

KIC 006961285

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})
006961285-01	OBS	No	2.110523	133.078117	141.9	7.945	8.5	9.2	0.83	5797	1.18	709.92

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006961285-01	OBS	FP	0.00	1	0	1	0	LPP_DV—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.

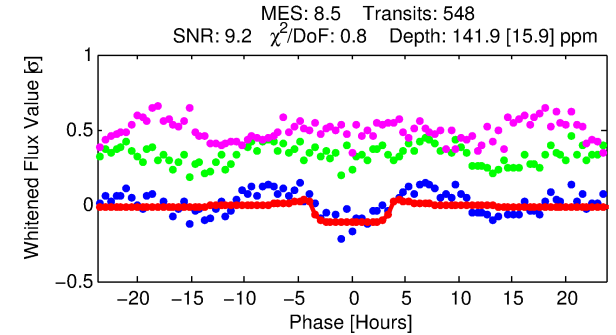
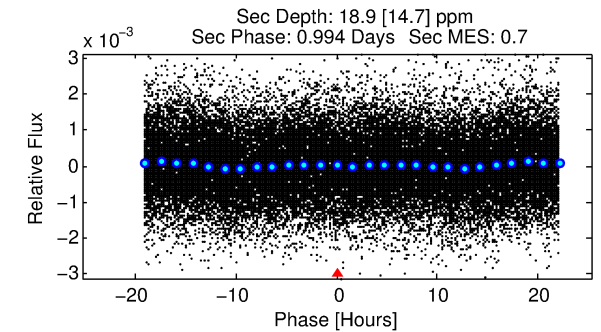
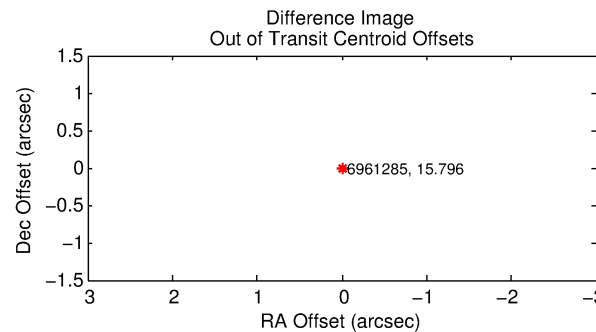
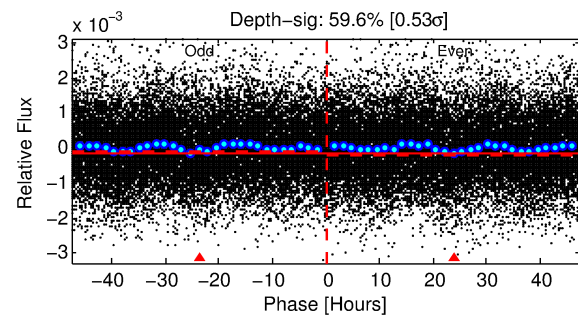
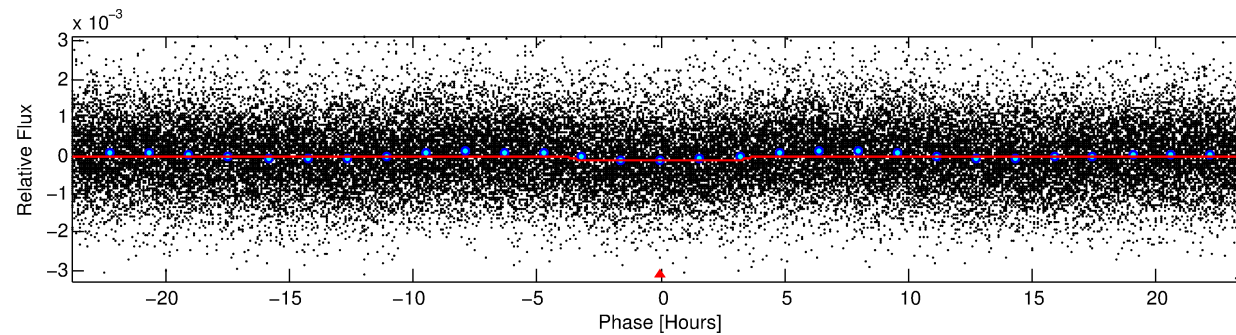
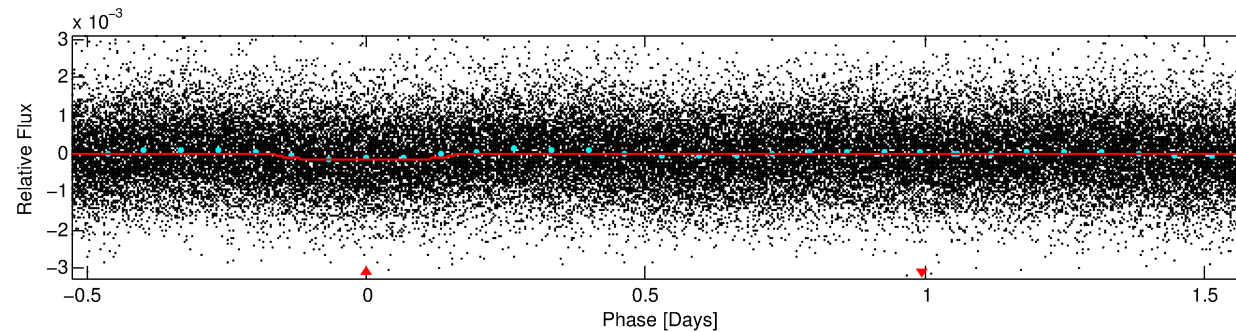
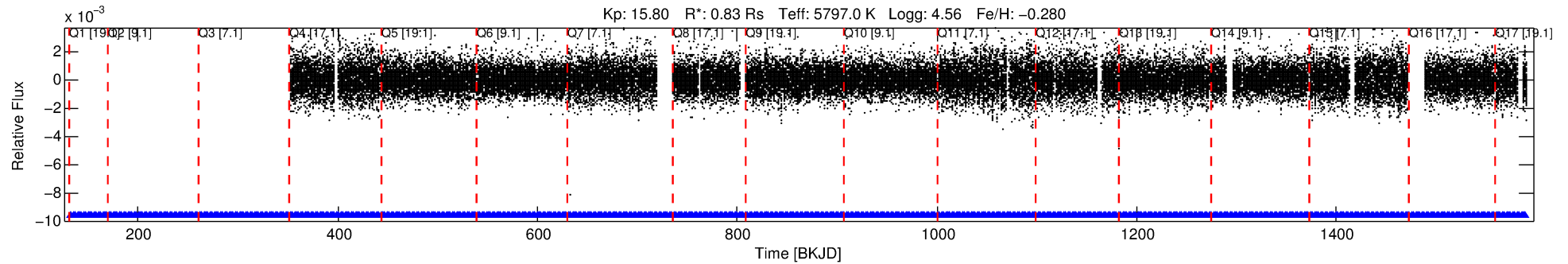
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006961285-01

No Significant Match Found

DV One-Page Summary

KIC: 6961285 Candidate: 1 of 1 Period: 2.111 d



DV Fit Results:

Period = 2.11052 [0.00002] d
Epoch = 133.0781 [0.0068] BKJD
Rp/R* = 0.0130 [0.0021]
a/R* = 1.31 [0.41]
b = 0.91 [0.14]
Seff = 709.92 [241.83]
Teq = 1316 [112] K
Rp = 1.18 [0.35] Re
a = 0.0313 [0.0067] AU
Ag = 7.33 [6.57] [0.96 σ]
Teffp = 3348 [714] K [2.81 σ]

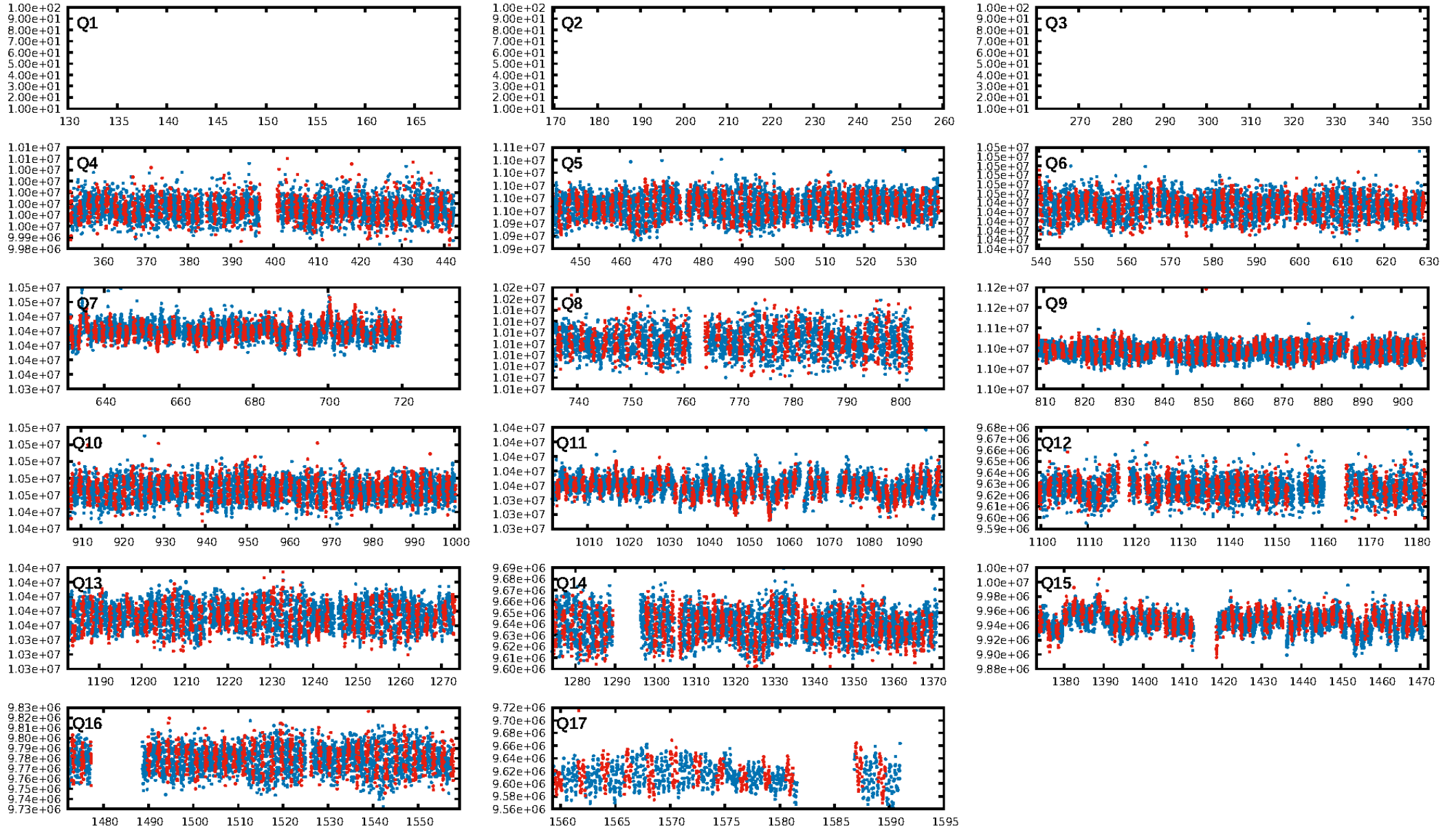
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.20e-13
RollingBand-fgt: 1.00 [535/535]
GhostDiagnostic-chr: -0.5681
Centroid-sig: 0.0%
Centroid-so: 0.527 arcsec [1.39 σ]
OotOffset-rm: N/A
KicOffset-rm: 6.084 arcsec [71.66 σ]
OotOffset-st: 0/0/0 [0]
KicOffset-st: 2/1/2 [7]
DiffImageQuality-fgm: 1.00 [7/7]
DiffImageOverlap-fno: 1.00 [14/14]

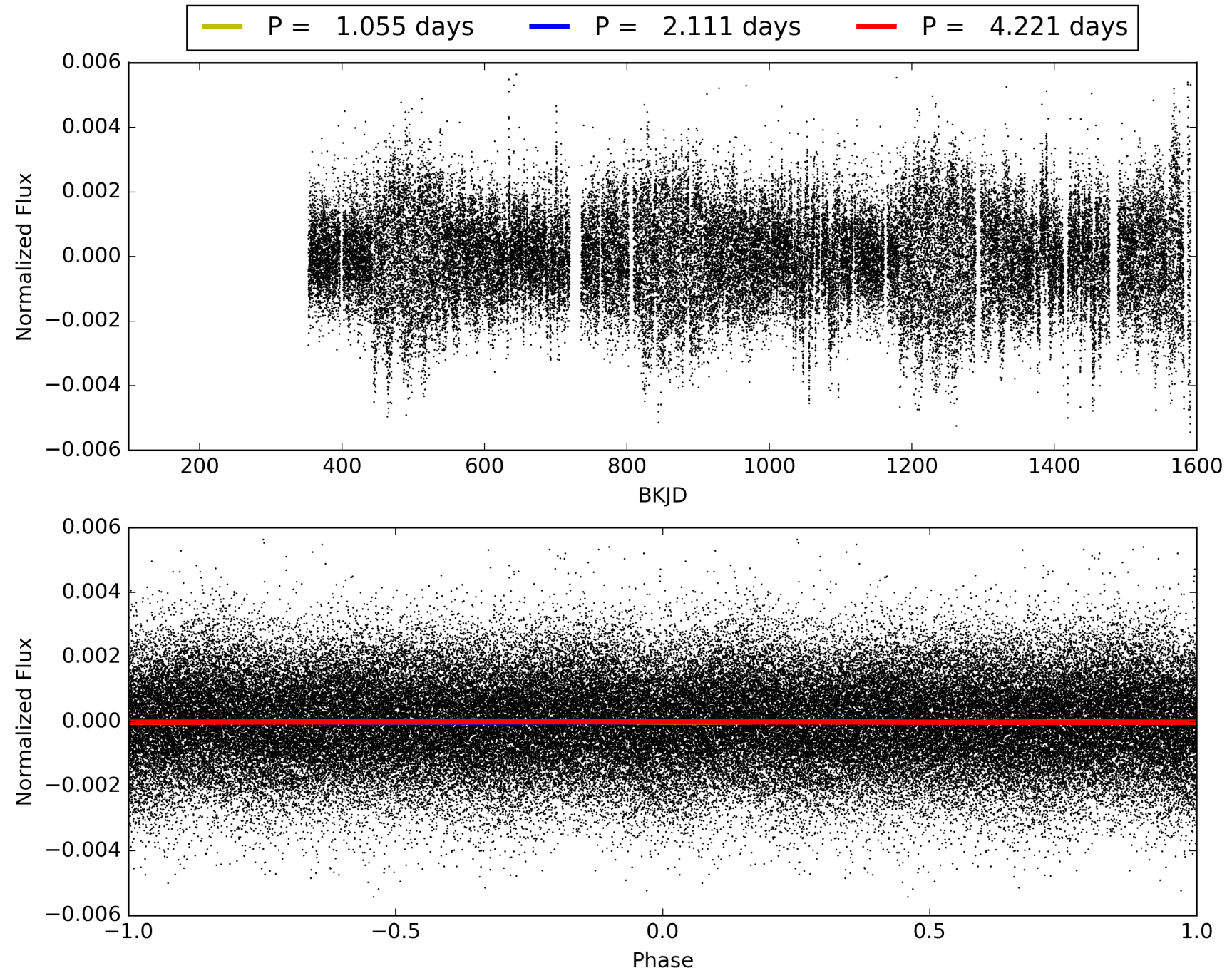
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:35:04 Z

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

TCE 006961285-01, PDC Light Curves

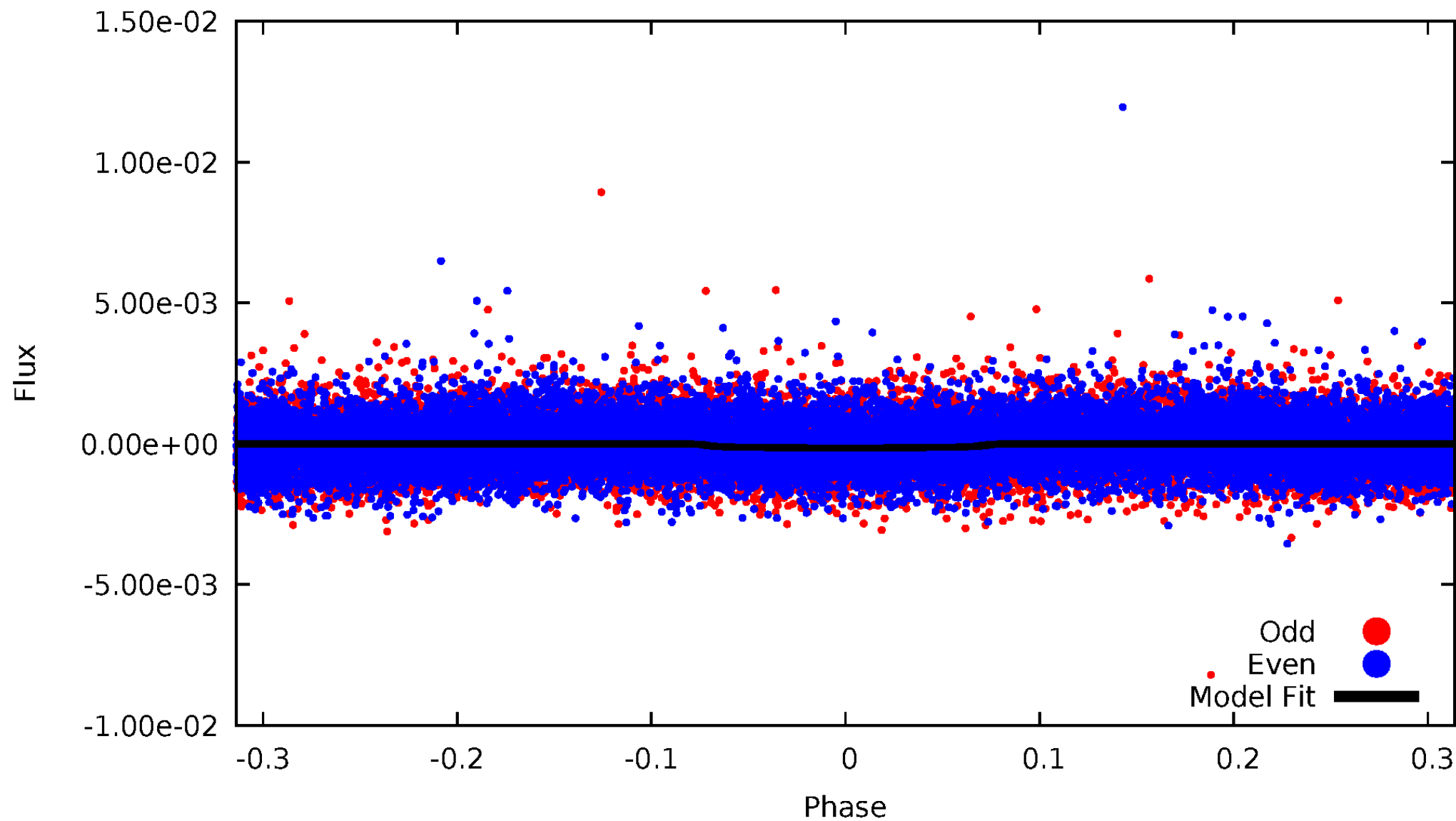


TCE 006961285-01



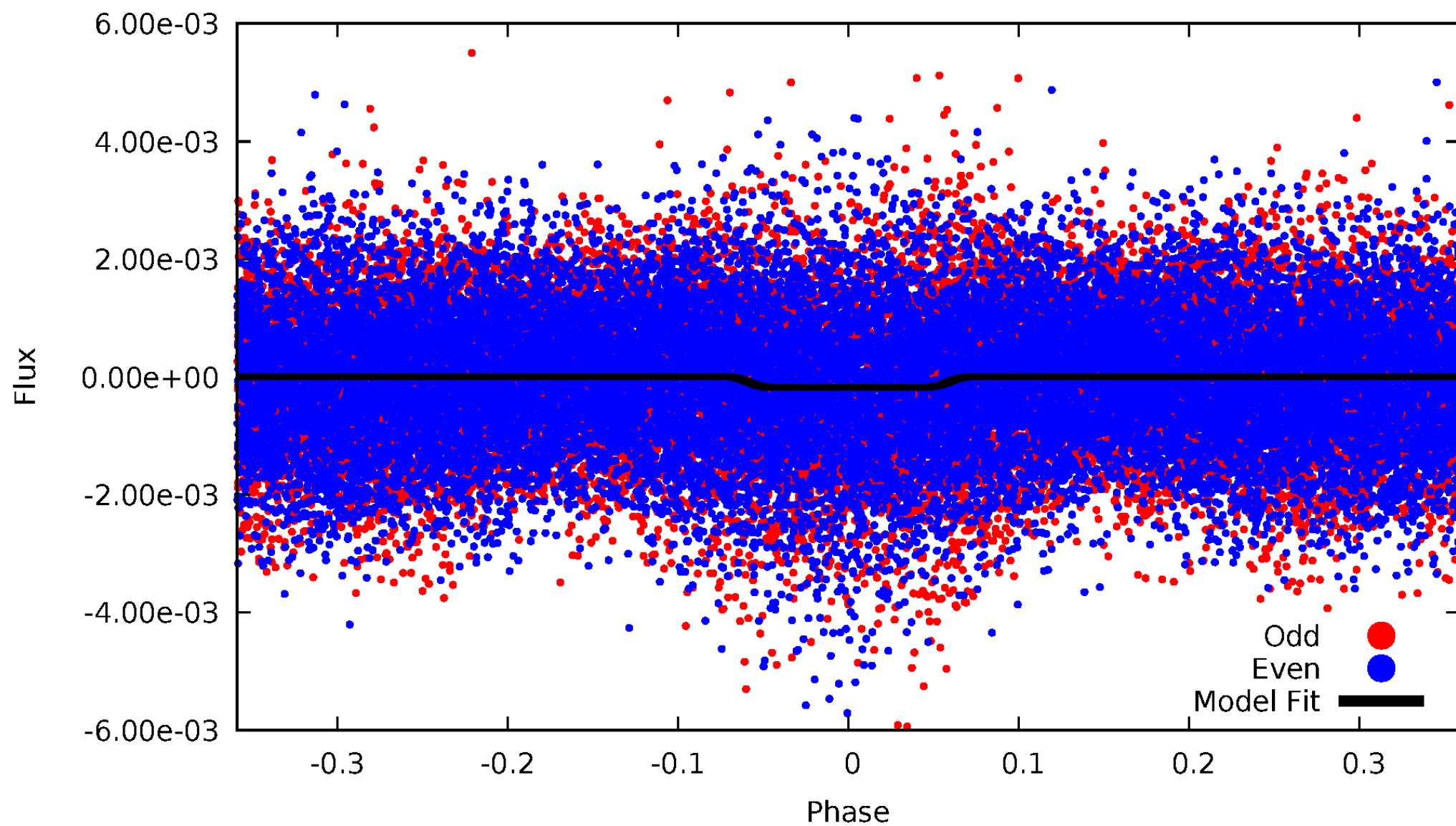
DV Odd/Even

TCE 006961285-01



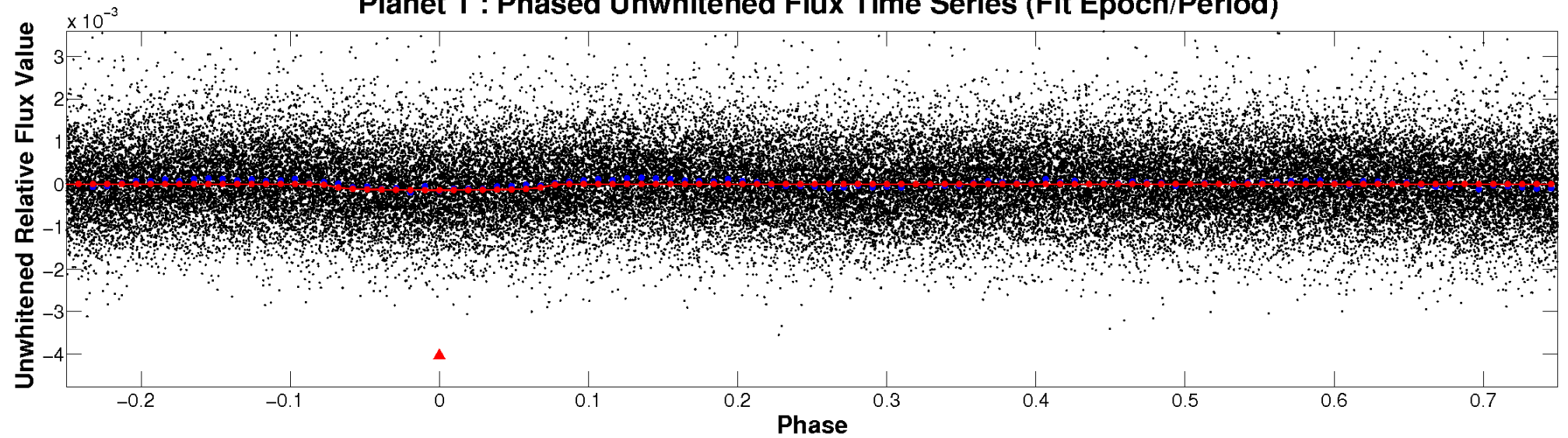
ALT Odd/Even

TCE 006961285-01

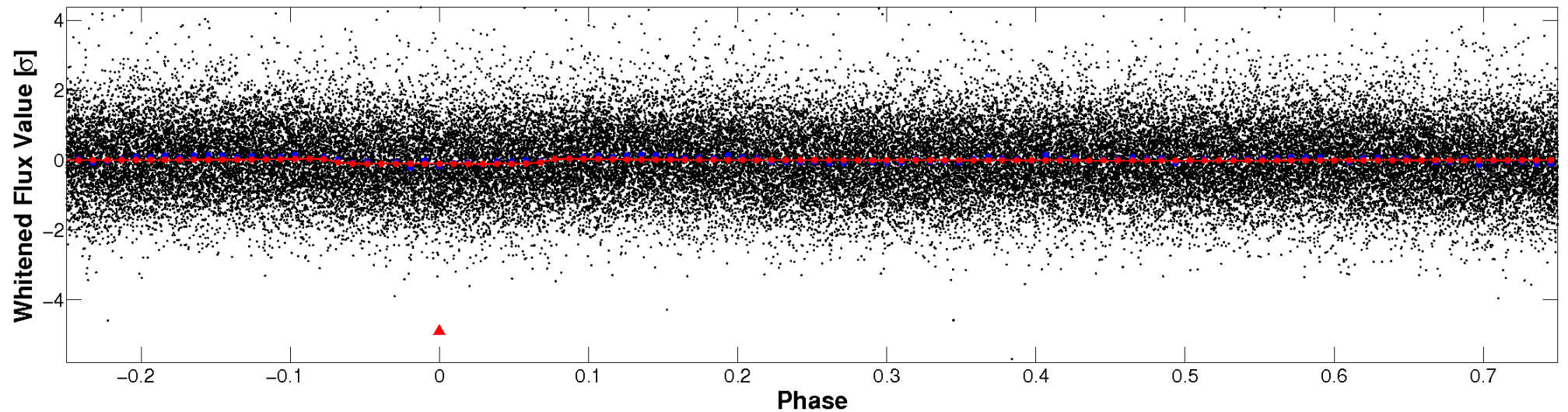


Non-Whitened Vs. Whitened Light Curve

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

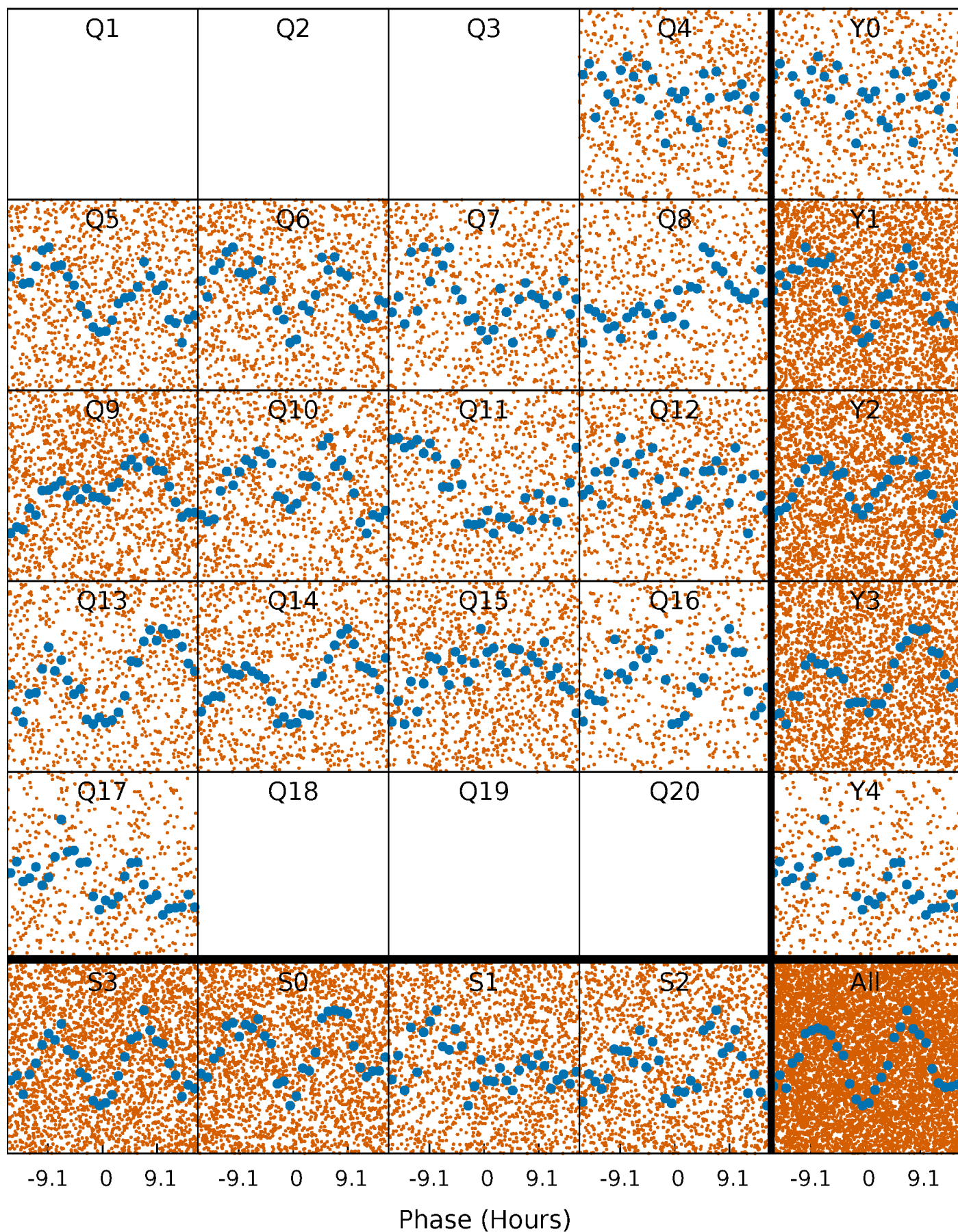


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



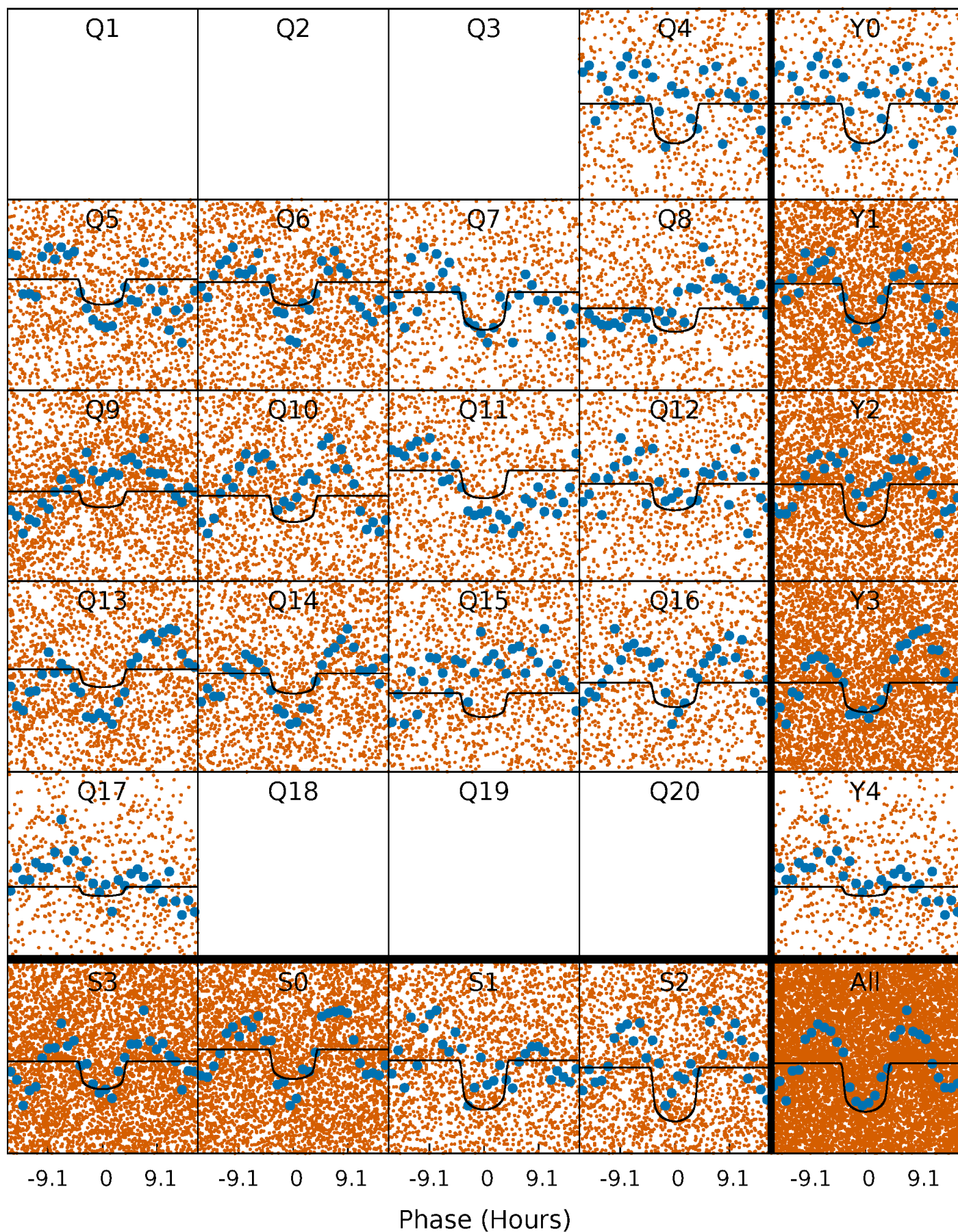
PDC Quarter-Phased Transit Curves

TCE 006961285-01 P= 2.110523 Days $T_0=133.078116$ (BKJD)



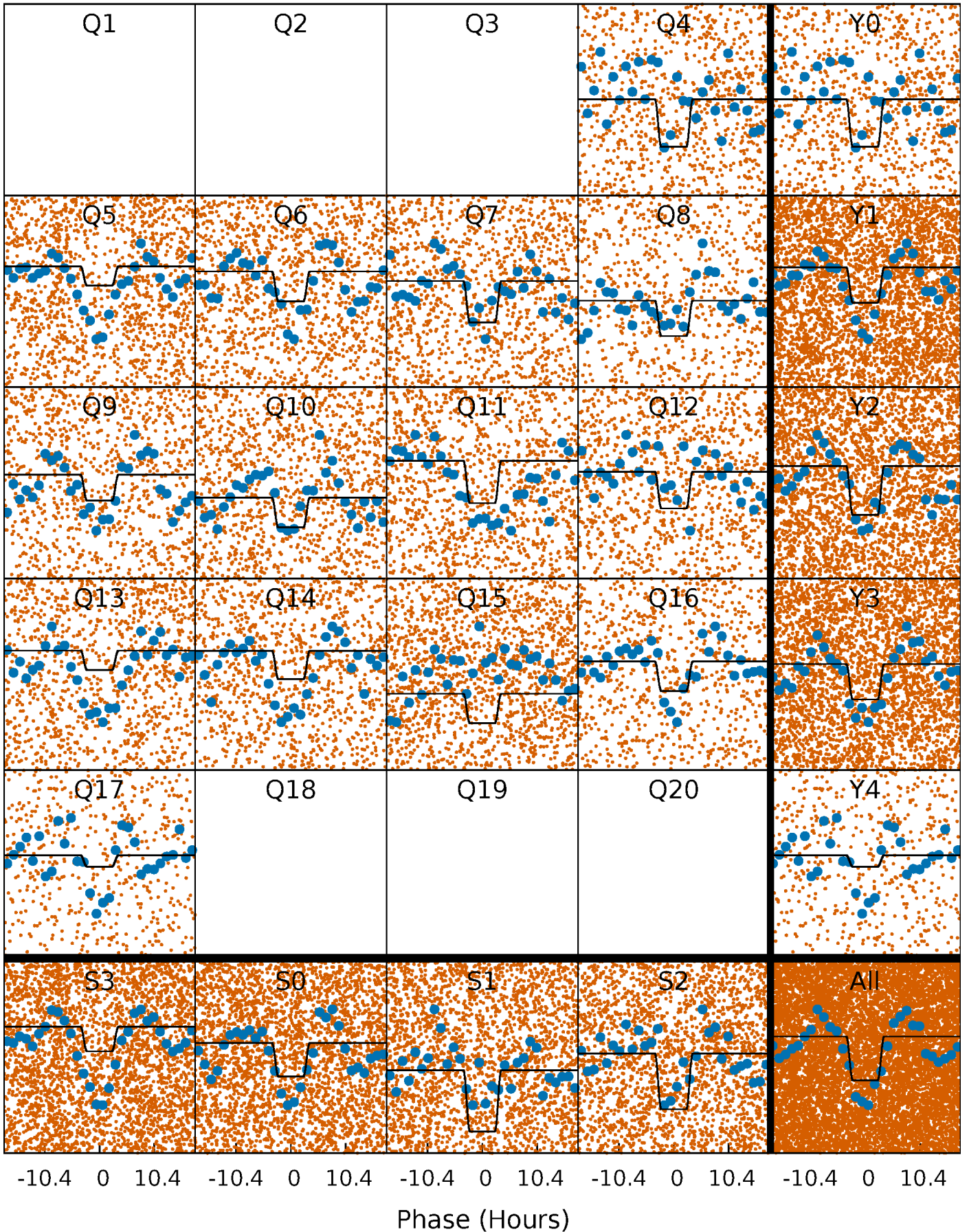
DV Quarter-Phased Transit Curves

TCE 006961285-01 P= 2.110523 Days $T_0=133.078116$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

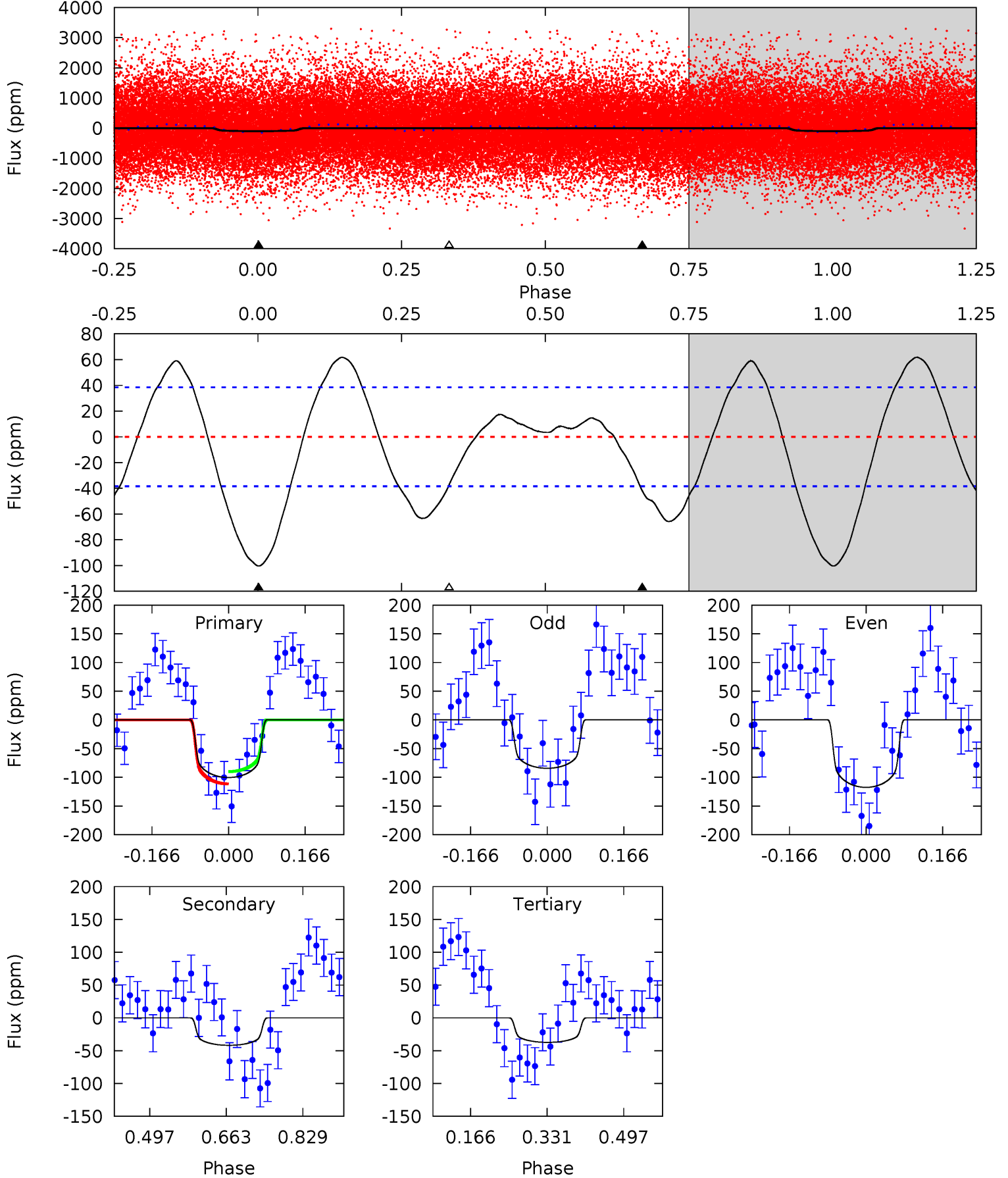
TCE 006961285-01 P= 2.110595 Days $T_0=133.046598$ (BKJD)



DV Model-Shift Uniqueness Test

006961285-01, P = 2.110523 Days, E = 133.078116 Days

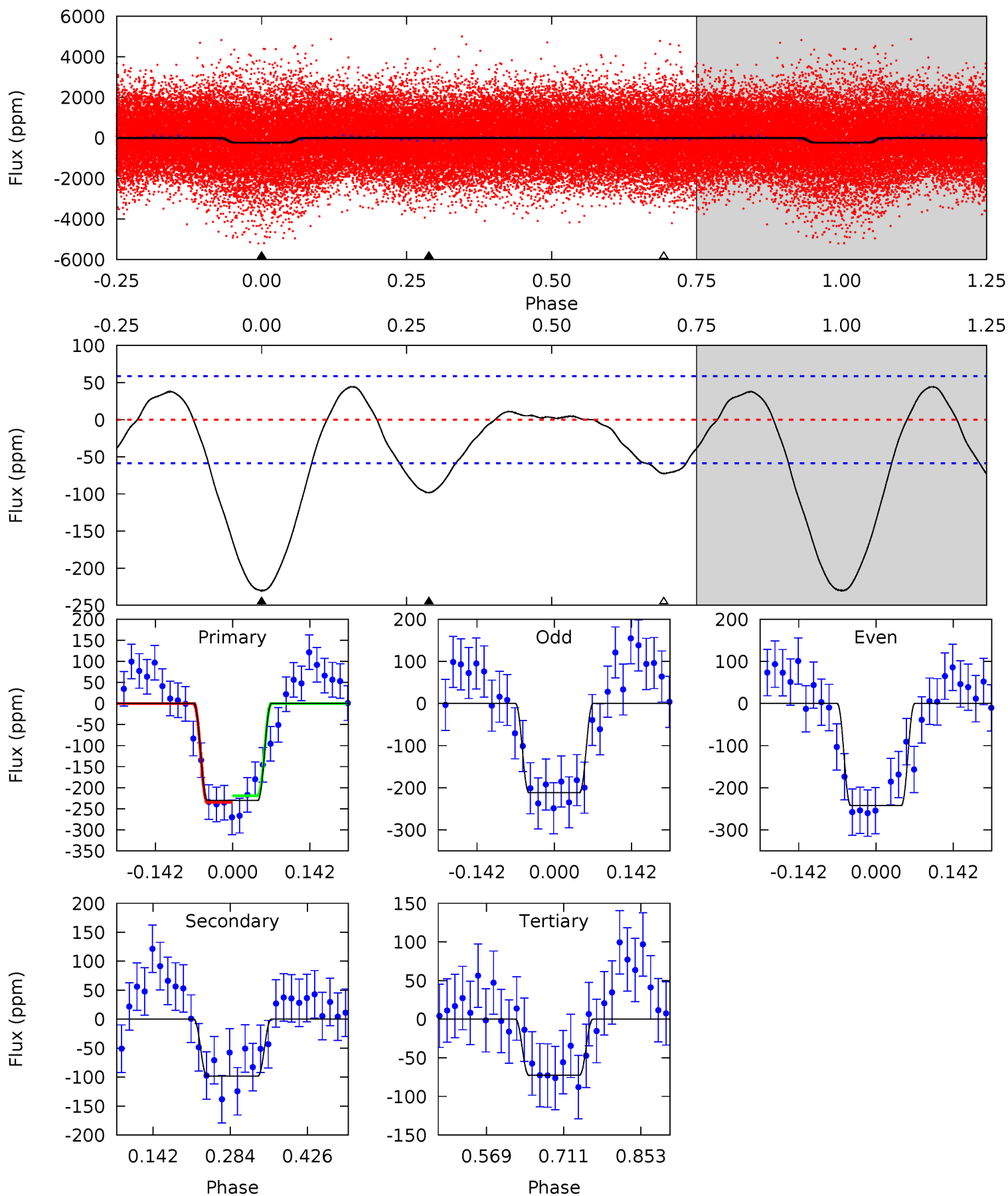
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	4.86	4.34	0	4.46	1.39	3.54	7.31	11.6	0.52	4.86	1.94	0.81	0.38	1.23



Alt Model-Shift Uniqueness Test

006961285-01, P = 2.110595 Days, E = 133.046598 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.6	7.53	5.56	0	4.49	1.47	2.53	12.1	17.6	1.97	7.53	1.18	1.41	0.16	0.61



Stellar Parameters For KIC 006961285

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5797^{+172}_{-207}	$4.563^{+0.042}_{-0.168}$	$-0.280^{+0.300}_{-0.300}$	$0.828^{+0.212}_{-0.071}$	$0.916^{+0.100}_{-0.110}$	$2.275^{+0.489}_{-1.005}$
	+3%/-4%	+1%/-4%	+107%/-107%	+26%/-9%	+11%/-12%	+22%/-44%
Source	KIC0	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 006961285-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-42 ± 9	$1.22^{+0.24}_{-0.21}$	1869^{+105}_{-88}	4270^{+347}_{-304}	15^{+7}_{-5}
Alt.	-98 ± 13	$1.22^{+0.25}_{-0.20}$	1871^{+118}_{-86}	5096^{+428}_{-378}	34^{+16}_{-11}

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

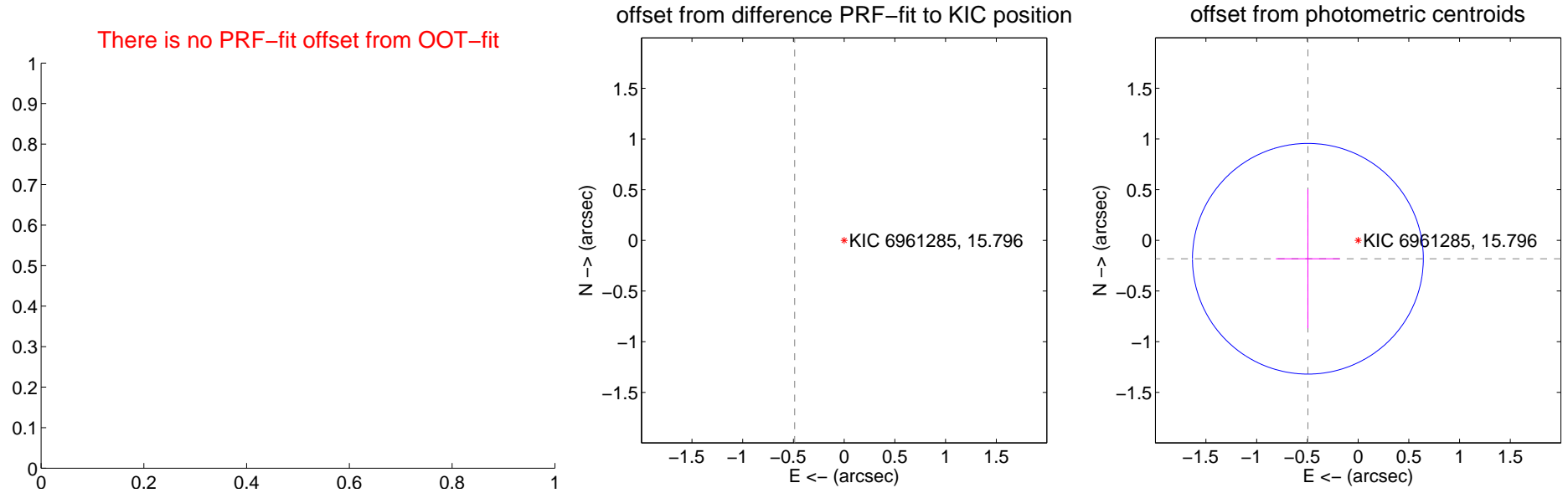
DV Centroid Data

Supplemental centroid analysis for 006961285-01. Kepler magnitude: 15.80. Transit SNR 9.23

There are 7 quarters with good PRF difference image offsets

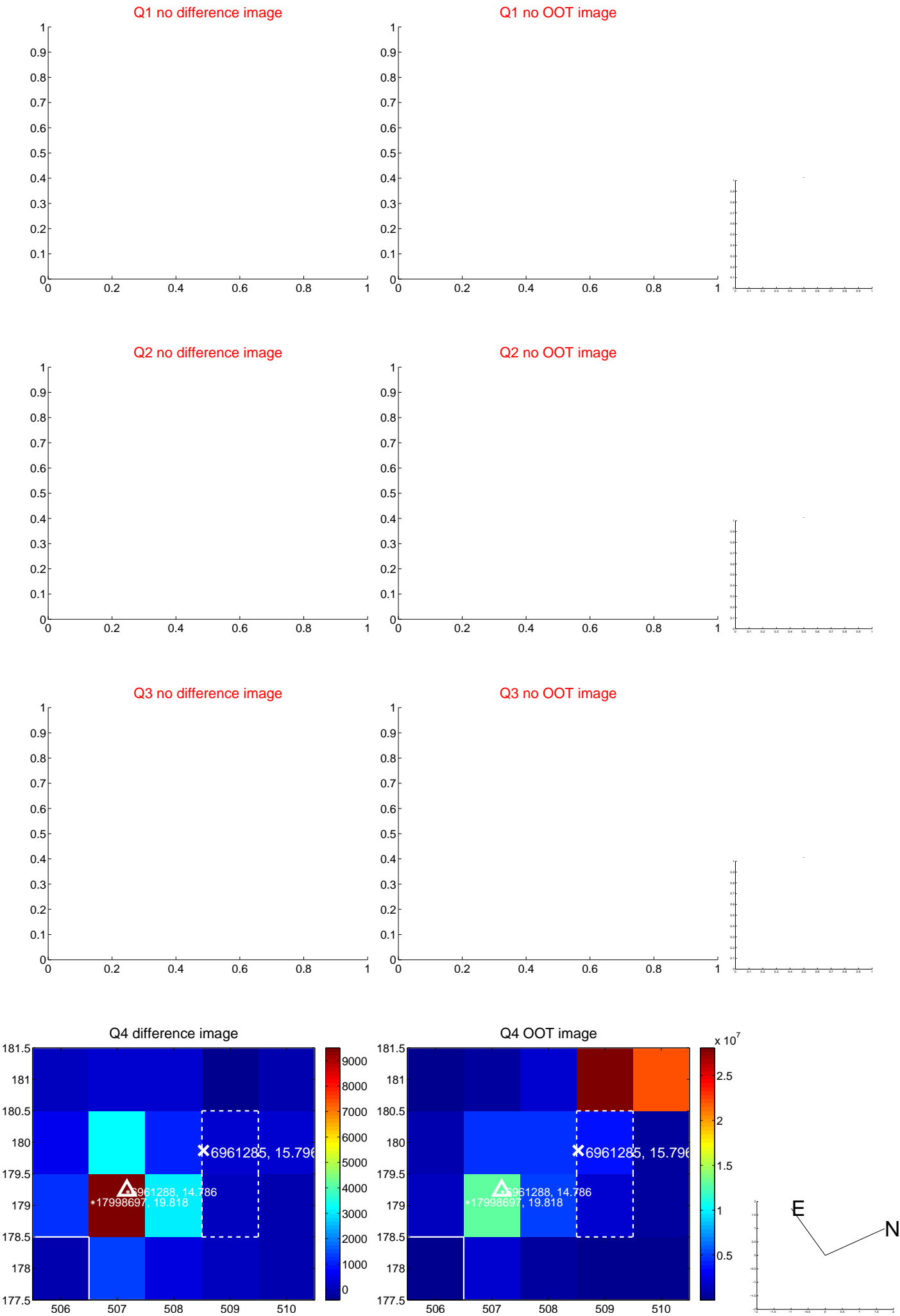
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	6.084 ± 0.085	71.66	0.488 ± 0.074	-6.065 ± 0.085
photometric centroid source offset	0.53 ± 0.38	1.39	0.50 ± 0.32	-0.18 ± 0.69

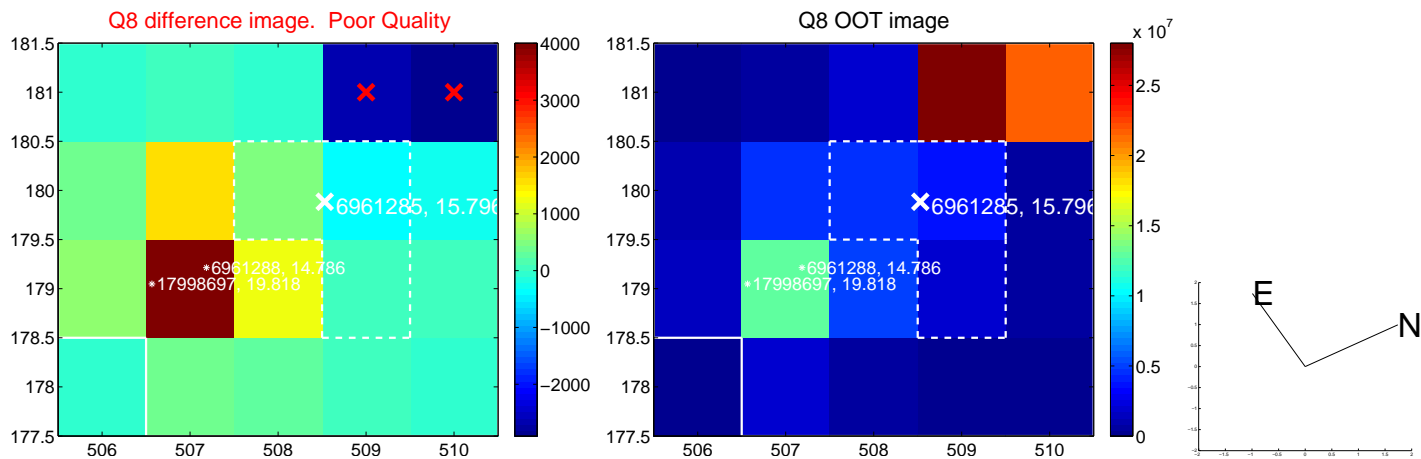
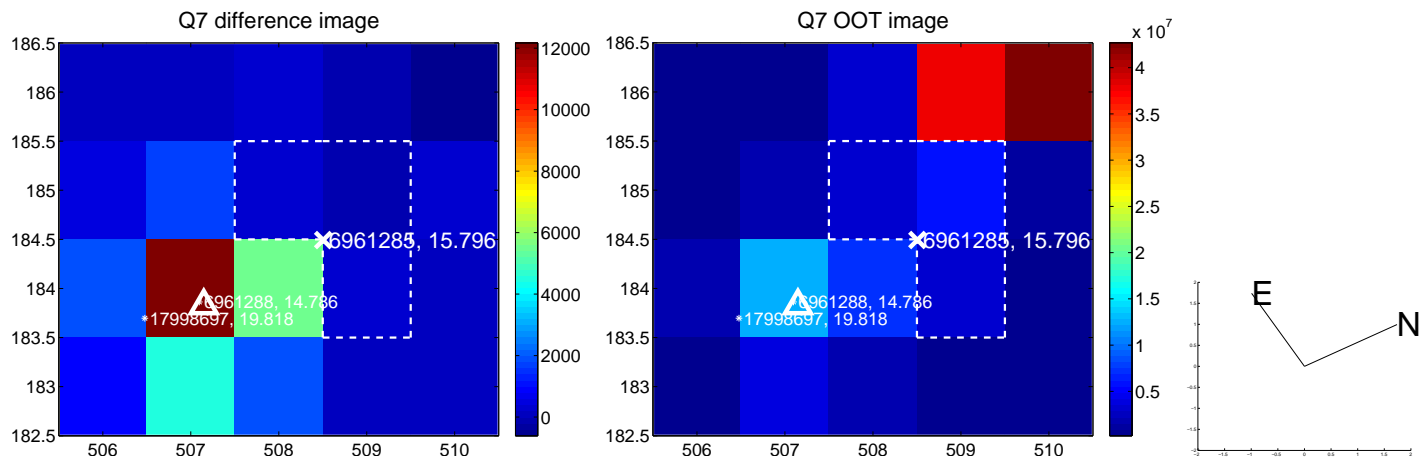
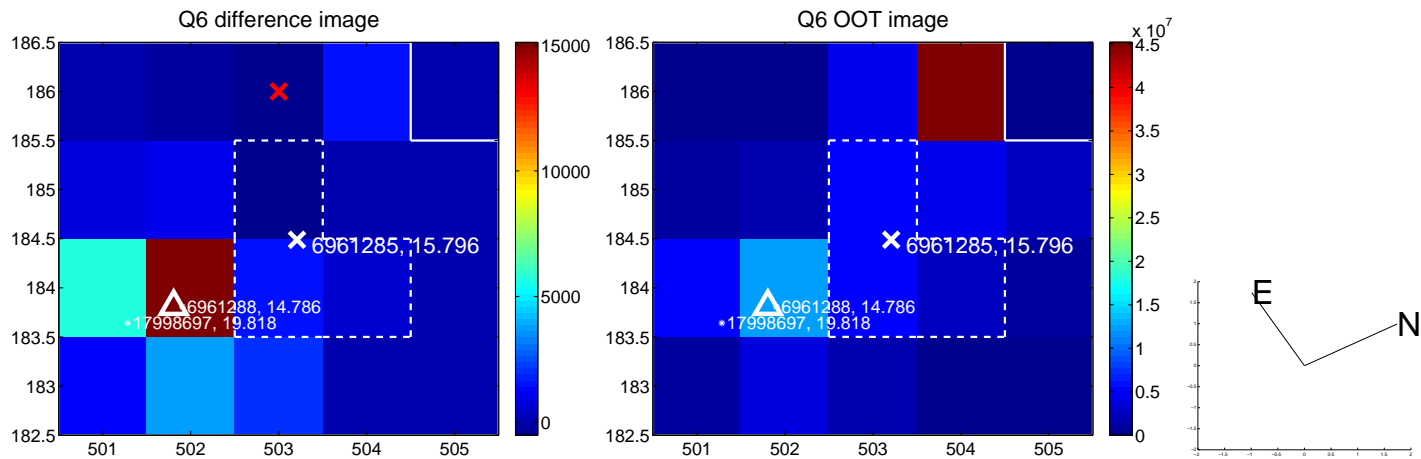
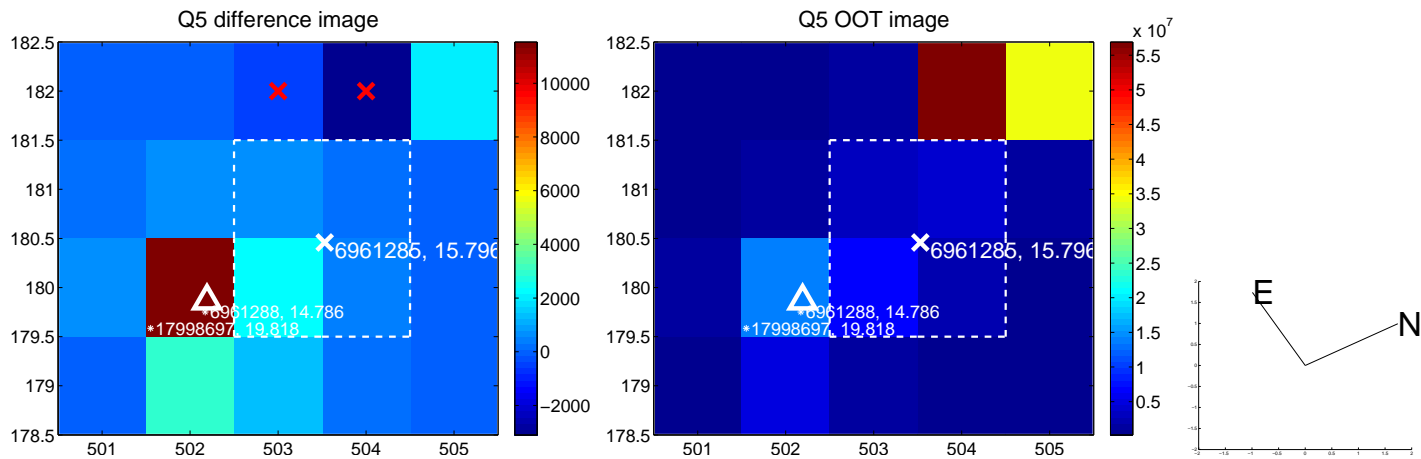


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

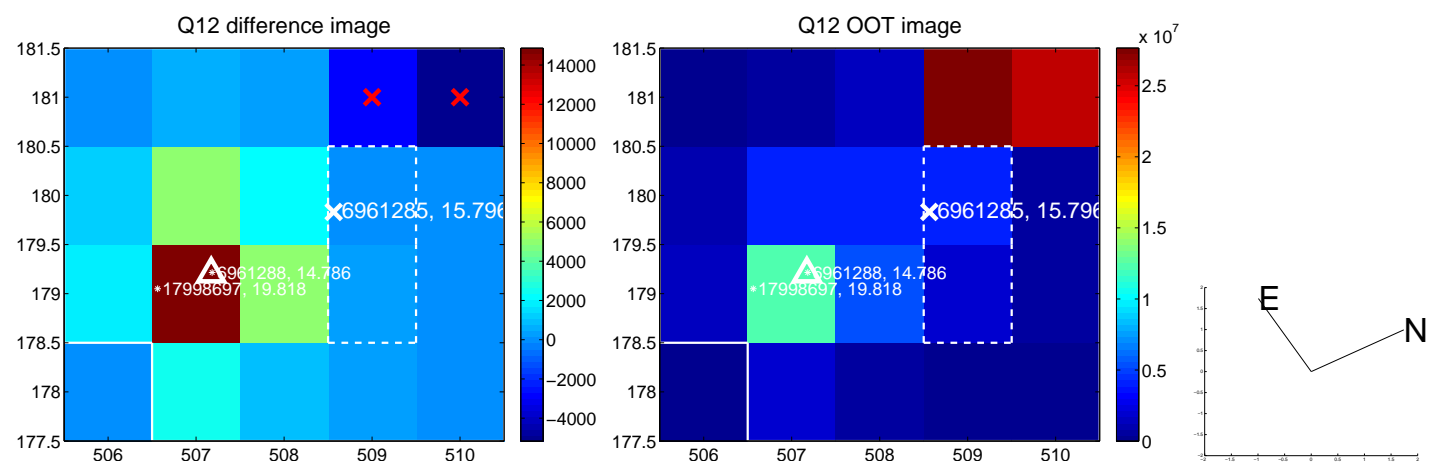
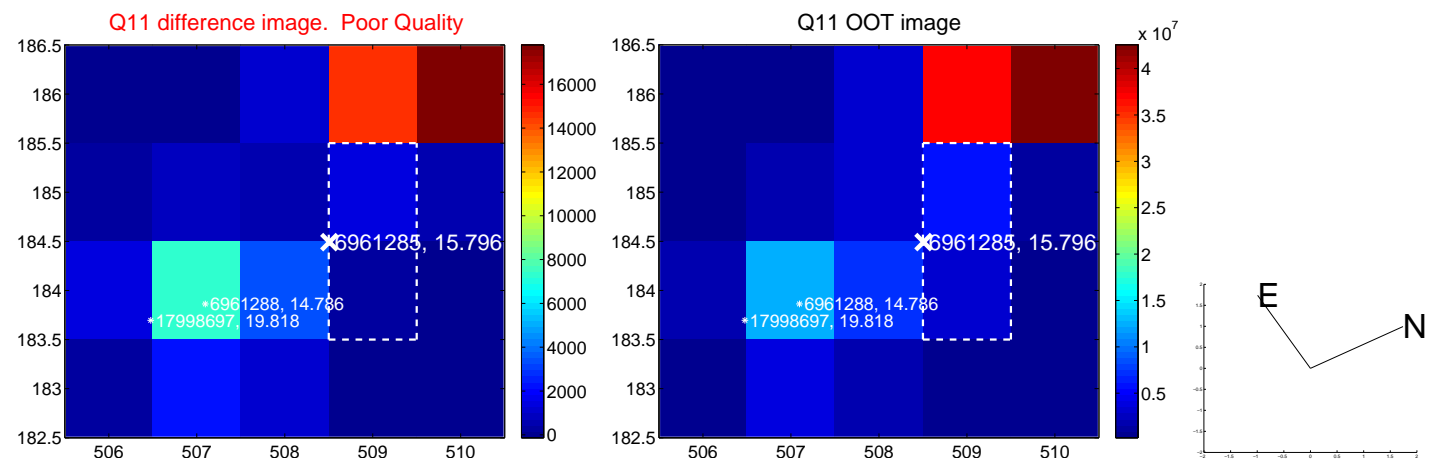
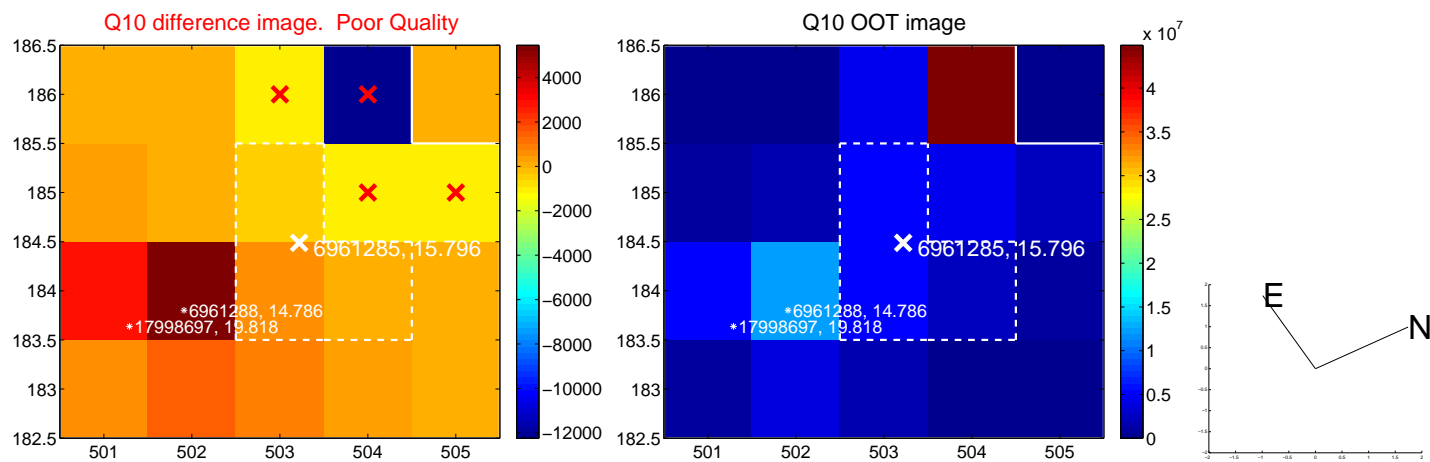
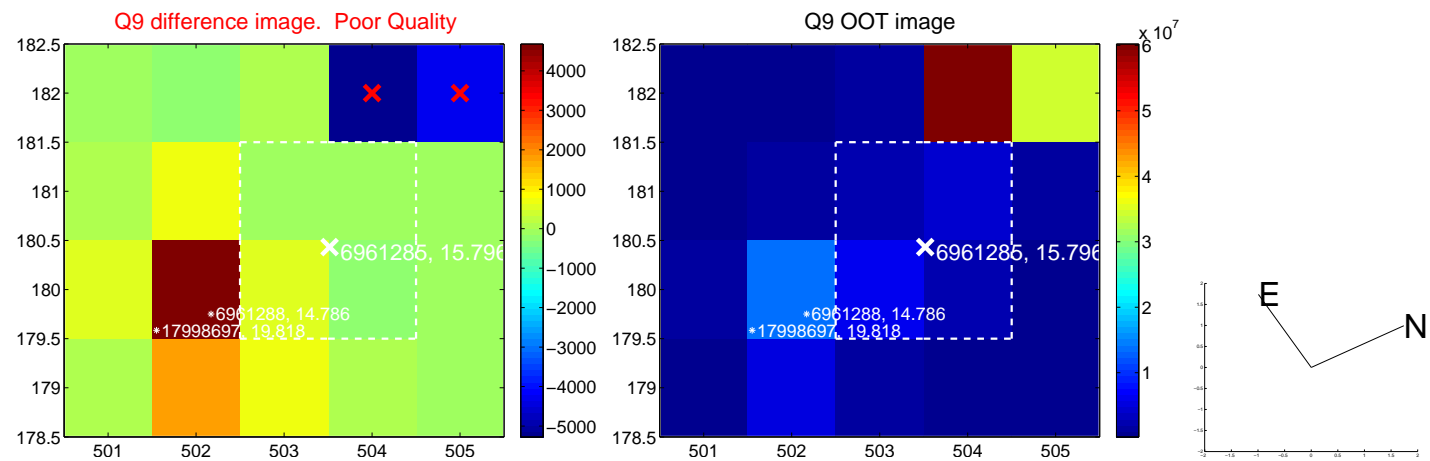
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



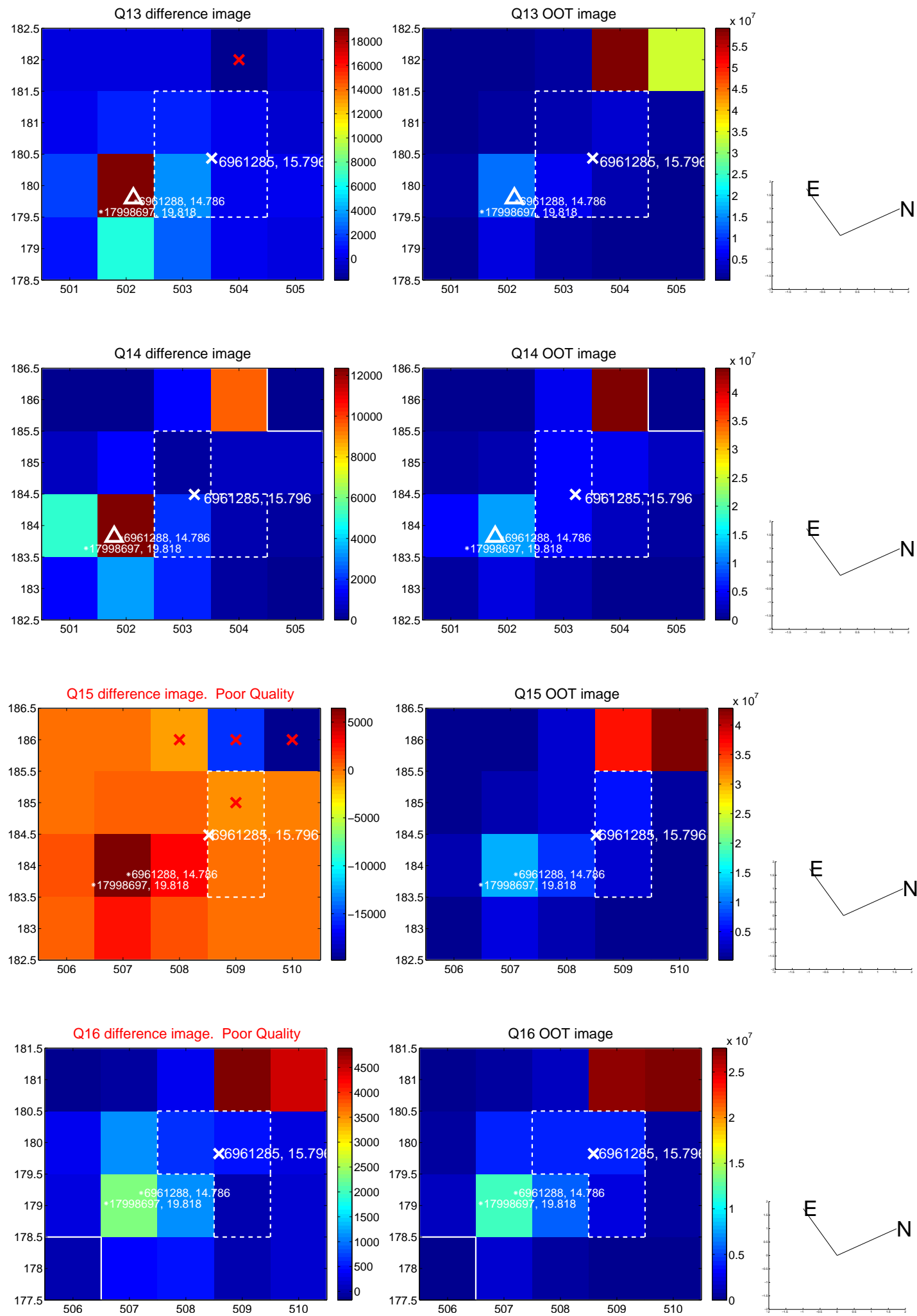
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



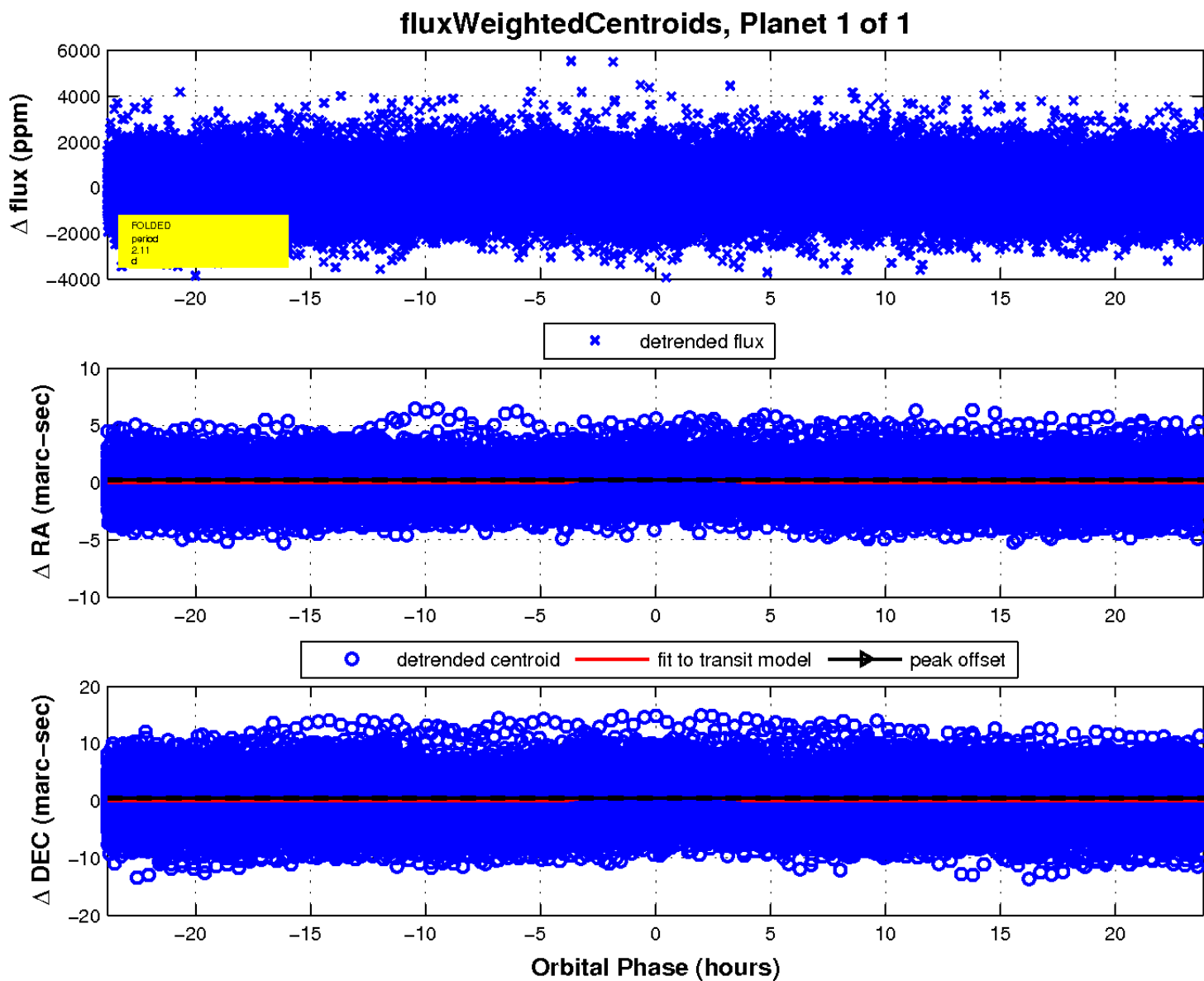
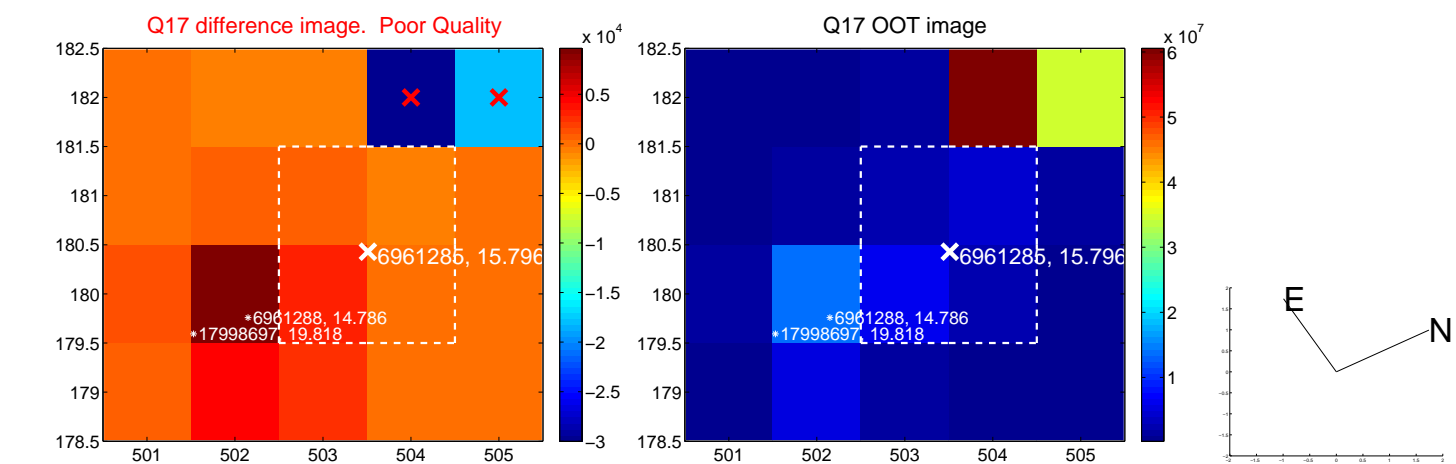
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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.



UKIRT Image

Declination

