

KIC 005263167

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})
005263167-01	OBS	6546.01	3.393977	134.379160	89.5	2.915	8.6	8.8	1.03	6181	1.15	689.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005263167-01	OBS	PC	0.78	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.

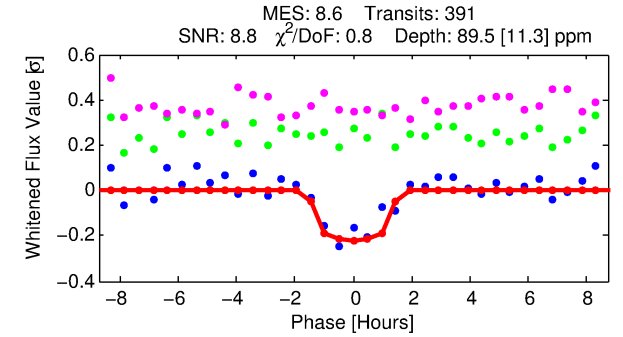
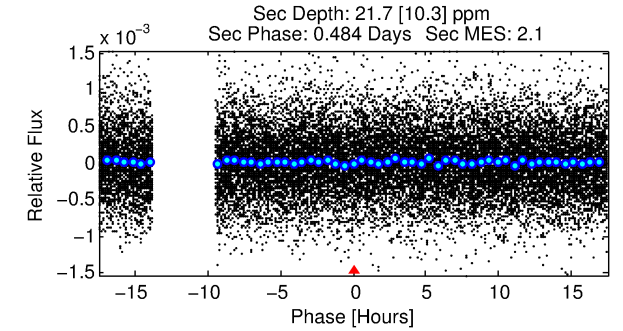
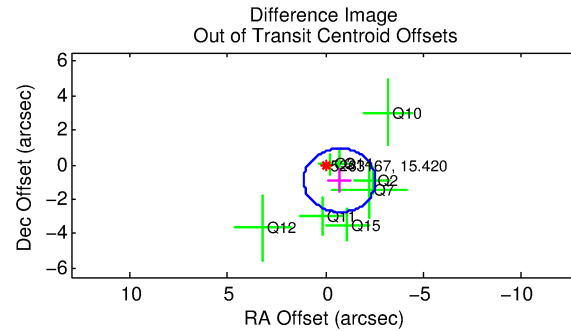
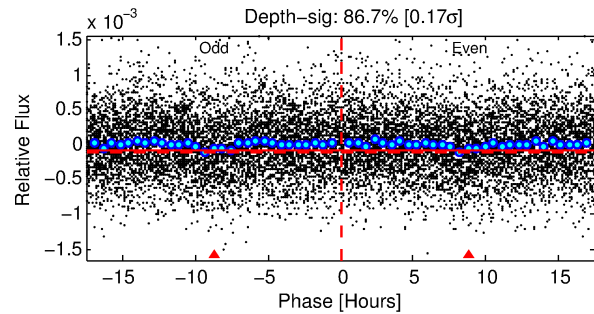
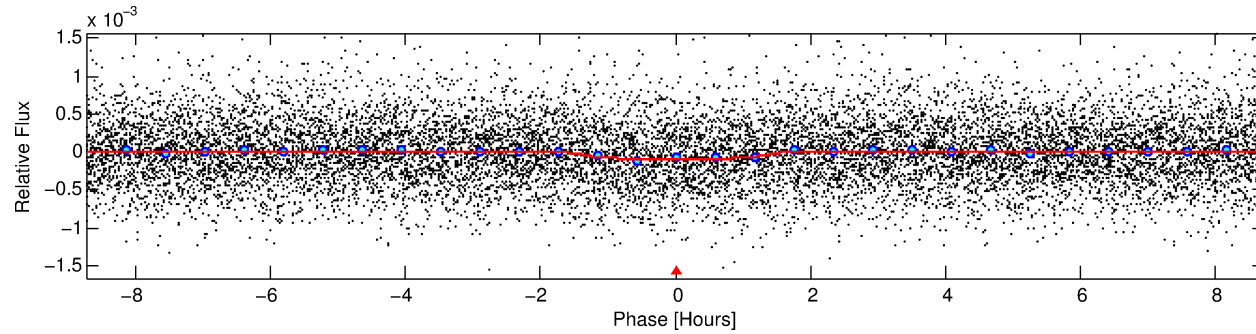
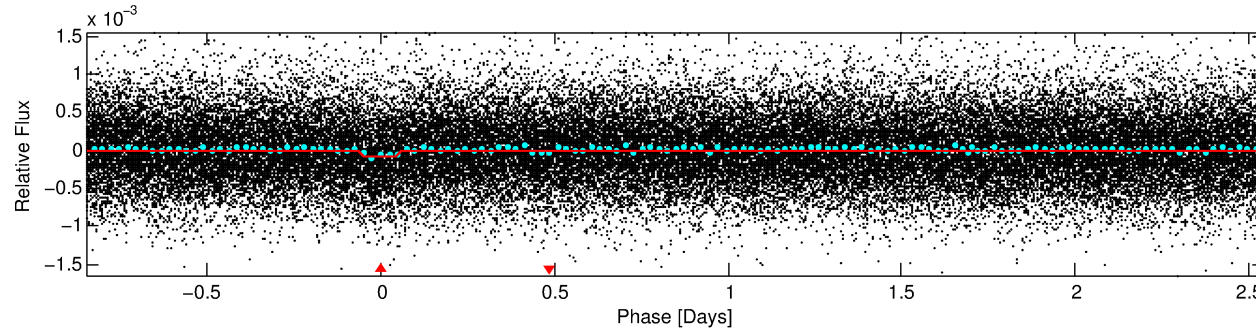
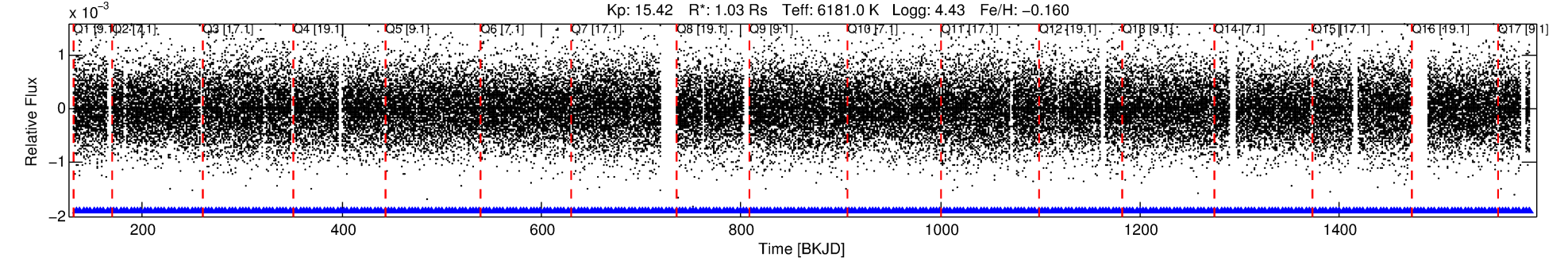
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005263167-01

No Significant Match Found

DV One-Page Summary

KIC: 5263167 Candidate: 1 of 1 Period: 3.394 d
KOI: K06546.01 Corr: 0.954



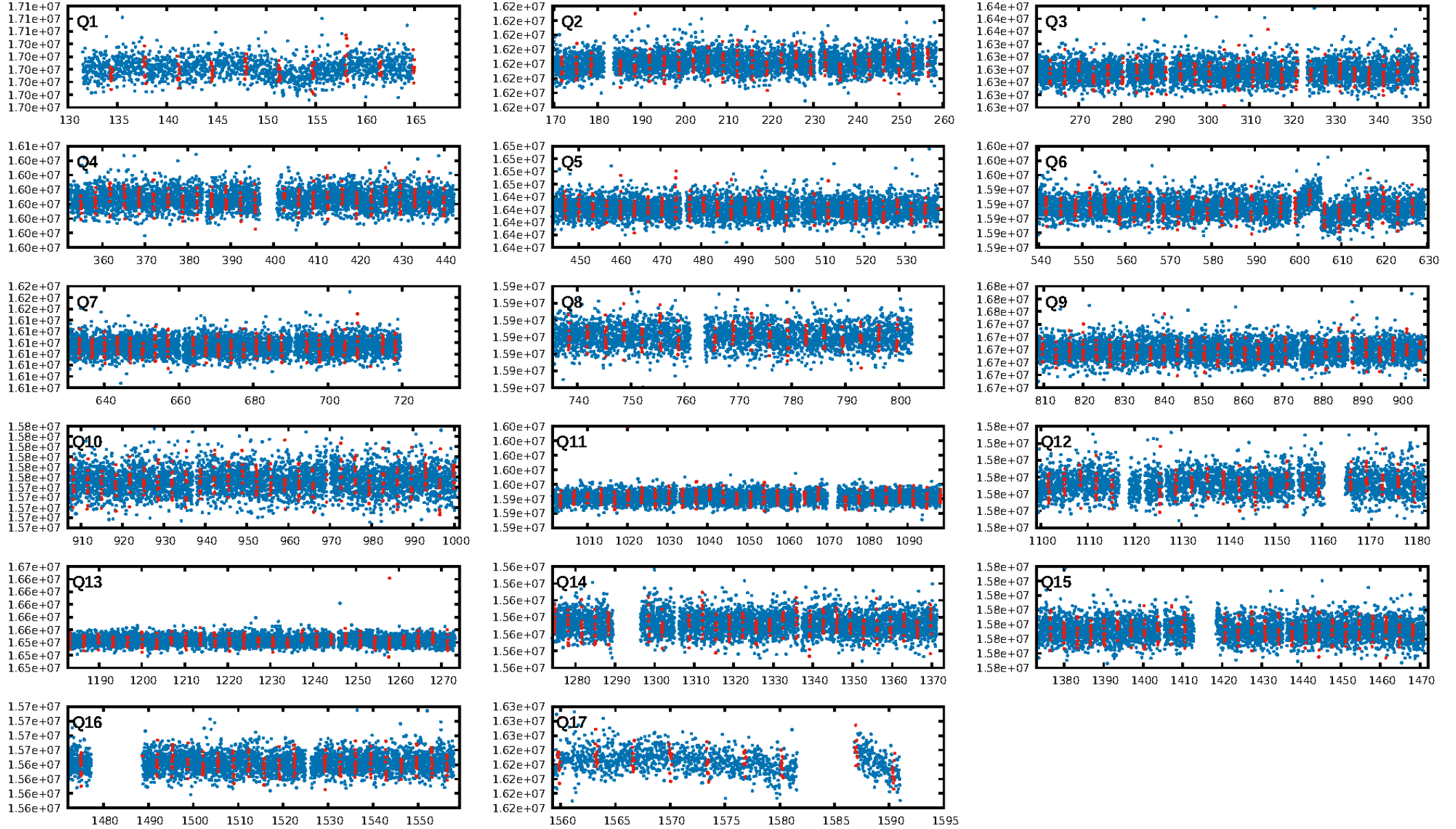
DV Fit Results:

Period = 3.39398 [0.00003] d
Epoch = 134.3792 [0.0055] BKJD
Rp/R* = 0.0102 [0.0072]
a/R* = 4.16 [15.06]
b = 0.90 [0.81]
Seff = 689.38 [284.08]
Teff = 1307 [135] K
Rp = 1.15 [0.89] Re
a = 0.0448 [0.0119] AU
Ag = 18.28 [28.18] [0.61 σ]
Teffp = 4177 [1566] K [1.83 σ]

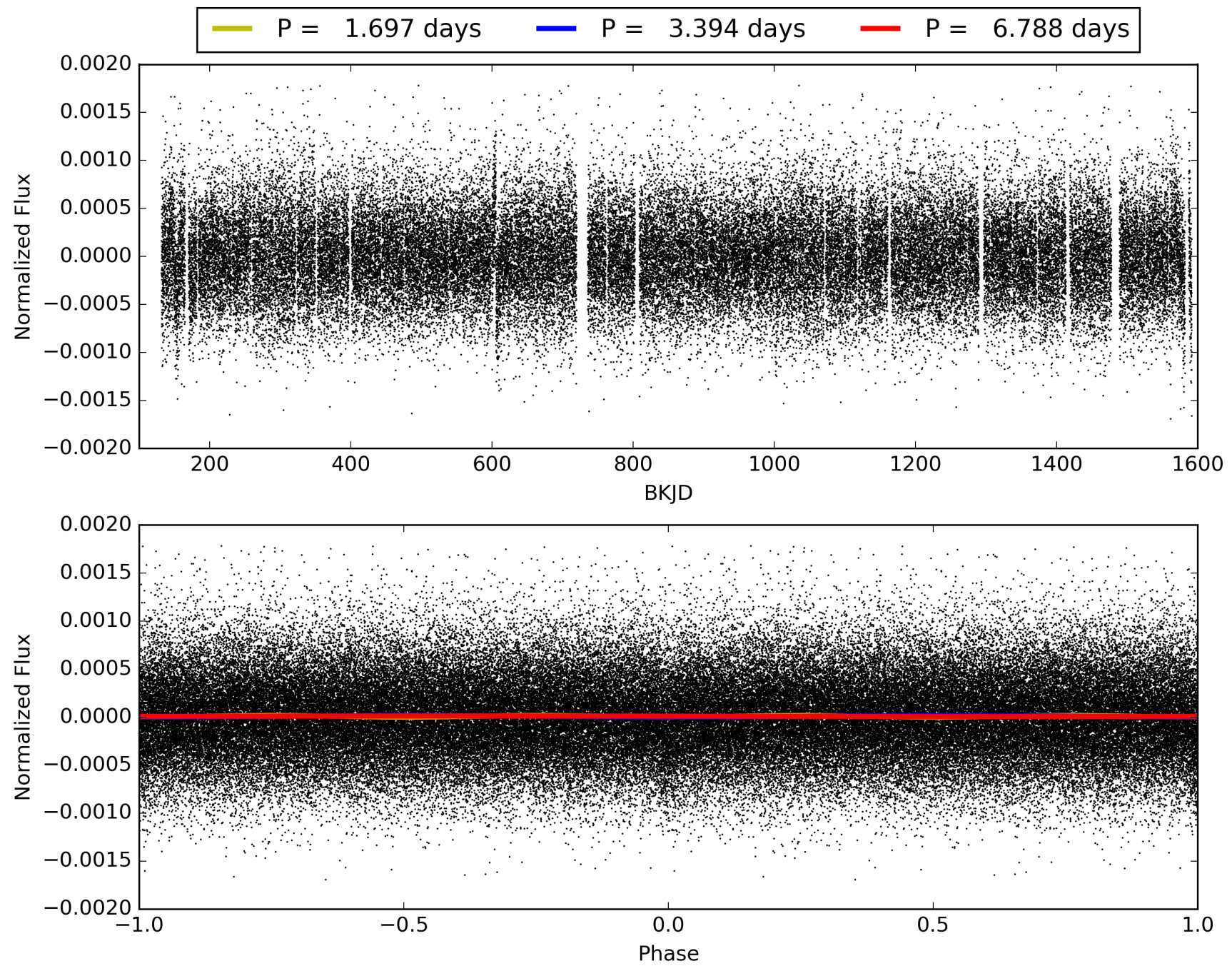
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.25e-18
RollingBand-fgt: 1.00 [372/372]
GhostDiagnostic-chr: -10.79
Centroid-sig: 1.7%
Centroid-so: 3.281 arcsec [1.85 σ]
OotOffset-rm: 1.163 arcsec [1.90 σ]
KicOffset-rm: 1.129 arcsec [1.88 σ]
OotOffset-st: 3/4/1/0 [8]
KicOffset-st: 3/4/1/0 [8]
DiffImageQuality-fgm: 0.38 [3/8]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 005263167-01, PDC Light Curves

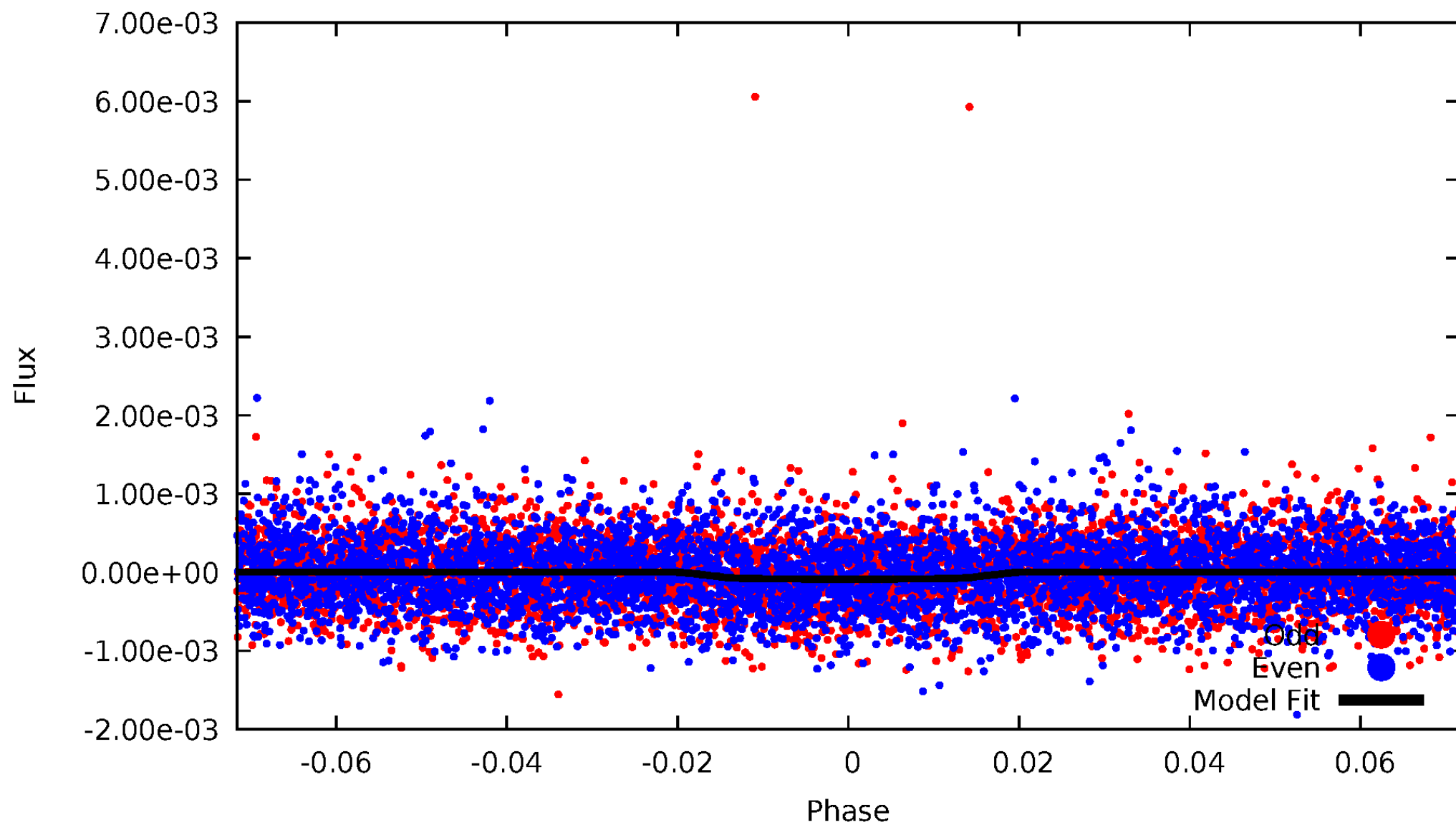


TCE 005263167-01



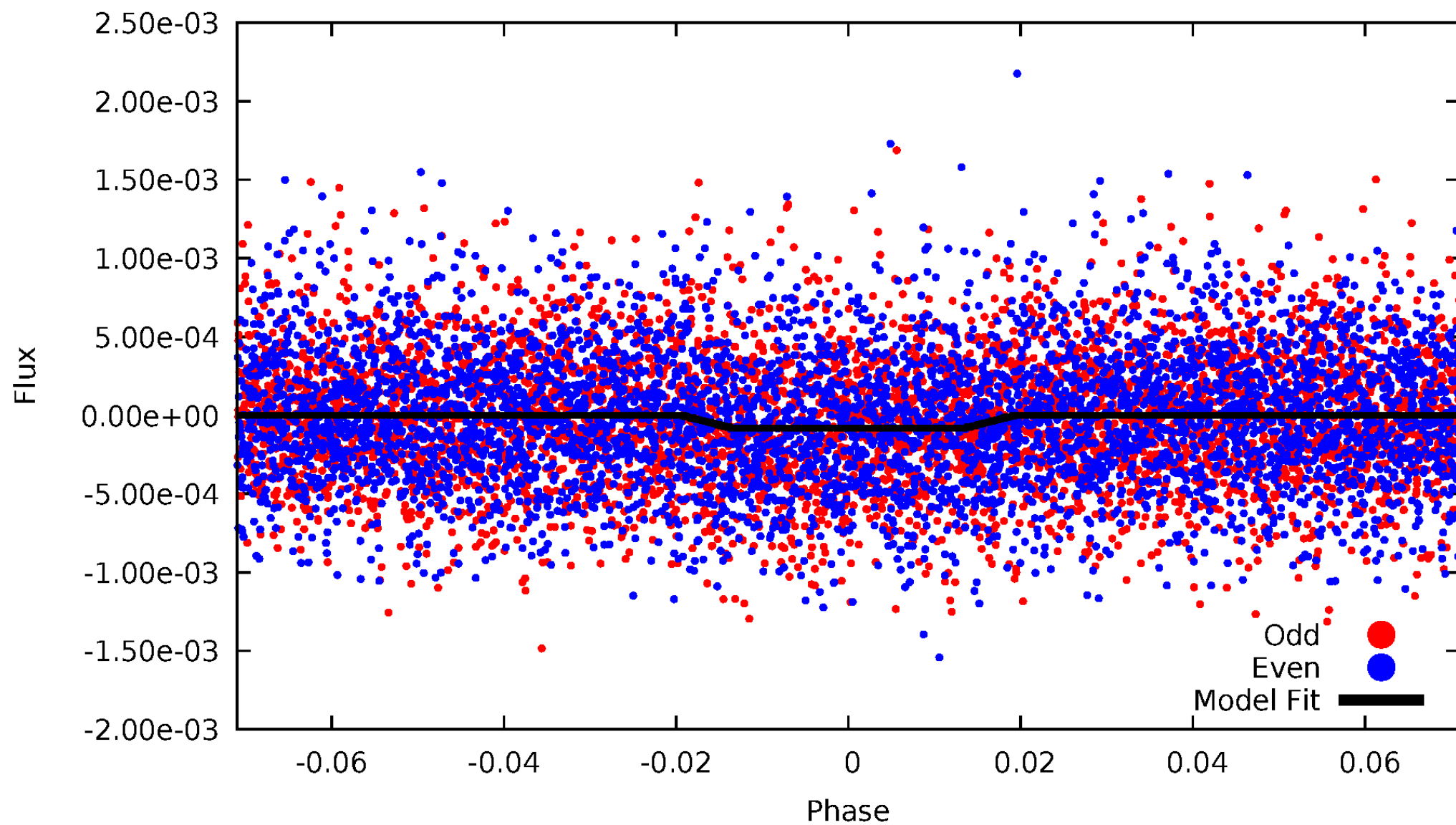
DV Odd/Even

TCE 005263167-01



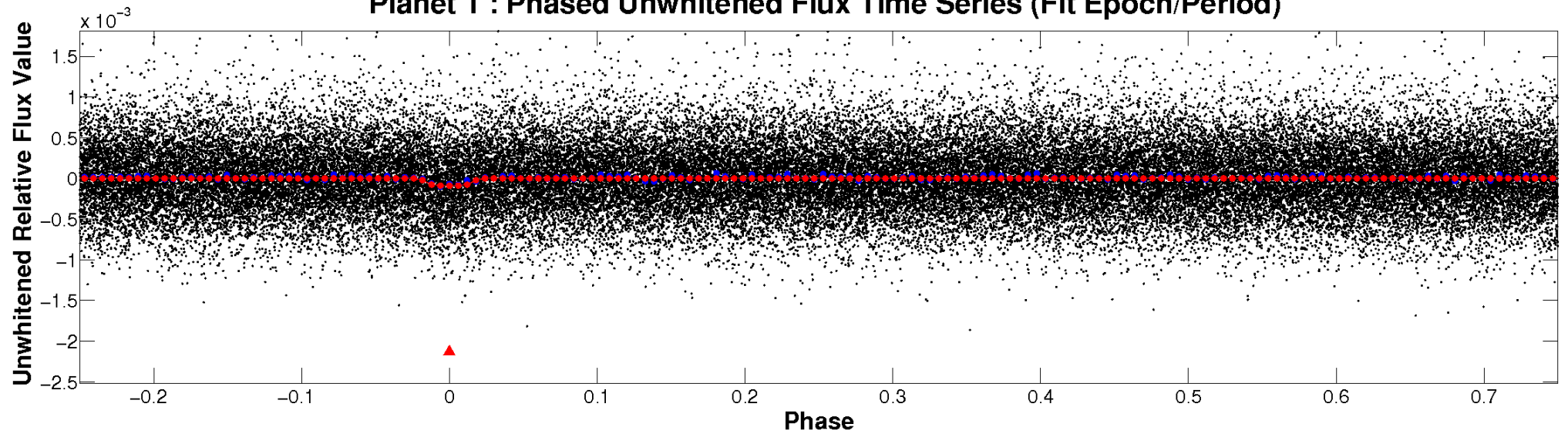
ALT Odd/Even

TCE 005263167-01

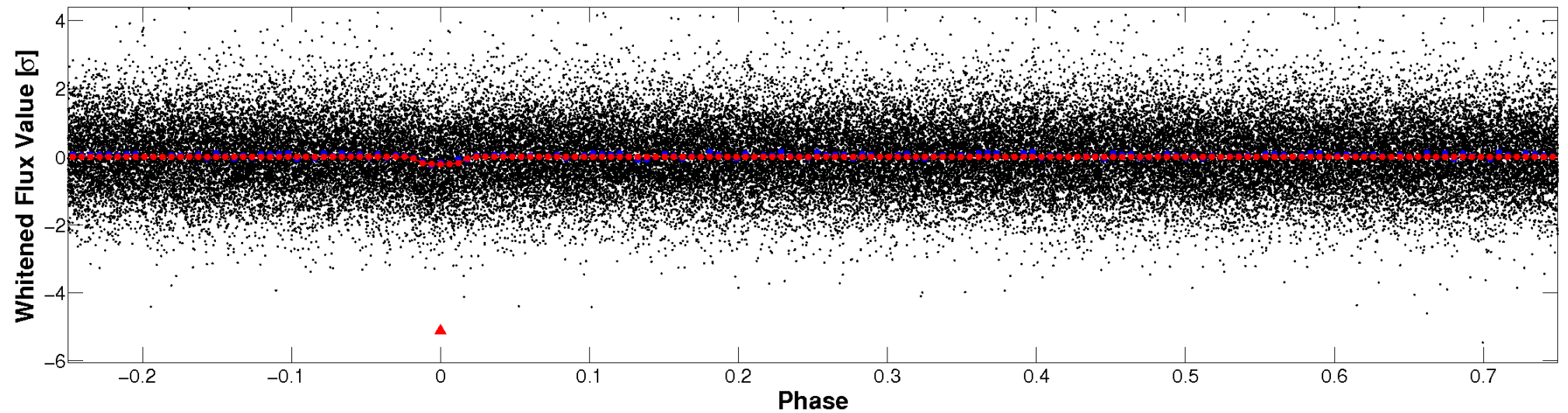


Non-Whitened Vs. Whitened Light Curve

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

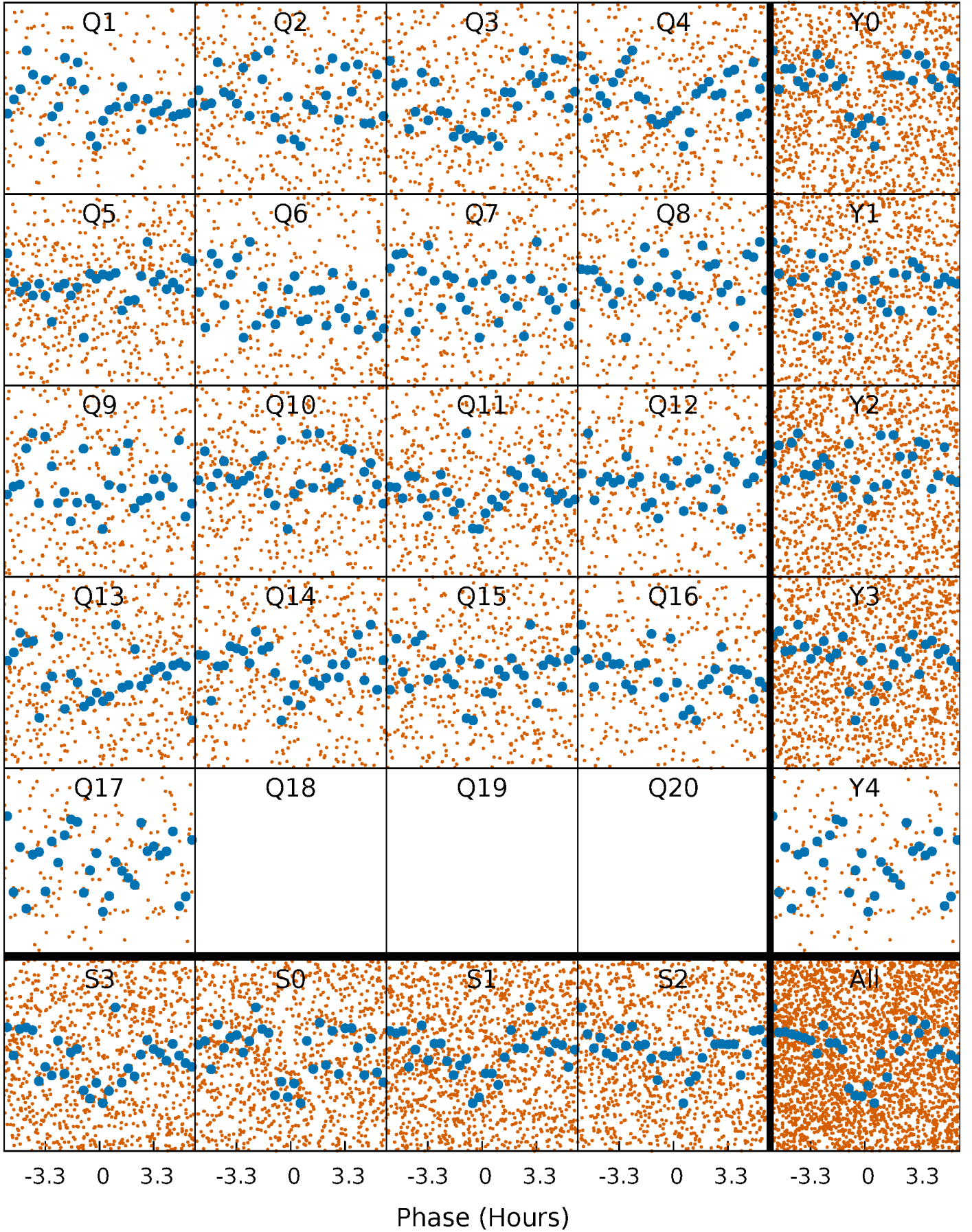


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



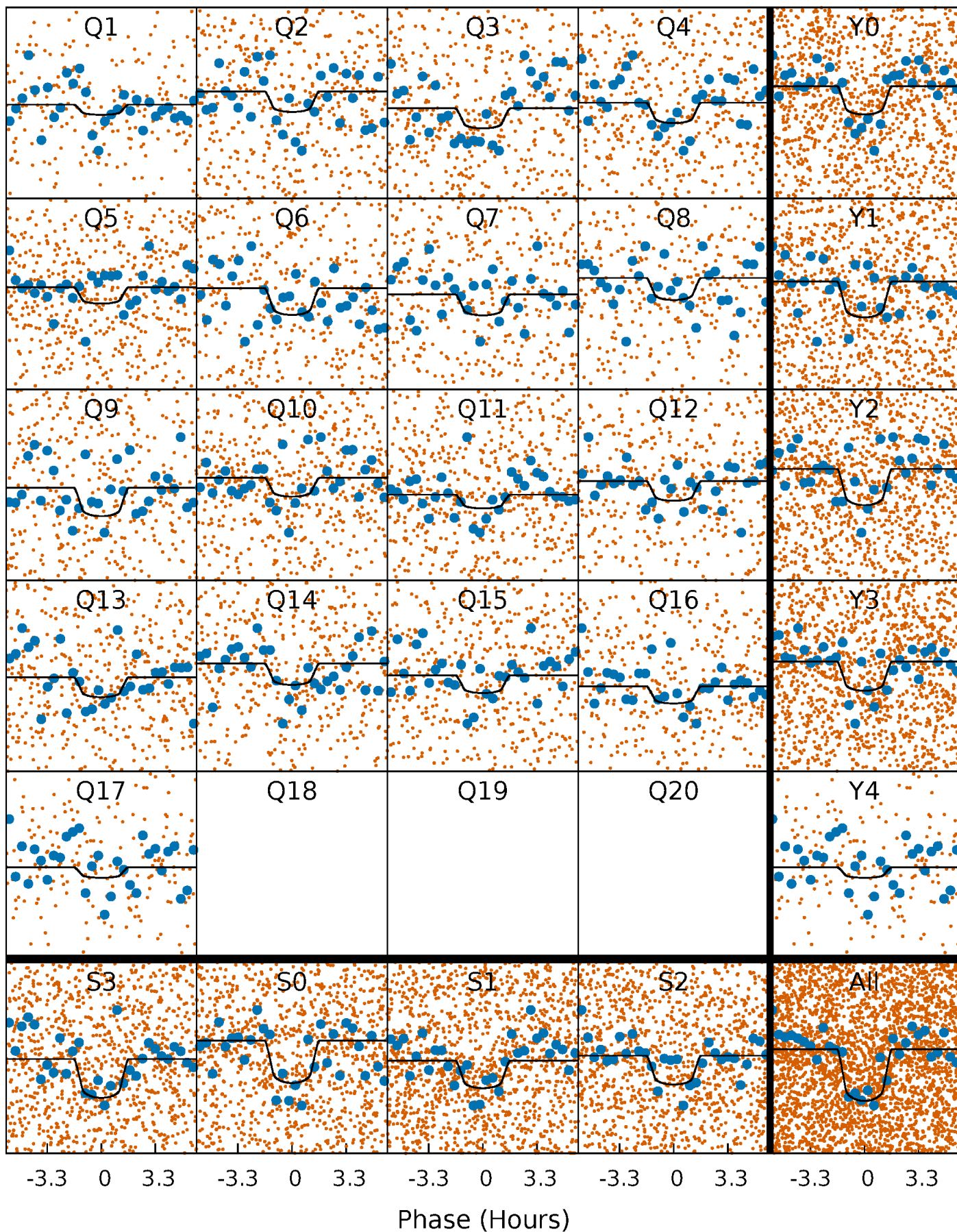
PDC Quarter-Phased Transit Curves

TCE 005263167-01 P= 3.393977 Days $T_0=134.379160$ (BKJD)



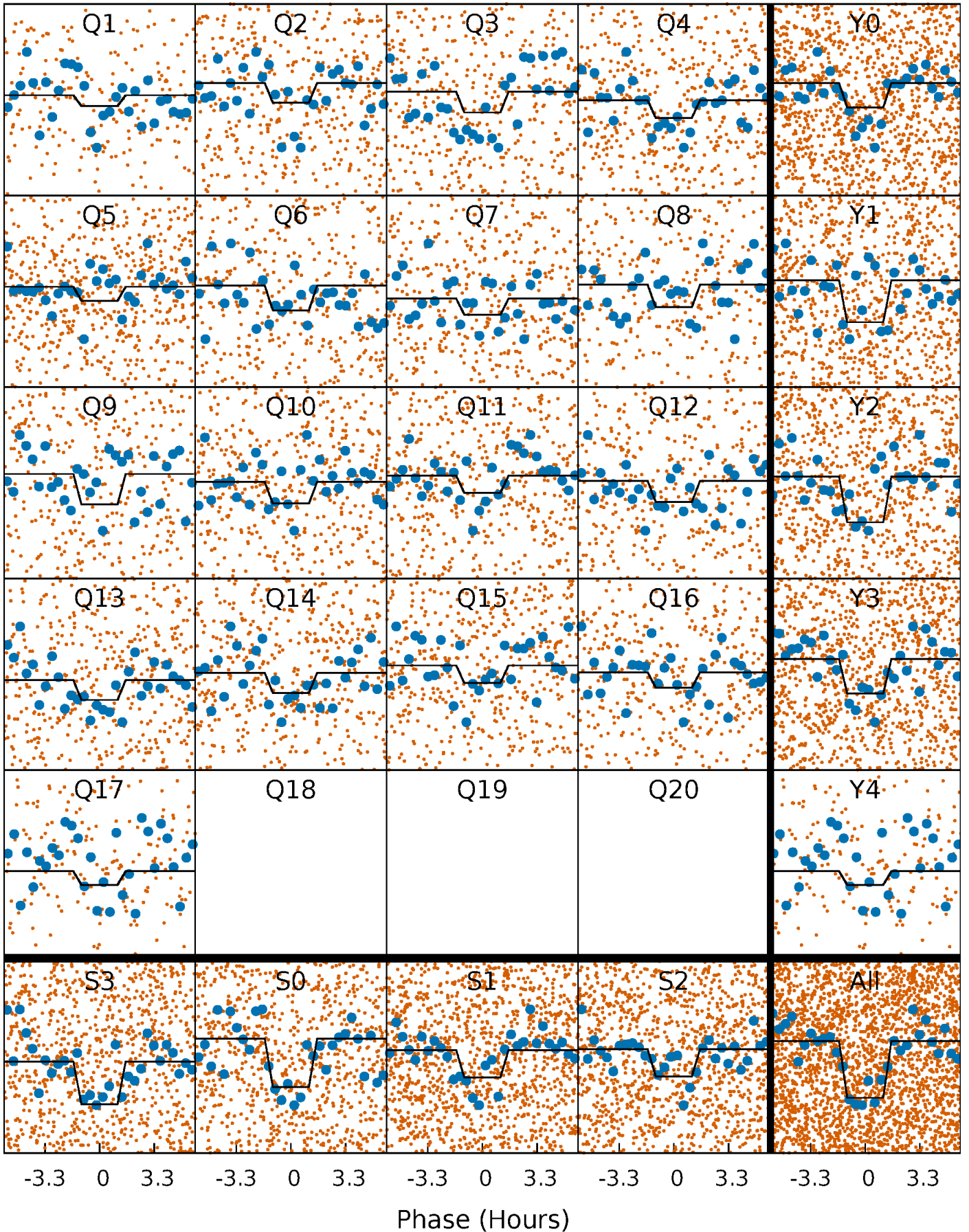
DV Quarter-Phased Transit Curves

TCE 005263167-01 P= 3.393977 Days $T_0=134.379160$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

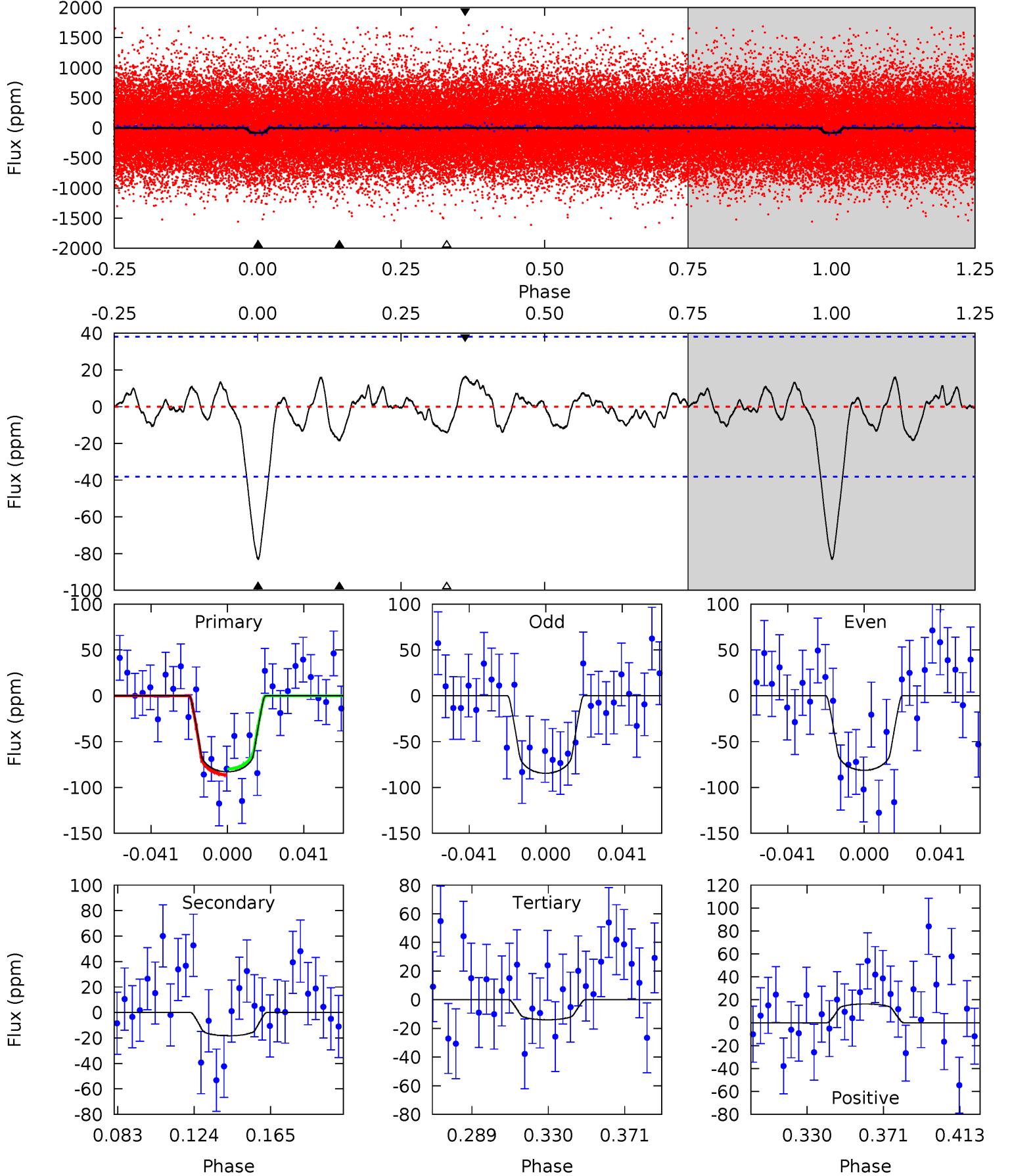
TCE 005263167-01 P= 3.393995 Days $T_0=134.378484$ (BKJD)



DV Model-Shift Uniqueness Test

005263167-01, P = 3.393977 Days, E = 130.985183 Days

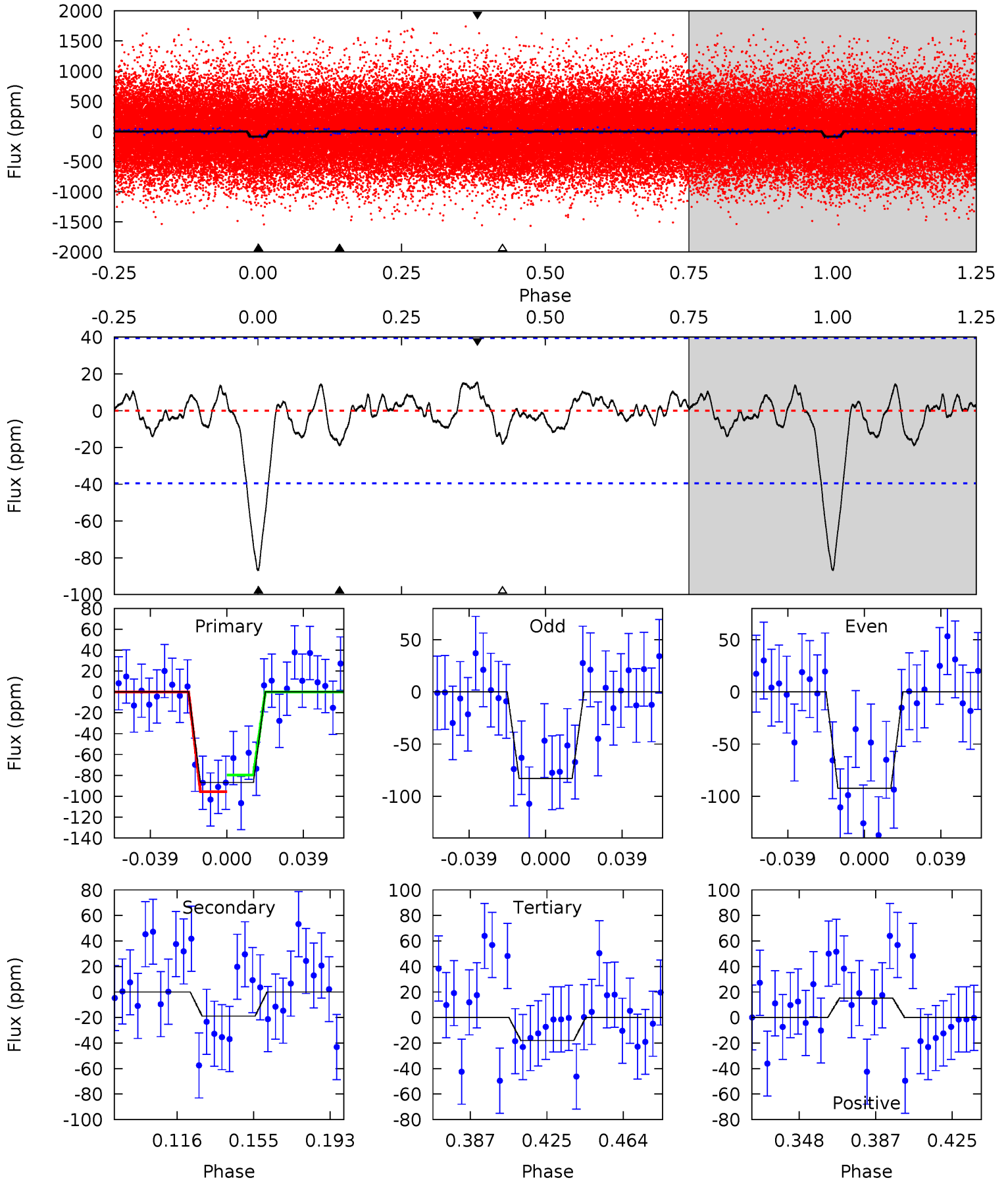
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	2.28	1.74	2.03	4.75	2.04	0.85	8.59	8.30	0.54	0.24	0.20	0.85	0.16	0.40



Alt Model-Shift Uniqueness Test

005263167-01, P = 3.393995 Days, E = 130.984489 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	2.28	2.17	1.85	4.76	2.07	0.82	8.29	8.61	0.11	0.43	0.56	0.95	0.15	0.96



Stellar Parameters For KIC 005263167

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6181^{+168}_{-224}	$4.431^{+0.070}_{-0.210}$	$-0.160^{+0.250}_{-0.300}$	$1.029^{+0.327}_{-0.117}$	$1.036^{+0.159}_{-0.130}$	$1.339^{+0.409}_{-0.740}$
	+3%/-4%	+2%/-5%	+156%/-188%	+32%/-11%	+15%/-13%	+31%/-55%
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 005263167-01 / KOI 6546.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-18 ± 8	$1.32^{+0.83}_{-0.76}$	1859^{+138}_{-110}	4035^{+1838}_{-666}	11^{+58}_{-8}
Alt.	-19 ± 8	$1.17^{+0.87}_{-0.71}$	1854^{+142}_{-101}	4212^{+2195}_{-797}	15^{+82}_{-11}

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

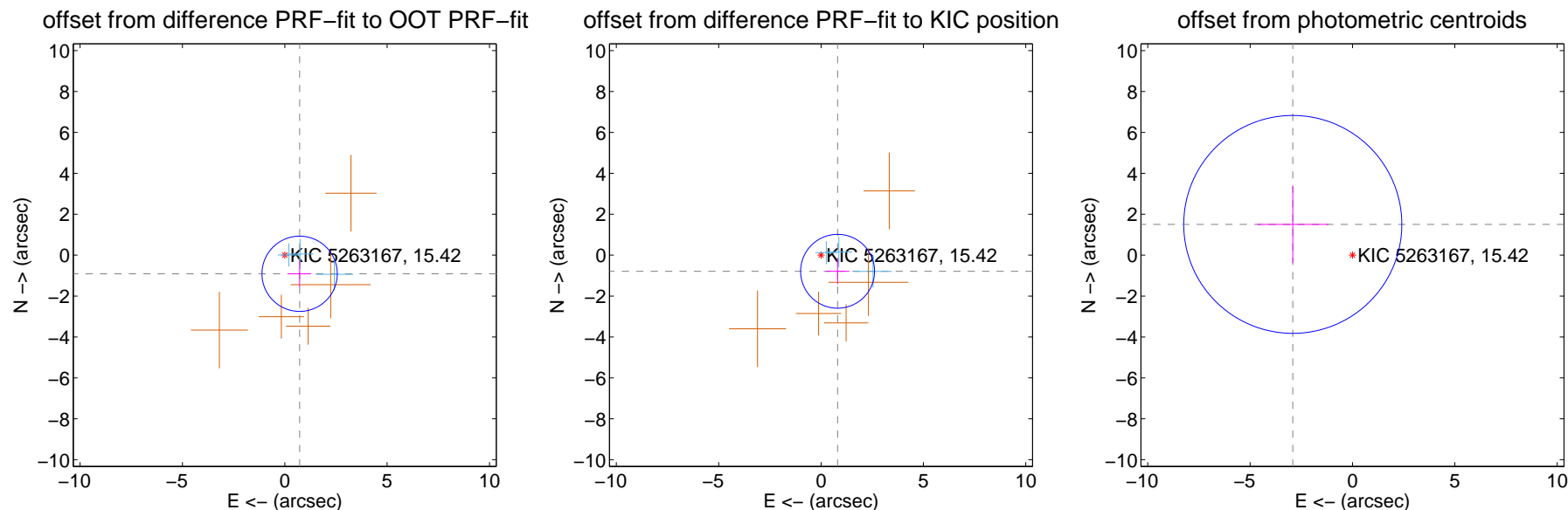
DV Centroid Data

Supplemental centroid analysis for 005263167-01. Kepler magnitude: 15.42. Transit SNR 8.80

There are 3 quarters with good PRF difference image offsets

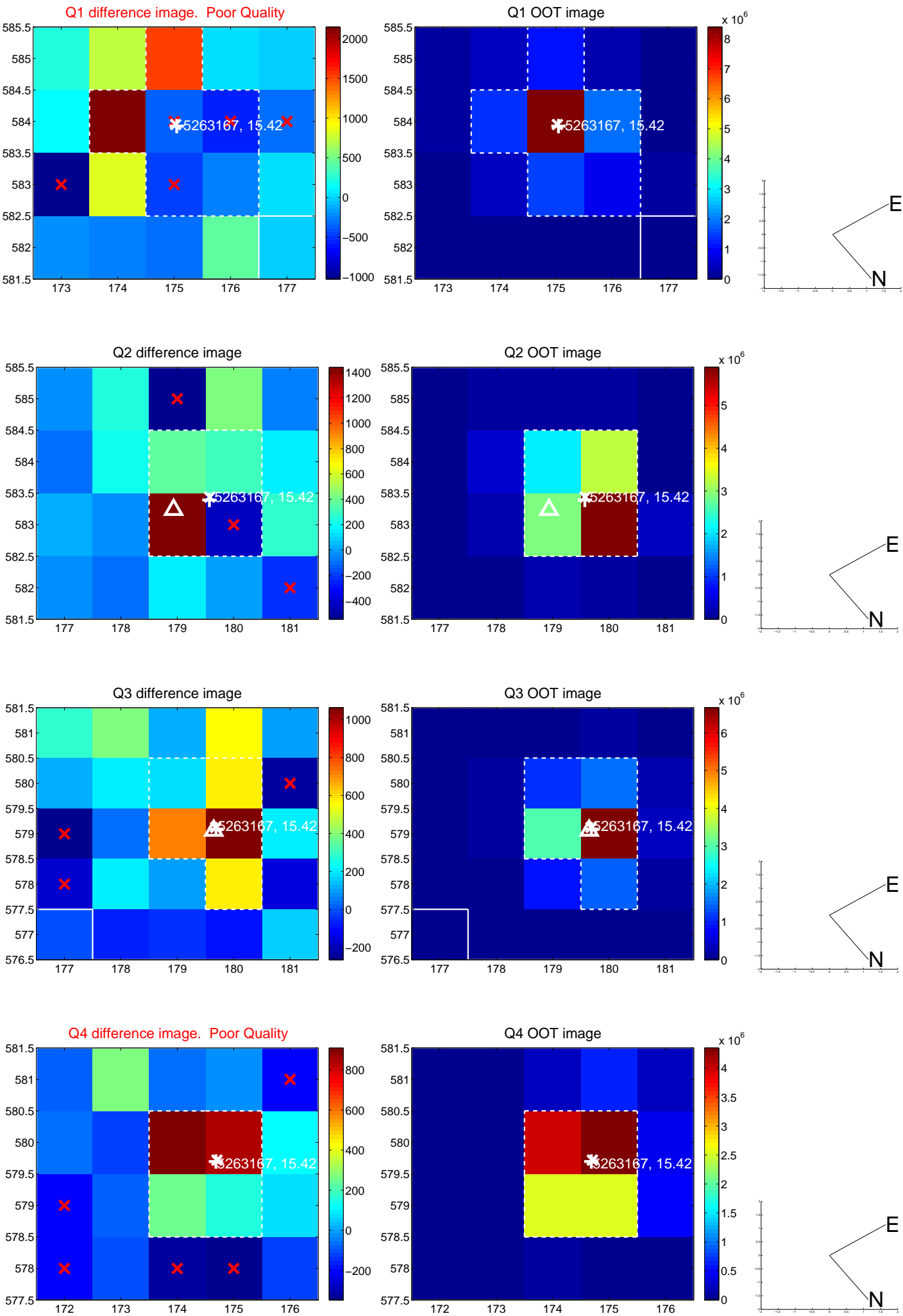
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.163 ± 0.613	1.90	-0.725 ± 0.571	-0.910 ± 0.638
PRF-fit source offset from KIC position	1.129 ± 0.602	1.88	-0.808 ± 0.573	-0.788 ± 0.631
photometric centroid source offset	3.28 ± 1.78	1.85	2.92 ± 1.74	1.50 ± 1.89

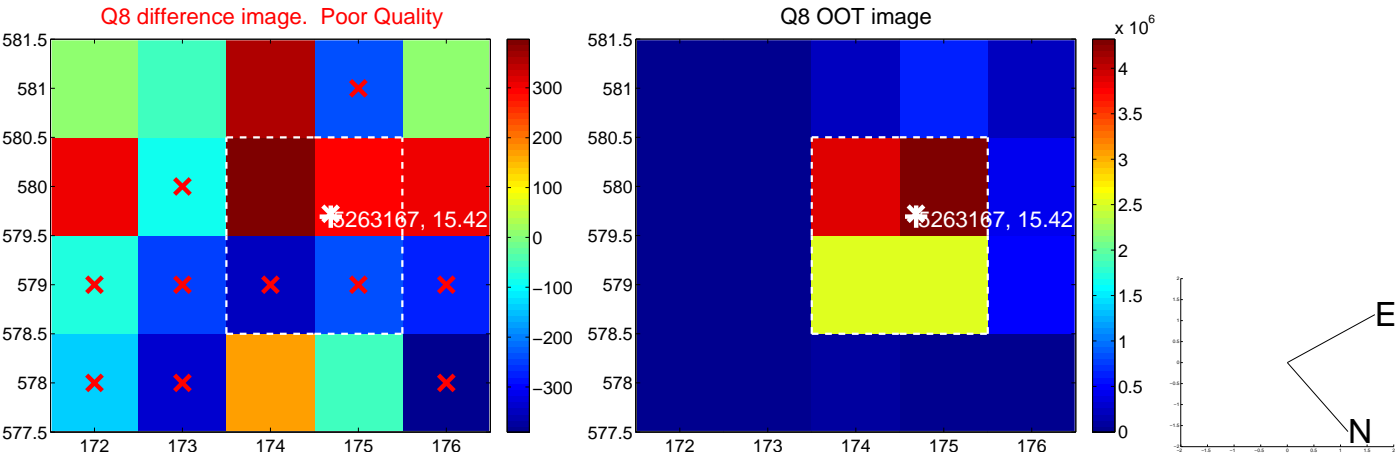
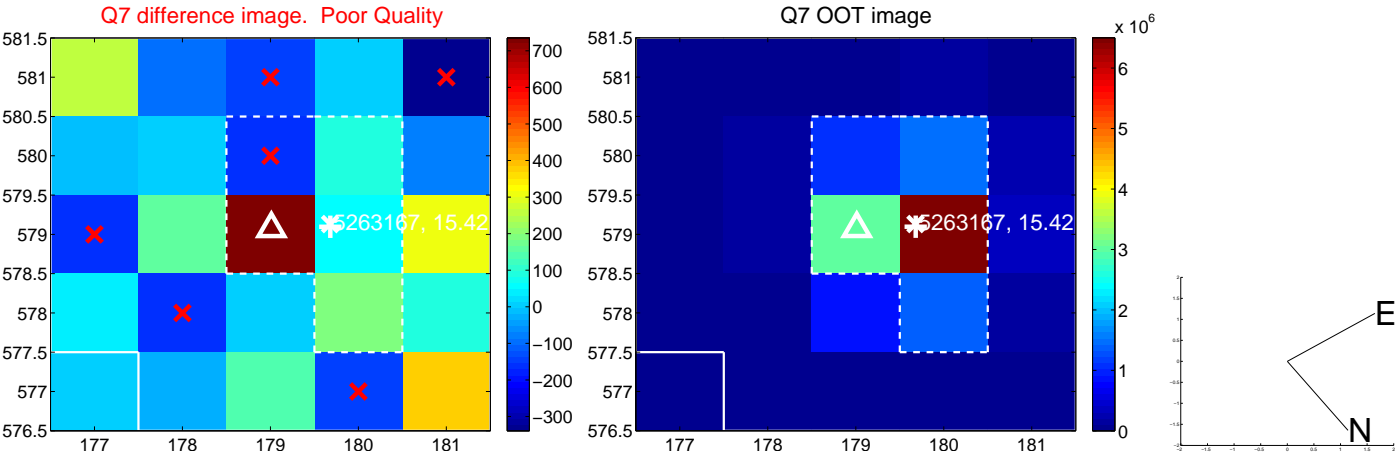
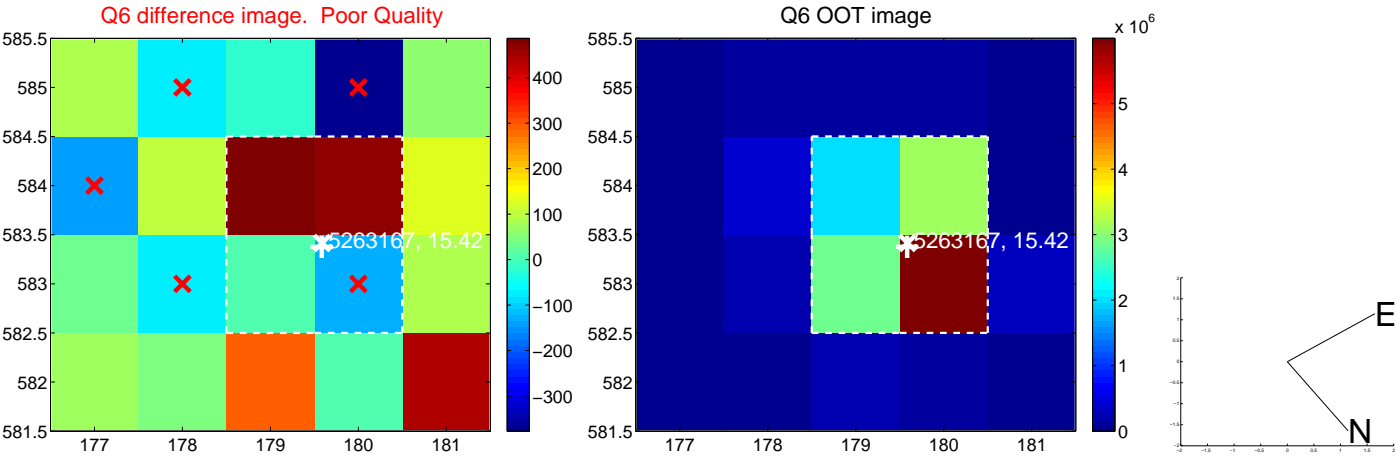
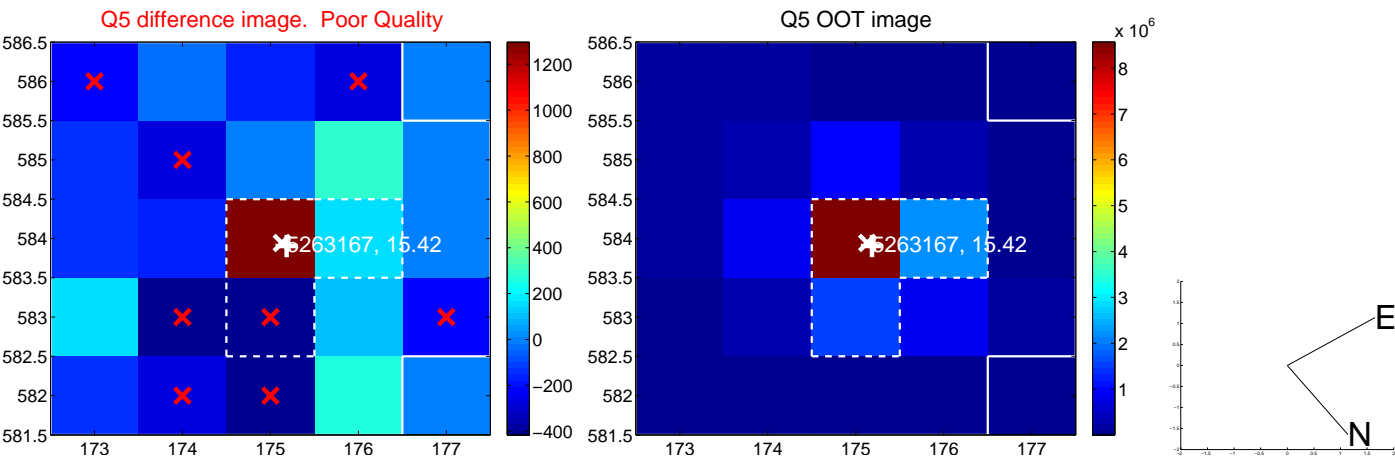


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

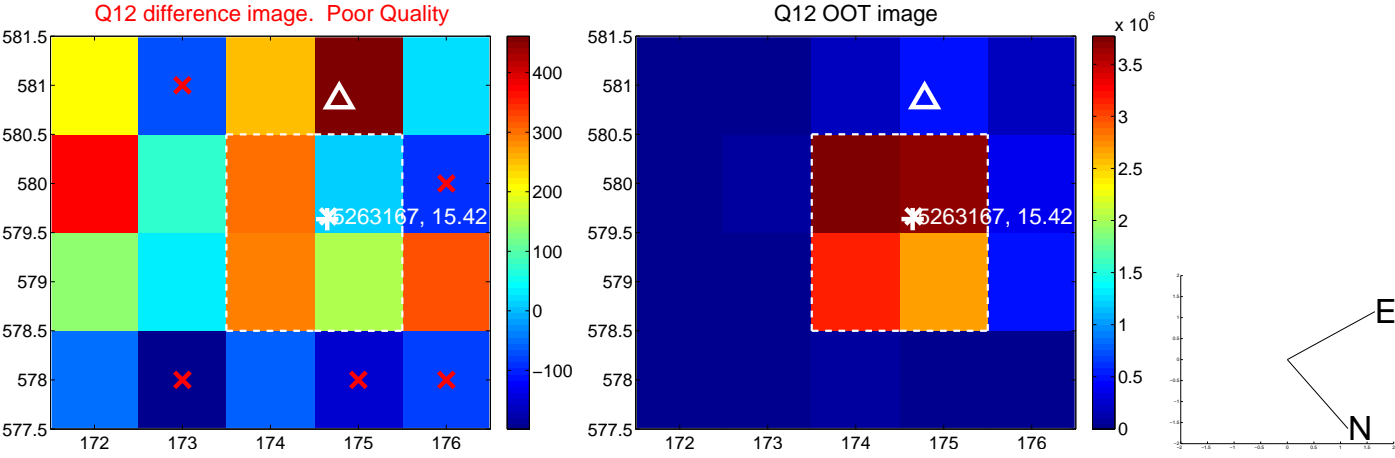
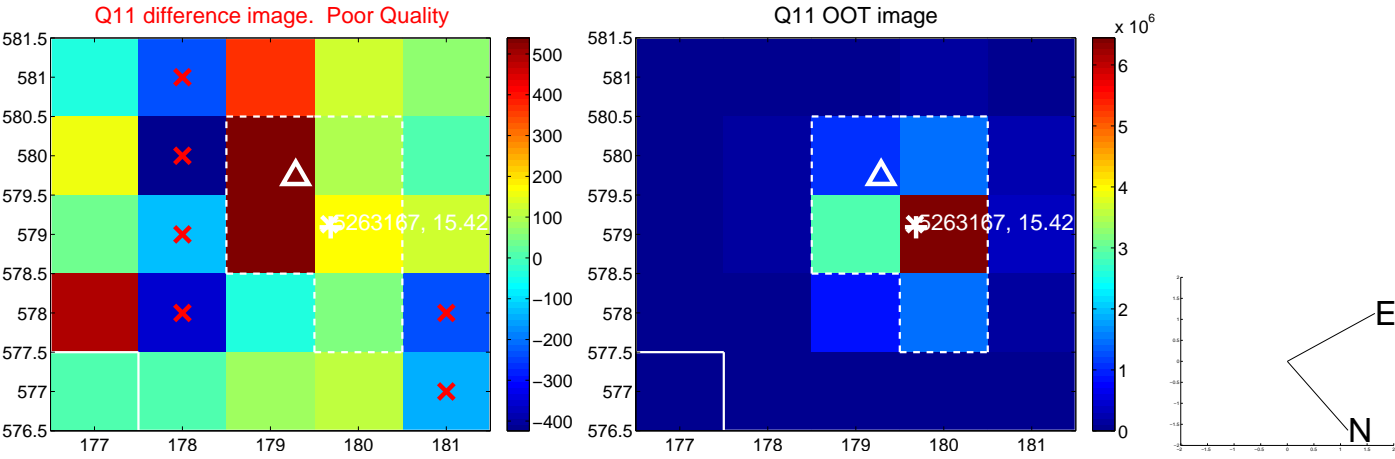
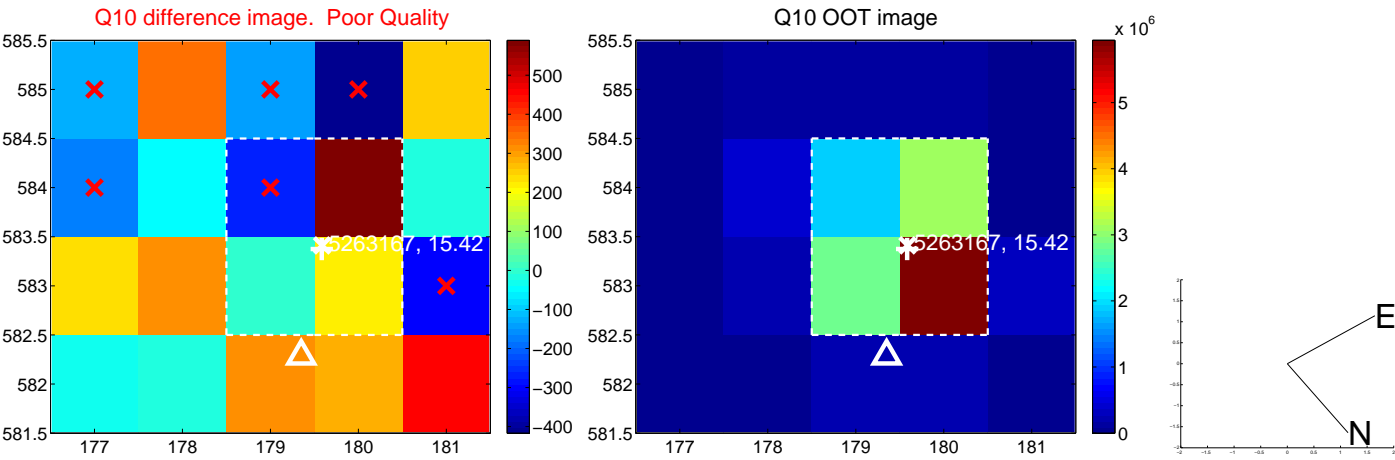
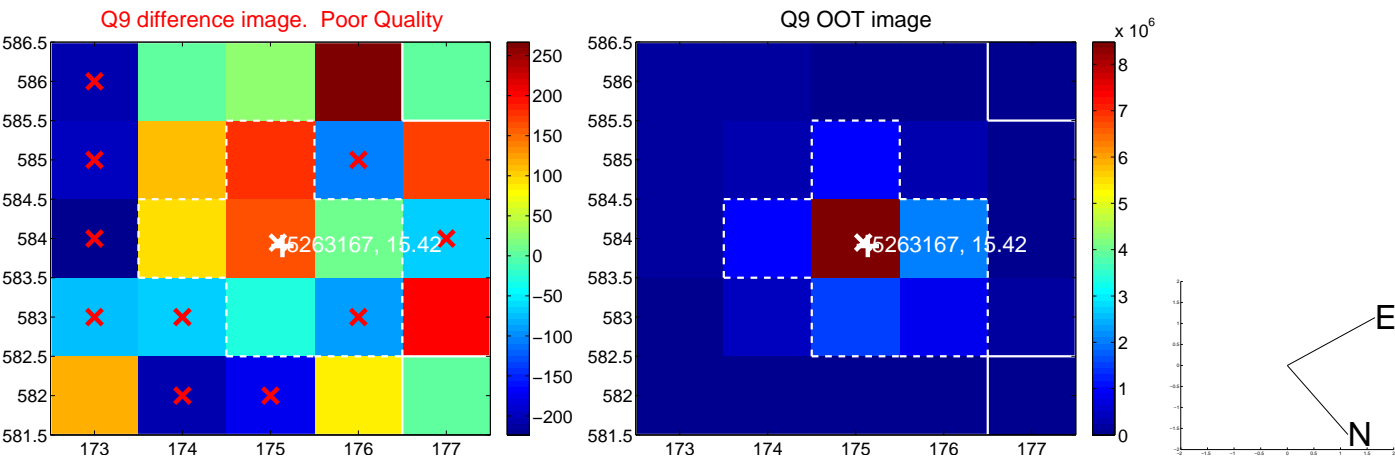
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



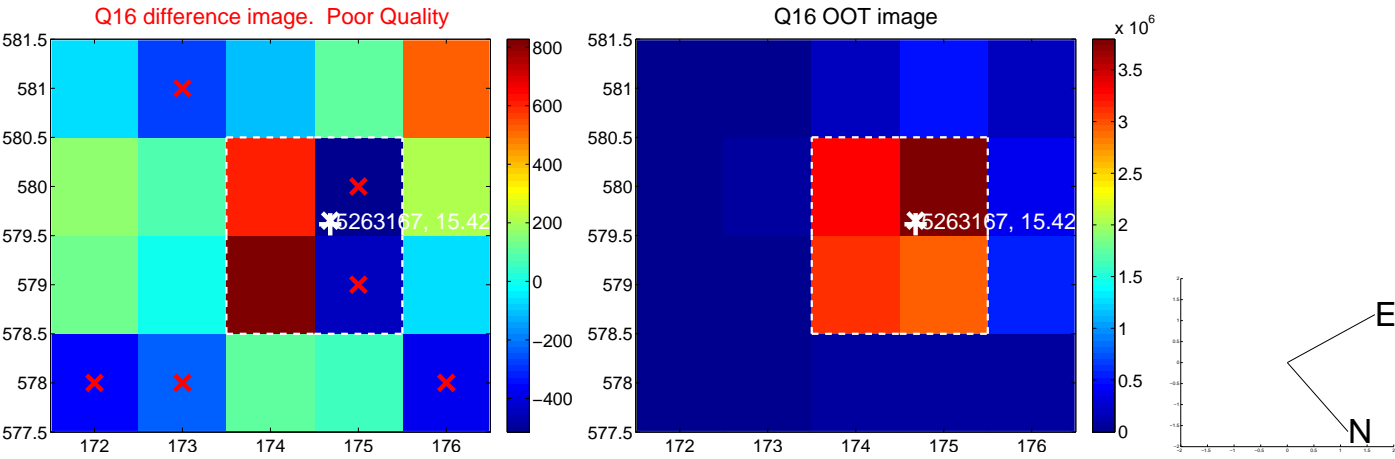
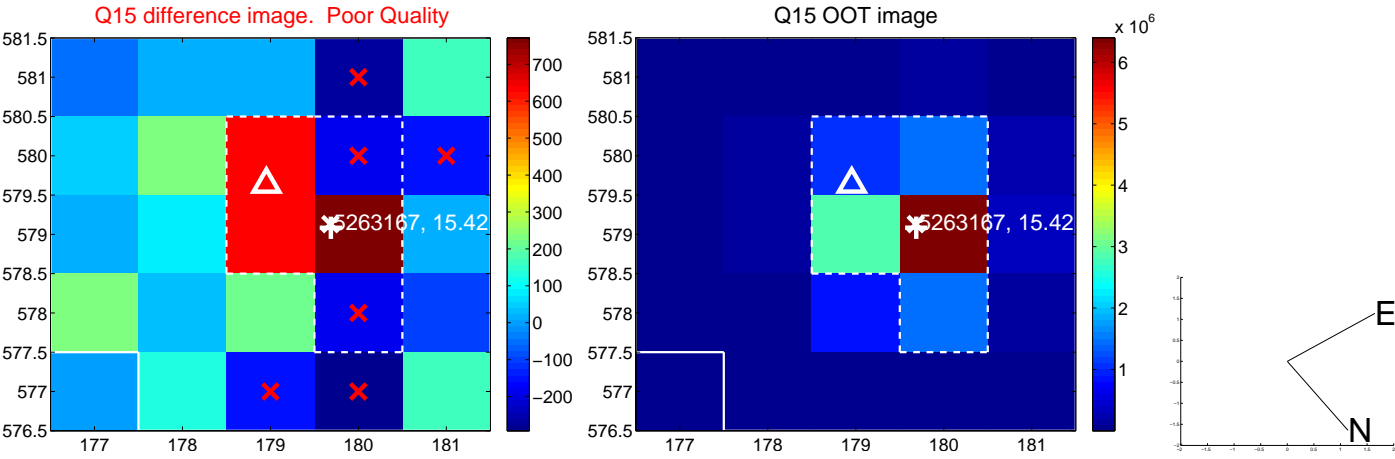
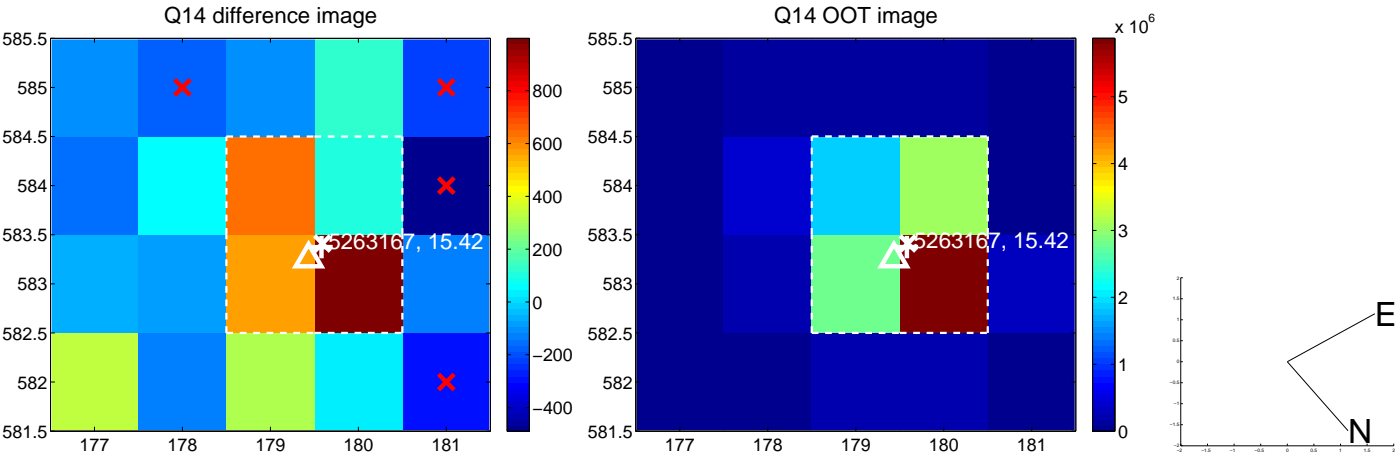
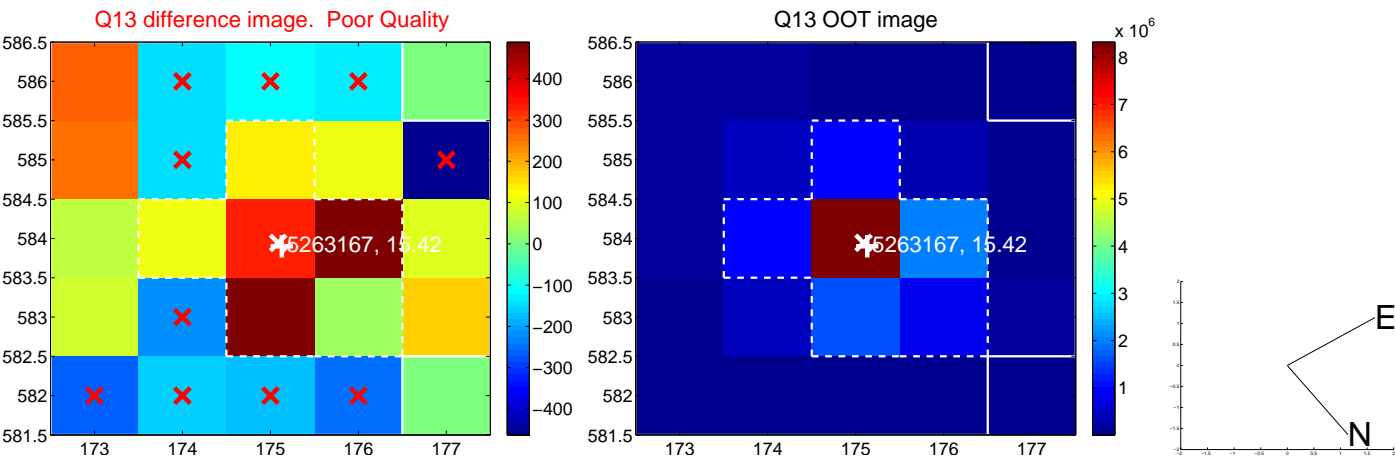
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



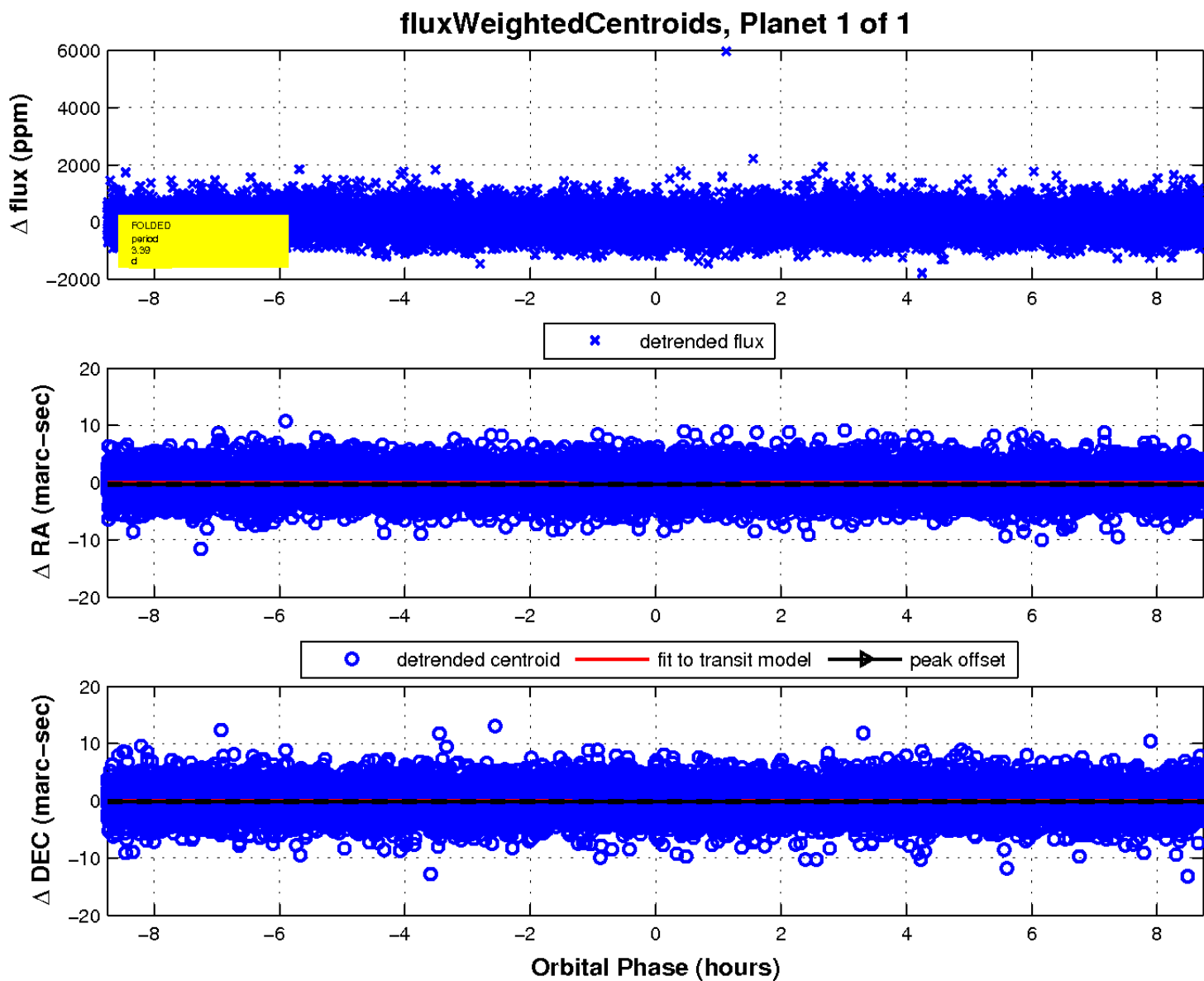
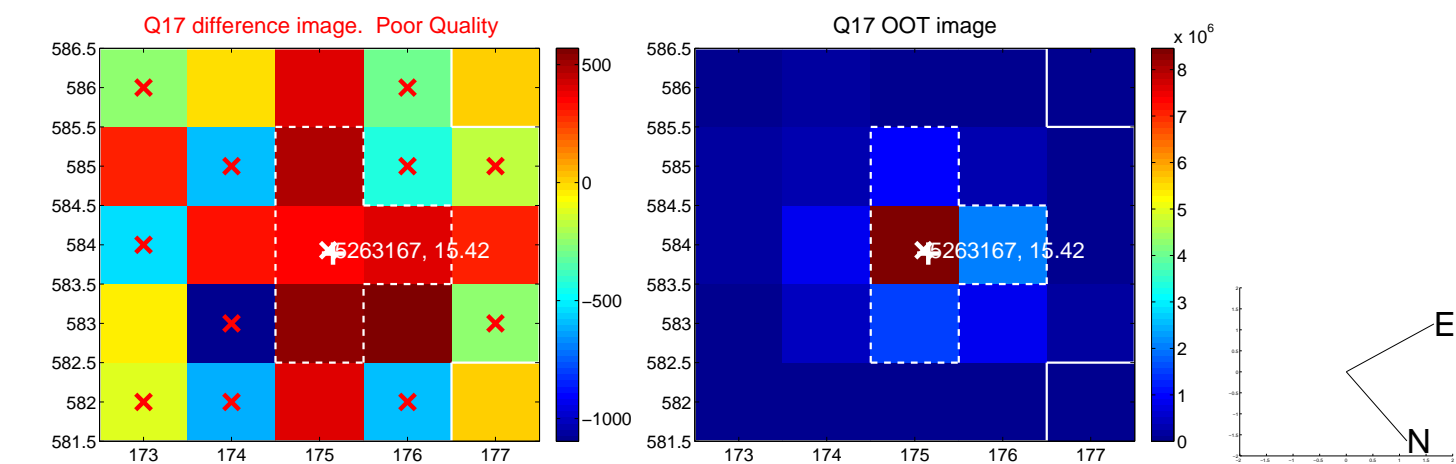
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



UKIRT Image

Declination

