

KIC 008885673

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})
008885673-01	OBS	2611.01	1.228716	132.273193	485.9	0.937	17.9	27.3	0.76	4897	1.65	727.90

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008885673-01	OBS	FP	0.00	0	0	1	0	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 008885673-01

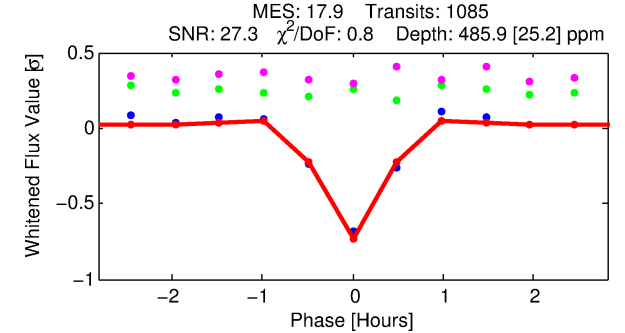
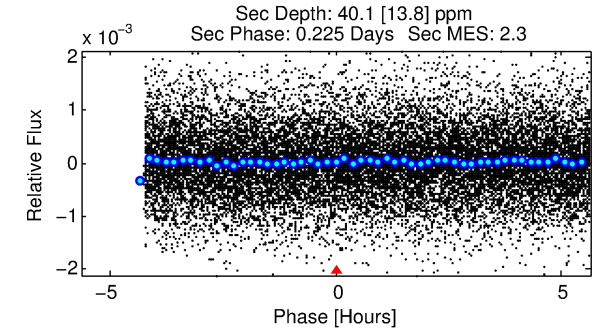
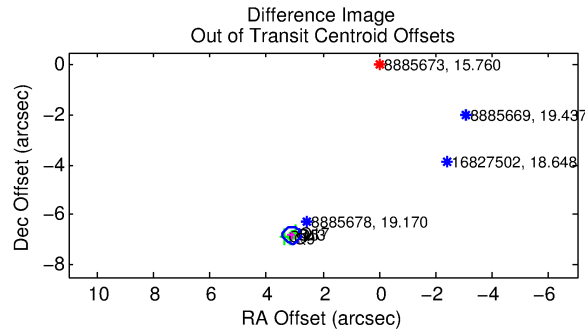
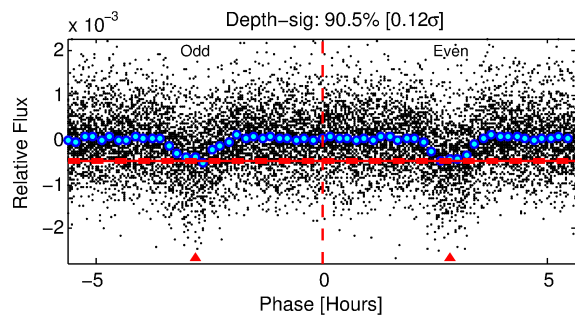
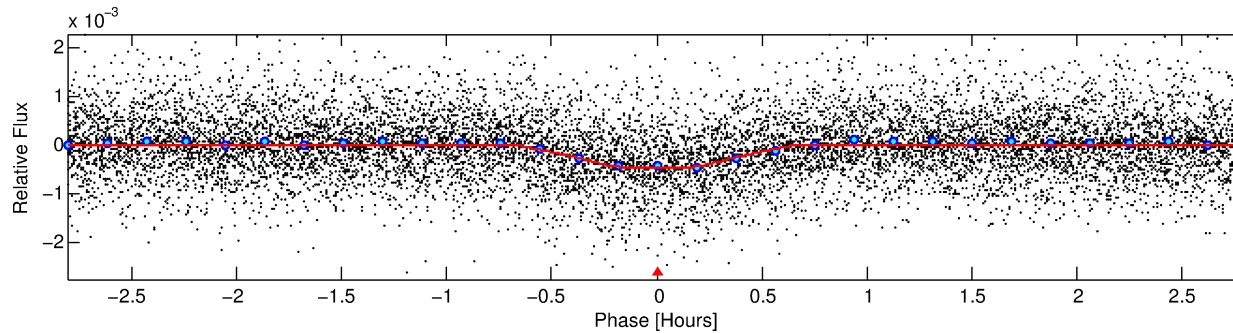
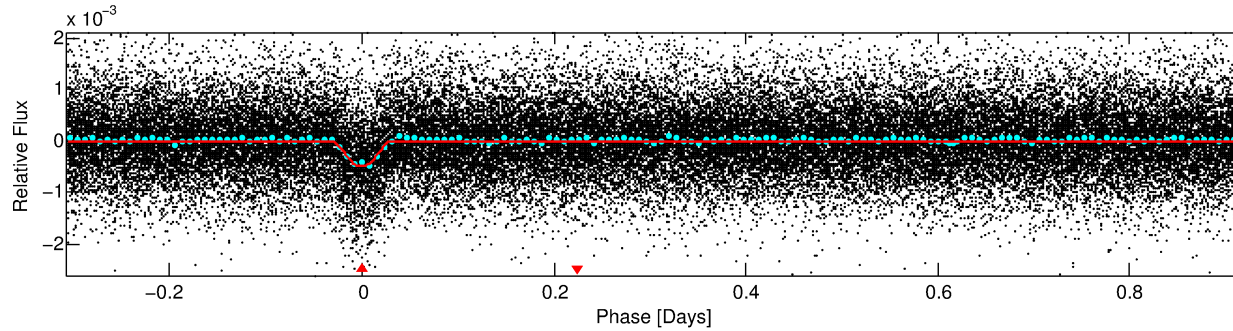
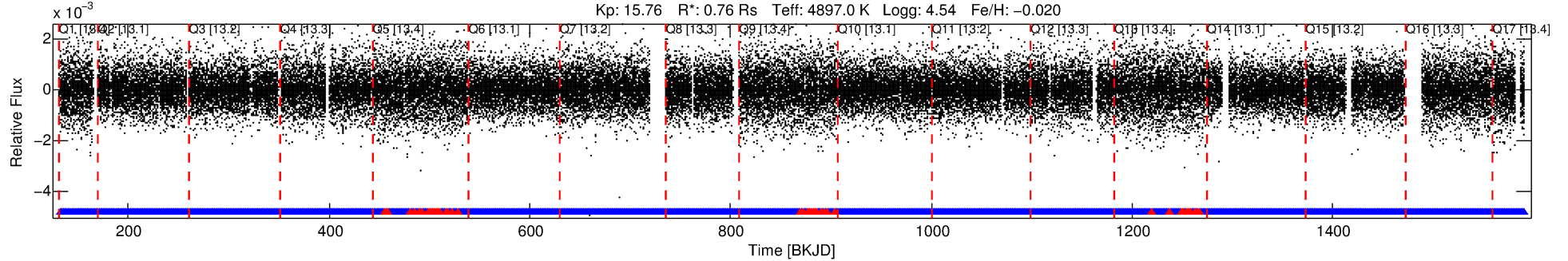
No Significant Match Found

DV One-Page Summary

KIC: 8885673 Candidate: 1 of 1 Period: 1.229 d

KOI: K02611.01 Corr: 0.940

Kp: 15.76 R*: 0.76 Rs Teff: 4897.0 K Logg: 4.54 Fe/H: -0.020



DV Fit Results:

Period = 1.22872 [0.00000] d
Epoch = 132.2732 [0.0006] BKJD
Rp/R* = 0.0198 [0.0128]
a/R* = 10.19 [21.52]
b = 0.09 [23.74]
Seff = 727.91 [127.25]
Teq = 1324 [58] K
Rp = 1.65 [1.08] Re
a = 0.0203 [0.0017] AU
Ag = 3.35 [4.51] [0.52σ]
Teff = 2770 [933] K [1.55σ]

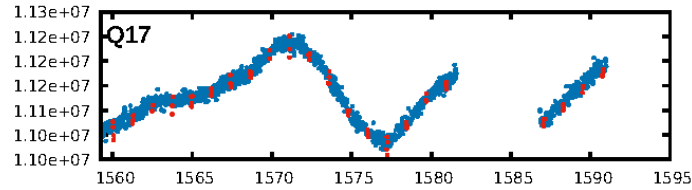
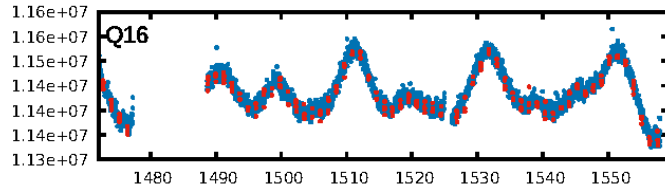
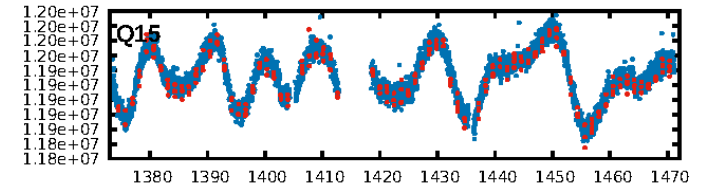
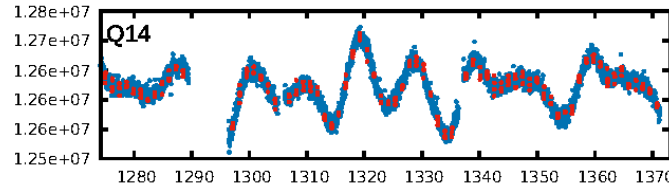
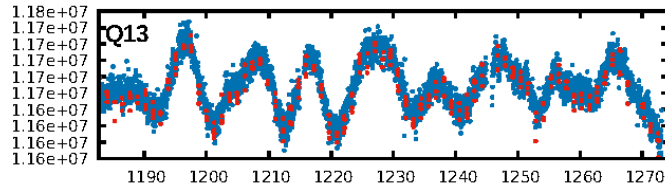
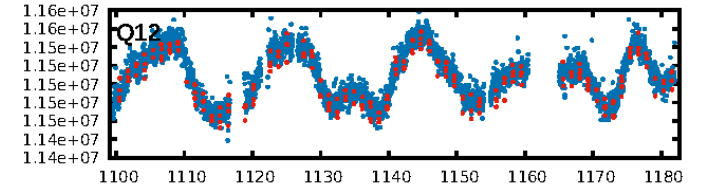
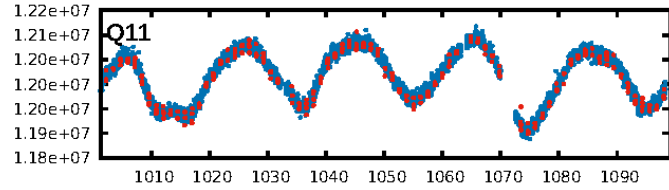
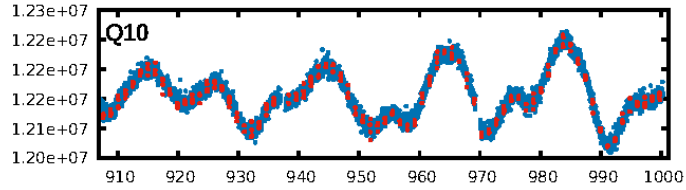
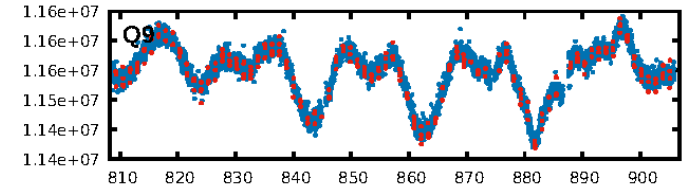
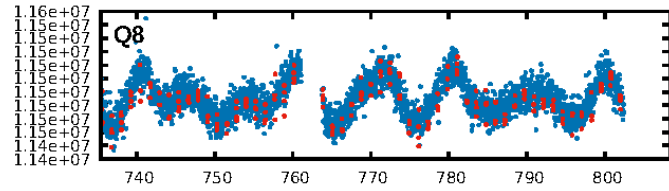
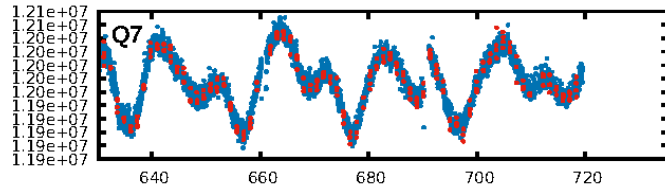
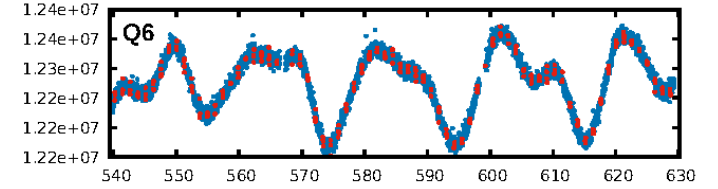
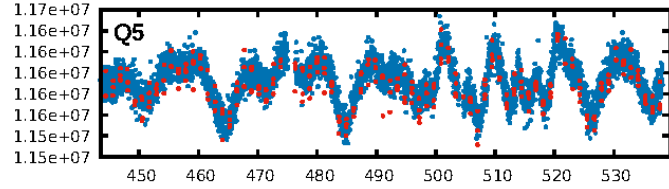
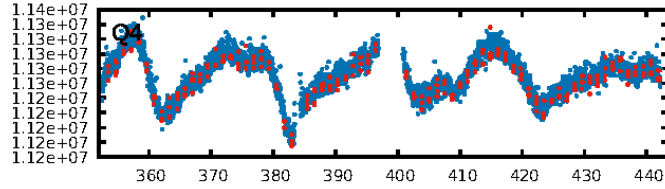
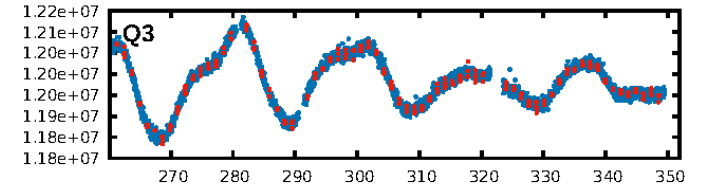
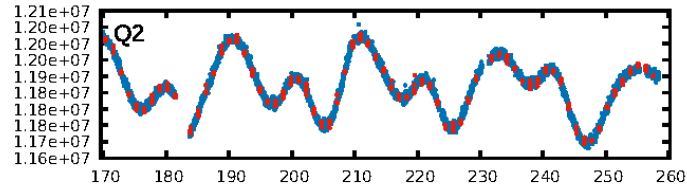
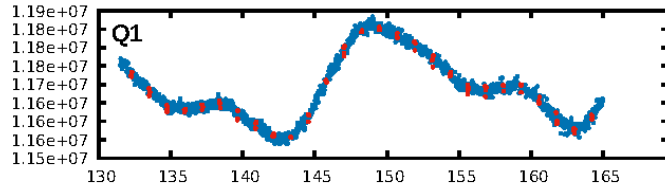
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.43e-69
RollingBand-fgt: 0.95 [987/1036]
GhostDiagnostic-chr: -0.4868
Centroid-sig: 0.0%
Centroid-so: 18.148 arcsec [36.43σ]
OotOffset-rm: 7.507 arcsec [69.55σ]
KicOffset-rm: 7.577 arcsec [70.04σ]
OotOffset-st: 0/0/0/5 [5]
KicOffset-st: 0/0/0/5 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 1.00 [17/17]

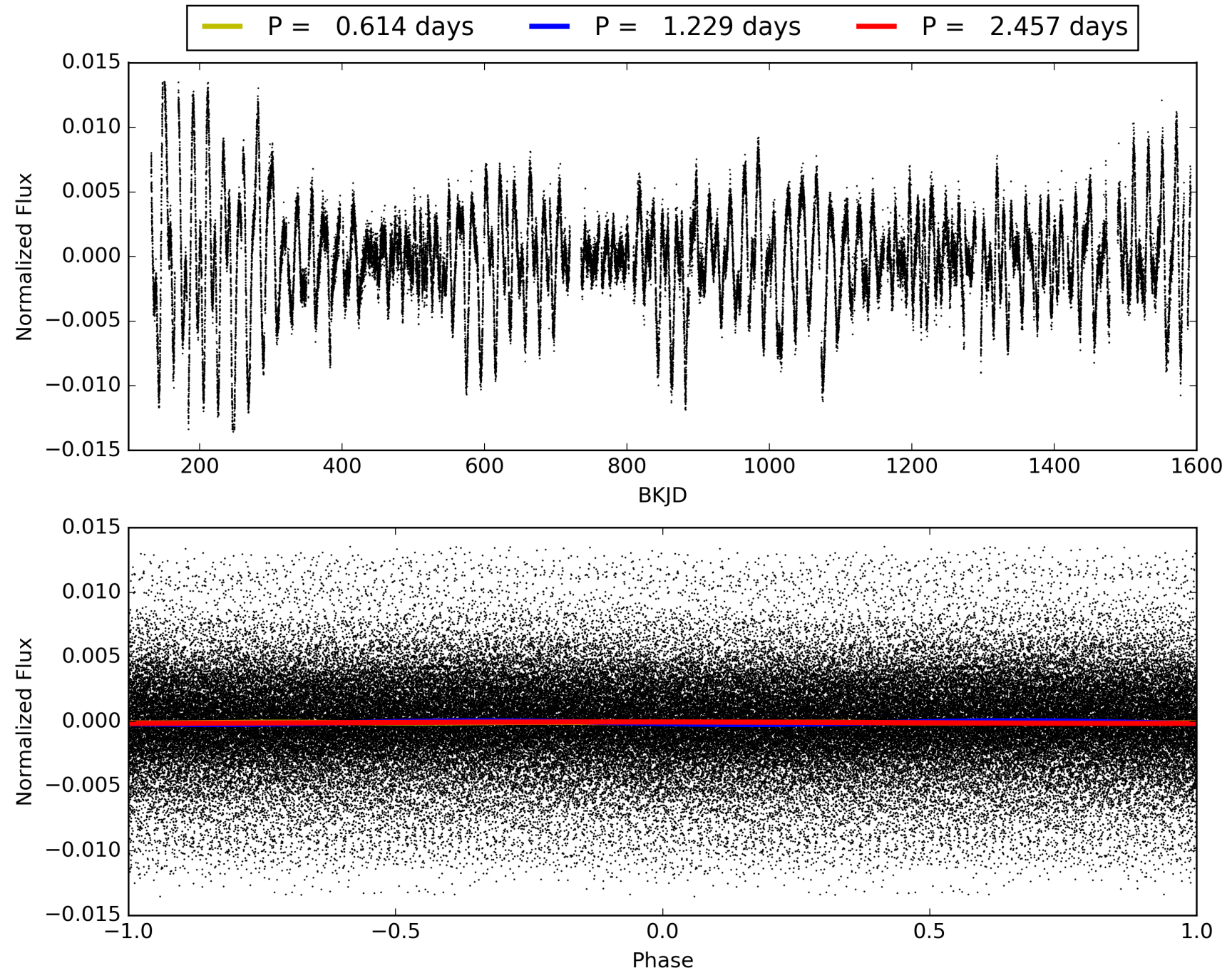
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 15:32:09 Z

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

TCE 00885673-01, PDC Light Curves

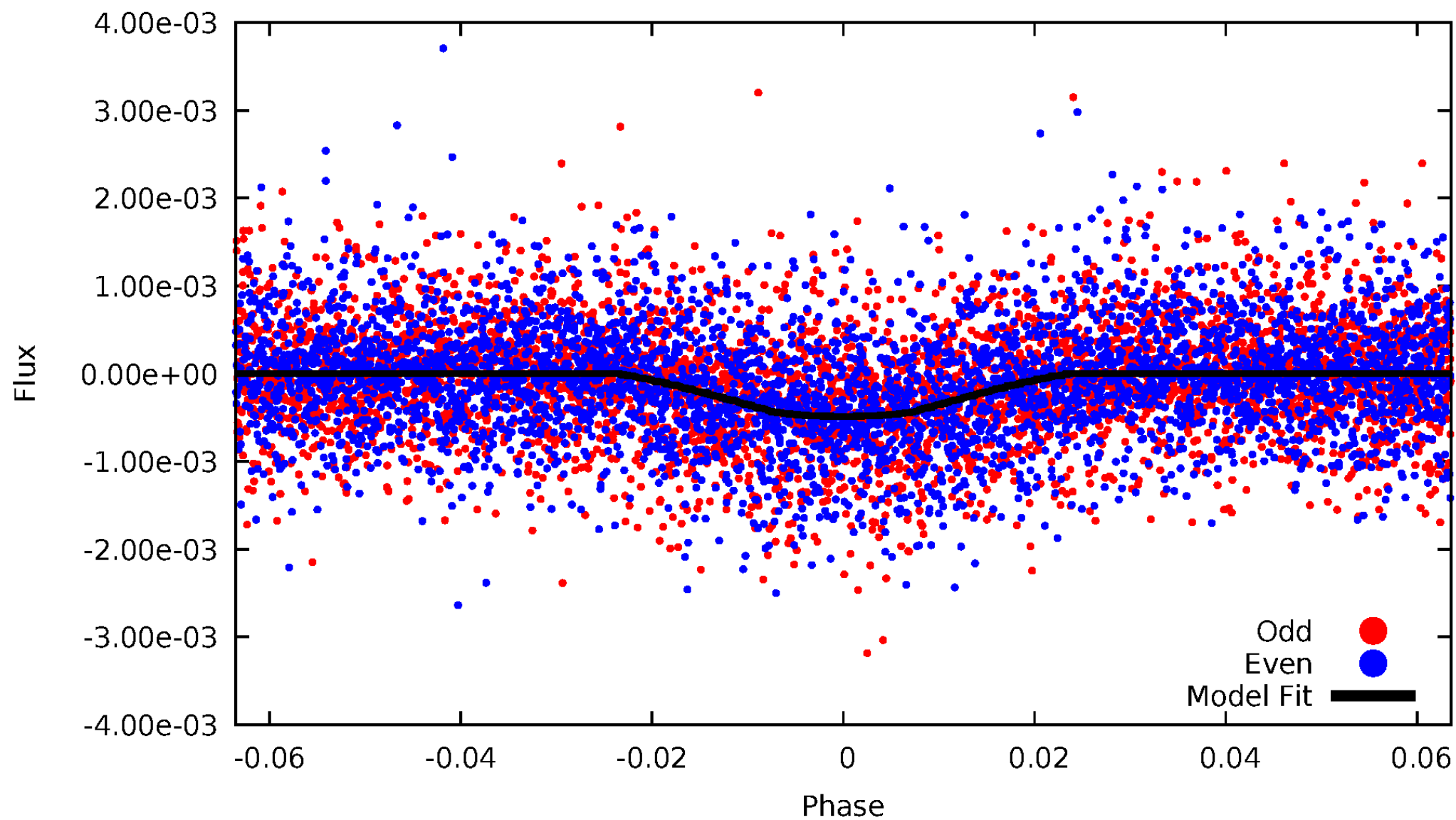


TCE 008885673-01



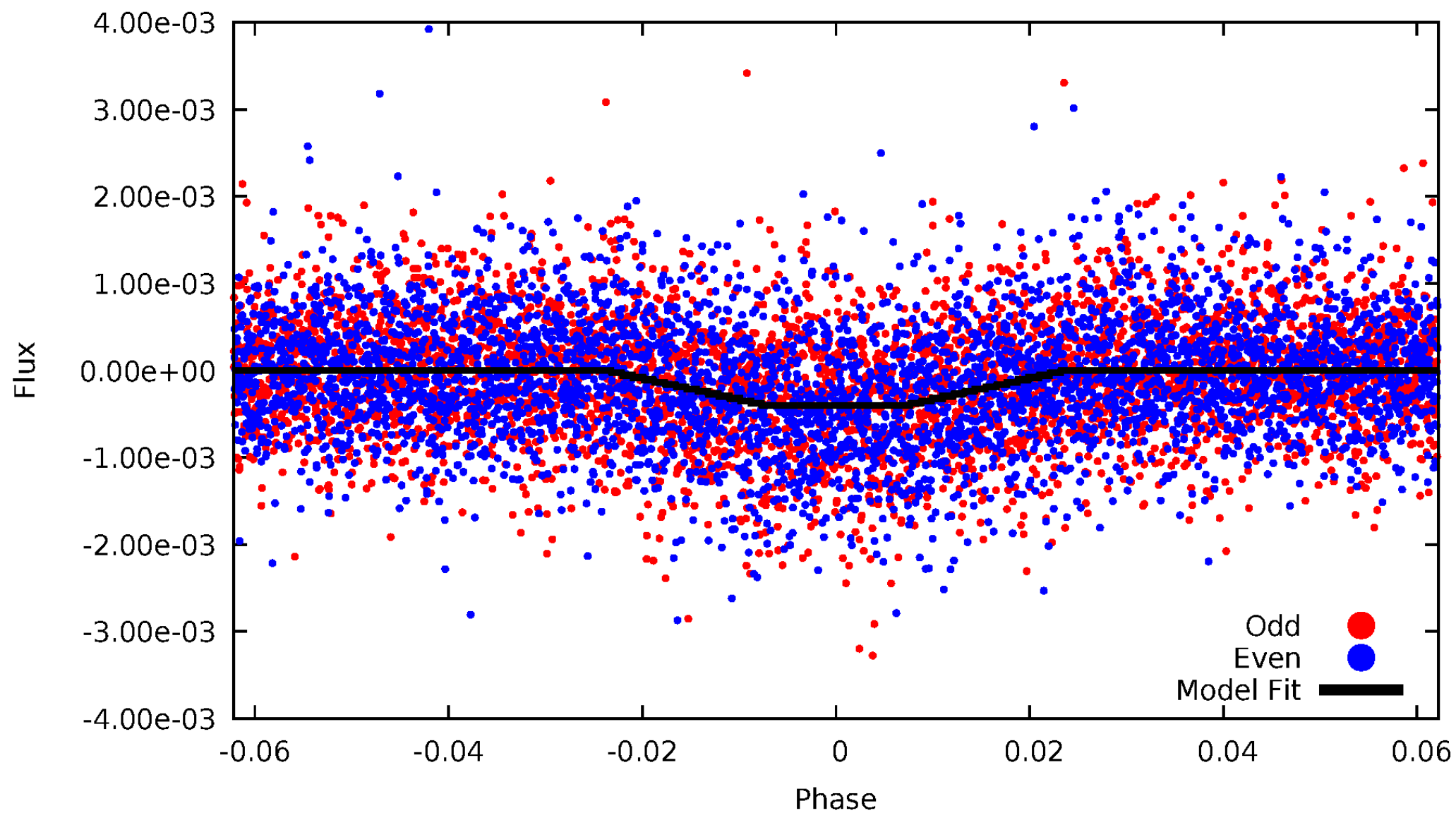
DV Odd/Even

TCE 008885673-01



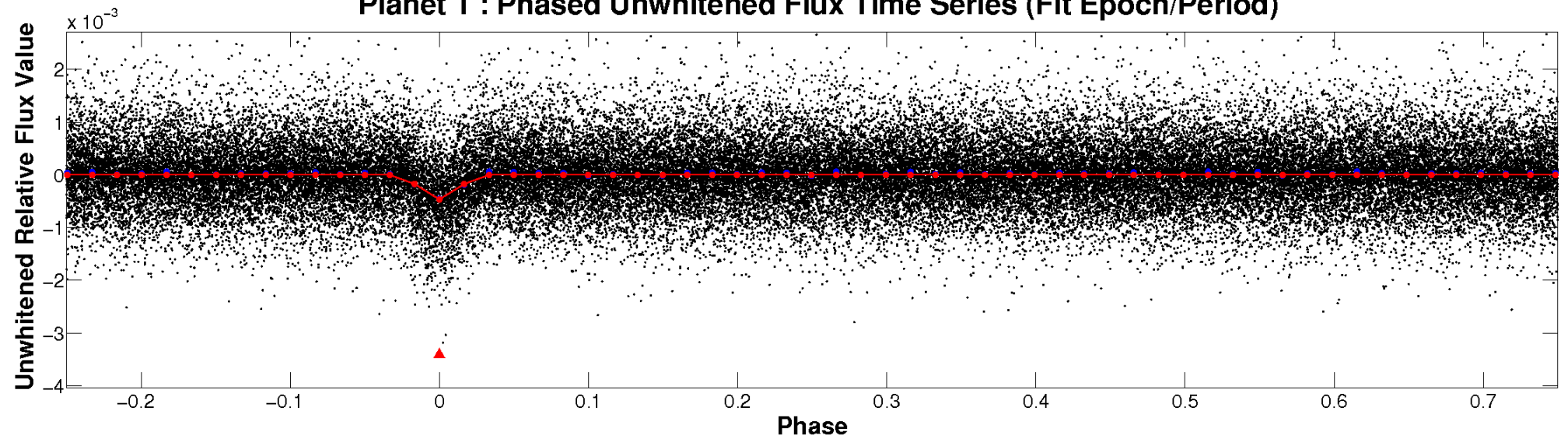
ALT Odd/Even

TCE 008885673-01

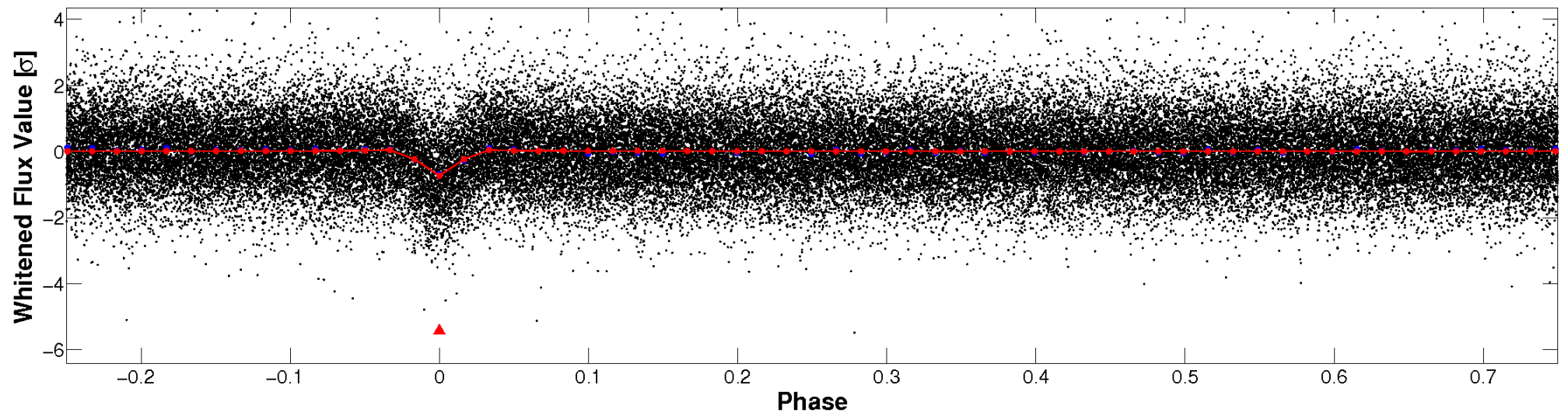


Non-Whitened Vs. Whitened Light Curve

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

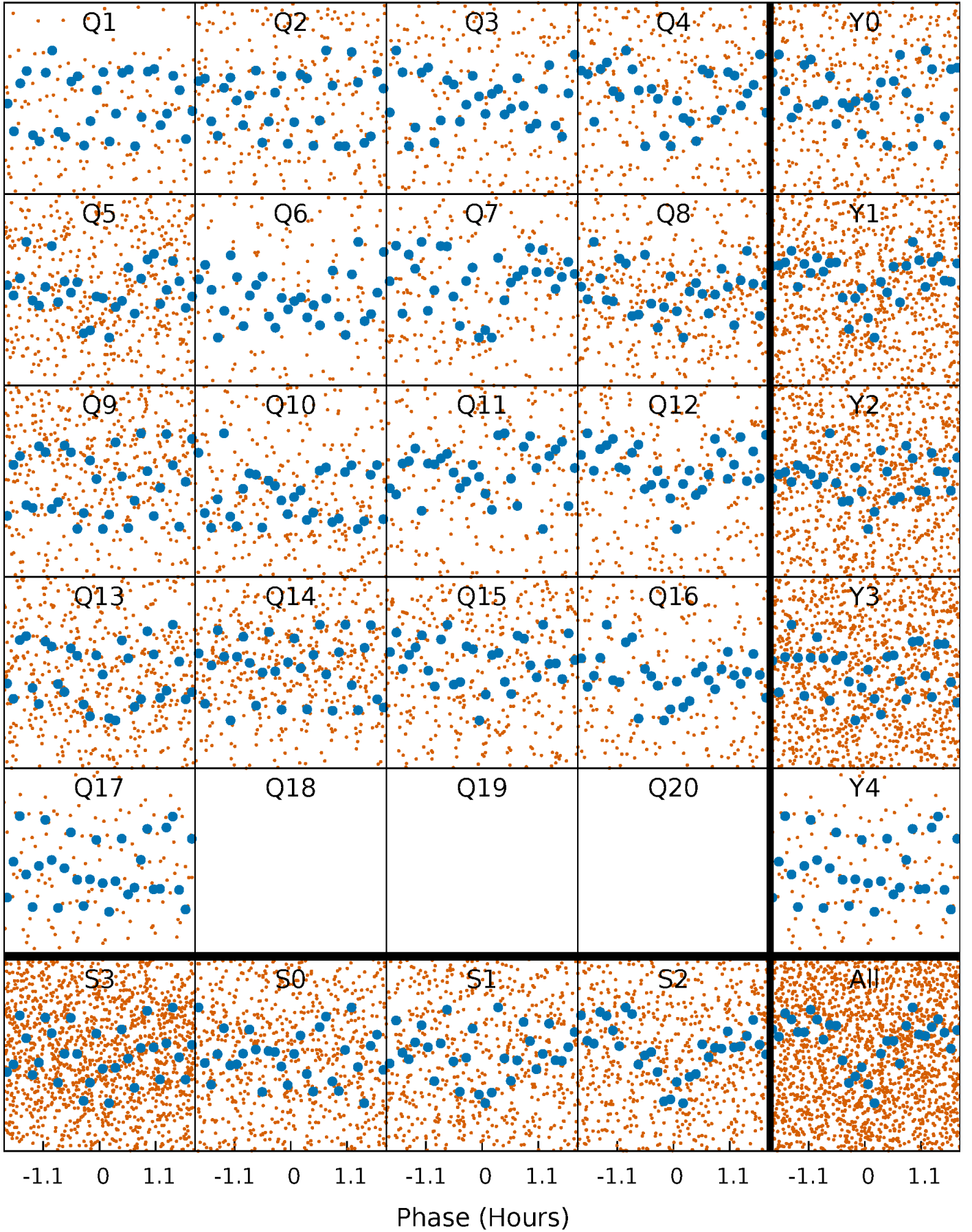


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



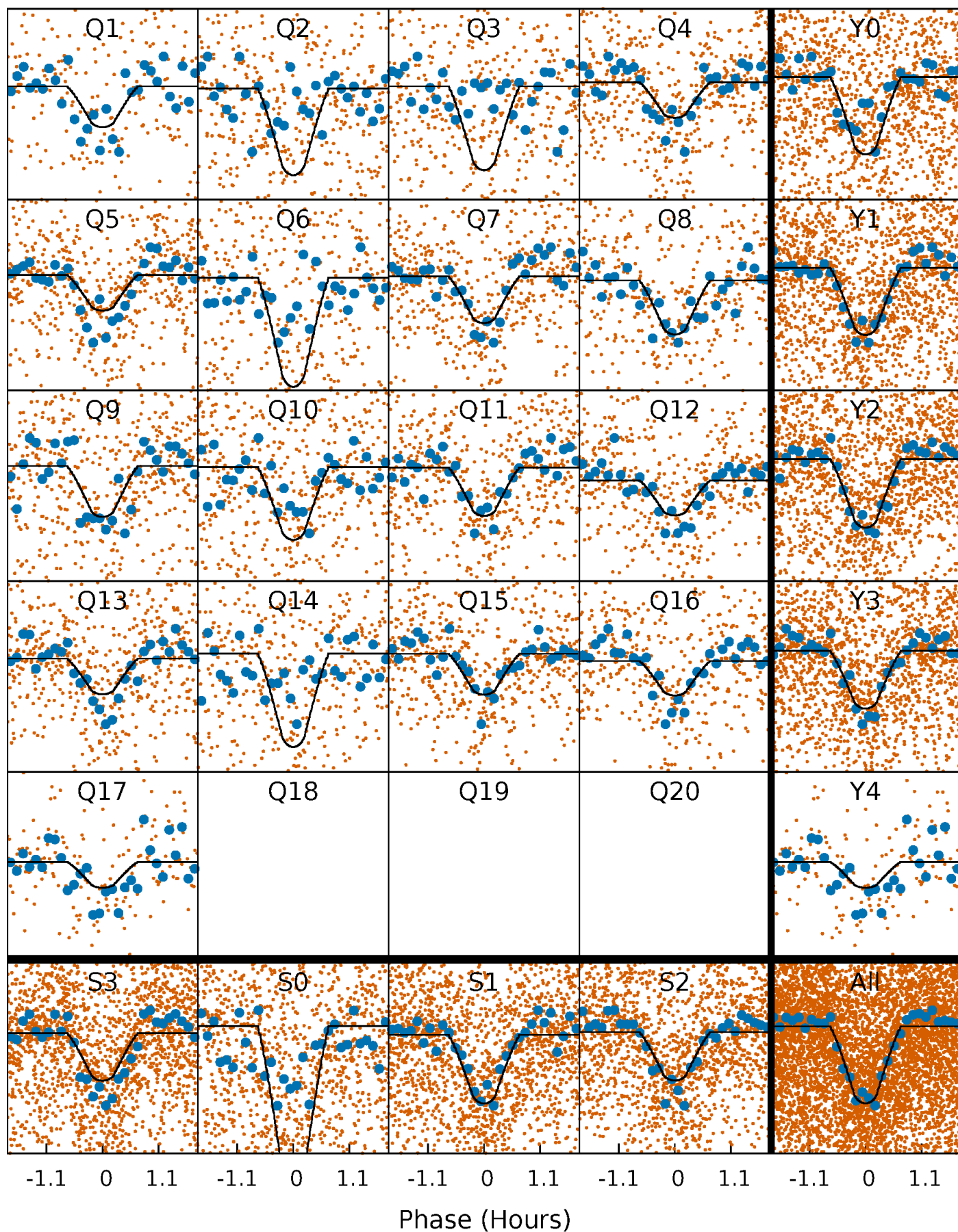
PDC Quarter-Phased Transit Curves

TCE 008885673-01 P= 1.228716 Days $T_0=132.273193$ (BKJD)



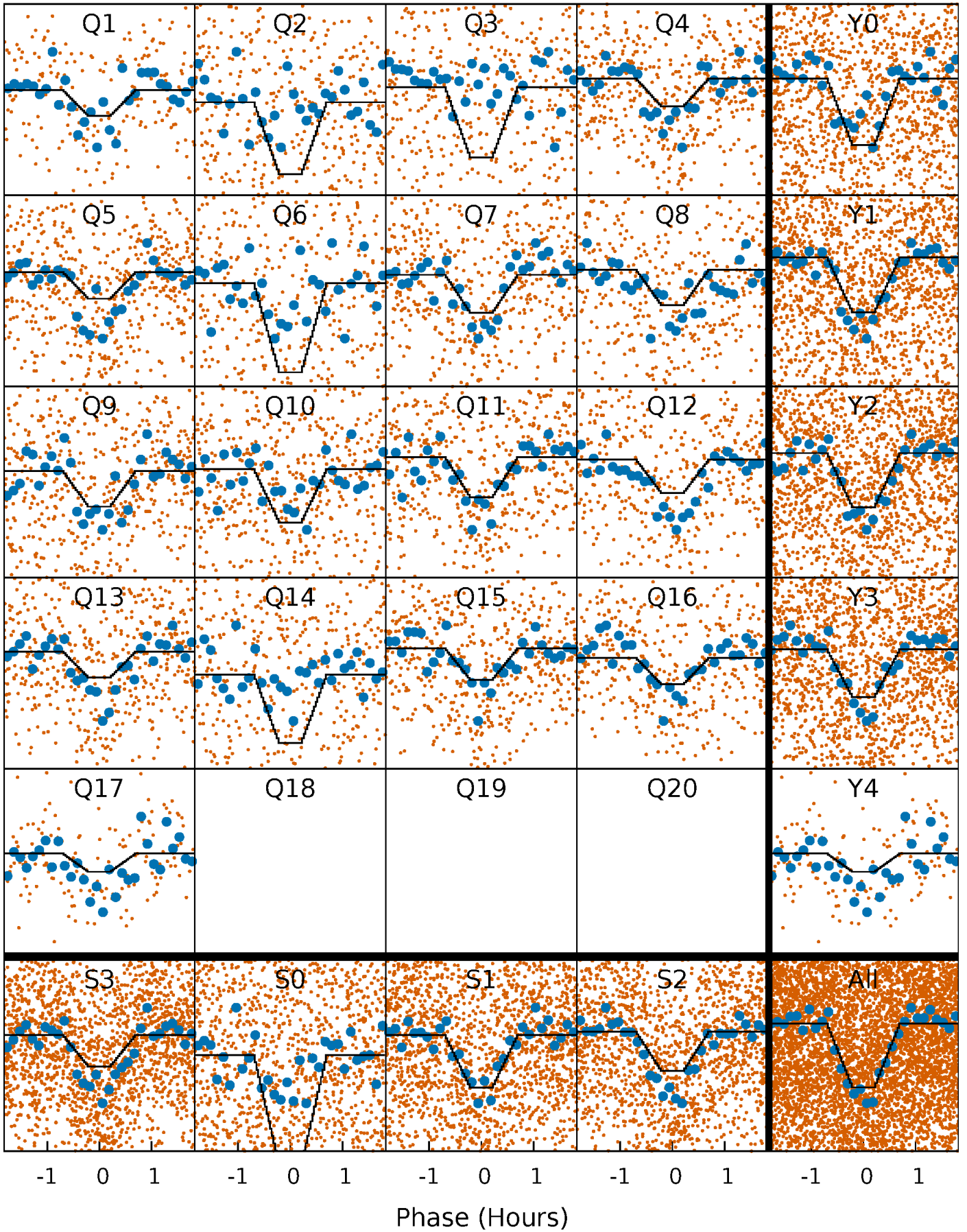
DV Quarter-Phased Transit Curves

TCE 008885673-01 P= 1.228716 Days $T_0=132.273193$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

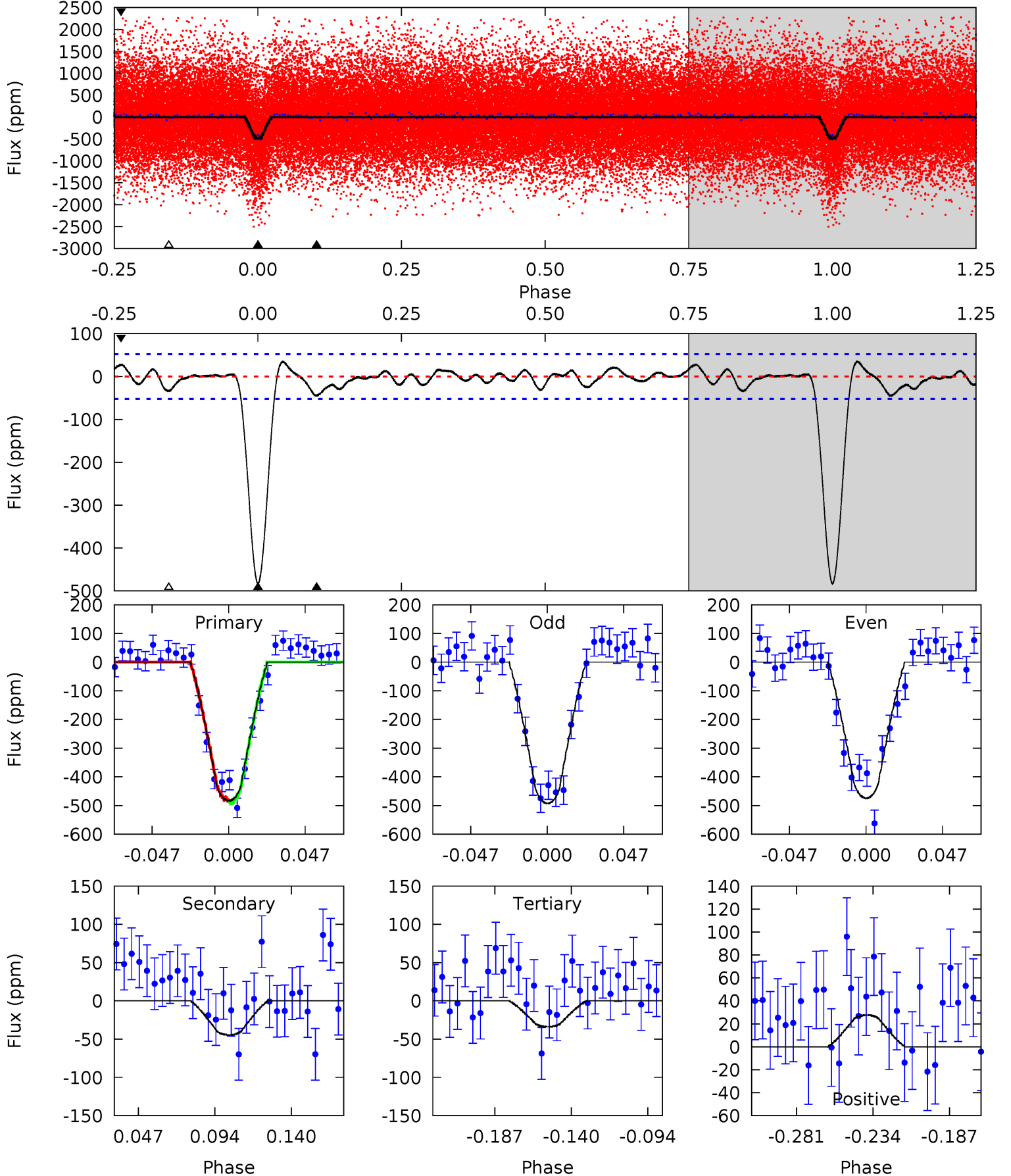
TCE 008885673-01 P= 1.228717 Days $T_0=132.273080$ (BKJD)



DV Model-Shift Uniqueness Test

008885673-01, P = 1.228716 Days, E = 131.044477 Days

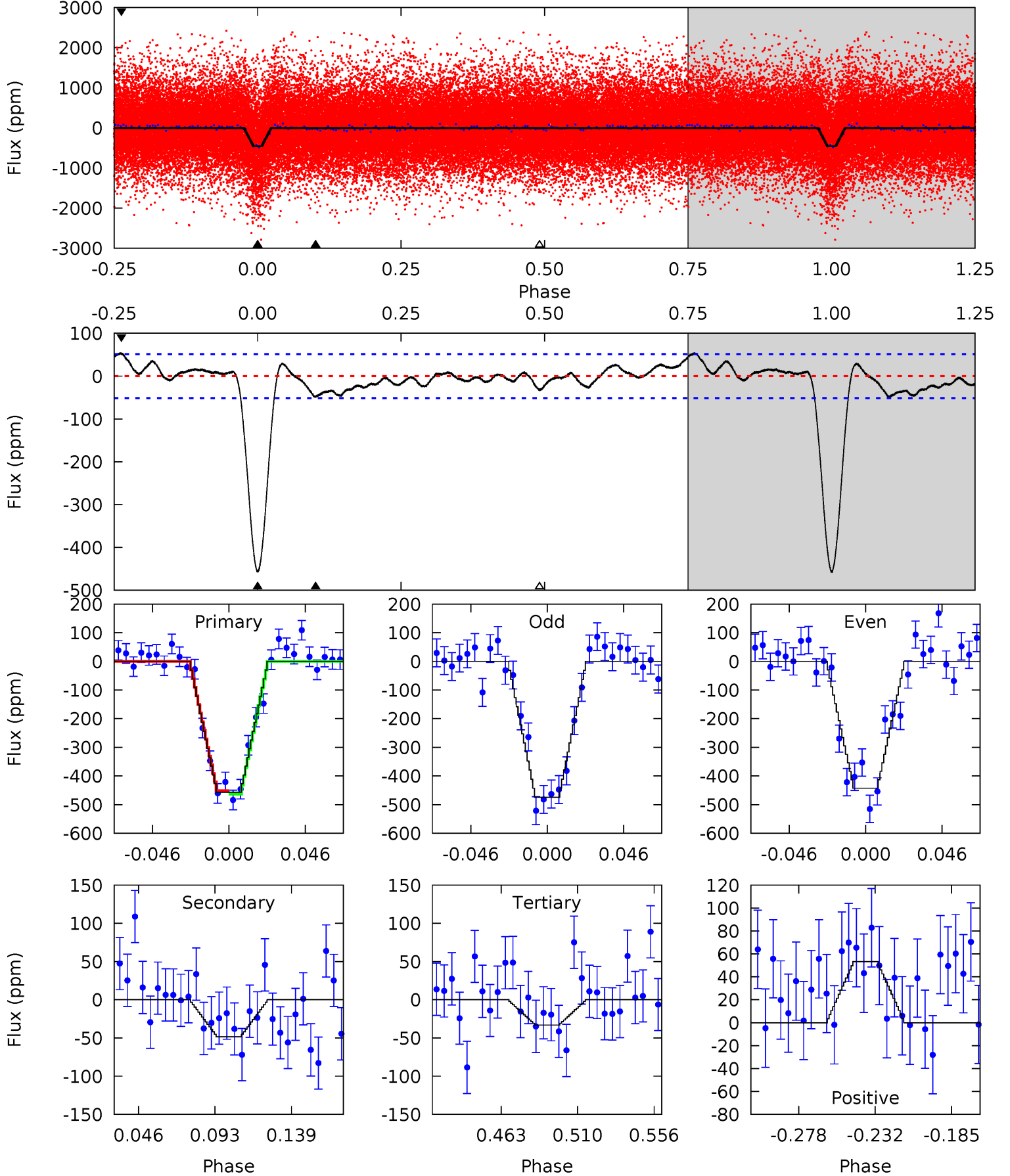
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.8	4.04	3.07	2.51	4.72	1.99	1.09	40.8	41.3	0.97	1.53	0.83	1.00	0.07	0.41



Alt Model-Shift Uniqueness Test

008885673-01, P = 1.228717 Days, E = 131.044363 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
41.9	4.44	3.03	4.88	4.72	1.99	1.64	38.9	37.1	1.41	-0.44	1.45	1.03	0.10	0.56



Stellar Parameters For KIC 008885673

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4897^{+148}_{-133}	$4.542^{+0.072}_{-0.039}$	$-0.020^{+0.300}_{-0.300}$	$0.764^{+0.056}_{-0.070}$	$0.742^{+0.083}_{-0.055}$	$2.346^{+0.667}_{-0.361}$
	+3%/-3%	+2%/-1%	+1500%/-1500%	+7%/-9%	+11%/-7%	+28%/-15%
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 008885673-01 / KOI 2611.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-45 ± 11	$1.65^{+1.05}_{-0.91}$	1844^{+71}_{-68}	3266^{+1106}_{-491}	$3.623^{+14.798}_{-2.301}$
Alt.	-48 ± 11	$1.76^{+1.05}_{-0.91}$	1841^{+67}_{-63}	3229^{+983}_{-475}	$3.491^{+12.341}_{-2.188}$

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 $A_{obs} \gg 1.0$

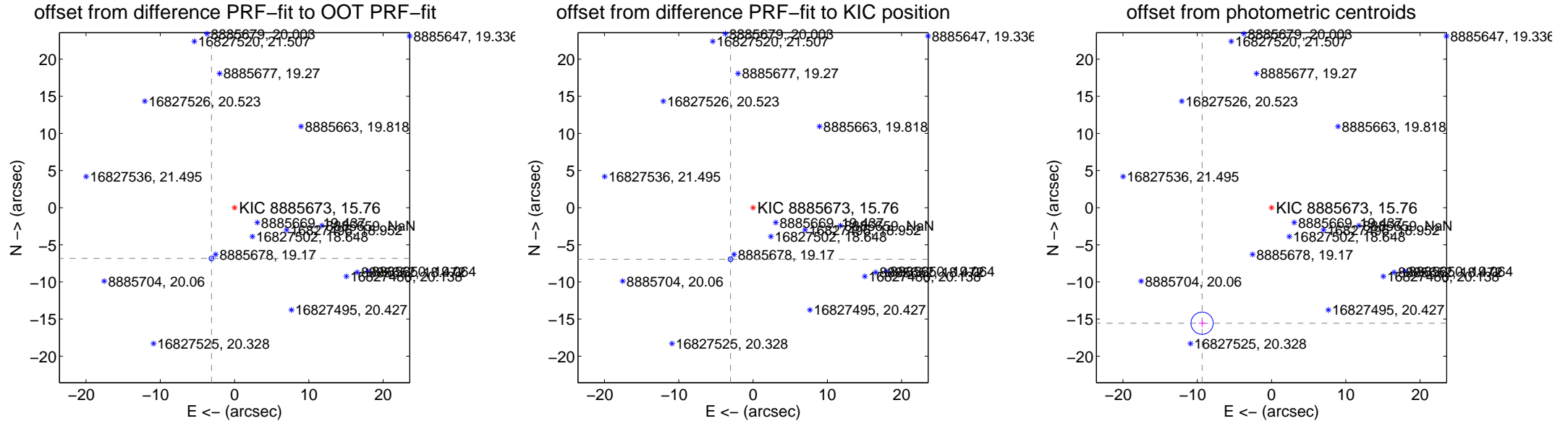
DV Centroid Data

Supplemental centroid analysis for 008885673-01. Kepler magnitude: 15.76. Transit SNR 27.29

There are 5 quarters with good PRF difference image offsets

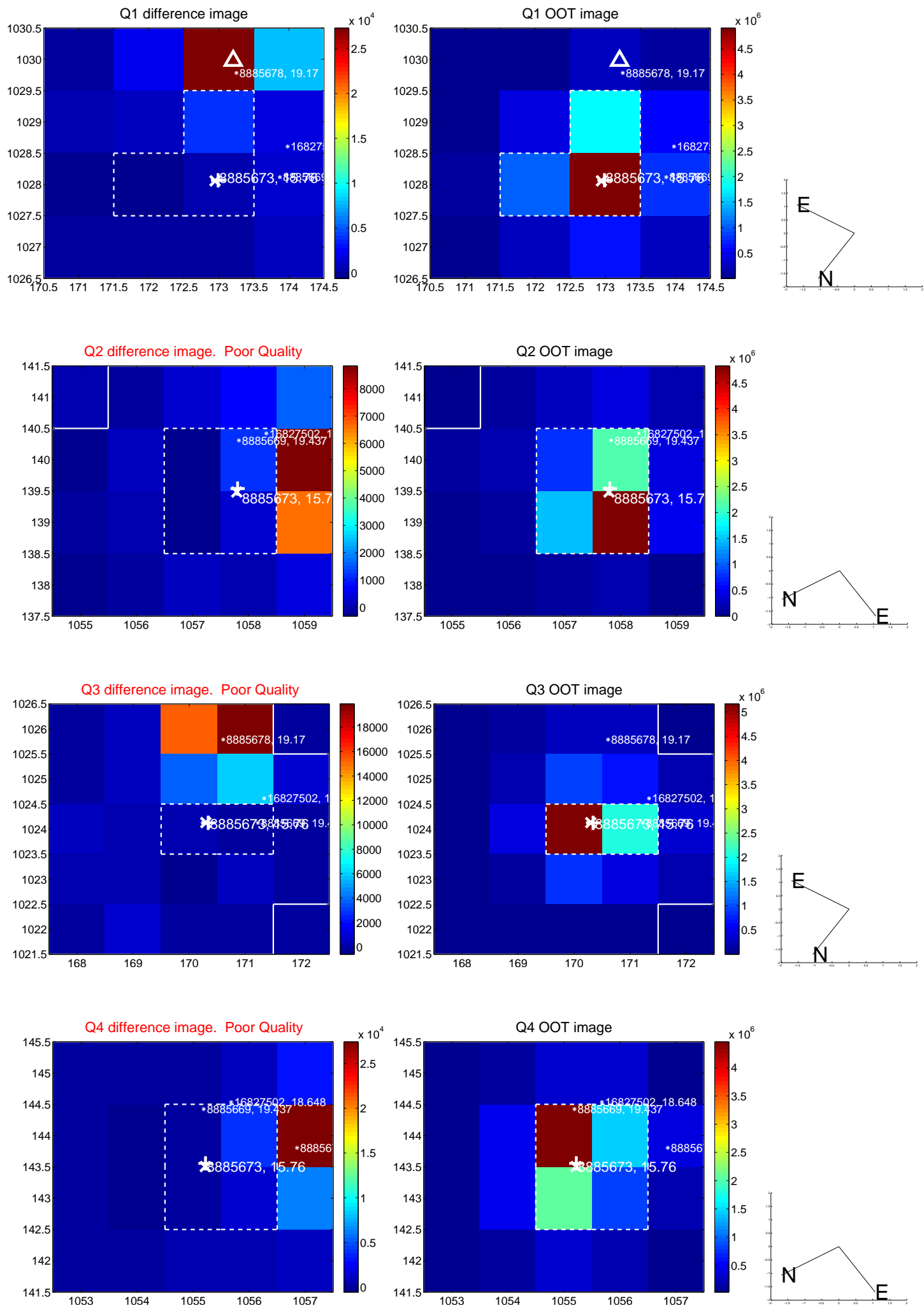
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.507 \pm 0.108	69.55	3.105 \pm 0.088	-6.835 \pm 0.112
PRF-fit source offset from KIC position	7.577 \pm 0.108	70.04	3.033 \pm 0.088	-6.943 \pm 0.112
photometric centroid source offset	18.15 \pm 0.50	36.43	9.35 \pm 0.47	-15.56 \pm 0.51

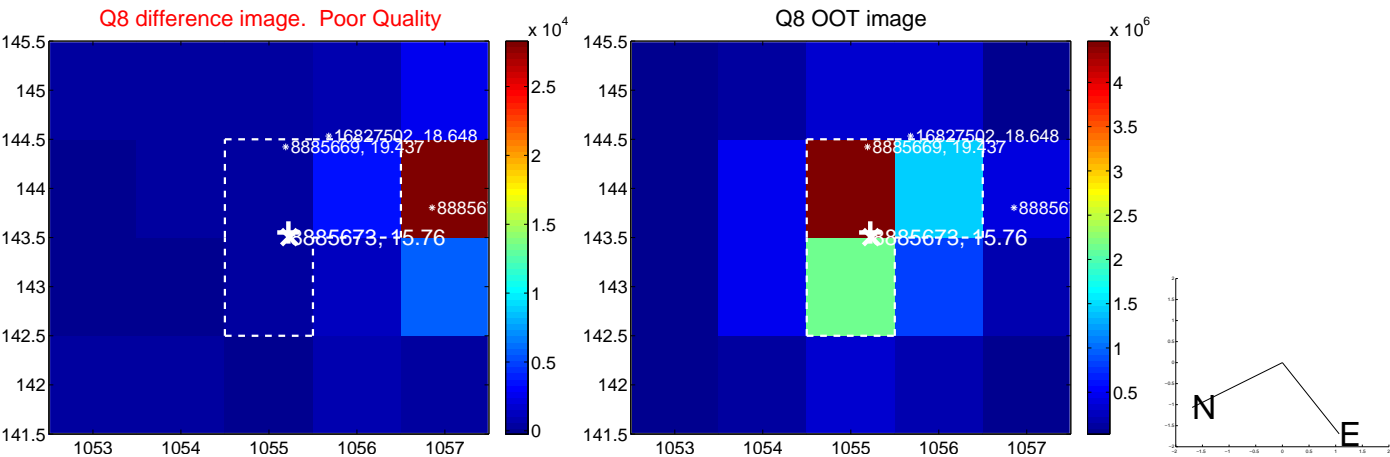
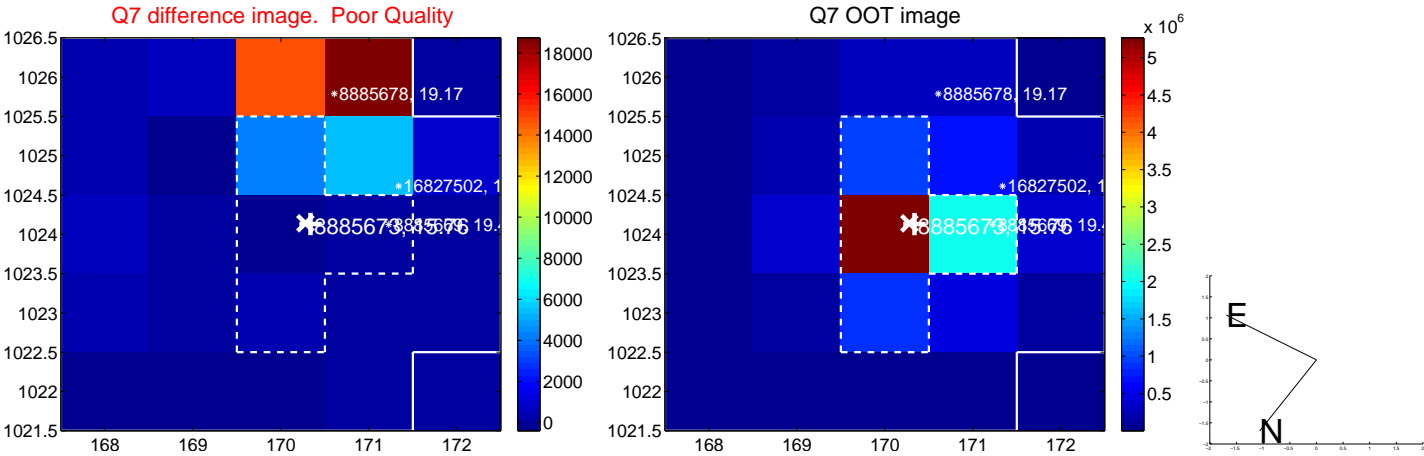
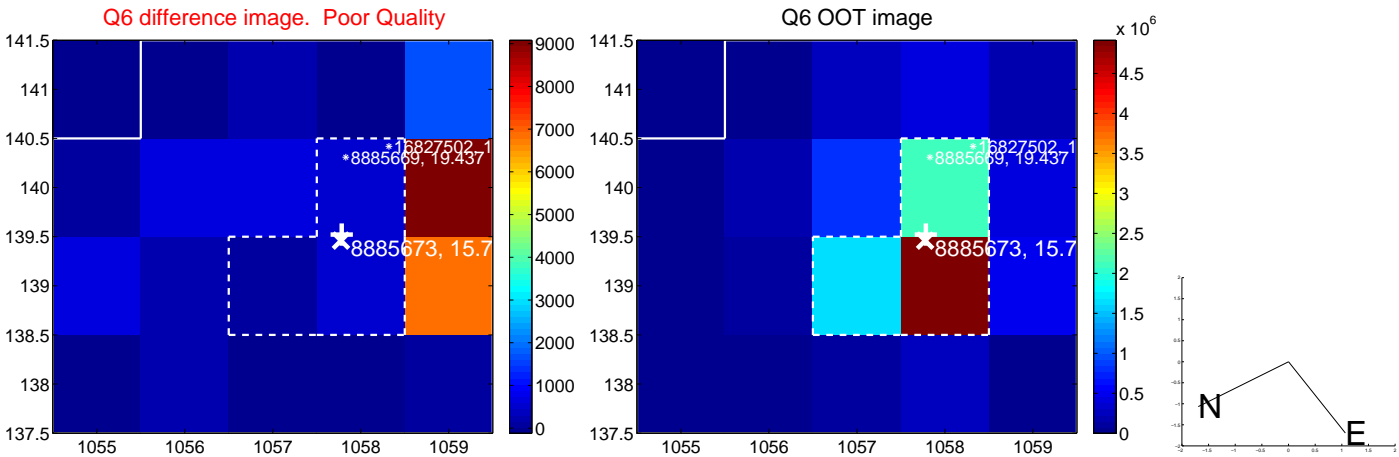
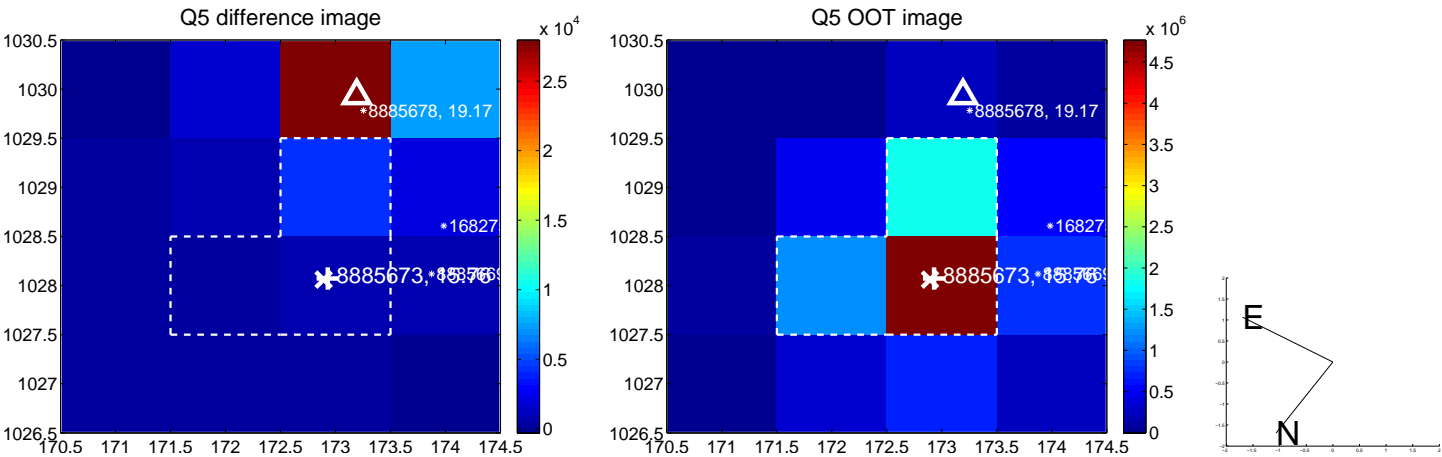


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000 are from the UKIRT catalog.

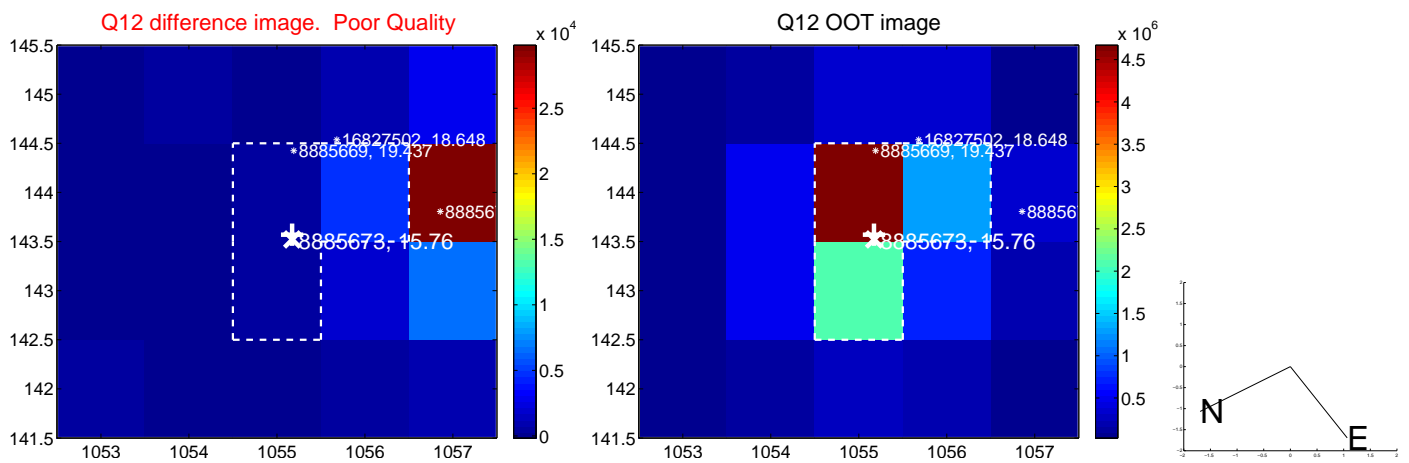
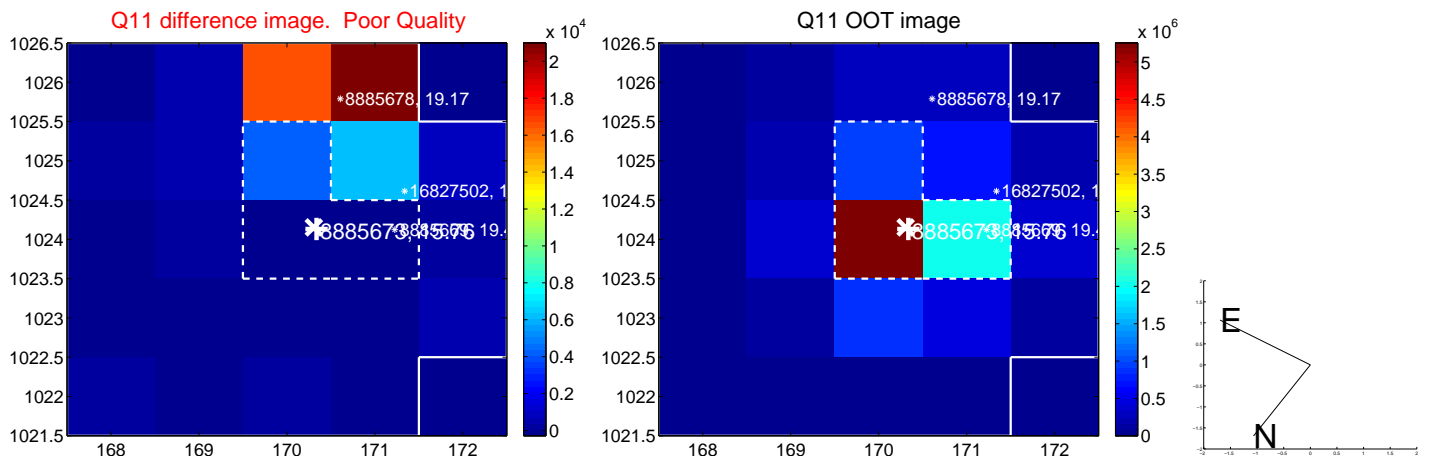
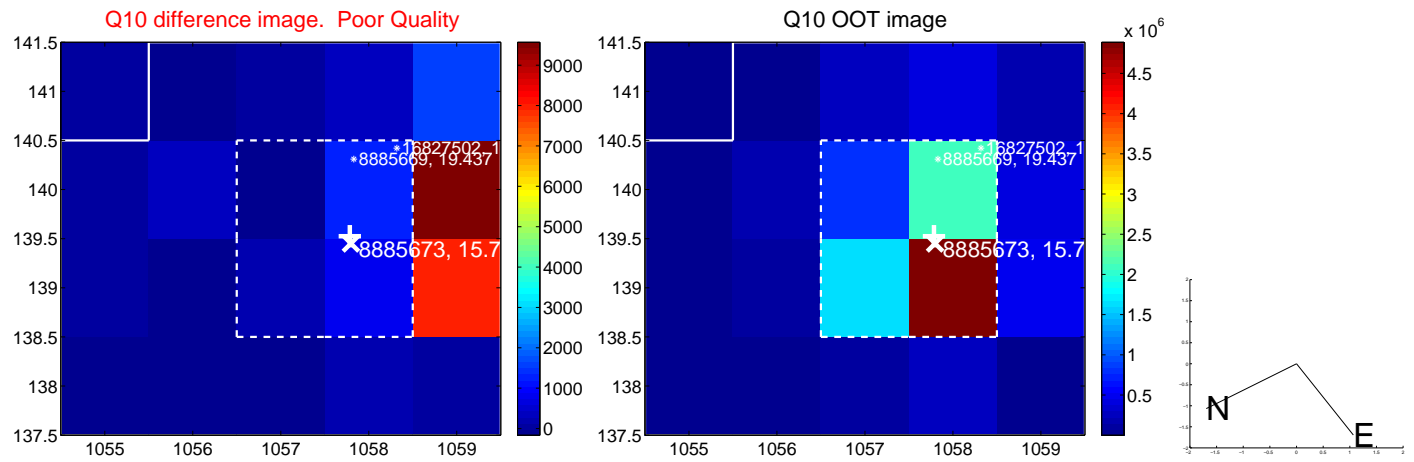
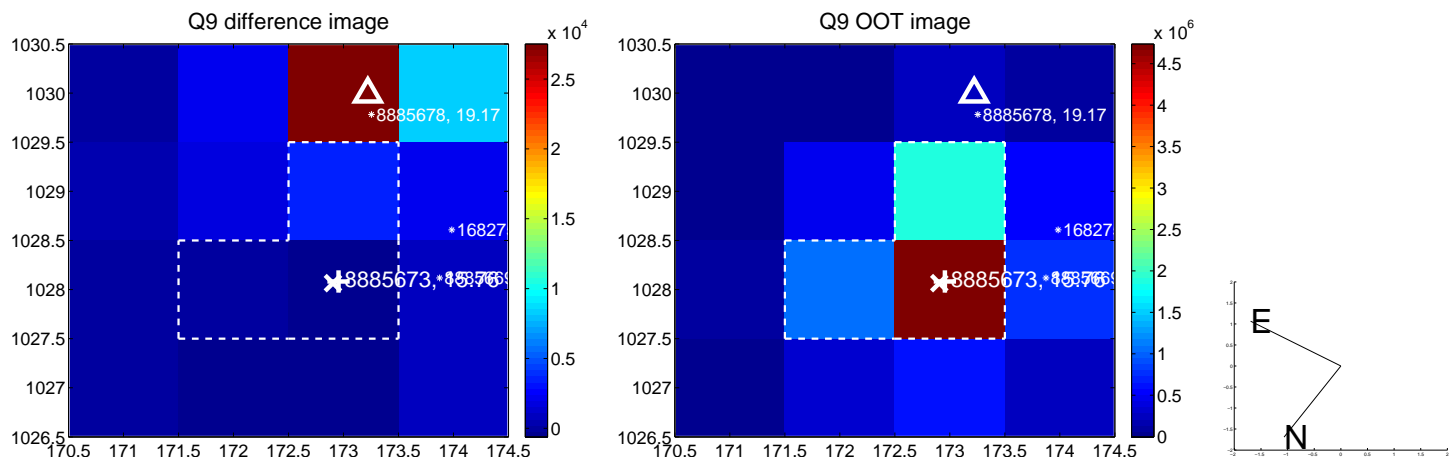
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



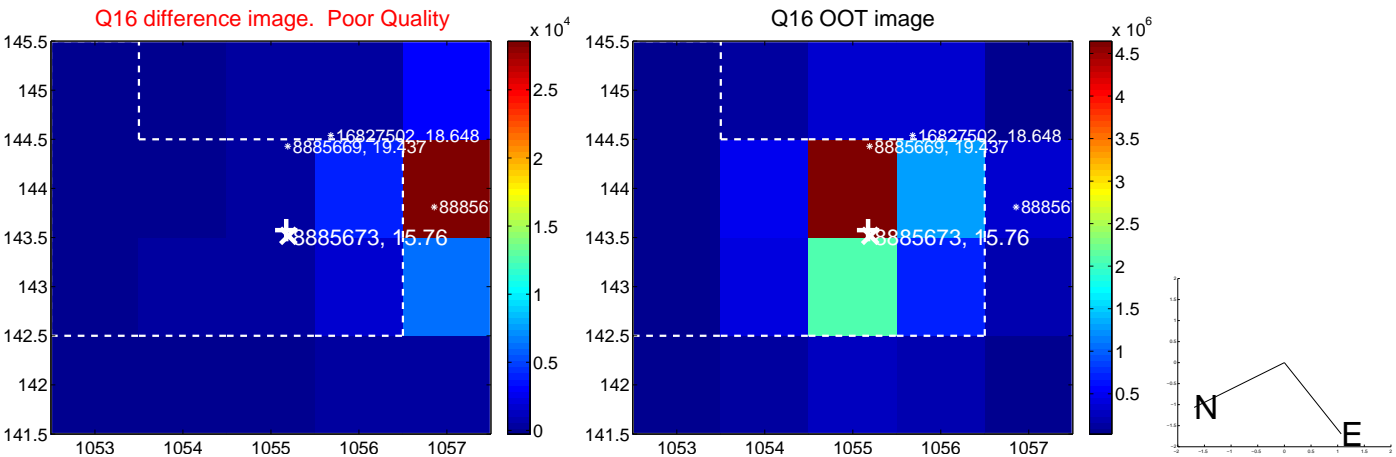
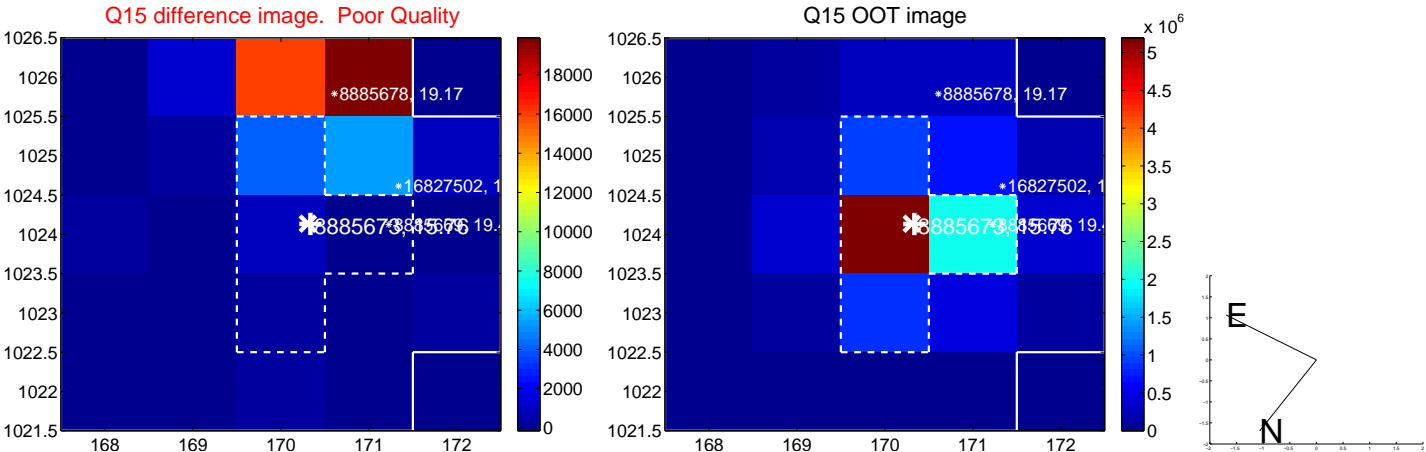
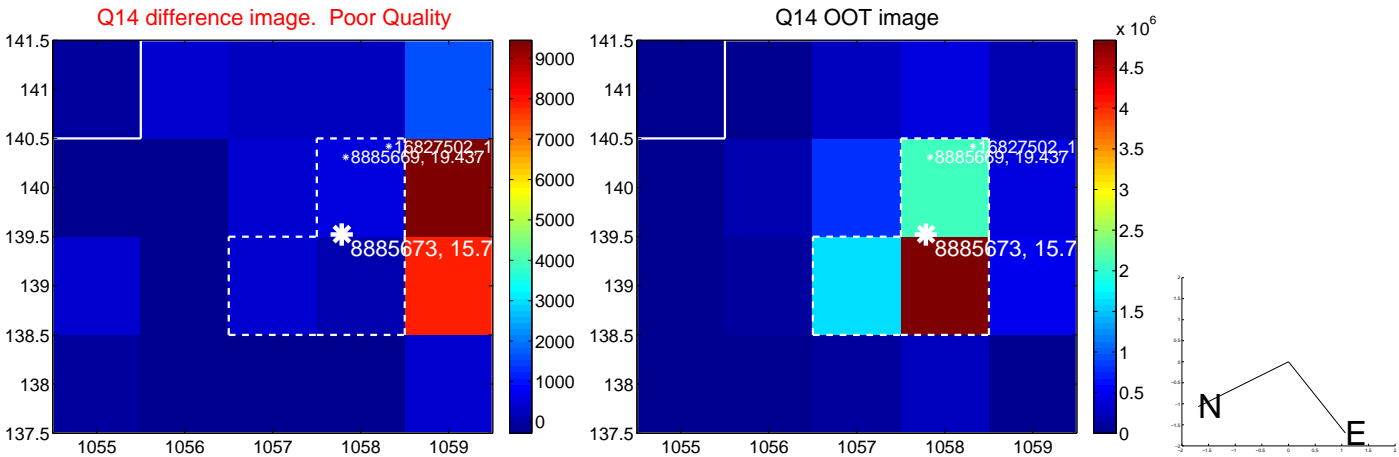
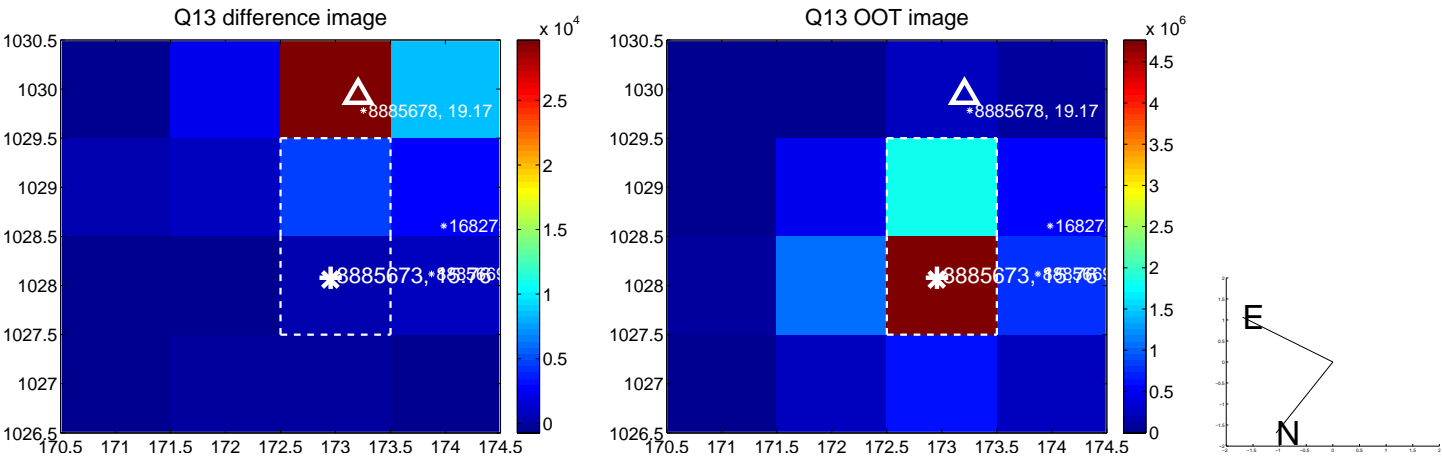
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



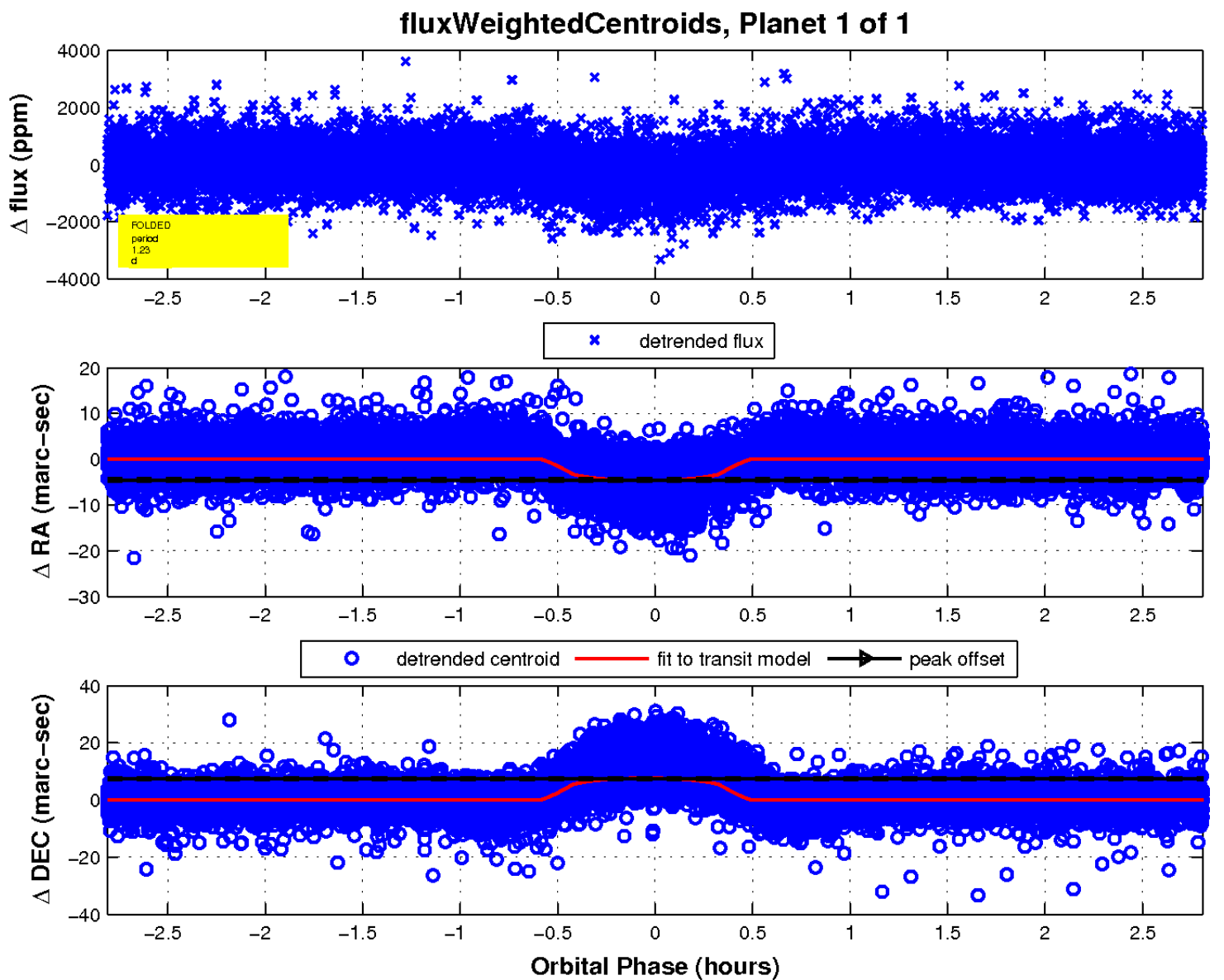
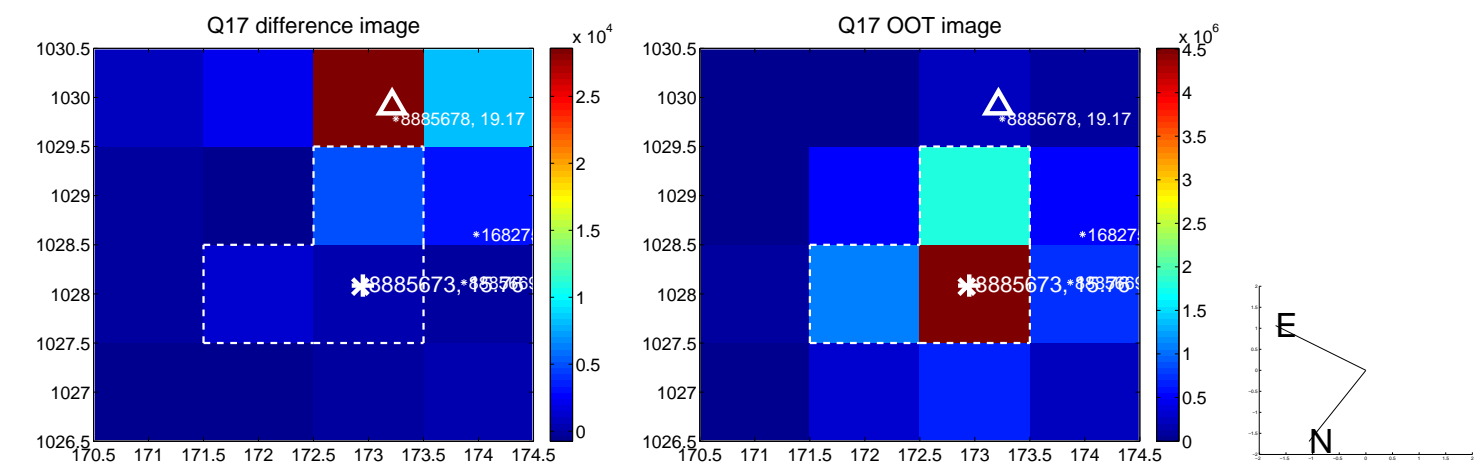
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

