

KIC 006069985

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})
006069985-01	OBS	No	0.671770	132.189674	17.3	6.168	8.0	6.0	1.04	6351	0.44	6648.34

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006069985-01	OBS	FP	0.00	1	0	0	0	LPP_DV—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.

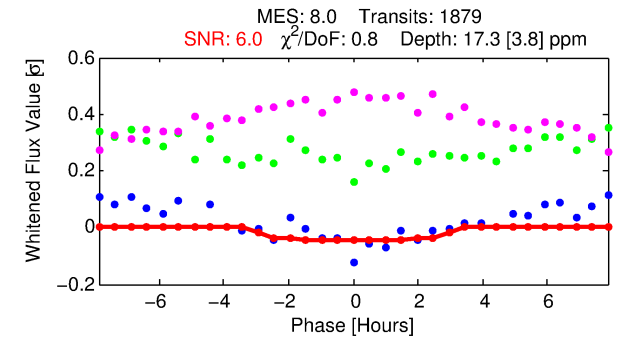
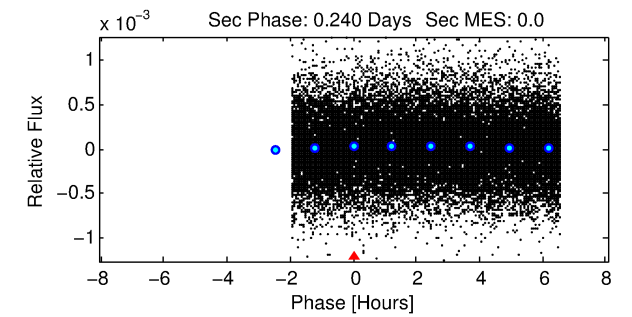
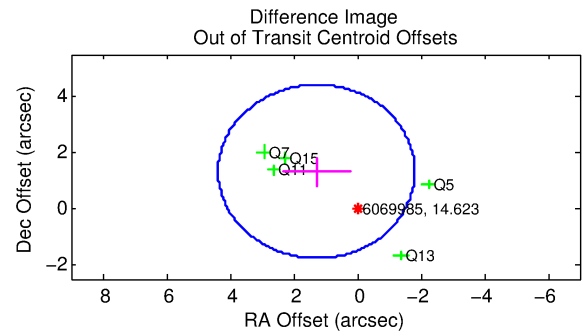
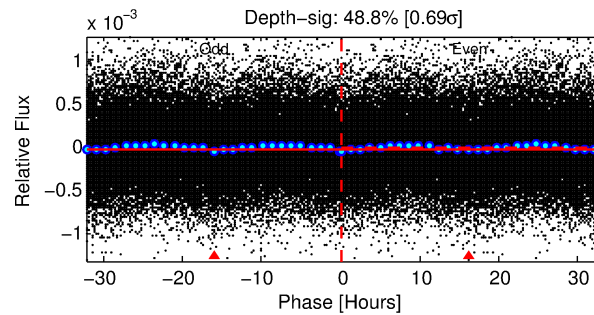
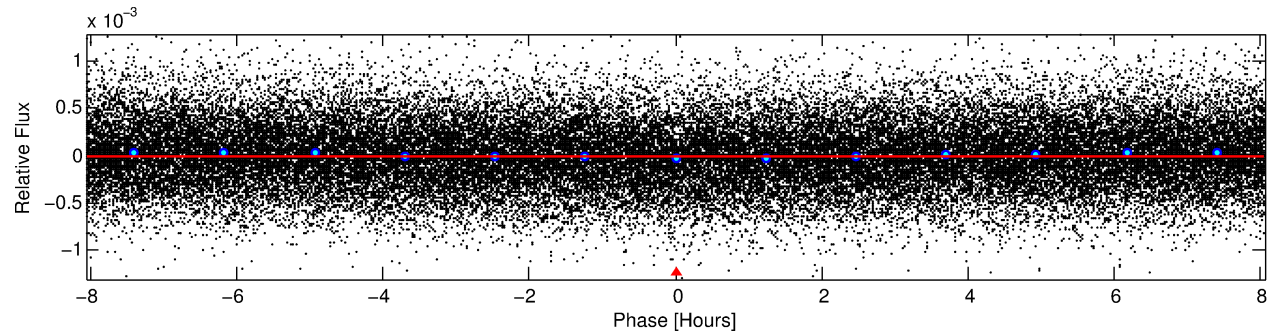
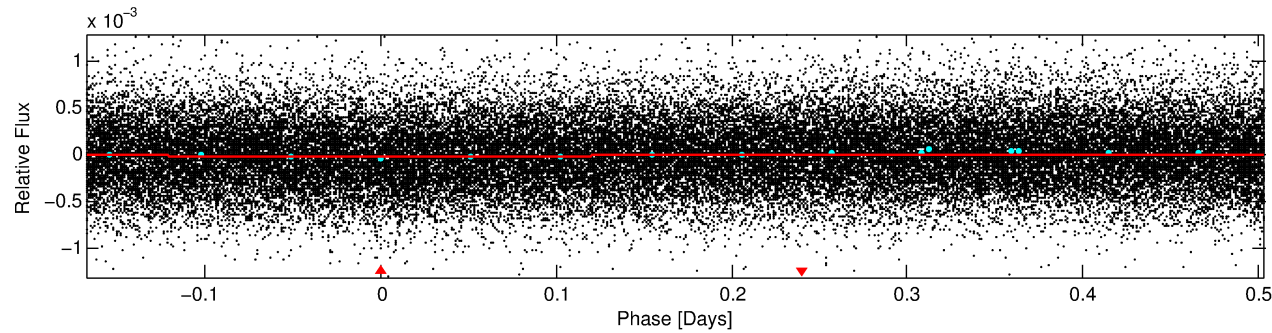
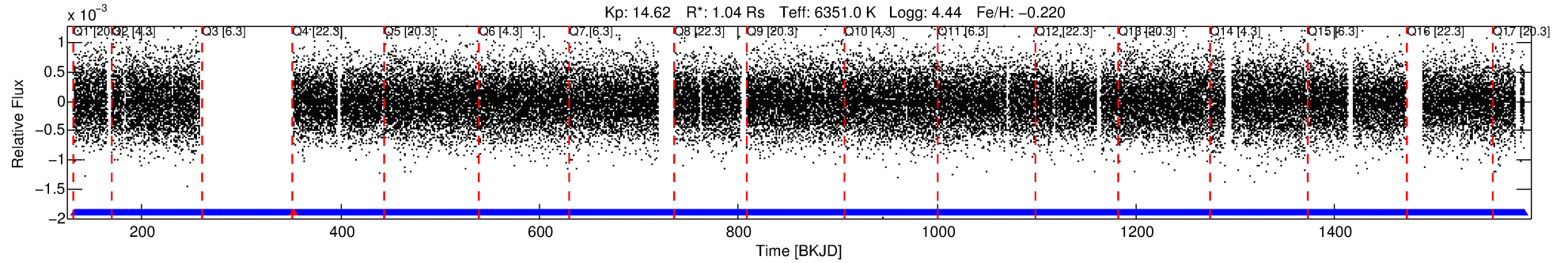
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006069985-01

No Significant Match Found

DV One-Page Summary

KIC: 6069985 Candidate: 1 of 1 Period: 0.672 d



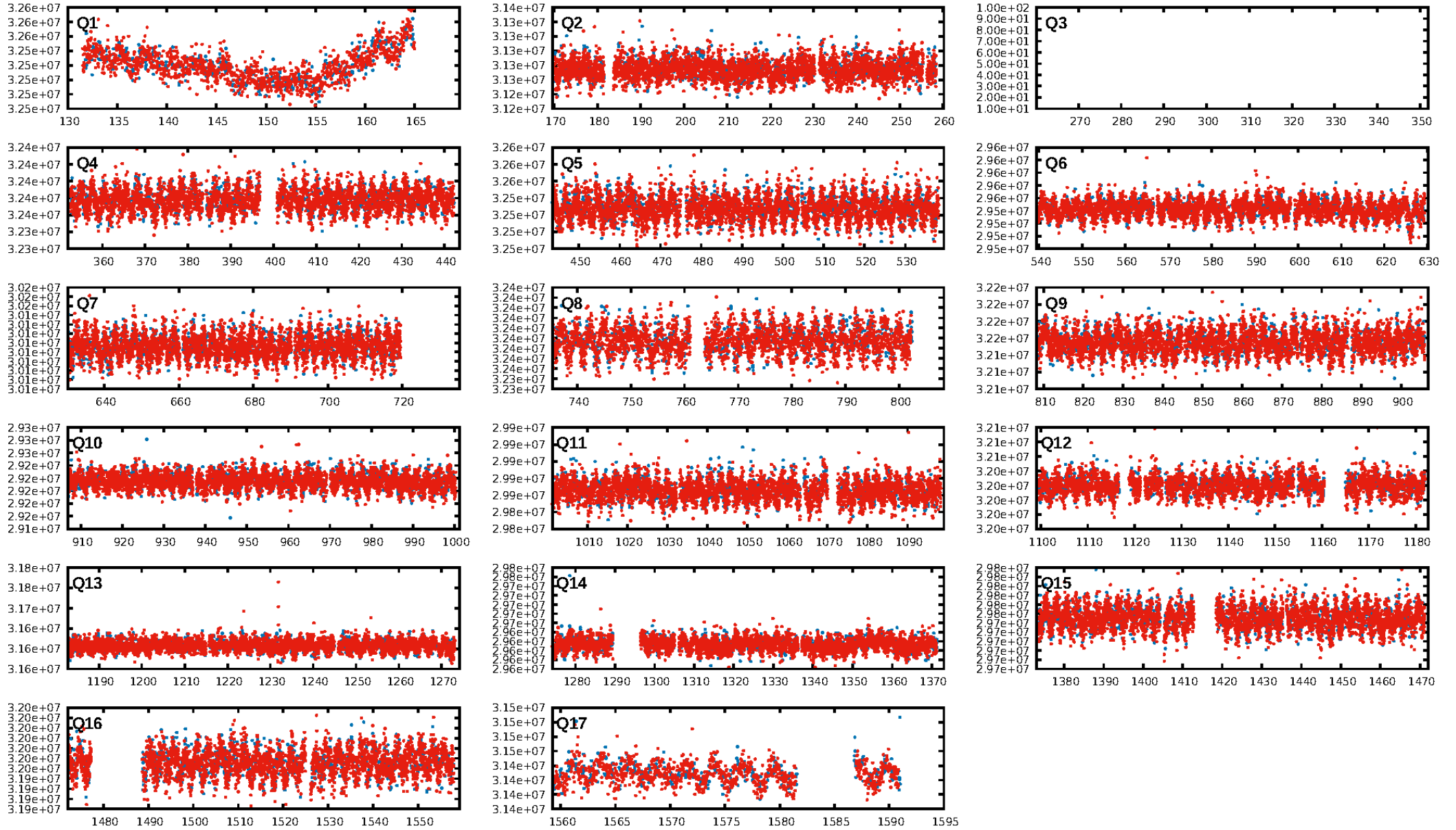
DV Fit Results:

Period = 0.67177 [0.00002] d
Epoch = 132.1897 [0.0107] BKJD
Rp/R* = 0.0038 [0.0072]
a/R* = 1.08 [1.40]
b = 0.11 [85.72]
Seff = 6648.34 [2810.54]
Teff = 2303 [243] K
Rp = 0.44 [0.84] Re
a = 0.0155 [0.0043] AU
Ag = N/A
Teffp = N/A

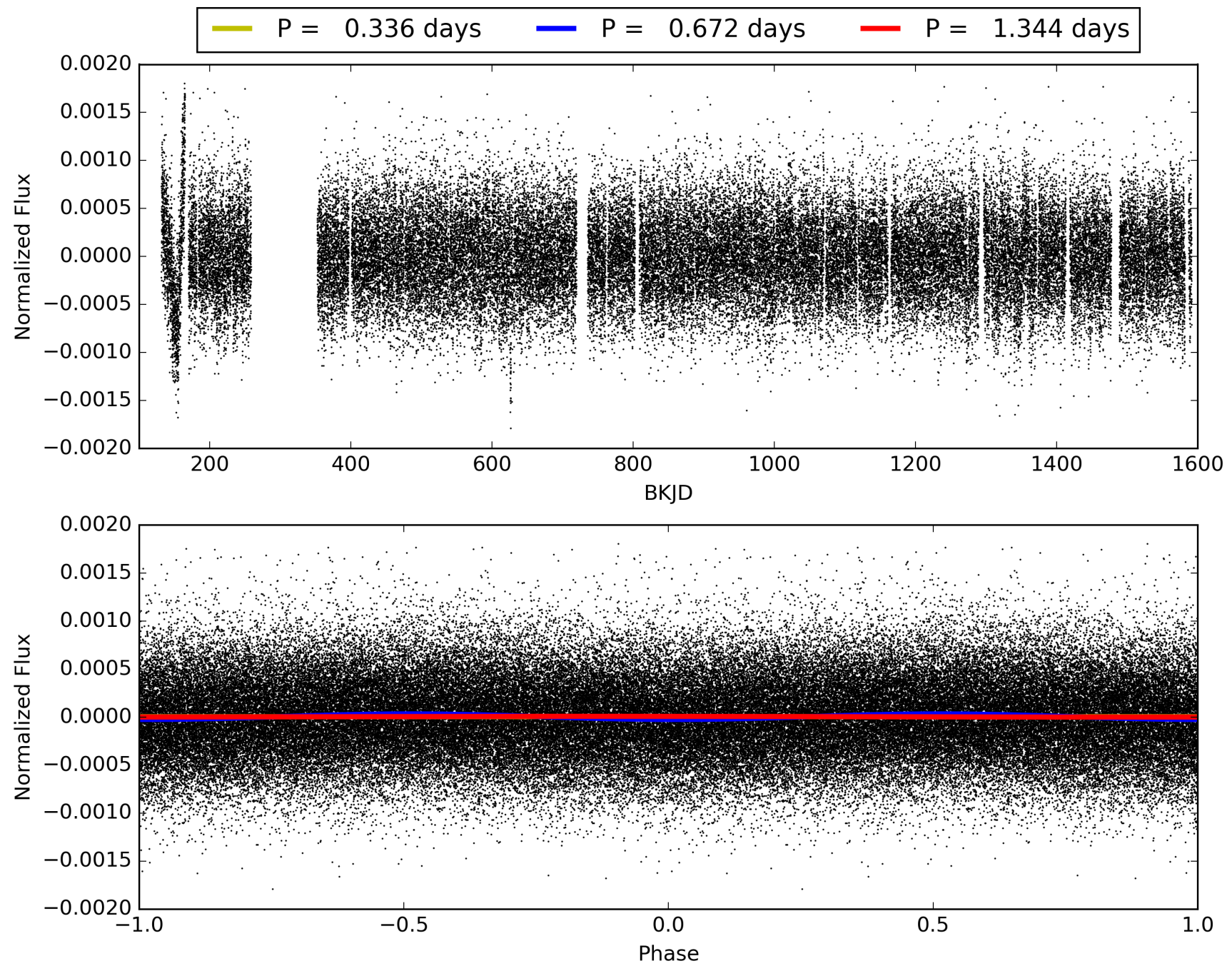
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1788/1789]
GhostDiagnostic-chr: 1.648
Centroid-sig: 0.0%
Centroid-so: 5.527 arcsec [3.12 σ]
OotOffset-rm: 1.844 arcsec [1.79 σ]
KicOffset-rm: 1.862 arcsec [2.07 σ]
OotOffset-st: 0/3/0/2 [5]
KicOffset-st: 0/3/0/2 [5]
DiffImageQuality-fgm: 0.00 [0/5]
DiffImageOverlap-fno: 1.00 [16/16]

TCE 006069985-01, PDC Light Curves

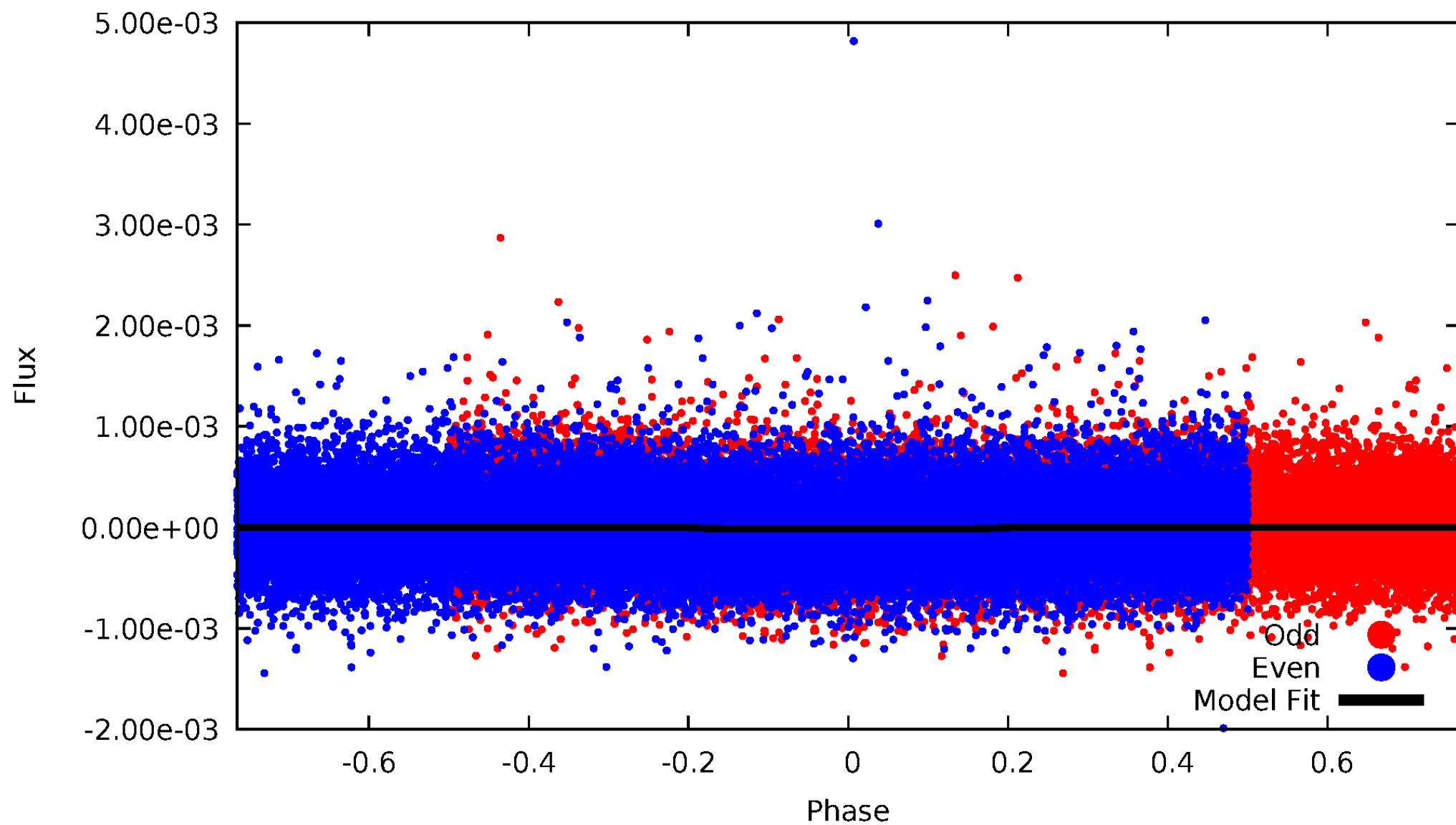


TCE 006069985-01



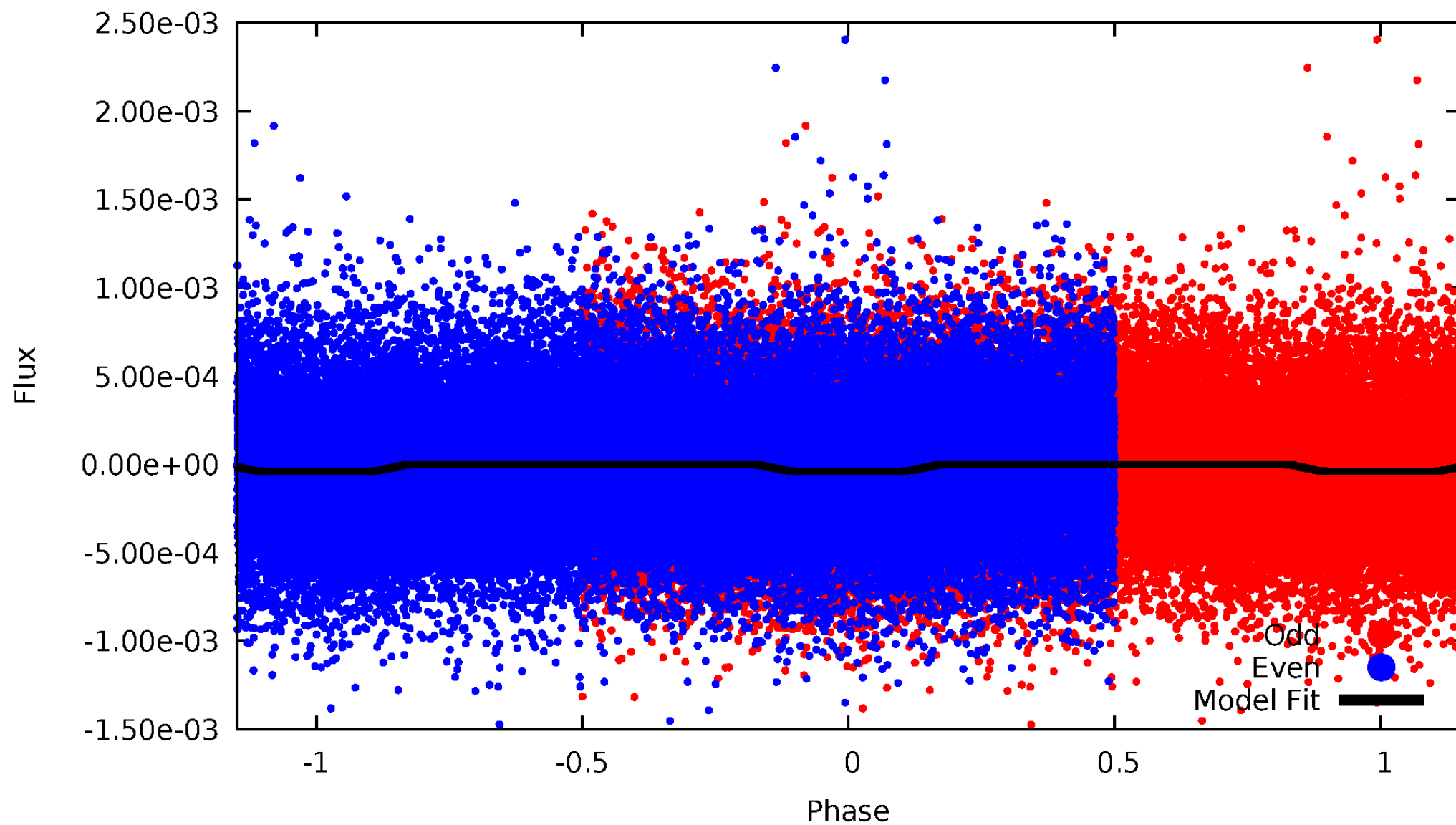
DV Odd/Even

TCE 006069985-01



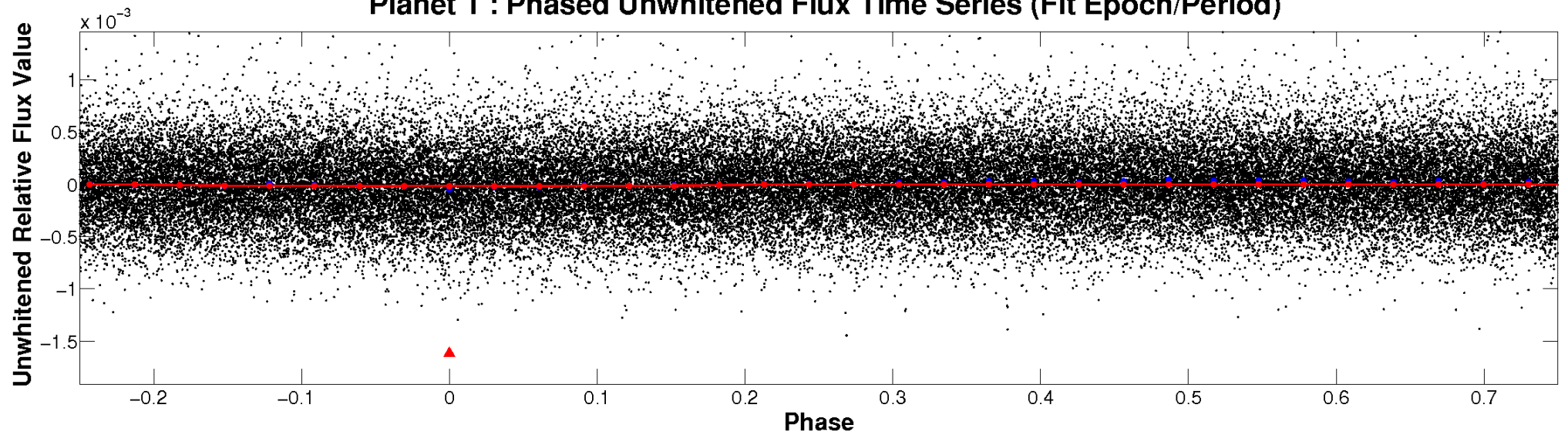
ALT Odd/Even

TCE 006069985-01

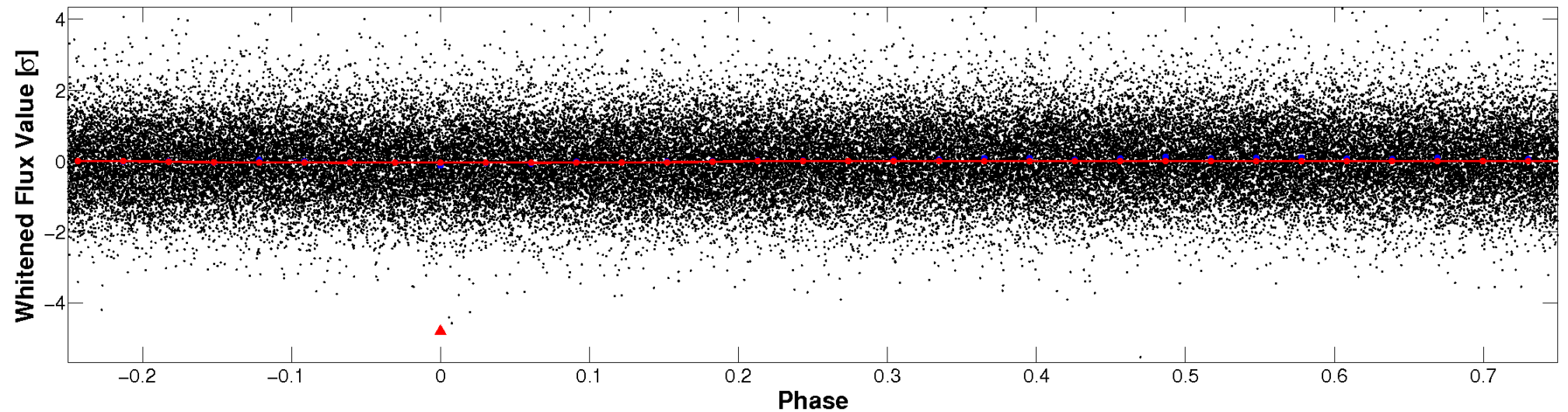


Non-Whitened Vs. Whitened Light Curve

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

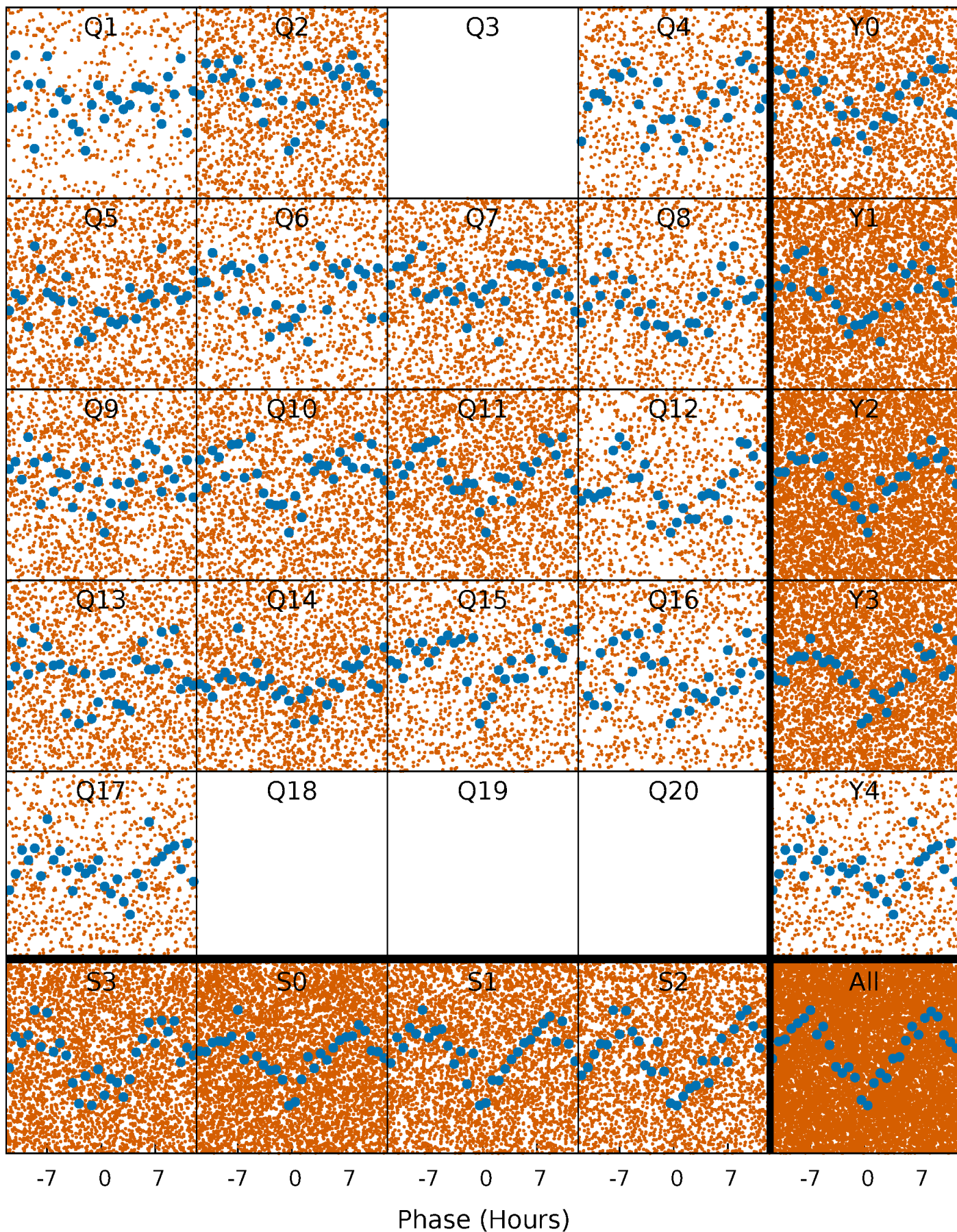


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



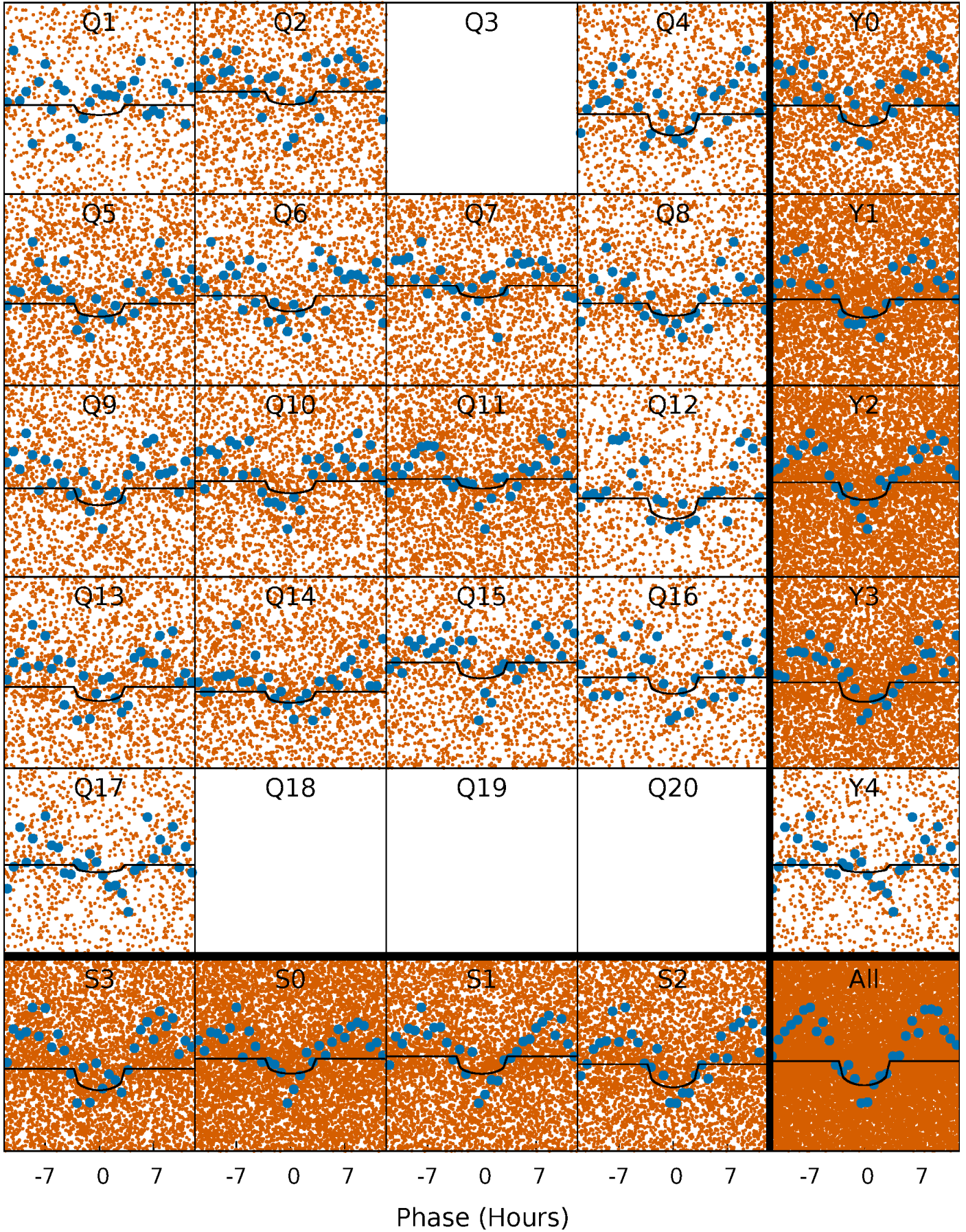
PDC Quarter-Phased Transit Curves

TCE 006069985-01 P= 0.671770 Days $T_0=132.189674$ (BKJD)



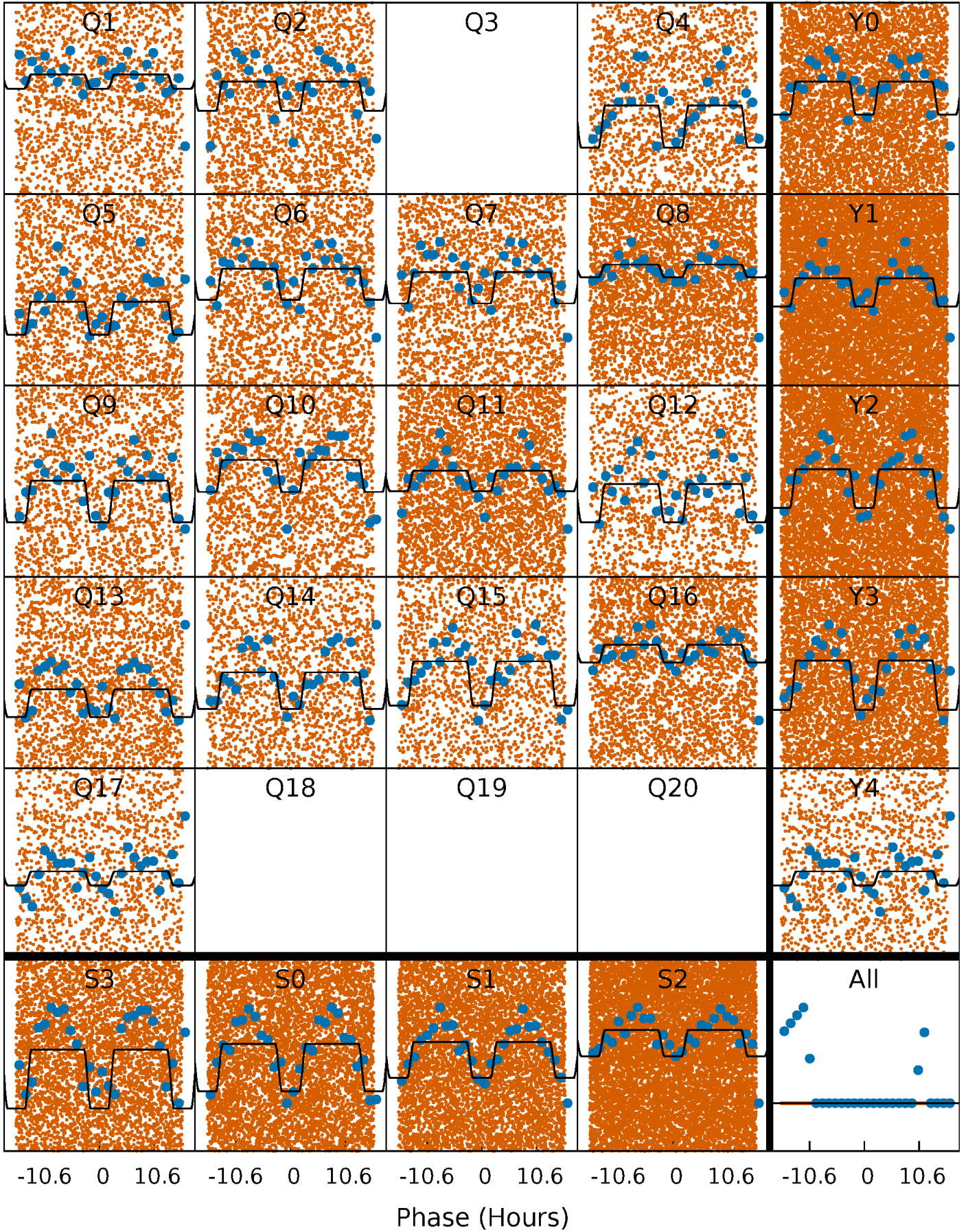
DV Quarter-Phased Transit Curves

TCE 006069985-01 P= 0.671770 Days $T_0=132.189674$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

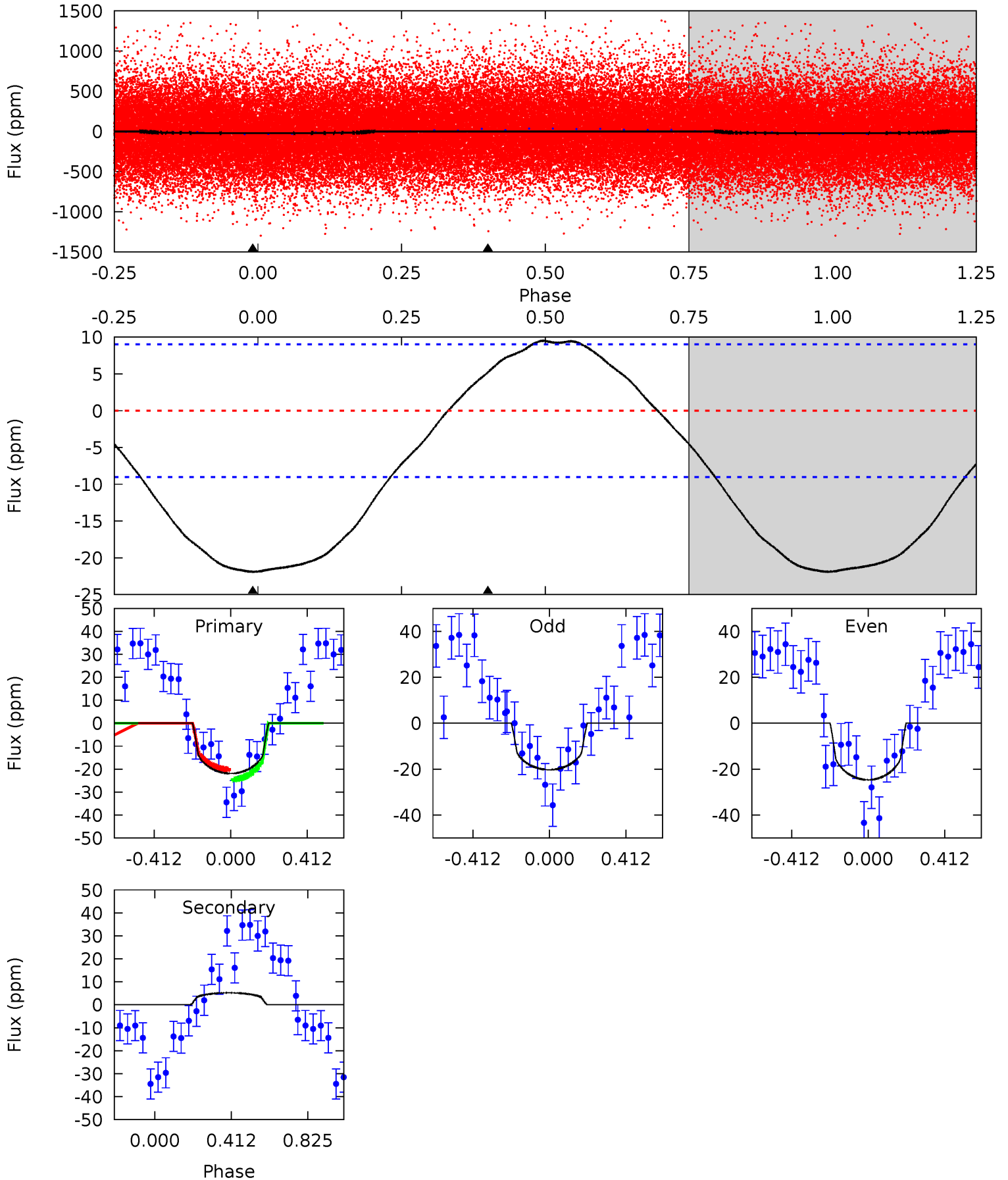
TCE 006069985-01 P= 0.671796 Days $T_0=132.164756$ (BKJD)



DV Model-Shift Uniqueness Test

006069985-01, P = 0.671770 Days, E = 130.846134 Days

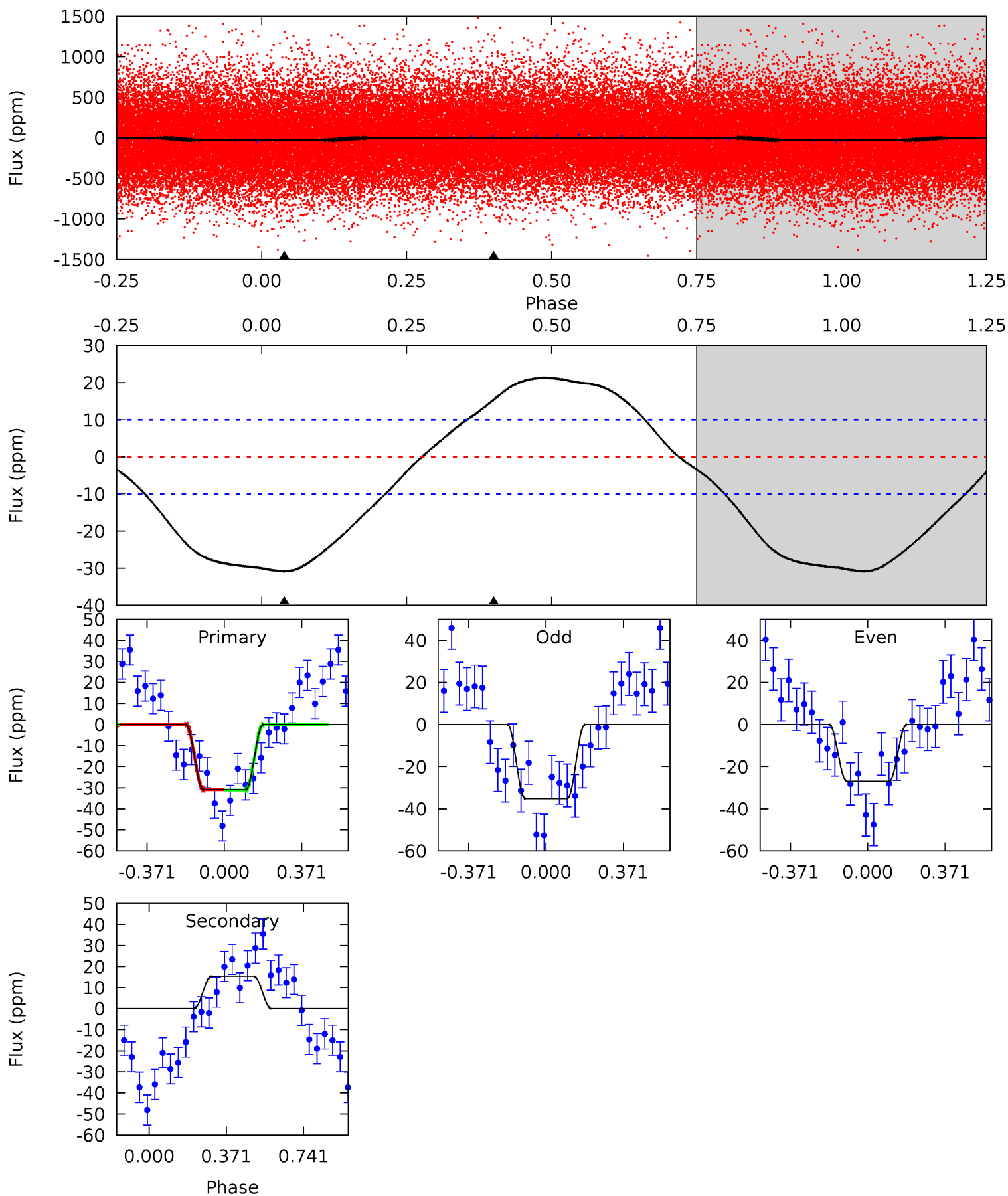
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.3	-2.46	0	0	4.26	0.82	1.14	10.3	10.3	-2.46	-2.46	1.04	0.92	0.30	1.04



Alt Model-Shift Uniqueness Test

006069985-01, P = 0.671796 Days, E = 131.492960 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	-6.59	0	0	4.28	0.90	1.74	13.3	13.3	-6.59	-6.59	1.76	1.11	0.41	0.06



Stellar Parameters For KIC 006069985

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6351^{+176}_{-220}	$4.439^{+0.054}_{-0.216}$	$-0.220^{+0.250}_{-0.300}$	$1.045^{+0.349}_{-0.116}$	$1.094^{+0.154}_{-0.154}$	$1.349^{+0.409}_{-0.748}$
	+3%/-3%	+1%/-5%	+114%/-136%	+33%/-11%	+14%/-14%	+30%/-55%
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 006069985-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	5 ± 2	$0.79^{+0.73}_{-0.54}$	3283^{+267}_{-147}	-4165^{+559}_{-2126}	$-1.015^{+0.782}_{-7.800}$
Alt.	15 ± 2	$0.92^{+0.79}_{-0.58}$	3288^{+255}_{-159}	-4767^{+786}_{-2863}	$-2.266^{+1.604}_{-14.363}$

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

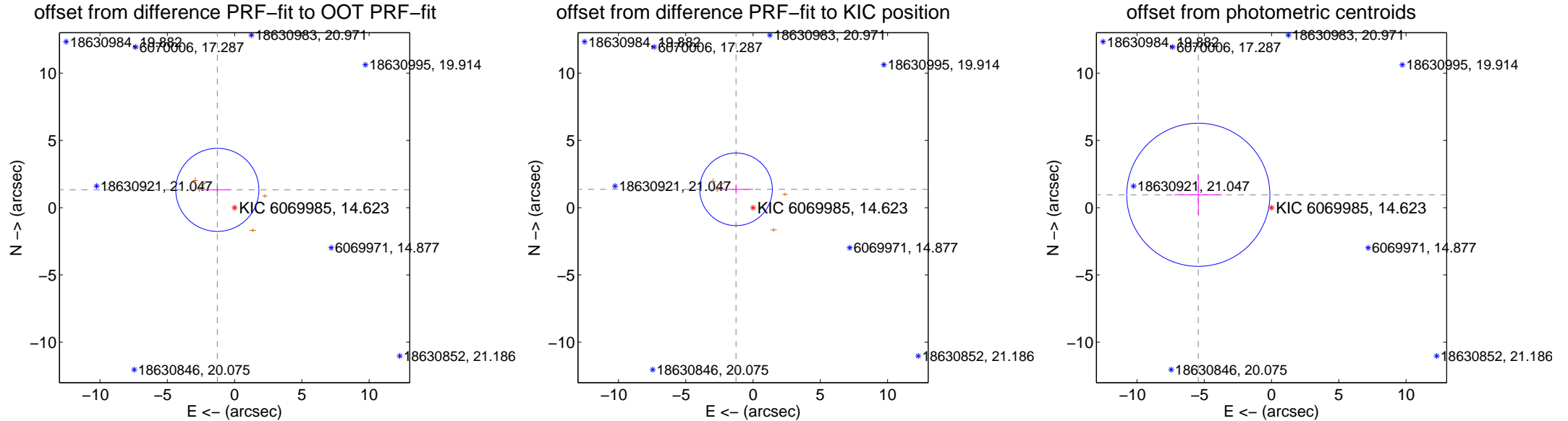
DV Centroid Data

Supplemental centroid analysis for 006069985-01. Kepler magnitude: 14.62. Transit SNR 5.96

There are 0 quarters with good PRF difference image offsets

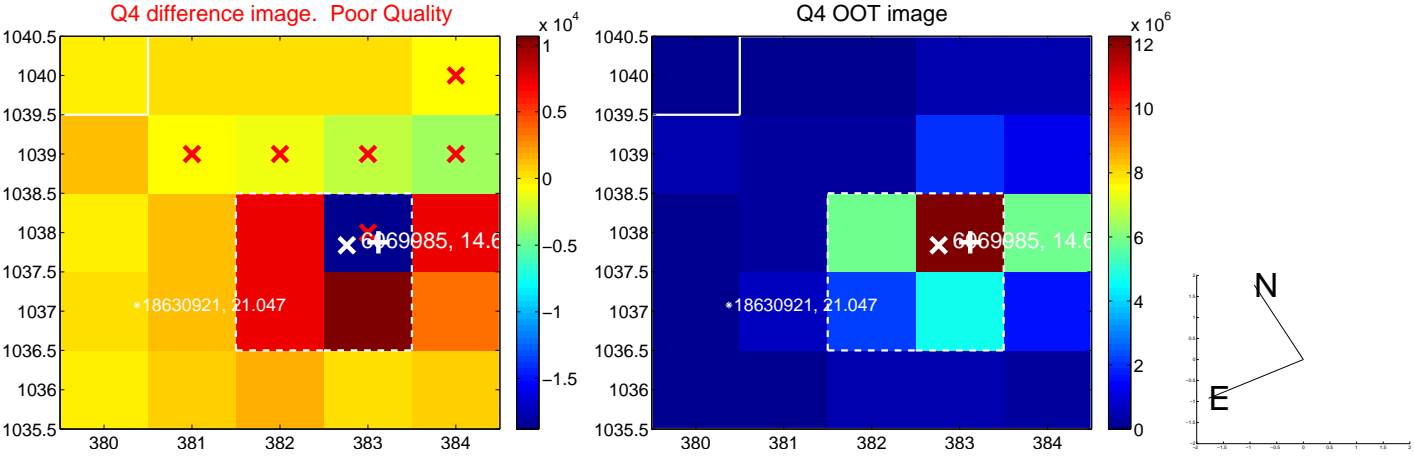
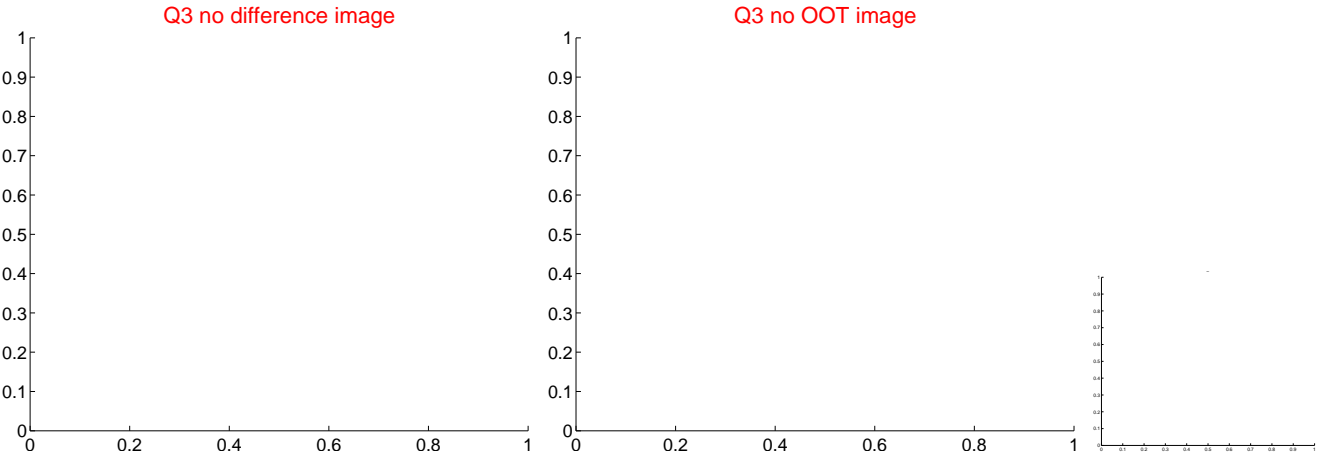
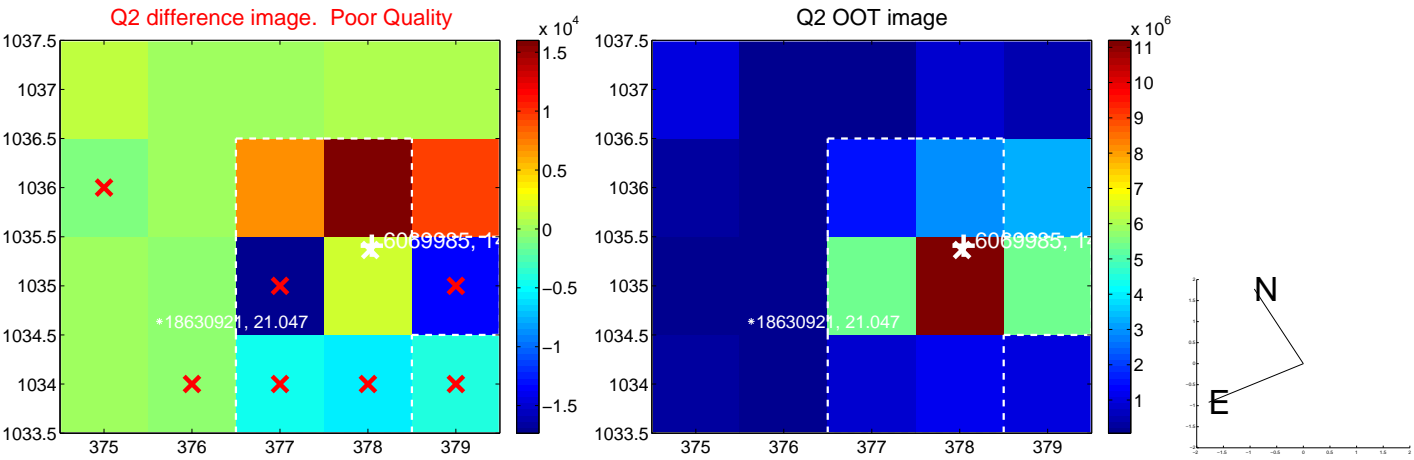
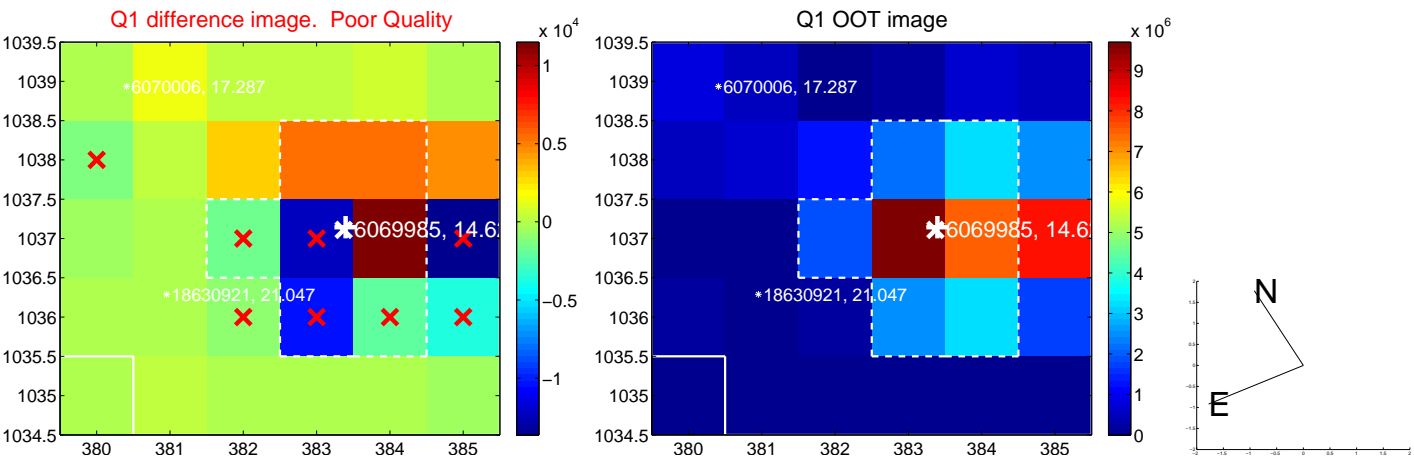
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.844 ± 1.030	1.79	1.282 ± 1.052	1.326 ± 0.502
PRF-fit source offset from KIC position	1.862 ± 0.900	2.07	1.265 ± 1.265	1.366 ± 0.361
photometric centroid source offset	5.53 ± 1.77	3.12	5.44 ± 1.78	0.96 ± 1.49

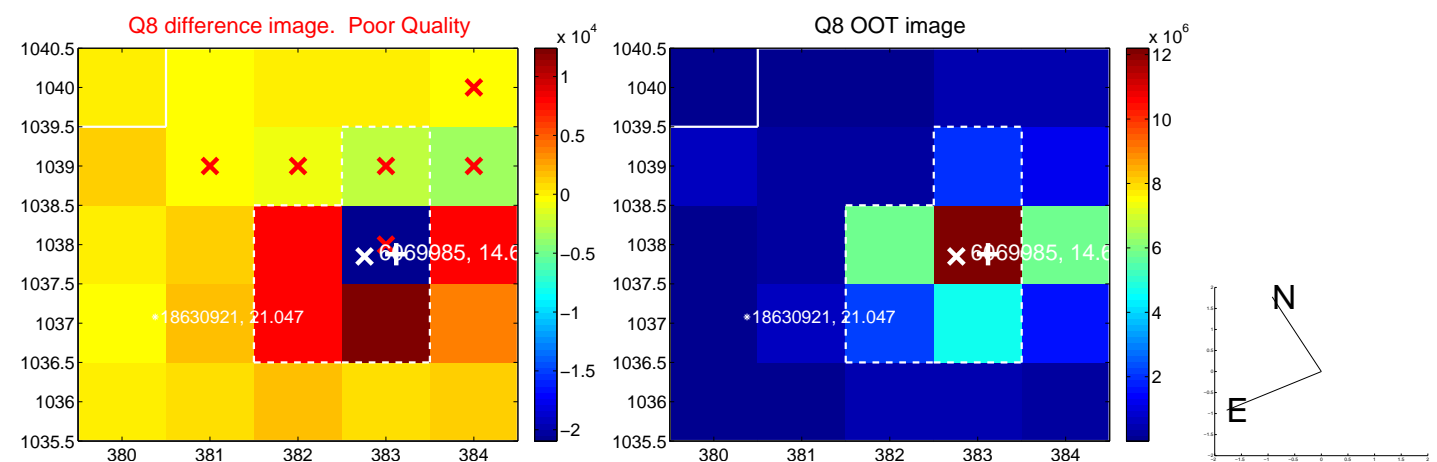
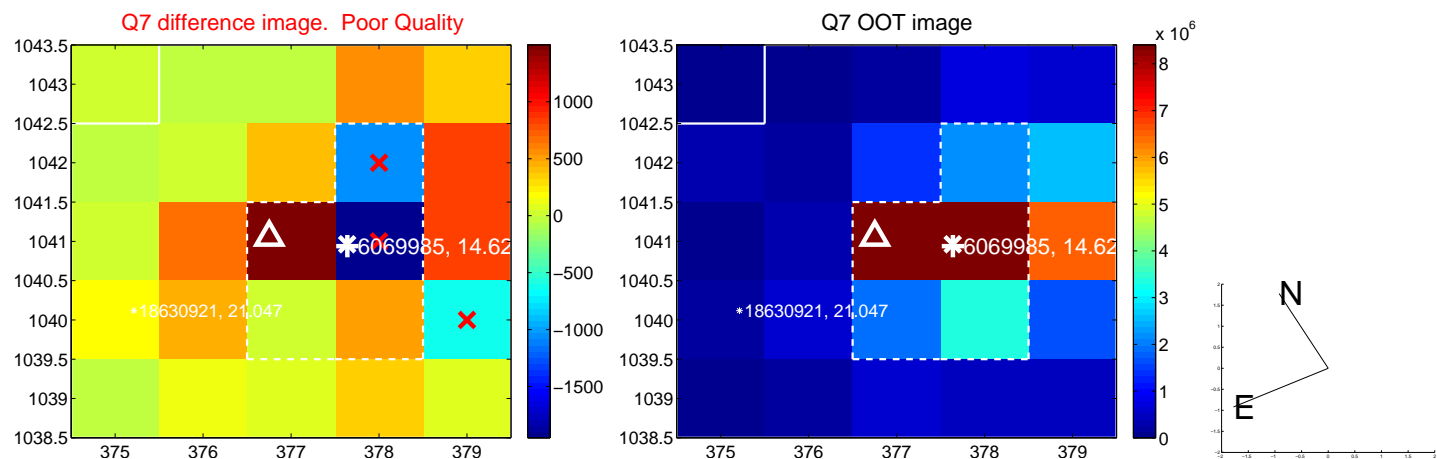
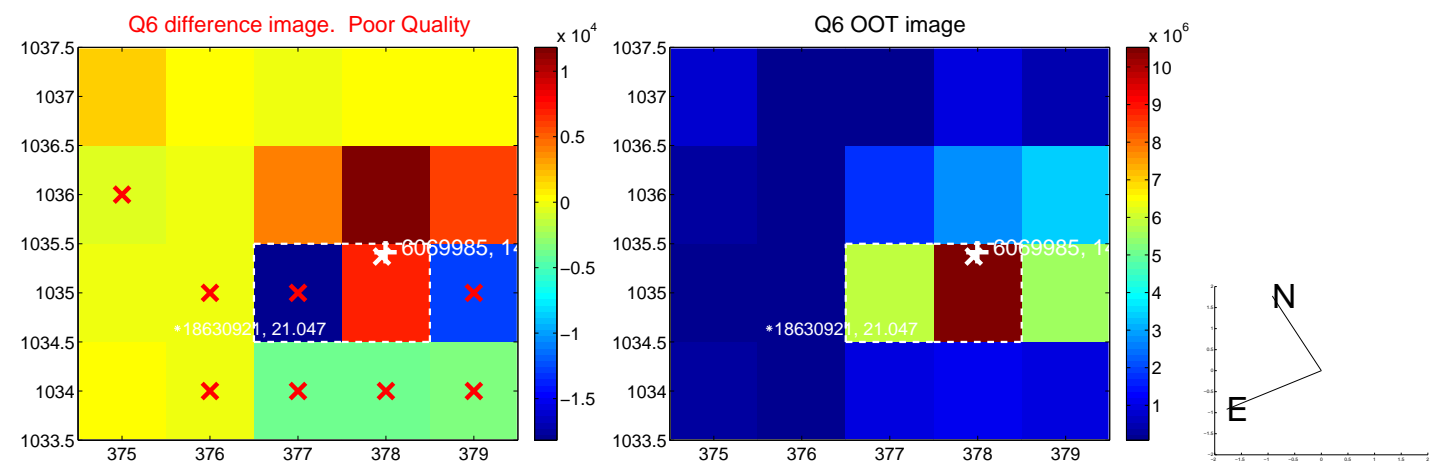
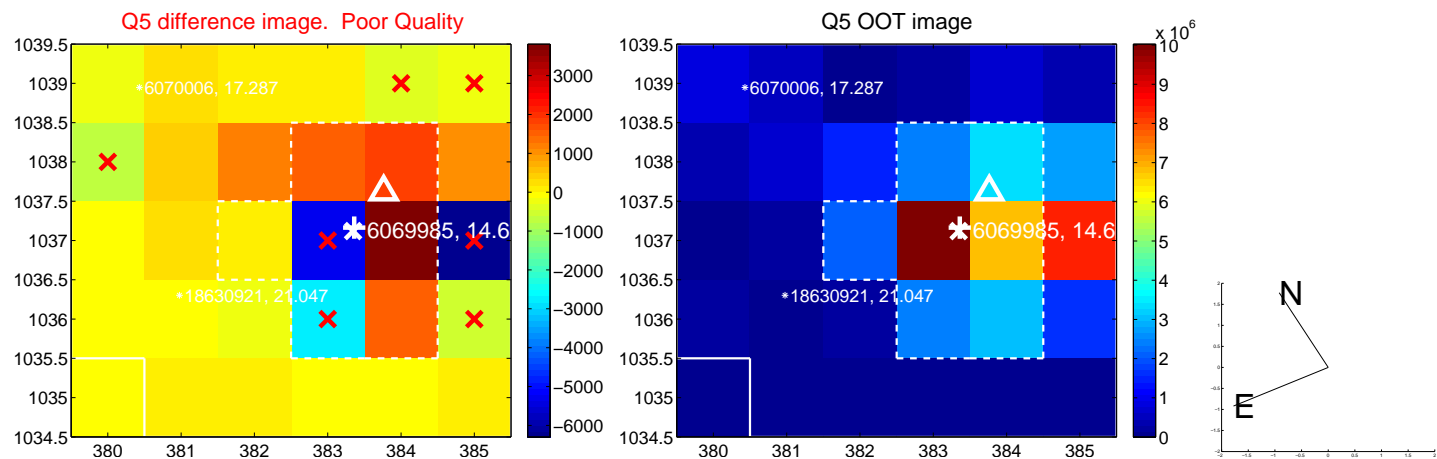


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

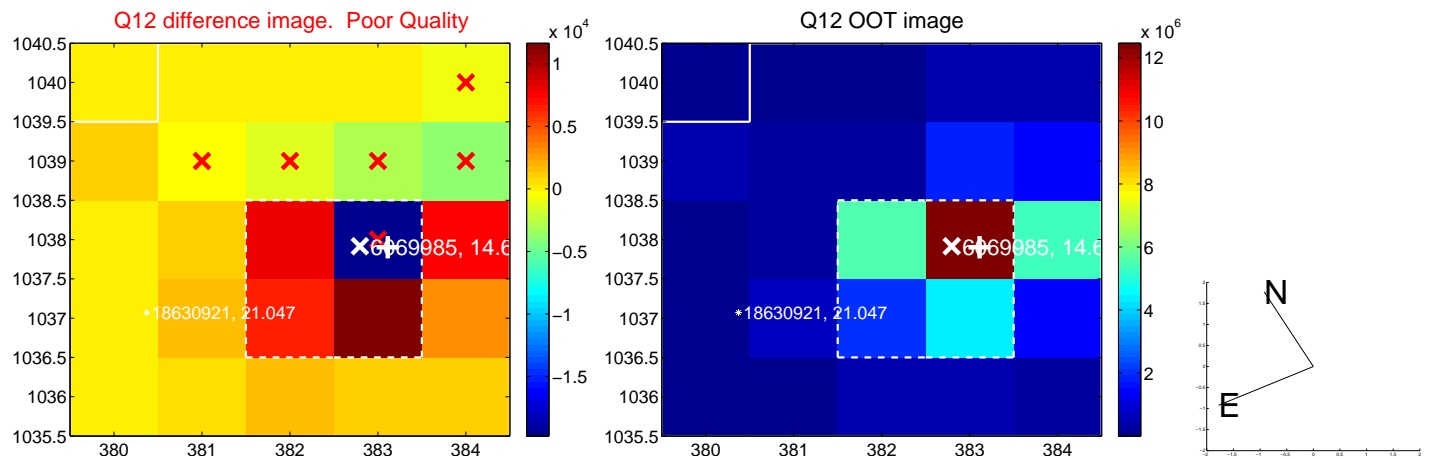
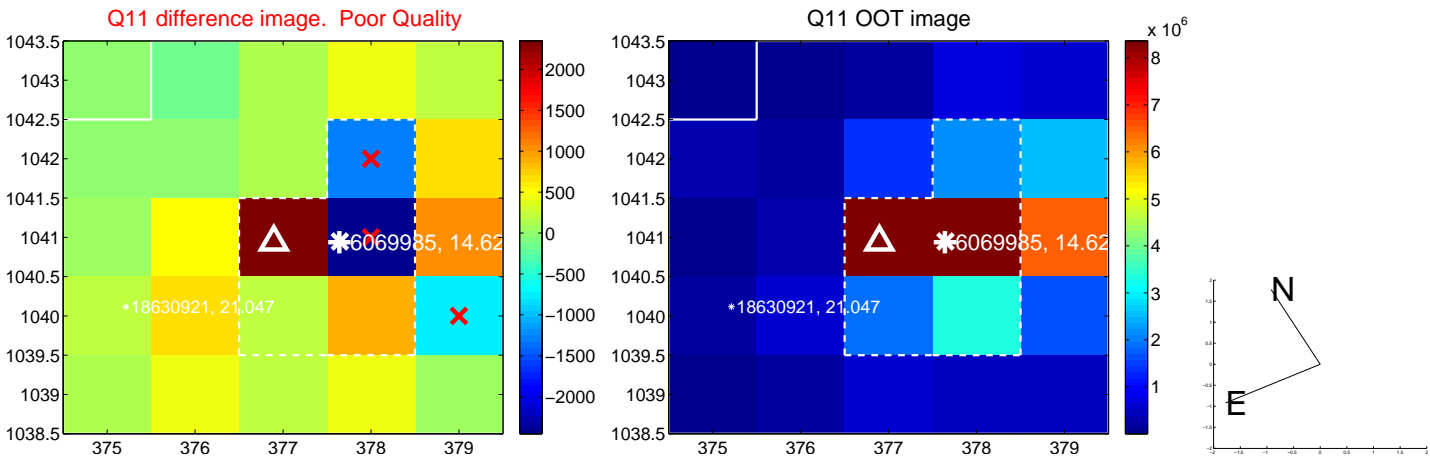
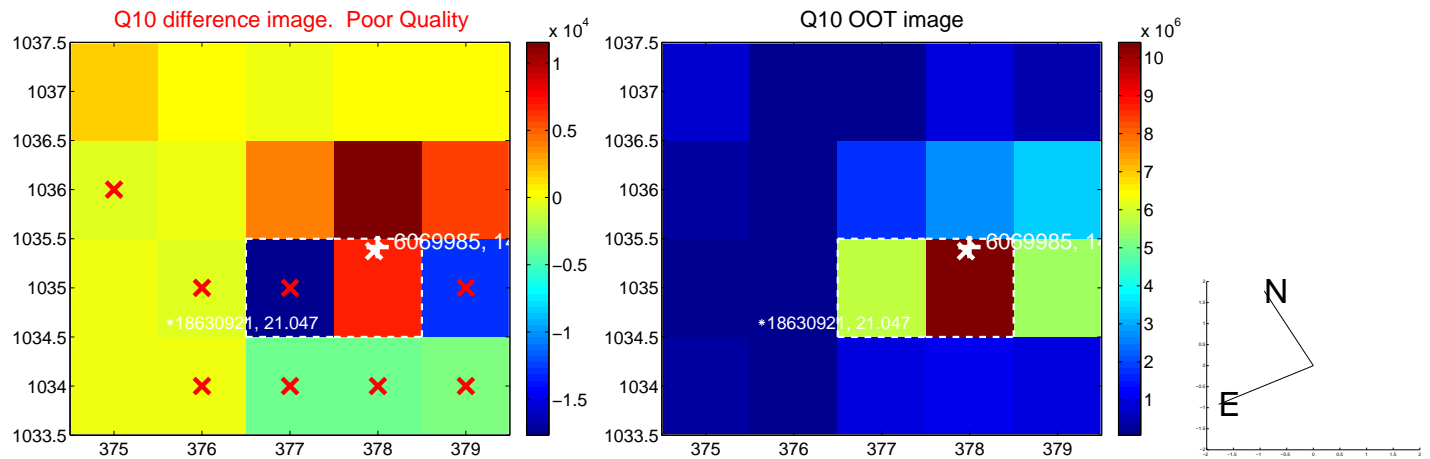
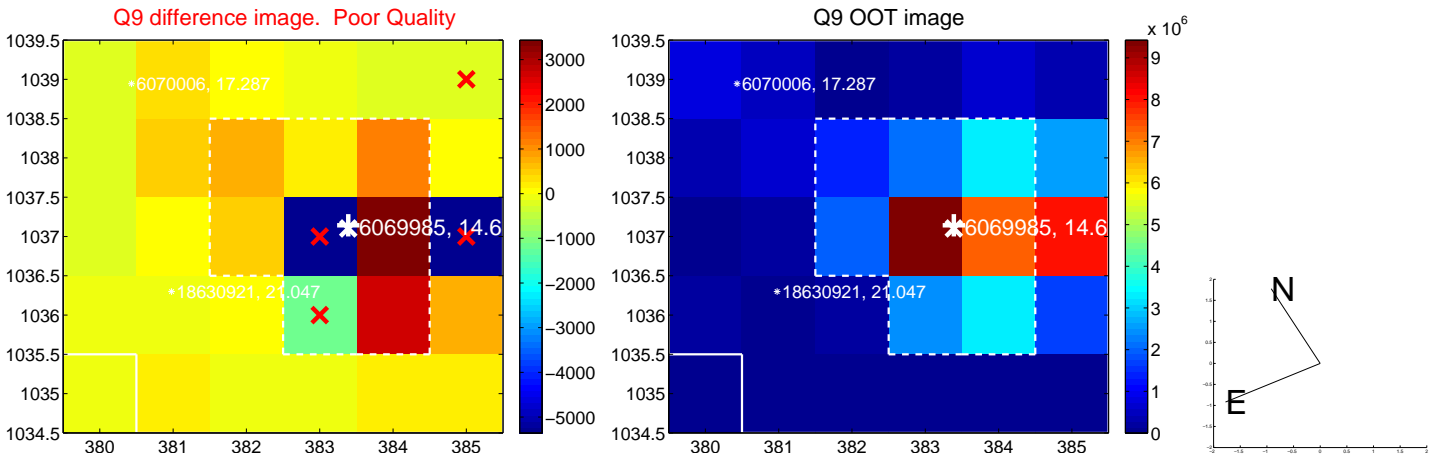
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



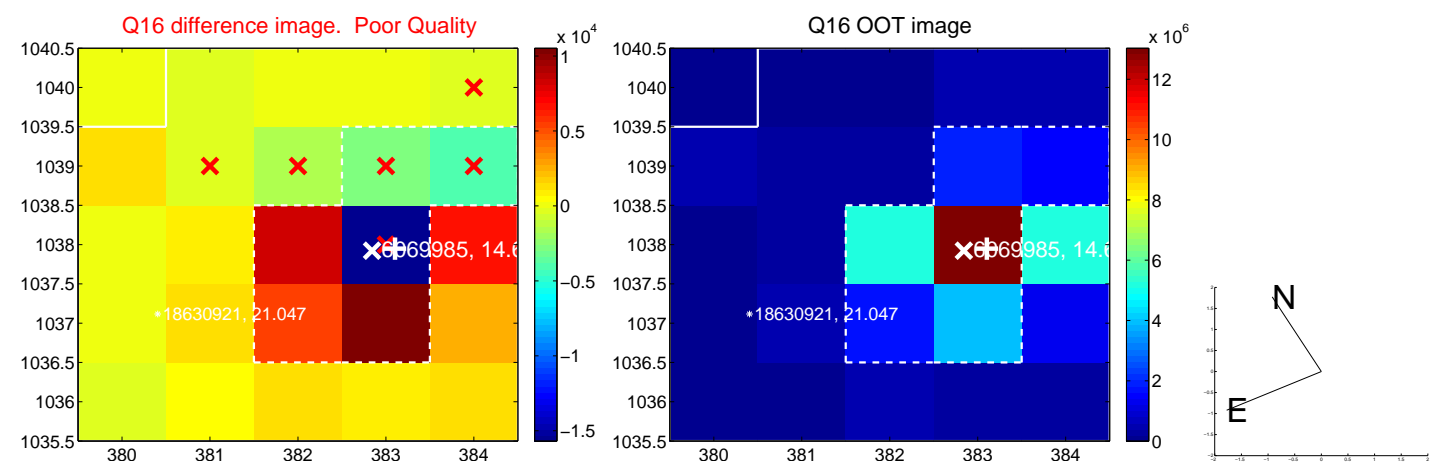
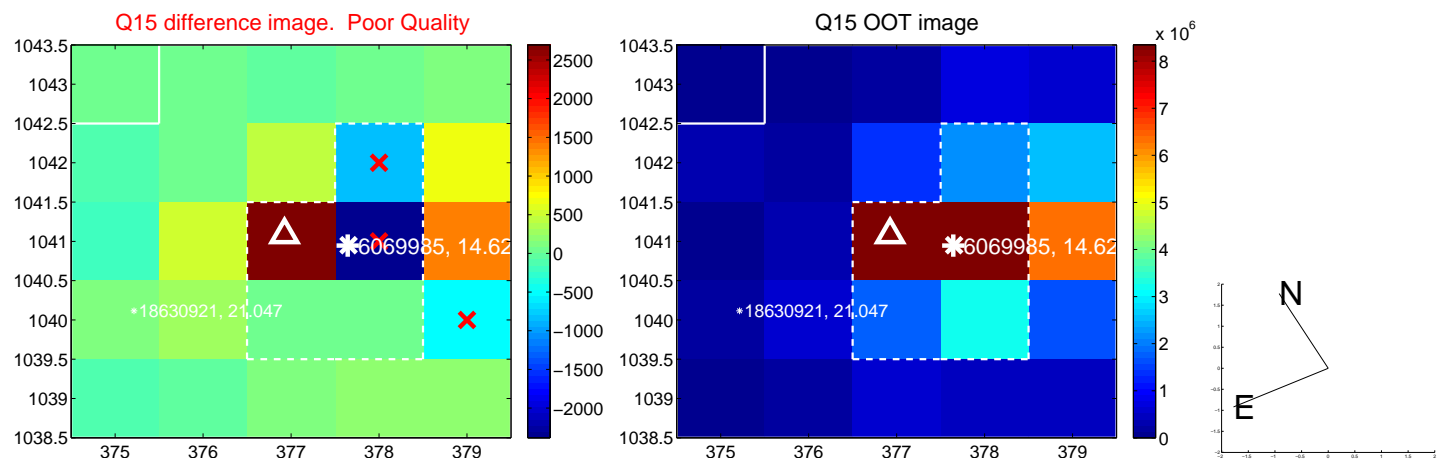
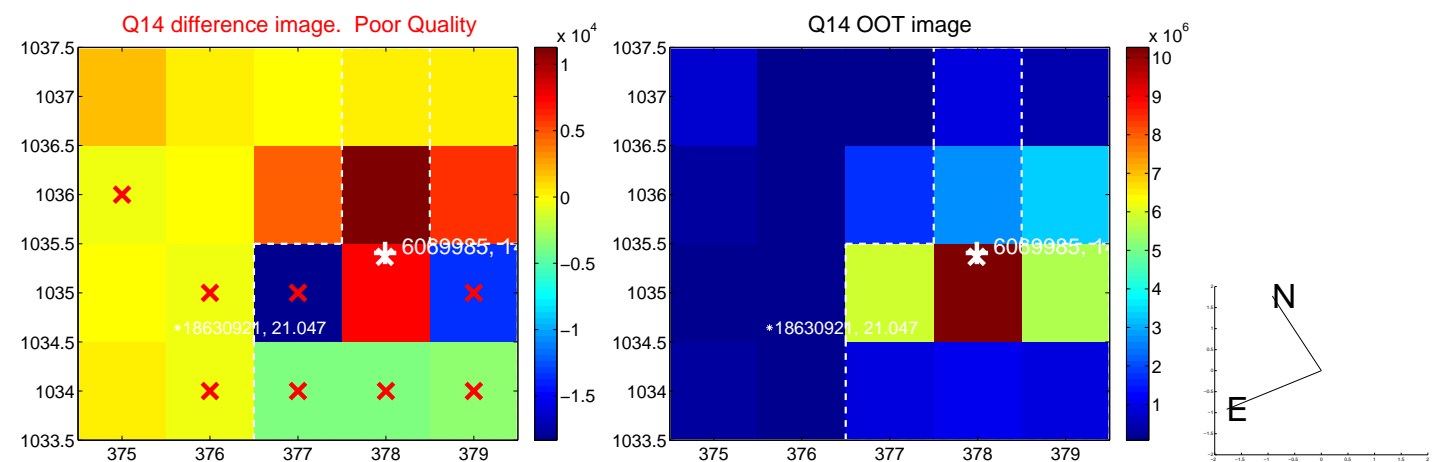
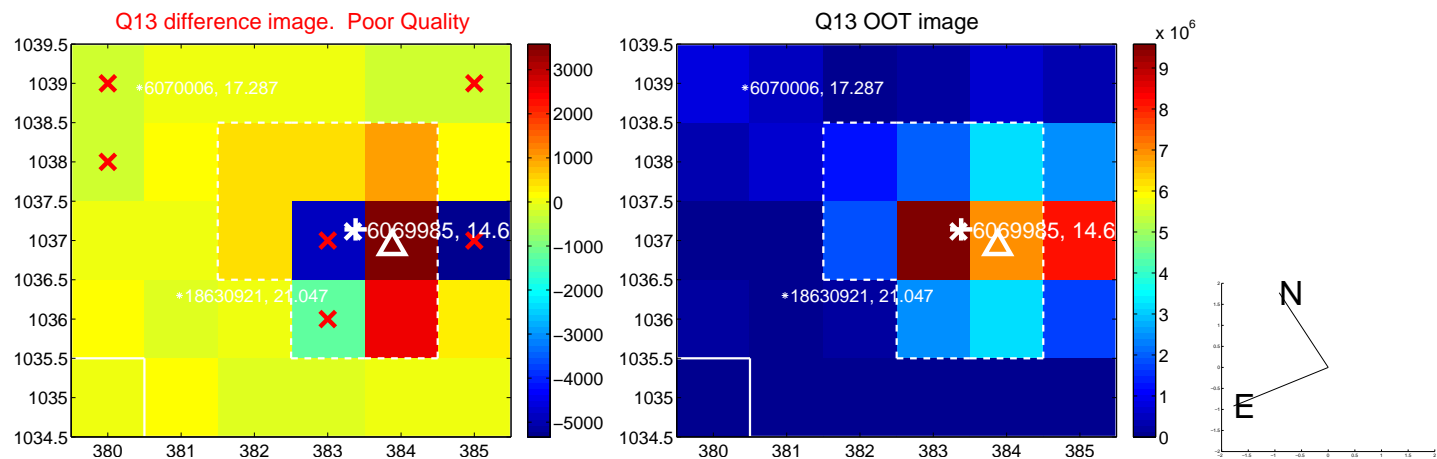
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



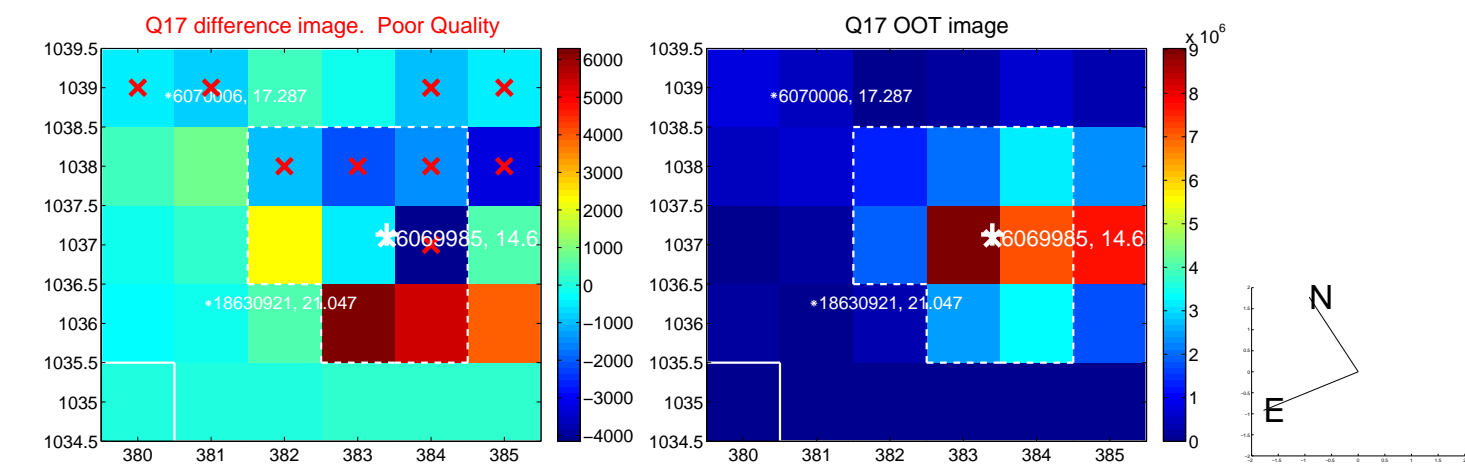
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



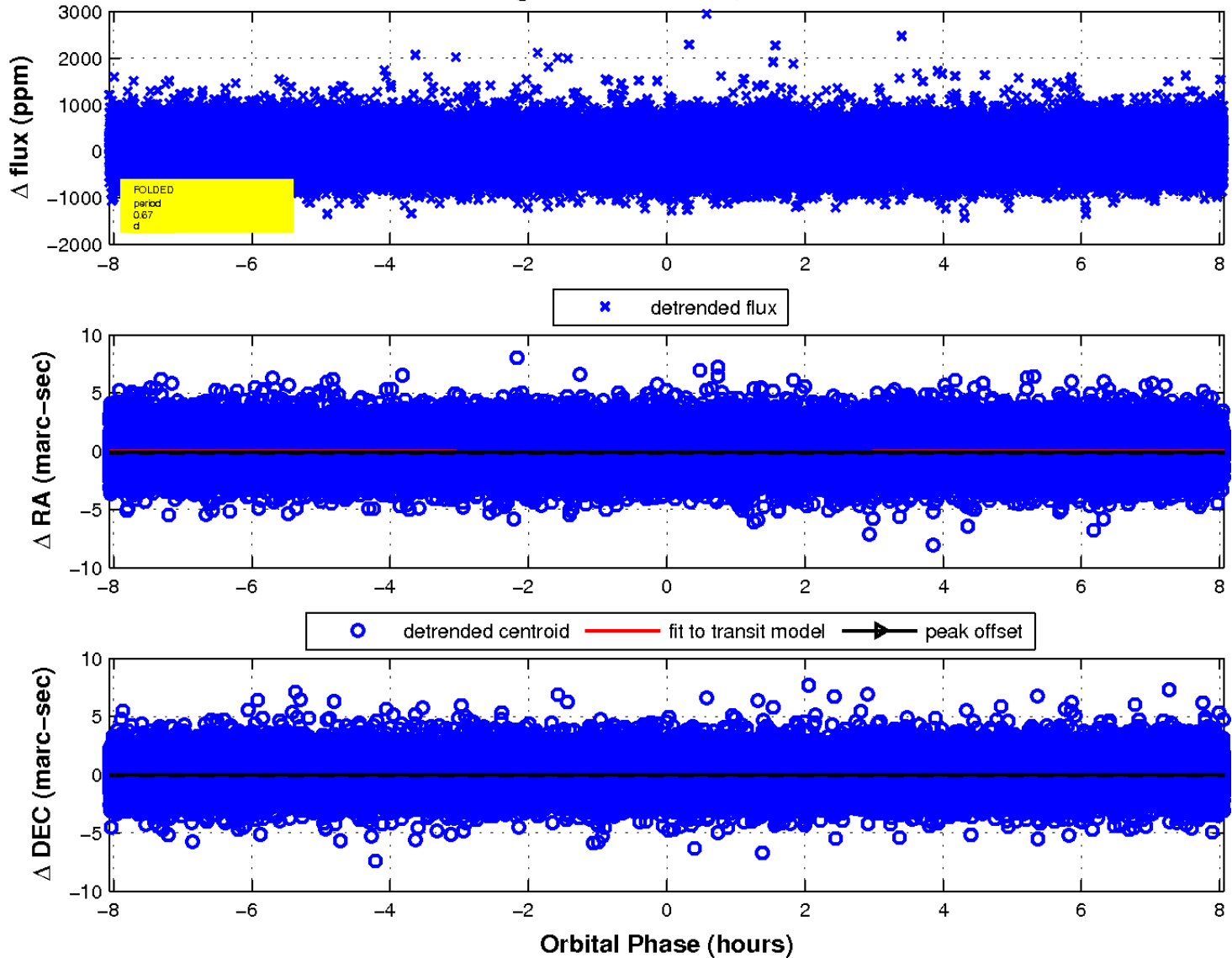
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

