

KIC 006314185

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})
006314185-01	OBS	3752.01	1.433255	132.825777	8165.3	3.000	240.6	-1.0	1.07	5977	9.66	2319.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006314185-01	OBS	FP	0.00	0	1	0	1	MOD_SEC_ALT—SEASONAL_DEPTH_DV—CENT_NOFITS—EPHEM_MATCH

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 006314185-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
006314185-01	6314185	3708.01	6314173	1:1	7.0	0	-2	17.72	14.89	61.45	Direct-PRF	0	0.50	0.26

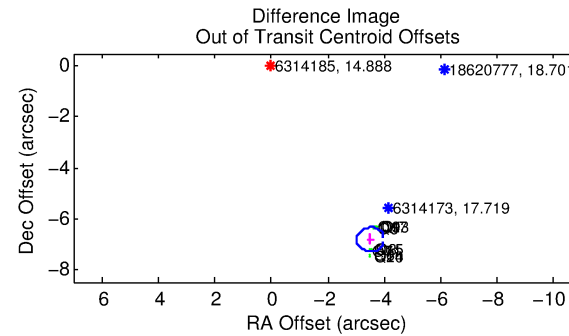
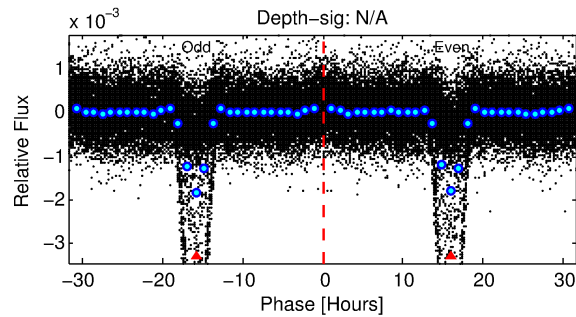
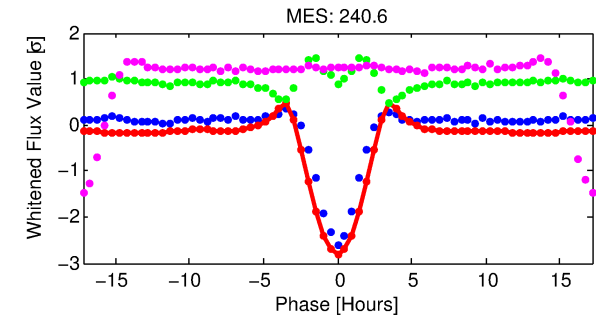
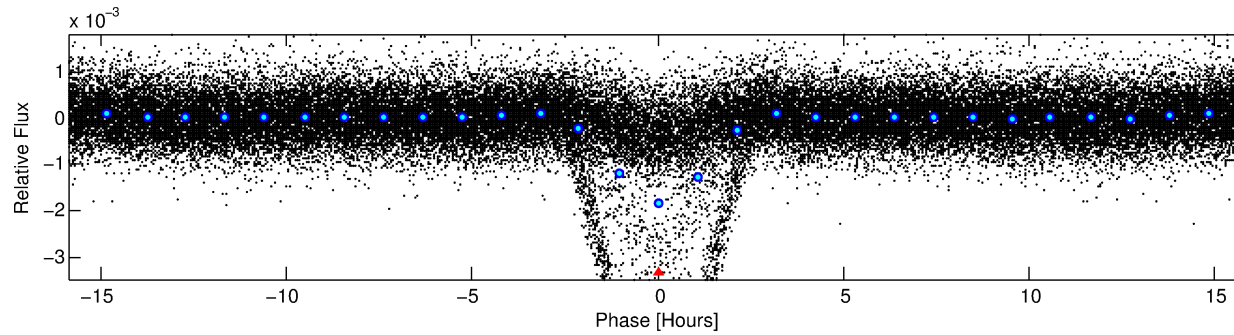
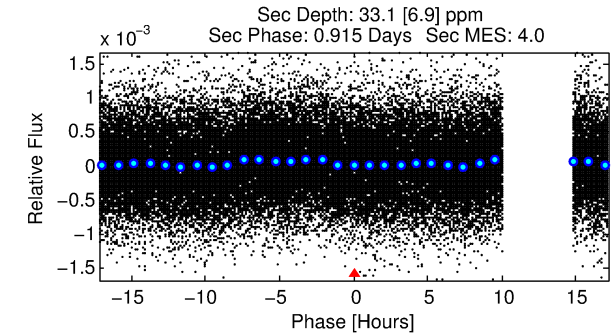
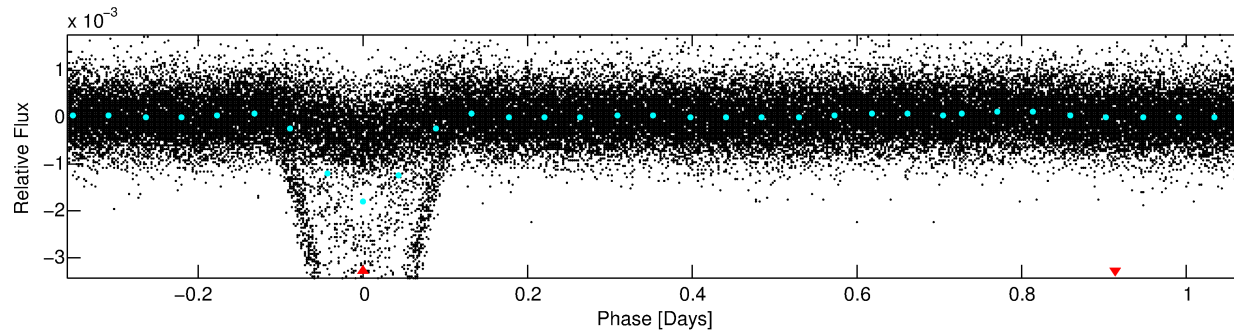
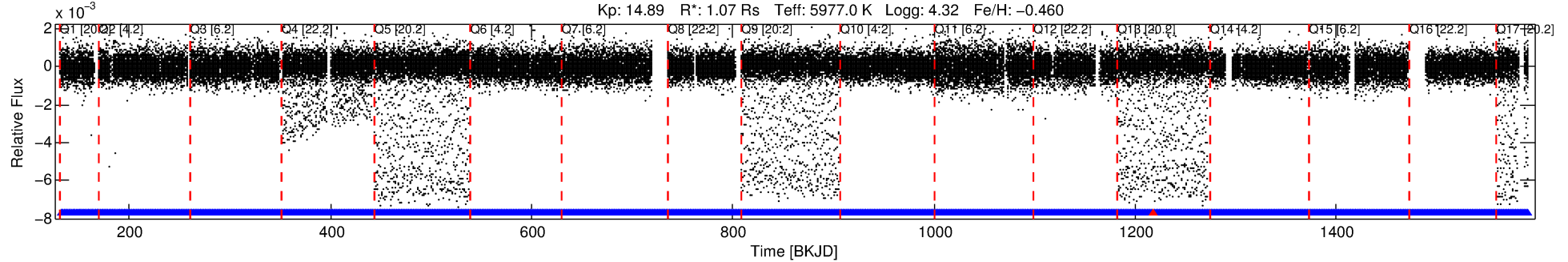
Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 6314185 Candidate: 1 of 1 Period: 1.433 d

KOI: K03752 Corr: No Ephemeris Match

Kp: 14.89 R*: 1.07 Rs Teff: 5977.0 K Logg: 4.32 Fe/H: -0.460



TPS TCE Results:

Period = 1.43326 d
Epoch = 132.8258 BKJD

DV fit results are unavailable

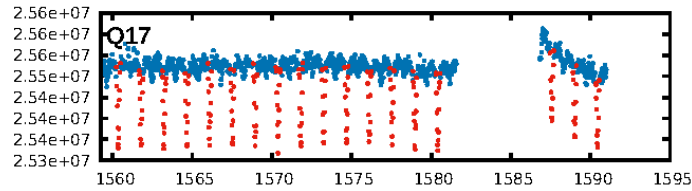
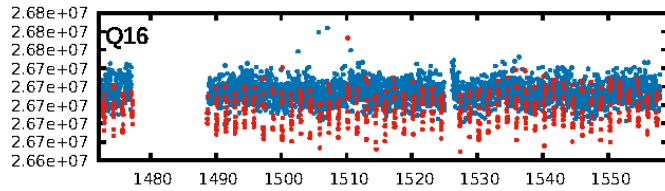
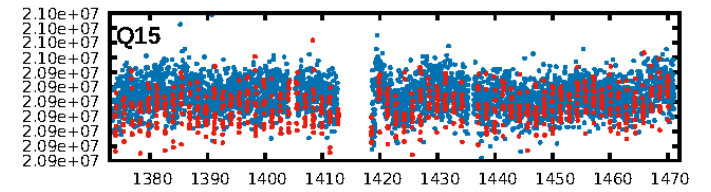
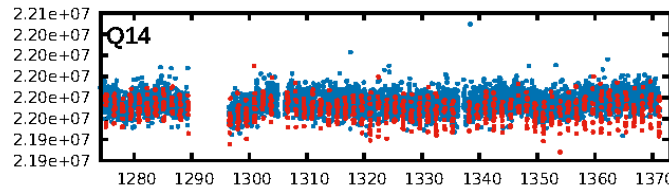
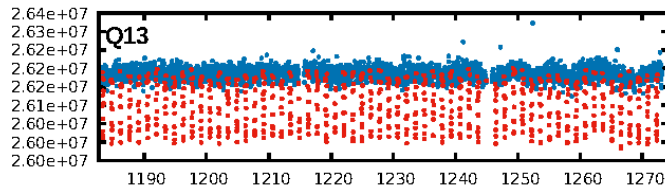
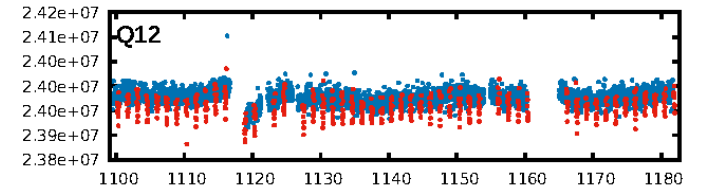
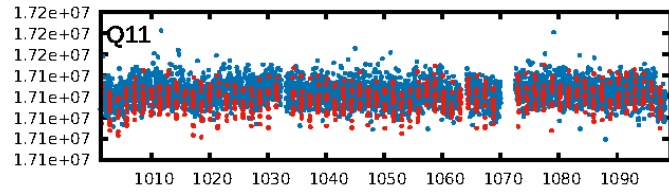
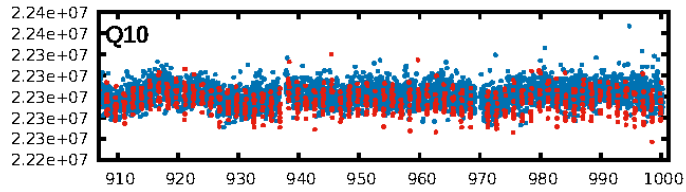
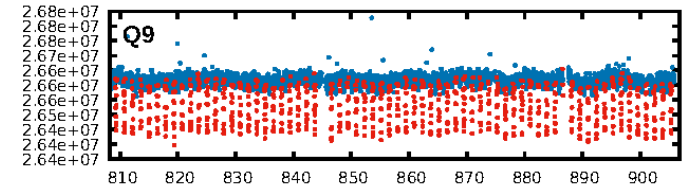
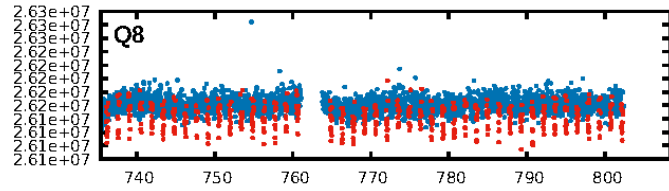
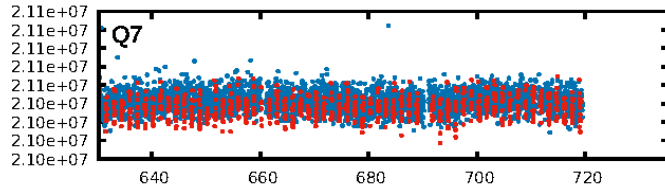
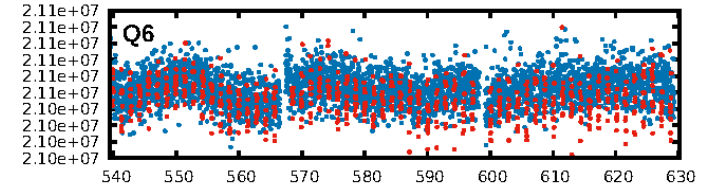
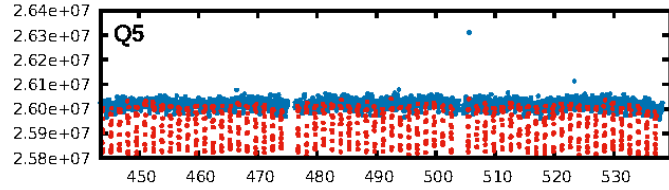
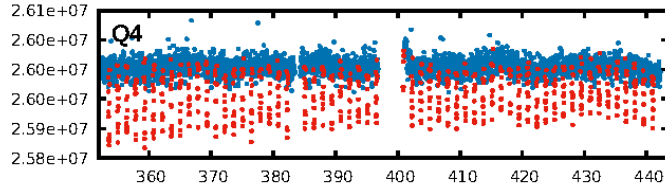
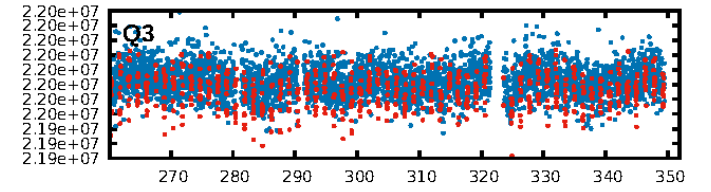
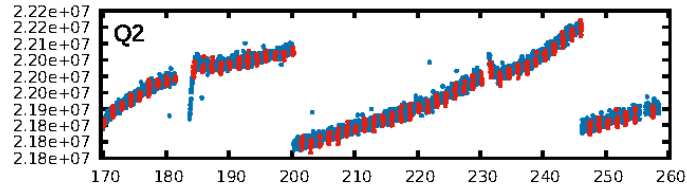
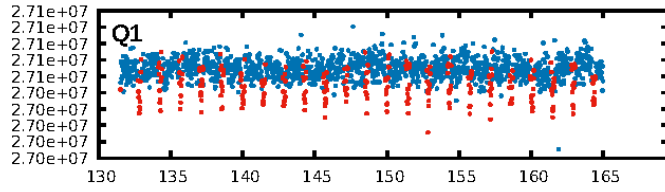
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [897/898]
GhostDiagnostic-chr: -0.6827
Centroid-sig: 0.0%
Centroid-so: 27.694 arcsec [630.72σ]
OotOffset-rm: 7.681 arcsec [48.37σ]
KicOffset-rm: 7.351 arcsec [103.90σ]
OotOffset-st: 4/4/0/5 [13]
KicOffset-st: 4/4/0/5 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [17/17]

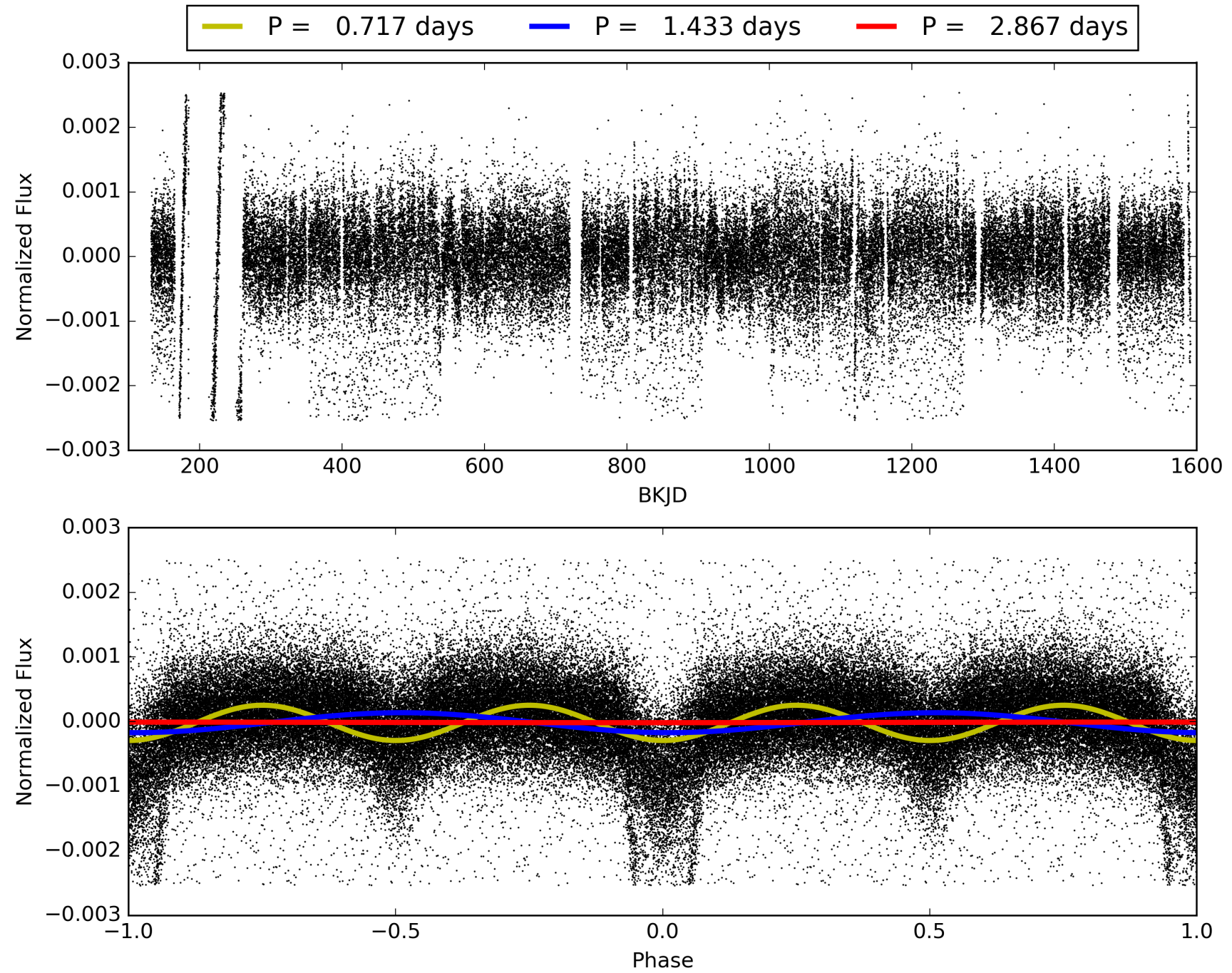
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:04:57 Z

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

TCE 006314185-01, PDC Light Curves

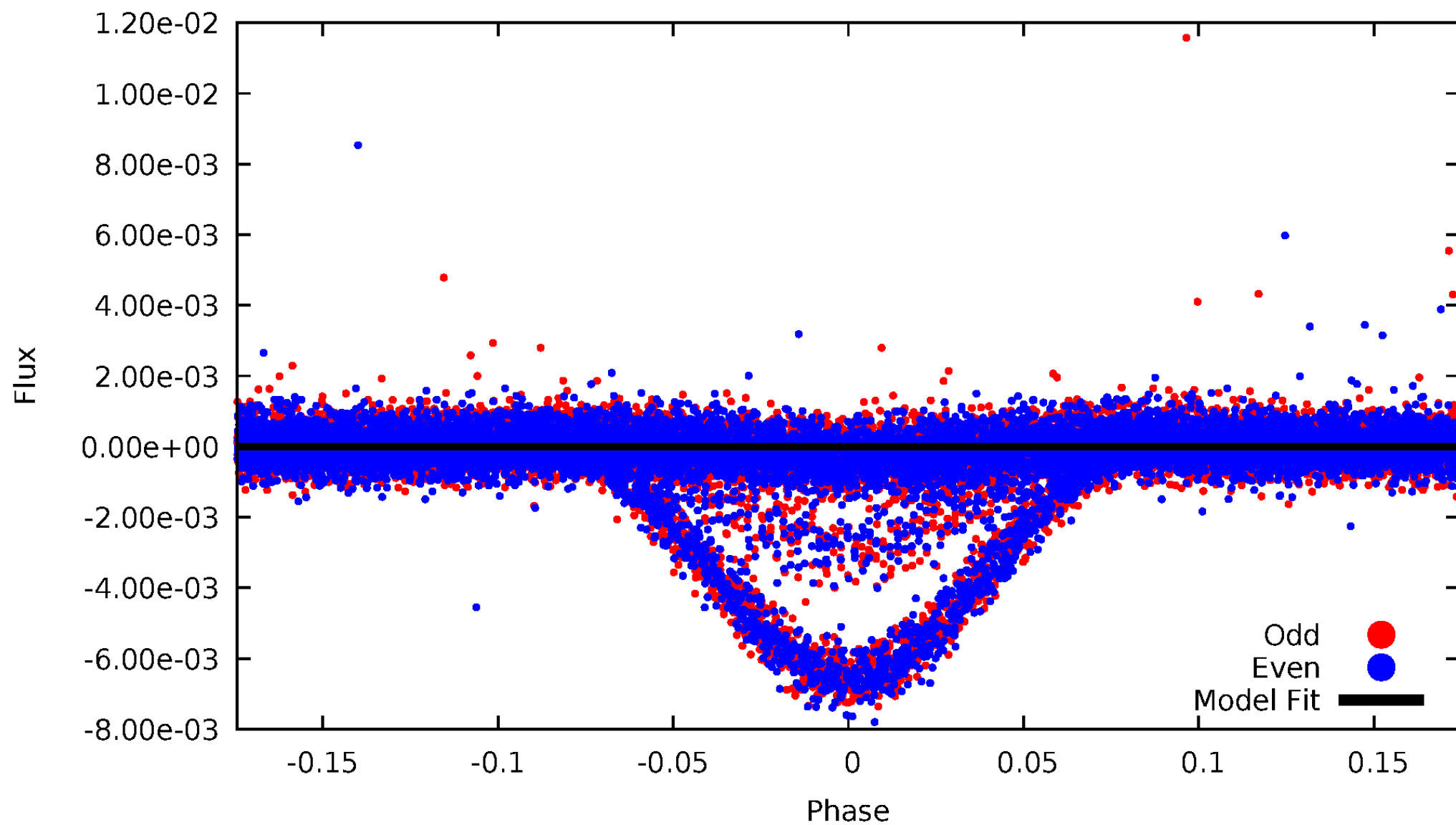


TCE 006314185-01



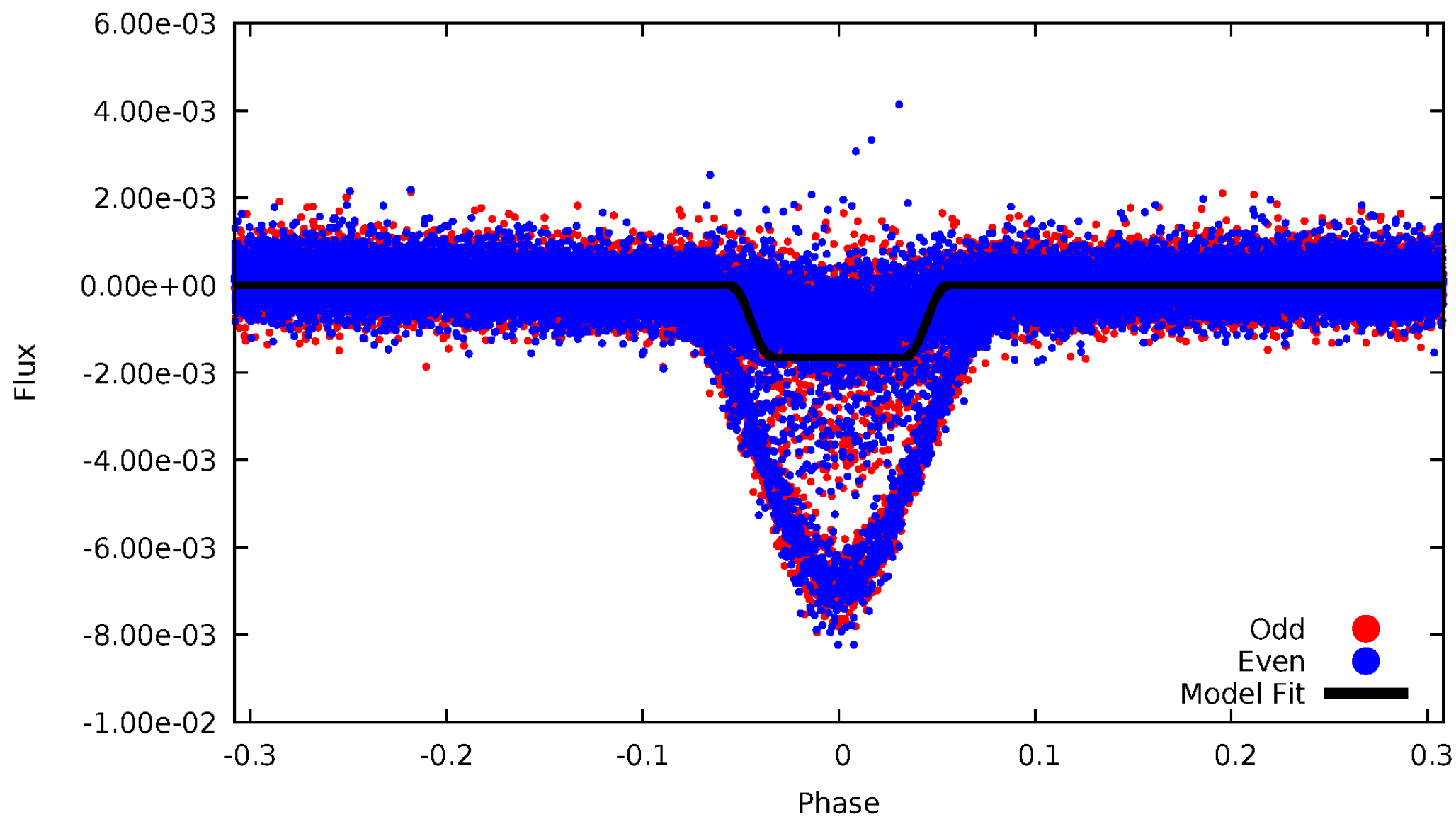
DV Odd/Even

TCE 006314185-01

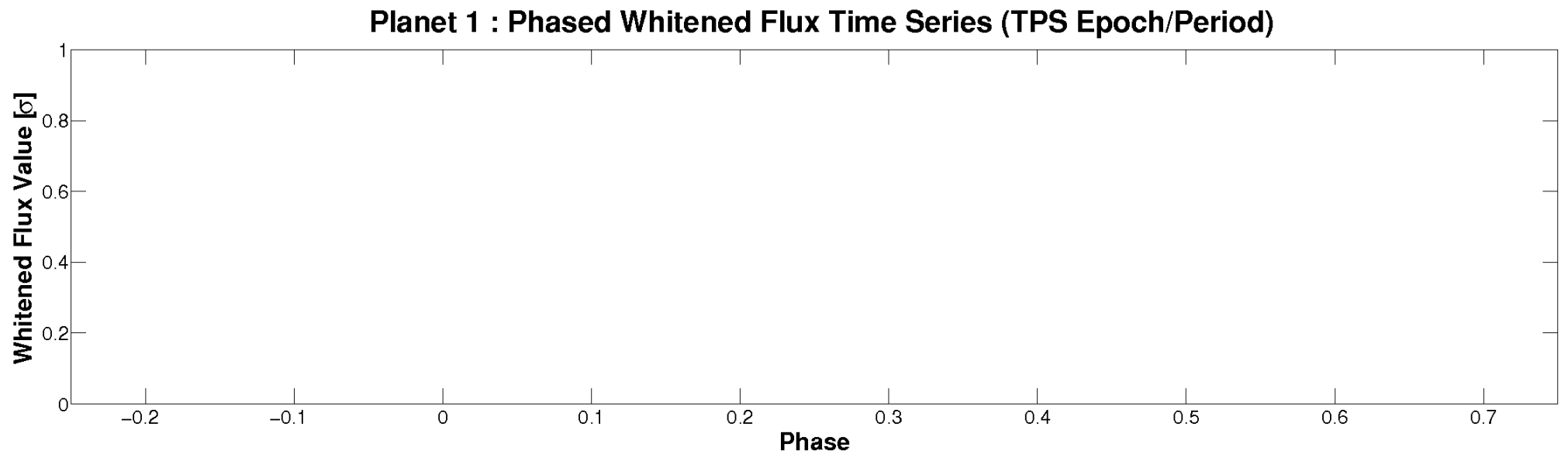
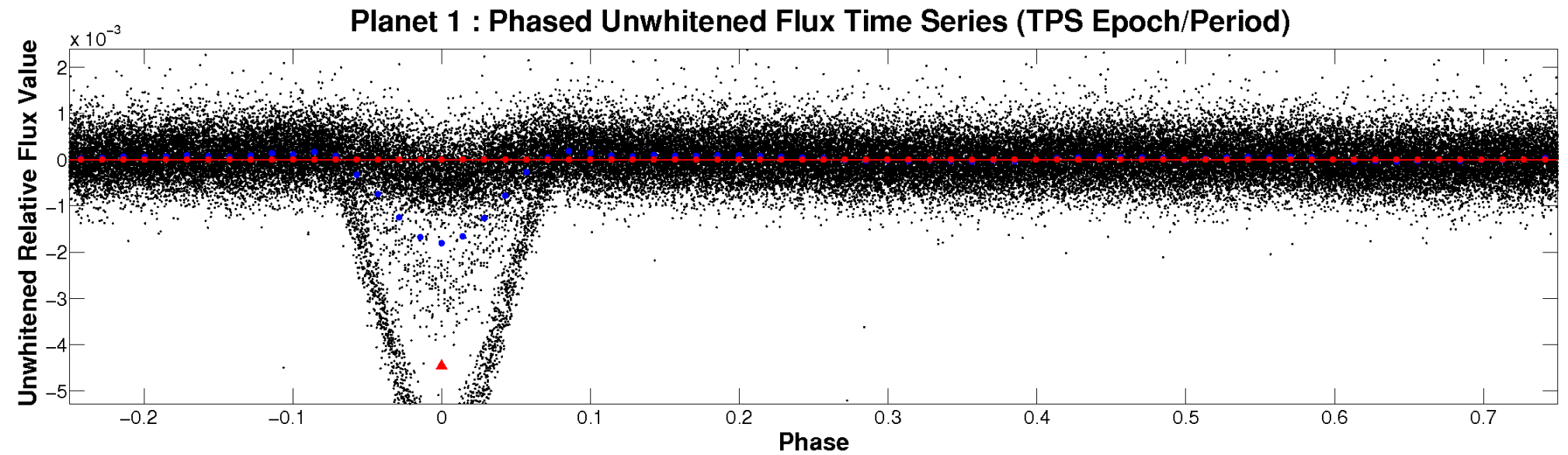


ALT Odd/Even

TCE 006314185-01

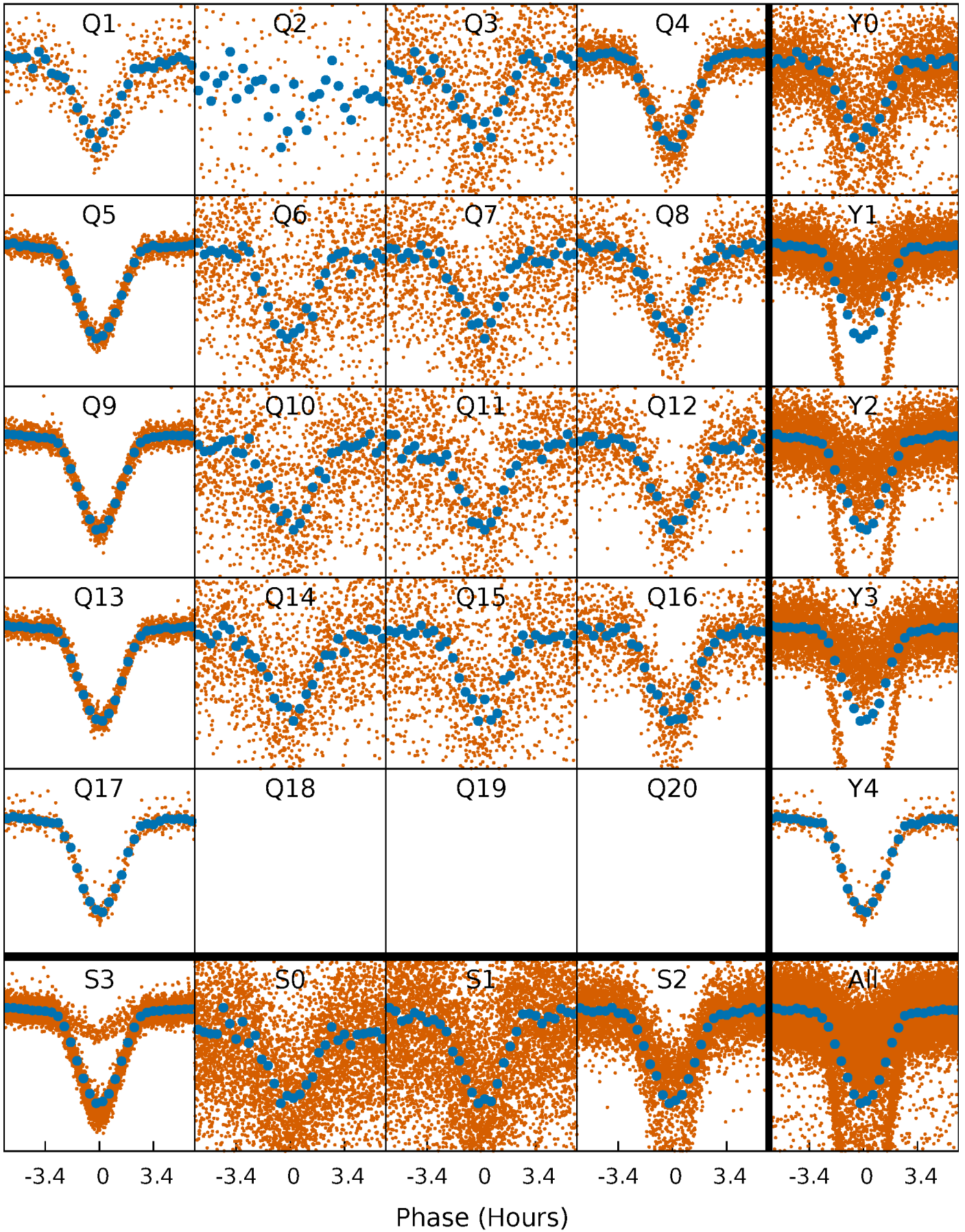


Non-Whitened Vs. Whitened Light Curve



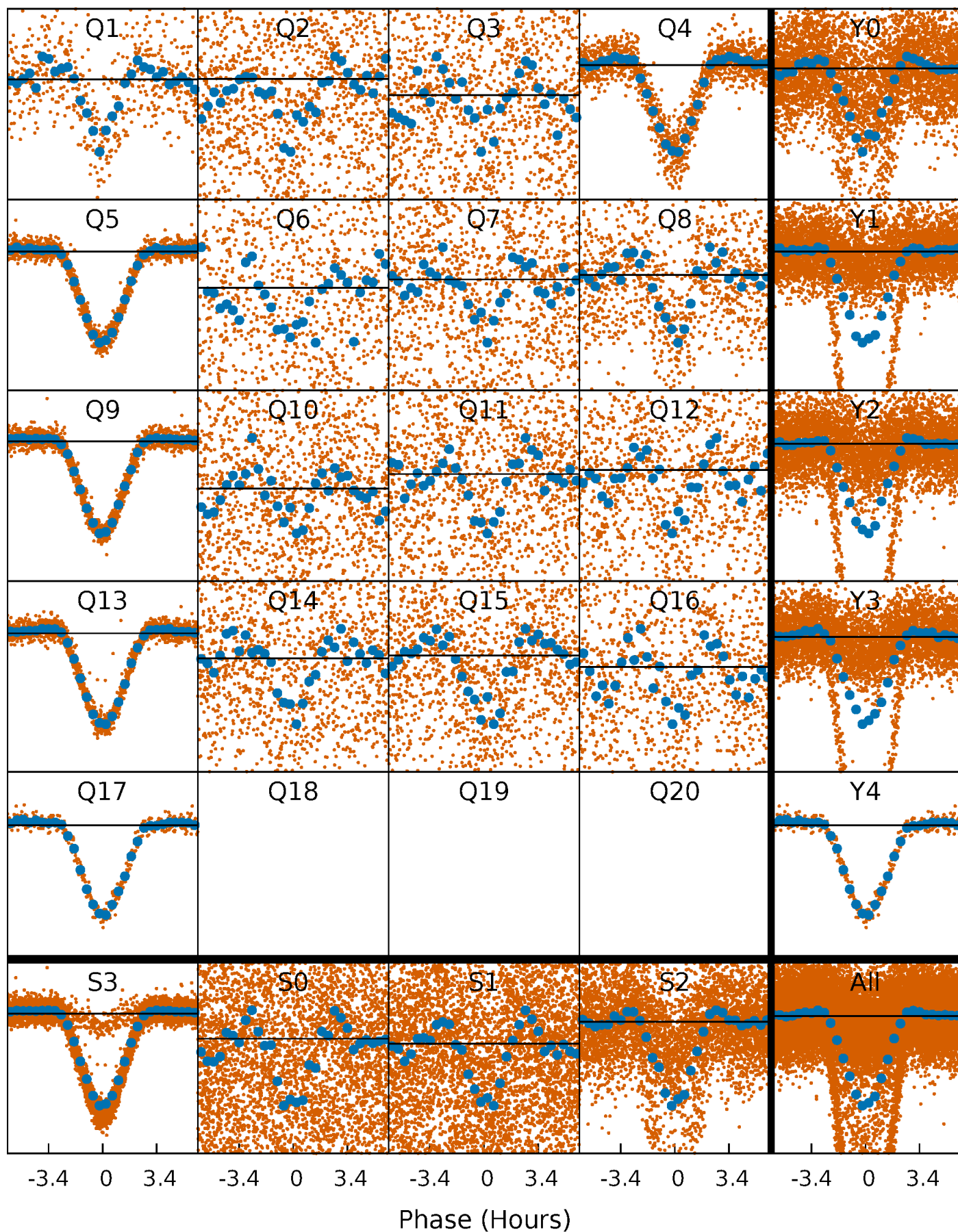
PDC Quarter-Phased Transit Curves

TCE 006314185-01 P= 1.433255 Days $T_0=132.825777$ (BKJD)



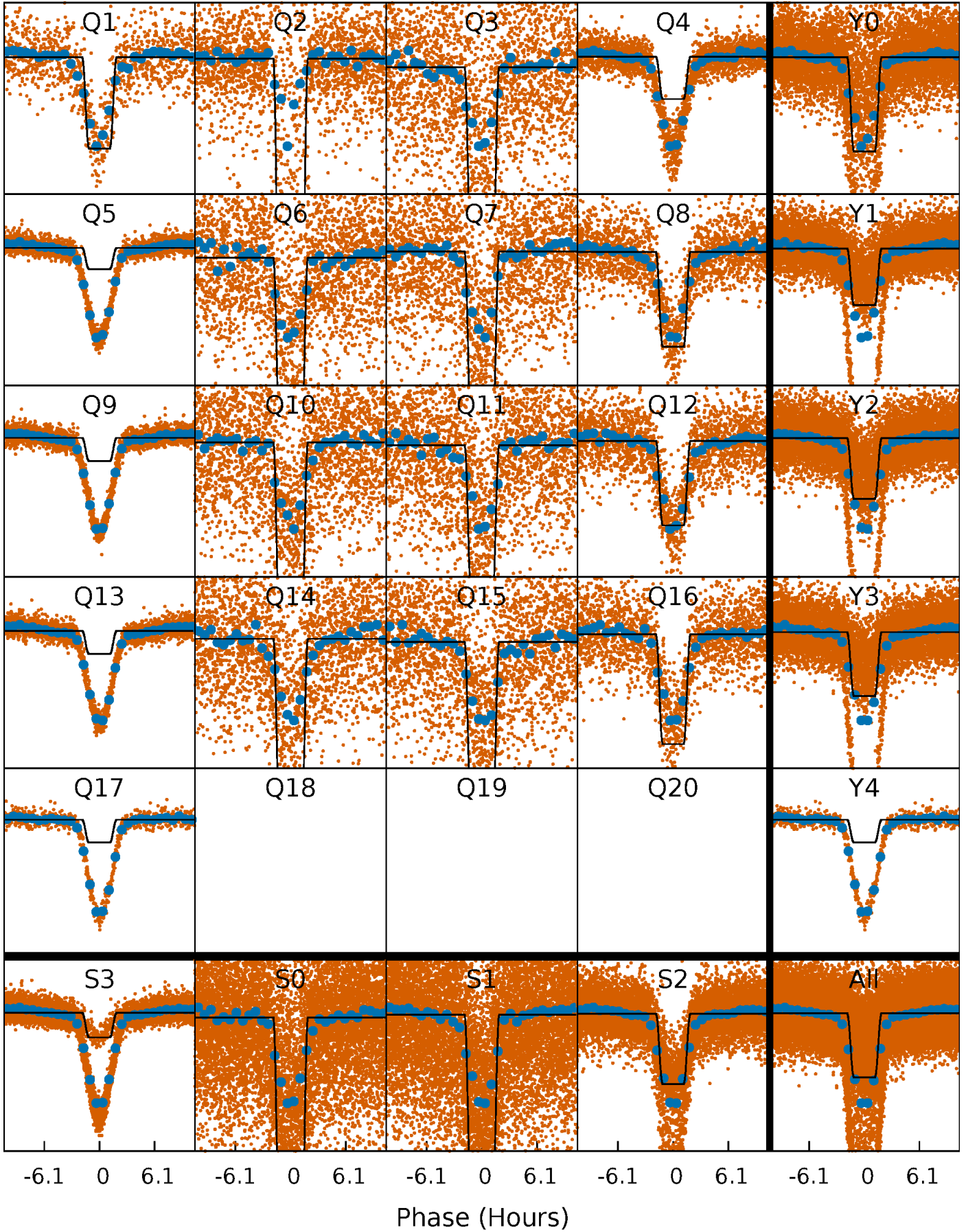
DV Quarter-Phased Transit Curves

TCE 006314185-01 P= 1.433255 Days $T_0=132.825777$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

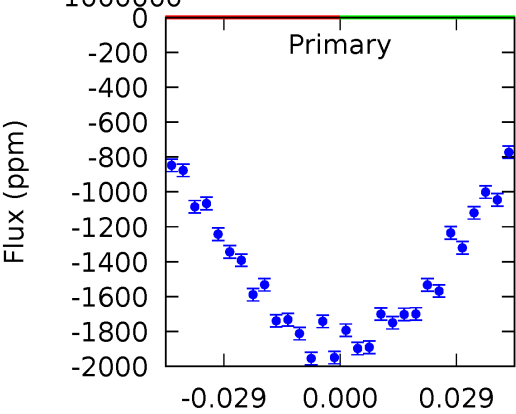
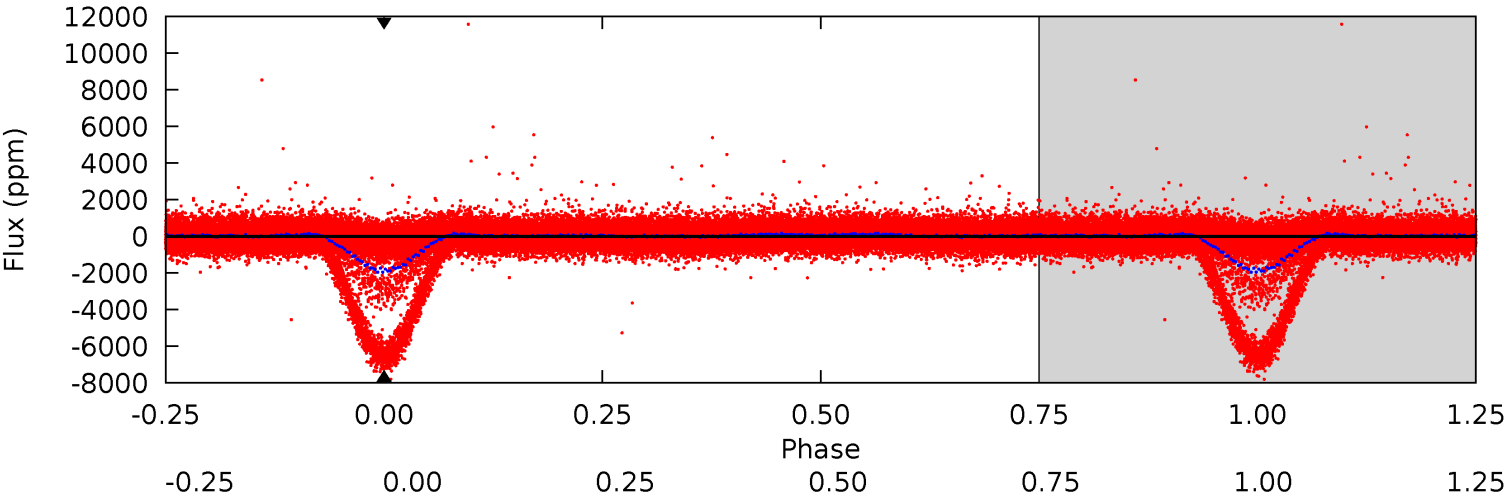
TCE 006314185-01 P= 1.433255 Days $T_0=132.825569$ (BKJD)



DV Model-Shift Uniqueness Test

006314185-01, P = 1.433255 Days, E = 131.392522 Days

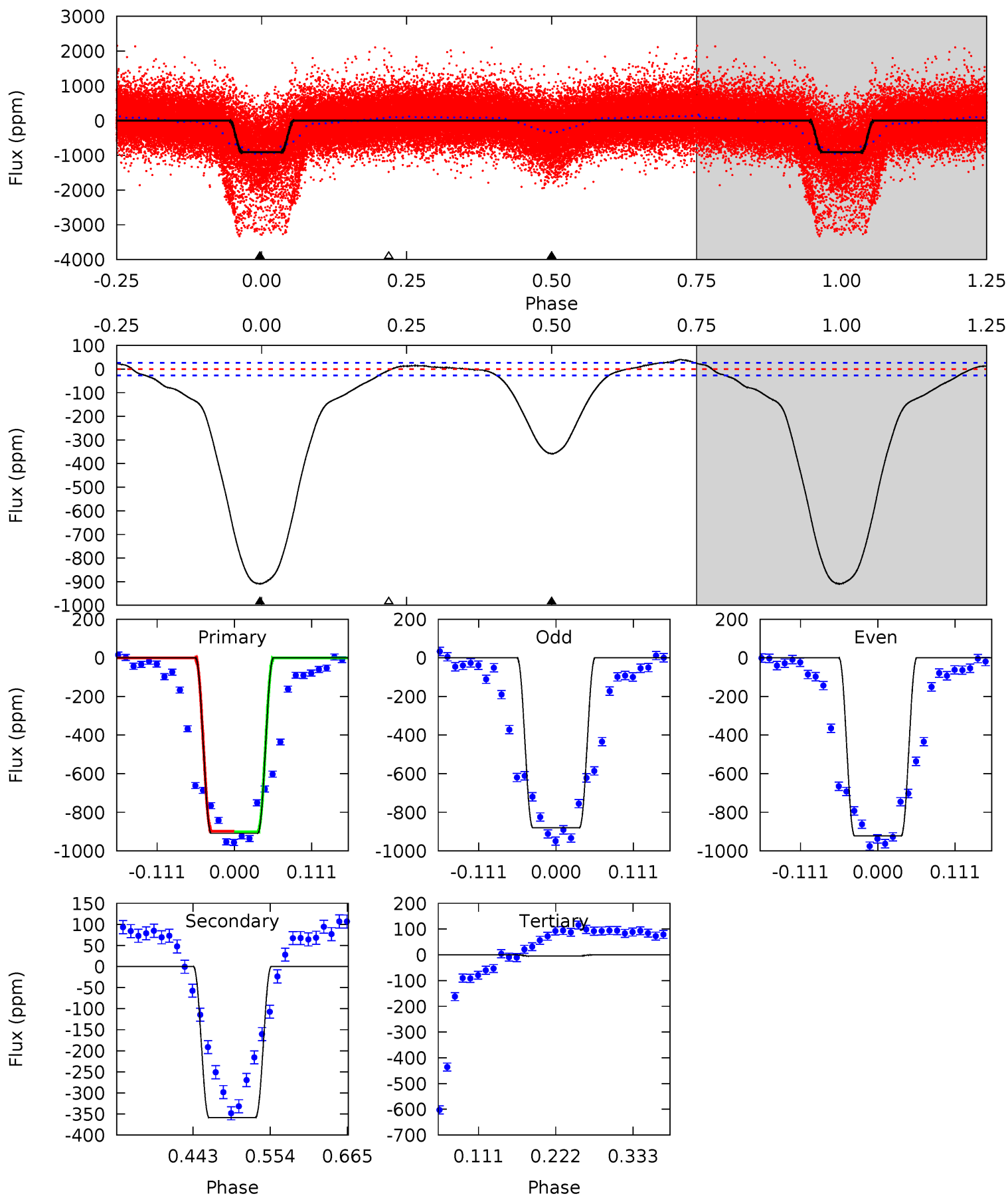
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006314185-01, P = 1.433255 Days, E = 131.392314 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
156.4	61.6	0.89	0	4.54	1.59	8.58	155.5	156.4	60.7	61.6	3.60	2.06	0.04	0.25



Stellar Parameters For KIC 006314185

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5977^{+179}_{-197}	$4.318^{+0.190}_{-0.190}$	$-0.460^{+0.300}_{-0.300}$	$1.068^{+0.291}_{-0.238}$	$0.864^{+0.120}_{-0.070}$	$1.000^{+0.953}_{-0.483}$
	+3%/-3%	+4%/-4%	+65%/-65%	+27%/-22%	+14%/-8%	+95%/-48%
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 006314185-01 / KOI 3752.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$12.37^{+10.93}_{-8.32}$	2473^{+192}_{-164}	-4882^{+19586}_{-9827}	$-9.062^{+353.328}_{-331.312}$
Alt.	-358 ± 6	$9.95^{+9.48}_{-6.90}$	2476^{+195}_{-168}	3219^{+2045}_{-4849}	$1.103^{+11.124}_{-0.804}$

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

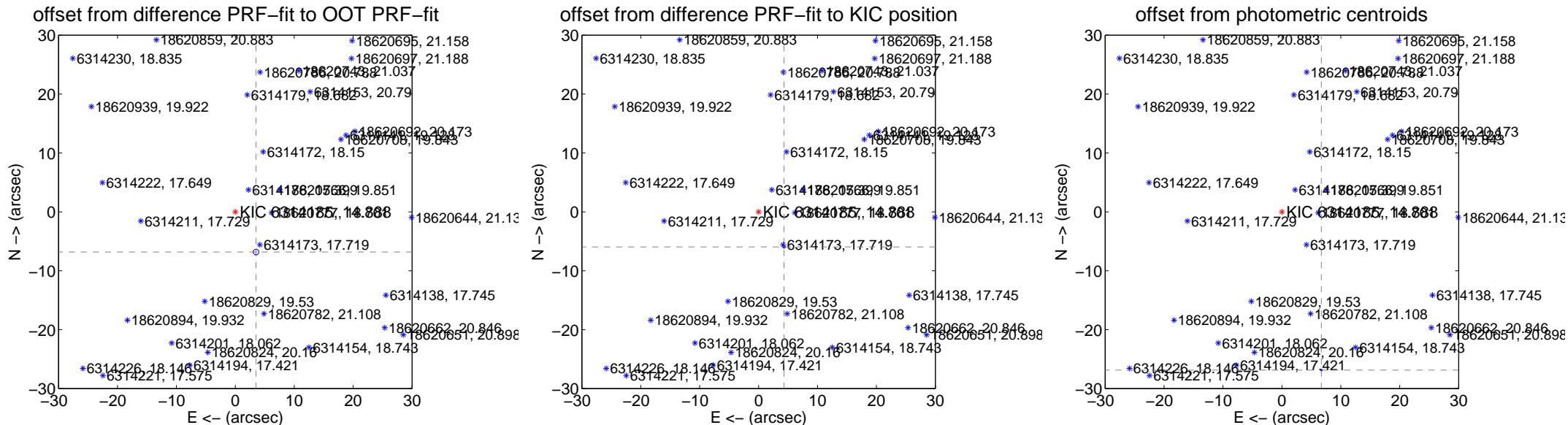
DV Centroid Data

Supplemental centroid analysis for 006314185-01. Kepler magnitude: 14.89. Transit SNR -1.00

There are 13 quarters with good PRF difference image offsets

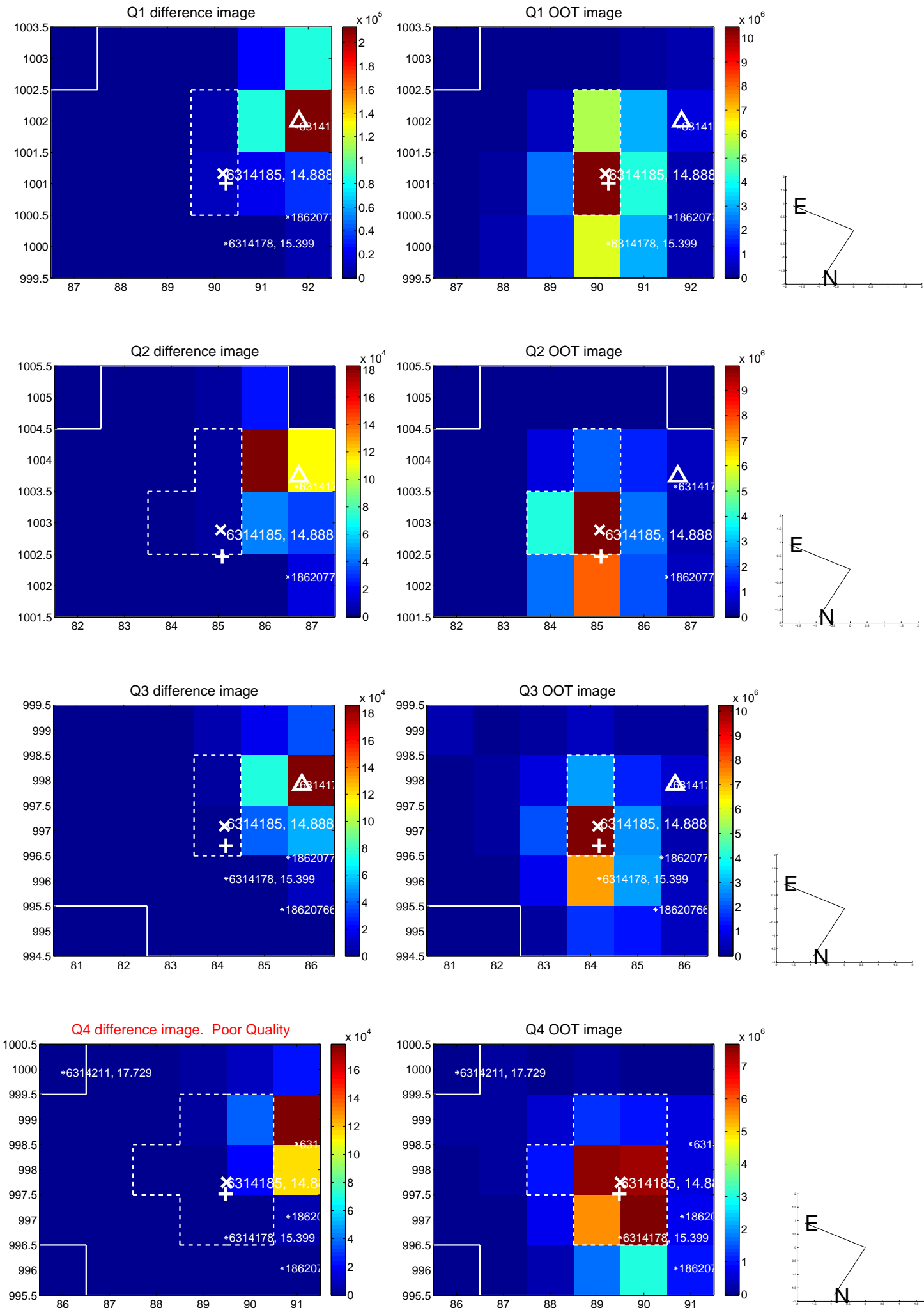
The direct PRF centroid is offset from the target star catalog position by about 0.69 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.681 \pm 0.159	48.37	-3.517 \pm 0.072	-6.829 \pm 0.175
PRF-fit source offset from KIC position	7.351 \pm 0.071	103.90	-4.316 \pm 0.069	-5.950 \pm 0.069
photometric centroid source offset	27.69 \pm 0.04	630.72	-6.70 \pm 0.04	-26.87 \pm 0.04

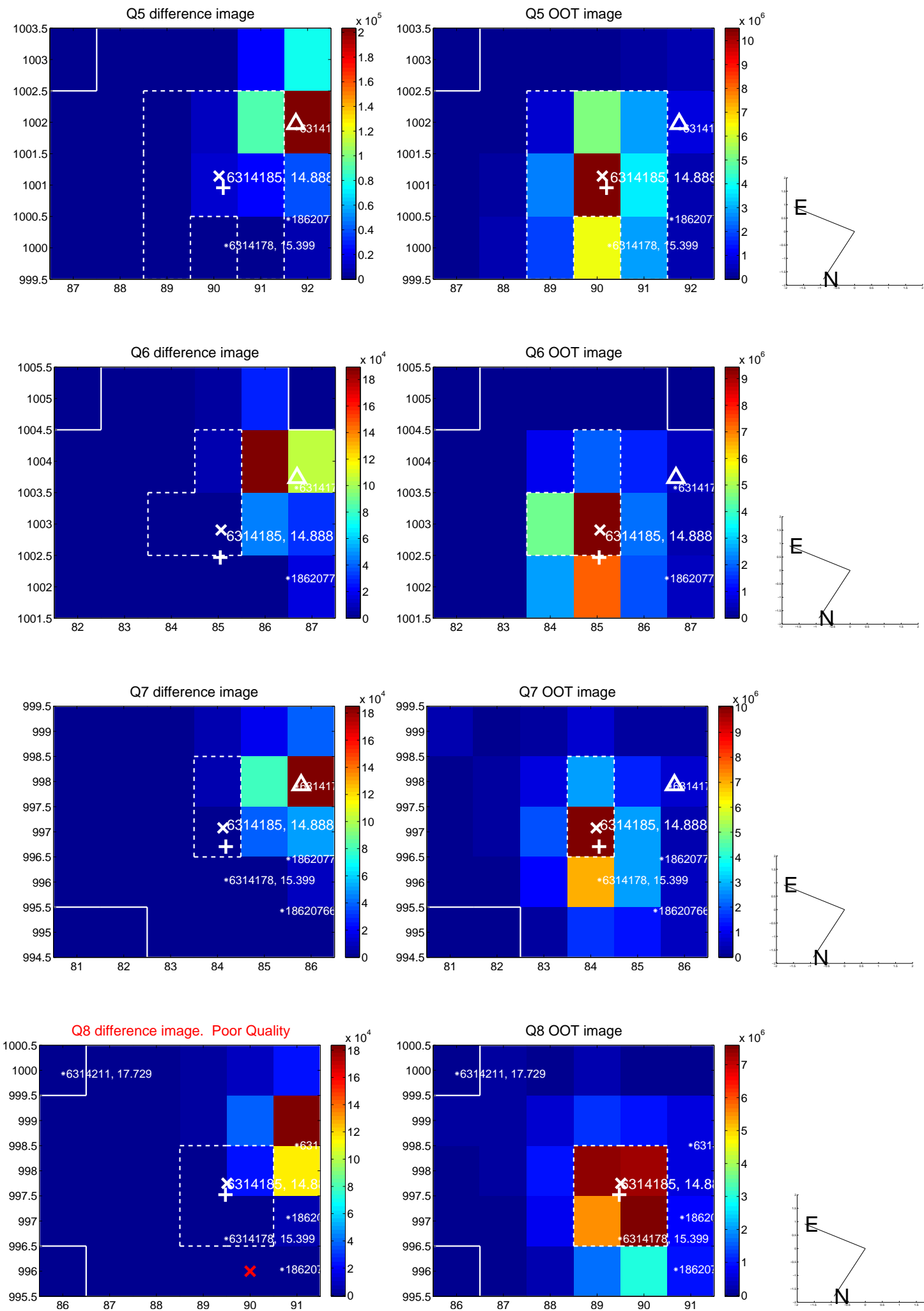


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

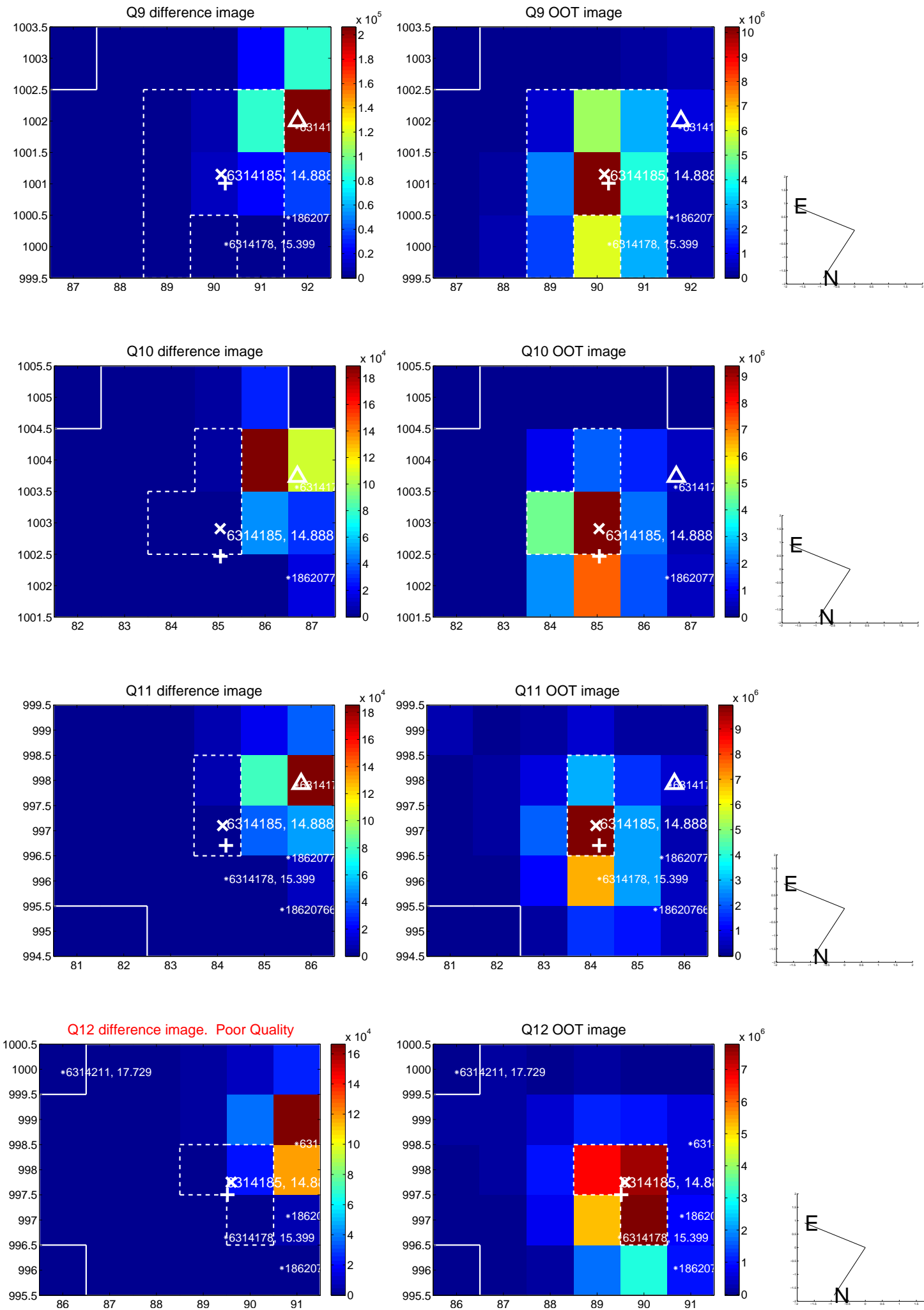
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



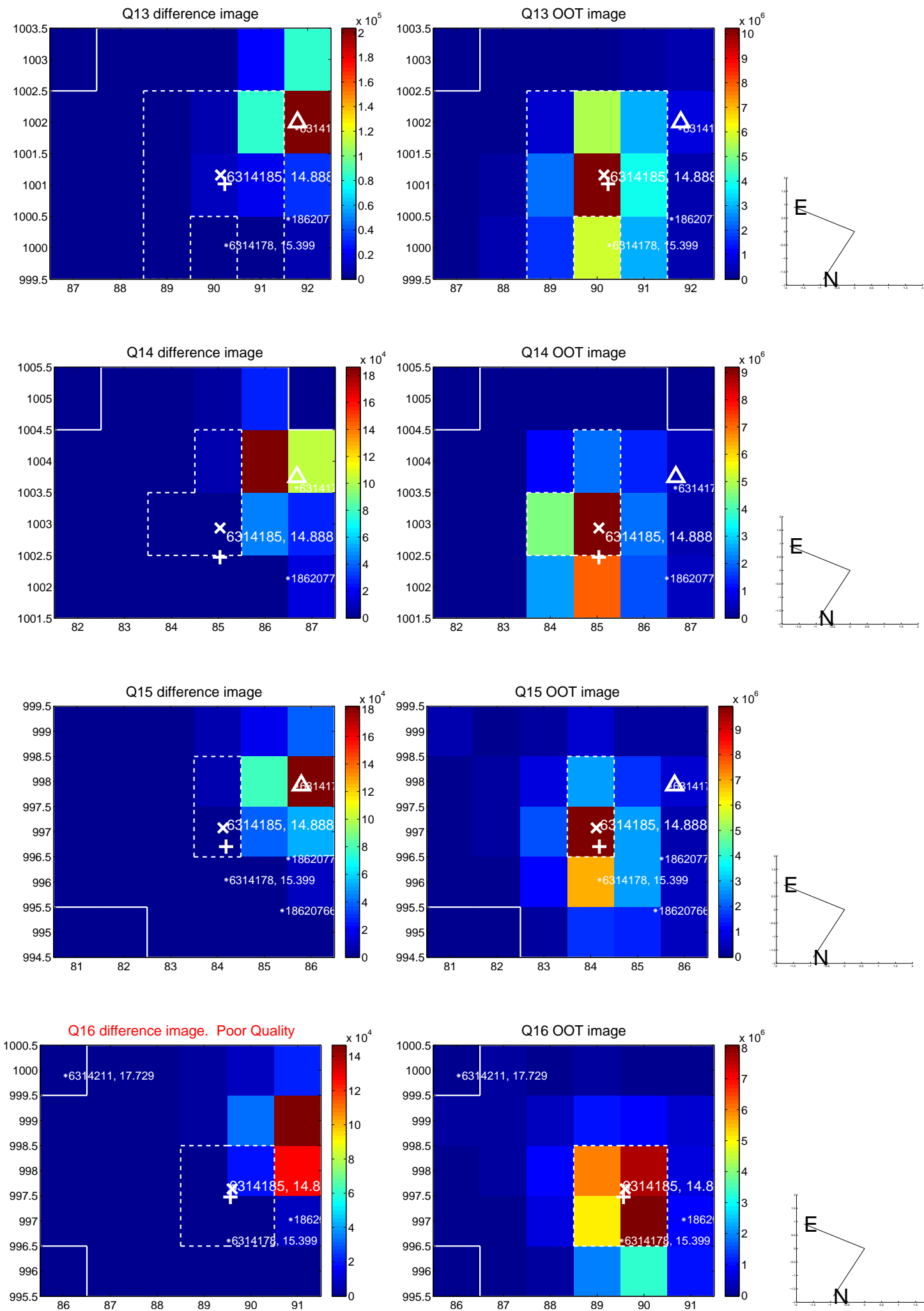
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



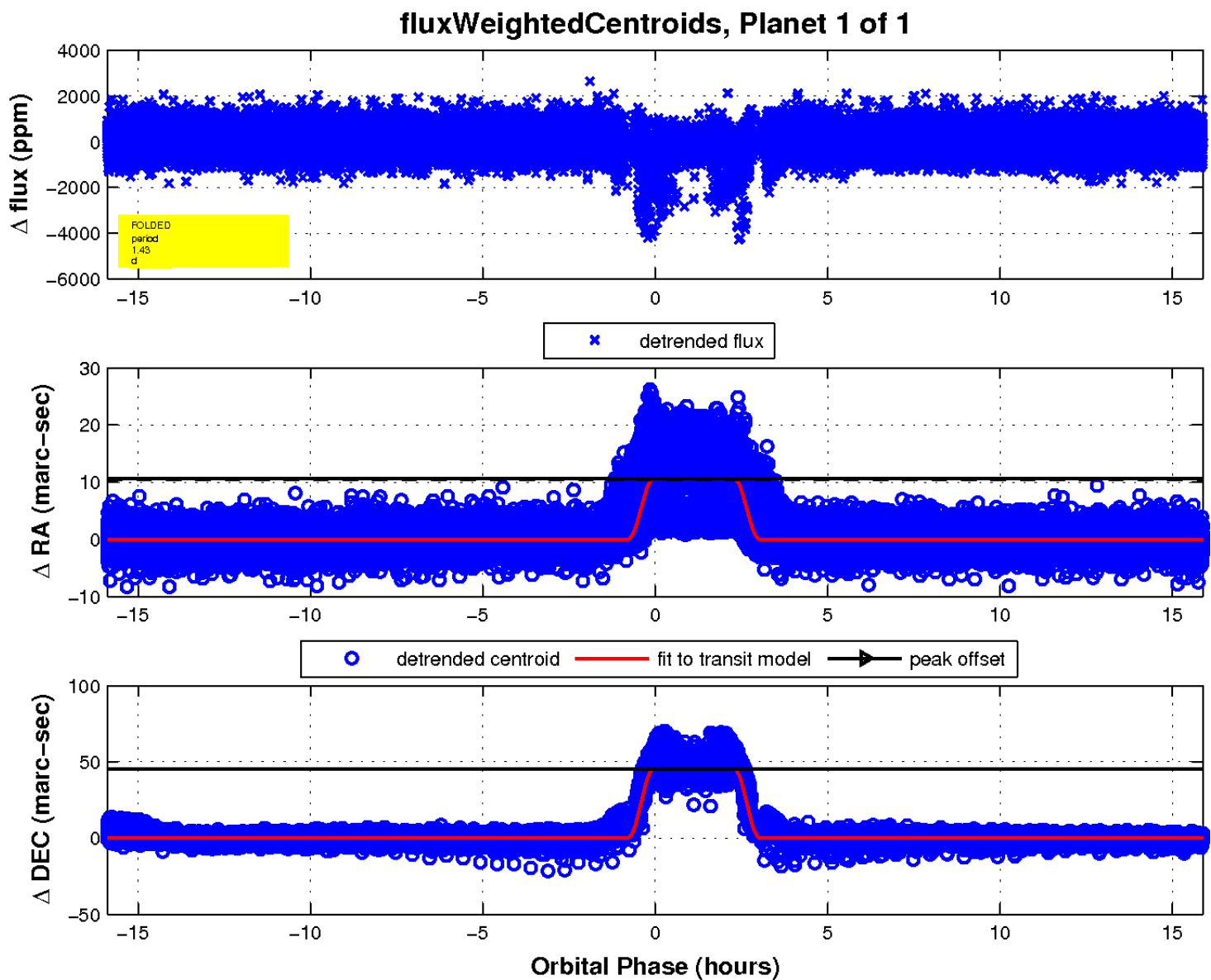
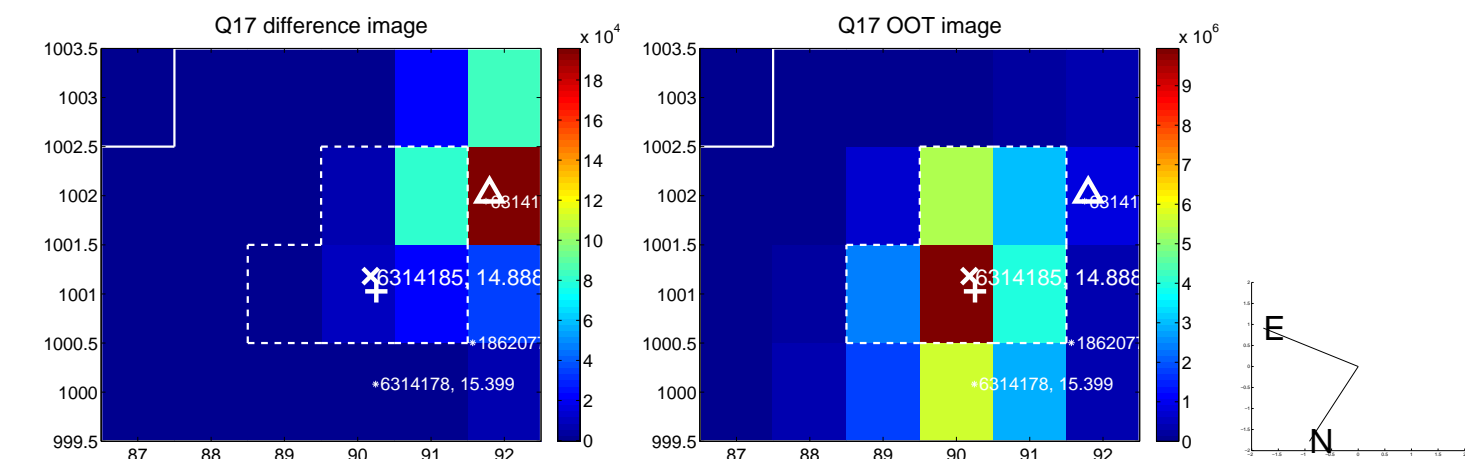
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

