

KIC 008295605

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})
008295605-01	OBS	No	374.246958	259.828254	2000.3	53.906	12.2	17.3	1.05	5824	8.99	1.06

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008295605-01	OBS	FP	0.00	1	0	0	1	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—EPHEM_MATCH

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.

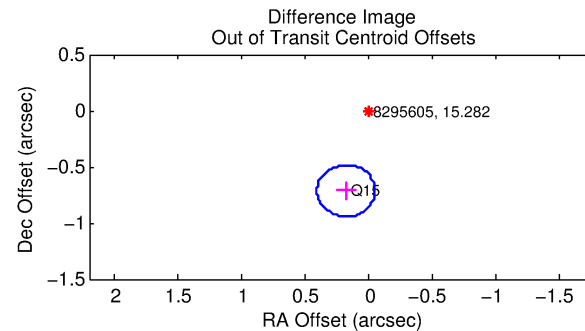
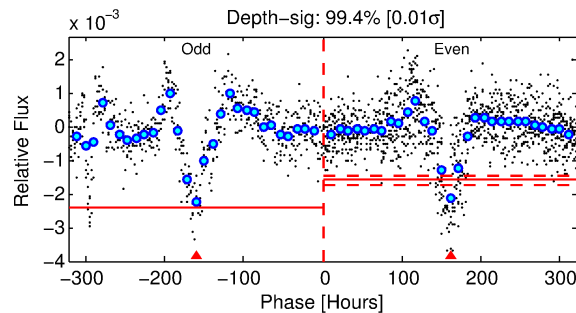
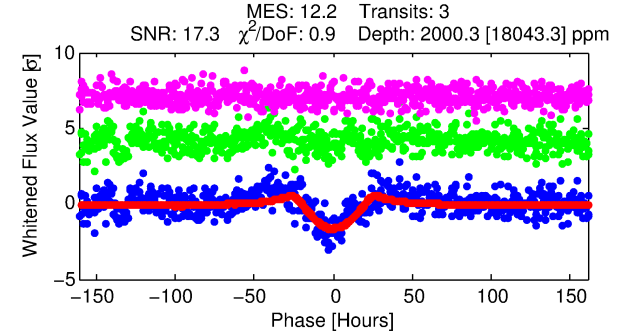
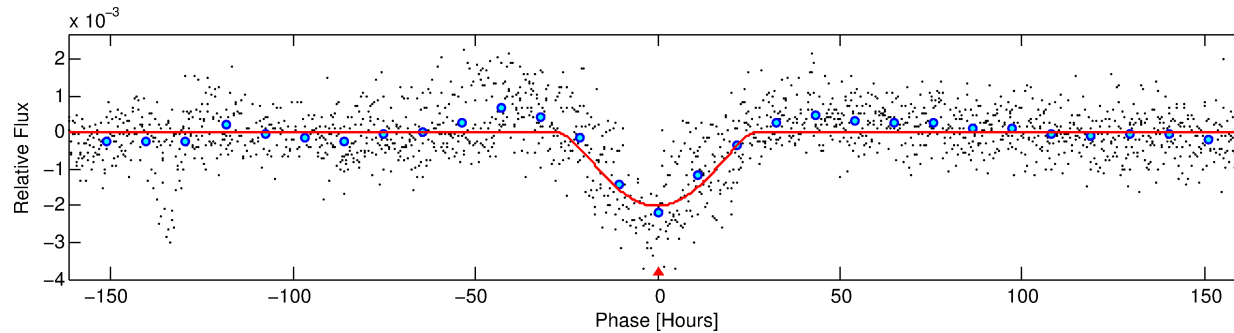
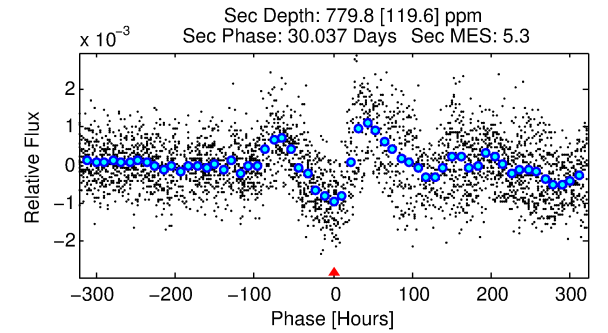
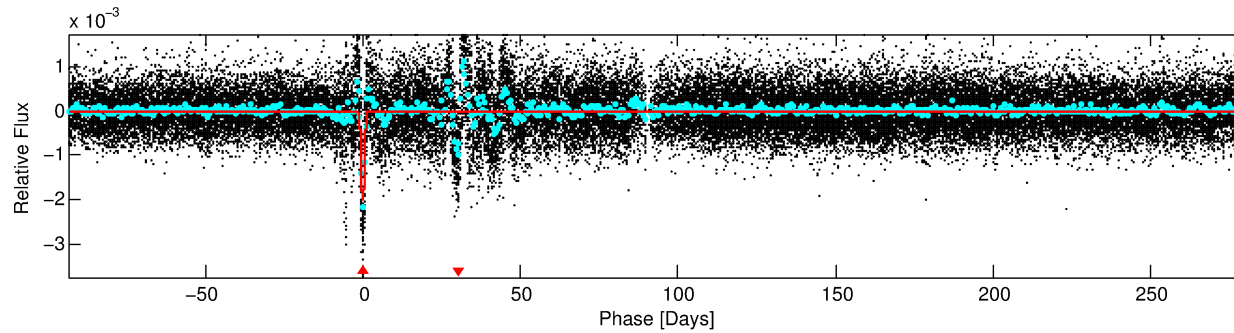
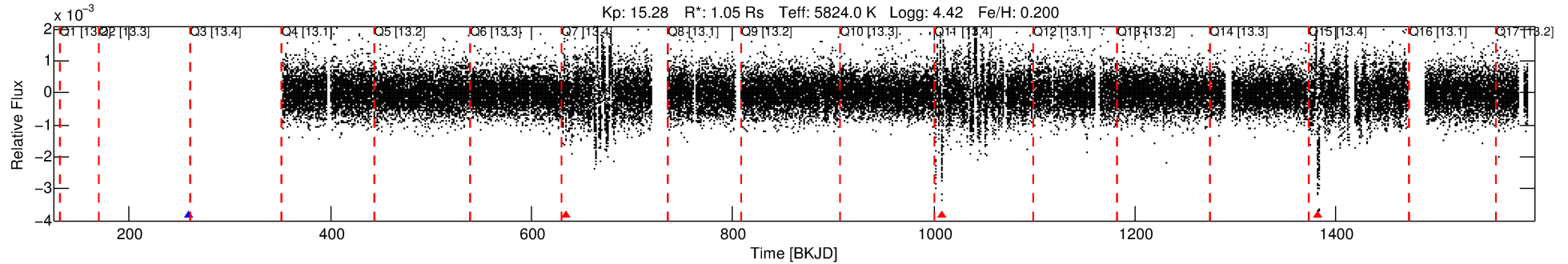
Ephemeris Match Information For 008295605-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist (\prime)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
008295605-01	8295605	008295843-01	8295843	1:1	228.3	-57	-3	15.96	15.28	1.41	Col-Anomaly	1	0.54	0.84

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 8295605 Candidate: 1 of 1 Period: 374.247 d



DV Fit Results:

Period = 374.24696 [0.03337] d
Epoch = 259.8283 [0.0731] BKJD
Rp/R* = 0.0783 [0.1087]
a/R* = 21.42 [6.28]
b = 1.00 [0.32]
Seff = 1.06 [0.41]
Teq = 259 [25] K
Rp = 8.99 [12.76] Re
a = 1.0371 [0.2592] AU
Ag = 5709.93 [16002.69] [0.36σ]
Teffp = 3478 [2420] K [1.33σ]

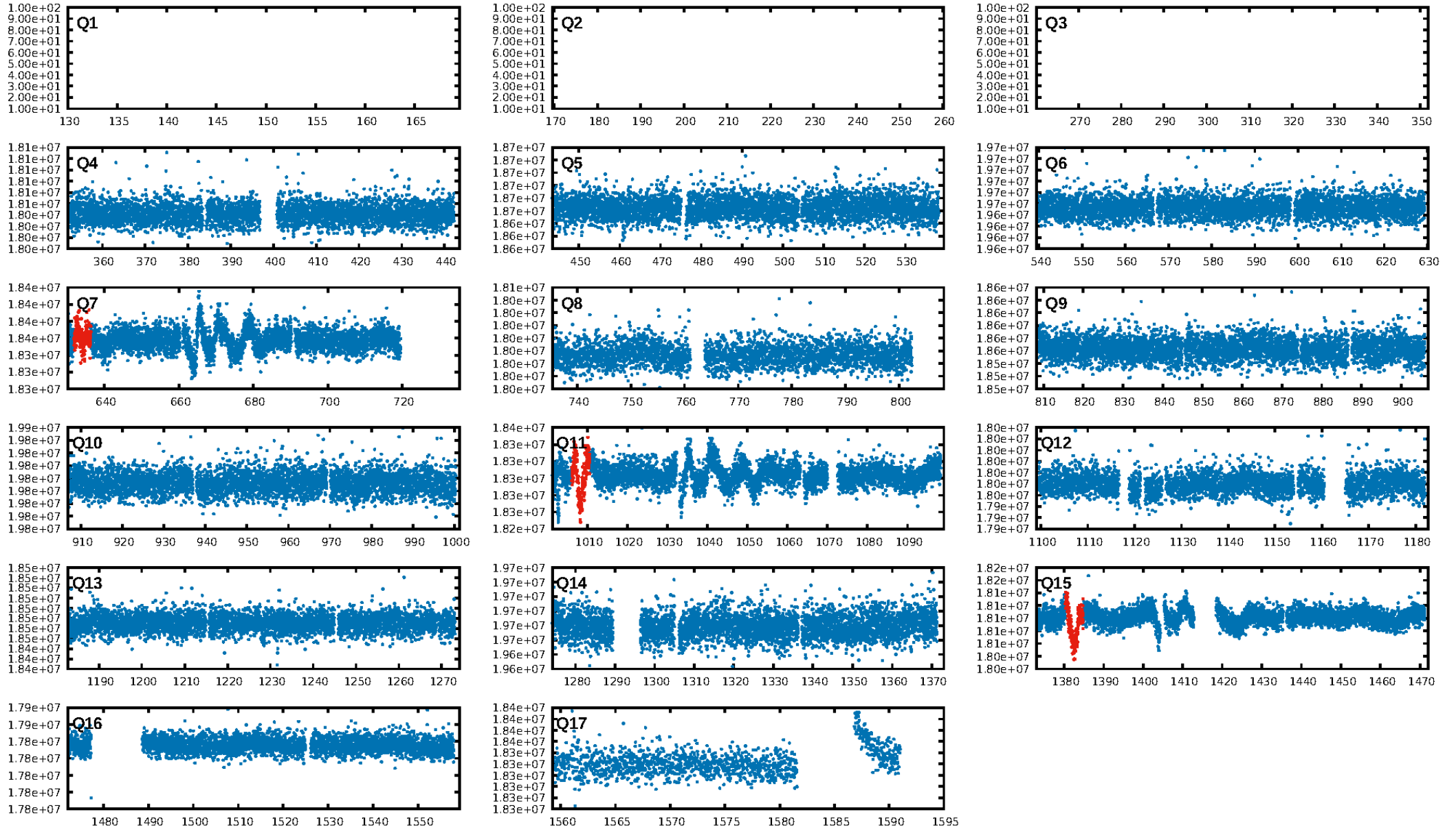
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 9.45e-22
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 0.3413
Centroid-sig: 1.6%
Centroid-so: 2.116 arcsec [1.88σ]
OotOffset-rm: 0.738 arcsec [9.68σ]
KicOffset-rm: 0.669 arcsec [8.78σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [1/1]

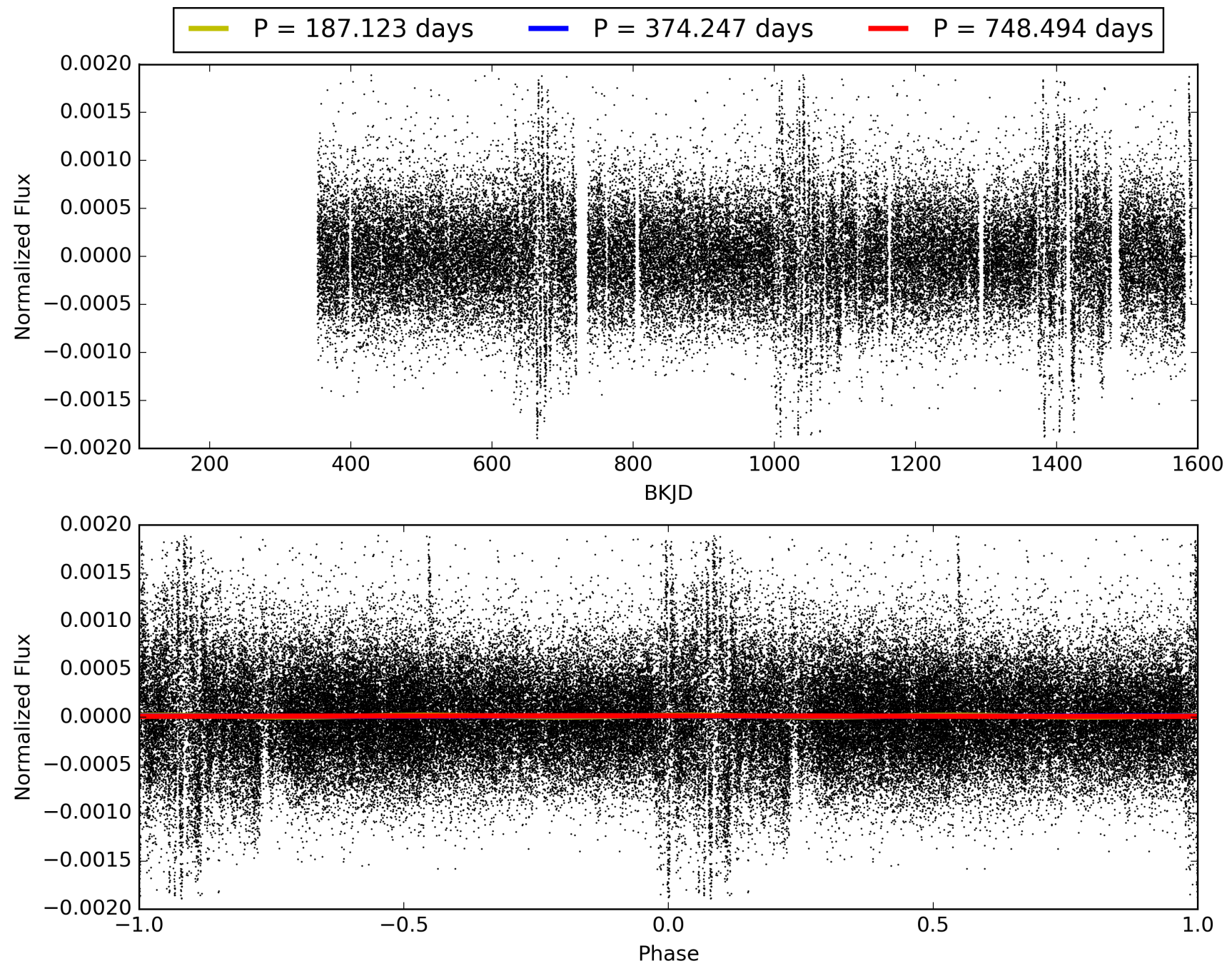
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:43:03 Z

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

TCE 008295605-01, PDC Light Curves

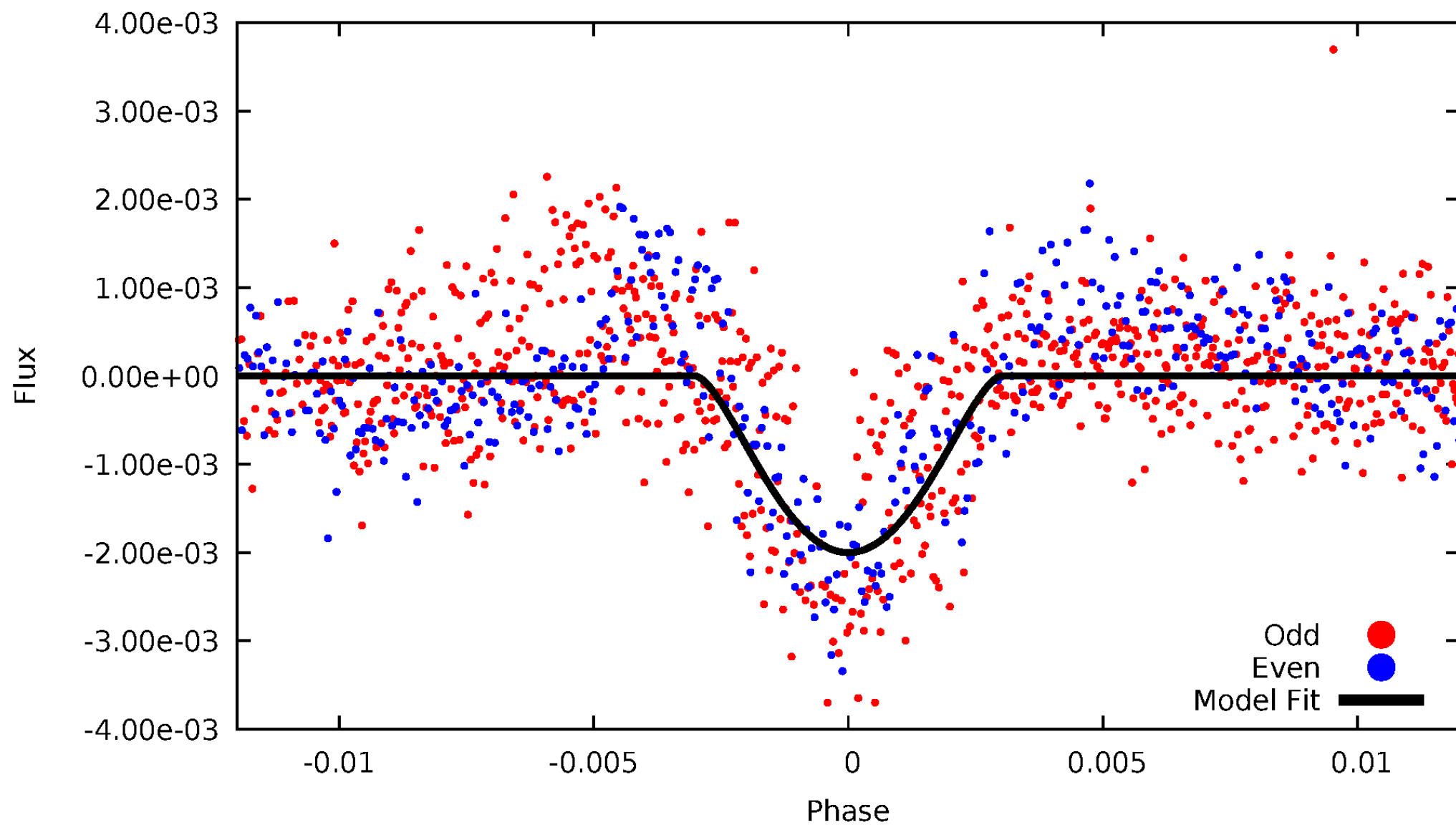


TCE 008295605-01



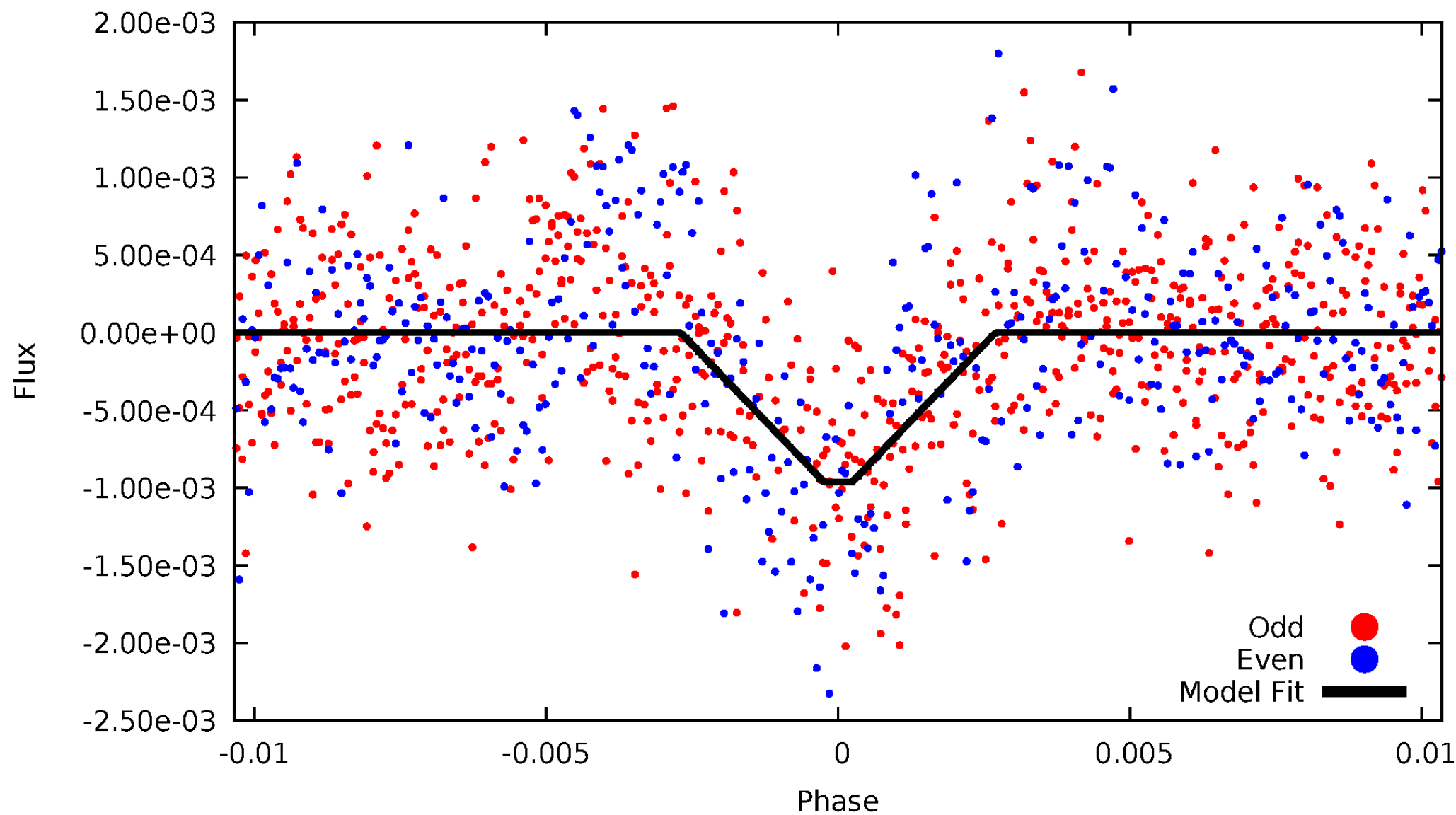
DV Odd/Even

TCE 008295605-01



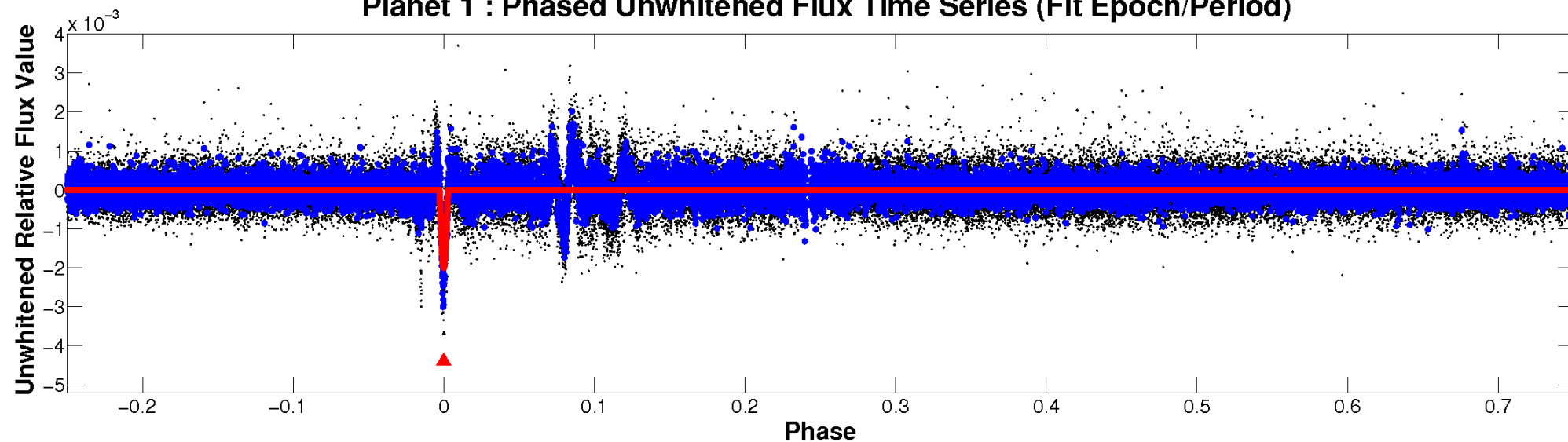
ALT Odd/Even

TCE 008295605-01

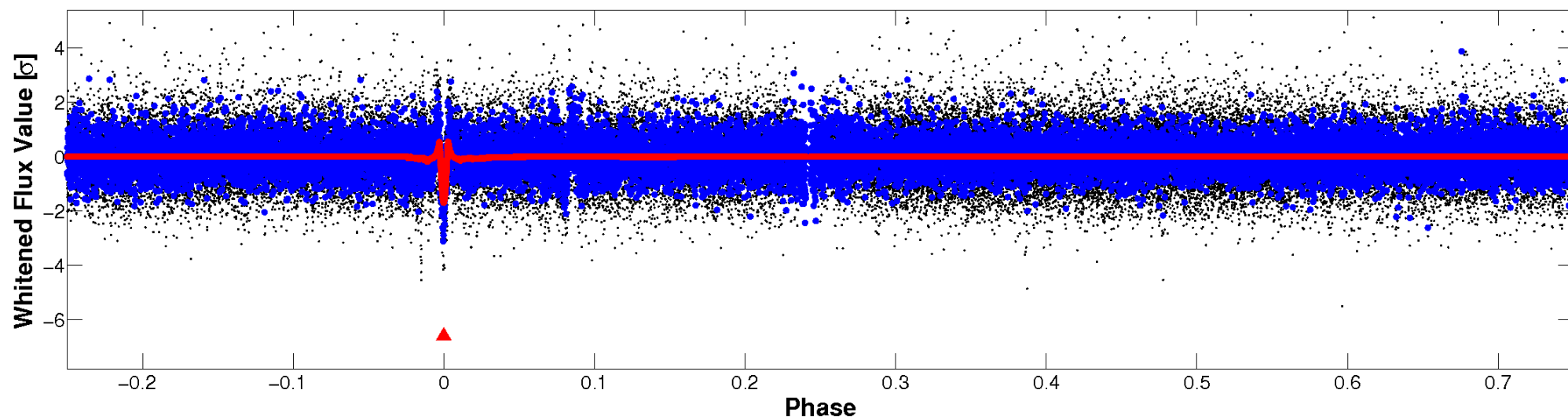


Non-Whitened Vs. Whitened Light Curve

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

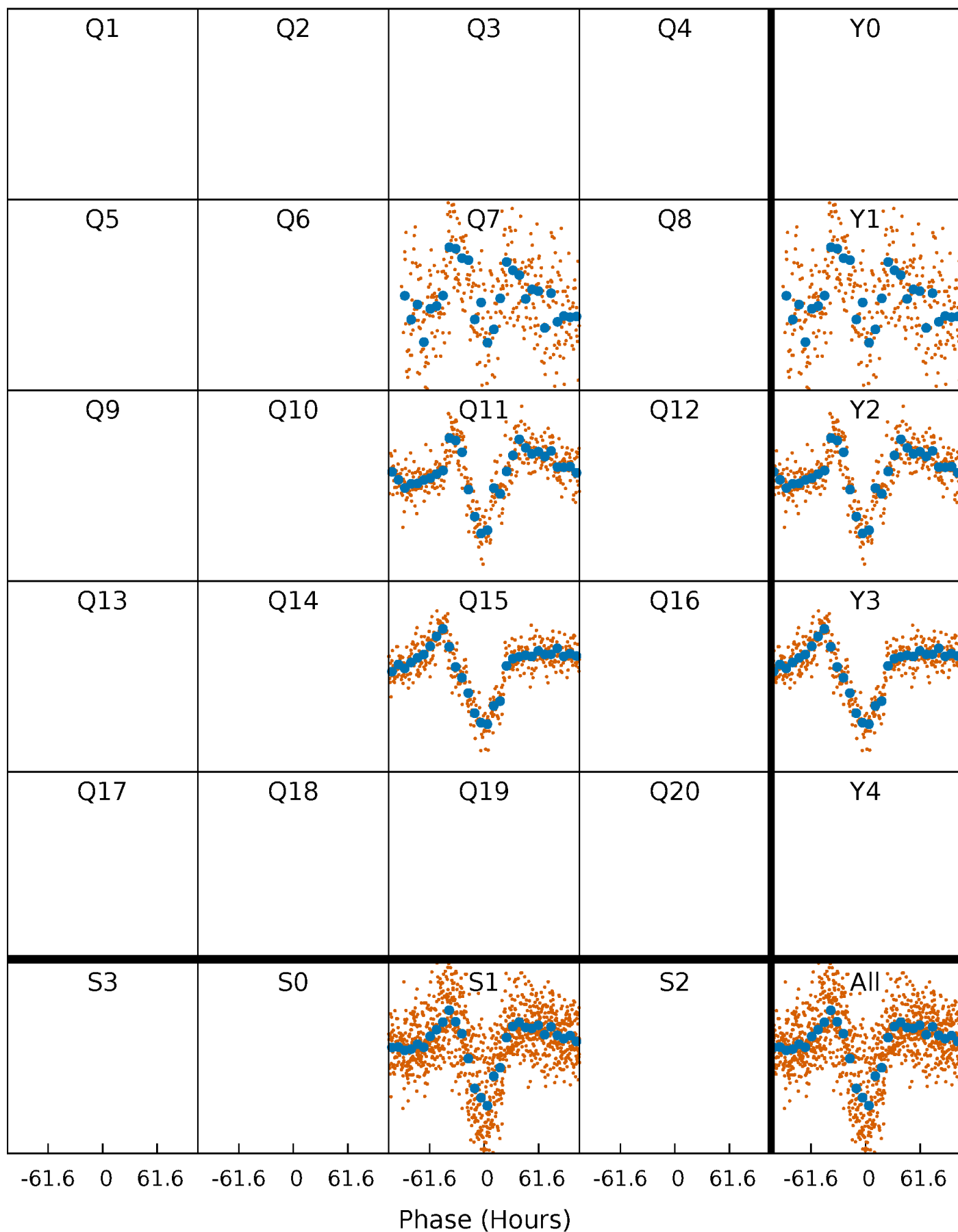


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



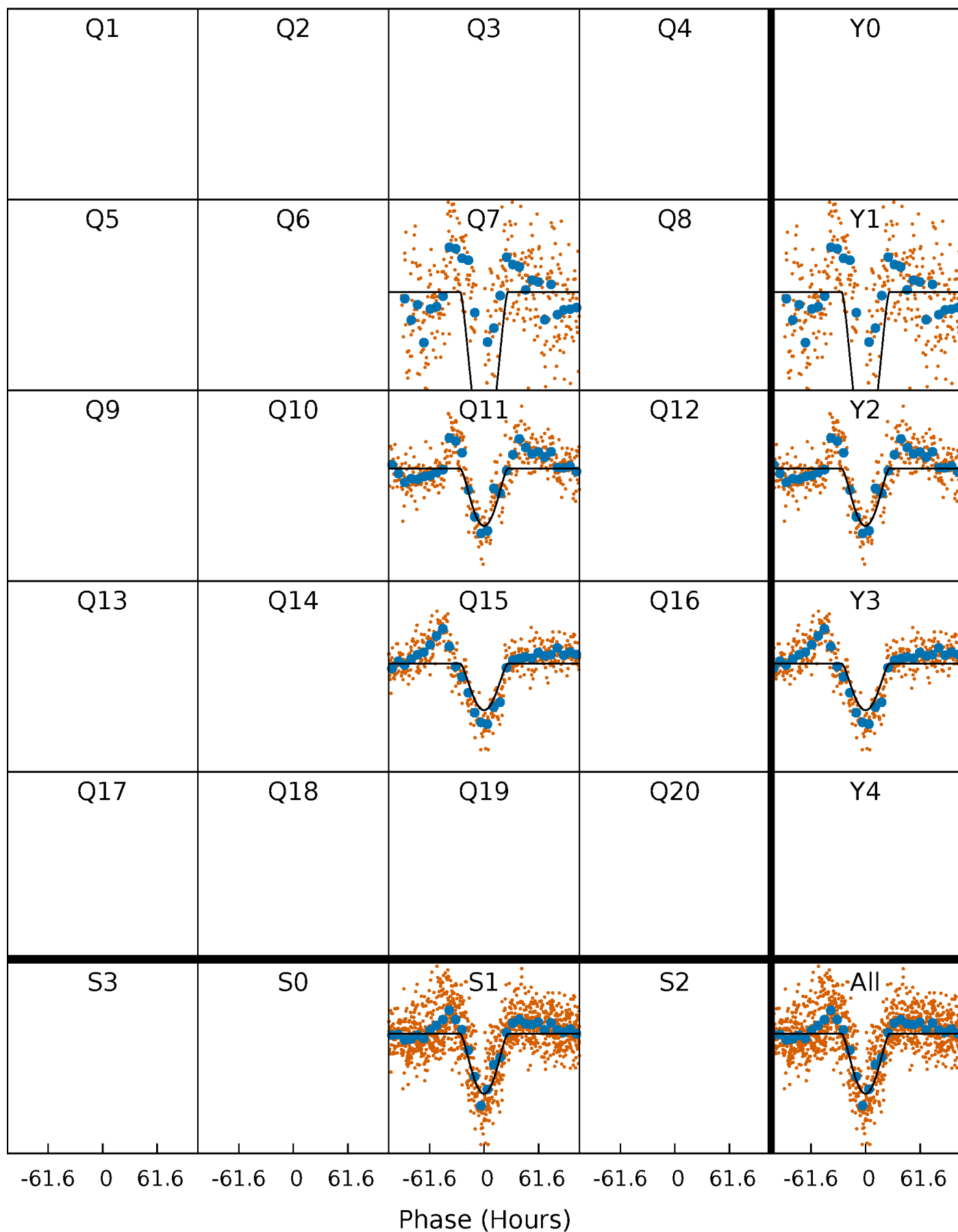
PDC Quarter-Phased Transit Curves

TCE 008295605-01 P=374.246958 Days $T_0=259.828254$ (BKJD)



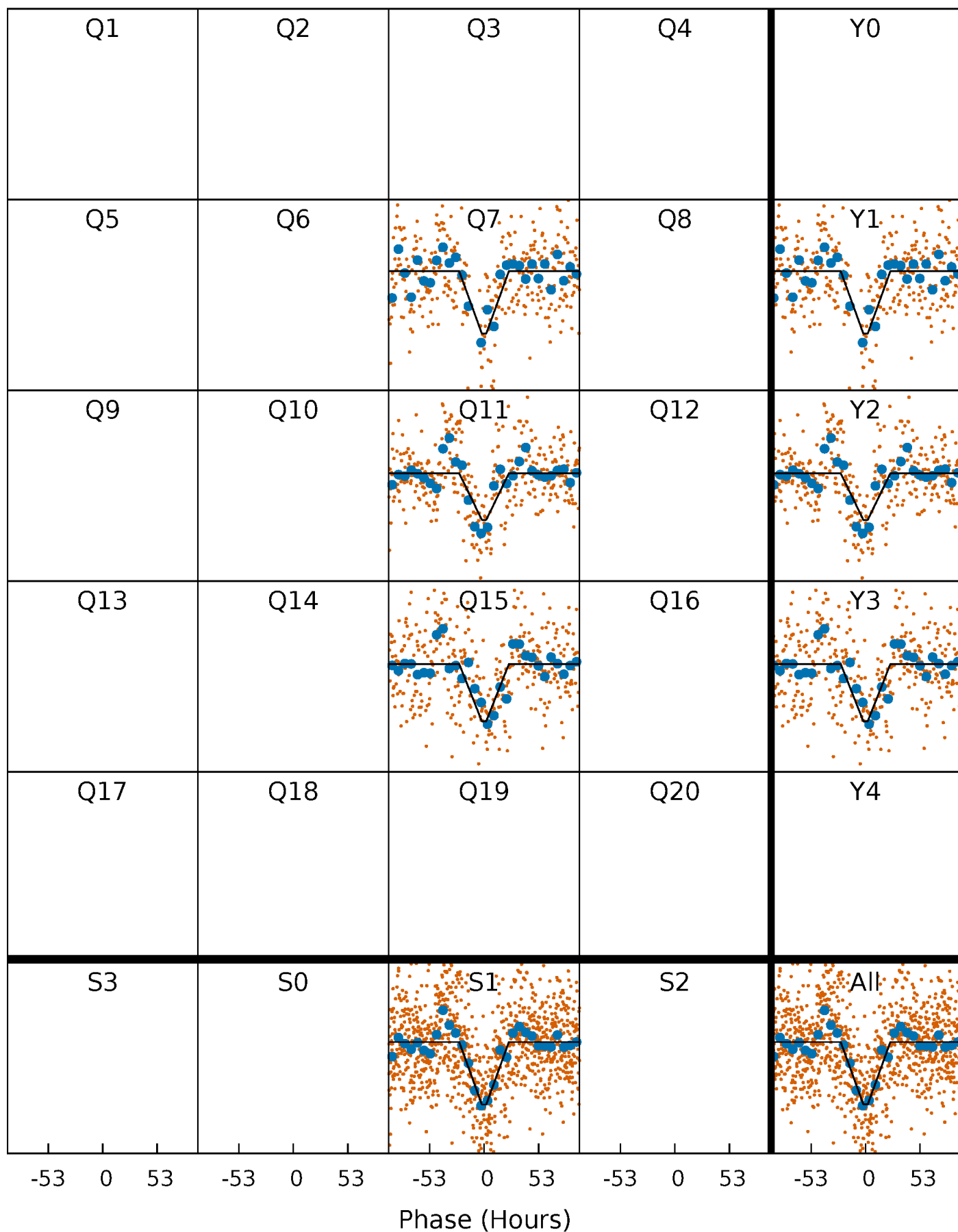
DV Quarter-Phased Transit Curves

TCE 008295605-01 $P=374.246958$ Days $T_0=259.828254$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

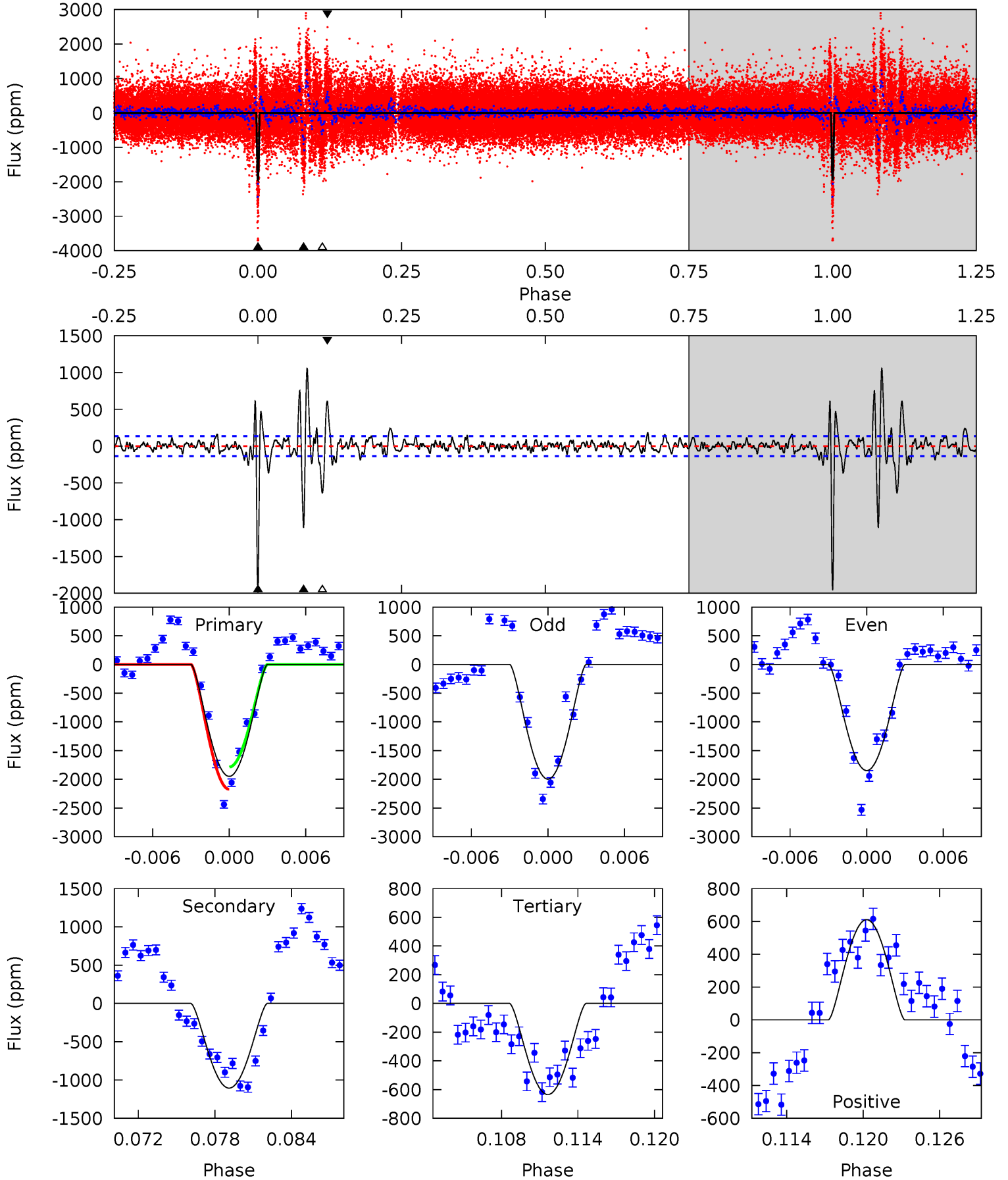
TCE 008295605-01 P=374.036316 Days $T_0=260.260940$ (BKJD)



DV Model-Shift Uniqueness Test

008295605-01, P = 374.246958 Days, E = 259.828254 Days

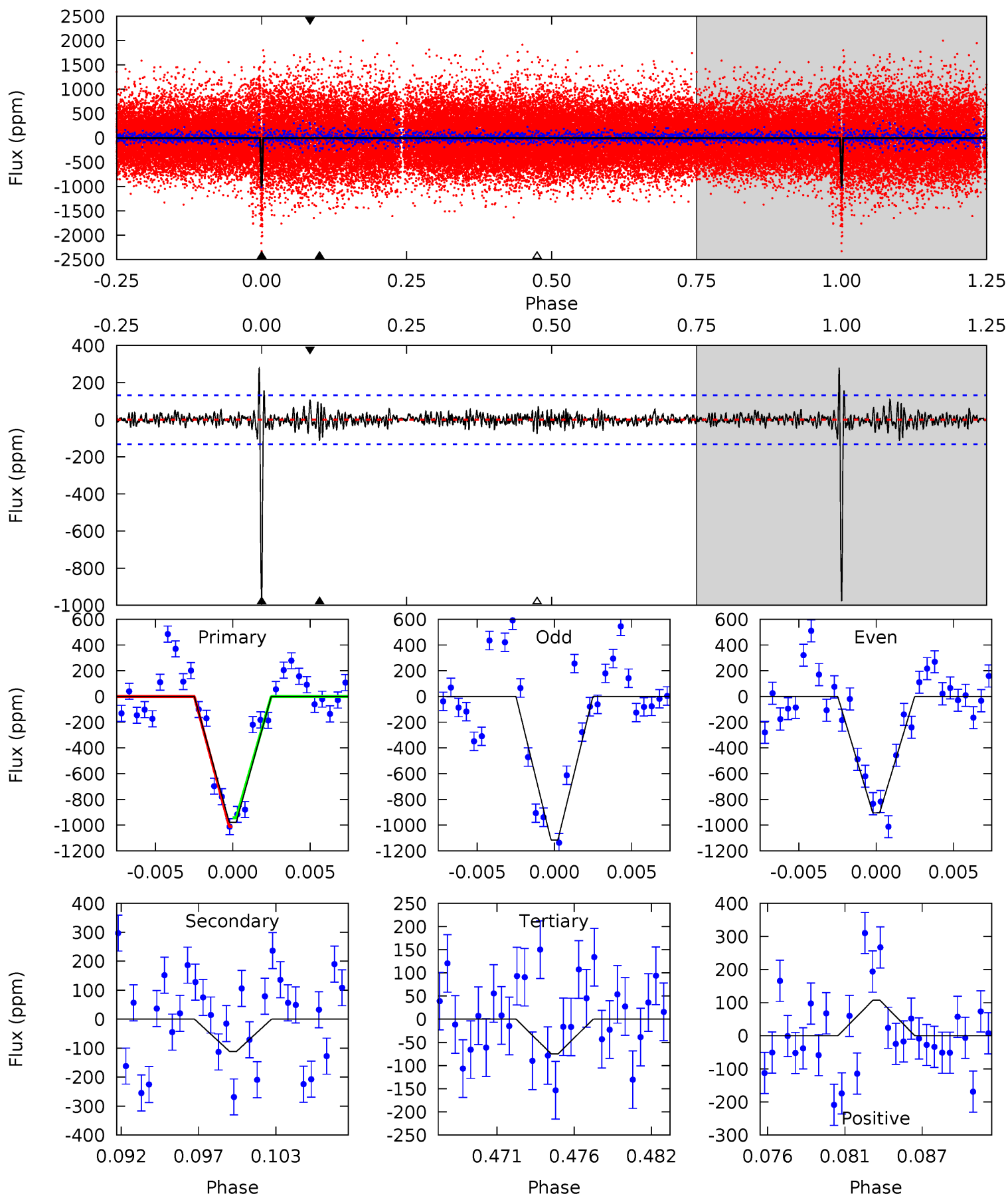
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
73.7	41.8	24.0	23.1	5.12	2.75	4.05	49.7	50.6	17.8	18.7	2.69	0.86	0.35	7.23



Alt Model-Shift Uniqueness Test

008295605-01, P = 374.036316 Days, E = 260.260940 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.1	4.34	2.92	4.18	5.14	2.78	0.86	35.2	33.9	1.42	0.16	3.93	1.05	0.22	1.32



Stellar Parameters For KIC 008295605

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5824^{+162}_{-203}	$4.420^{+0.084}_{-0.196}$	$0.200^{+0.200}_{-0.300}$	$1.052^{+0.315}_{-0.135}$	$1.062^{+0.125}_{-0.125}$	$1.284^{+0.462}_{-0.661}$
	+3%/-3%	+2%/-4%	+100%/-150%	+30%/-13%	+12%/-12%	+36%/-51%
Source	KIC0	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 008295605-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1106 ± 26	$13.34^{+11.58}_{-8.70}$	366^{+27}_{-19}	3612^{+1759}_{-621}	3733^{+27084}_{-2675}
Alt.	-111 ± 26	$10.59^{+10.07}_{-7.14}$	366^{+27}_{-21}	2745^{+1103}_{-430}	556^{+4671}_{-412}

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 $A_{obs} \gg 1.0$

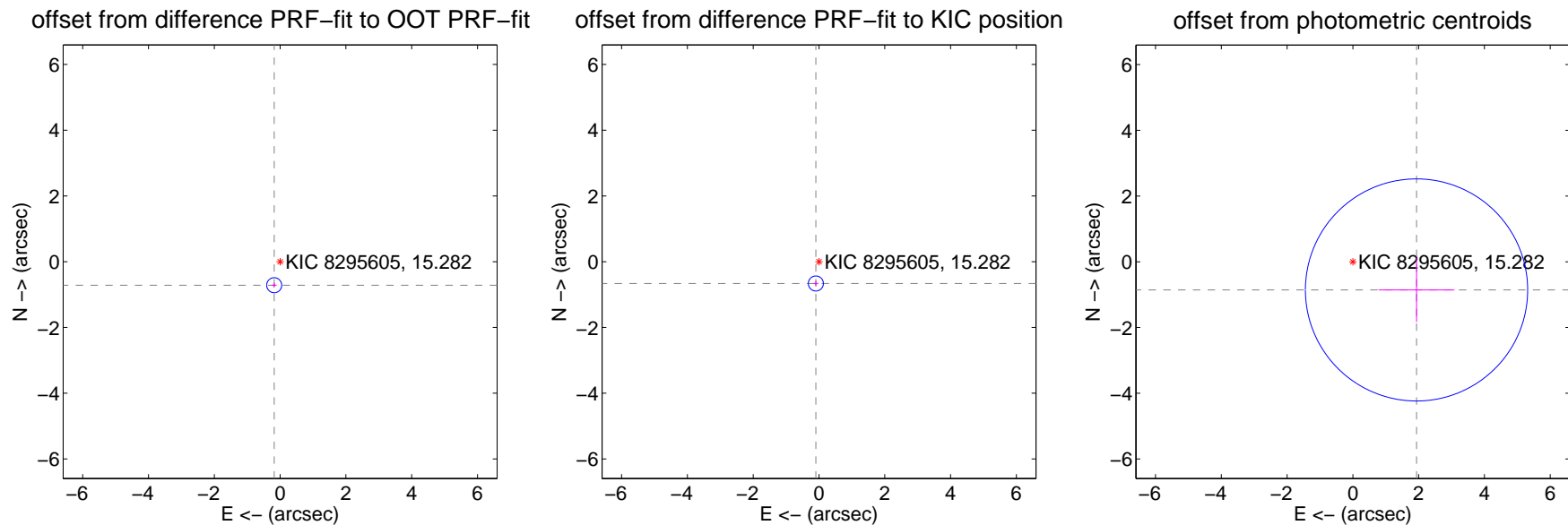
DV Centroid Data

Supplemental centroid analysis for 008295605-01. Kepler magnitude: 15.28. Transit SNR 17.31

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.738 ± 0.076	9.68	0.180 ± 0.076	-0.715 ± 0.076
PRF-fit source offset from KIC position	0.669 ± 0.076	8.78	0.095 ± 0.076	-0.663 ± 0.076
photometric centroid source offset	2.12 ± 1.13	1.88	-1.94 ± 1.15	-0.86 ± 0.97



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.



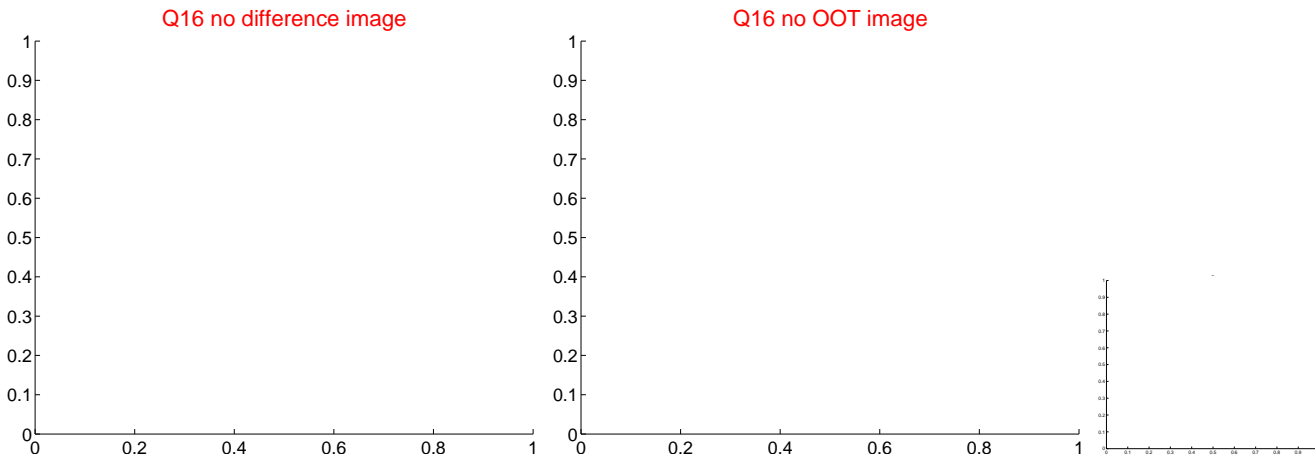
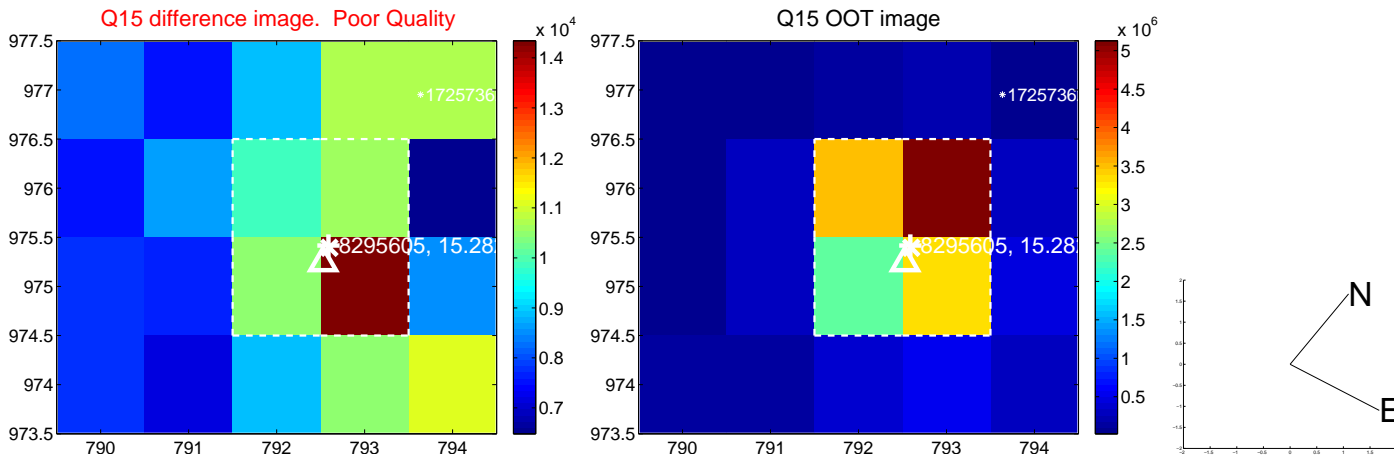
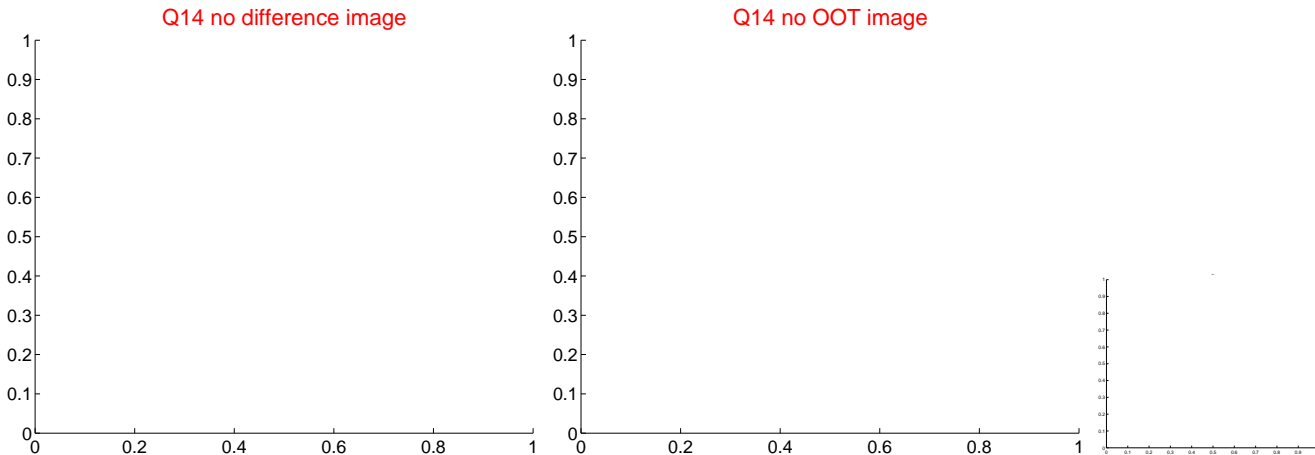
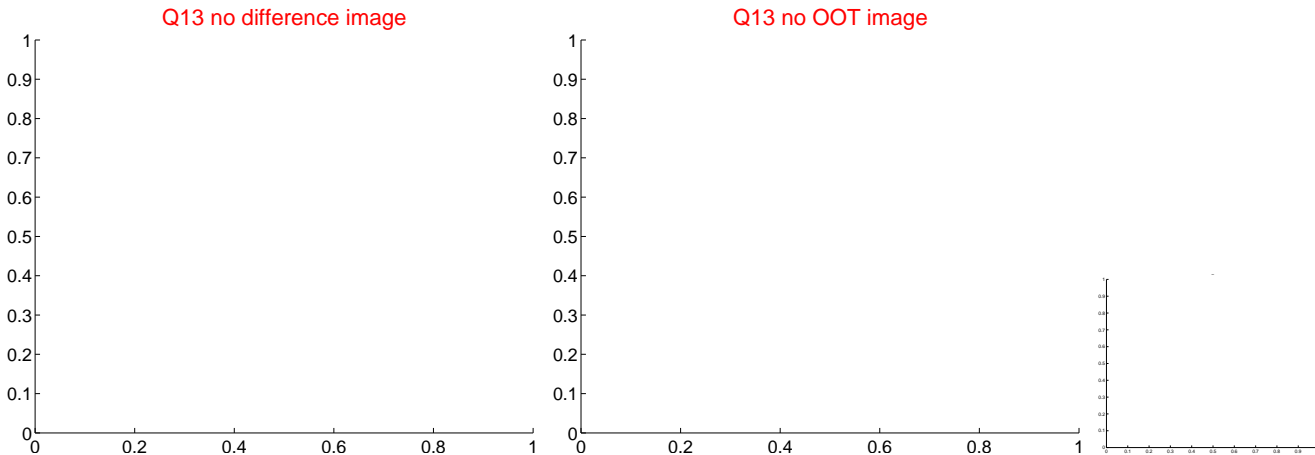
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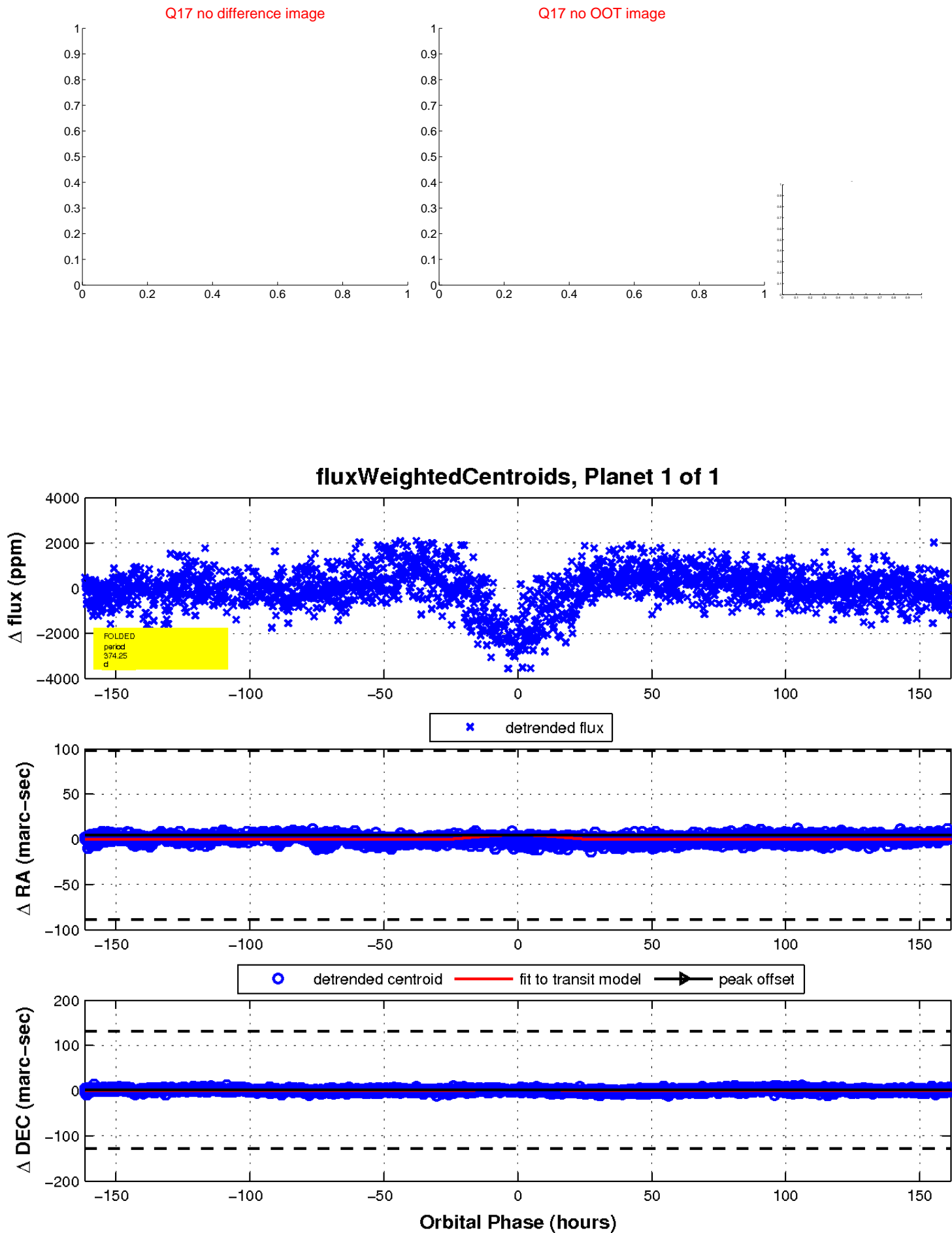
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UKIRT Image

Declination

