

KIC 006765135

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})
006765135-01	OBS	2592.01	175.604122	202.370563	463.2	8.504	12.1	11.6	1.01	6225	2.33	3.47

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006765135-01	OBS	PC	0.99	0	0	0	0	NO_COMMENT

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

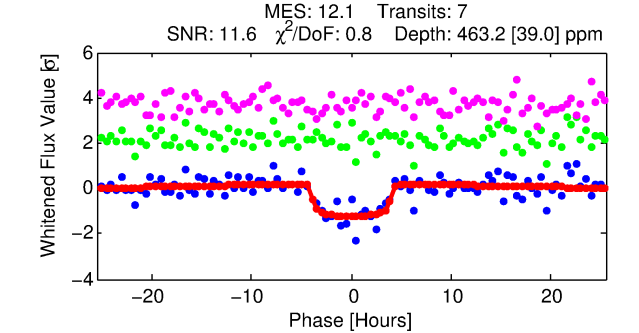
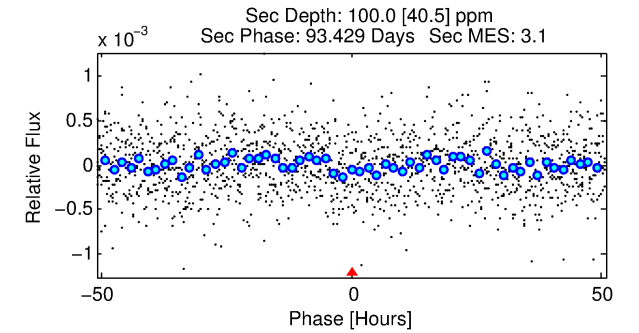
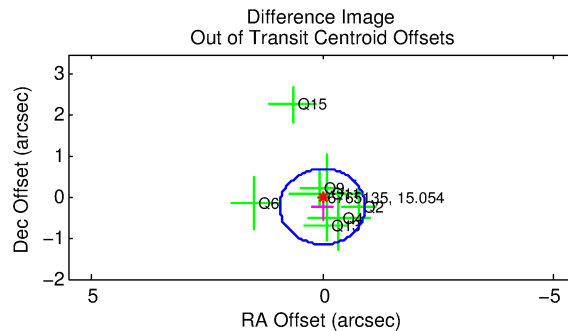
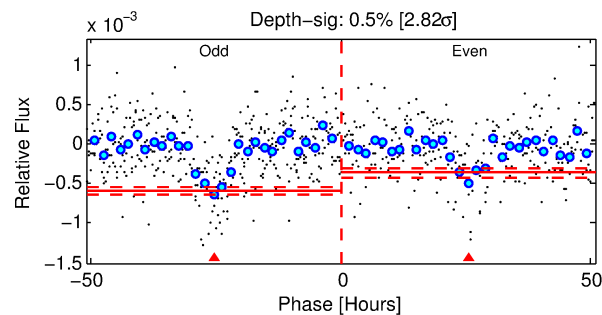
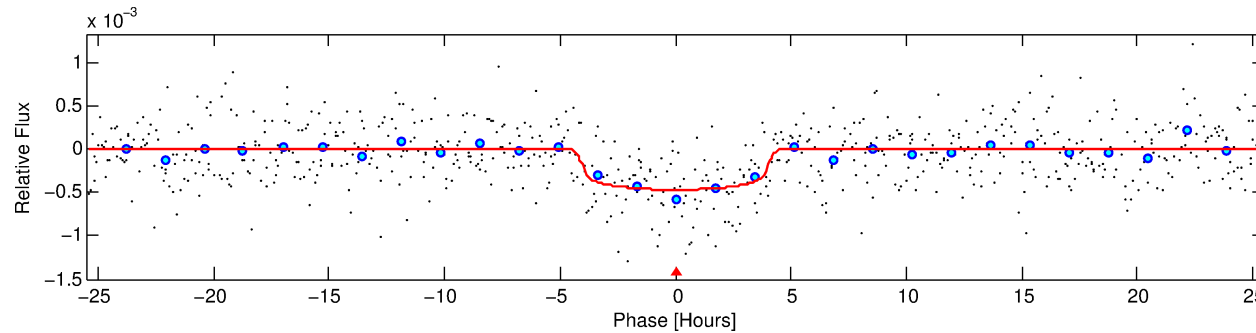
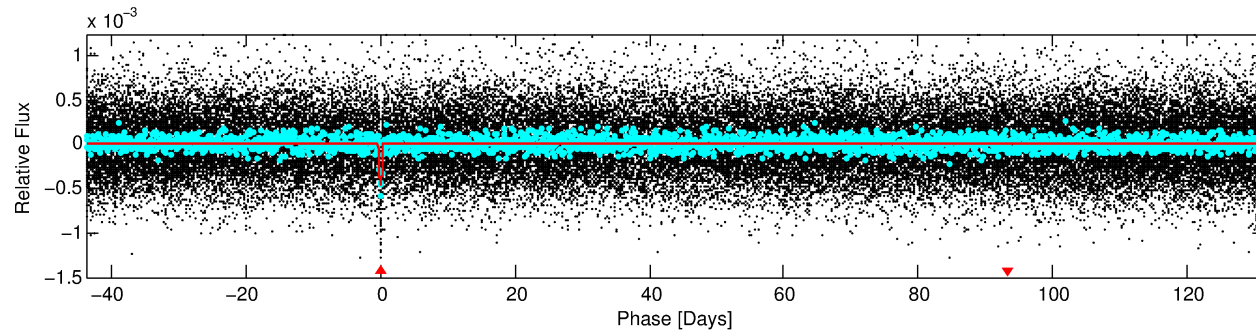
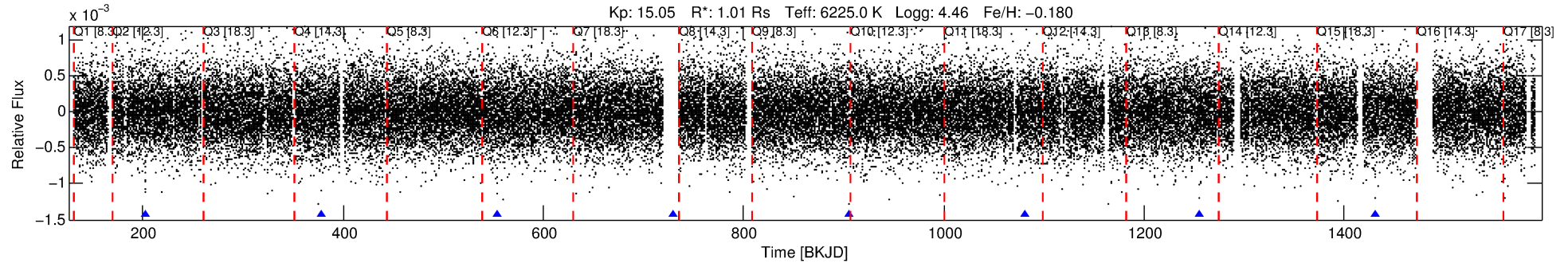
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006765135-01

No Significant Match Found

DV One-Page Summary

KIC: 6765135 Candidate: 1 of 1 Period: 175.604 d
KOI: K02592.01 Corr: 0.968



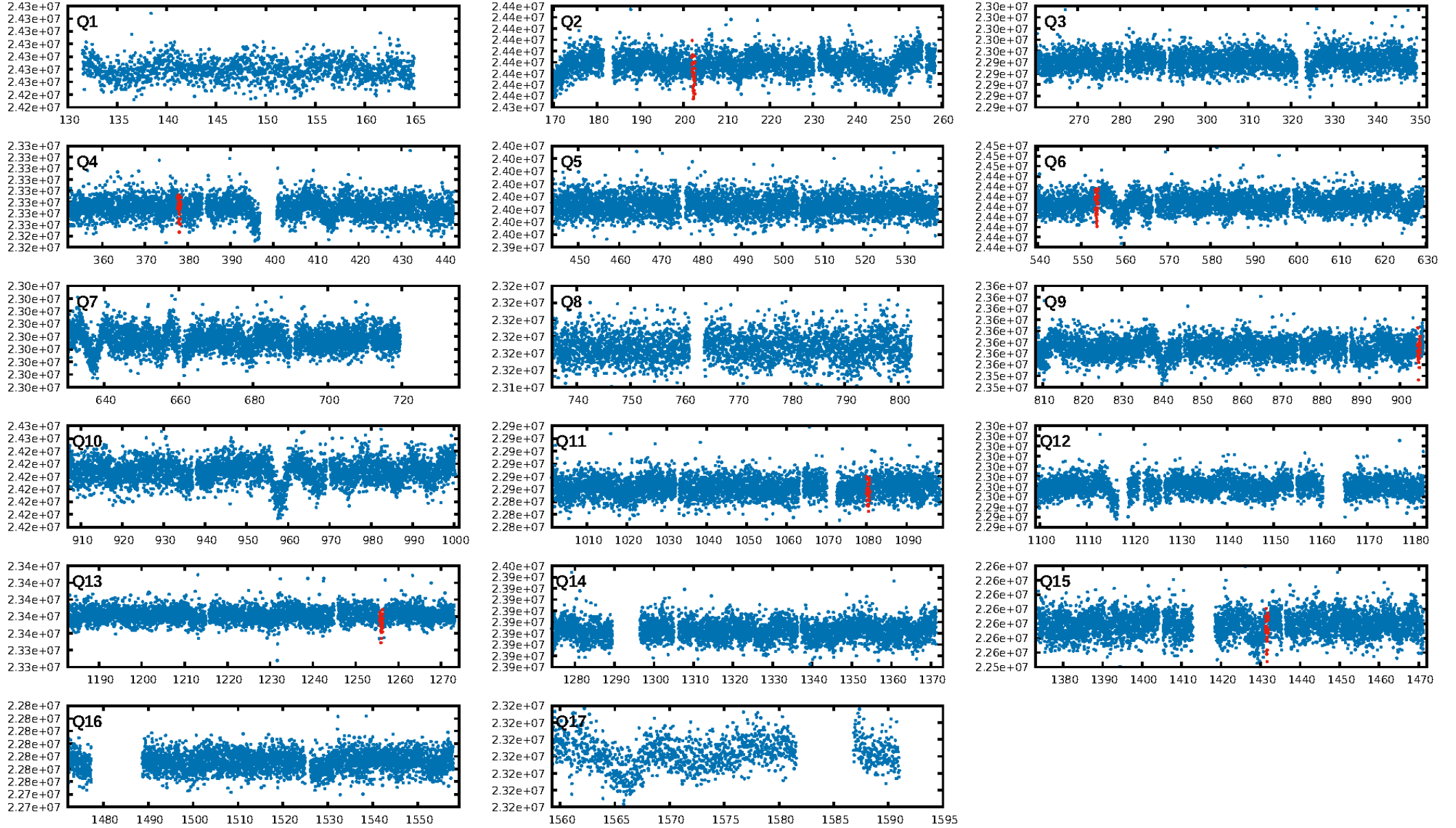
DV Fit Results:

Period = 175.60412 [0.00260] d
Epoch = 202.3706 [0.0118] BKJD
Rp/R* = 0.0211 [0.0086]
a/R* = 116.45 [243.49]
b = 0.71 [1.50]
Seff = 3.47 [1.44]
Teff = 348 [36] K
Rp = 2.33 [1.22] Re
a = 0.6285 [0.1721] AU
Ag = 4019.91 [3988.22] [1.01σ]
Teffp = 4284 [988] K [3.98σ]

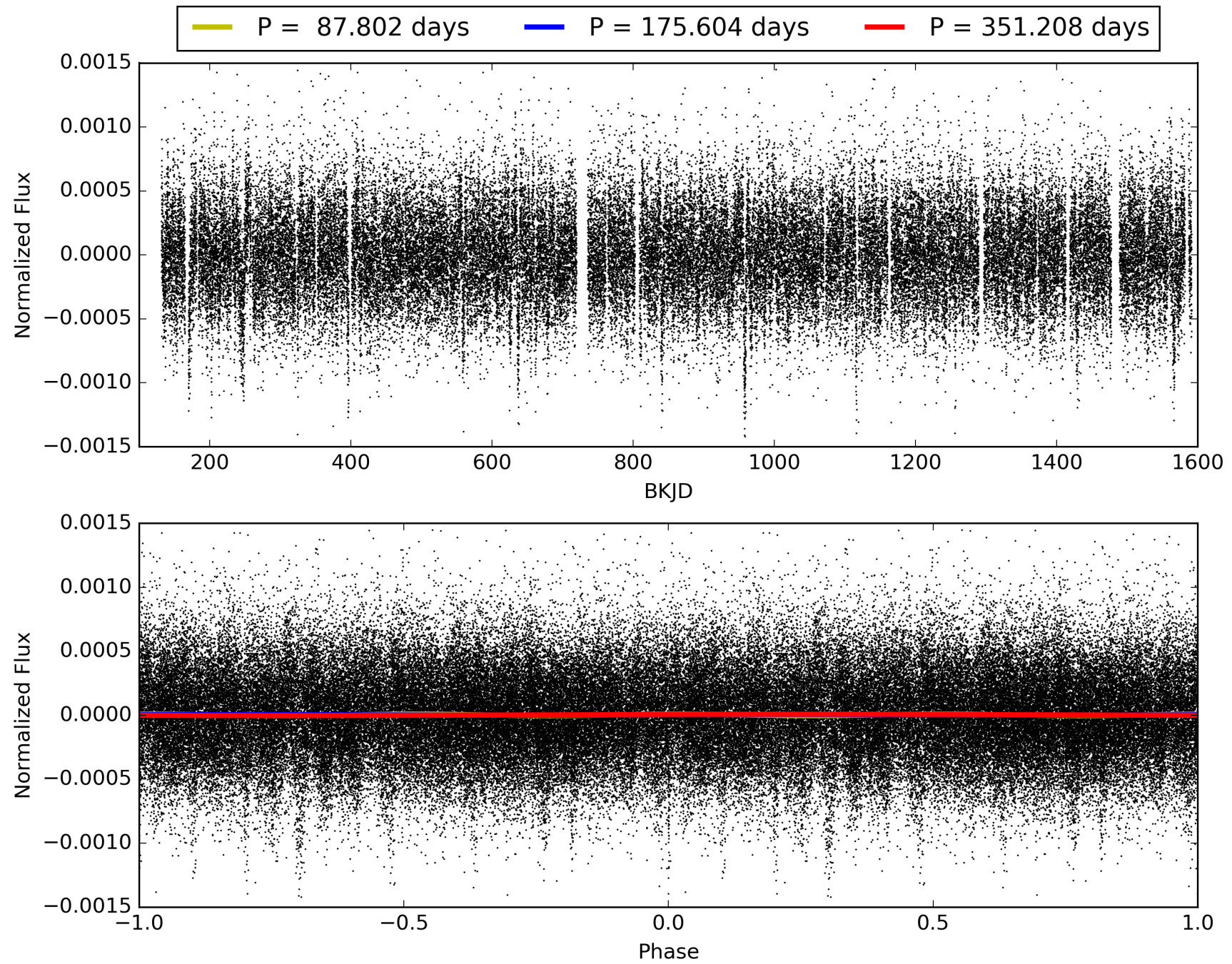
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.94e-29
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -12.12
Centroid-sig: 29.8%
Centroid-so: 1.186 arcsec [1.10σ]
OotOffset-rm: 0.232 arcsec [0.75σ]
KicOffset-rm: 0.293 arcsec [0.88σ]
OotOffset-st: 2/2/1/2 [7]
KicOffset-st: 2/2/1/2 [7]
DiffImageQuality-fgm: 1.00 [7/7]
DiffImageOverlap-fno: 1.00 [7/7]

TCE 006765135-01, PDC Light Curves

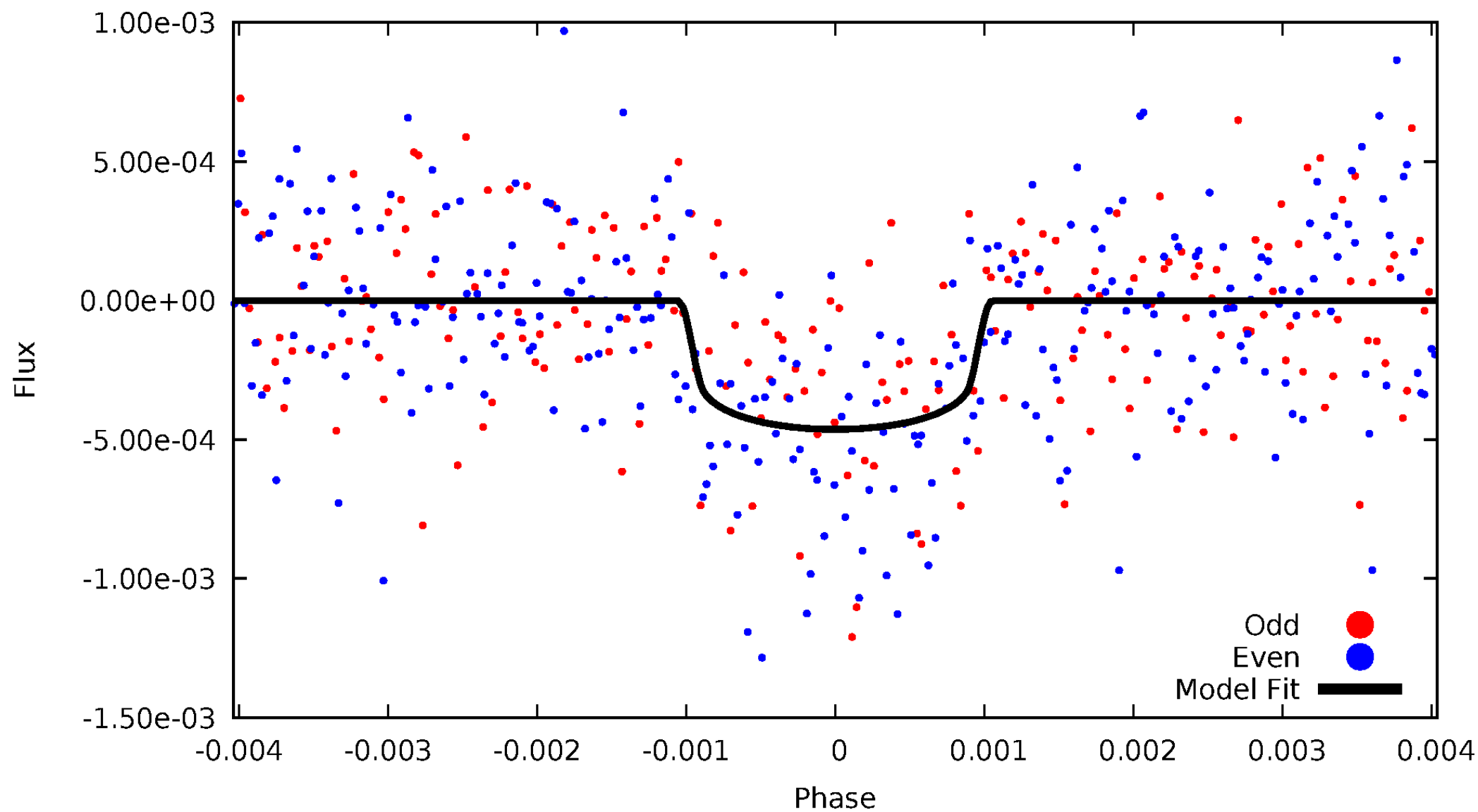


TCE 006765135-01



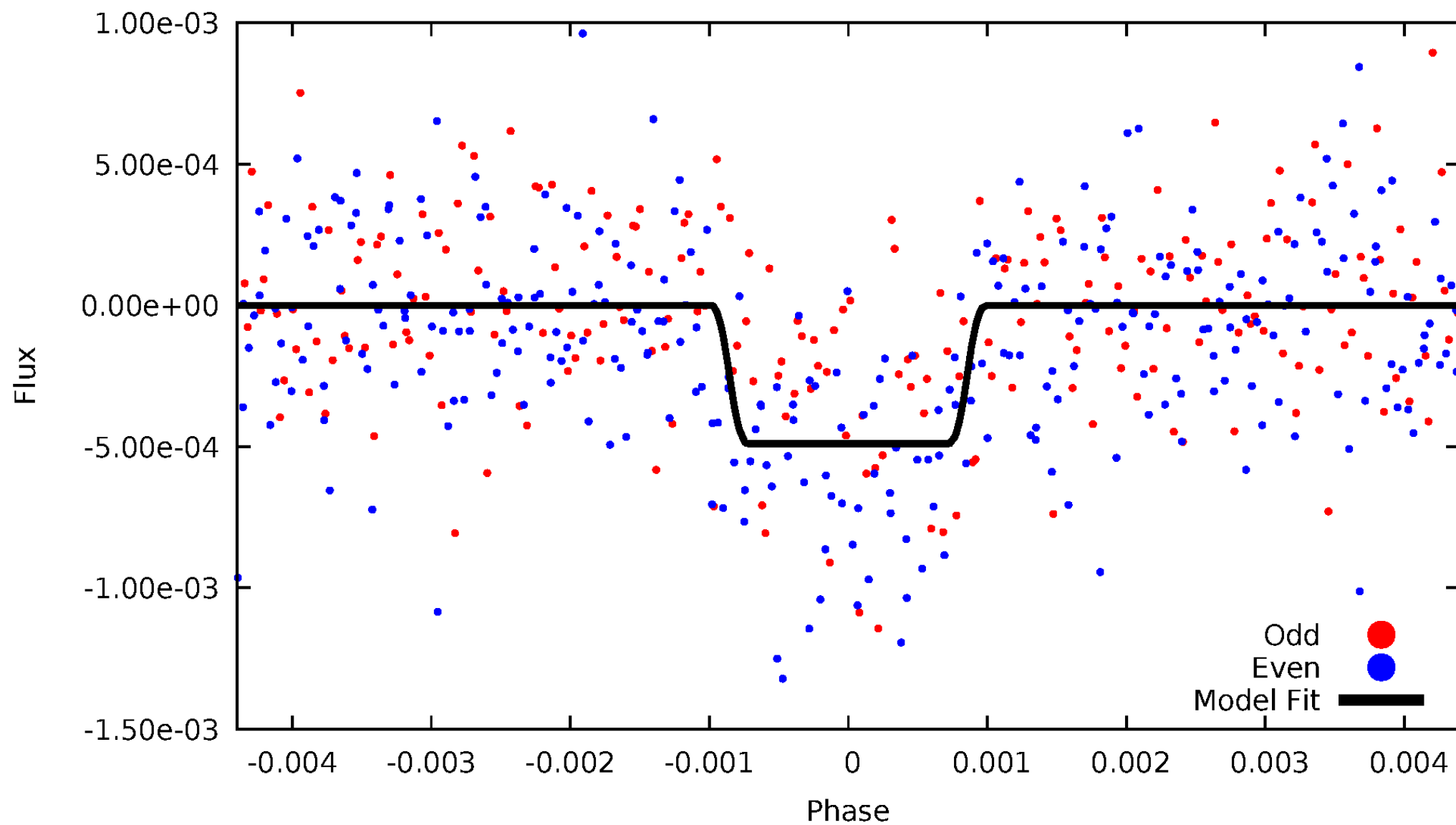
DV Odd/Even

TCE 006765135-01



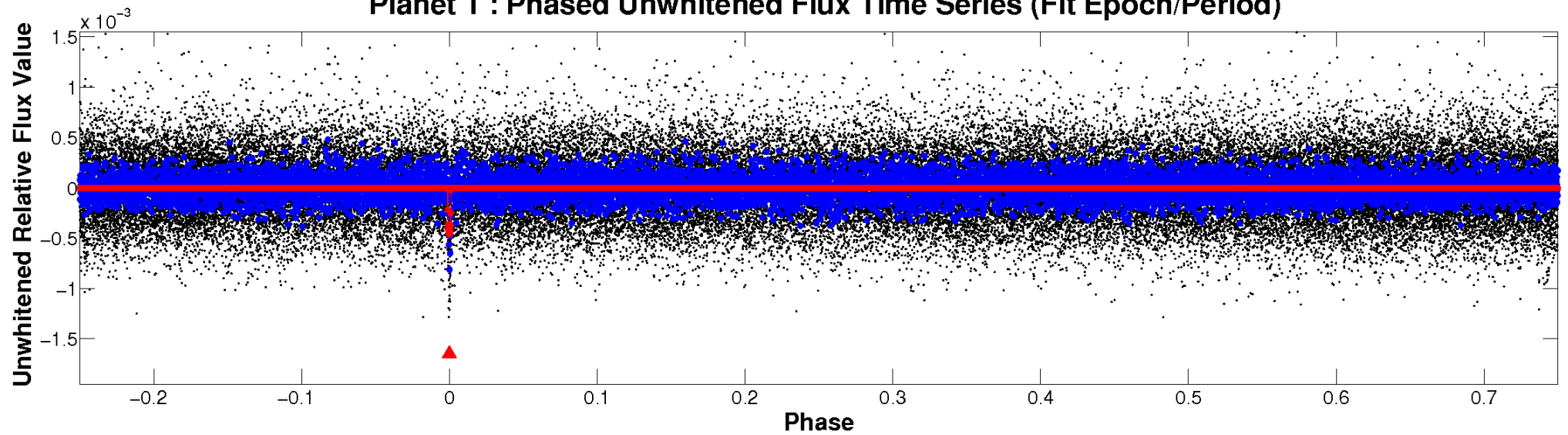
ALT Odd/Even

TCE 006765135-01

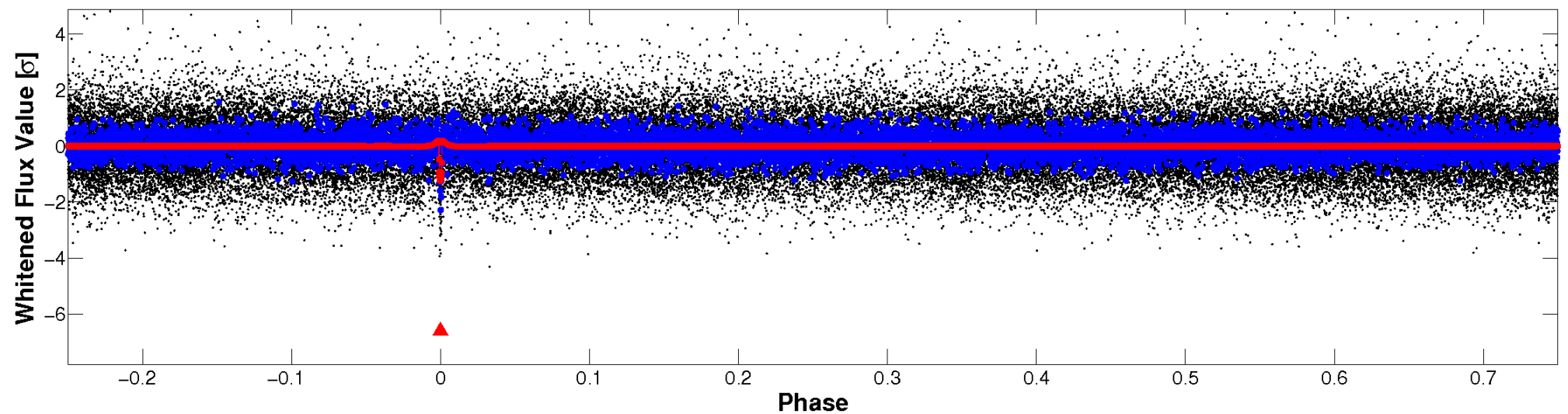


Non-Whitened Vs. Whitened Light Curve

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

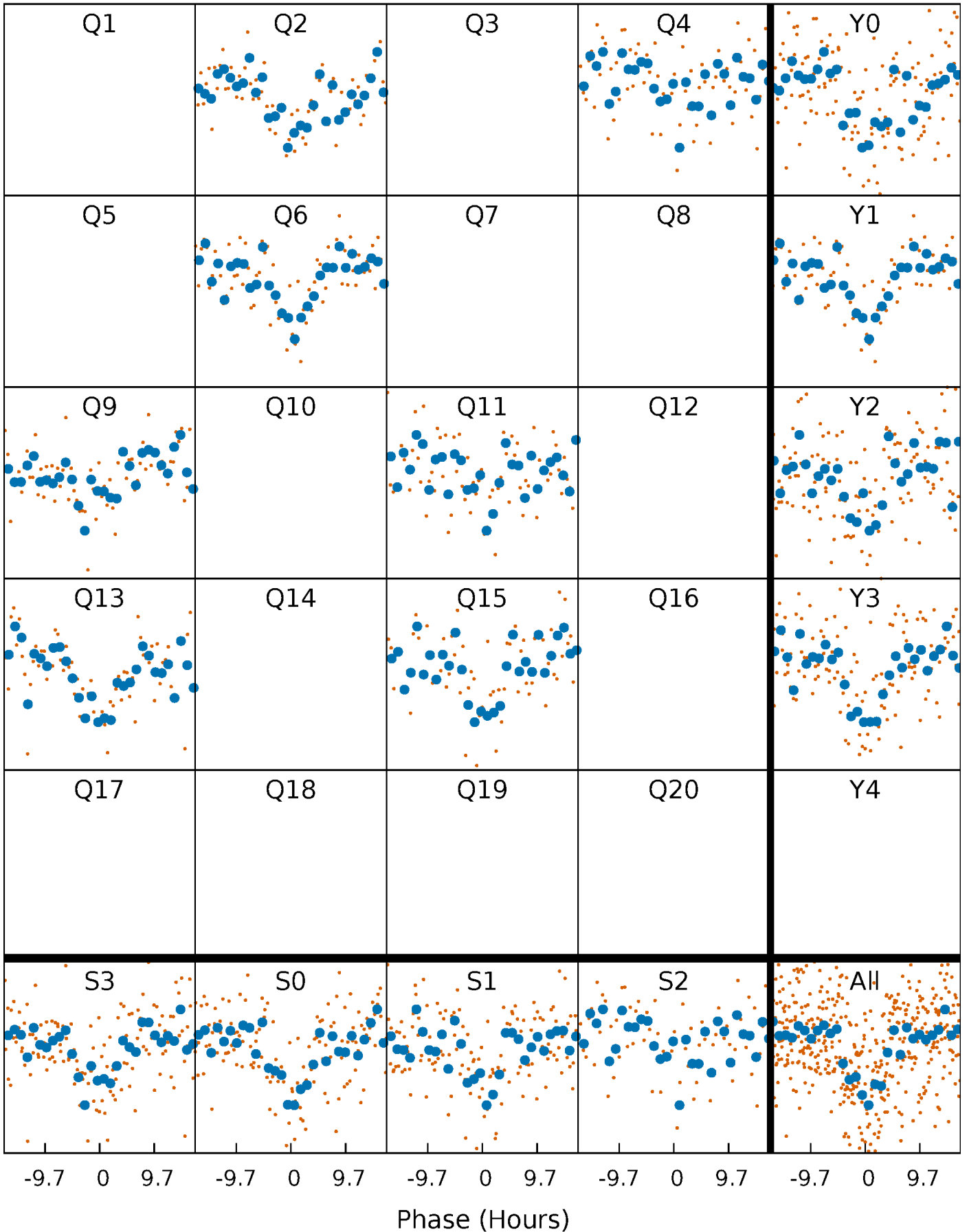


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



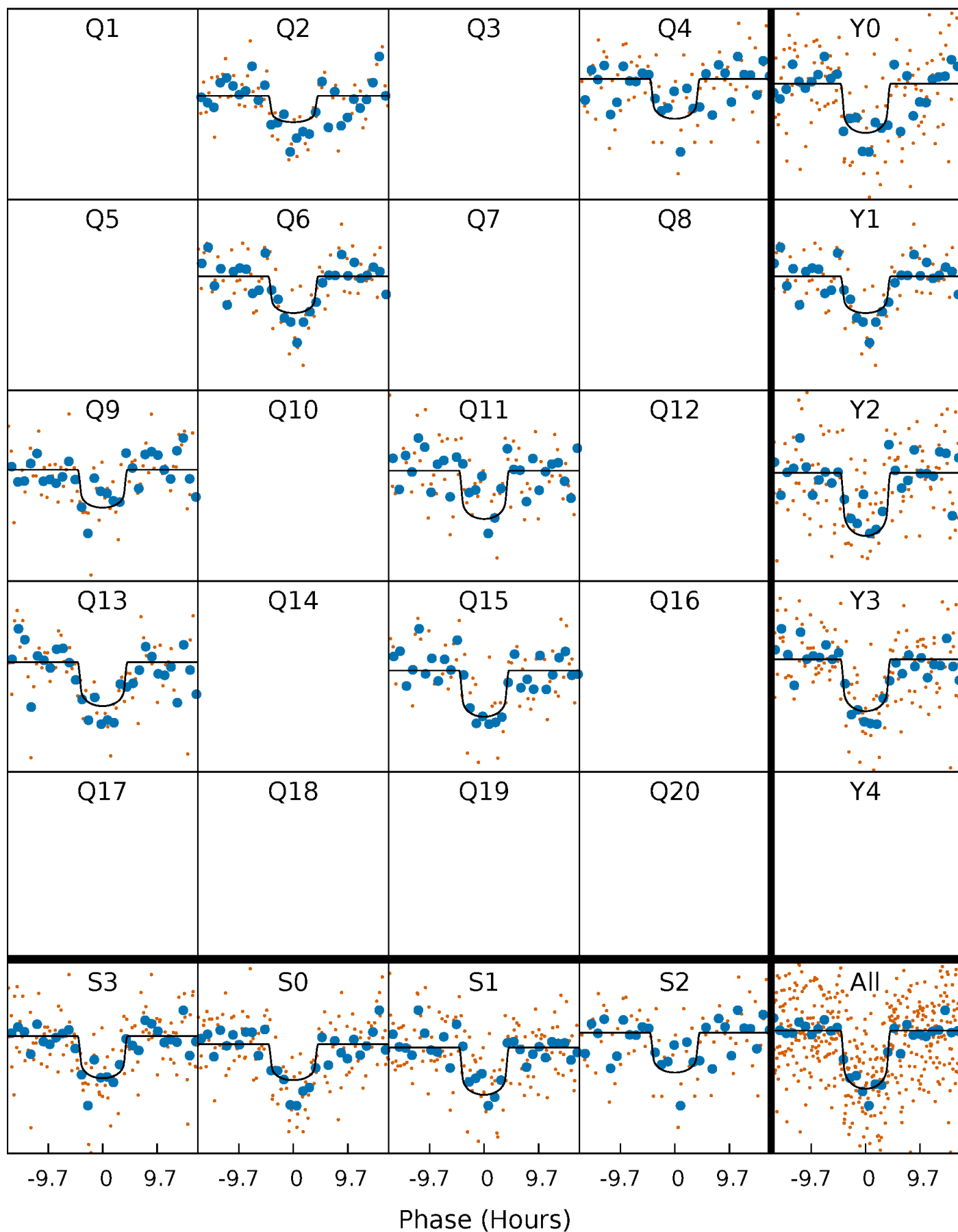
PDC Quarter-Phased Transit Curves

TCE 006765135-01 P=175.604122 Days $T_0=202.370563$ (BKJD)



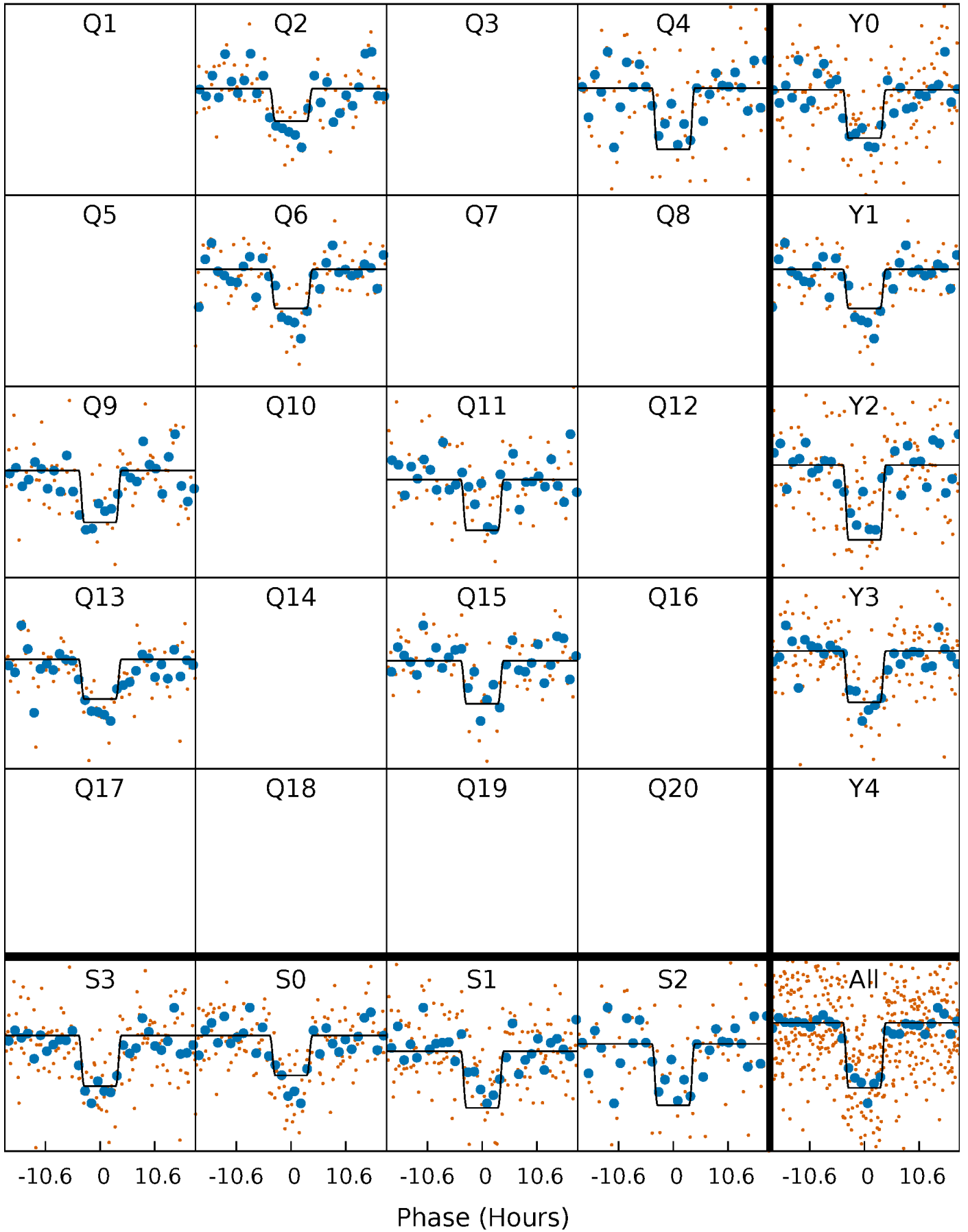
DV Quarter-Phased Transit Curves

TCE 006765135-01 P=175.604122 Days $T_0=202.370563$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

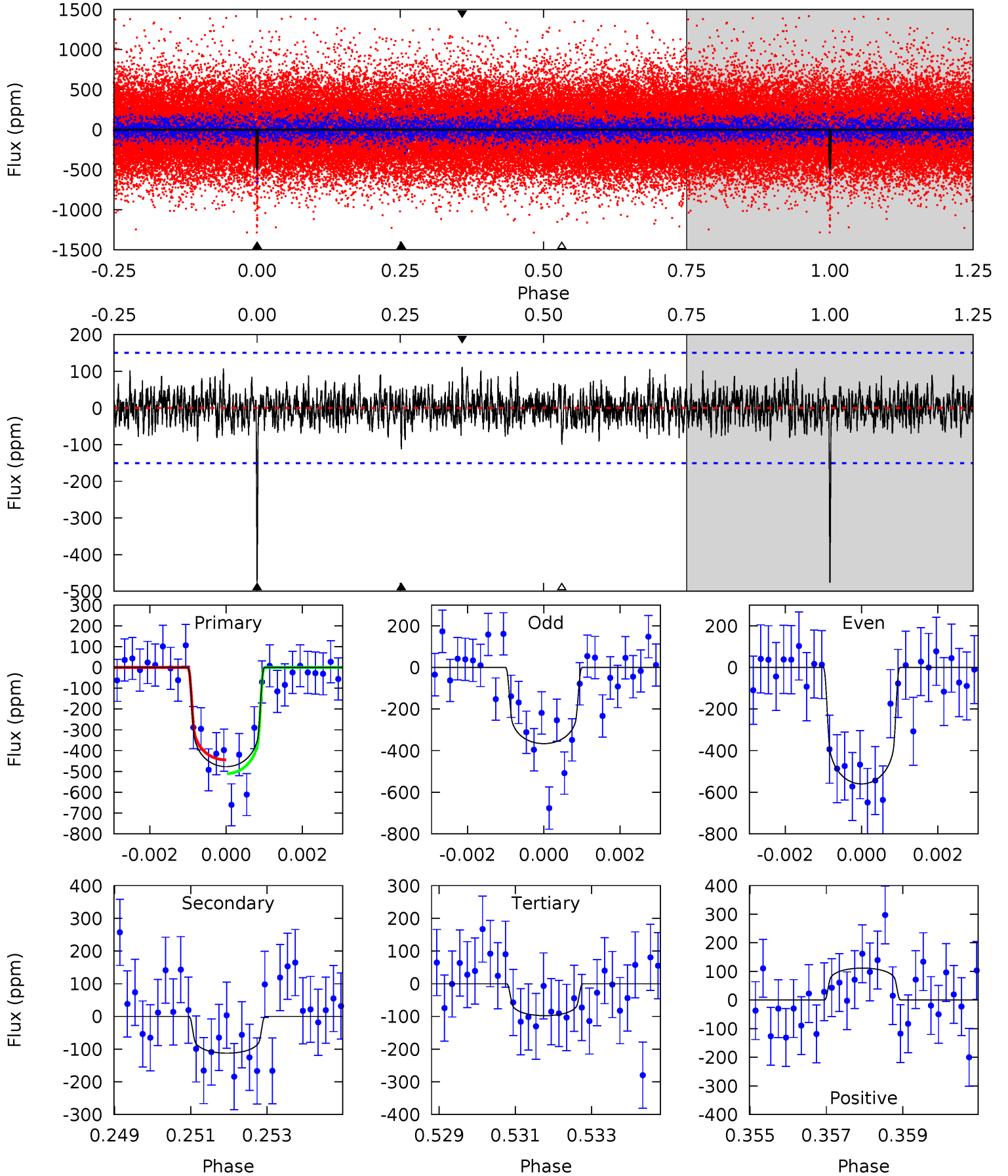
TCE 006765135-01 P=175.599203 Days $T_0=202.386732$ (BKJD)



DV Model-Shift Uniqueness Test

006765135-01, $P = 175.604122$ Days, $E = 26.766441$ Days

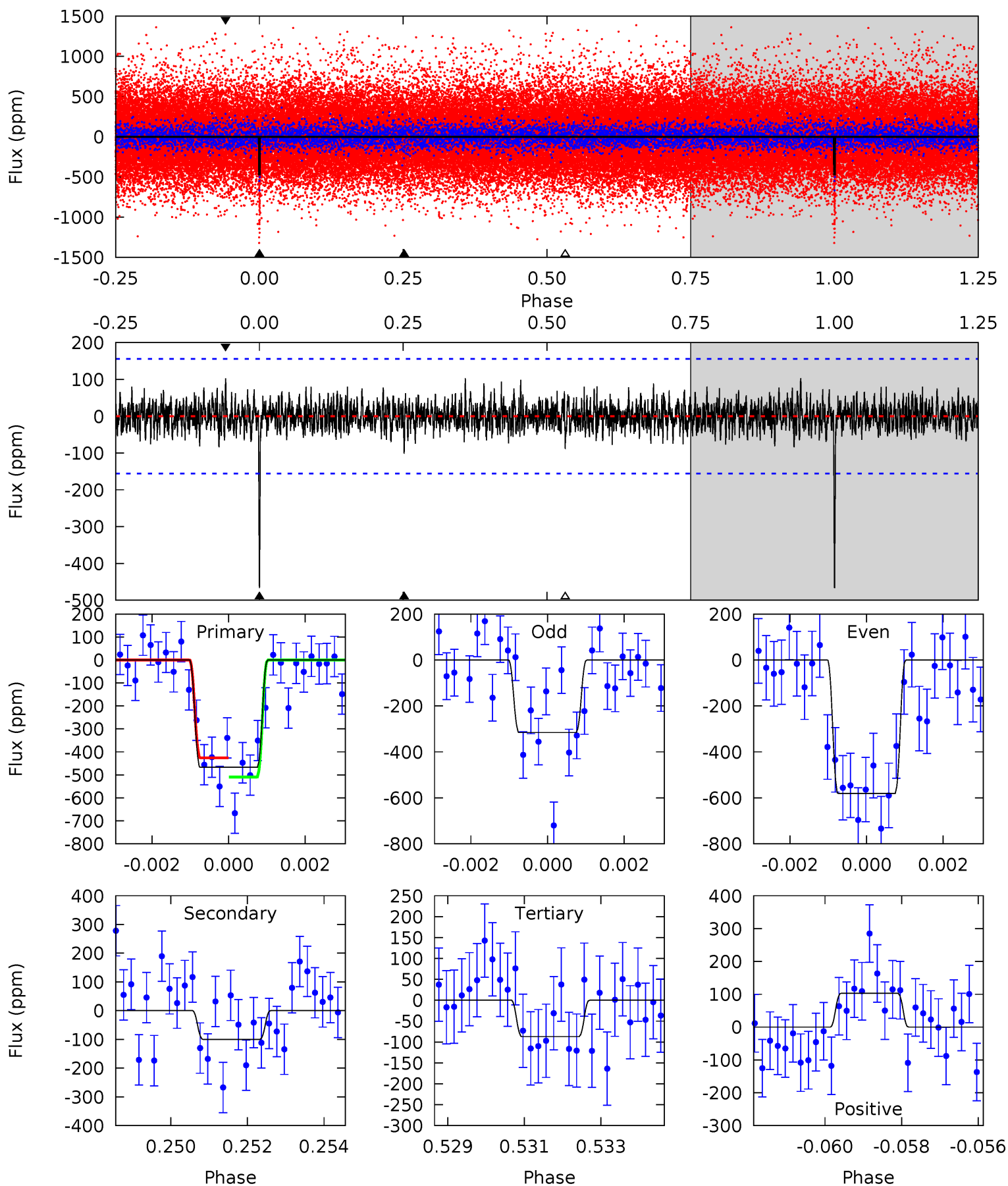
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.8	3.97	3.45	3.94	5.32	3.07	1.12	13.4	12.9	0.52	0.03	3.38	1.01	0.19	1.17



Alt Model-Shift Uniqueness Test

006765135-01, $P = 175.599203$ Days, $E = 26.787529$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.0	3.42	2.99	3.51	5.33	3.10	0.96	13.0	12.5	0.43	-0.10	4.51	1.01	0.18	1.43



Stellar Parameters For KIC 006765135

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6225^{+175}_{-218}	$4.461^{+0.056}_{-0.210}$	$-0.180^{+0.250}_{-0.350}$	$1.009^{+0.335}_{-0.112}$	$1.070^{+0.144}_{-0.144}$	$1.467^{+0.430}_{-0.785}$
	+3%/-4%	+1%/-5%	+139%/-194%	+33%/-11%	+13%/-13%	+29%/-54%
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 006765135-01 / KOI 2592.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-112 ± 28	$2.40^{+1.10}_{-1.01}$	498^{+37}_{-26}	4559^{+1249}_{-565}	4038^{+7873}_{-2150}
Alt.	-100 ± 29	$2.50^{+1.11}_{-1.02}$	496^{+39}_{-26}	4406^{+996}_{-582}	3289^{+6175}_{-1812}

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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

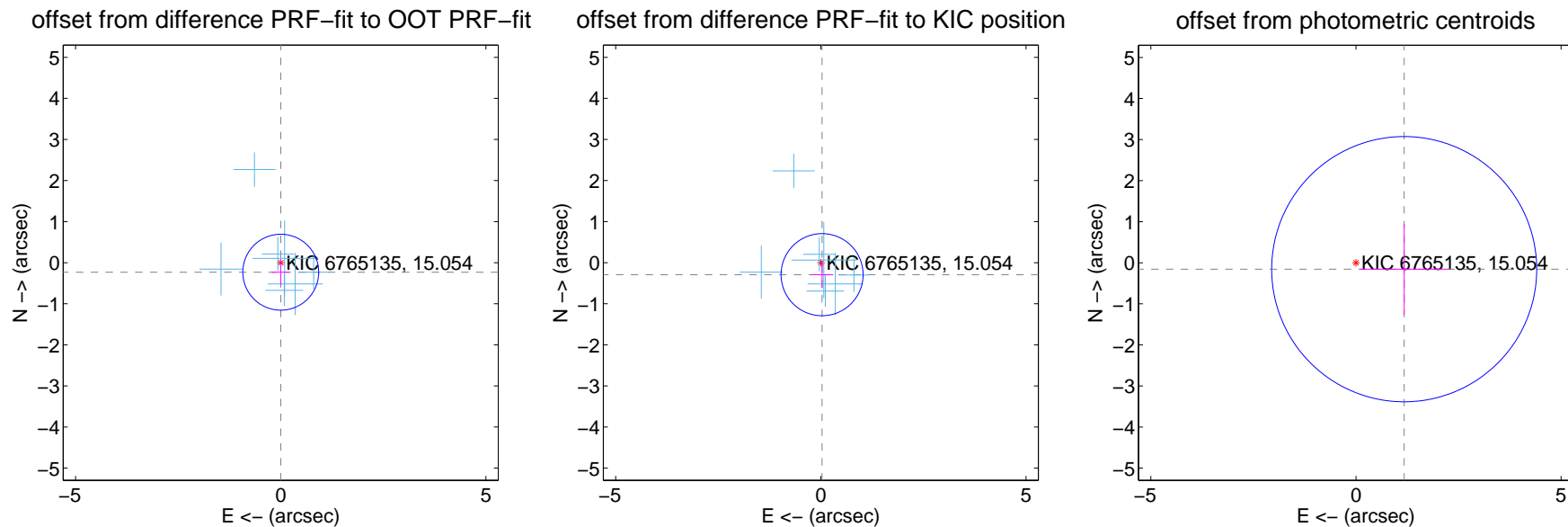
DV Centroid Data

Supplemental centroid analysis for 006765135-01. Kepler magnitude: 15.05. Transit SNR 11.61

There are 7 quarters with good PRF difference image offsets

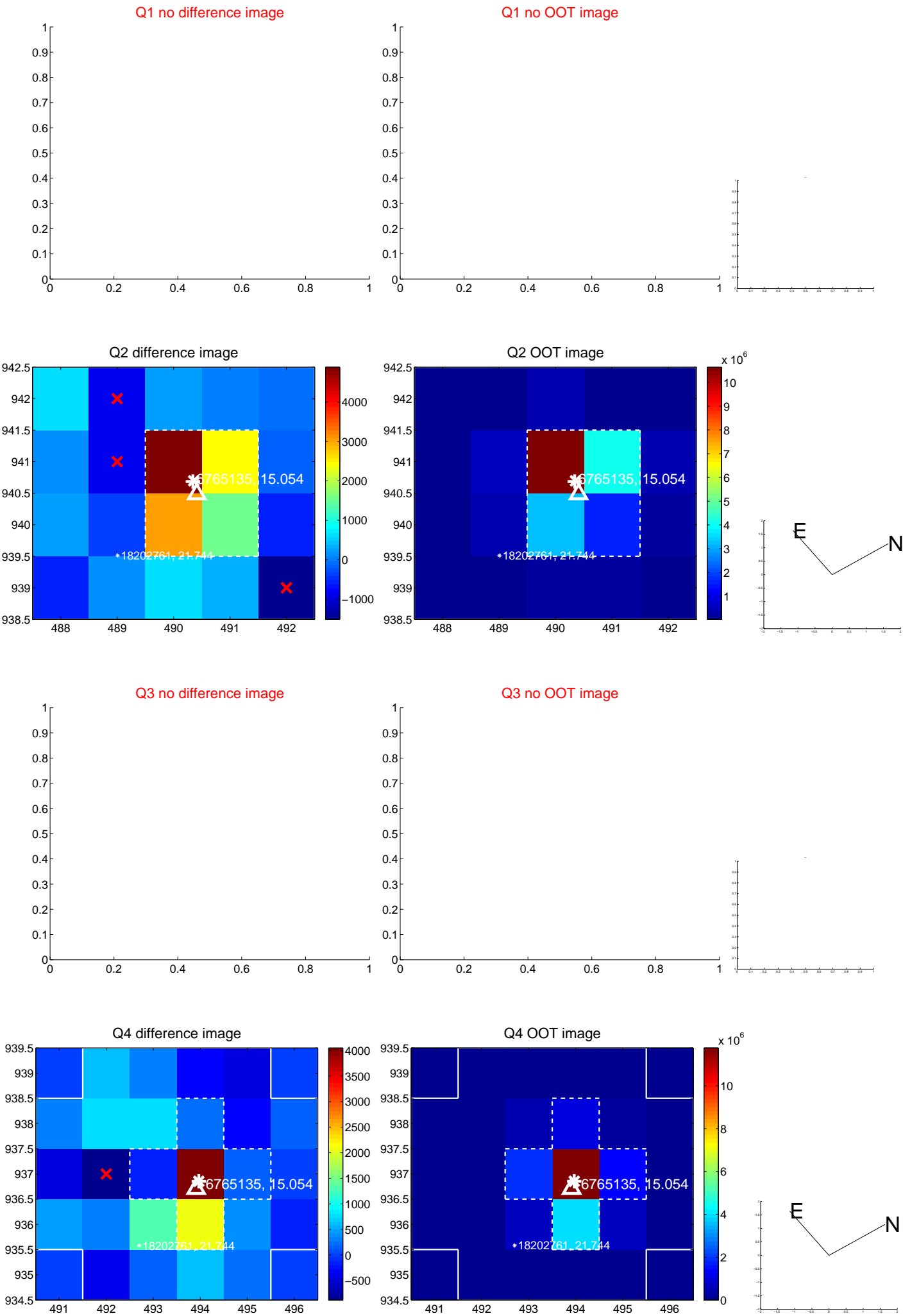
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.232 ± 0.308	0.75	-0.000 ± 0.218	-0.232 ± 0.308
PRF-fit source offset from KIC position	0.293 ± 0.333	0.88	-0.030 ± 0.272	-0.292 ± 0.328
photometric centroid source offset	1.19 ± 1.08	1.10	-1.18 ± 1.08	-0.16 ± 1.10



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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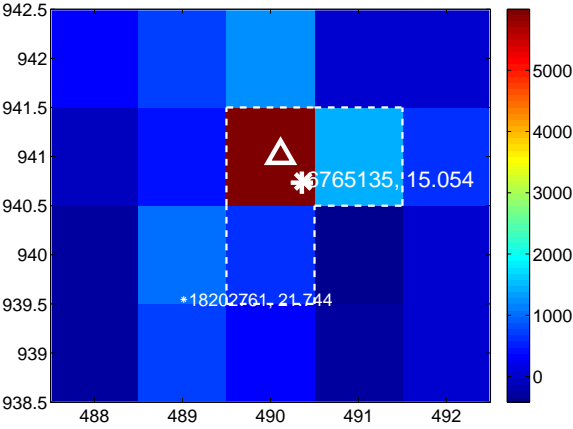
Q5 no difference image



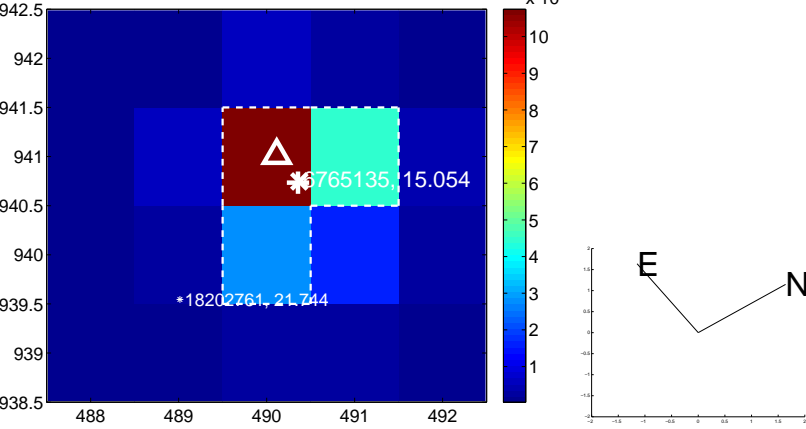
Q5 no OOT image



Q6 difference image



Q6 OOT image



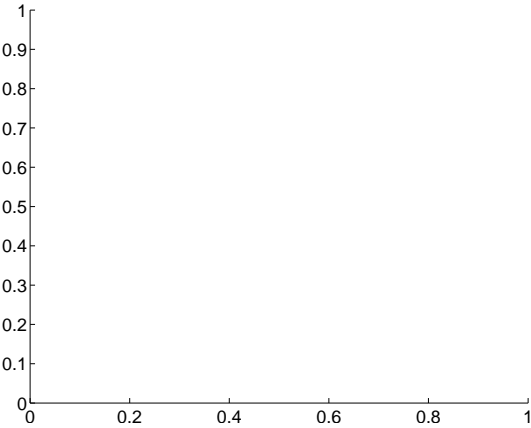
Q7 no difference image



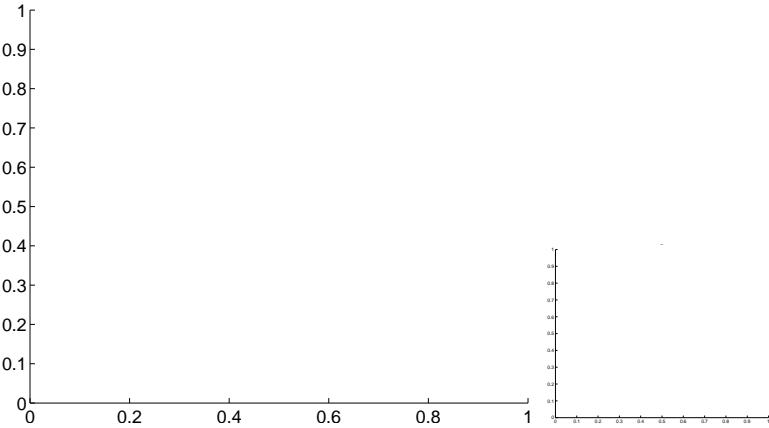
Q7 no OOT image



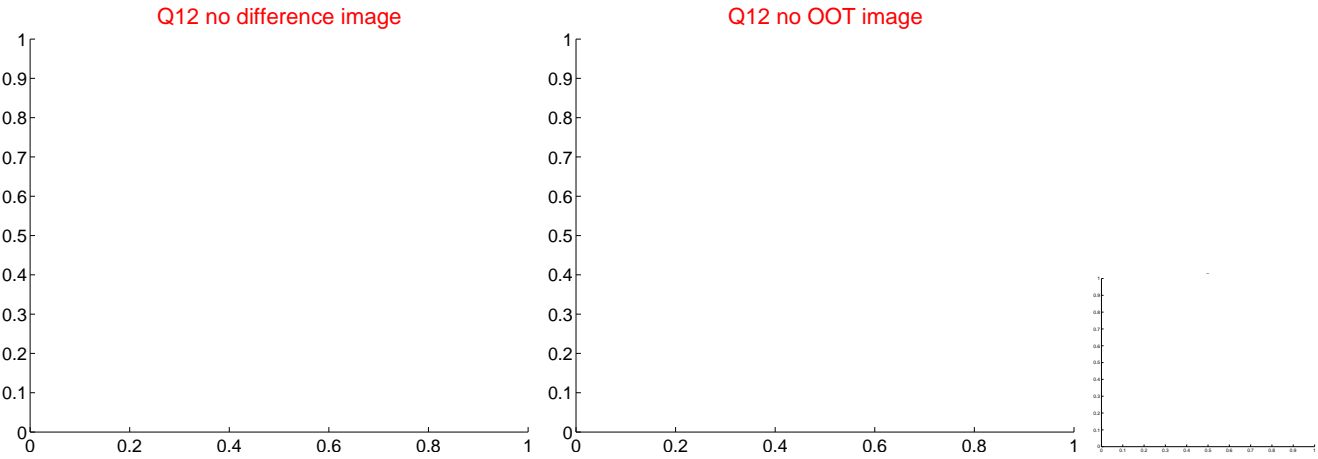
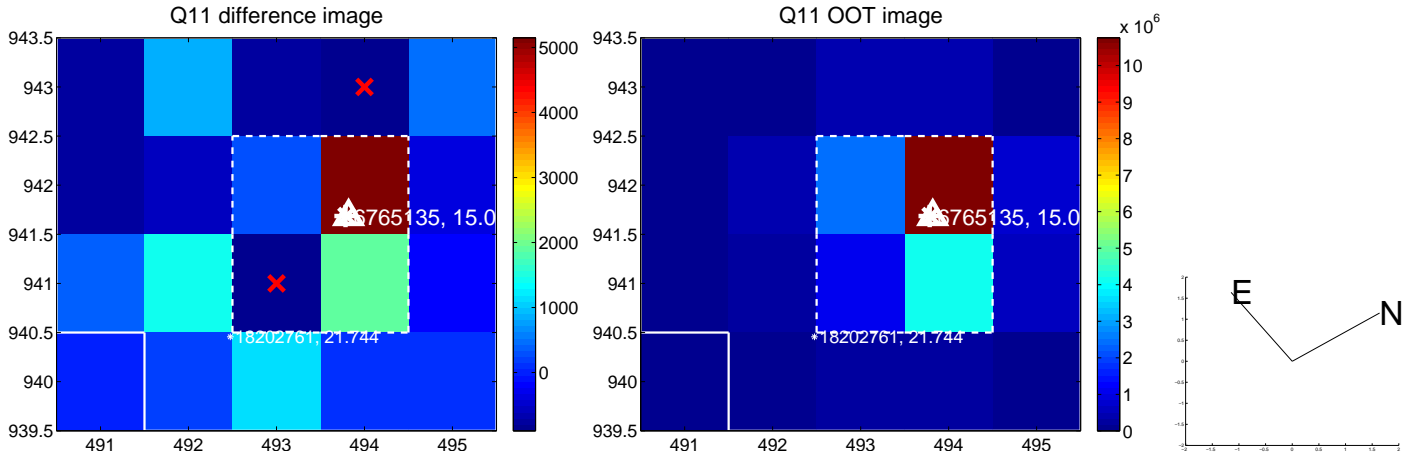
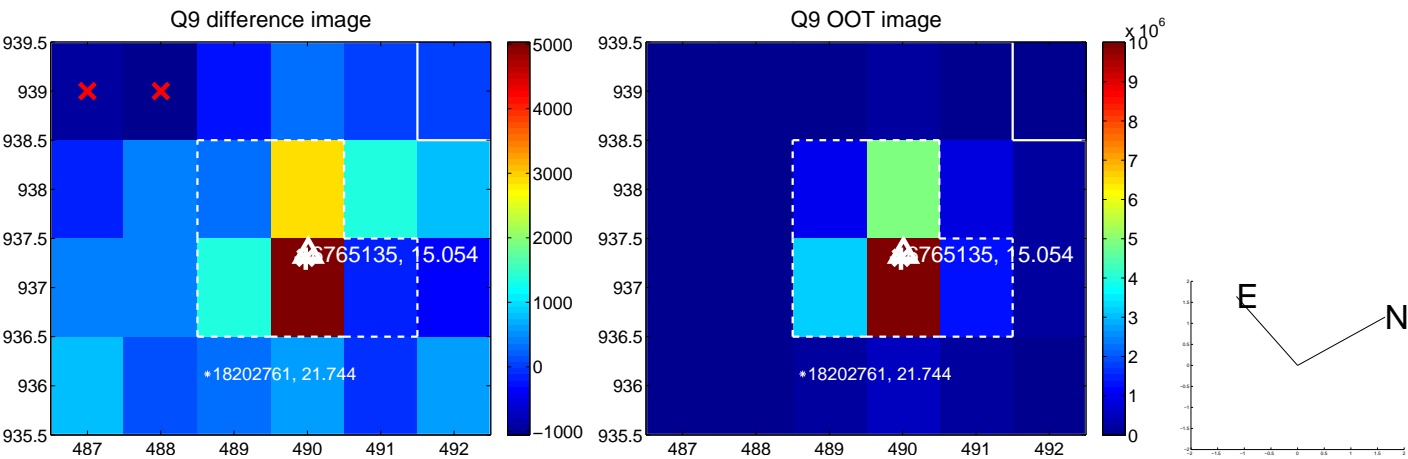
Q8 no difference image



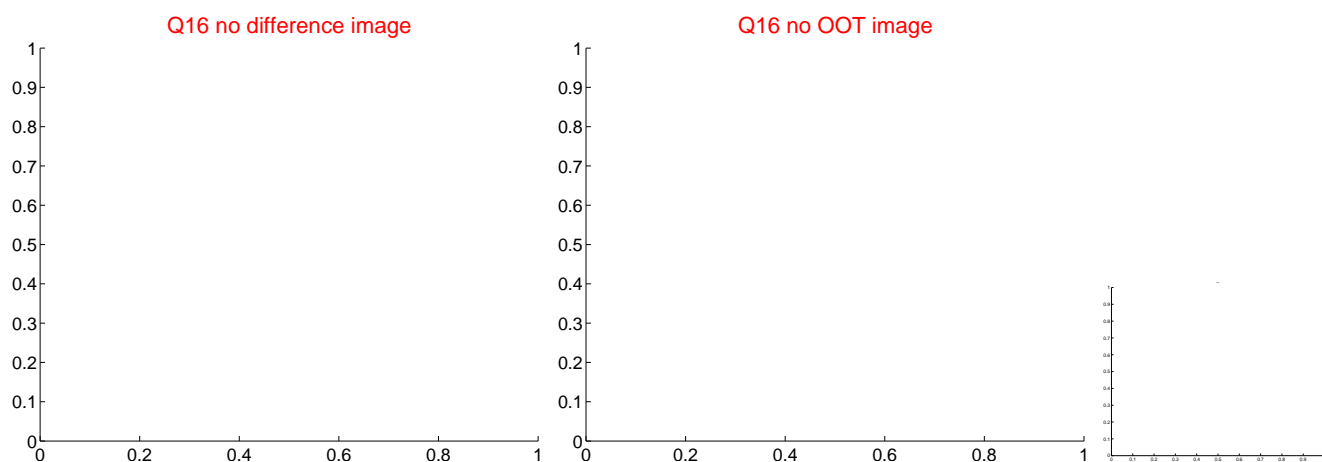
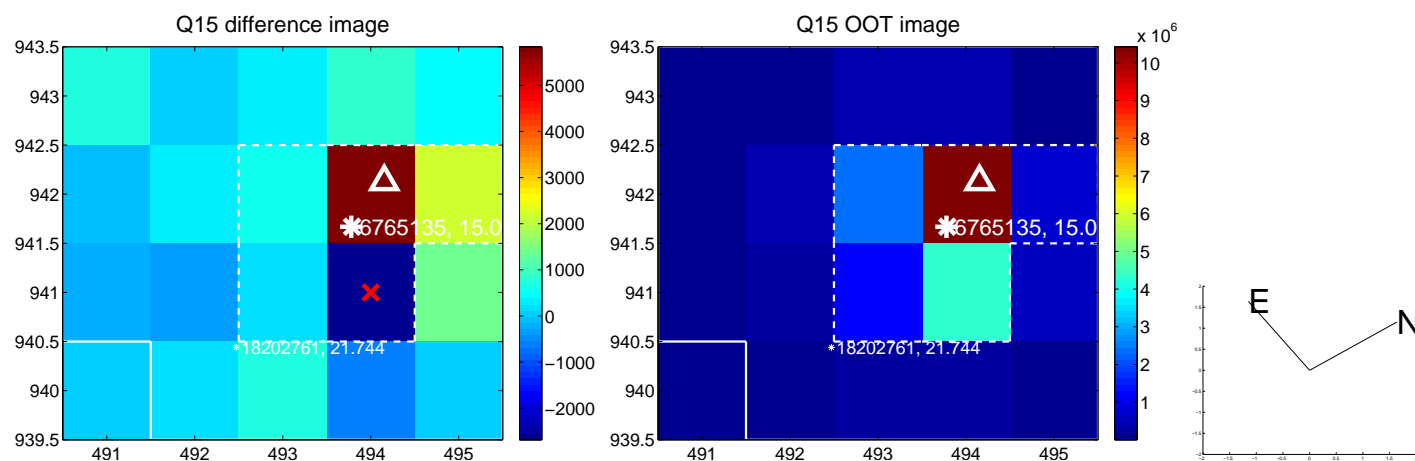
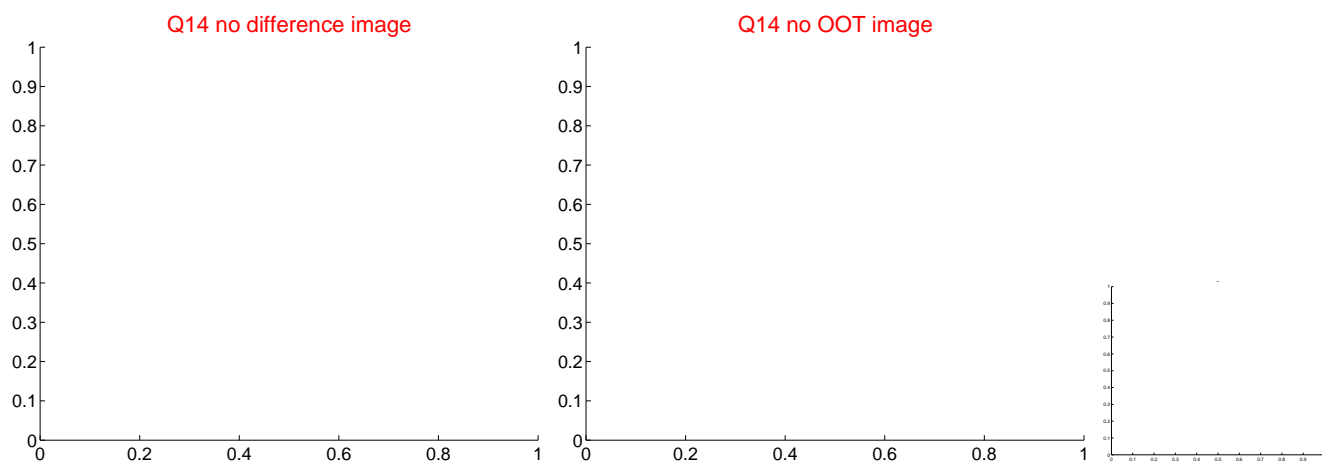
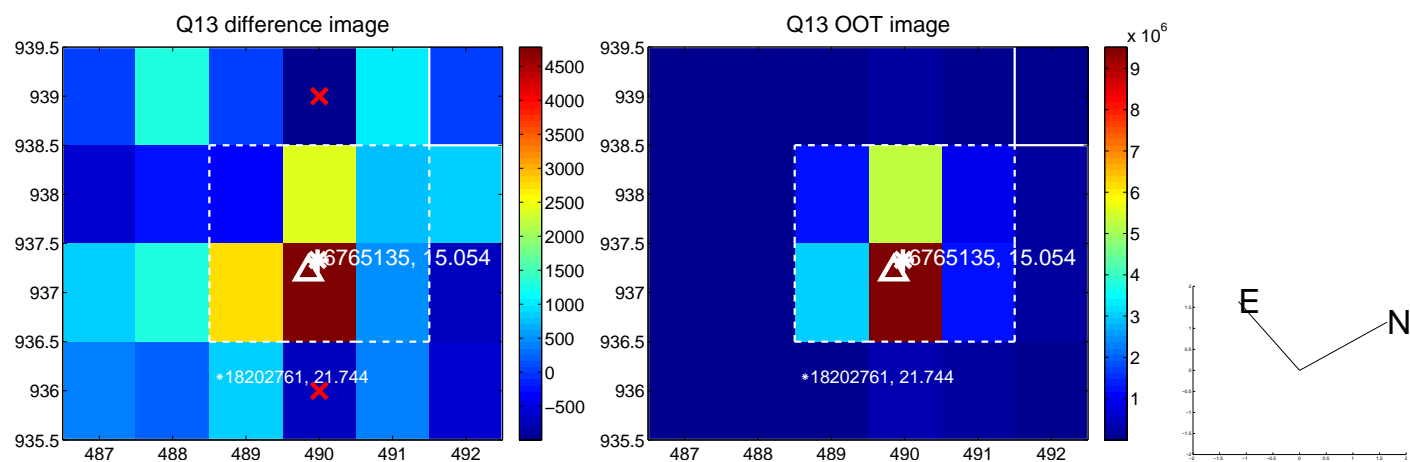
Q8 no OOT image



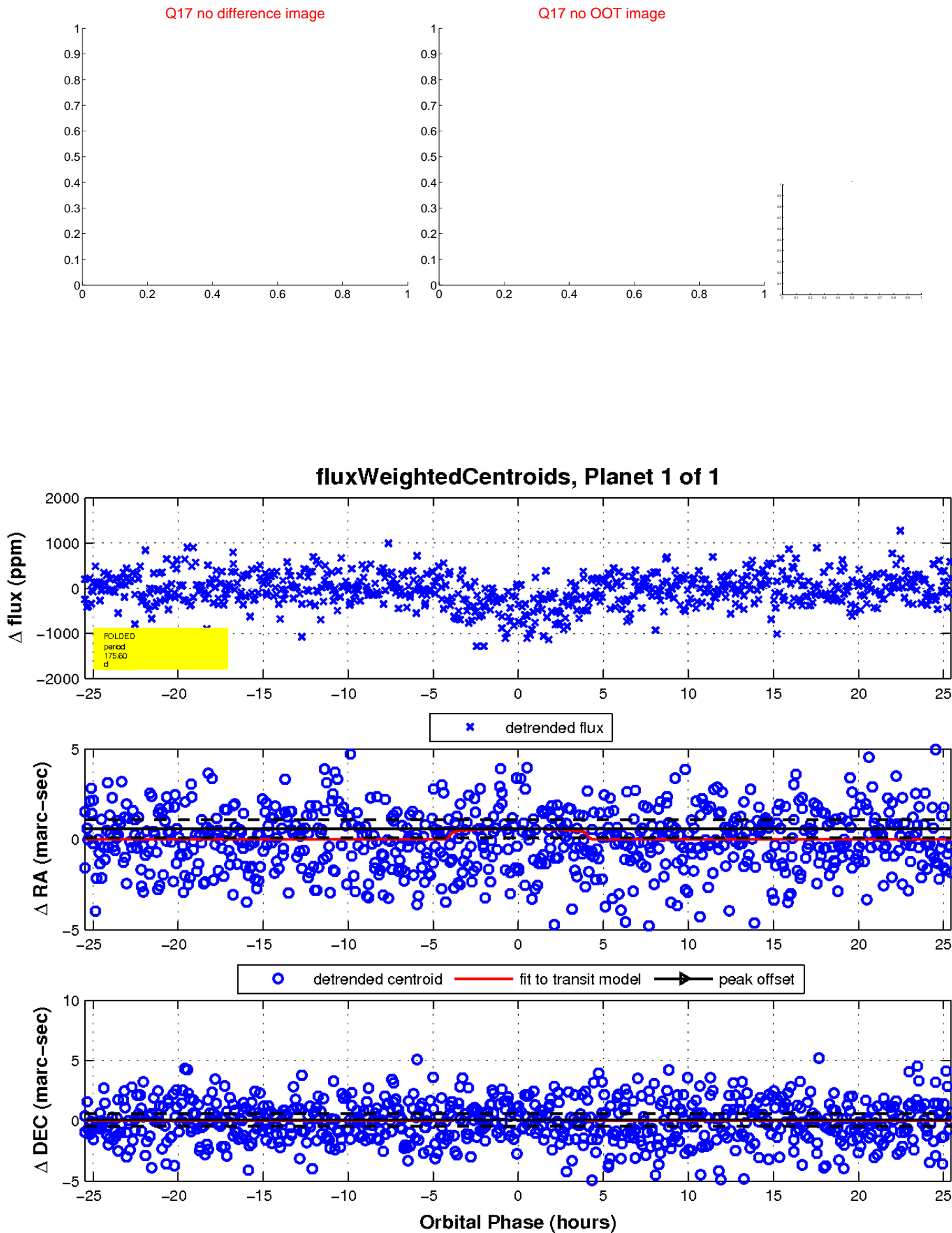
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

