

KIC 005985713

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})
005985713-01	OBS	3190.01	8.952987	134.333586	44.5	2.967	11.1	12.1	1.21	6047	0.95	248.26

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005985713-01	OBS	PC	1.00	0	0	0	0	CENT_SATURATED

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.

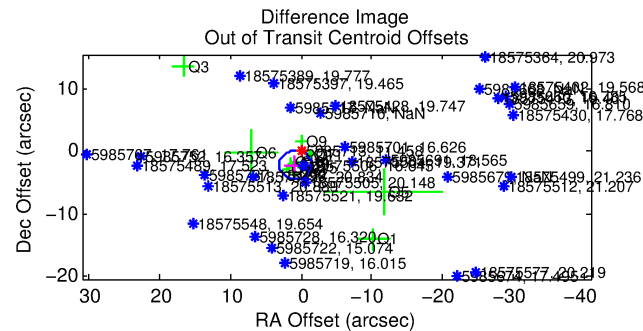
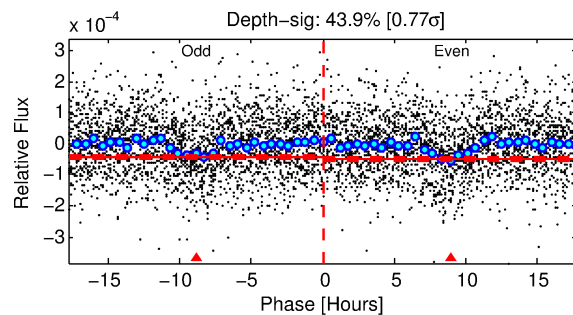
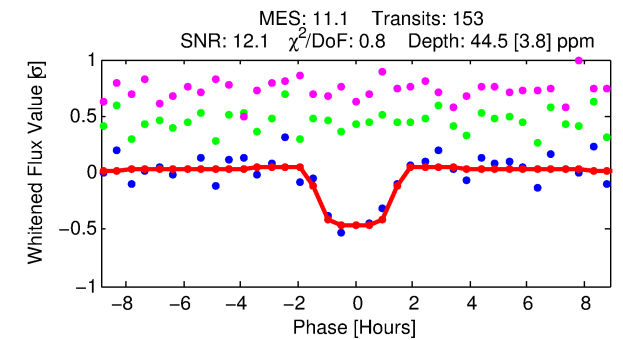
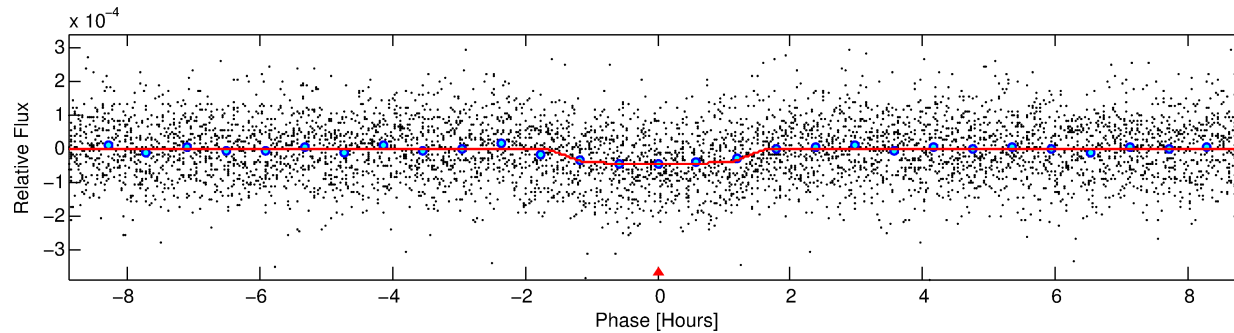
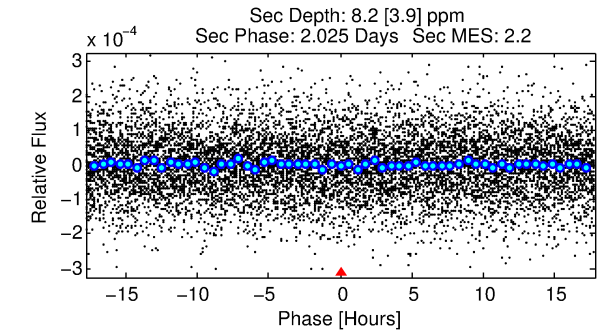
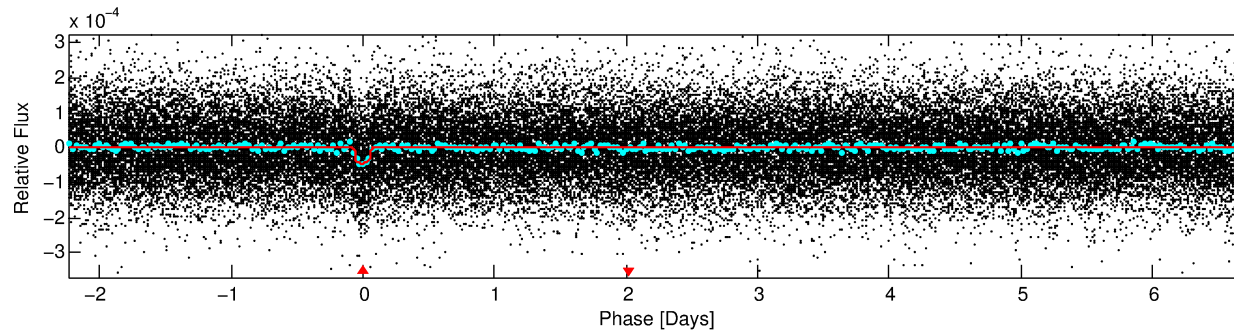
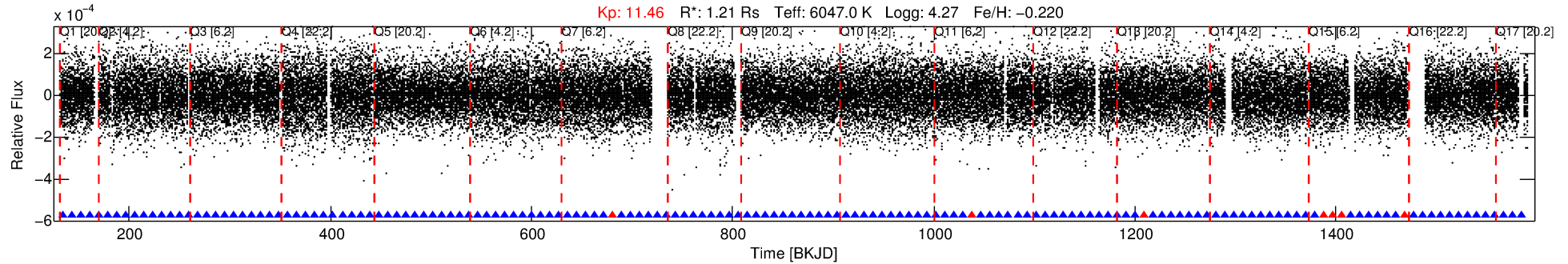
Ephemeris Match Information For 005985713-01

No Significant Match Found

DV One-Page Summary

KIC: 5985713 Candidate: 1 of 1 Period: 8.953 d

KOI: K03190.01 Corr: 0.990



DV Fit Results:

Period = 8.95299 [0.00006] d
Epoch = 134.3336 [0.0050] BKJD
Rp/R* = 0.0072 [0.0029]
a/R* = 10.45 [22.34]
b = 0.90 [0.46]
Seff = 248.26 [69.52]
Teq = 1012 [71] K
Rp = 0.95 [0.42] Re
a = 0.0838 [0.0140] AU
Ag = 35.17 [34.41] [0.99σ]
Teffp = 3811 [901] K [3.10σ]

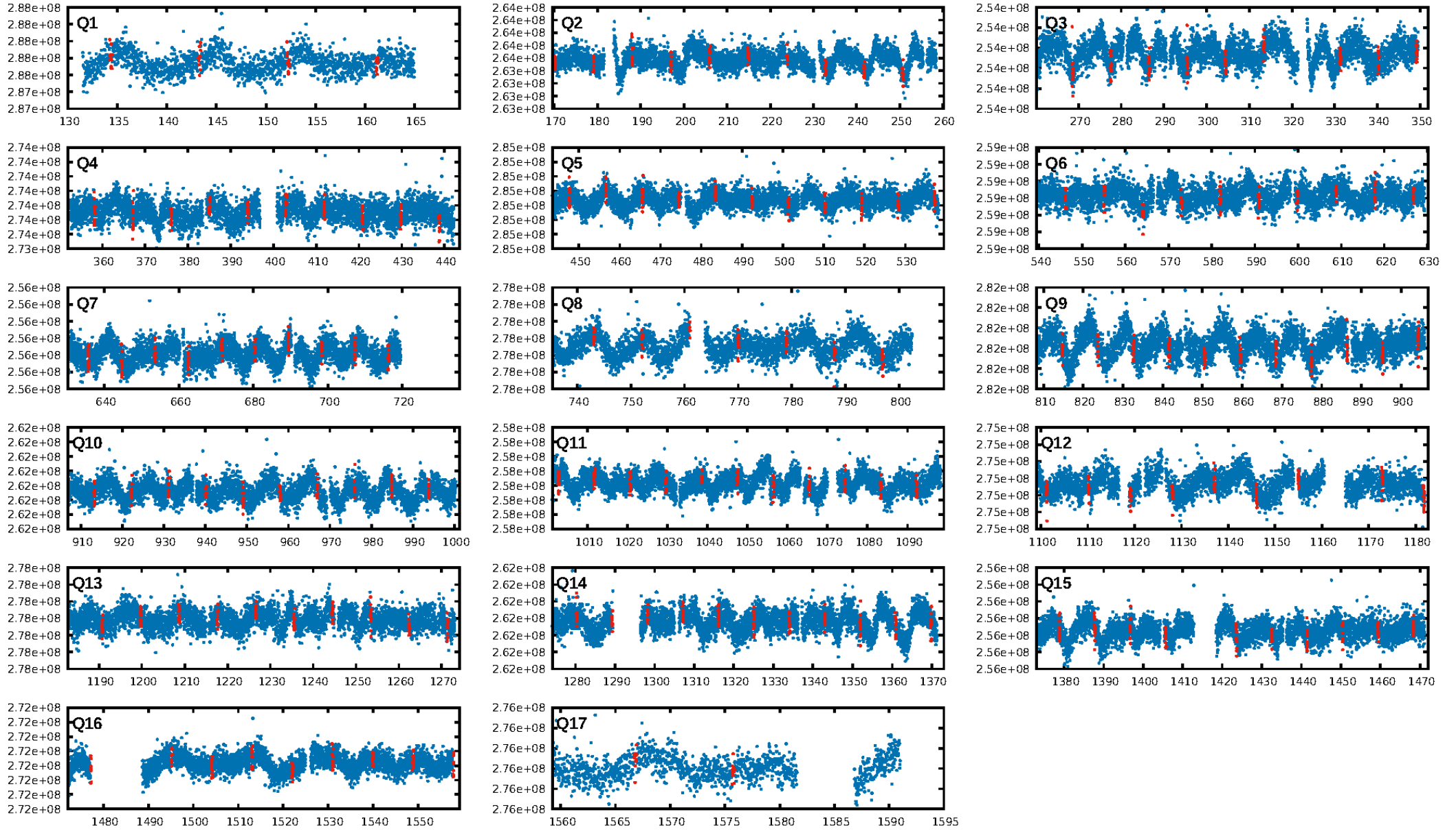
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 97.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.32e-28
RollingBand-fgt: 0.95 [140/147]
GhostDiagnostic-chr: 40.29
Centroid-sig: 0.0%
Centroid-so: 3.140 arcsec [2.72σ]
OOTOffset-rm: 2.390 arcsec [3.14σ]
KicOffset-rm: 2.404 arcsec [2.33σ]
OOTOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 0.53 [8/15]
DiffImageOverlap-fno: 1.00 [17/17]

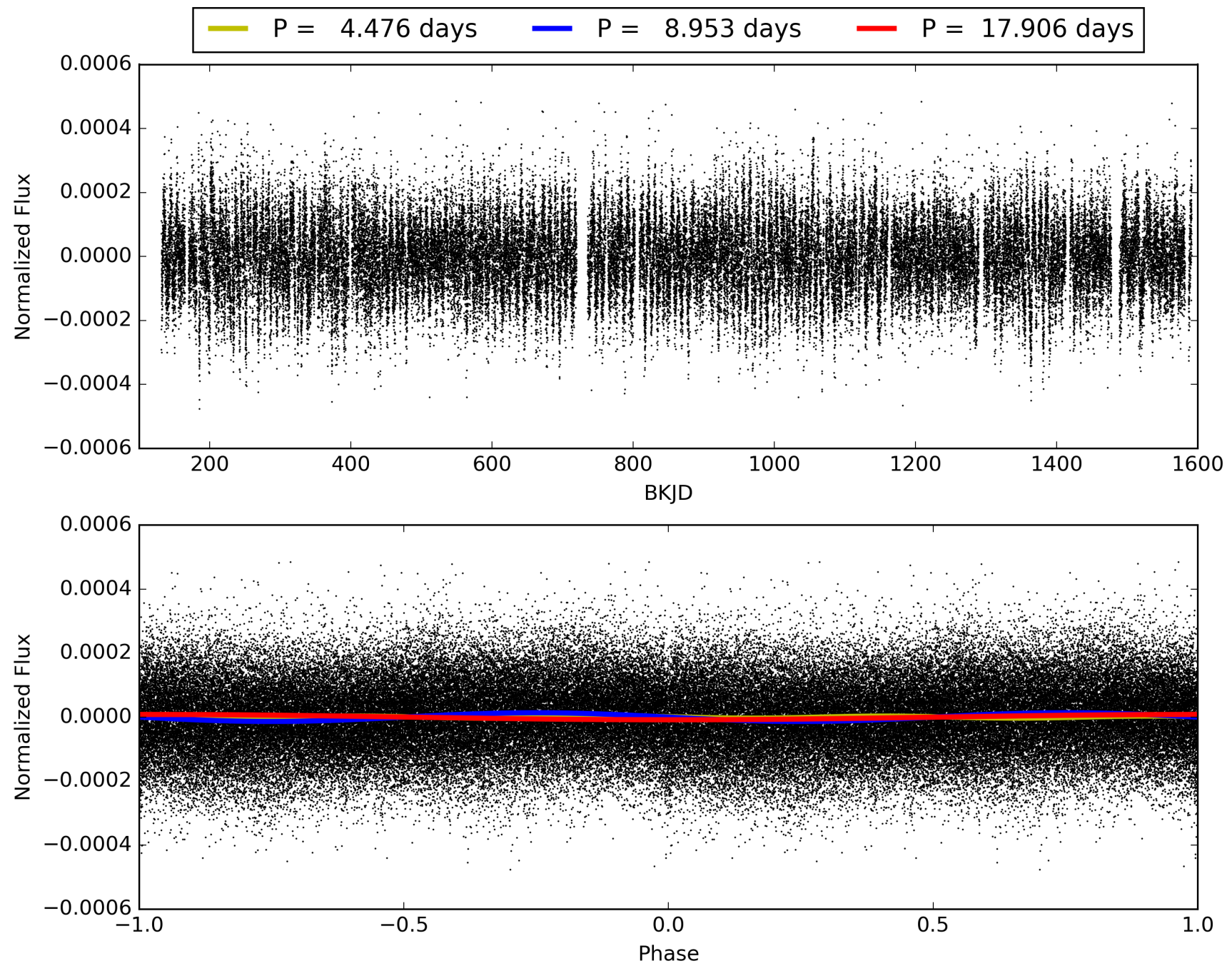
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:06:31 Z

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

TCE 005985713-01, PDC Light Curves

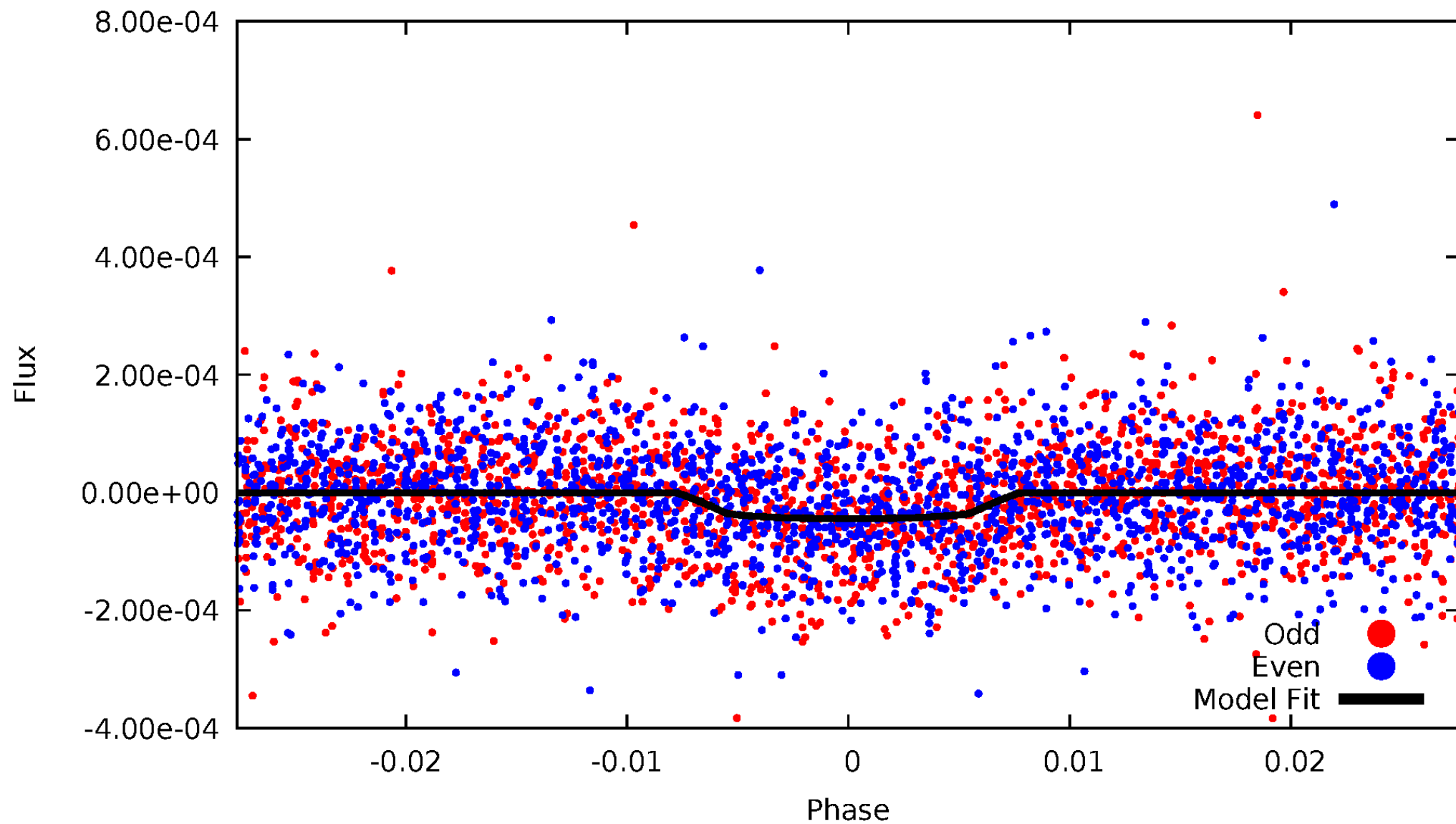


TCE 005985713-01



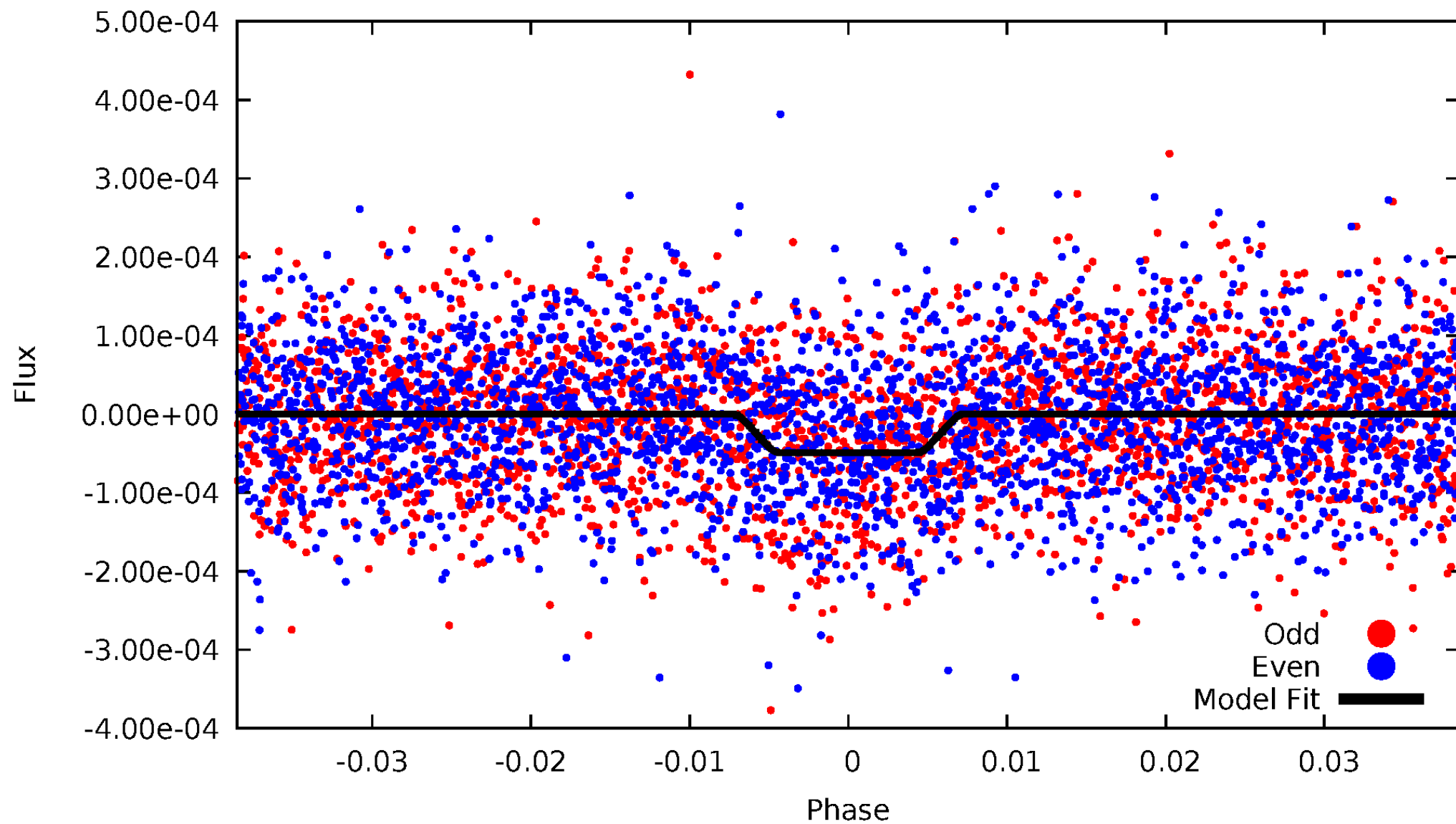
DV Odd/Even

TCE 005985713-01



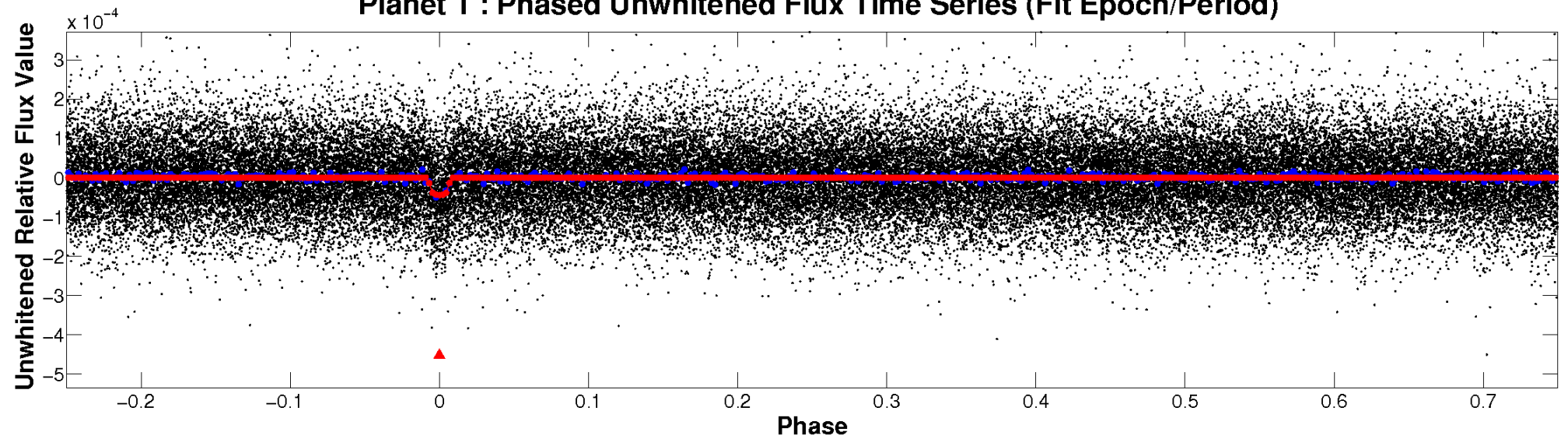
ALT Odd/Even

TCE 005985713-01

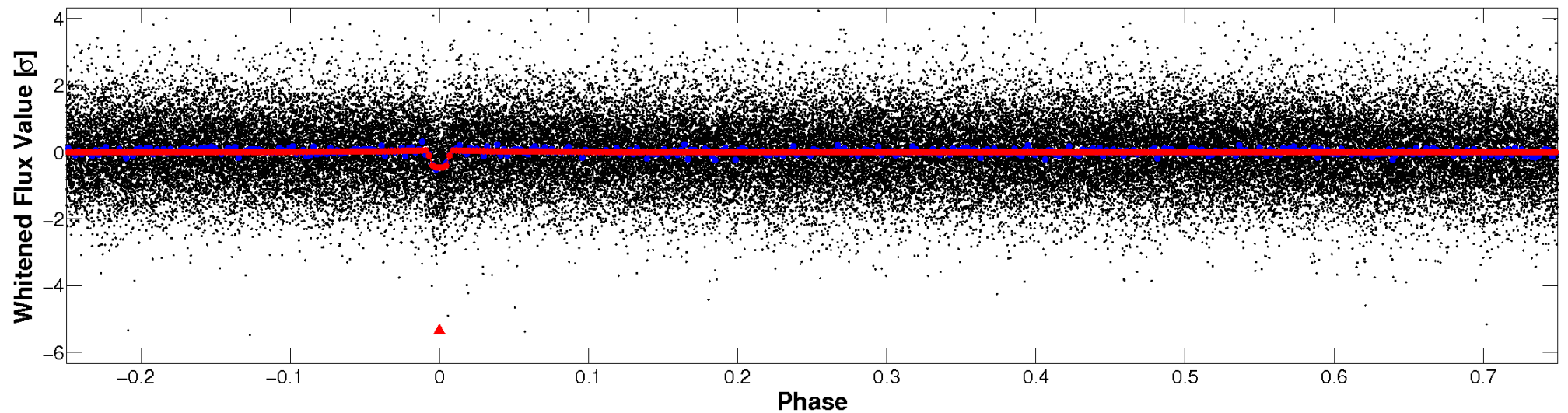


Non-Whitened Vs. Whitened Light Curve

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

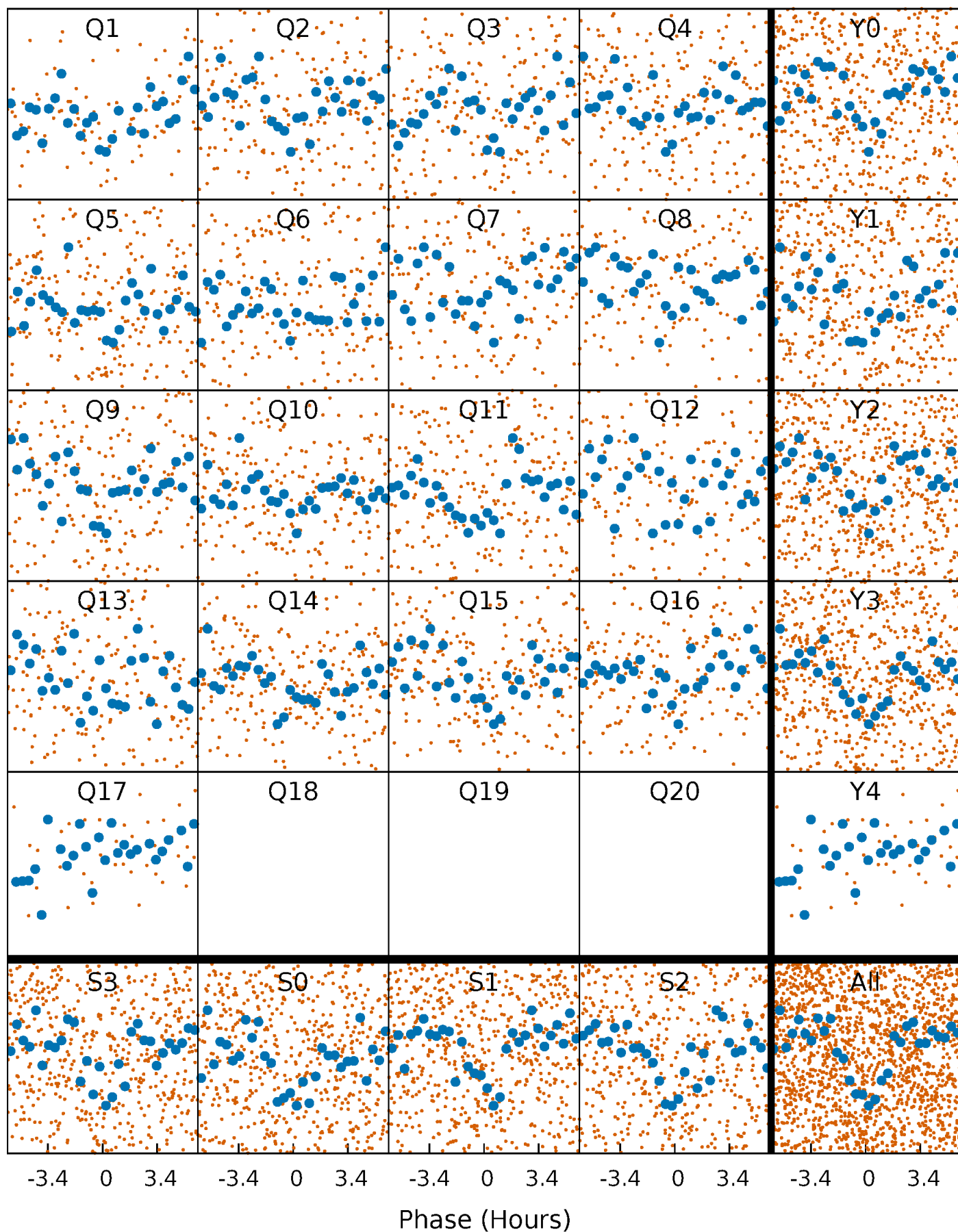


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



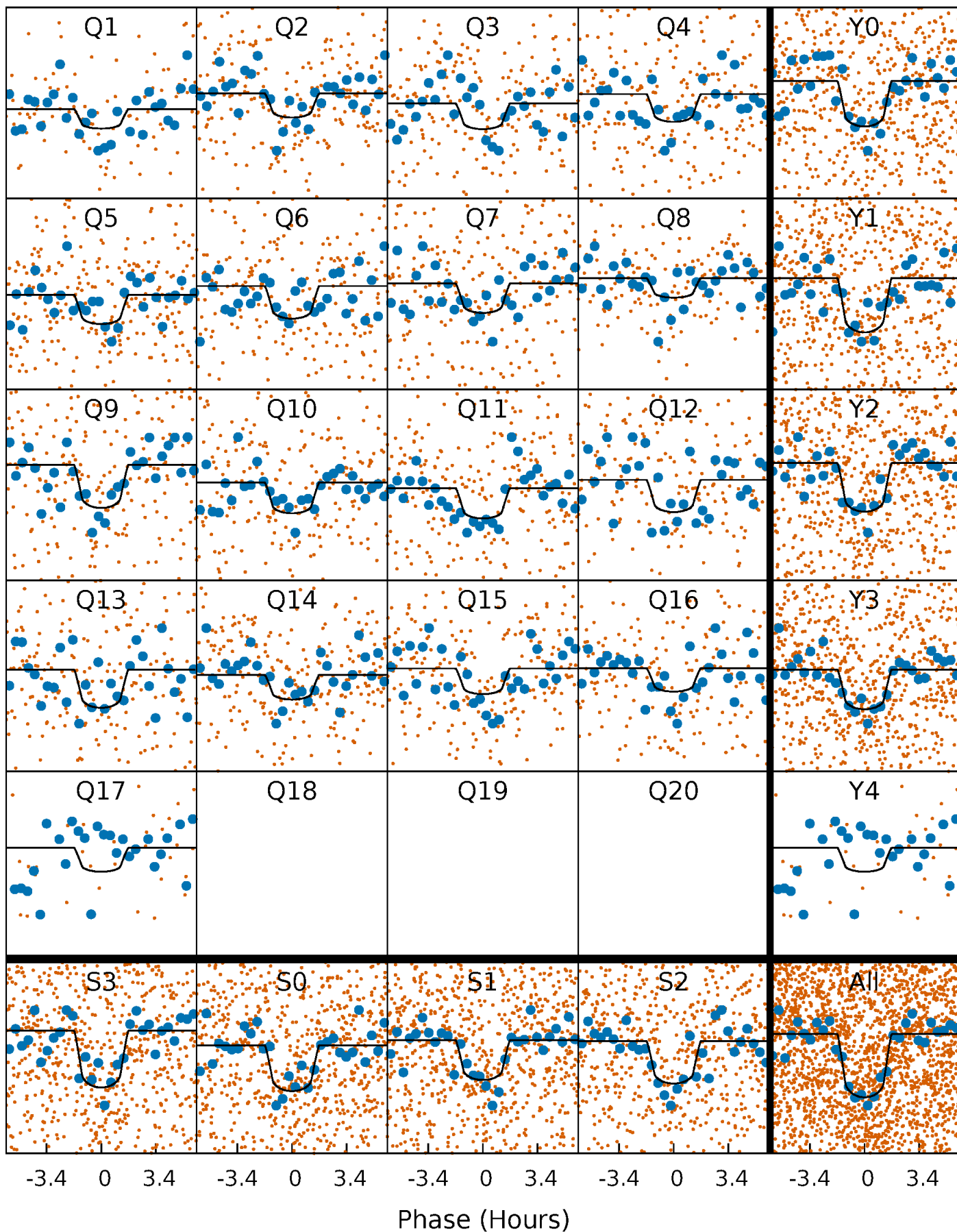
PDC Quarter-Phased Transit Curves

TCE 005985713-01 P= 8.952987 Days $T_0=134.333586$ (BKJD)



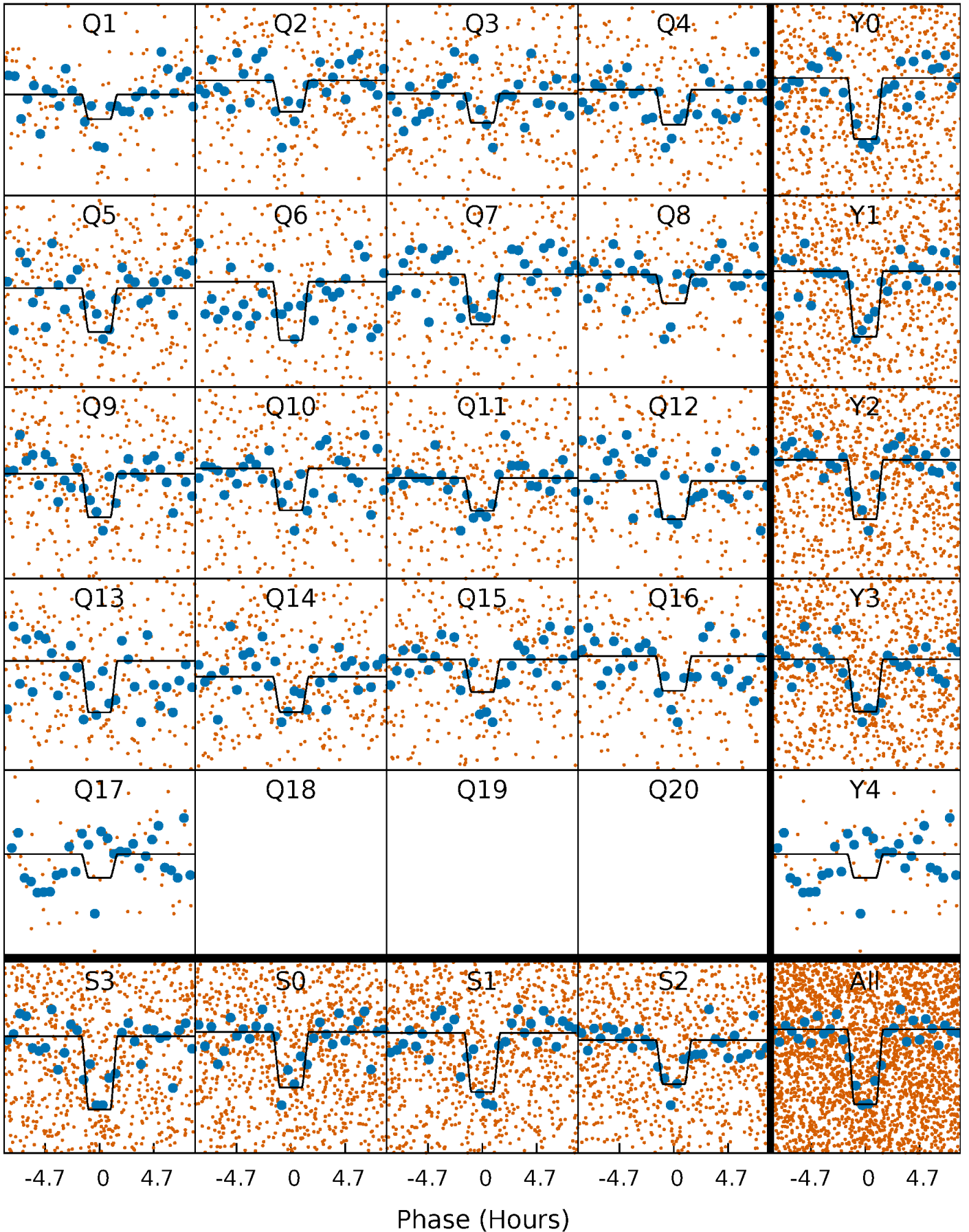
DV Quarter-Phased Transit Curves

TCE 005985713-01 P= 8.952987 Days $T_0=134.333586$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

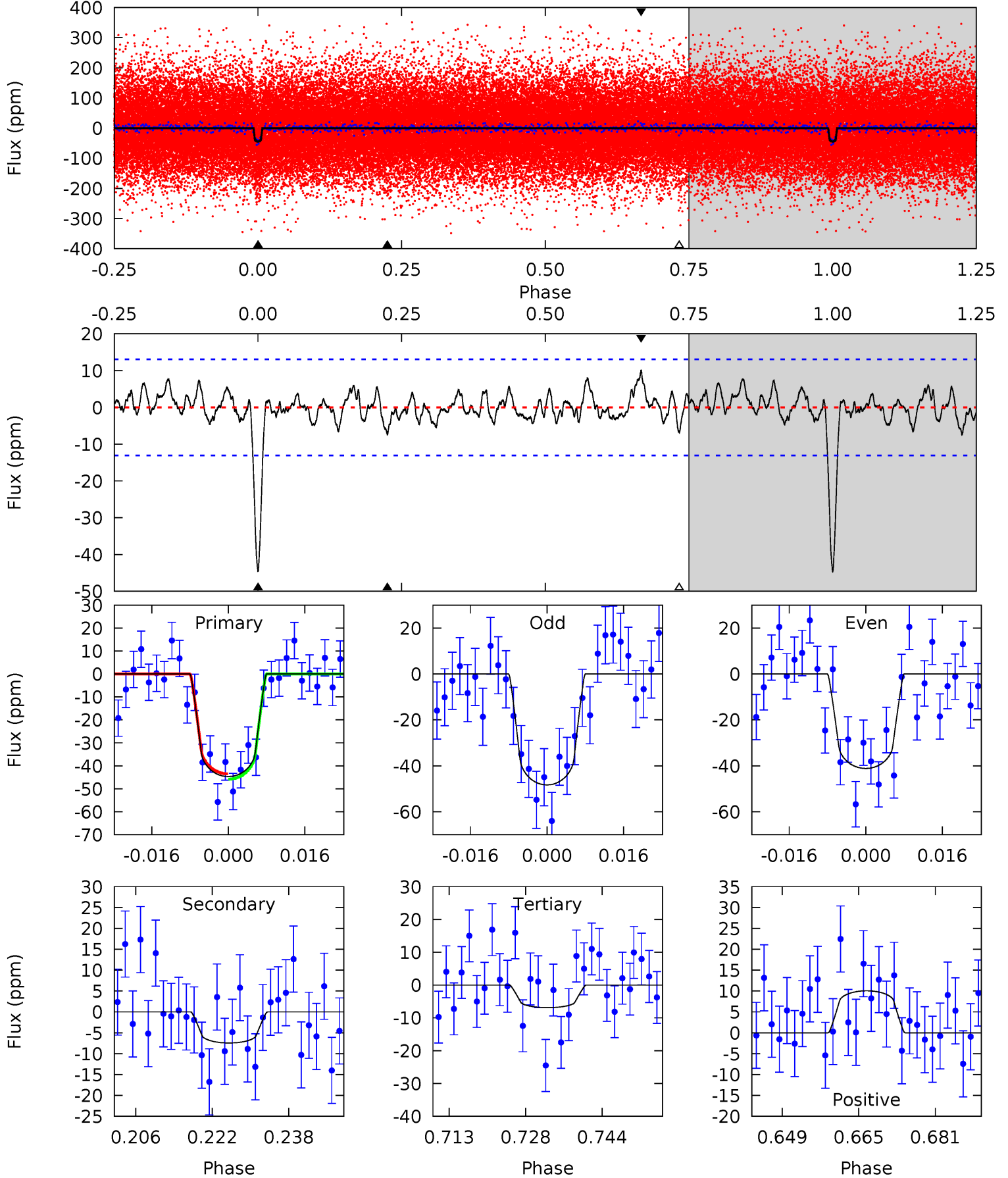
TCE 005985713-01 P= 8.952919 Days $T_0=134.337258$ (BKJD)



DV Model-Shift Uniqueness Test

005985713-01, P = 8.952987 Days, E = 125.380599 Days

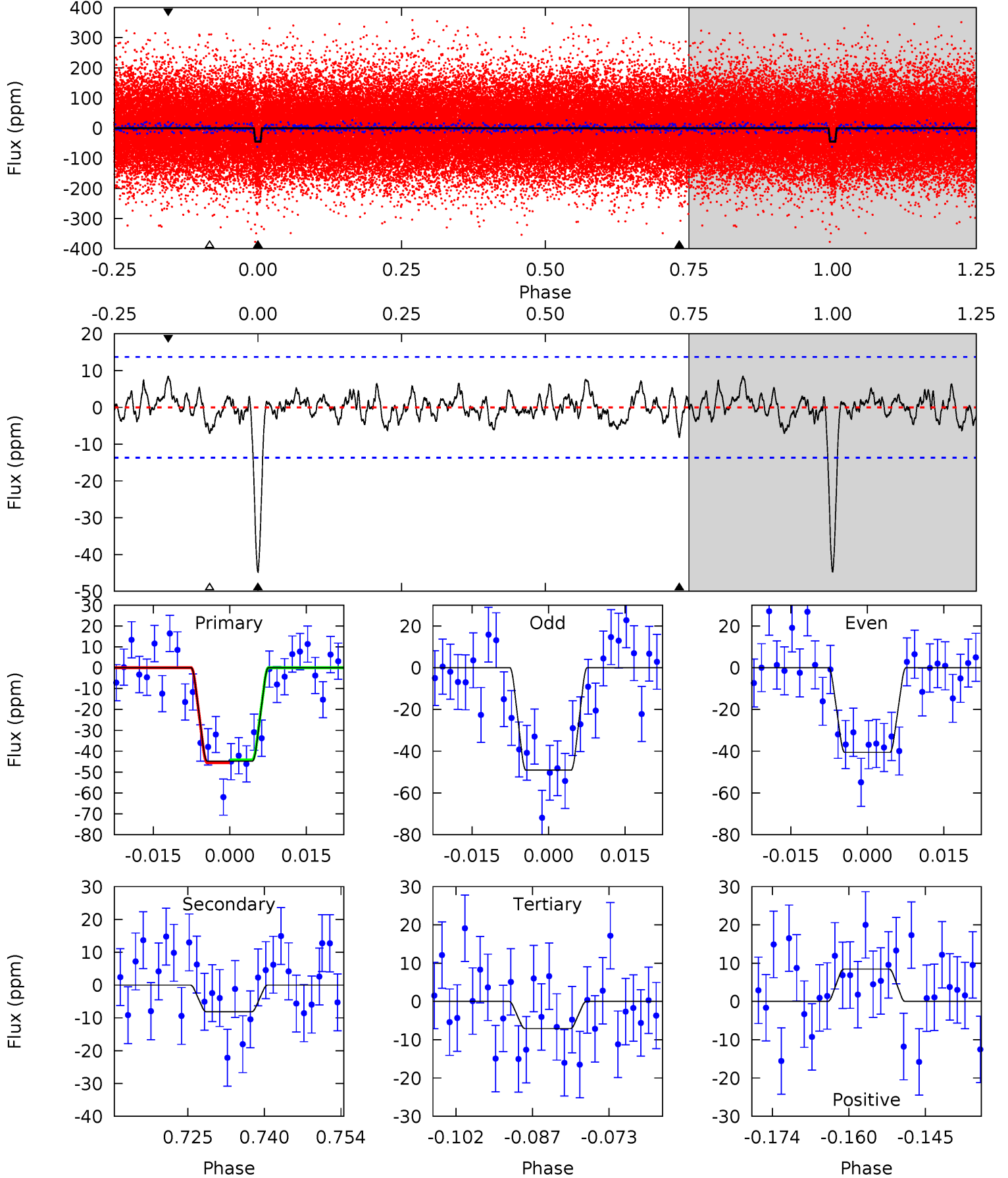
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.9	2.81	2.60	3.80	4.94	2.41	1.10	14.3	13.1	0.21	-0.98	1.36	0.99	0.18	0.44



Alt Model-Shift Uniqueness Test

005985713-01, P = 8.952919 Days, E = 125.384339 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.2	2.95	2.56	3.06	4.95	2.44	1.02	13.6	13.1	0.38	-0.12	1.54	1.04	0.16	0.25



Stellar Parameters For KIC 005985713

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6047^{+120}_{-132}	$4.266^{+0.156}_{-0.104}$	$-0.220^{+0.150}_{-0.150}$	$1.207^{+0.191}_{-0.210}$	$0.980^{+0.077}_{-0.070}$	$0.786^{+0.541}_{-0.250}$
	+2%/-2%	+4%/-2%	+68%/-68%	+16%/-17%	+8%/-7%	+69%/-32%
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 005985713-01 / KOI 3190.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-7 ± 3	$0.96^{+0.36}_{-0.38}$	1406^{+69}_{-75}	3969^{+829}_{-484}	31^{+51}_{-17}
Alt.	-8 ± 3	$0.92^{+0.39}_{-0.38}$	1408^{+64}_{-72}	4107^{+897}_{-519}	37^{+68}_{-20}

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 $A_{obs} \gg 1.0$

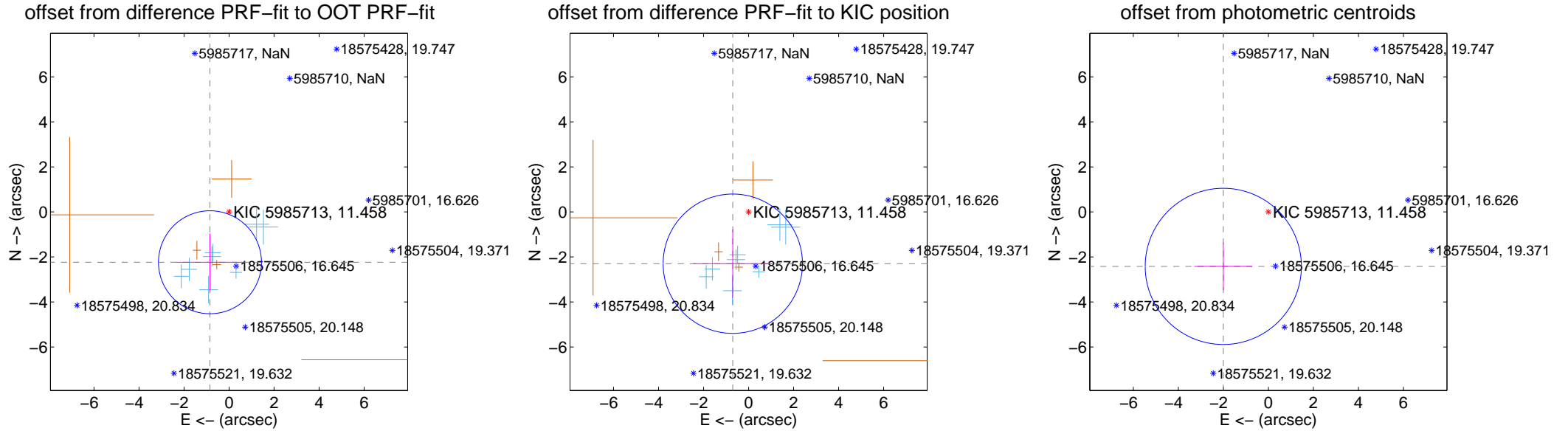
DV Centroid Data

Supplemental centroid analysis for 005985713-01. **Kepler magnitude: 11.46.** Transit SNR 12.08

There are 8 quarters with good PRF difference image offsets

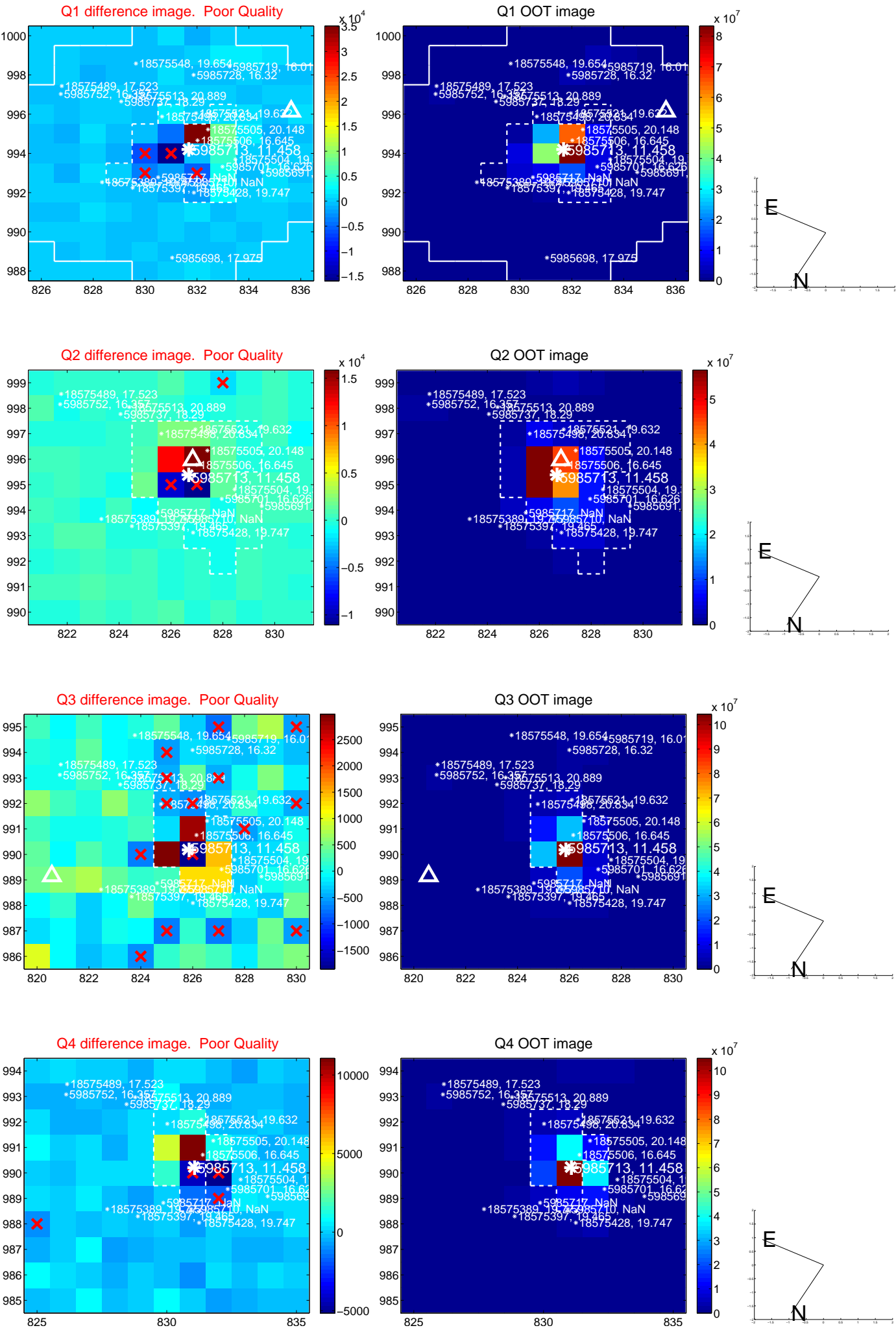
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.390 \pm 0.762	3.14	0.848 \pm 1.507	-2.235 \pm 1.275
PRF-fit source offset from KIC position	2.404 \pm 1.031	2.33	0.702 \pm 1.753	-2.300 \pm 1.530
photometric centroid source offset	3.14 \pm 1.16	2.72	2.00 \pm 1.29	-2.42 \pm 1.06

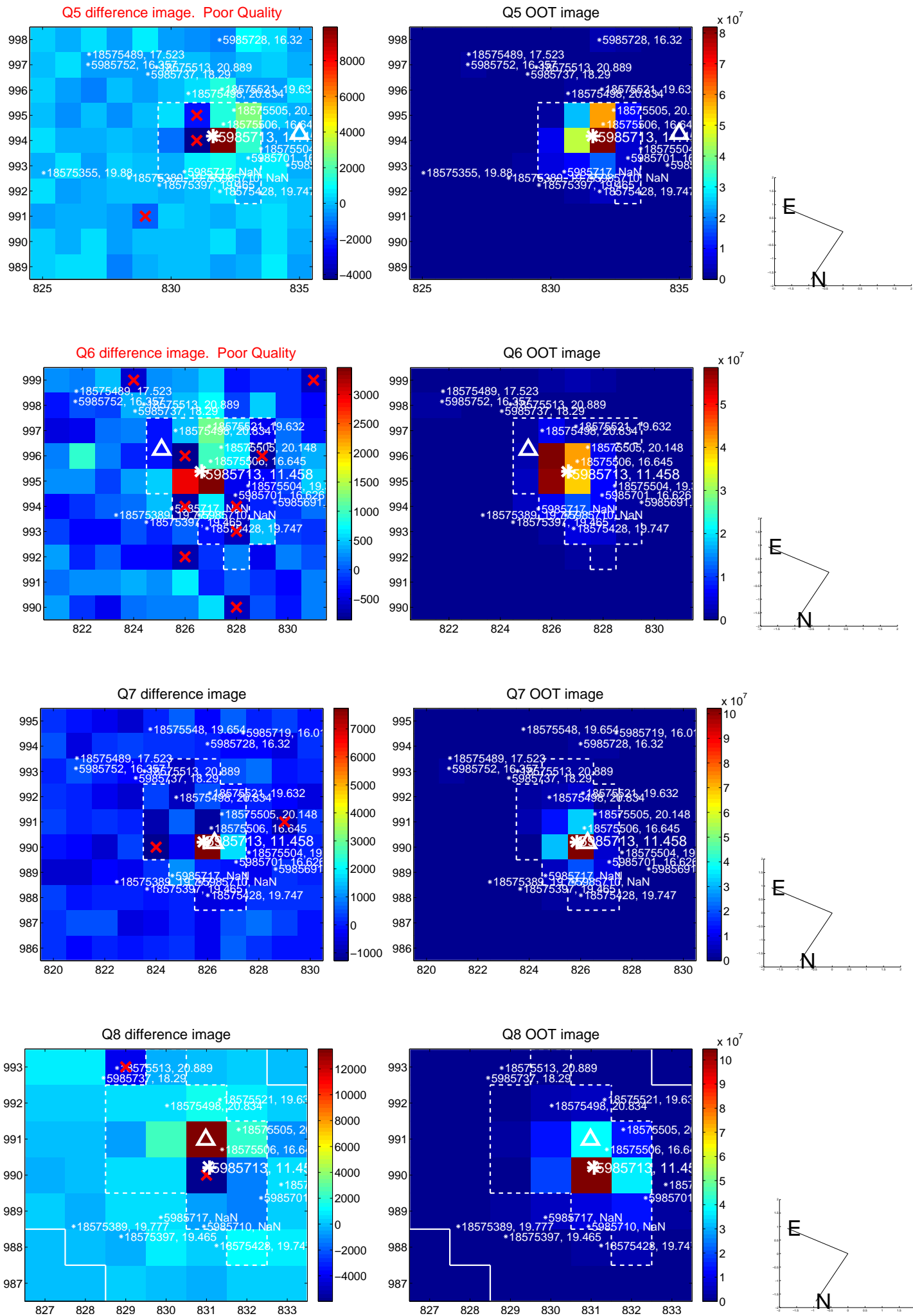


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

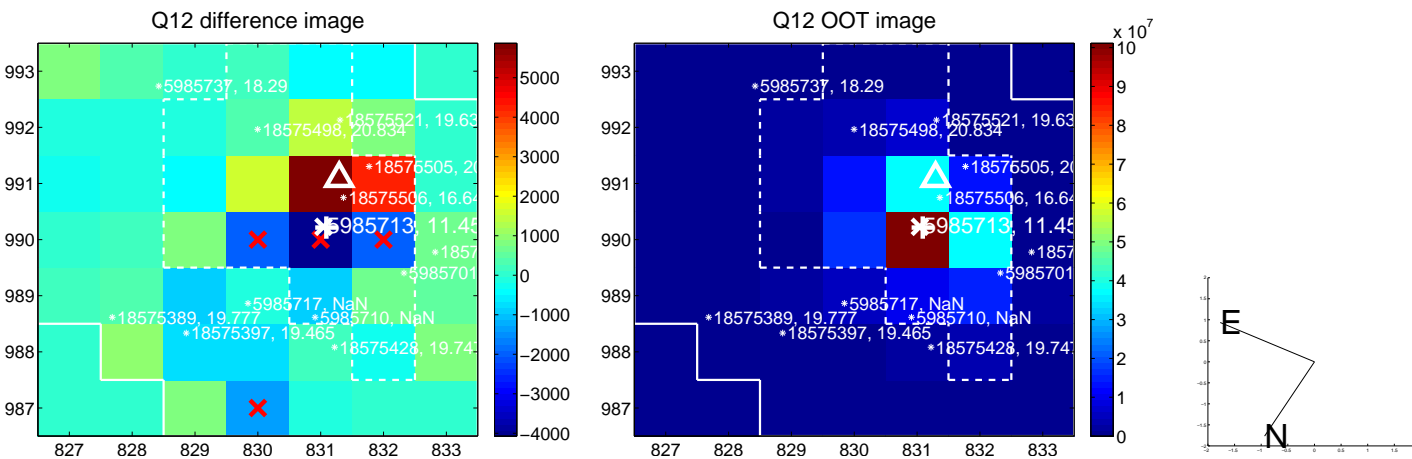
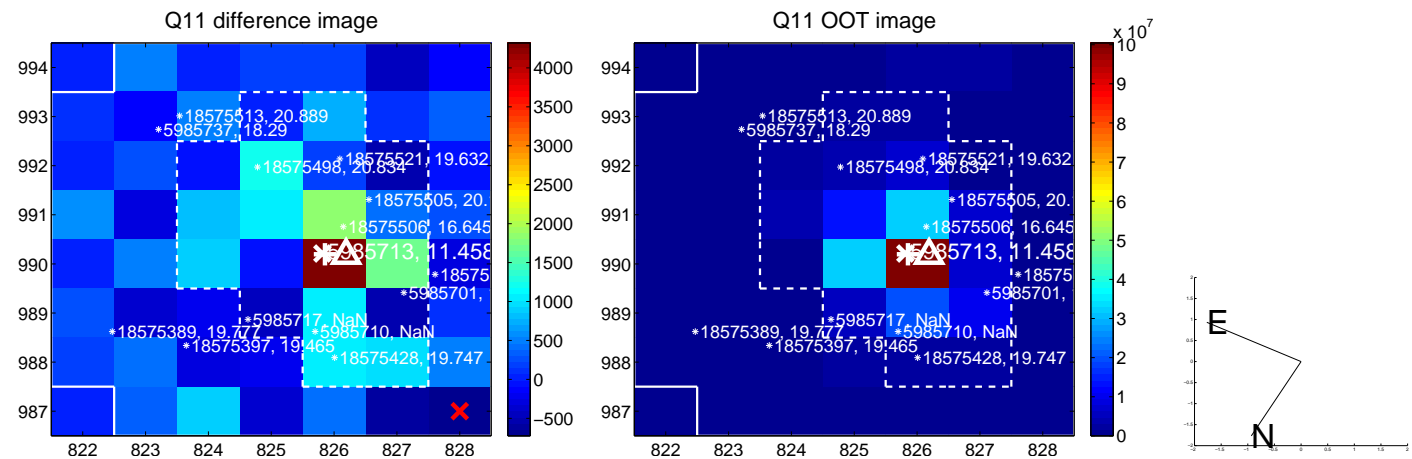
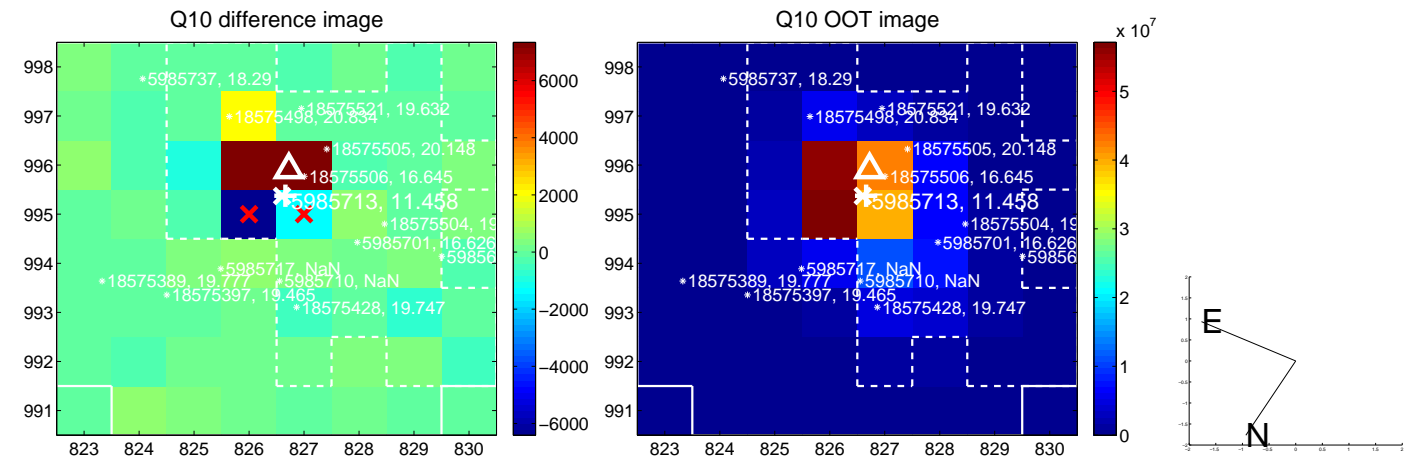
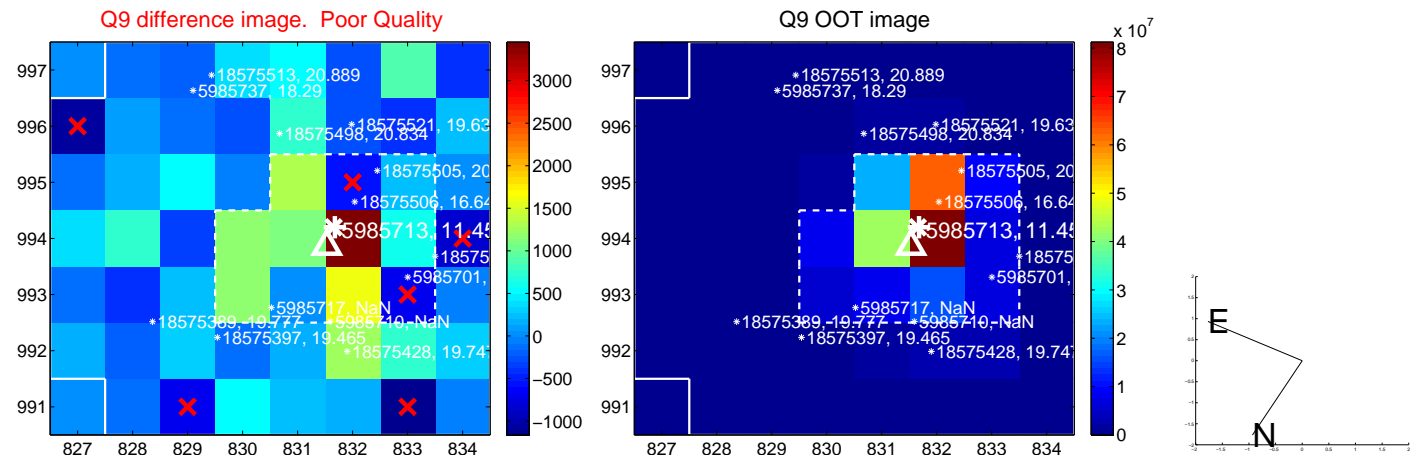
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



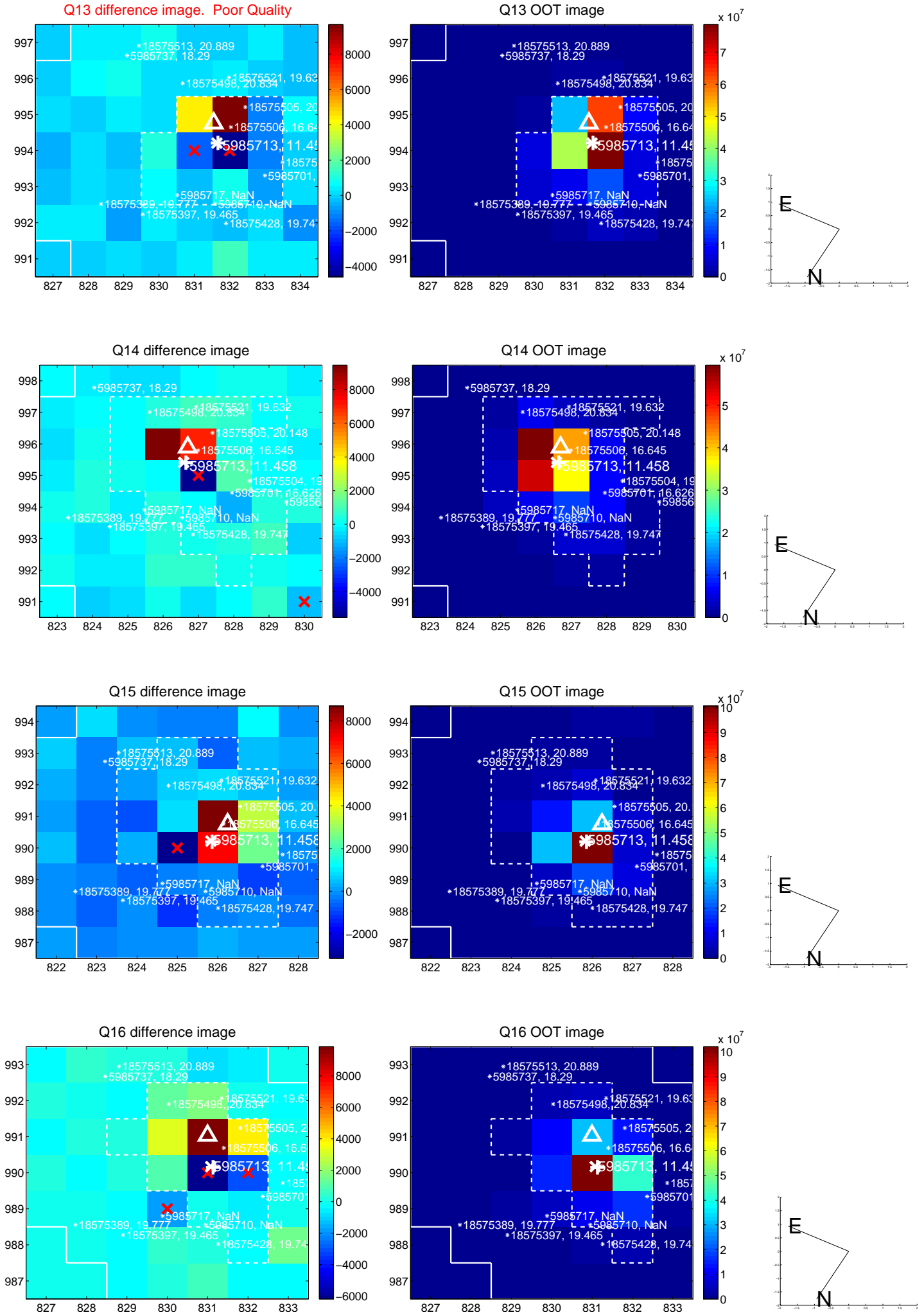
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



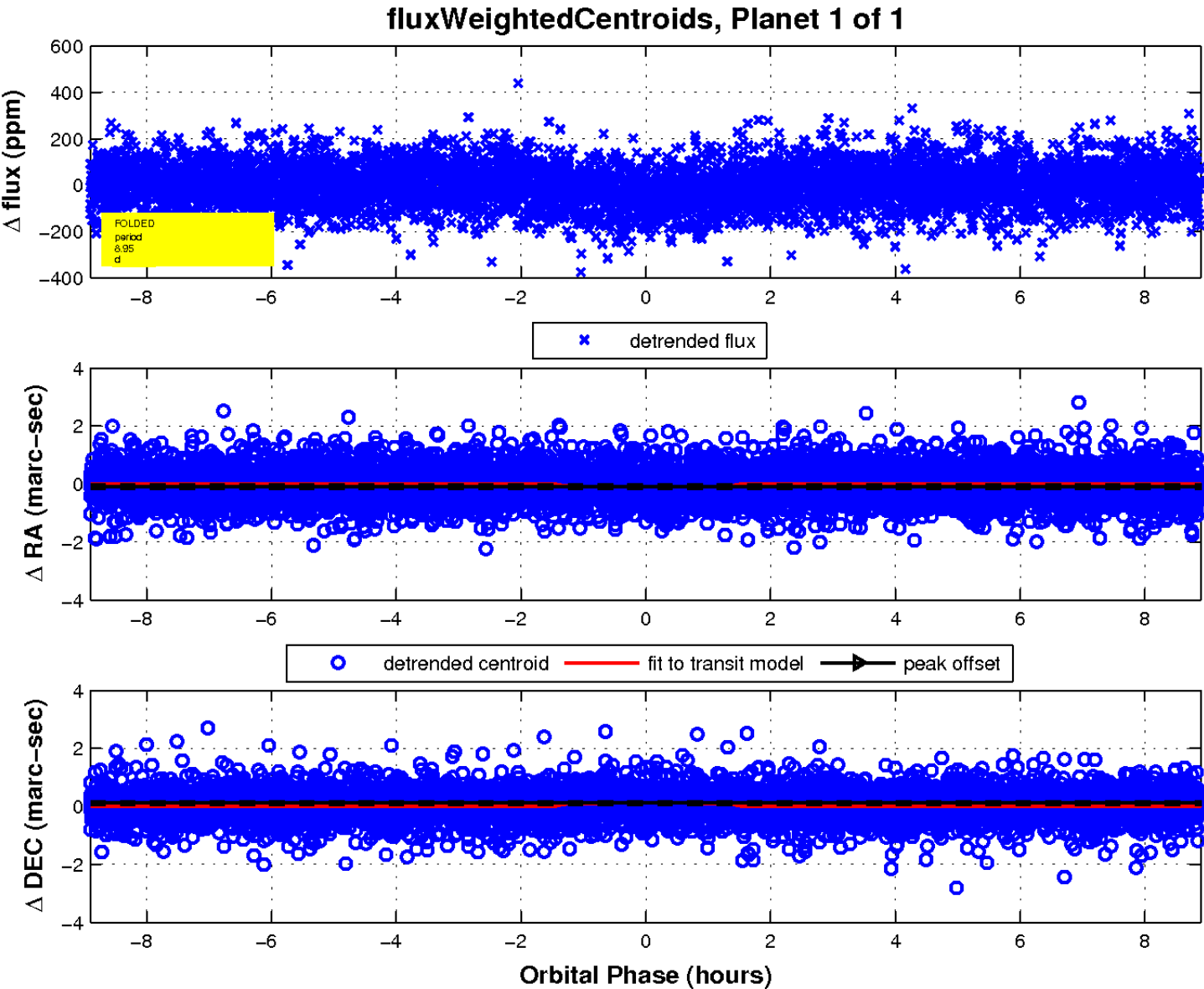
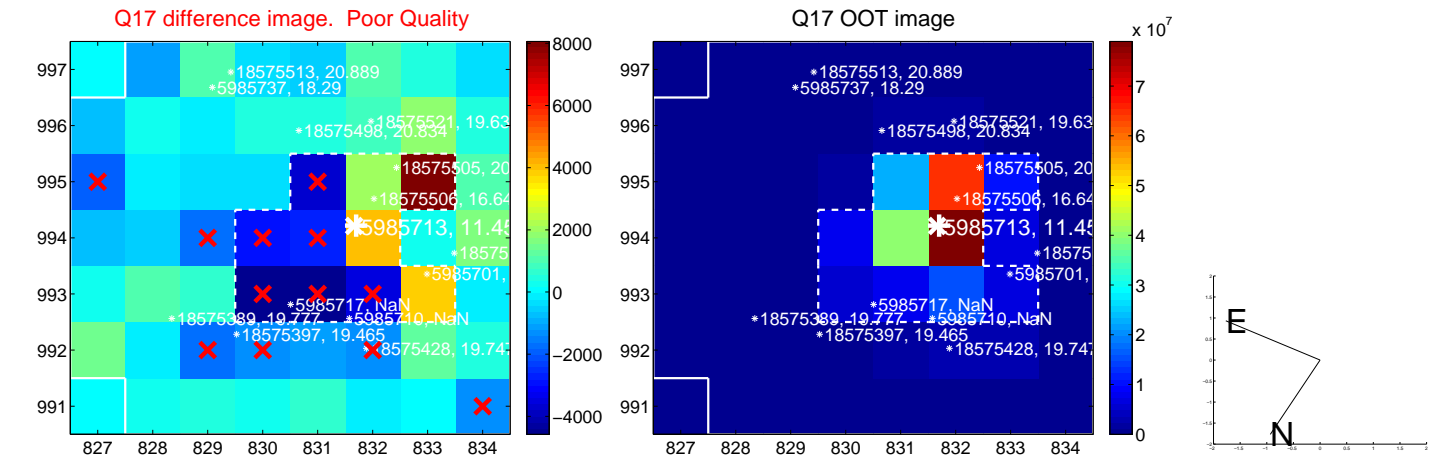
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UKIRT Image

