

KIC 008653068

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})
008653068-01	OBS	No	322.468822	409.880787	25.1	5.000	9.8	-1.0	111.92	3332	51.45	1696.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008653068-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_SATURATED

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

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

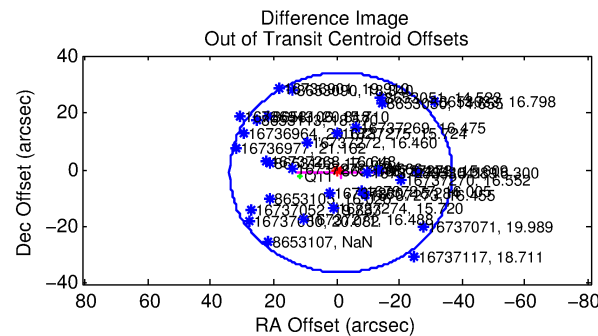
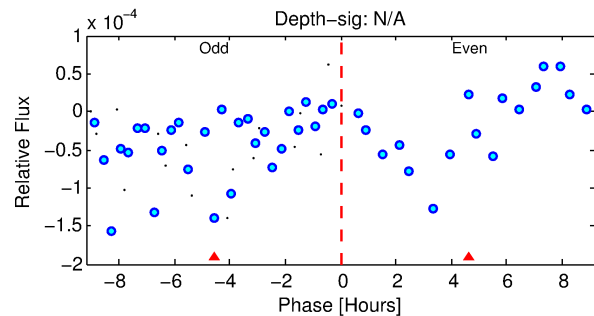
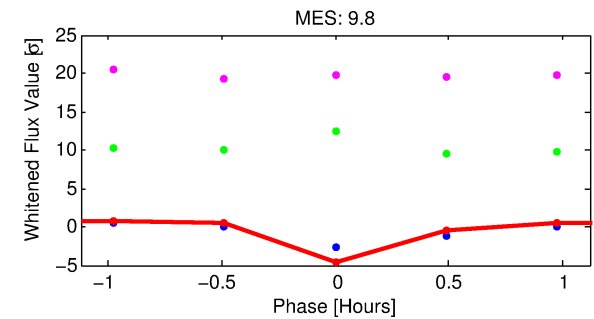
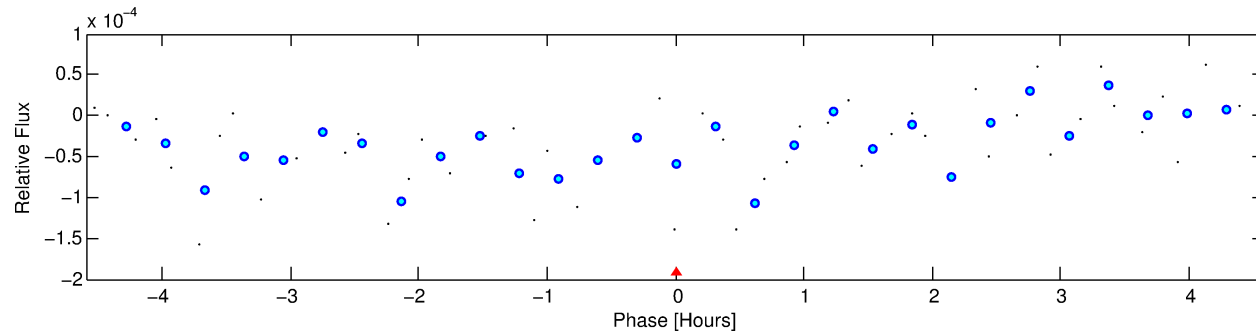
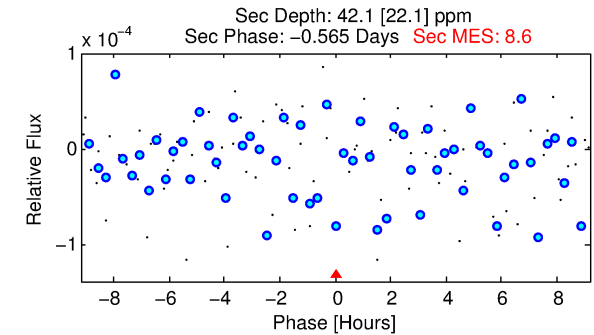
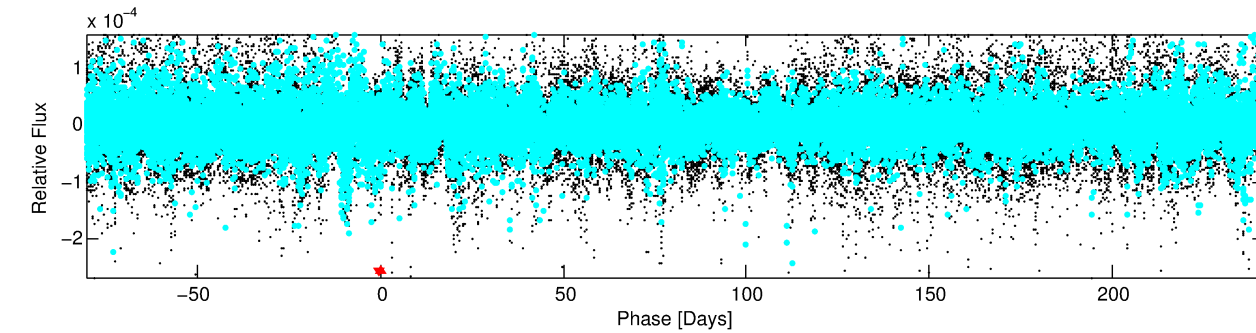
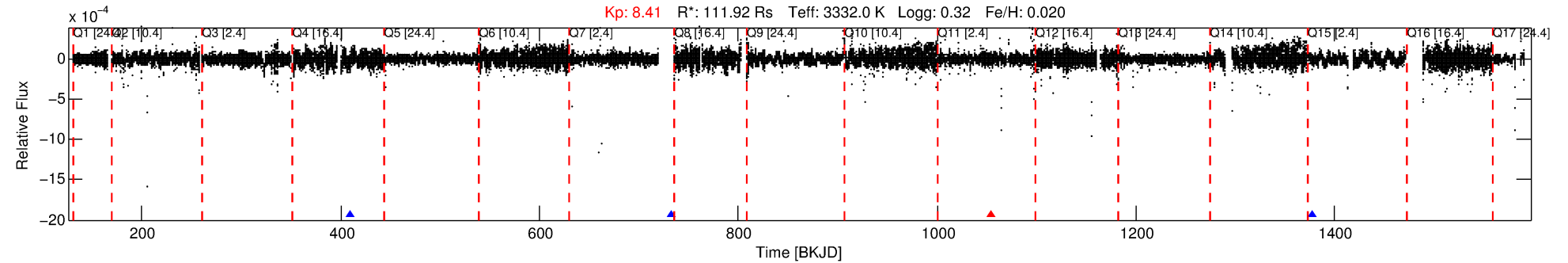
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008653068-01

No Significant Match Found

DV One-Page Summary

KIC: 8653068 Candidate: 1 of 1 Period: 322.469 d



TPS TCE Results:

Period = 322.46882 d
Epoch = 409.8808 BKJD

DV fit results are unavailable

DV Diagnostic Results:

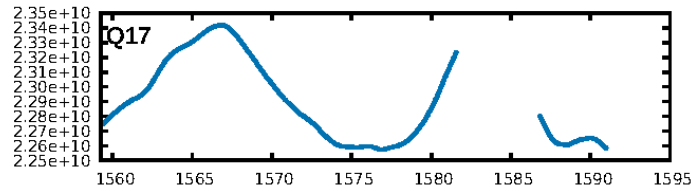
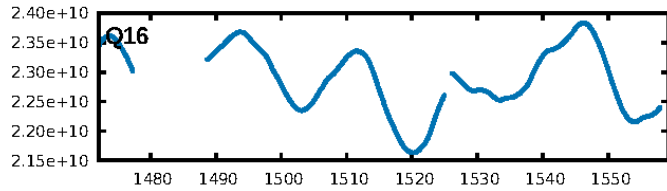
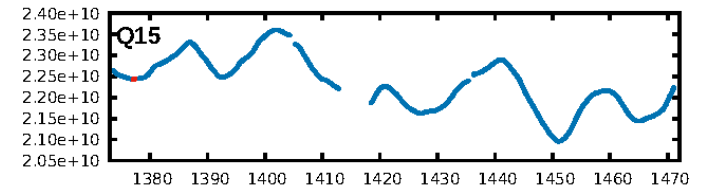
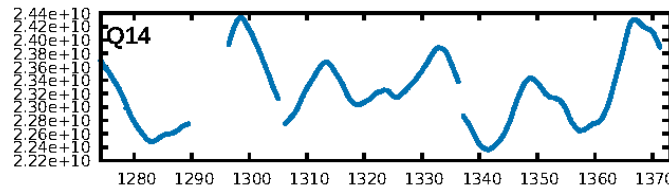
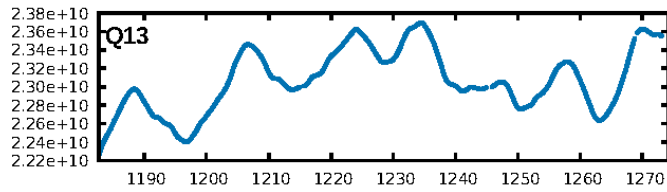
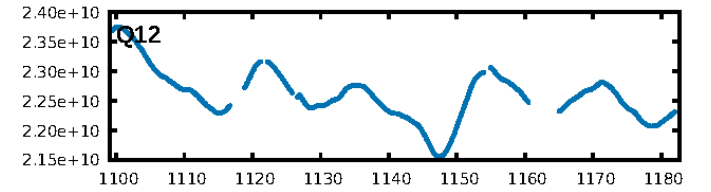
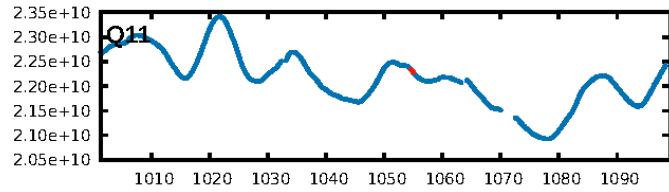
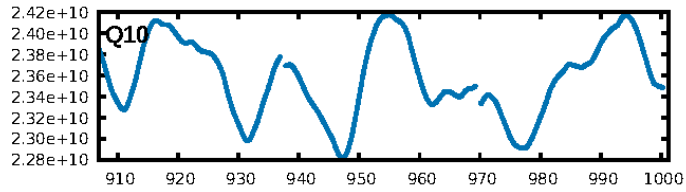
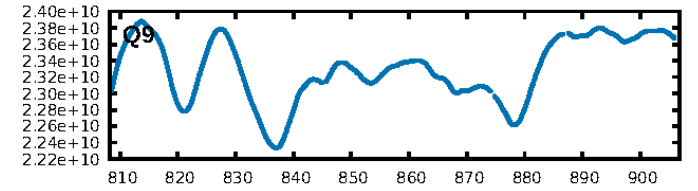
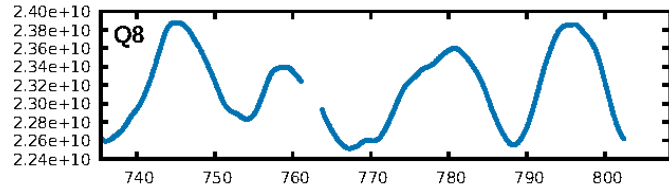
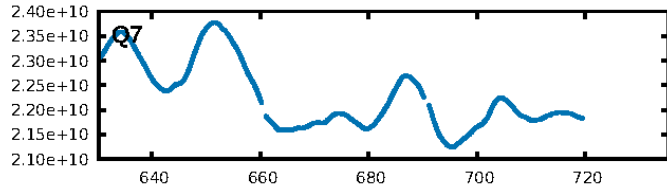
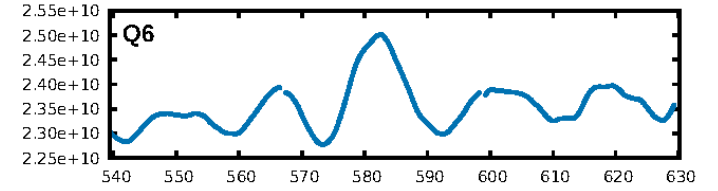
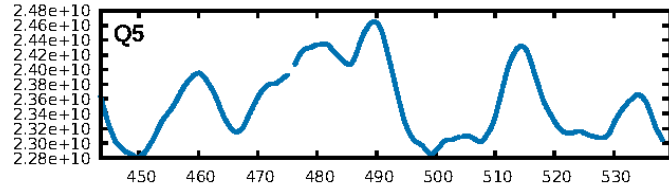
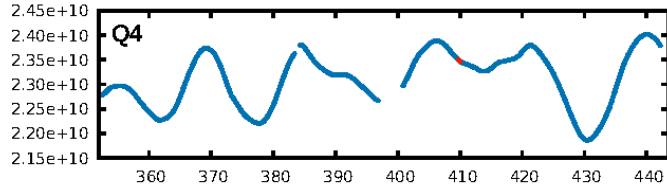
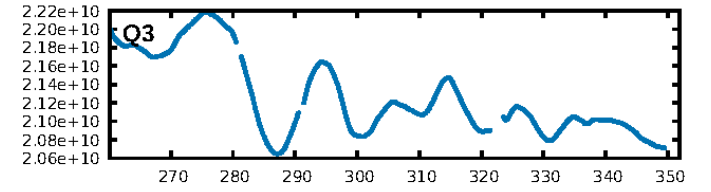
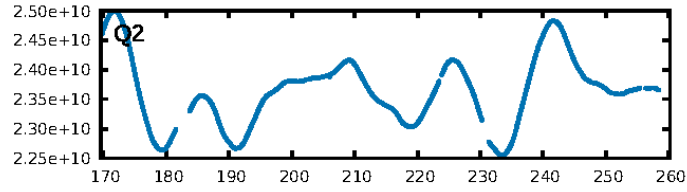
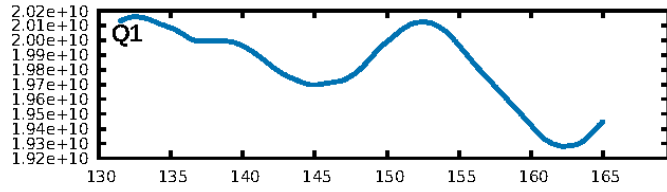
ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.49e-04
RollingBand-fgt: 0.67 [2/3]
GhostDiagnostic-chr: N/A

Centroid-sig: 79.8%
Centroid-so: 0.893 arcsec [0.10σ]
OotOffset-rm: 1.723 arcsec [0.15σ]
KicOffset-rm: 2.910 arcsec [0.27σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

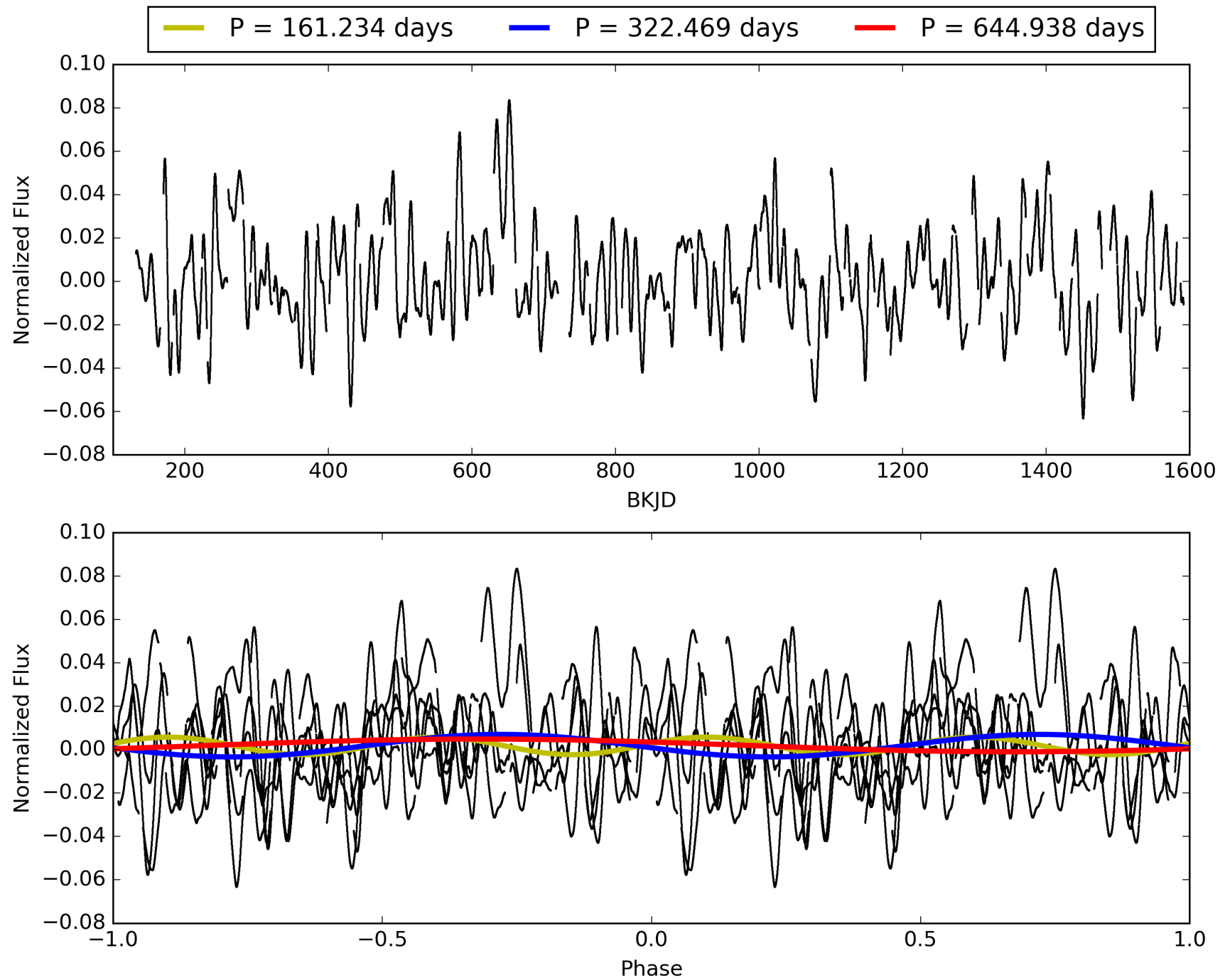
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:03:37 Z

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

TCE 008653068-01, PDC Light Curves

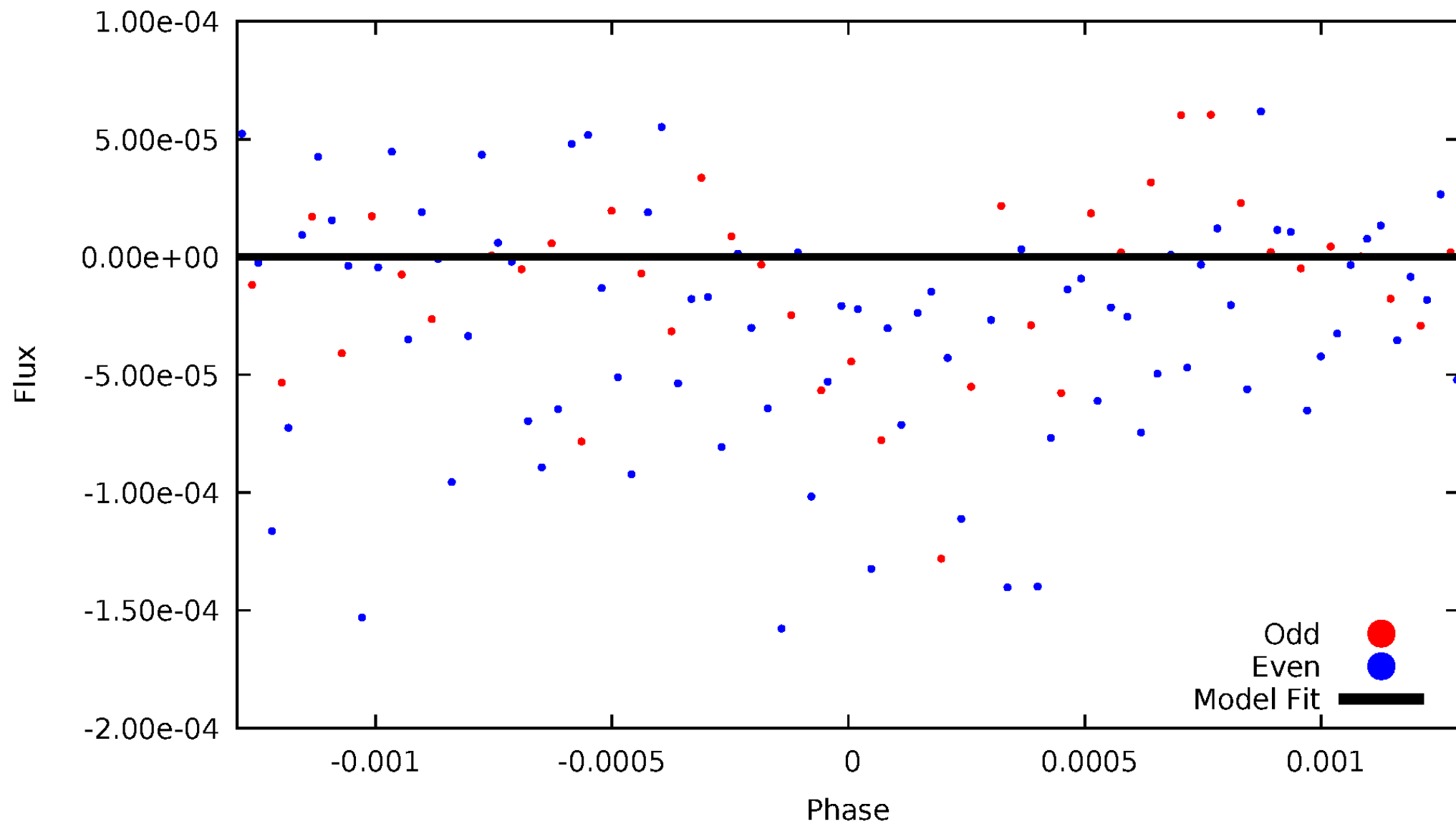


TCE 008653068-01



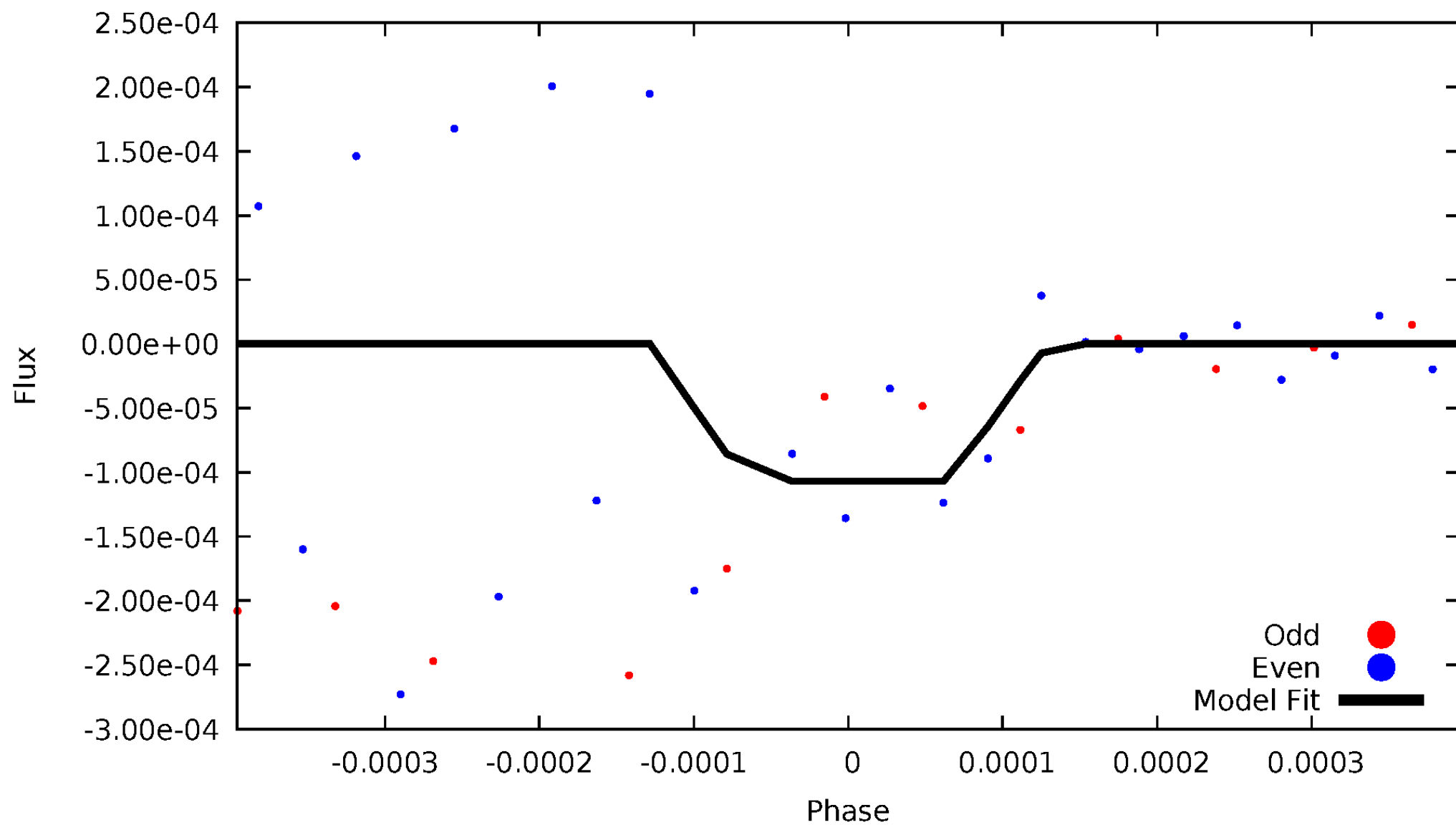
DV Odd/Even

TCE 008653068-01

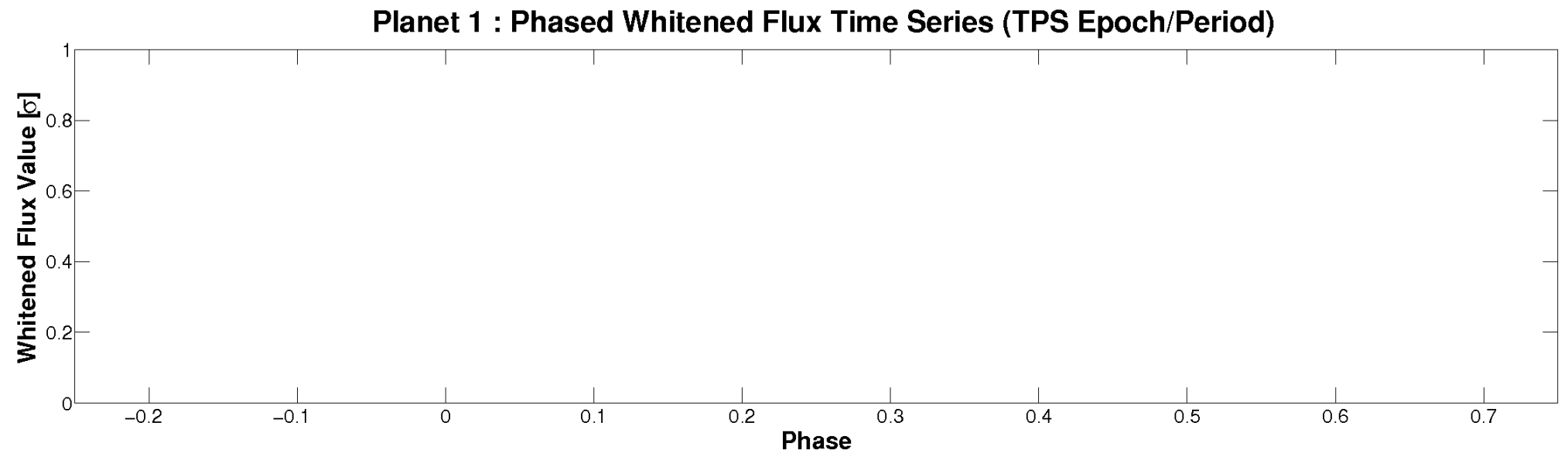
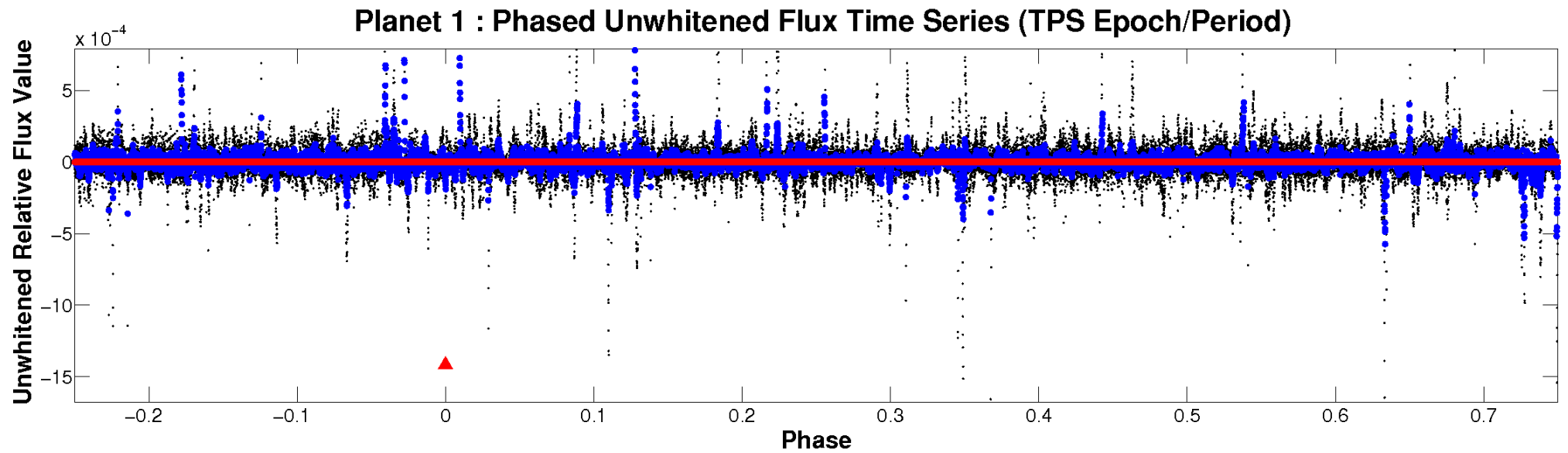


ALT Odd/Even

TCE 008653068-01

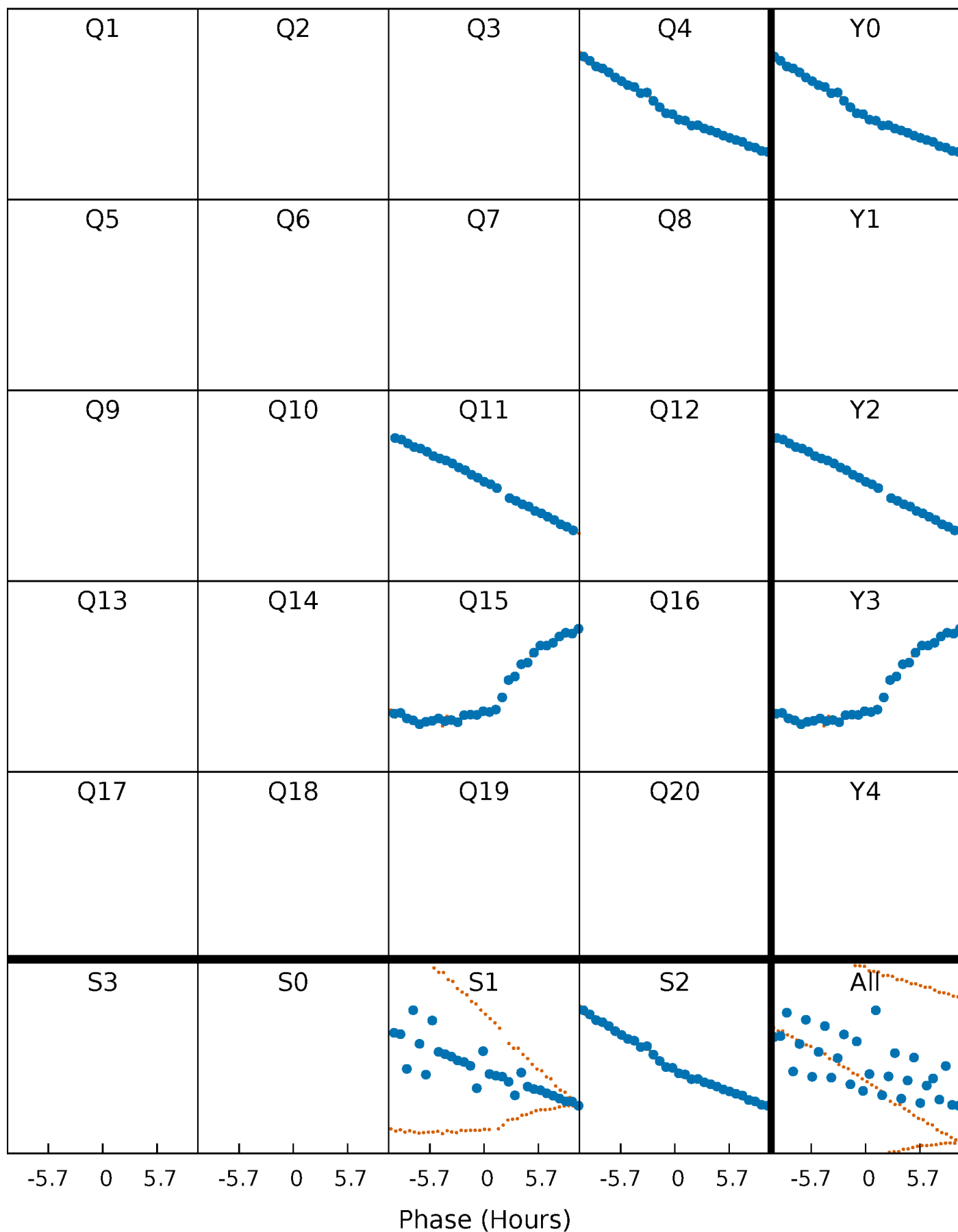


Non-Whitened Vs. Whitened Light Curve



PDC Quarter-Phased Transit Curves

TCE 008653068-01 P=322.468821 Days $T_0=409.880787$ (BKJD)



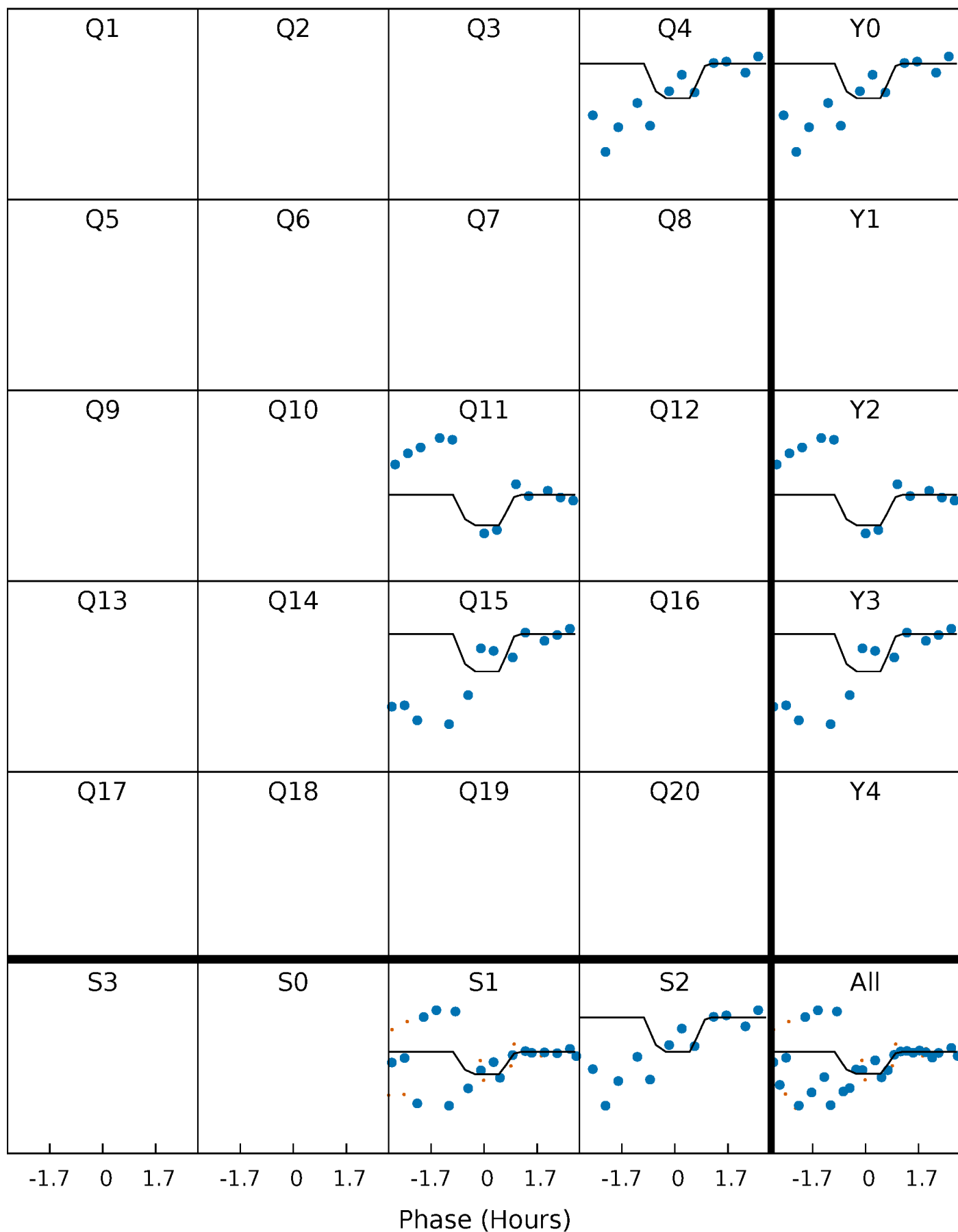
DV Quarter-Phased Transit Curves

TCE 008653068-01 P=322.468821 Days $T_0=409.880787$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

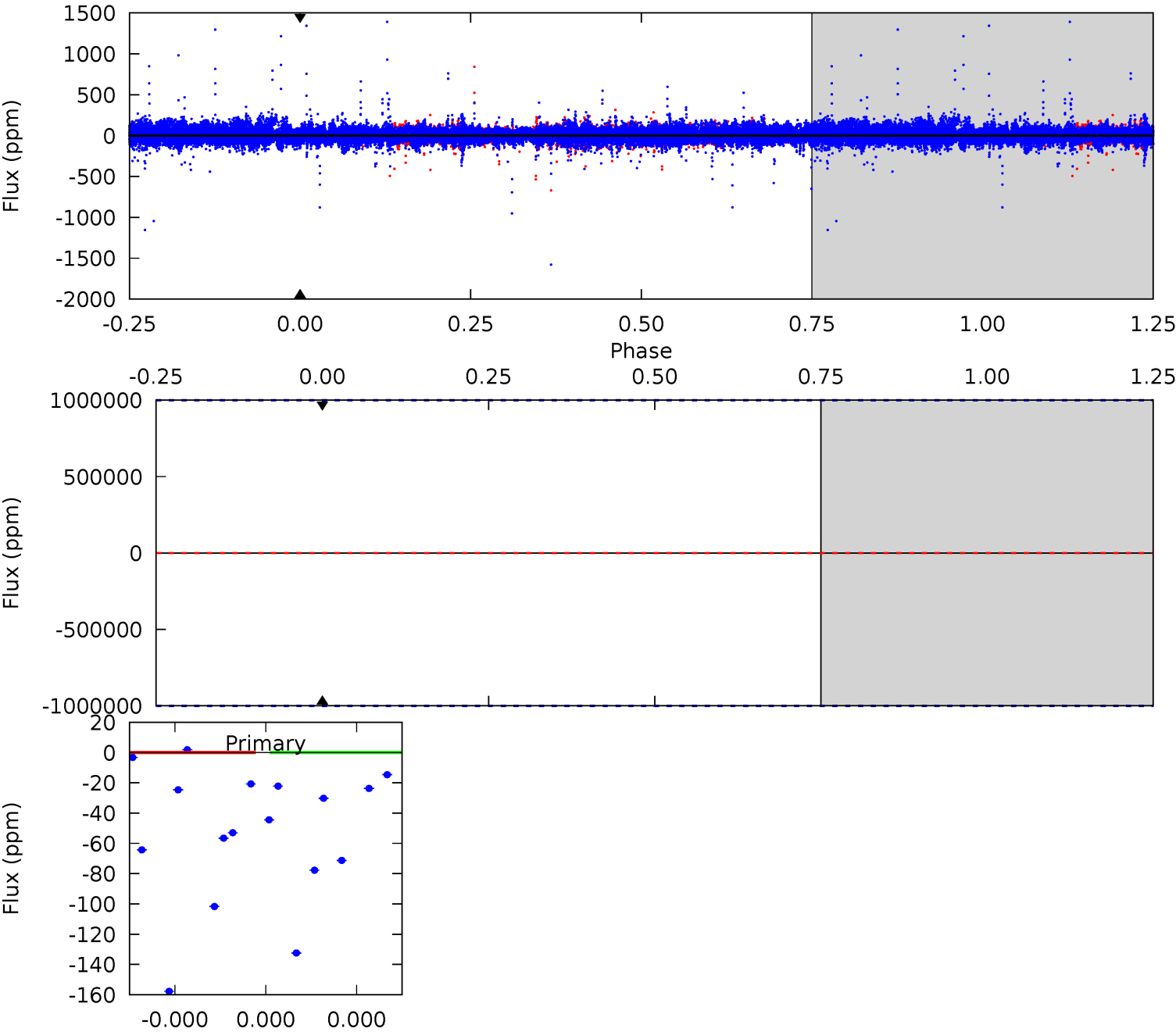
TCE 008653068-01 P=322.468821 Days $T_0=409.989909$ (BKJD)



DV Model-Shift Uniqueness Test

008653068-01, P = 322.468821 Days, E = 87.411966 Days

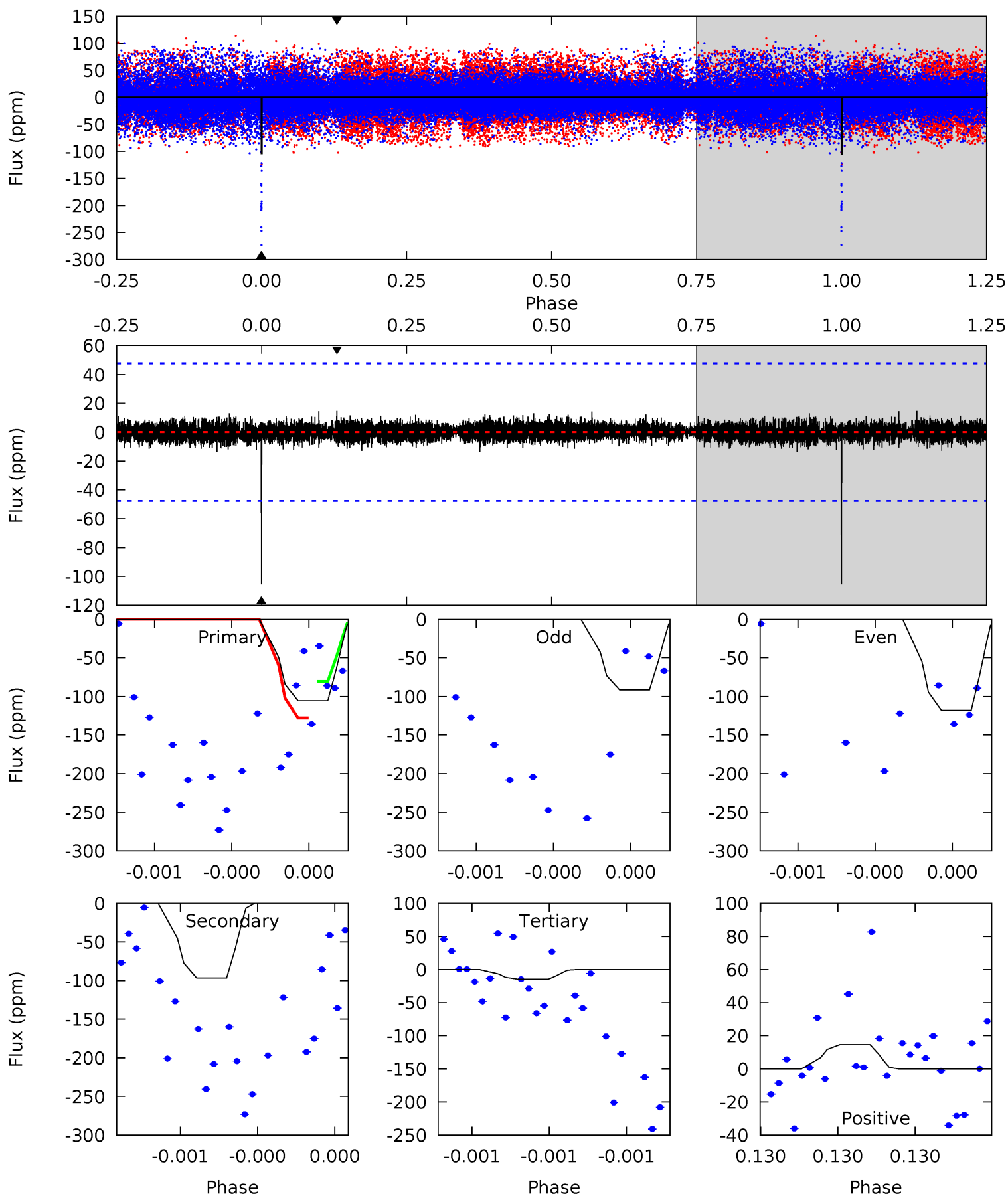
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008653068-01, $P = 322.468821$ Days, $E = 87.521088$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	11.5	1.75	1.75	5.69	3.66	0.39	10.8	10.8	9.78	9.78	1.51	1.05	0.12	2.86



Stellar Parameters For KIC 008653068

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3332^{+79}_{-72}	$0.315^{+0.198}_{-0.144}$	$0.020^{+0.250}_{-0.150}$	$111.919^{+34.643}_{-21.319}$	$0.944^{+0.392}_{-0.041}$	$0.000^{+0.000}_{-0.000}$
	+2%/-2%	+63%/-46%	+1250%/-750%	+31%/-19%	+42%/-4%	+99%/-43%
Source	SPE14	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008653068-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$923.67^{+939.08}_{-646.34}$	2255^{+172}_{-134}	2326^{+4148}_{-8863}	$0.479^{+82.633}_{-93.220}$
Alt.	-97 ± 8	$899.75^{+947.02}_{-617.57}$	2268^{+161}_{-143}	-2339^{+4729}_{-129}	$0.057^{+0.531}_{-0.043}$

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 $A_{obs} \gg 1.0$

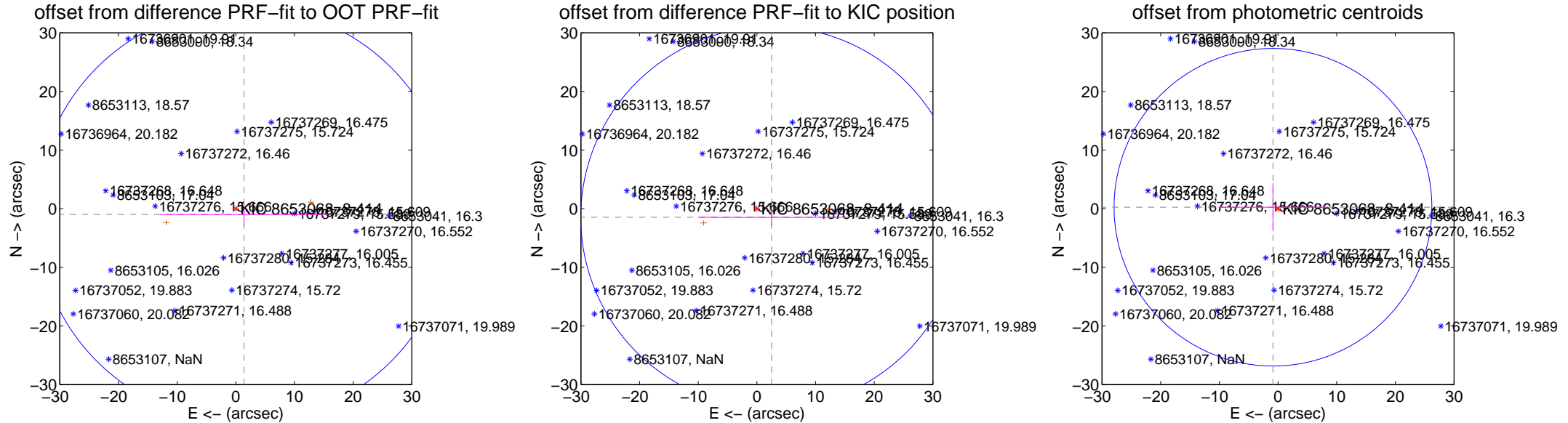
DV Centroid Data

Supplemental centroid analysis for 008653068-01. **Kepler magnitude: 8.41.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

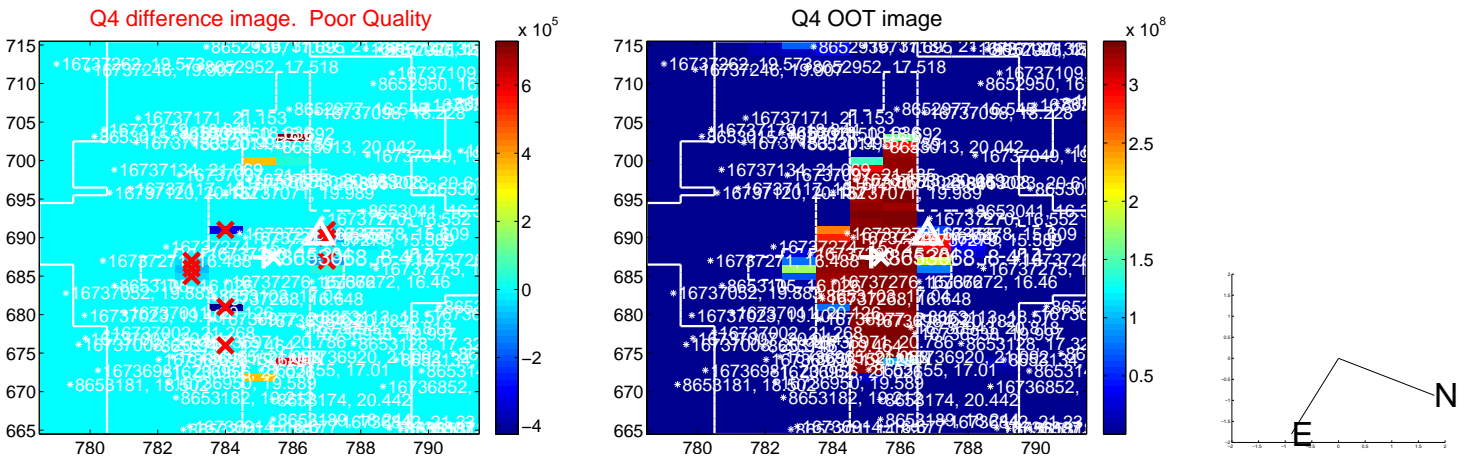
The OOT PRF centroid is offset from the target star catalog position by about 2.78 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.723 ± 11.813	0.15	-1.410 ± 14.369	-0.991 ± 1.988
PRF-fit source offset from KIC position	2.910 ± 10.846	0.27	-2.510 ± 12.548	-1.472 ± 1.390
photometric centroid source offset	0.89 ± 9.03	0.10	0.86 ± 9.31	0.24 ± 4.12



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 ×: 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.



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

Q9 no difference image



Q9 no OOT image



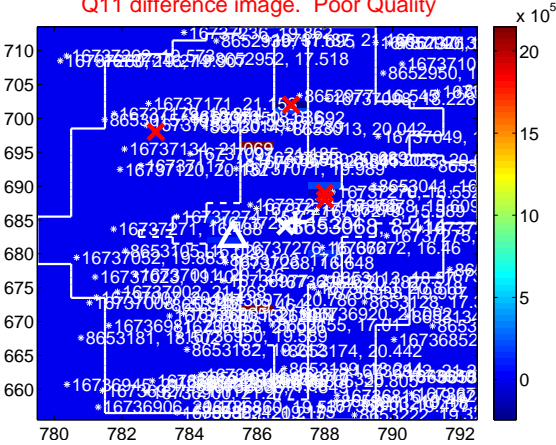
Q10 no difference image



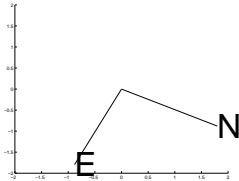
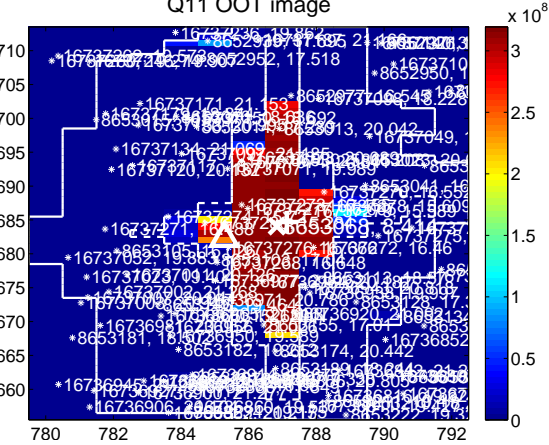
Q10 no OOT image



Q11 difference image. Poor Quality



Q11 OOT image



Q12 no difference image



Q12 no OOT image



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

Q13 no difference image



Q13 no OOT image



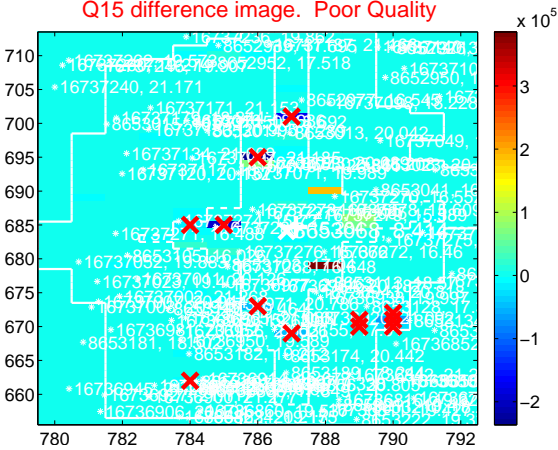
Q14 no difference image



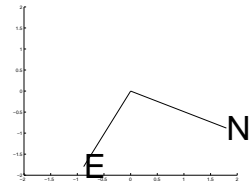
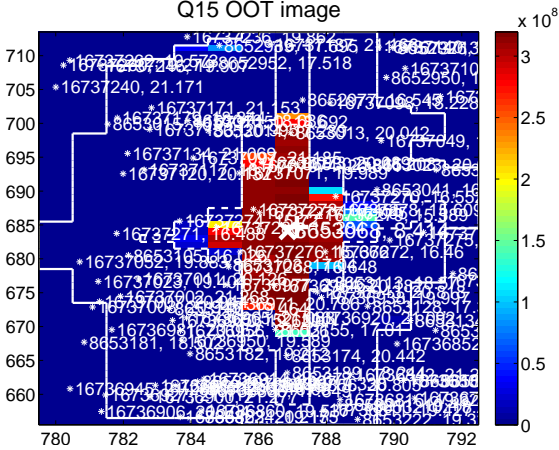
Q14 no OOT image



Q15 difference image. Poor Quality



Q15 OOT image



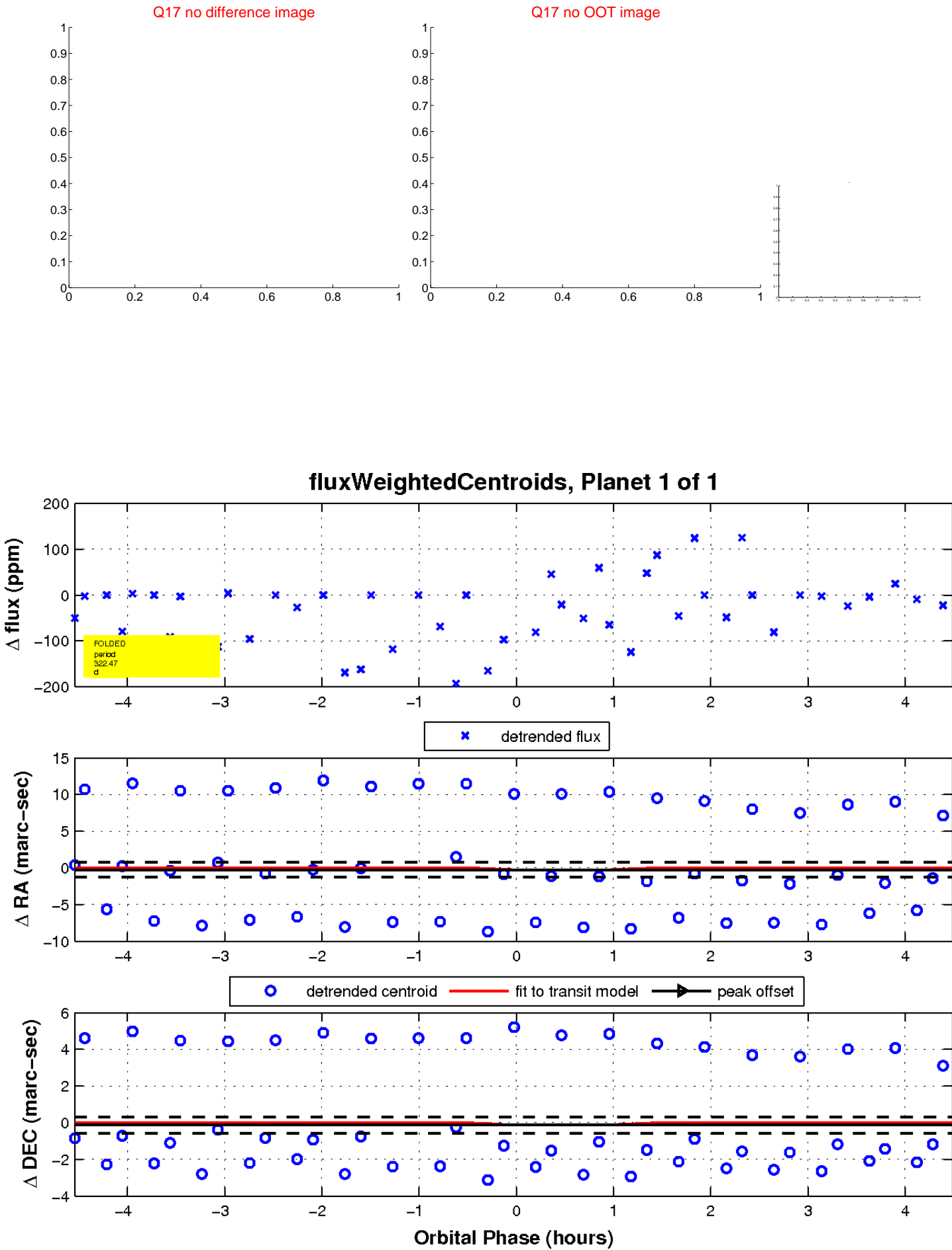
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

Declination

