

KIC 006603765

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})
006603765-01	OBS	6739.01	19.163955	139.830538	207.9	2.939	7.6	7.9	0.67	5103	1.14	17.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006603765-01	OBS	PC	0.65	0	0	0	0	NO_COMMENT

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.

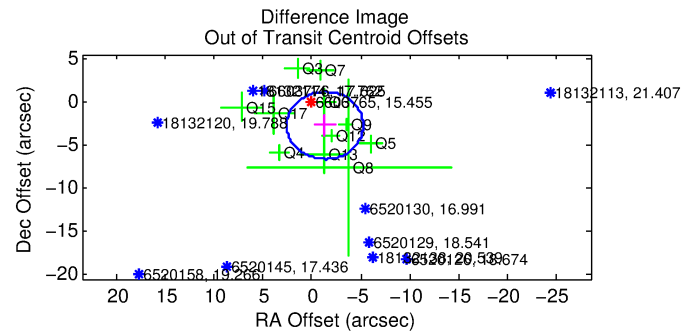
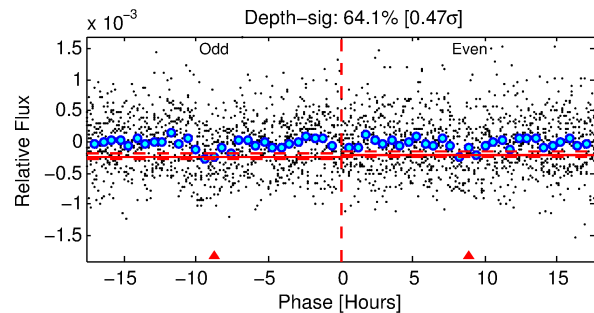
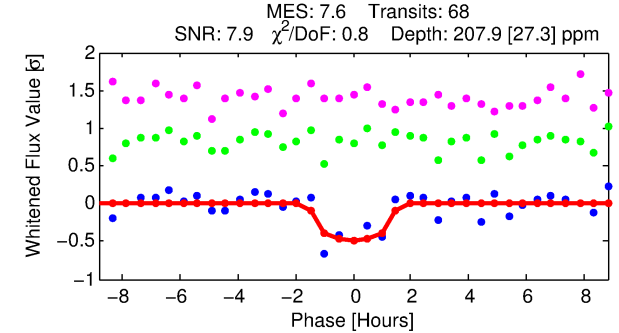
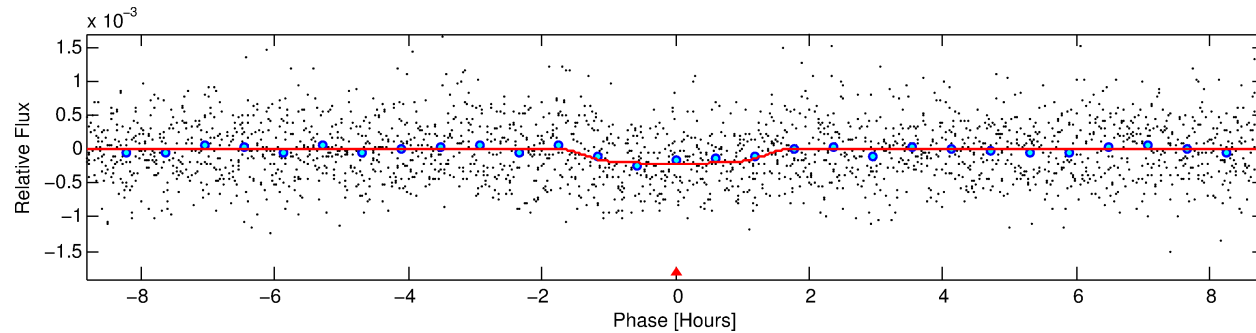
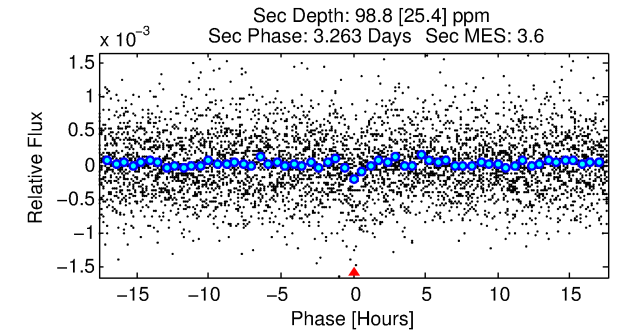
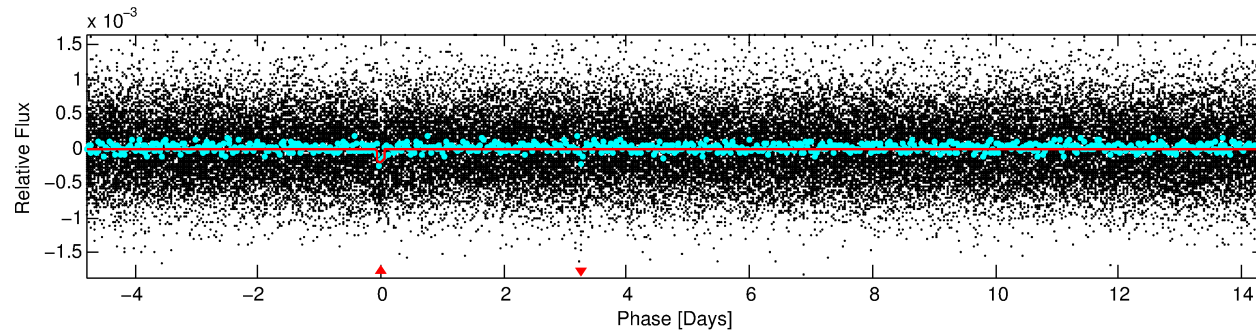
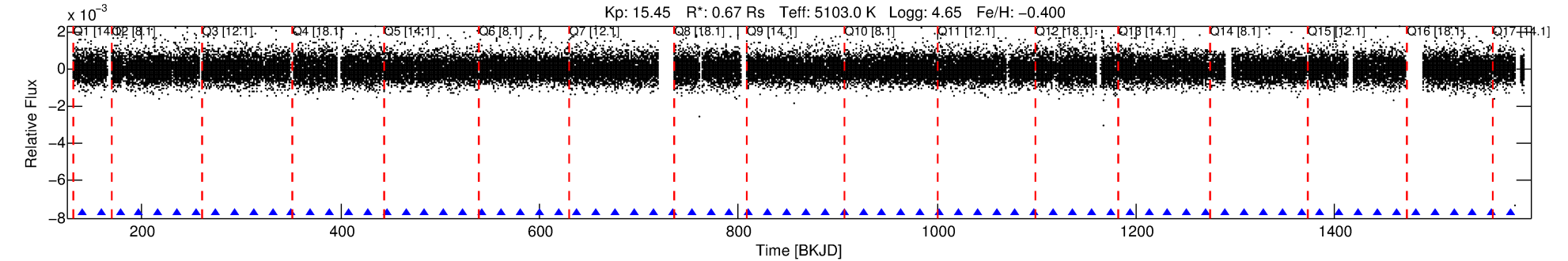
Ephemeris Match Information For 006603765-01

No Significant Match Found

DV One-Page Summary

KIC: 6603765 Candidate: 1 of 1 Period: 19.164 d

KOI: K06739.01 Corr: 0.975



DV Fit Results:

Period = 19.16396 [0.00022] d
Epoch = 139.8305 [0.0090] BKJD
Rp/R* = 0.0155 [0.0176]
a/R* = 26.15 [120.98]
b = 0.87 [1.33]
Seff = 17.17 [3.25]
Teff = 519 [25] K
Rp = 1.14 [1.30] Re
a = 0.1268 [0.0133] AU
Ag = 673.01 [1540.70] [0.44σ]
Teffp = 4087 [2338] K [1.53σ]

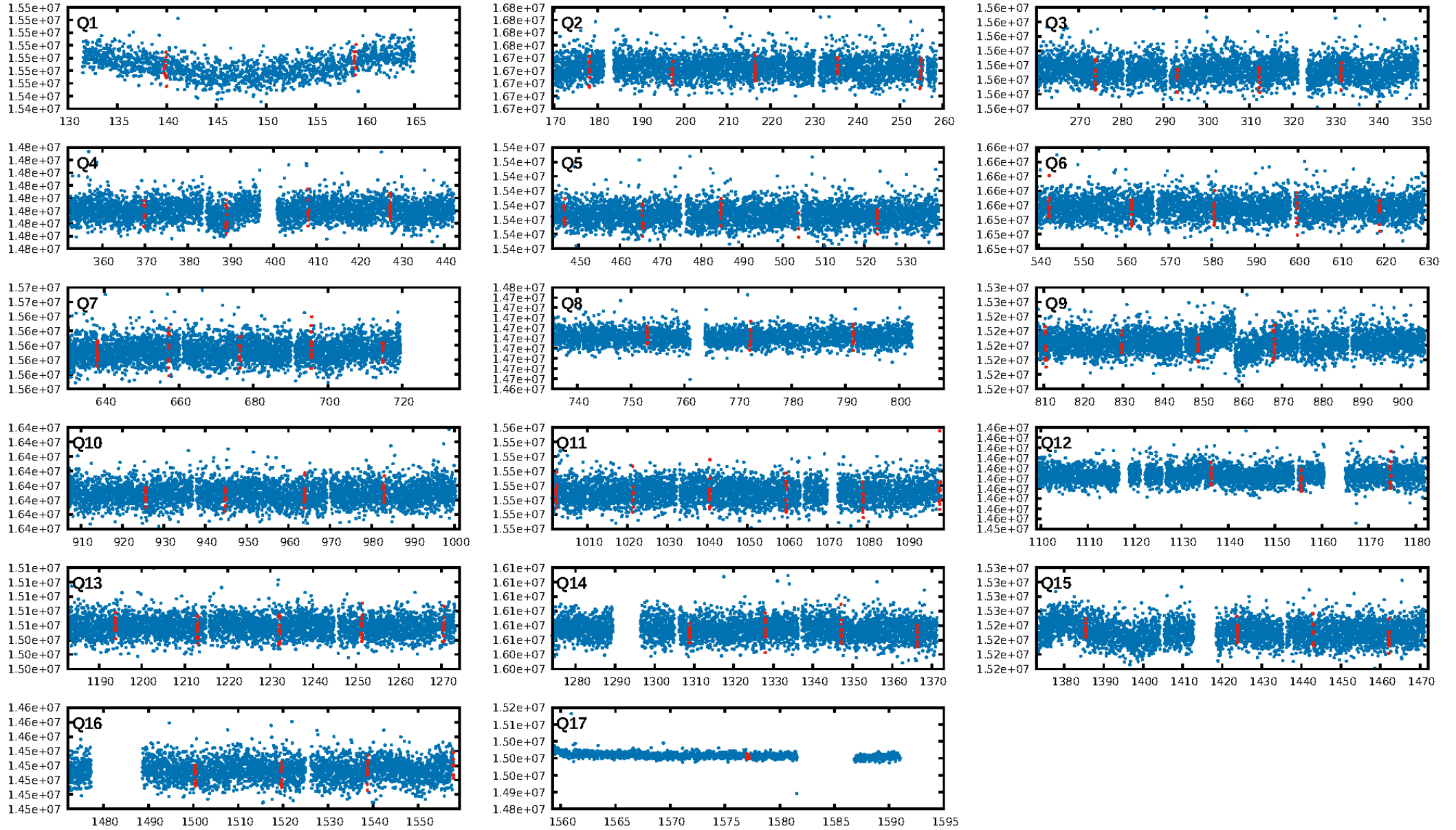
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 98.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.14e-14
RollingBand-fgt: 1.00 [65/65]
GhostDiagnostic-chr: 2.5
Centroid-sig: 0.1%
Centroid-so: 3.817 arcsec [2.04σ]
OotOffset-rm: 3.032 arcsec [2.33σ]
KicOffset-rm: 2.939 arcsec [2.38σ]
OotOffset-st: 1/3/3/4 [11]
KicOffset-st: 1/3/3/4 [11]
DiffImageQuality-fgm: 0.00 [0/11]
DiffImageOverlap-fno: 1.00 [17/17]

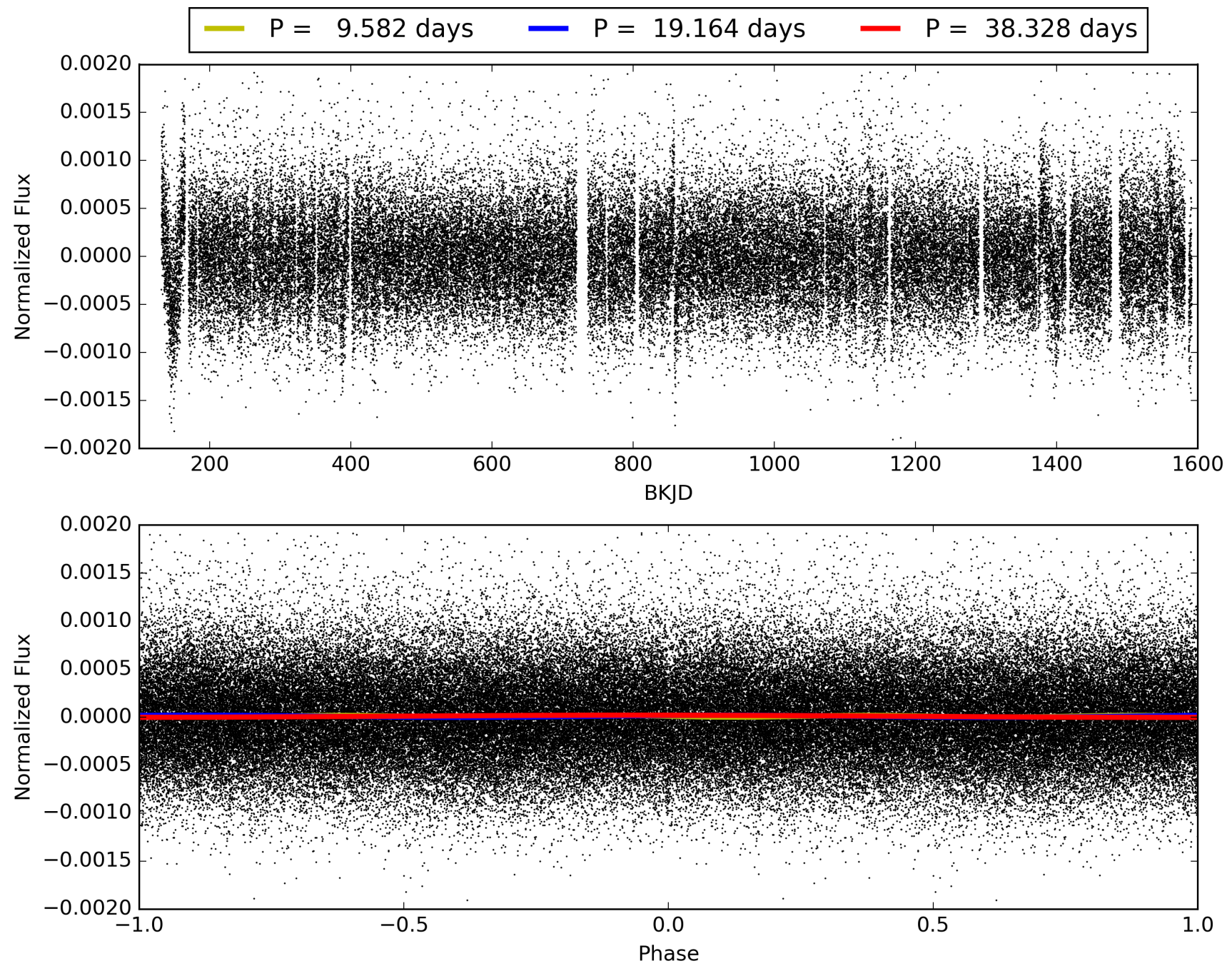
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 04:40:38 Z

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

TCE 006603765-01, PDC Light Curves

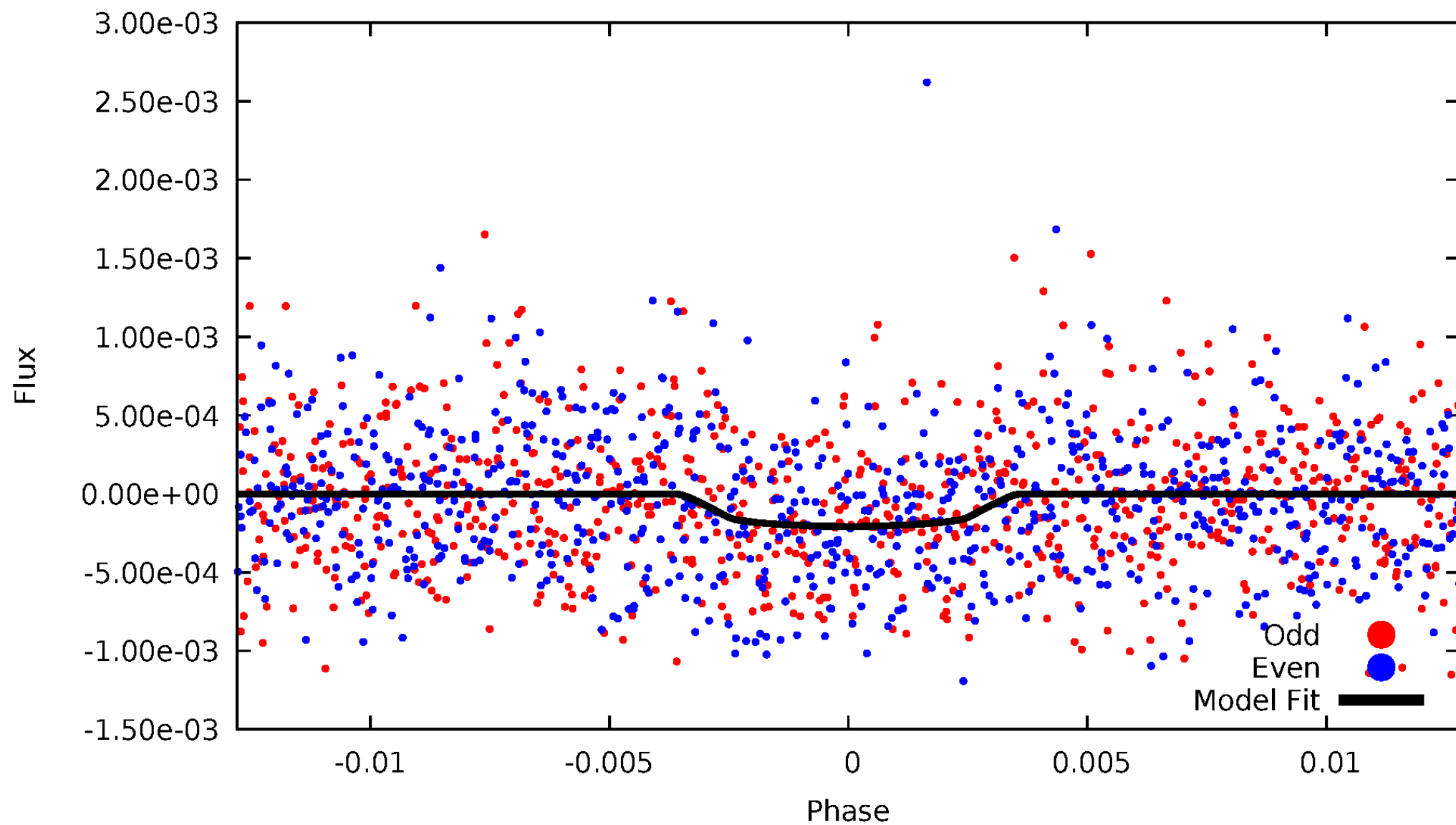


TCE 006603765-01



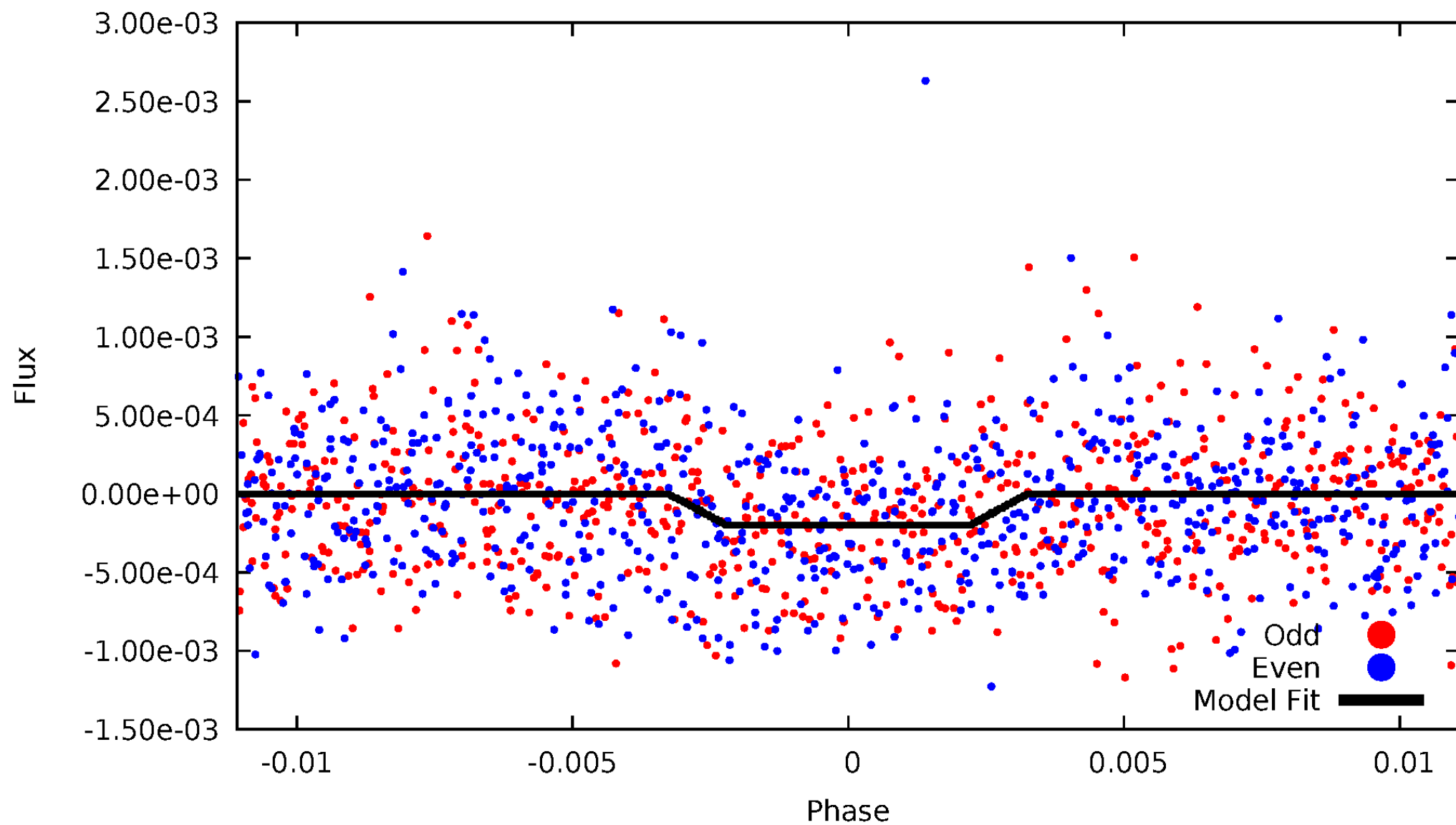
DV Odd/Even

TCE 006603765-01



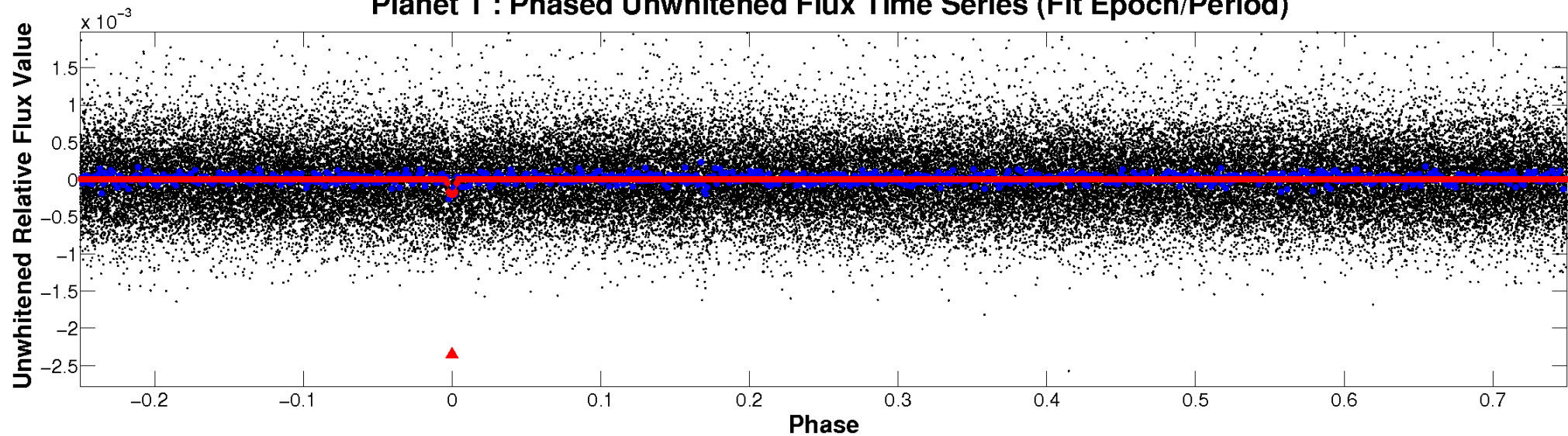
ALT Odd/Even

TCE 006603765-01

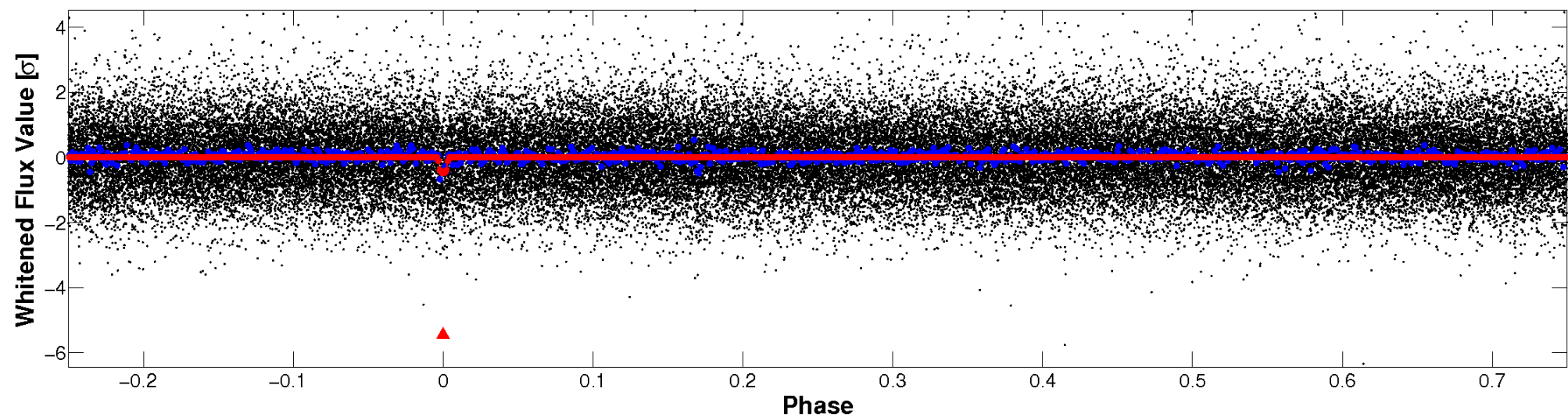


Non-Whitened Vs. Whitened Light Curve

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

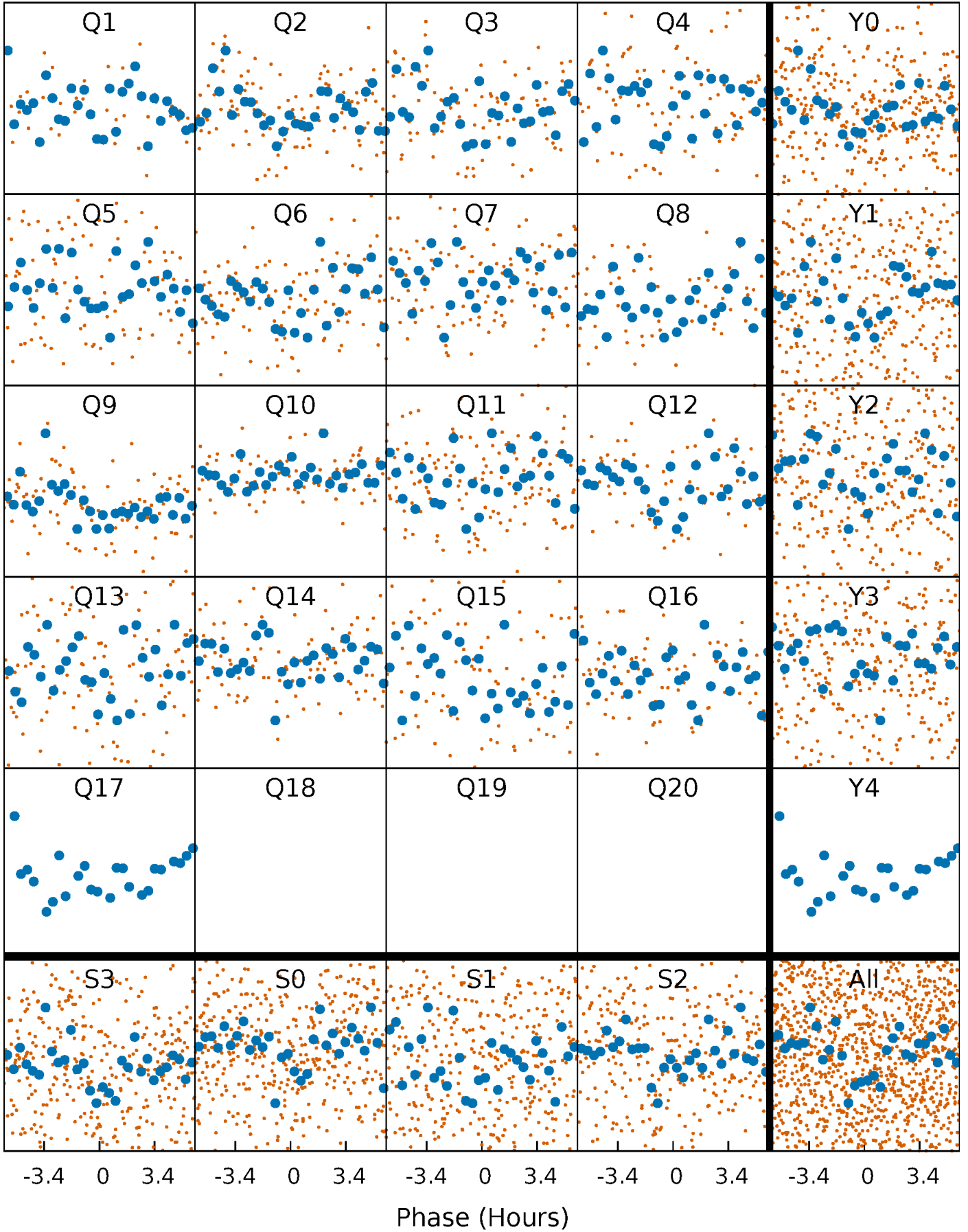


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



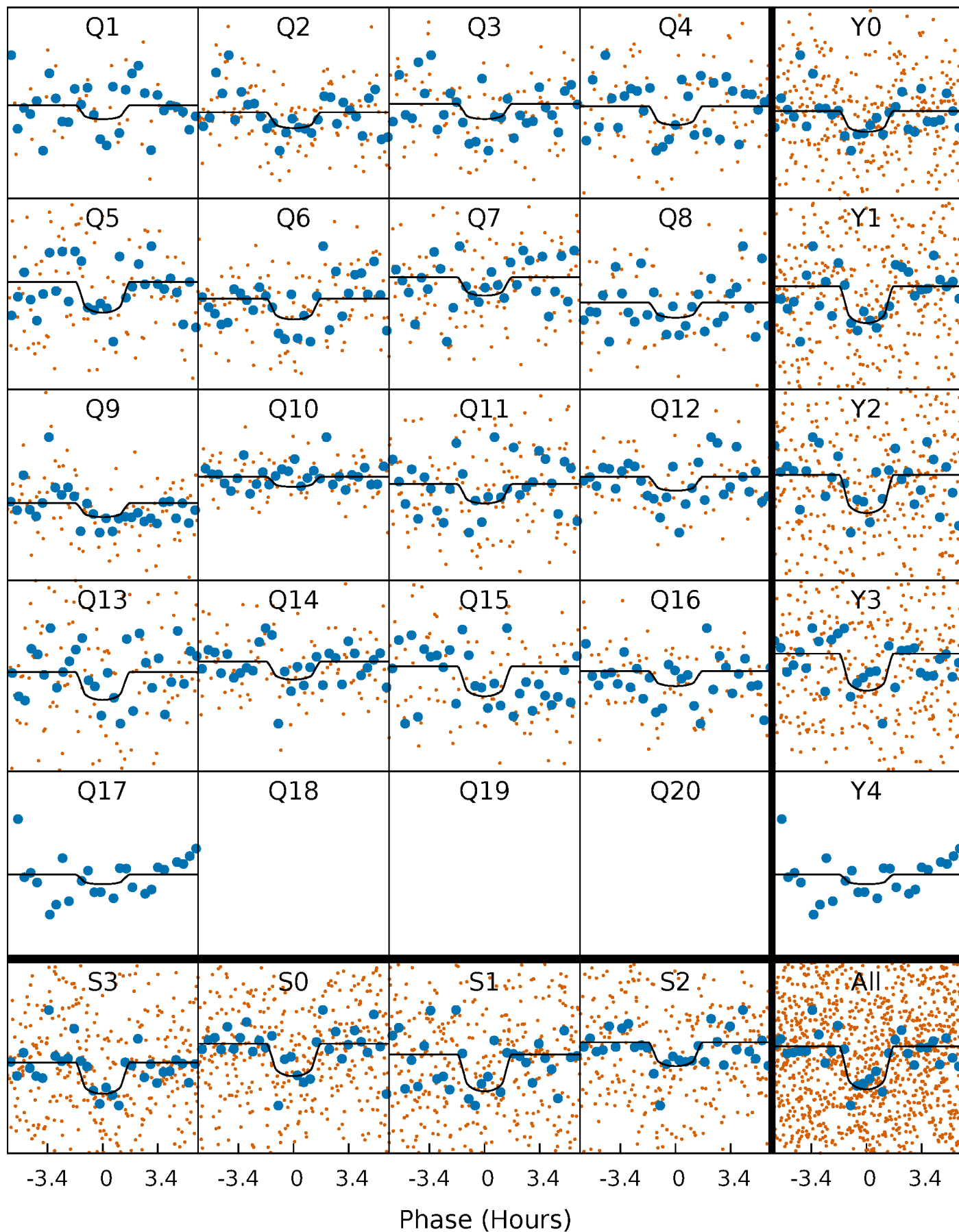
PDC Quarter-Phased Transit Curves

TCE 006603765-01 P= 19.163955 Days $T_0=139.830538$ (BKJD)



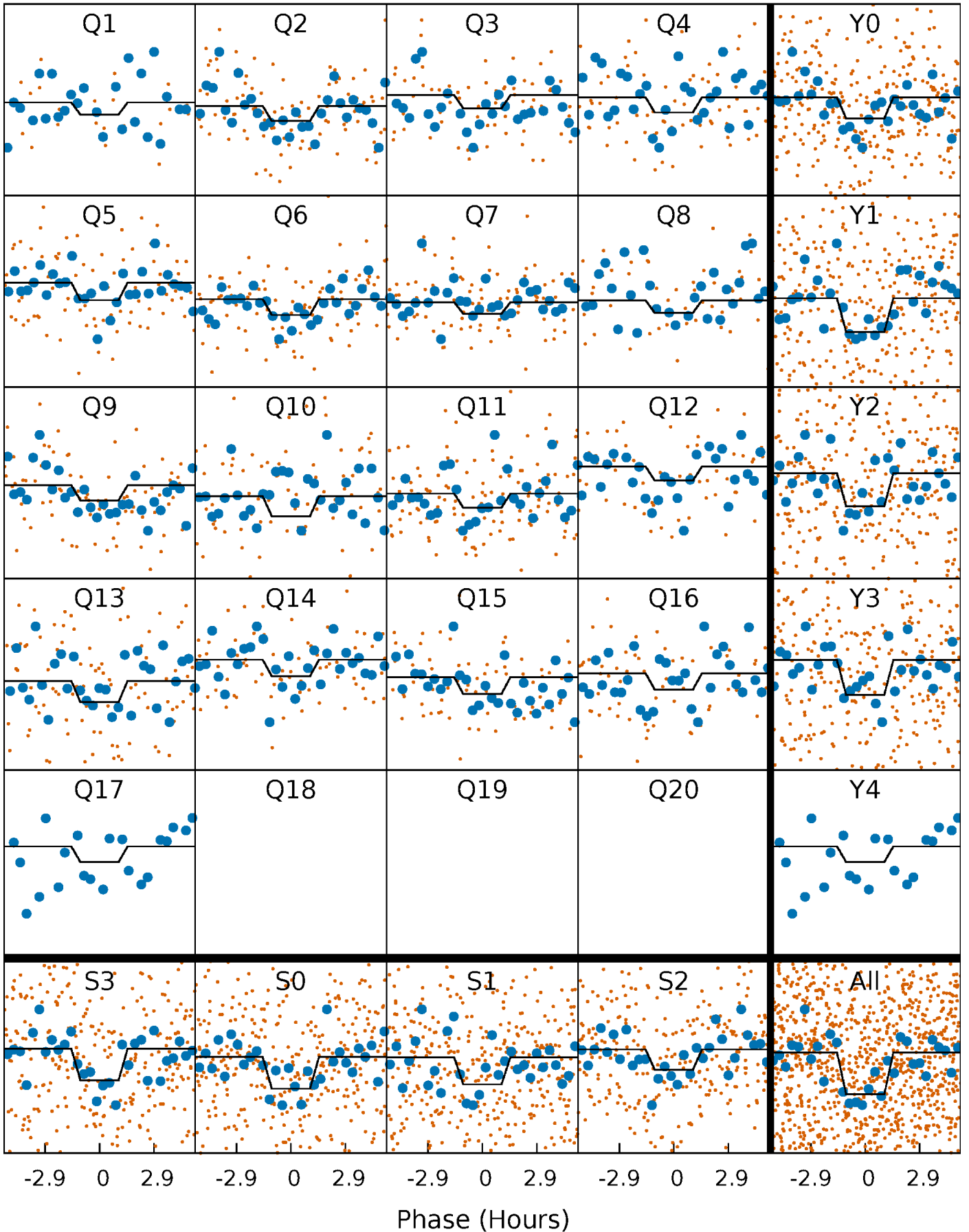
DV Quarter-Phased Transit Curves

TCE 006603765-01 P= 19.163955 Days $T_0=139.830538$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

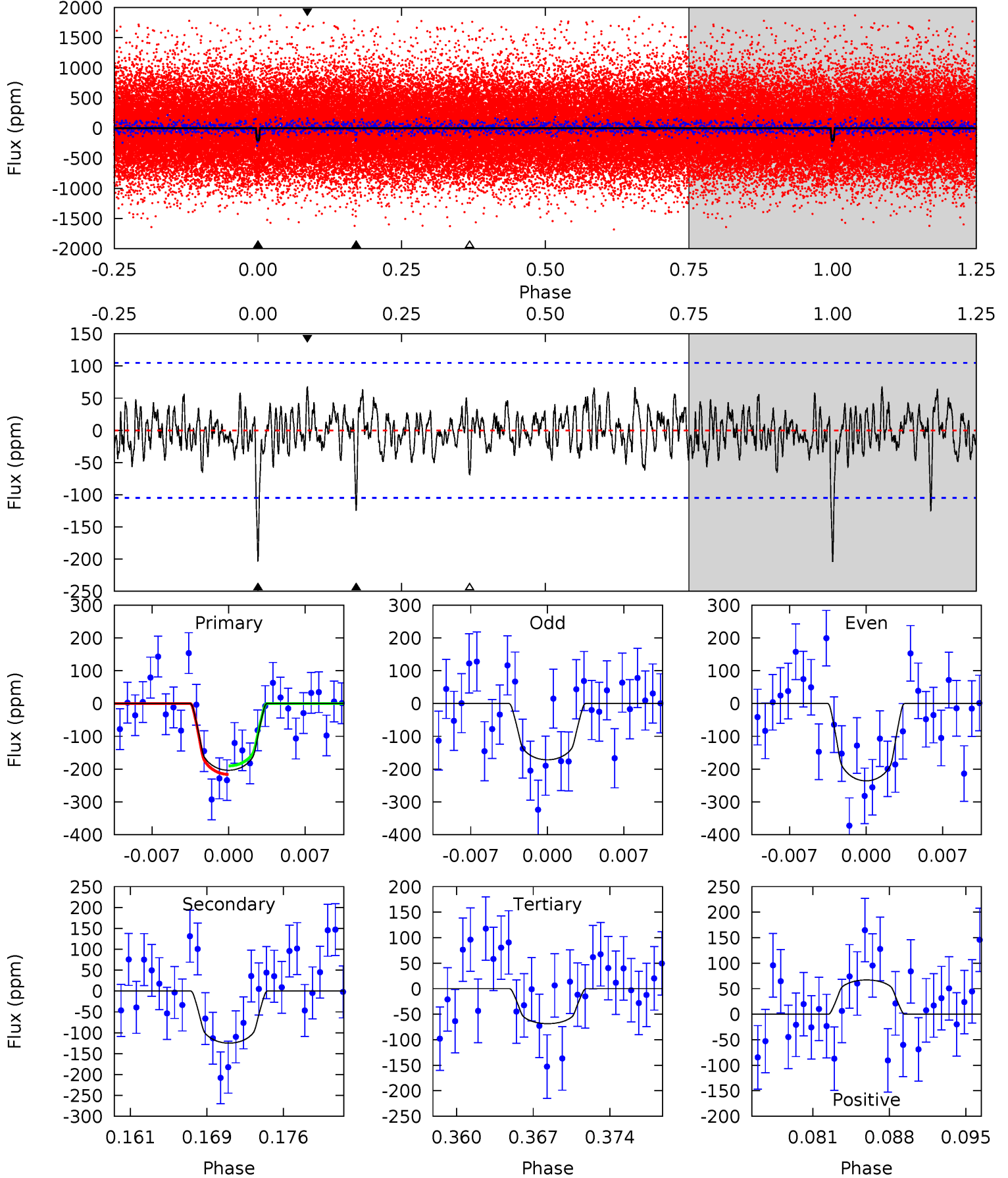
TCE 006603765-01 P= 19.164274 Days $T_0=139.819247$ (BKJD)



DV Model-Shift Uniqueness Test

006603765-01, P = 19.163955 Days, E = 120.666583 Days

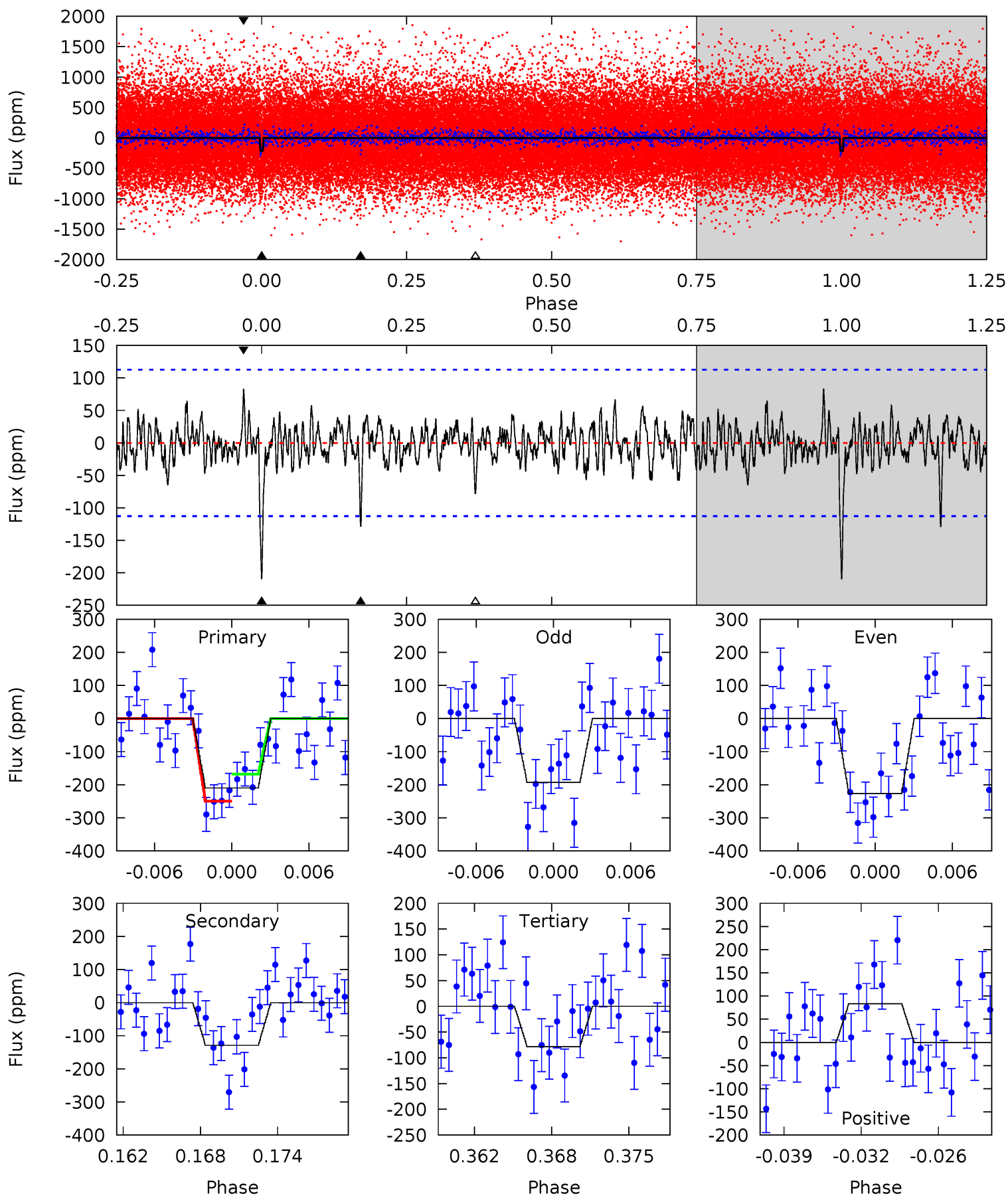
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.87	6.05	3.32	3.26	5.09	2.68	1.19	6.55	6.61	2.73	2.80	1.56	0.93	0.25	0.63



Alt Model-Shift Uniqueness Test

006603765-01, $P = 19.164274$ Days, $E = 120.654973$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.51	5.85	3.55	3.79	5.11	2.72	1.07	5.96	5.72	2.31	2.07	0.77	1.02	0.28	1.85



Stellar Parameters For KIC 006603765

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5103^{+153}_{-138}	$4.650^{+0.033}_{-0.077}$	$-0.400^{+0.350}_{-0.300}$	$0.674^{+0.088}_{-0.052}$	$0.747^{+0.073}_{-0.073}$	$3.441^{+0.479}_{-0.902}$
	+3%/-3%	+1%/-2%	+87%/-75%	+13%/-8%	+10%/-10%	+14%/-26%
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 006603765-01 / KOI 6739.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-125 ± 21	$1.44^{+1.23}_{-0.89}$	732^{+28}_{-25}	4097^{+2270}_{-719}	519^{+3401}_{-362}
Alt.	-129 ± 22	$1.36^{+1.26}_{-0.89}$	731^{+30}_{-25}	4197^{+2488}_{-827}	581^{+4395}_{-421}

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 $A_{obs} \gg 1.0$

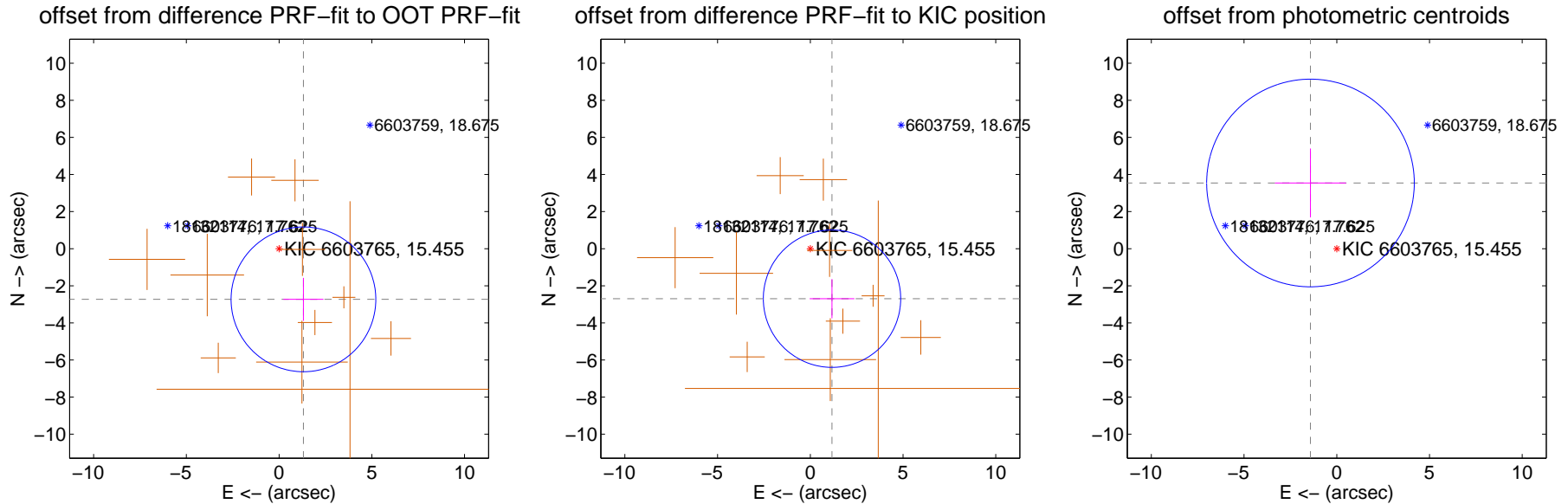
DV Centroid Data

Supplemental centroid analysis for 006603765-01. Kepler magnitude: 15.46. Transit SNR 7.92

There are 0 quarters with good PRF difference image offsets

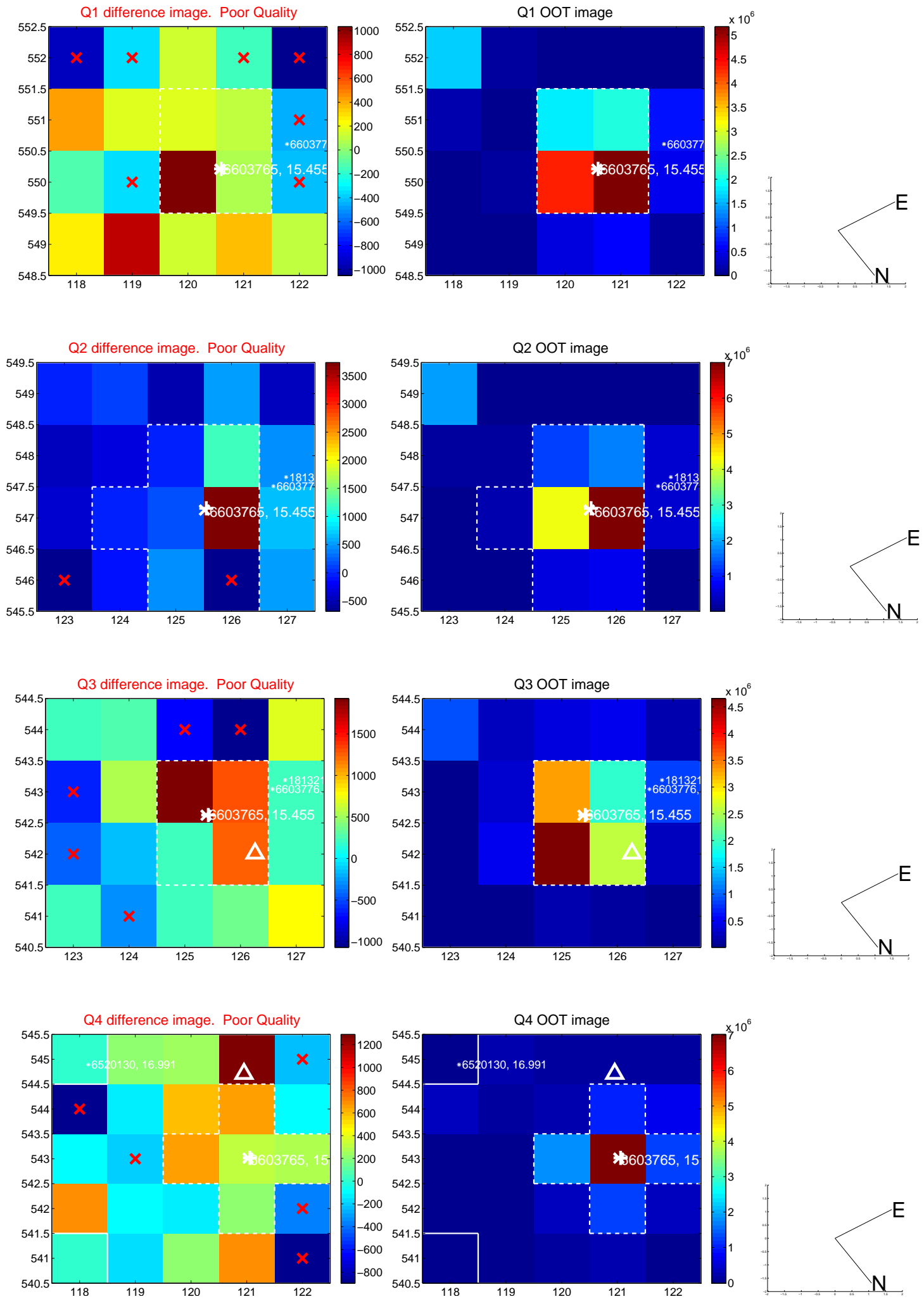
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.032 ± 1.301	2.33	-1.314 ± 1.079	-2.732 ± 1.157
PRF-fit source offset from KIC position	2.939 ± 1.235	2.38	-1.170 ± 1.204	-2.696 ± 1.056
photometric centroid source offset	3.82 ± 1.87	2.04	1.42 ± 1.92	3.54 ± 1.86

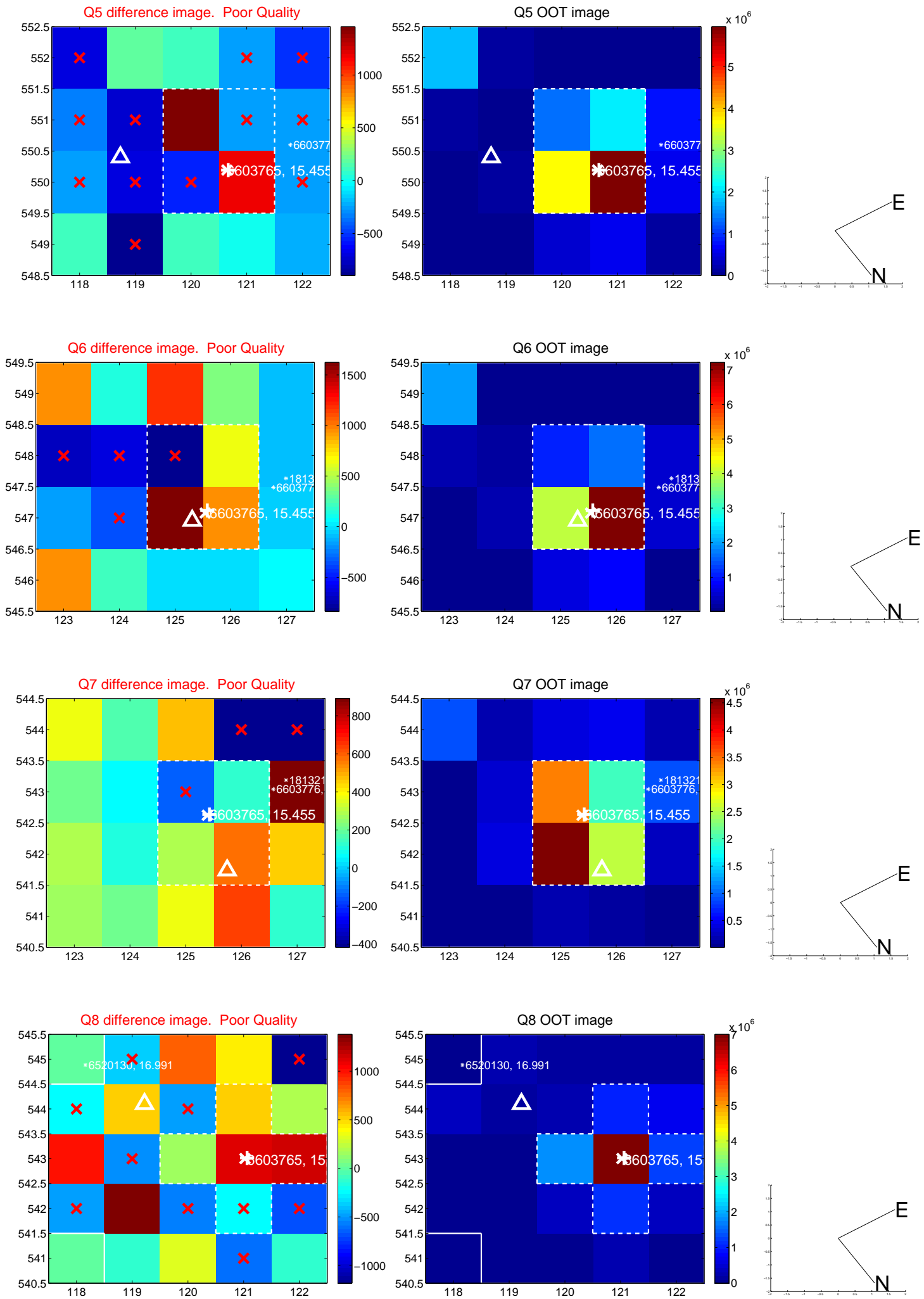


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

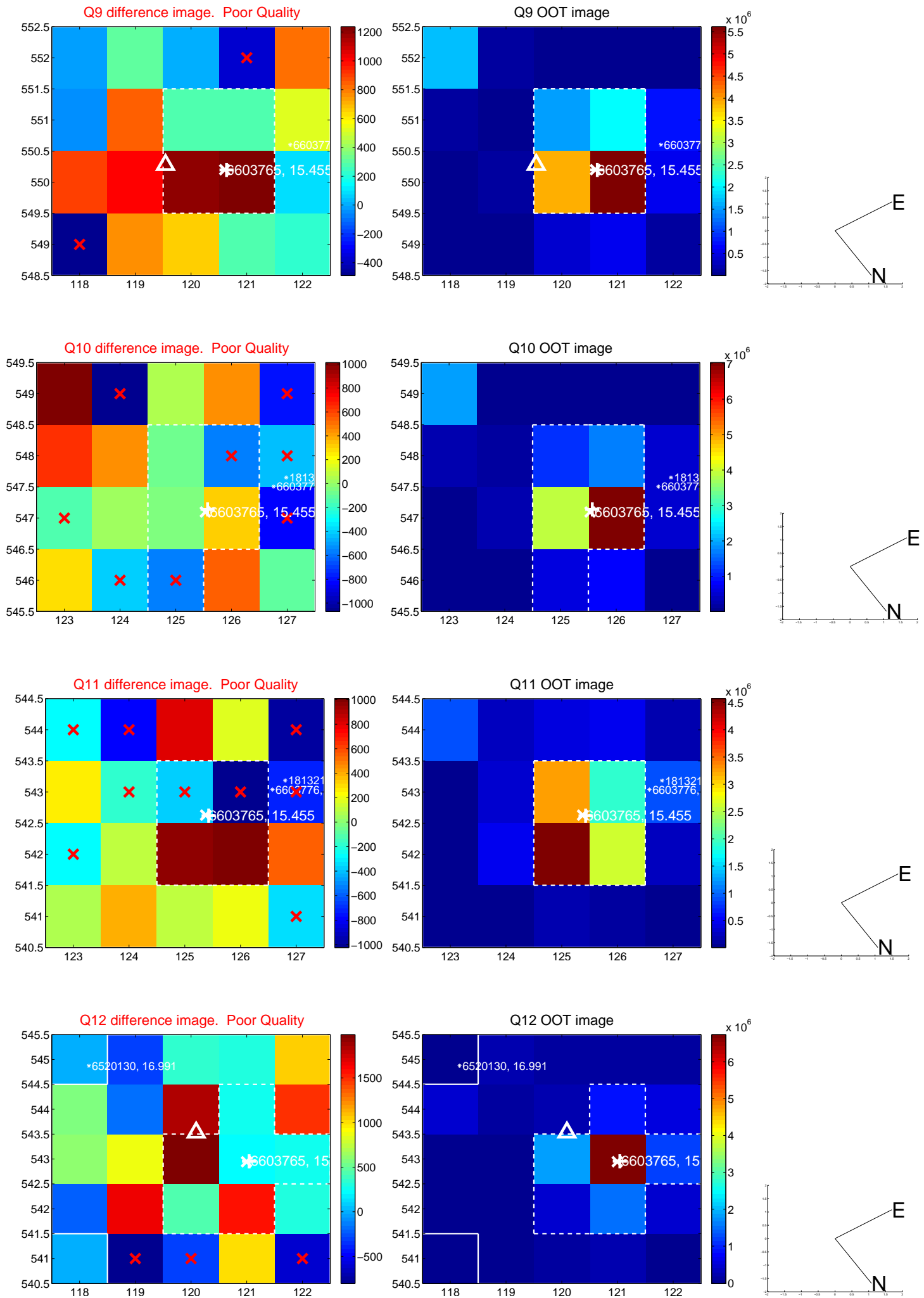
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



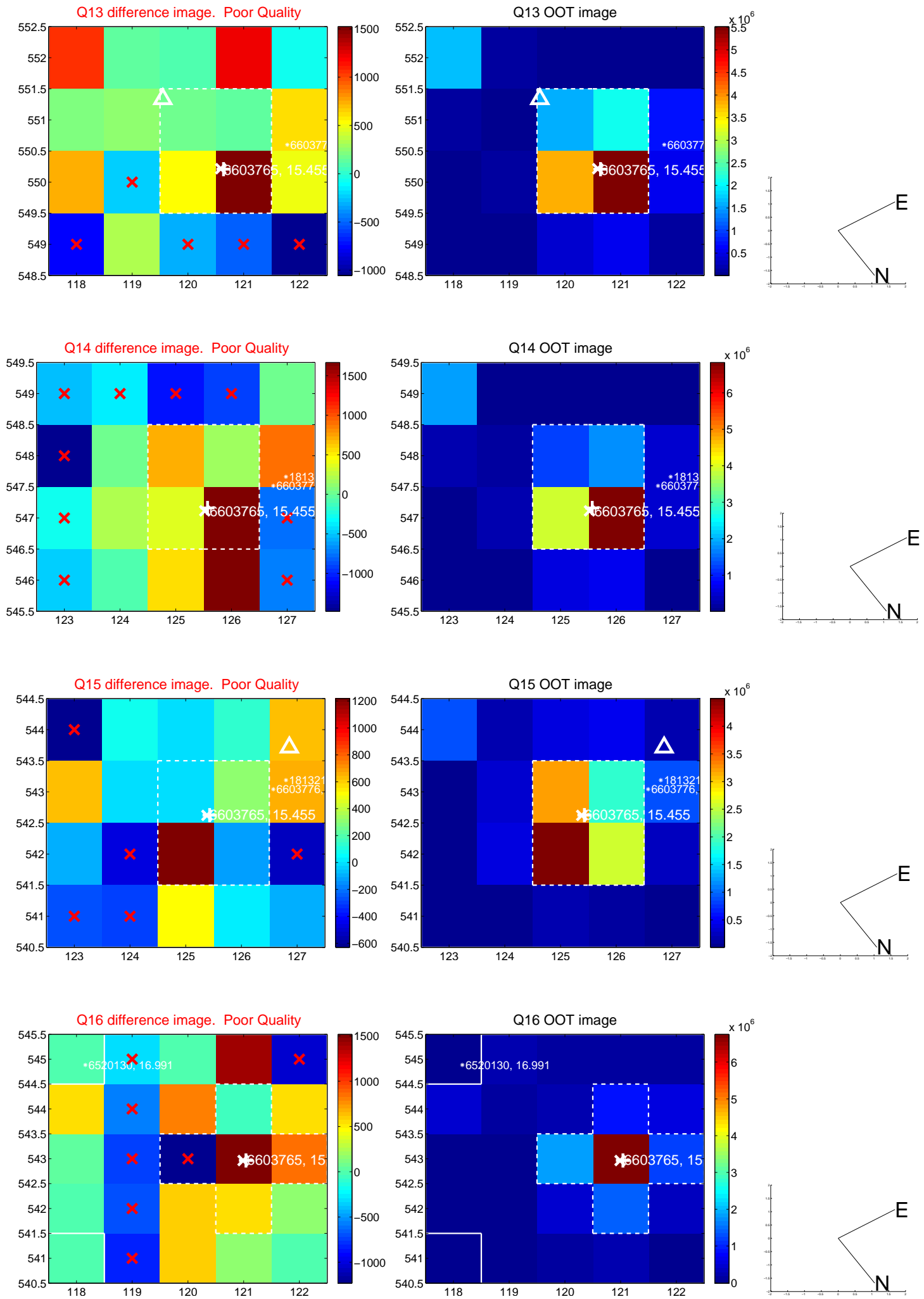
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



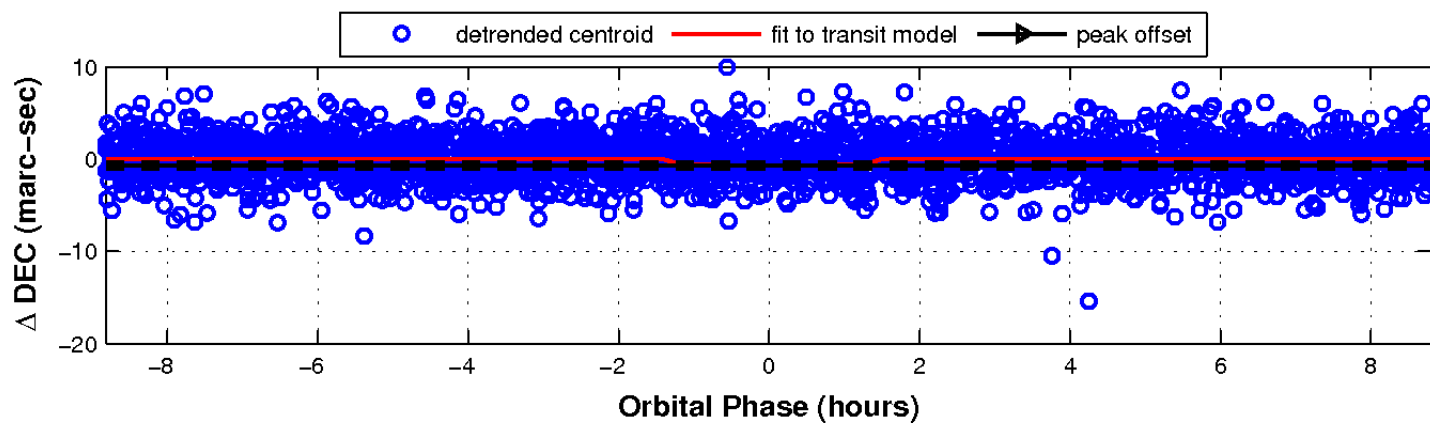
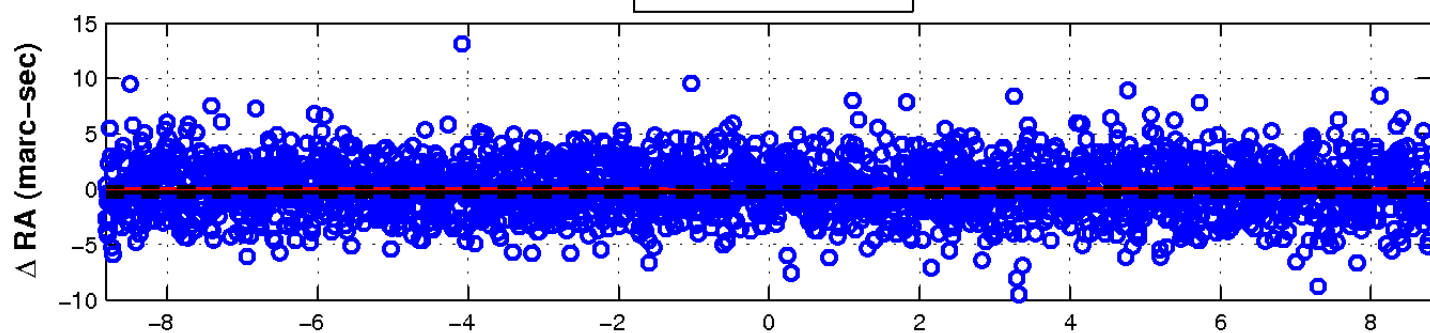
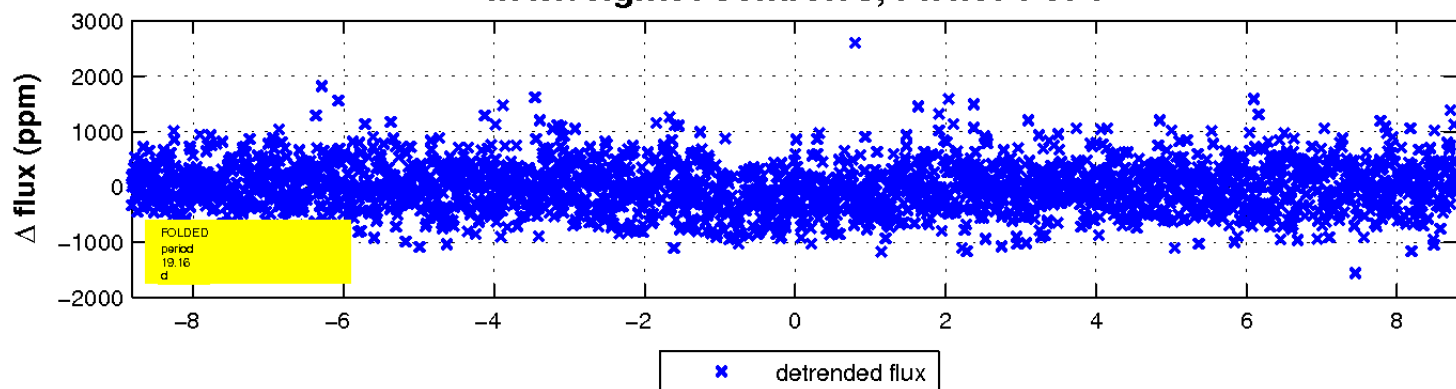
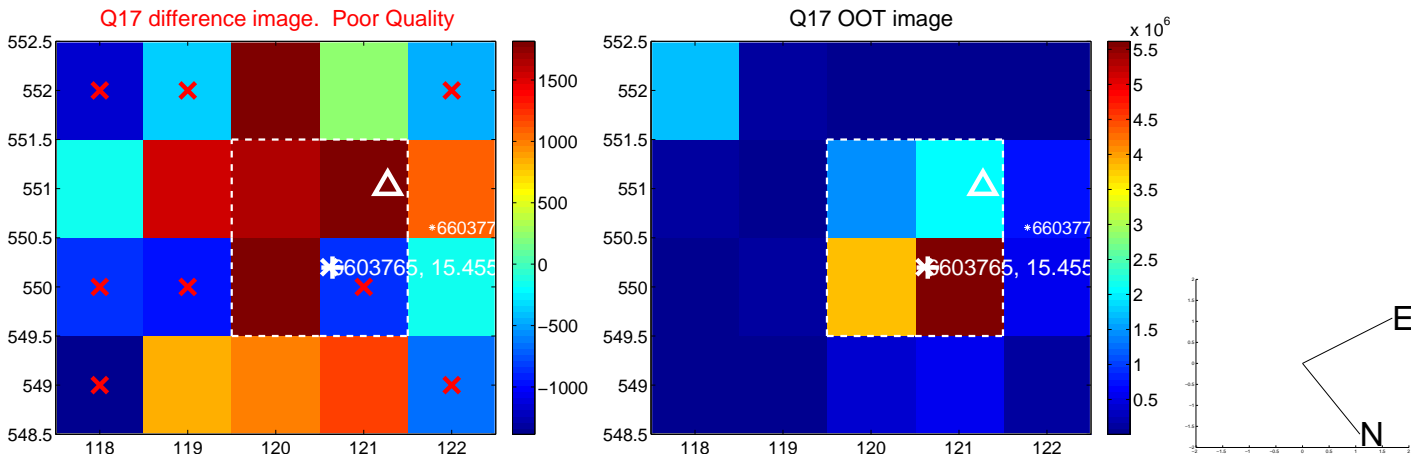
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white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

