

KIC 005717618

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})
005717618-01	OBS	No	321.210898	284.895011	161.2	7.846	12.9	13.5	1.00	5780	1.52	1.19

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005717618-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—INCONSISTENT_TRANS—CENT_SATURATED

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

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

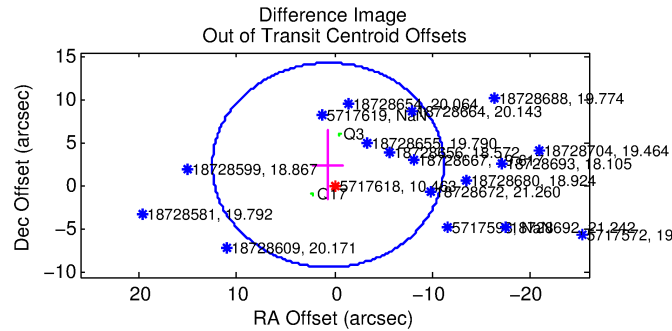
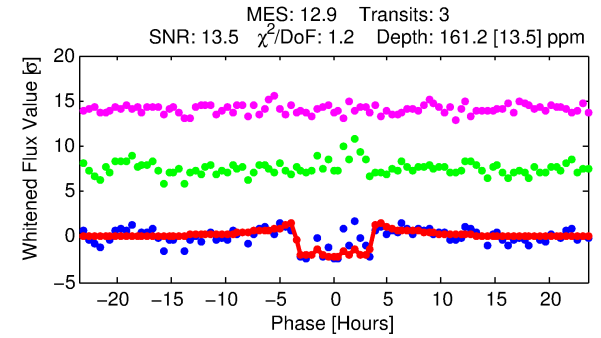
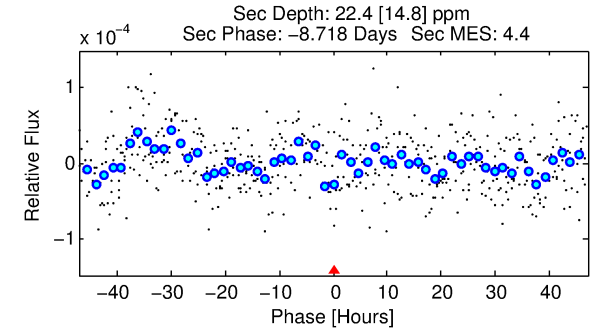
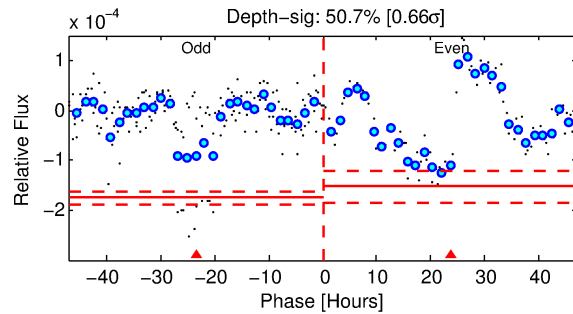
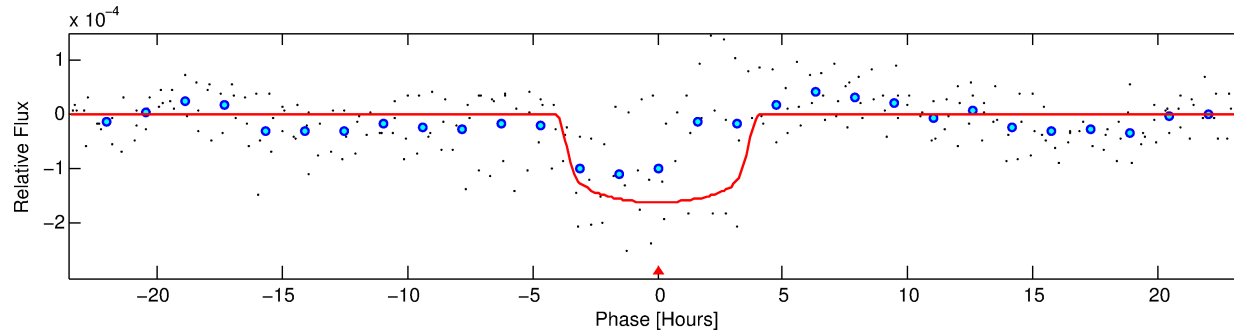
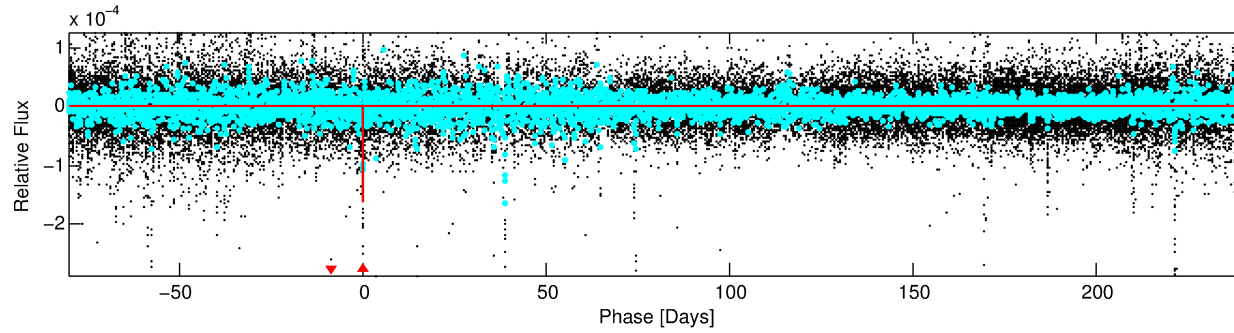
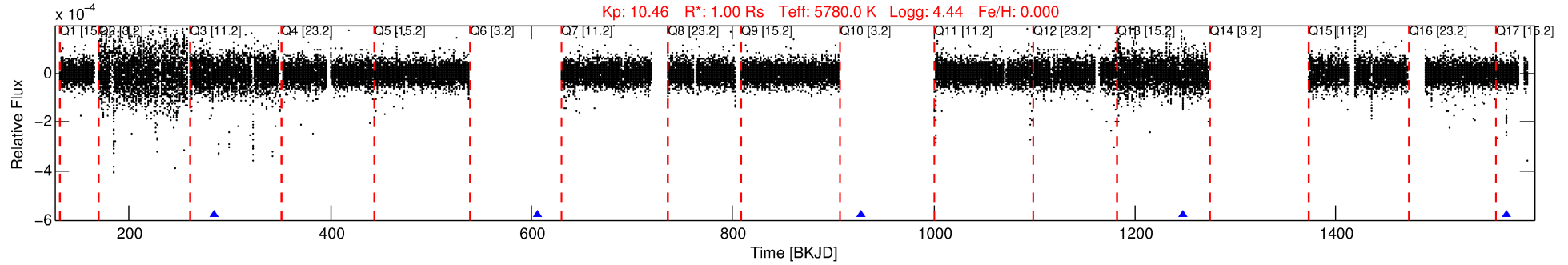
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005717618-01

No Significant Match Found

DV One-Page Summary

KIC: 5717618 Candidate: 1 of 1 Period: 321.211 d



DV Fit Results:

Period = 321.21090 [0.00199] d
Epoch = 284.8950 [0.0052] BKJD
Rp/R* = 0.0140 [0.0018]
a/R* = 140.37 [79.43]
b = 0.91 [0.11]
Seff = 1.19 [0.00]
Teq = 266 [0] K
Rp = 1.52 [0.20] Re
a = 0.9181 [0.0000] AU
Ag = 4484.75 [3176.08] [1.41 σ]
Teffp = 3367 [596] K [5.20 σ]

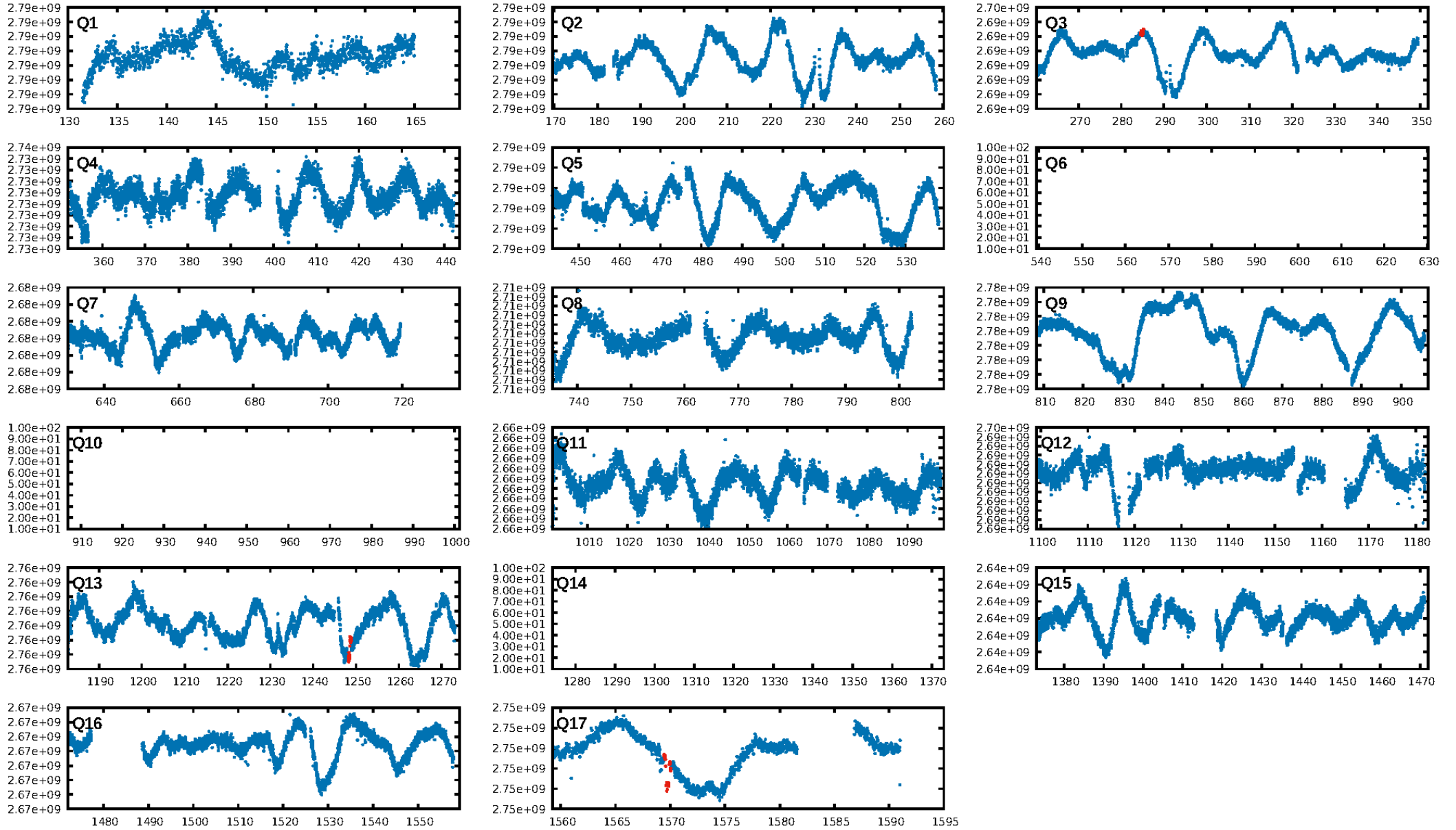
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 43.7%
Bootstrap-pfa: 1.11e-18
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: N/A
Centroid-sig: 53.0%
Centroid-so: 1.579 arcsec [1.91 σ]
OotOffset-rm: 2.538 arcsec [0.64 σ]
KicOffset-rm: 3.927 arcsec [0.92 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [3/3]

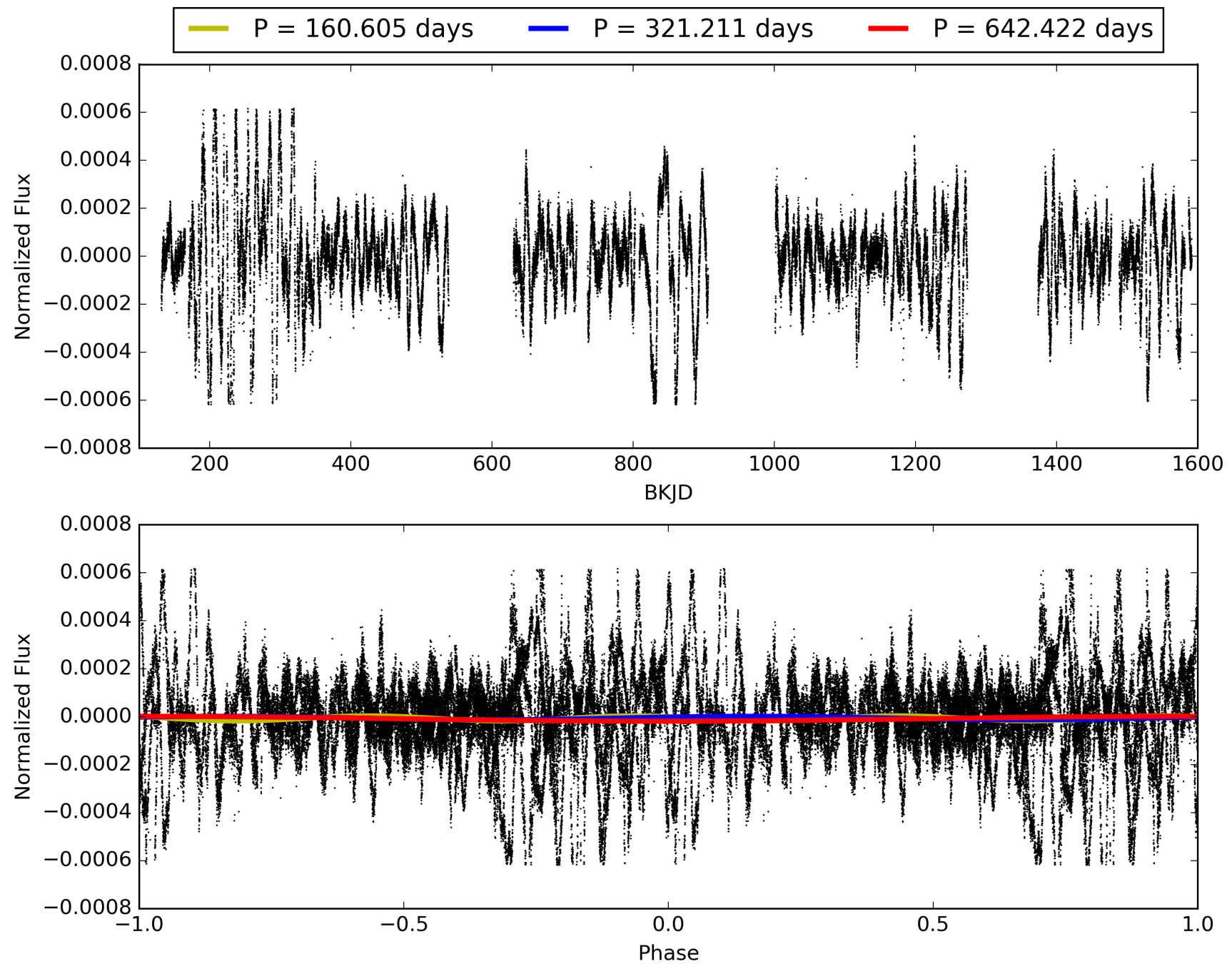
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:27:50 Z

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

TCE 005717618-01, PDC Light Curves

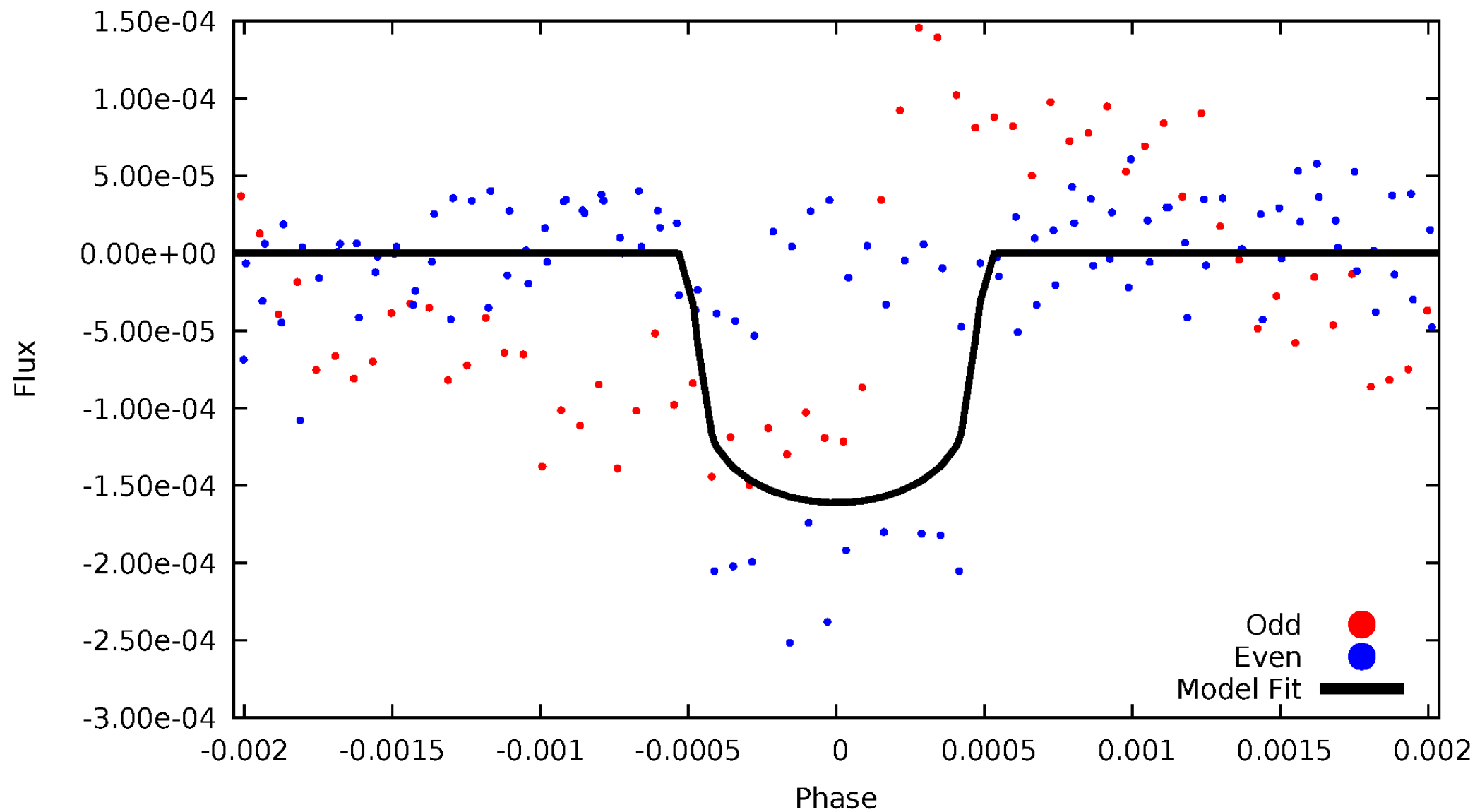


TCE 005717618-01



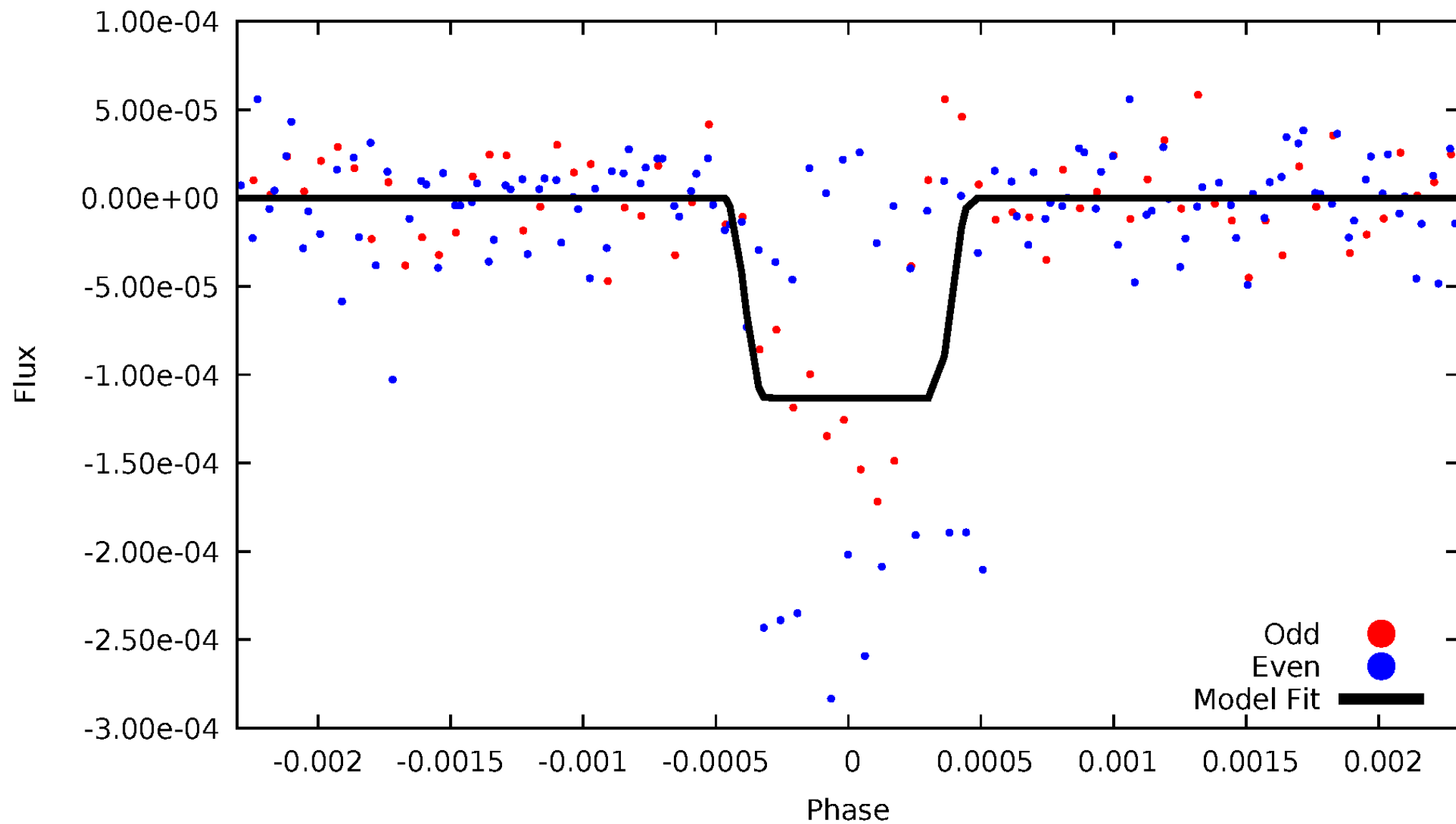
DV Odd/Even

TCE 005717618-01



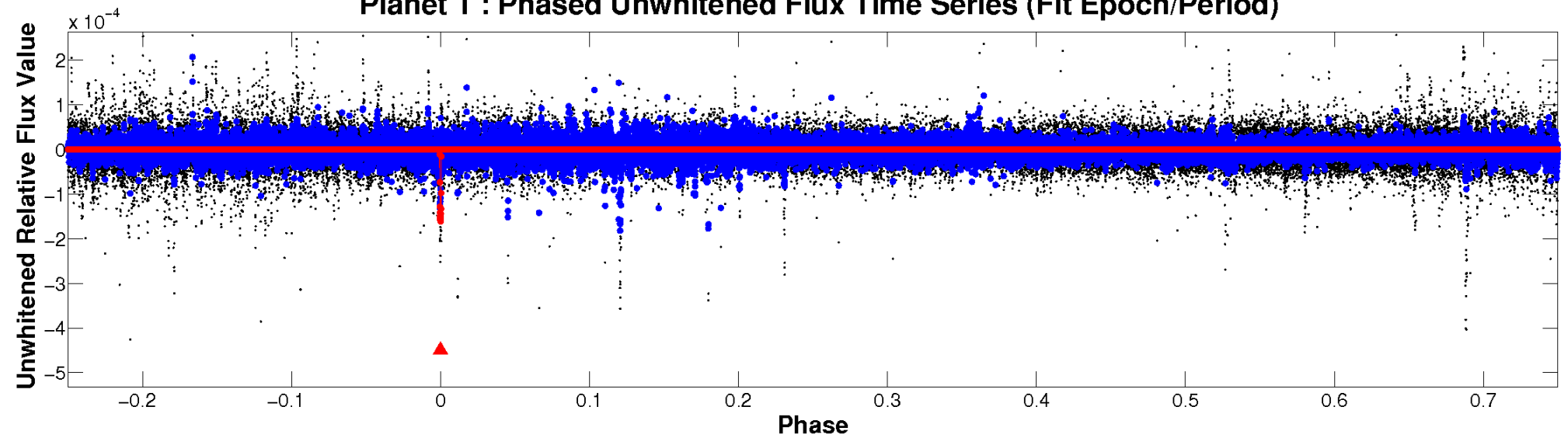
ALT Odd/Even

TCE 005717618-01

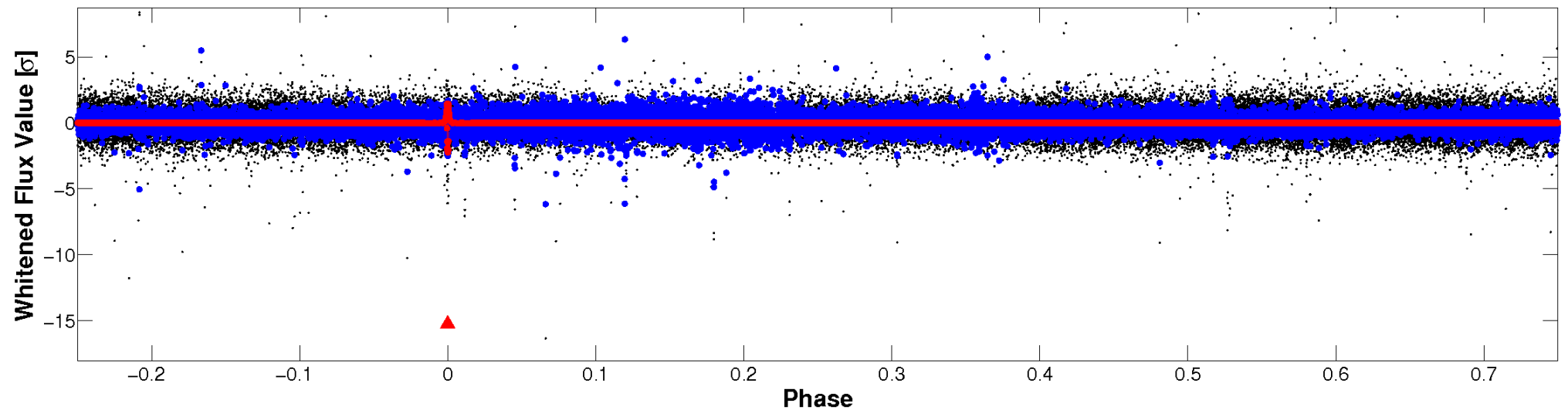


Non-Whitened Vs. Whitened Light Curve

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

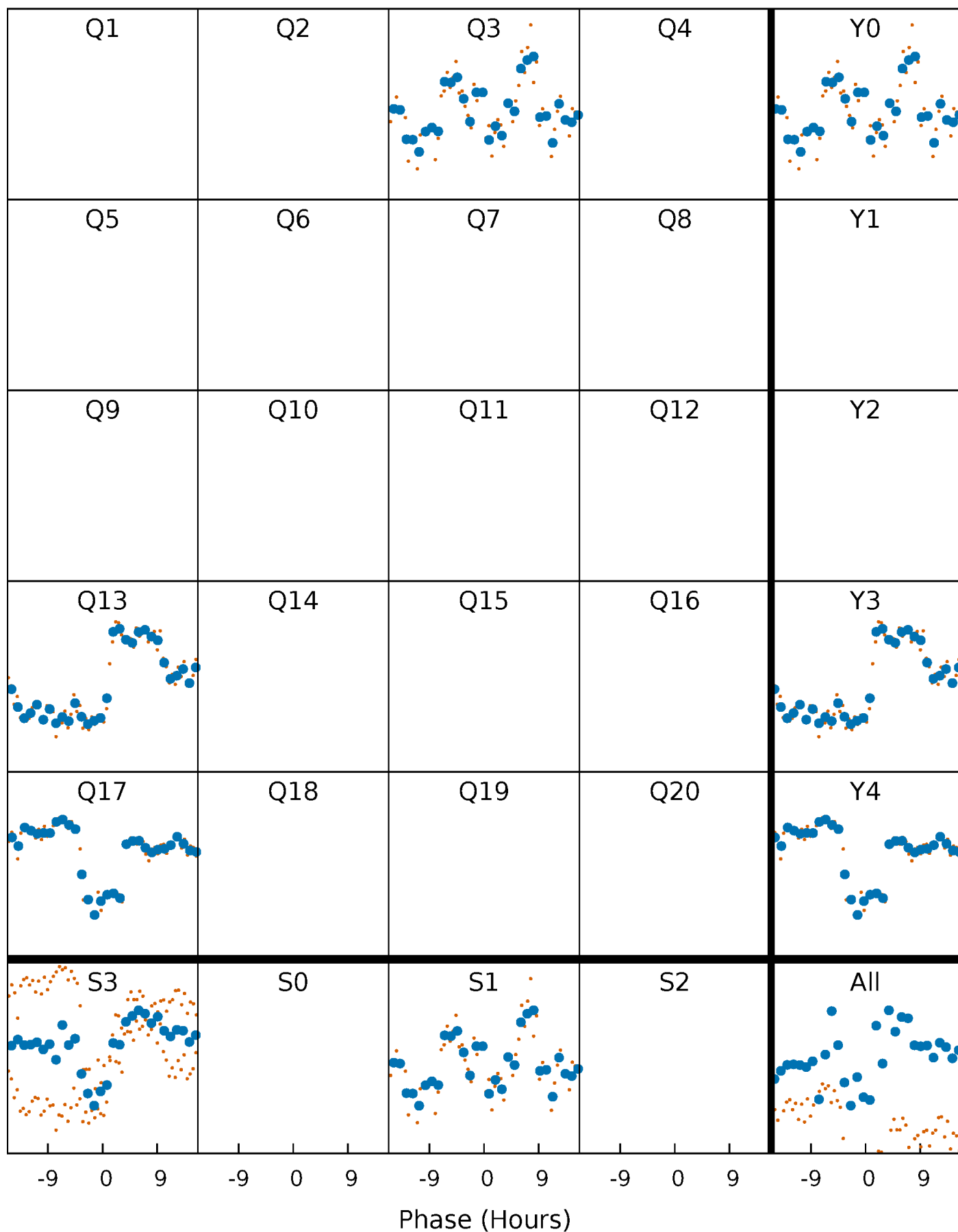


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



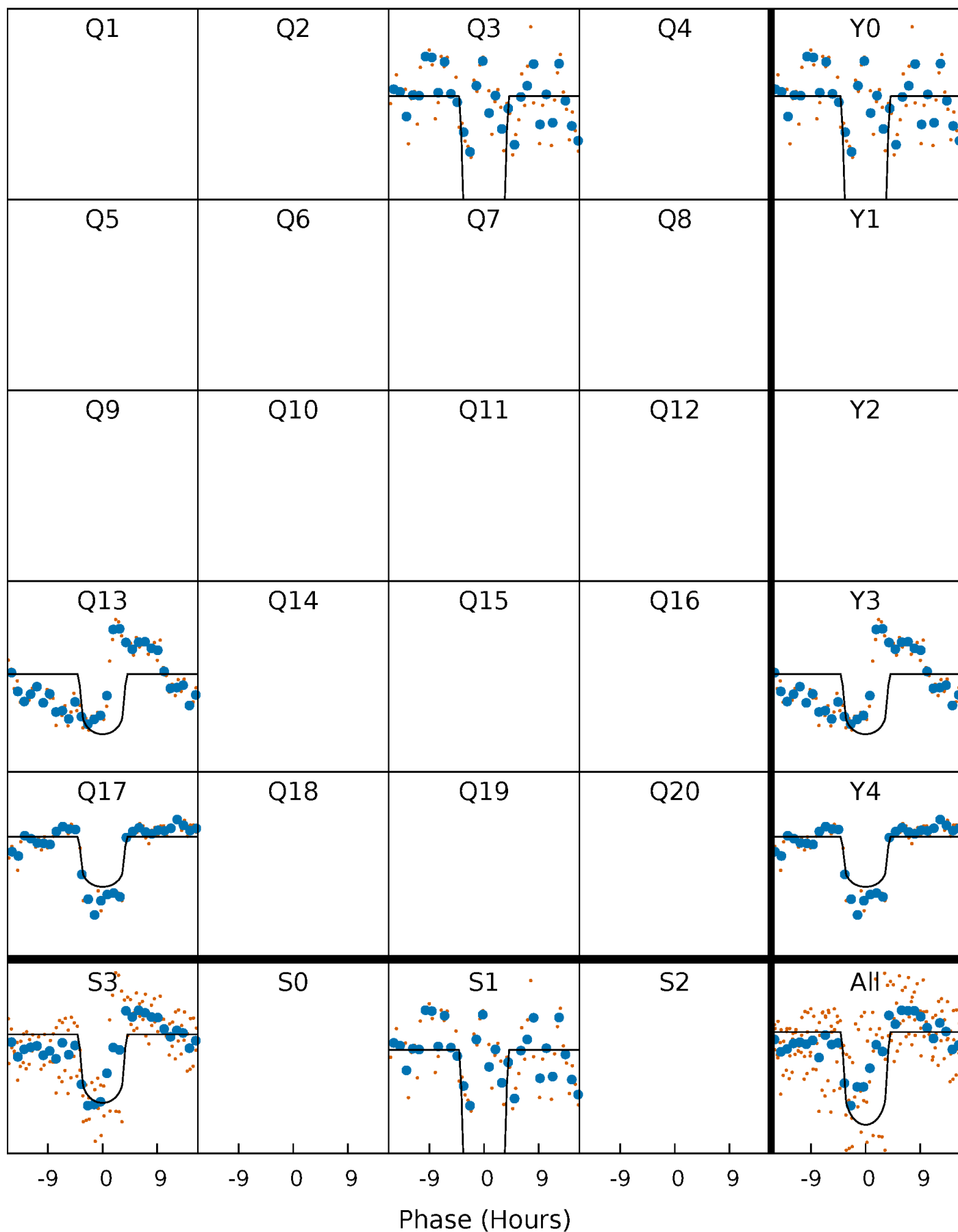
PDC Quarter-Phased Transit Curves

TCE 005717618-01 P=321.210898 Days $T_0=284.895011$ (BKJD)



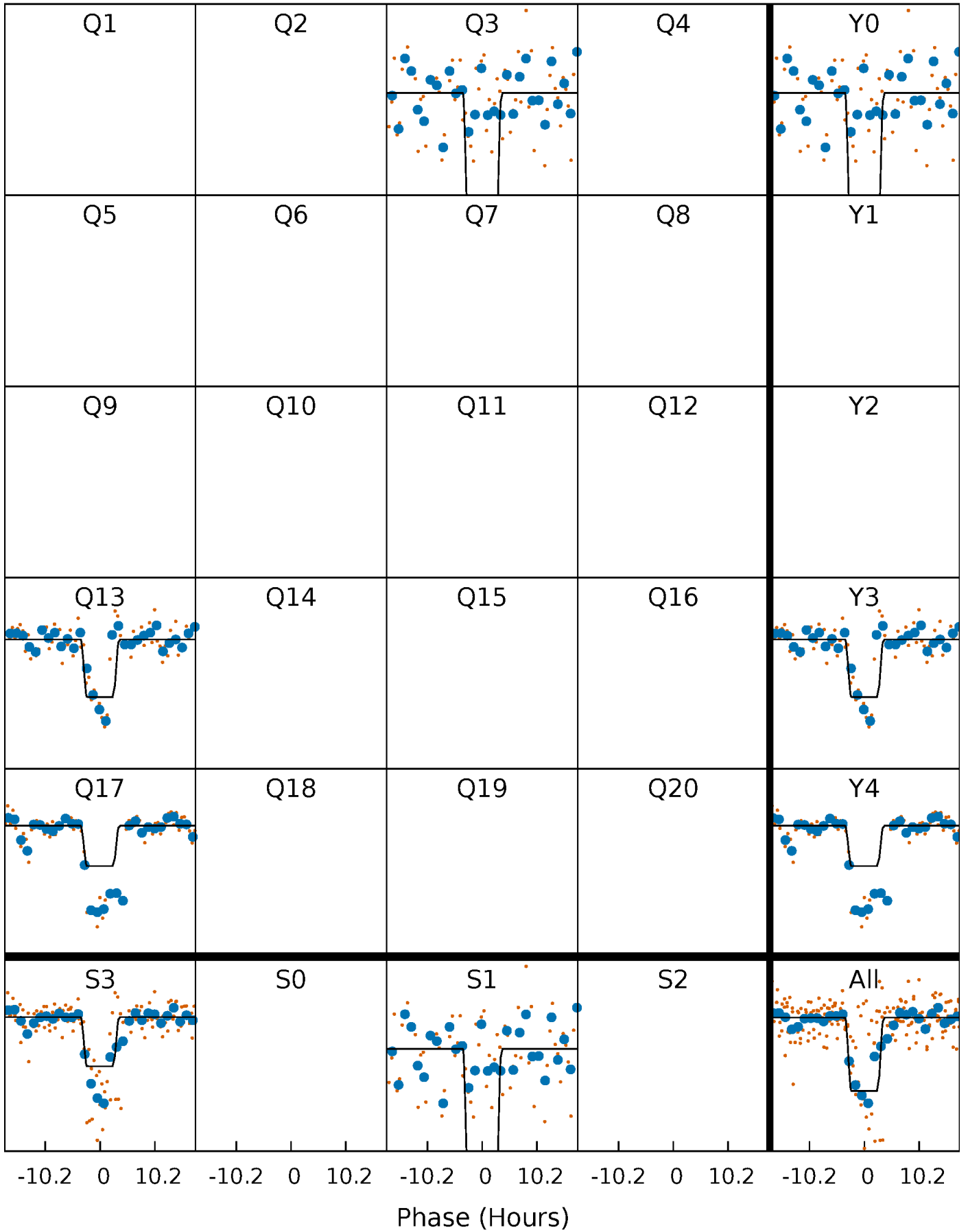
DV Quarter-Phased Transit Curves

TCE 005717618-01 P=321.210898 Days $T_0=284.895011$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

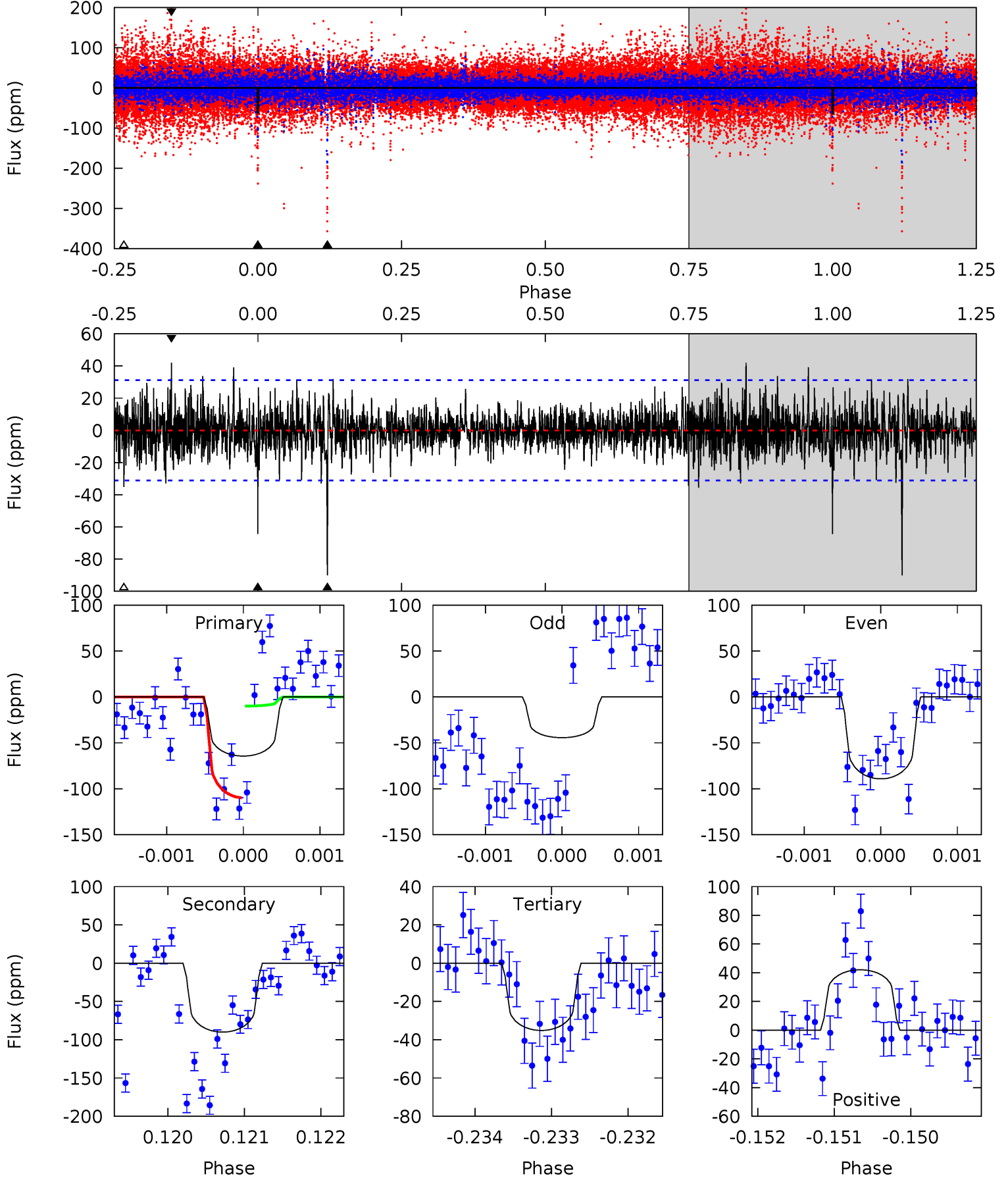
TCE 005717618-01 P=321.208752 Days $T_0=284.873753$ (BKJD)



DV Model-Shift Uniqueness Test

005717618-01, P = 321.210898 Days, E = 284.895011 Days

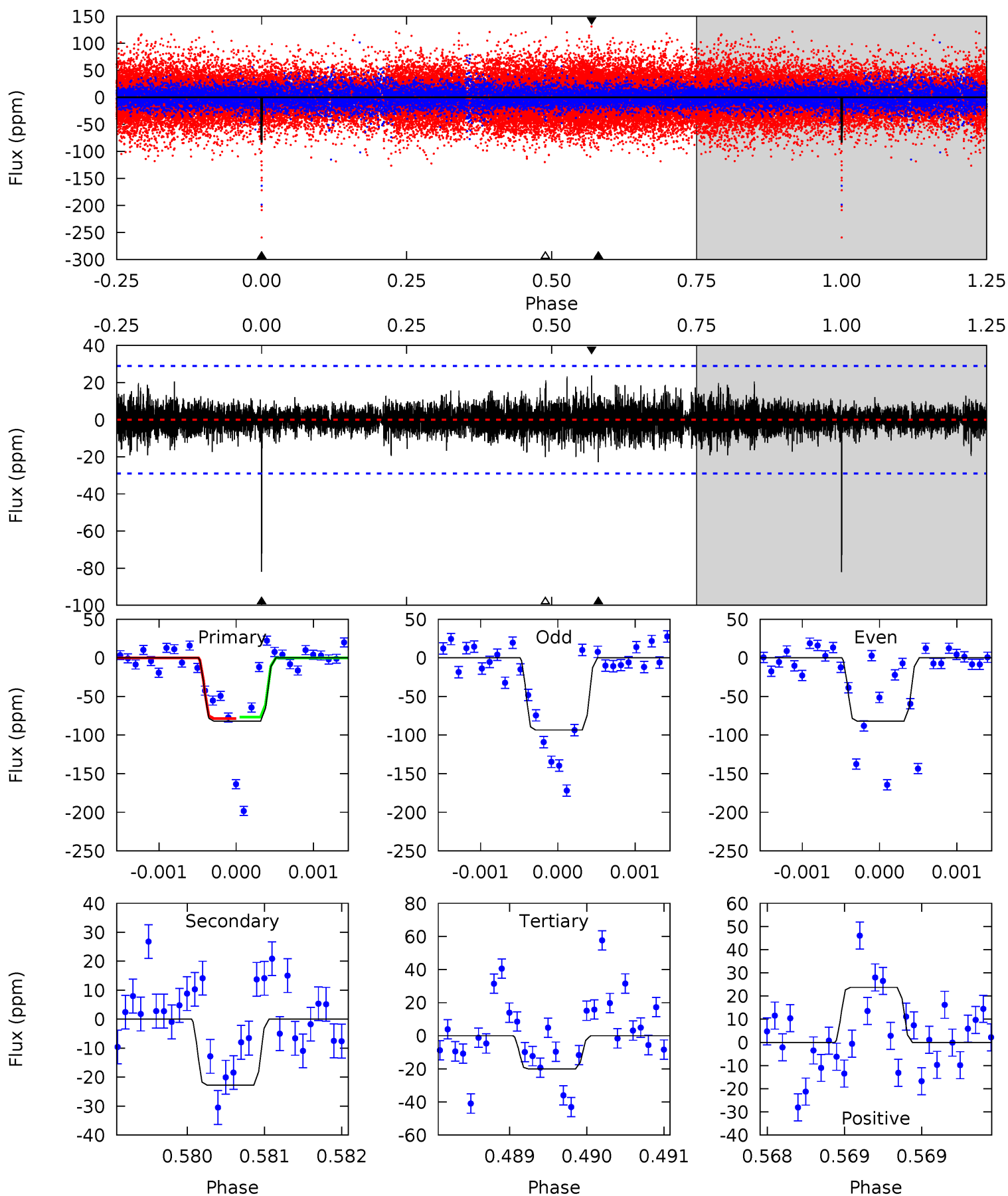
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	15.7	6.14	7.35	5.45	3.28	1.52	5.11	3.90	9.59	8.38	4.02	2.06	0.32	8.84



Alt Model-Shift Uniqueness Test

005717618-01, P = 321.208752 Days, E = 284.873753 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.4	4.28	3.78	4.47	5.46	3.30	1.02	11.7	11.0	0.50	-0.18	1.15	1.20	0.22	0.20



Stellar Parameters For KIC 005717618

	$T_{\text{eff}}(K)$	$\log(g)$	[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 005717618-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-90 ± 6	$1.52^{+0.22}_{-0.20}$	371^{+17}_{-16}	4875^{+326}_{-286}	18267^{+5933}_{-4547}
Alt.	-23 ± 5	$1.15^{+0.24}_{-0.20}$	372^{+18}_{-18}	4129^{+376}_{-298}	7814^{+4422}_{-2747}

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

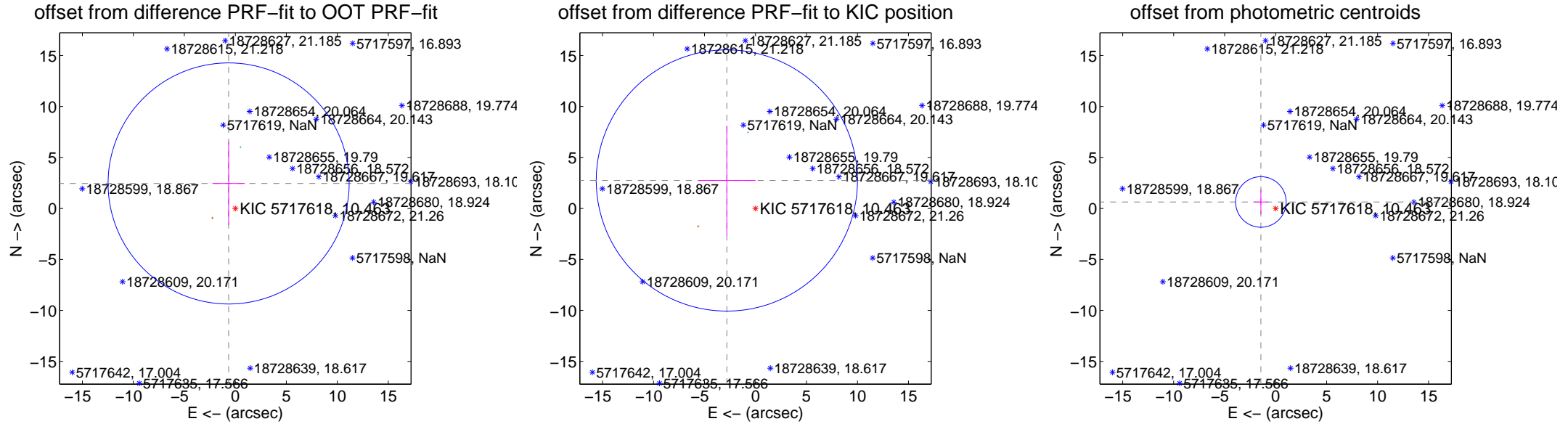
DV Centroid Data

Supplemental centroid analysis for 005717618-01. **Kepler magnitude: 10.46.** Transit SNR 13.49

There are 1 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 3.47 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	2.538 ± 3.941	0.64	0.660 ± 1.591	2.450 ± 4.059
PRF-fit source offset from KIC position	3.927 ± 4.270	0.92	2.809 ± 2.825	2.744 ± 5.384
photometric centroid source offset	1.58 ± 0.83	1.91	1.45 ± 0.73	0.63 ± 1.20



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.

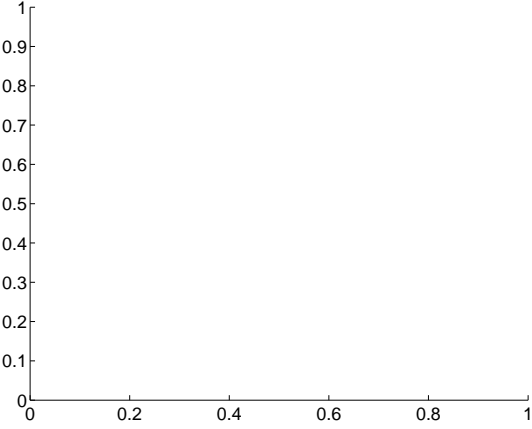
Q1 no difference image



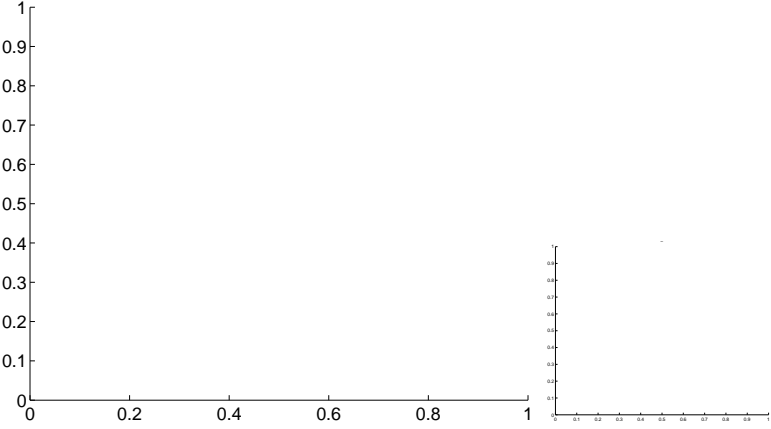
Q1 no OOT image



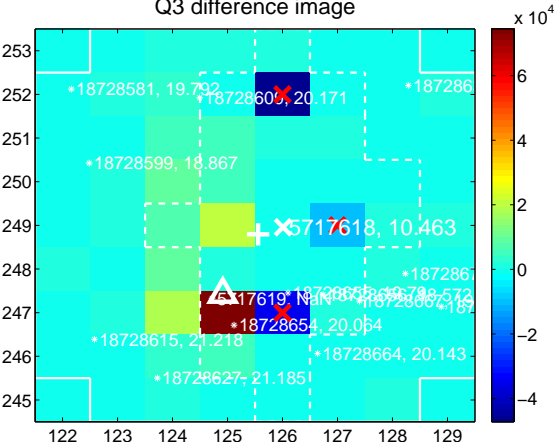
Q2 no difference image



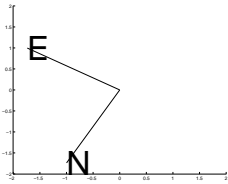
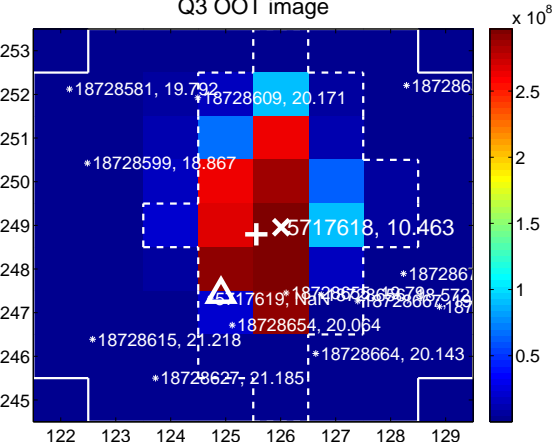
Q2 no OOT image



Q3 difference image



Q3 OOT image



Q4 no difference image



Q4 no OOT image



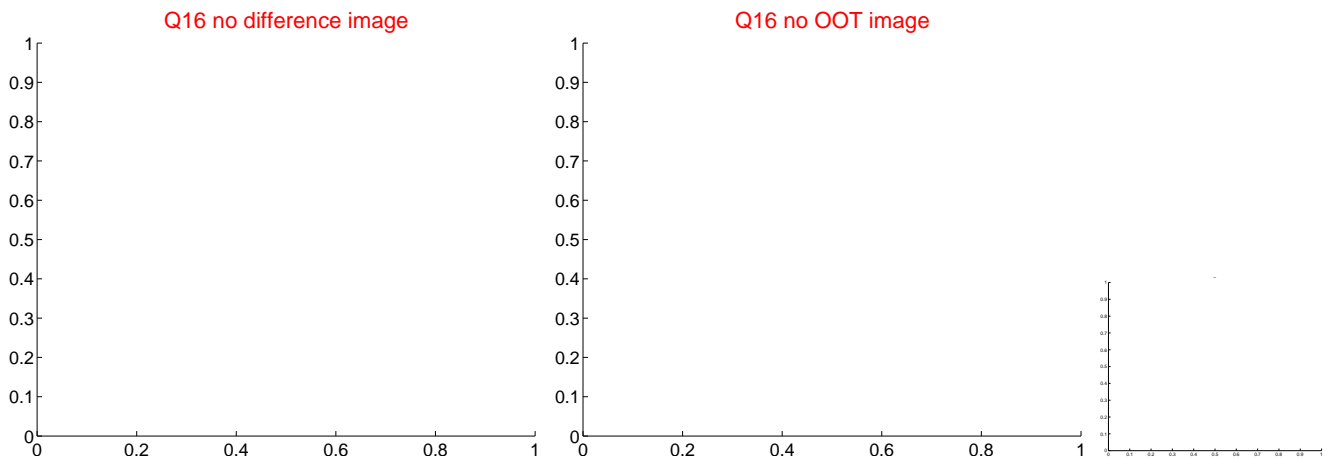
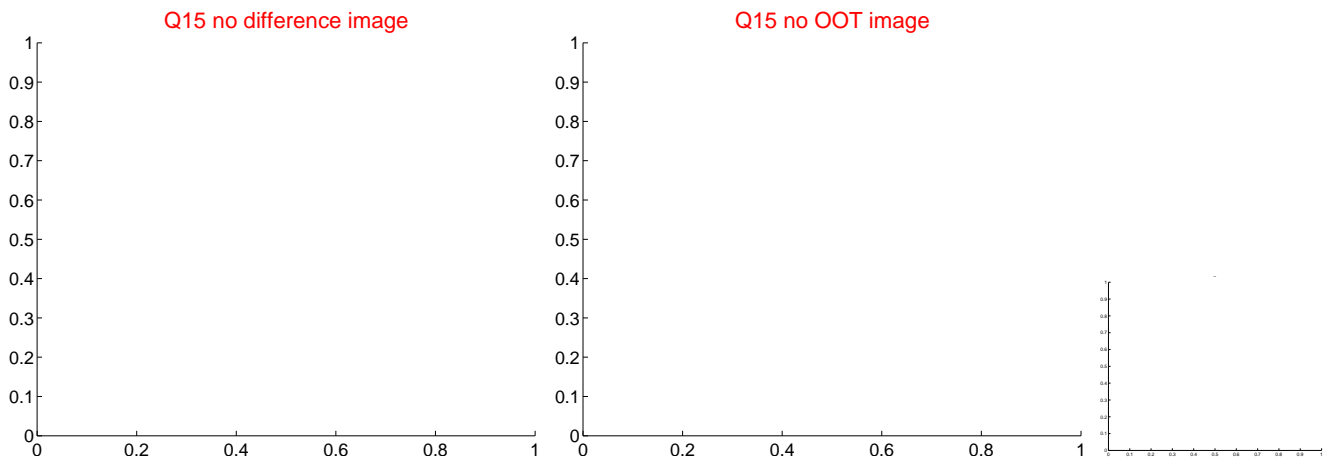
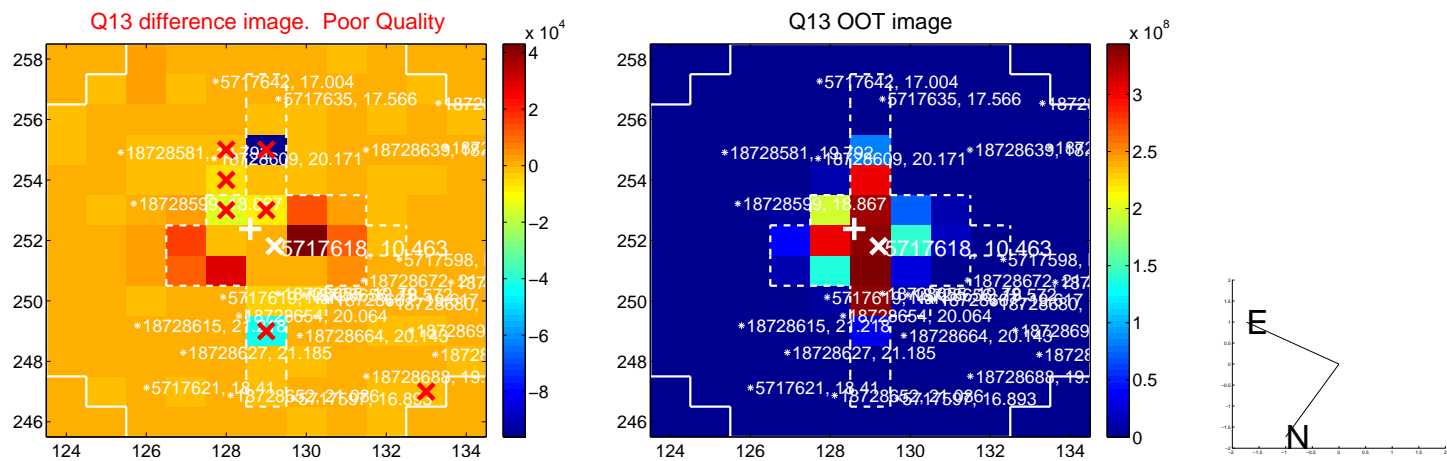
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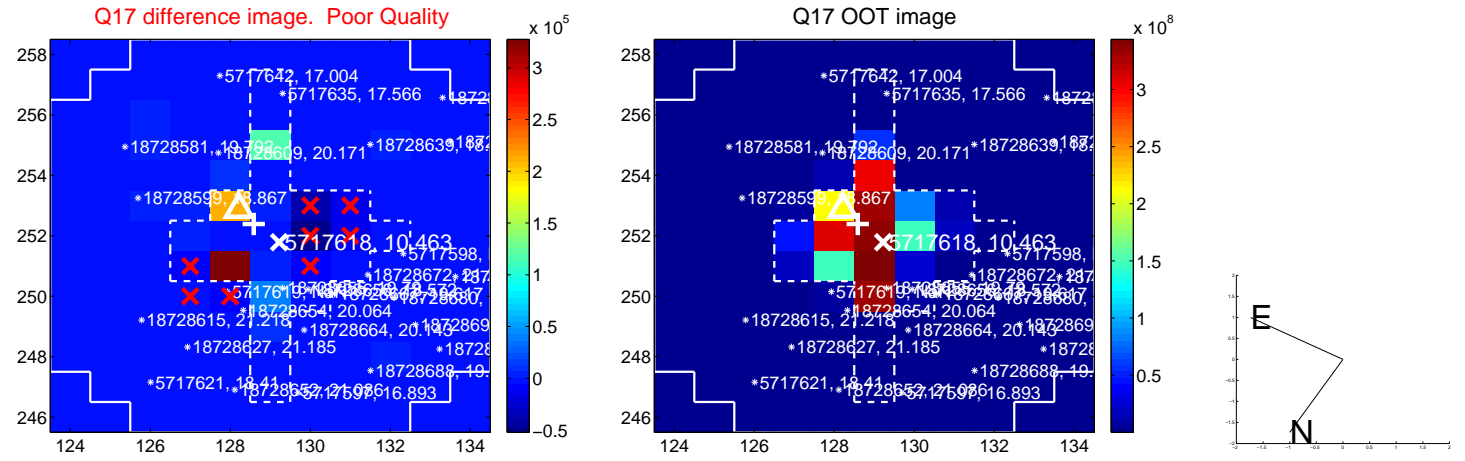
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



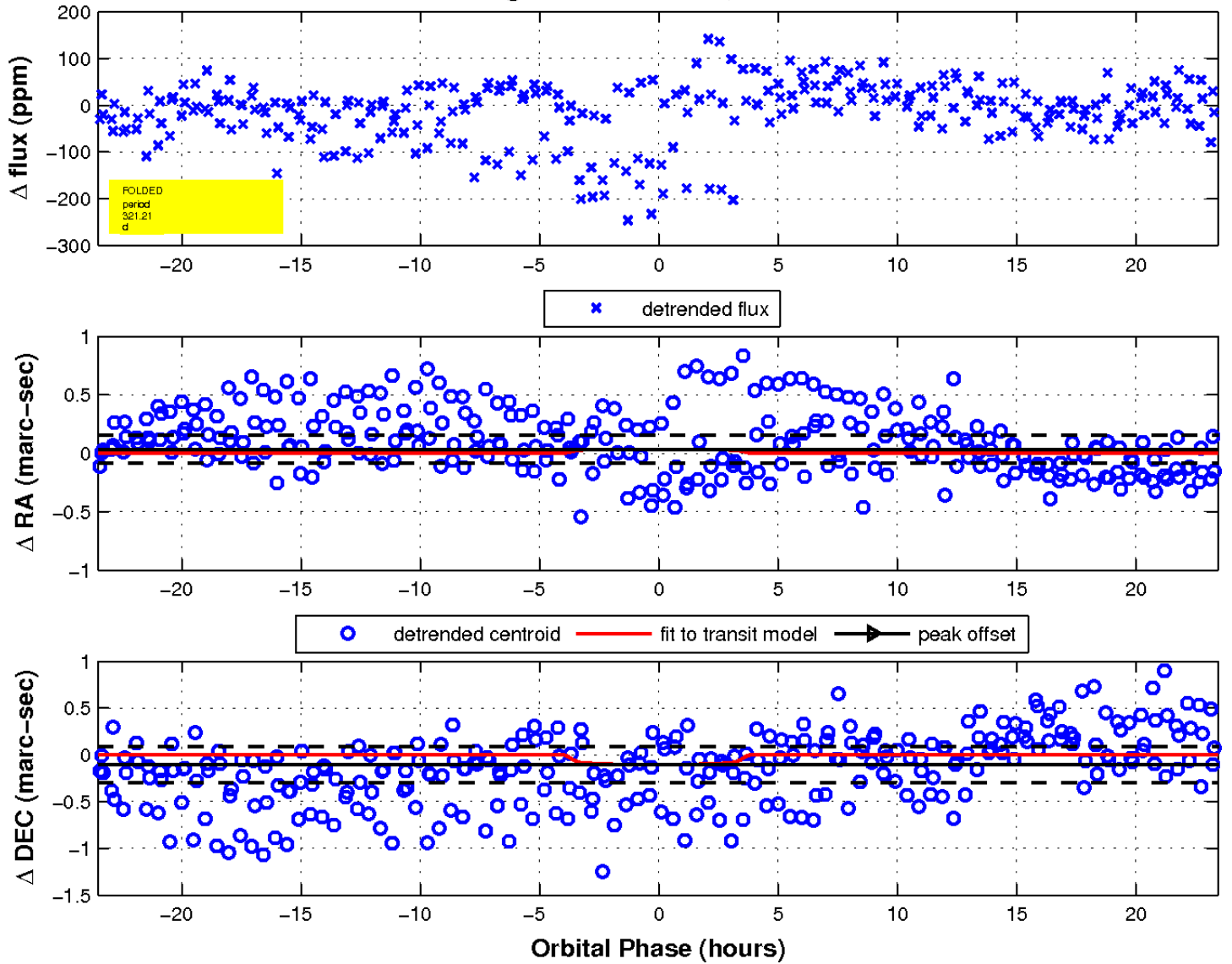
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



This astronomical image shows a galaxy cluster with a grid overlay. The grid is composed of blue lines forming a square pattern. A red horizontal line is drawn across the middle of the image. The background is black, and the galaxies are visible as bright, orange-yellow spots. The central galaxy is the largest and brightest. The grid lines are spaced at regular intervals. The red line is positioned at the center of the image.

Declination