

KIC 006292976

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})
006292976-01	OBS	No	0.755226	132.010374	73.5	1.365	8.0	5.1	1.00	5780	1.02	3794.63

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006292976-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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.

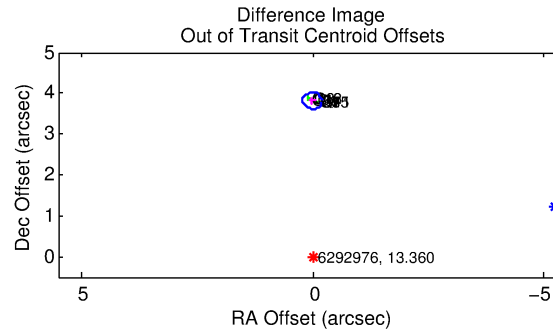
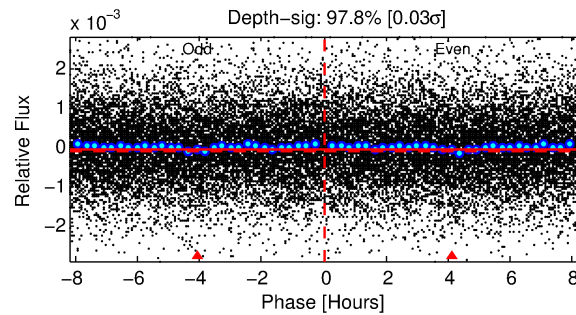
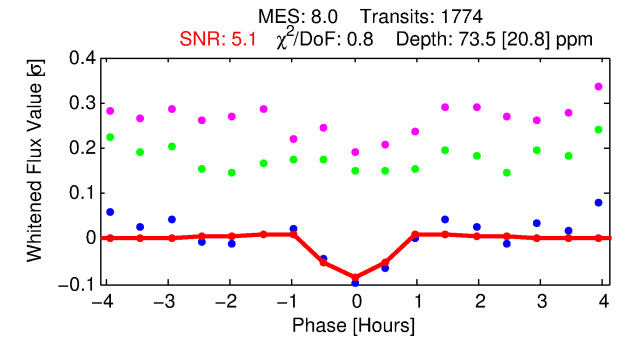
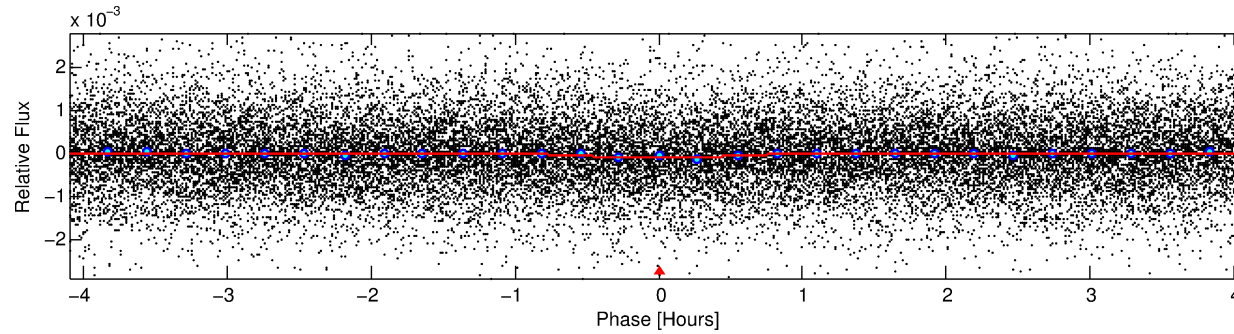
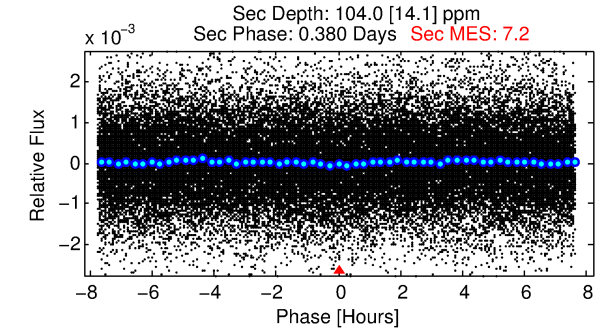
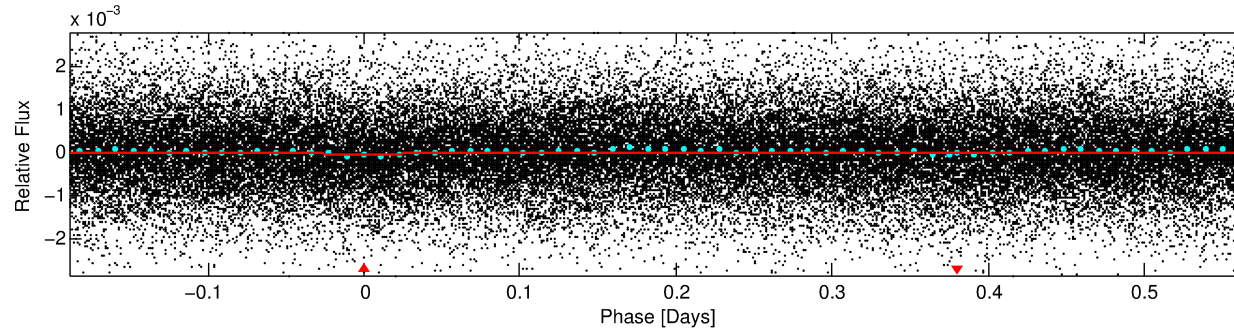
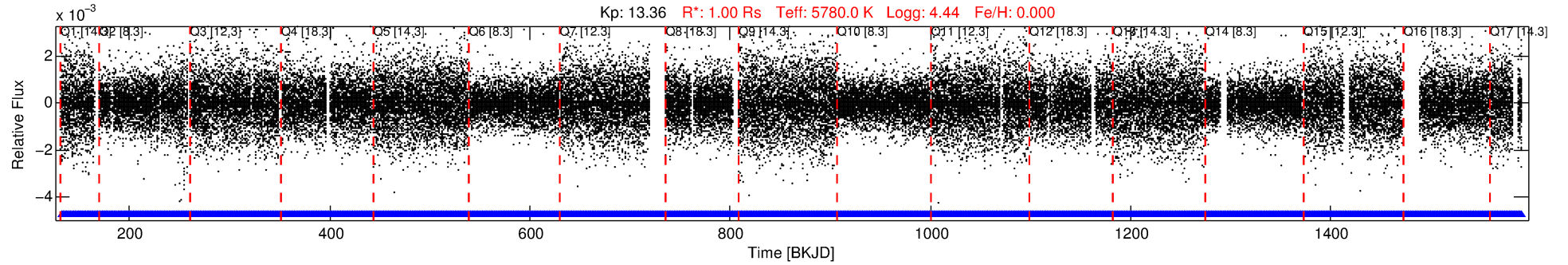
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006292976-01

No Significant Match Found

DV One-Page Summary

KIC: 6292976 Candidate: 1 of 1 Period: 0.755 d



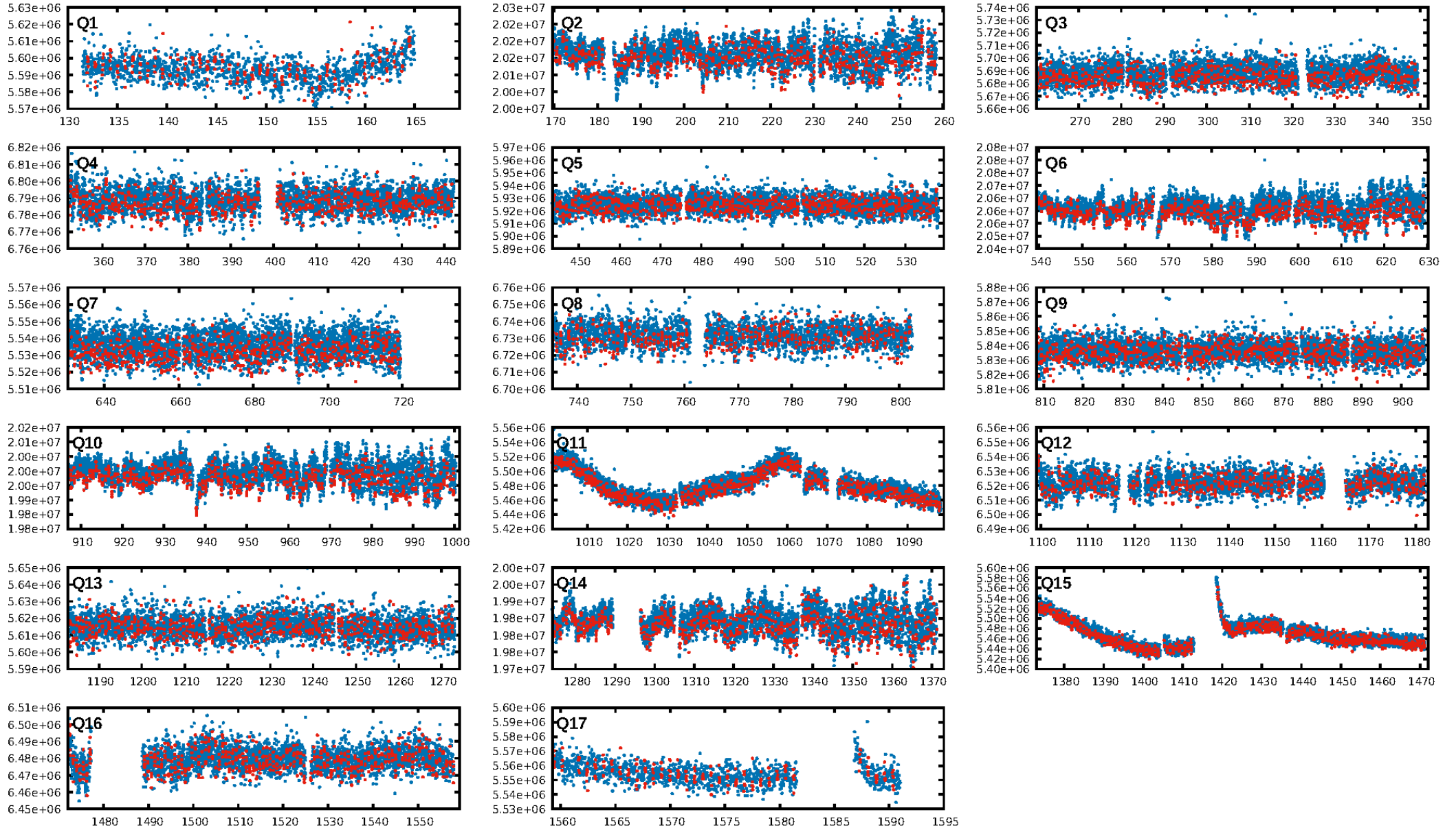
DV Fit Results:

Period = 0.75523 [0.00002] d
Epoch = 132.0104 [0.0037] BKJD
Rp/R* = 0.0094 [0.0129]
a/R* = 2.15 [11.11]
b = 0.90 [1.43]
Seff = 3794.63 [0.14]
Teff = 2001 [0] K
Rp = 1.02 [1.41] Re
a = 0.0162 [0.0000] AU
Ag = 14.38 [39.74] [0.34σ]
Teff = 6026 [4163] K [0.97σ]

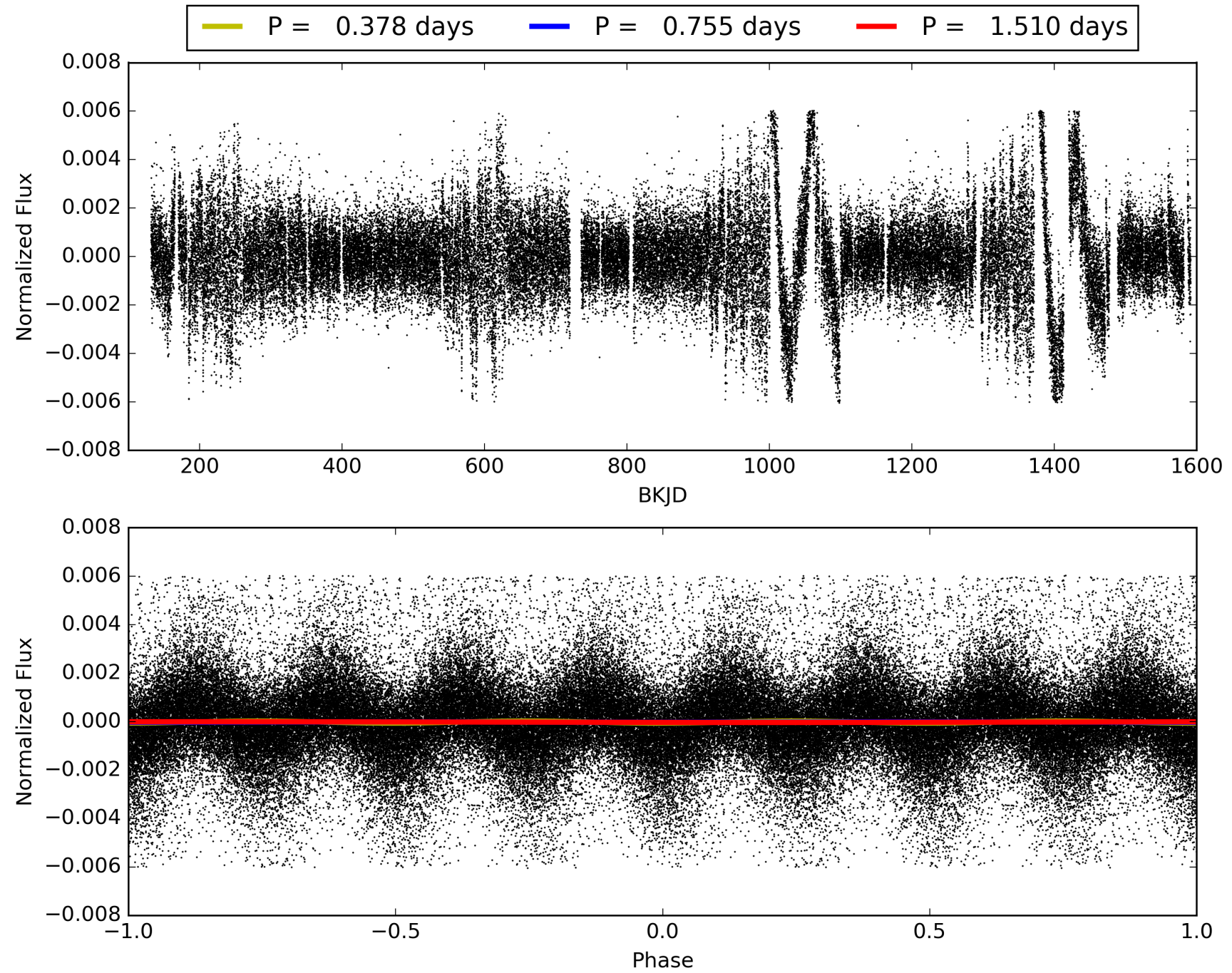
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.24e-27
RollingBand-fgt: 1.00 [1696/1696]
GhostDiagnostic-chr: -0.4824
Centroid-sig: 0.7%
Centroid-so: 2.962 arcsec [6.42σ]
OotOffset-rm: 3.818 arcsec [55.72σ]
KicOffset-rm: 7.276 arcsec [108.01σ]
OotOffset-st: 0/4/4/1 [9]
KicOffset-st: 0/4/4/1 [9]
DiffImageQuality-fgm: 1.00 [9/9]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006292976-01, PDC Light Curves

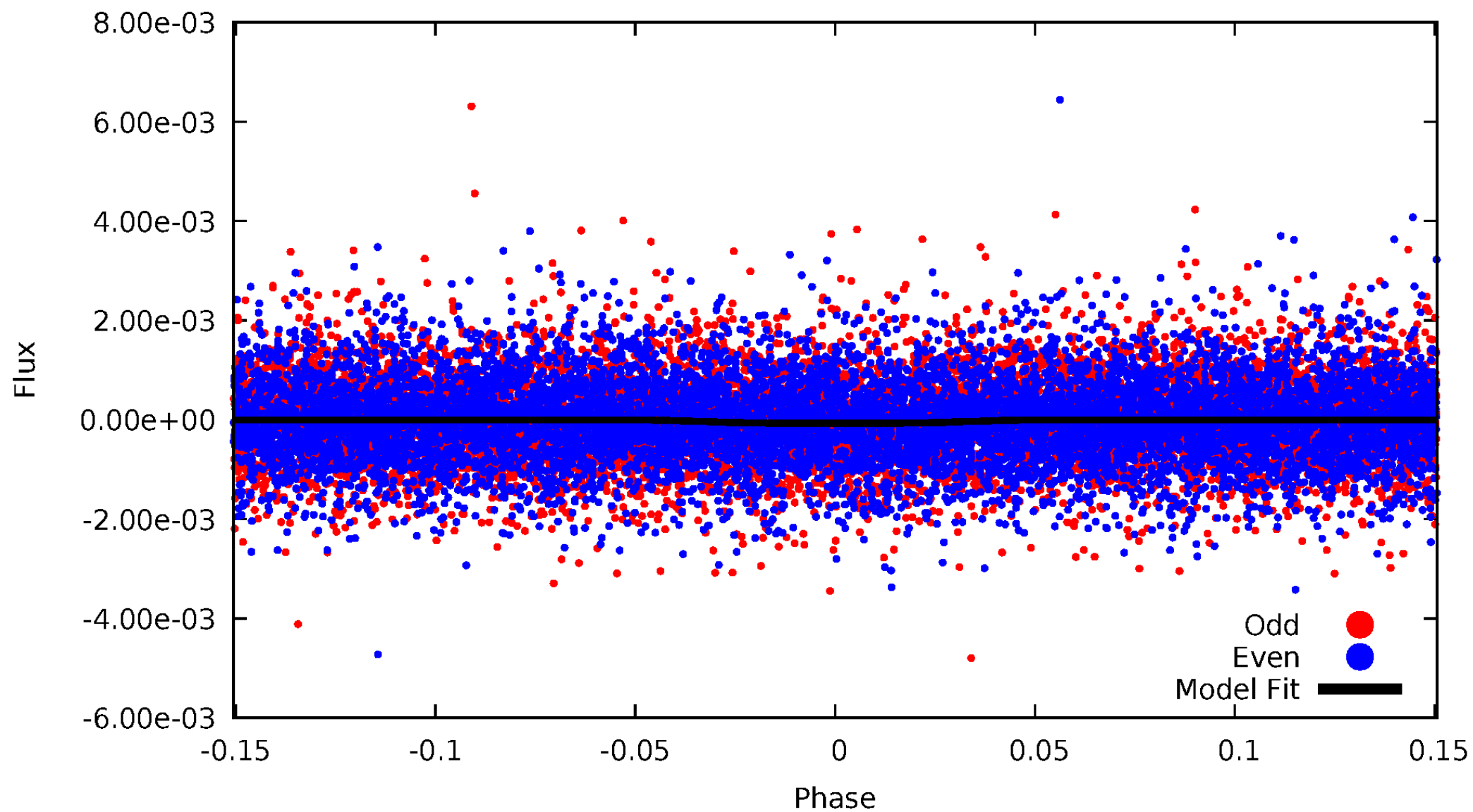


TCE 006292976-01



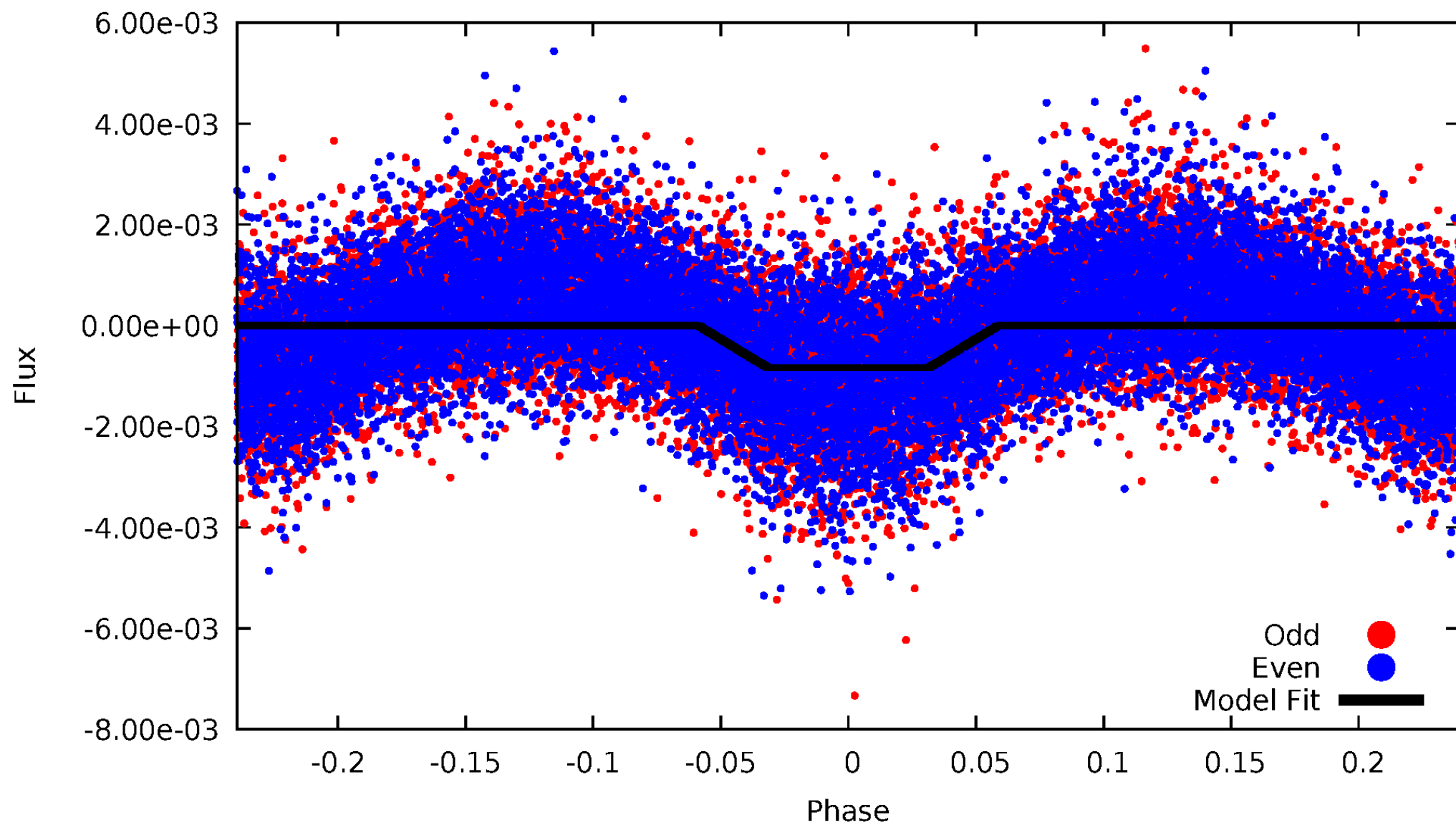
DV Odd/Even

TCE 006292976-01



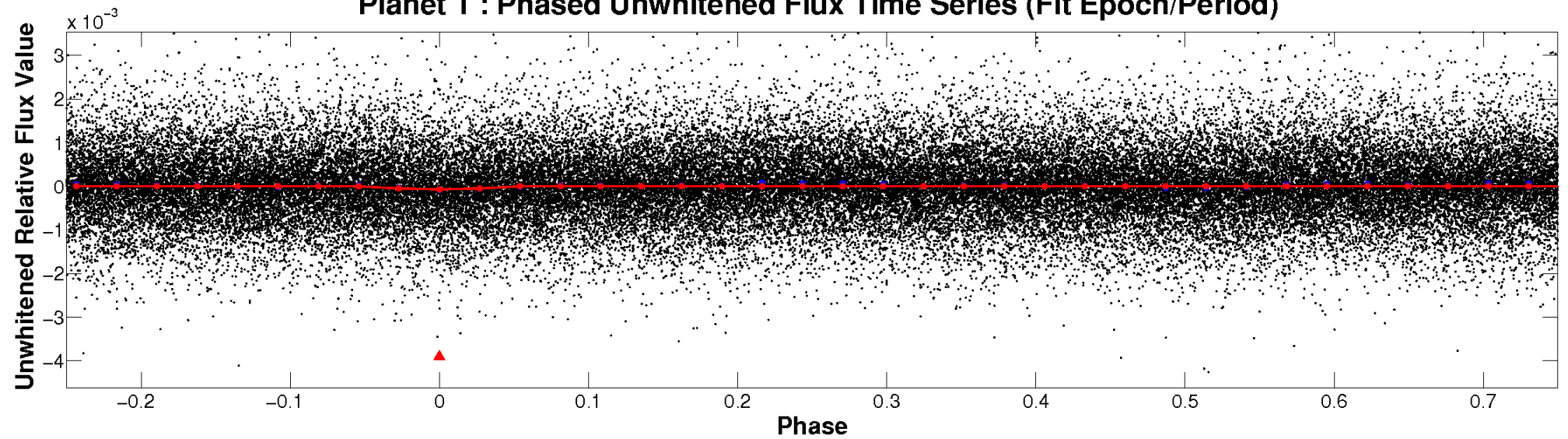
ALT Odd/Even

TCE 006292976-01

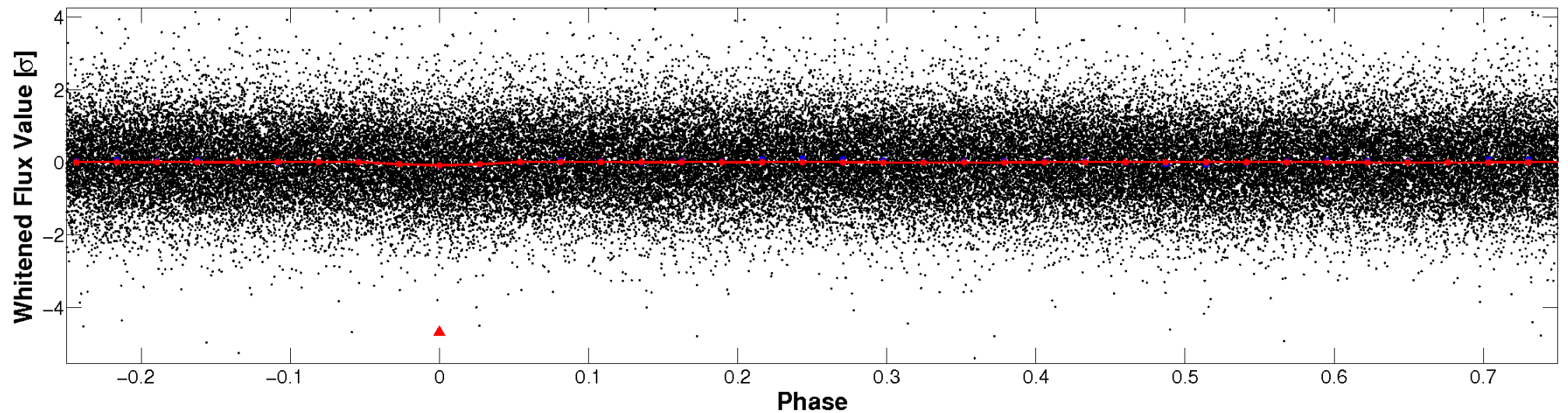


Non-Whitened Vs. Whitened Light Curve

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

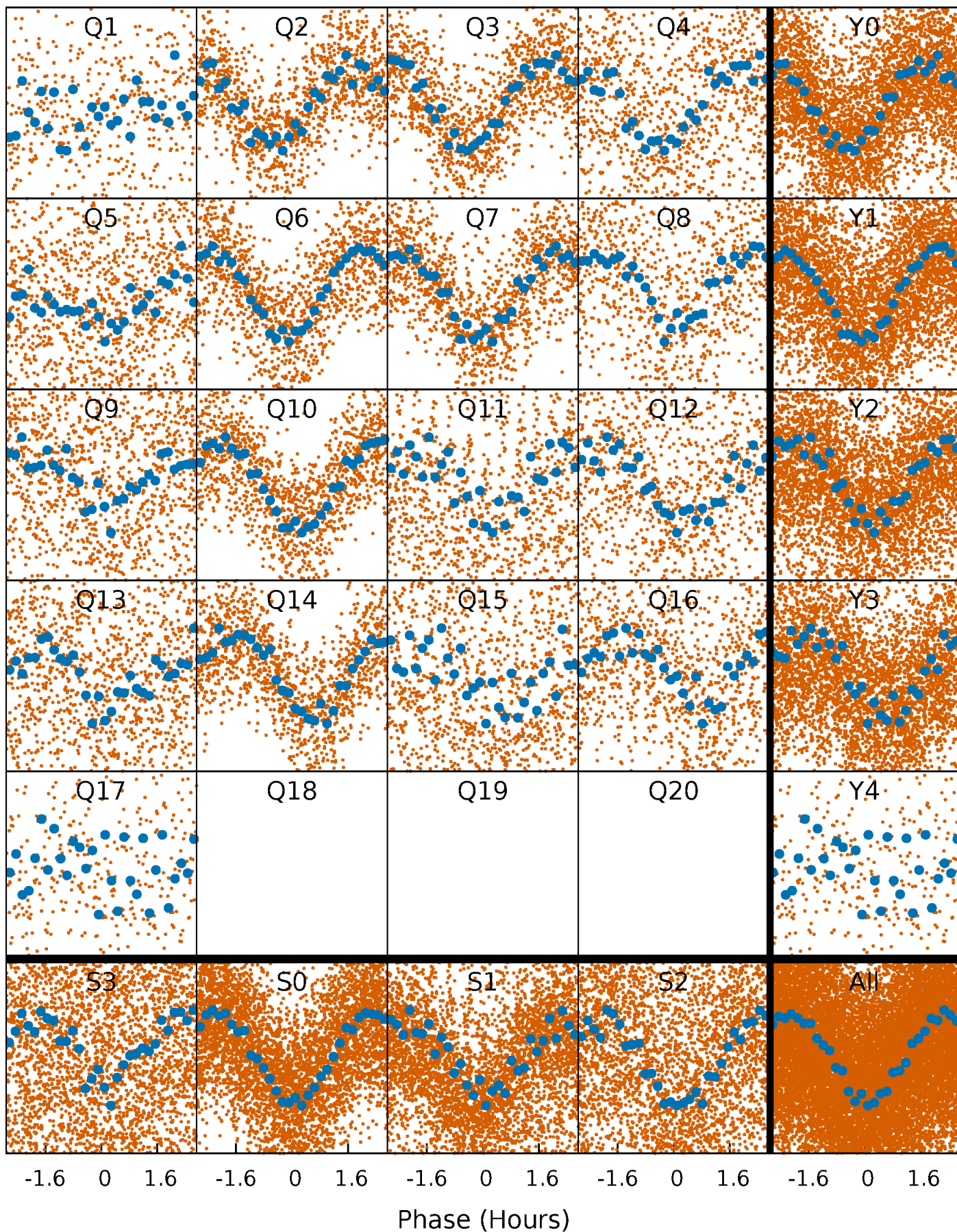


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



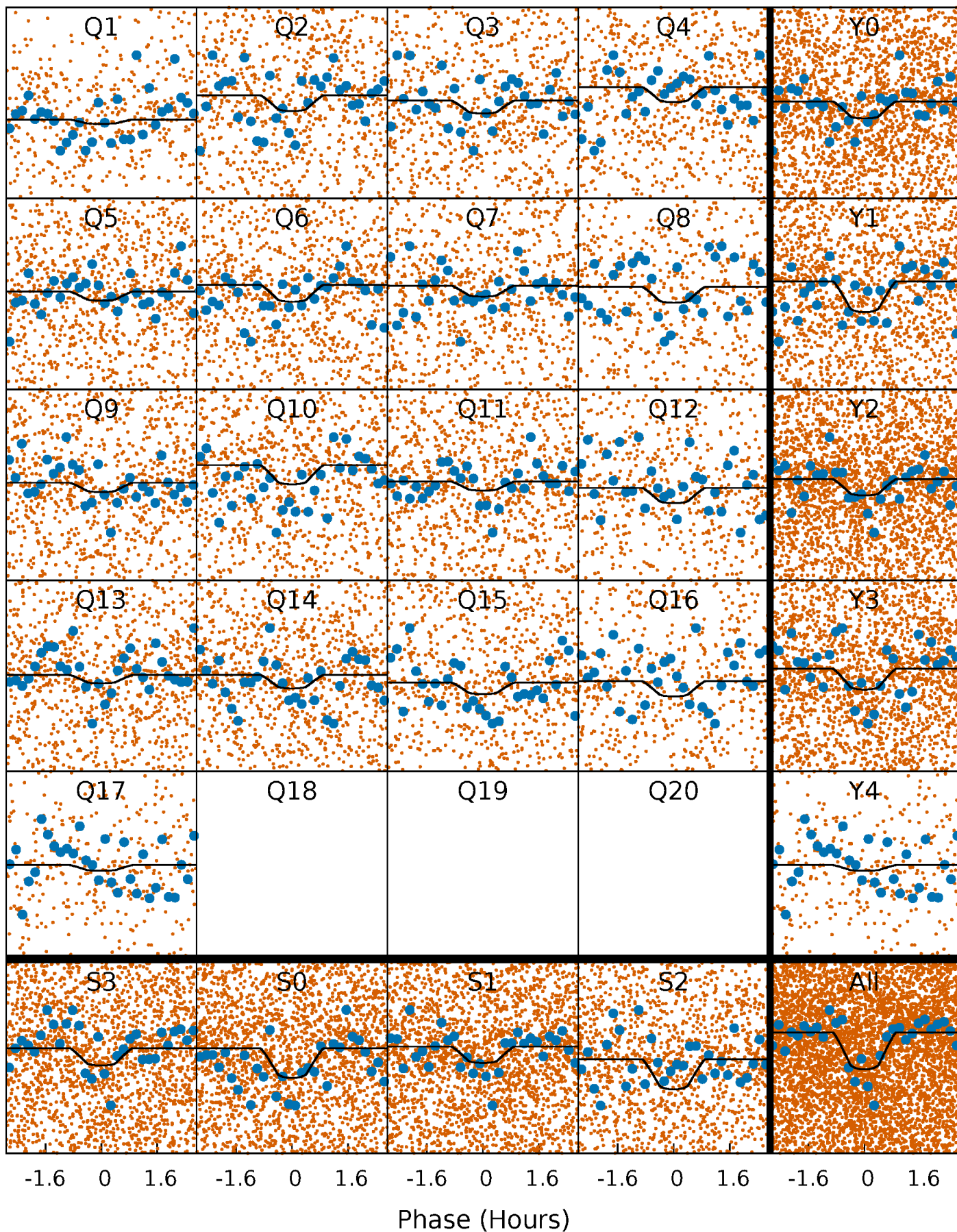
PDC Quarter-Phased Transit Curves

TCE 006292976-01 P= 0.755226 Days $T_0=132.010375$ (BKJD)



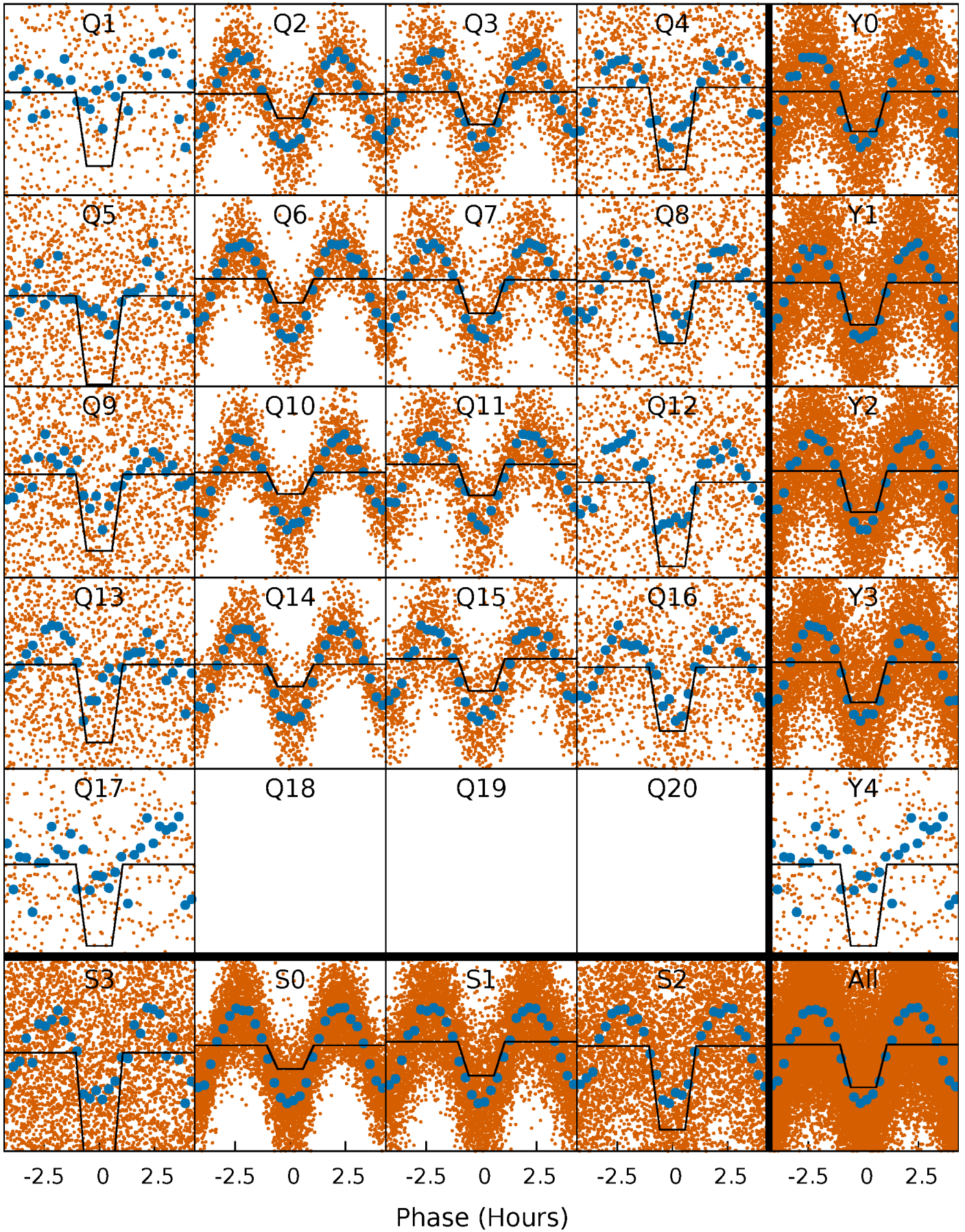
DV Quarter-Phased Transit Curves

TCE 006292976-01 P= 0.755226 Days $T_0=132.010375$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

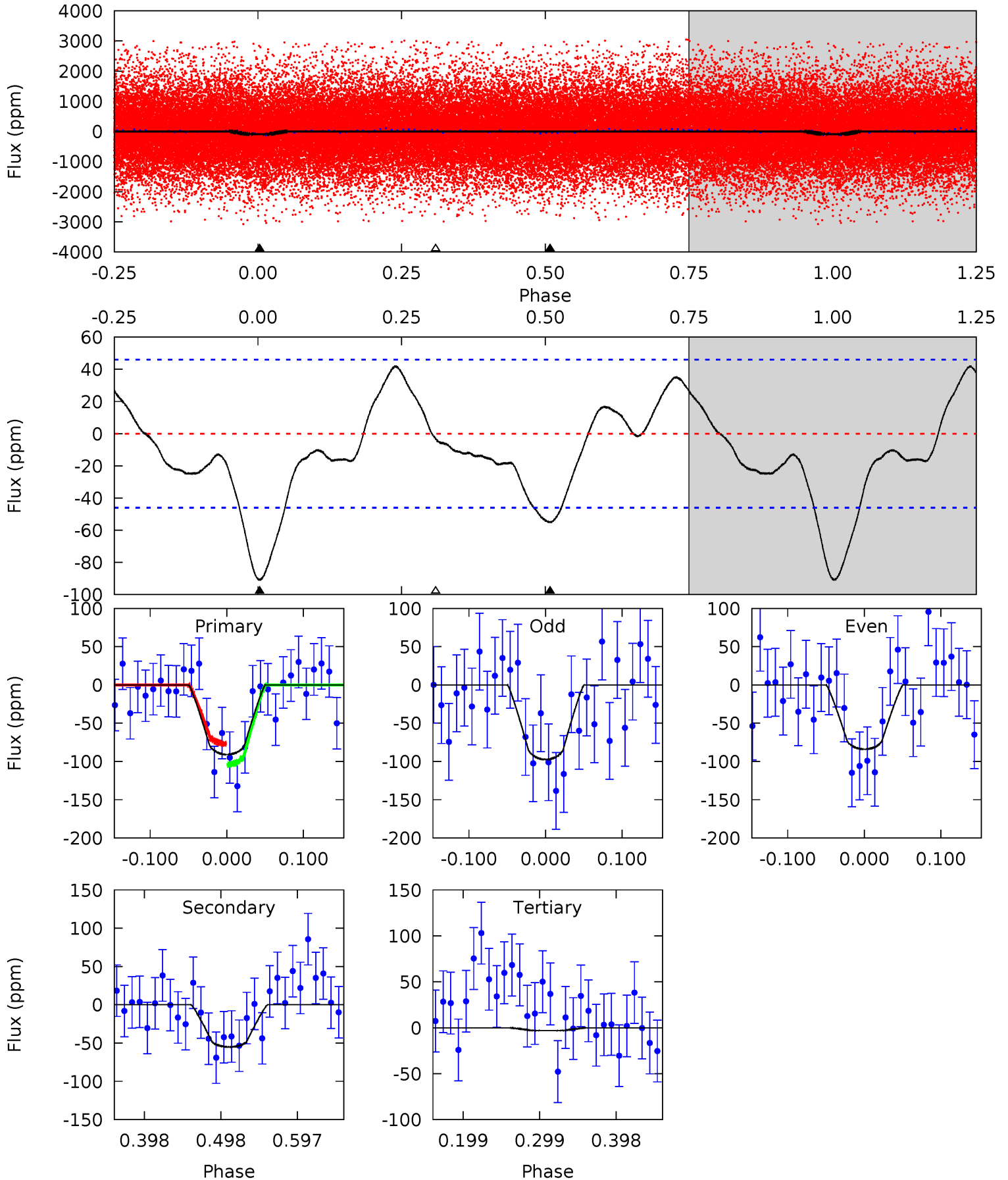
TCE 006292976-01 P= 0.755255 Days $T_0=131.987862$ (BKJD)



DV Model-Shift Uniqueness Test

006292976-01, P = 0.755226 Days, E = 131.255149 Days

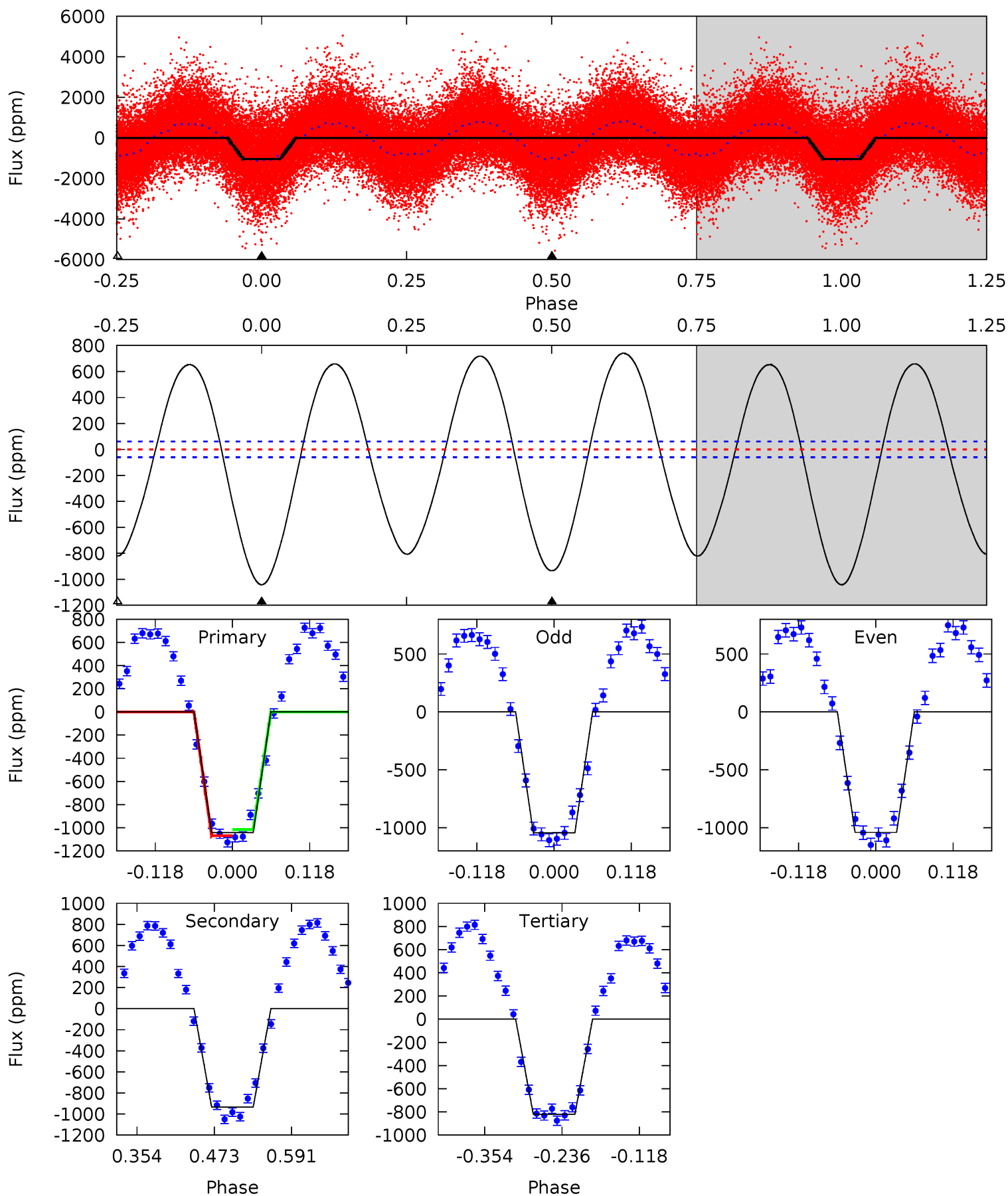
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.03	5.48	0.32	0	4.57	1.65	1.89	8.71	9.03	5.16	5.48	0.67	0.95	0.32	1.35



Alt Model-Shift Uniqueness Test

006292976-01, P = 0.755255 Days, E = 131.232607 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
78.0	70.0	61.5	0	4.53	1.56	40.4	16.5	78.0	8.49	70.0	0.15	1.11	0.42	2.00



Stellar Parameters For KIC 006292976

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

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

Secondary Eclipse Parameters for KIC 006292976-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-55 ± 10	$1.43^{+1.20}_{-0.94}$	2798^{+132}_{-130}	4454^{+3285}_{-1009}	$3.888^{+30.256}_{-2.757}$
Alt.	-935 ± 13	$3.15^{+1.52}_{-1.34}$	2812^{+139}_{-140}	5928^{+2298}_{-1012}	14^{+28}_{-8}

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

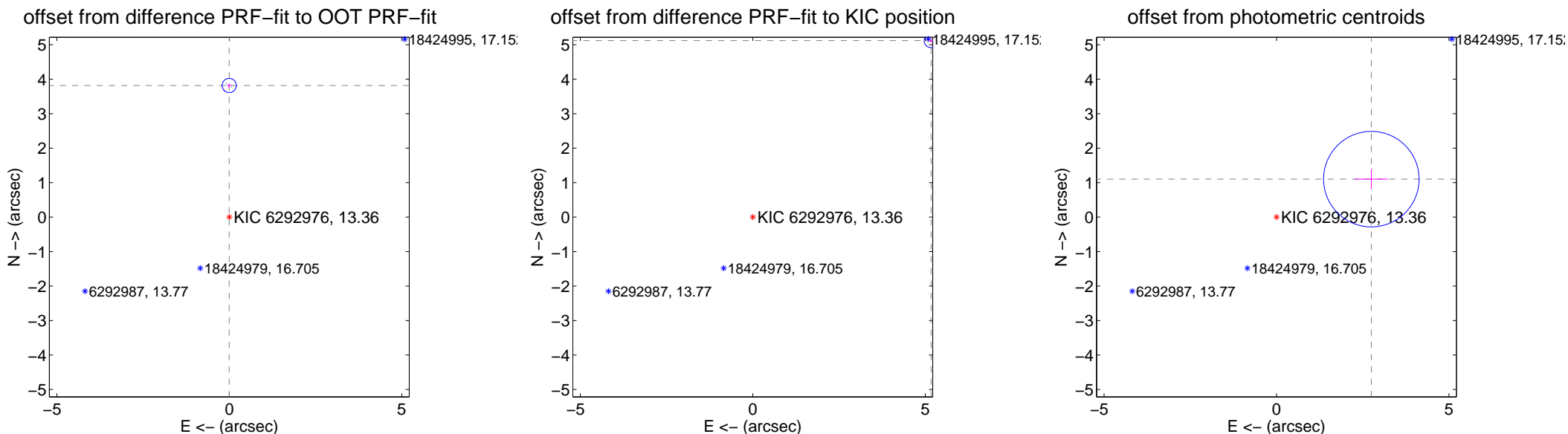
DV Centroid Data

Supplemental centroid analysis for 006292976-01. Kepler magnitude: 13.36. Transit SNR 5.09

There are 9 quarters with good PRF difference image offsets

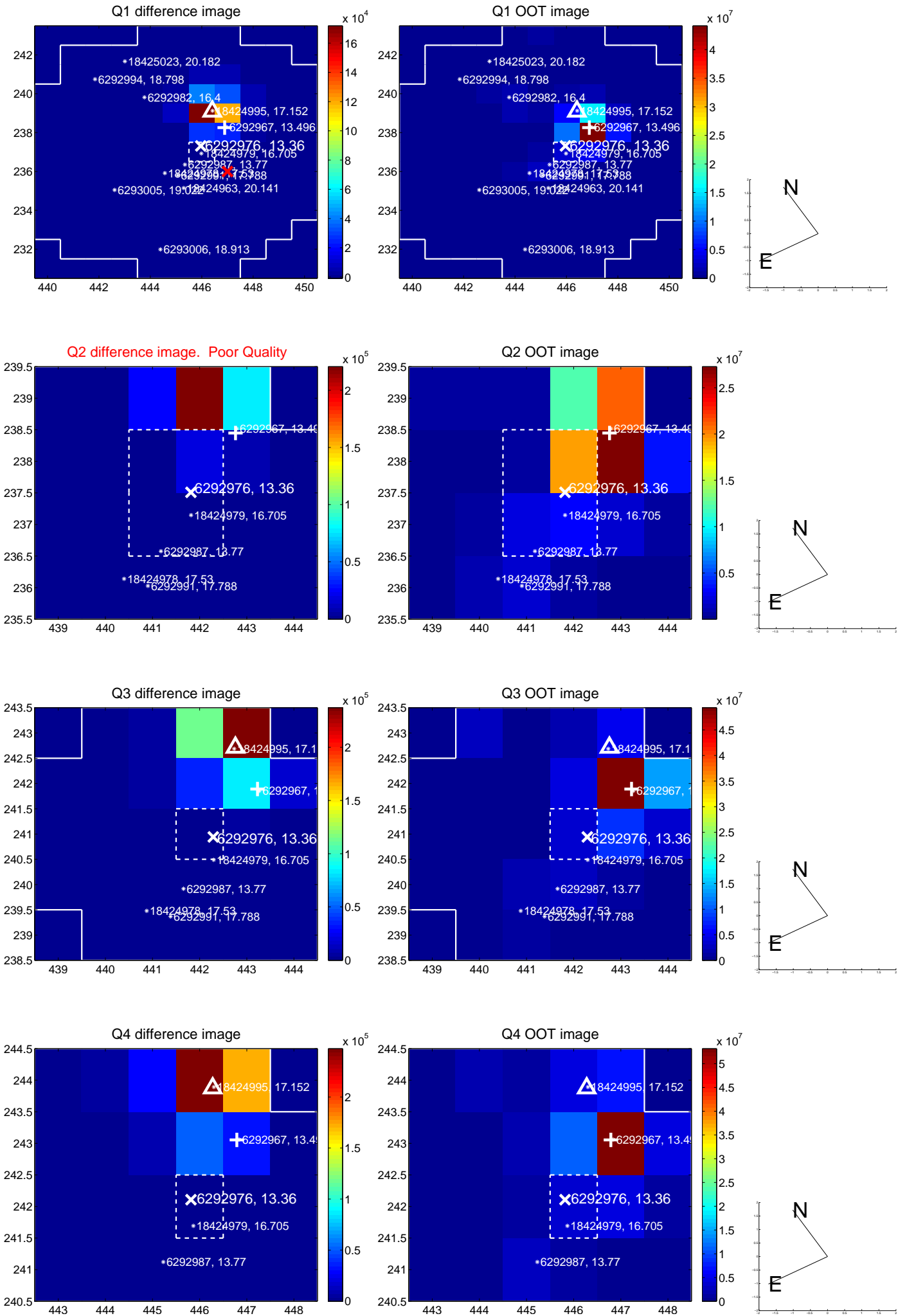
The OOT PRF centroid is offset from the target star catalog position by about 5.38 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.818 ± 0.069	55.72	0.003 ± 0.074	3.818 ± 0.069
PRF-fit source offset from KIC position	7.276 ± 0.067	108.01	-5.169 ± 0.068	5.120 ± 0.067
photometric centroid source offset	2.96 ± 0.46	6.42	-2.75 ± 0.48	1.10 ± 0.29

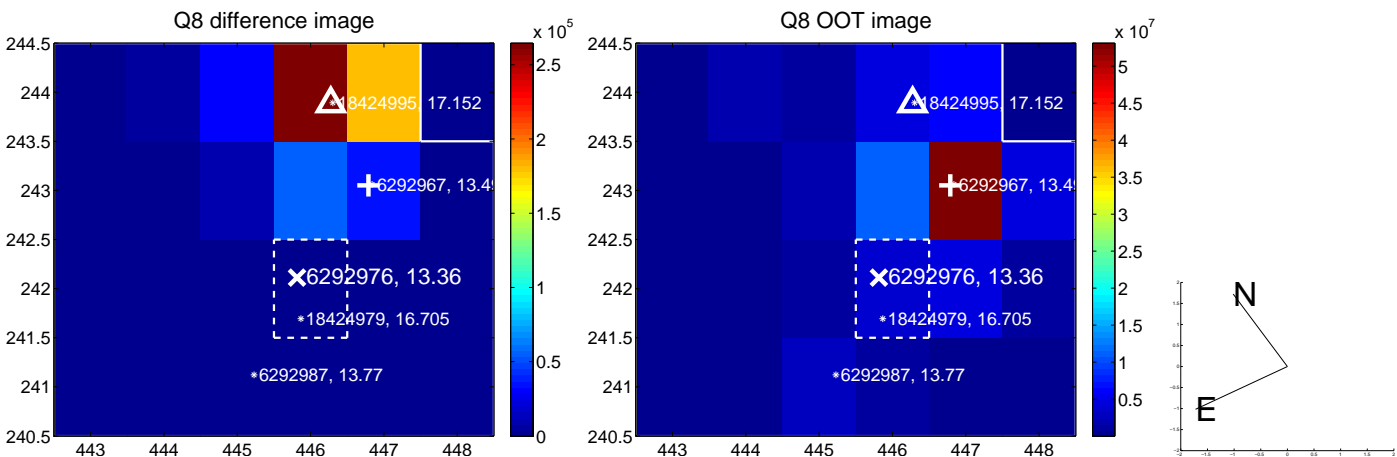
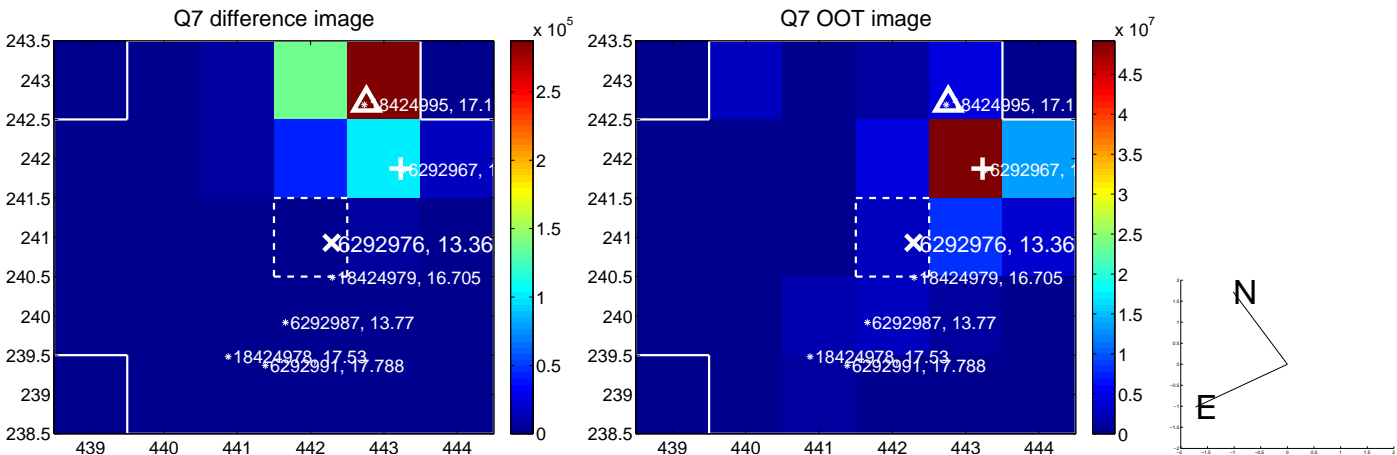
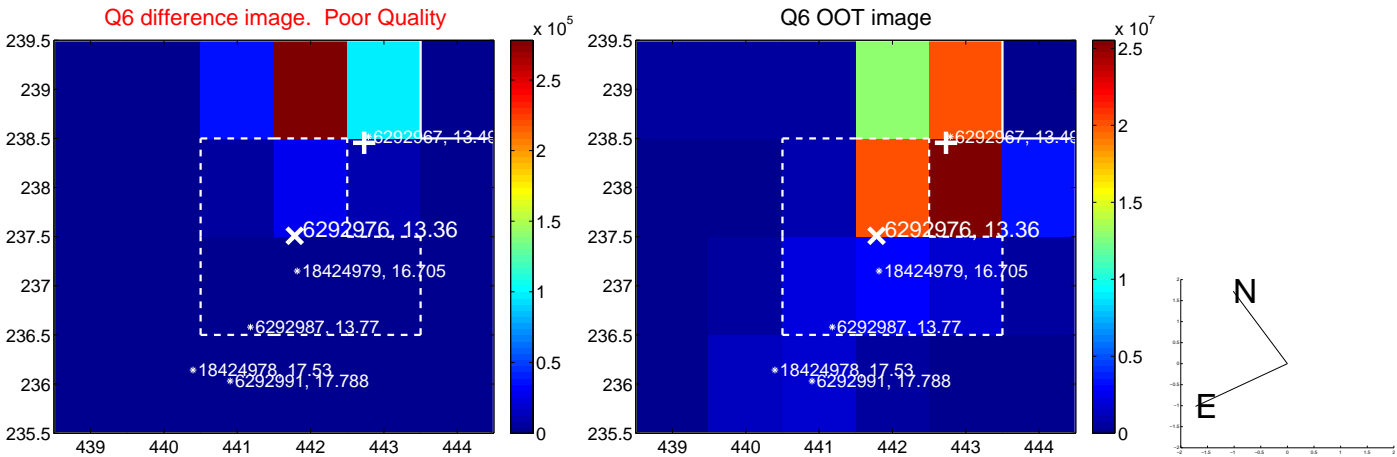
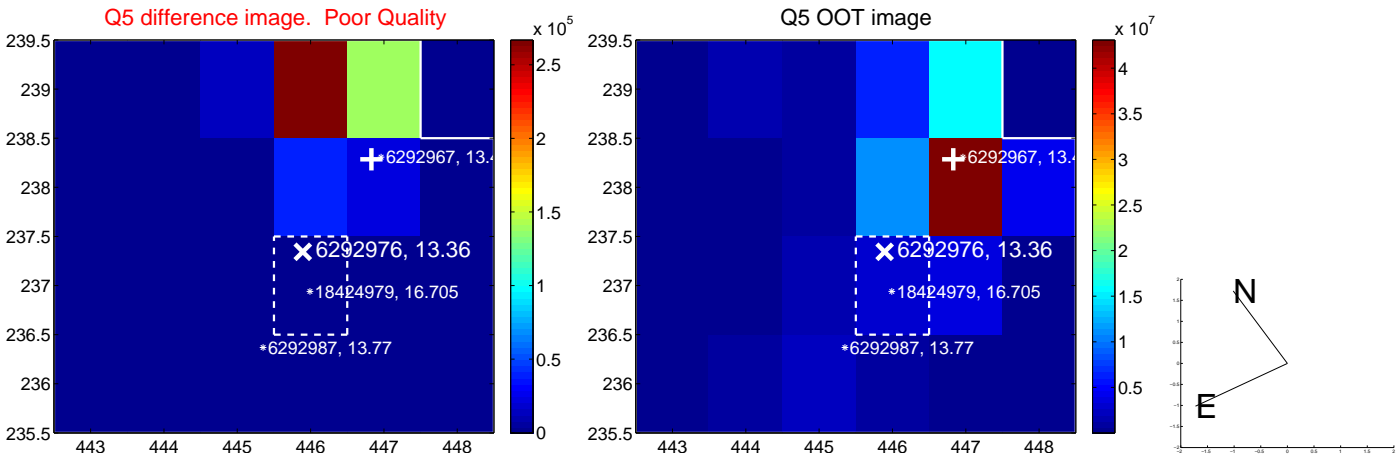


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

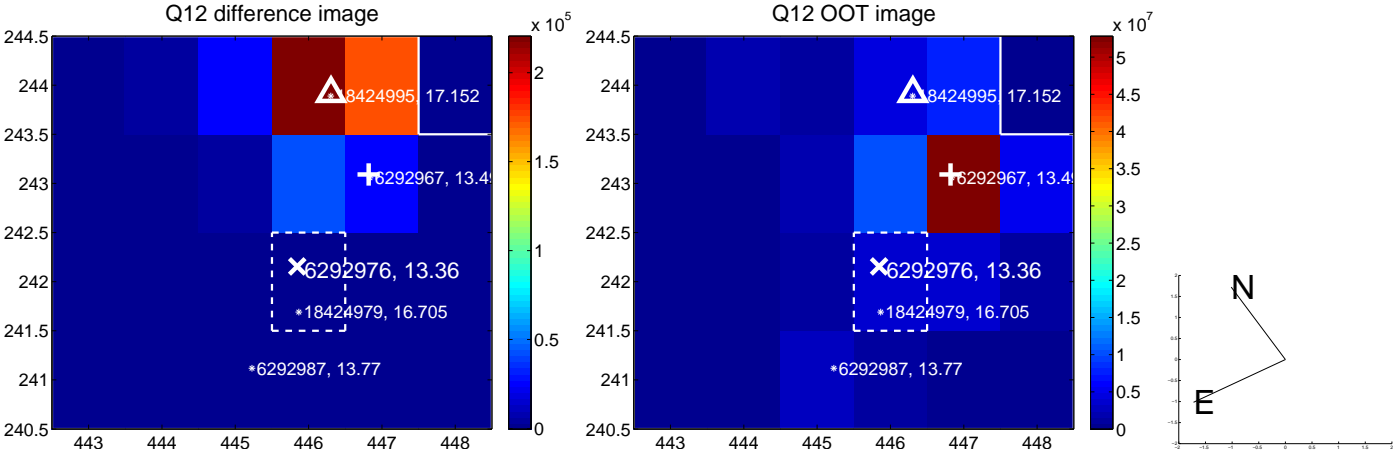
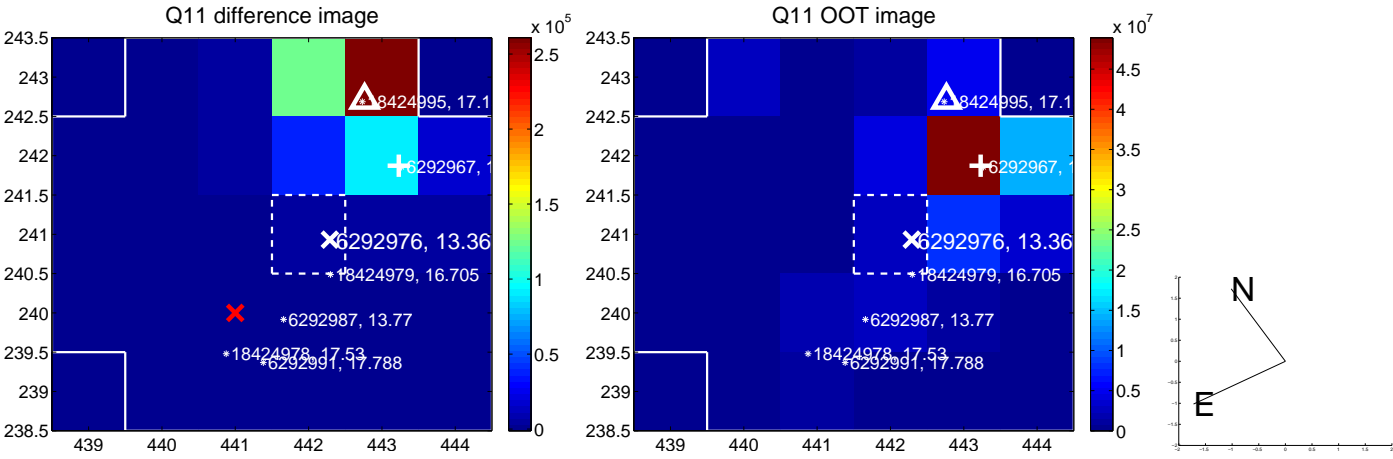
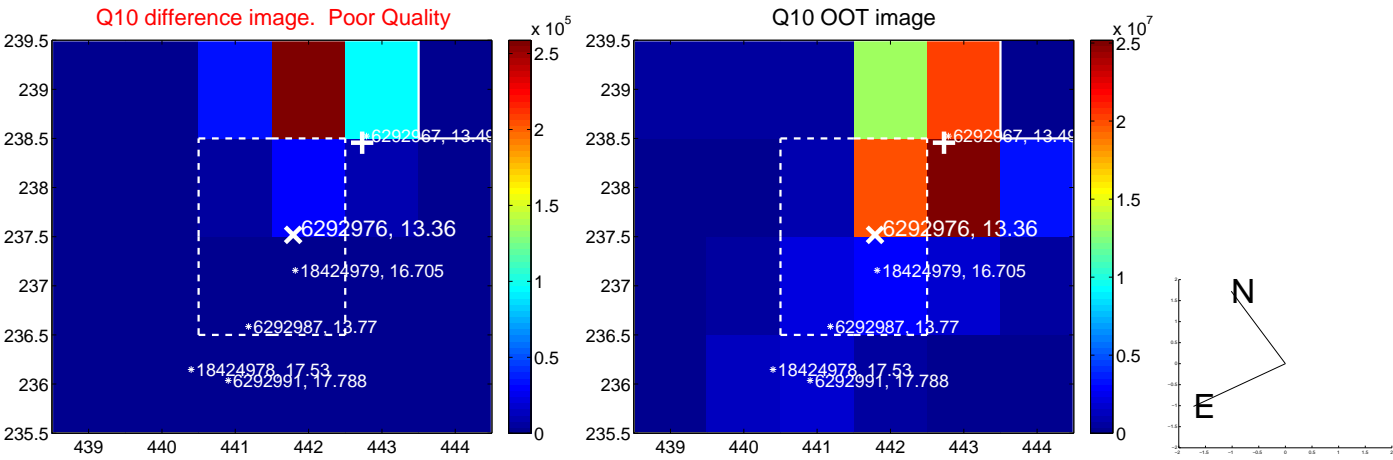
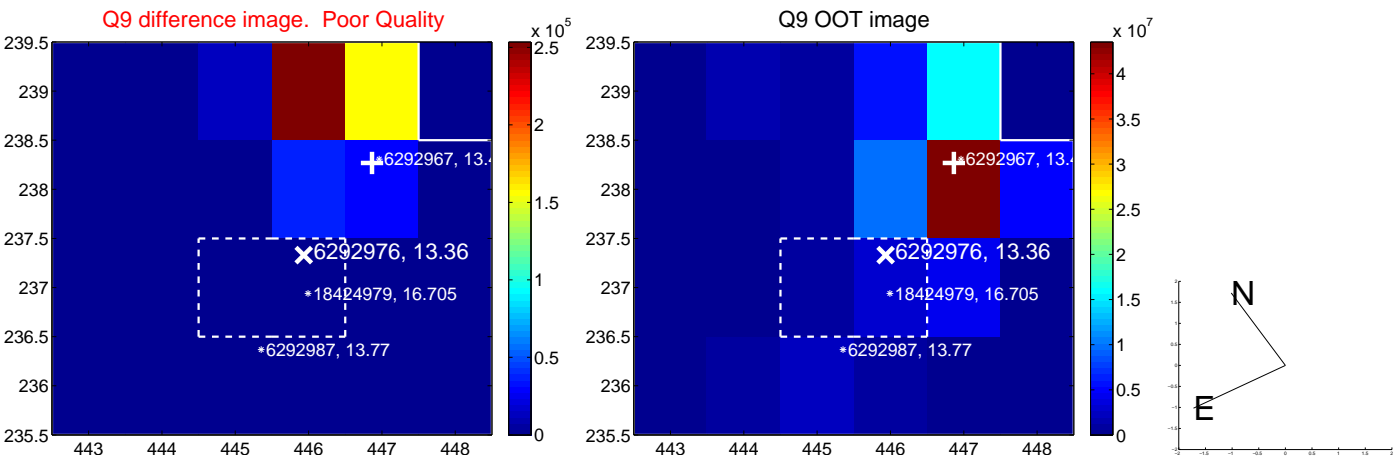
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



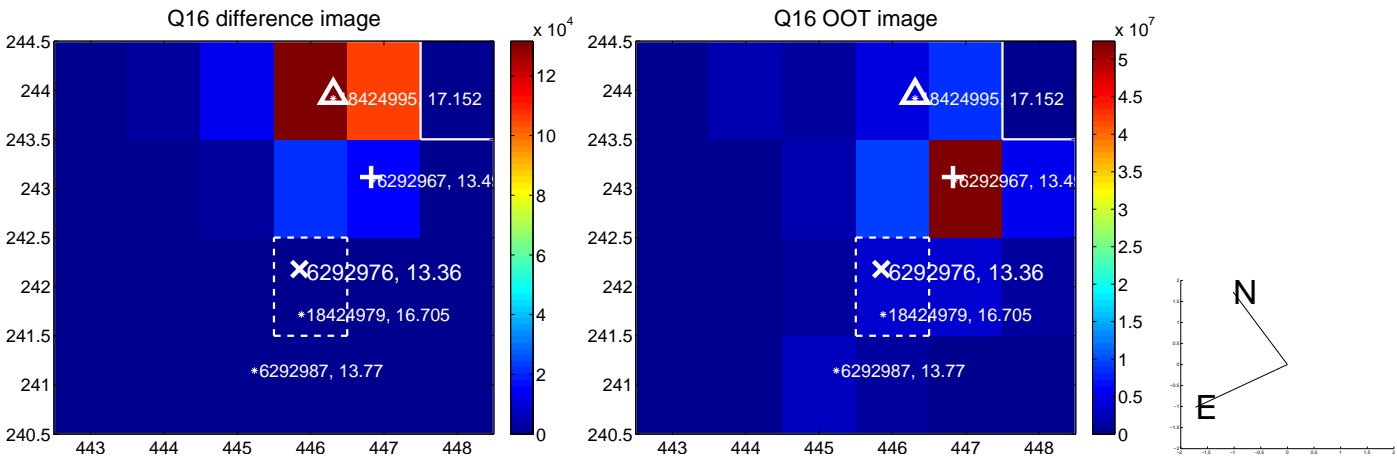
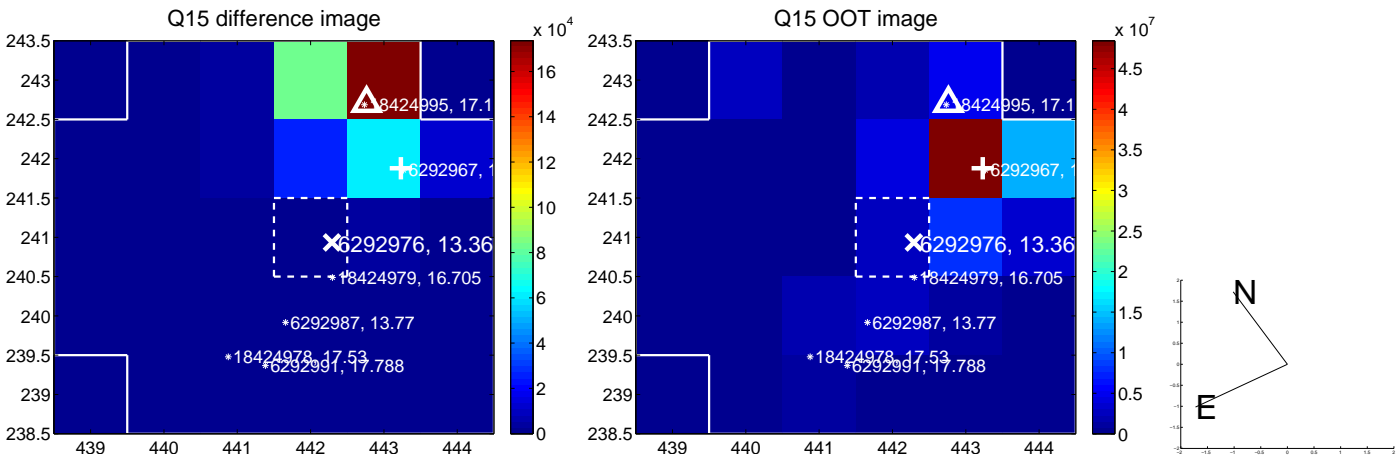
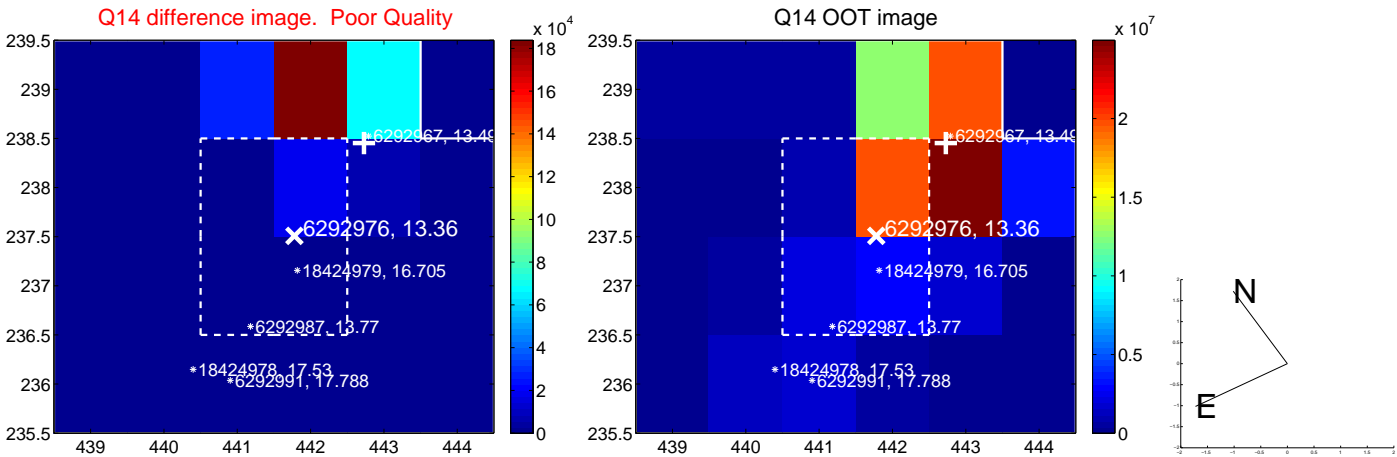
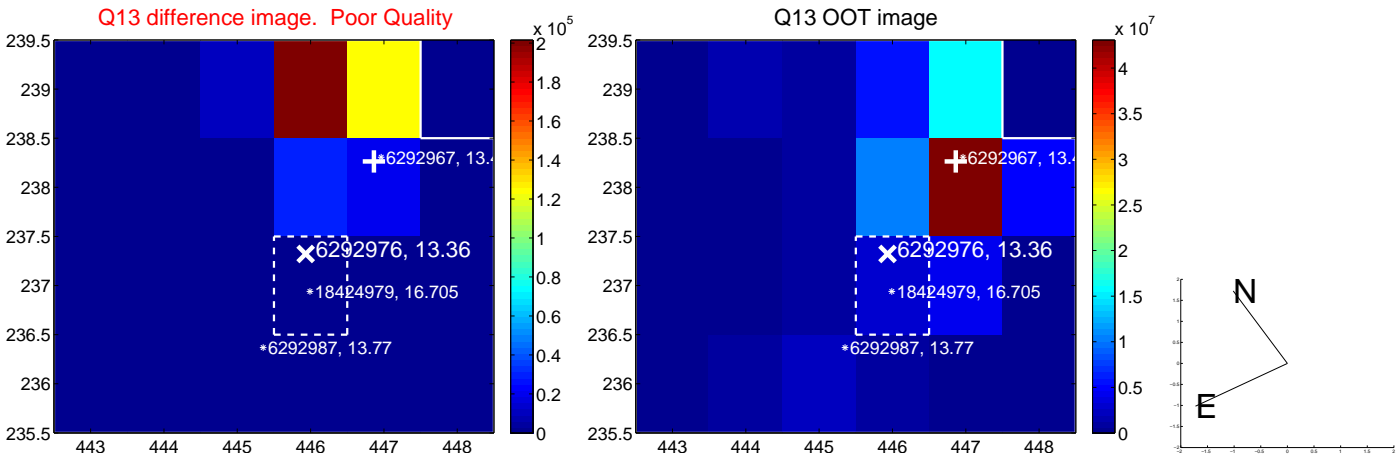
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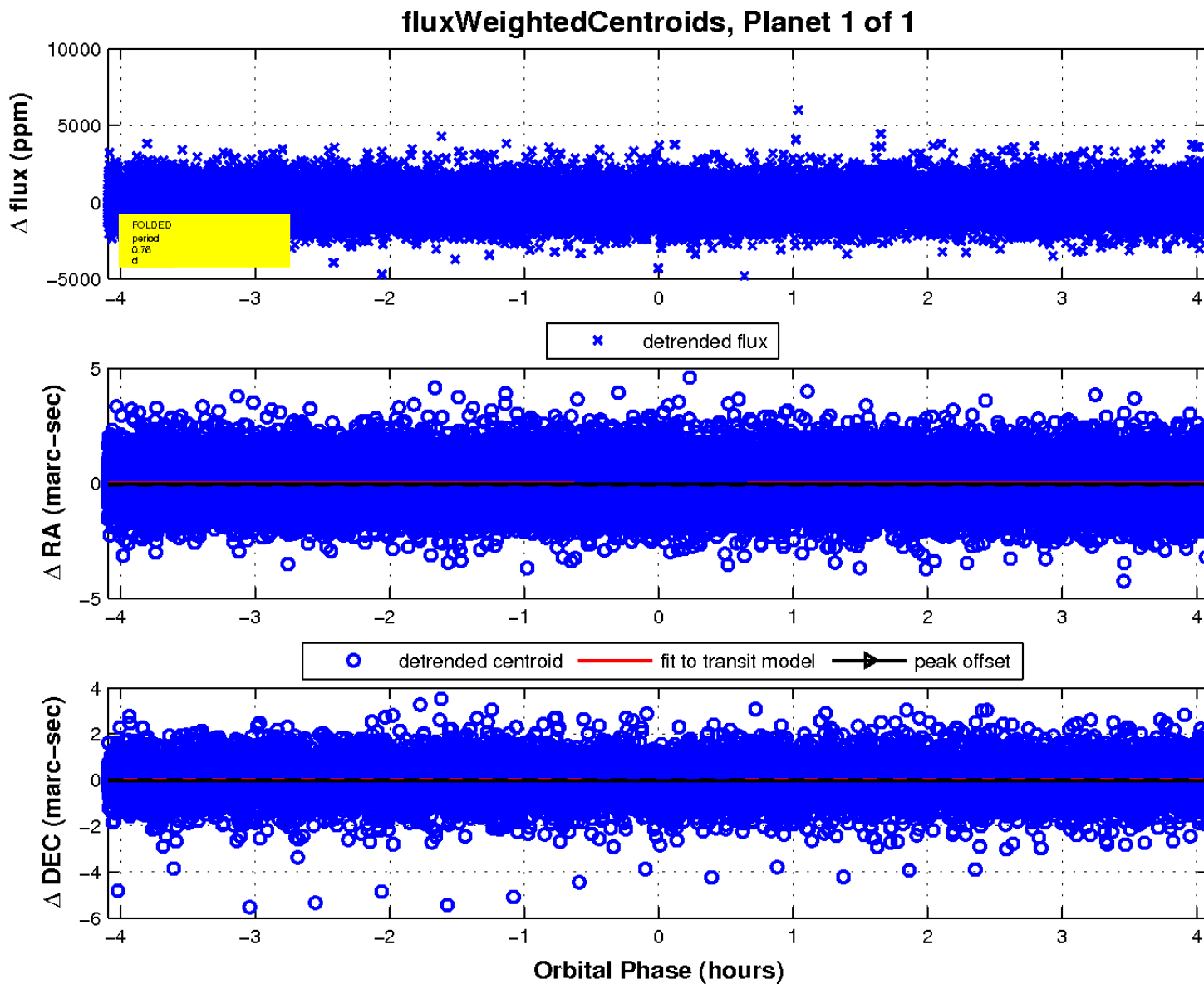
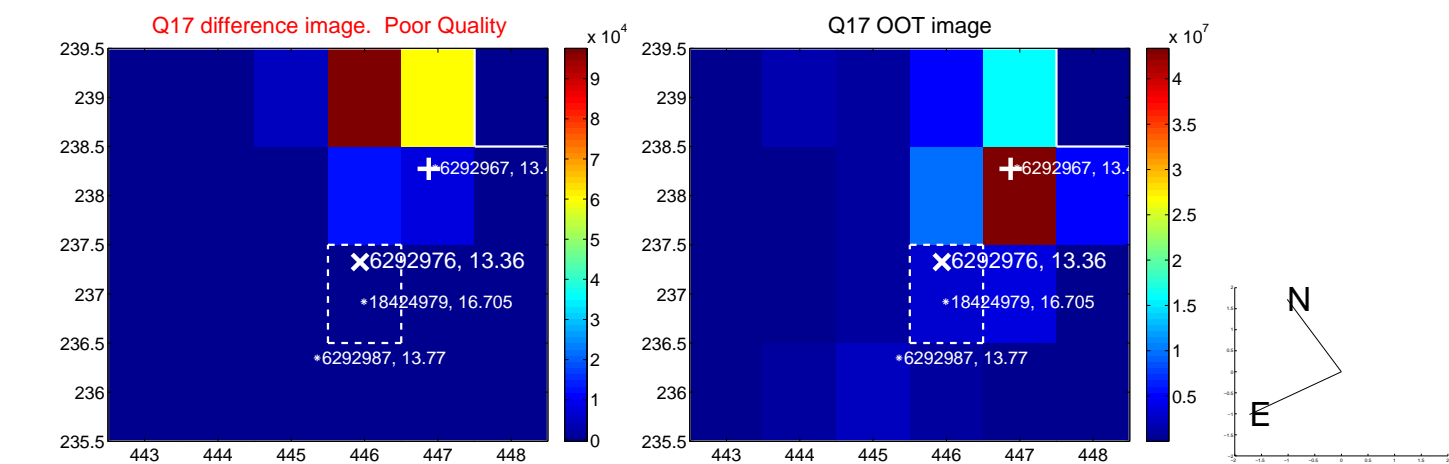
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UKIRT Image

Declination

