

KIC 008655750

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})
008655750-01	OBS	No	1.826883	132.418961	59.1	6.655	7.7	8.2	2.21	5607	2.03	5015.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008655750-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT

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

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

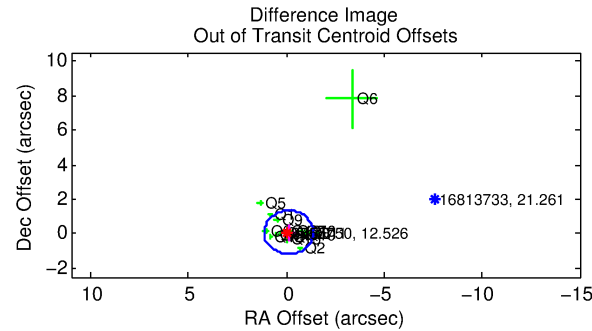
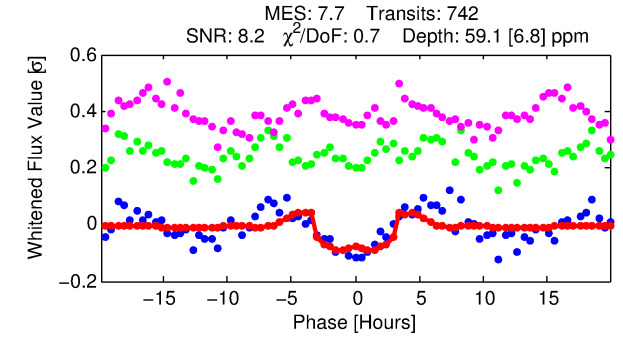
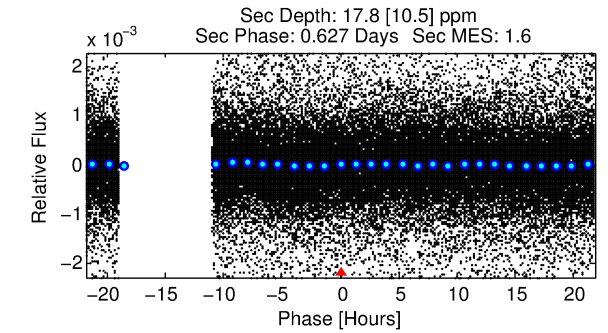
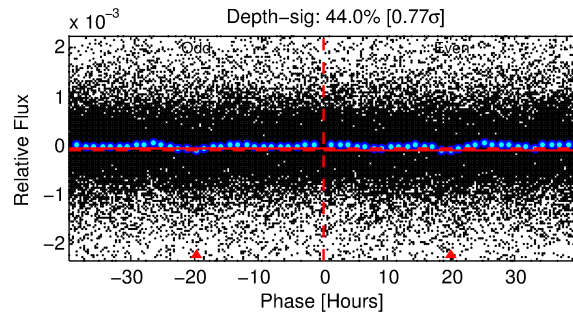
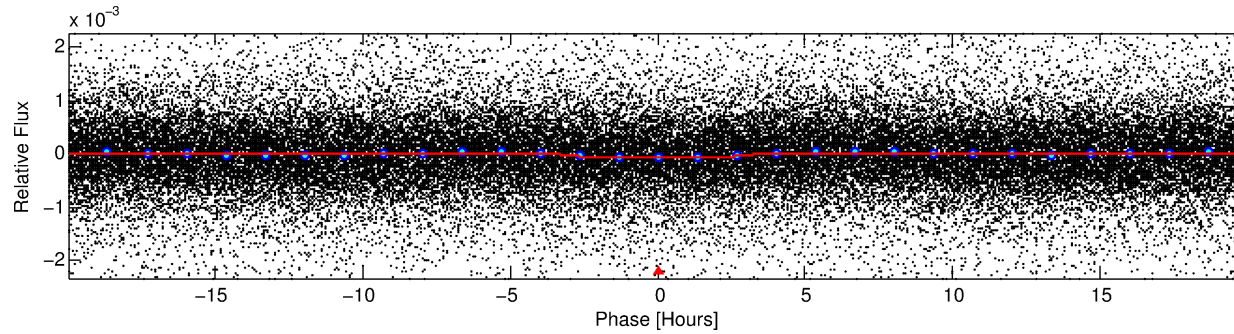
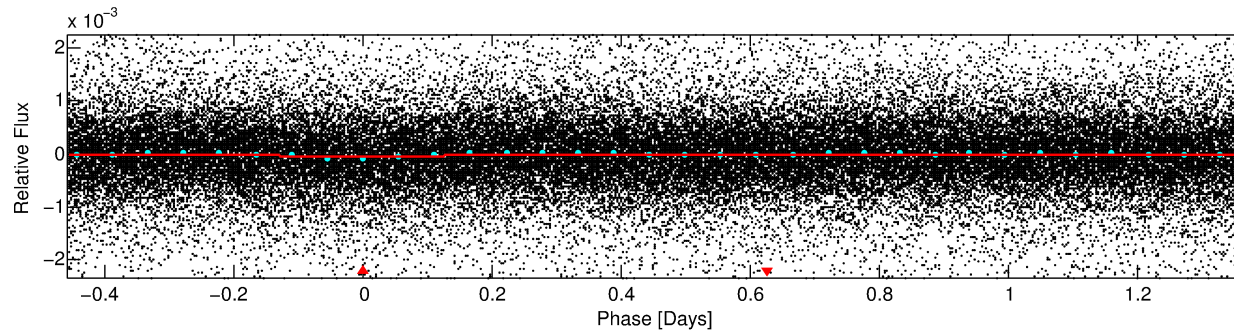
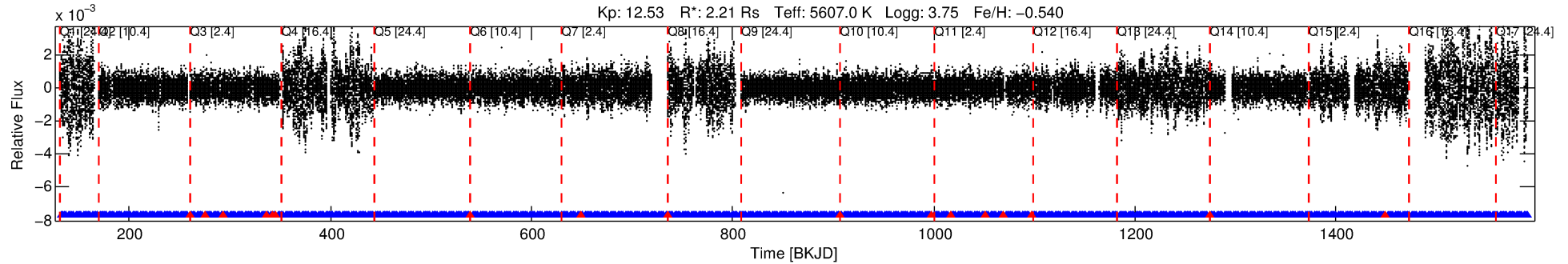
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008655750-01

No Significant Match Found

DV One-Page Summary

KIC: 8655750 Candidate: 1 of 1 Period: 1.827 d



DV Fit Results:

Period = 1.82688 [0.00002] d
Epoch = 132.4190 [0.0048] BKJD
Rp/R* = 0.0084 [0.0019]
a/R* = 1.32 [0.62]
b = 0.91 [0.22]
Seff = 5015.57 [6159.06]
Teq = 2146 [659] K
Rp = 2.03 [1.32] Re
a = 0.0294 [0.0207] AU
Ag = 2.07 [2.96] [0.36 σ]
Teffp = 3978 [753] K [1.83 σ]

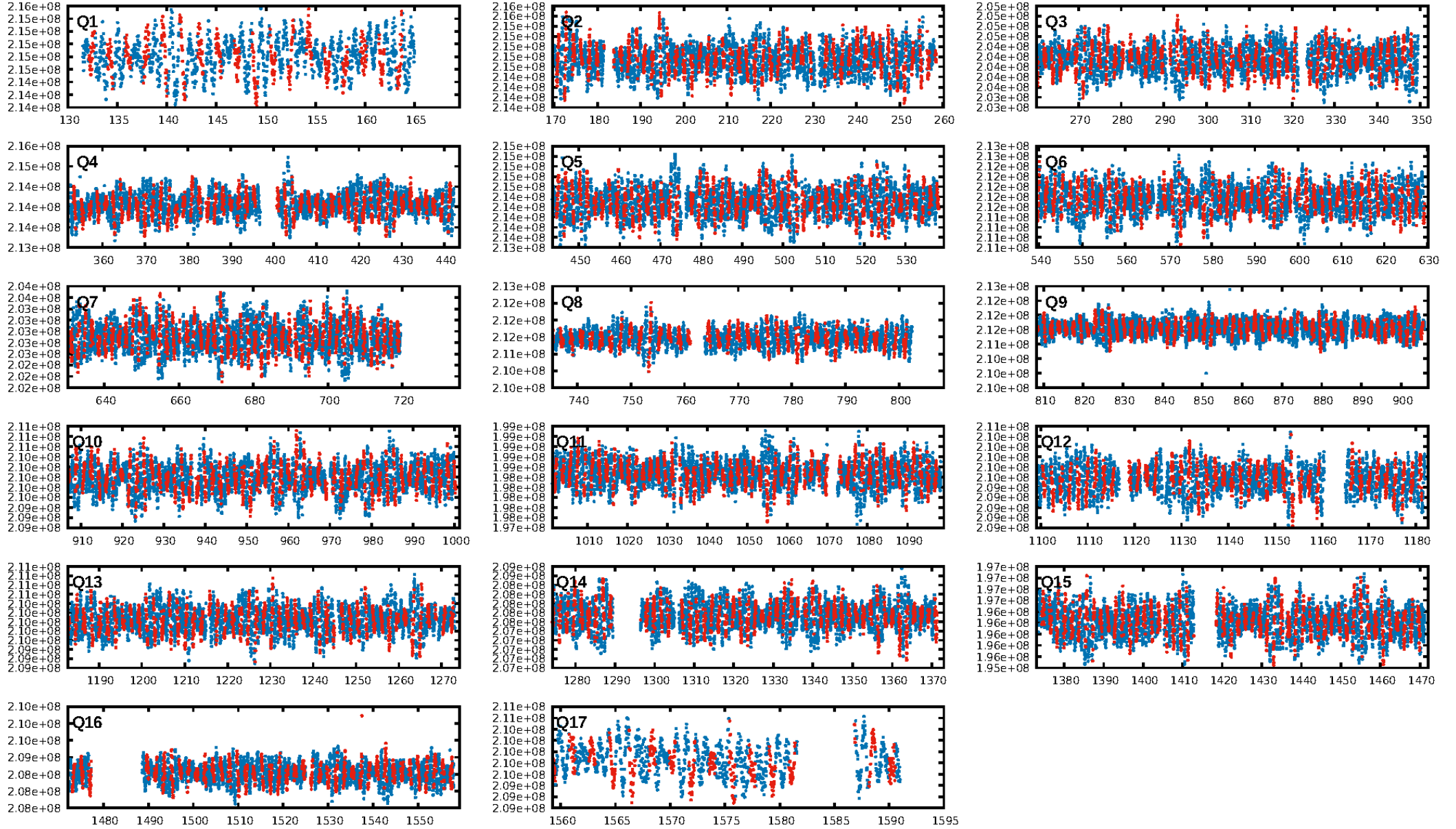
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.16e-12
RollingBand-fgt: 0.98 [692/709]
GhostDiagnostic-chr: 2.128
Centroid-sig: 0.6%
Centroid-so: 0.925 arcsec [2.35 σ]
OotOffset-rm: 0.139 arcsec [0.33 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.224 arcsec [0.51 σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.53 [9/17]
DiffImageOverlap-fno: 1.00 [17/17]

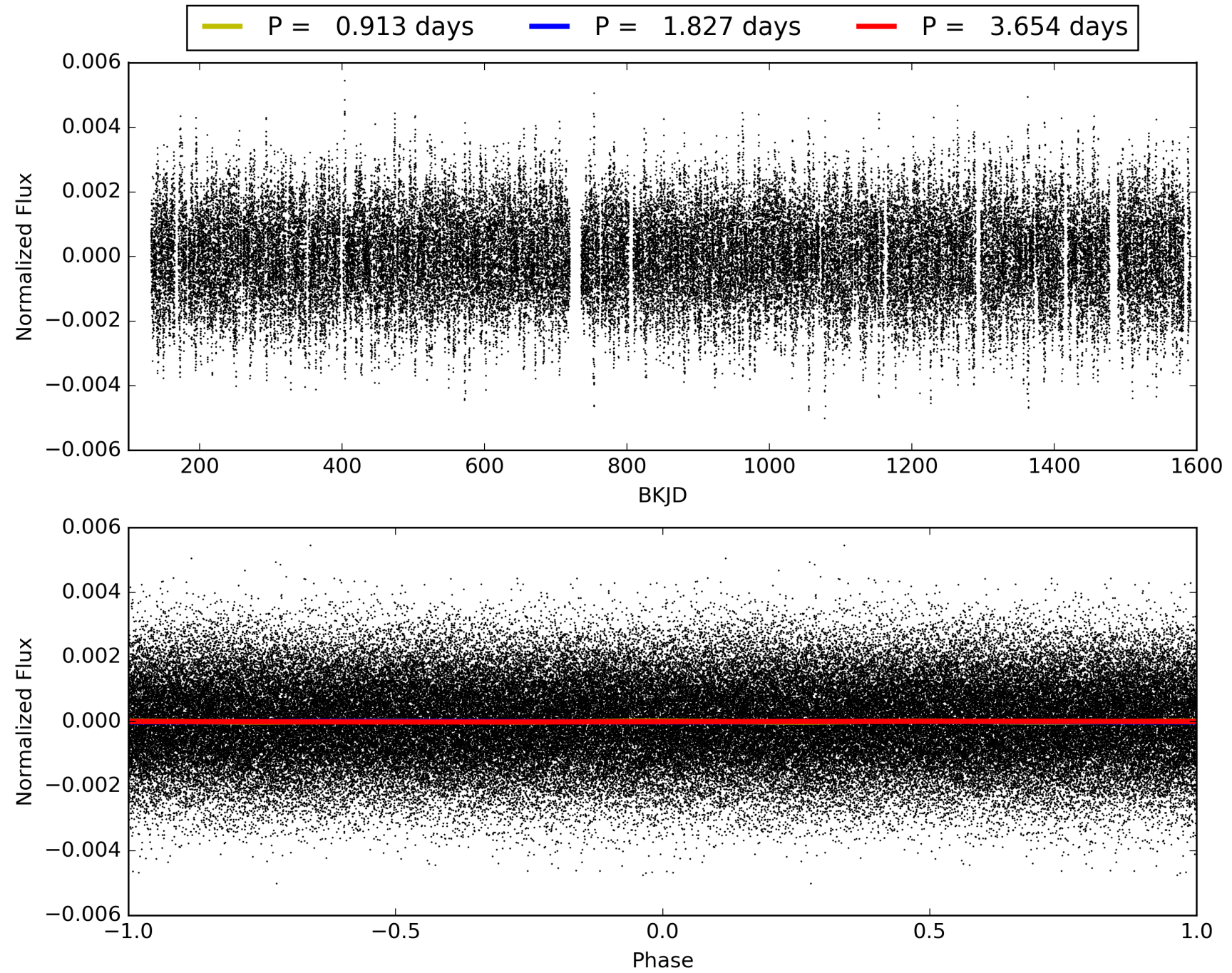
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 23:42:20 Z

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

TCE 008655750-01, PDC Light Curves

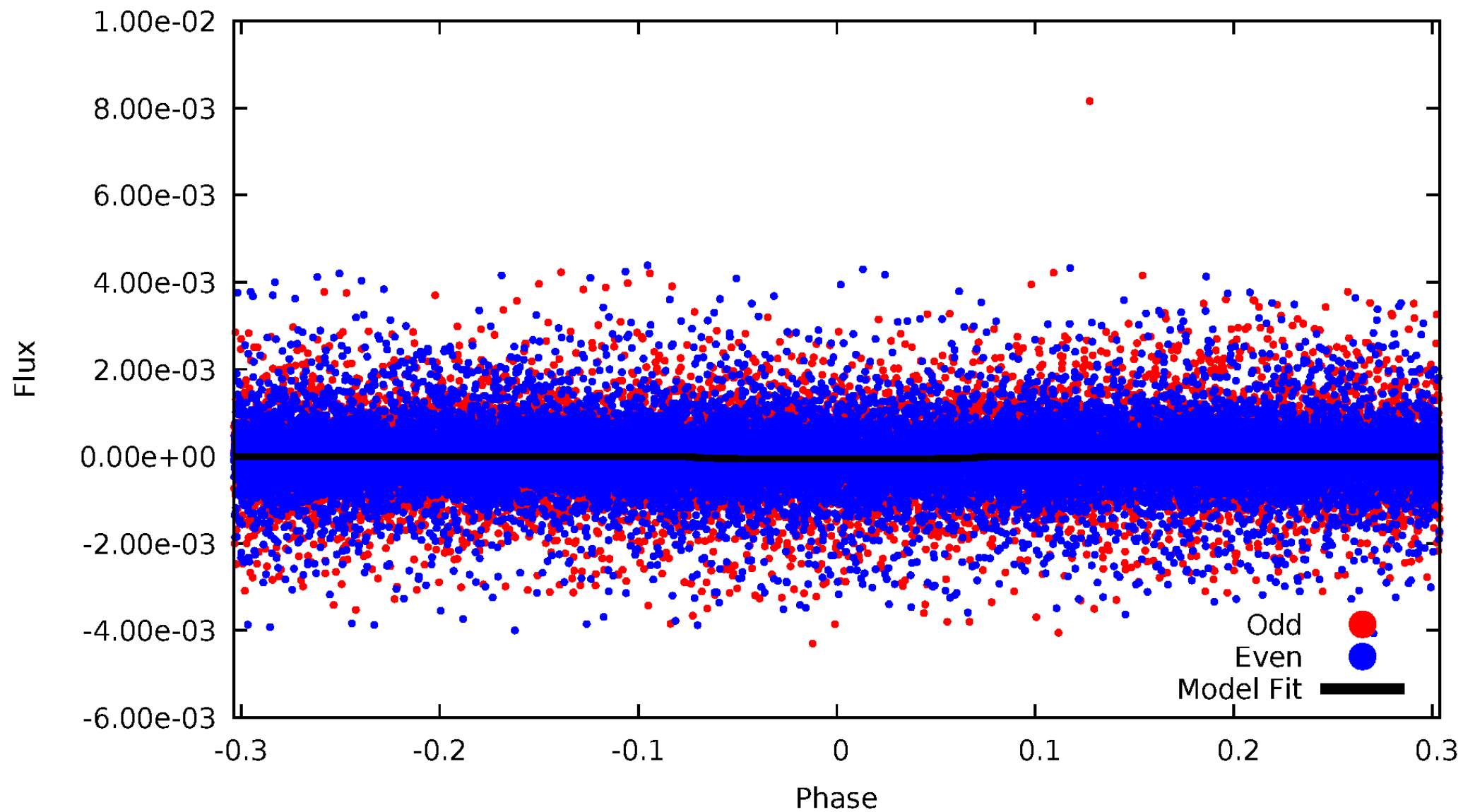


TCE 008655750-01



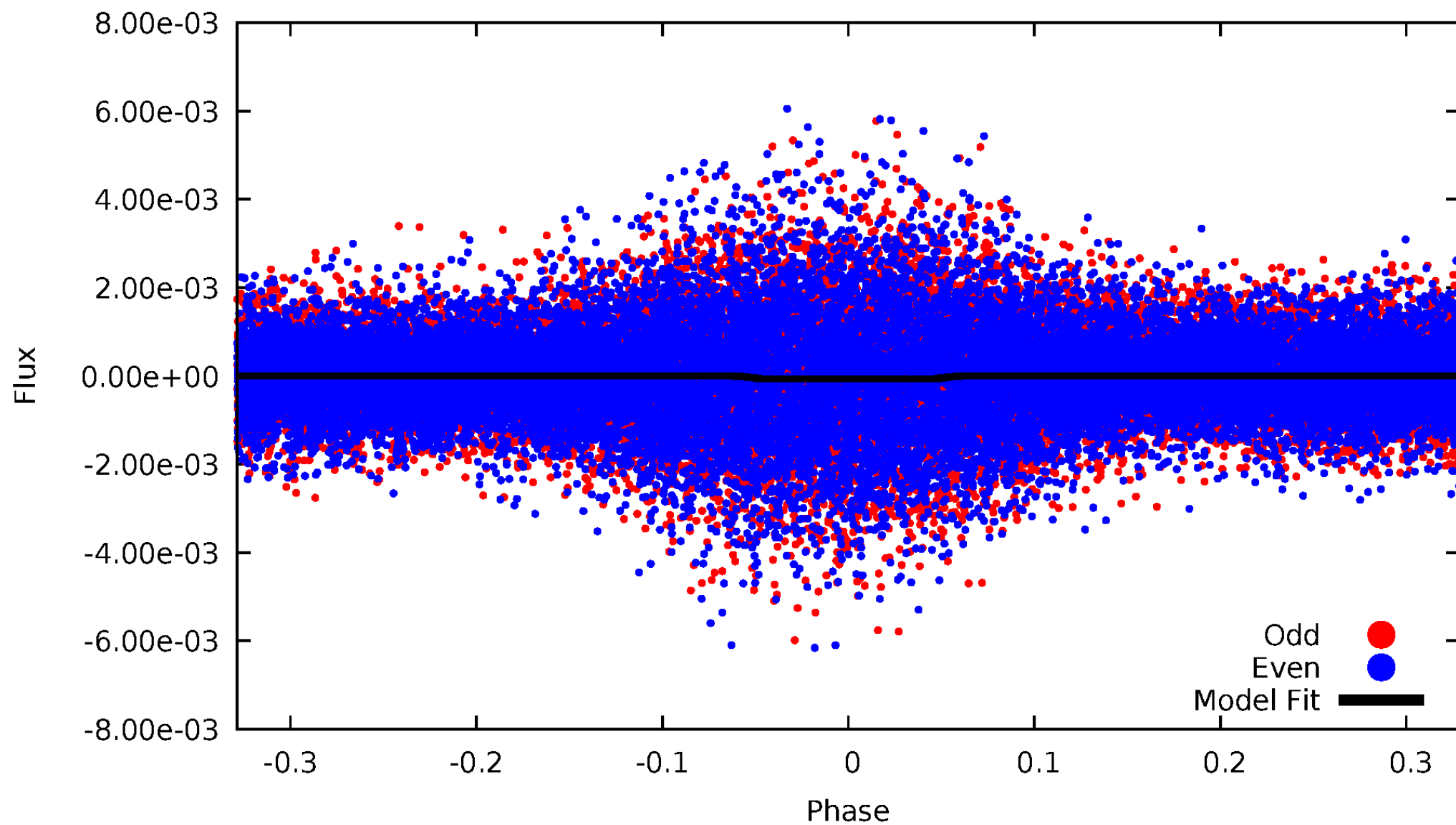
DV Odd/Even

TCE 008655750-01



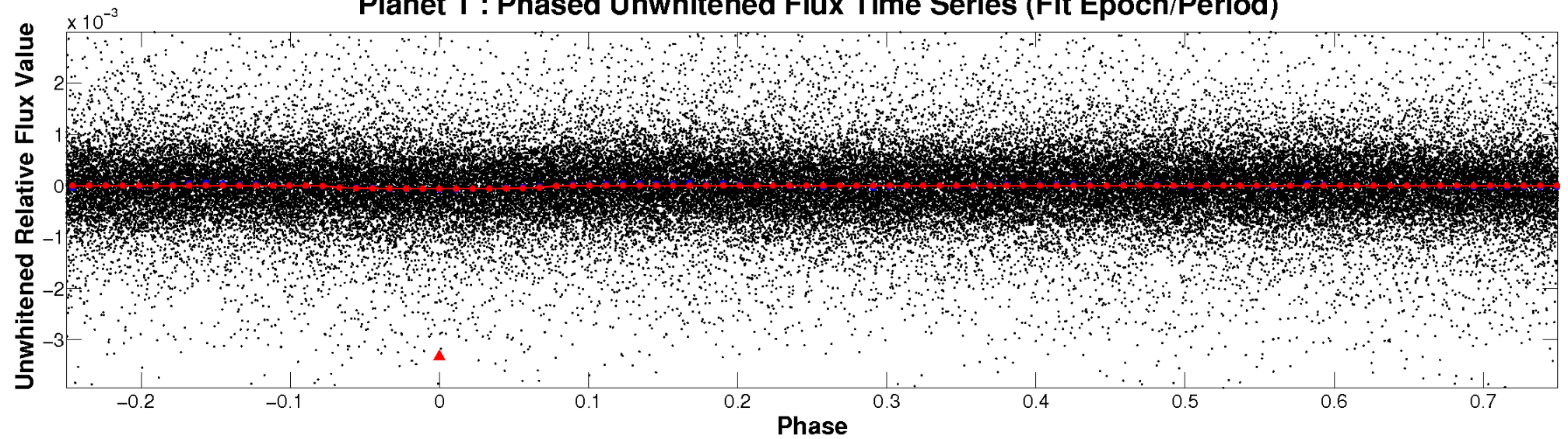
ALT Odd/Even

TCE 008655750-01

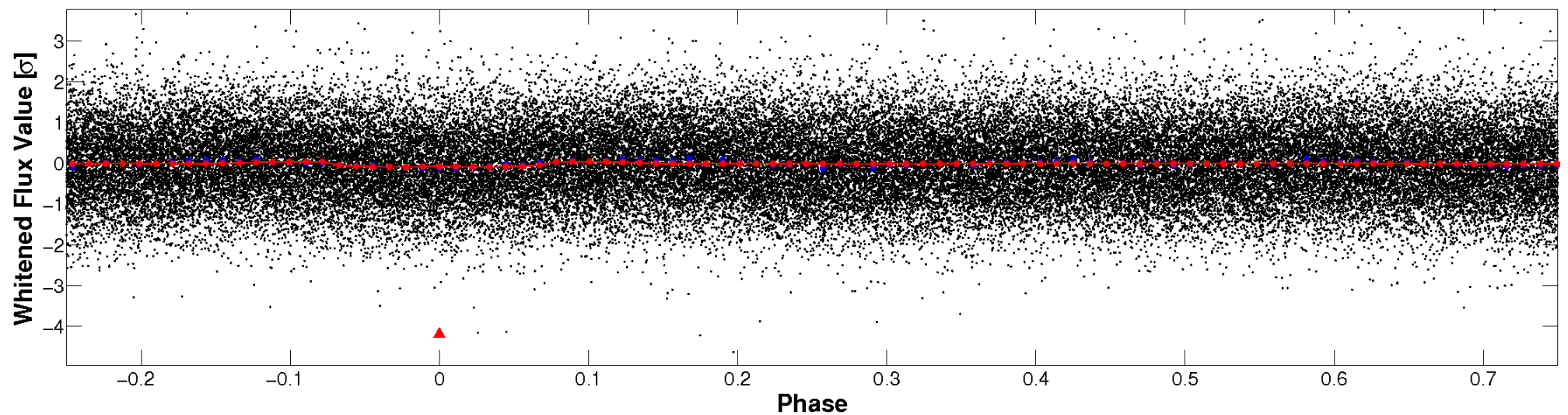


Non-Whitened Vs. Whitened Light Curve

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

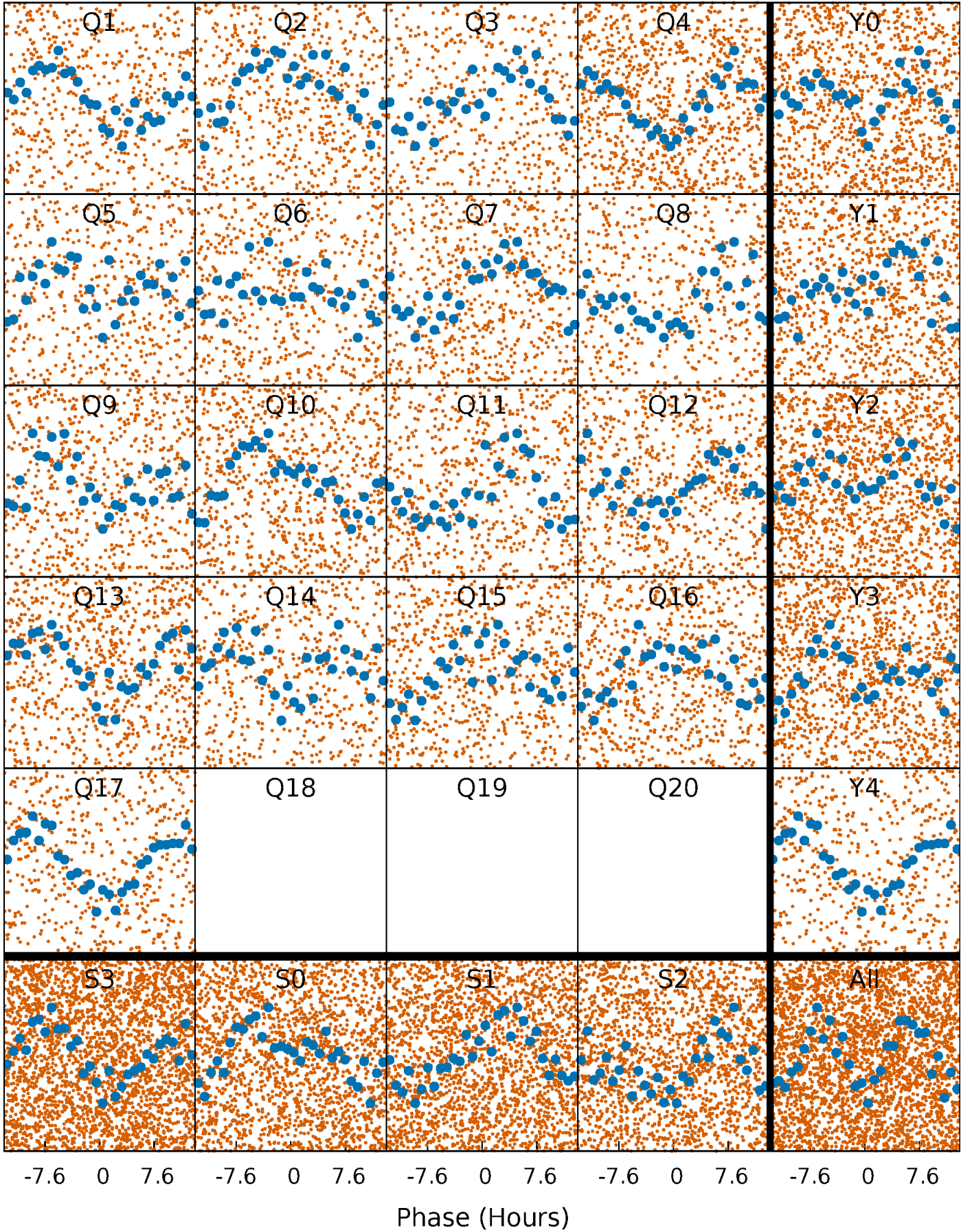


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



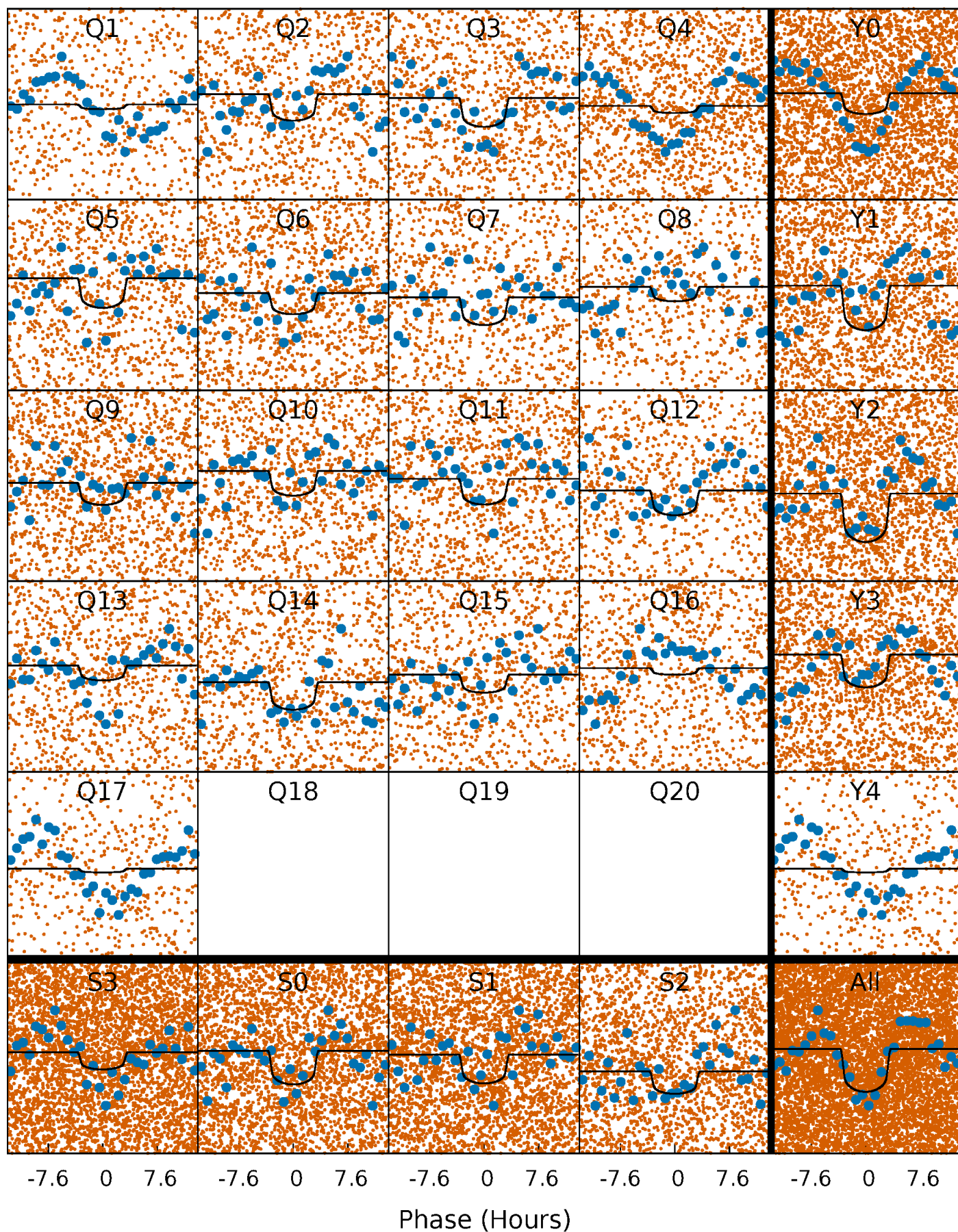
PDC Quarter-Phased Transit Curves

TCE 008655750-01 P= 1.826883 Days $T_0=132.418961$ (BKJD)



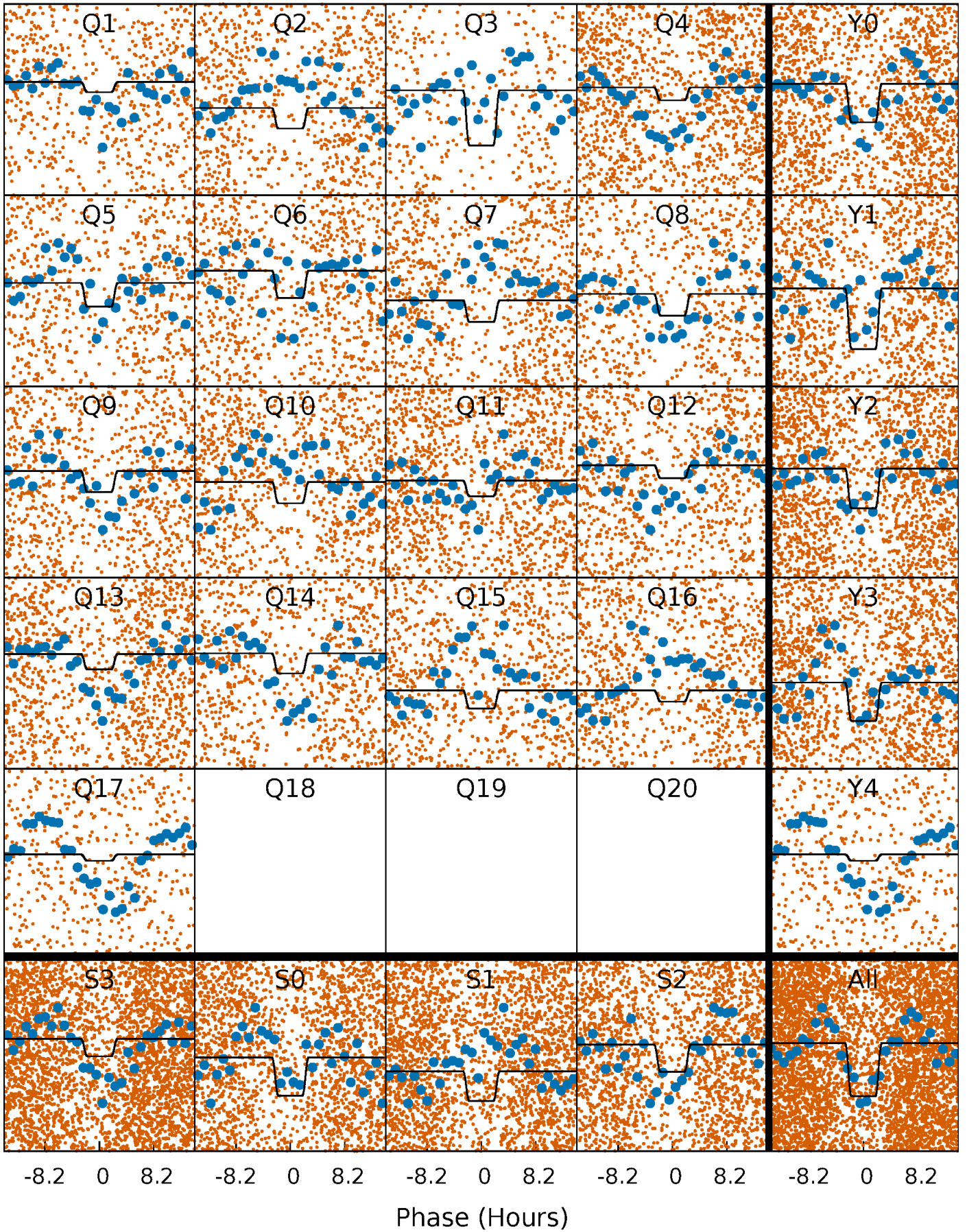
DV Quarter-Phased Transit Curves

TCE 008655750-01 P= 1.826883 Days $T_0=132.418961$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

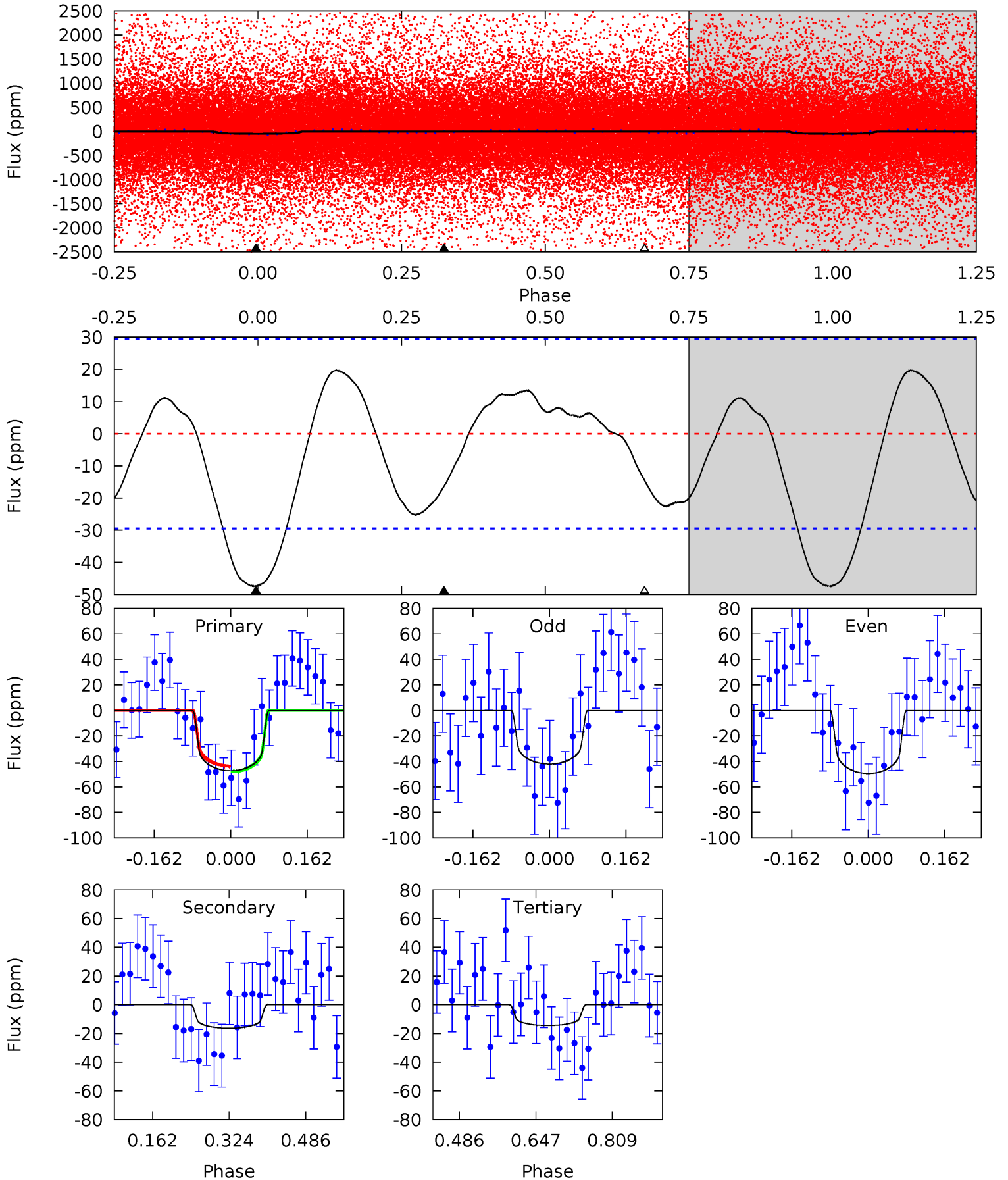
TCE 008655750-01 P= 1.826830 Days $T_0=132.430533$ (BKJD)



DV Model-Shift Uniqueness Test

008655750-01, P = 1.826883 Days, E = 130.592078 Days

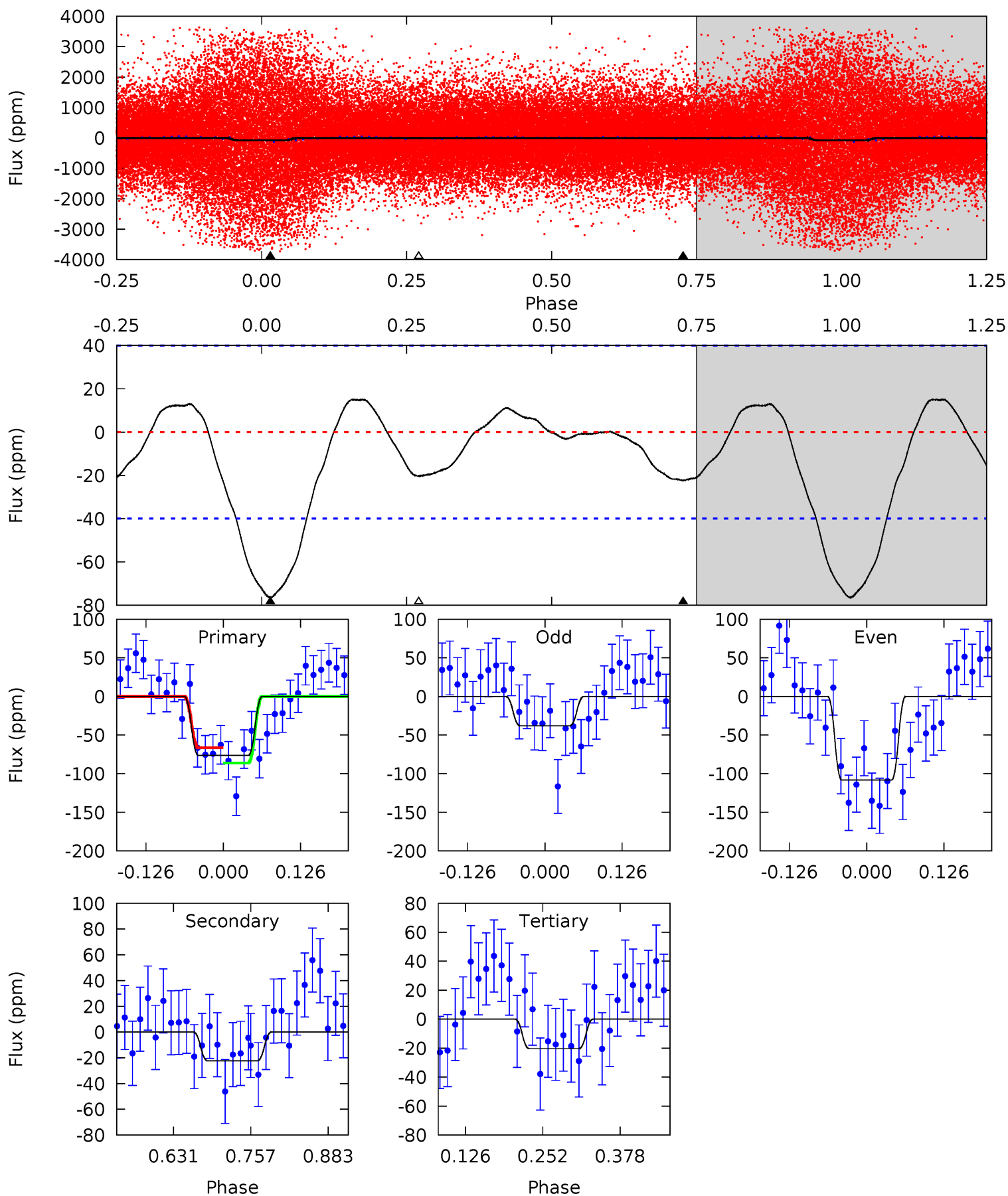
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.17	2.48	2.19	0	4.46	1.40	1.72	4.98	7.17	0.29	2.48	0.56	2.33	0.29	0.34



Alt Model-Shift Uniqueness Test

008655750-01, P = 1.826830 Days, E = 130.603703 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.64	2.52	2.30	0	4.52	1.53	1.19	6.34	8.64	0.22	2.52	3.91	0.73	0.16	1.13



Stellar Parameters For KIC 008655750

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5607^{+184}_{-167}	$3.755^{+0.750}_{-0.250}$	$-0.540^{+0.350}_{-0.250}$	$2.214^{+0.900}_{-1.350}$	$1.016^{+0.192}_{-0.235}$	$0.132^{+2.137}_{-0.076}$
	+3%/-3%	+20%/-7%	+65%/-46%	+41%/-61%	+19%/-23%	+1620%/-57%
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 008655750-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-16 ± 7	$1.87^{+0.75}_{-0.69}$	2927^{+368}_{-521}	4014^{+606}_{-551}	$2.174^{+3.499}_{-1.246}$
Alt.	-22 ± 9	$1.86^{+0.74}_{-0.67}$	2929^{+353}_{-527}	4327^{+587}_{-549}	$2.990^{+5.132}_{-1.622}$

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

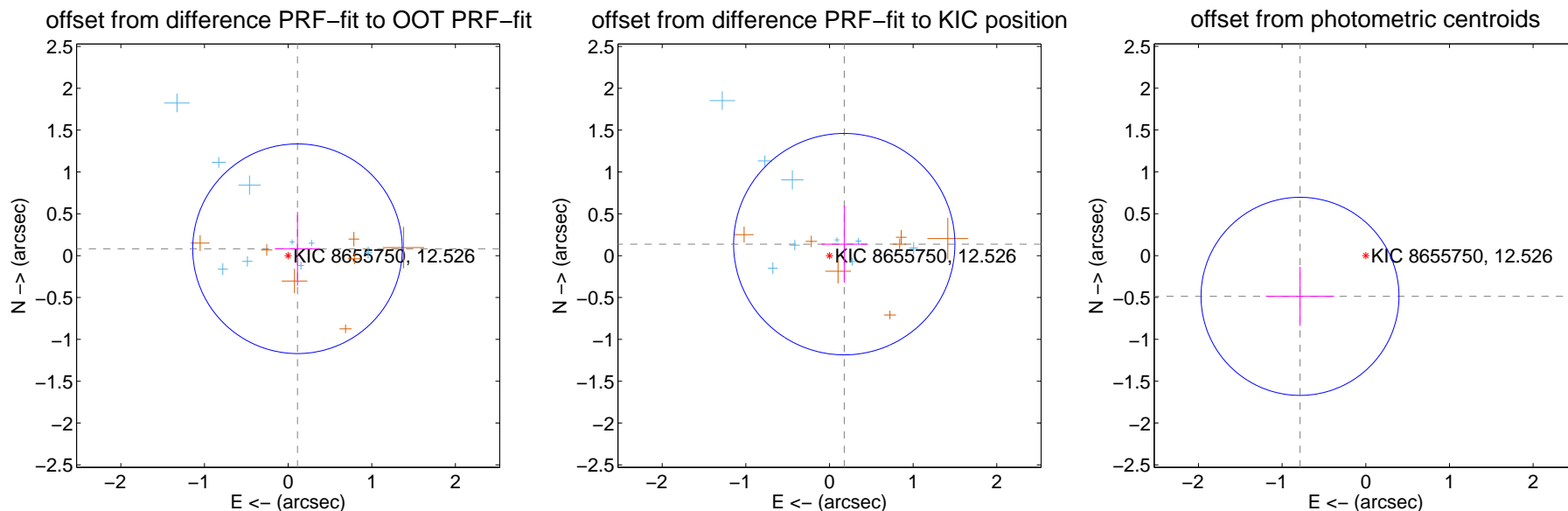
DV Centroid Data

Supplemental centroid analysis for 008655750-01. Kepler magnitude: 12.53. Transit SNR 8.22

There are 9 quarters with good PRF difference image offsets

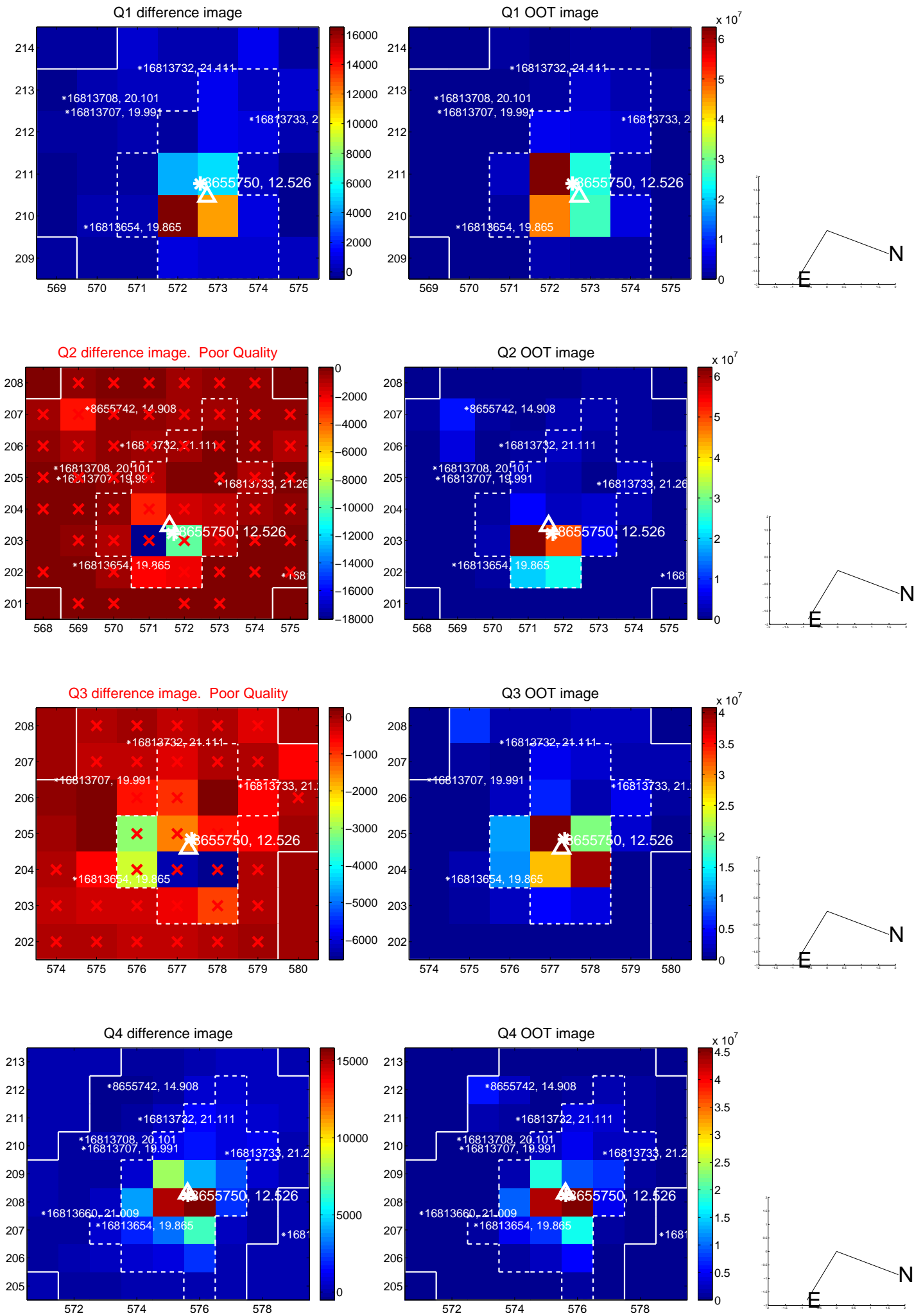
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.139 ± 0.417	0.33	-0.112 ± 0.272	0.083 ± 0.441
PRF-fit source offset from KIC position	0.224 ± 0.441	0.51	-0.177 ± 0.271	0.137 ± 0.460
photometric centroid source offset	0.92 ± 0.39	2.35	0.79 ± 0.41	-0.49 ± 0.35

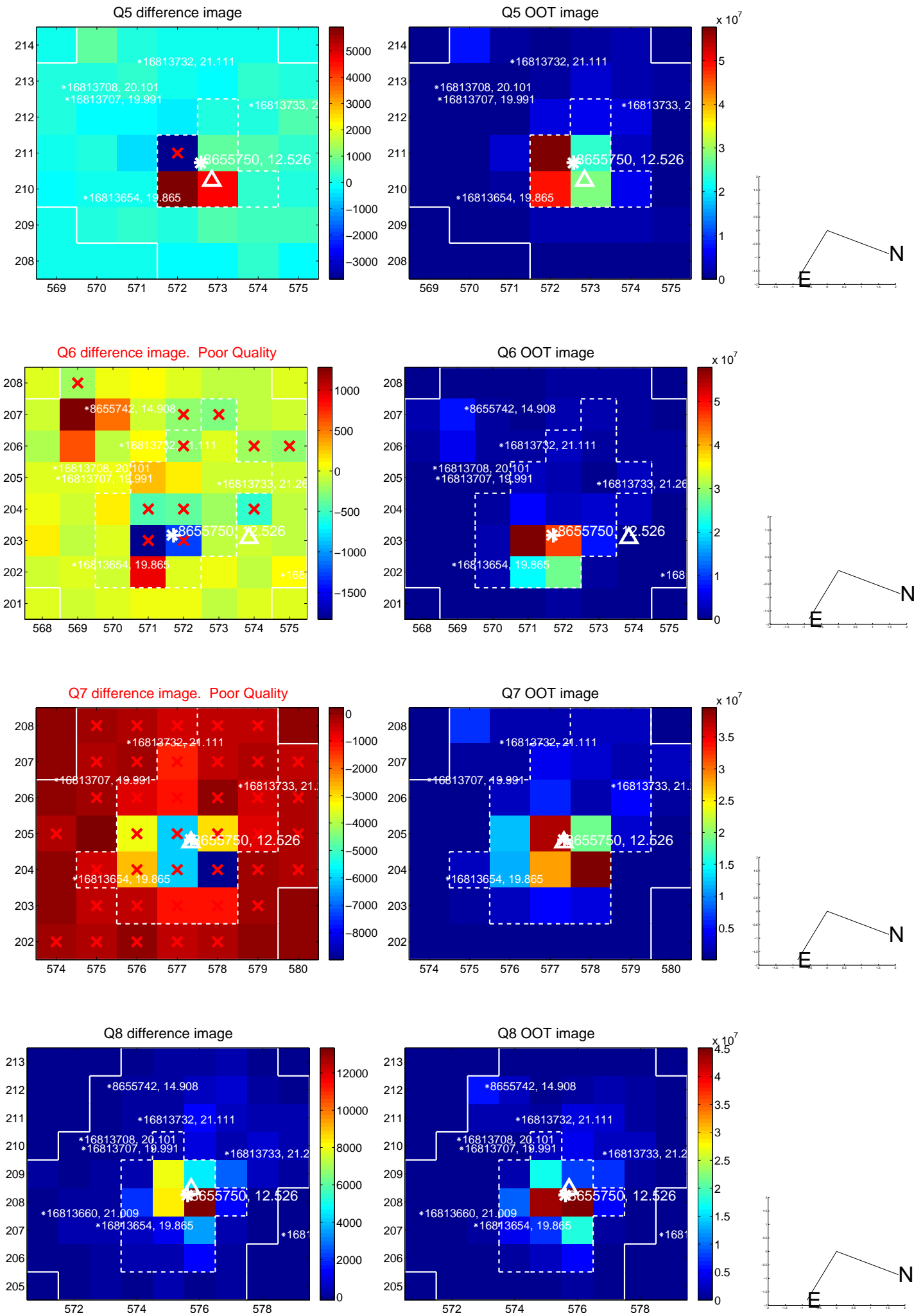


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

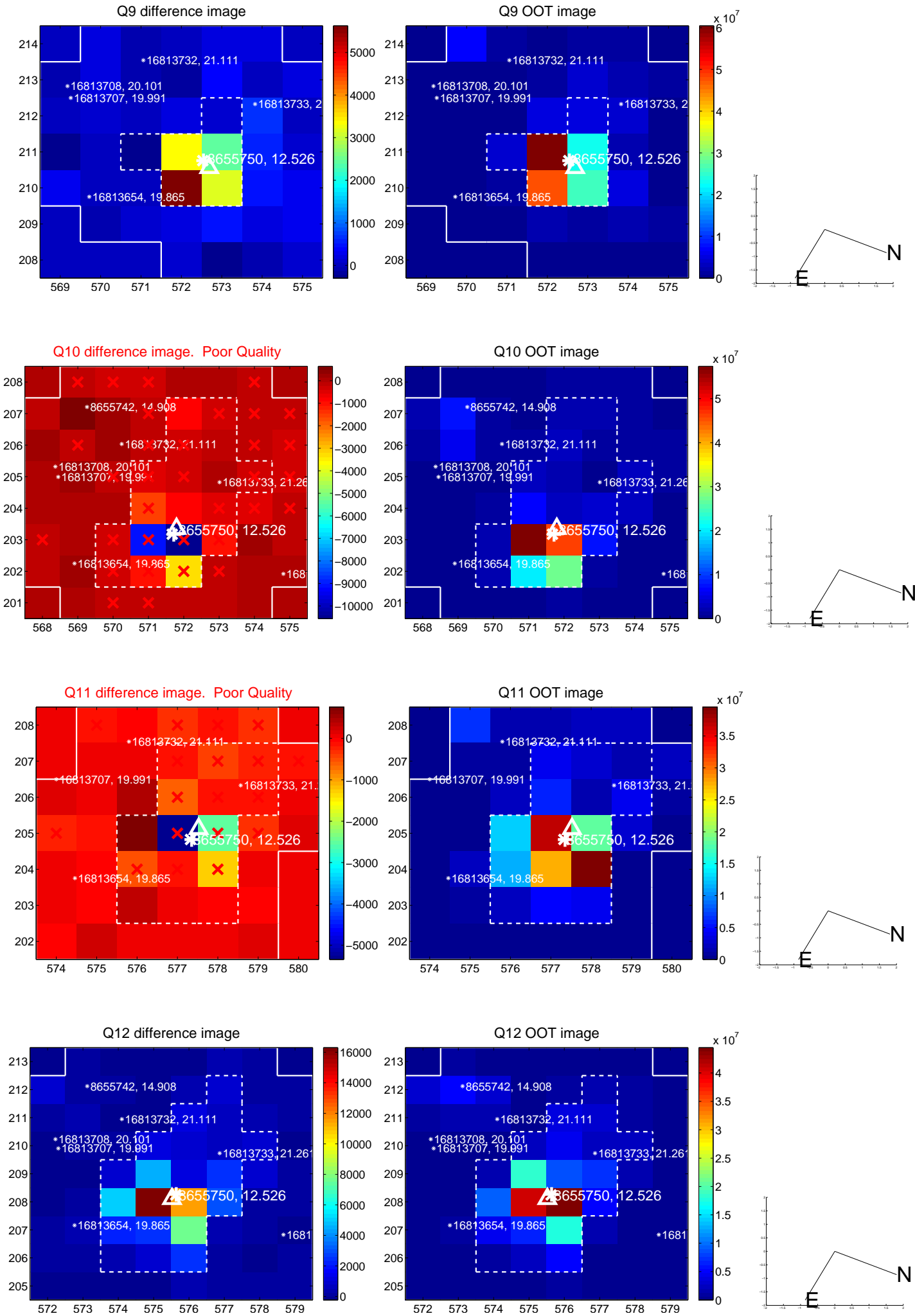
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



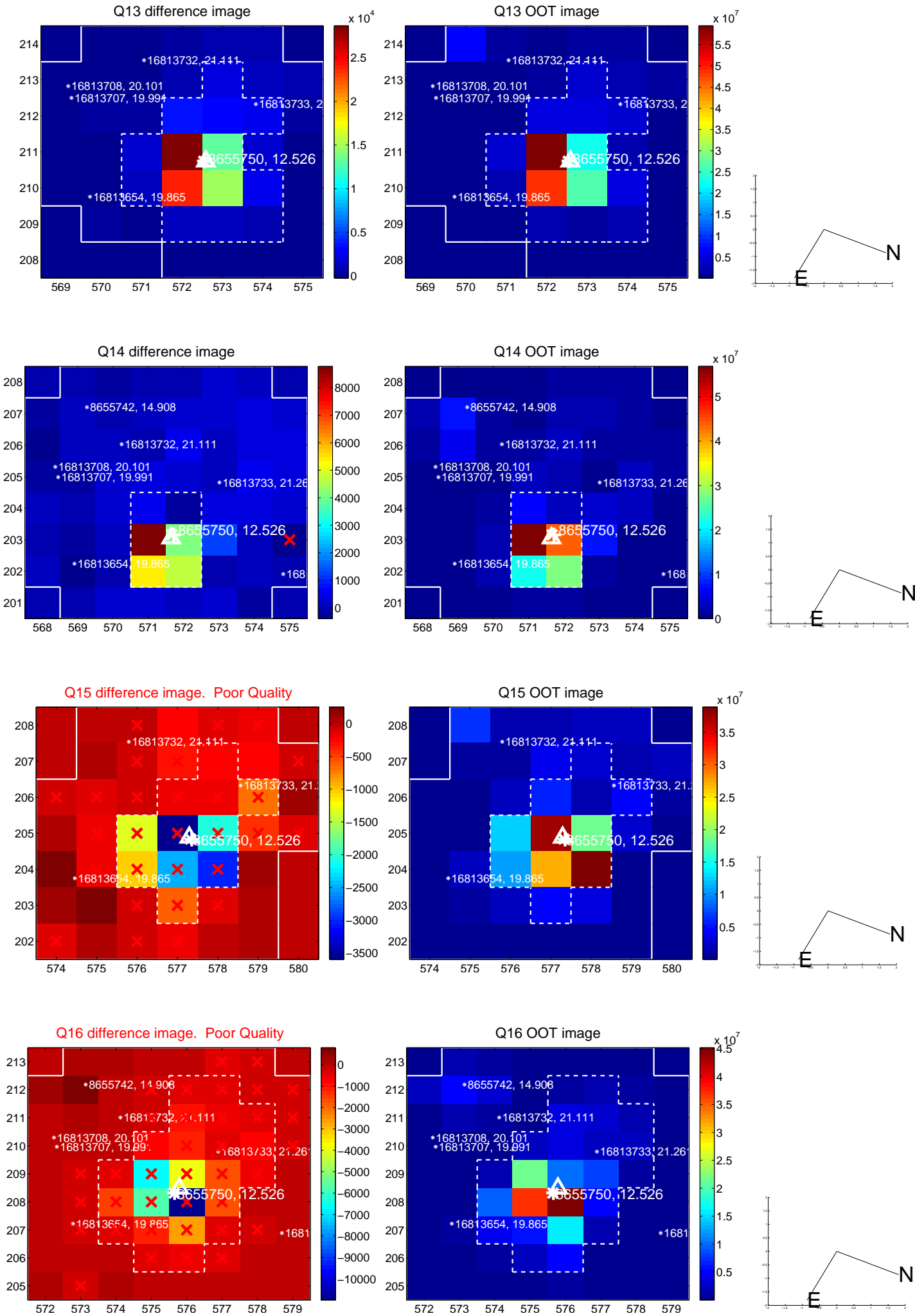
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



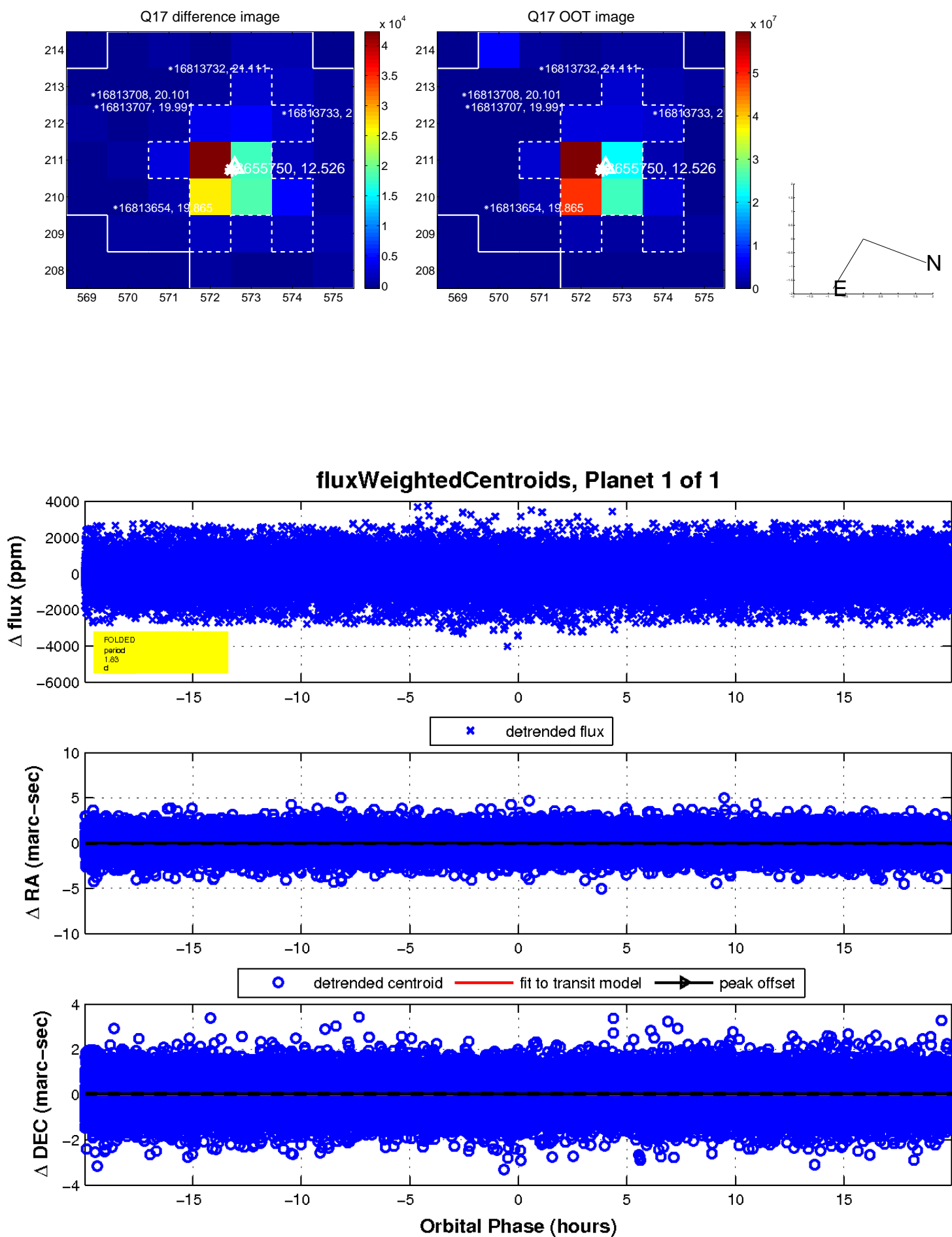
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

