

KIC 005561188

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})
005561188-01	OBS	No	689.064652	198.528887	331.2	9.308	7.7	6.1	2.57	6634	4.88	3.64

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005561188-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

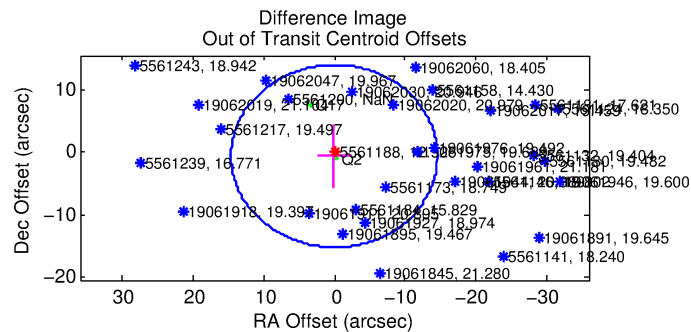
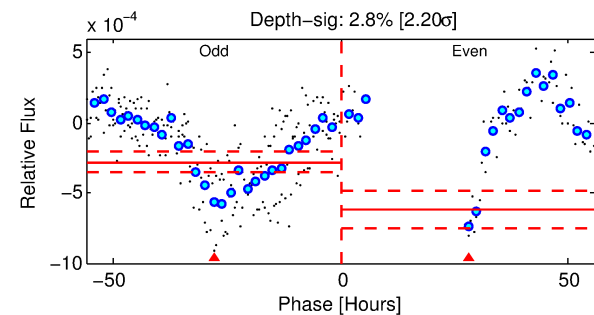
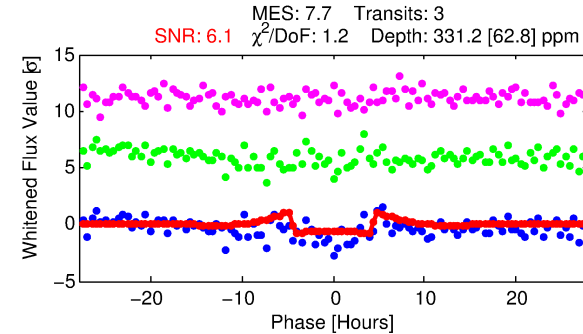
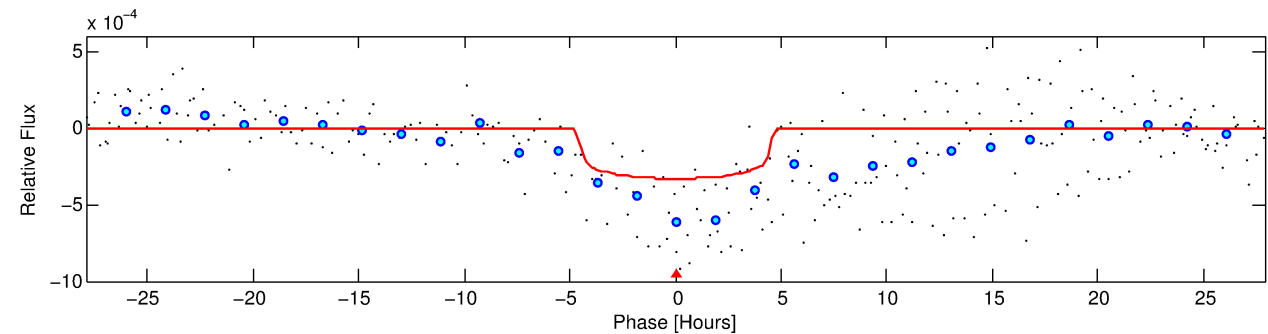
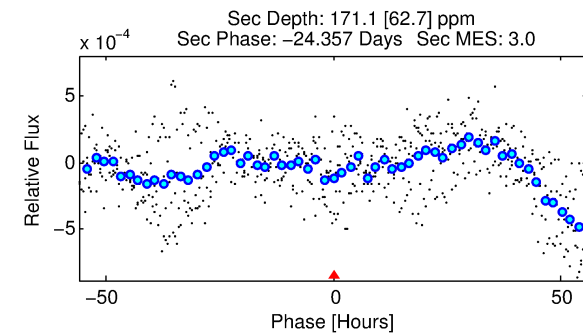
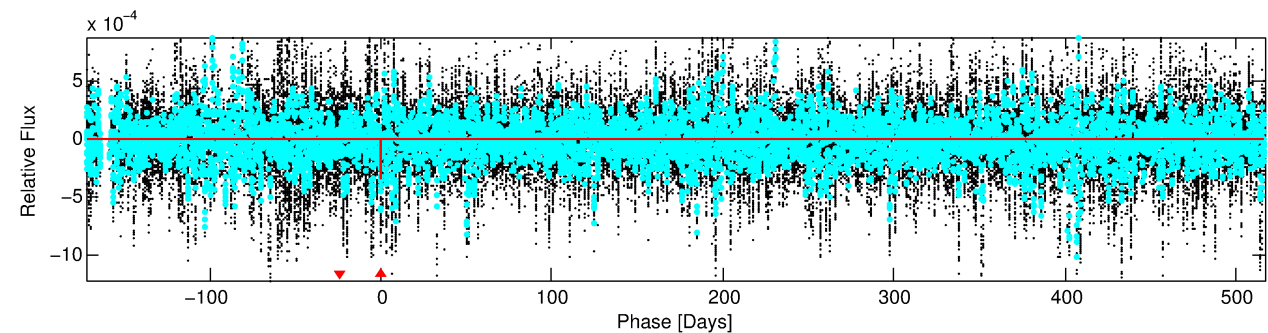
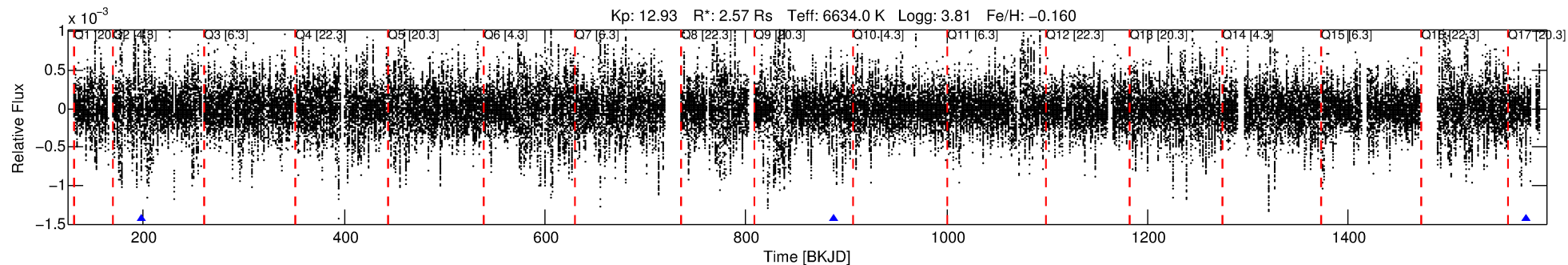
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005561188-01

No Significant Match Found

DV One-Page Summary

KIC: 5561188 Candidate: 1 of 1 Period: 689.065 d



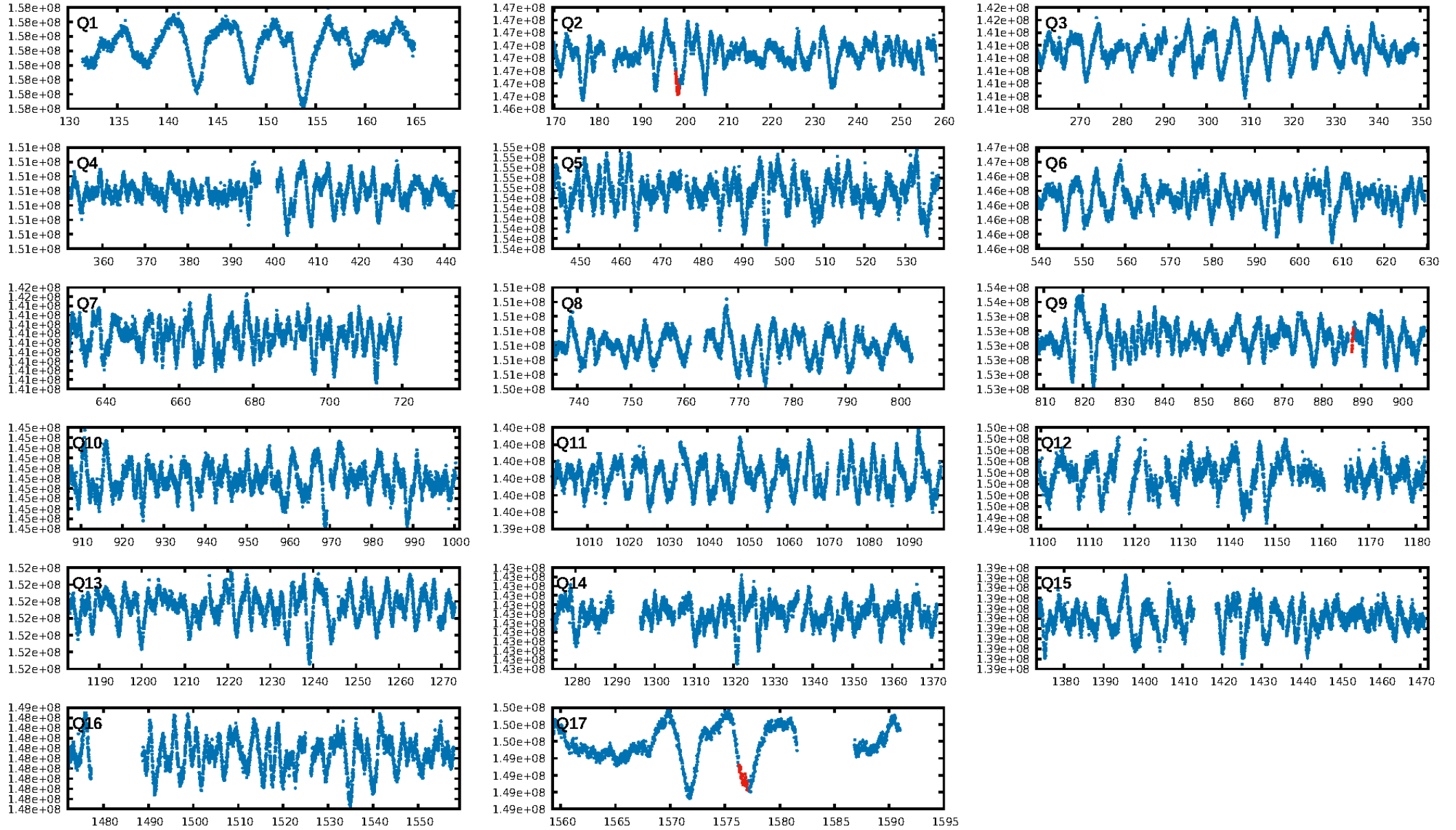
DV Fit Results:

Period = 689.06465 [0.00699] d
Epoch = 198.5289 [0.0106] BKJD
Rp/R* = 0.0174 [0.0144]
a/R* = 475.88 [2150.86]
b = 0.57 [5.35]
Seff = 3.64 [1.90]
Teff = 352 [46] K
Rp = 4.88 [4.39] Re
a = 1.7739 [0.5717] AU
Ag = 12438.03 [22048.30] [0.56 σ]
Teffp = 5750 [2450] K [2.20 σ]

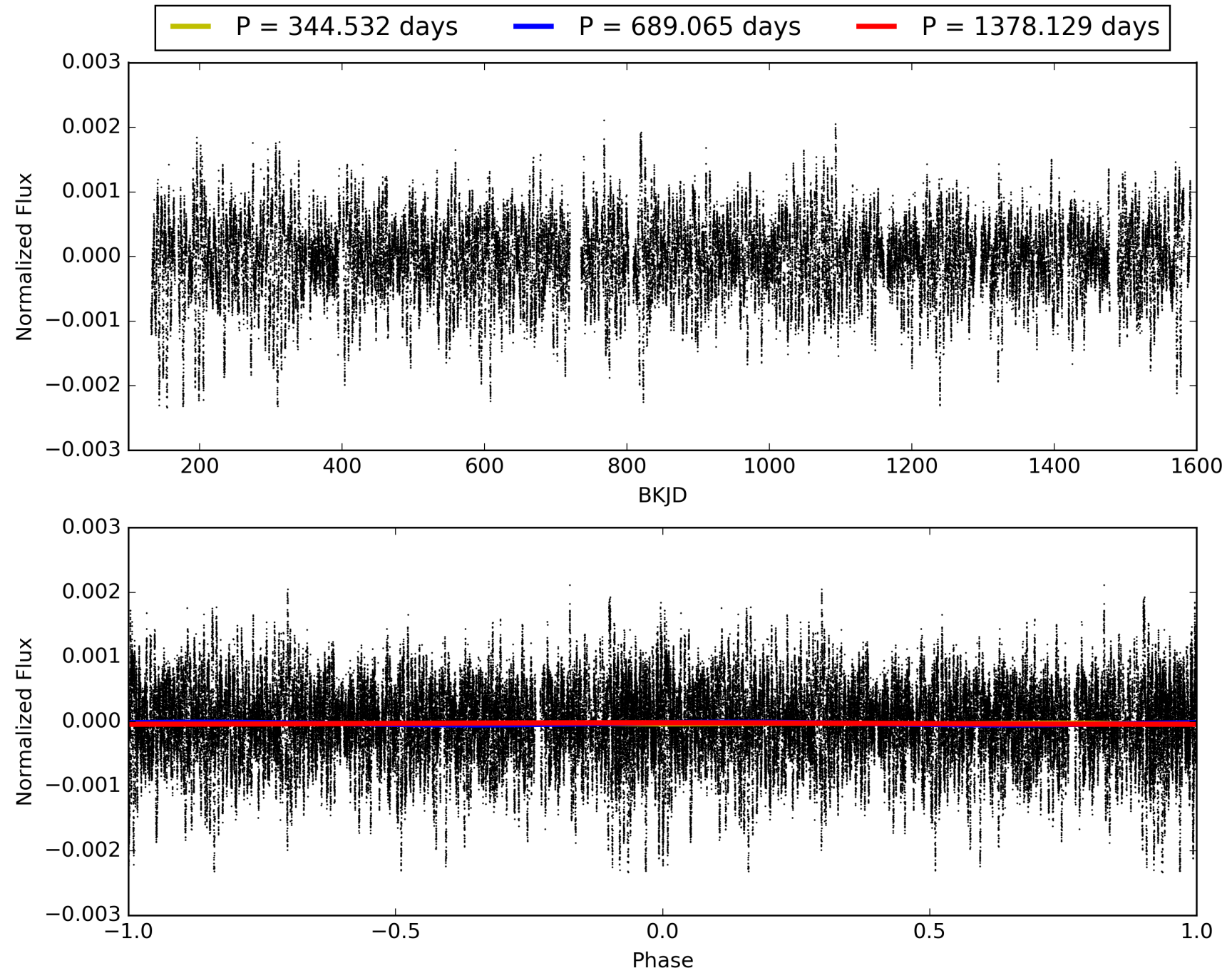
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 48.5%
ModelChiSquareGof-sig: 89.2%
Bootstrap-pfa: 5.79e-09
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 1.542
Centroid-sig: 32.3%
Centroid-so: 2.372 arcsec [1.29 σ]
OotOffset-rm: 0.662 arcsec [0.14 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-rm: 0.904 arcsec [0.40 σ]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 005561188-01, PDC Light Curves

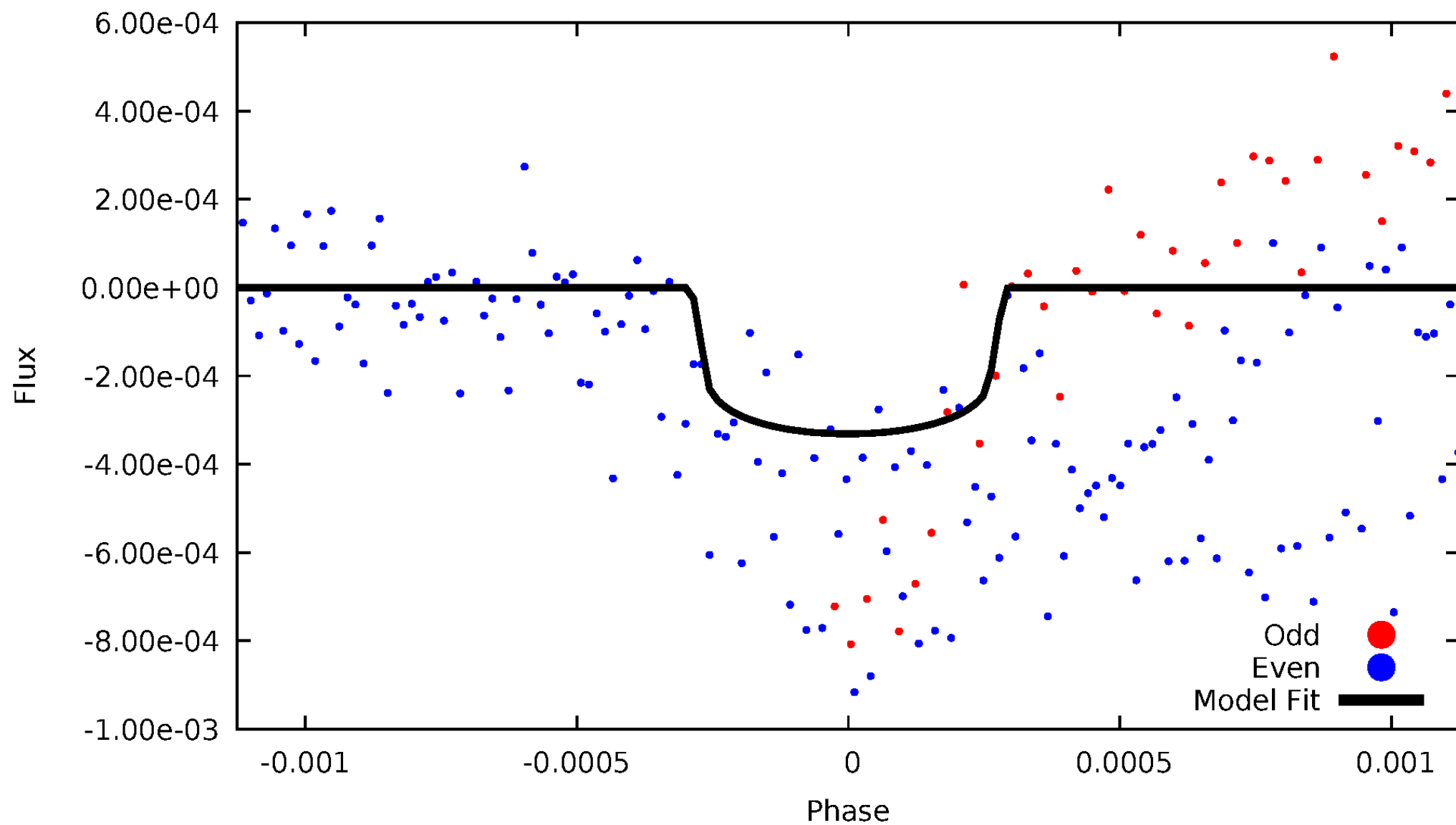


TCE 005561188-01



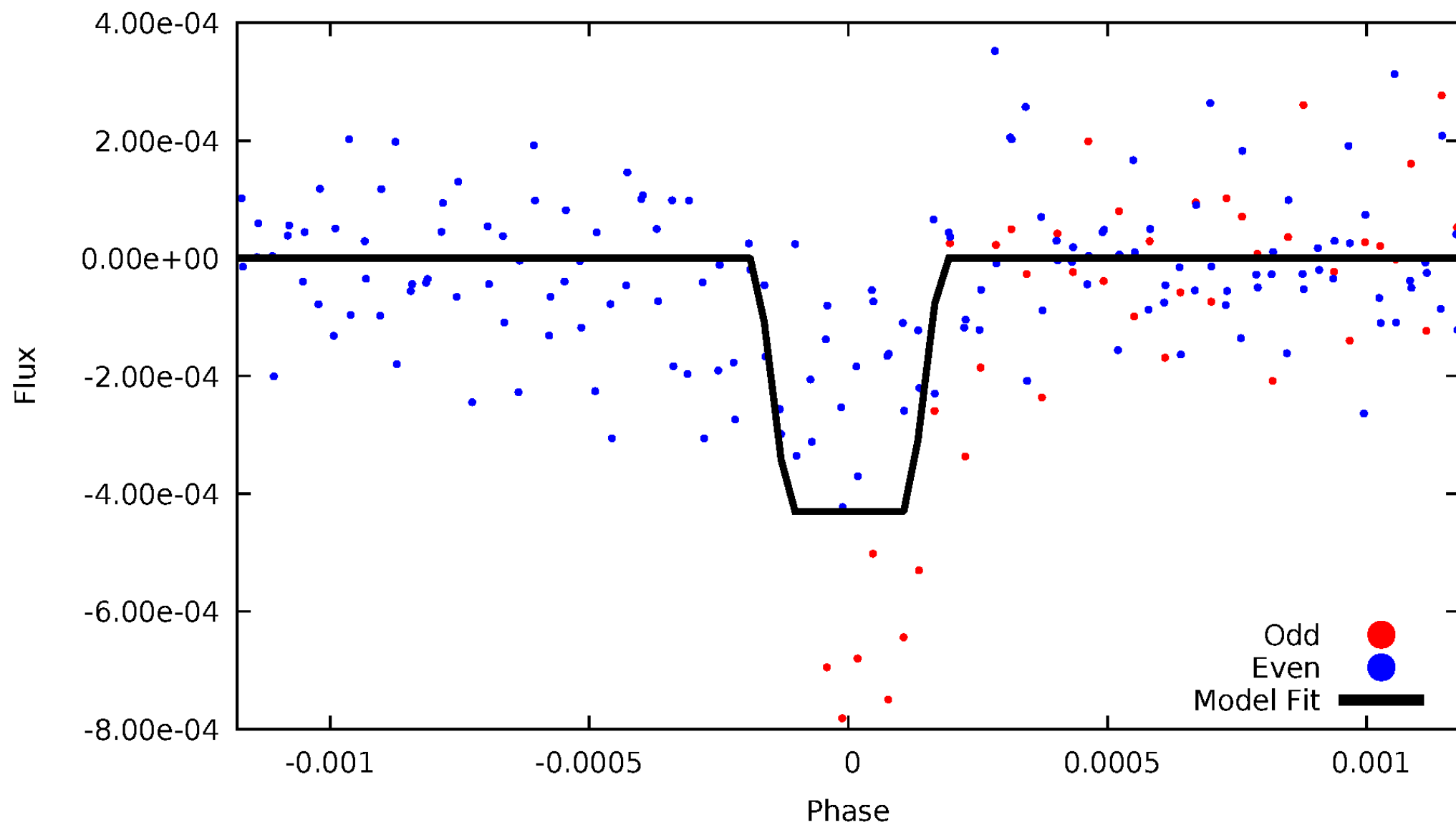
DV Odd/Even

TCE 005561188-01



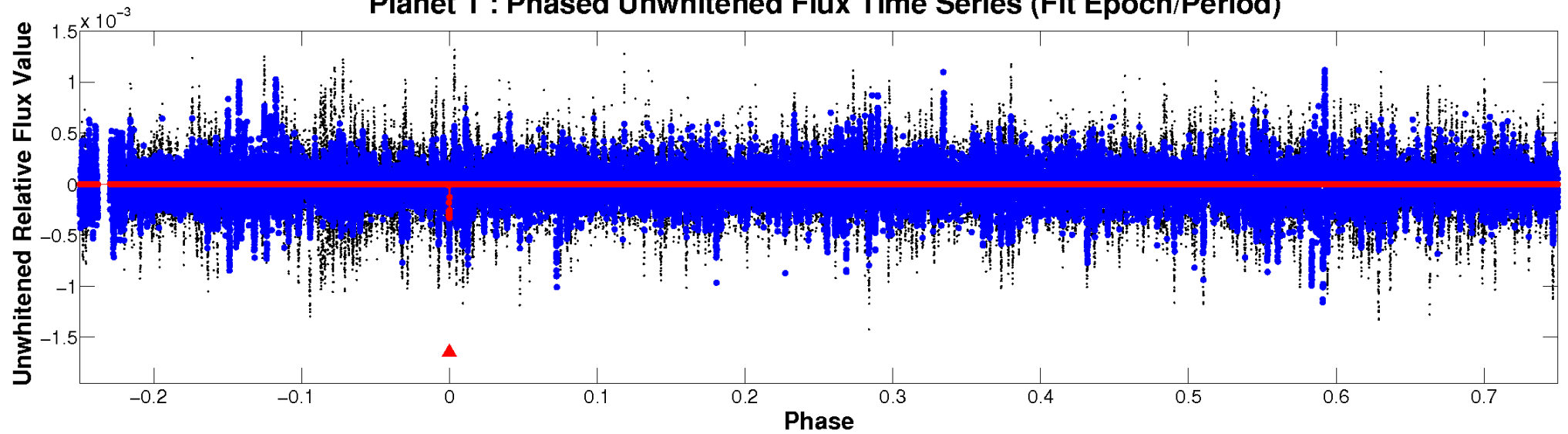
ALT Odd/Even

TCE 005561188-01

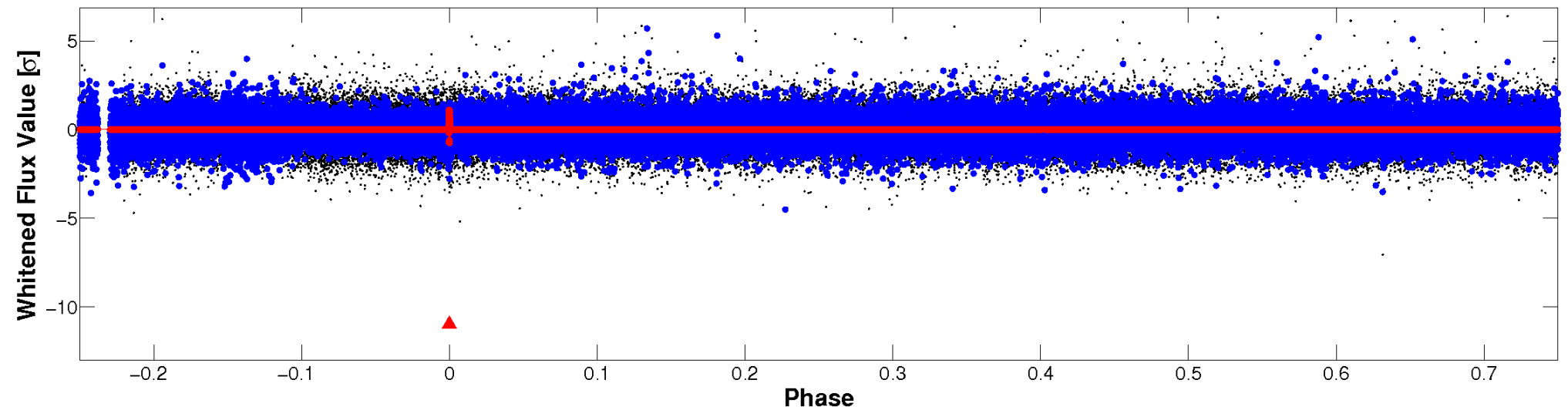


Non-Whitened Vs. Whitened Light Curve

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

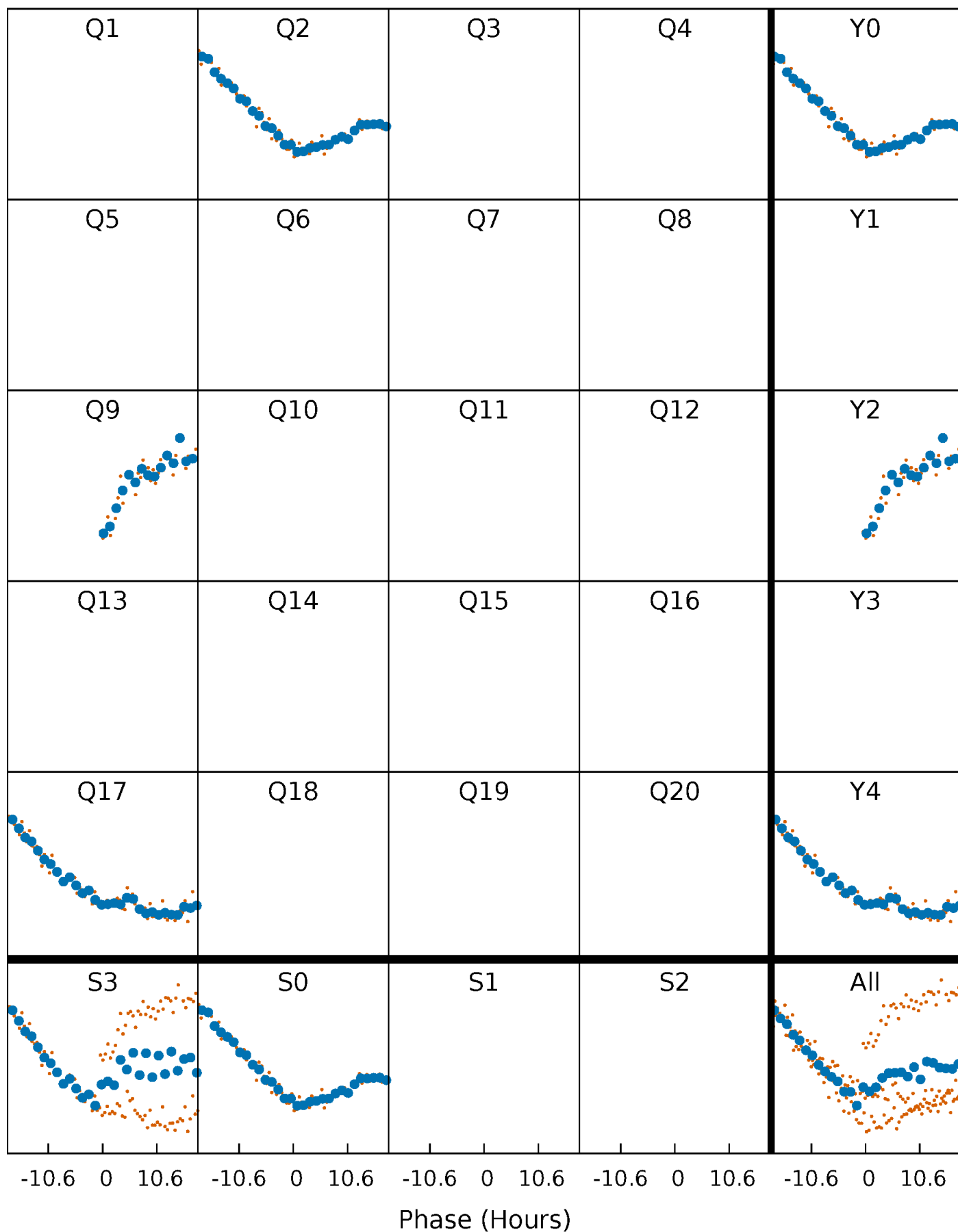


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



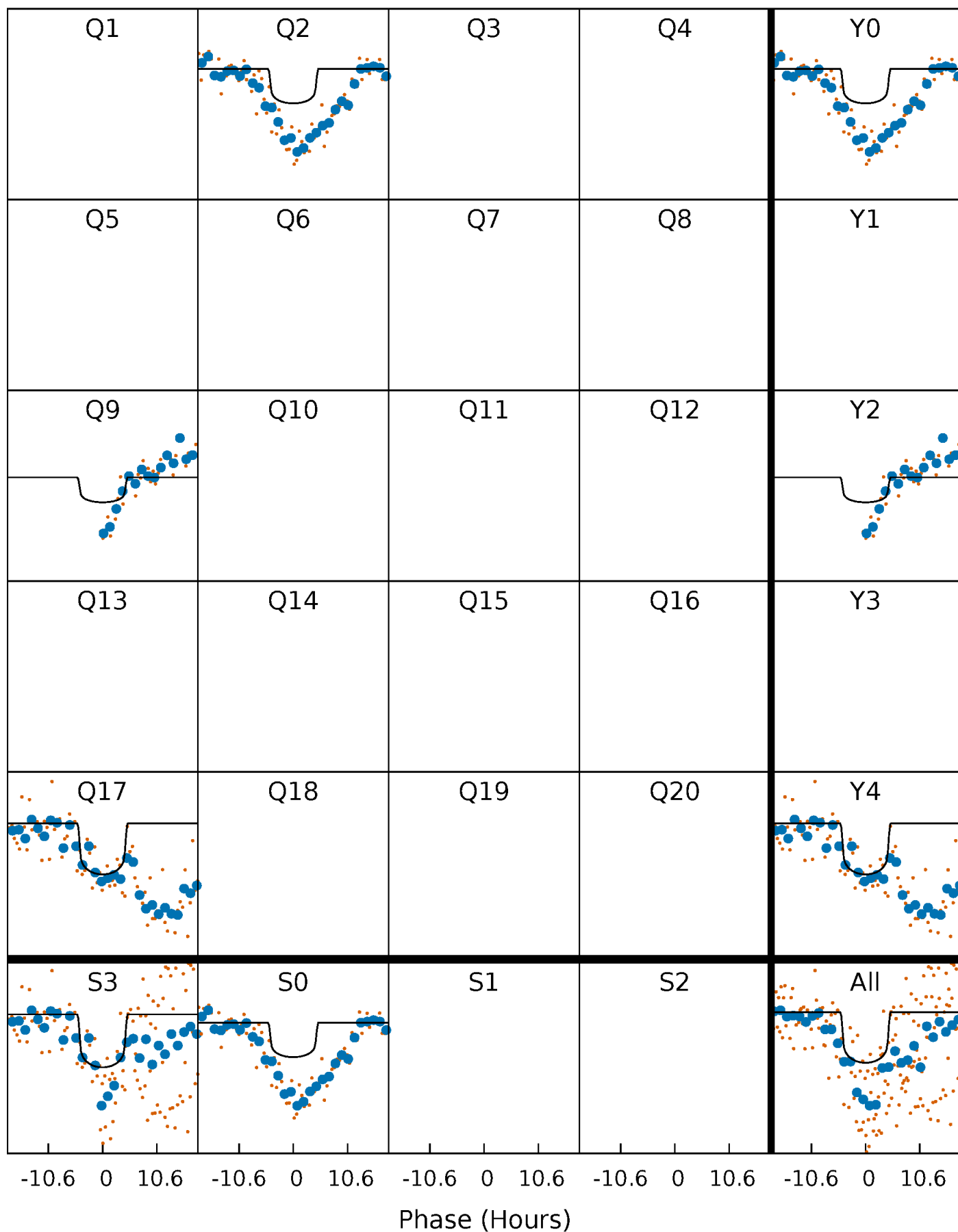
PDC Quarter-Phased Transit Curves

TCE 005561188-01 P=689.064652 Days $T_0=198.528887$ (BKJD)



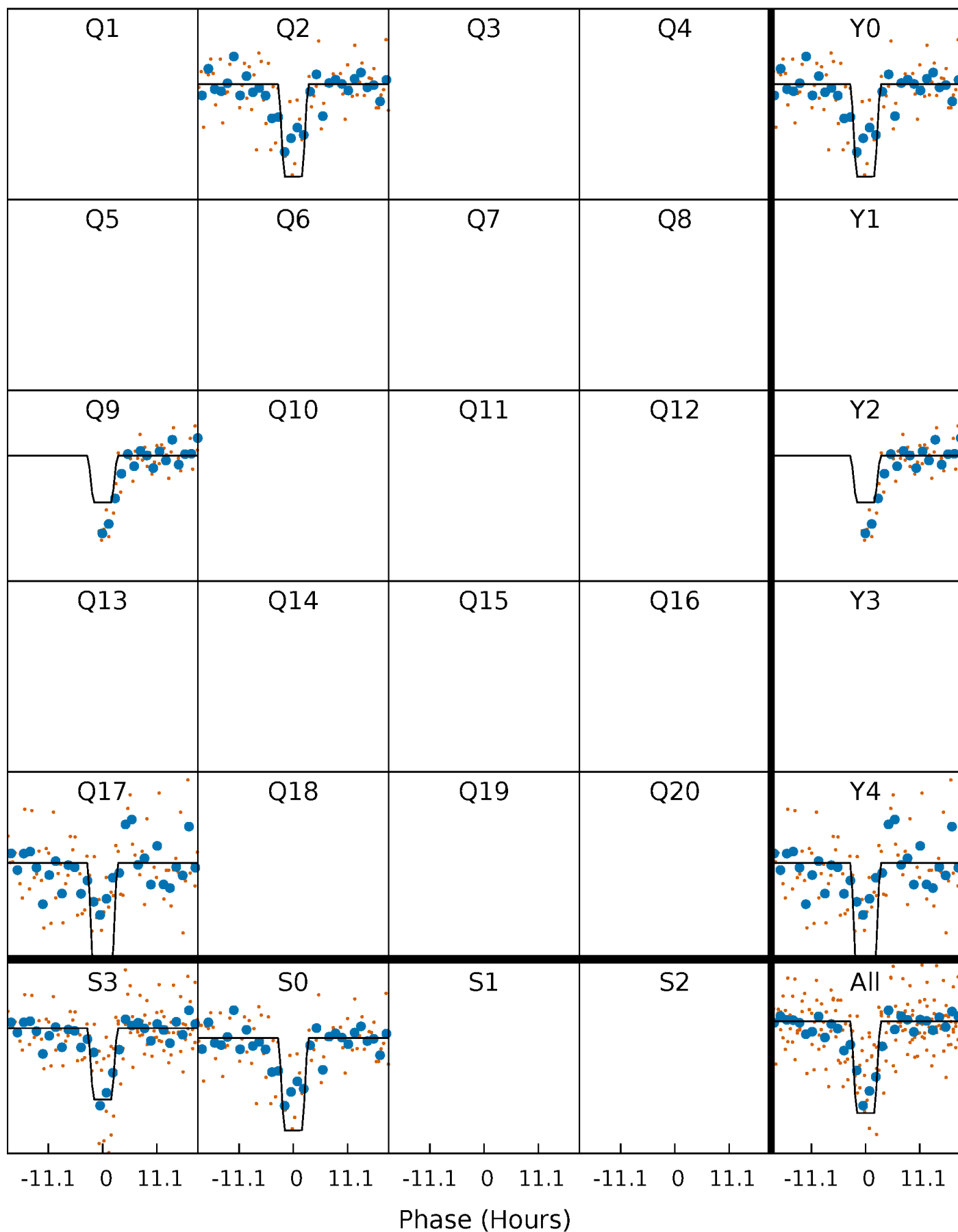
DV Quarter-Phased Transit Curves

TCE 005561188-01 P=689.064652 Days $T_0=198.528887$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

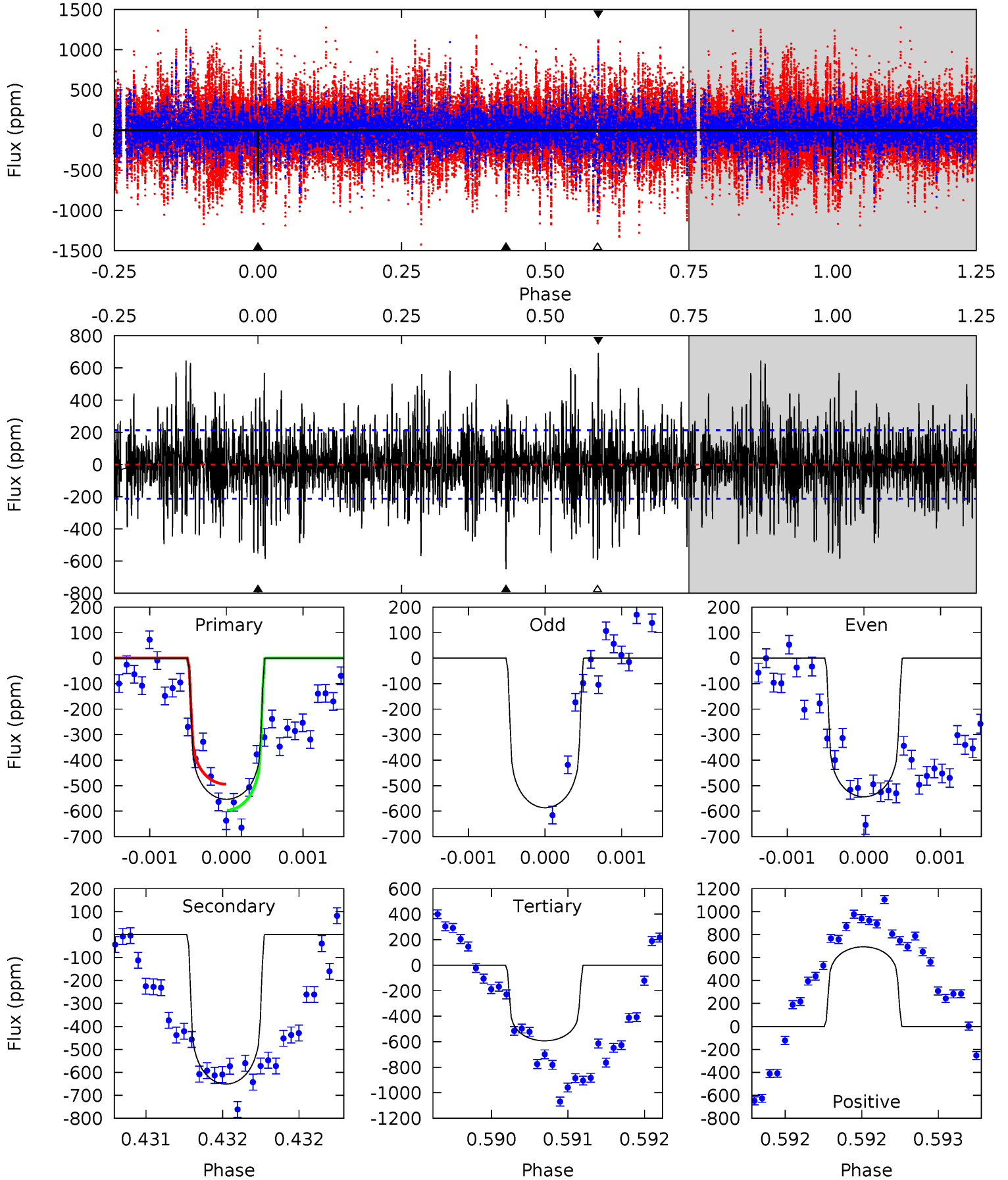
TCE 005561188-01 P=689.060510 Days $T_0=198.544327$ (BKJD)



DV Model-Shift Uniqueness Test

005561188-01, P = 689.064652 Days, E = 198.528887 Days

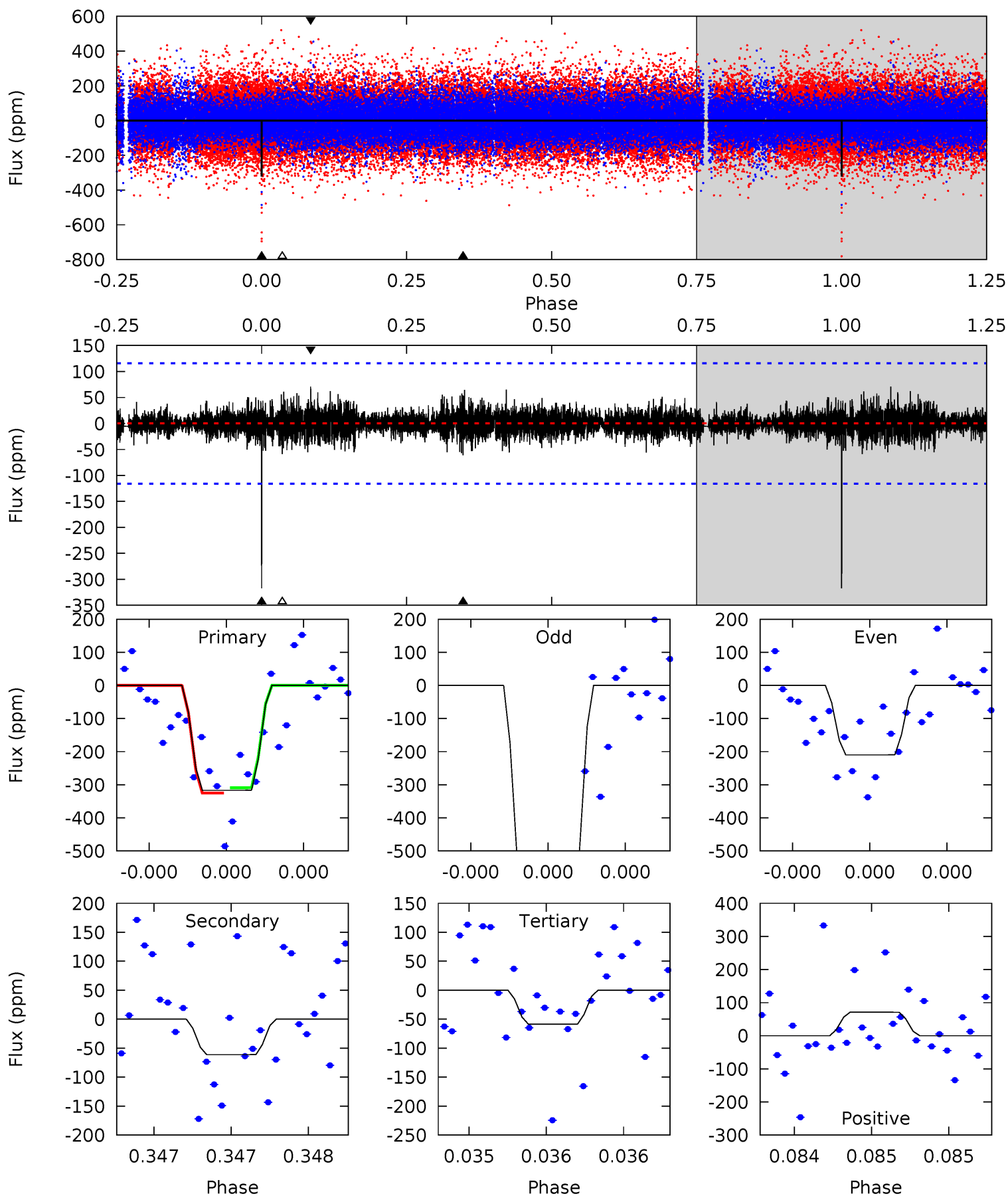
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.4	16.9	15.4	18.0	5.55	3.44	4.32	-1.03	-3.64	1.51	-1.10	0.46	0.95	0.52	1.28



Alt Model-Shift Uniqueness Test

005561188-01, P = 689.060510 Days, E = 198.544327 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.4	2.98	2.85	3.45	5.65	3.59	0.69	12.6	12.0	0.13	-0.47	10.5	1.36	0.18	0.39



Stellar Parameters For KIC 005561188

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6634^{+179}_{-219}	$3.814^{+0.292}_{-0.097}$	$-0.160^{+0.300}_{-0.250}$	$2.568^{+0.480}_{-0.892}$	$1.566^{+0.196}_{-0.364}$	$0.130^{+0.274}_{-0.041}$
	+3%/-3%	+8%/-3%	+188%/-156%	+19%/-35%	+13%/-23%	+211%/-32%
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 005561188-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-651 ± 38	$5.36^{+3.33}_{-3.37}$	482^{+31}_{-41}	7564^{+7664}_{-1707}	$39567^{+230690}_{-24938}$
Alt.	-61 ± 21	$5.92^{+3.73}_{-3.46}$	480^{+33}_{-40}	4128^{+1770}_{-640}	2932^{+12906}_{-1910}

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

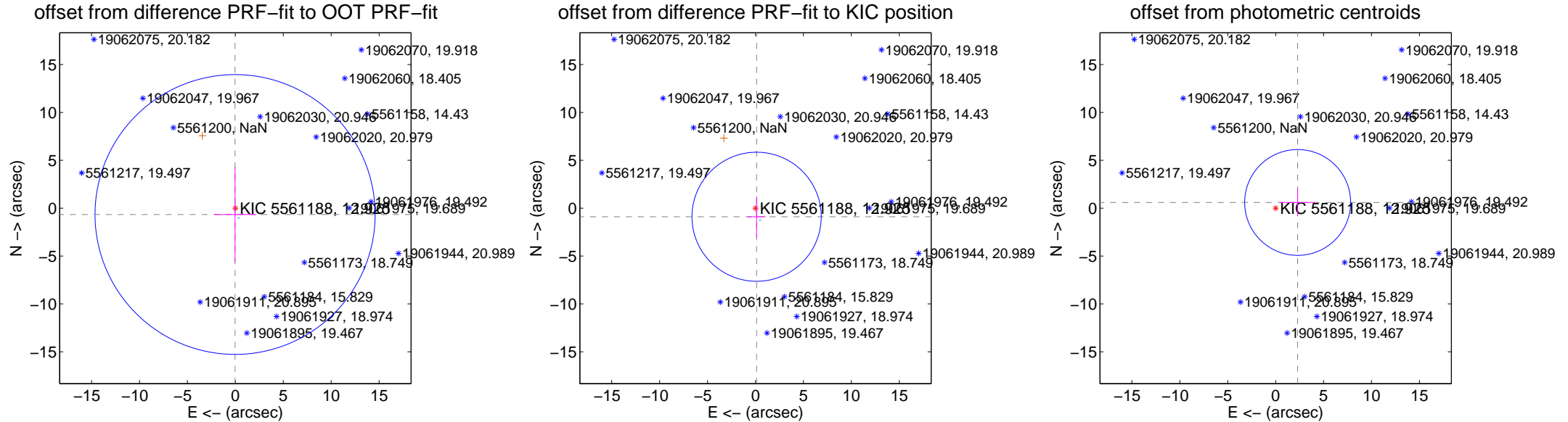
DV Centroid Data

Supplemental centroid analysis for 005561188-01. Kepler magnitude: 12.93. Transit SNR 6.05

There are 1 quarters with good PRF difference image offsets

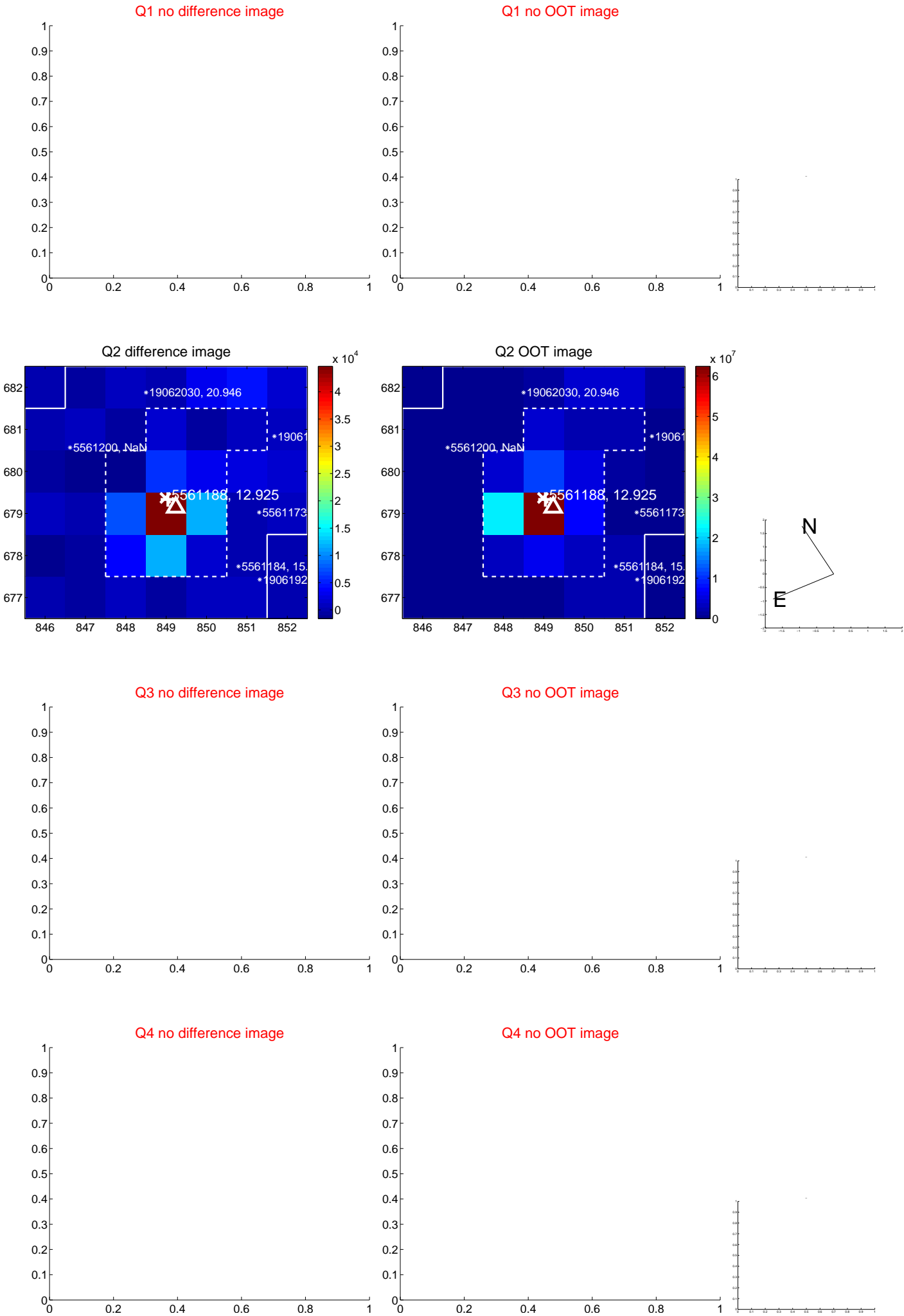
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.662 ± 4.871	0.14	0.026 ± 2.183	-0.661 ± 4.961
PRF-fit source offset from KIC position	0.904 ± 2.247	0.40	-0.116 ± 0.949	-0.896 ± 2.143
photometric centroid source offset	2.37 ± 1.84	1.29	-2.30 ± 1.87	0.60 ± 1.44



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.



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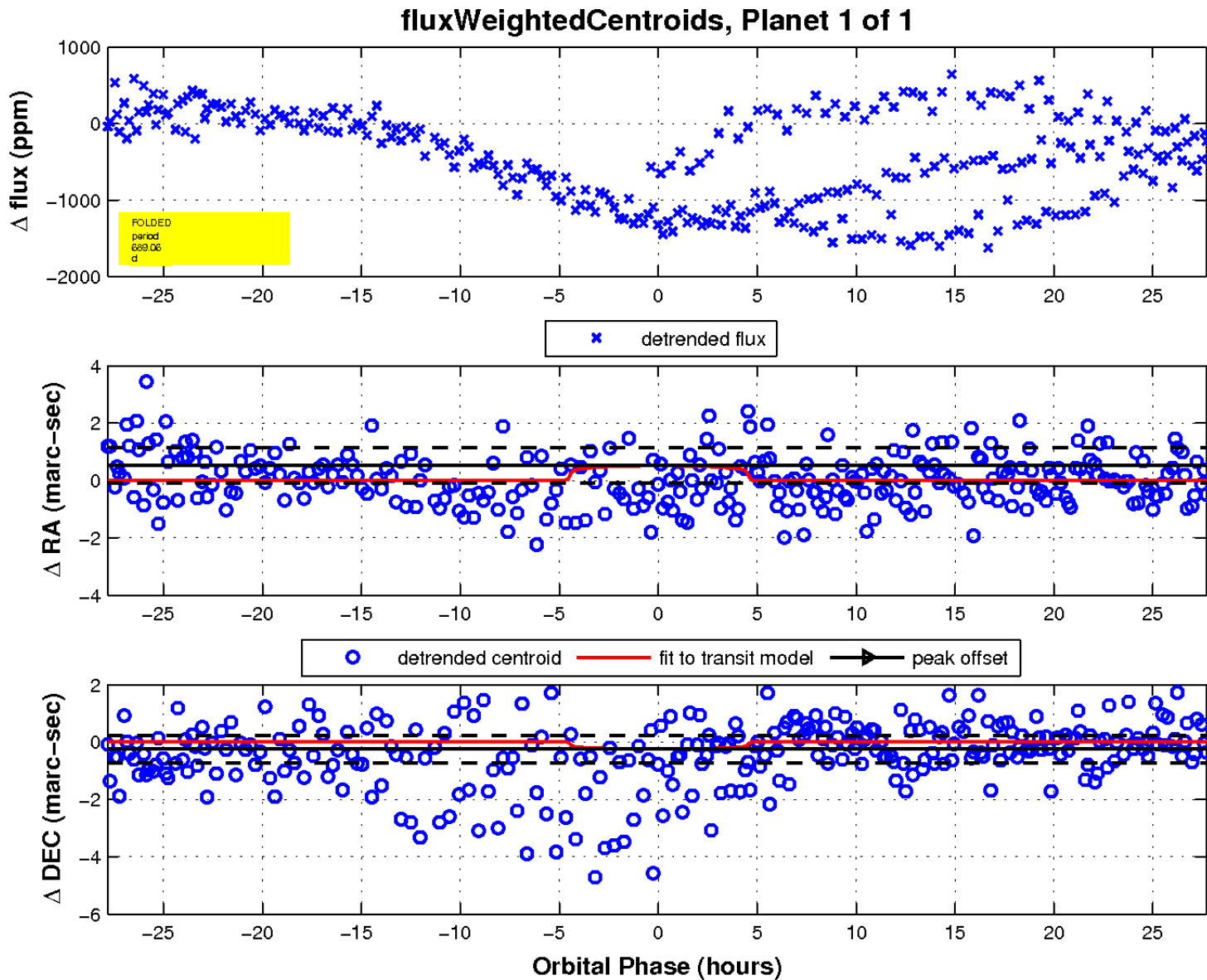
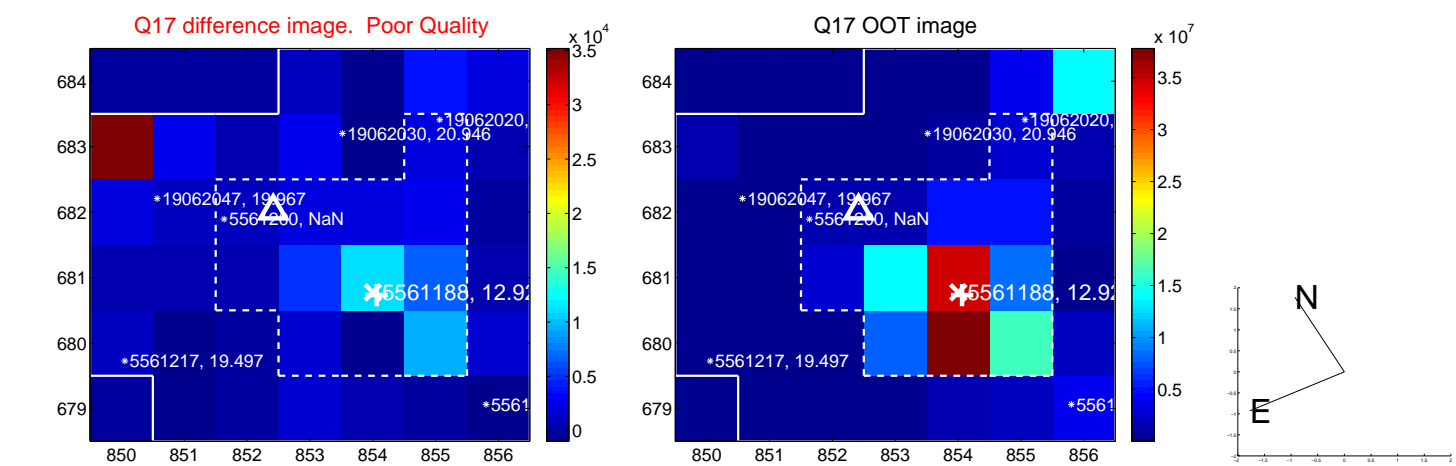
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white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

