

KIC 010290447

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})
010290447-01	OBS	No	0.693523	131.741237	1.3	7.328	10.5	0.0	0.59	4892	0.07	1071.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010290447-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV

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

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

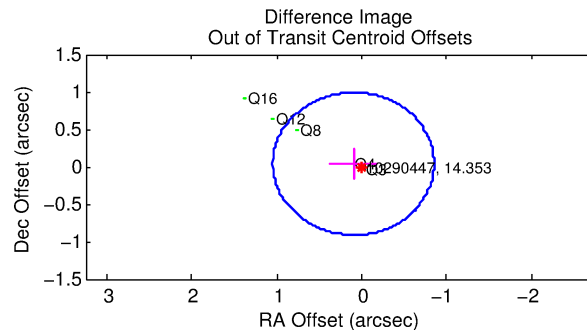
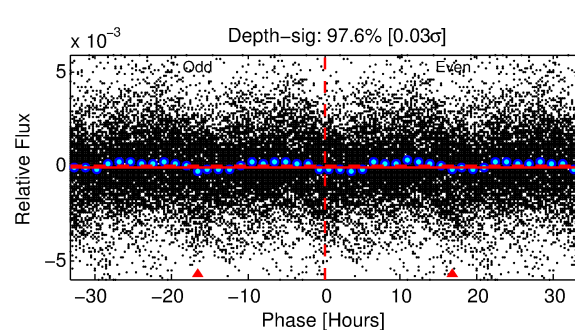
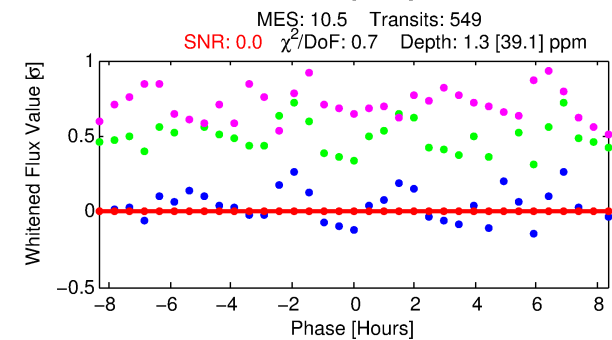
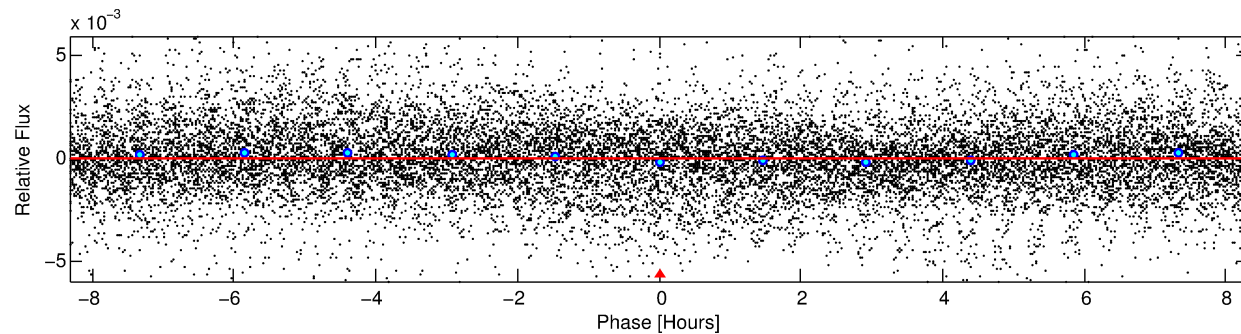
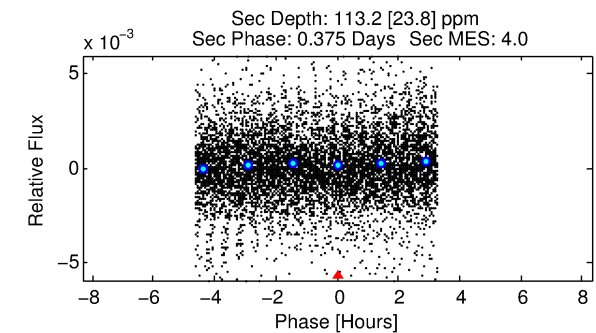
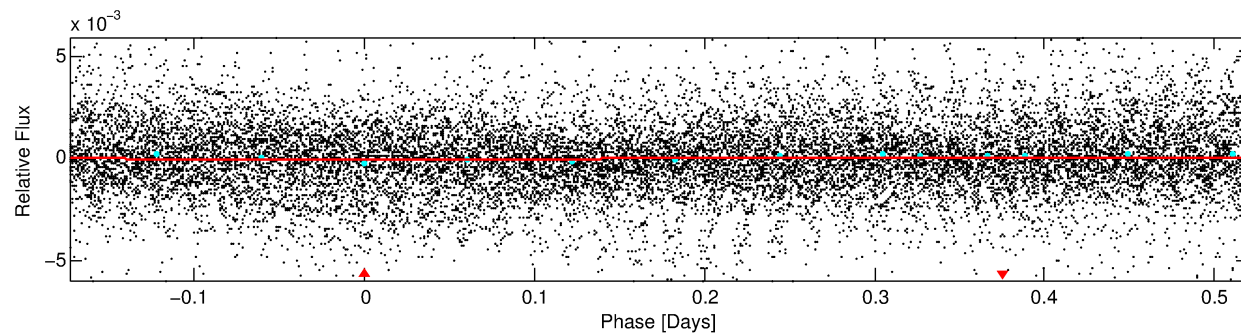
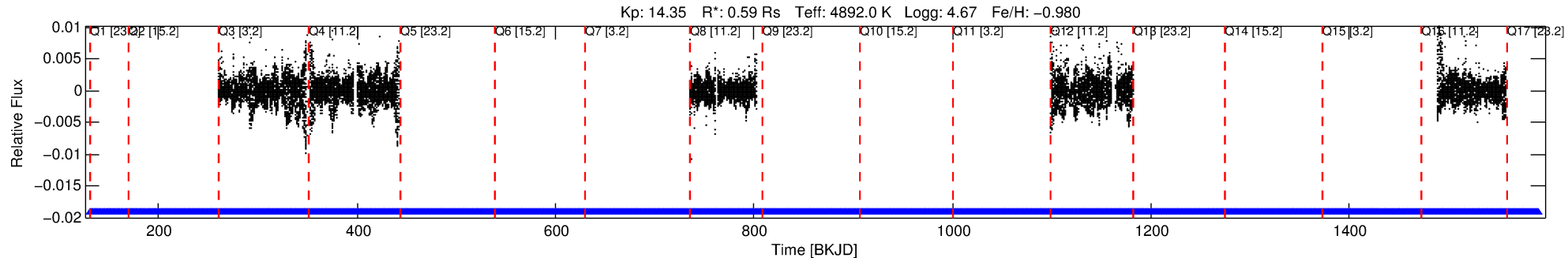
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010290447-01

No Significant Match Found

DV One-Page Summary

KIC: 10290447 Candidate: 1 of 1 Period: 0.694 d
KOI: K07306 Corr: No Ephemeris Match



DV Fit Results:

Period = 0.69352 [0.00263] d
Epoch = 131.7412 [0.4283] BKJD
Rp/R* = 0.0010 [0.0499]
a/R* = 1.02 [6.54]
b = 0.26 [697.56]
Seff = 1071.58 [187.39]
Teq = 1459 [64] K
Rp = 0.07 [3.19] Re
a = 0.0128 [0.0009] AU
Ag = 2300.38 [219961.46] [0.01σ]
Teff = 15621 [373438] K [0.04σ]

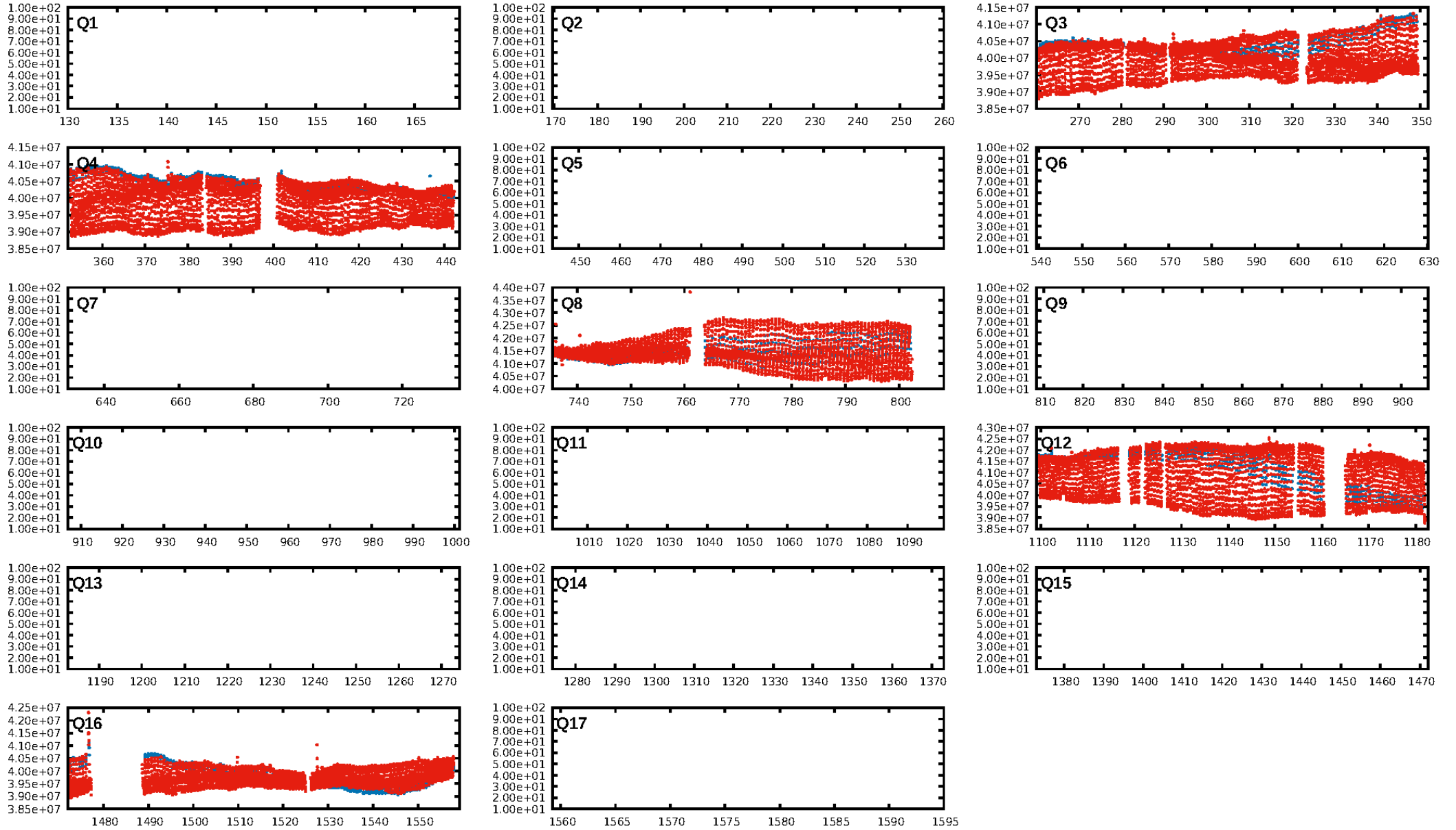
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [549/549]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.101 arcsec [0.32σ]
KicOffset-rm: 0.253 arcsec [0.95σ]
OotOffset-st: 0/1/4/0 [5]
KicOffset-st: 0/1/4/0 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 1.00 [5/5]

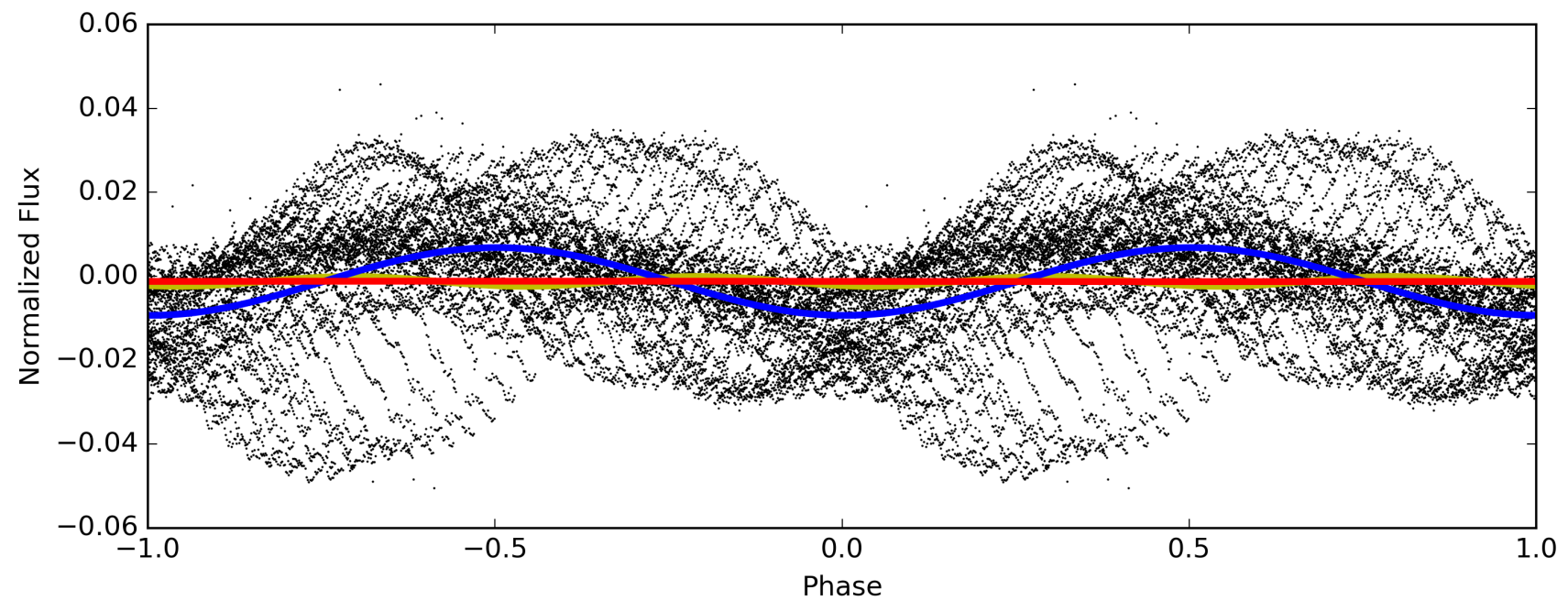
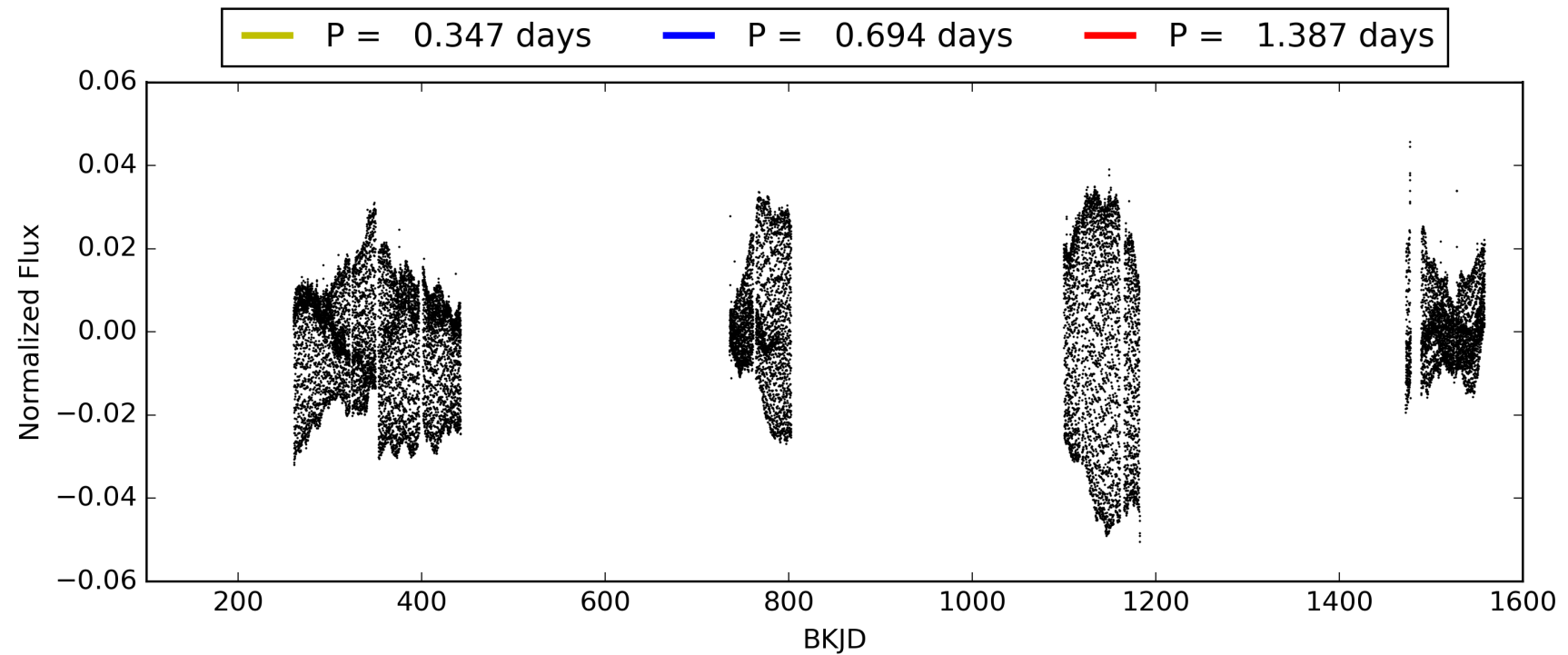
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 00:30:20 Z

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

TCE 010290447-01, PDC Light Curves

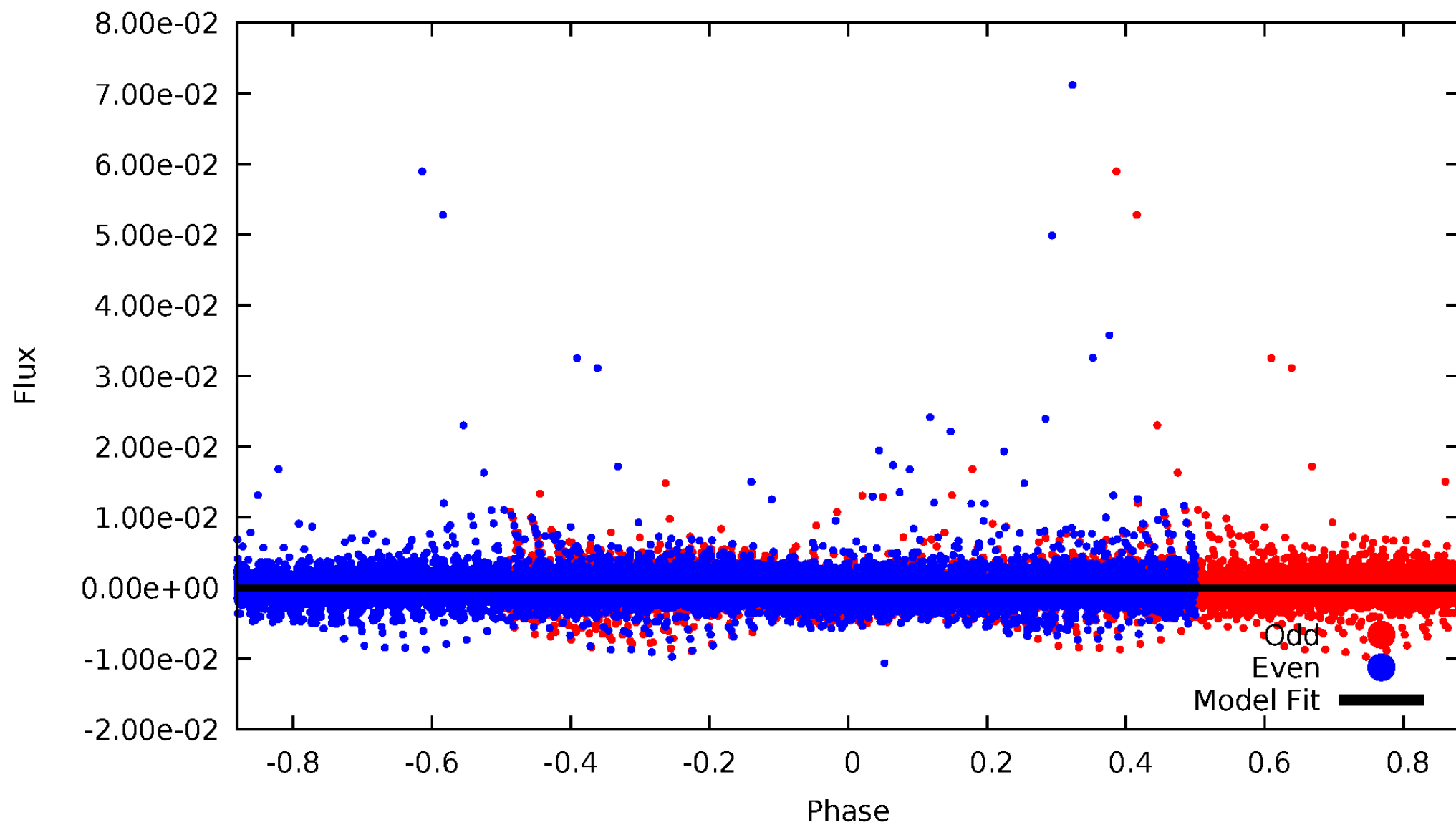


TCE 010290447-01



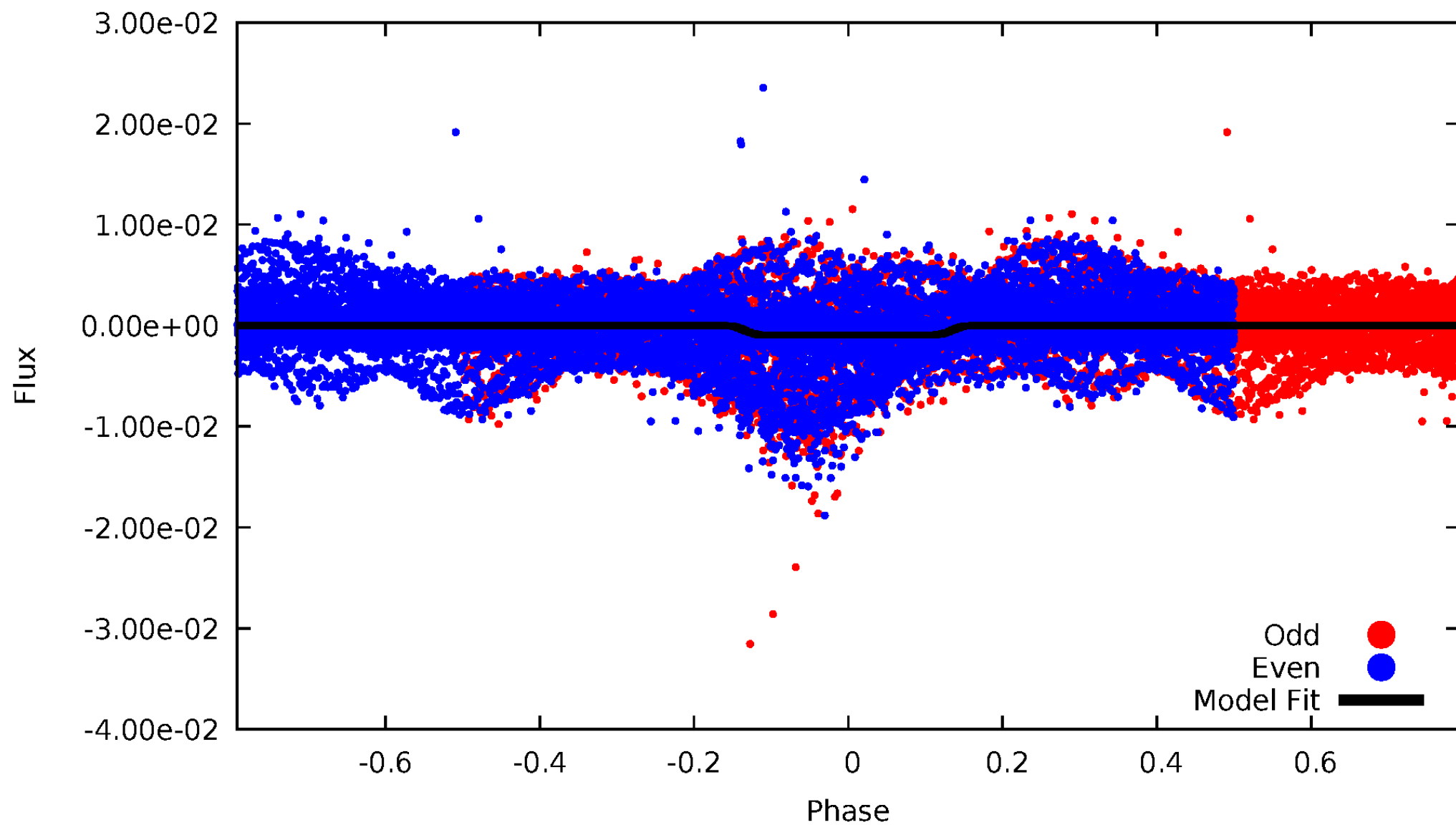
DV Odd/Even

TCE 010290447-01

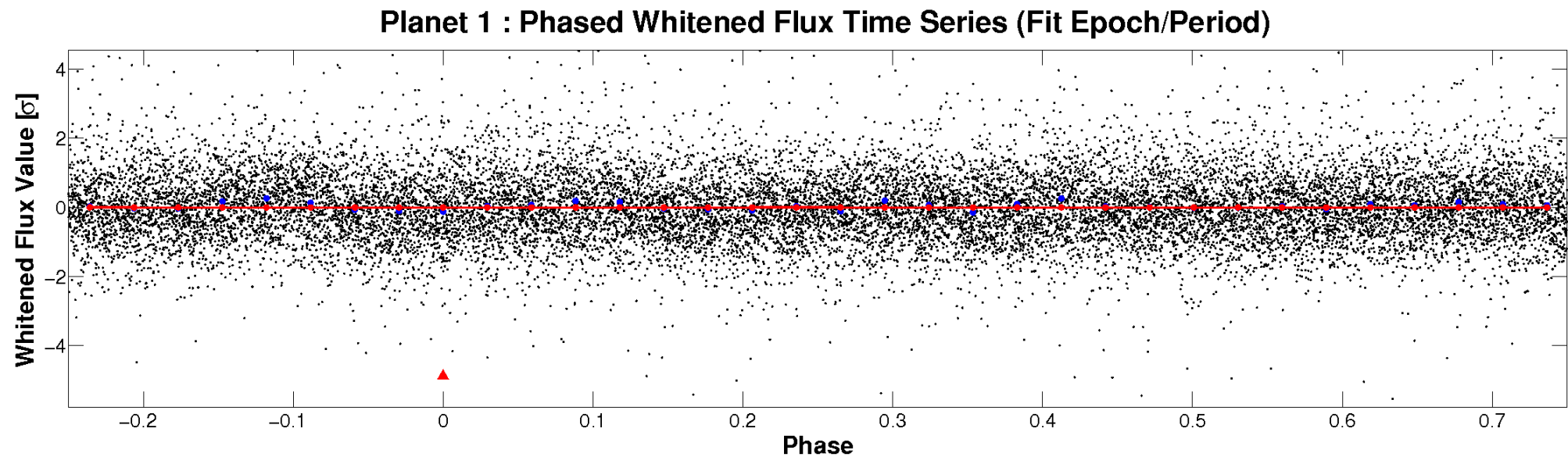
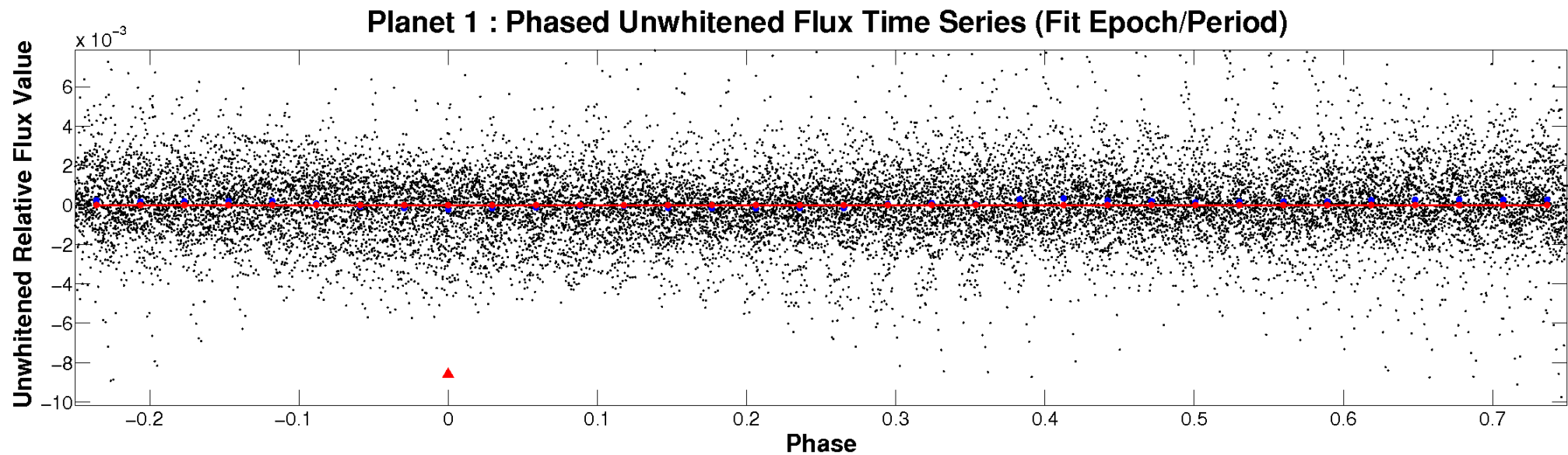


ALT Odd/Even

TCE 010290447-01

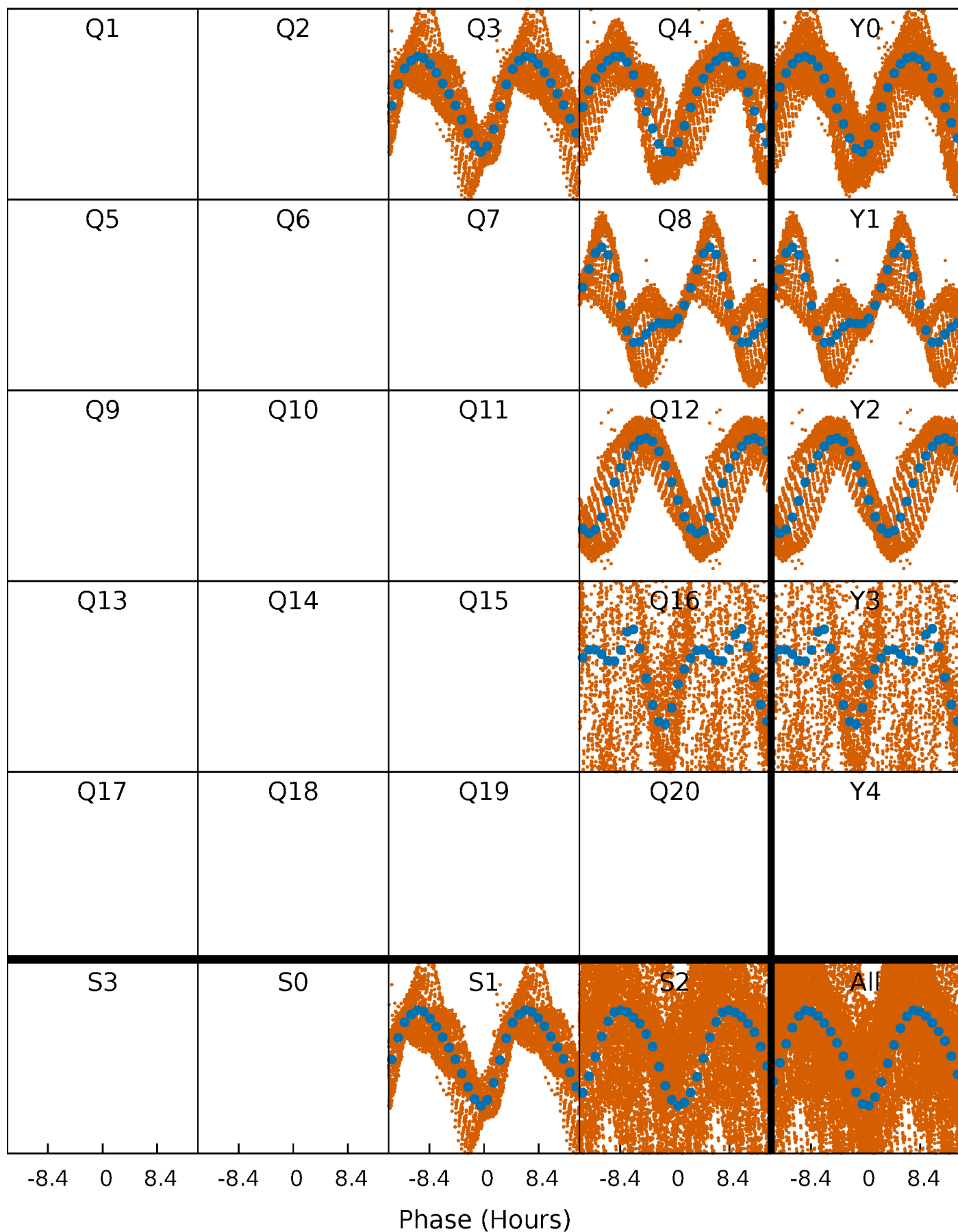


Non-Whitened Vs. Whitened Light Curve



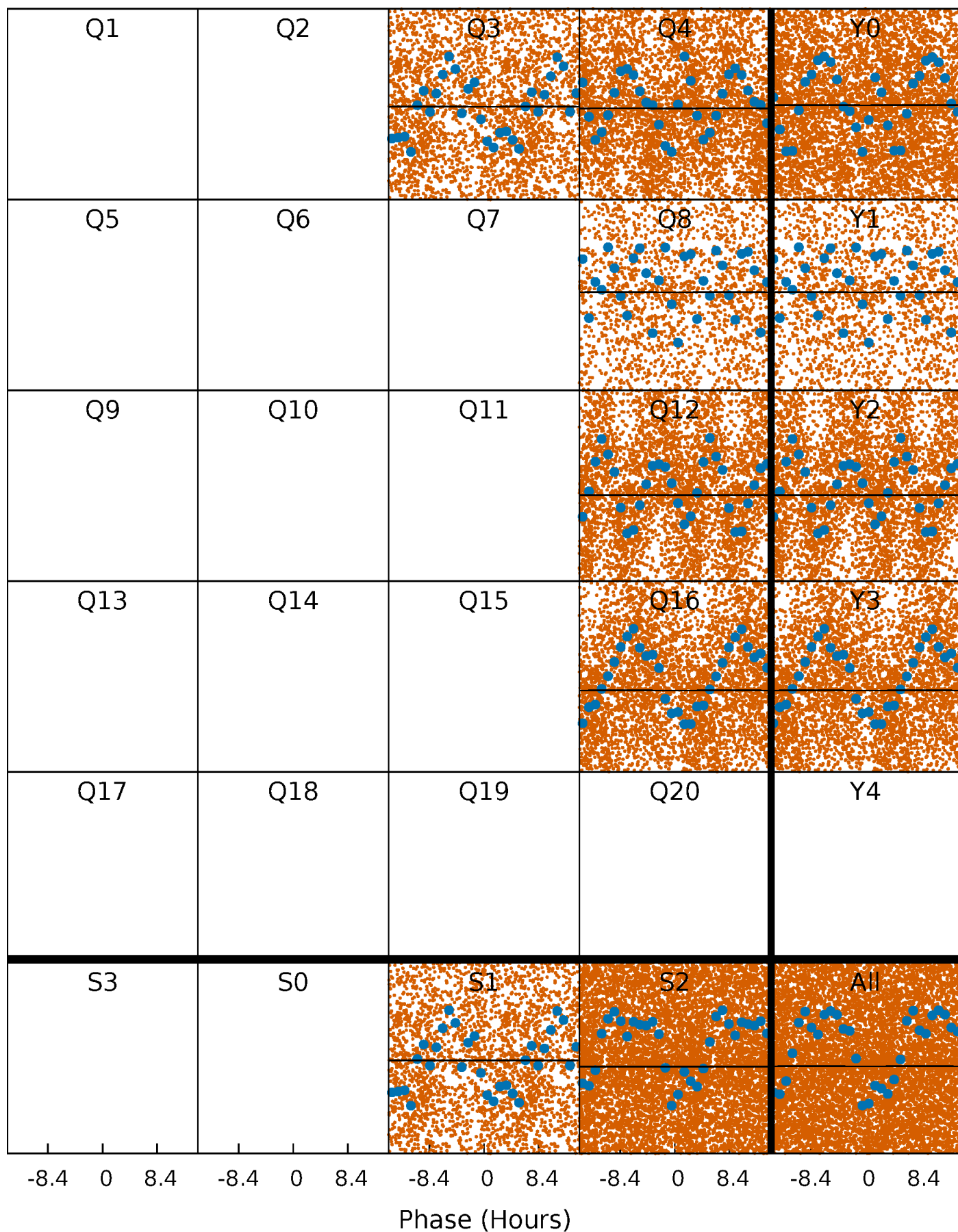
PDC Quarter-Phased Transit Curves

TCE 010290447-01 P= 0.693523 Days $T_0=131.741237$ (BKJD)



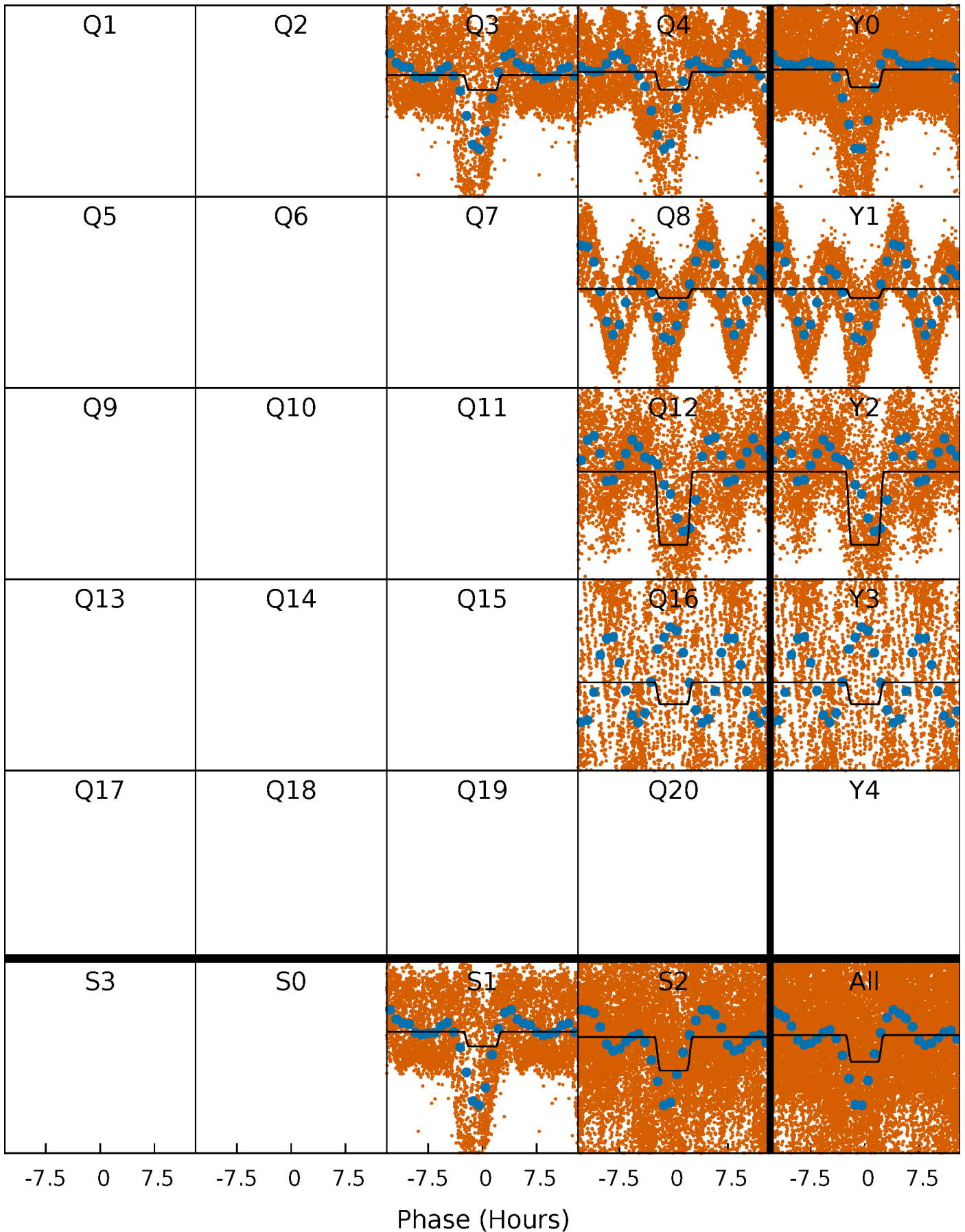
DV Quarter-Phased Transit Curves

TCE 010290447-01 P= 0.693523 Days $T_0=131.741237$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

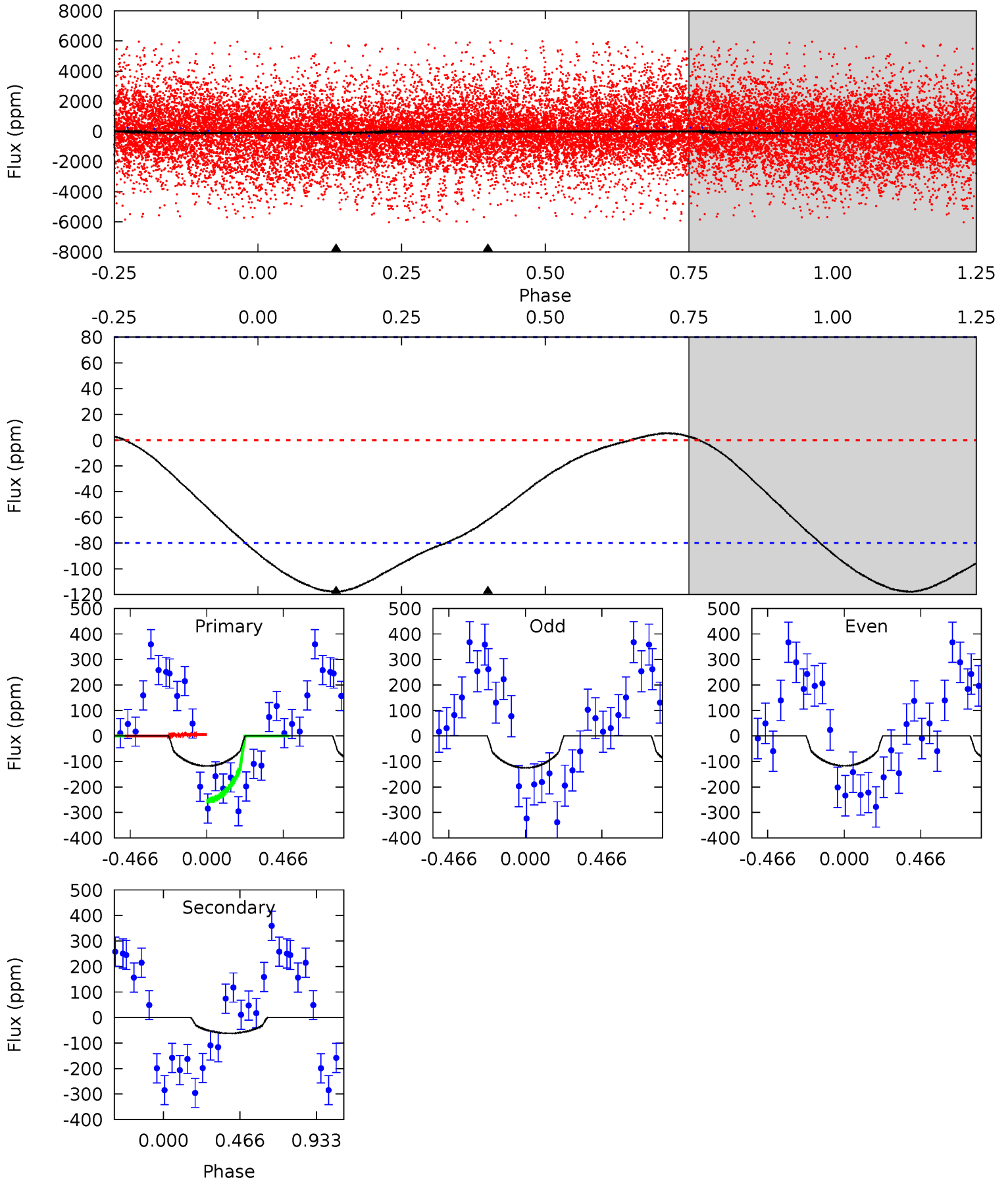
TCE 010290447-01 P= 0.693581 Days $T_0=131.747822$ (BKJD)



DV Model-Shift Uniqueness Test

010290447-01, P = 0.693523 Days, E = 131.741237 Days

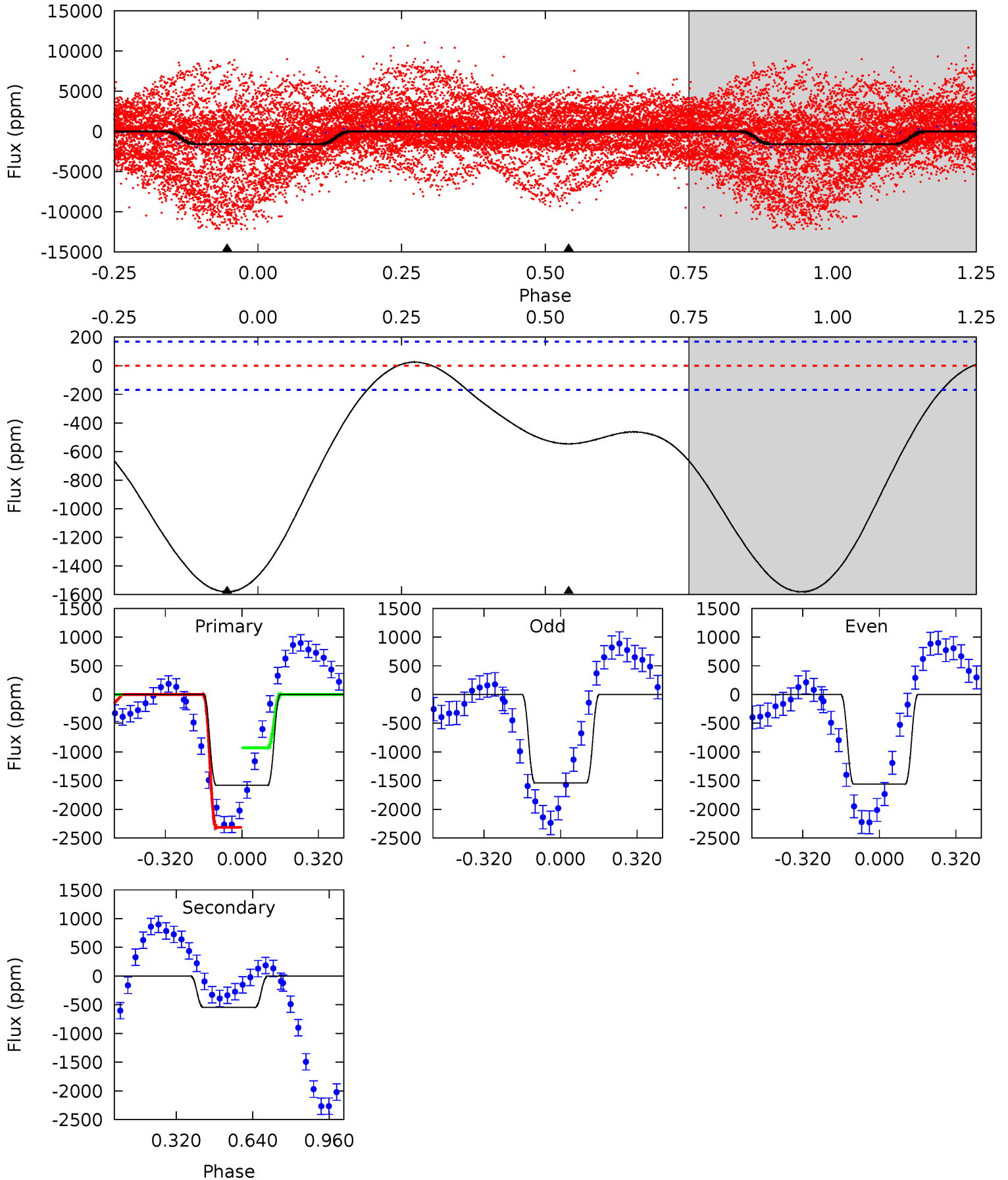
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.24	3.28	0	0	4.23	0.73	0.30	6.24	6.24	3.28	3.28	0.21	-0.67	0.04	6.69



Alt Model-Shift Uniqueness Test

010290447-01, P = 0.693581 Days, E = 131.747822 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
40.4	13.9	0	0	4.31	0.99	1.37	40.4	40.4	13.9	13.9	0.29	1.47	0.02	19.0



Stellar Parameters For KIC 010290447

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4892^{+177}_{-157}	$4.669^{+0.054}_{-0.036}$	$-0.980^{+0.300}_{-0.300}$	$0.586^{+0.046}_{-0.041}$	$0.583^{+0.054}_{-0.025}$	$4.089^{+0.852}_{-0.586}$
	+4%/-3%	+1%/-1%	+31%/-31%	+8%/-7%	+9%/-4%	+21%/-14%
Source	KIC0	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 010290447-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-62 ± 19	$2.30^{+2.16}_{-1.57}$	2035^{+85}_{-79}	2794^{+1478}_{-4826}	$1.032^{+9.670}_{-0.784}$
Alt.	-547 ± 39	$3.00^{+2.66}_{-1.97}$	2035^{+76}_{-83}	3748^{+2039}_{-741}	$5.766^{+41.565}_{-4.176}$

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 $A_{obs} \gg 1.0$

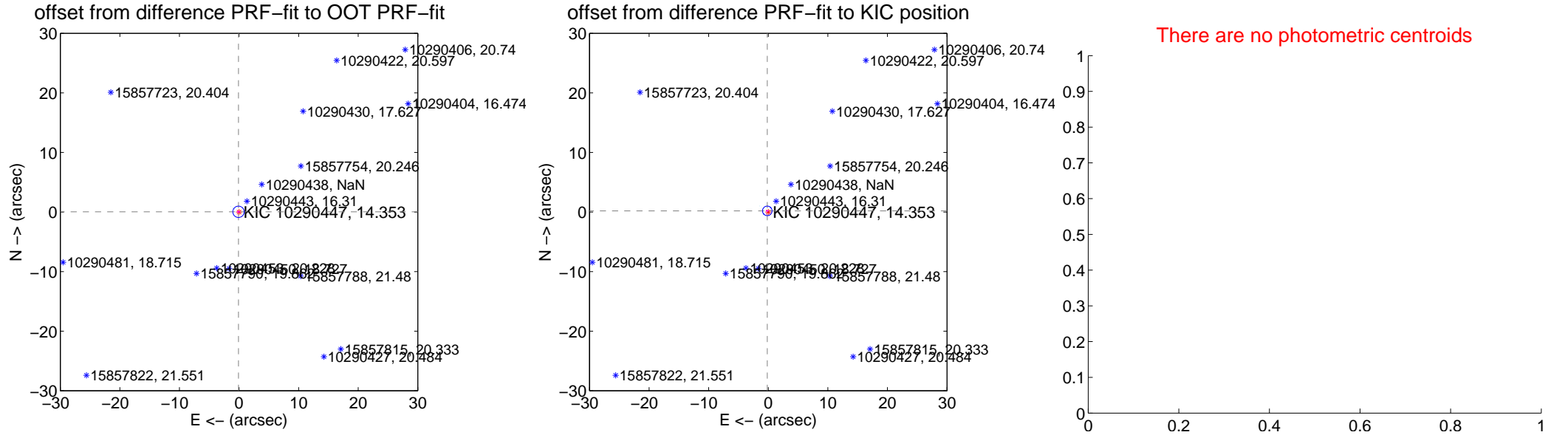
DV Centroid Data

Supplemental centroid analysis for 010290447-01. Kepler magnitude: 14.35. Transit SNR 0.04

There are 5 quarters with good PRF difference image offsets

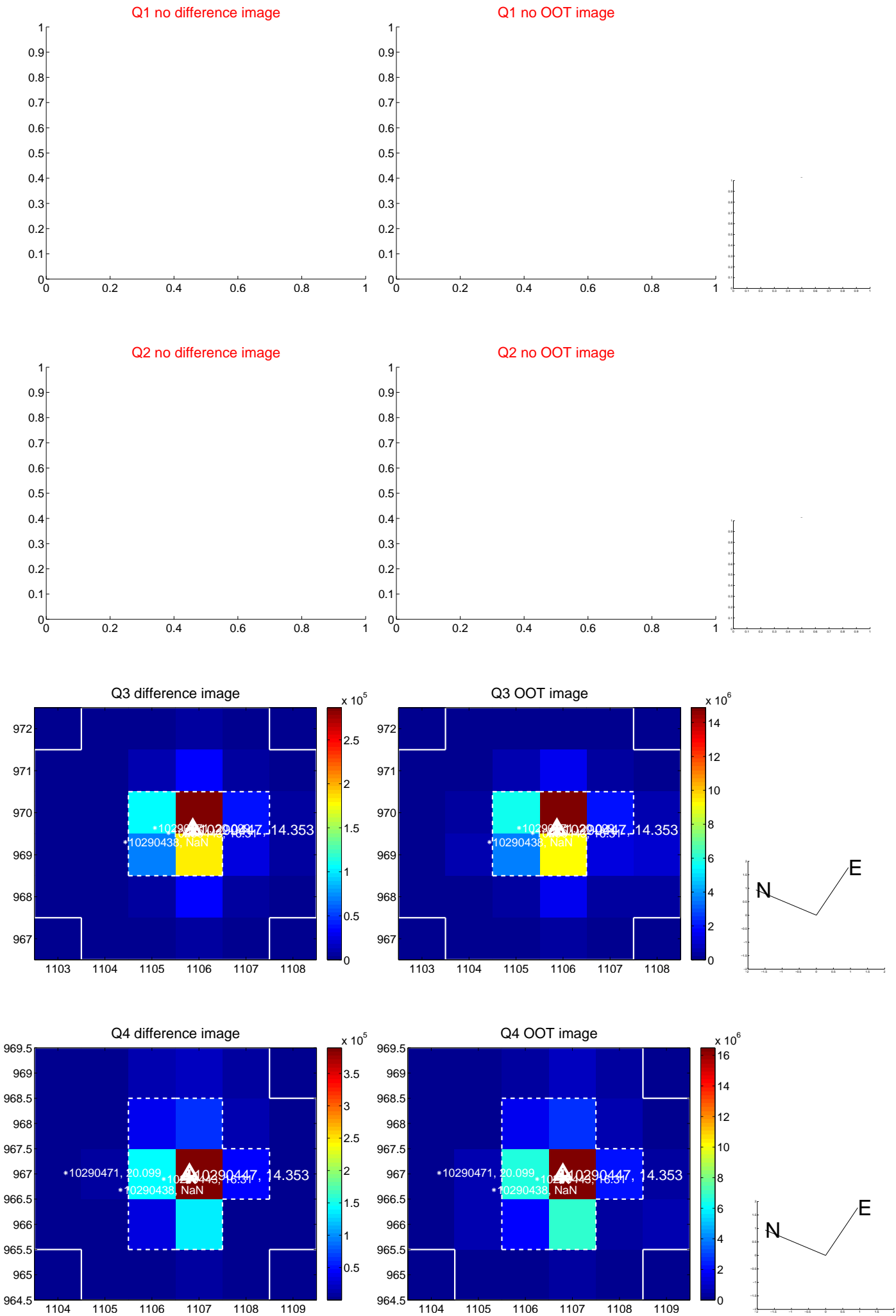
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.101 ± 0.317	0.32	0.094 ± 0.270	0.039 ± 0.191
PRF-fit source offset from KIC position	0.253 ± 0.267	0.95	0.163 ± 0.237	0.193 ± 0.162
photometric centroid source offset	—	—	—	—

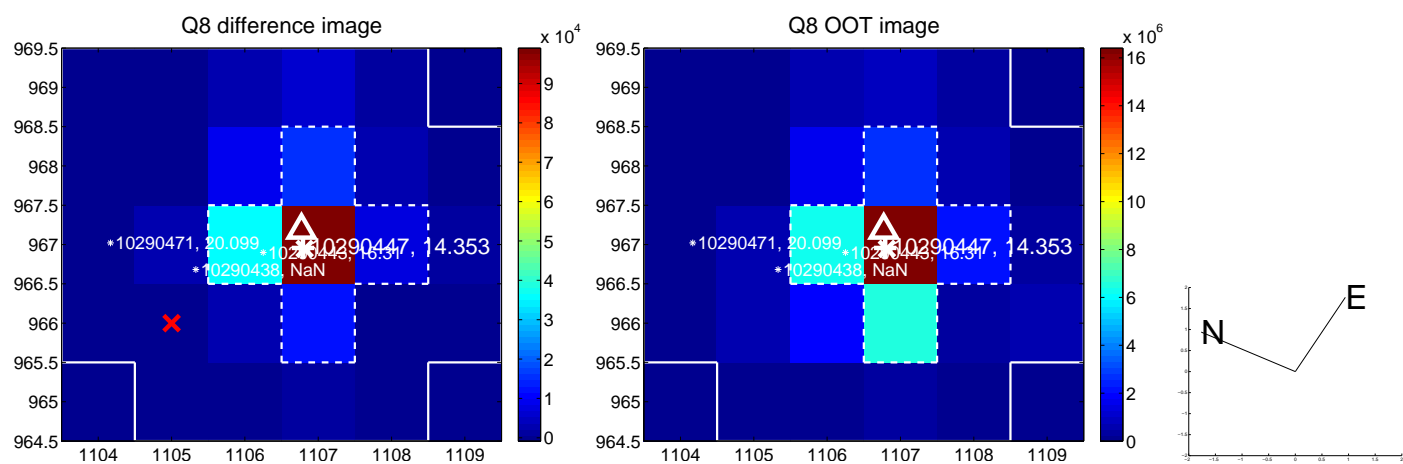
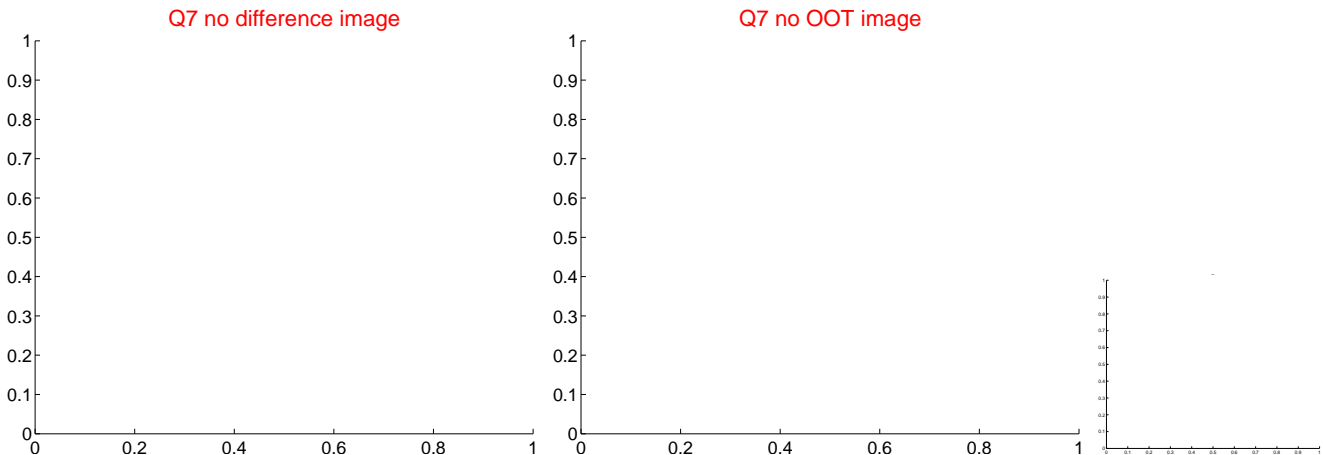
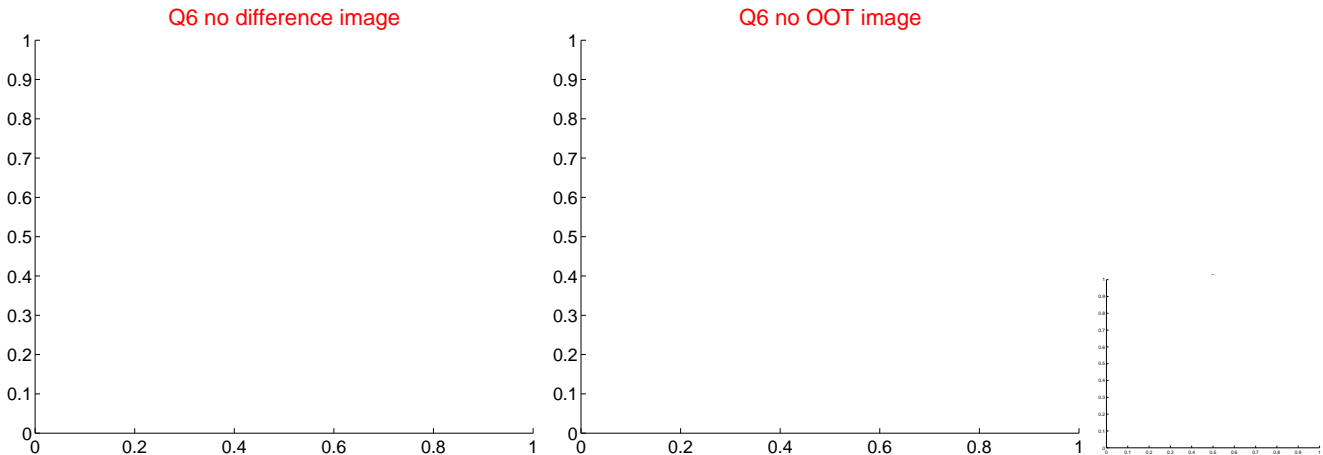
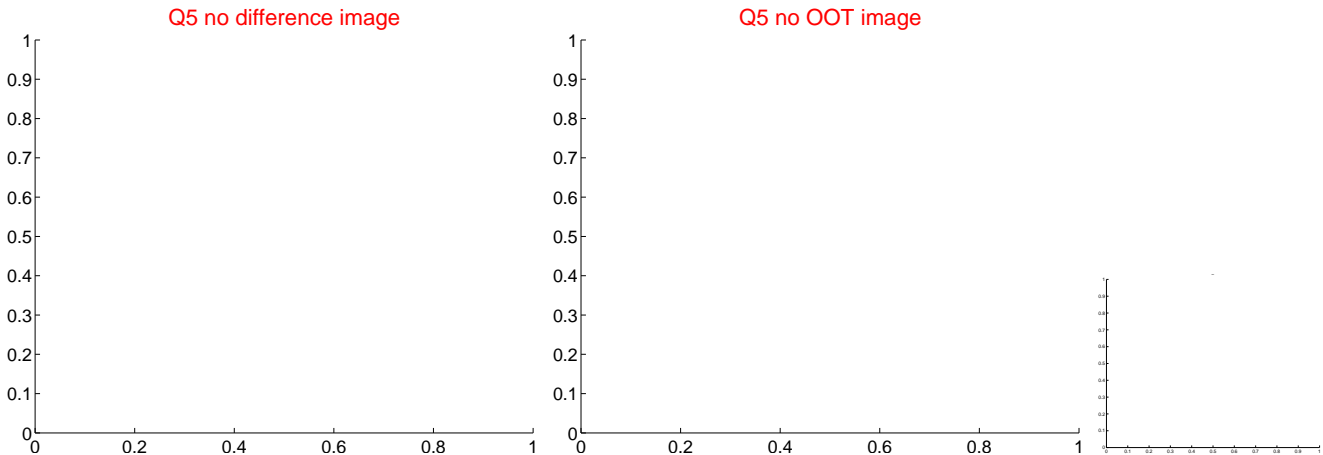


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

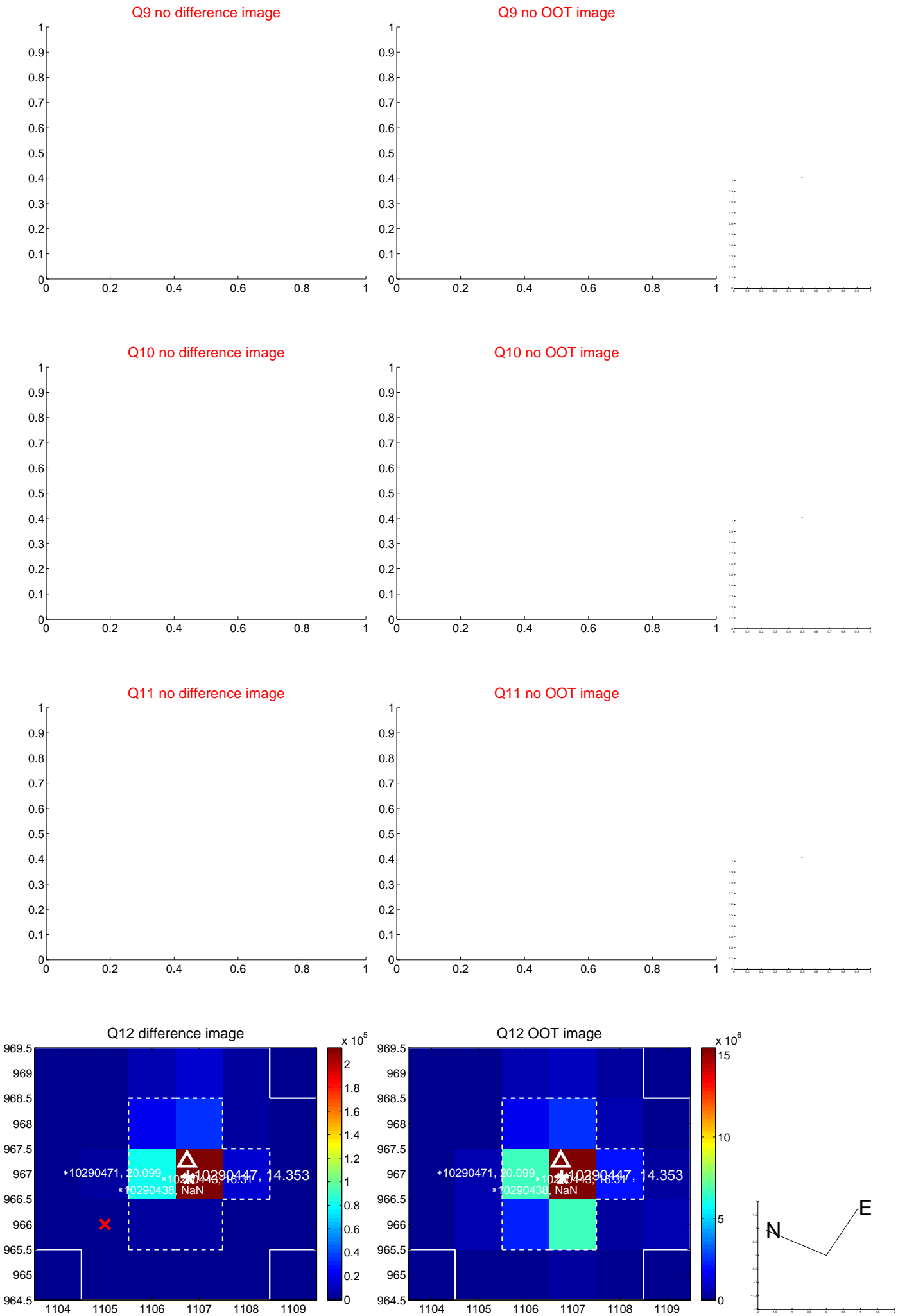
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



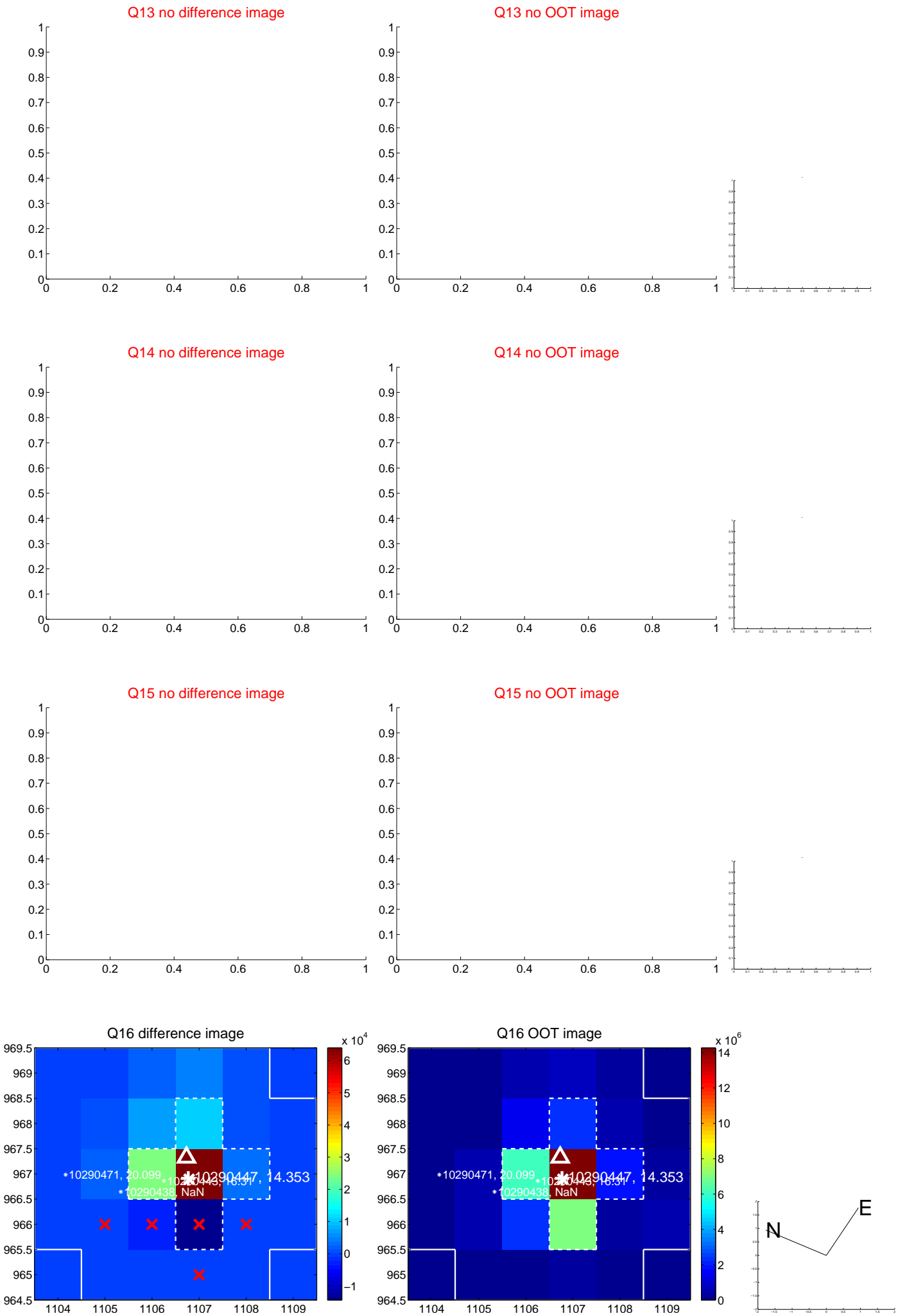
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



folded centroid time series figure for this object.

UKIRT Image

Declination

