

KIC 006619377

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})
006619377-01	OBS	No	613.408660	241.034875	391.2	4.500	13.3	-1.0	1.19	6571	2.37	1.05

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006619377-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS

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.

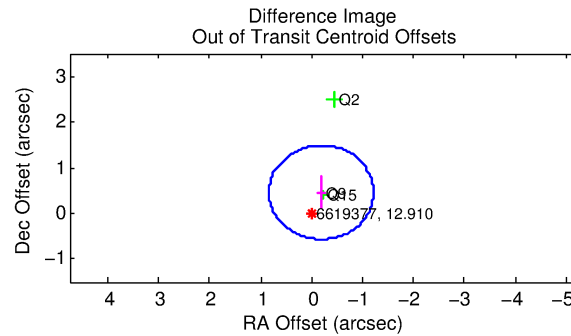
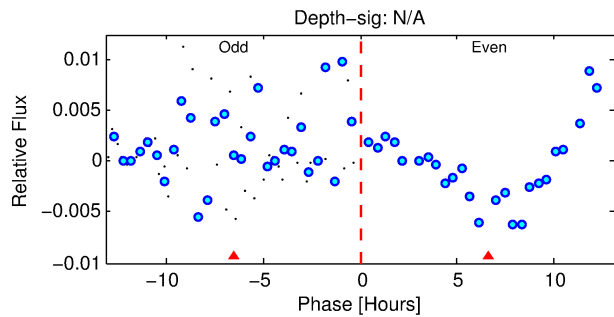
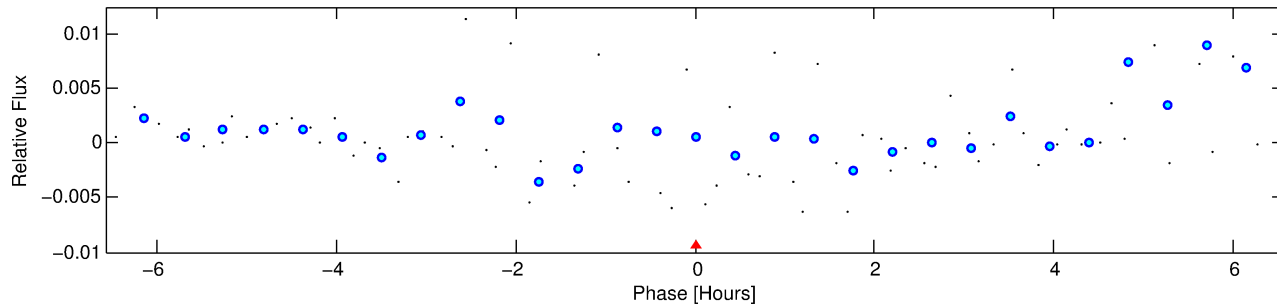
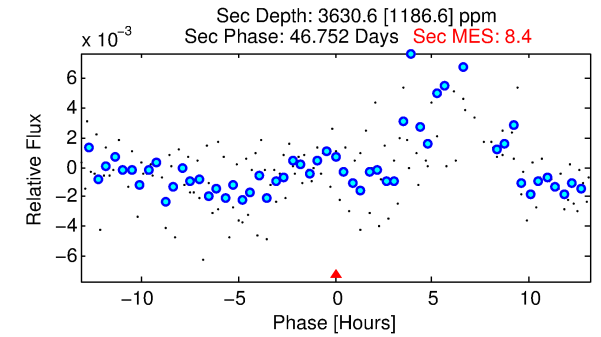
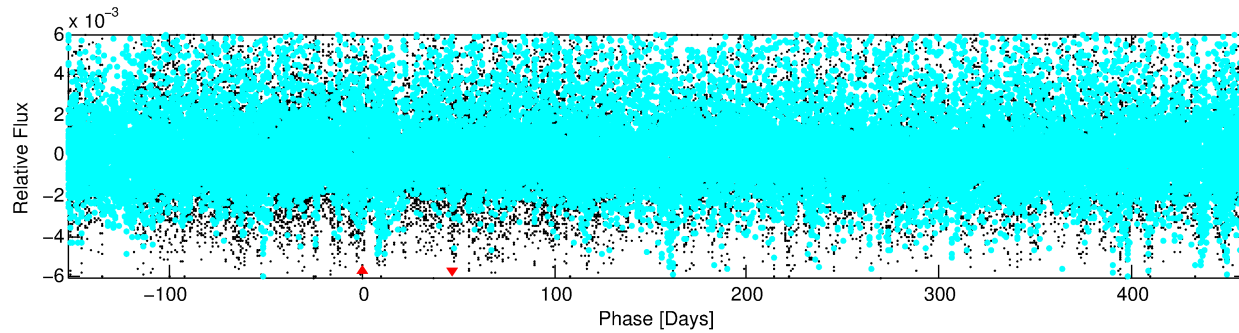
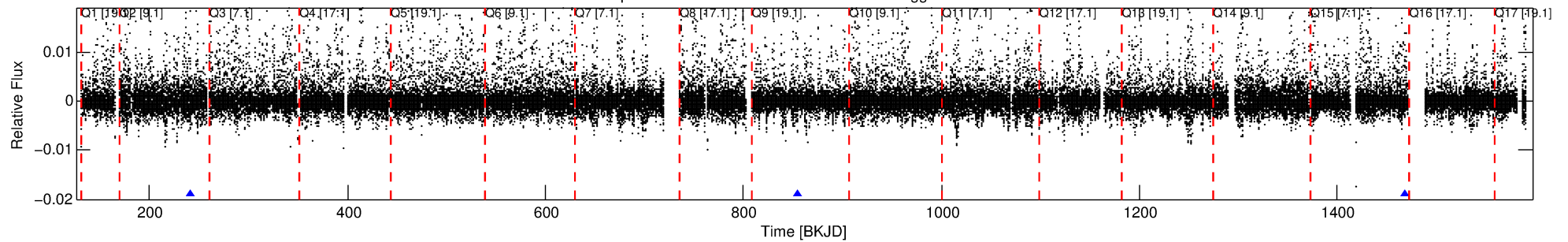
Ephemeris Match Information For 006619377-01

No Significant Match Found

DV One-Page Summary

KIC: 6619377 Candidate: 1 of 1 Period: 613.409 d

Kp: 12.91 R*: 1.19 Rs Teff: 6571.0 K Logg: 4.37 Fe/H: -0.100



TPS TCE Results:

Period = 613.40866 d
Epoch = 241.0349 BKJD

DV fit results are unavailable

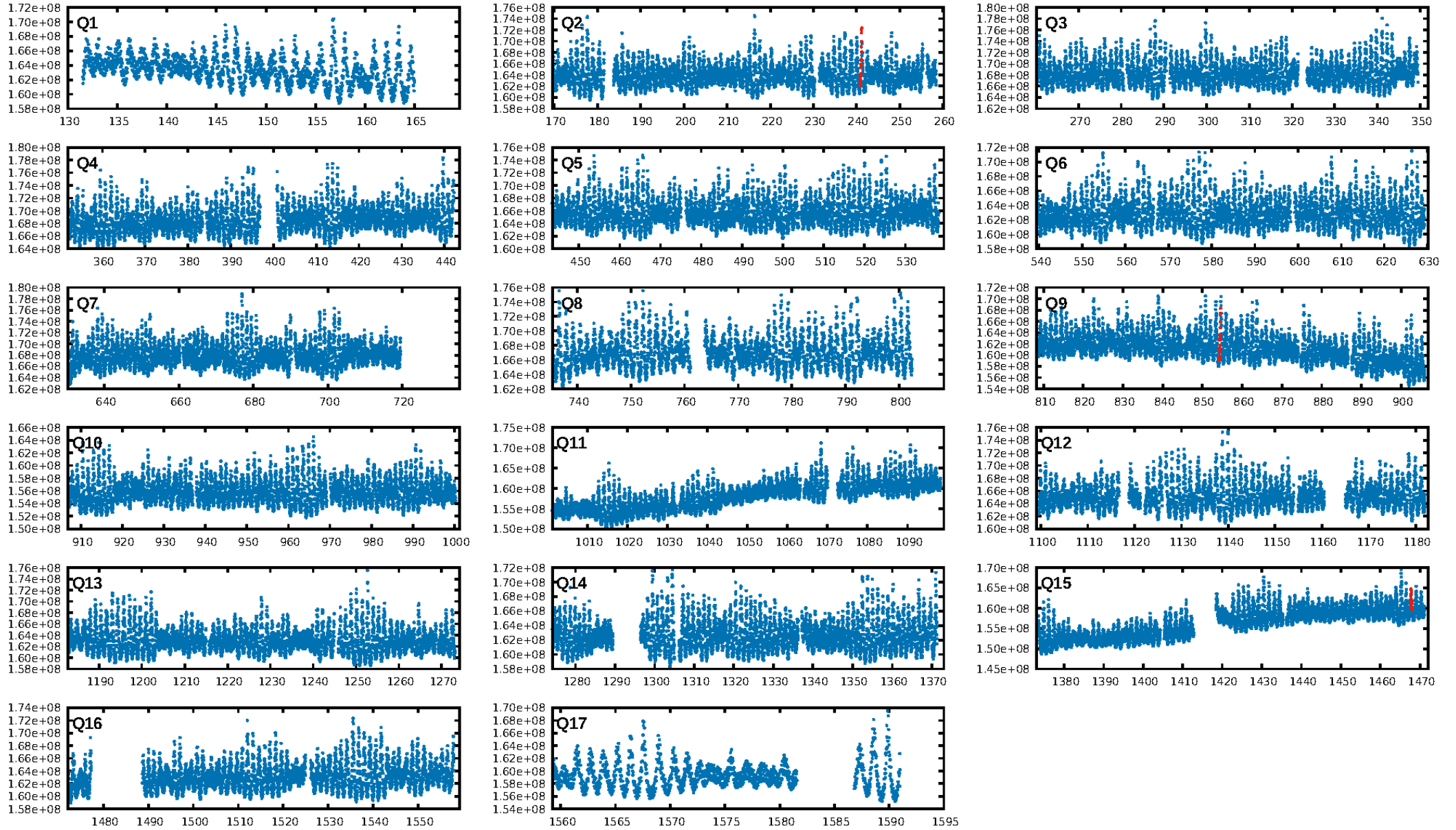
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.30e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.500 arcsec [1.46σ]
KicOffset-rm: 0.462 arcsec [0.81σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

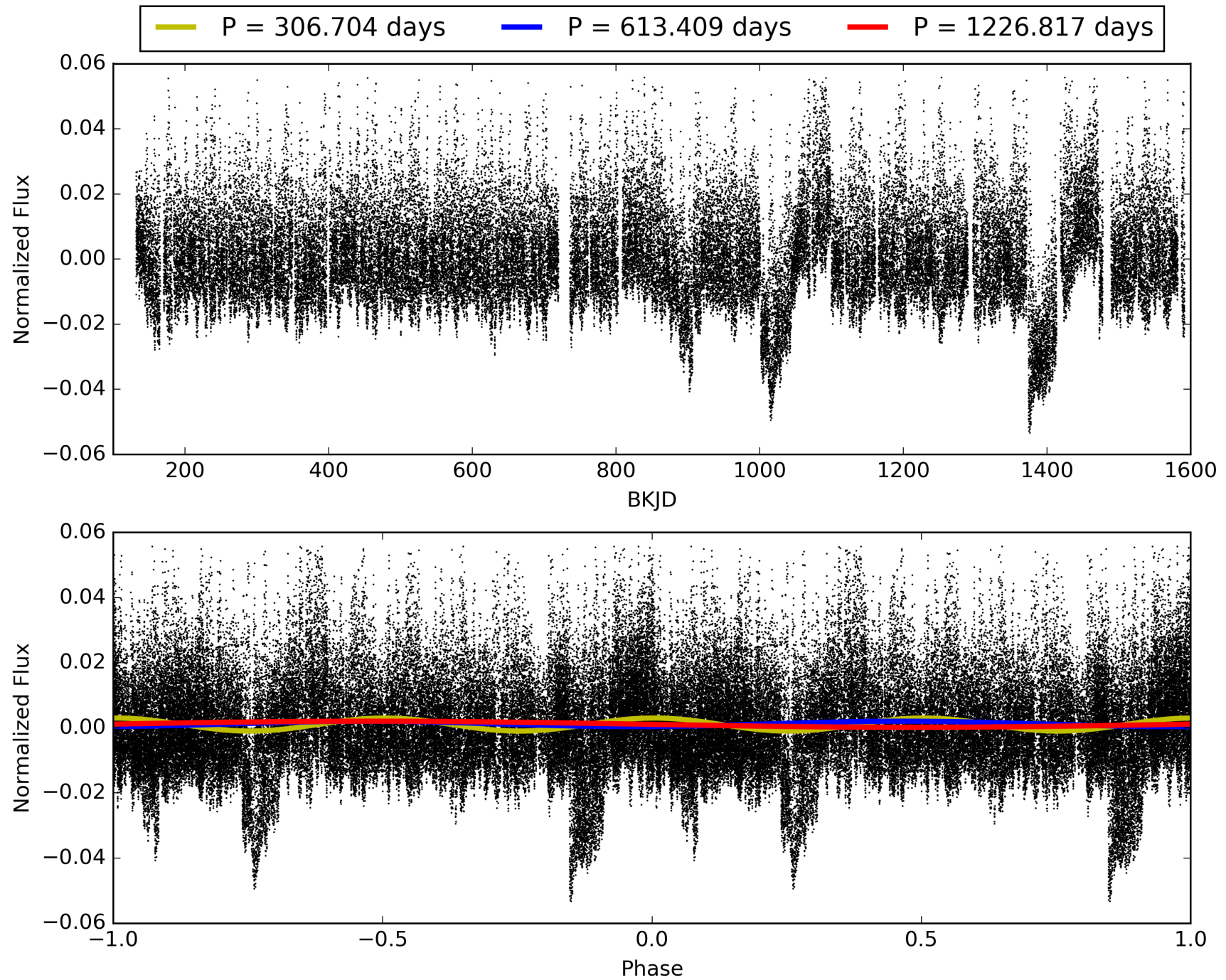
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:06:19 Z

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

TCE 006619377-01, PDC Light Curves

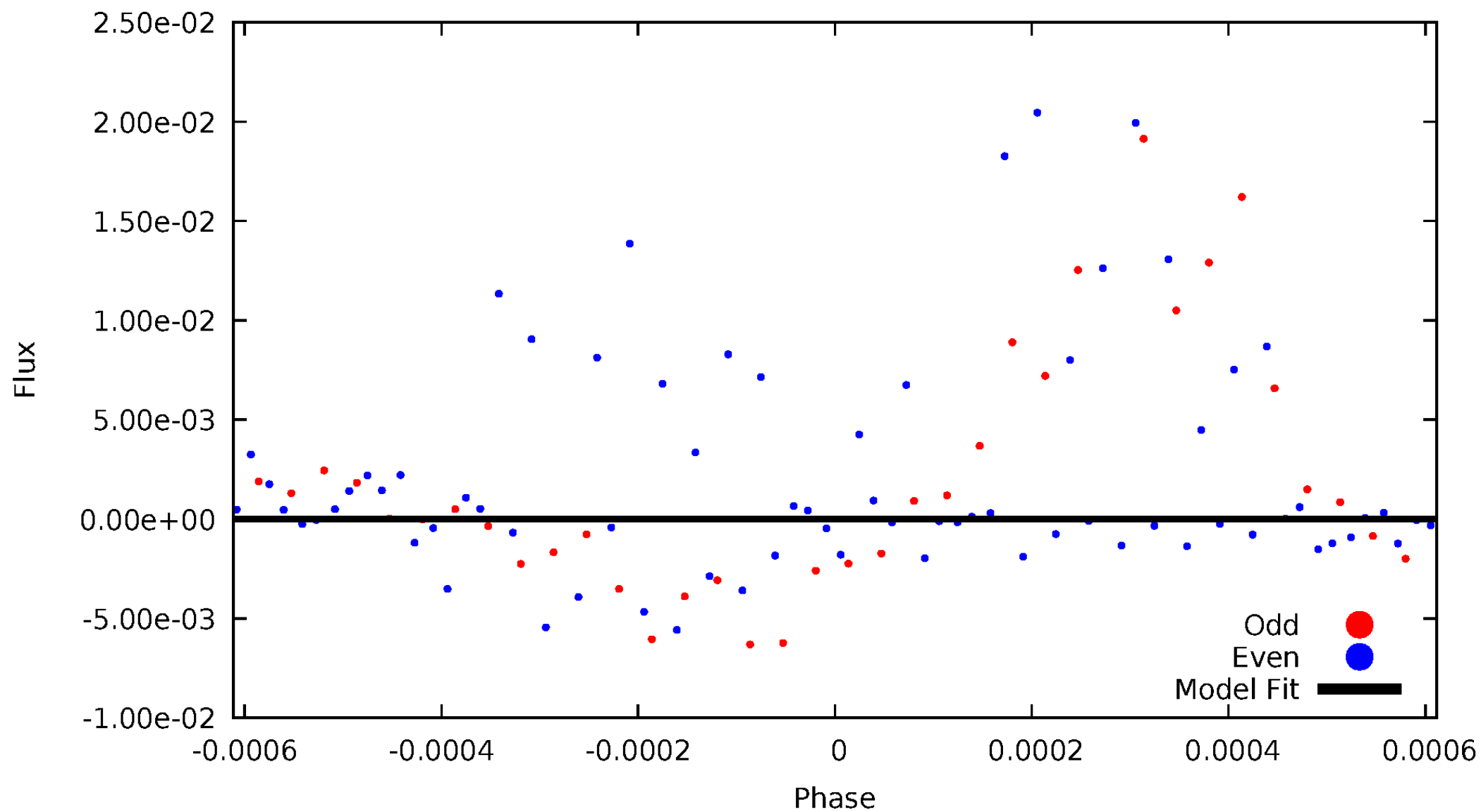


TCE 006619377-01



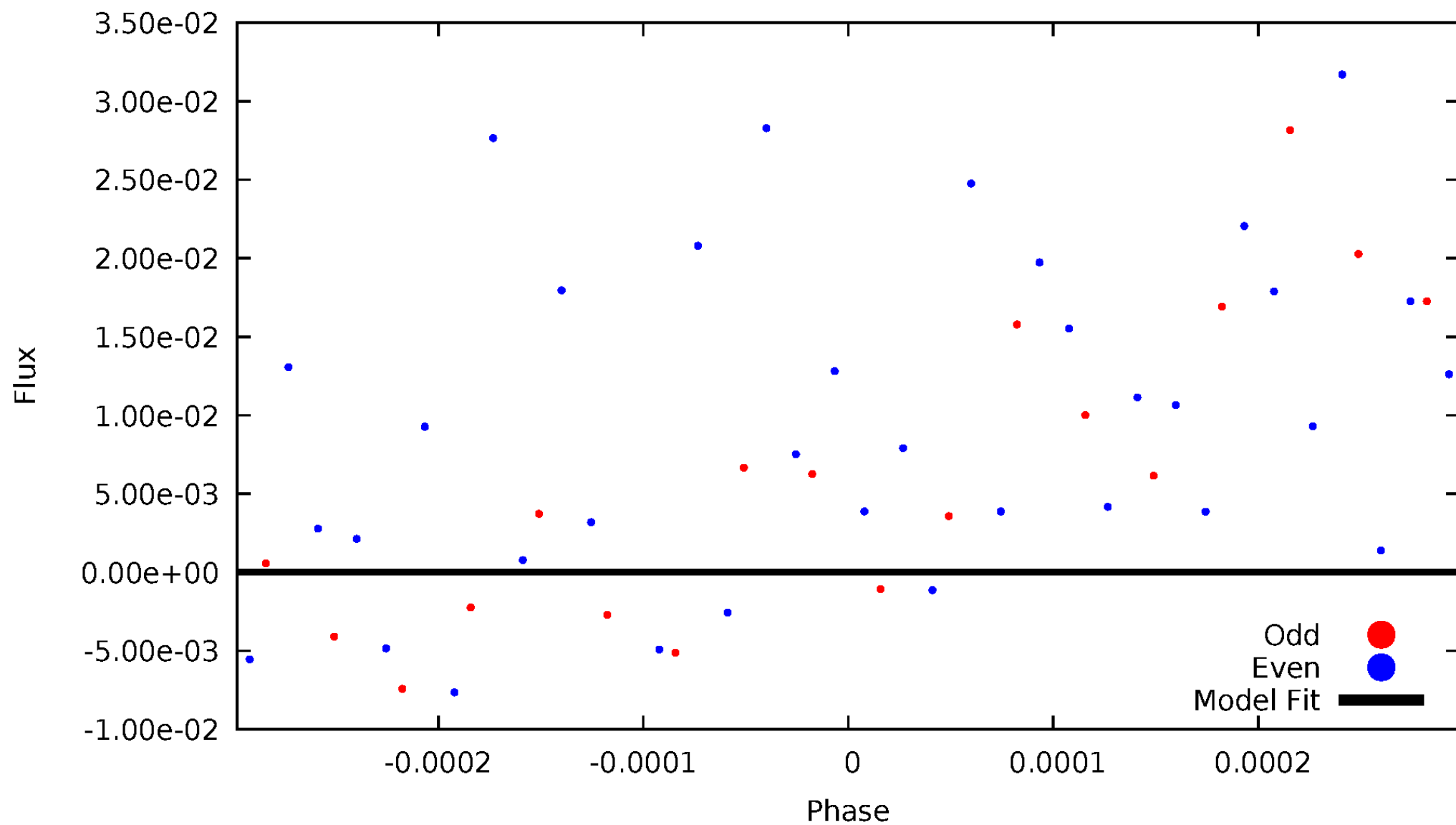
DV Odd/Even

TCE 006619377-01



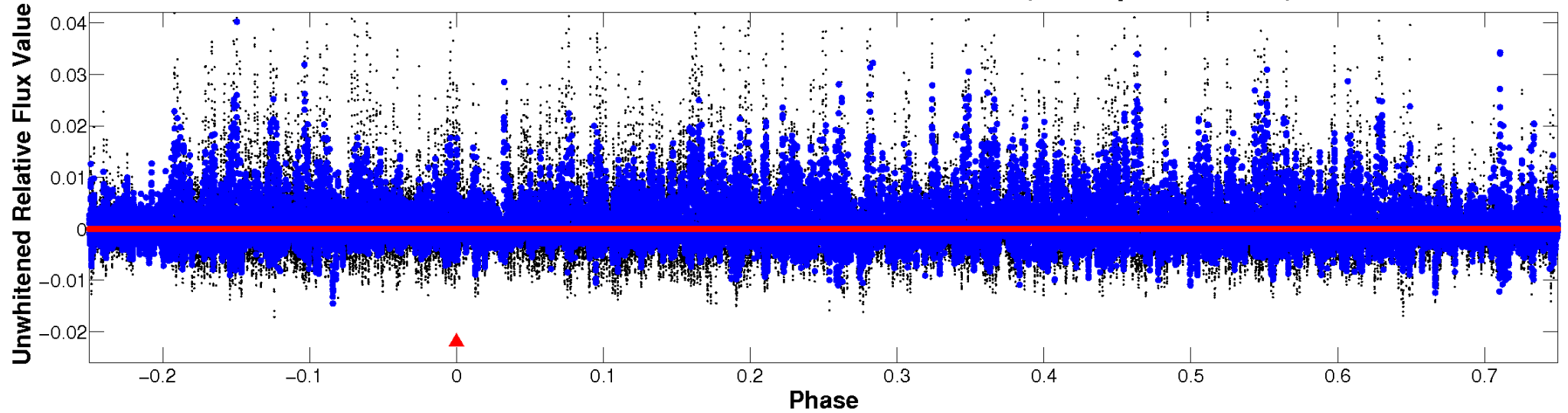
ALT Odd/Even

TCE 006619377-01

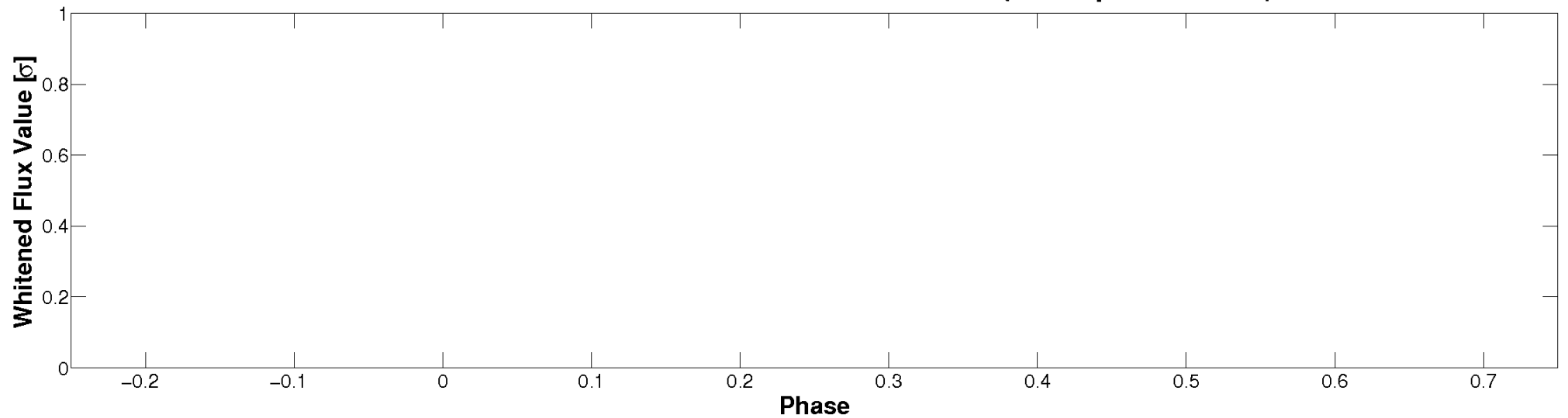


Non-Whitened Vs. Whitened Light Curve

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

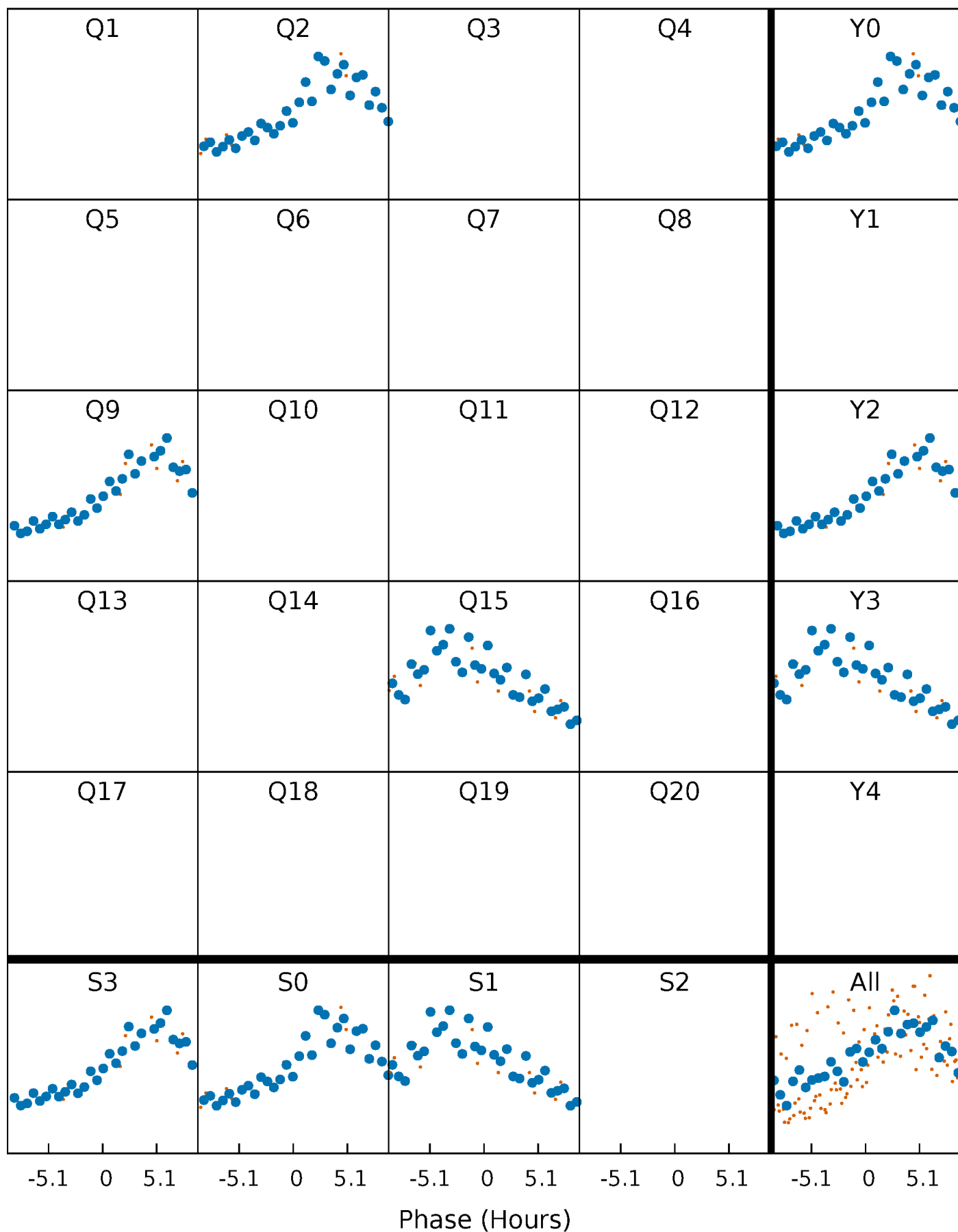


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



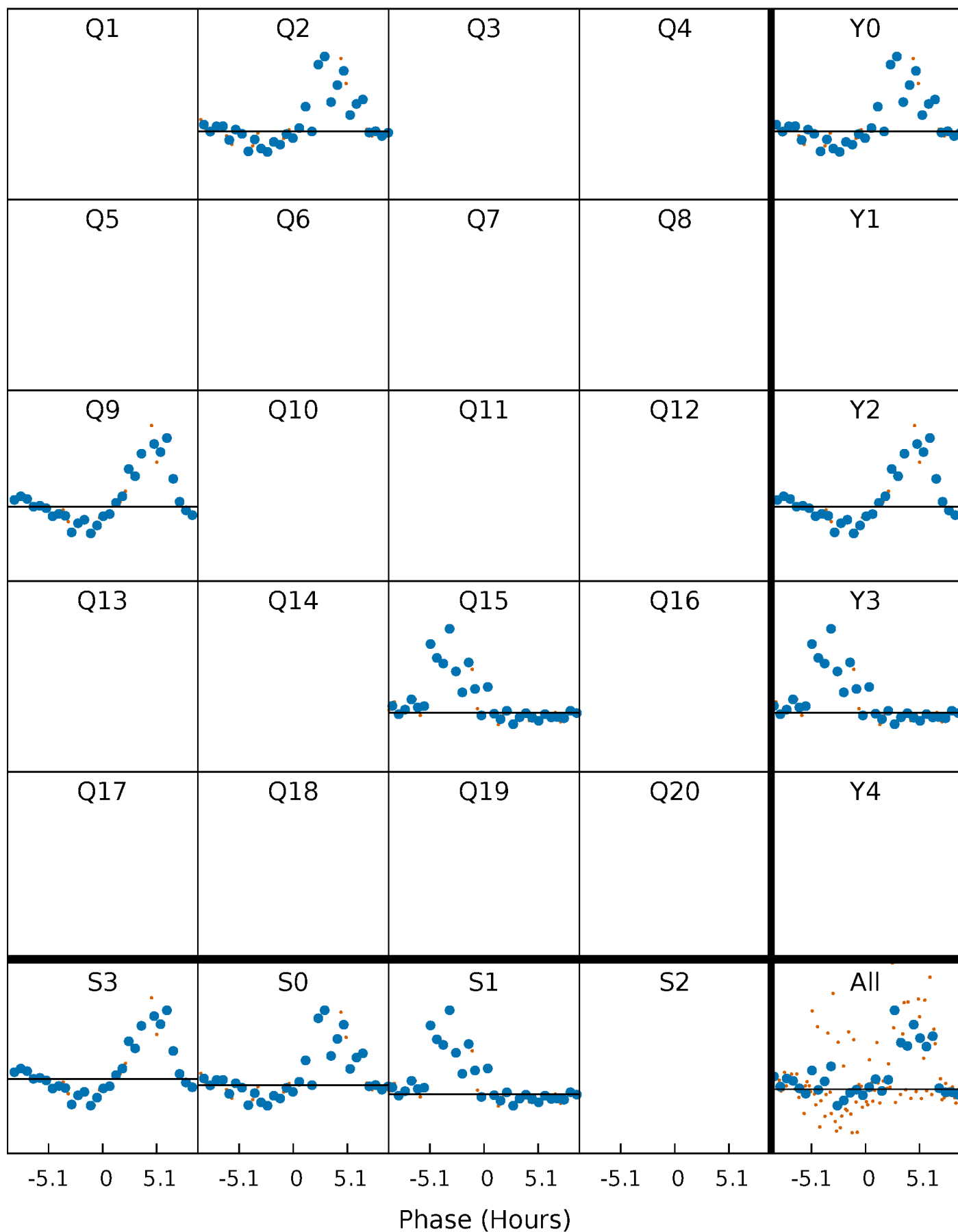
PDC Quarter-Phased Transit Curves

TCE 006619377-01 P=613.408660 Days $T_0=241.034875$ (BKJD)



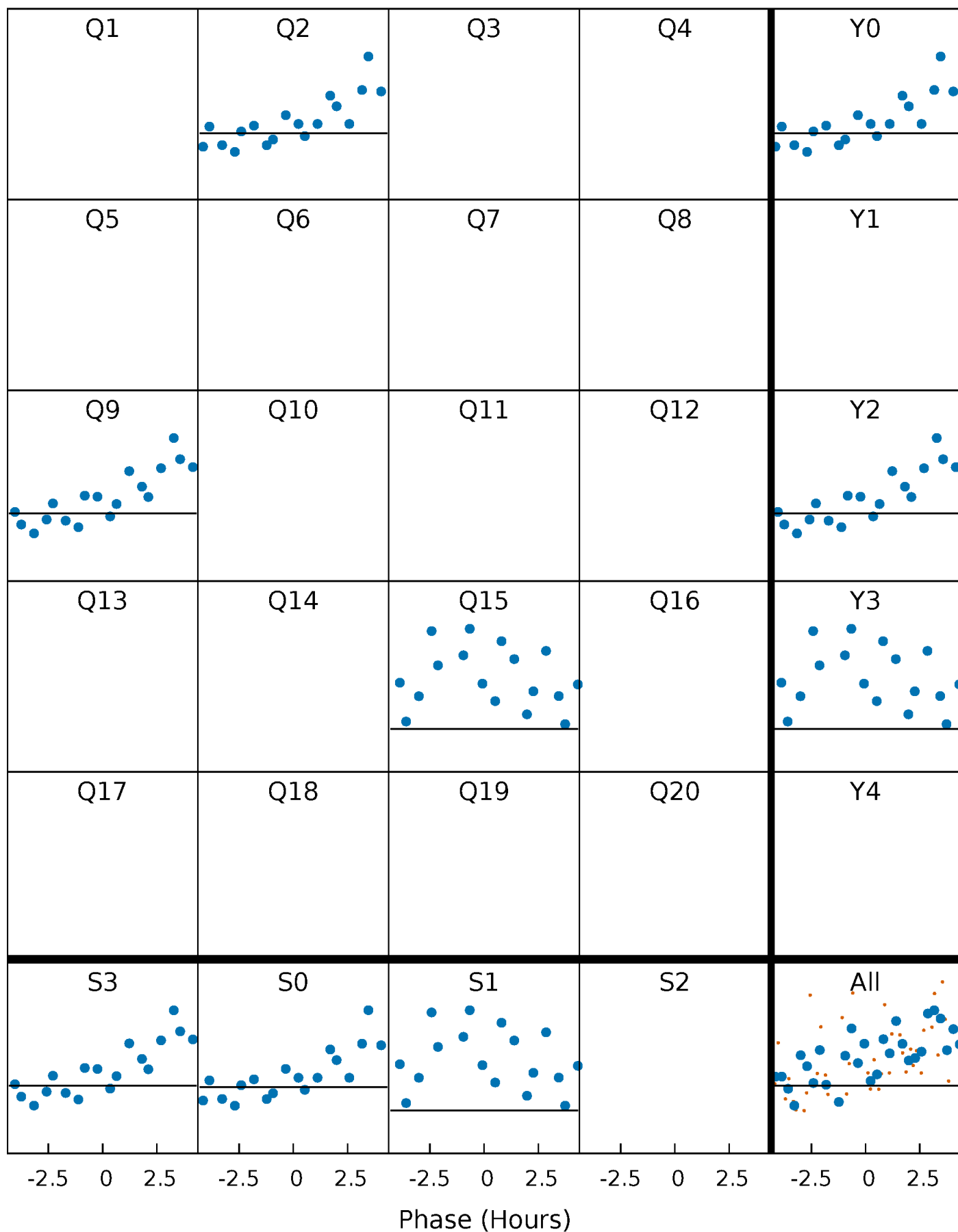
DV Quarter-Phased Transit Curves

TCE 006619377-01 P=613.408660 Days $T_0=241.034875$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

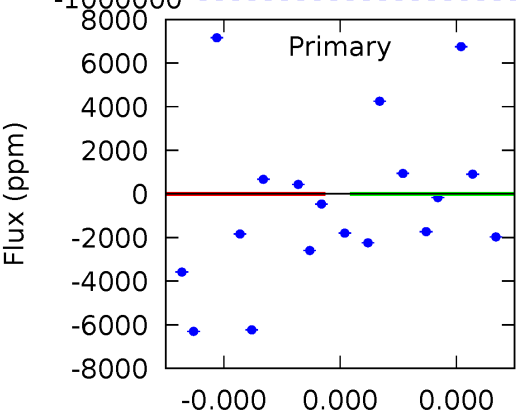
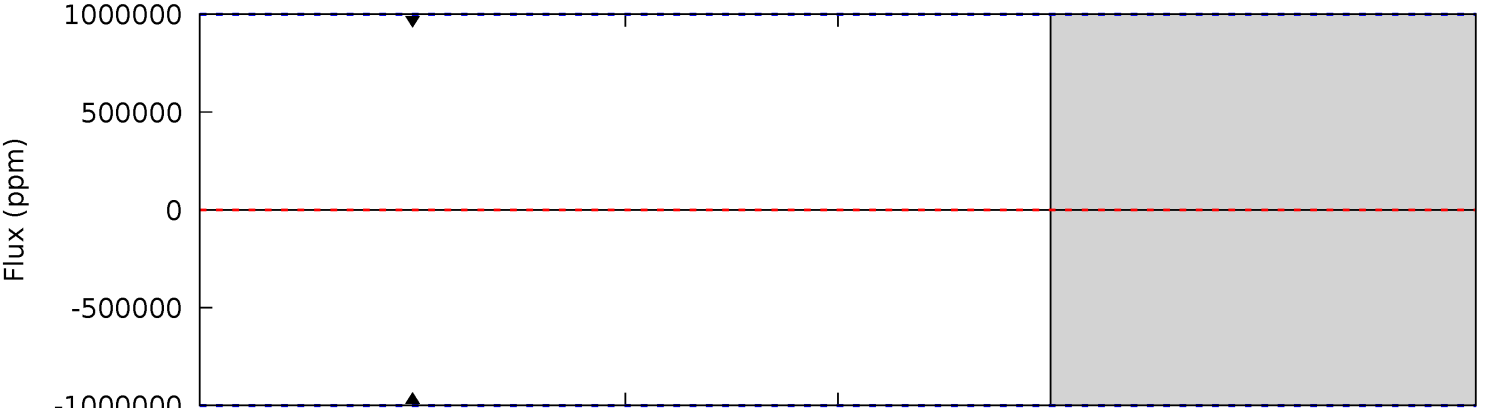
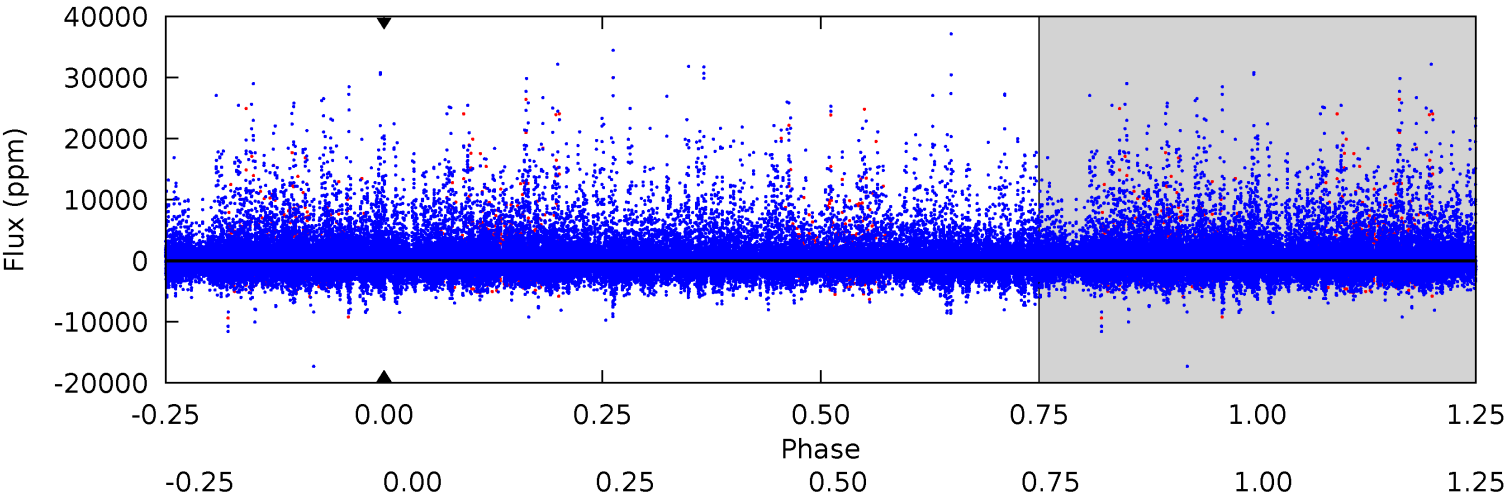
TCE 006619377-01 P=613.408660 Days $T_0=240.931538$ (BKJD)



DV Model-Shift Uniqueness Test

006619377-01, P = 613.408660 Days, E = 241.034875 Days

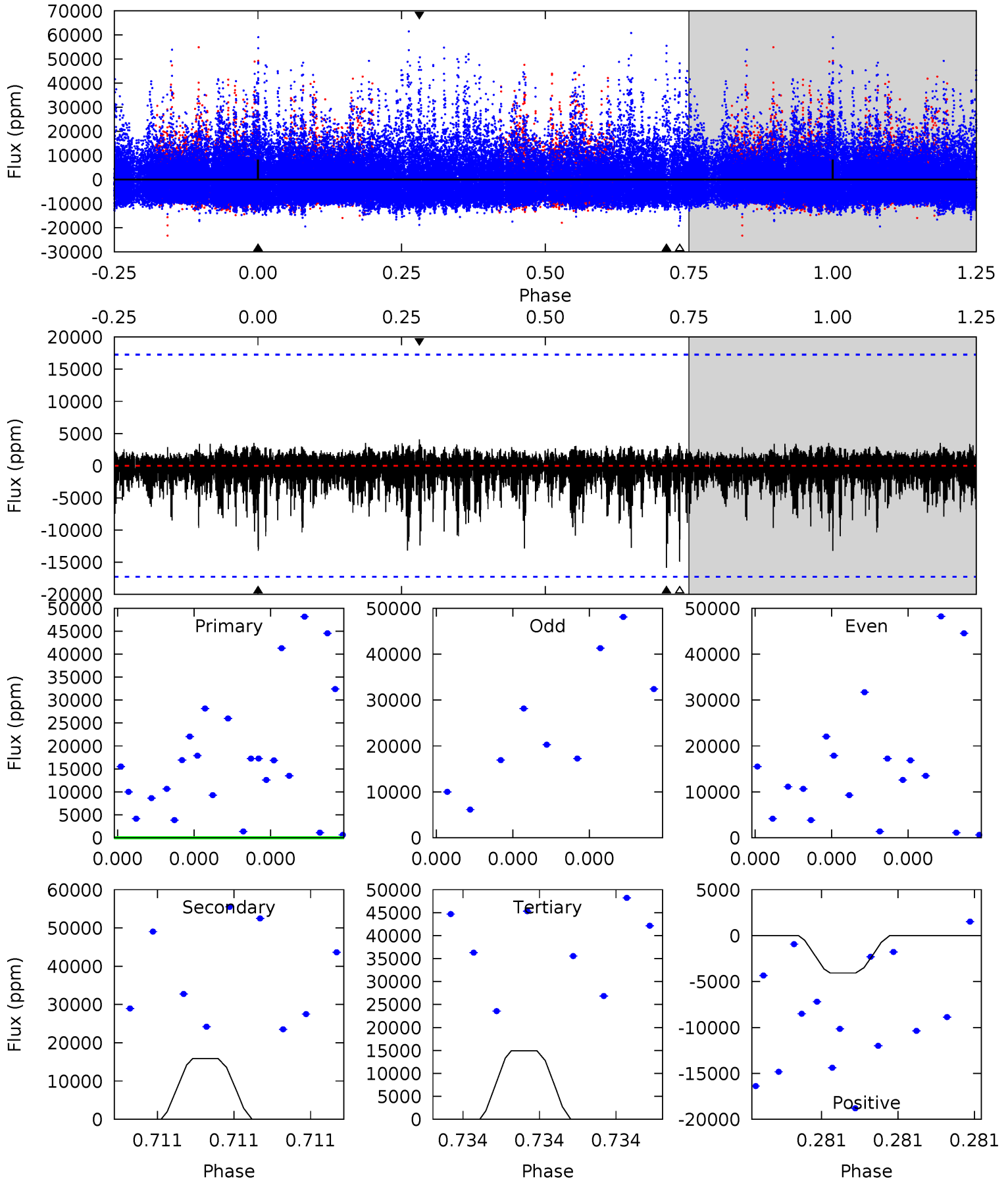
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006619377-01, P = 613.408660 Days, E = 240.931538 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.79	5.38	5.06	1.38	5.85	3.89	0.69	-2.27	1.41	0.31	3.99	1.28	1.64	0.20	1.61



Stellar Parameters For KIC 006619377

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6571^{+149}_{-198}	$4.368^{+0.072}_{-0.180}$	$-0.100^{+0.250}_{-0.350}$	$1.192^{+0.338}_{-0.145}$	$1.213^{+0.164}_{-0.164}$	$1.008^{+0.324}_{-0.508}$
	+2%/-3%	+2%/-4%	+250%/-350%	+28%/-12%	+14%/-14%	+32%/-50%
Source	PHO1	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 006619377-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$10.39^{+10.36}_{-7.28}$	364^{+24}_{-18}	3298^{+30306}_{-28493}	$1408^{+2656111}_{-1793524}$
Alt.	-15863 ± 2951	$9.54^{+8.93}_{-6.66}$	364^{+23}_{-17}	9298^{+20962}_{-3094}	$223763^{+2142878}_{-167579}$

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

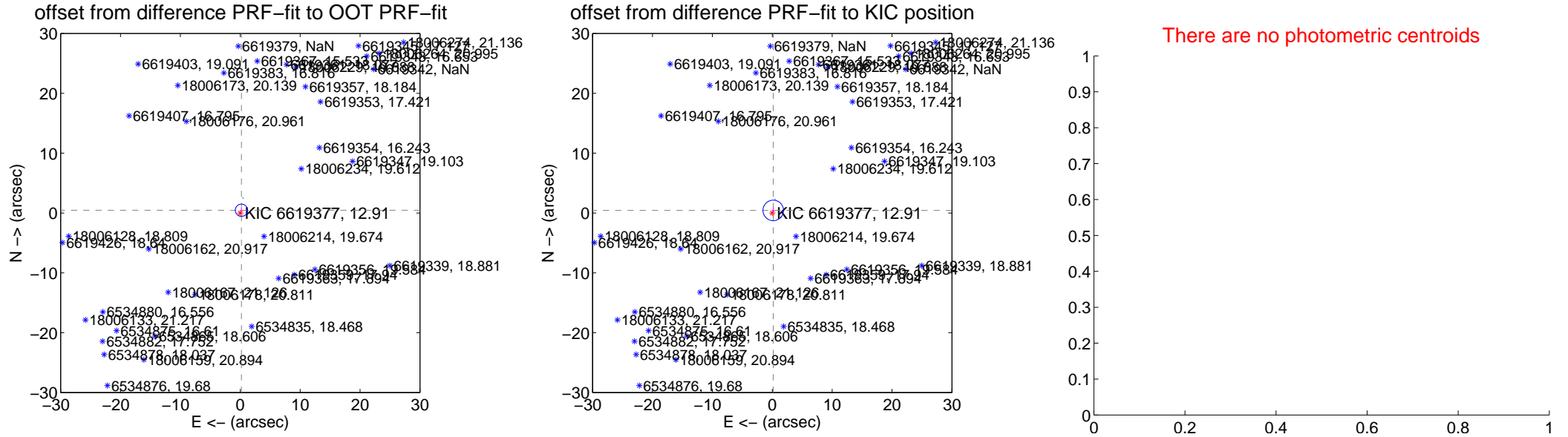
DV Centroid Data

Supplemental centroid analysis for 006619377-01. Kepler magnitude: 12.91. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.49 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.500 ± 0.342	1.46	-0.193 ± 0.077	0.462 ± 0.355
PRF-fit source offset from KIC position	0.462 ± 0.571	0.81	-0.162 ± 0.120	0.433 ± 0.572
photometric centroid source offset	—	—	—	—



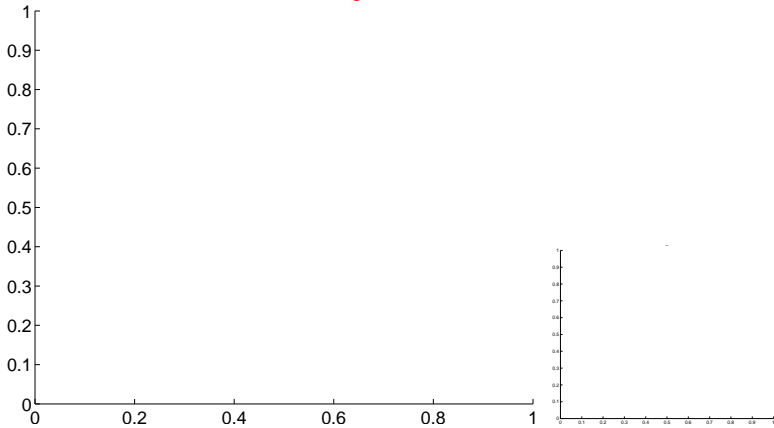
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

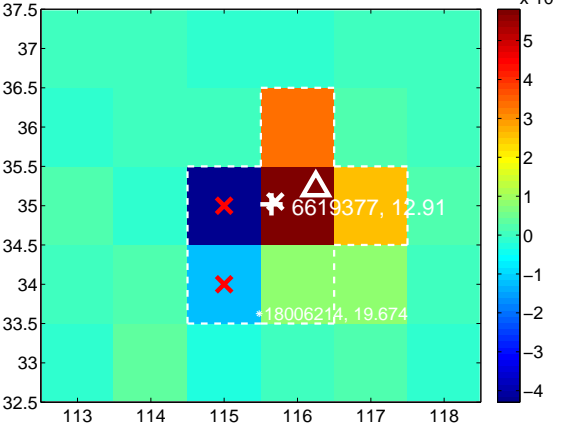
Q1 no difference image



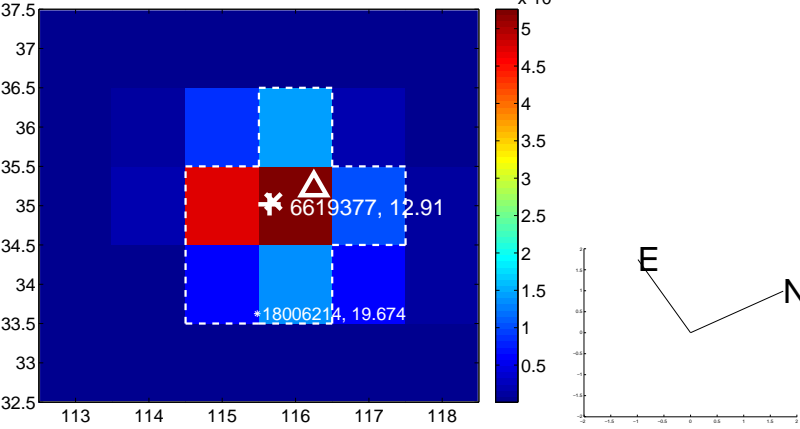
Q1 no OOT image



Q2 difference image



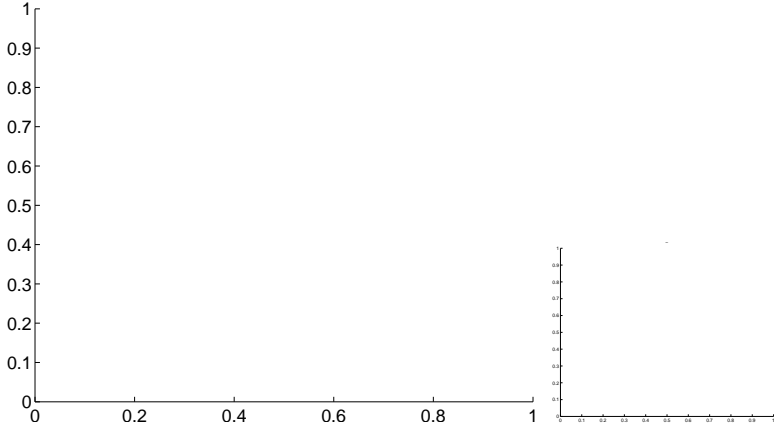
Q2 OOT image



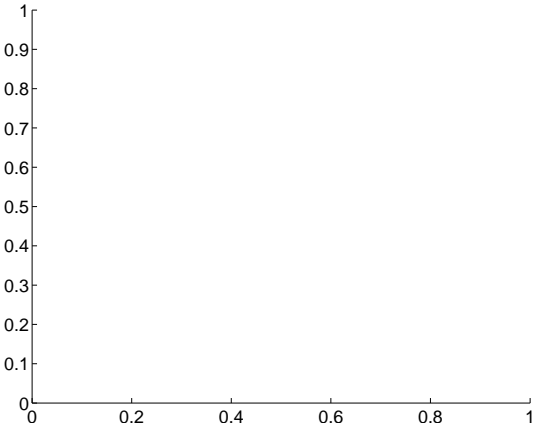
Q3 no difference image



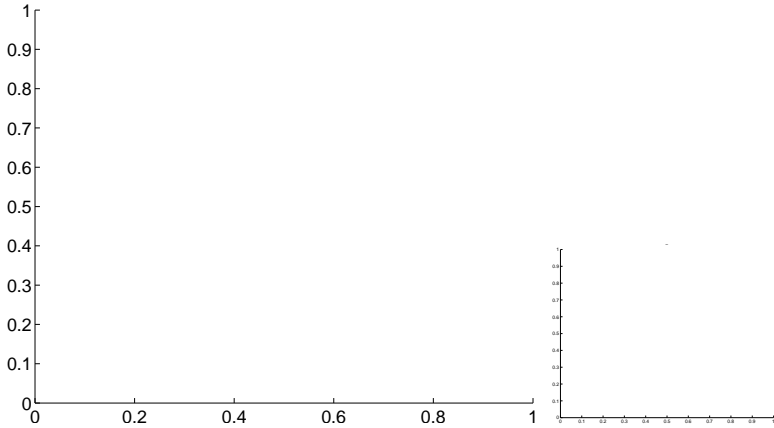
Q3 no OOT image



Q4 no difference image



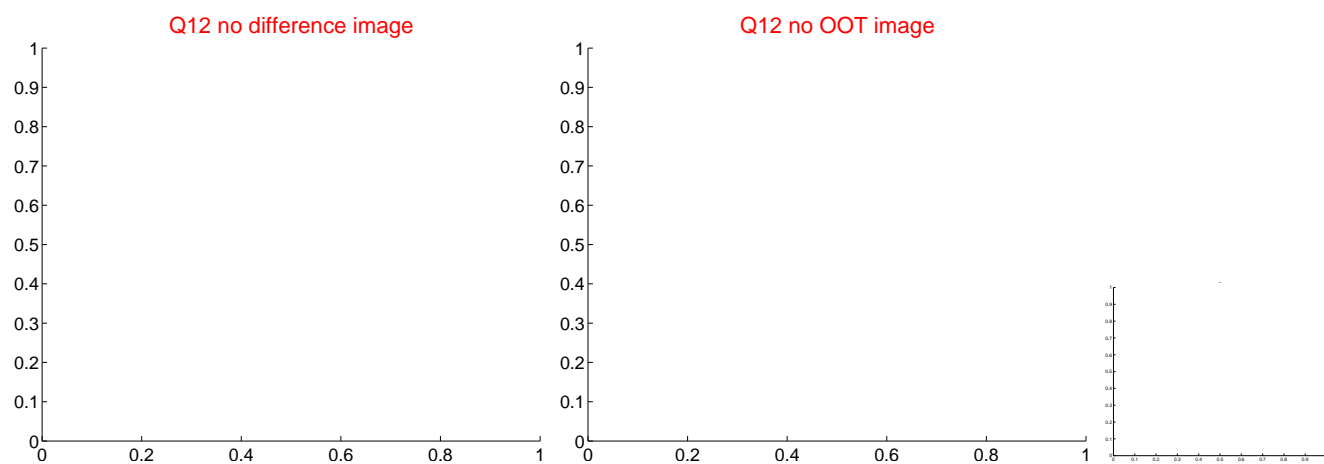
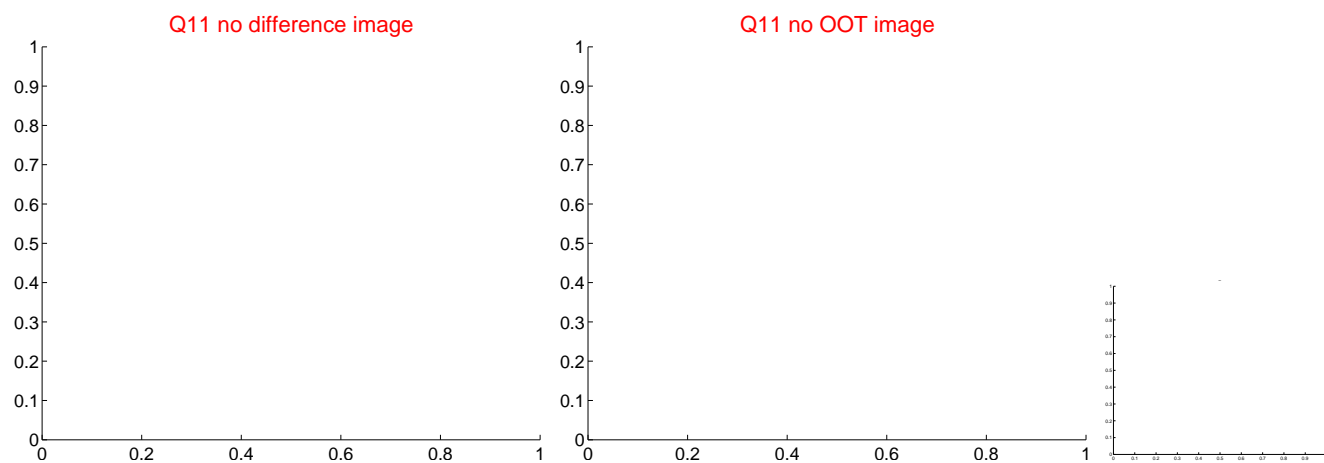
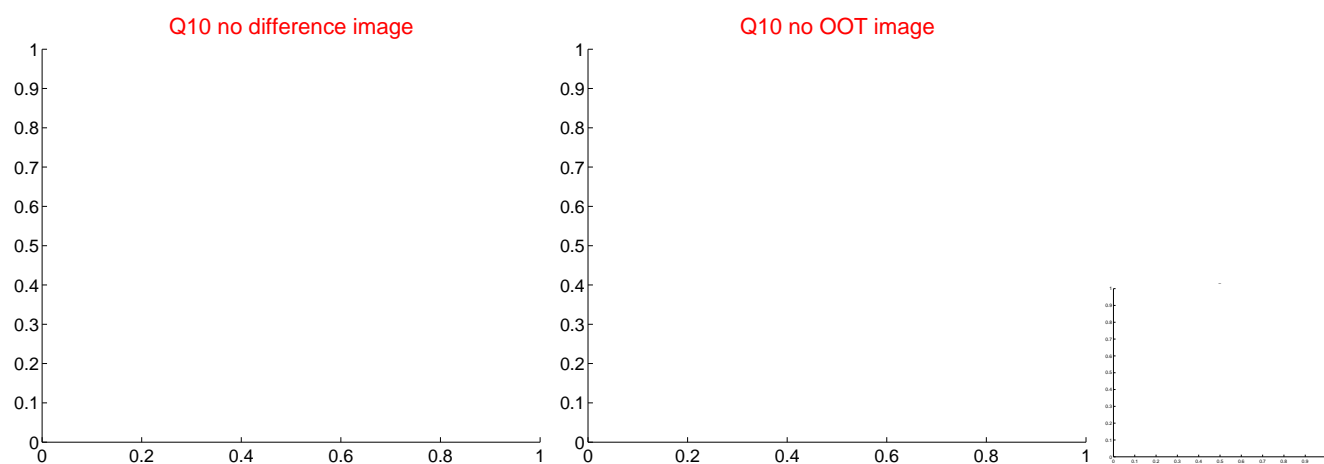
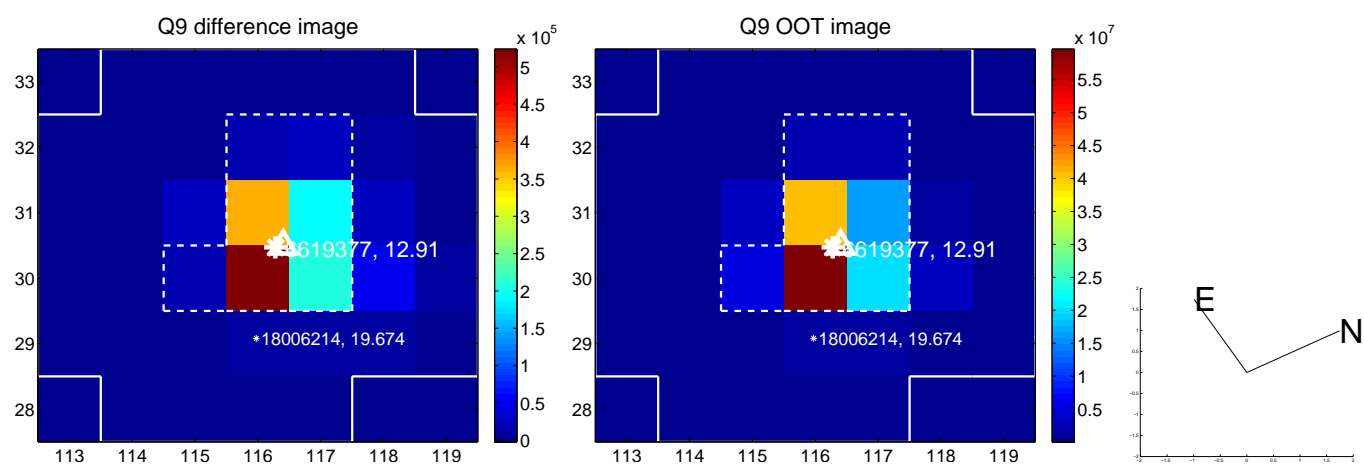
Q4 no OOT image



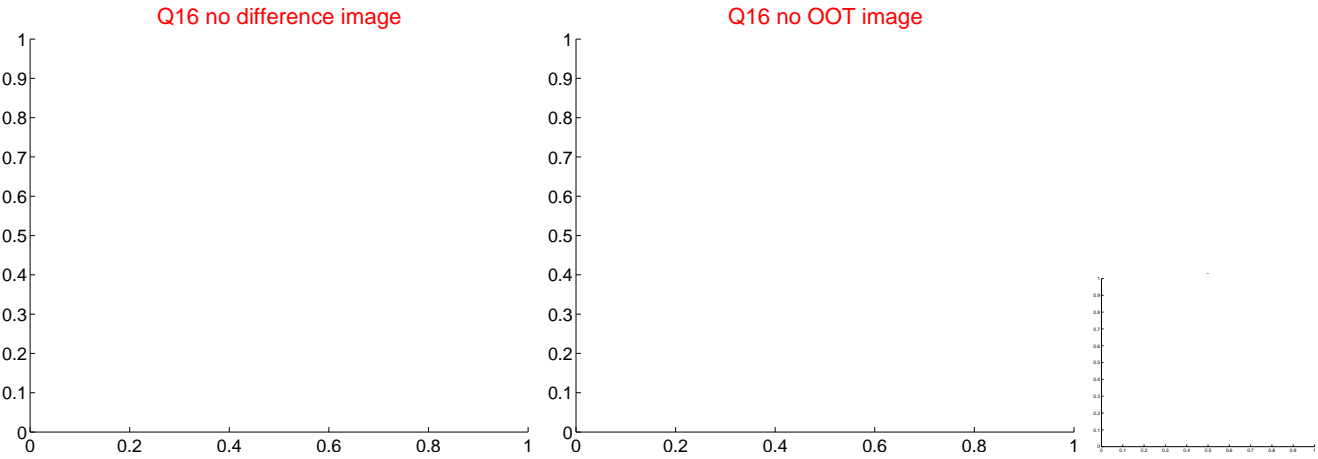
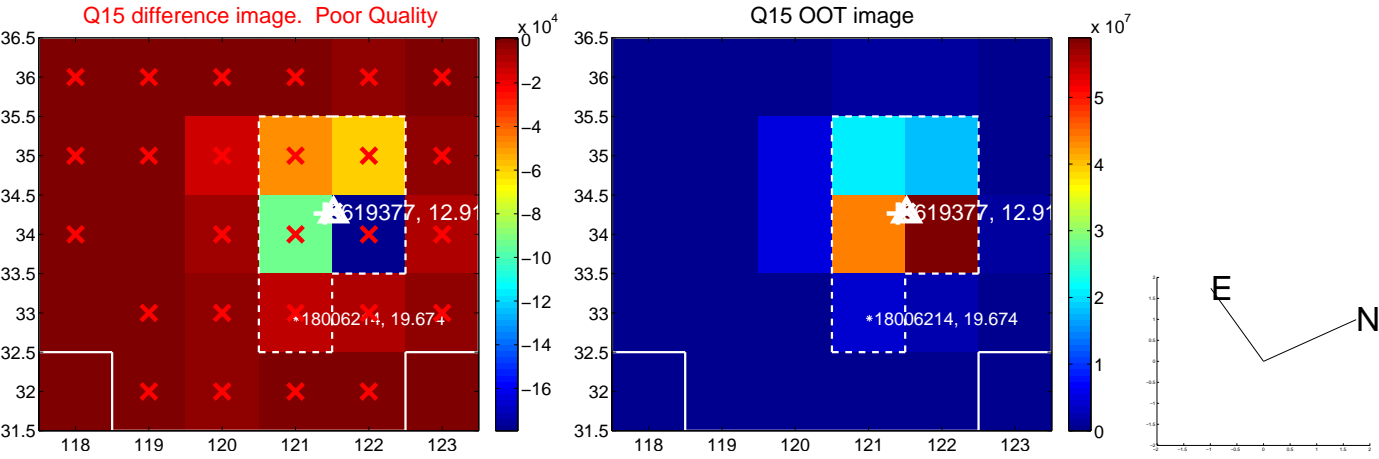
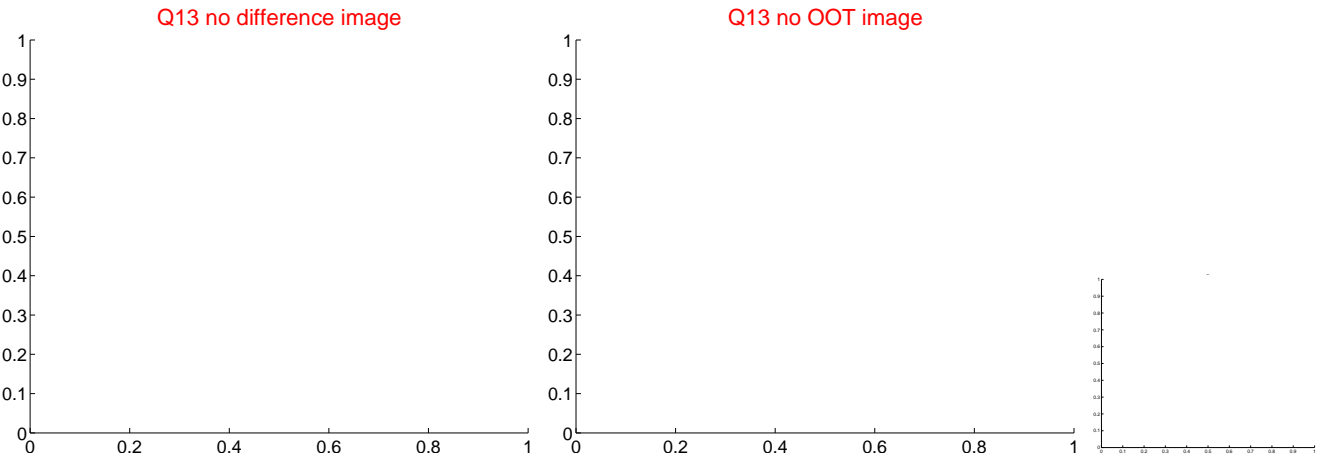
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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folded centroid time series figure for this object.

UKIRT Image

Declination

