

KIC 008242265

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})
008242265-01	OBS	No	370.438120	231.366360	1461.1	23.908	7.5	7.8	0.71	5048	4.20	0.37

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008242265-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

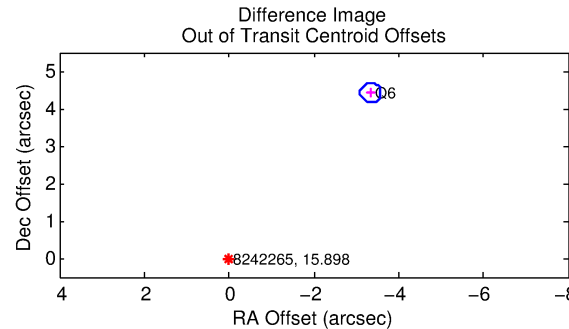
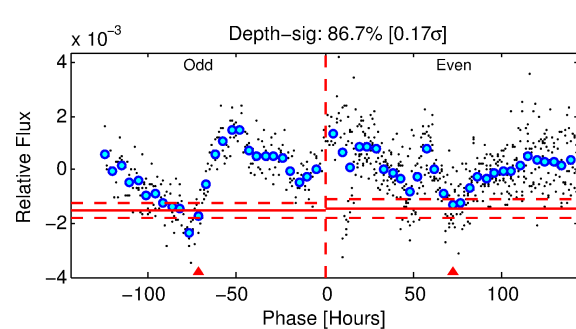
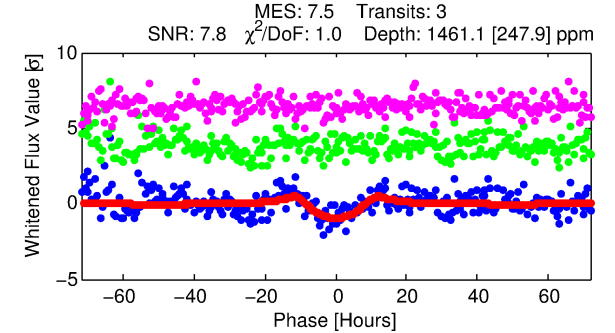
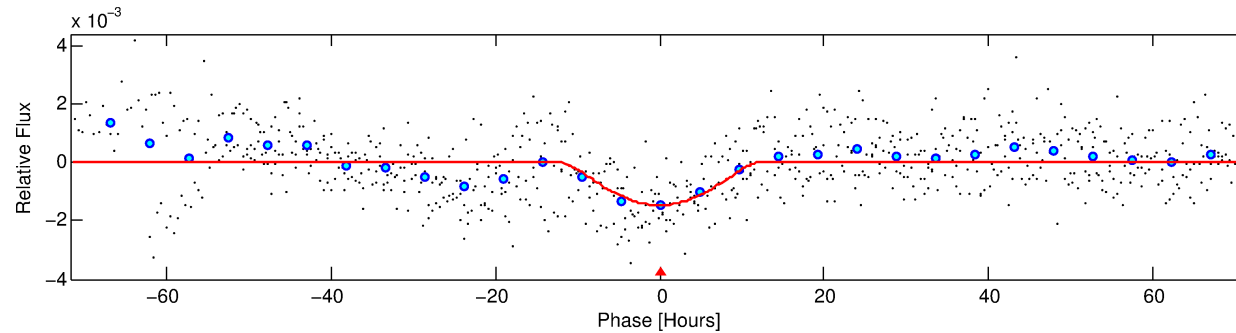
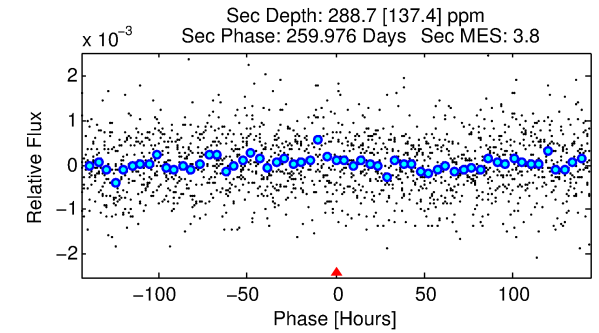
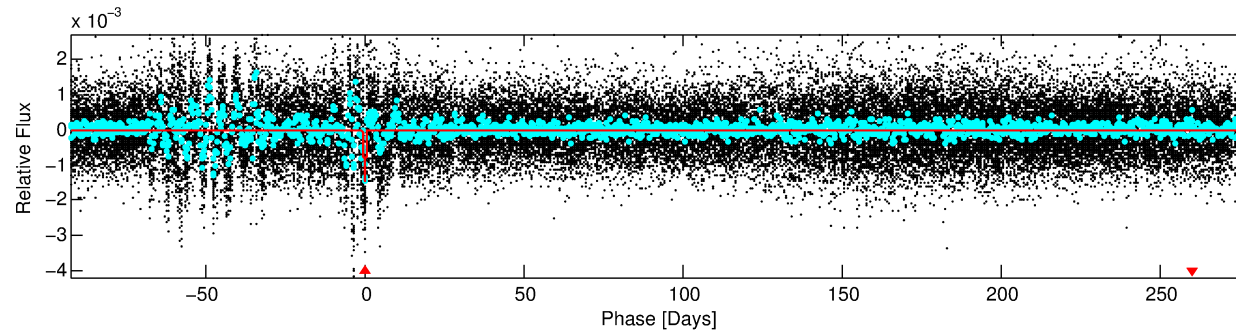
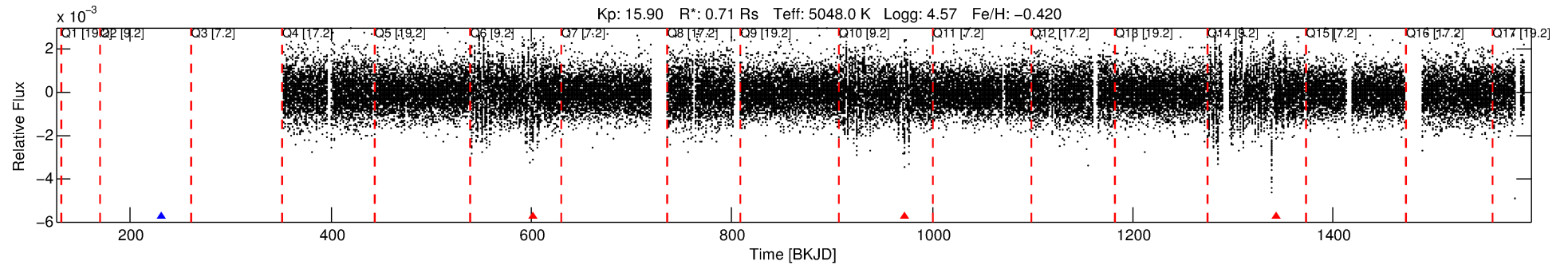
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008242265-01

No Significant Match Found

DV One-Page Summary

KIC: 8242265 Candidate: 1 of 1 Period: 370.438 d



DV Fit Results:

Period = 370.43812 [0.03327] d
Epoch = 231.3664 [0.0703] BKJD
Rp/R* = 0.0544 [0.0526]
a/R* = 47.47 [16.96]
b = 0.98 [0.10]
Seff = 0.37 [0.07]
Teq = 199 [10] K
Rp = 4.20 [4.08] Re
a = 0.8874 [0.0803] AU
Ag = 7098.92 [14170.47] [0.50σ]
Teff = 2821 [1408] K [1.86σ]

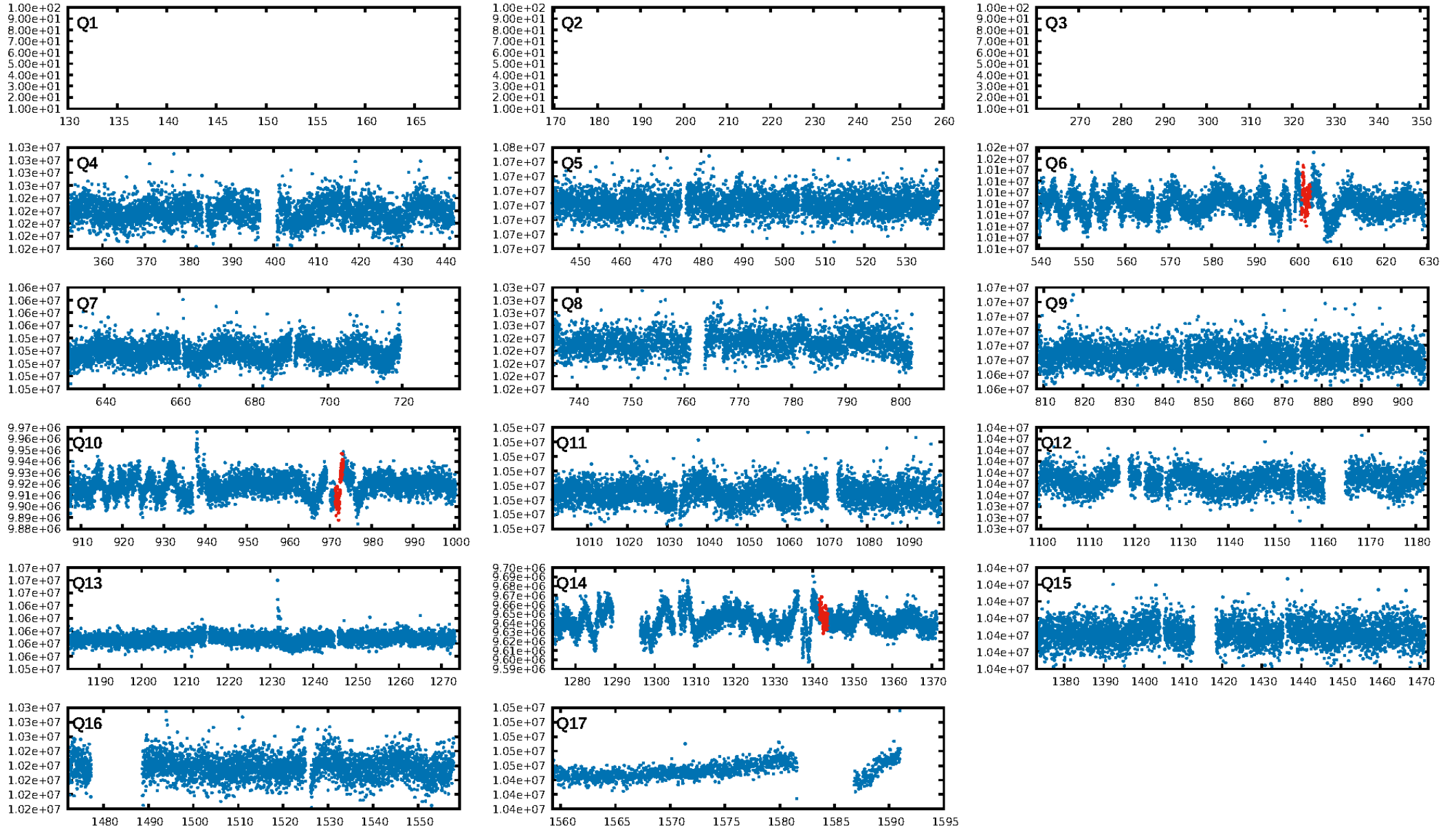
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 74.1%
ModelChiSquareGoF-sig: 100.0%
Bootstrap-pfa: 1.86e-09
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 2.25
Centroid-sig: 0.4%
Centroid-so: 5.963 arcsec [2.50σ]
OotOffset-rm: 5.537 arcsec [65.71σ]
KicOffset-rm: 6.840 arcsec [81.31σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [2/2]

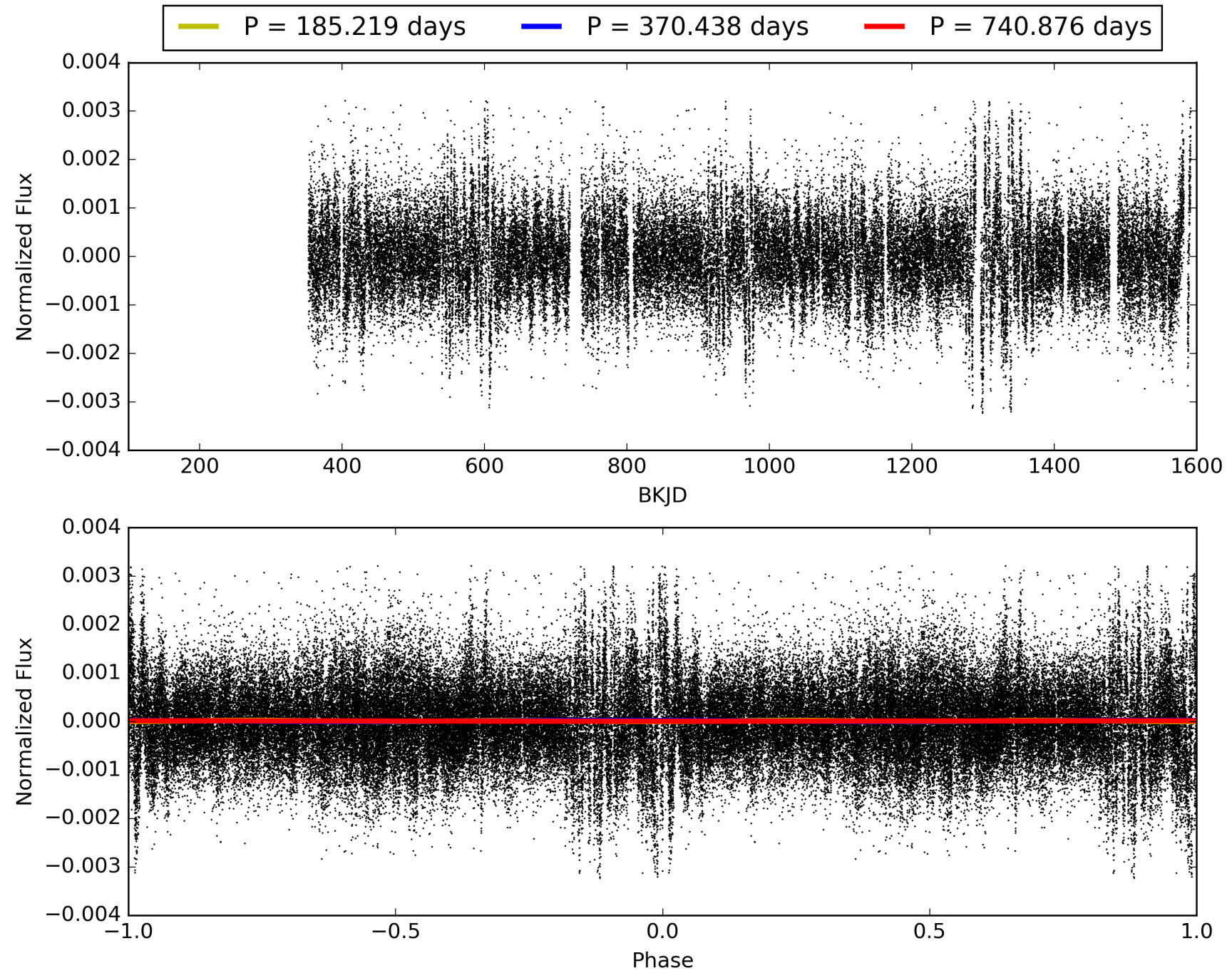
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 23:57:44 Z

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

TCE 008242265-01, PDC Light Curves

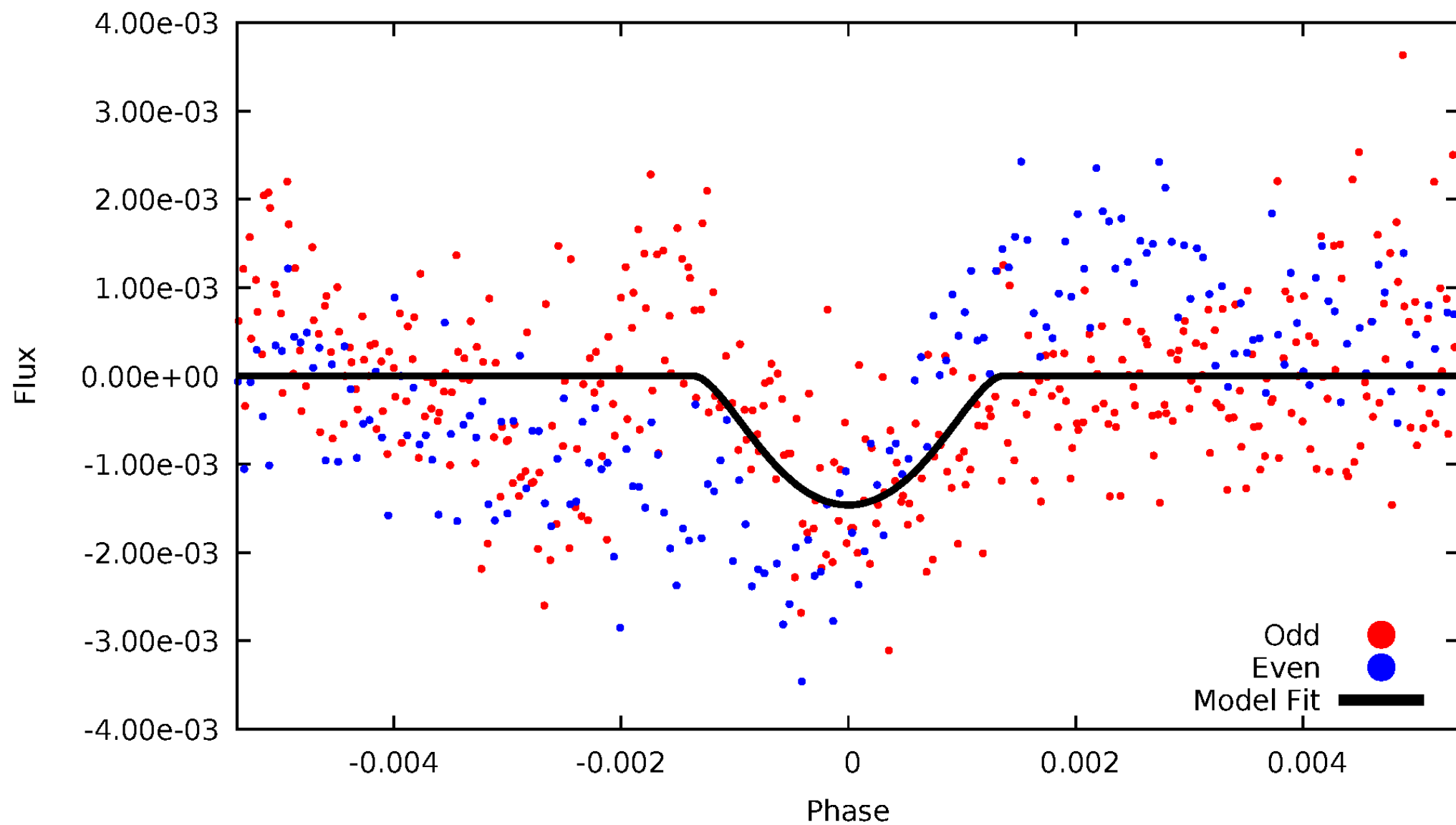


TCE 008242265-01



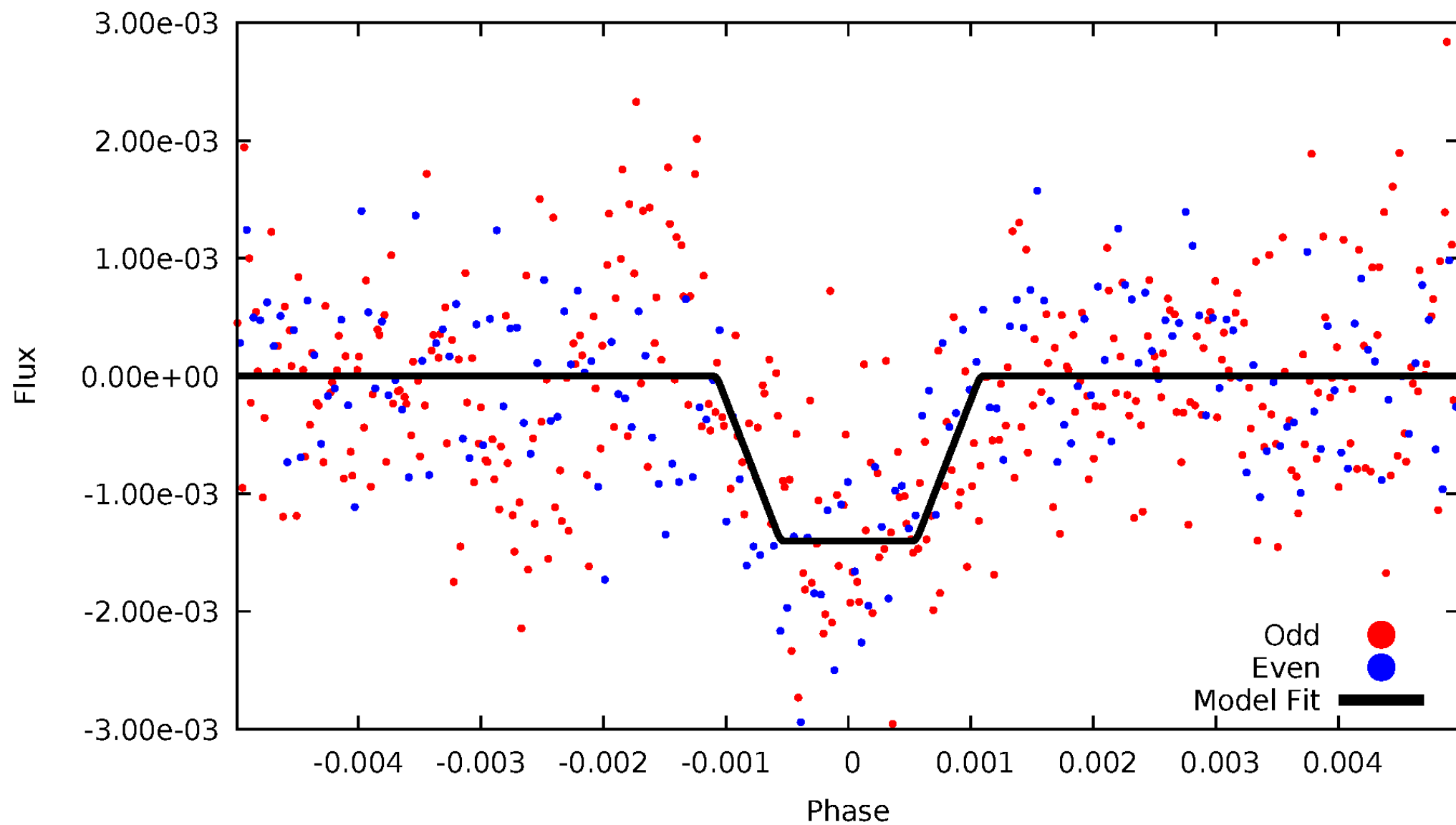
DV Odd/Even

TCE 008242265-01



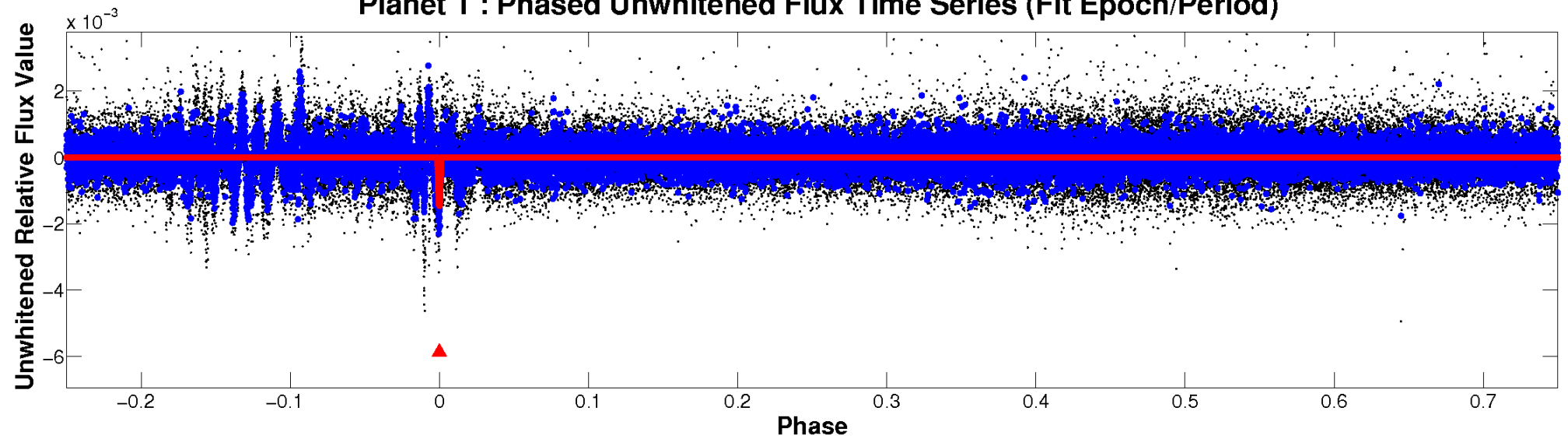
ALT Odd/Even

TCE 008242265-01

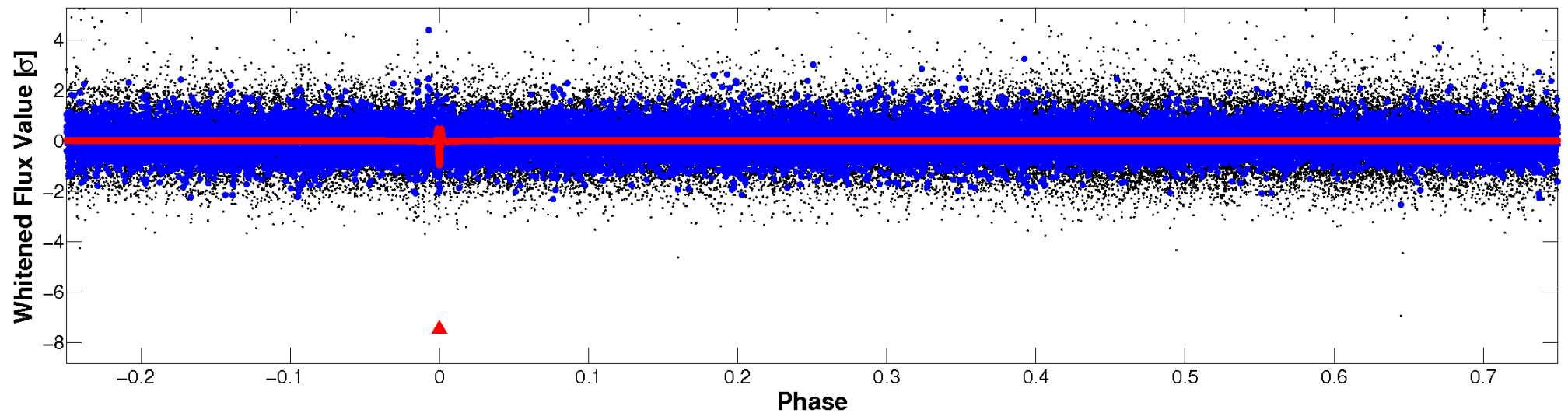


Non-Whitened Vs. Whitened Light Curve

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

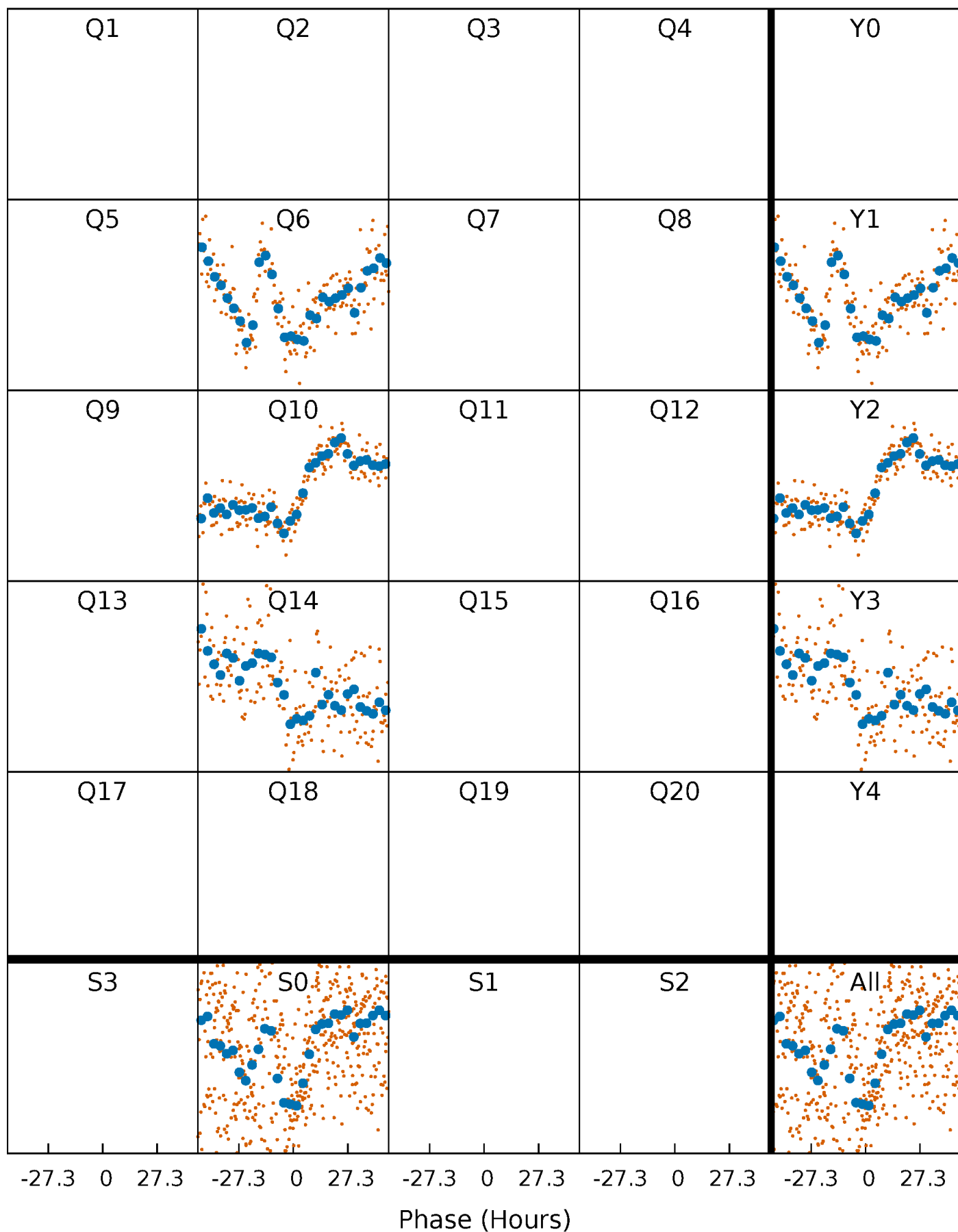


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



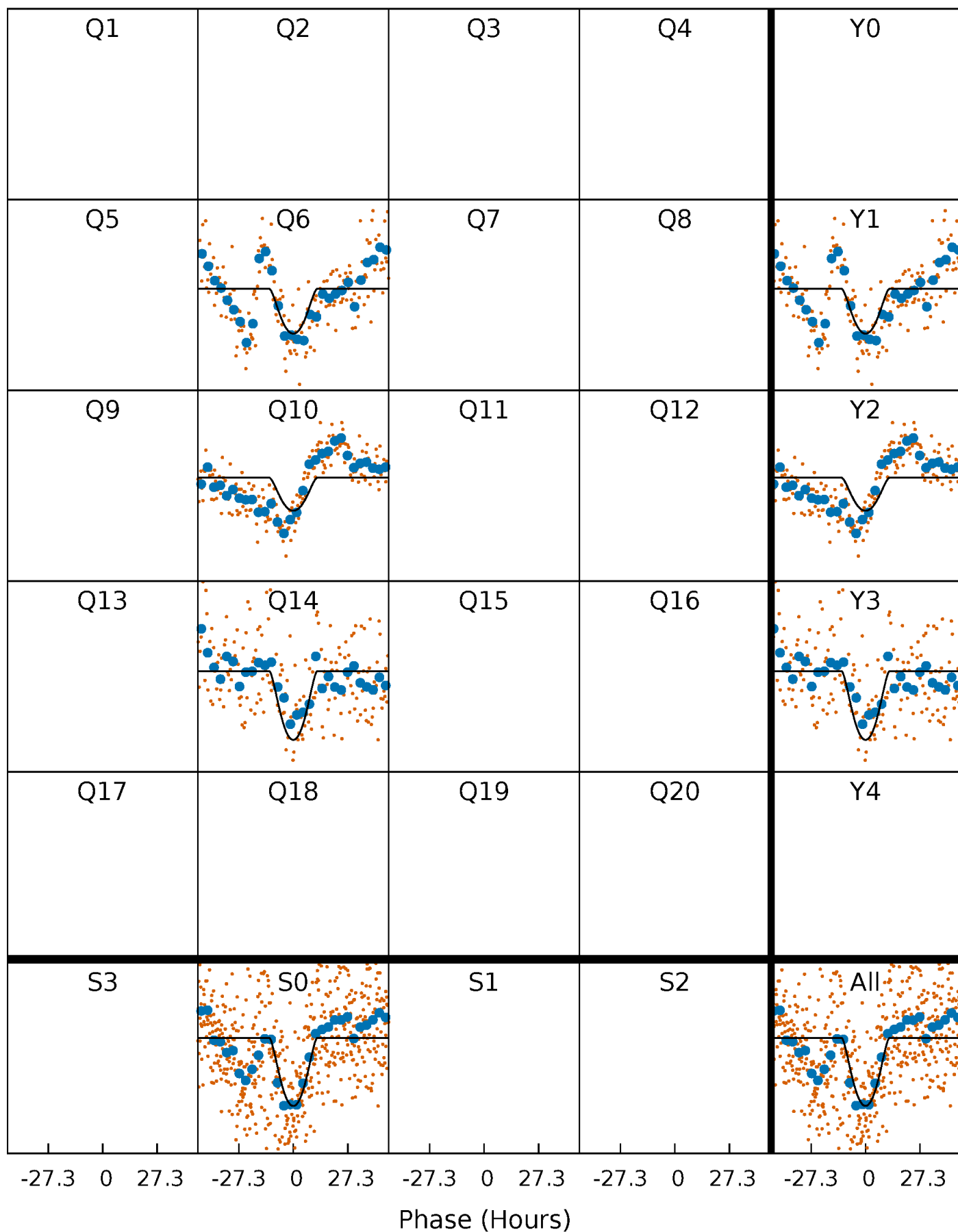
PDC Quarter-Phased Transit Curves

TCE 008242265-01 P=370.438120 Days $T_0=231.366361$ (BKJD)



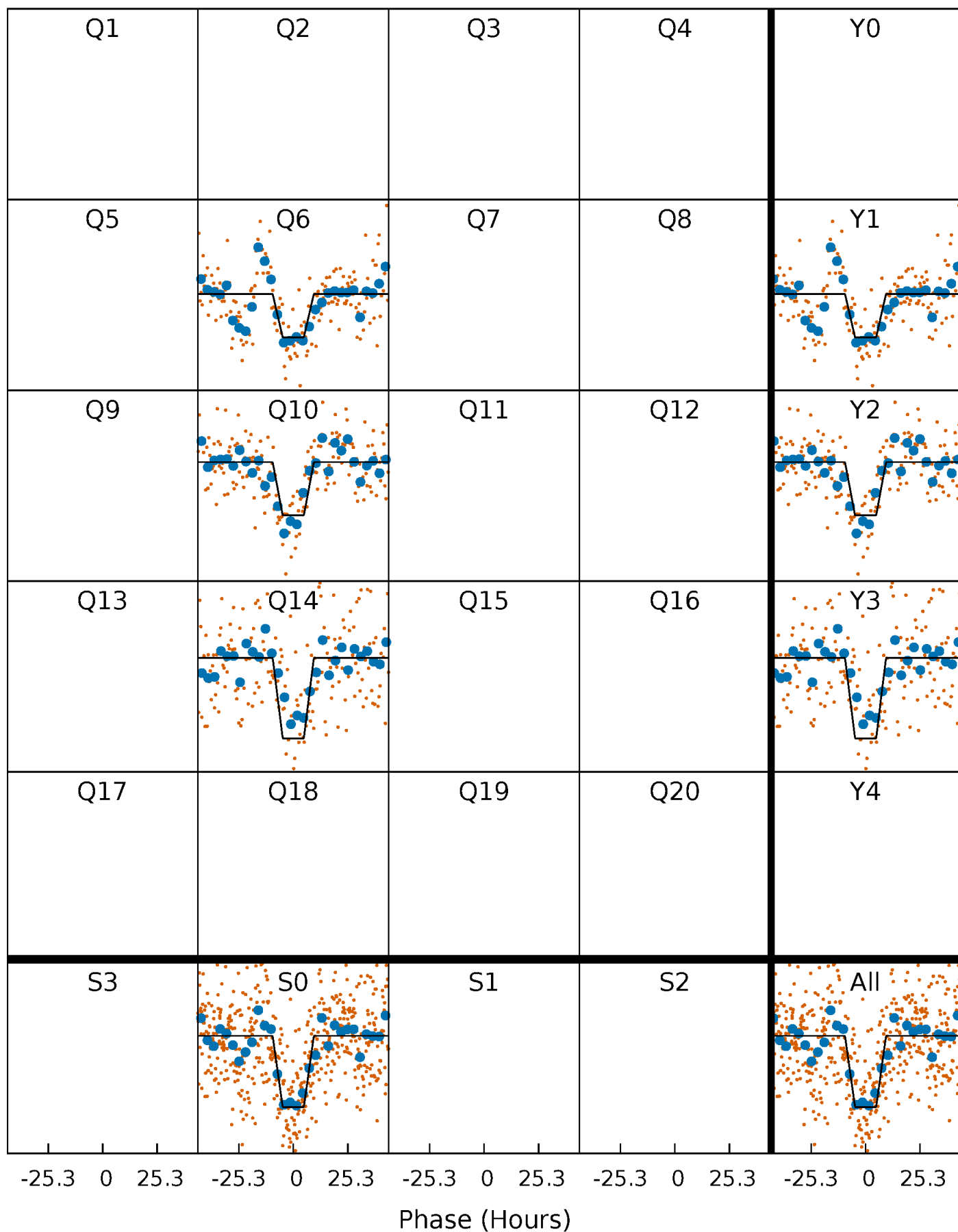
DV Quarter-Phased Transit Curves

TCE 008242265-01 P=370.438120 Days $T_0=231.366361$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

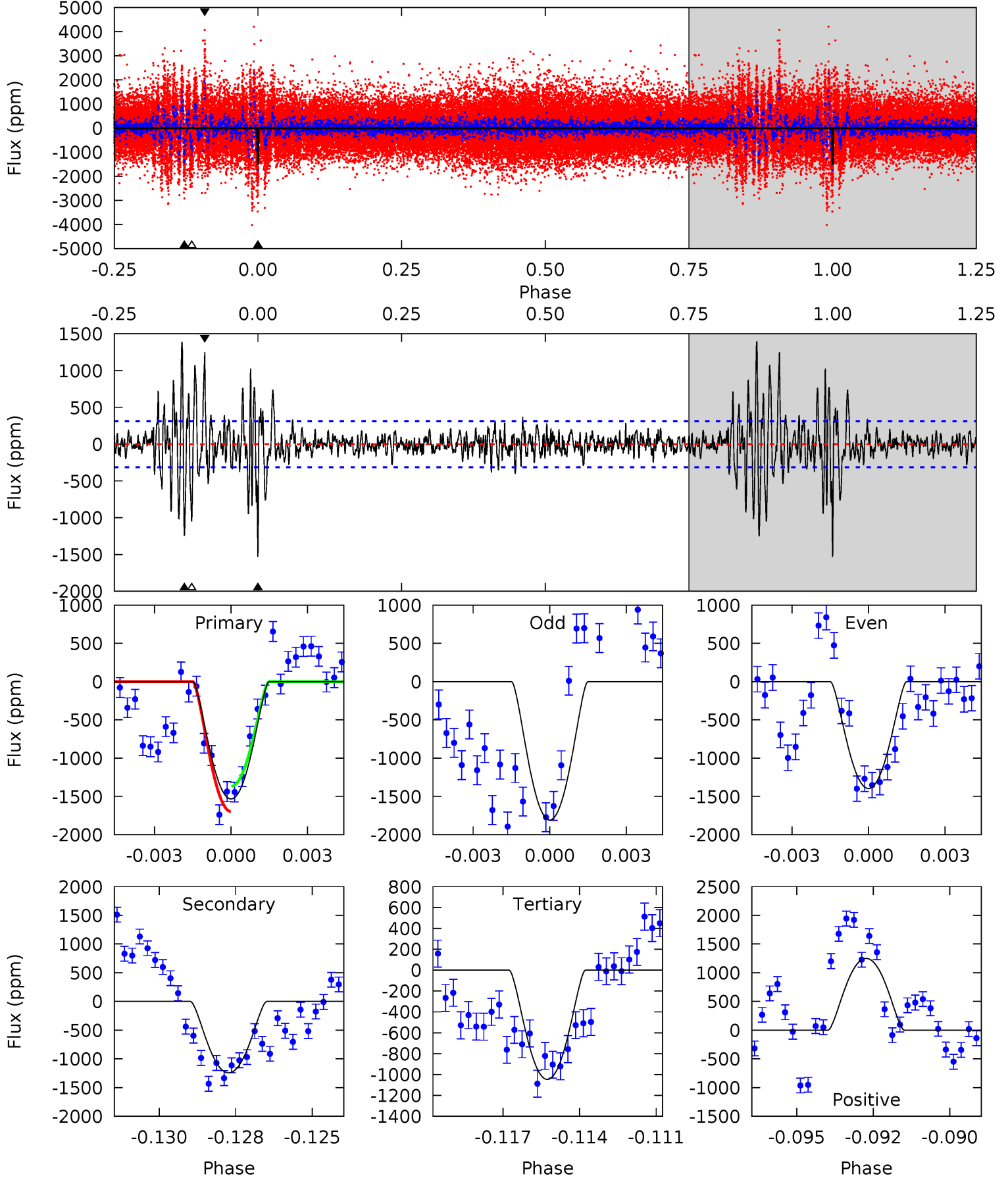
TCE 008242265-01 P=370.433198 Days $T_0=231.368939$ (BKJD)



DV Model-Shift Uniqueness Test

008242265-01, $P = 370.438120$ Days, $E = 231.366361$ Days

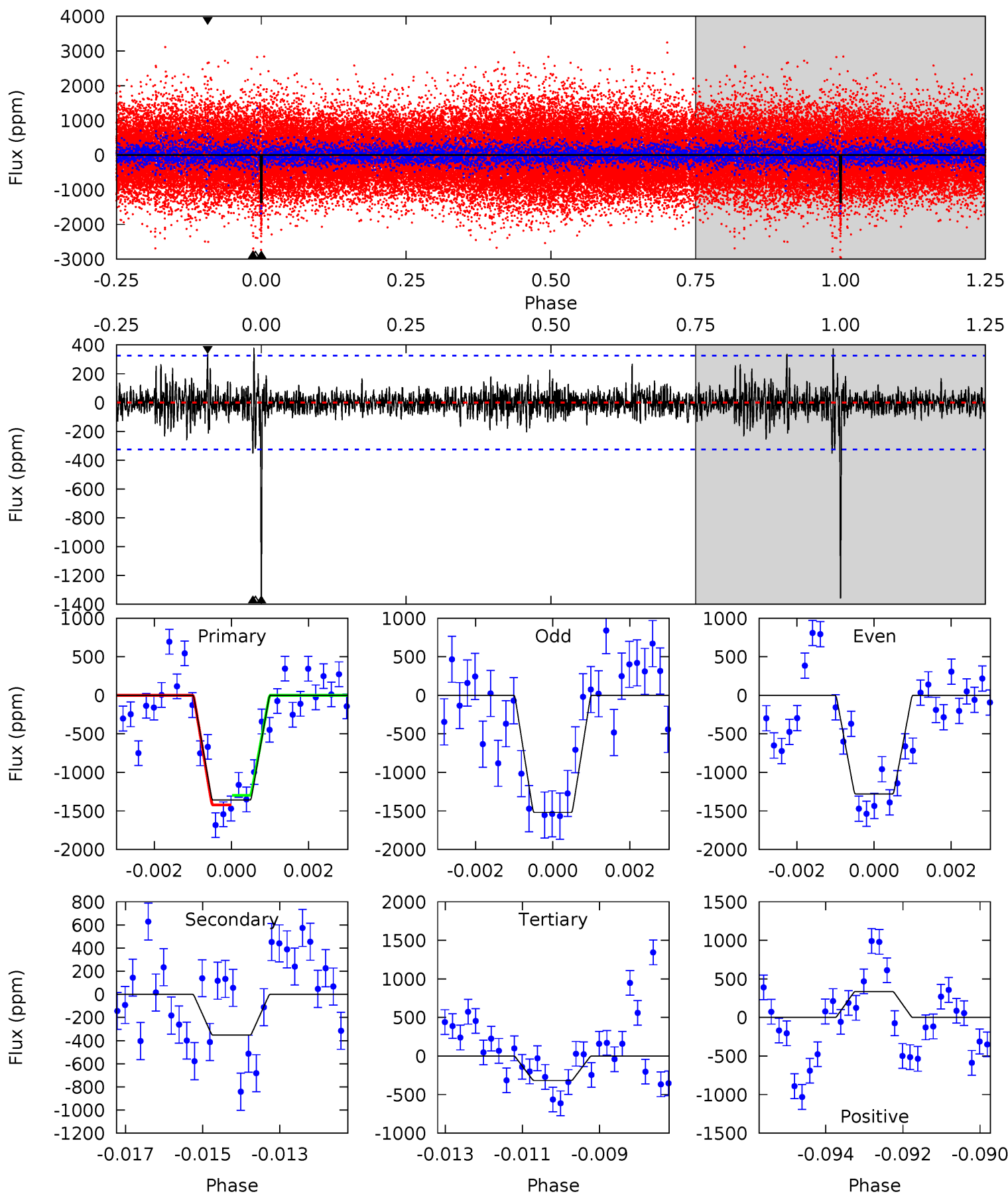
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.8	20.9	17.6	21.0	5.27	3.00	3.53	8.19	4.77	3.31	-0.11	3.33	0.88	0.48	2.77



Alt Model-Shift Uniqueness Test

008242265-01, P = 370.433198 Days, E = 231.368939 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	5.76	5.17	5.48	5.31	3.06	1.02	17.0	16.7	0.58	0.27	1.84	0.88	0.22	1.00



Stellar Parameters For KIC 008242265

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5048^{+181}_{-181}	$4.571^{+0.078}_{-0.045}$	$-0.420^{+0.350}_{-0.300}$	$0.707^{+0.072}_{-0.072}$	$0.679^{+0.093}_{-0.043}$	$2.710^{+0.863}_{-0.456}$
	+4%/-4%	+2%/-1%	+83%/-71%	+10%/-10%	+14%/-6%	+32%/-17%
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 008242265-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1243 ± 59	$4.70^{+3.82}_{-2.95}$	276^{+11}_{-12}	4086^{+2021}_{-743}	$25495^{+154317}_{-17980}$
Alt.	-353 ± 61	$3.79^{+3.62}_{-2.46}$	277^{+12}_{-13}	3529^{+1594}_{-635}	10646^{+70244}_{-7817}

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 $A_{obs} \gg 1.0$

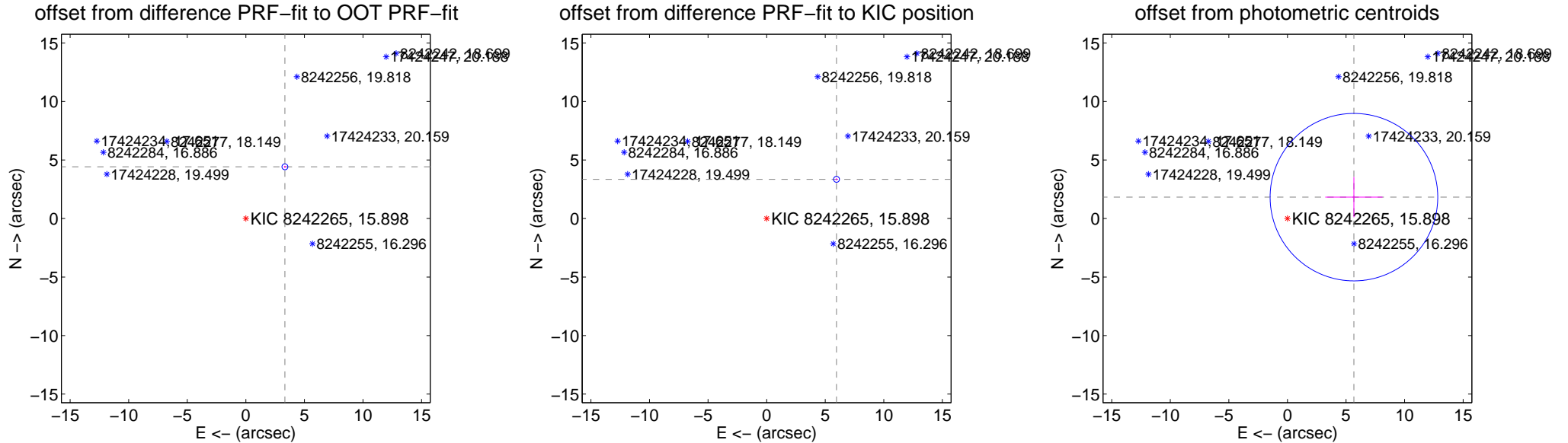
DV Centroid Data

Supplemental centroid analysis for 008242265-01. Kepler magnitude: 15.90. Transit SNR 7.83

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 2.84 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	5.537 ± 0.084	65.71	-3.335 ± 0.084	4.419 ± 0.084
PRF-fit source offset from KIC position	6.840 ± 0.084	81.31	-5.963 ± 0.084	3.351 ± 0.084
photometric centroid source offset	5.96 ± 2.38	2.50	-5.68 ± 2.44	1.83 ± 1.72

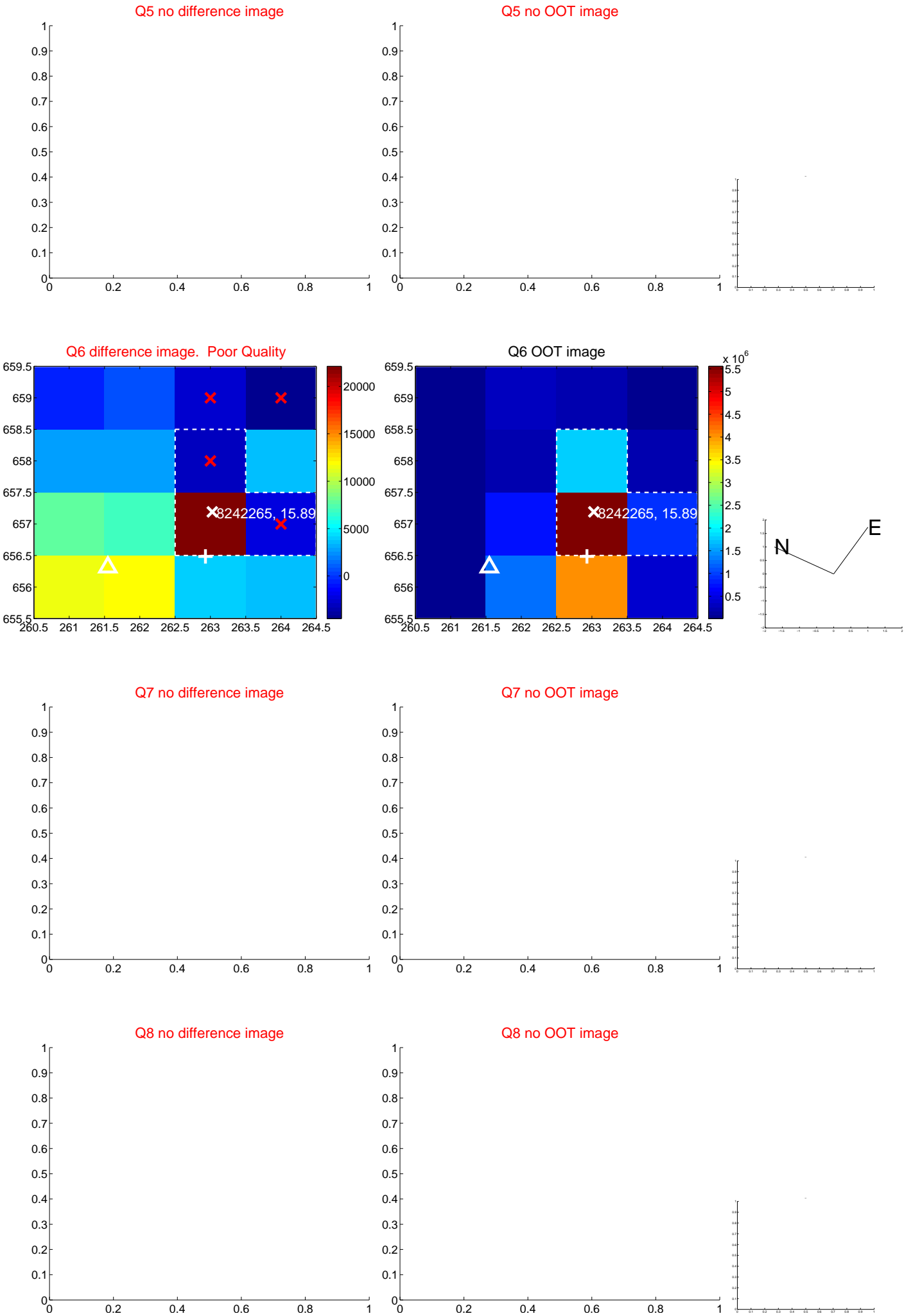


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



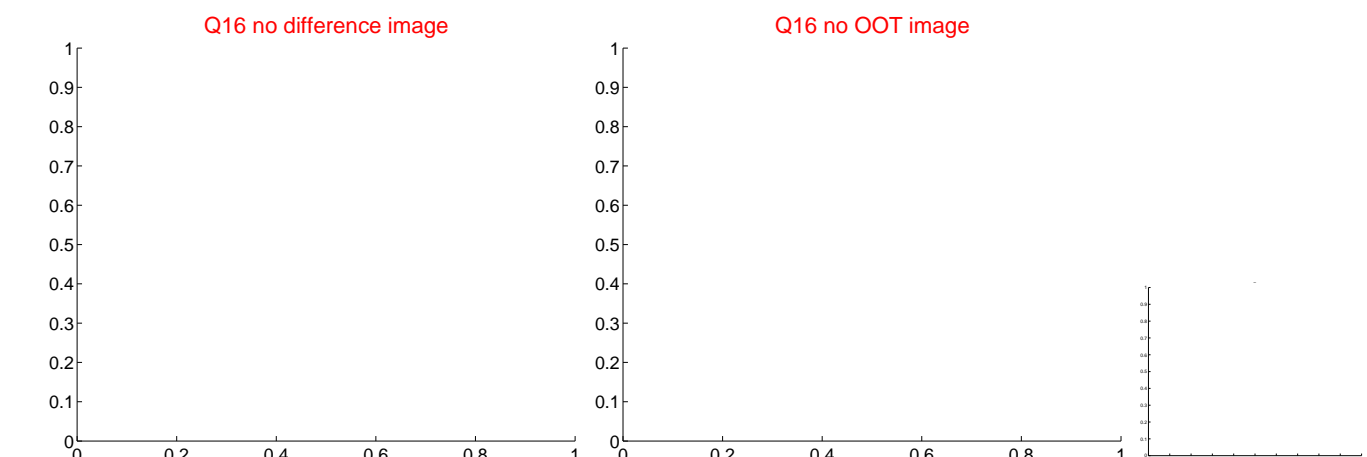
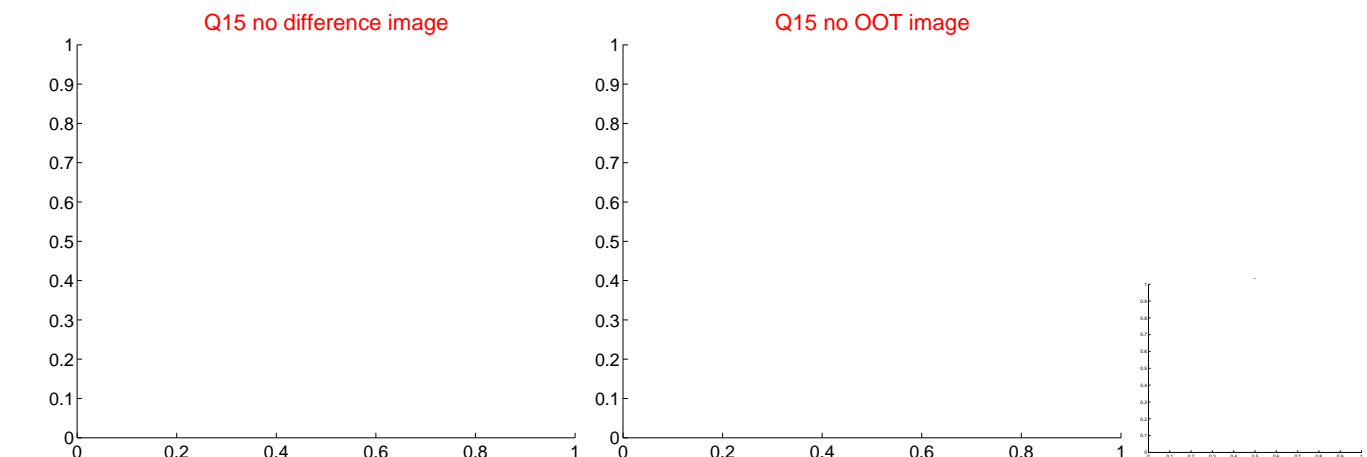
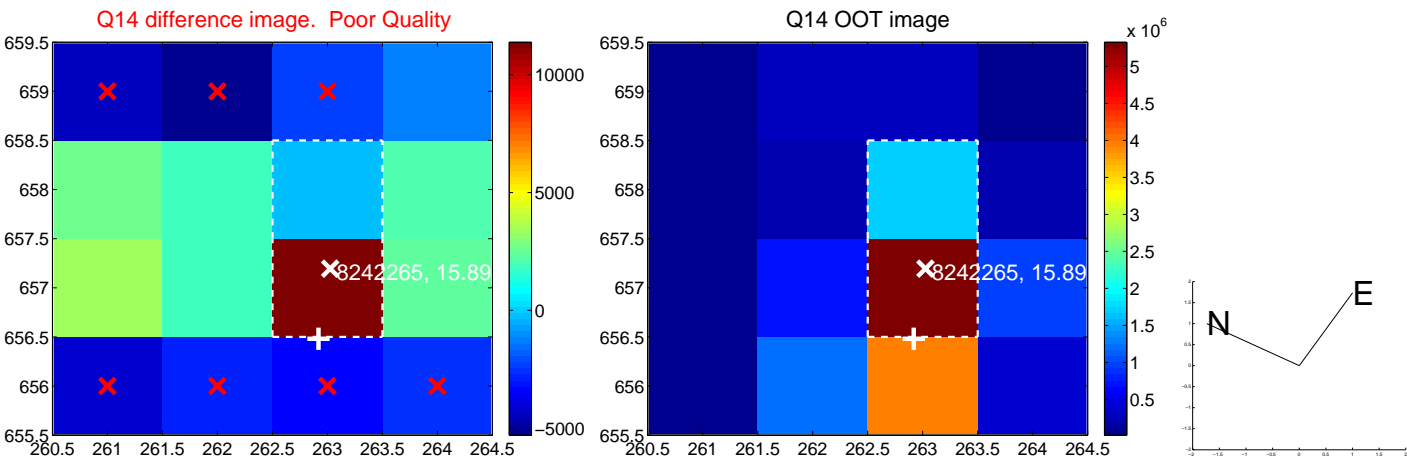
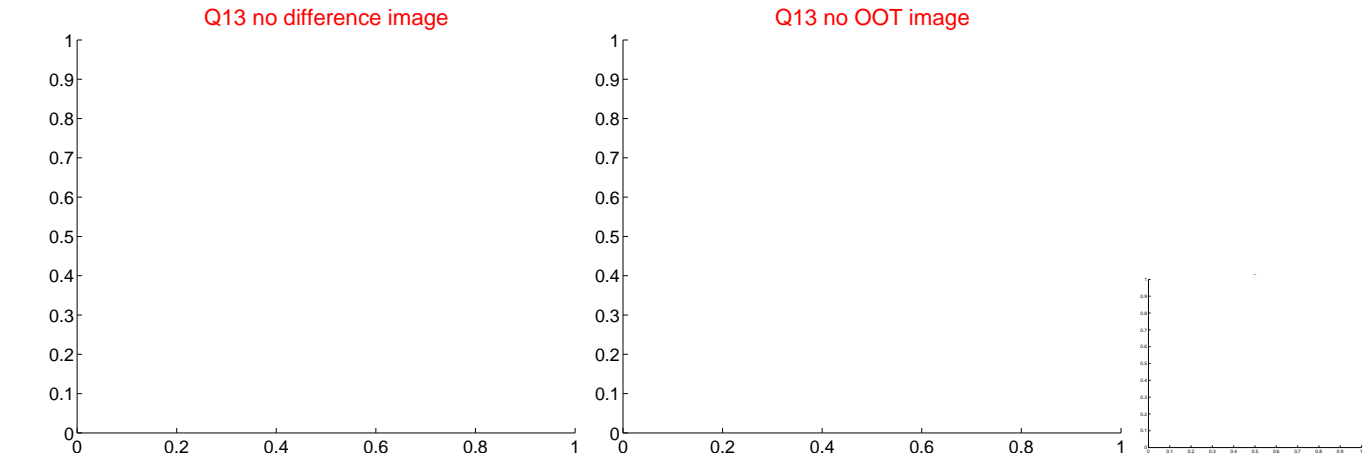
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



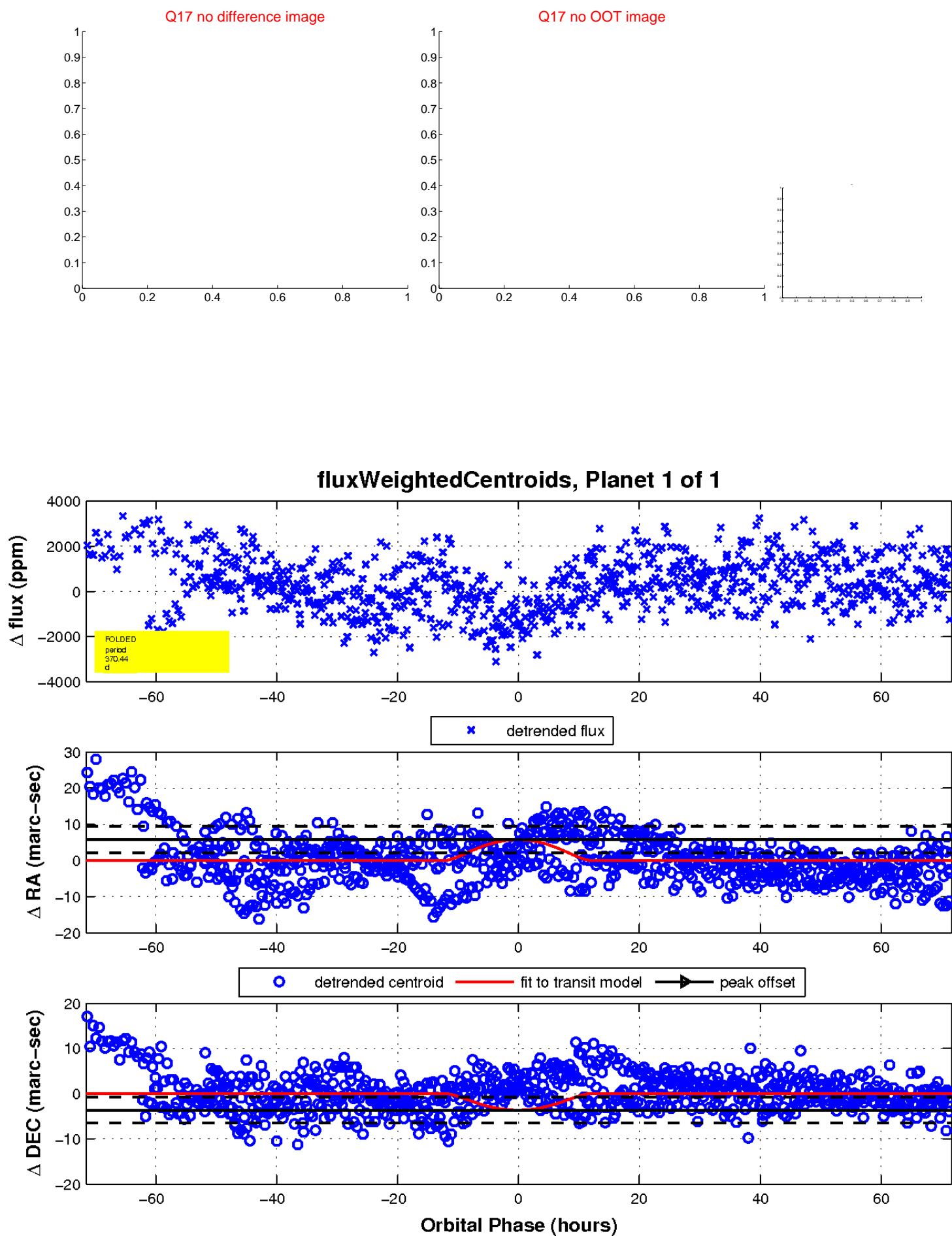
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UKIRT Image

Declination

