

KIC 008628665

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})
008628665-01	OBS	3434.01	10.285621	141.210689	137.9	2.983	9.9	10.3	1.06	5841	1.49	132.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008628665-01	OBS	PC	1.00	0	0	0	0	CENT_FEW_MEAS

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.

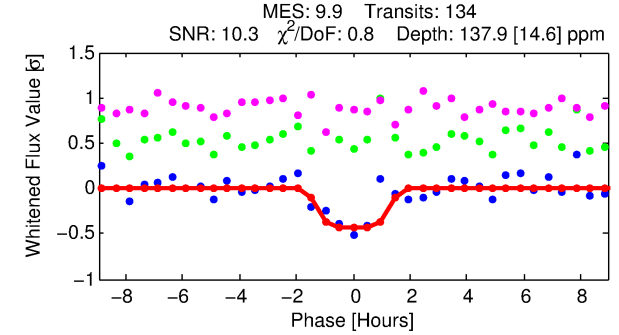
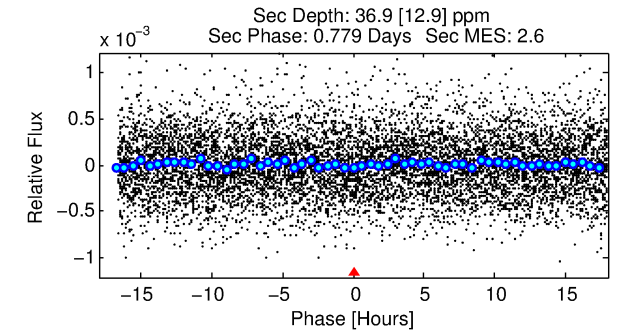
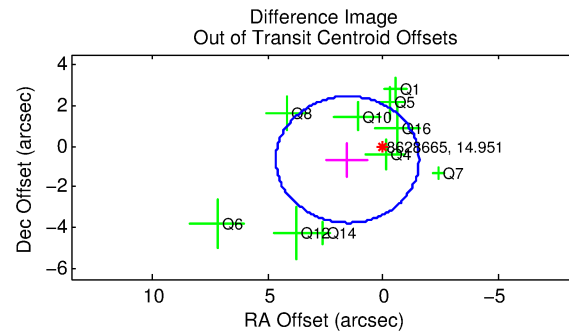
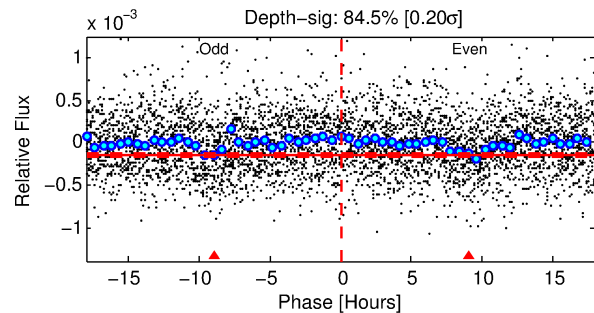
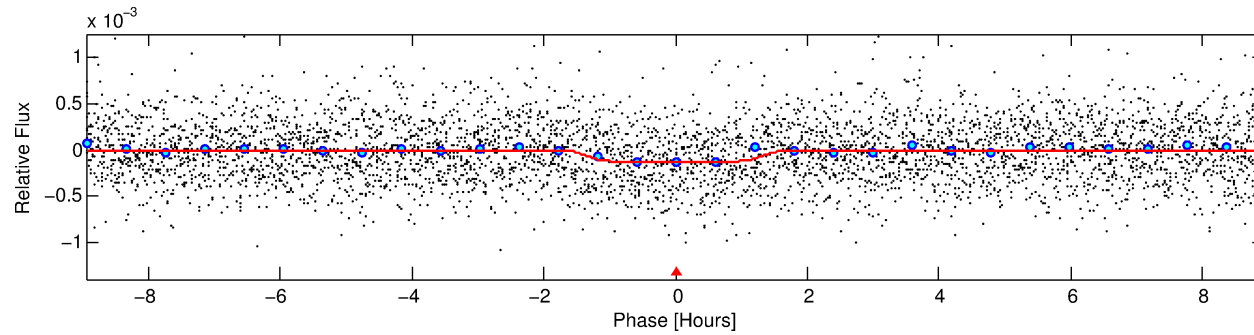
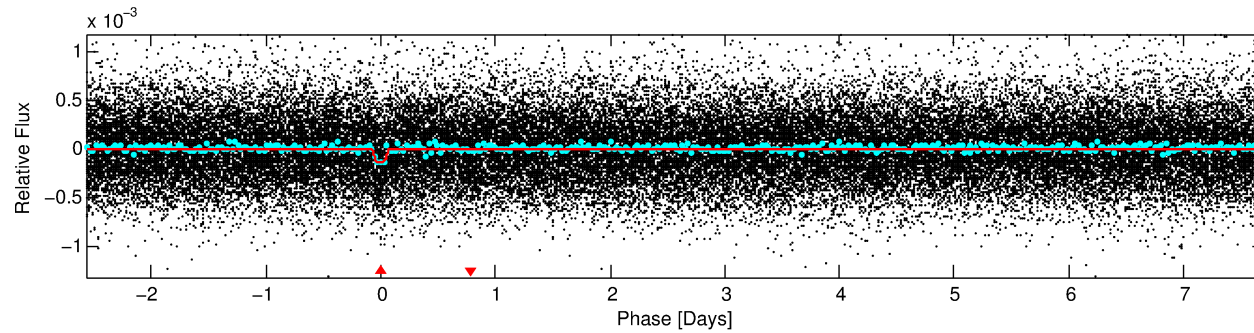
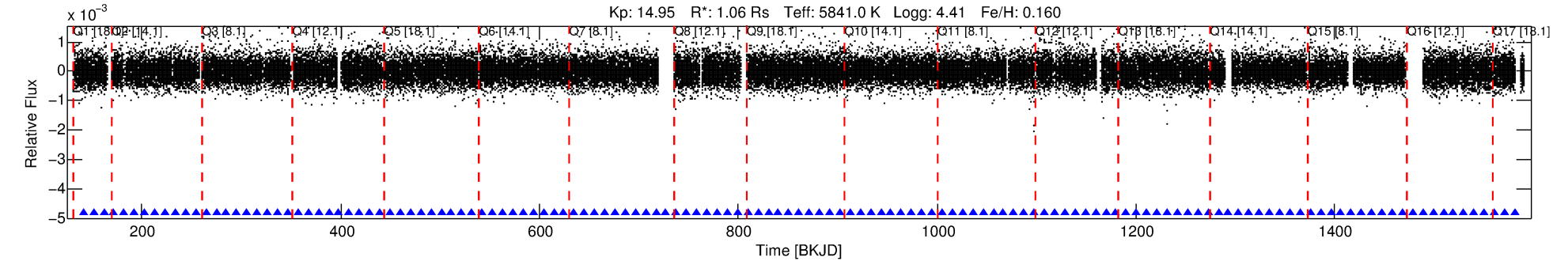
Ephemeris Match Information For 008628665-01

No Significant Match Found

DV One-Page Summary

KIC: 8628665 Candidate: 1 of 1 Period: 10.286 d

KOI: K03434.01 Corr: 0.982



DV Fit Results:

Period = 10.28562 [0.00009] d
Epoch = 141.2107 [0.0067] BKJD
Rp/R* = 0.0129 [0.0084]
a/R* = 11.87 [36.95]
b = 0.91 [0.62]
Seff = 132.25 [29.97]
Teq = 865 [49] K
Rp = 1.49 [1.00] Re
a = 0.0941 [0.0134] AU
Ag = 80.68 [109.76] [0.73 σ]
Teffp = 4007 [1346] K [2.33 σ]

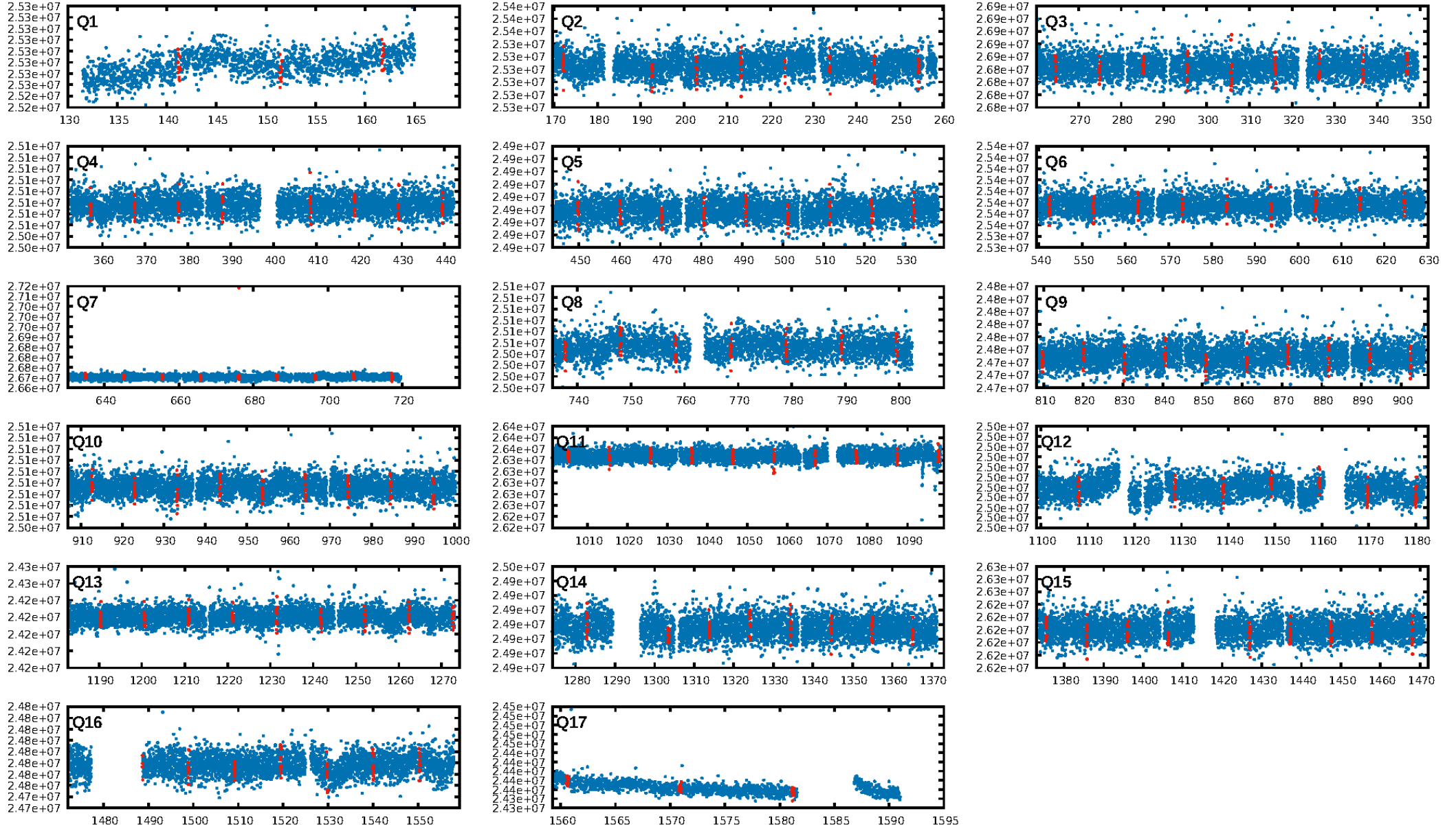
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 98.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.40e-22
RollingBand-fgt: 1.00 [128/128]
GhostDiagnostic-chr: 4.695
Centroid-sig: 1.5%
Centroid-so: 2.563 arcsec [1.85 σ]
OotOffset-rm: 1.679 arcsec [1.63 σ]
KicOffset-rm: 1.787 arcsec [1.84 σ]
OotOffset-st: 3/1/4/2 [10]
KicOffset-st: 3/1/4/2 [10]
DiffImageQuality-fgm: 0.30 [3/10]
DiffImageOverlap-fno: 1.00 [17/17]

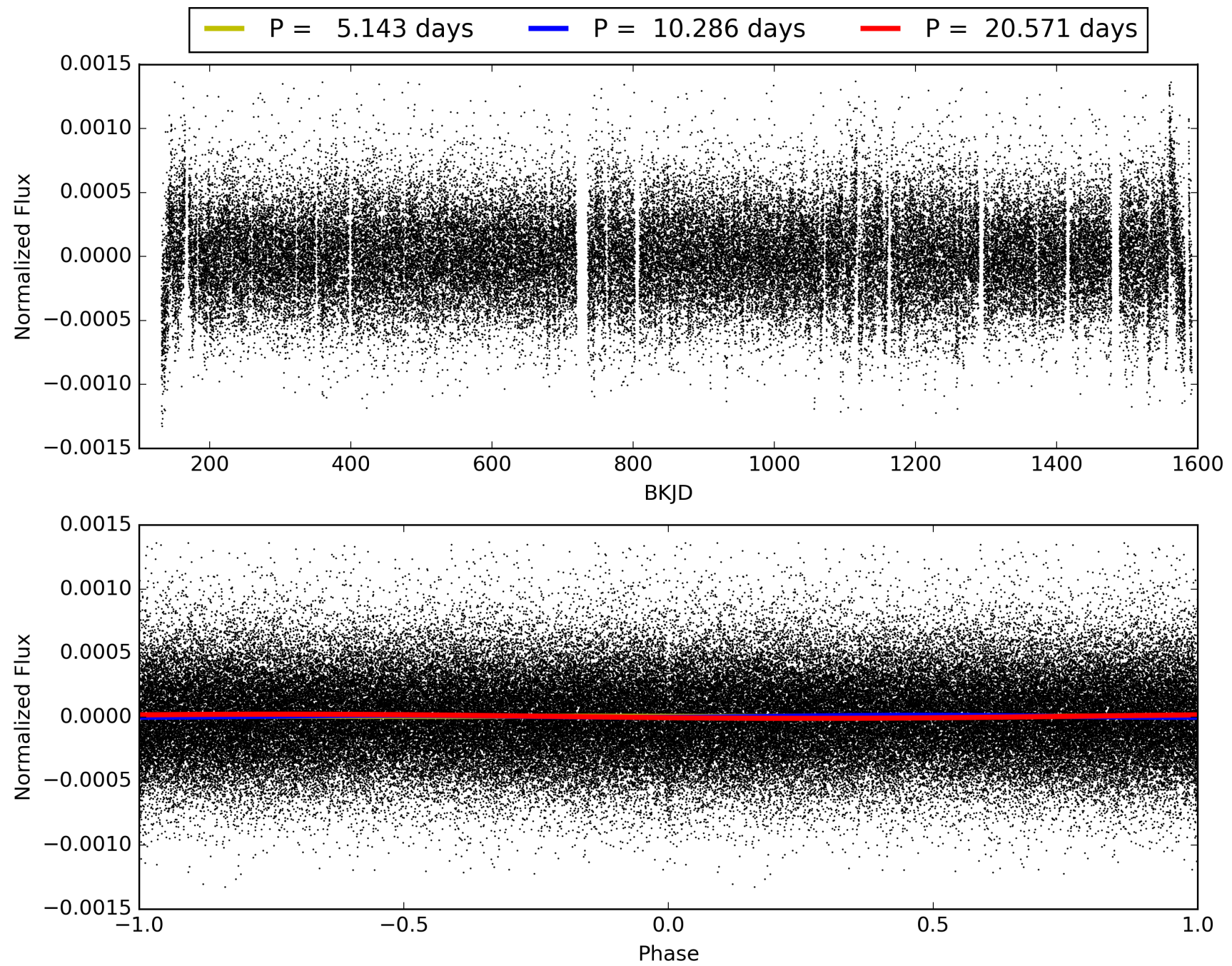
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 15:49:41 Z

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

TCE 008628665-01, PDC Light Curves

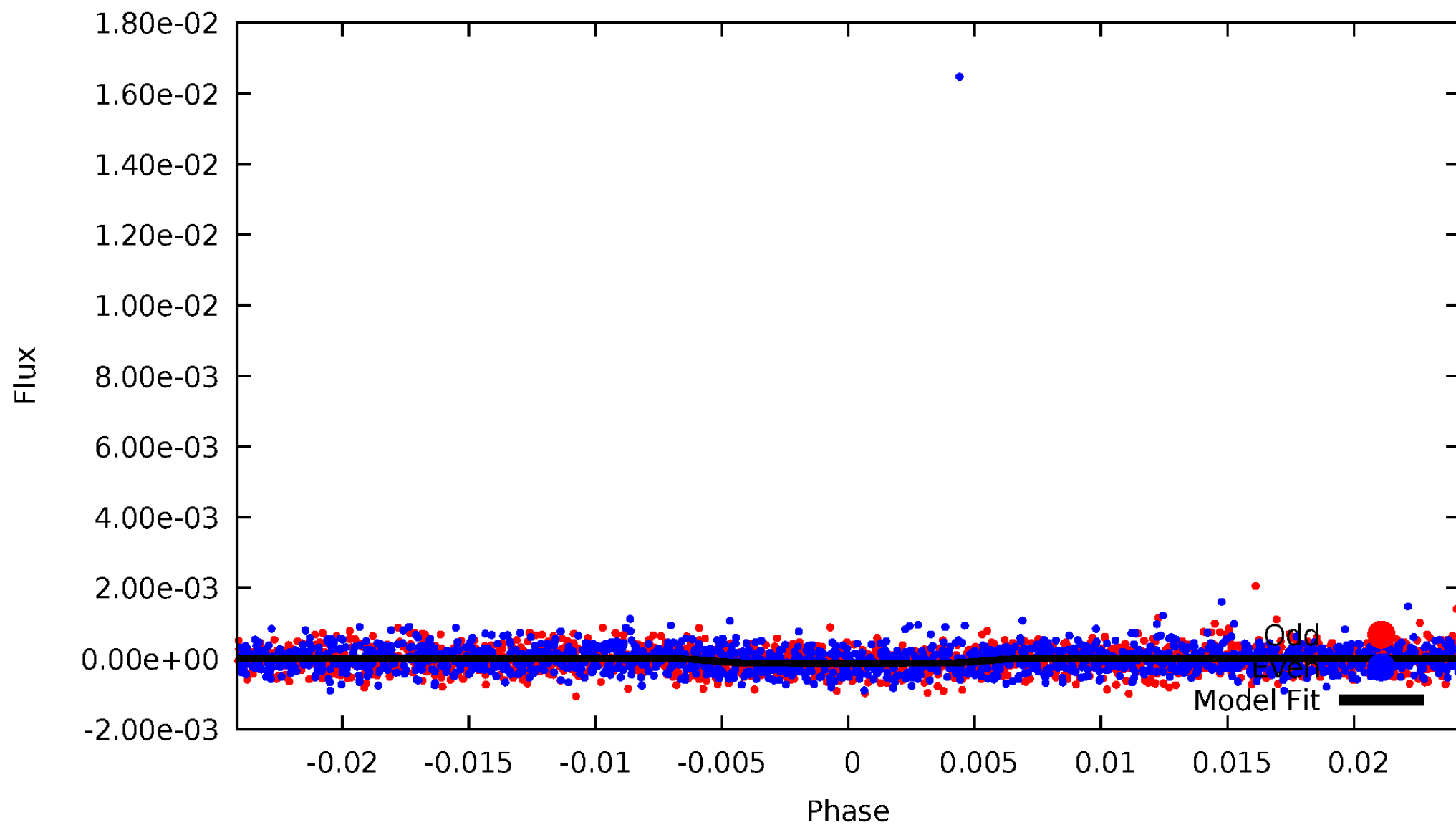


TCE 008628665-01



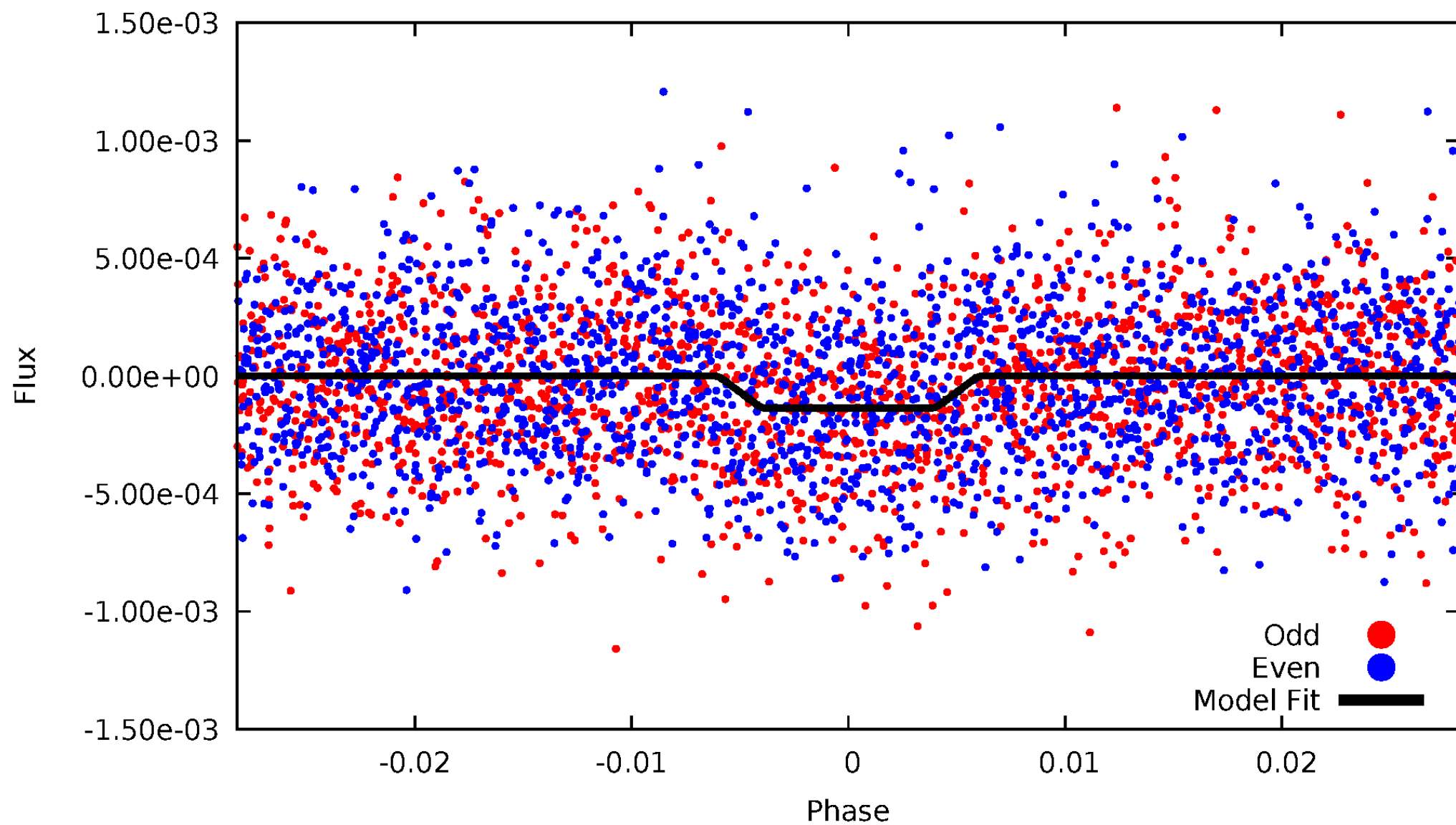
DV Odd/Even

TCE 008628665-01



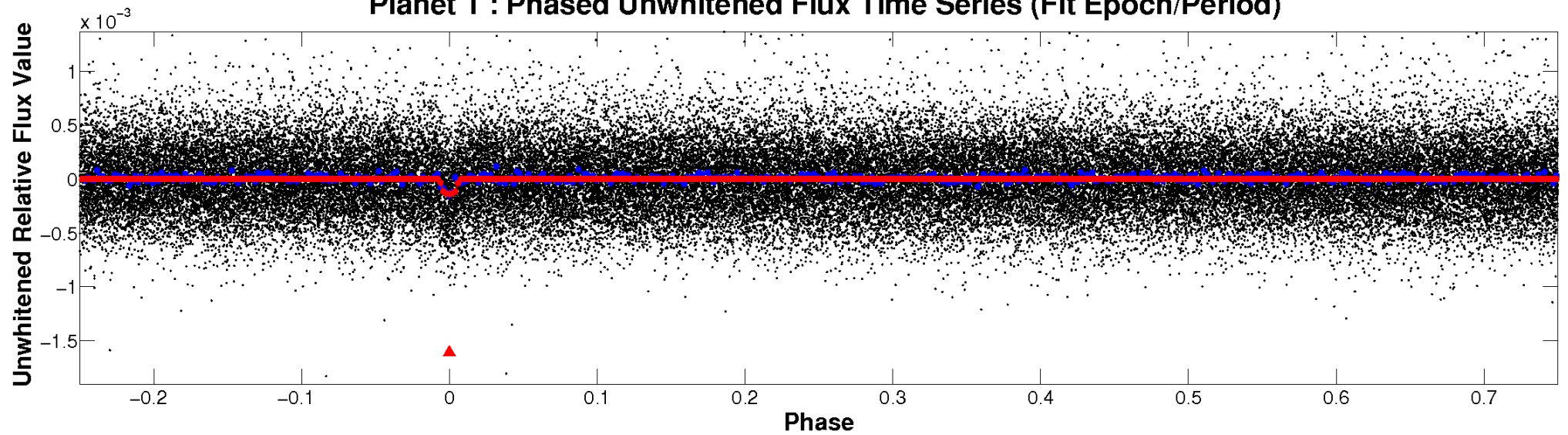
ALT Odd/Even

TCE 008628665-01

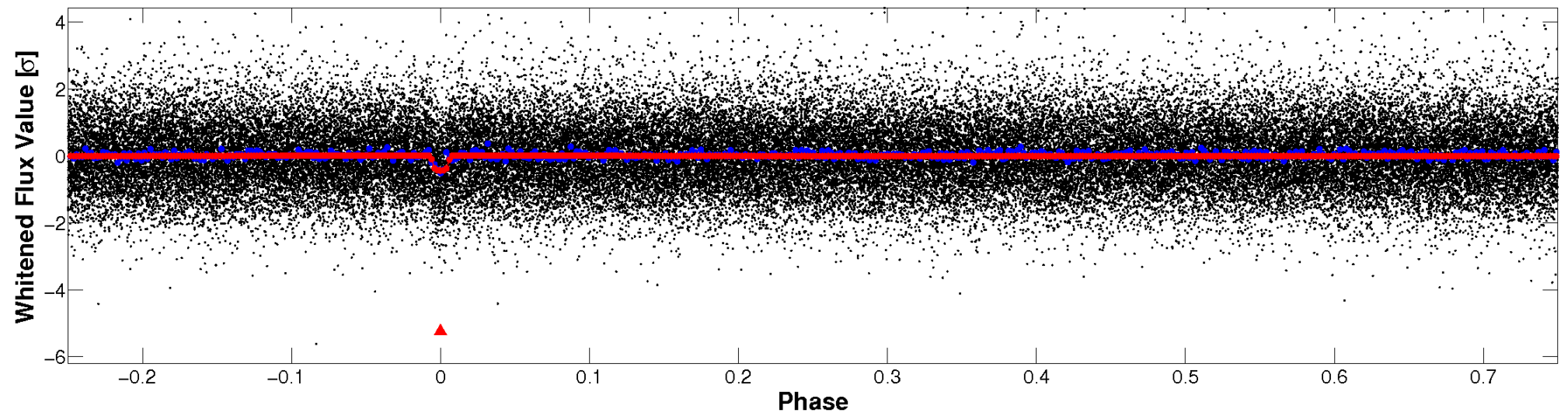


Non-Whitened Vs. Whitened Light Curve

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

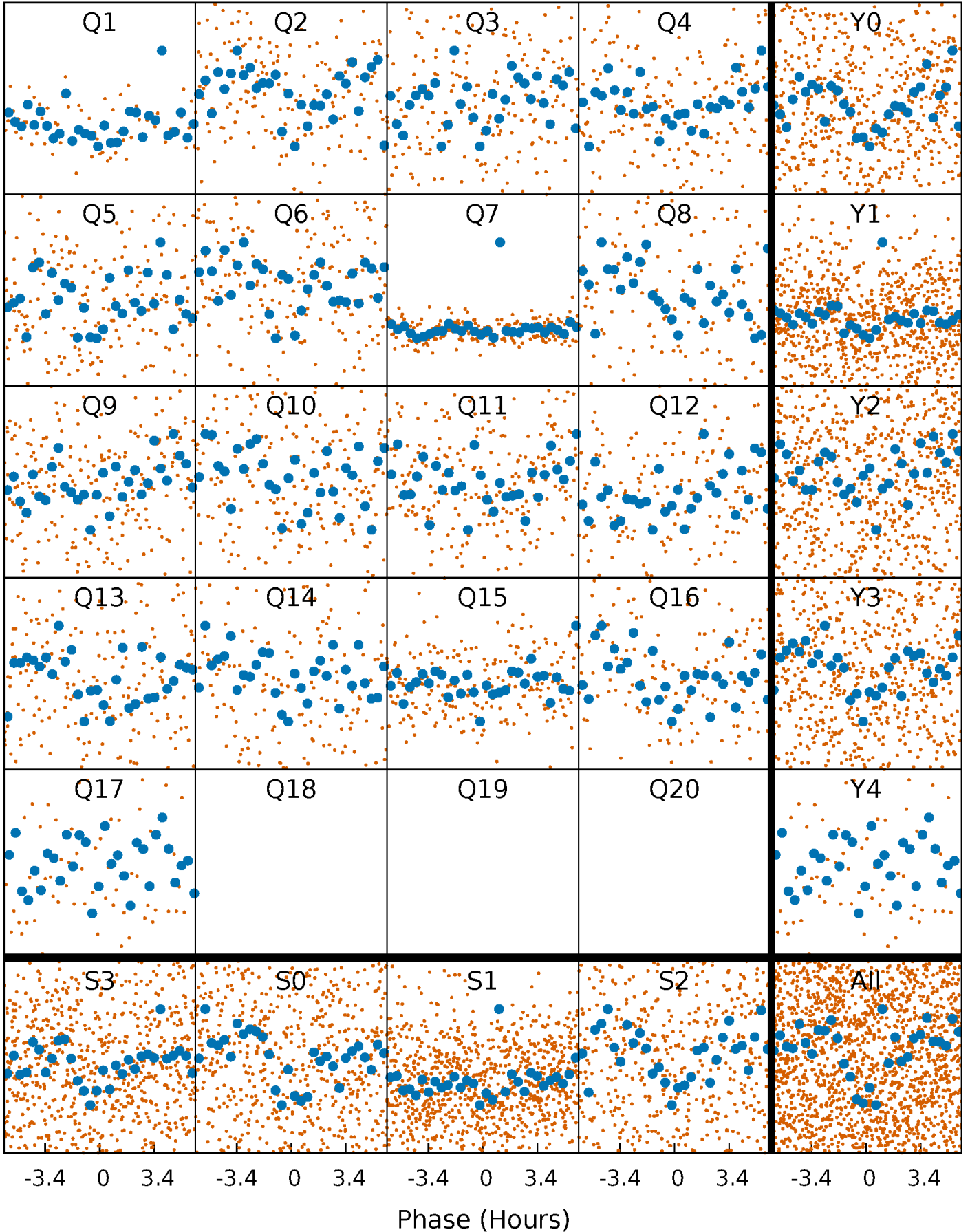


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



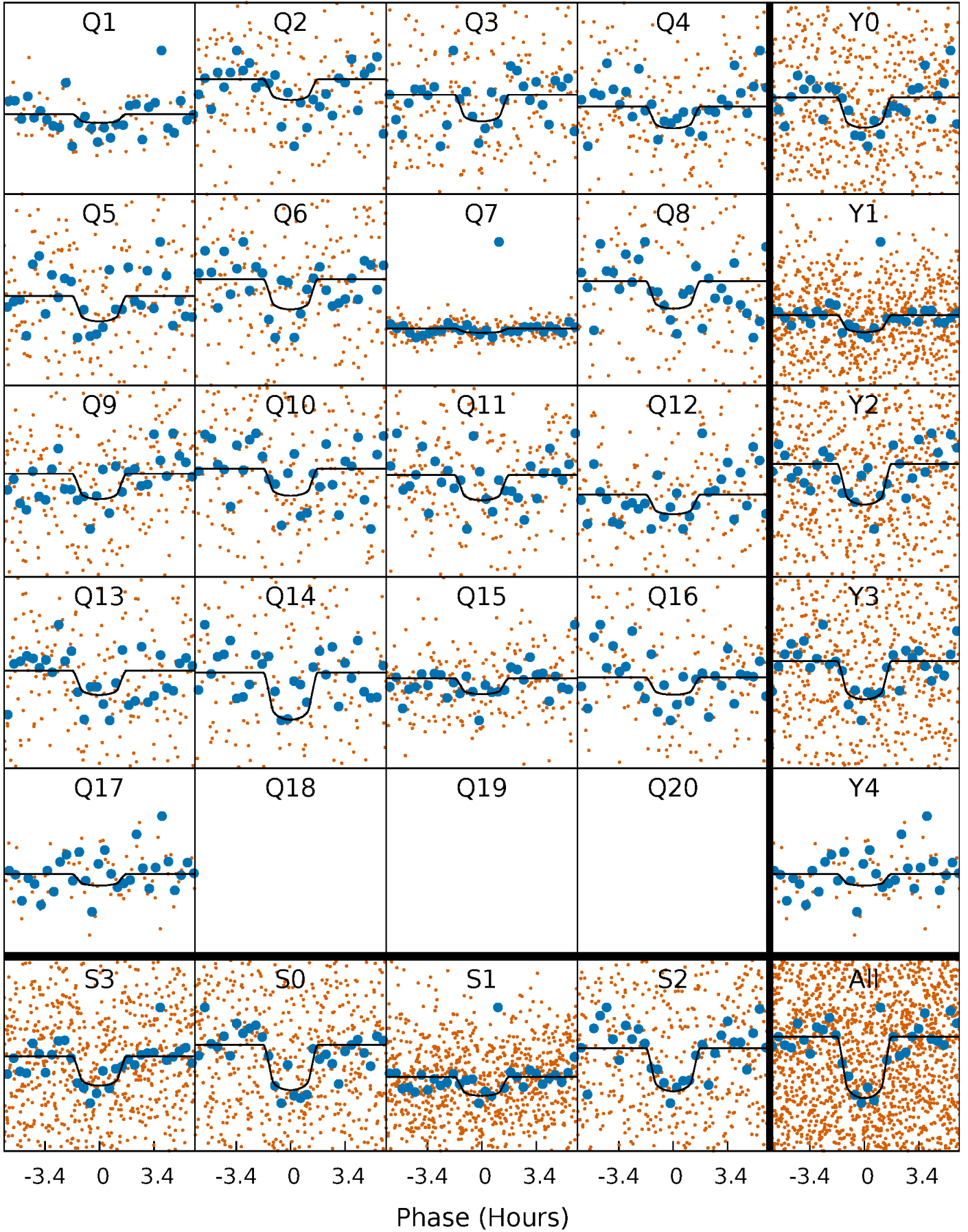
PDC Quarter-Phased Transit Curves

TCE 008628665-01 P= 10.285621 Days $T_0=141.210689$ (BKJD)



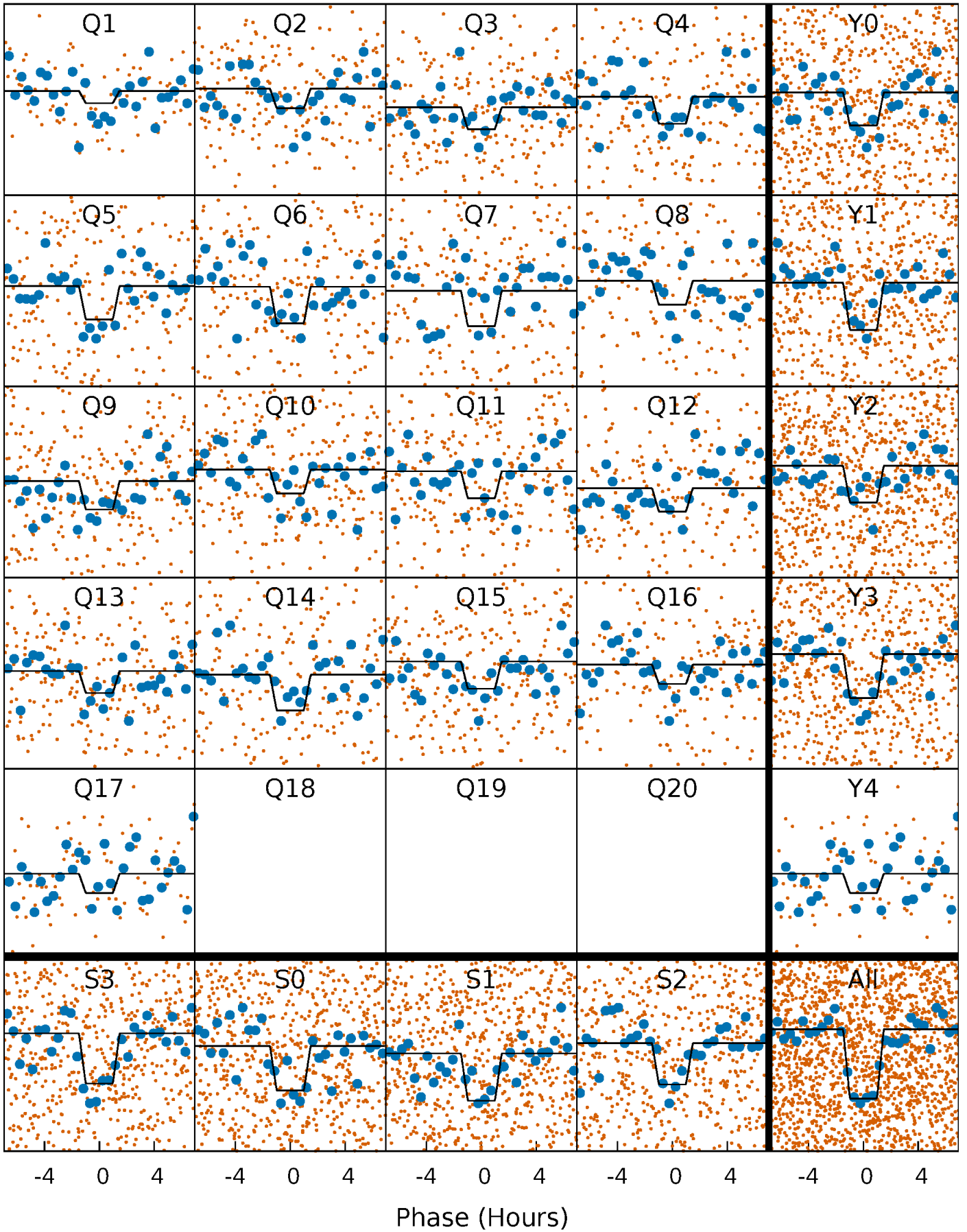
DV Quarter-Phased Transit Curves

TCE 008628665-01 P= 10.285621 Days $T_0=141.210689$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

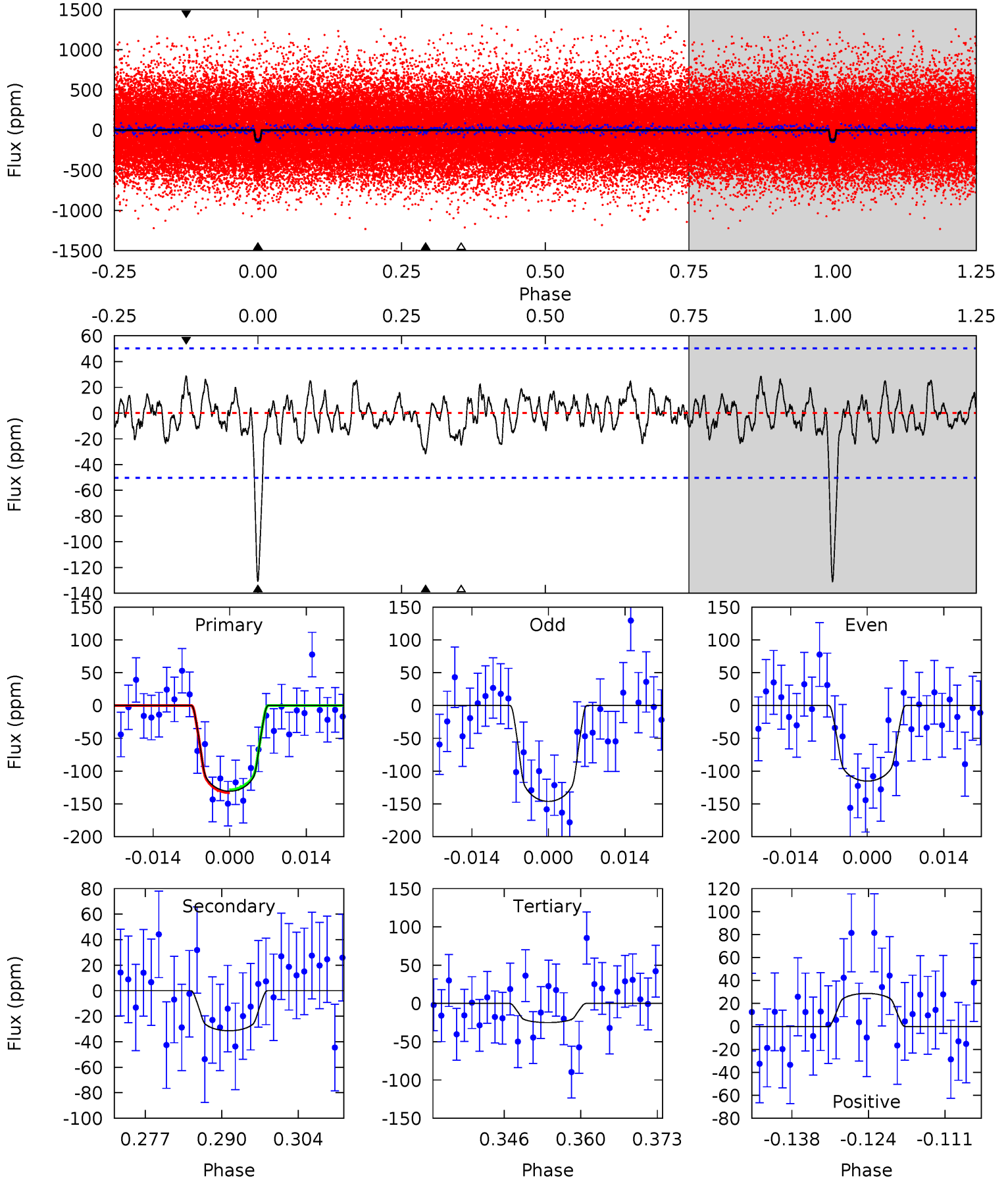
TCE 008628665-01 P= 10.285631 Days $T_0=141.209304$ (BKJD)



DV Model-Shift Uniqueness Test

008628665-01, P = 10.285621 Days, E = 130.925068 Days

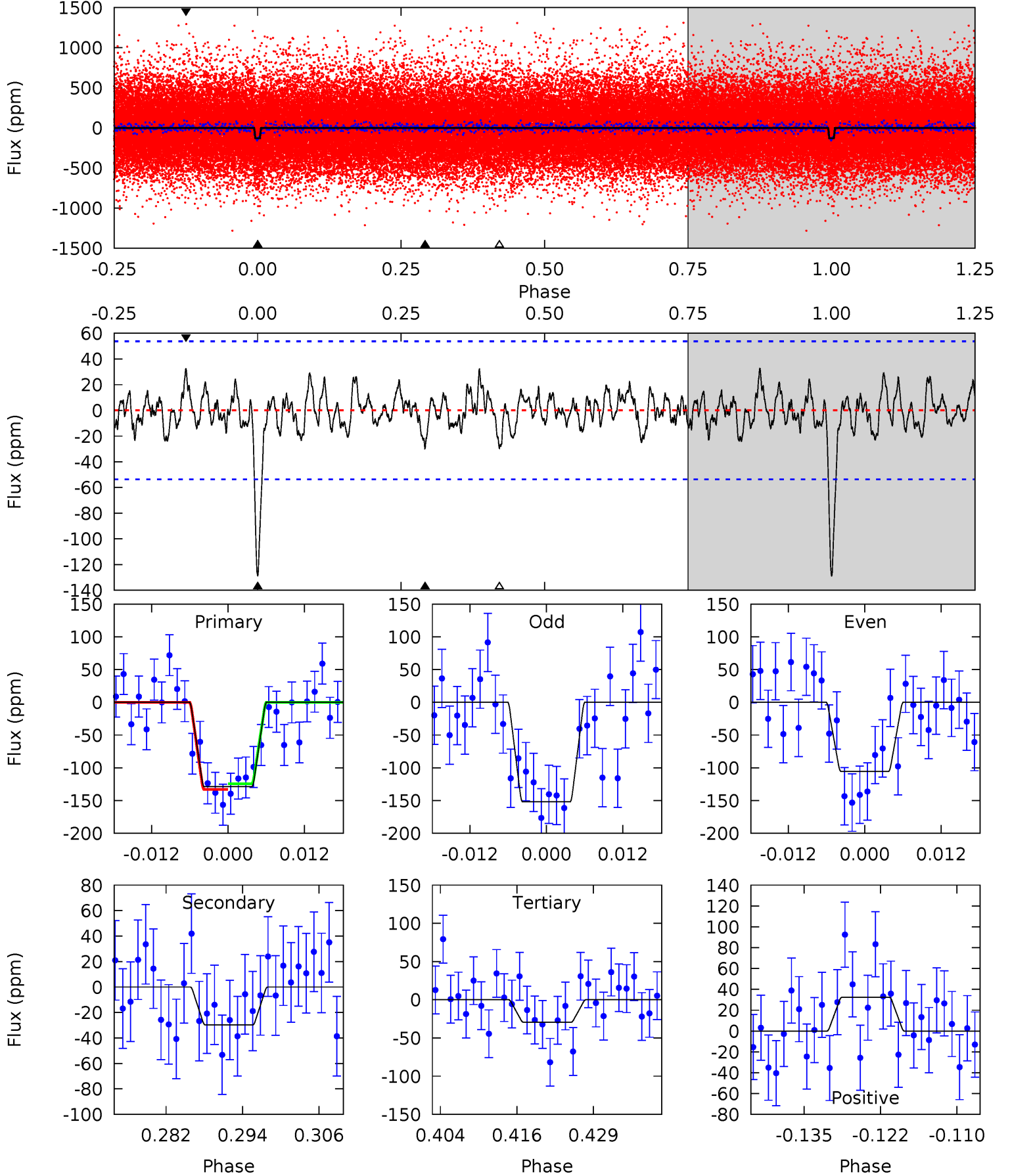
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.9	3.10	2.47	2.84	4.96	2.46	1.05	10.4	10.1	0.64	0.26	1.53	0.89	0.18	0.21



Alt Model-Shift Uniqueness Test

008628665-01, P = 10.285631 Days, E = 130.923673 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	2.76	2.73	3.00	4.99	2.51	1.01	9.23	8.96	0.03	-0.24	2.16	1.03	0.20	0.41



Stellar Parameters For KIC 008628665

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5841^{+79}_{-79}	$4.409^{+0.054}_{-0.126}$	$0.160^{+0.150}_{-0.150}$	$1.060^{+0.167}_{-0.090}$	$1.053^{+0.064}_{-0.064}$	$1.244^{+0.310}_{-0.420}$
	+1%/-1%	+1%/-3%	+94%/-94%	+16%/-8%	+6%/-6%	+25%/-34%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 008628665-01 / KOI 3434.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-31 ± 10	$1.59^{+0.90}_{-0.86}$	1217^{+52}_{-34}	4085^{+1525}_{-639}	62^{+243}_{-39}
Alt.	-30 ± 11	$1.50^{+0.93}_{-0.82}$	1219^{+49}_{-36}	4123^{+1540}_{-690}	66^{+244}_{-44}

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 $A_{obs} \gg 1.0$

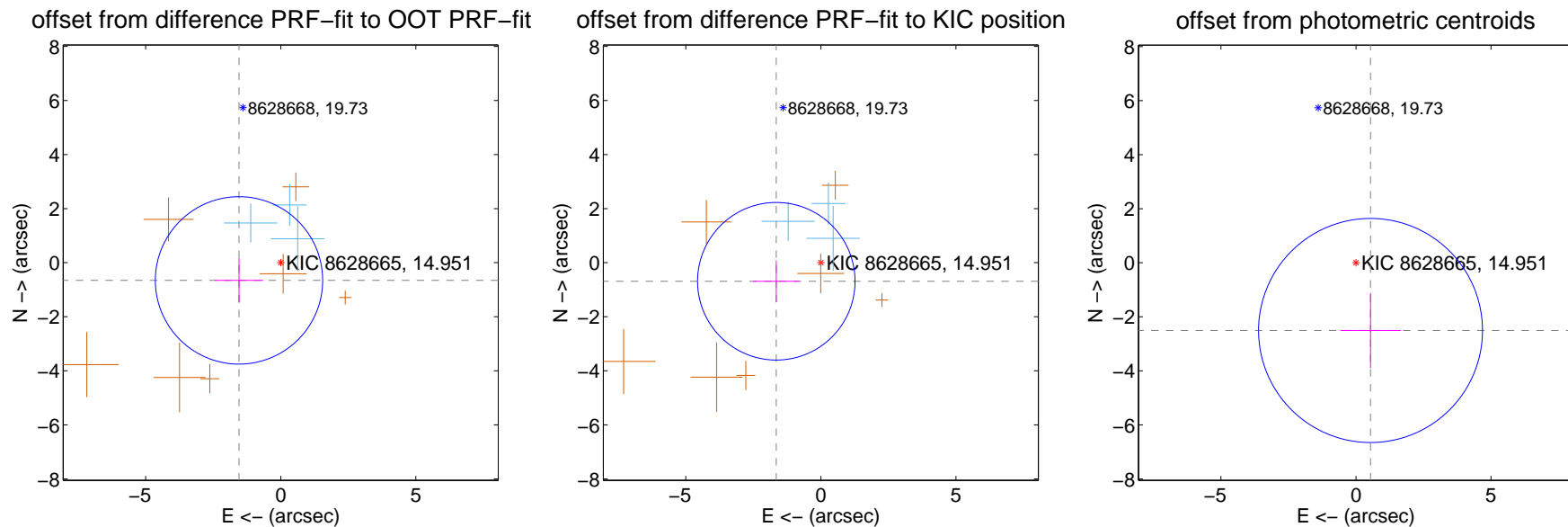
DV Centroid Data

Supplemental centroid analysis for 008628665-01. Kepler magnitude: 14.95. Transit SNR 10.31

There are 3 quarters with good PRF difference image offsets

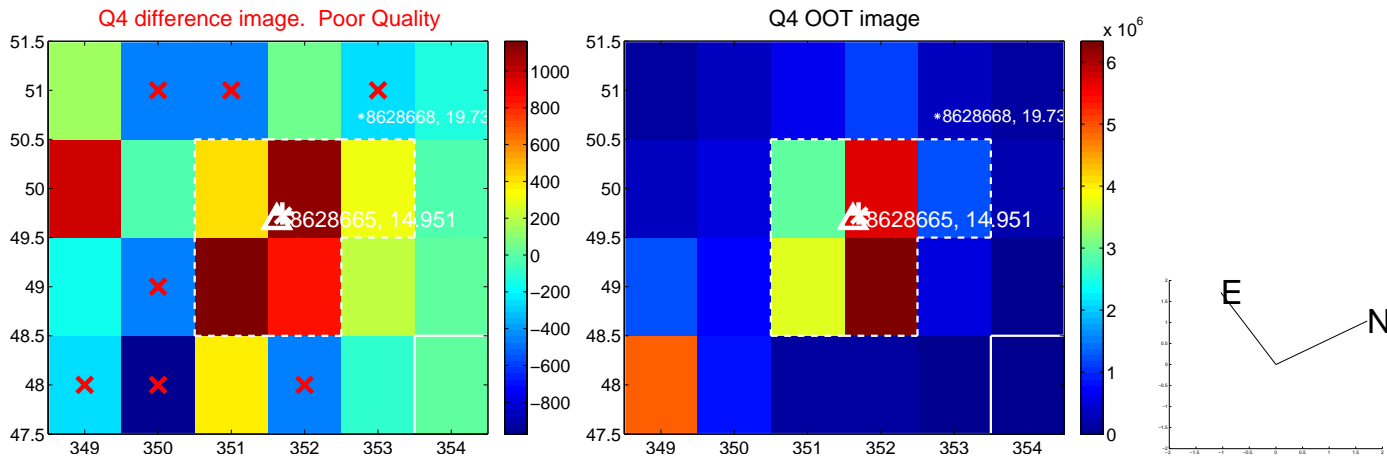
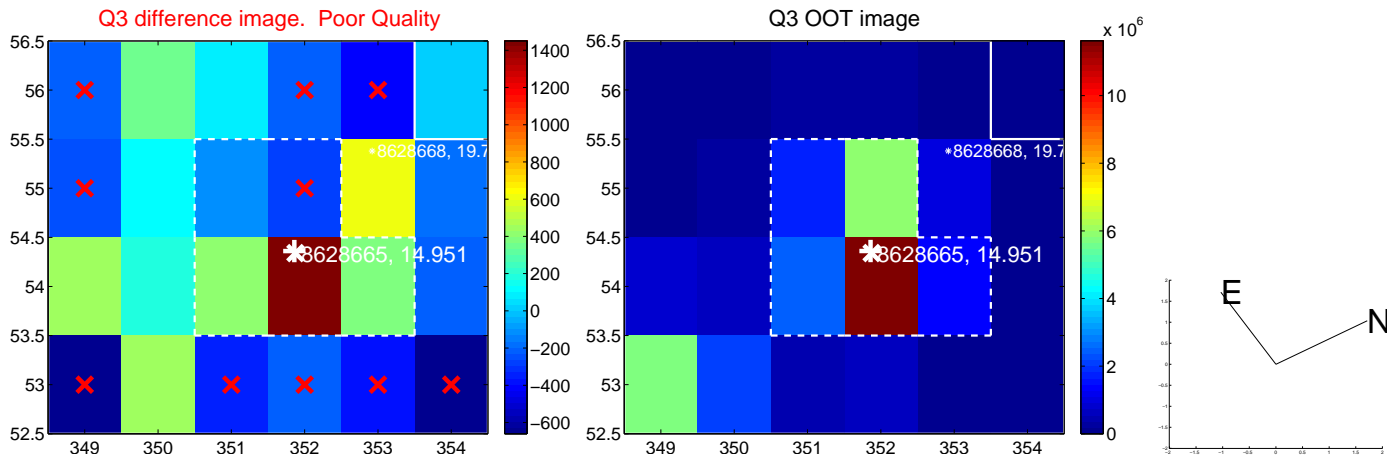
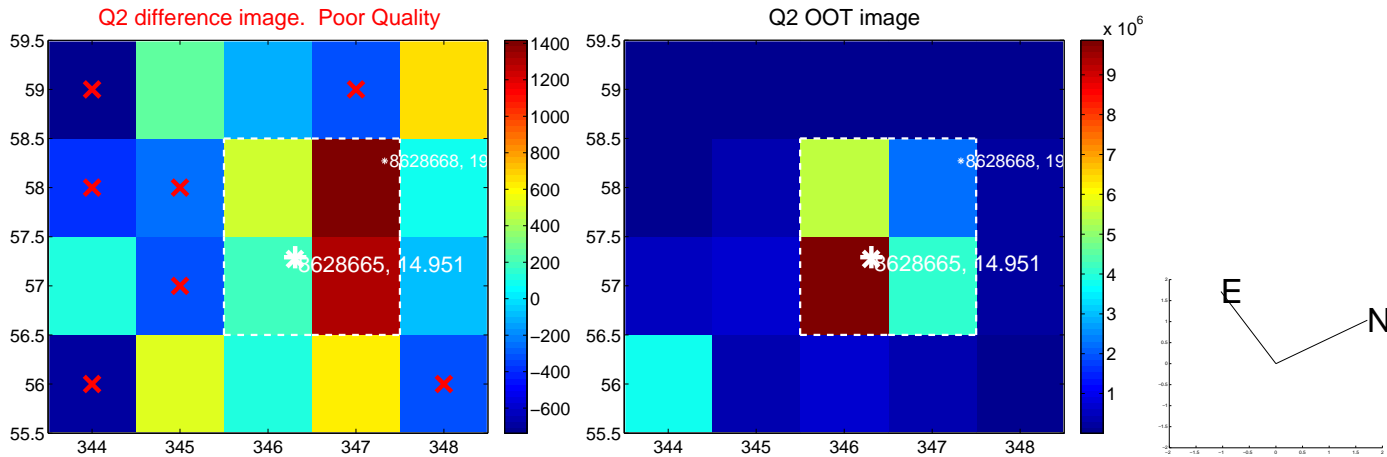
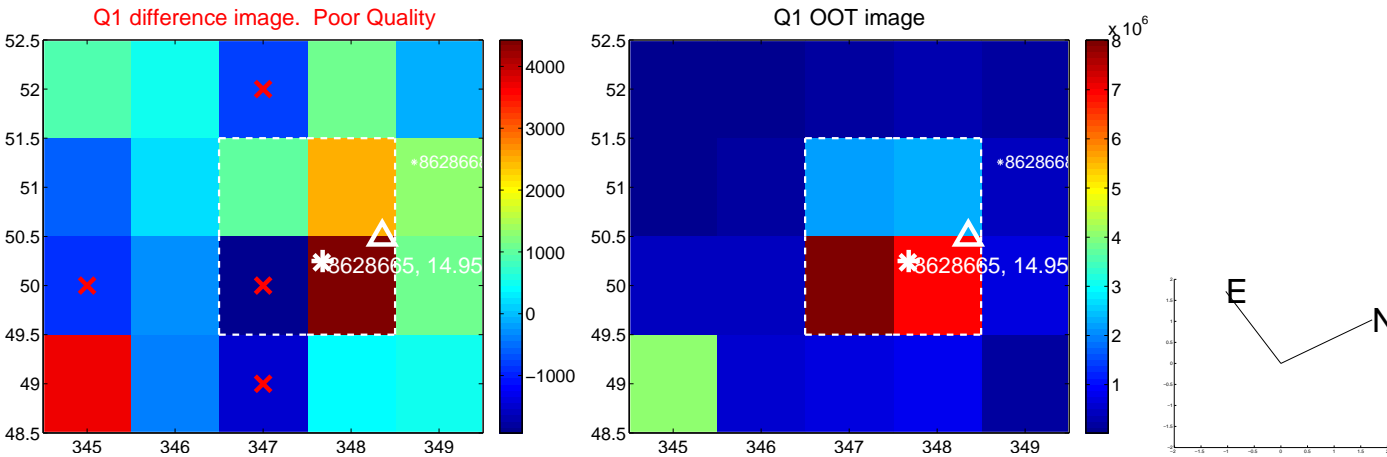
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.679 ± 1.032	1.63	1.546 ± 0.892	-0.655 ± 0.823
PRF-fit source offset from KIC position	1.787 ± 0.972	1.84	1.650 ± 0.853	-0.687 ± 0.763
photometric centroid source offset	2.56 ± 1.38	1.85	-0.54 ± 1.12	-2.51 ± 1.39

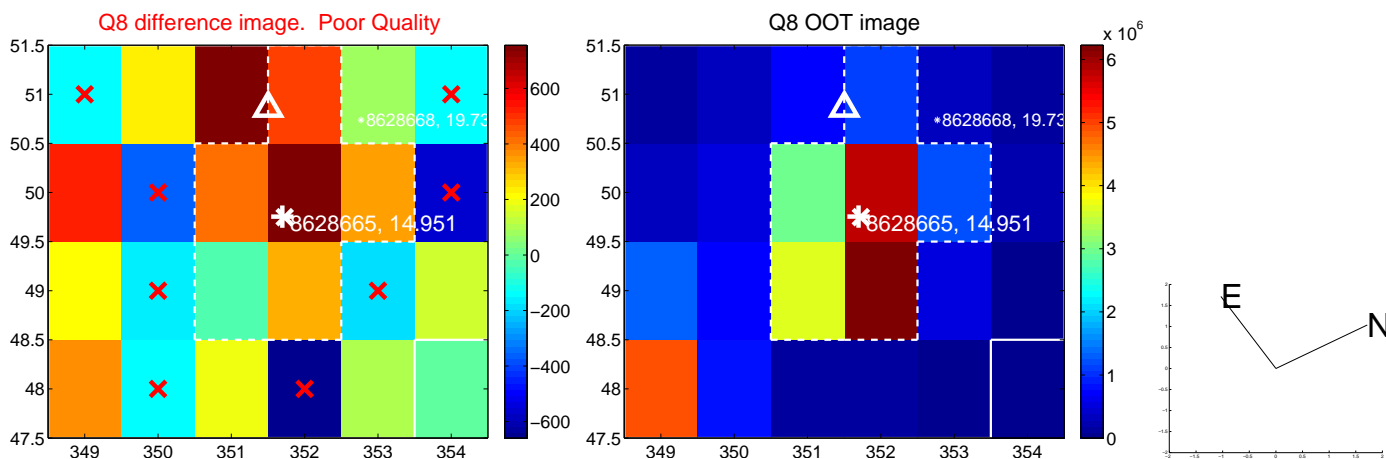
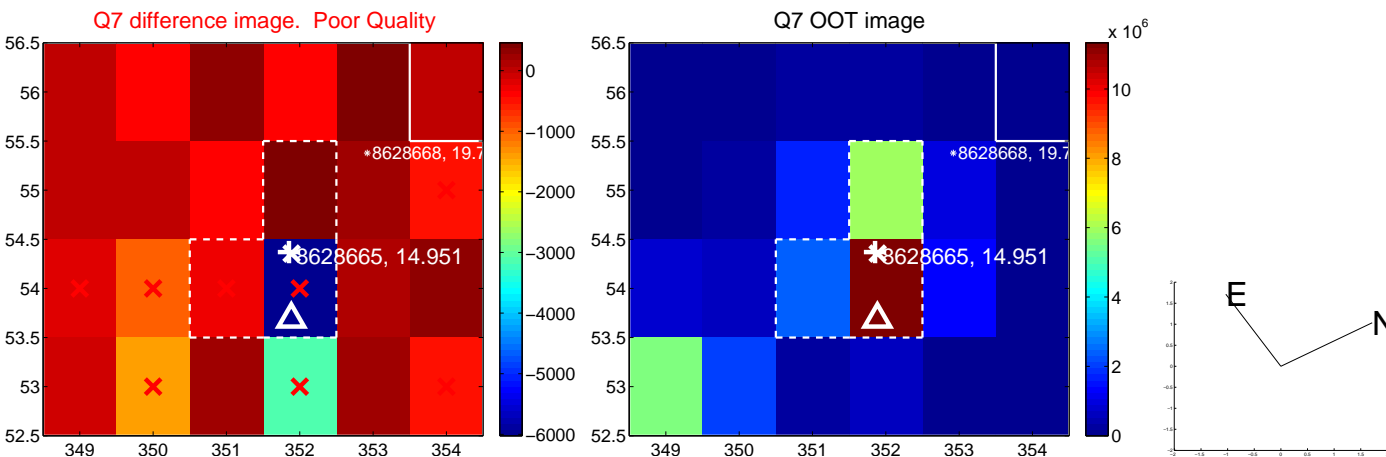
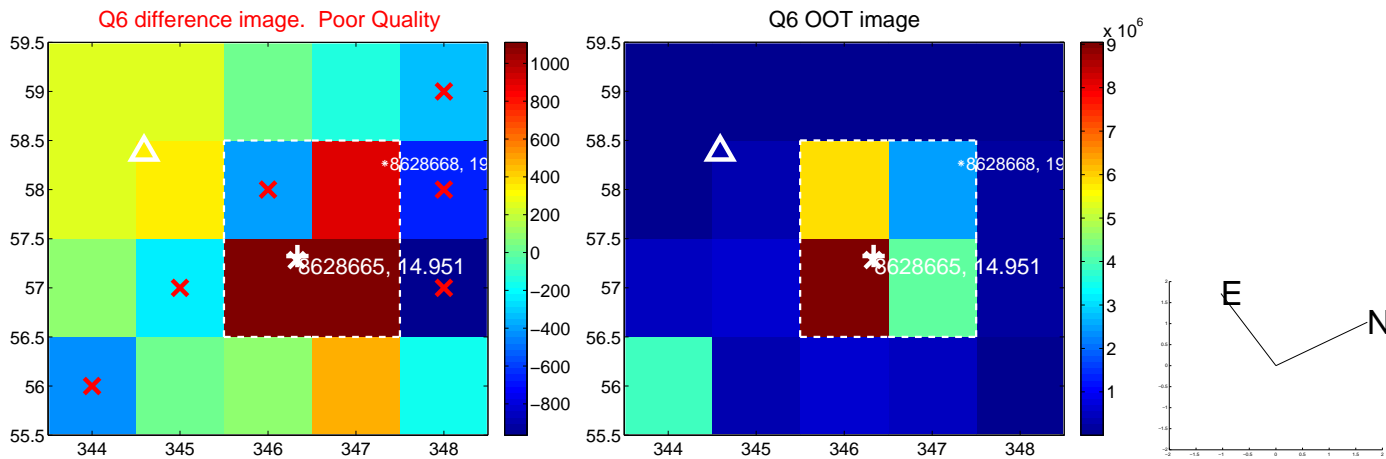
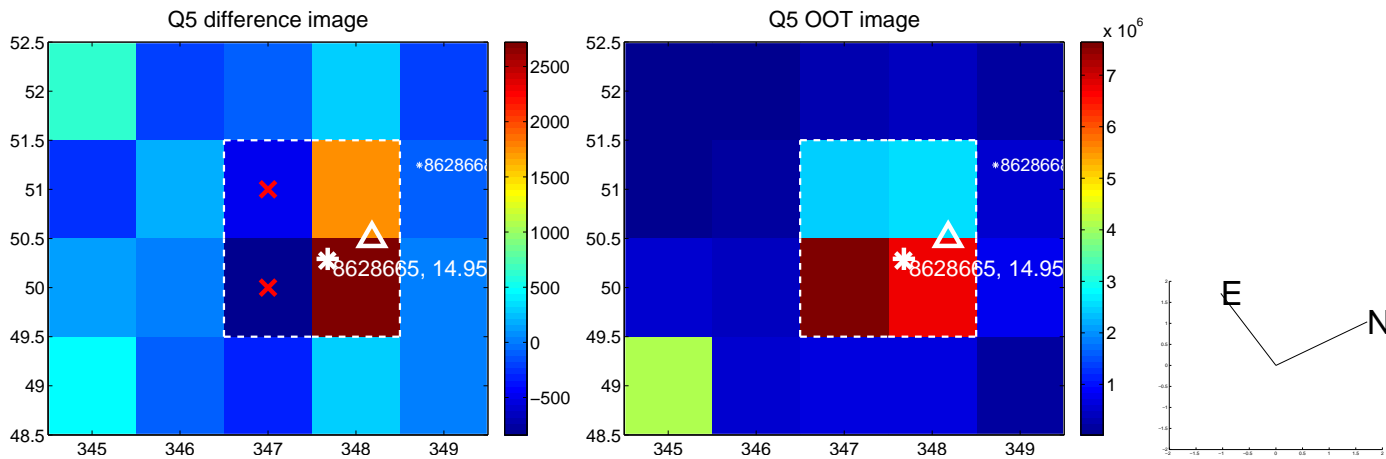


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

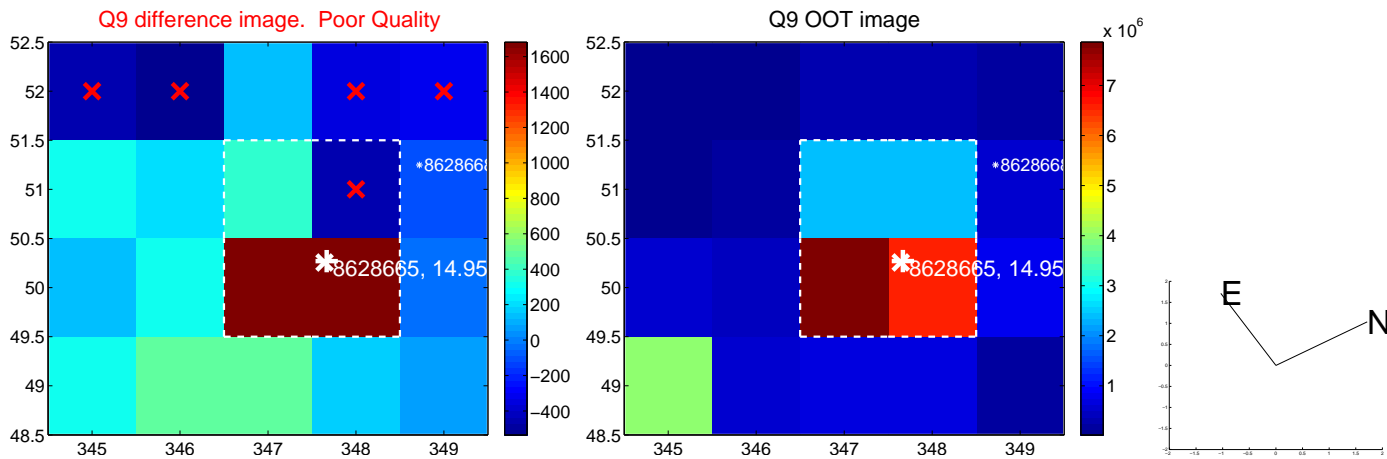
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



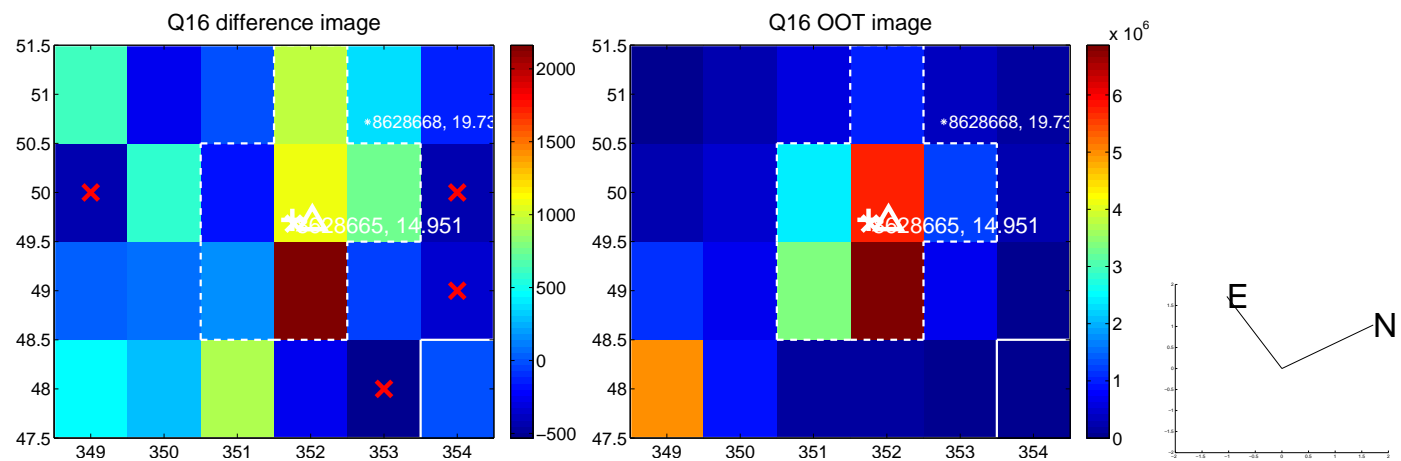
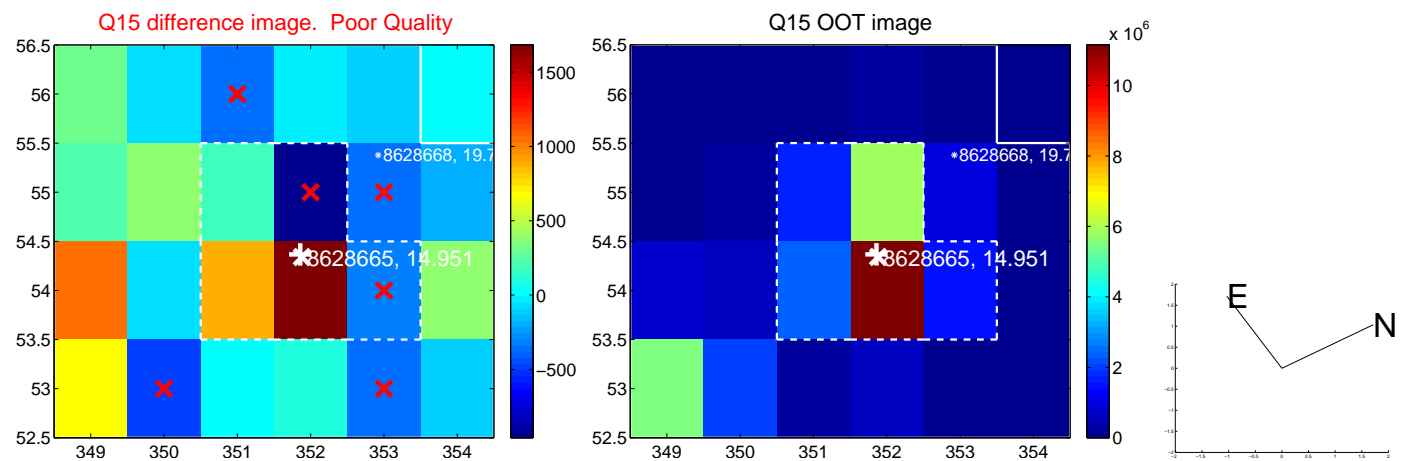
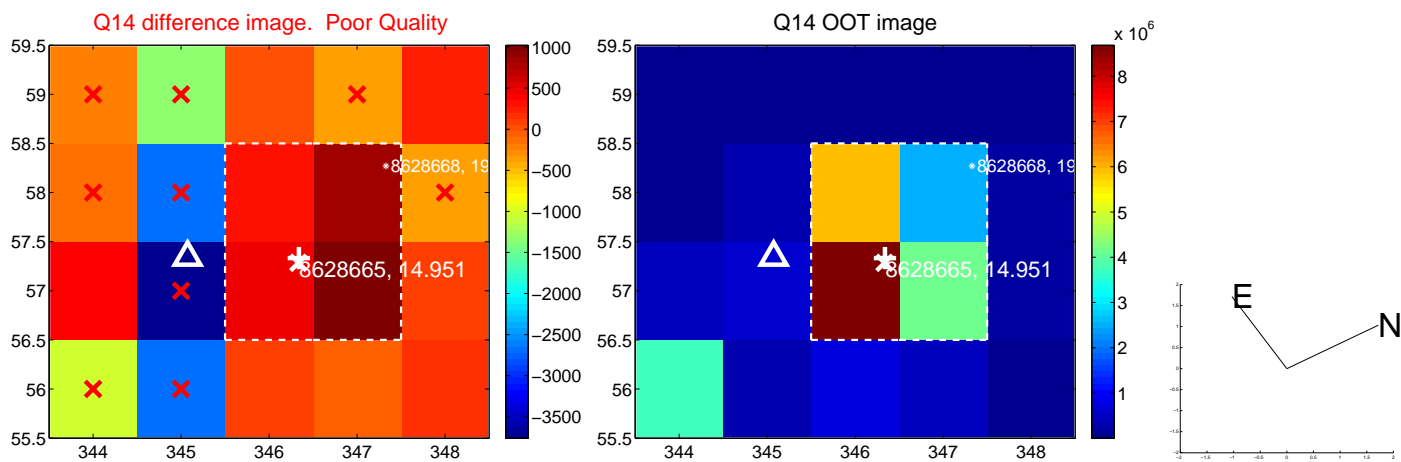
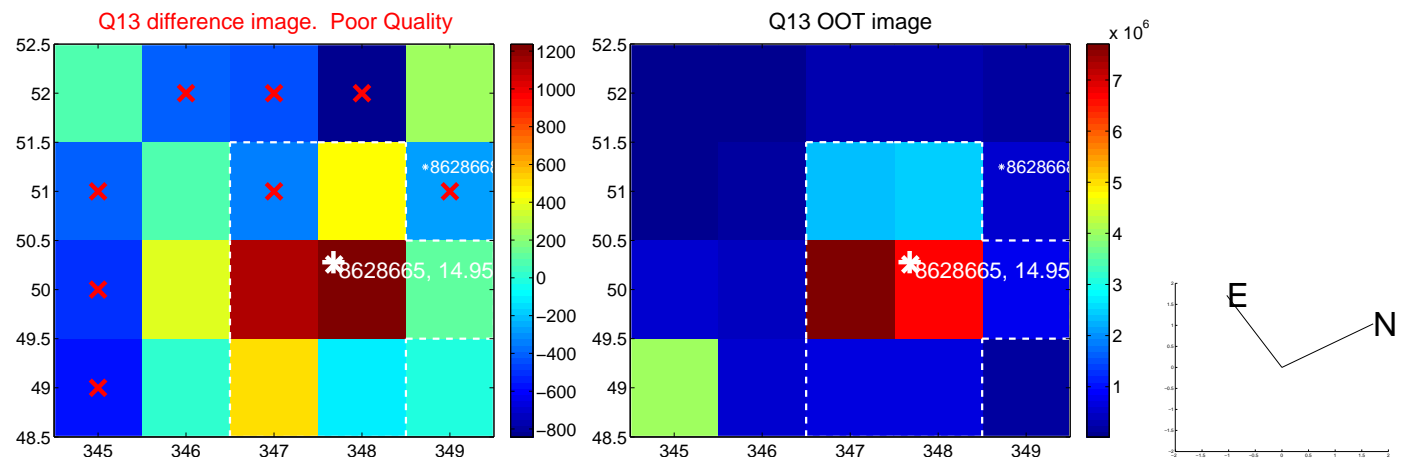
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

