

KIC 011302930

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})
011302930-01	OBS	No	505.826350	247.459779	522.5	13.736	7.5	7.7	29.05	5149	69.38	157.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011302930-01	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

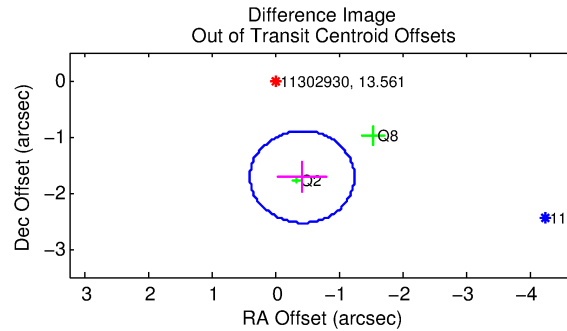
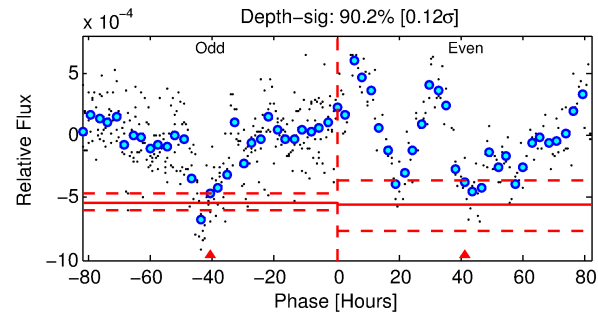
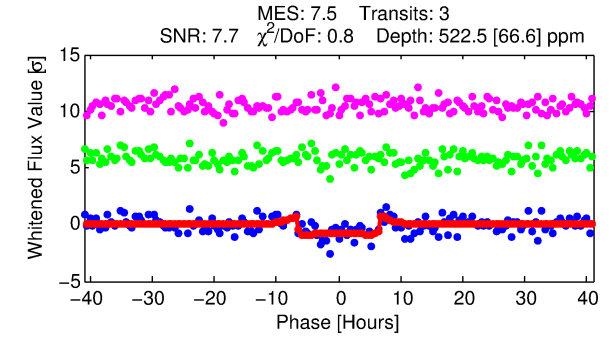
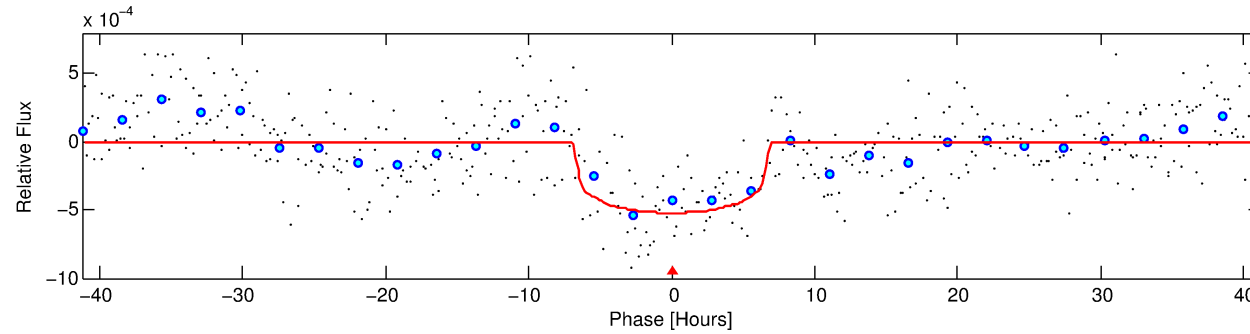
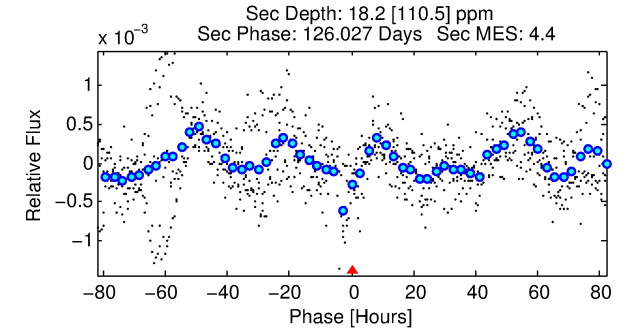
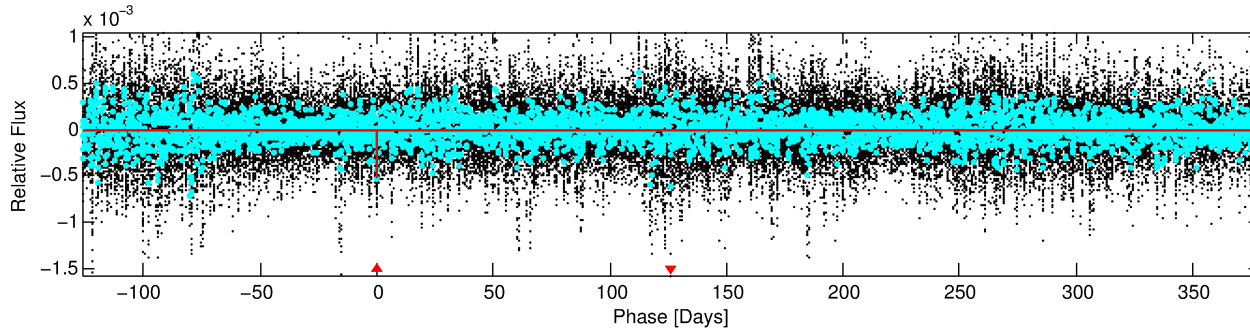
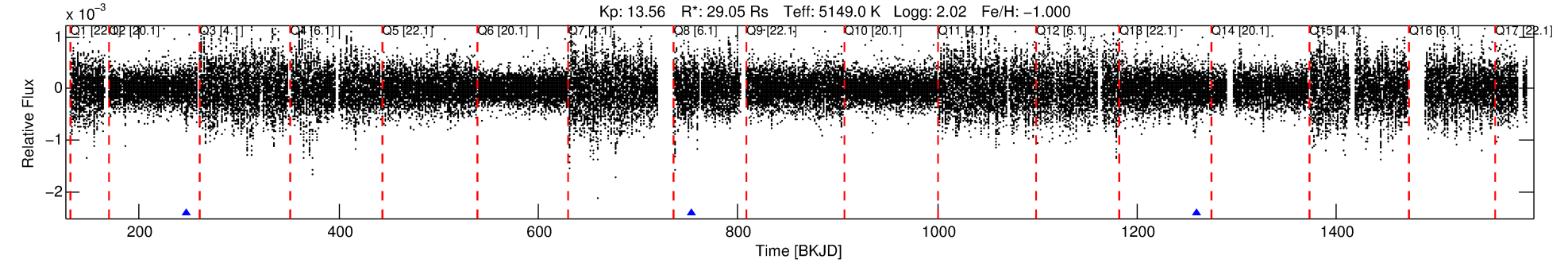
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011302930-01

No Significant Match Found

DV One-Page Summary

KIC: 11302930 Candidate: 1 of 1 Period: 505.826 d



DV Fit Results:

Period = 505.82635 [0.00715] d
Epoch = 247.4598 [0.0098] BKJD
Rp/R* = 0.0219 [0.0064]
a/R* = 229.41 [280.50]
b = 0.62 [1.24]
Seff = 157.25 [38.83]
Teq = 903 [56] K
Rp = 69.37 [29.32] Re
a = 1.8387 [0.3774] AU
Ag = 7.05 [42.94] [0.14σ]
Teffp = 2275 [3462] K [0.40σ]

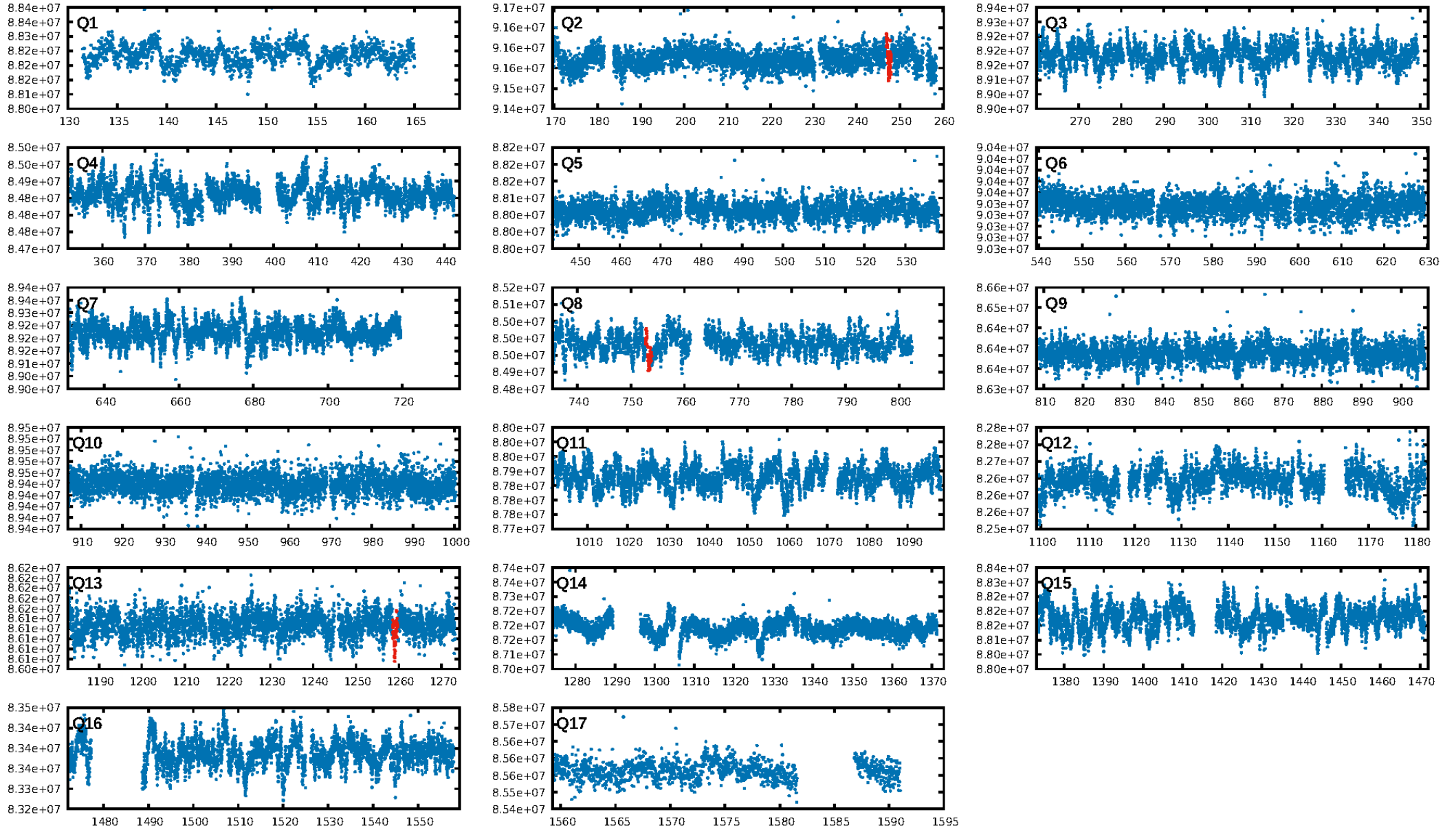
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 86.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.43e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.1577
Centroid-sig: 25.5%
Centroid-so: 3.319 arcsec [2.20σ]
OotOffset-rm: 1.767 arcsec [6.48σ]
KicOffset-rm: 3.965 arcsec [10.84σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

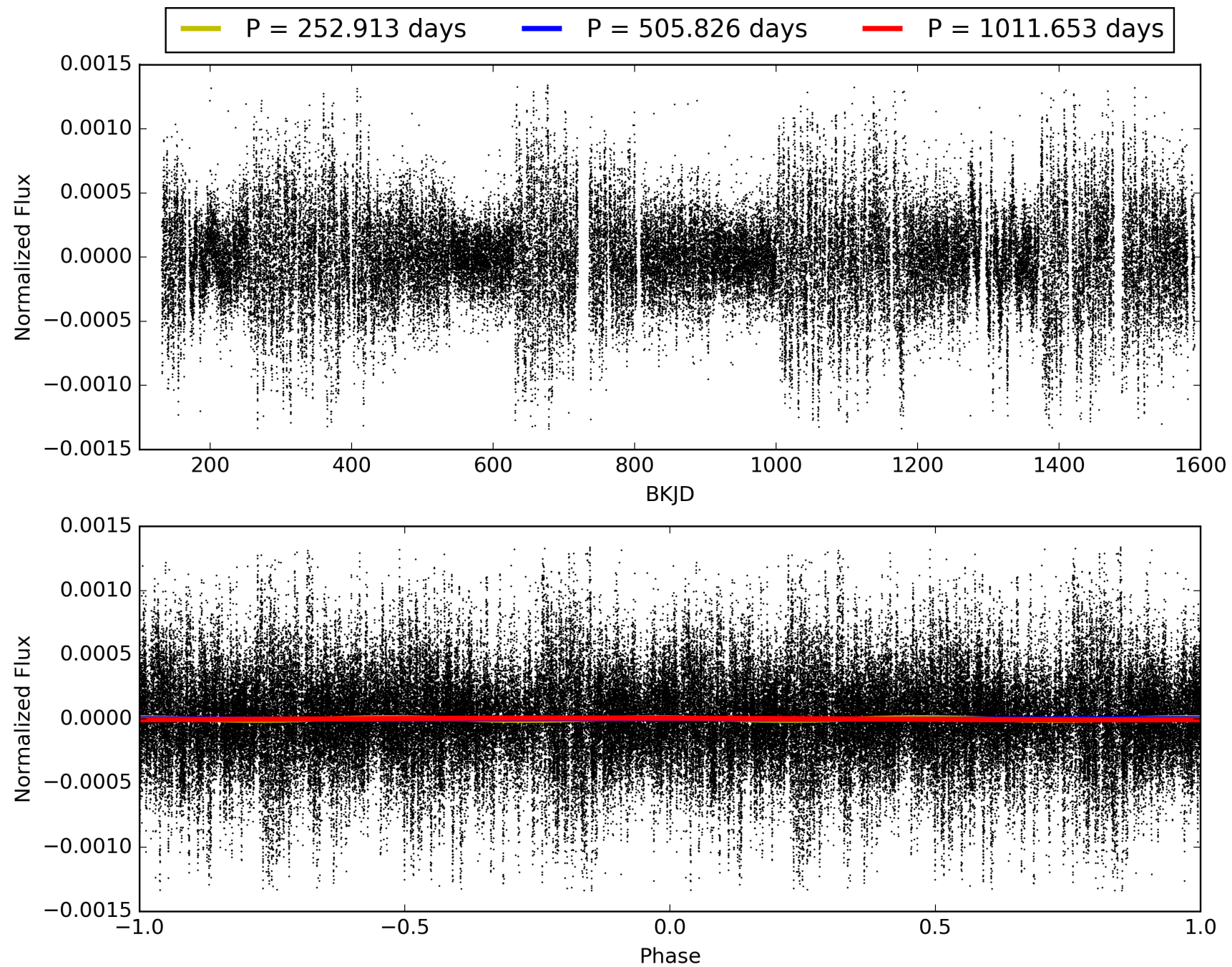
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:38:40 Z

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

TCE 011302930-01, PDC Light Curves

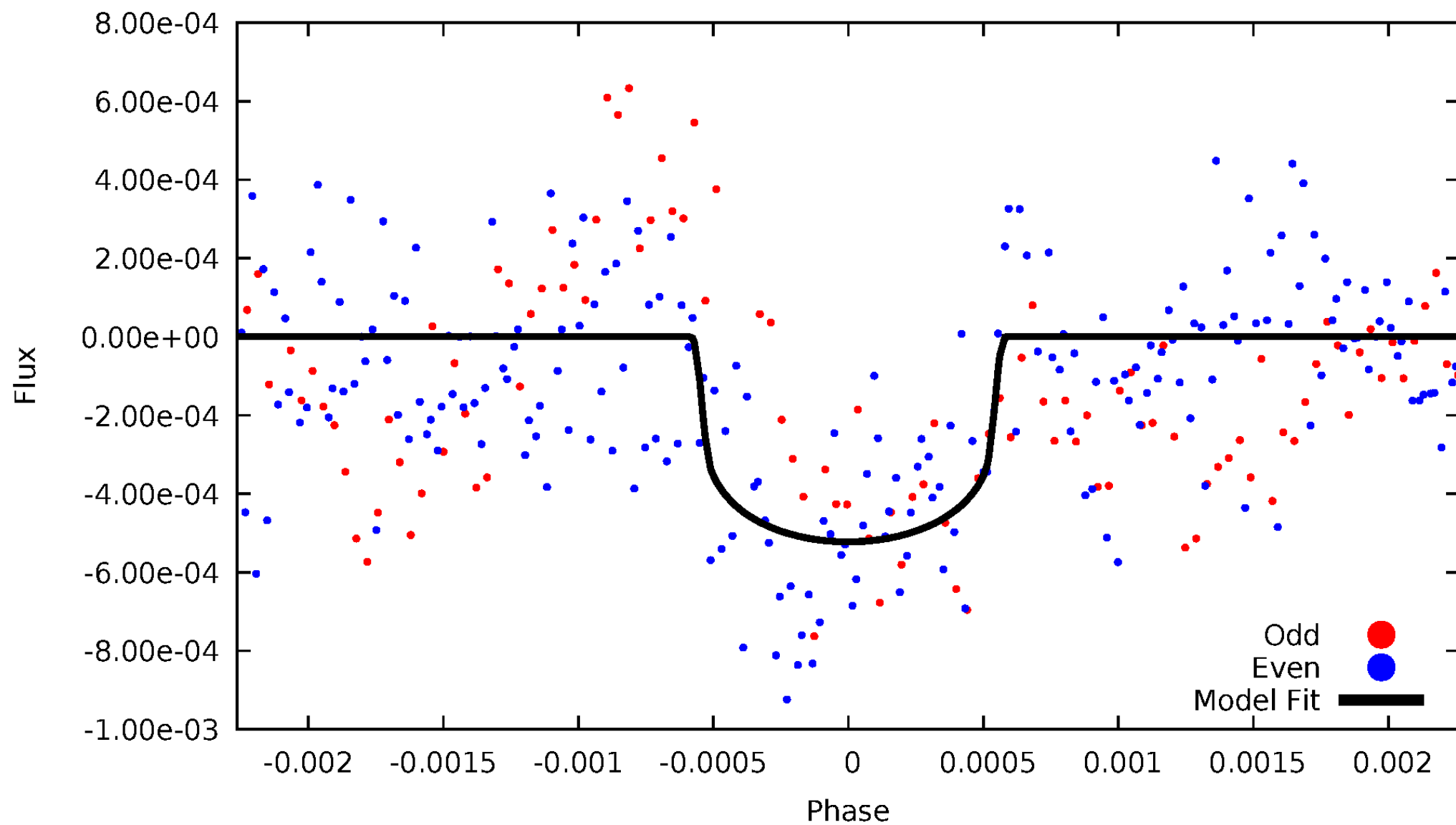


TCE 011302930-01



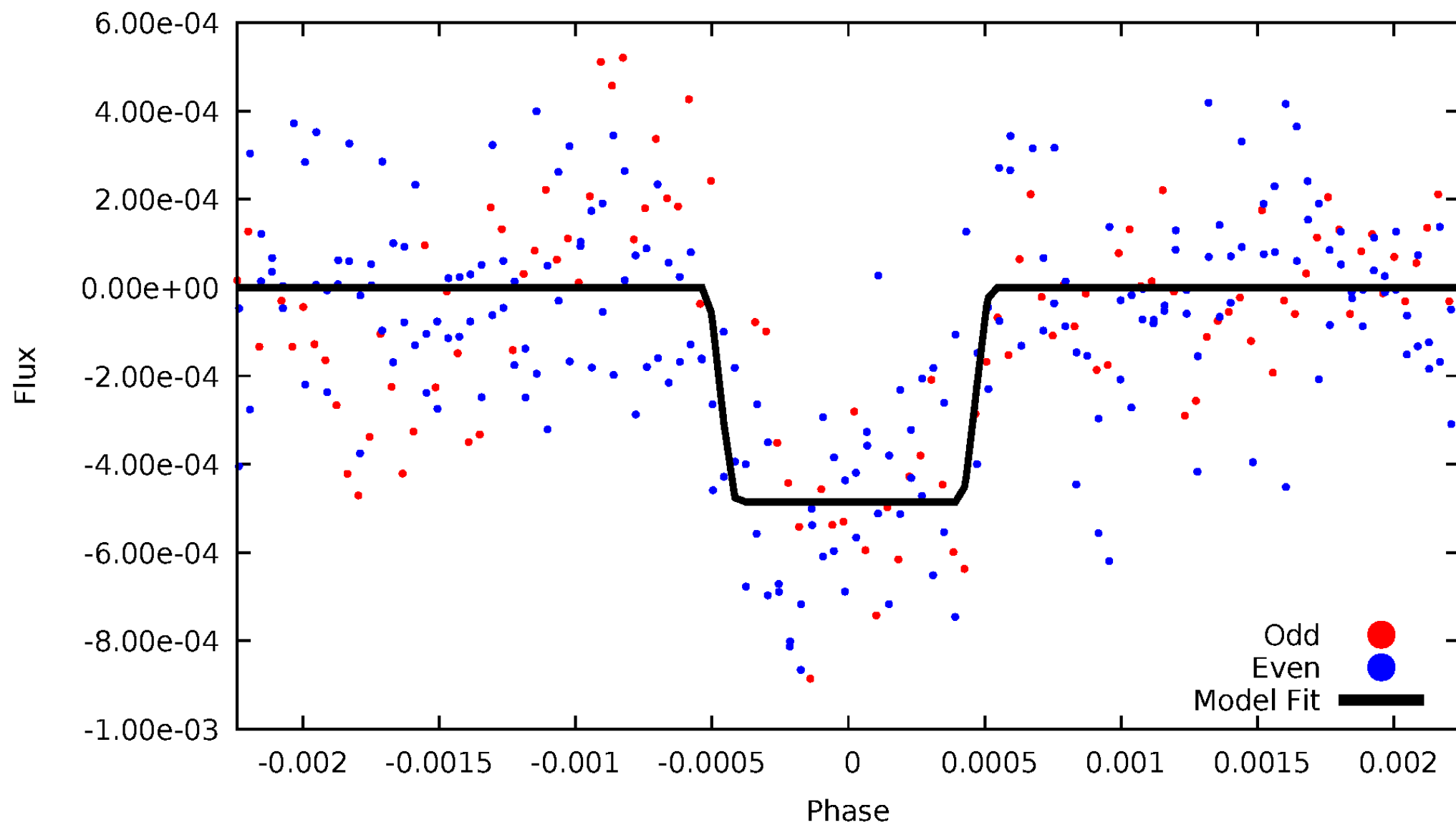
DV Odd/Even

TCE 011302930-01



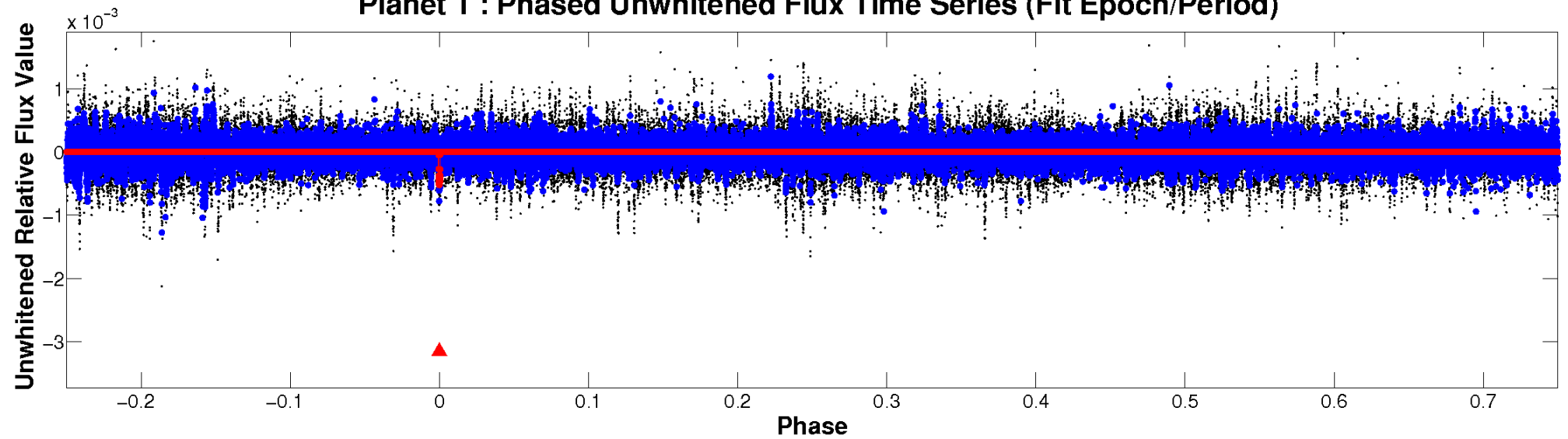
ALT Odd/Even

TCE 011302930-01

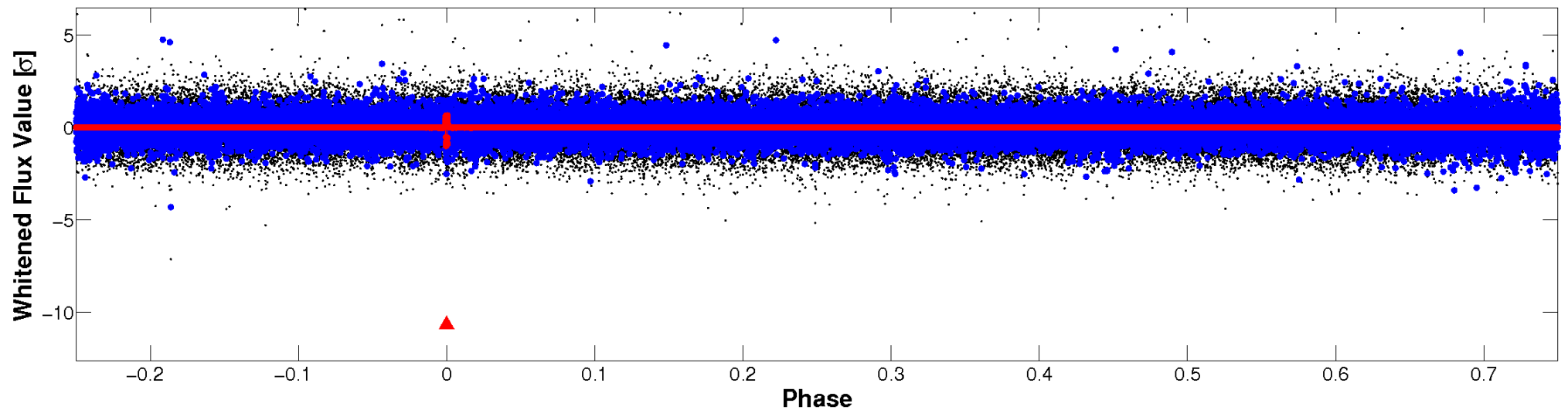


Non-Whitened Vs. Whitened Light Curve

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

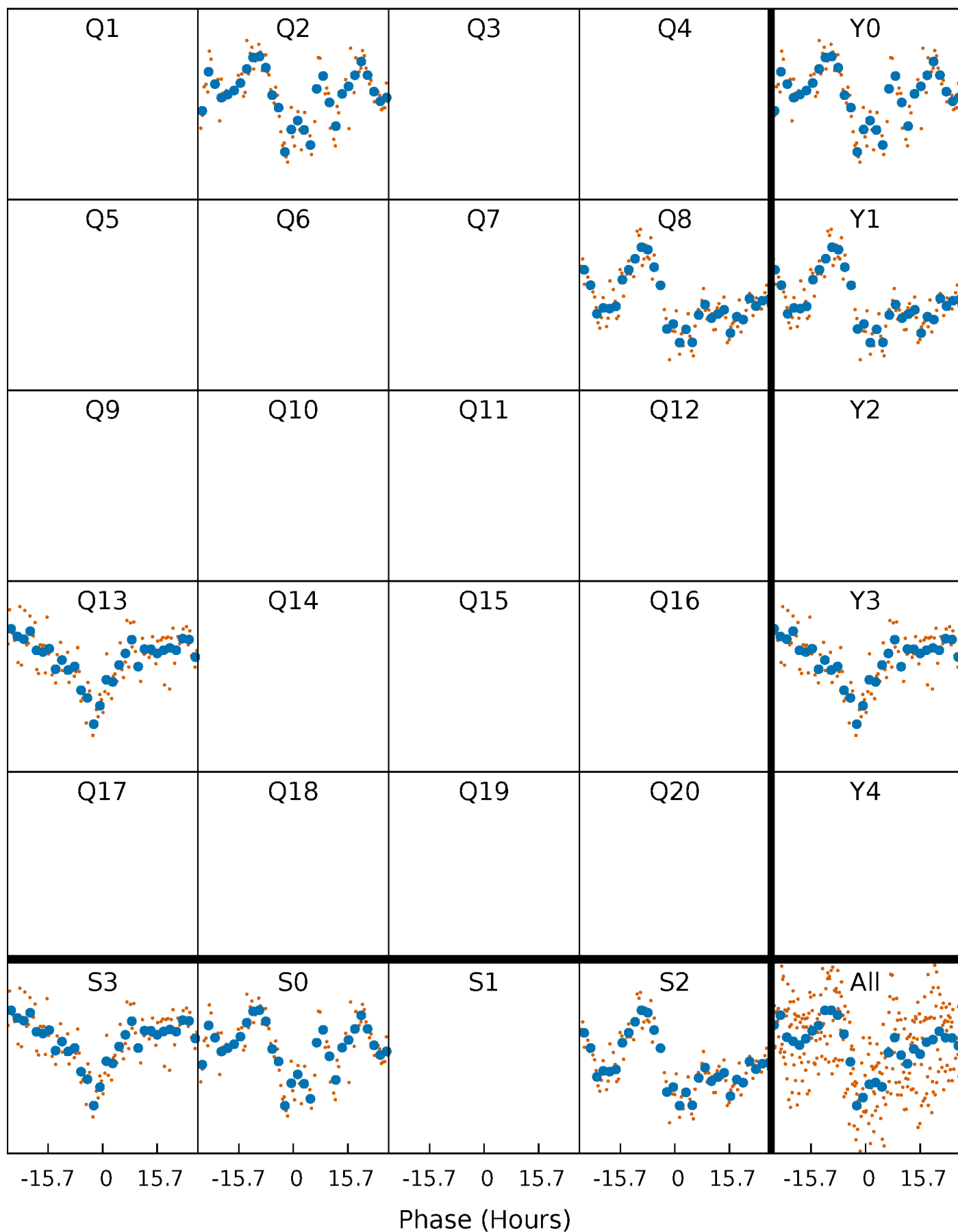


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



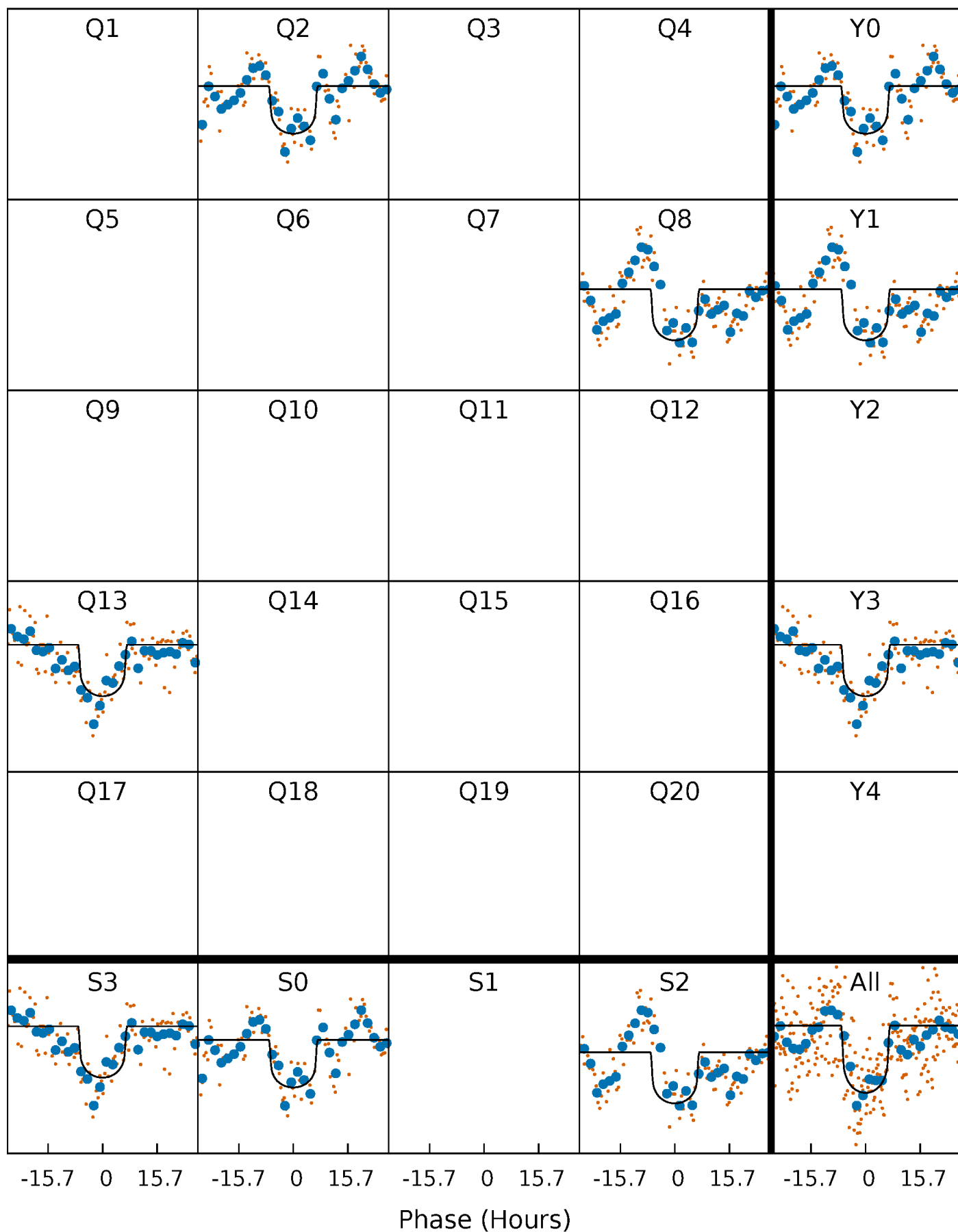
PDC Quarter-Phased Transit Curves

TCE 011302930-01 P=505.826350 Days $T_0=247.459779$ (BKJD)



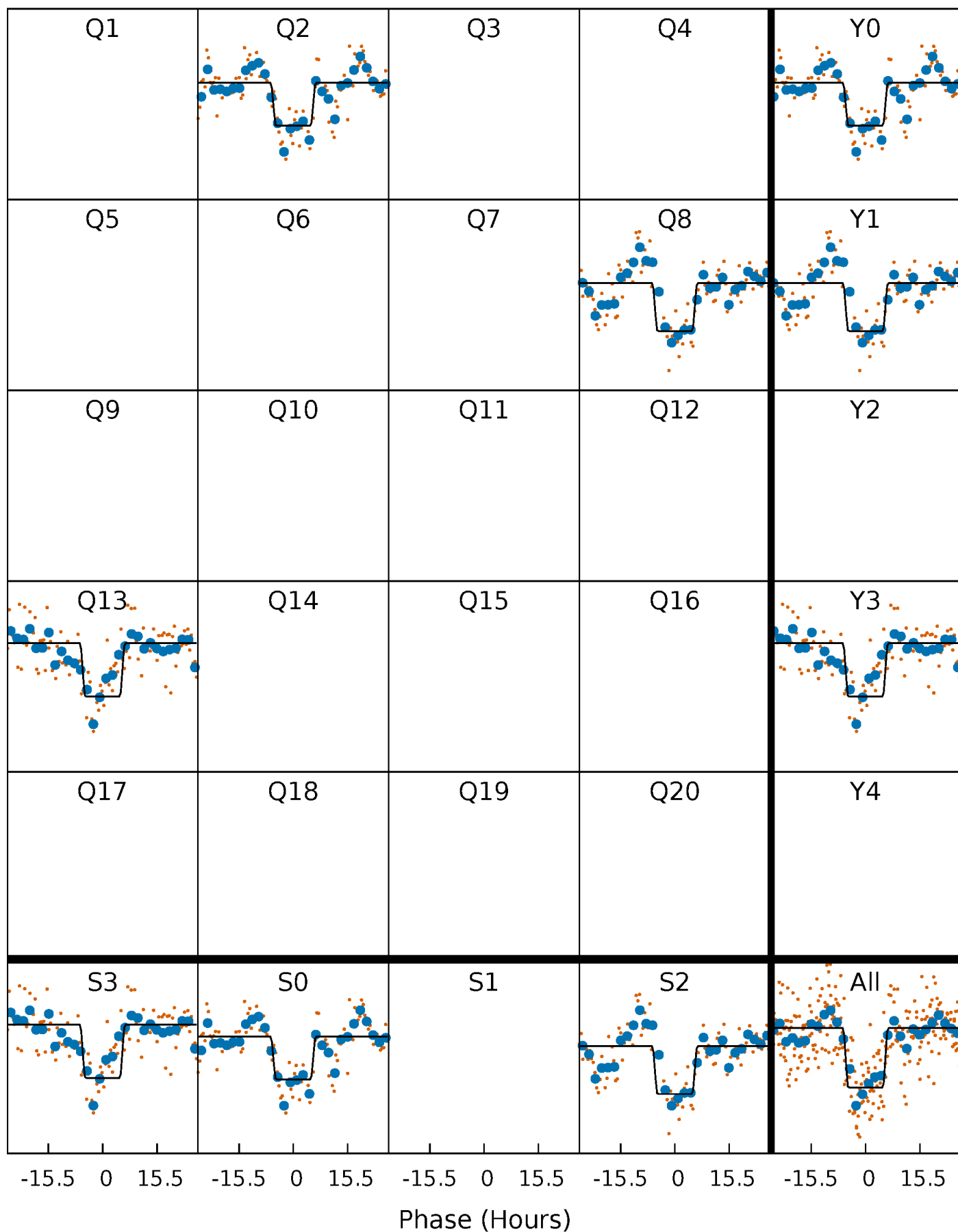
DV Quarter-Phased Transit Curves

TCE 011302930-01 P=505.826350 Days $T_0=247.459779$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

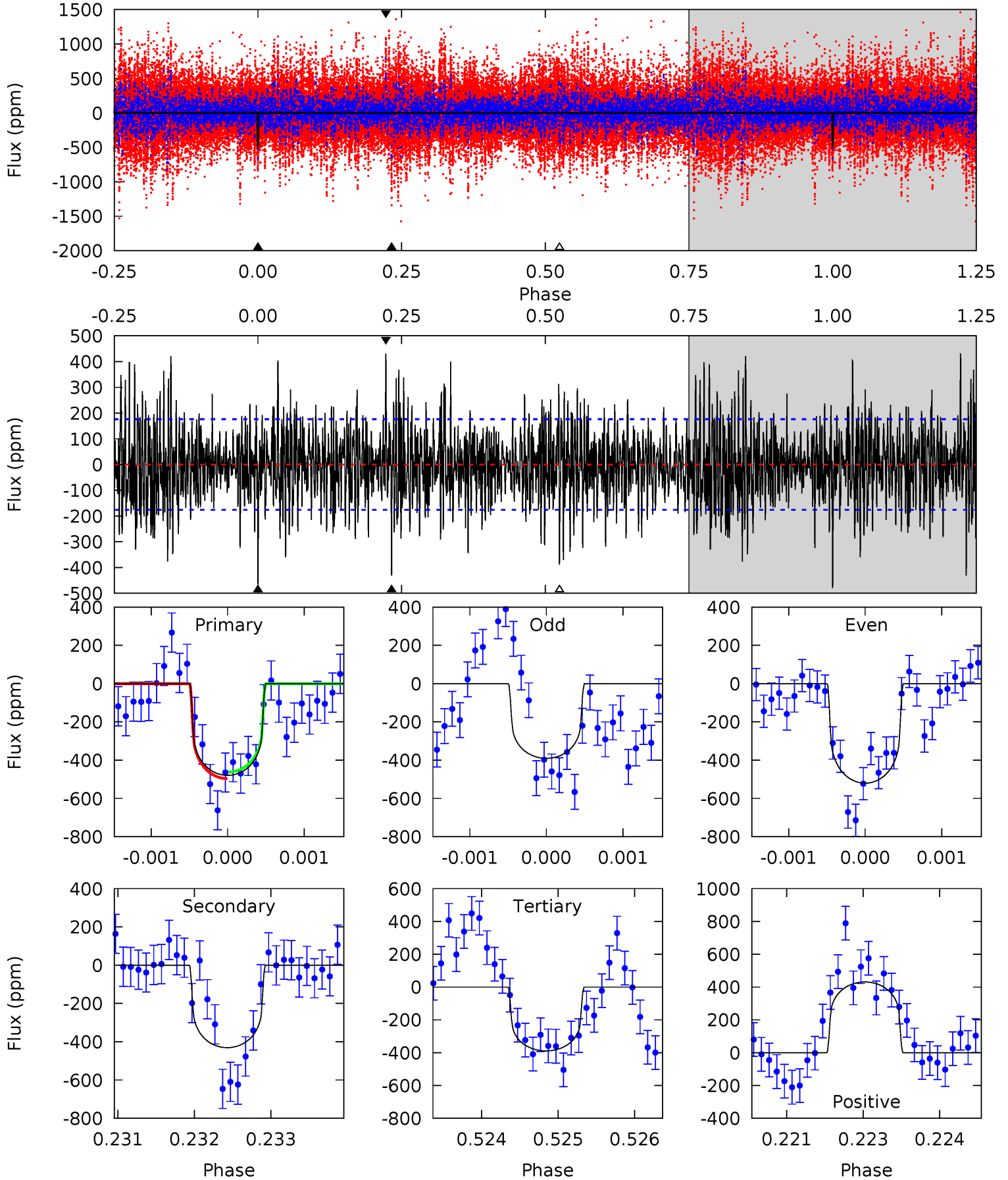
TCE 011302930-01 P=505.812344 Days $T_0=247.480813$ (BKJD)



DV Model-Shift Uniqueness Test

011302930-01, P = 505.826350 Days, E = 247.459779 Days

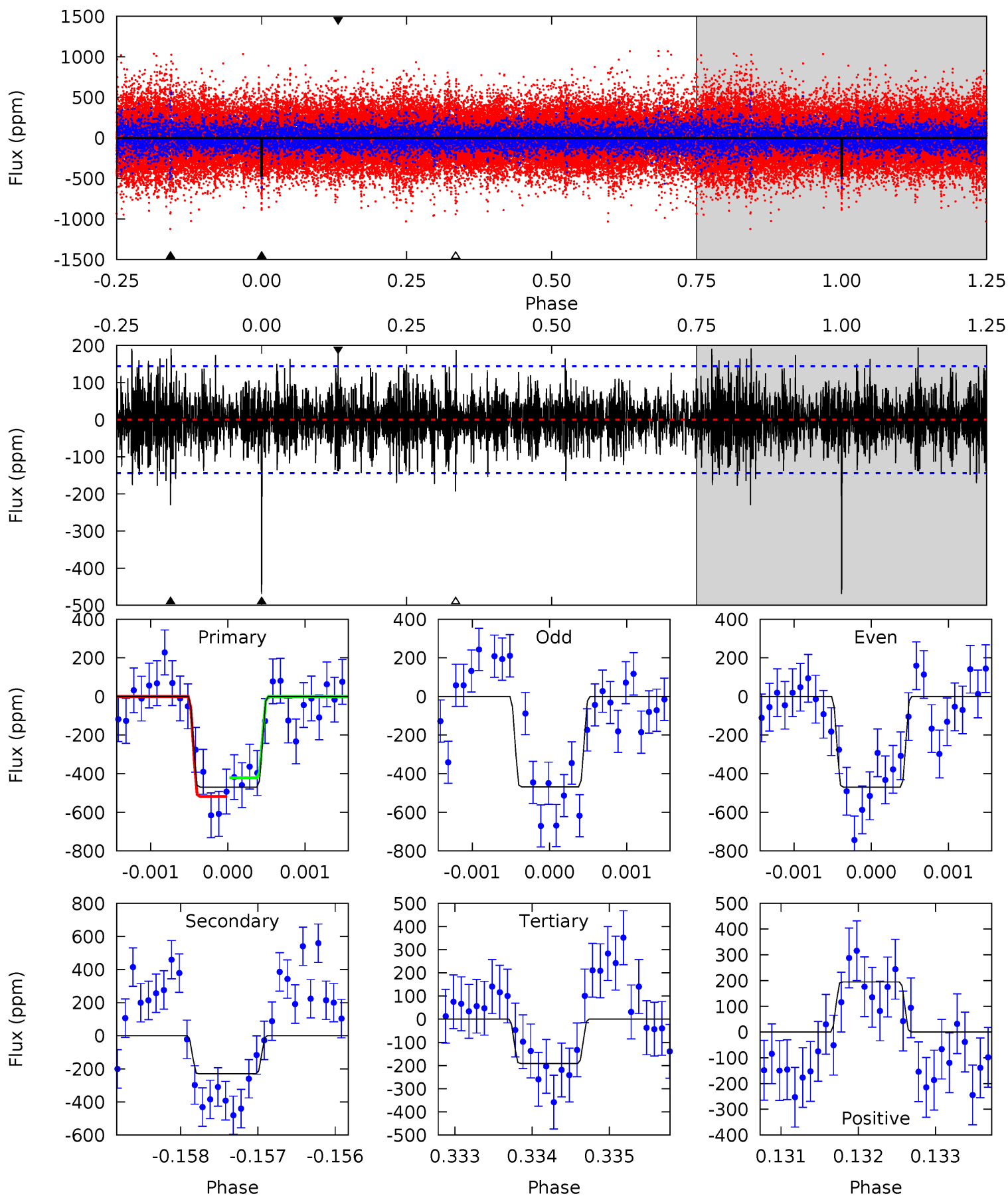
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	13.3	12.0	13.3	5.42	3.25	3.56	2.78	1.49	1.29	-0.00	1.93	0.97	0.47	0.53



Alt Model-Shift Uniqueness Test

011302930-01, P = 505.812344 Days, E = 247.480813 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.7	8.70	7.23	7.35	5.44	3.28	1.89	10.5	10.4	1.47	1.35	0.02	1.00	0.29	1.82



Stellar Parameters For KIC 011302930

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5149^{+30}_{-169}	$2.022^{+0.030}_{-0.030}$	$-1.000^{+0.050}_{-0.400}$	$29.054^{+0.988}_{-8.890}$	$3.236^{+0.087}_{-1.660}$	$0.000^{+0.000}_{-0.000}$
	+1%/-3%	+1%/-1%	+5%/-40%	+3%/-31%	+3%/-51%	+39%/-10%
Source	PHO1	AST71	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 011302930-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-431 ± 32	$69.16^{+20.94}_{-21.59}$	1261^{+17}_{-45}	4972^{+858}_{-488}	167^{+173}_{-69}
Alt.	-230 ± 26	$67.94^{+21.21}_{-19.85}$	1259^{+18}_{-43}	4427^{+631}_{-435}	92^{+83}_{-39}

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

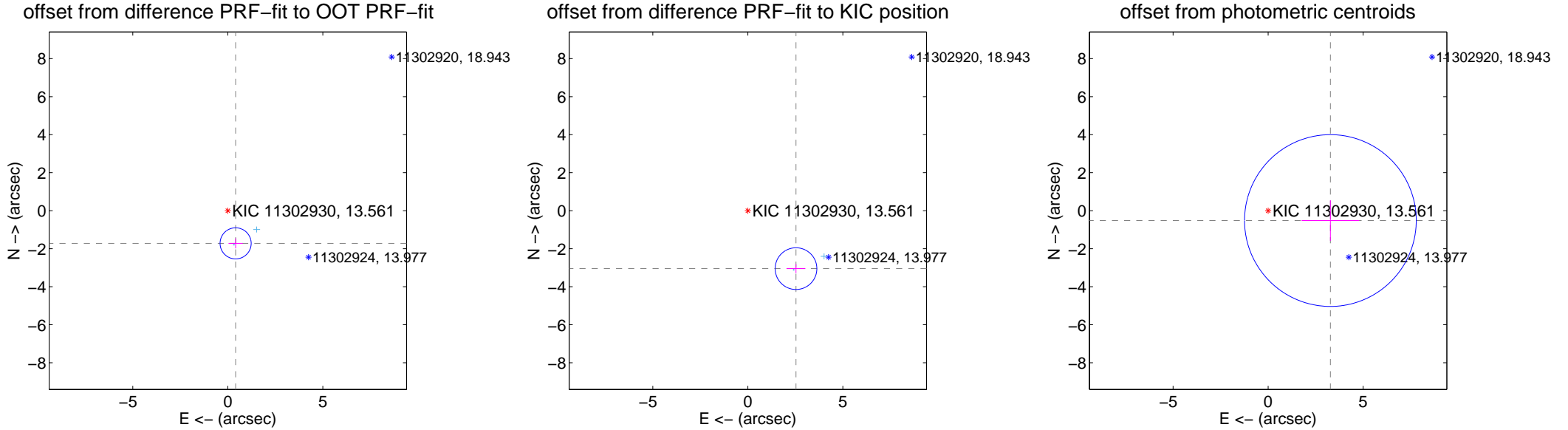
DV Centroid Data

Supplemental centroid analysis for 011302930-01. Kepler magnitude: 13.56. Transit SNR 7.66

There are 2 quarters with good PRF difference image offsets

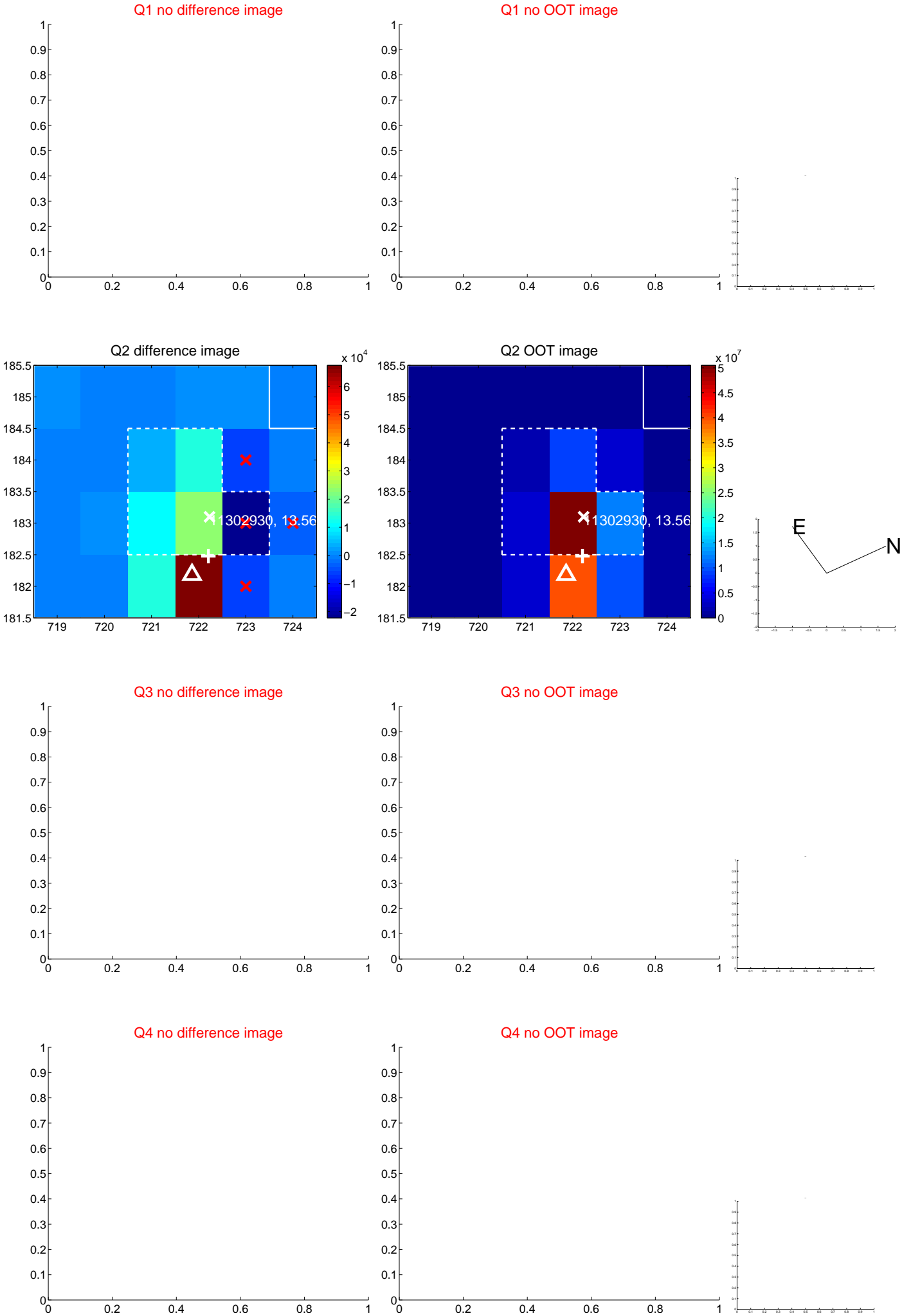
The OOT PRF centroid is offset from the target star catalog position by about 2.87 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.767 ± 0.273	6.48	-0.411 ± 0.374	-1.719 ± 0.266
PRF-fit source offset from KIC position	3.965 ± 0.366	10.84	-2.536 ± 0.495	-3.049 ± 0.238
photometric centroid source offset	3.32 ± 1.51	2.20	-3.28 ± 1.52	-0.52 ± 1.07

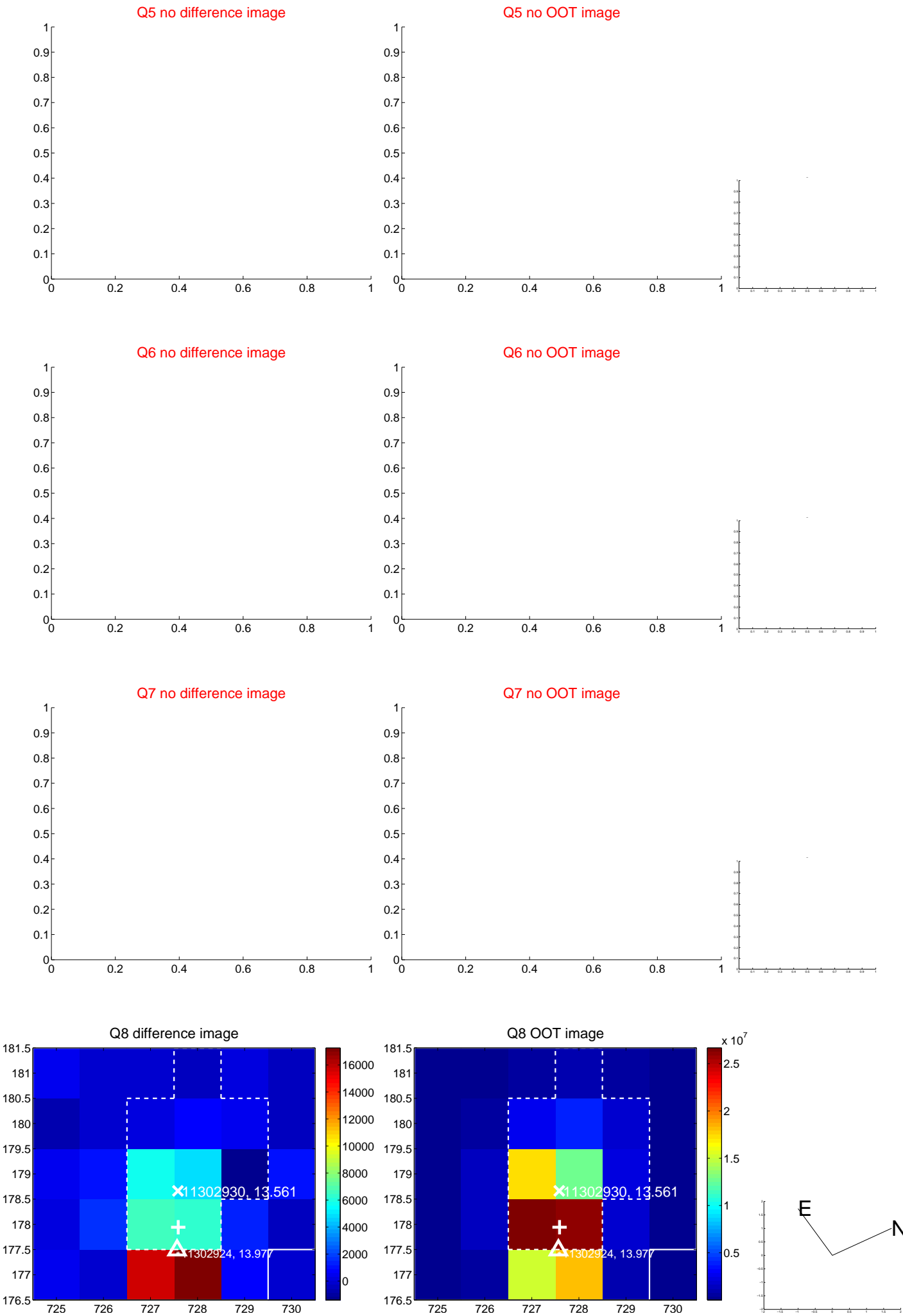


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

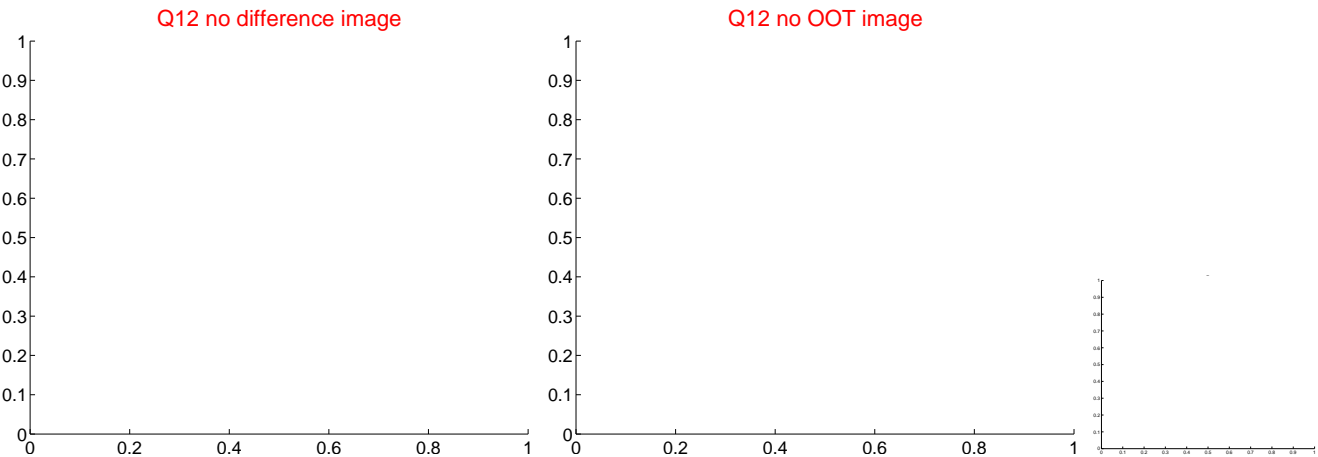
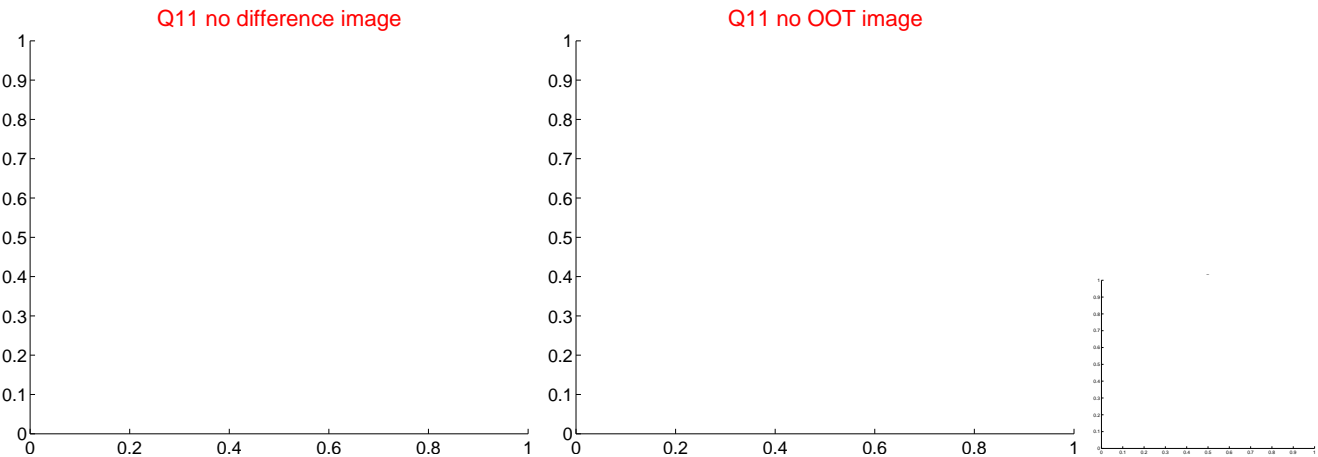
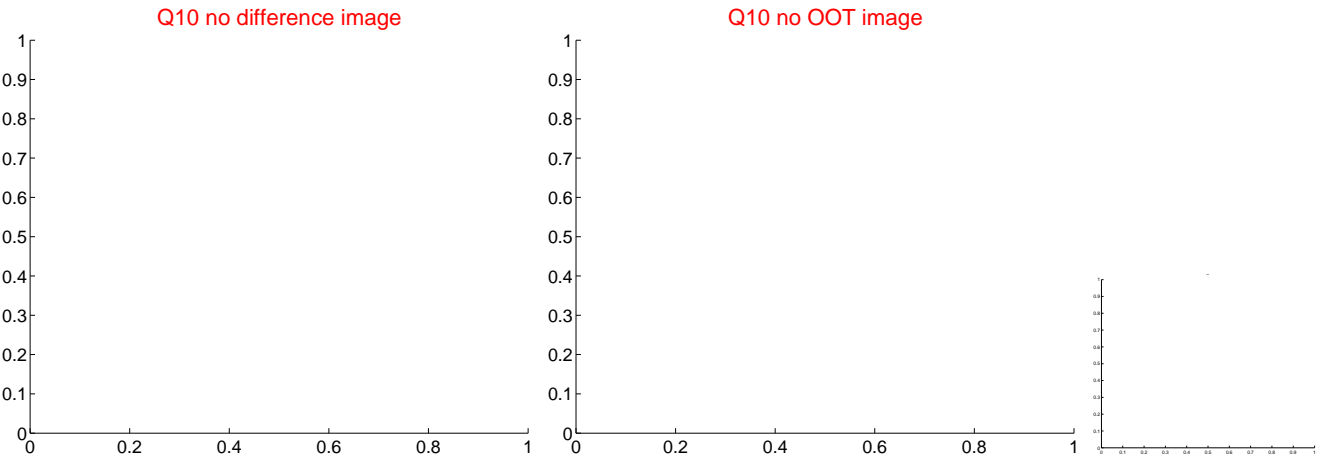
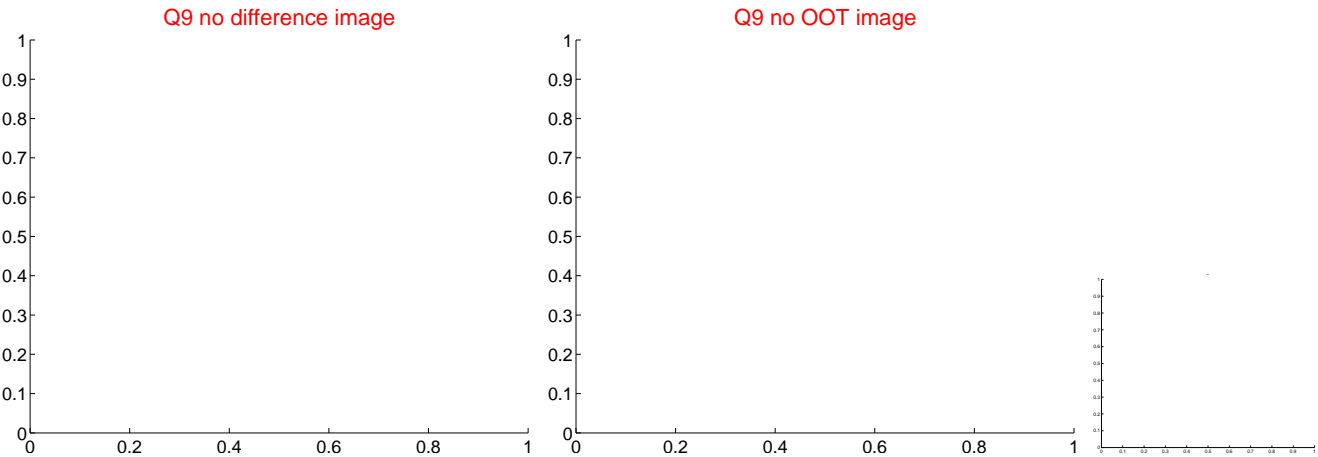
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



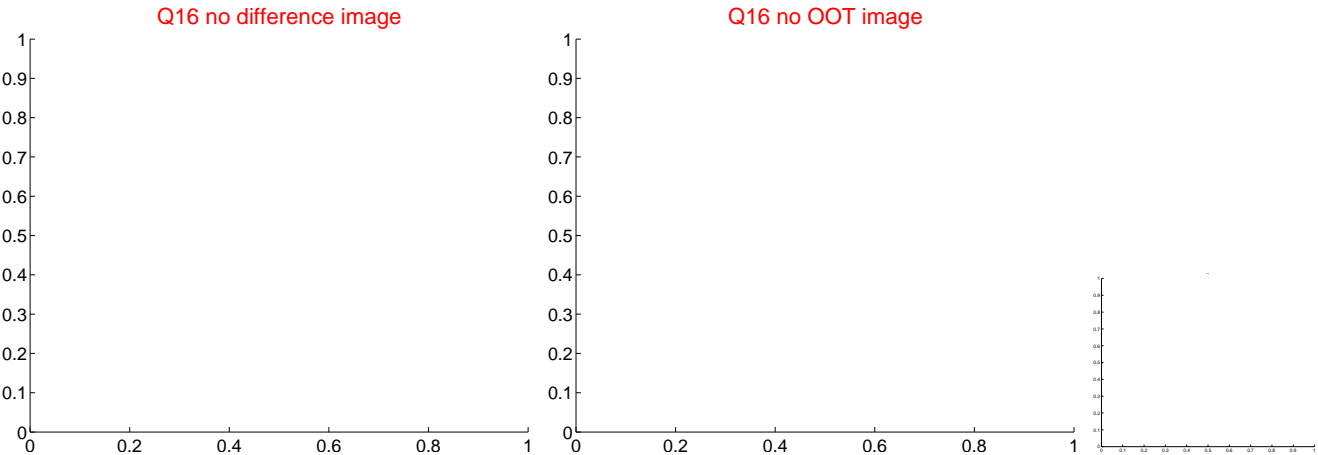
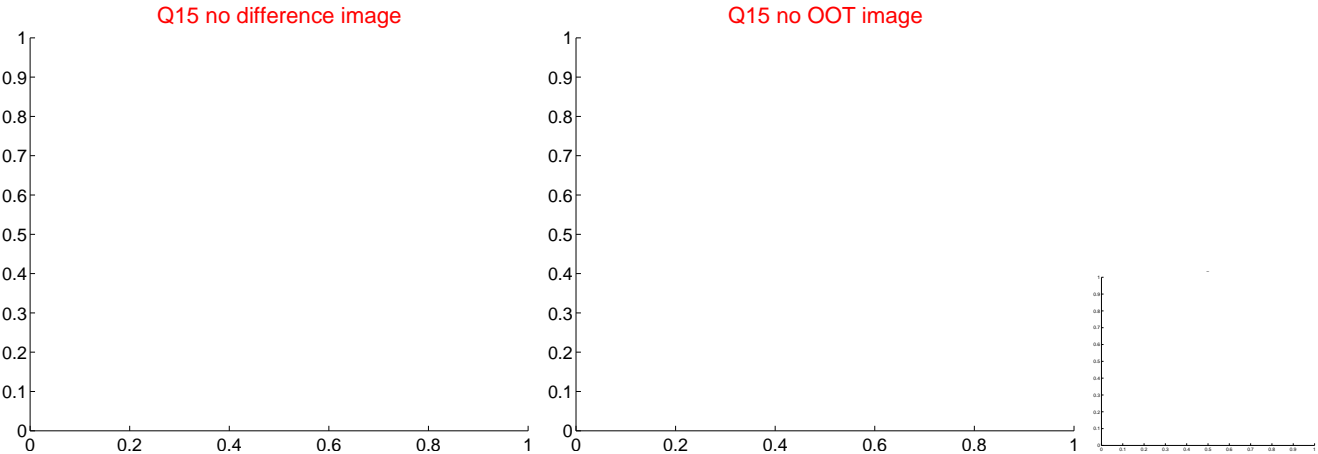
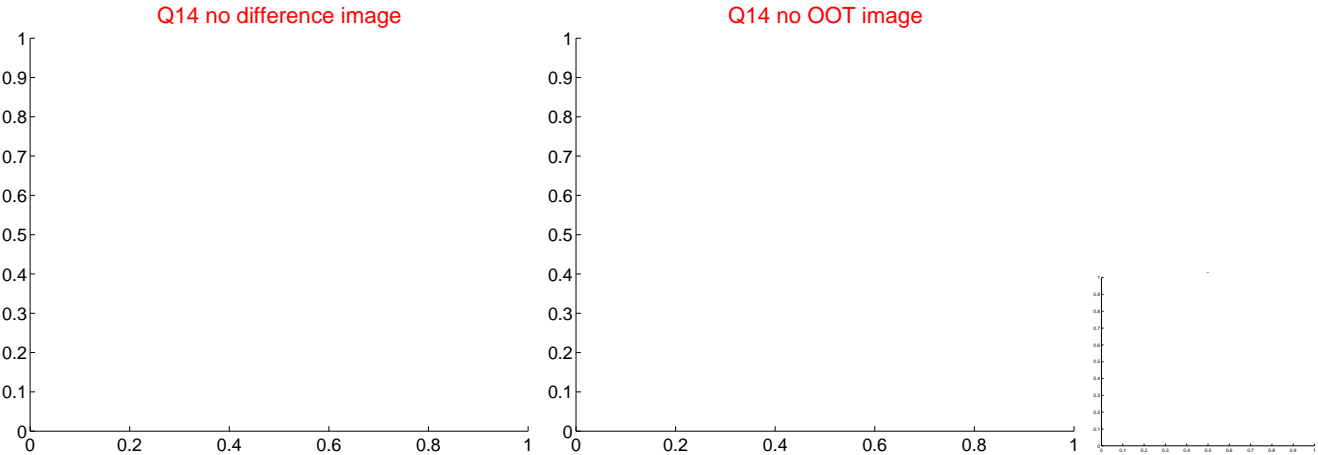
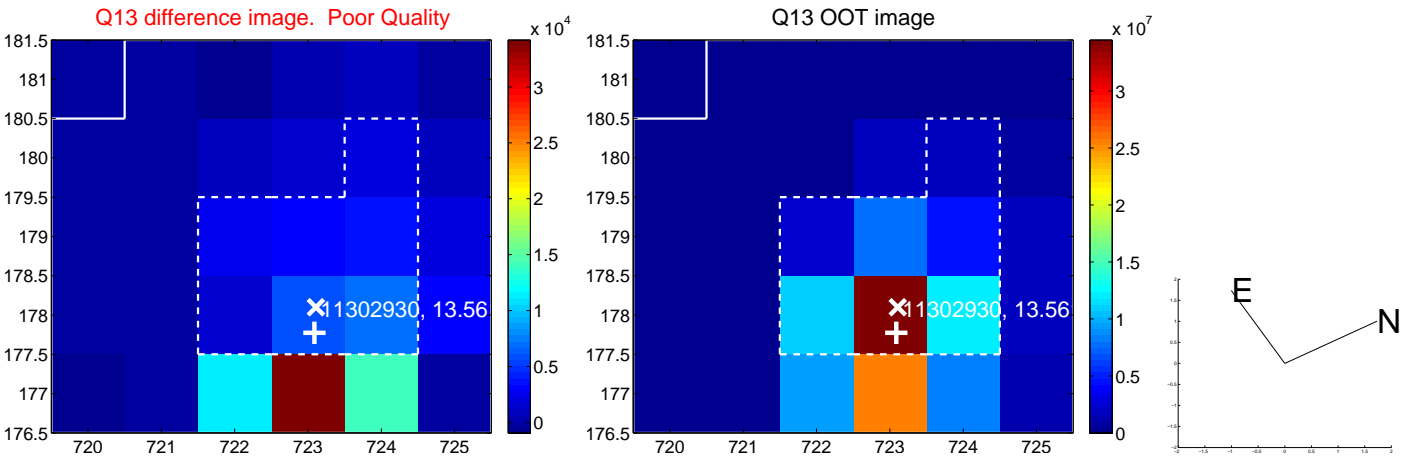
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



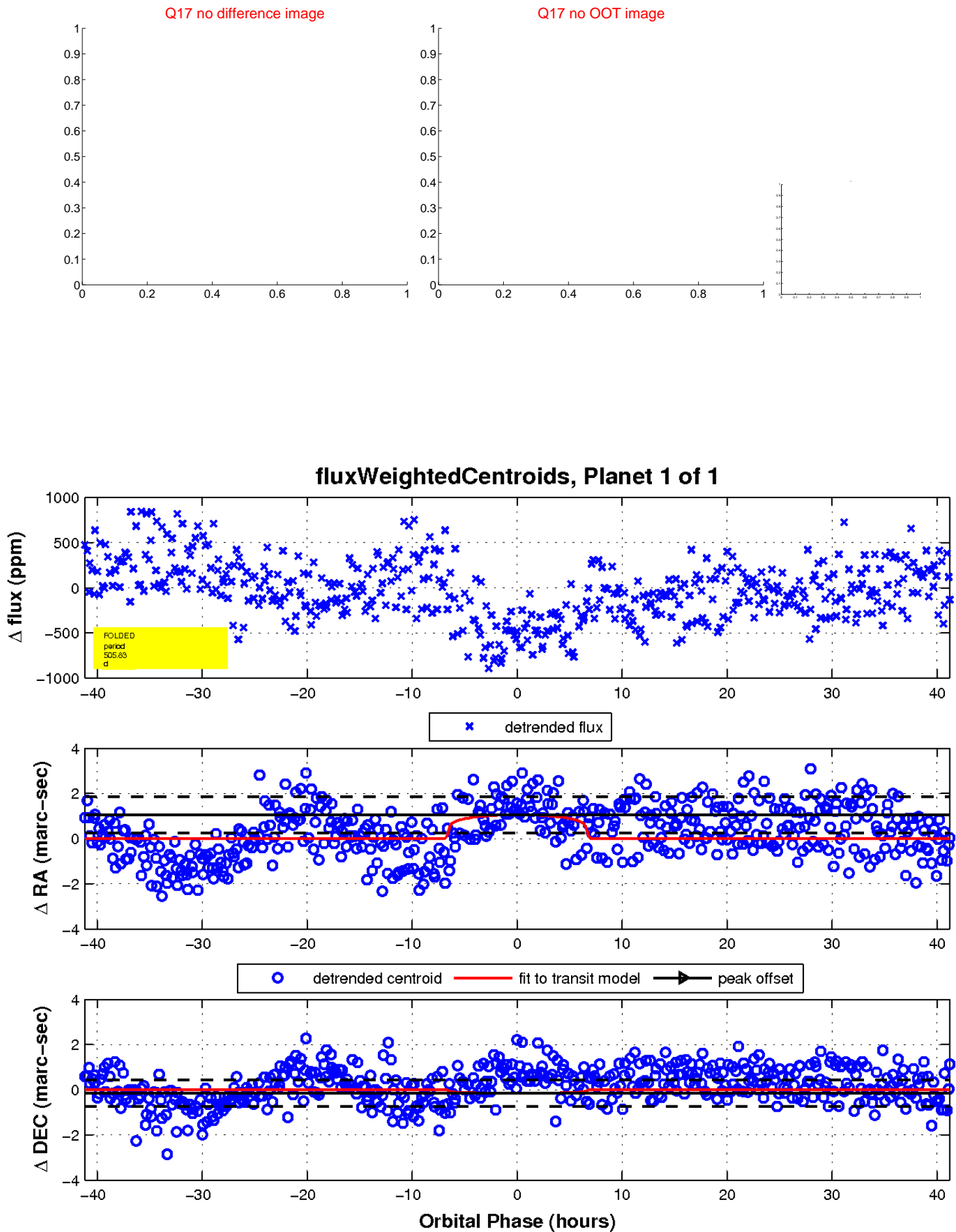
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

