

KIC 007766017

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})
007766017-01	OBS	No	371.084300	229.442585	2809.8	30.317	10.6	13.3	1.11	6178	10.35	1.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007766017-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—MOD_NONUNIQ_DV—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.

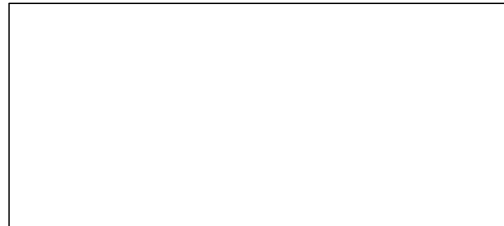
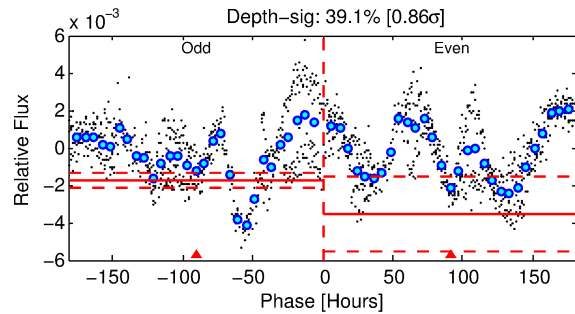
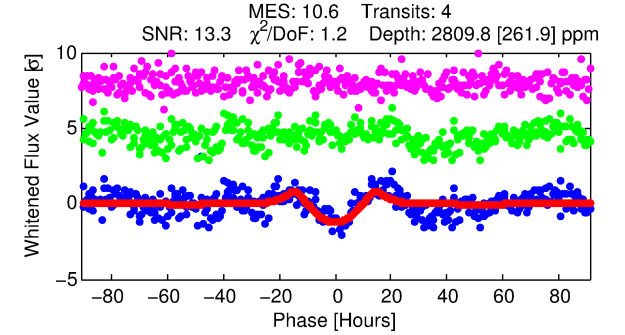
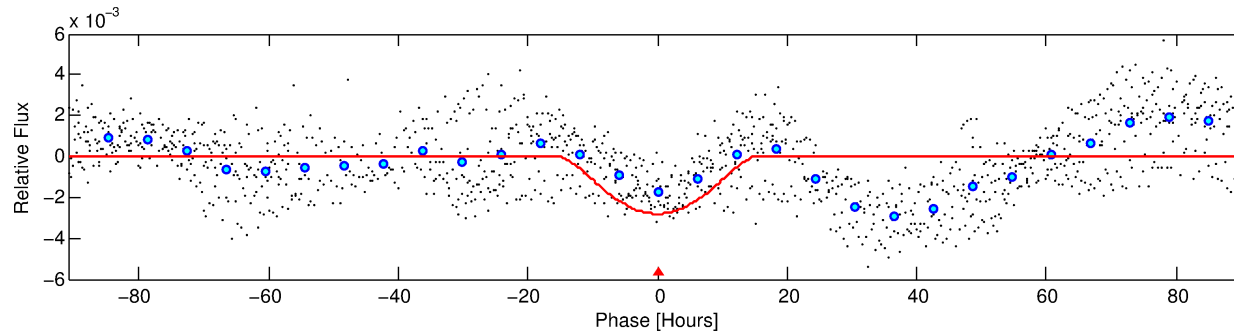
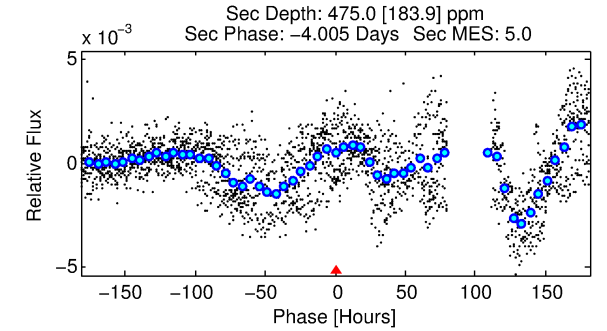
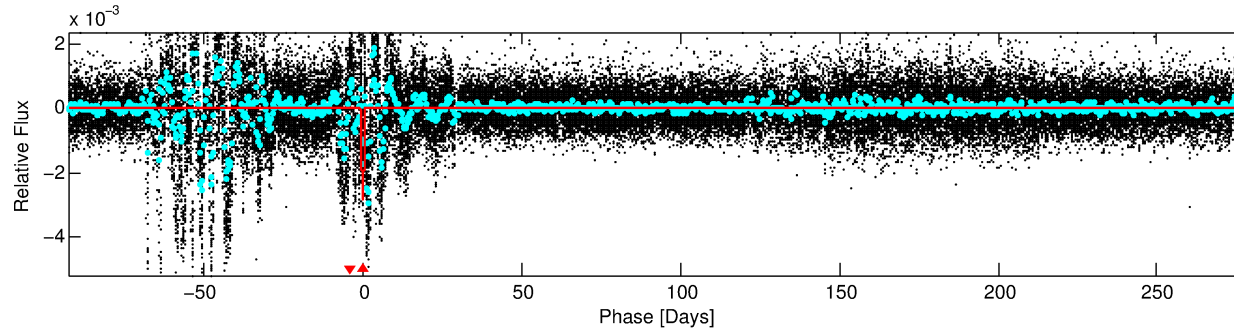
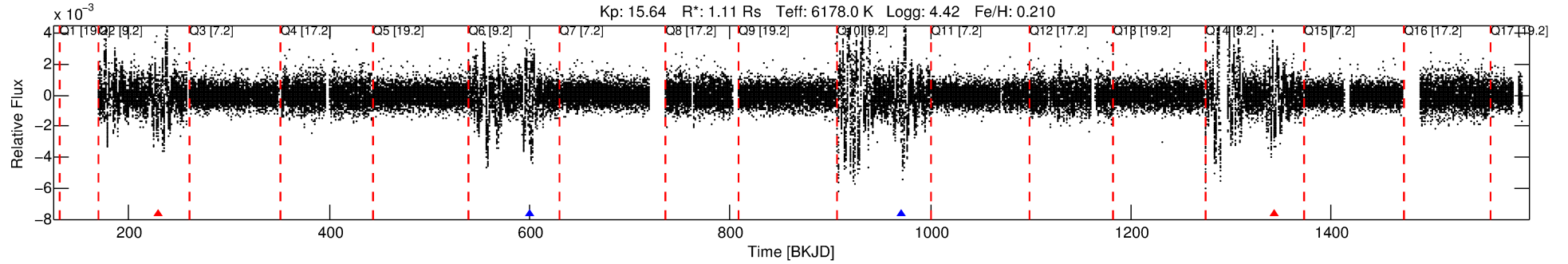
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007766017-01

No Significant Match Found

DV One-Page Summary

KIC: 7766017 Candidate: 1 of 1 Period: 371.084 d



DV Fit Results:

Period = 371.08430 [0.01781] d
Epoch = 229.4426 [0.0337] BKJD
Rp/R* = 0.0851 [0.0951]
a/R* = 41.12 [10.48]
b = 0.99 [0.14]
Seff = 1.40 [0.61]
Teff = 277 [30] K
Rp = 10.34 [12.08] Re
a = 1.0747 [0.3014] AU
Ag = 2820.02 [6496.96] [0.43σ]
Teffp = 3126 [1778] K [1.60σ]

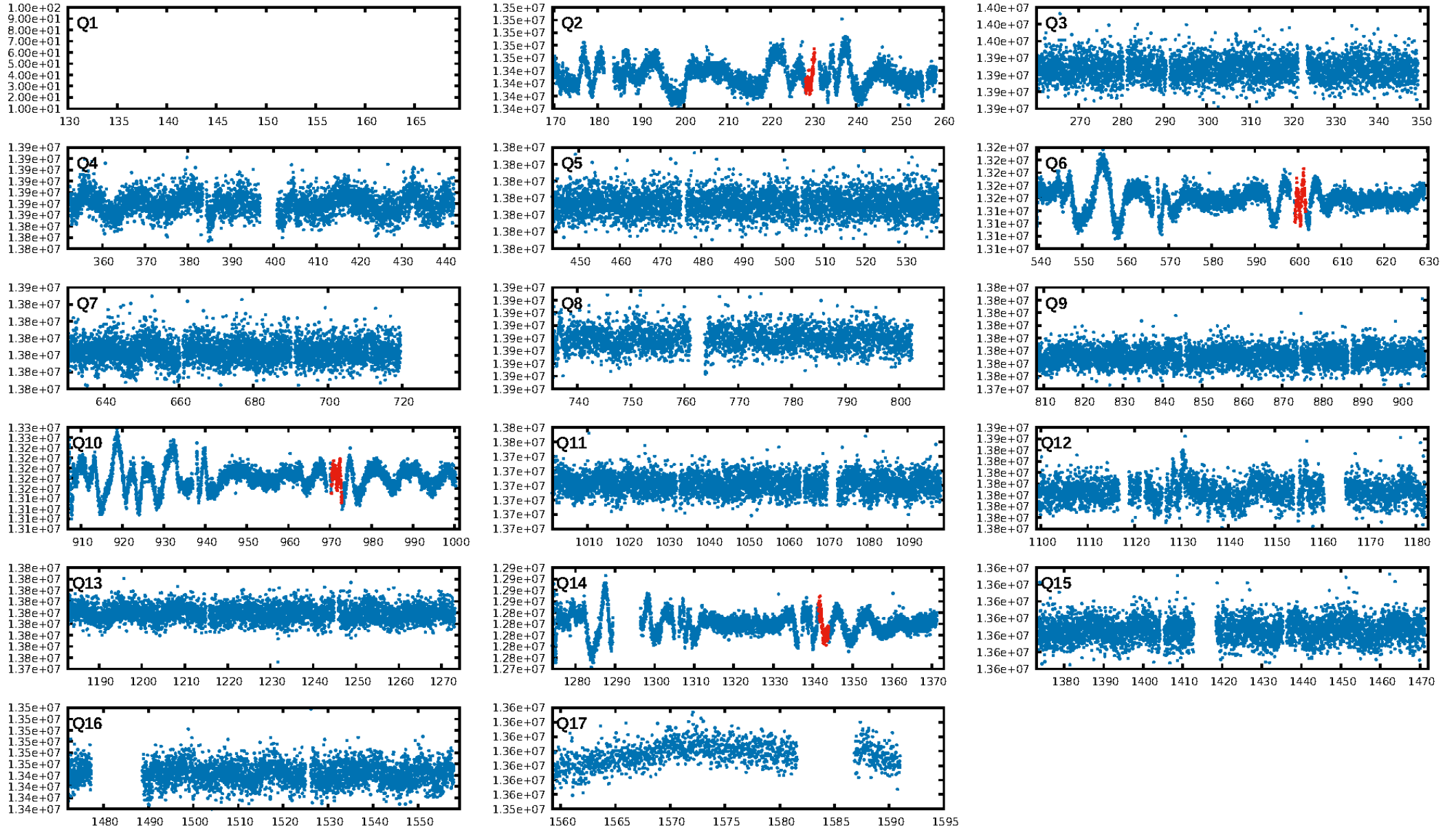
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 99.5%
Bootstrap-pfa: 1.78e-10
RollingBand-fgt: 0.50 [2/4]
GhostDiagnostic-chr: -754.2
Centroid-sig: 30.9%
Centroid-so: 1.090 arcsec [0.80σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

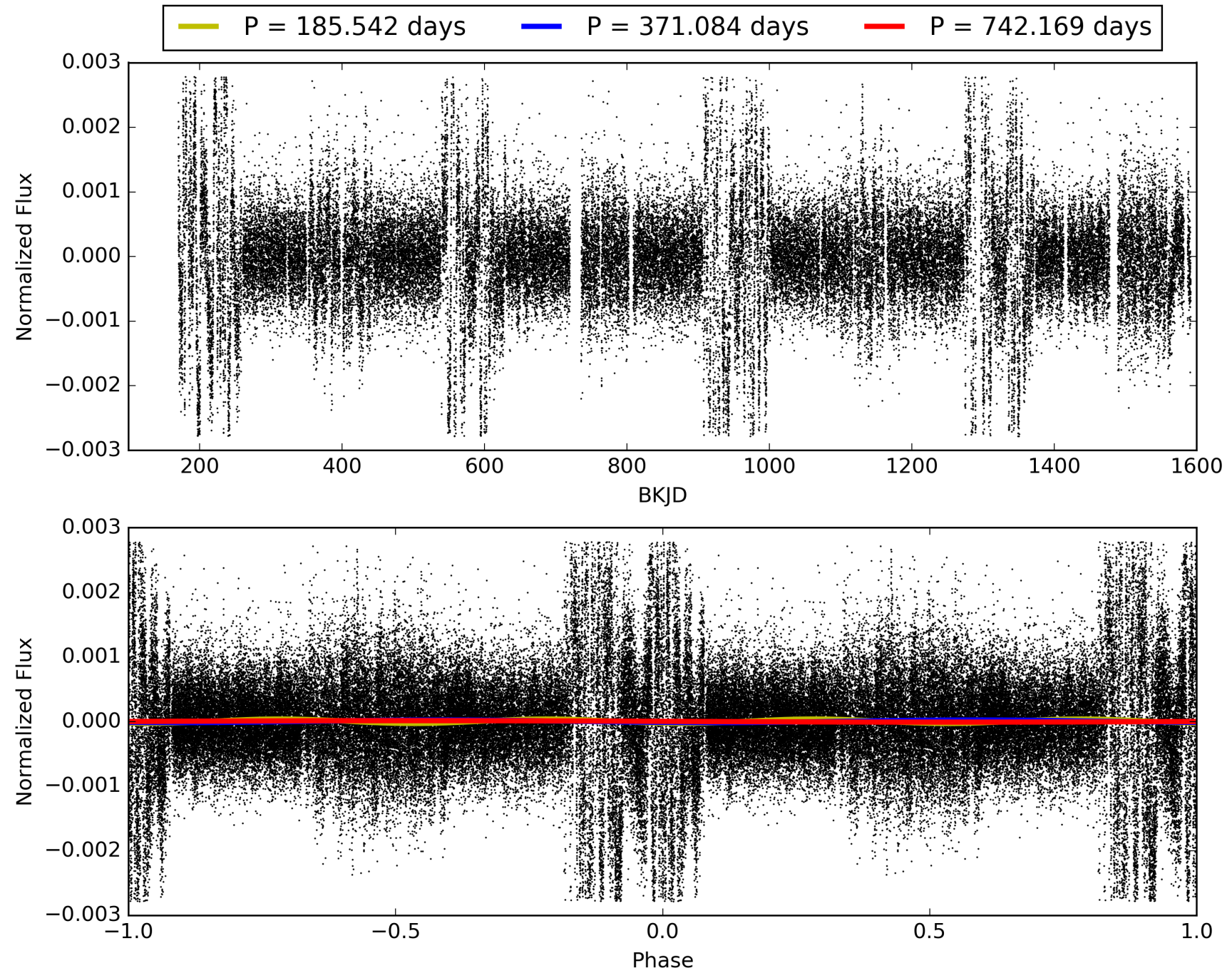
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:52:24 Z

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

TCE 007766017-01, PDC Light Curves

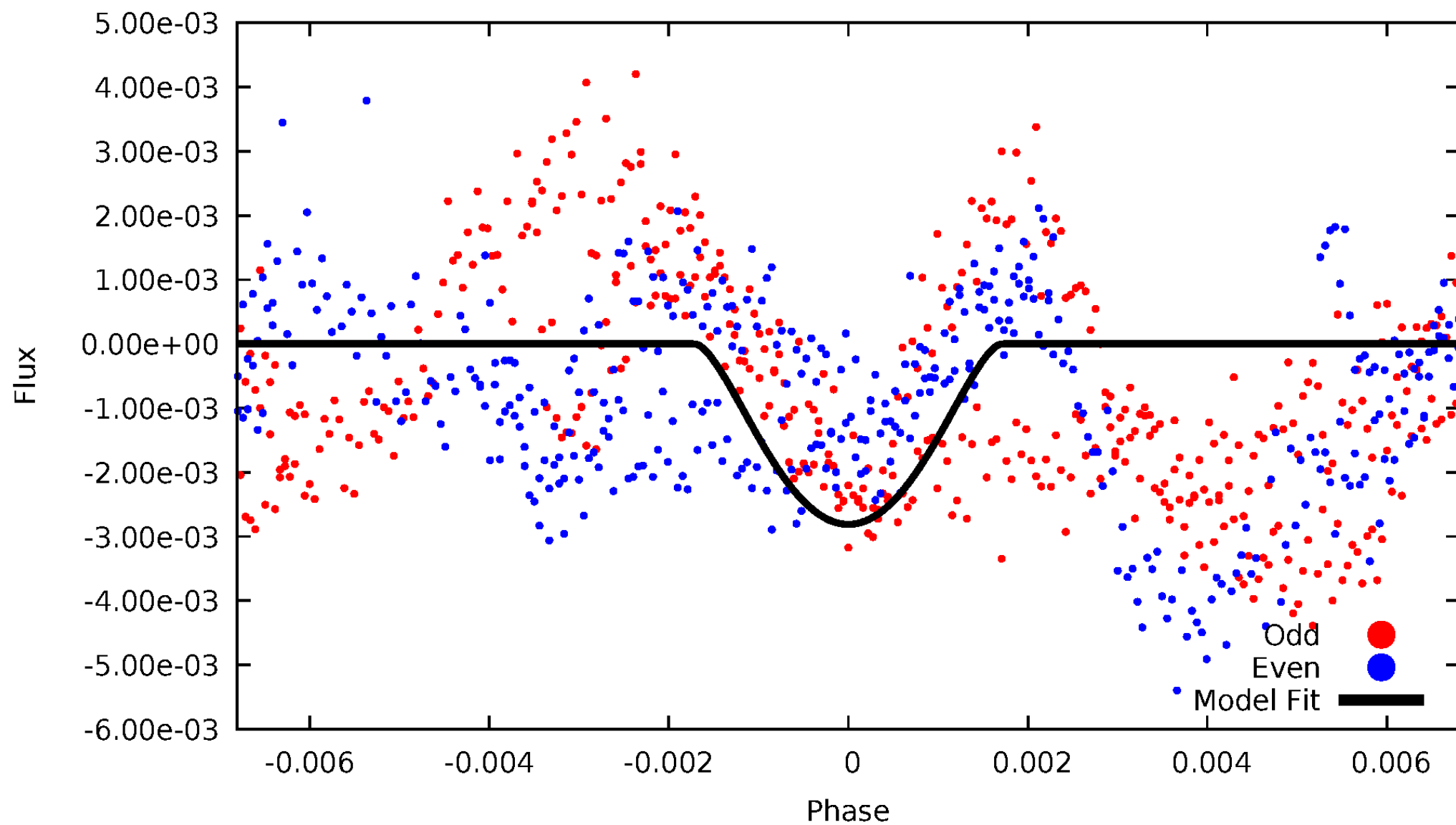


TCE 007766017-01



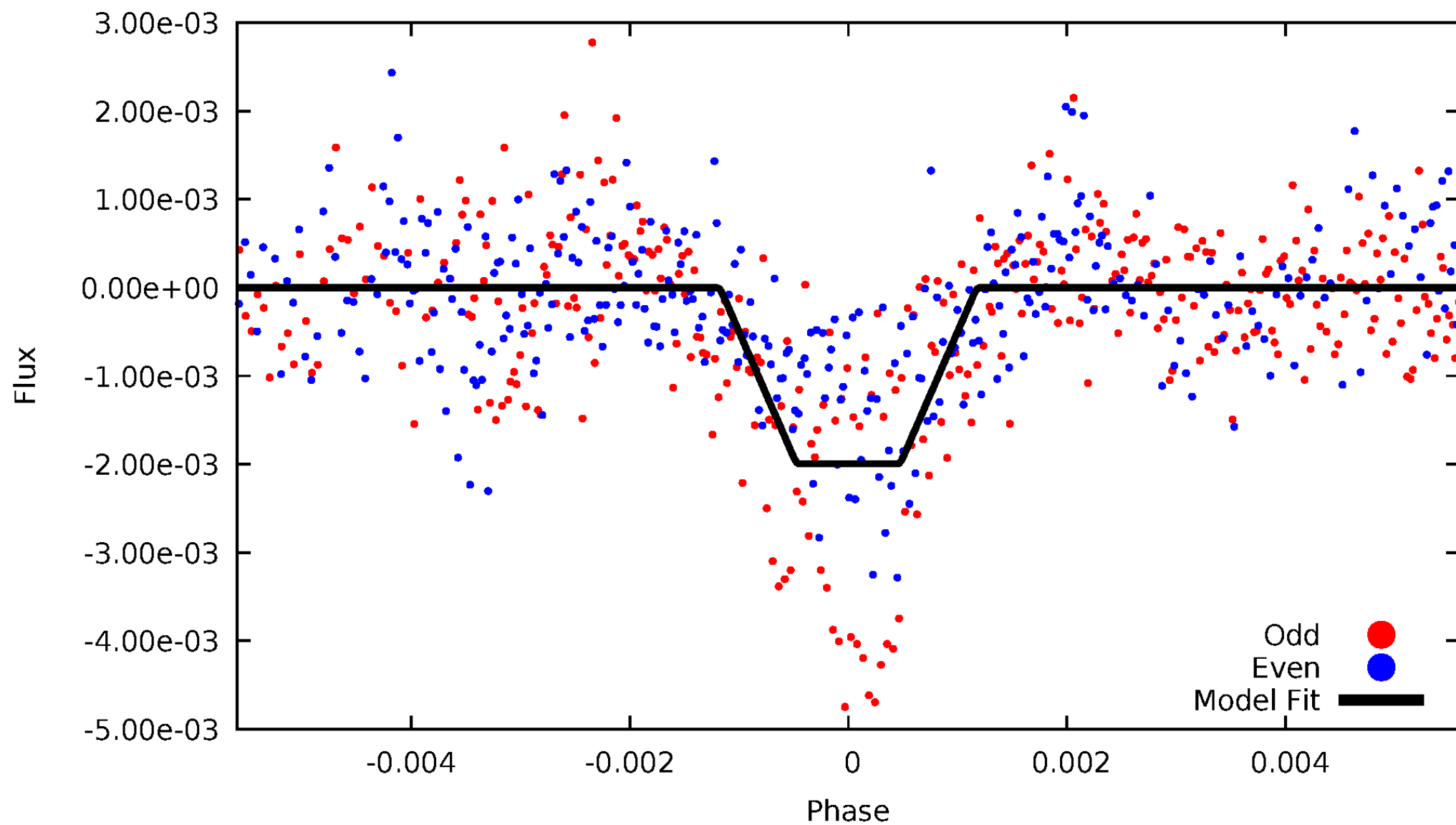
DV Odd/Even

TCE 007766017-01

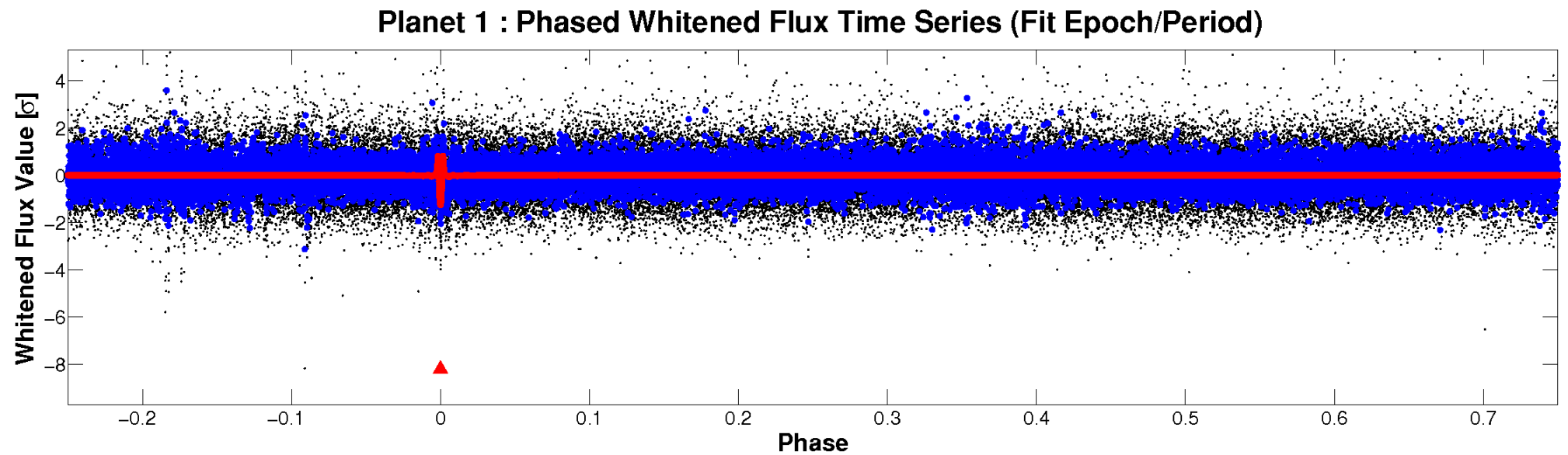
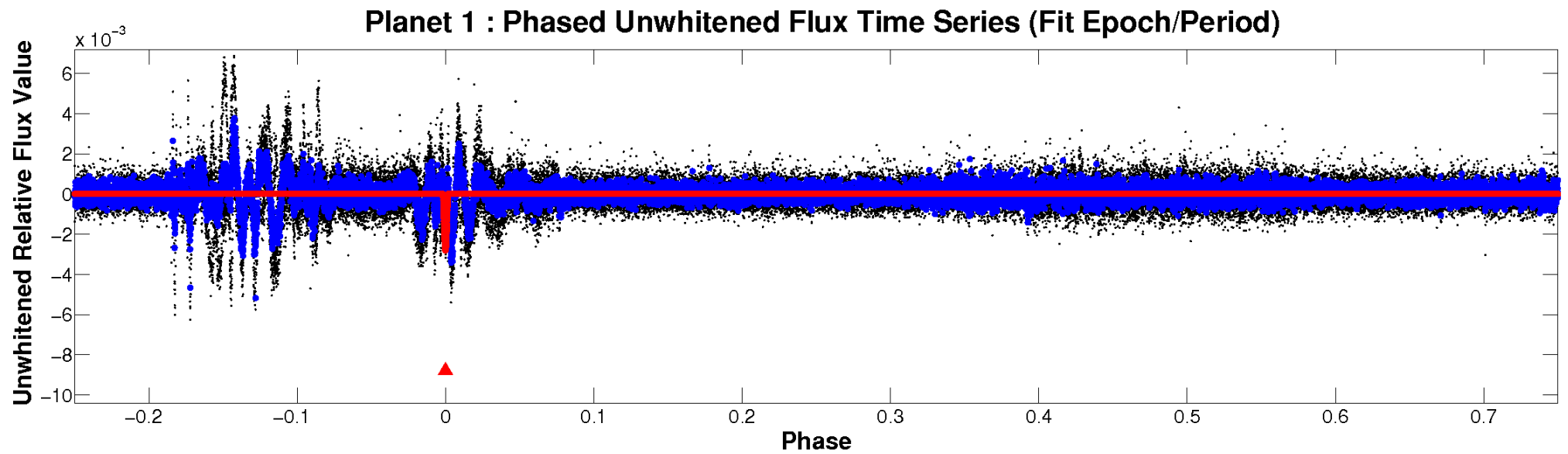


ALT Odd/Even

TCE 007766017-01

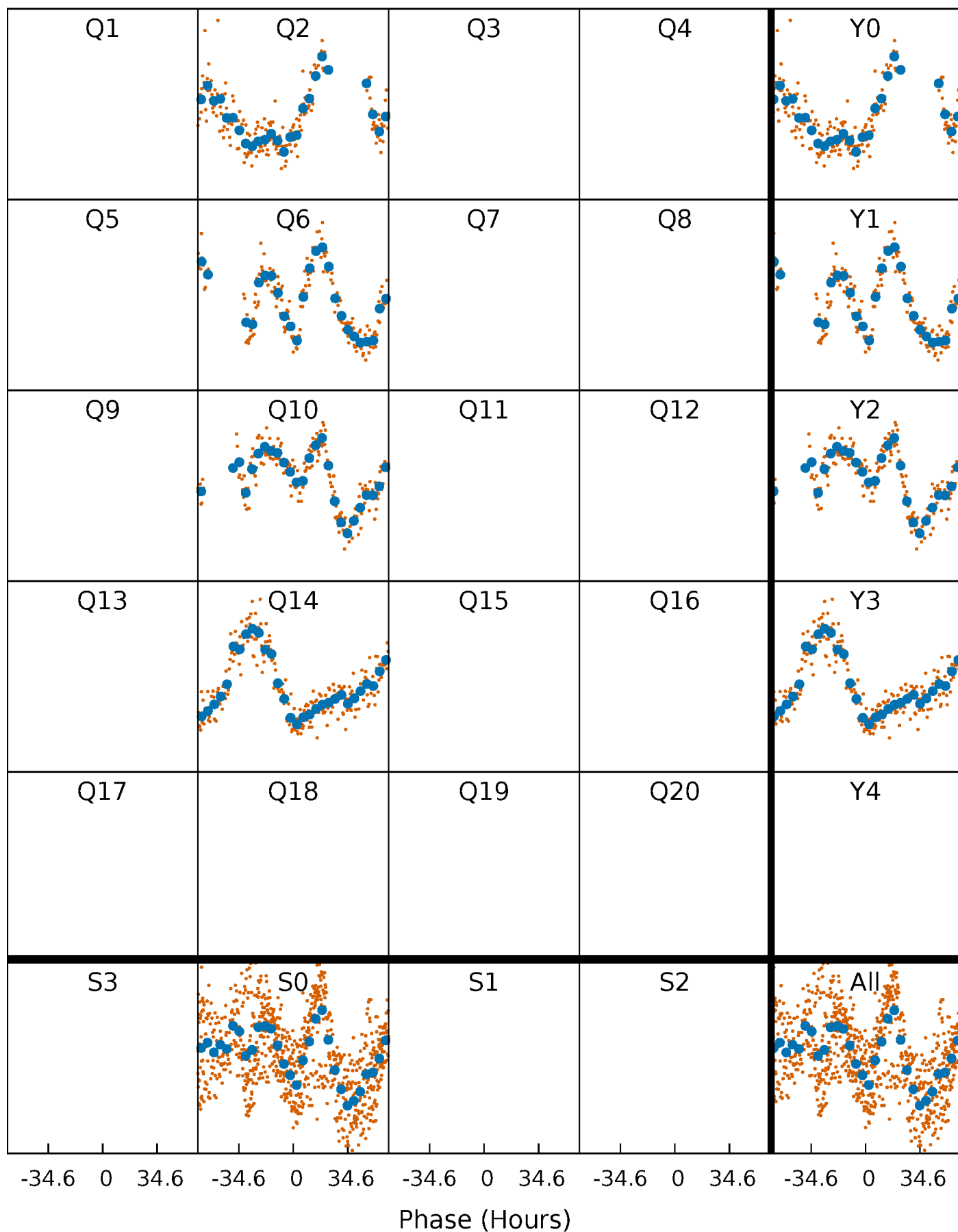


Non-Whitened Vs. Whitened Light Curve



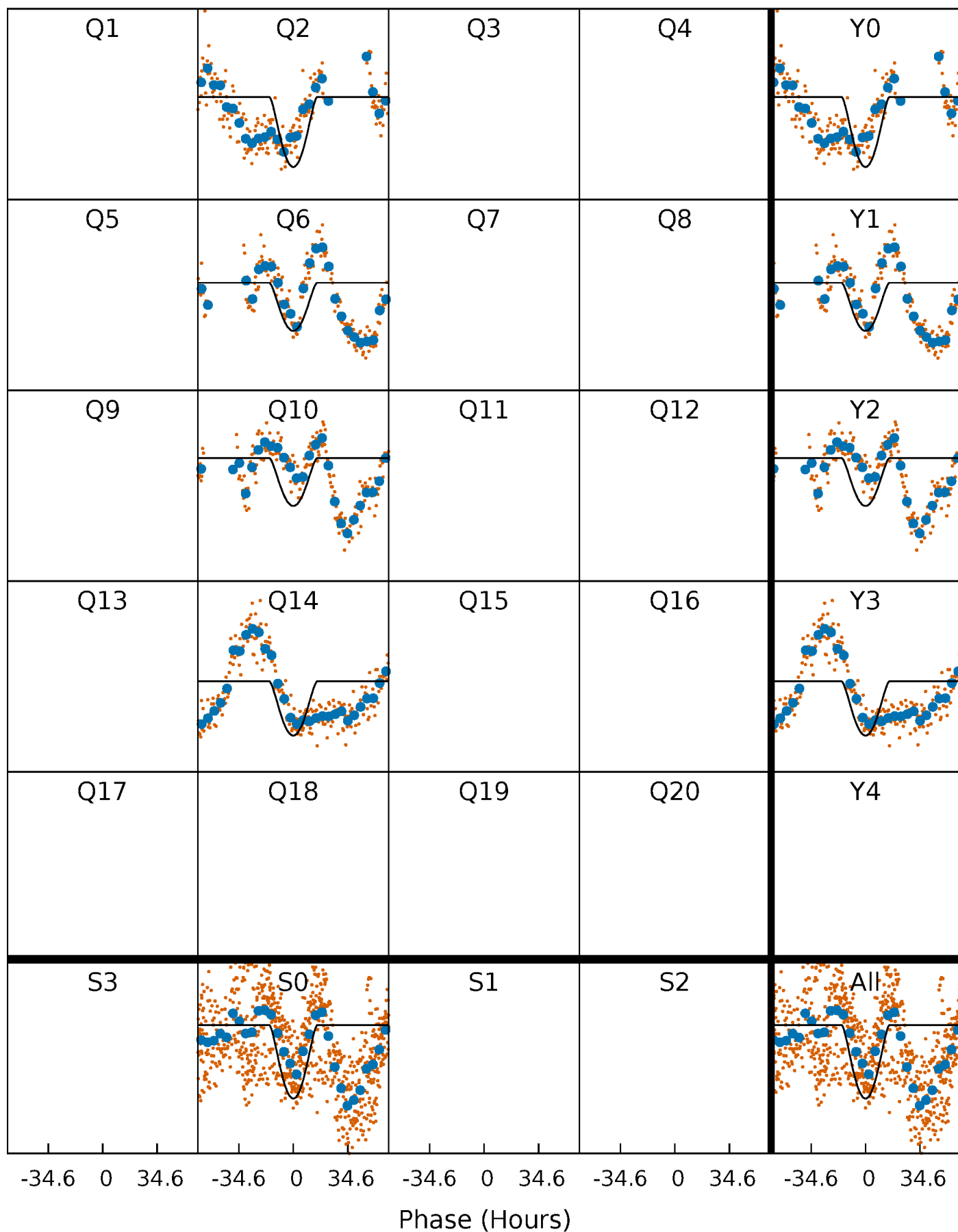
PDC Quarter-Phased Transit Curves

TCE 007766017-01 P=371.084299 Days $T_0=229.442585$ (BKJD)



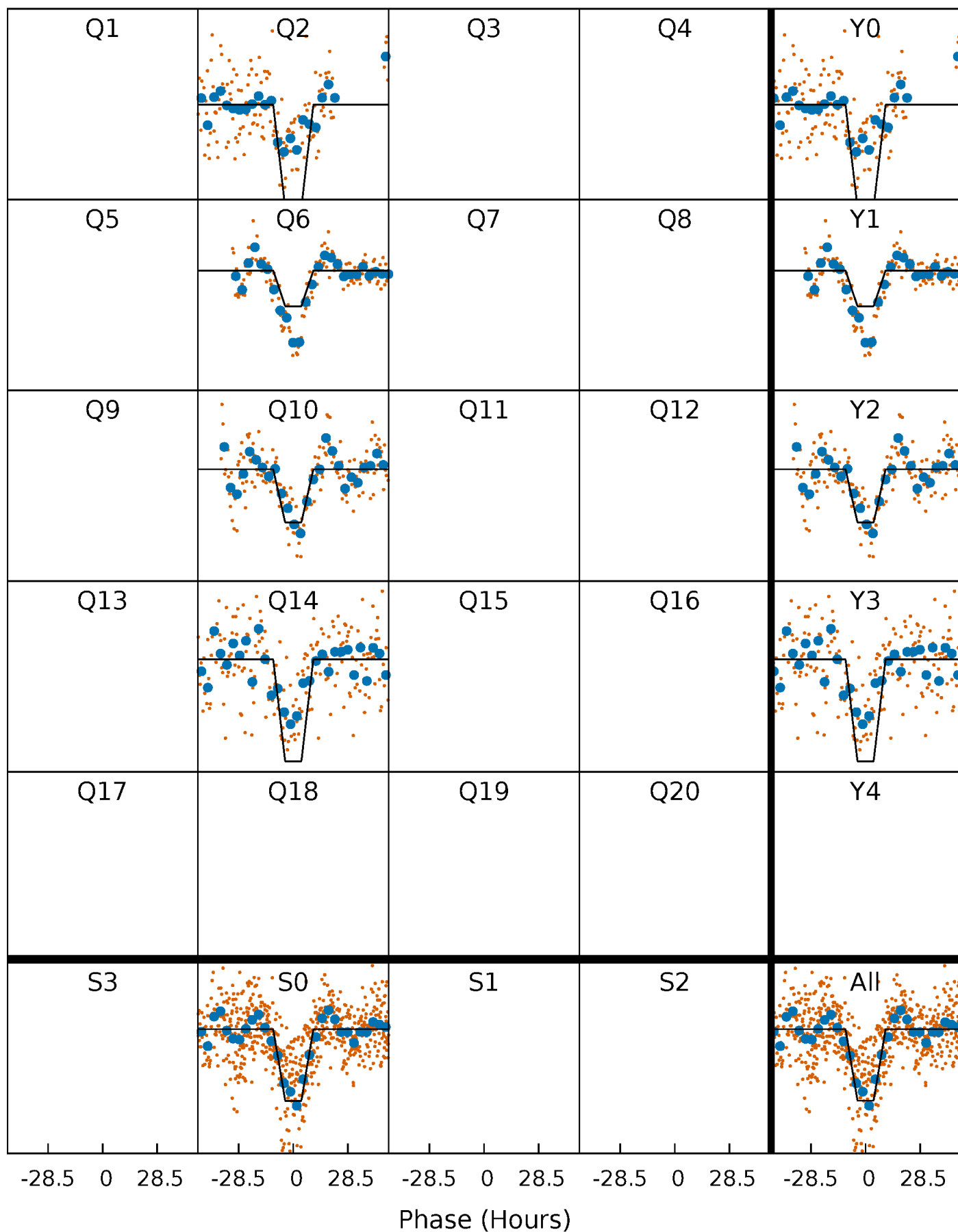
DV Quarter-Phased Transit Curves

TCE 007766017-01 P=371.084299 Days $T_0=229.442585$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

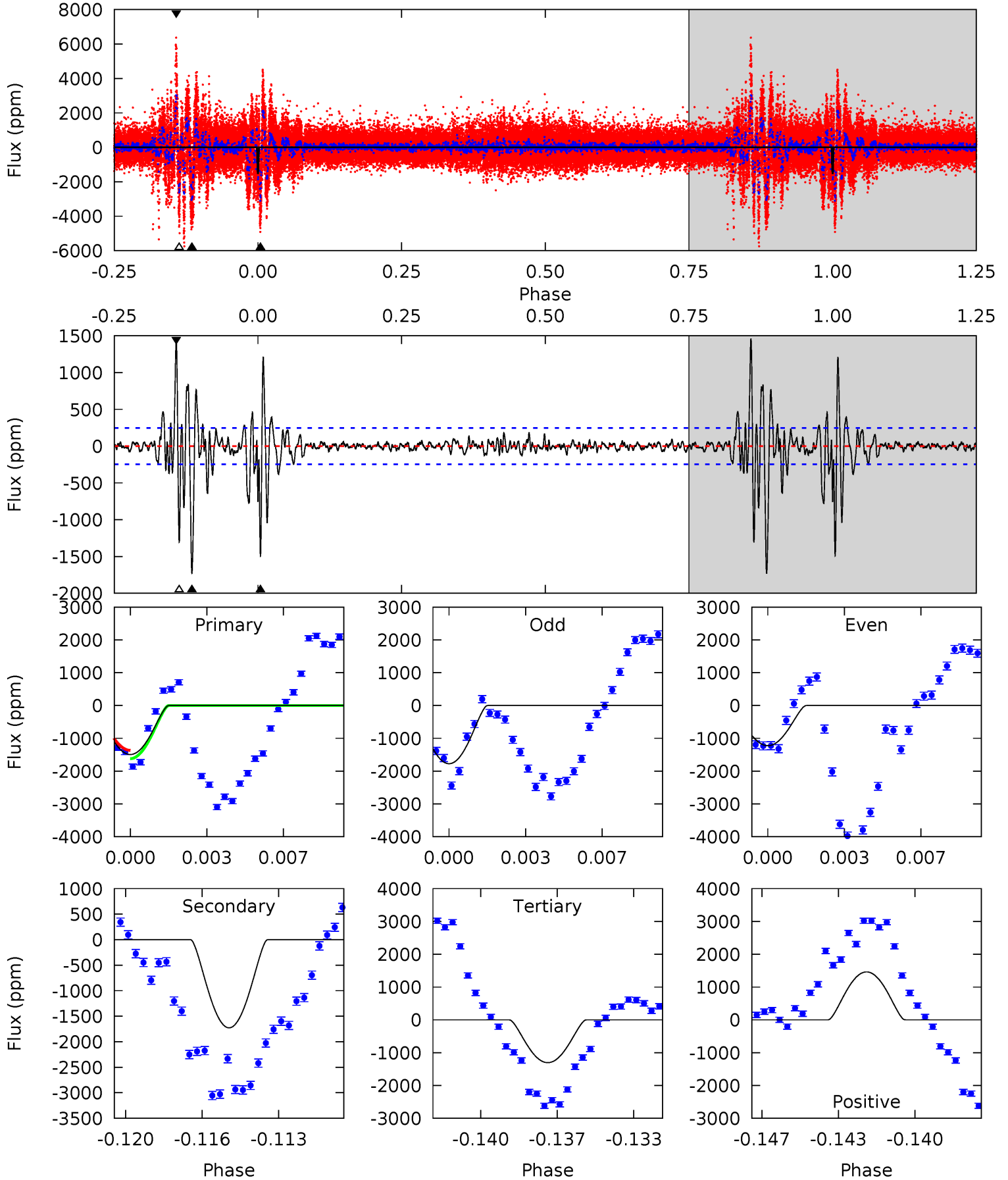
TCE 007766017-01 P=371.121128 Days $T_0=229.417247$ (BKJD)



DV Model-Shift Uniqueness Test

007766017-01, P = 371.084299 Days, E = 229.442585 Days

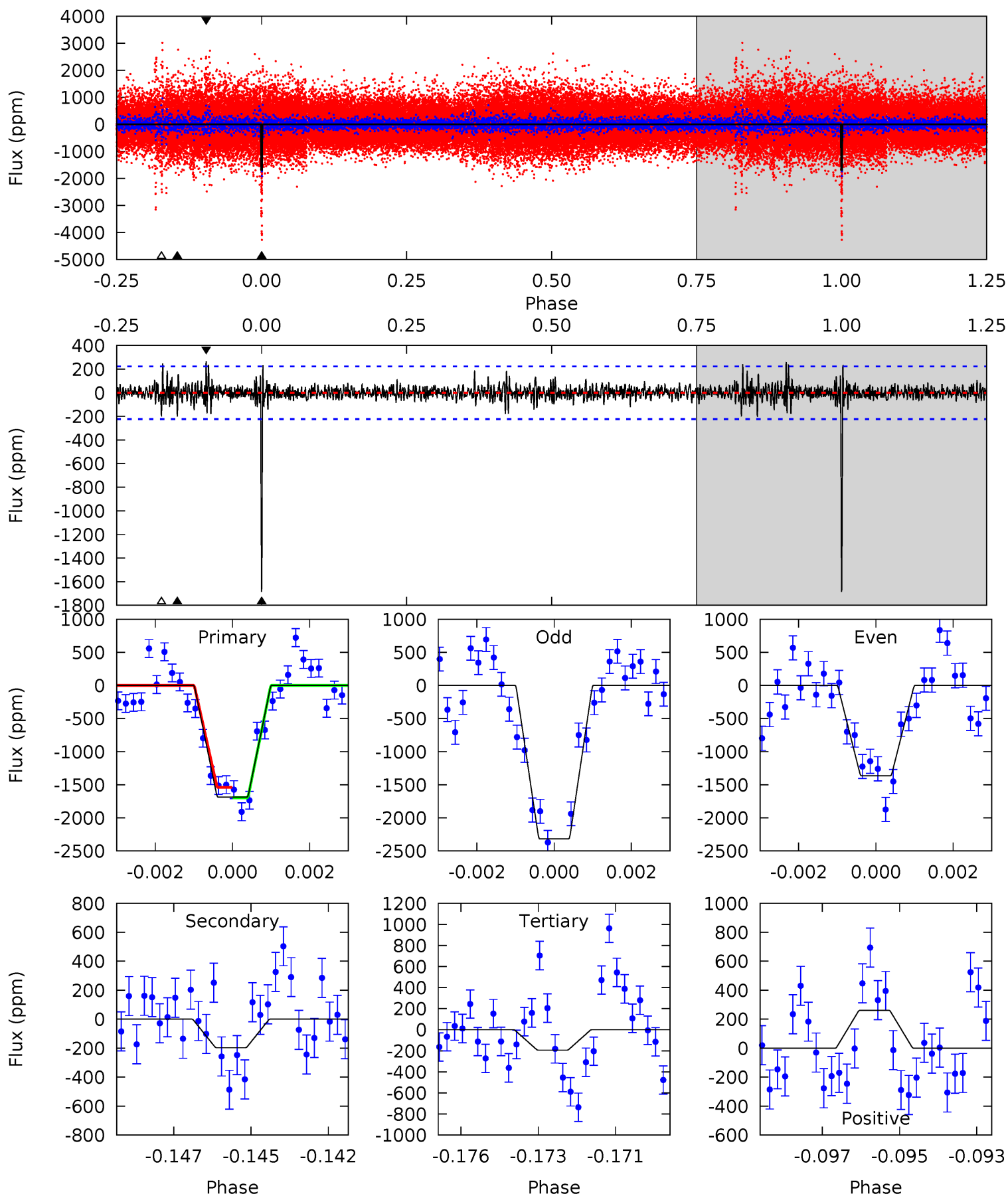
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.6	36.5	27.6	30.9	5.23	2.93	3.93	4.00	0.70	8.93	5.63	5.25	0.92	0.46	2.70



Alt Model-Shift Uniqueness Test

007766017-01, P = 371.121128 Days, E = 229.417247 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.1	4.68	4.60	6.20	5.30	3.04	1.03	35.5	33.9	0.08	-1.52	11.5	1.23	0.13	1.84



Stellar Parameters For KIC 007766017

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6178^{+190}_{-253}	$4.424^{+0.054}_{-0.216}$	$0.210^{+0.150}_{-0.300}$	$1.114^{+0.378}_{-0.118}$	$1.203^{+0.151}_{-0.151}$	$1.227^{+0.353}_{-0.681}$
	+3%/-4%	+1%/-5%	+71%/-143%	+34%/-11%	+13%/-13%	+29%/-55%
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 007766017-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1727 ± 47	$13.77^{+11.46}_{-8.53}$	397^{+30}_{-24}	4105^{+2025}_{-745}	5577^{+32335}_{-3869}
Alt.	-197 ± 42	$10.29^{+9.91}_{-6.45}$	395^{+30}_{-23}	3176^{+1298}_{-549}	1150^{+7758}_{-856}

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 $A_{obs} \gg 1.0$

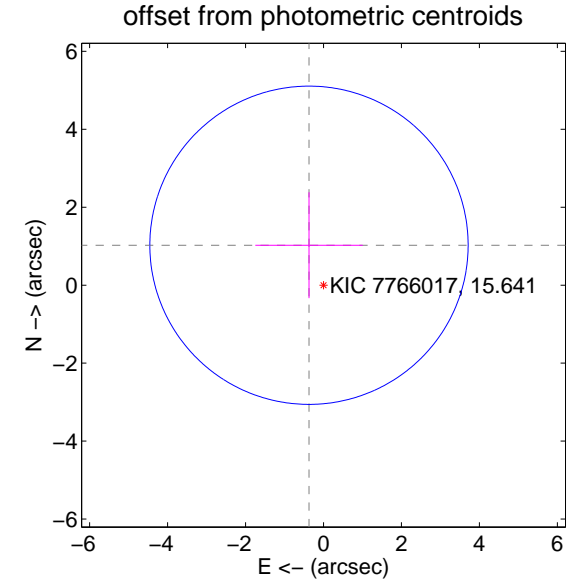
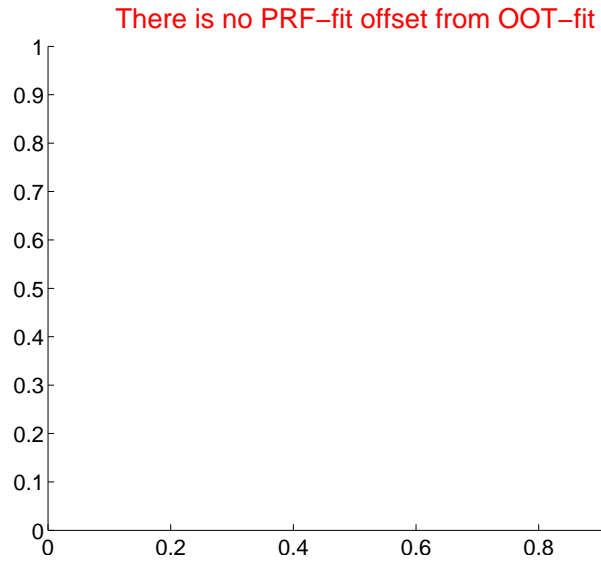
DV Centroid Data

Supplemental centroid analysis for 007766017-01. Kepler magnitude: 15.64. Transit SNR 13.28

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.09 ± 1.36	0.80	0.37 ± 1.38	1.02 ± 1.36



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.



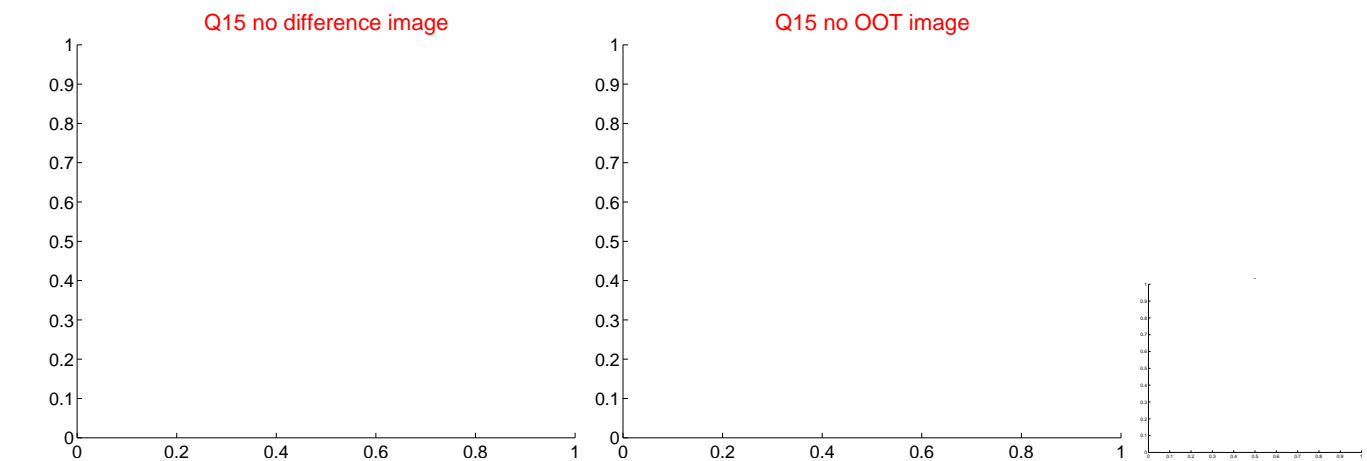
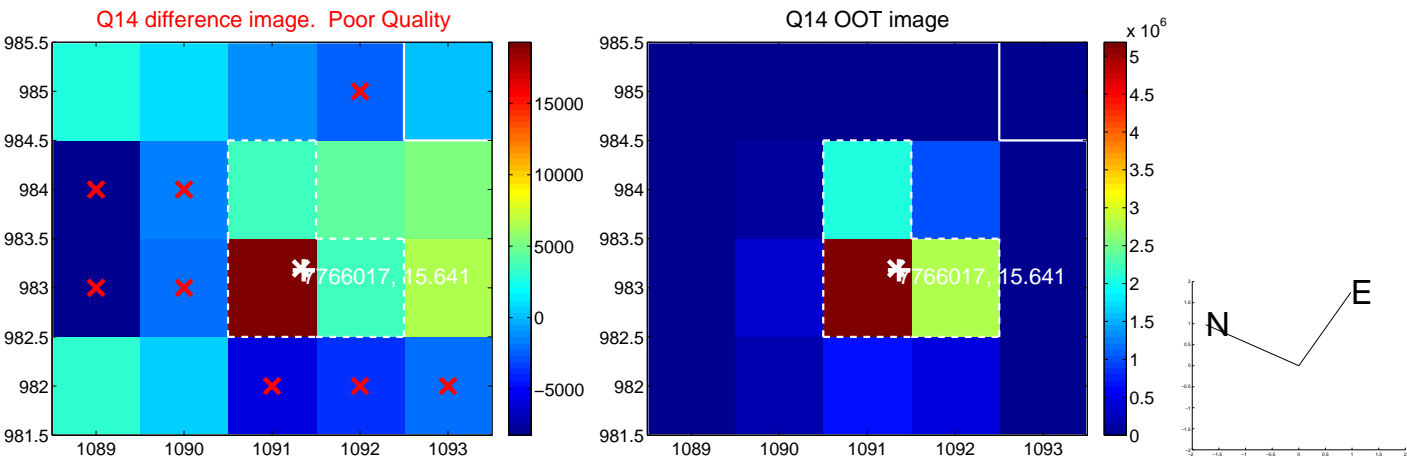
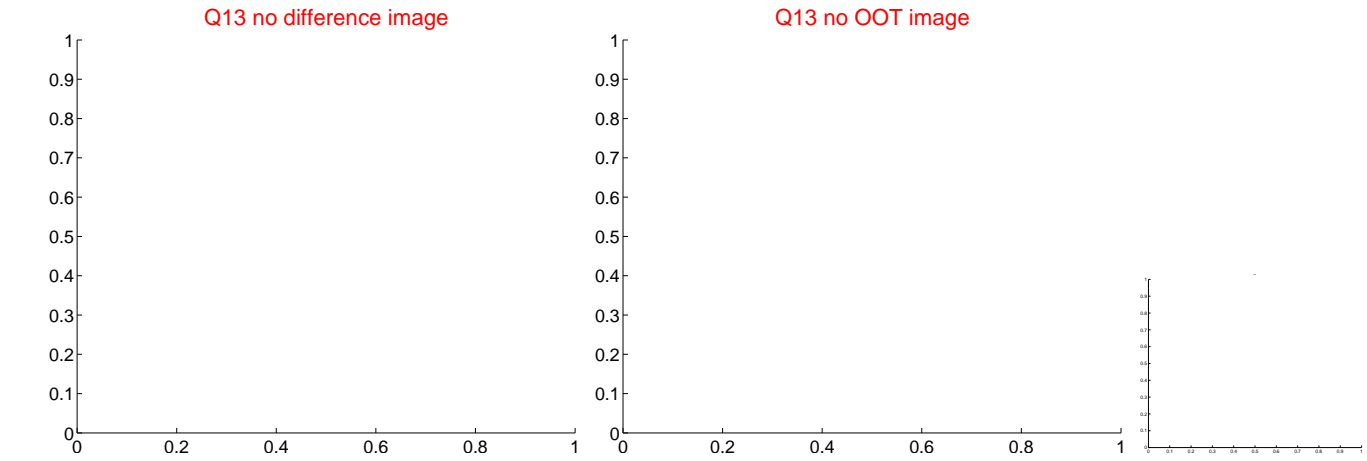
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



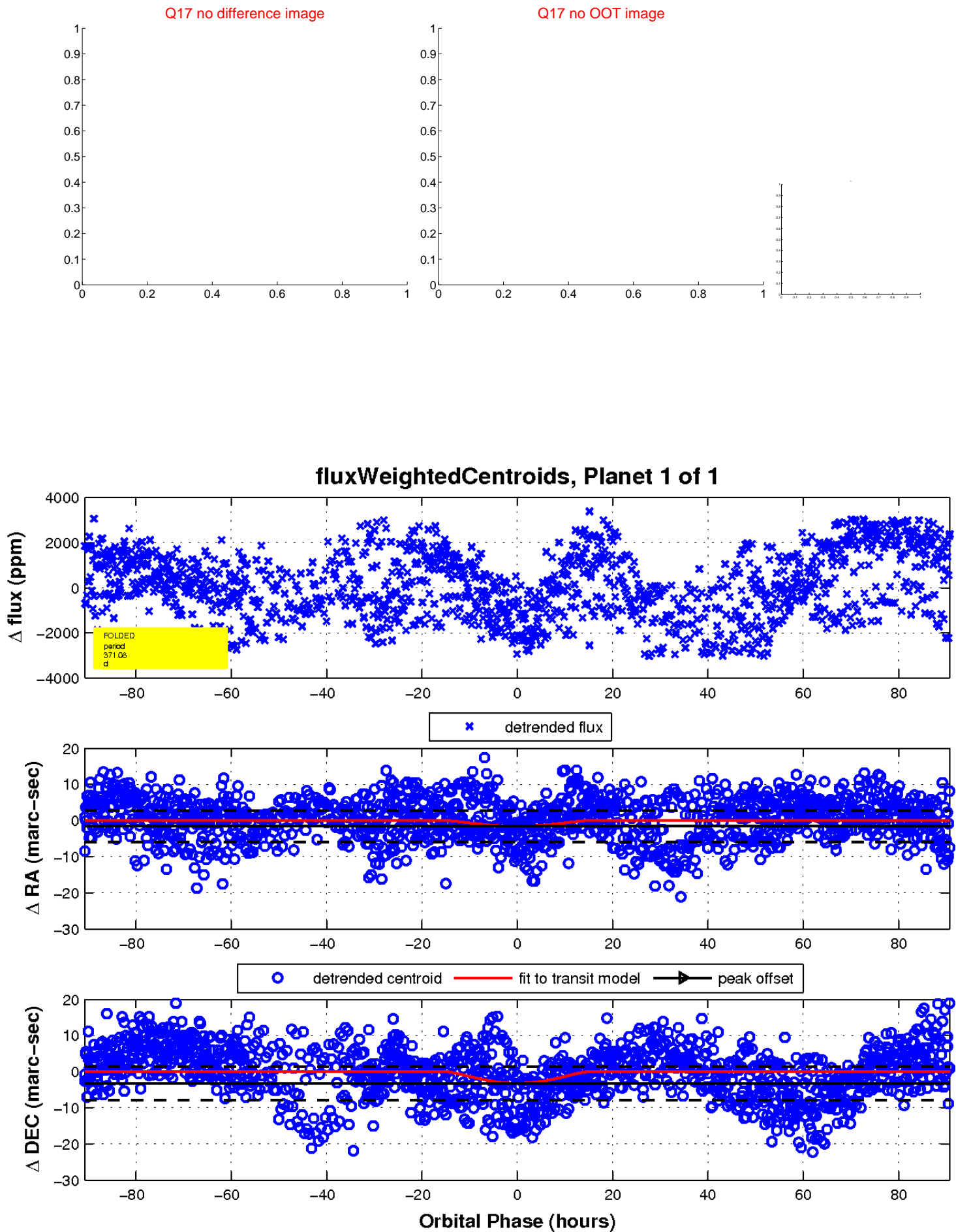
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UKIRT Image

Declination

