

KIC 005769275

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})
005769275-01	OBS	No	298.209534	198.604630	792.1	3.718	12.2	2.7	0.98	6061	3.25	1.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005769275-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_MARSHALL_ZUMA_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

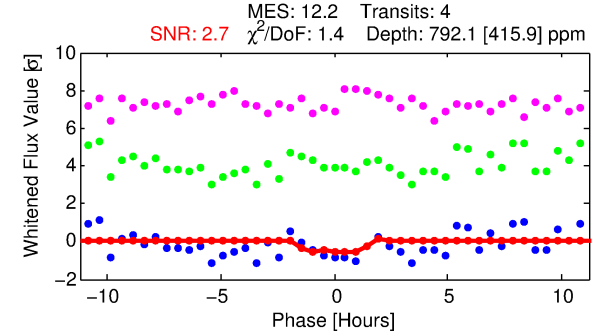
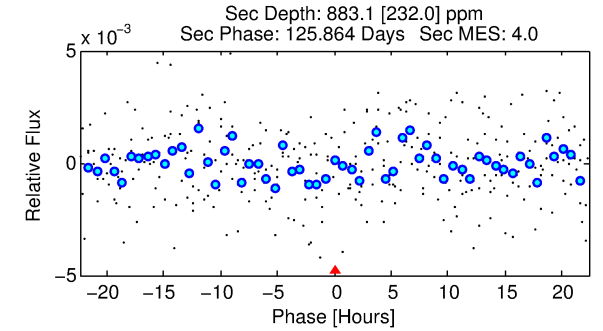
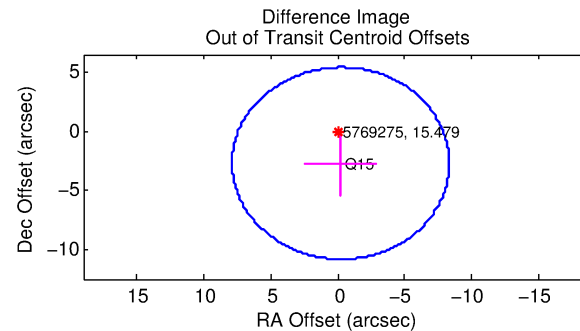
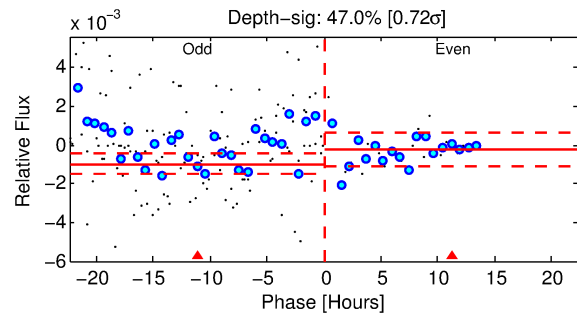
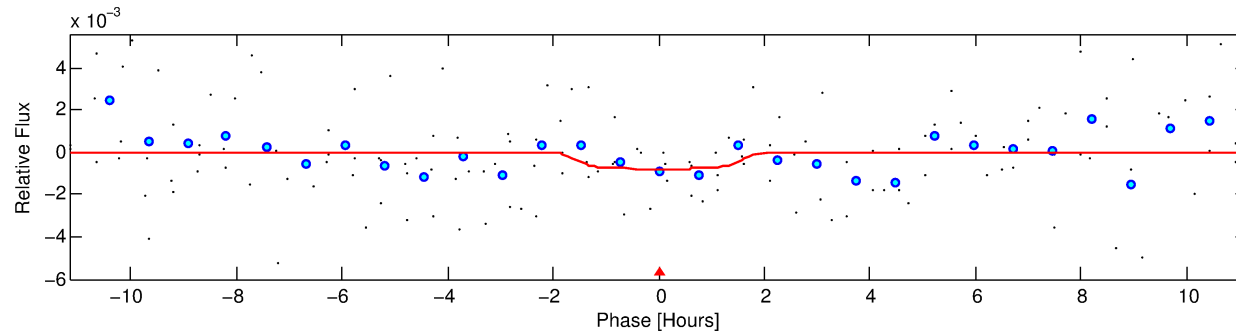
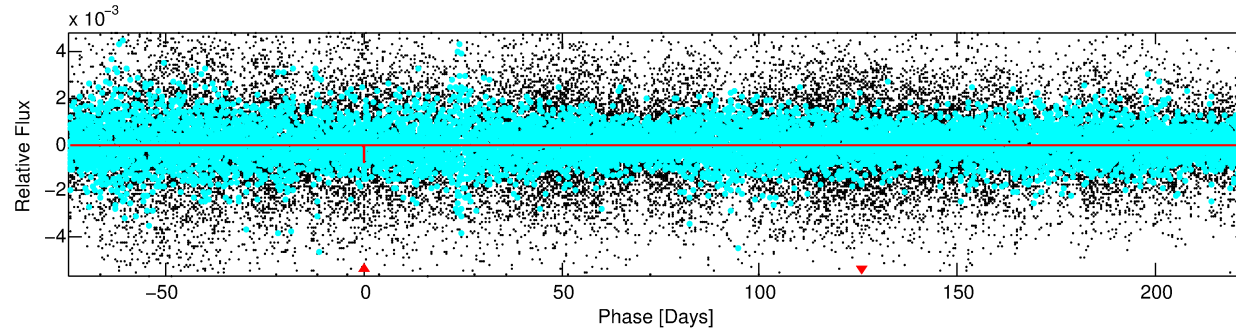
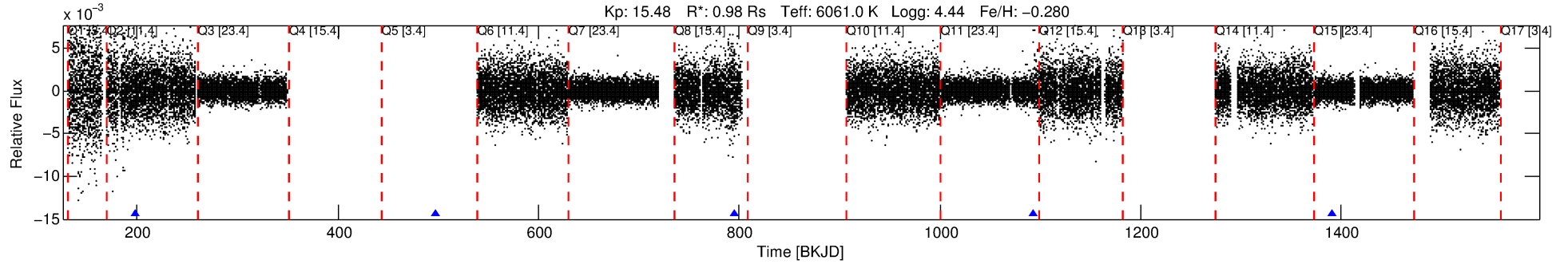
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005769275-01

No Significant Match Found

DV One-Page Summary

KIC: 5769275 Candidate: 1 of 1 Period: 298.210 d



DV Fit Results:

Period = 298.20953 [0.01665] d
Epoch = 198.6046 [0.0595] BKJD
Rp/R* = 0.0303 [0.0242]
a/R* = 311.70 [1151.21]
b = 0.90 [0.83]
Seff = 1.57 [0.62]
Teq = 286 [28] K
Rp = 3.25 [2.78] Re
a = 0.8636 [0.2192] AU
Ag = 34258.12 [56911.00] [0.60 σ]
Teffp = 6007 [2440] K [2.34 σ]

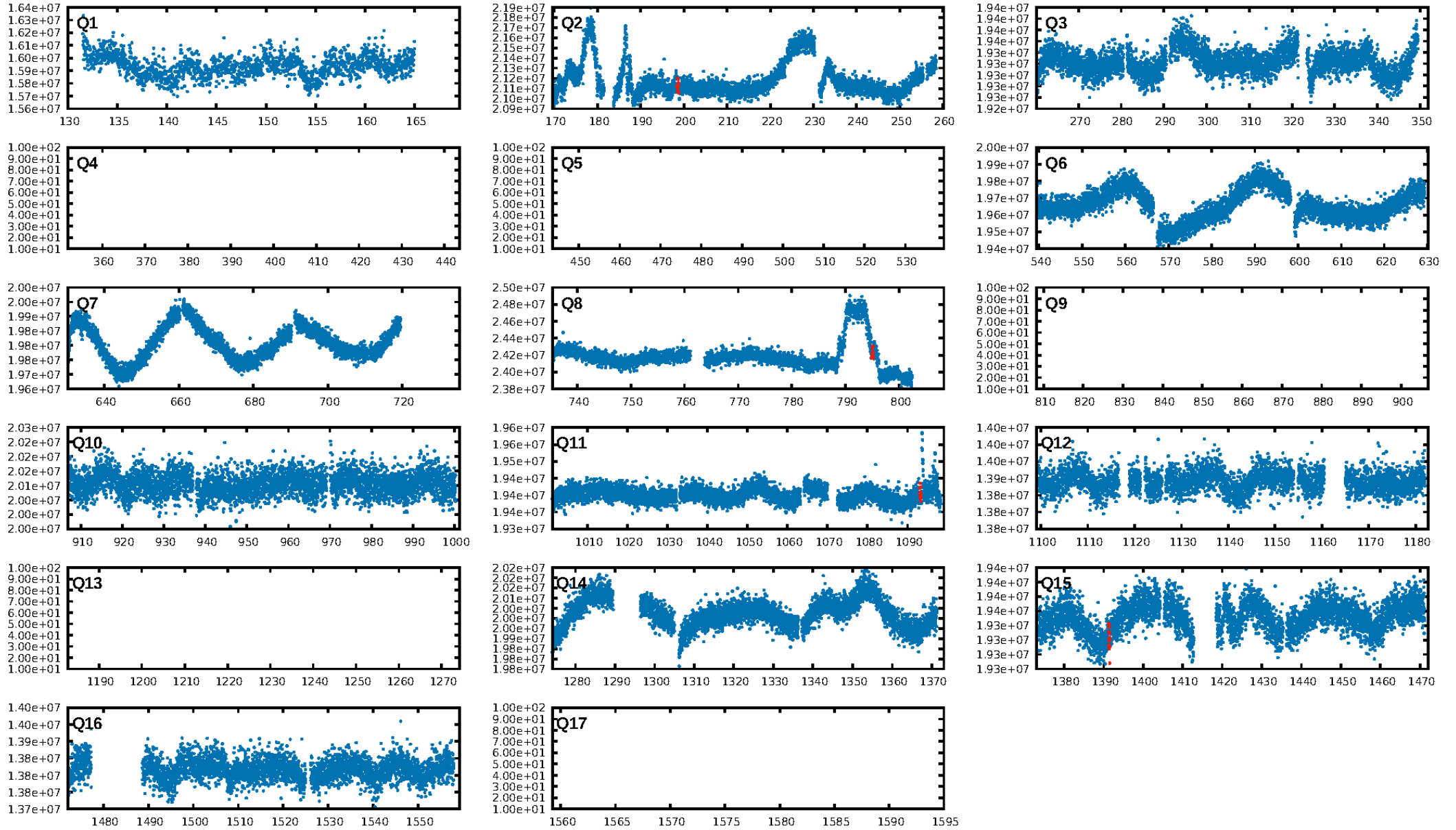
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 26.7%
ModelChiSquareGof-sig: 97.5%
Bootstrap-pfa: 6.38e-16
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.2102
Centroid-sig: 39.5%
Centroid-so: 0.851 arcsec [9.85 σ]
OotOffset-rm: 2.728 arcsec [1.01 σ]
KicOffset-rm: 1.250 arcsec [0.47 σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

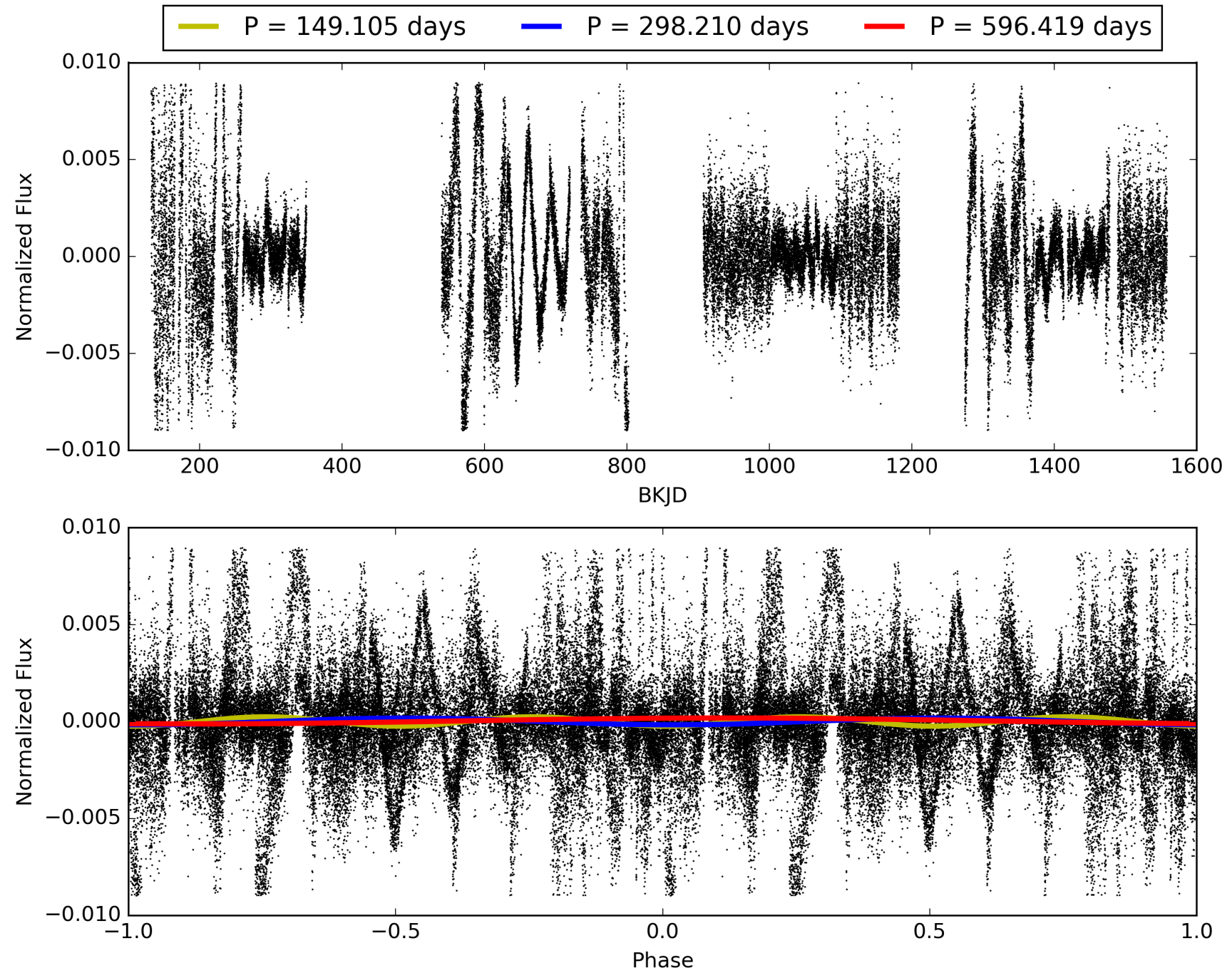
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:26:44 Z

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

TCE 005769275-01, PDC Light Curves

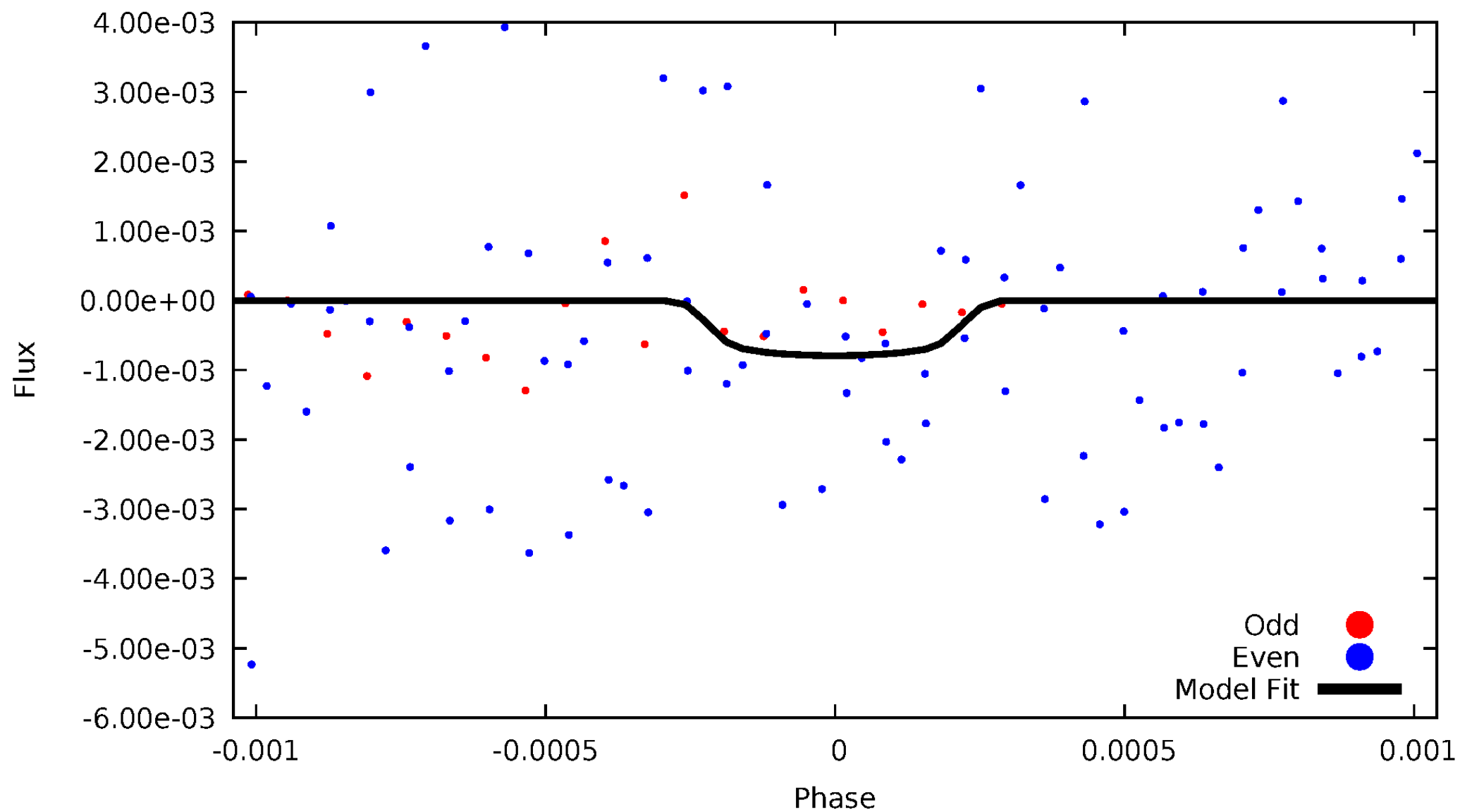


TCE 005769275-01



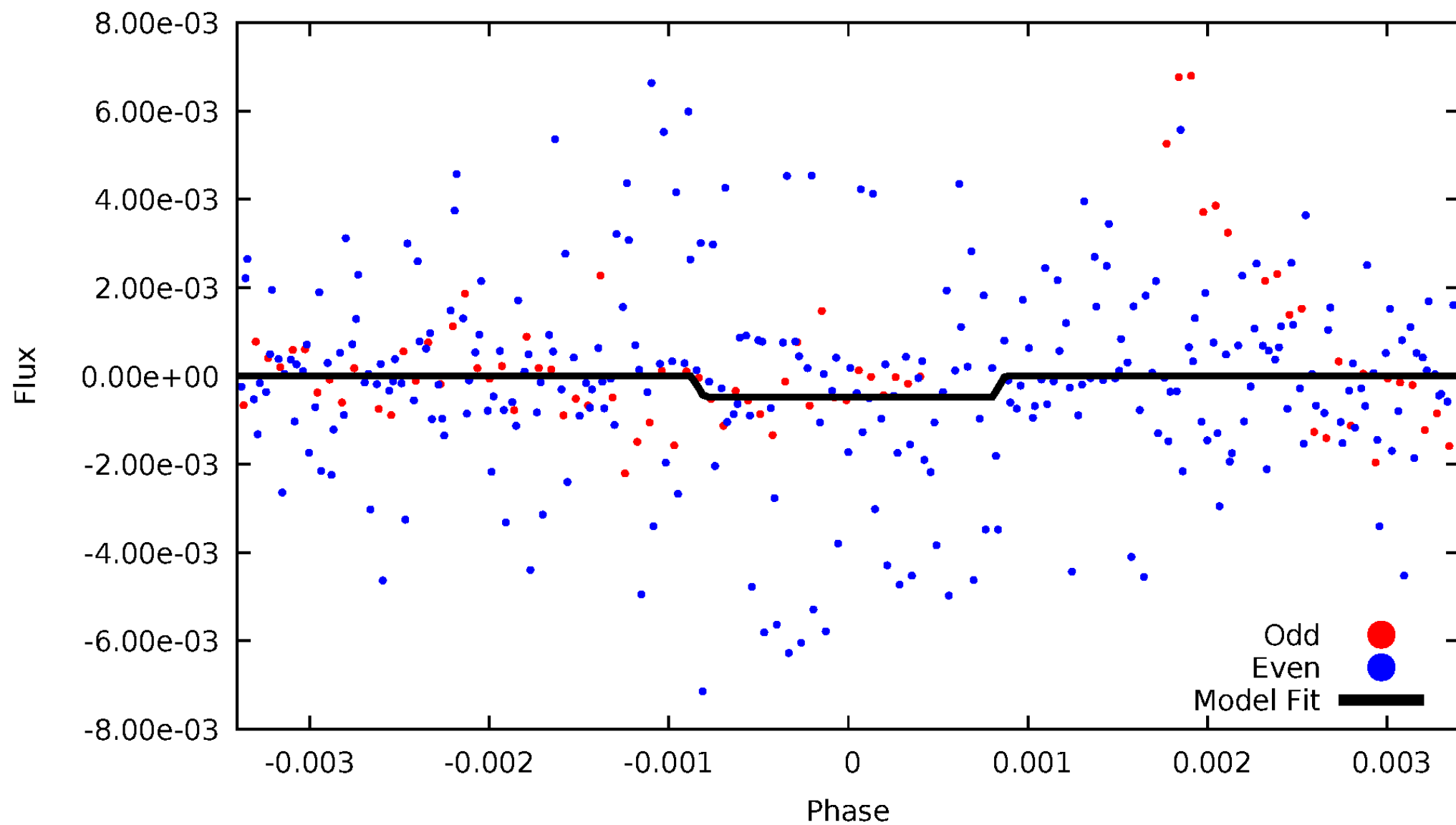
DV Odd/Even

TCE 005769275-01



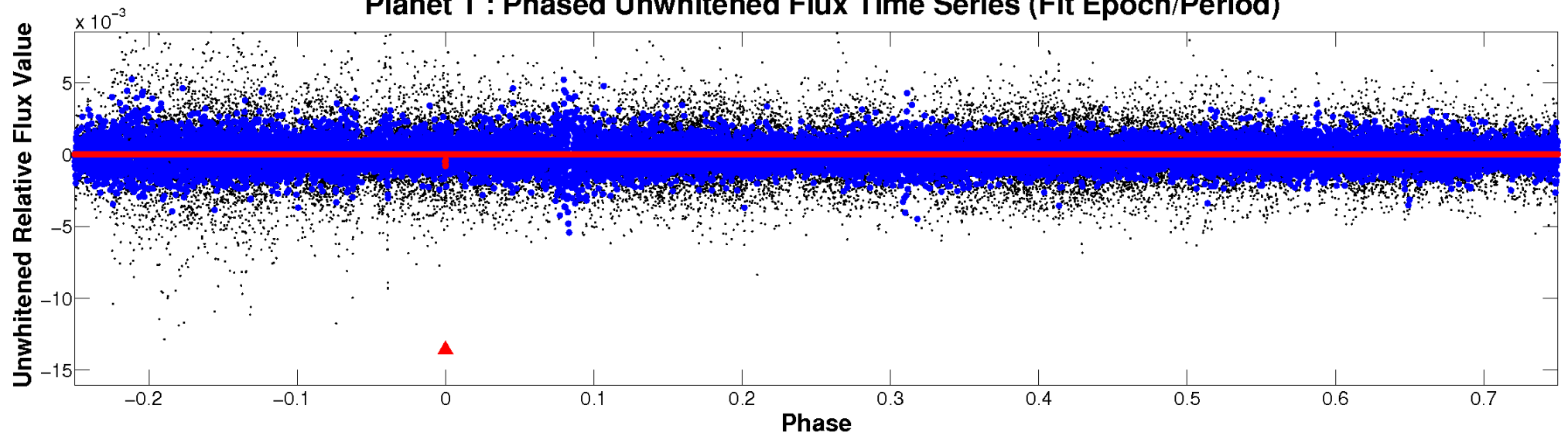
ALT Odd/Even

TCE 005769275-01

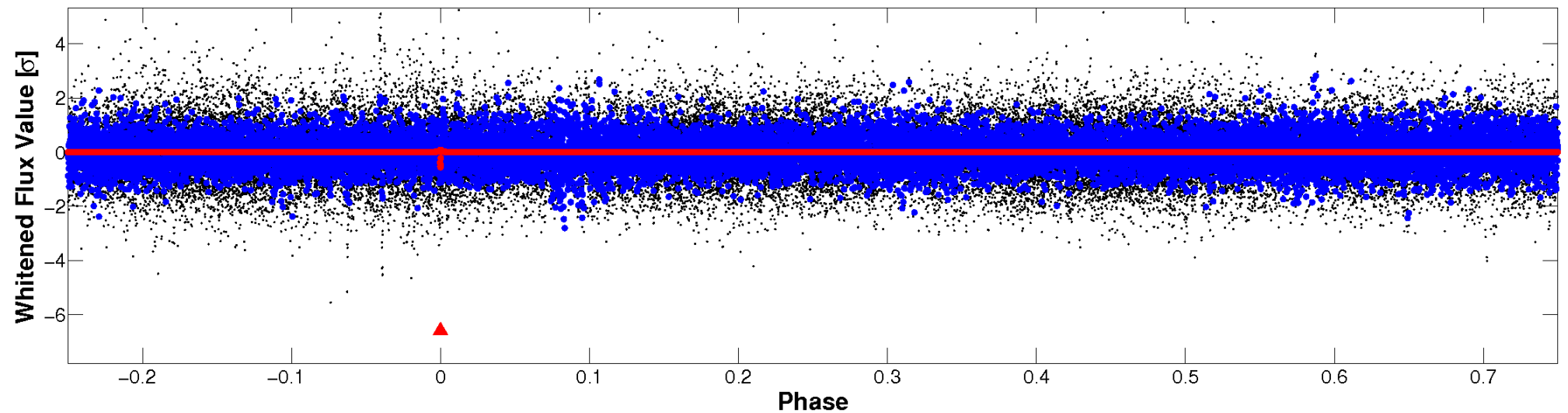


Non-Whitened Vs. Whitened Light Curve

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

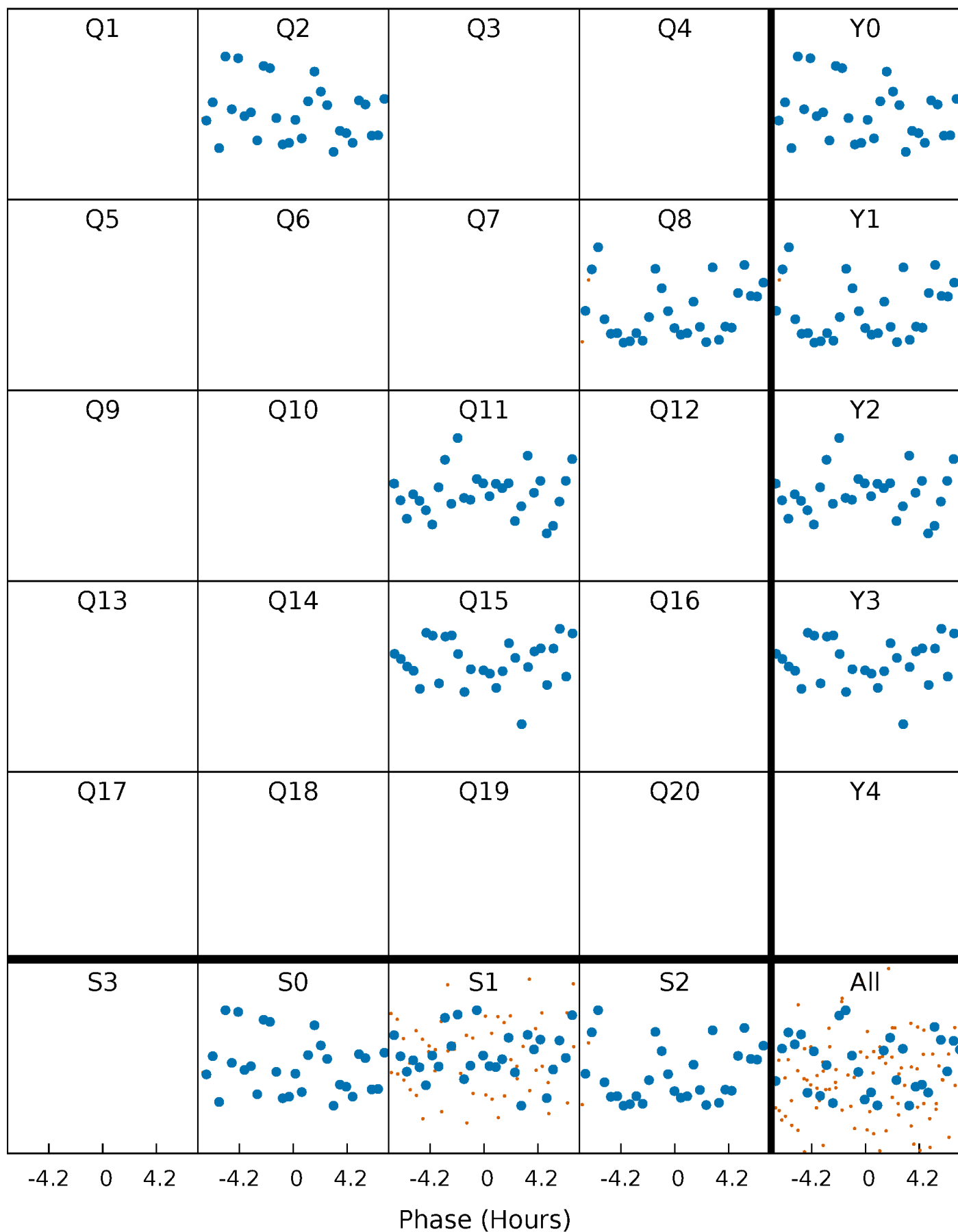


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



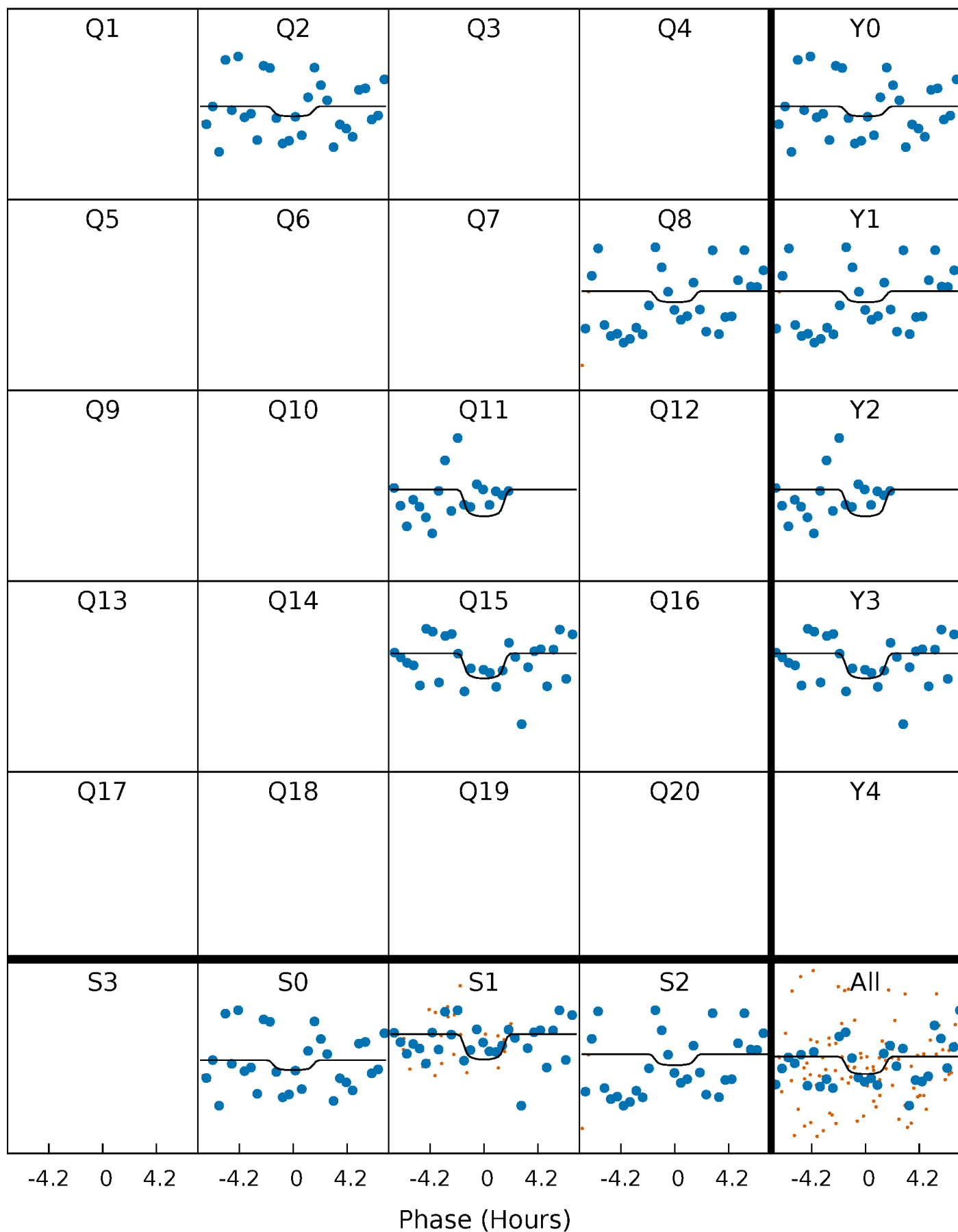
PDC Quarter-Phased Transit Curves

TCE 005769275-01 P=298.209534 Days $T_0=198.604630$ (BKJD)



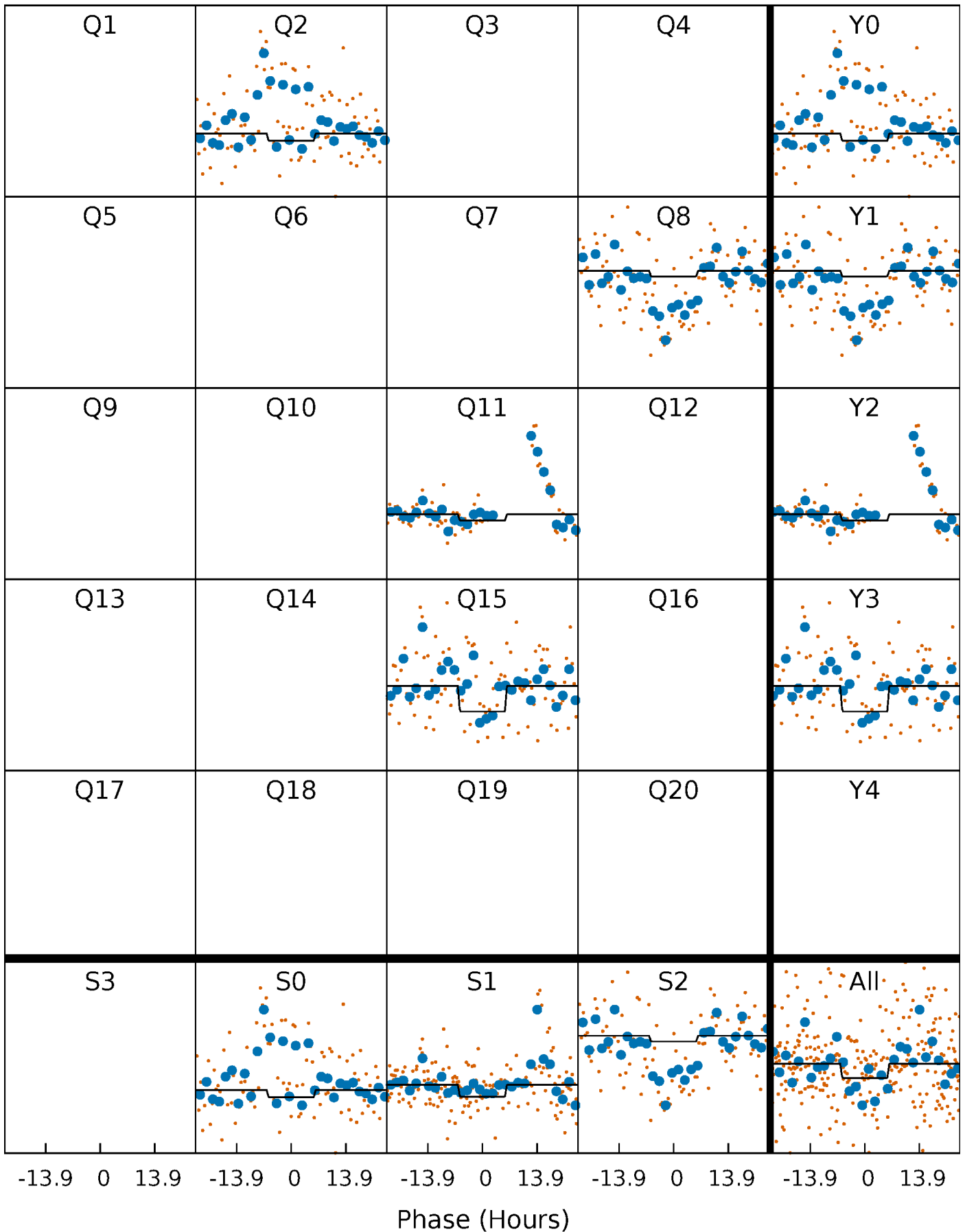
DV Quarter-Phased Transit Curves

TCE 005769275-01 P=298.209534 Days $T_0=198.604630$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

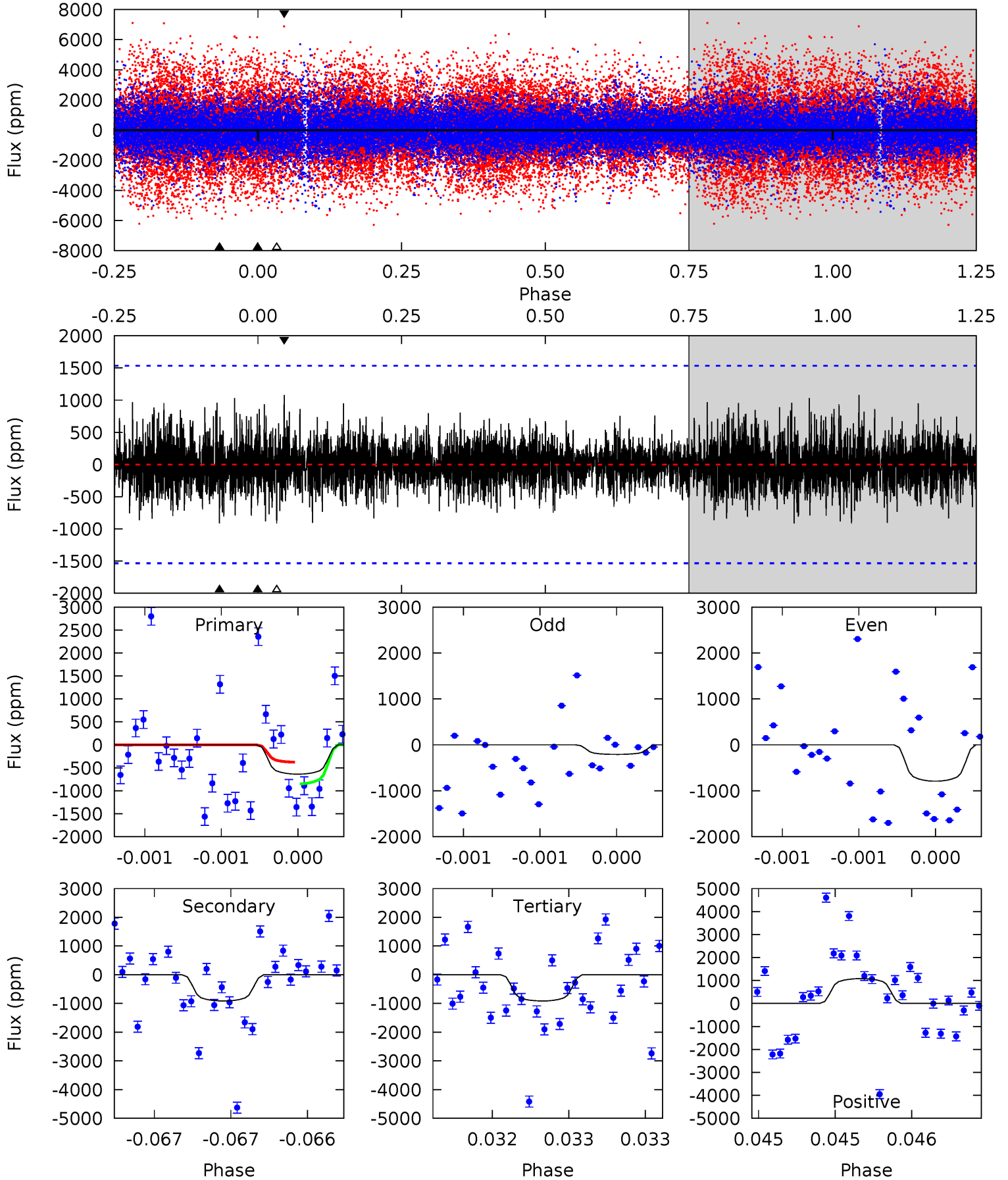
TCE 005769275-01 $P=298.234619$ Days $T_0=198.495720$ (BKJD)



DV Model-Shift Uniqueness Test

005769275-01, P = 298.209534 Days, E = 198.604630 Days

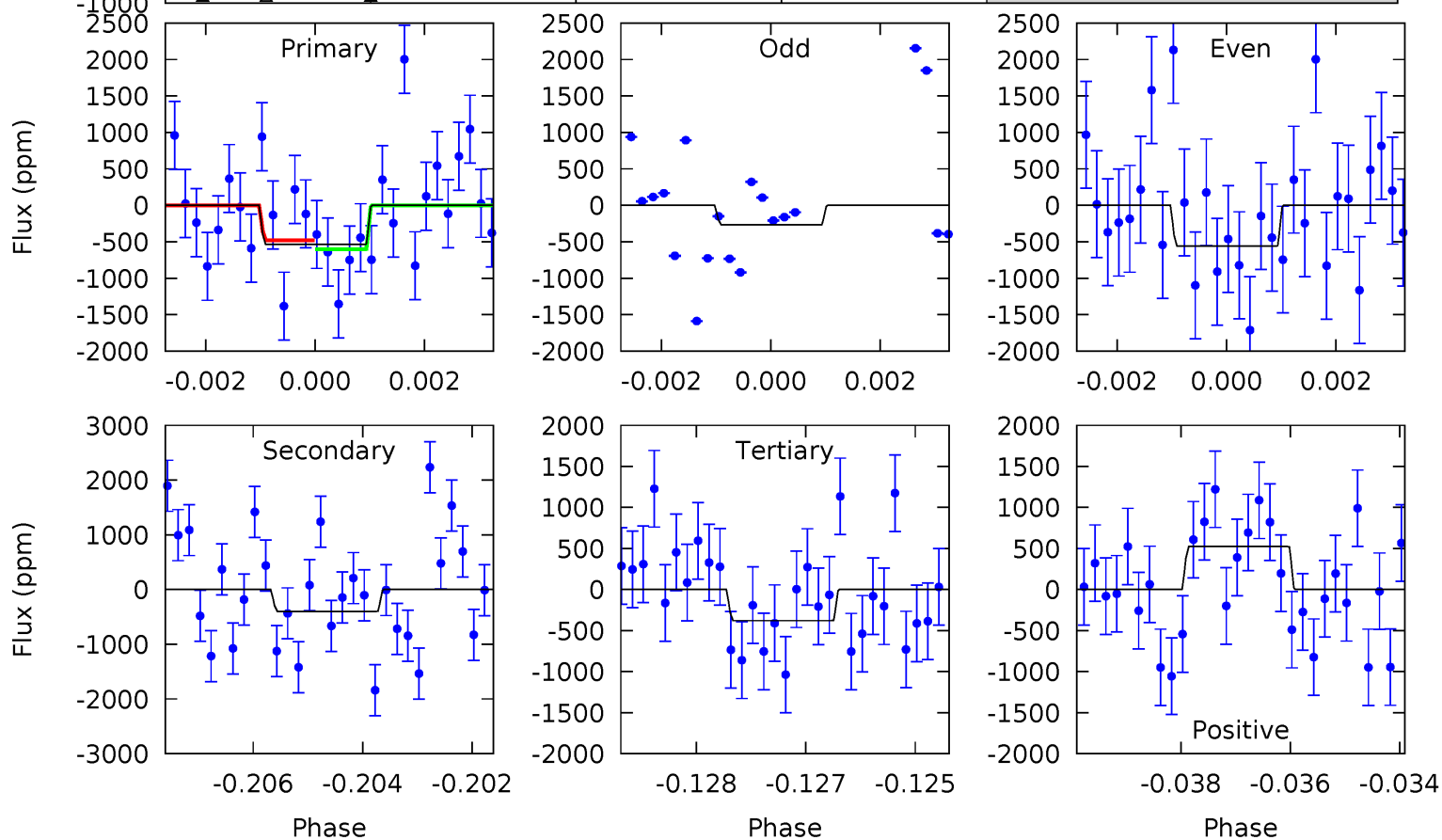
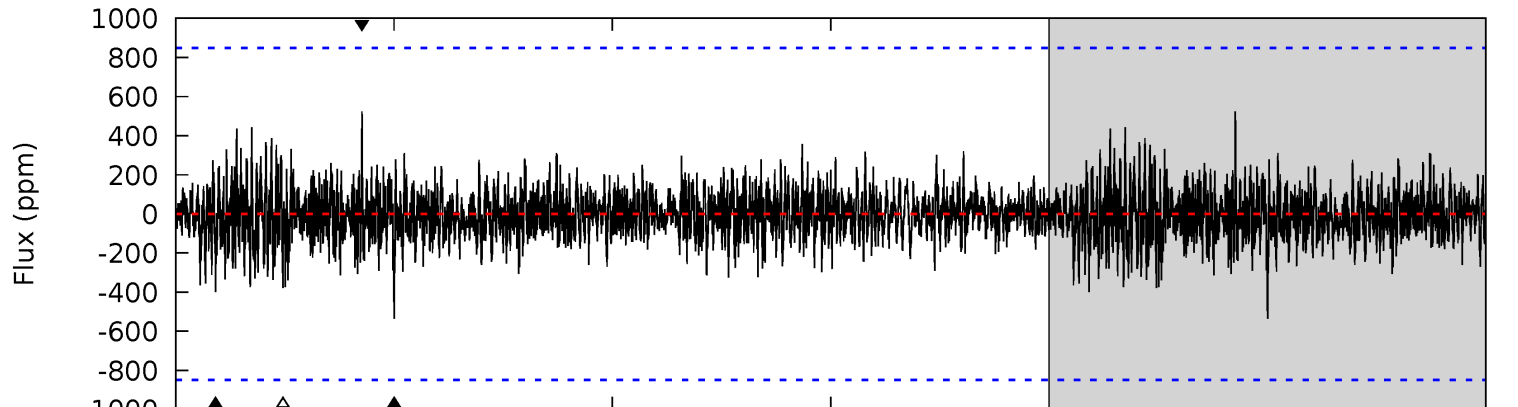
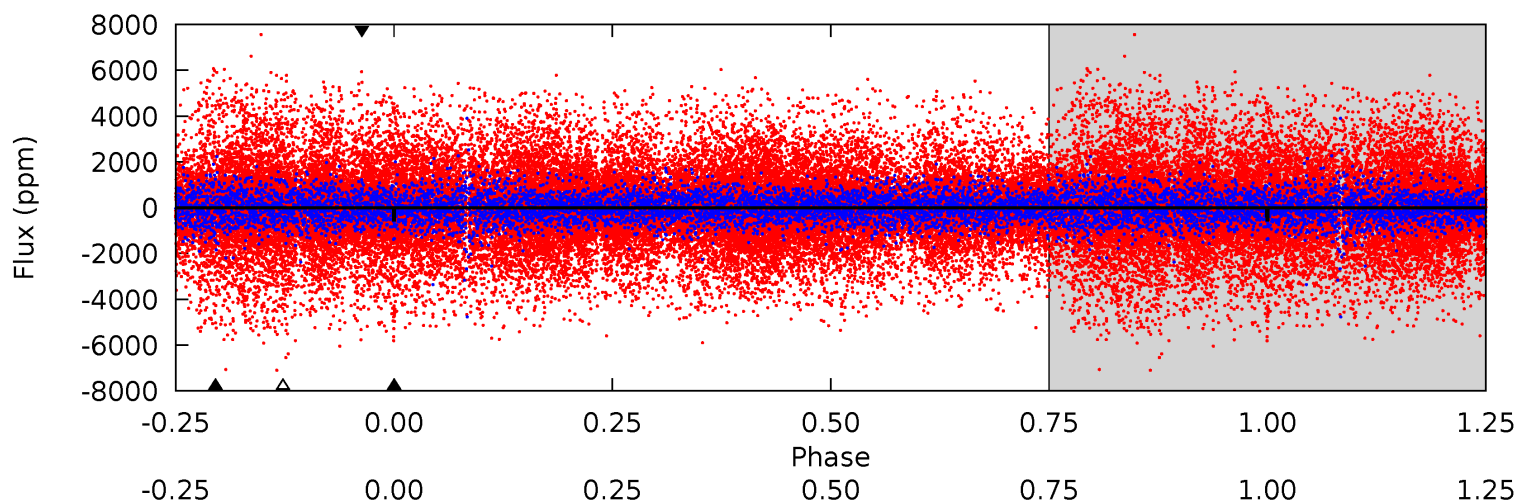
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.31	3.31	3.31	3.92	5.56	3.46	0.93	-1.00	-1.60	0.00	-0.60	0.89	1.24	0.54	0.86



Alt Model-Shift Uniqueness Test

005769275-01, P = 298.234619 Days, E = 198.495720 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.39	2.52	2.39	3.31	5.35	3.14	0.66	0.99	0.08	0.13	-0.79	0.76	3.17	0.49	0.39



Stellar Parameters For KIC 005769275

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6061^{+181}_{-200}	$4.436^{+0.087}_{-0.203}$	$-0.280^{+0.300}_{-0.300}$	$0.985^{+0.296}_{-0.127}$	$0.966^{+0.129}_{-0.116}$	$1.422^{+0.616}_{-0.727}$
	+3%/-3%	+2%/-5%	+107%/-107%	+30%/-13%	+13%/-12%	+43%/-51%
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 005769275-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-914 ± 276	$3.61^{+2.72}_{-2.21}$	404^{+30}_{-21}	5827^{+4522}_{-1235}	$29803^{+155262}_{-20891}$
Alt.	-399 ± 158	$3.16^{+2.43}_{-2.04}$	405^{+31}_{-22}	5073^{+3709}_{-1061}	15381^{+91758}_{-10890}

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

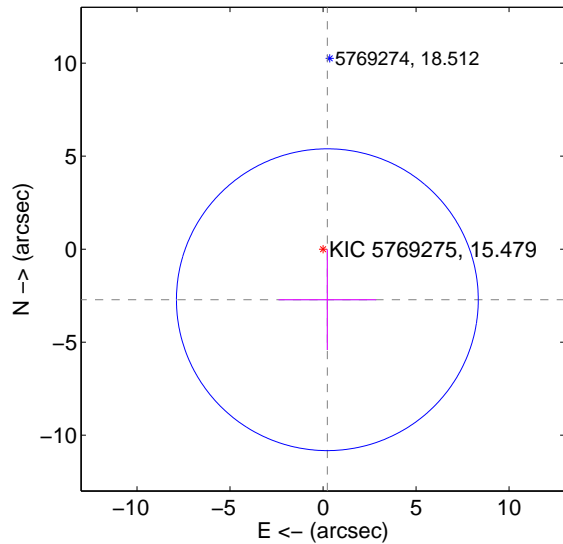
Supplemental centroid analysis for 005769275-01. Kepler magnitude: 15.48. Transit SNR 2.69

There are 1 quarters with good PRF difference image offsets

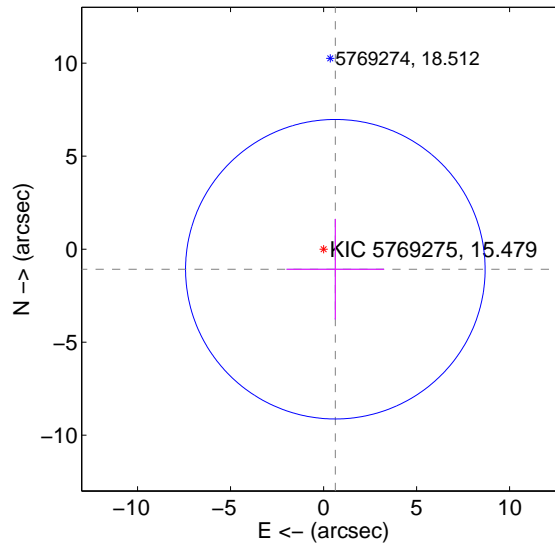
The direct PRF centroid is offset from the target star catalog position by about 1.69 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.728 ± 2.705	1.01	-0.232 ± 2.623	-2.718 ± 2.705
PRF-fit source offset from KIC position	1.250 ± 2.684	0.47	-0.632 ± 2.623	-1.078 ± 2.705
photometric centroid source offset	0.85 ± 0.09	9.85	-0.47 ± 0.08	0.71 ± 0.09

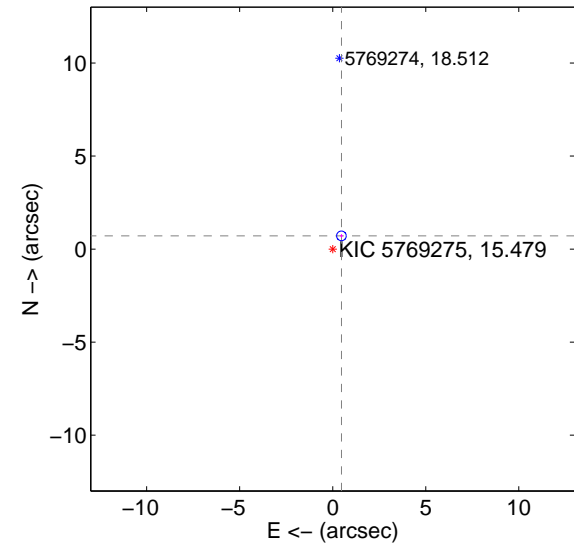
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

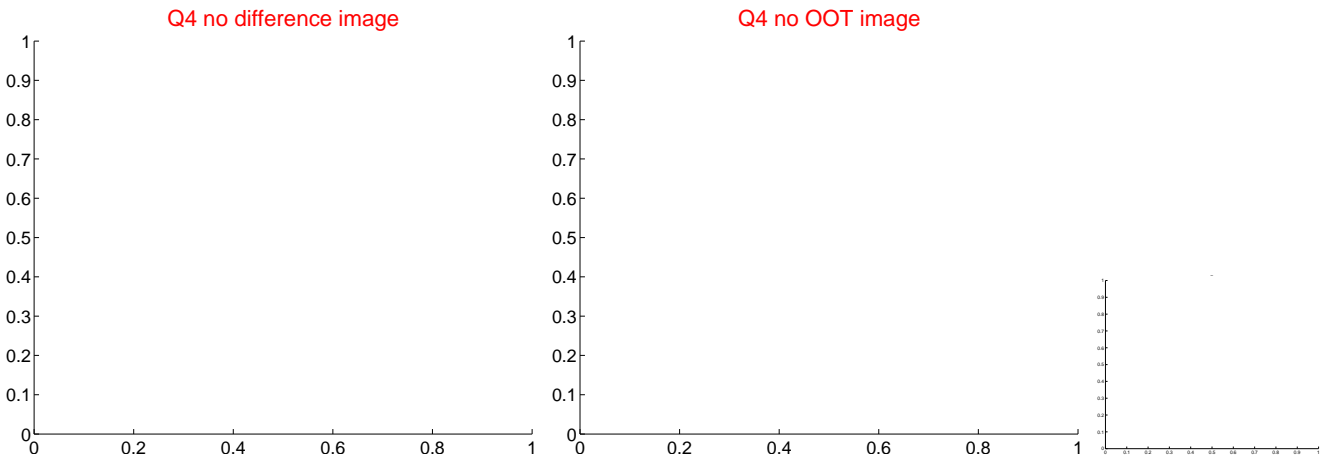
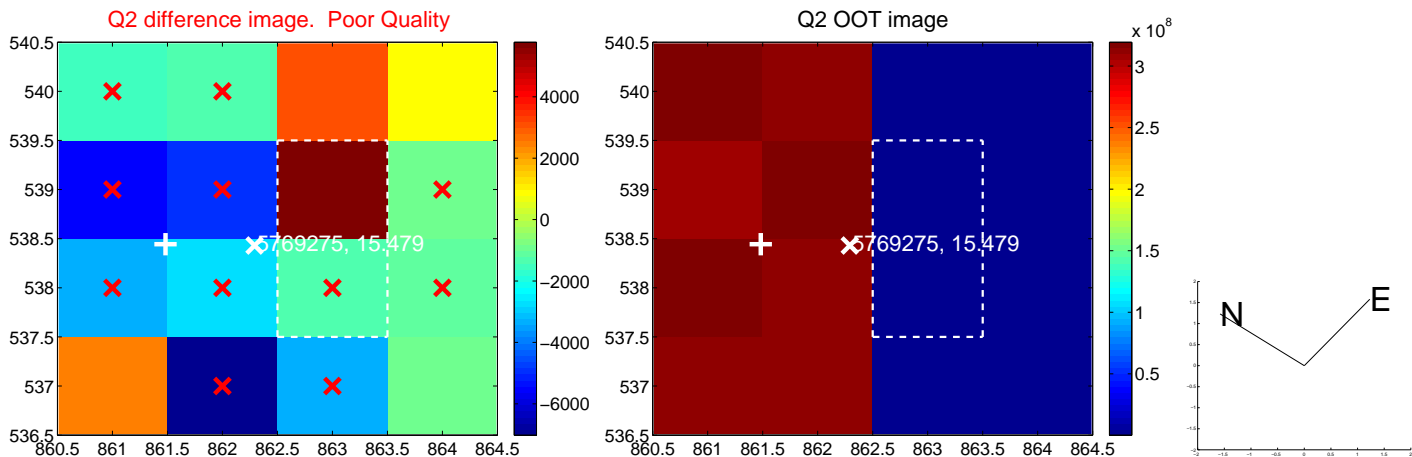


offset from photometric centroids

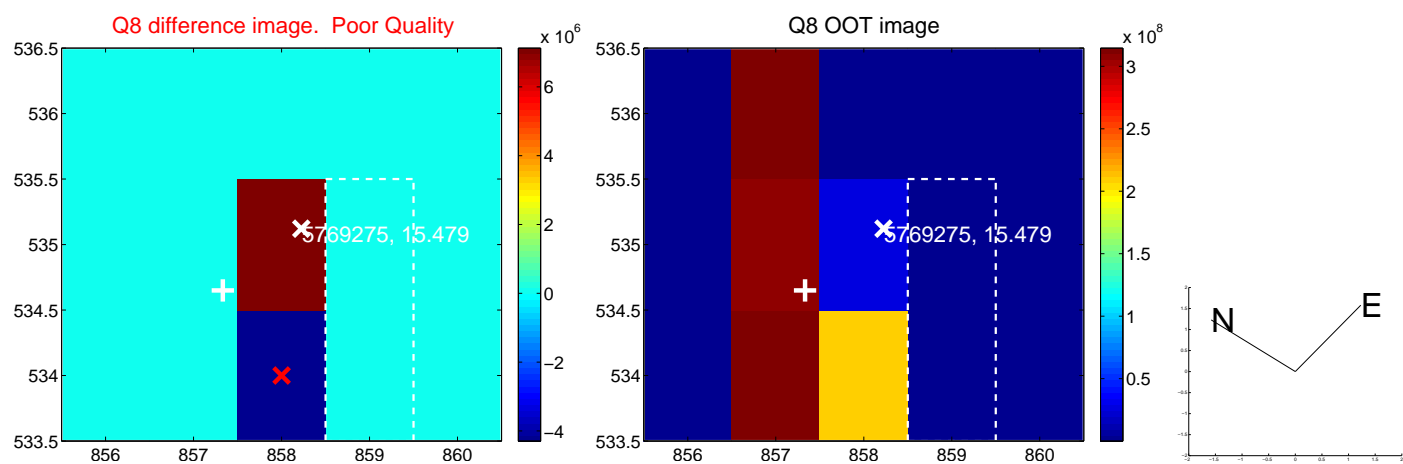


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



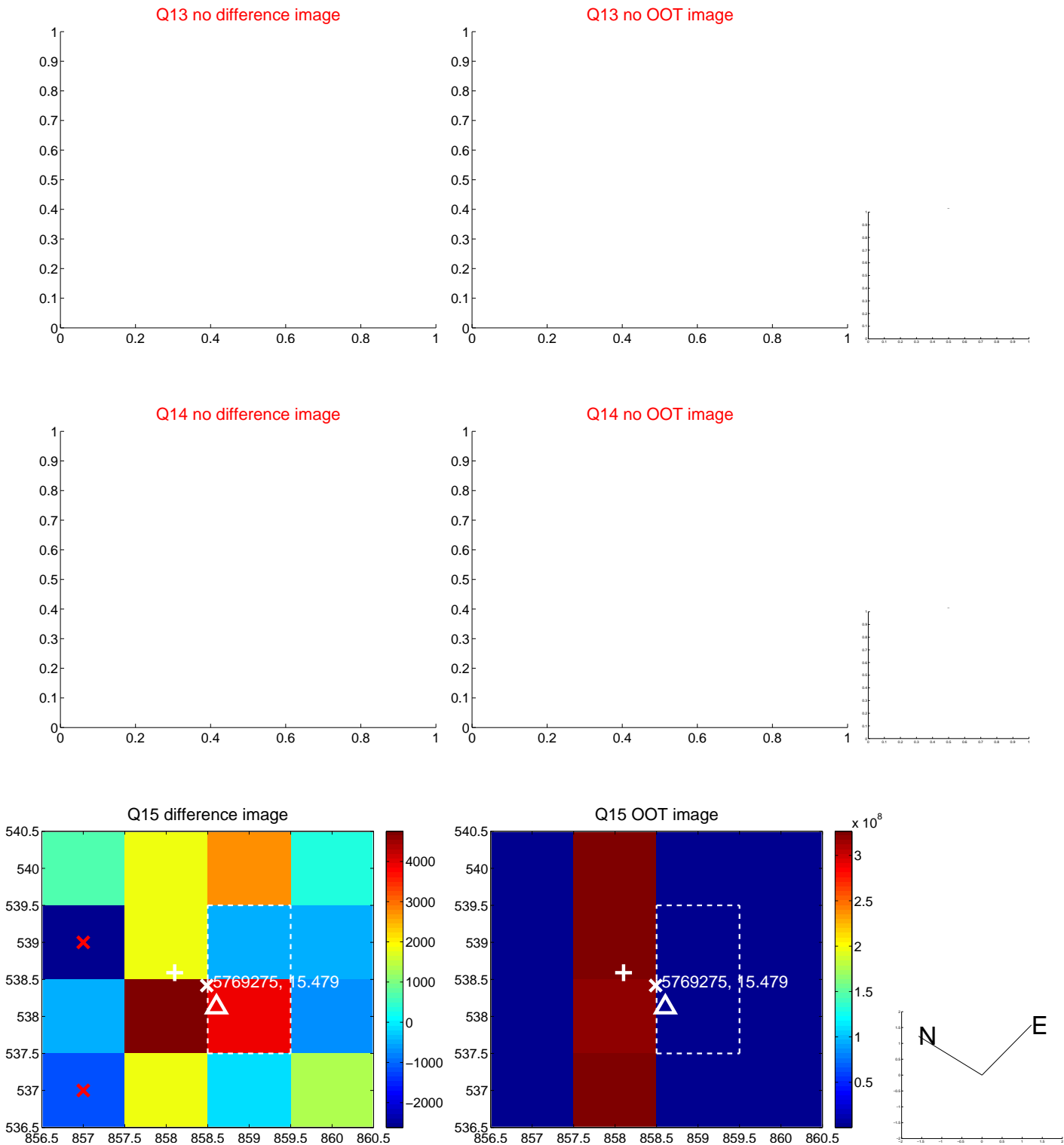
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



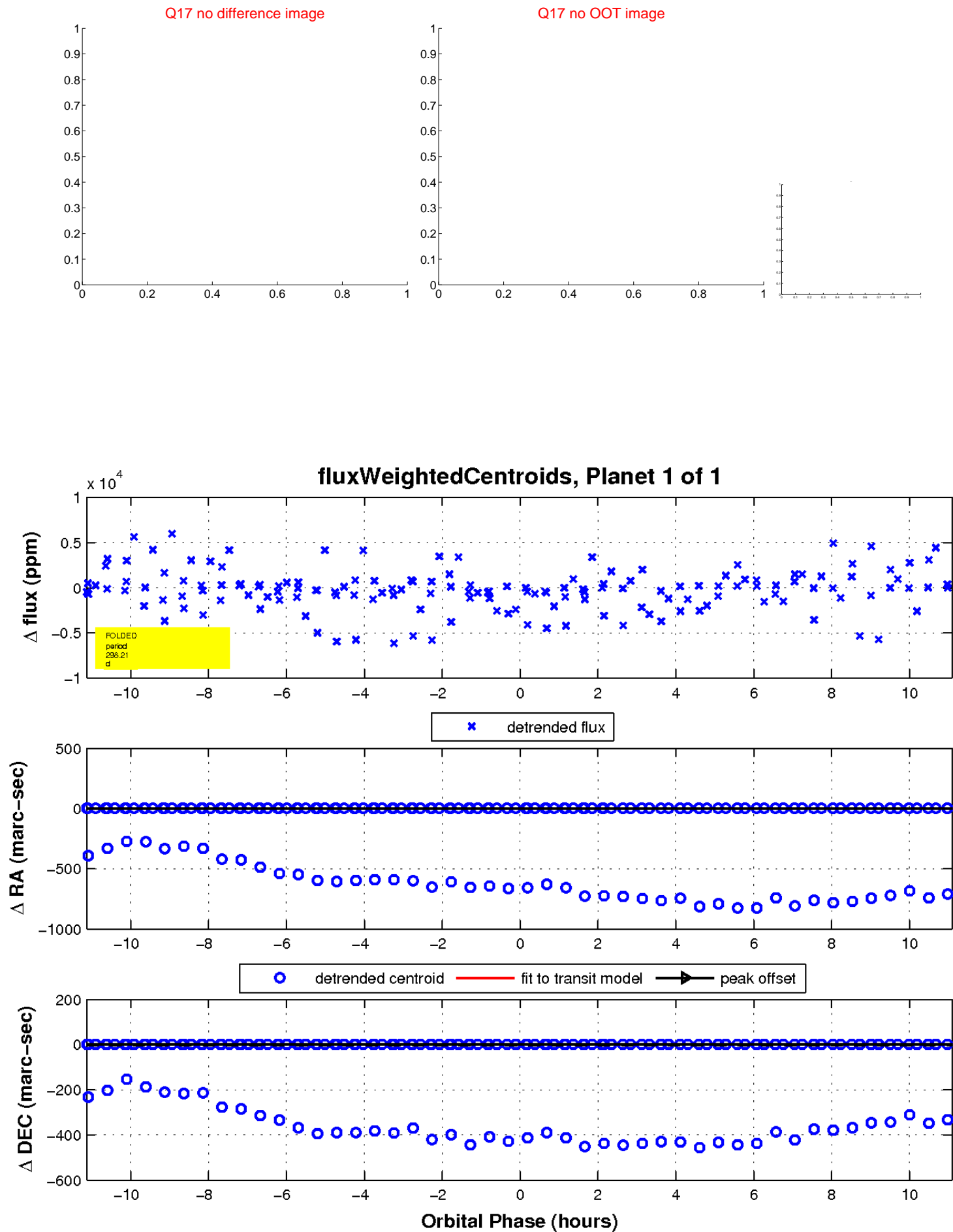
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

