

KIC 006636320

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})
006636320-01	OBS	2989.01	6.331227	137.144161	313.2	3.207	14.6	15.8	0.76	5383	1.74	108.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006636320-01	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.

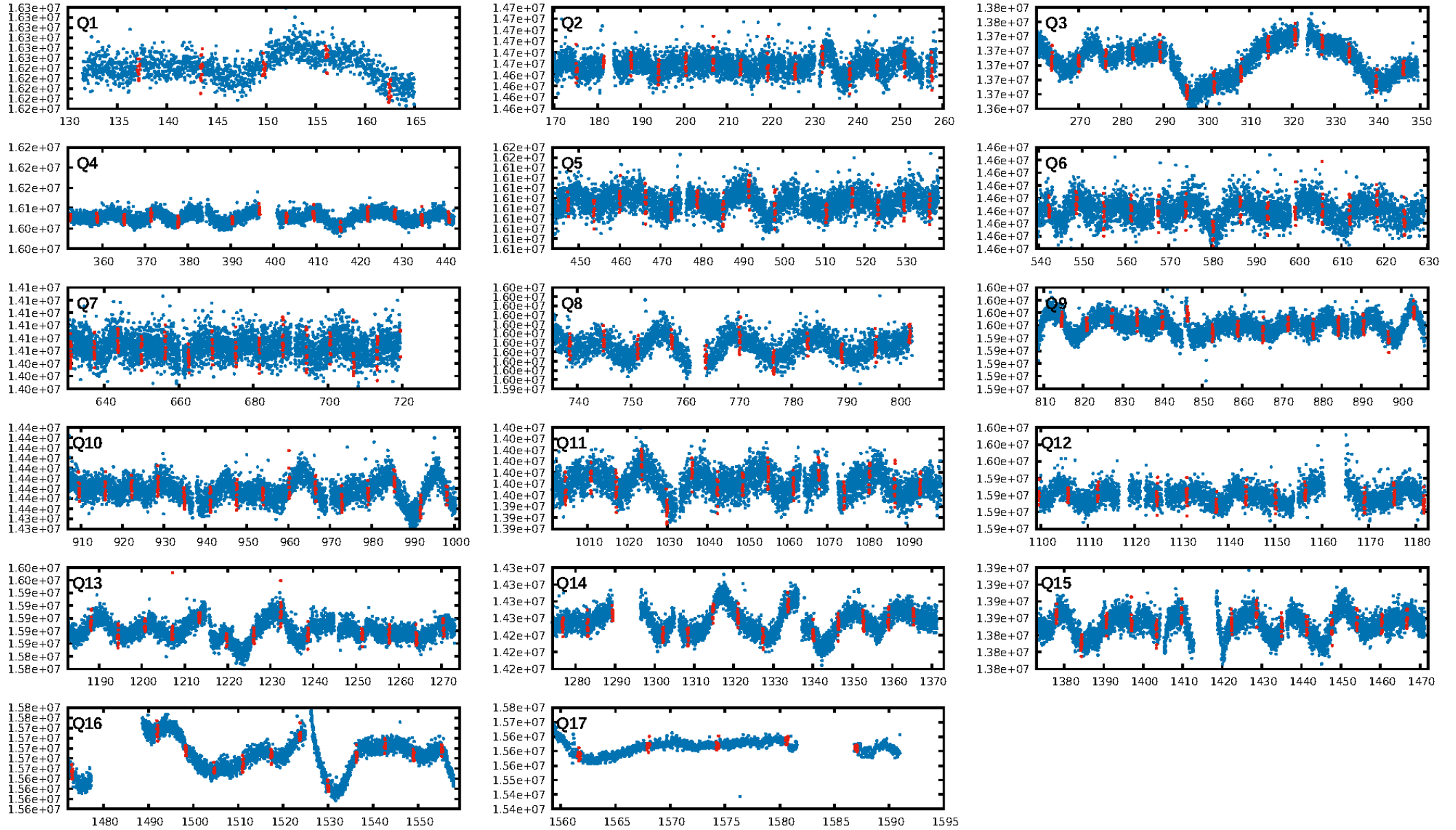
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006636320-01

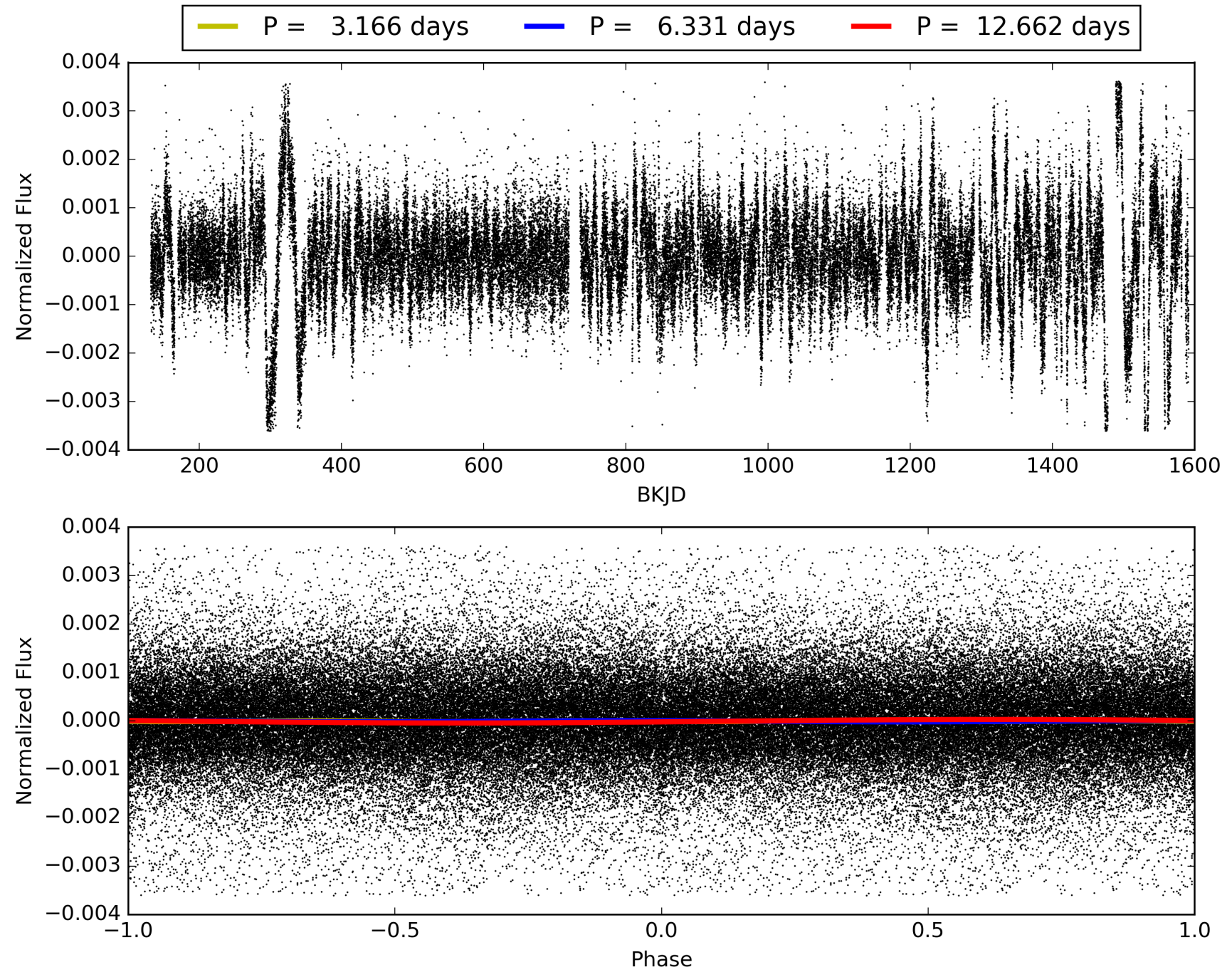
No Significant Match Found

Software Revision: [svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958](https://murzim/repo/soc/tags/release/9.3.42@60958) -- Date Generated: 29-Jan-2016 22:56:00 Z
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006636320-01, PDC Light Curves

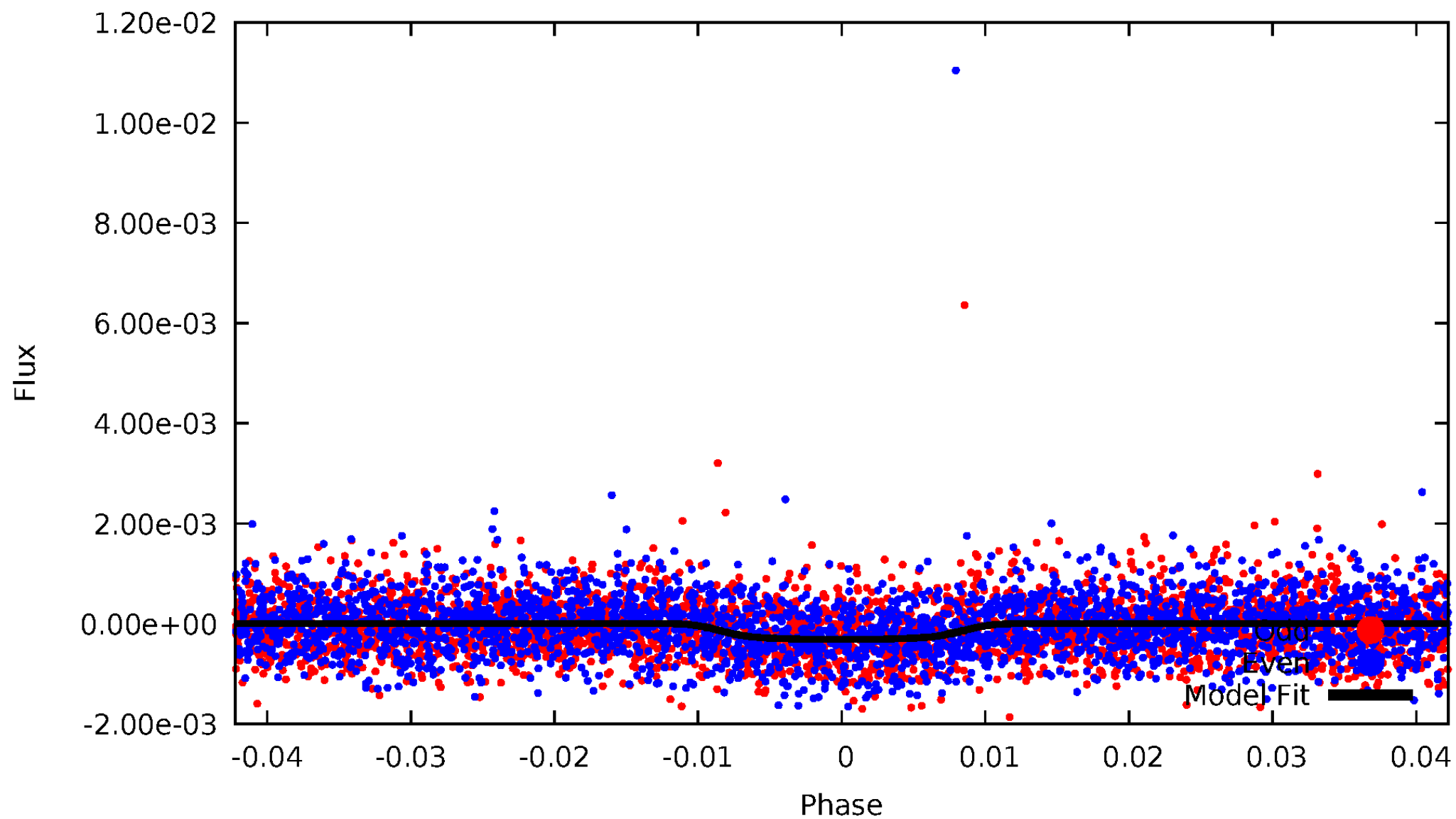


TCE 006636320-01



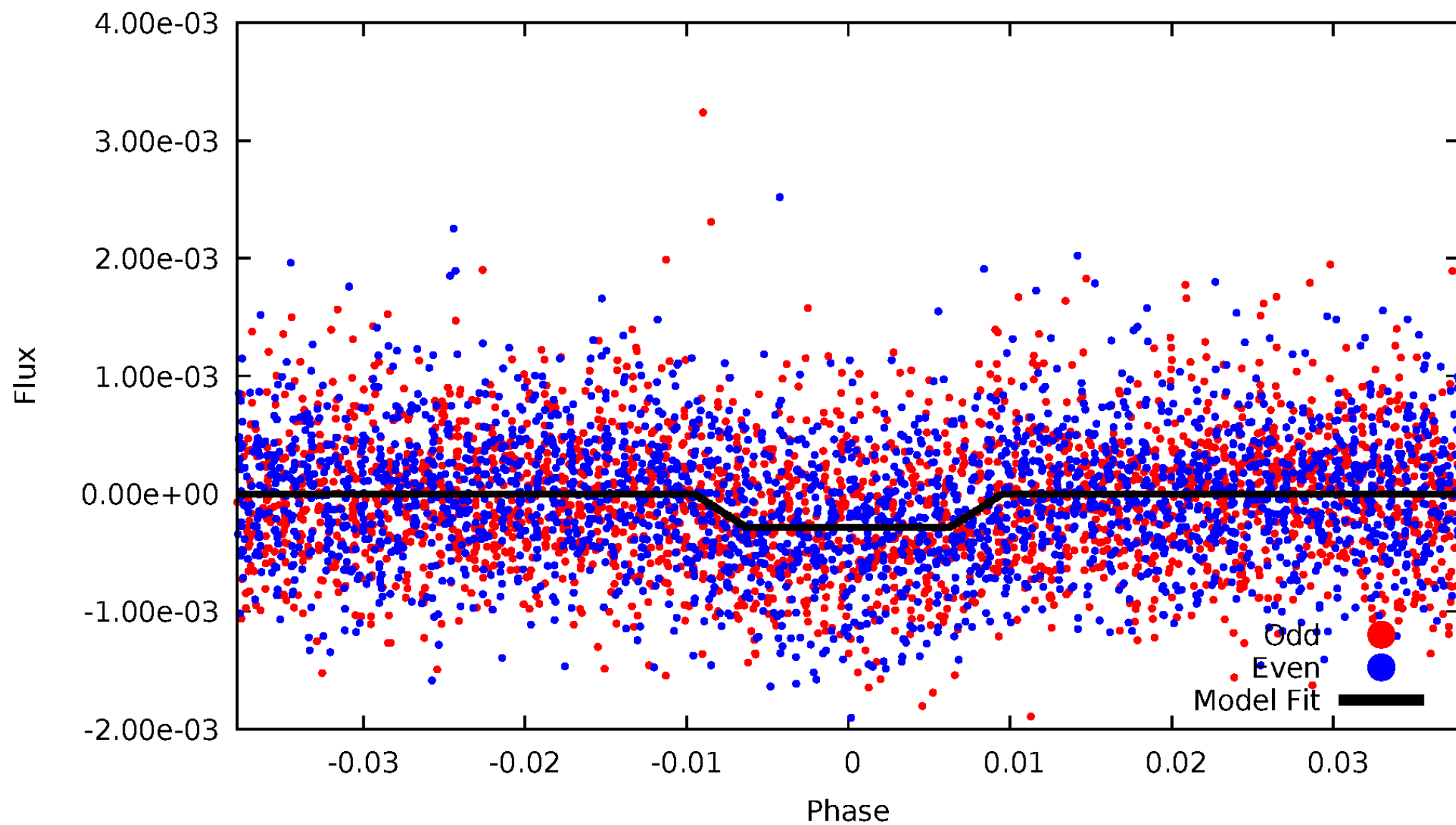
DV Odd/Even

TCE 006636320-01



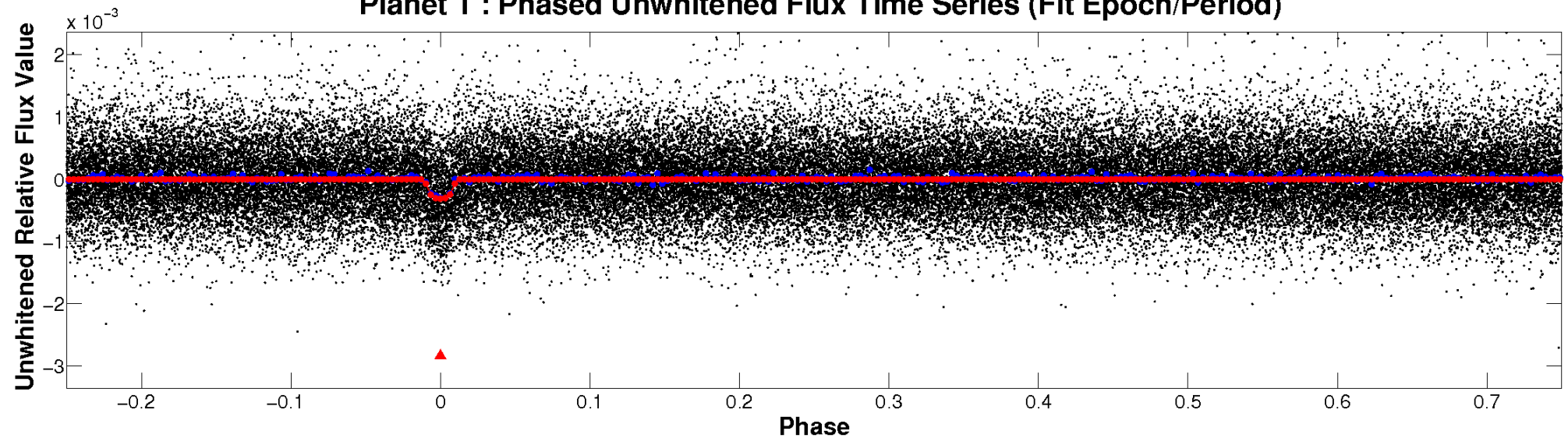
ALT Odd/Even

TCE 006636320-01

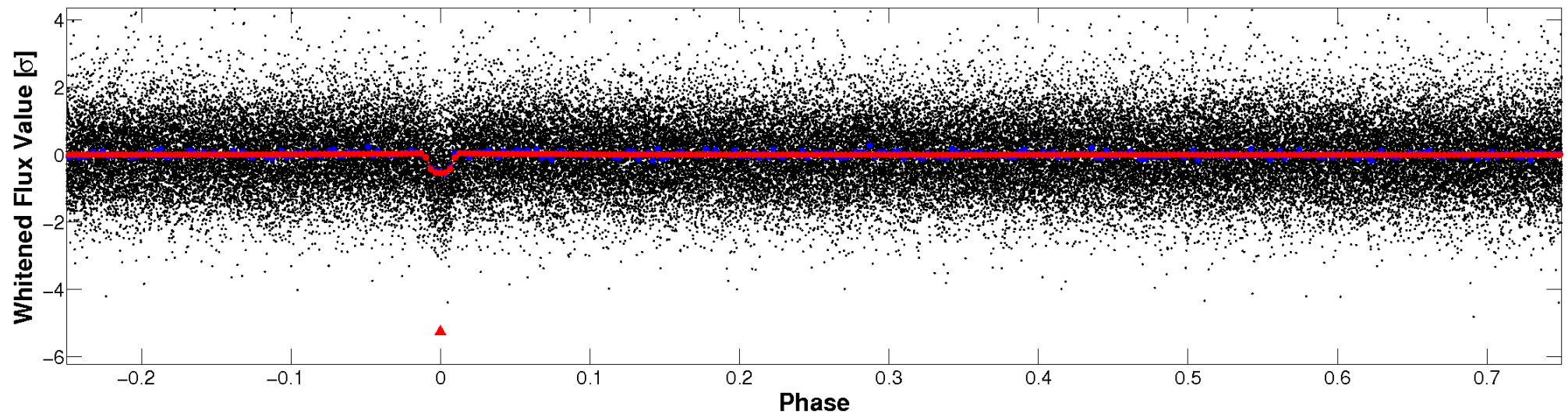


Non-Whitened Vs. Whitened Light Curve

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

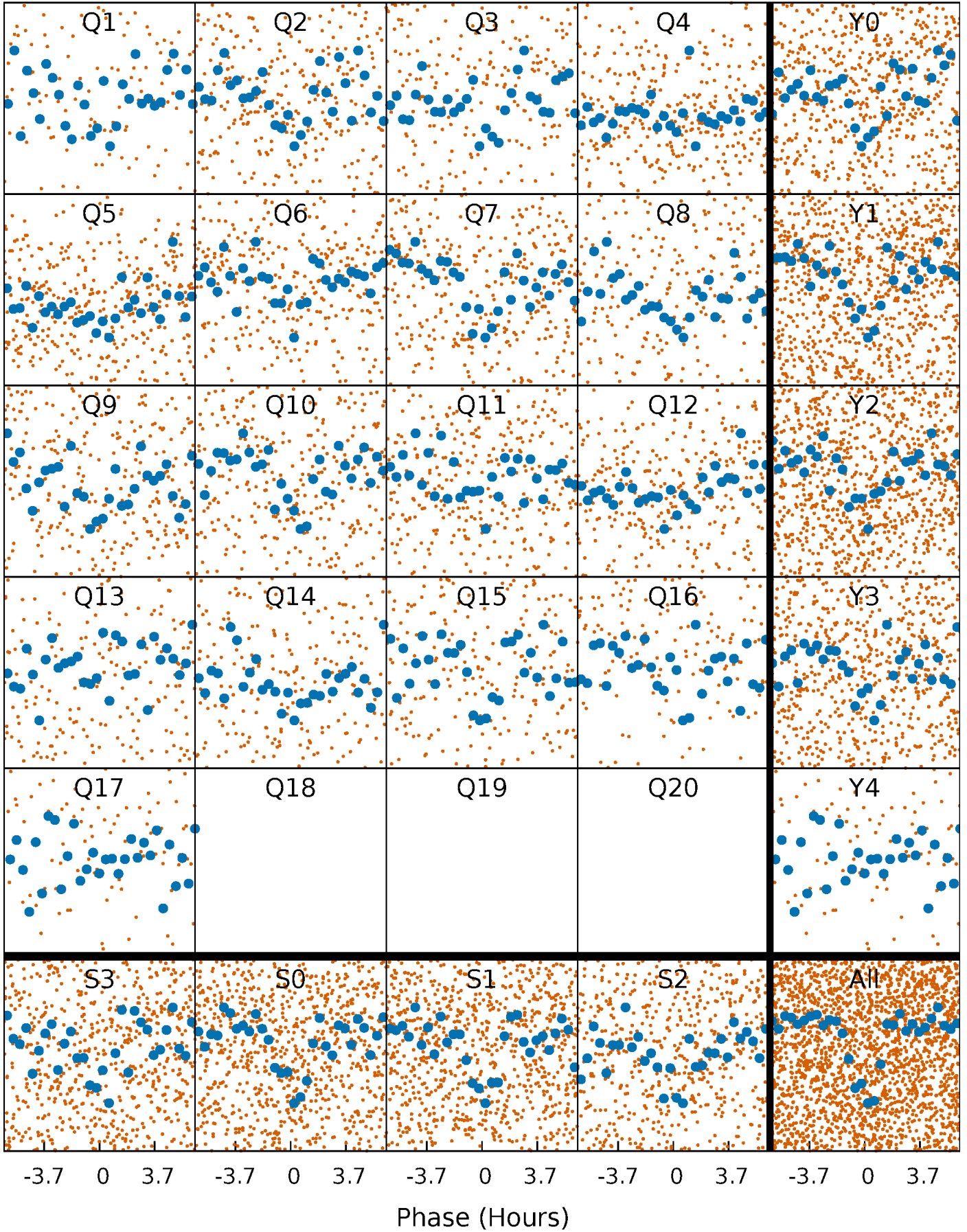


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



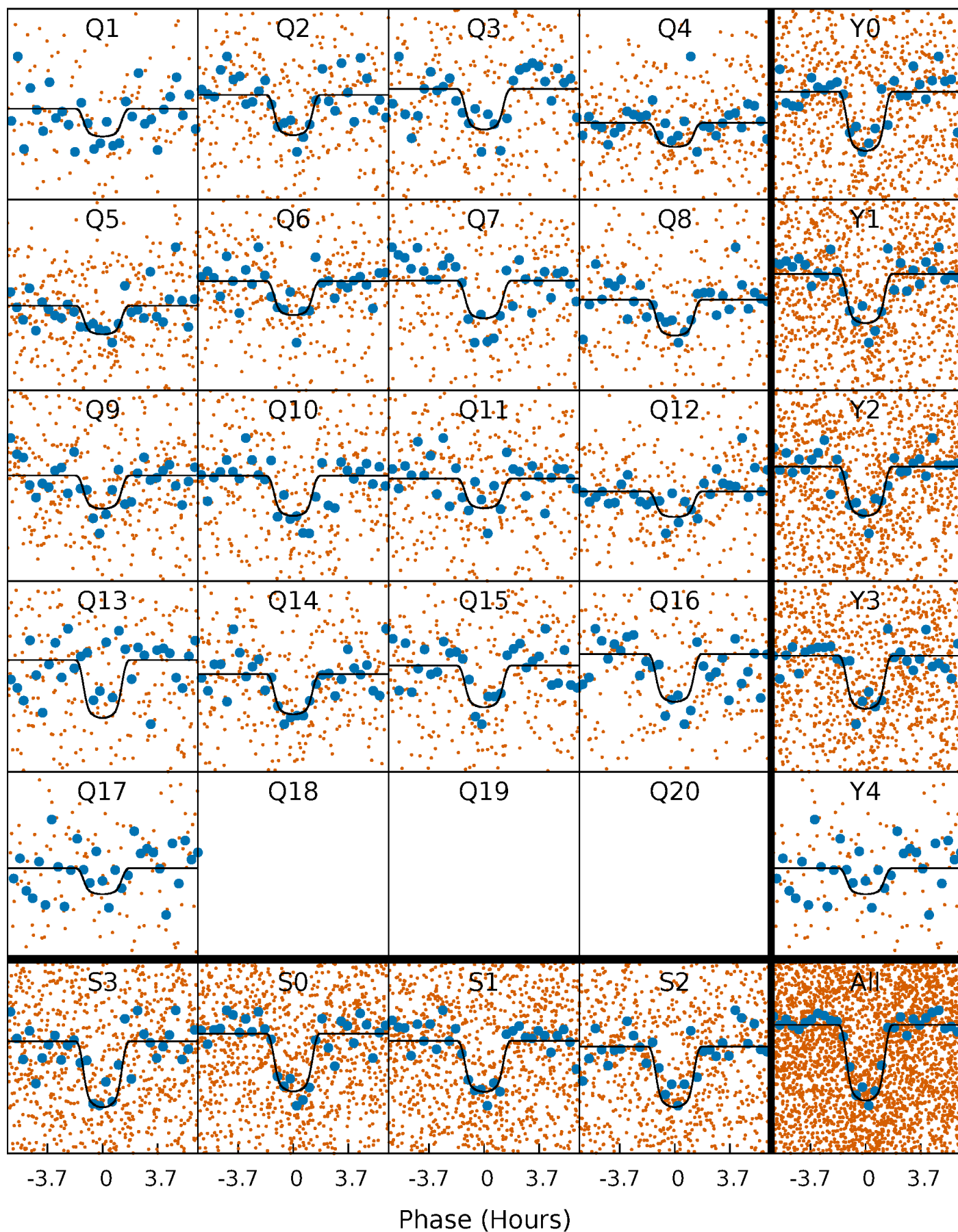
PDC Quarter-Phased Transit Curves

TCE 006636320-01 P= 6.331227 Days $T_0=137.144160$ (BKJD)



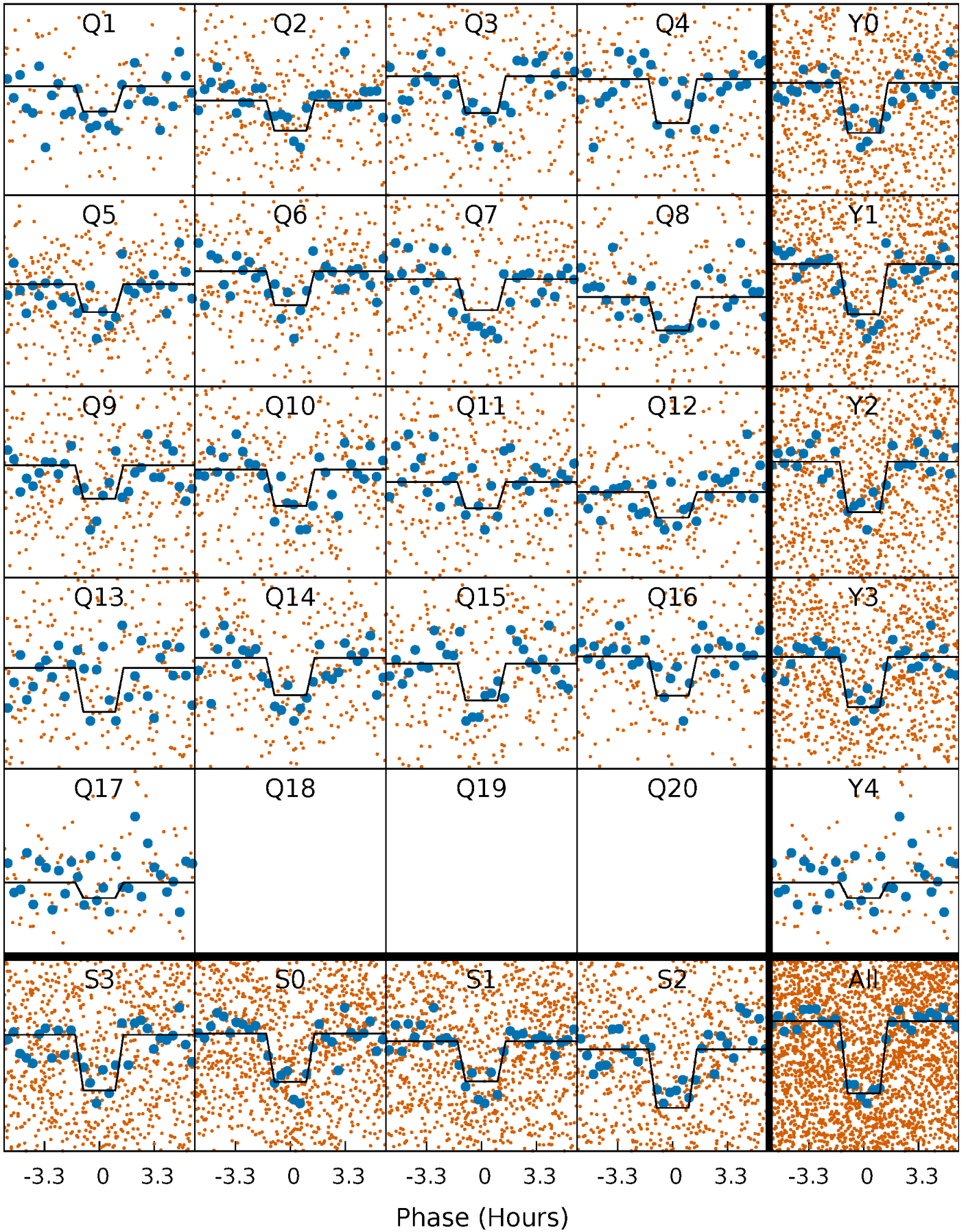
DV Quarter-Phased Transit Curves

TCE 006636320-01 P= 6.331227 Days $T_0=137.144160$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

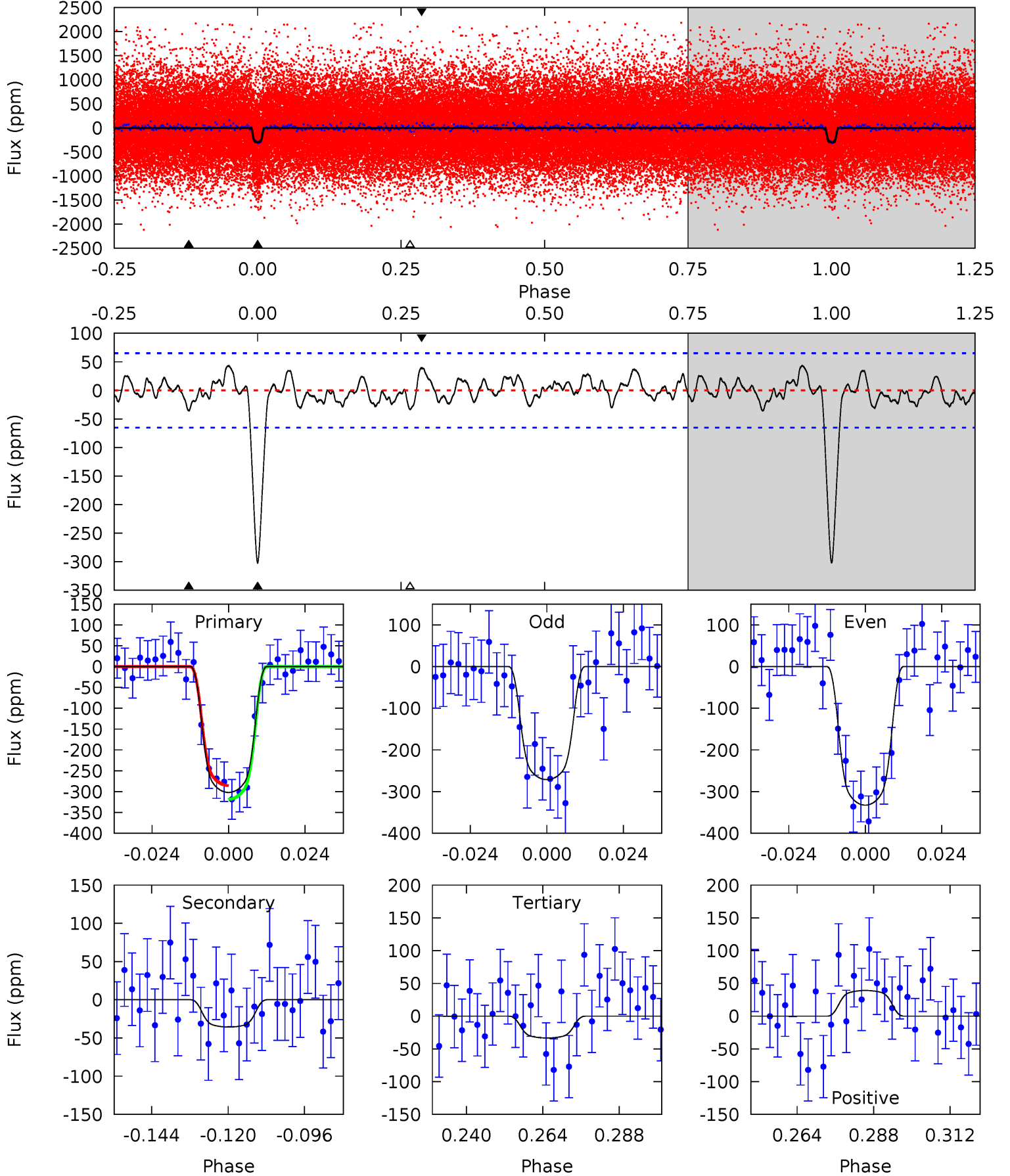
TCE 006636320-01 P= 6.331235 Days $T_0=137.145008$ (BKJD)



DV Model-Shift Uniqueness Test

006636320-01, P = 6.331227 Days, E = 130.812933 Days

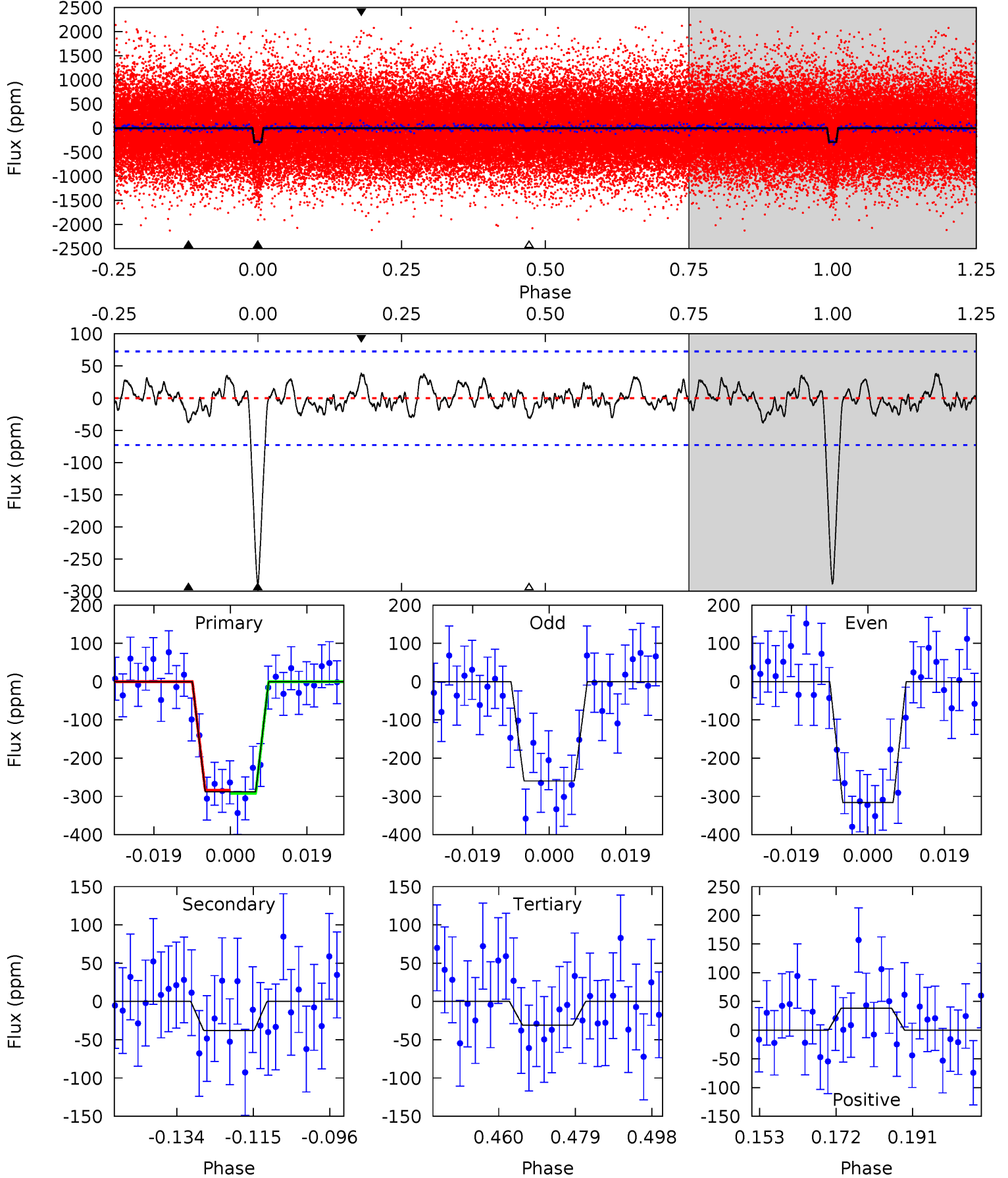
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.5	2.66	2.48	2.92	4.86	2.26	1.21	20.0	19.6	0.18	-0.25	2.29	1.02	0.12	1.23



Alt Model-Shift Uniqueness Test

006636320-01, P = 6.331235 Days, E = 130.813773 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.4	2.56	2.08	2.58	4.90	2.34	0.98	17.3	16.8	0.48	-0.03	1.91	1.07	0.12	0.28



Stellar Parameters For KIC 006636320

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5383^{+159}_{-159}	$4.603^{+0.035}_{-0.112}$	$-0.220^{+0.300}_{-0.300}$	$0.759^{+0.132}_{-0.057}$	$0.851^{+0.078}_{-0.096}$	$2.738^{+0.510}_{-0.897}$
	+3%/-3%	+1%/-2%	+136%/-136%	+17%/-8%	+9%/-11%	+19%/-33%
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 006636320-01 / KOI 2989.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-36 ± 13	$1.78^{+0.22}_{-0.20}$	1165^{+51}_{-46}	3357^{+228}_{-258}	24^{+12}_{-10}
Alt.	-38 ± 15	$1.44^{+0.20}_{-0.21}$	1164^{+50}_{-46}	3641^{+273}_{-304}	39^{+21}_{-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 $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

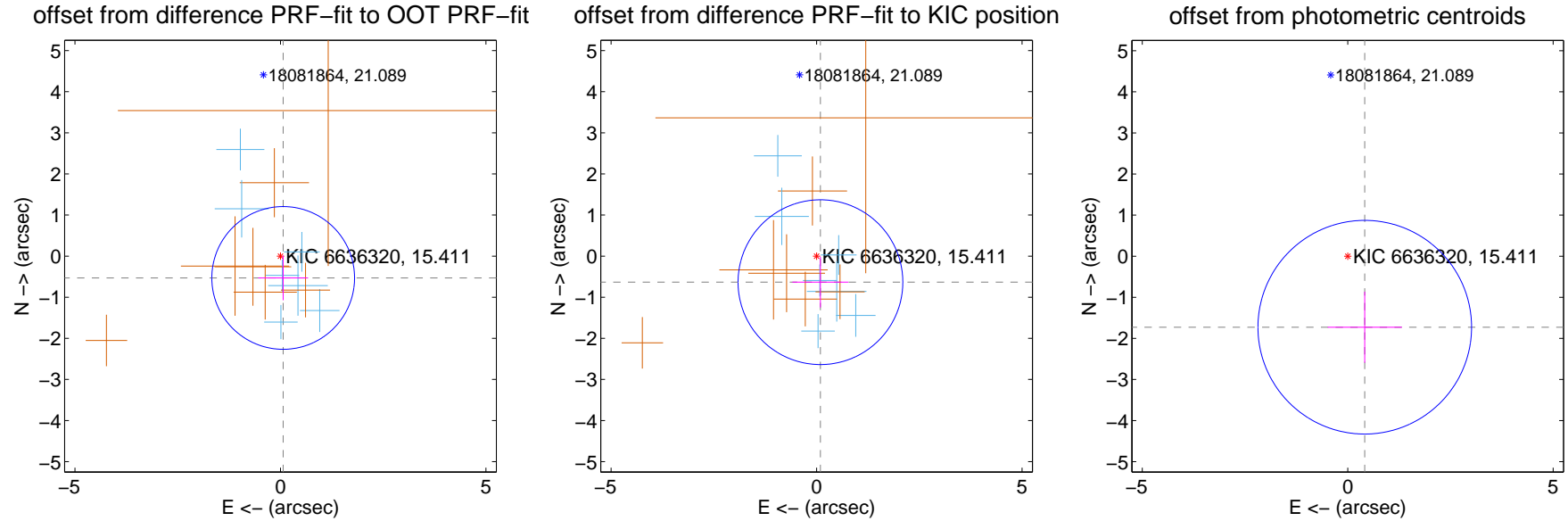
DV Centroid Data

Supplemental centroid analysis for 006636320-01. Kepler magnitude: 15.41. Transit SNR 15.84

There are 7 quarters with good PRF difference image offsets

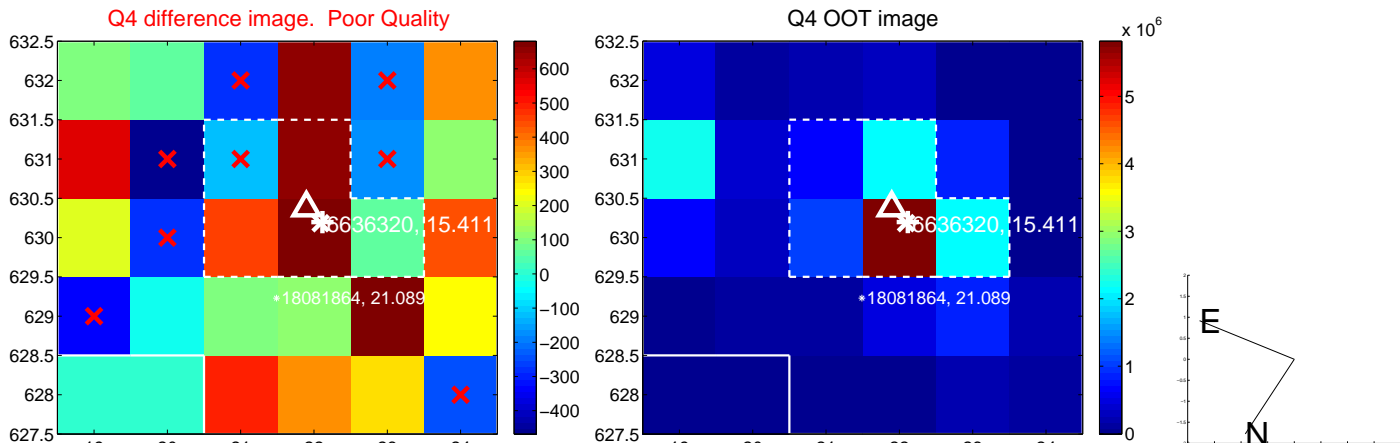
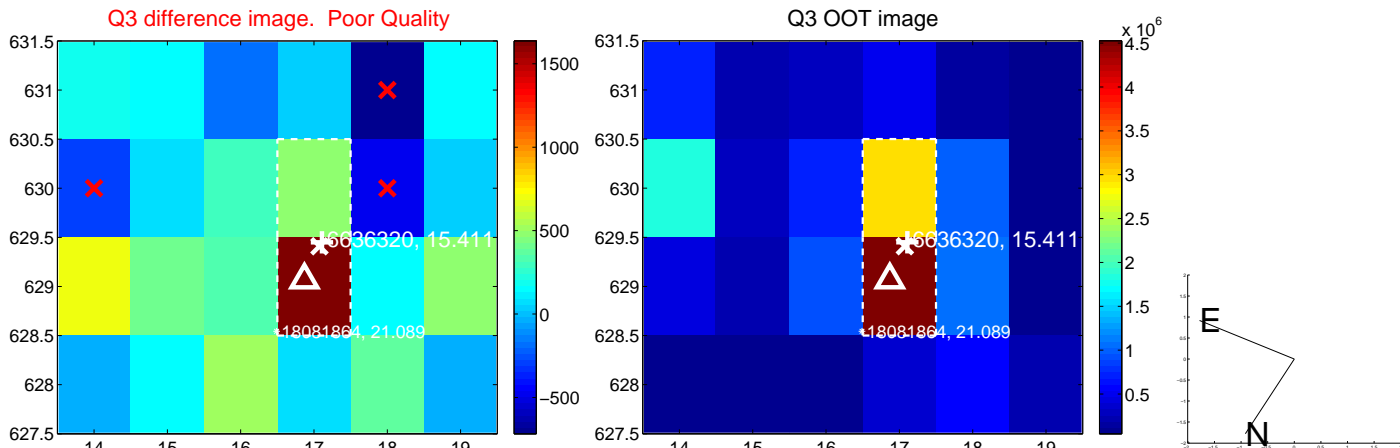
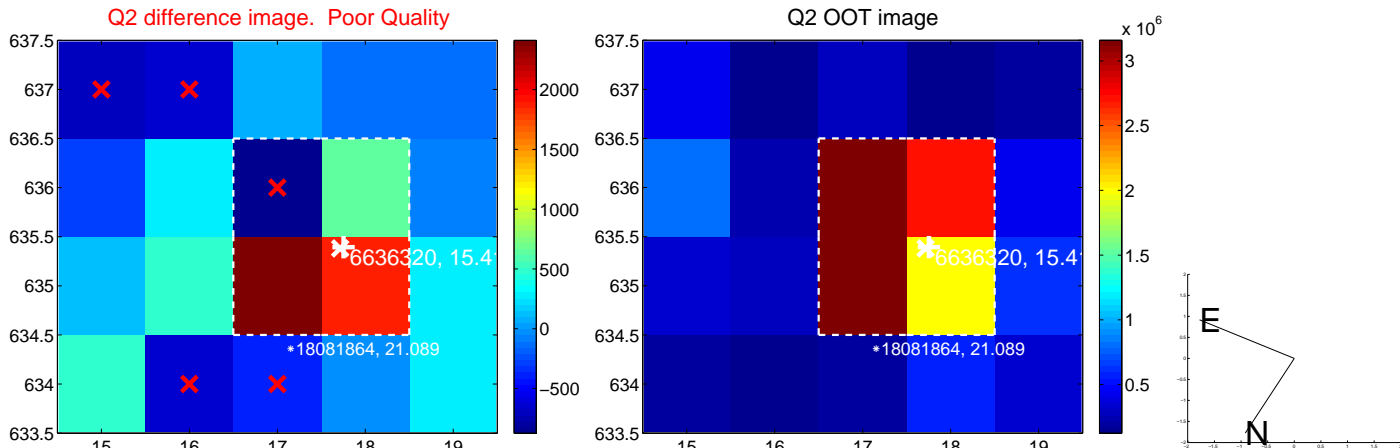
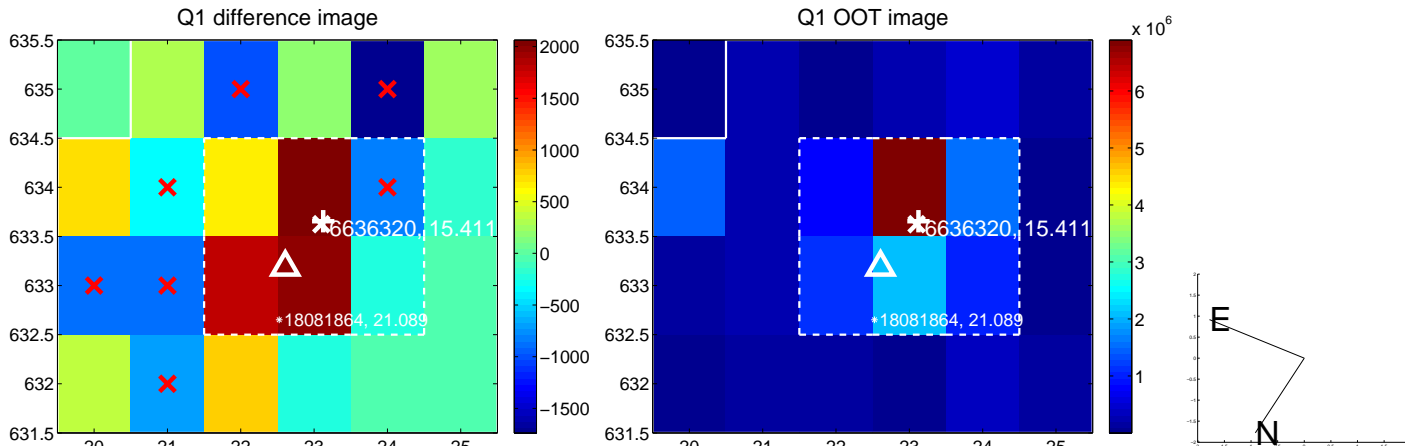
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.535 ± 0.579	0.92	-0.066 ± 0.605	-0.531 ± 0.543
PRF-fit source offset from KIC position	0.641 ± 0.668	0.96	-0.094 ± 0.681	-0.634 ± 0.616
photometric centroid source offset	1.78 ± 0.87	2.05	-0.41 ± 0.90	-1.73 ± 0.86

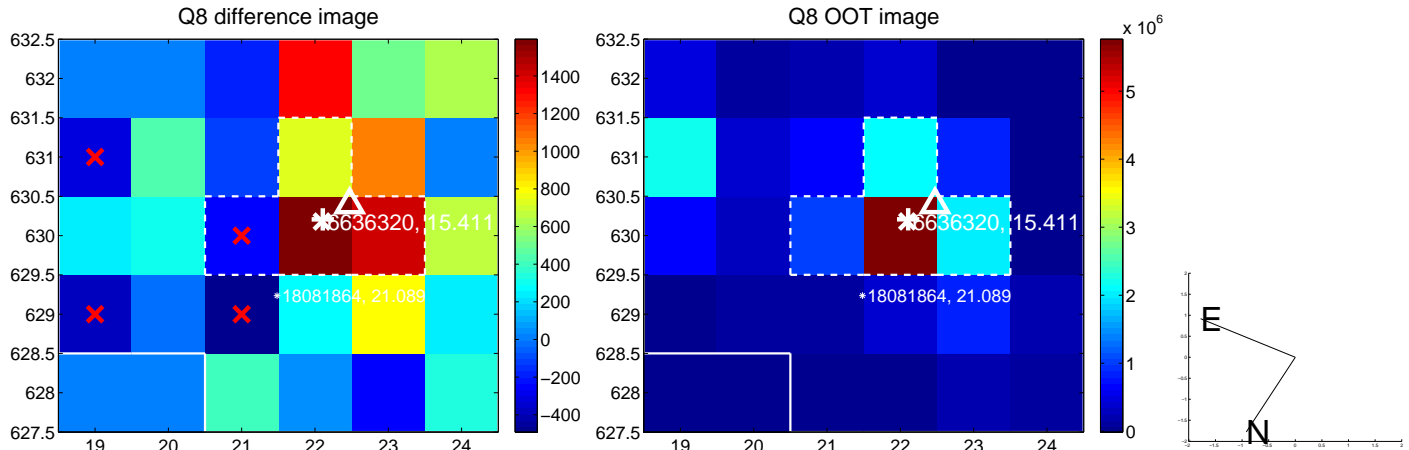
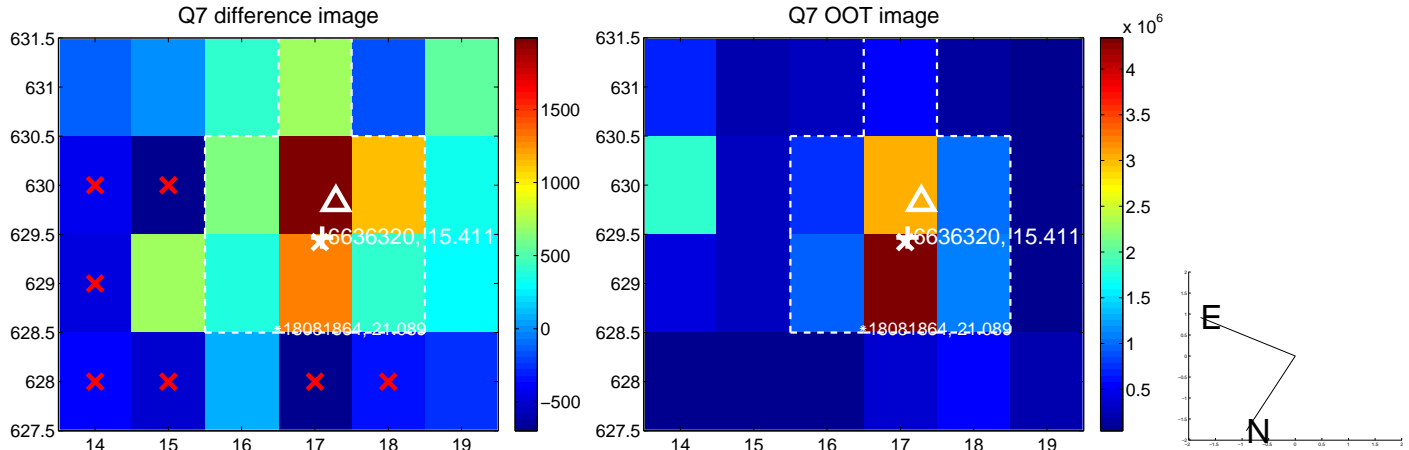
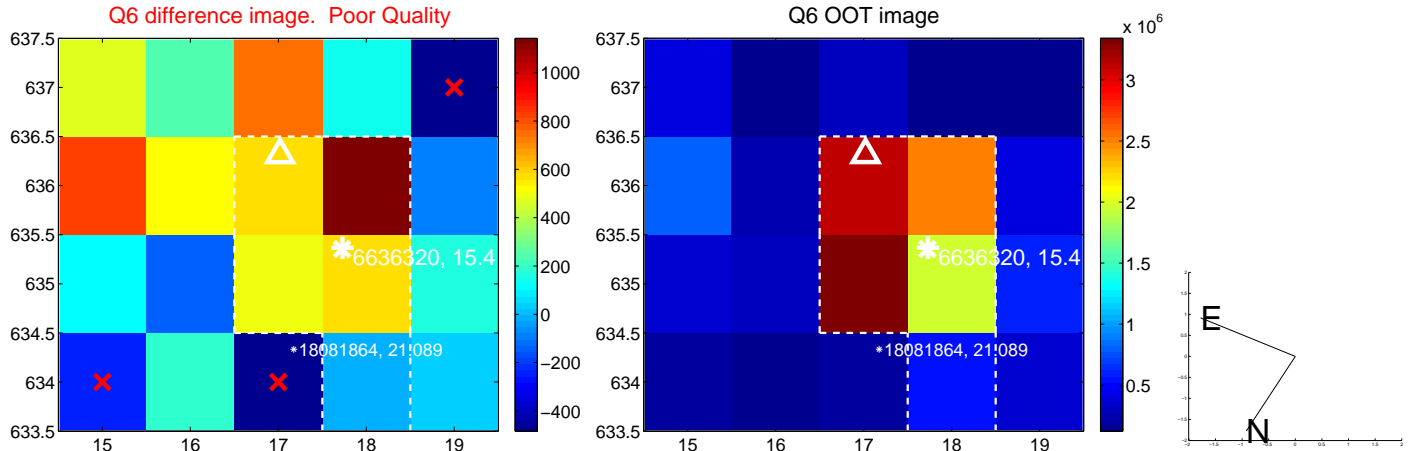
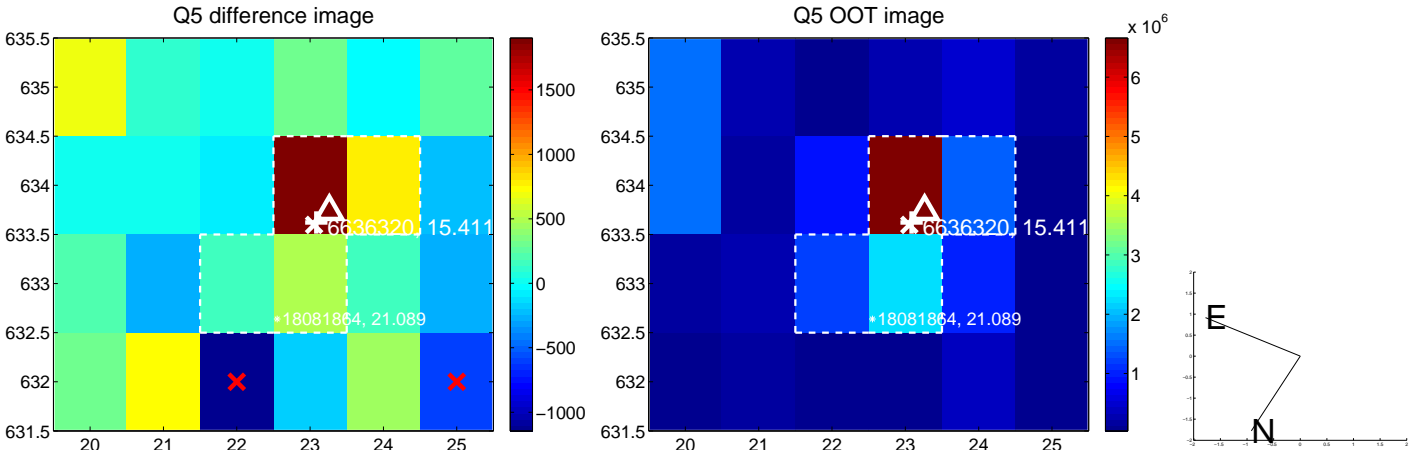


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

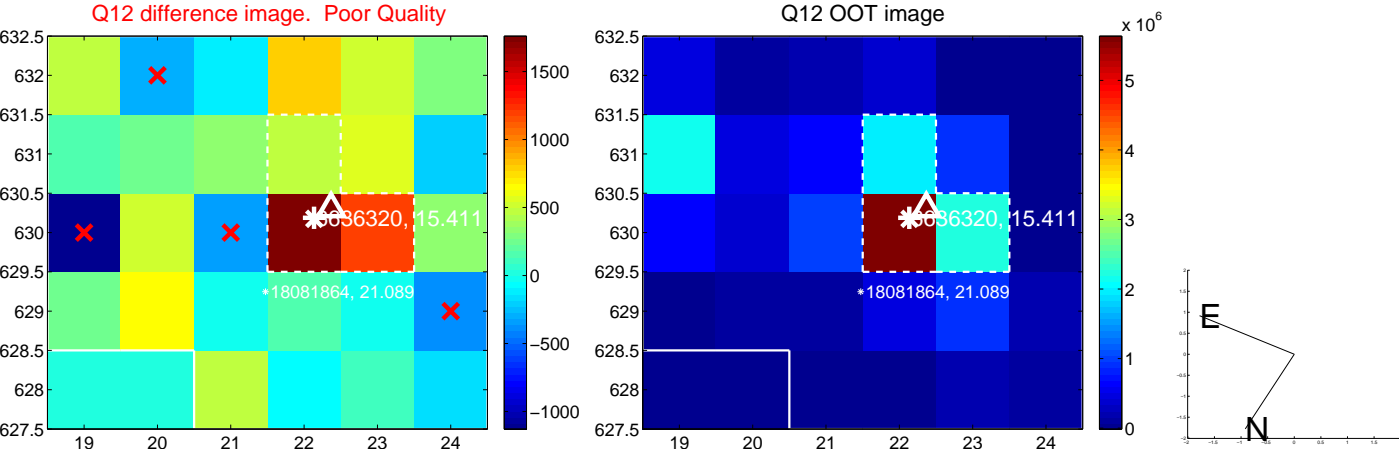
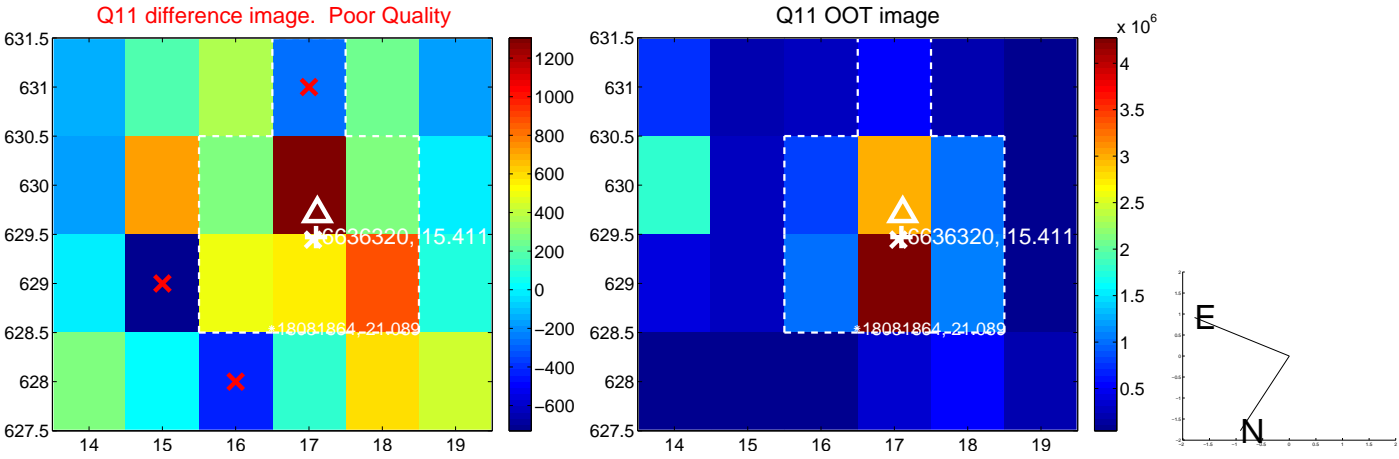
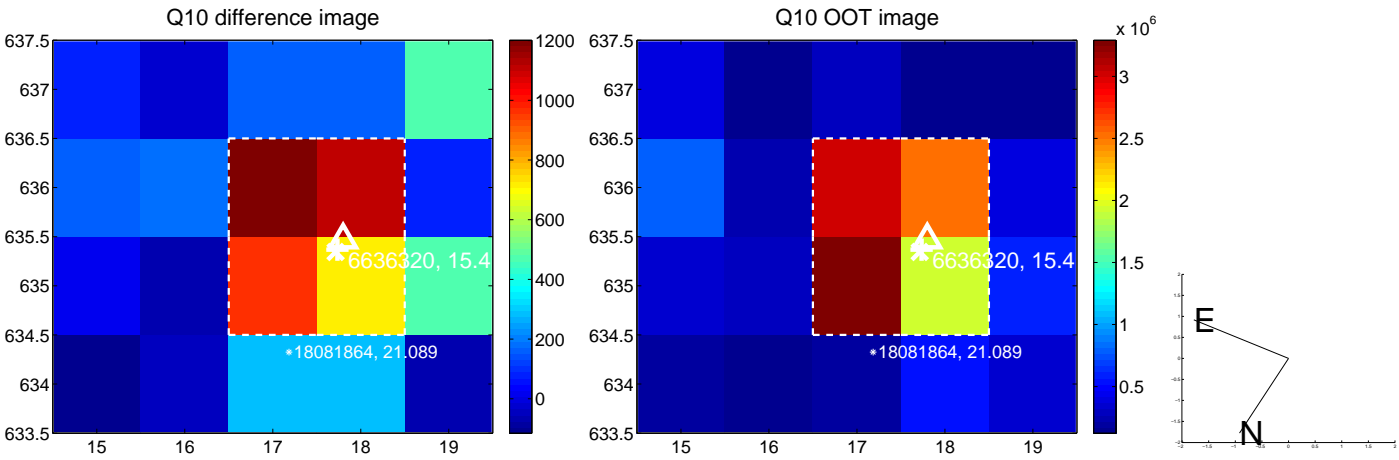
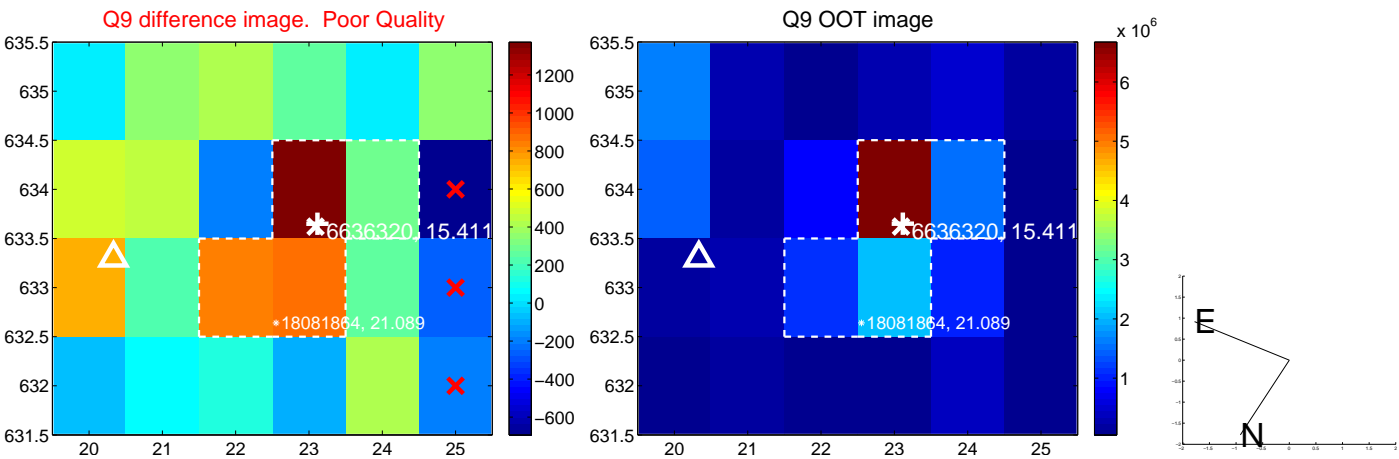
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



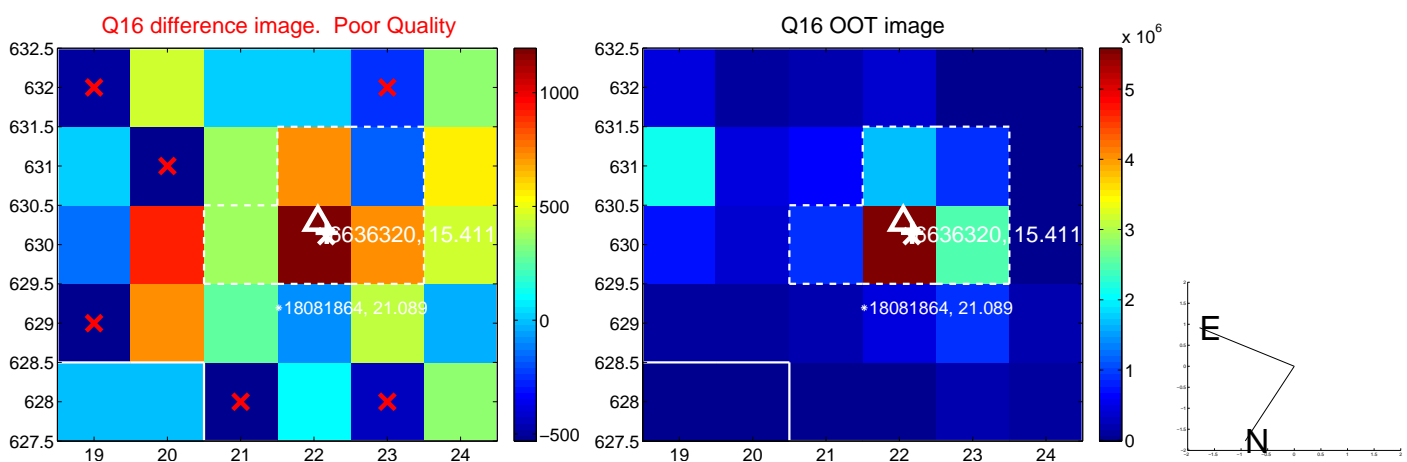
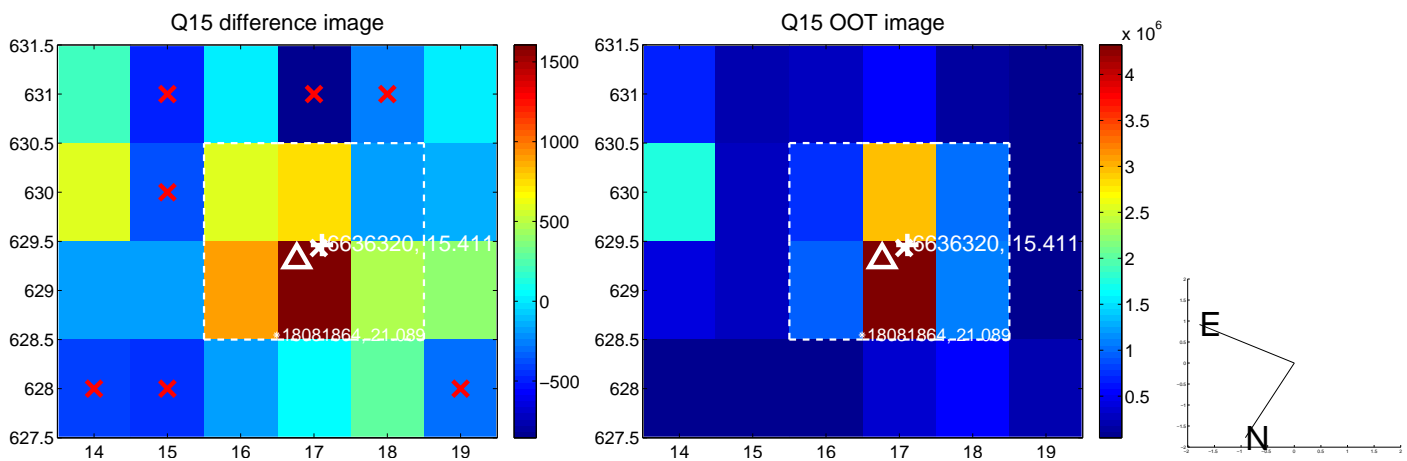
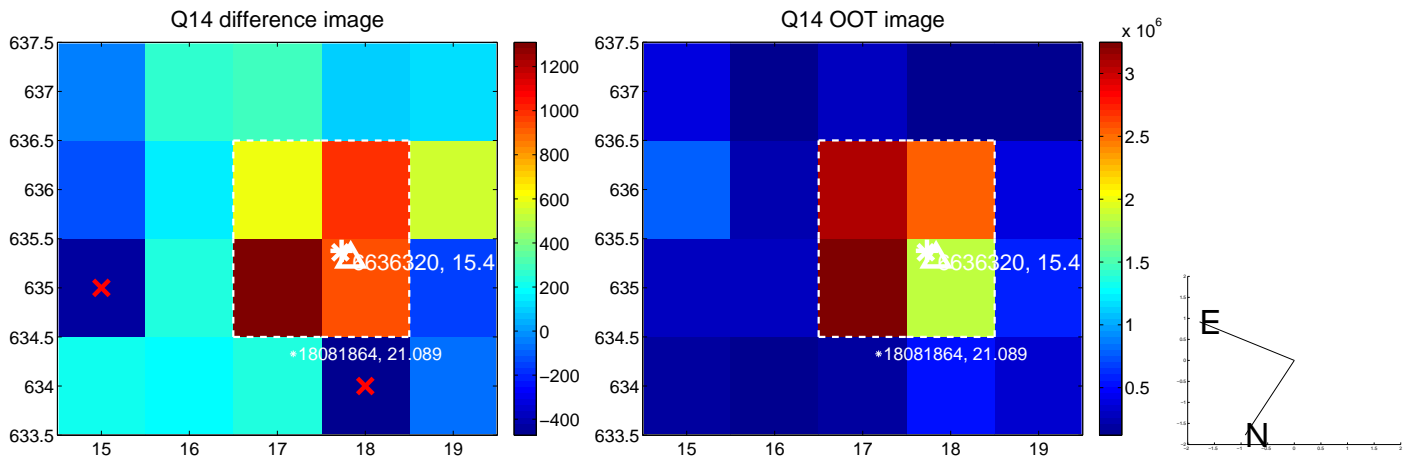
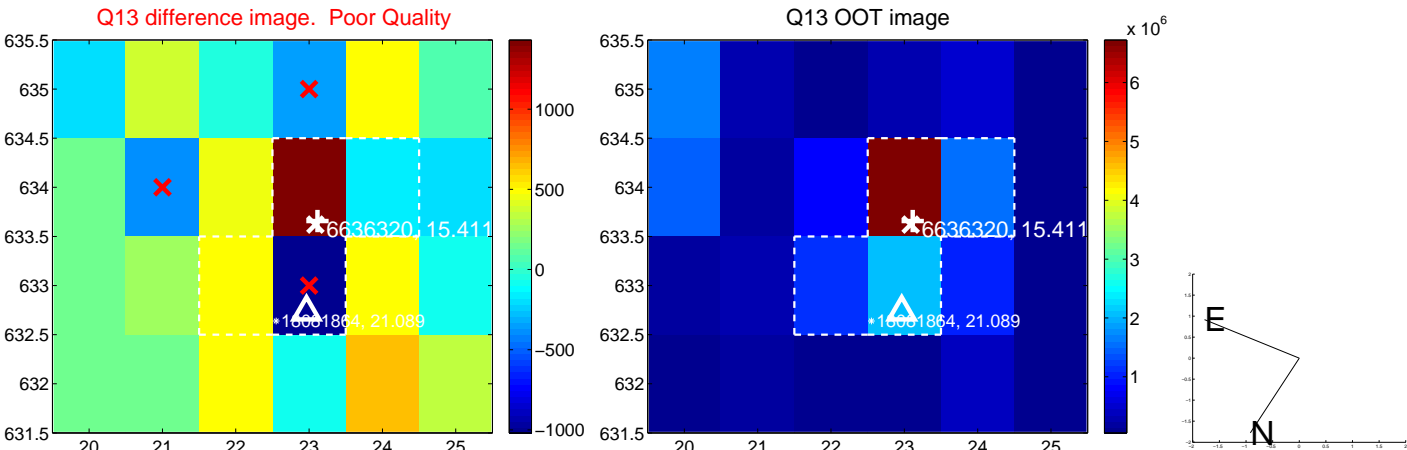
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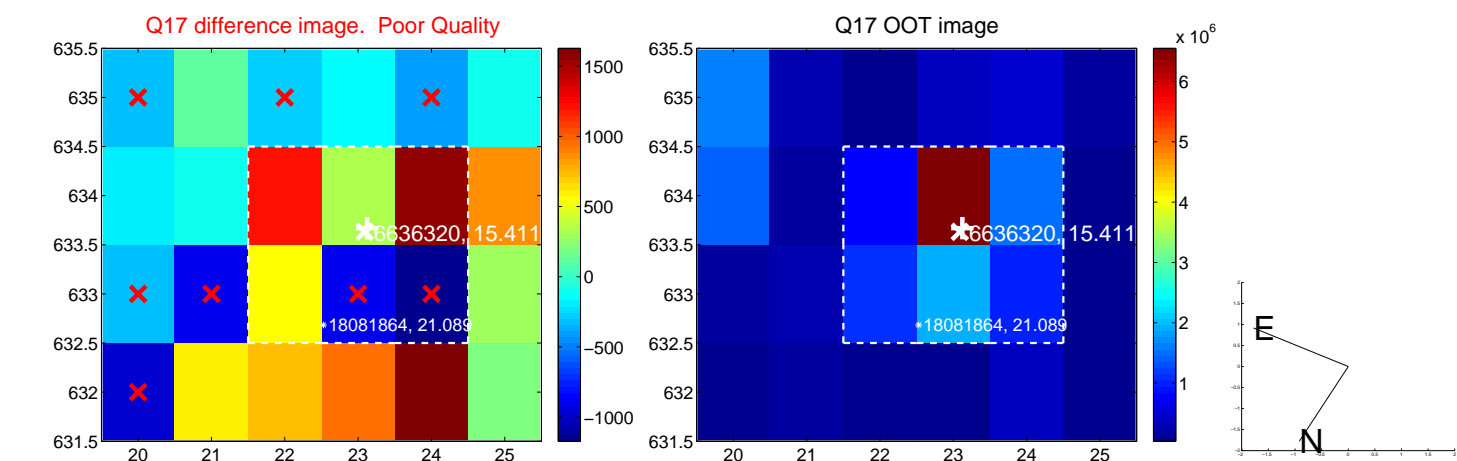
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



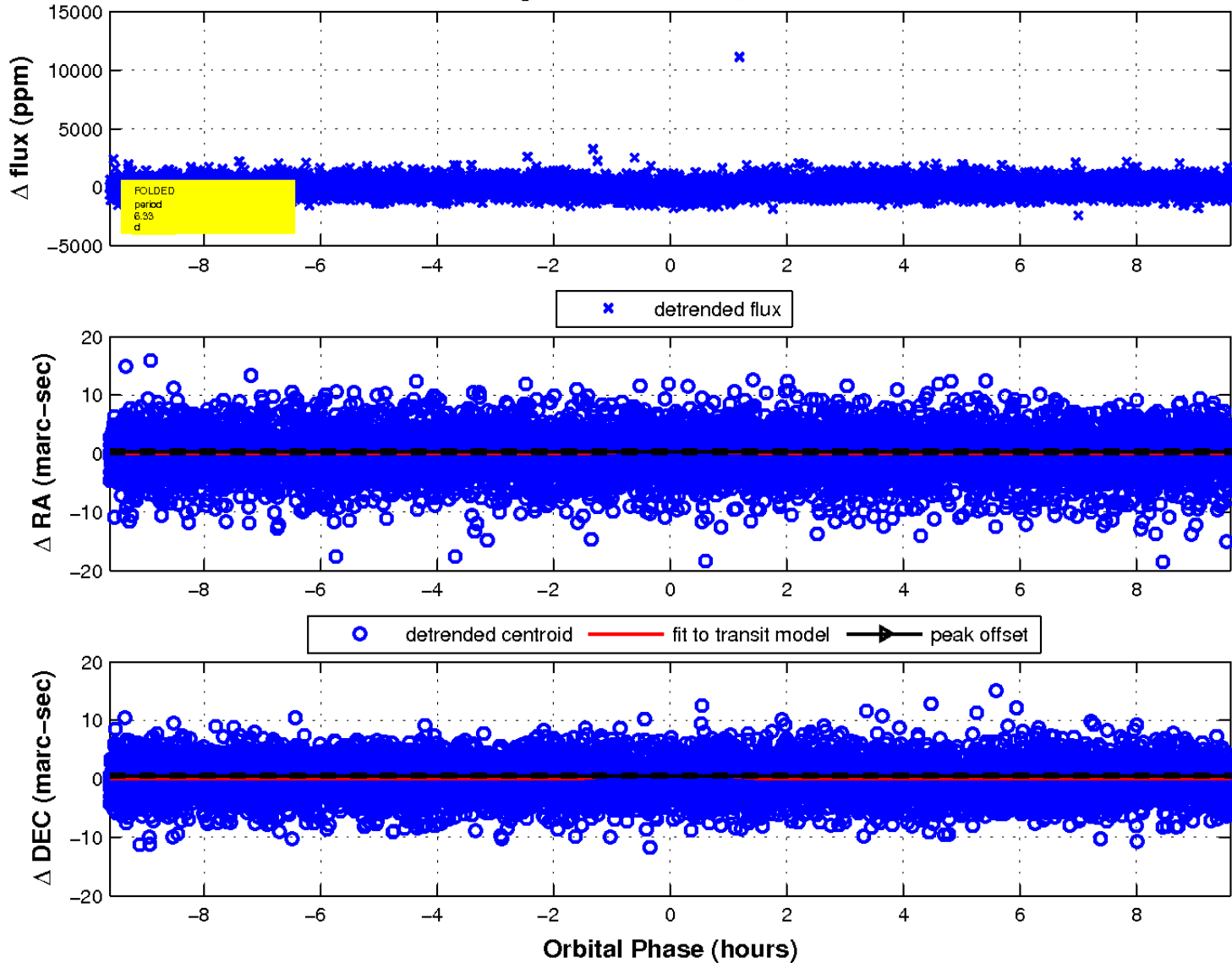
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

