

KIC 005528061

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})
005528061-01	OBS	No	379.156234	432.444671	777.8	2.840	10.6	7.0	0.80	5596	2.32	0.59

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005528061-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_POS_DV—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.

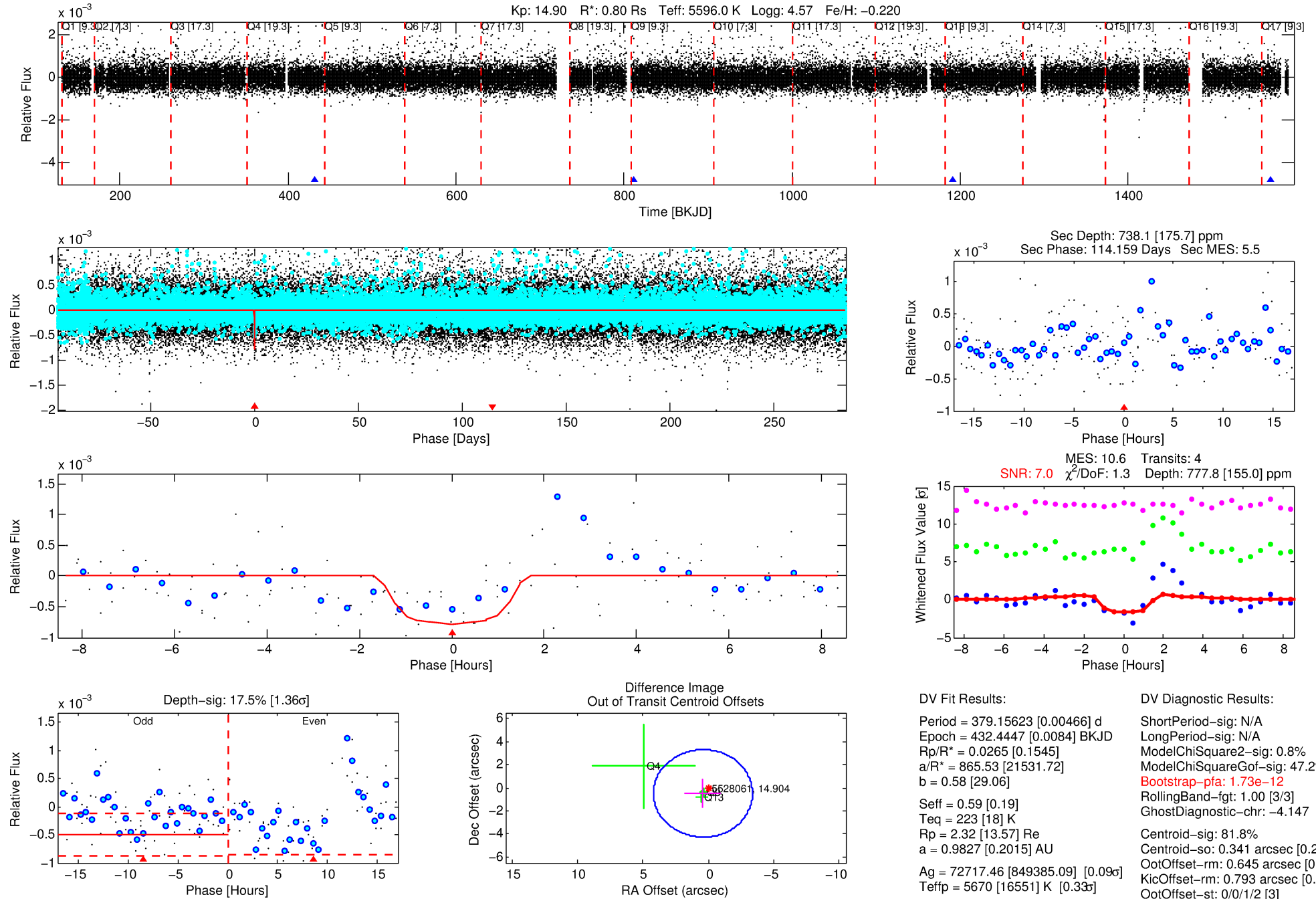
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005528061-01

No Significant Match Found

DV One-Page Summary

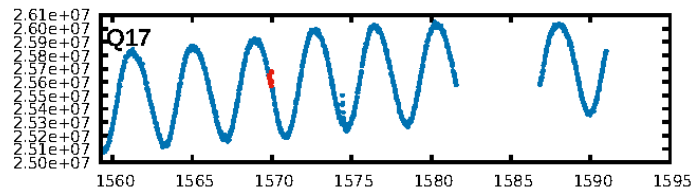
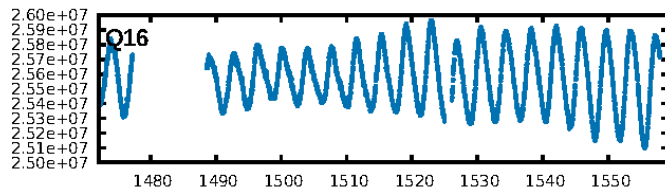
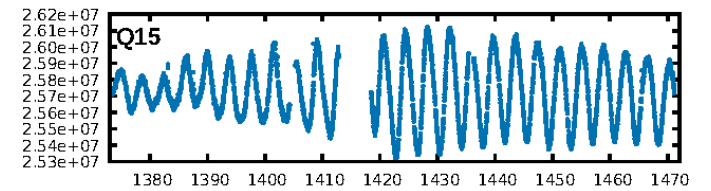
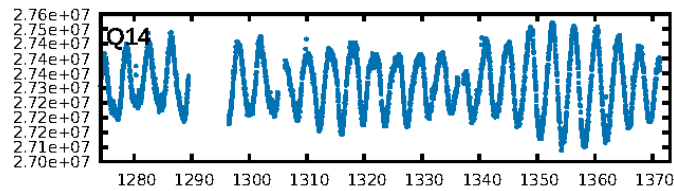
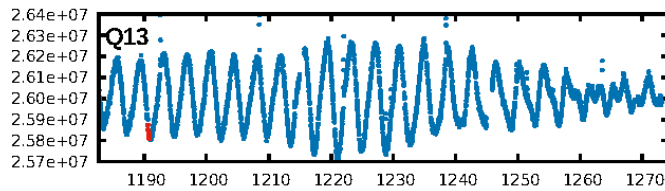
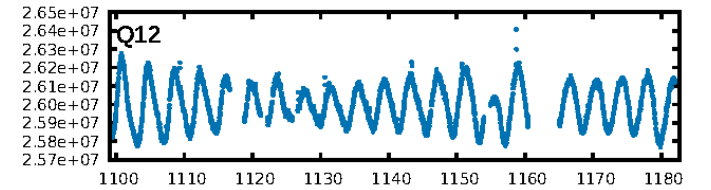
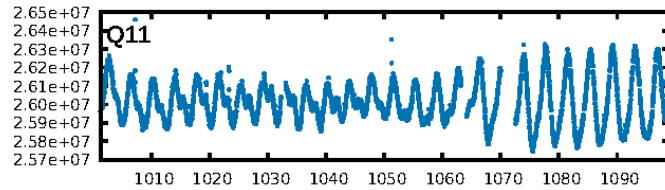
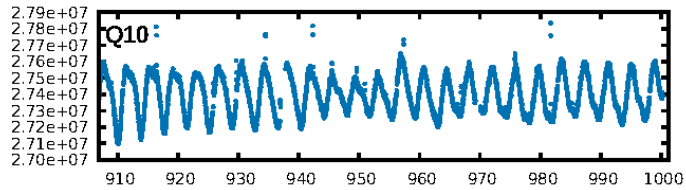
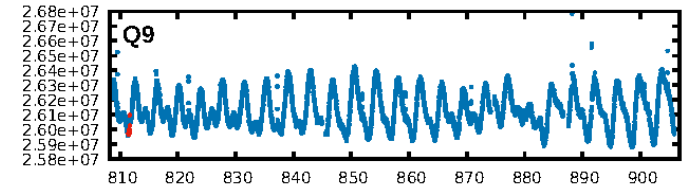
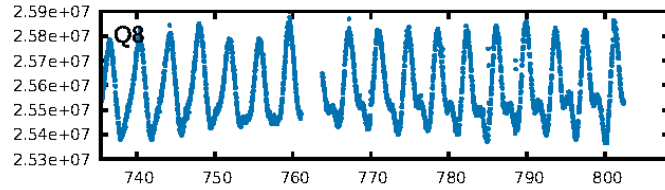
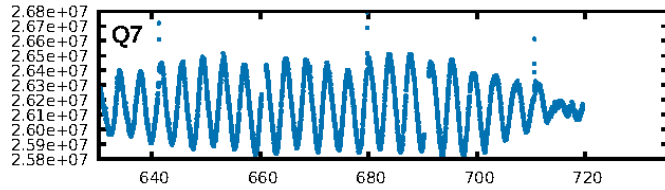
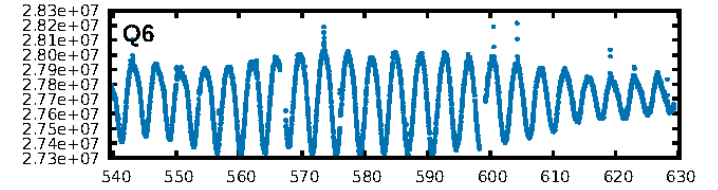
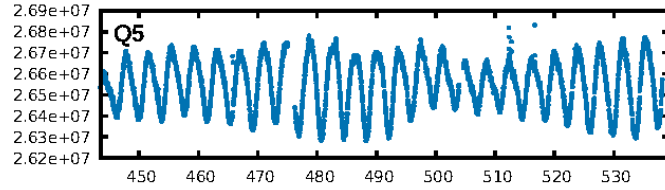
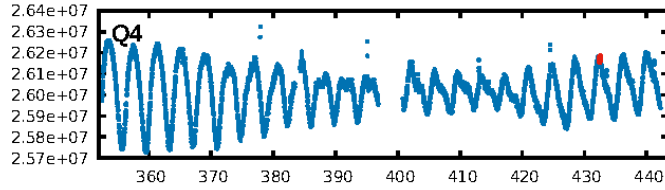
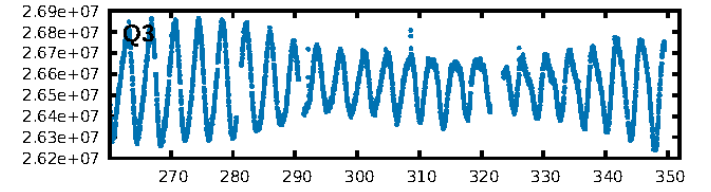
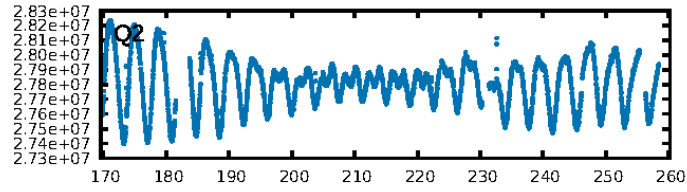
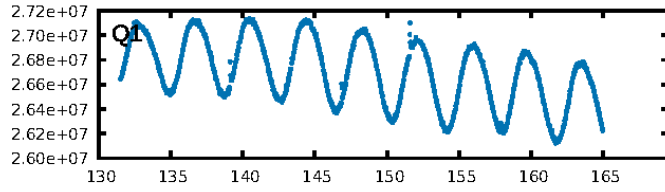
KIC: 5528061 Candidate: 1 of 1 Period: 379.156 d



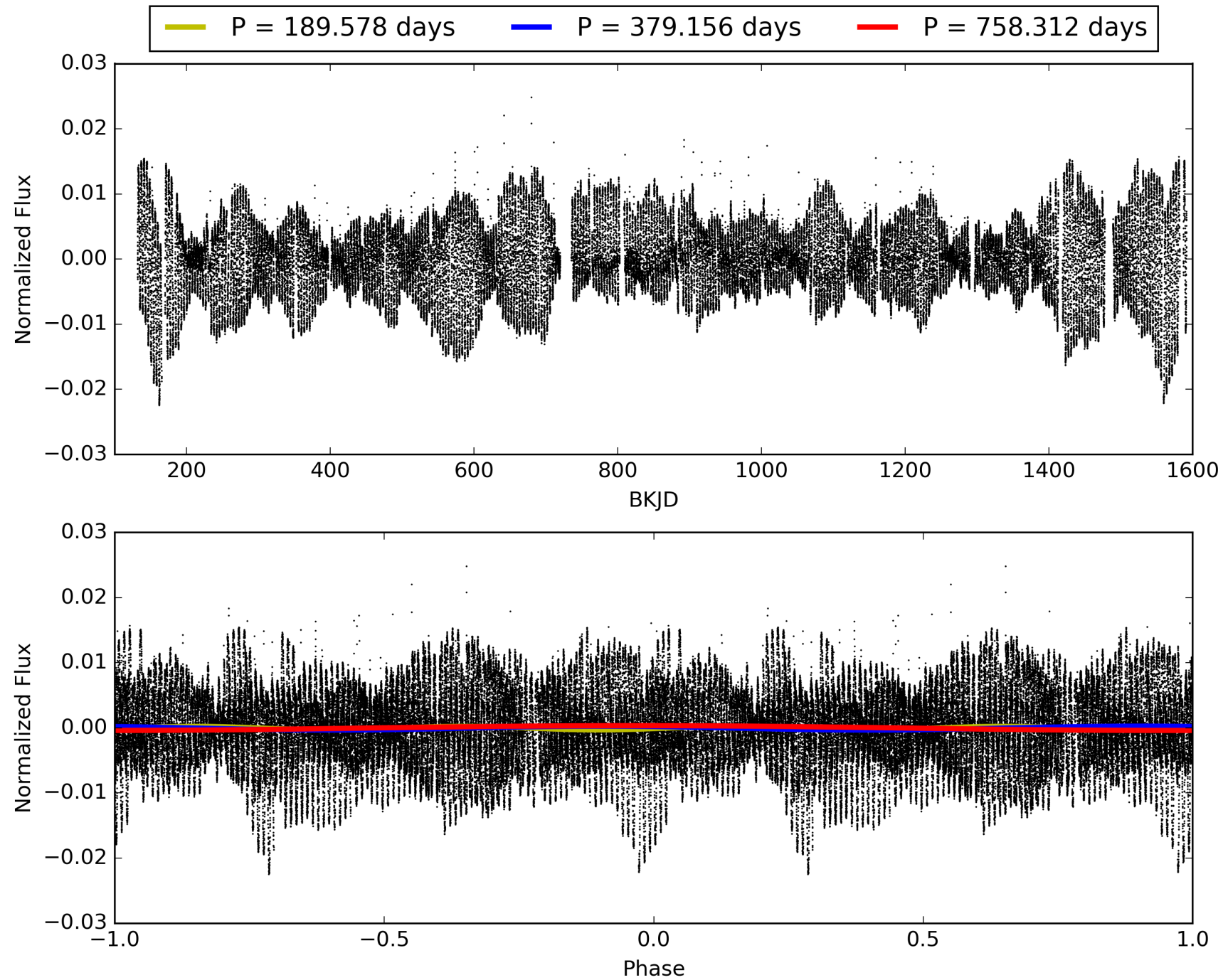
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:03:48 Z

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

TCE 005528061-01, PDC Light Curves

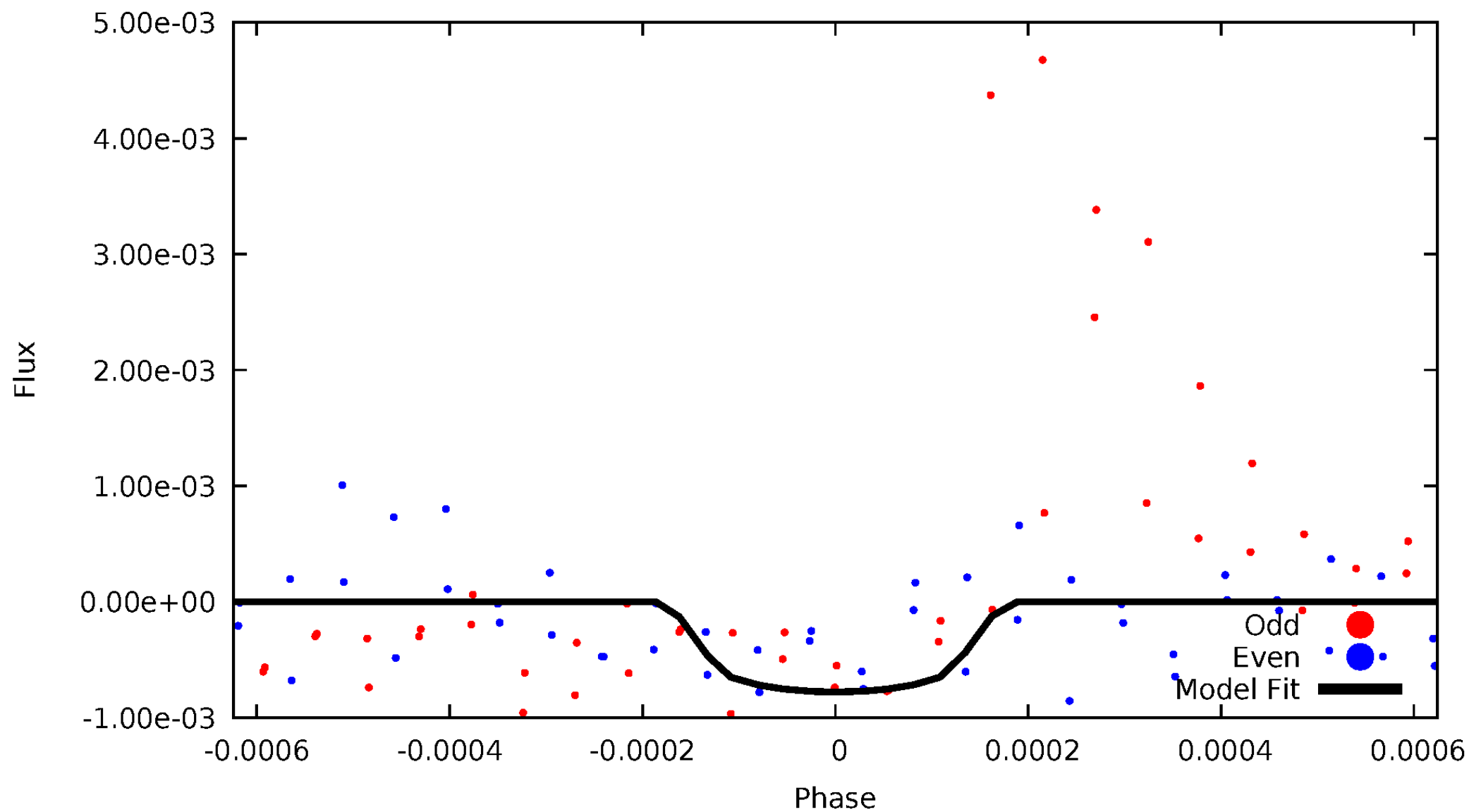


TCE 005528061-01



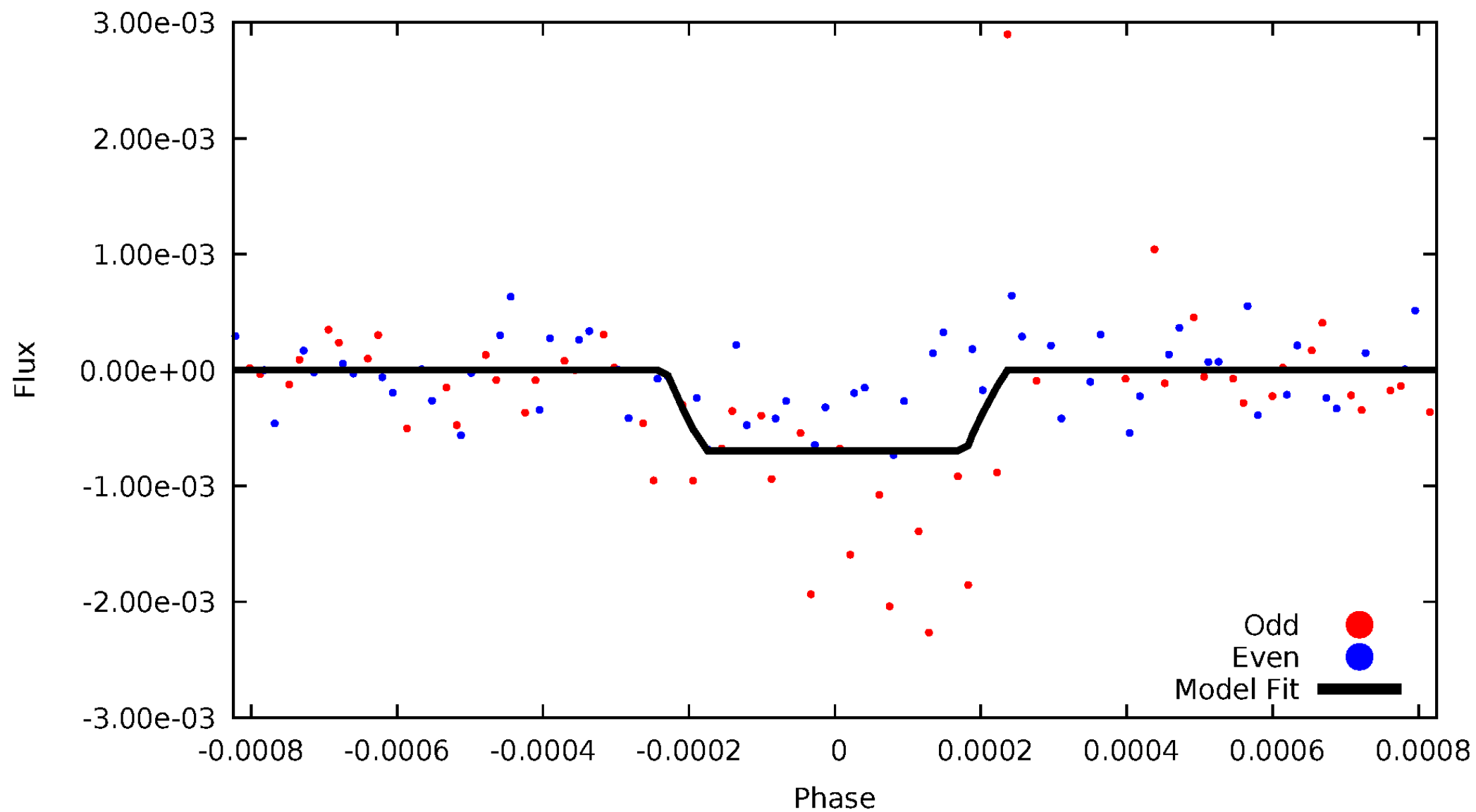
DV Odd/Even

TCE 005528061-01



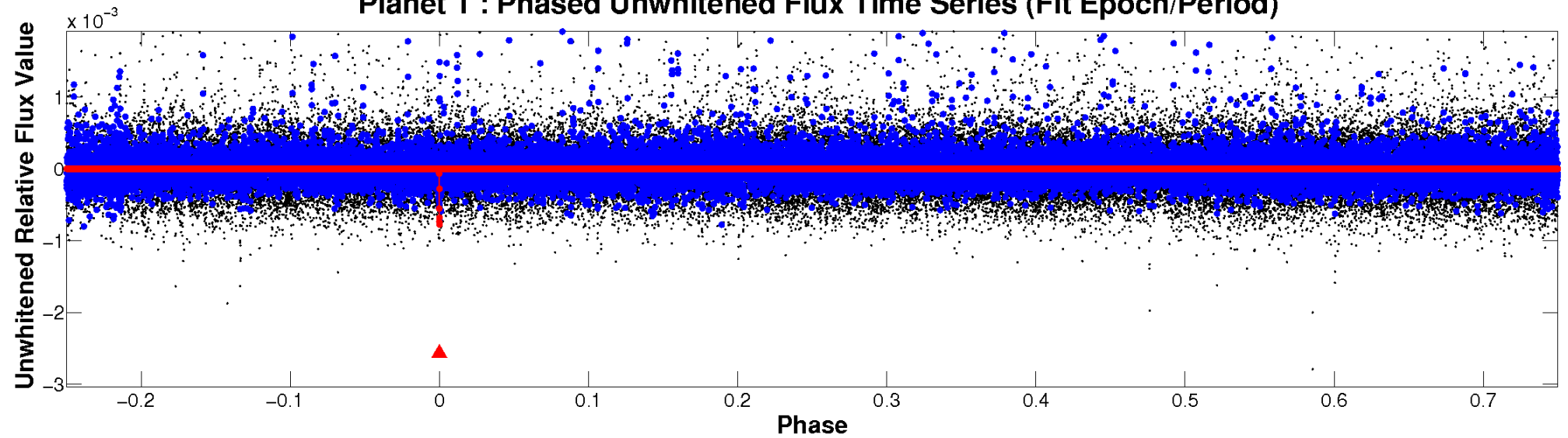
ALT Odd/Even

TCE 005528061-01

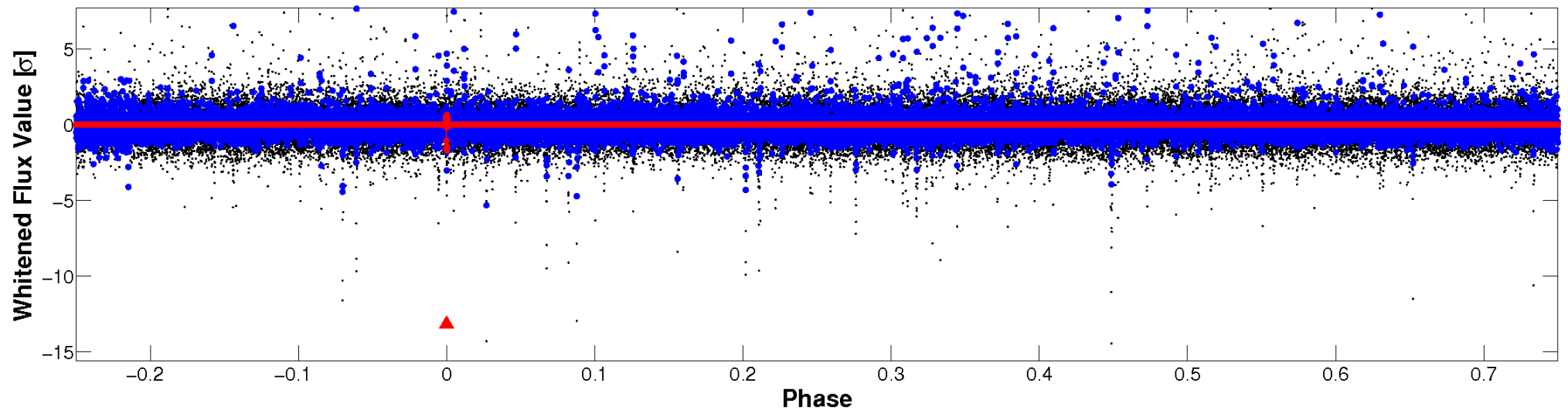


Non-Whitened Vs. Whitened Light Curve

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

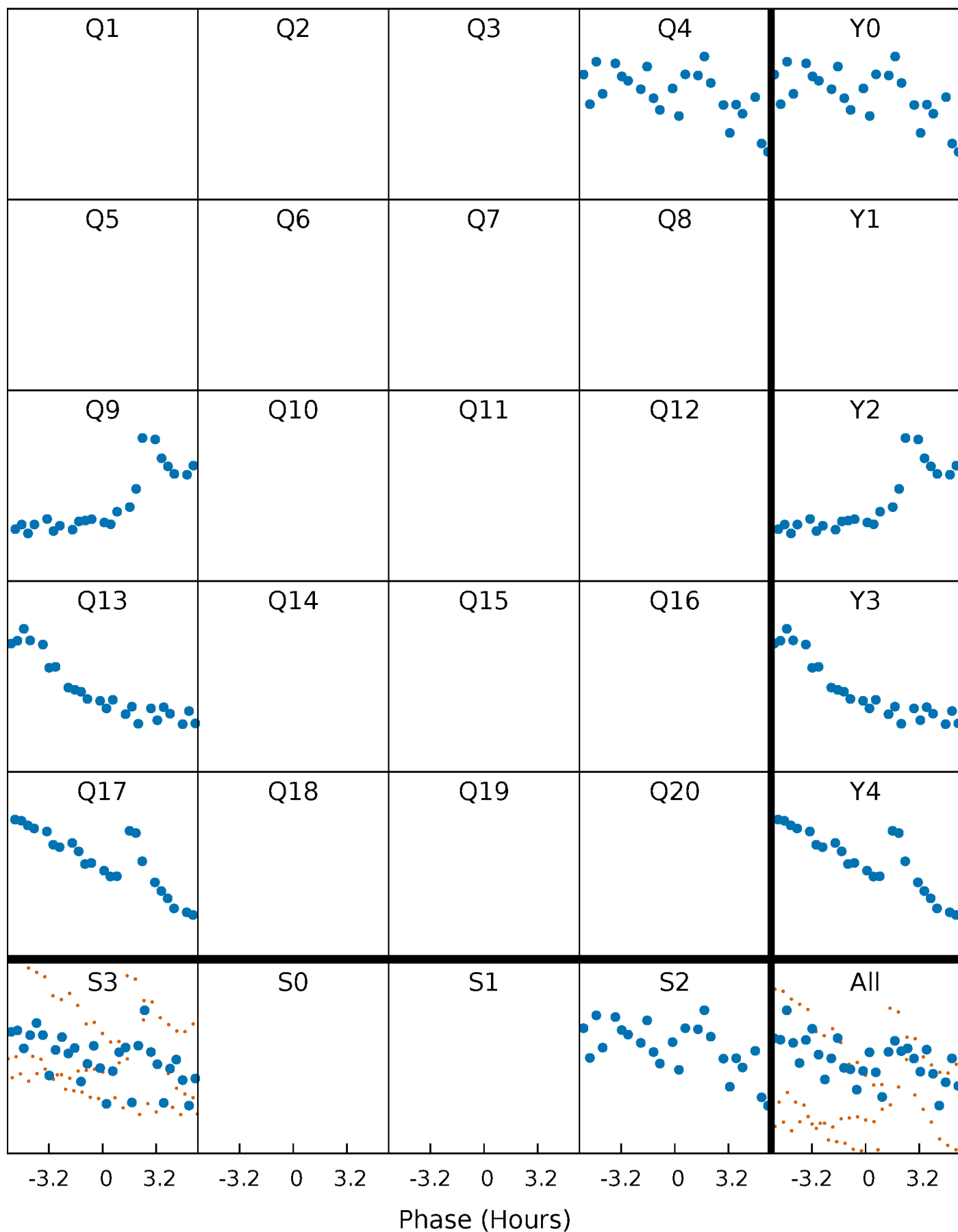


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



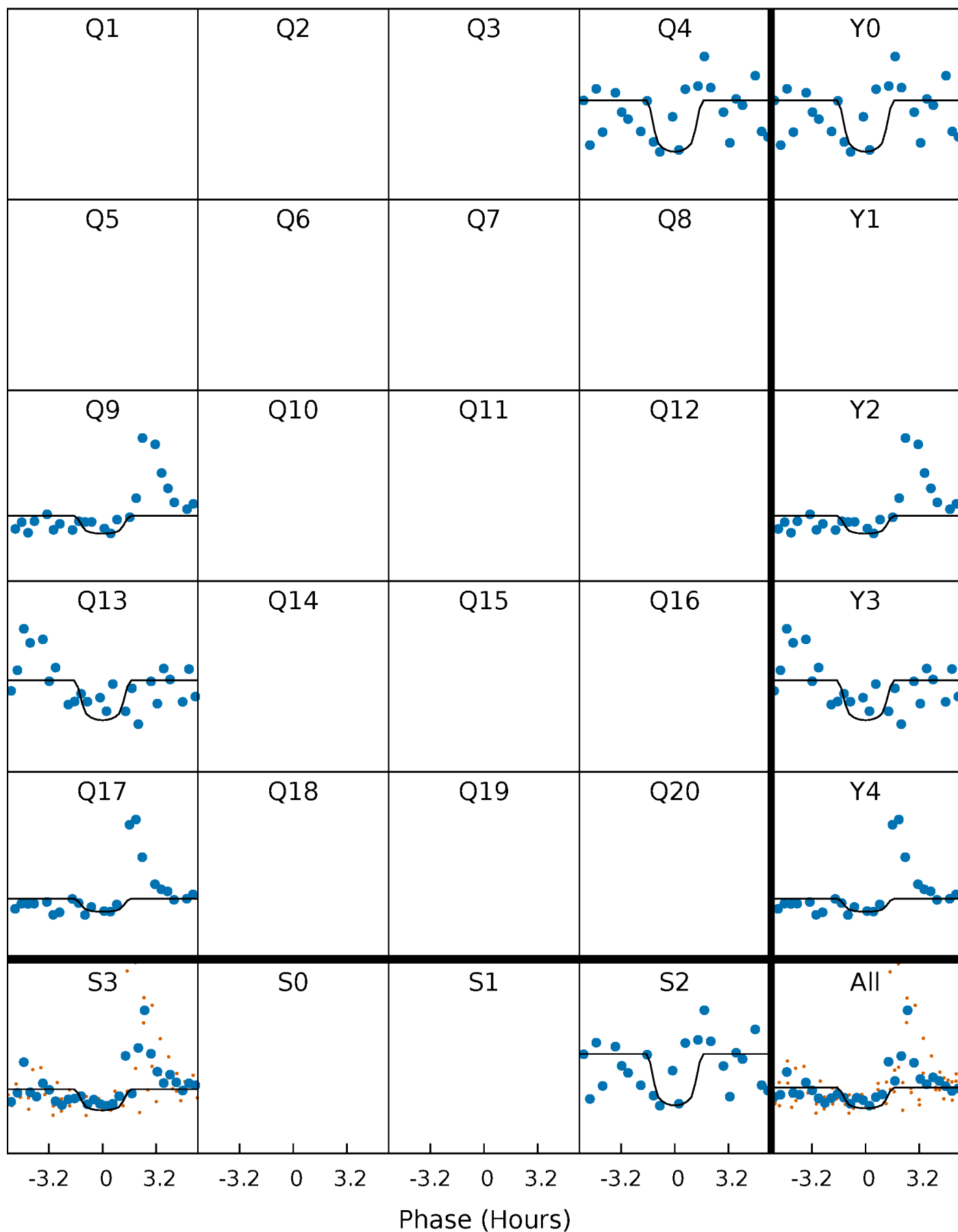
PDC Quarter-Phased Transit Curves

TCE 005528061-01 $P=379.156234$ Days $T_0=432.444671$ (BKJD)



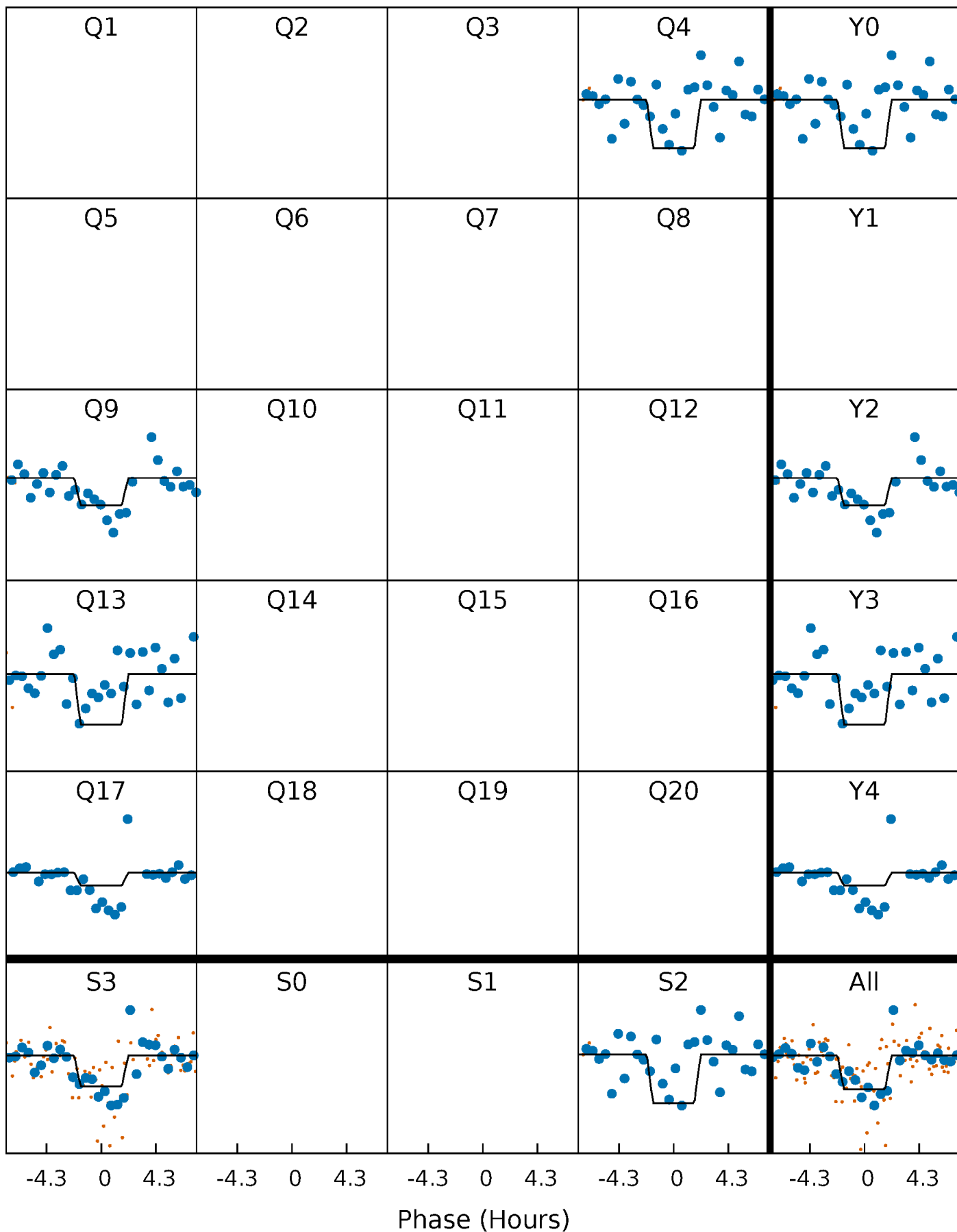
DV Quarter-Phased Transit Curves

TCE 005528061-01 P=379.156234 Days $T_0=432.444671$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

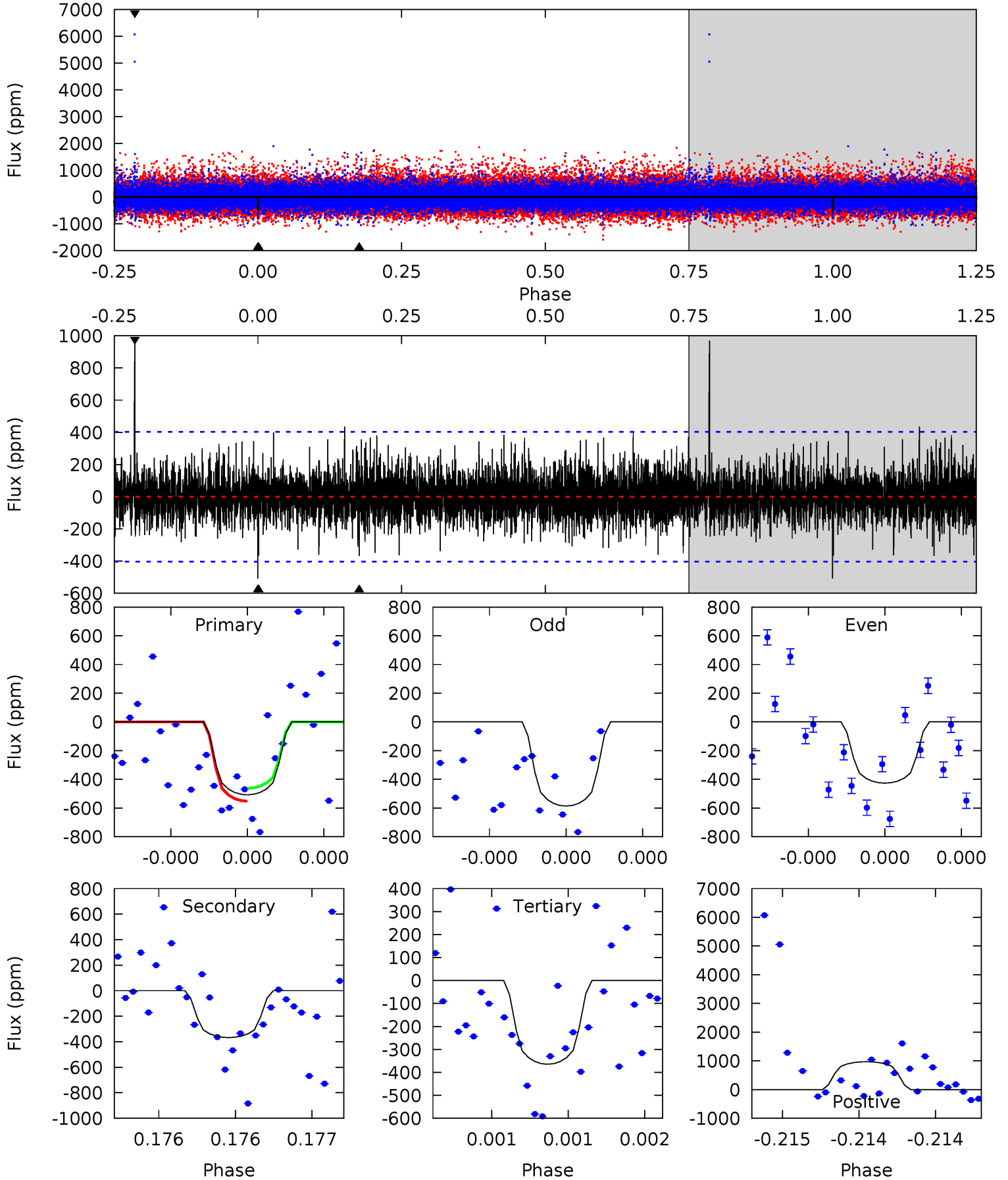
TCE 005528061-01 P=379.153190 Days $T_0=432.425205$ (BKJD)



DV Model-Shift Uniqueness Test

005528061-01, $P = 379.156234$ Days, $E = 53.288437$ Days

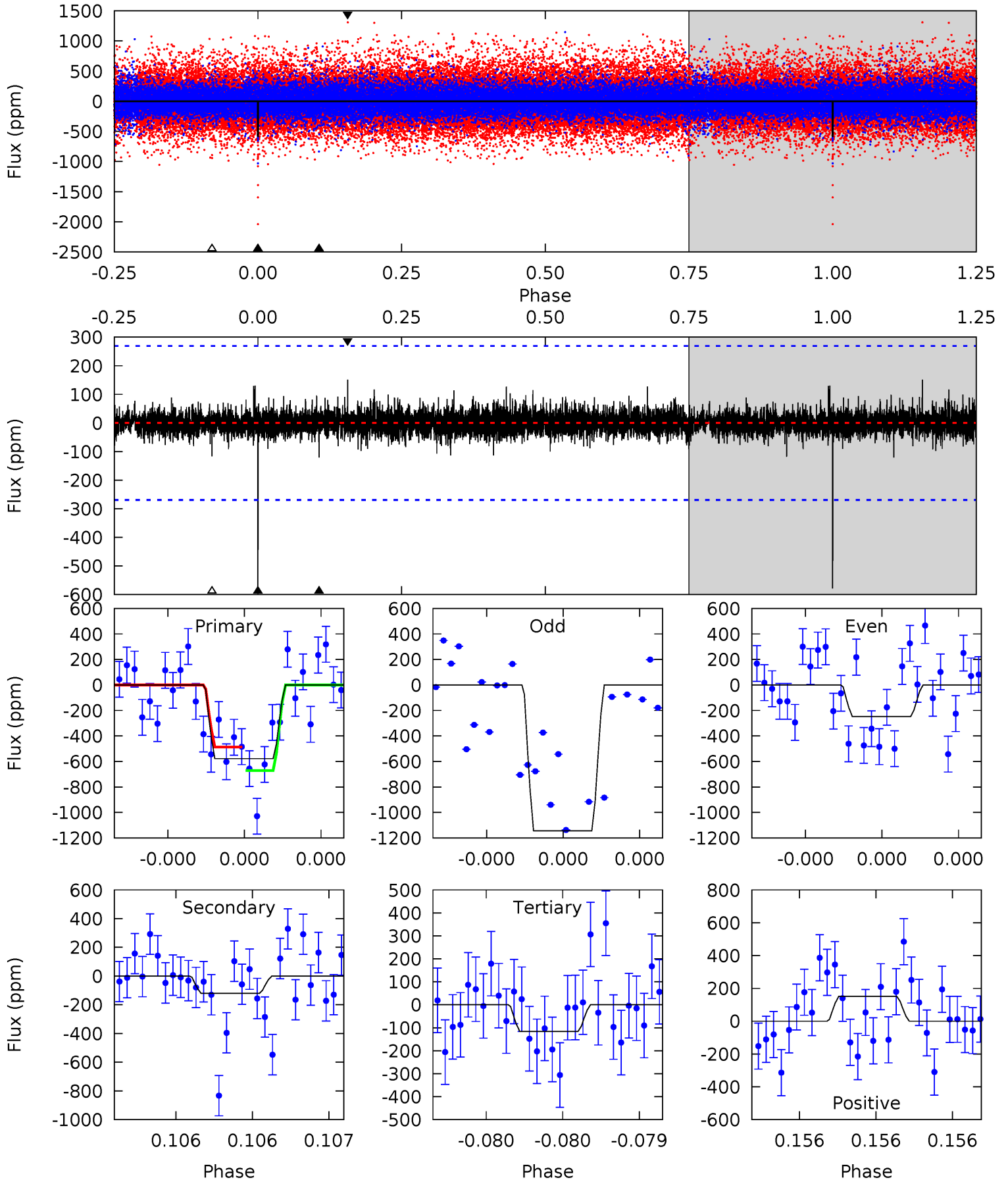
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.12	5.14	5.10	13.6	5.65	3.59	1.39	2.01	-6.47	0.04	-8.44	1.06	1.04	0.66	0.63



Alt Model-Shift Uniqueness Test

005528061-01, P = 379.153190 Days, E = 53.272015 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	2.51	2.41	3.13	5.59	3.51	0.53	9.59	8.87	0.09	-0.63	9.63	1.32	0.21	1.91



Stellar Parameters For KIC 005528061

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5596^{+167}_{-167}	$4.572^{+0.040}_{-0.160}$	$-0.220^{+0.300}_{-0.300}$	$0.804^{+0.198}_{-0.066}$	$0.880^{+0.090}_{-0.100}$	$2.387^{+0.408}_{-1.070}$
	+3%/-3%	+1%/-3%	+136%/-136%	+25%/-8%	+10%/-11%	+17%/-45%
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 005528061-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-367 ± 71	$10.12^{+11.65}_{-6.80}$	318^{+19}_{-14}	2974^{+1351}_{-514}	1805^{+16175}_{-1400}
Alt.	-121 ± 48	$10.38^{+11.86}_{-7.37}$	318^{+19}_{-13}	2557^{+1066}_{-419}	576^{+5956}_{-463}

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 $A_{obs} \gg 1.0$

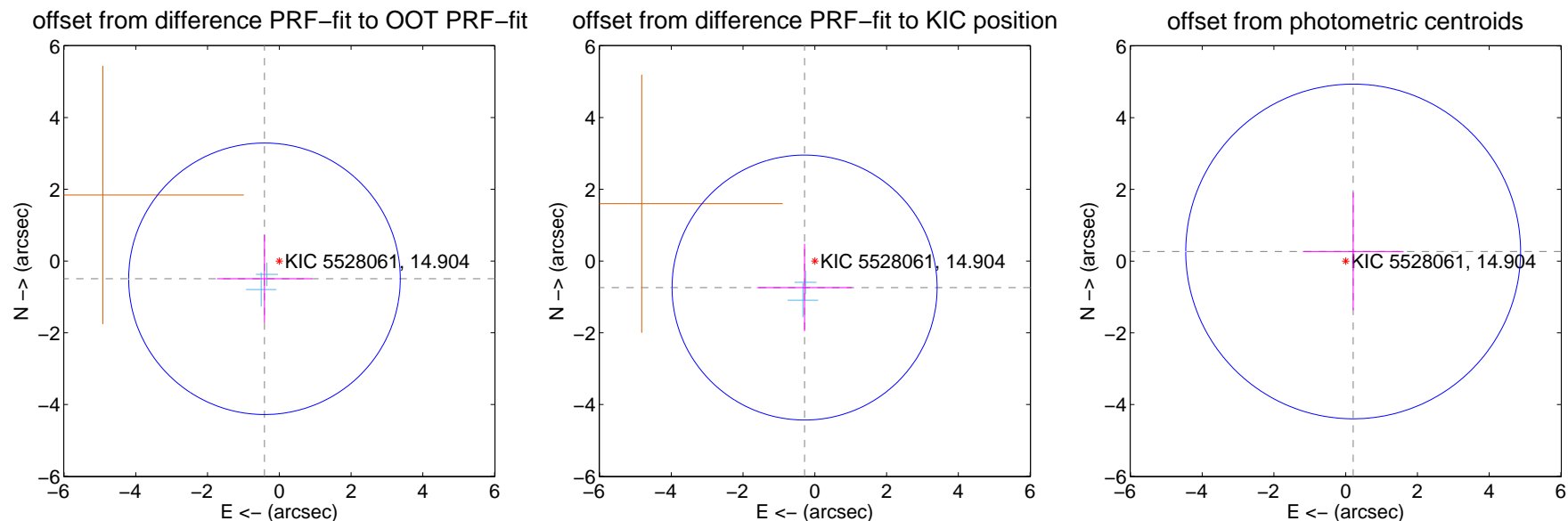
DV Centroid Data

Supplemental centroid analysis for 005528061-01. Kepler magnitude: 14.90. Transit SNR 7.01

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.35 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.645 ± 1.262	0.51	0.413 ± 1.323	-0.494 ± 1.217
PRF-fit source offset from KIC position	0.793 ± 1.231	0.64	0.285 ± 1.323	-0.740 ± 1.217
photometric centroid source offset	0.34 ± 1.56	0.22	-0.21 ± 1.40	0.27 ± 1.64



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 no difference image



Q2 no OOT image



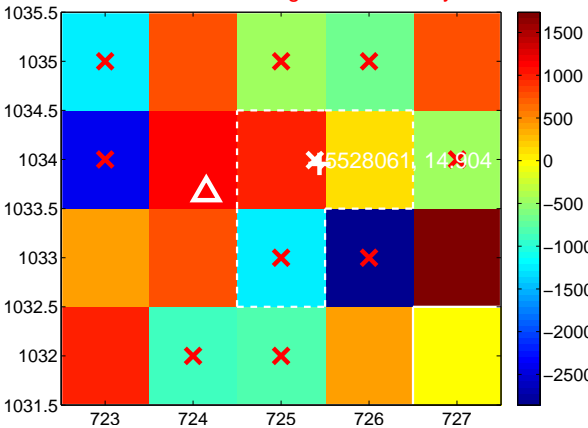
Q3 no difference image



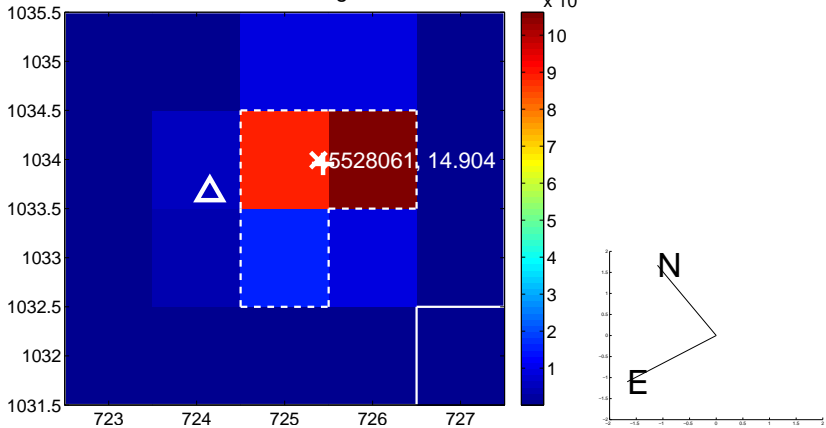
Q3 no OOT image



Q4 difference image. Poor Quality



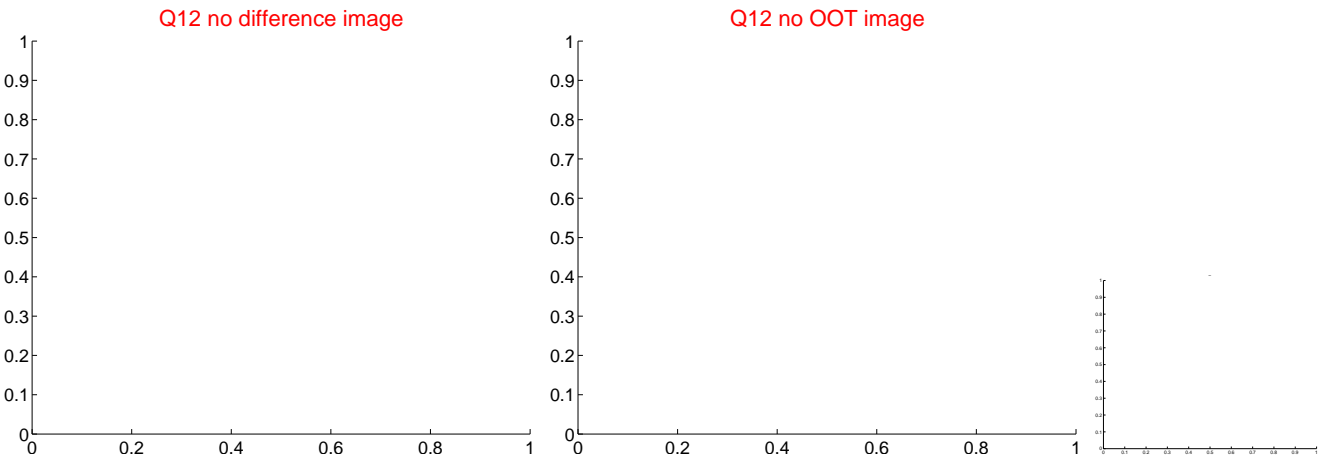
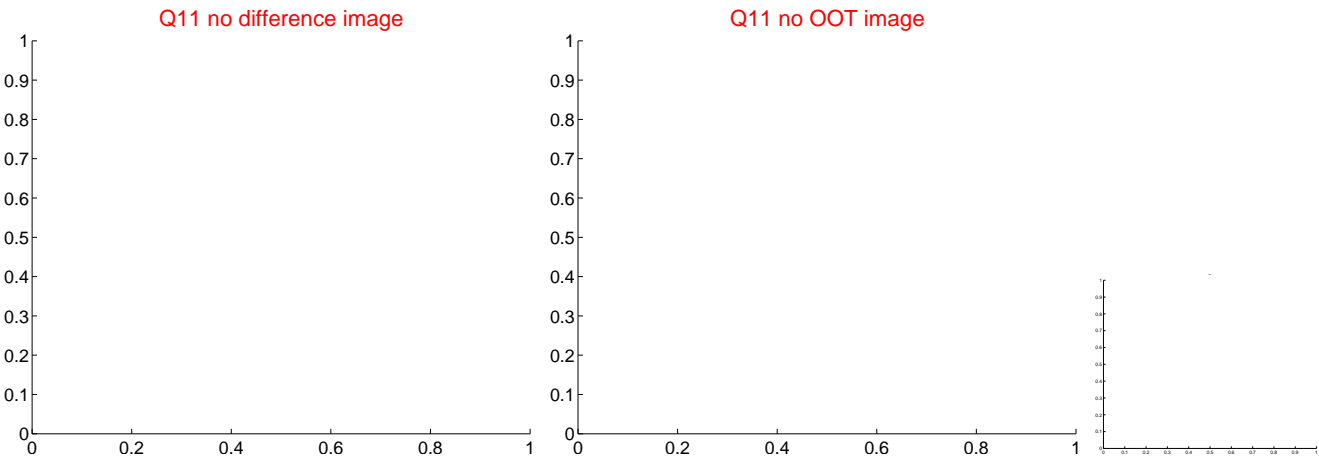
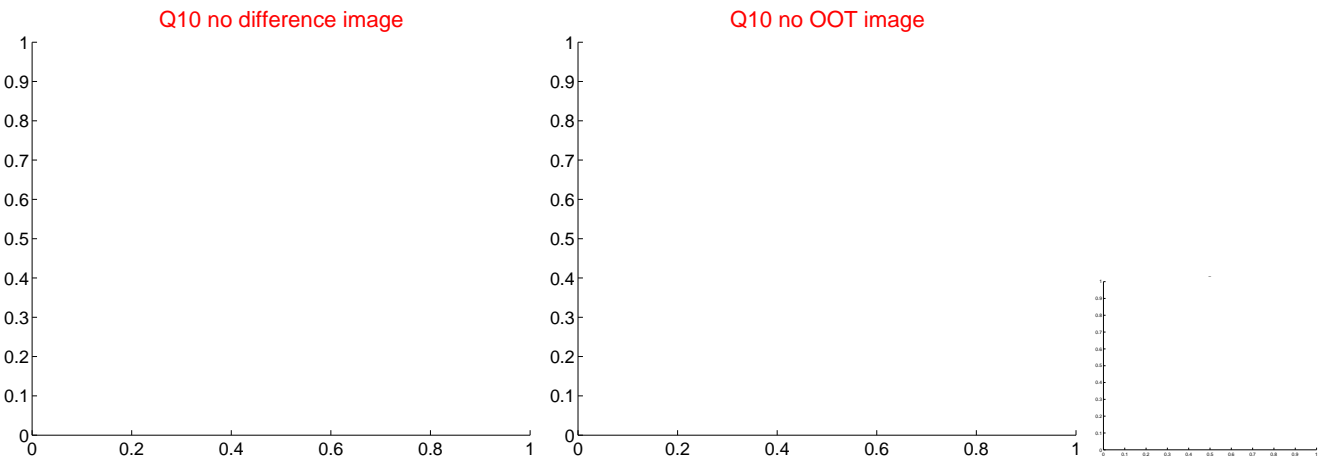
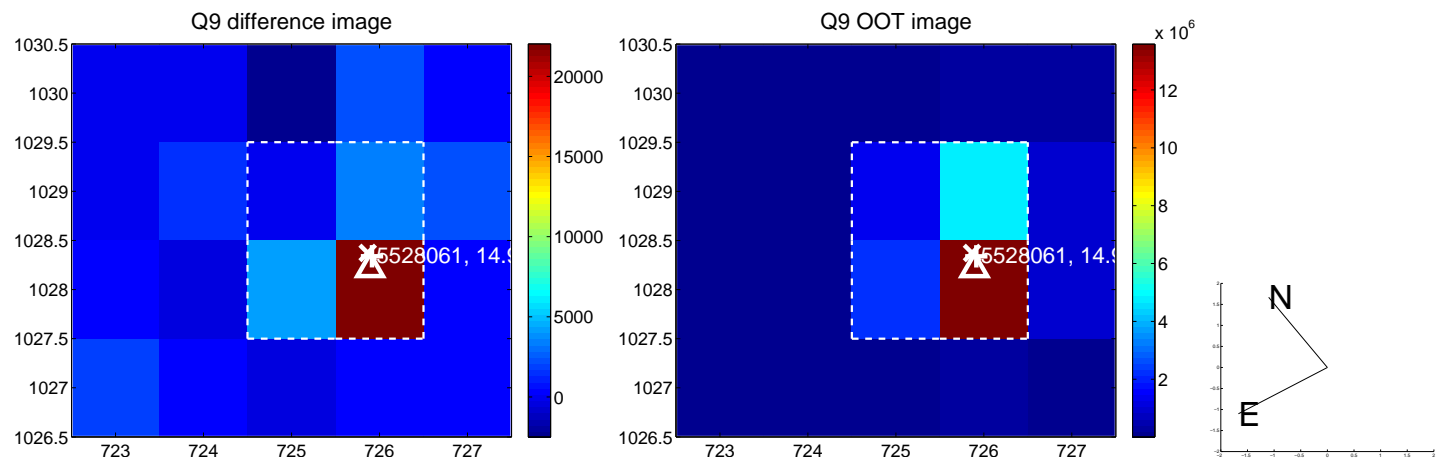
Q4 OOT image



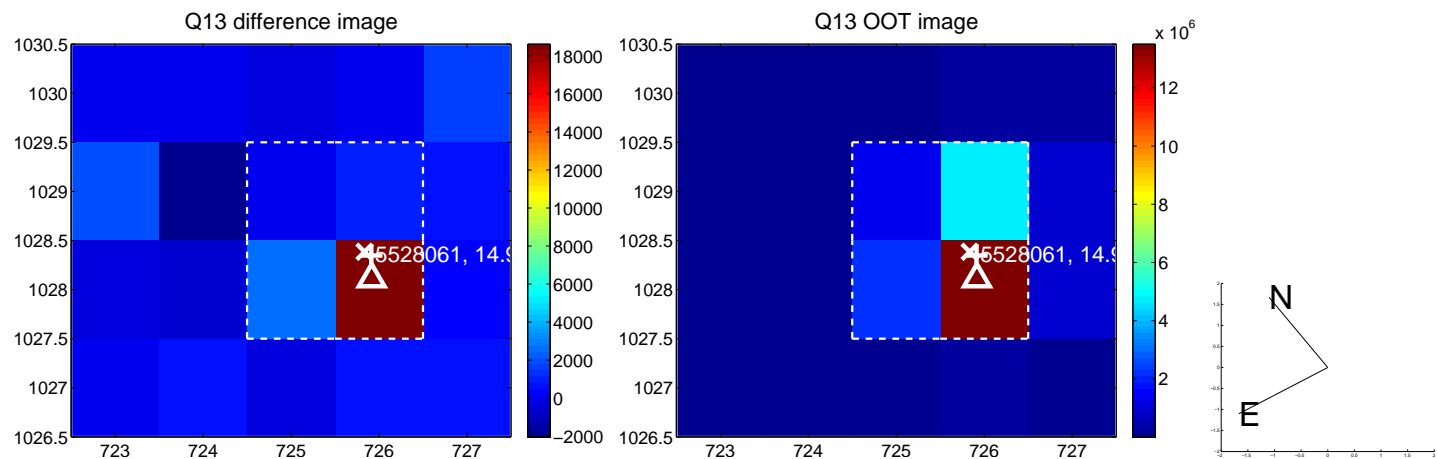
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



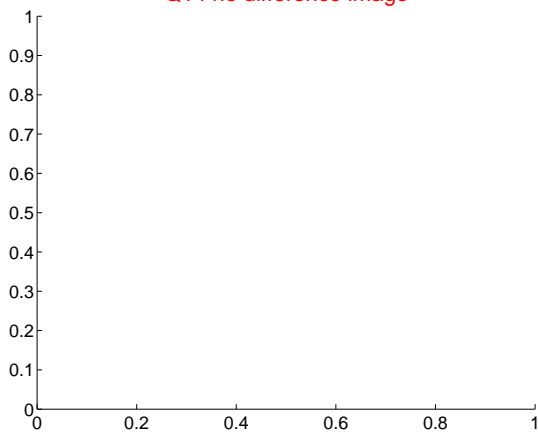
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



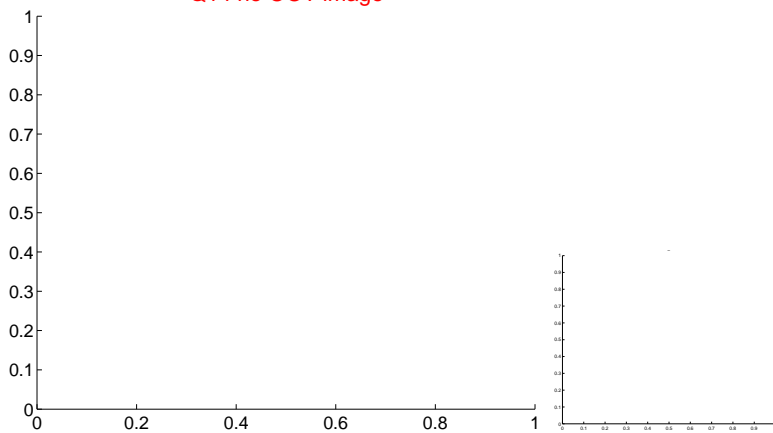
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



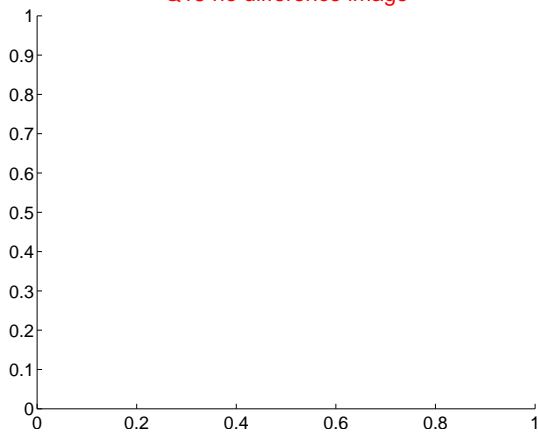
Q14 no difference image



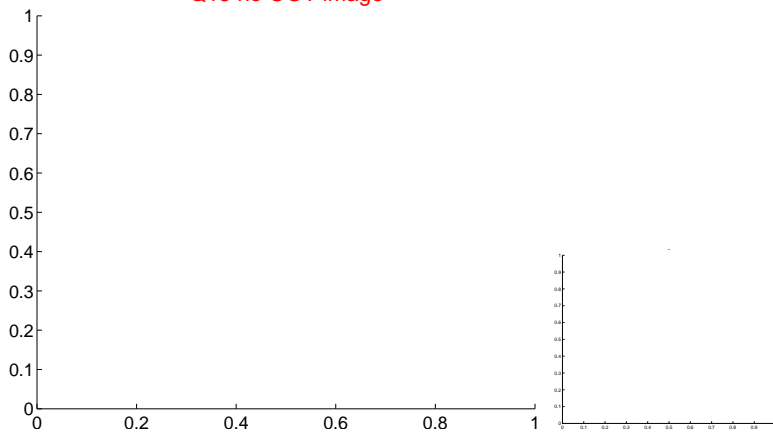
Q14 no OOT image



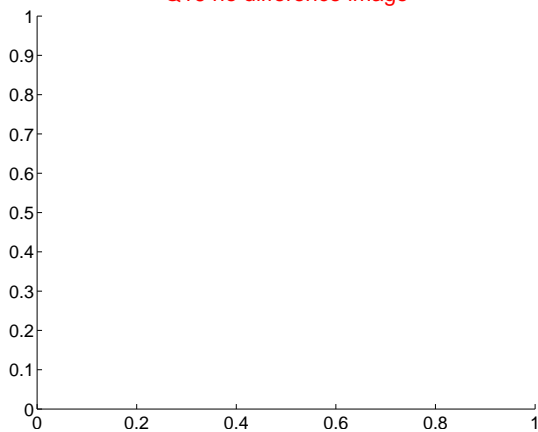
Q15 no difference image



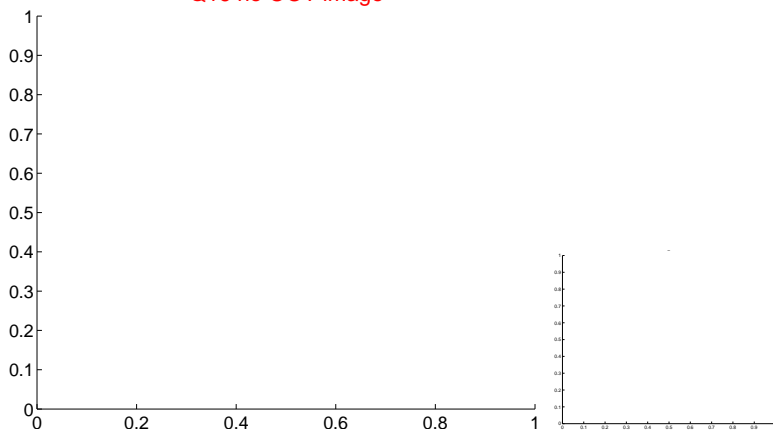
Q15 no OOT image



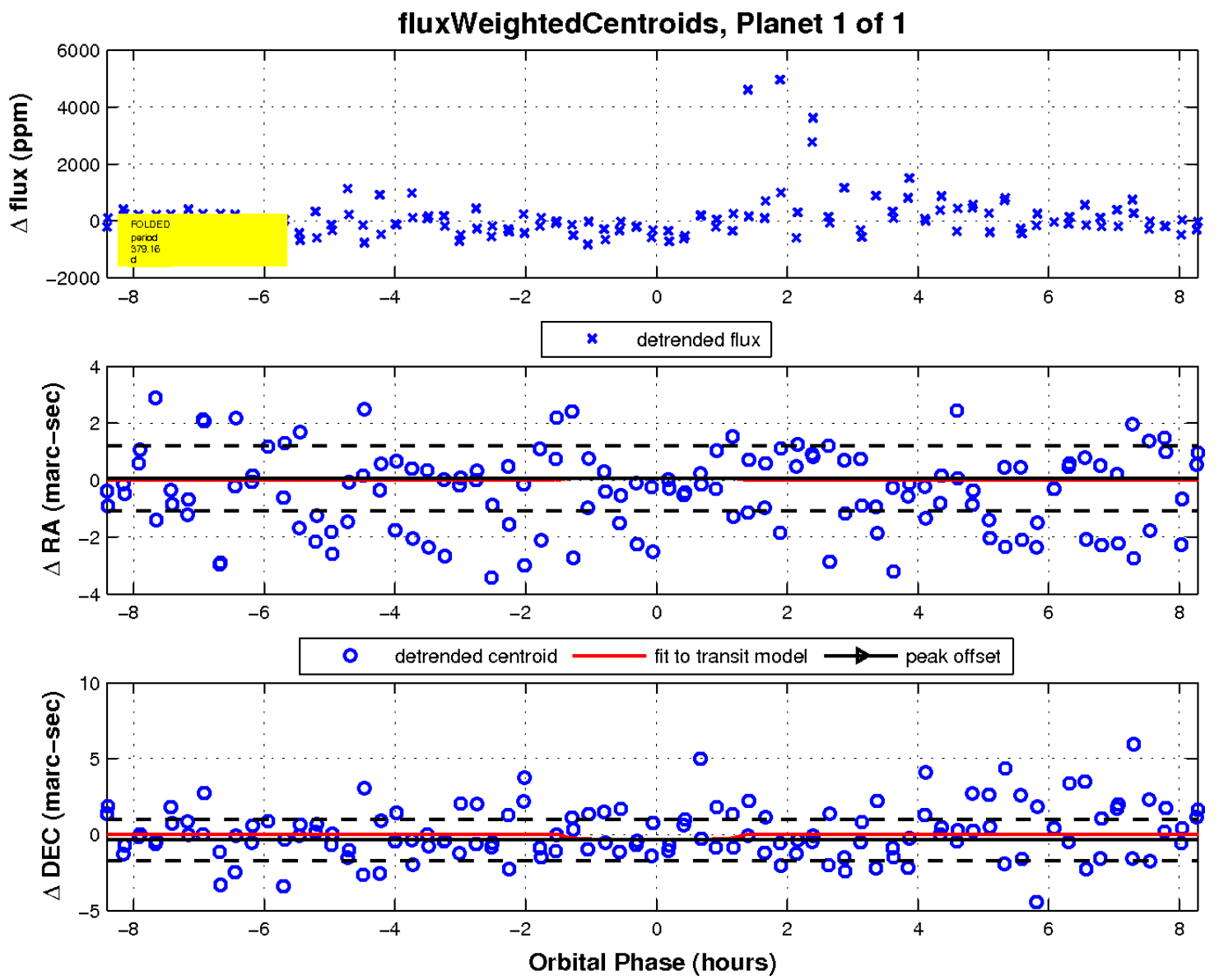
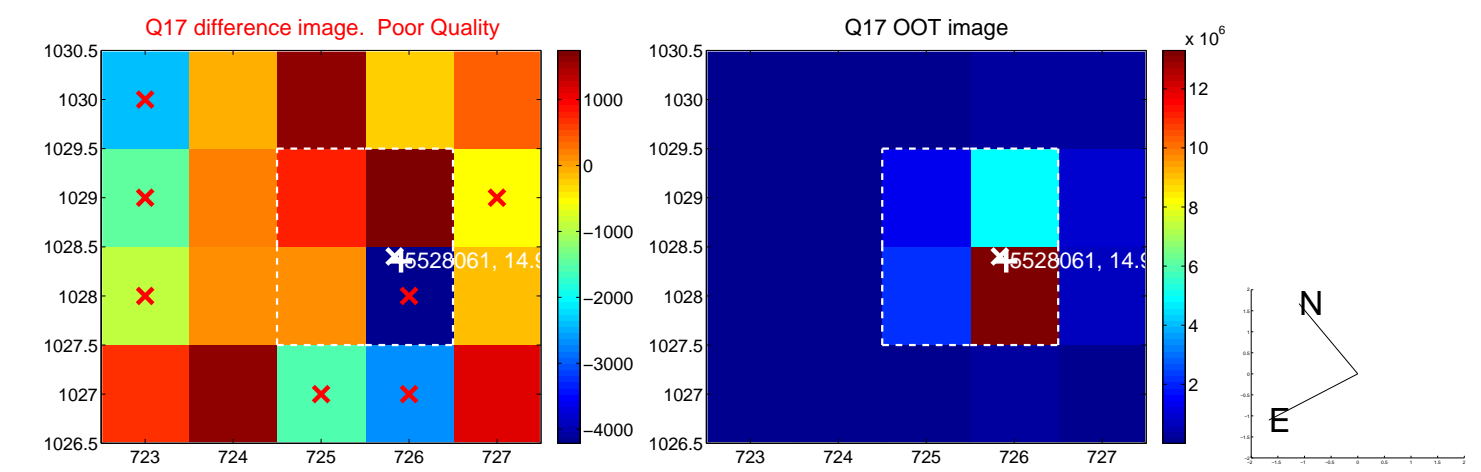
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

