

KIC 005268955

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})
005268955-01	OBS	7557.01	12.821668	137.443654	143.4	41.517	17.9	31.3	1.35	5845	3.34	165.74

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005268955-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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.

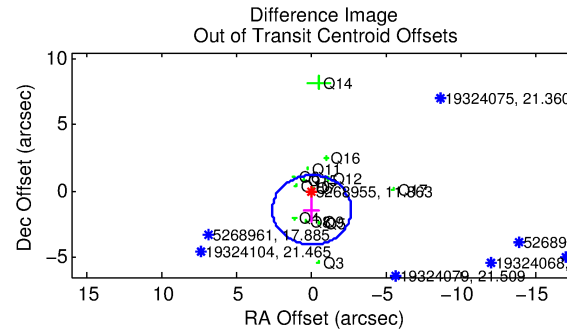
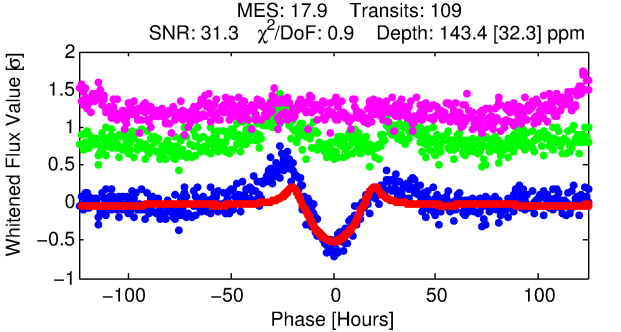
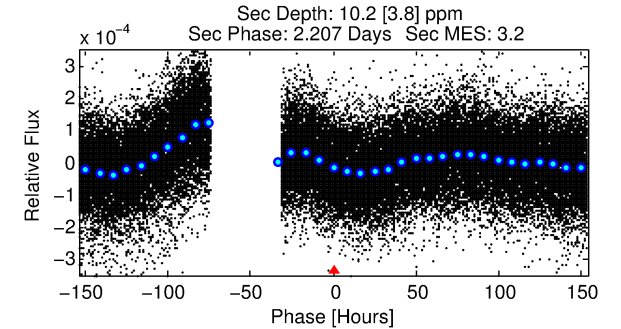
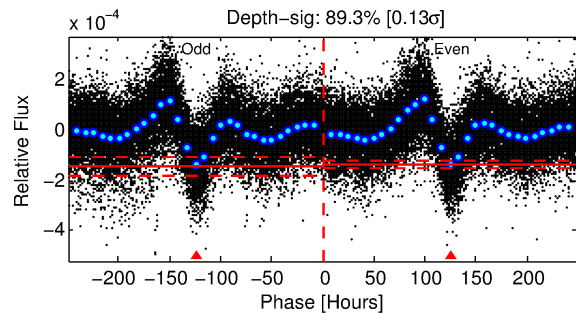
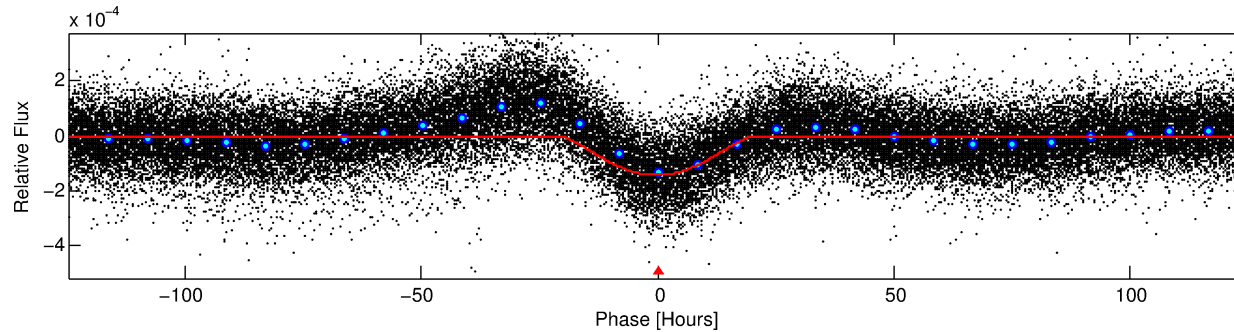
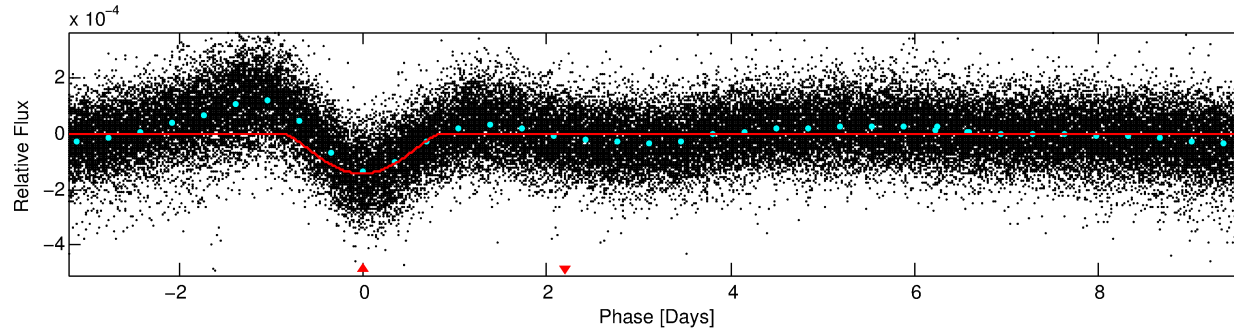
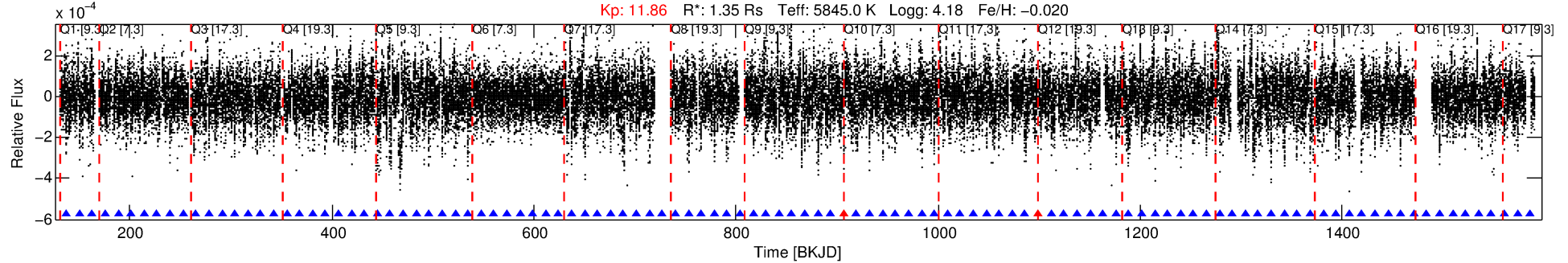
Ephemeris Match Information For 005268955-01

No Significant Match Found

DV One-Page Summary

KIC: 5268955 Candidate: 1 of 1 Period: 12.822 d
KOI: K07557 Corr: No Ephemeris Match

Kp: 11.86 R*: 1.35 Rs Teff: 5845.0 K Logg: 4.18 Fe/H: -0.020



DV Fit Results:

Period = 12.82167 [0.00032] d
Epoch = 137.4437 [0.0204] BKJD
Rp/R* = 0.0227 [0.0098]
a/R* = 1.13 [0.02]
b = 1.00 [0.01]
Seff = 165.74 [62.47]
Teq = 915 [86] K
Rp = 3.34 [1.66] Re
a = 0.1074 [0.0245] AU
Ag = 5.80 [5.84] [0.82σ]
Teffp = 2195 [520] K [2.43σ]

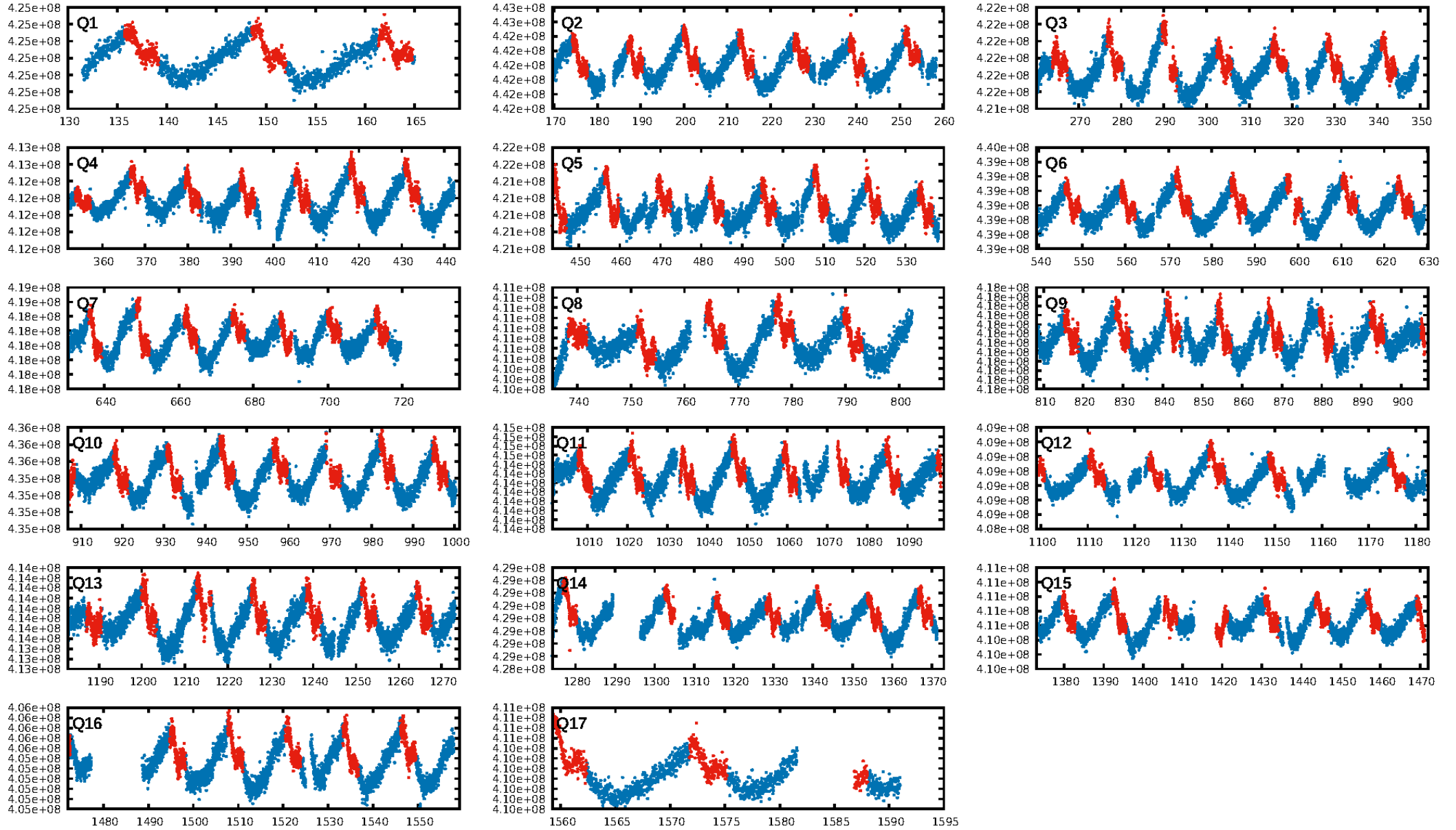
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 17.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.35e-71
RollingBand-fgt: 0.98 [101/103]
GhostDiagnostic-chr: 6.769
Centroid-sig: 98.4%
Centroid-so: 0.063 arcsec [0.45σ]
OotOffset-rm: 1.425 arcsec [1.63σ]
OotOffset-st: 3/4/4/3 [14]
KicOffset-rm: 1.461 arcsec [1.86σ]
KicOffset-st: 3/4/4/3 [14]
DiffImageQuality-fgm: 0.71 [10/14]
DiffImageOverlap-fno: 1.00 [17/17]

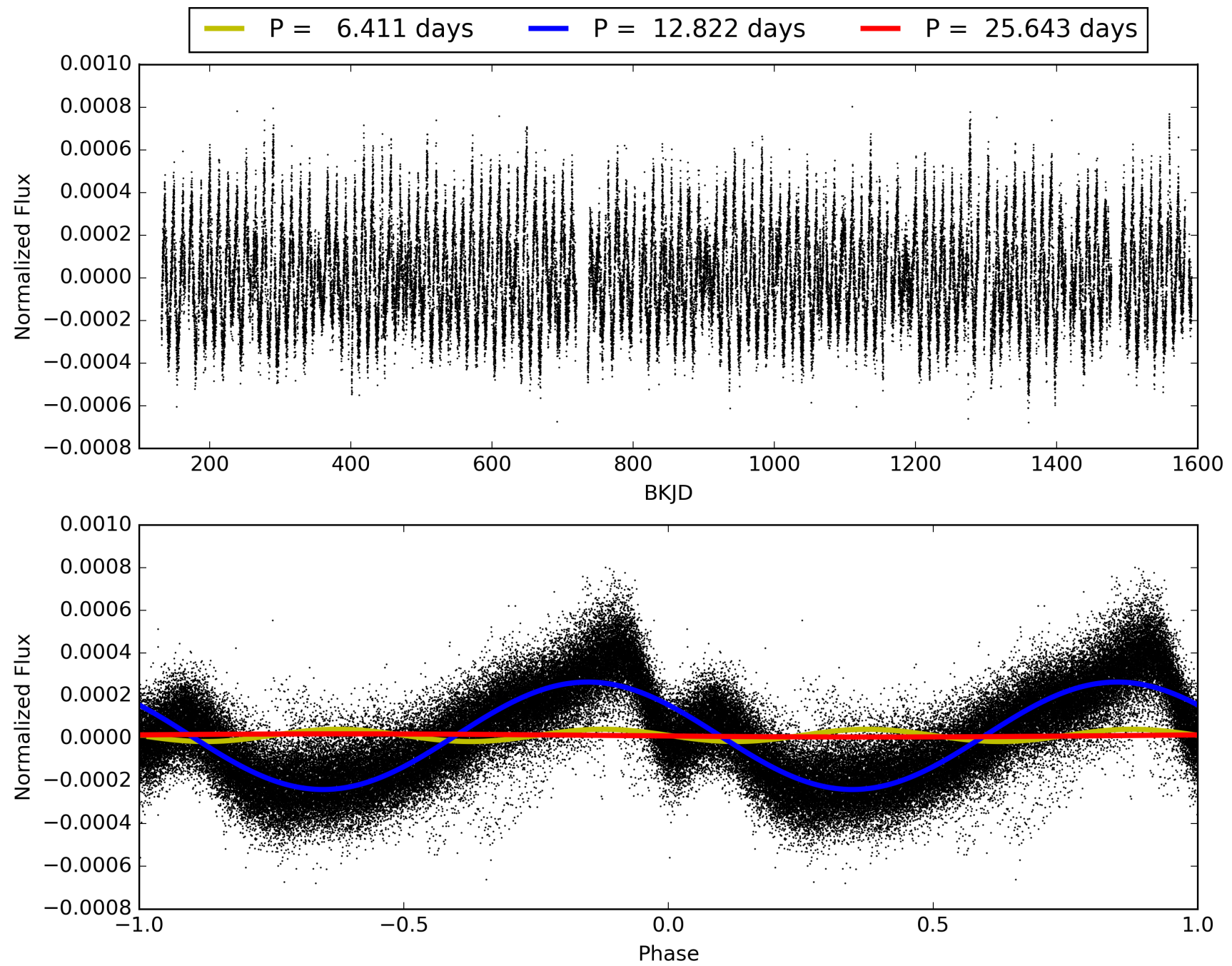
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 11:15:39 Z

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

TCE 005268955-01, PDC Light Curves

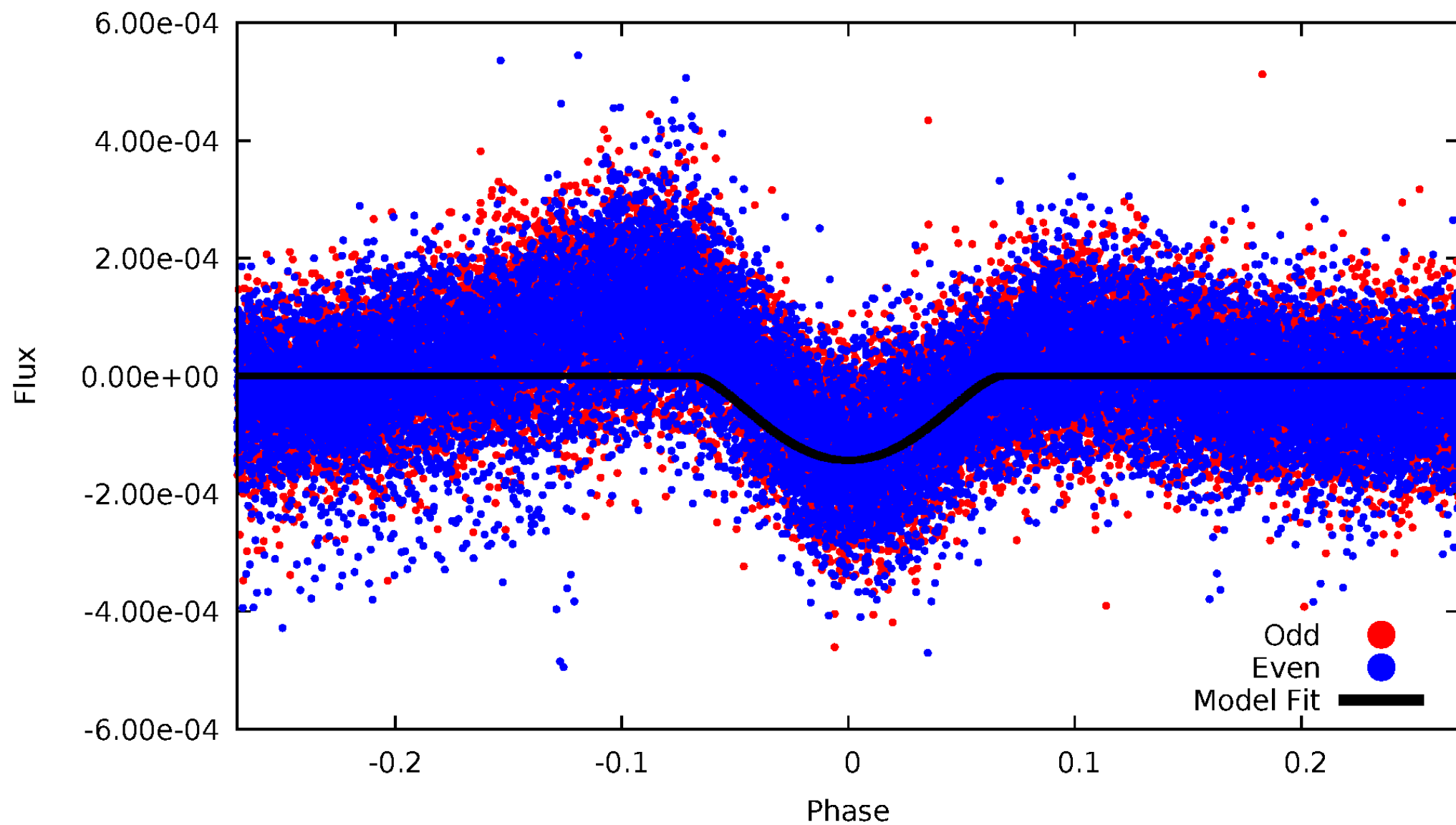


TCE 005268955-01



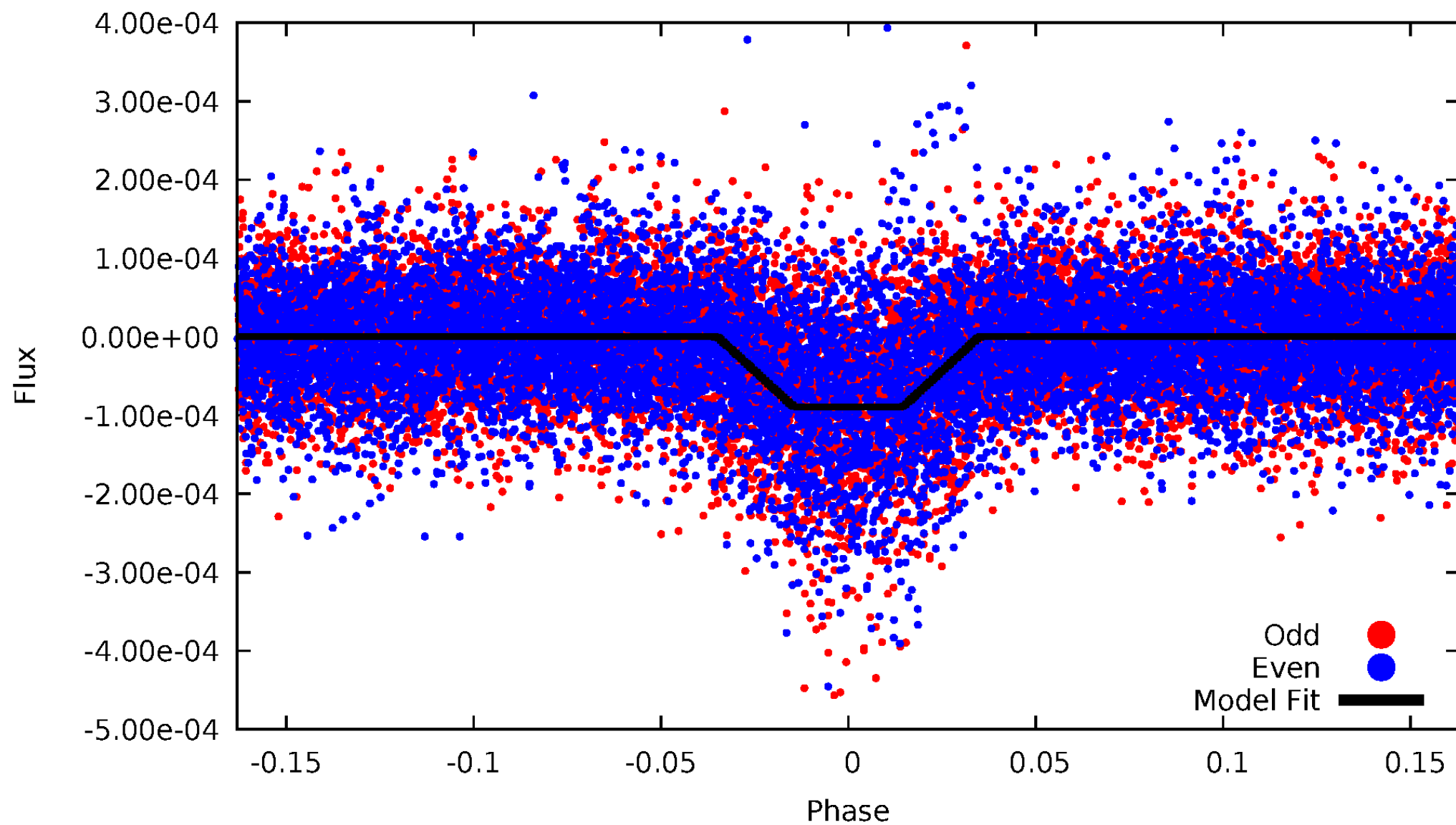
DV Odd/Even

TCE 005268955-01

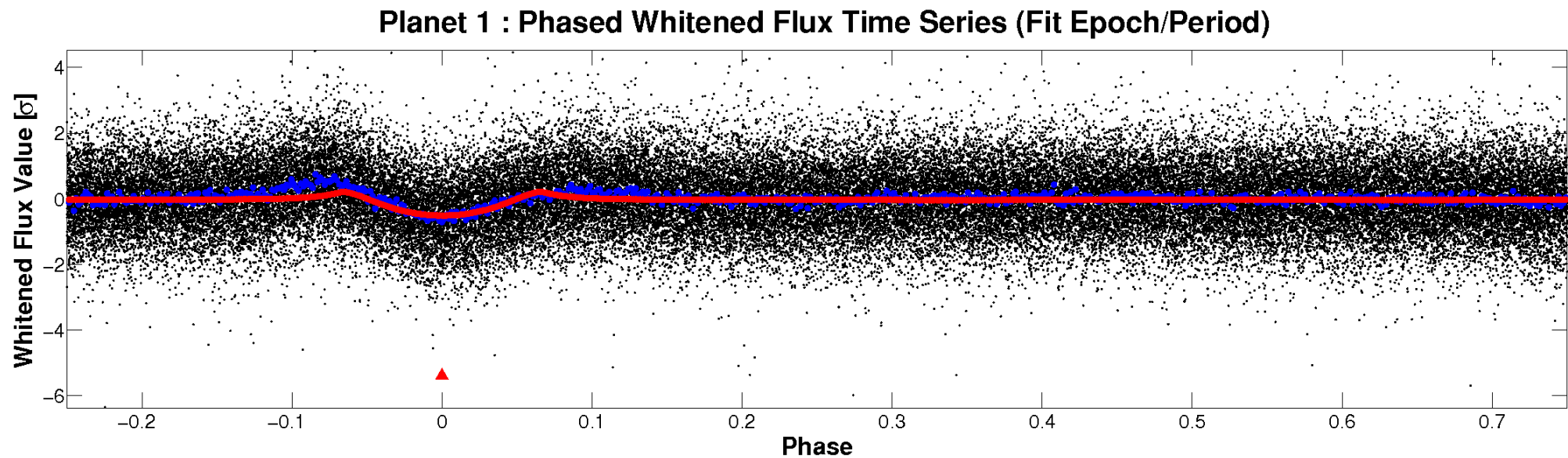
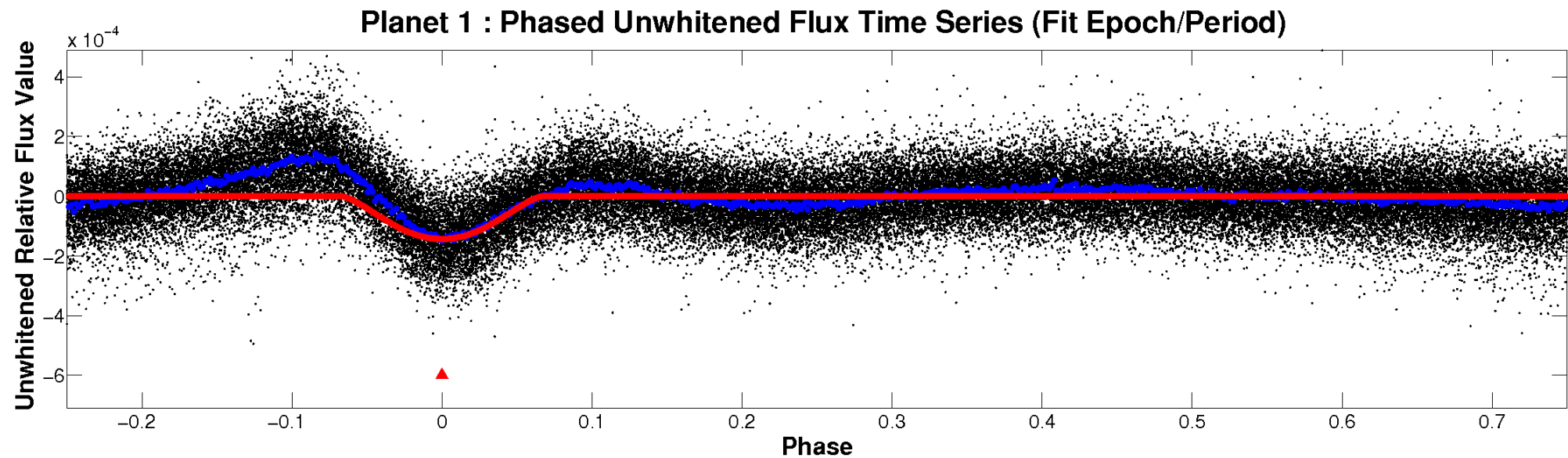


ALT Odd/Even

TCE 005268955-01

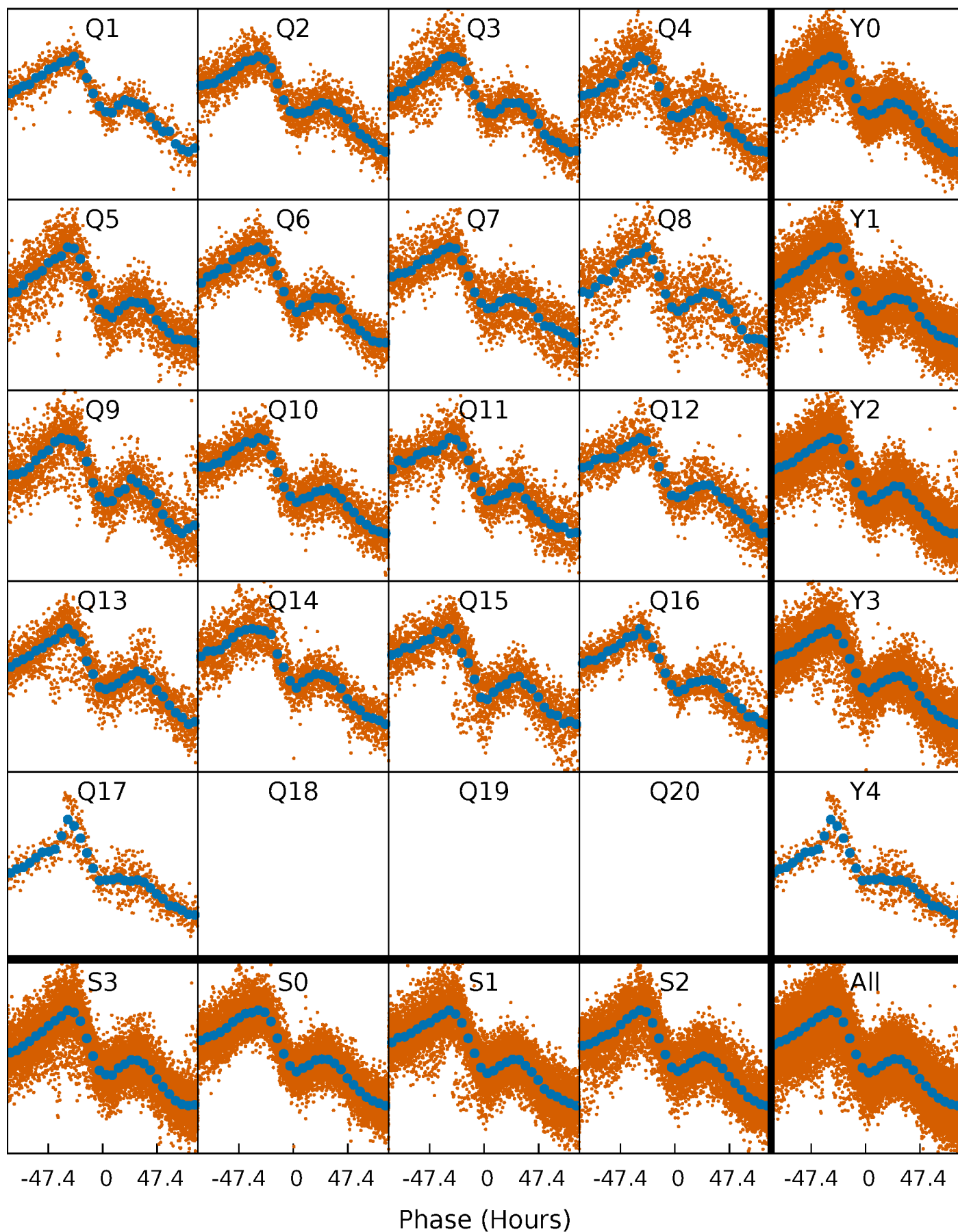


Non-Whitened Vs. Whitened Light Curve



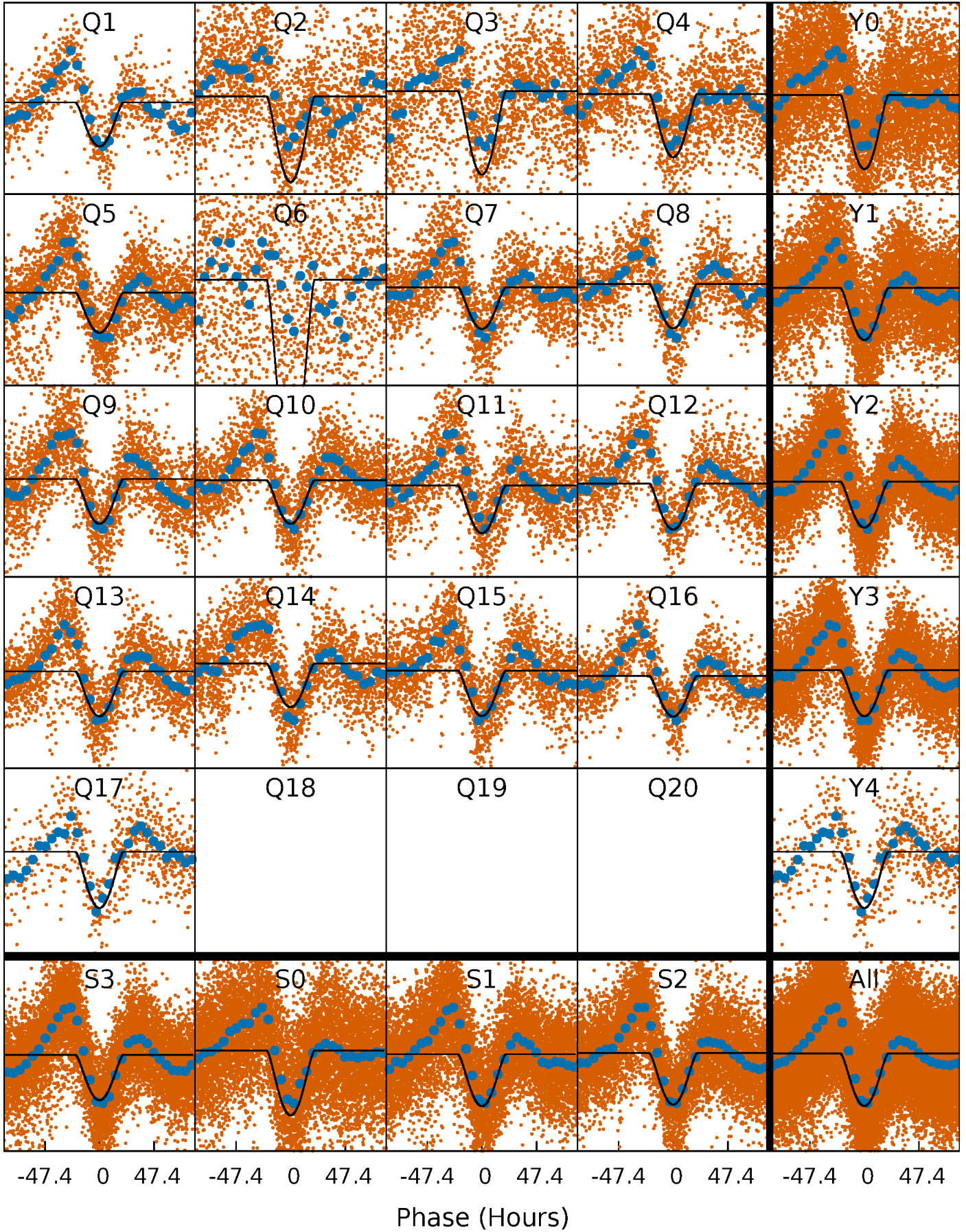
PDC Quarter-Phased Transit Curves

TCE 005268955-01 P= 12.821668 Days $T_0=137.443654$ (BKJD)



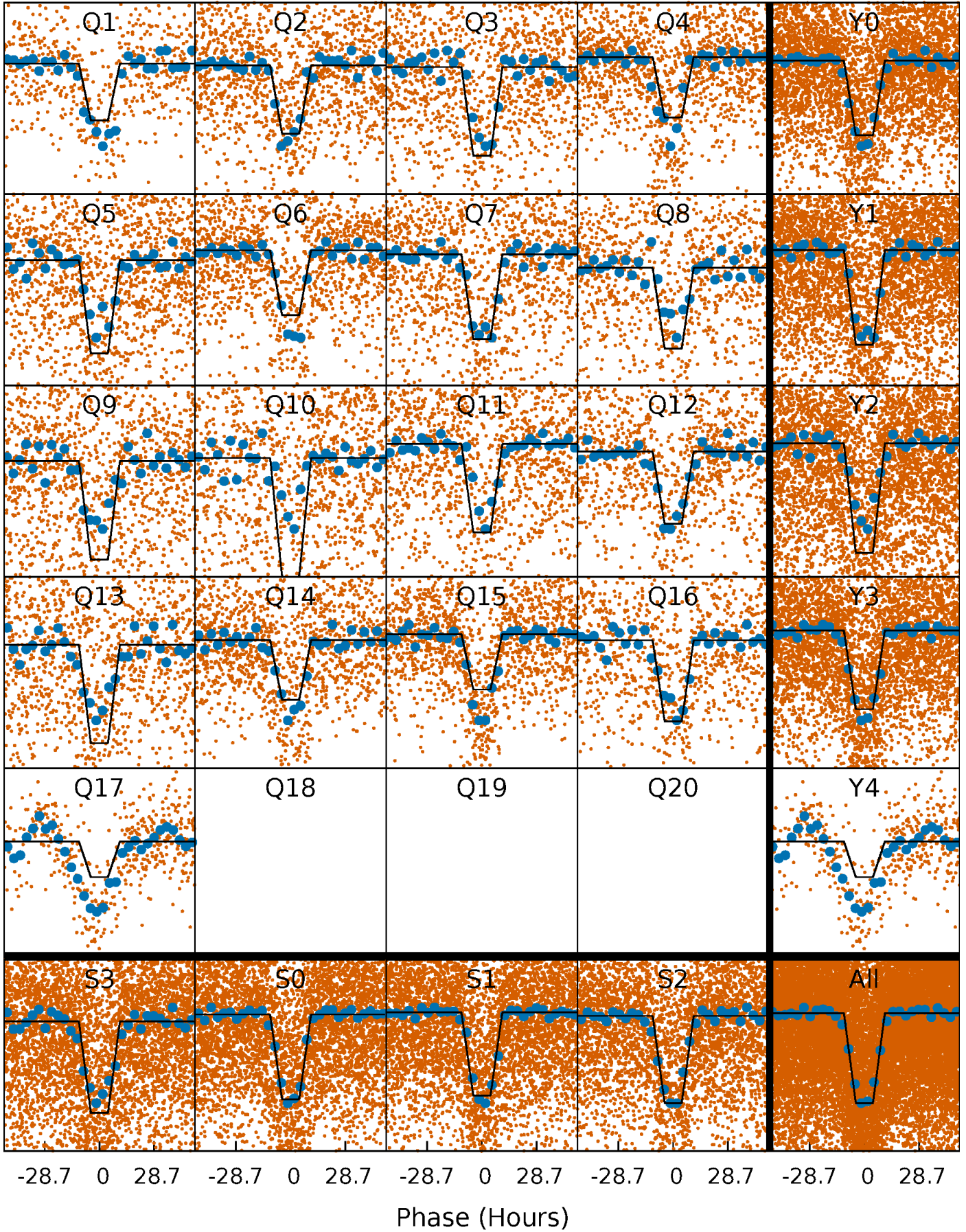
DV Quarter-Phased Transit Curves

TCE 005268955-01 P= 12.821668 Days $T_0=137.443654$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

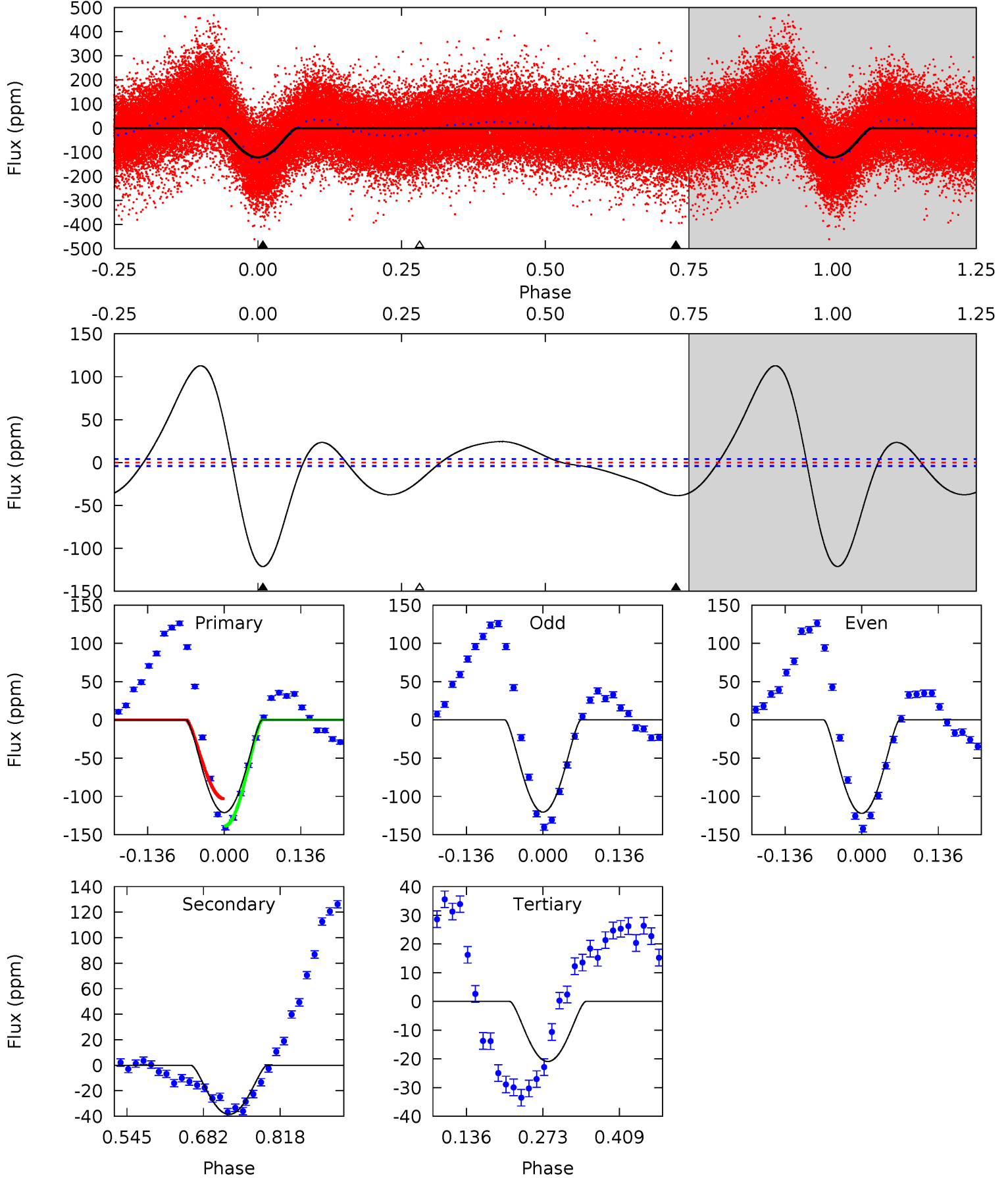
TCE 005268955-01 P= 12.821722 Days $T_0=137.429695$ (BKJD)



DV Model-Shift Uniqueness Test

005268955-01, P = 12.821668 Days, E = 124.621986 Days

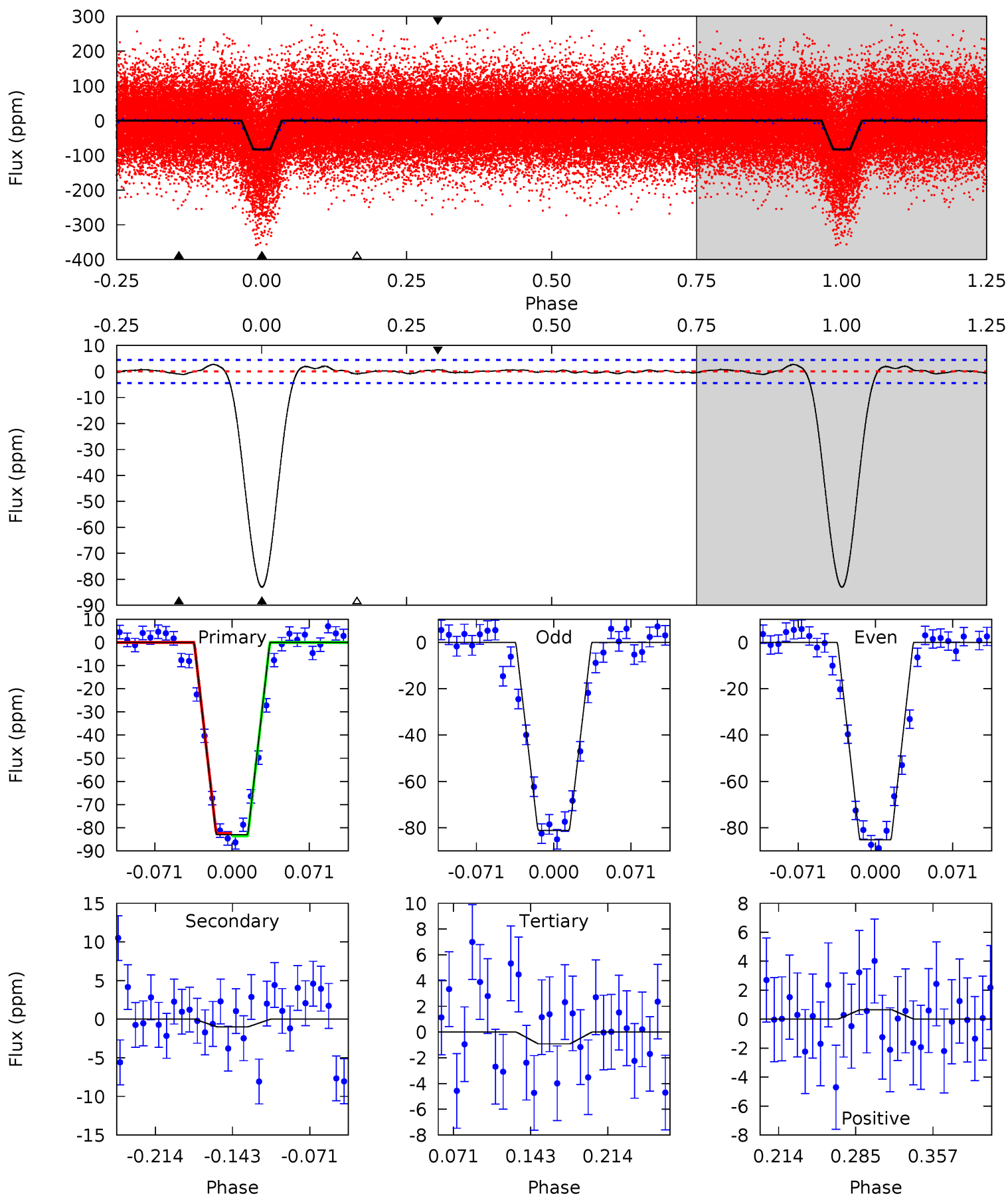
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
135.6	43.1	23.4	0	4.50	1.49	25.8	112.2	135.6	19.7	43.1	0.91	0.98	0.48	19.3



Alt Model-Shift Uniqueness Test

005268955-01, $P = 12.821722$ Days, $E = 124.607973$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
86.4	1.02	0.96	0.69	4.64	1.80	0.59	85.4	85.7	0.06	0.33	2.09	1.11	0.03	0.55



Stellar Parameters For KIC 005268955

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5845^{+146}_{-161}	$4.178^{+0.210}_{-0.123}$	$-0.020^{+0.300}_{-0.250}$	$1.352^{+0.297}_{-0.327}$	$1.003^{+0.147}_{-0.107}$	$0.572^{+0.656}_{-0.229}$
	+2%/-3%	+5%/-3%	+1500%/-1250%	+22%/-24%	+15%/-11%	+115%/-40%
Source	PHO1	FLK73	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 005268955-01 / KOI 7557.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-38 ± 1	$3.34^{+1.54}_{-1.38}$	1267^{+78}_{-83}	3489^{+708}_{-359}	22^{+42}_{-12}
Alt.	-1 ± 1	$1.62^{+1.33}_{-0.96}$	1265^{+77}_{-86}	2442^{+771}_{-4379}	$1.931^{+11.998}_{-1.801}$

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

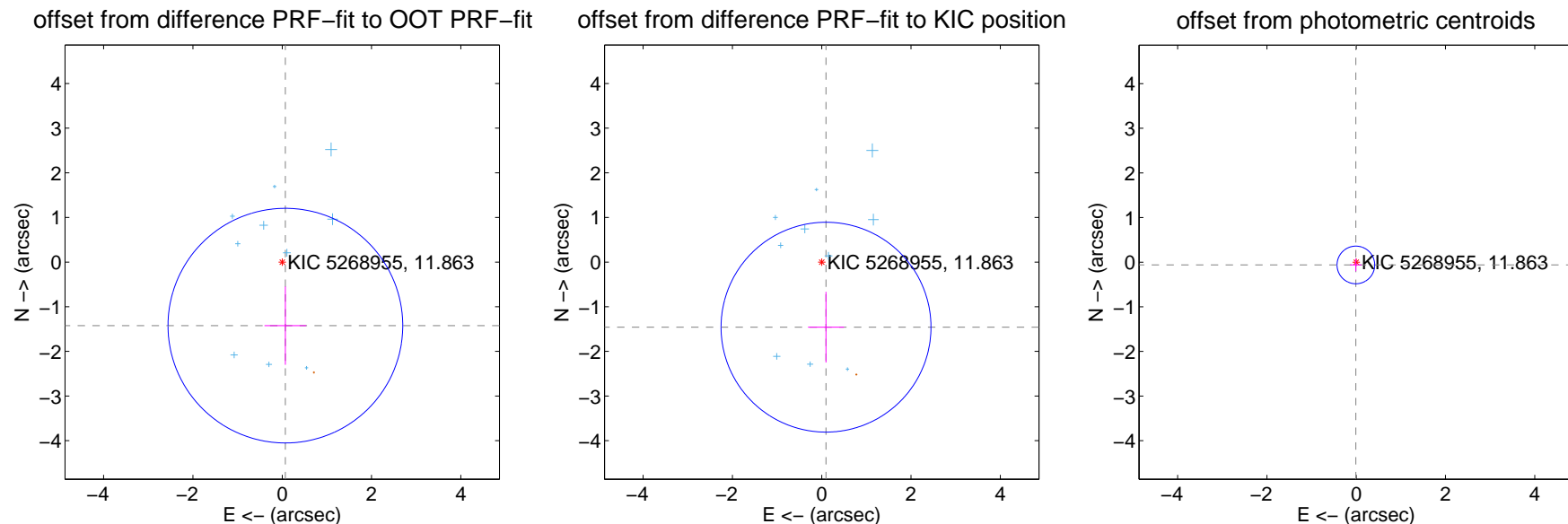
DV Centroid Data

Supplemental centroid analysis for 005268955-01. **Kepler magnitude: 11.86.** Transit SNR 31.28

There are 10 quarters with good PRF difference image offsets

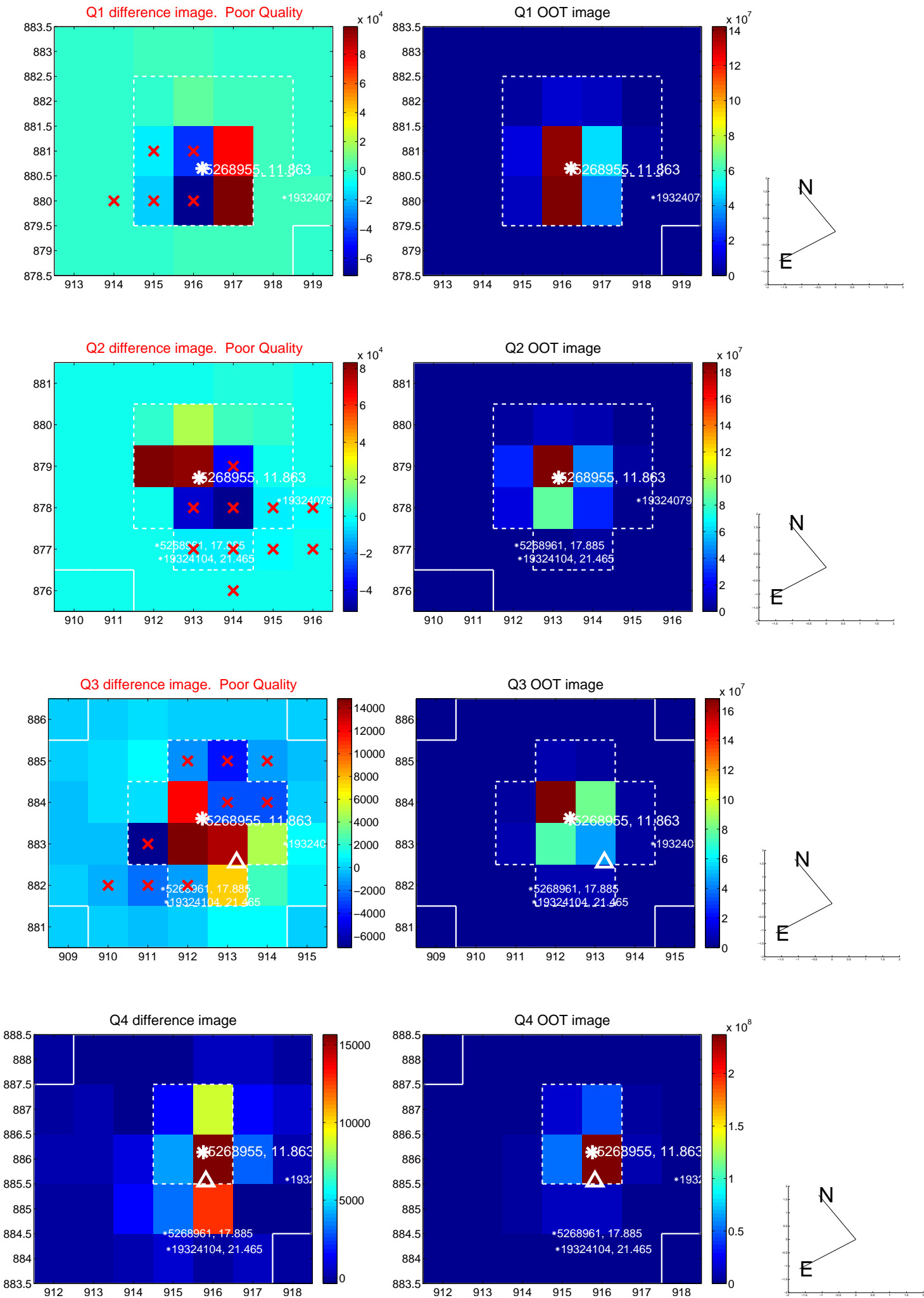
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.425 ± 0.876	1.63	-0.071 ± 0.467	-1.424 ± 0.878
PRF-fit source offset from KIC position	1.461 ± 0.784	1.86	-0.096 ± 0.404	-1.458 ± 0.792
photometric centroid source offset	0.06 ± 0.14	0.45	0.01 ± 0.13	-0.06 ± 0.14

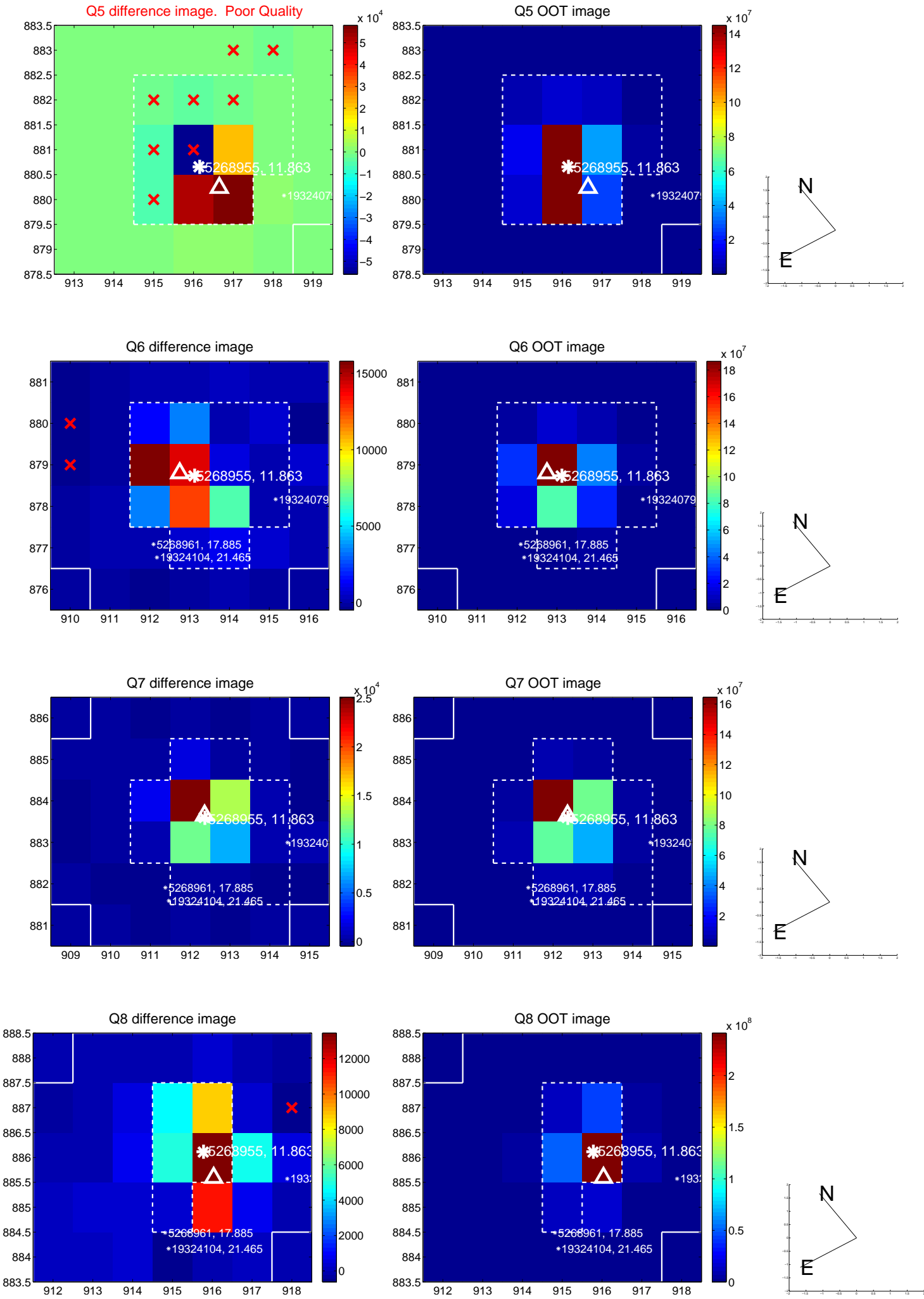


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

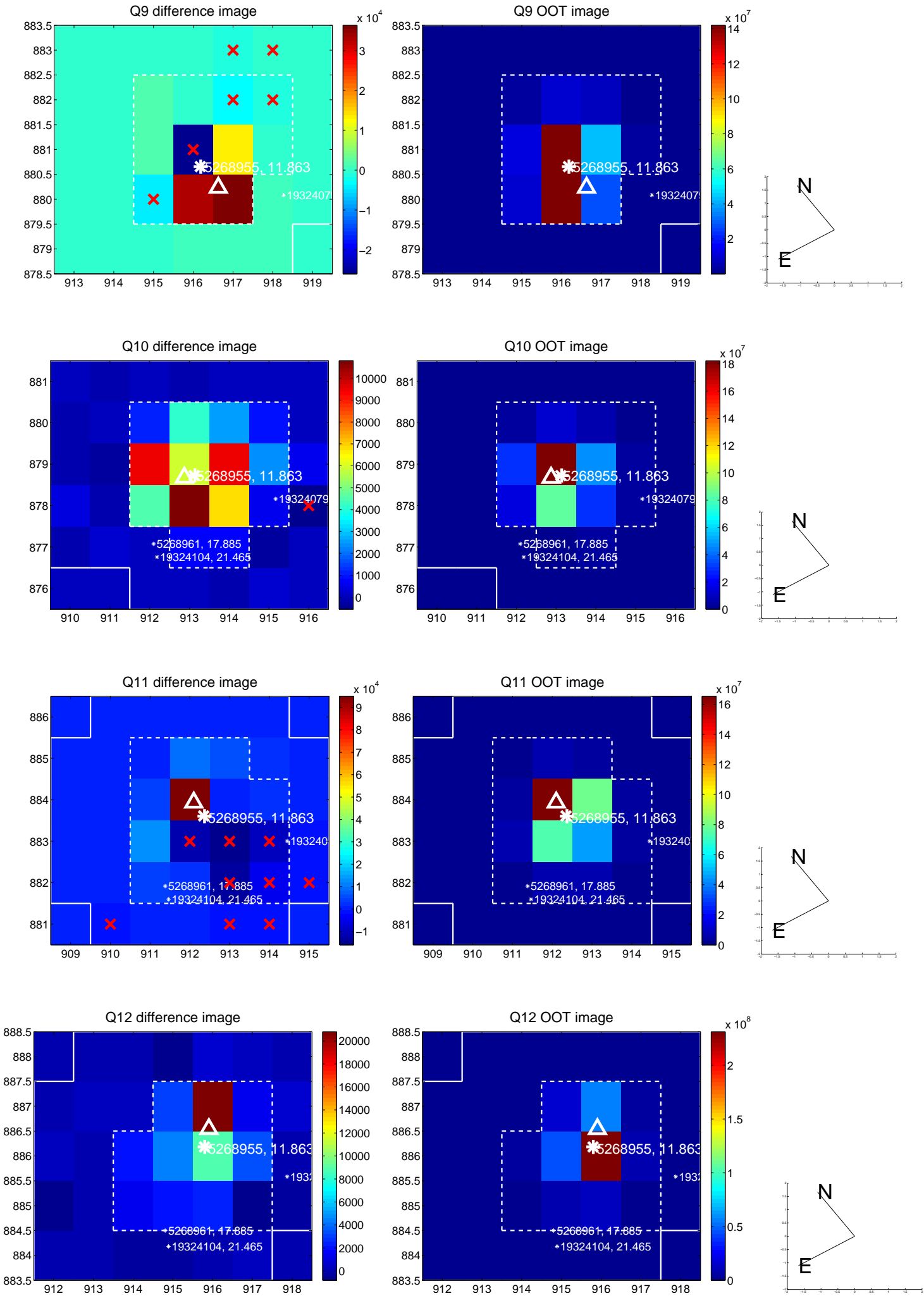
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



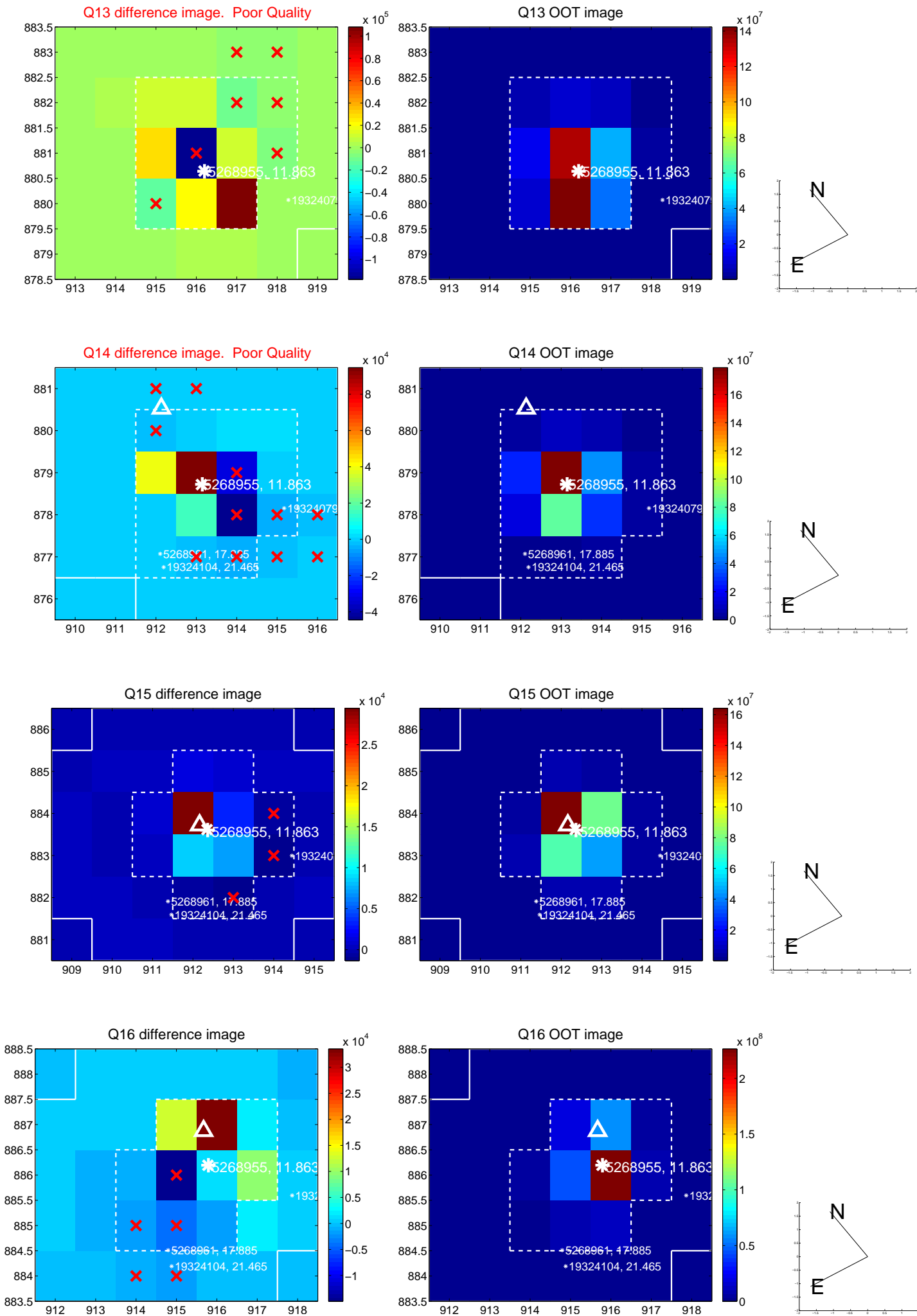
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



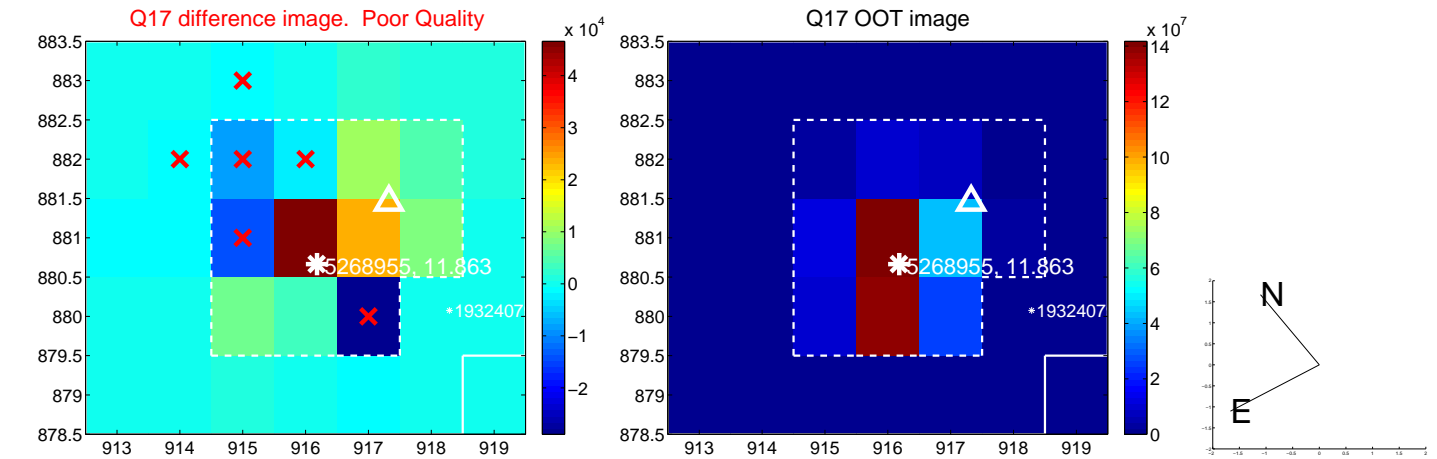
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



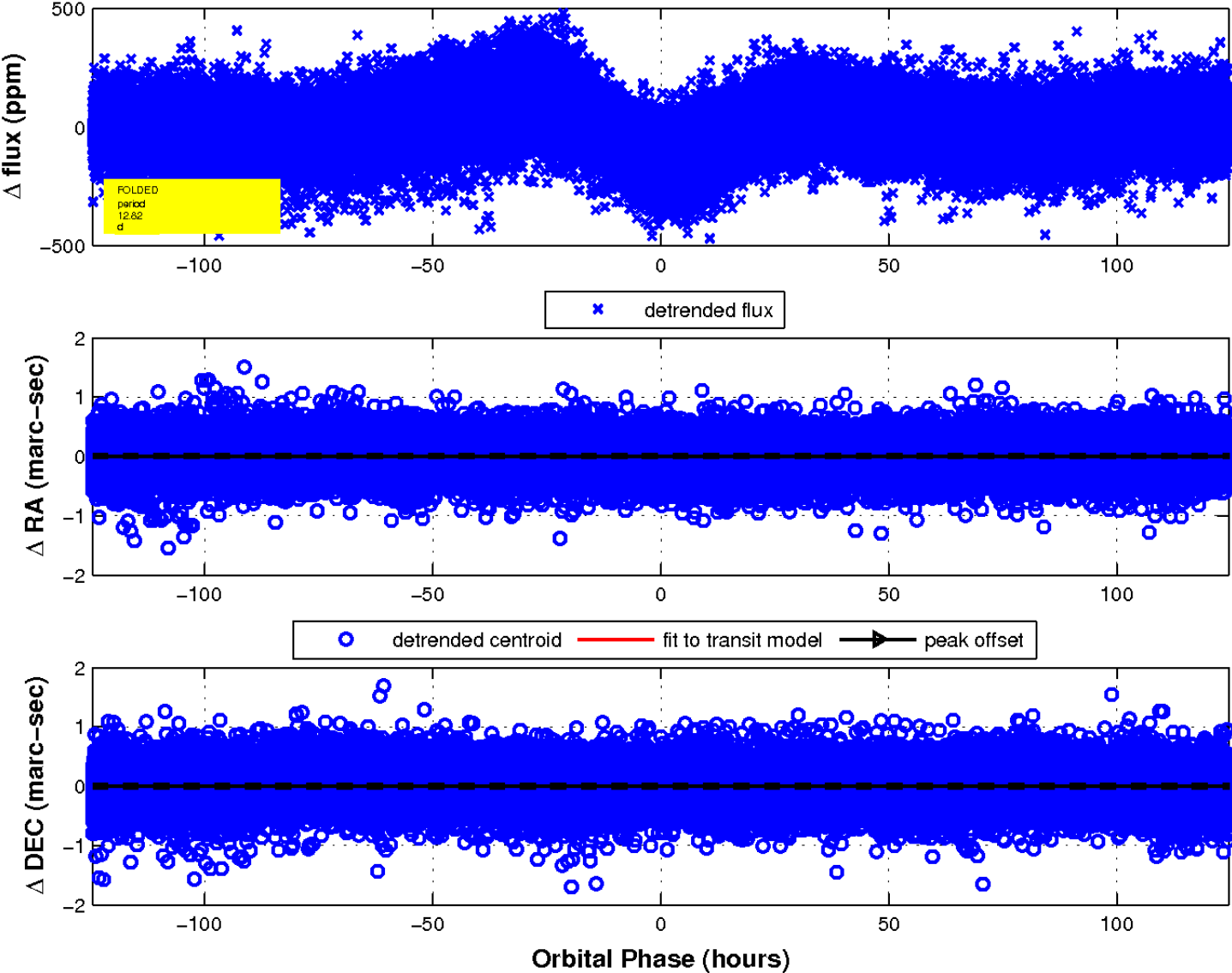
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

