

KIC 007900688

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})
007900688-01	OBS	No	372.422999	229.868967	695.3	16.205	8.3	8.3	0.90	5853	2.47	0.83

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007900688-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—ALL_TRANS_CHASES—INCONSISTENT_TRANS—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.

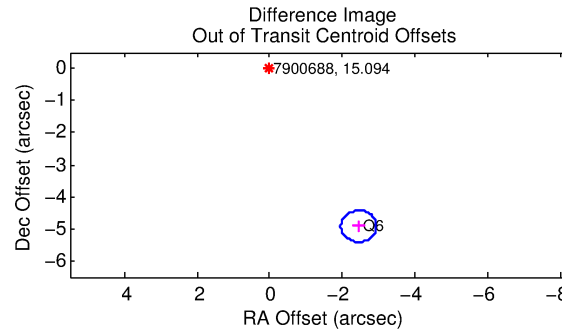
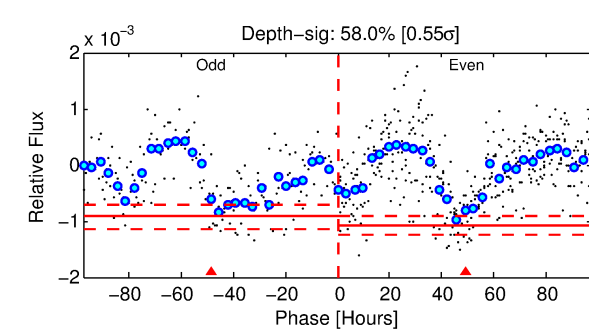
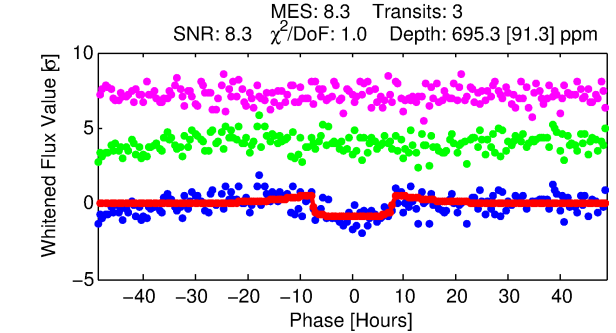
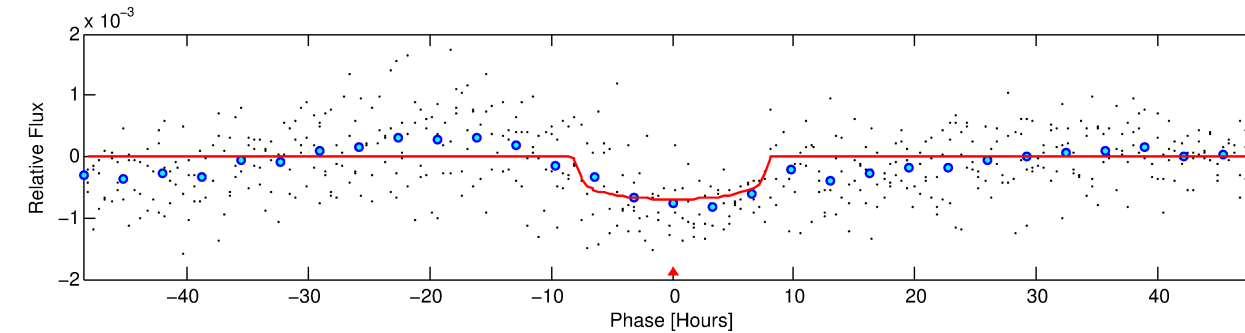
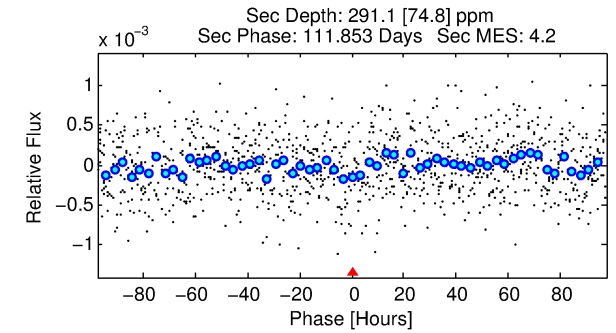
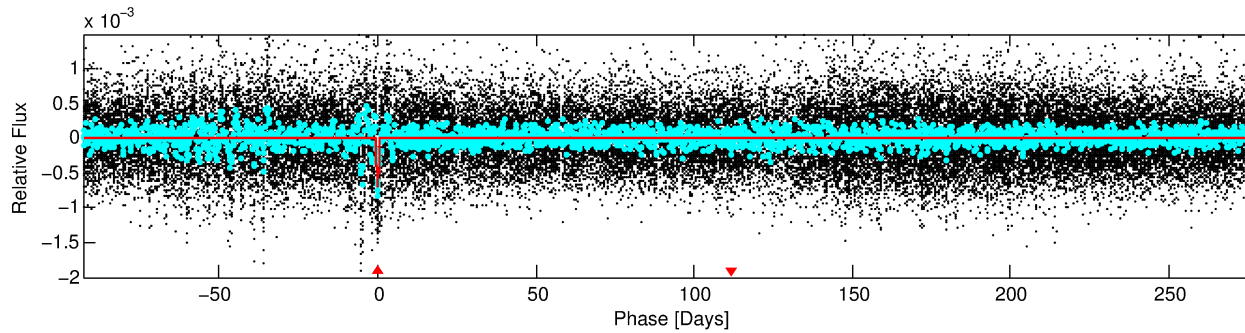
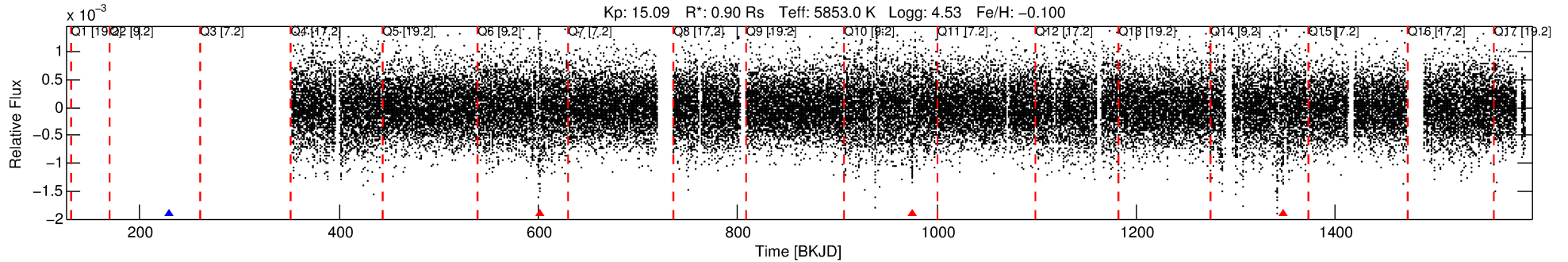
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007900688-01

No Significant Match Found

DV One-Page Summary

KIC: 7900688 Candidate: 1 of 1 Period: 372.423 d



DV Fit Results:

Period = 372.42300 [0.01375] d
Epoch = 229.8690 [0.0296] BKJD
Rp/R* = 0.0253 [0.0074]
a/R* = 143.75 [185.46]
b = 0.62 [1.30]
Seff = 0.83 [0.30]
Teq = 243 [22] K
Rp = 2.47 [0.99] Re
a = 1.0091 [0.2331] AU
Ag = 26789.28 [19441.44] [1.38σ]
Teffp = 4810 [789] K [5.78σ]

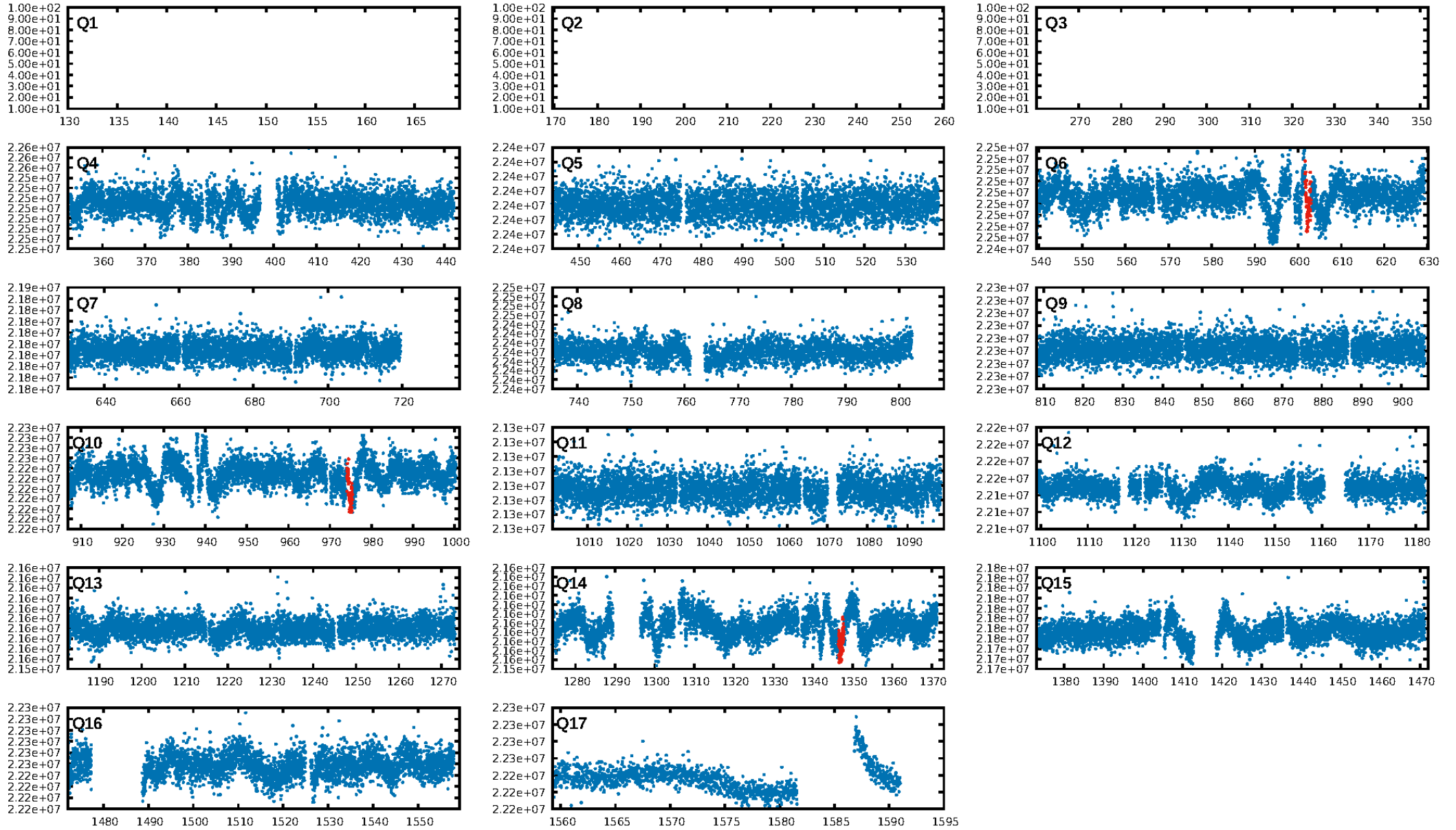
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 22.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.98e-10
RollingBand-fgt: 0.00 [0/3]
GhostDiagnostic-chr: 1.414
Centroid-sig: 1.5%
Centroid-so: 6.305 arcsec [4.19σ]
OotOffset-rm: 5.493 arcsec [33.65σ]
KicOffset-rm: 2.152 arcsec [13.16σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [3/3]

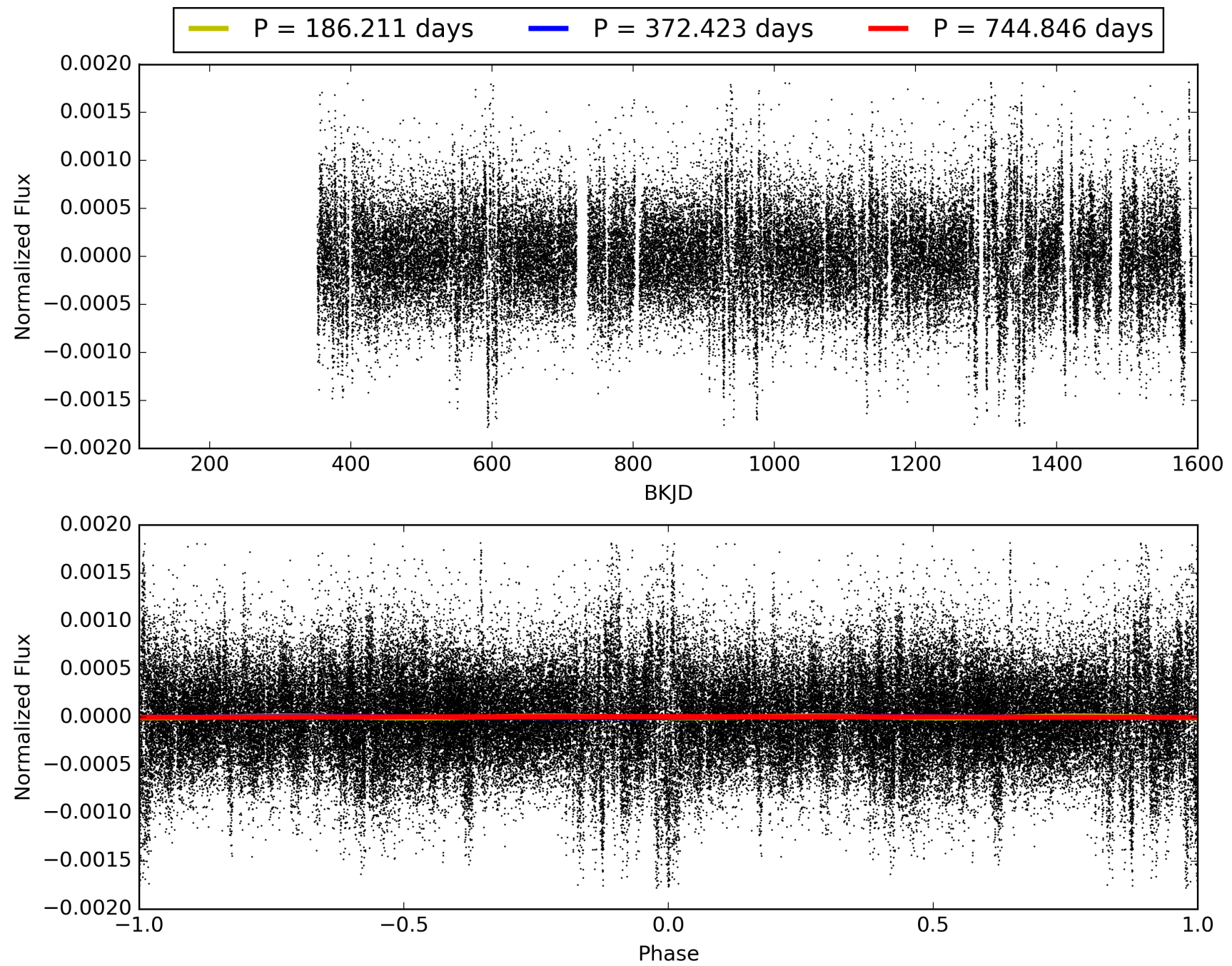
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:11:37 Z

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

TCE 007900688-01, PDC Light Curves

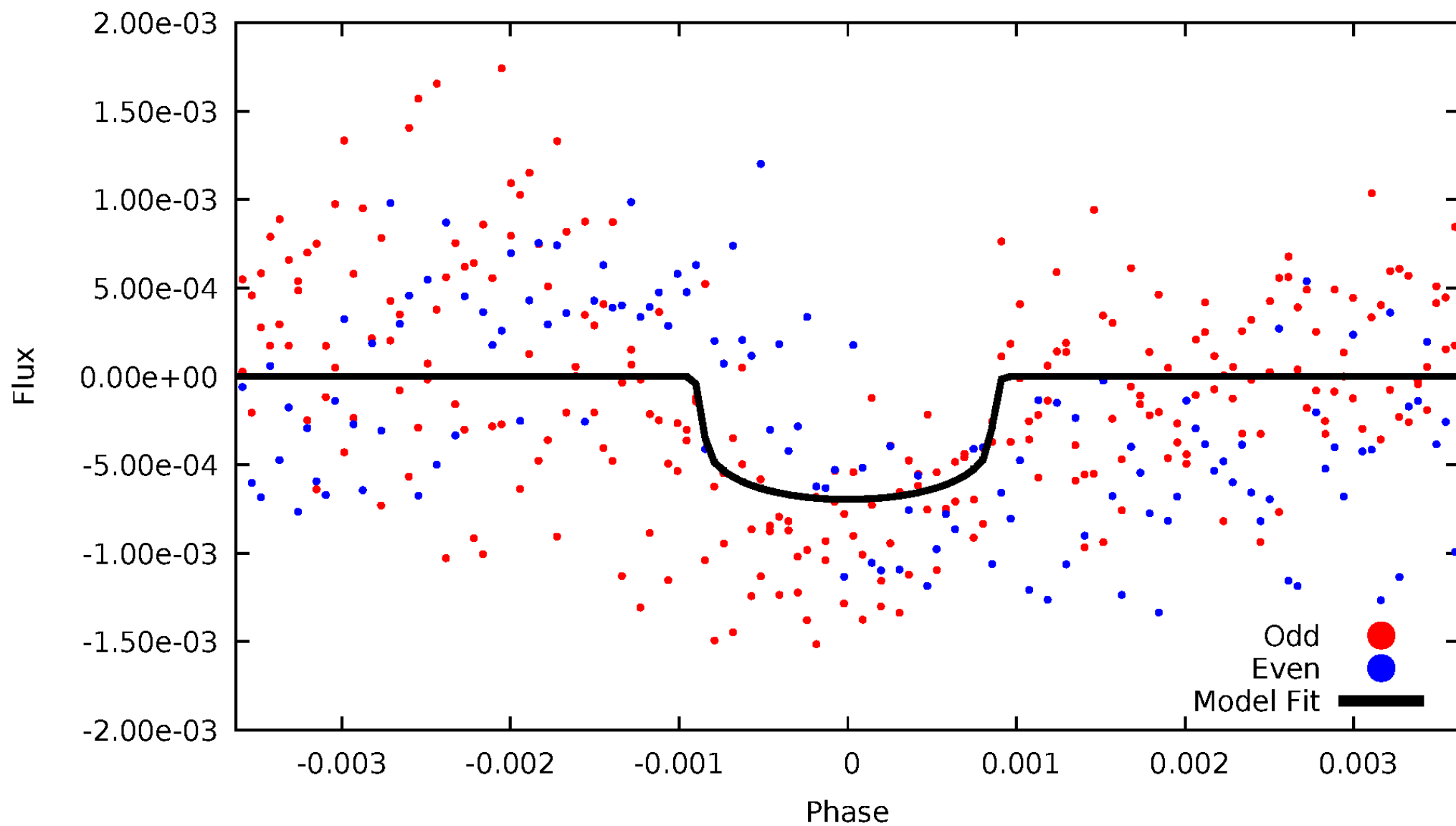


TCE 007900688-01



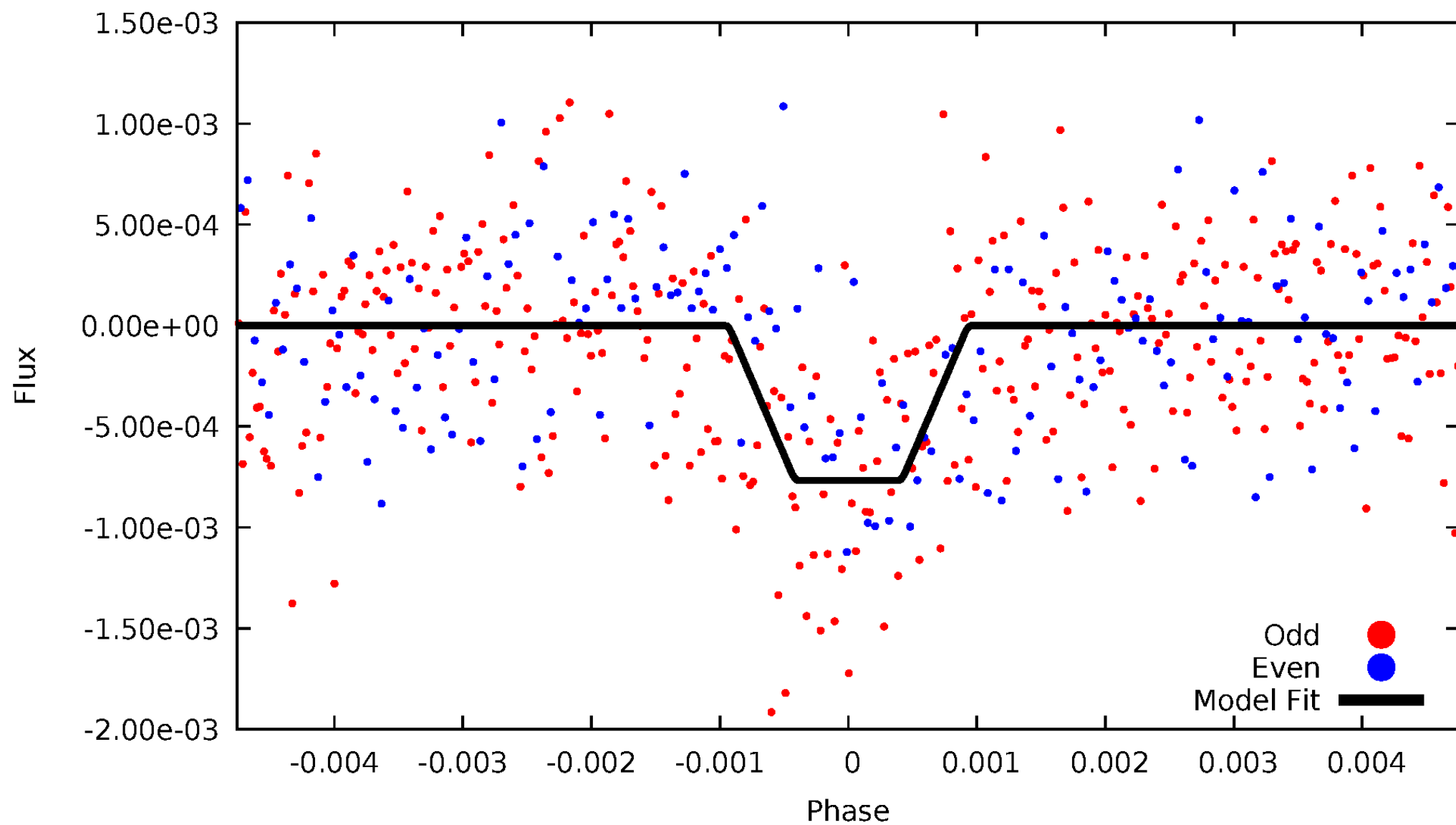
DV Odd/Even

TCE 007900688-01

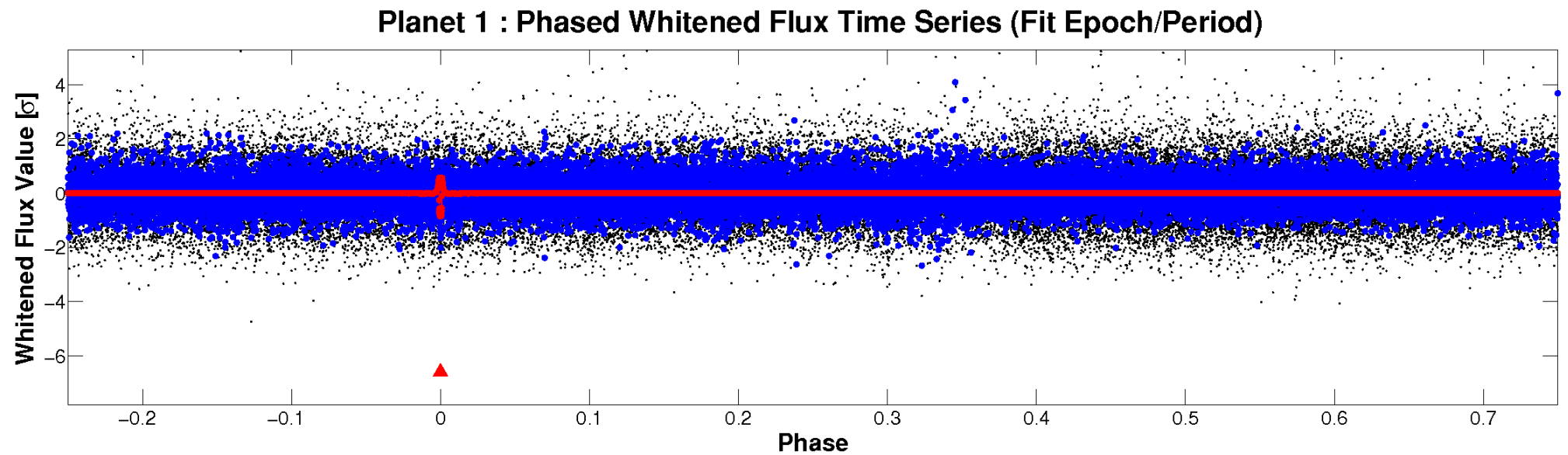
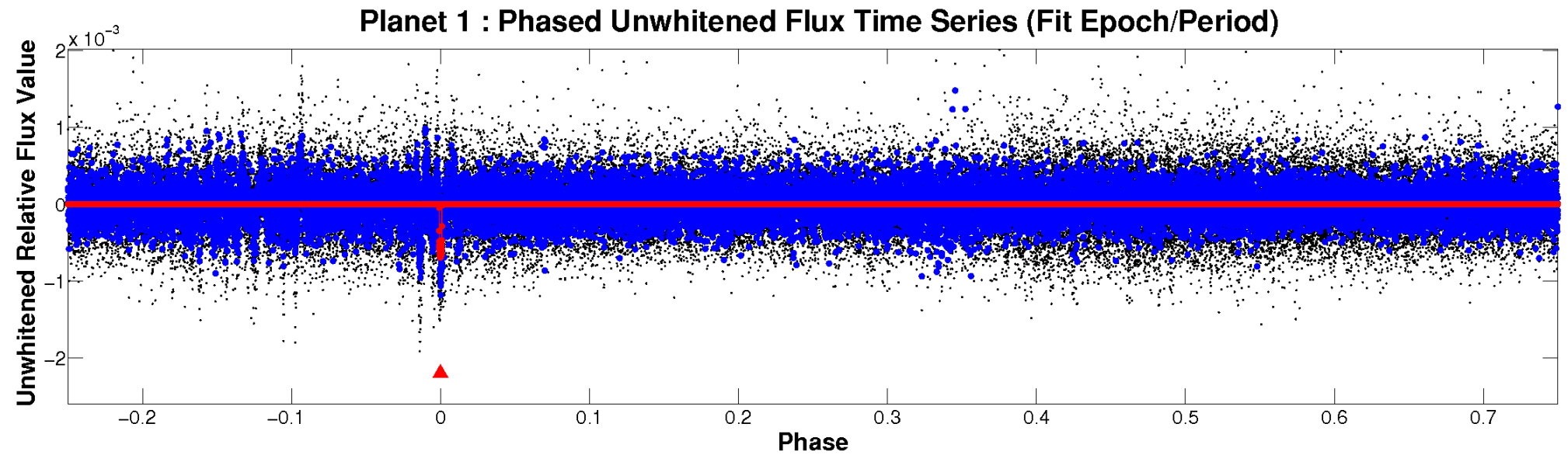


ALT Odd/Even

TCE 007900688-01

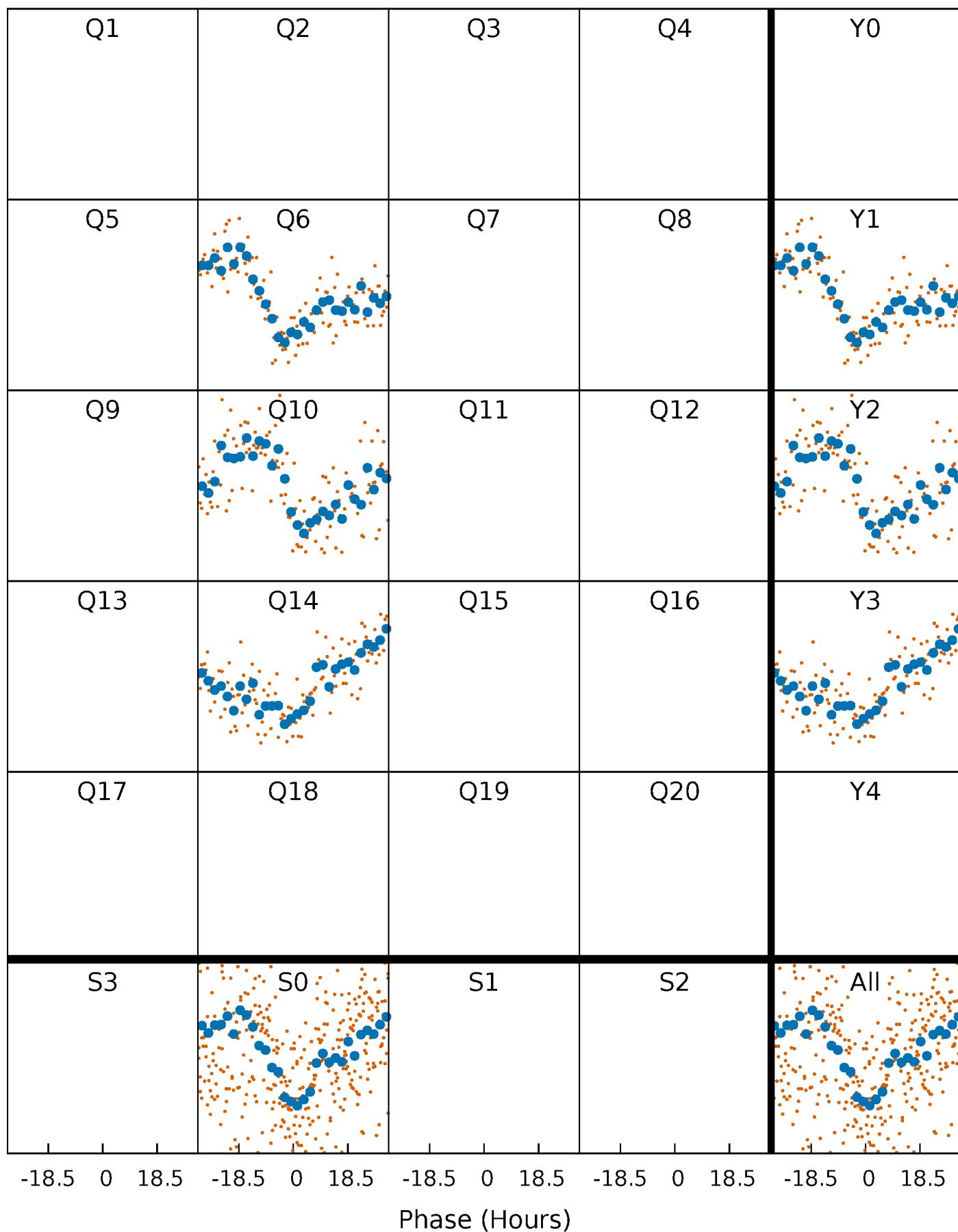


Non-Whitened Vs. Whitened Light Curve



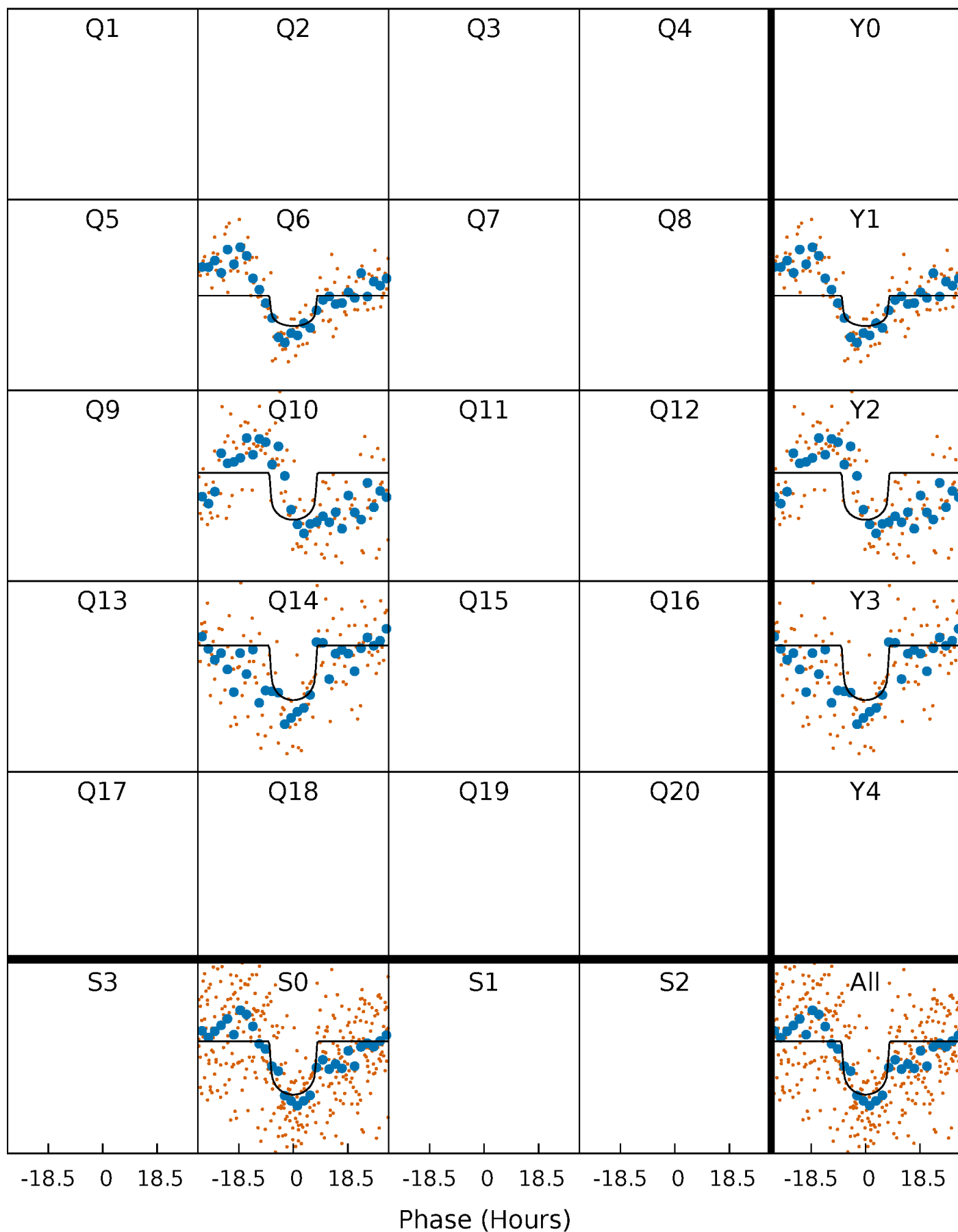
PDC Quarter-Phased Transit Curves

TCE 007900688-01 P=372.422999 Days $T_0=229.868967$ (BKJD)



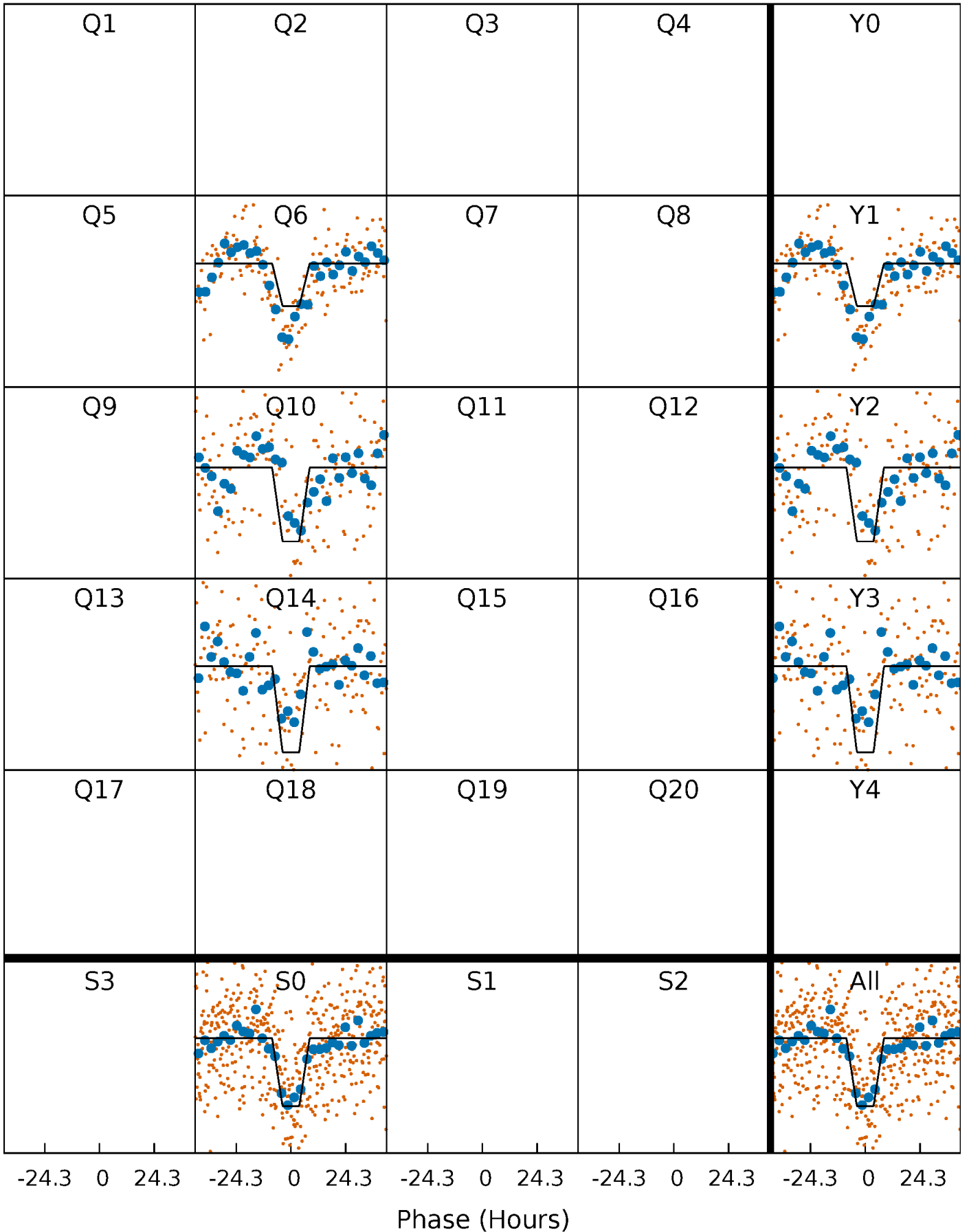
DV Quarter-Phased Transit Curves

TCE 007900688-01 P=372.422999 Days $T_0=229.868967$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

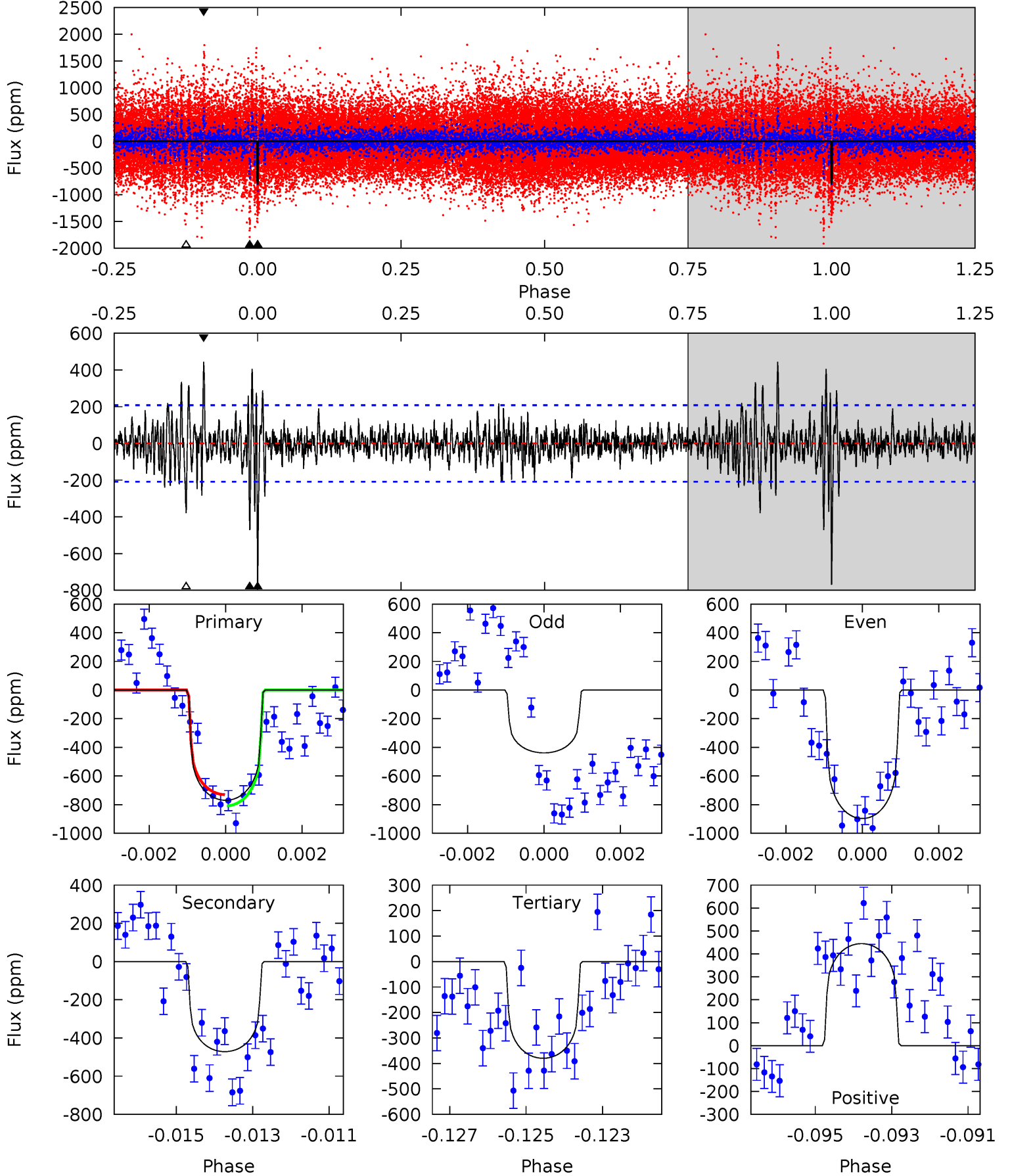
TCE 007900688-01 P=372.490176 Days $T_0=229.731031$ (BKJD)



DV Model-Shift Uniqueness Test

007900688-01, P = 372.422999 Days, E = 229.868967 Days

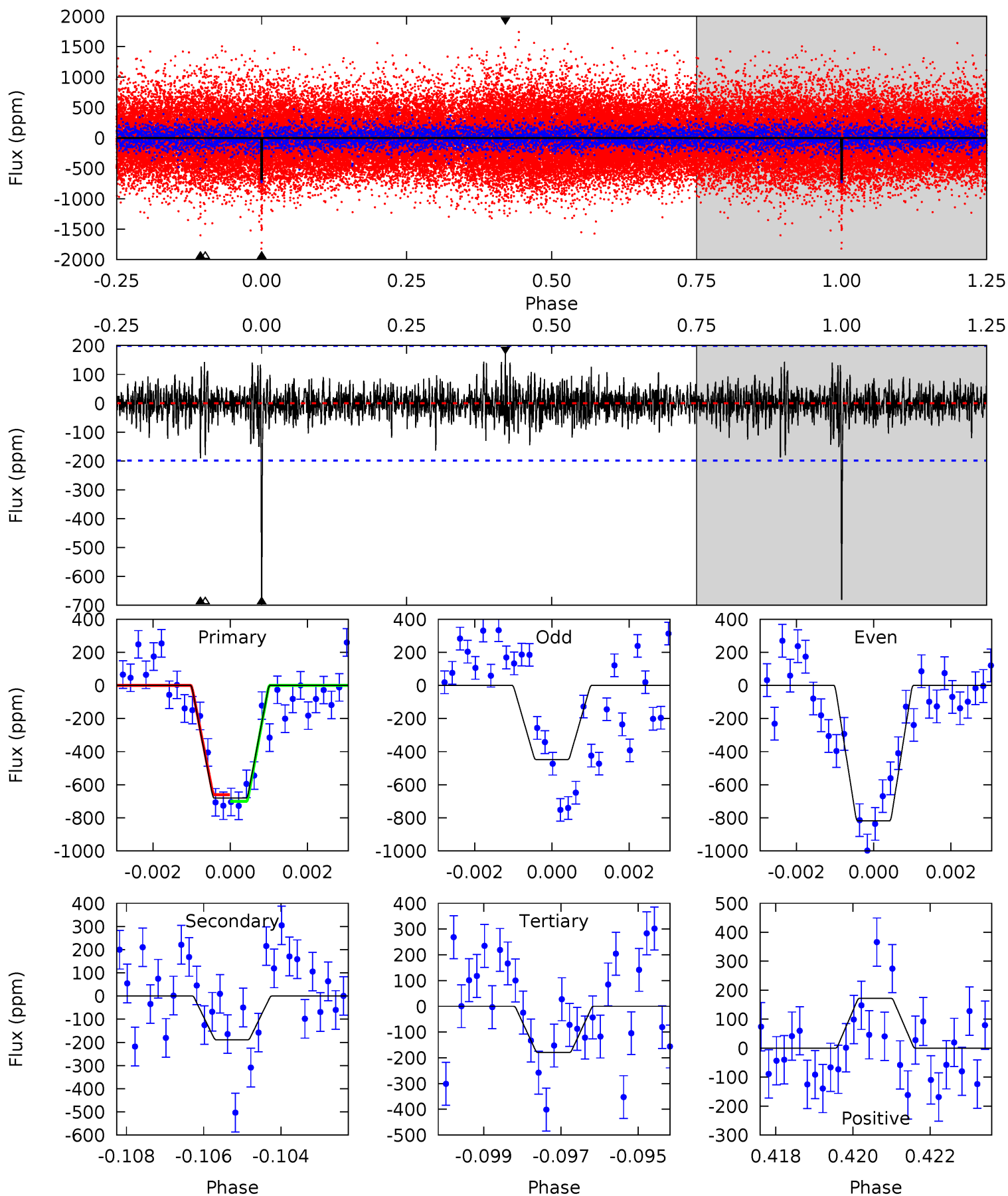
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.7	12.1	9.73	11.4	5.34	3.11	1.89	10.00	8.33	2.36	0.69	5.54	0.87	0.37	1.00



Alt Model-Shift Uniqueness Test

007900688-01, P = 372.490176 Days, E = 229.731031 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.3	5.07	4.81	4.62	5.34	3.11	1.07	13.5	13.7	0.26	0.46	4.70	1.55	0.20	0.54



Stellar Parameters For KIC 007900688

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5853^{+163}_{-204}	$4.529^{+0.044}_{-0.187}$	$-0.100^{+0.250}_{-0.300}$	$0.895^{+0.243}_{-0.087}$	$0.990^{+0.116}_{-0.127}$	$1.941^{+0.471}_{-0.926}$
	+3%/-3%	+1%/-4%	+250%/-300%	+27%/-10%	+12%/-13%	+24%/-48%
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 007900688-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-472 ± 39	$2.56^{+0.82}_{-0.79}$	346^{+23}_{-17}	5479^{+968}_{-623}	39435^{+40650}_{-16789}
Alt.	-189 ± 37	$2.84^{+0.84}_{-0.80}$	348^{+22}_{-17}	4338^{+634}_{-411}	12344^{+13291}_{-4907}

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

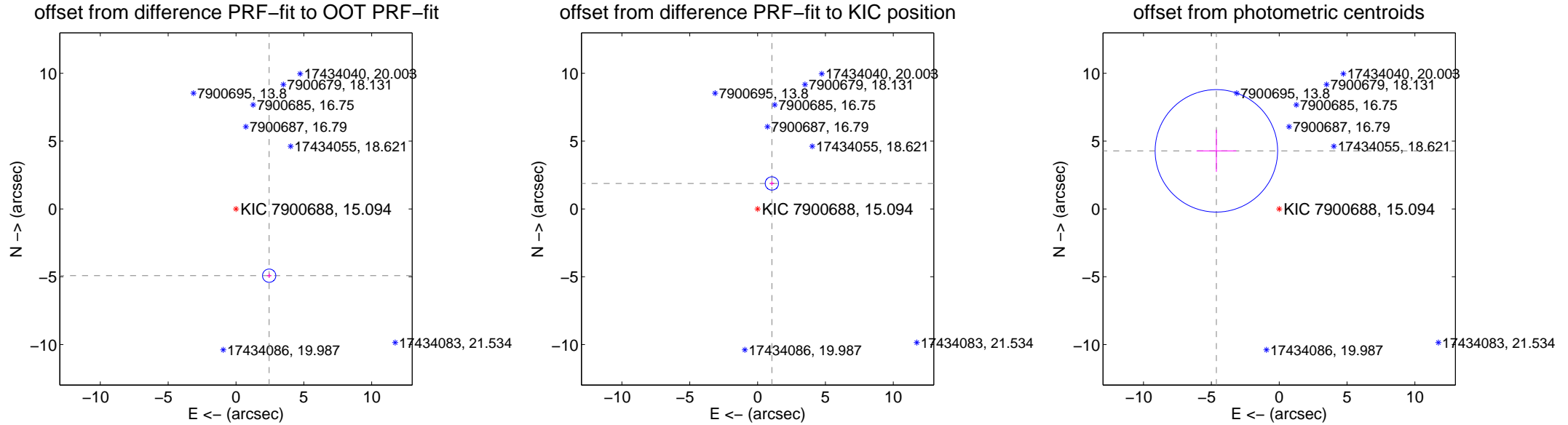
DV Centroid Data

Supplemental centroid analysis for 007900688-01. Kepler magnitude: 15.09. Transit SNR 8.27

There are 0 quarters with good PRF difference image offsets

The OOT PRF centroid is offset from the target star catalog position by about 6.94 arcsec so the offset from difference PRF-fit to OOT PRF-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.493 ± 0.163	33.65	-2.444 ± 0.168	-4.920 ± 0.162
PRF-fit source offset from KIC position	2.152 ± 0.163	13.16	-1.051 ± 0.168	1.878 ± 0.162
photometric centroid source offset	6.30 ± 1.50	4.19	4.63 ± 1.47	4.28 ± 1.55

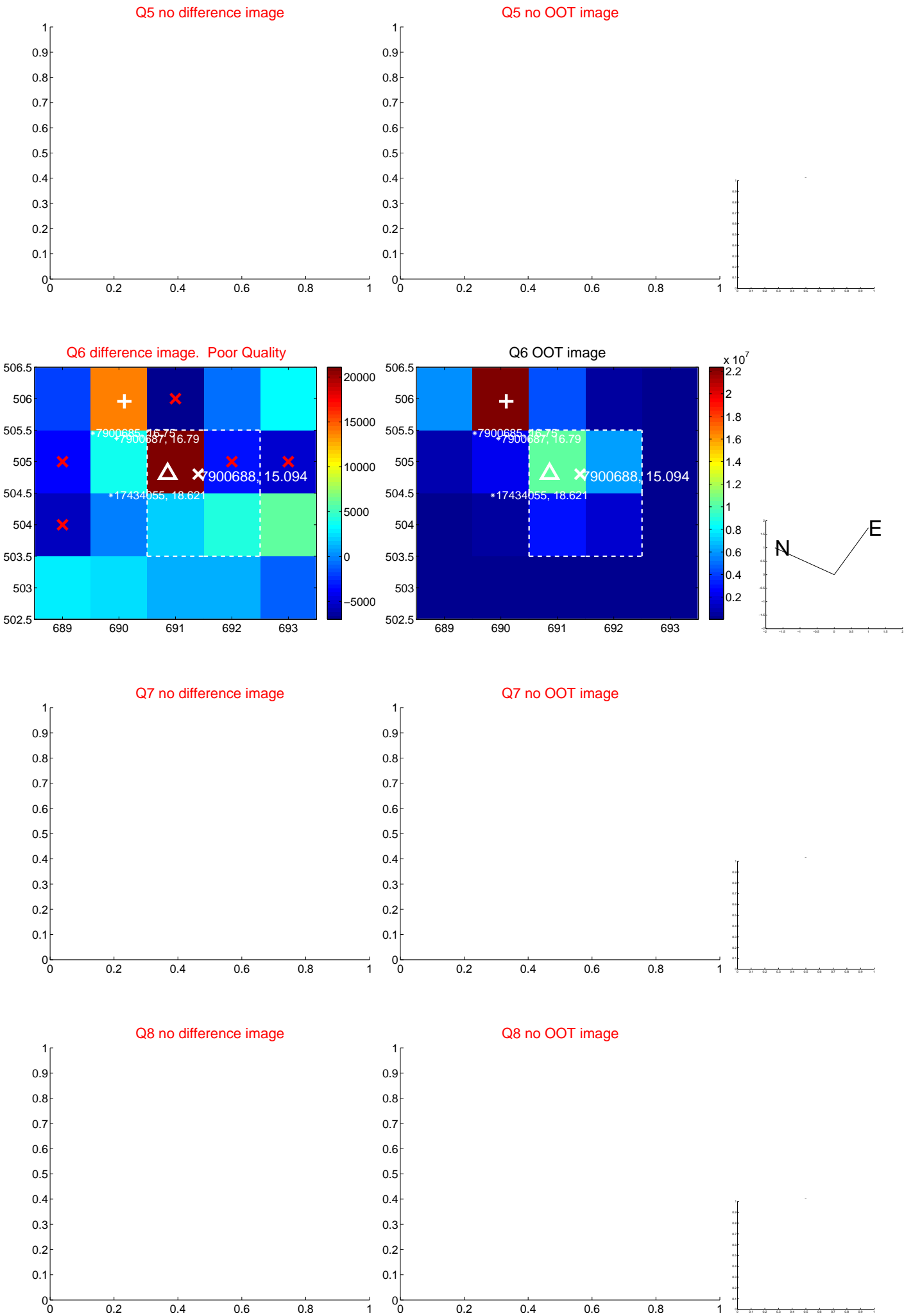


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

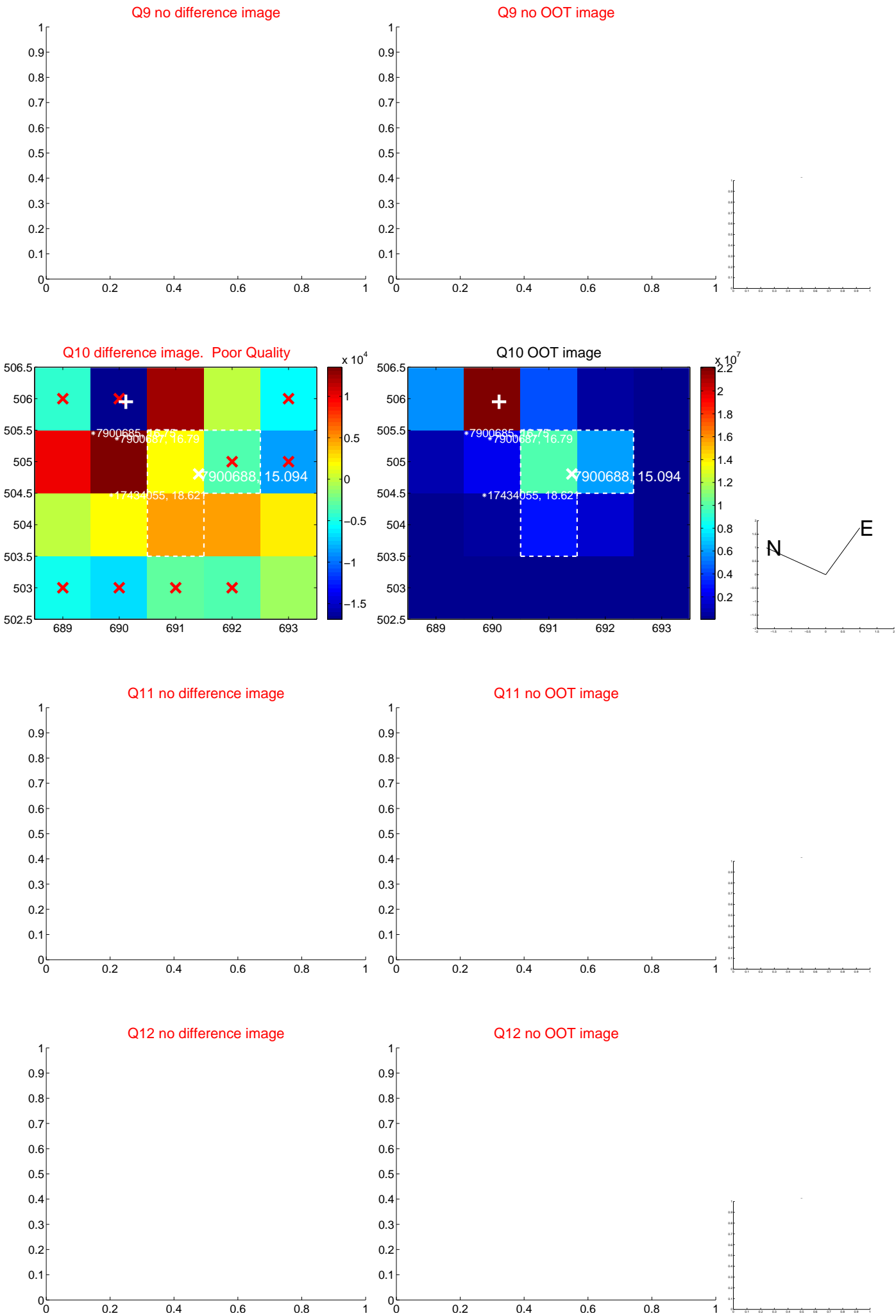
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



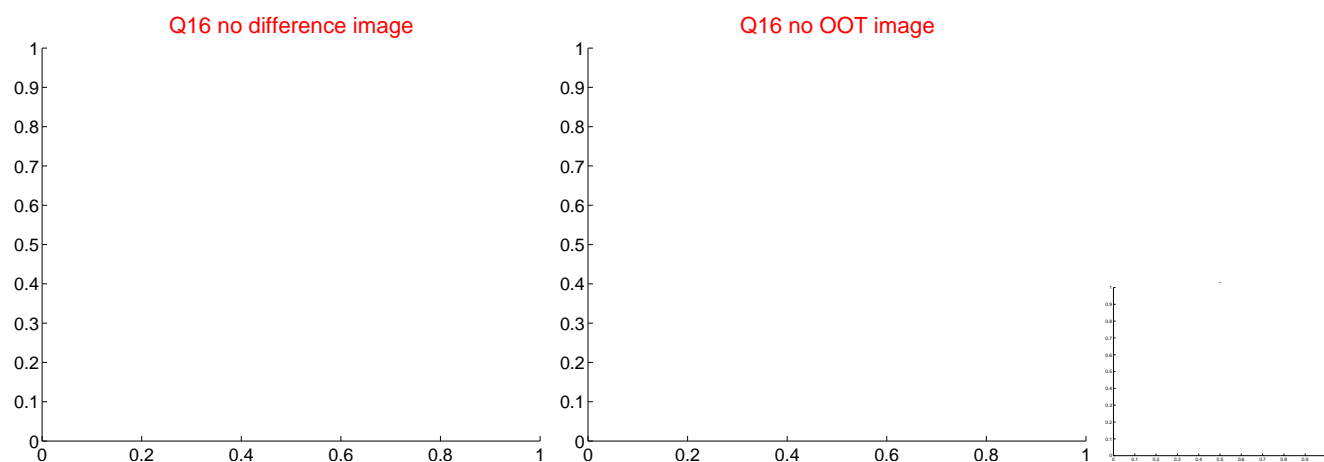
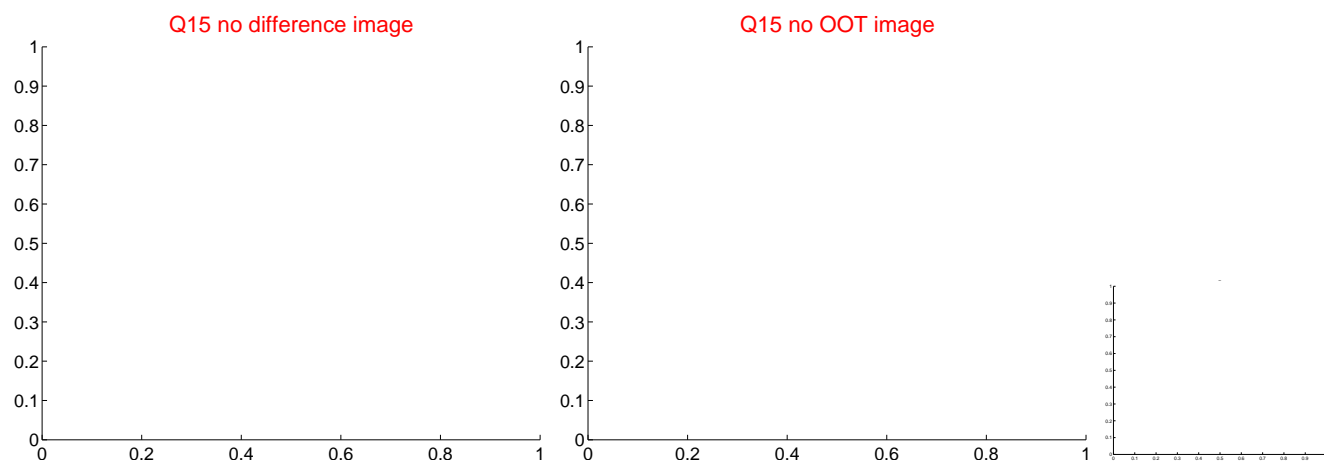
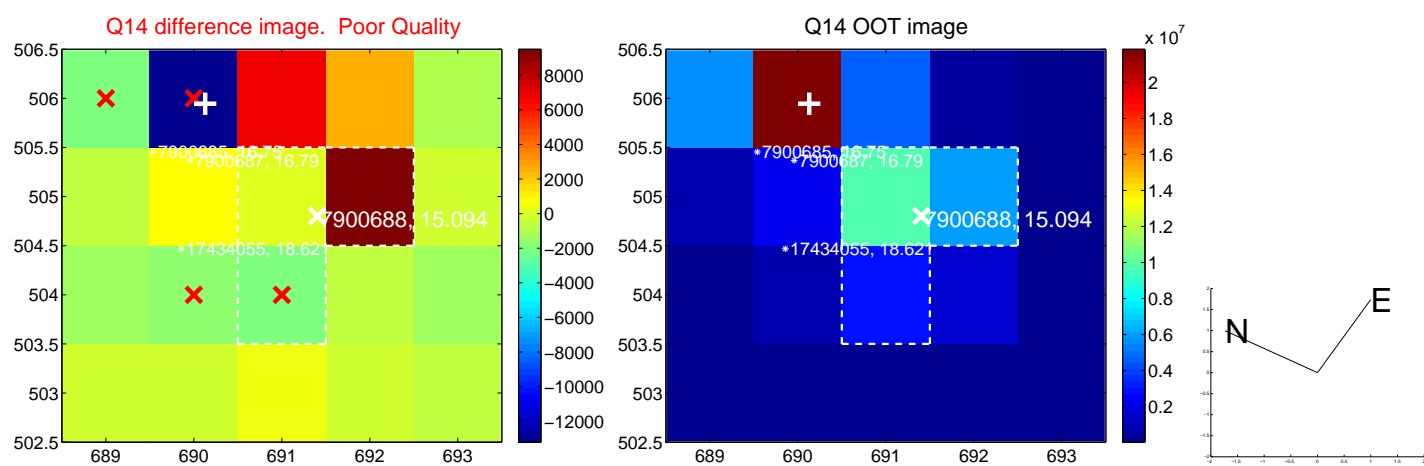
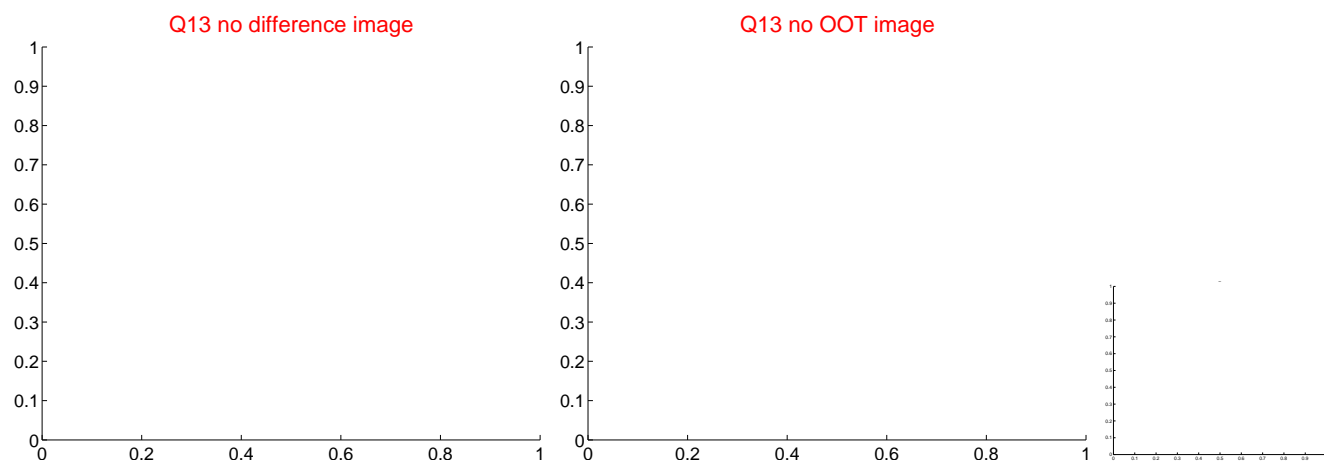
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



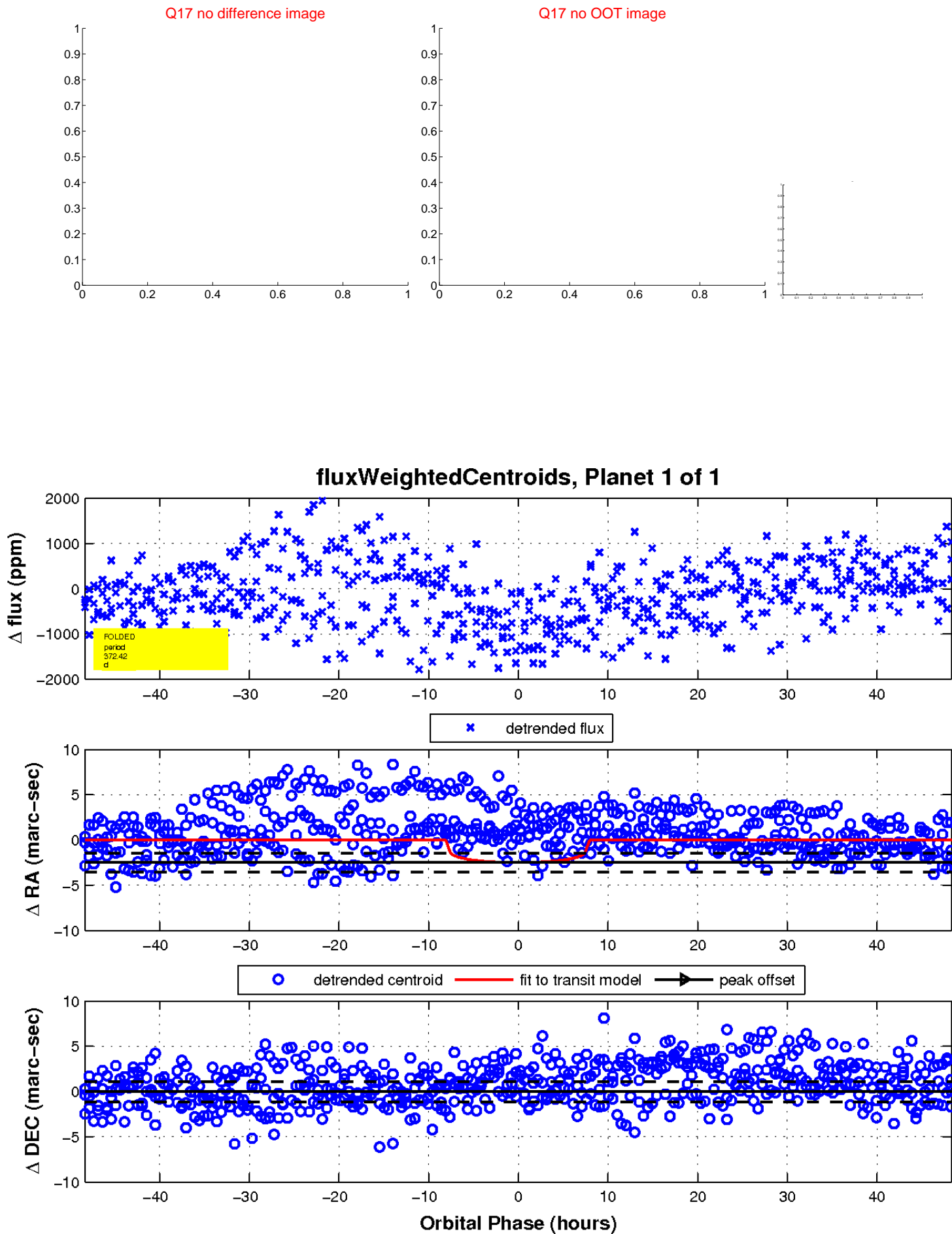
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UKIRT Image

Declination

