

KIC 006350476

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})
006350476-01	OBS	2710.01	1.110591	131.575186	121.2	1.513	21.5	31.0	0.87	5227	1.16	1327.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006350476-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_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 006350476-01

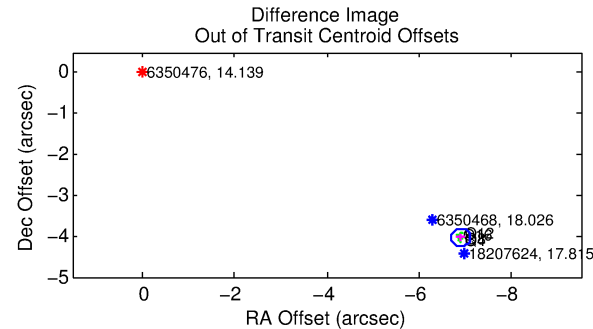
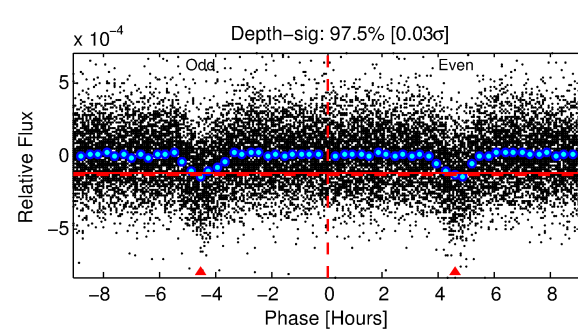
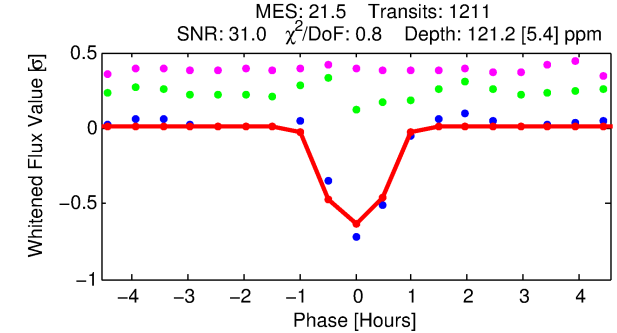
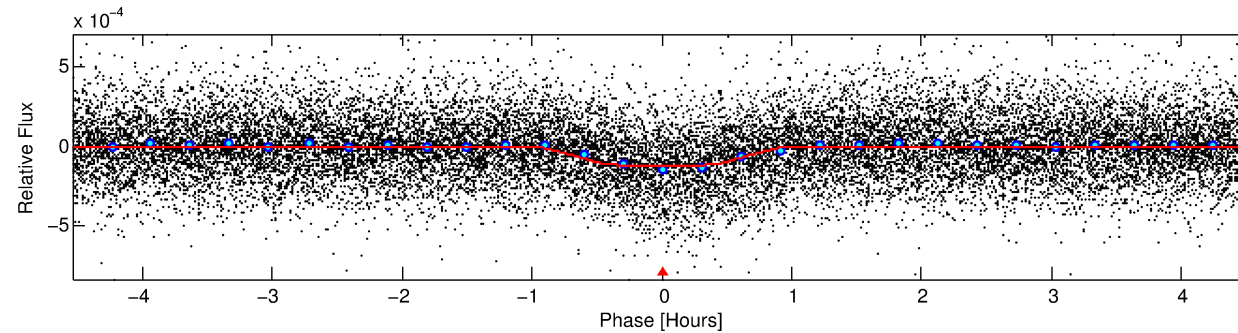
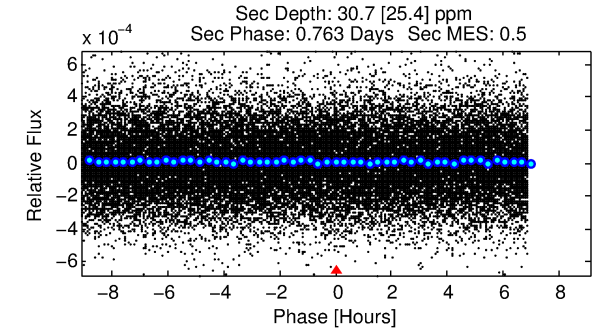
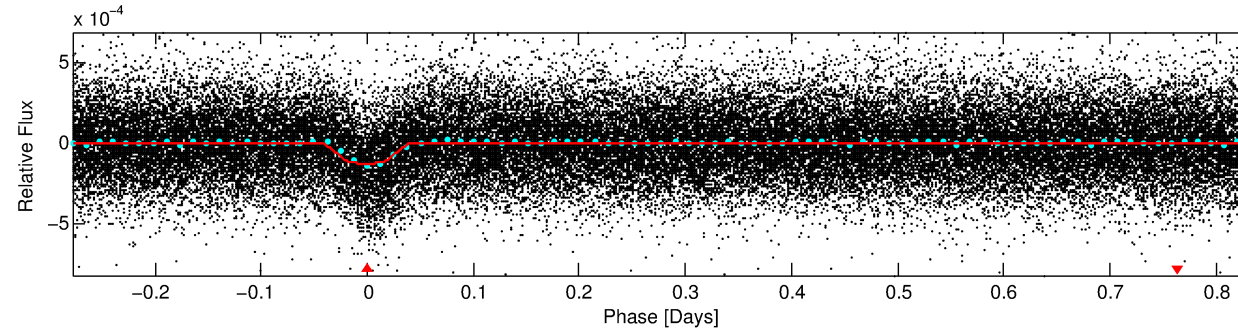
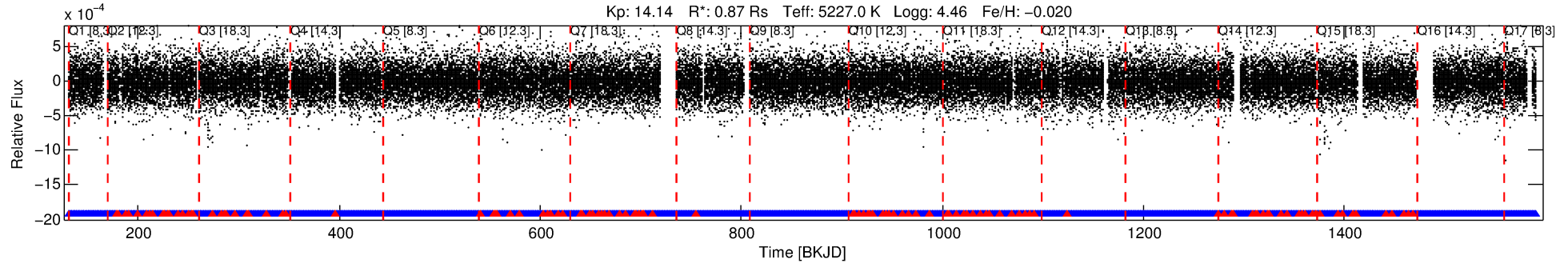
No Significant Match Found

DV One-Page Summary

KIC: 6350476 Candidate: 1 of 1 Period: 1.111 d

KOI: K02710.01 Corr: 0.908

Kp: 14.14 R*: 0.87 Rs Teff: 5227.0 K Logg: 4.46 Fe/H: -0.020



DV Fit Results:

Period = 1.11059 [0.00000] d
Epoch = 131.5752 [0.0008] BKJD
Rp/R* = 0.0123 [0.0036]
a/R* = 2.75 [2.94]
b = 0.90 [0.27]
Seff = 1327.94 [352.82]
Teq = 1539 [102] K
Rp = 1.16 [0.39] Re
a = 0.0195 [0.0029] AU
Ag = 4.76 [4.96] [0.76σ]
Teff = 3516 [897] K [2.19σ]

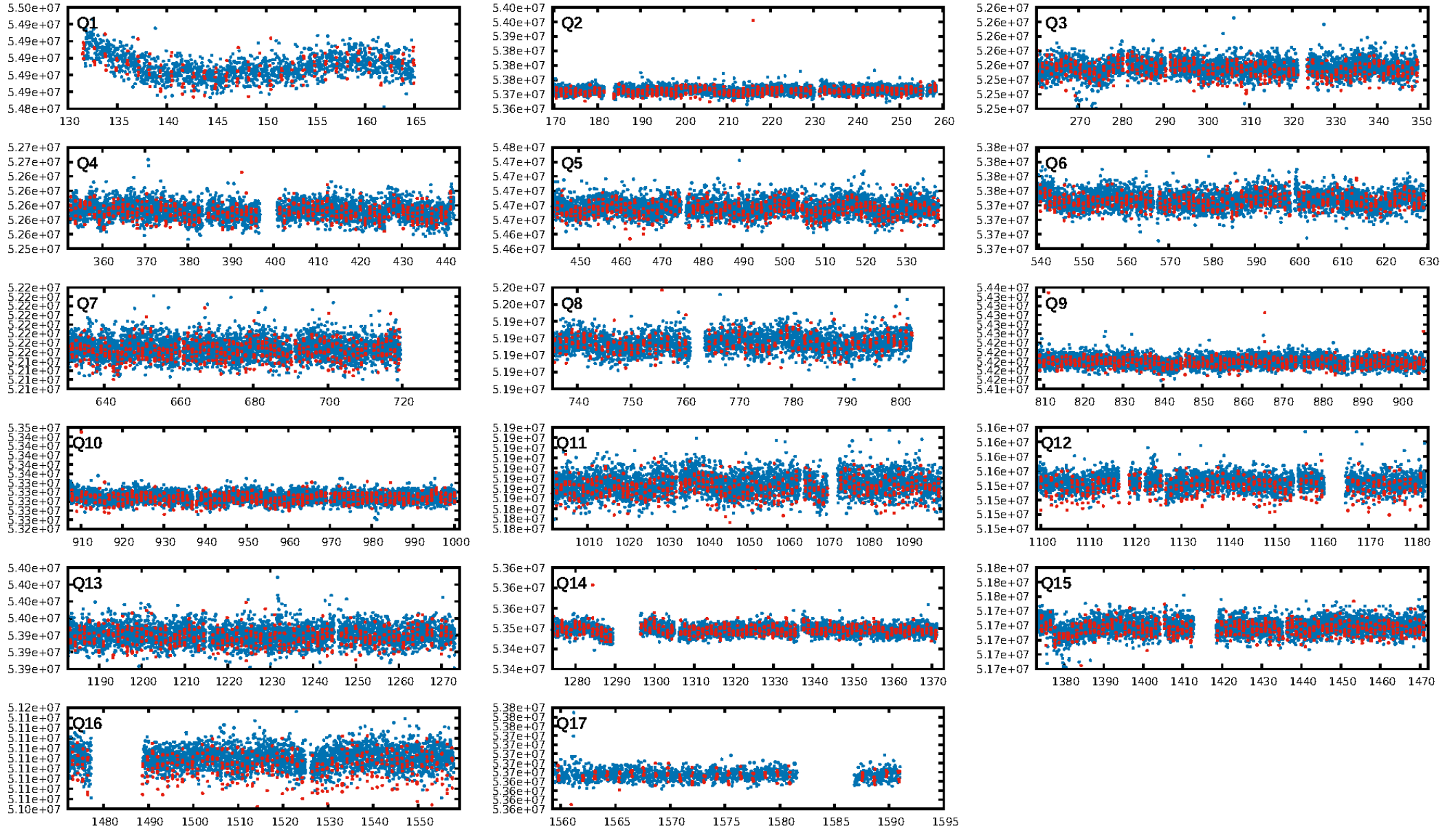
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.45e-97
RollingBand-fgt: 0.90 [1037/1157]
GhostDiagnostic-chr: -0.2586
Centroid-sig: N/A
Centroid-so: 63.312 arcsec [147.05σ]
OotOffset-rm: 7.980 arcsec [111.43σ]
KicOffset-rm: 8.165 arcsec [116.31σ]
OotOffset-st: 0/0/4/0 [4]
KicOffset-st: 0/0/4/0 [4]
DiffImageQuality-fgm: 1.00 [4/4]
DiffImageOverlap-fno: 1.00 [17/17]

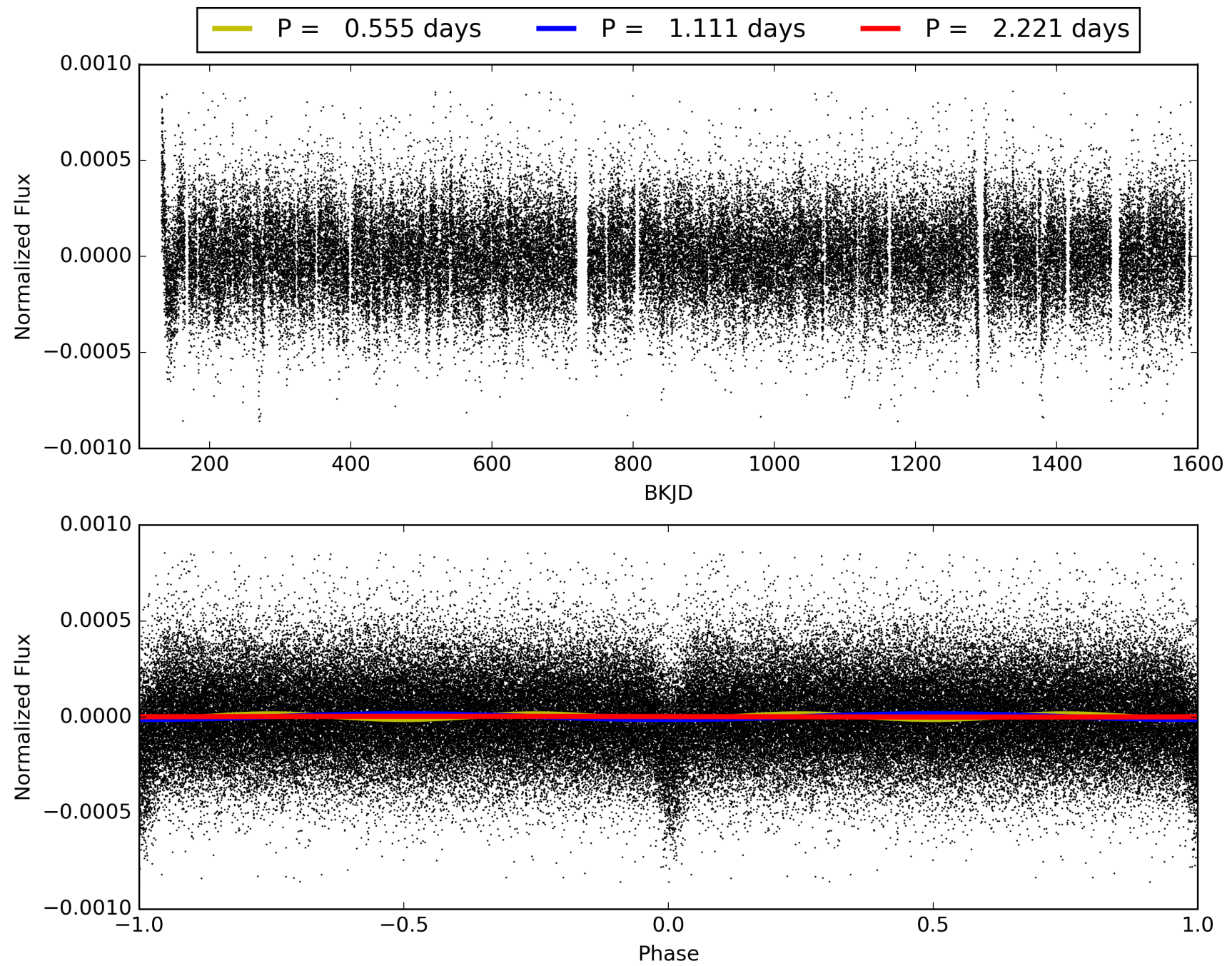
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 19:14:58 Z

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

TCE 006350476-01, PDC Light Curves

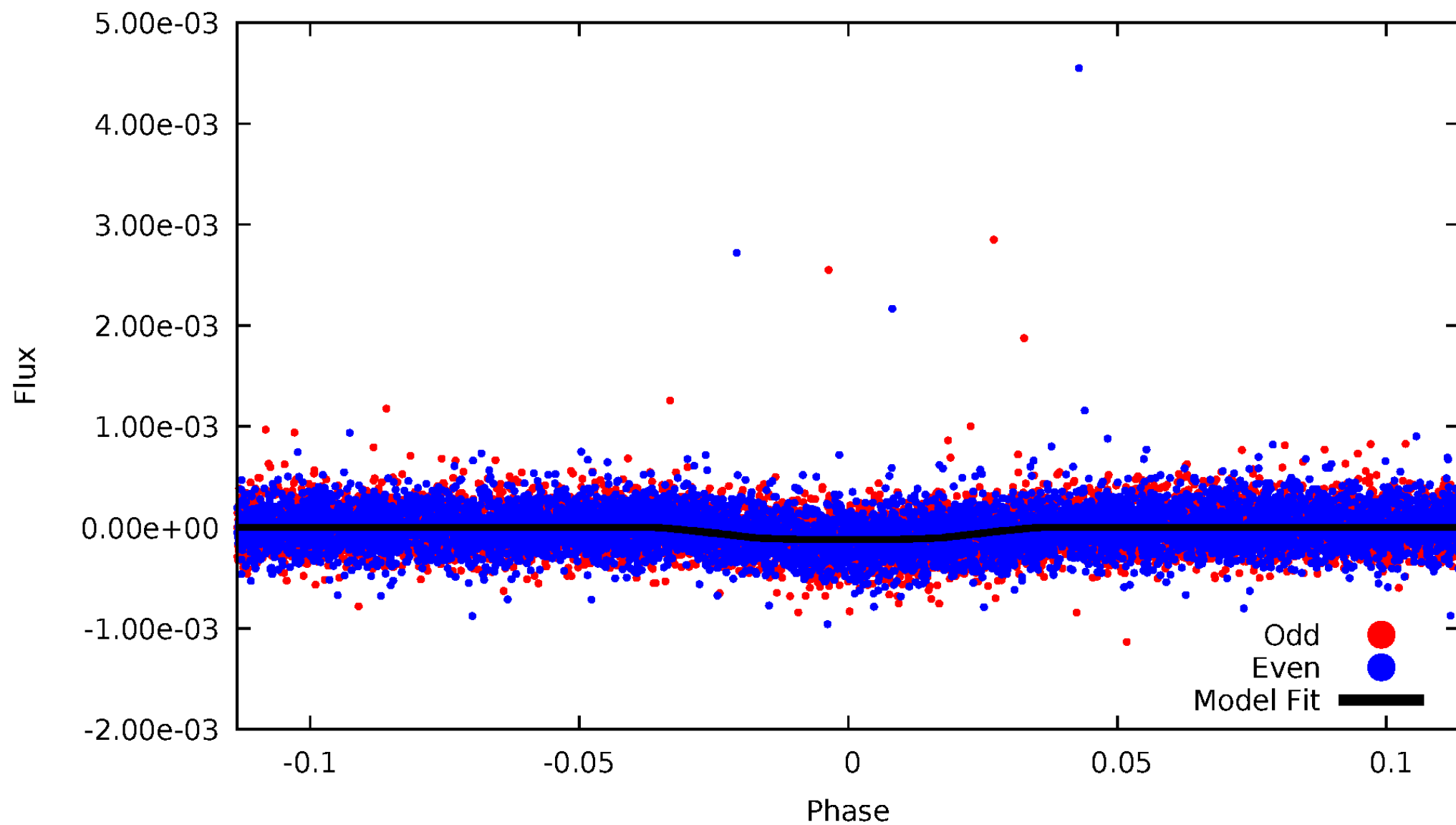


TCE 006350476-01



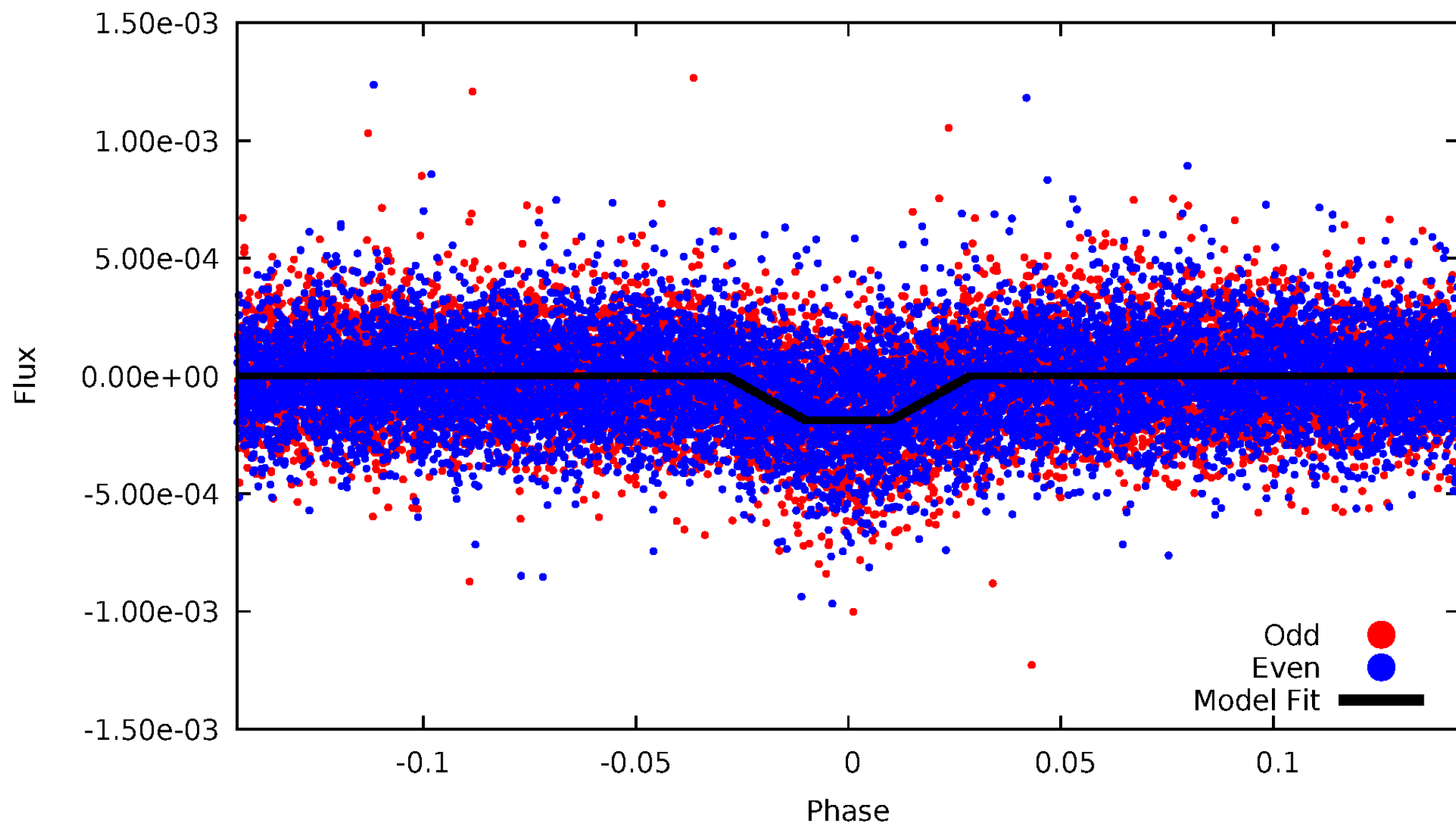
DV Odd/Even

TCE 006350476-01



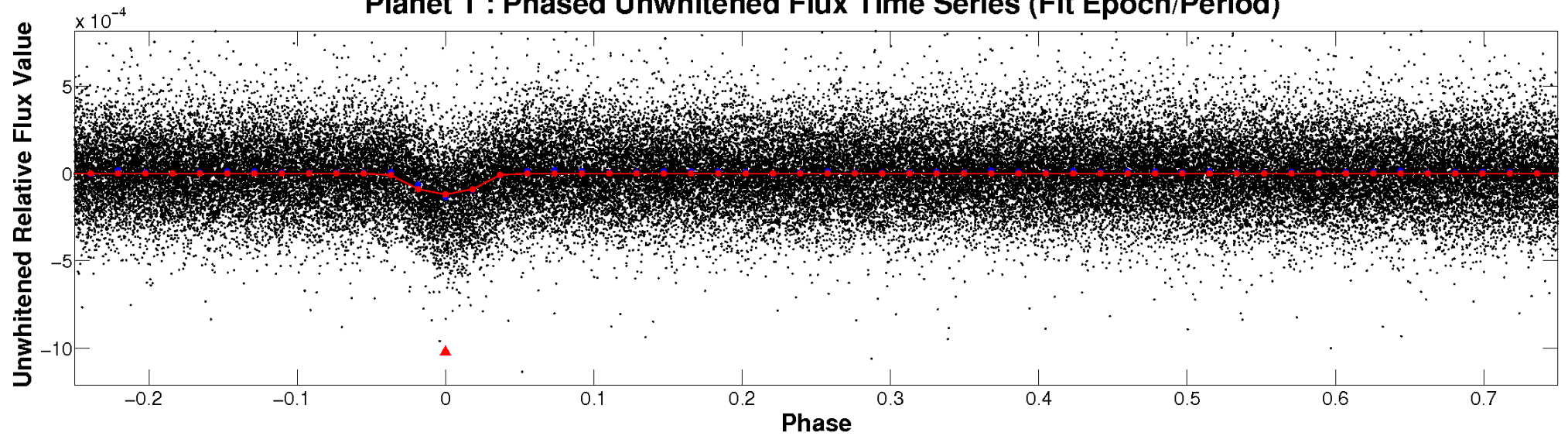
ALT Odd/Even

TCE 006350476-01

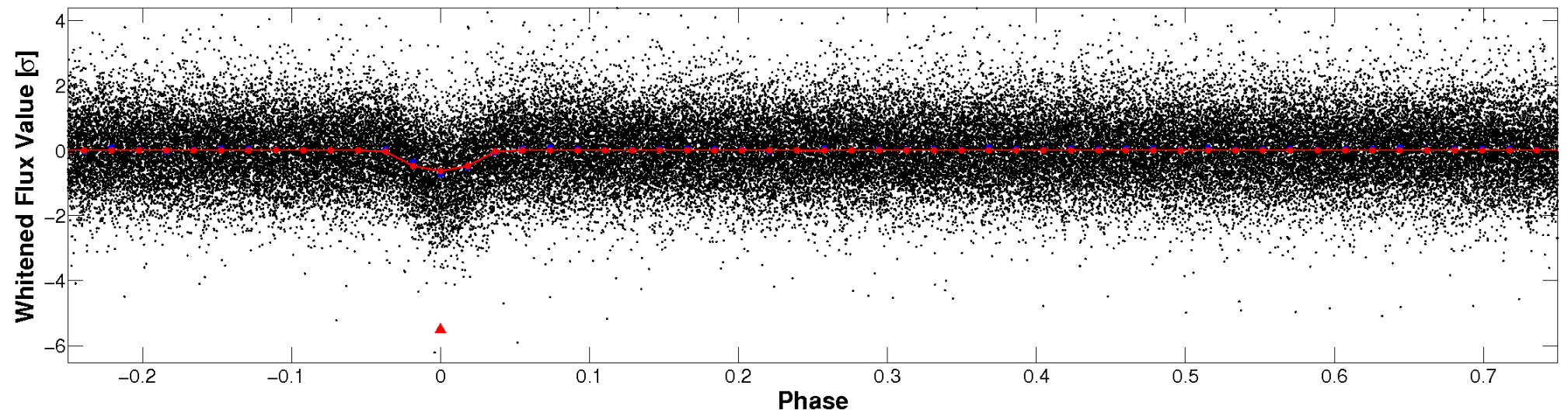


Non-Whitened Vs. Whitened Light Curve

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

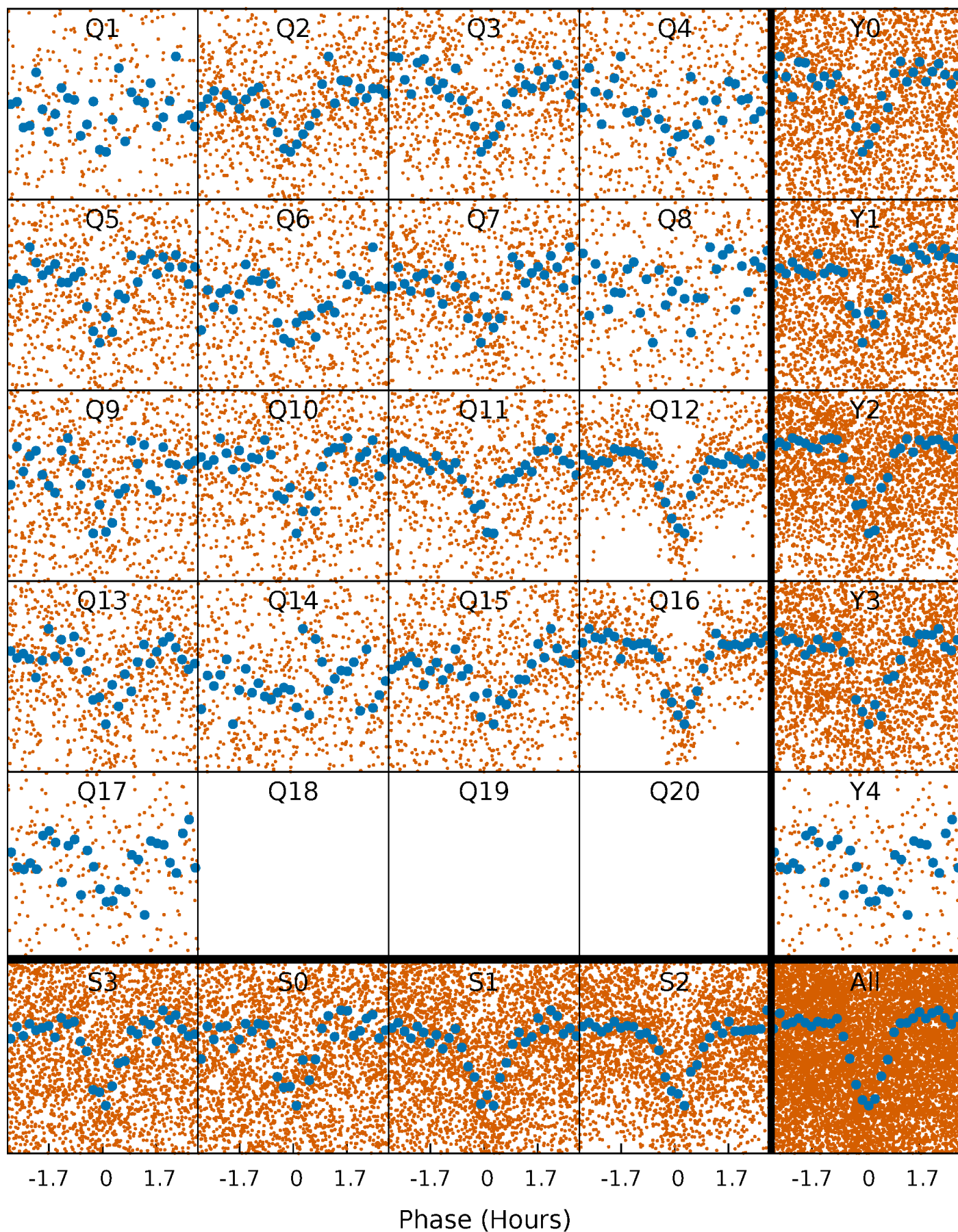


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



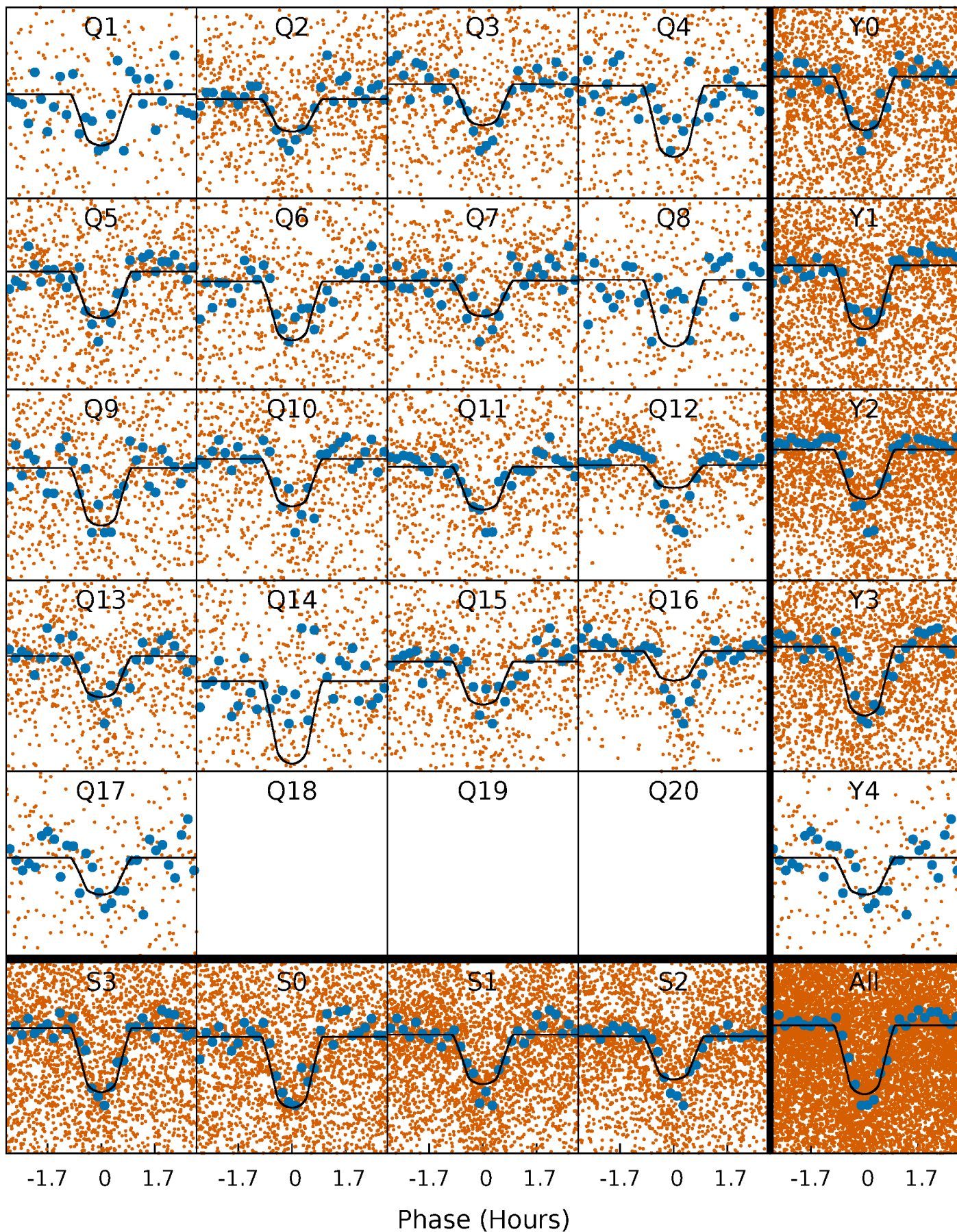
PDC Quarter-Phased Transit Curves

TCE 006350476-01 P= 1.110591 Days $T_0=131.575186$ (BKJD)



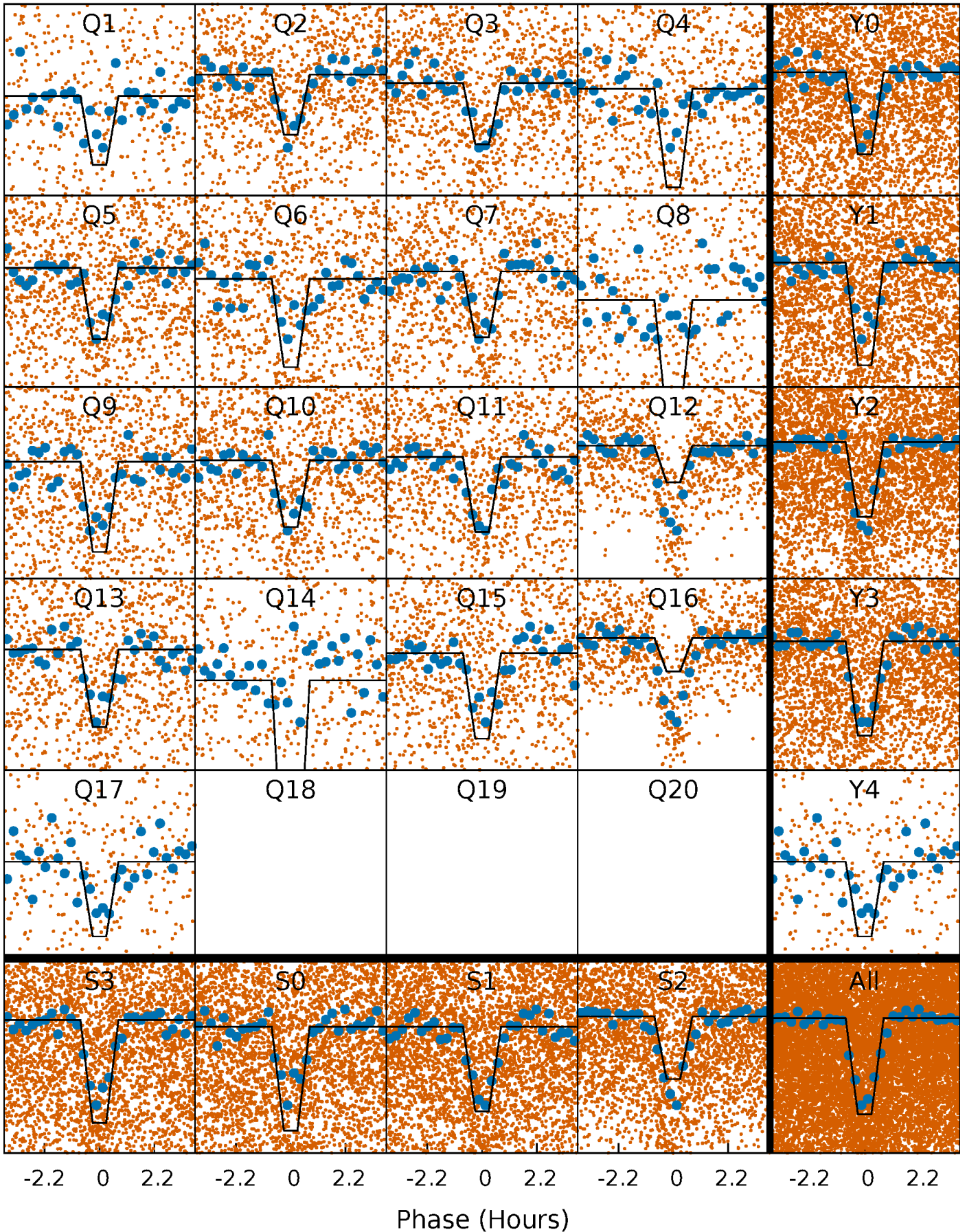
DV Quarter-Phased Transit Curves

TCE 006350476-01 P= 1.110591 Days $T_0=131.575186$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

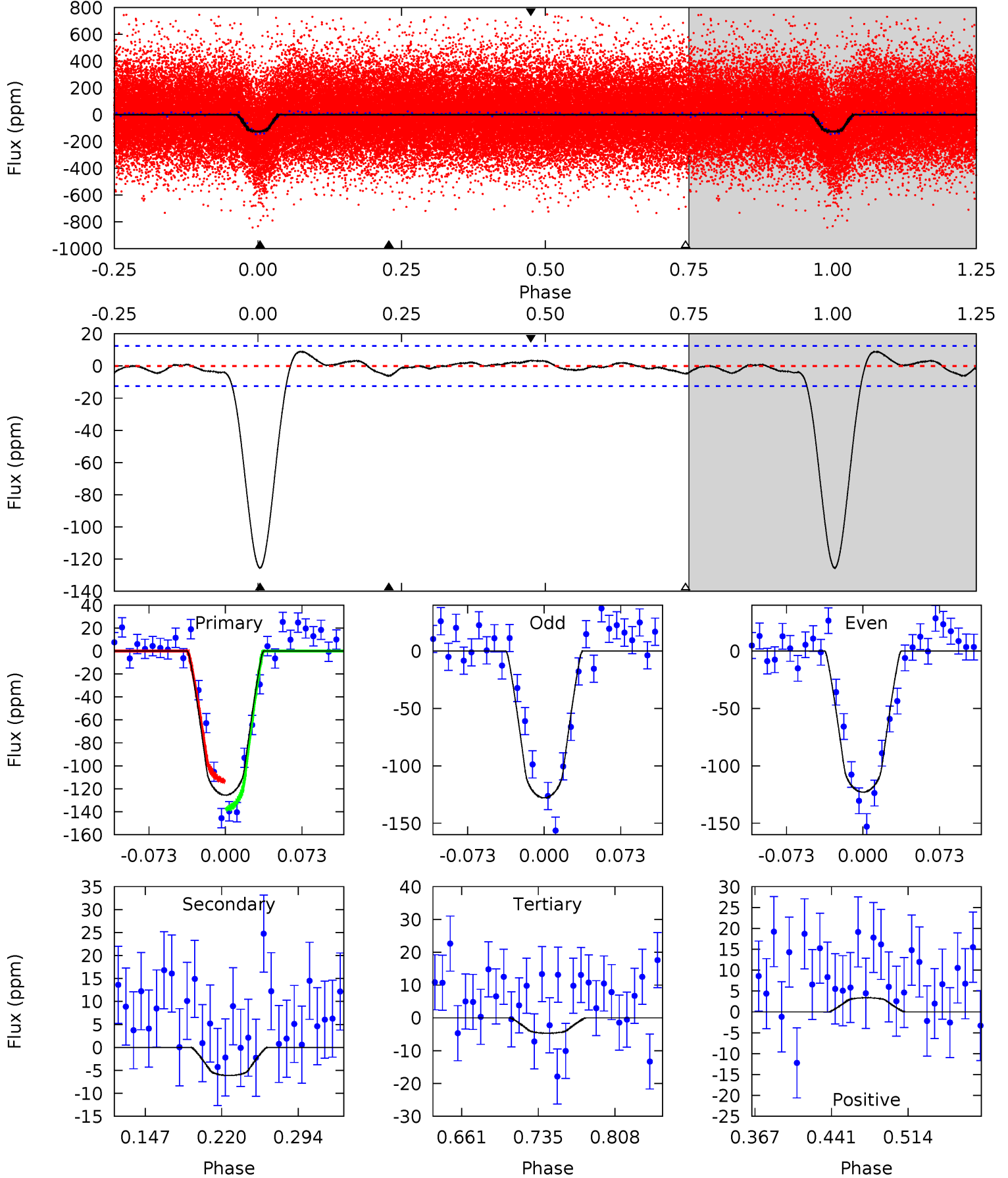
TCE 006350476-01 P= 1.110601 Days $T_0=131.571858$ (BKJD)



DV Model-Shift Uniqueness Test

006350476-01, P = 1.110591 Days, E = 130.464595 Days

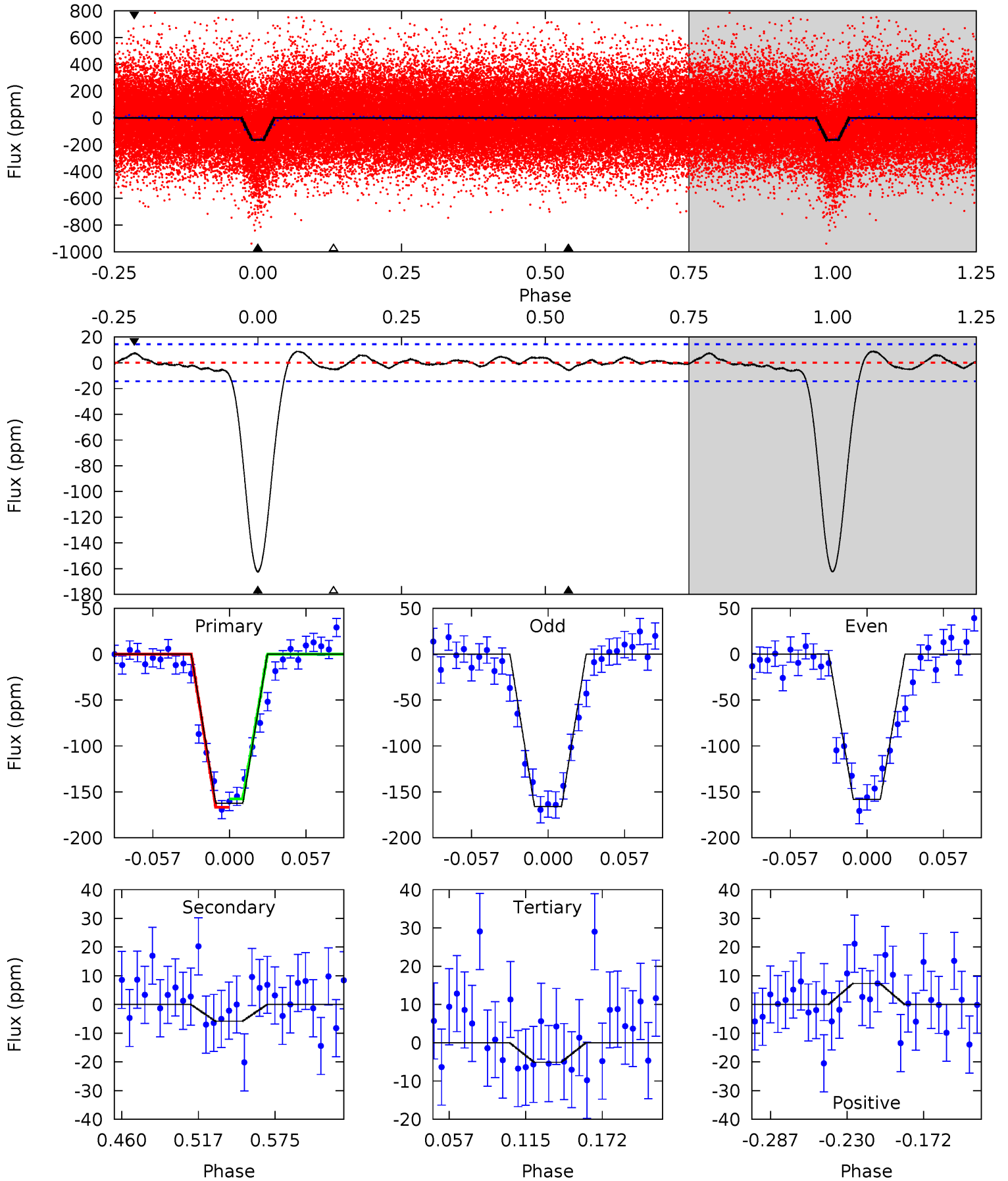
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
46.5	2.27	1.73	1.25	4.63	1.79	0.87	44.7	45.2	0.54	1.02	0.93	0.97	0.07	4.55



Alt Model-Shift Uniqueness Test

006350476-01, P = 1.110601 Days, E = 130.461257 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
52.7	1.89	1.65	2.38	4.68	1.90	1.03	51.1	50.4	0.24	-0.49	1.28	1.07	0.05	1.45



Stellar Parameters For KIC 006350476

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5227^{+158}_{-158}	$4.463^{+0.112}_{-0.138}$	$-0.020^{+0.300}_{-0.300}$	$0.867^{+0.137}_{-0.112}$	$0.796^{+0.109}_{-0.062}$	$1.721^{+0.820}_{-0.657}$
	+3%/-3%	+3%/-3%	+1500%/-1500%	+16%/-13%	+14%/-8%	+48%/-38%
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 006350476-01 / KOI 2710.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-6 ± 3	$1.17^{+0.36}_{-0.35}$	2155^{+115}_{-99}	2798^{+490}_{-487}	$0.884^{+1.180}_{-0.467}$
Alt.	-6 ± 3	$1.28^{+0.41}_{-0.35}$	2163^{+121}_{-101}	2688^{+416}_{-4088}	$0.717^{+0.779}_{-0.417}$

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

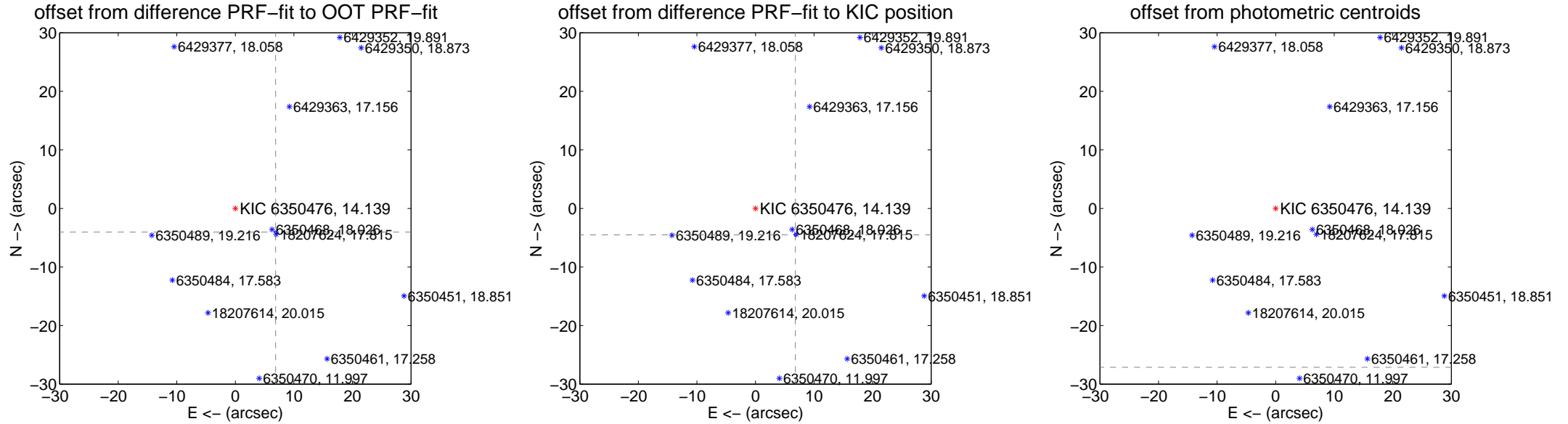
DV Centroid Data

Supplemental centroid analysis for 006350476-01. Kepler magnitude: 14.14. Transit SNR 30.97

There are 4 quarters with good PRF difference image offsets

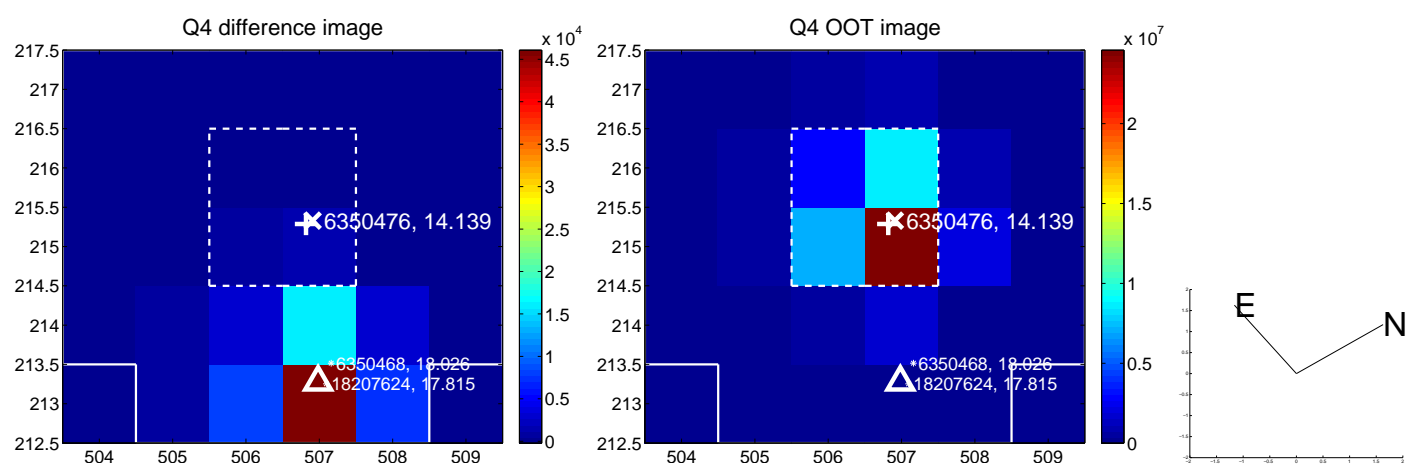
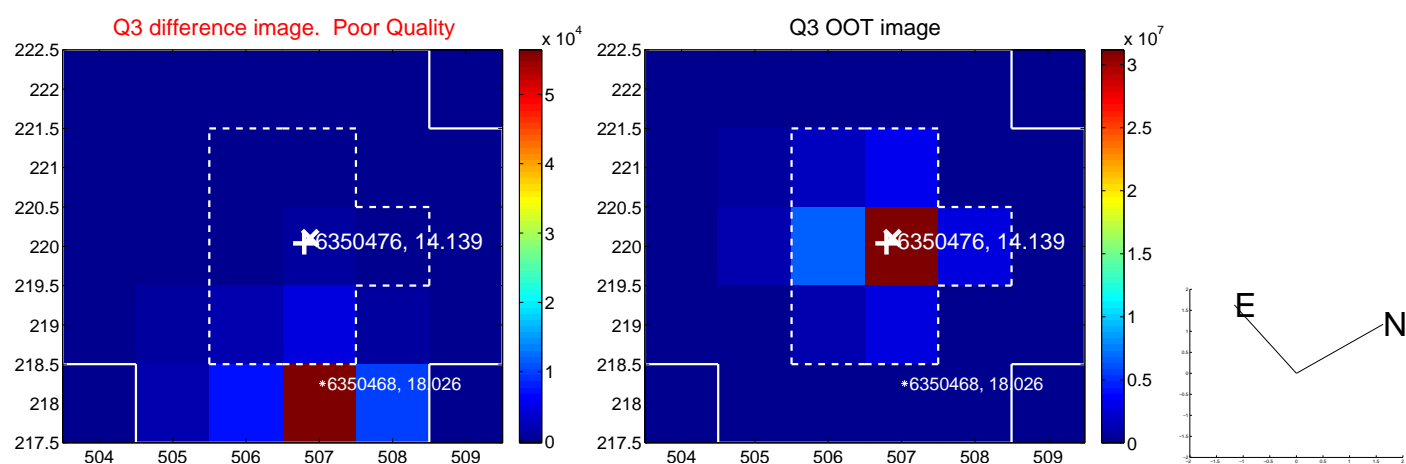
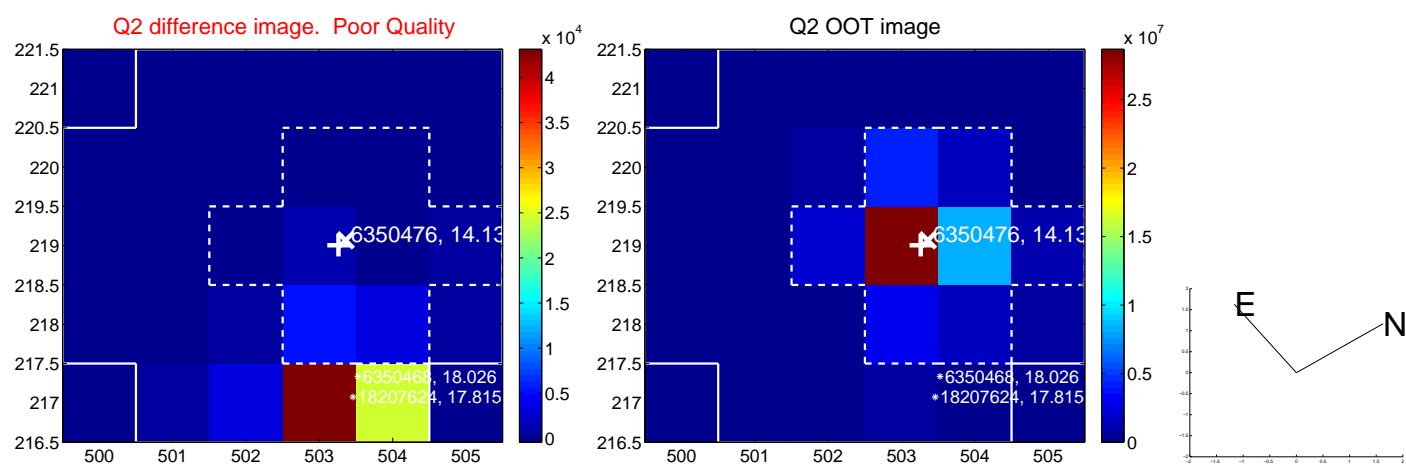
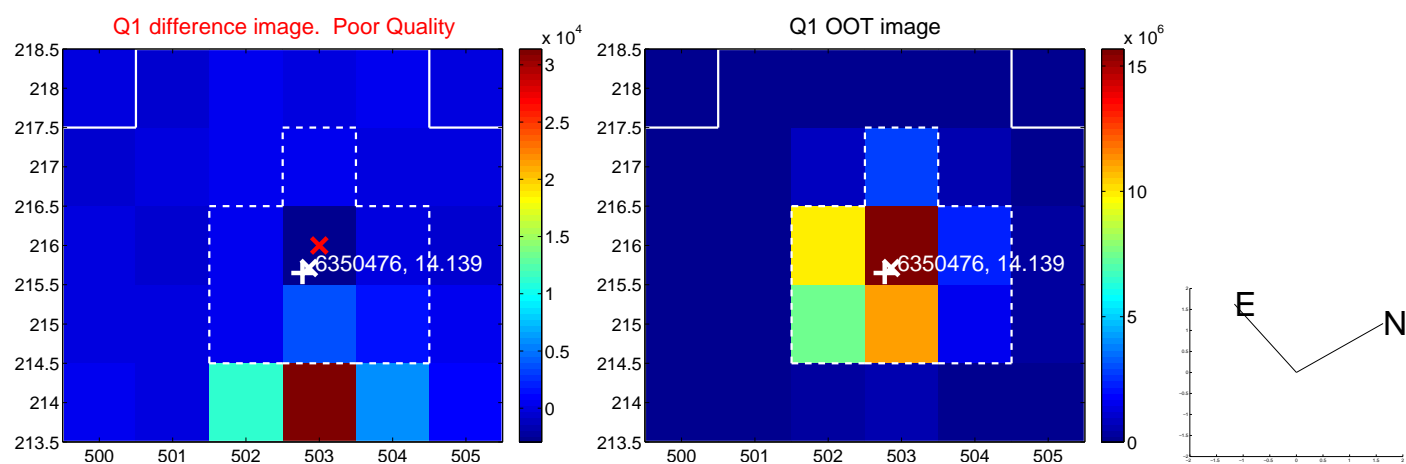
The direct PRF centroid is offset from the target star catalog position by about 0.52 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.980 \pm 0.072	111.43	-6.885 \pm 0.069	-4.035 \pm 0.080
PRF-fit source offset from KIC position	8.165 \pm 0.070	116.31	-6.809 \pm 0.071	-4.506 \pm 0.068
photometric centroid source offset	63.32 \pm 0.43	147.05	-57.22 \pm 0.42	-27.12 \pm 0.47

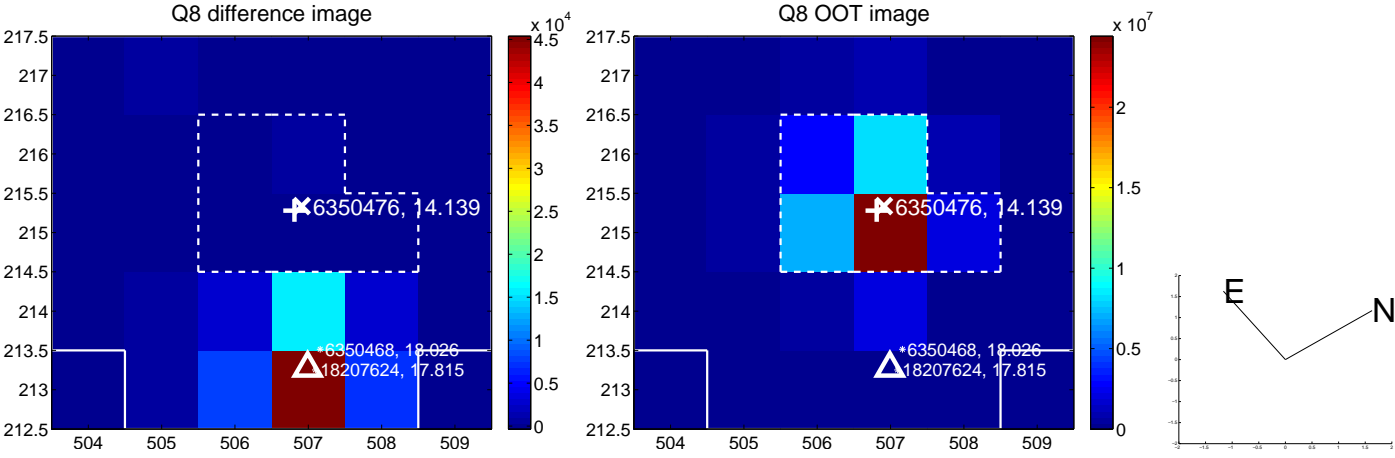
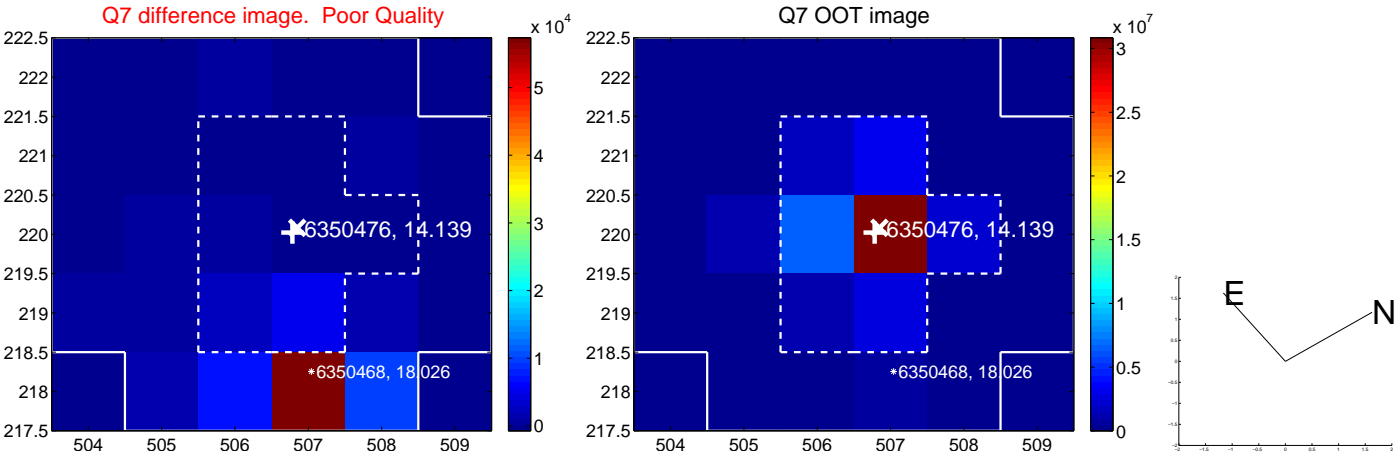
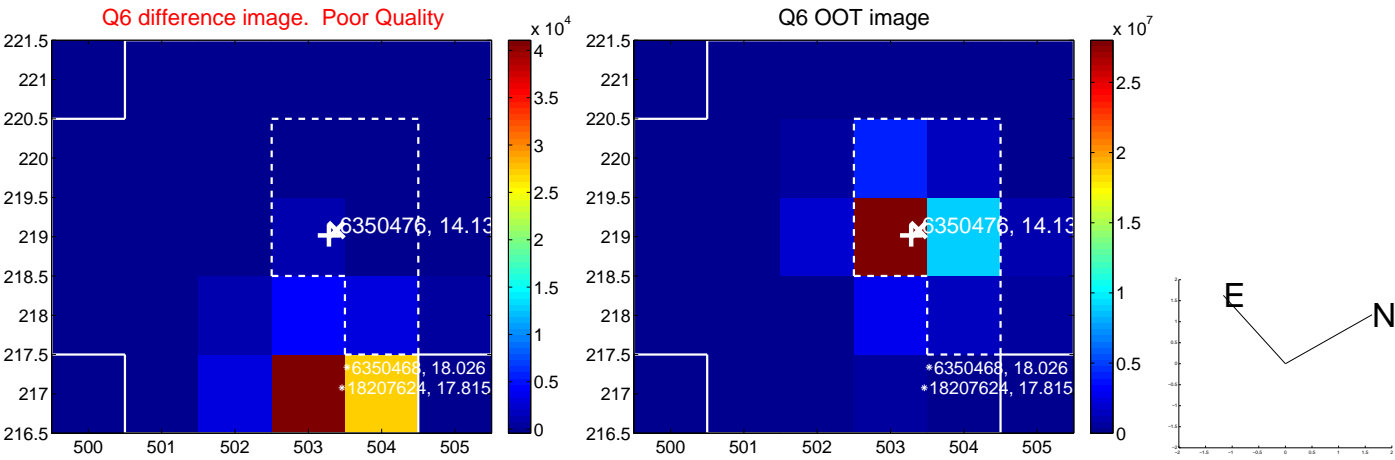
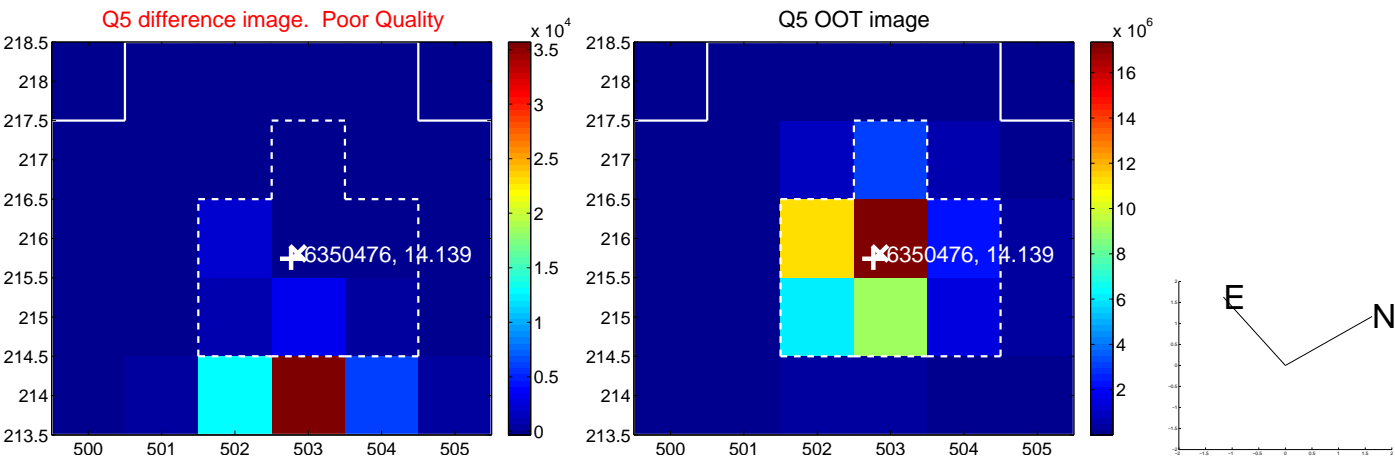


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

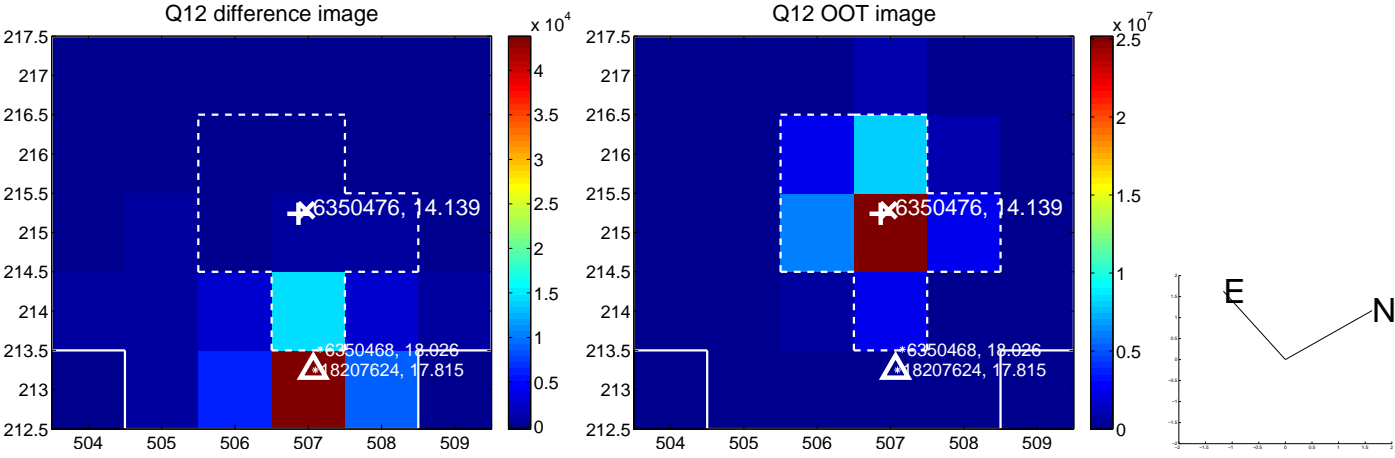
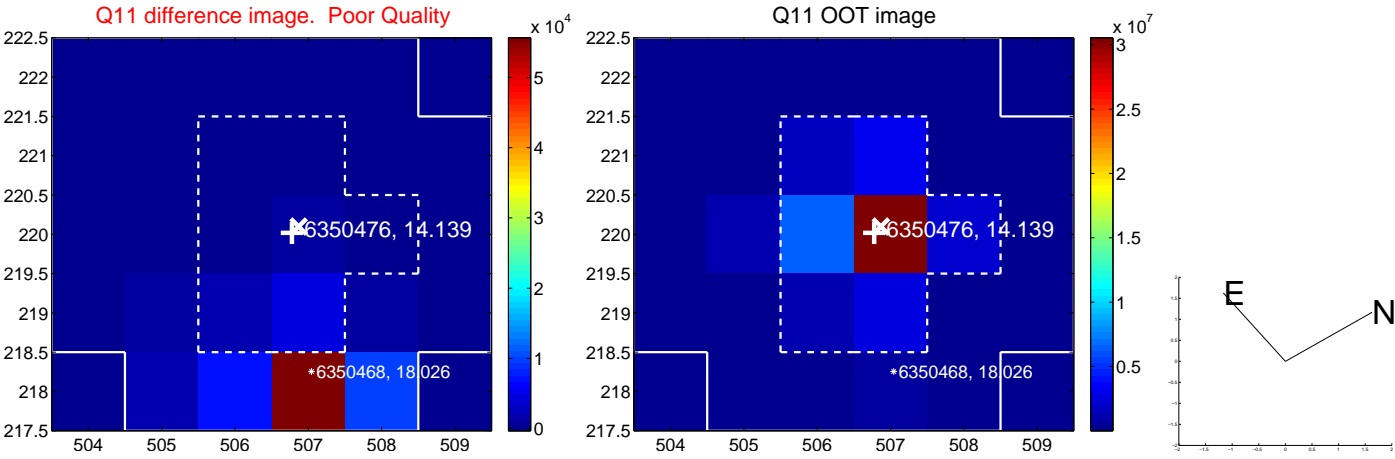
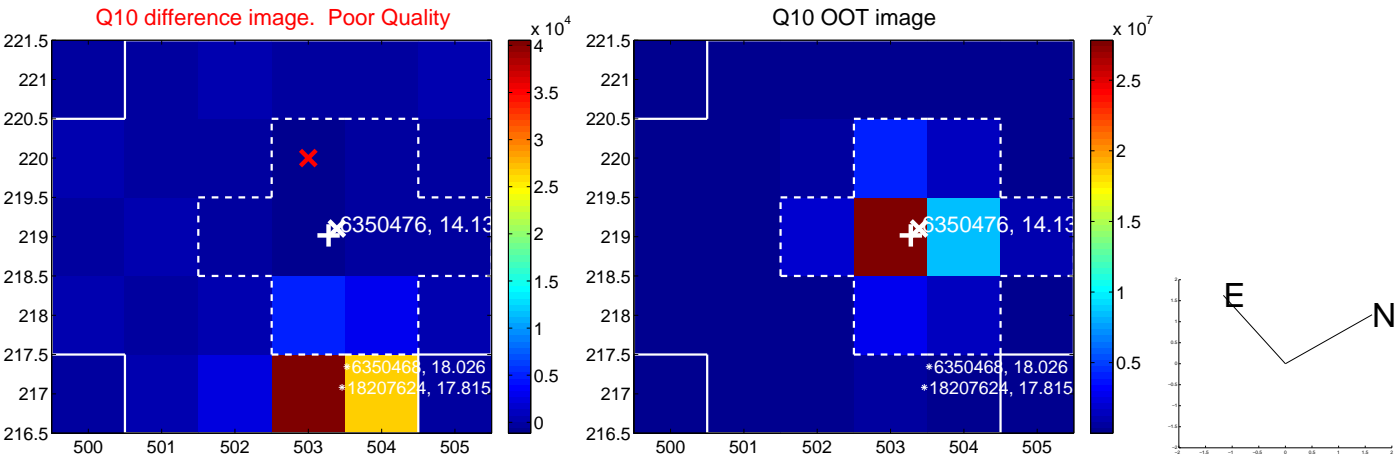
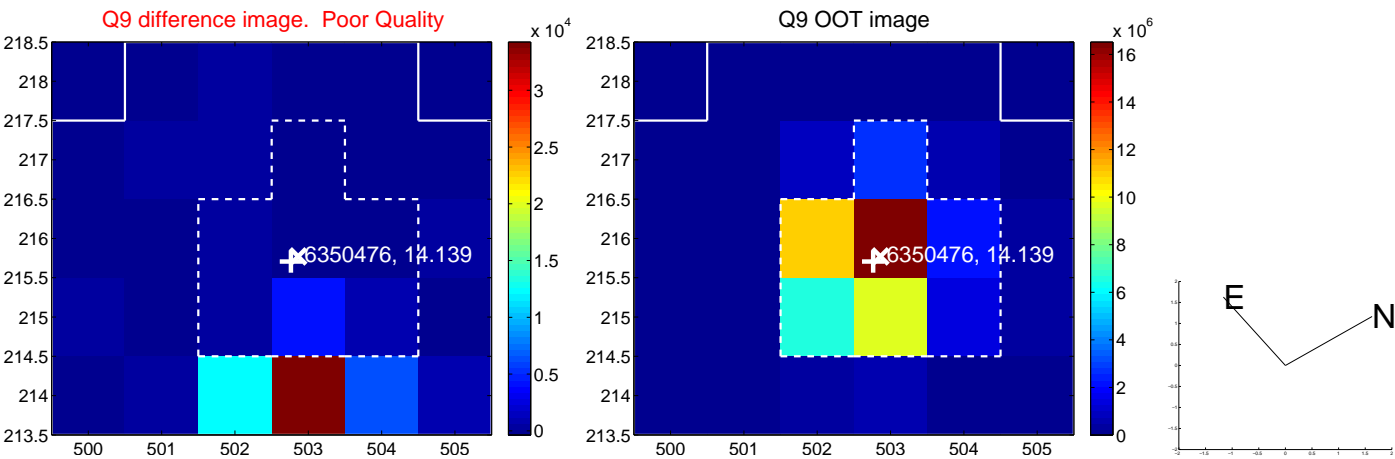
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



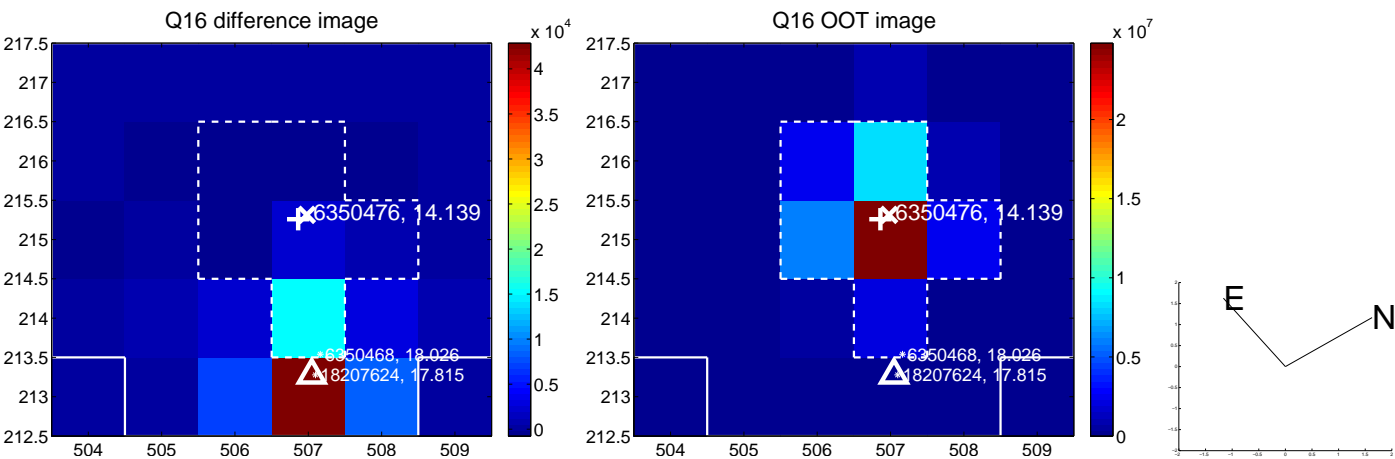
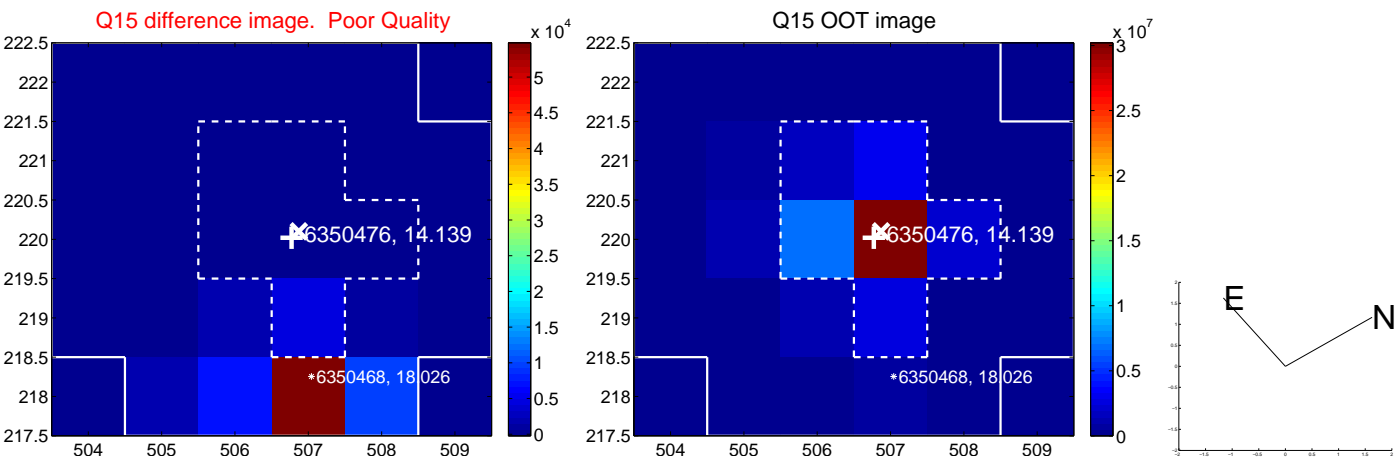
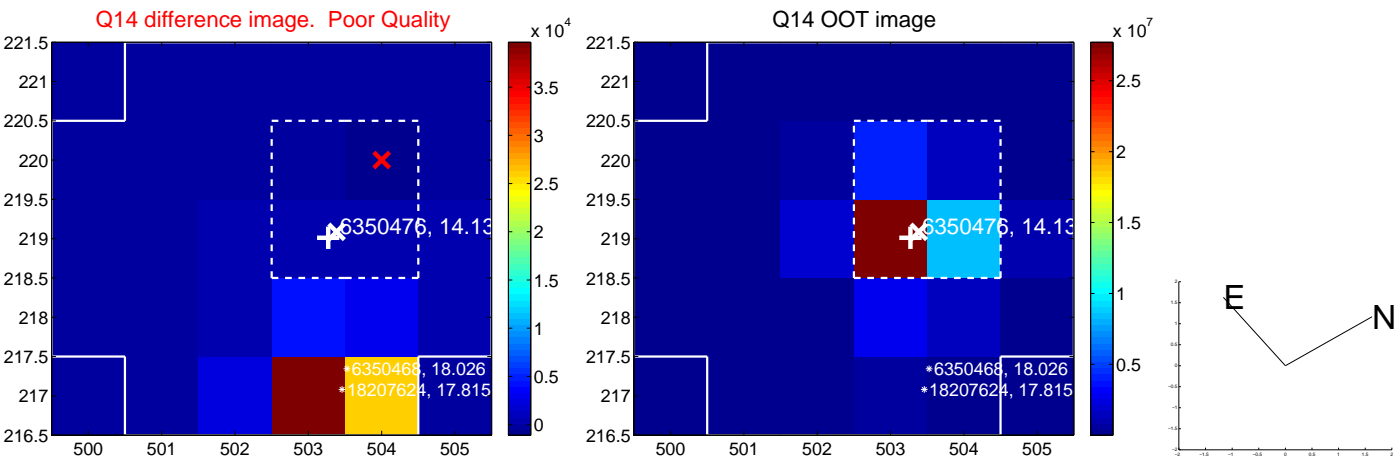
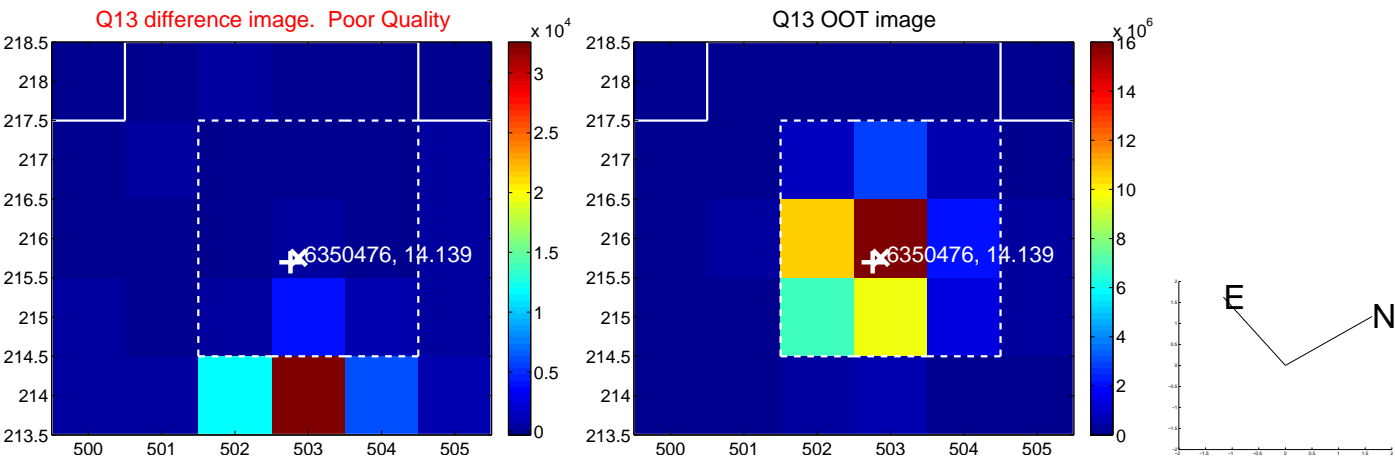
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



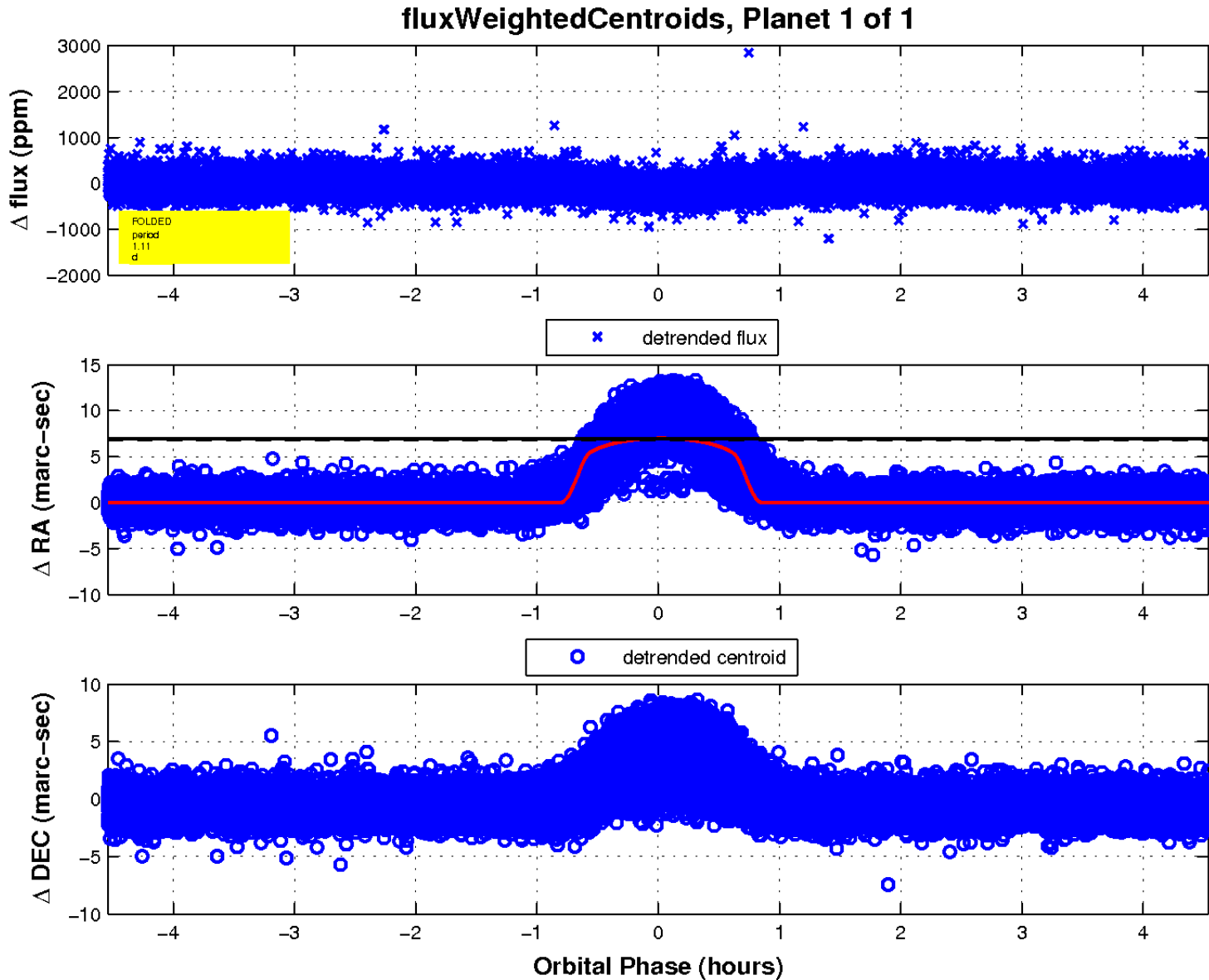
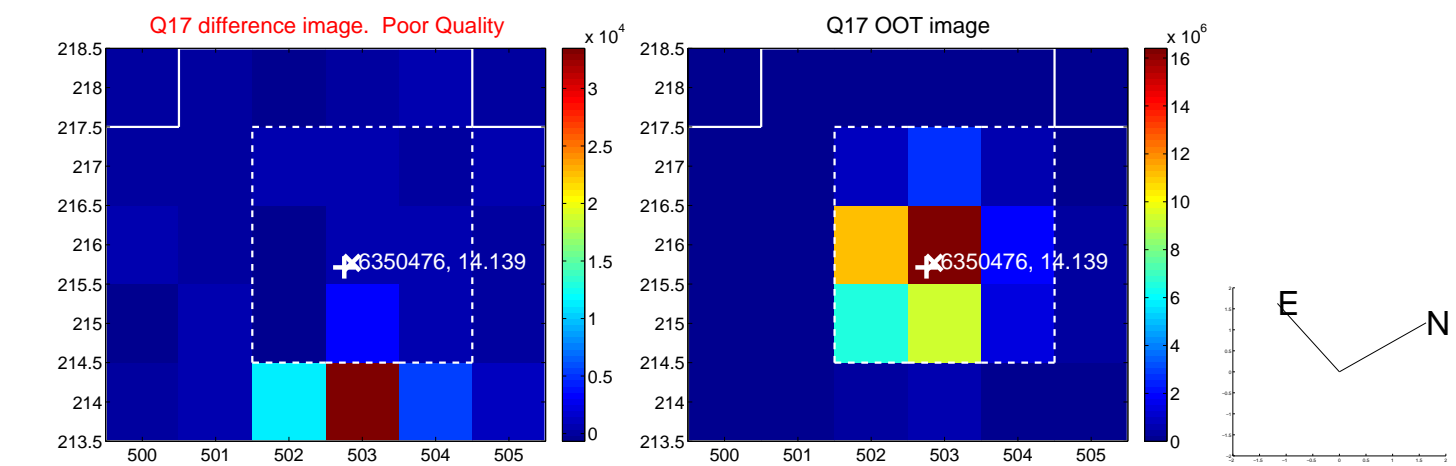
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

