

KIC 011655826

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})
011655826-01	OBS	4643.01	5.593463	137.094240	854.0	2.000	9.3	-1.0	0.93	5874	2.71	244.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011655826-01	OBS	PC	1.00	0	0	0	0	CENT_NOFITS

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.

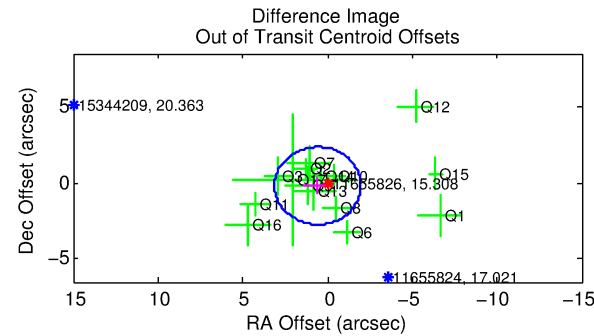
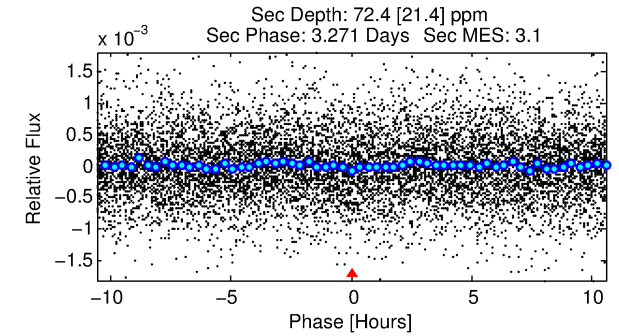
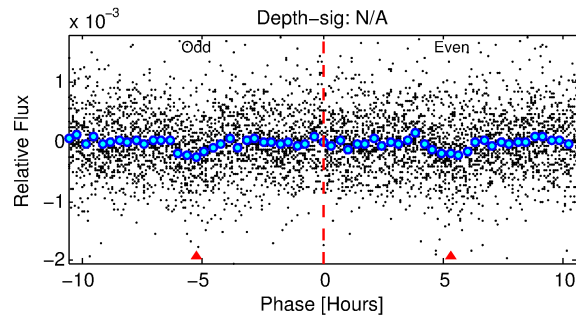
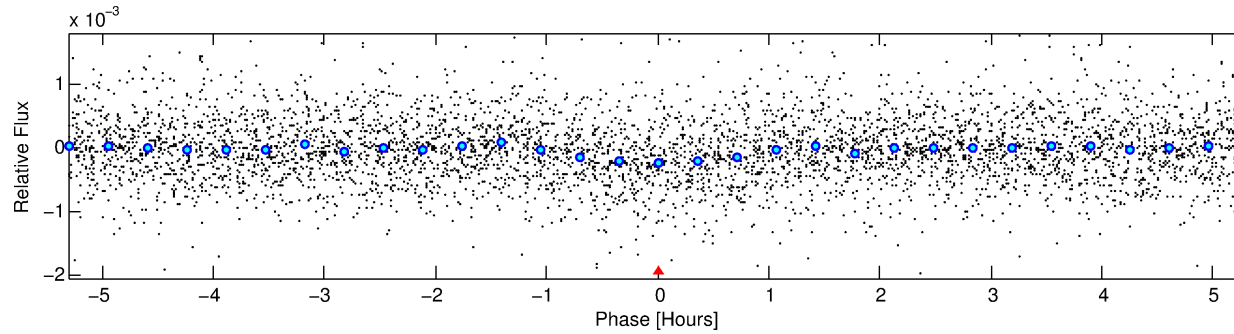
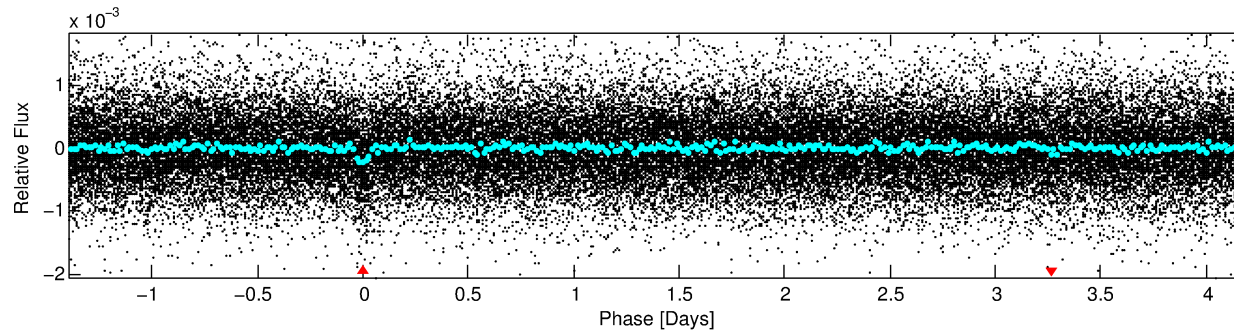
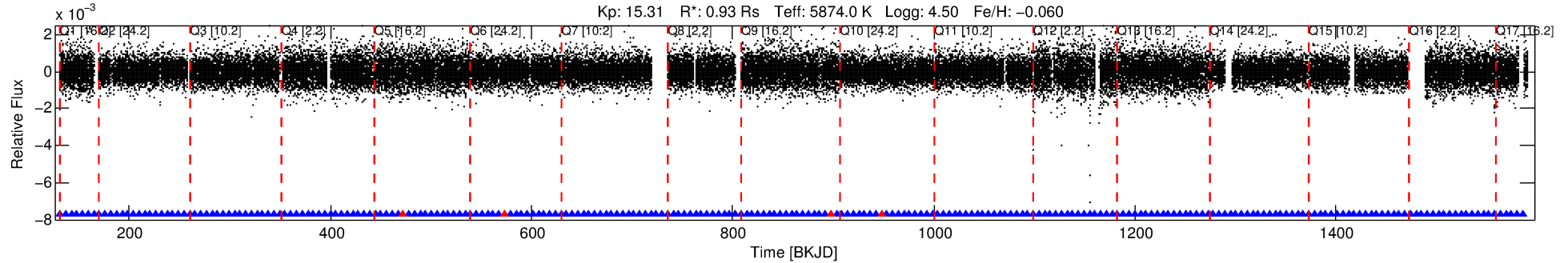
Ephemeris Match Information For 011655826-01

No Significant Match Found

DV One-Page Summary

KIC: 11655826 Candidate: 1 of 1 Period: 5.593 d
KOI: K04643.01 Corr: 0.884

Kp: 15.31 R*: 0.93 Rs Teff: 5874.0 K Logg: 4.50 Fe/H: -0.060



TPS TCE Results:

Period = 5.59346 d
Epoch = 137.0942 BKJD

DV fit results are unavailable

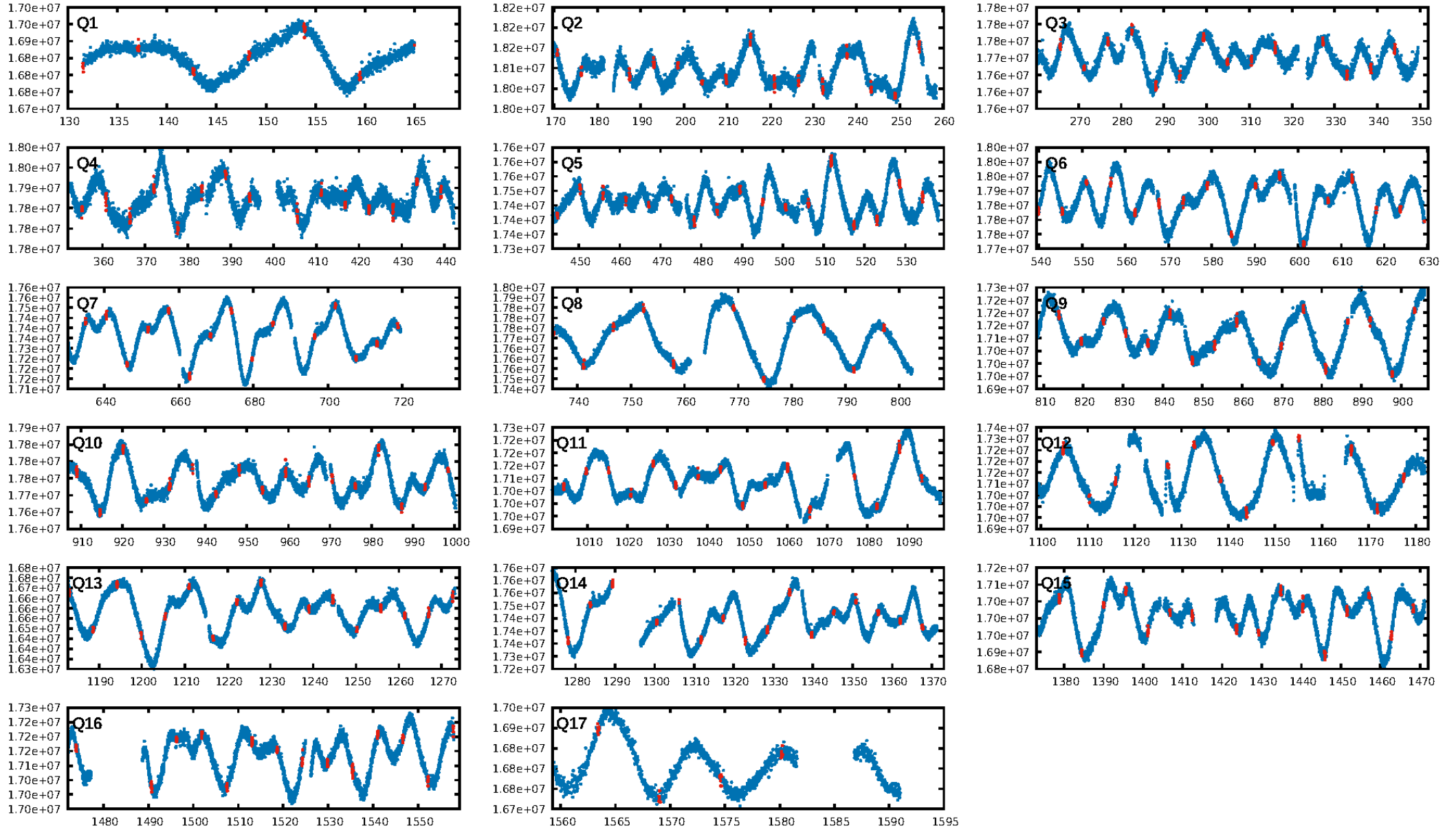
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.61e-20
RollingBand-fgt: 0.98 [223/227]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.617 arcsec [0.73σ]
KicOffset-rm: 0.571 arcsec [0.61σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.20 [3/15]
DiffImageOverlap-fno: 1.00 [17/17]

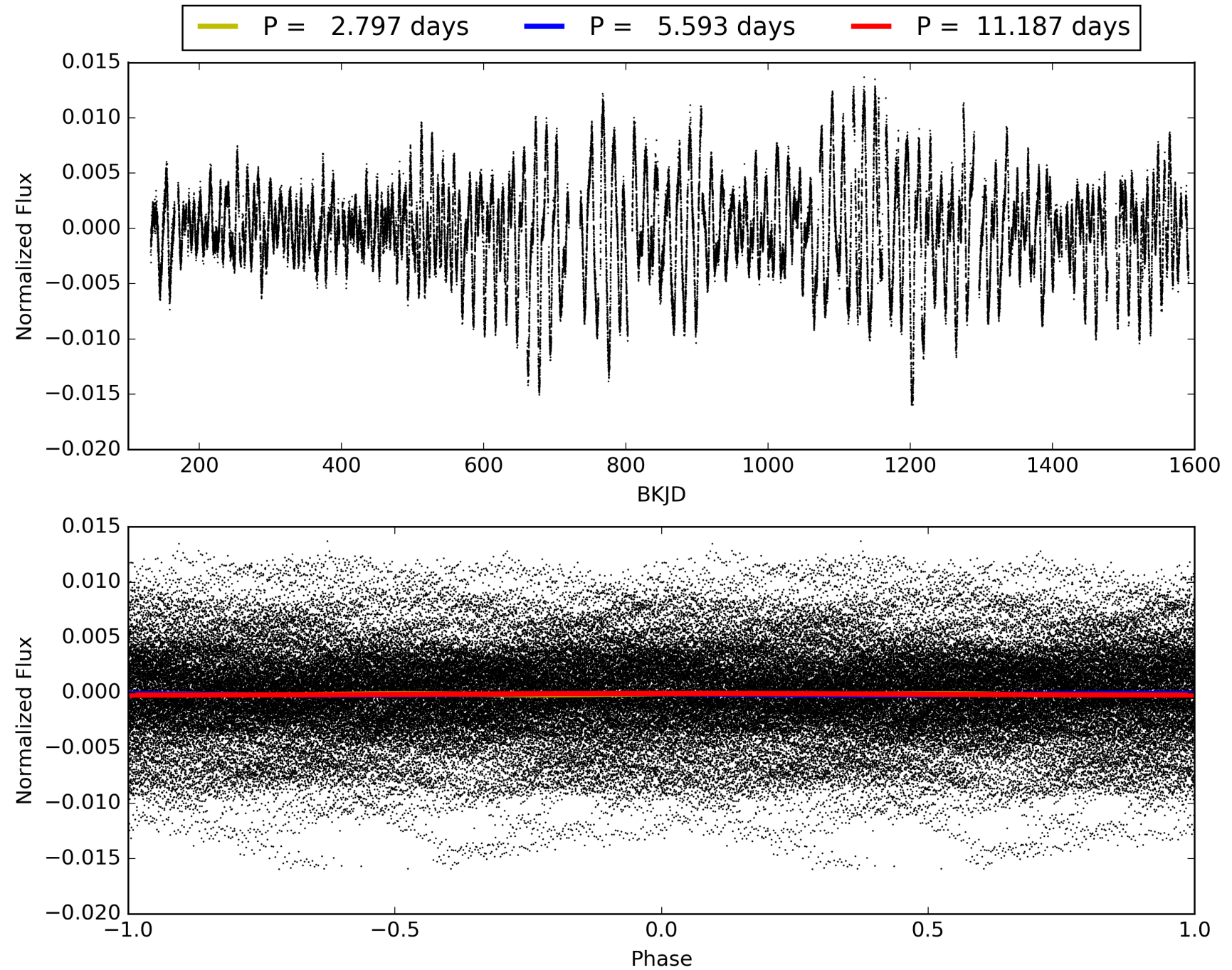
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 18:11:34 Z

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

TCE 011655826-01, PDC Light Curves

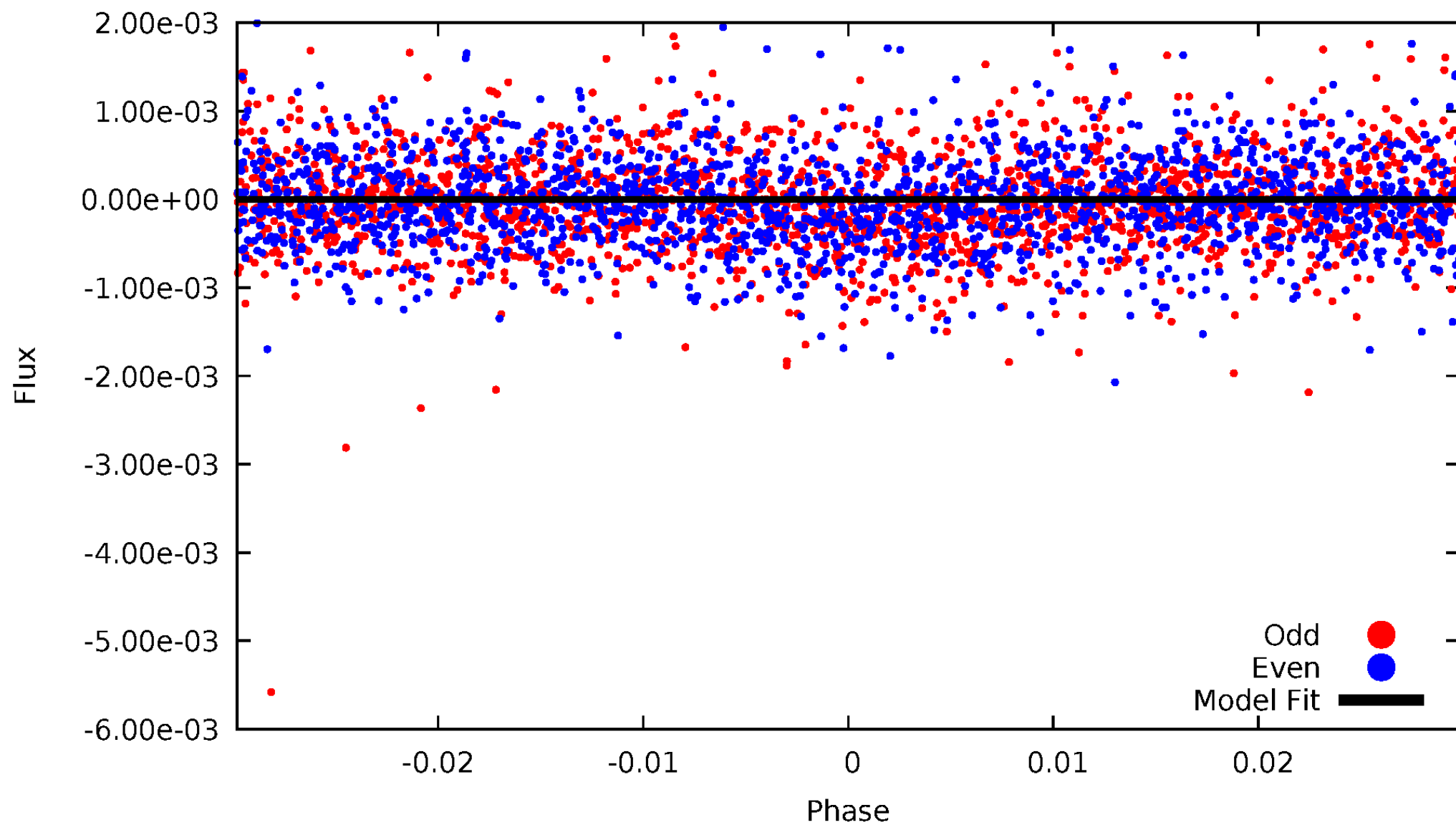


TCE 011655826-01



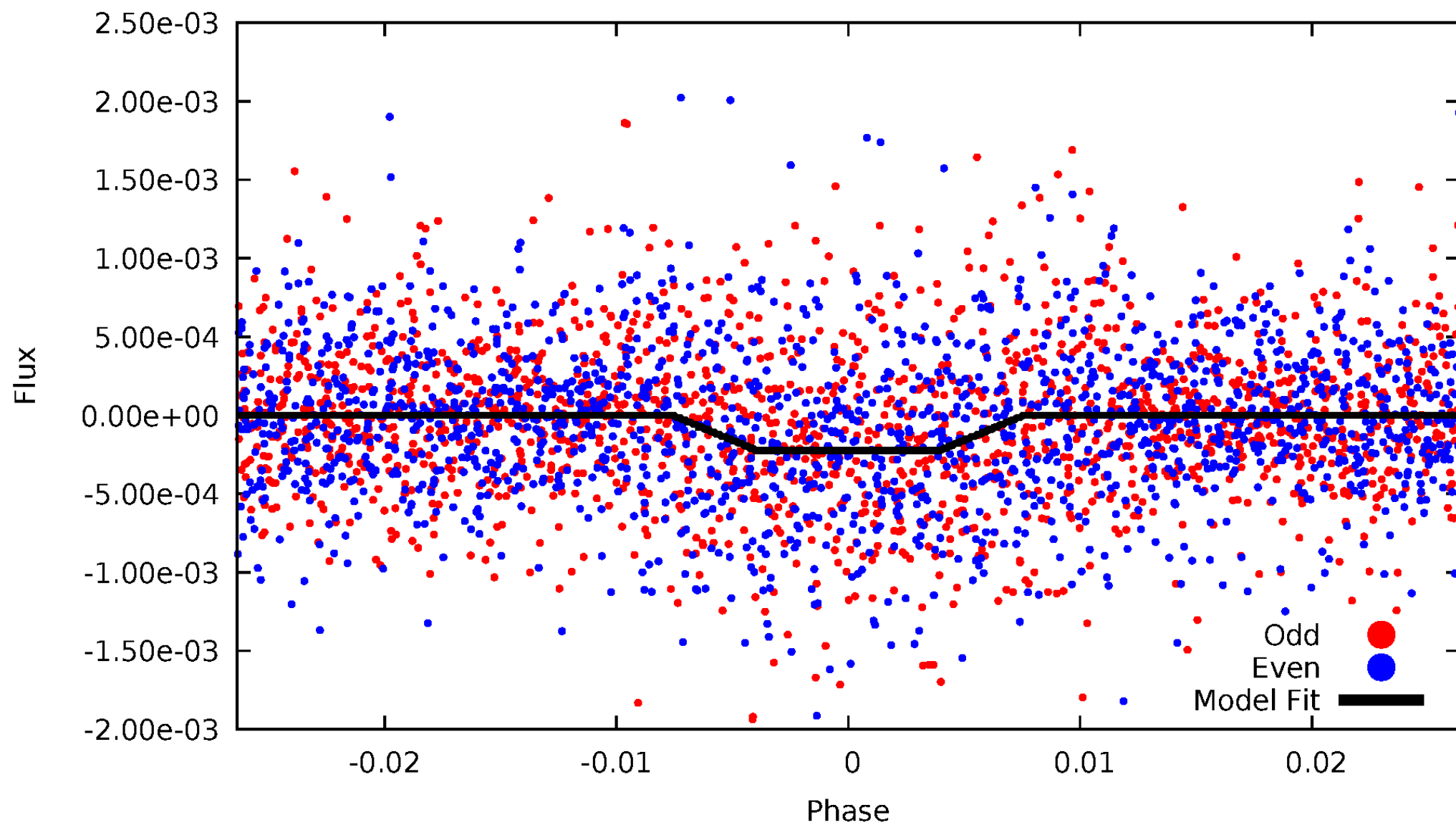
DV Odd/Even

TCE 011655826-01



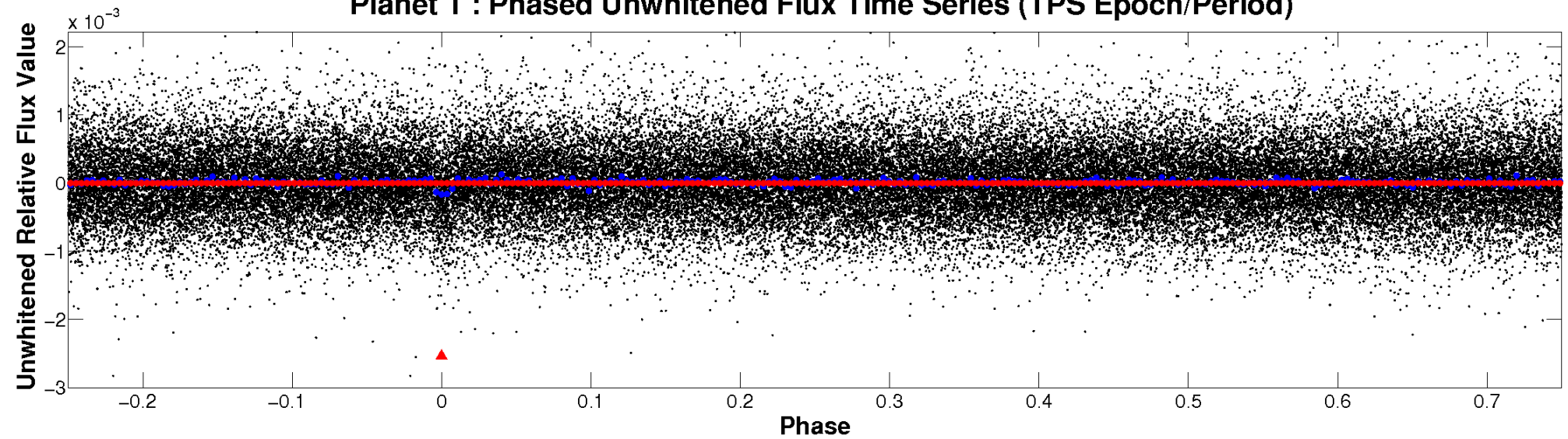
ALT Odd/Even

TCE 011655826-01

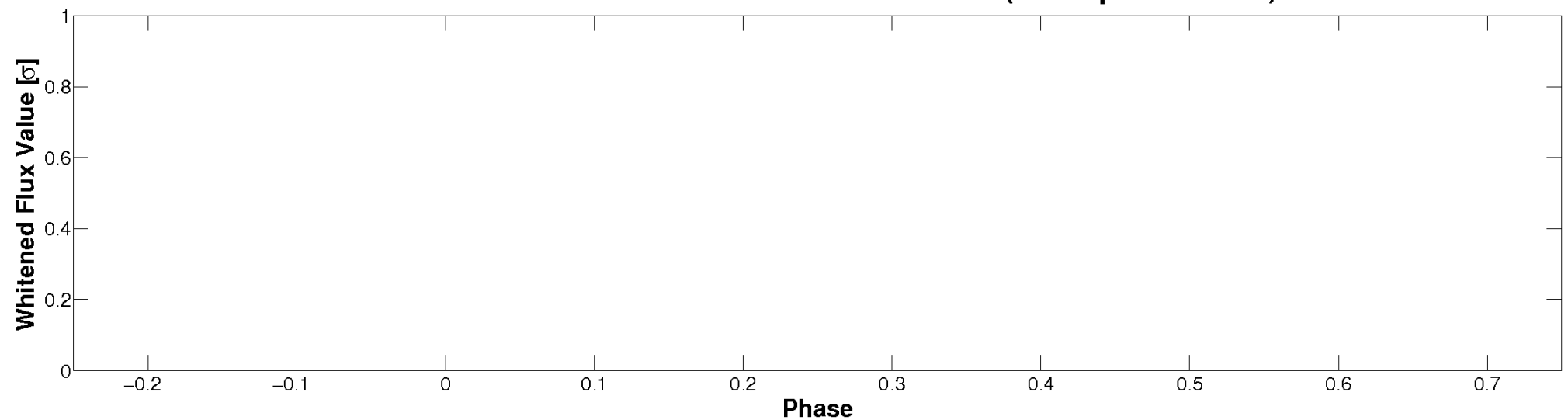


Non-Whitened Vs. Whitened Light Curve

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

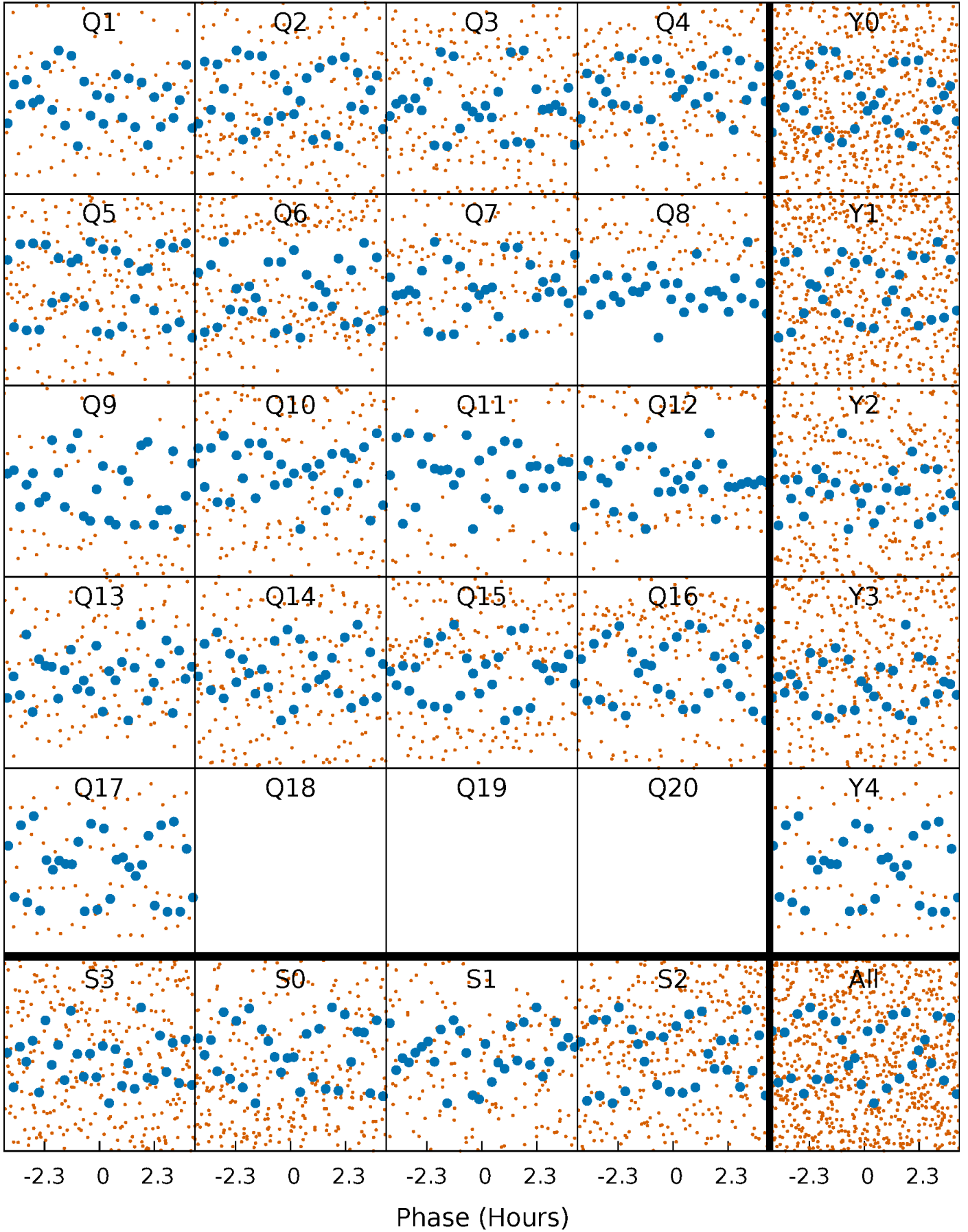


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



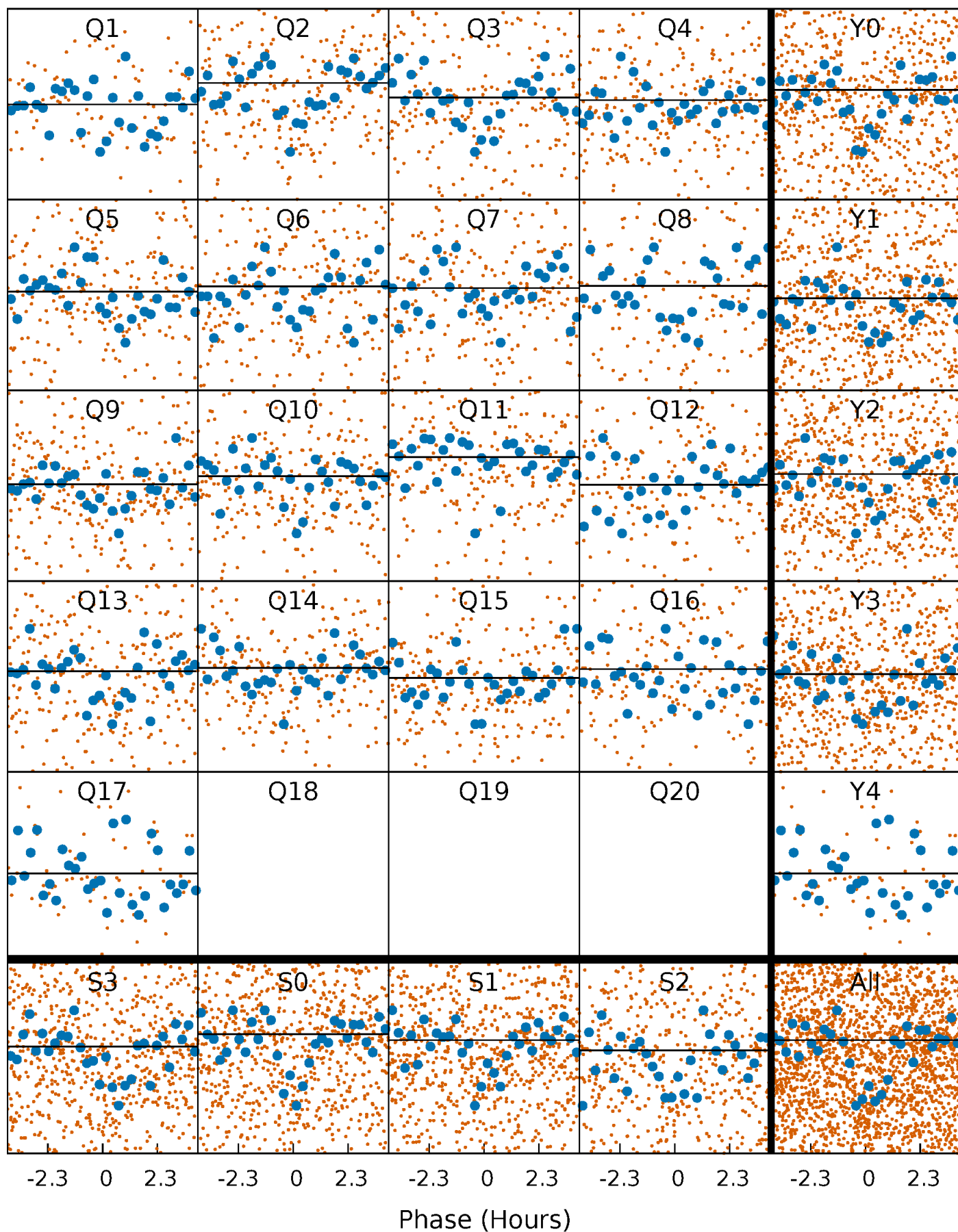
PDC Quarter-Phased Transit Curves

TCE 011655826-01 P= 5.593463 Days $T_0=137.094240$ (BKJD)



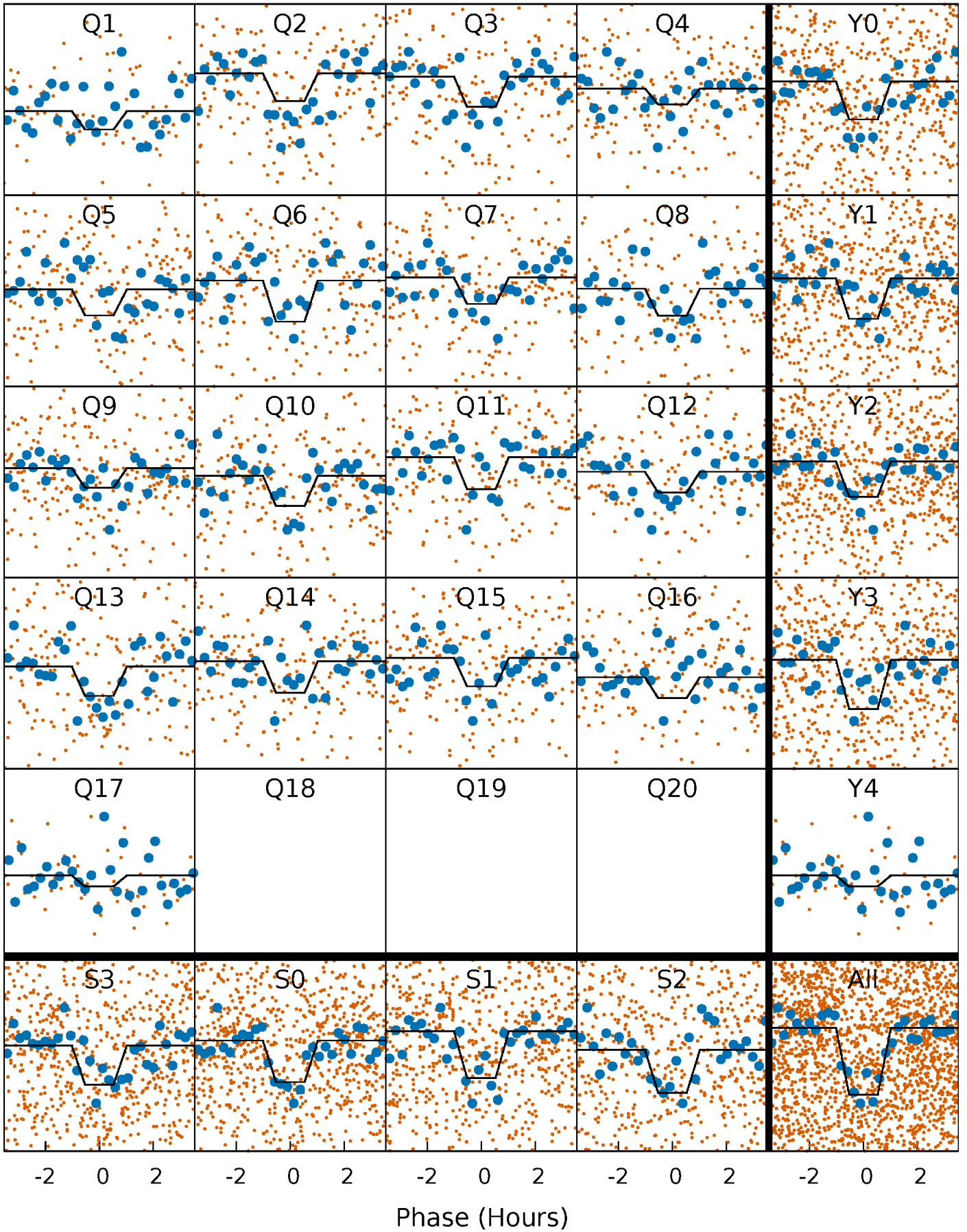
DV Quarter-Phased Transit Curves

TCE 011655826-01 P= 5.593463 Days $T_0=137.094240$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

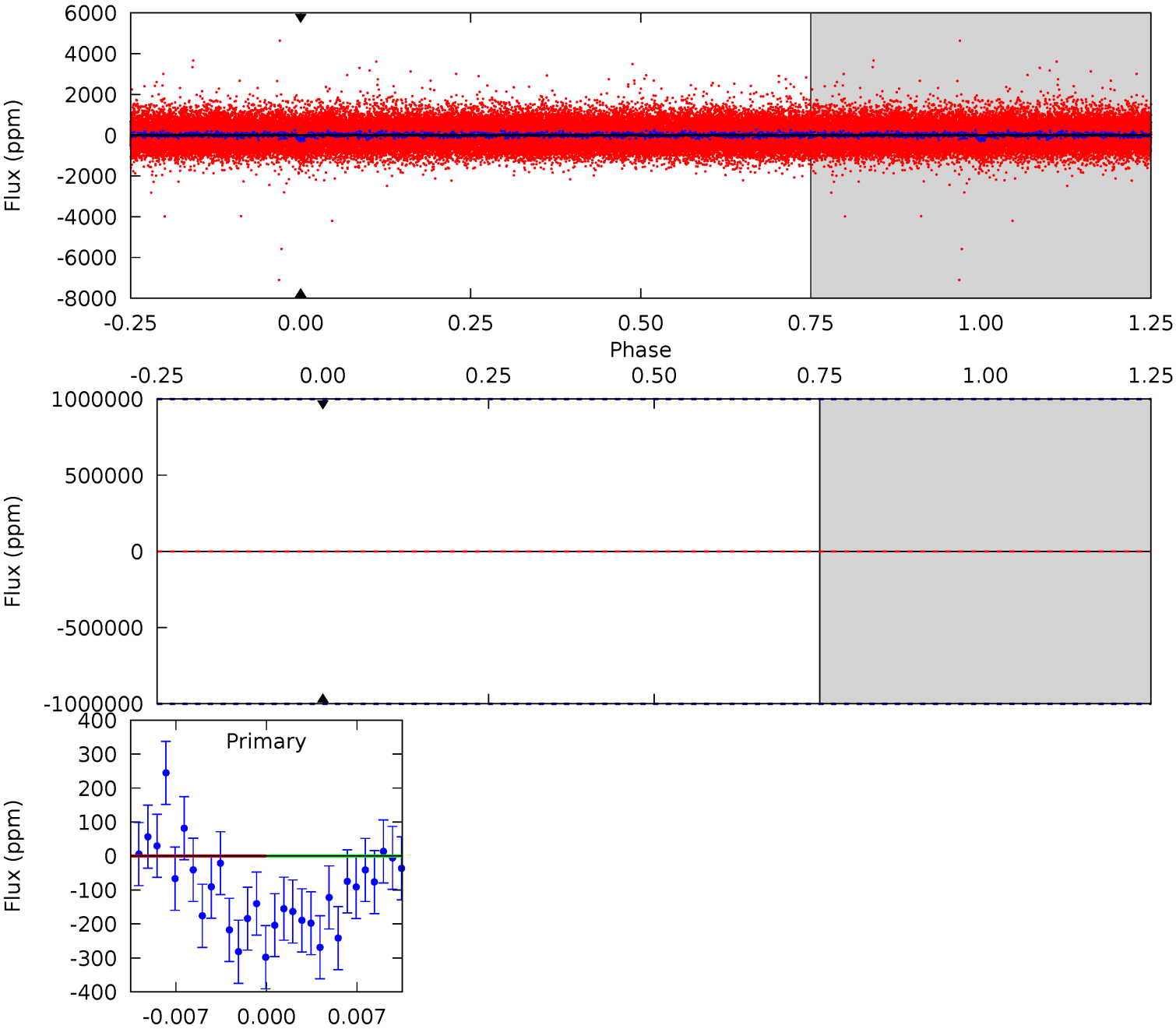
TCE 011655826-01 P= 5.593463 Days $T_0=131.507074$ (BKJD)



DV Model-Shift Uniqueness Test

011655826-01, P = 5.593463 Days, E = 131.500777 Days

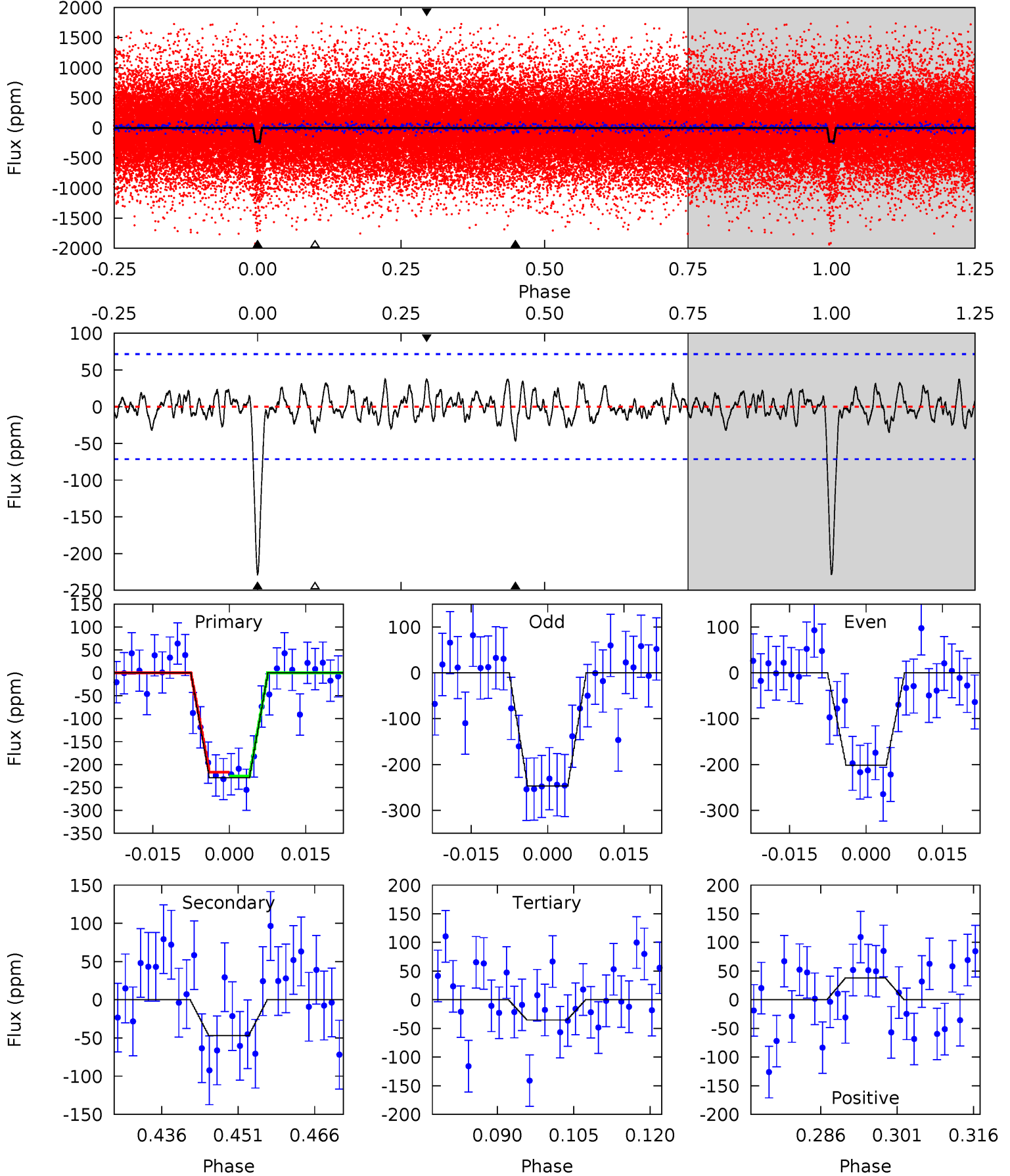
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011655826-01, P = 5.593463 Days, E = 131.507074 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.8	3.24	2.44	2.62	4.95	2.43	0.97	13.4	13.2	0.80	0.61	1.57	0.91	0.14	0.30



Stellar Parameters For KIC 011655826

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5874^{+164}_{-205}	$4.498^{+0.052}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$0.933^{+0.297}_{-0.099}$	$1.001^{+0.127}_{-0.127}$	$1.736^{+0.489}_{-0.913}$
	+3%/-3%	+1%/-5%	+417%/-500%	+32%/-11%	+13%/-13%	+28%/-53%
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 011655826-01 / KOI 4643.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$8.70^{+7.67}_{-5.95}$	1437^{+101}_{-75}	3464^{+18299}_{-20238}	13^{+6211}_{-3830}
Alt.	-47 ± 14	$7.93^{+8.17}_{-5.59}$	1435^{+107}_{-71}	2530^{+1137}_{-801}	$1.527^{+15.793}_{-1.190}$

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 $A_{obs} \gg 1.0$

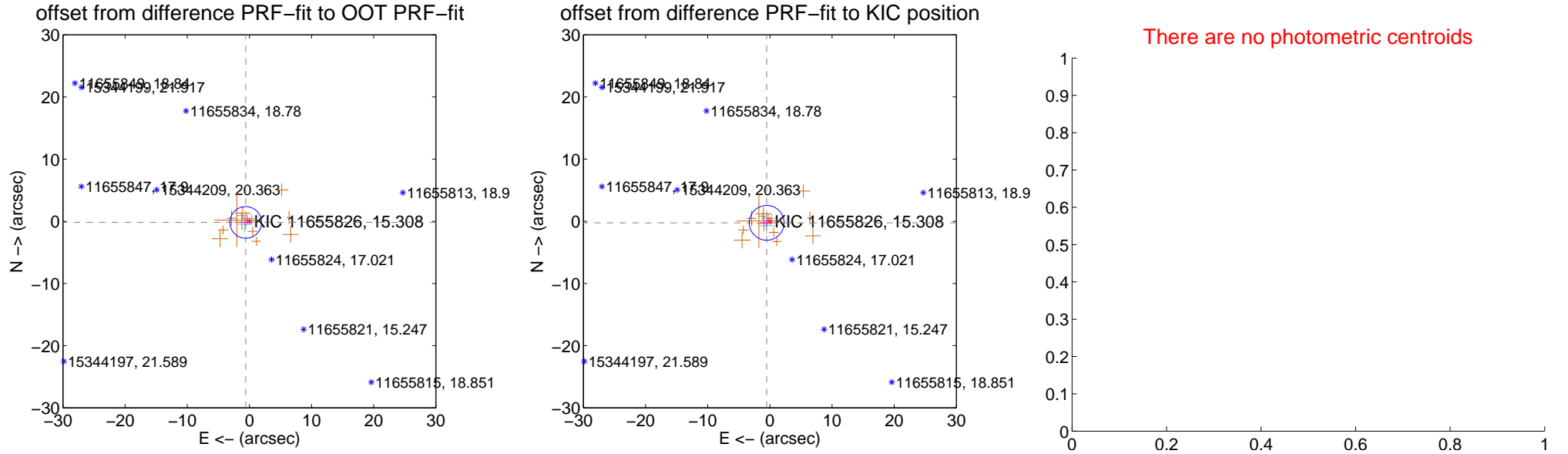
DV Centroid Data

Supplemental centroid analysis for 011655826-01. Kepler magnitude: 15.31. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

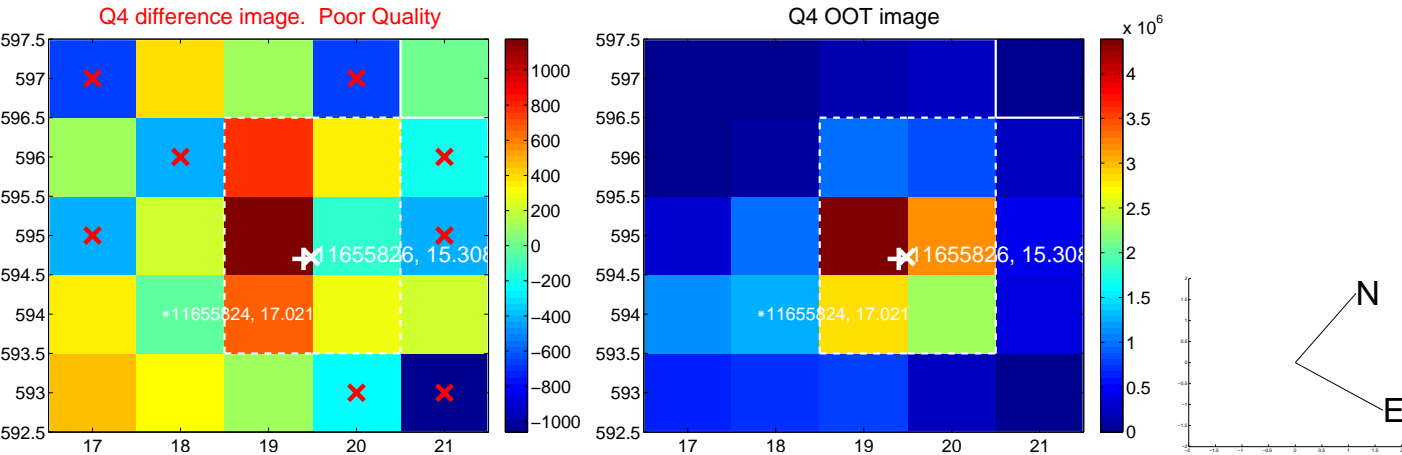
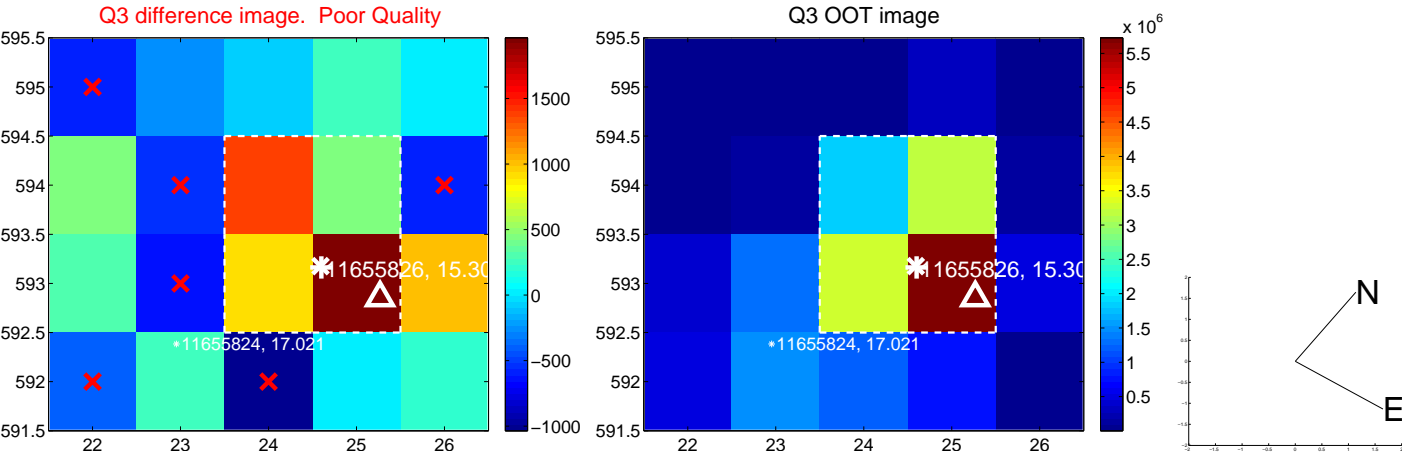
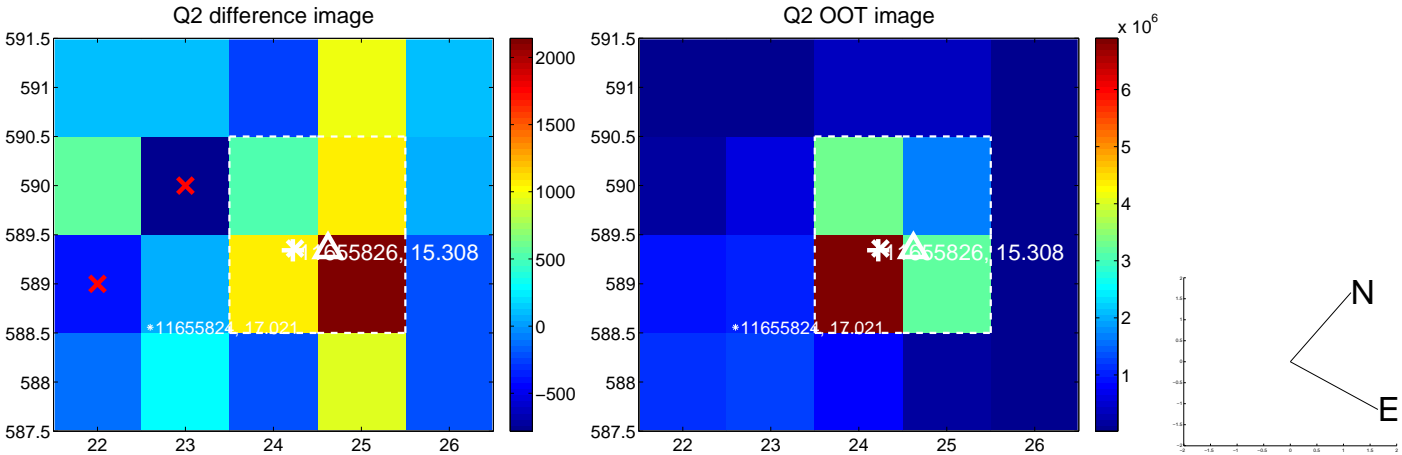
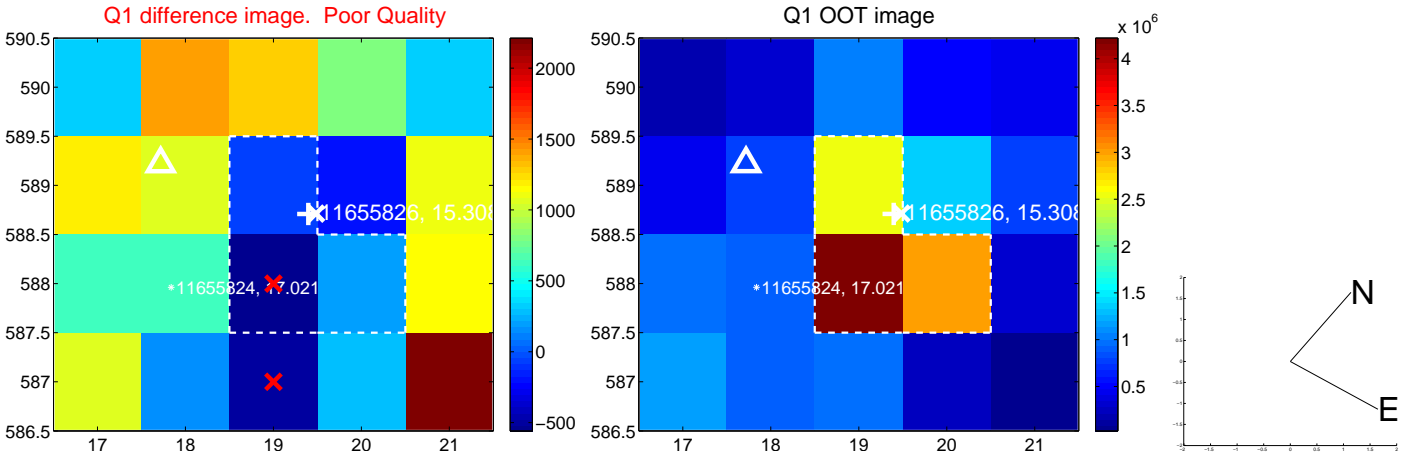
The direct PRF centroid is offset from the target star catalog position by about 0.29 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.617 ± 0.850	0.73	0.588 ± 0.835	-0.184 ± 0.503
PRF-fit source offset from KIC position	0.571 ± 0.933	0.61	0.516 ± 0.916	-0.245 ± 0.518
photometric centroid source offset	—	—	—	—

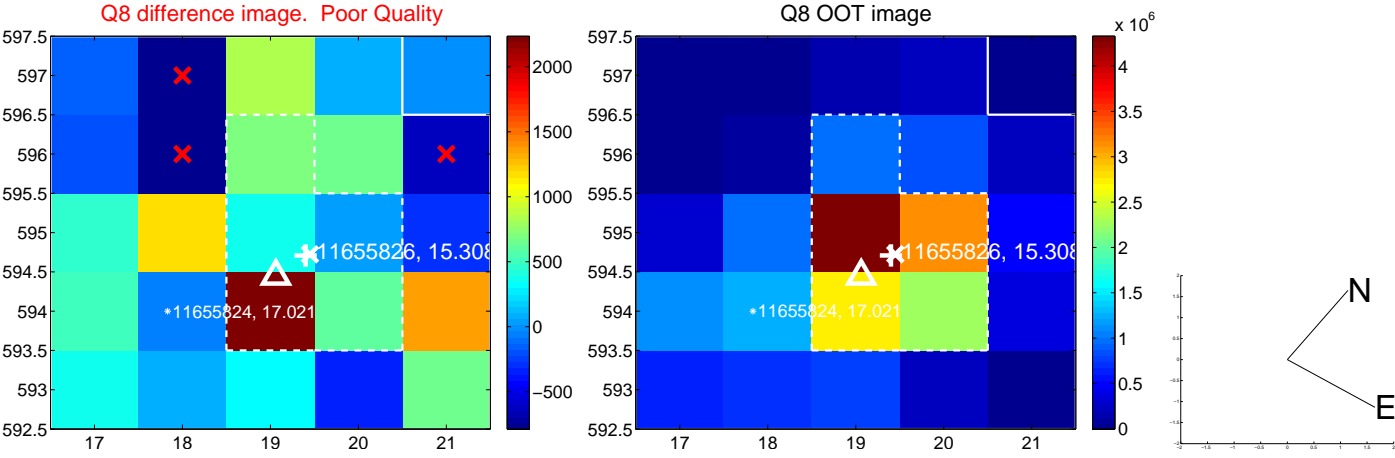
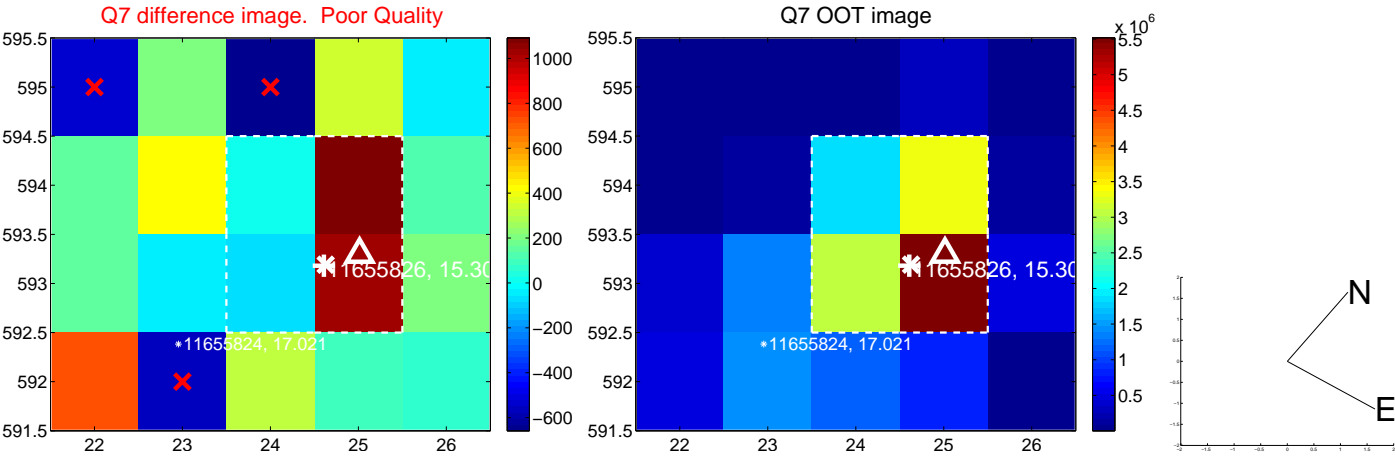
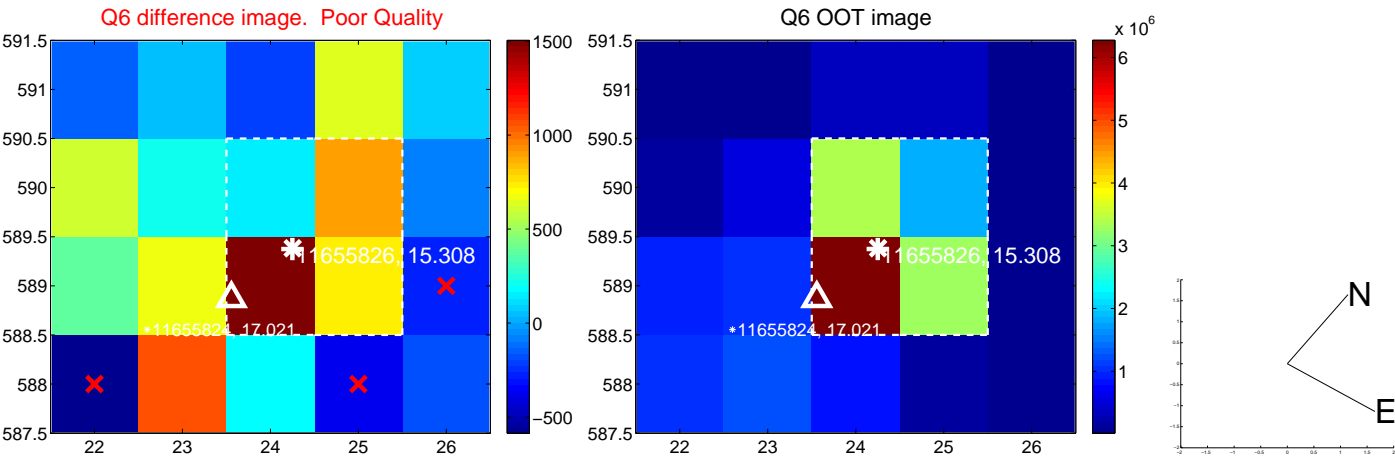
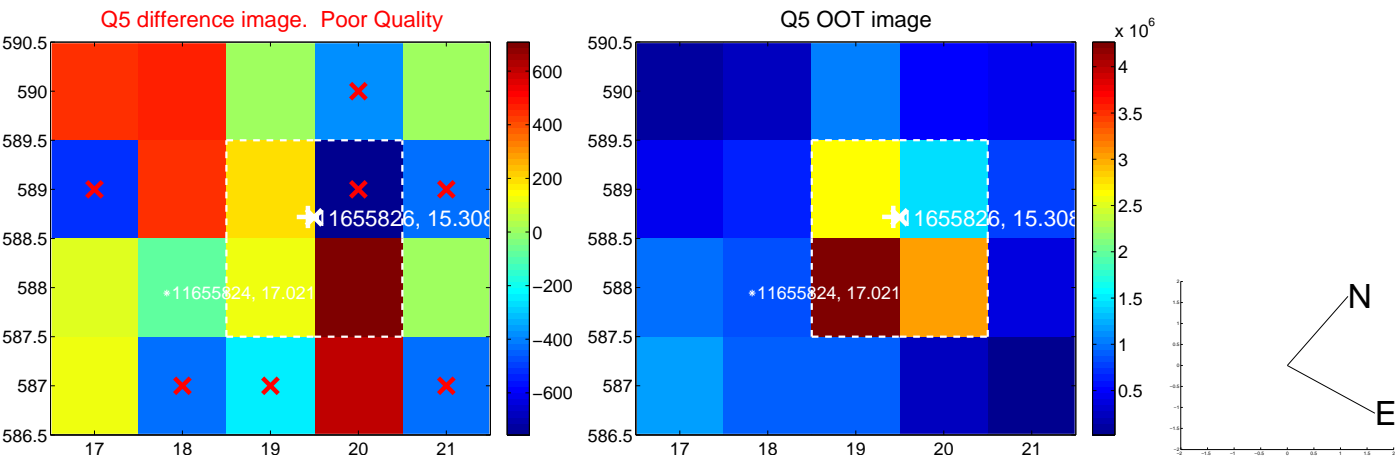


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

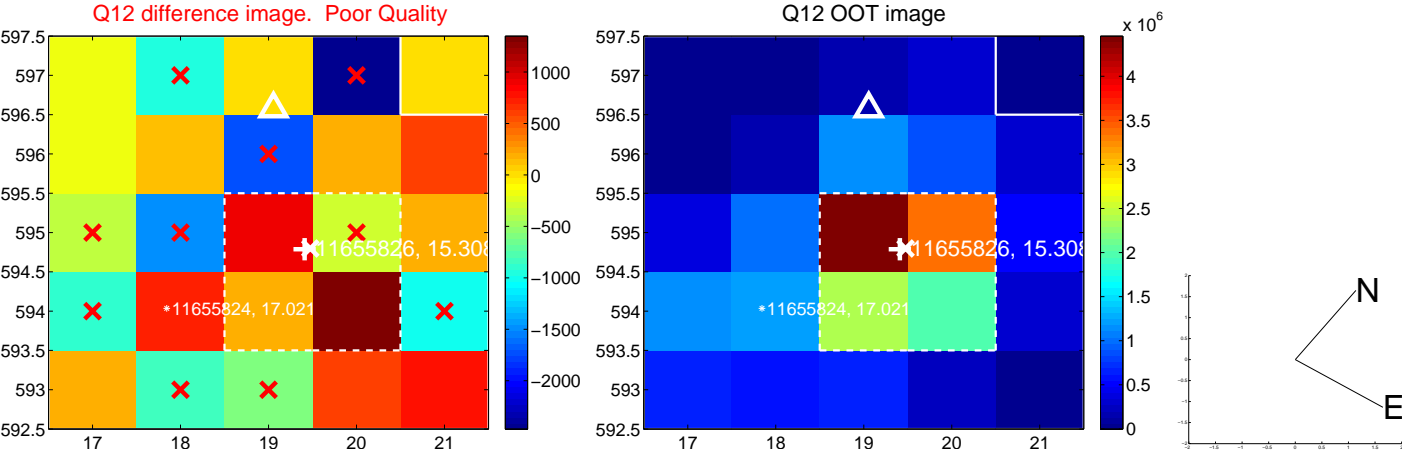
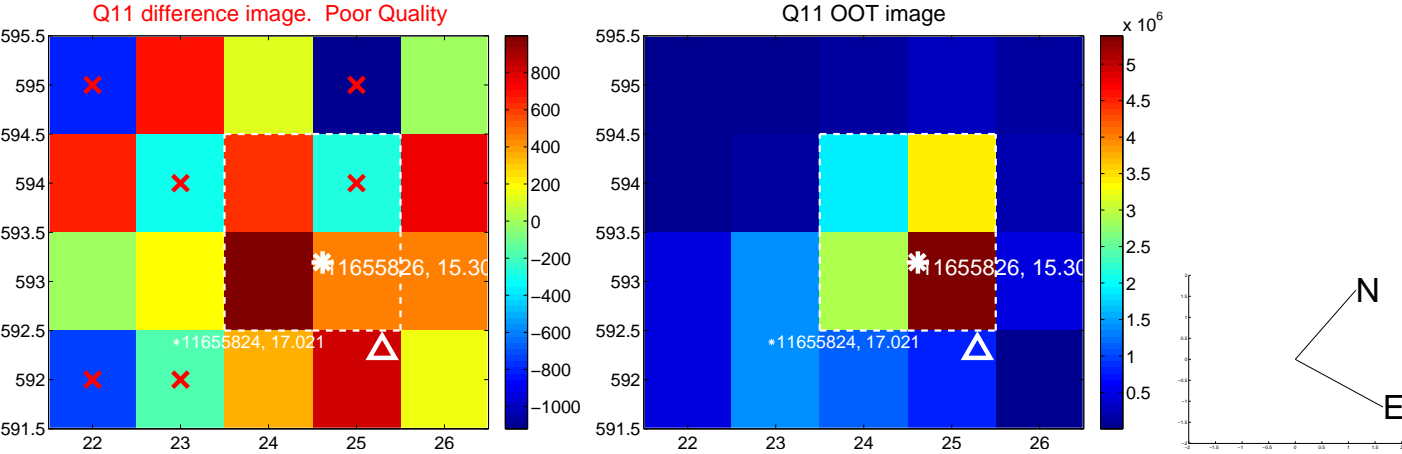
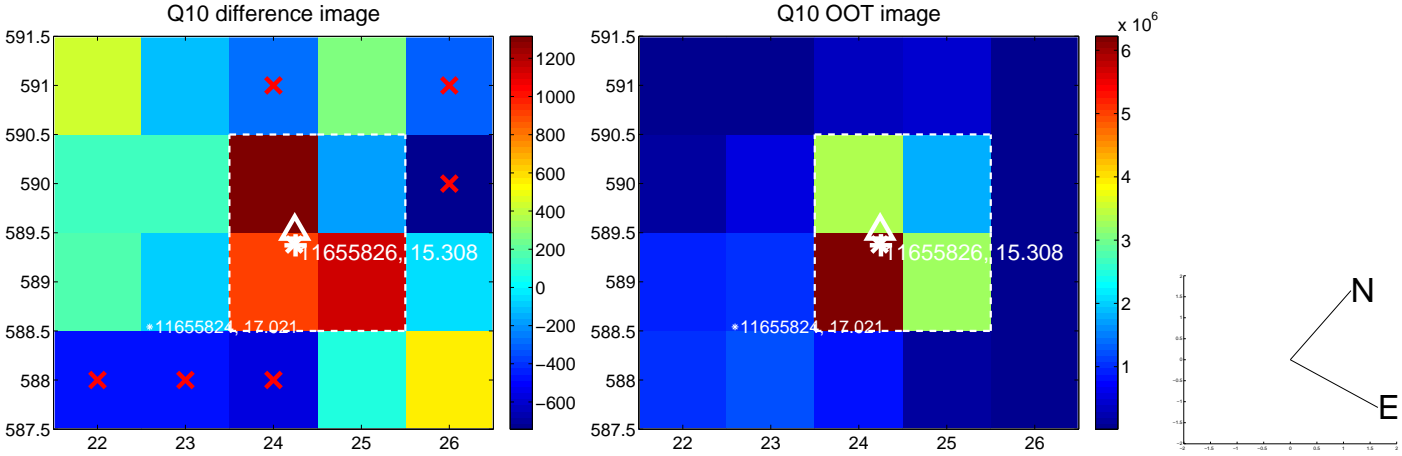
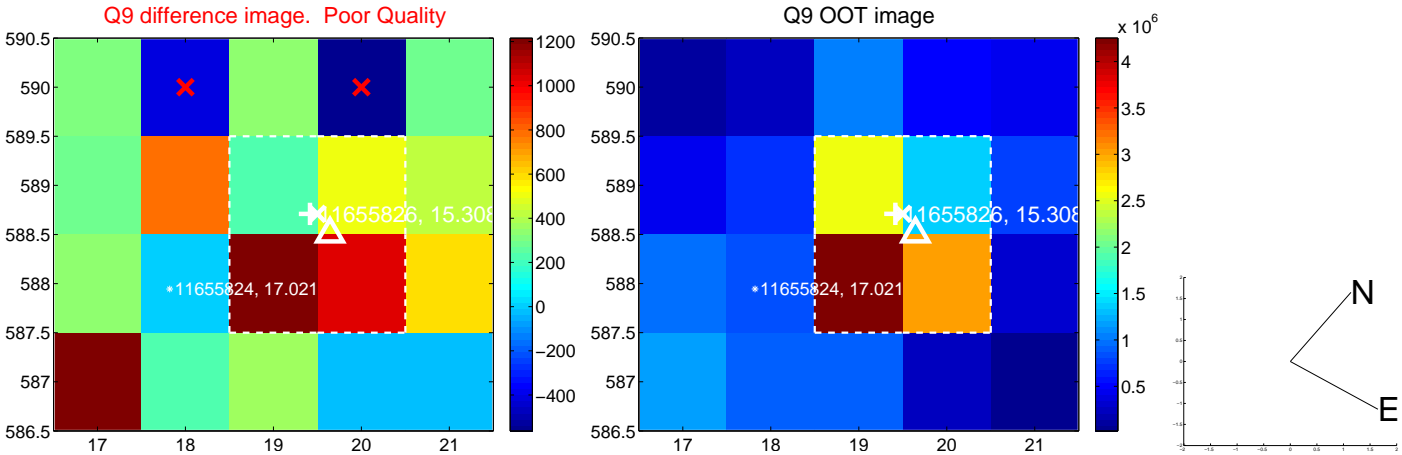
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



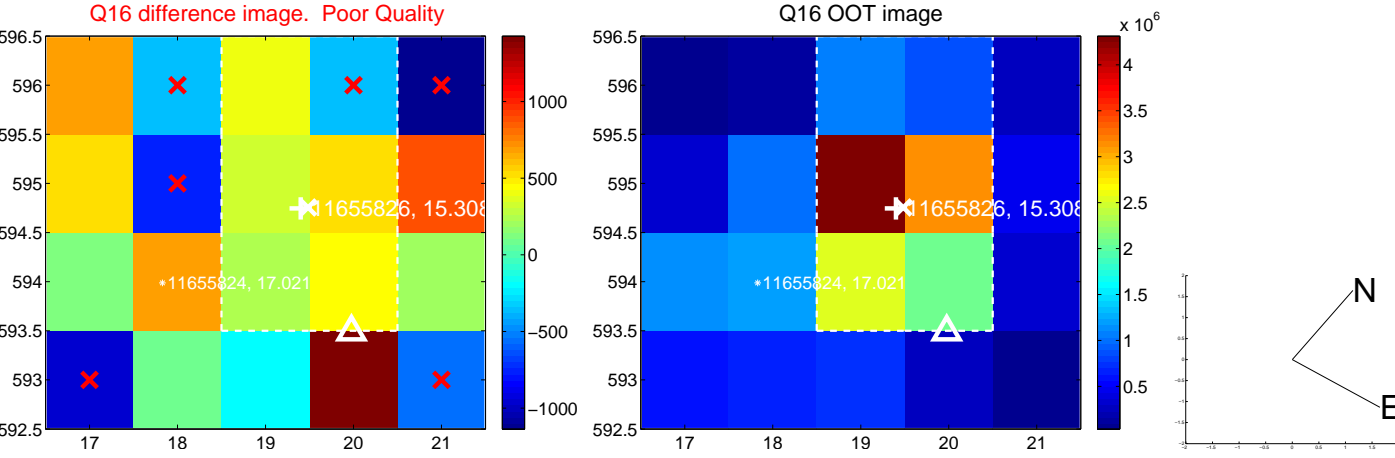
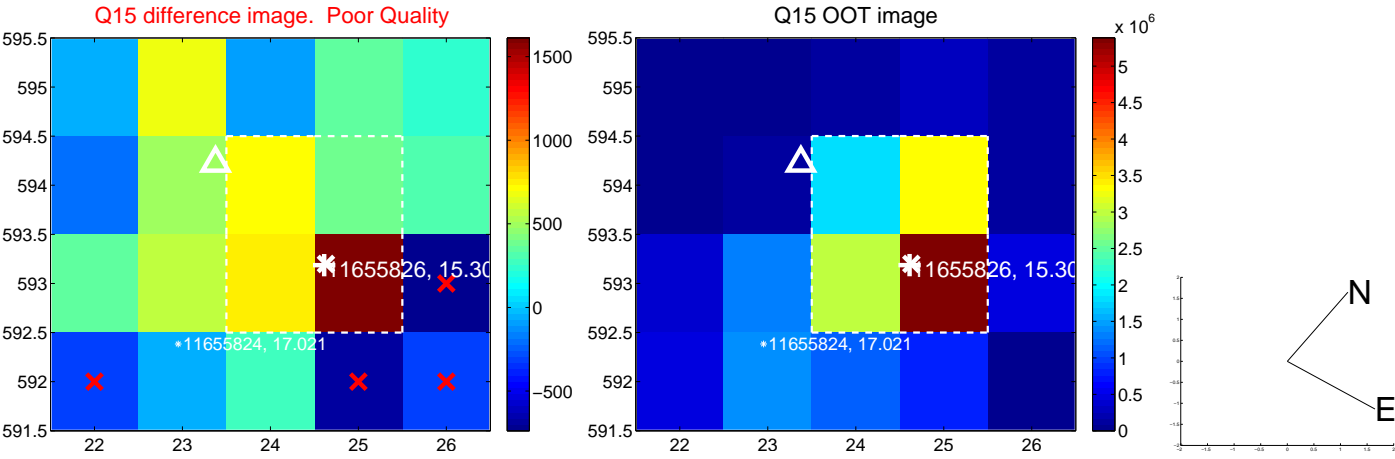
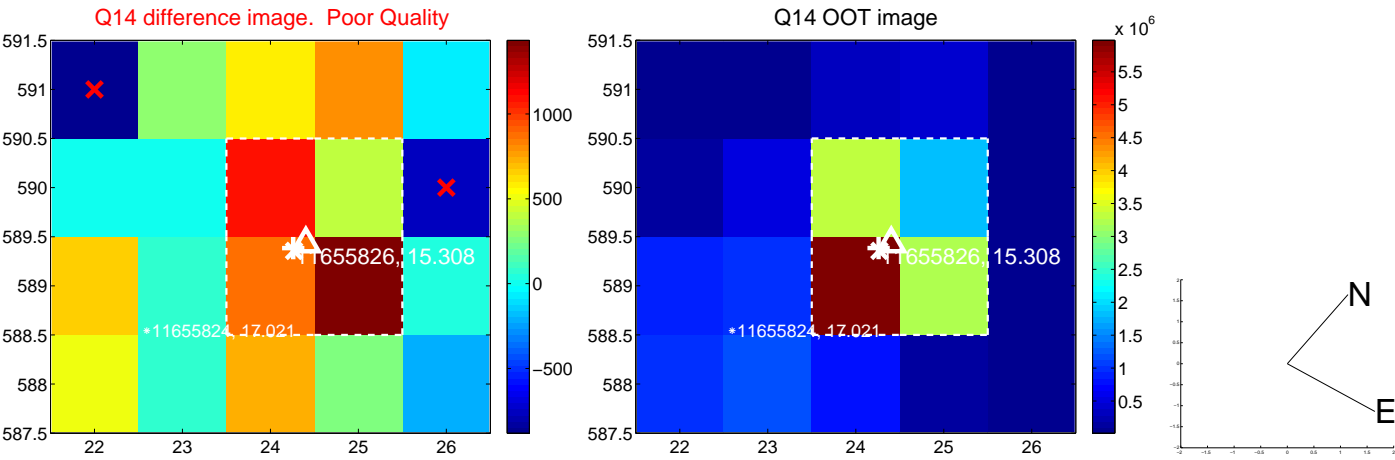
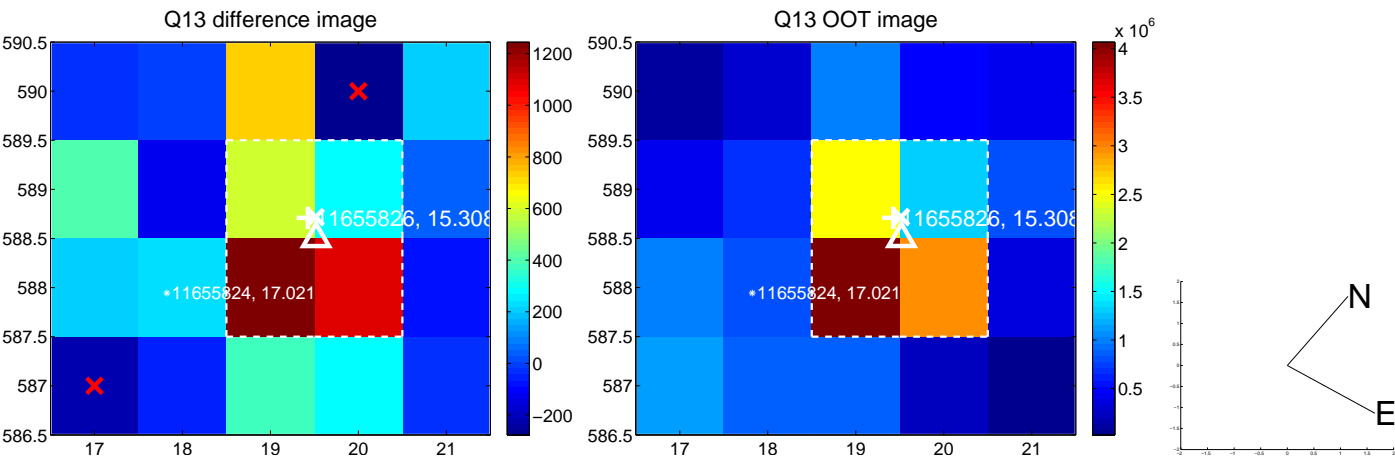
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



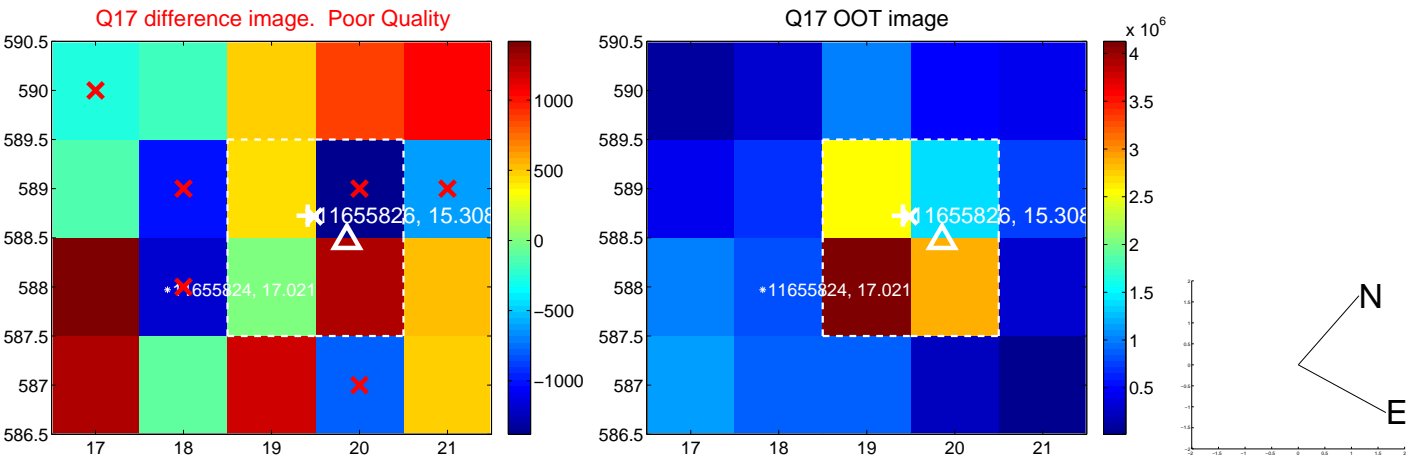
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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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

