

KIC 008197560

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})
008197560-01	OBS	3074.01	1.024245	132.522542	1099.4	2.065	27.3	29.8	0.76	5337	3.07	1208.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008197560-01	OBS	FP	0.00	0	0	1	0	CENT_UNRESOLVED_OFFSET

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.

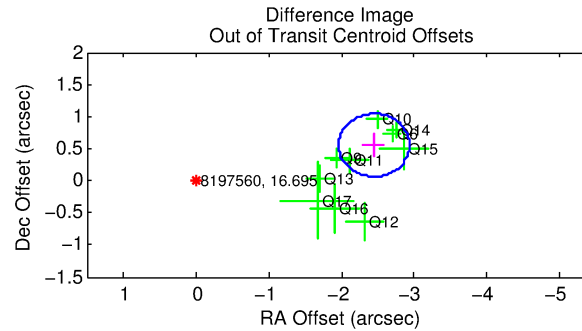
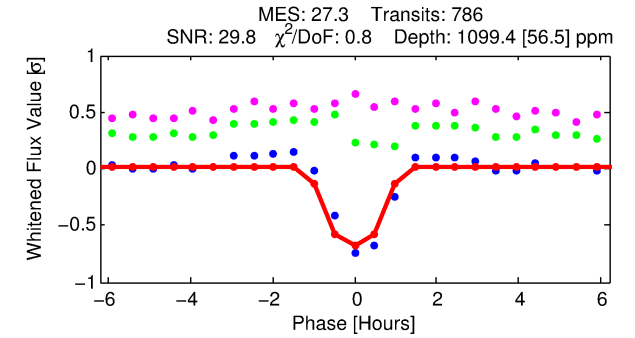
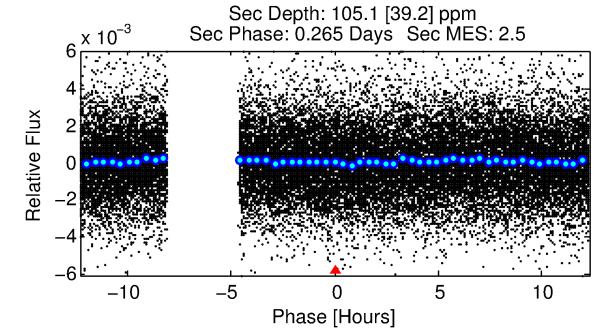
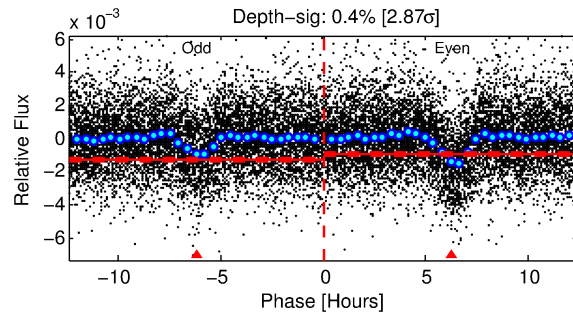
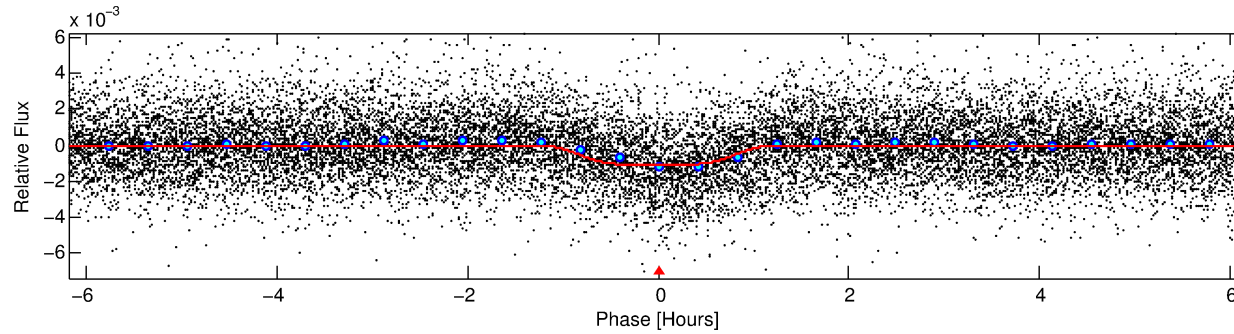
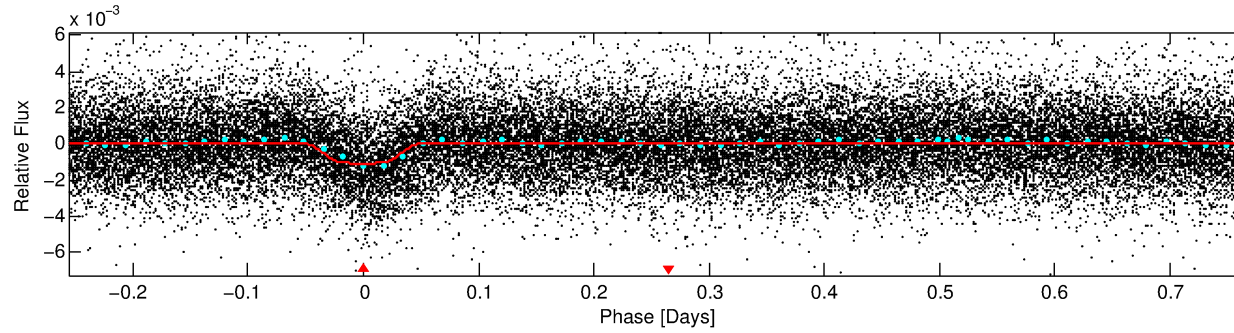
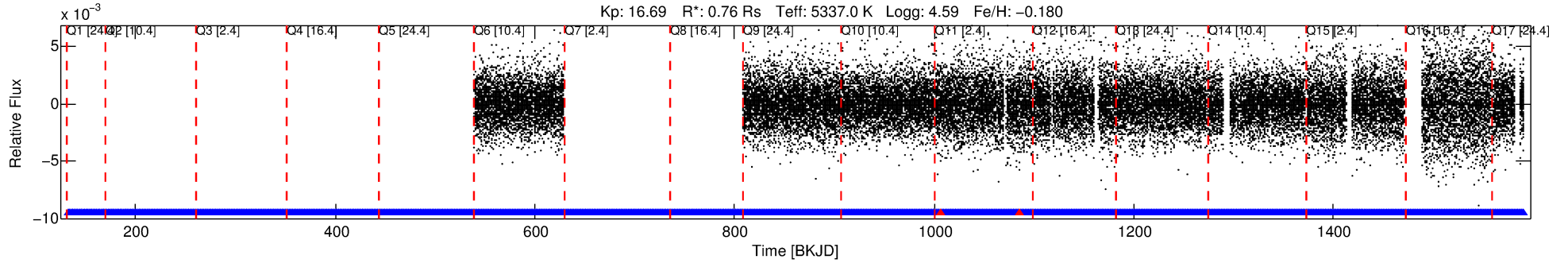
Ephemeris Match Information For 008197560-01

No Significant Match Found

DV One-Page Summary

KIC: 8197560 Candidate: 1 of 1 Period: 1.024 d

KOI: K03074.01 Corr: 0.896



DV Fit Results:

Period = 1.02424 [0.00000] d
Epoch = 132.5225 [0.0009] BKJD
Rp/R* = 0.0368 [0.0037]
a/R* = 2.15 [0.65]
b = 0.90 [0.08]
Seff = 1208.58 [306.59]
Teq = 1503 [95] K
Rp = 3.07 [0.65] Re
a = 0.0187 [0.0028] AU
Ag = 2.15 [1.02] [1.13 σ]
Teffp = 2816 [314] K [4.00 σ]

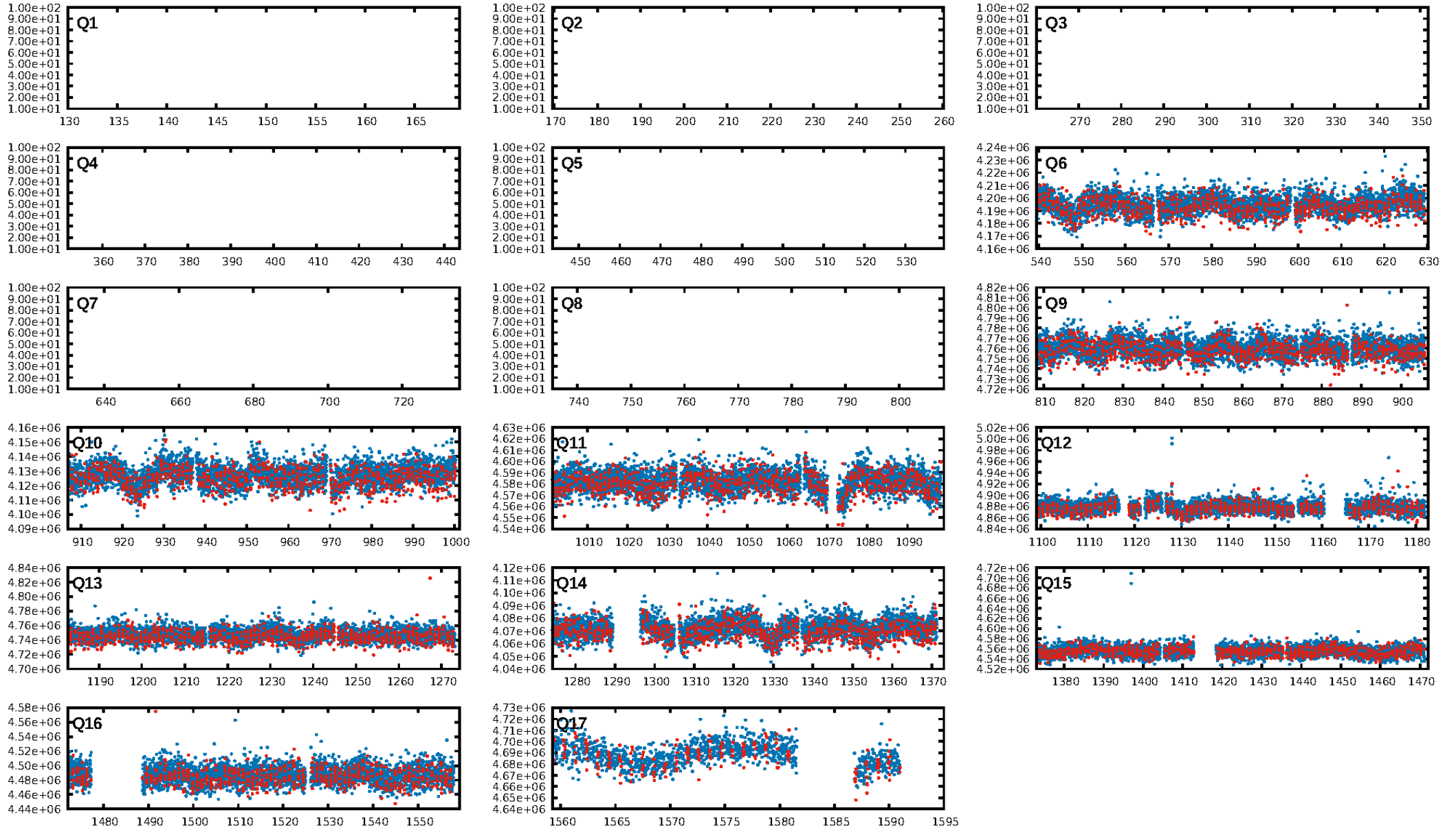
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.68e-158
RollingBand-fgt: 1.00 [757/759]
GhostDiagnostic-chr: 1.482
Centroid-sig: 0.0%
Centroid-so: 0.984 arcsec [2.66 σ]
OotOffset-rm: 2.509 arcsec [15.40 σ]
KicOffset-rm: 2.216 arcsec [15.20 σ]
OotOffset-st: 3/2/2/3 [10]
KicOffset-st: 3/2/2/3 [10]
DiffImageQuality-fgm: 1.00 [10/10]
DiffImageOverlap-fno: 1.00 [10/10]

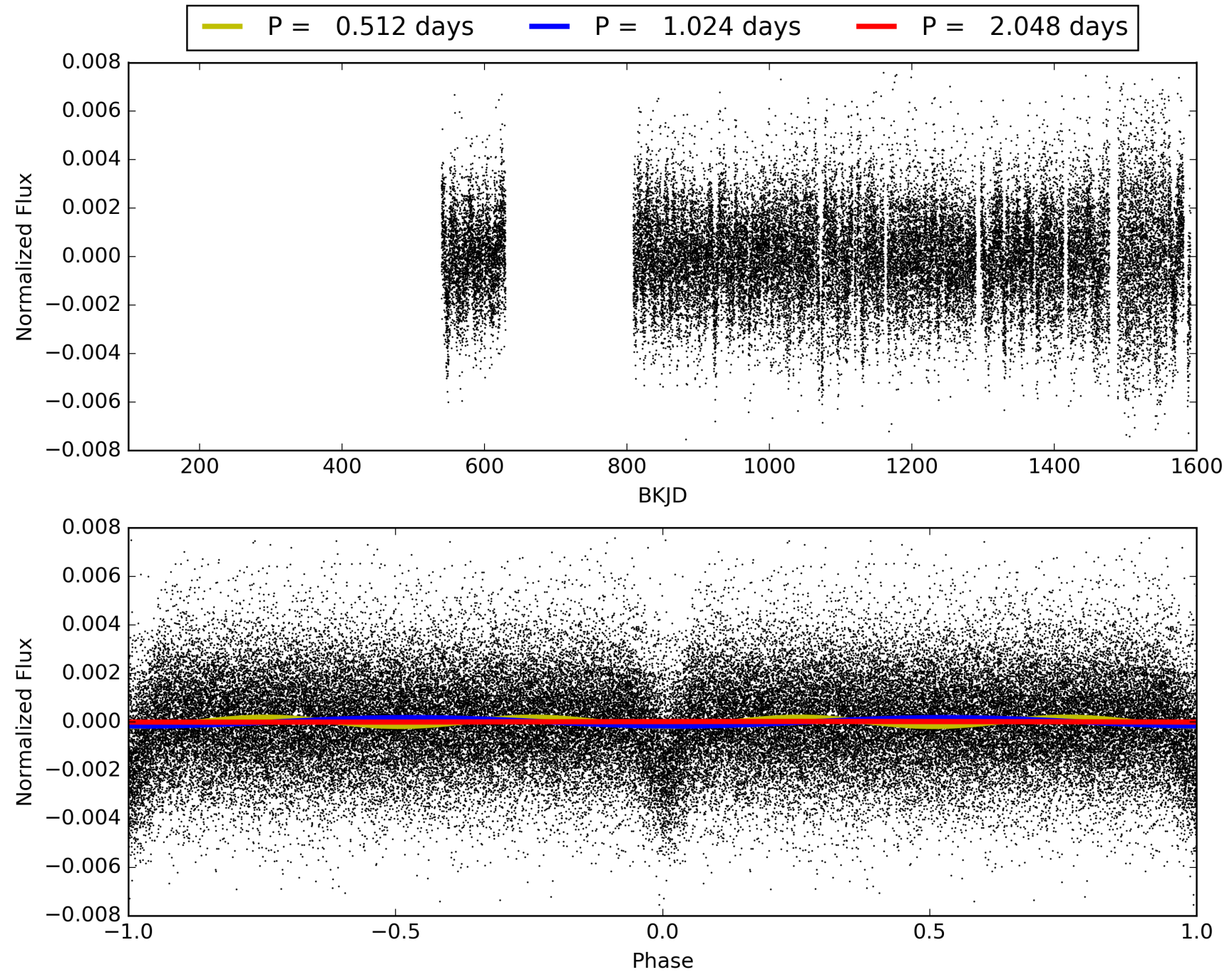
Software Revision: svn-ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:52:31 Z

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

TCE 008197560-01, PDC Light Curves

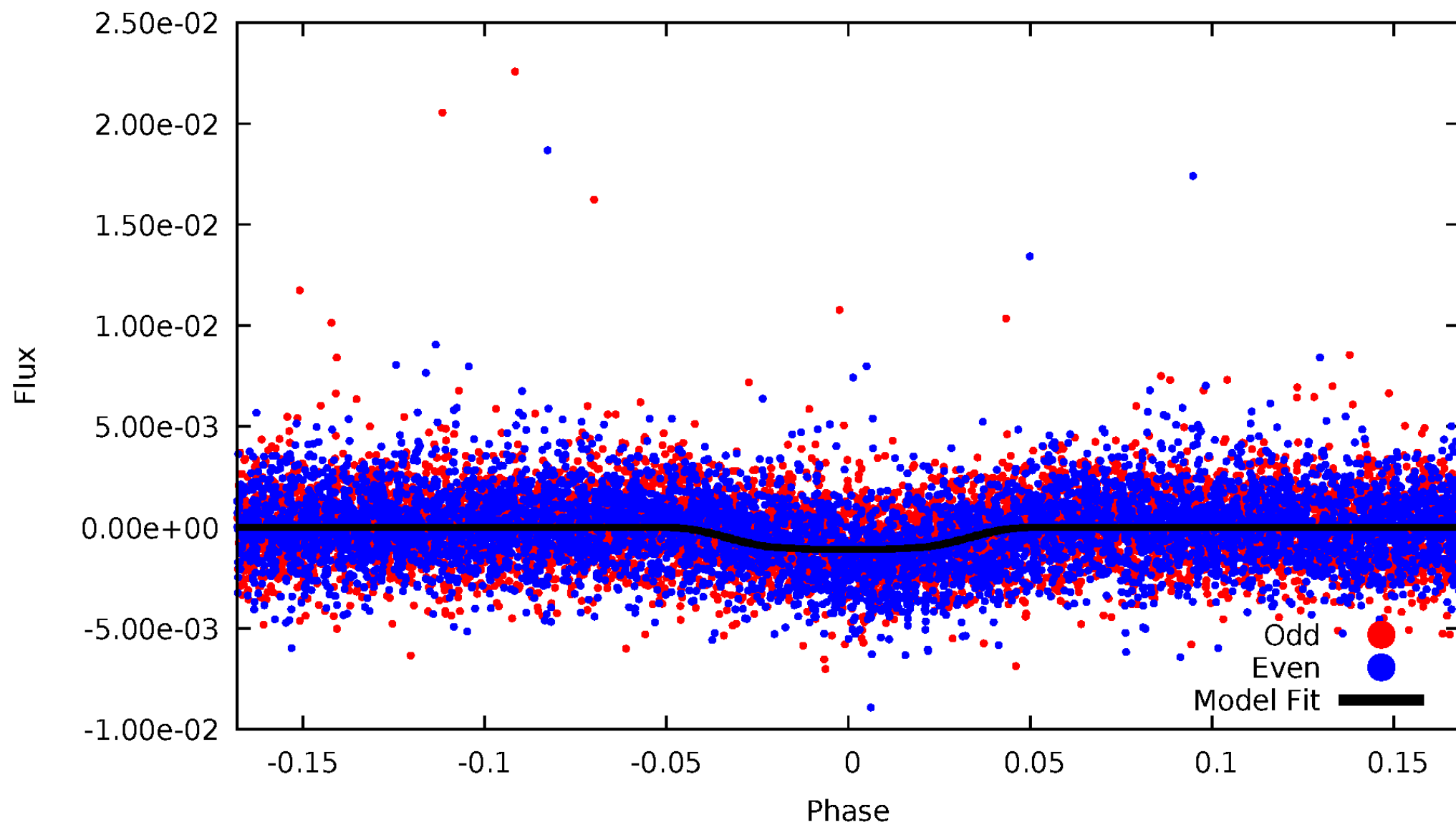


TCE 008197560-01



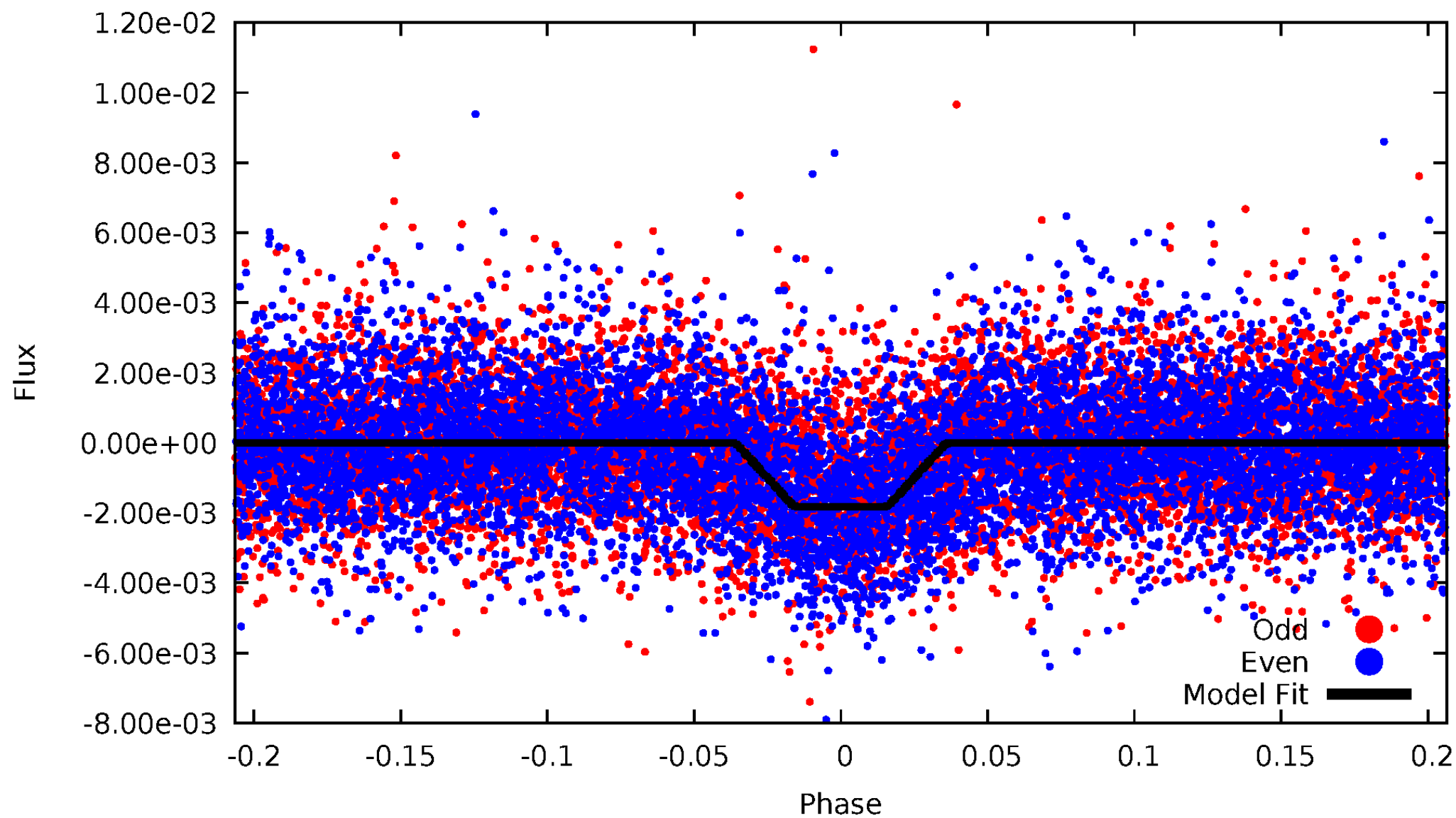
DV Odd/Even

TCE 008197560-01

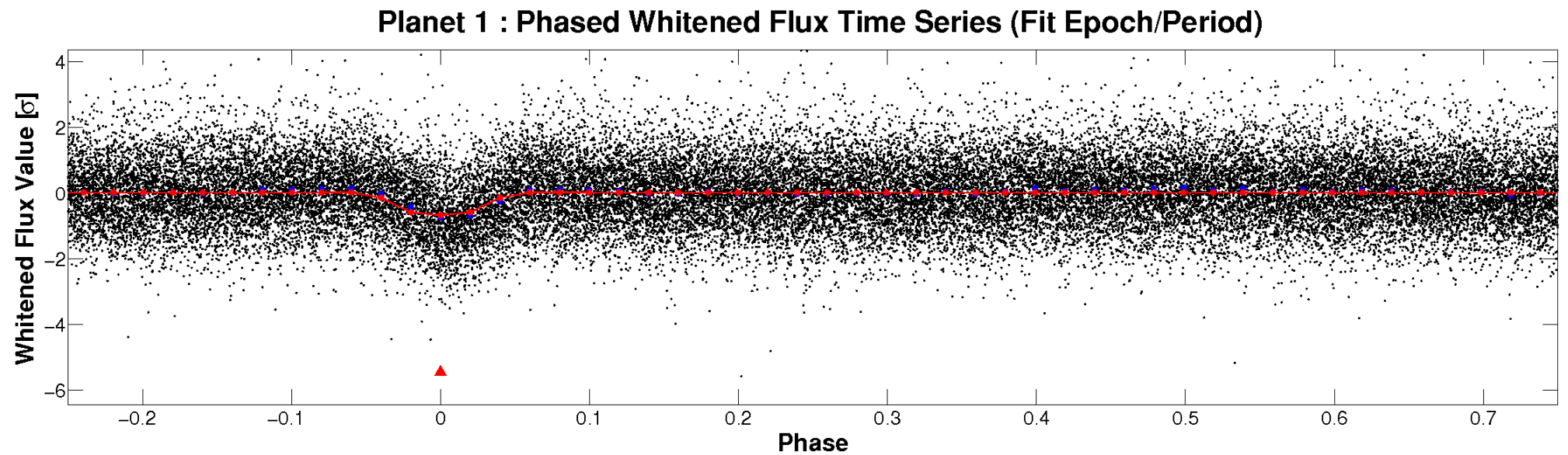
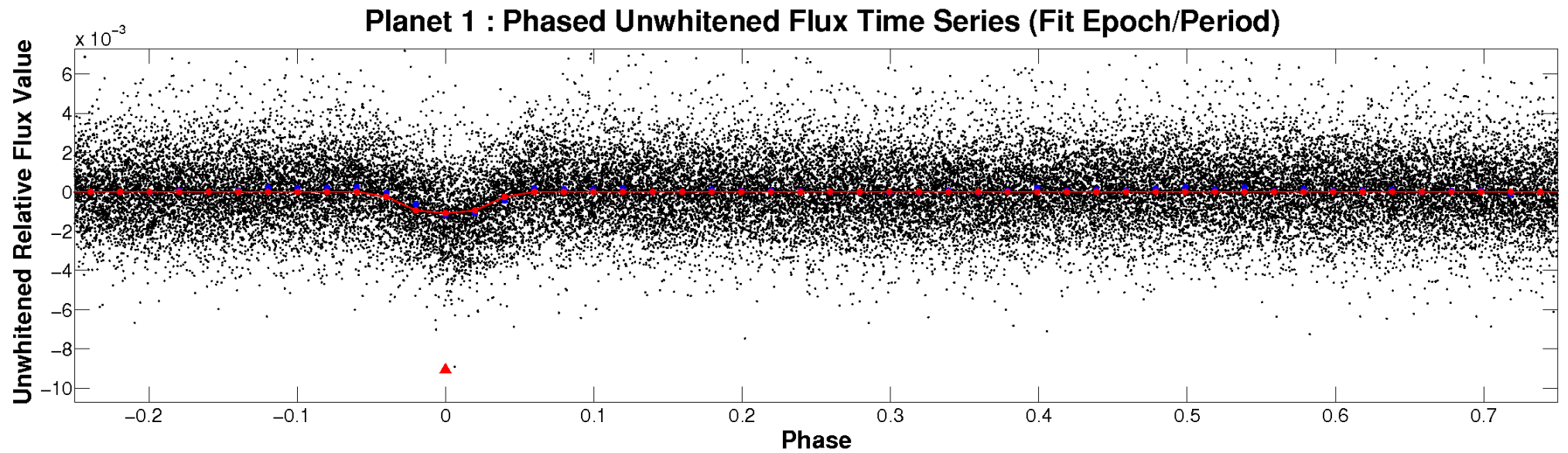


ALT Odd/Even

TCE 008197560-01

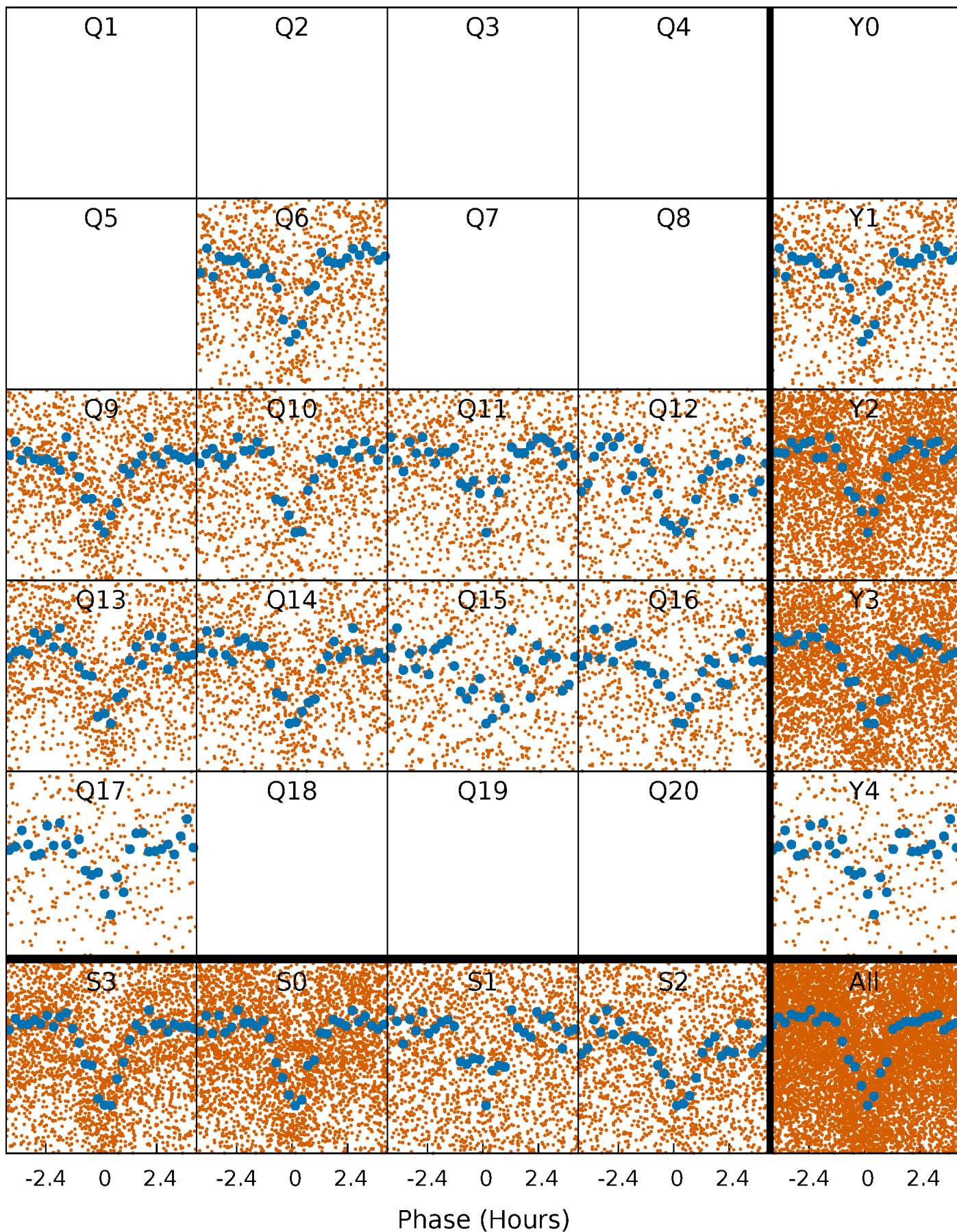


Non-Whitened Vs. Whitened Light Curve



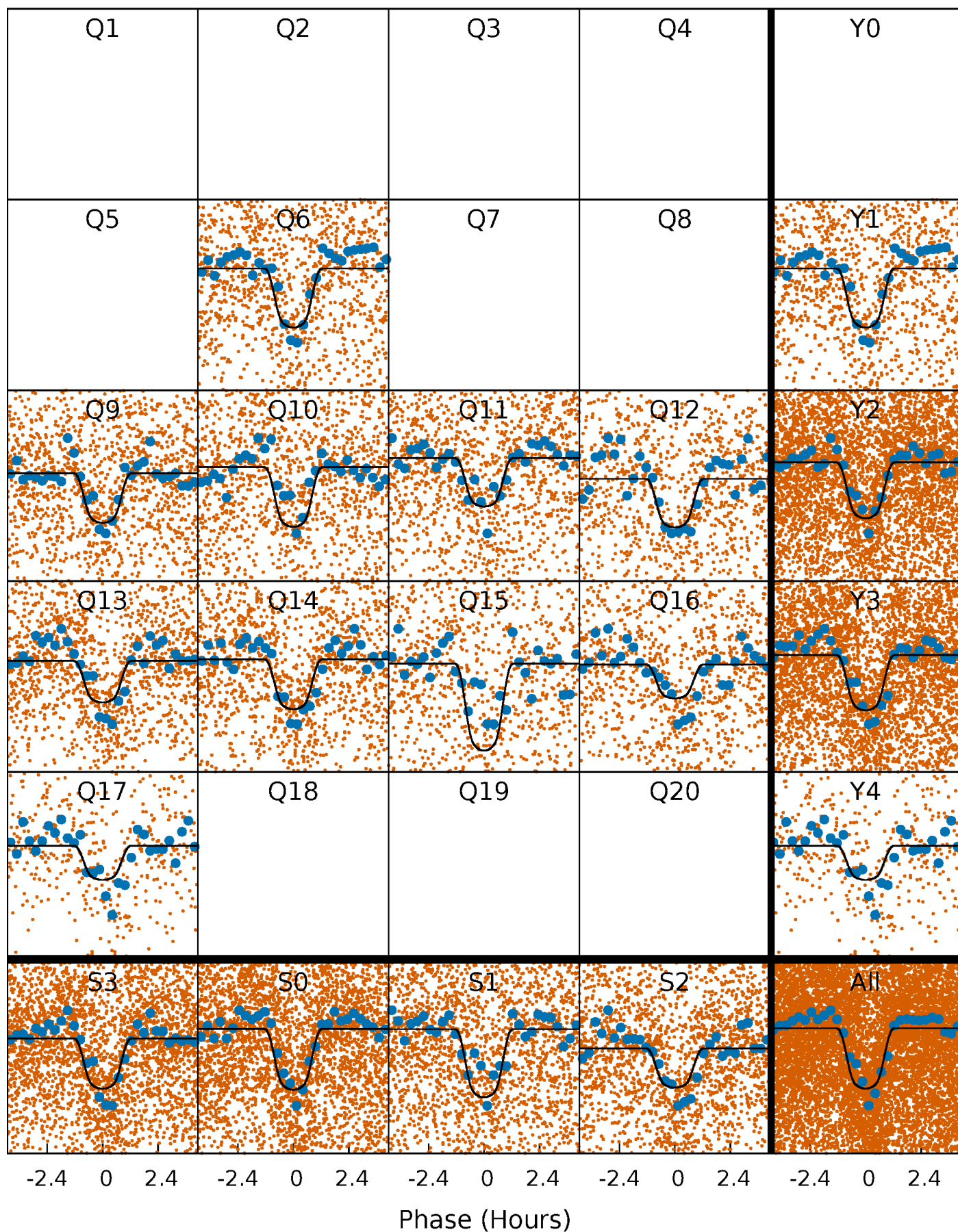
PDC Quarter-Phased Transit Curves

TCE 008197560-01 P= 1.024245 Days $T_0=132.522542$ (BKJD)



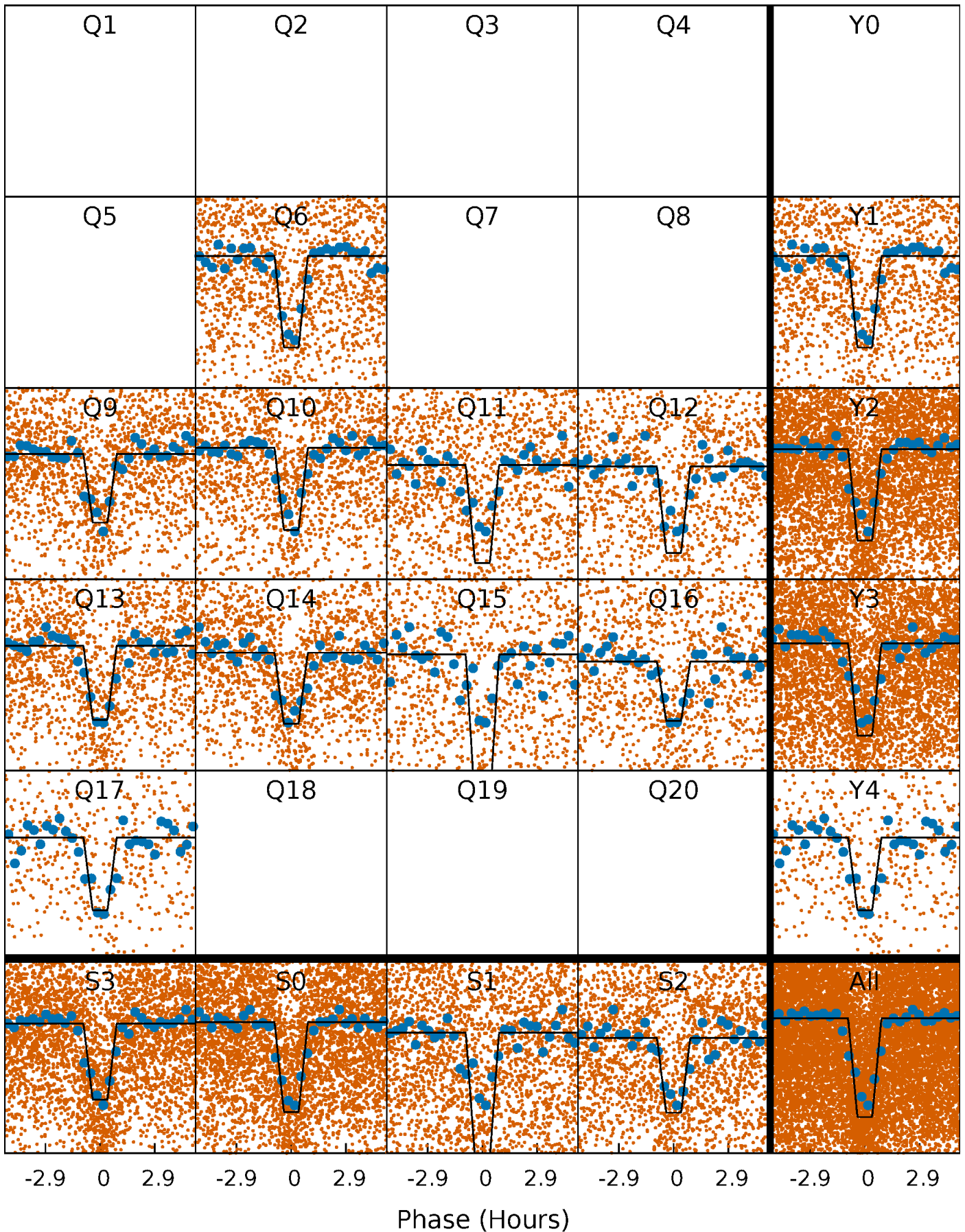
DV Quarter-Phased Transit Curves

TCE 008197560-01 P= 1.024245 Days $T_0=132.522542$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

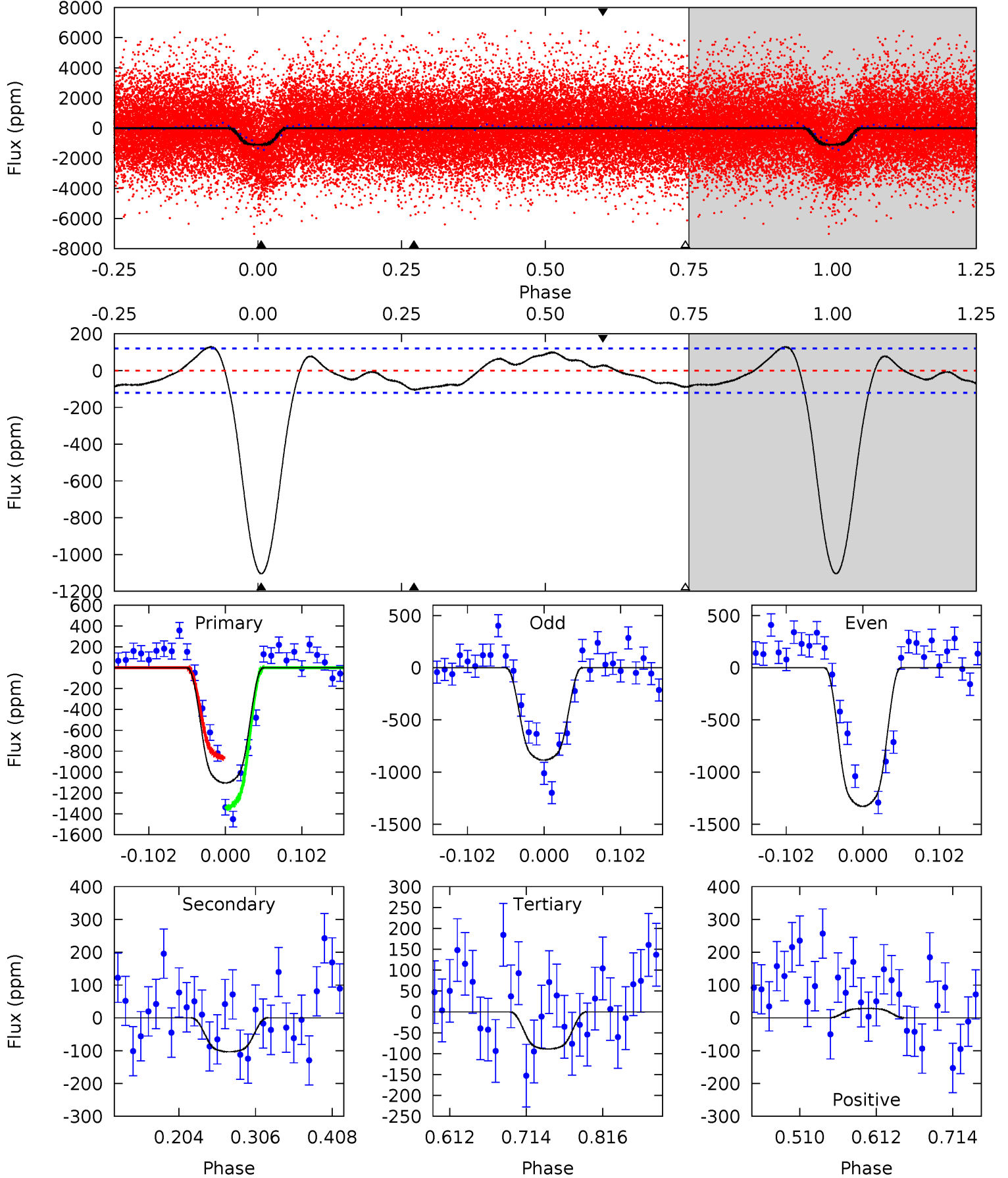
TCE 008197560-01 P= 1.024256 Days $T_0=132.518114$ (BKJD)



DV Model-Shift Uniqueness Test

008197560-01, P = 1.024245 Days, E = 132.522542 Days

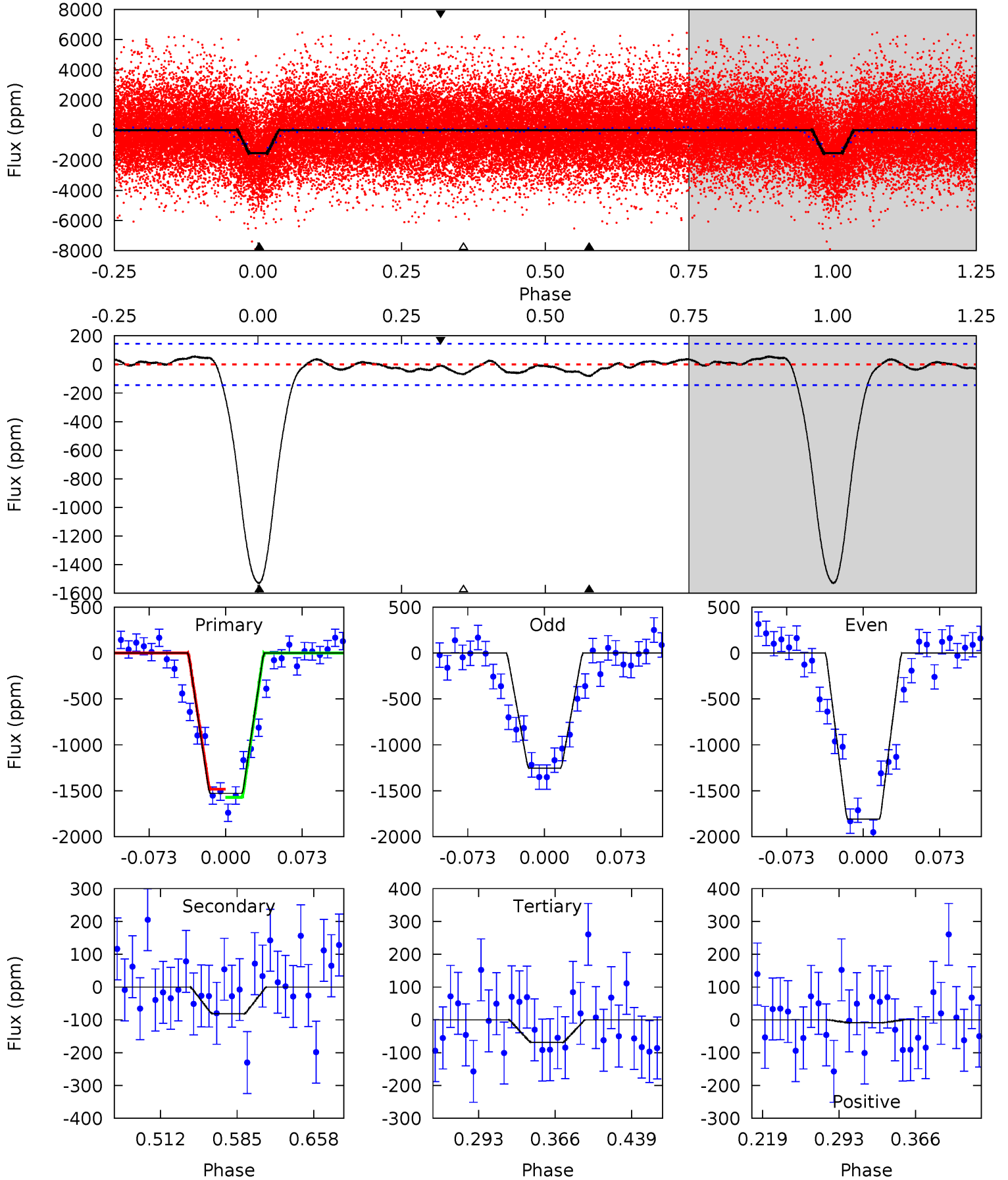
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.9	3.92	3.37	1.09	4.56	1.63	2.11	38.5	40.8	0.55	2.83	8.41	1.01	0.10	9.12



Alt Model-Shift Uniqueness Test

008197560-01, P = 1.024256 Days, E = 132.518114 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
48.9	2.61	2.20	-0.29	4.63	1.79	0.96	46.7	49.2	0.41	2.90	8.90	0.99	0.03	1.40



Stellar Parameters For KIC 008197560

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5337^{+185}_{-185}	$4.594^{+0.037}_{-0.112}$	$-0.180^{+0.300}_{-0.300}$	$0.764^{+0.143}_{-0.061}$	$0.840^{+0.078}_{-0.096}$	$2.654^{+0.505}_{-0.940}$
	+3%/-3%	+1%/-2%	+167%/-167%	+19%/-8%	+9%/-11%	+19%/-35%
Source	KIC0	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 008197560-01 / KOI 3074.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-103 ± 26	$3.14^{+0.40}_{-0.39}$	2135^{+106}_{-97}	3240^{+220}_{-218}	$1.998^{+0.836}_{-0.691}$
Alt.	-82 ± 31	$3.64^{+0.42}_{-0.39}$	2131^{+104}_{-91}	2941^{+216}_{-282}	$1.149^{+0.557}_{-0.464}$

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

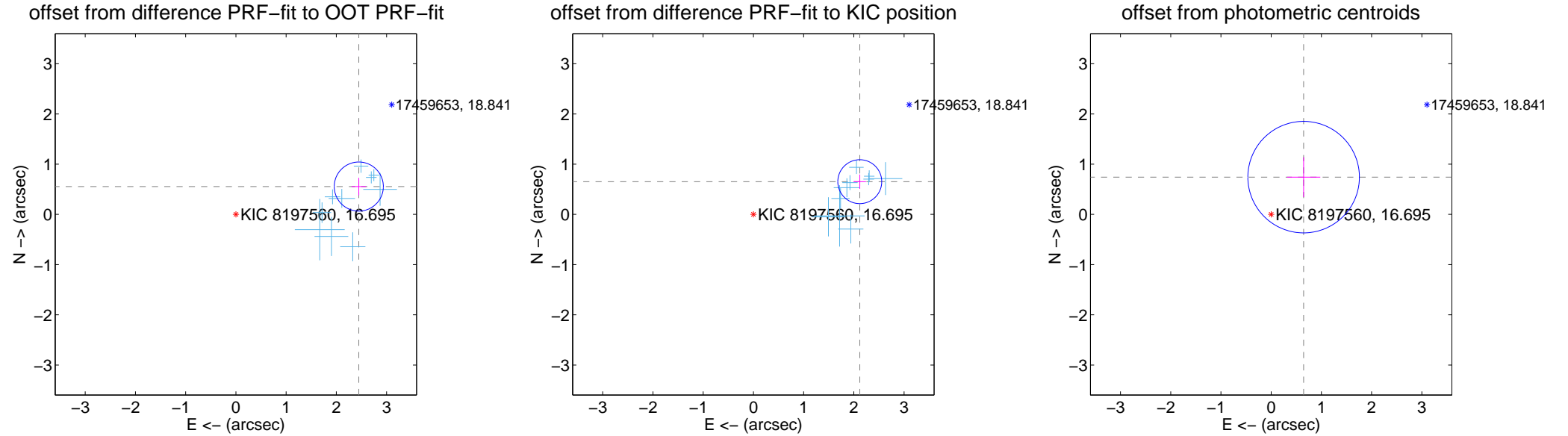
DV Centroid Data

Supplemental centroid analysis for 008197560-01. Kepler magnitude: 16.70. Transit SNR 29.83

There are 10 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.509 ± 0.163	15.40	-2.447 ± 0.144	0.554 ± 0.174
PRF-fit source offset from KIC position	2.216 ± 0.146	15.20	-2.118 ± 0.125	0.652 ± 0.143
photometric centroid source offset	0.98 ± 0.37	2.66	-0.65 ± 0.33	0.74 ± 0.40

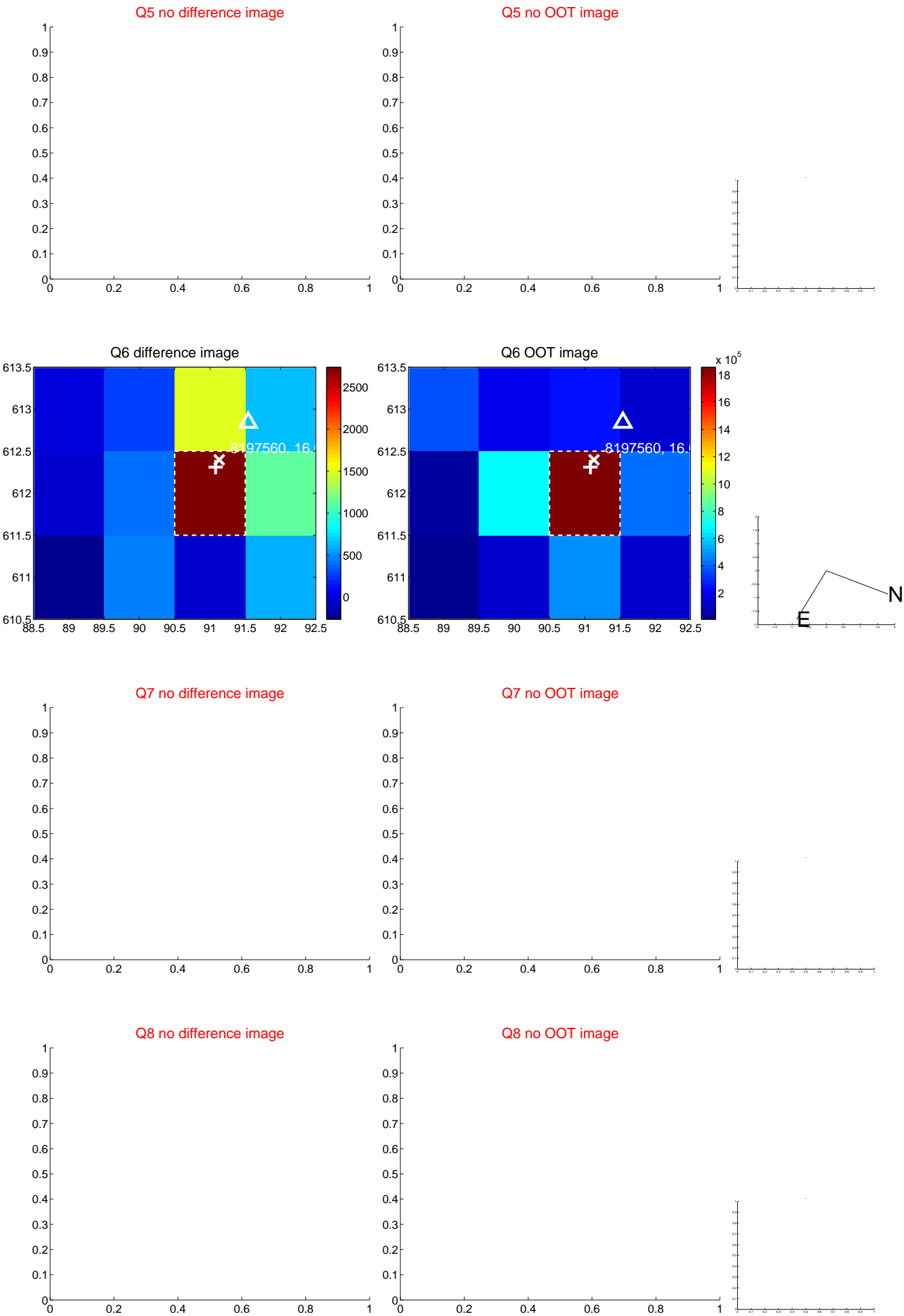


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

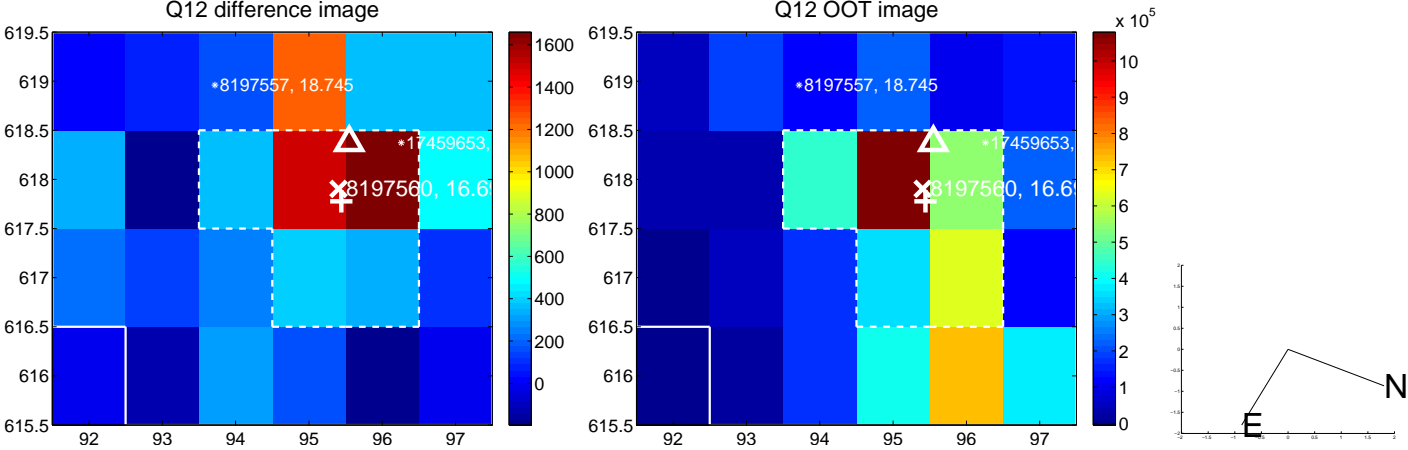
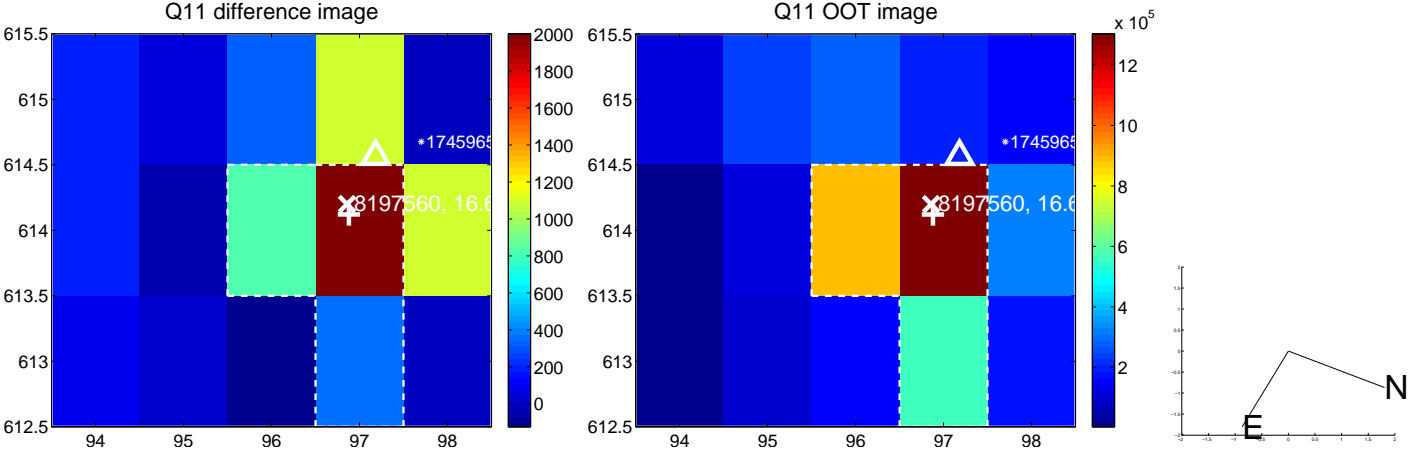
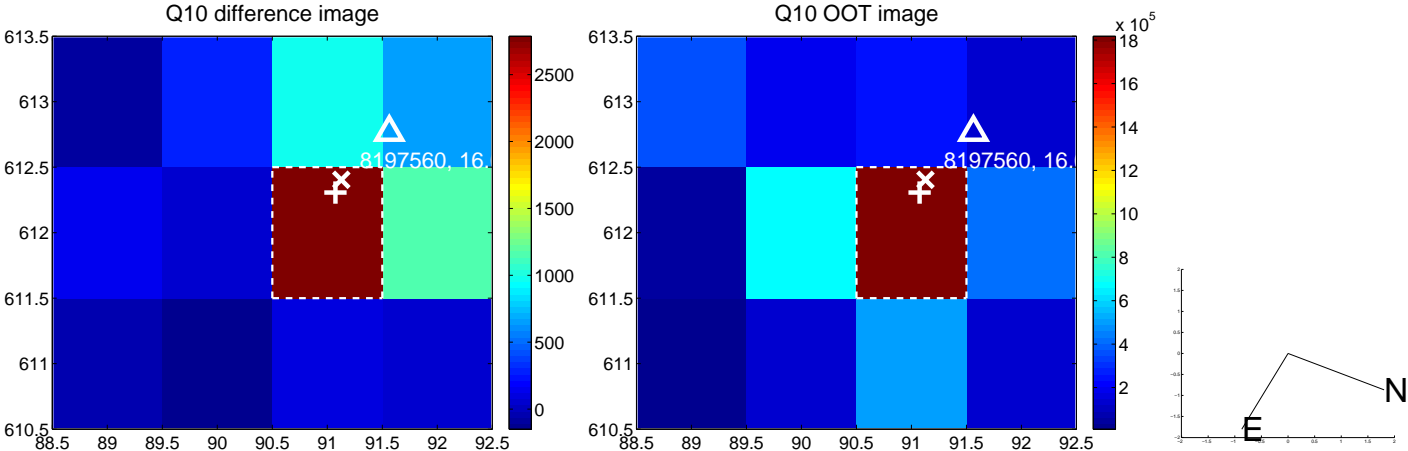
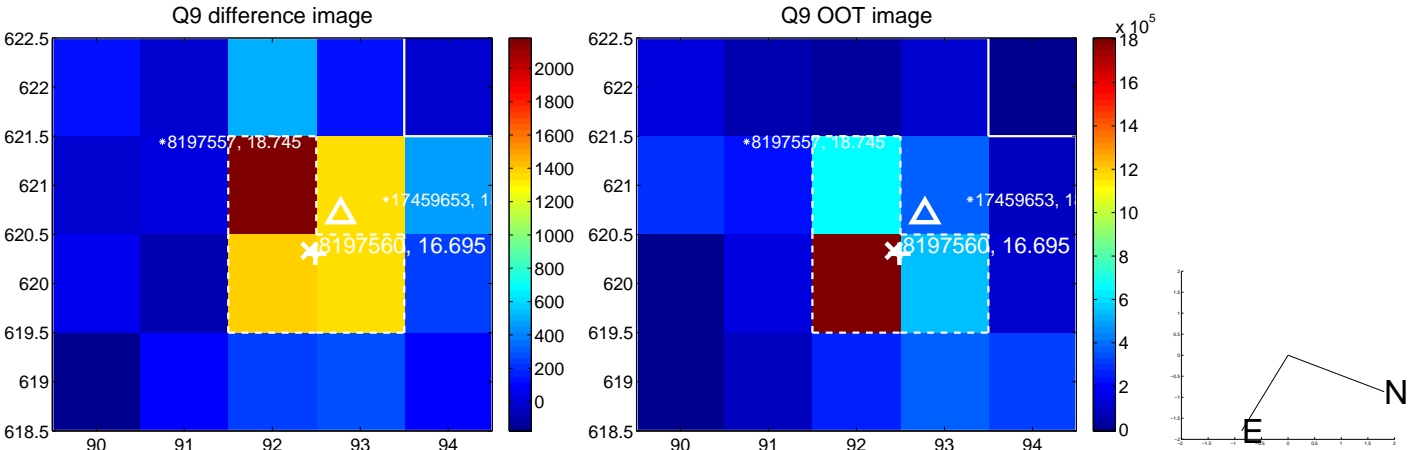
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



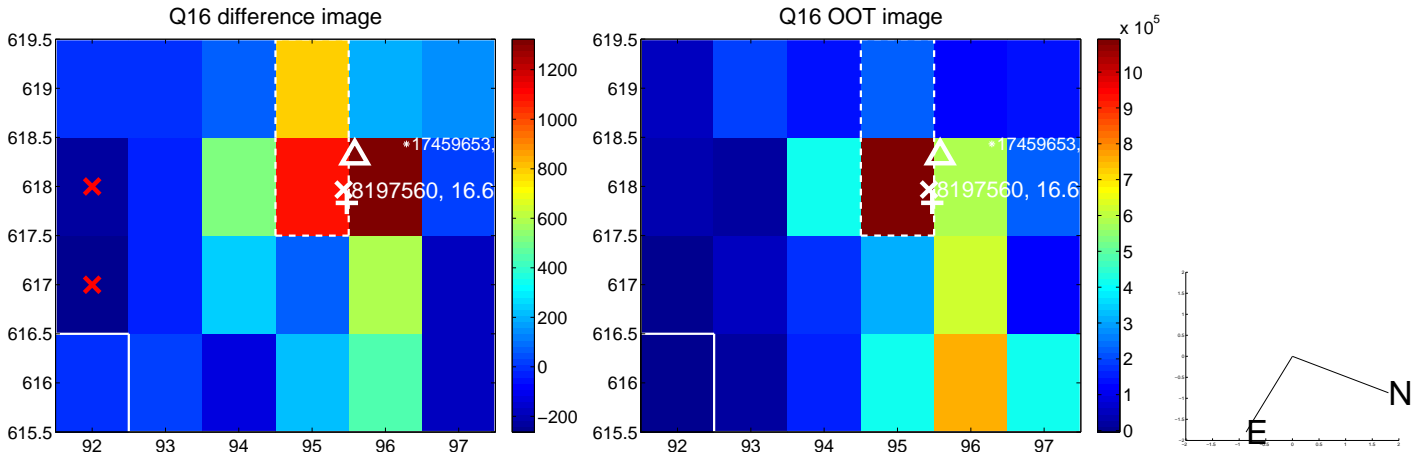
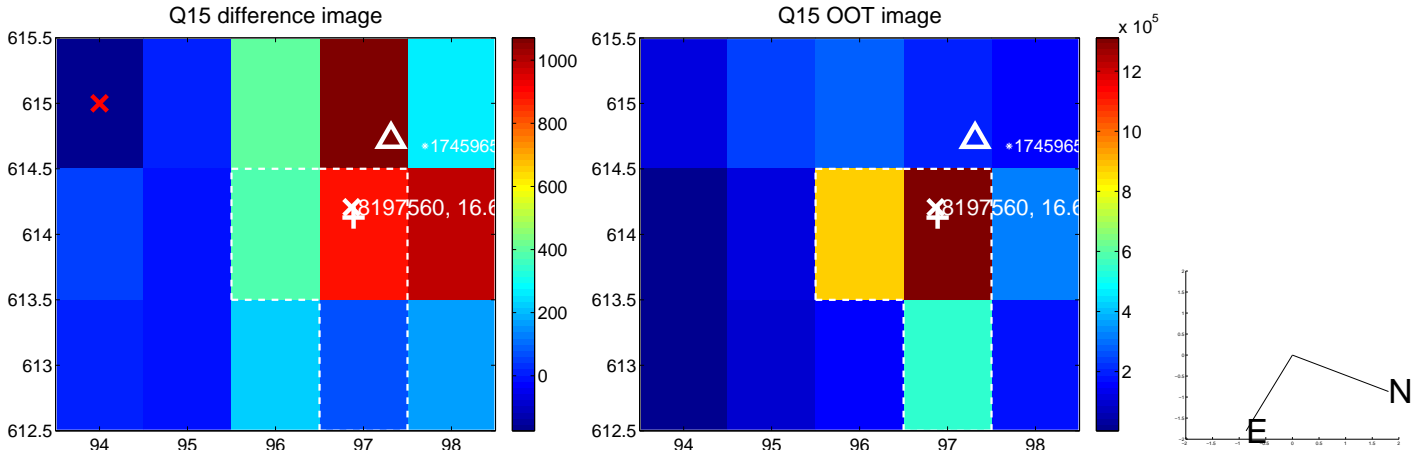
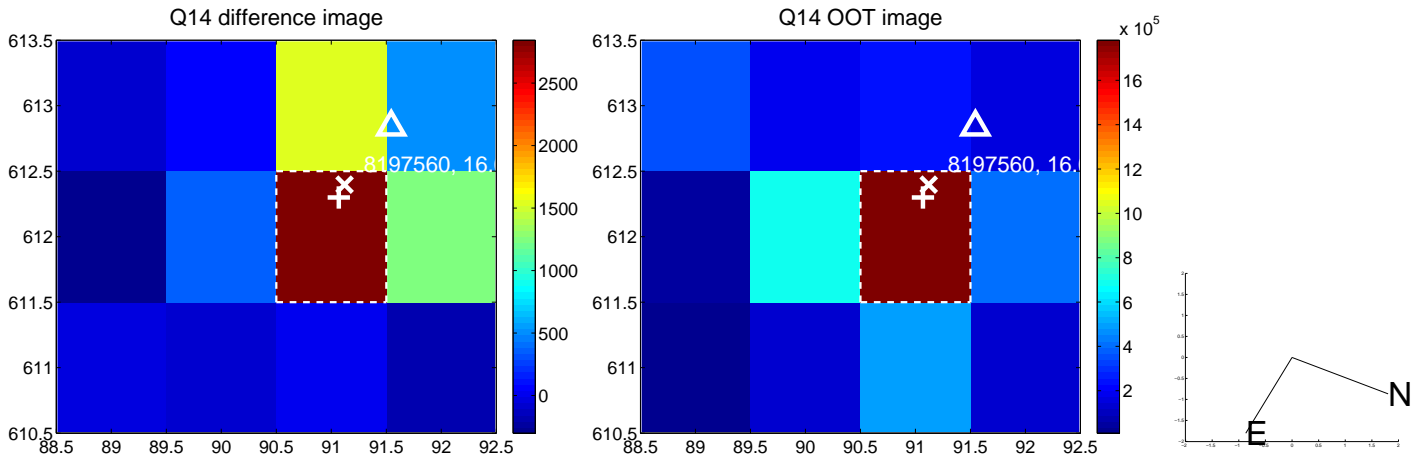
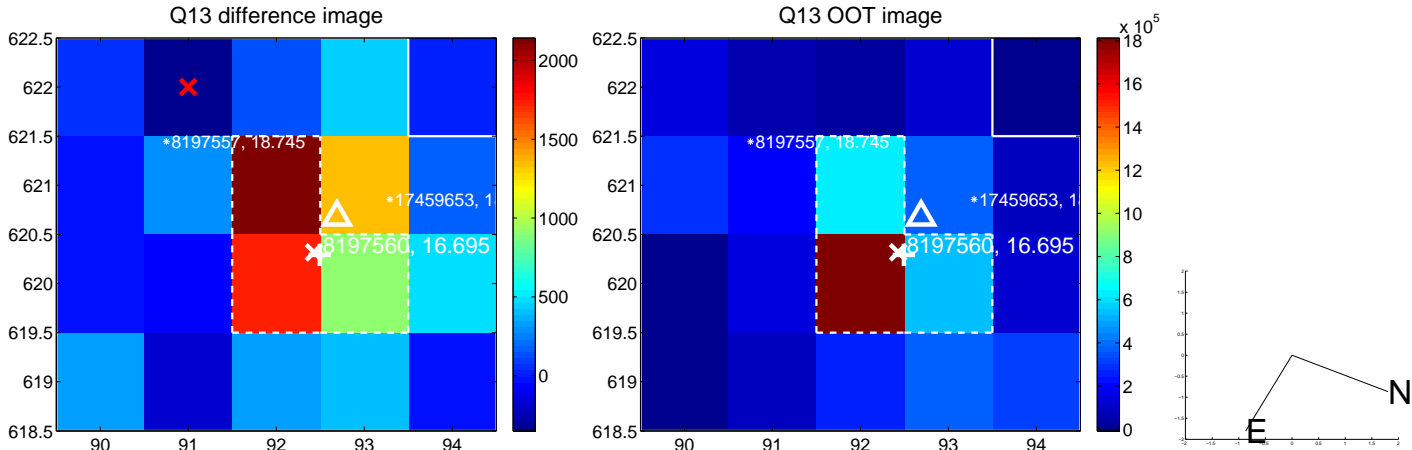
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



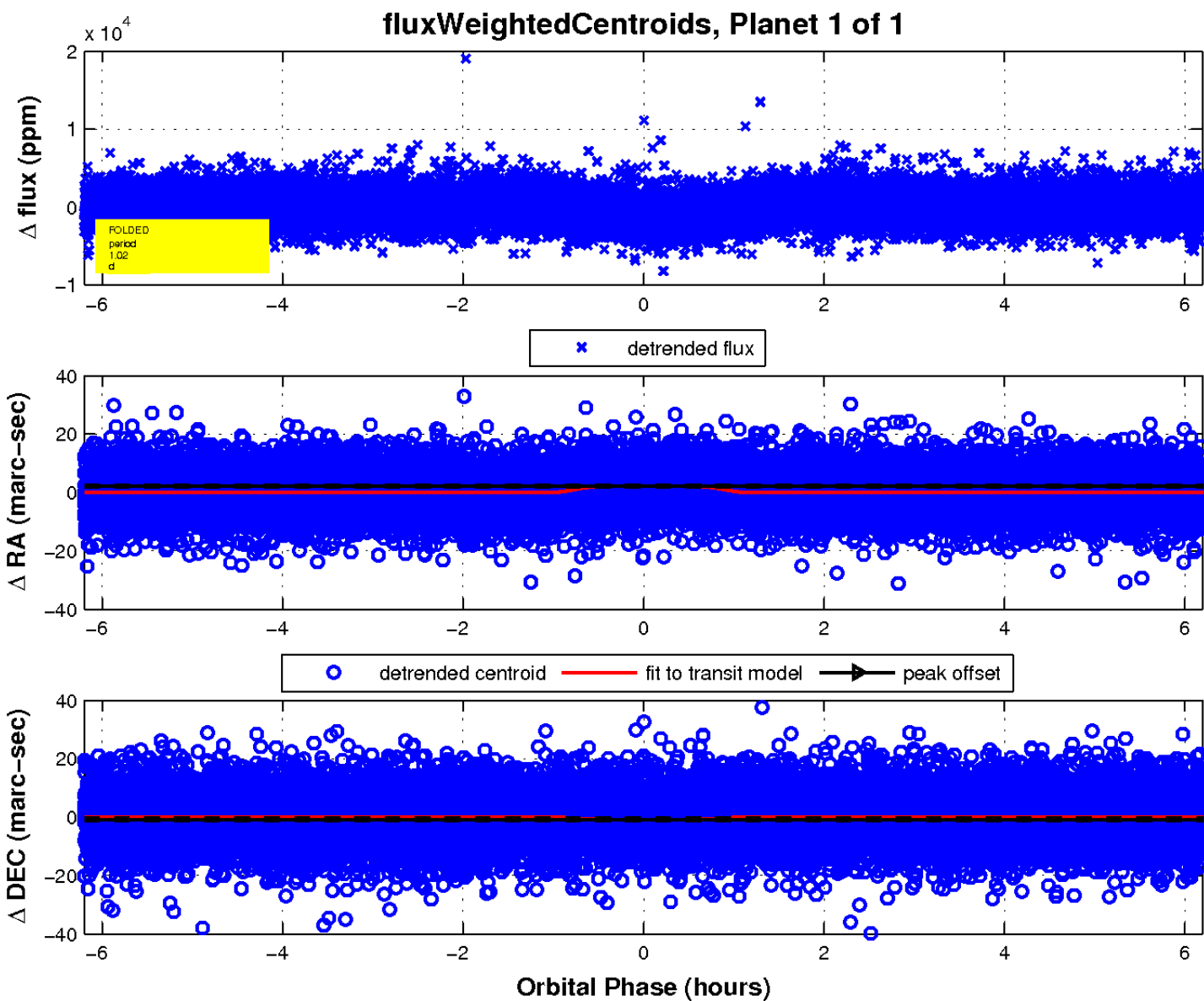
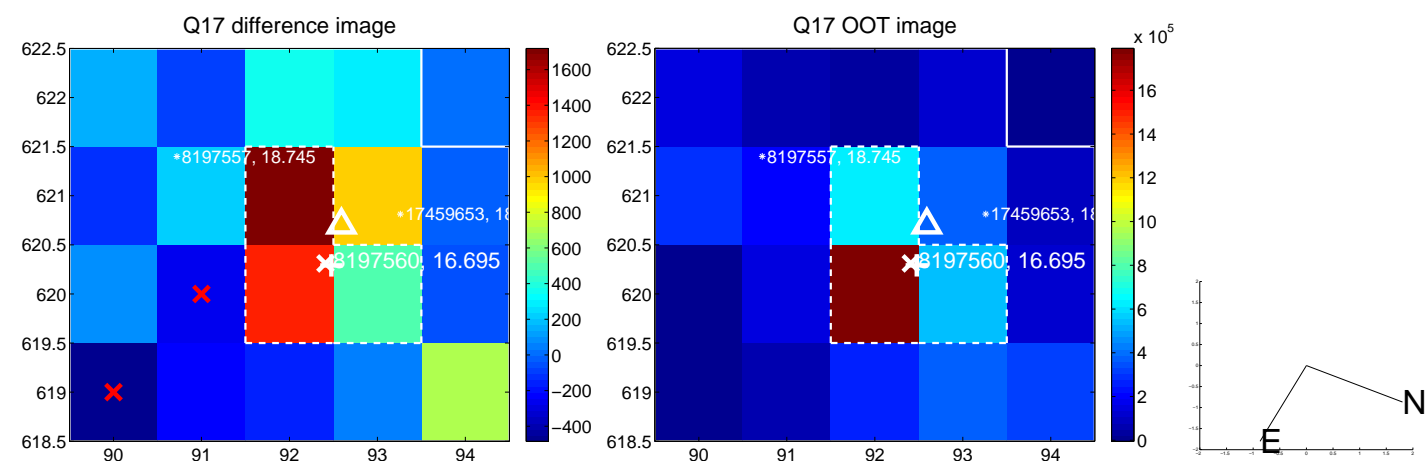
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UKIRT Image

Declination

