

KIC 005482494

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})
005482494-01	OBS	No	1.095144	132.136684	15.2	8.797	8.5	8.4	3.18	6608	1.25	29756.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005482494-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

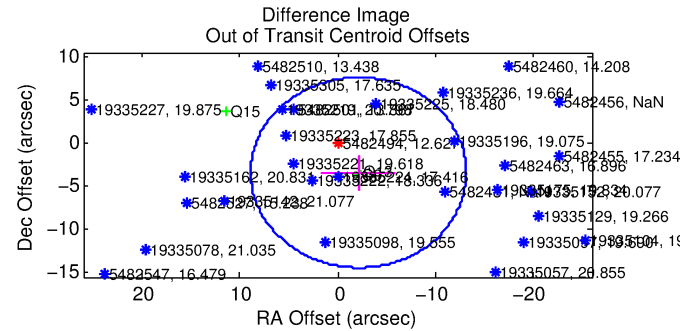
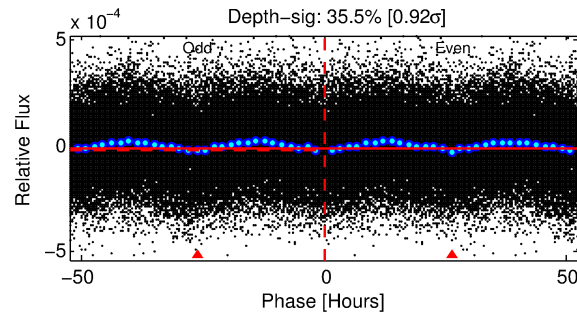
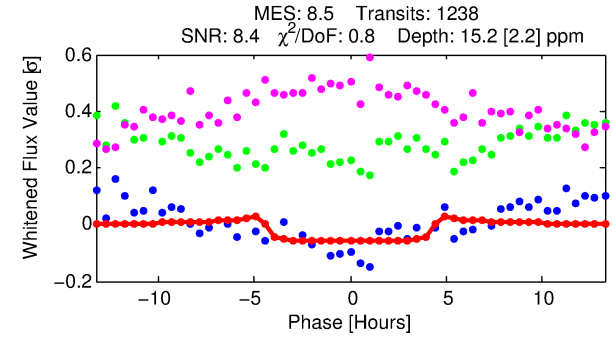
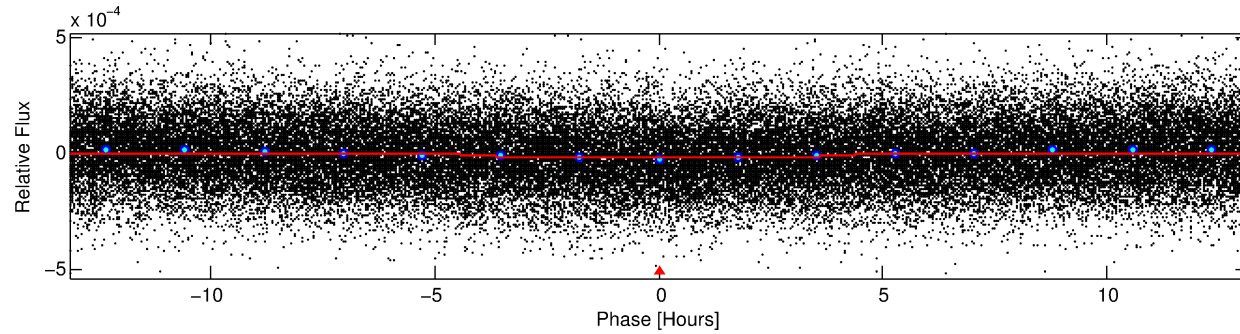
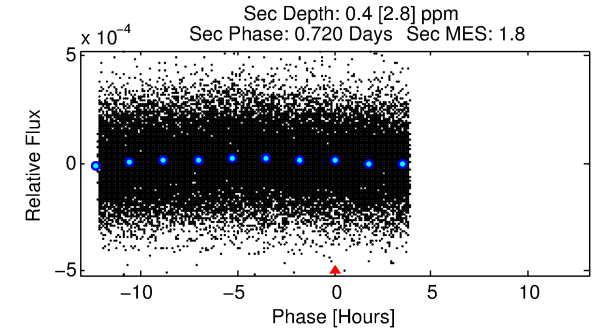
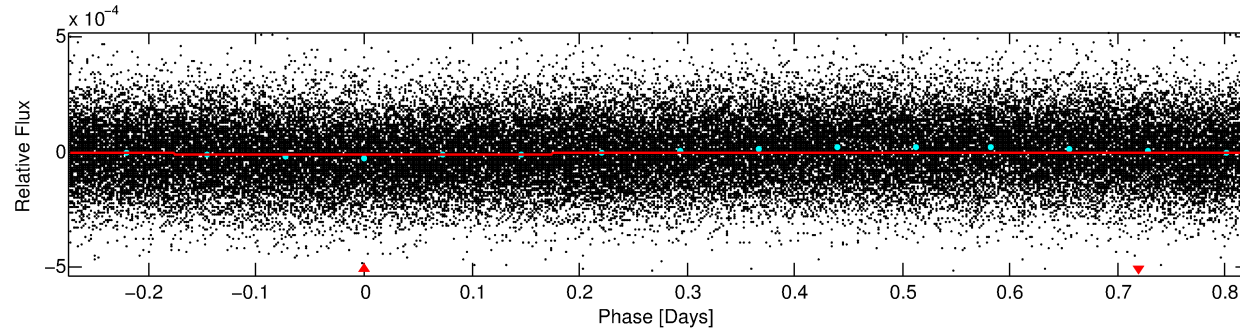
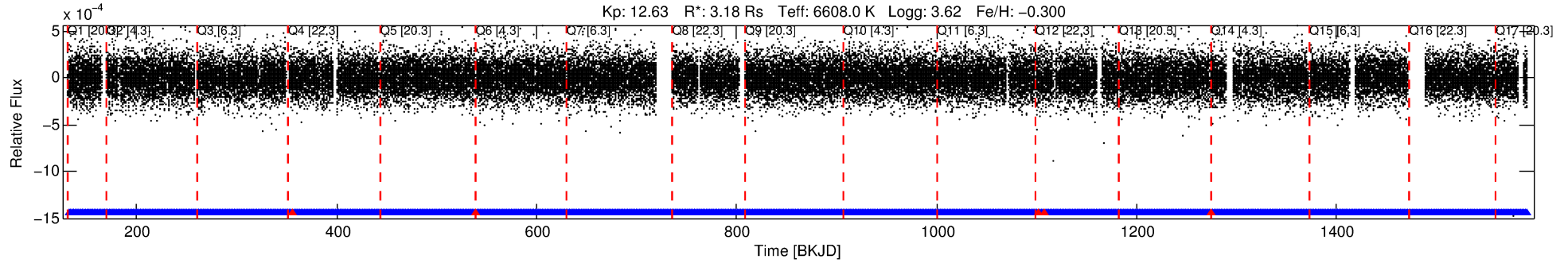
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005482494-01

No Significant Match Found

DV One-Page Summary

KIC: 5482494 Candidate: 1 of 1 Period: 1.095 d



DV Fit Results:

Period = 1.09514 [0.00002] d
Epoch = 132.1367 [0.0061] BKJD
Rp/R* = 0.0036 [0.0028]
a/R* = 1.16 [1.19]
b = 0.07 [56.67]
Seff = 29756.97 [16422.51]
Teq = 3349 [462] K
Rp = 1.25 [1.06] Re
a = 0.0241 [0.0082] AU
Ag = 0.08 [0.59] [-1.57σ]
Teffp = 2743 [5109] K [-0.12σ]

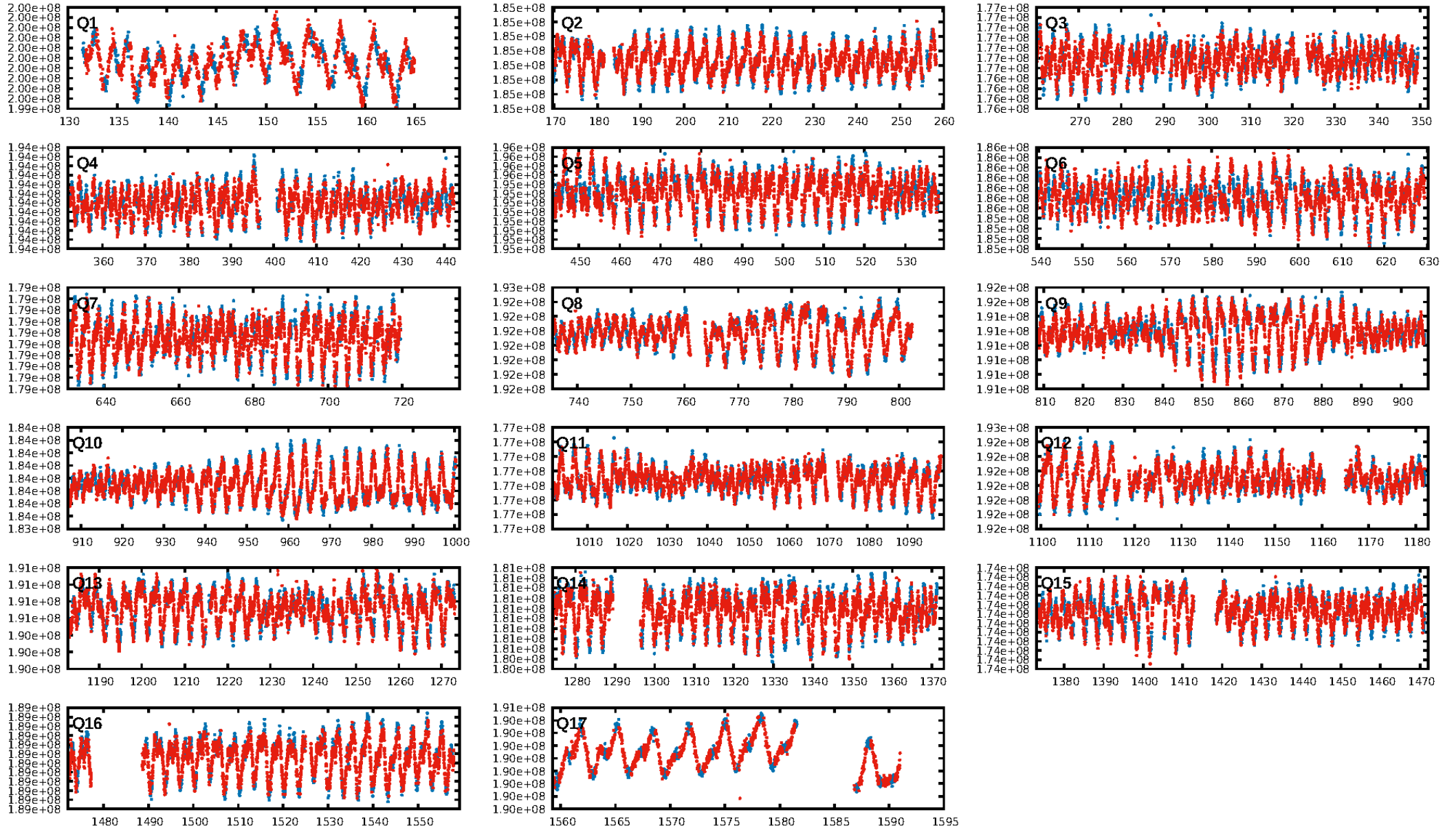
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1177/1182]
GhostDiagnostic-chr: 4.111
Centroid-sig: 17.2%
Centroid-so: 1.571 arcsec [1.55σ]
OotOffset-rm: 4.036 arcsec [1.10σ]
OotOffset-st: 0/1/0/2 [3]
KicOffset-rm: 3.766 arcsec [1.05σ]
KicOffset-st: 0/1/0/2 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [17/17]

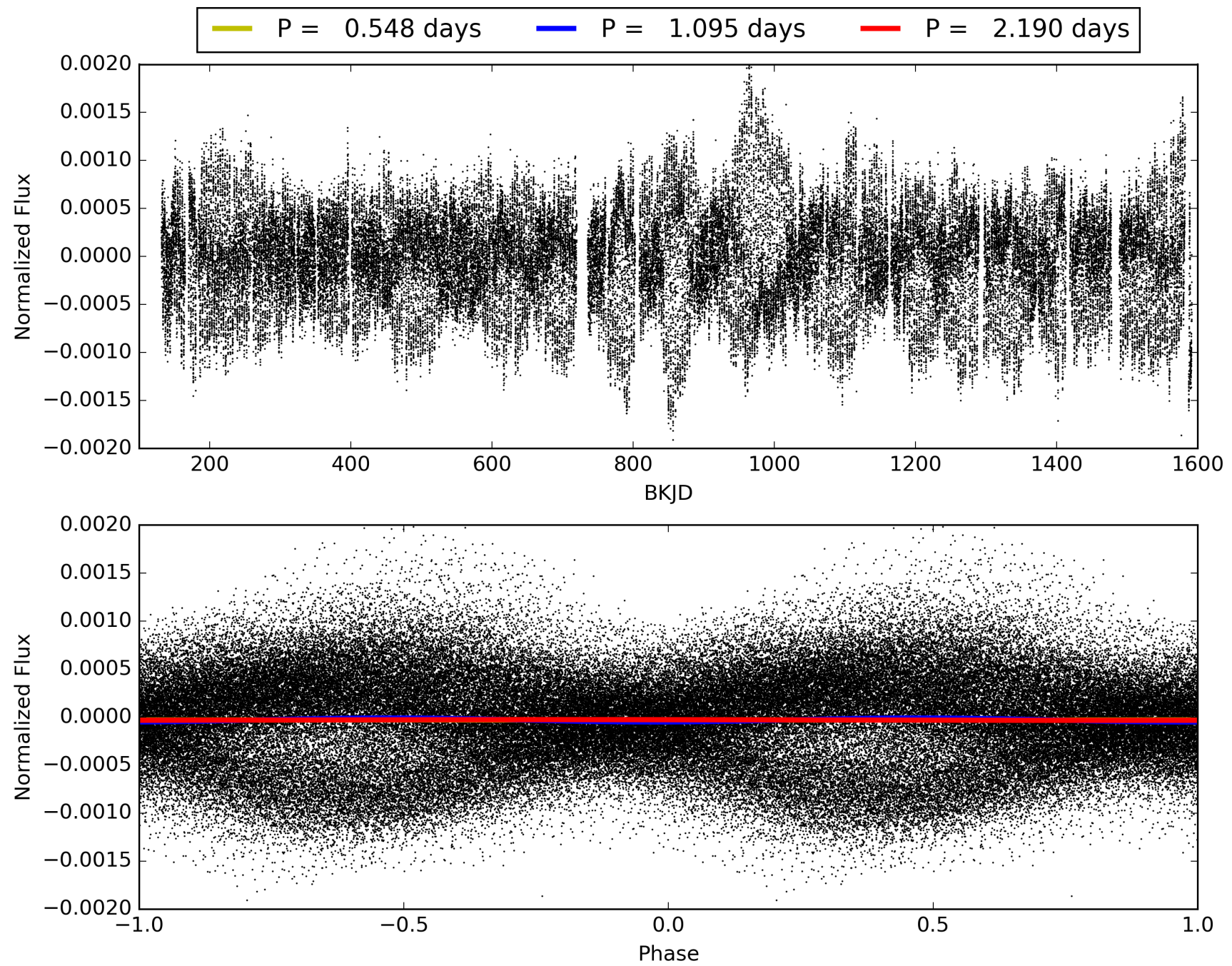
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 08:26:44 Z

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

TCE 005482494-01, PDC Light Curves

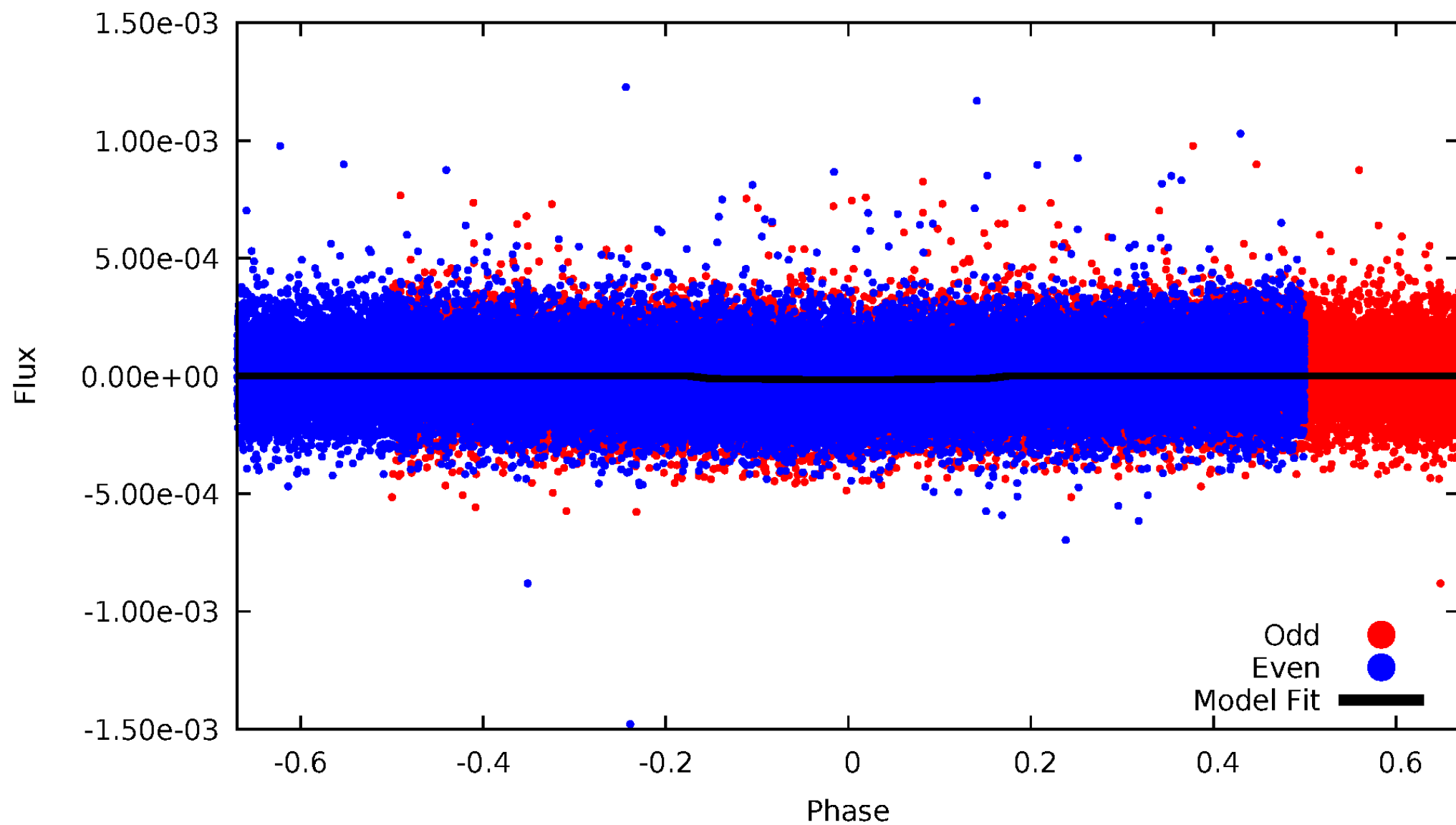


TCE 005482494-01



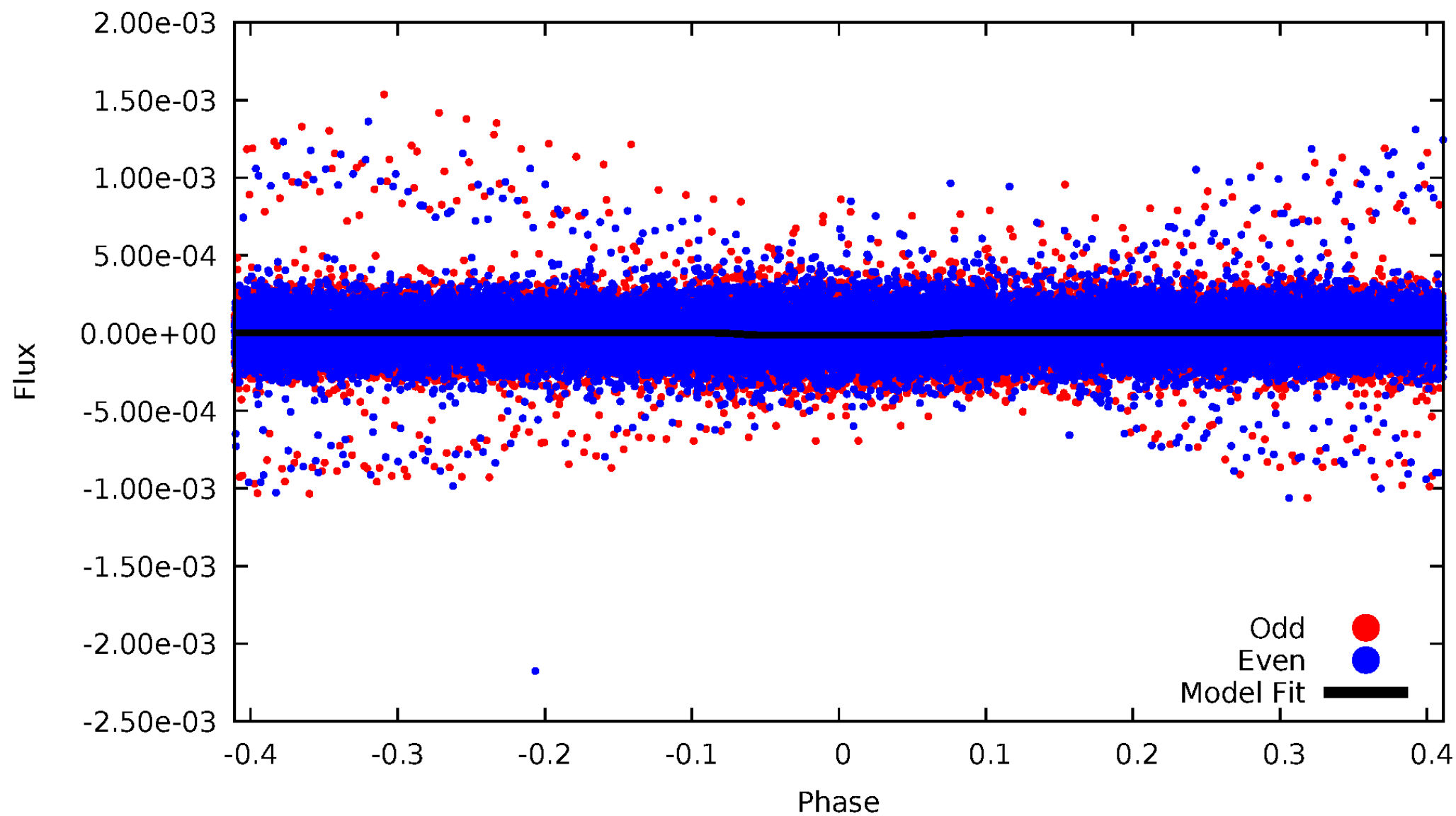
DV Odd/Even

TCE 005482494-01



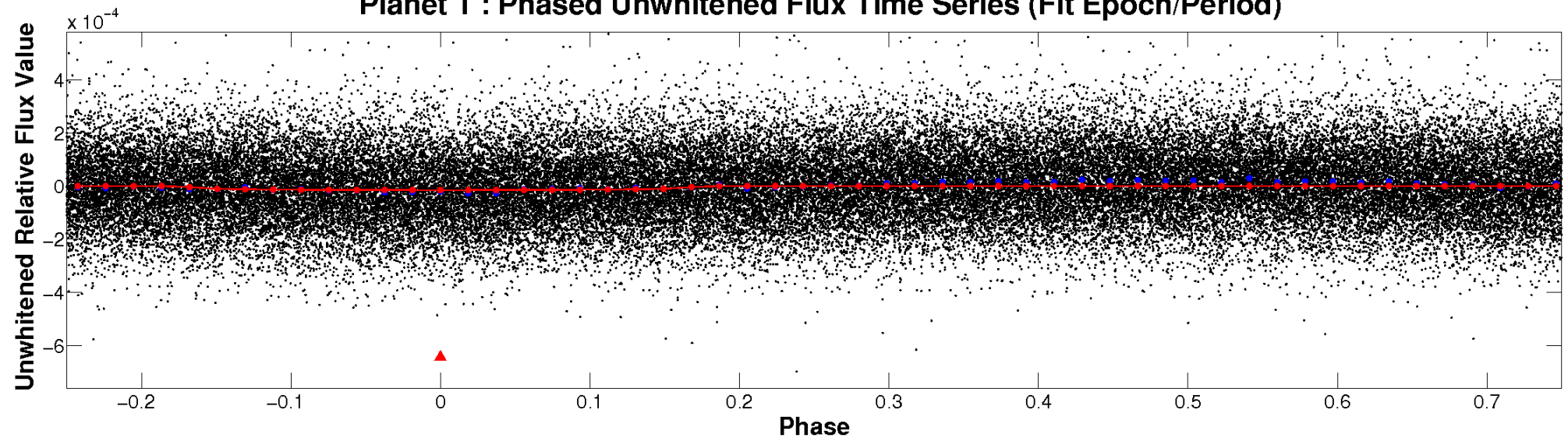
ALT Odd/Even

TCE 005482494-01

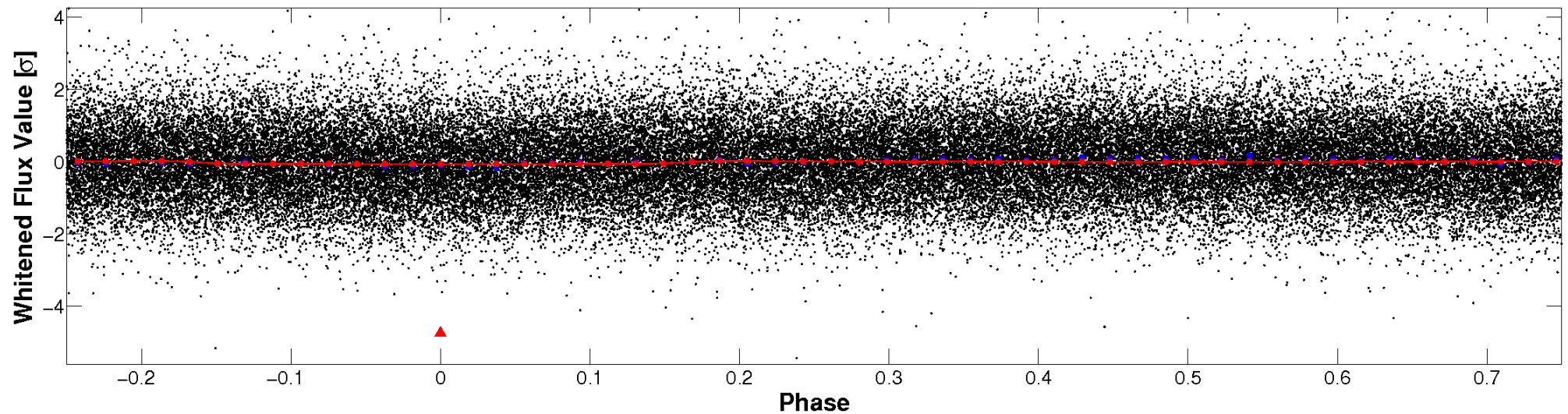


Non-Whitened Vs. Whitened Light Curve

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

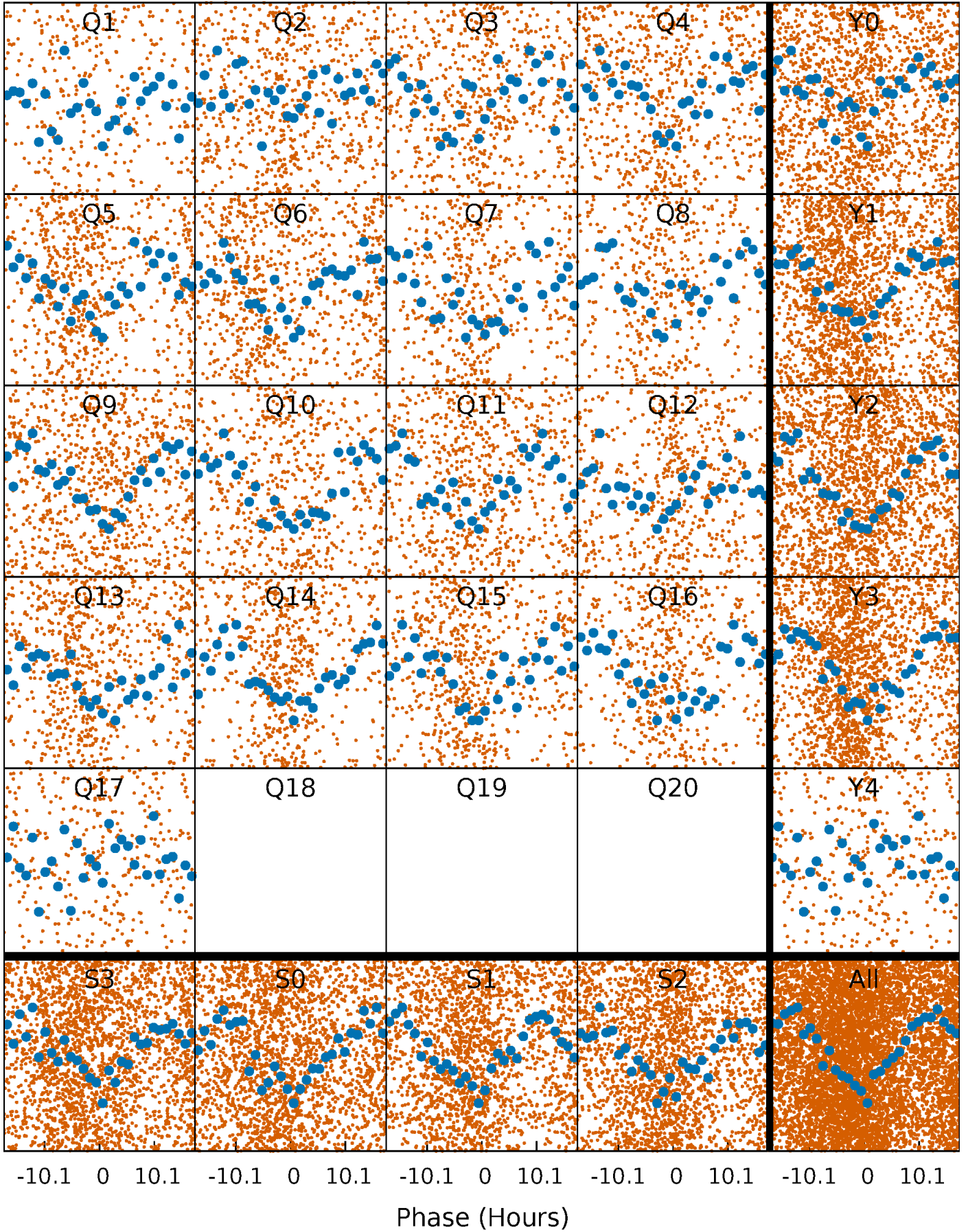


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



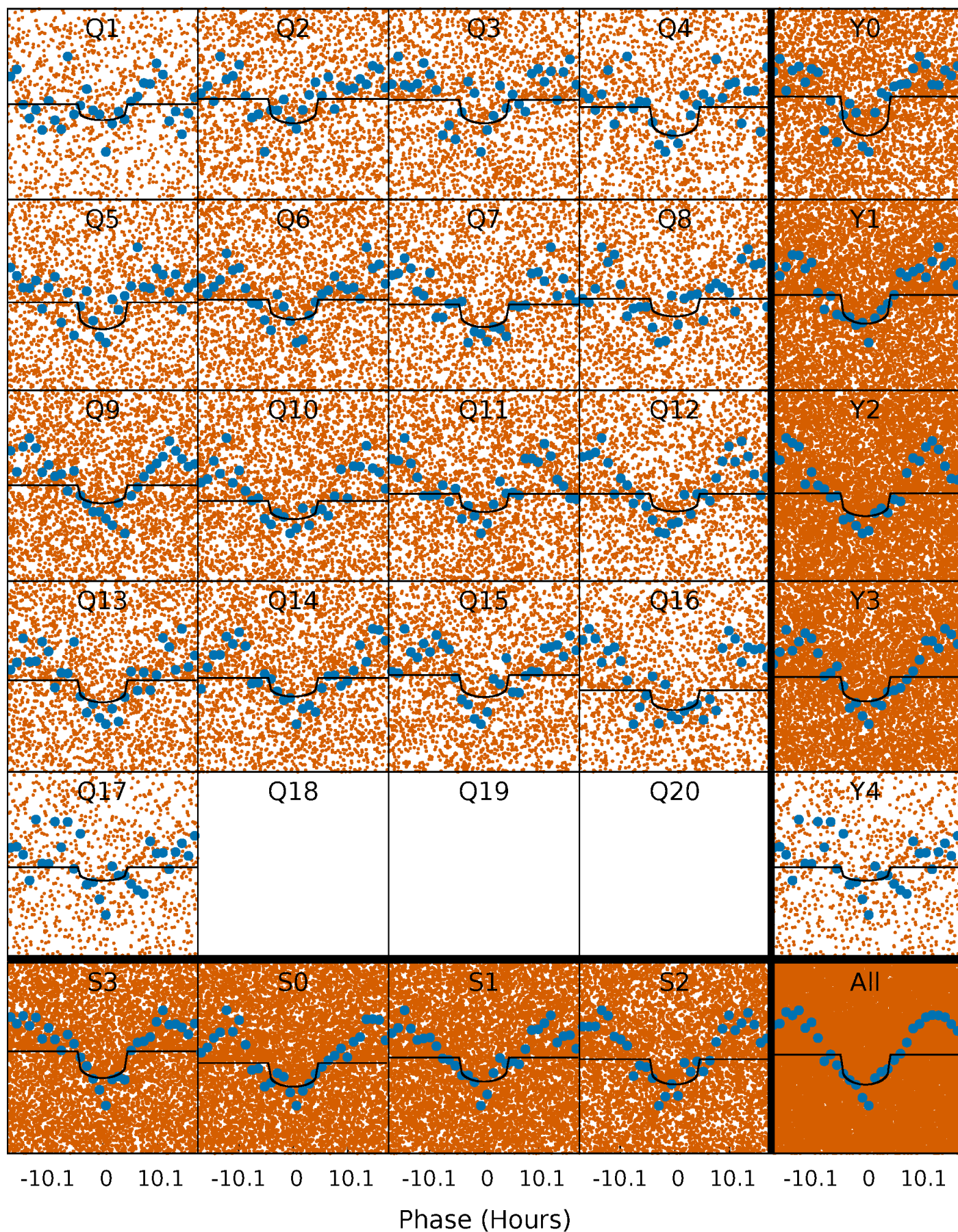
PDC Quarter-Phased Transit Curves

TCE 005482494-01 P= 1.095144 Days $T_0=132.136684$ (BKJD)



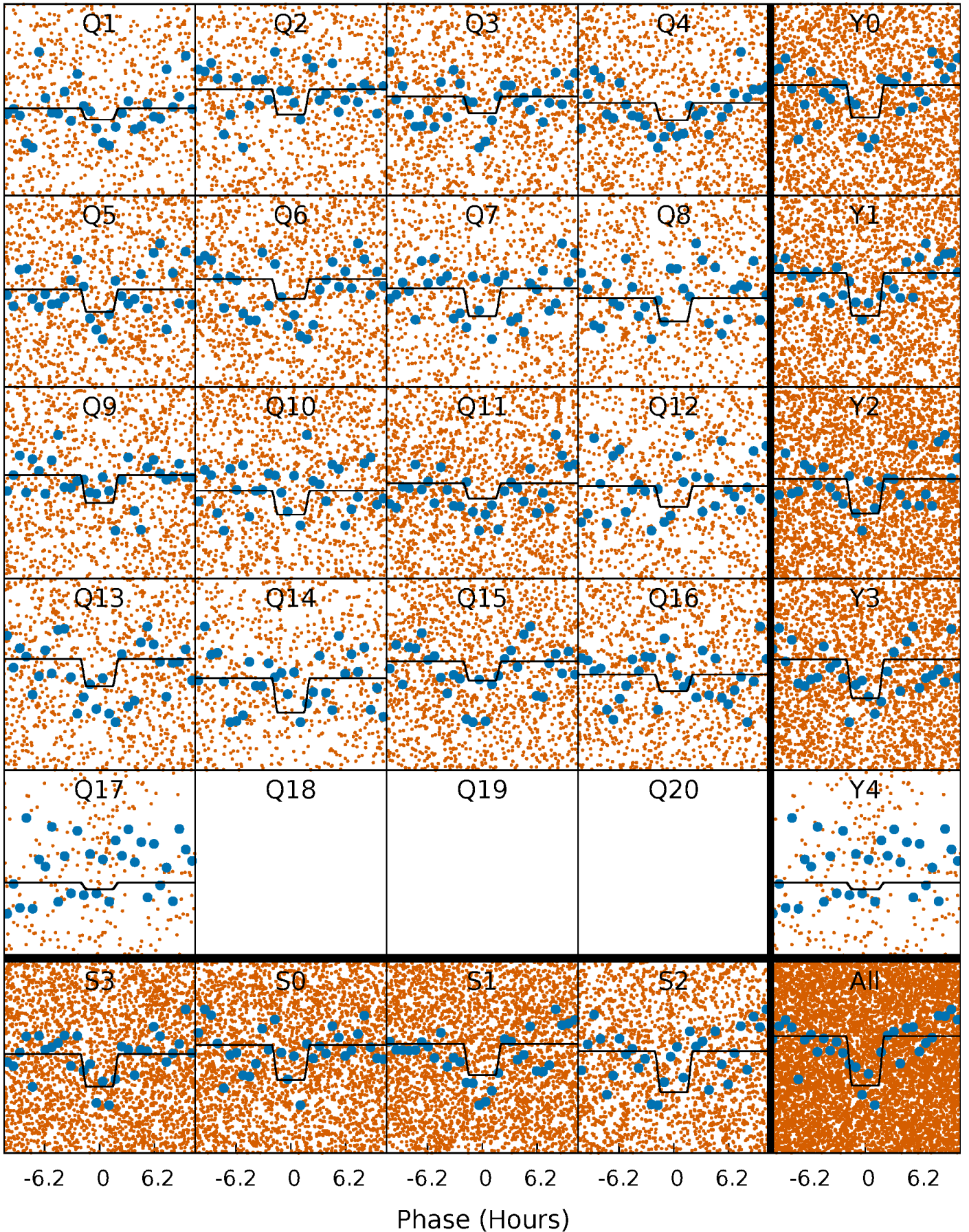
DV Quarter-Phased Transit Curves

TCE 005482494-01 P= 1.095144 Days $T_0=132.136684$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

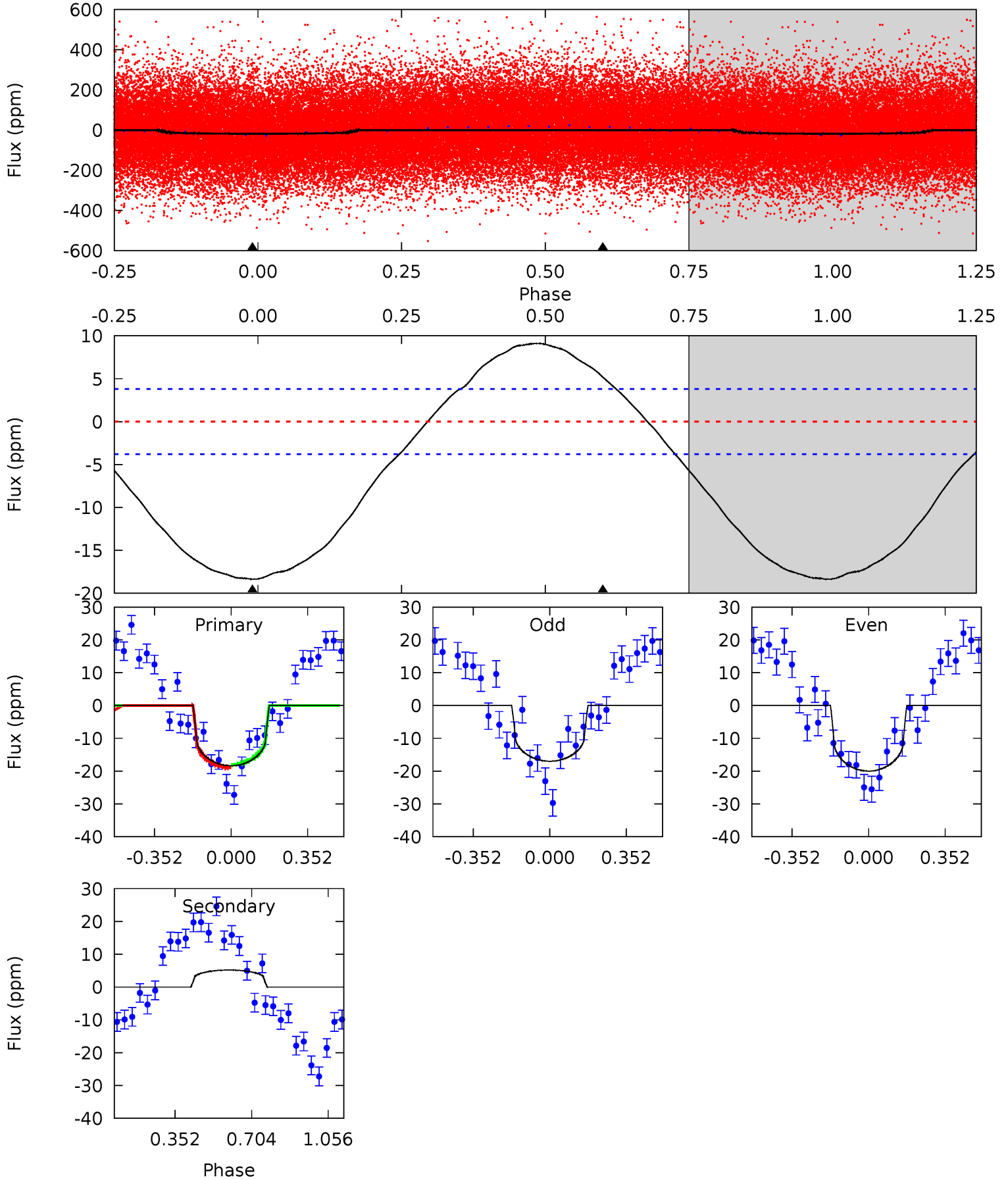
TCE 005482494-01 P= 1.095113 Days $T_0=132.141146$ (BKJD)



DV Model-Shift Uniqueness Test

005482494-01, P = 1.095144 Days, E = 131.041540 Days

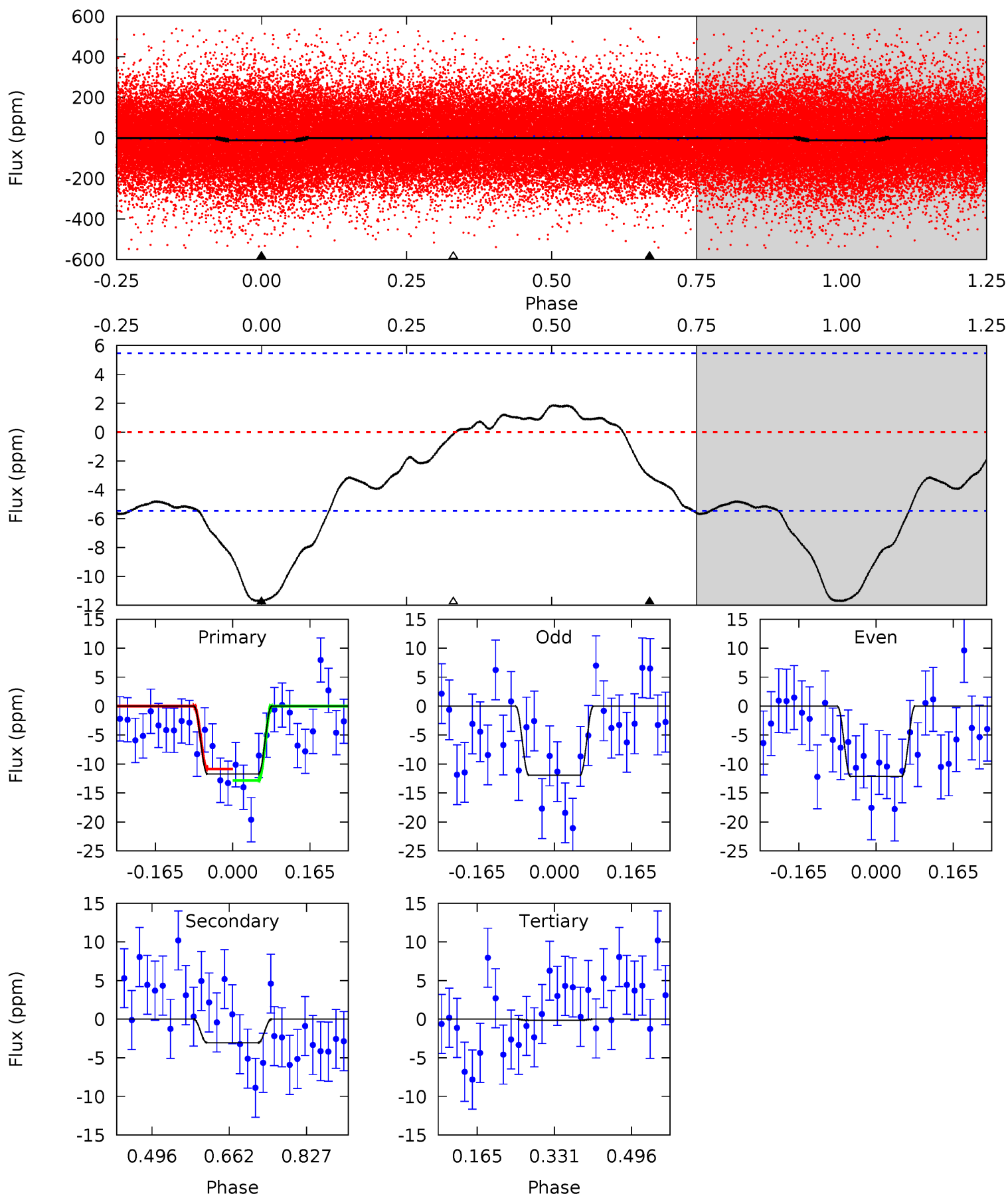
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.8	-5.87	0	0	4.29	0.93	2.53	20.8	20.8	-5.87	-5.87	1.71	1.05	0.33	0.54



Alt Model-Shift Uniqueness Test

005482494-01, P = 1.095113 Days, E = 131.046033 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.55	2.49	0.11	0	4.46	1.39	1.47	9.44	9.55	2.38	2.49	0.08	1.02	0.14	0.82



Stellar Parameters For KIC 005482494

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6608^{+198}_{-218}	$3.625^{+0.312}_{-0.078}$	$-0.300^{+0.350}_{-0.250}$	$3.181^{+0.410}_{-1.147}$	$1.555^{+0.253}_{-0.310}$	$0.068^{+0.161}_{-0.017}$
	+3%/-3%	+9%/-2%	+117%/-83%	+13%/-36%	+16%/-20%	+236%/-24%
Source	PHO1	FLK73	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 005482494-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	5 ± 1	$1.25^{+0.84}_{-0.68}$	4583^{+257}_{-421}	-5408^{+751}_{-2265}	$-1.065^{+0.698}_{-3.953}$
Alt.	-3 ± 1	$1.25^{+0.86}_{-0.73}$	4575^{+253}_{-413}	4023^{+2845}_{-7493}	$0.600^{+3.129}_{-0.418}$

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 $A_{obs} \gg 1.0$

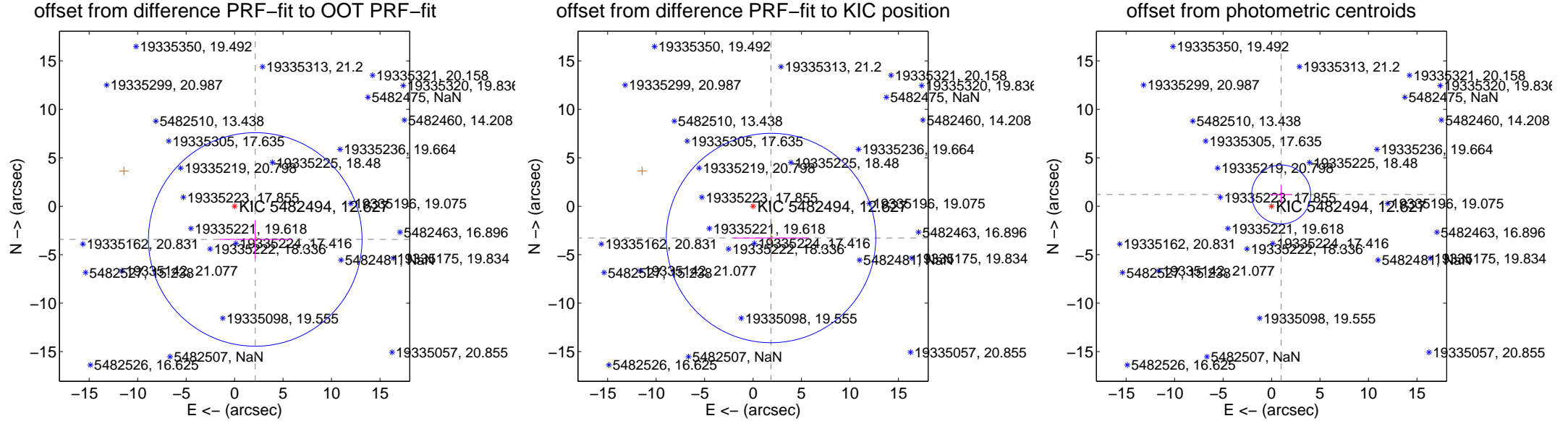
DV Centroid Data

Supplemental centroid analysis for 005482494-01. Kepler magnitude: 12.63. Transit SNR 8.41

There are 0 quarters with good PRF difference image offsets

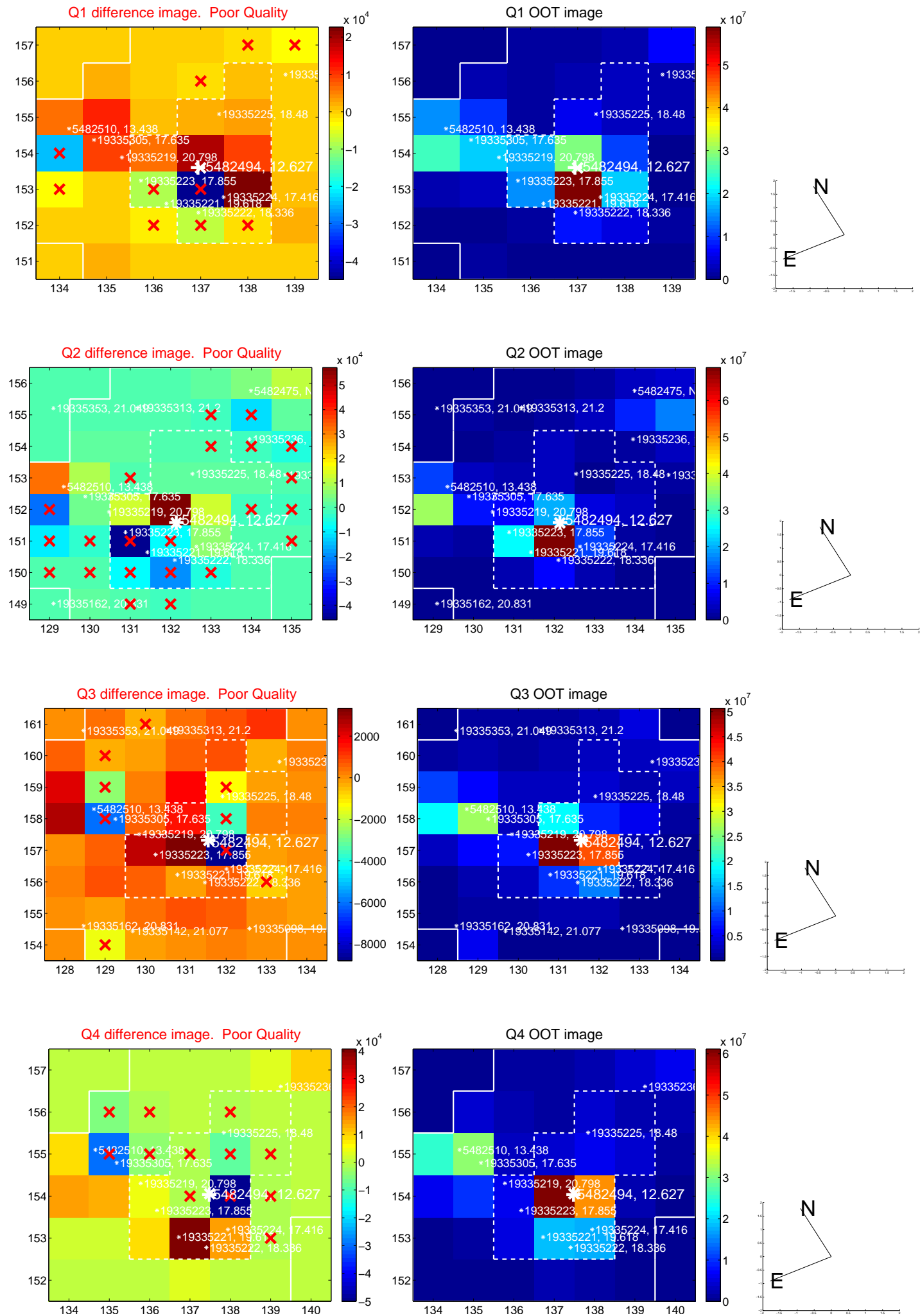
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.036 ± 3.672	1.10	-2.132 ± 3.763	-3.426 ± 1.985
PRF-fit source offset from KIC position	3.766 ± 3.601	1.05	-1.855 ± 3.874	-3.278 ± 1.947
photometric centroid source offset	1.57 ± 1.01	1.55	-1.00 ± 1.16	1.21 ± 0.91

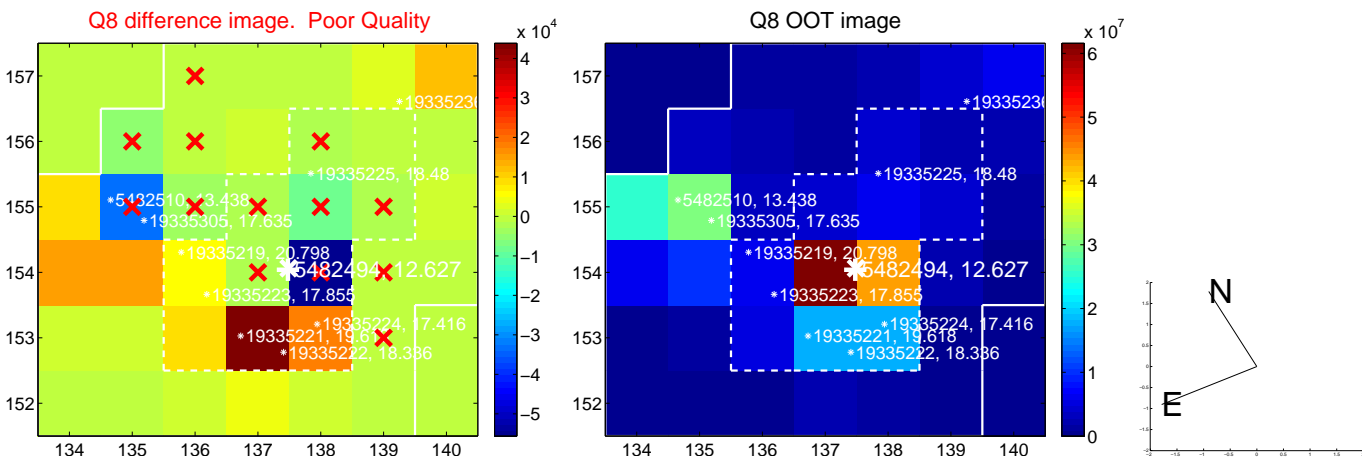
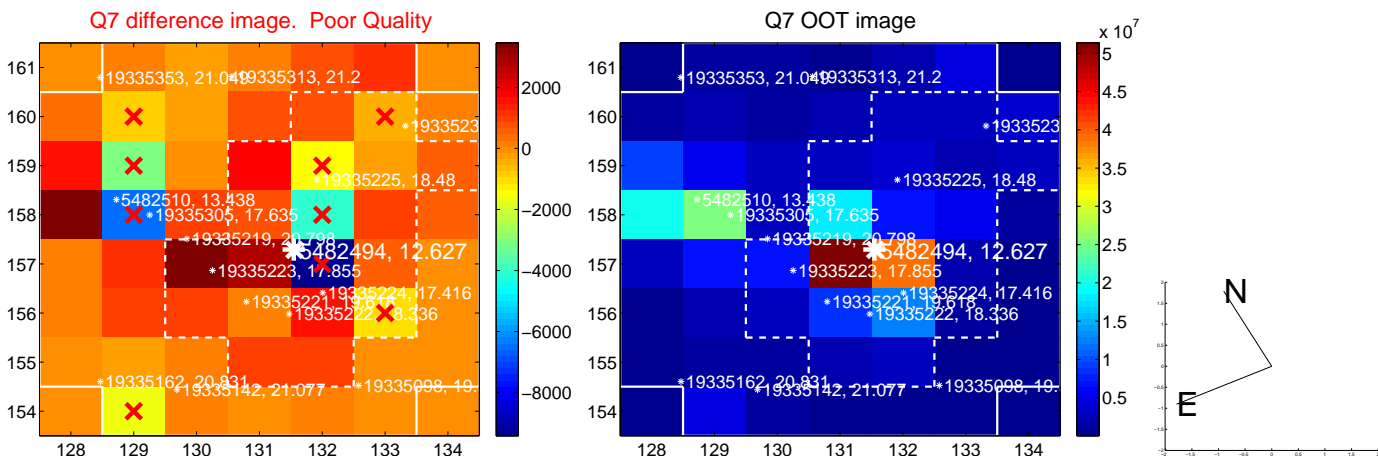
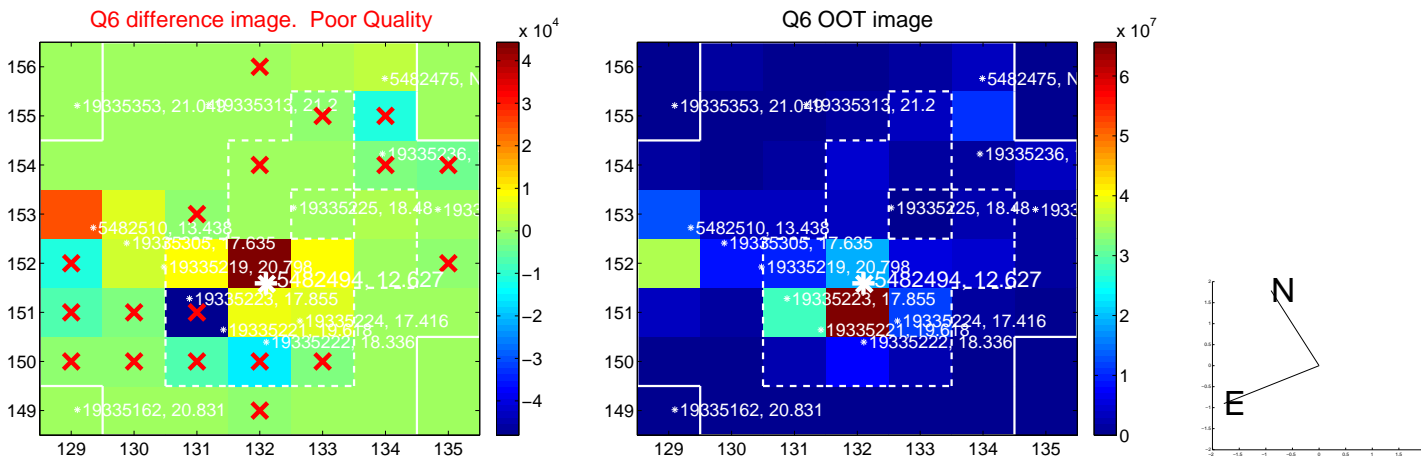
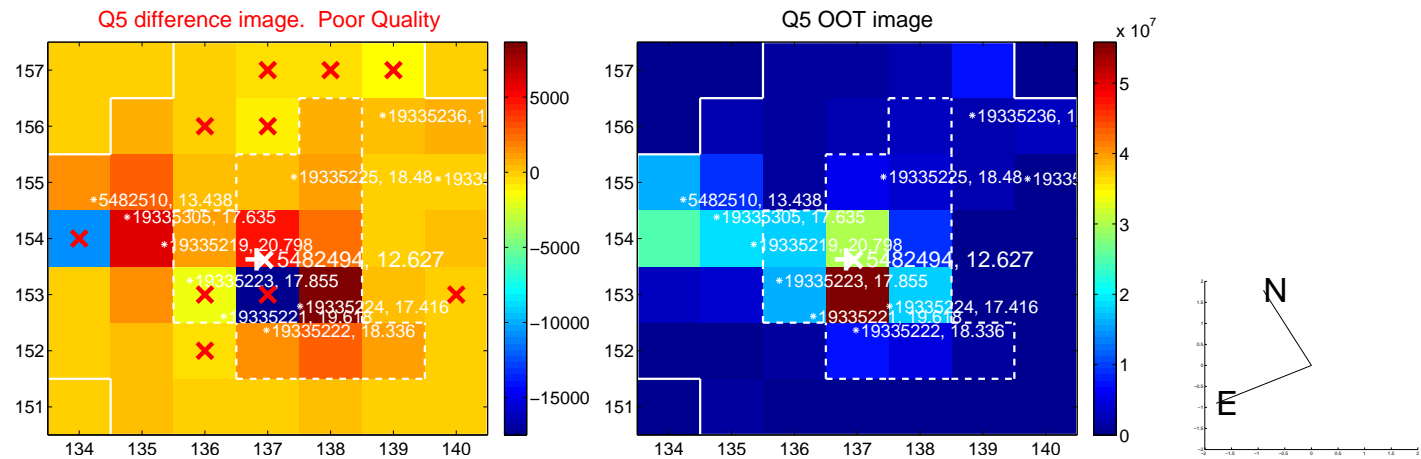


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

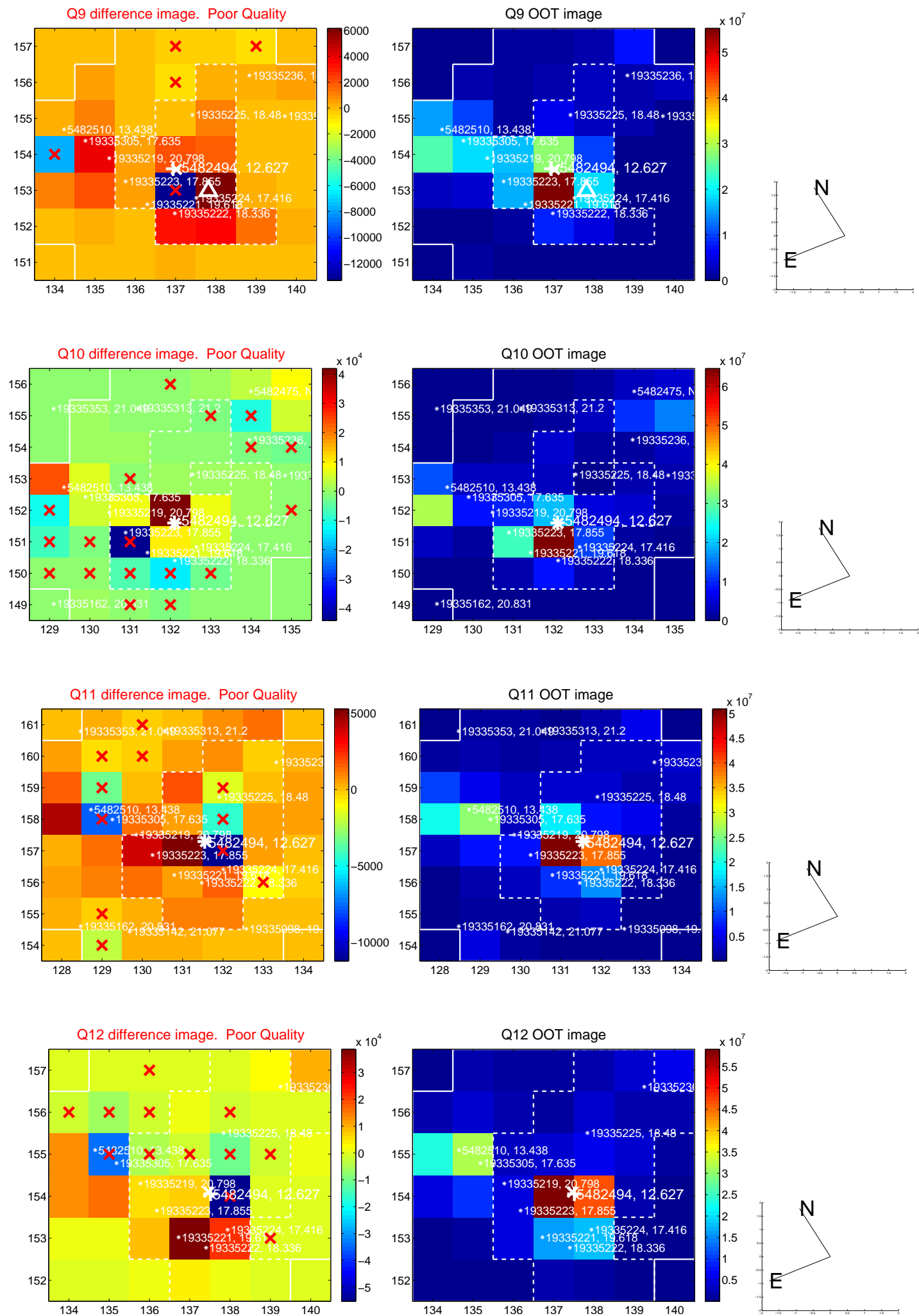
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



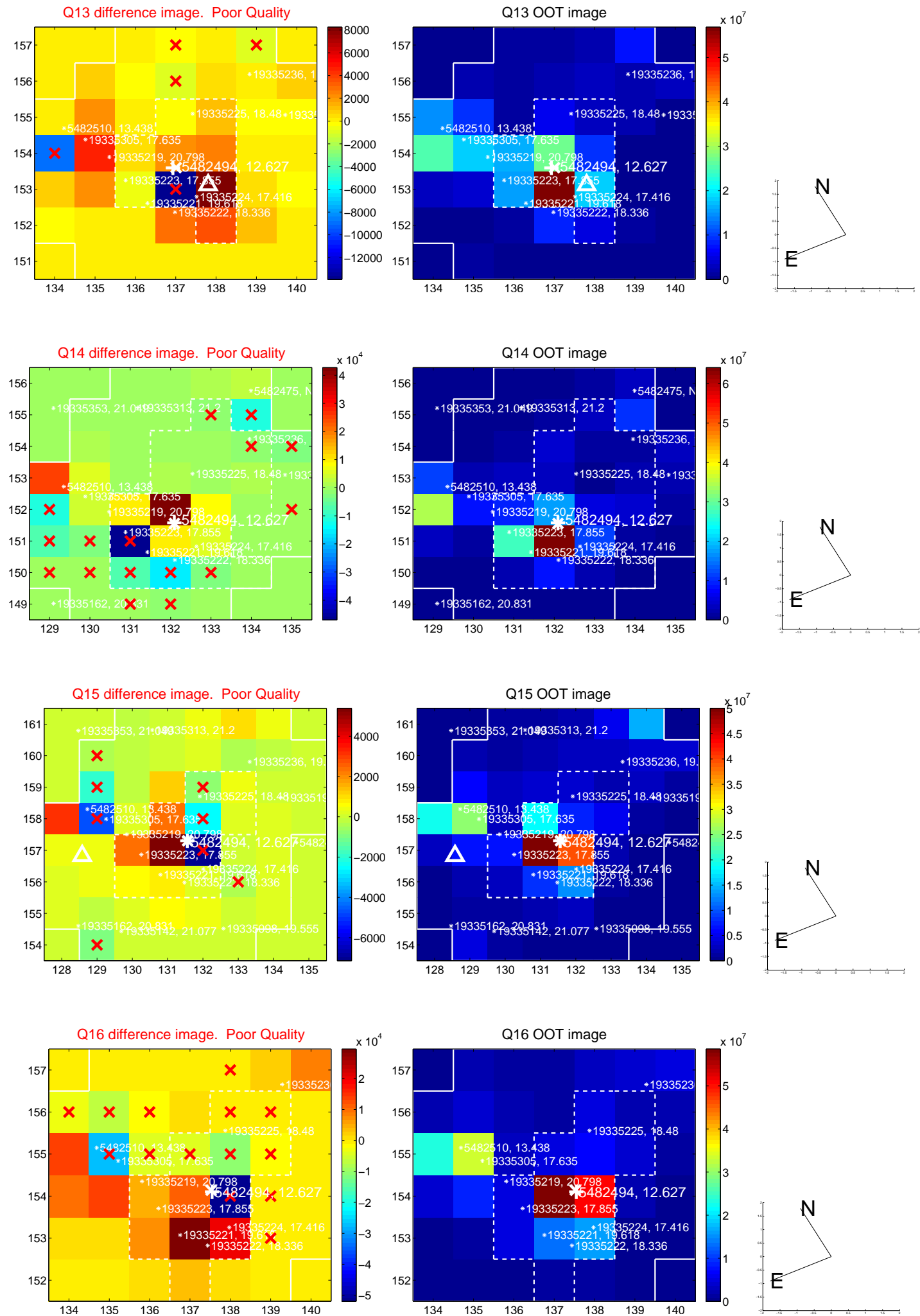
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



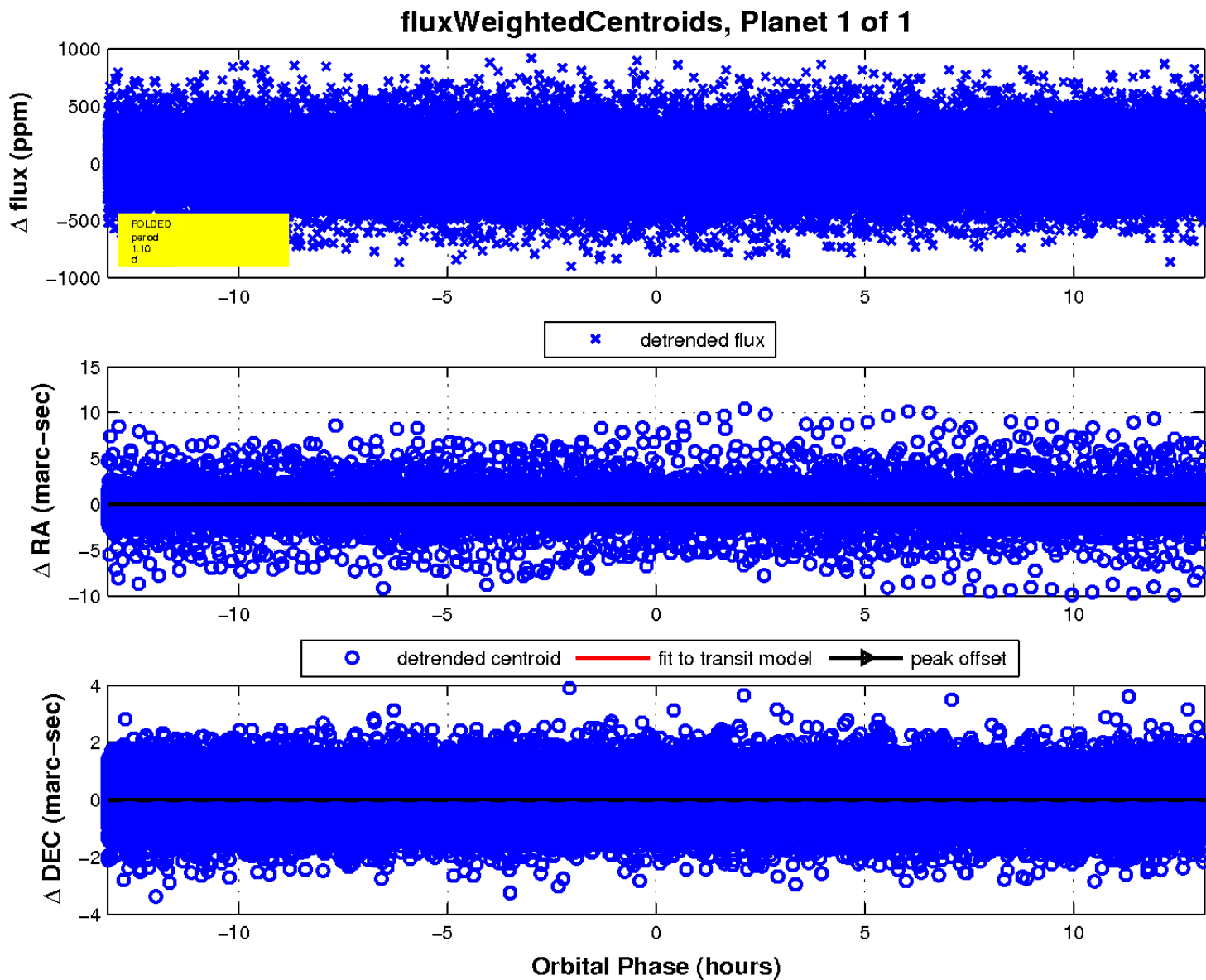
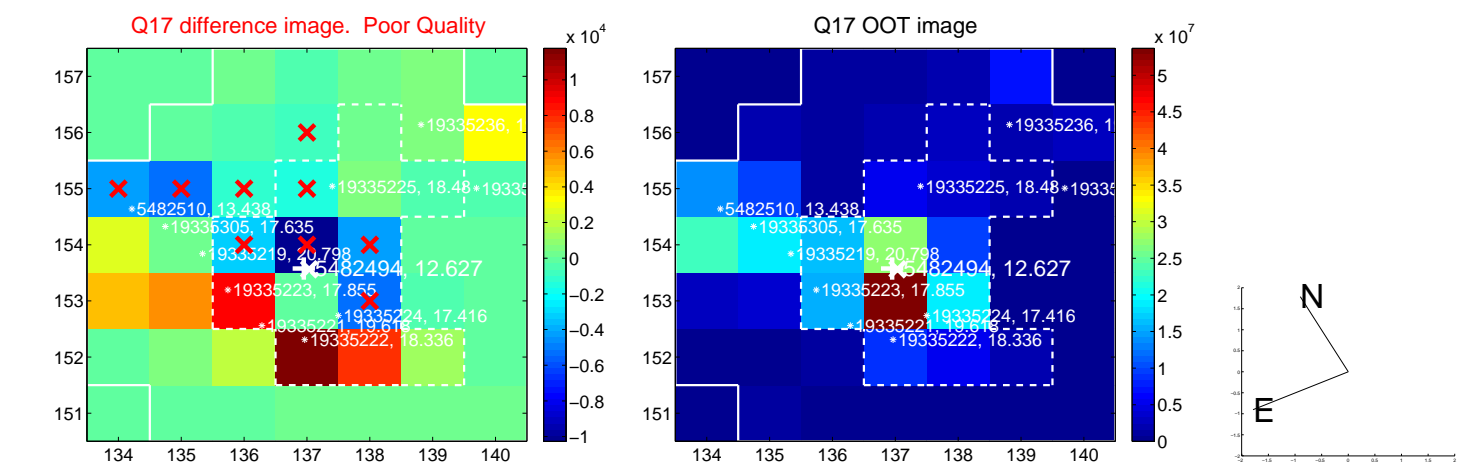
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

