

KIC 006761498

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})
006761498-01	OBS	No	463.968987	433.311388	392.0	6.386	11.1	7.2	1.51	5592	3.34	1.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006761498-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—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.

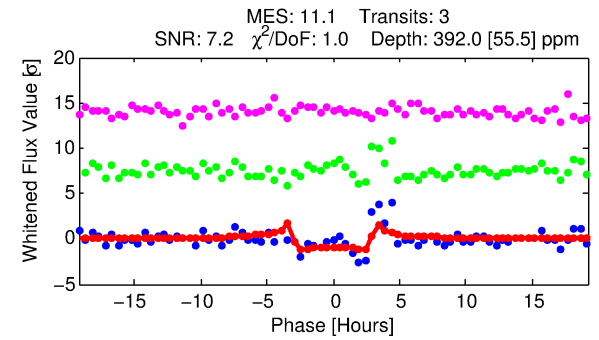
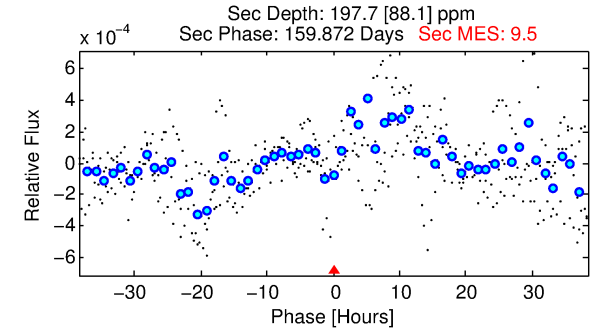
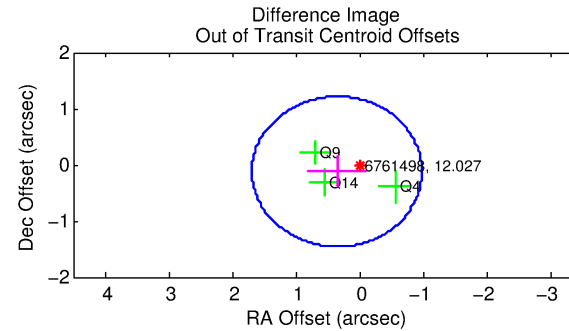
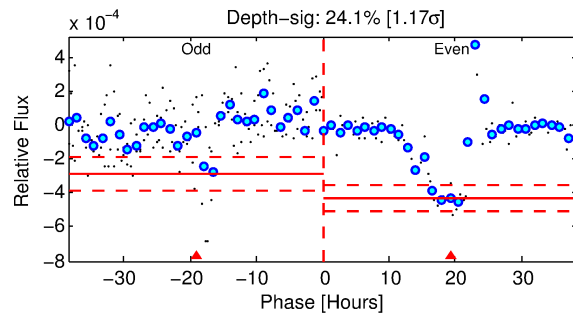
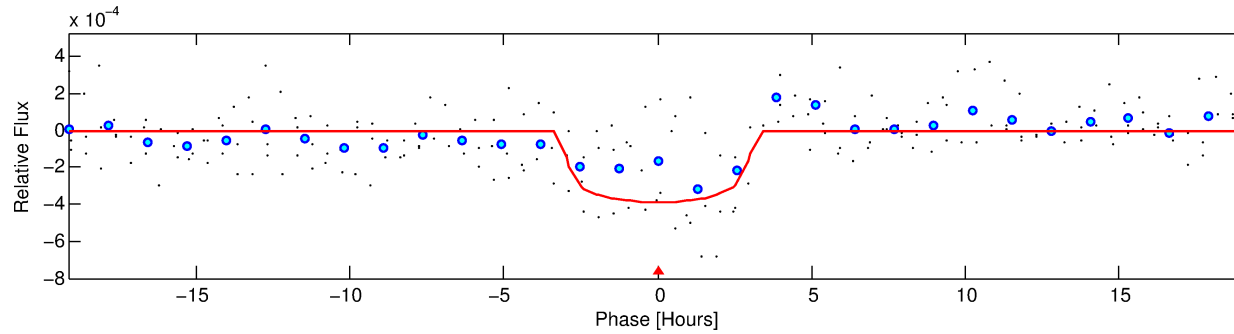
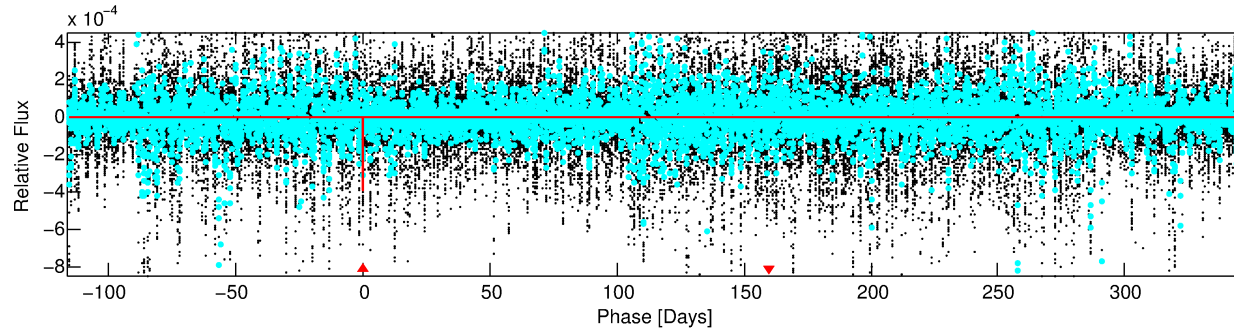
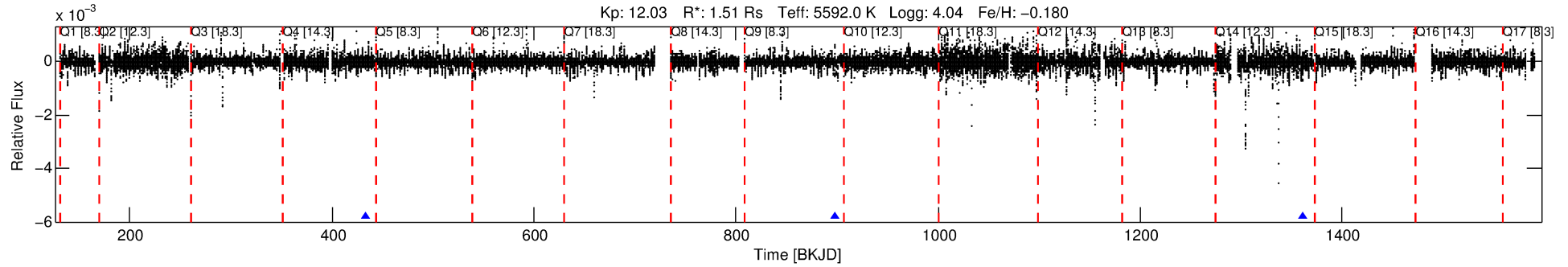
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006761498-01

No Significant Match Found

DV One-Page Summary

KIC: 6761498 Candidate: 1 of 1 Period: 463.969 d



DV Fit Results:

Period = 463.96899 [0.00447] d
Epoch = 433.3114 [0.0058] BKJD
Rp/R* = 0.0203 [0.0083]
a/R* = 341.73 [612.07]
b = 0.81 [0.75]
Seff = 1.54 [1.20]
Teq = 284 [55] K
Rp = 3.34 [1.96] Re
a = 1.1371 [0.5150] AU
Ag = 12595.31 [15199.55] [0.83 σ]
Teffp = 4655 [1094] K [3.99 σ]

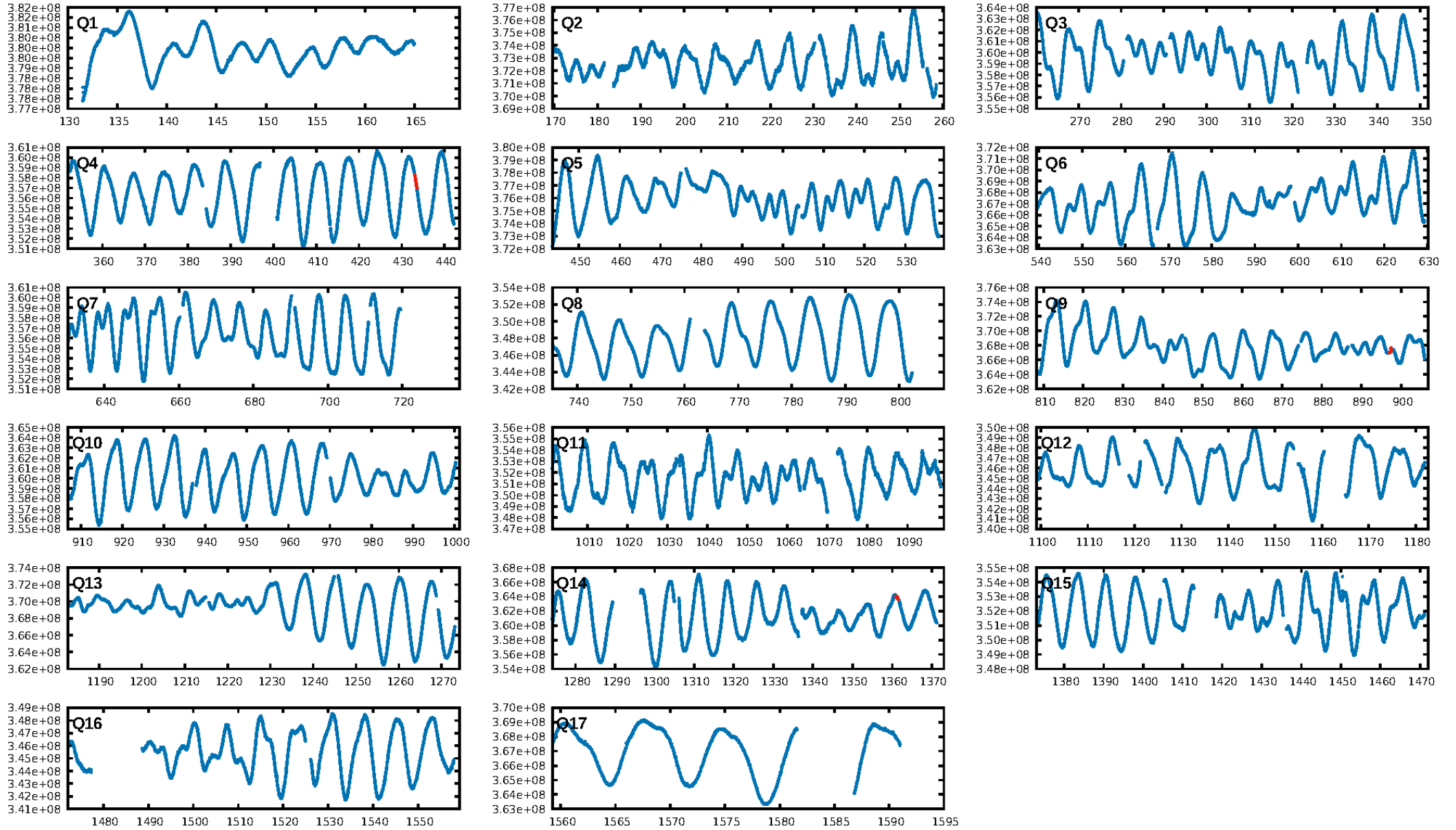
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 8.9%
ModelChiSquareGof-sig: 93.4%
Bootstrap-pfa: 1.76e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.5781
Centroid-sig: 3.5%
Centroid-so: 0.695 arcsec [1.47 σ]
OotOffset-rm: 0.373 arcsec [0.84 σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 0.362 arcsec [0.80 σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

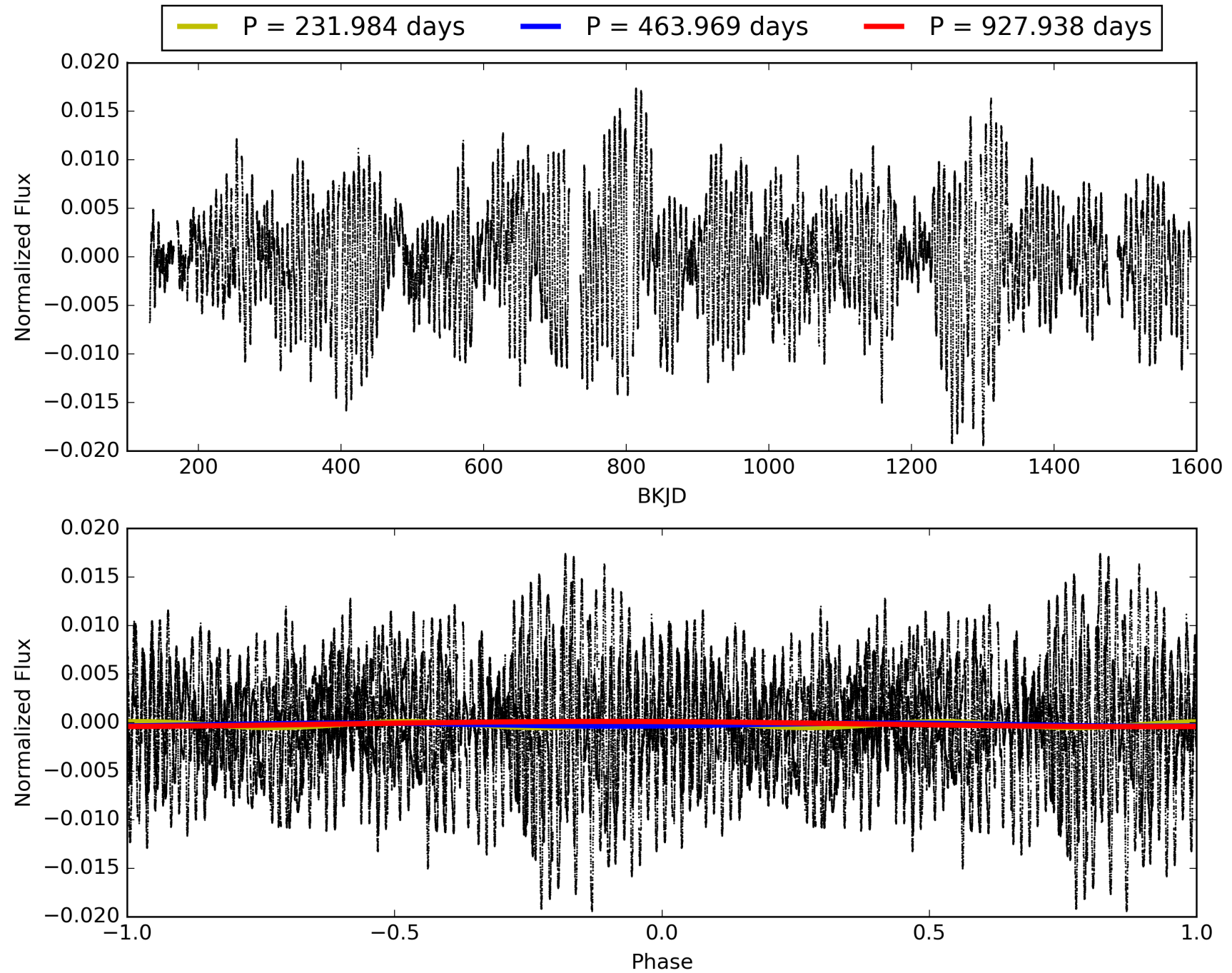
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 17:19:16 Z

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

TCE 006761498-01, PDC Light Curves

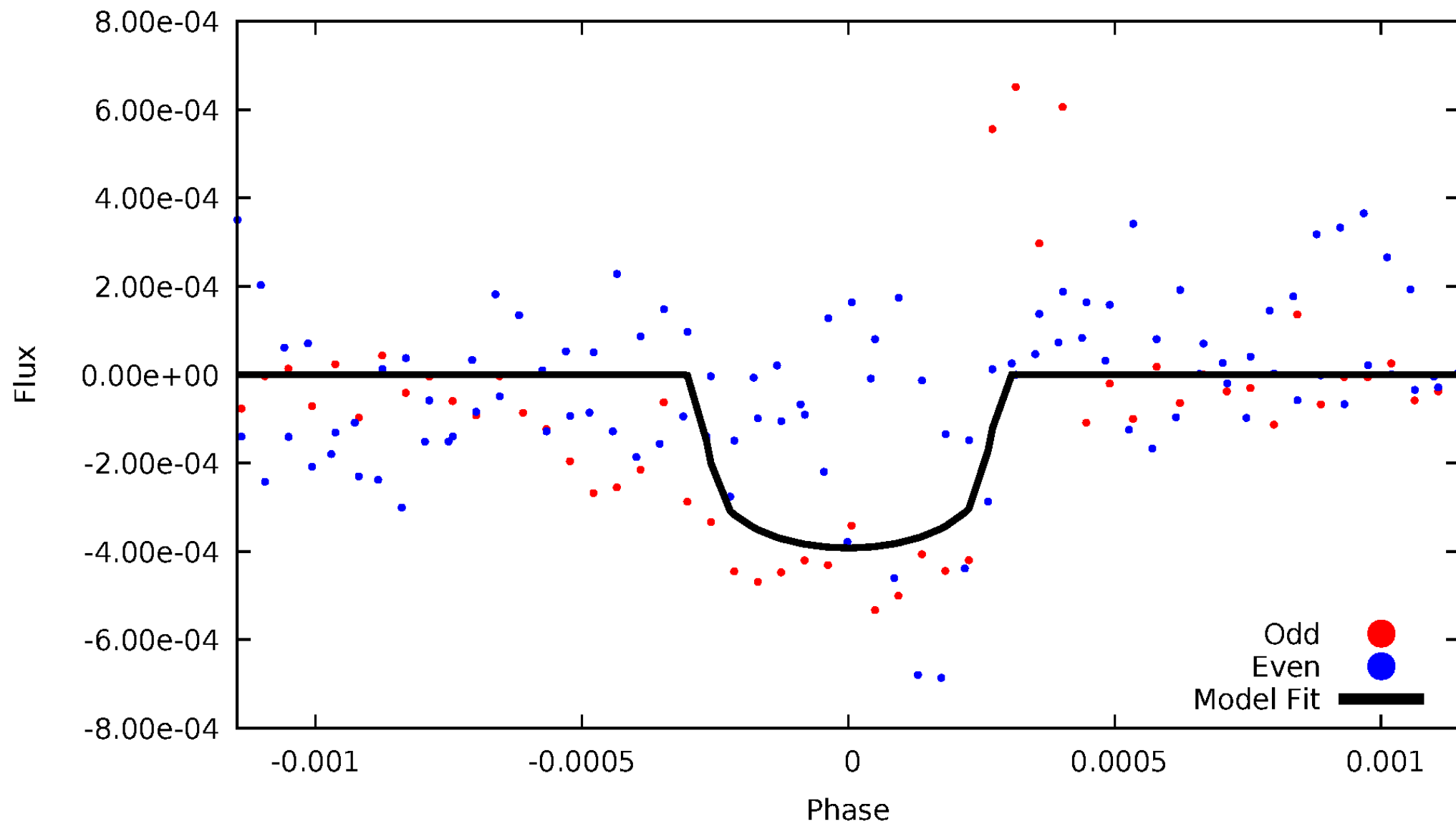


TCE 006761498-01



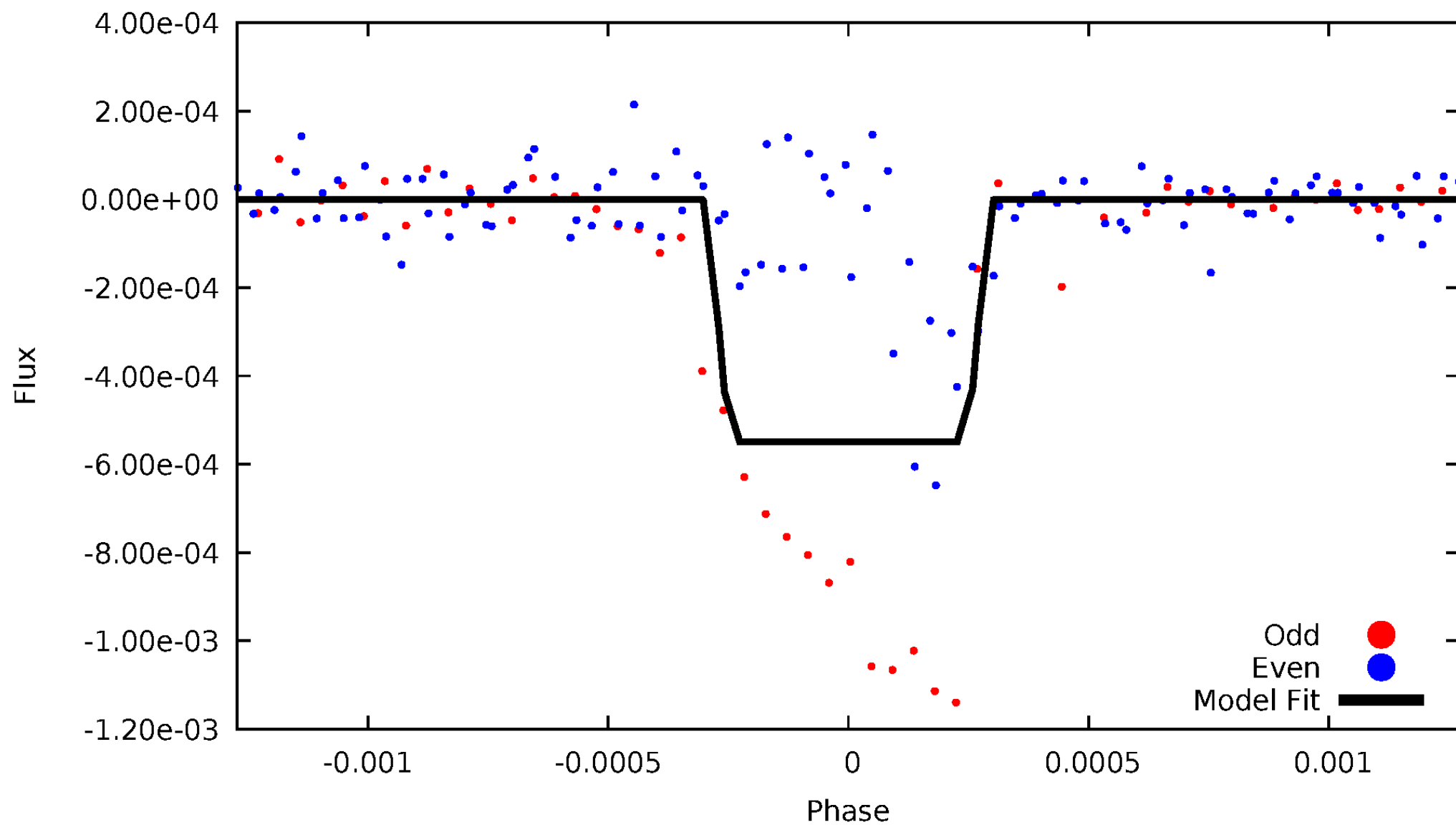
DV Odd/Even

TCE 006761498-01



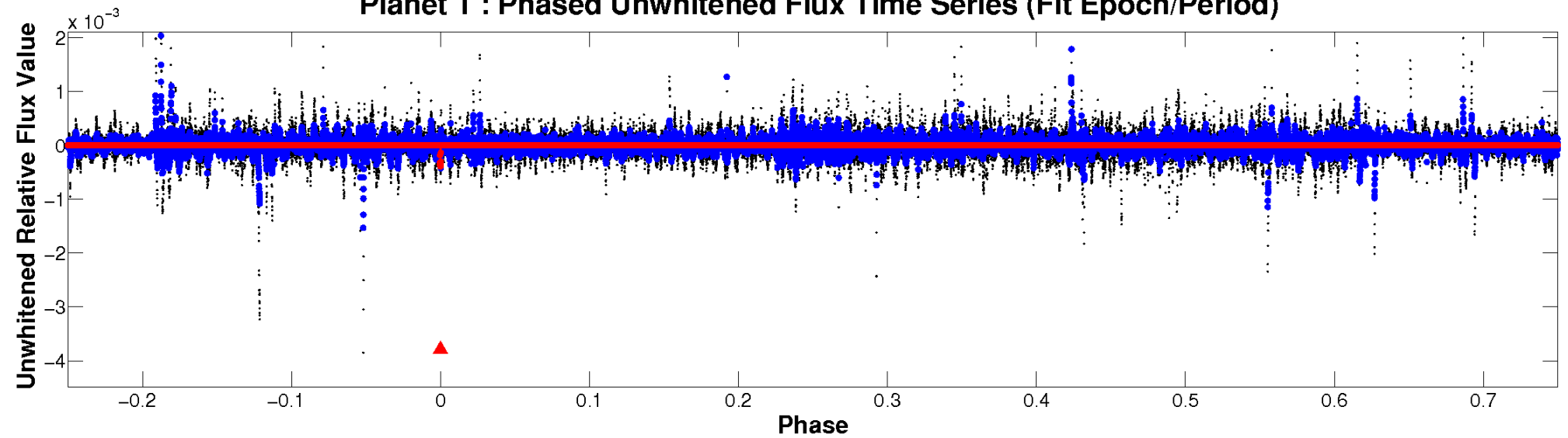
ALT Odd/Even

TCE 006761498-01

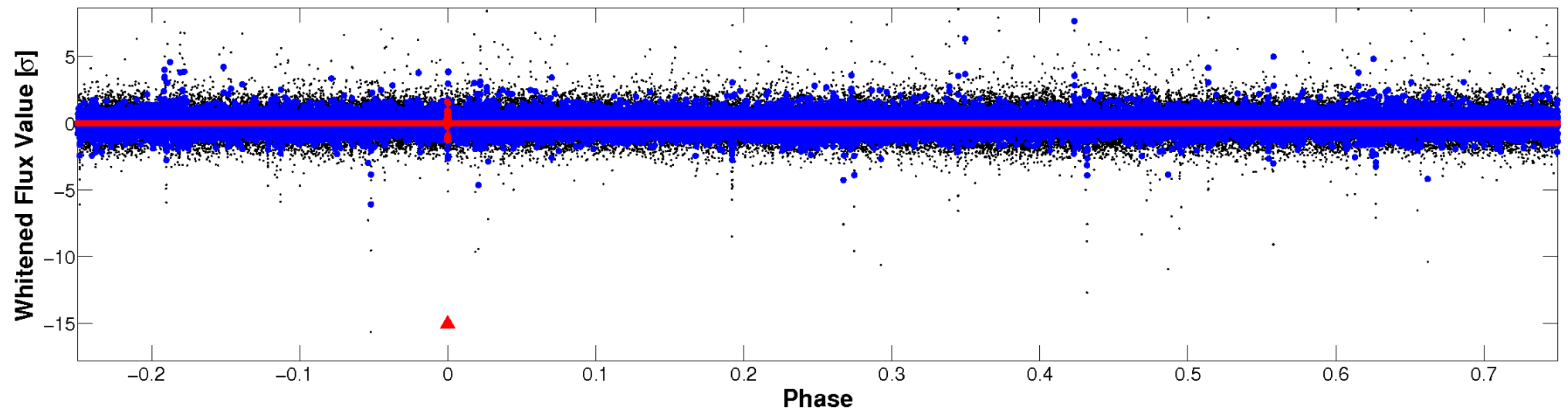


Non-Whitened Vs. Whitened Light Curve

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

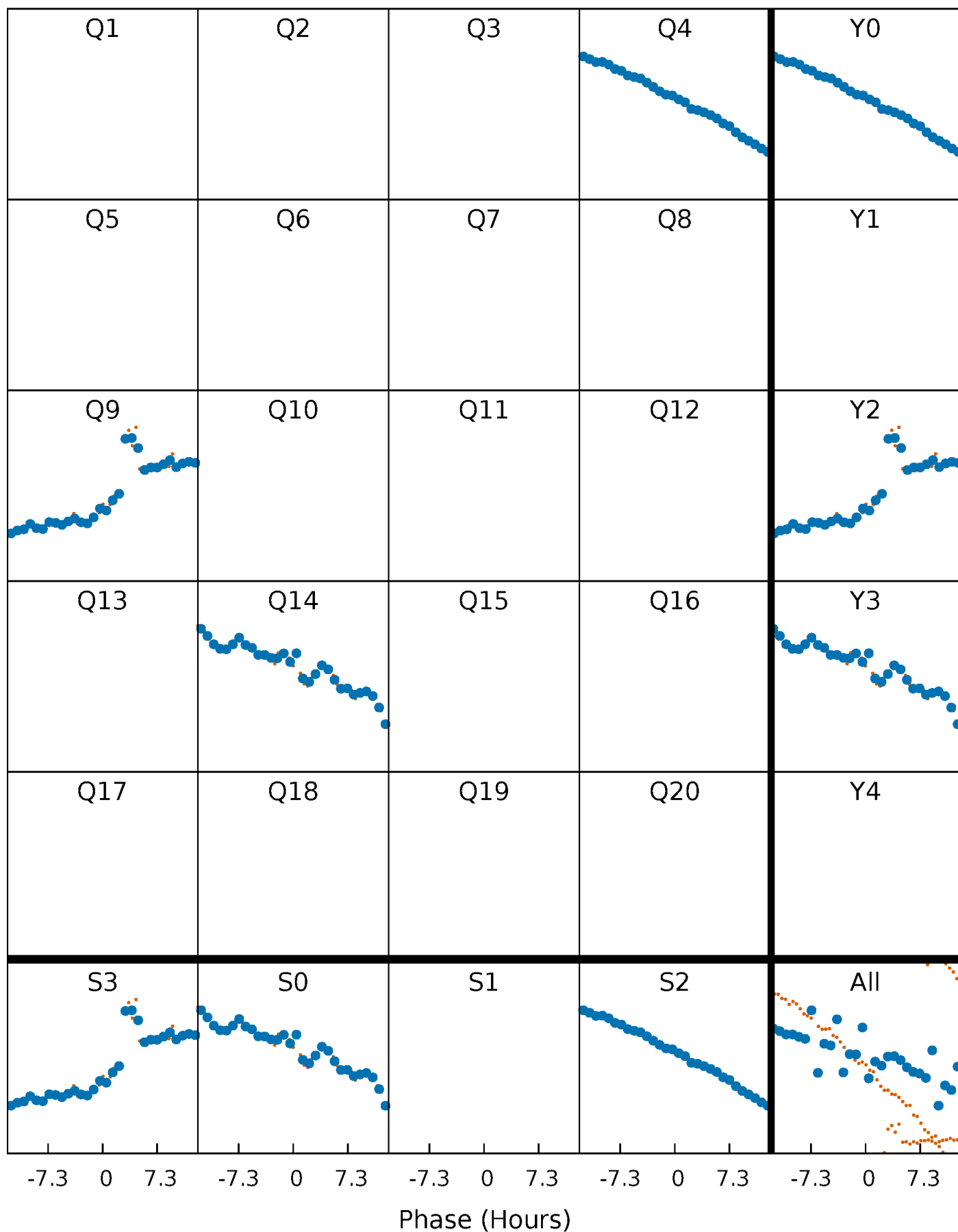


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



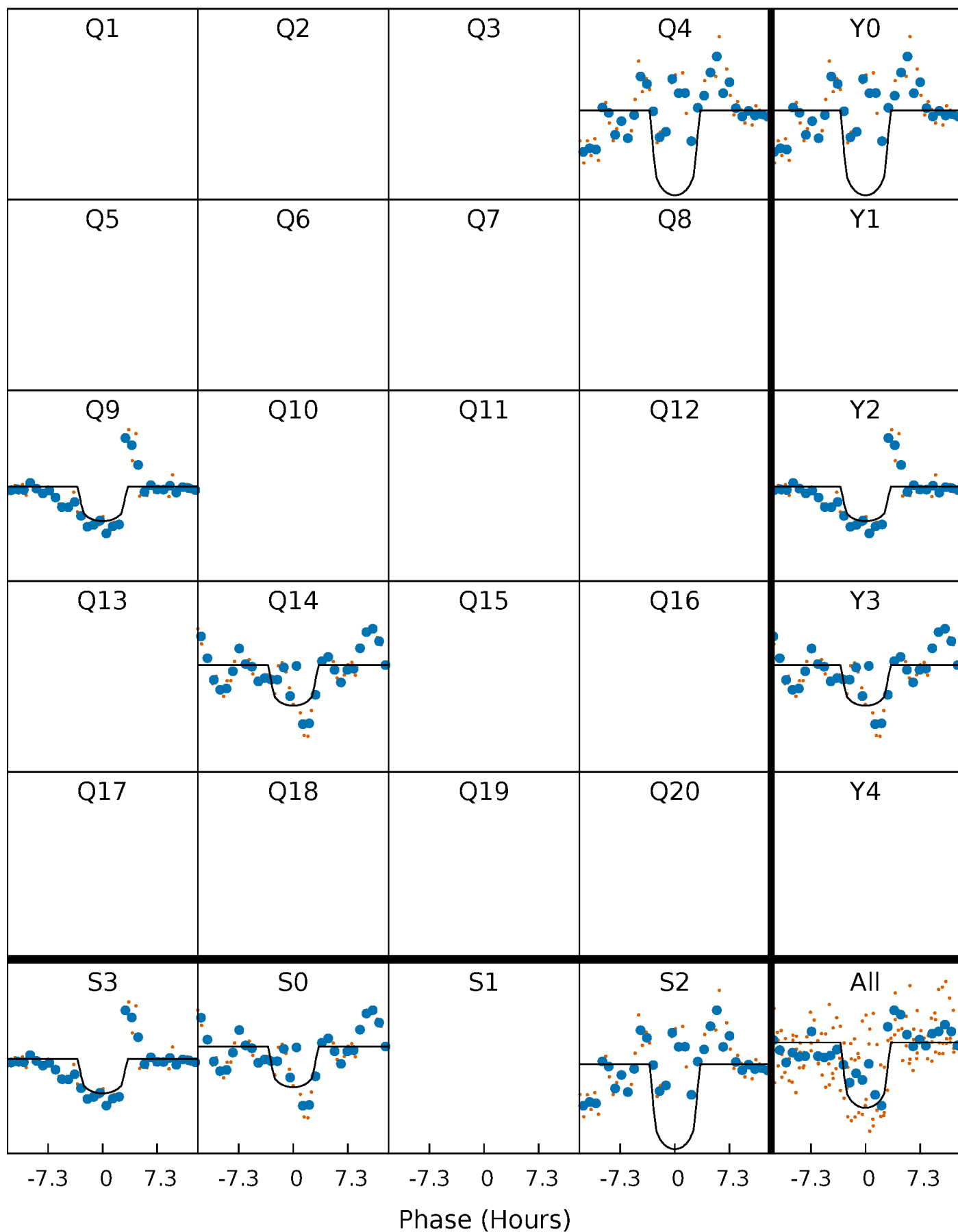
PDC Quarter-Phased Transit Curves

TCE 006761498-01 P=463.968987 Days $T_0=433.311388$ (BKJD)



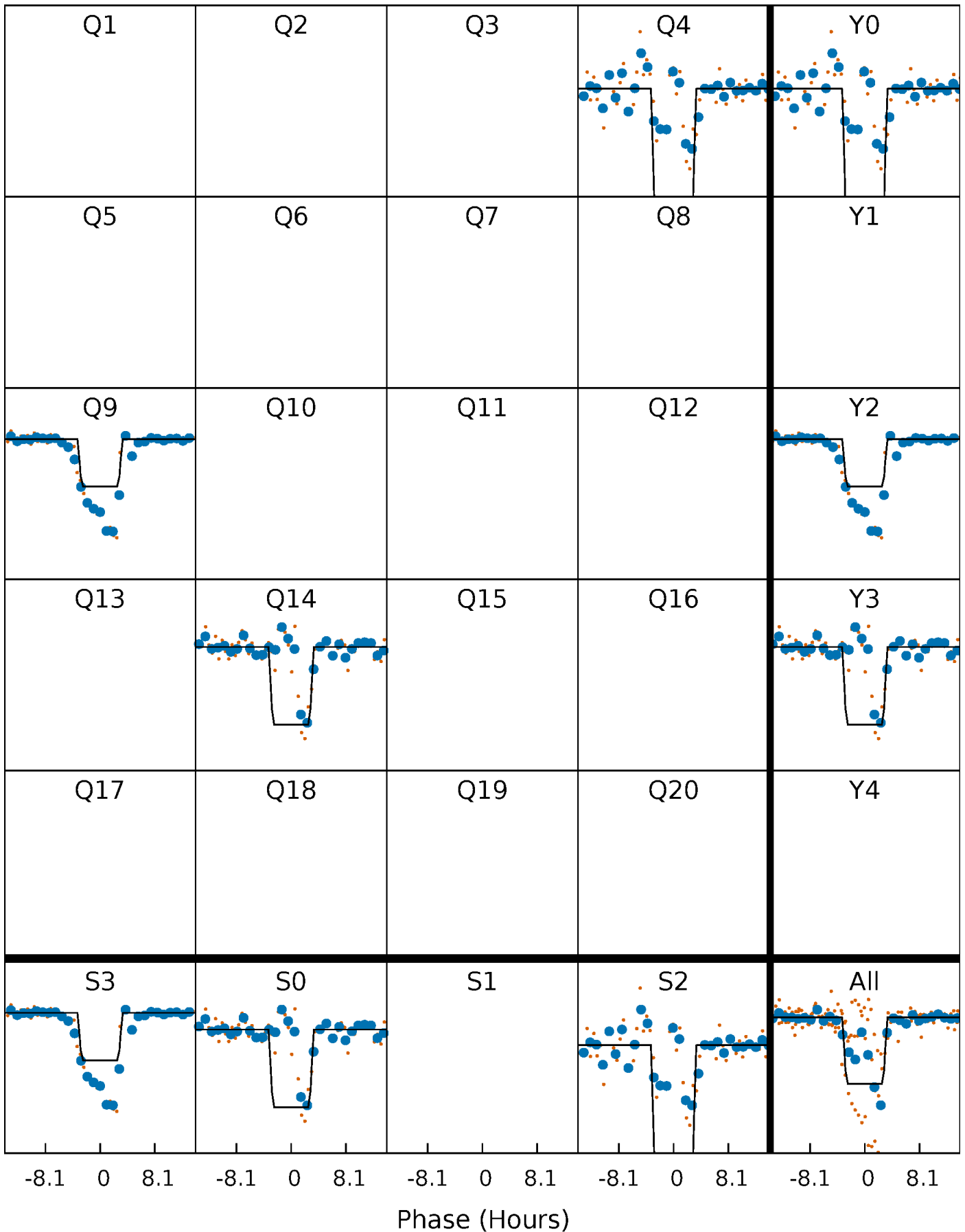
DV Quarter-Phased Transit Curves

TCE 006761498-01 P=463.968987 Days $T_0=433.311388$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

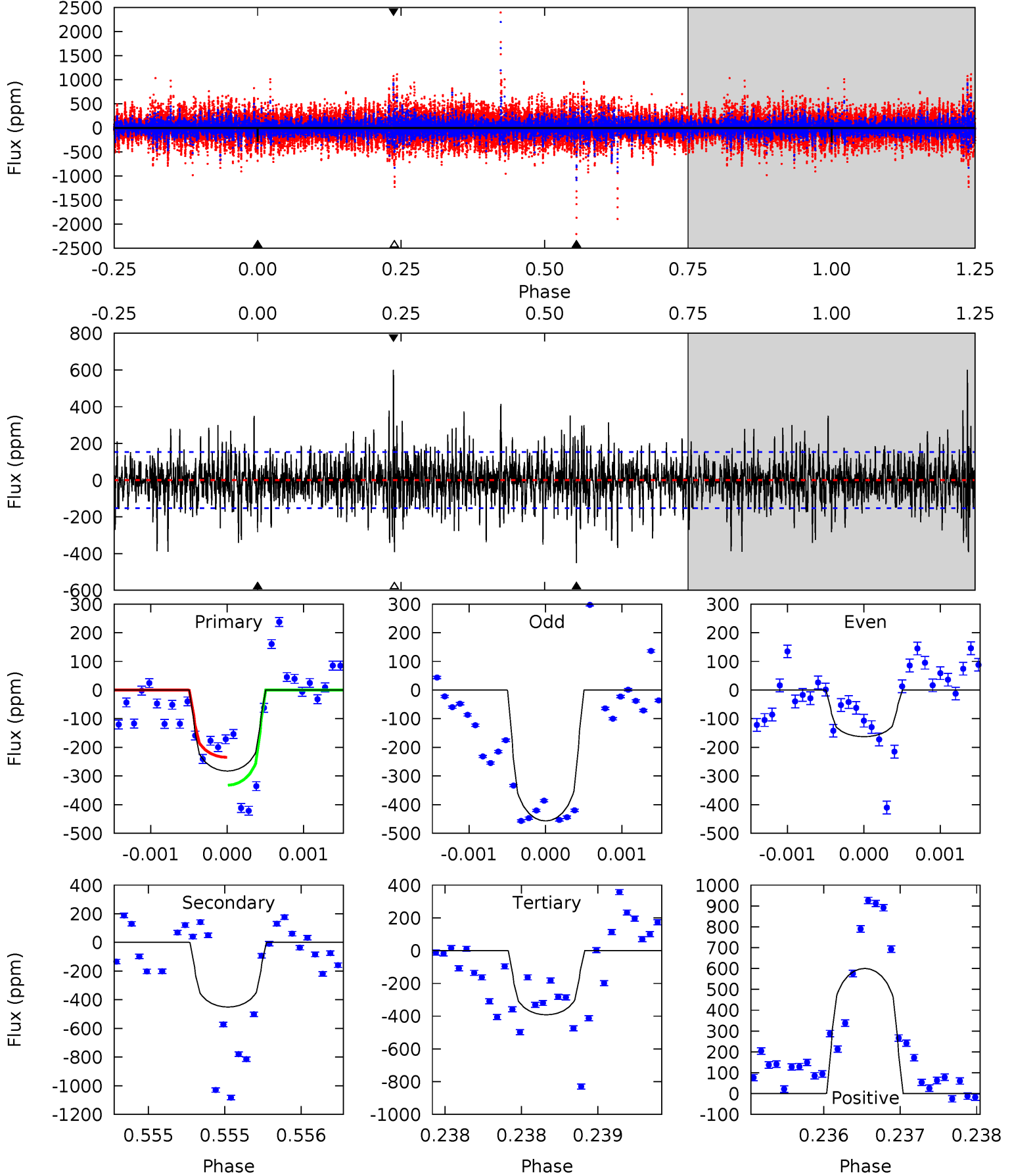
TCE 006761498-01 P=463.964413 Days $T_0=433.316886$ (BKJD)



DV Model-Shift Uniqueness Test

006761498-01, P = 463.968987 Days, E = 433.311388 Days

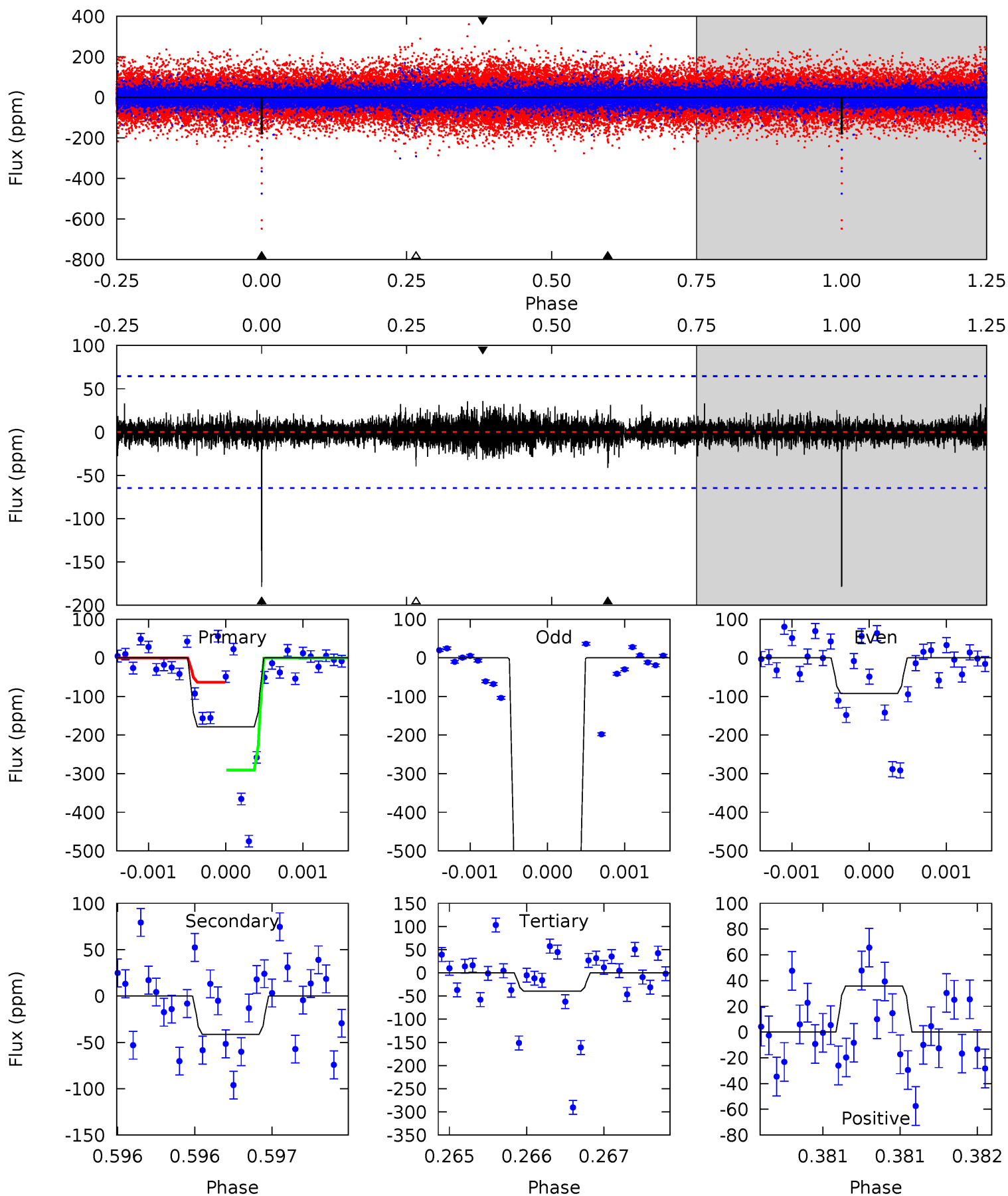
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	16.3	14.2	21.7	5.54	3.43	3.23	-3.96	-11.5	2.14	-5.41	4.41	0.83	0.57	1.78



Alt Model-Shift Uniqueness Test

006761498-01, P = 463.964413 Days, E = 433.316886 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	3.54	3.40	3.07	5.54	3.43	0.65	11.9	12.2	0.14	0.48	37.9	2.28	0.17	9.83



Stellar Parameters For KIC 006761498

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5592^{+169}_{-135}	$4.040^{+0.465}_{-0.186}$	$-0.180^{+0.300}_{-0.250}$	$1.509^{+0.421}_{-0.631}$	$0.911^{+0.104}_{-0.094}$	$0.374^{+1.387}_{-0.179}$
	+3%/-2%	+12%/-5%	+167%/-139%	+28%/-42%	+11%/-10%	+371%/-48%
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 006761498-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-451 ± 28	$3.10^{+1.50}_{-1.38}$	392^{+34}_{-46}	5764^{+1909}_{-848}	33507^{+75660}_{-18431}
Alt.	-41 ± 12	$3.64^{+1.75}_{-1.45}$	391^{+36}_{-46}	3424^{+570}_{-358}	2238^{+4170}_{-1287}

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

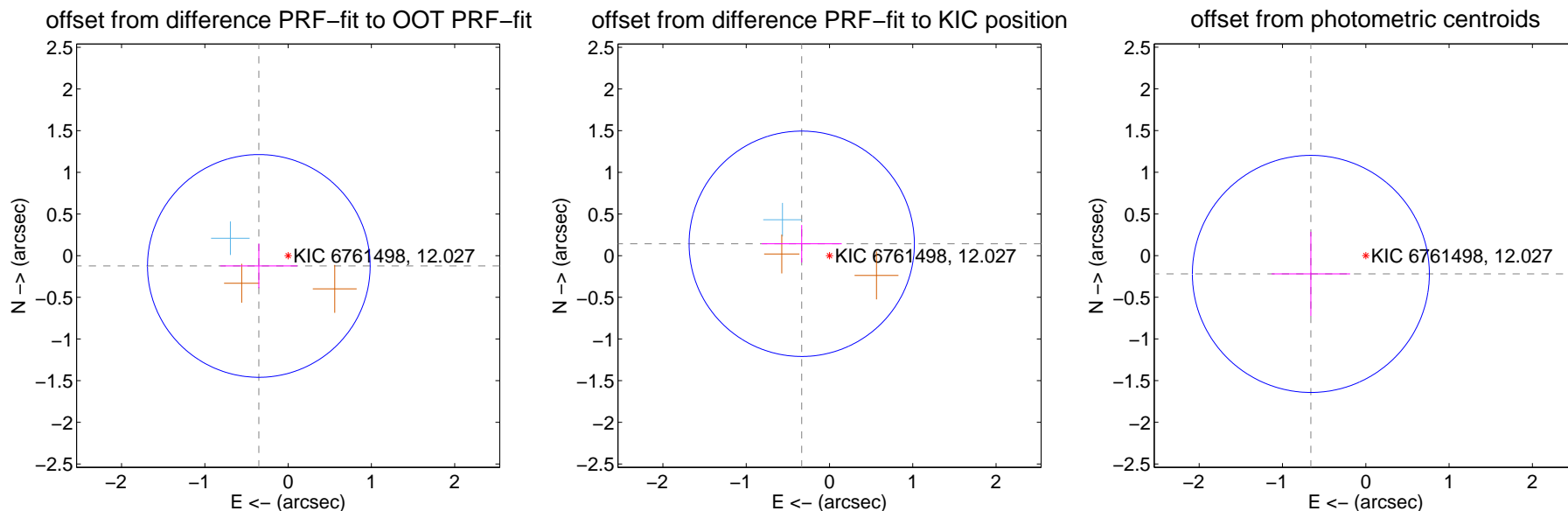
DV Centroid Data

Supplemental centroid analysis for 006761498-01. Kepler magnitude: 12.03. Transit SNR 7.23

There are 1 quarters with good PRF difference image offsets

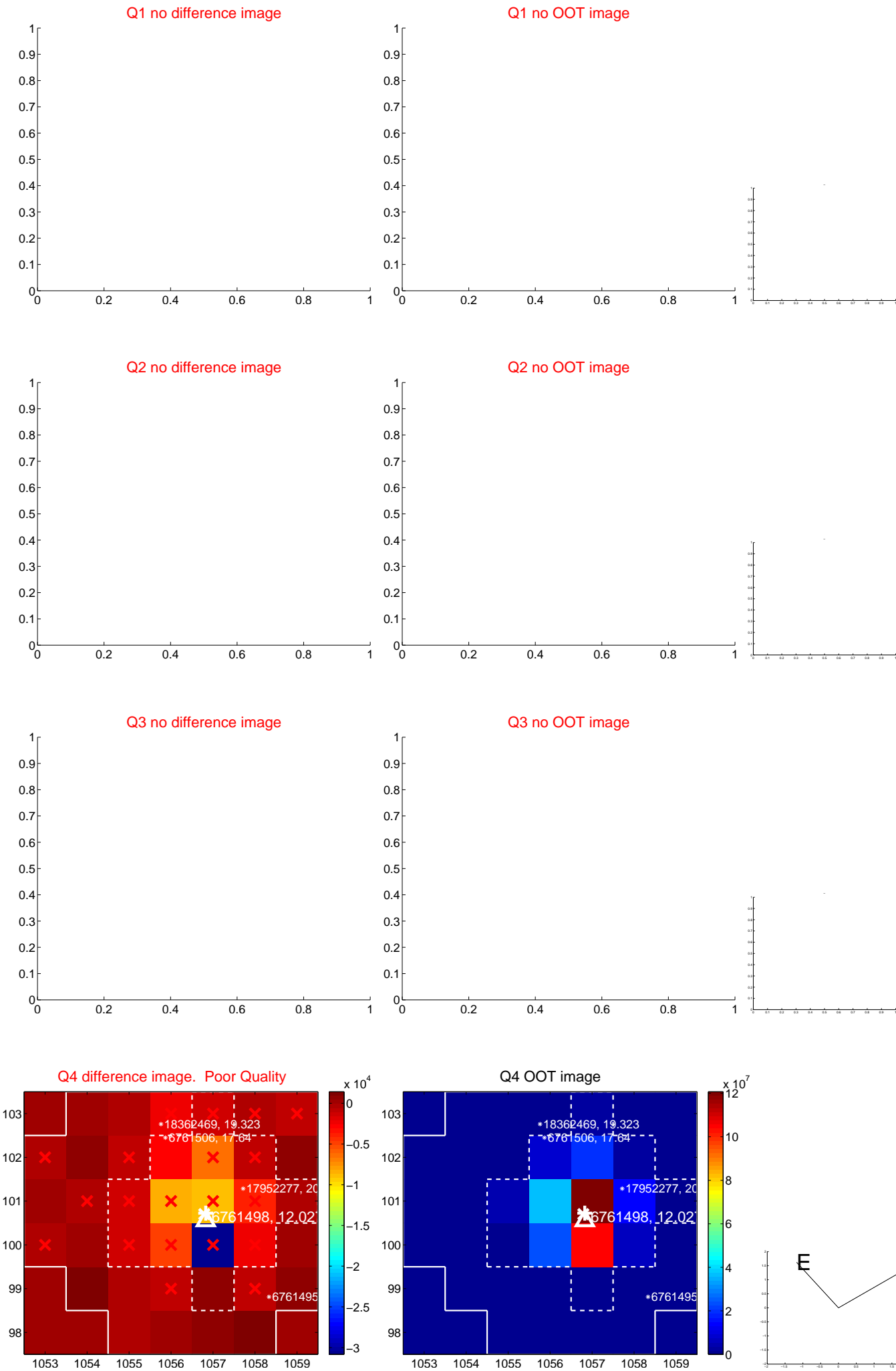
The direct PRF centroid is offset from the target star catalog position by about 0.35 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.373 ± 0.446	0.84	0.352 ± 0.463	-0.123 ± 0.267
PRF-fit source offset from KIC position	0.362 ± 0.451	0.80	0.333 ± 0.481	0.143 ± 0.225
photometric centroid source offset	0.69 ± 0.47	1.47	0.66 ± 0.47	-0.22 ± 0.50



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.

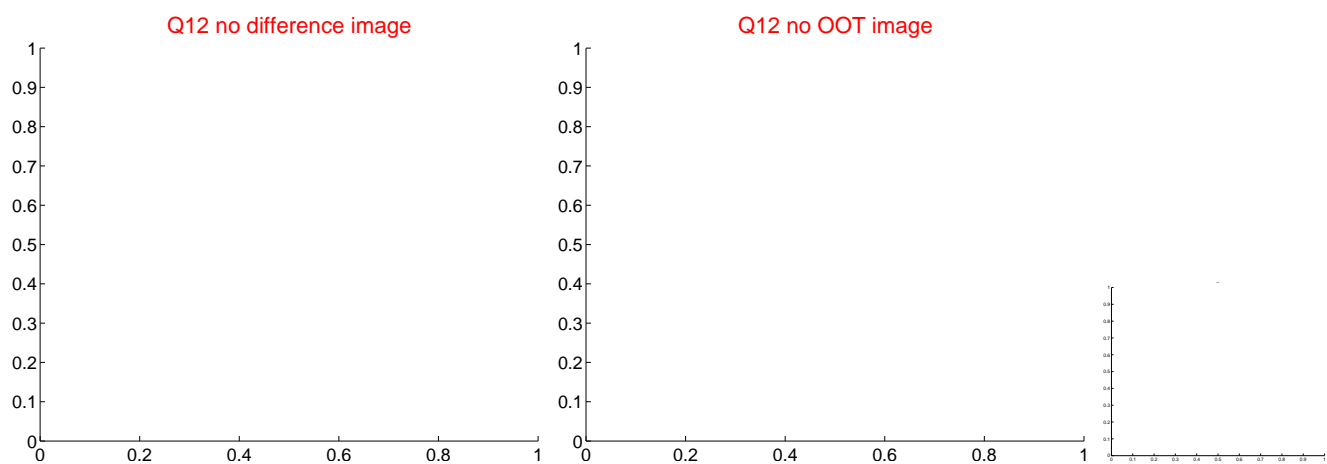
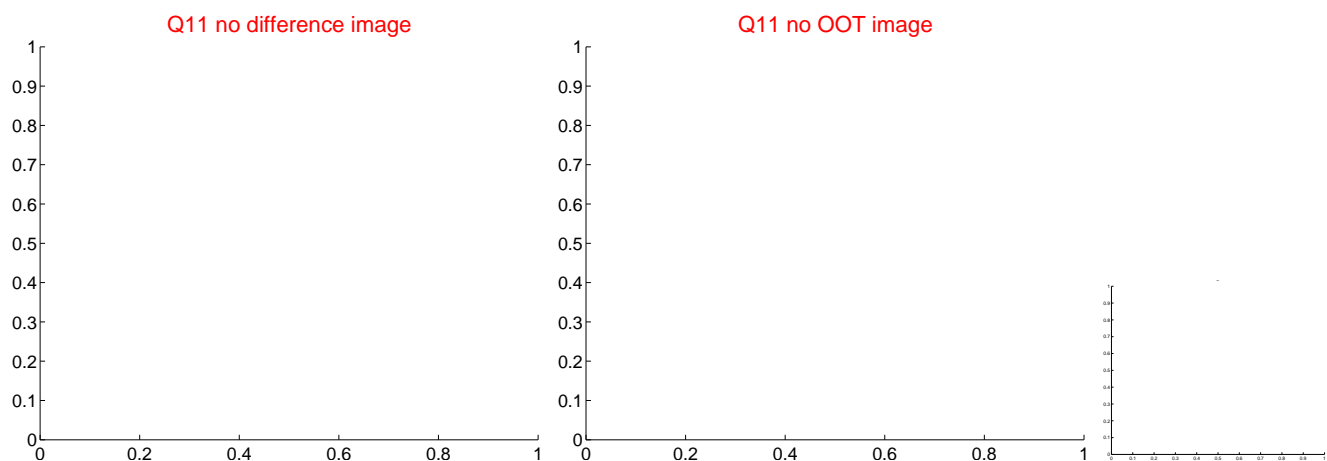
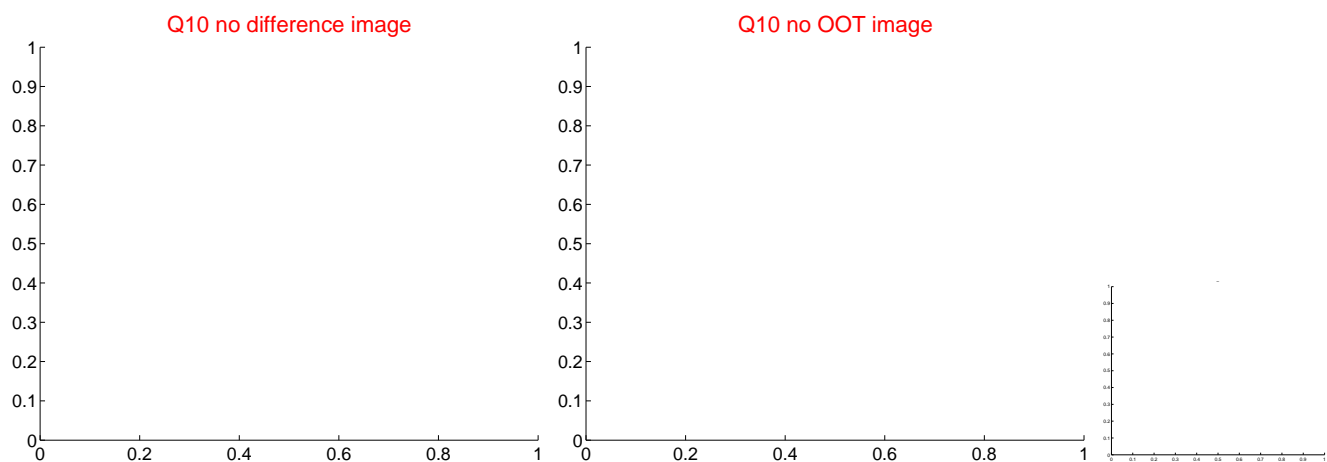
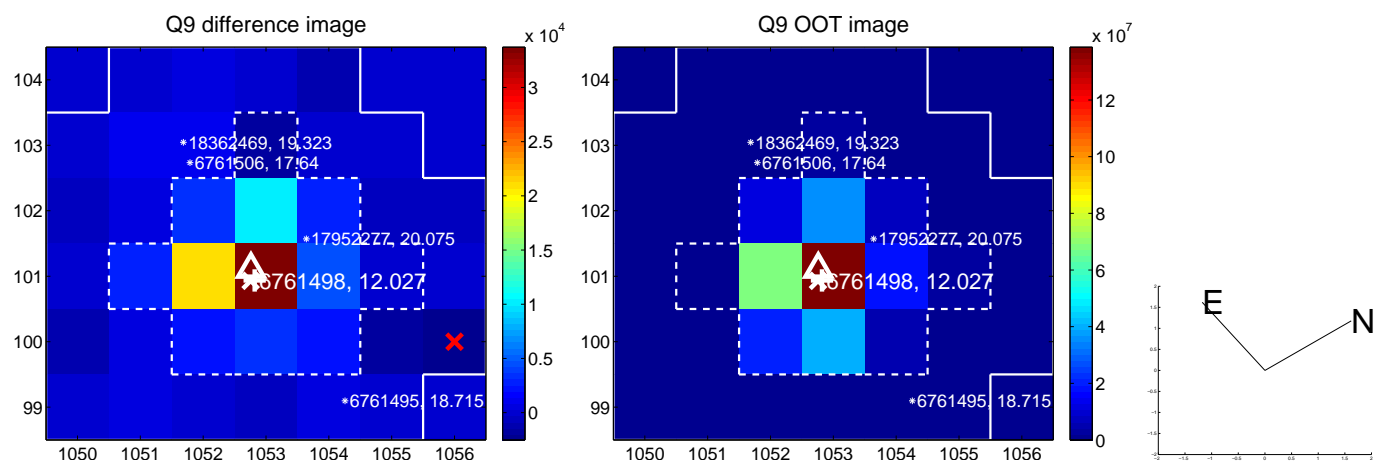
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



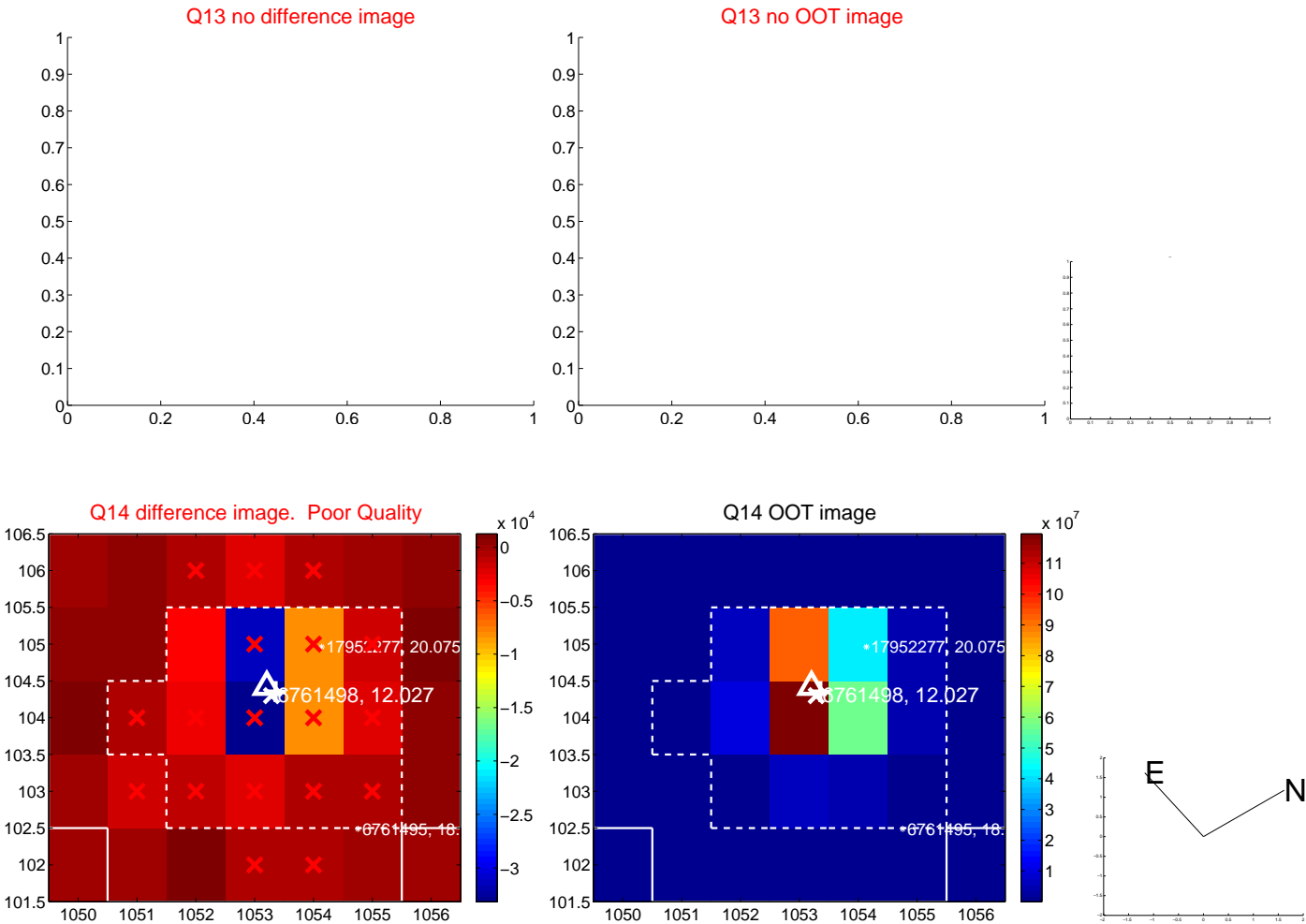
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



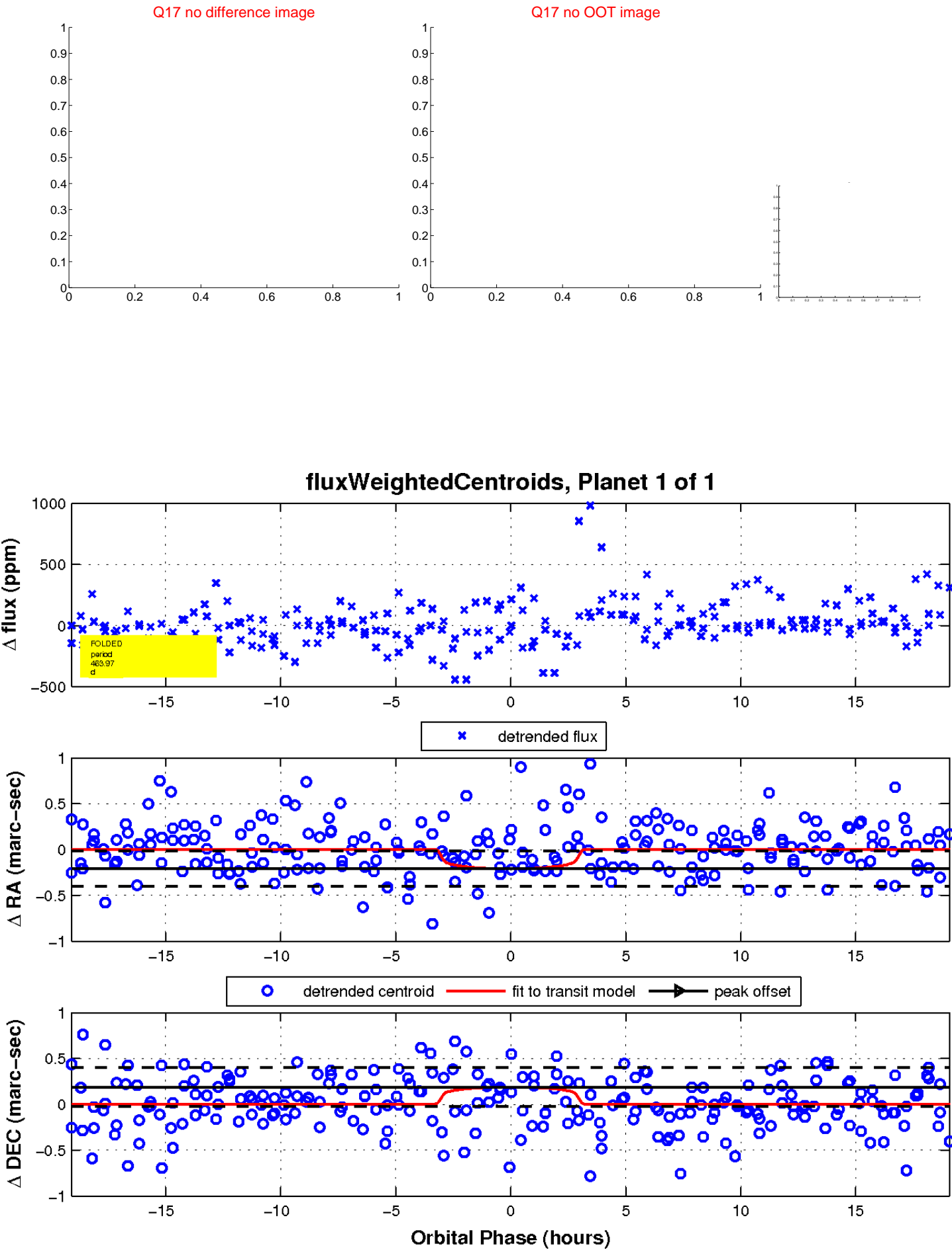
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

