

KIC 011495989

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})
011495989-01	OBS	No	0.662049	132.139071	89.4	6.124	8.9	4.8	0.76	5019	0.70	1676.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011495989-01	OBS	FP	0.00	1	0	0	0	LPP_DV

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 011495989-01

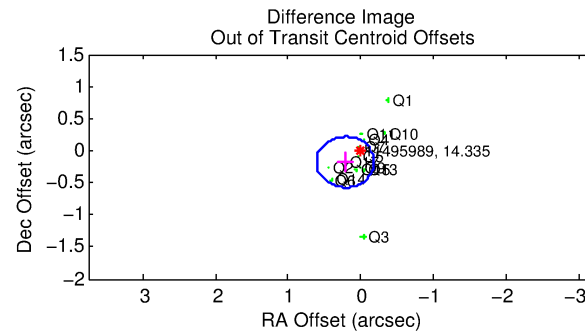
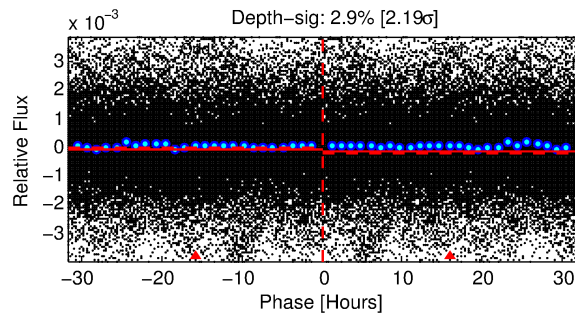
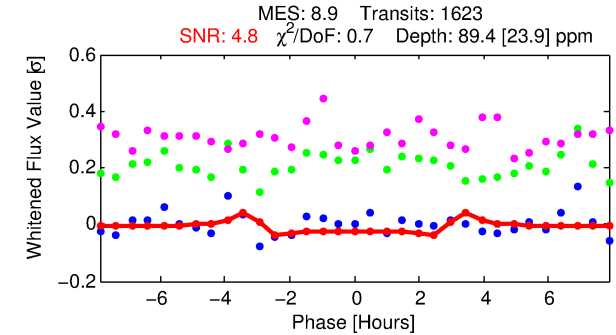
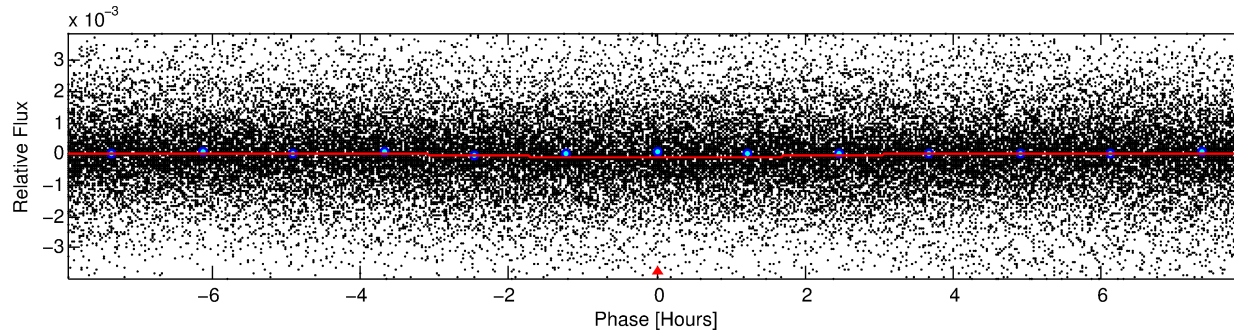
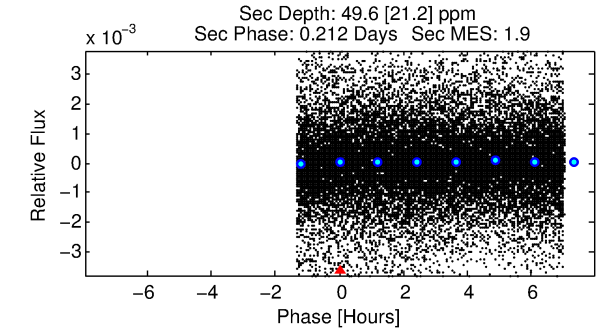
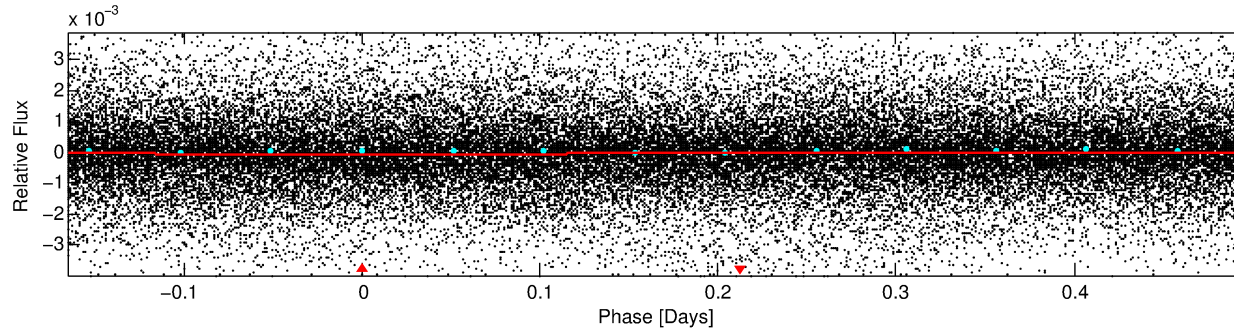
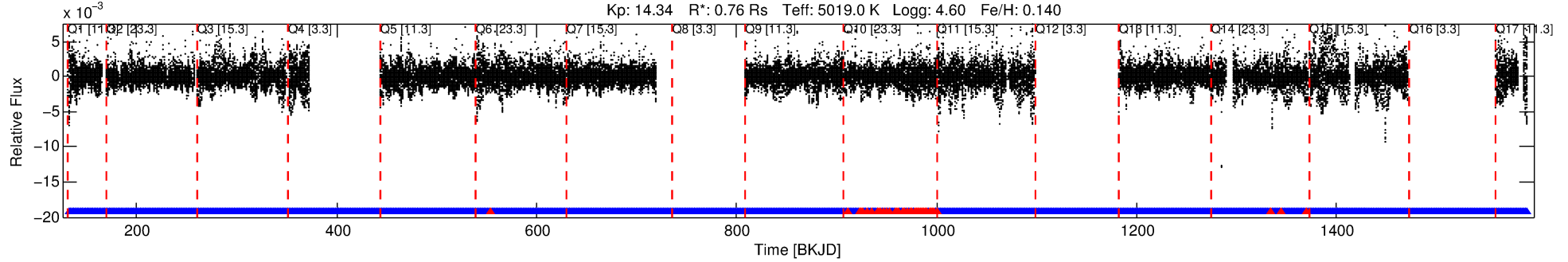
No Significant Match Found

DV One-Page Summary

KIC: 11495989 Candidate: 1 of 1 Period: 0.662 d

KOI: K07449 Corr: No Ephemeris Match

Kp: 14.34 R*: 0.76 Rs Teff: 5019.0 K Logg: 4.60 Fe/H: 0.140



DV Fit Results:

Period = 0.66205 [0.00002] d
Epoch = 132.1391 [0.0035] BKJD
Rp/R* = 0.0084 [0.0042]
a/R* = 1.08 [0.25]
b = 0.17 [9.95]
Seff = 1676.97 [213.43]
Teq = 1632 [52] K
Rp = 0.70 [0.35] Re
a = 0.0140 [0.0010] AU
Ag = 11.00 [11.99] [0.83σ]
Teffp = 4595 [1248] K [2.37σ]

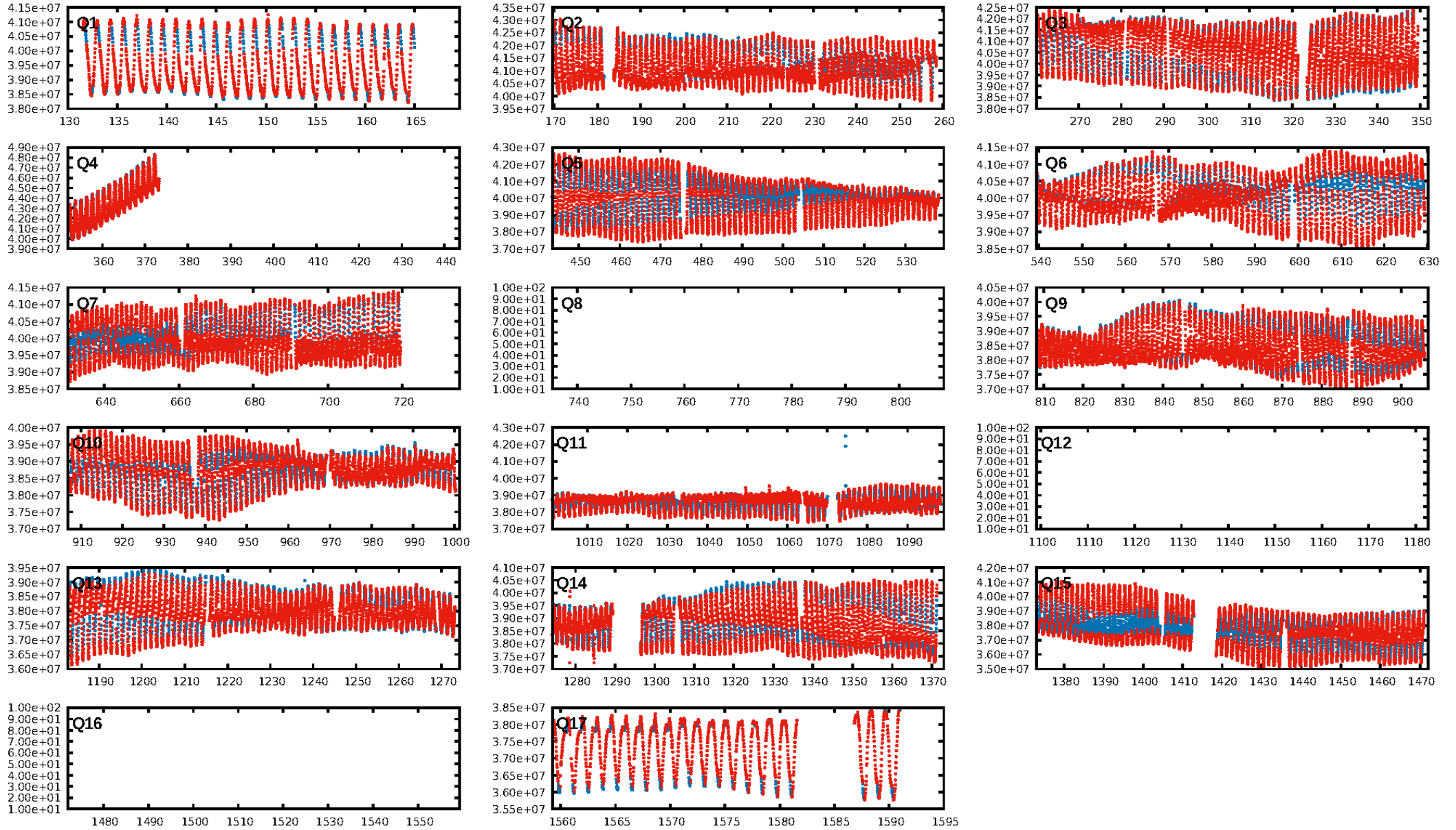
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.96 [1447/1500]
GhostDiagnostic-chr: 3.569
Centroid-sig: 46.5%
Centroid-so: 0.552 arcsec [0.97σ]
OotOffset-rm: 0.277 arcsec [2.10σ]
KicOffset-rm: 0.189 arcsec [1.86σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.71 [10/14]
DiffImageOverlap-fno: 1.00 [14/14]

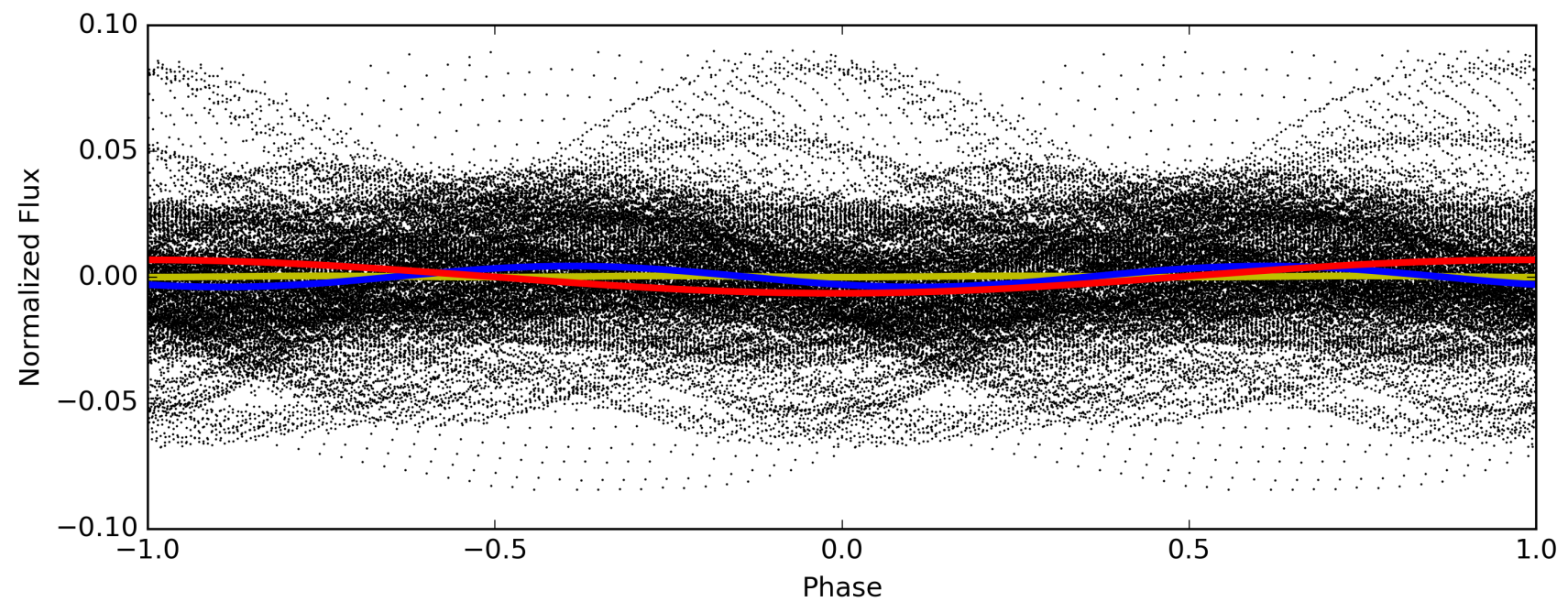
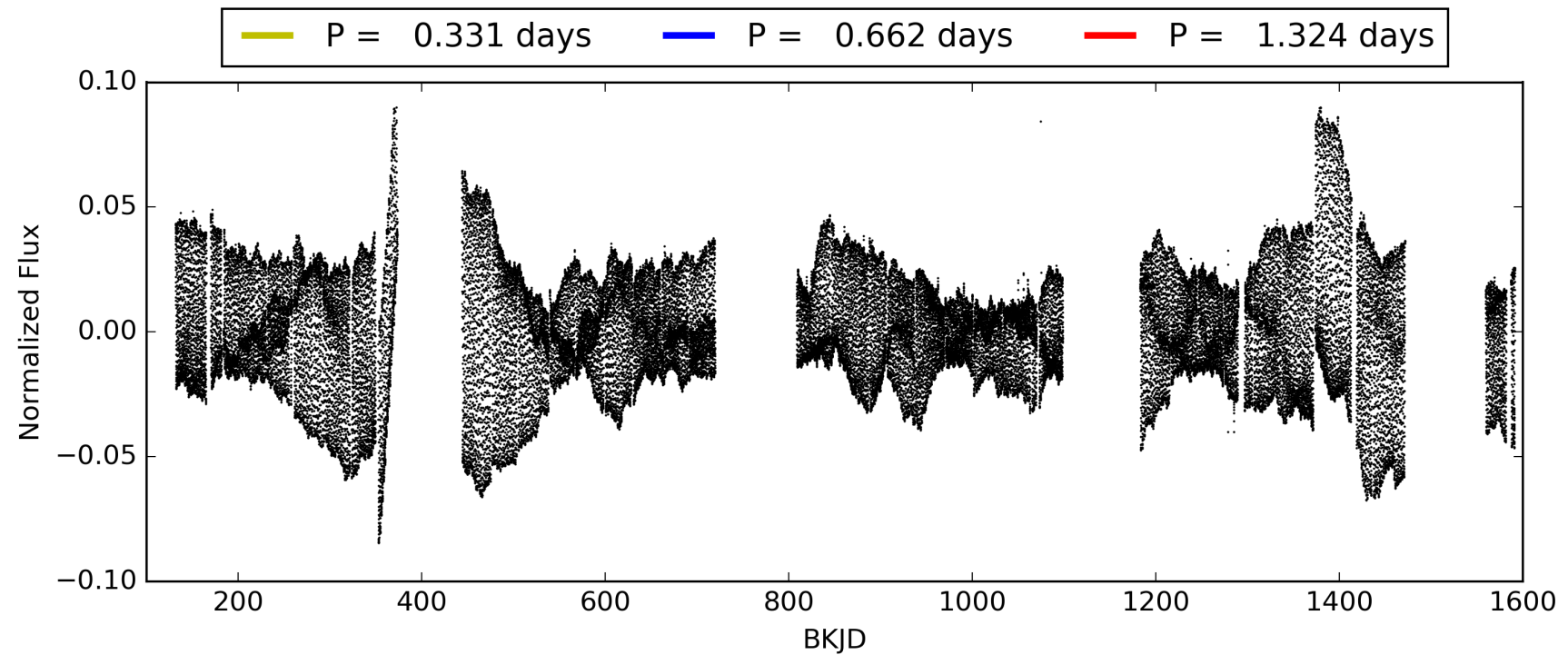
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 05:56:55 Z

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

TCE 011495989-01, PDC Light Curves

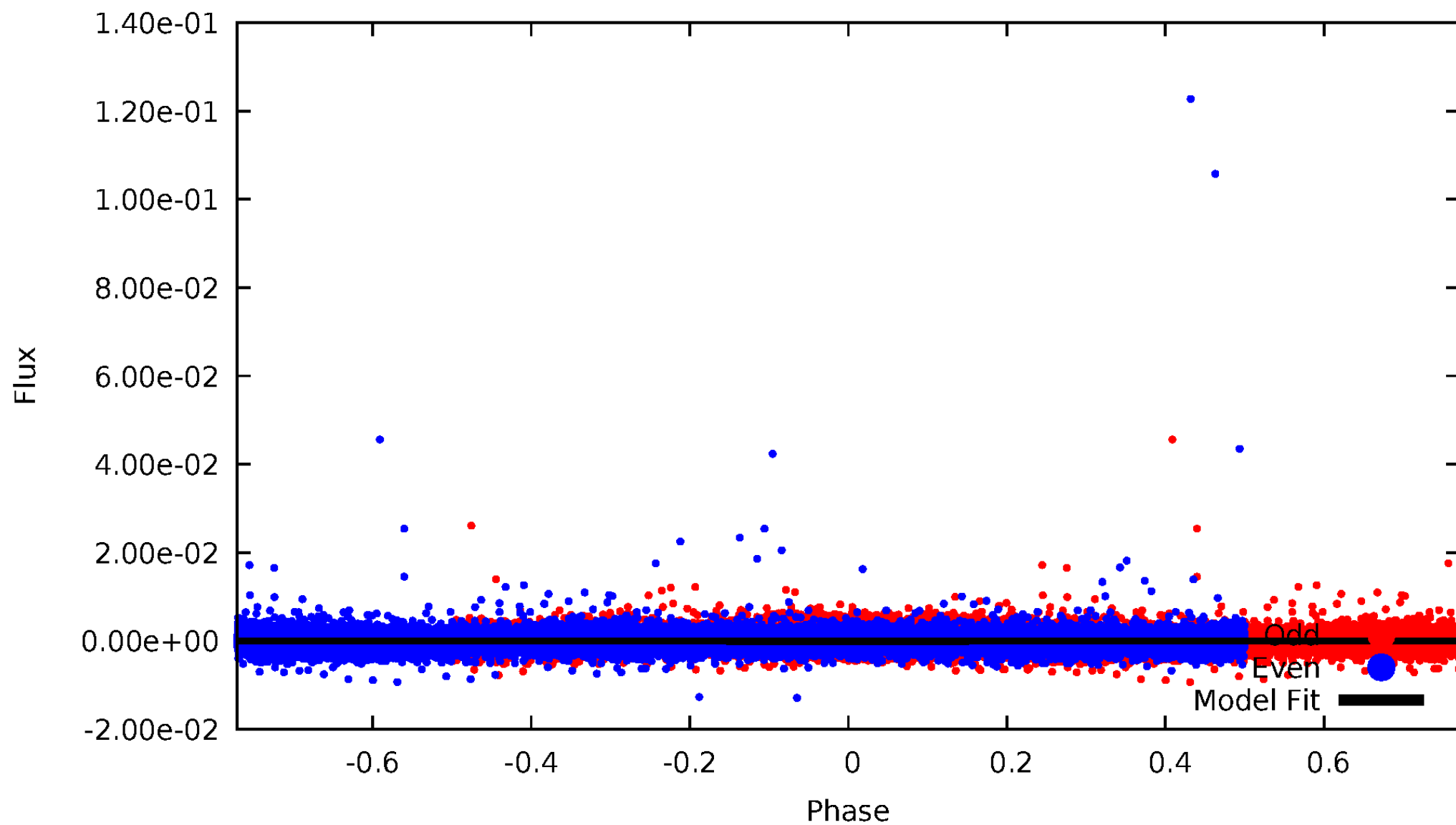


TCE 011495989-01



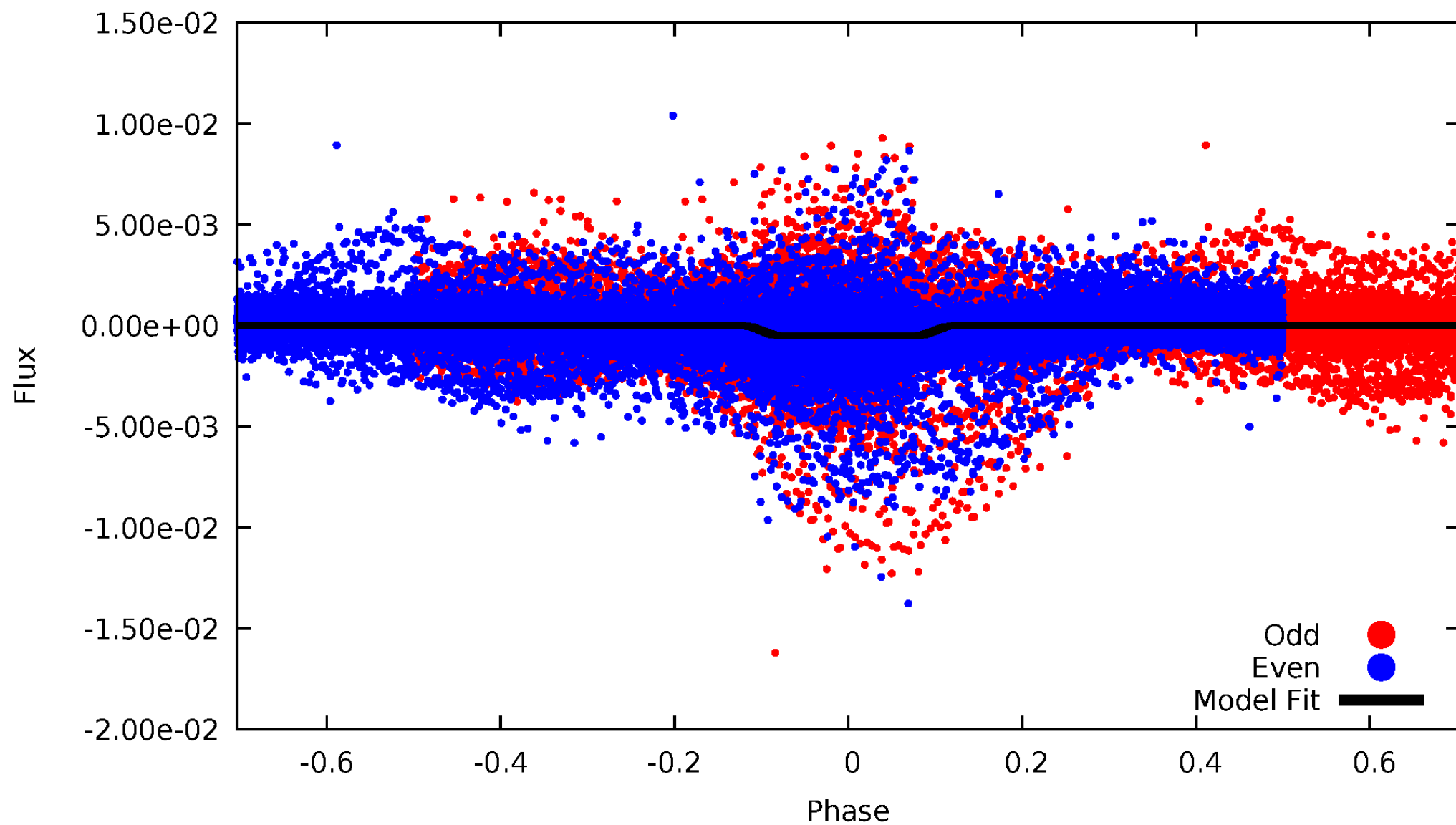
DV Odd/Even

TCE 011495989-01



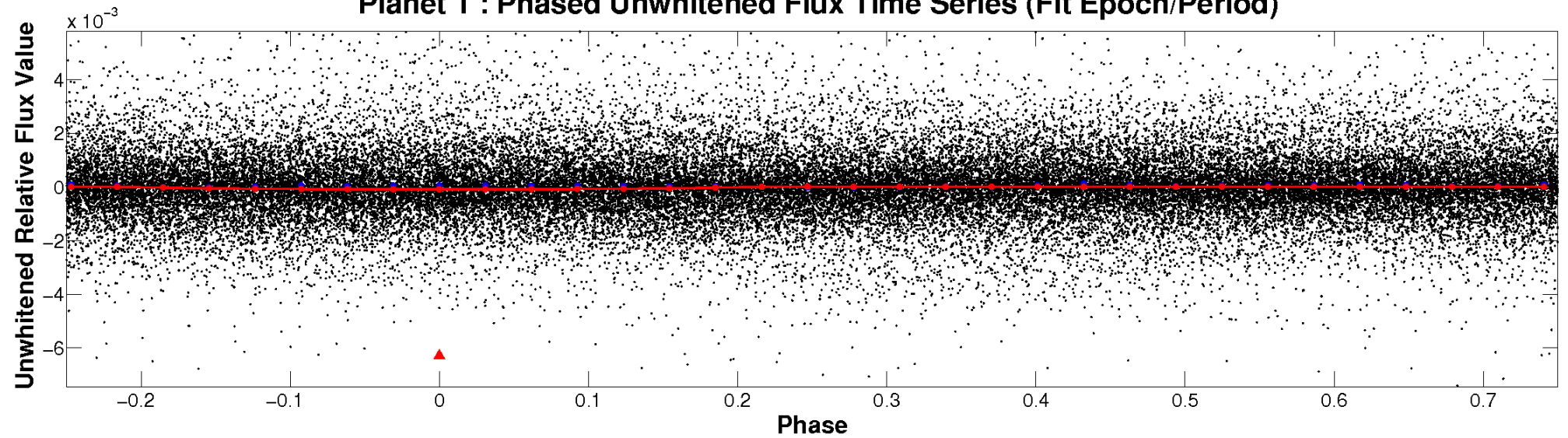
ALT Odd/Even

TCE 011495989-01

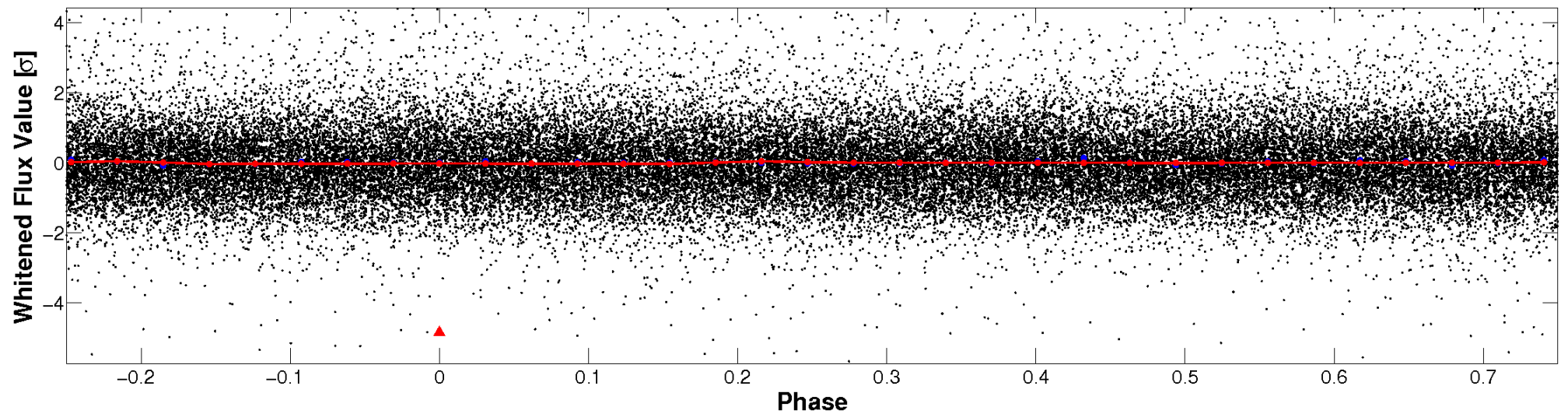


Non-Whitened Vs. Whitened Light Curve

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

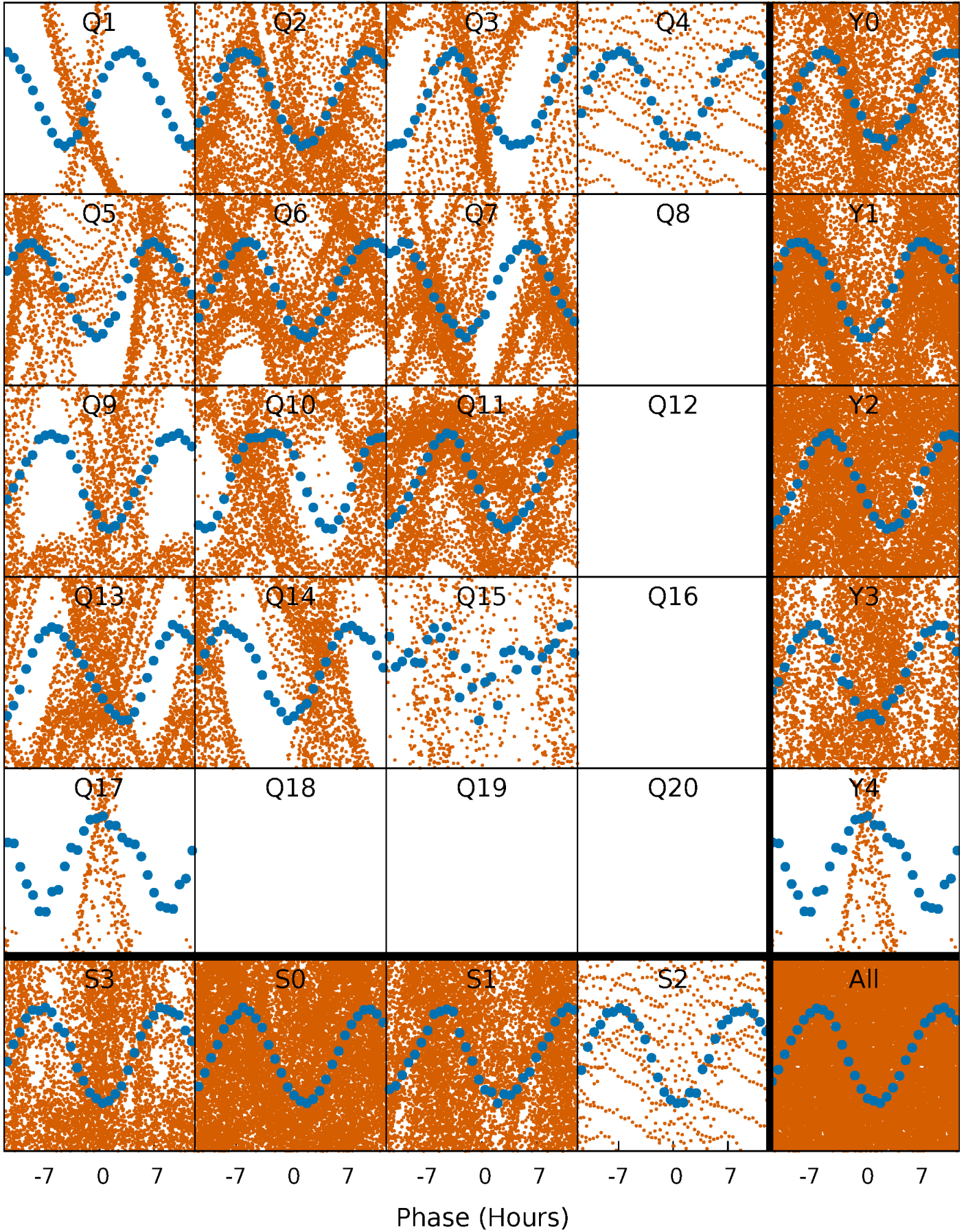


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



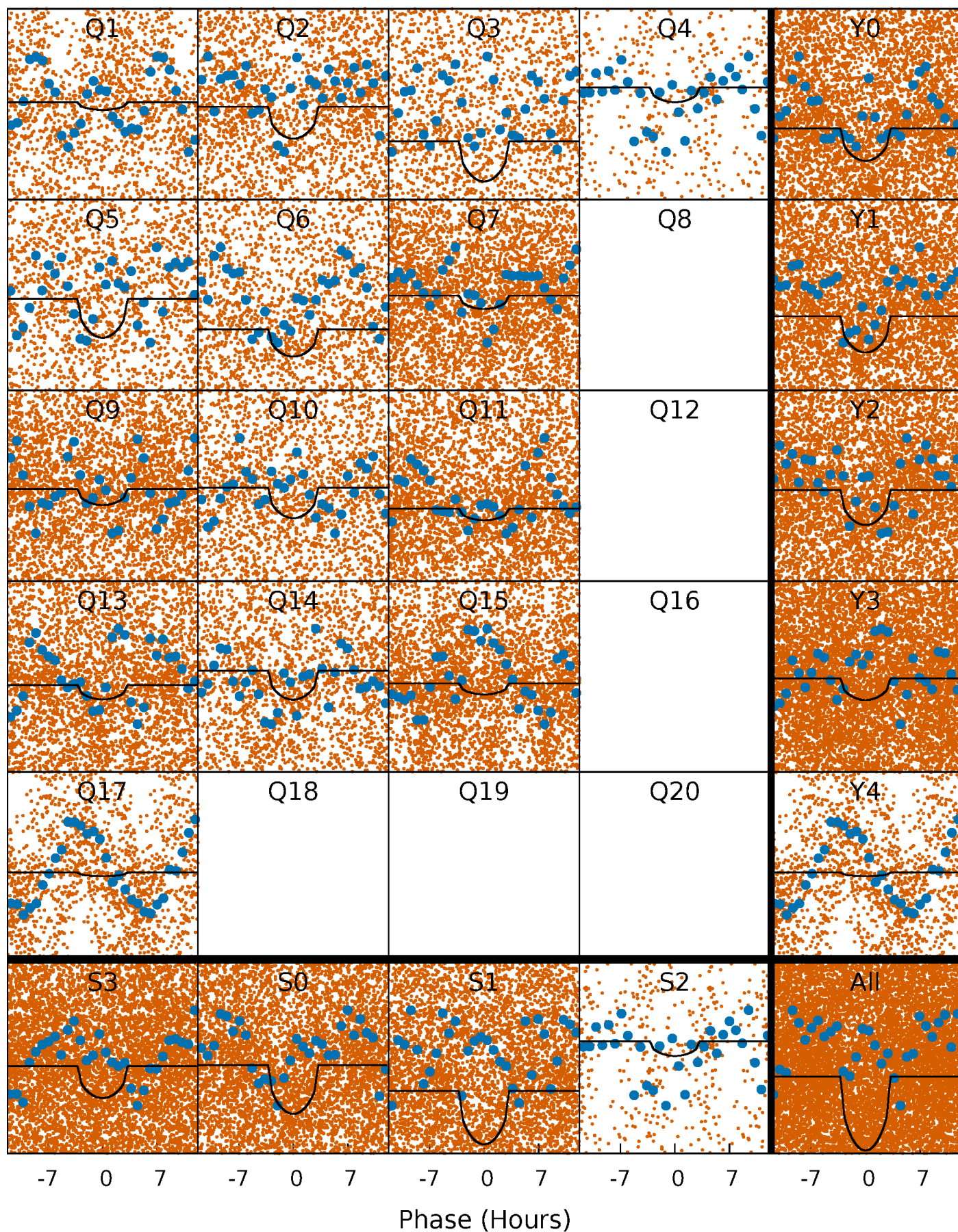
PDC Quarter-Phased Transit Curves

TCE 011495989-01 P= 0.662049 Days $T_0=132.139072$ (BKJD)



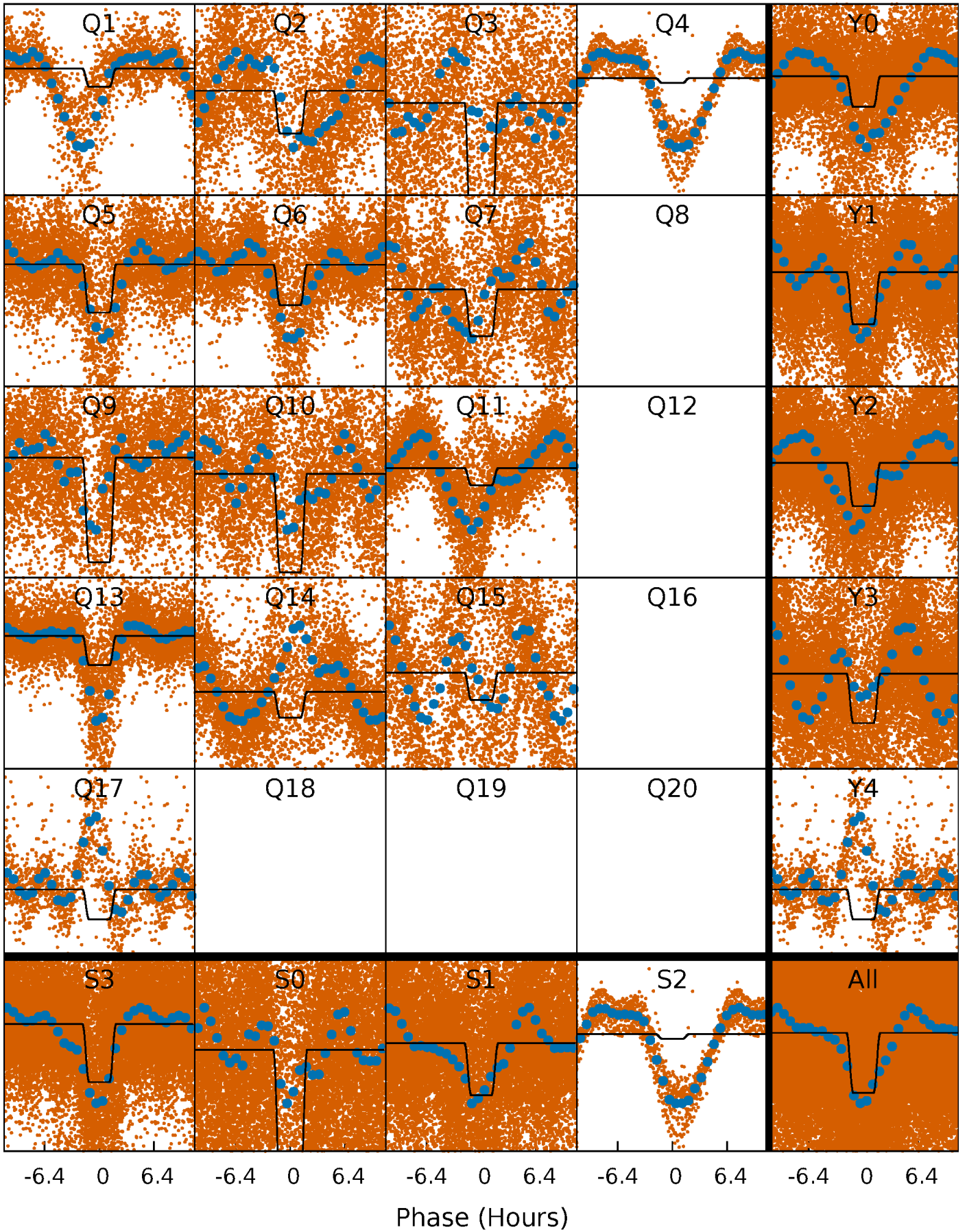
DV Quarter-Phased Transit Curves

TCE 011495989-01 P= 0.662049 Days $T_0=132.139072$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

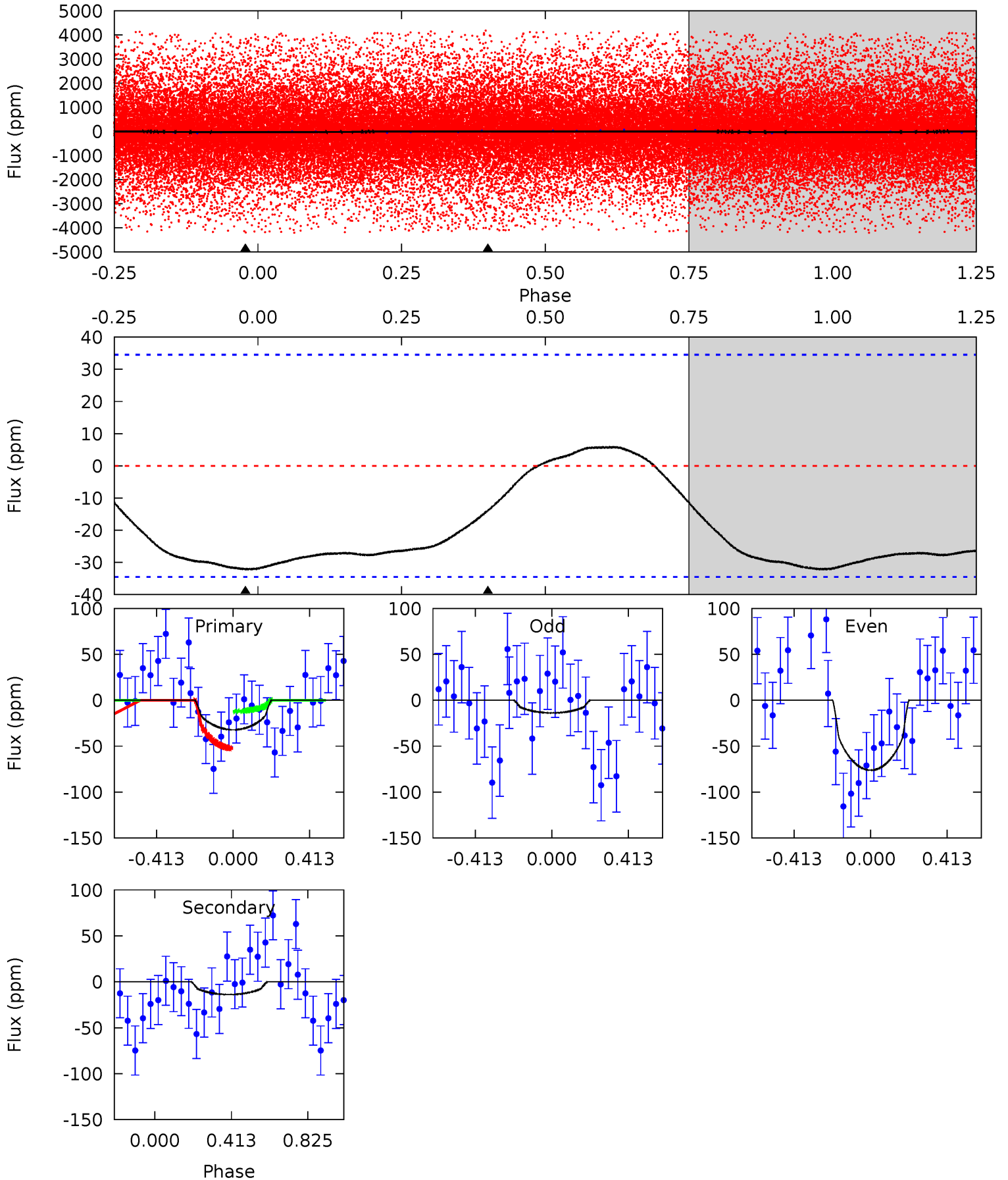
TCE 011495989-01 P= 0.662213 Days $T_0=132.055079$ (BKJD)



DV Model-Shift Uniqueness Test

011495989-01, P = 0.662049 Days, E = 131.477023 Days

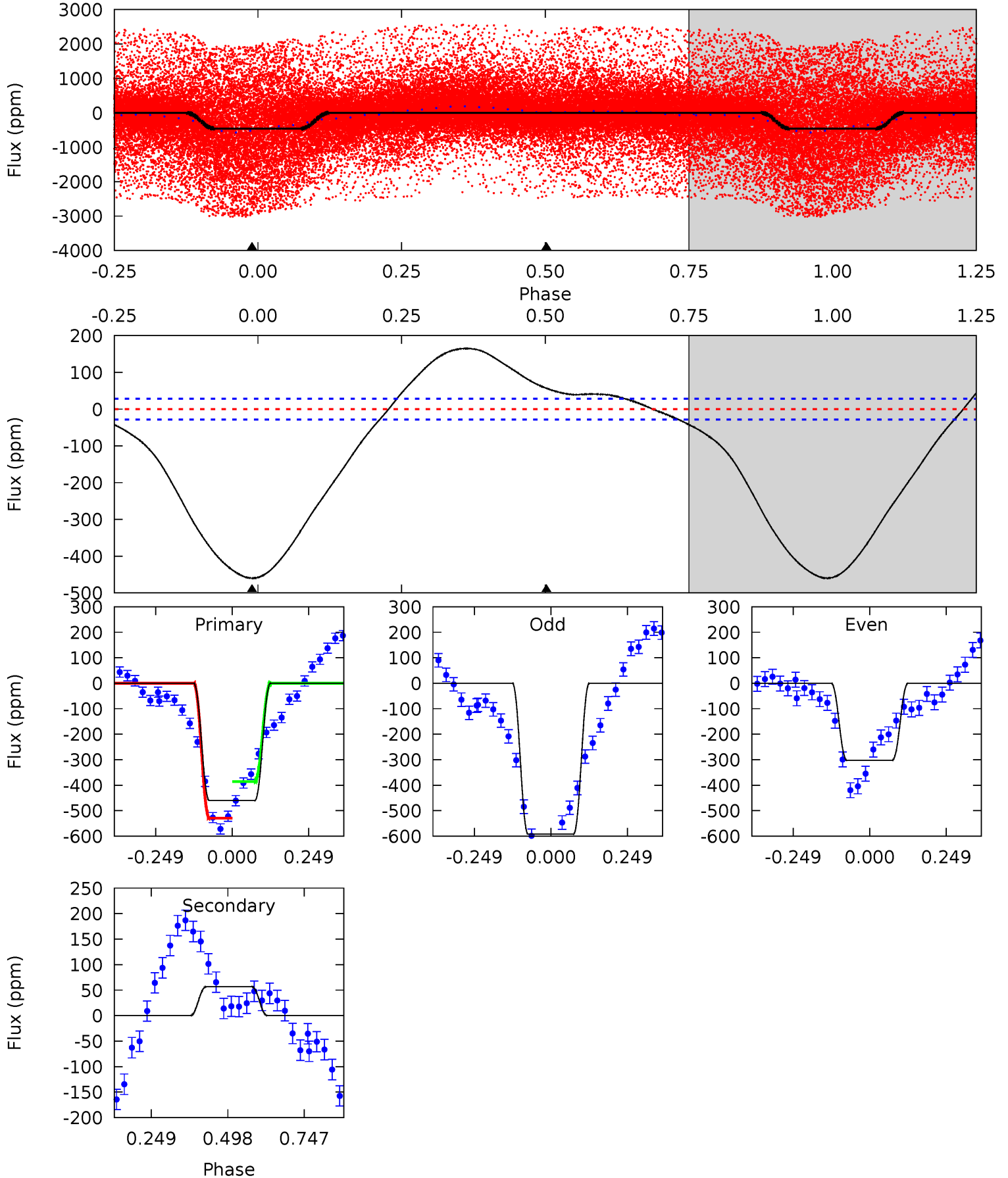
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.97	1.71	0	0	4.26	0.82	0.55	3.97	3.97	1.71	1.71	3.82	-0.86	0.15	2.41



Alt Model-Shift Uniqueness Test

011495989-01, P = 0.662213 Days, E = 131.392866 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
71.3	-8.80	0	0	4.37	1.15	6.91	71.3	71.3	-8.80	-8.80	23.0	1.34	0.26	11.2



Stellar Parameters For KIC 011495989

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5019^{+80}_{-80}	$4.599^{+0.012}_{-0.064}$	$0.140^{+0.150}_{-0.150}$	$0.763^{+0.057}_{-0.024}$	$0.855^{+0.026}_{-0.057}$	$2.713^{+0.168}_{-0.581}$
	+2%/-2%	+0%/-1%	+107%/-107%	+7%/-3%	+3%/-7%	+6%/-21%
Source	SPE90	SPE90	SPE90	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 011495989-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-14 ± 8	$0.73^{+0.35}_{-0.35}$	2298^{+50}_{-48}	3558^{+1091}_{-702}	$2.593^{+7.871}_{-1.757}$
Alt.	57 ± 6	$1.93^{+0.35}_{-0.36}$	2301^{+53}_{-47}	-3462^{+159}_{-218}	$-1.655^{+0.493}_{-0.857}$

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 $A_{obs} \gg 1.0$

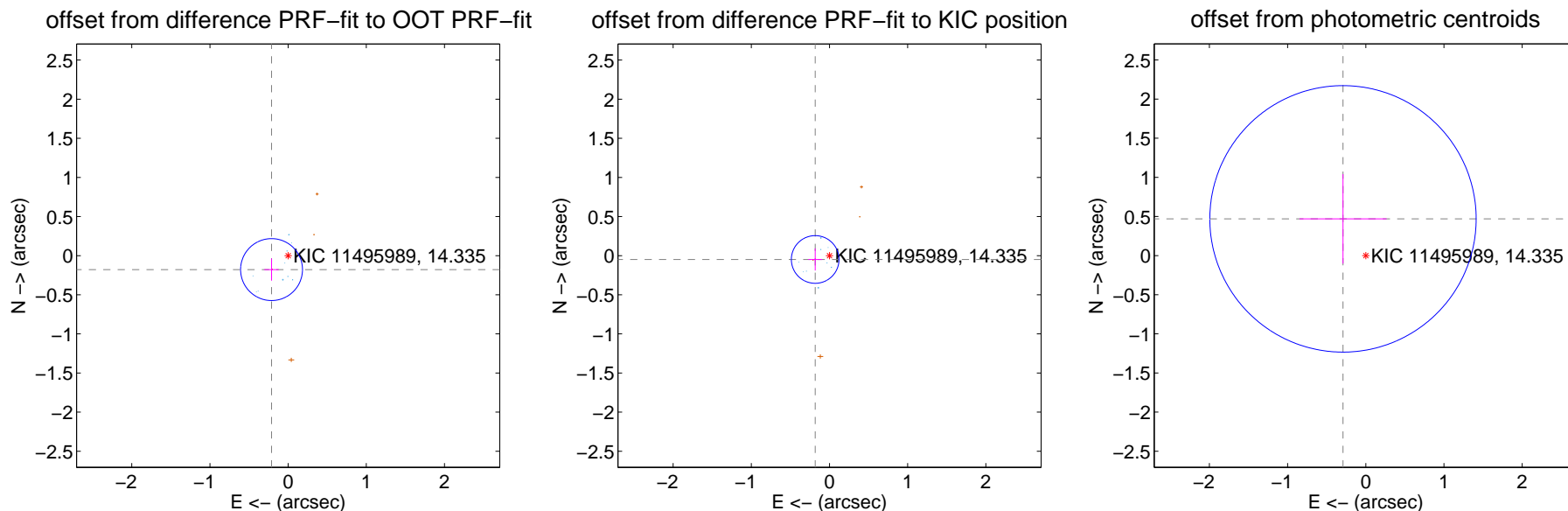
DV Centroid Data

Supplemental centroid analysis for 011495989-01. Kepler magnitude: 14.34. Transit SNR 4.81

There are 10 quarters with good PRF difference image offsets

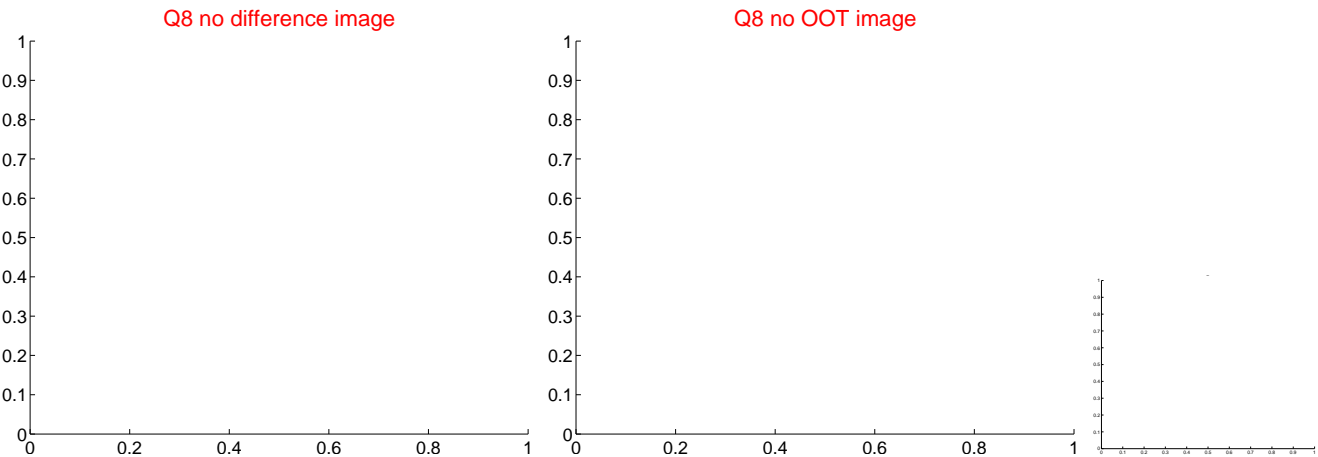
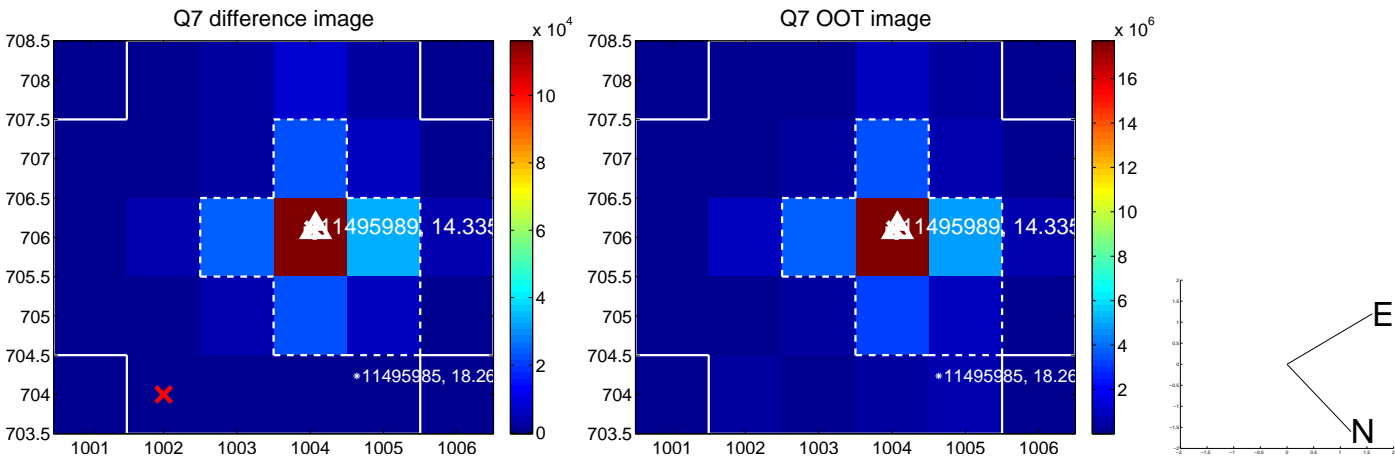
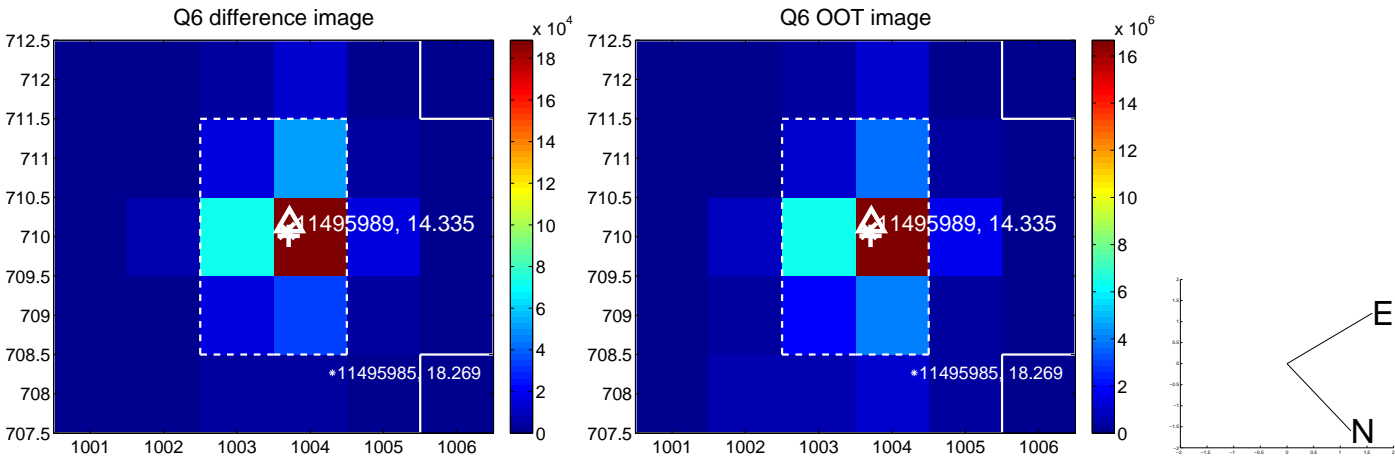
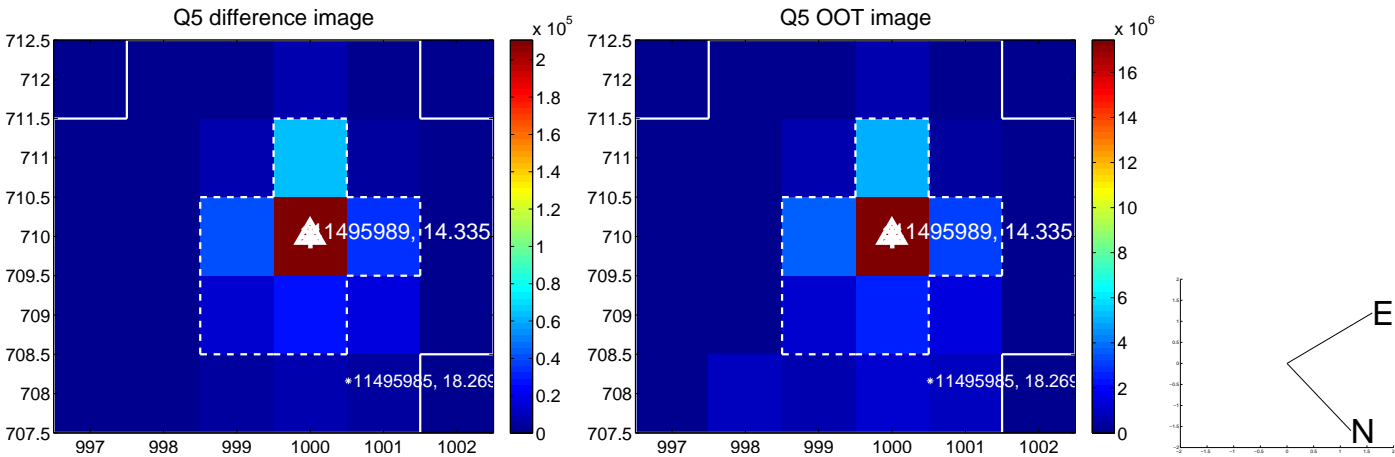
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.277 ± 0.132	2.10	0.212 ± 0.092	-0.178 ± 0.141
PRF-fit source offset from KIC position	0.189 ± 0.102	1.86	0.183 ± 0.088	-0.049 ± 0.142
photometric centroid source offset	0.55 ± 0.57	0.97	0.29 ± 0.56	0.47 ± 0.57

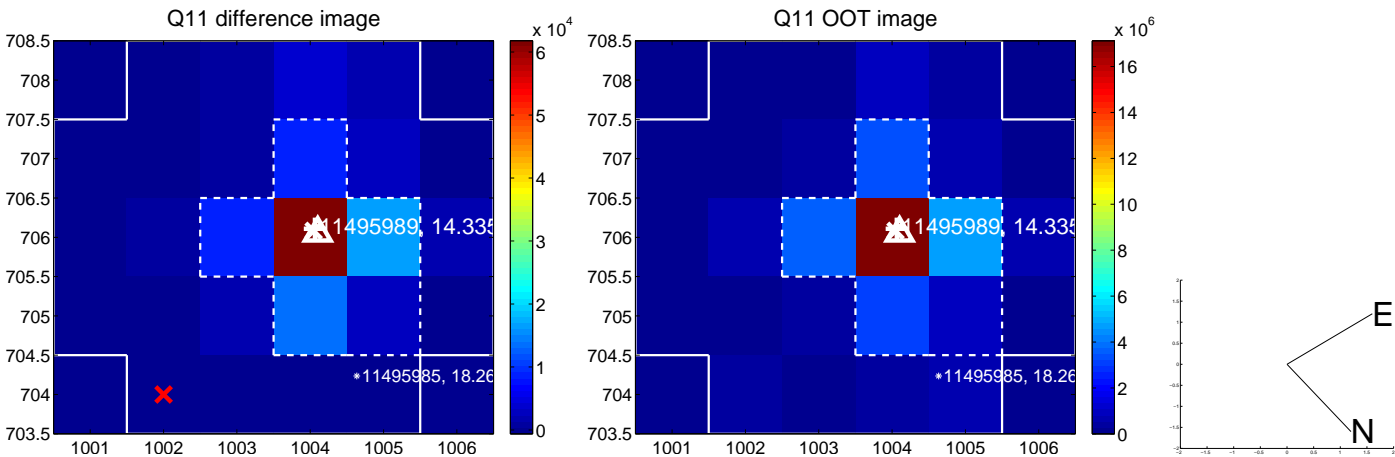
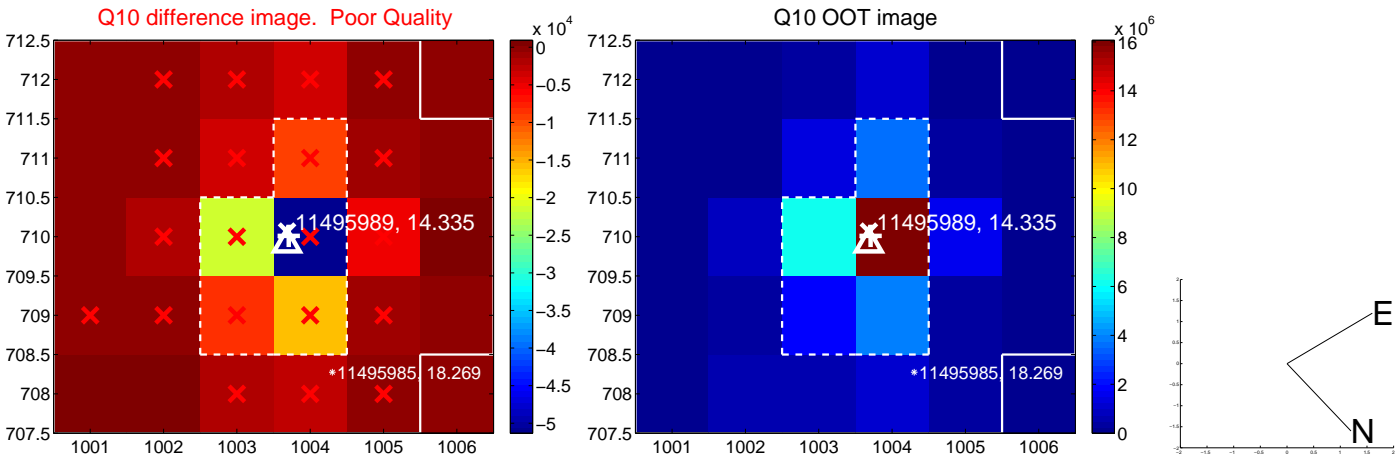
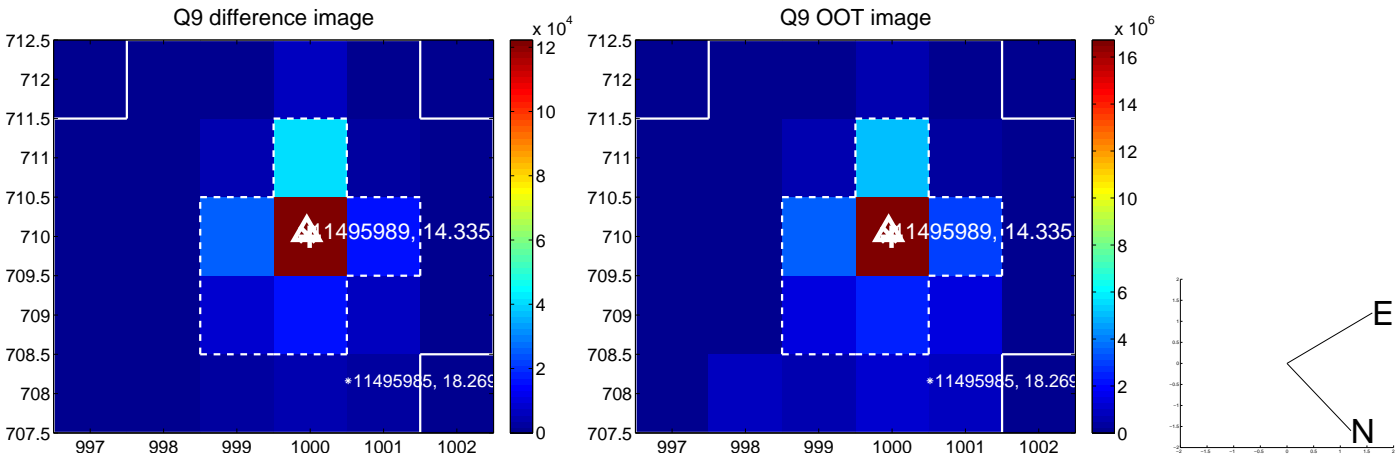


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

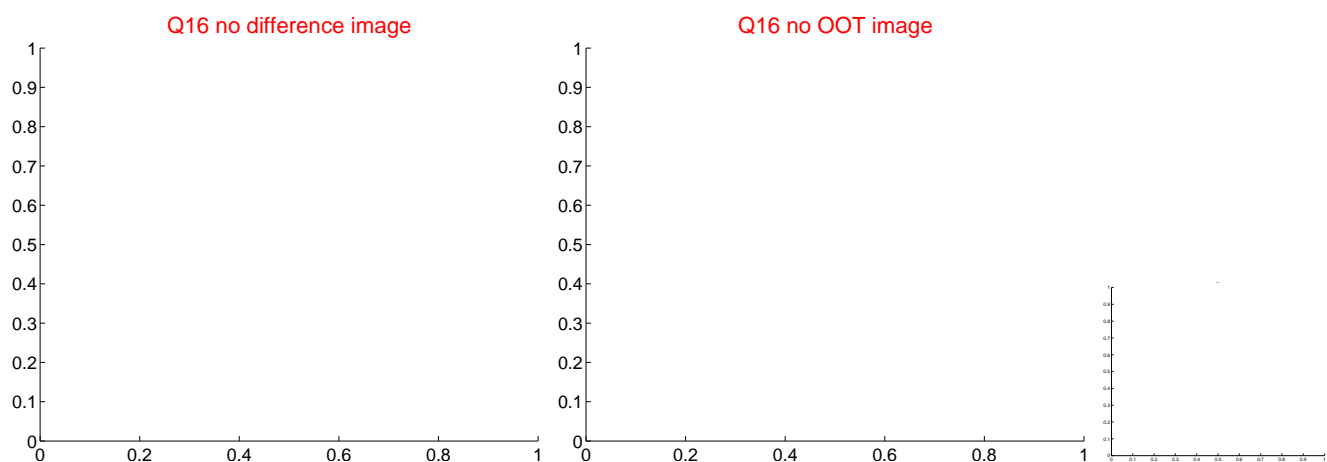
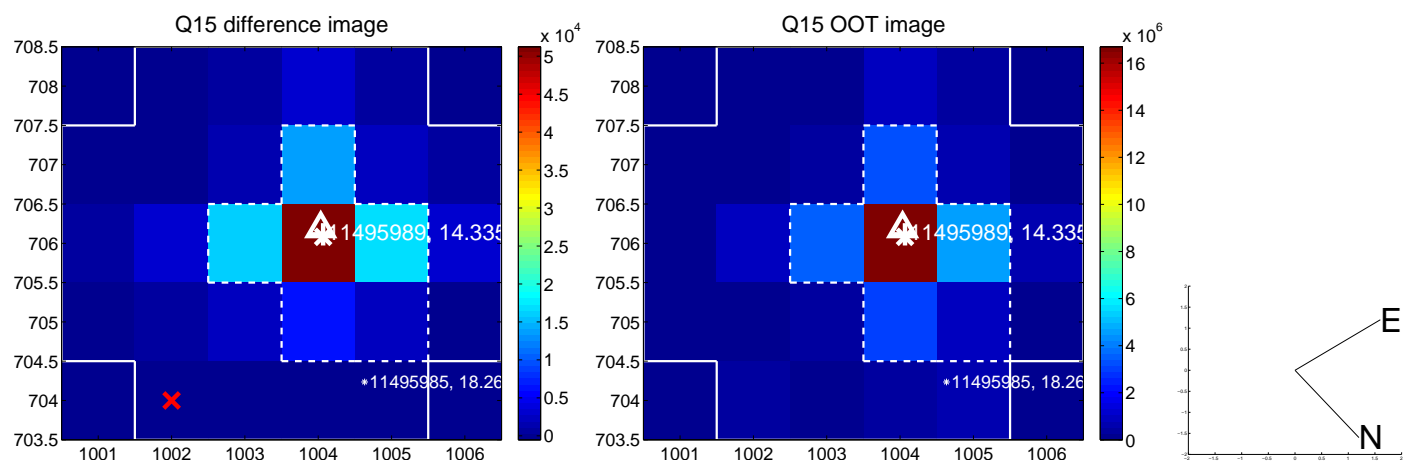
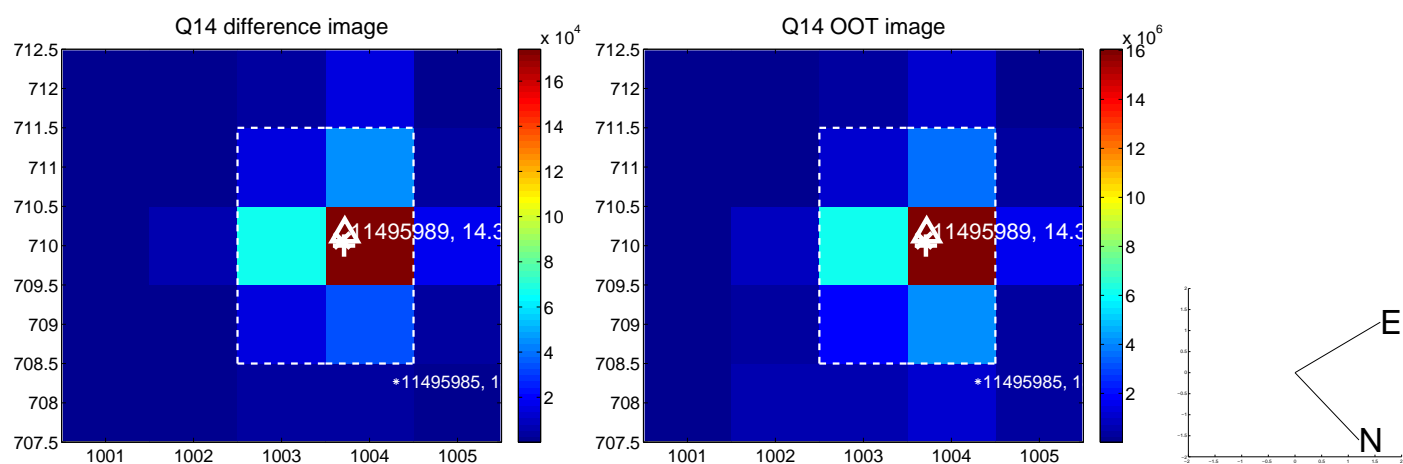
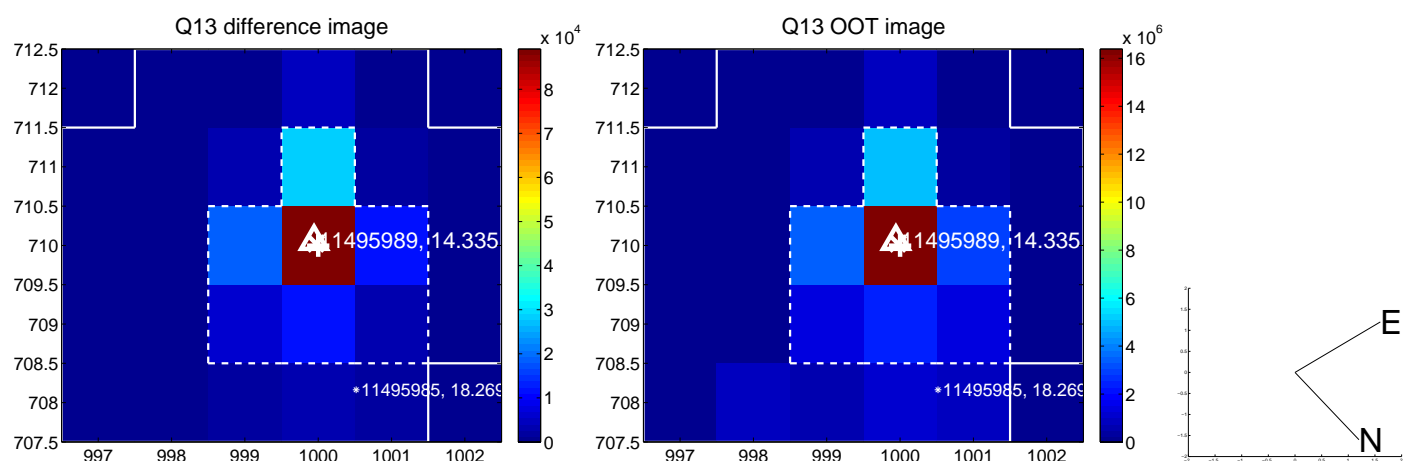
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



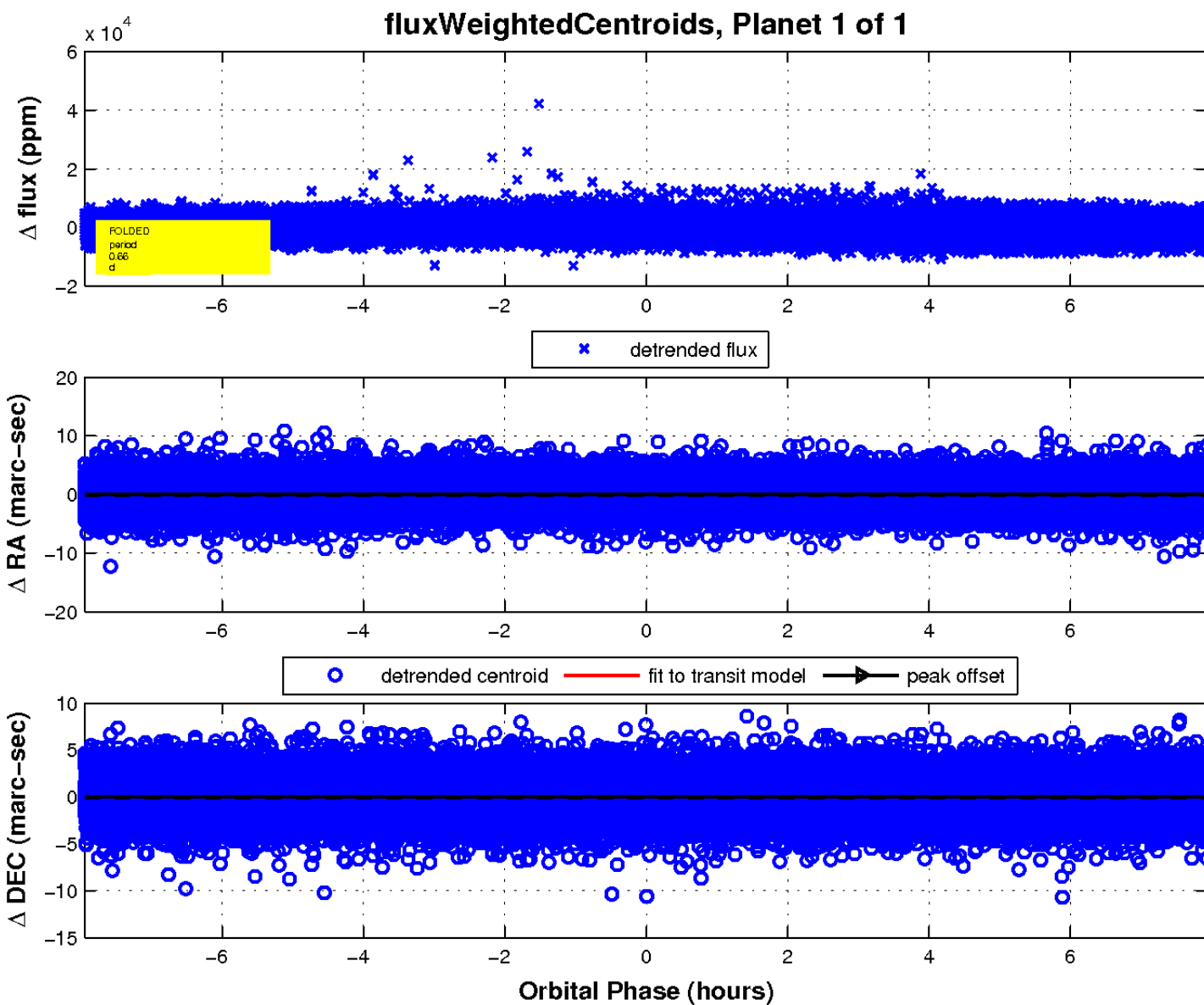
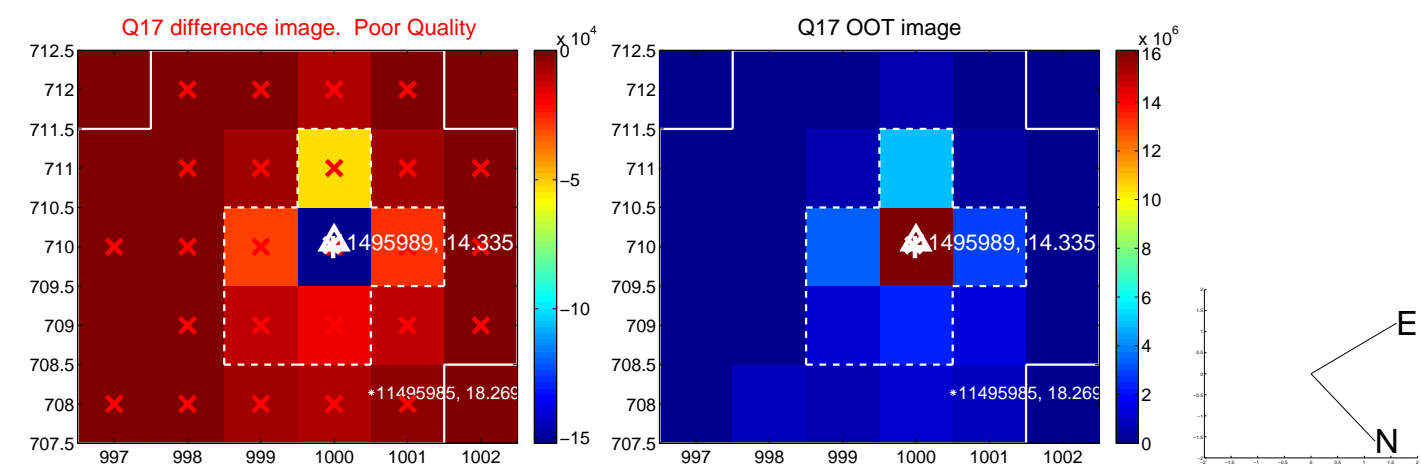
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

