

KIC 006195670

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})
006195670-01	OBS	No	371.102965	308.662399	3357.0	37.401	10.7	12.4	0.68	4963	7.64	0.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006195670-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—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.

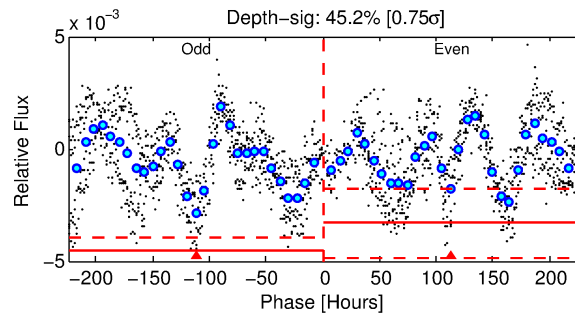
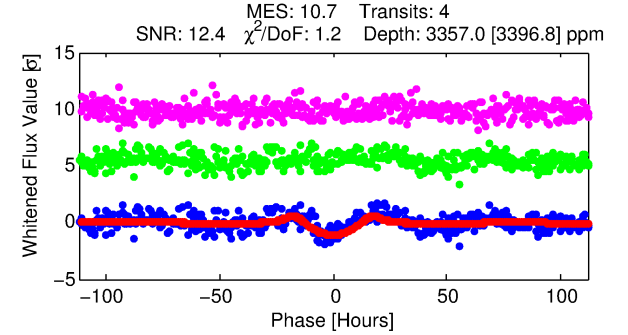
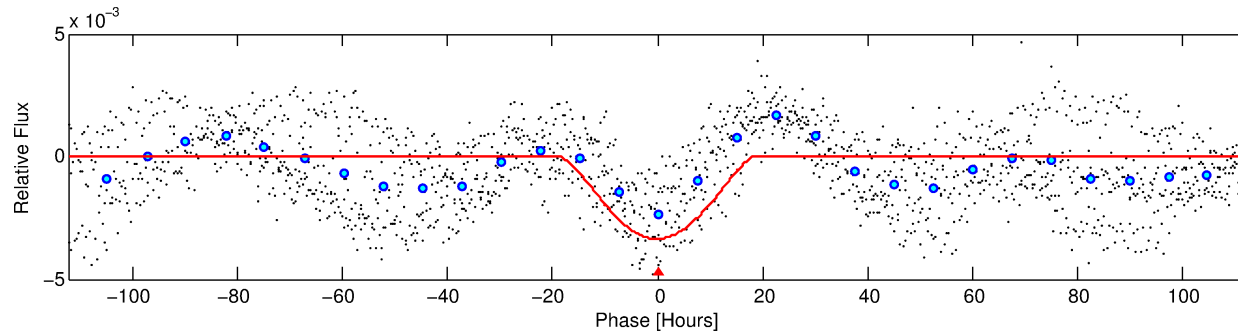
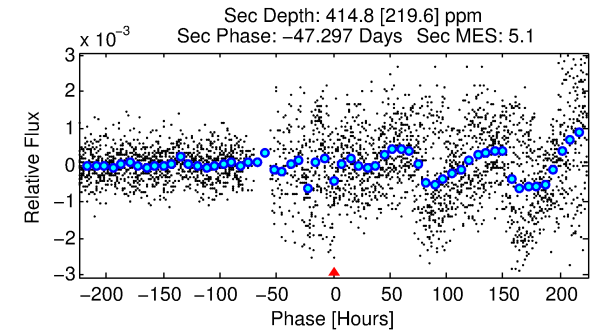
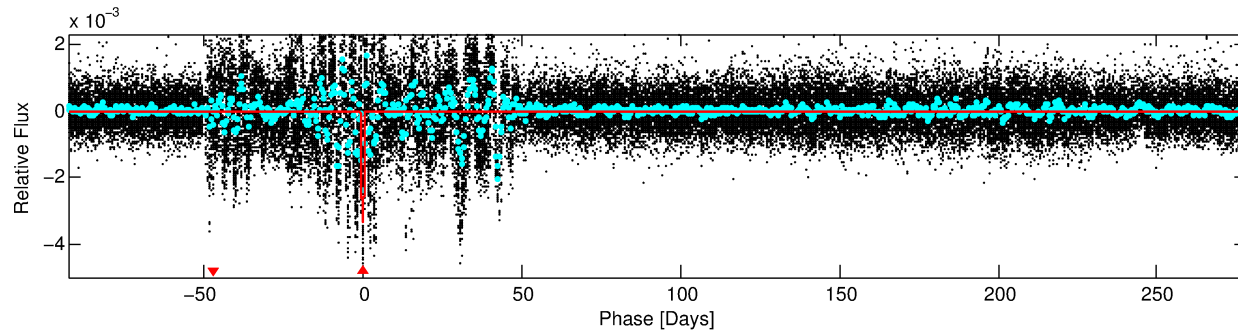
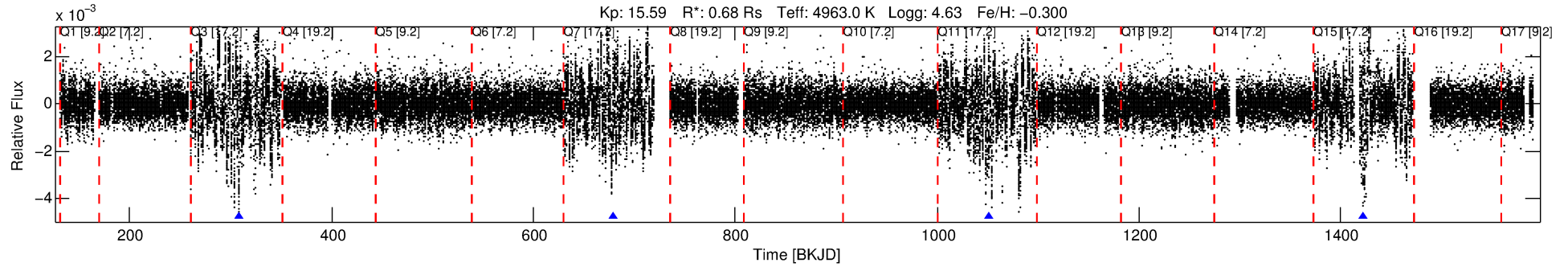
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006195670-01

No Significant Match Found

DV One-Page Summary

KIC: 6195670 Candidate: 1 of 1 Period: 371.103 d



DV Fit Results:

Period = 371.10297 [0.02350] d
Epoch = 308.6624 [0.0442] BKJD
Rp/R* = 0.1027 [0.1429]
a/R* = 35.23 [9.17]
b = 1.00 [0.13]
Seff = 0.30 [0.05]
Teq = 189 [8] K
Rp = 7.64 [10.67] Re
a = 0.9111 [0.0823] AU
Ag = 3245.60 [9204.64] [0.35σ]
Teffp = 2211 [1567] K [1.29σ]

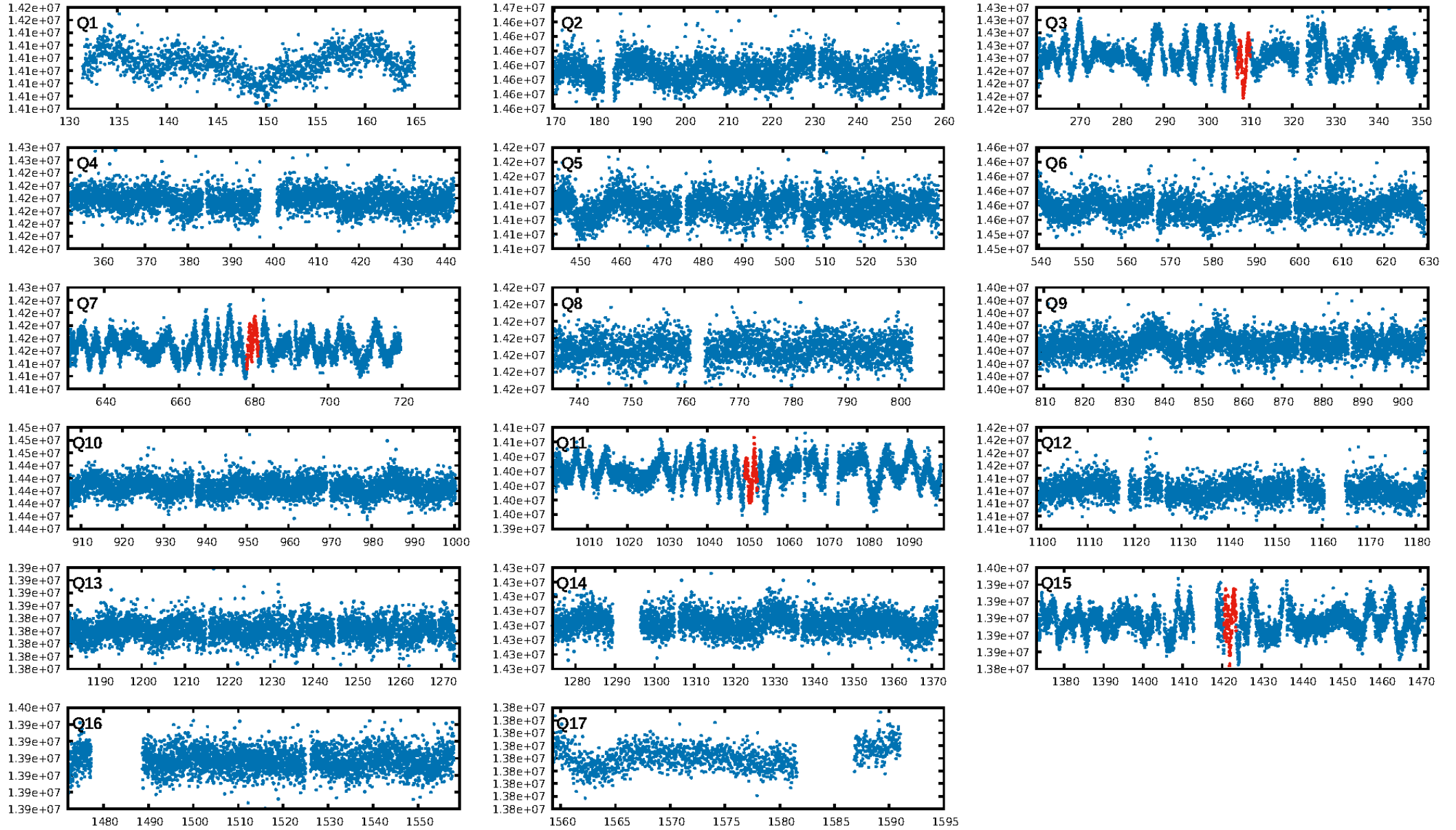
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 32.3%
ModelChiSquareGof-sig: 98.7%
Bootstrap-pfa: 9.26e-14
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.588
Centroid-sig: 2.9%
Centroid-so: 2.021 arcsec [1.56σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [4/4]

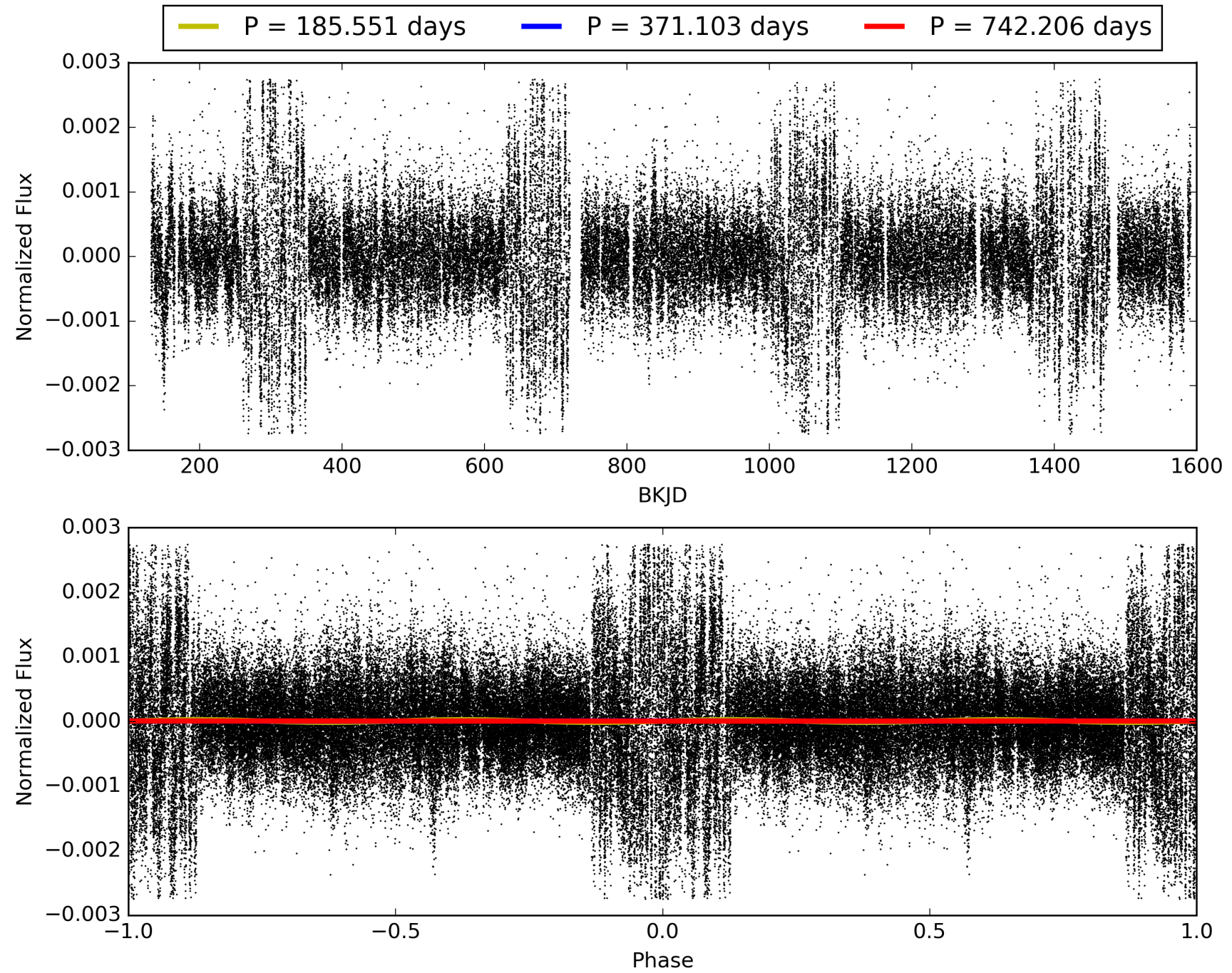
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 16:21:15 Z

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

TCE 006195670-01, PDC Light Curves

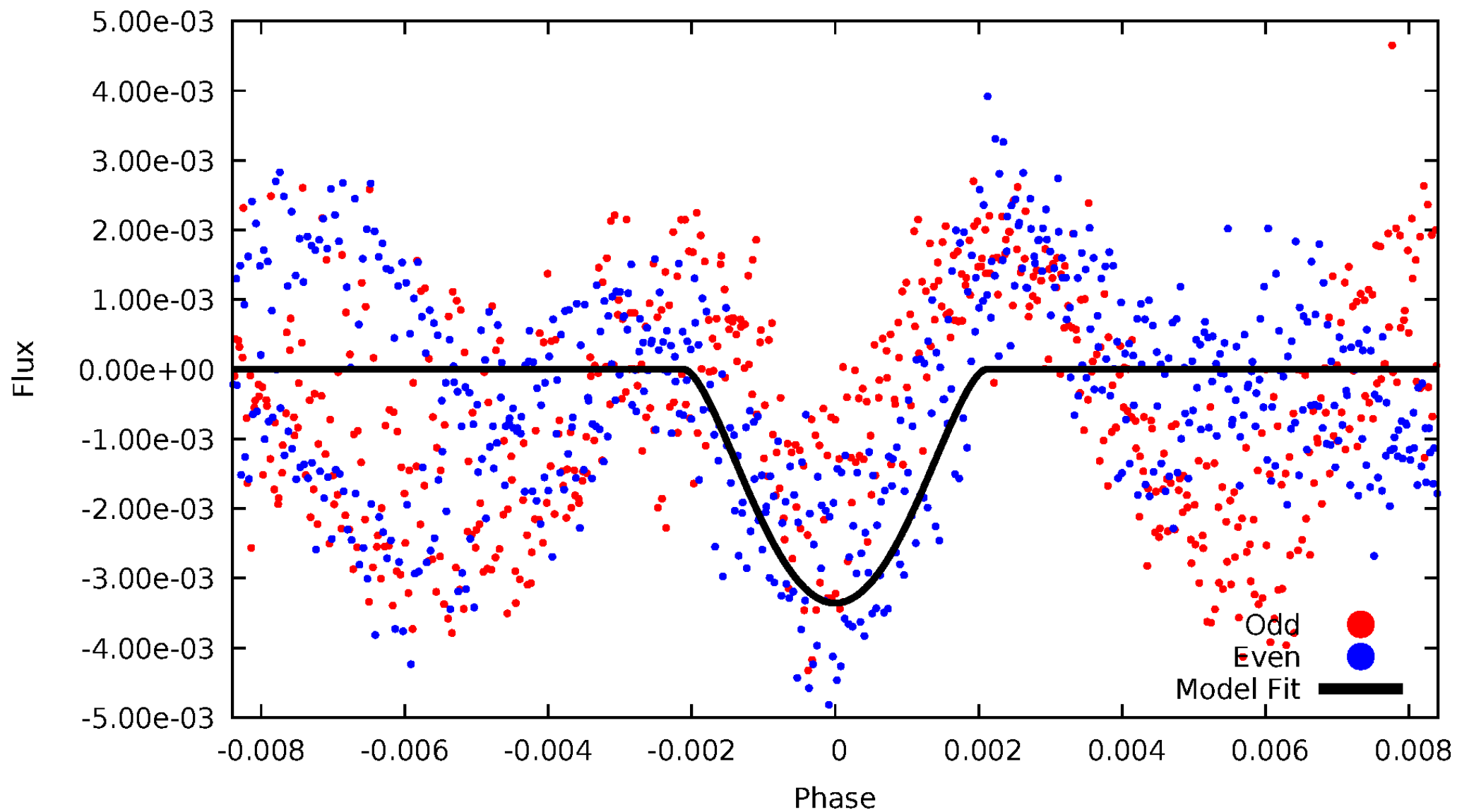


TCE 006195670-01



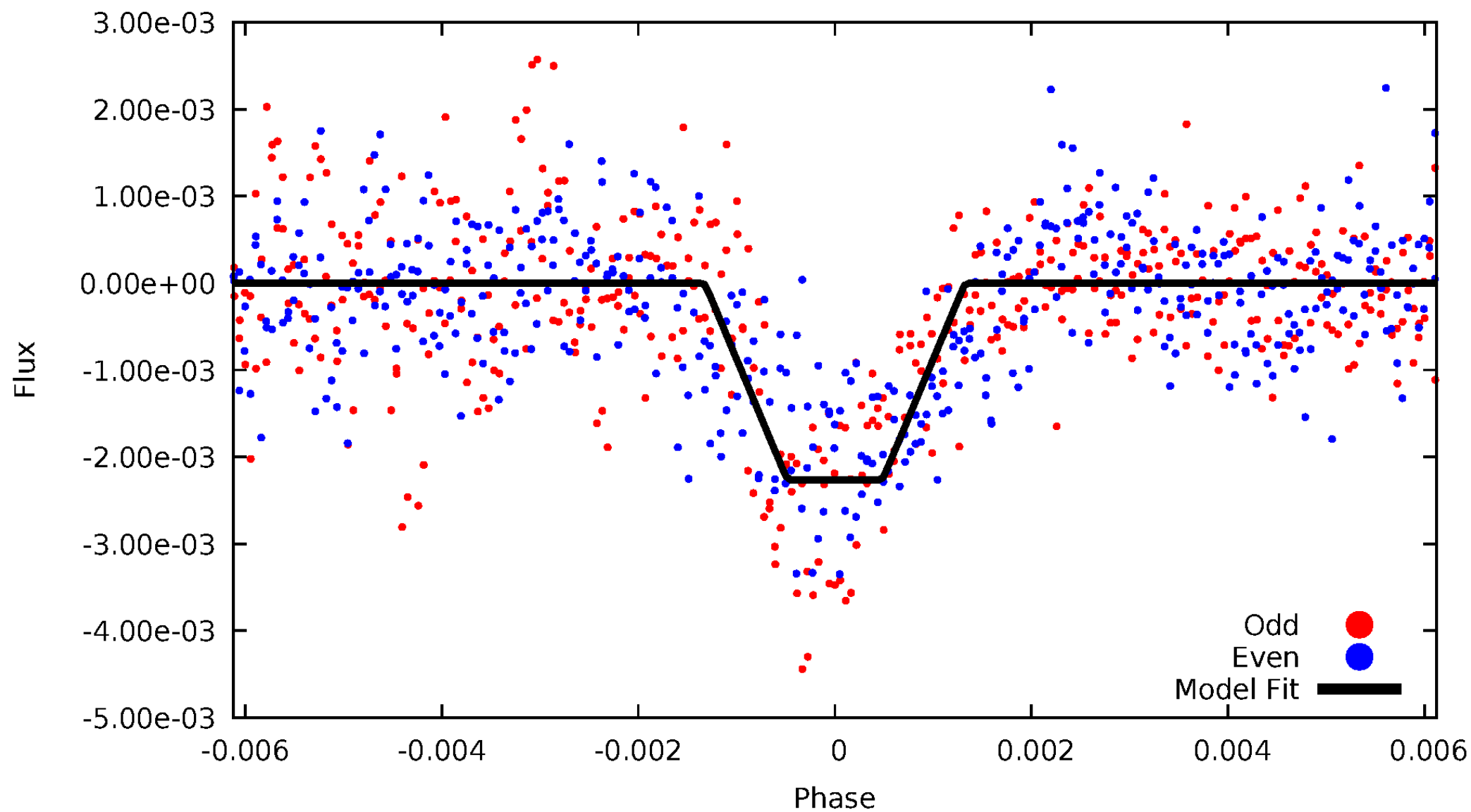
DV Odd/Even

TCE 006195670-01



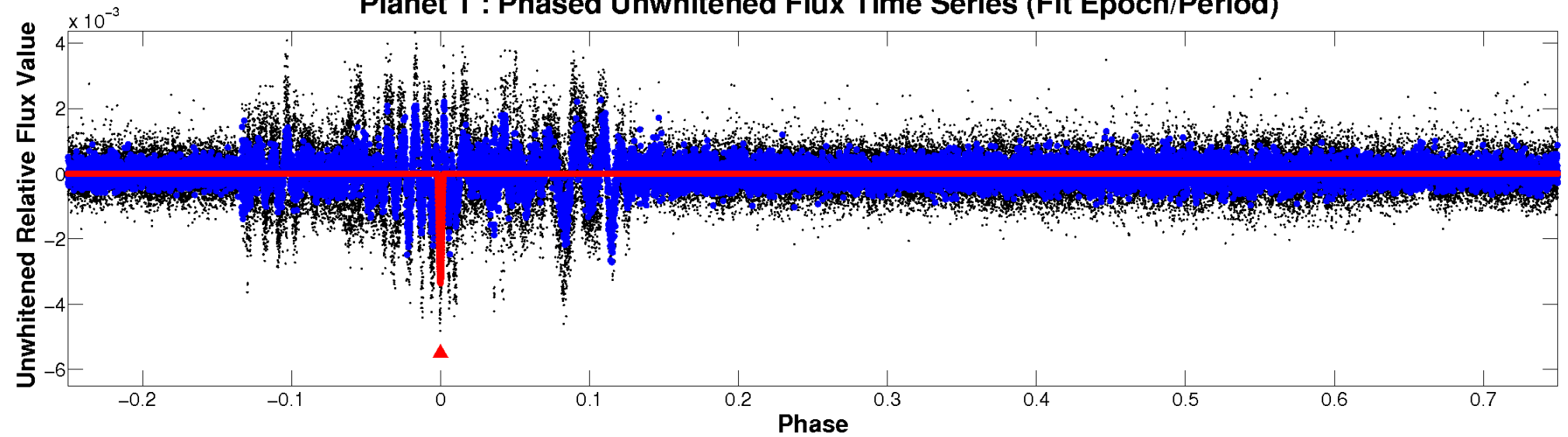
ALT Odd/Even

TCE 006195670-01

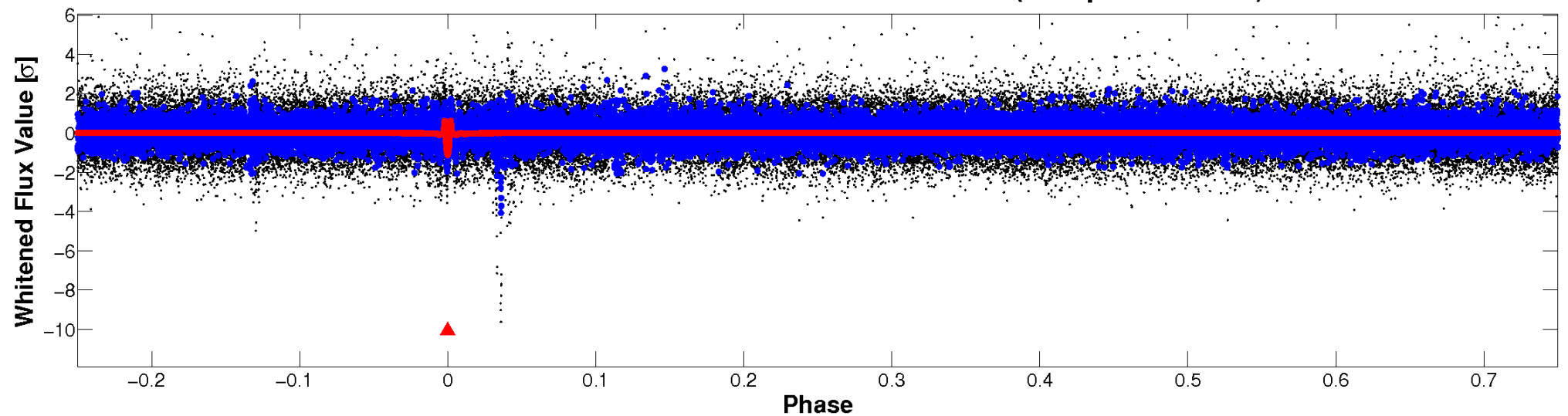


Non-Whitened Vs. Whitened Light Curve

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

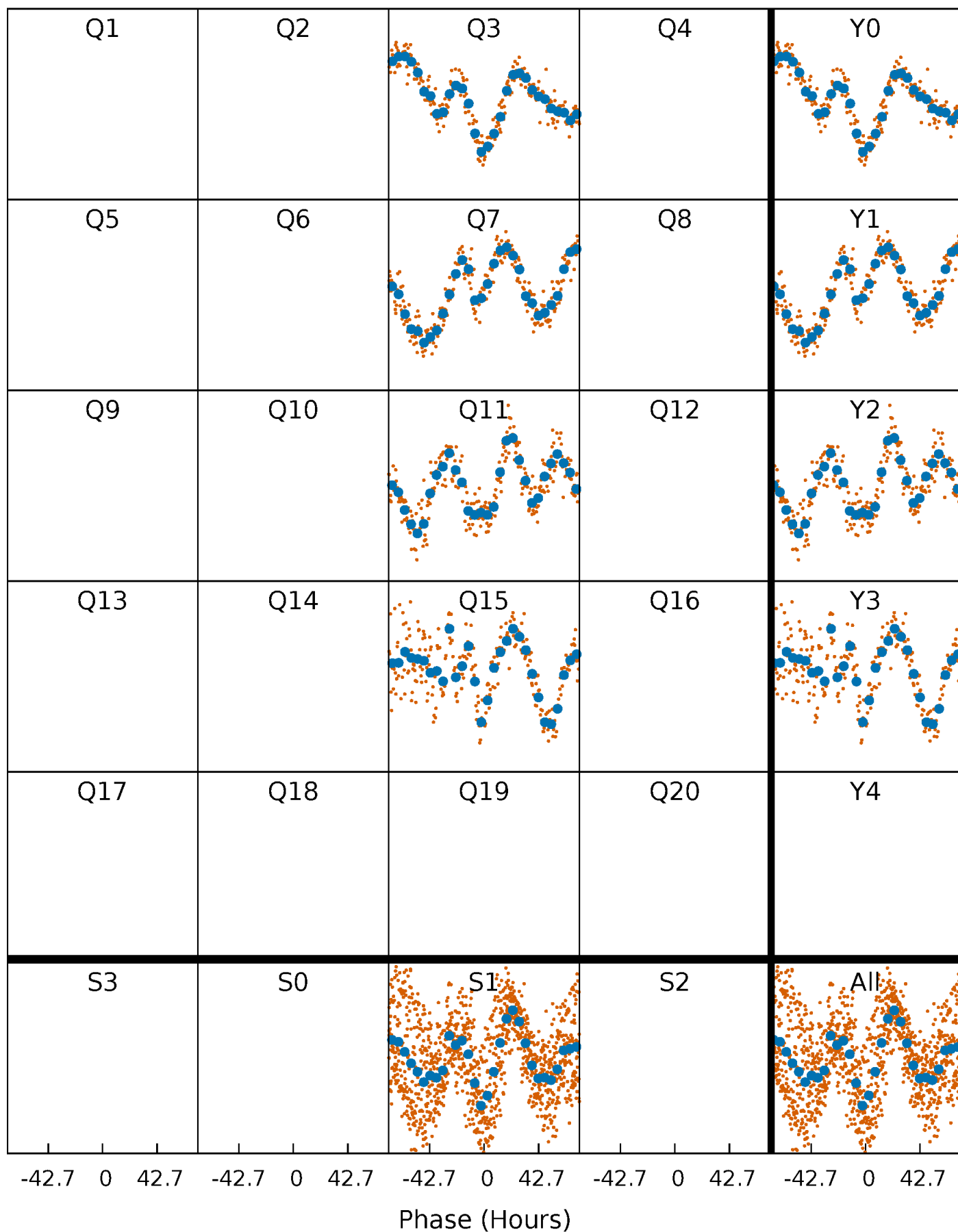


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



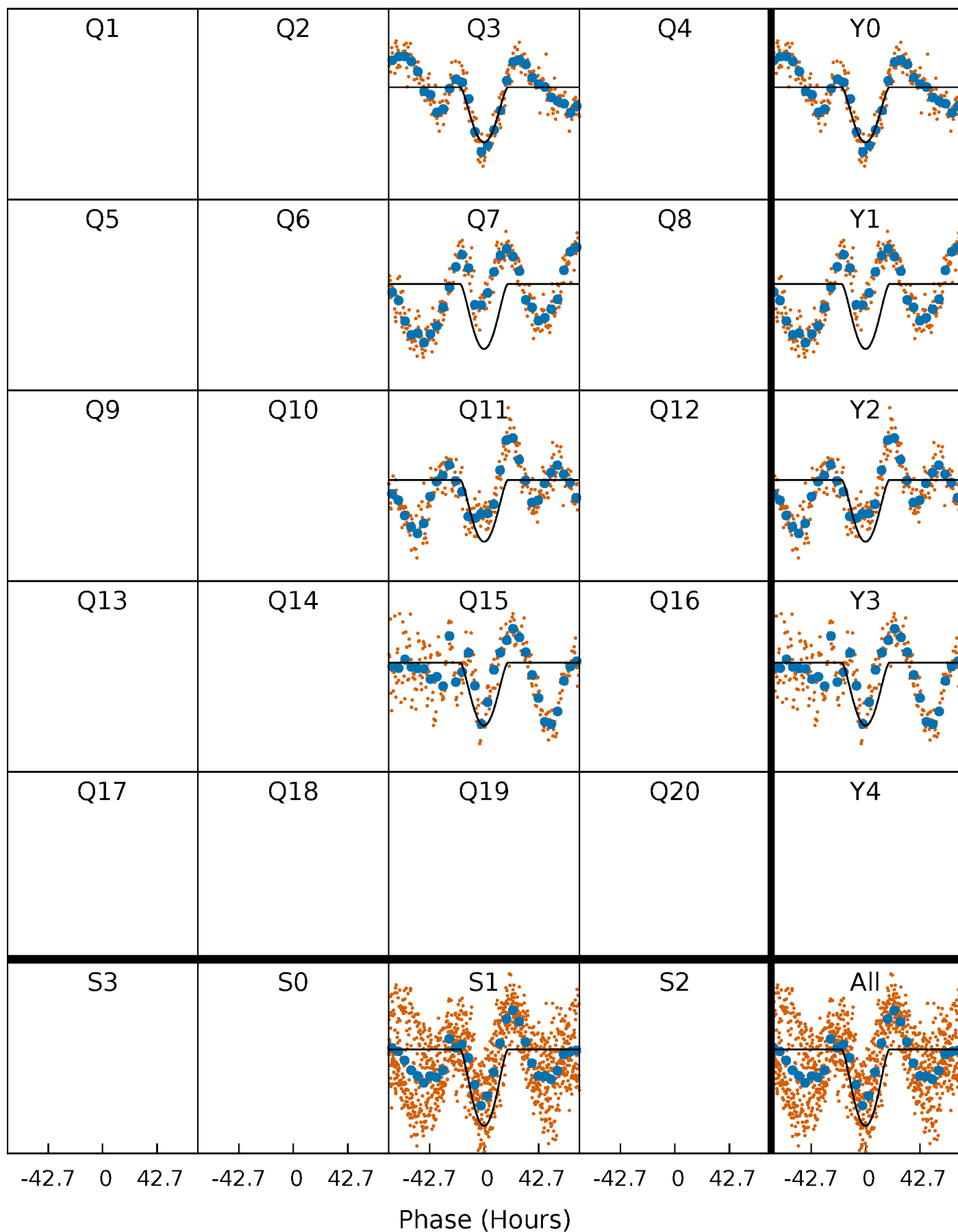
PDC Quarter-Phased Transit Curves

TCE 006195670-01 P=371.102965 Days $T_0=308.662399$ (BKJD)



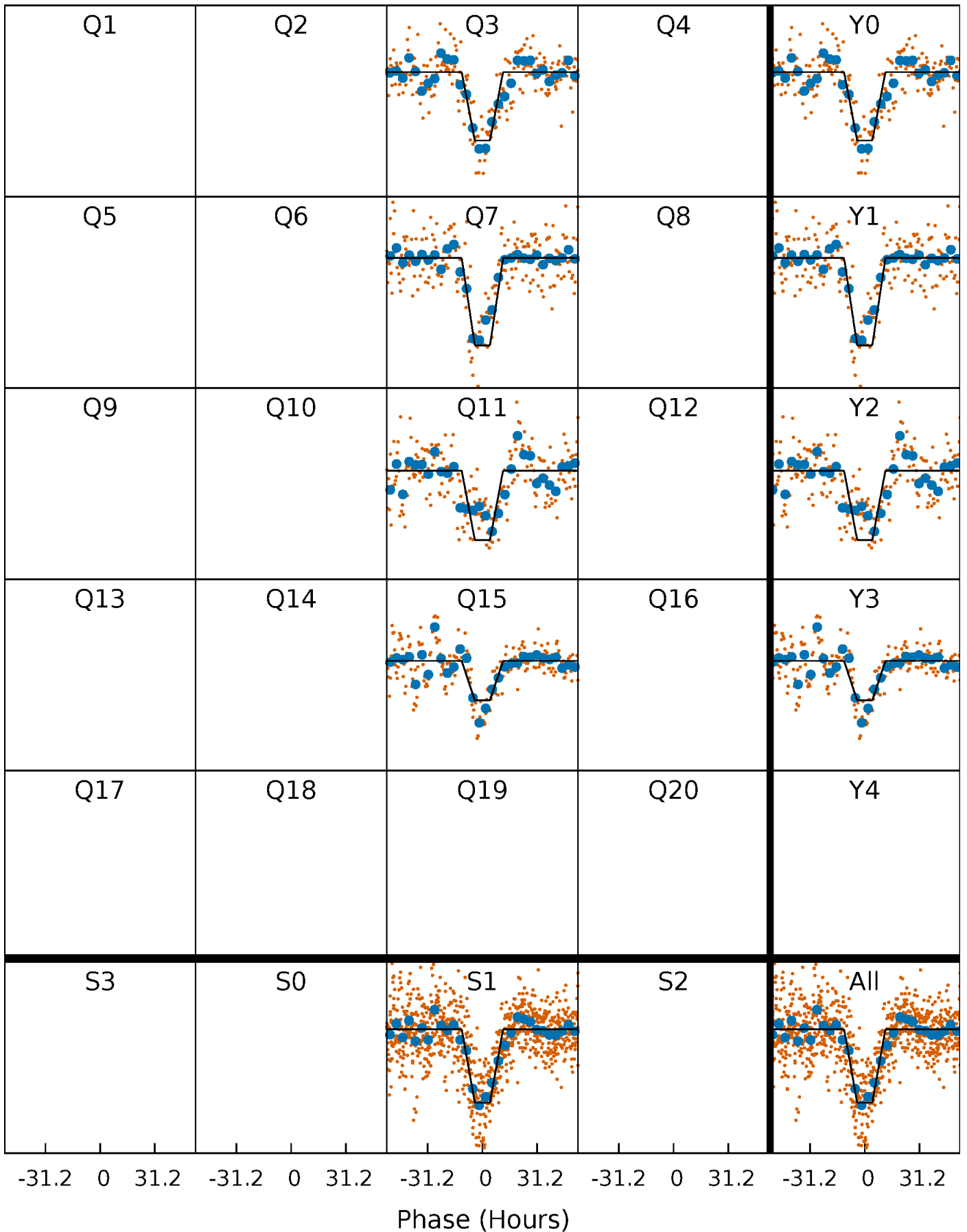
DV Quarter-Phased Transit Curves

TCE 006195670-01 P=371.102965 Days $T_0=308.662399$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

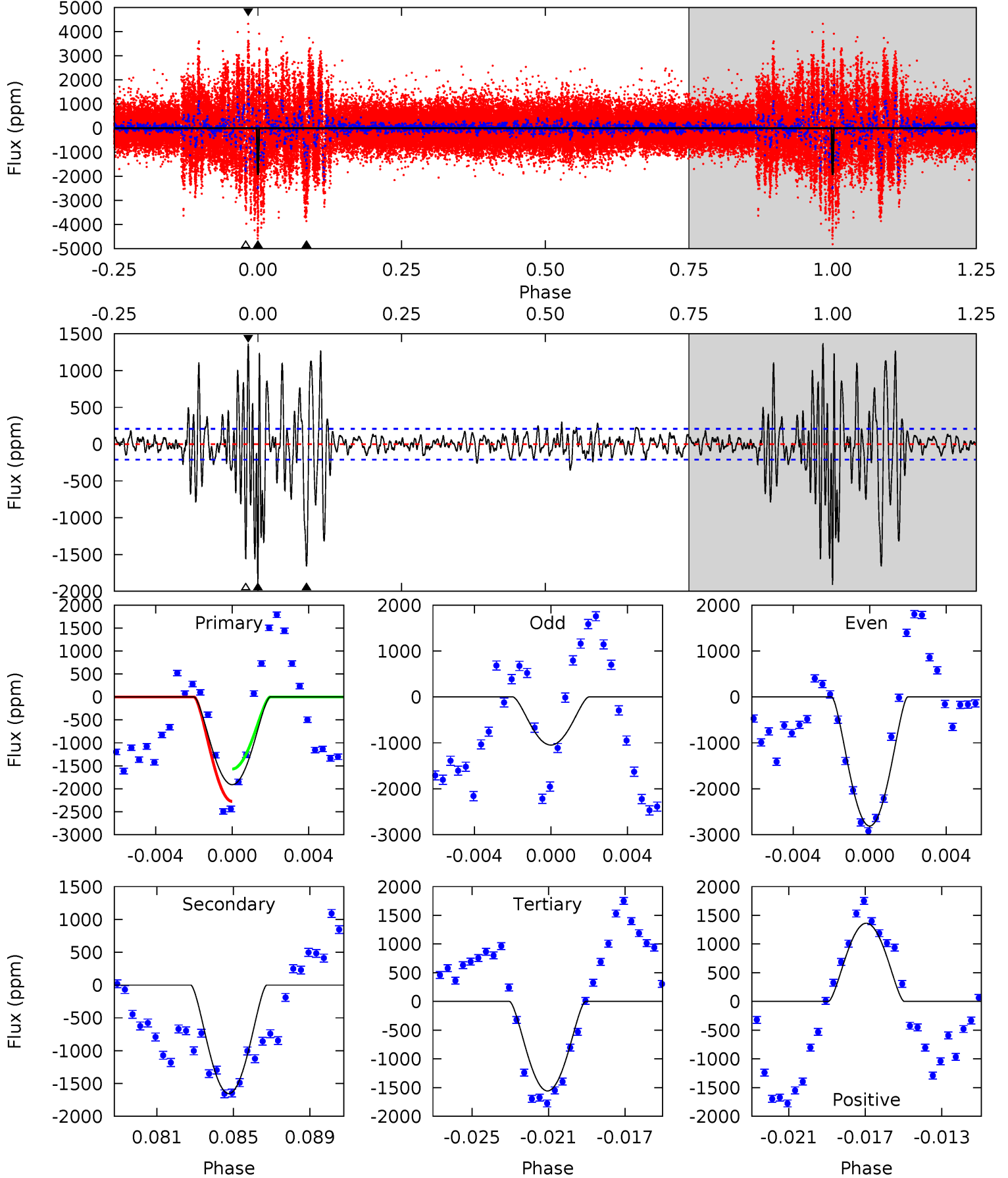
TCE 006195670-01 P=371.114317 Days $T_0=308.611784$ (BKJD)



DV Model-Shift Uniqueness Test

006195670-01, P = 371.102965 Days, E = 308.662399 Days

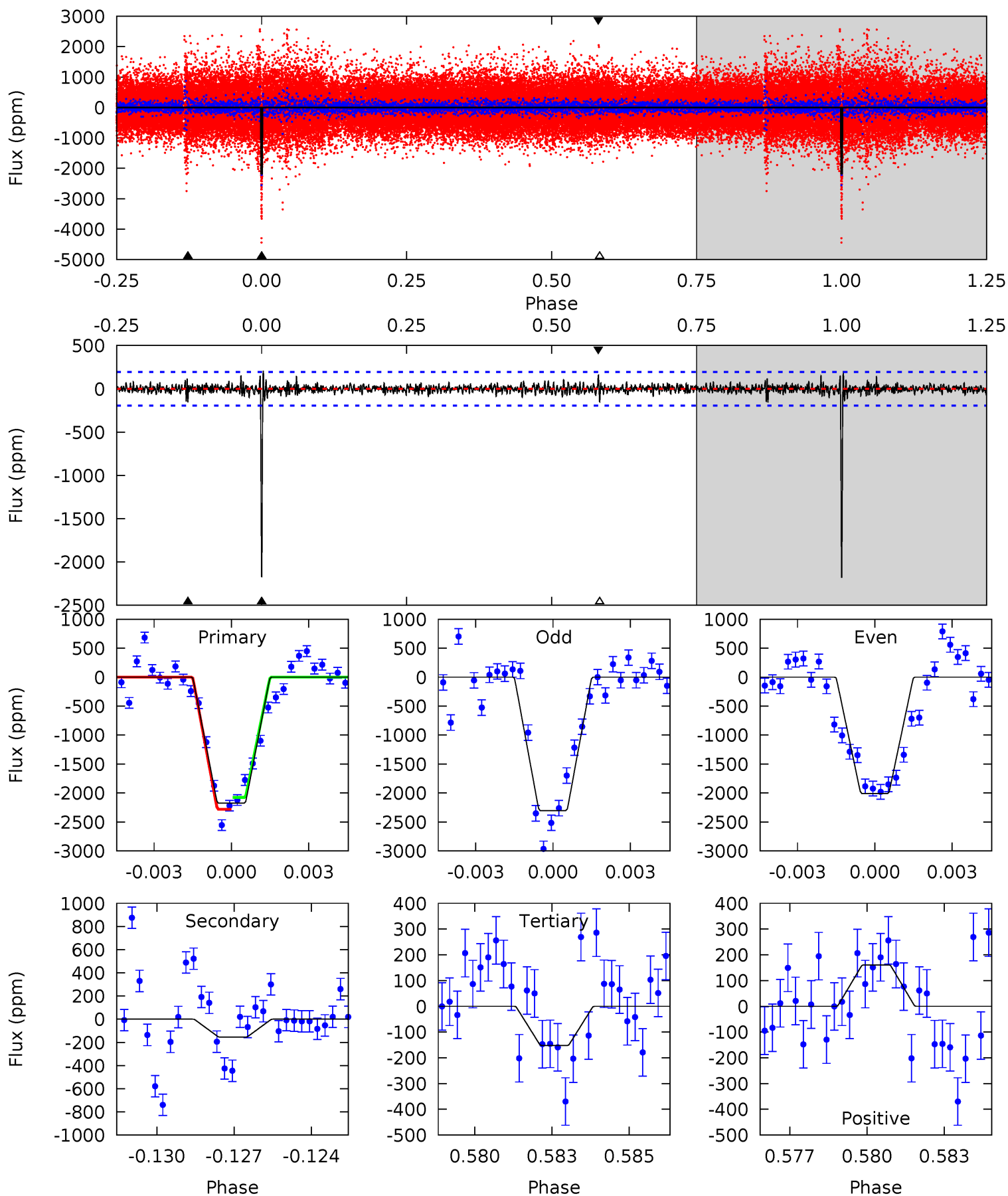
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.2	40.9	38.5	33.6	5.19	2.86	6.88	8.71	13.6	2.37	7.22	21.5	1.00	0.42	8.74



Alt Model-Shift Uniqueness Test

006195670-01, P = 371.114317 Days, E = 308.611784 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
59.2	4.22	4.14	4.37	5.28	3.01	0.89	55.1	54.8	0.08	-0.15	4.02	1.01	0.09	2.74



Stellar Parameters For KIC 006195670

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4963^{+136}_{-151}	$4.635^{+0.031}_{-0.063}$	$-0.300^{+0.300}_{-0.300}$	$0.682^{+0.078}_{-0.052}$	$0.737^{+0.071}_{-0.071}$	$3.277^{+0.511}_{-0.720}$
	+3%/-3%	+1%/-1%	+100%/-100%	+11%/-8%	+10%/-10%	+16%/-22%
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 006195670-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1654 ± 40	$11.09^{+9.40}_{-7.56}$	267^{+9}_{-9}	3177^{+1491}_{-498}	6118^{+51272}_{-4309}
Alt.	-155 ± 37	$8.89^{+9.11}_{-5.89}$	266^{+9}_{-9}	2447^{+829}_{-354}	883^{+6289}_{-662}

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

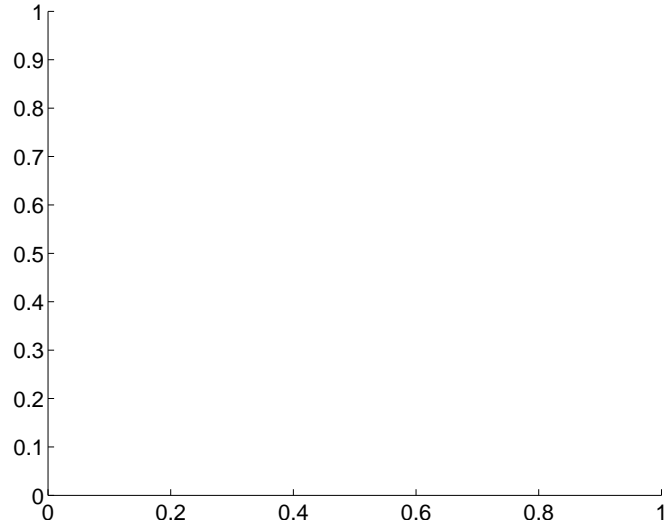
Supplemental centroid analysis for 006195670-01. Kepler magnitude: 15.59. Transit SNR 12.44

There are 0 quarters with good PRF difference image offsets

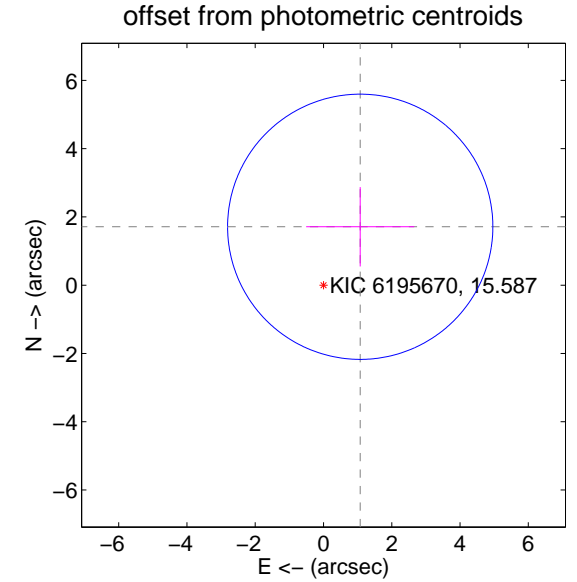
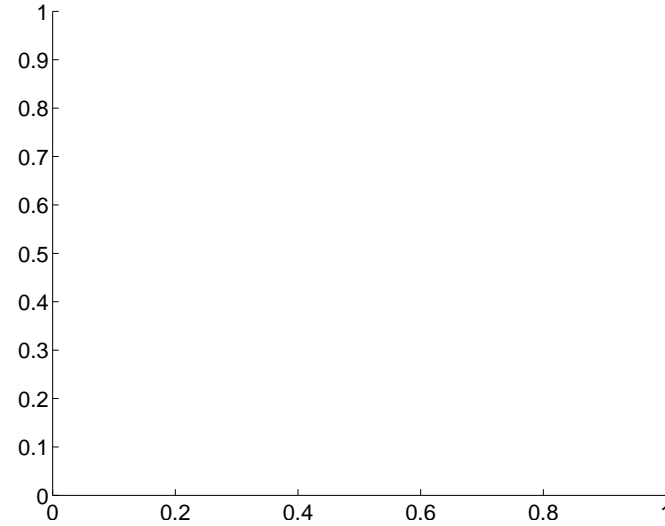
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	2.02 ± 1.29	1.56	-1.08 ± 1.58	1.71 ± 1.16

There is no PRF-fit offset from OOT-fit

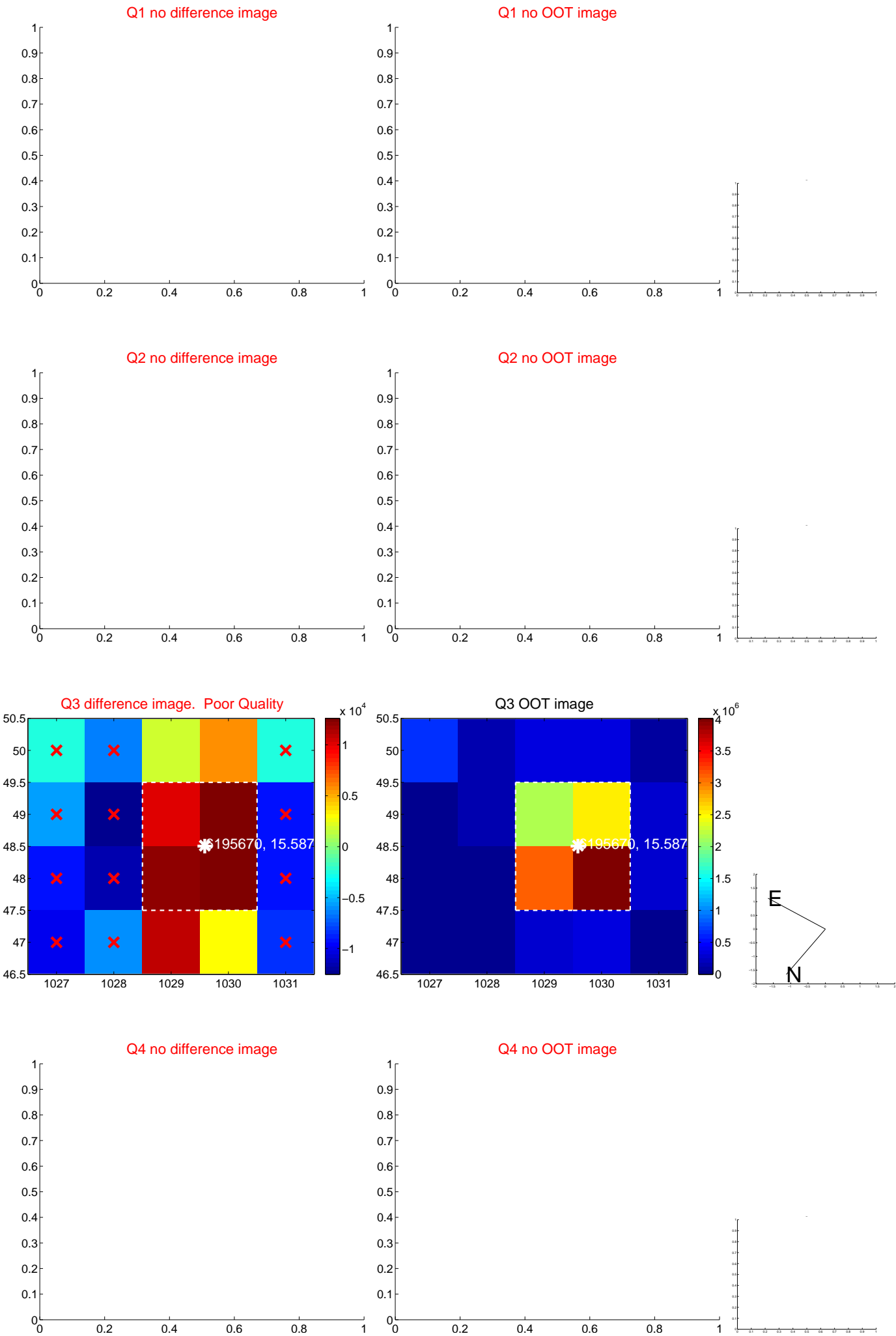


There is no PRF-fit offset from KIC



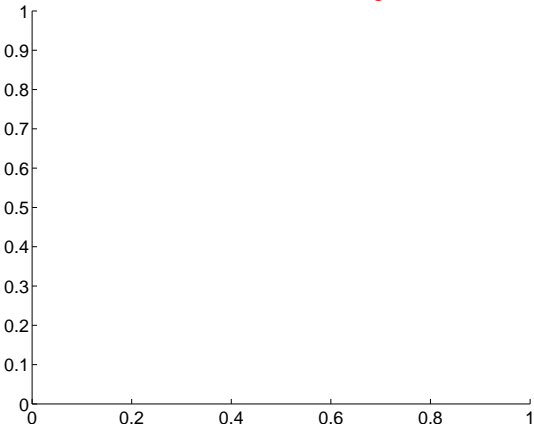
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

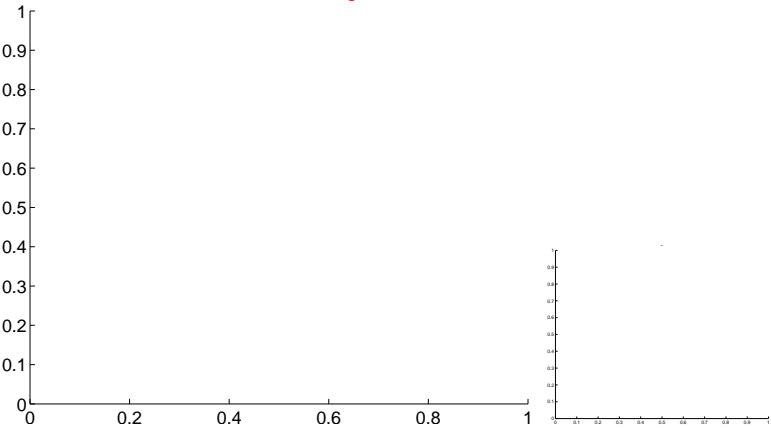


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

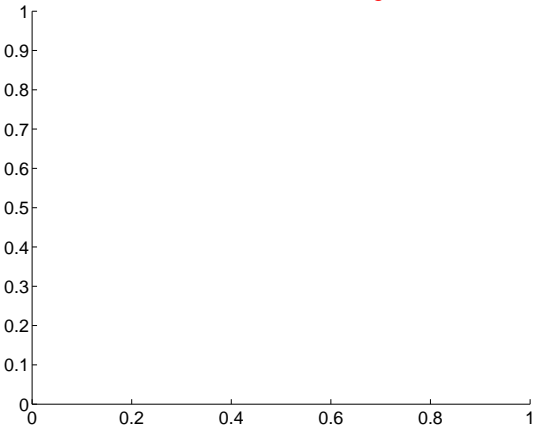
Q5 no difference image



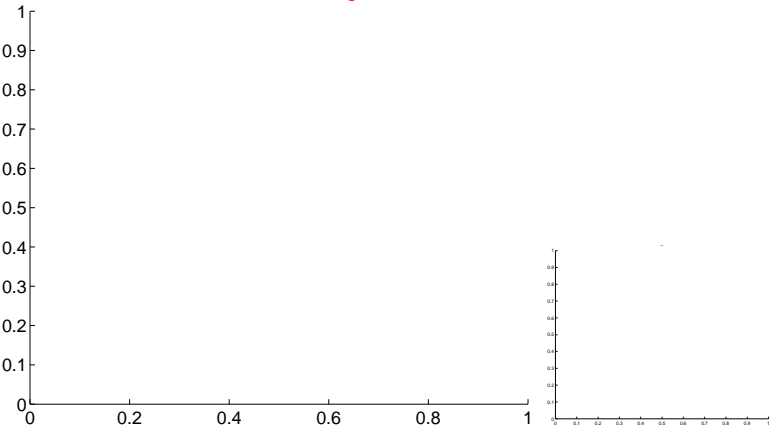
Q5 no OOT image



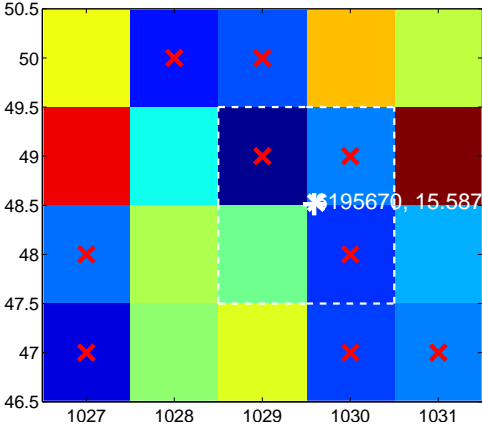
Q6 no difference image



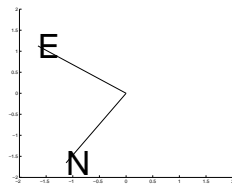
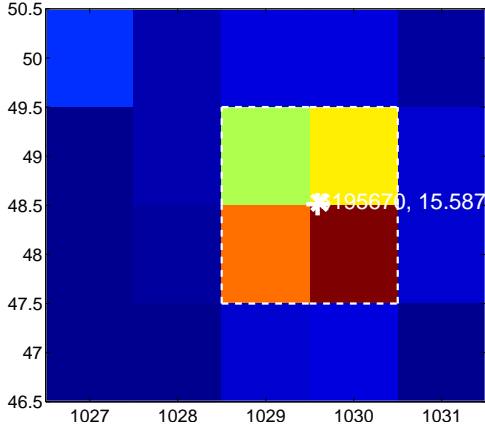
Q6 no OOT image



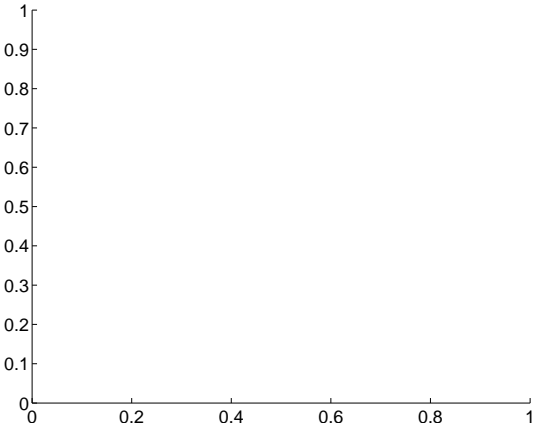
Q7 difference image. Poor Quality



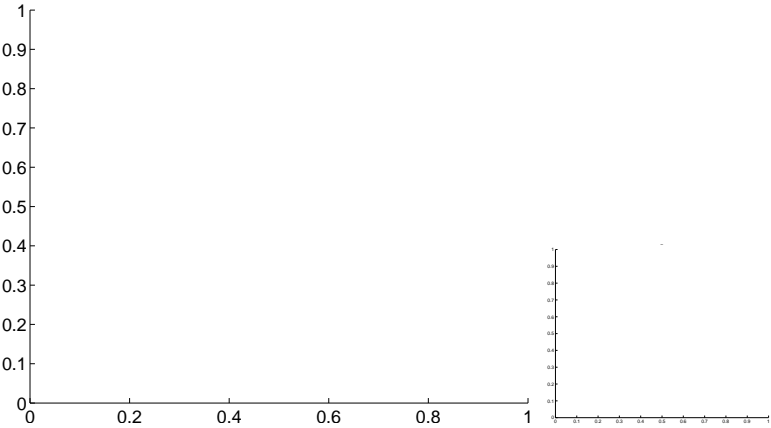
Q7 OOT image



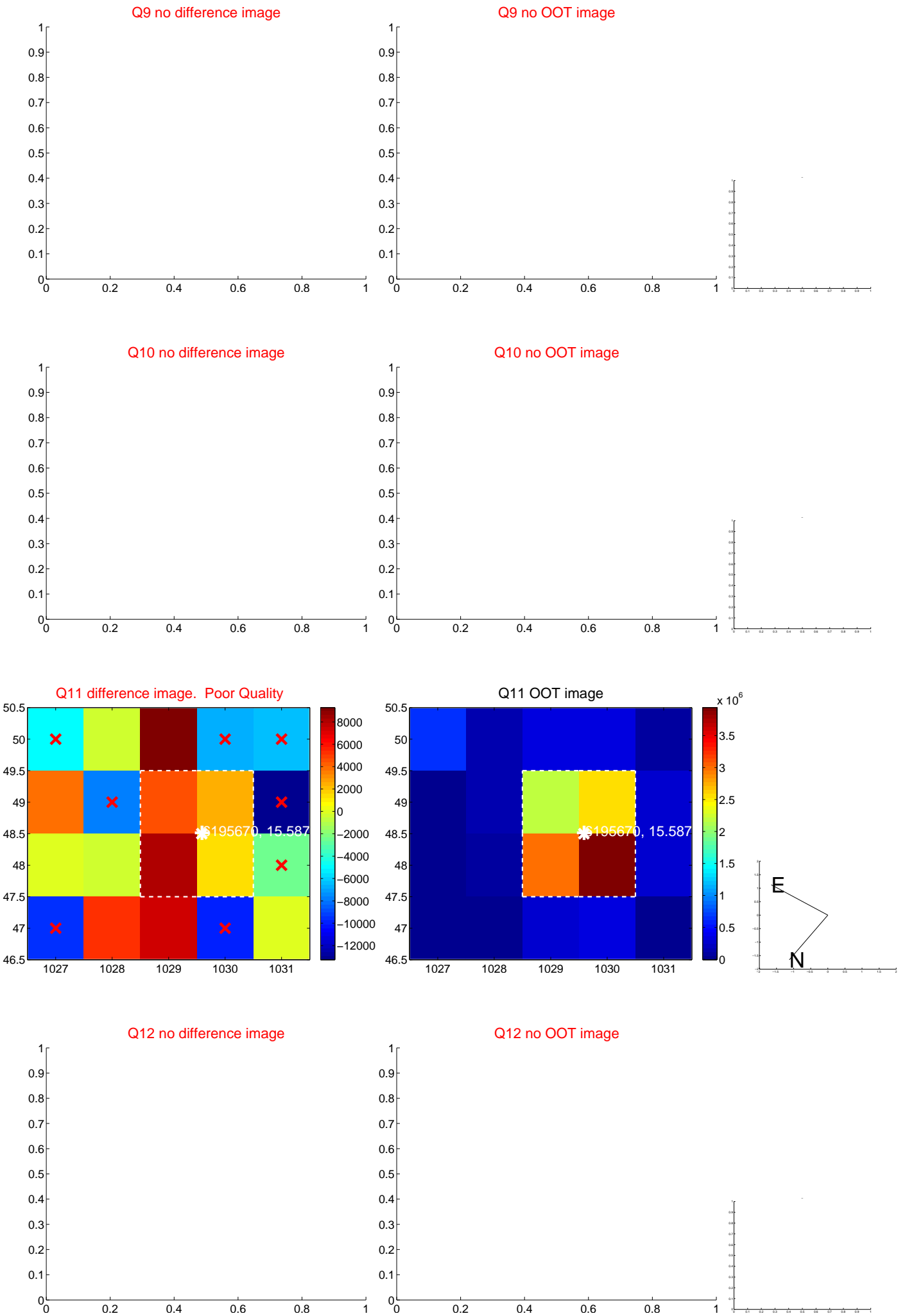
Q8 no difference image



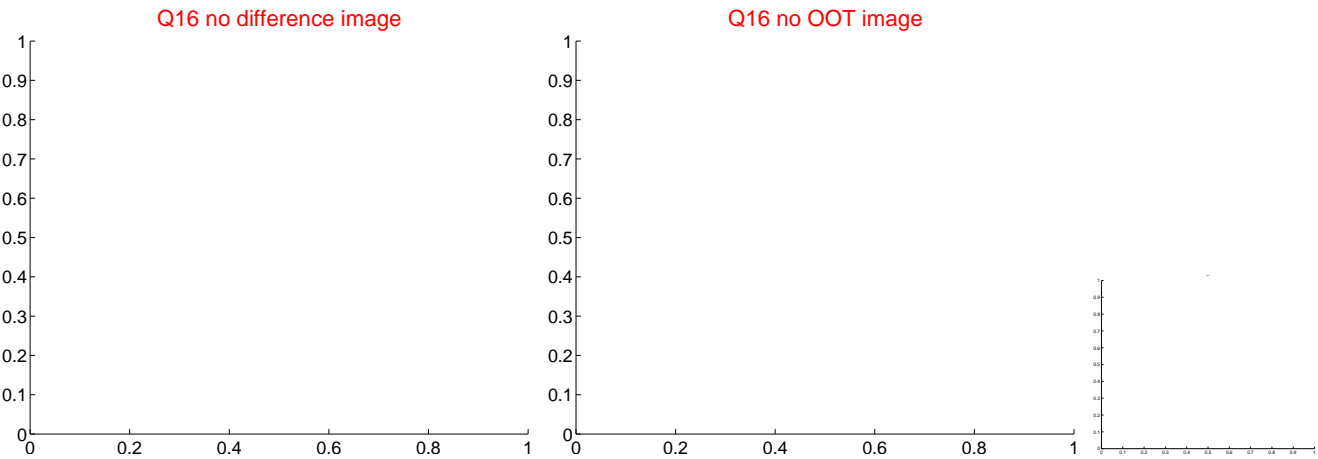
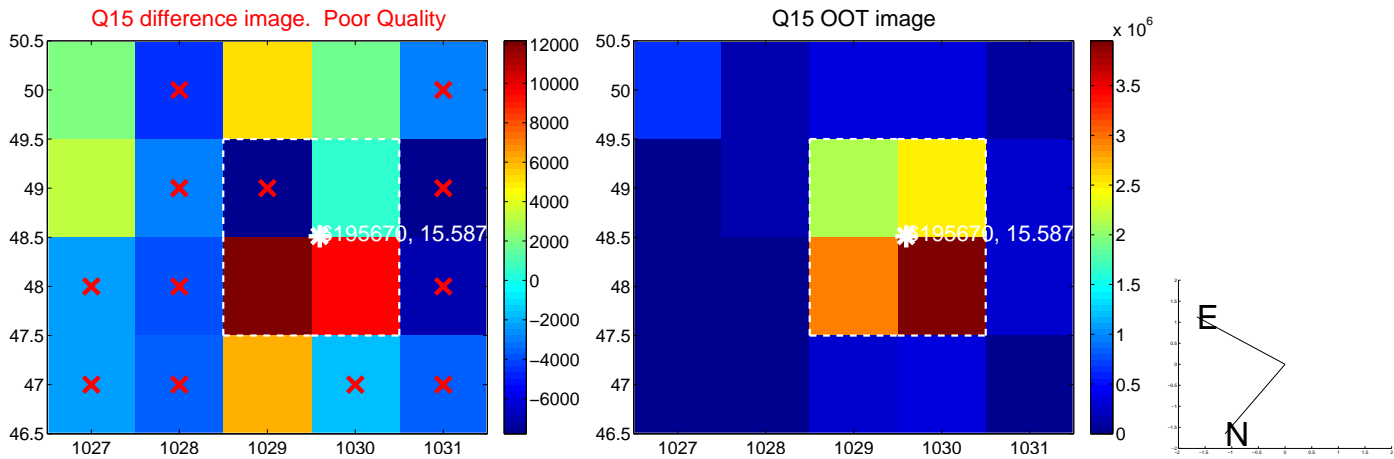
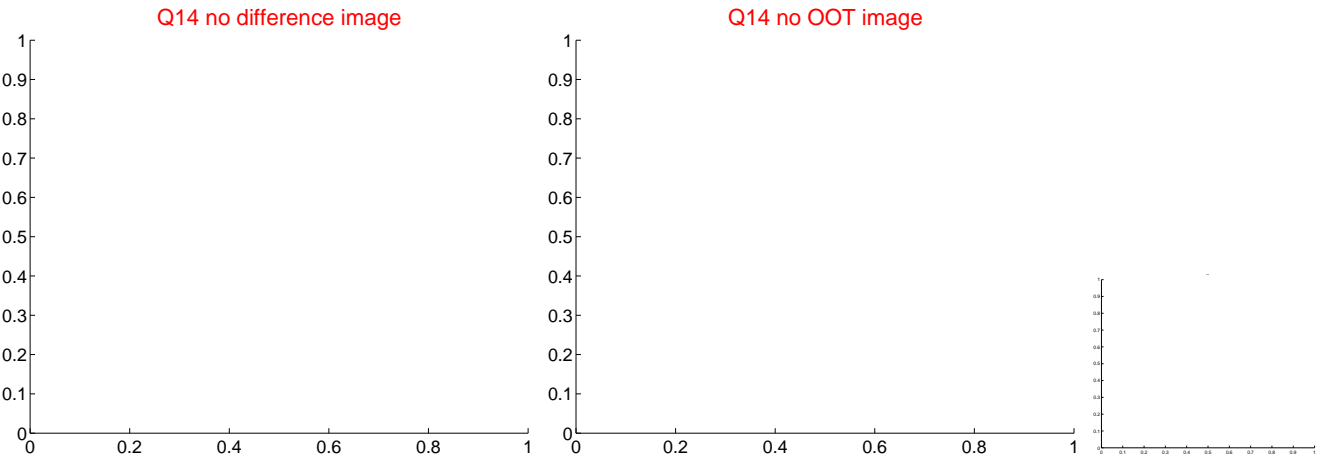
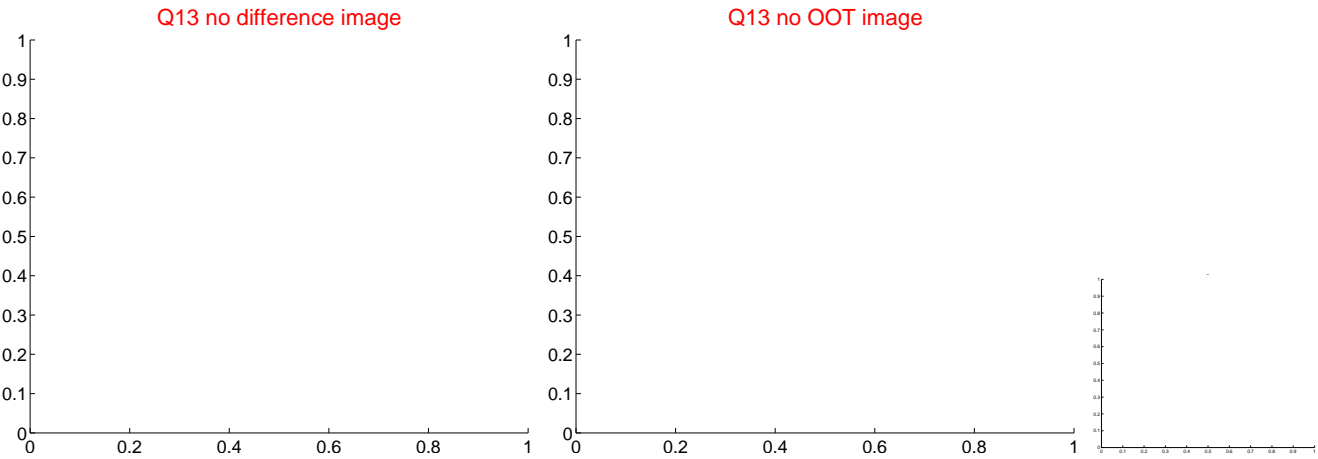
Q8 no OOT image



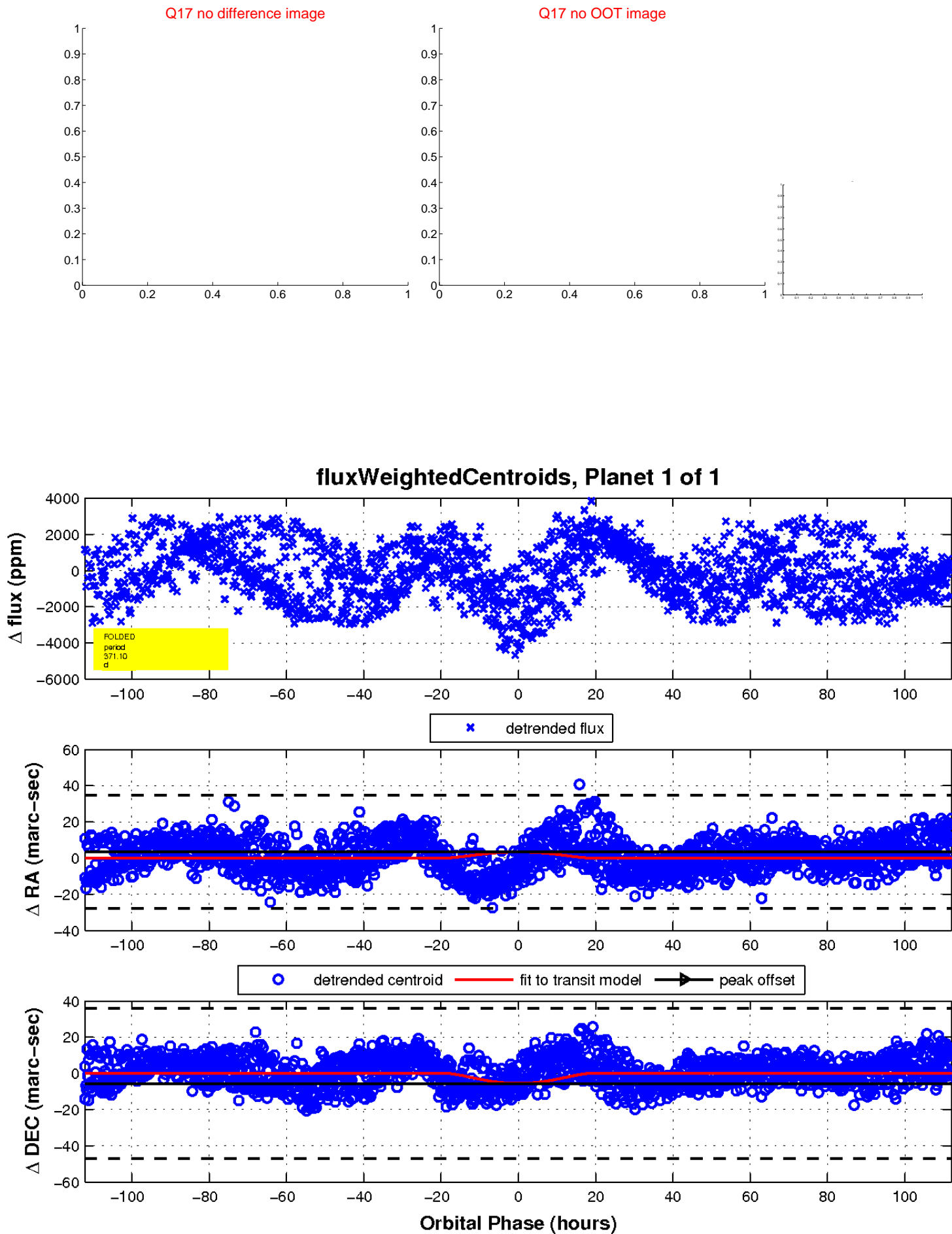
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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UKIRT Image

Declination

