

KIC 011241285

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})
011241285-01	OBS	No	668.671179	172.518275	556.0	2.207	10.3	6.7	1.84	4951	5.25	0.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011241285-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—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.

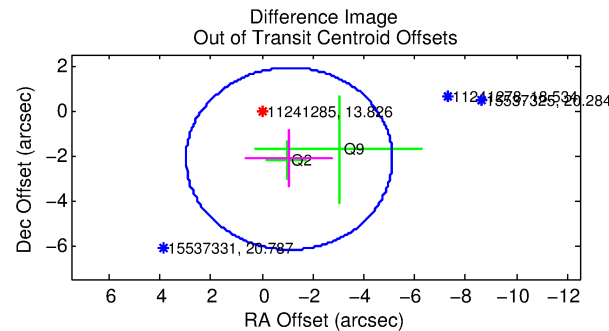
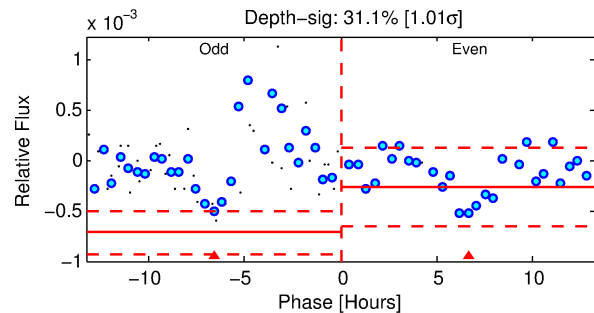
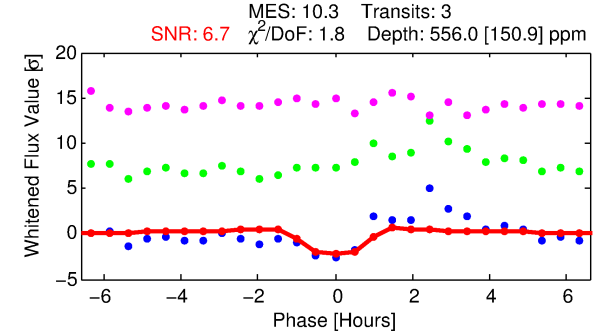
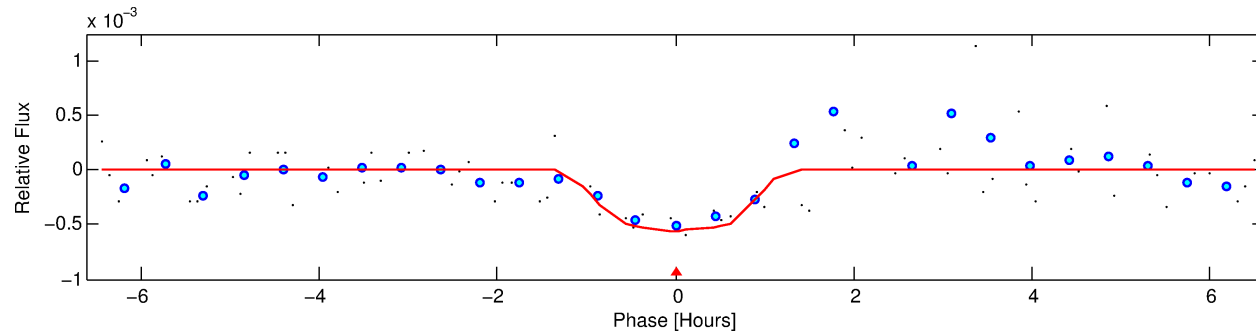
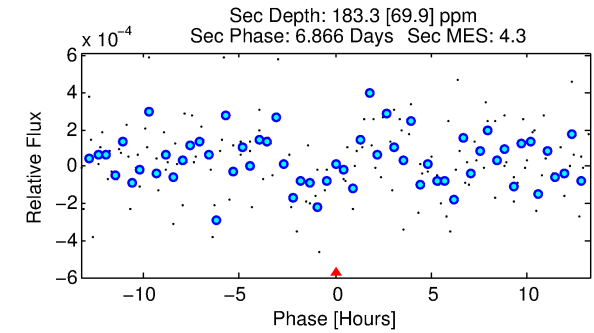
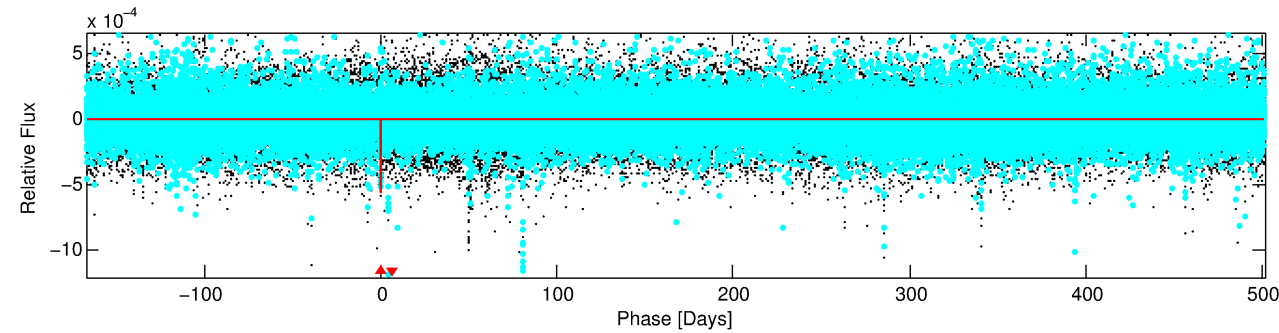
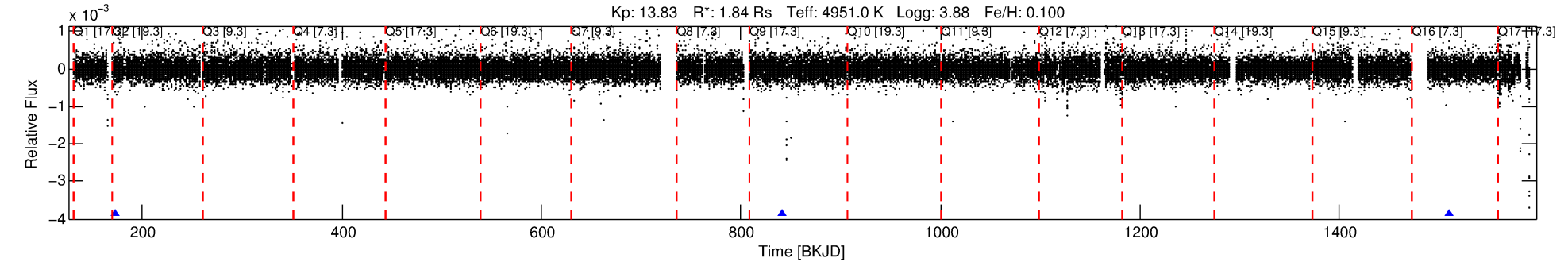
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011241285-01

No Significant Match Found

DV One-Page Summary

KIC: 11241285 Candidate: 1 of 1 Period: 668.671 d



DV Fit Results:

Period = 668.67118 [0.00847] d
Epoch = 172.5183 [0.0120] BKJD
Rp/R* = 0.0261 [0.1479]
a/R* = 1187.97 [25916.88]
b = 0.89 [5.35]
Seff = 0.86 [1.02]
Teq = 245 [73] K
Rp = 5.25 [29.92] Re
a = 1.4617 [1.0199] AU
Ag = 7825.93 [89228.38] [0.09 σ]
Teffp = 3567 [10112] K [0.33 σ]

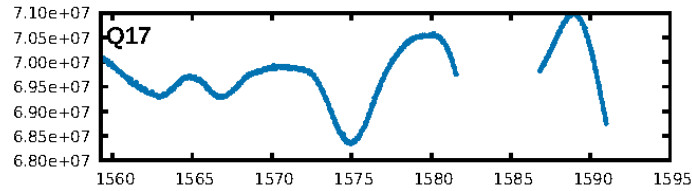
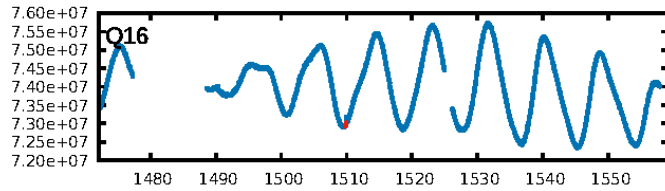
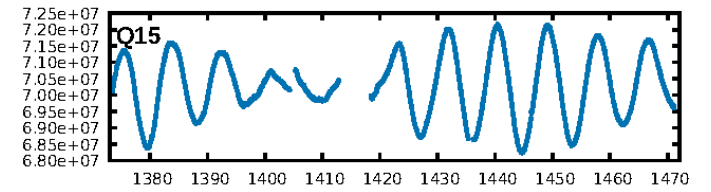
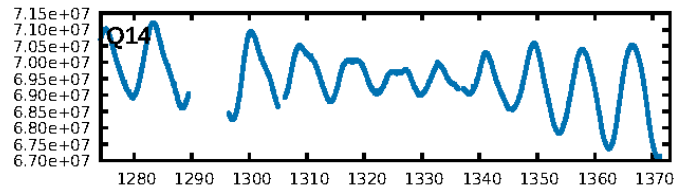
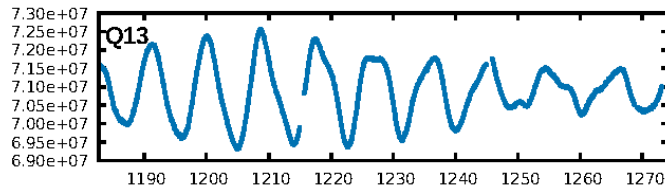
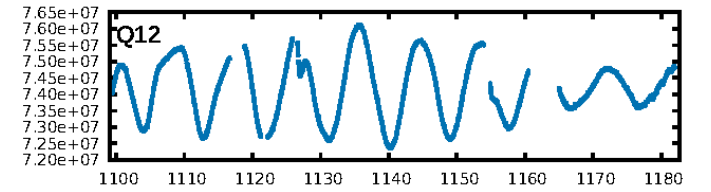
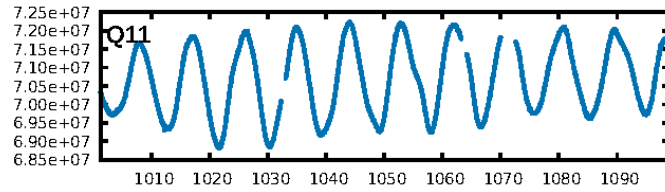
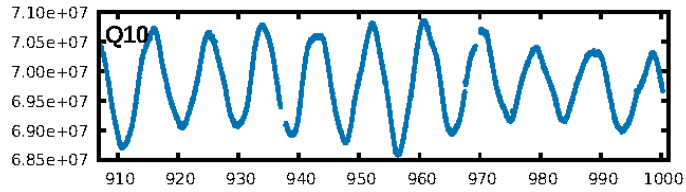
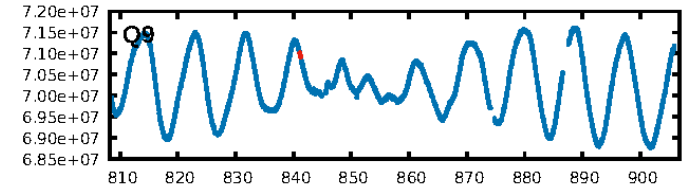
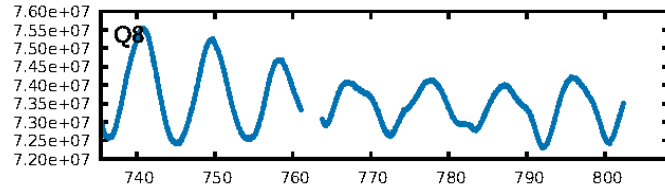
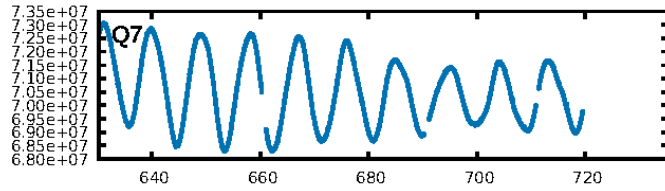
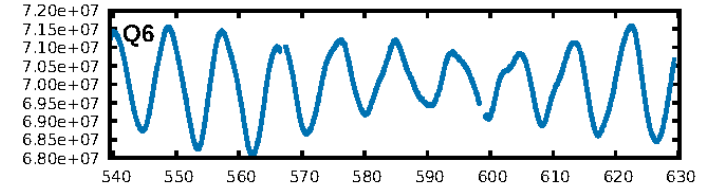
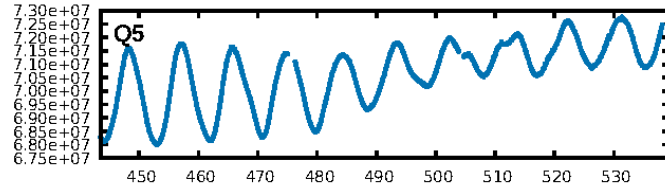
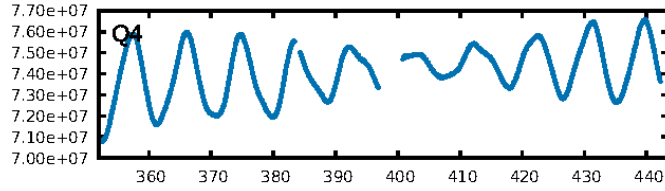
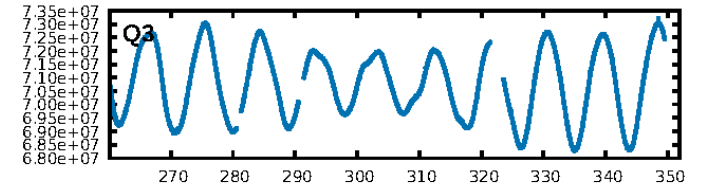
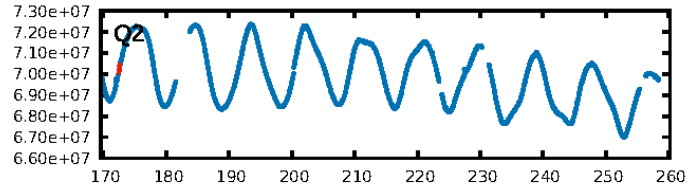
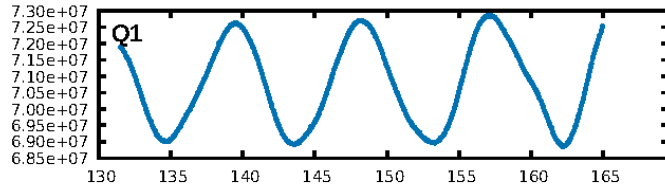
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.7%
ModelChiSquareGof-sig: 88.2%
Bootstrap-pfa: 1.80e-07
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -1.374
Centroid-sig: 23.1%
Centroid-so: 1.286 arcsec [1.02 σ]
OotOffset-rm: 2.402 arcsec [1.78 σ]
KicOffset-rm: 2.254 arcsec [1.67 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

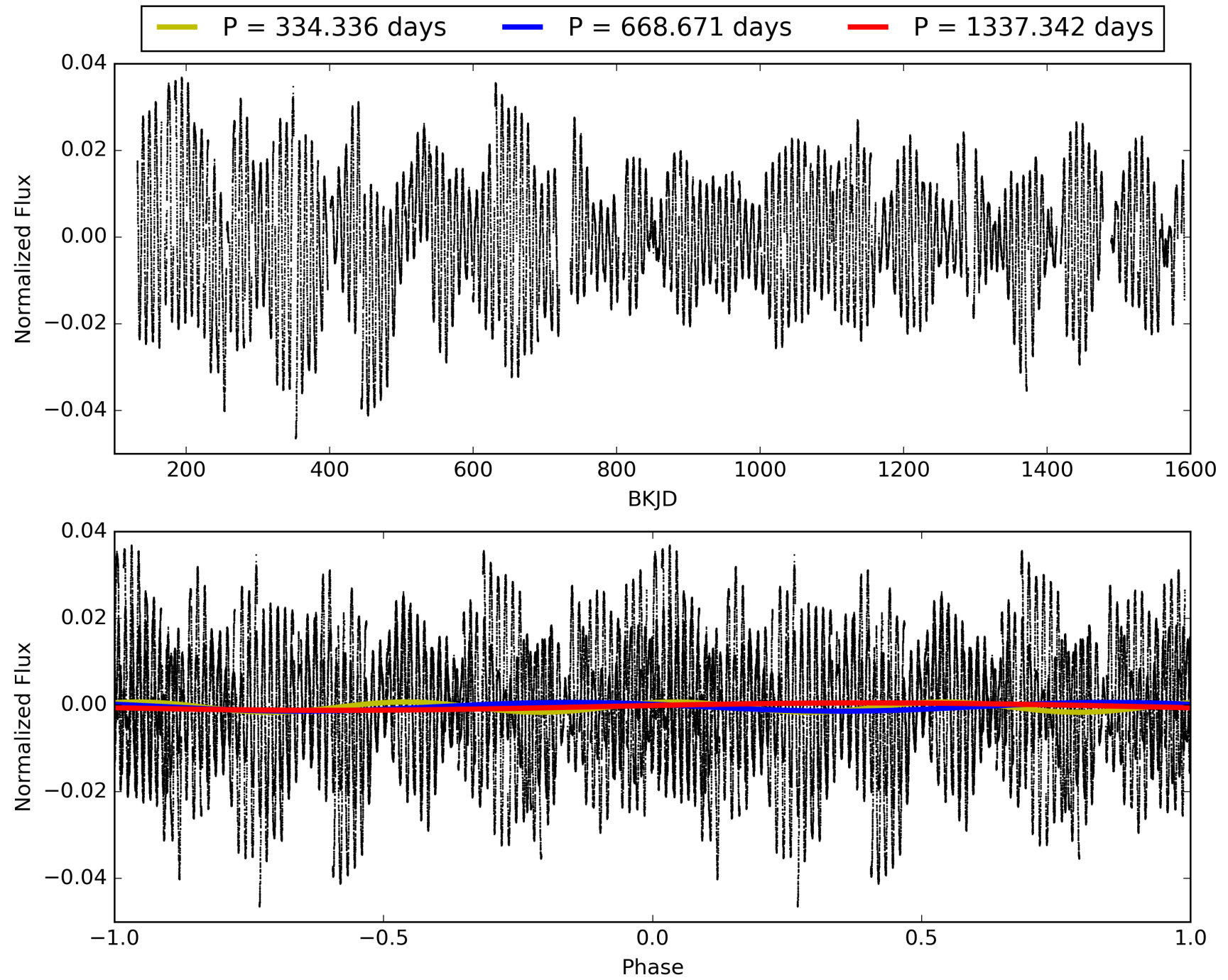
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:49:36 Z

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

TCE 011241285-01, PDC Light Curves

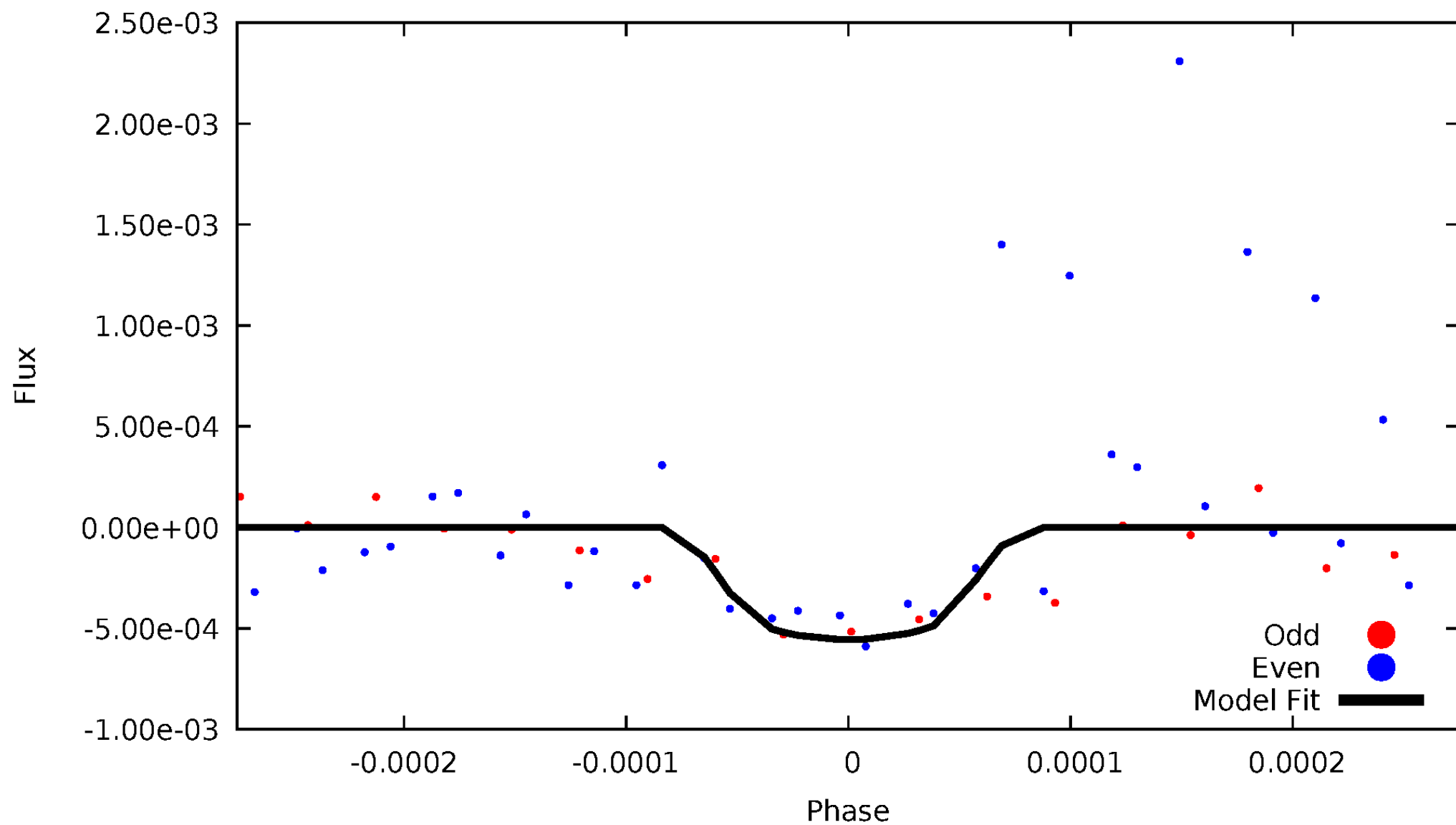


TCE 011241285-01



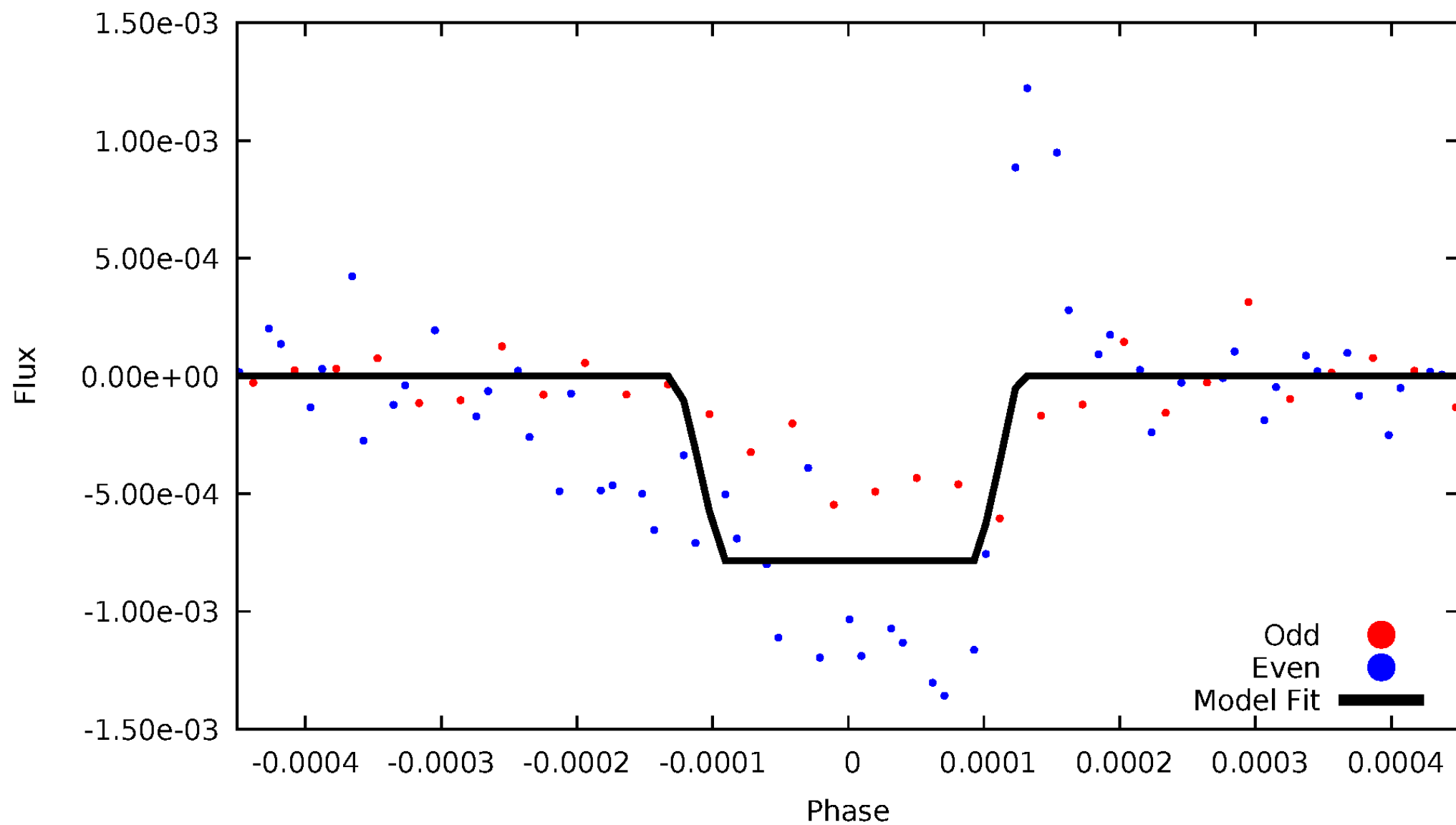
DV Odd/Even

TCE 011241285-01



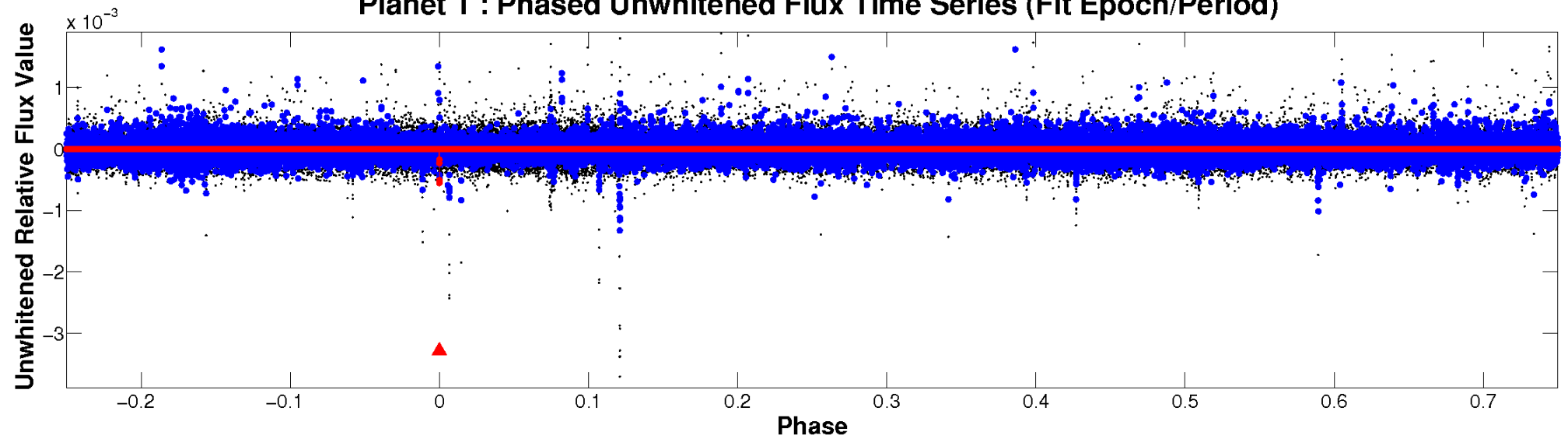
ALT Odd/Even

TCE 011241285-01

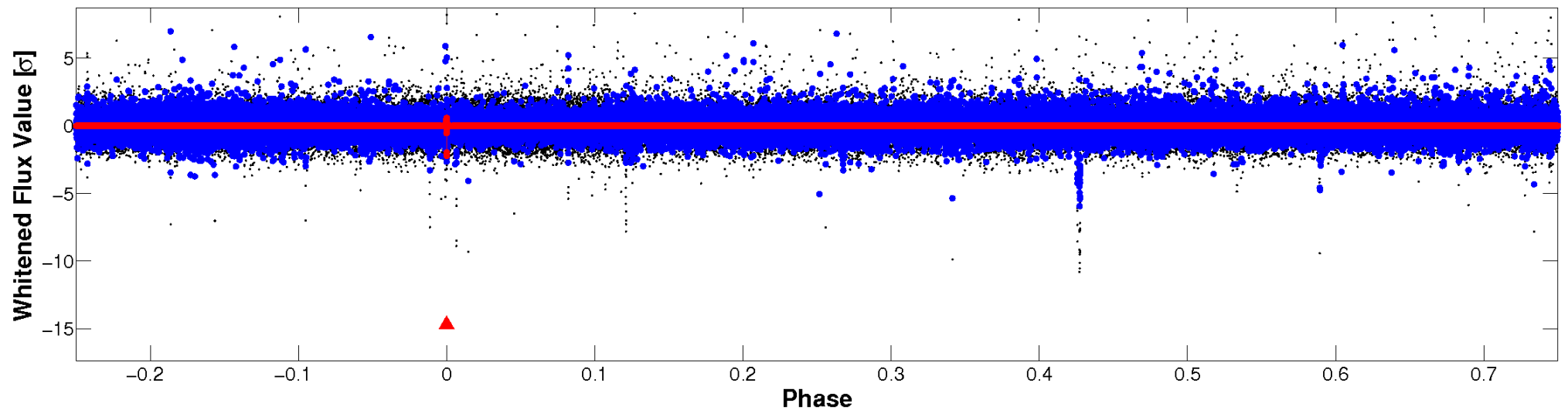


Non-Whitened Vs. Whitened Light Curve

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

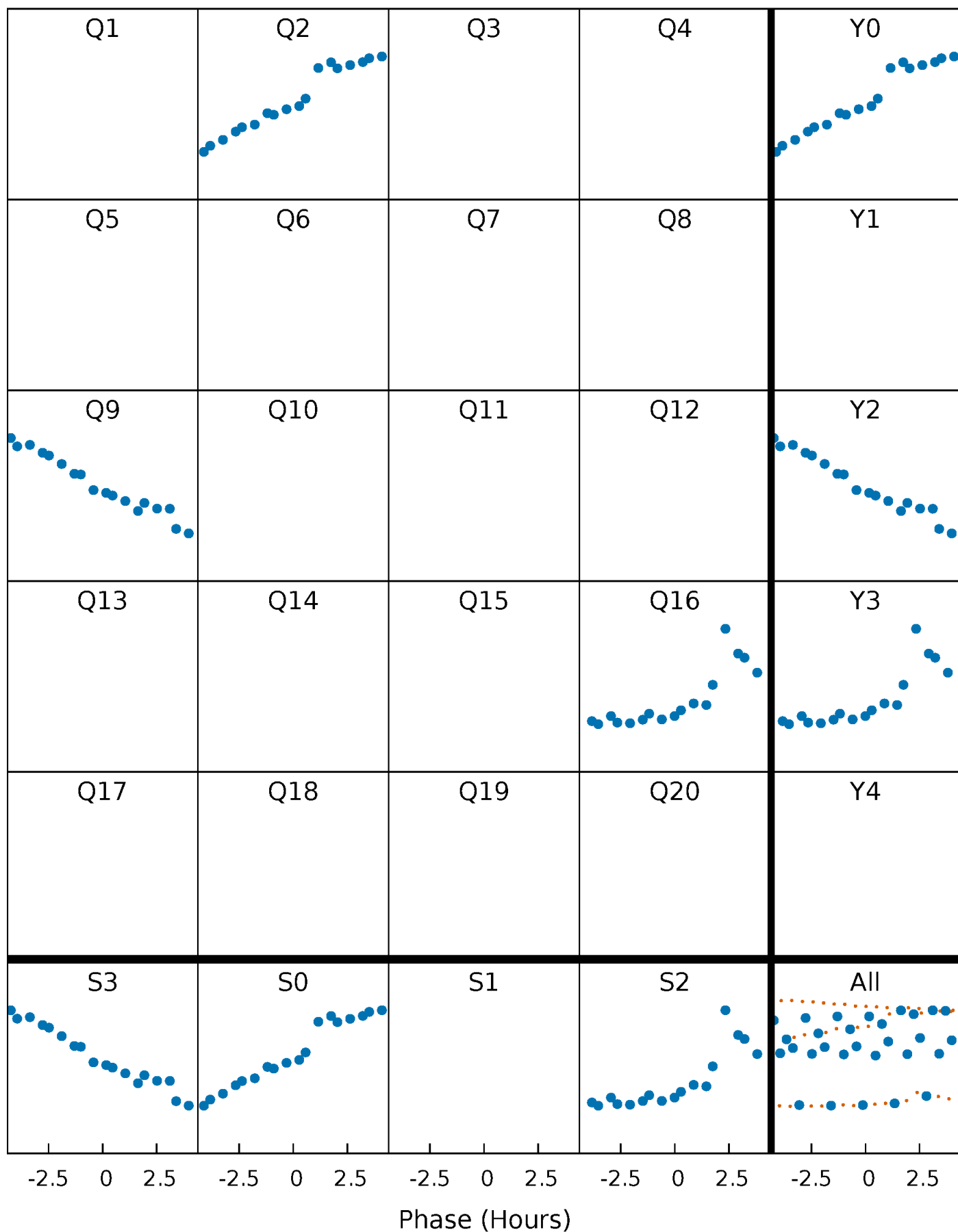


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



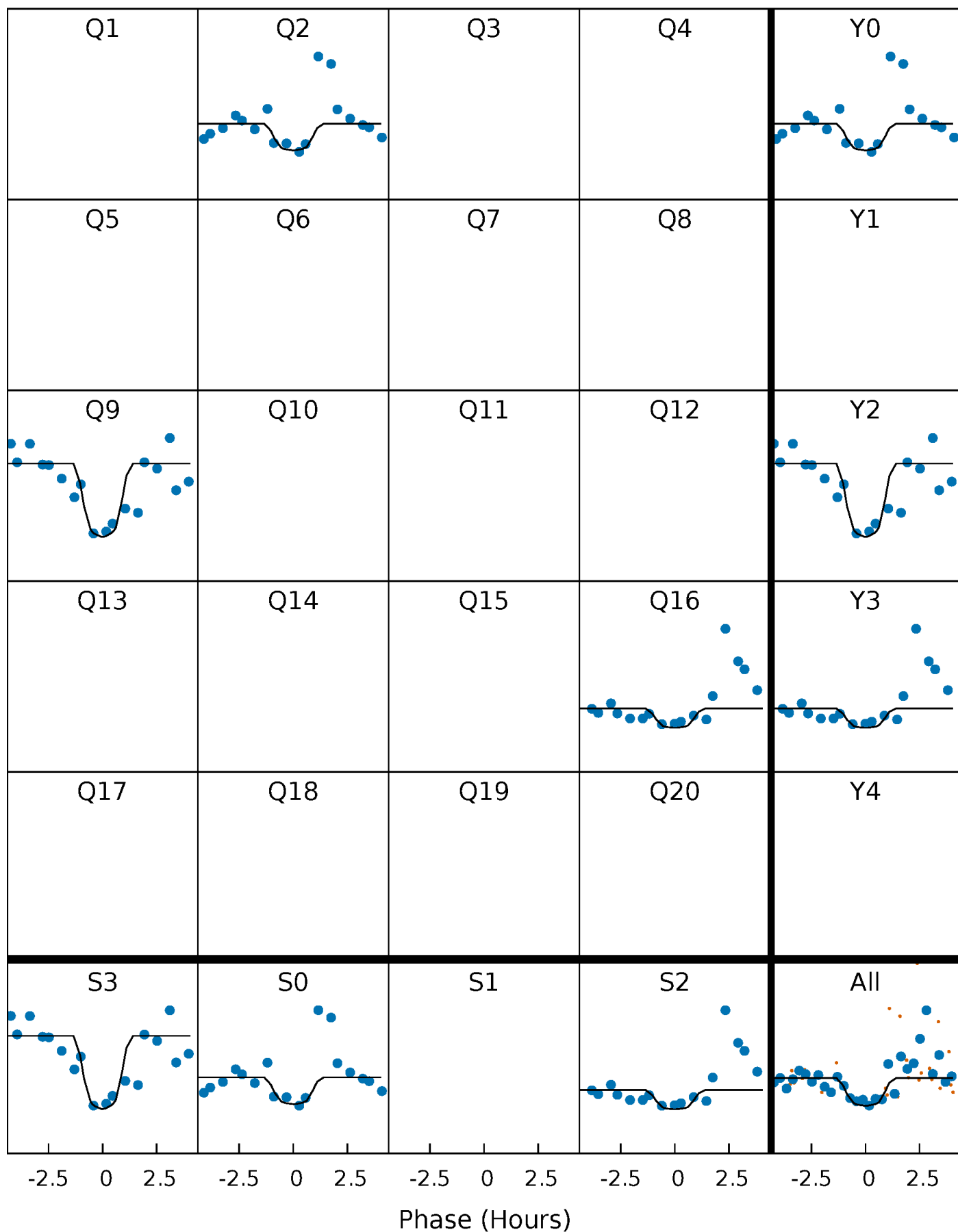
PDC Quarter-Phased Transit Curves

TCE 011241285-01 P=668.671179 Days $T_0=172.518275$ (BKJD)



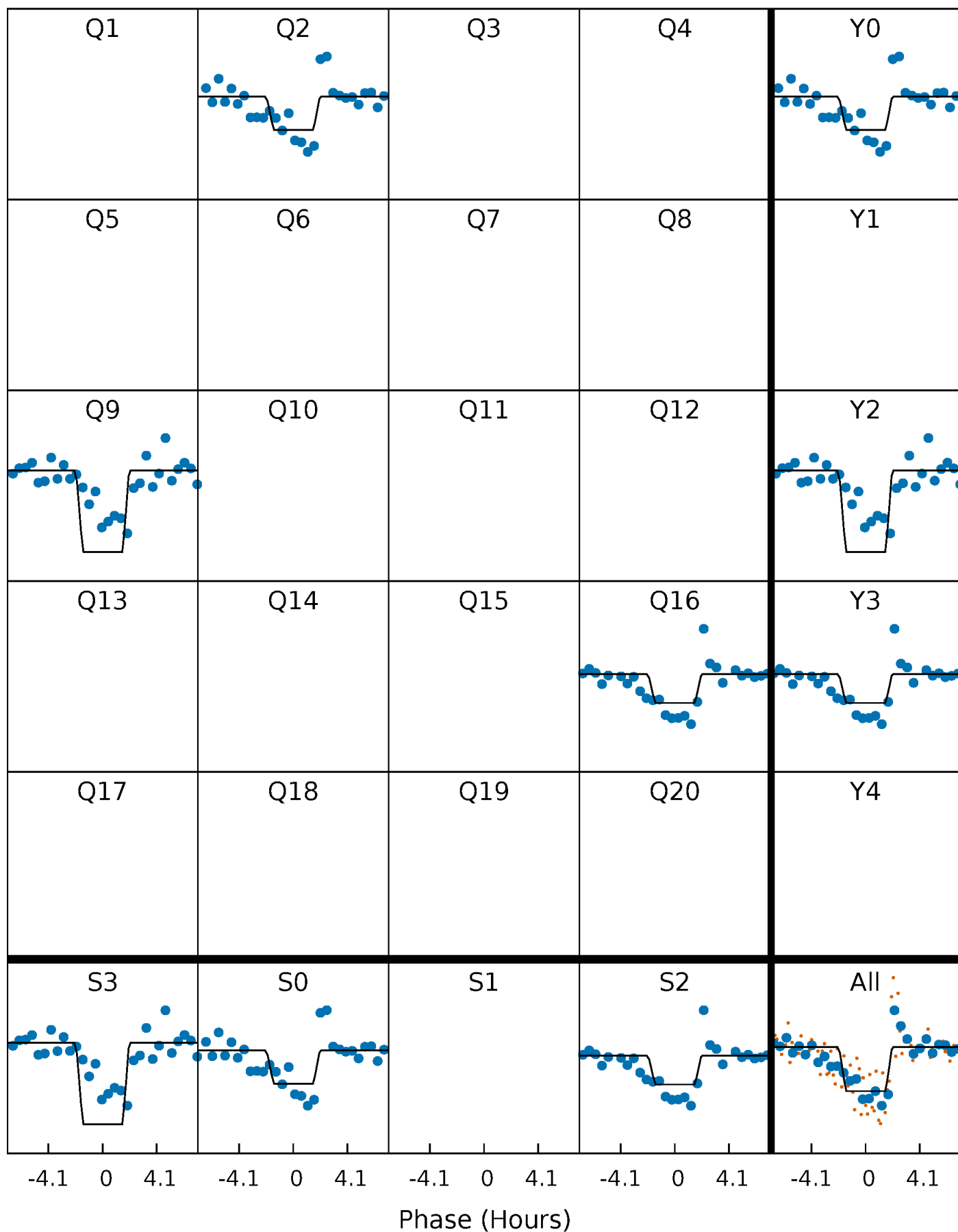
DV Quarter-Phased Transit Curves

TCE 011241285-01 P=668.671179 Days $T_0=172.518275$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

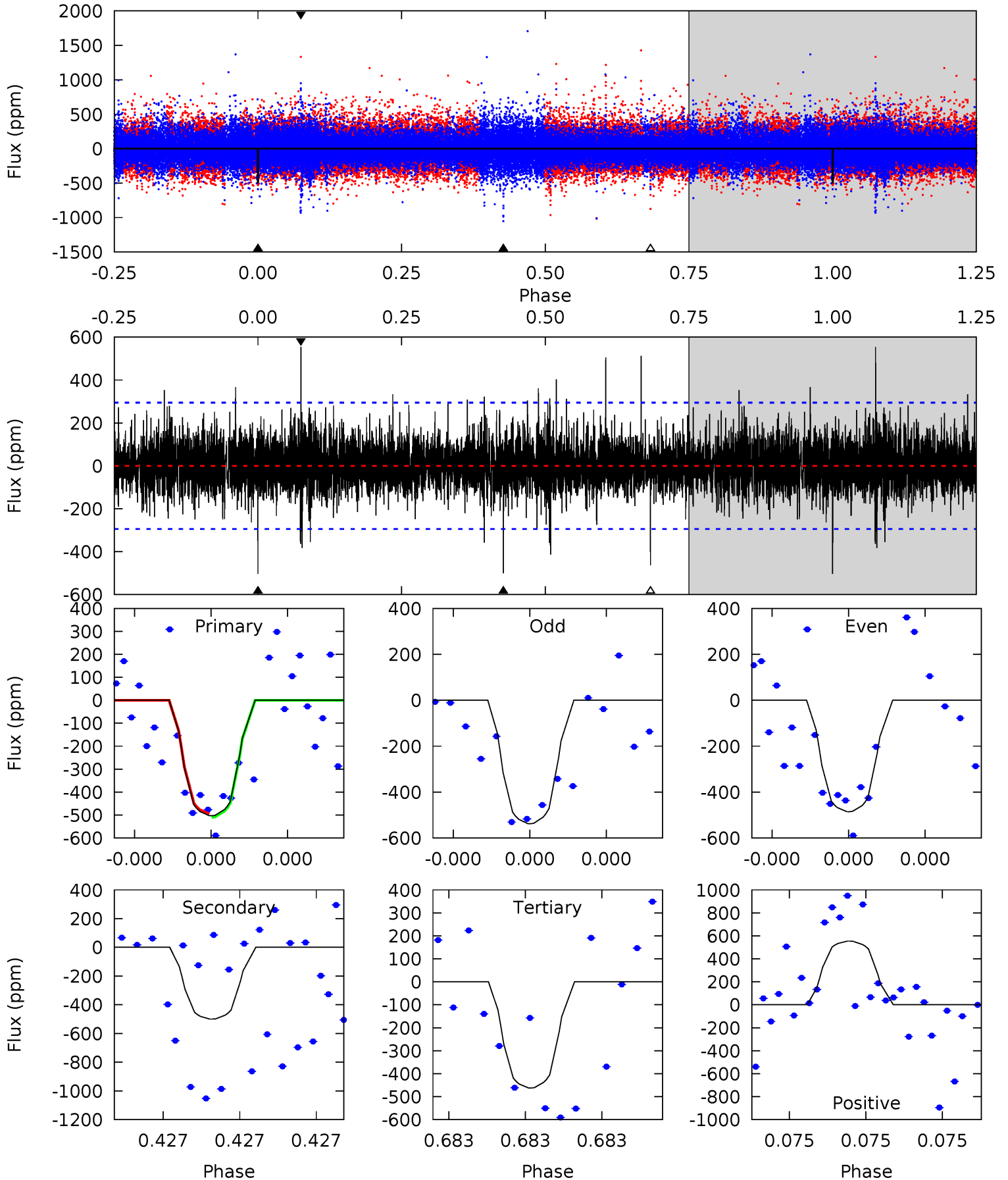
TCE 011241285-01 P=668.695062 Days $T_0=172.481997$ (BKJD)



DV Model-Shift Uniqueness Test

011241285-01, P = 668.671179 Days, E = 172.518275 Days

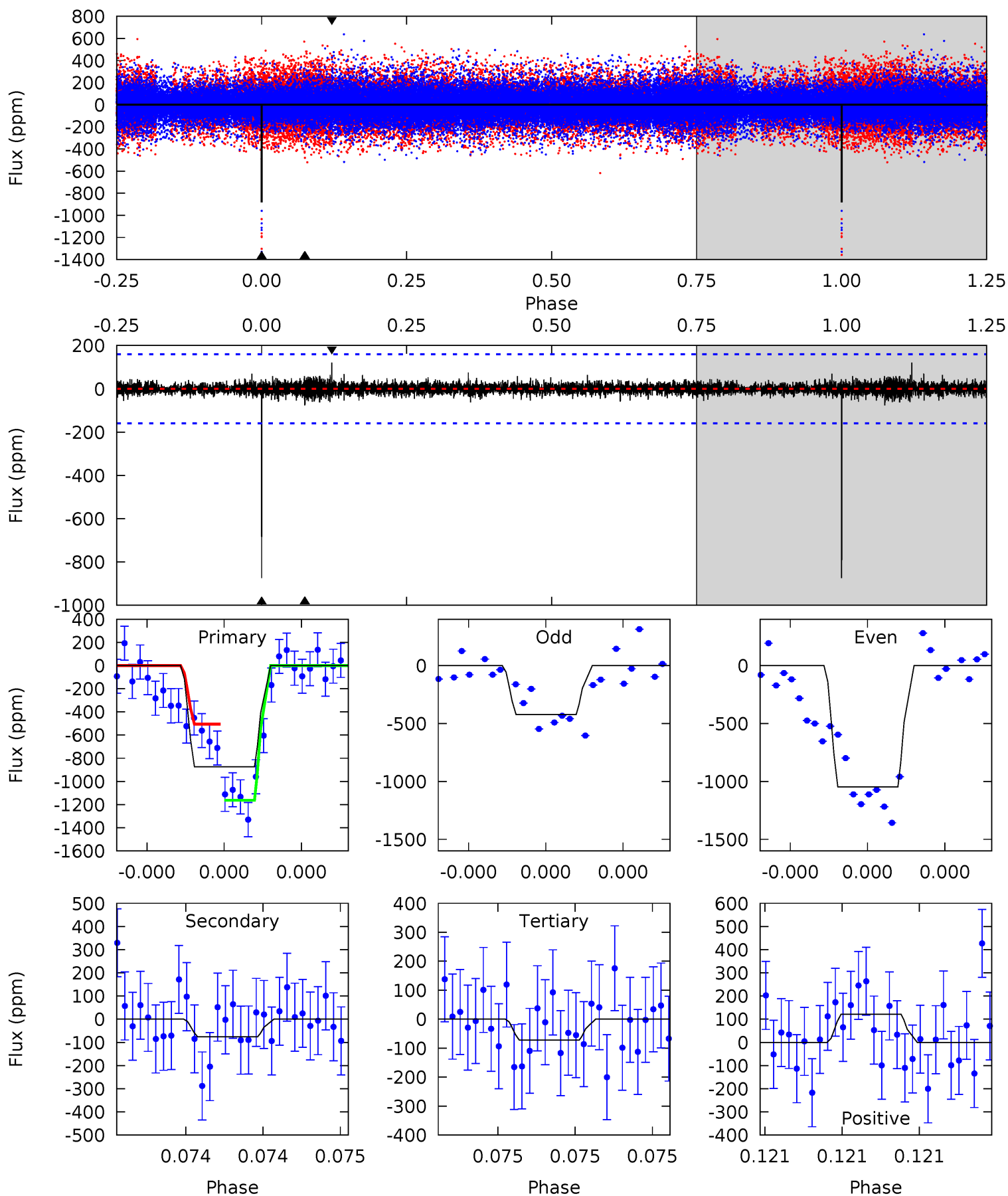
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.87	9.80	9.07	10.9	5.78	3.79	1.44	0.80	-1.01	0.73	-1.08	0.48	1.07	0.52	0.15



Alt Model-Shift Uniqueness Test

011241285-01, P = 668.695062 Days, E = 172.481997 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.2	2.71	2.58	4.33	5.70	3.68	0.50	28.7	26.9	0.13	-1.62	11.5	0.91	0.12	11.2



Stellar Parameters For KIC 011241285

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4951^{+133}_{-148}	$3.876^{+0.721}_{-0.309}$	$0.100^{+0.200}_{-0.300}$	$1.843^{+0.962}_{-1.175}$	$0.931^{+0.213}_{-0.174}$	$0.209^{+2.458}_{-0.131}$
	+3%/-3%	+19%/-8%	+200%/-300%	+52%/-64%	+23%/-19%	+1173%/-63%
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 011241285-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-500 ± 51	$19.83^{+24.09}_{-13.13}$	336^{+48}_{-58}	2898^{+1126}_{-491}	1507^{+11673}_{-1217}
Alt.	-76 ± 28	$19.77^{+25.23}_{-13.70}$	339^{+48}_{-60}	2260^{+816}_{-326}	216^{+1996}_{-177}

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

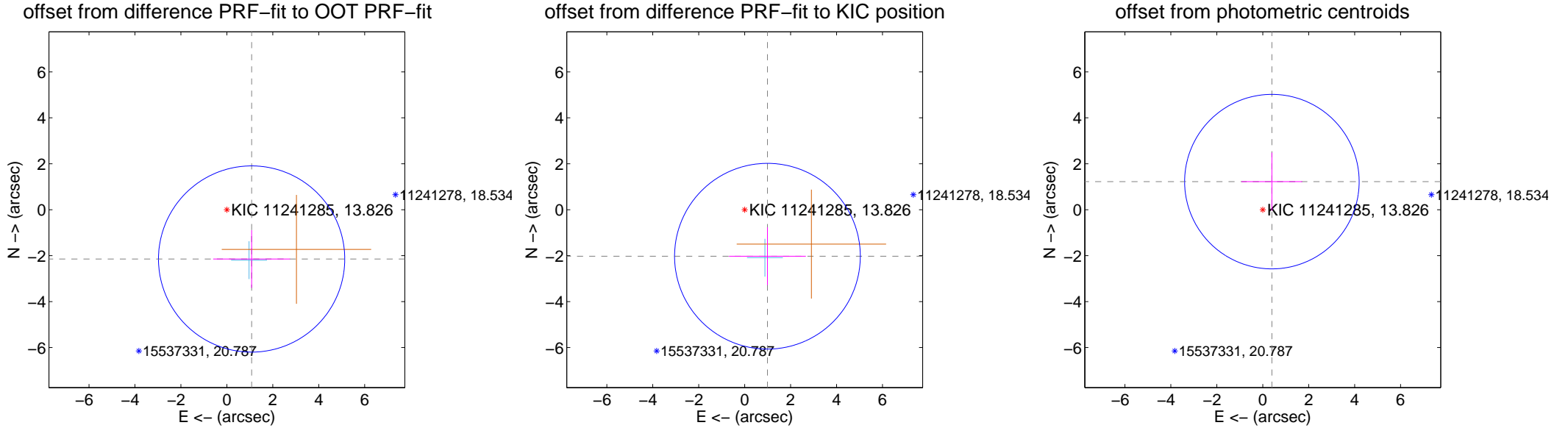
DV Centroid Data

Supplemental centroid analysis for 011241285-01. Kepler magnitude: 13.83. Transit SNR 6.67

There are 1 quarters with good PRF difference image offsets

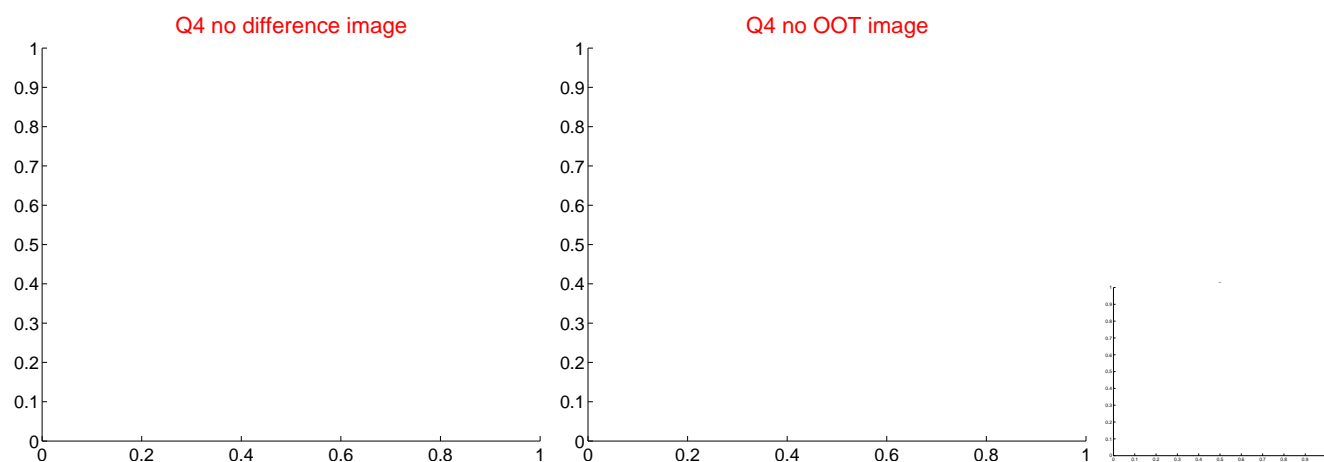
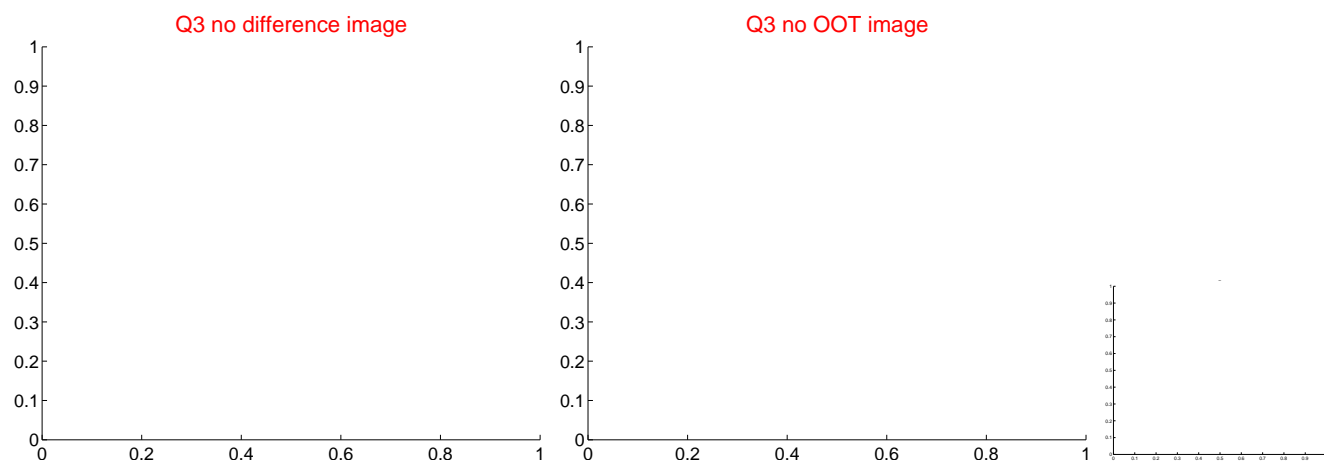
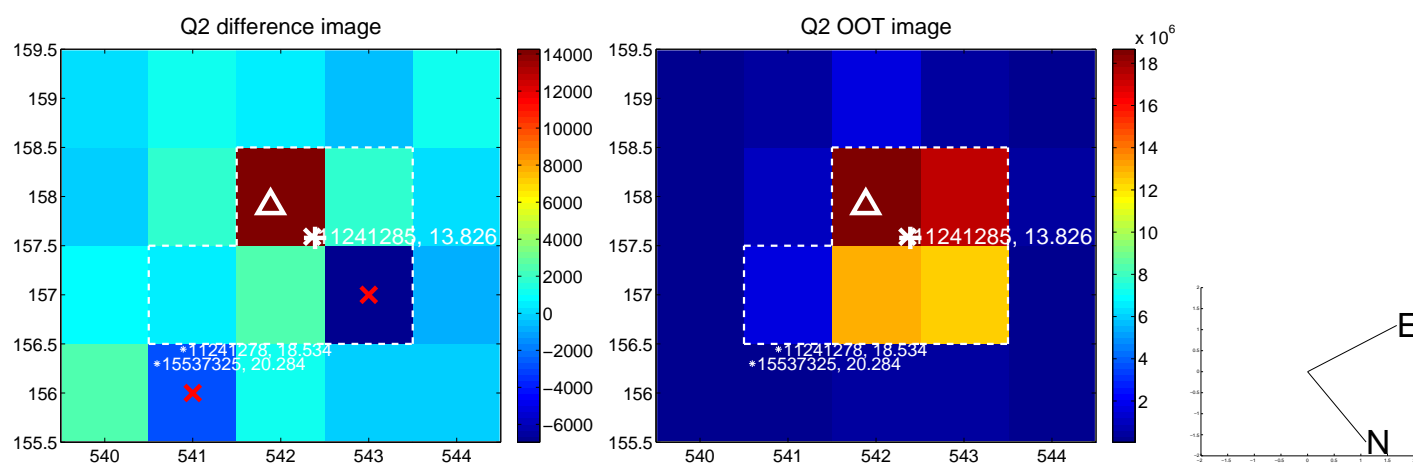
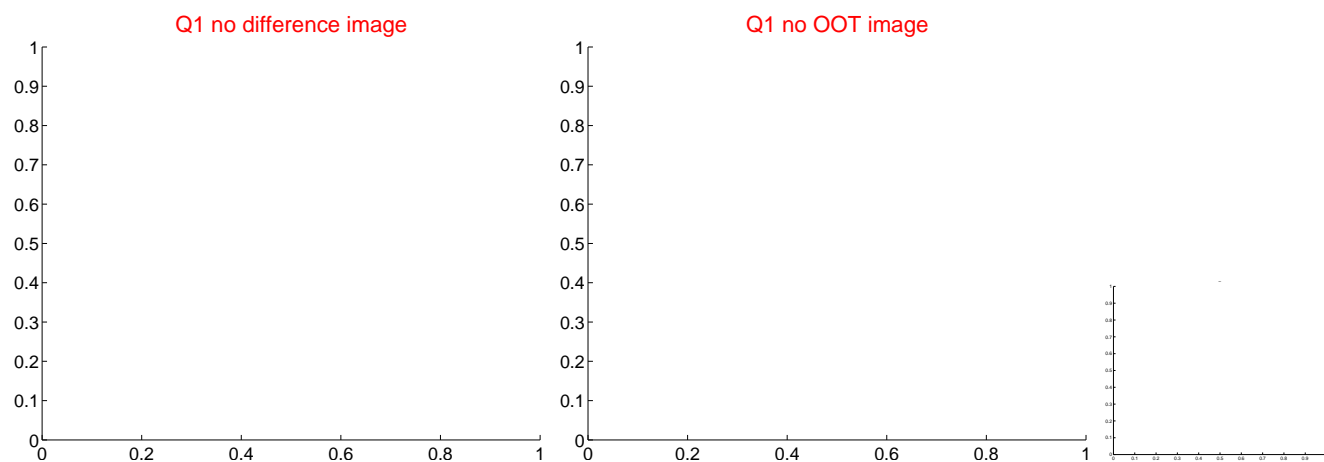
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.402 ± 1.351	1.78	-1.078 ± 1.674	-2.146 ± 1.257
PRF-fit source offset from KIC position	2.254 ± 1.348	1.67	-0.991 ± 1.674	-2.025 ± 1.257
photometric centroid source offset	1.29 ± 1.27	1.02	-0.40 ± 1.32	1.22 ± 1.26



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.

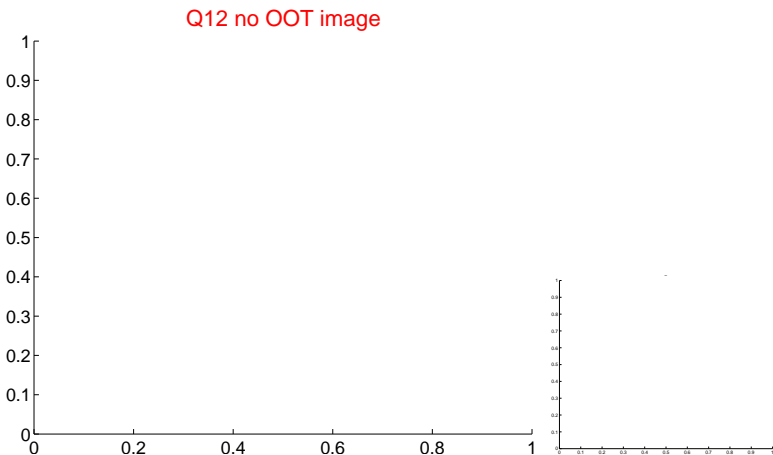
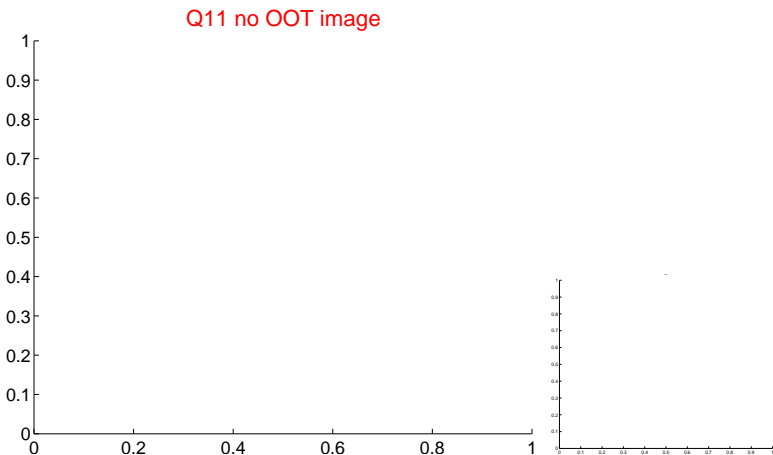
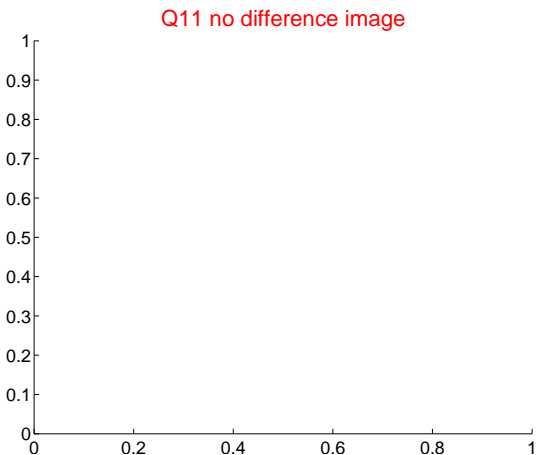
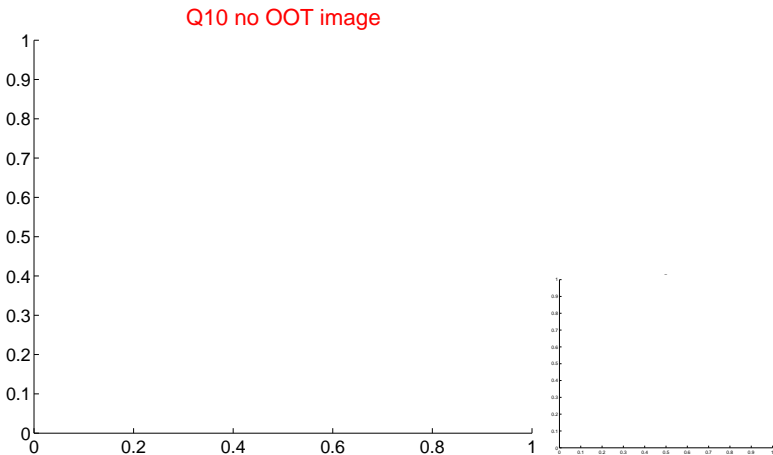
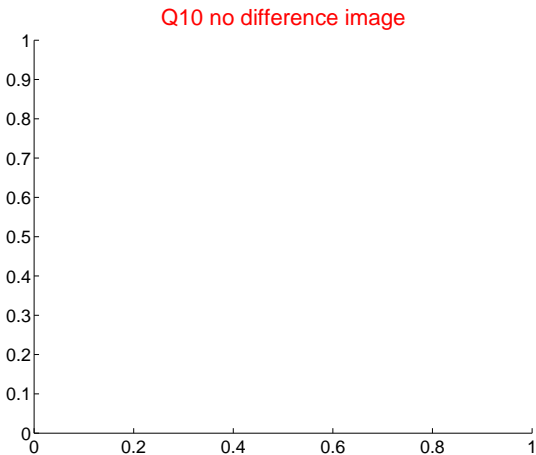
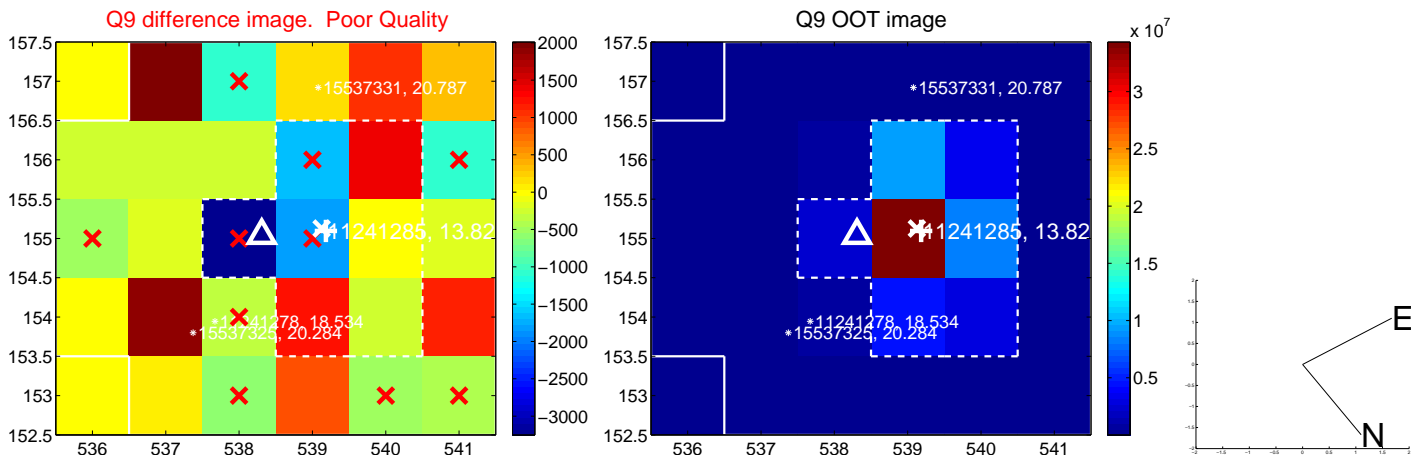
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



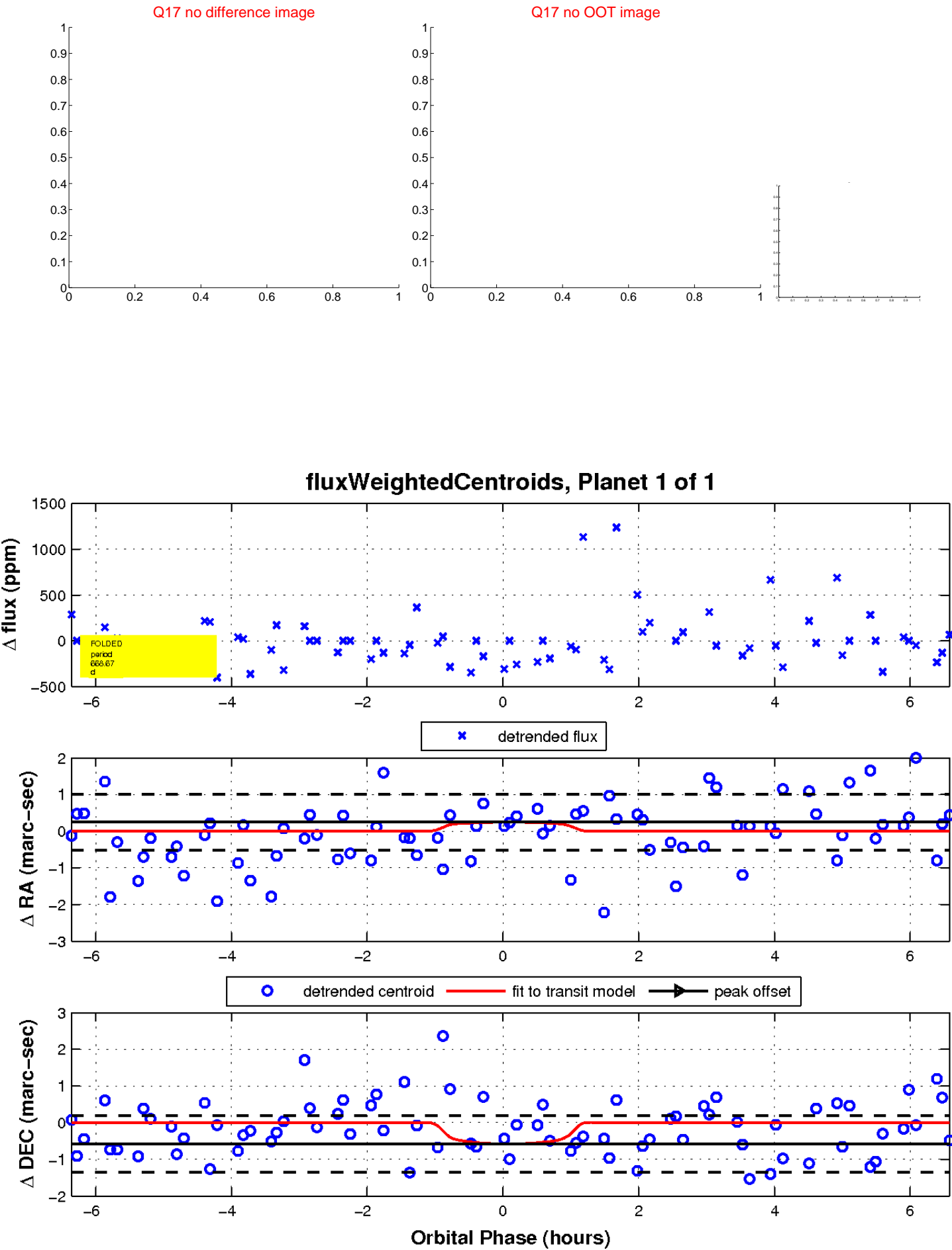
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



UKIRT Image

Declination

