

KIC 005612776

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})
005612776-01	OBS	No	391.696631	246.899820	925.9	25.840	8.2	8.2	0.42	3687	1.58	0.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005612776-01	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.

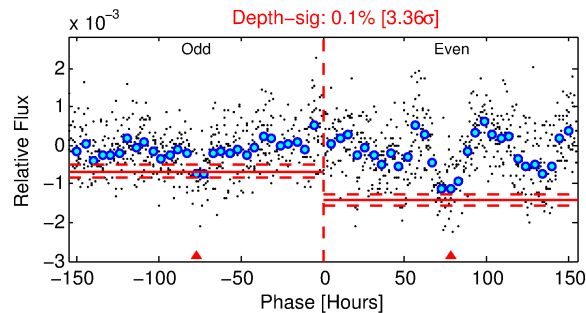
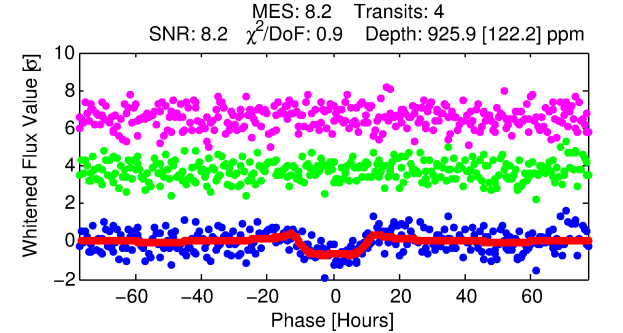
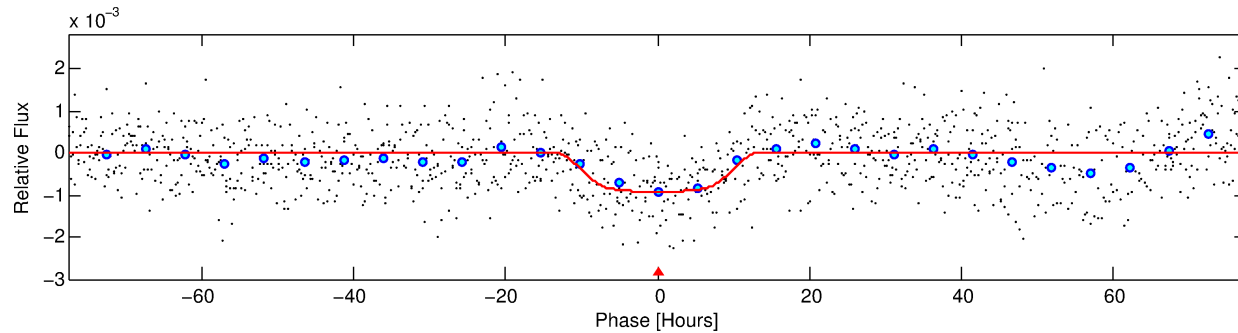
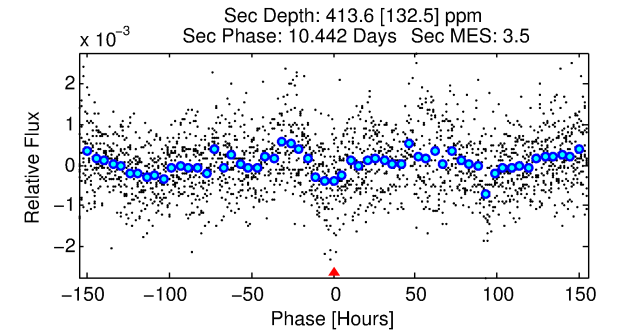
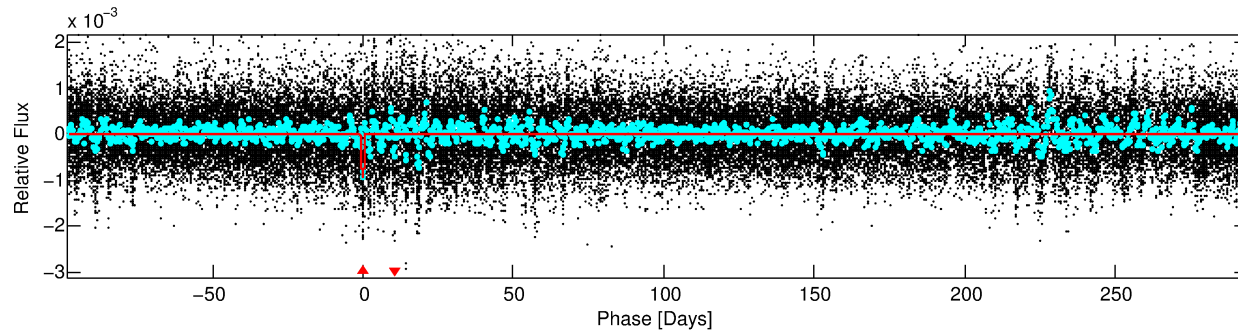
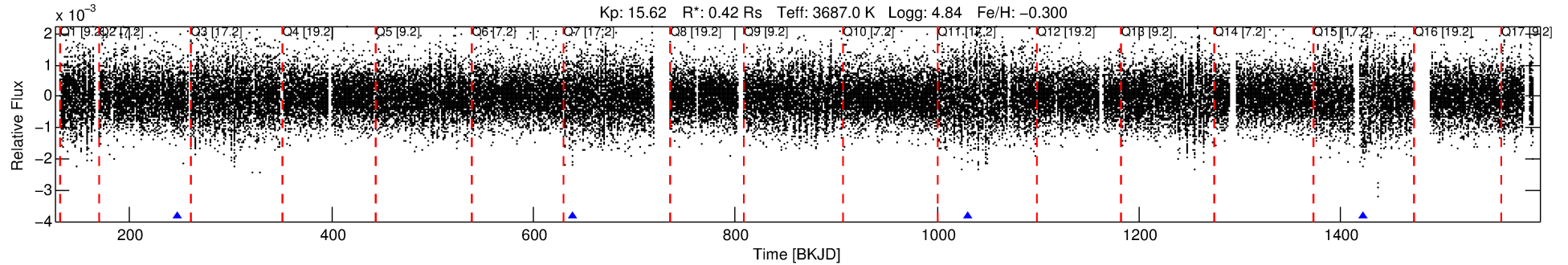
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005612776-01

No Significant Match Found

DV One-Page Summary

KIC: 5612776 Candidate: 1 of 1 Period: 391.697 d



DV Fit Results:

Period = 391.69663 [0.02126] d
Epoch = 246.8998 [0.0364] BKJD
Rp/R* = 0.0344 [0.0030]
a/R* = 50.47 [9.68]
b = 0.94 [0.03]
Seff = 0.05 [0.01]
Teq = 118 [5] K
Rp = 1.58 [0.26] Re
a = 0.7995 [0.0840] AU
Ag = 58399.09 [22740.48] [2.57σ]
Teffp = 2833 [267] K [10.17σ]

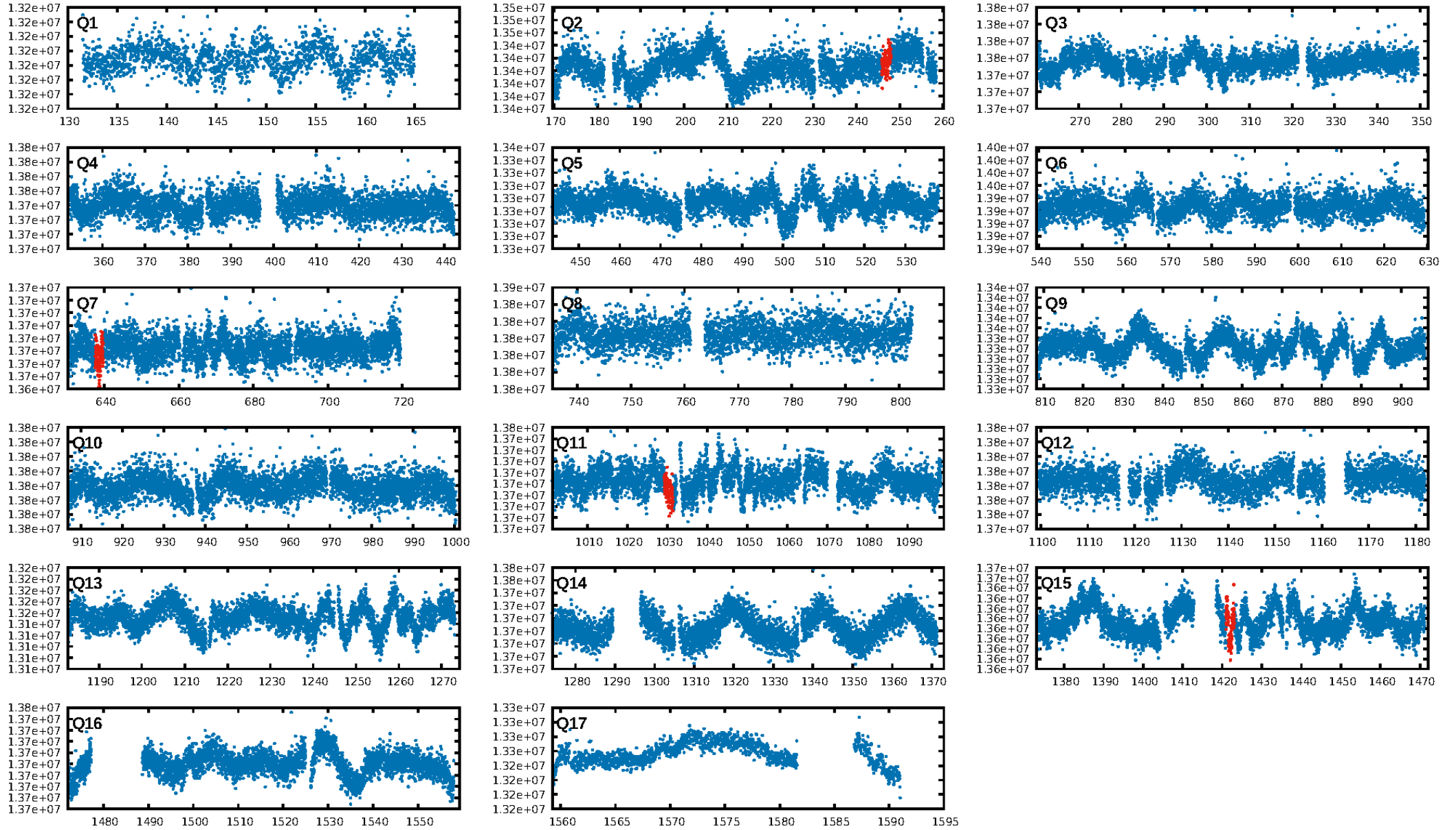
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.2%
ModelChiSquareGoF-sig: 100.0%
Bootstrap-pfa: 3.63e-13
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -3.192
Centroid-sig: 93.1%
Centroid-so: 0.631 arcsec [0.51σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [2/2]

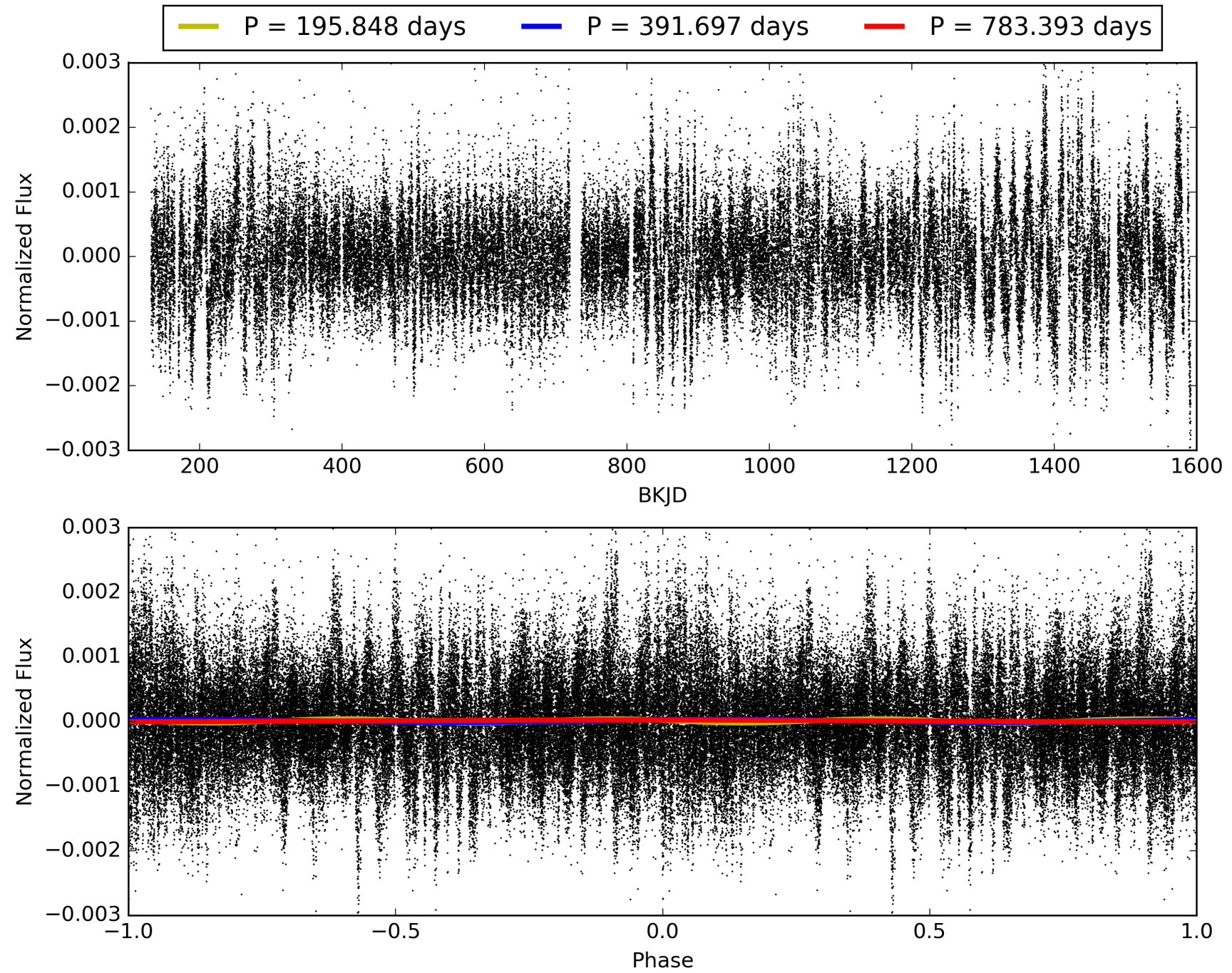
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 17:10:40 Z

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

TCE 005612776-01, PDC Light Curves

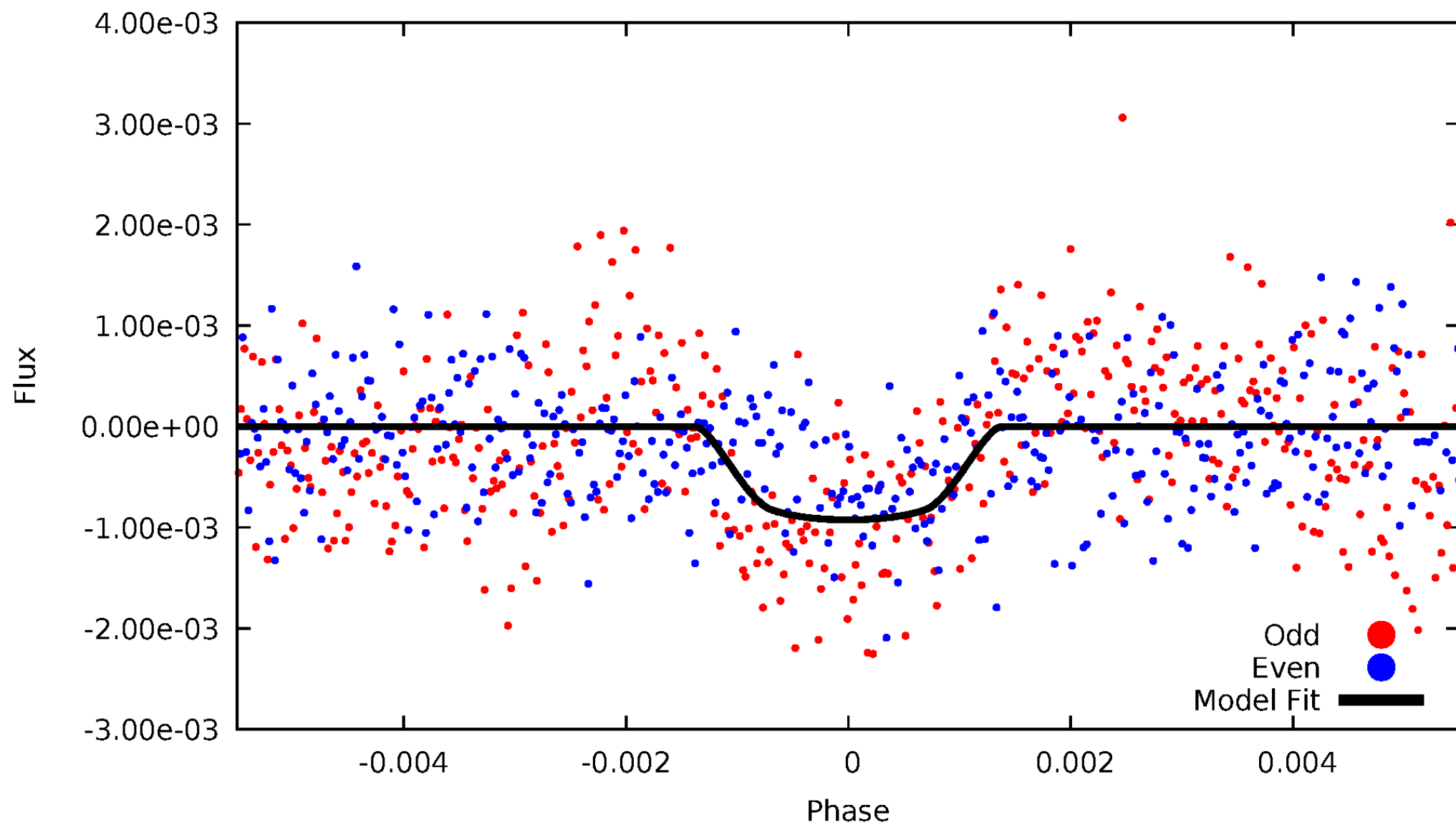


TCE 005612776-01



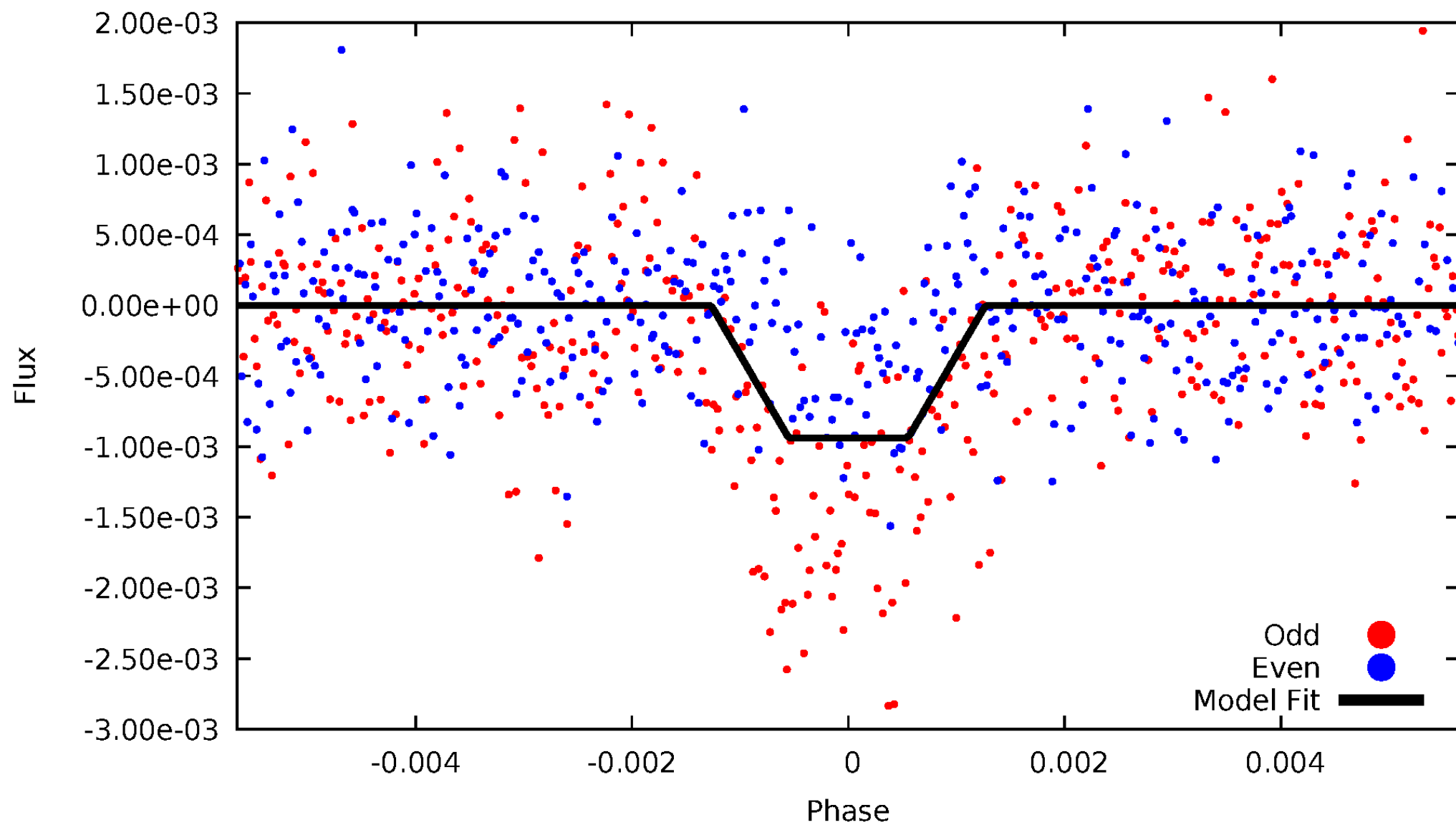
DV Odd/Even

TCE 005612776-01

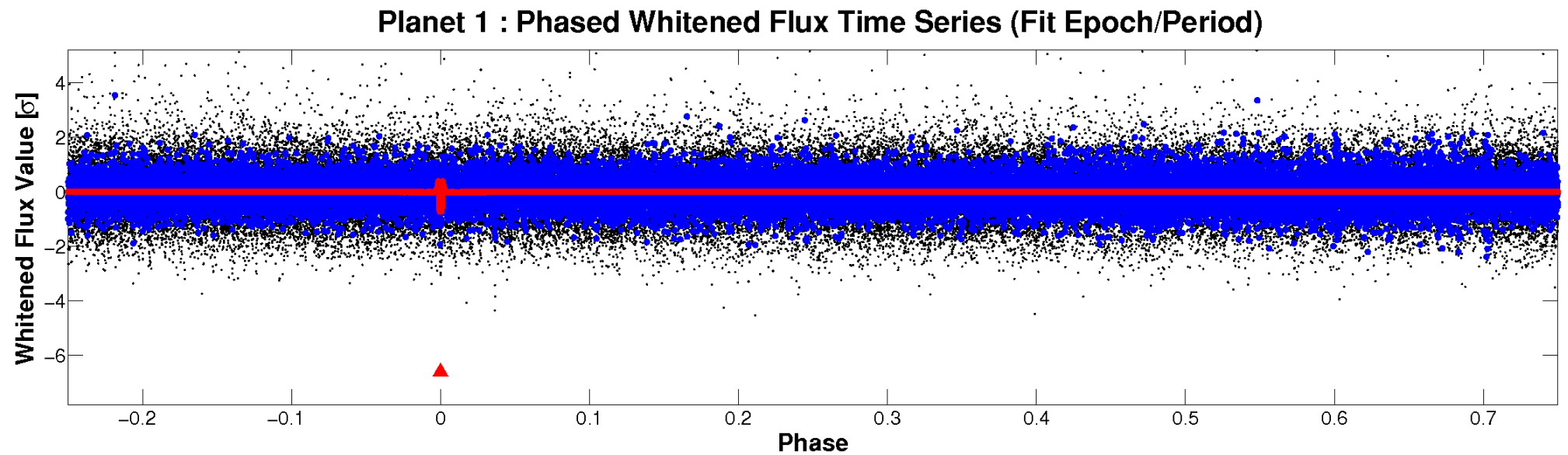
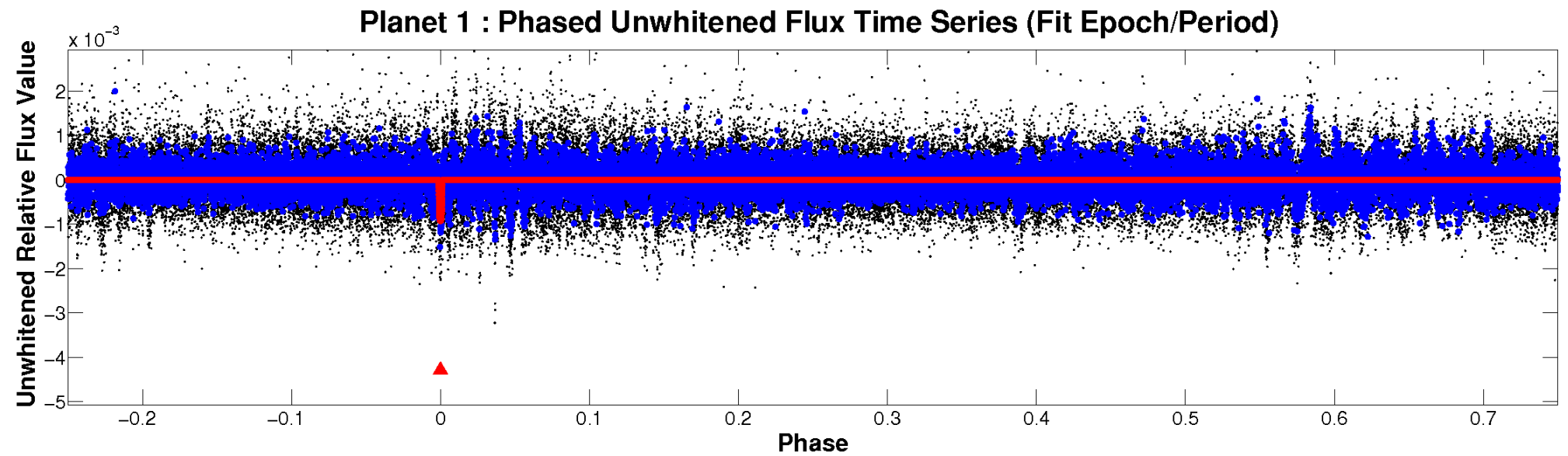


ALT Odd/Even

TCE 005612776-01

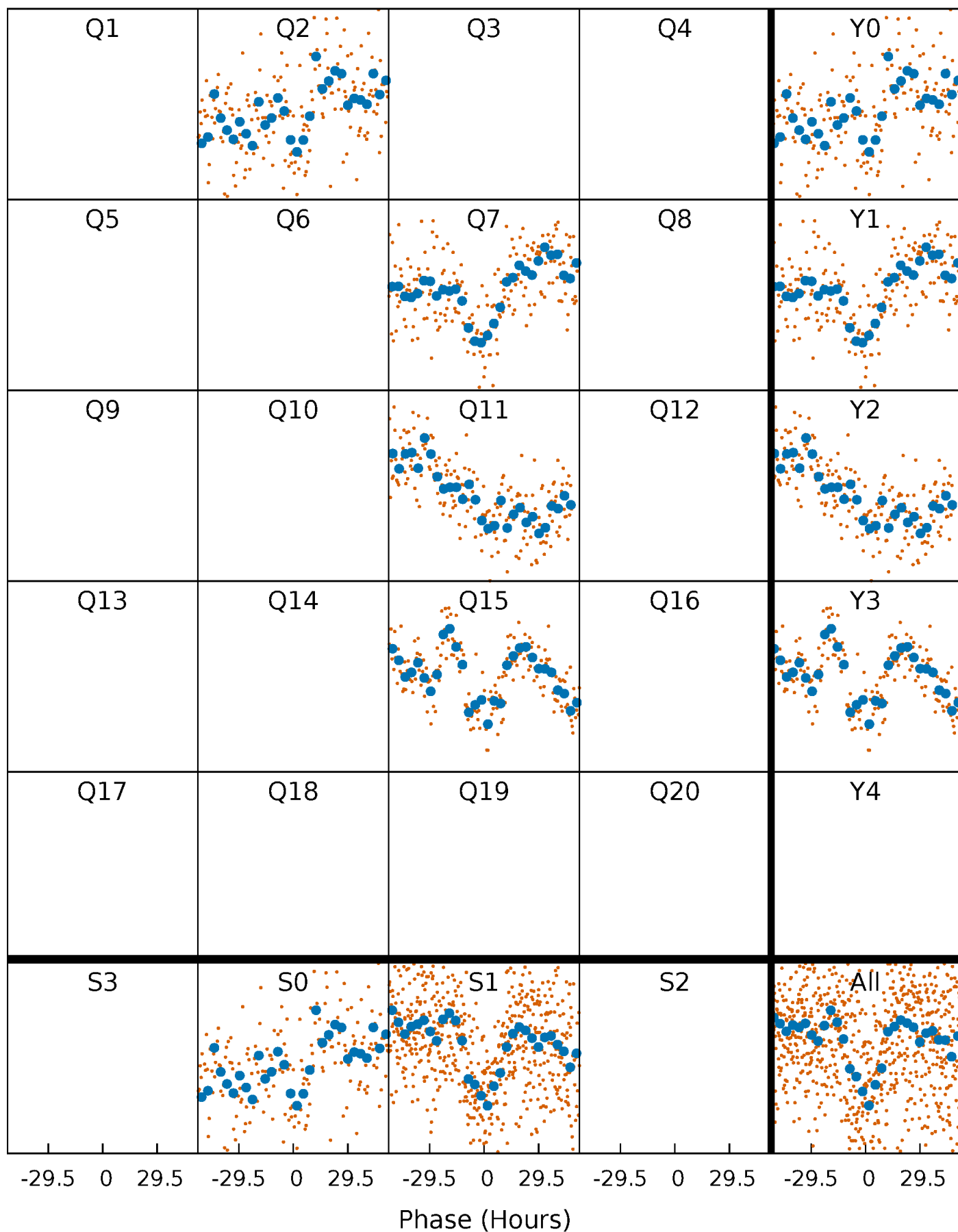


Non-Whitened Vs. Whitened Light Curve



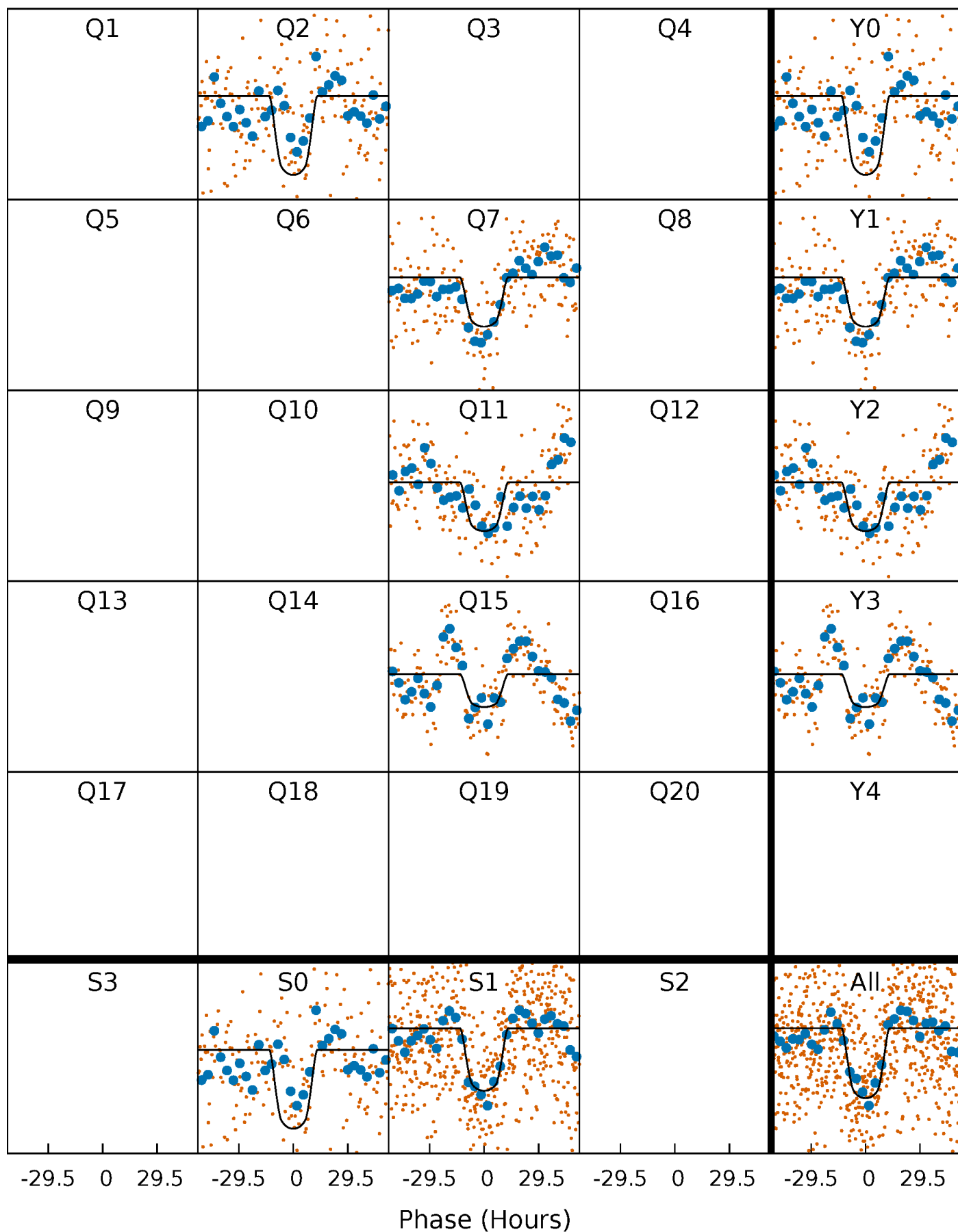
PDC Quarter-Phased Transit Curves

TCE 005612776-01 P=391.696631 Days $T_0=246.899821$ (BKJD)



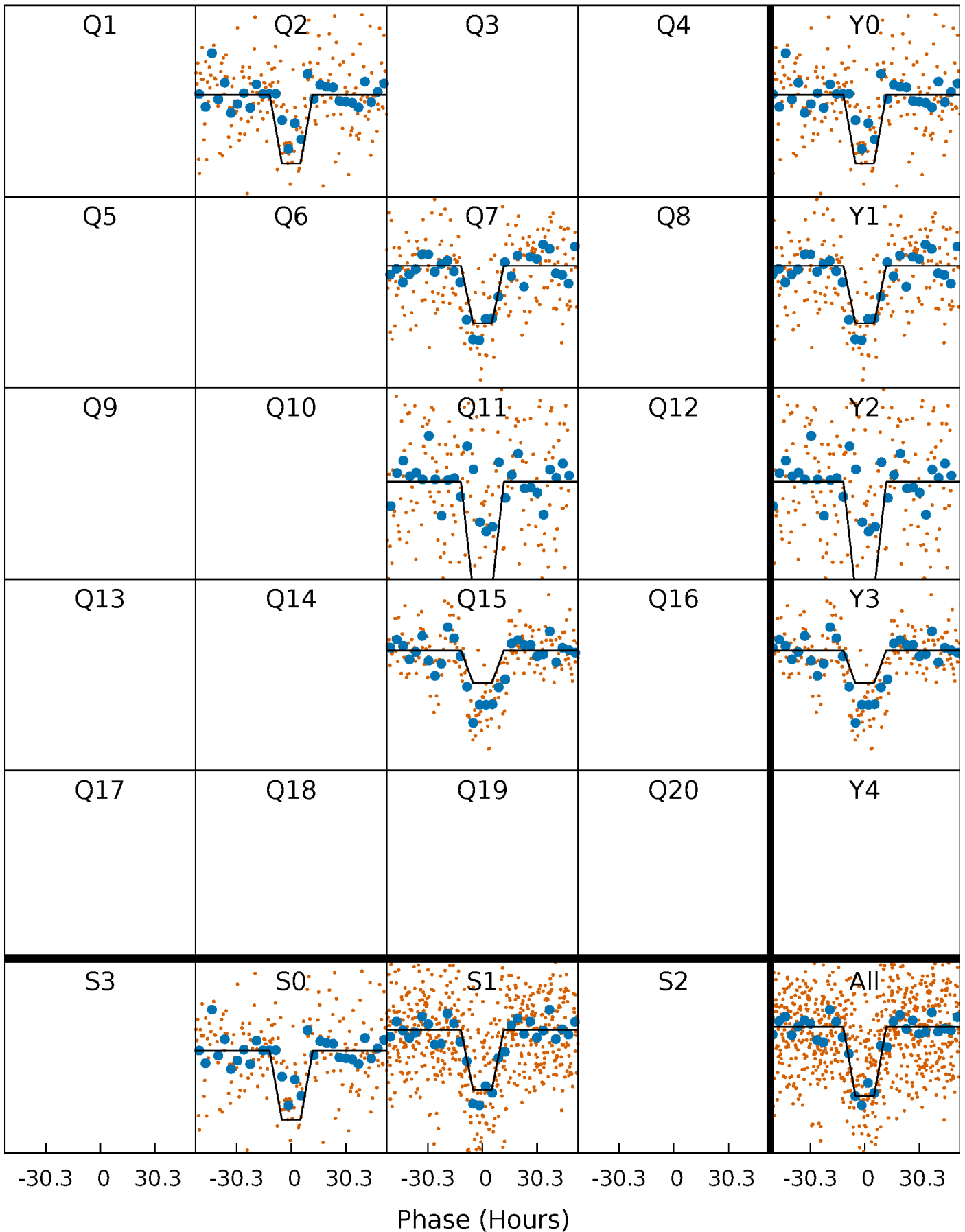
DV Quarter-Phased Transit Curves

TCE 005612776-01 P=391.696631 Days $T_0=246.899821$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

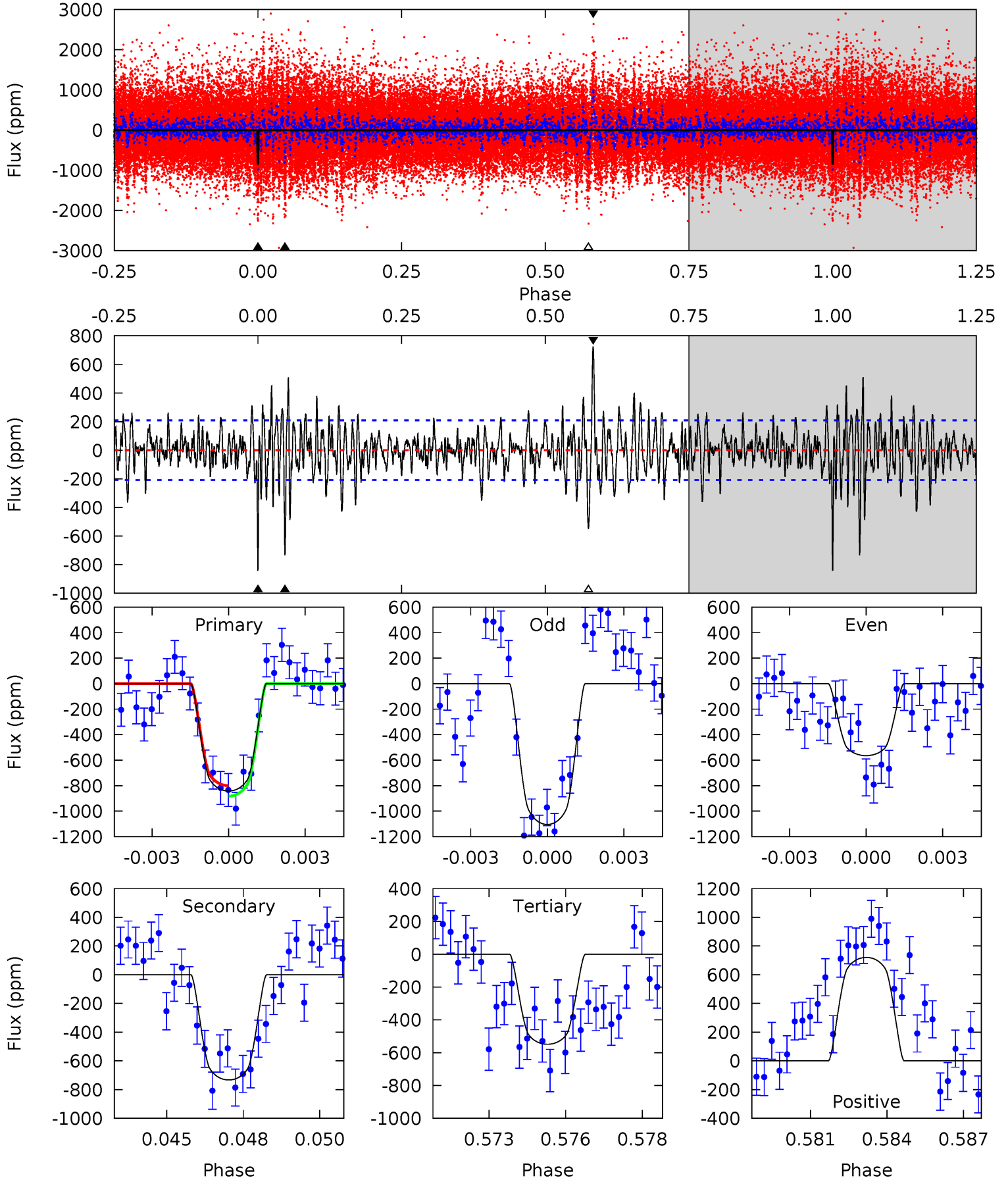
TCE 005612776-01 P=391.636422 Days $T_0=247.001906$ (BKJD)



DV Model-Shift Uniqueness Test

005612776-01, P = 391.696631 Days, E = 246.899821 Days

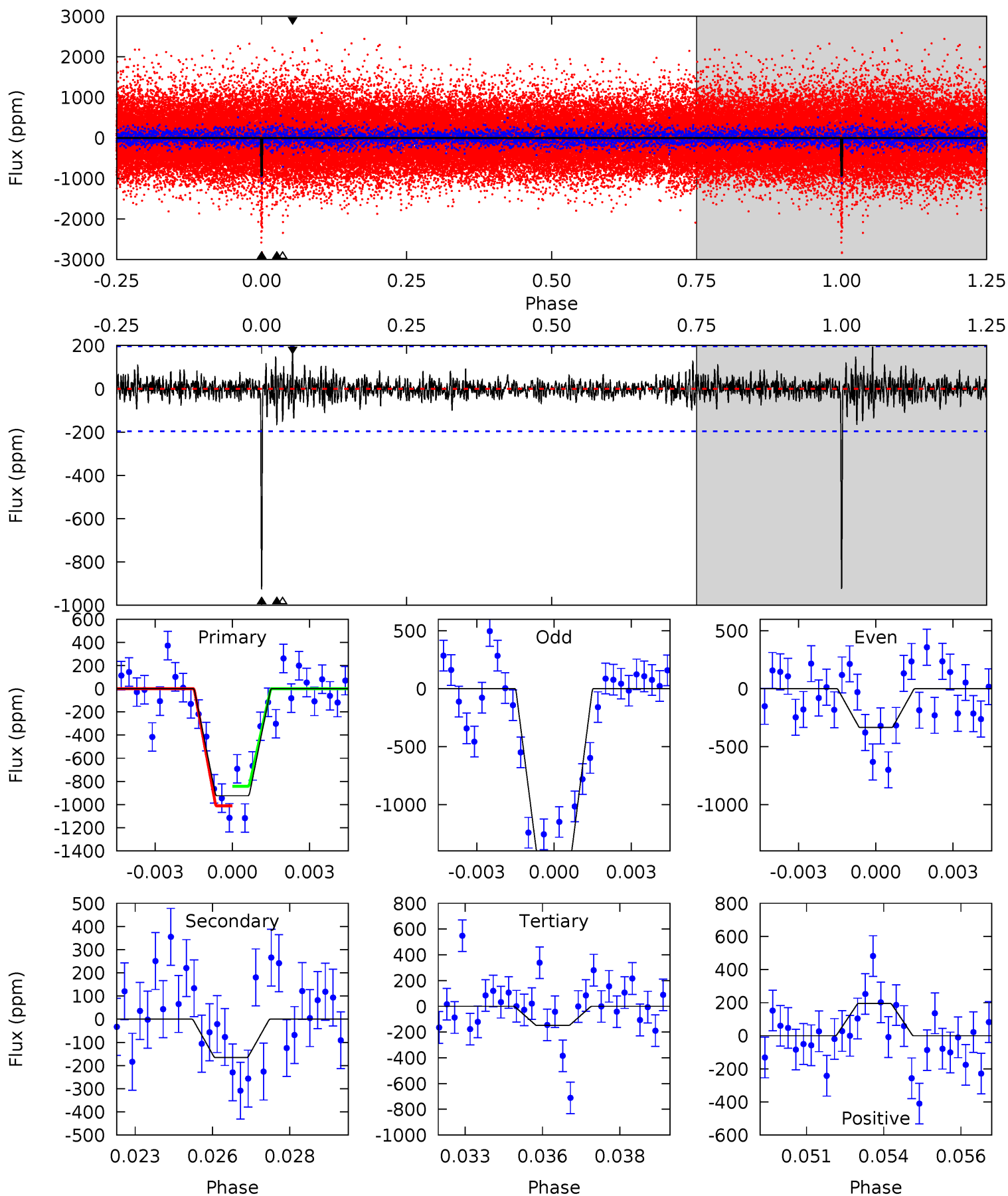
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.3	18.5	13.9	18.2	5.27	2.99	3.42	7.41	3.07	4.65	0.31	6.81	0.92	0.46	1.04



Alt Model-Shift Uniqueness Test

005612776-01, P = 391.636422 Days, E = 247.001906 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.8	4.45	4.00	5.25	5.28	3.02	0.88	20.8	19.6	0.45	-0.80	15.2	1.14	0.17	2.28



Stellar Parameters For KIC 005612776

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3687^{+81}_{-88}	$4.839^{+0.066}_{-0.049}$	$-0.300^{+0.200}_{-0.200}$	$0.420^{+0.048}_{-0.058}$	$0.442^{+0.042}_{-0.063}$	$8.418^{+2.877}_{-1.804}$
	+2%/-2%	+1%/-1%	+67%/-67%	+11%/-14%	+10%/-14%	+34%/-21%
Source	PHO2	PHO2	PHO2	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005612776-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-733 ± 40	$1.57^{+0.17}_{-0.17}$	164^{+5}_{-5}	3411^{+129}_{-113}	104755^{+25486}_{-17740}
Alt.	-166 ± 37	$1.40^{+0.16}_{-0.16}$	164^{+5}_{-6}	2841^{+130}_{-133}	29593^{+10479}_{-8245}

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

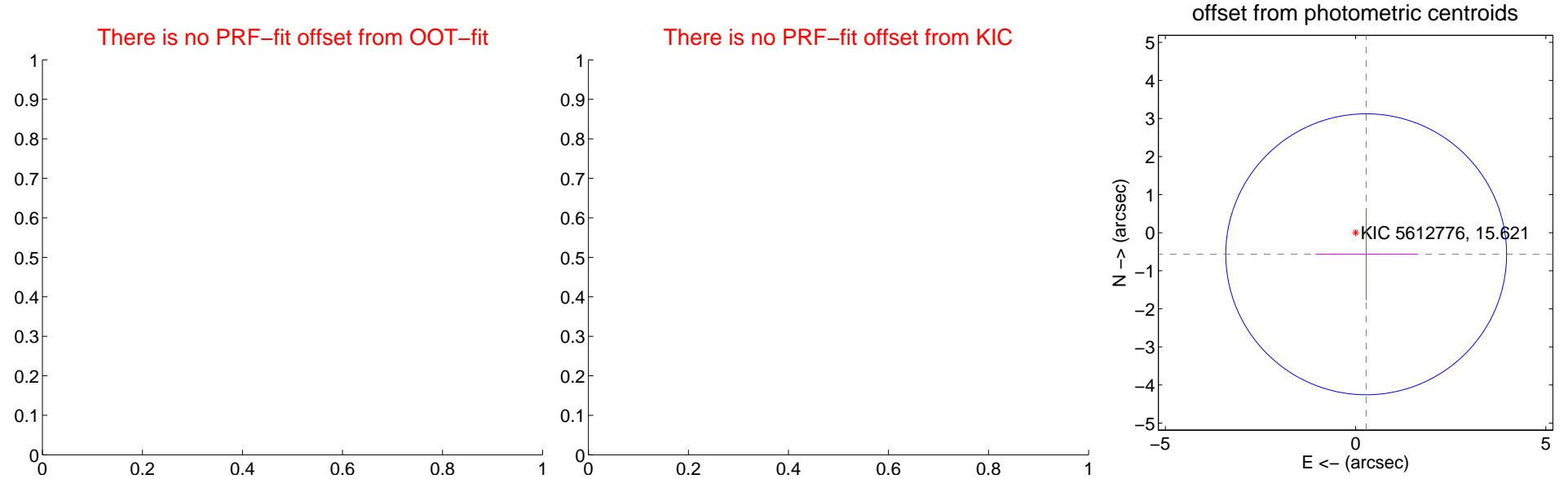
DV Centroid Data

Supplemental centroid analysis for 005612776-01. Kepler magnitude: 15.62. Transit SNR 8.21

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	0.63 ± 1.23	0.51	-0.28 ± 1.33	-0.57 ± 1.20

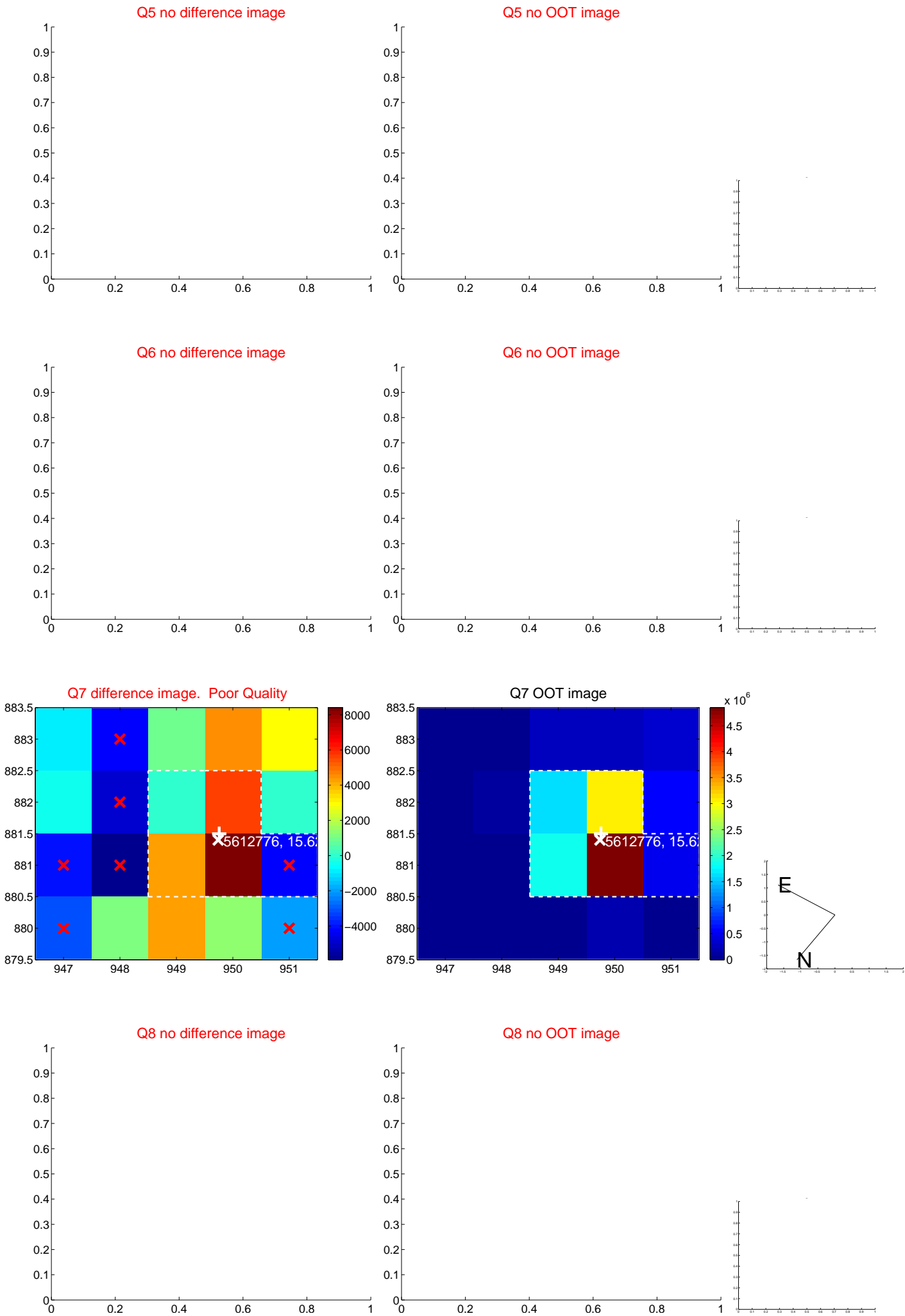


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

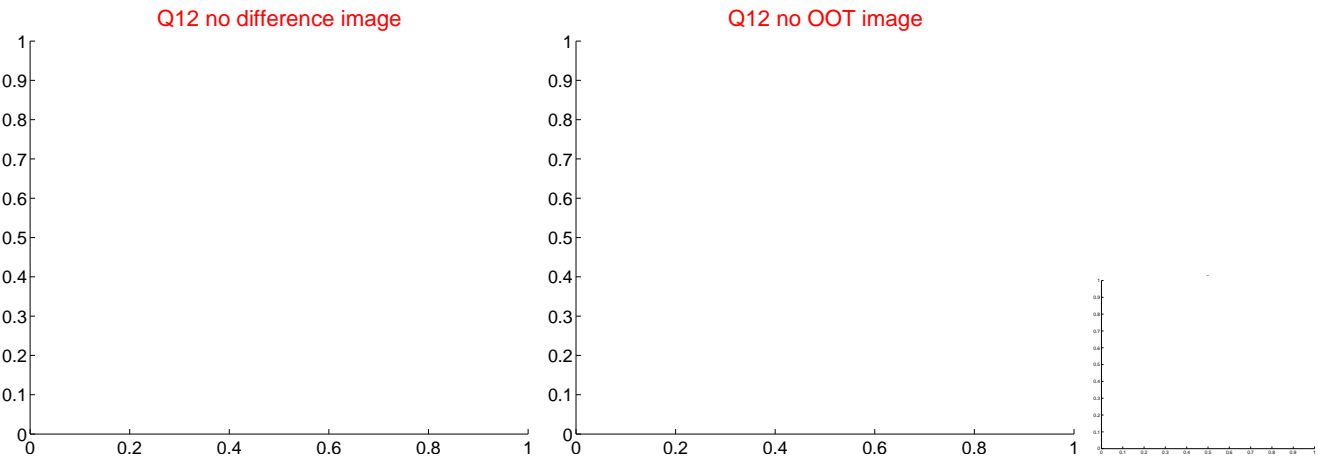
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



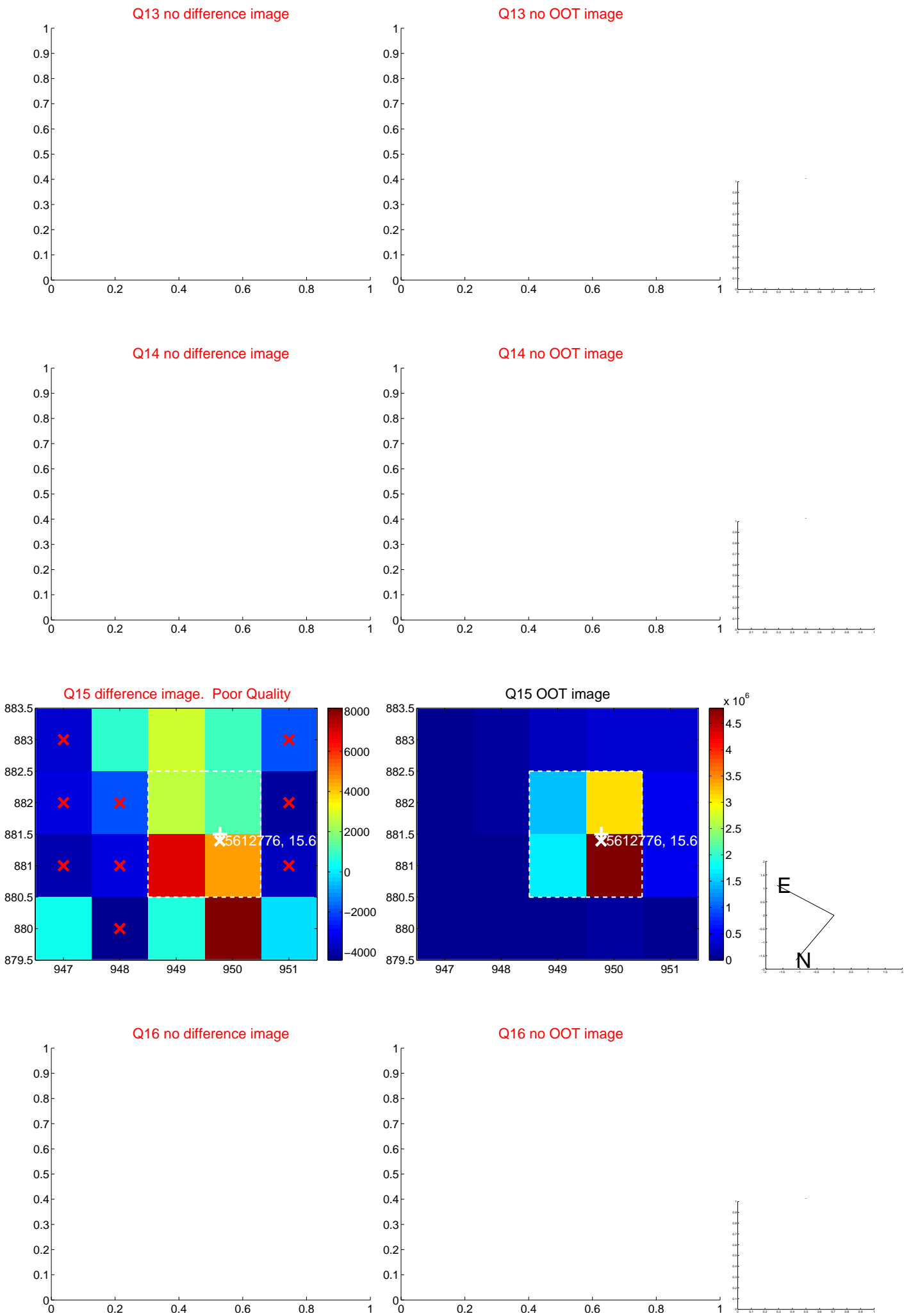
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



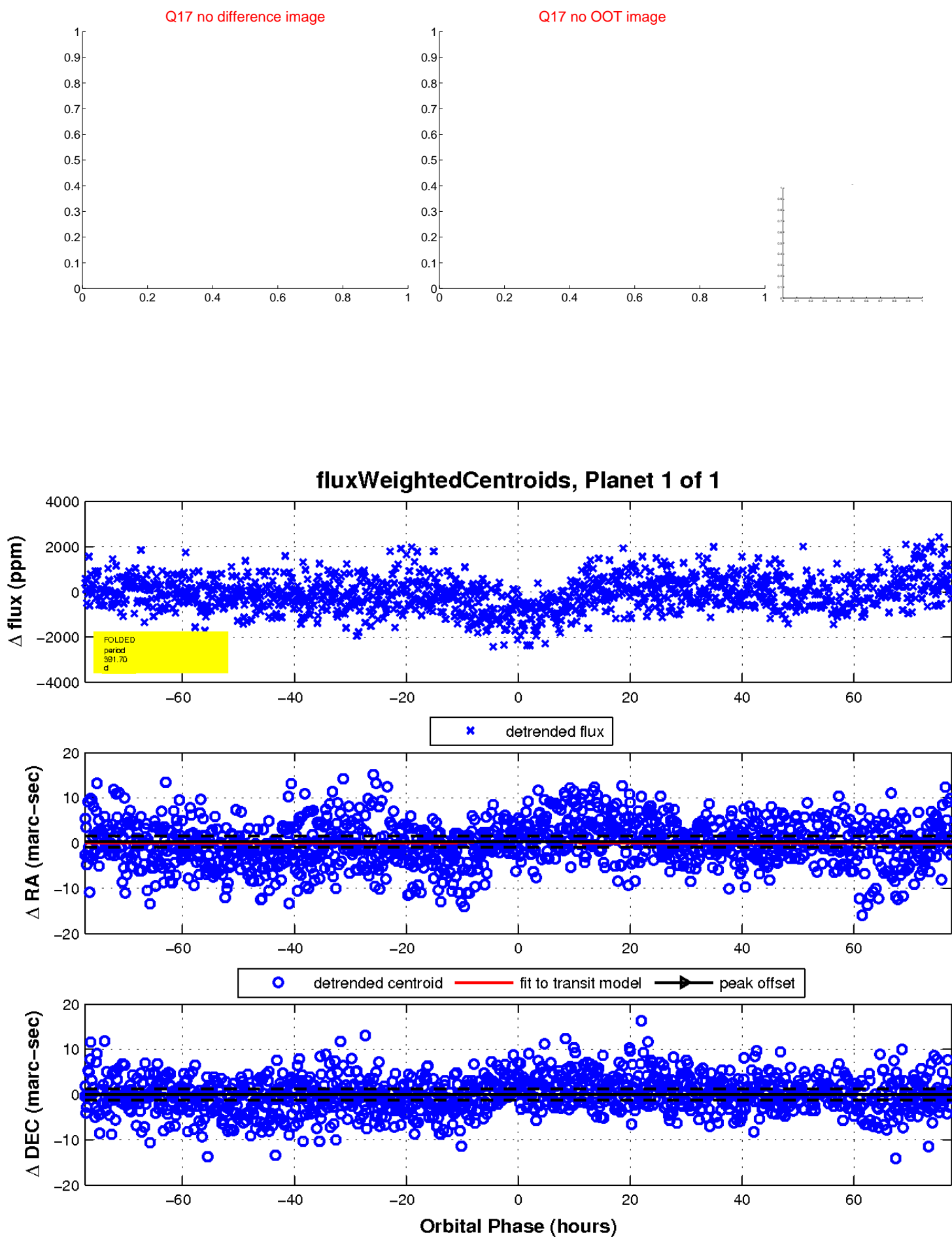
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



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



UKIRT Image

Declination

