

KIC 011241491

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})
011241491-01	OBS	No	350.416544	388.255222	652.9	3.501	7.4	7.5	0.86	6071	2.60	1.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011241491-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—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.

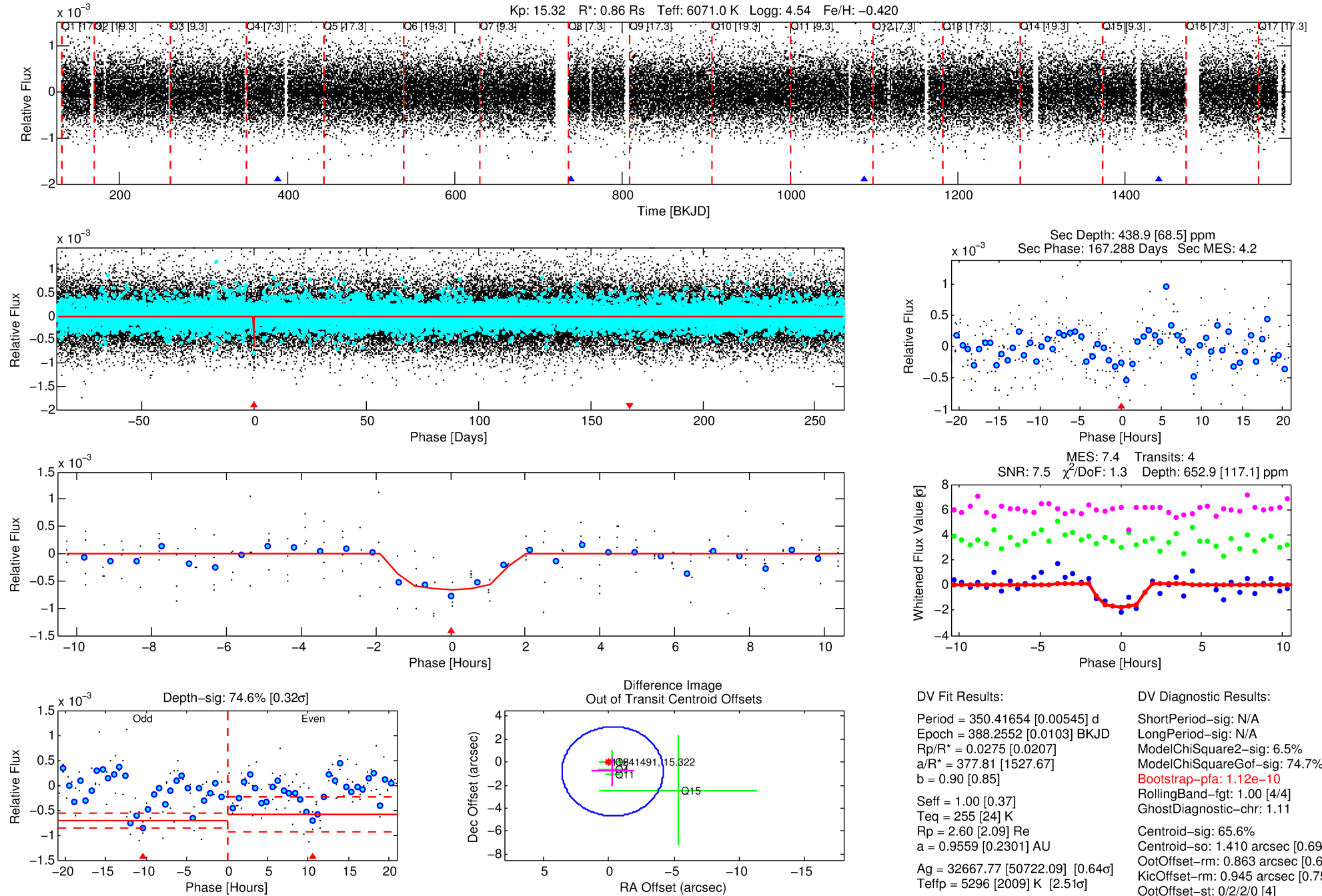
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011241491-01

No Significant Match Found

DV One-Page Summary

KIC: 11241491 Candidate: 1 of 1 Period: 350.417 d



DV Fit Results:

Period = 350.41654 [0.00545] d
Epoch = 388.2552 [0.0103] BKJD
Rp/R* = 0.0275 [0.0207]
a/R* = 377.81 [1527.67]
b = 0.90 [0.85]
Seff = 1.00 [0.37]
Teq = 255 [24] K
Rp = 2.60 [2.09] Re
a = 0.9559 [0.2301] AU
Ag = 32667.77 [50722.09] [0.64 σ]
Teff = 5296 [2009] K [2.51 σ]

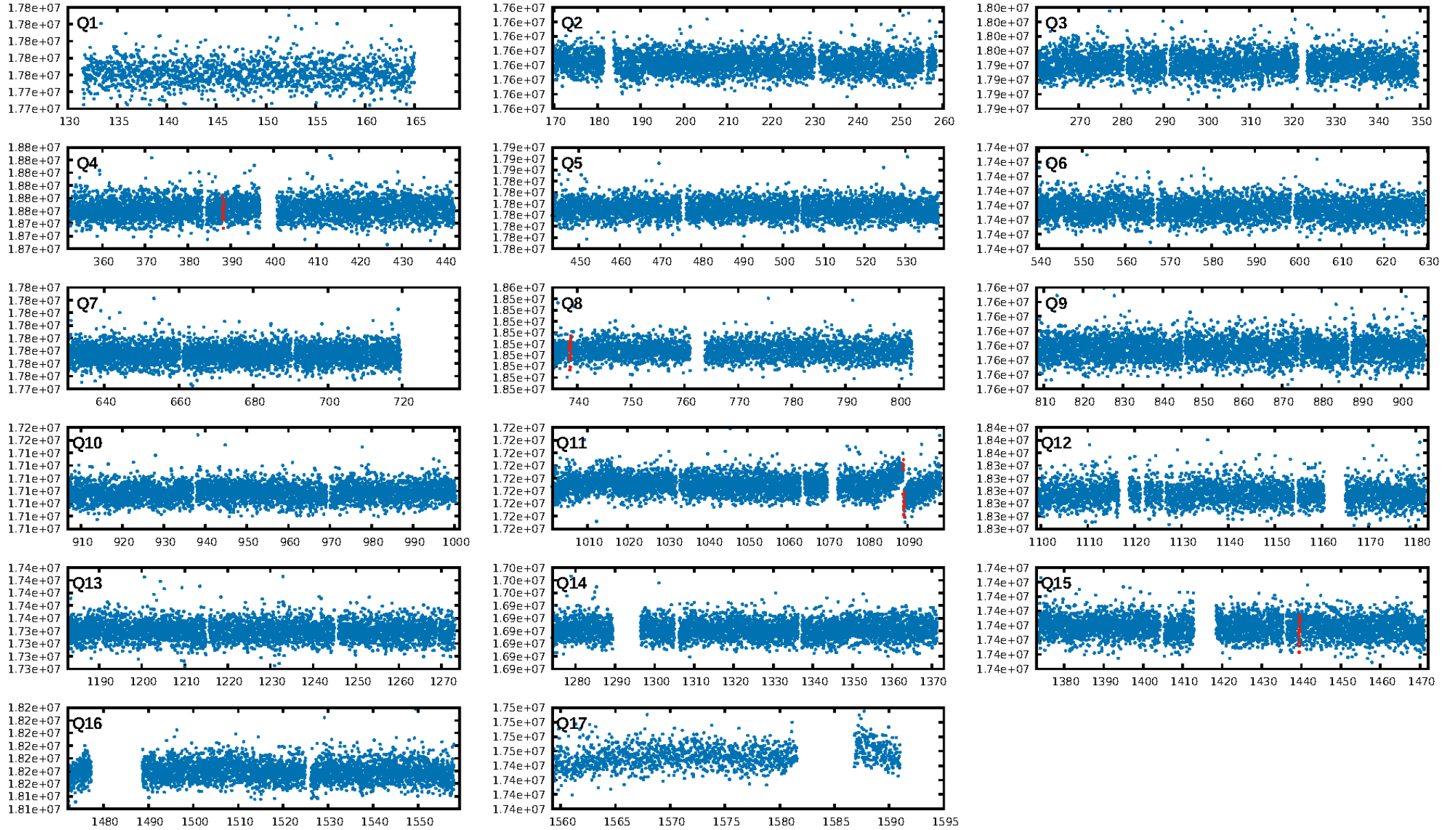
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.5%
ModelChiSquareGof-sig: 74.7%
Bootstrap-pfa: 1.12e-10
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.11
Centroid-sig: 65.6%
Centroid-so: 1.410 arcsec [0.69 σ]
OotOffset-rm: 0.863 arcsec [0.67 σ]
KicOffset-rm: 0.945 arcsec [0.75 σ]
OotOffset-st: 0/2/2/0 [4]
KicOffset-st: 0/2/2/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 1.00 [4/4]

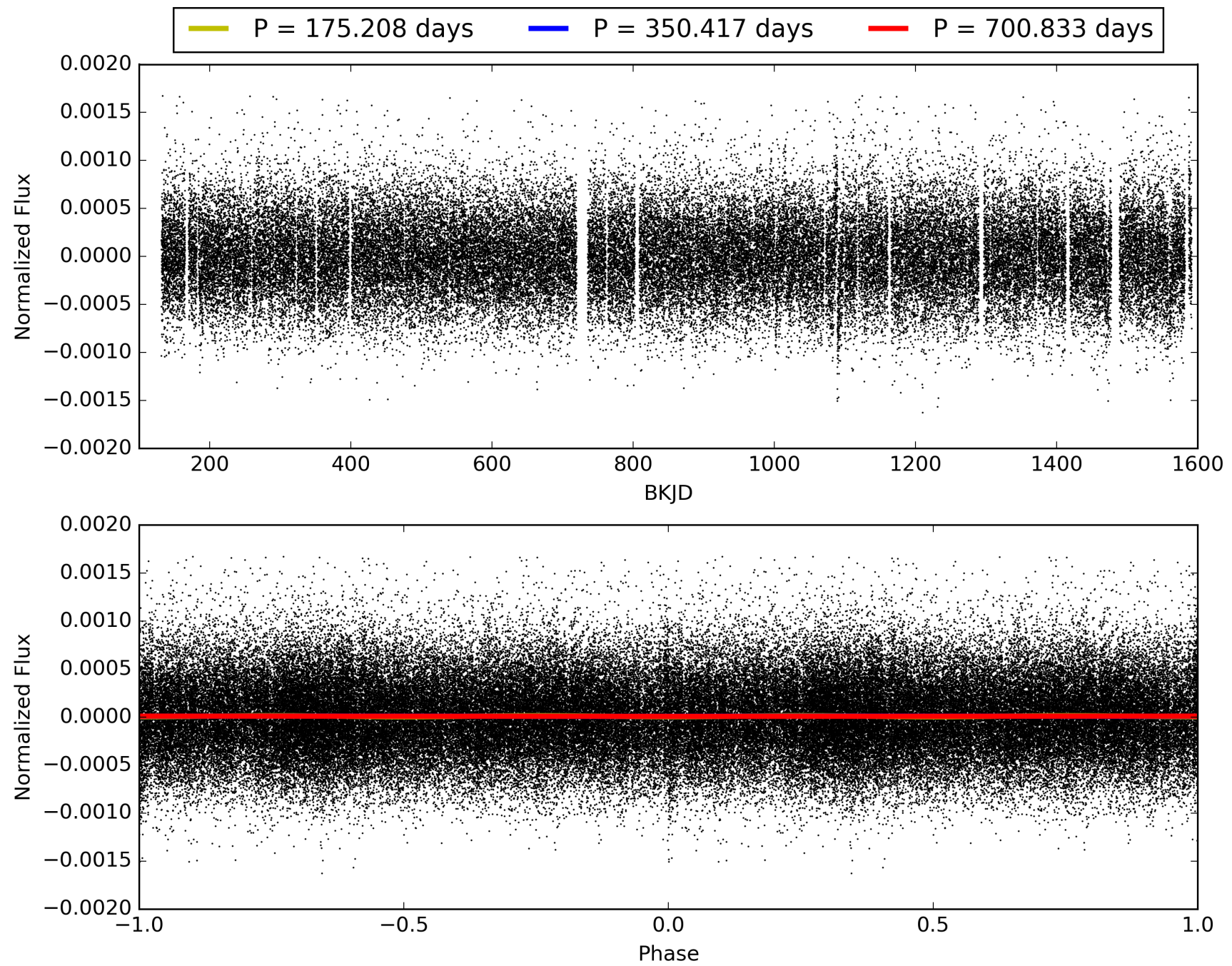
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 20:27:52 Z

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

TCE 011241491-01, PDC Light Curves

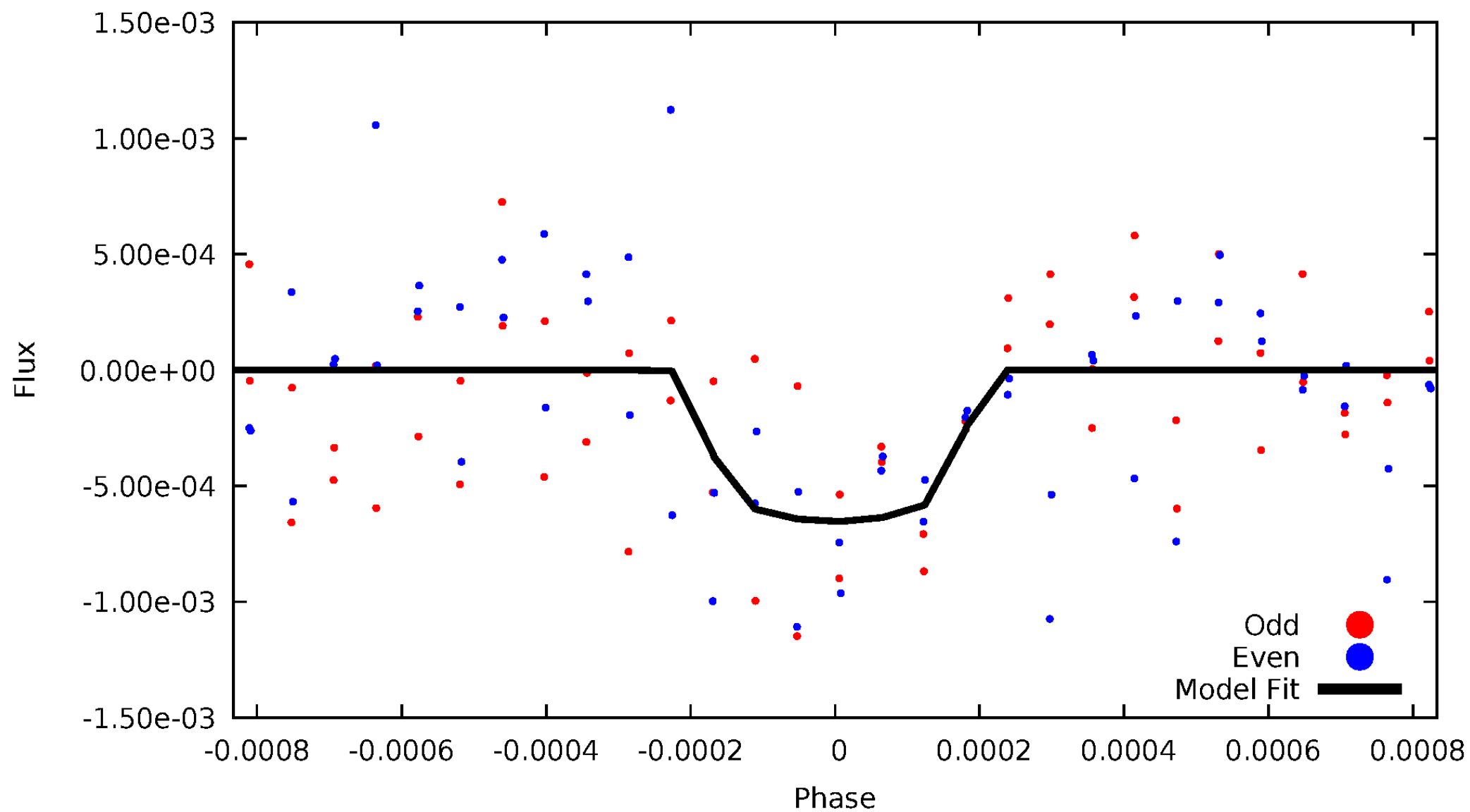


TCE 011241491-01



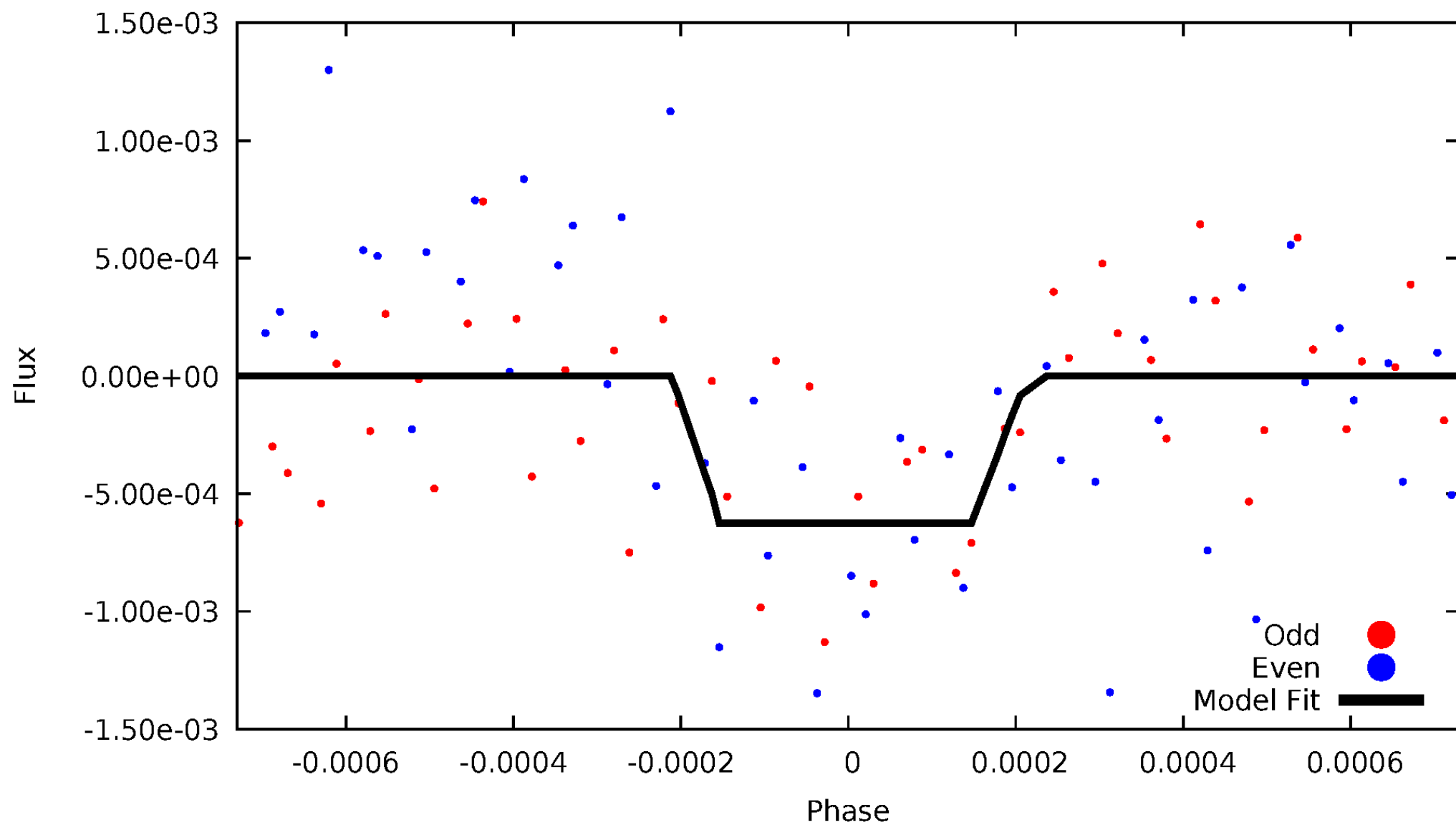
DV Odd/Even

TCE 011241491-01

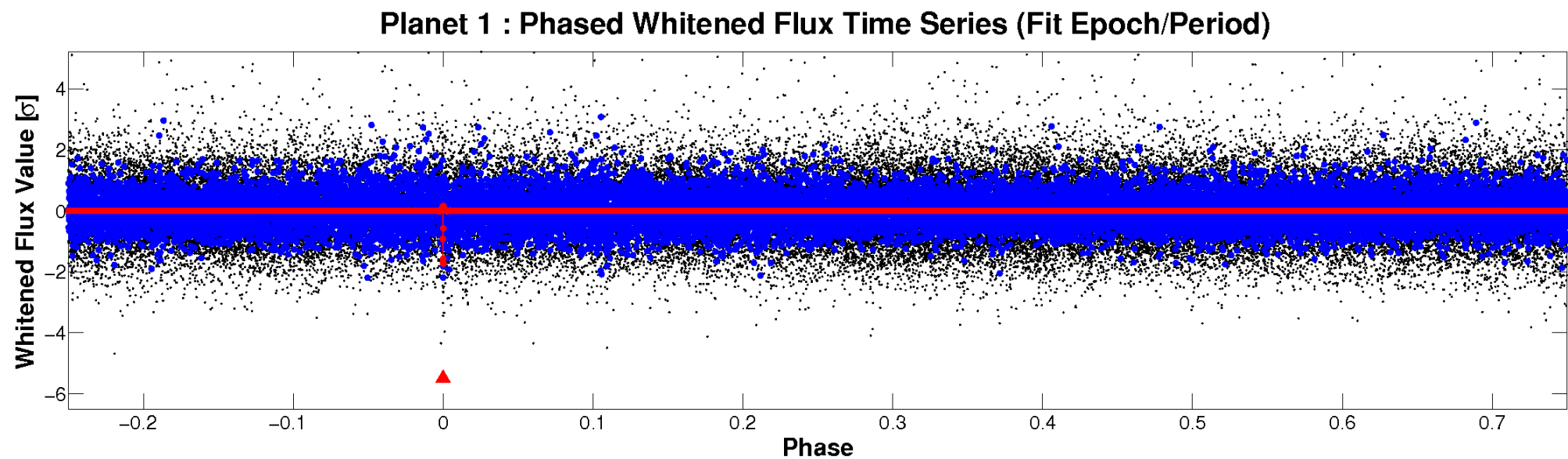
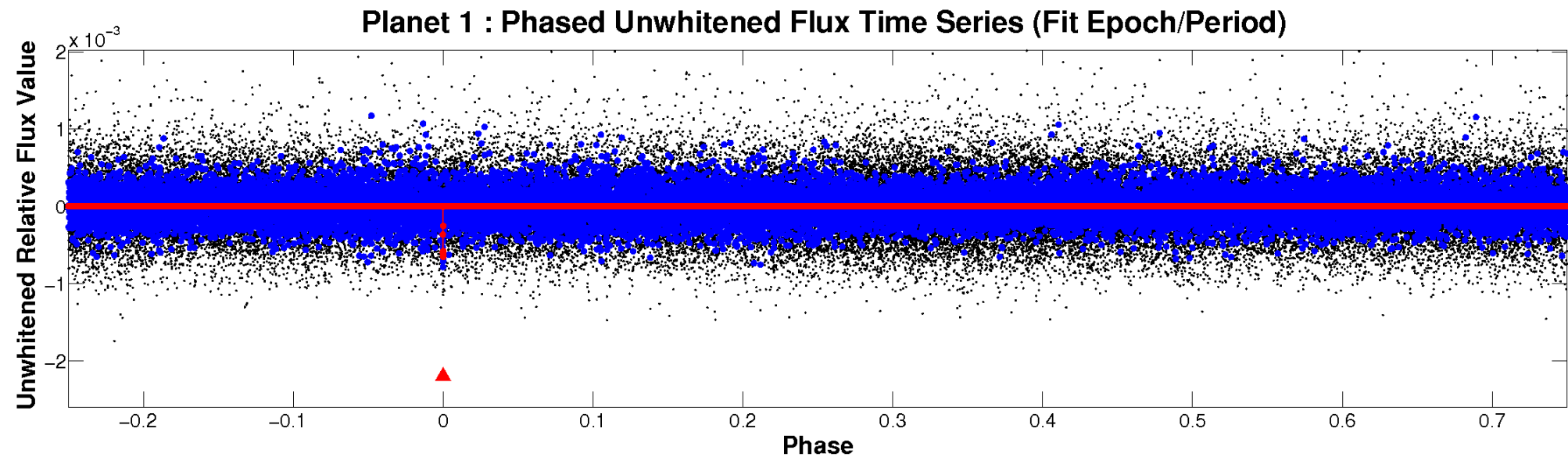


ALT Odd/Even

TCE 011241491-01

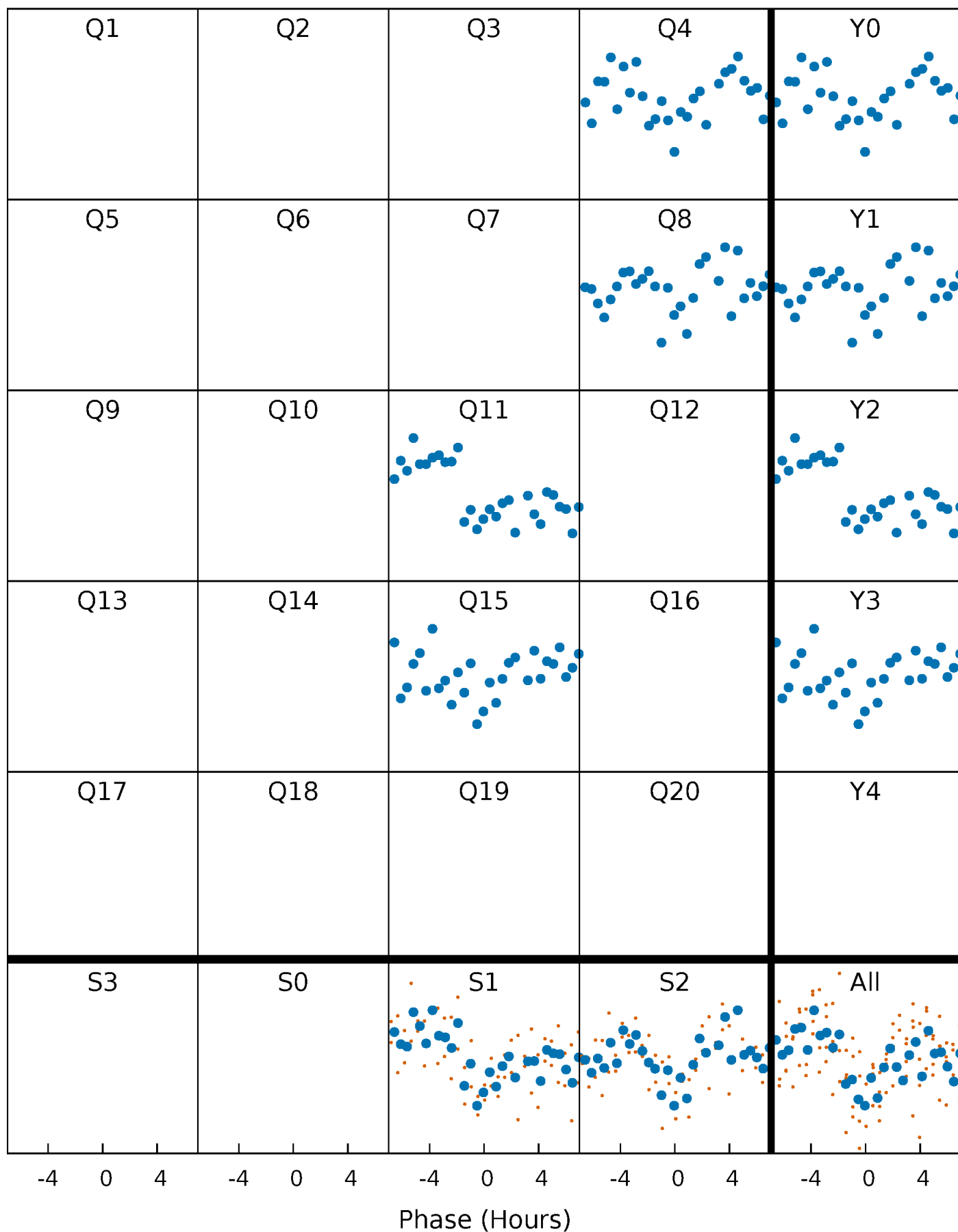


Non-Whitened Vs. Whitened Light Curve



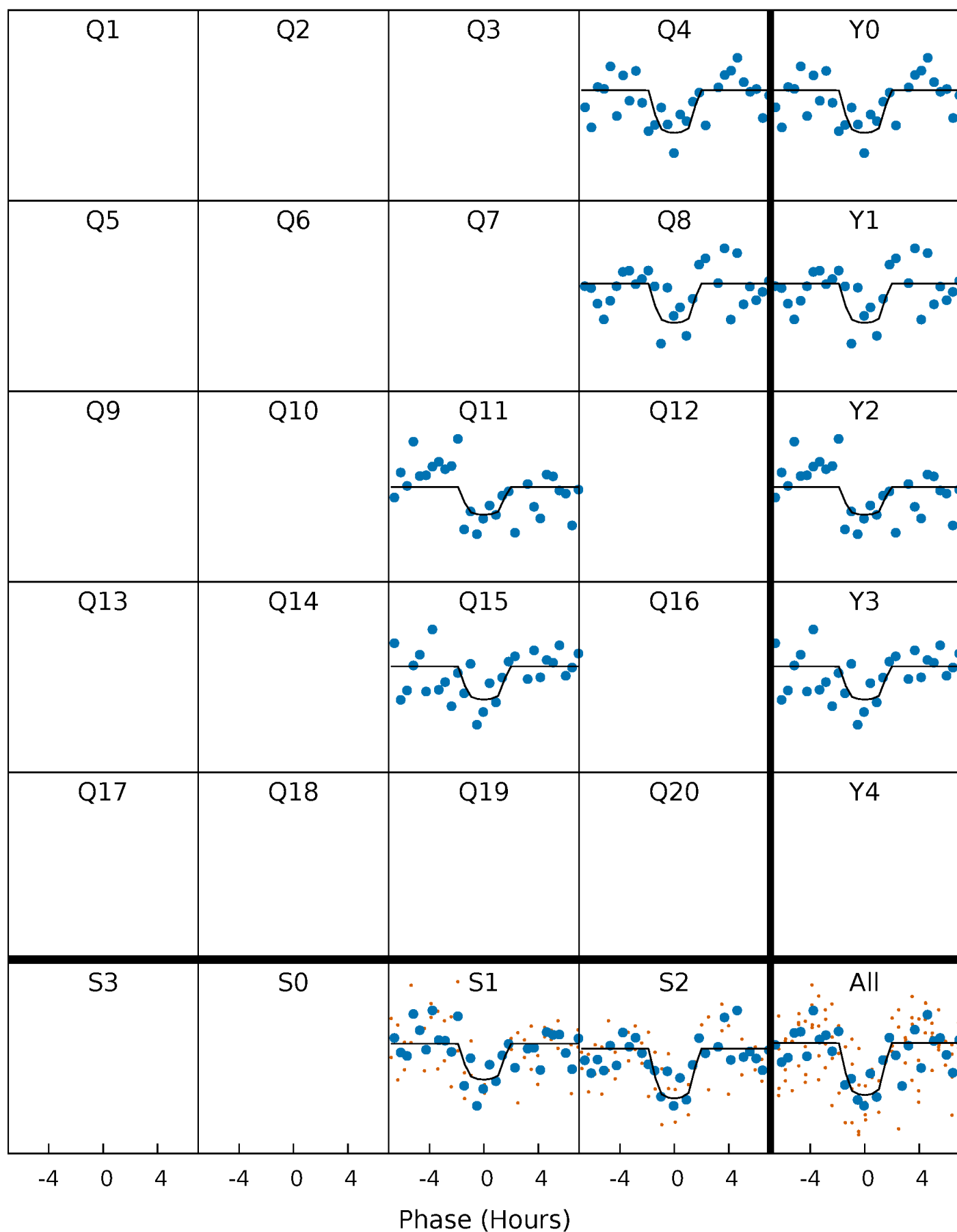
PDC Quarter-Phased Transit Curves

TCE 011241491-01 P=350.416544 Days $T_0=388.255222$ (BKJD)



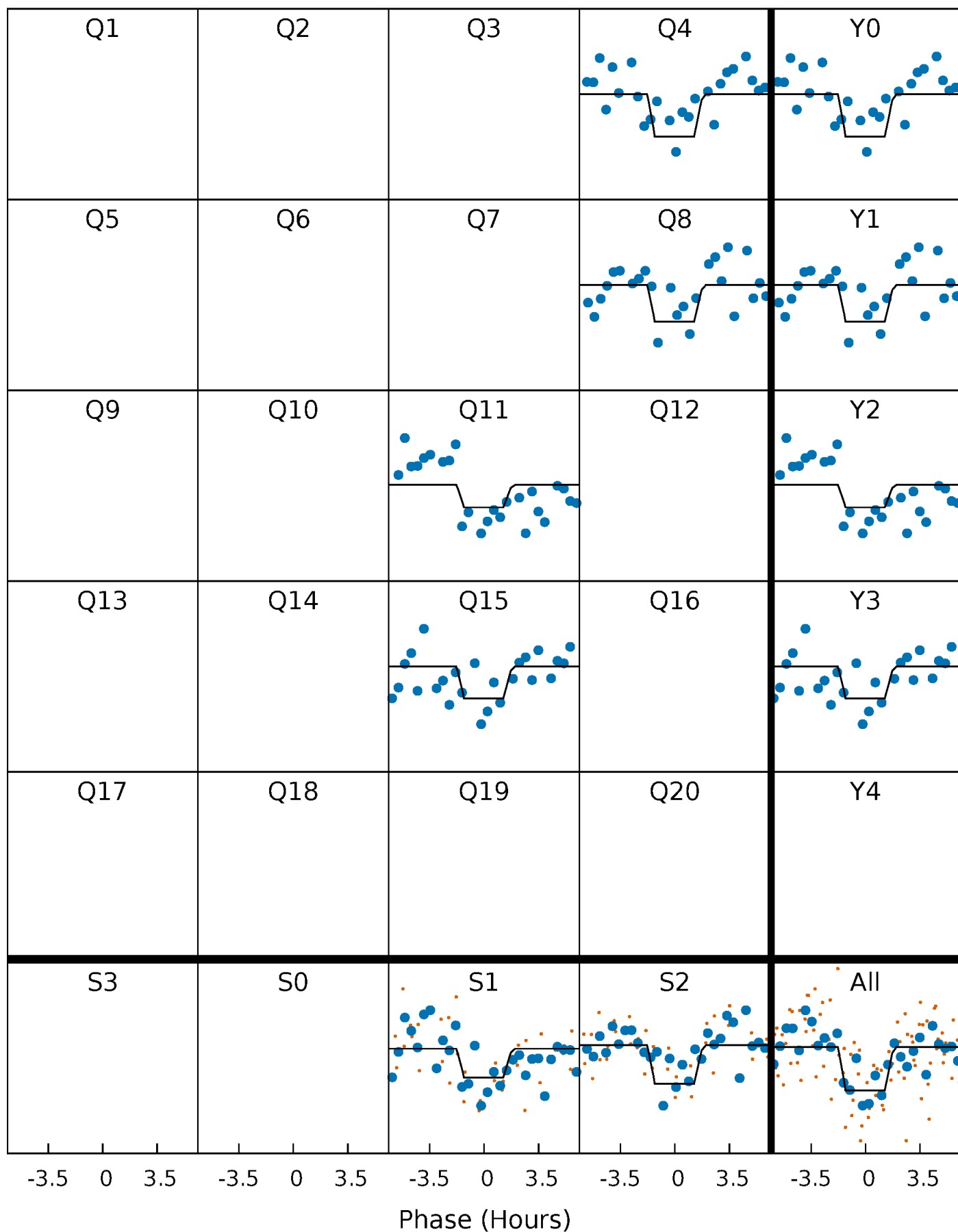
DV Quarter-Phased Transit Curves

TCE 011241491-01 P=350.416544 Days $T_0=388.255222$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

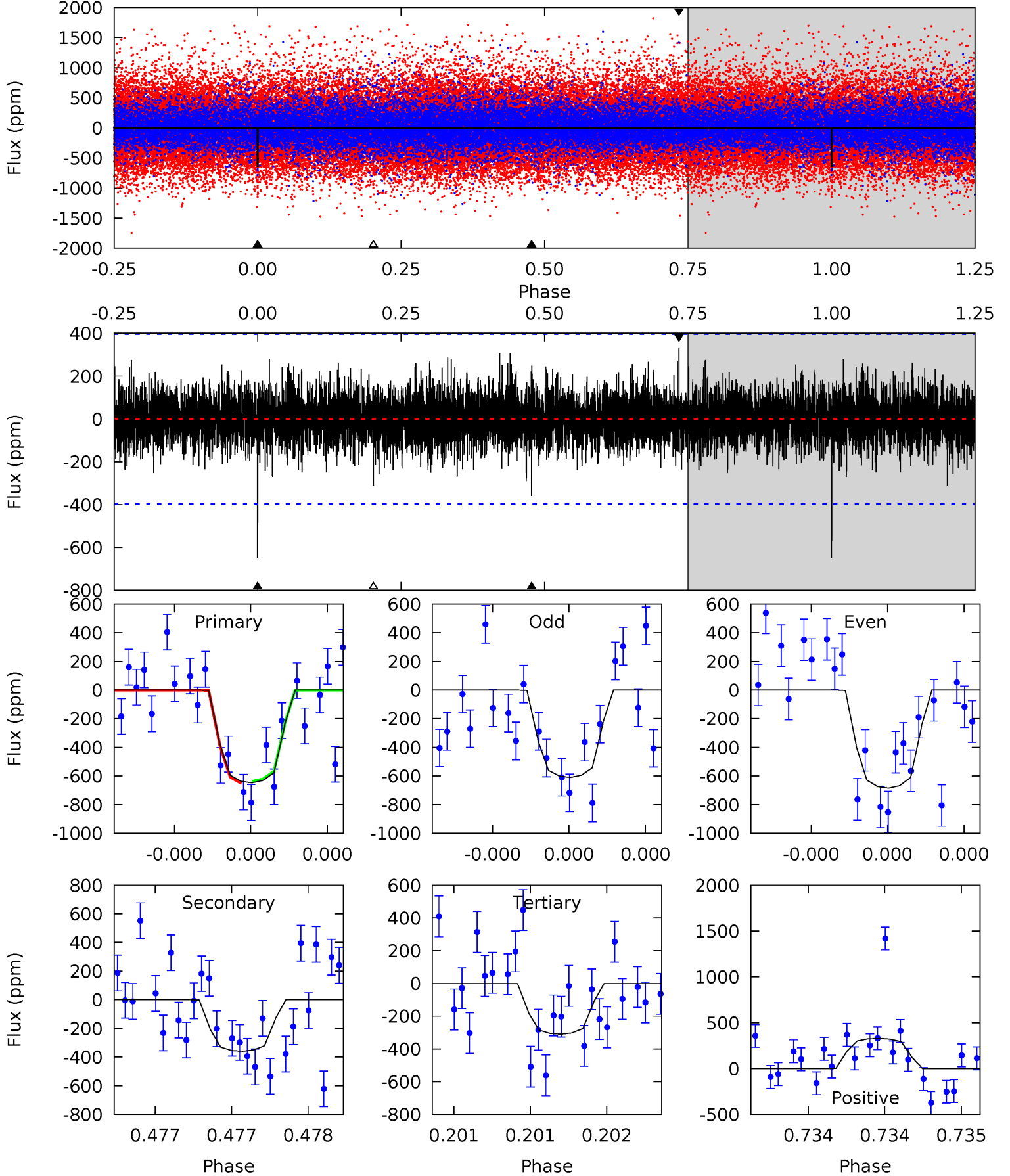
TCE 011241491-01 P=350.413183 Days $T_0=388.256647$ (BKJD)



DV Model-Shift Uniqueness Test

011241491-01, $P = 350.416544$ Days, $E = 37.838678$ Days

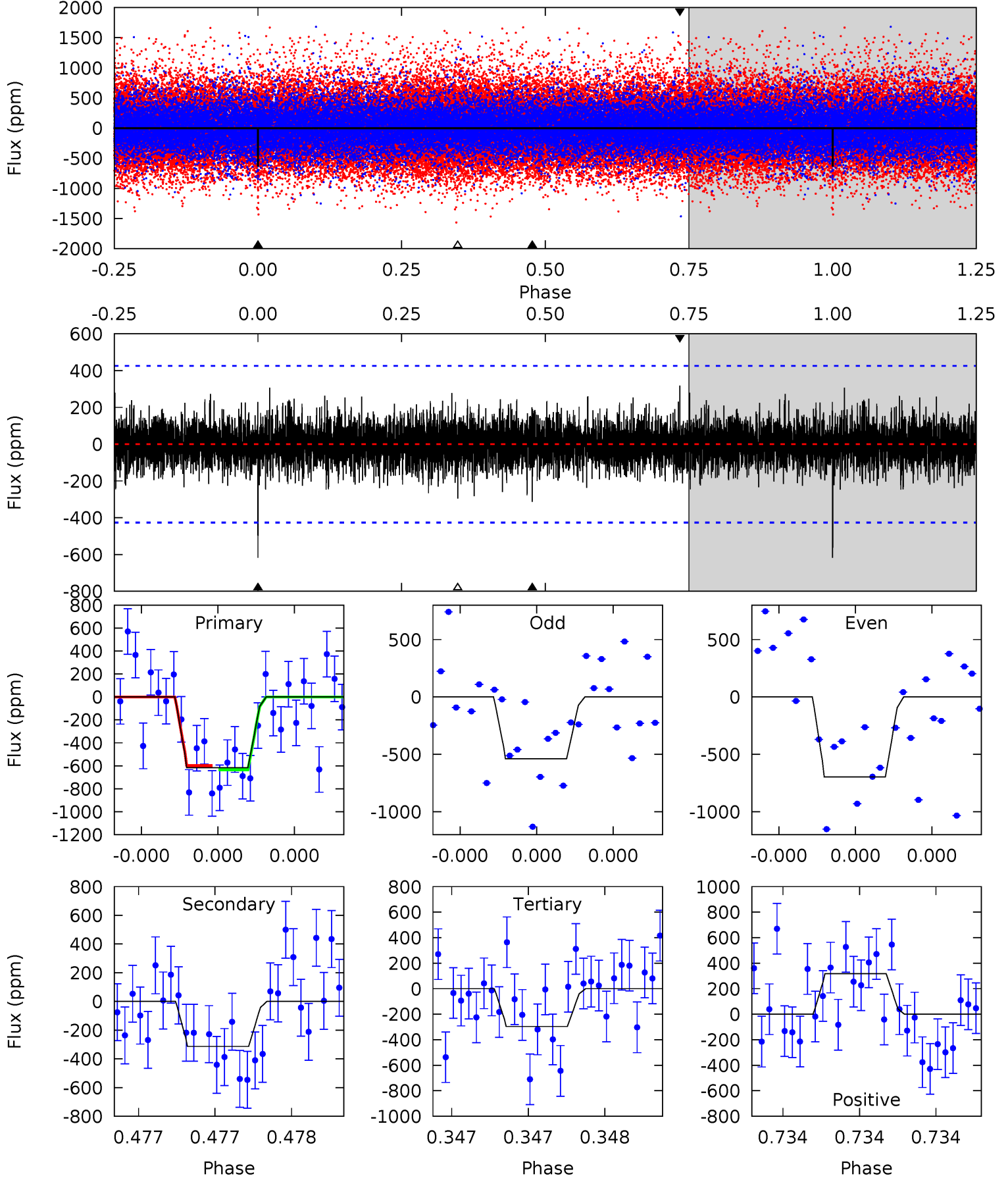
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.14	5.08	4.38	4.64	5.61	3.53	1.11	4.76	4.50	0.69	0.44	0.54	1.05	0.34	0.10



Alt Model-Shift Uniqueness Test

011241491-01, P = 350.413183 Days, E = 37.843464 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.14	4.14	3.91	4.20	5.62	3.56	0.99	4.24	3.95	0.23	-0.06	1.04	1.14	0.34	0.24



Stellar Parameters For KIC 011241491

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6071^{+165}_{-183}	$4.541^{+0.048}_{-0.192}$	$-0.420^{+0.300}_{-0.300}$	$0.865^{+0.247}_{-0.077}$	$0.947^{+0.108}_{-0.119}$	$2.062^{+0.400}_{-1.042}$
	+3%/-3%	+1%/-4%	+71%/-71%	+29%/-9%	+11%/-13%	+19%/-51%
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 011241491-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-359 ± 71	$3.03^{+1.98}_{-1.84}$	364^{+25}_{-17}	4945^{+2716}_{-920}	$19574^{+103016}_{-12811}$
Alt.	-313 ± 76	$2.74^{+1.99}_{-1.67}$	364^{+24}_{-17}	4970^{+2693}_{-995}	$20931^{+104255}_{-14425}$

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 $A_{obs} \gg 1.0$

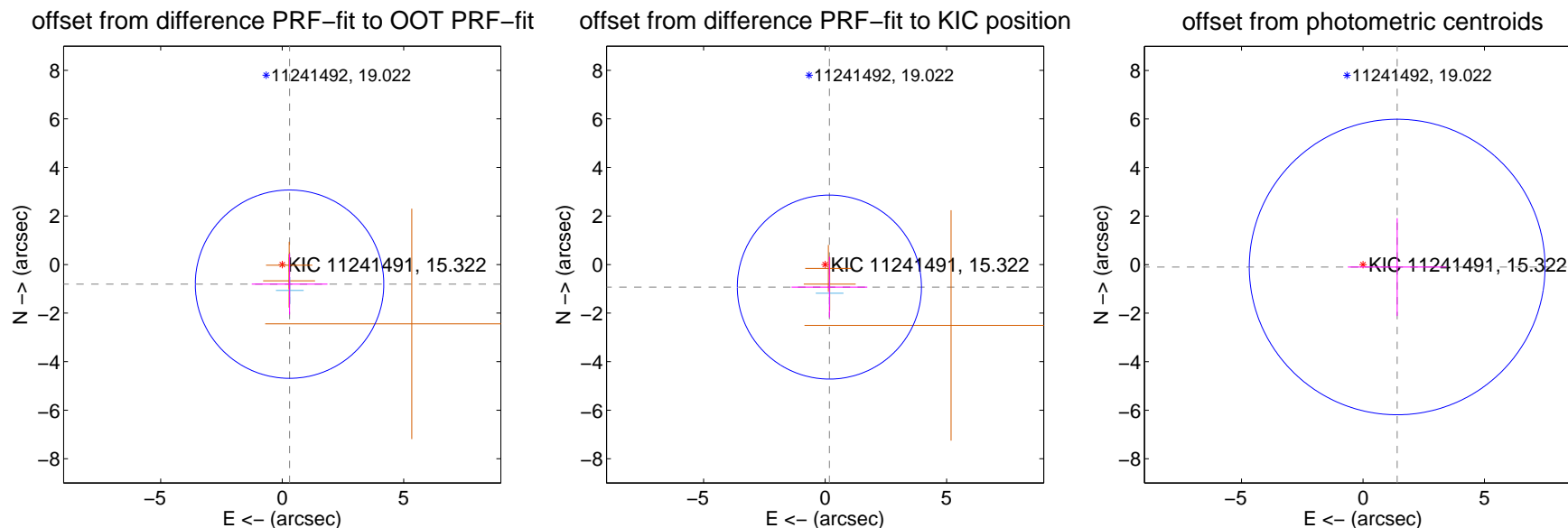
DV Centroid Data

Supplemental centroid analysis for 011241491-01. Kepler magnitude: 15.32. Transit SNR 7.50

There are 1 quarters with good PRF difference image offsets

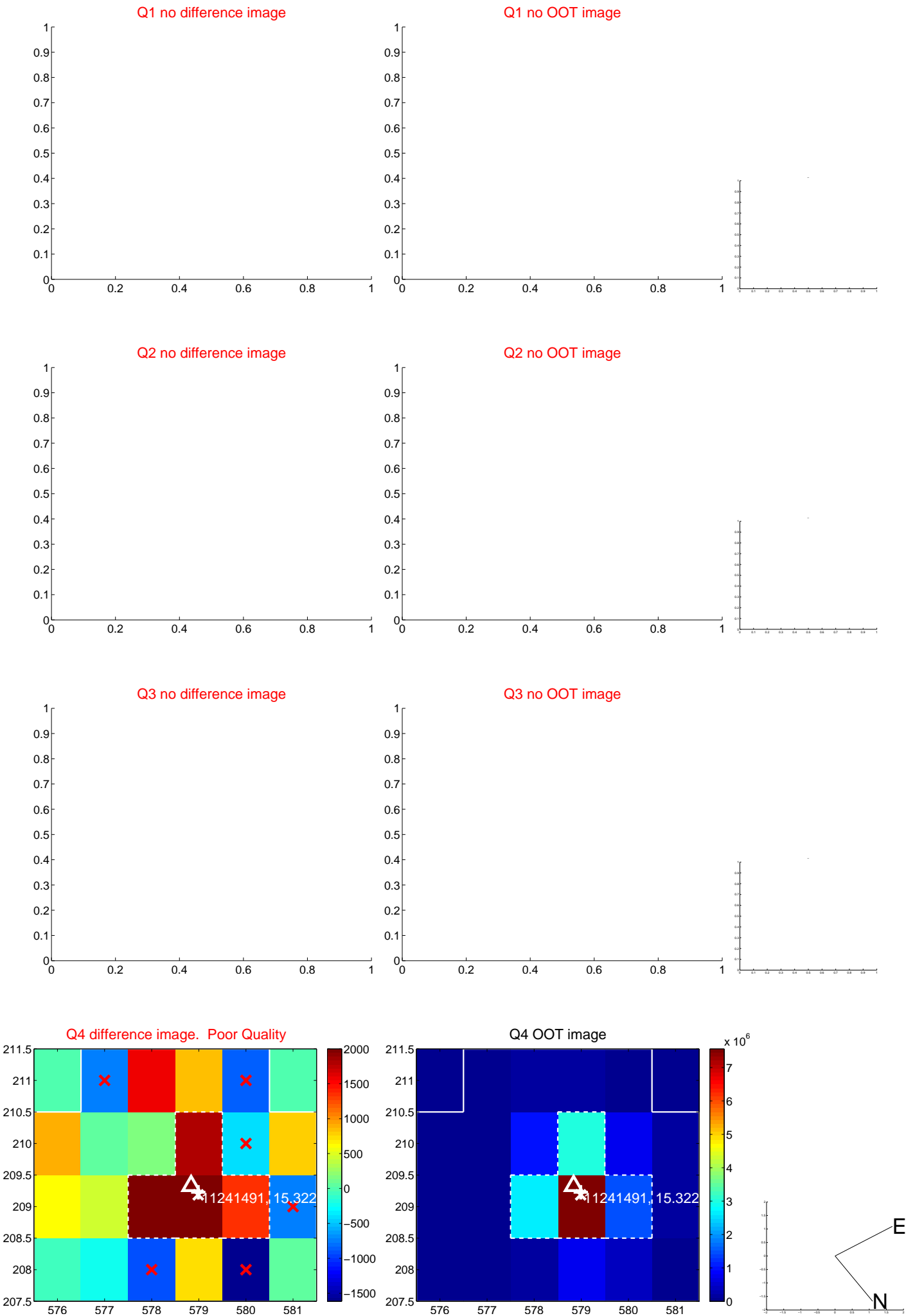
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.863 ± 1.293	0.67	-0.303 ± 1.558	-0.808 ± 1.251
PRF-fit source offset from KIC position	0.945 ± 1.263	0.75	-0.176 ± 1.558	-0.928 ± 1.251
photometric centroid source offset	1.41 ± 2.03	0.69	-1.41 ± 2.03	-0.10 ± 2.01

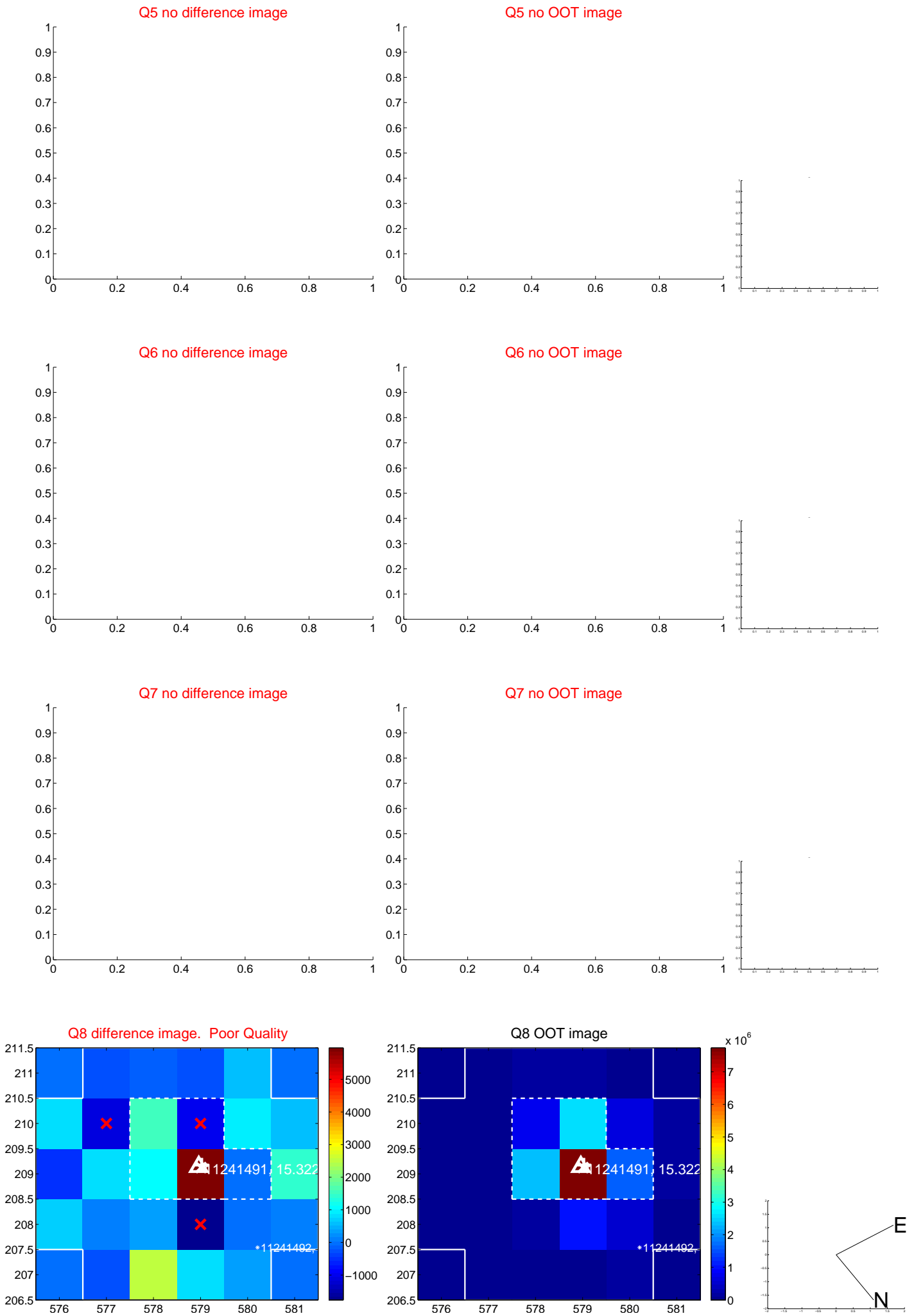


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



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

Q9 no difference image



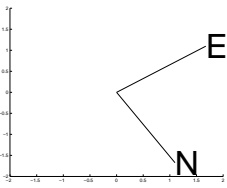
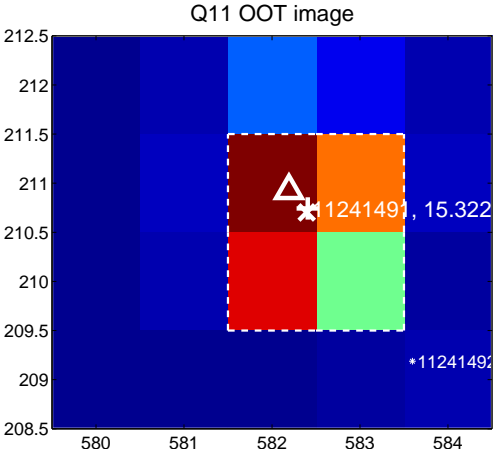
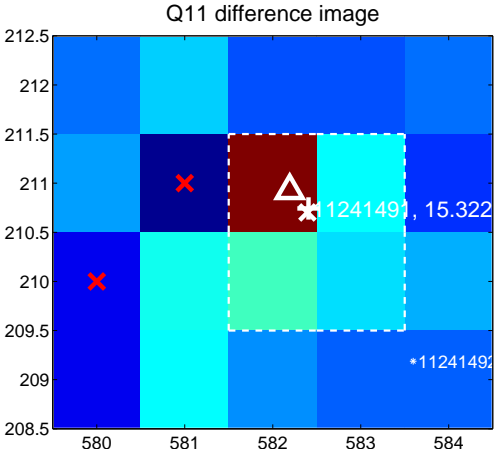
Q9 no OOT image



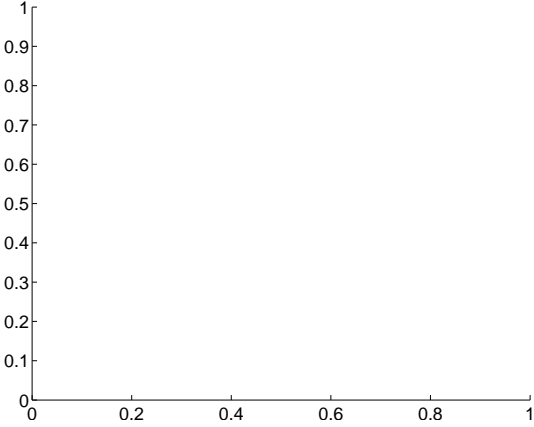
Q10 no difference image



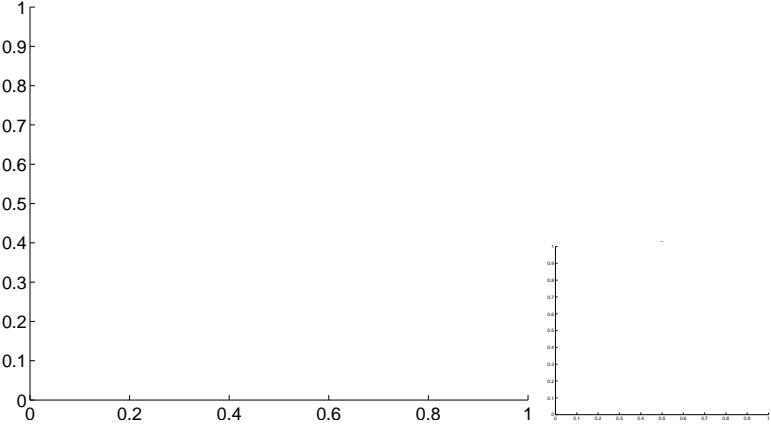
Q10 no OOT image



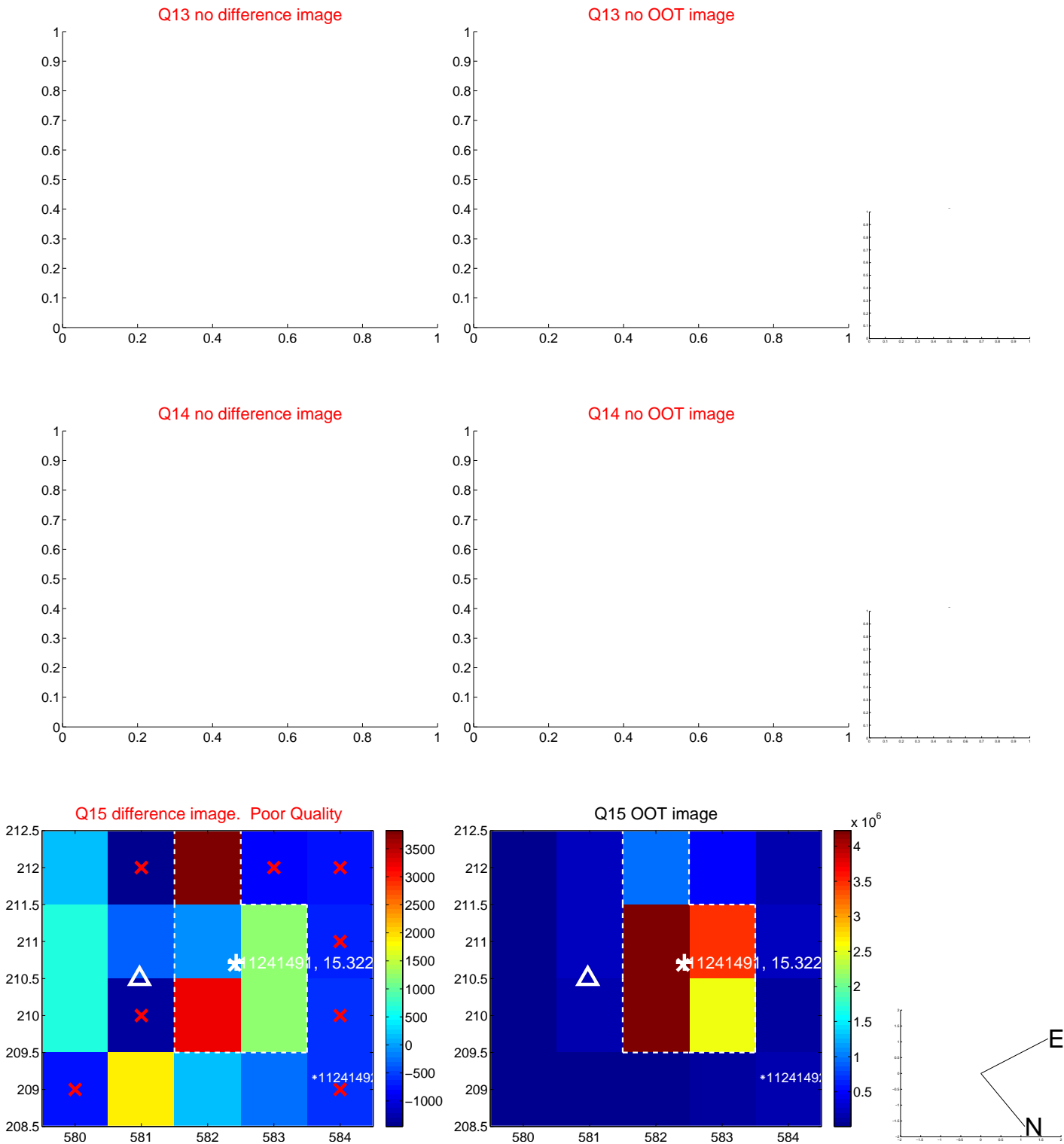
Q12 no difference image



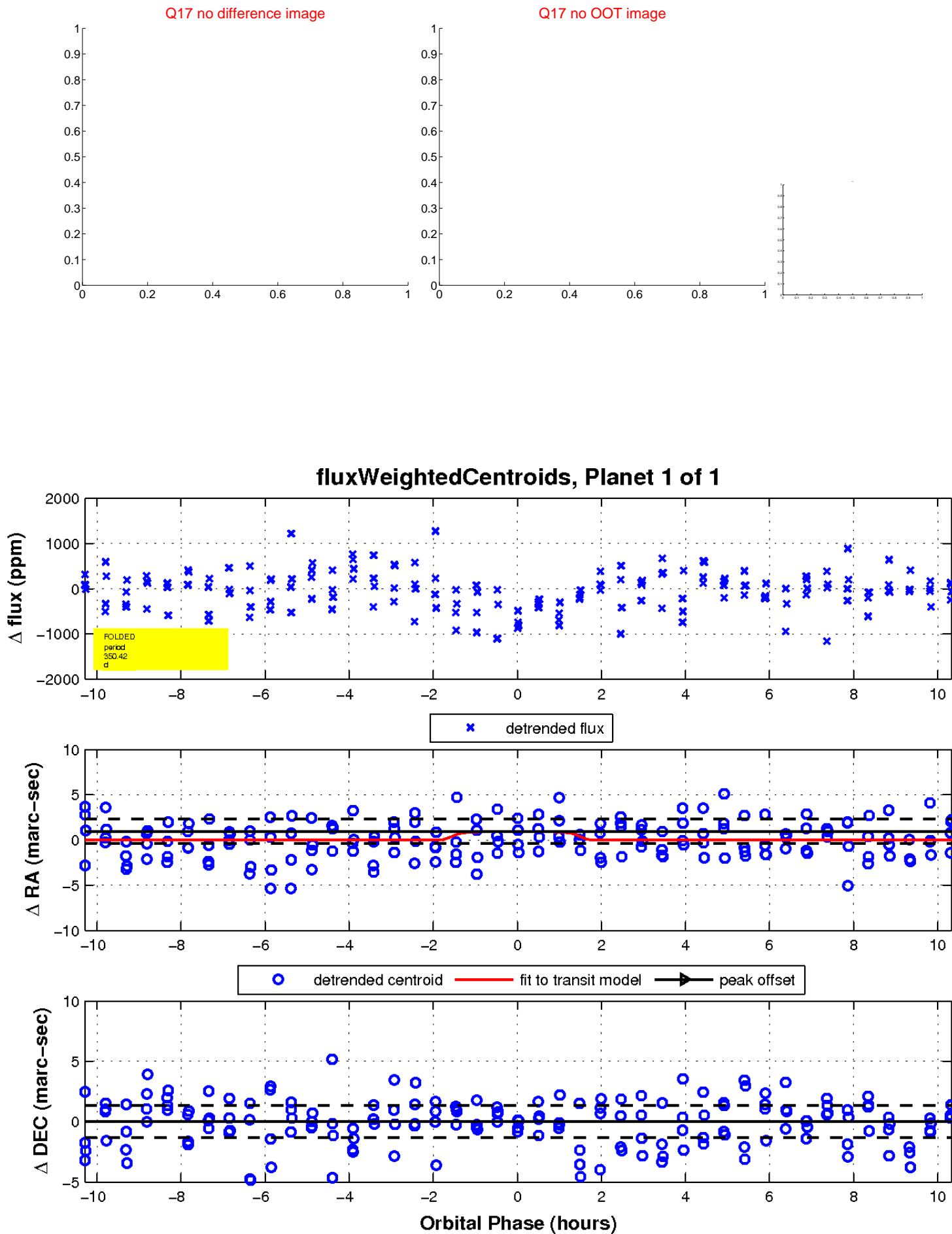
Q12 no OOT image



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



UKIRT Image

Declination

