

KIC 008105677

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})
008105677-01	OBS	No	370.417458	231.954863	968.1	25.973	7.2	8.8	0.95	6060	3.66	1.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008105677-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_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.

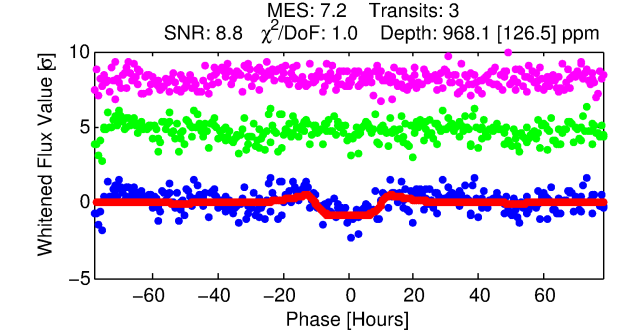
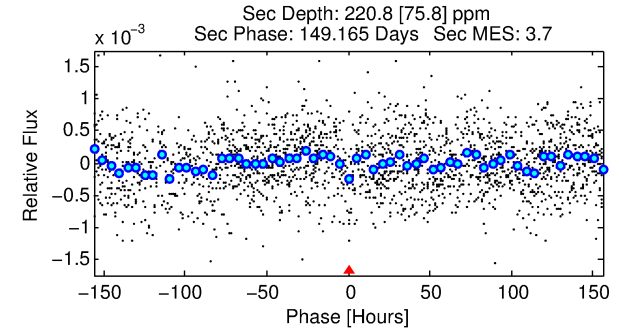
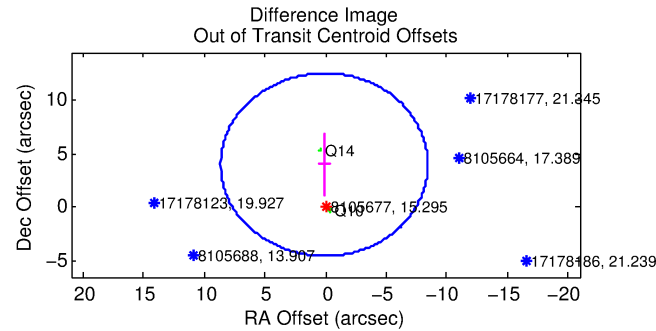
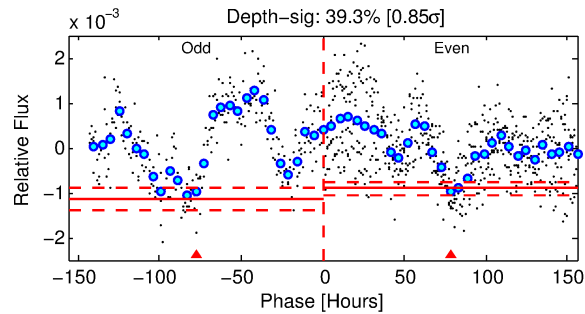
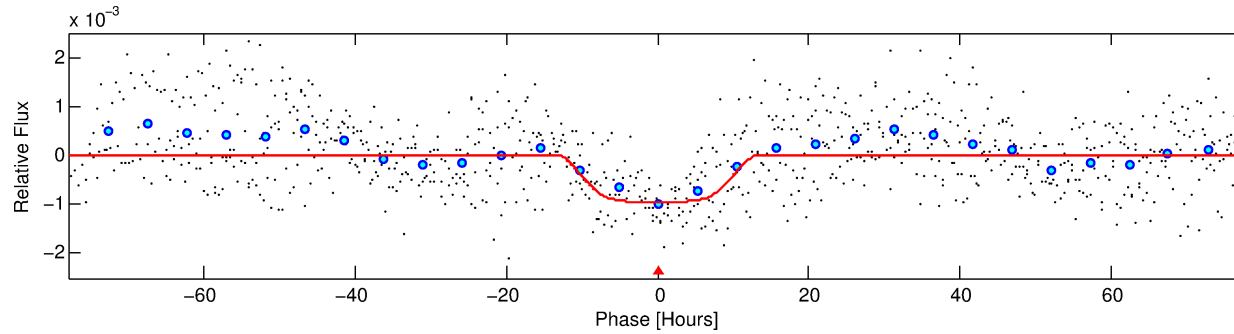
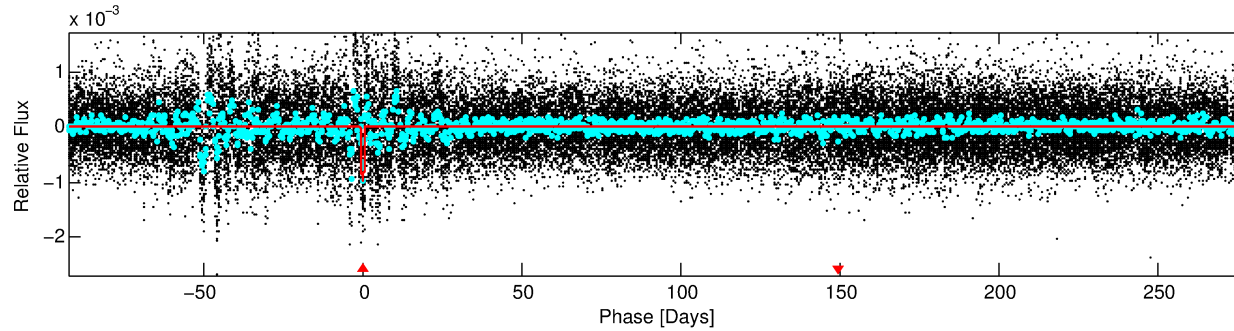
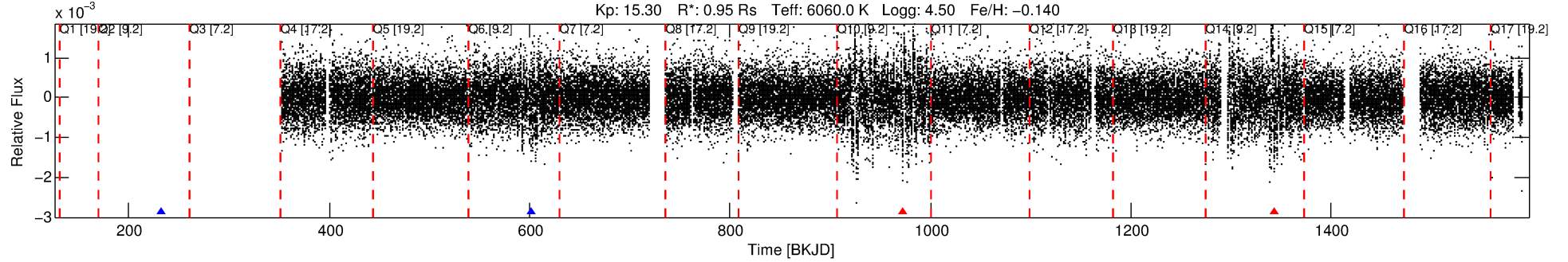
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008105677-01

No Significant Match Found

DV One-Page Summary

KIC: 8105677 Candidate: 1 of 1 Period: 370.417 d



DV Fit Results:

Period = 370.41746 [0.02686] d
Epoch = 231.9549 [0.0557] BKJD
Rp/R* = 0.0352 [0.0029]
a/R* = 47.44 [8.35]
b = 0.94 [0.02]
Seff = 1.05 [0.42]
Teq = 258 [26] K
Rp = 3.66 [1.19] Re
a = 1.0215 [0.2656] AU
Ag = 9471.57 [5033.88] [1.88 σ]
Teffp = 3939 [403] K [9.1 σ]

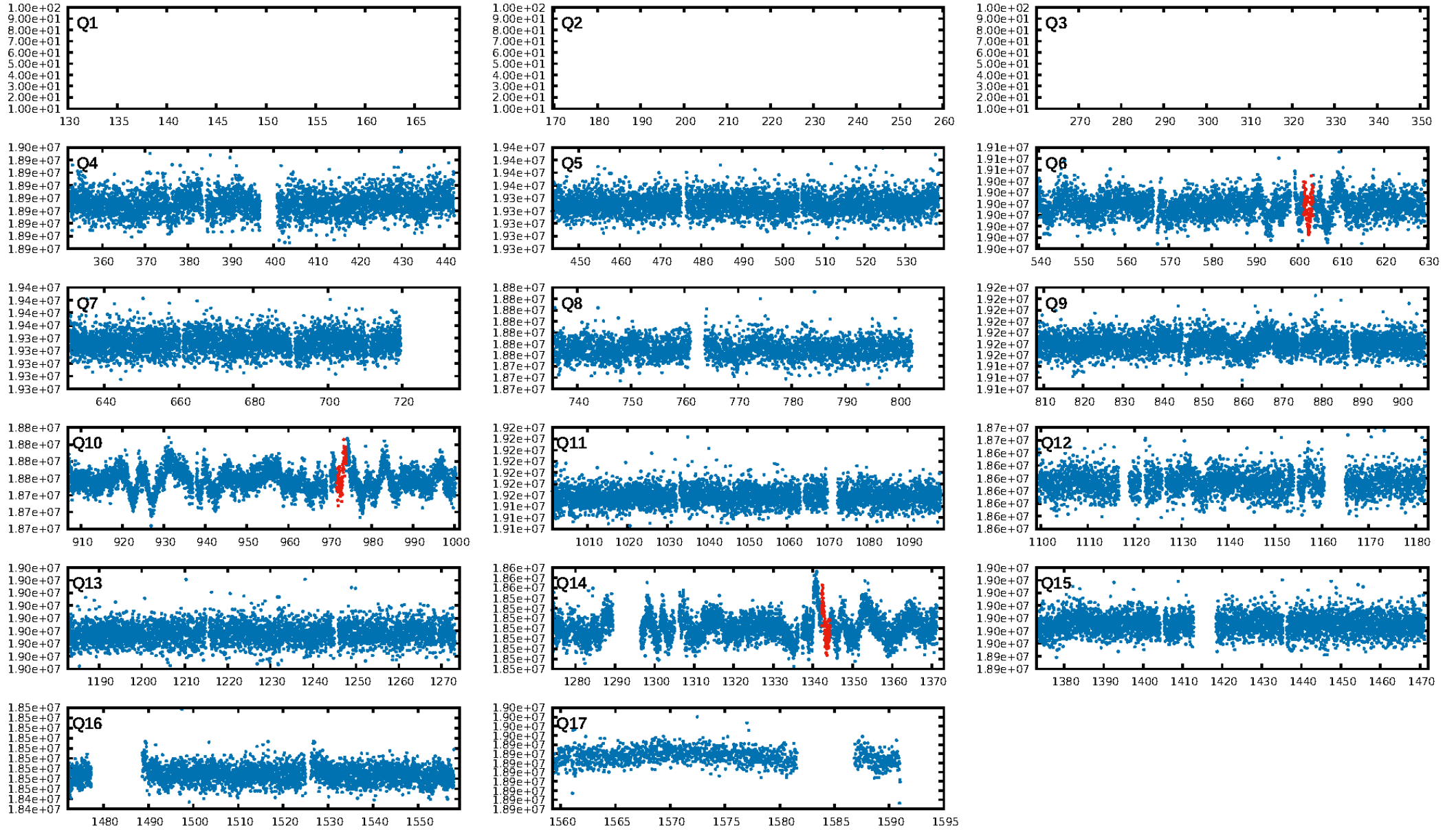
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 87.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.88e-09
RollingBand-fgt: 0.33 [1/3]
GhostDiagnostic-chr: 0.6344
Centroid-sig: 0.0%
Centroid-so: 7.126 arcsec [3.35 σ]
OotOffset-rm: 4.006 arcsec [1.41 σ]
KicOffset-rm: 3.960 arcsec [1.40 σ]
OotOffset-st: 2/0/0/0 [2]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

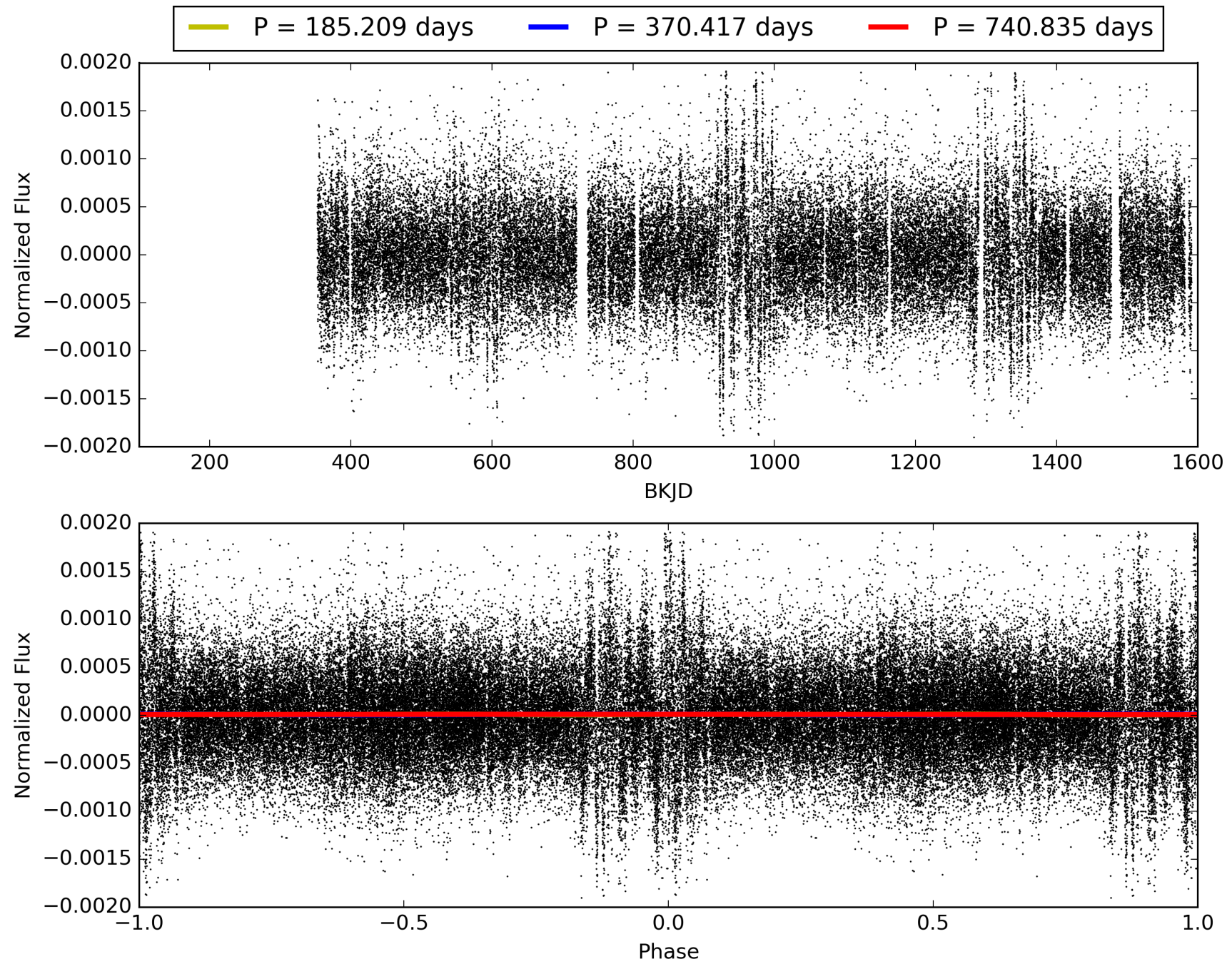
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:07:47 Z

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

TCE 008105677-01, PDC Light Curves

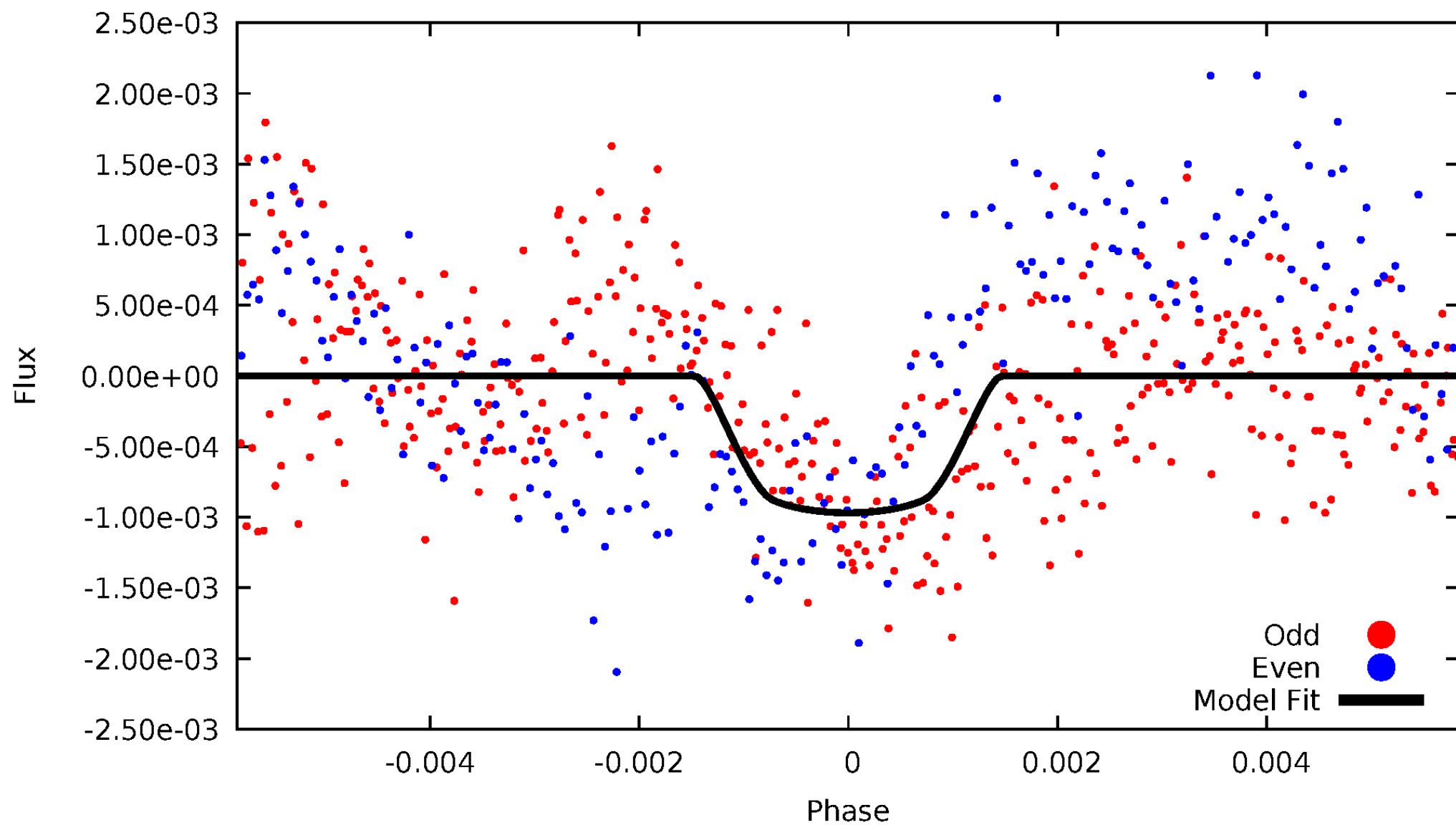


TCE 008105677-01



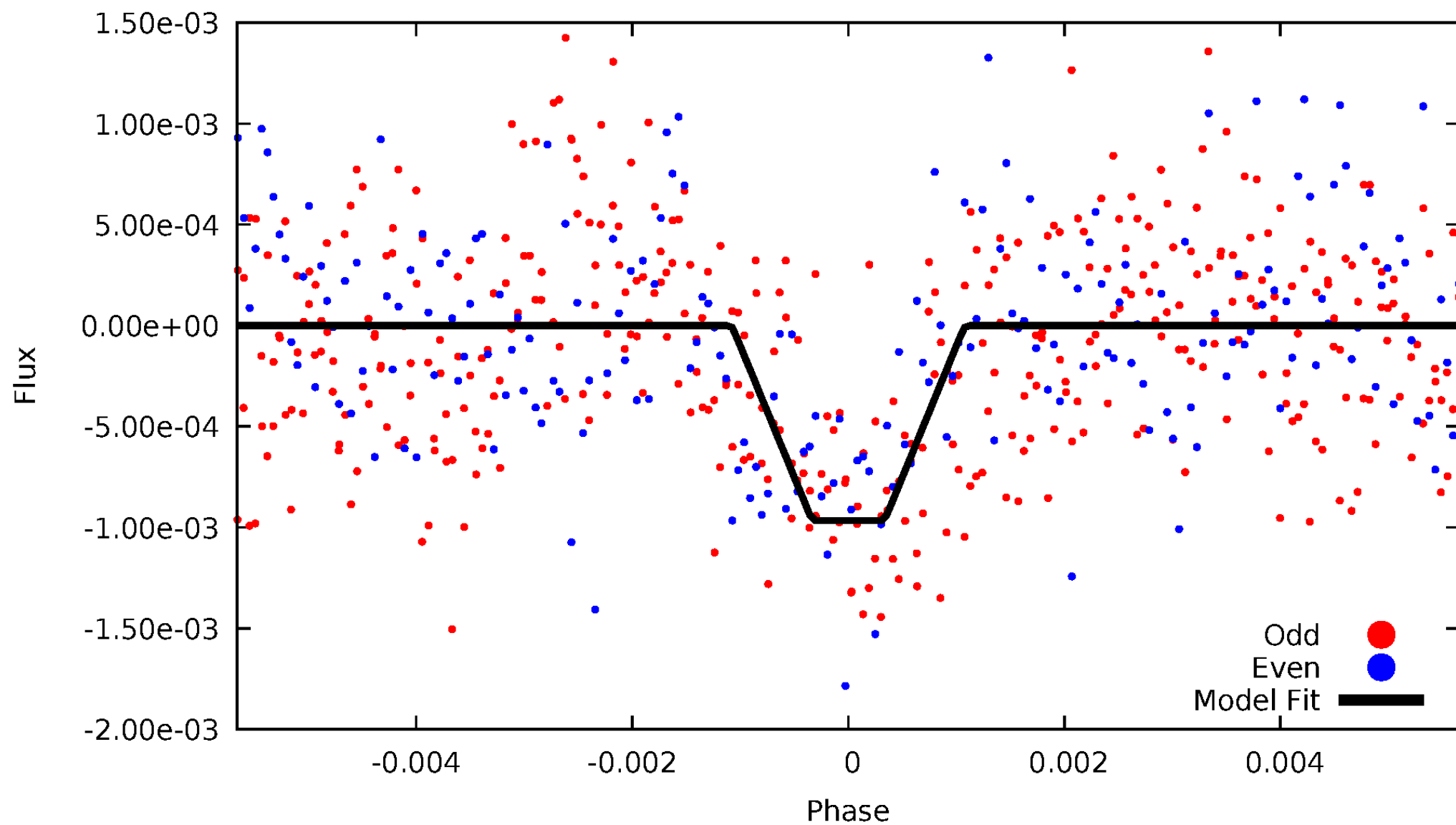
DV Odd/Even

TCE 008105677-01

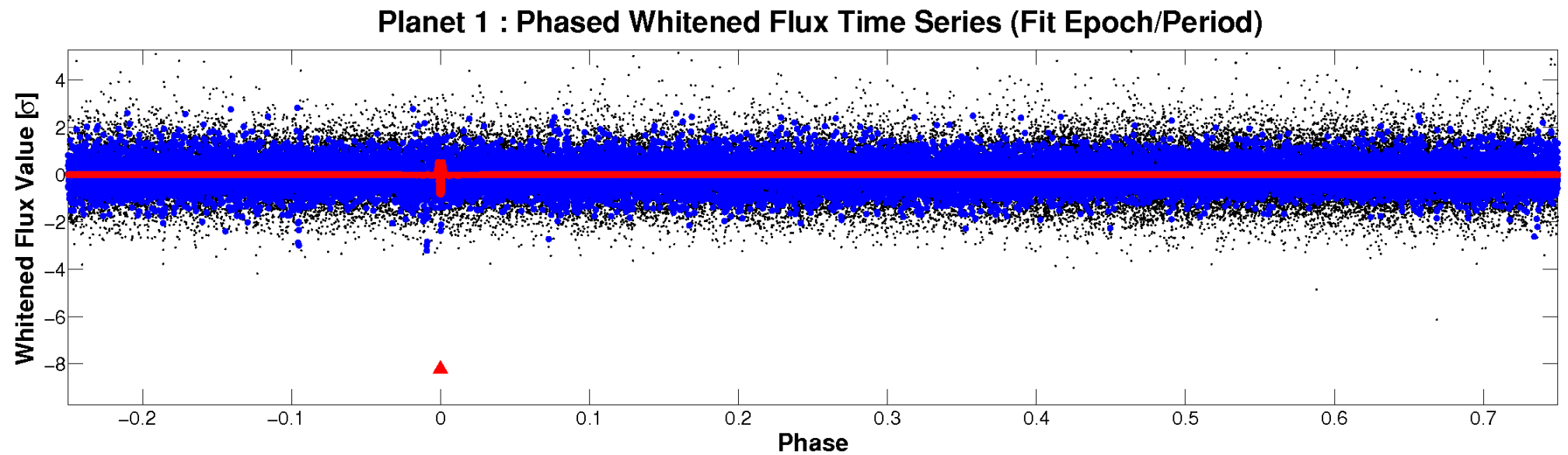
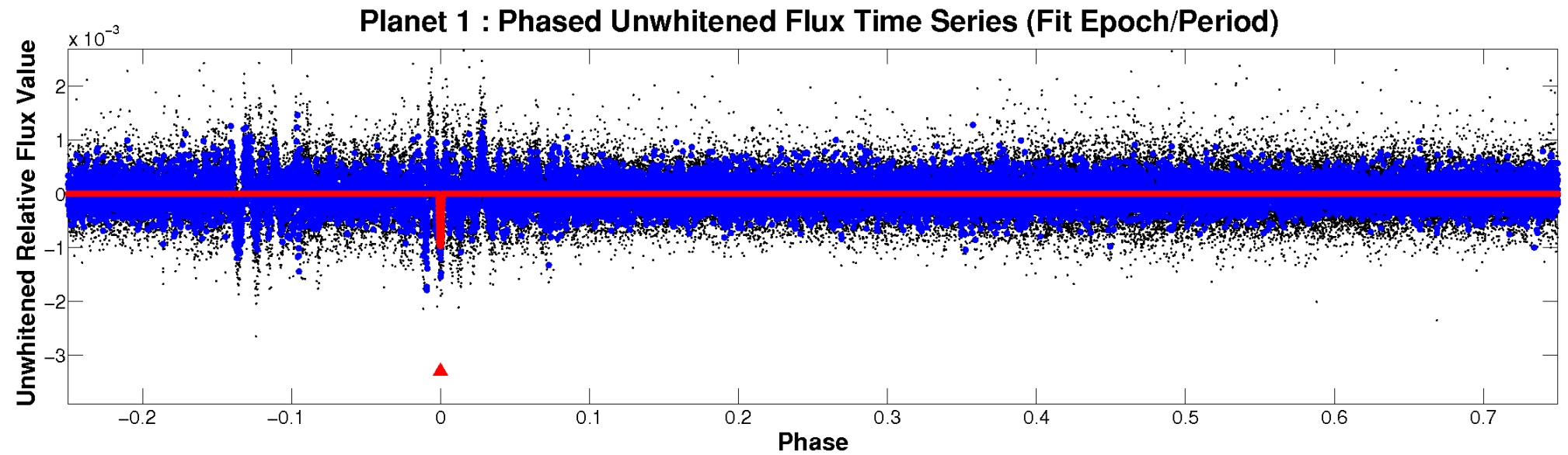


ALT Odd/Even

TCE 008105677-01

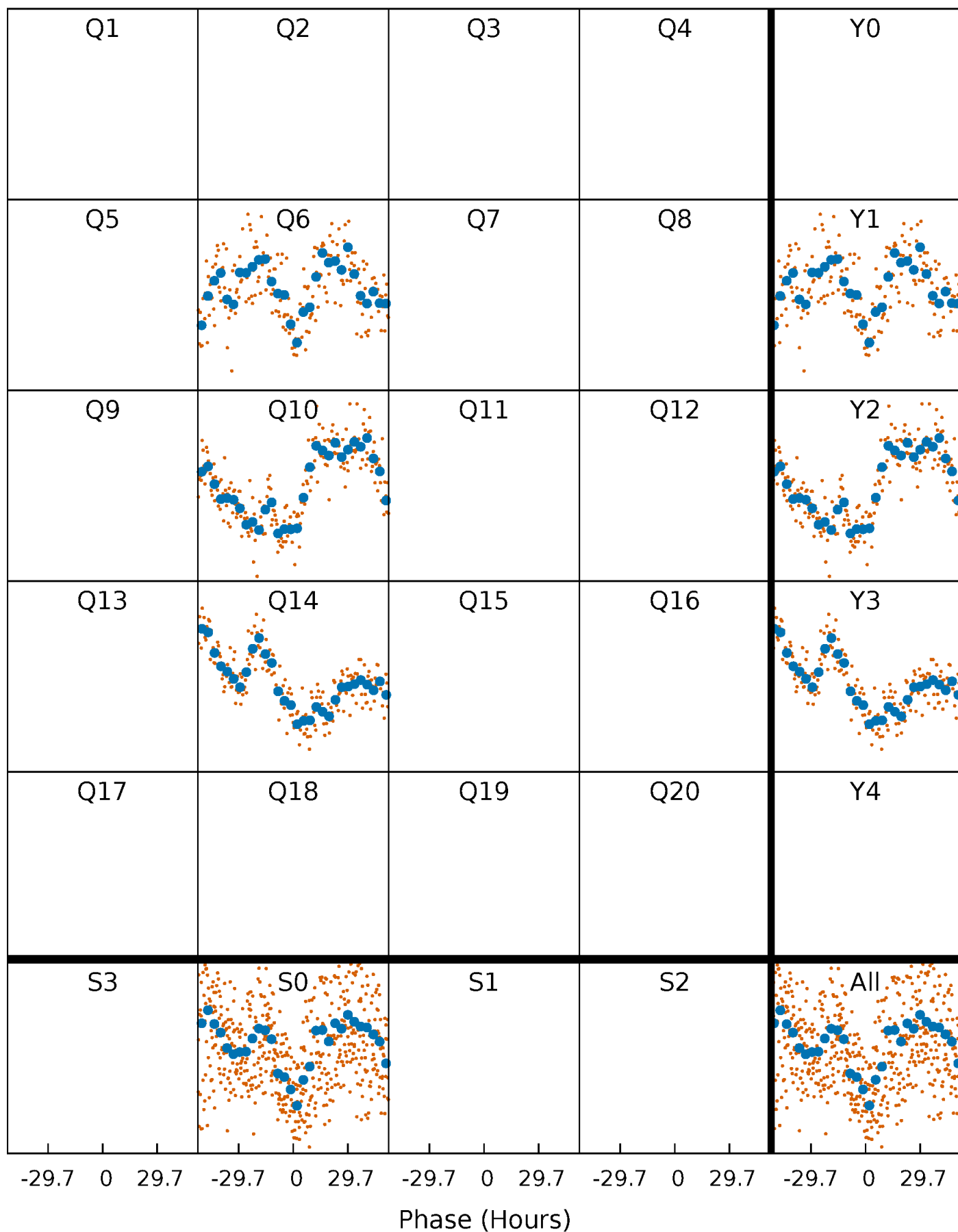


Non-Whitened Vs. Whitened Light Curve



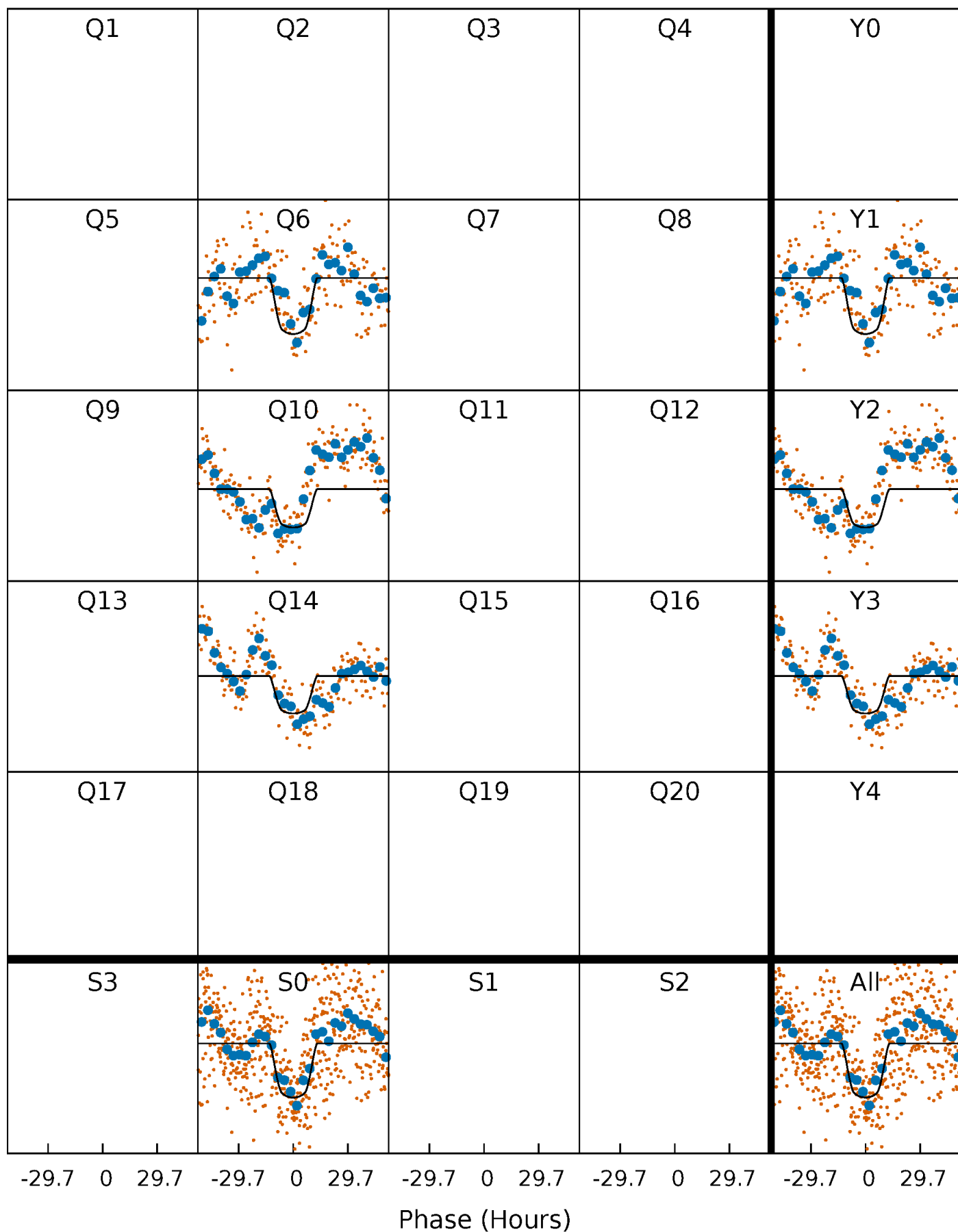
PDC Quarter-Phased Transit Curves

TCE 008105677-01 P=370.417458 Days $T_0=231.954863$ (BKJD)



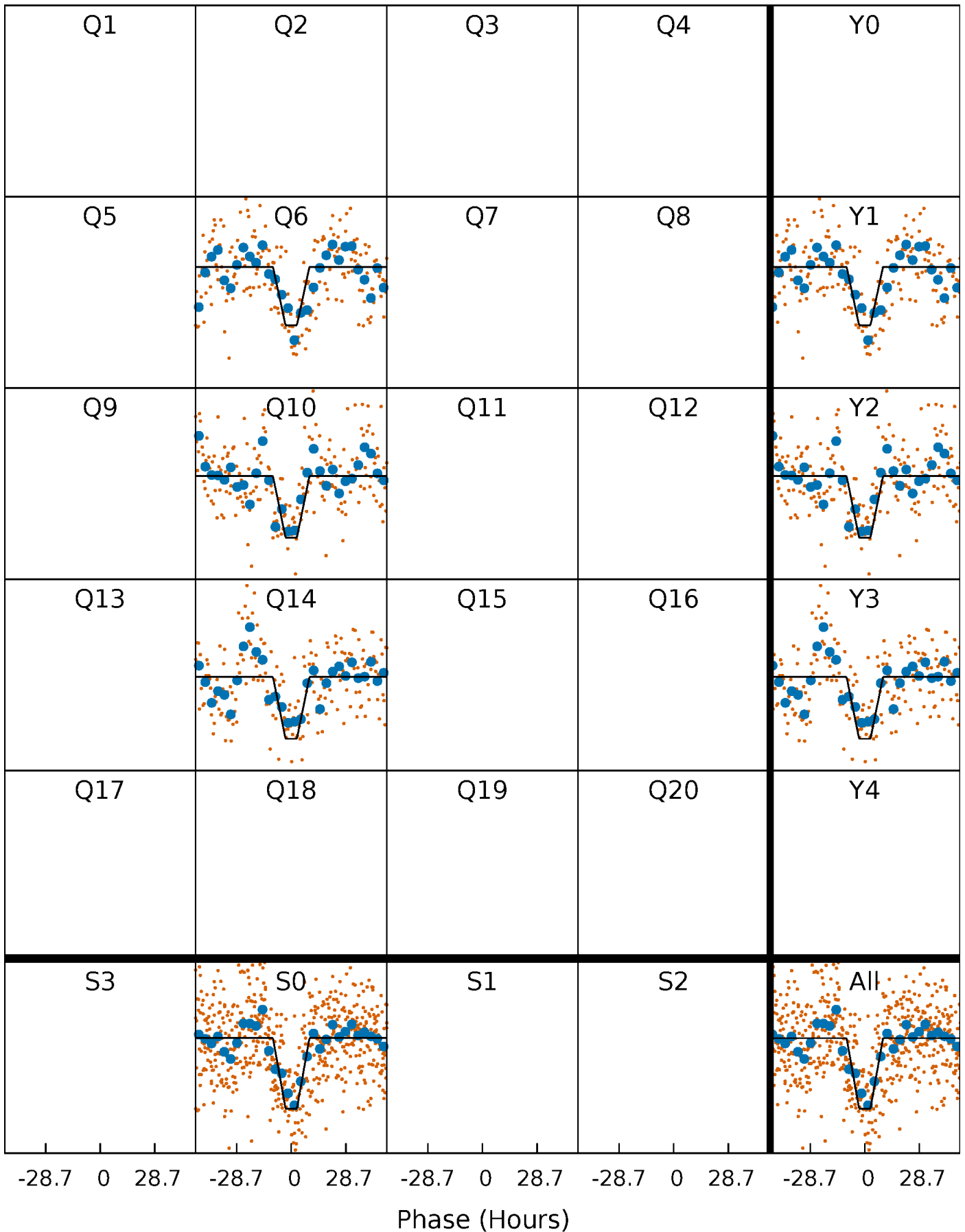
DV Quarter-Phased Transit Curves

TCE 008105677-01 P=370.417458 Days $T_0=231.954863$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

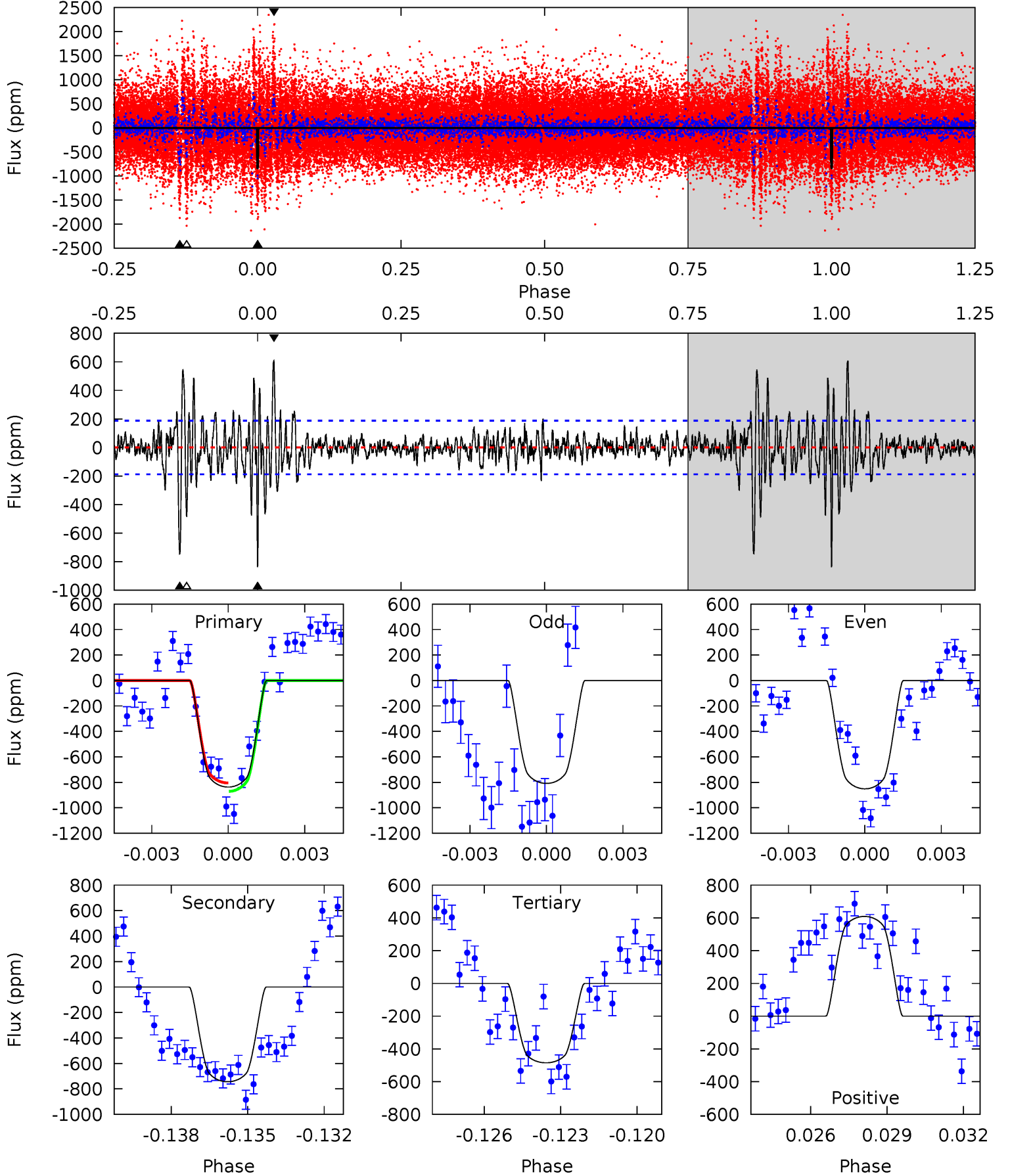
TCE 008105677-01 P=370.501310 Days $T_0=231.834335$ (BKJD)



DV Model-Shift Uniqueness Test

008105677-01, P = 370.417458 Days, E = 231.954863 Days

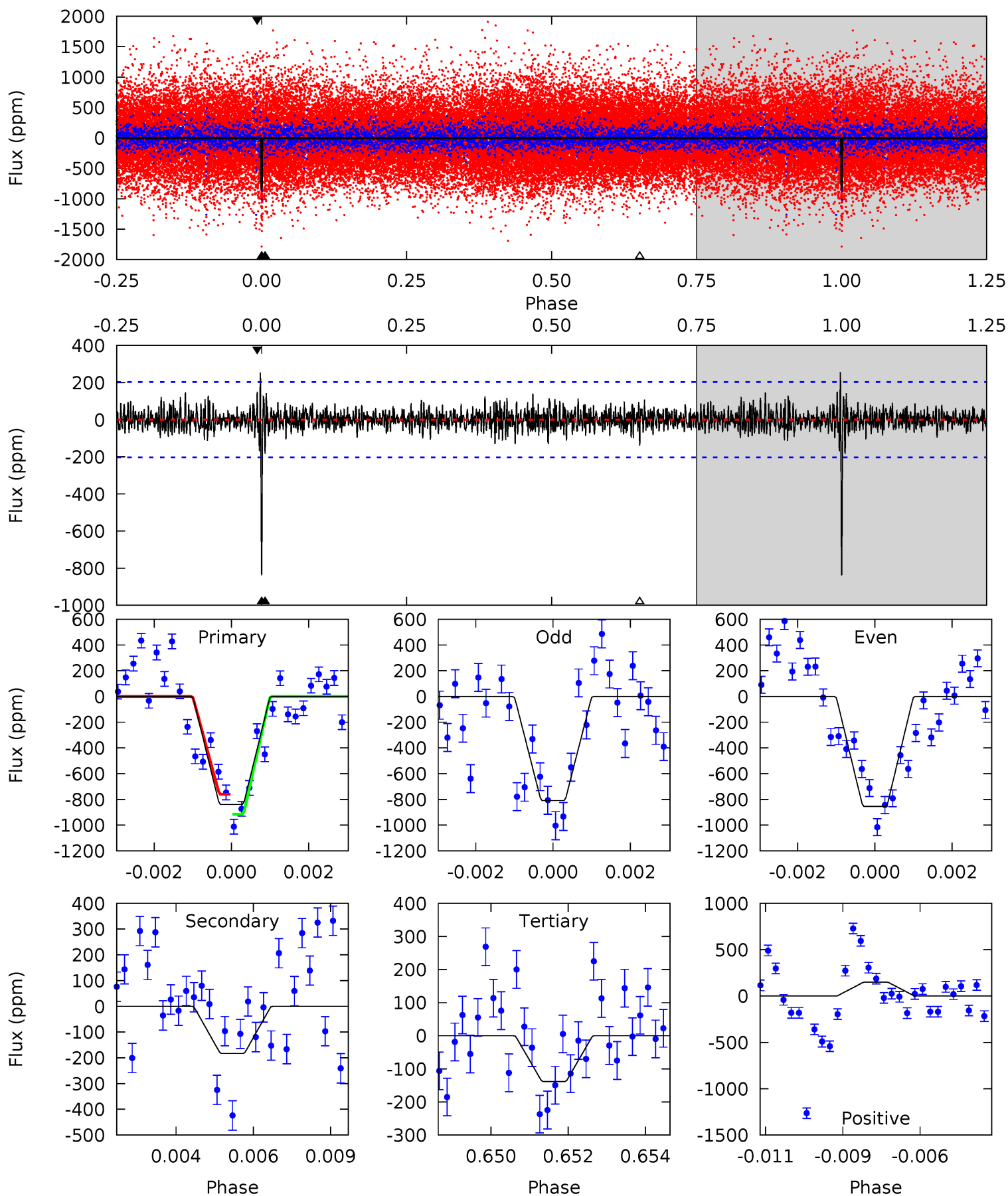
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.4	20.8	13.6	17.1	5.26	2.97	2.88	9.86	6.39	7.24	3.78	0.56	1.04	0.42	0.93



Alt Model-Shift Uniqueness Test

008105677-01, P = 370.501310 Days, E = 231.834335 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.9	4.79	3.62	3.92	5.31	3.07	1.07	18.3	18.0	1.17	0.87	0.56	1.04	0.23	2.03



Stellar Parameters For KIC 008105677

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6060^{+210}_{-232}	$4.495^{+0.050}_{-0.200}$	$-0.140^{+0.300}_{-0.300}$	$0.953^{+0.300}_{-0.100}$	$1.036^{+0.129}_{-0.142}$	$1.684^{+0.450}_{-0.848}$
	+3%/-4%	+1%/-4%	+214%/-214%	+31%/-10%	+12%/-14%	+27%/-50%
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 008105677-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-744 ± 36	$3.81^{+0.61}_{-0.46}$	369^{+26}_{-19}	5371^{+265}_{-253}	28855^{+8002}_{-6763}
Alt.	-183 ± 38	$3.34^{+0.59}_{-0.42}$	369^{+29}_{-18}	4248^{+258}_{-246}	9016^{+3197}_{-2704}

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 $A_{obs} \gg 1.0$

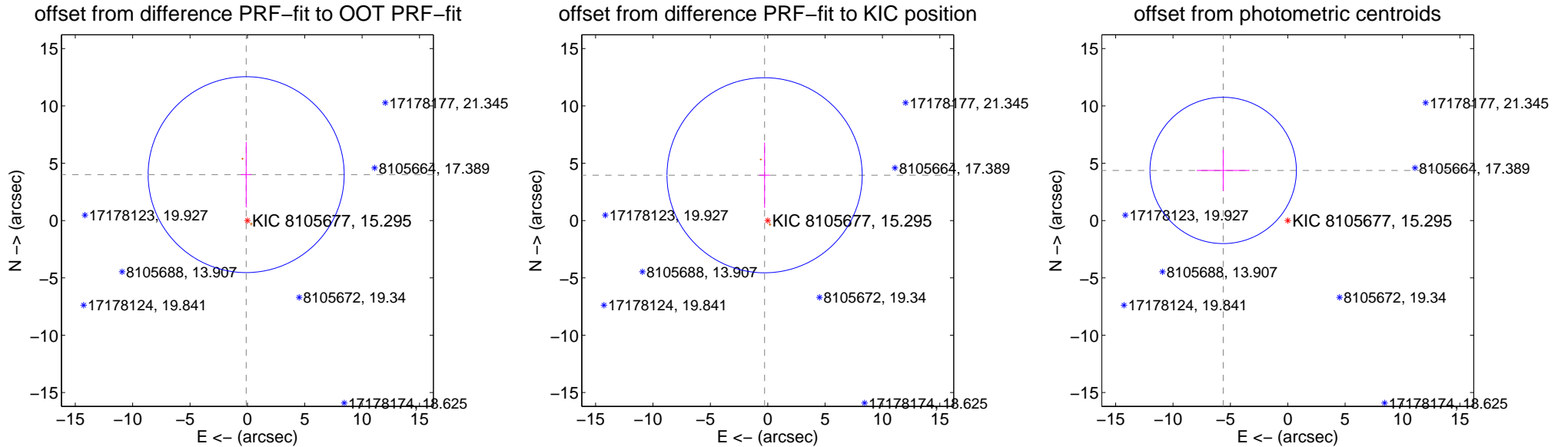
DV Centroid Data

Supplemental centroid analysis for 008105677-01. Kepler magnitude: 15.29. Transit SNR 8.77

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.006 ± 2.847	1.41	0.107 ± 0.446	4.005 ± 2.848
PRF-fit source offset from KIC position	3.960 ± 2.835	1.40	0.272 ± 0.461	3.950 ± 2.842
photometric centroid source offset	7.13 ± 2.13	3.35	5.63 ± 2.31	4.37 ± 1.79

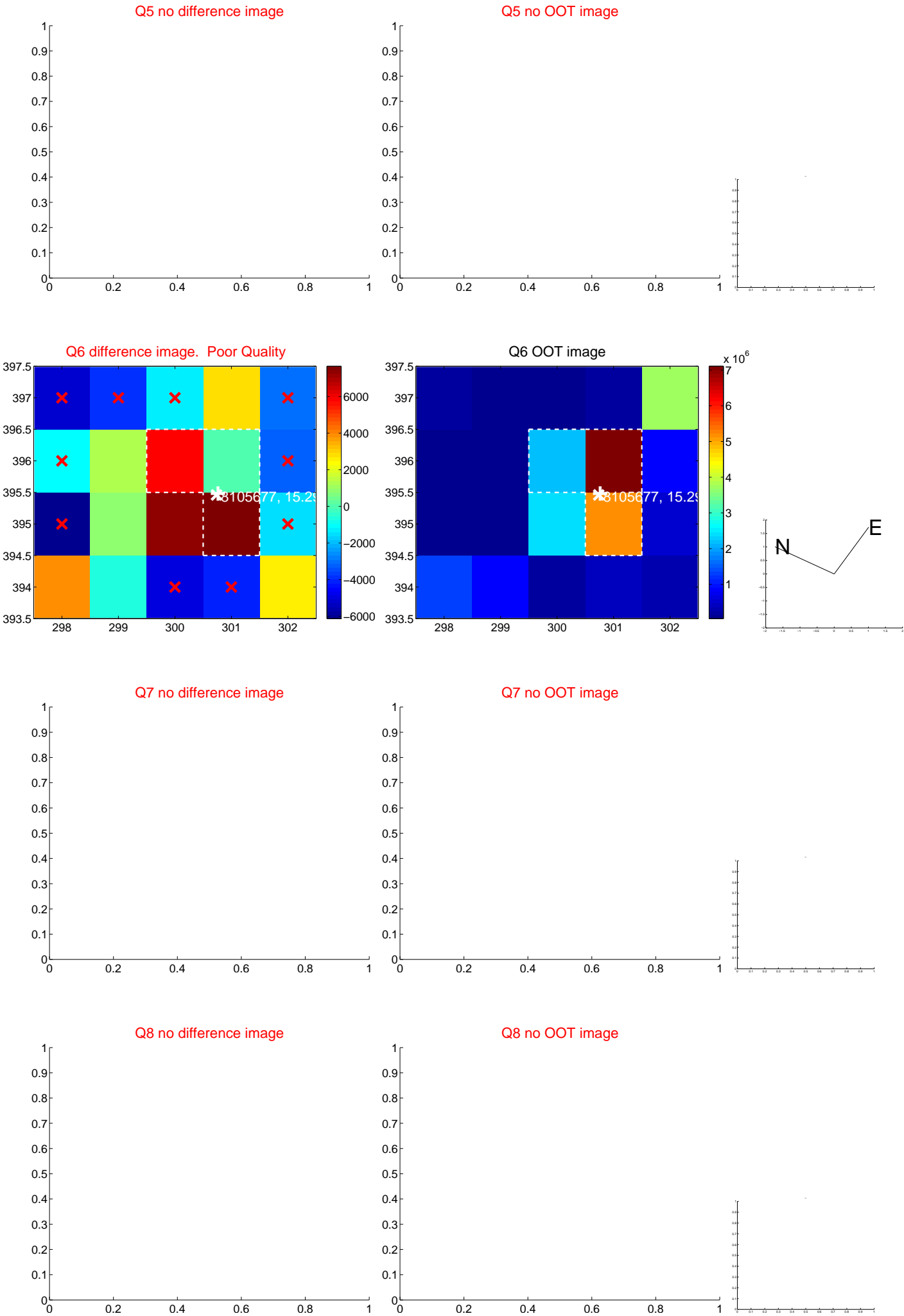


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

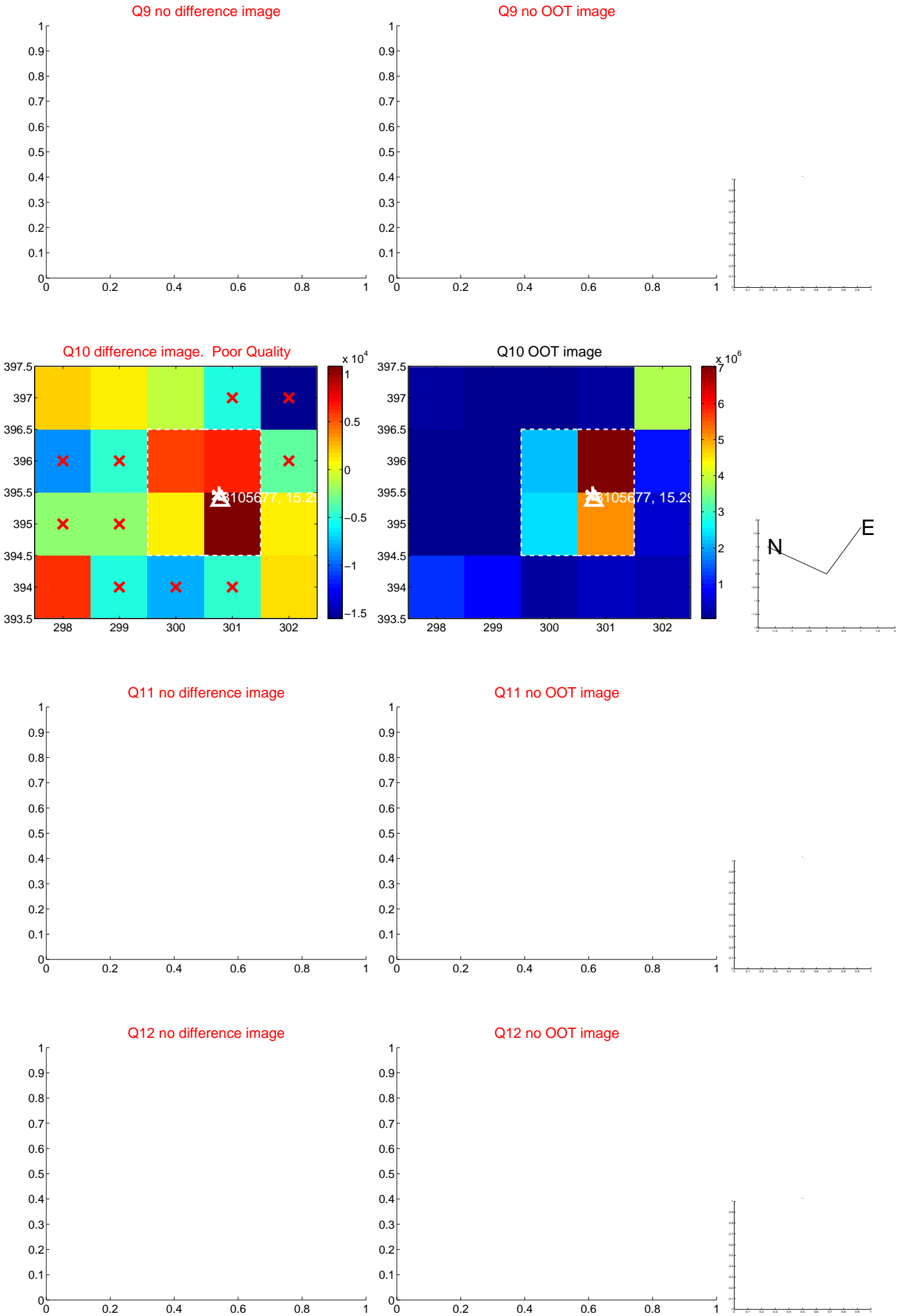
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



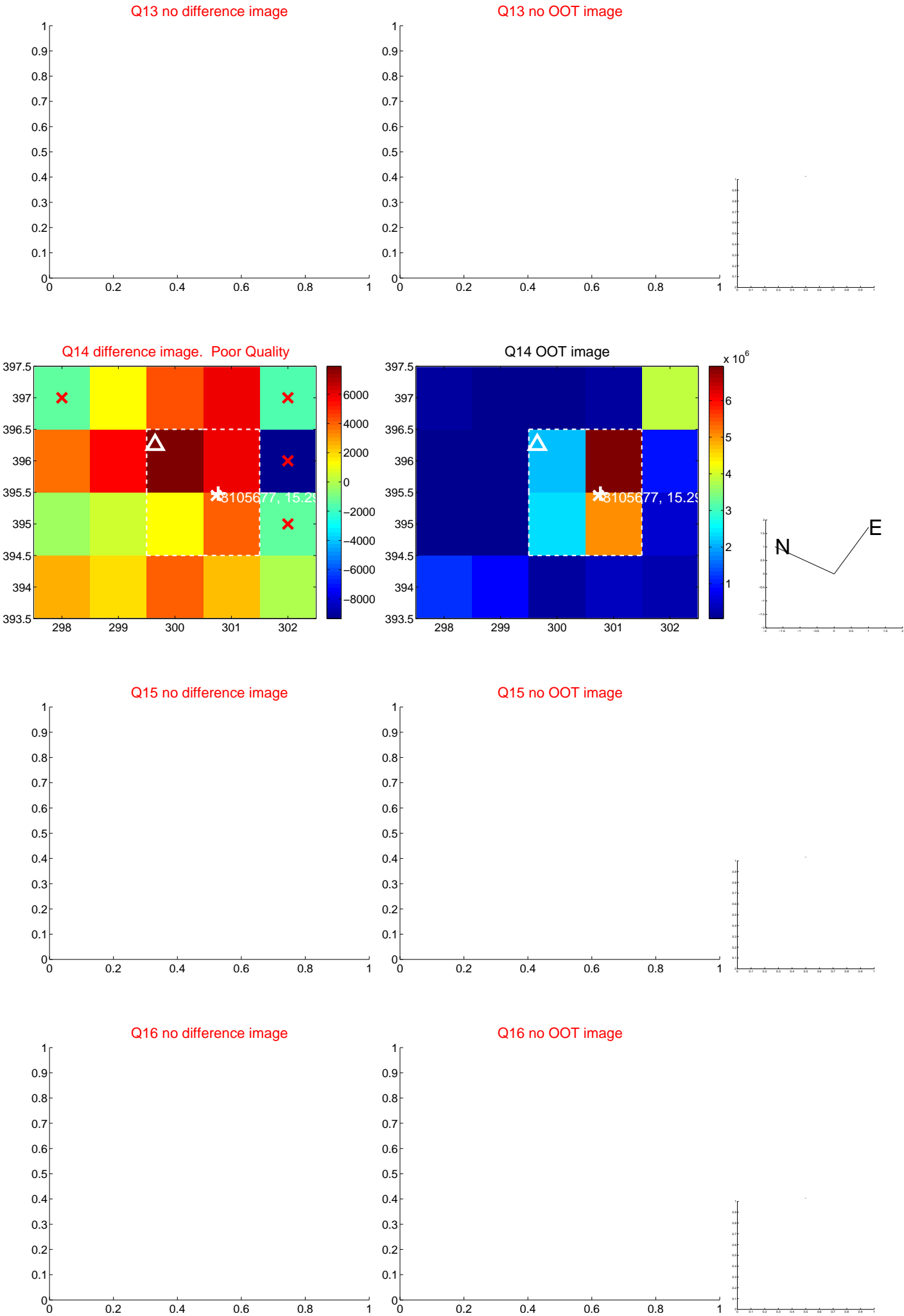
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



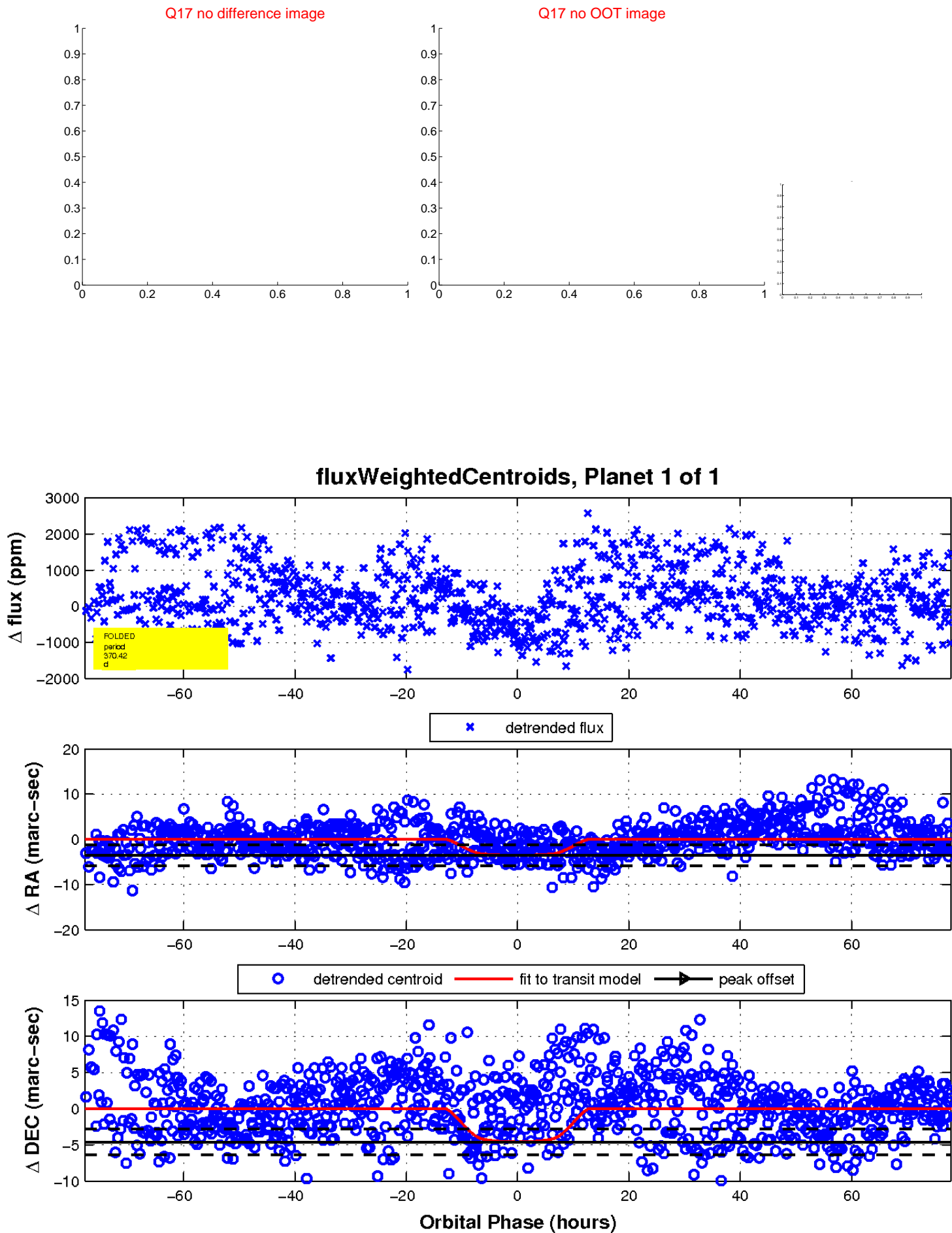
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

