

KIC 008687036

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})
008687036-01	OBS	No	375.282185	138.166939	1386.5	73.011	16.4	30.9	0.89	5765	6.40	0.80

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008687036-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE--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.

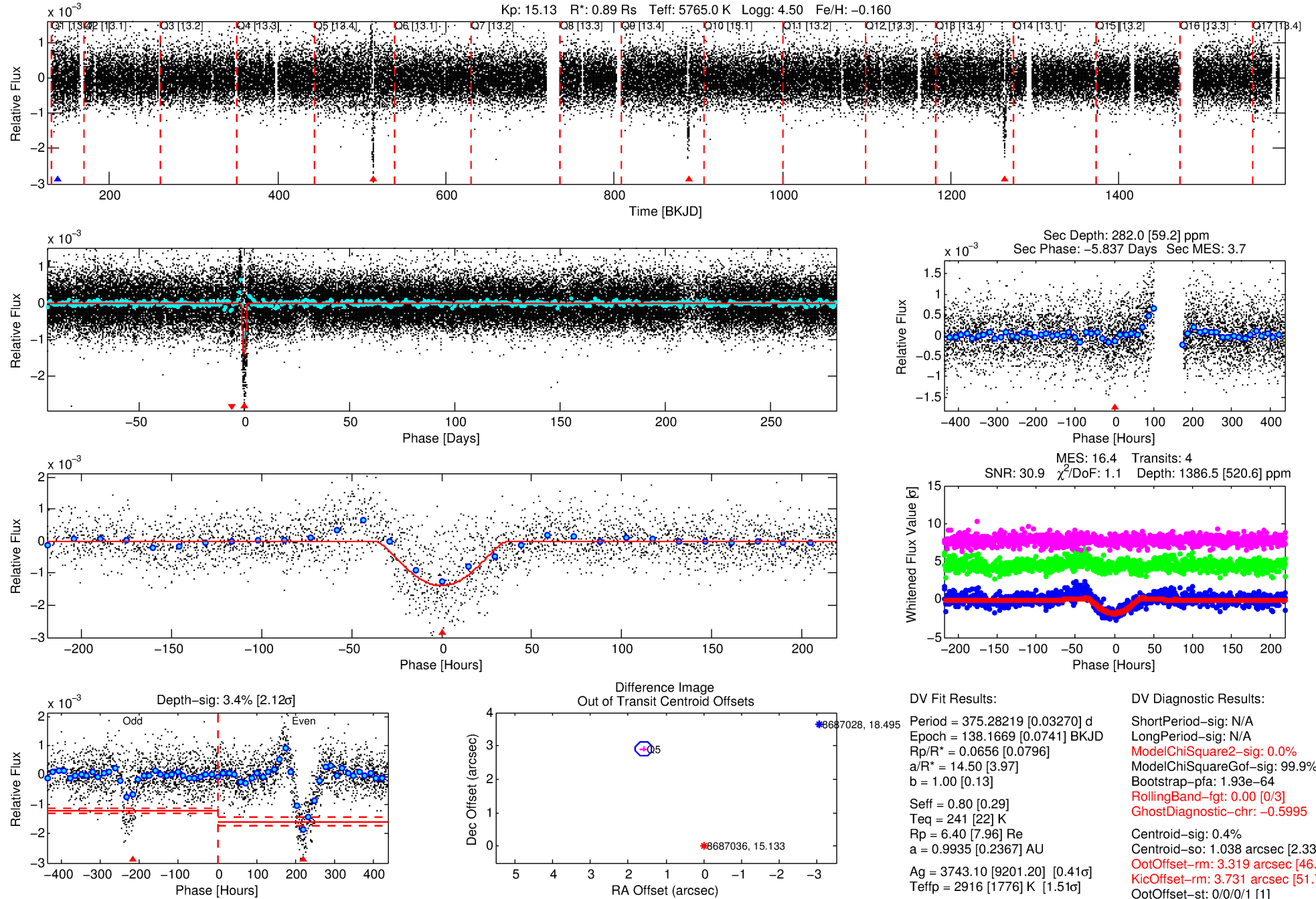
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008687036-01

No Significant Match Found

DV One-Page Summary

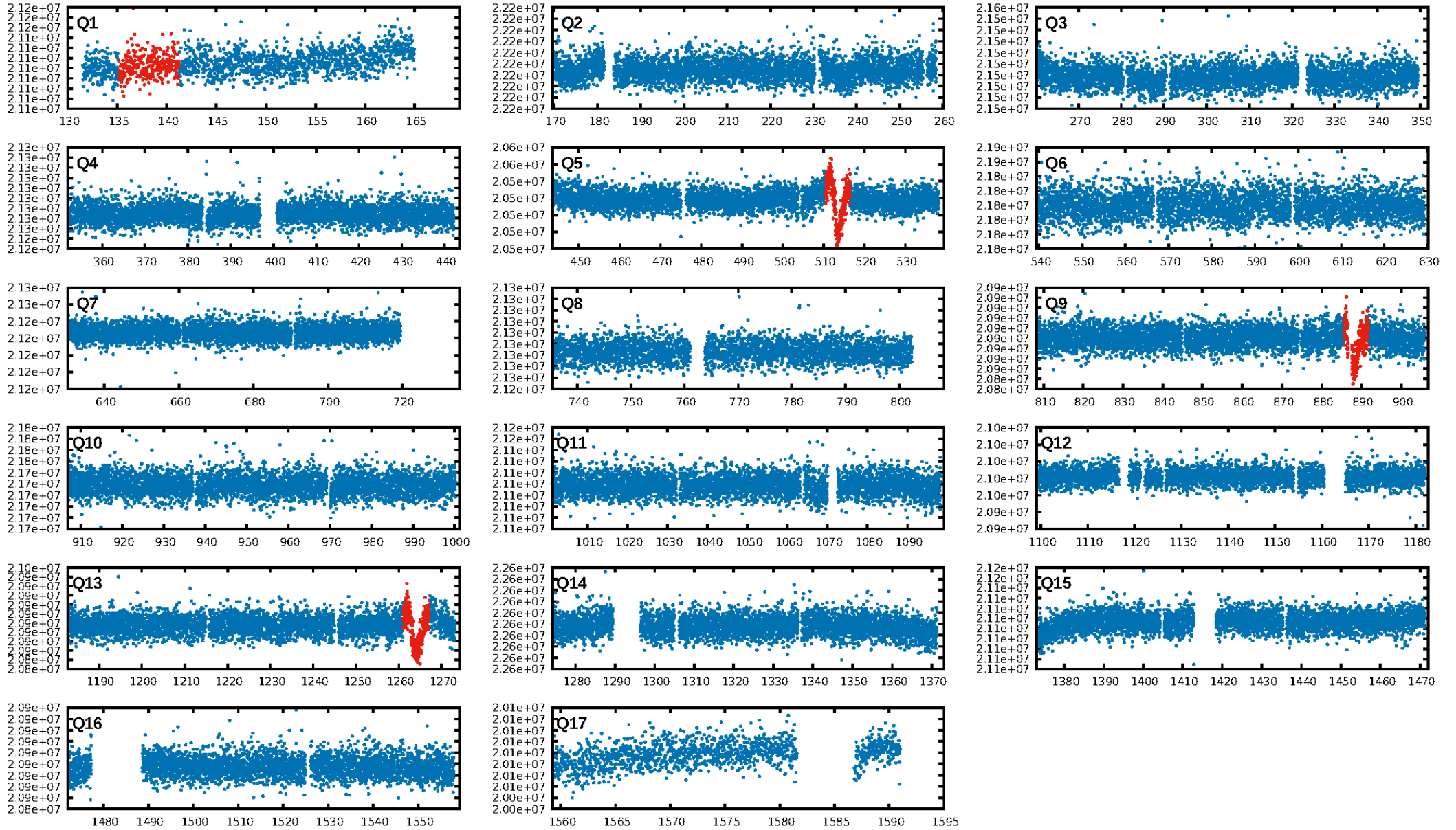
KIC: 8687036 Candidate: 1 of 1 Period: 375.282 d



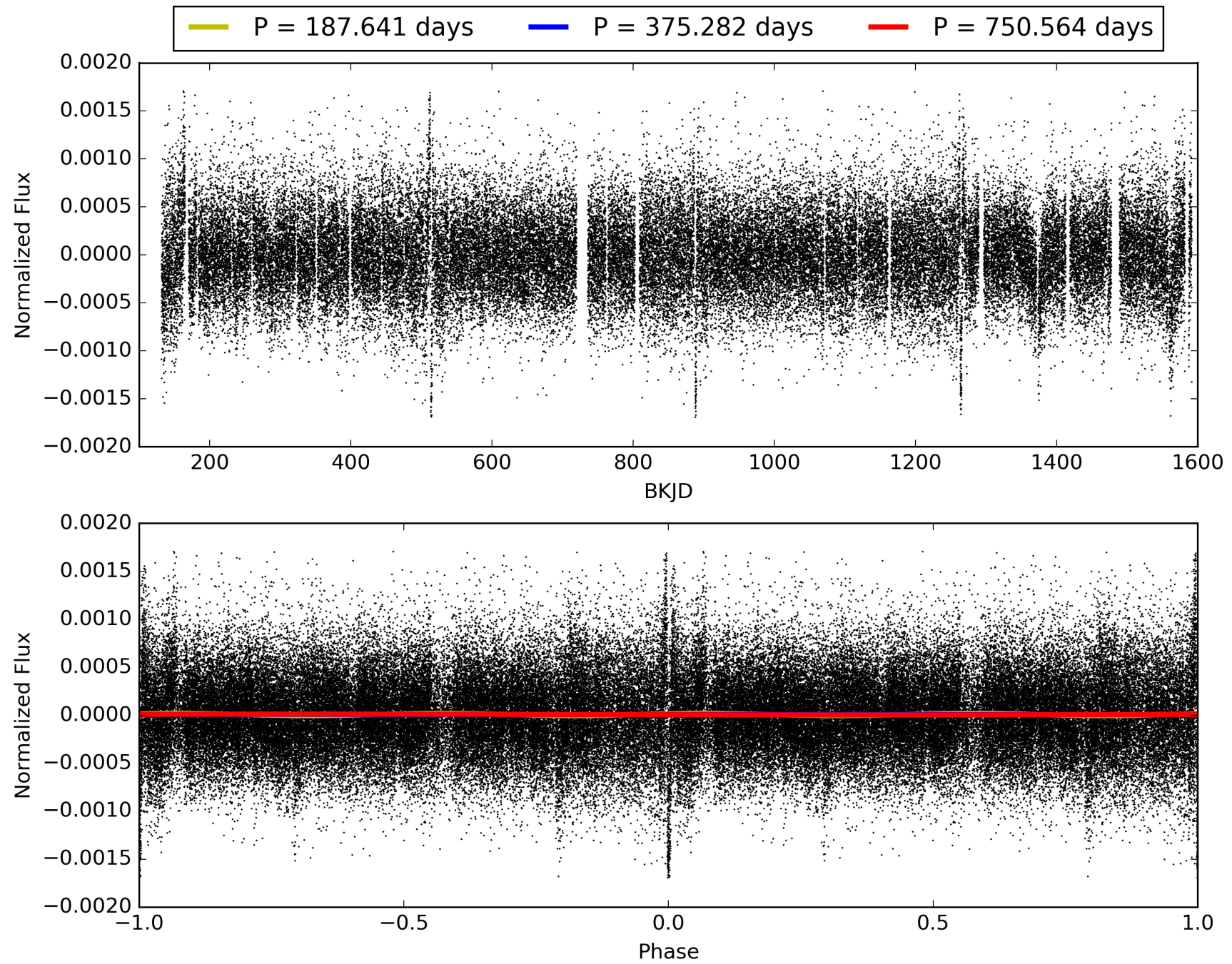
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:53:39 Z

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

TCE 008687036-01, PDC Light Curves

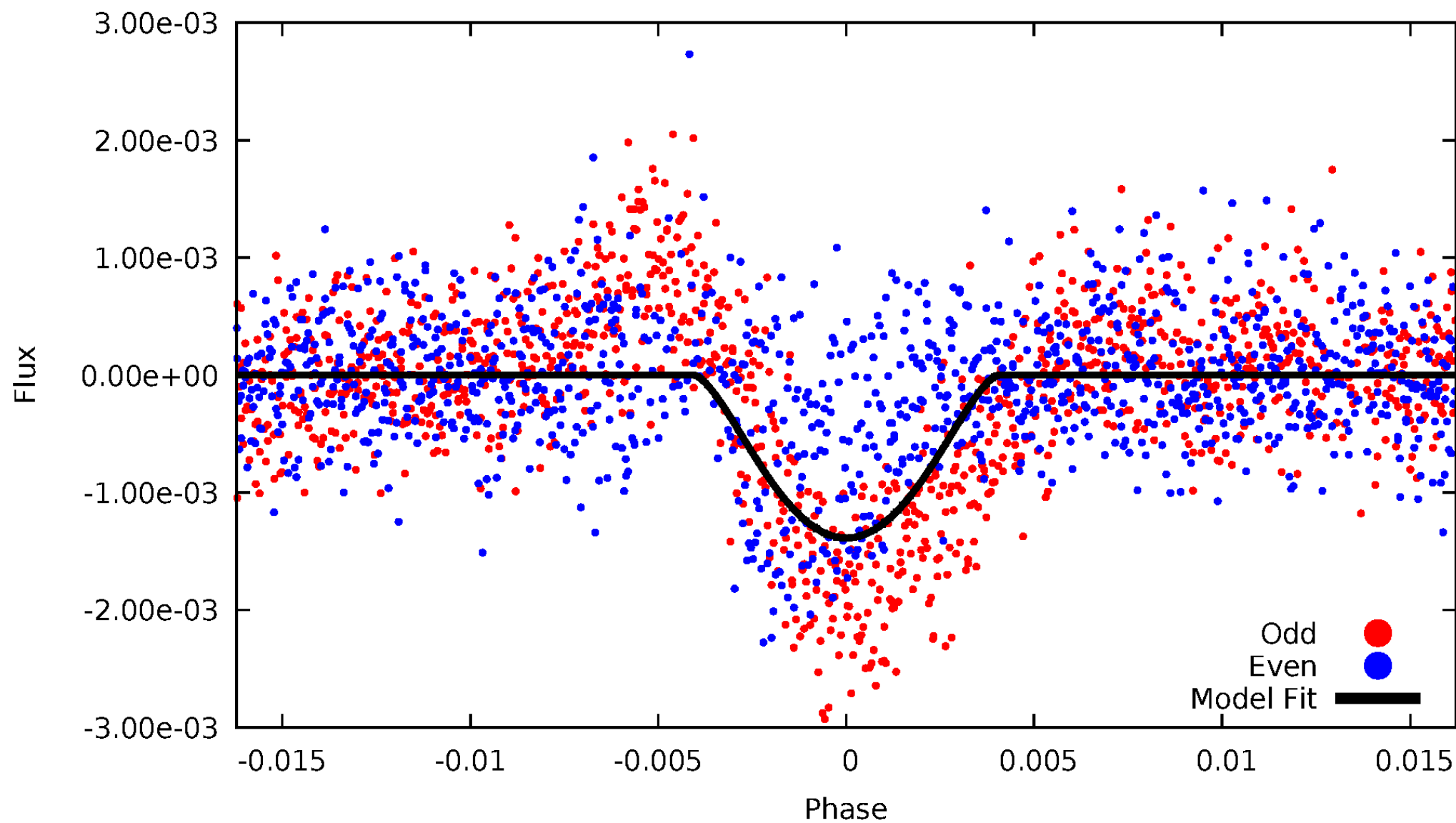


TCE 008687036-01



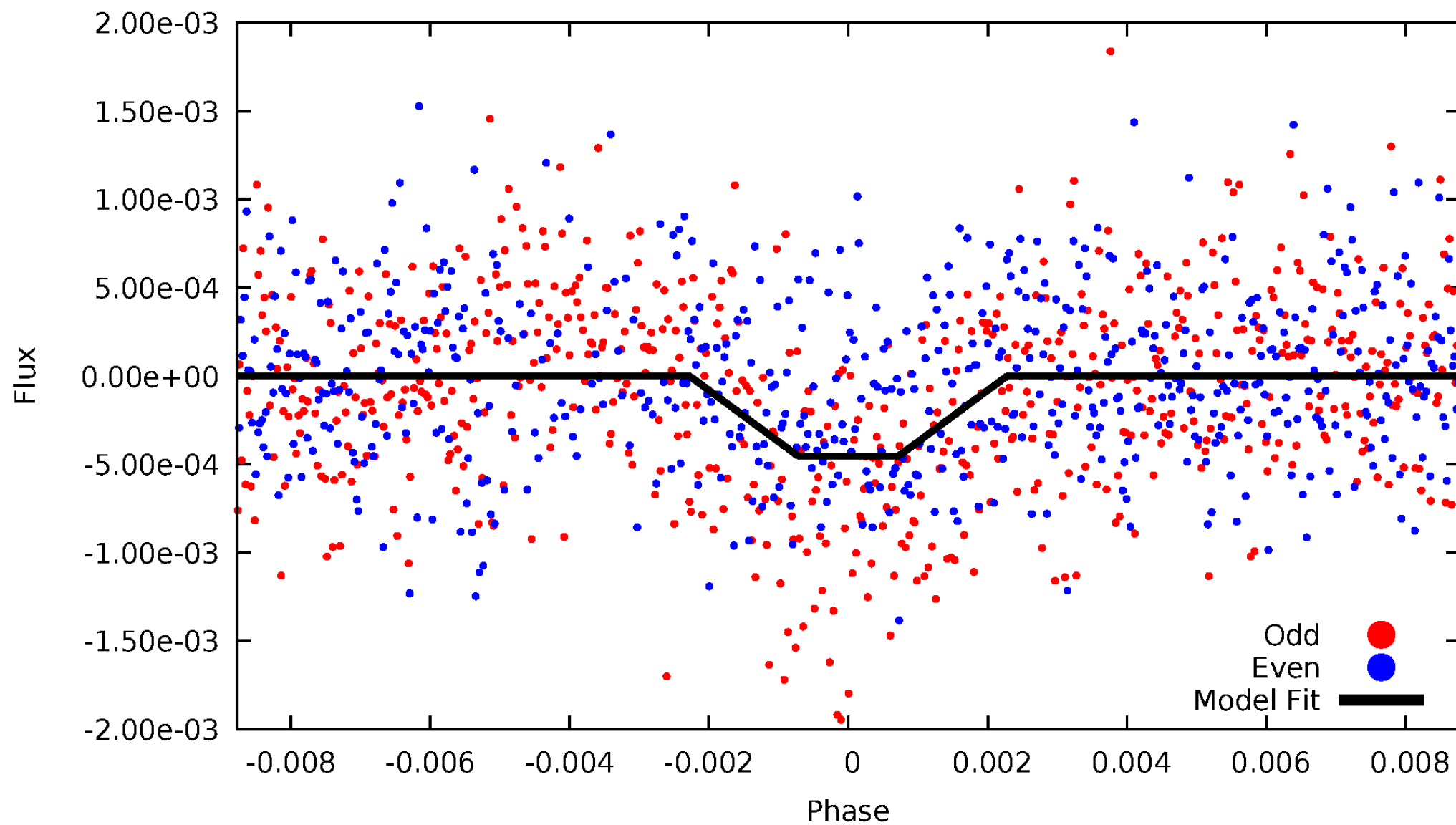
DV Odd/Even

TCE 008687036-01

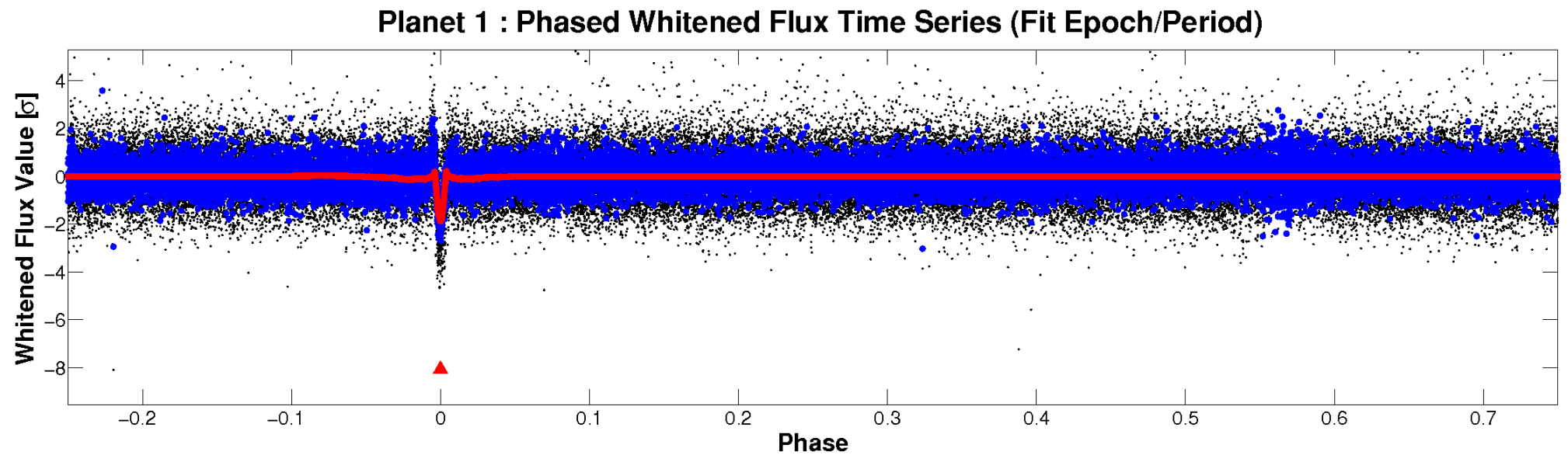
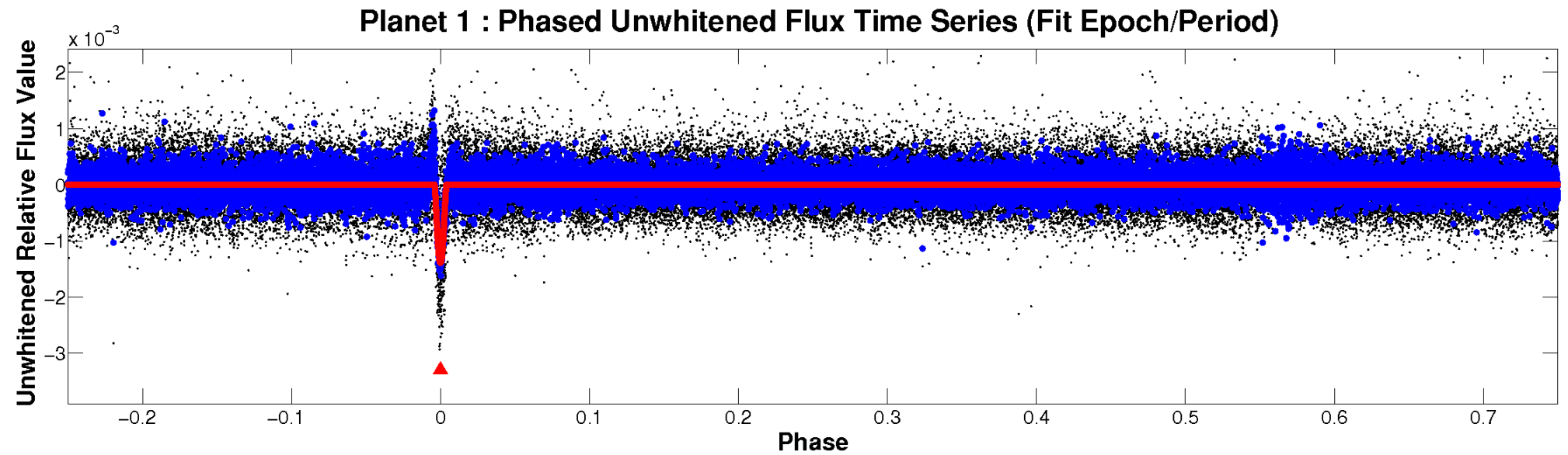


ALT Odd/Even

TCE 008687036-01

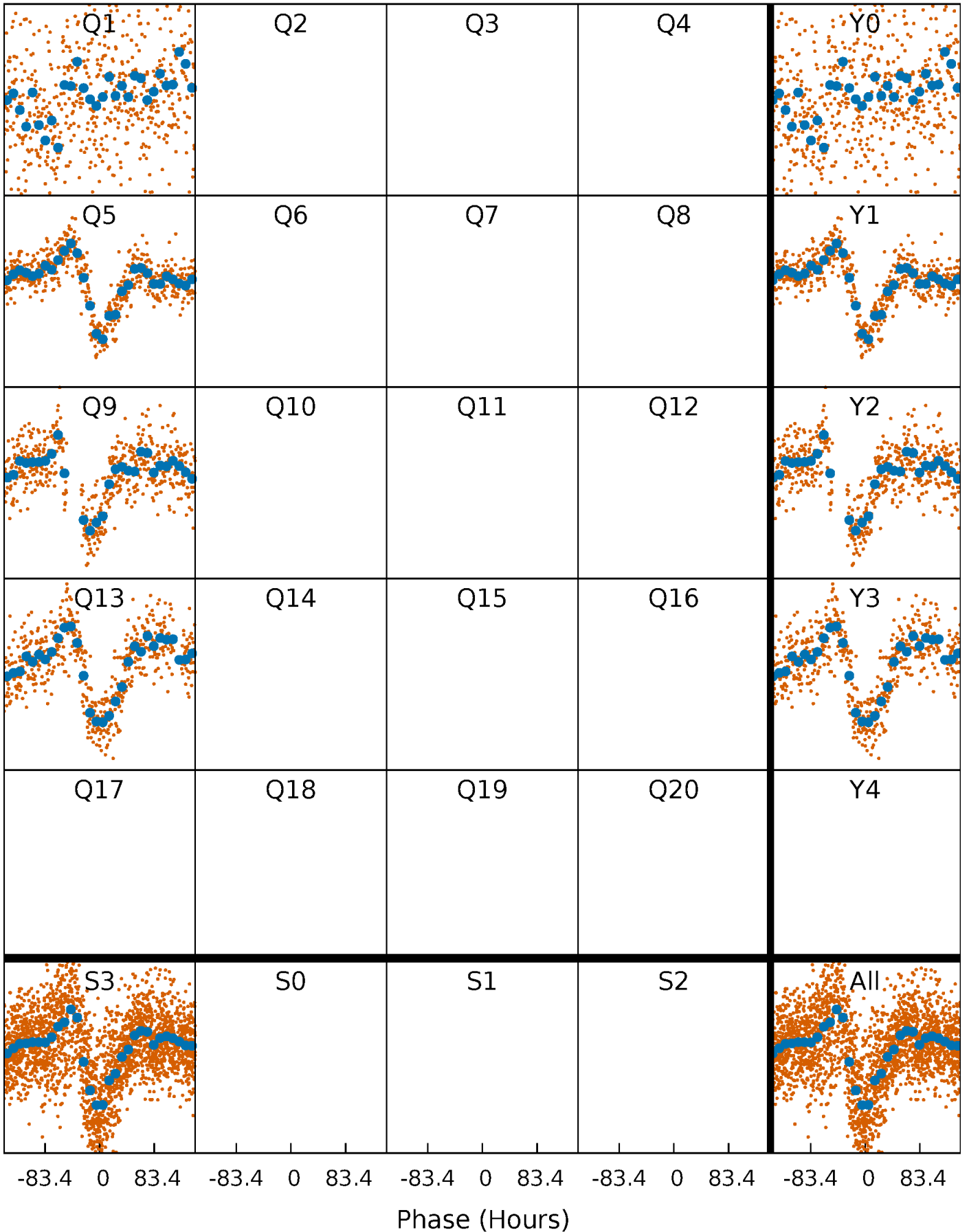


Non-Whitened Vs. Whitened Light Curve



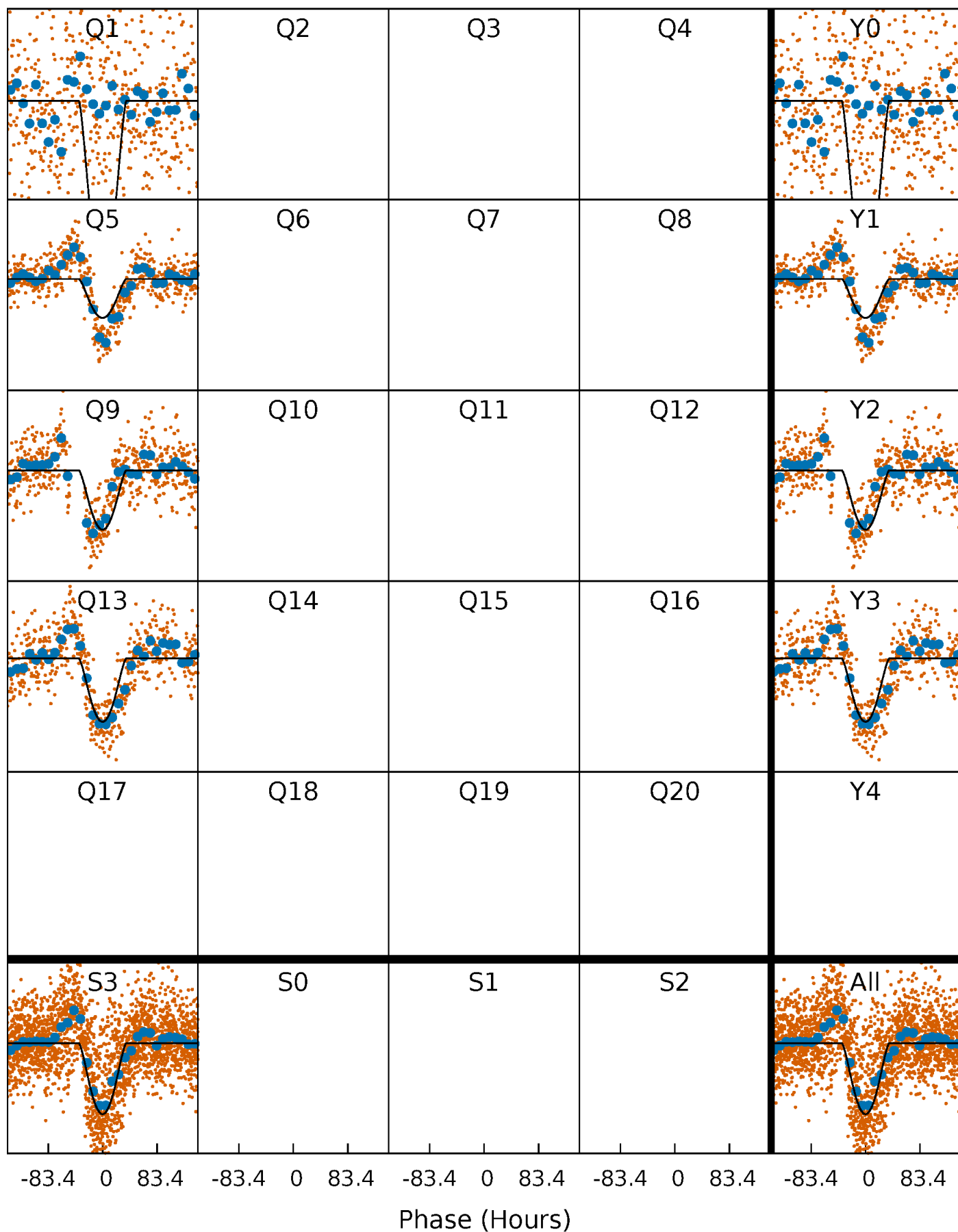
PDC Quarter-Phased Transit Curves

TCE 008687036-01 P=375.282185 Days $T_0=138.166939$ (BKJD)



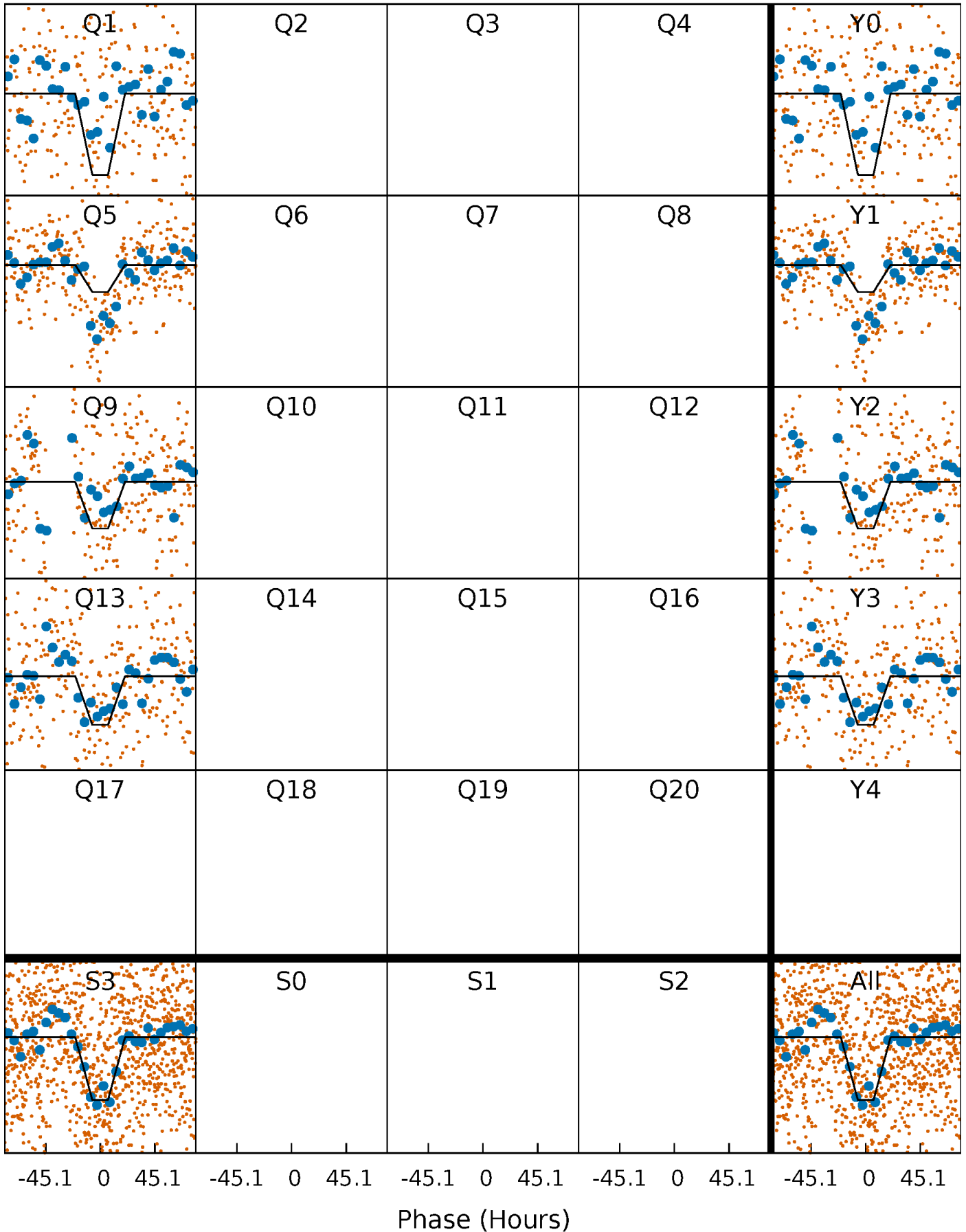
DV Quarter-Phased Transit Curves

TCE 008687036-01 P=375.282185 Days $T_0=138.166939$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

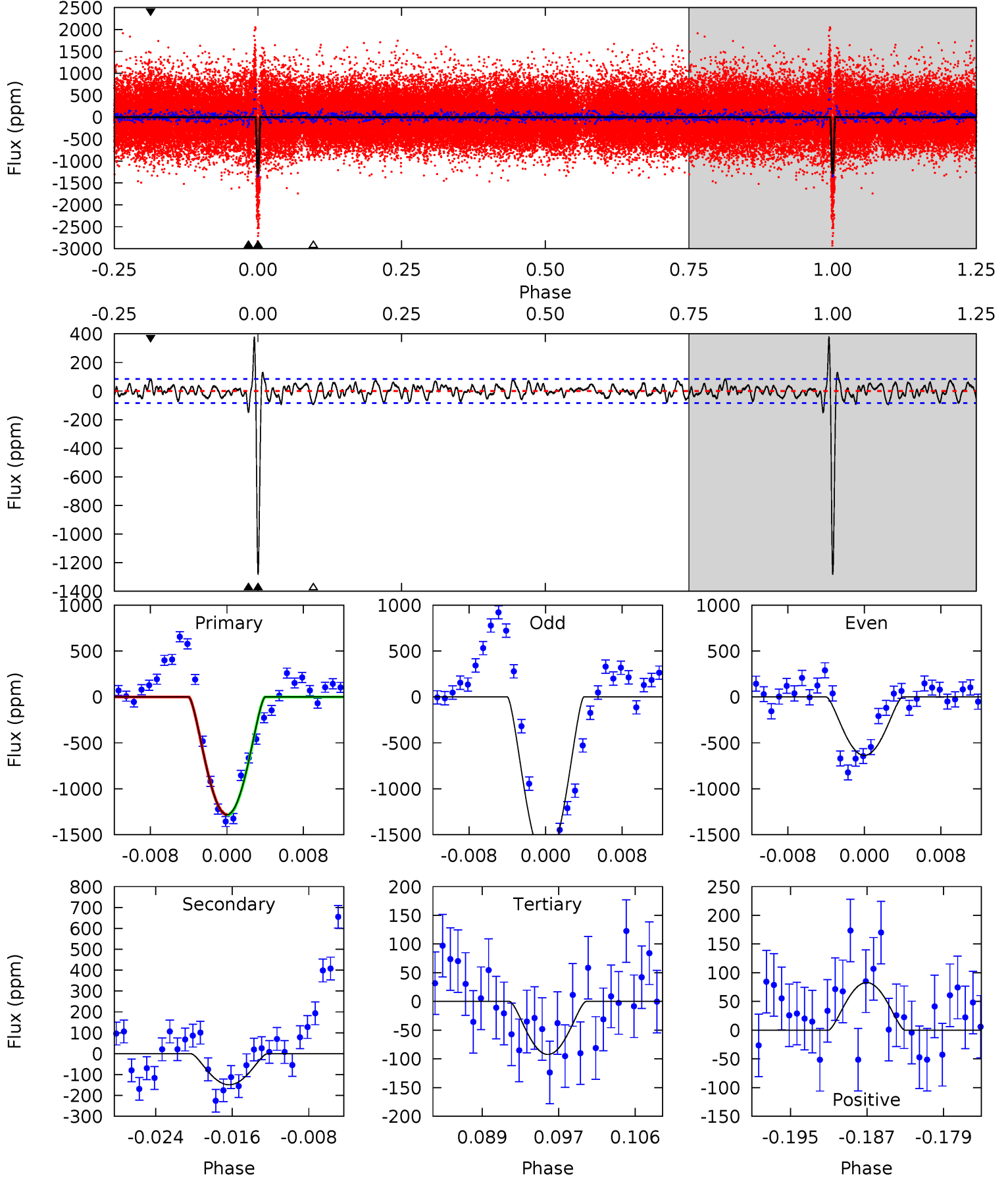
TCE 008687036-01 P=375.248707 Days $T_0=138.023418$ (BKJD)



DV Model-Shift Uniqueness Test

008687036-01, P = 375.282185 Days, E = 138.166939 Days

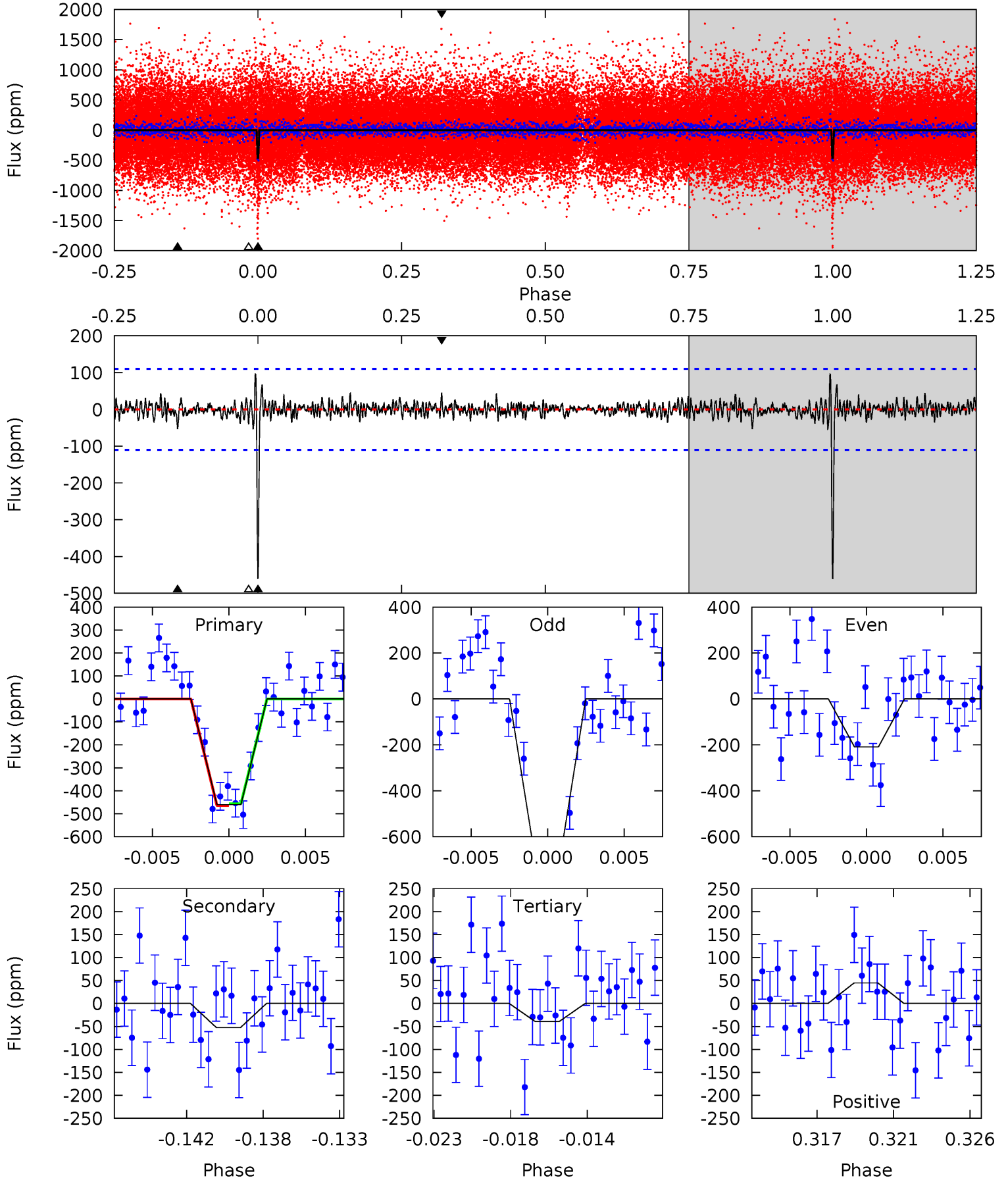
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
77.2	8.97	5.56	4.99	5.07	2.65	2.08	71.7	72.3	3.41	3.98	34.9	0.86	0.23	0.22



Alt Model-Shift Uniqueness Test

008687036-01, P = 375.248707 Days, E = 138.023418 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	2.47	1.85	2.09	5.17	2.83	0.64	19.8	19.5	0.62	0.38	11.7	1.47	0.17	0.18



Stellar Parameters For KIC 008687036

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5765^{+155}_{-172}	$4.504^{+0.062}_{-0.188}$	$-0.160^{+0.300}_{-0.300}$	$0.893^{+0.254}_{-0.085}$	$0.928^{+0.111}_{-0.100}$	$1.837^{+0.469}_{-0.904}$
	+3%/-3%	+1%/-4%	+188%/-188%	+28%/-10%	+12%/-11%	+26%/-49%
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 008687036-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-149±17	$9.16^{+6.77}_{-5.83}$	342^{+24}_{-16}	2852^{+1060}_{-382}	957^{+6259}_{-640}
Alt.	-53±21	$6.28^{+6.82}_{-4.38}$	343^{+21}_{-15}	2701^{+1161}_{-464}	644^{+6241}_{-507}

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

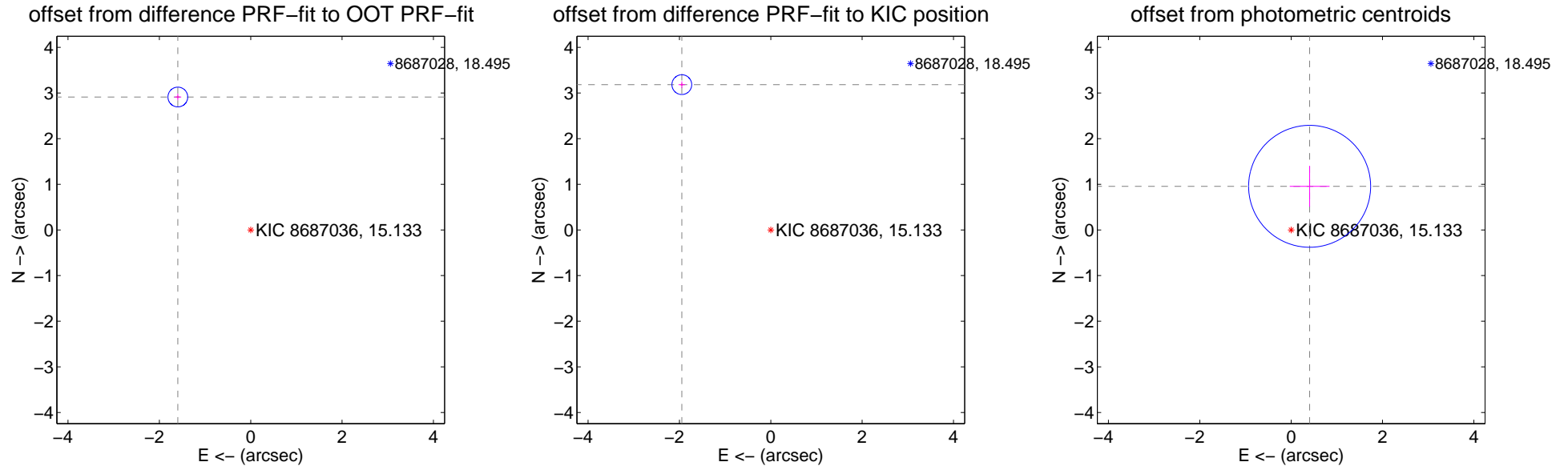
DV Centroid Data

Supplemental centroid analysis for 008687036-01. Kepler magnitude: 15.13. Transit SNR 30.86

There are 0 quarters with good PRF difference image offsets

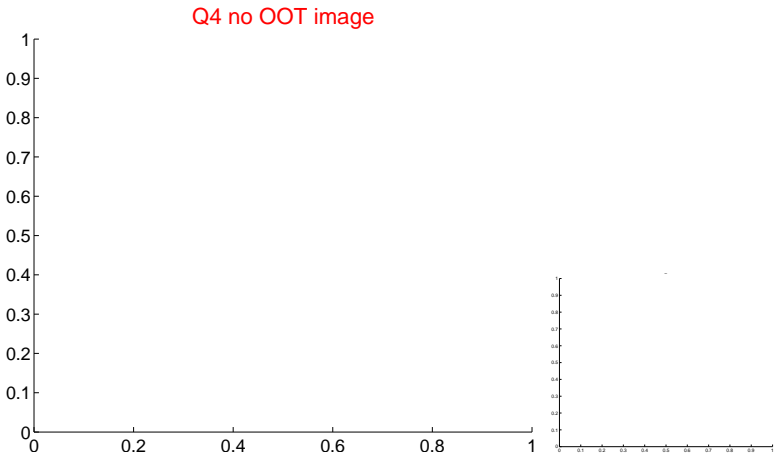
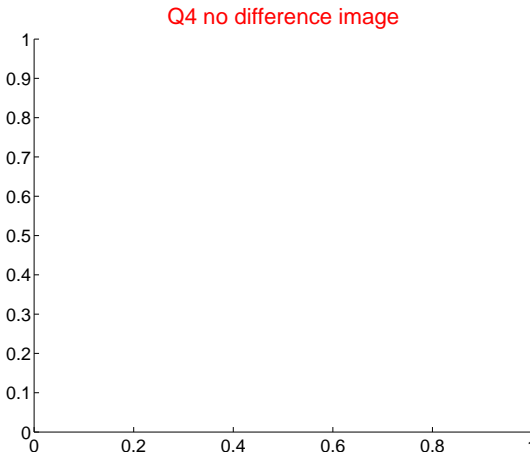
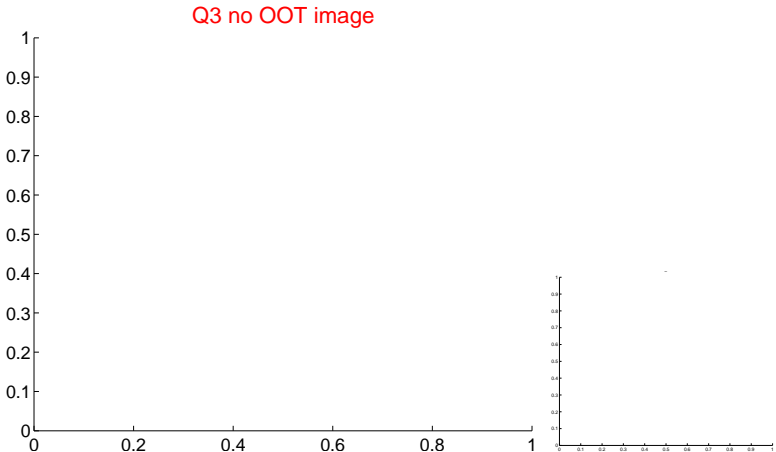
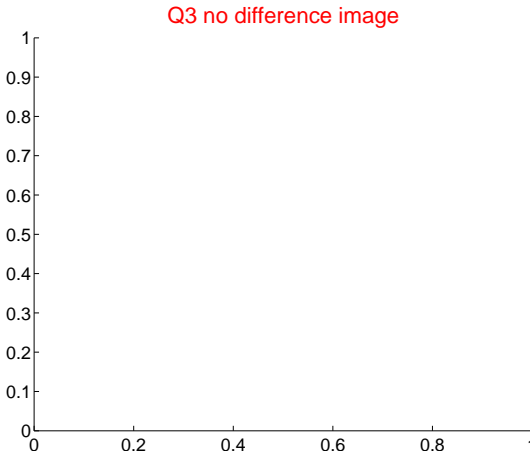
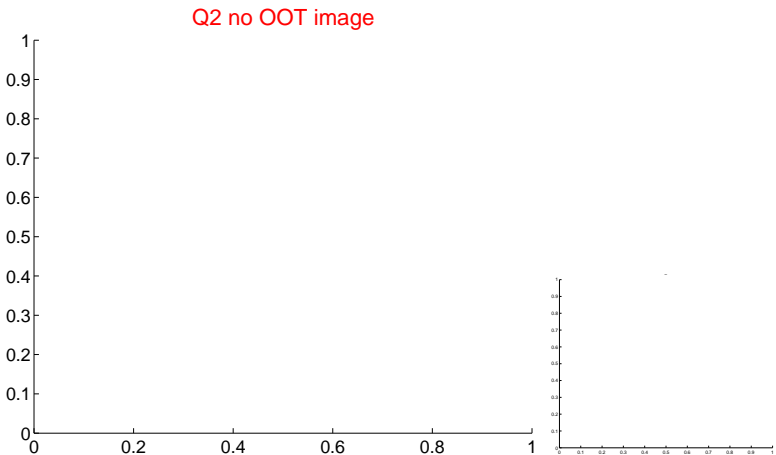
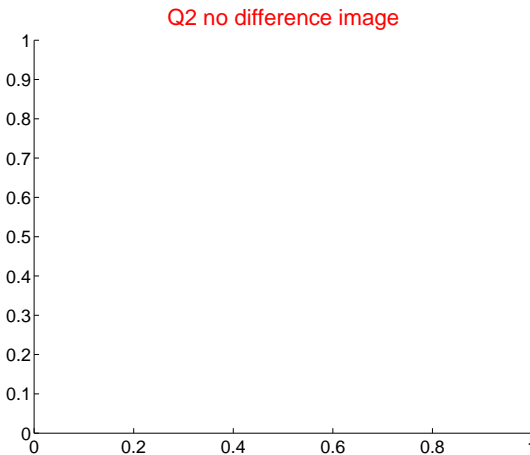
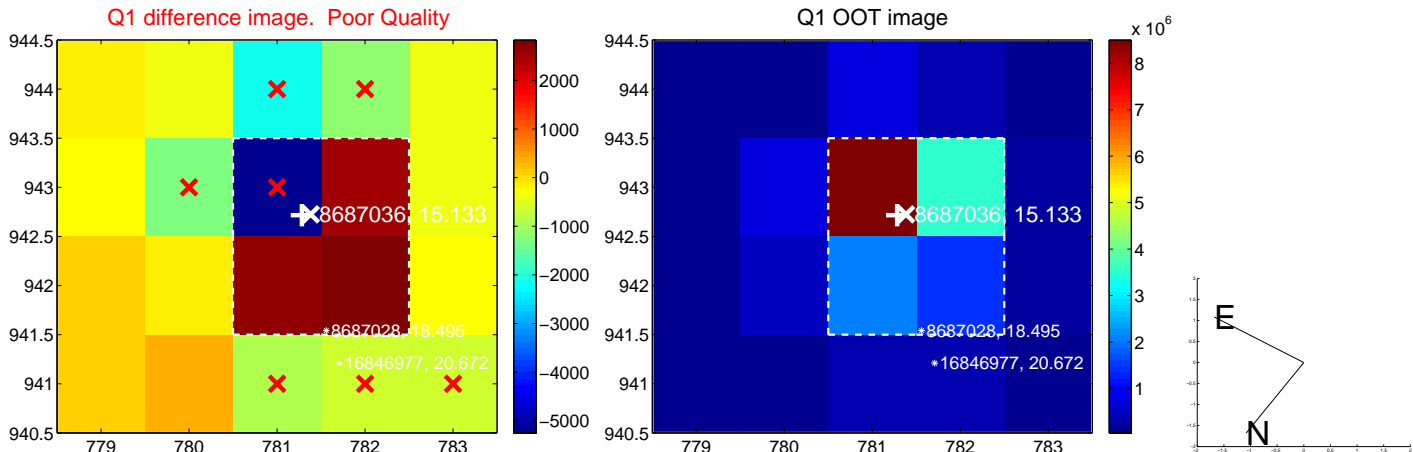
The direct PRF centroid is offset from the target star catalog position by about 0.44 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.319 ± 0.072	46.03	1.595 ± 0.073	2.911 ± 0.072
PRF-fit source offset from KIC position	3.731 ± 0.072	51.70	1.947 ± 0.073	3.183 ± 0.072
photometric centroid source offset	1.04 ± 0.45	2.33	-0.40 ± 0.44	0.96 ± 0.45

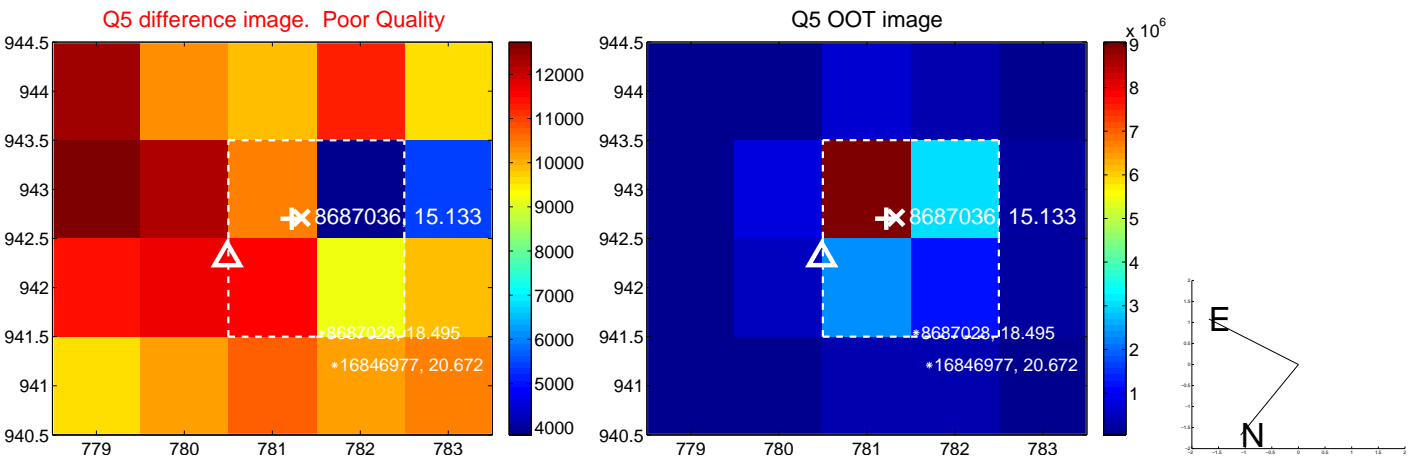


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



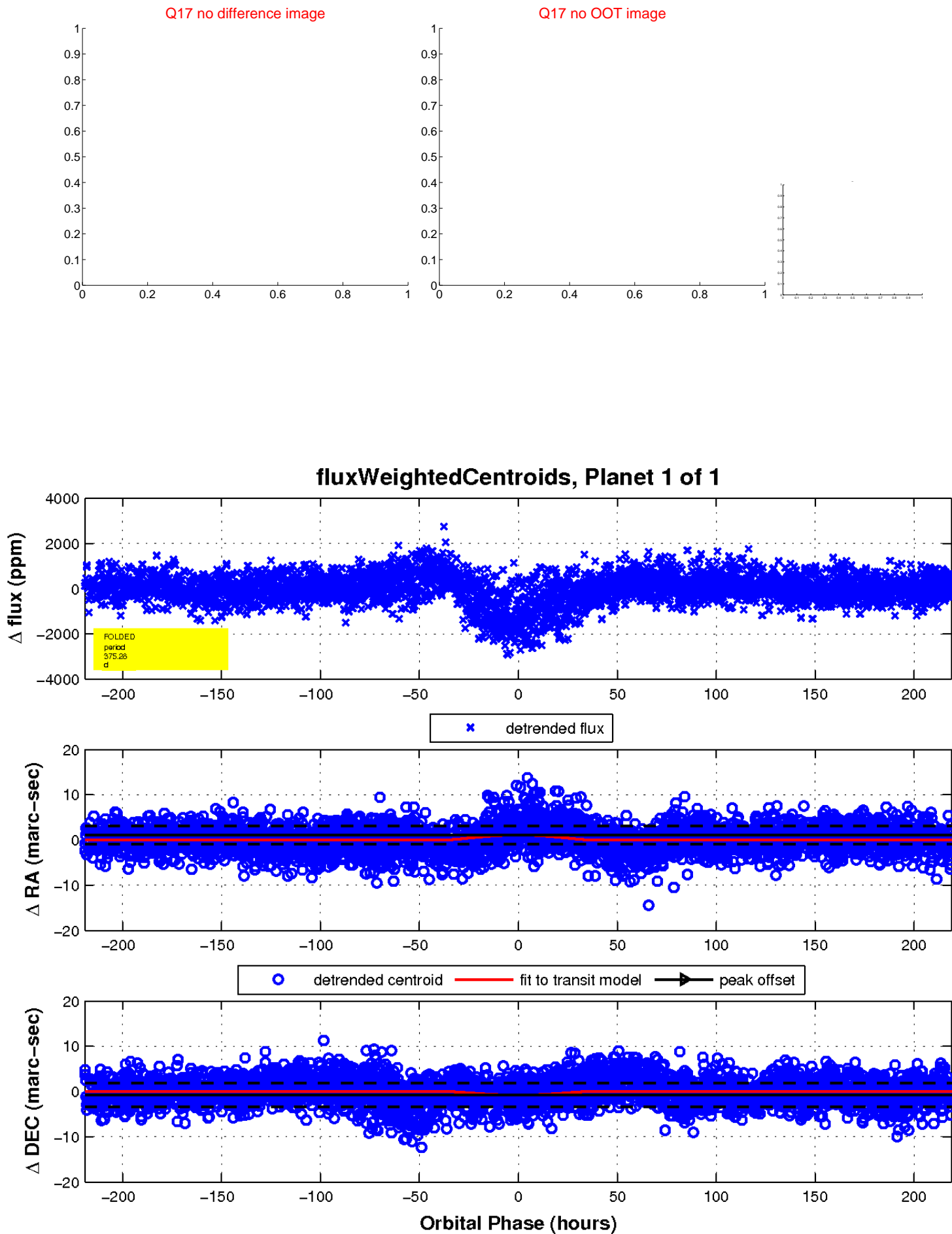
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

