

KIC 003526555

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})
003526555-01	OBS	No	456.072278	181.708454	671.7	7.014	7.9	7.2	0.71	5356	2.15	0.35

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003526555-01	OBS	FP	0.04	1	0	0	0	MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

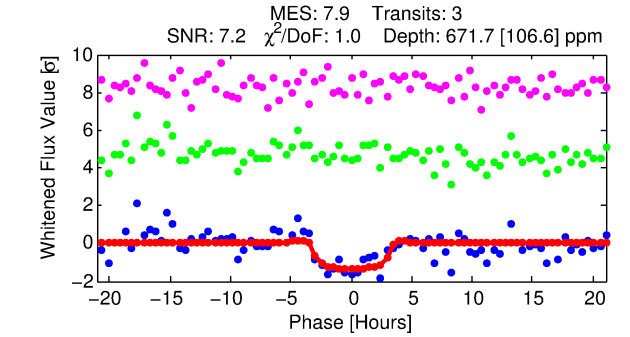
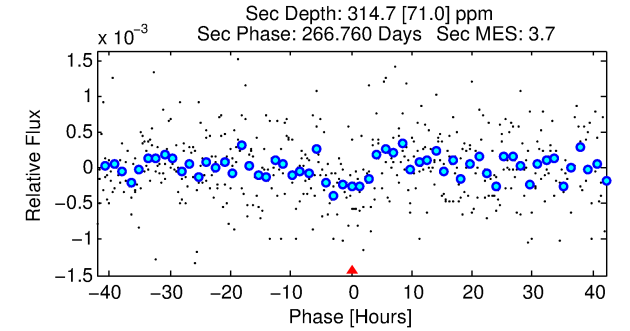
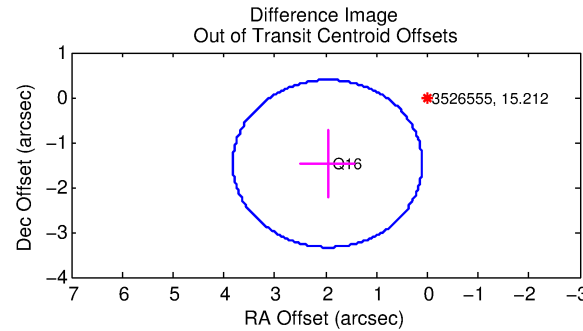
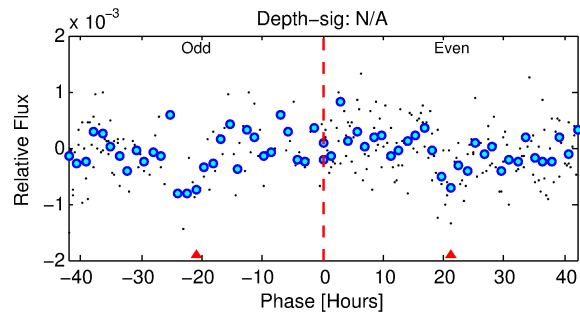
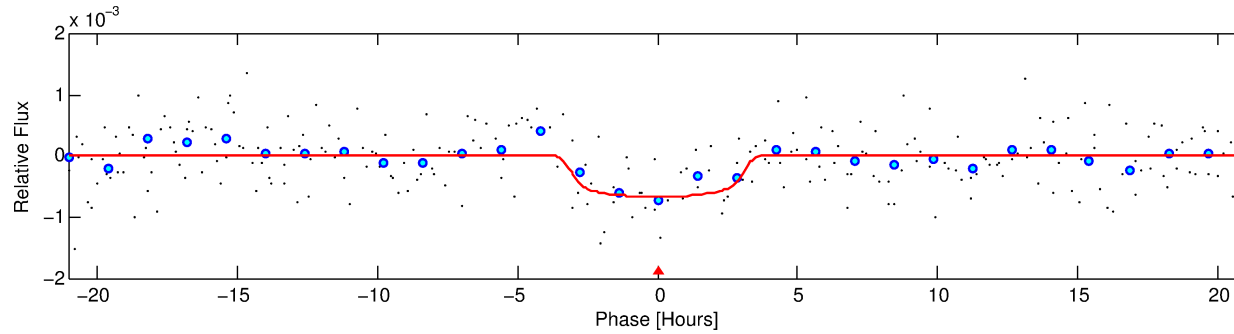
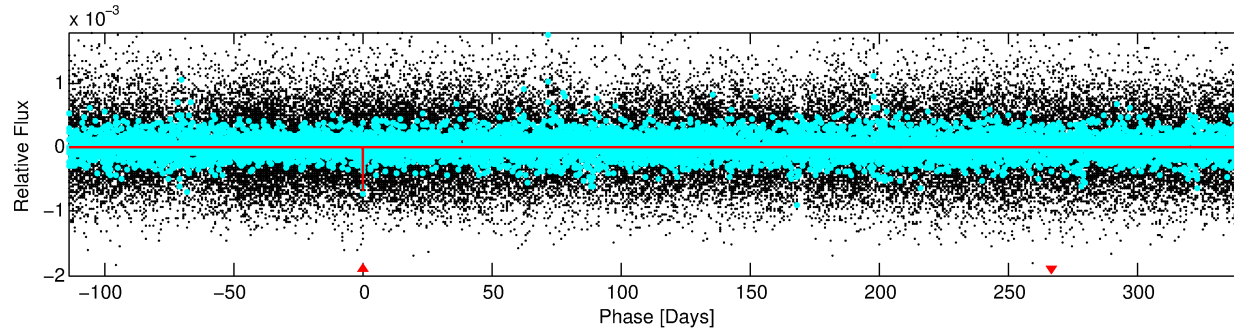
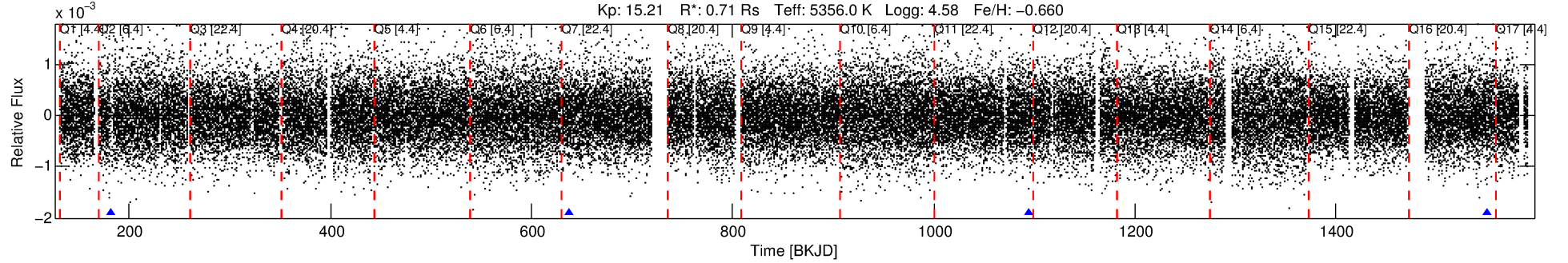
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003526555-01

No Significant Match Found

DV One-Page Summary

KIC: 3526555 Candidate: 1 of 1 Period: 456.072 d



DV Fit Results:

Period = 456.07228 [0.01296] d
Epoch = 181.7085 [0.0284] BKJD
Rp/R* = 0.0278 [0.0083]
a/R* = 262.65 [336.72]
b = 0.88 [0.33]
Seff = 0.35 [0.06]
Teq = 196 [9] K
Rp = 2.15 [0.69] Re
a = 1.0252 [0.0963] AU
Ag = 39285.54 [25698.24] [1.53σ]
Teffp = 4277 [697] K [5.86σ]

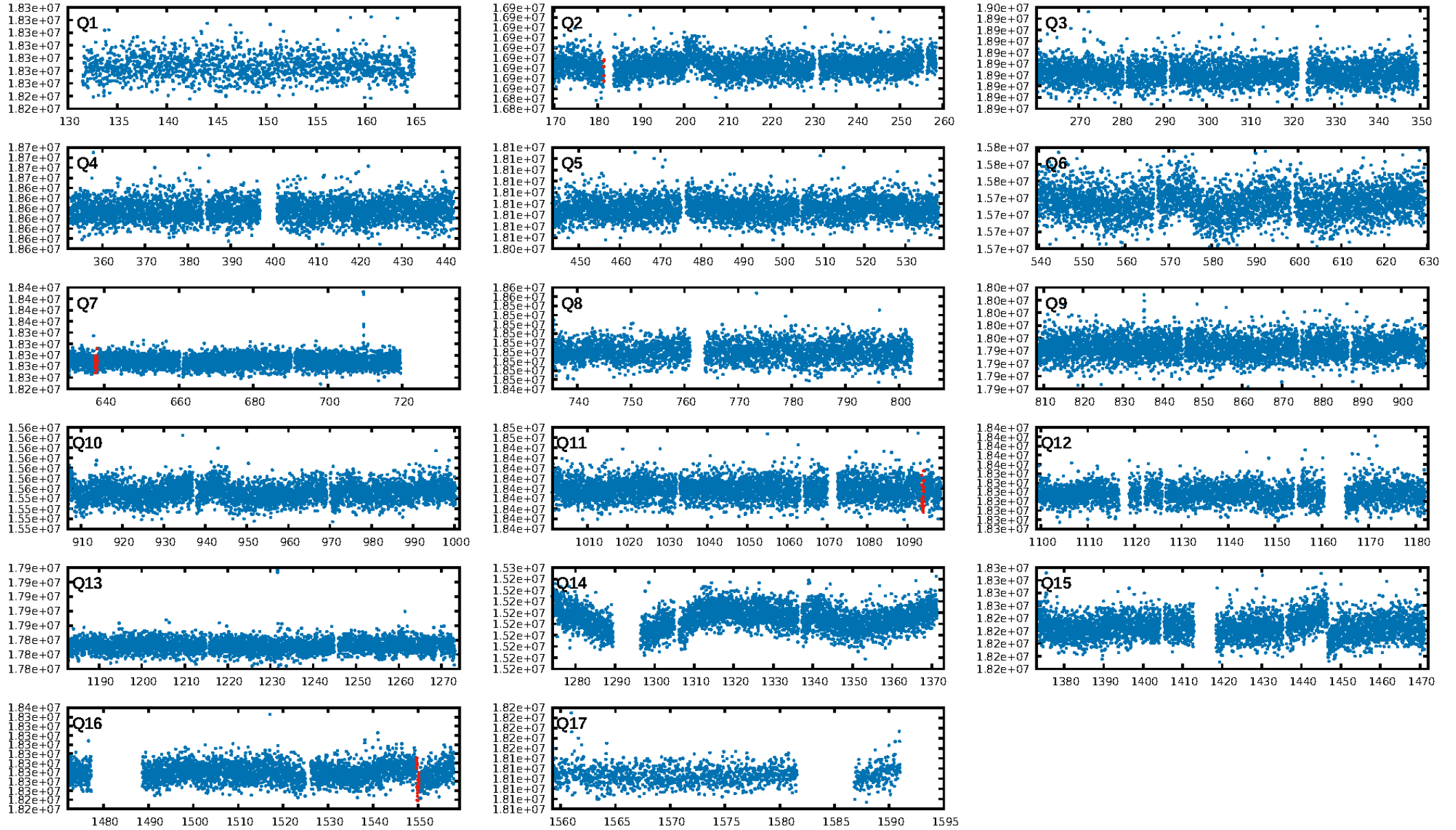
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 5.7%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 5.27e-14
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.399
Centroid-sig: 5.8%
Centroid-so: 3.184 arcsec [1.63σ]
OotOffset-rm: 2.452 arcsec [3.95σ]
KicOffset-rm: 2.437 arcsec [3.94σ]
OotOffset-st: 0/0/1/0 [1]
KicOffset-st: 0/0/1/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [2/2]

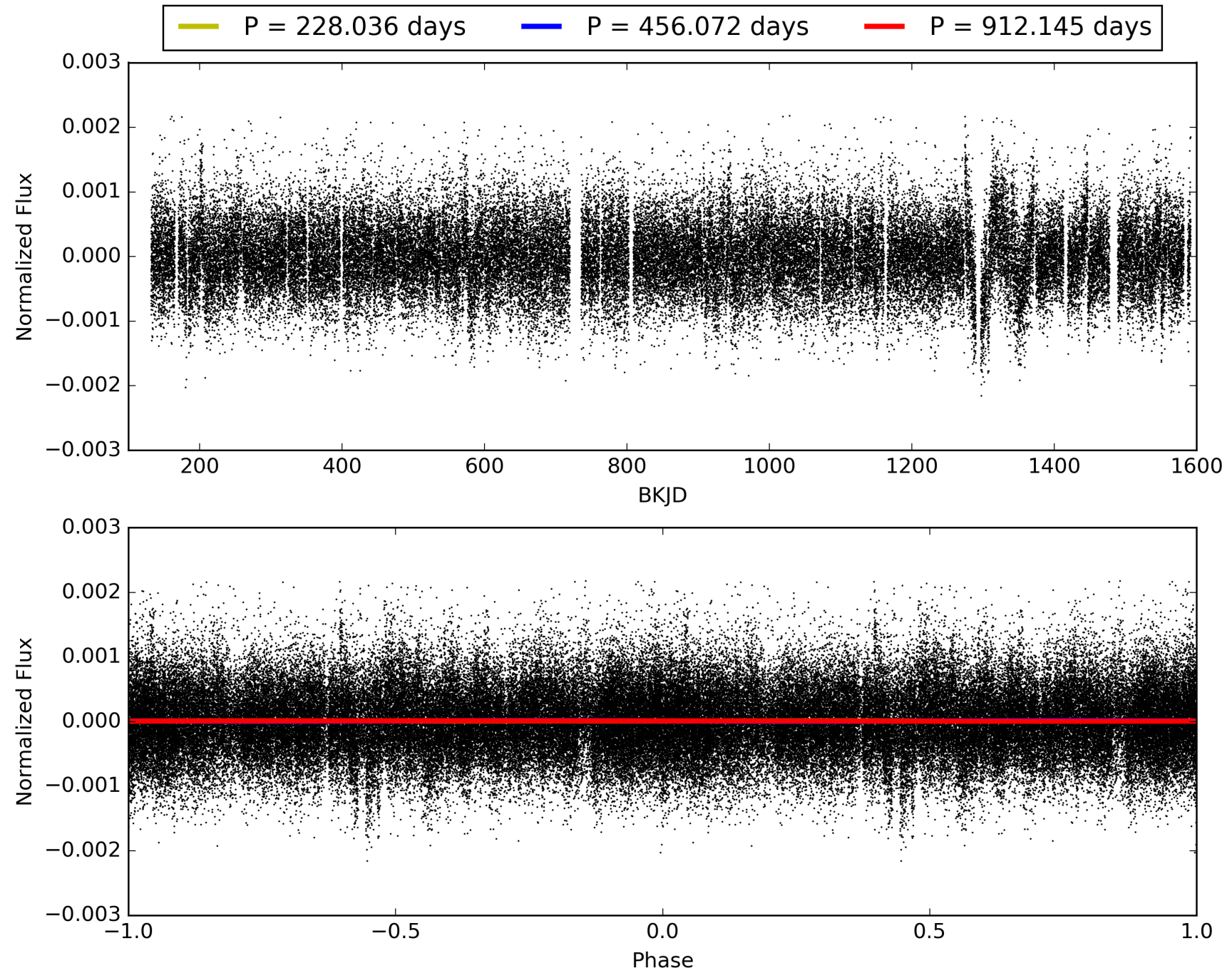
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:52:46 Z

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

TCE 003526555-01, PDC Light Curves

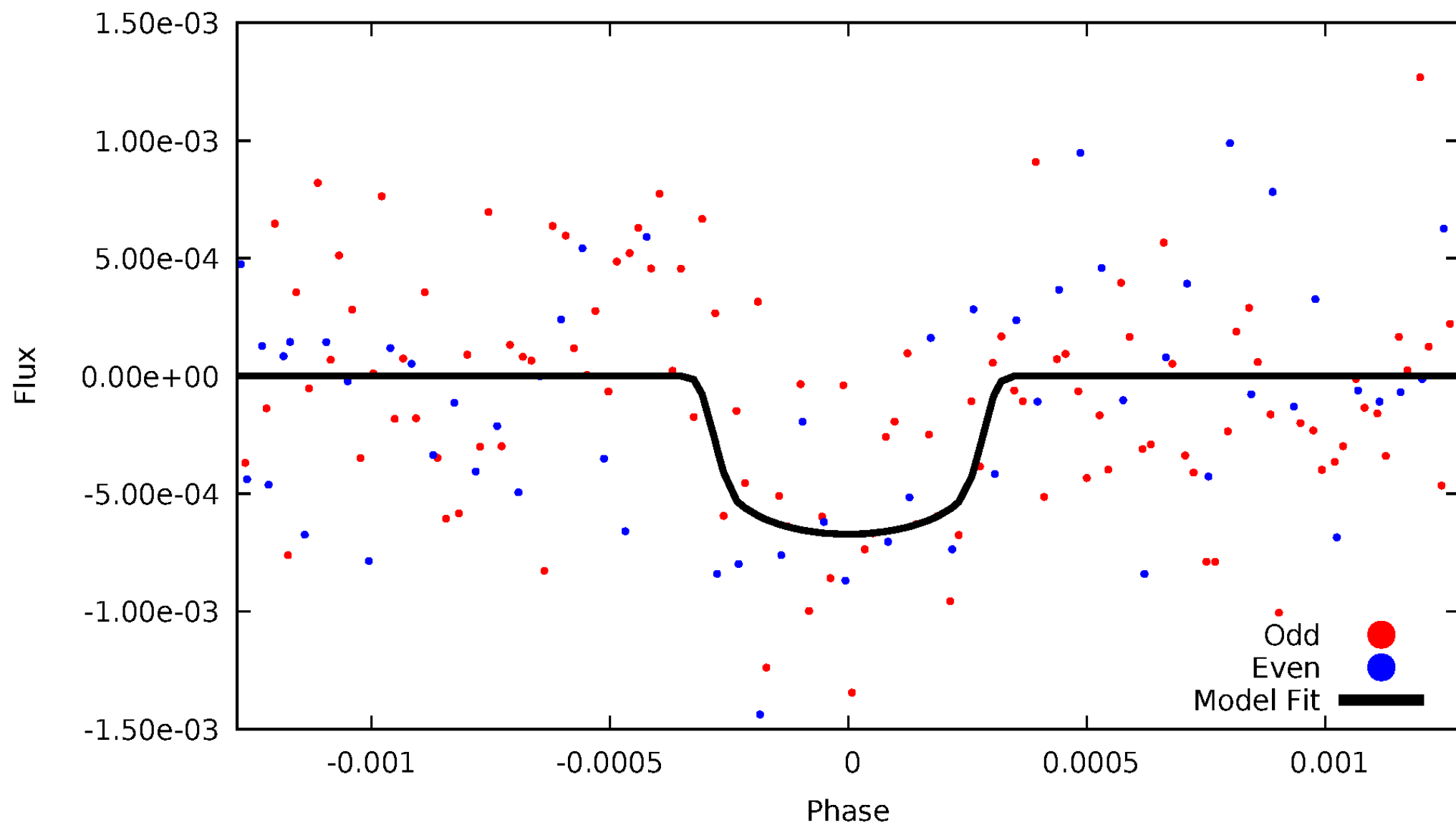


TCE 003526555-01



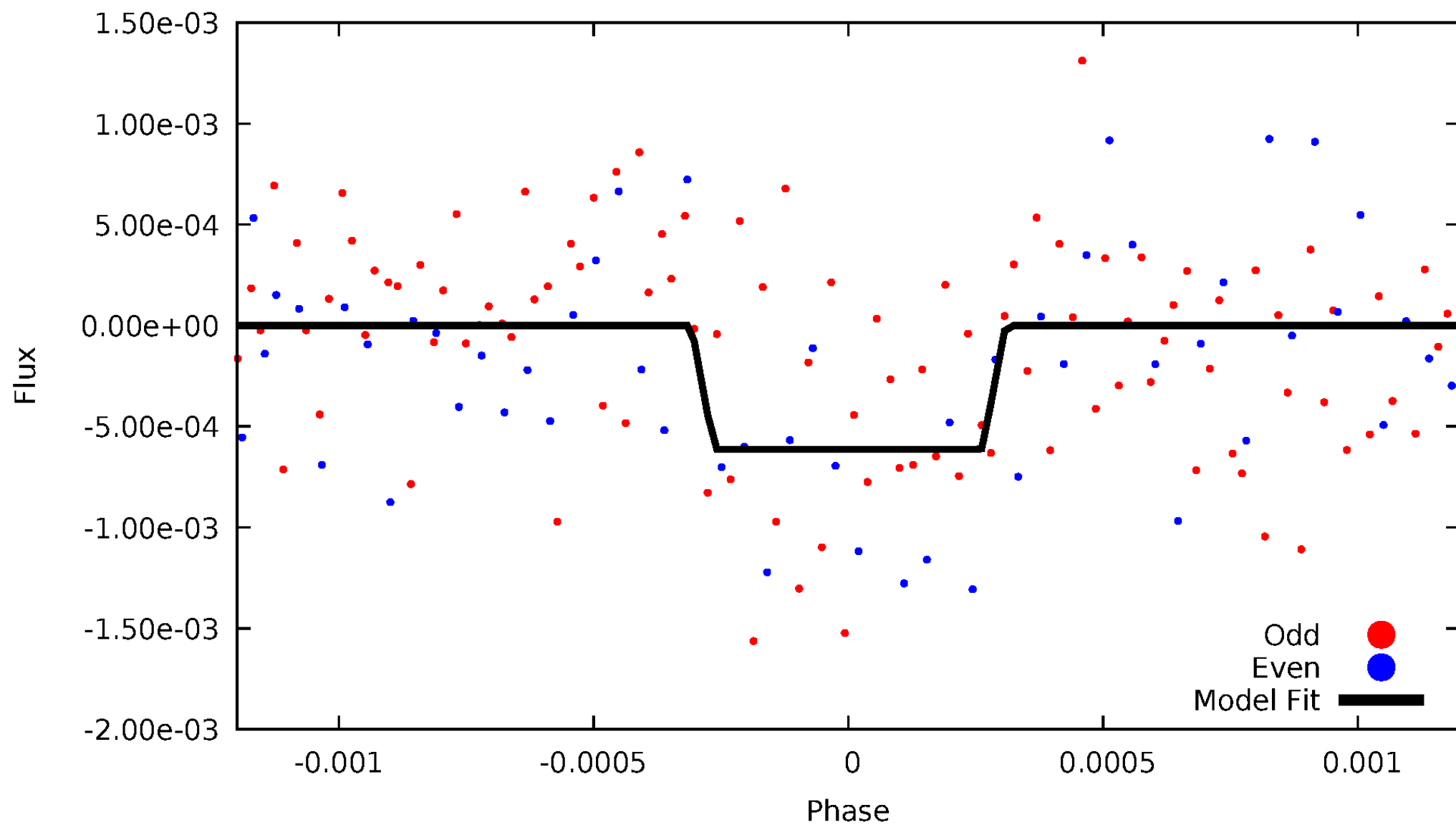
DV Odd/Even

TCE 003526555-01



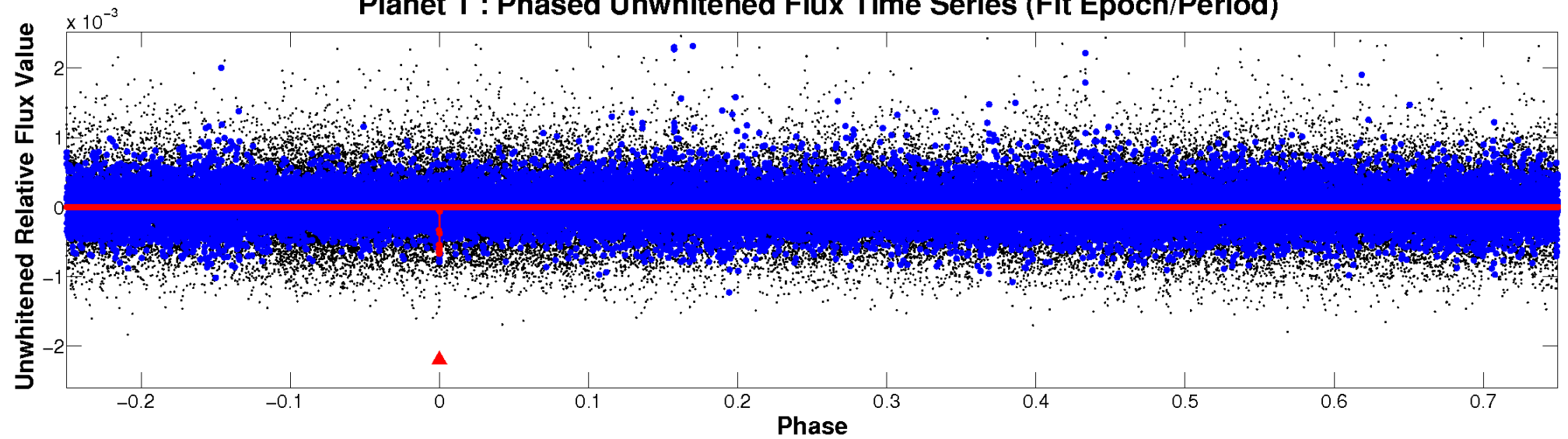
ALT Odd/Even

TCE 003526555-01

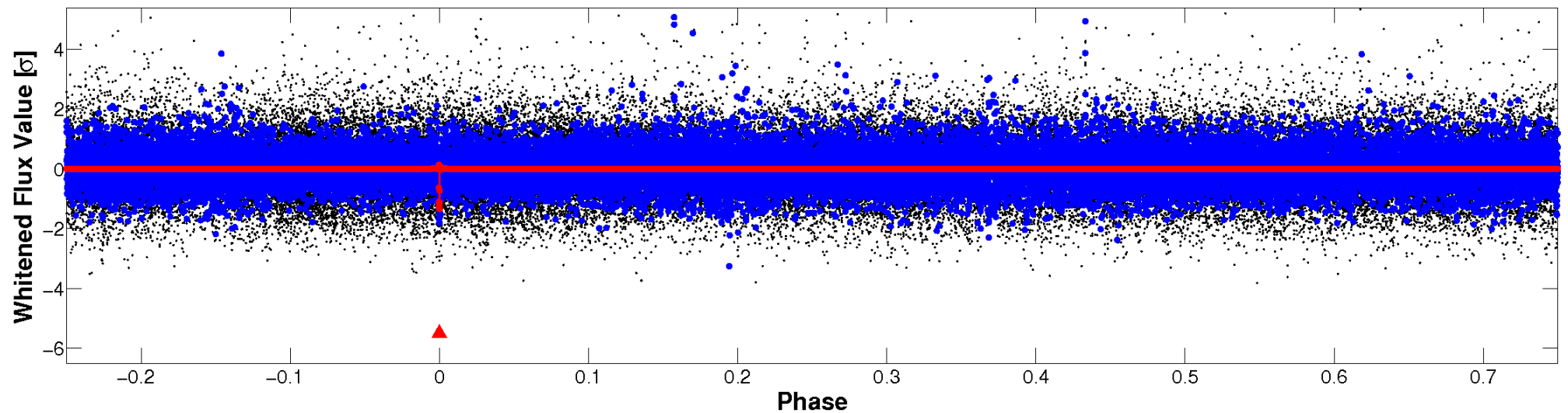


Non-Whitened Vs. Whitened Light Curve

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

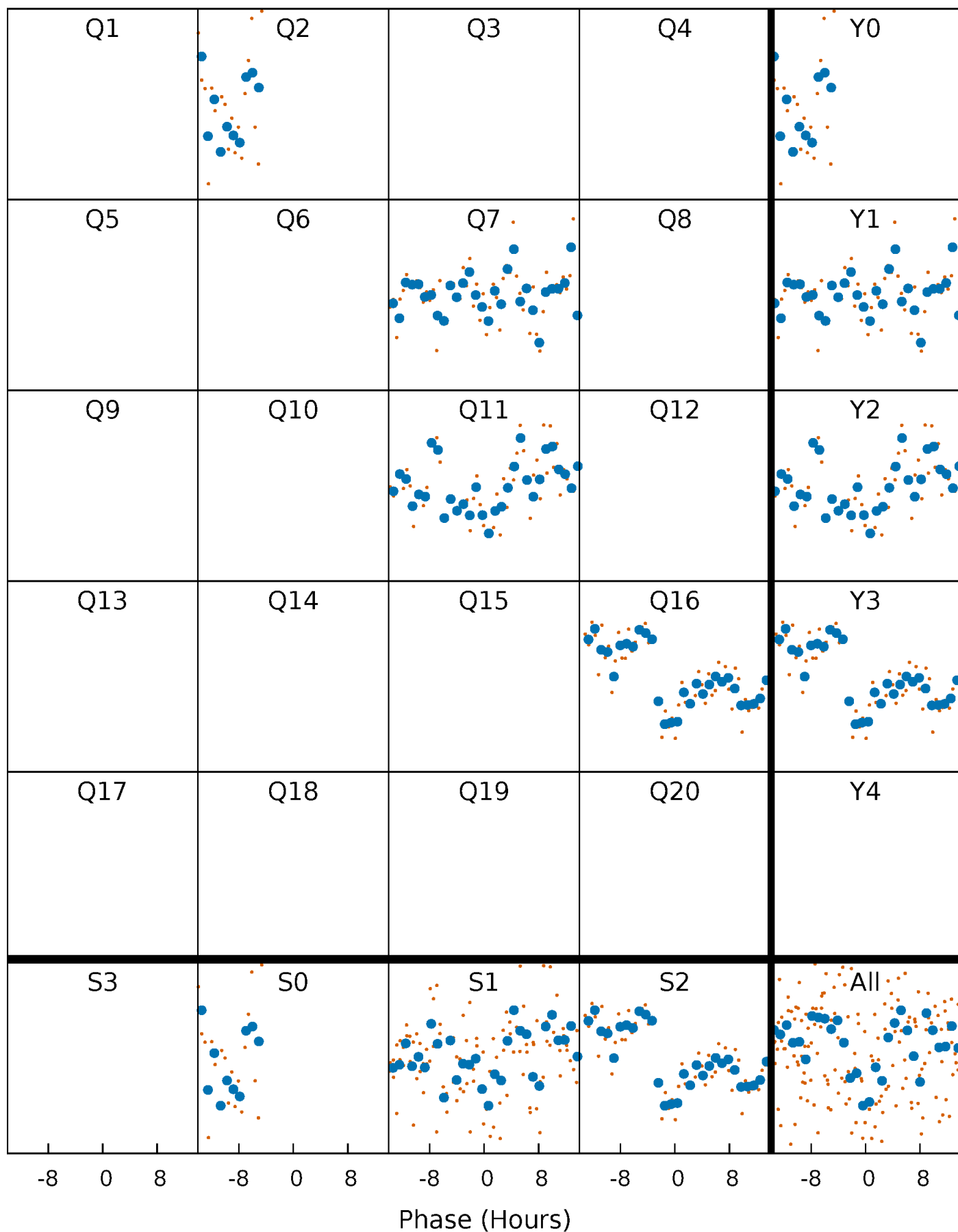


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



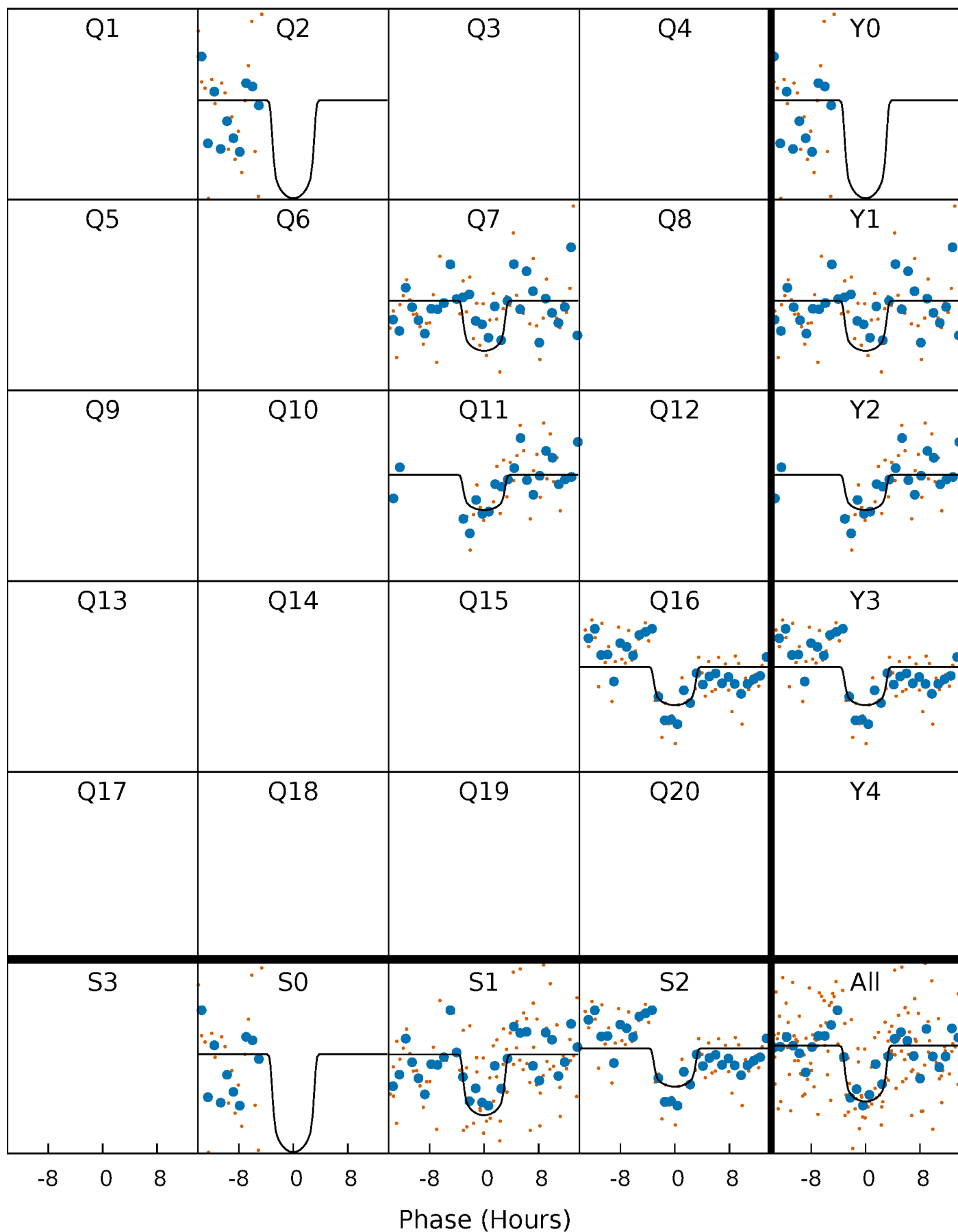
PDC Quarter-Phased Transit Curves

TCE 003526555-01 P=456.072278 Days $T_0=181.708454$ (BKJD)



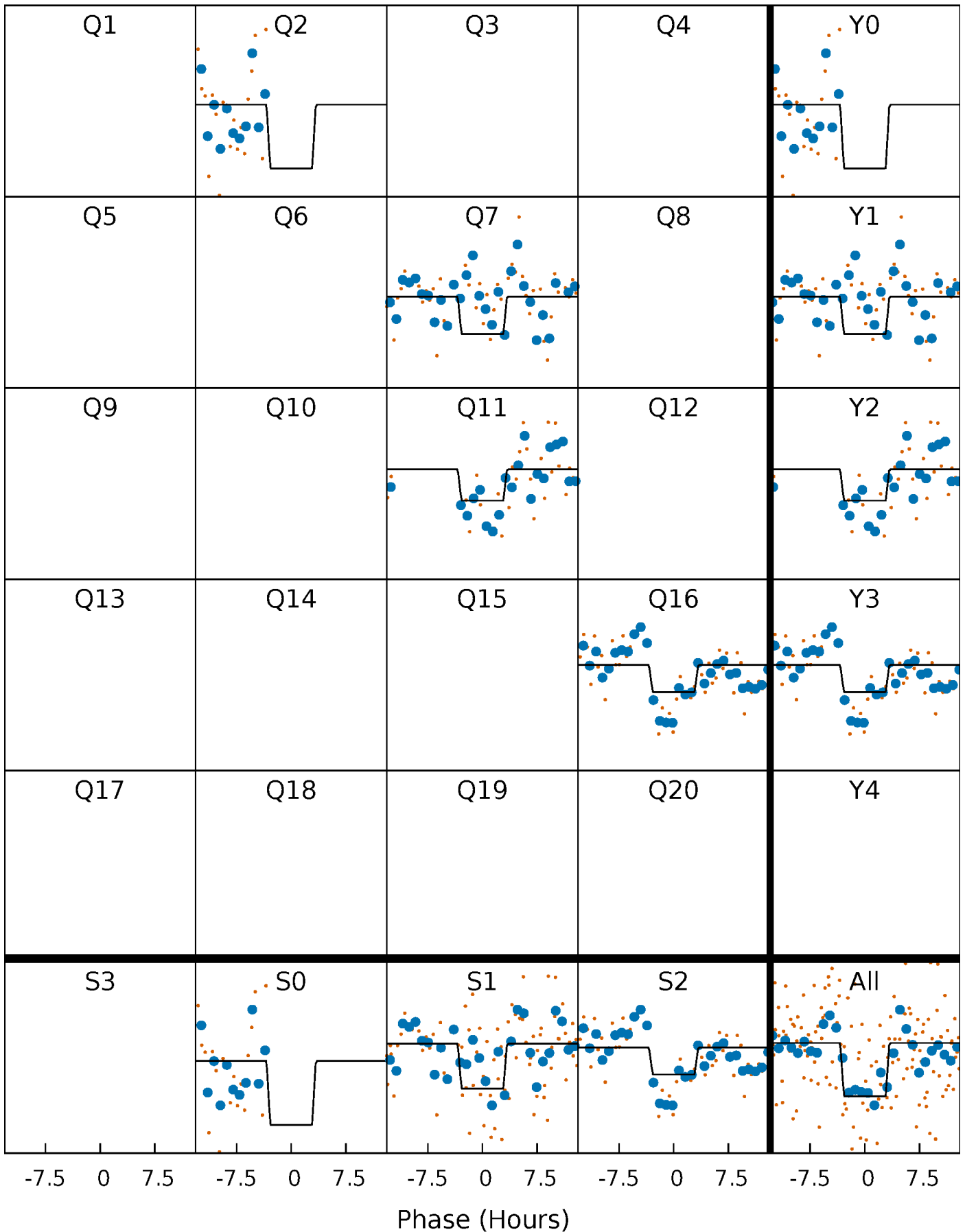
DV Quarter-Phased Transit Curves

TCE 003526555-01 P=456.072278 Days $T_0=181.708454$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

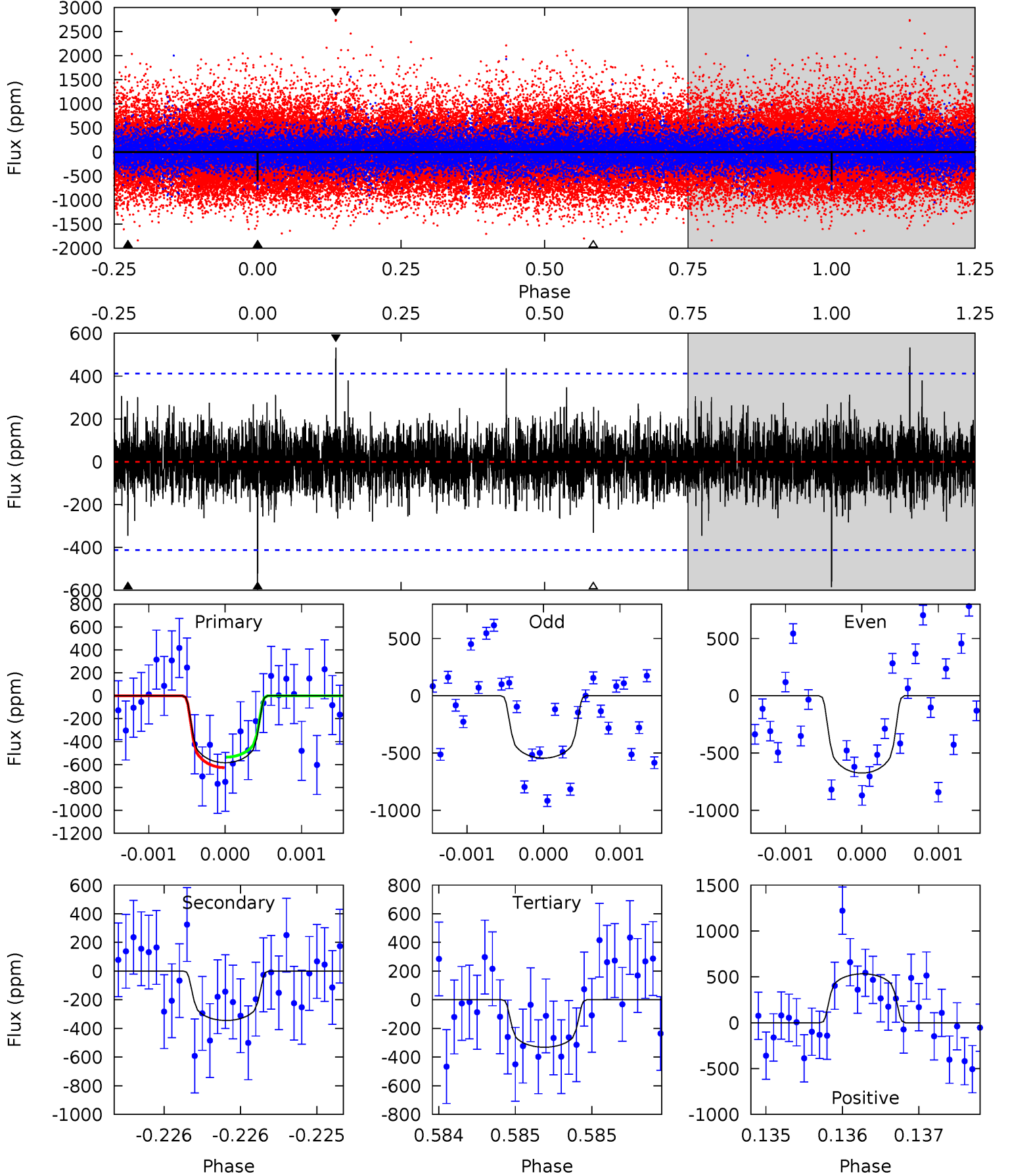
TCE 003526555-01 P=456.090682 Days $T_0=181.659809$ (BKJD)



DV Model-Shift Uniqueness Test

003526555-01, P = 456.072278 Days, E = 181.708454 Days

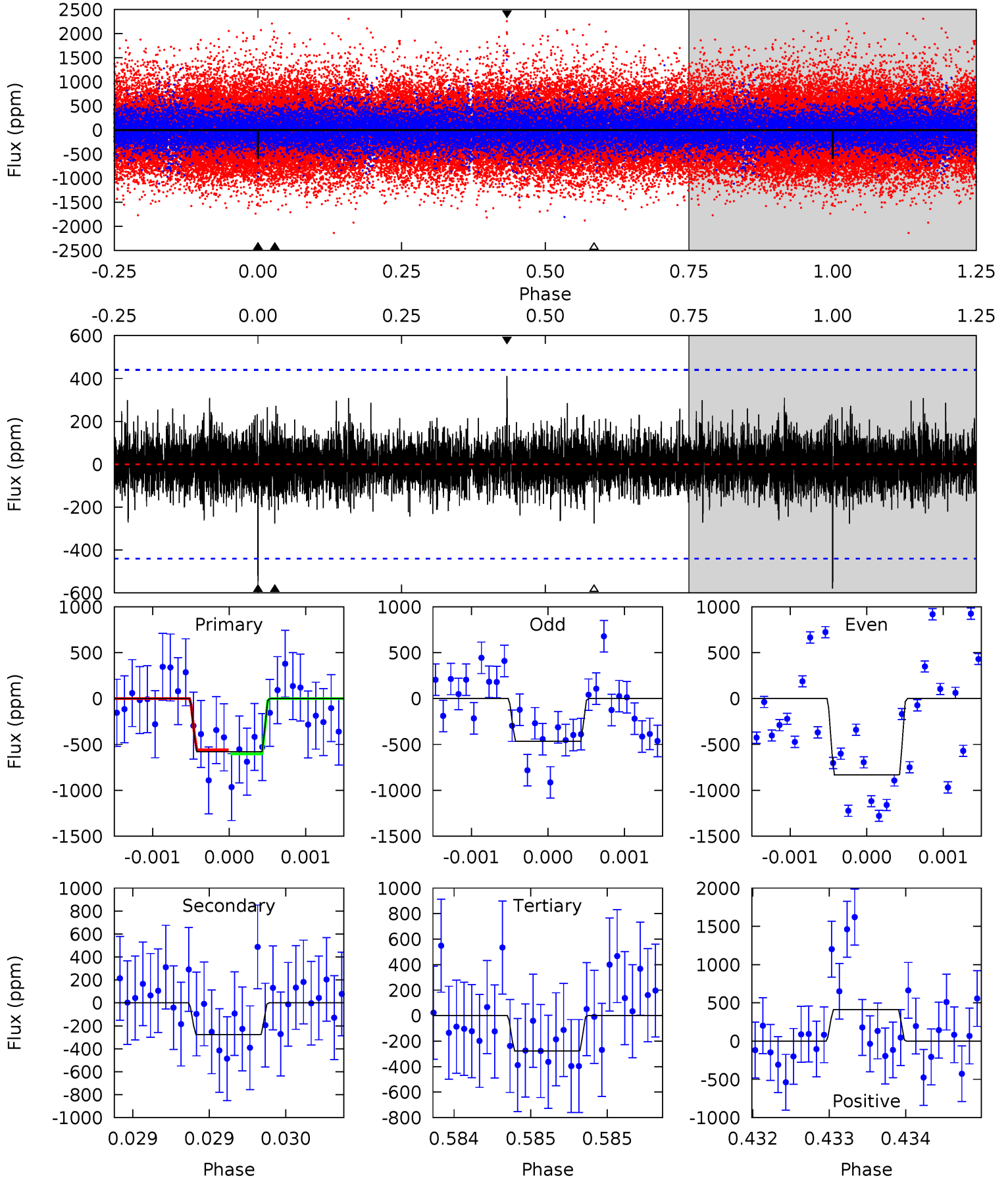
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.85	4.63	4.45	7.15	5.53	3.42	1.13	3.40	0.70	0.18	-2.52	0.82	0.87	0.48	0.62



Alt Model-Shift Uniqueness Test

003526555-01, P = 456.090682 Days, E = 181.659809 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.30	3.48	3.48	5.17	5.54	3.43	0.95	3.82	2.12	0.00	-1.70	2.14	0.71	0.41	0.28



Stellar Parameters For KIC 003526555

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5356^{+160}_{-160}	$4.576^{+0.070}_{-0.063}$	$-0.660^{+0.350}_{-0.300}$	$0.709^{+0.082}_{-0.067}$	$0.690^{+0.084}_{-0.039}$	$2.732^{+0.912}_{-0.572}$
	+3%/-3%	+2%/-1%	+53%/-45%	+12%/-9%	+12%/-6%	+33%/-21%
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 003526555-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-345 ± 74	$2.17^{+0.67}_{-0.72}$	275^{+12}_{-10}	4537^{+851}_{-517}	43138^{+52985}_{-20598}
Alt.	-276 ± 79	$1.93^{+0.64}_{-0.62}$	275^{+11}_{-11}	4515^{+927}_{-529}	42359^{+60023}_{-20096}

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 $A_{obs} \gg 1.0$

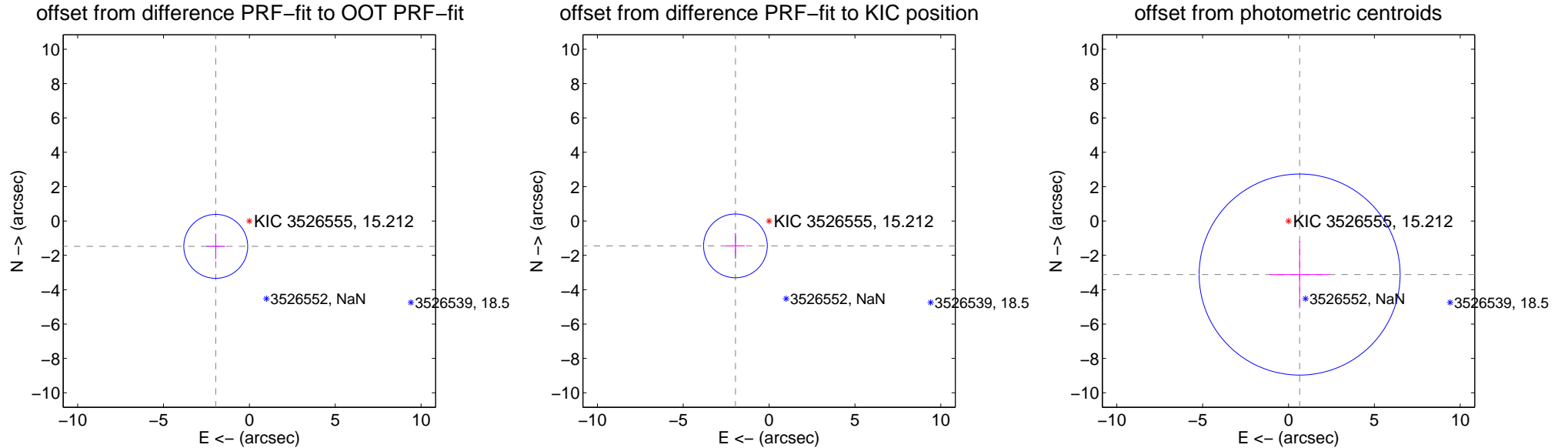
DV Centroid Data

Supplemental centroid analysis for 003526555-01. Kepler magnitude: 15.21. Transit SNR 7.17

There are 1 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	2.452 ± 0.620	3.95	1.958 ± 0.541	-1.476 ± 0.739
PRF-fit source offset from KIC position	2.437 ± 0.618	3.94	1.960 ± 0.541	-1.448 ± 0.739
photometric centroid source offset	3.18 ± 1.95	1.63	-0.65 ± 1.74	-3.12 ± 1.96

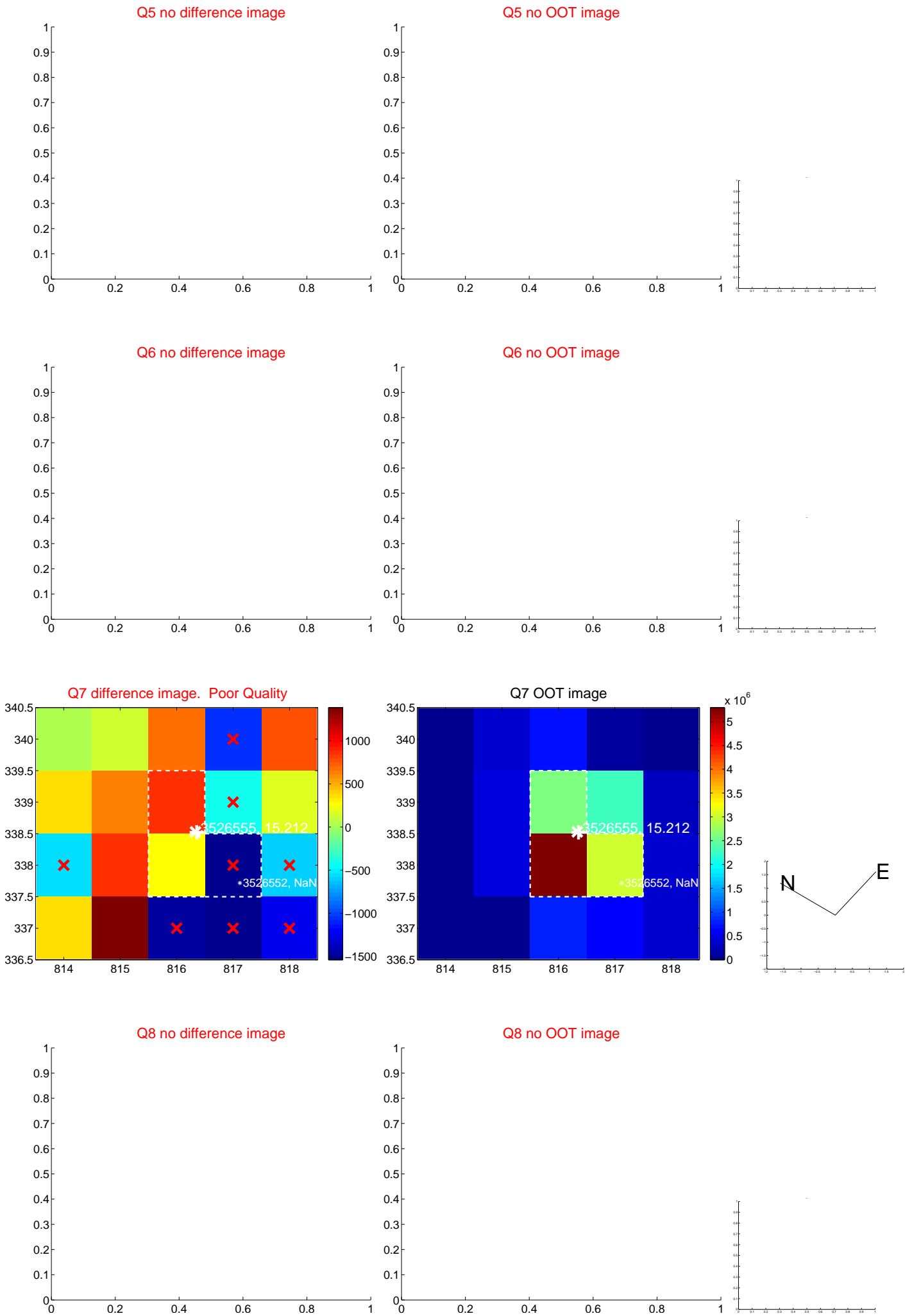


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



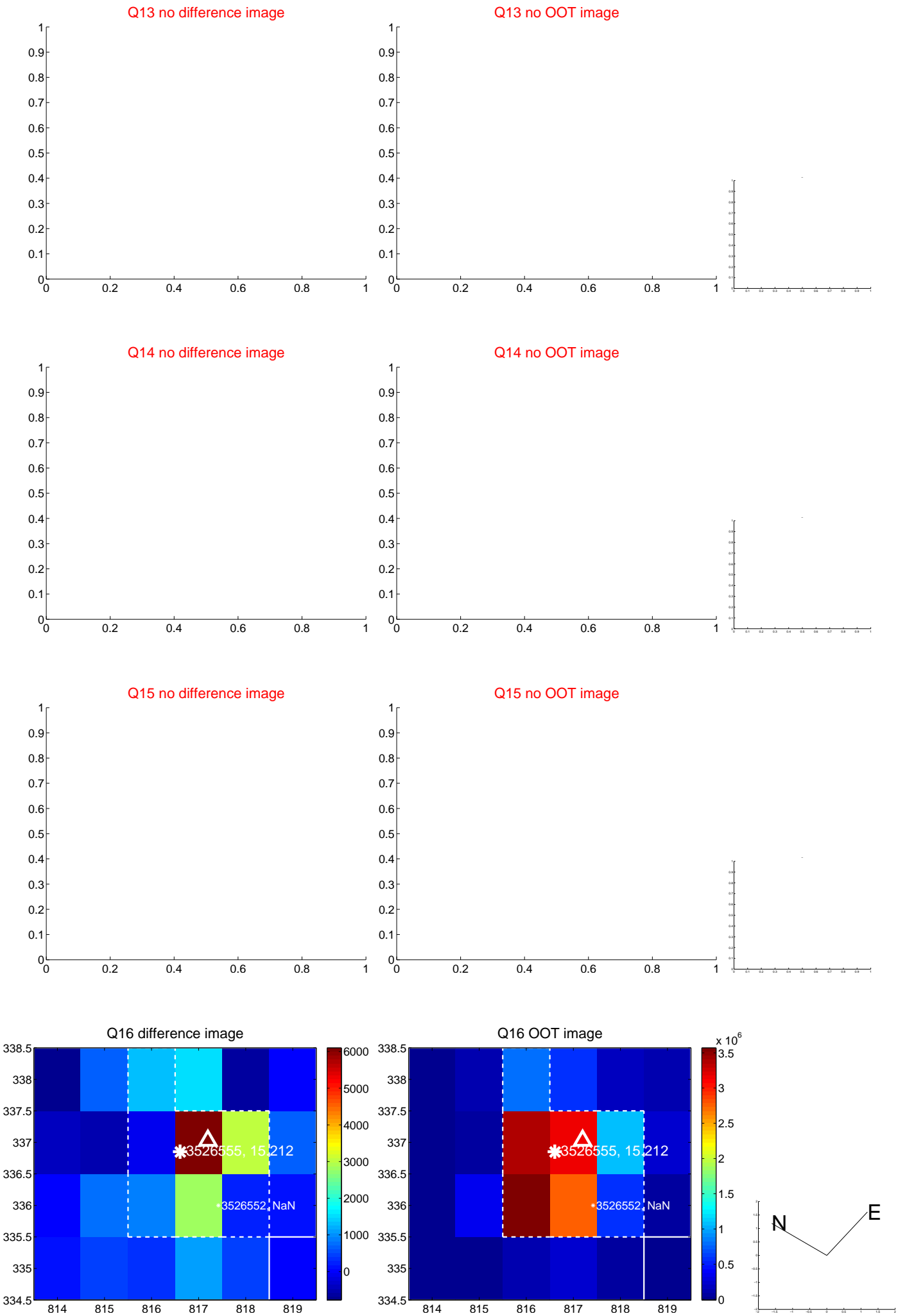
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



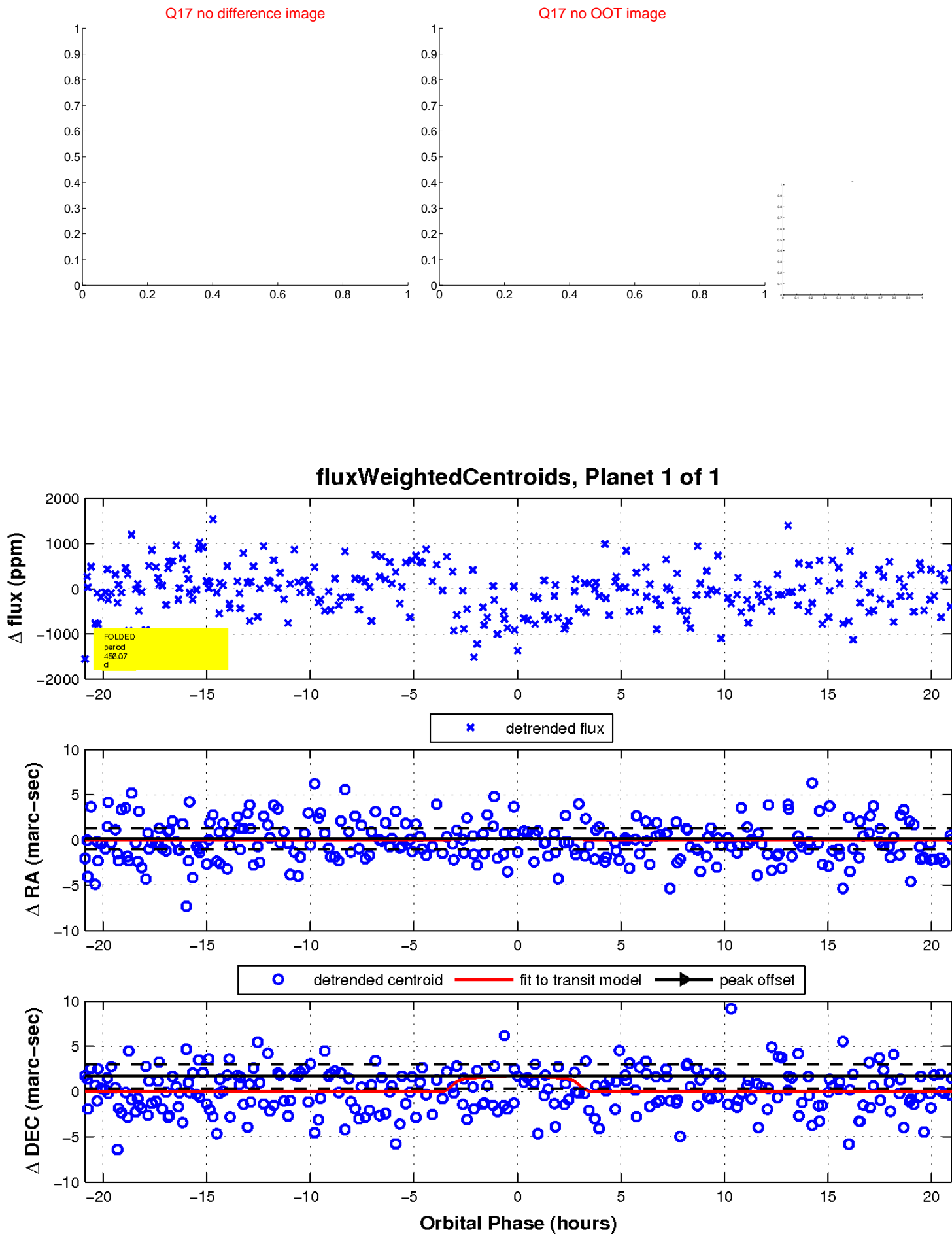
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

