

KIC 011760860

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})
011760860-01	OBS	3892.01	2.416598	131.538492	84.0	2.063	26.7	32.8	1.03	5705	1.12	769.86

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011760860-01	OBS	PC	1.00	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.

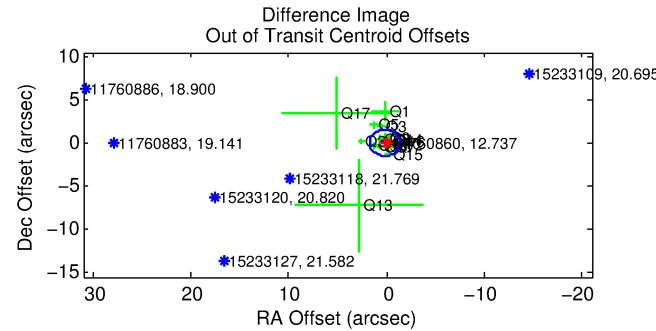
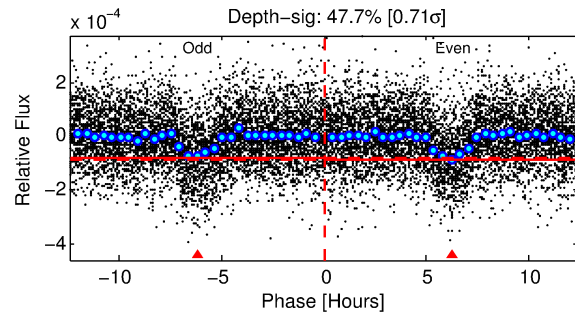
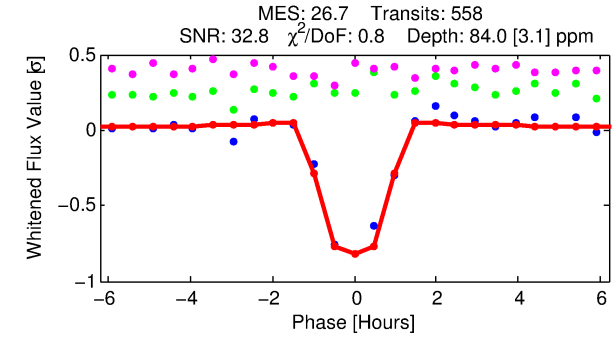
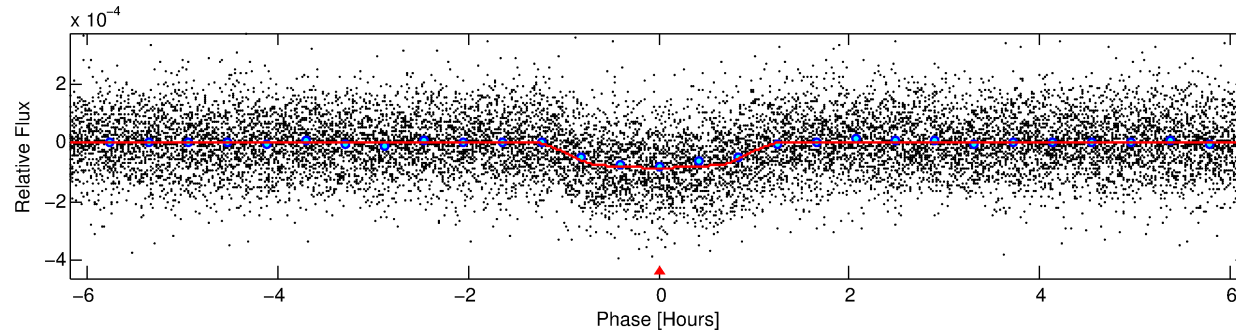
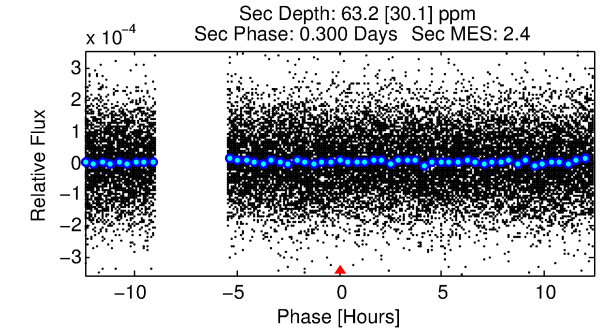
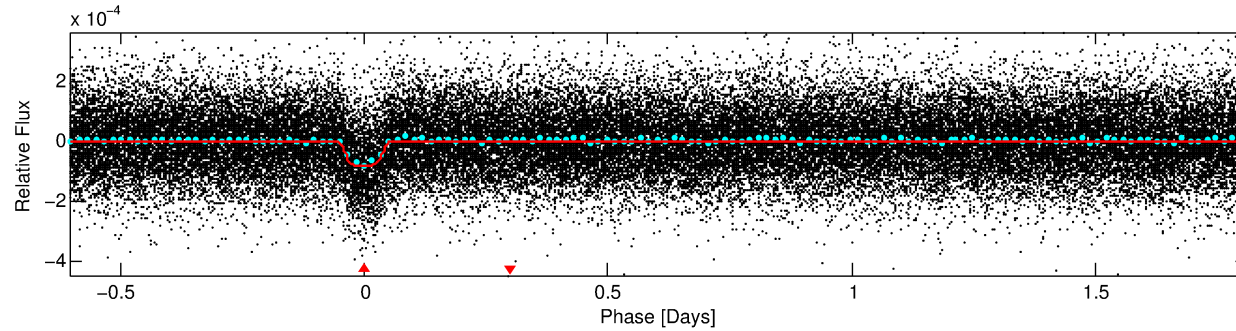
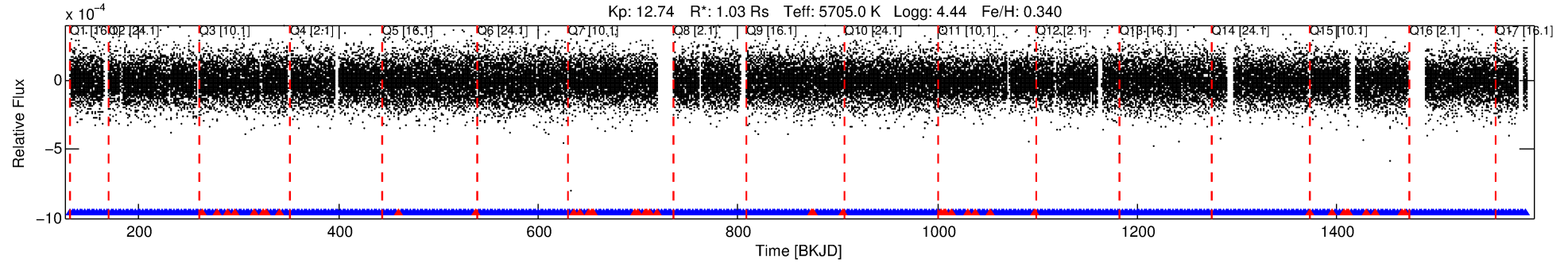
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011760860-01

No Significant Match Found

DV One-Page Summary

KIC: 11760860 Candidate: 1 of 1 Period: 2.417 d
KOI: K03892.01 Corr: 0.976



DV Fit Results:

Period = 2.41660 [0.00000] d
Epoch = 131.5385 [0.0010] BKJD
Rp/R* = 0.0100 [0.0022]
a/R* = 4.36 [4.18]
b = 0.89 [0.24]
Seff = 769.86 [183.74]
Teff = 1343 [80] K
Rp = 1.12 [0.31] Re
a = 0.0360 [0.0051] AU
Ag = 36.10 [24.98] [1.40σ]
Teffp = 5090 [842] K [4.43σ]

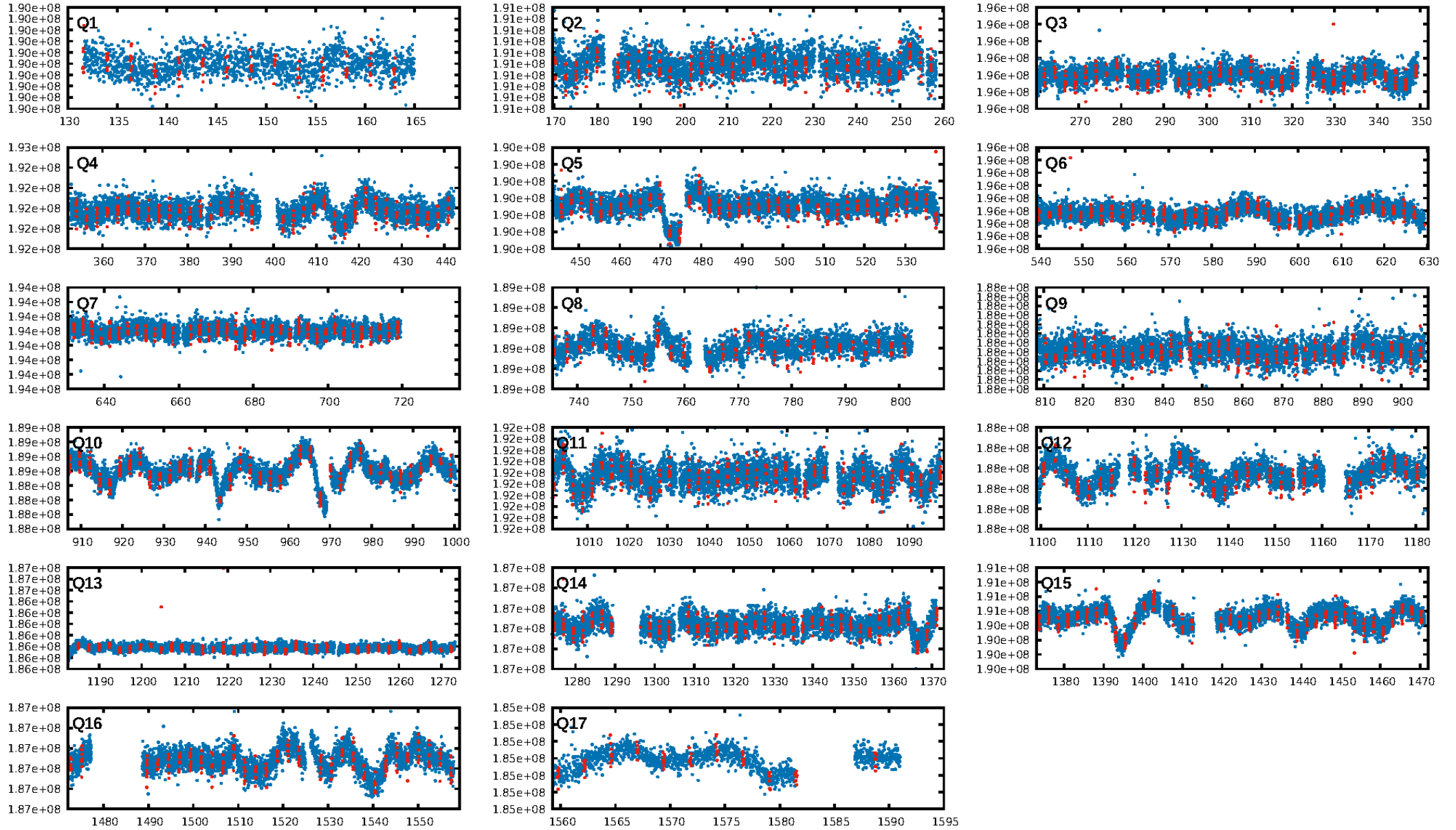
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.41e-149
RollingBand-fgt: 0.92 [492/533]
GhostDiagnostic-chr: 17.09
Centroid-sig: 16.3%
Centroid-so: 0.566 arcsec [1.45σ]
OotOffset-rm: 0.200 arcsec [0.39σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.279 arcsec [0.54σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.82 [14/17]
DiffImageOverlap-fno: 1.00 [17/17]

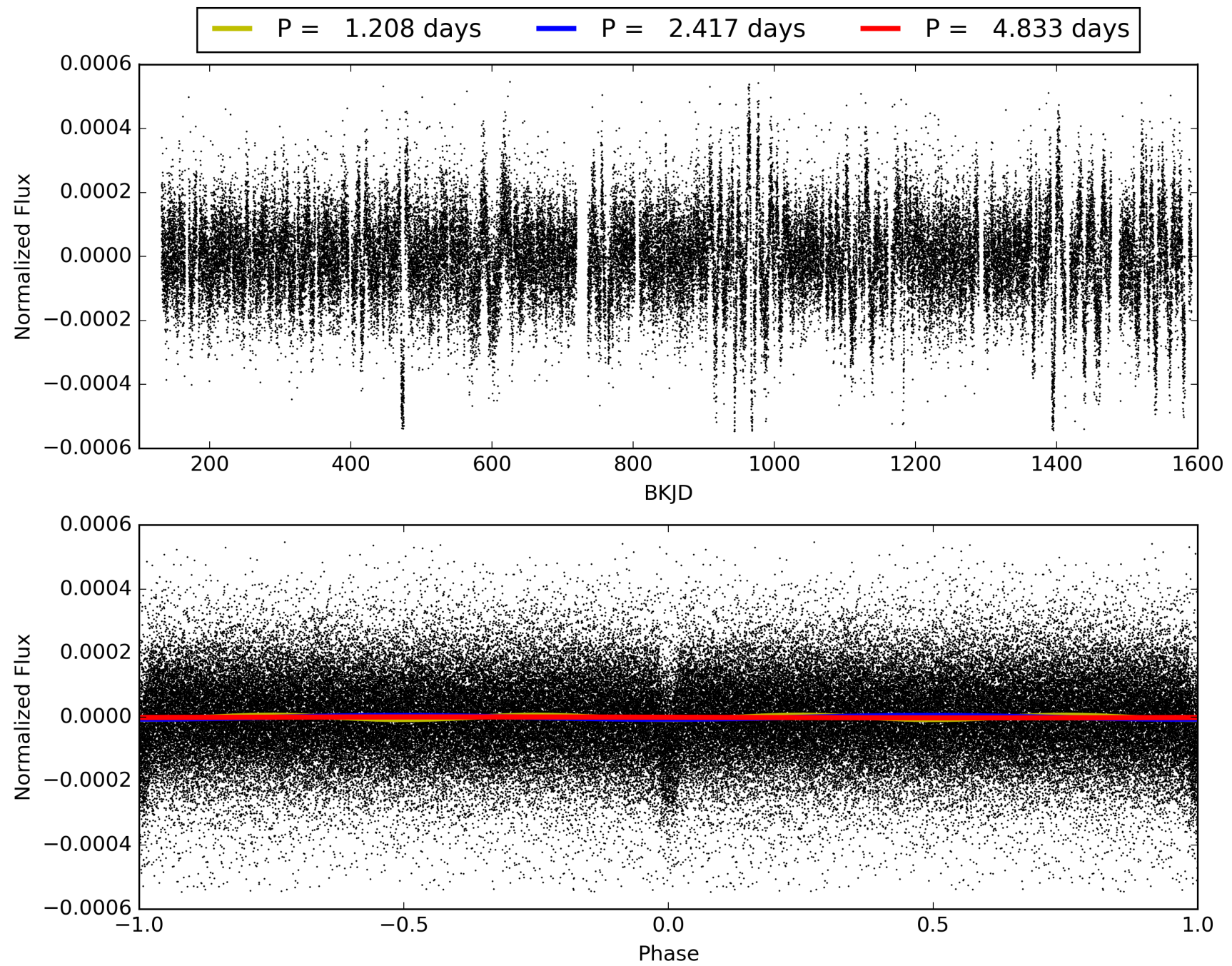
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:25:43 Z

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

TCE 011760860-01, PDC Light Curves

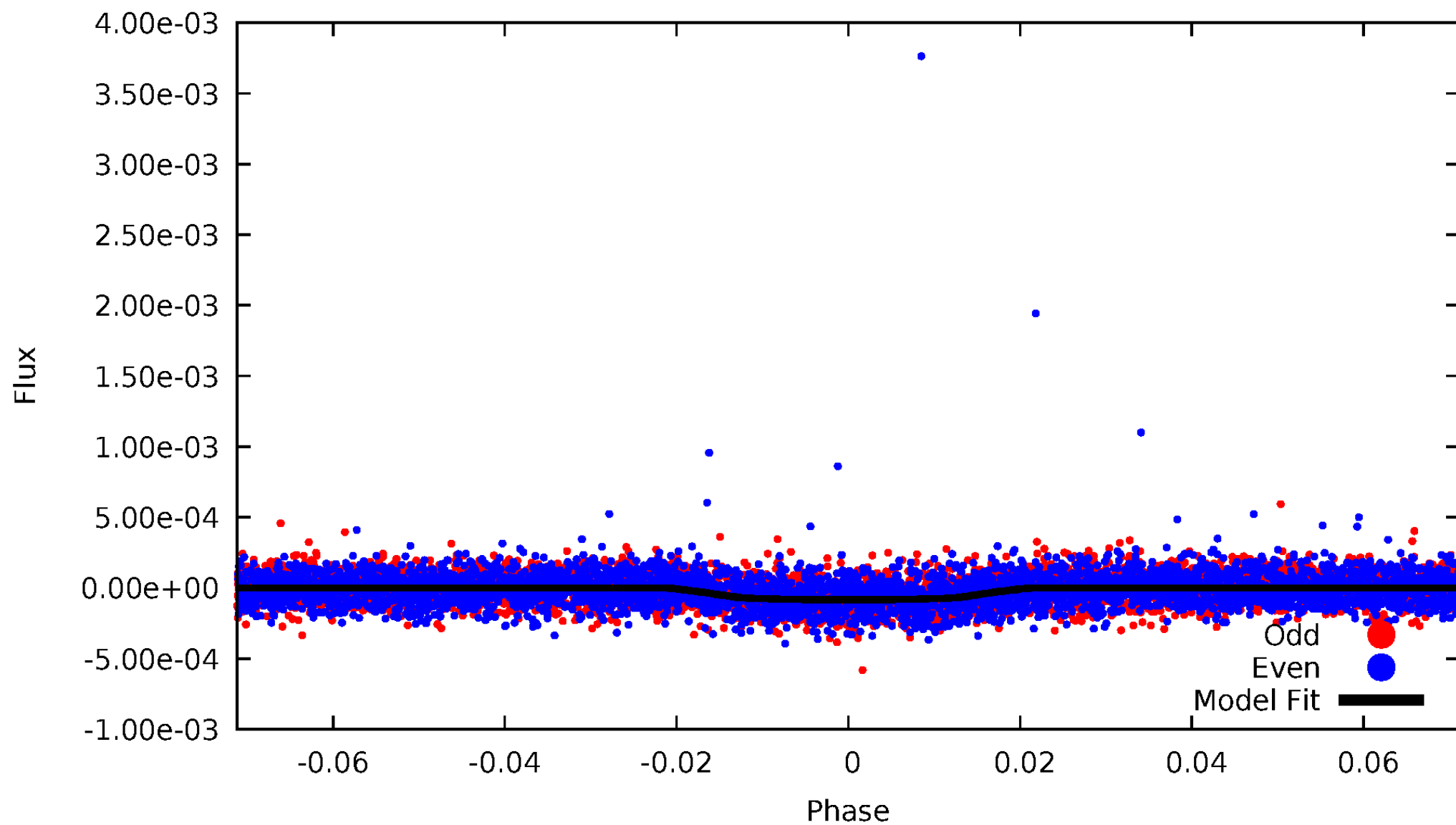


TCE 011760860-01



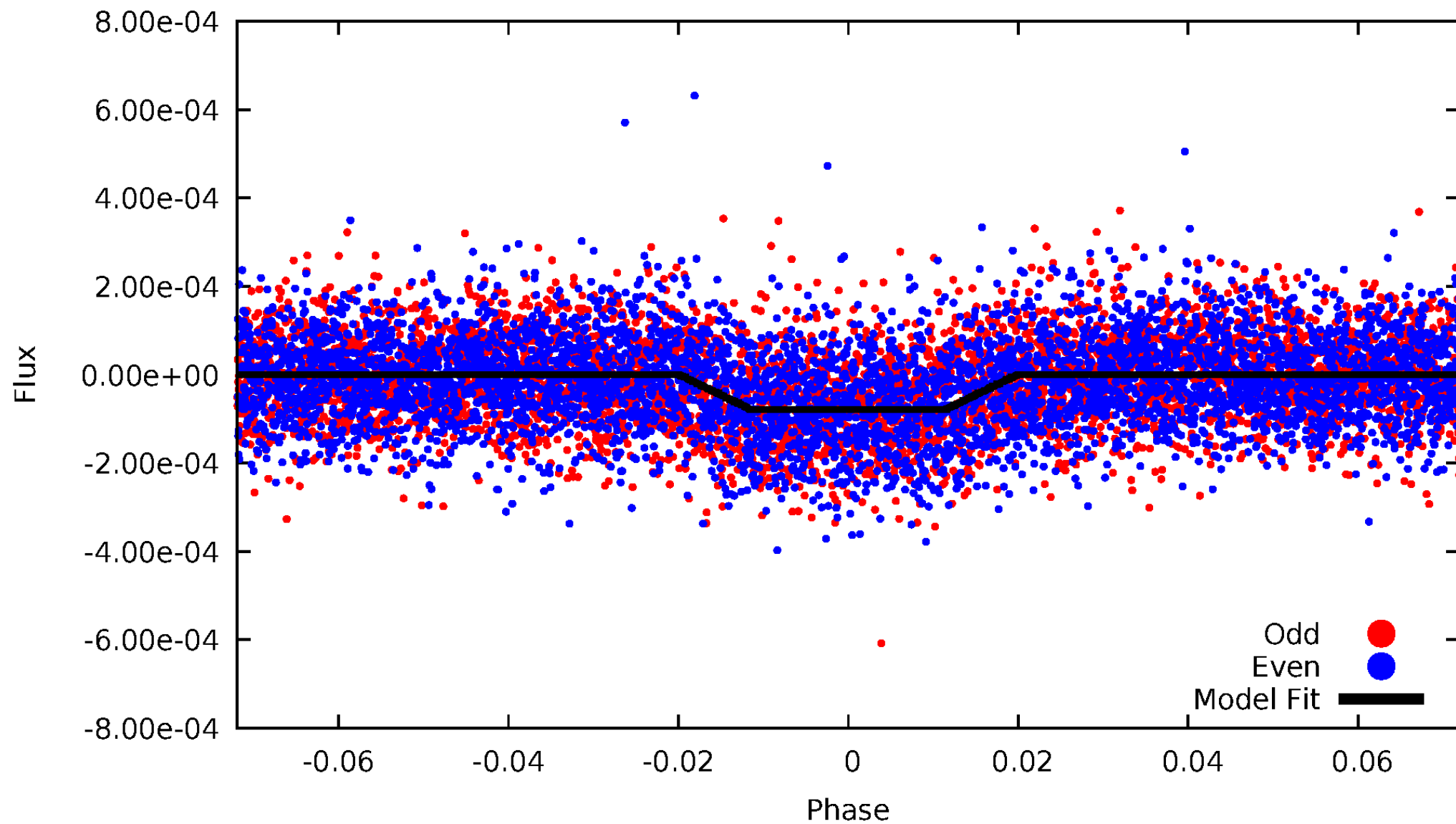
DV Odd/Even

TCE 011760860-01

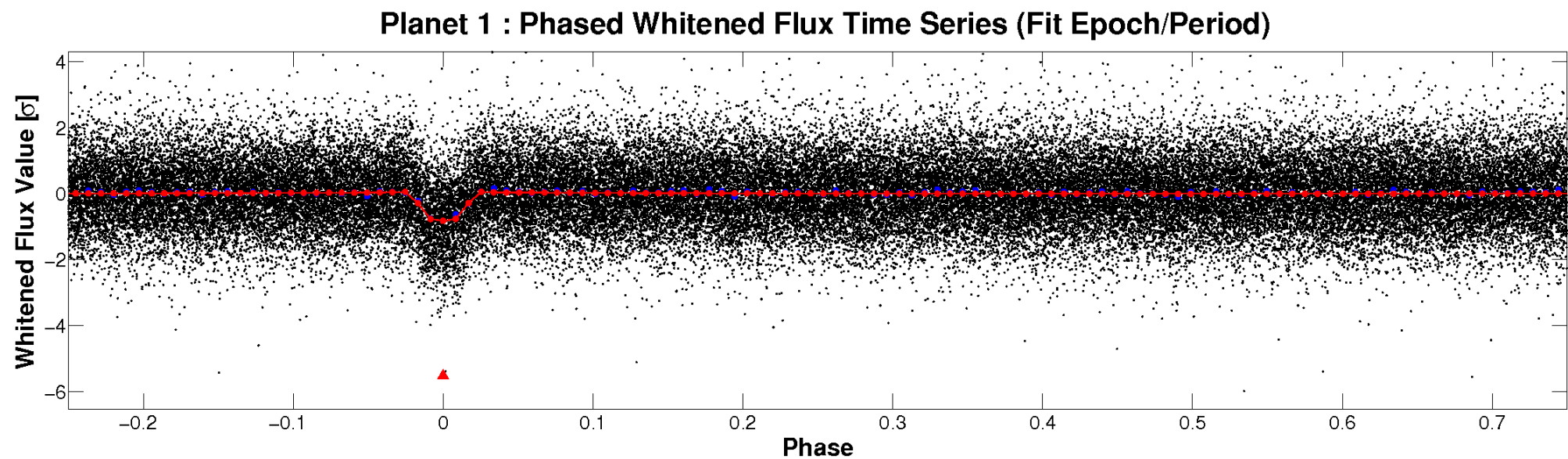
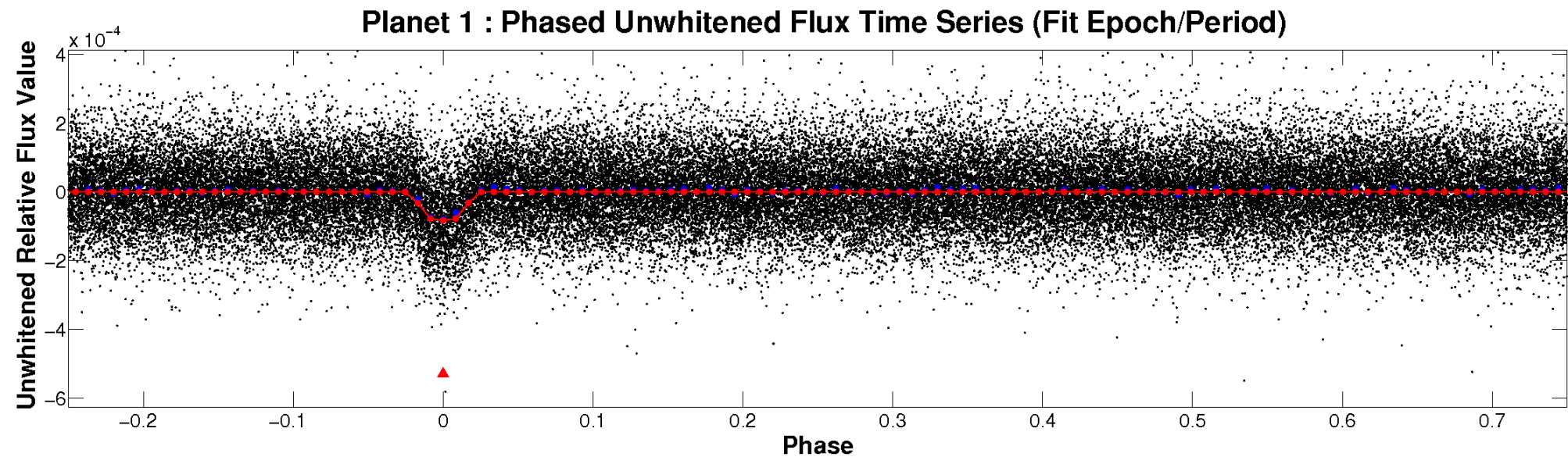


ALT Odd/Even

TCE 011760860-01

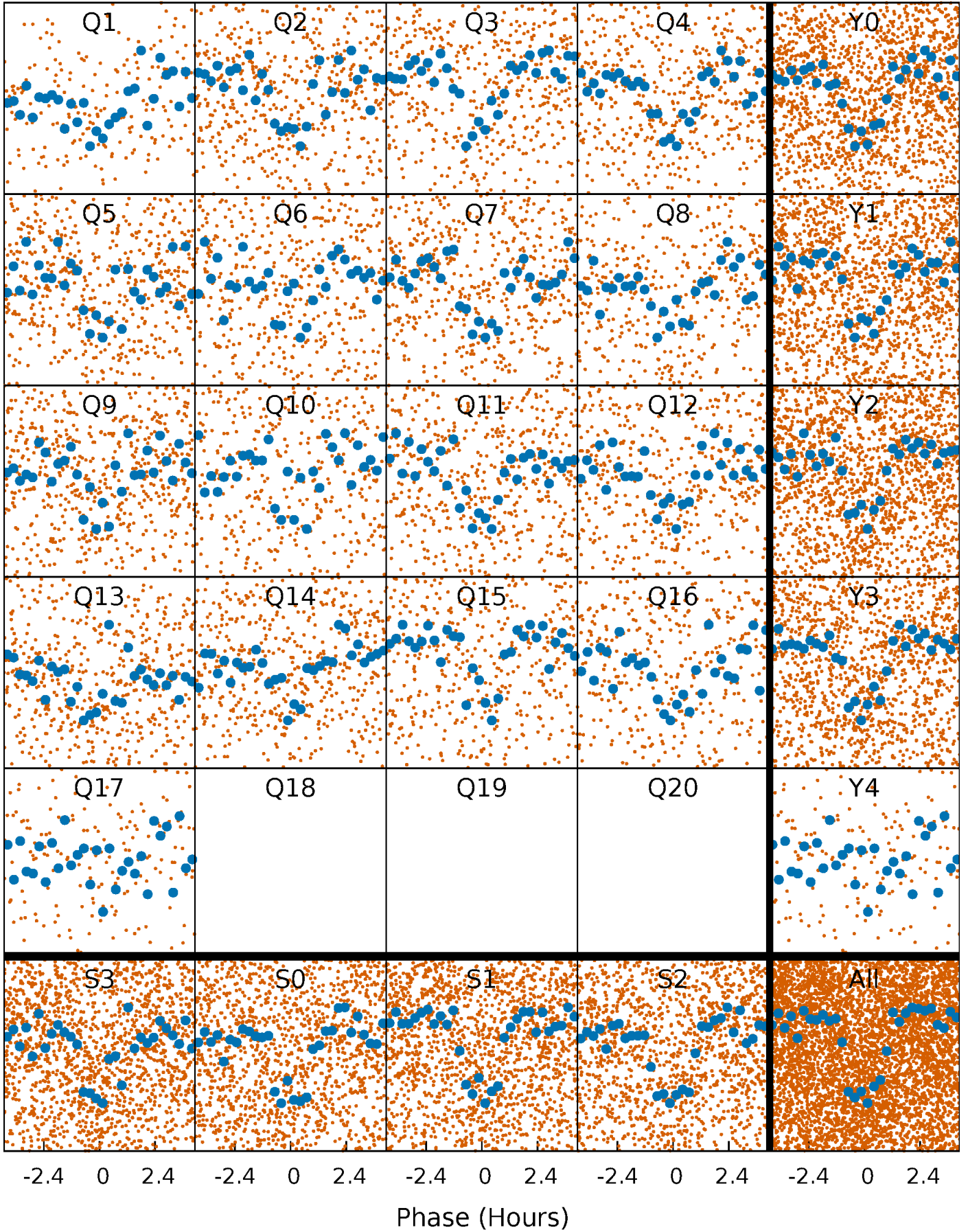


Non-Whitened Vs. Whitened Light Curve



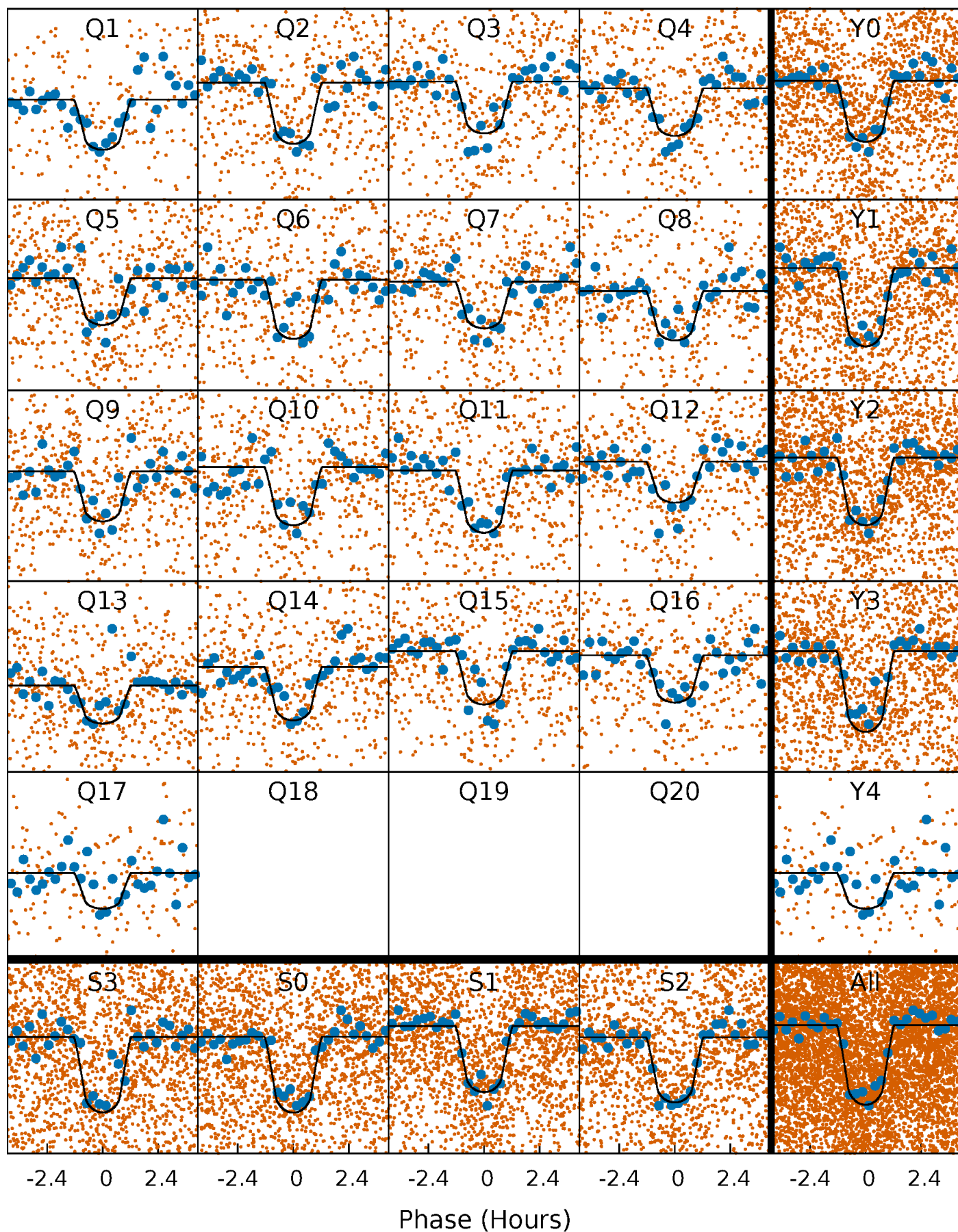
PDC Quarter-Phased Transit Curves

TCE 011760860-01 P= 2.416598 Days $T_0=131.538492$ (BKJD)



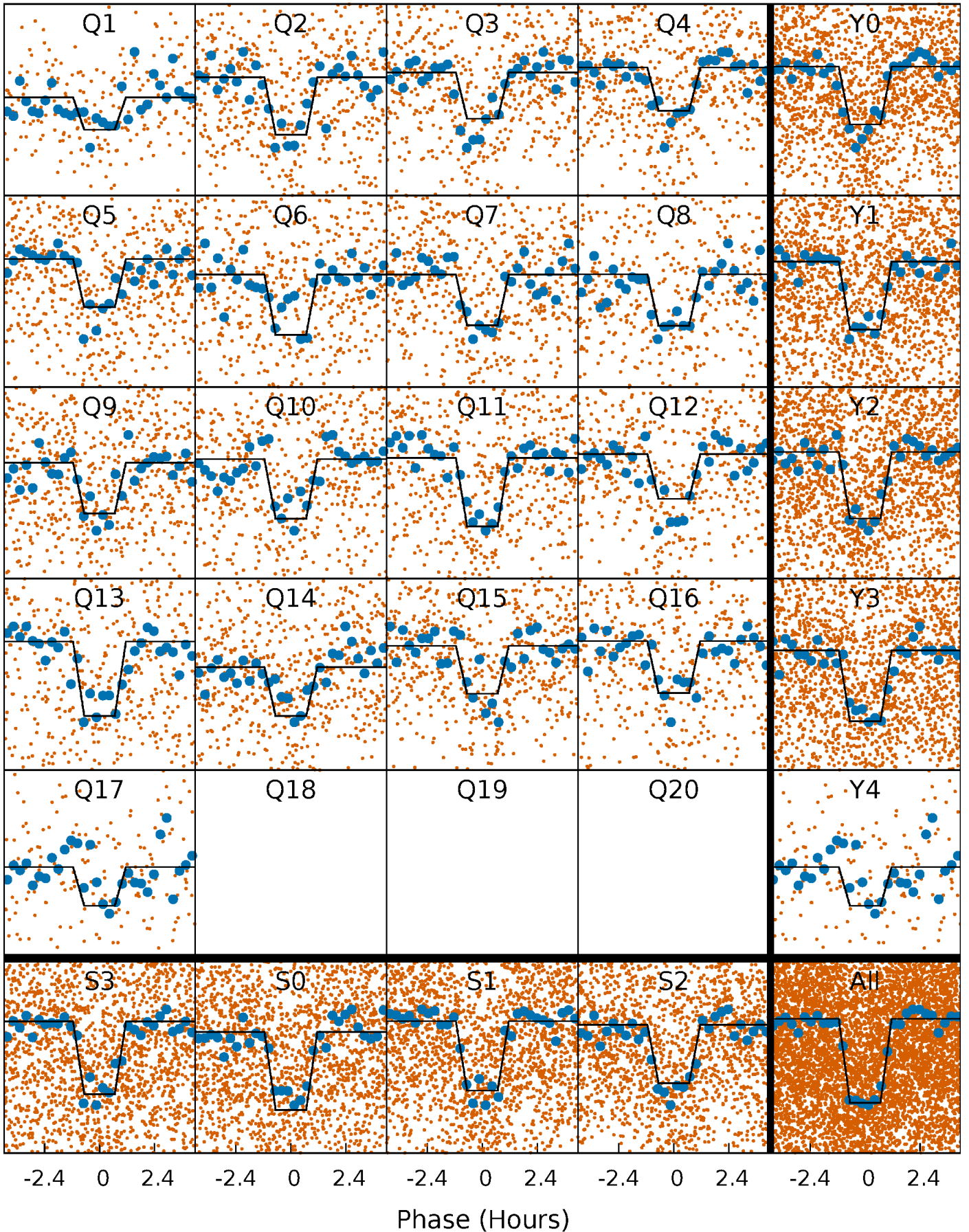
DV Quarter-Phased Transit Curves

TCE 011760860-01 P= 2.416598 Days $T_0=131.538492$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

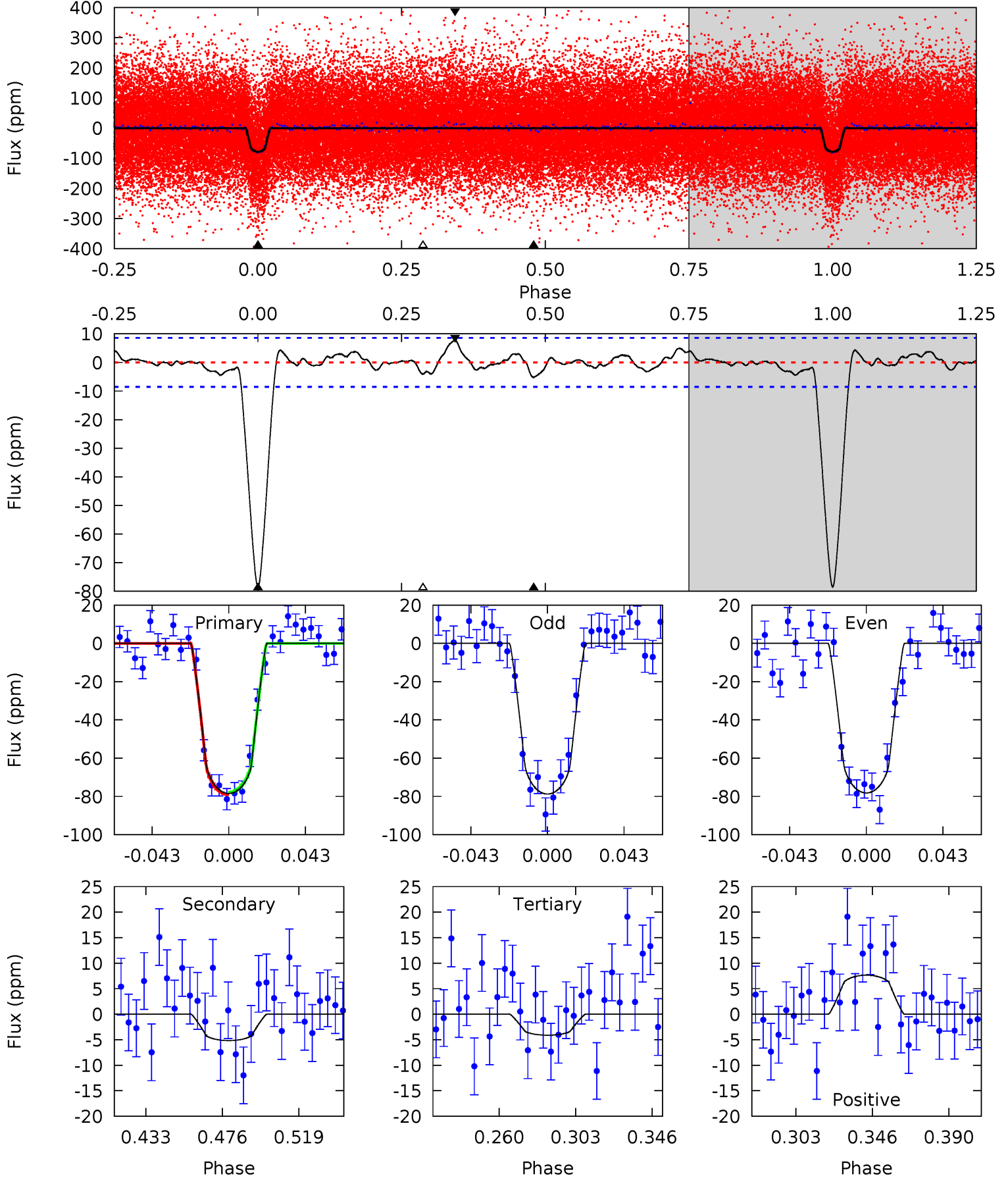
TCE 011760860-01 P= 2.416576 Days $T_0=131.545441$ (BKJD)



DV Model-Shift Uniqueness Test

011760860-01, P = 2.416598 Days, E = 129.121894 Days

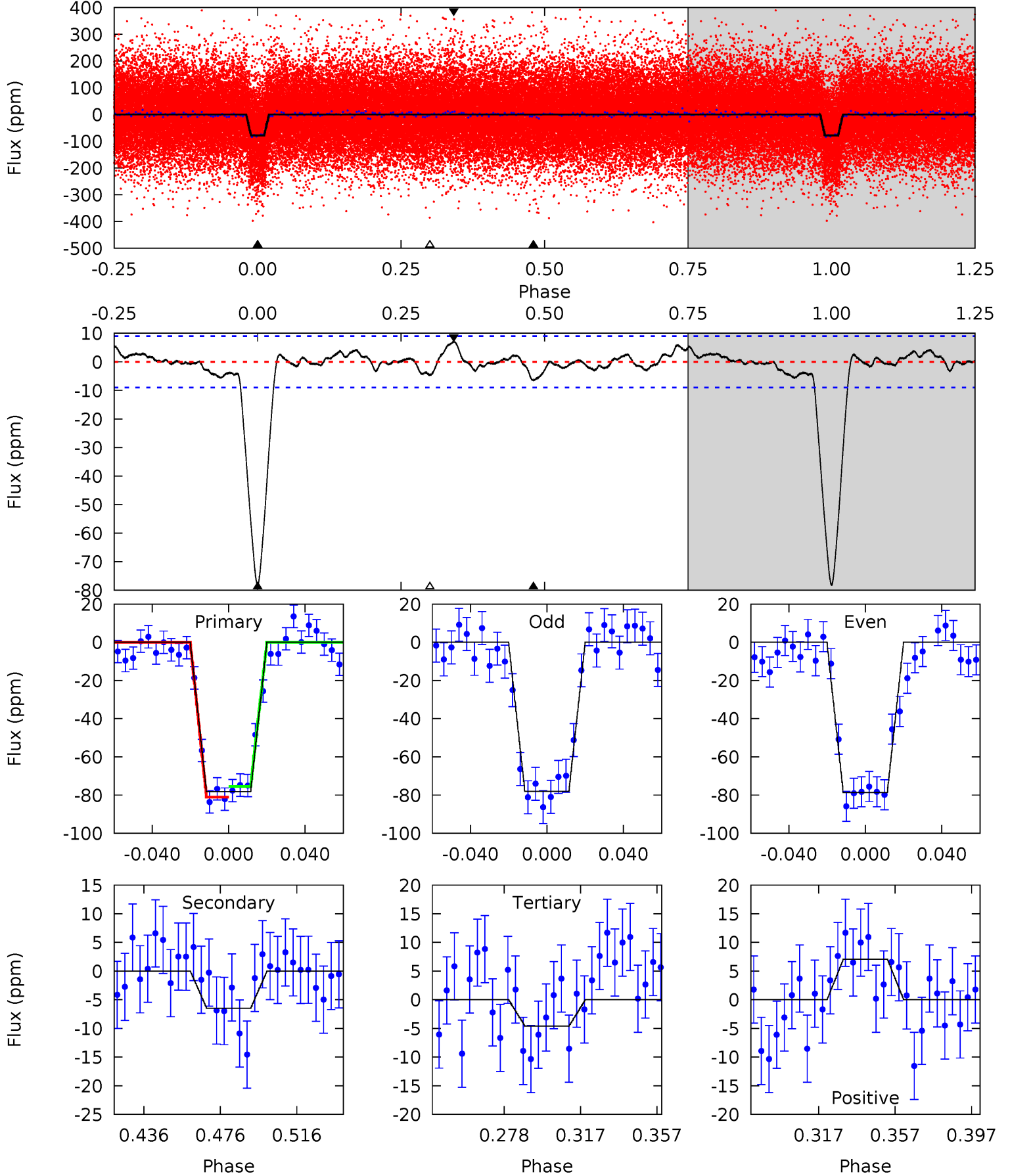
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.5	2.86	2.28	4.24	4.74	2.02	1.22	41.2	39.2	0.58	-1.38	0.16	0.93	0.09	0.34



Alt Model-Shift Uniqueness Test

011760860-01, P = 2.416576 Days, E = 129.128865 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.3	3.41	2.43	3.73	4.76	2.06	1.29	38.9	37.6	0.98	-0.31	0.16	0.93	0.08	1.47



Stellar Parameters For KIC 011760860

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5705^{+103}_{-125}	$4.444^{+0.040}_{-0.128}$	$0.340^{+0.100}_{-0.150}$	$1.026^{+0.159}_{-0.068}$	$1.069^{+0.053}_{-0.066}$	$1.393^{+0.226}_{-0.506}$
	+2%/-2%	+1%/-3%	+29%/-44%	+15%/-7%	+5%/-6%	+16%/-36%
Source	SPE59	SPE59	SPE59	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011760860-01 / KOI 3892.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-5 ± 2	$1.14^{+0.25}_{-0.27}$	1891^{+70}_{-56}	3222^{+341}_{-309}	$2.850^{+2.230}_{-1.340}$
Alt.	-6 ± 2	$1.03^{+0.28}_{-0.25}$	1896^{+80}_{-62}	3468^{+355}_{-324}	$4.178^{+3.579}_{-1.775}$

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

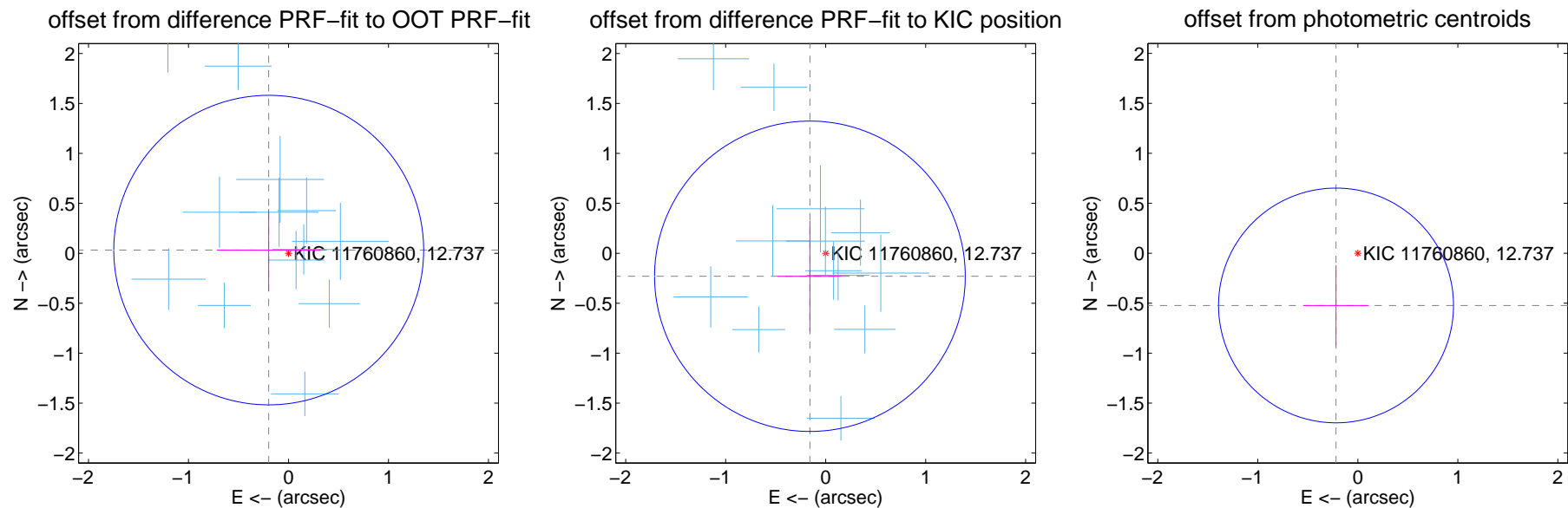
DV Centroid Data

Supplemental centroid analysis for 011760860-01. Kepler magnitude: 12.74. Transit SNR 32.81

There are 14 quarters with good PRF difference image offsets

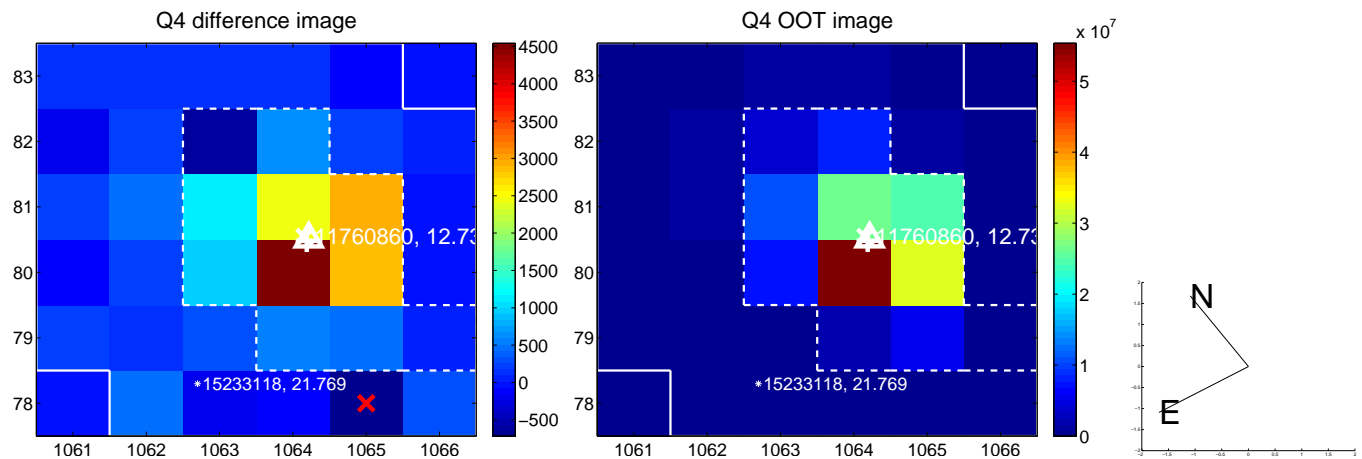
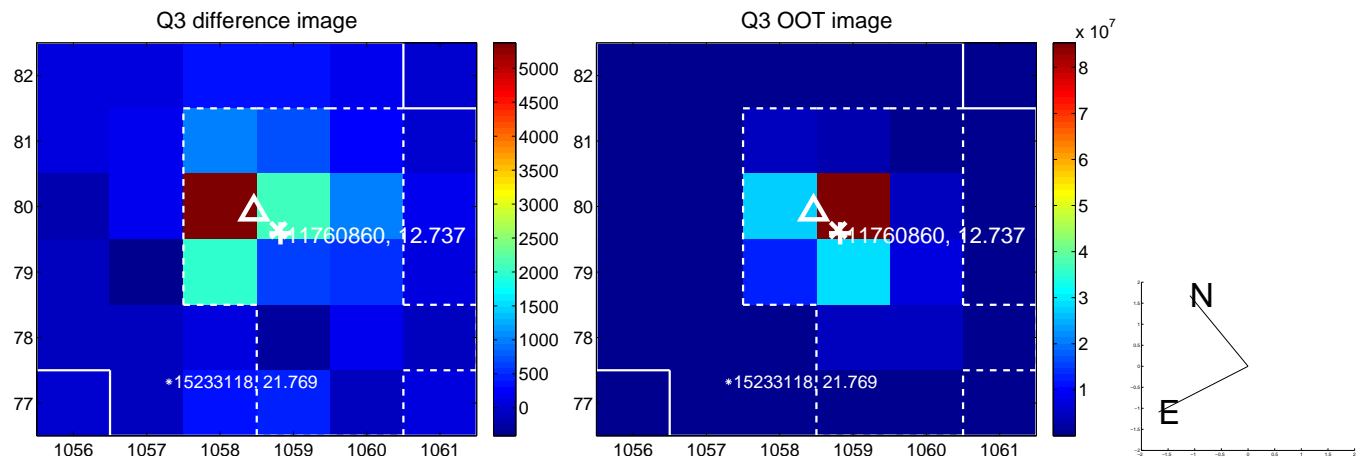
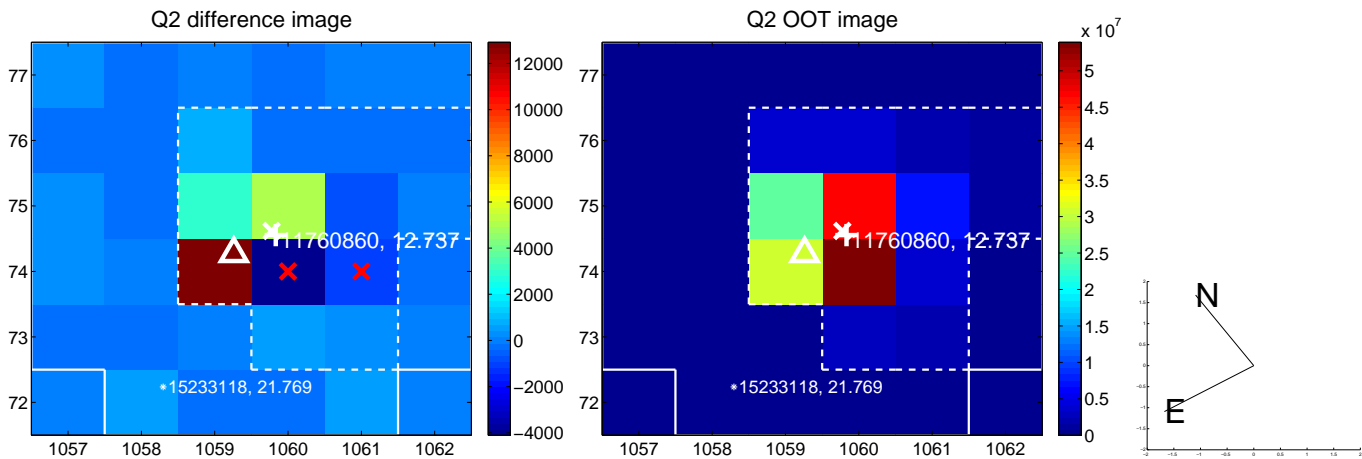
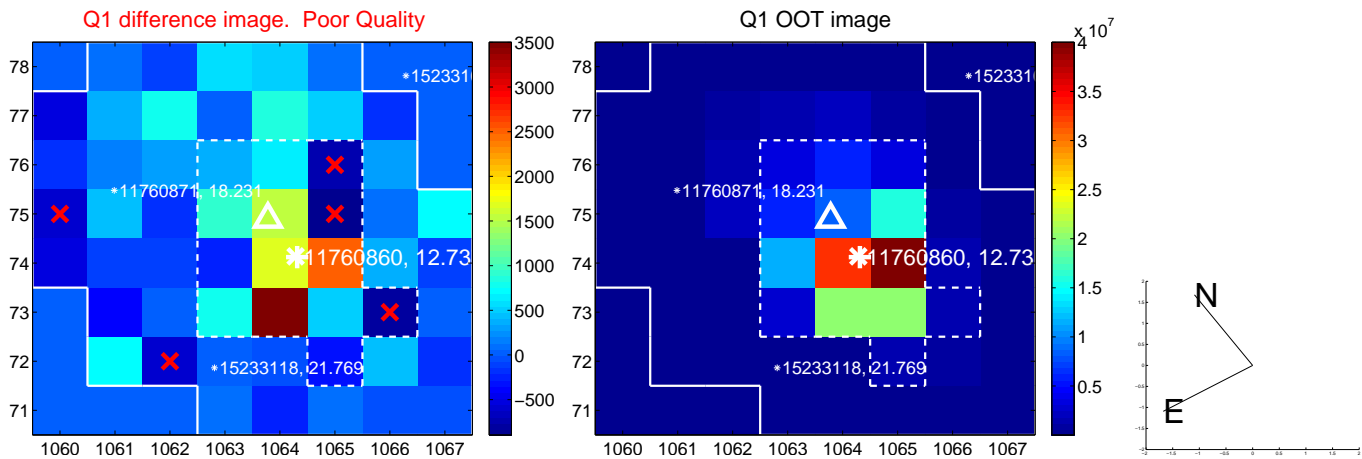
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.200 ± 0.516	0.39	0.198 ± 0.519	0.032 ± 0.410
PRF-fit source offset from KIC position	0.279 ± 0.518	0.54	0.157 ± 0.324	-0.230 ± 0.556
photometric centroid source offset	0.57 ± 0.39	1.45	0.22 ± 0.33	-0.52 ± 0.40

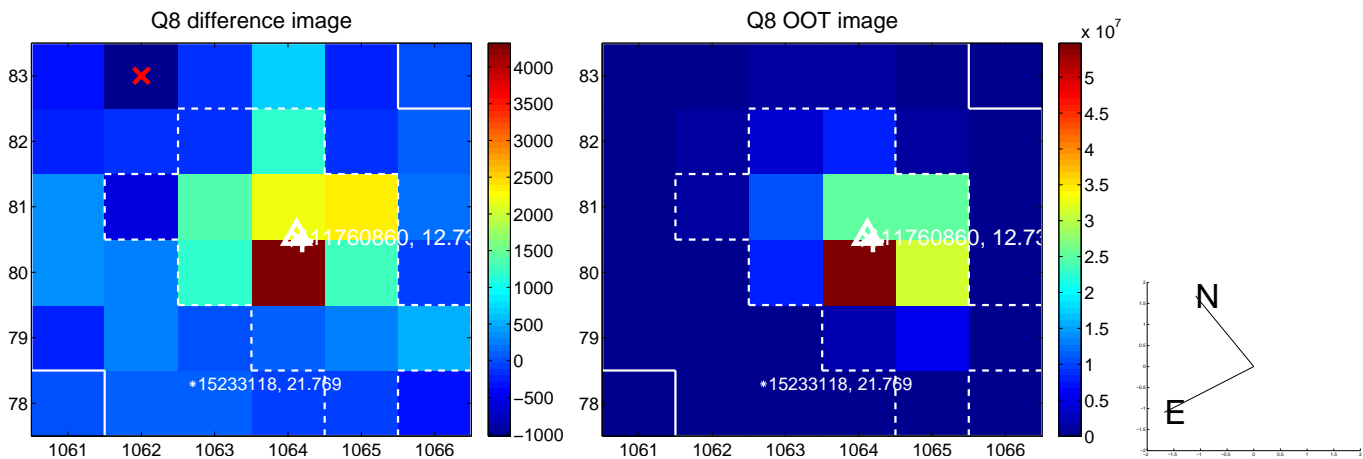
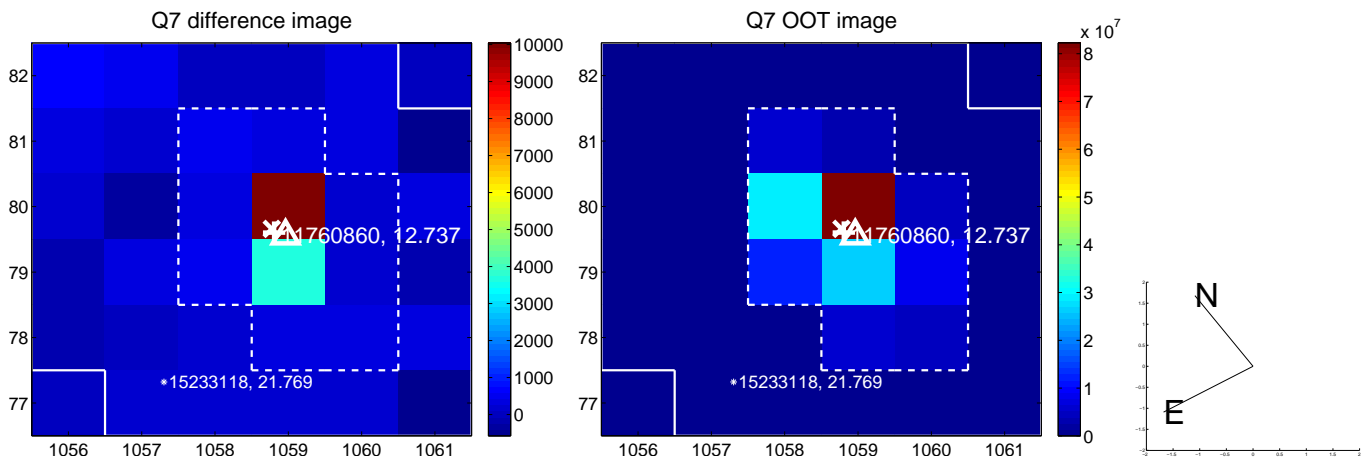
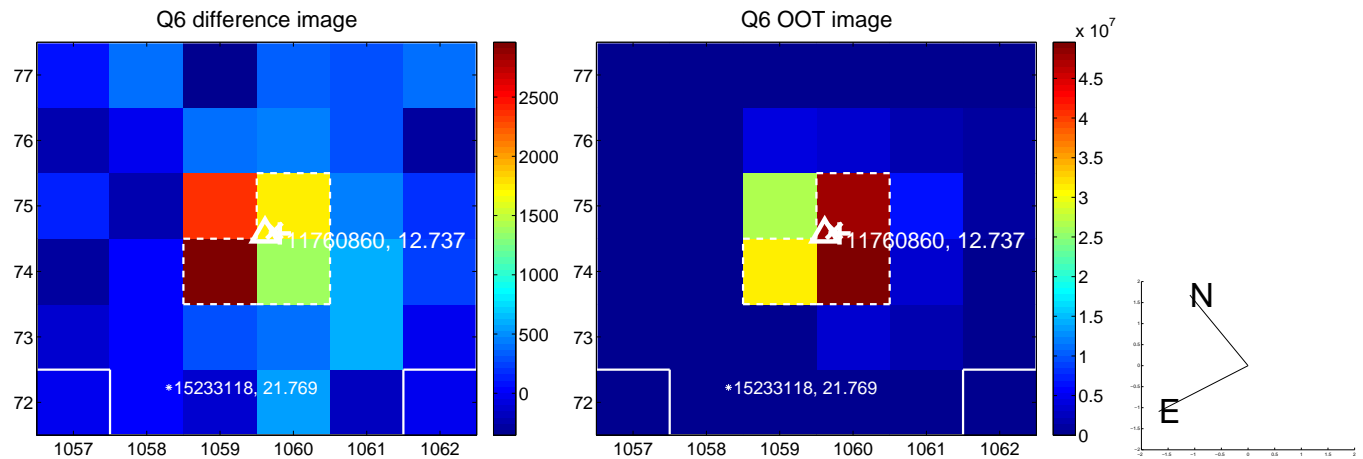
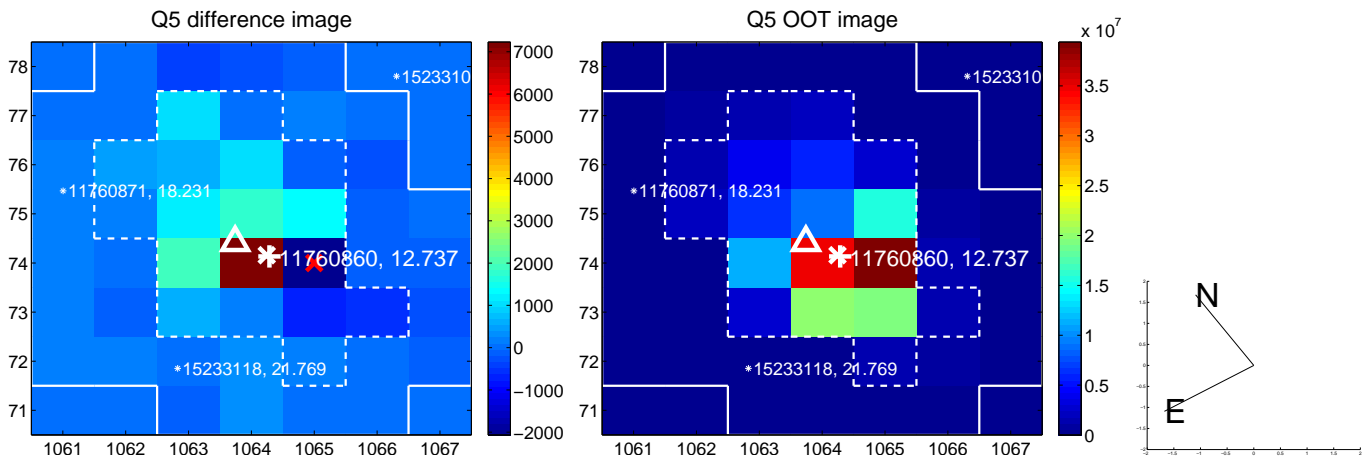


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

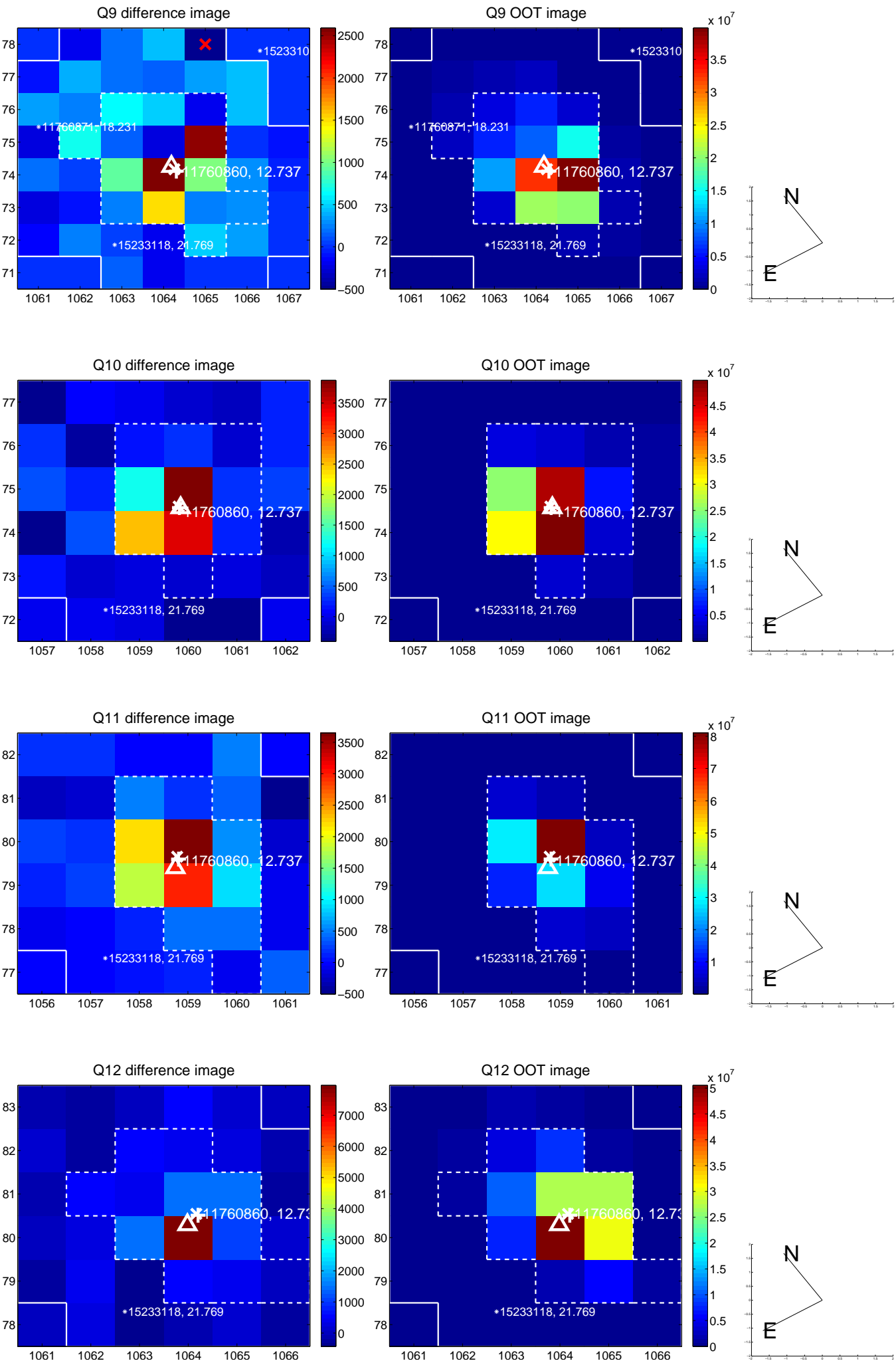
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



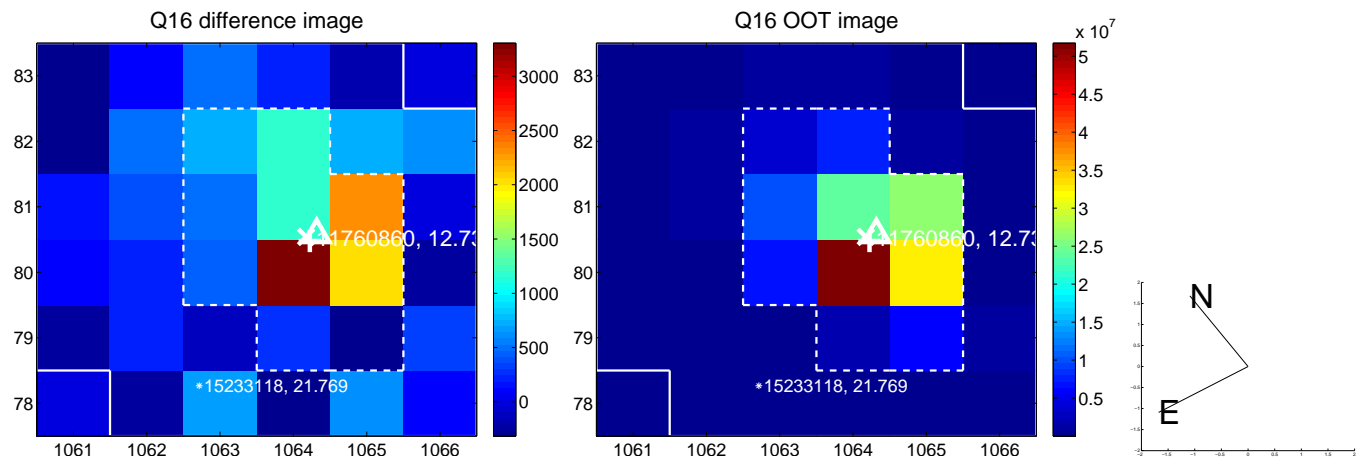
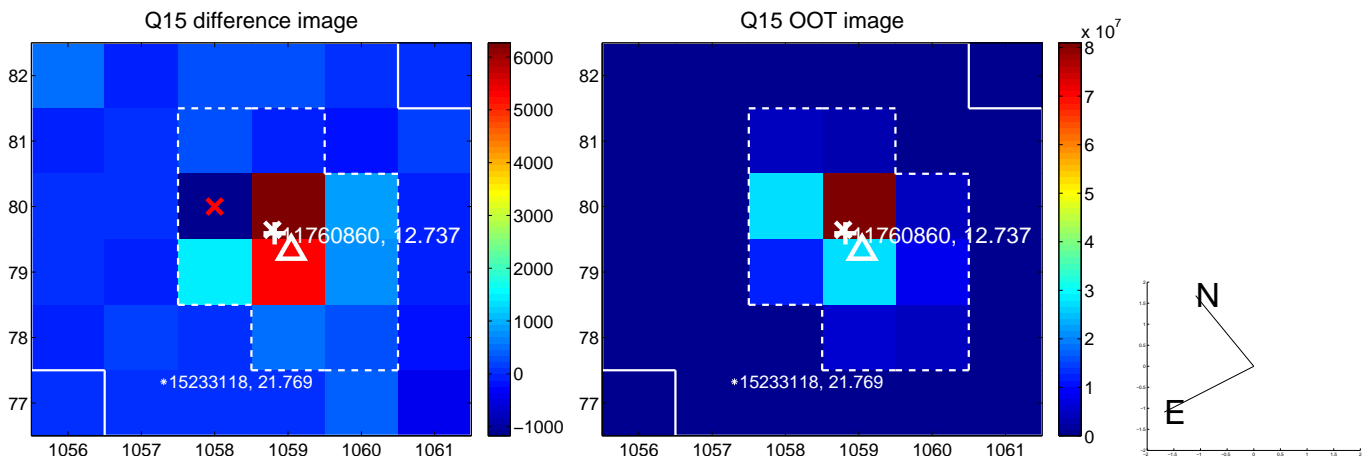
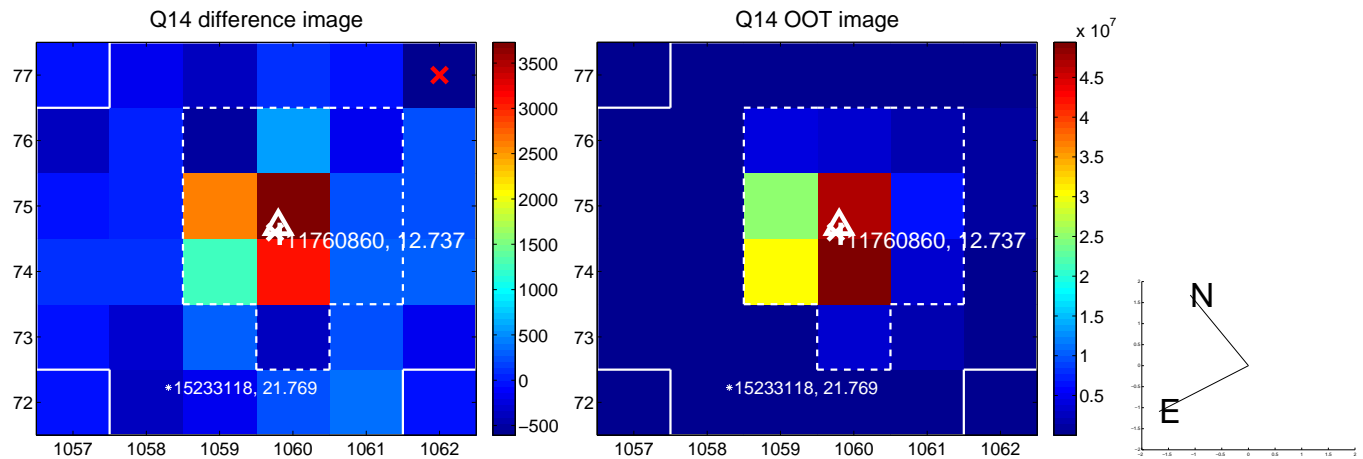
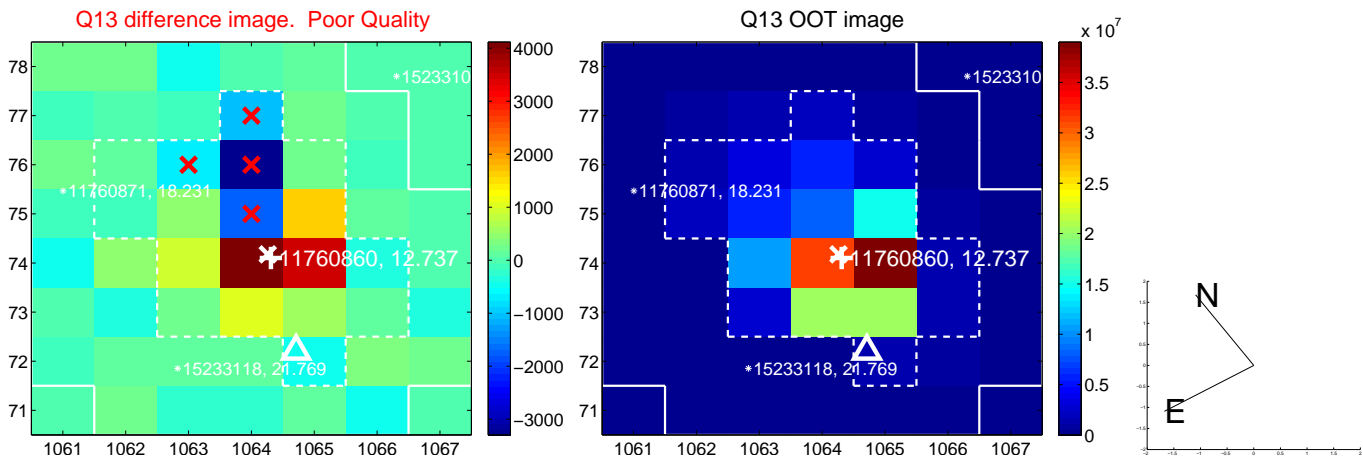
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



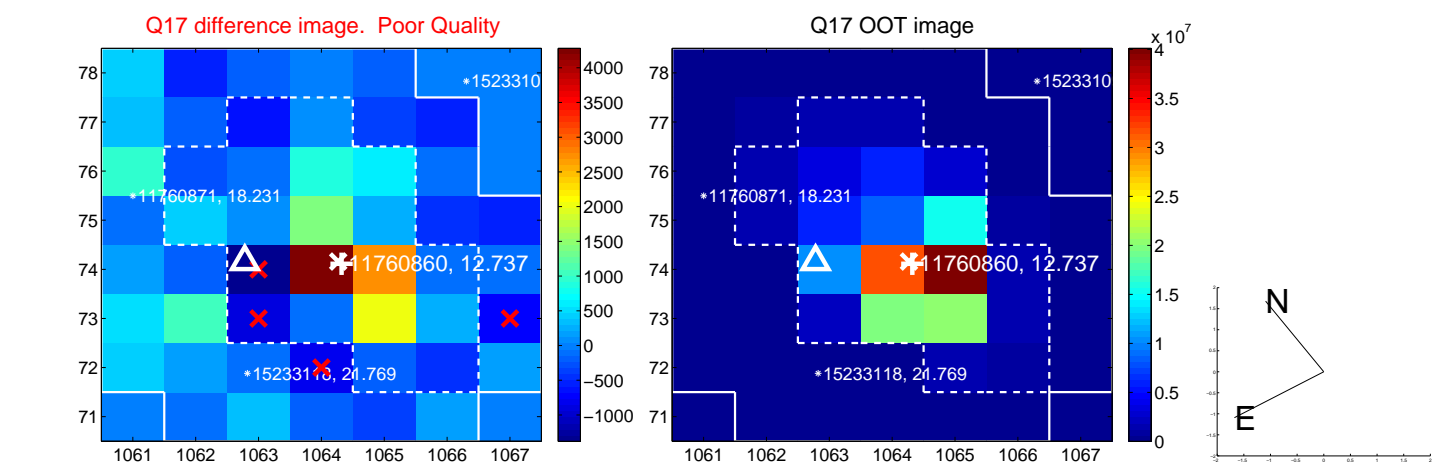
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



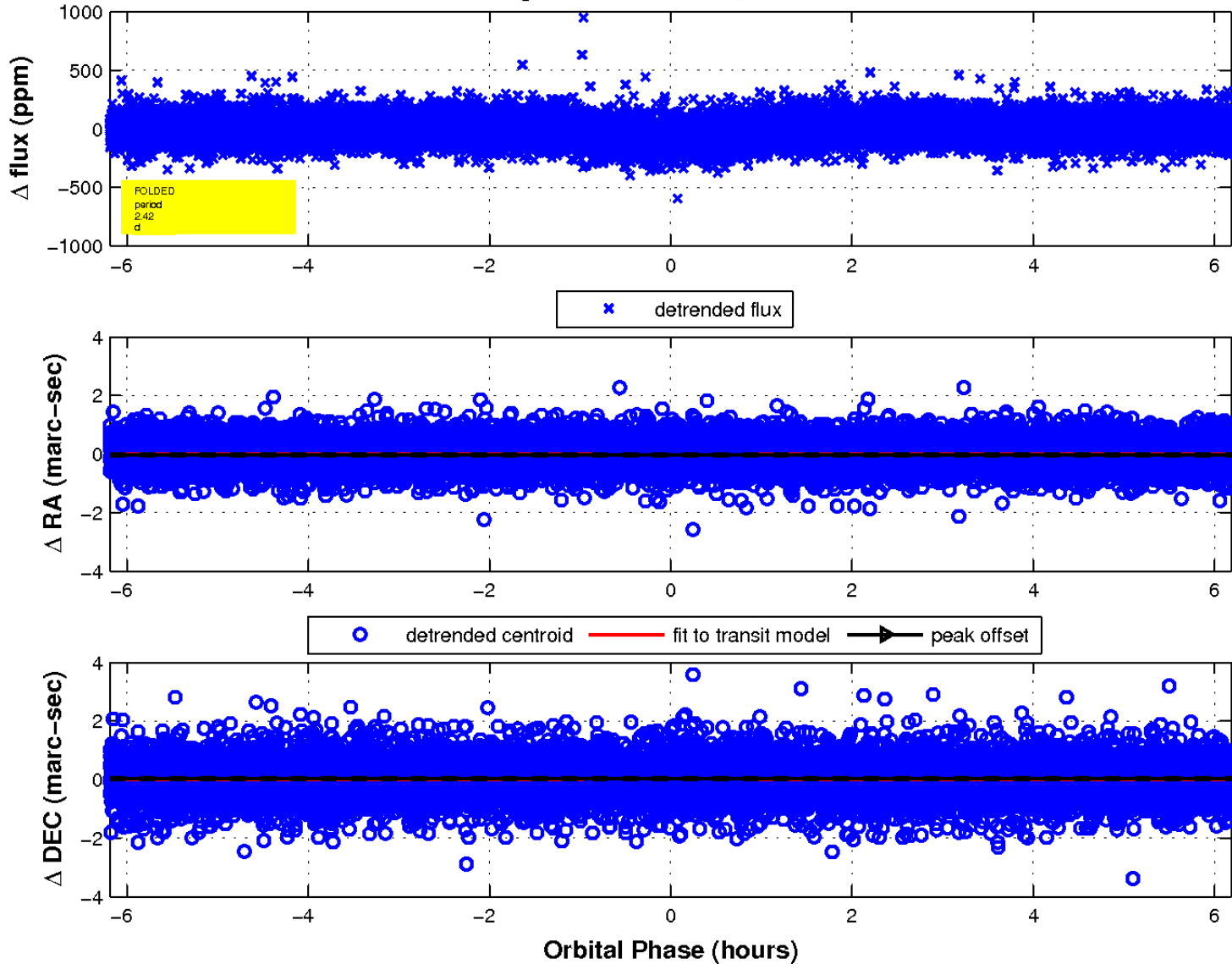
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

