

KIC 010290256

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})
010290256-01	OBS	No	260.150955	144.072218	1332.0	5.757	12.2	5.3	19.81	5013	90.95	150.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010290256-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT

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

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

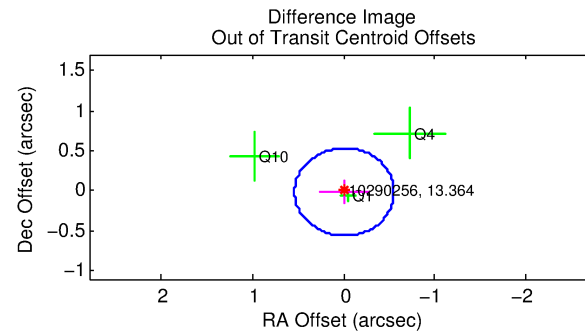
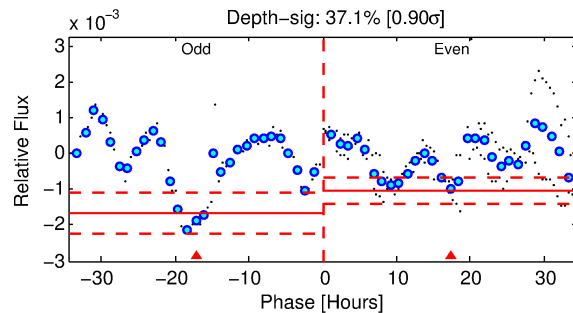
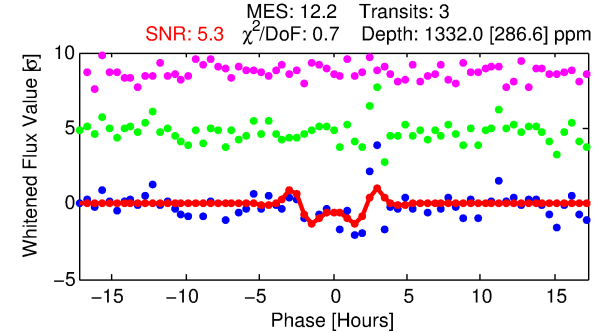
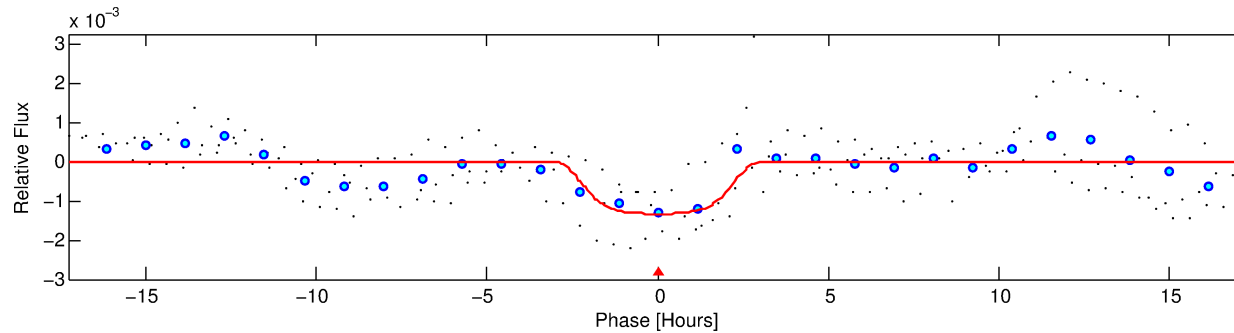
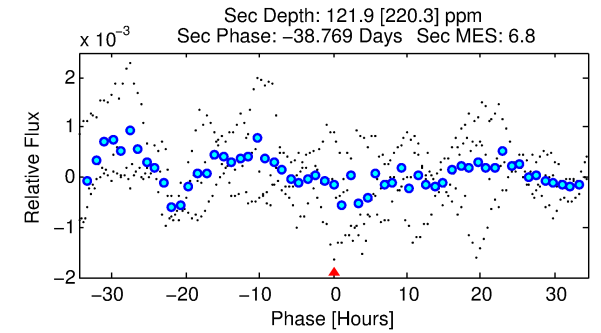
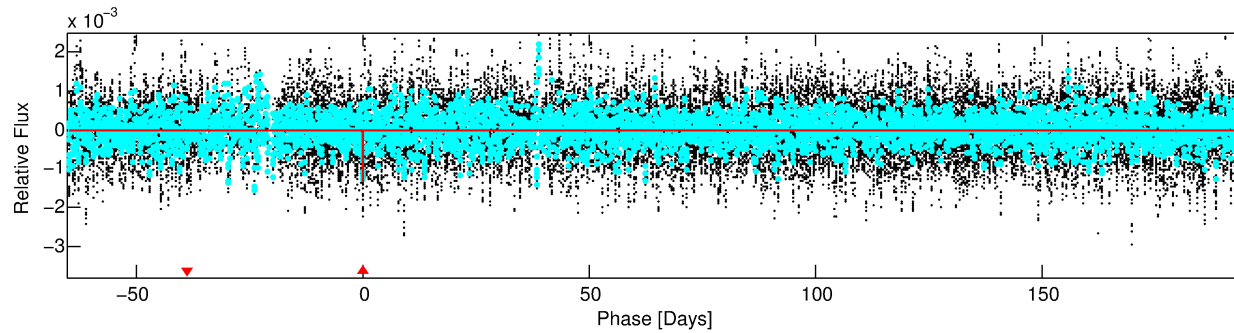
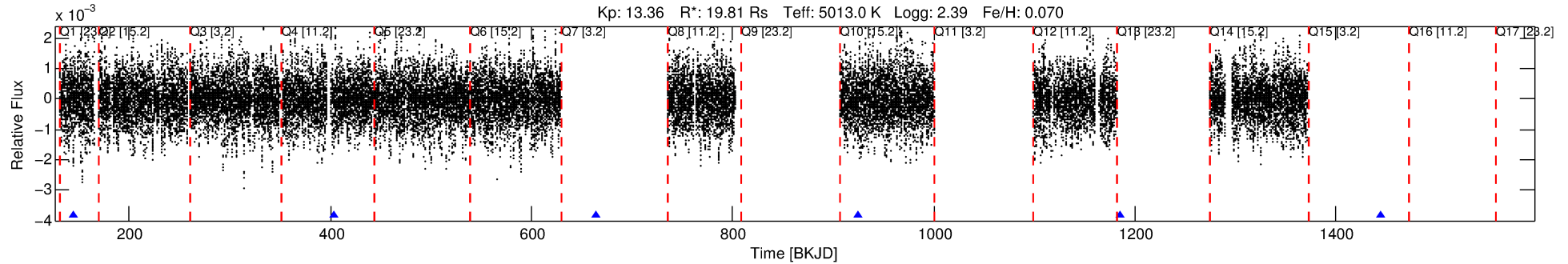
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010290256-01

No Significant Match Found

DV One-Page Summary

KIC: 10290256 Candidate: 1 of 1 Period: 260.151 d



DV Fit Results:

Period = 260.15096 [0.00333] d
Epoch = 144.0722 [0.0069] BKJD
Rp/R* = 0.0421 [0.0050]
a/R* = 165.81 [19.46]
b = 0.92 [0.02]
Seff = 150.07 [54.95]
Teq = 892 [82] K
Rp = 90.95 [40.04] Re
a = 1.2166 [0.3453] AU
Ag = 12.00 [22.15] [0.50σ]
Teffp = 2568 [1179] K [1.42σ]

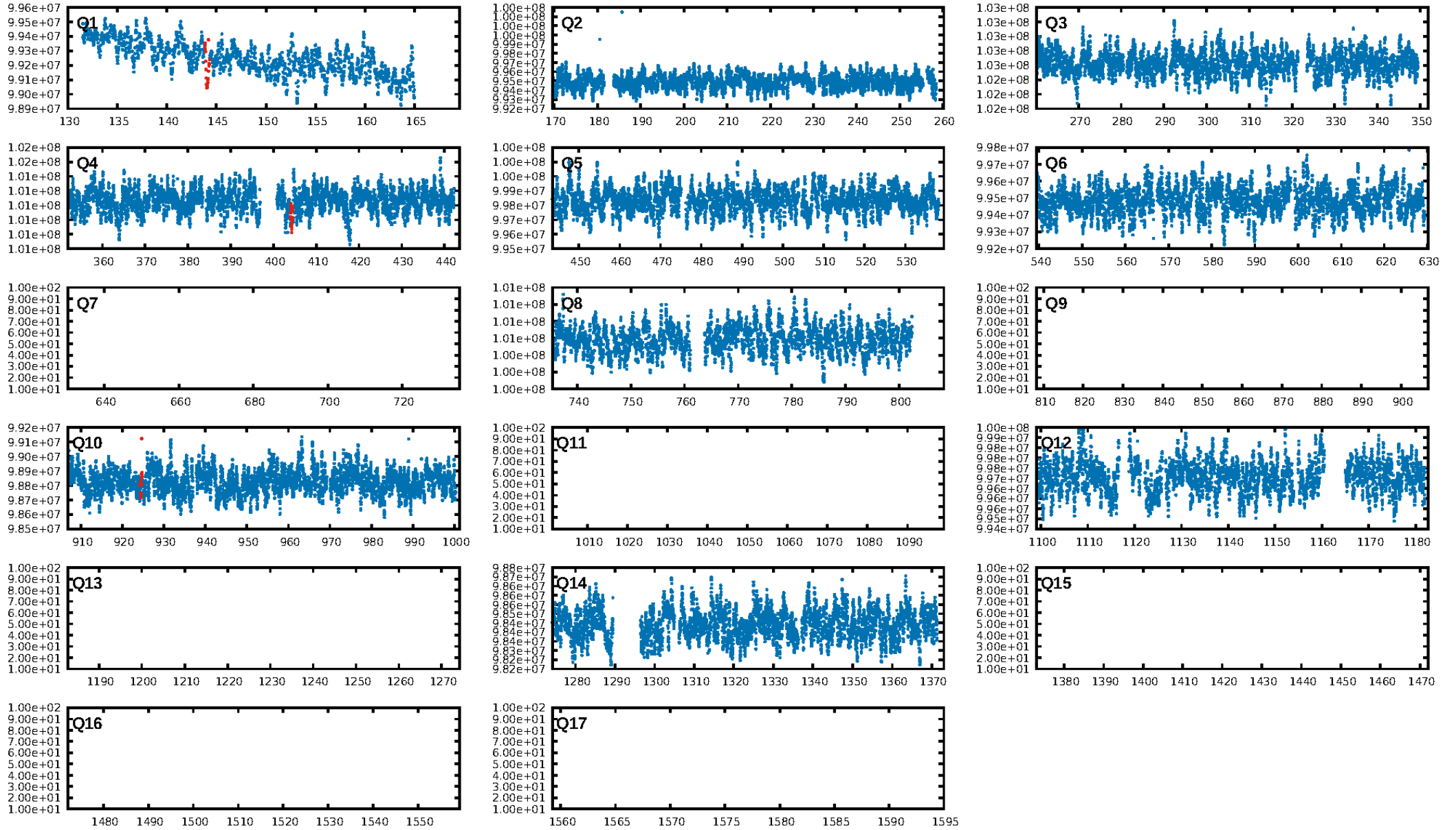
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 56.2%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 3.56e-24
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 0.915
Centroid-sig: 38.2%
Centroid-so: 0.213 arcsec [0.59σ]
OotOffset-rm: 0.018 arcsec [0.10σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.110 arcsec [0.46σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

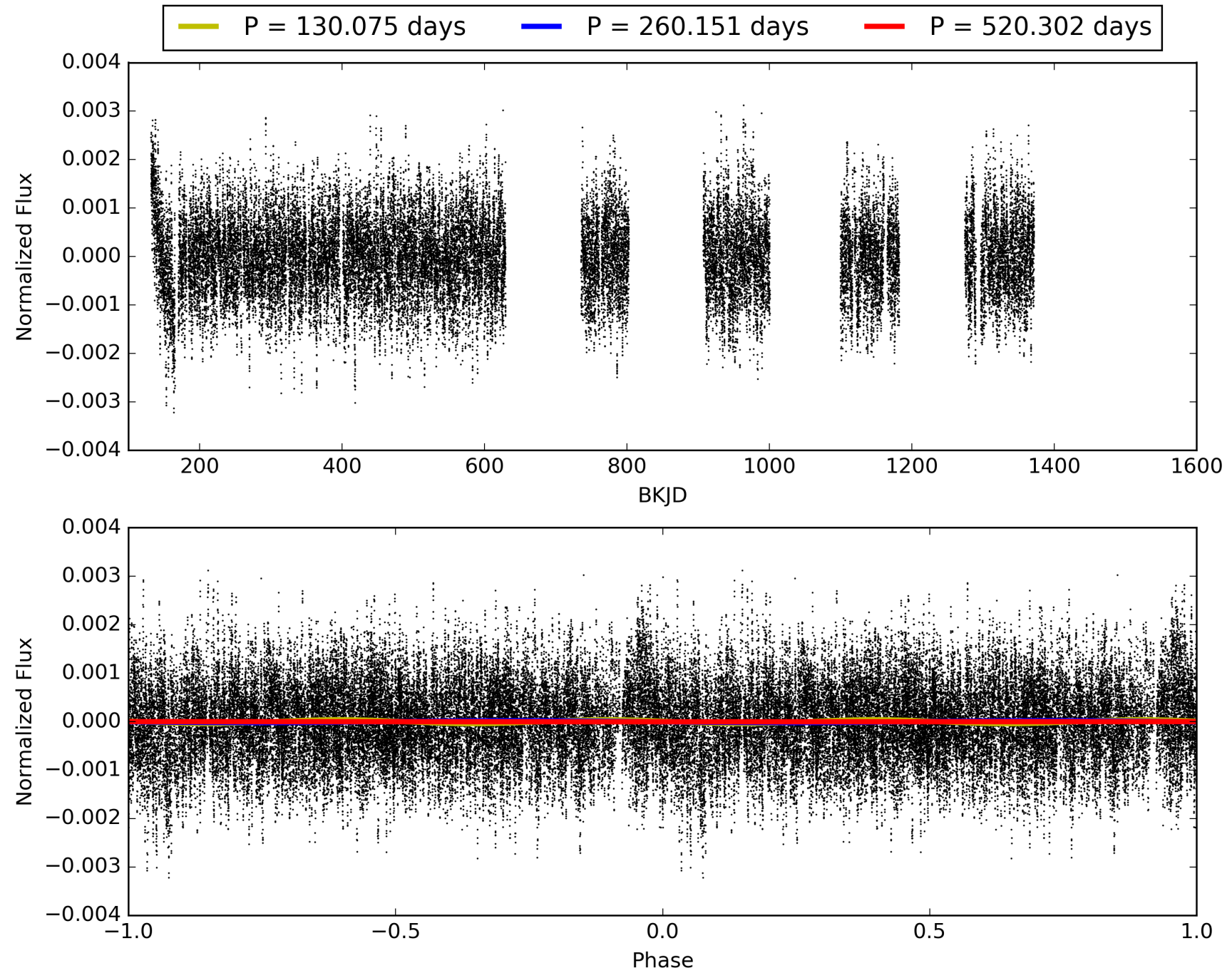
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:33:52 Z

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

TCE 010290256-01, PDC Light Curves

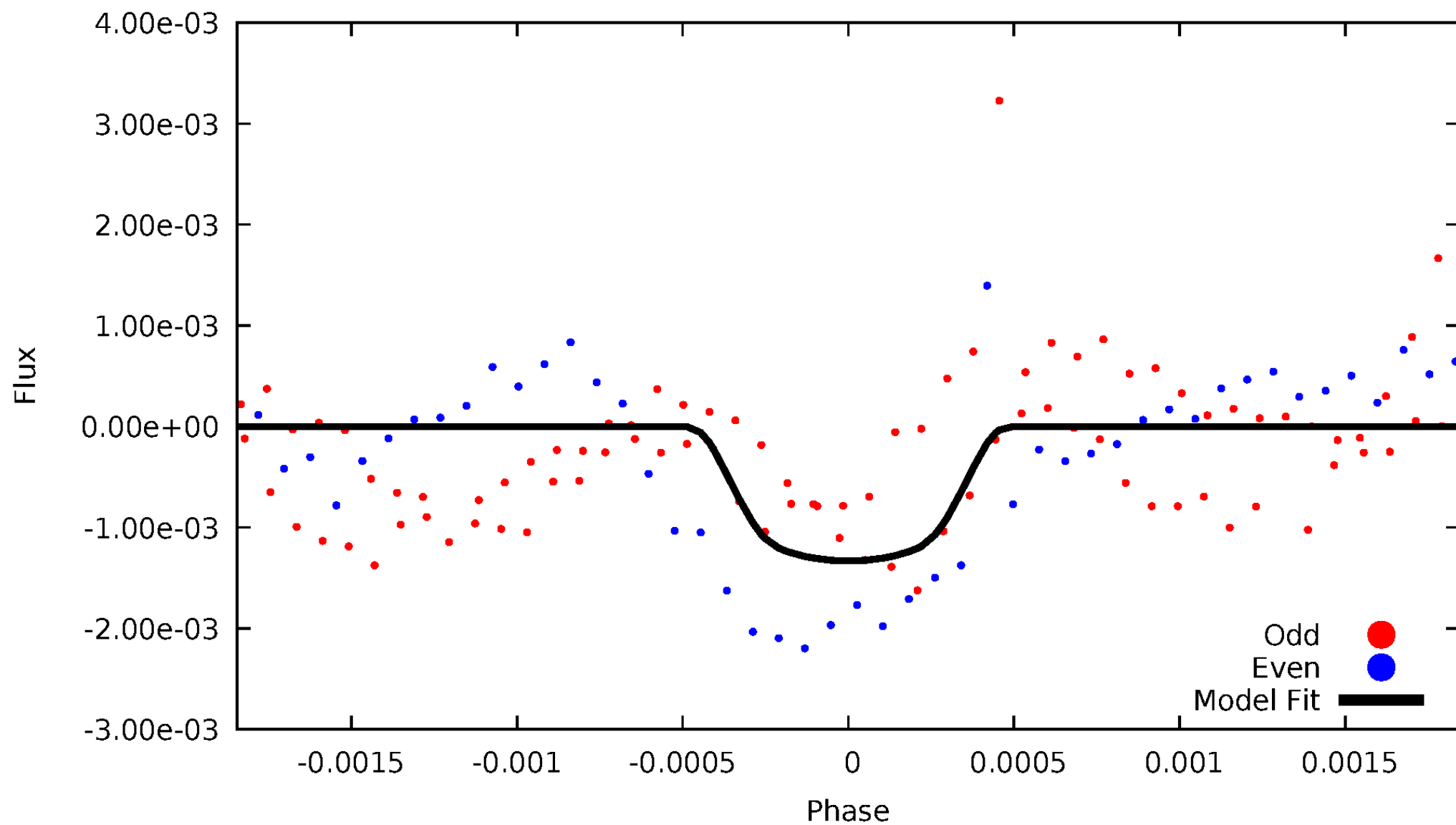


TCE 010290256-01



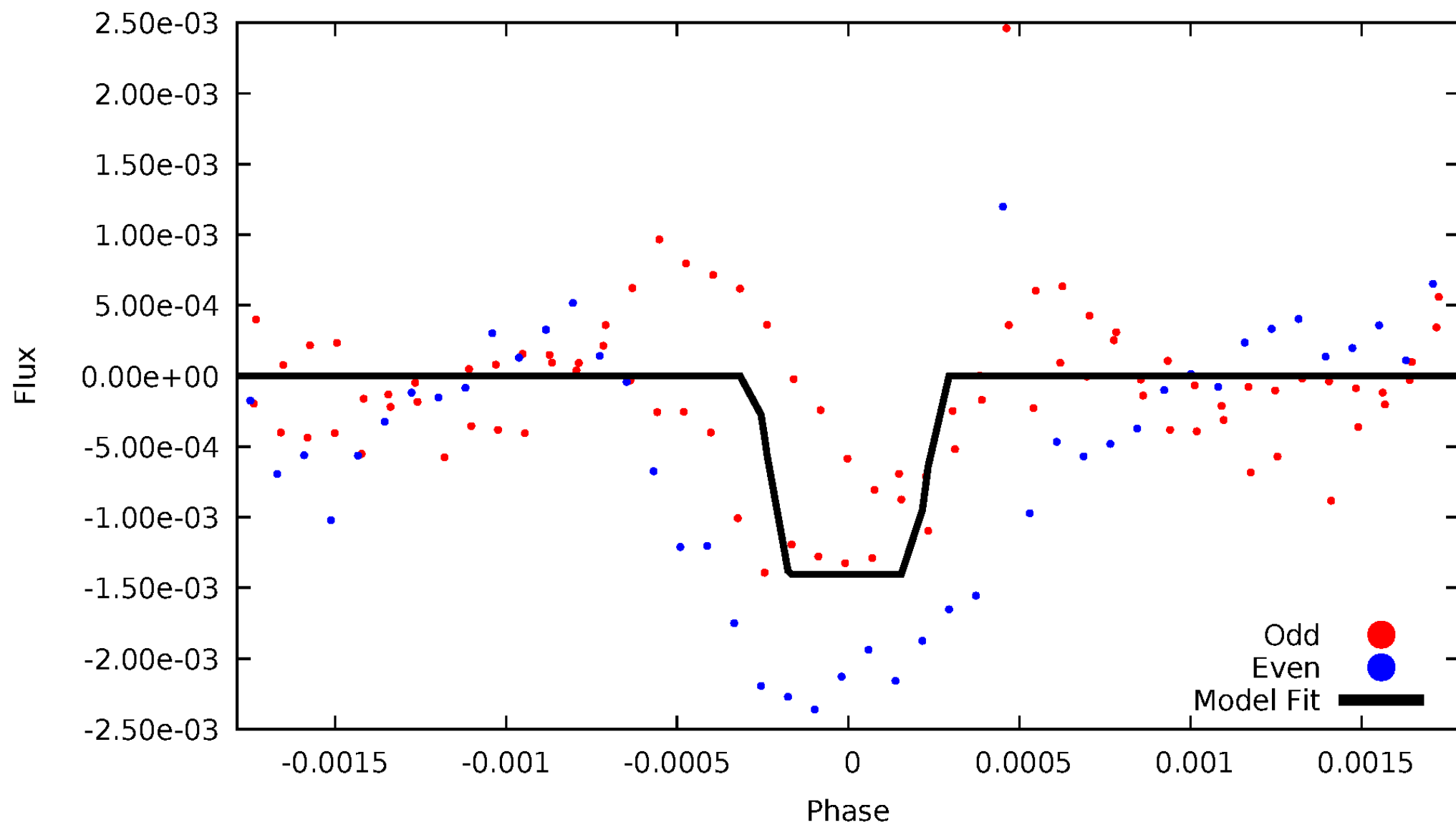
DV Odd/Even

TCE 010290256-01



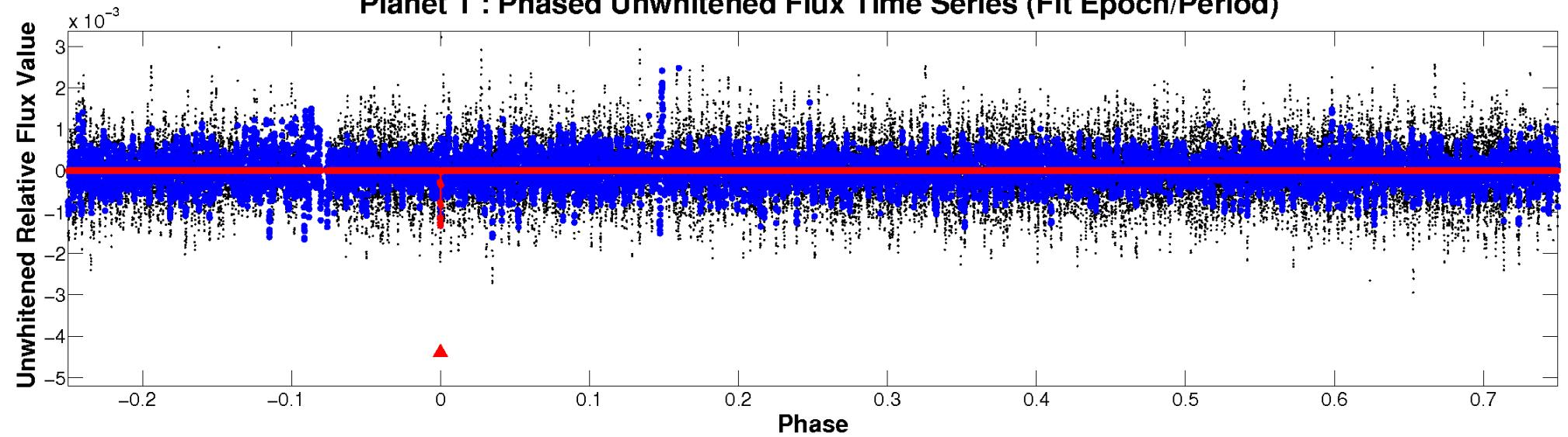
ALT Odd/Even

TCE 010290256-01

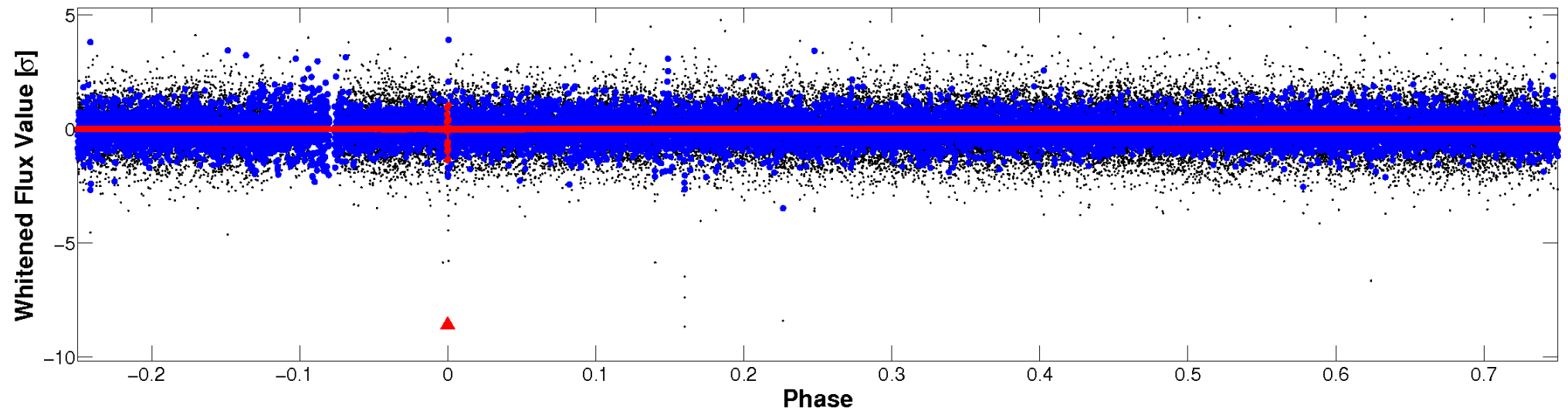


Non-Whitened Vs. Whitened Light Curve

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

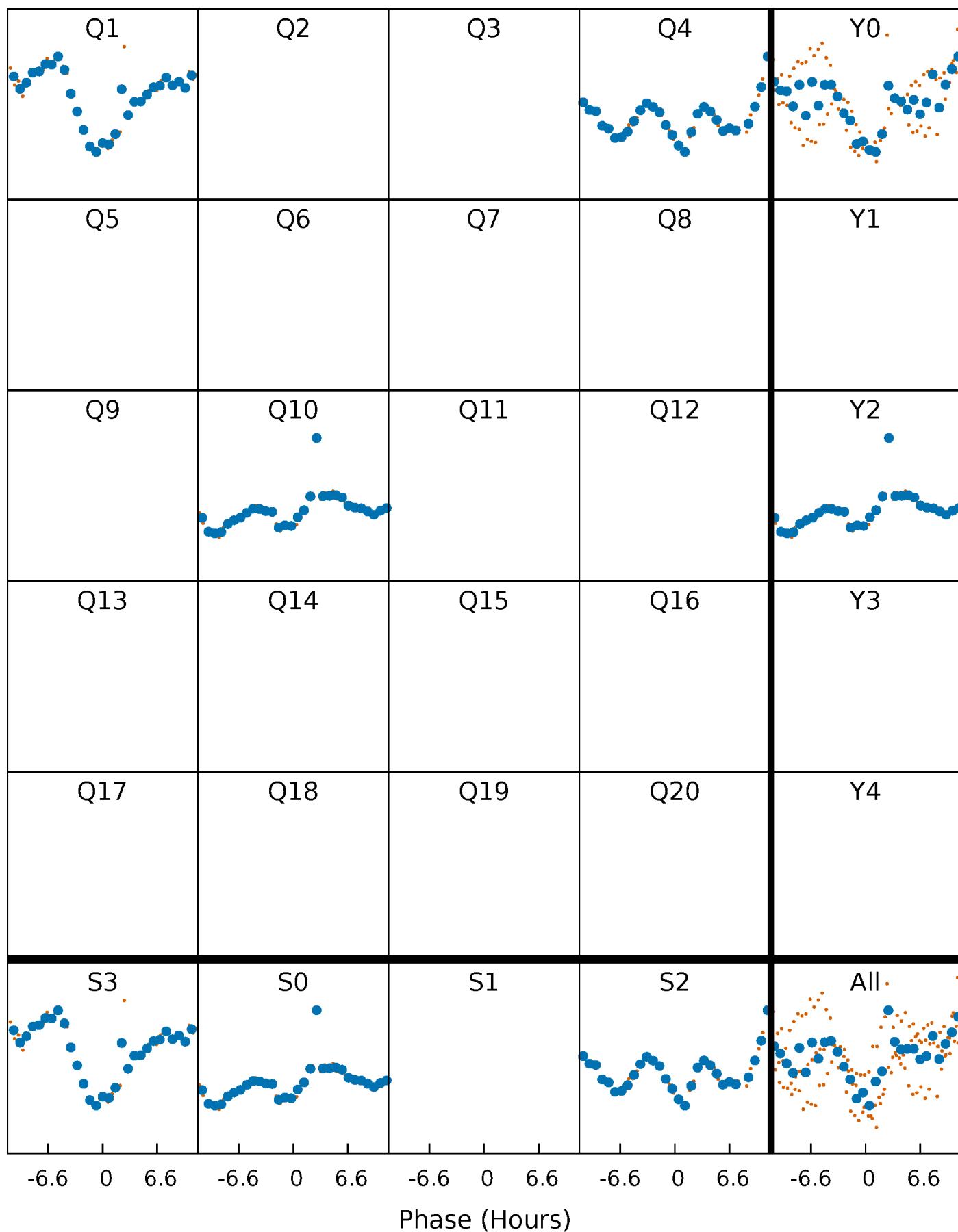


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



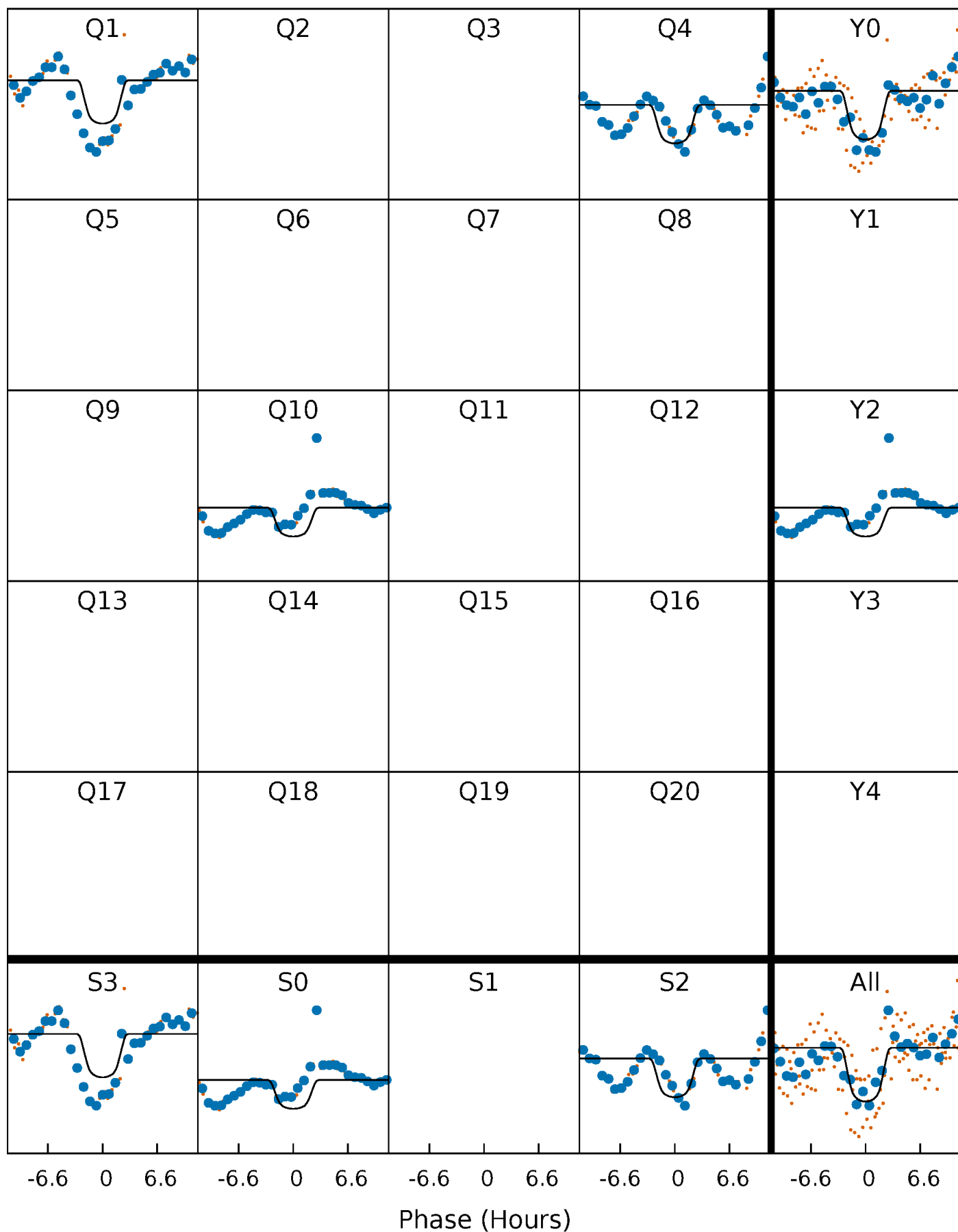
PDC Quarter-Phased Transit Curves

TCE 010290256-01 P=260.150955 Days $T_0=144.072218$ (BKJD)



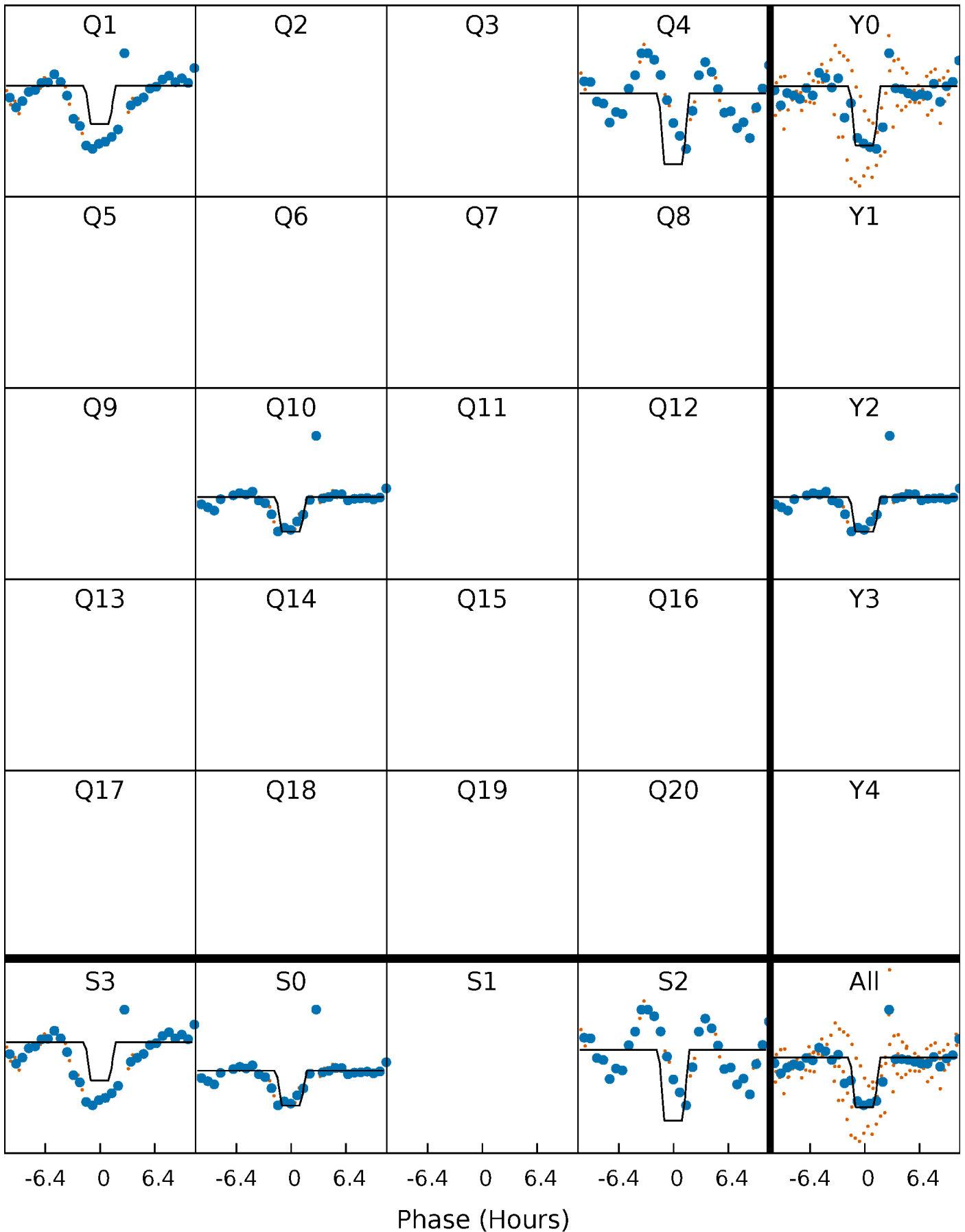
DV Quarter-Phased Transit Curves

TCE 010290256-01 P=260.150955 Days $T_0=144.072218$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

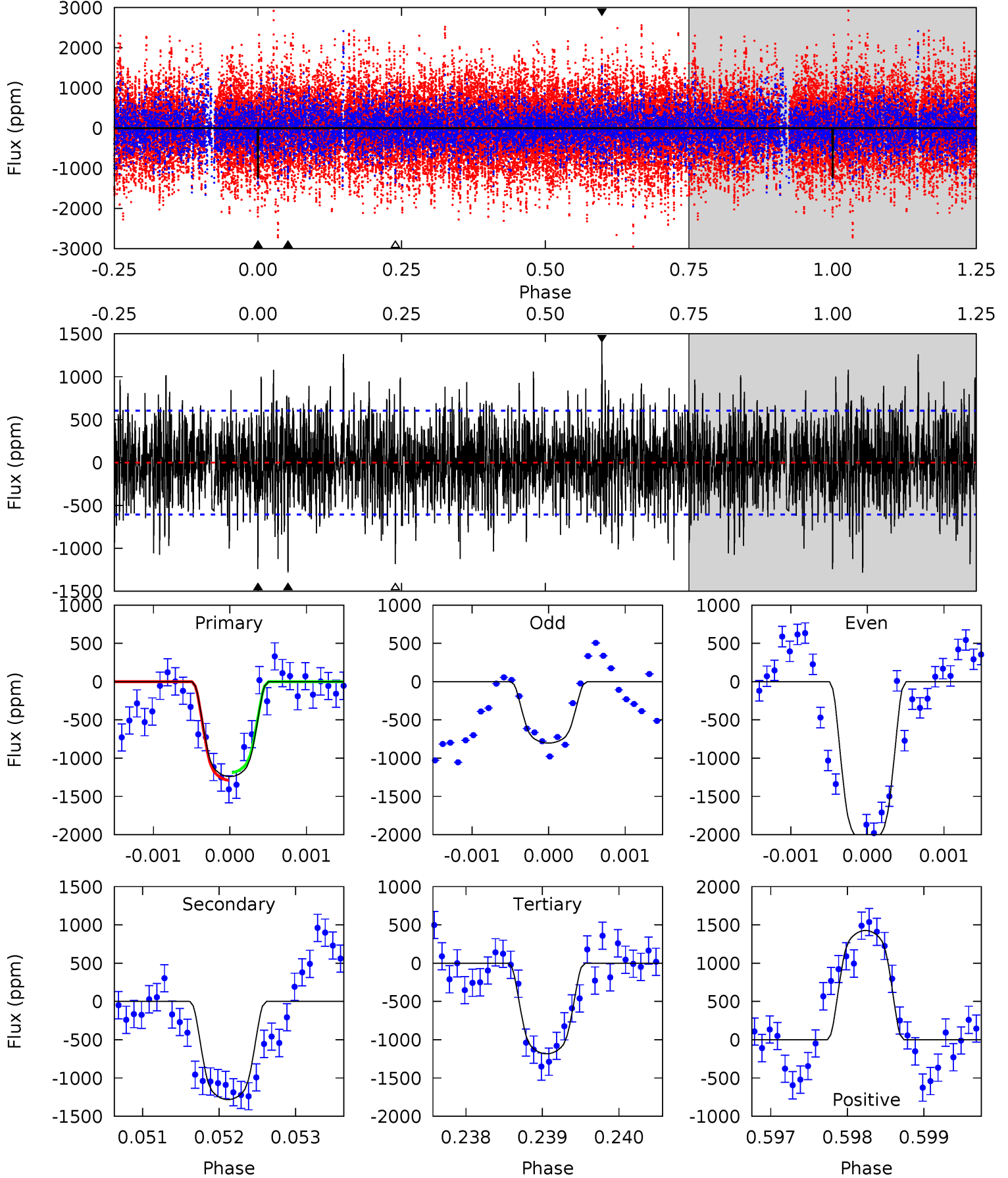
TCE 010290256-01 P=260.153275 Days $T_0=144.063578$ (BKJD)



DV Model-Shift Uniqueness Test

010290256-01, P = 260.150955 Days, E = 144.072218 Days

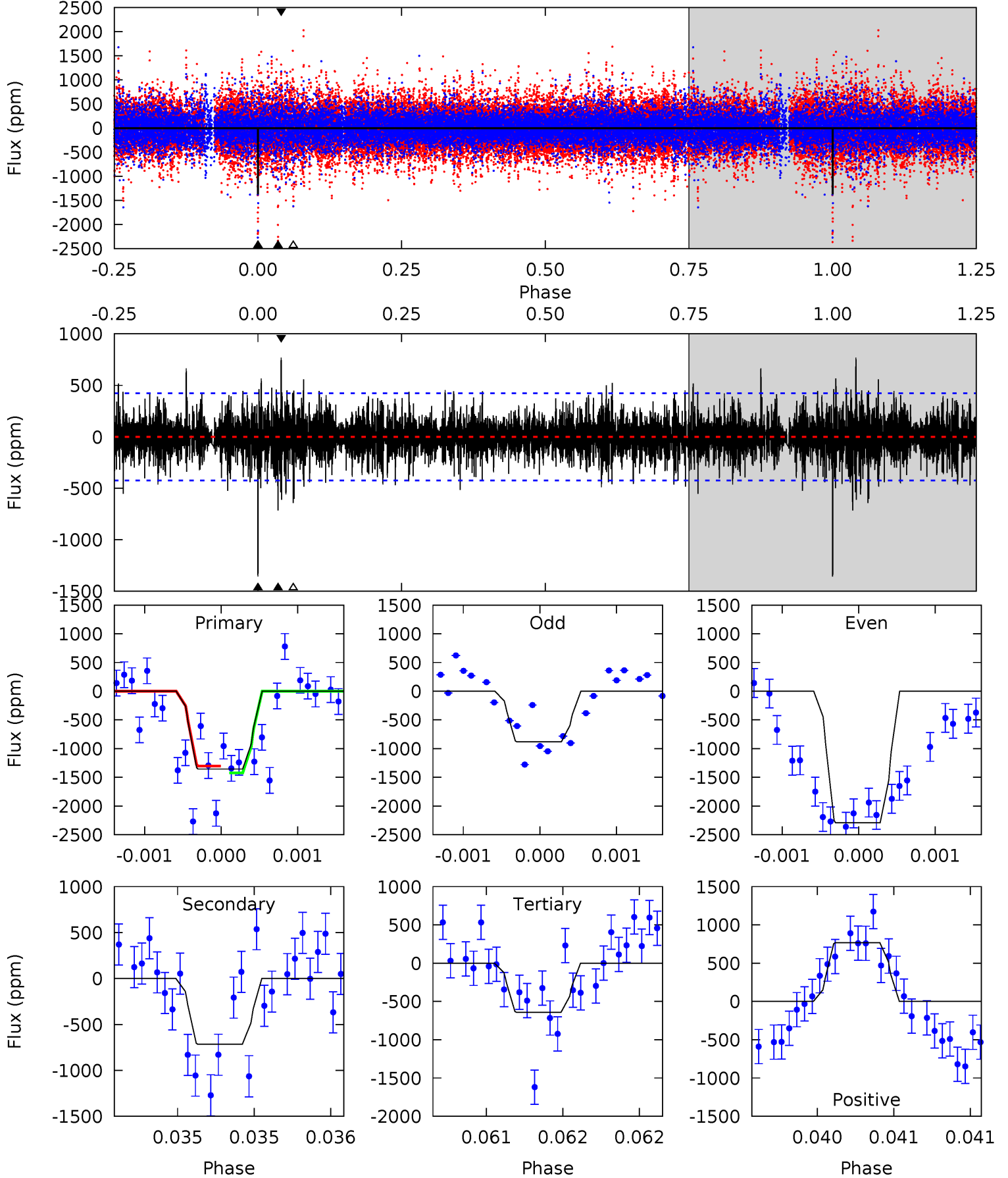
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.2	11.5	10.7	12.8	5.45	3.30	3.06	0.52	-1.67	0.89	-1.31	5.62	1.16	0.53	0.45



Alt Model-Shift Uniqueness Test

010290256-01, P = 260.153275 Days, E = 144.063578 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.8	9.40	8.42	10.1	5.56	3.46	1.94	9.38	7.73	0.97	-0.68	8.20	1.10	0.36	0.77



Stellar Parameters For KIC 010290256

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5013^{+101}_{-284}	$2.394^{+0.035}_{-0.025}$	$0.070^{+0.150}_{-0.600}$	$19.813^{+0.442}_{-8.397}$	$3.549^{+0.071}_{-2.357}$	$0.001^{+0.001}_{-0.000}$
	+2%/-6%	+1%/-1%	+214%/-857%	+2%/-42%	+2%/-66%	+78%/-6%
Source	PHO1	AST9	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 010290256-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1281±111	$91.40^{+10.79}_{-11.86}$	1246^{+31}_{-67}	4646^{+309}_{-281}	127^{+37}_{-27}
Alt.	-716±76	$81.70^{+11.09}_{-12.06}$	1243^{+34}_{-72}	4322^{+303}_{-269}	89^{+34}_{-23}

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 $A_{obs} \gg 1.0$

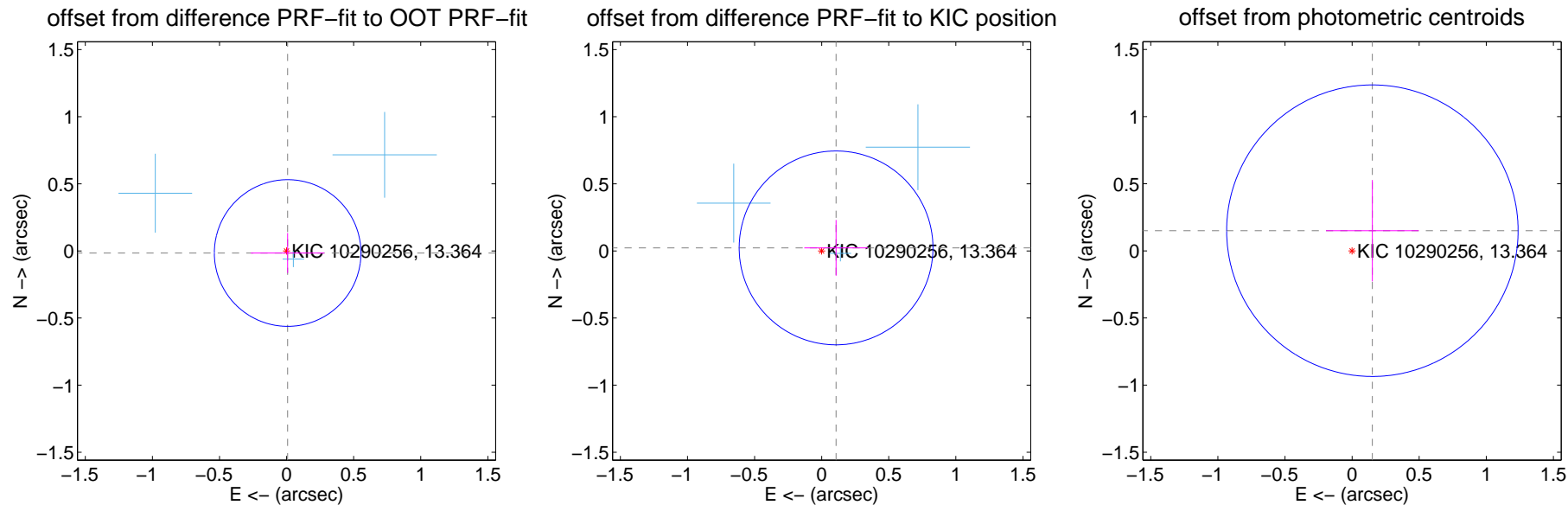
DV Centroid Data

Supplemental centroid analysis for 010290256-01. Kepler magnitude: 13.36. Transit SNR 5.33

There are 3 quarters with good PRF difference image offsets

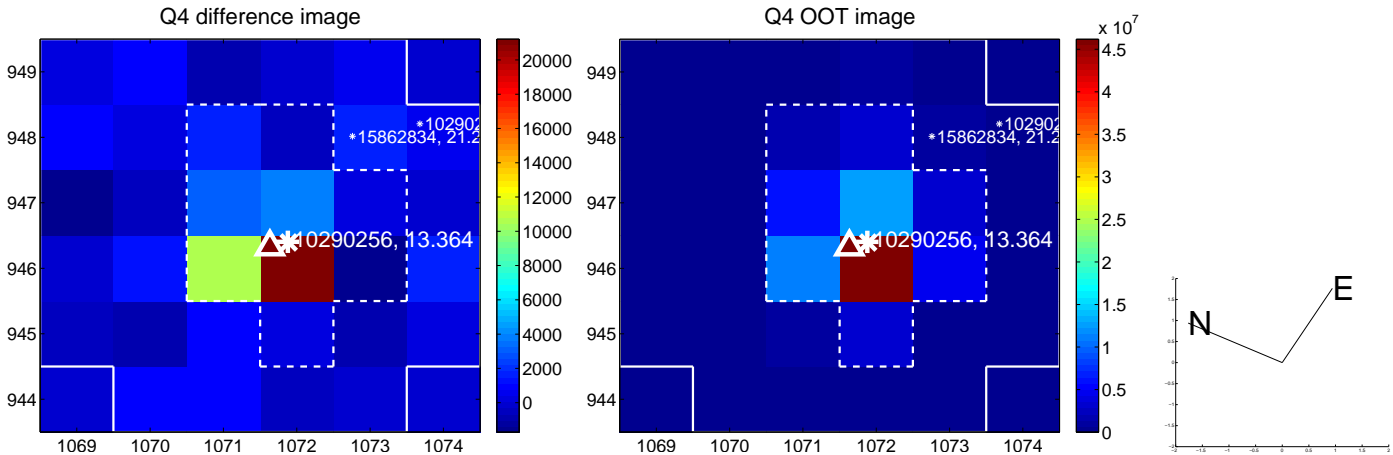
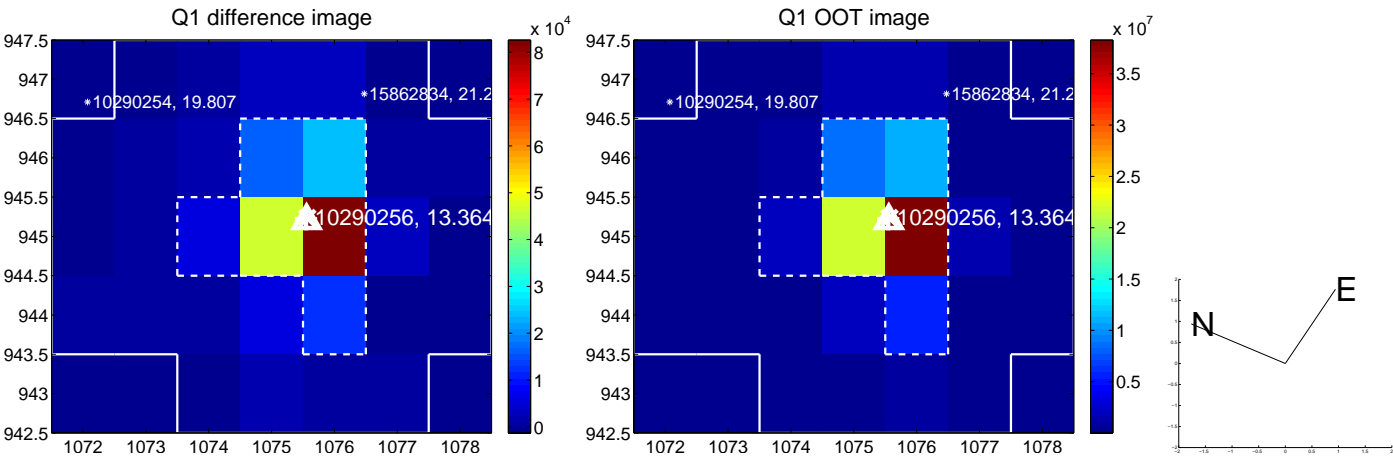
The direct PRF centroid is offset from the target star catalog position by about 0.33 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.018 ± 0.182	0.10	-0.008 ± 0.274	-0.016 ± 0.149
PRF-fit source offset from KIC position	0.110 ± 0.241	0.46	-0.107 ± 0.237	0.023 ± 0.208
photometric centroid source offset	0.21 ± 0.36	0.59	-0.15 ± 0.35	0.15 ± 0.38



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.

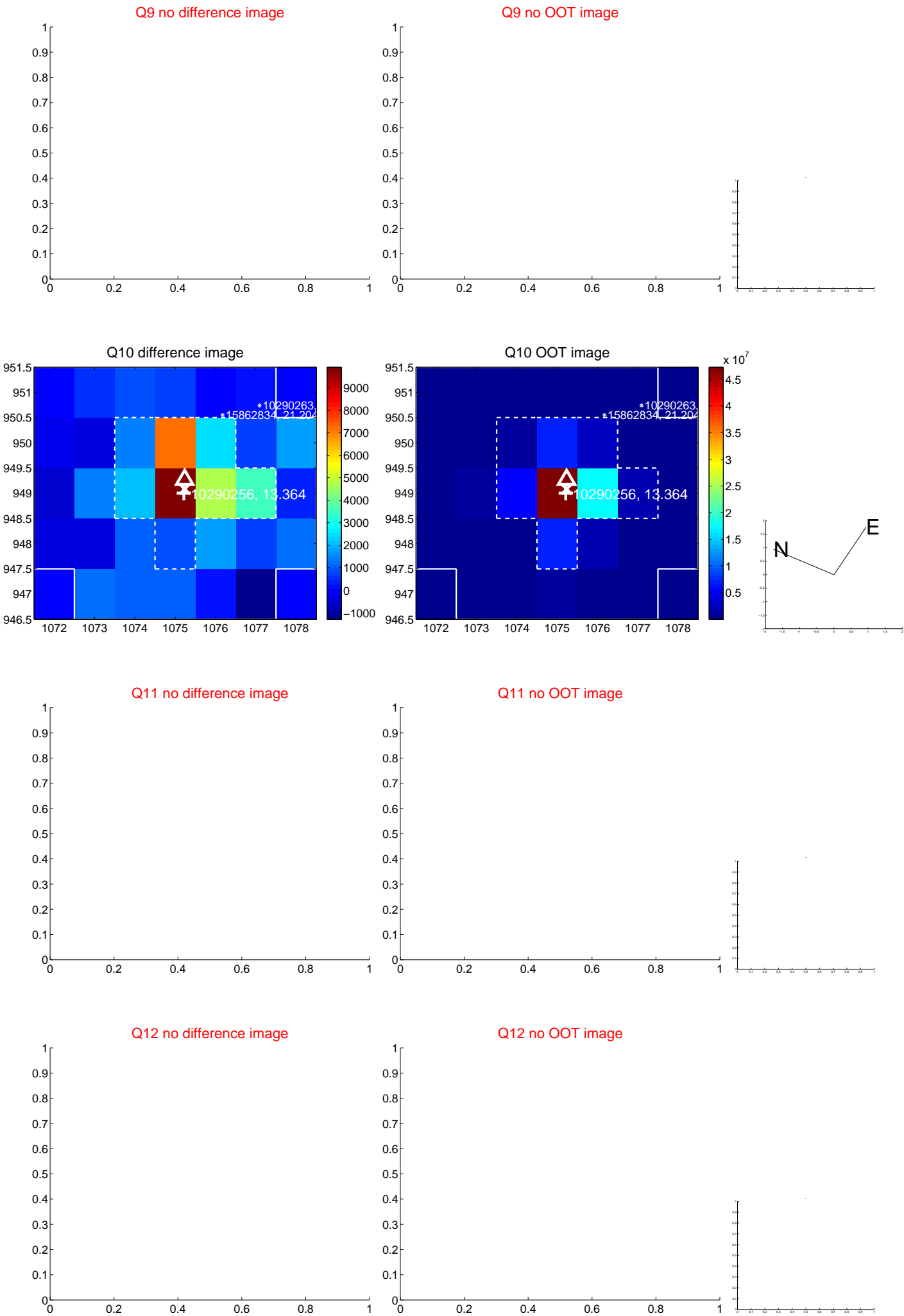
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



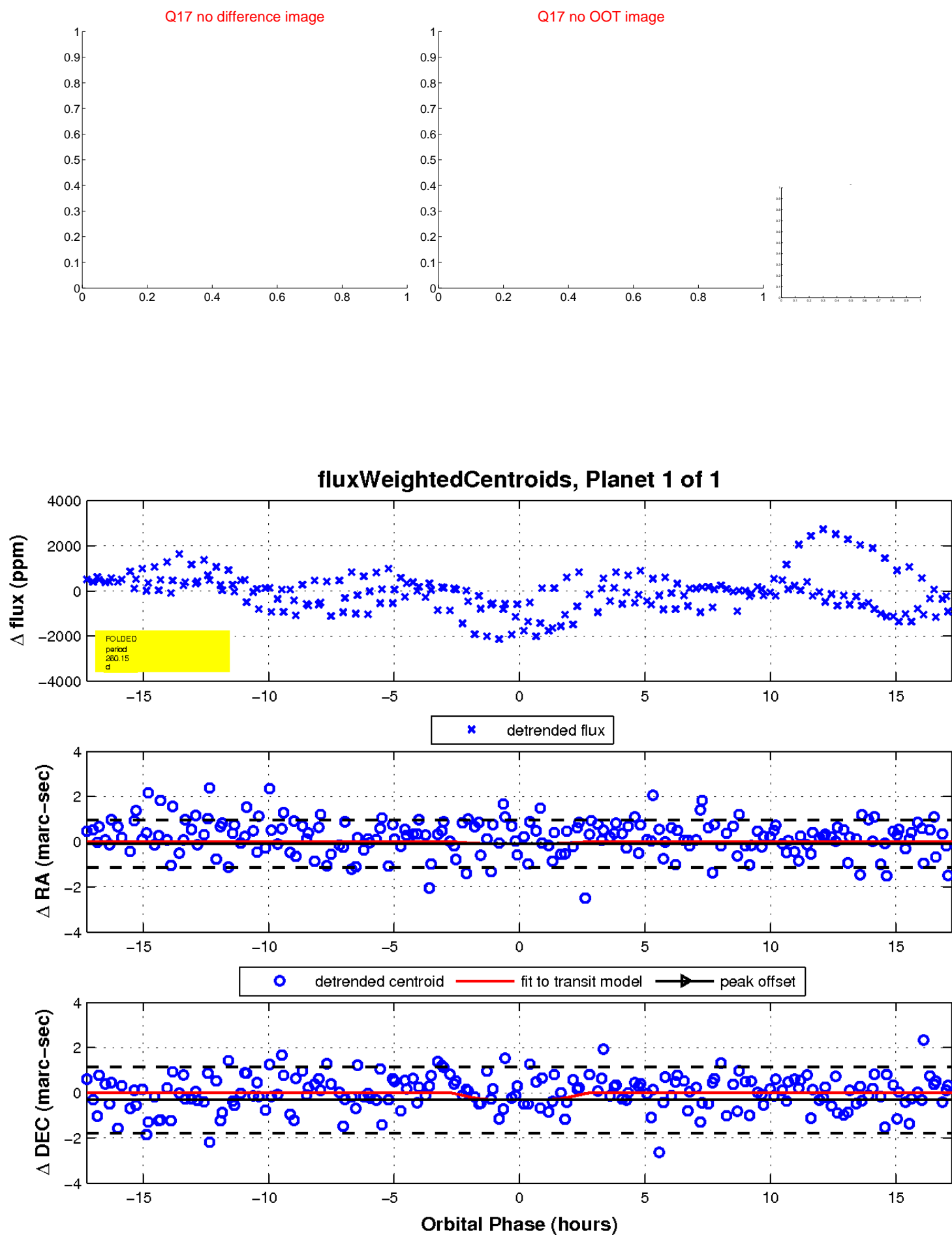
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

