

KIC 002695030

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})
002695030-01	OBS	No	0.671349	131.734878	136.1	4.628	15.7	13.0	1.75	7318	2.12	26559.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002695030-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV

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

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

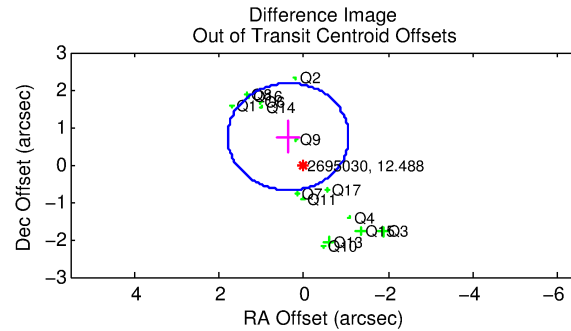
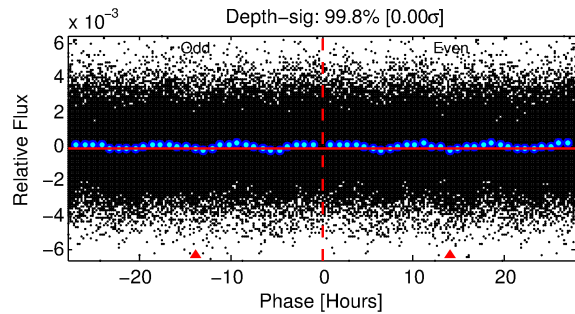
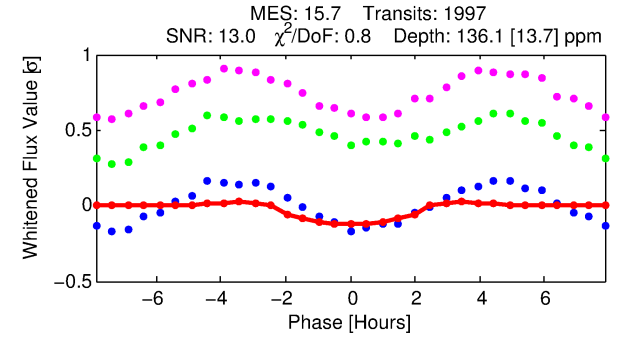
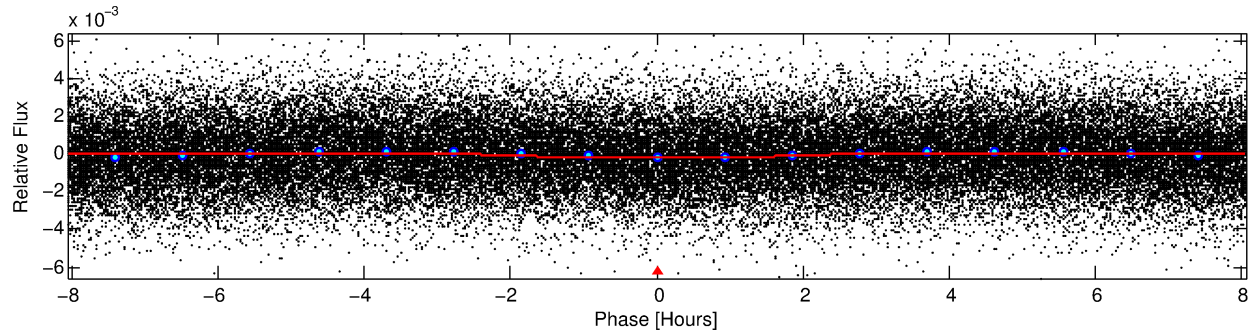
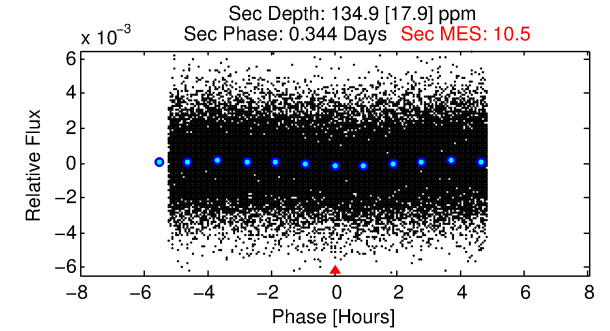
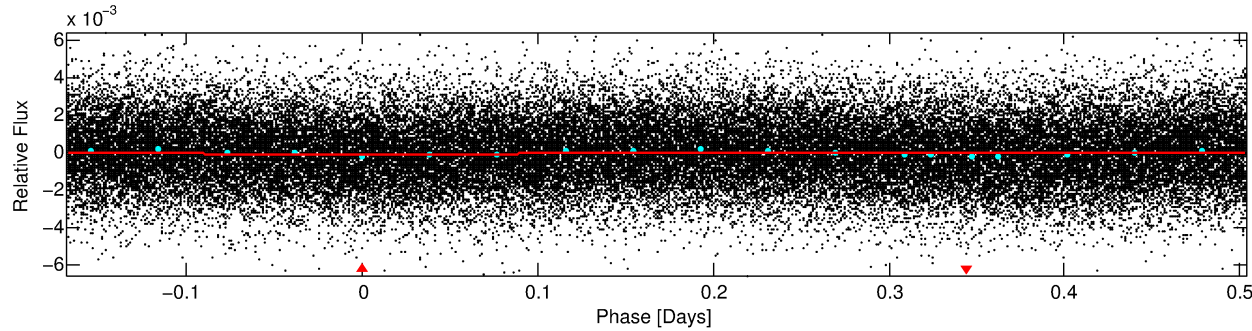
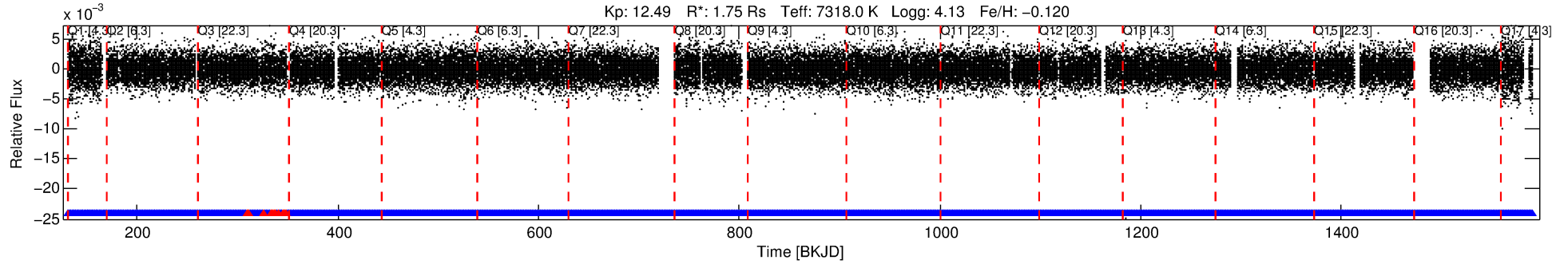
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002695030-01

No Significant Match Found

DV One-Page Summary

KIC: 2695030 Candidate: 1 of 1 Period: 0.671 d



DV Fit Results:

Period = 0.67135 [0.00001] d
Epoch = 131.7349 [0.0043] BKJD
Rp/R* = 0.0111 [0.0134]
a/R* = 1.22 [2.95]
b = 0.51 [10.75]
Seff = 26559.95 [10182.79]
Teq = 3255 [312] K
Rp = 2.12 [2.64] Re
a = 0.0172 [0.0042] AU
Ag = 4.89 [11.93] [0.33σ]
Teffp = 7482 [4533] K [0.93σ]

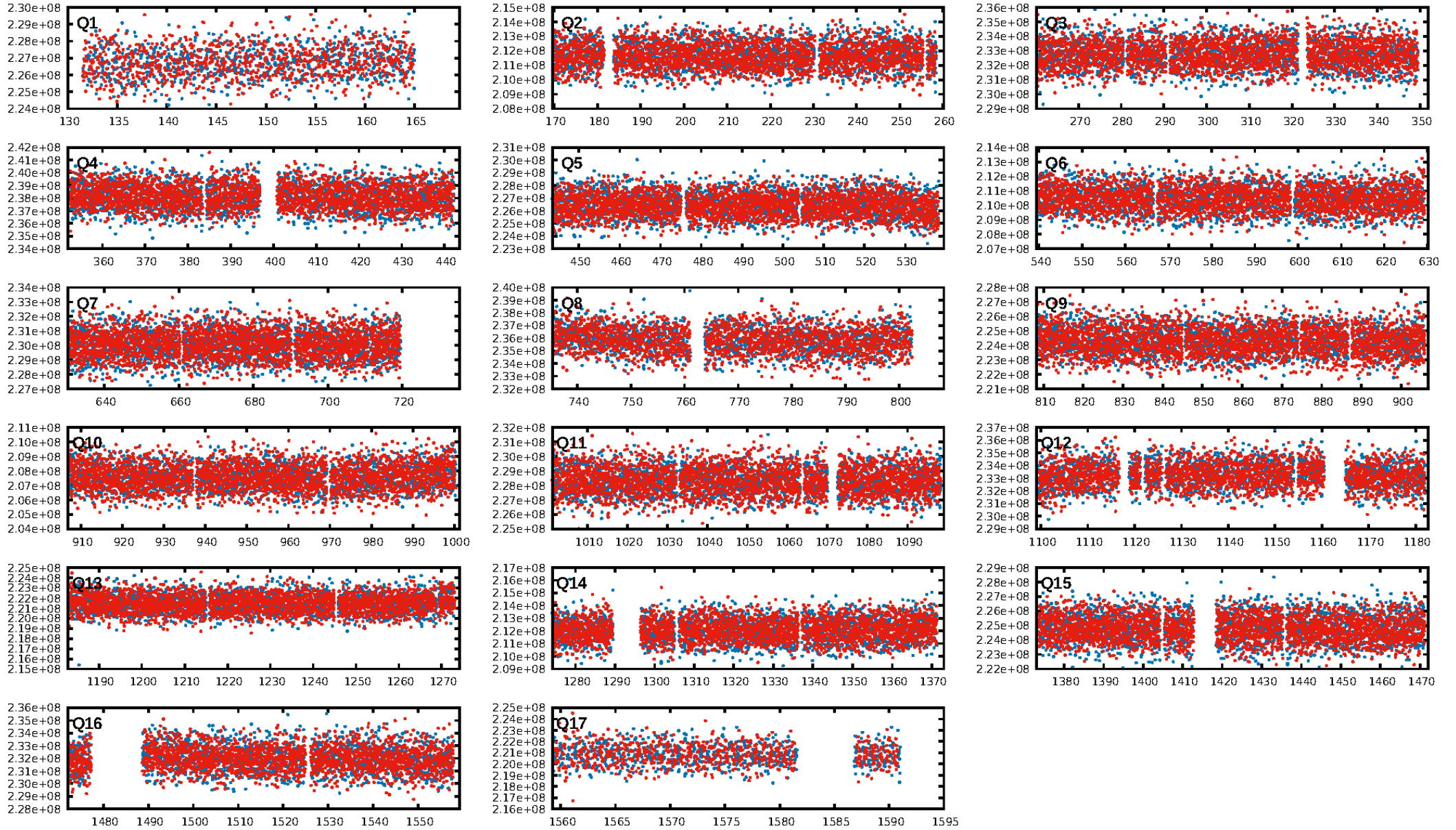
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.38e-33
RollingBand-fgt: 0.99 [1894/1908]
GhostDiagnostic-chr: 0.8887
Centroid-sig: 1.4%
Centroid-so: 0.091 arcsec [0.98σ]
OotOffset-rm: 0.826 arcsec [1.73σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-rm: 0.921 arcsec [1.93σ]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.60 [9/15]
DiffImageOverlap-fno: 1.00 [17/17]

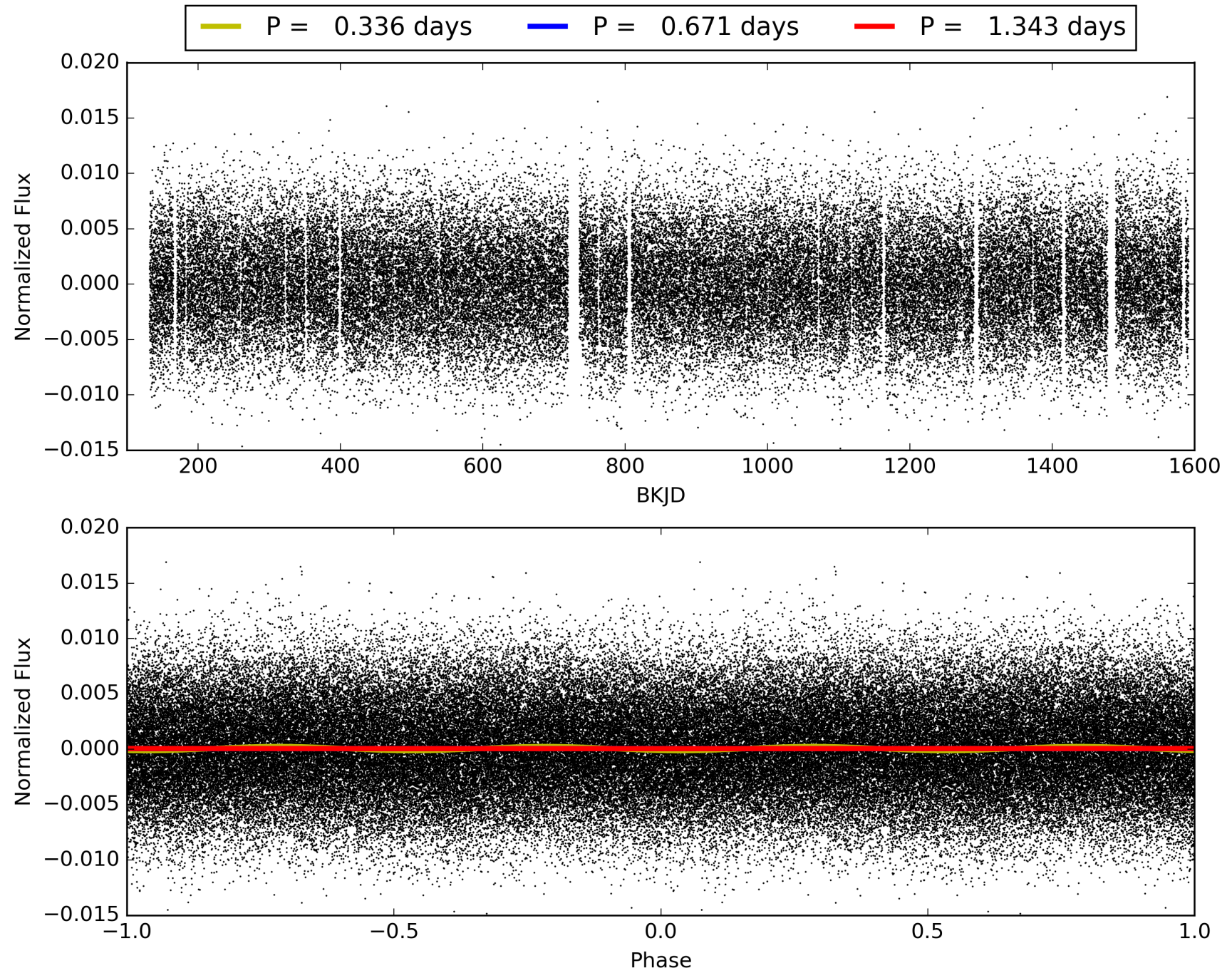
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 04:16:19 Z

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

TCE 002695030-01, PDC Light Curves

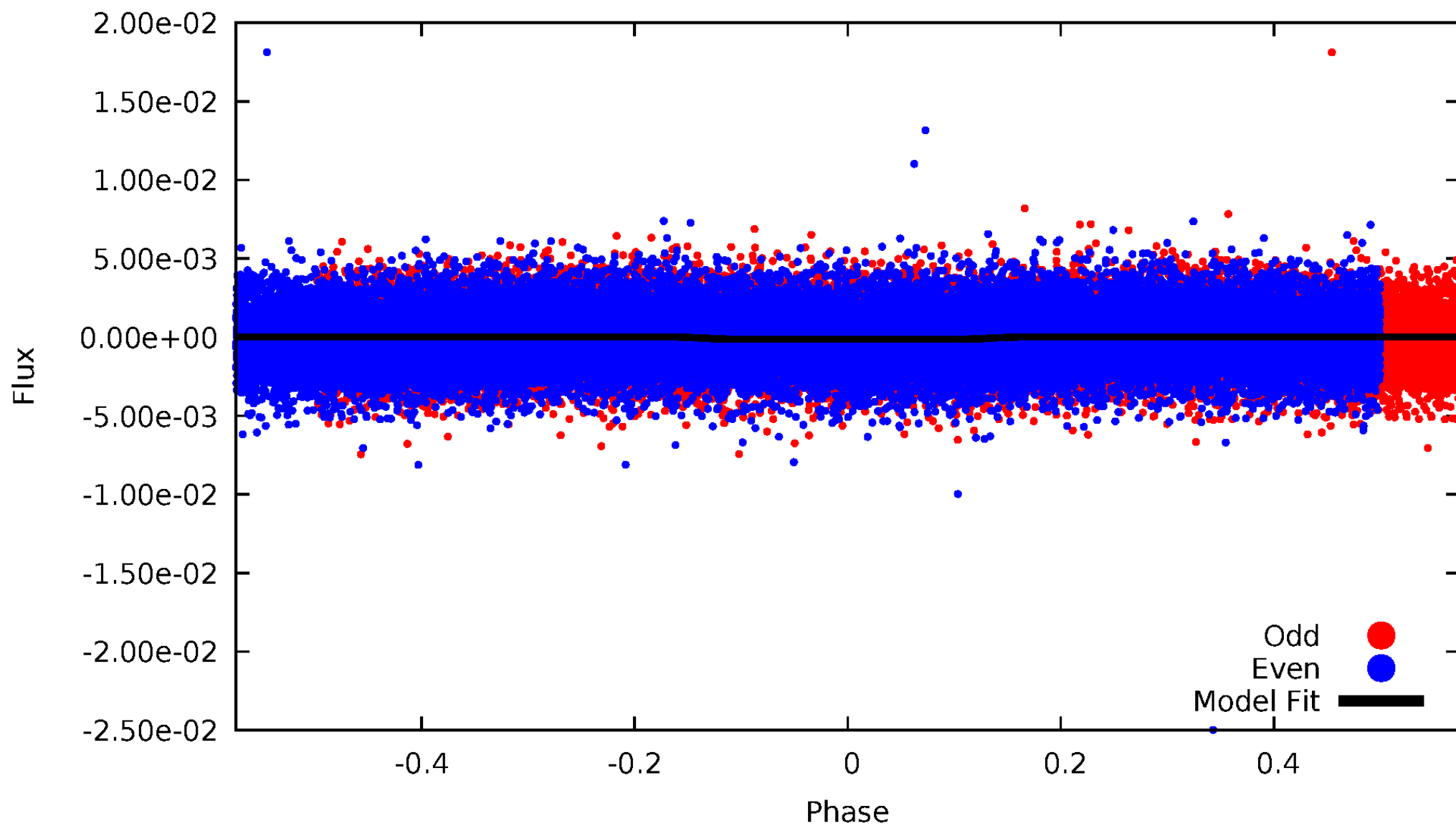


TCE 002695030-01



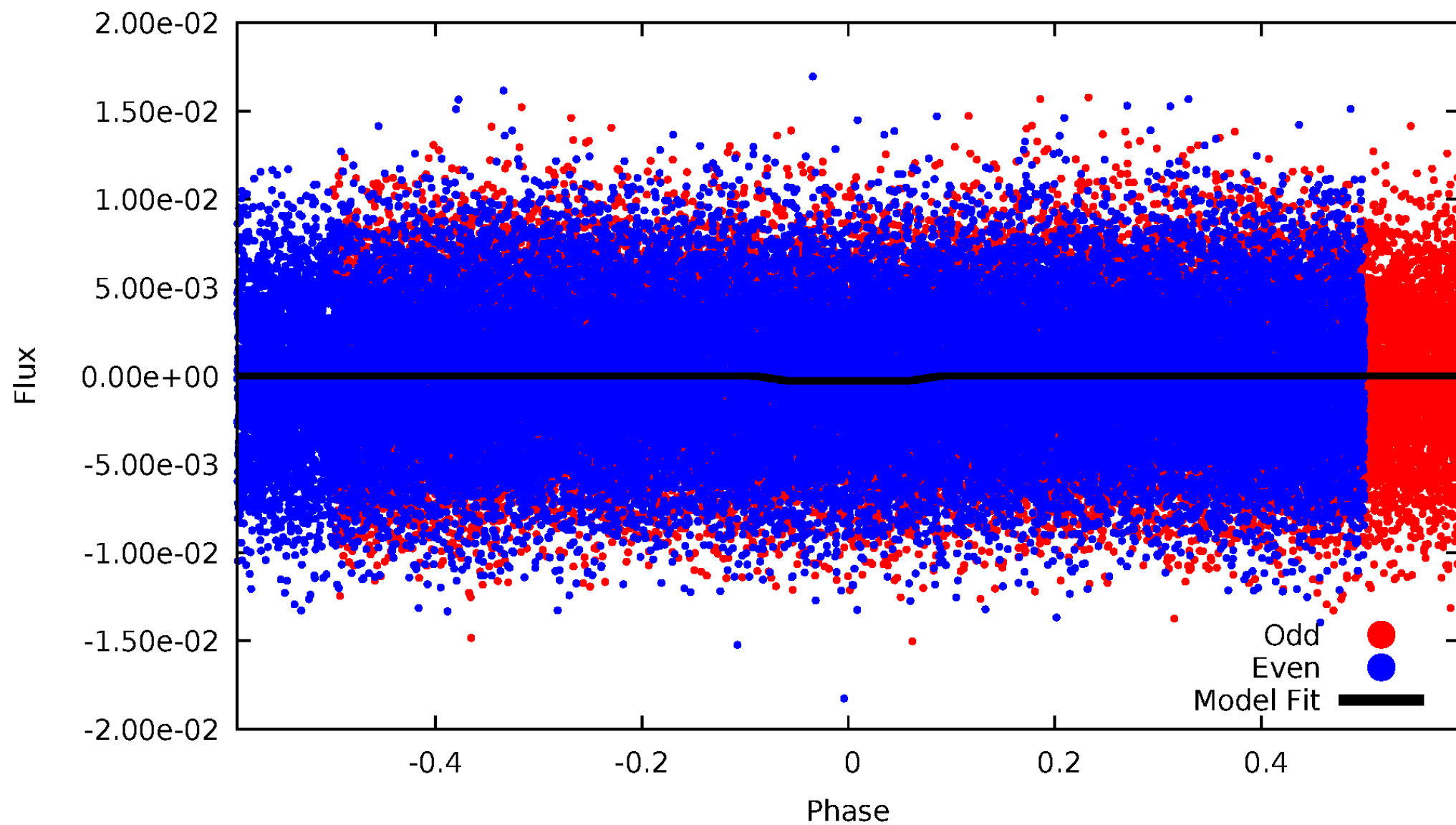
DV Odd/Even

TCE 002695030-01



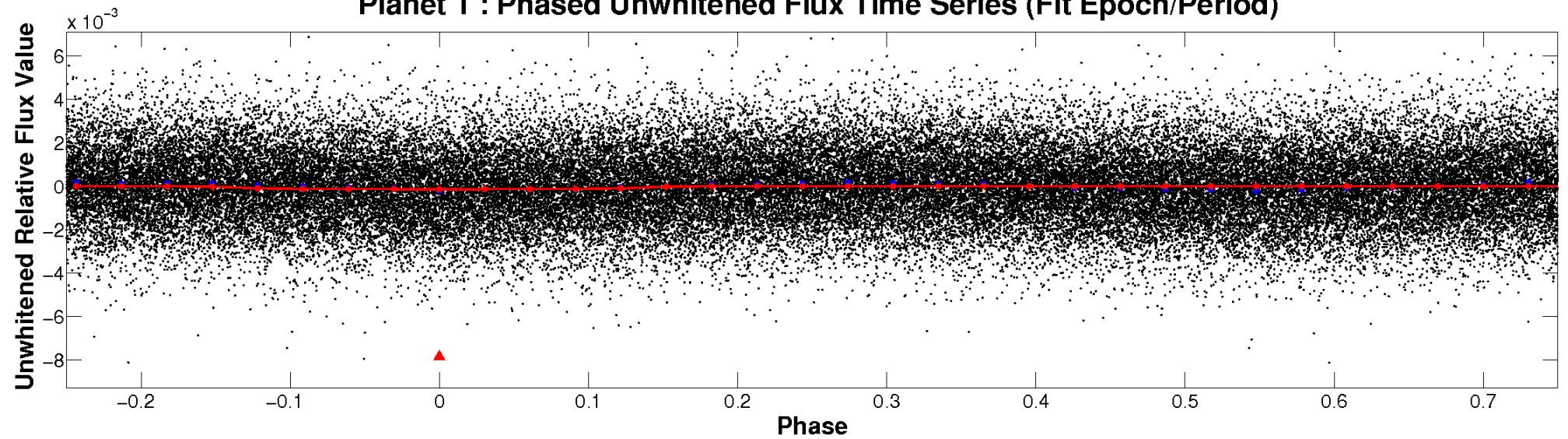
ALT Odd/Even

TCE 002695030-01

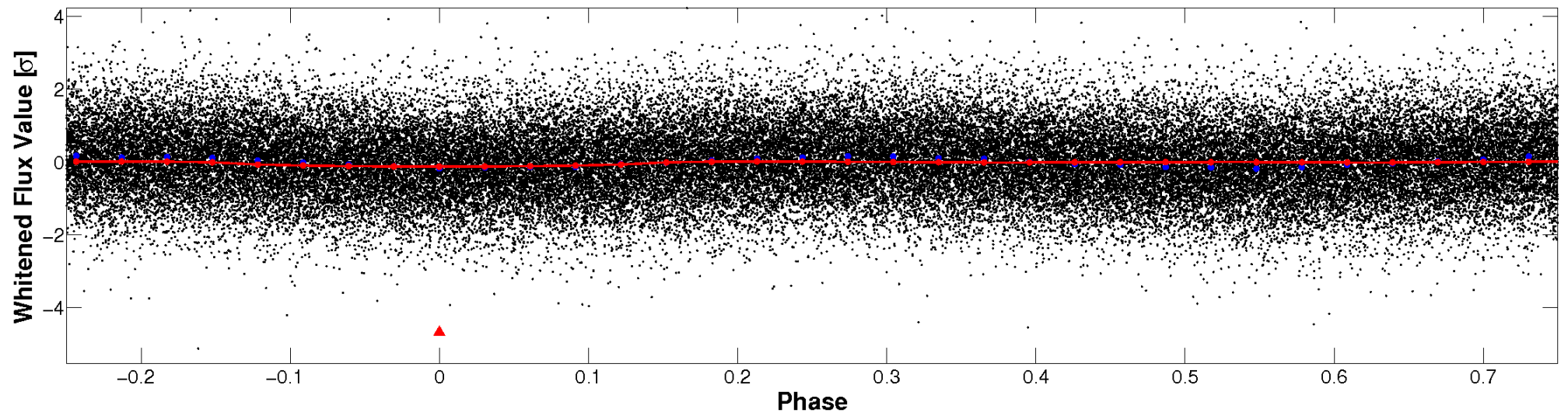


Non-Whitened Vs. Whitened Light Curve

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

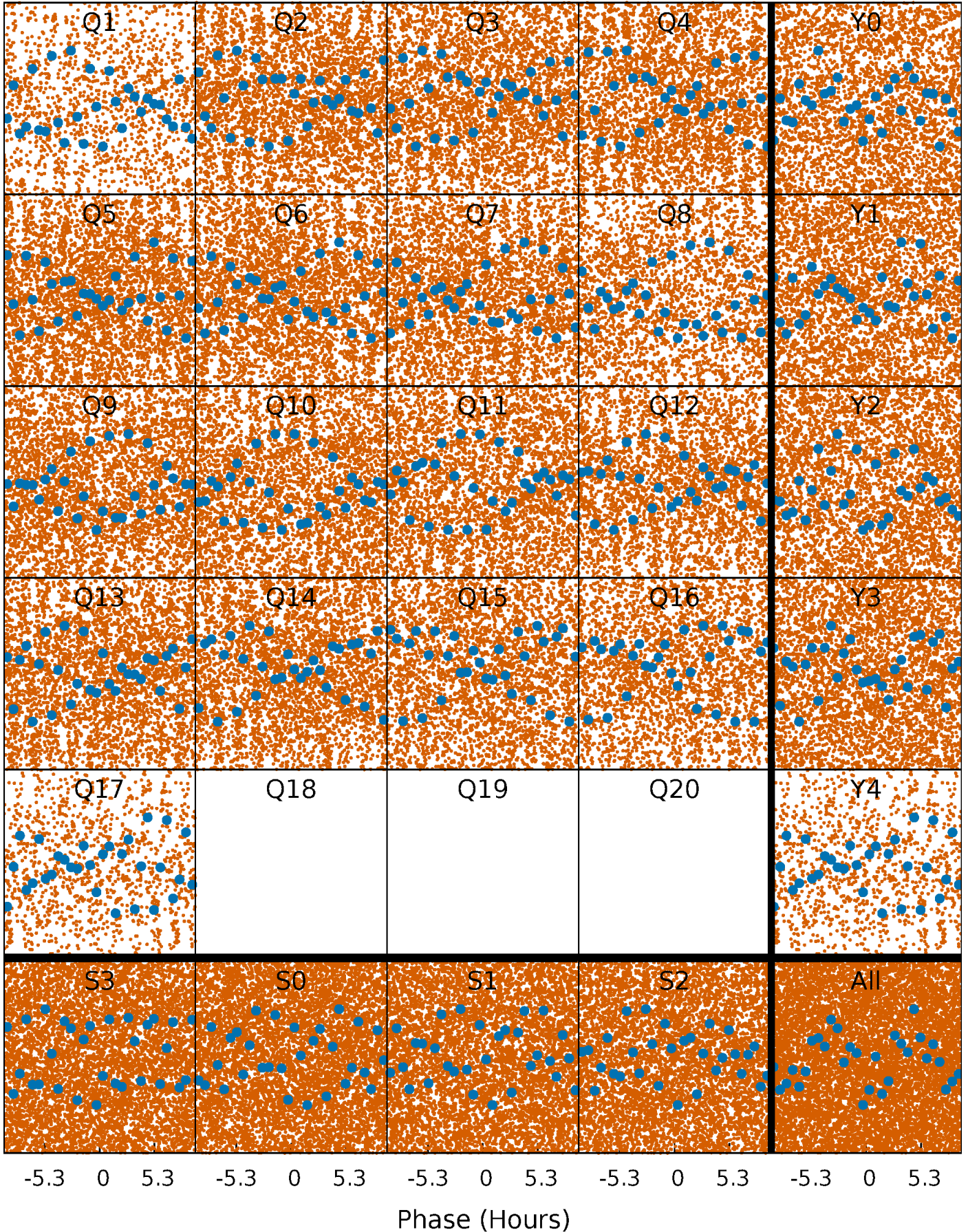


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



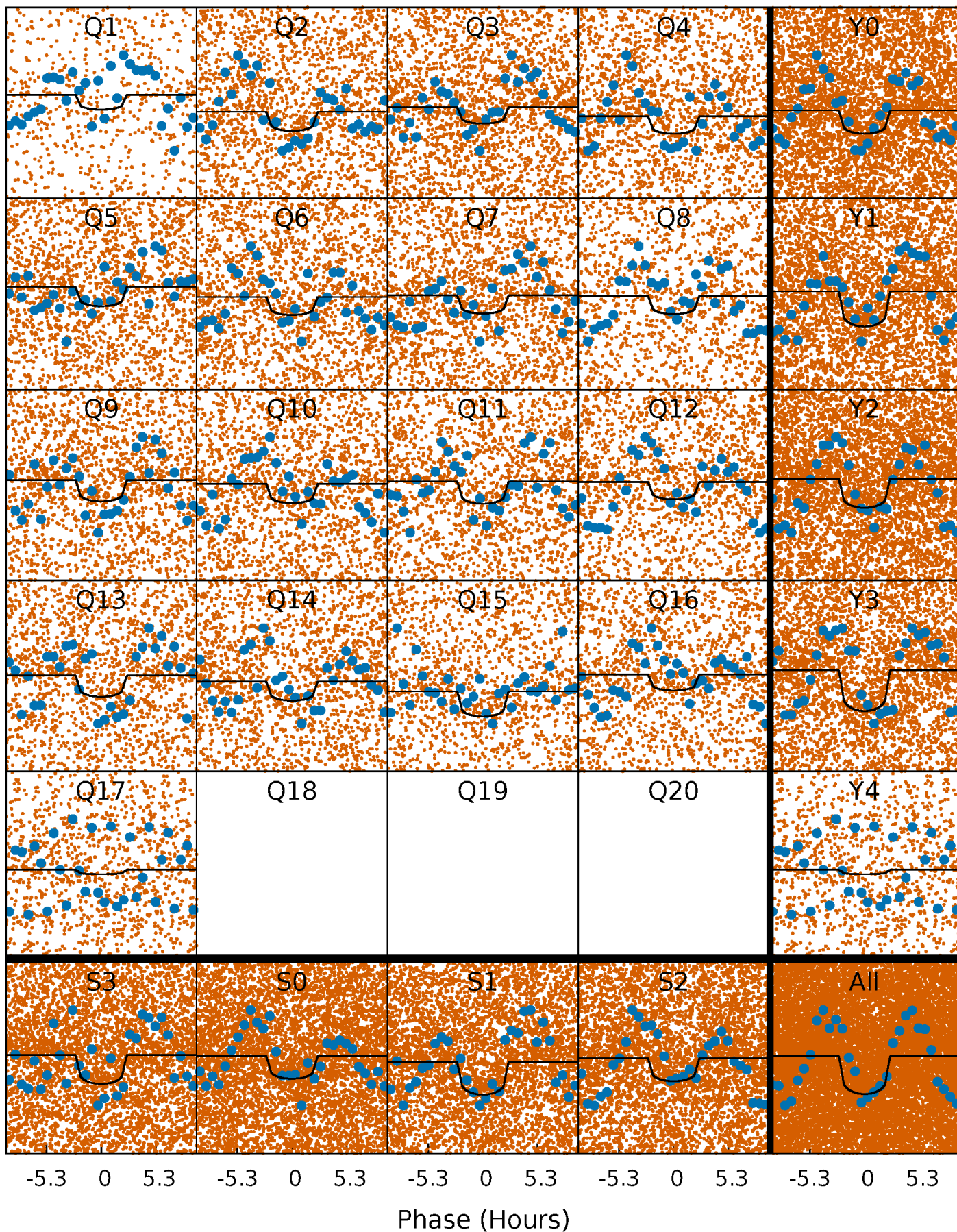
PDC Quarter-Phased Transit Curves

TCE 002695030-01 P= 0.671349 Days $T_0=131.734878$ (BKJD)



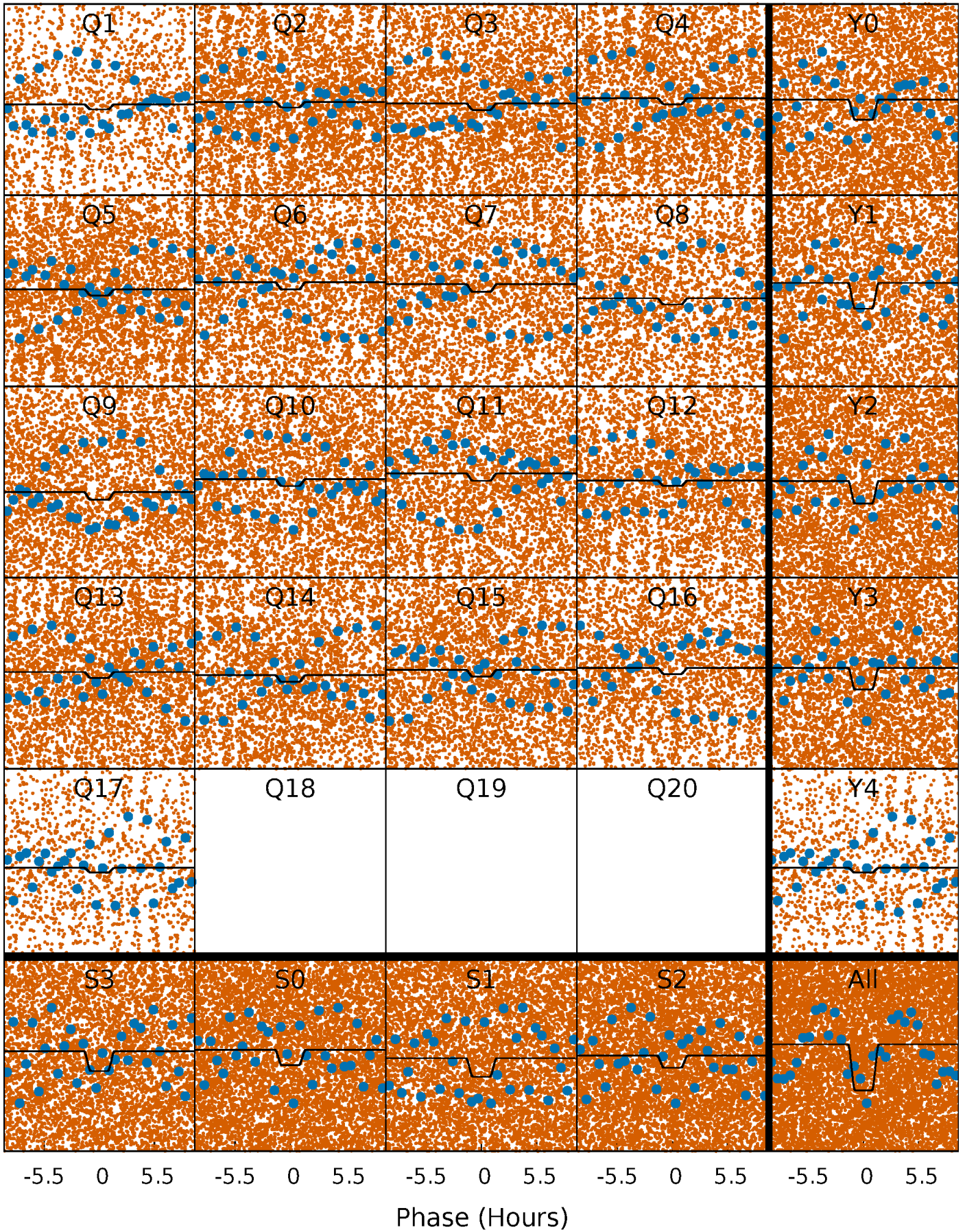
DV Quarter-Phased Transit Curves

TCE 002695030-01 P= 0.671349 Days $T_0=131.734878$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

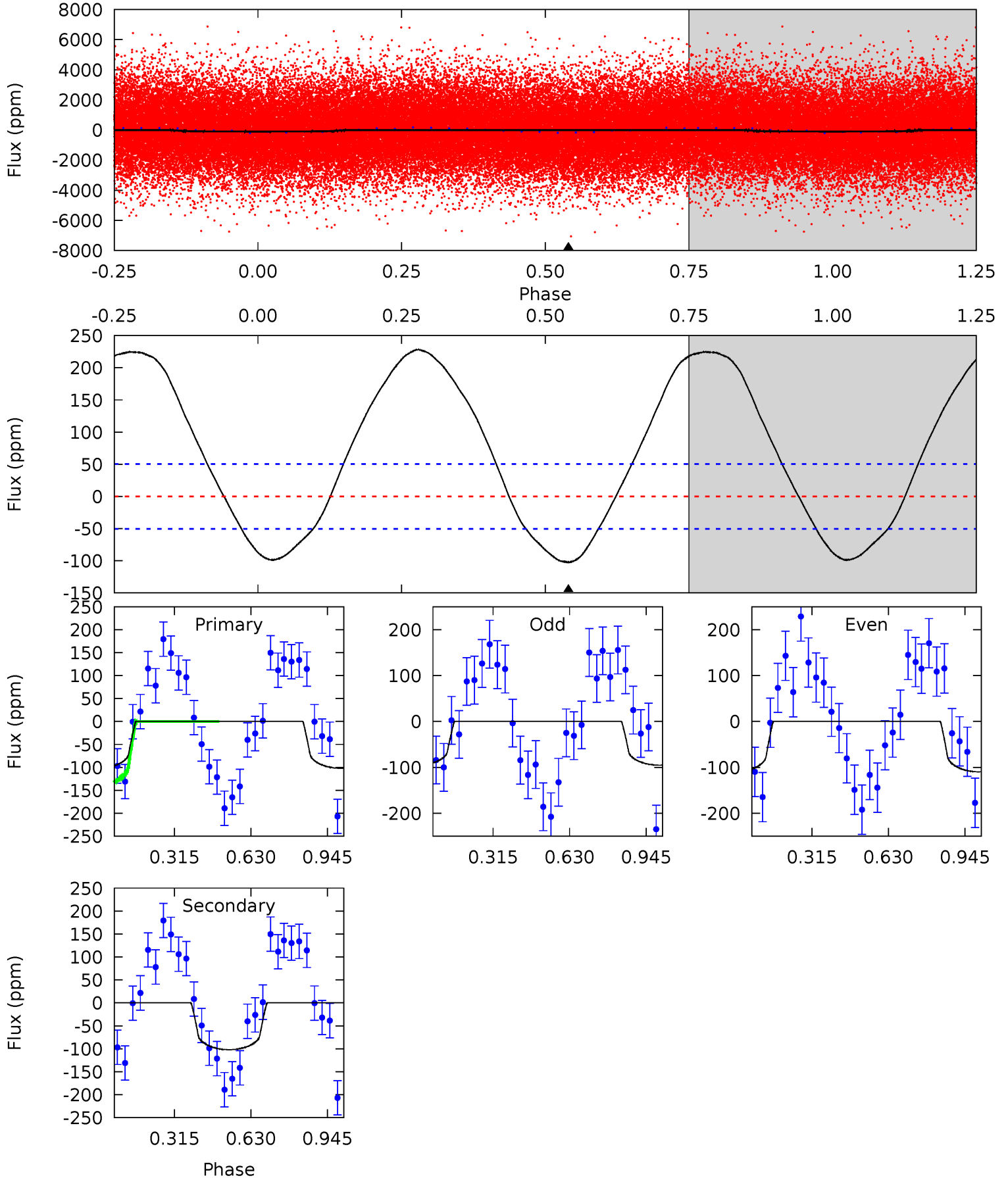
TCE 002695030-01 P= 0.671394 Days $T_0=131.711236$ (BKJD)



DV Model-Shift Uniqueness Test

002695030-01, P = 0.671349 Days, E = 131.063529 Days

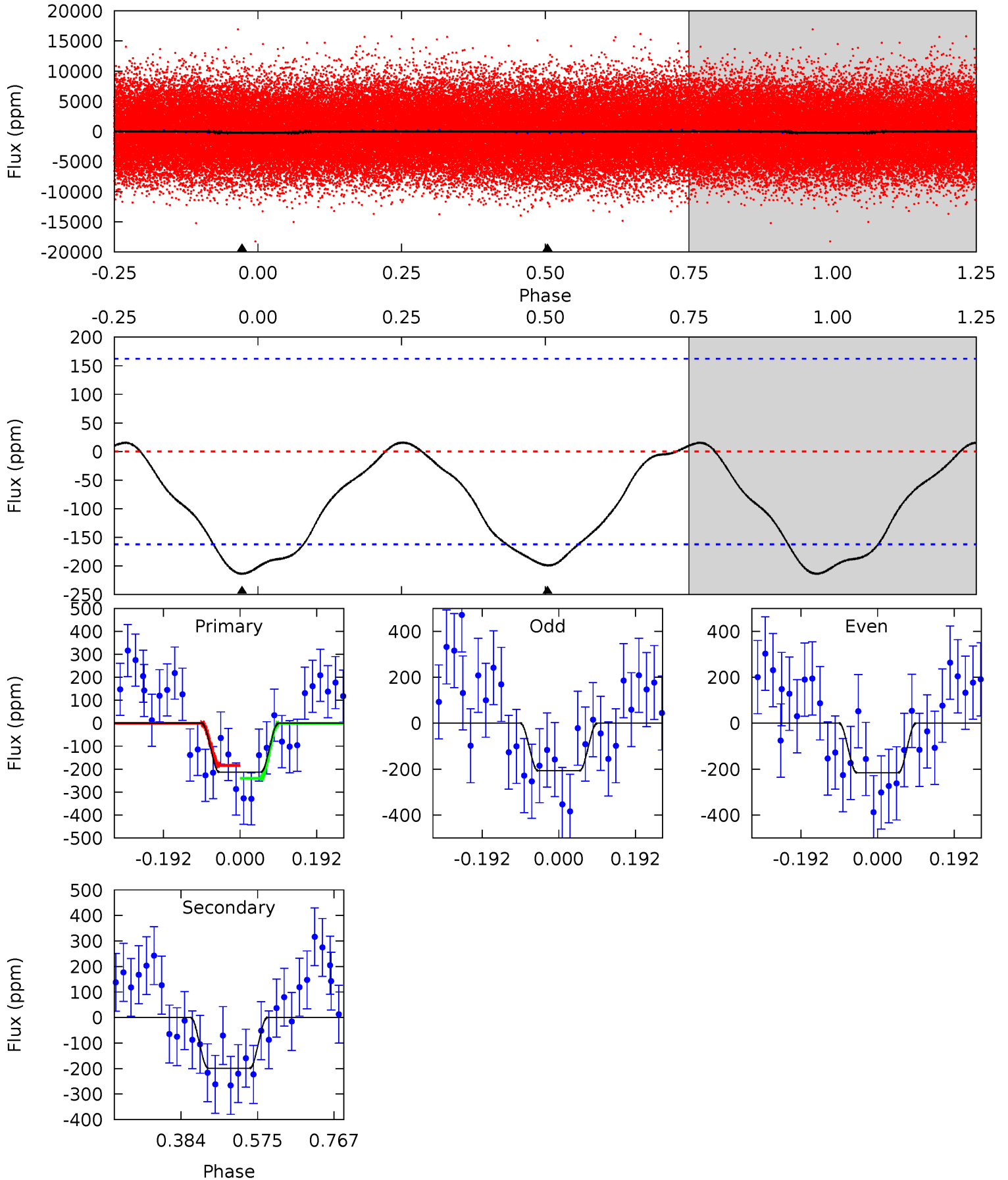
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.74	8.74	0	0	4.32	1.00	7.48	8.74	8.74	8.74	8.74	0.61	0.96	0.69	3.19



Alt Model-Shift Uniqueness Test

002695030-01, P = 0.671394 Days, E = 131.039842 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.82	5.43	0	0	4.43	1.31	0.48	5.82	5.82	5.43	5.43	0.12	0.91	0.07	0.77



Stellar Parameters For KIC 002695030

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7318^{+203}_{-304}	$4.130^{+0.149}_{-0.182}$	$-0.120^{+0.250}_{-0.350}$	$1.748^{+0.533}_{-0.400}$	$1.501^{+0.211}_{-0.234}$	$0.396^{+0.297}_{-0.194}$
	+3%/-4%	+4%/-4%	+208%/-292%	+30%/-23%	+14%/-16%	+75%/-49%
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 002695030-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-102±12	$2.81^{+2.49}_{-1.78}$	4557^{+352}_{-332}	5800^{+5967}_{-1749}	$2.084^{+13.757}_{-1.488}$
Alt.	-199±37	$3.54^{+2.56}_{-2.18}$	4561^{+346}_{-310}	6141^{+5511}_{-1603}	$2.615^{+15.241}_{-1.752}$

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 $A_{obs} \gg 1.0$

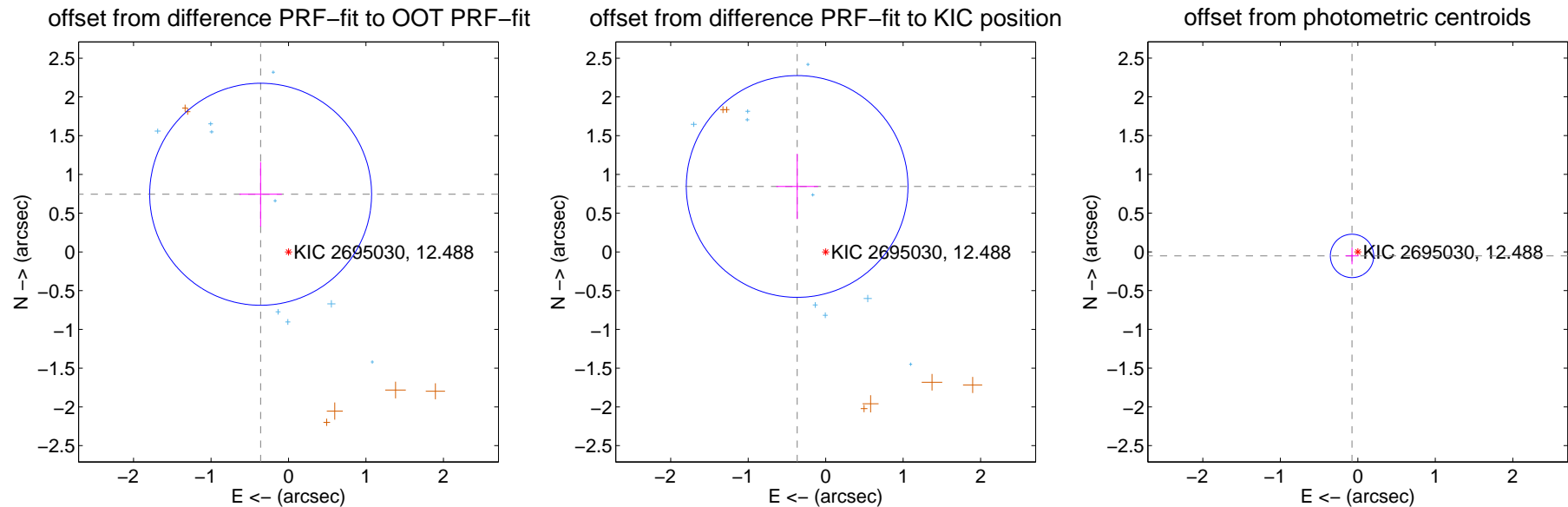
DV Centroid Data

Supplemental centroid analysis for 002695030-01. Kepler magnitude: 12.49. Transit SNR 12.96

There are 9 quarters with good PRF difference image offsets

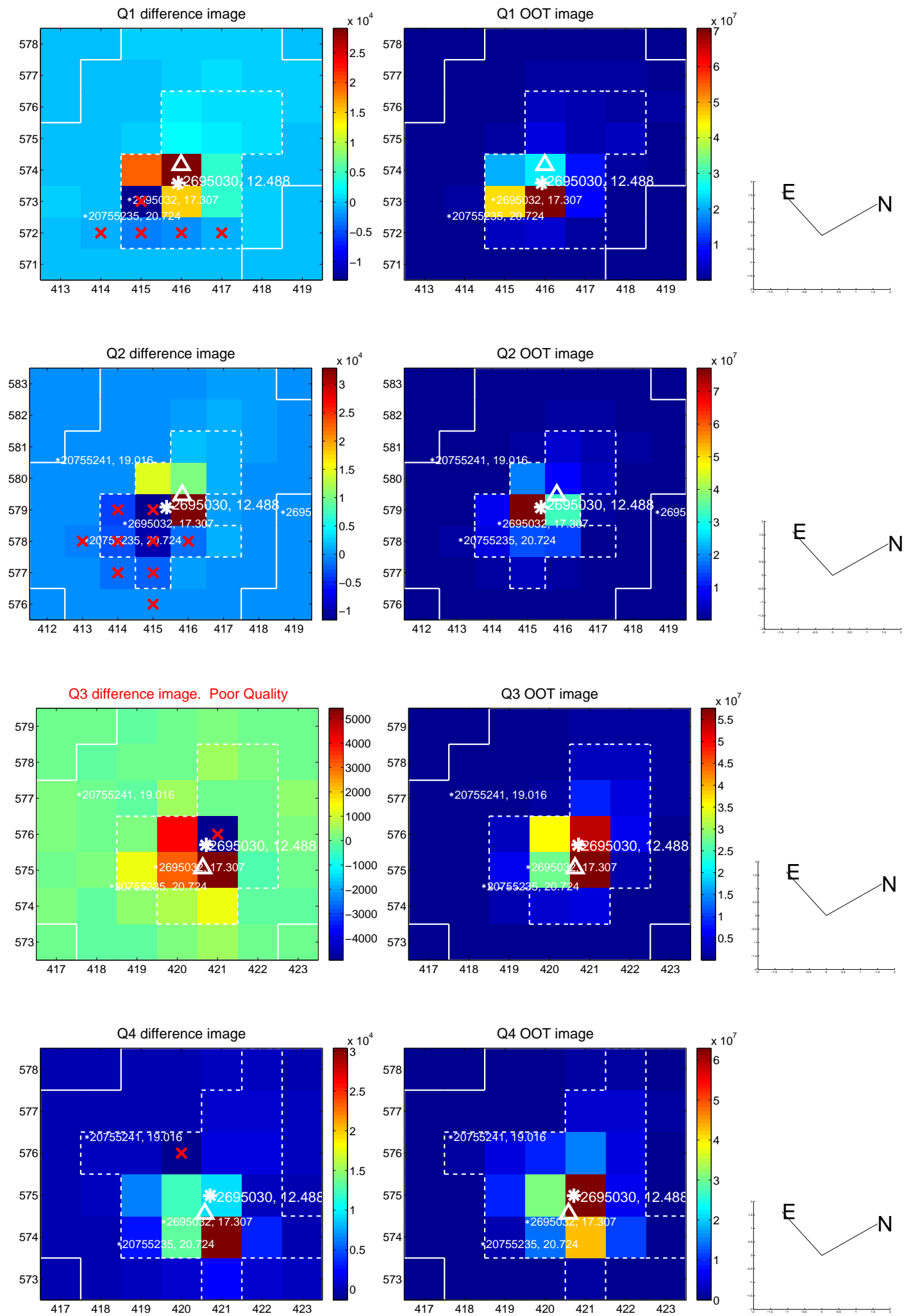
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.826 ± 0.477	1.73	0.360 ± 0.275	0.744 ± 0.416
PRF-fit source offset from KIC position	0.921 ± 0.477	1.93	0.368 ± 0.270	0.845 ± 0.421
photometric centroid source offset	0.09 ± 0.09	0.98	0.07 ± 0.09	-0.05 ± 0.11

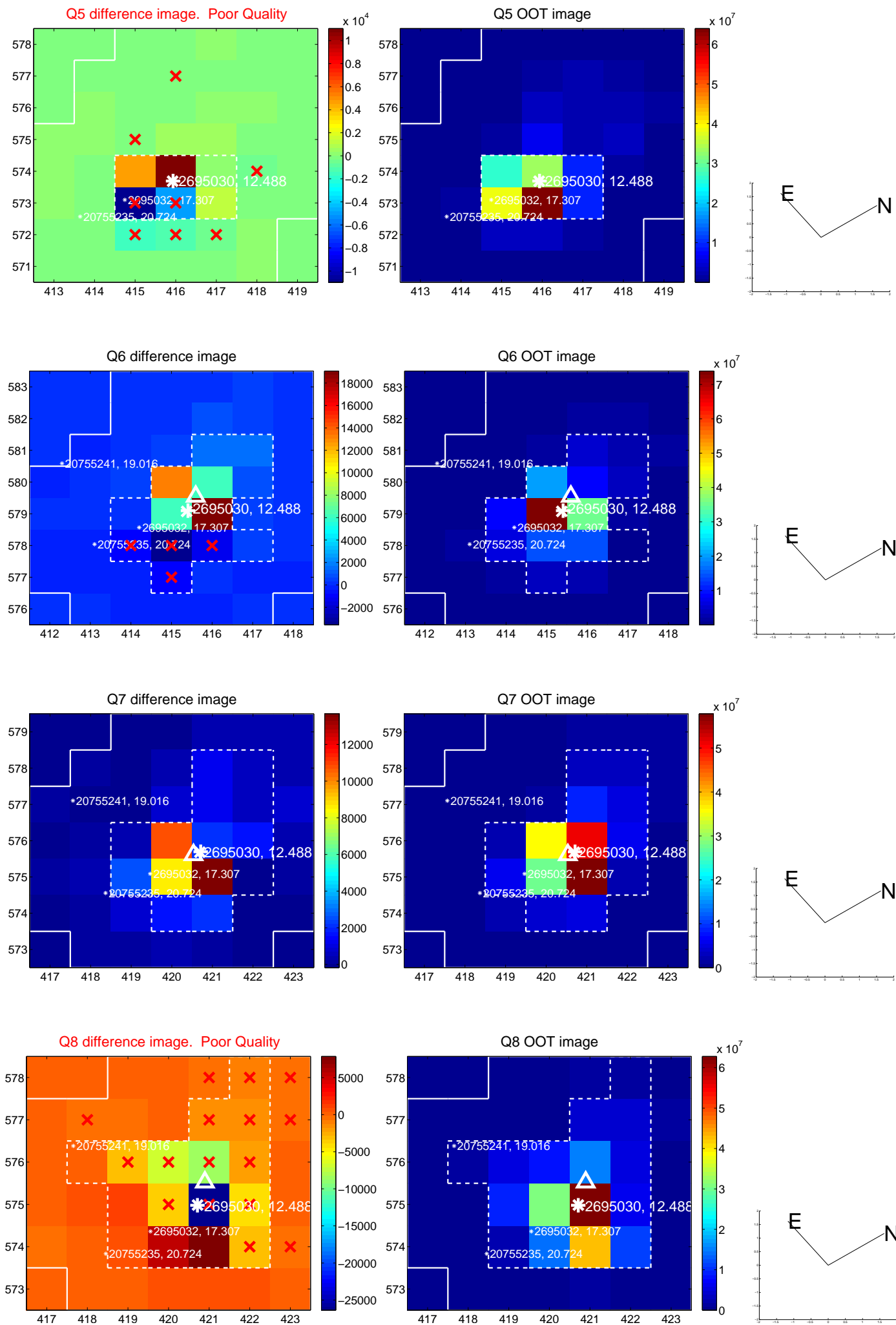


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

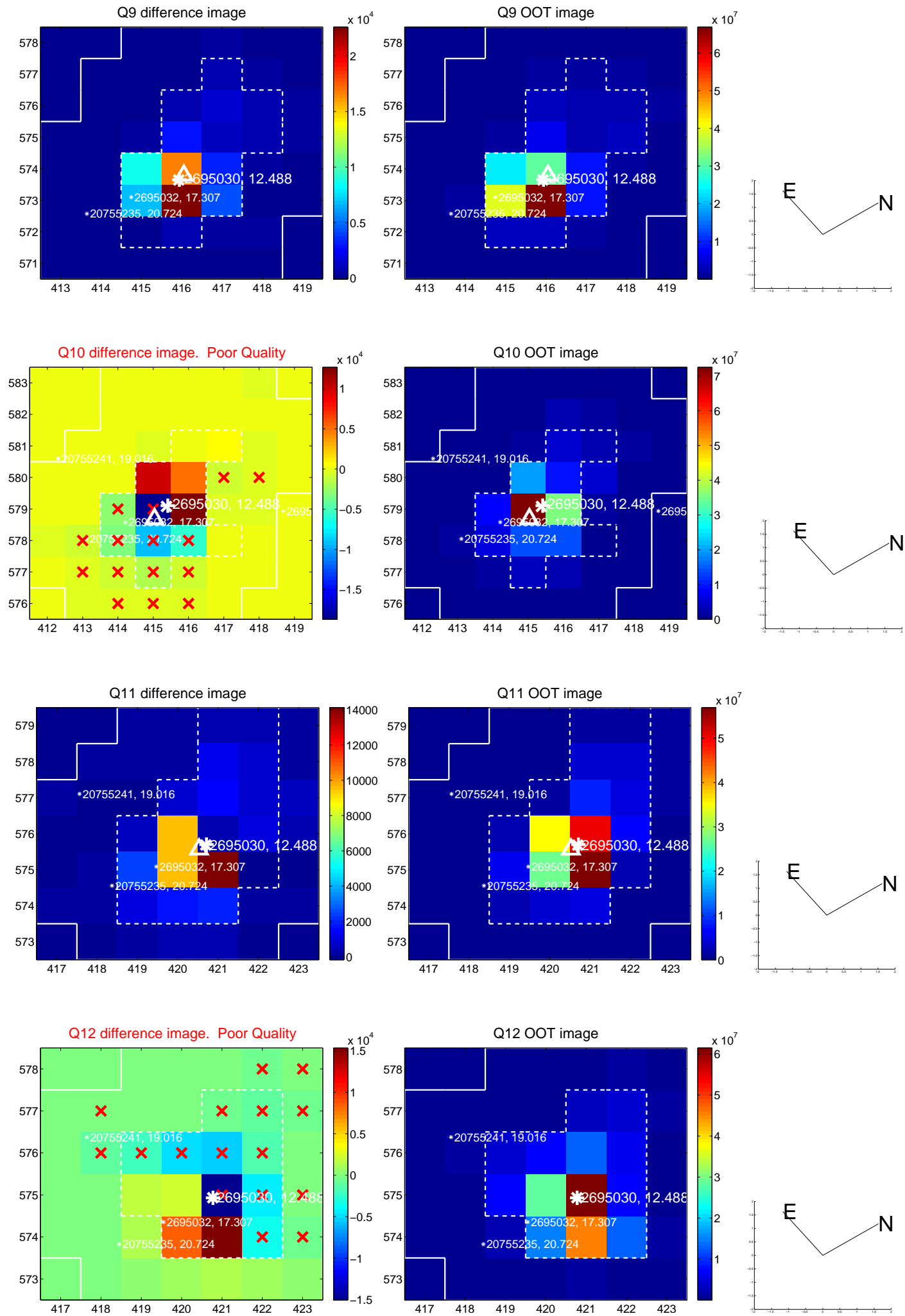
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



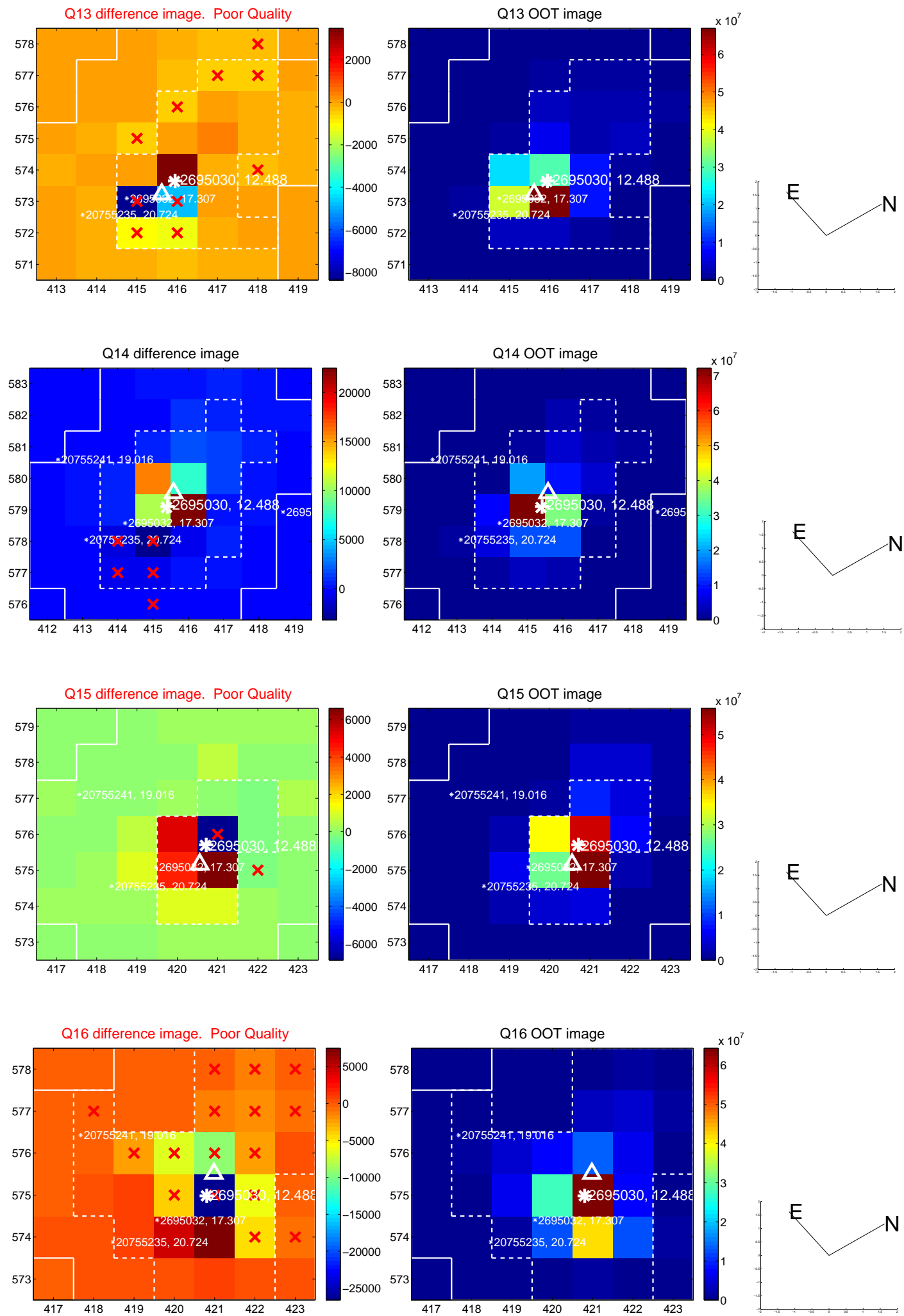
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



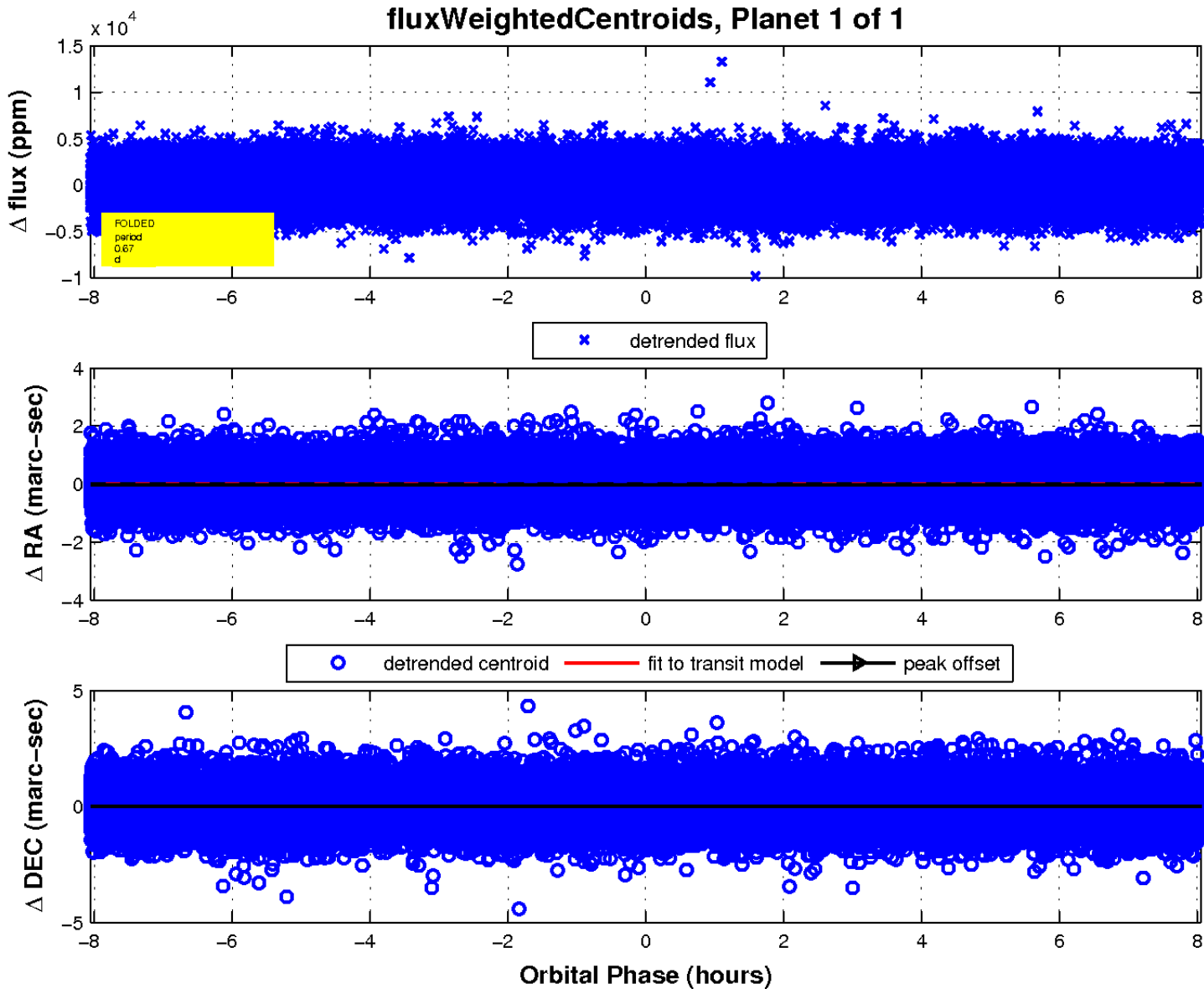
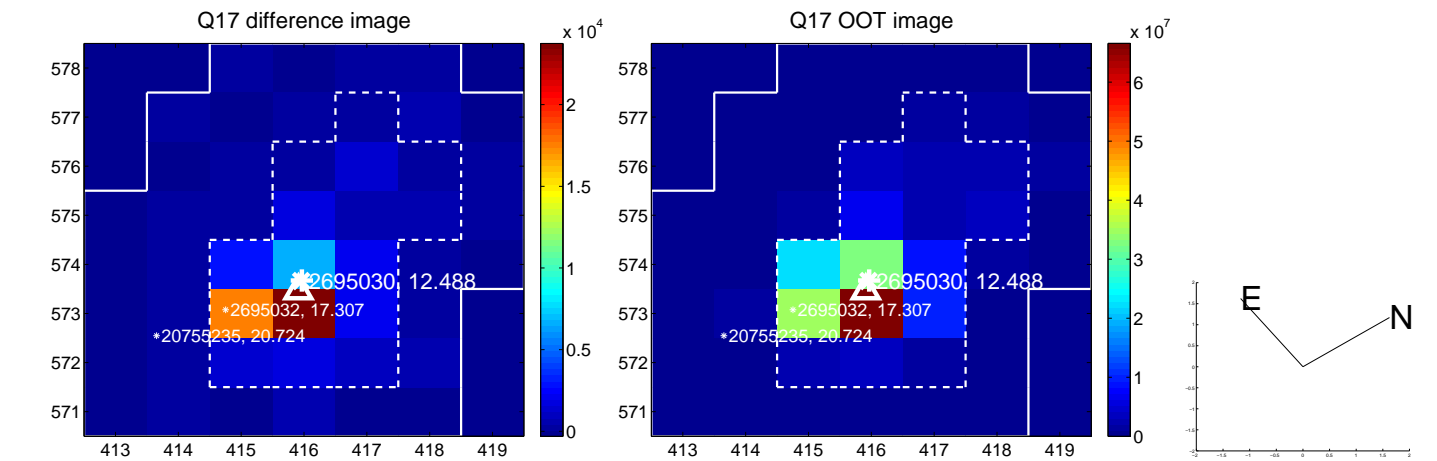
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

