

KIC 011069175

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})
011069175-01	OBS	No	530.559521	174.600002	104.8	10.946	7.6	7.0	0.88	5718	1.07	0.49

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011069175-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL—INCONSISTENT_TRANS—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.

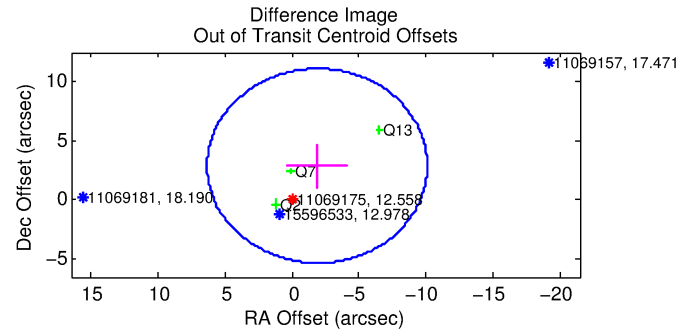
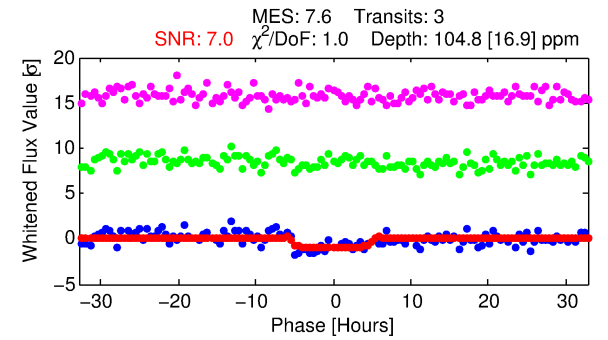
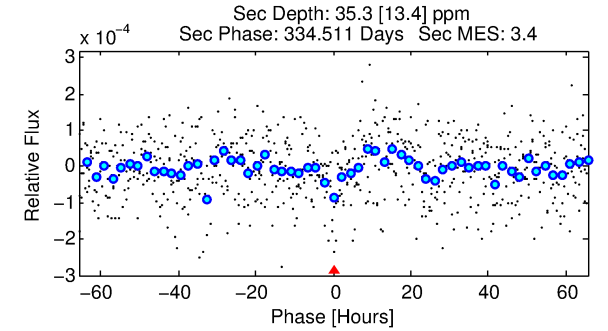
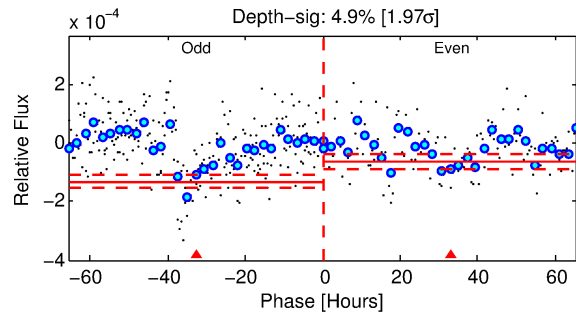
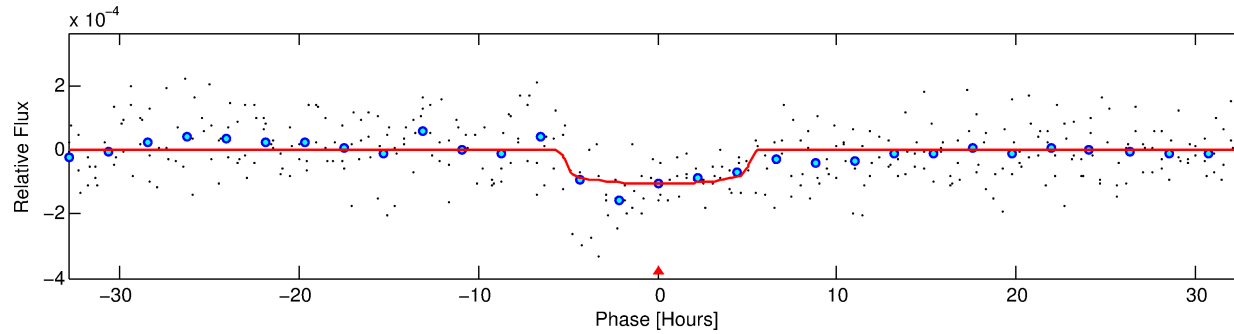
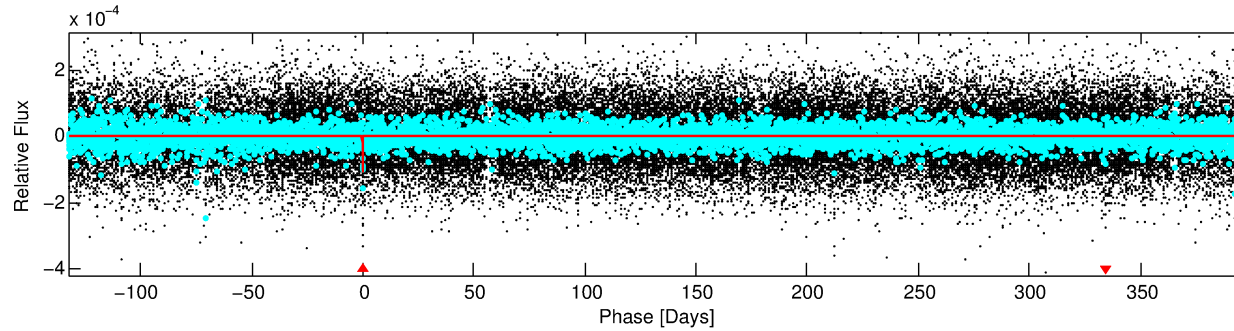
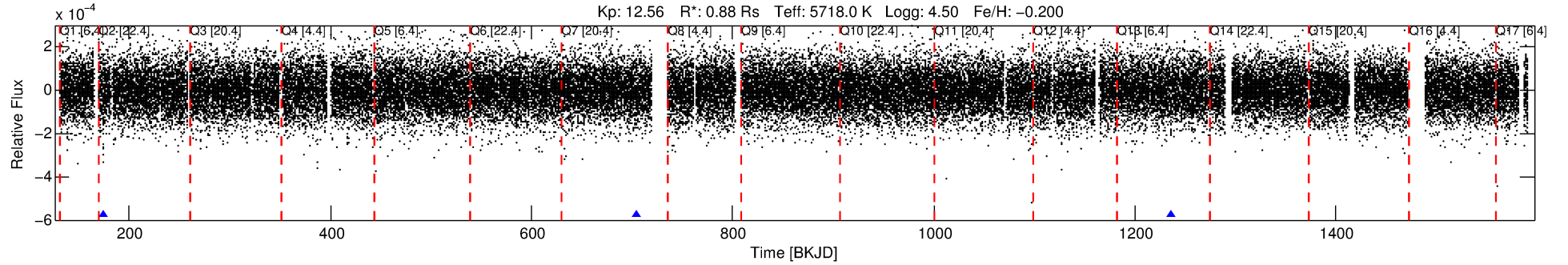
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011069175-01

No Significant Match Found

DV One-Page Summary

KIC: 11069175 Candidate: 1 of 1 Period: 530.560 d



DV Fit Results:

Period = 530.55952 [0.01579] d
Epoch = 174.6000 [0.0205] BKJD
Rp/R* = 0.0111 [0.0037]
a/R* = 172.45 [268.39]
b = 0.90 [0.34]
Seff = 0.49 [0.13]
Teq = 213 [14] K
Rp = 1.07 [0.41] Re
a = 1.2364 [0.2038] AU
Ag = 25875.06 [20699.81] [1.25 σ]
Teff = 4183 [807] K [4.92 σ]

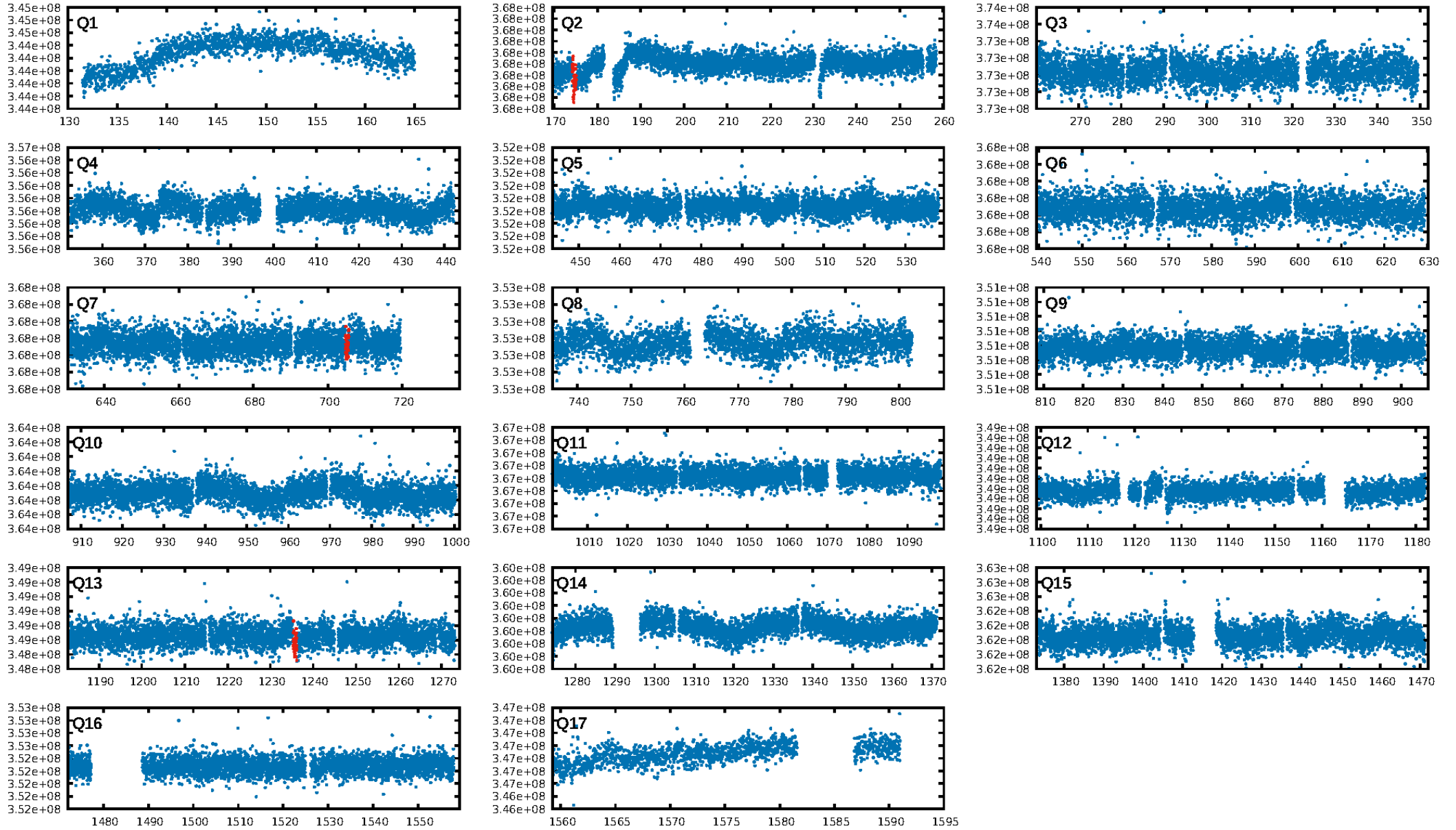
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.05e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.62
Centroid-sig: 23.0%
Centroid-so: 2.094 arcsec [1.12 σ]
OotOffset-rm: 3.456 arcsec [1.26 σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-rm: 3.343 arcsec [1.23 σ]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

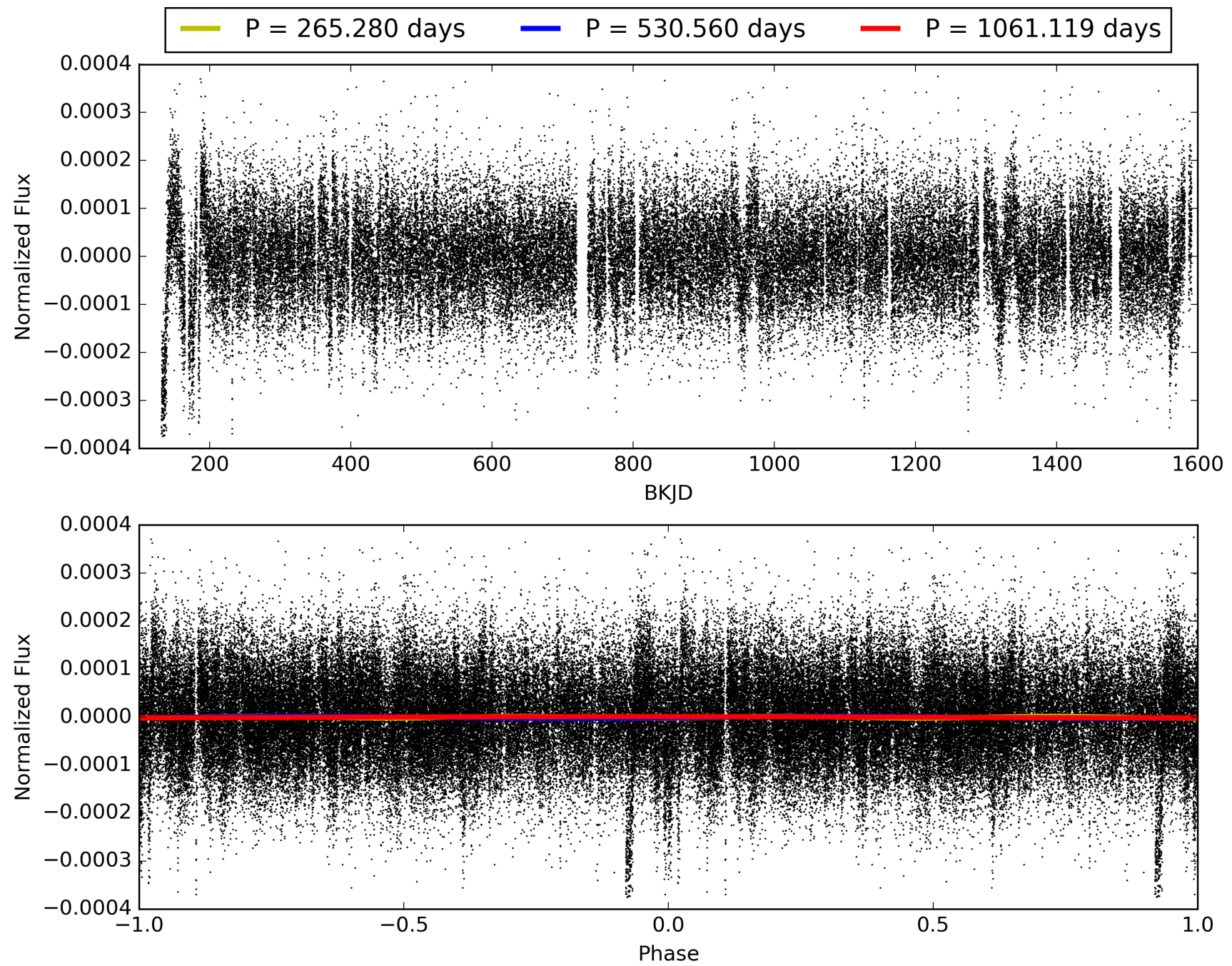
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 23:20:41 Z

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

TCE 011069175-01, PDC Light Curves

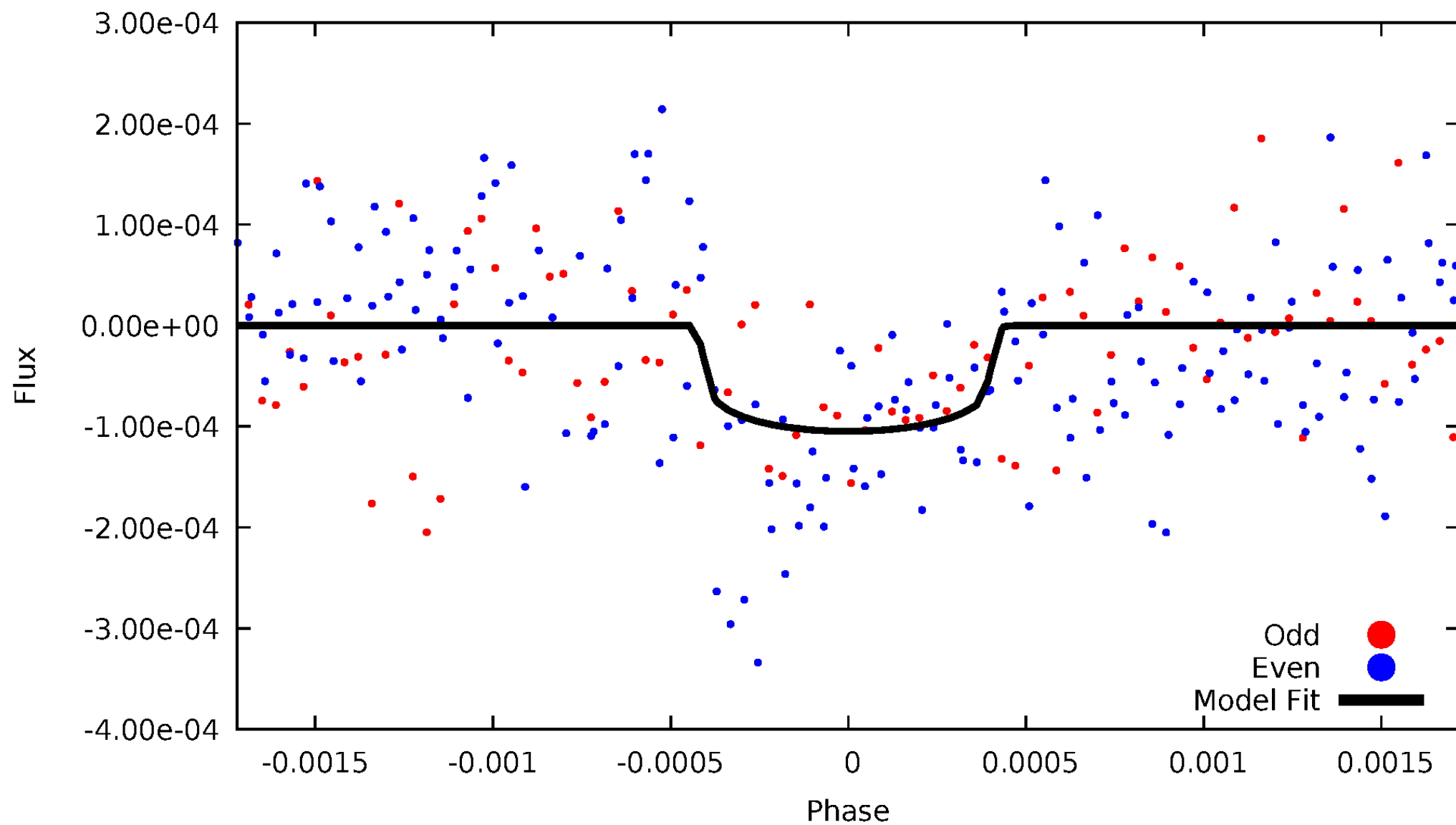


TCE 011069175-01



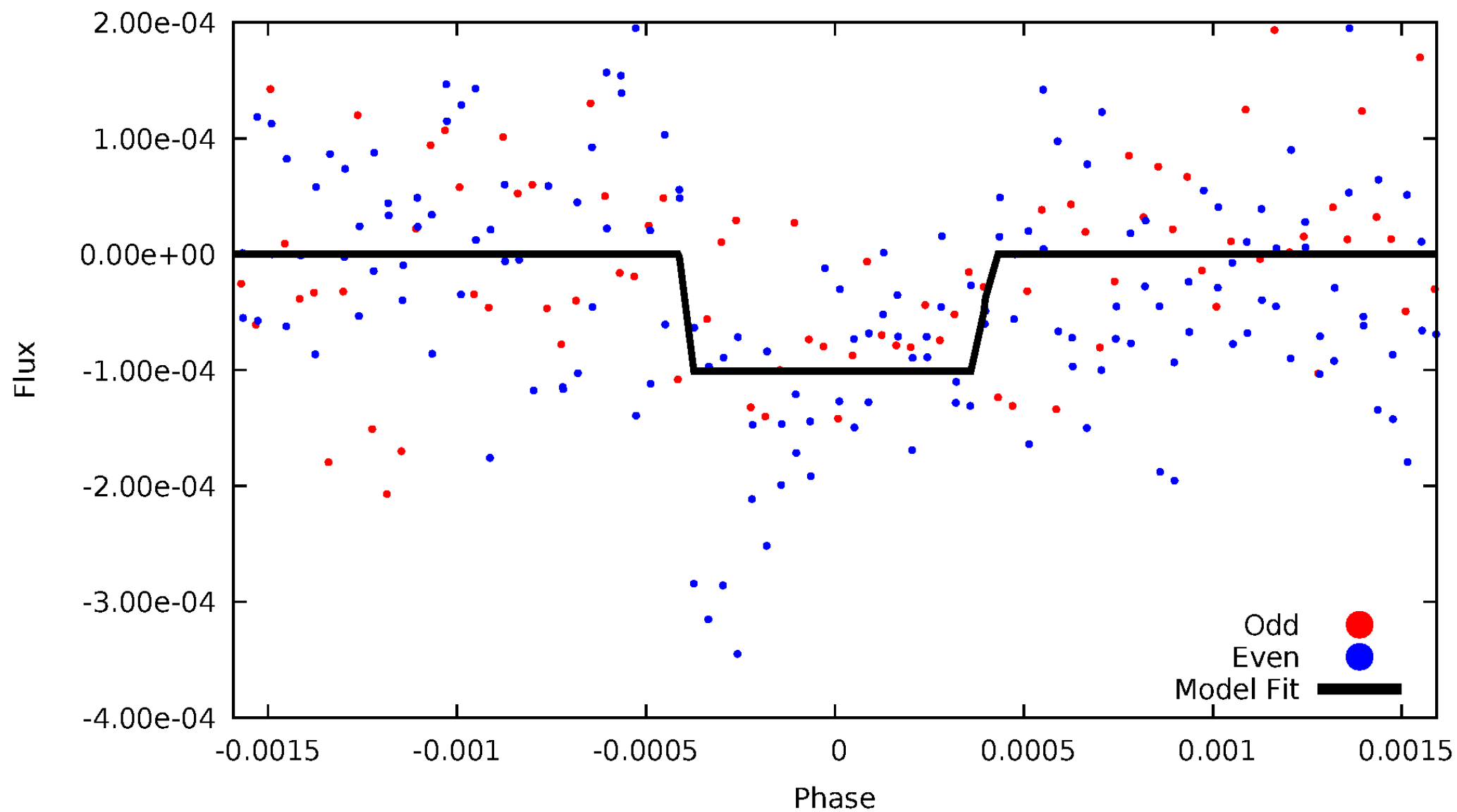
DV Odd/Even

TCE 011069175-01



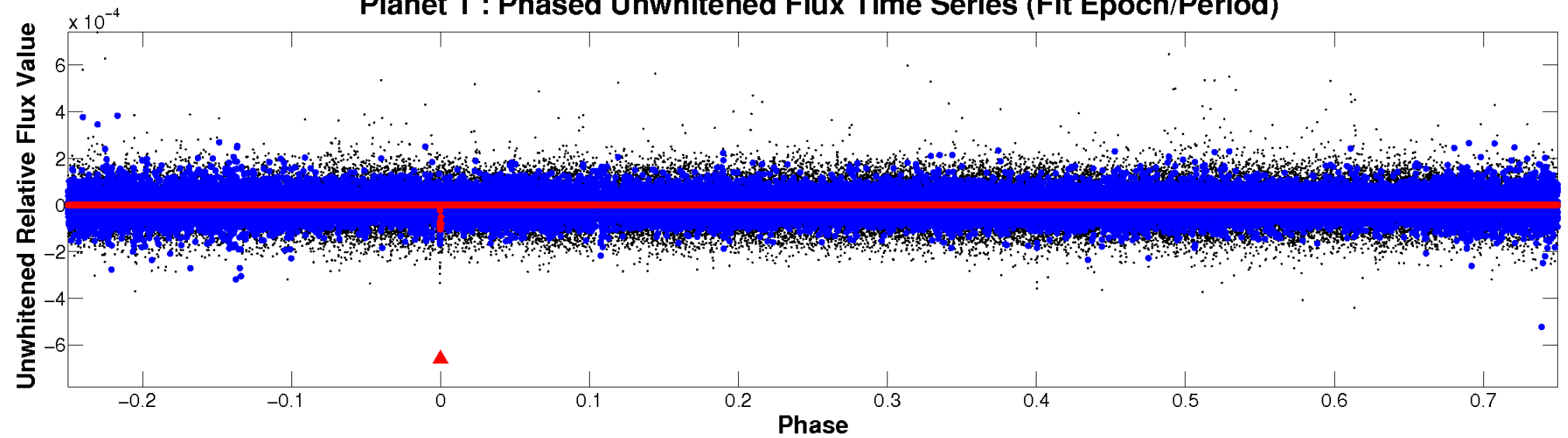
ALT Odd/Even

TCE 011069175-01

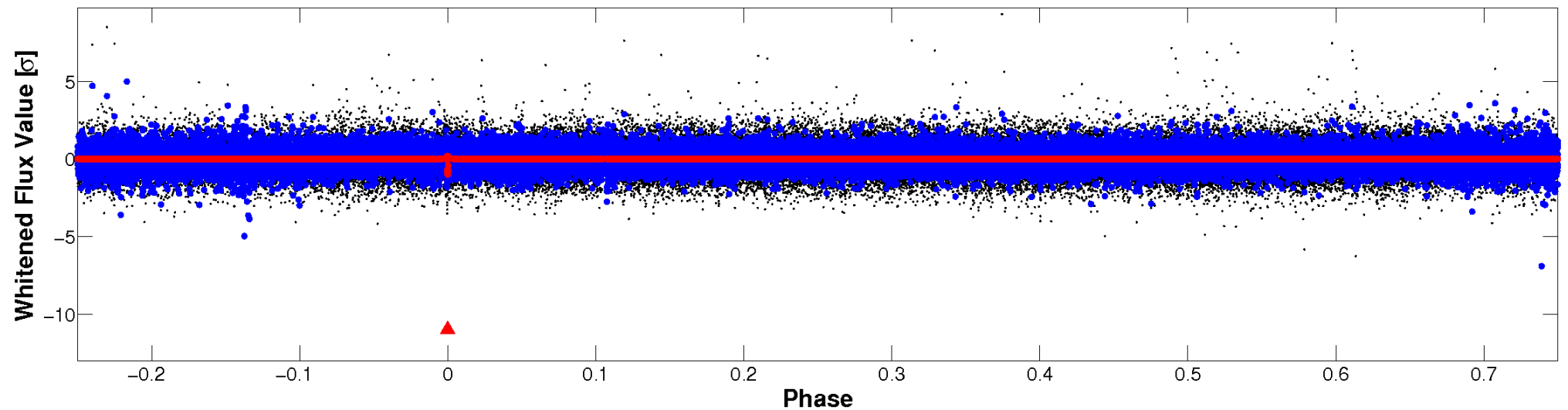


Non-Whitened Vs. Whitened Light Curve

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

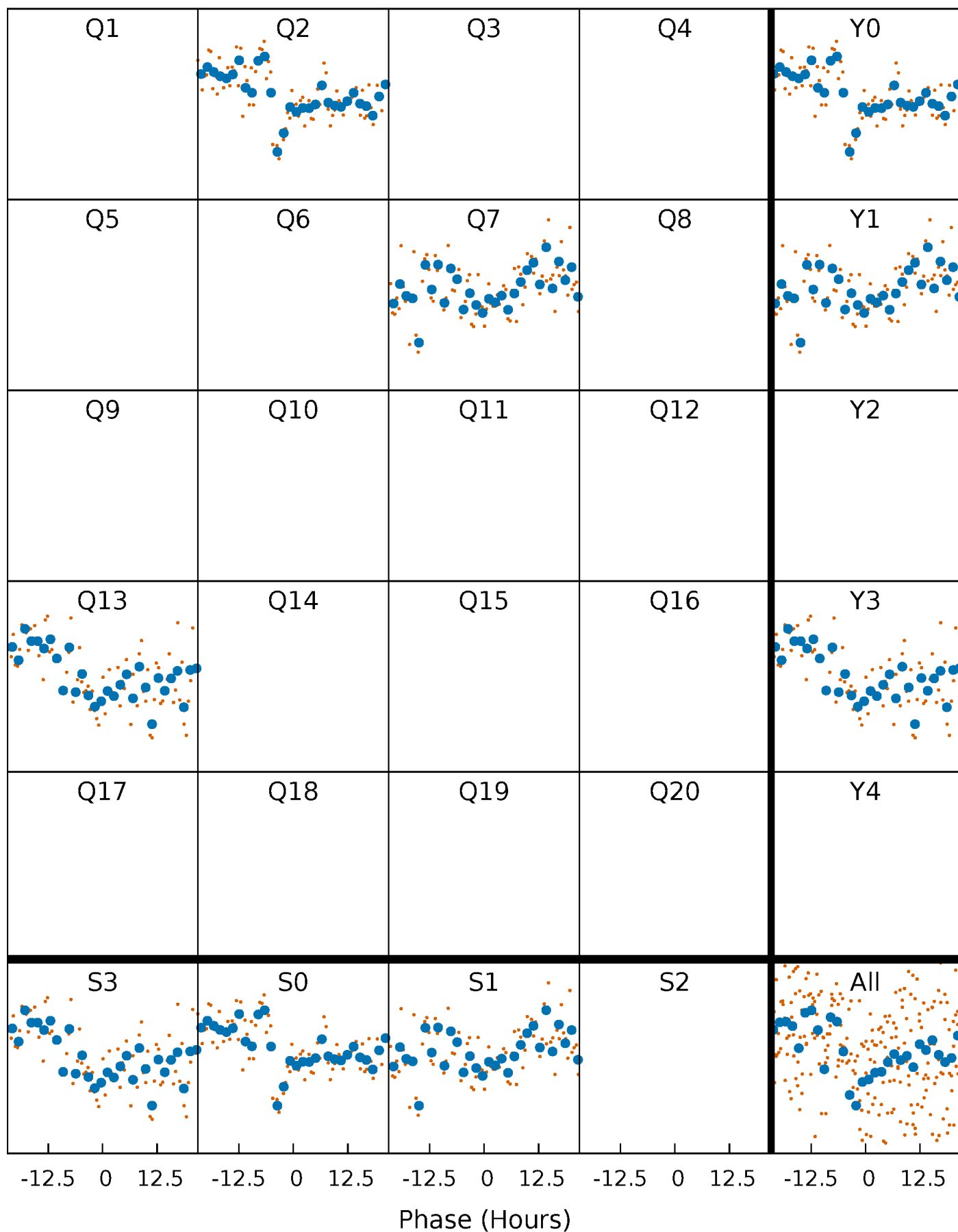


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



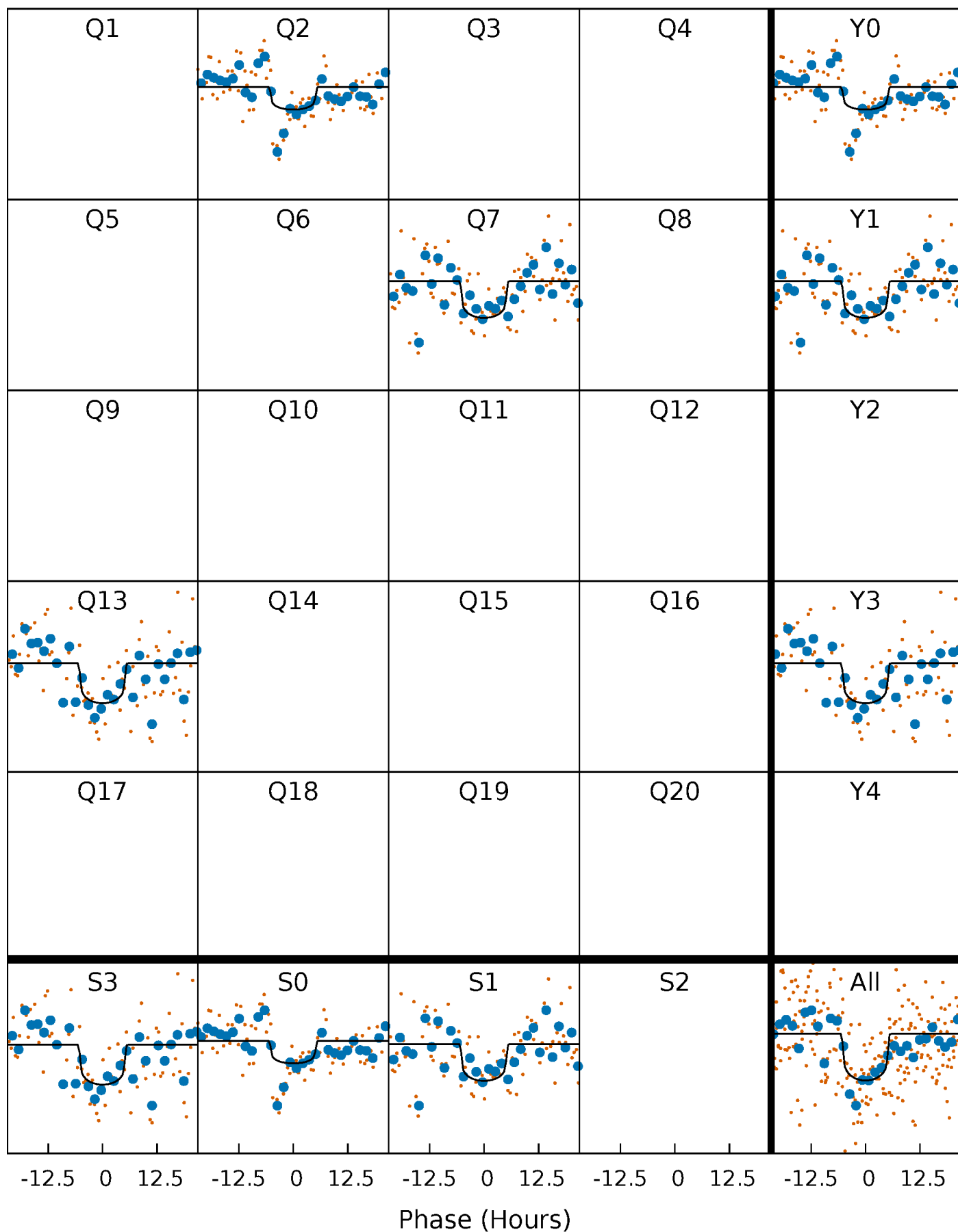
PDC Quarter-Phased Transit Curves

TCE 011069175-01 P=530.559521 Days $T_0=174.600002$ (BKJD)



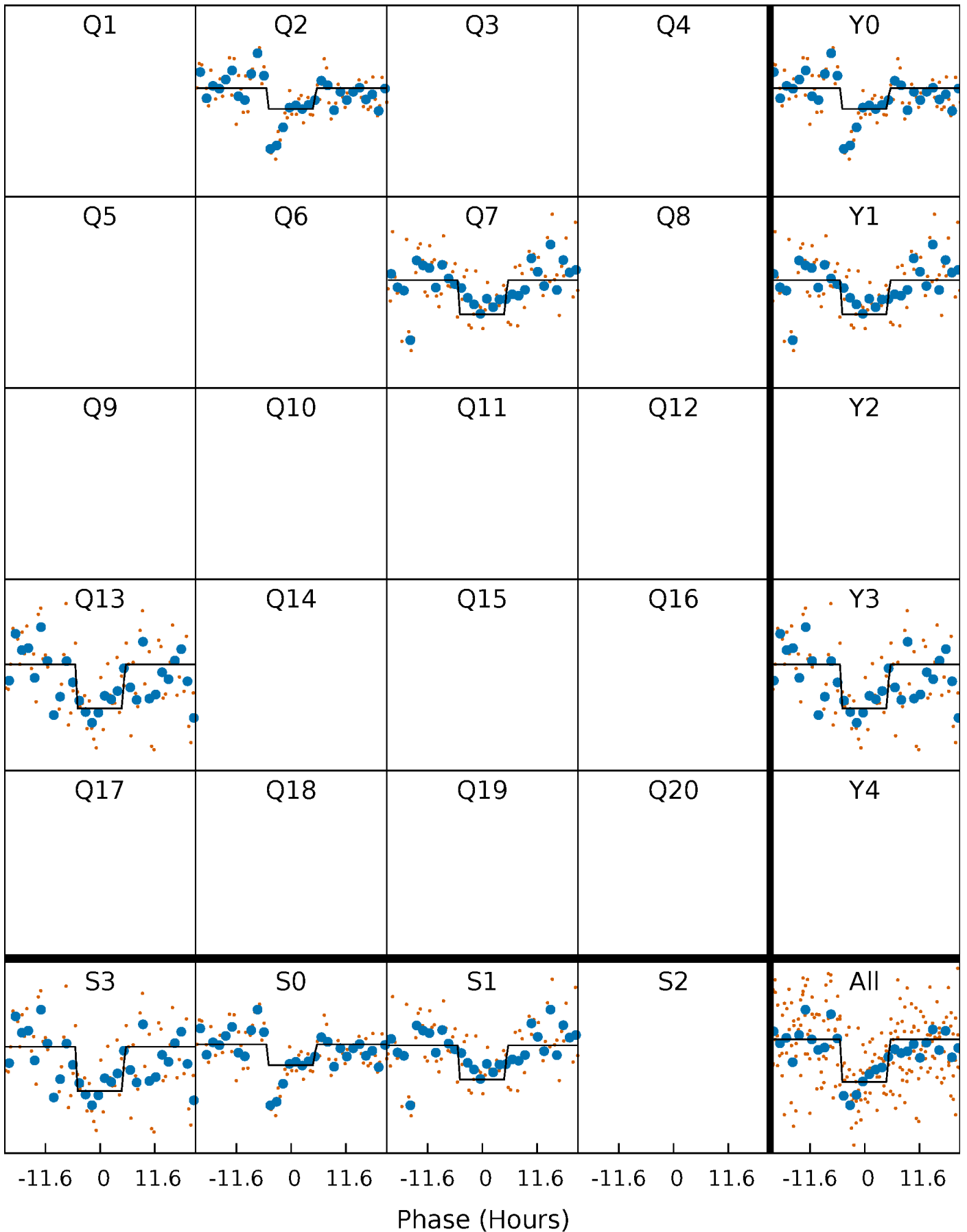
DV Quarter-Phased Transit Curves

TCE 011069175-01 P=530.559521 Days $T_0=174.600002$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

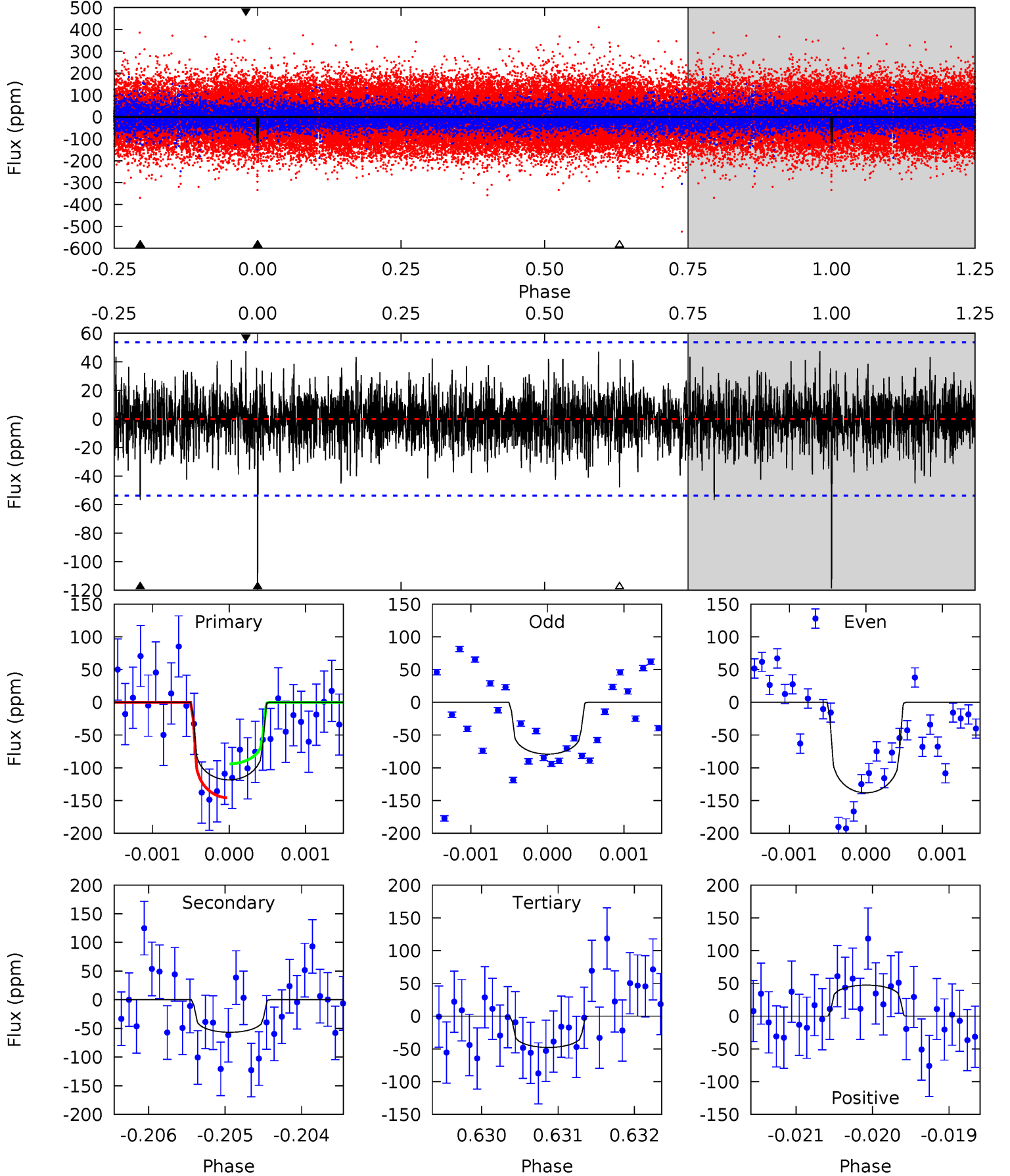
TCE 011069175-01 P=530.557385 Days $T_0=174.601832$ (BKJD)



DV Model-Shift Uniqueness Test

011069175-01, $P = 530.559521$ Days, $E = 174.600002$ Days

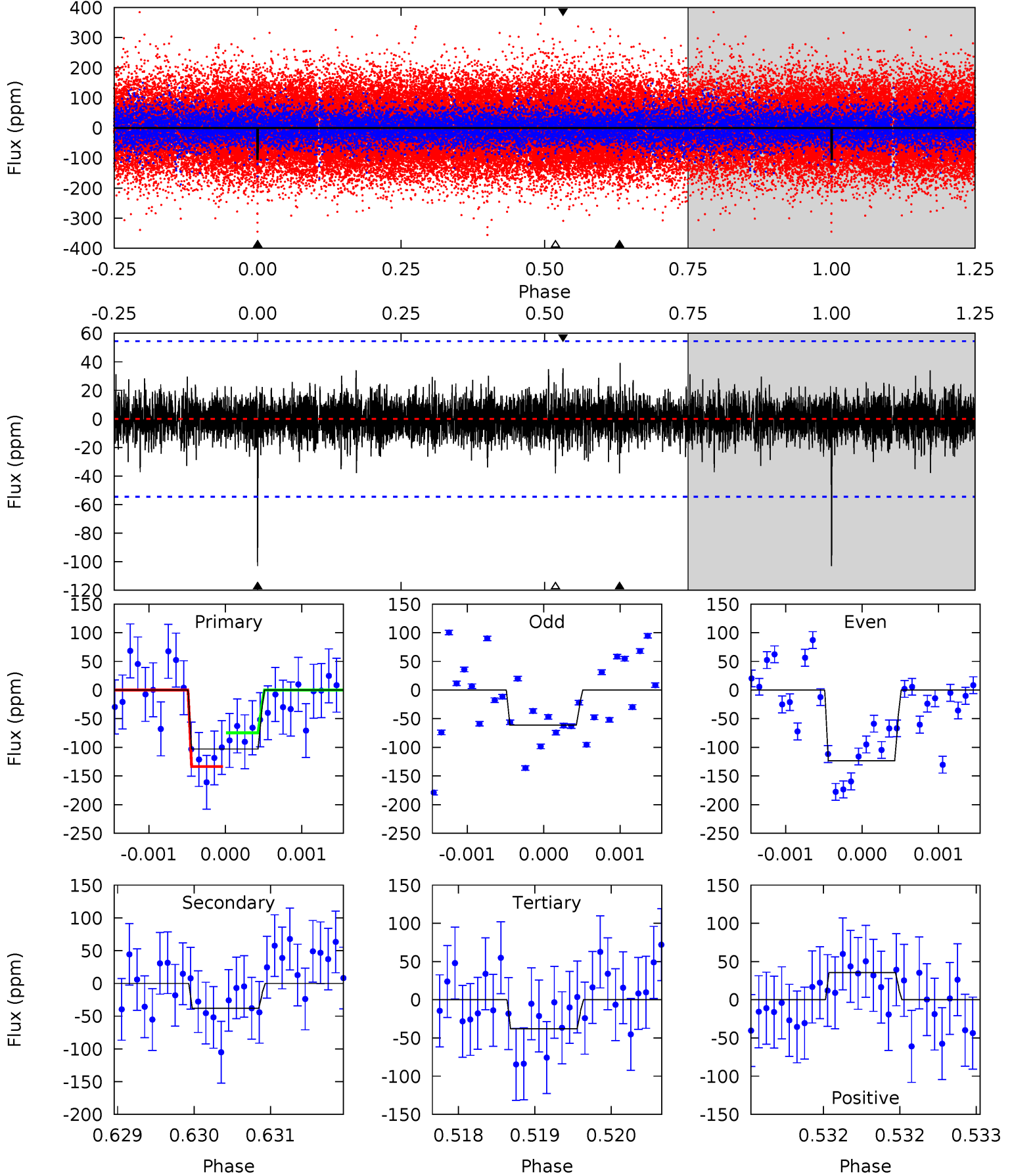
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.1	5.78	4.87	4.83	5.47	3.32	1.32	7.20	7.25	0.91	0.95	2.84	1.10	0.29	2.64



Alt Model-Shift Uniqueness Test

011069175-01, P = 530.557385 Days, E = 174.601832 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.4	3.83	3.82	3.56	5.48	3.34	0.91	6.53	6.79	0.00	0.27	2.93	1.15	0.28	2.96



Stellar Parameters For KIC 011069175

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5718^{+143}_{-158}	$4.497^{+0.070}_{-0.130}$	$-0.200^{+0.300}_{-0.300}$	$0.884^{+0.174}_{-0.087}$	$0.895^{+0.100}_{-0.090}$	$1.827^{+0.530}_{-0.685}$
	+3%/-3%	+2%/-3%	+150%/-150%	+20%/-10%	+11%/-10%	+29%/-38%
Source	PHO1	FLK73	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 011069175-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-57 ± 10	$1.10^{+0.37}_{-0.38}$	301^{+14}_{-13}	4813^{+956}_{-544}	39197^{+54369}_{-17695}
Alt.	-38 ± 10	$0.96^{+0.37}_{-0.35}$	300^{+15}_{-12}	4655^{+1063}_{-605}	33473^{+56311}_{-17109}

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 $A_{obs} \gg 1.0$

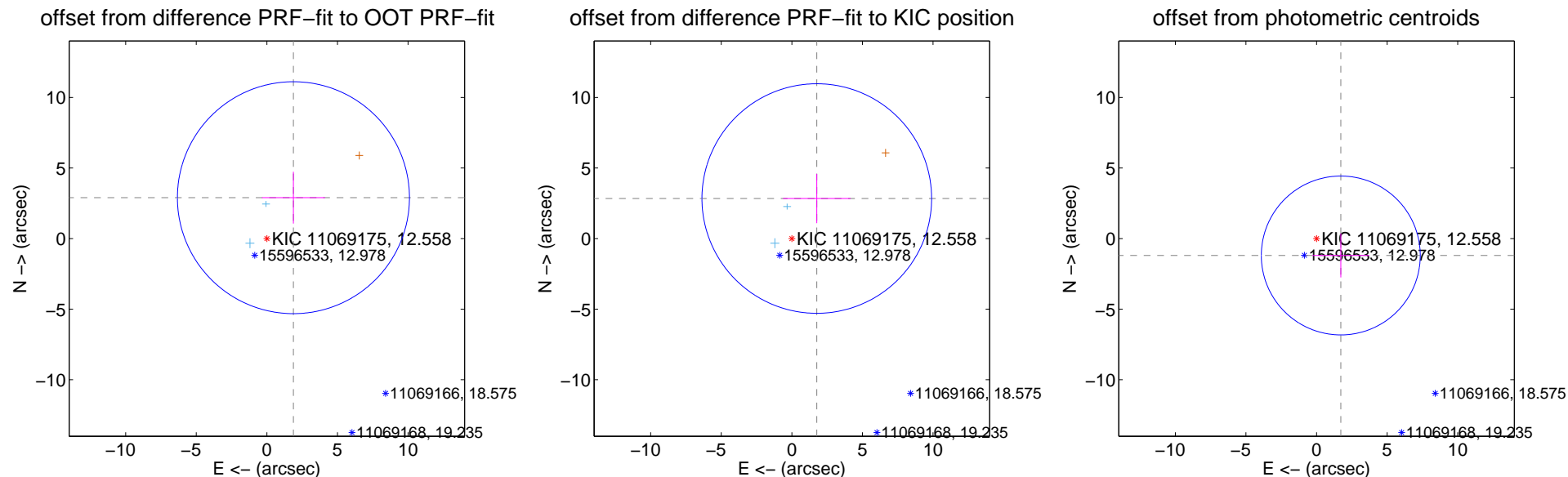
DV Centroid Data

Supplemental centroid analysis for 011069175-01. Kepler magnitude: 12.56. Transit SNR 7.05

There are 2 quarters with good PRF difference image offsets

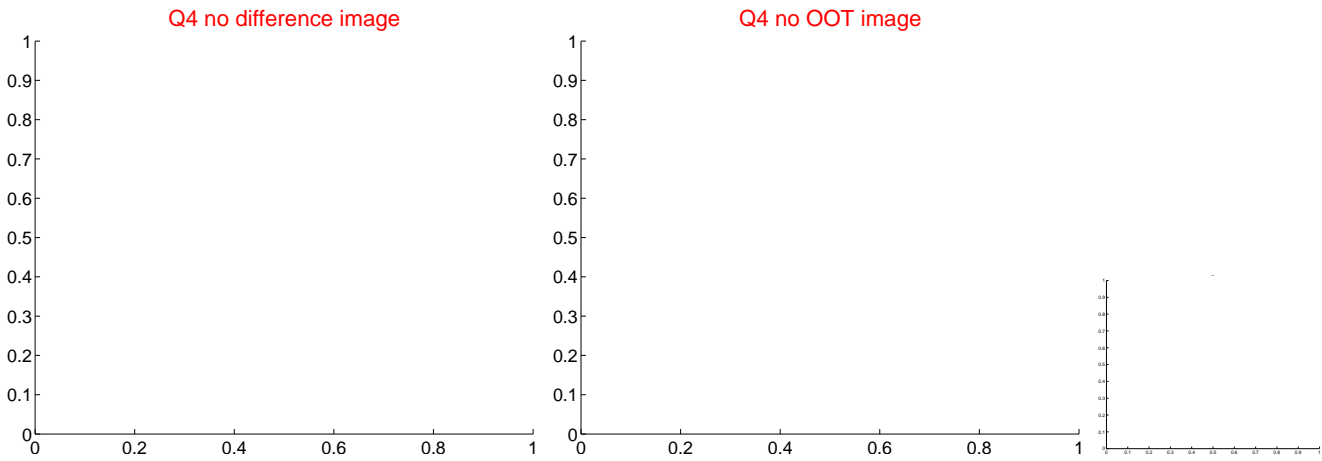
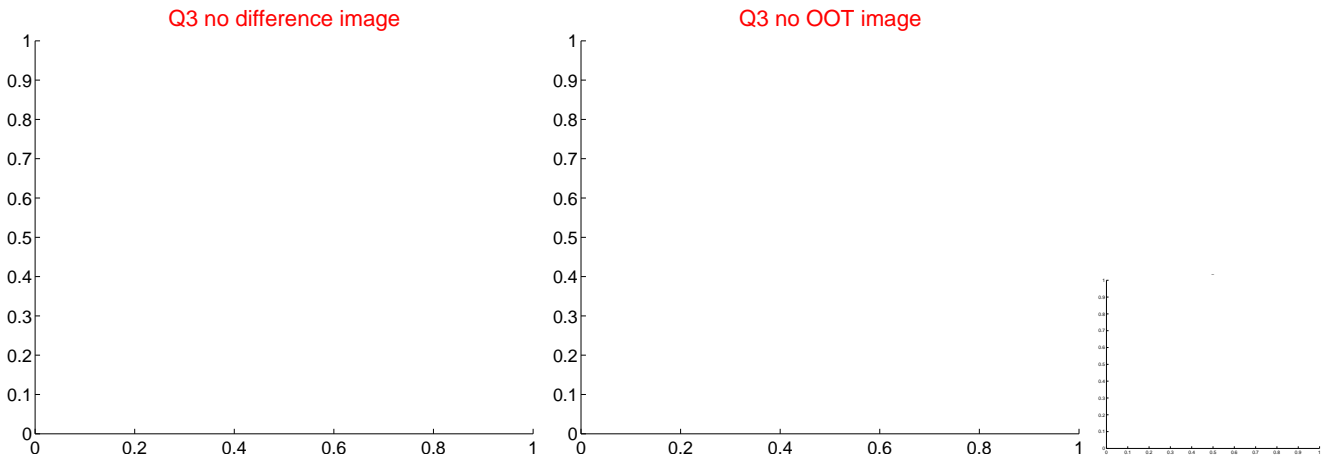
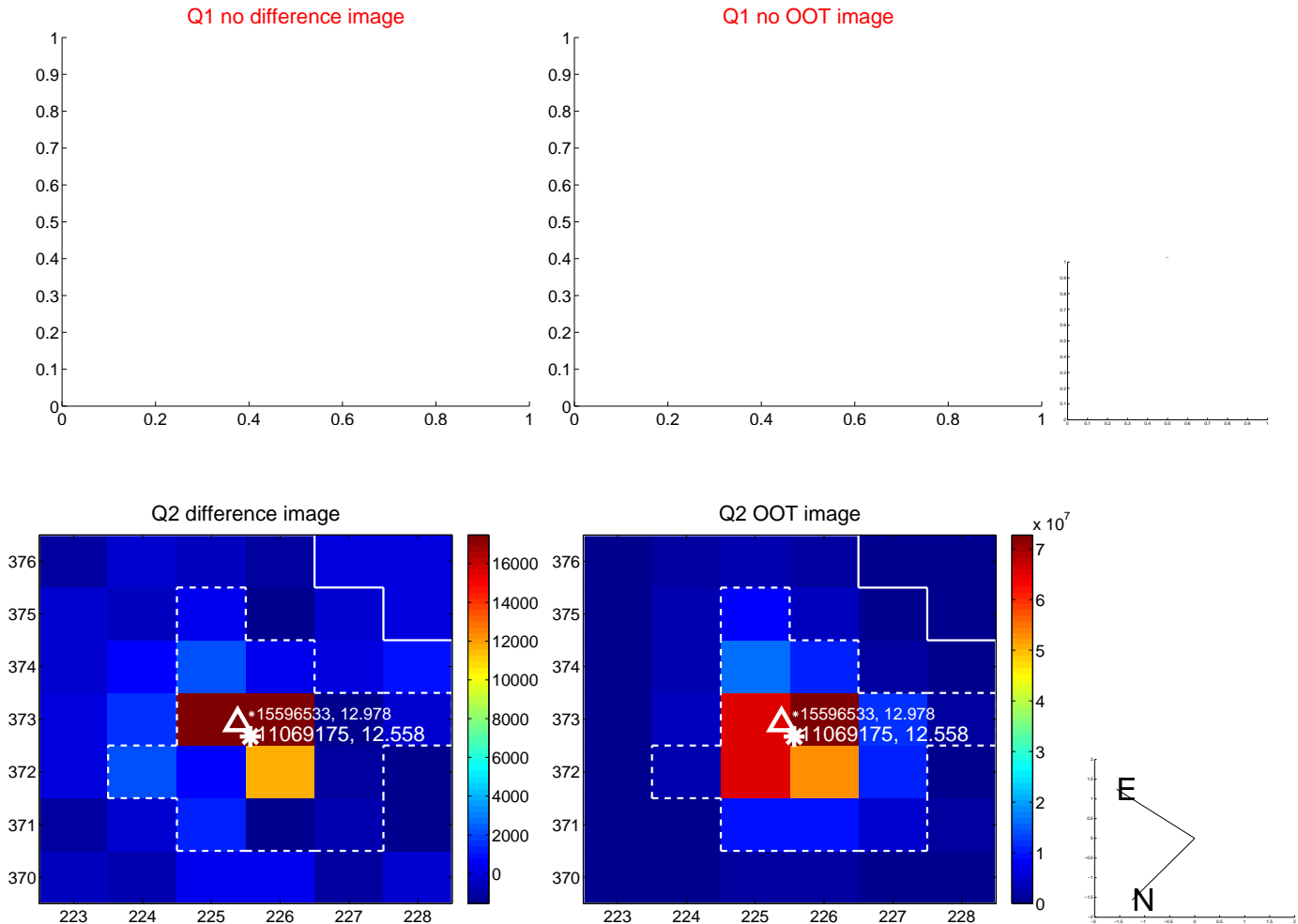
The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.456 ± 2.740	1.26	-1.881 ± 2.231	2.899 ± 1.837
PRF-fit source offset from KIC position	3.343 ± 2.712	1.23	-1.766 ± 2.392	2.839 ± 1.748
photometric centroid source offset	2.09 ± 1.88	1.12	-1.72 ± 2.01	-1.20 ± 1.56

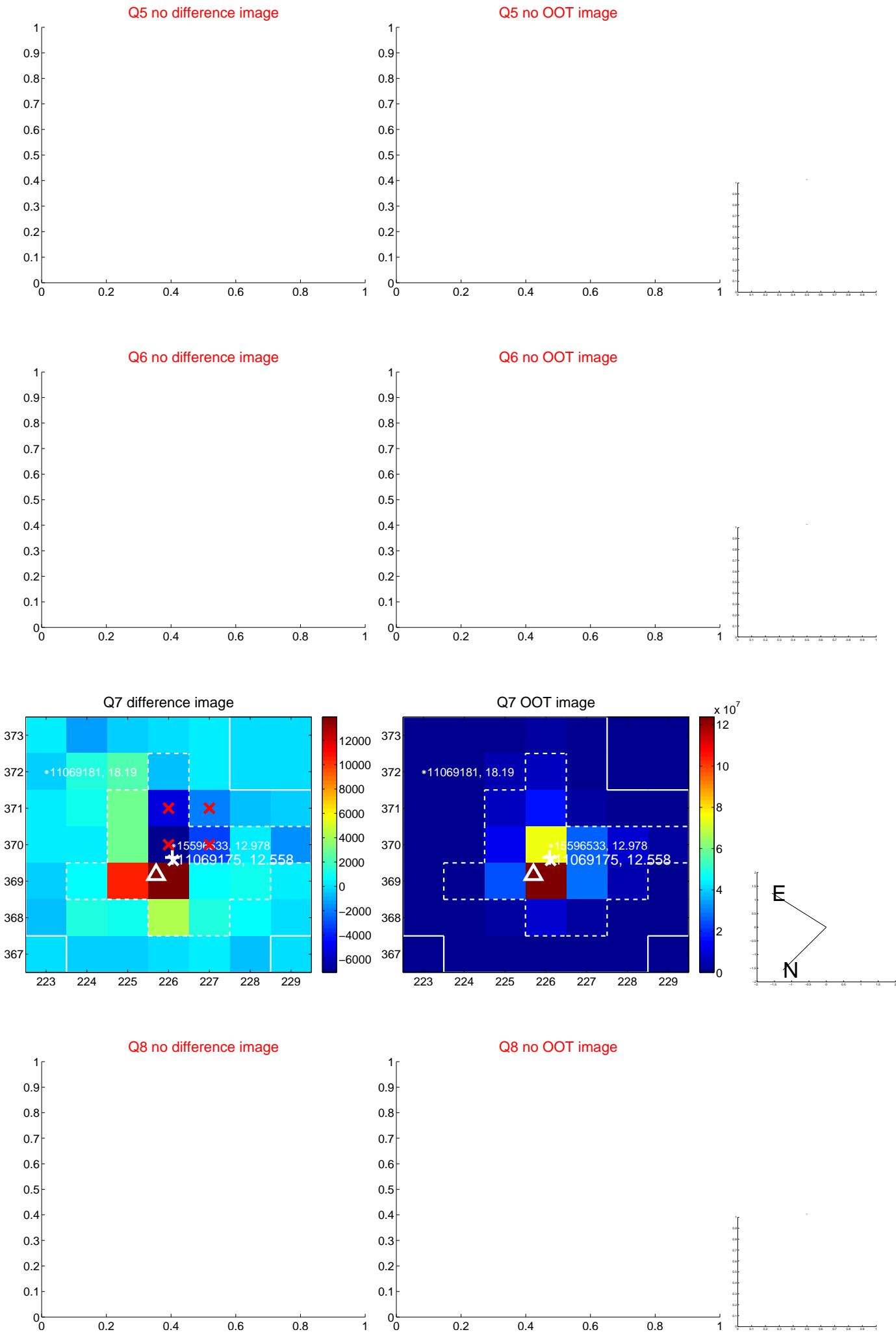


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



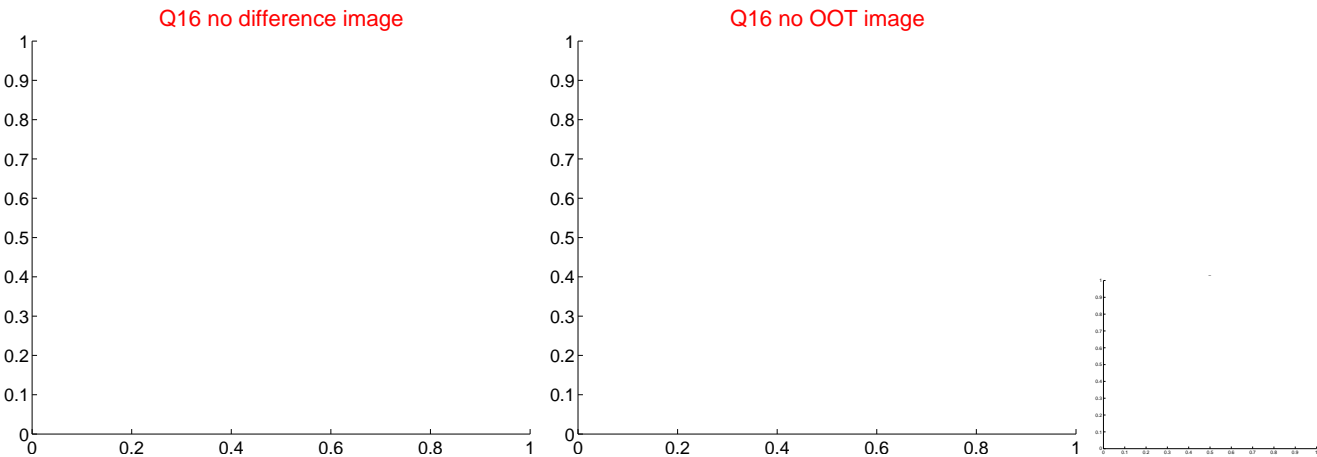
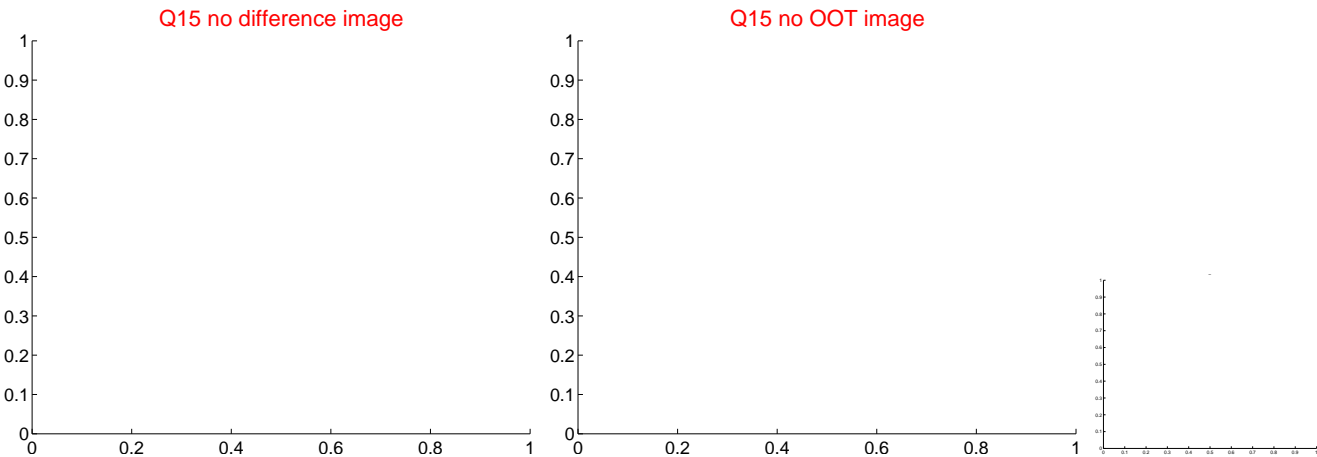
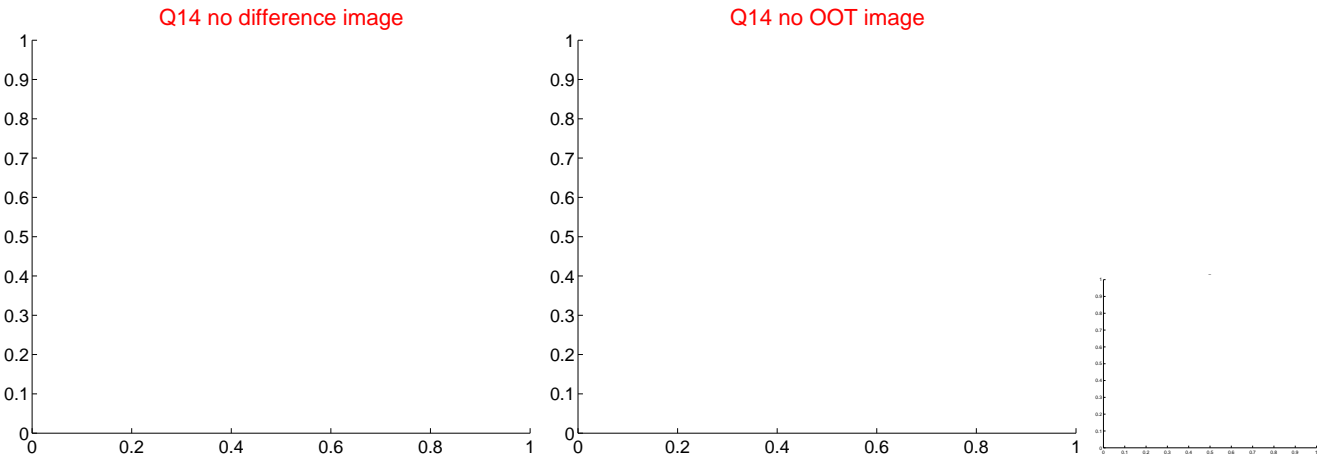
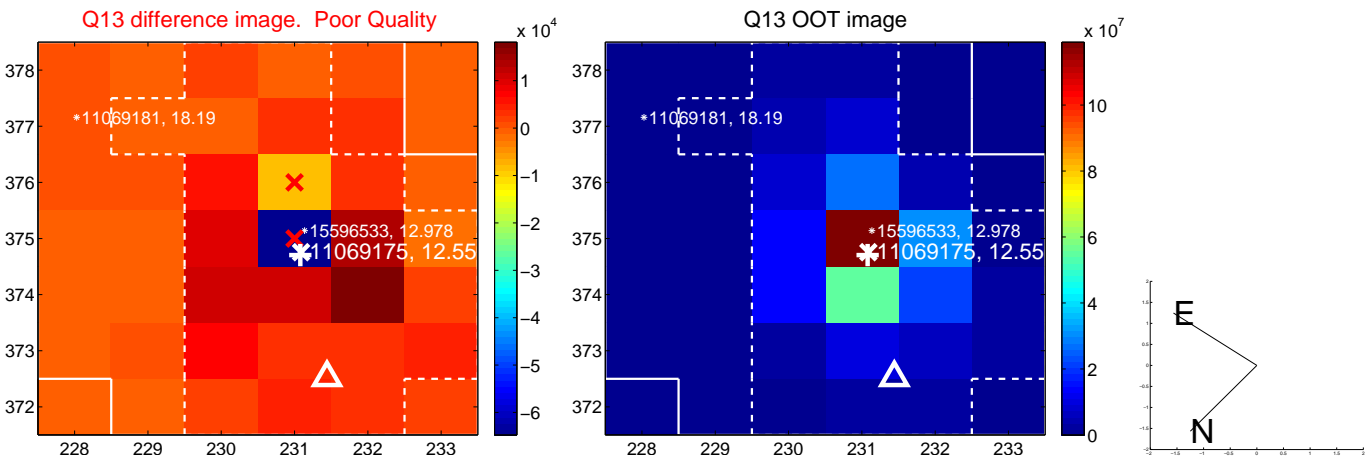
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



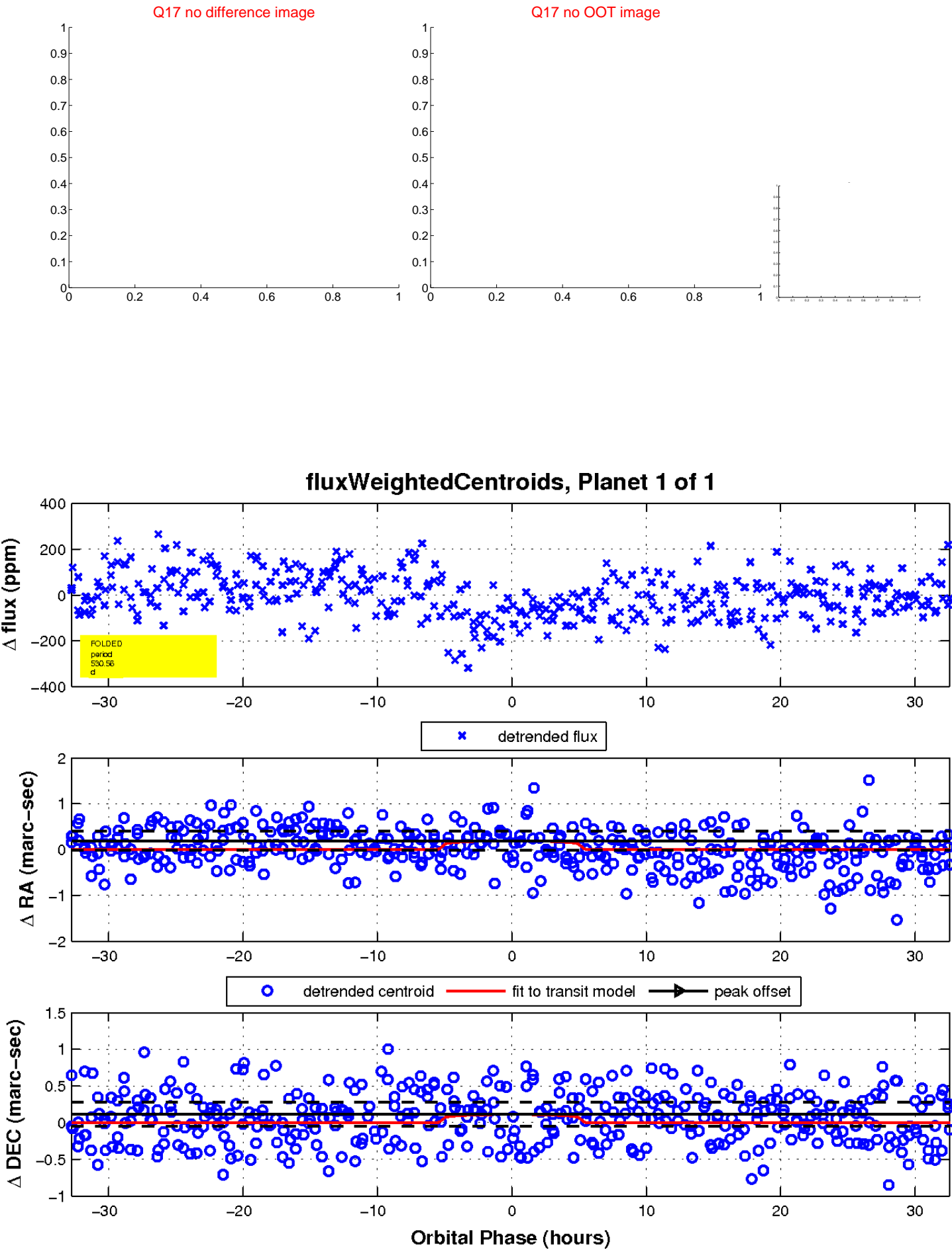
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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

