

KIC 003867299

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})
003867299-01	OBS	No	1.384938	132.455212	72.8	2.219	8.0	8.6	1.58	6632	1.57	6209.21

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003867299-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV—CENT_KIC_POS

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

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

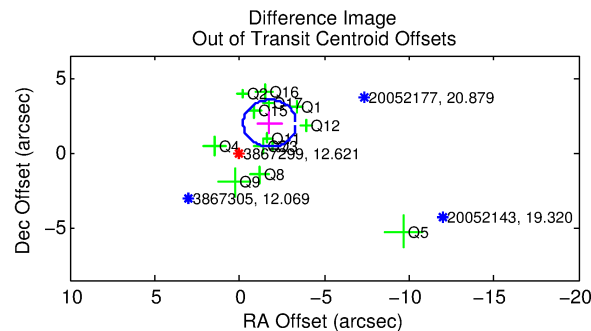
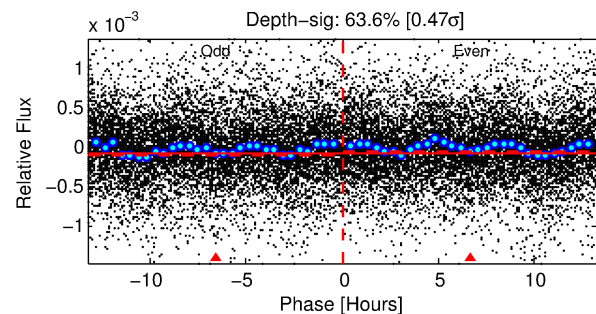
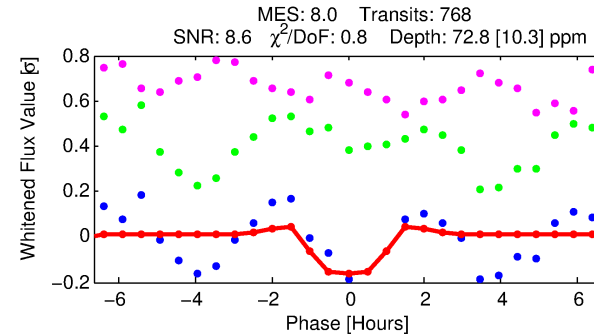
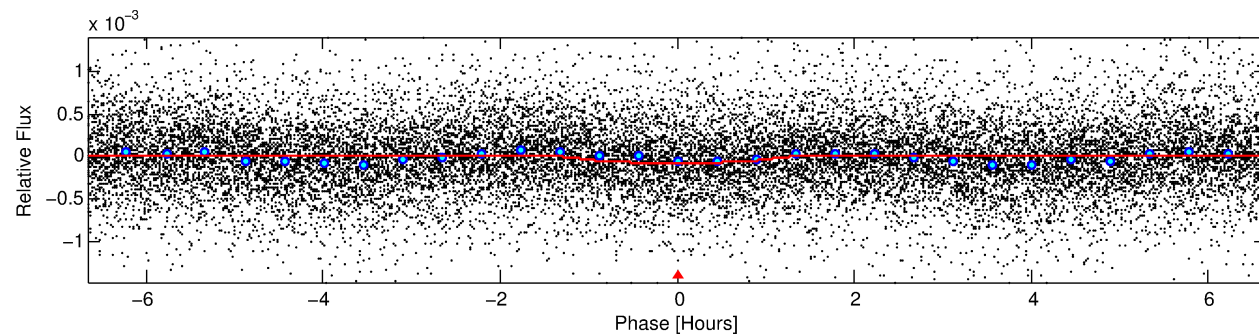
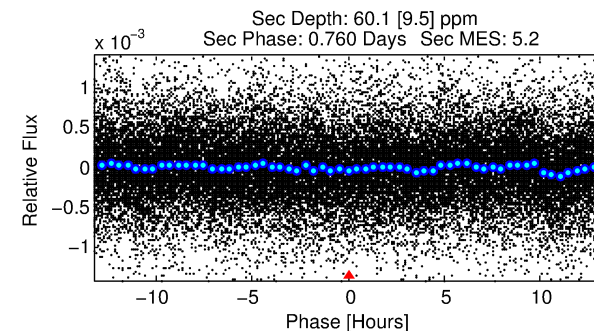
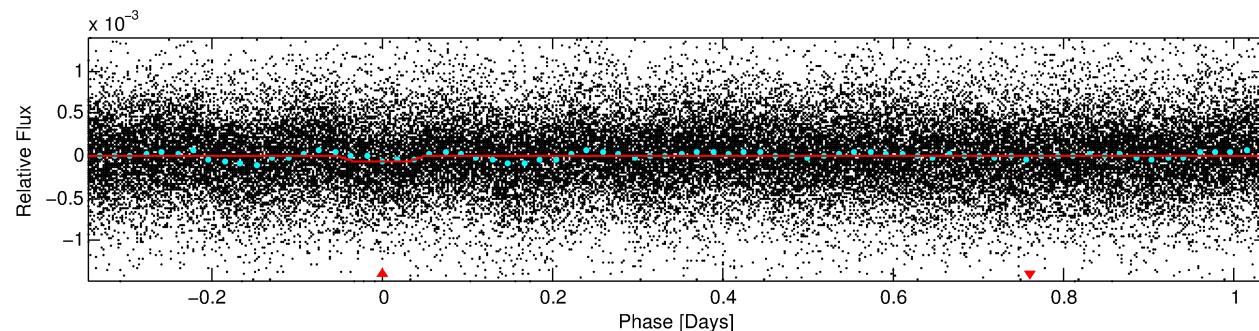
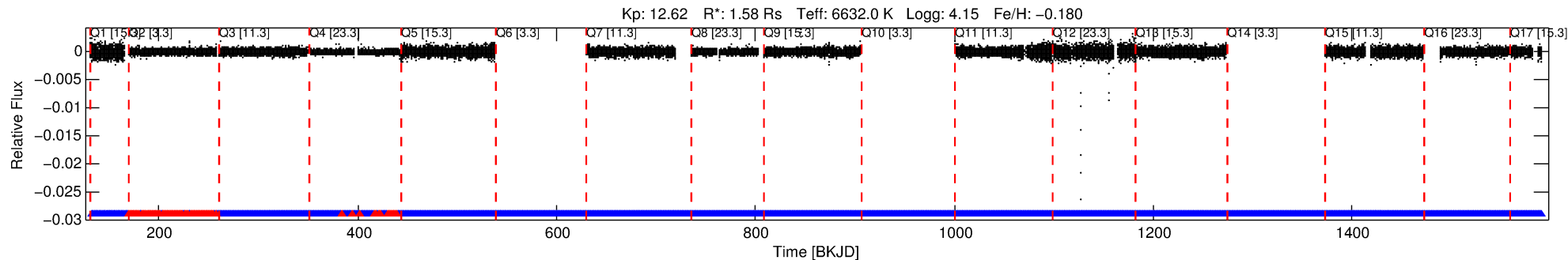
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003867299-01

No Significant Match Found

DV One-Page Summary

KIC: 3867299 Candidate: 1 of 1 Period: 1.385 d



DV Fit Results:

Period = 1.38494 [0.00001] d
Epoch = 132.4552 [0.0030] BKJD
Rp/R* = 0.0091 [0.0050]
a/R* = 2.41 [6.32]
b = 0.90 [0.71]
Seff = 6209.21 [2364.82]
Teq = 2264 [216] K
Rp = 1.57 [0.98] Re
a = 0.0264 [0.0065] AU
Ag = 9.37 [10.83] [0.77σ]
Teffp = 6122 [1698] K [2.25σ]

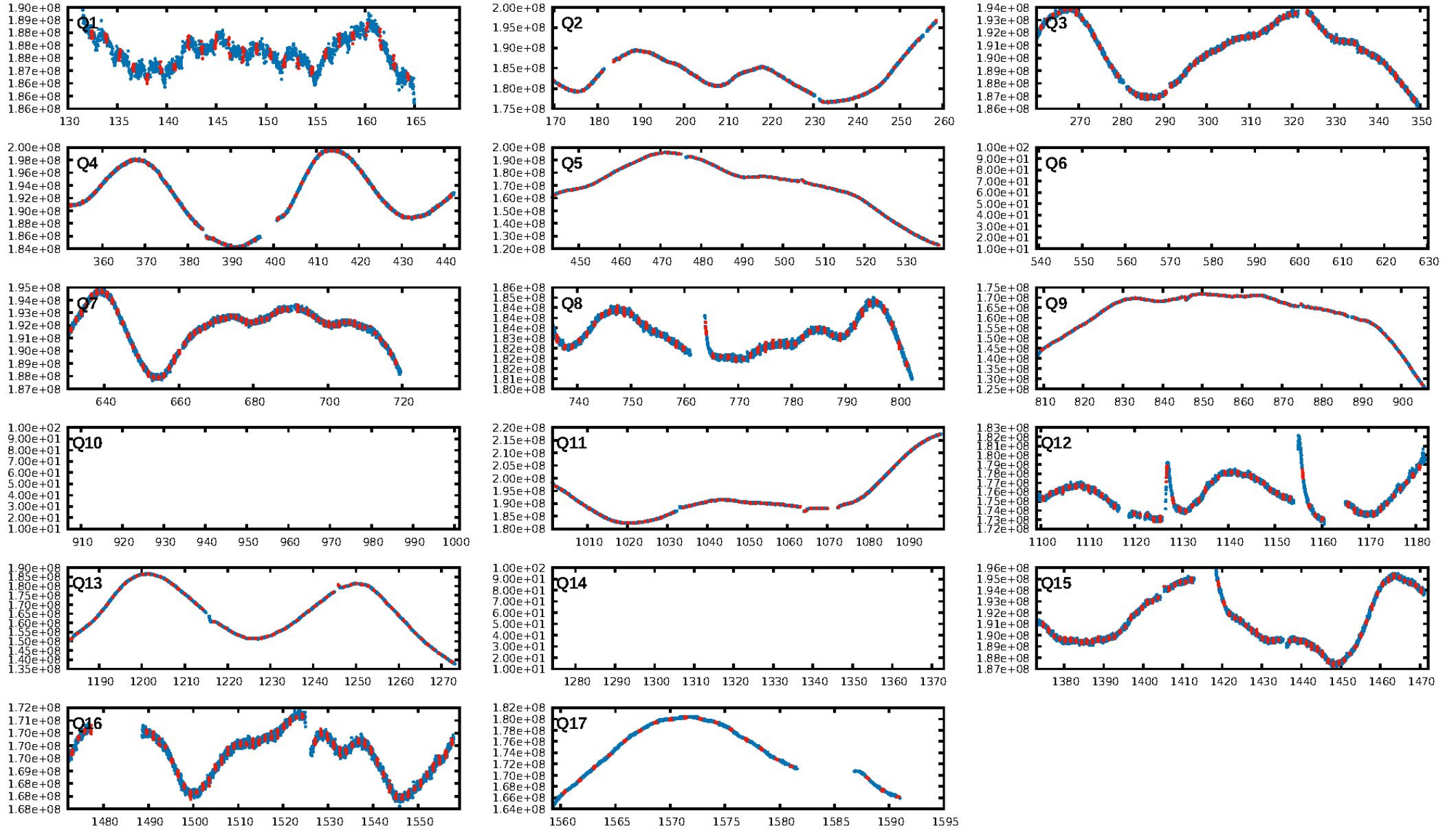
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.70e-15
RollingBand-ftg: 0.90 [650/725]
GhostDiagnostic-chr: -2.054
Centroid-sig: 0.0%
Centroid-so: 0.957 arcsec [1.51σ]
OotOffset-rm: 2.650 arcsec [5.08σ]
KicOffset-rm: 0.113 arcsec [0.19σ]
OotOffset-st: 1/4/4/4 [13]
KicOffset-st: 1/4/4/4 [13]
DiffImageQuality-fgm: 0.69 [9/13]
DiffImageOverlap-fno: 1.00 [14/14]

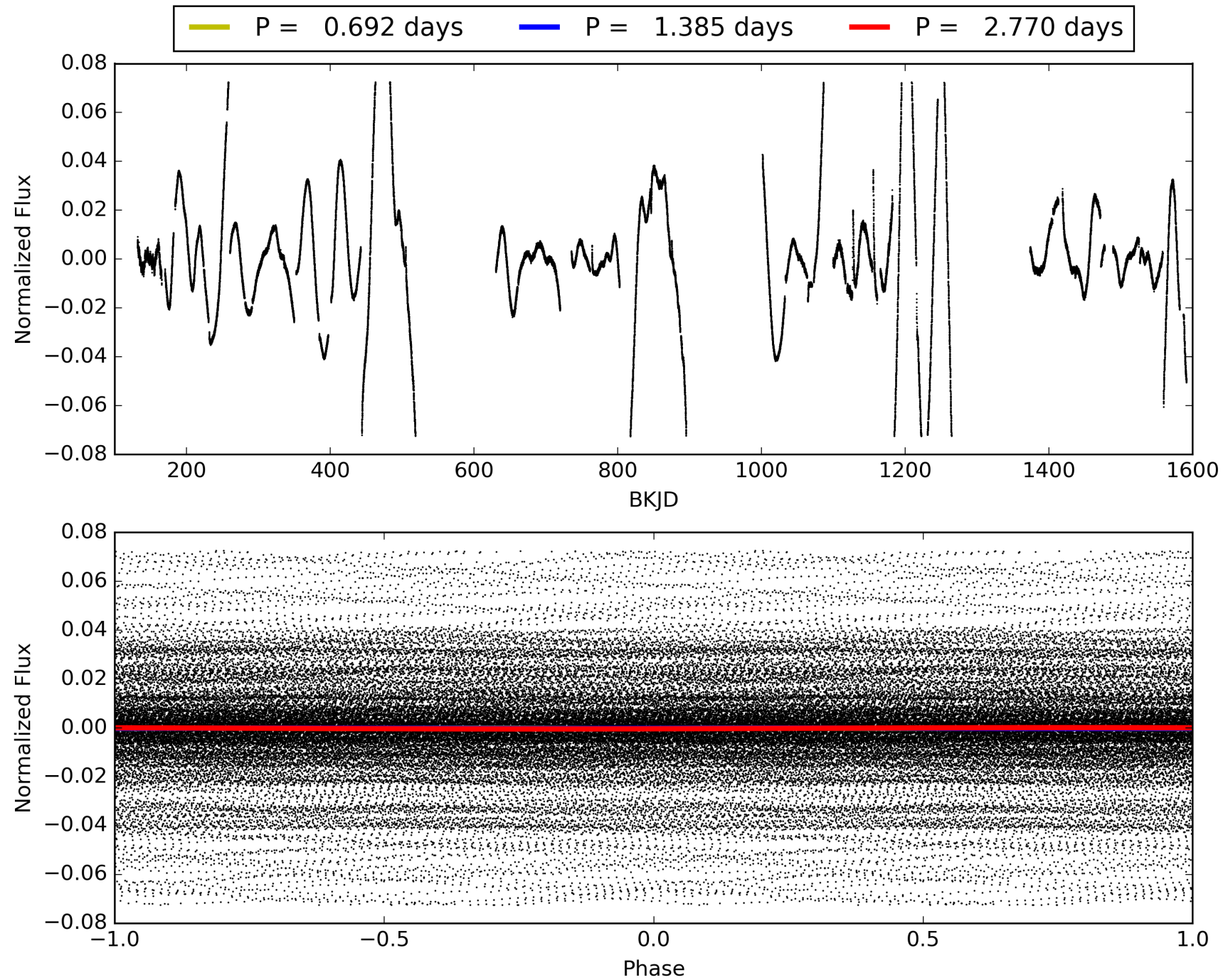
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:35:09 Z

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

TCE 003867299-01, PDC Light Curves

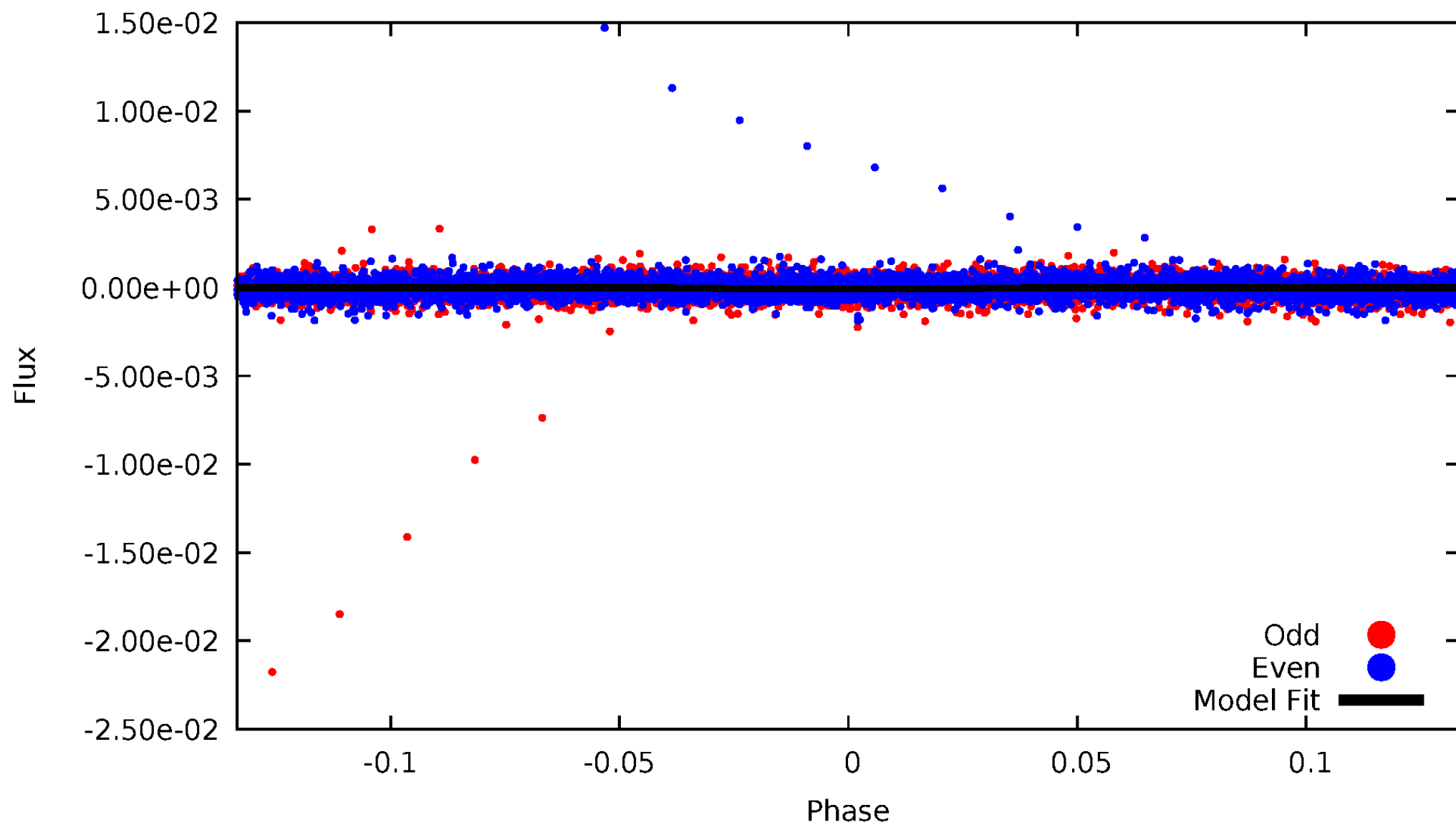


TCE 003867299-01



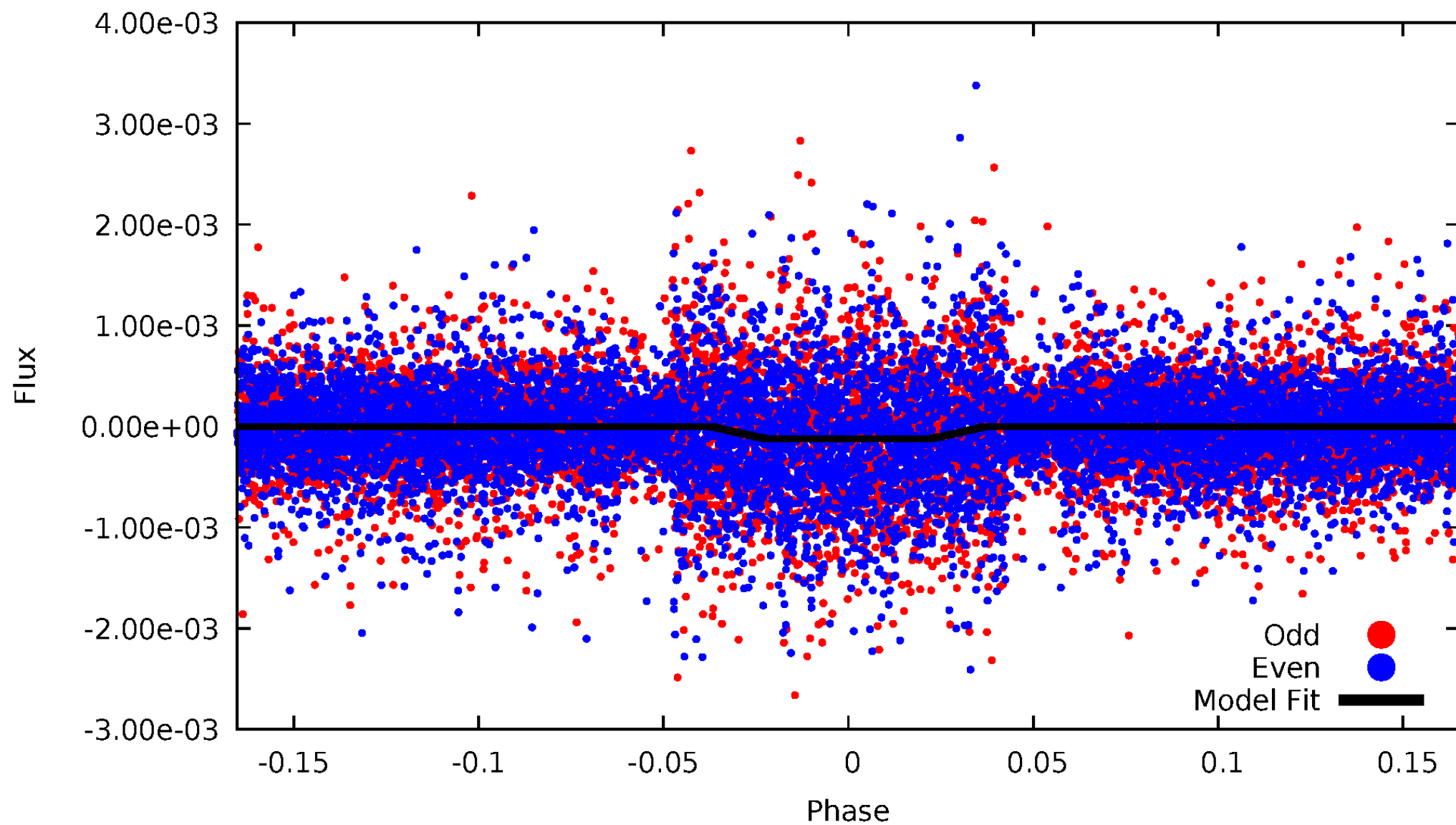
DV Odd/Even

TCE 003867299-01



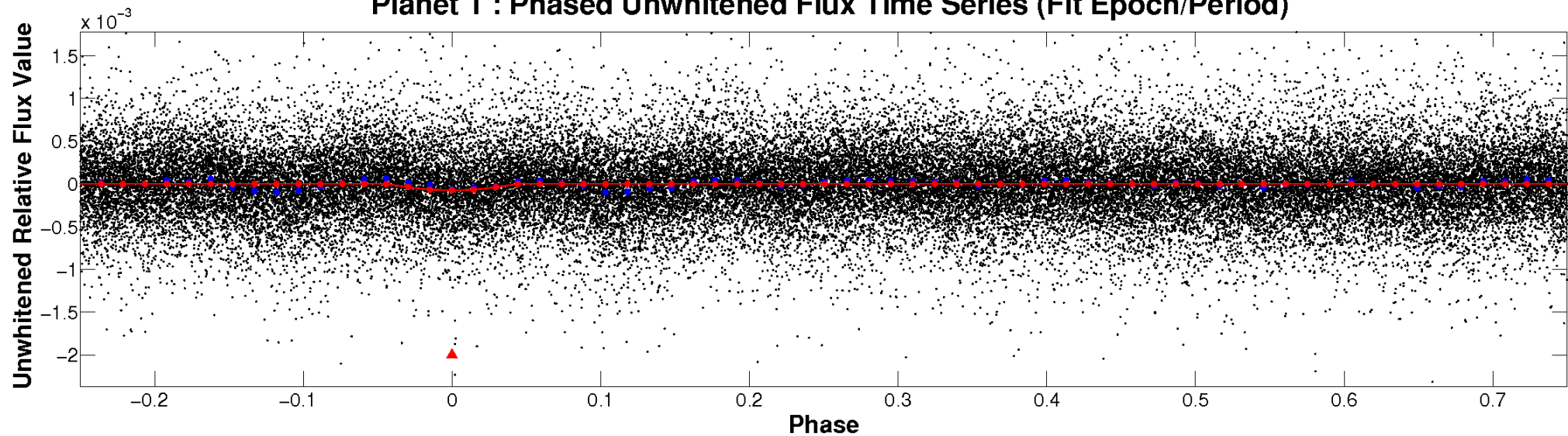
ALT Odd/Even

TCE 003867299-01

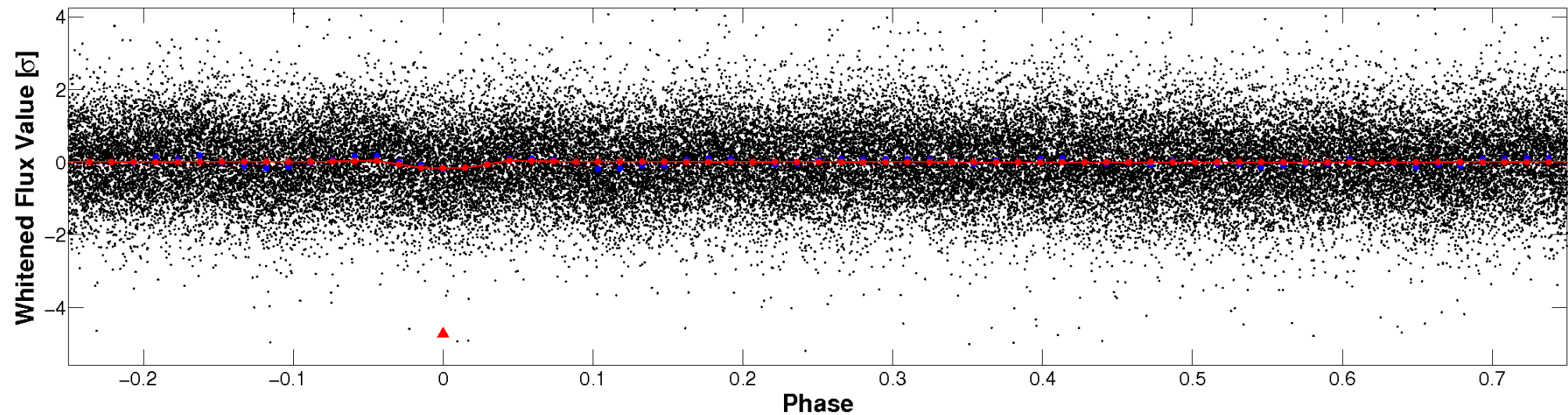


Non-Whitened Vs. Whitened Light Curve

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

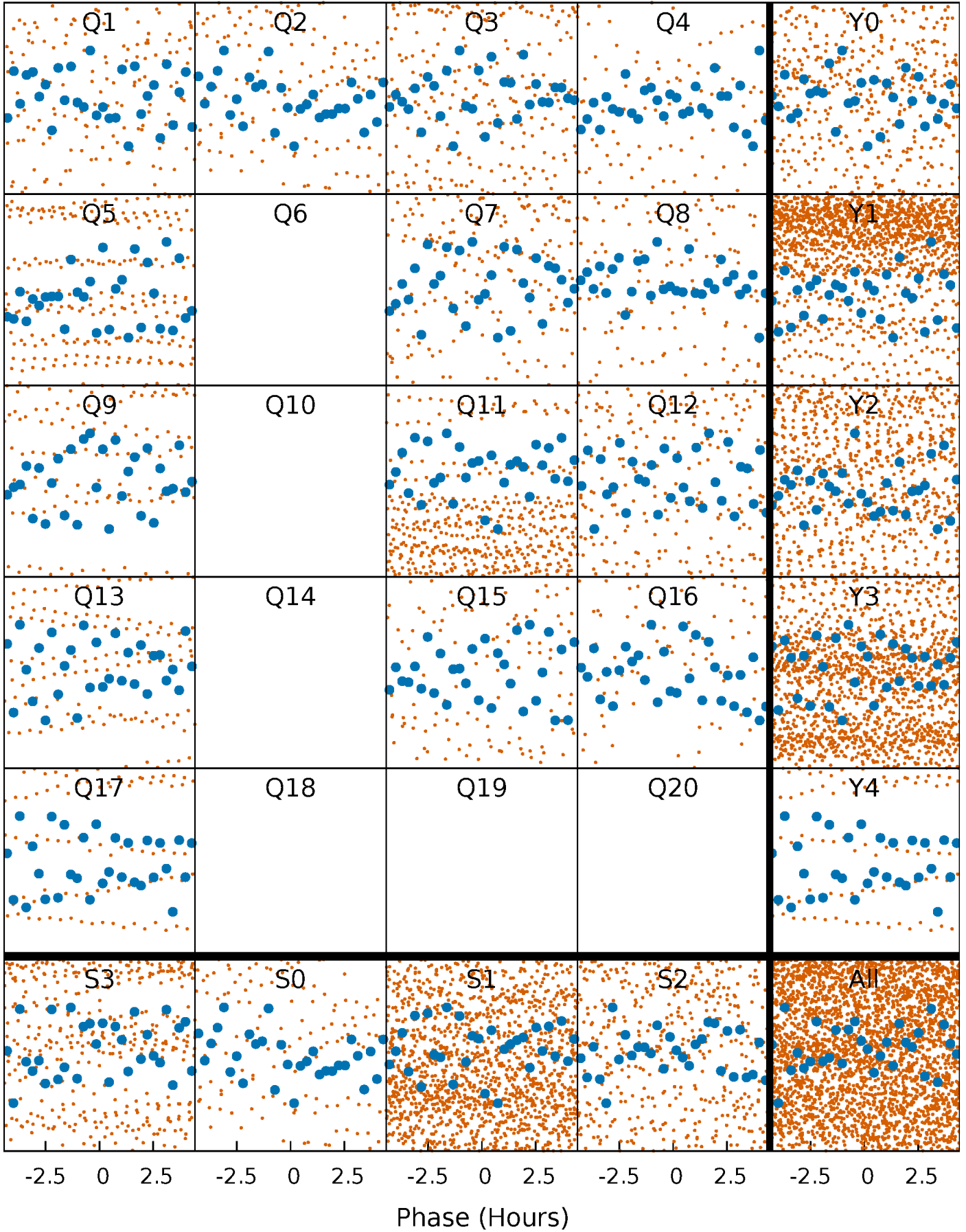


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



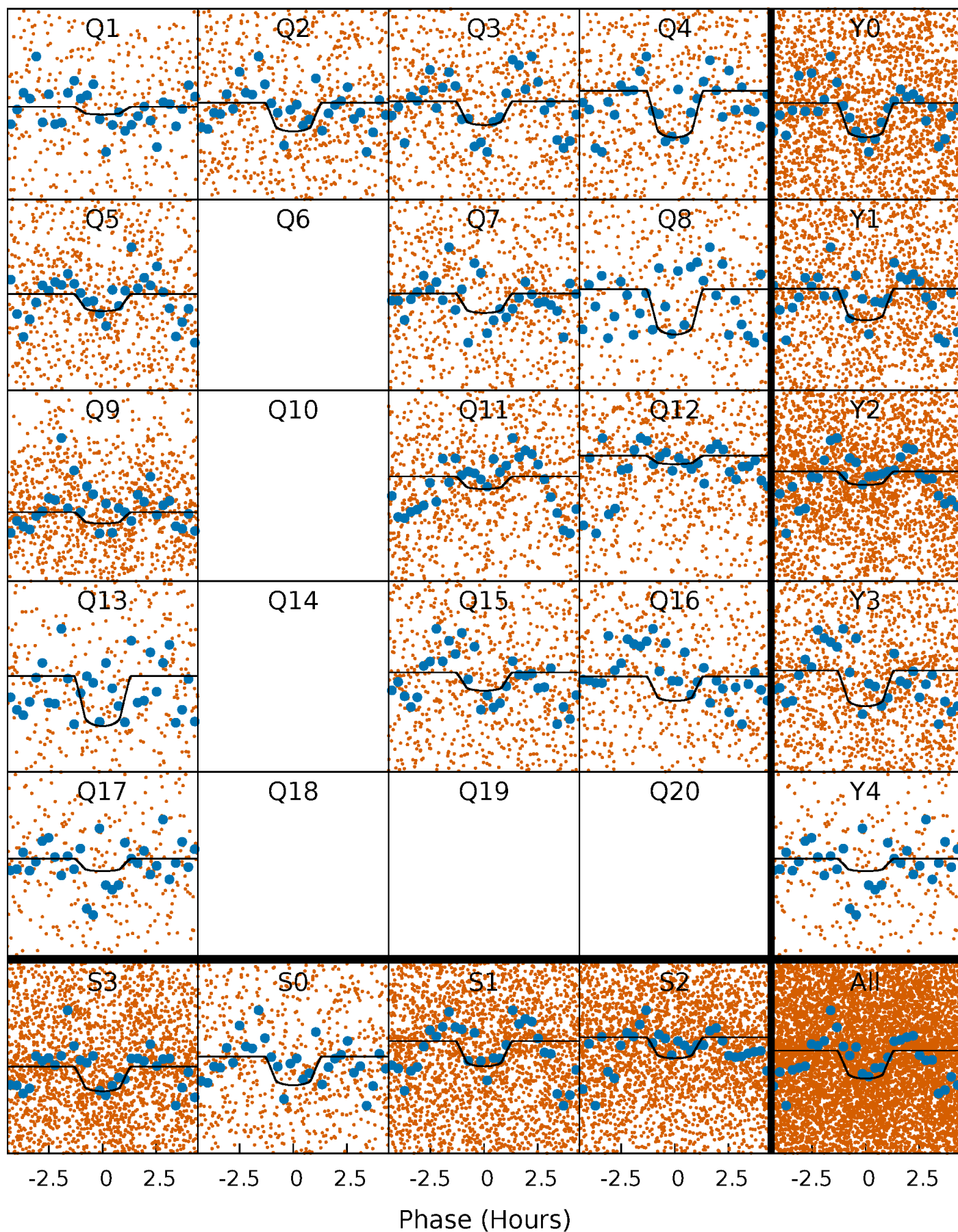
PDC Quarter-Phased Transit Curves

TCE 003867299-01 P= 1.384938 Days $T_0=132.455212$ (BKJD)



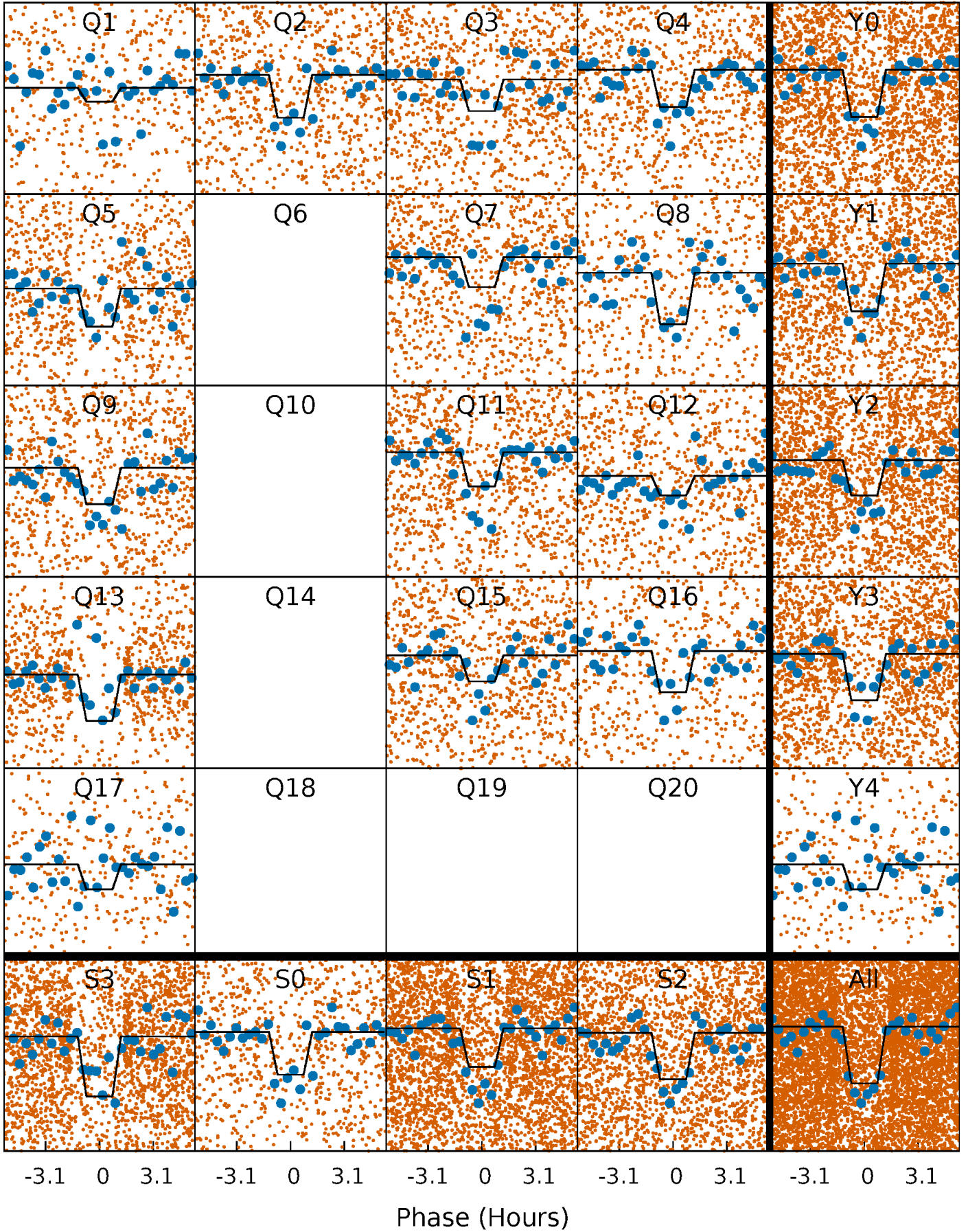
DV Quarter-Phased Transit Curves

TCE 003867299-01 P= 1.384938 Days $T_0=132.455212$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

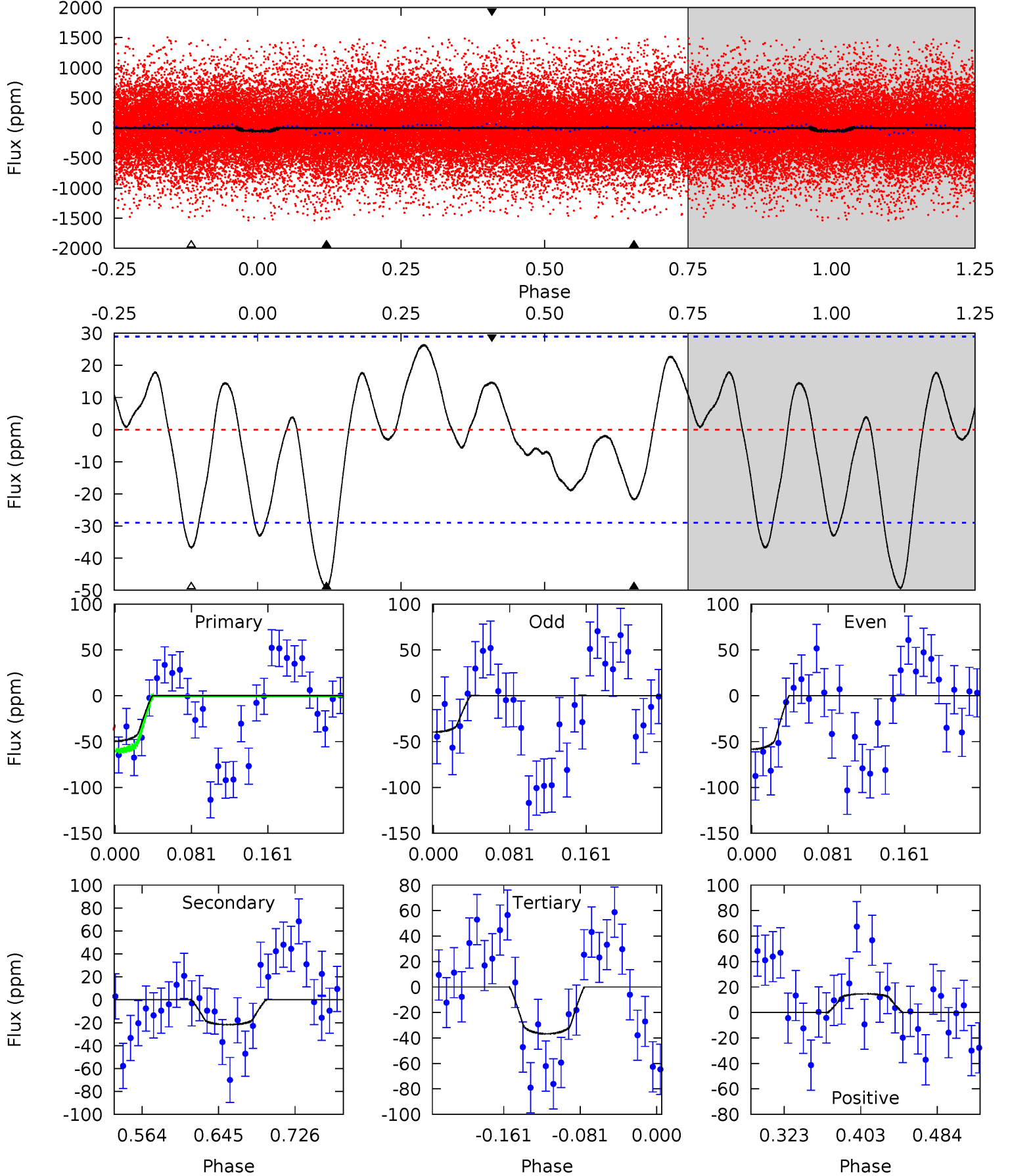
TCE 003867299-01 P= 1.384960 Days $T_0=132.455679$ (BKJD)



DV Model-Shift Uniqueness Test

003867299-01, P = 1.384938 Days, E = 131.070274 Days

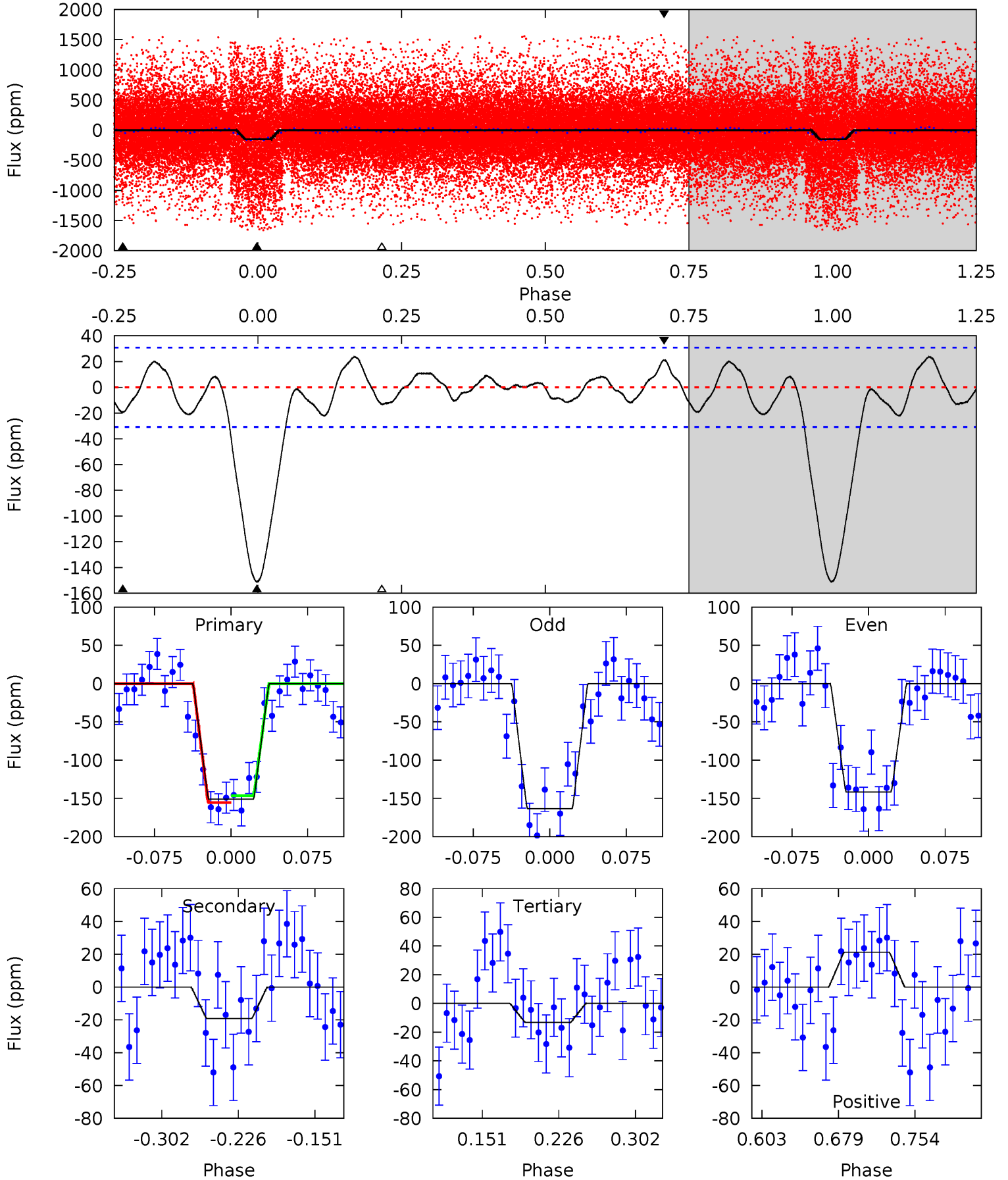
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.87	3.46	5.85	2.33	4.61	1.75	2.42	2.01	5.53	-2.39	1.12	1.49	0.76	0.35	2.06



Alt Model-Shift Uniqueness Test

003867299-01, P = 1.384960 Days, E = 131.070719 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.7	2.88	1.98	3.18	4.62	1.78	1.49	20.7	19.5	0.89	-0.30	1.62	0.91	0.14	0.68



Stellar Parameters For KIC 003867299

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6632^{+187}_{-234}	$4.148^{+0.190}_{-0.171}$	$-0.180^{+0.250}_{-0.300}$	$1.582^{+0.475}_{-0.389}$	$1.291^{+0.182}_{-0.222}$	$0.459^{+0.472}_{-0.237}$
	+3%/-4%	+5%/-4%	+139%/-167%	+30%/-25%	+14%/-17%	+103%/-52%
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 003867299-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-22 ± 6	$1.56^{+0.88}_{-0.79}$	3155^{+243}_{-225}	4704^{+1996}_{-823}	$3.395^{+10.478}_{-2.155}$
Alt.	-19 ± 7	$1.96^{+0.86}_{-0.88}$	3151^{+240}_{-225}	4149^{+1301}_{-737}	$1.810^{+4.381}_{-1.036}$

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

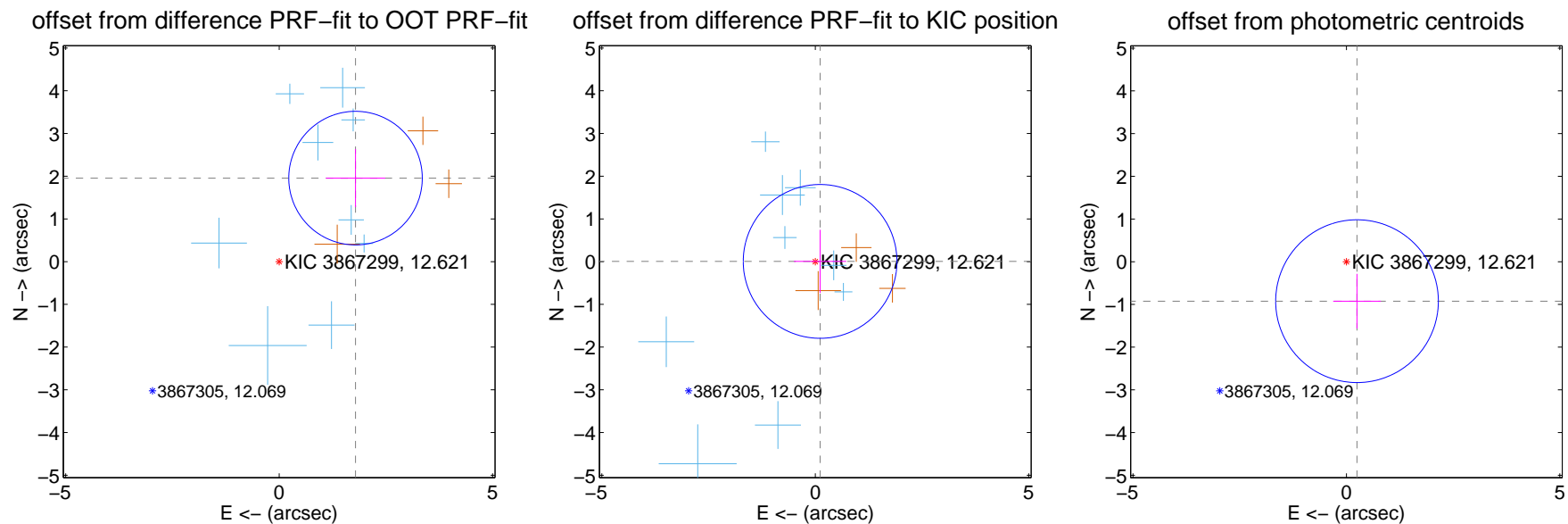
DV Centroid Data

Supplemental centroid analysis for 003867299-01. Kepler magnitude: 12.62. Transit SNR 8.57

There are 9 quarters with good PRF difference image offsets

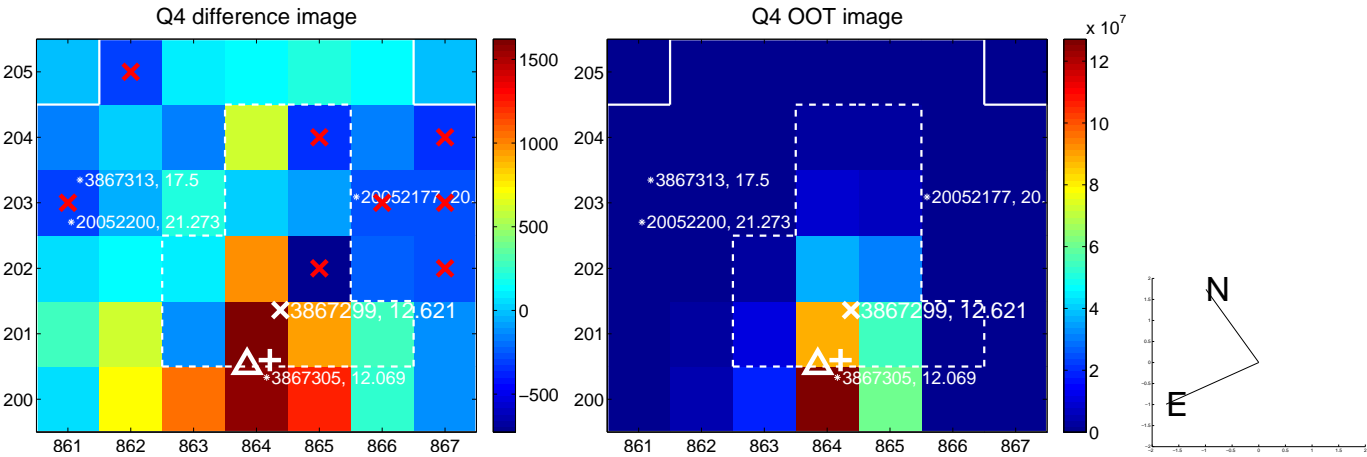
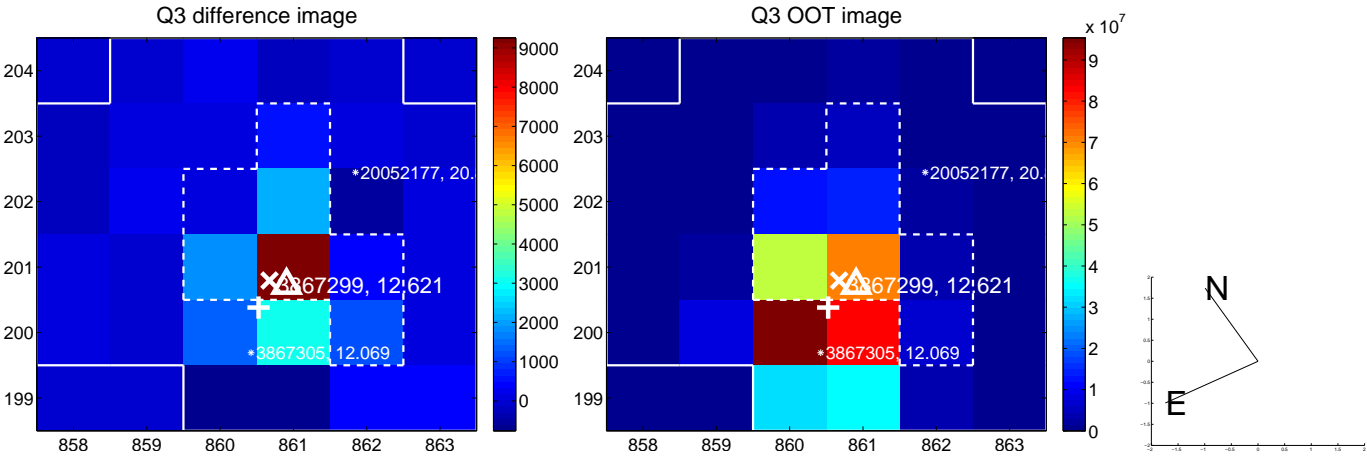
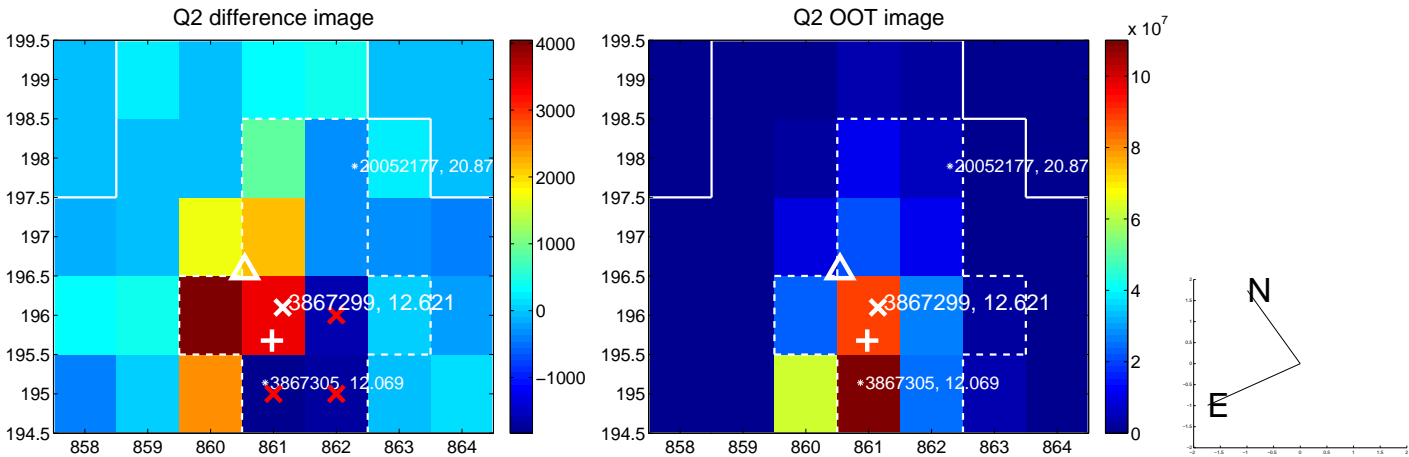
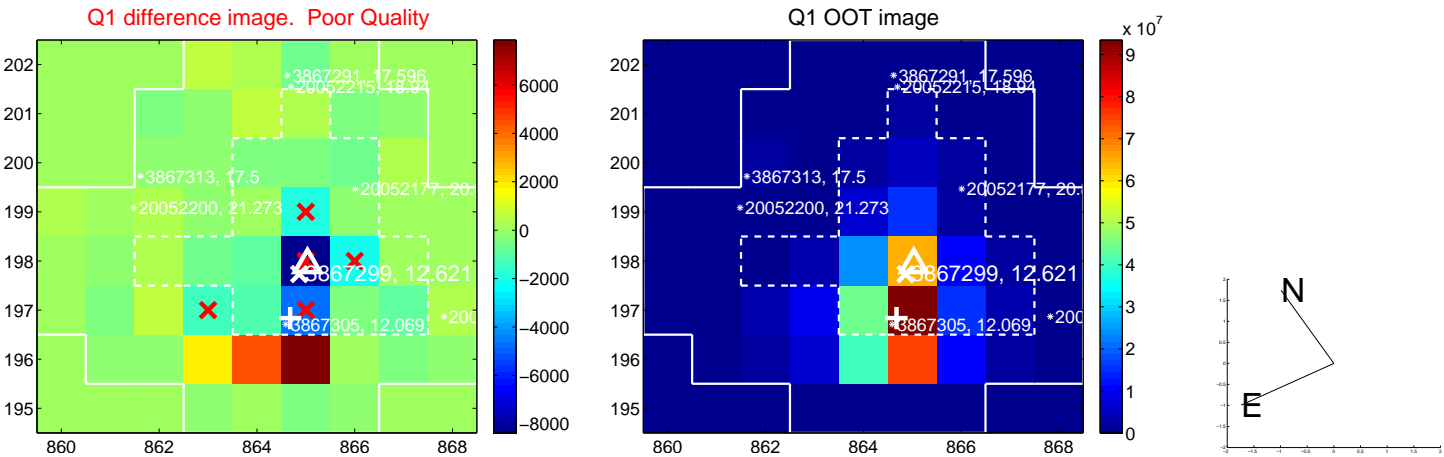
The OOT PRF centroid is offset from the target star catalog position by about 3.68 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.650 ± 0.521	5.08	-1.789 ± 0.695	1.955 ± 0.680
PRF-fit source offset from KIC position	0.113 ± 0.600	0.19	-0.113 ± 0.613	0.006 ± 0.739
photometric centroid source offset	0.96 ± 0.64	1.51	-0.25 ± 0.56	-0.92 ± 0.64

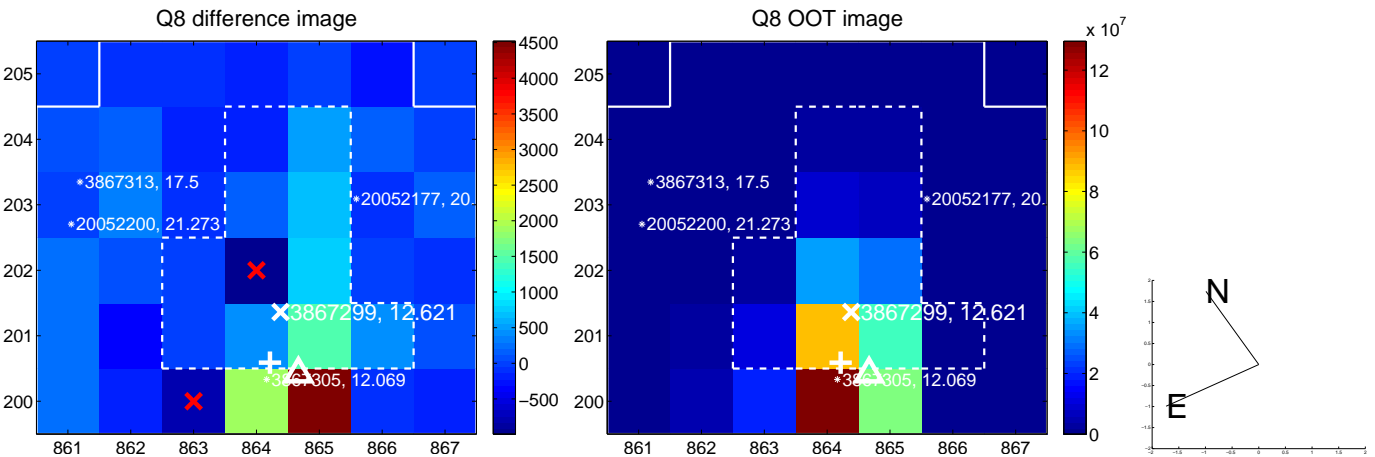
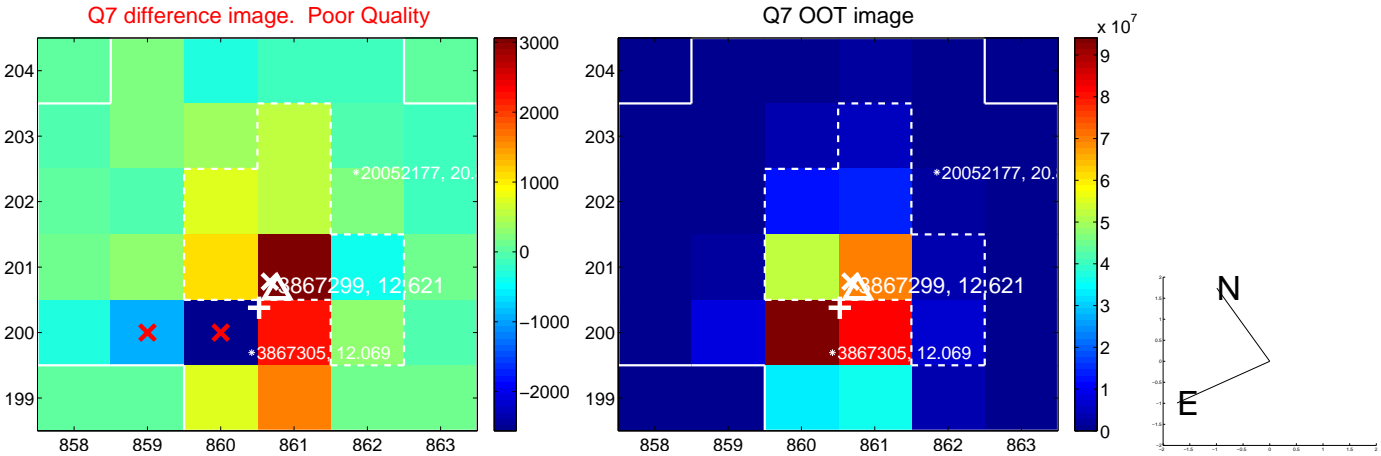
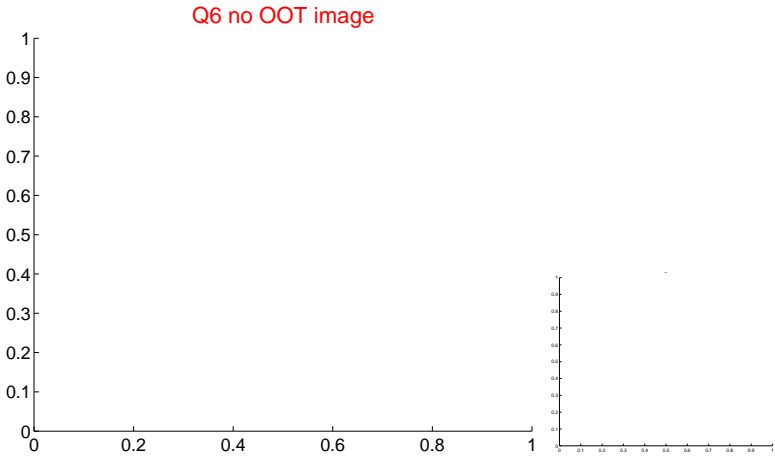
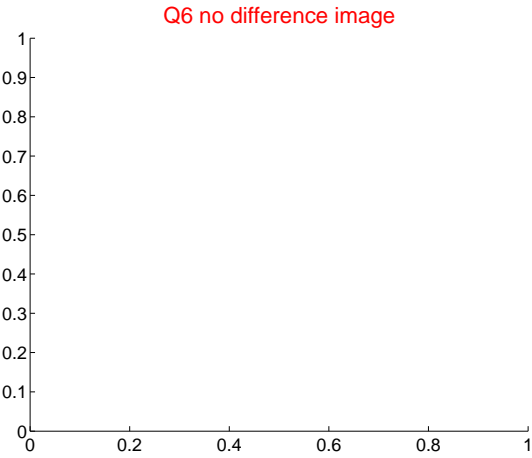
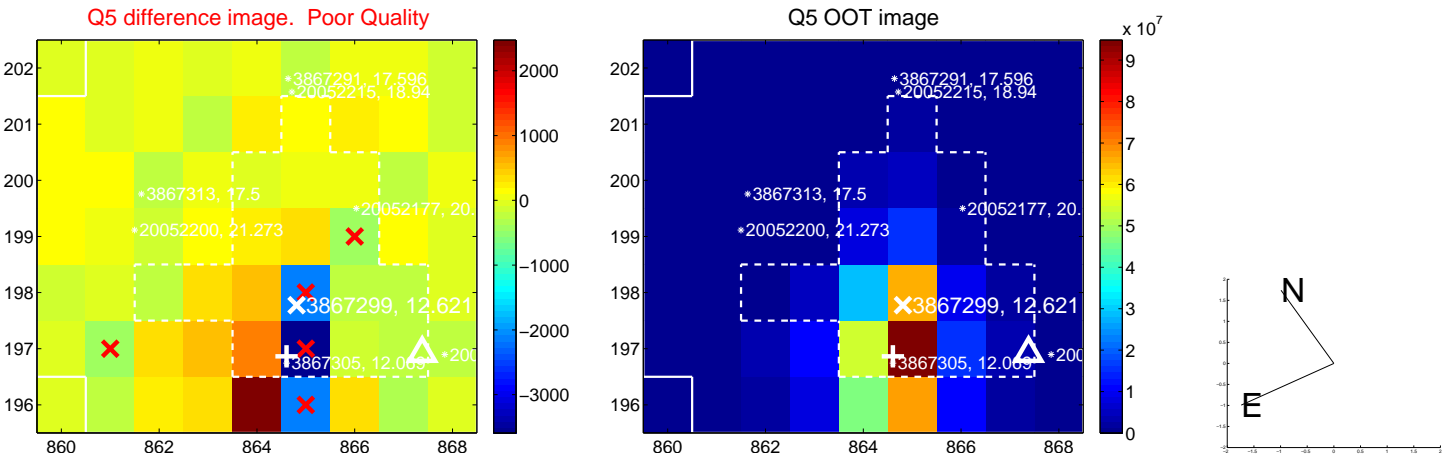


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

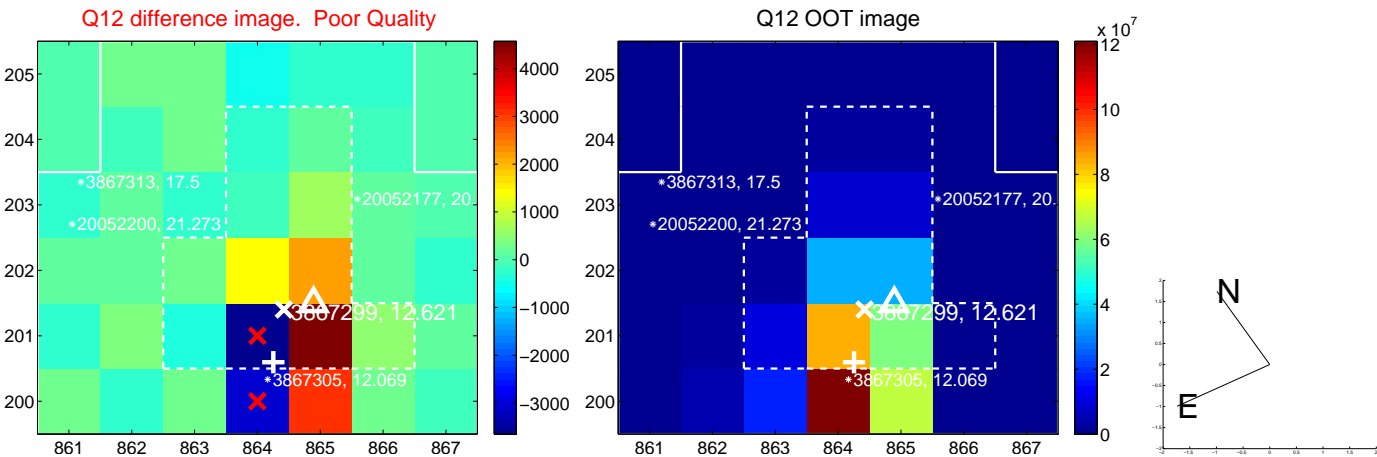
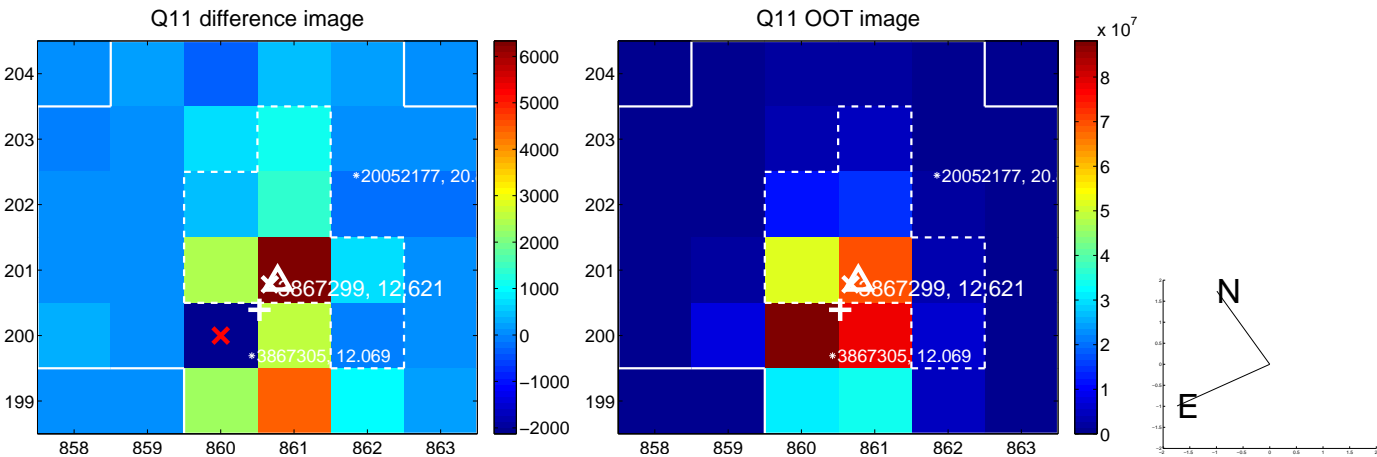
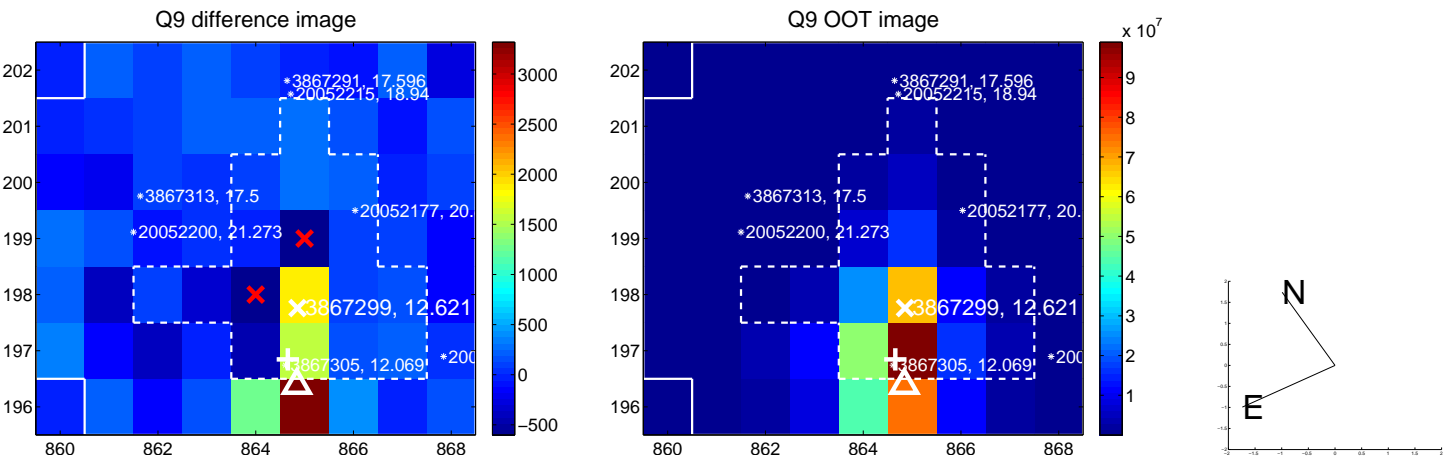
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



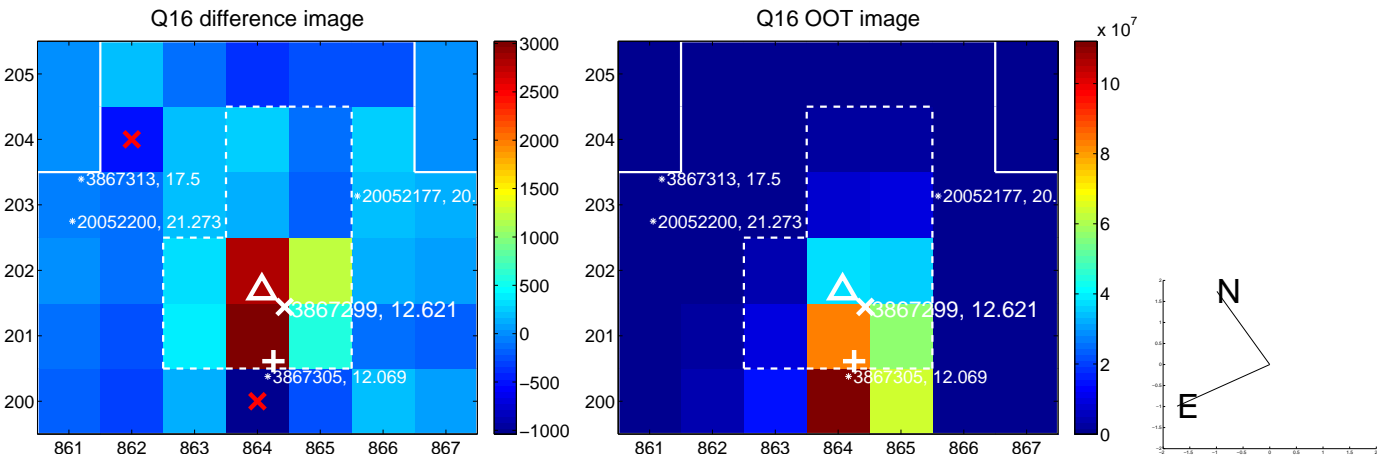
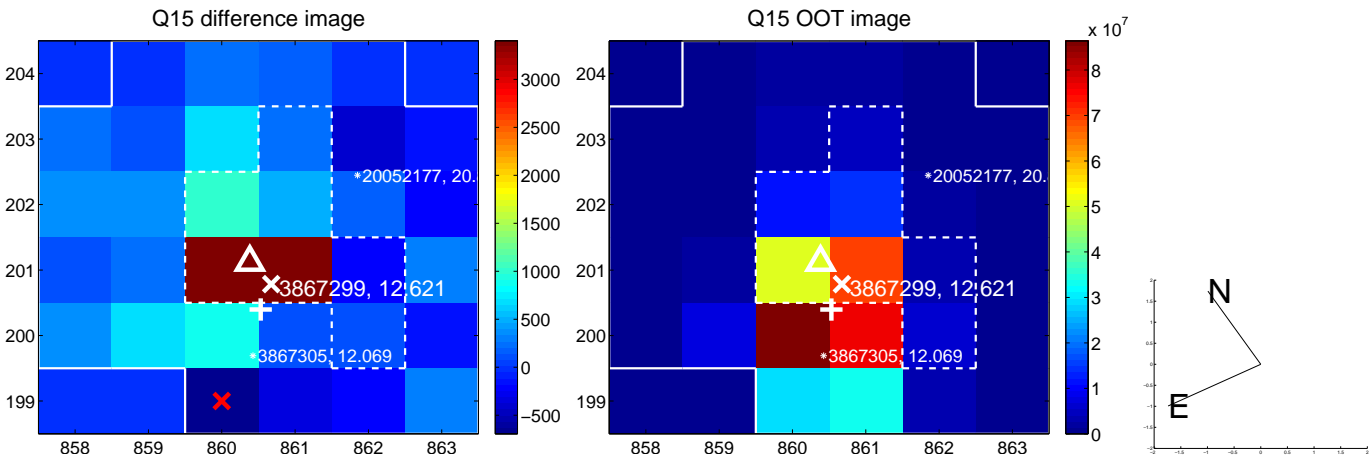
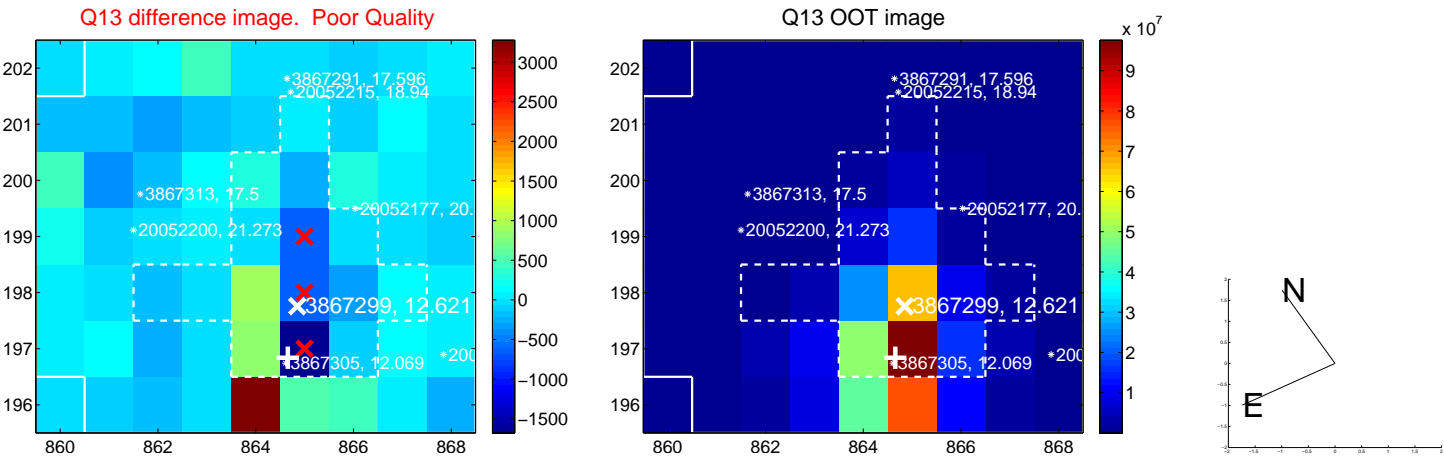
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



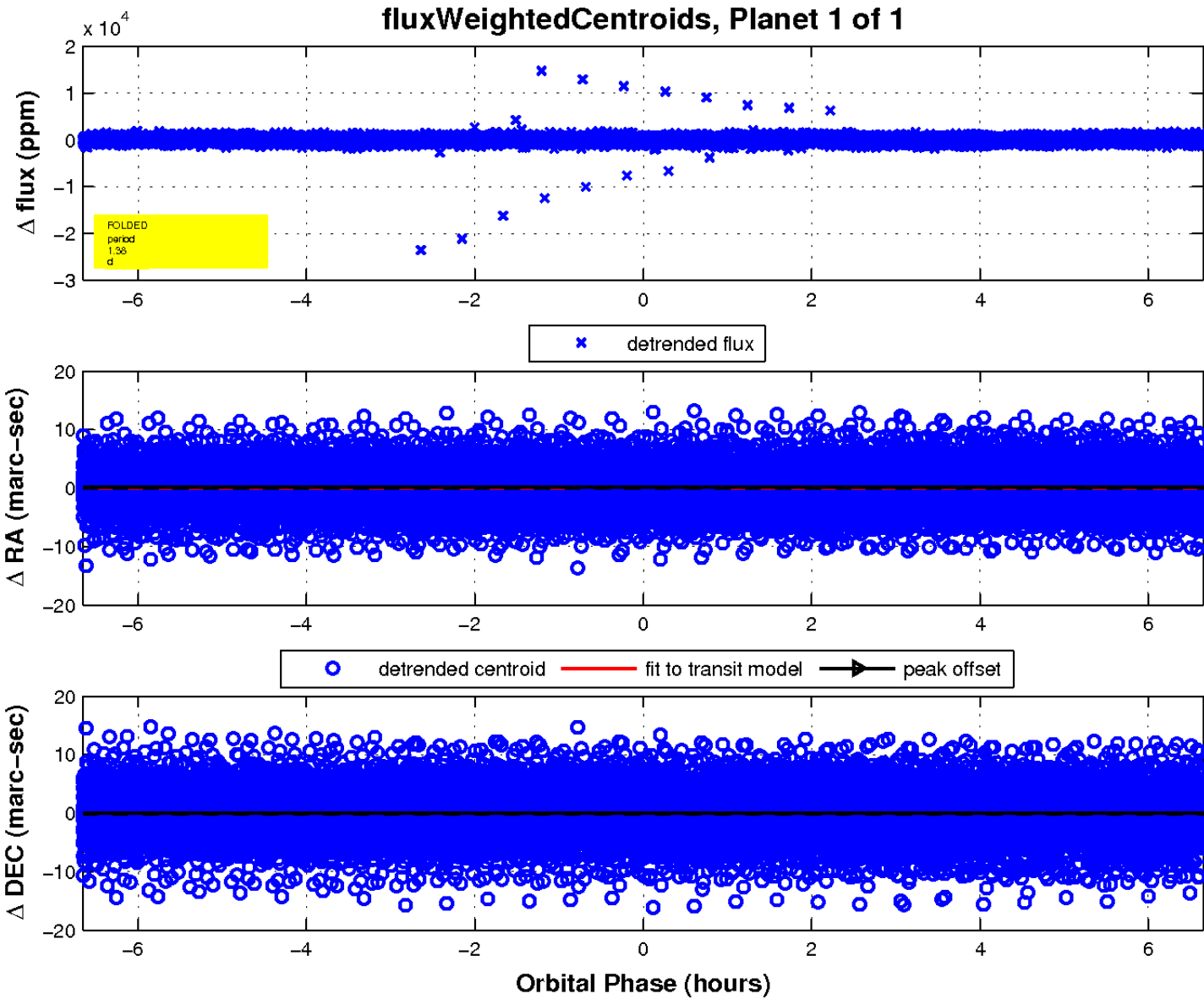
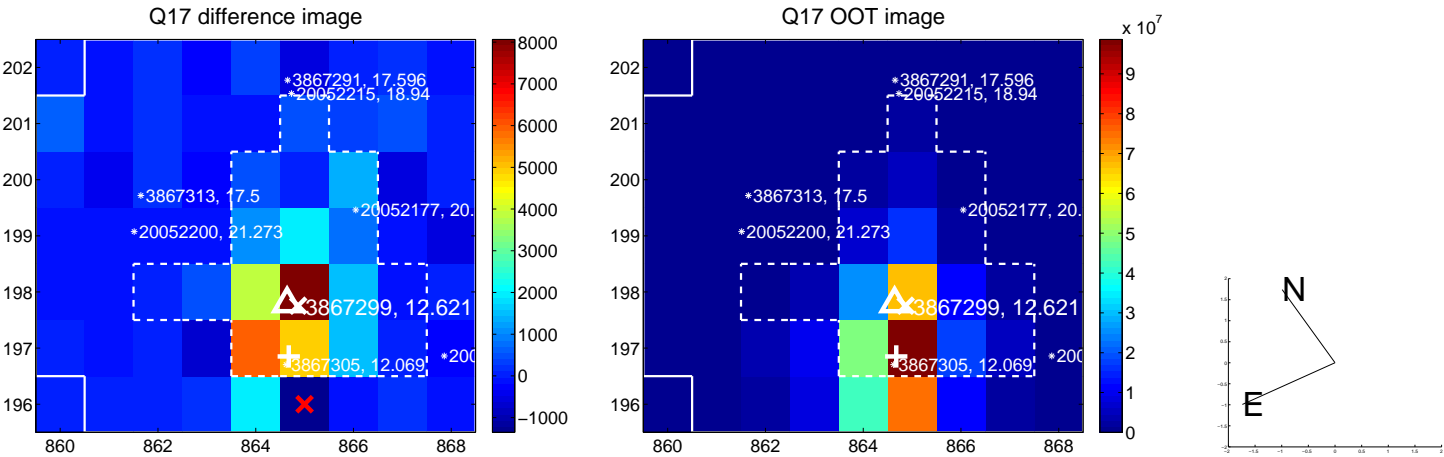
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UKIRT Image

Declination

