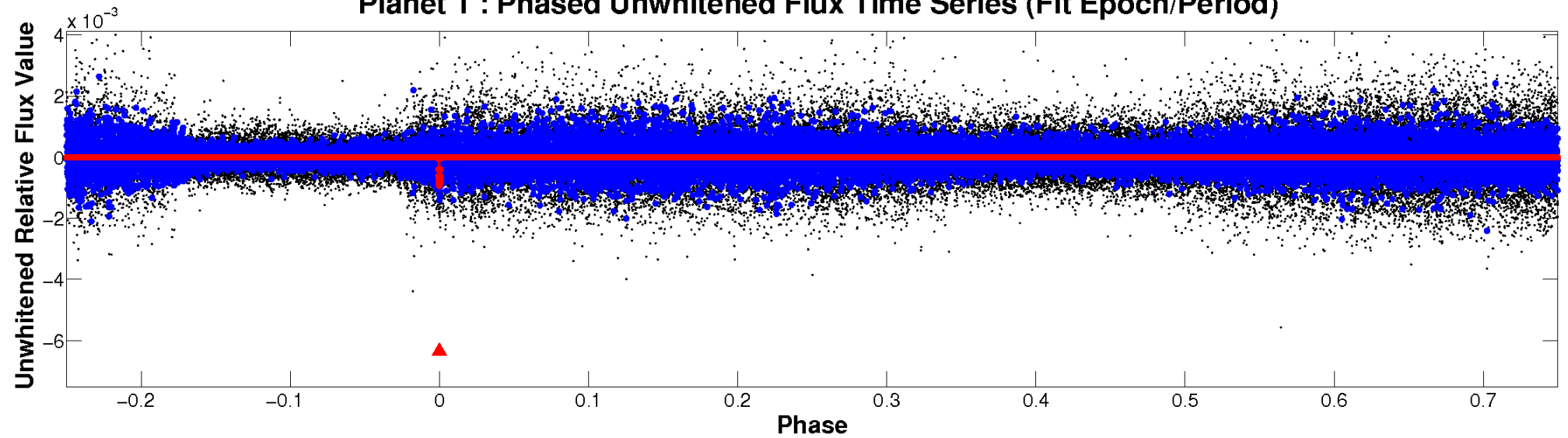
ALT Odd/Even

TCE 011176026-01

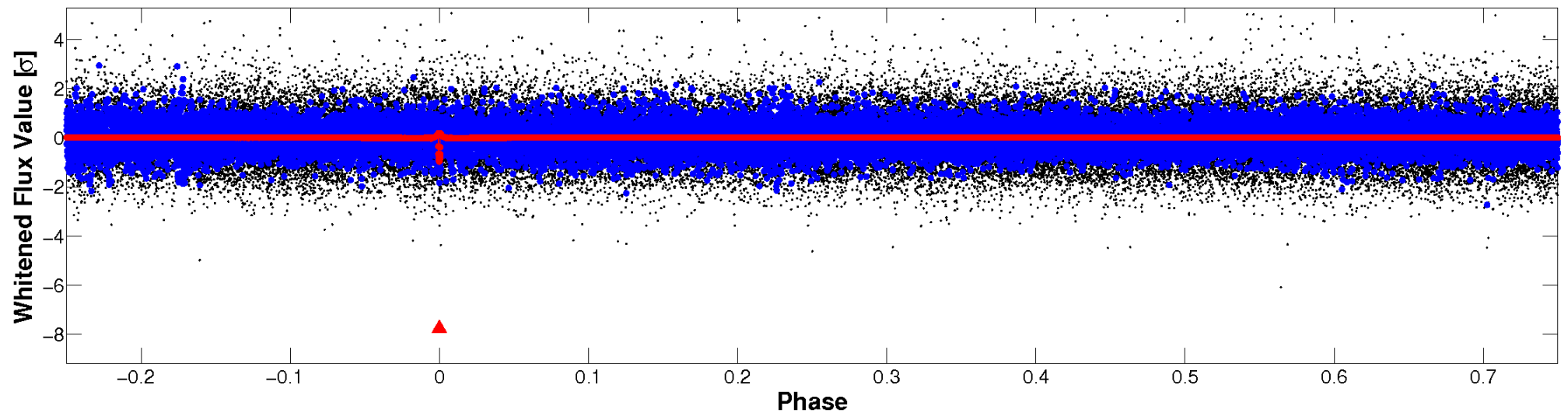


Non-Whitened Vs. Whitened Light Curve

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



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



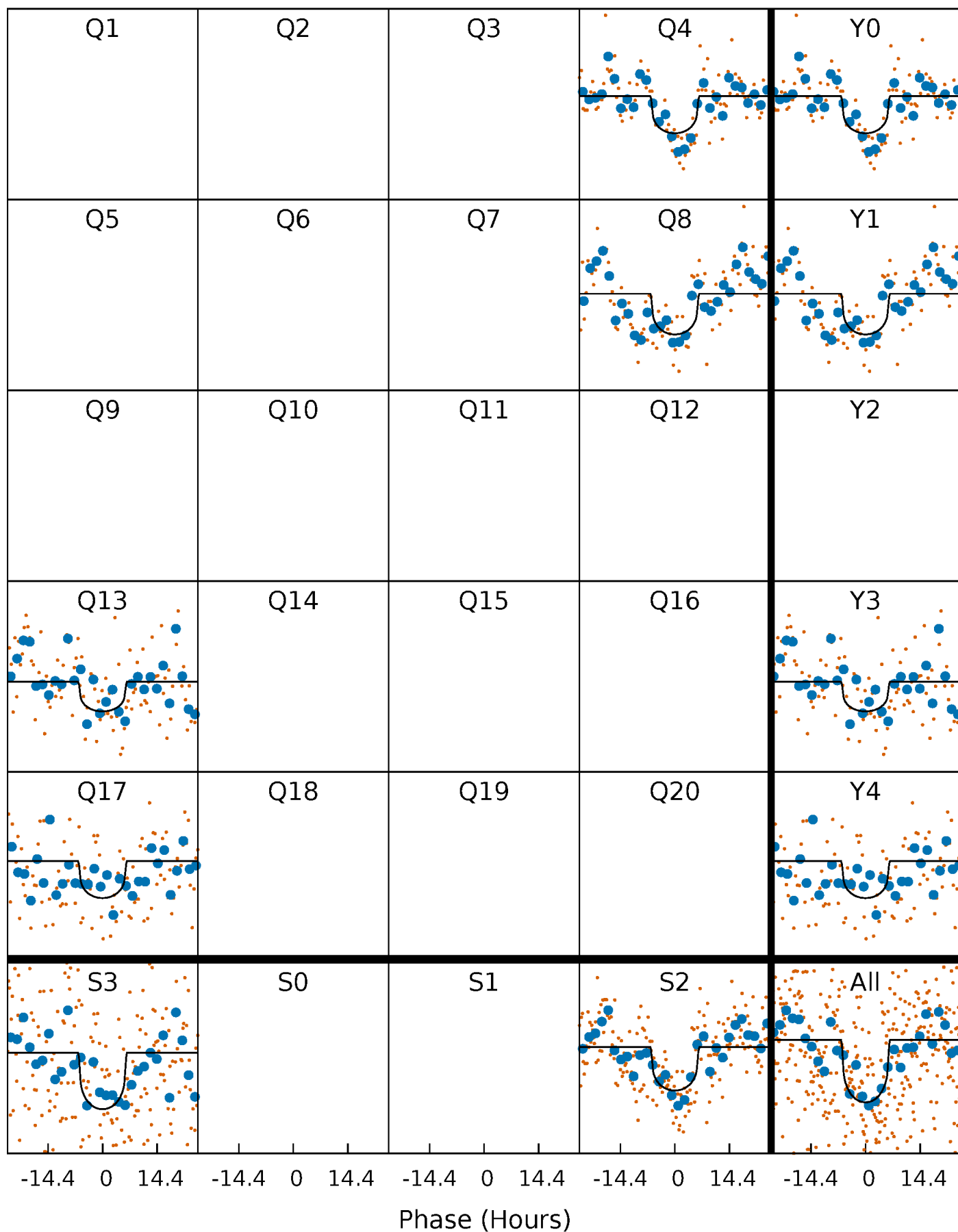
PDC Quarter-Phased Transit Curves

TCE 011176026-01 P=383.466356 Days $T_0=417.260487$ (BKJD)



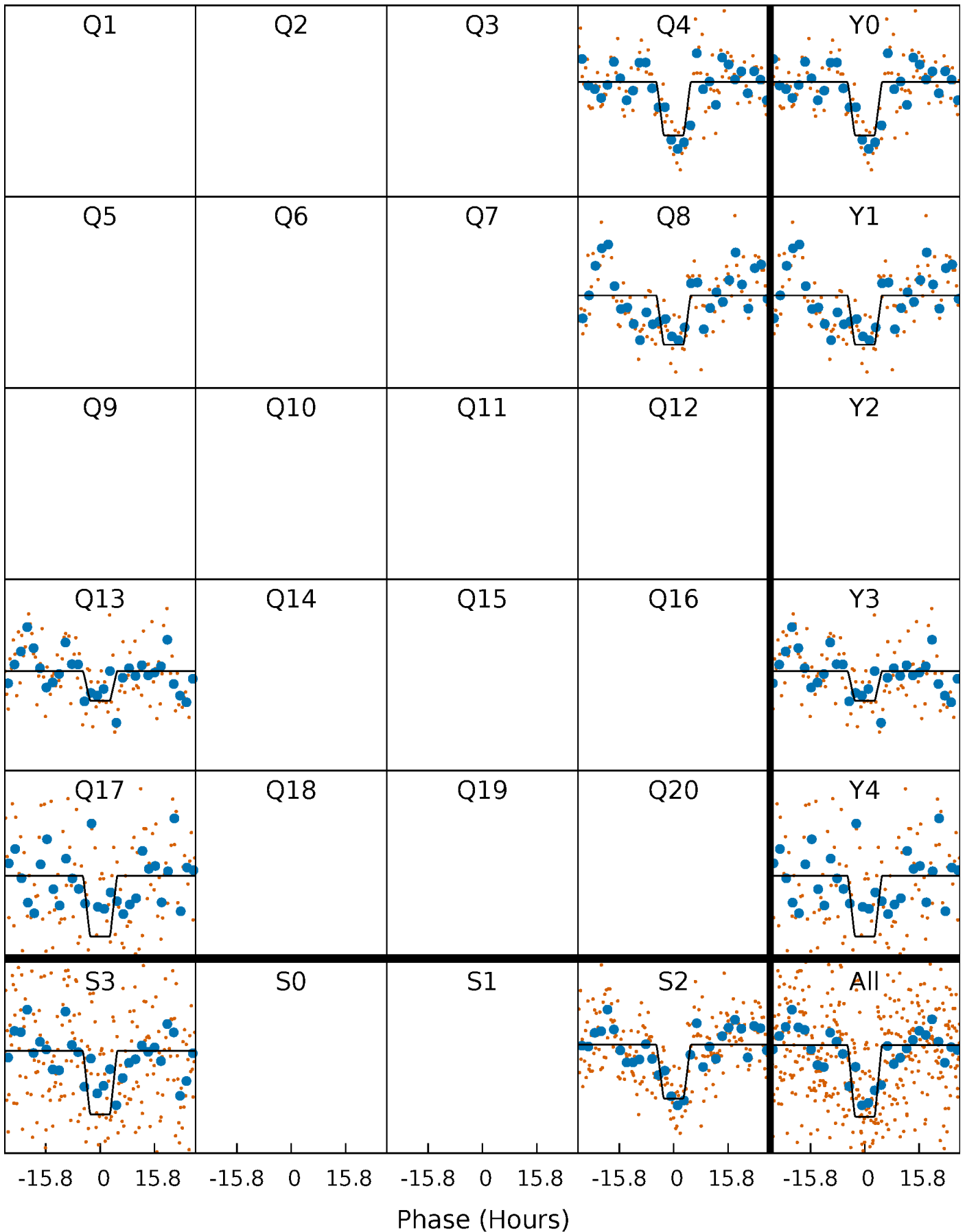
DV Quarter-Phased Transit Curves

TCE 011176026-01 P=383.466356 Days $T_0=417.260487$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

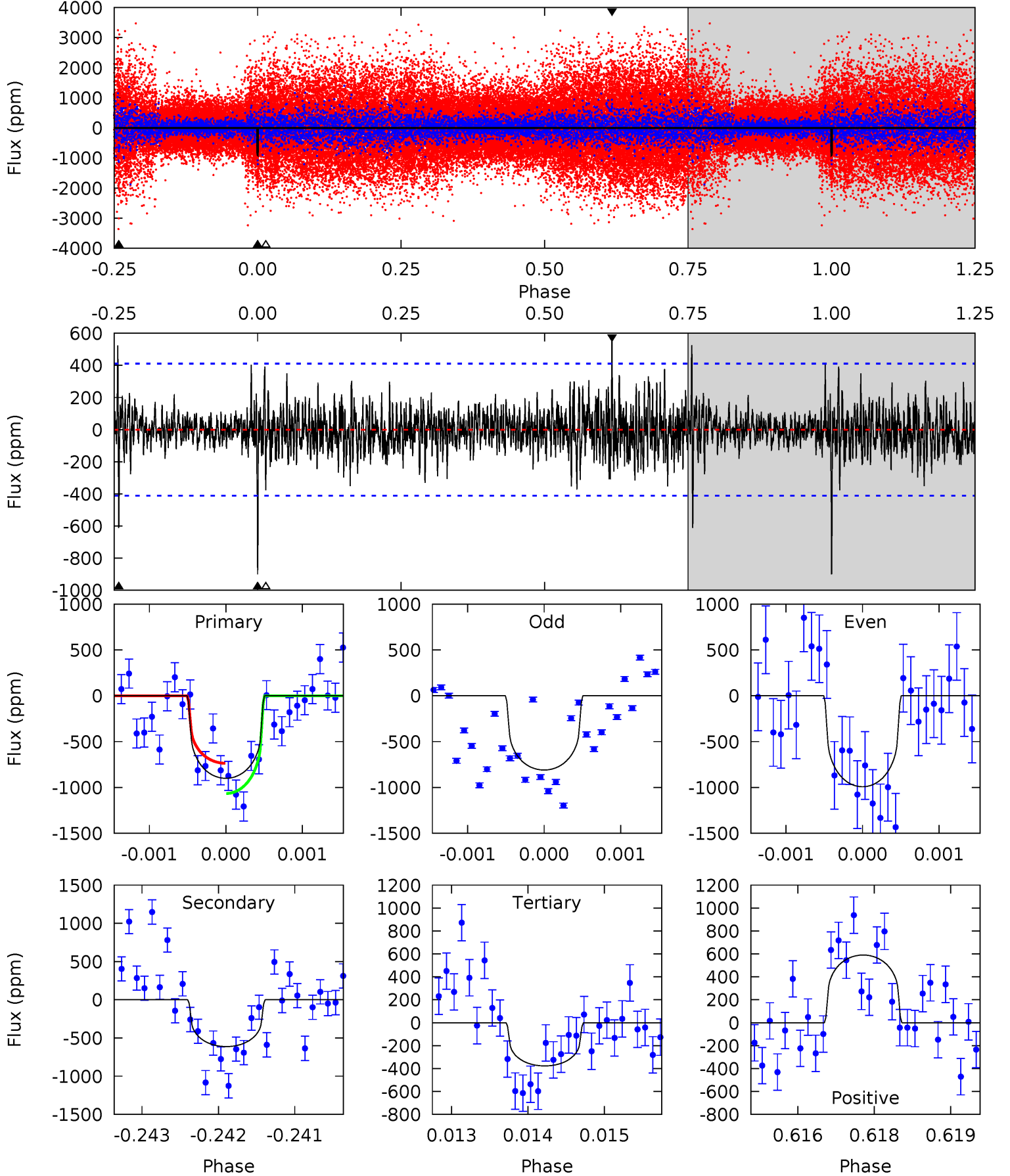
TCE 011176026-01 P=383.469809 Days $T_0=417.275836$ (BKJD)



DV Model-Shift Uniqueness Test

011176026-01, $P = 383.466356$ Days, $E = 33.794131$ Days

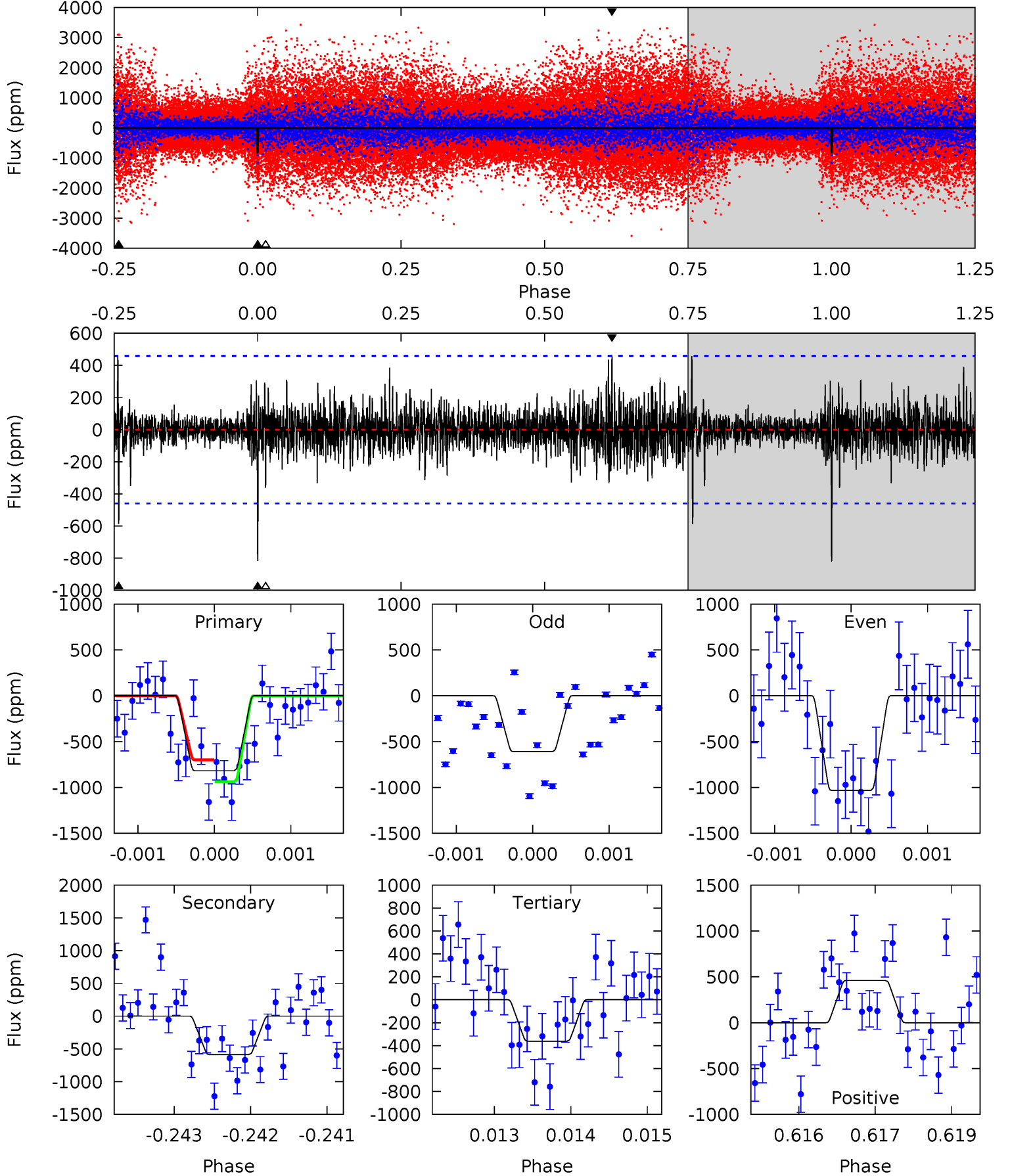
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.8	8.03	4.95	7.74	5.39	3.20	1.37	6.86	4.07	3.09	0.30	1.19	1.05	0.40	2.18



Alt Model-Shift Uniqueness Test

011176026-01, $P = 383.469809$ Days, $E = 33.806027$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.68	6.94	4.28	5.46	5.43	3.26	1.08	5.40	4.23	2.67	1.49	2.52	0.96	0.36	1.43



Stellar Parameters For KIC 011176026

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5056^{+151}_{-136}	$4.627^{+0.033}_{-0.066}$	$-0.280^{+0.300}_{-0.300}$	$0.698^{+0.086}_{-0.058}$	$0.760^{+0.071}_{-0.078}$	$3.141^{+0.523}_{-0.782}$
	+3%/-3%	+1%/-1%	+107%/-107%	+12%/-8%	+9%/-10%	+17%/-25%
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 011176026-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-613 ± 76	$2.35^{+1.33}_{-1.23}$	271^{+10}_{-9}	4657^{+1939}_{-775}	$54062^{+195334}_{-32969}$
Alt.	-586 ± 84	$2.62^{+1.46}_{-1.26}$	271^{+10}_{-10}	4443^{+1474}_{-687}	$40990^{+115026}_{-24029}$

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

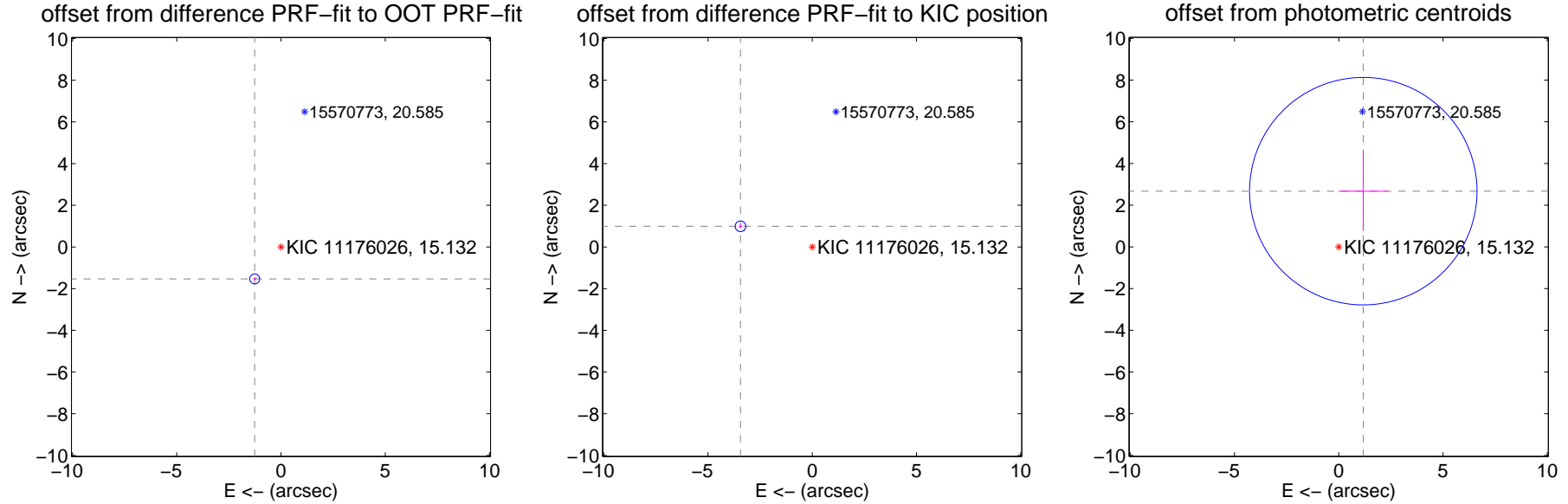
DV Centroid Data

Supplemental centroid analysis for 011176026-01. Kepler magnitude: 15.13. Transit SNR 8.61

There are 2 quarters with good PRF difference image offsets

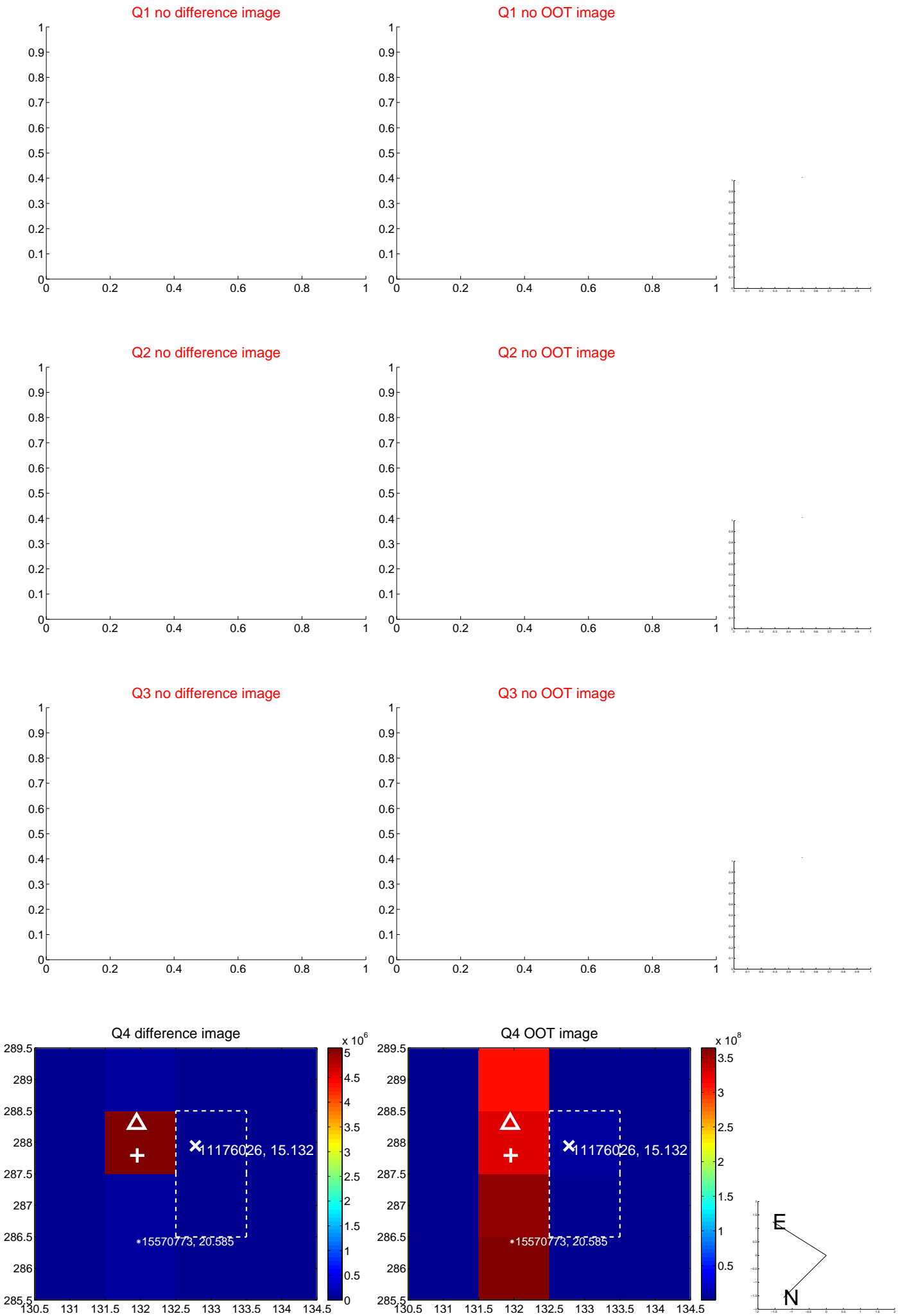
The OOT PRF centroid is offset from the target star catalog position by about 3.35 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.986 ± 0.079	25.06	1.262 ± 0.074	-1.534 ± 0.073
PRF-fit source offset from KIC position	3.580 ± 0.085	42.04	3.440 ± 0.085	0.992 ± 0.091
photometric centroid source offset	2.92 ± 1.82	1.61	-1.18 ± 1.19	2.67 ± 1.92

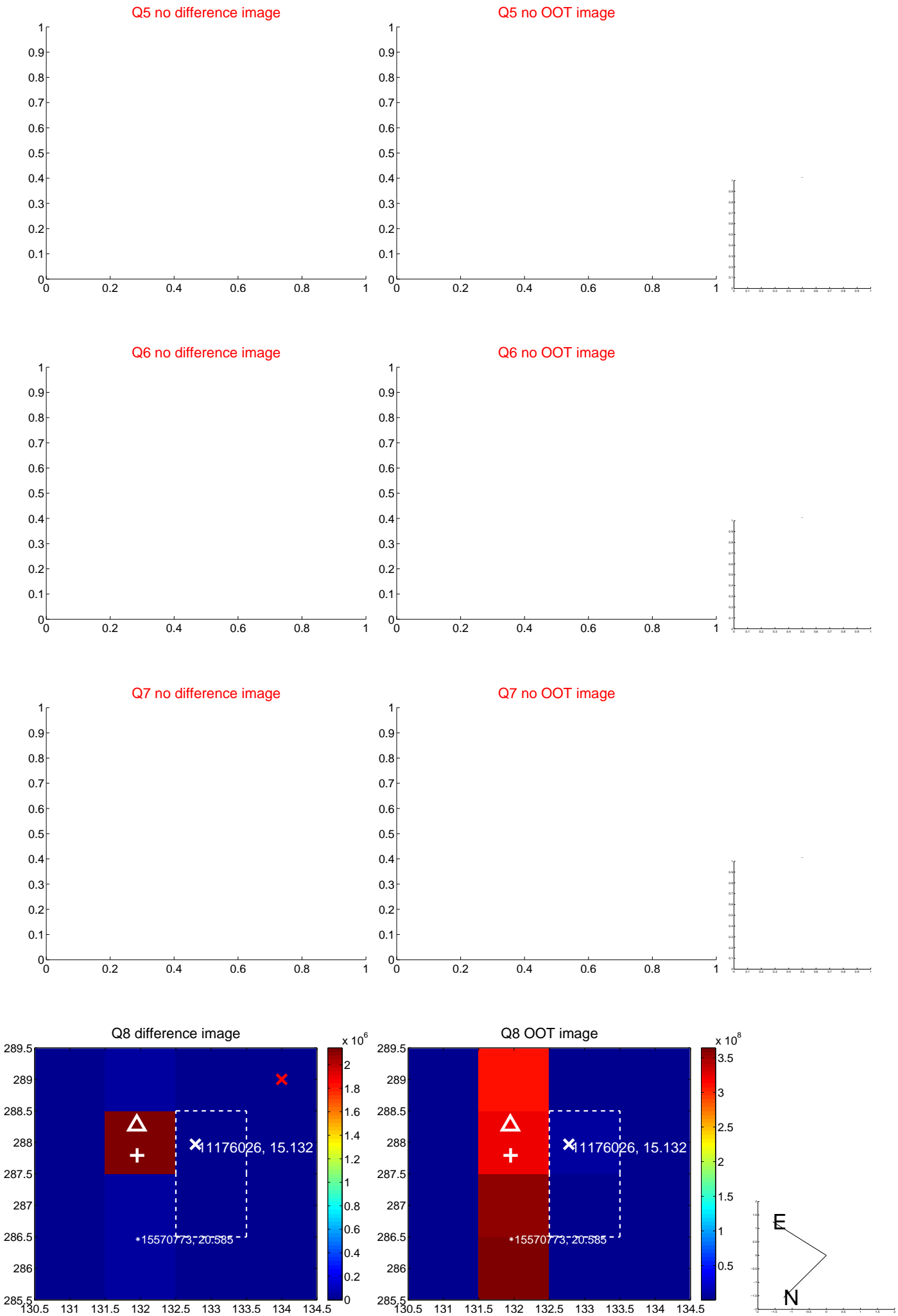


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



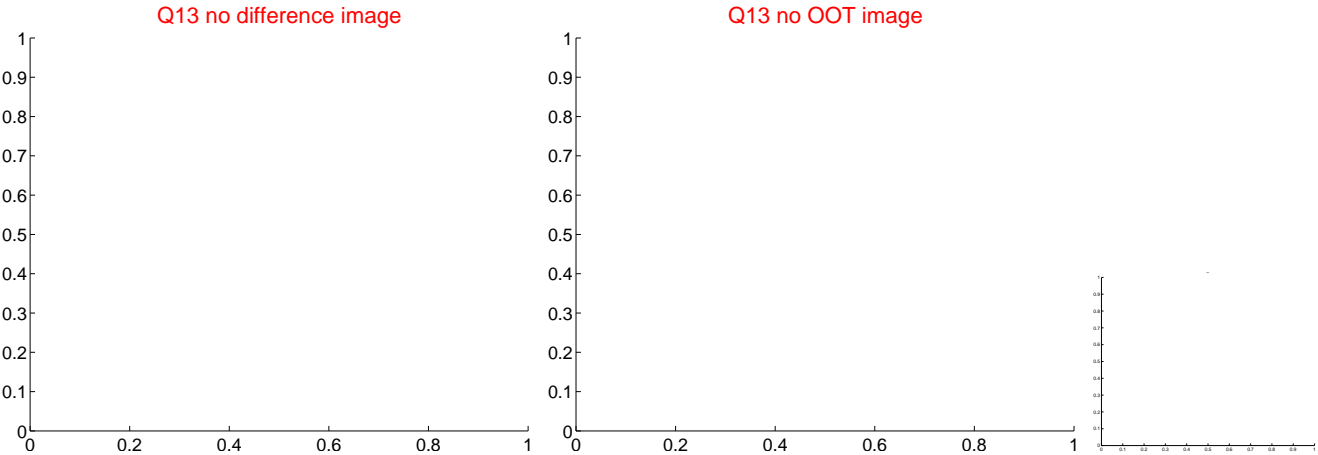
white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



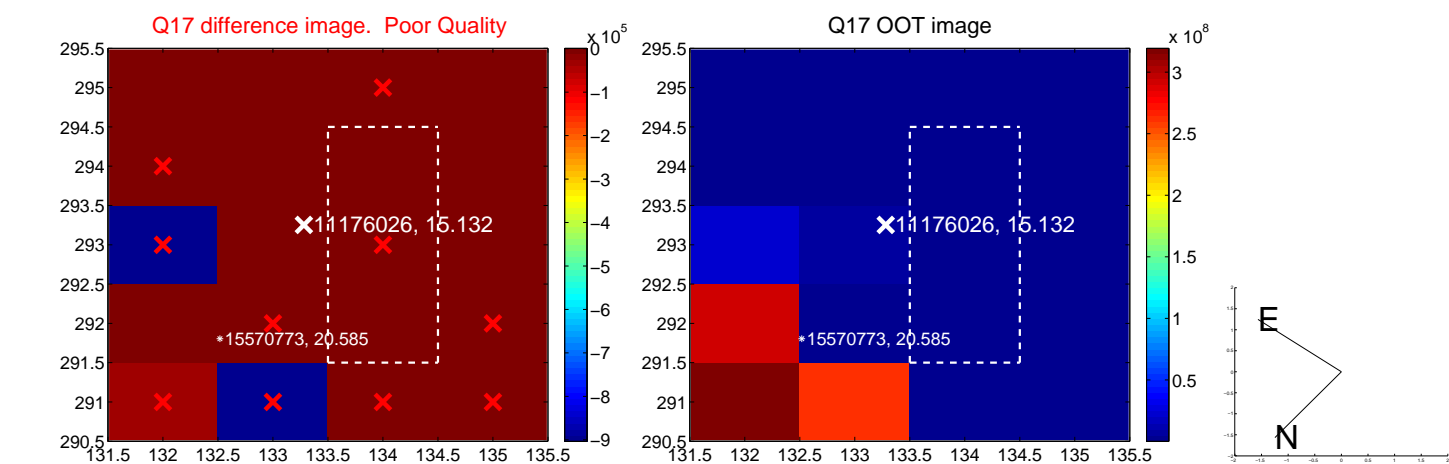
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



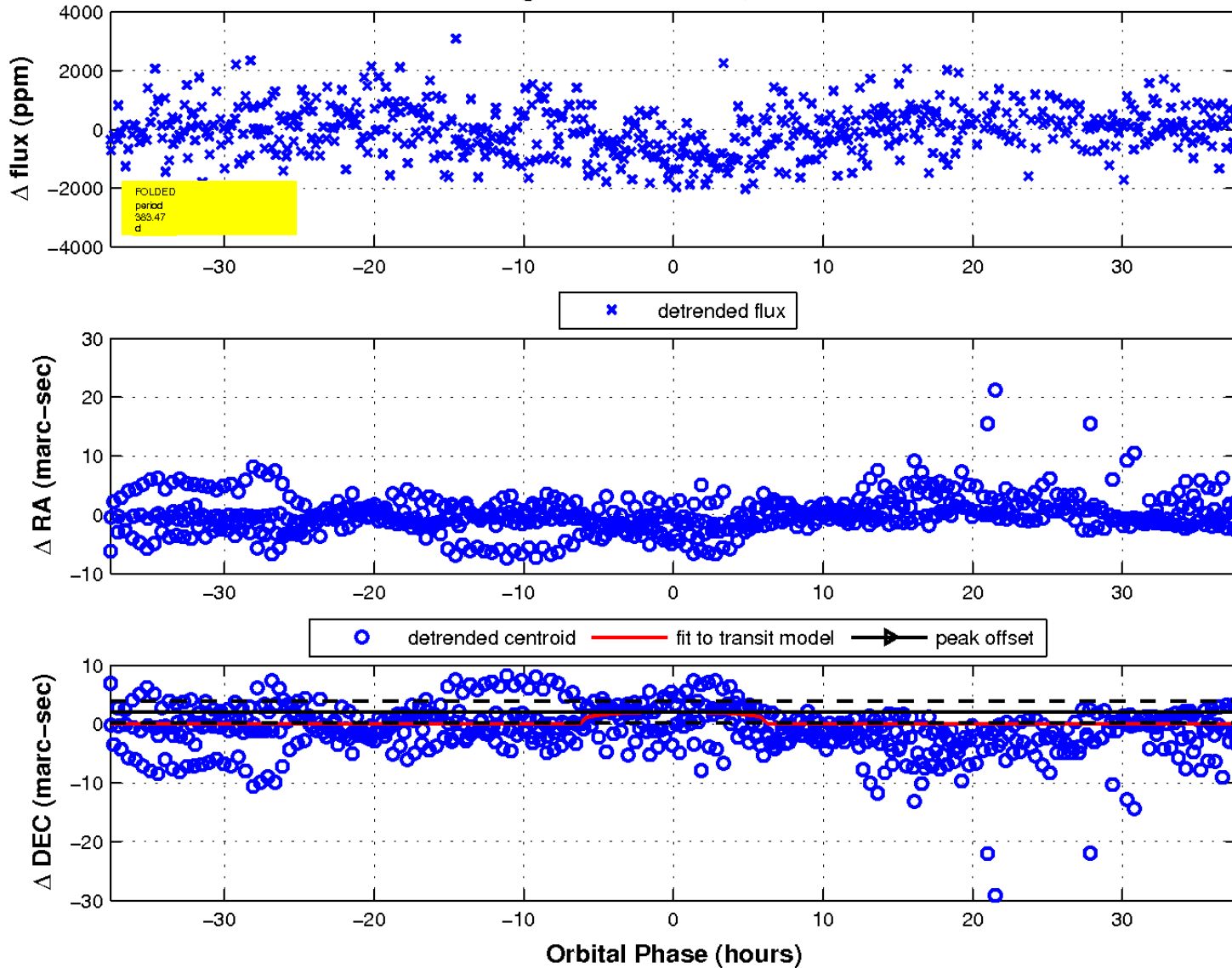
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

