

KIC 008359848

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})
008359848-01	OBS	No	7.080226	133.600343	30.4	14.736	8.3	7.1	1.33	6506	0.83	488.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008359848-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_RESOLVED_OFFSET

Notes: OBS = Observed. INJ = Injected. INV = Inverted. SCR = Scrambled.

N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

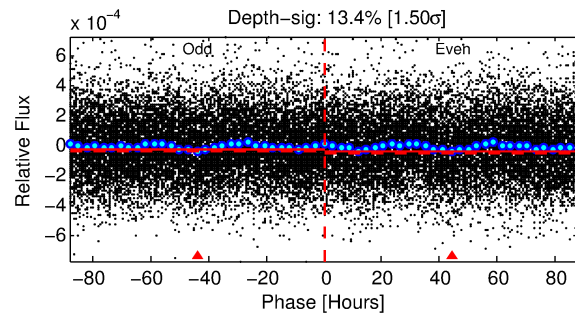
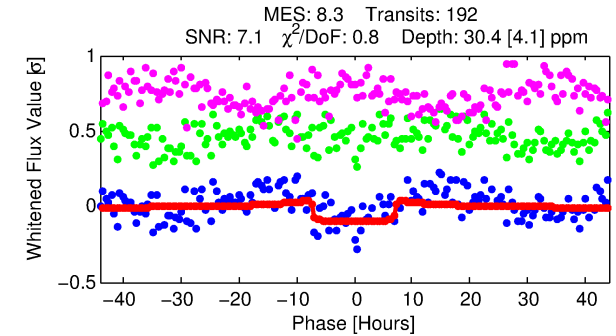
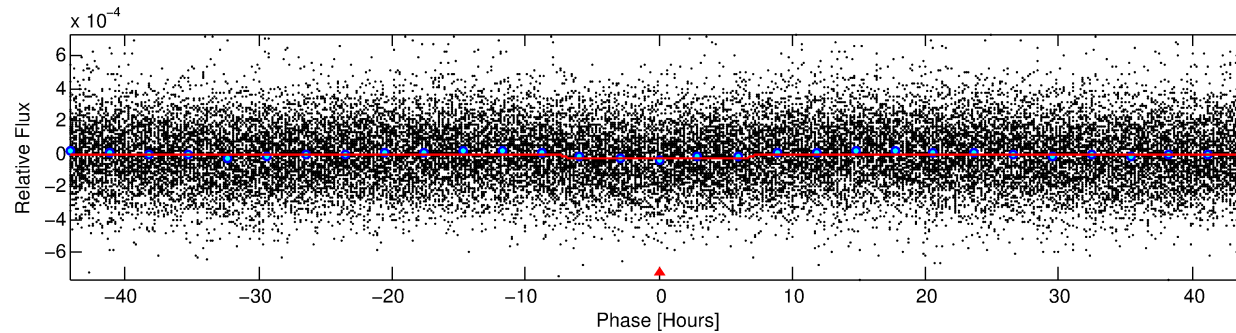
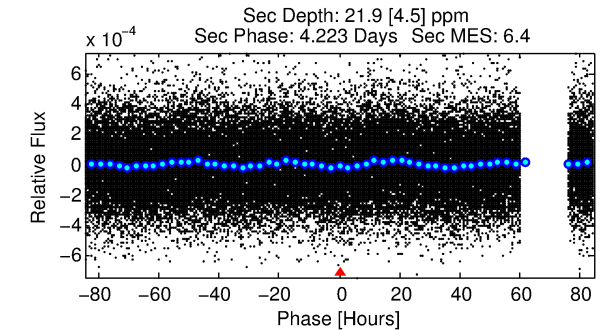
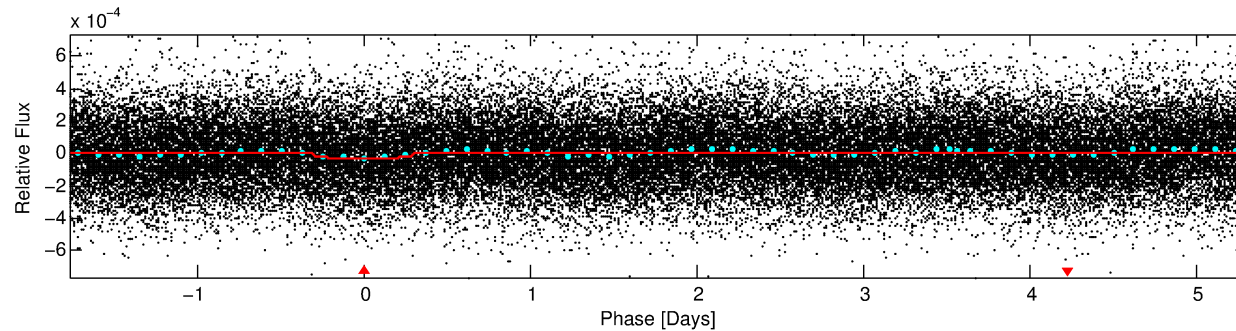
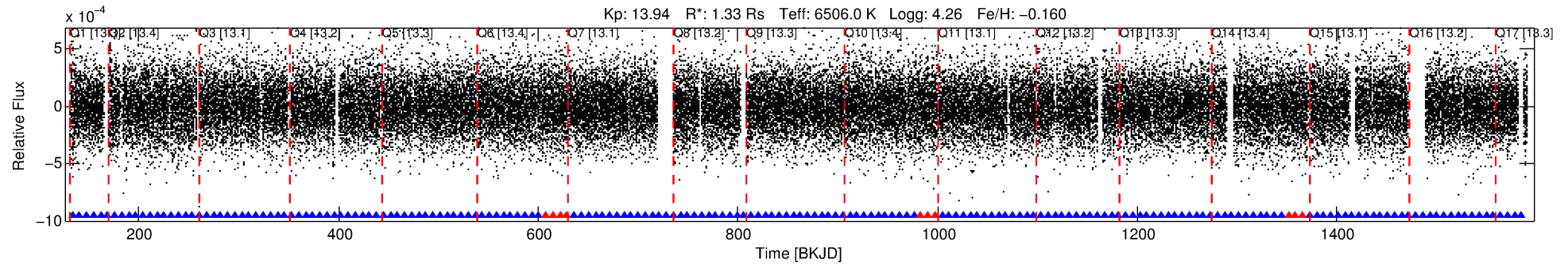
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008359848-01

No Significant Match Found

DV One-Page Summary

KIC: 8359848 Candidate: 1 of 1 Period: 7.080 d



DV Fit Results:

Period = 7.08023 [0.00018] d
Epoch = 133.6003 [0.0186] BKJD
Rp/R* = 0.0057 [0.0014]
a/R* = 2.16 [2.27]
b = 0.85 [0.43]
Seff = 488.00 [182.10]
Teff = 1198 [112] K
Rp = 0.83 [0.32] Re
a = 0.0764 [0.0189] AU
Ag = 101.82 [65.00] [1.55σ]
Teffp = 5886 [809] K [5.74σ]

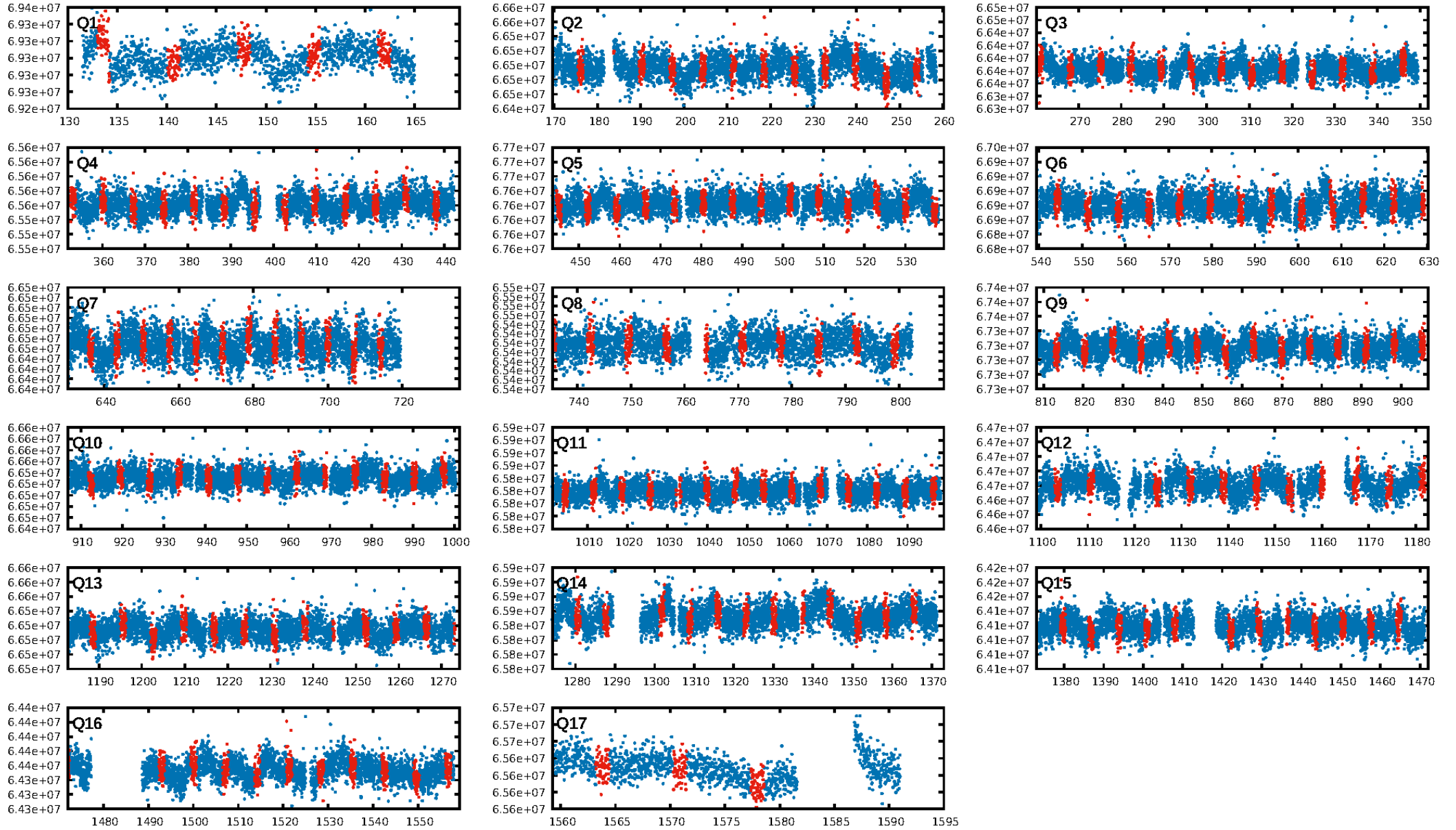
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 100.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.39e-15
RollingBand-fgt: 0.95 [174/184]
GhostDiagnostic-chr: 1.094
Centroid-sig: 6.0%
Centroid-so: 1.938 arcsec [0.62σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [17/17]

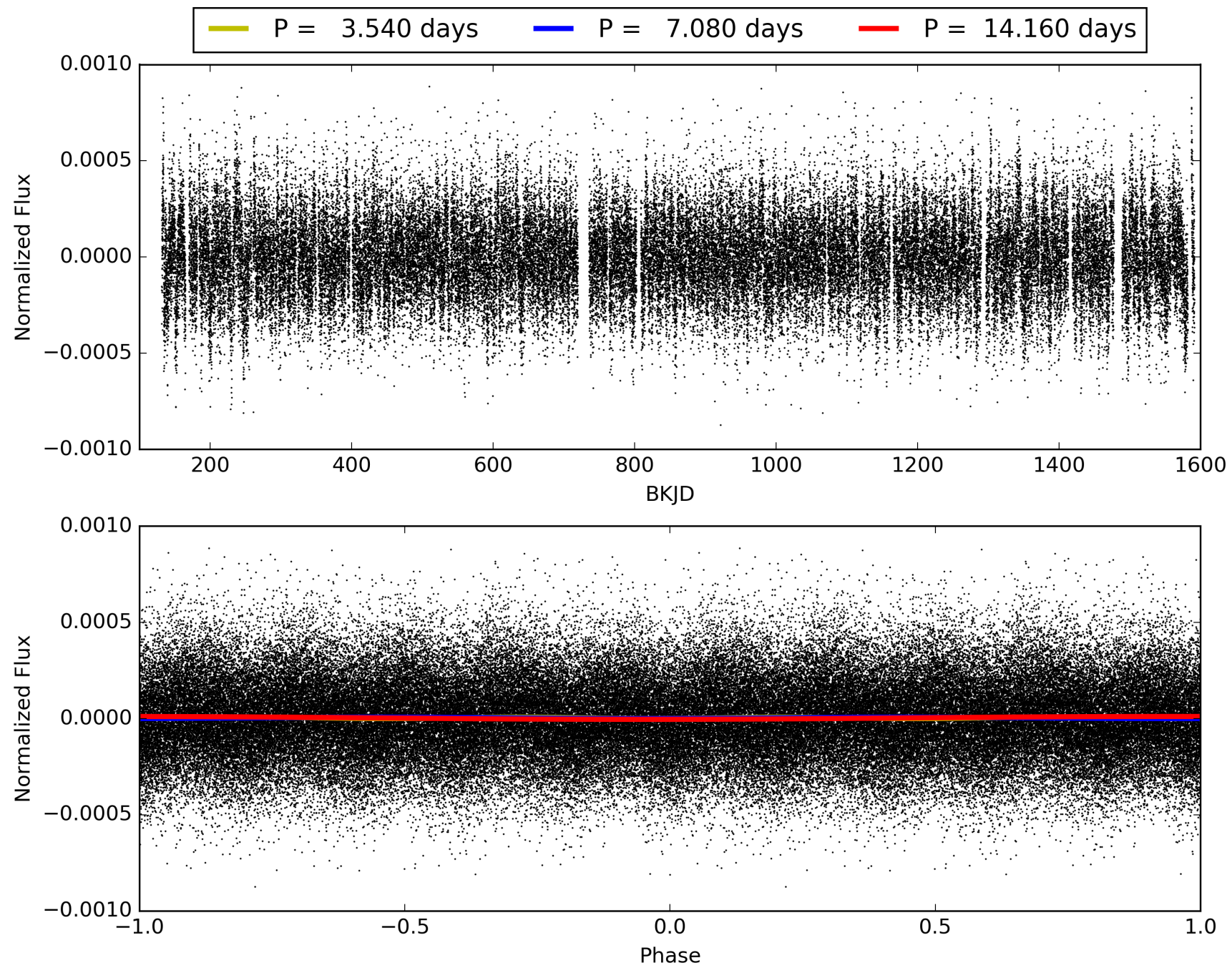
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:41:01 Z

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

TCE 008359848-01, PDC Light Curves

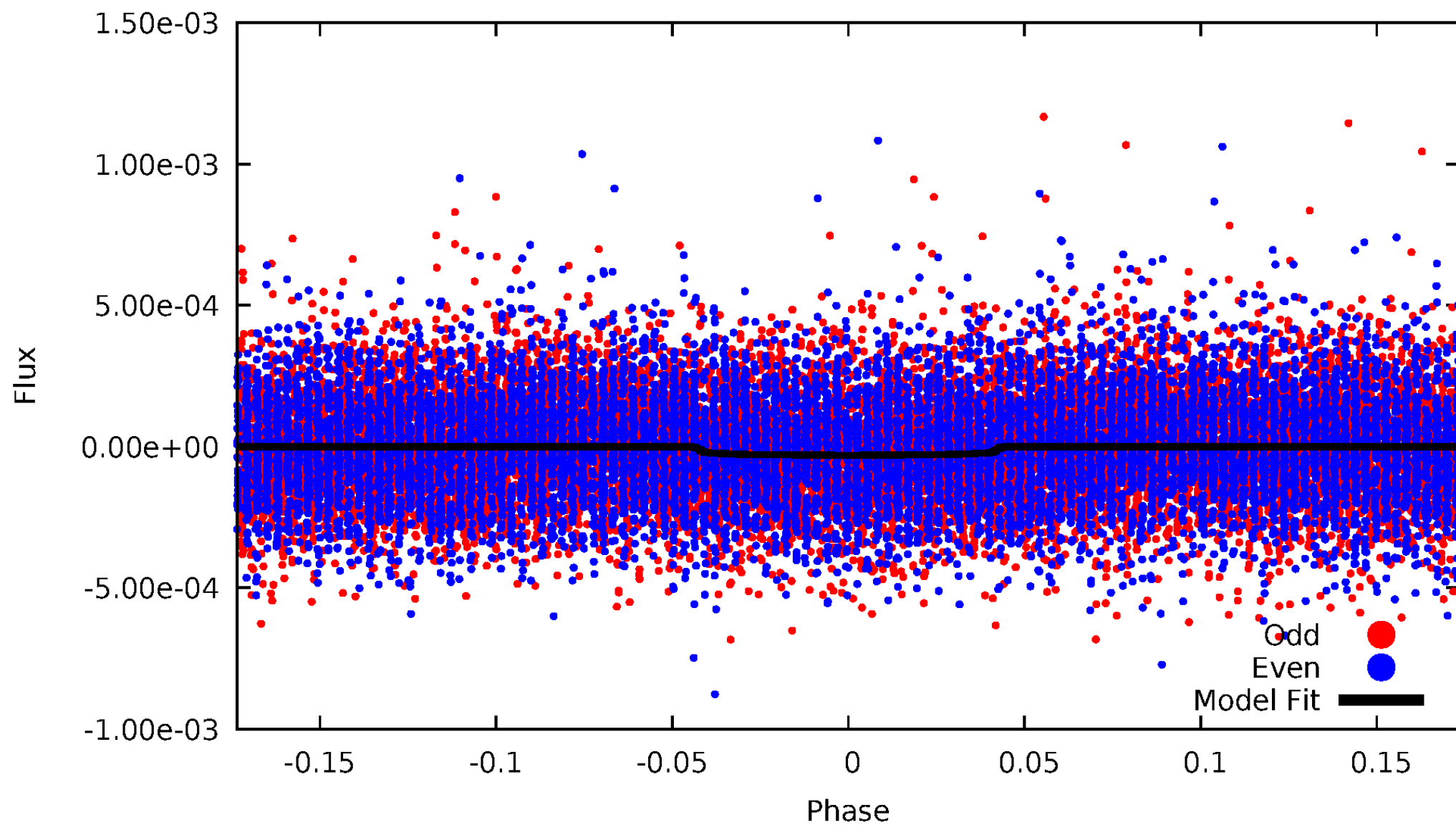


TCE 008359848-01



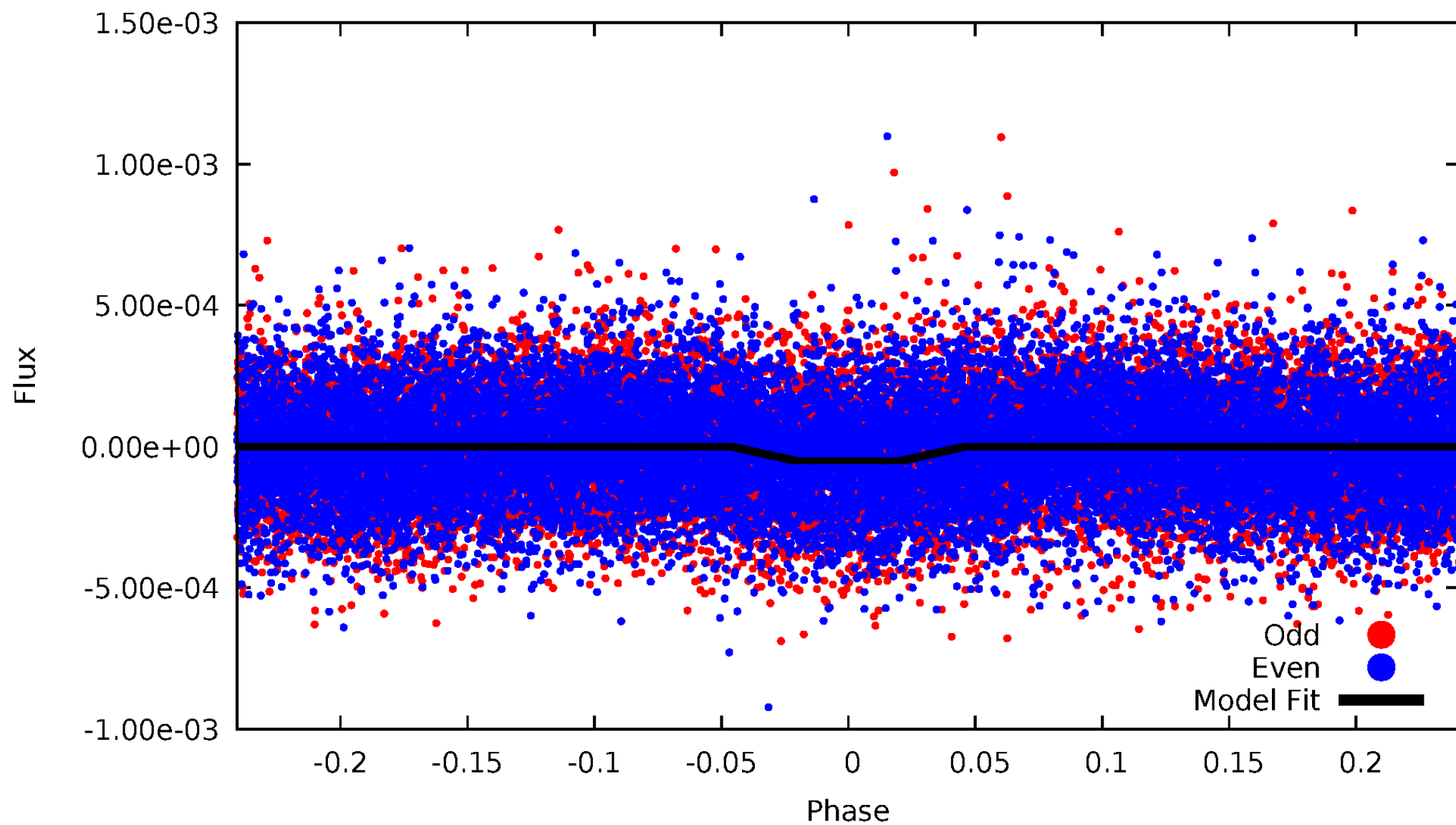
DV Odd/Even

TCE 008359848-01

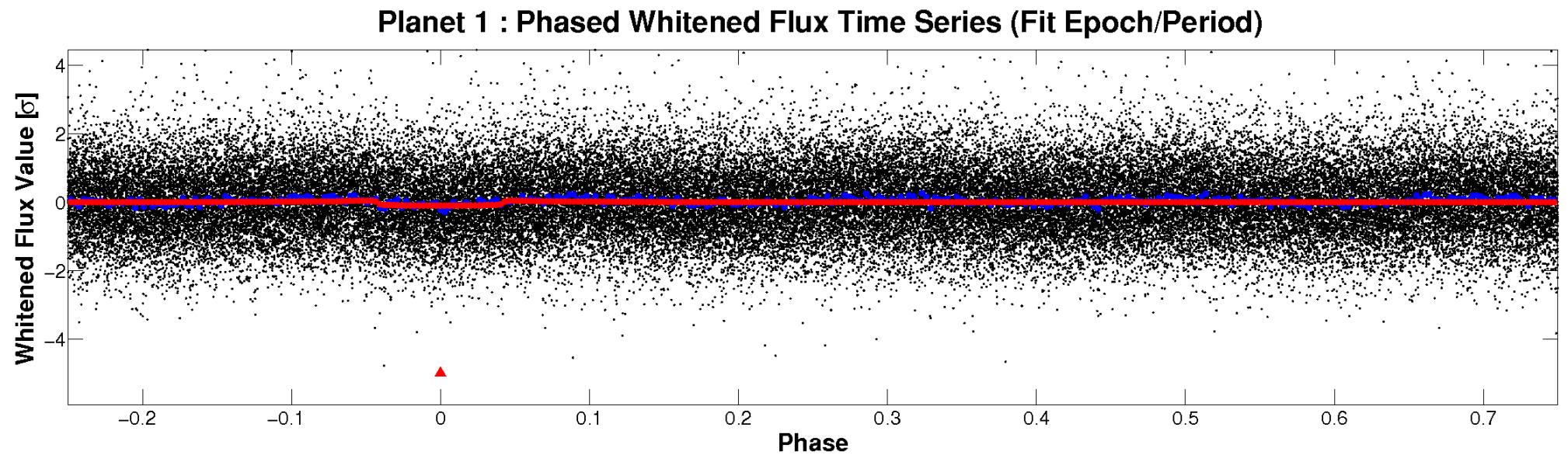
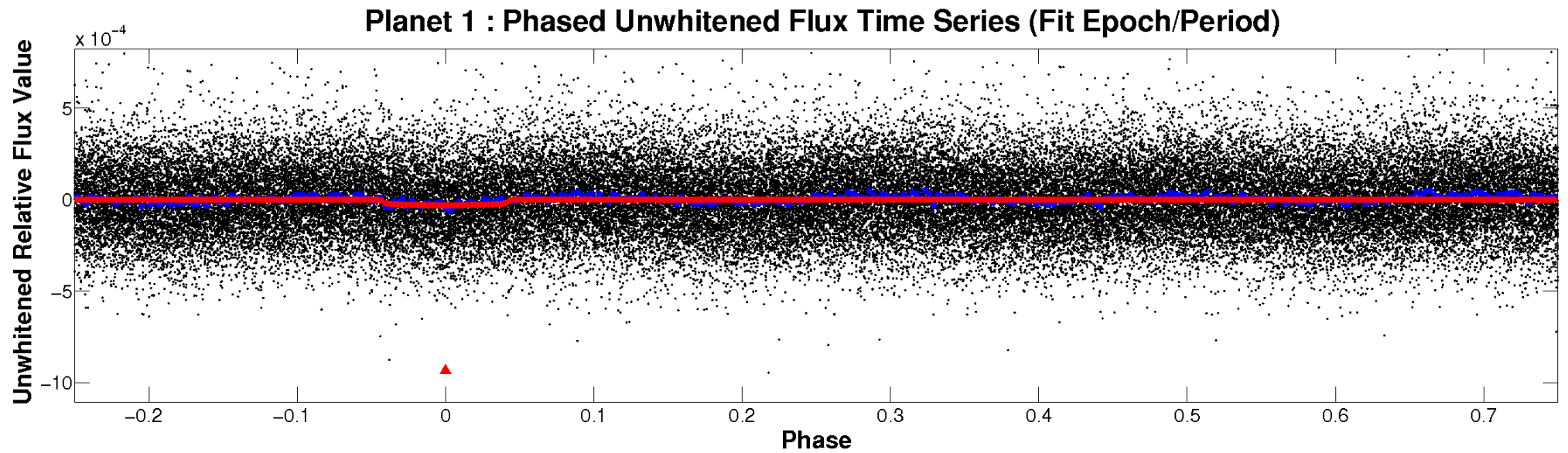


ALT Odd/Even

TCE 008359848-01

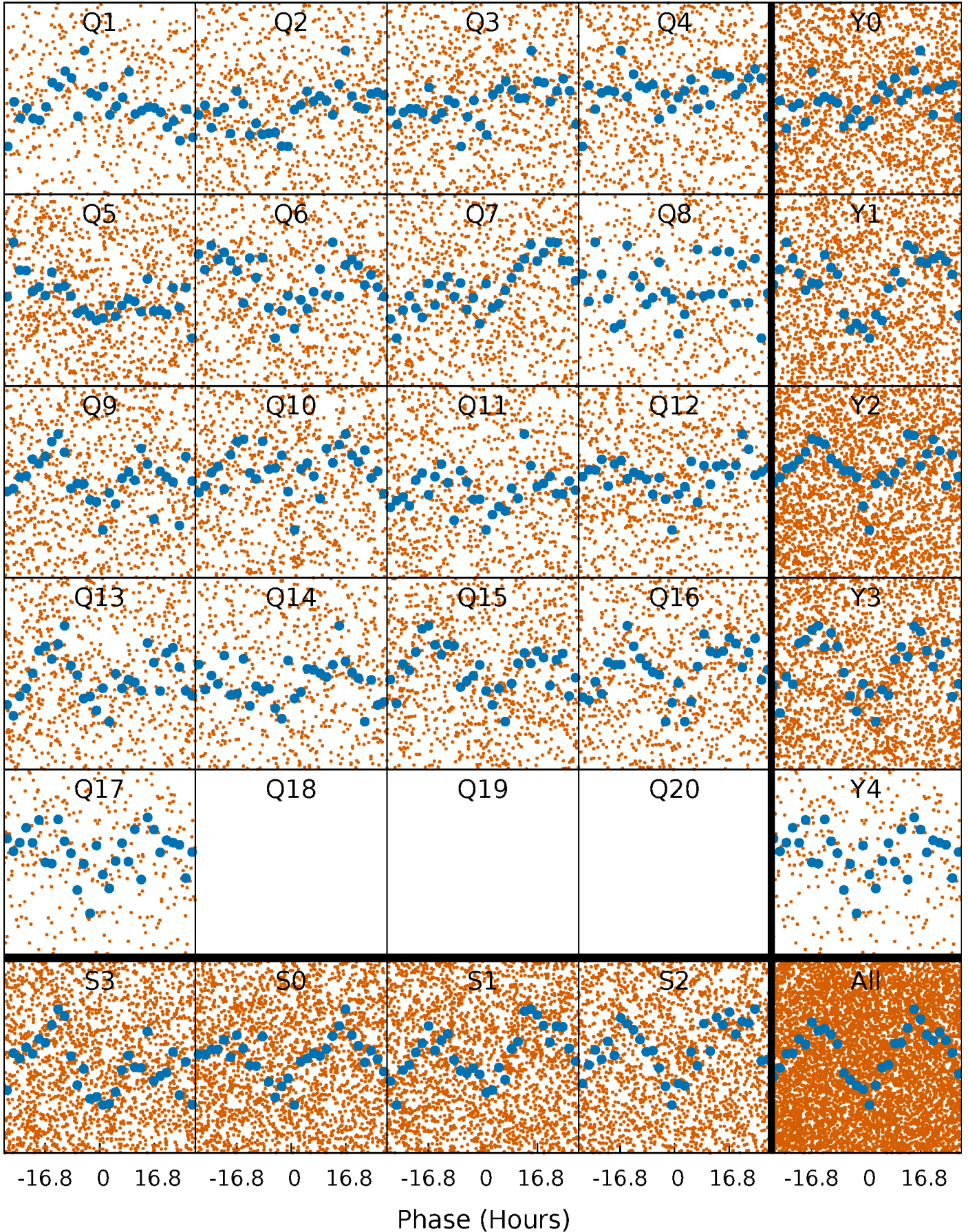


Non-Whitened Vs. Whitened Light Curve



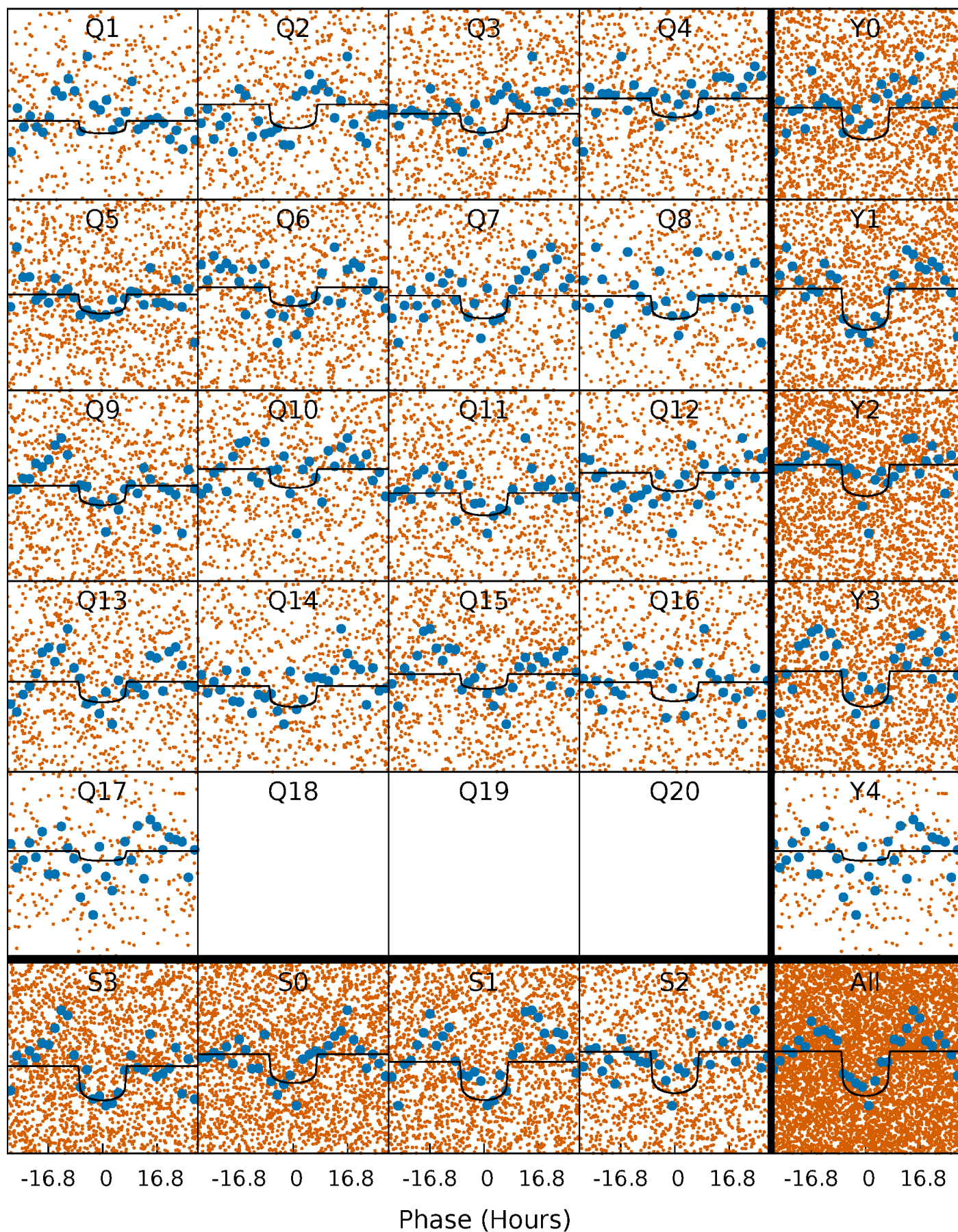
PDC Quarter-Phased Transit Curves

TCE 008359848-01 P= 7.080226 Days $T_0=133.600343$ (BKJD)



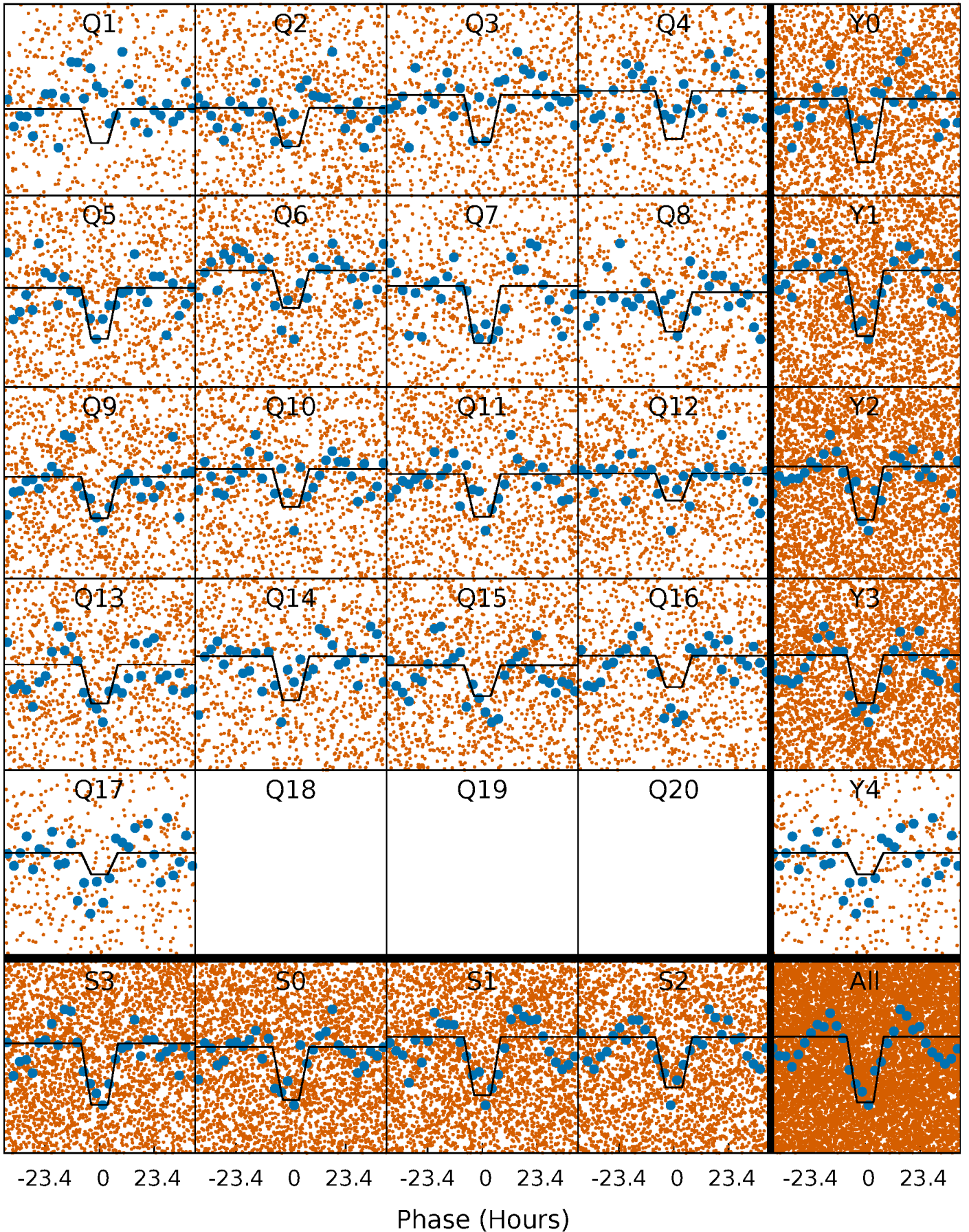
DV Quarter-Phased Transit Curves

TCE 008359848-01 P= 7.080226 Days $T_0=133.600343$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

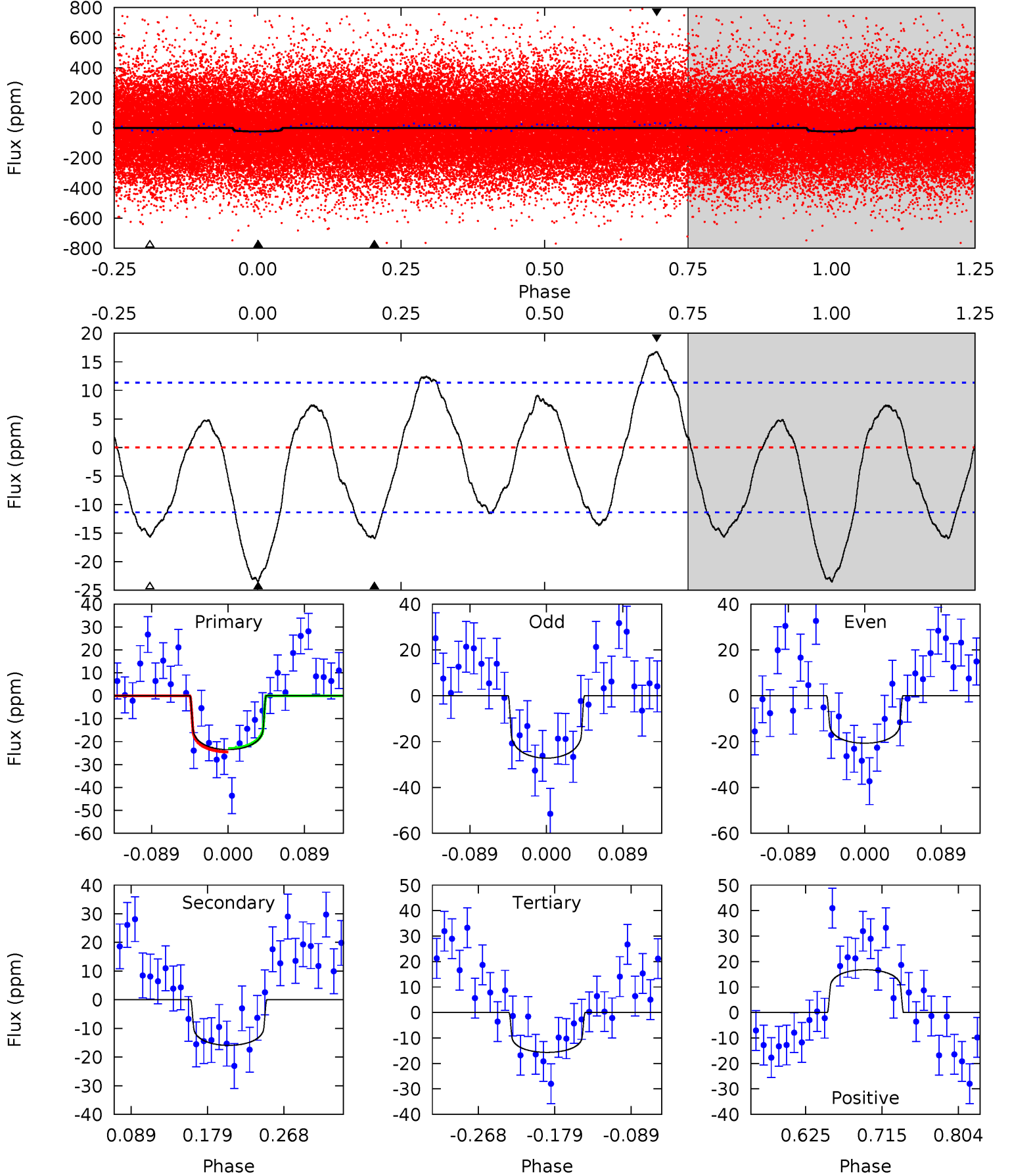
TCE 008359848-01 P= 7.080781 Days $T_0=133.544949$ (BKJD)



DV Model-Shift Uniqueness Test

008359848-01, P = 7.080226 Days, E = 126.520117 Days

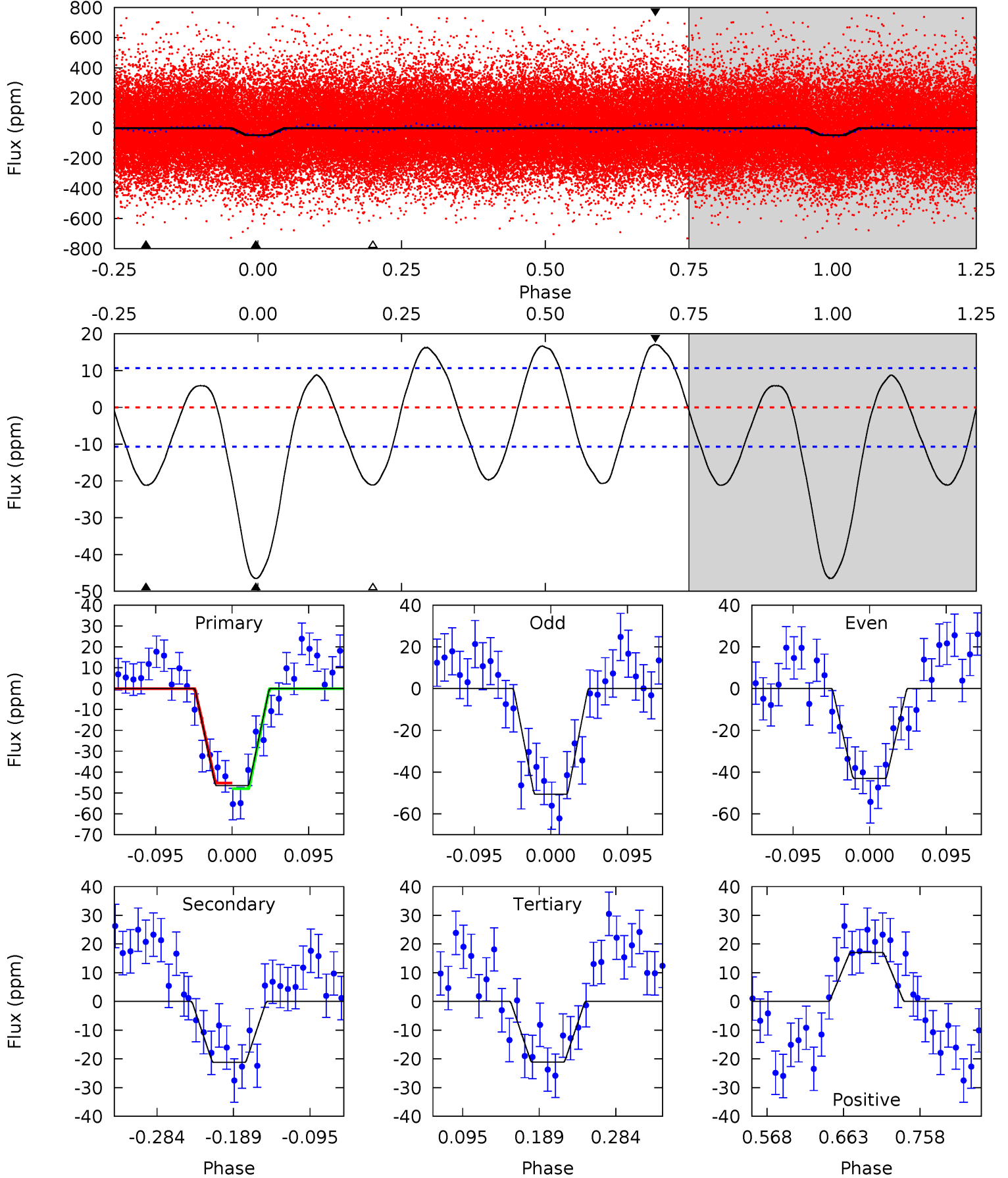
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.50	6.43	6.33	6.79	4.59	1.70	3.66	3.17	2.71	0.10	-0.35	1.31	0.96	0.42	0.29



Alt Model-Shift Uniqueness Test

008359848-01, P = 7.080781 Days, E = 126.464168 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.9	9.08	9.03	7.31	4.58	1.67	5.45	10.9	12.6	0.04	1.76	1.64	1.00	0.27	0.58



Stellar Parameters For KIC 008359848

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6506^{+162}_{-211}	$4.263^{+0.124}_{-0.186}$	$-0.160^{+0.250}_{-0.300}$	$1.332^{+0.404}_{-0.249}$	$1.186^{+0.192}_{-0.157}$	$0.707^{+0.419}_{-0.354}$
	+2%/-3%	+3%/-4%	+156%/-188%	+30%/-19%	+16%/-13%	+59%/-50%
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 008359848-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-16 ± 2	$0.84^{+0.26}_{-0.21}$	1685^{+118}_{-101}	5440^{+828}_{-545}	72^{+55}_{-31}
Alt.	-21 ± 2	$1.04^{+0.27}_{-0.24}$	1687^{+114}_{-106}	5305^{+588}_{-450}	64^{+39}_{-24}

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 008359848-01. Kepler magnitude: 13.94. Transit SNR 7.14

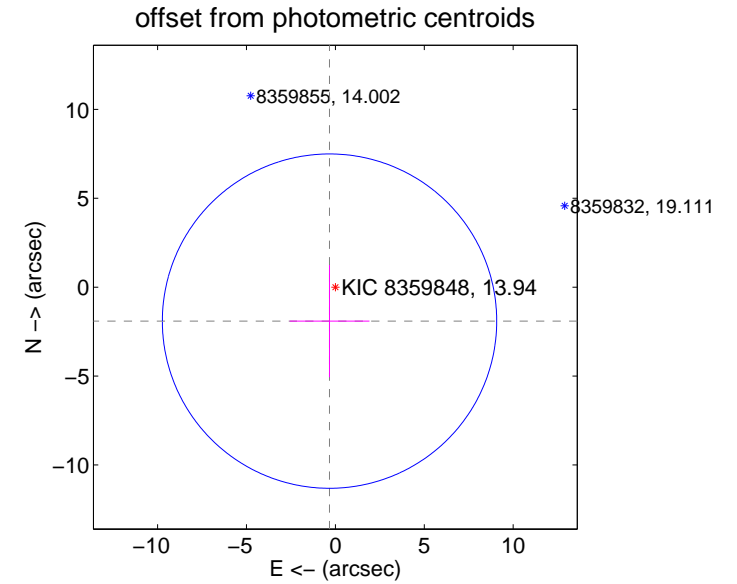
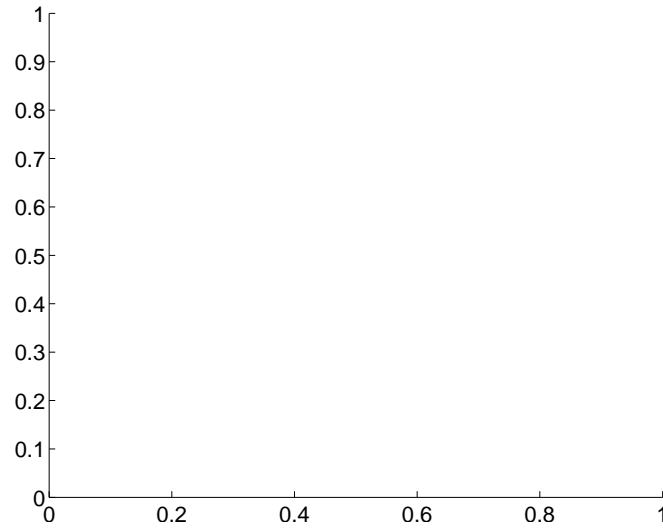
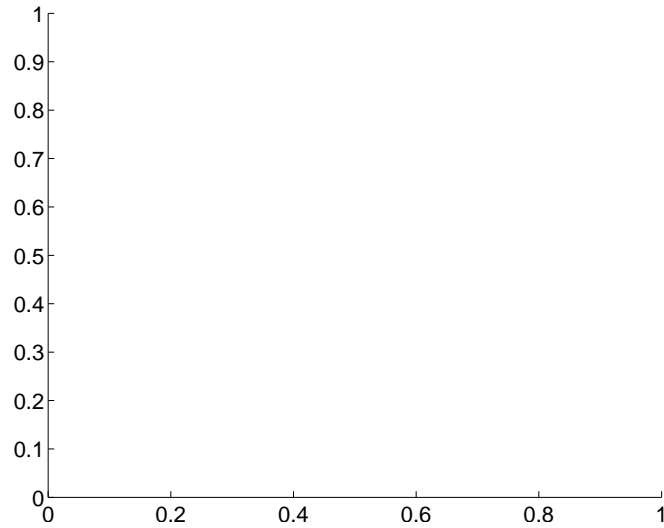
There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.94 ± 3.13	0.62	0.33 ± 2.25	-1.91 ± 3.16

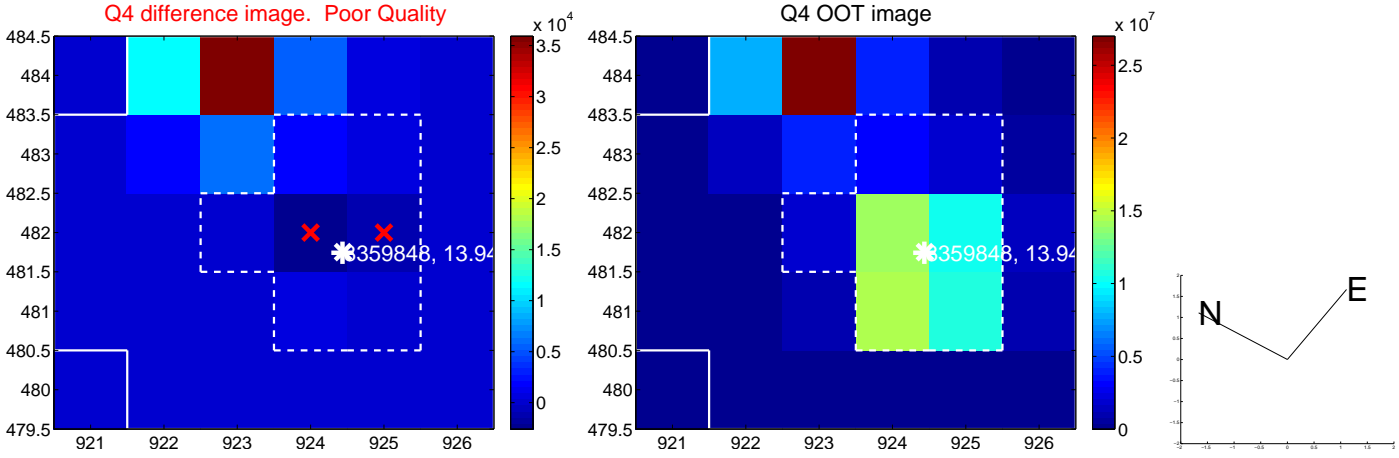
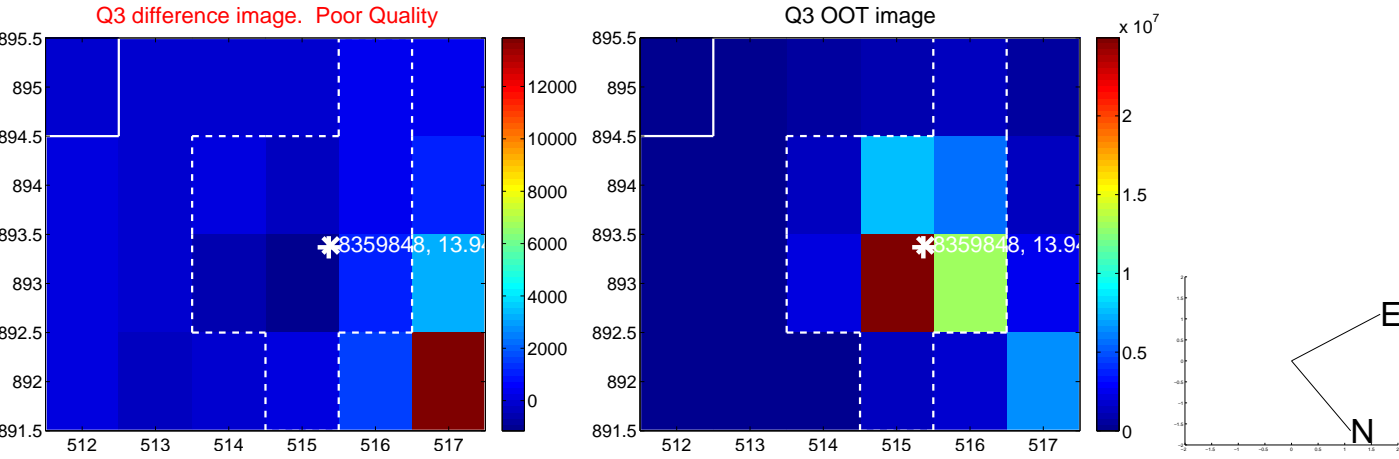
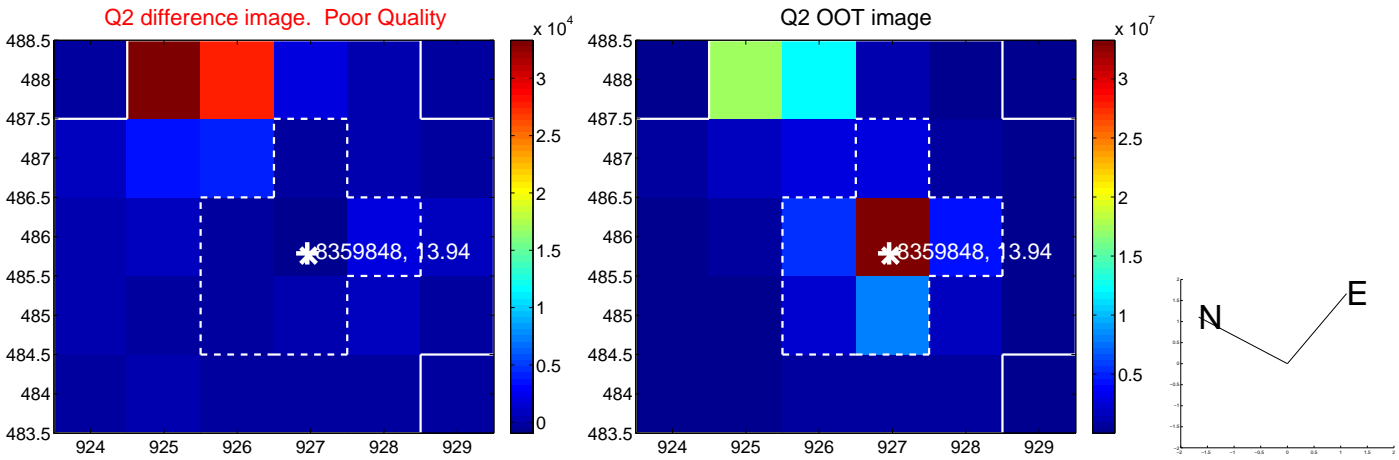
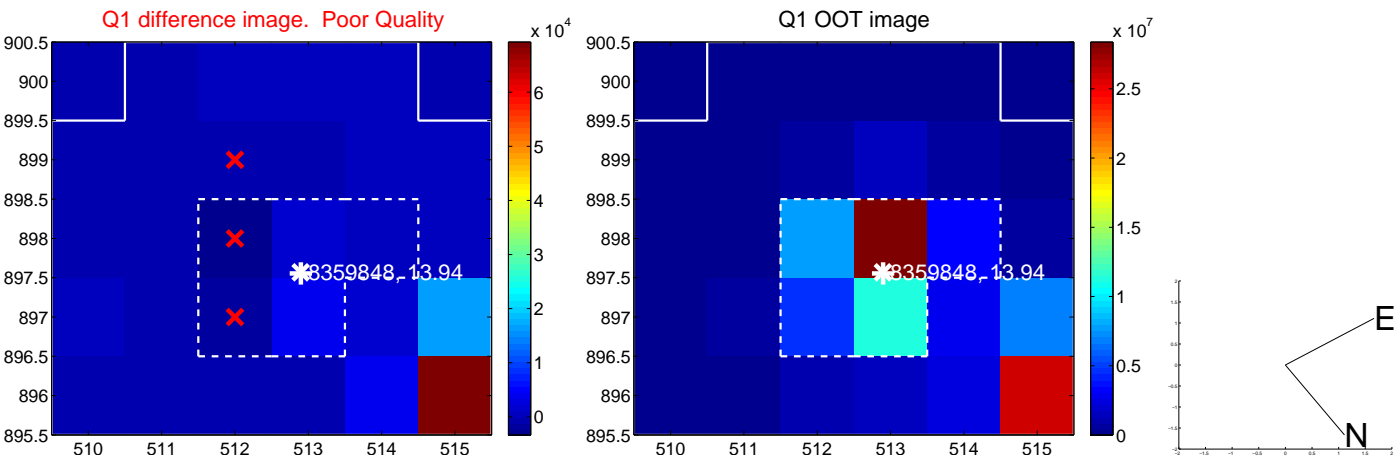
There is no PRF-fit offset from OOT-fit

There is no PRF-fit offset from KIC

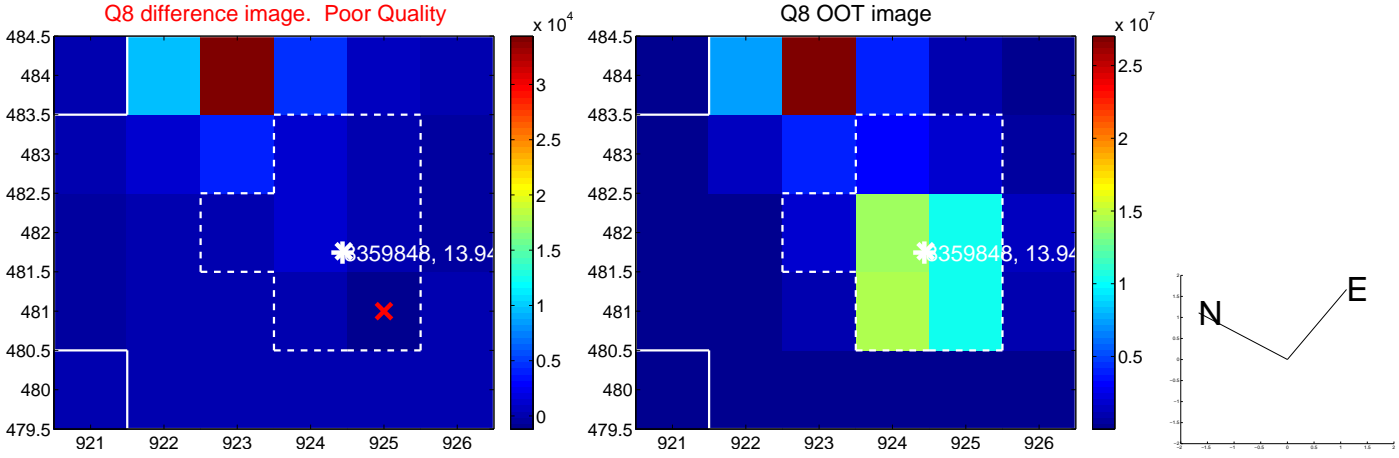
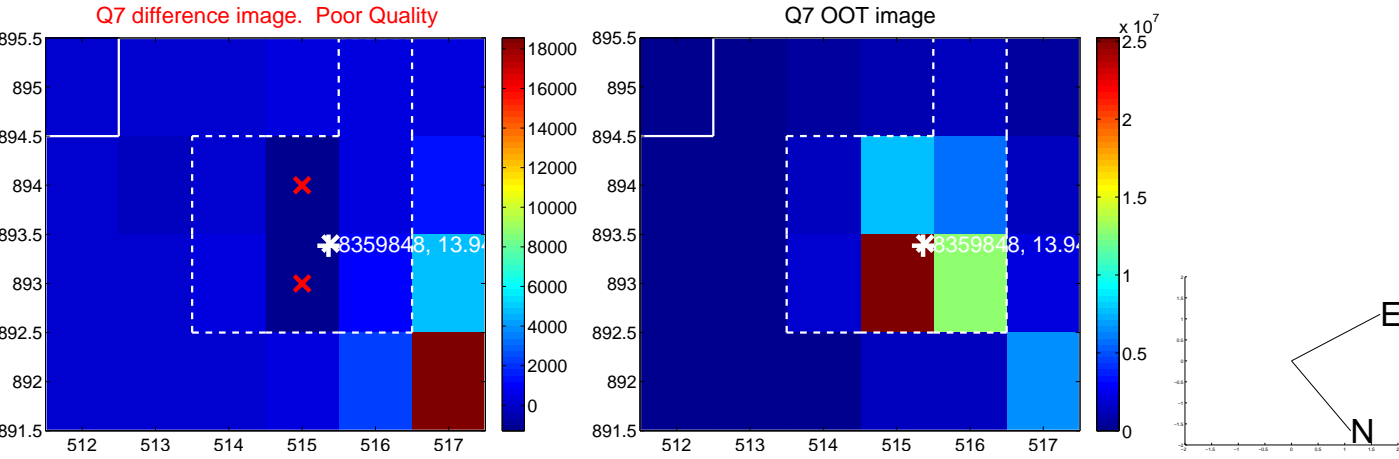
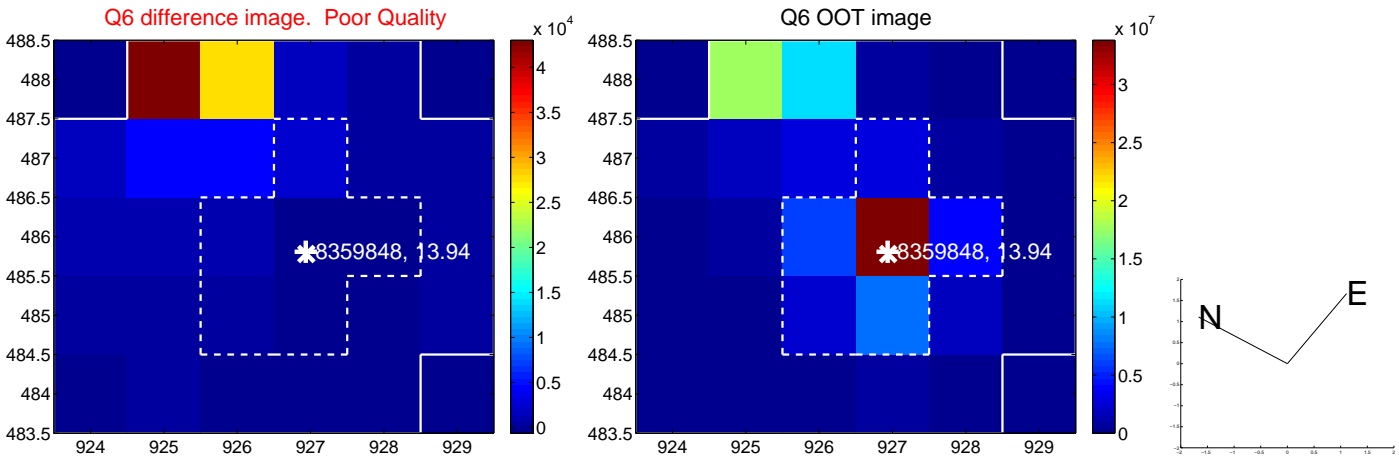
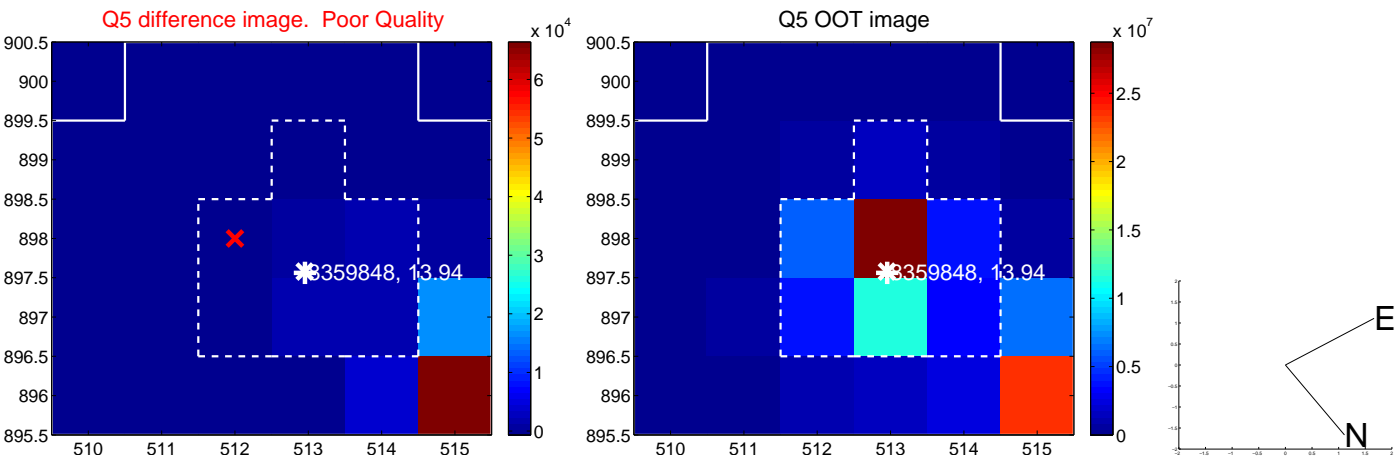


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

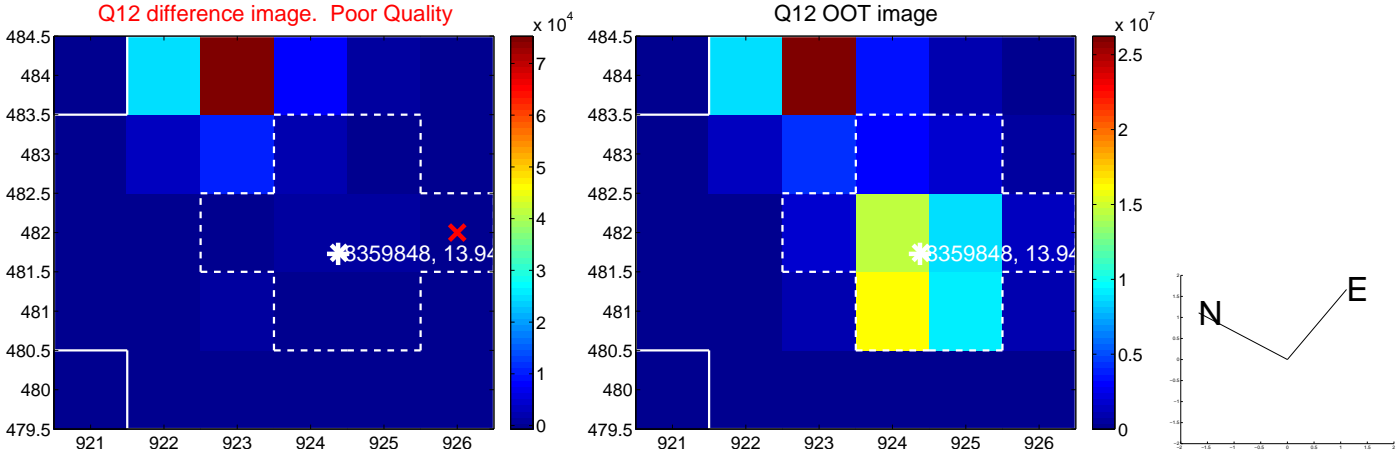
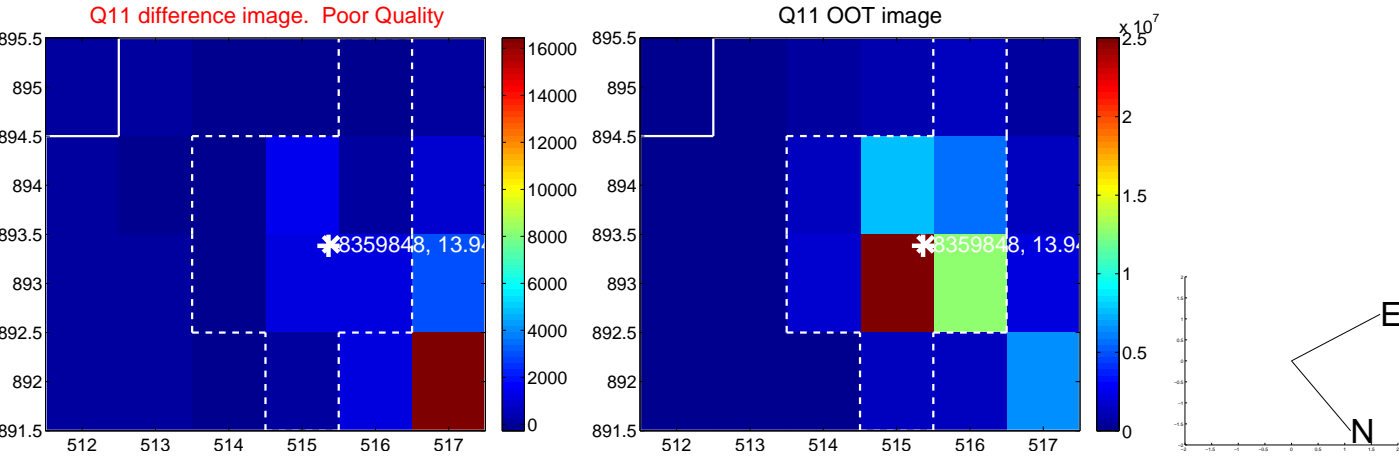
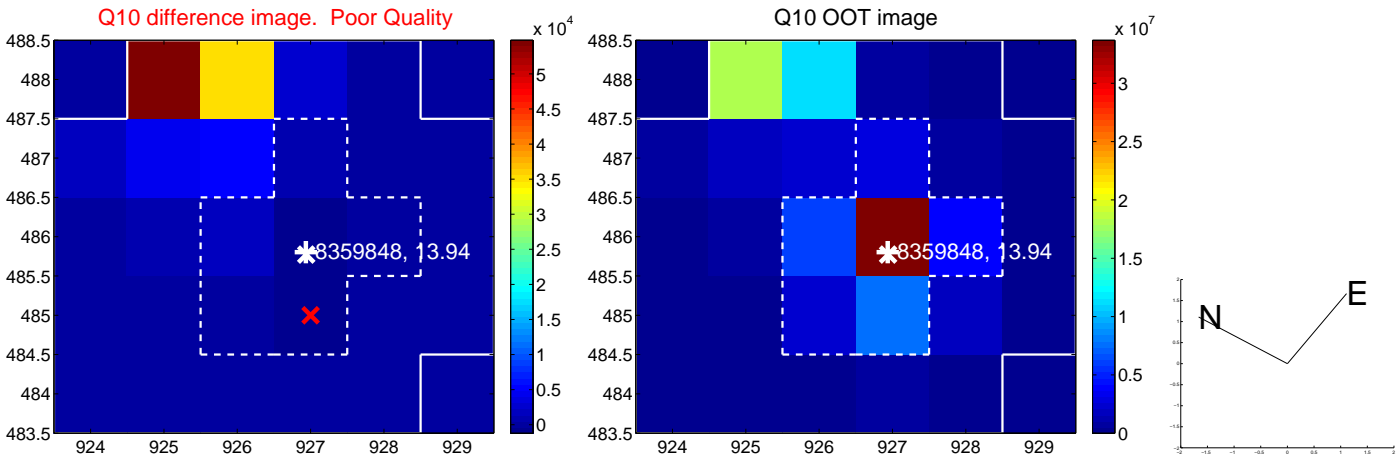
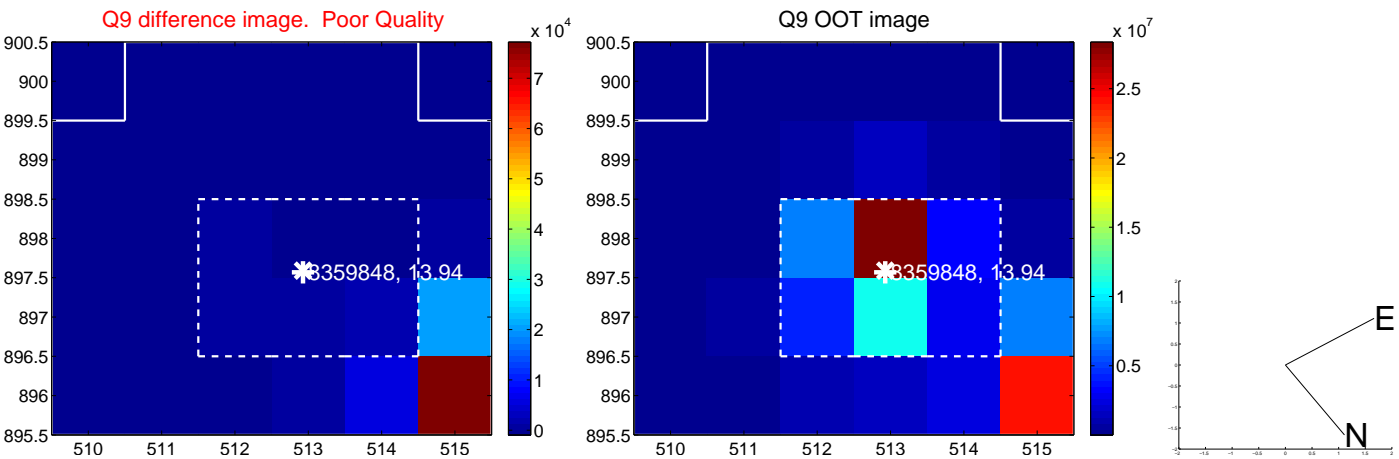
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



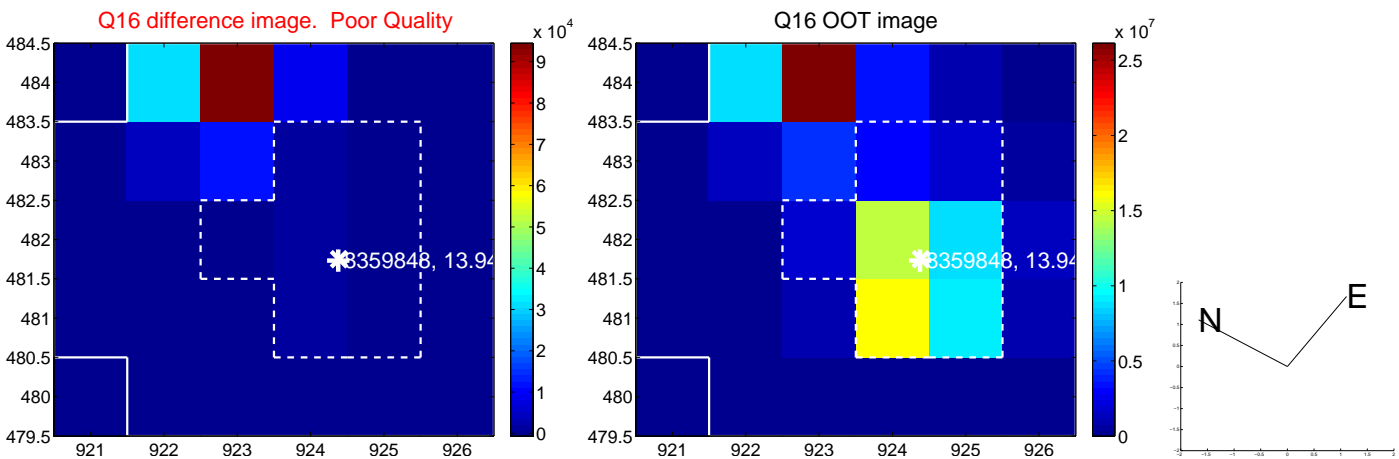
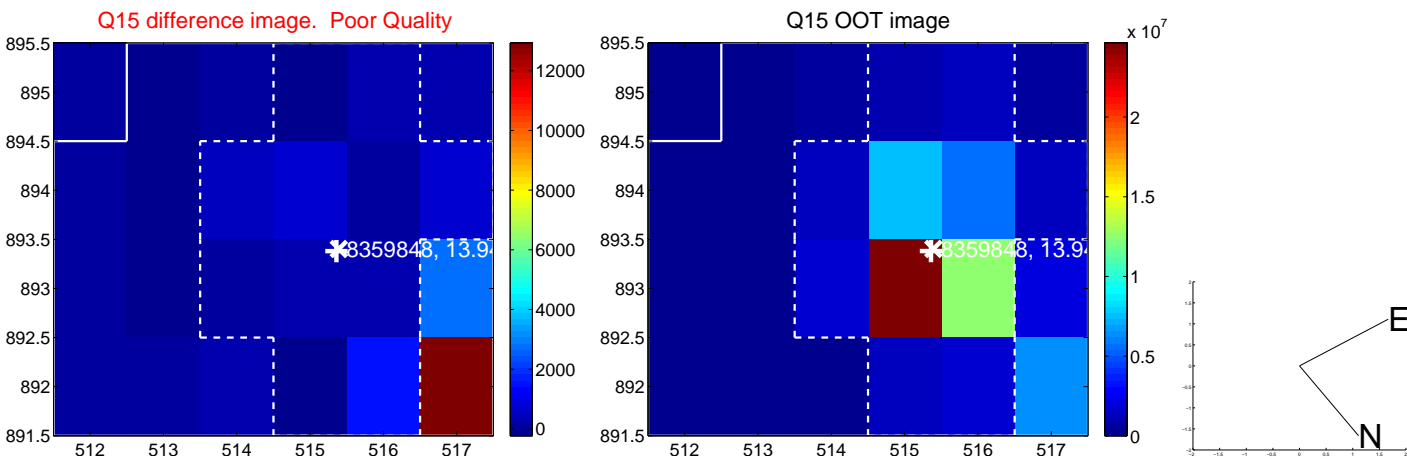
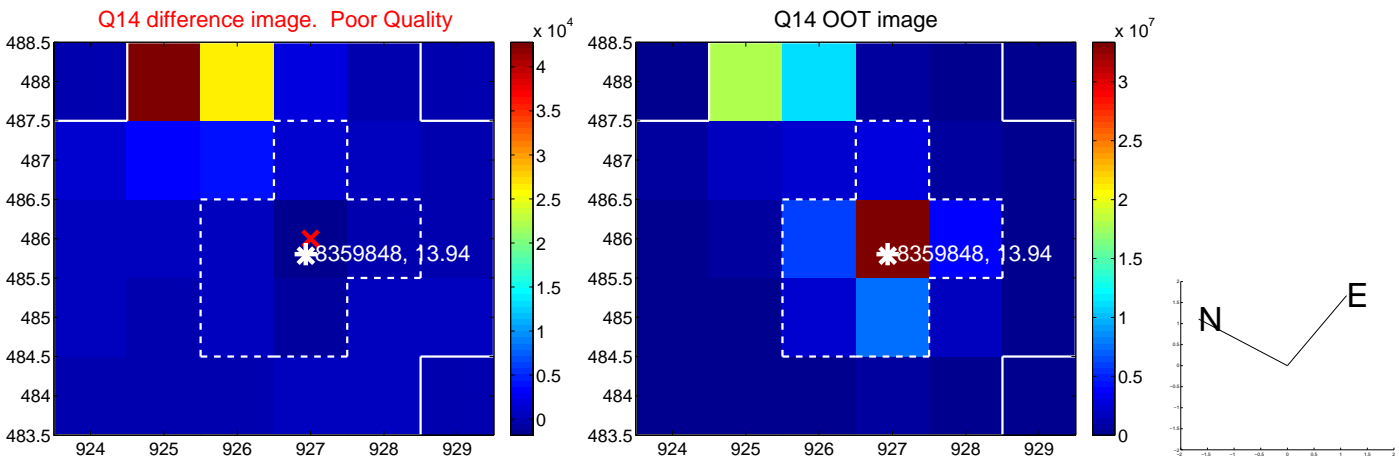
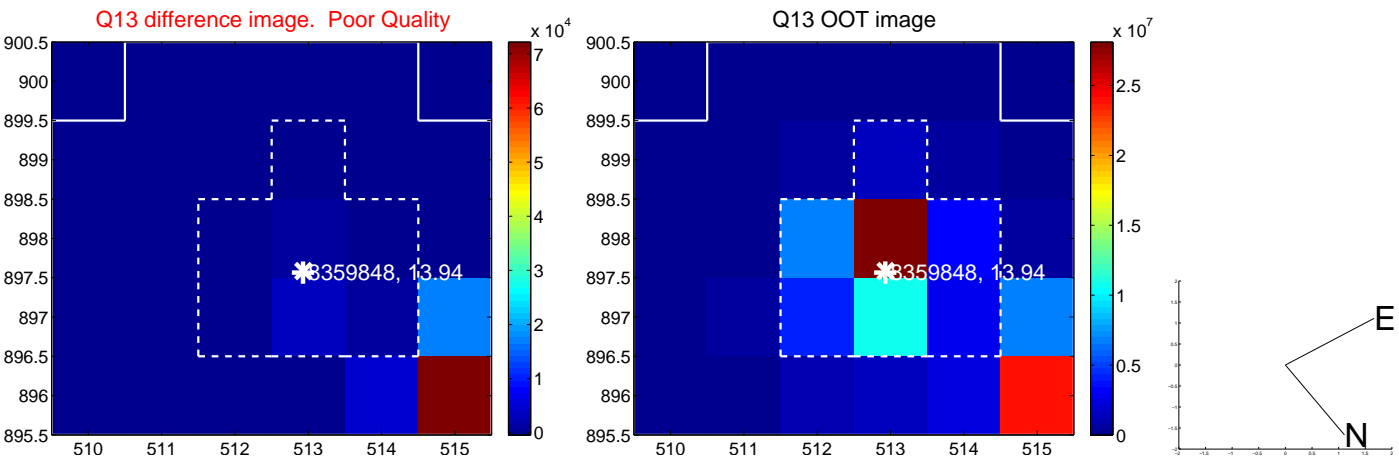
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



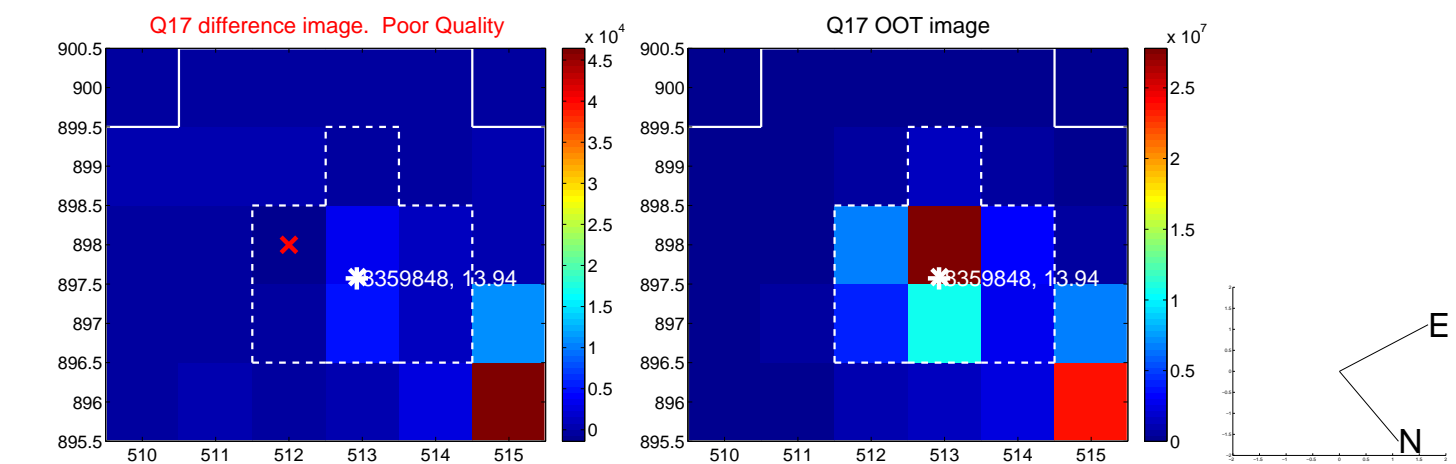
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



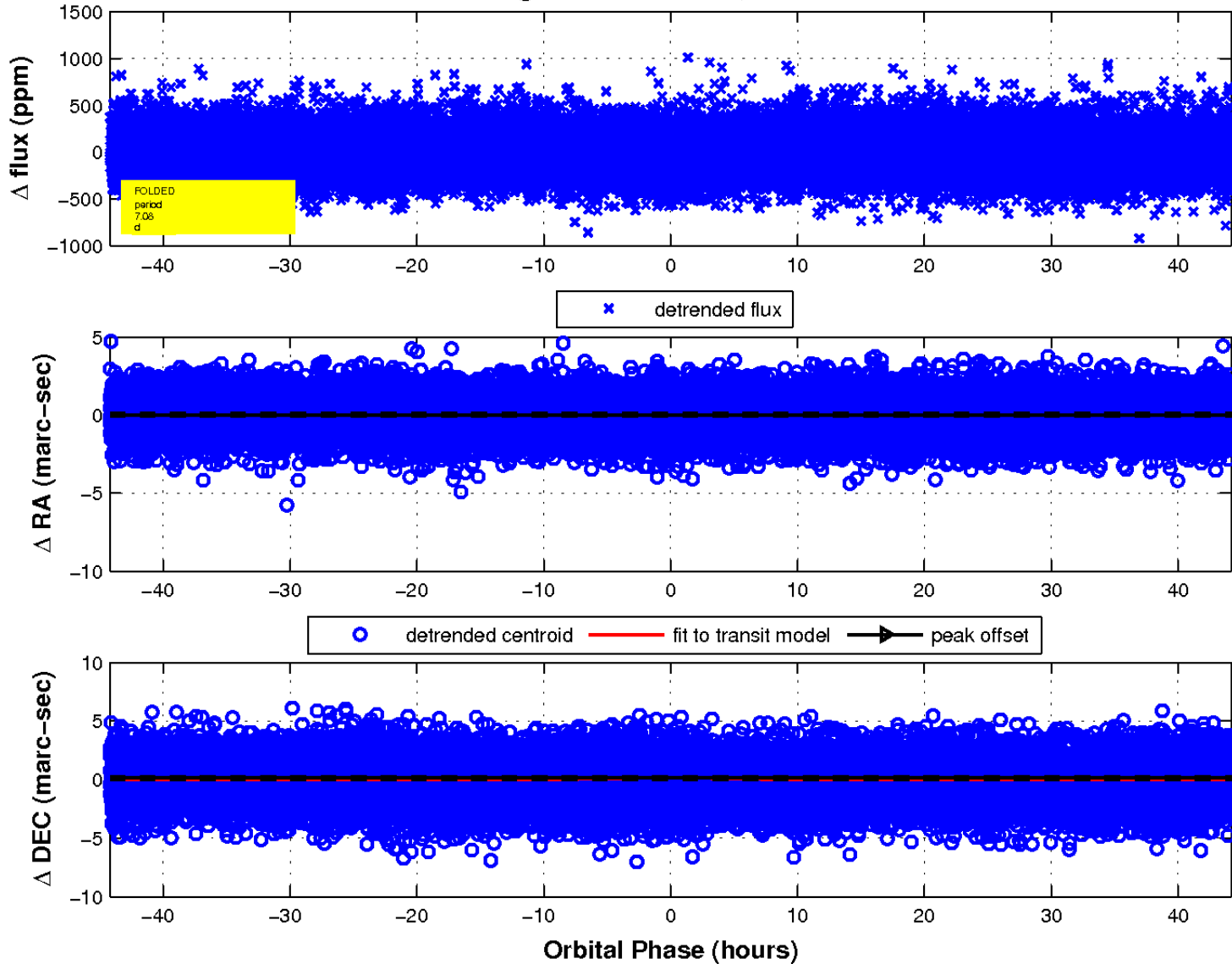
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

