

KIC 006887030

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})
006887030-01	OBS	7795.01	5.440953	134.283366	142.9	2.115	7.9	8.9	0.76	5519	1.09	149.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006887030-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

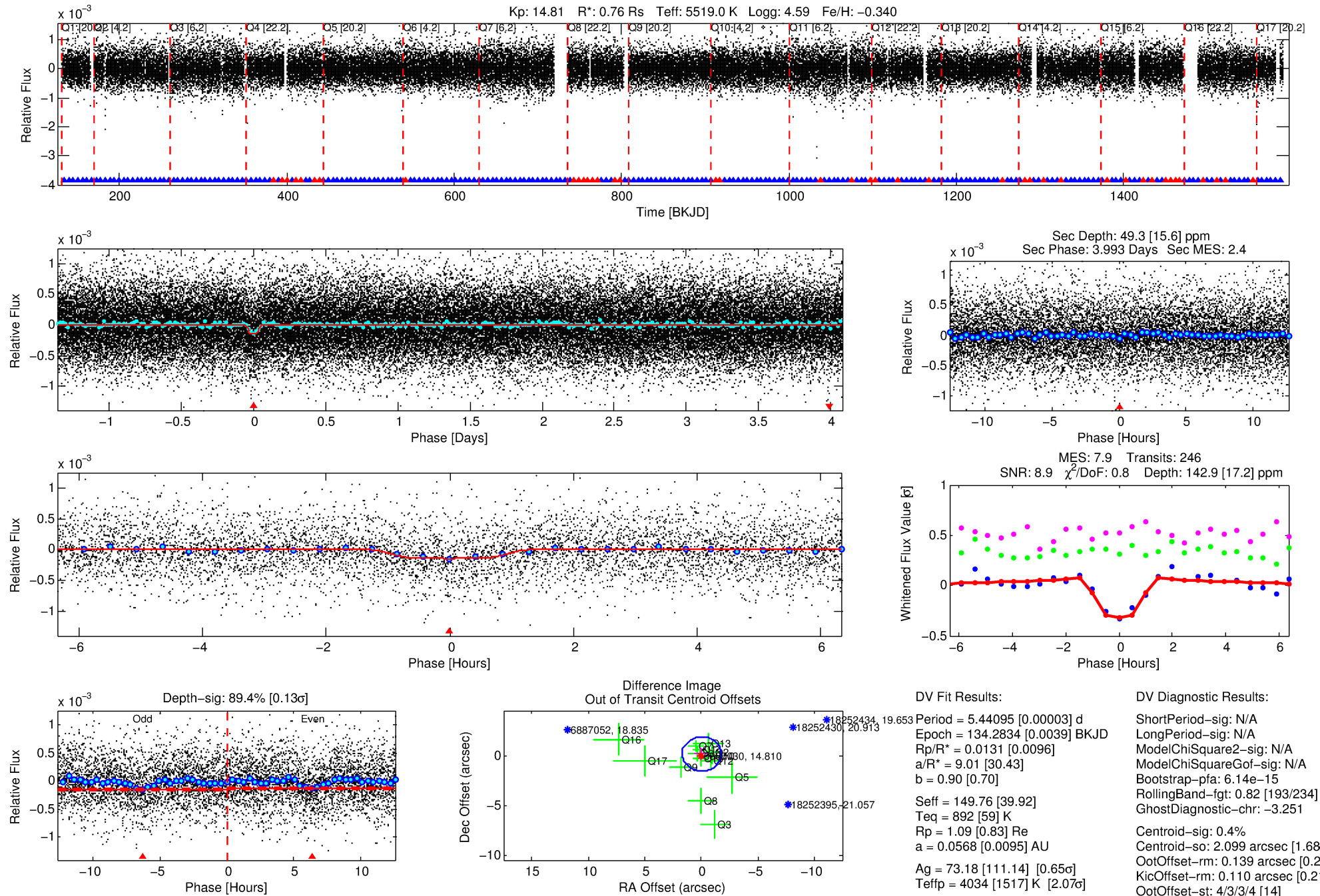
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006887030-01

No Significant Match Found

DV One-Page Summary

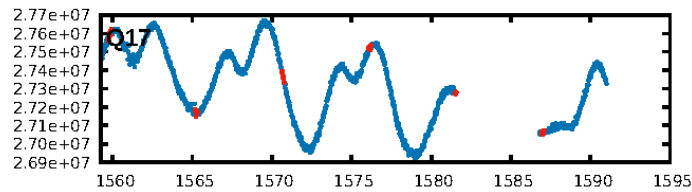
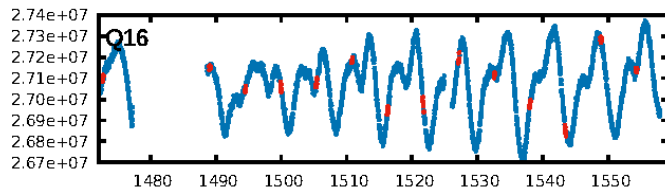
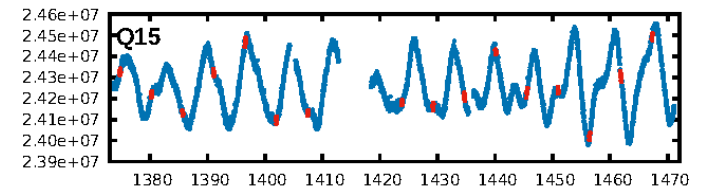
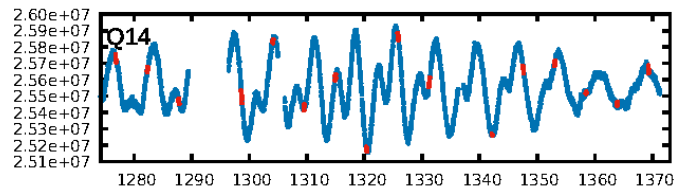
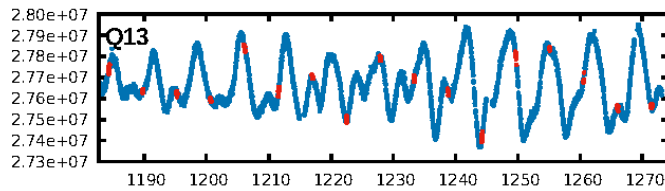
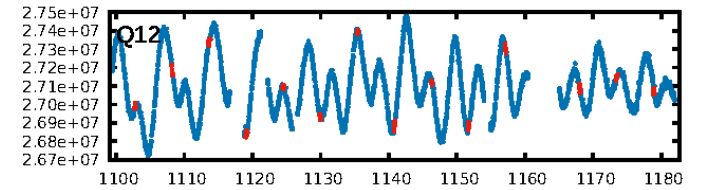
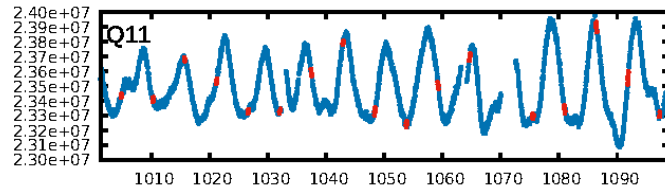
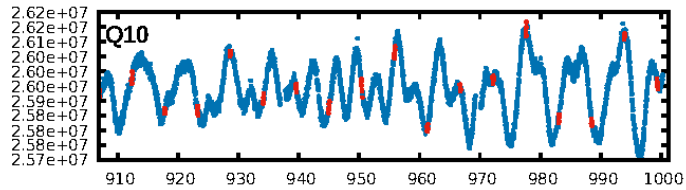
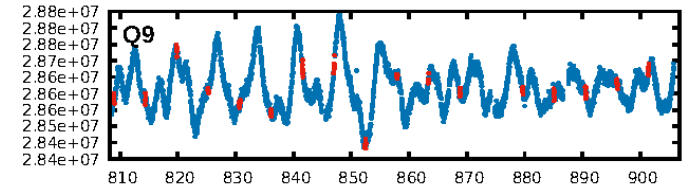
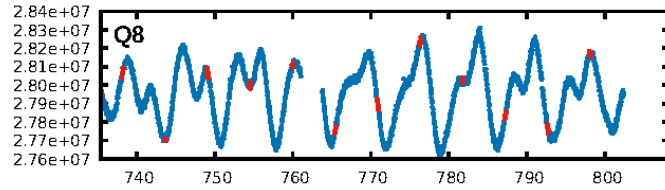
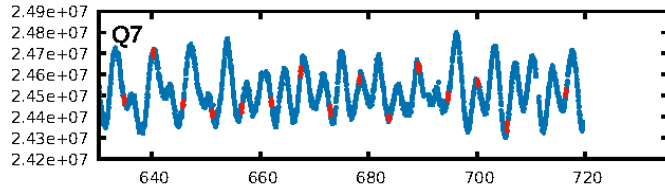
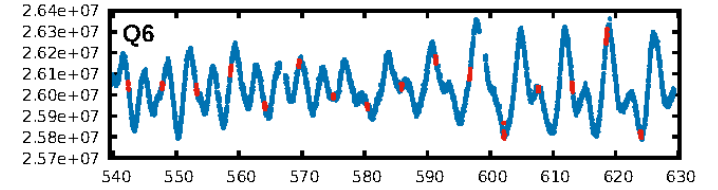
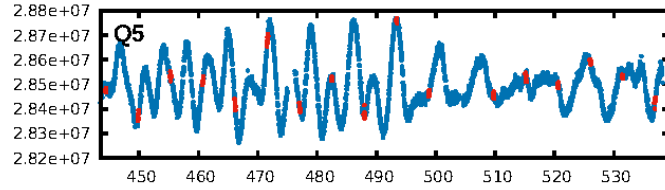
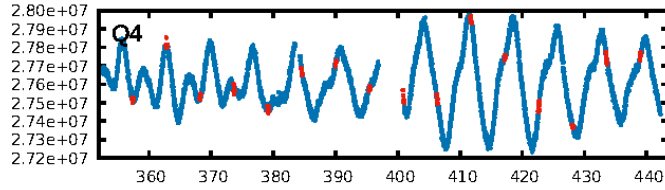
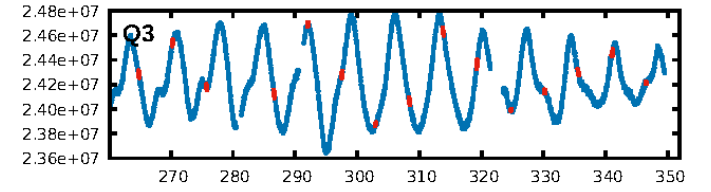
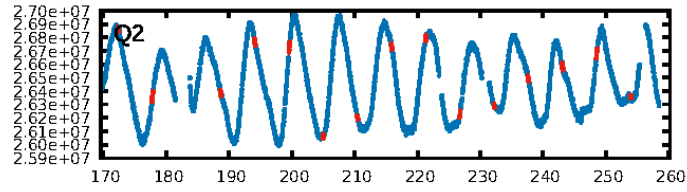
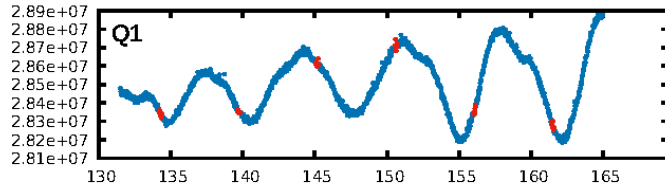
KIC: 6887030 Candidate: 1 of 1 Period: 5.441 d



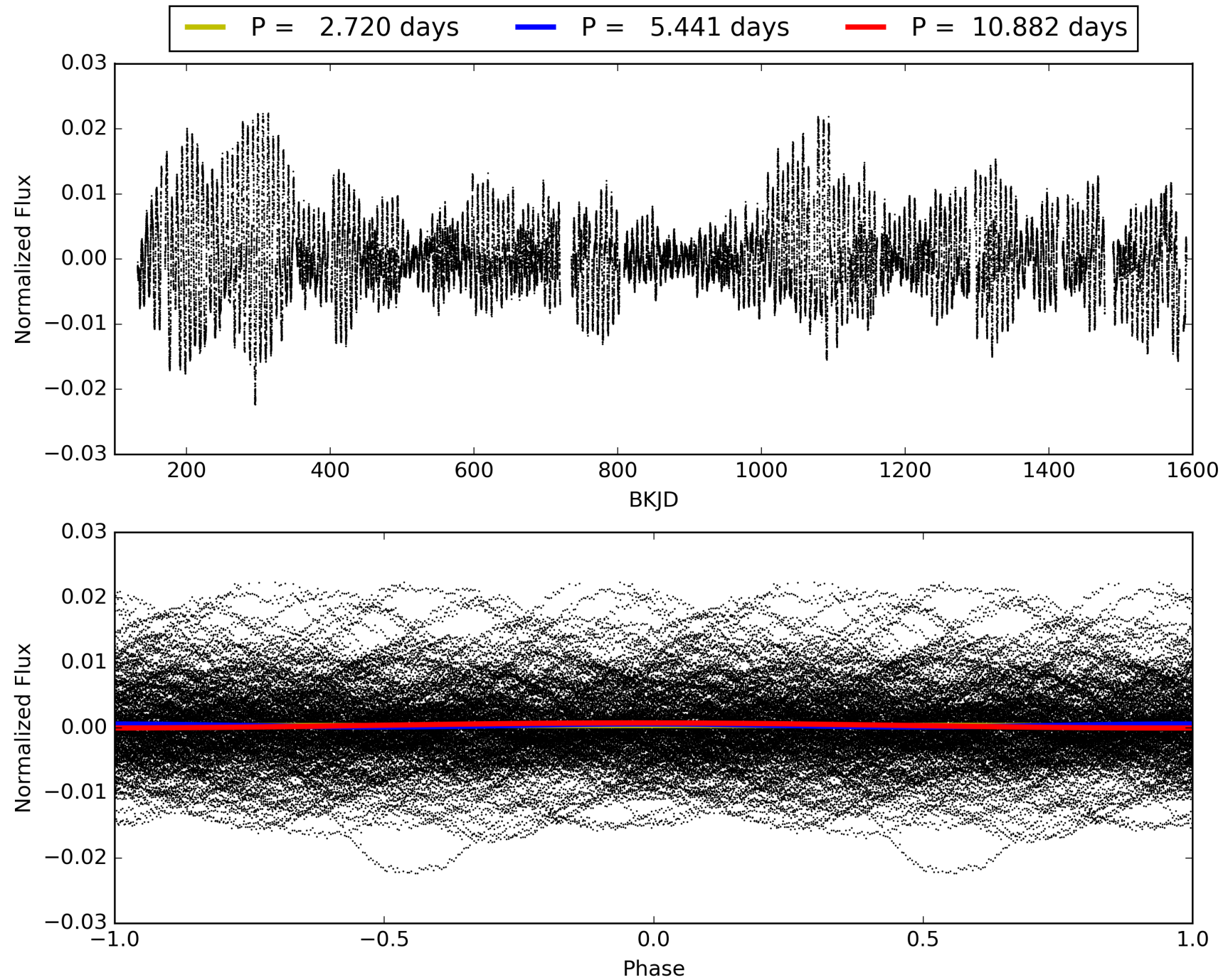
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 21:22:33 Z

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

TCE 006887030-01, PDC Light Curves

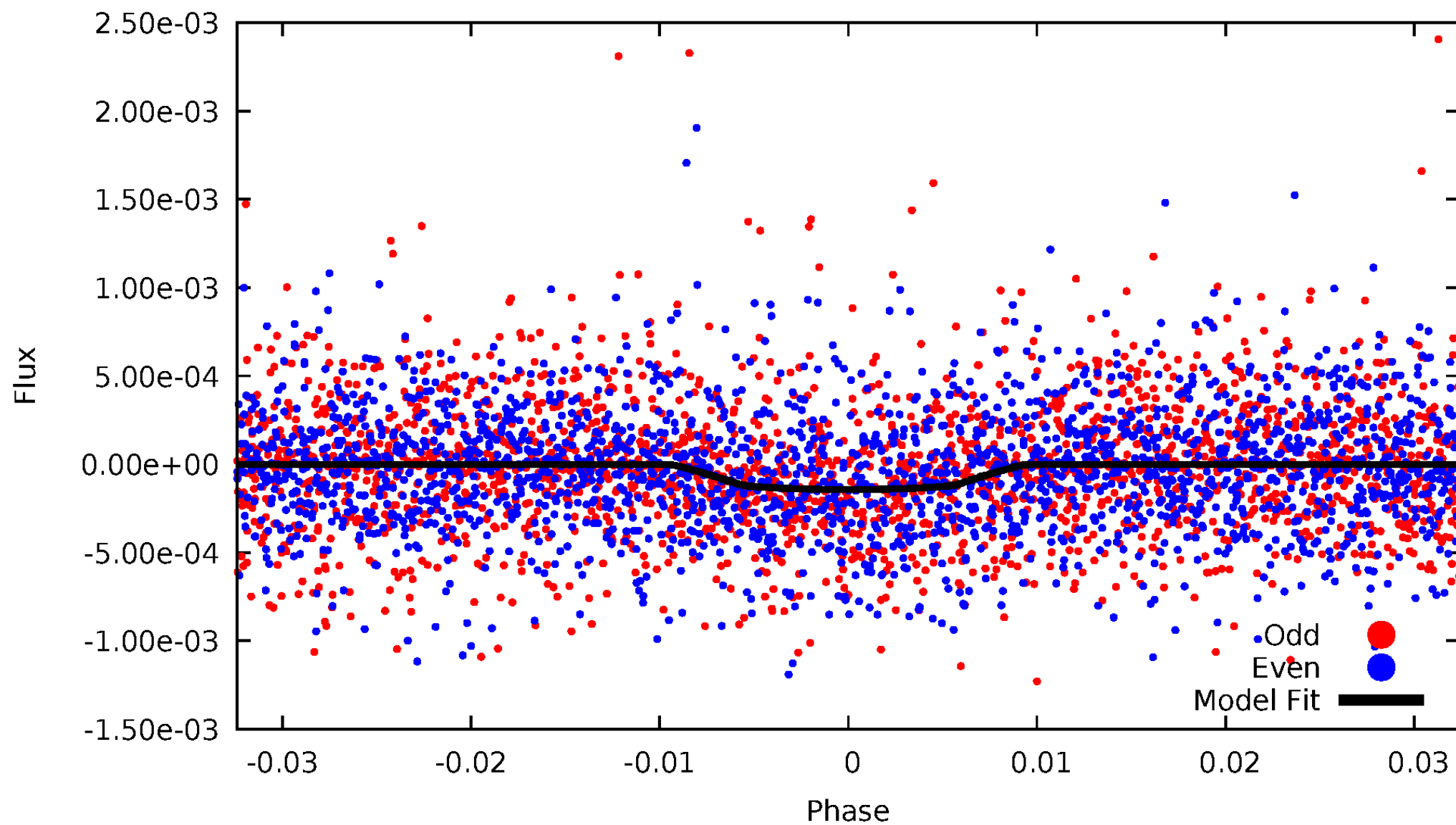


TCE 006887030-01



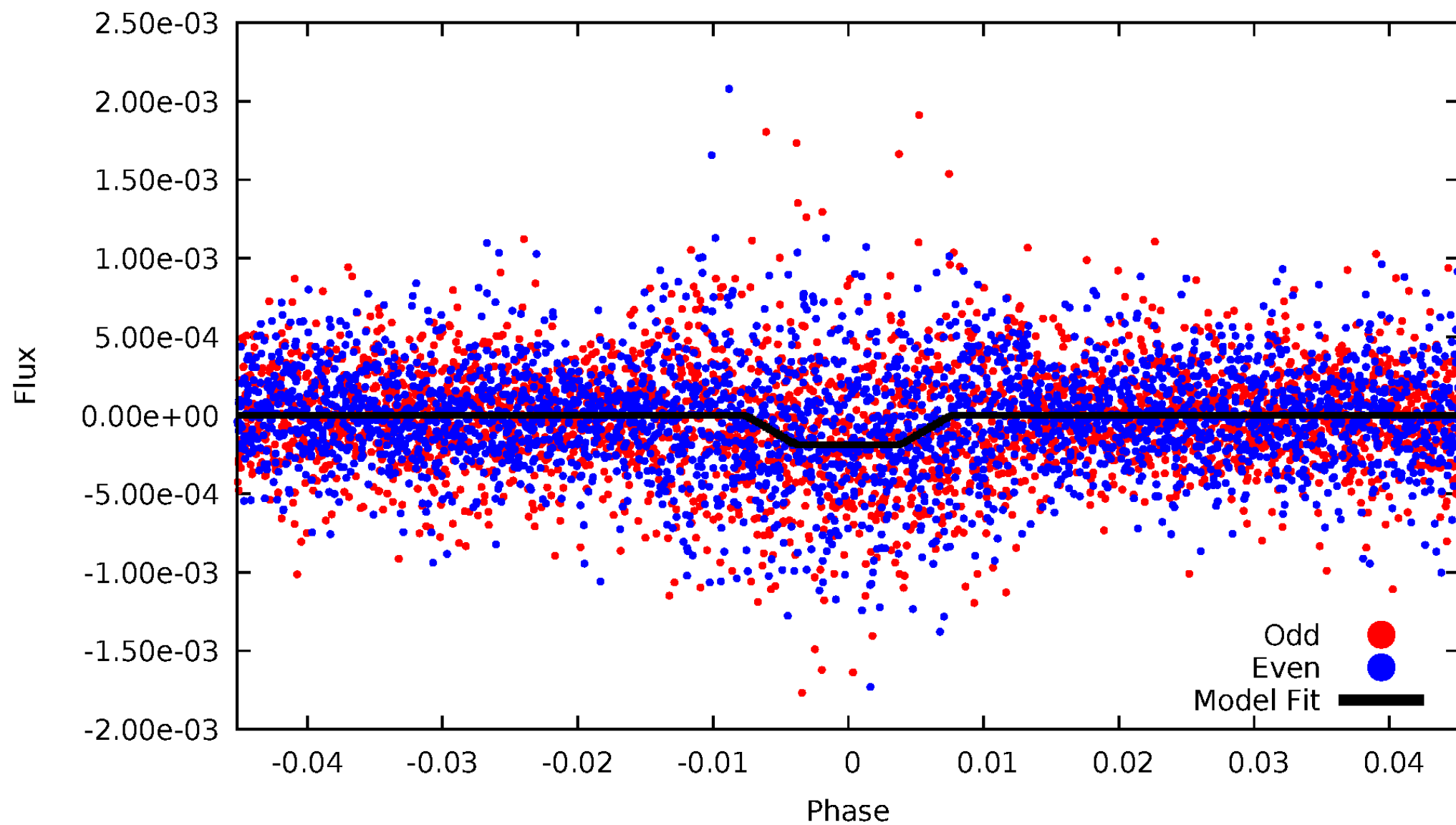
DV Odd/Even

TCE 006887030-01



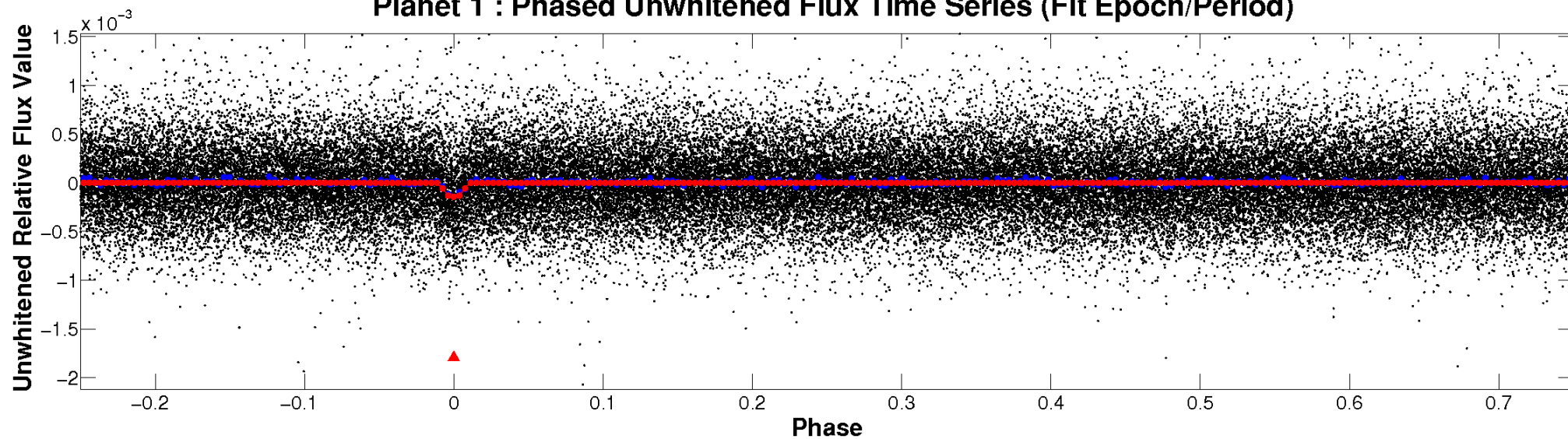
ALT Odd/Even

TCE 006887030-01

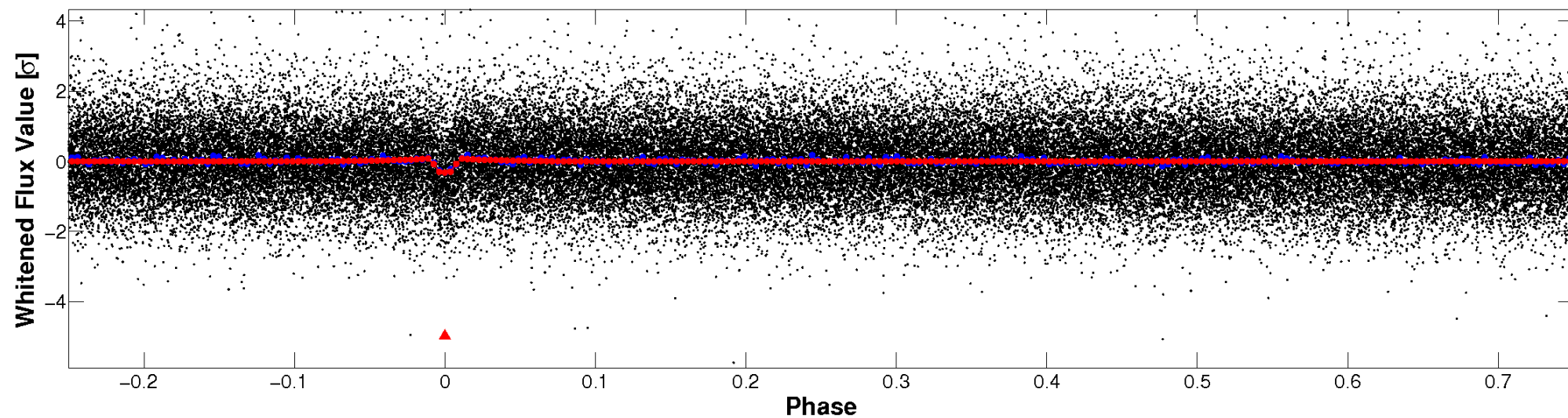


Non-Whitened Vs. Whitened Light Curve

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

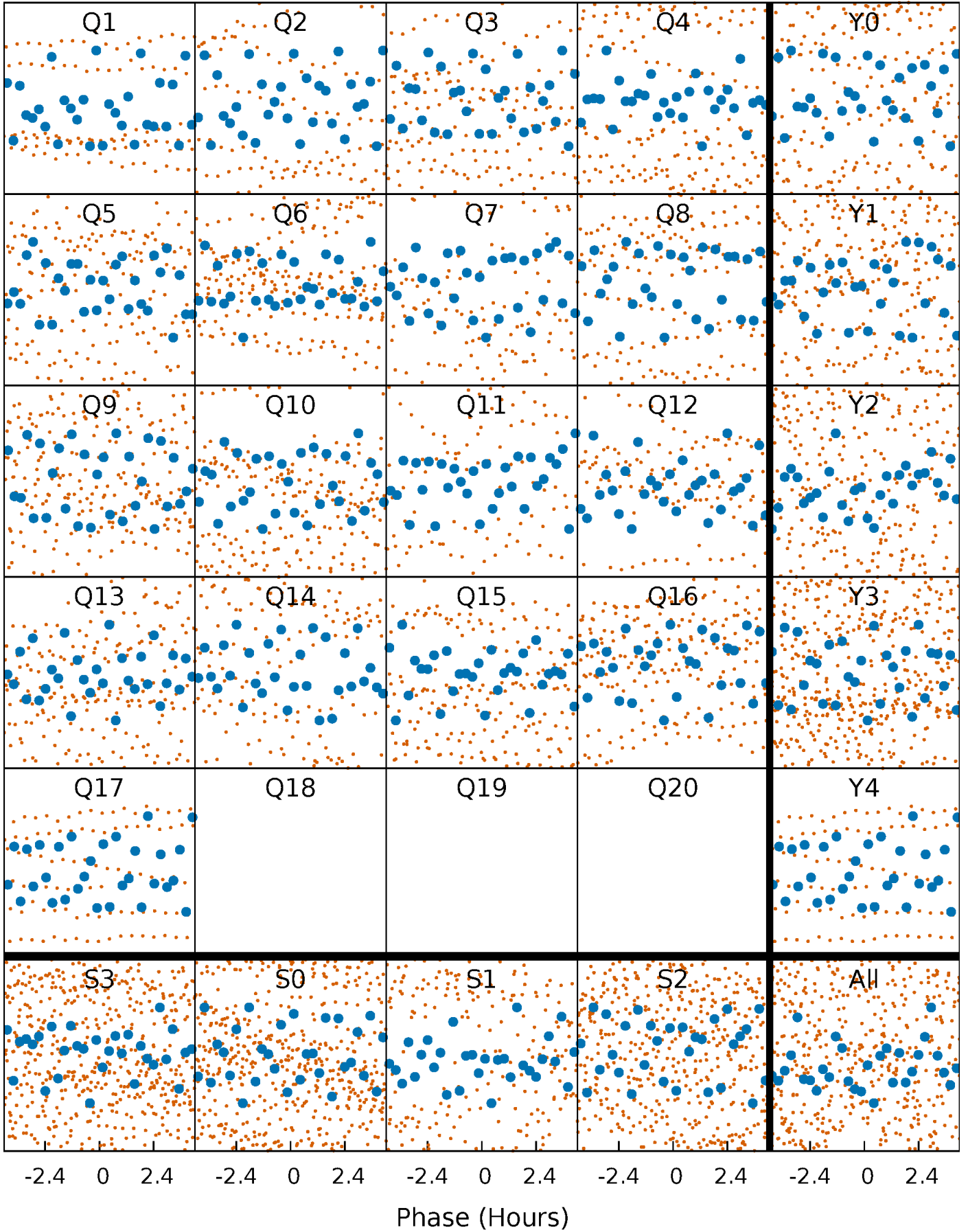


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



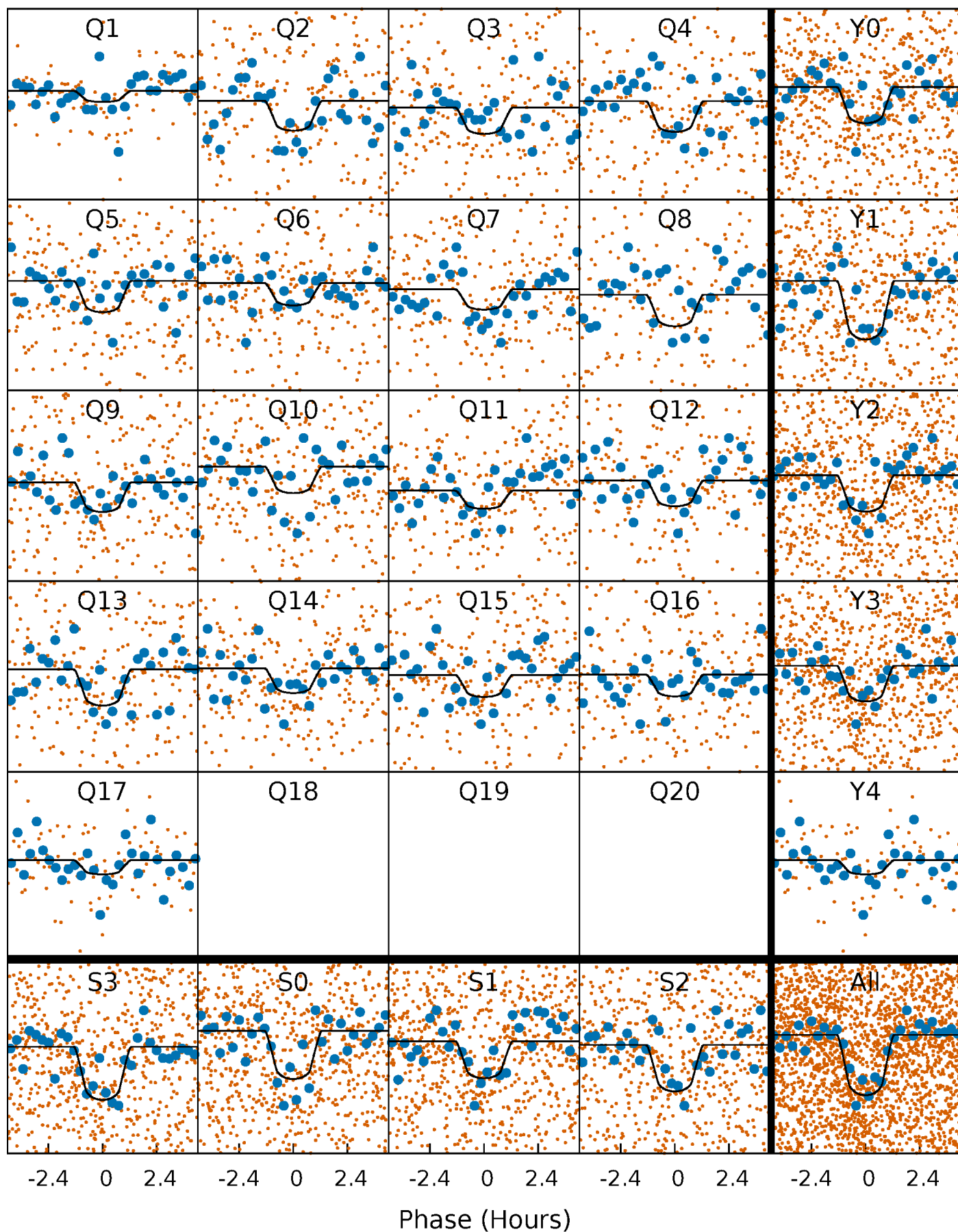
PDC Quarter-Phased Transit Curves

TCE 006887030-01 P= 5.440953 Days $T_0=134.283366$ (BKJD)



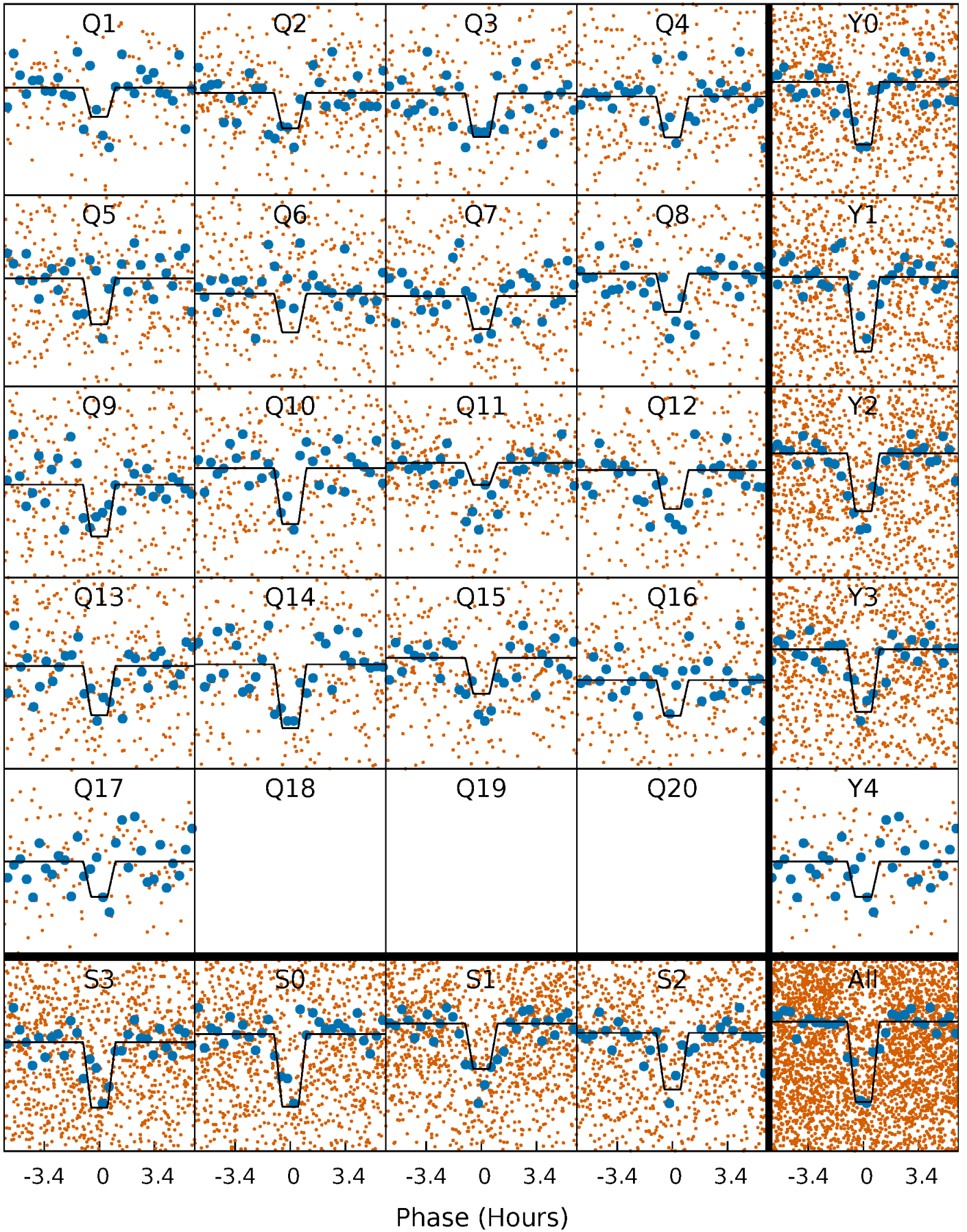
DV Quarter-Phased Transit Curves

TCE 006887030-01 P= 5.440953 Days $T_0=134.283366$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

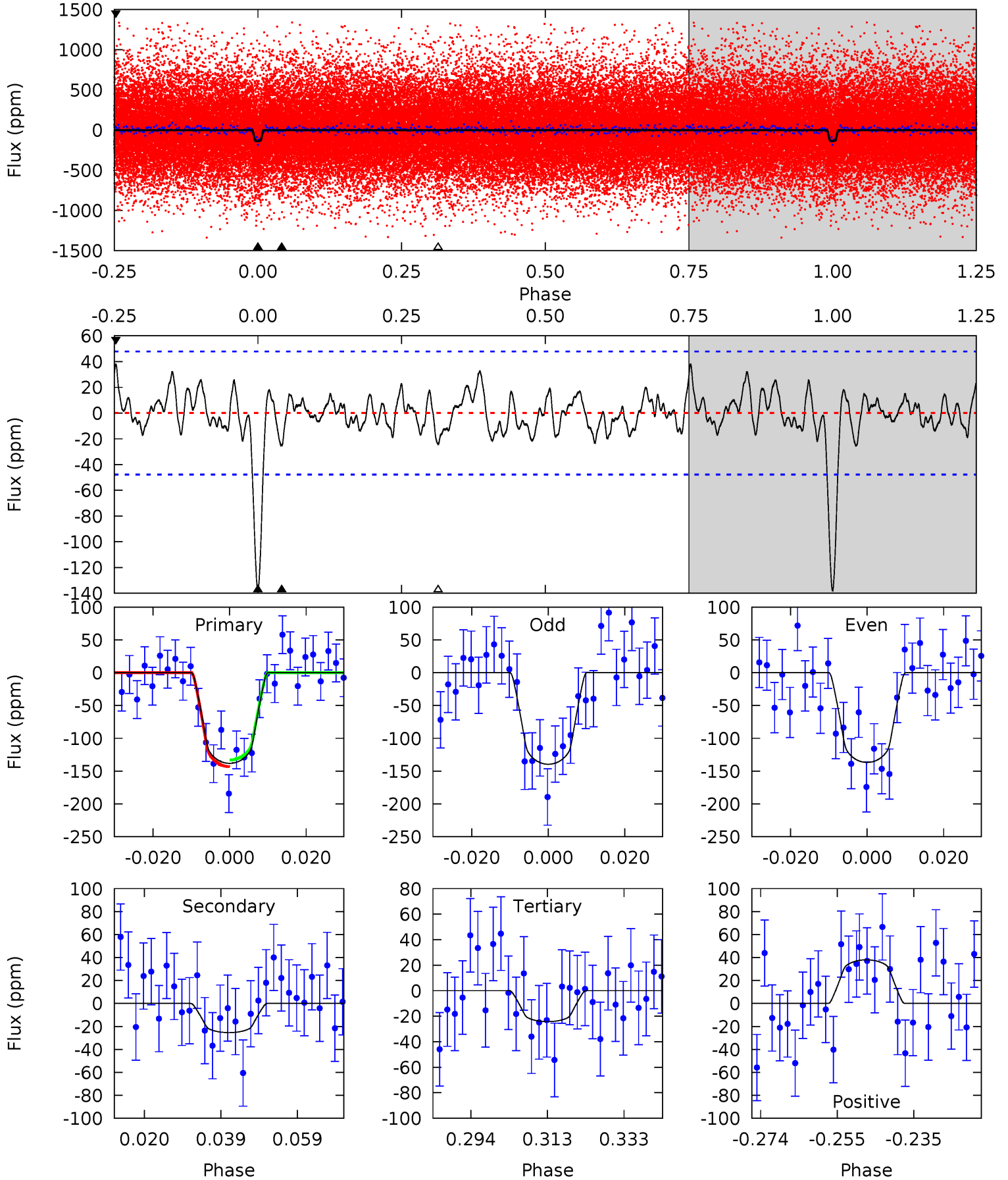
TCE 006887030-01 P= 5.440862 Days $T_0=134.295494$ (BKJD)



DV Model-Shift Uniqueness Test

006887030-01, P = 5.440953 Days, E = 128.842413 Days

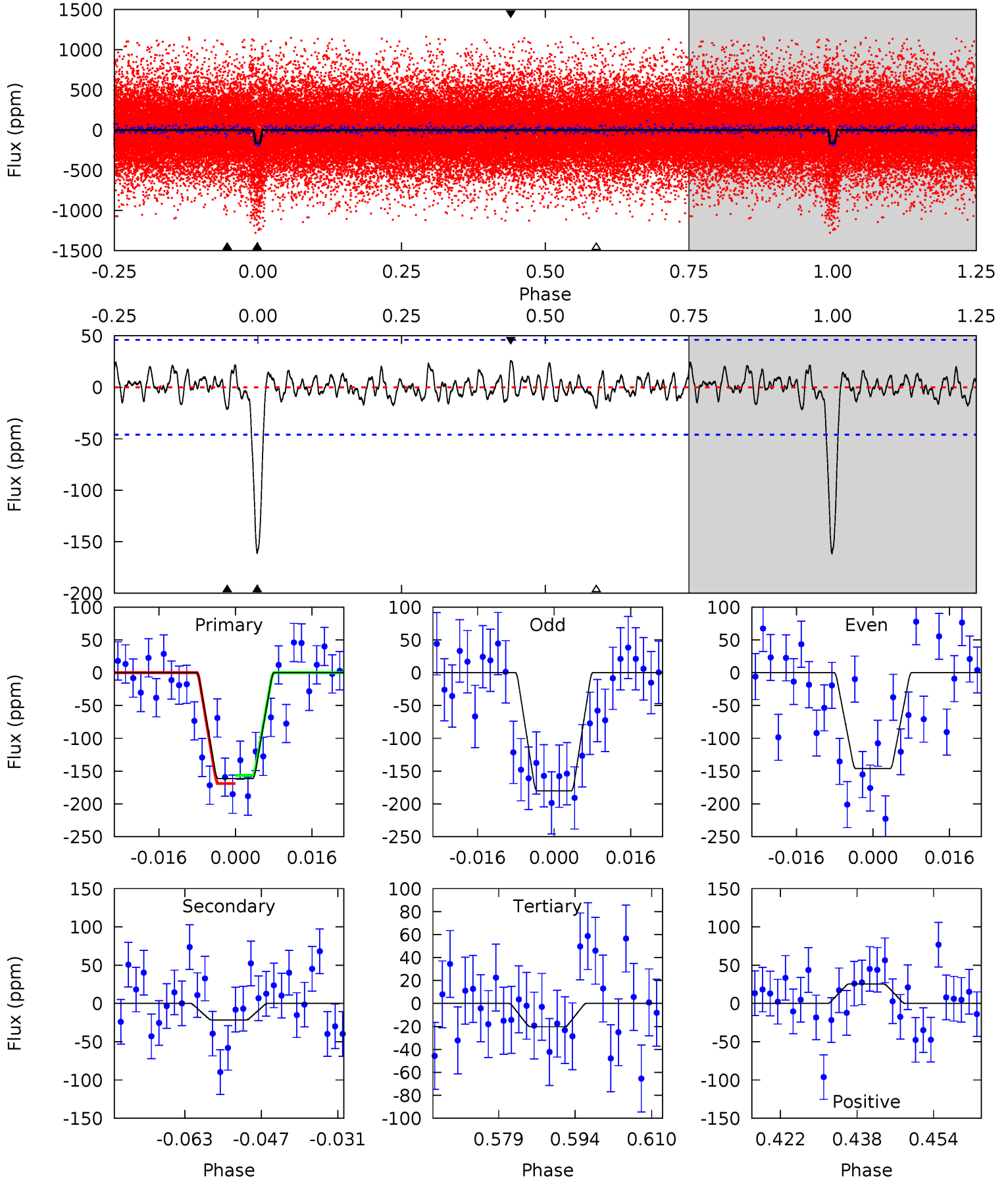
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.1	2.60	2.48	3.89	4.90	2.33	1.22	11.7	10.3	0.11	-1.29	0.14	0.87	0.22	0.52



Alt Model-Shift Uniqueness Test

006887030-01, P = 5.440862 Days, E = 128.854632 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.3	2.31	2.17	2.73	4.94	2.42	0.90	15.1	14.6	0.14	-0.42	1.82	1.17	0.14	0.66



Stellar Parameters For KIC 006887030

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5519^{+165}_{-149}	$4.590^{+0.043}_{-0.128}$	$-0.340^{+0.300}_{-0.300}$	$0.762^{+0.154}_{-0.066}$	$0.827^{+0.090}_{-0.082}$	$2.626^{+0.476}_{-0.979}$
	+3%/-3%	+1%/-3%	+88%/-88%	+20%/-9%	+11%/-10%	+18%/-37%
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 006887030-01 / KOI 7795.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-25 ± 10	$1.20^{+0.80}_{-0.69}$	1268^{+63}_{-55}	3691^{+1486}_{-588}	30^{+151}_{-21}
Alt.	-22 ± 9	$1.24^{+0.84}_{-0.69}$	1267^{+58}_{-53}	3502^{+1268}_{-583}	23^{+93}_{-16}

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 $A_{obs} \gg 1.0$

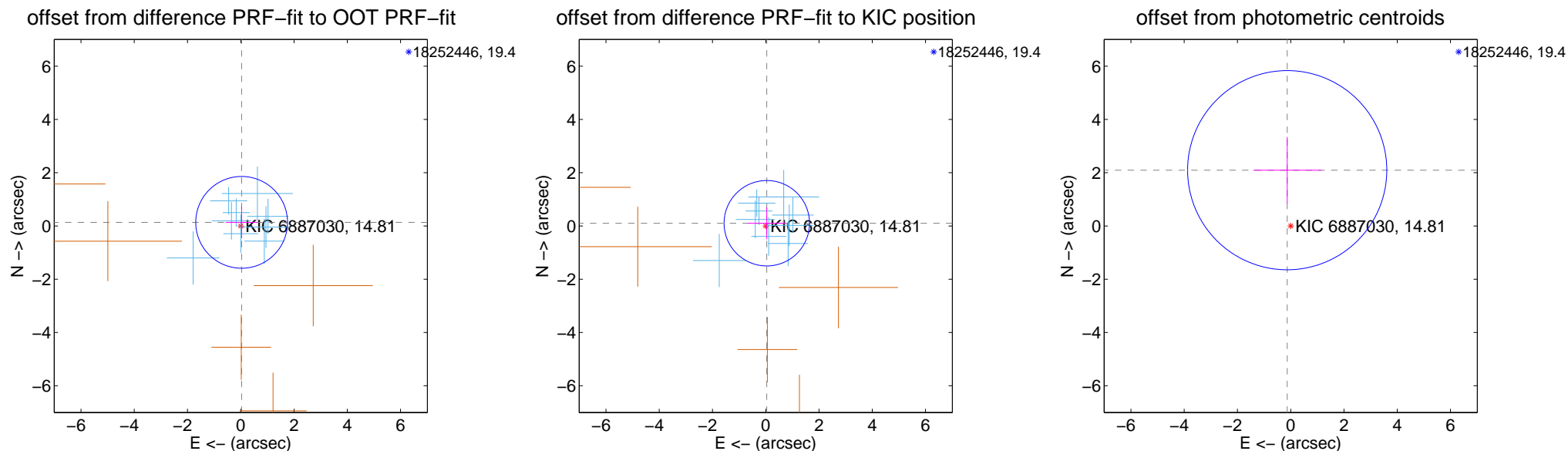
DV Centroid Data

Supplemental centroid analysis for 006887030-01. Kepler magnitude: 14.81. Transit SNR 8.87

There are 9 quarters with good PRF difference image offsets

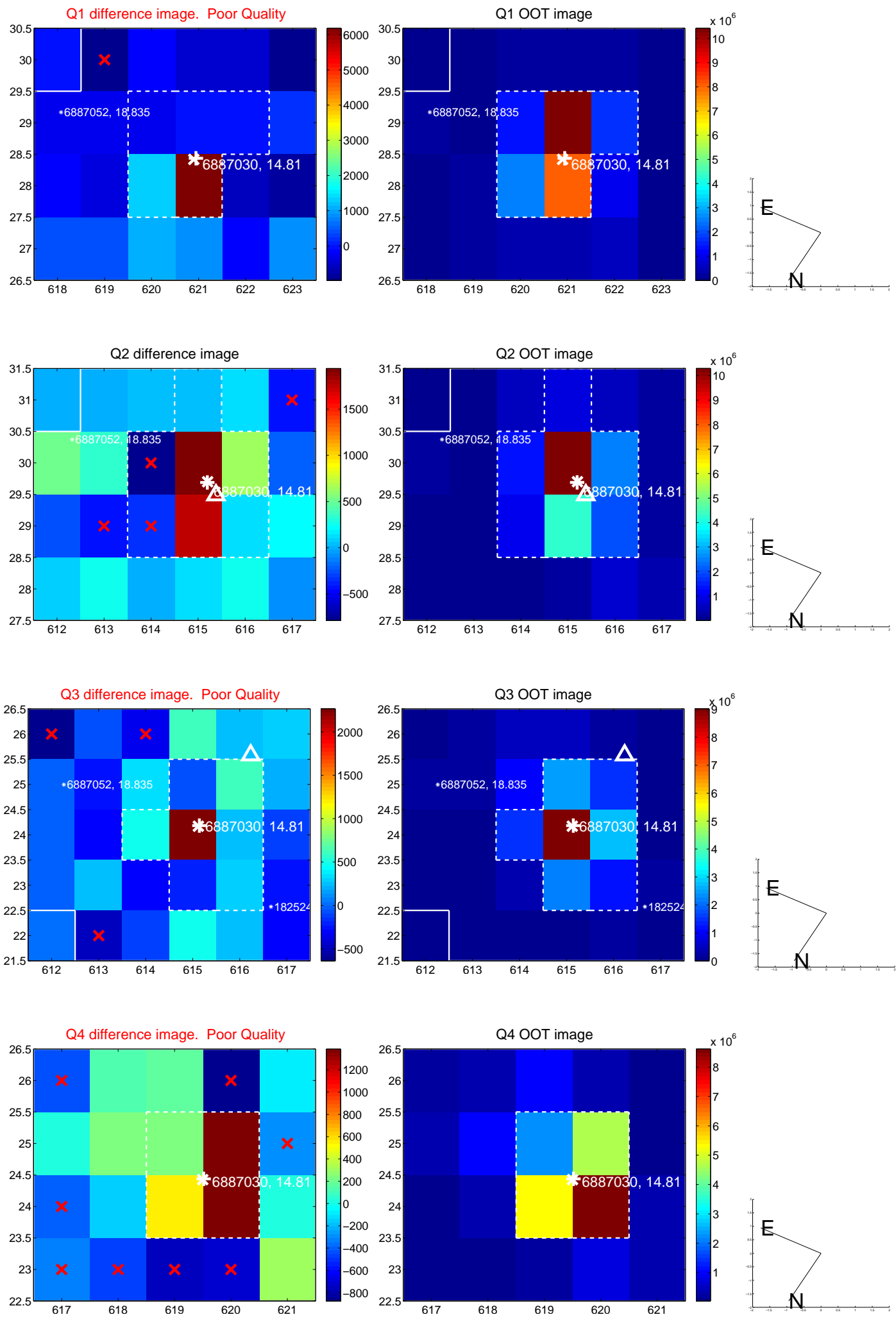
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.139 ± 0.574	0.24	-0.032 ± 0.594	0.136 ± 0.599
PRF-fit source offset from KIC position	0.110 ± 0.535	0.21	-0.039 ± 0.717	0.103 ± 0.597
photometric centroid source offset	2.10 ± 1.25	1.68	0.13 ± 1.27	2.09 ± 1.25

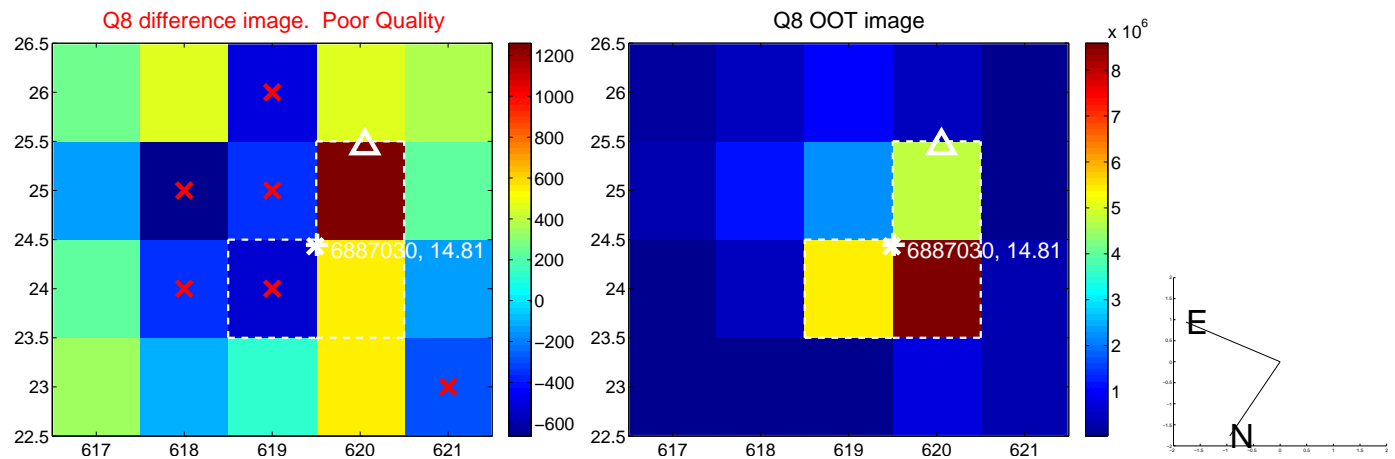
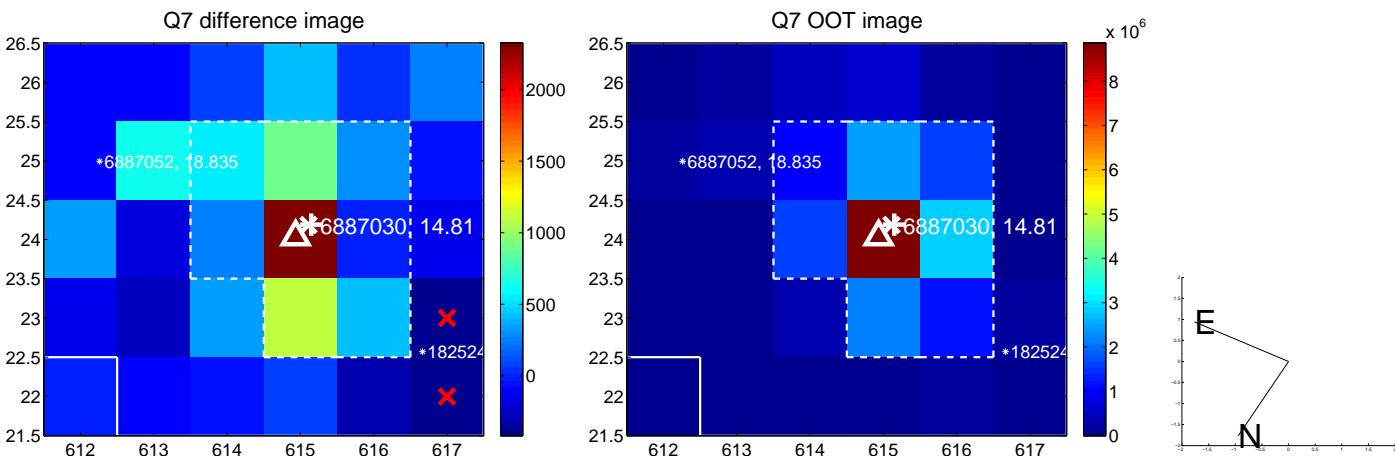
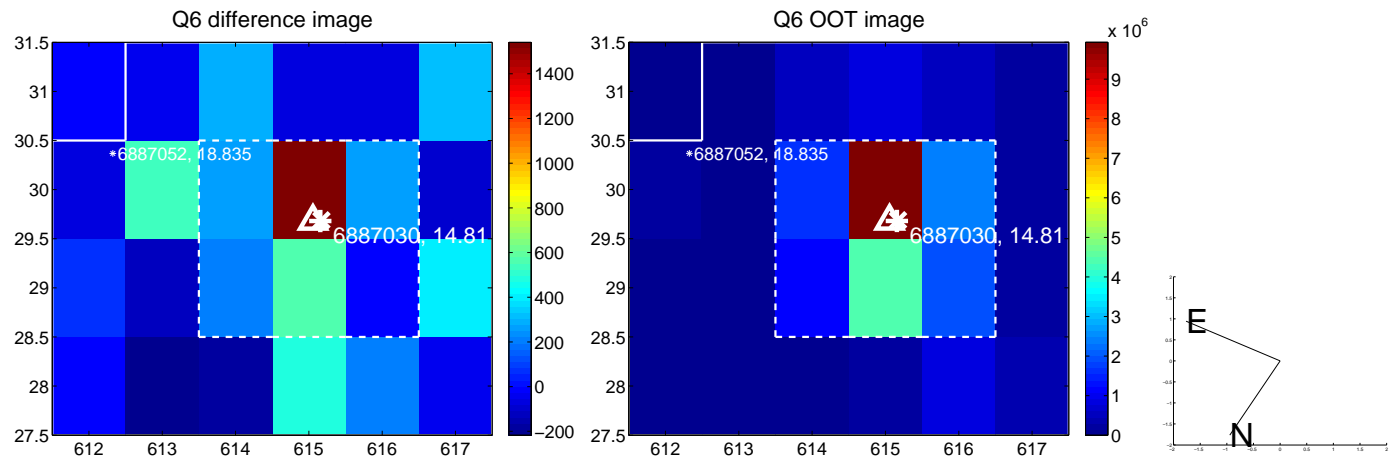
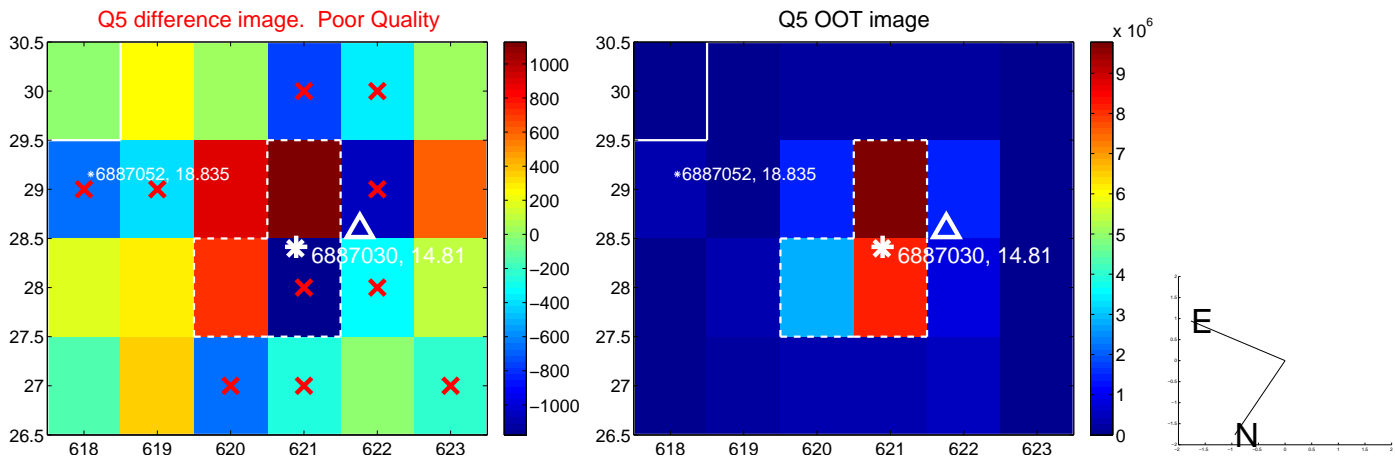


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

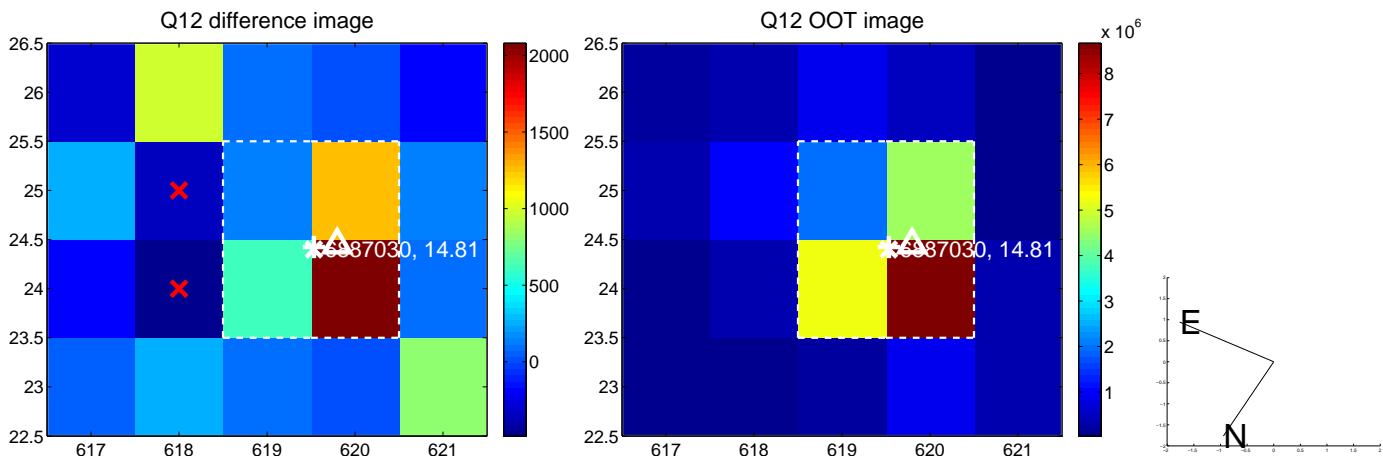
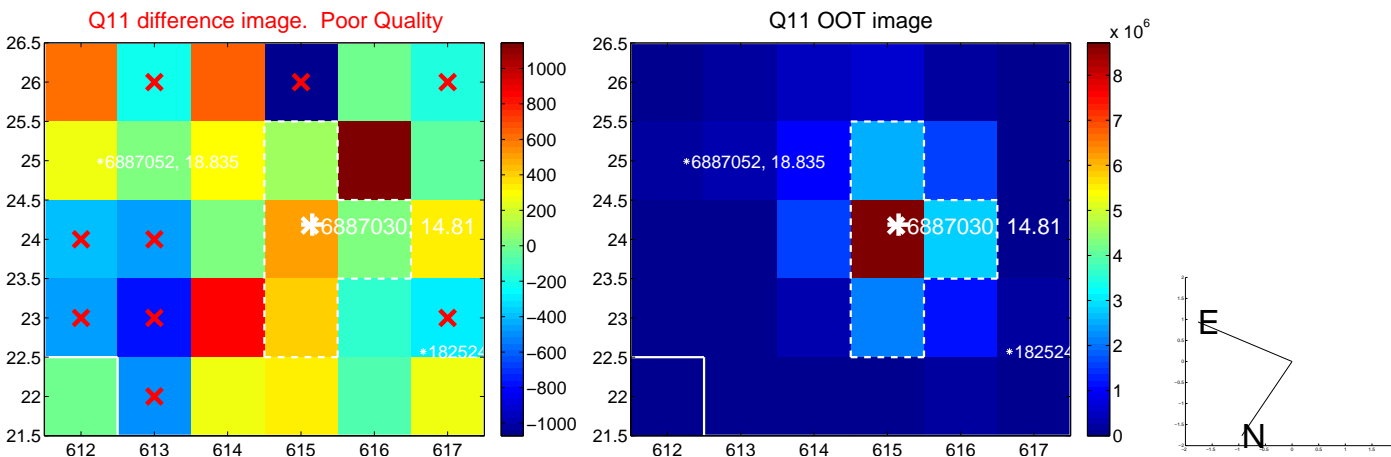
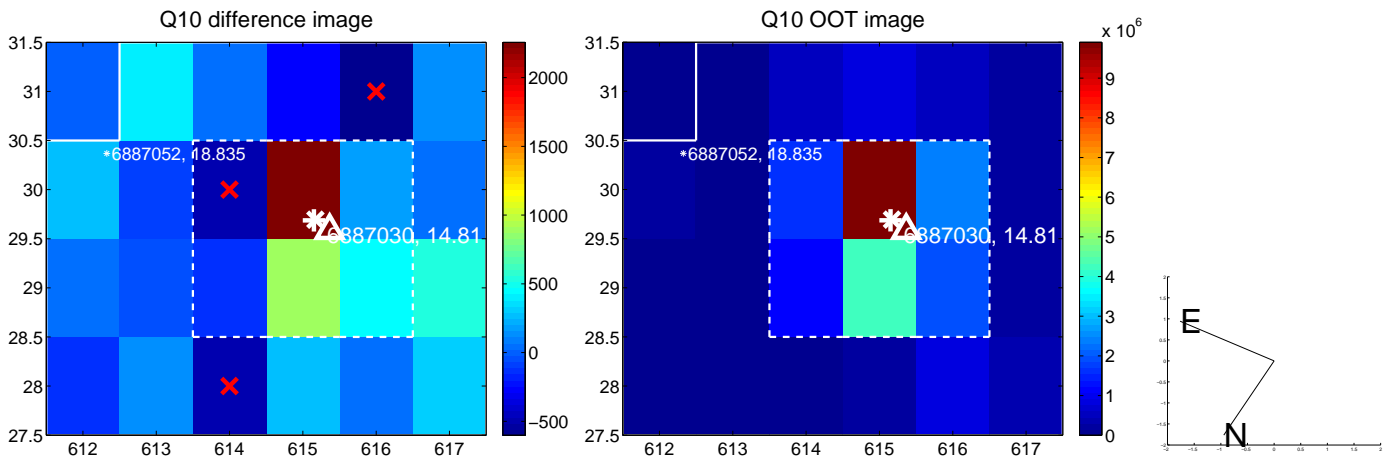
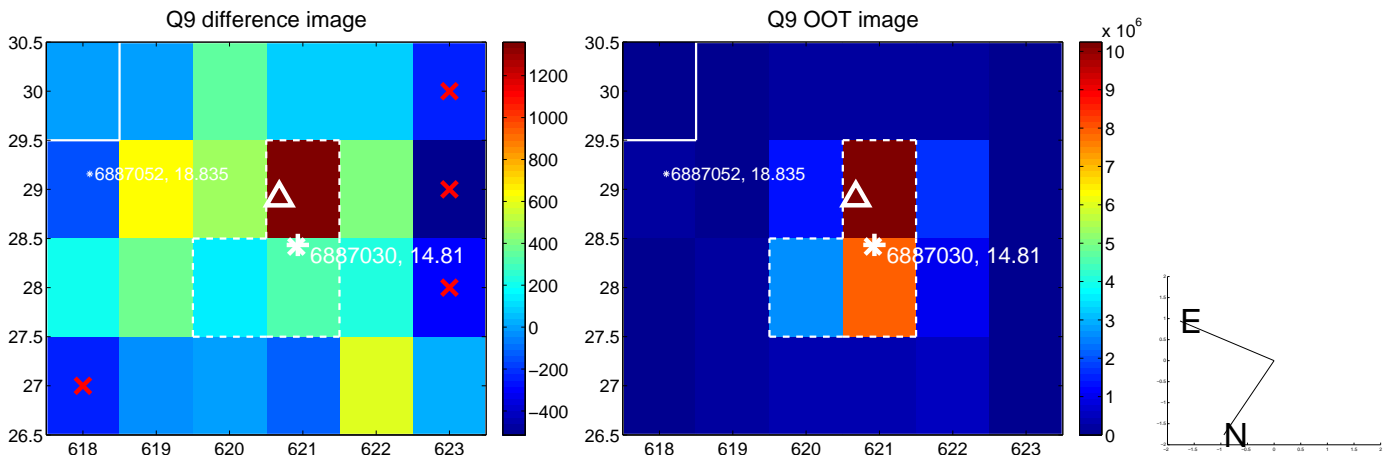
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



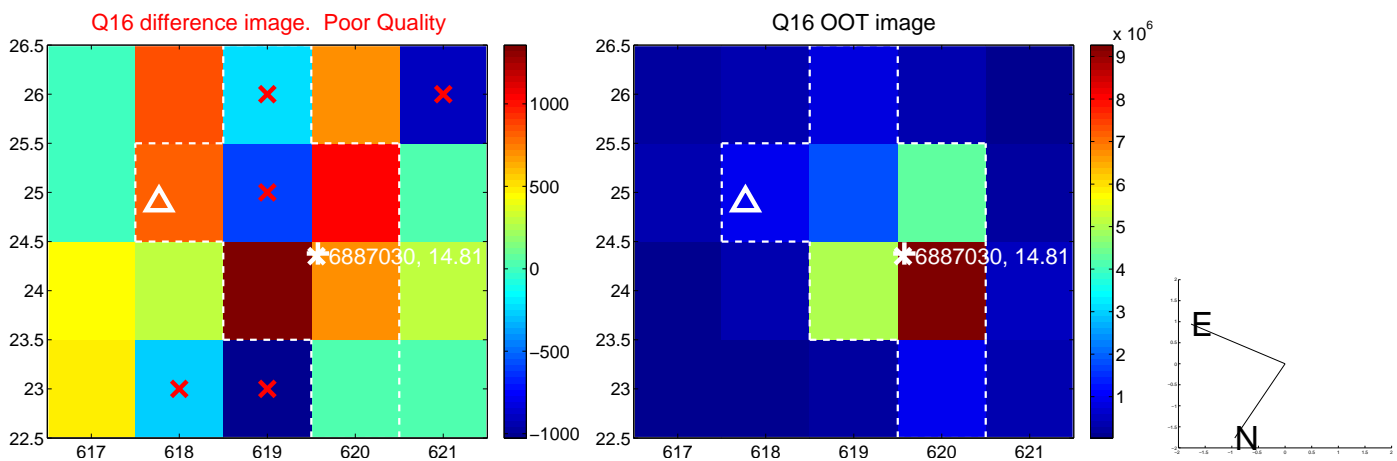
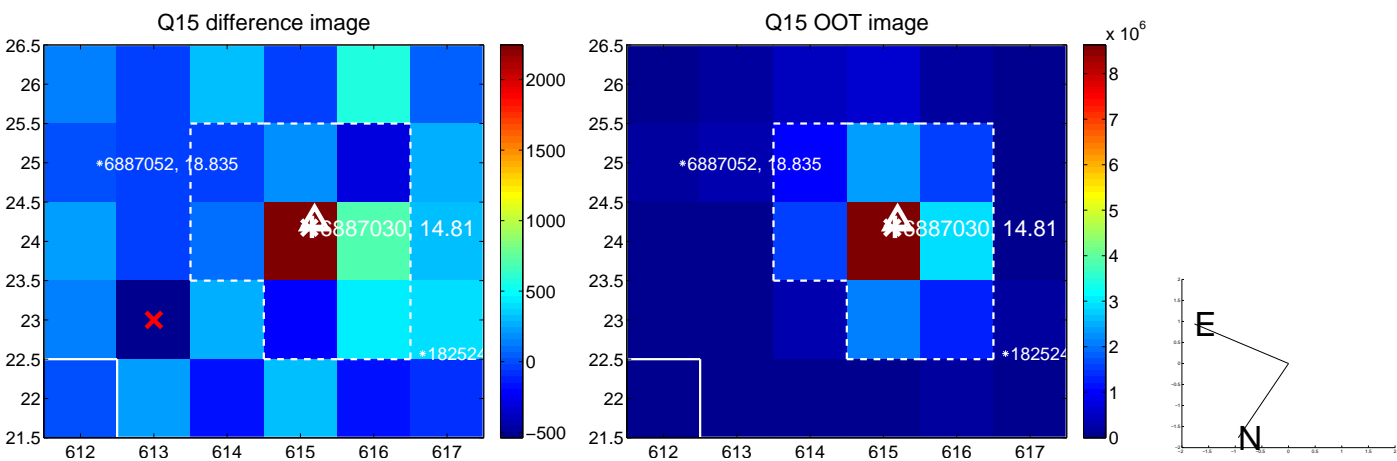
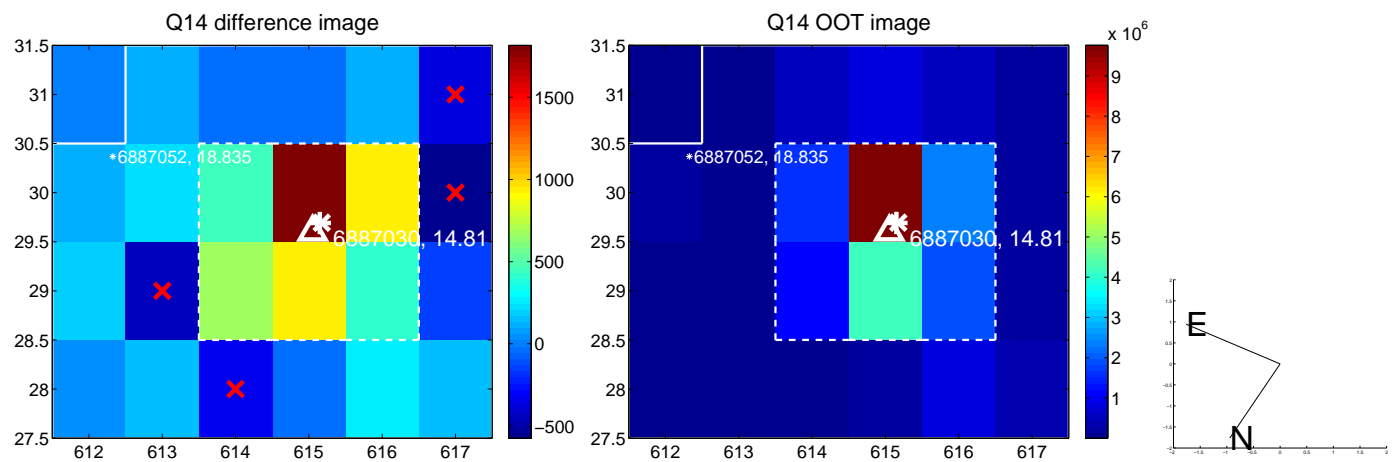
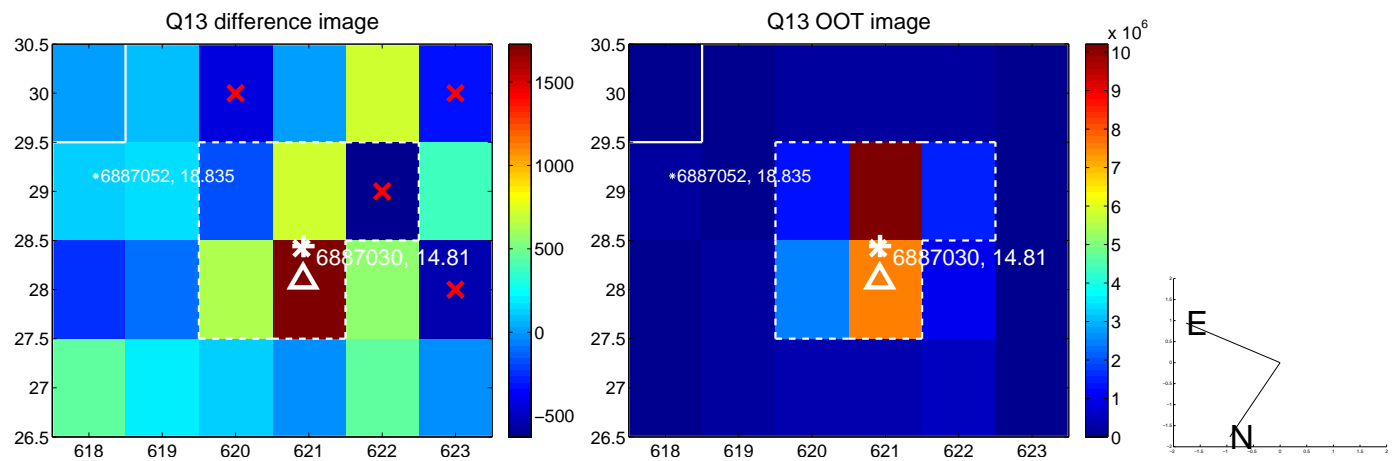
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



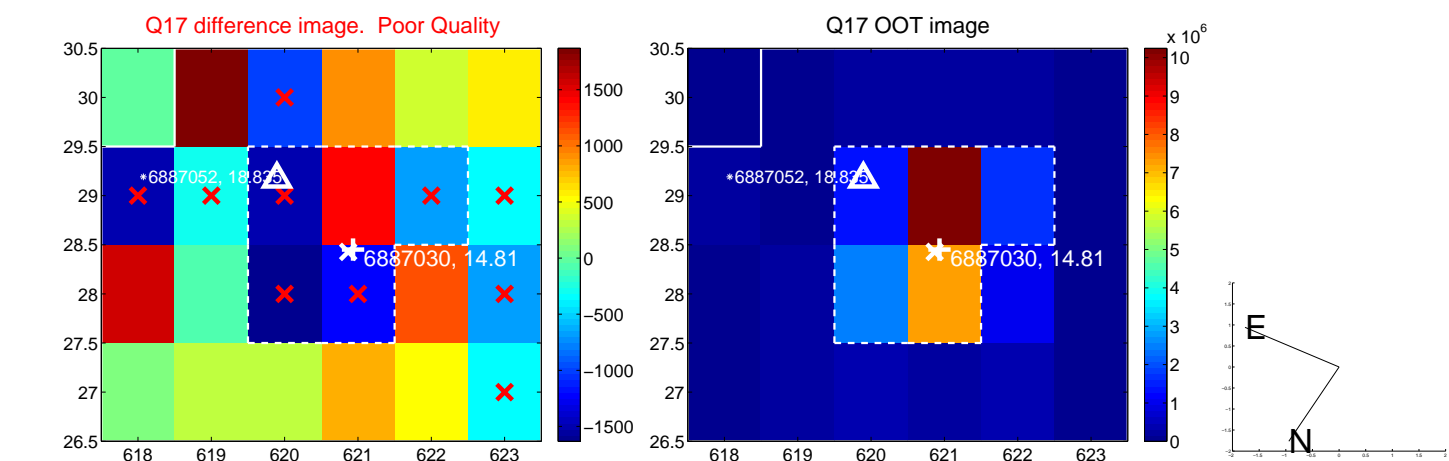
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



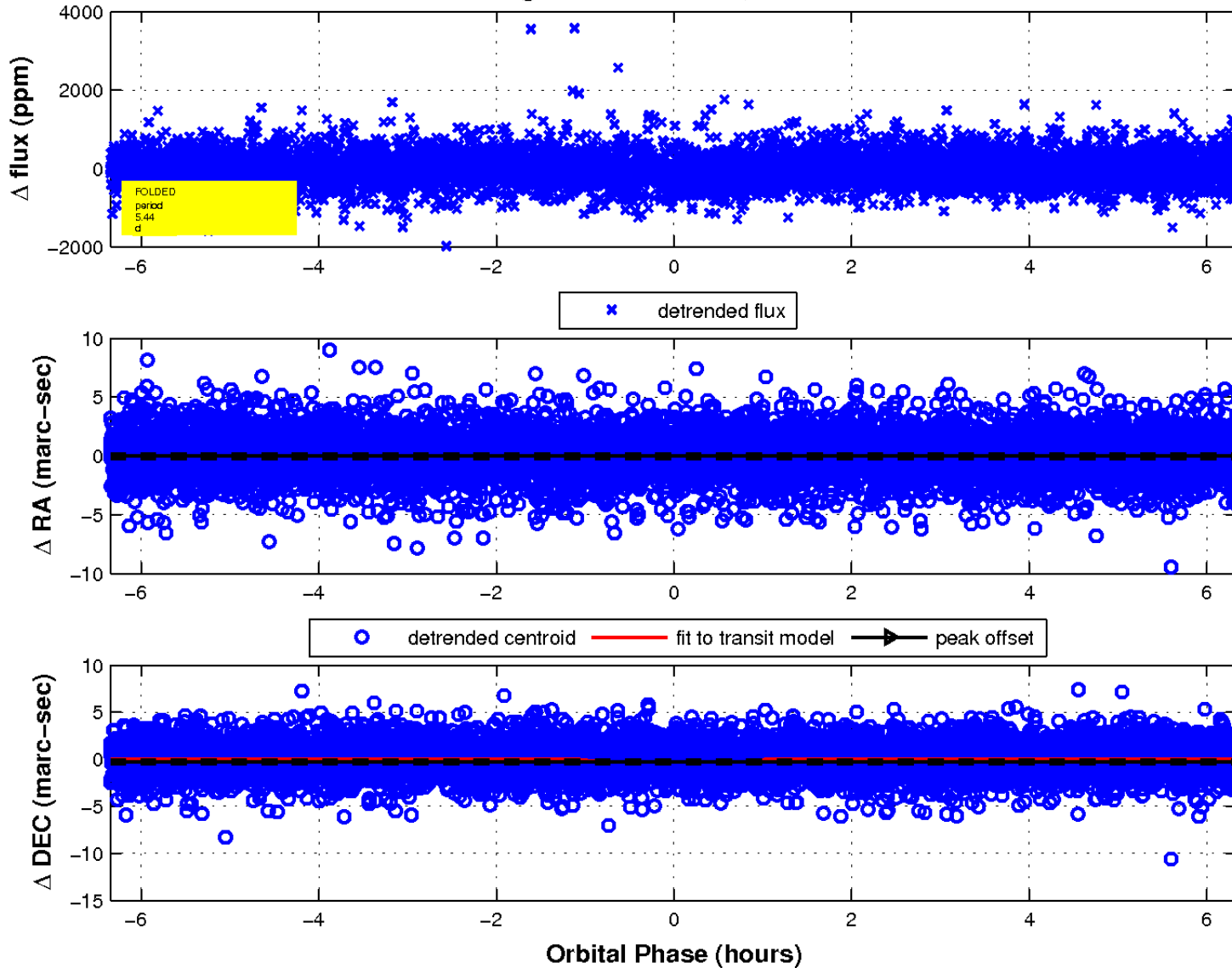
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

