

KIC 006934986

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})
006934986-01	OBS	2294.01	131.486698	177.483305	602.2	6.231	13.6	15.6	1.24	5765	4.06	6.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006934986-01	OBS	PC	0.97	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.

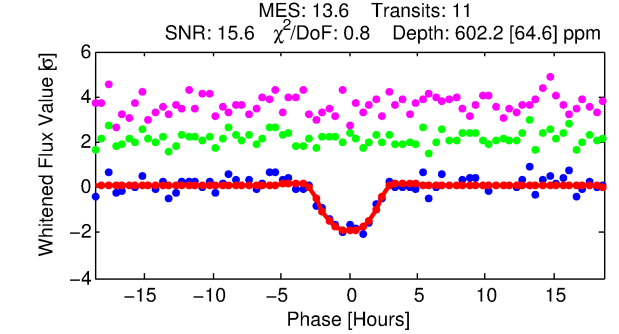
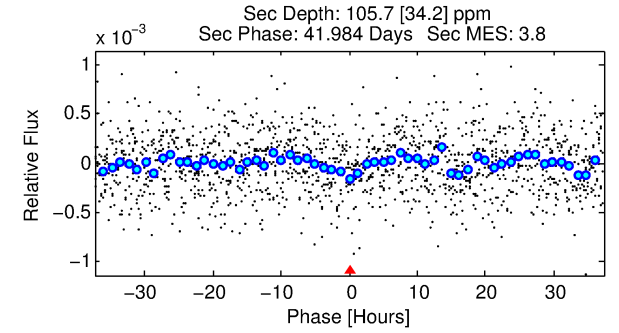
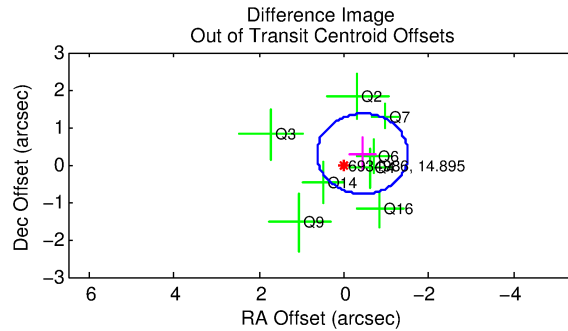
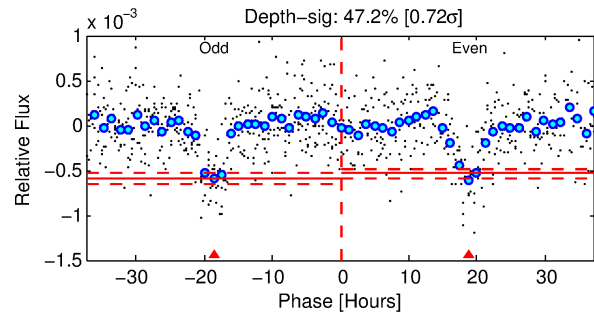
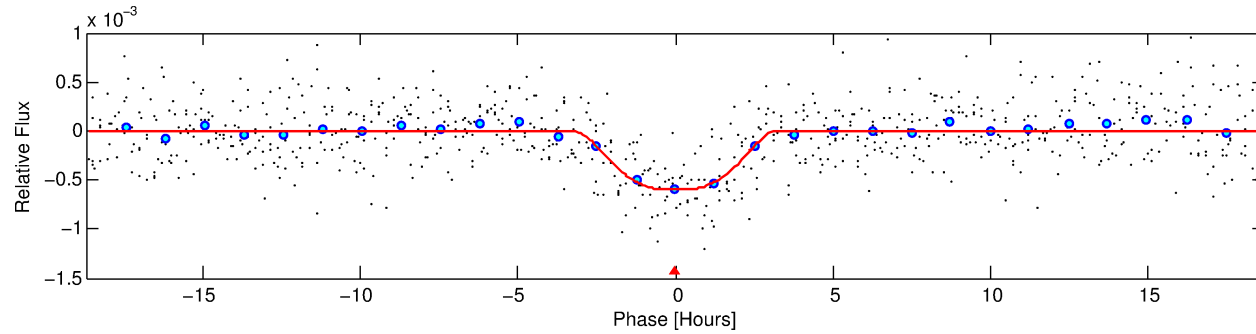
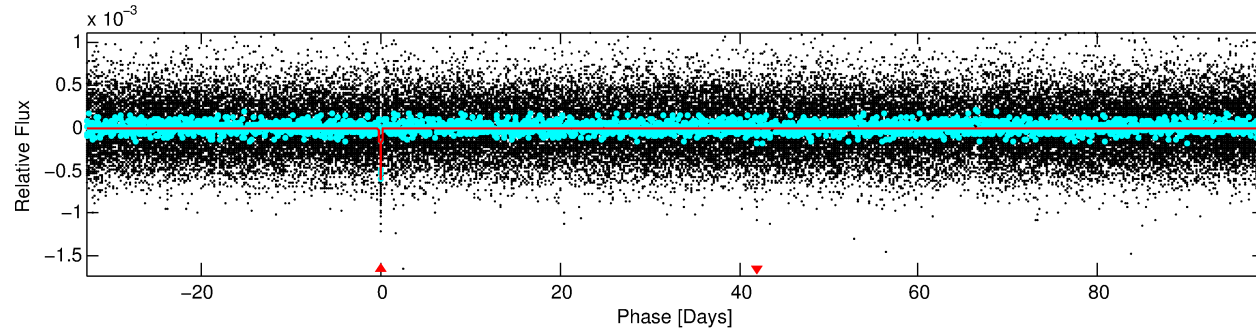
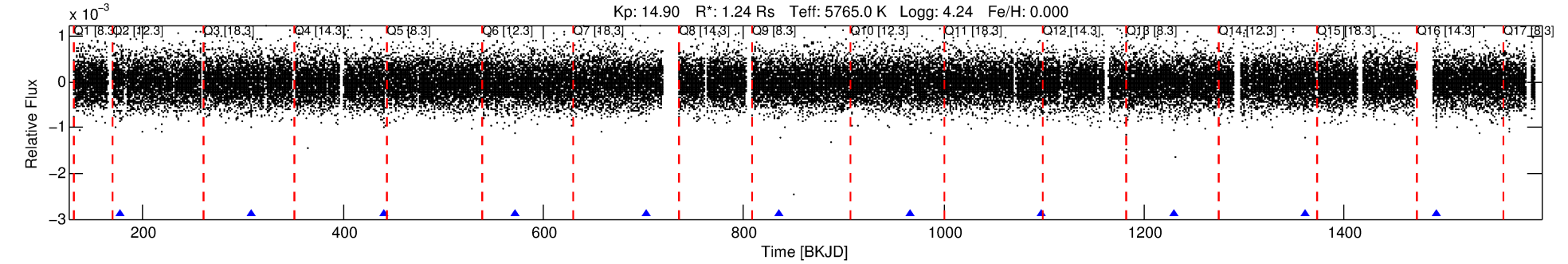
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006934986-01

No Significant Match Found

DV One-Page Summary

KIC: 6934986 Candidate: 1 of 1 Period: 131.487 d
KOI: K02294.01 Corr: 0.909



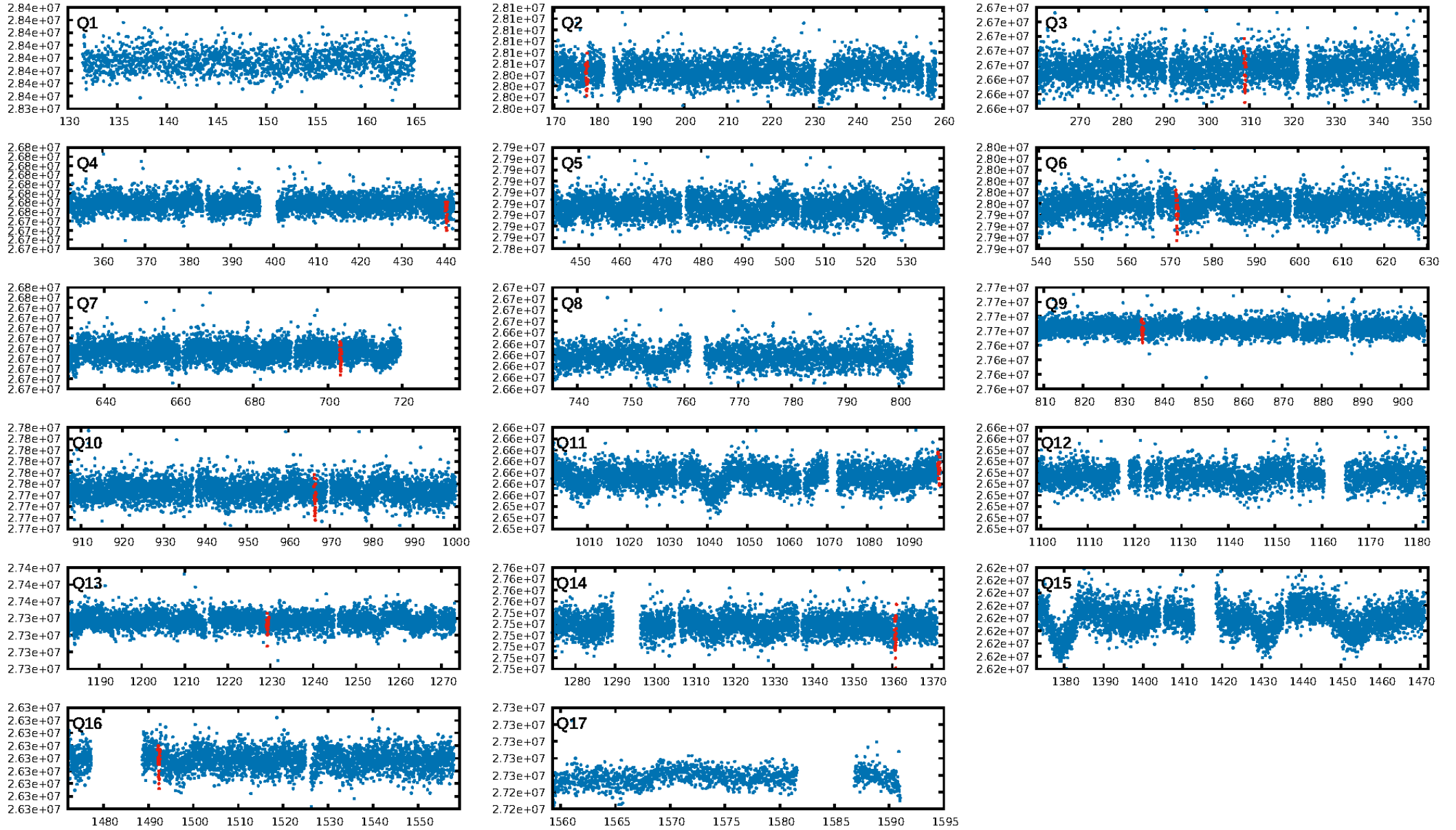
DV Fit Results:

Period = 131.48670 [0.00141] d
Epoch = 177.4833 [0.0086] BKJD
Rp/R* = 0.0300 [0.0025]
a/R* = 56.51 [7.64]
b = 0.97 [0.01]
Seff = 6.09 [1.73]
Teff = 401 [28] K
Rp = 4.06 [0.76] Re
a = 0.5008 [0.0839] AU
Ag = 884.66 [402.45] [2.20 σ]
Teffp = 3377 [315] K [9.42 σ]

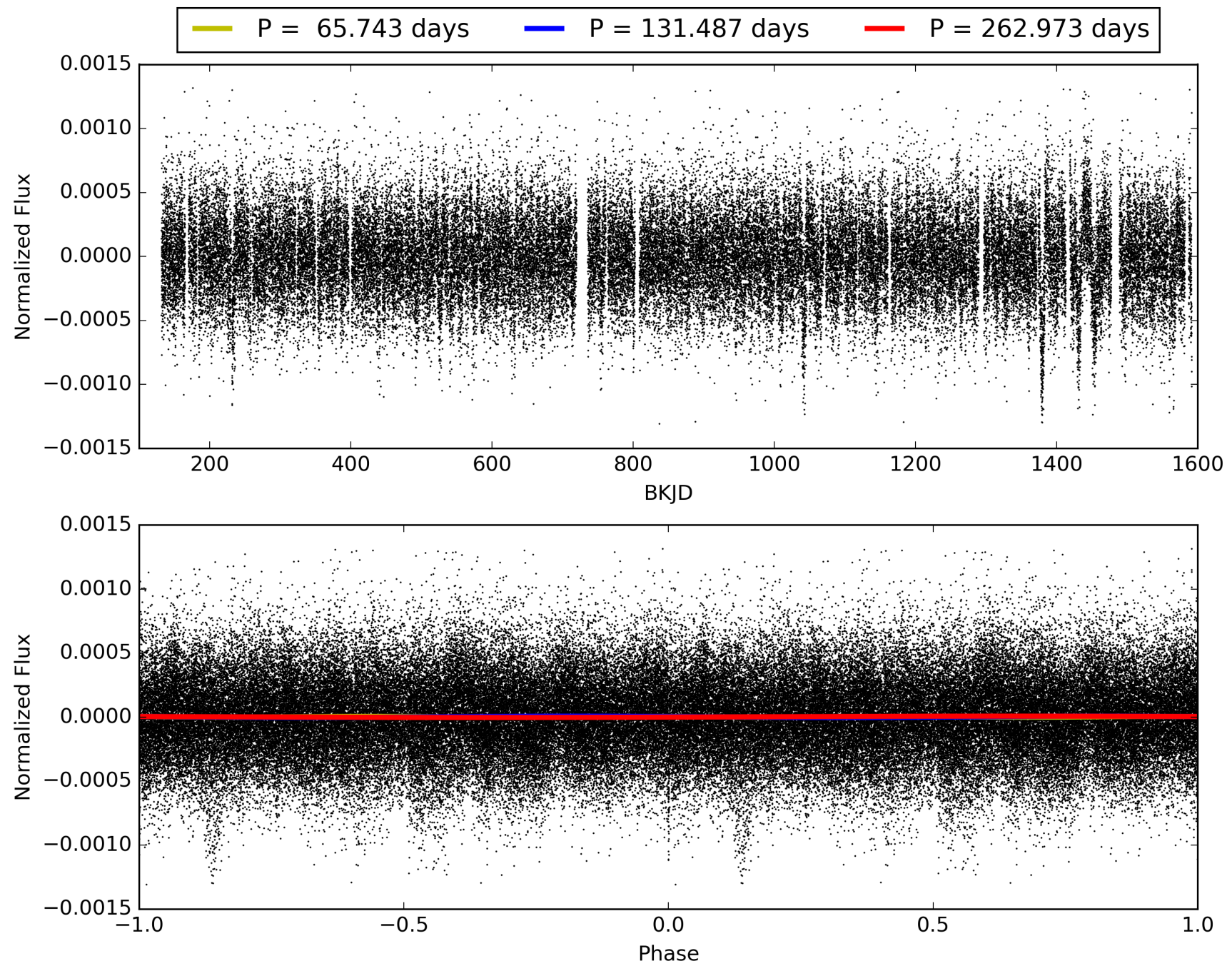
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 87.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.87e-42
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: 6.789
Centroid-sig: 0.0%
Centroid-so: 2.028 arcsec [2.41 σ]
OotOffset-rm: 0.530 arcsec [1.48 σ]
KicOffset-rm: 0.550 arcsec [1.29 σ]
OotOffset-st: 3/2/2/1 [8]
KicOffset-st: 3/2/2/1 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [9/9]

TCE 006934986-01, PDC Light Curves

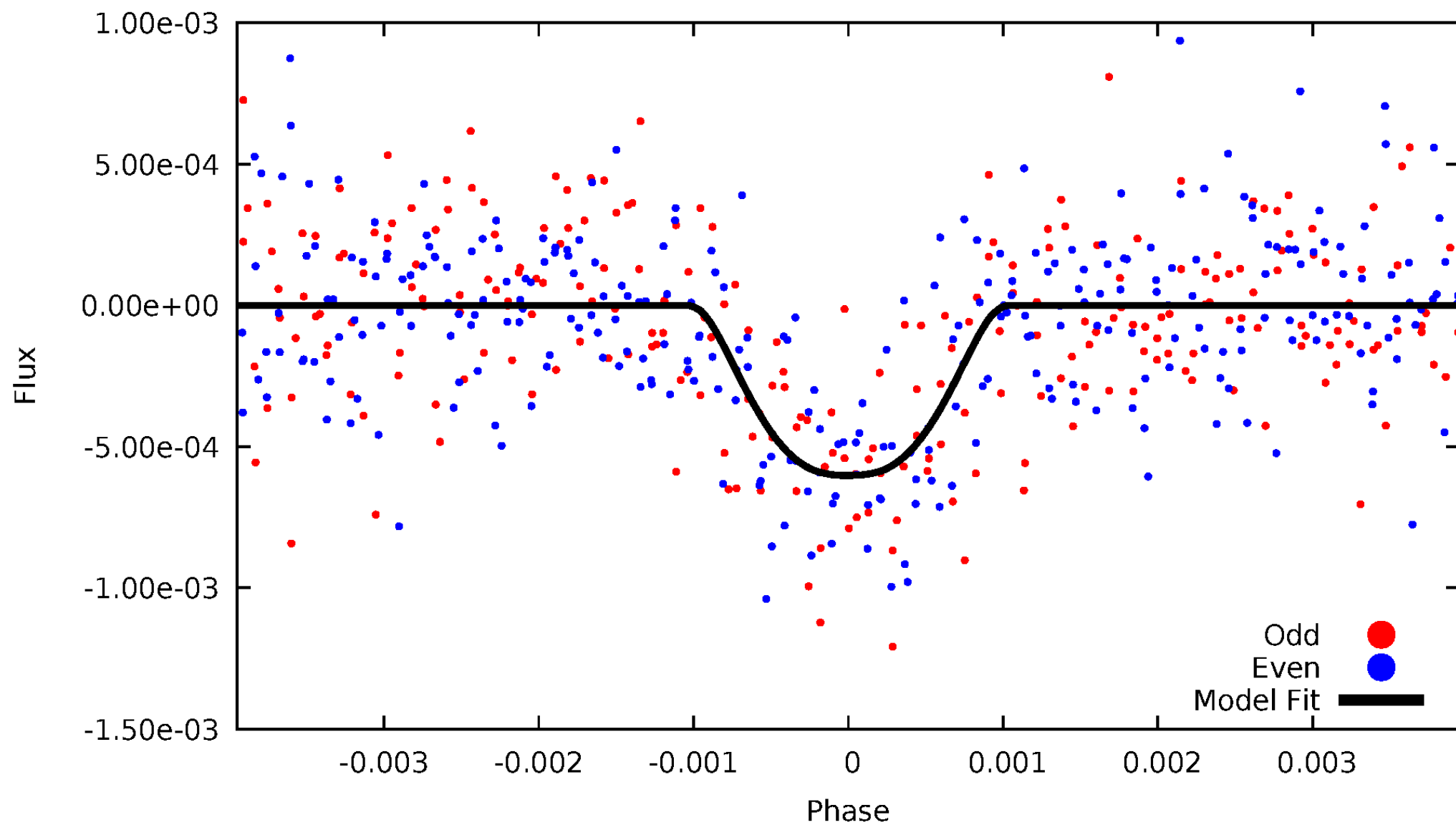


TCE 006934986-01



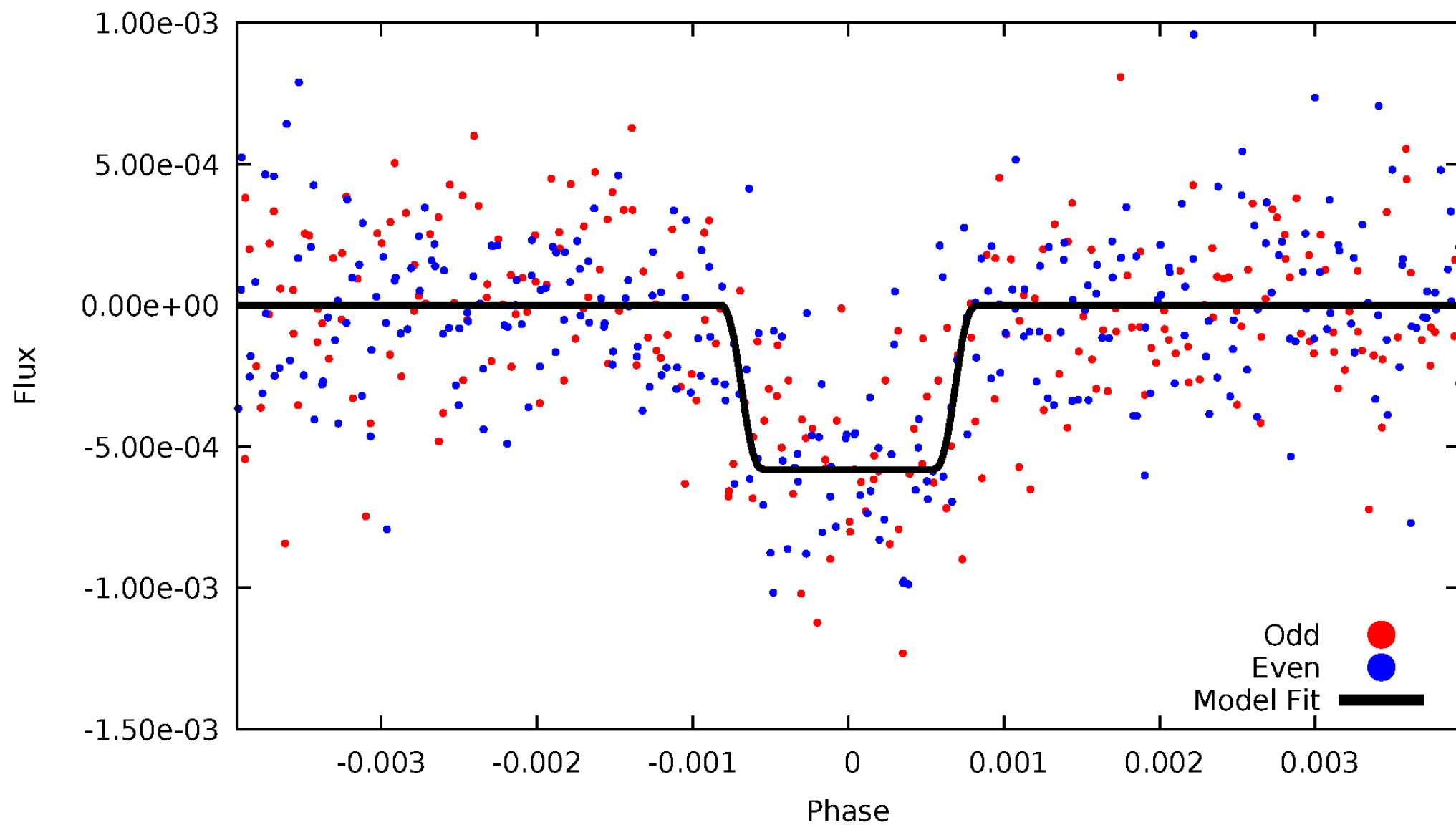
DV Odd/Even

TCE 006934986-01

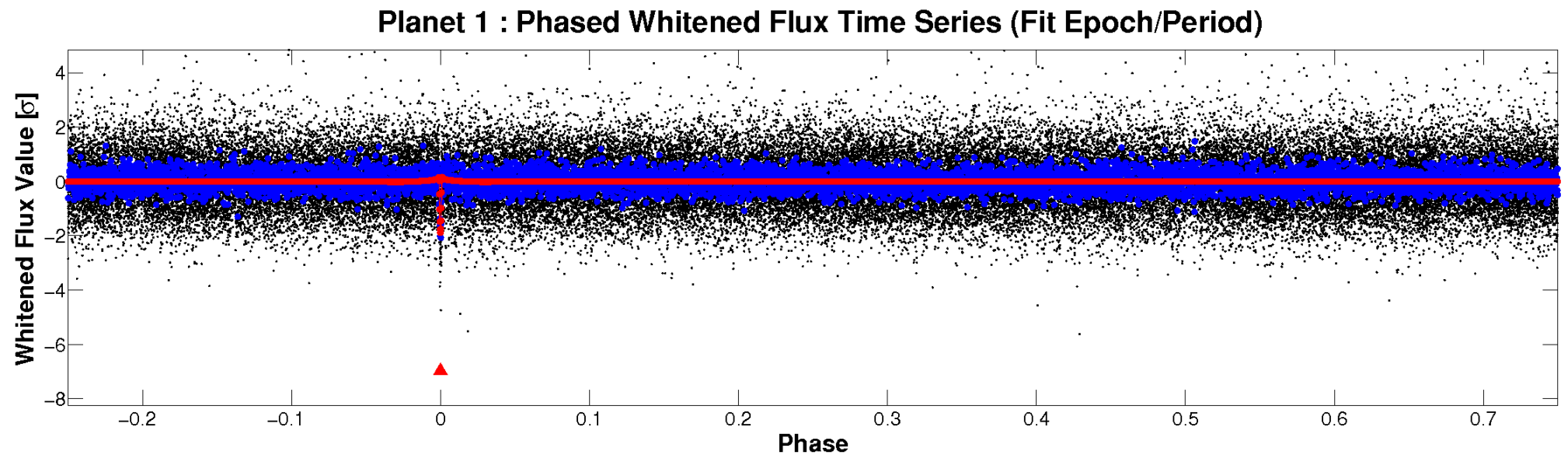
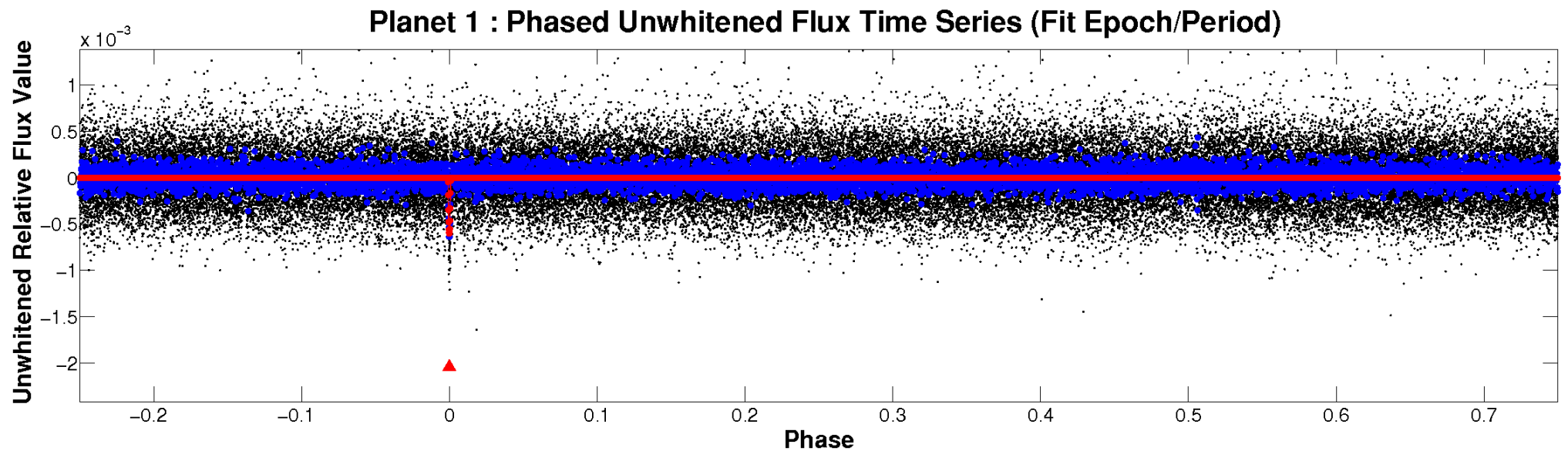


ALT Odd/Even

TCE 006934986-01

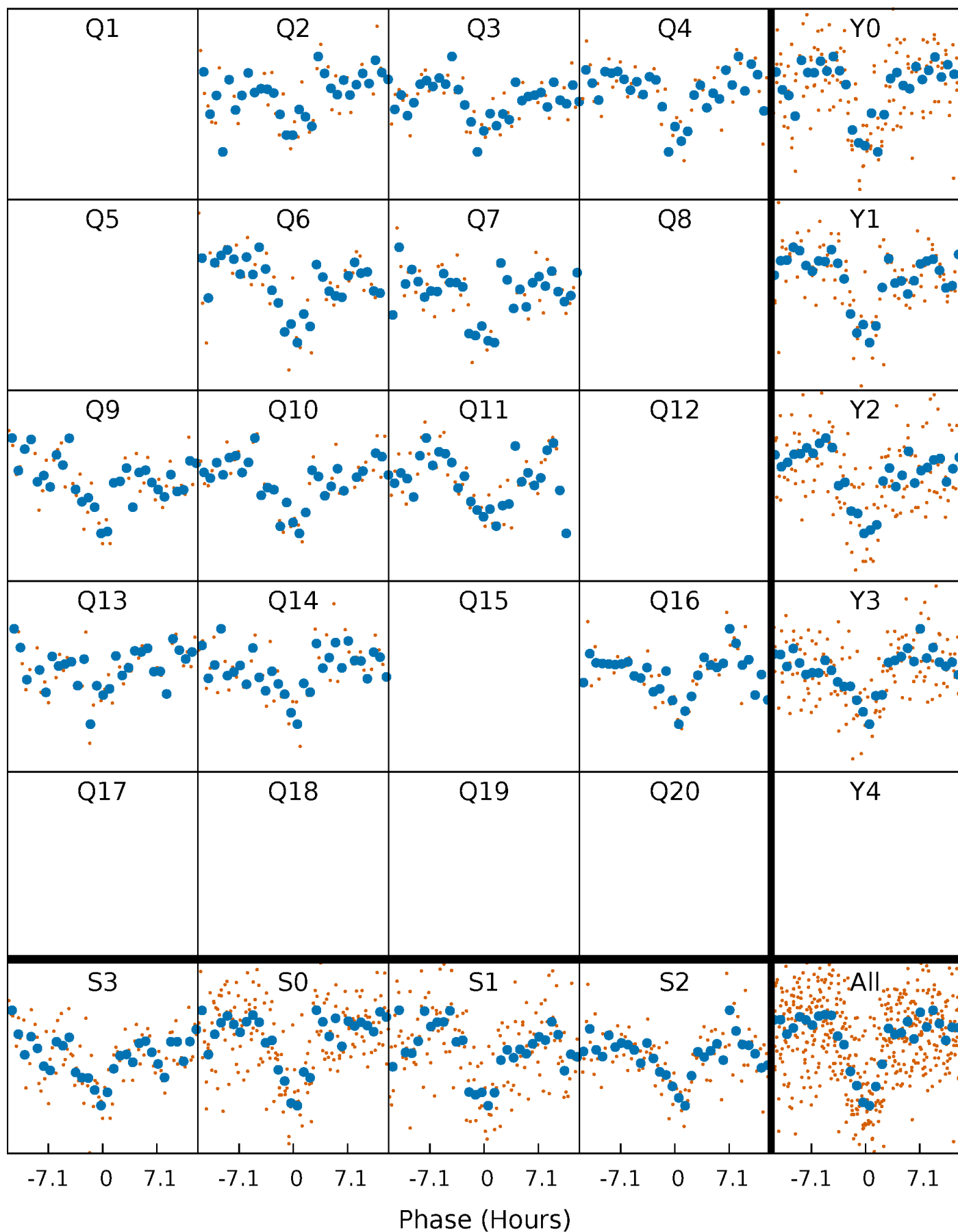


Non-Whitened Vs. Whitened Light Curve



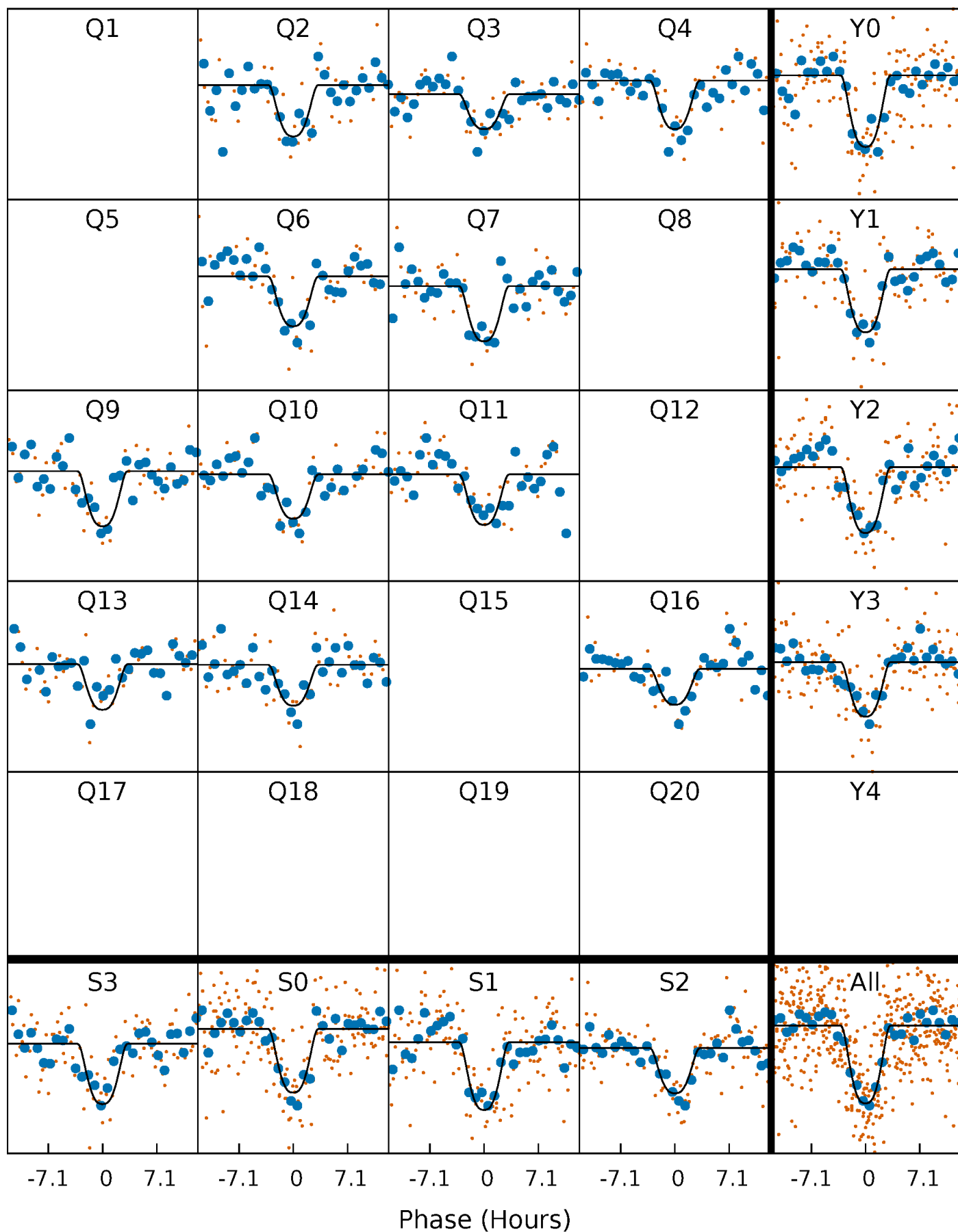
PDC Quarter-Phased Transit Curves

TCE 006934986-01 P=131.486698 Days $T_0=177.483306$ (BKJD)



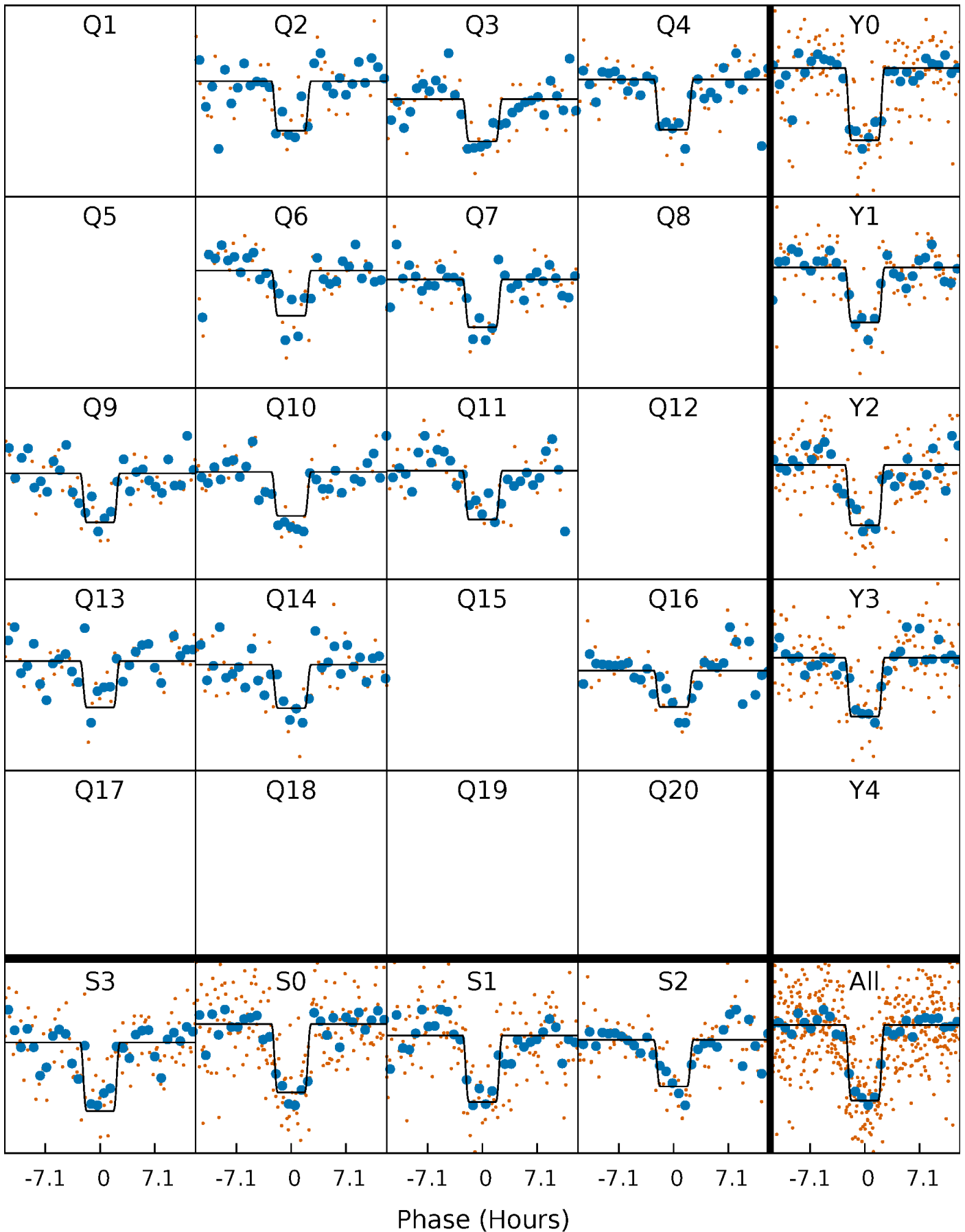
DV Quarter-Phased Transit Curves

TCE 006934986-01 P=131.486698 Days $T_0=177.483306$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

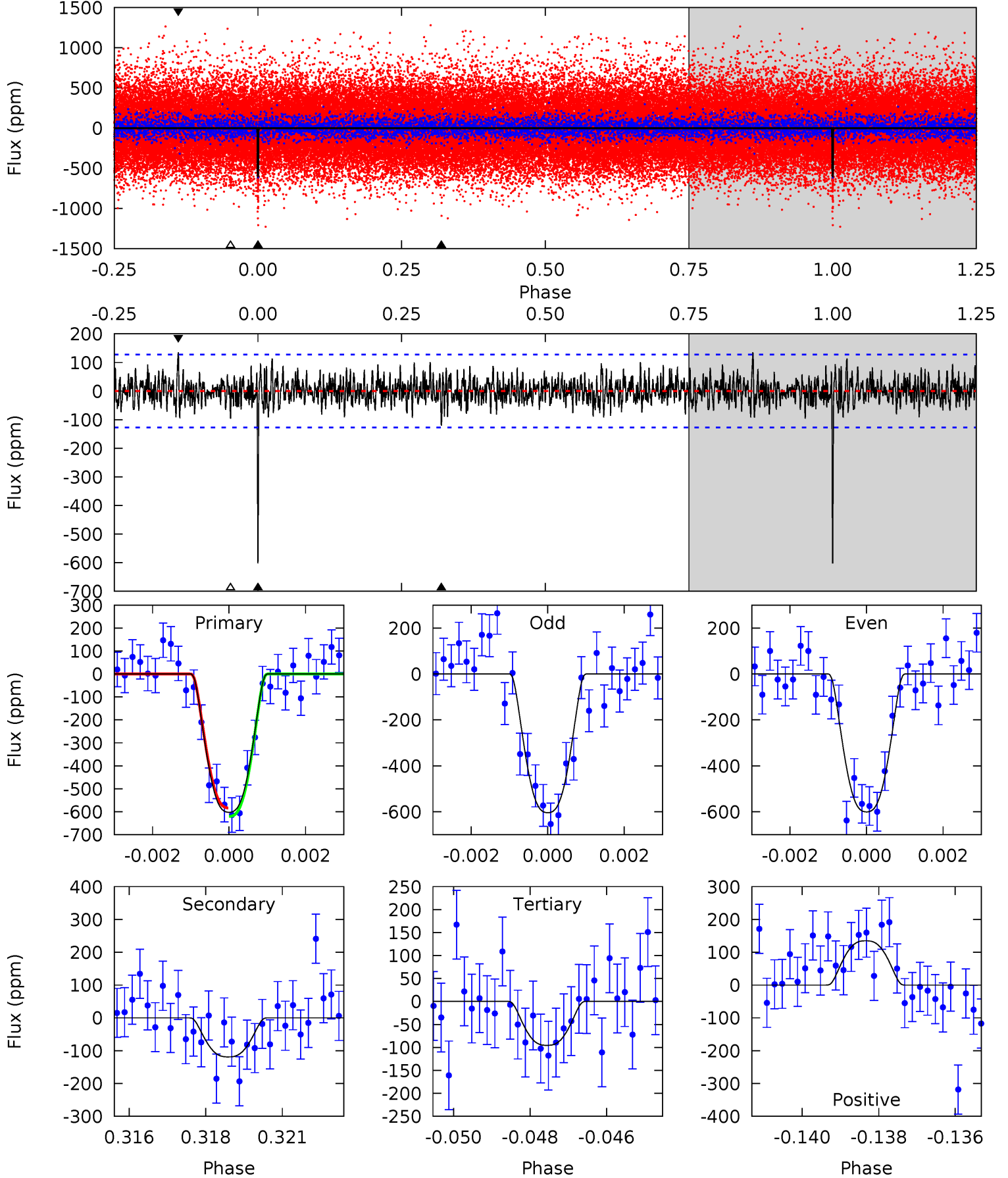
TCE 006934986-01 P=131.484901 Days $T_0=177.491245$ (BKJD)



DV Model-Shift Uniqueness Test

006934986-01, $P = 131.486698$ Days, $E = 45.996608$ Days

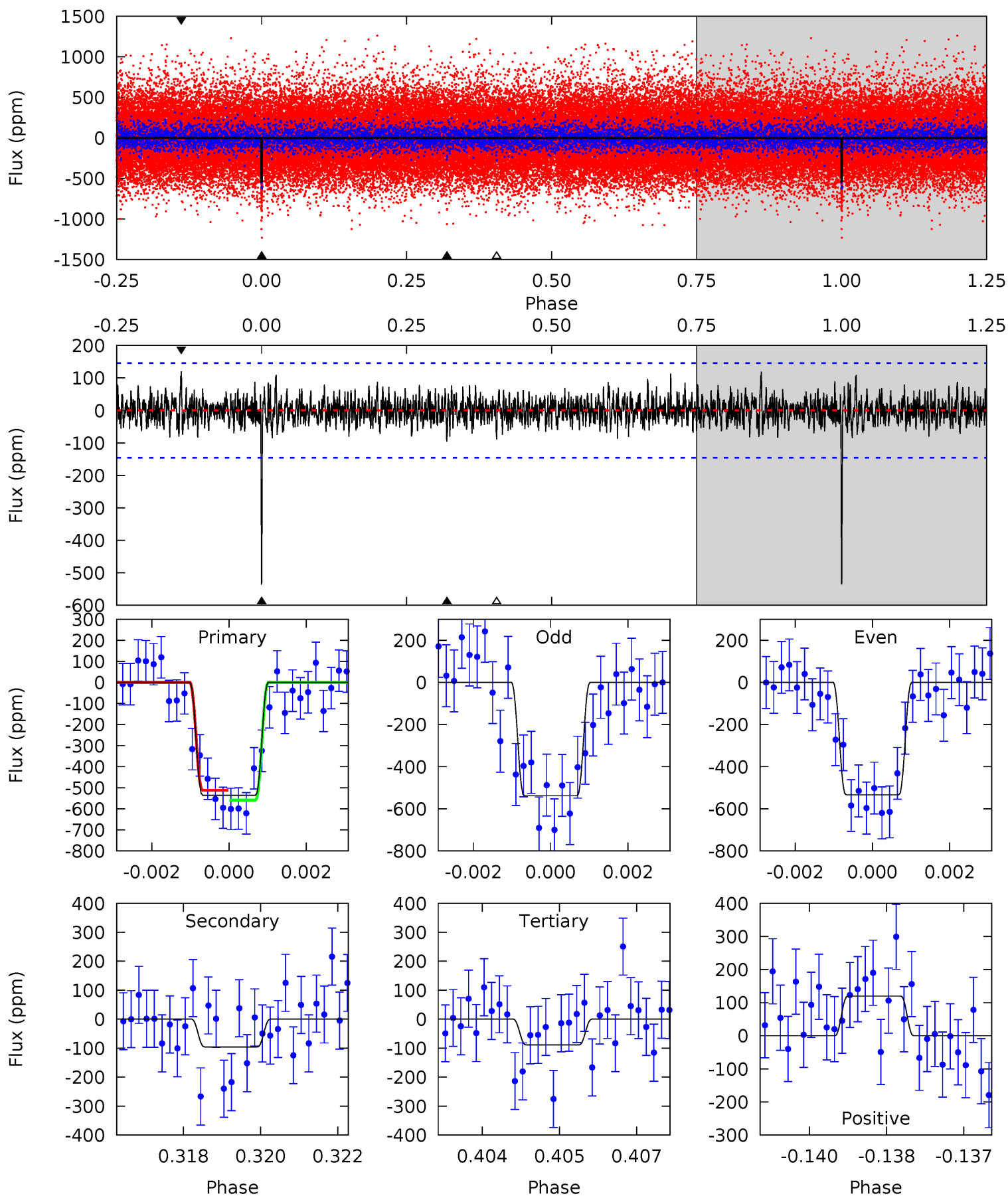
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.1	4.97	3.99	5.63	5.32	3.08	1.44	21.1	19.5	0.98	-0.67	0.07	0.91	0.18	0.77



Alt Model-Shift Uniqueness Test

006934986-01, P = 131.484901 Days, E = 46.006344 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	3.51	3.28	4.41	5.37	3.15	1.09	16.4	15.3	0.24	-0.90	0.08	0.95	0.18	0.86



Stellar Parameters For KIC 006934986

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5765^{+105}_{-116}	$4.236^{+0.162}_{-0.108}$	$0.000^{+0.150}_{-0.150}$	$1.242^{+0.209}_{-0.209}$	$0.968^{+0.080}_{-0.066}$	$0.713^{+0.550}_{-0.224}$
	+2%/-2%	+4%/-3%	+inf%/-inf%	+17%/-17%	+8%/-7%	+77%/-31%
Source	SPE57	SPE57	SPE57	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 006934986-01 / KOI 2294.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-119 ± 24	$4.04^{+0.52}_{-0.48}$	558^{+26}_{-31}	3837^{+171}_{-171}	1004^{+365}_{-266}
Alt.	-96 ± 27	$3.21^{+0.47}_{-0.45}$	556^{+26}_{-29}	3981^{+270}_{-268}	1263^{+635}_{-446}

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 $A_{obs} \gg 1.0$

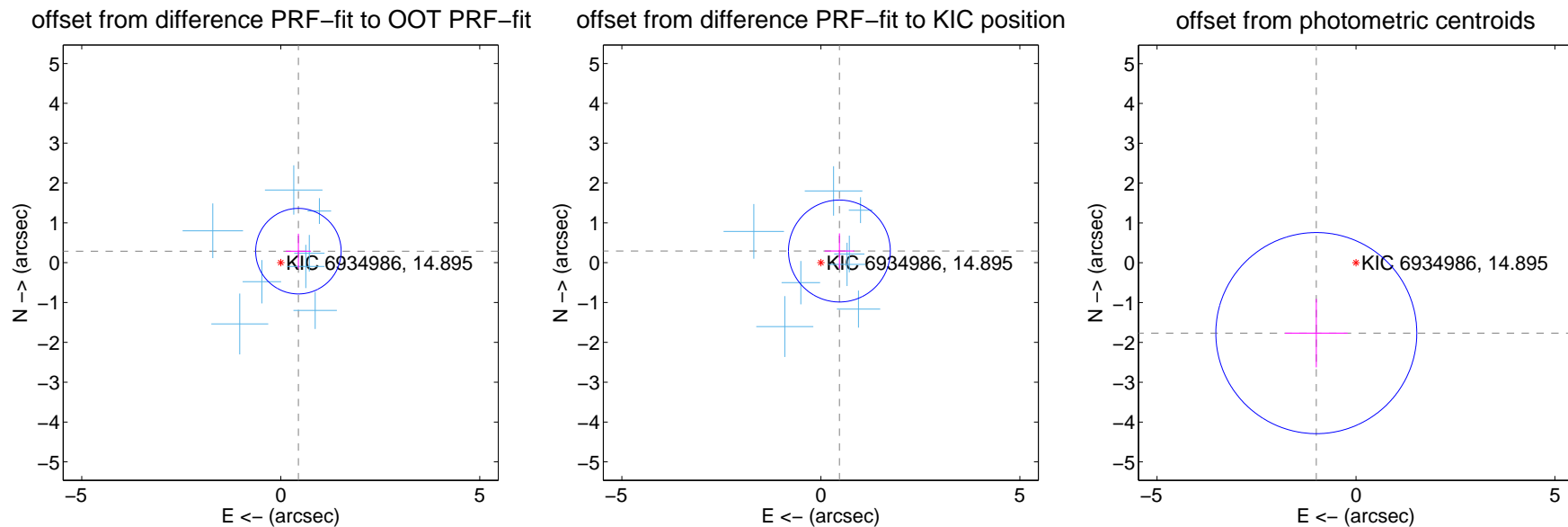
DV Centroid Data

Supplemental centroid analysis for 006934986-01. Kepler magnitude: 14.89. Transit SNR 15.56

There are 8 quarters with good PRF difference image offsets

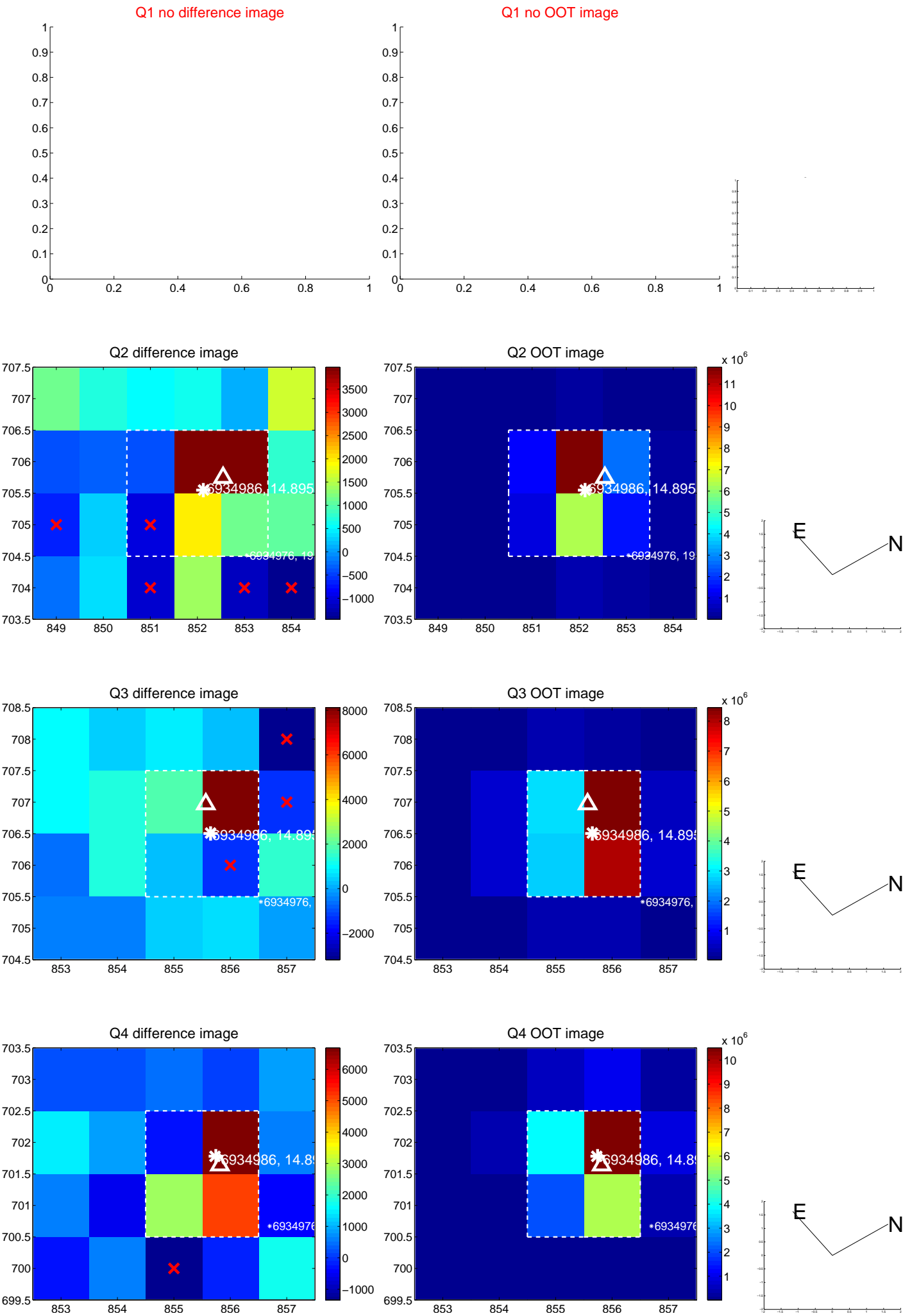
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.530 ± 0.358	1.48	-0.444 ± 0.318	0.289 ± 0.437
PRF-fit source offset from KIC position	0.550 ± 0.426	1.29	-0.466 ± 0.370	0.293 ± 0.442
photometric centroid source offset	2.03 ± 0.84	2.41	1.00 ± 0.79	-1.77 ± 0.86

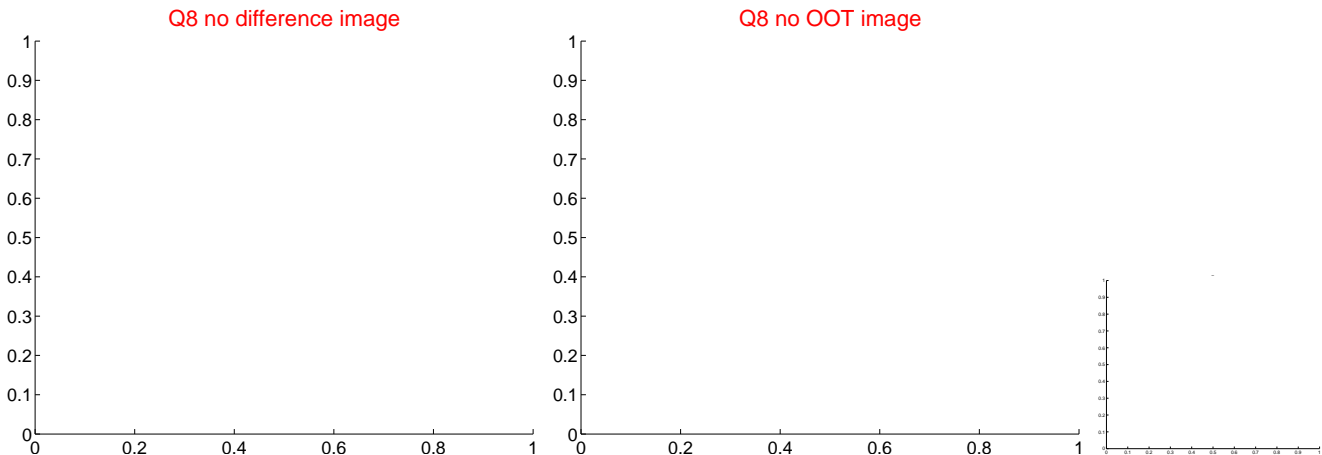
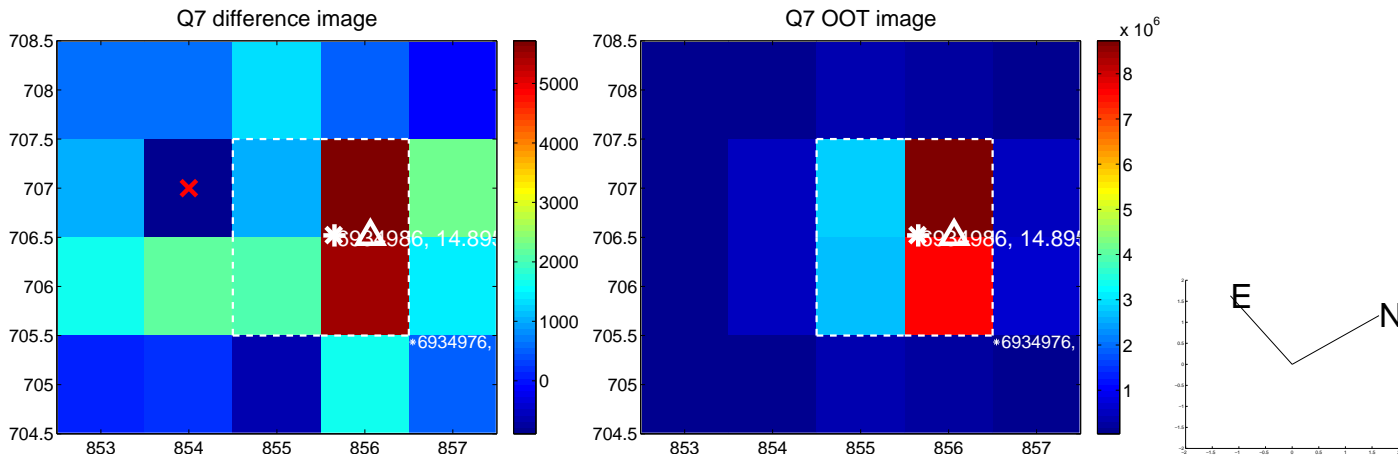
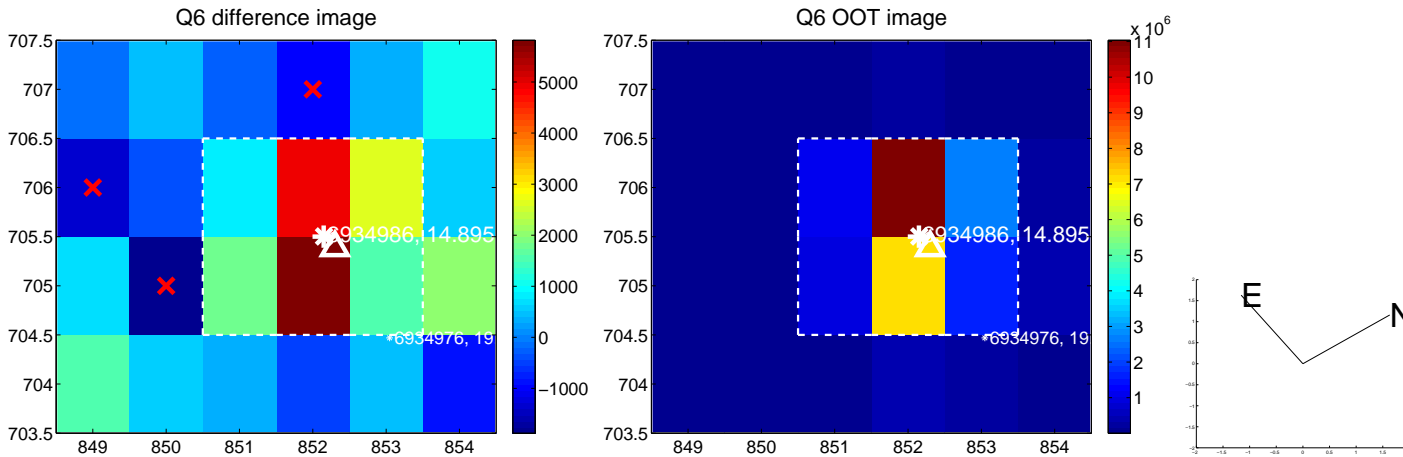
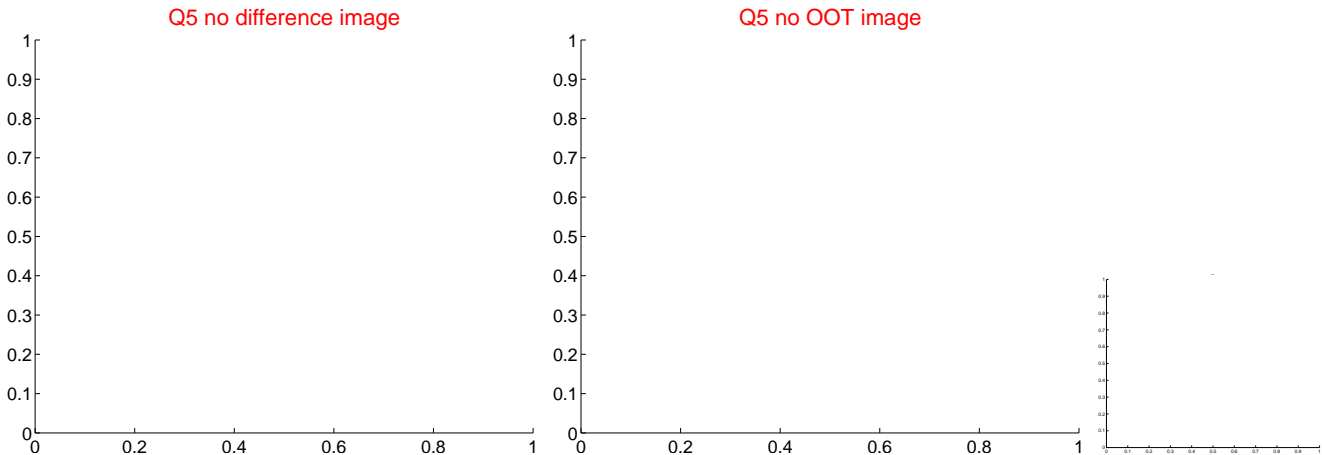


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

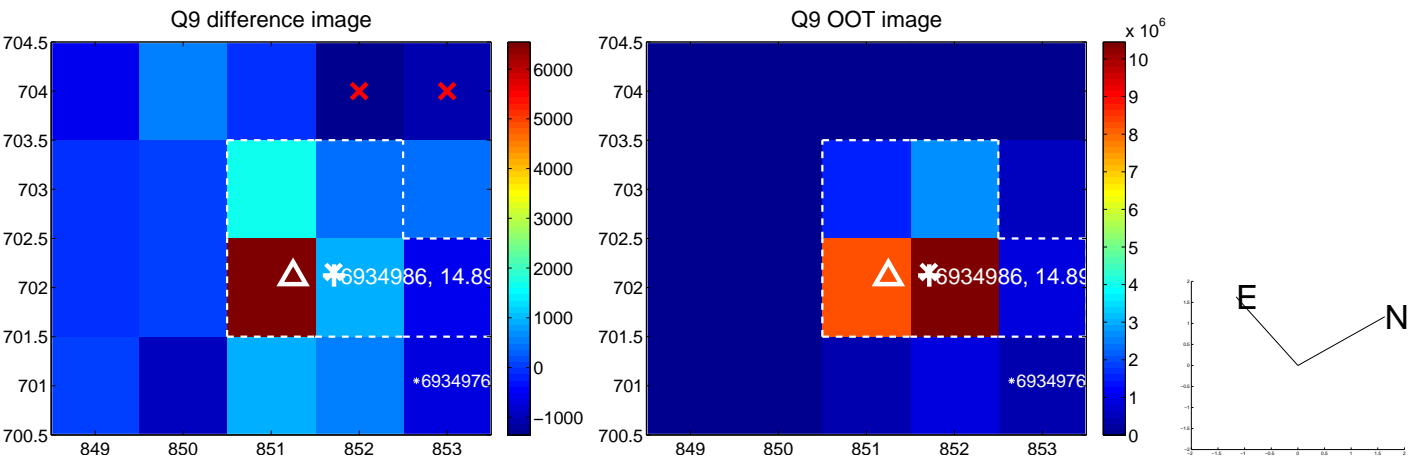
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



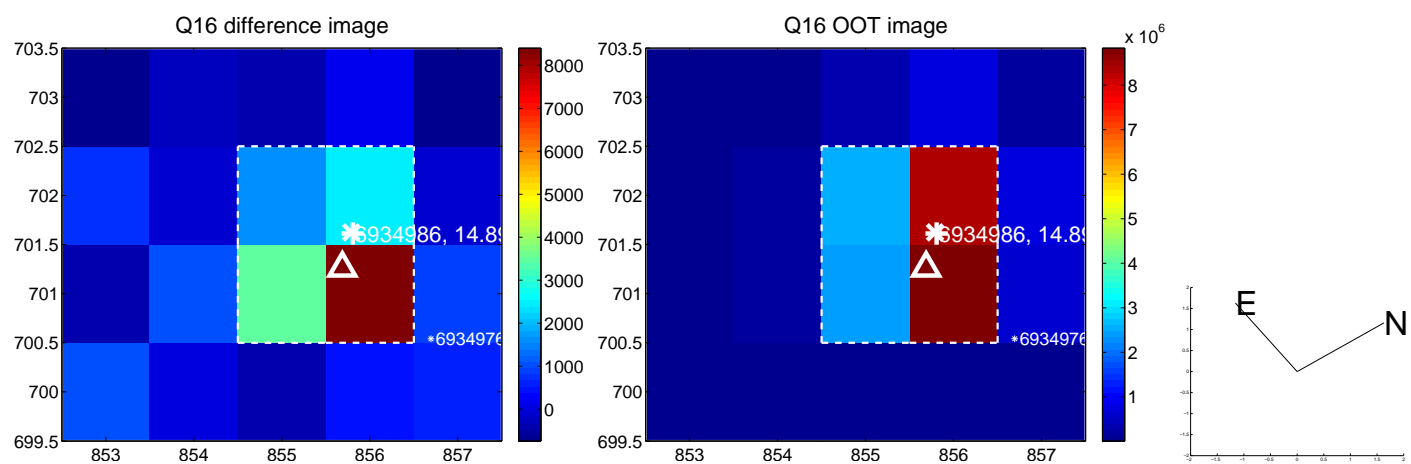
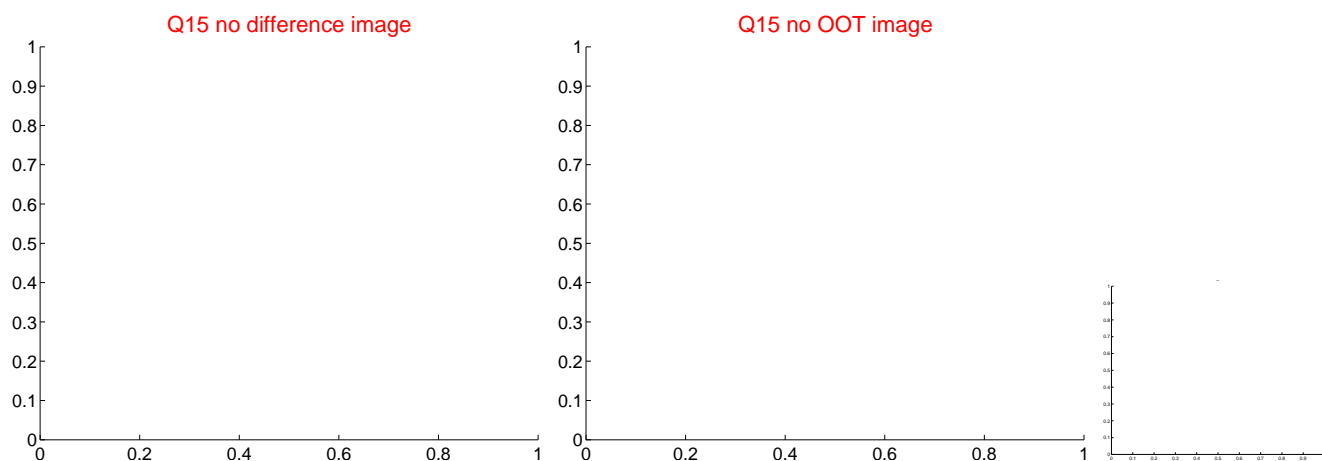
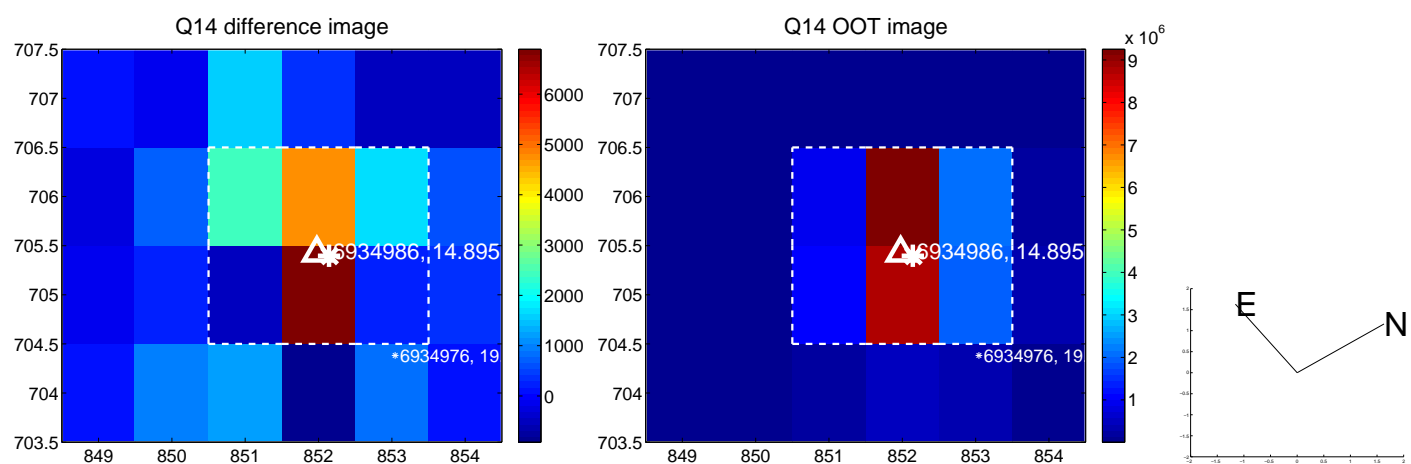
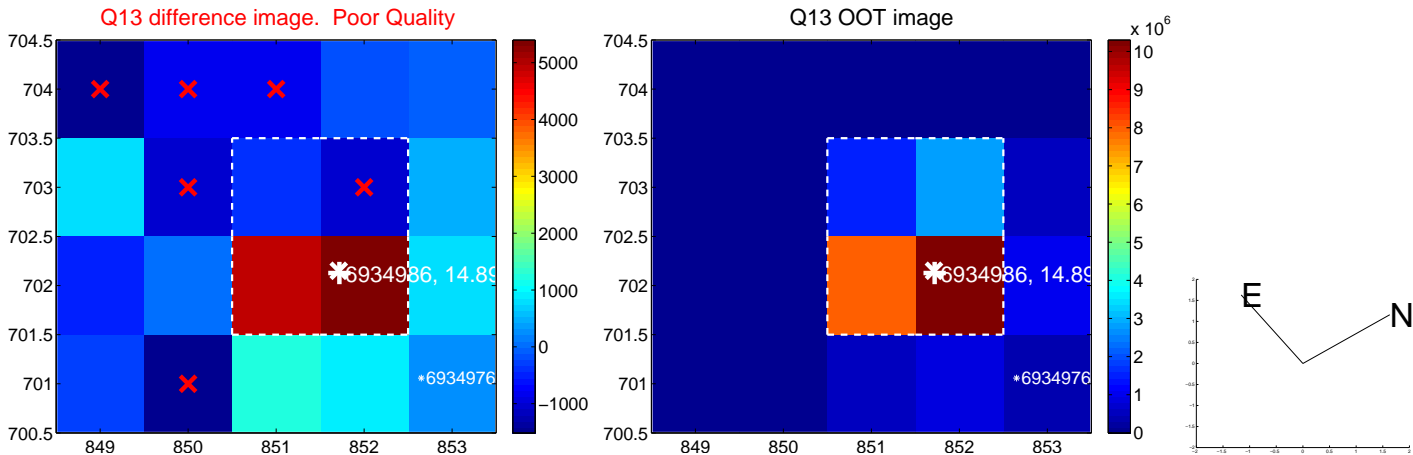
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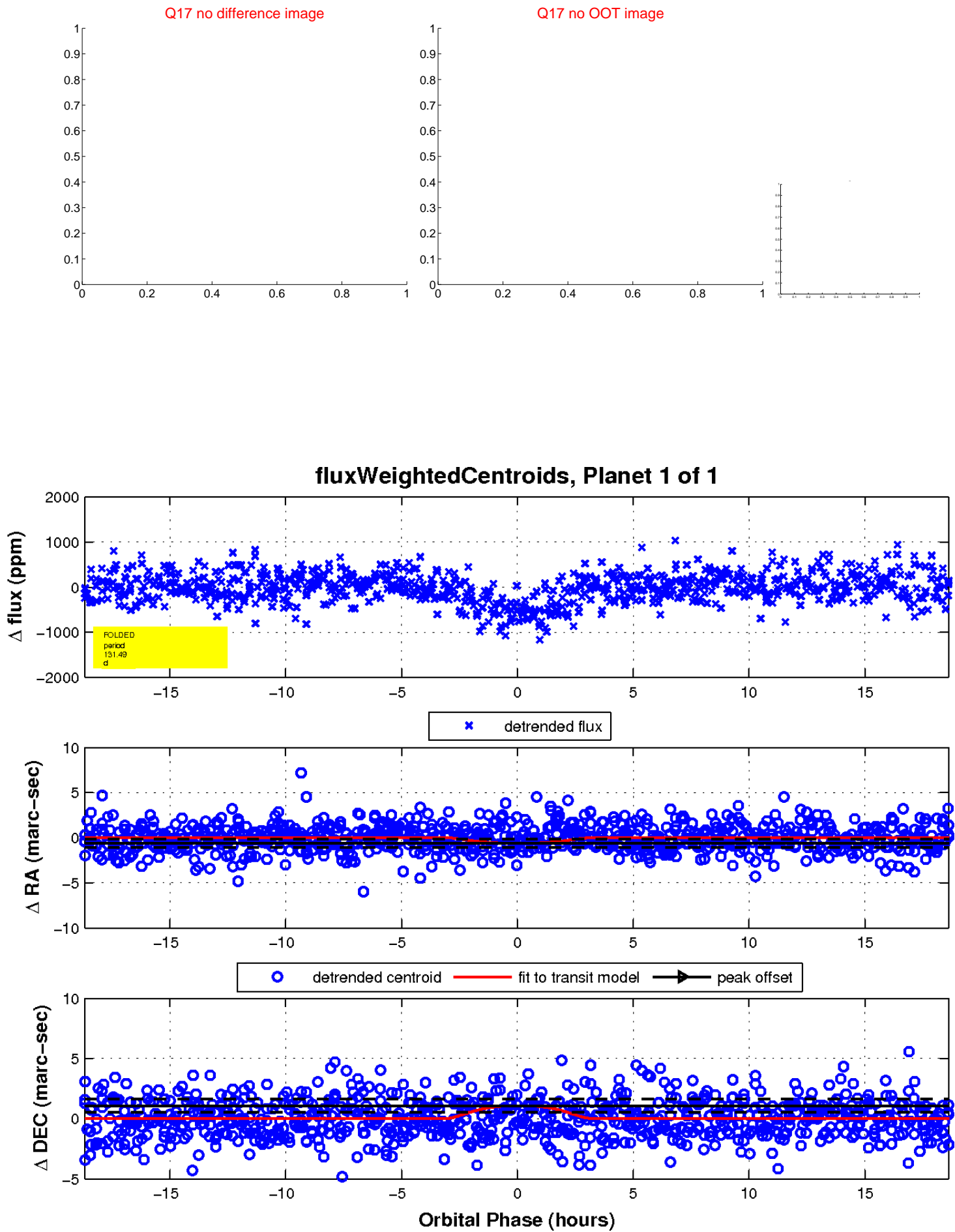
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UKIRT Image

Declination

