

KIC 008330895

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})
008330895-01	OBS	No	0.678148	131.968900	6.8	5.453	8.8	1.8	1.46	7503	0.40	20696.96

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008330895-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_FEW_DIFFS

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

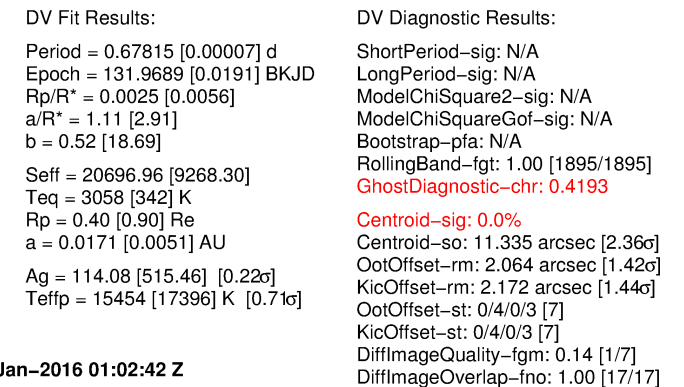
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

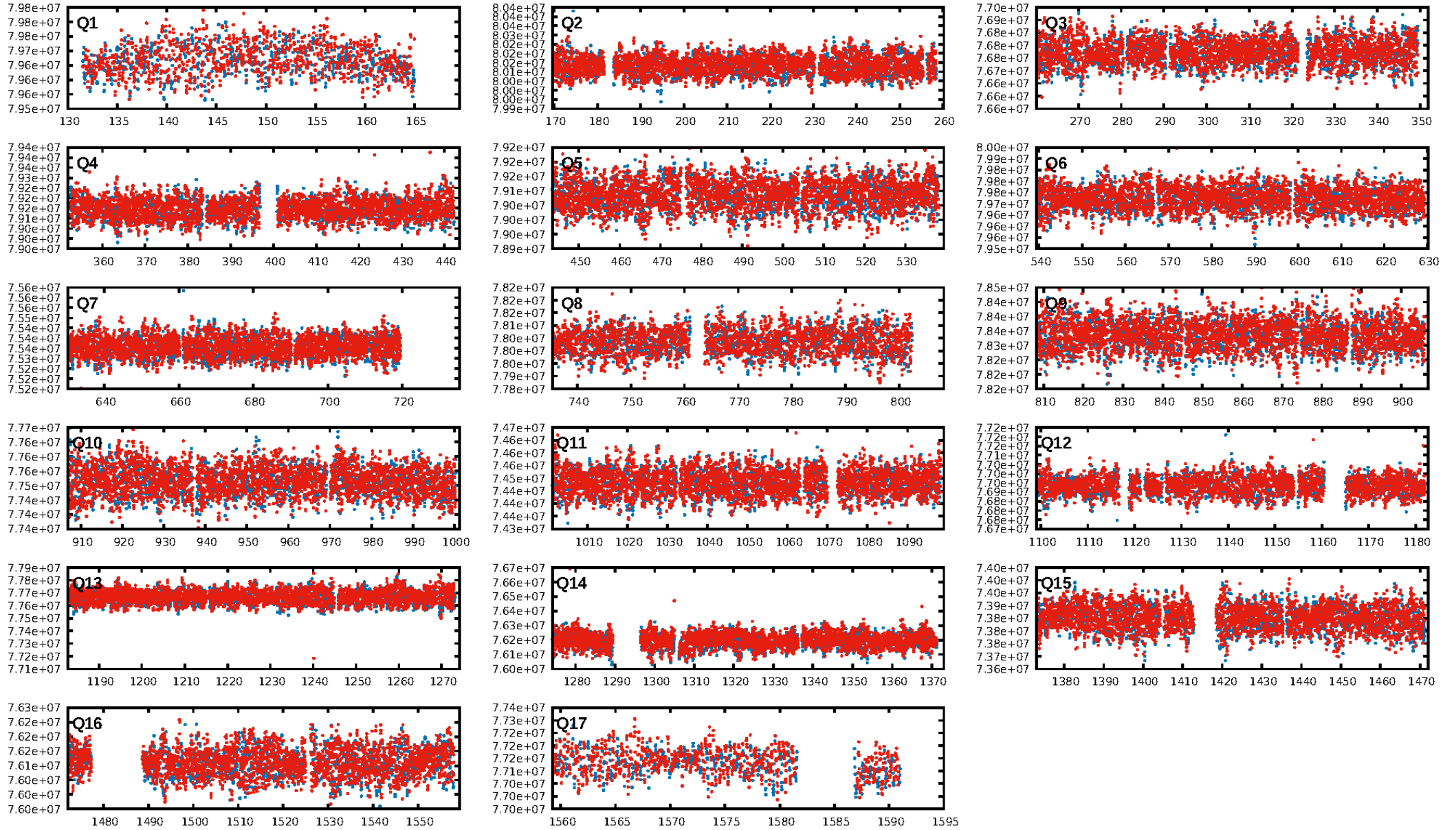
Ephemeris Match Information For 008330895-01

No Significant Match Found

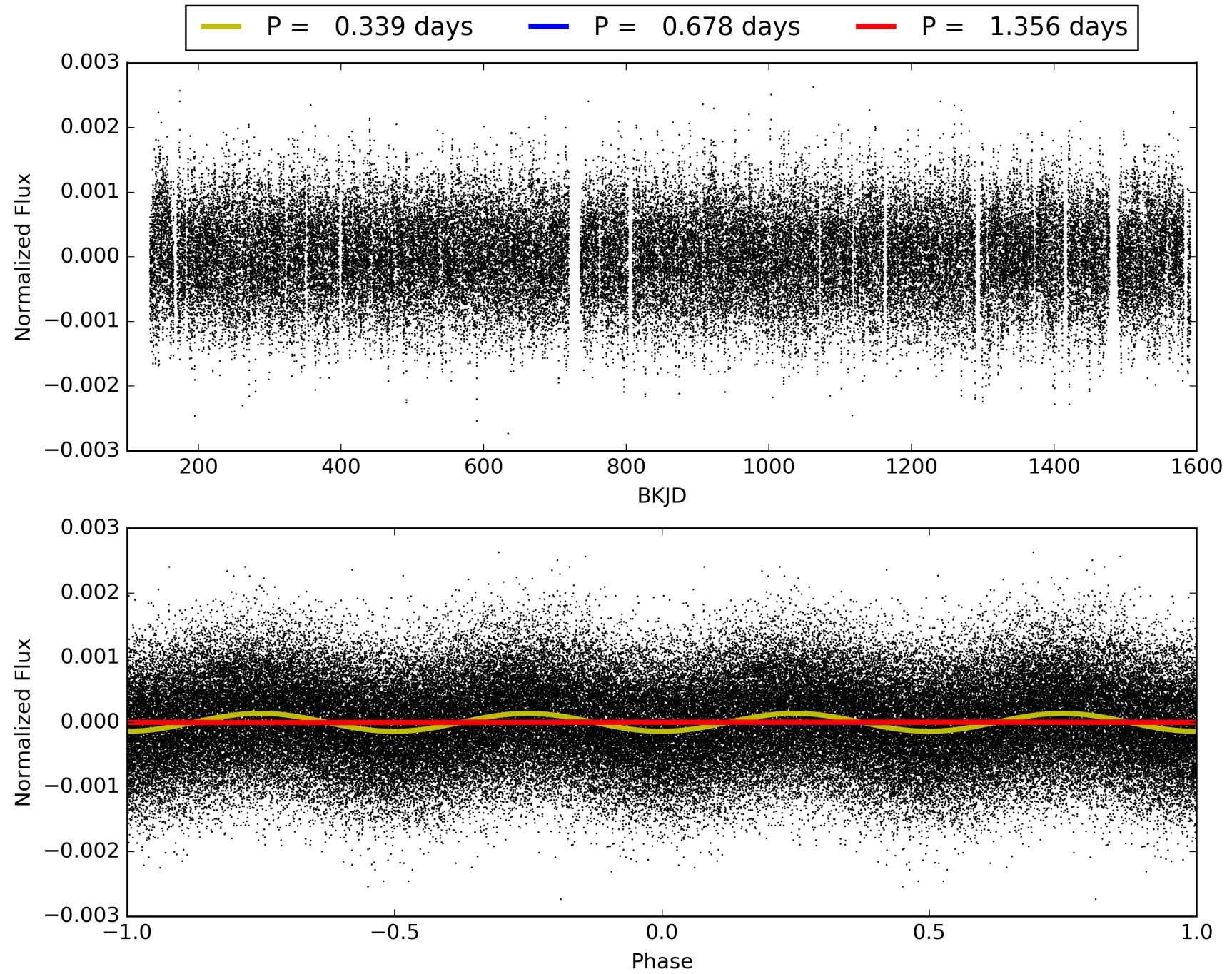
KIC: 8330895 Candidate: 1 of 1 Period: 0.678 d



TCE 008330895-01, PDC Light Curves

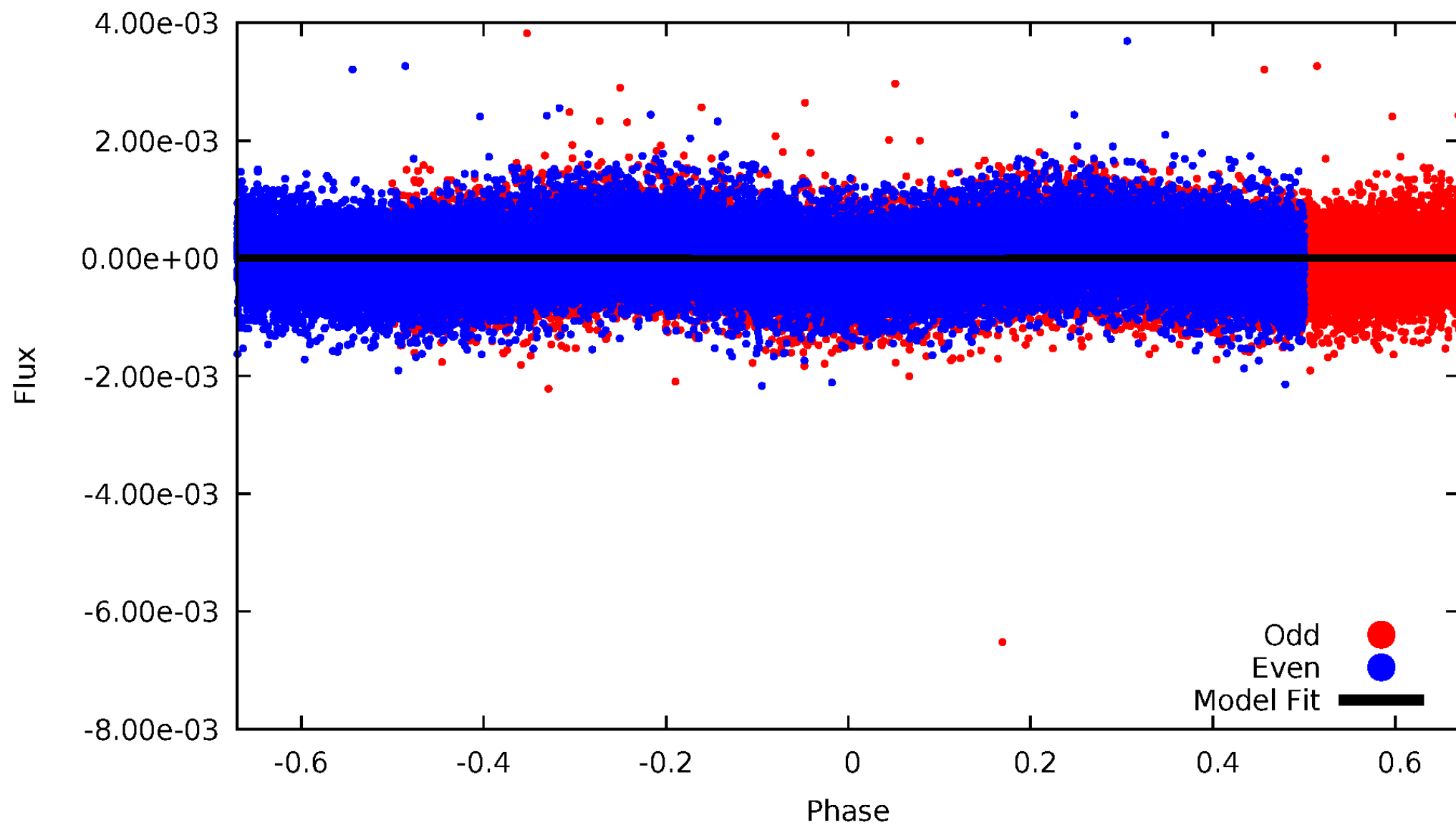


TCE 008330895-01



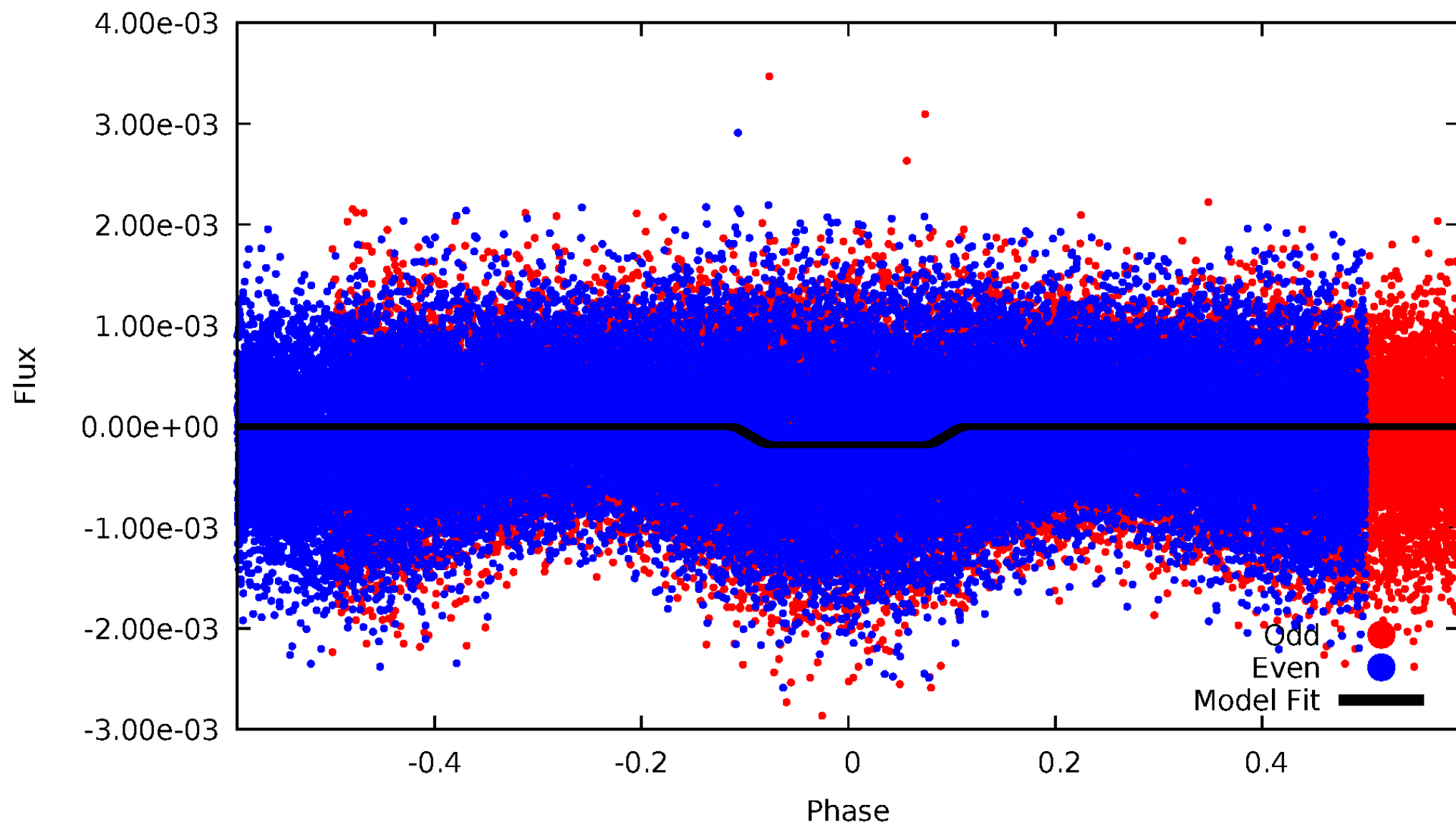
DV Odd/Even

TCE 008330895-01



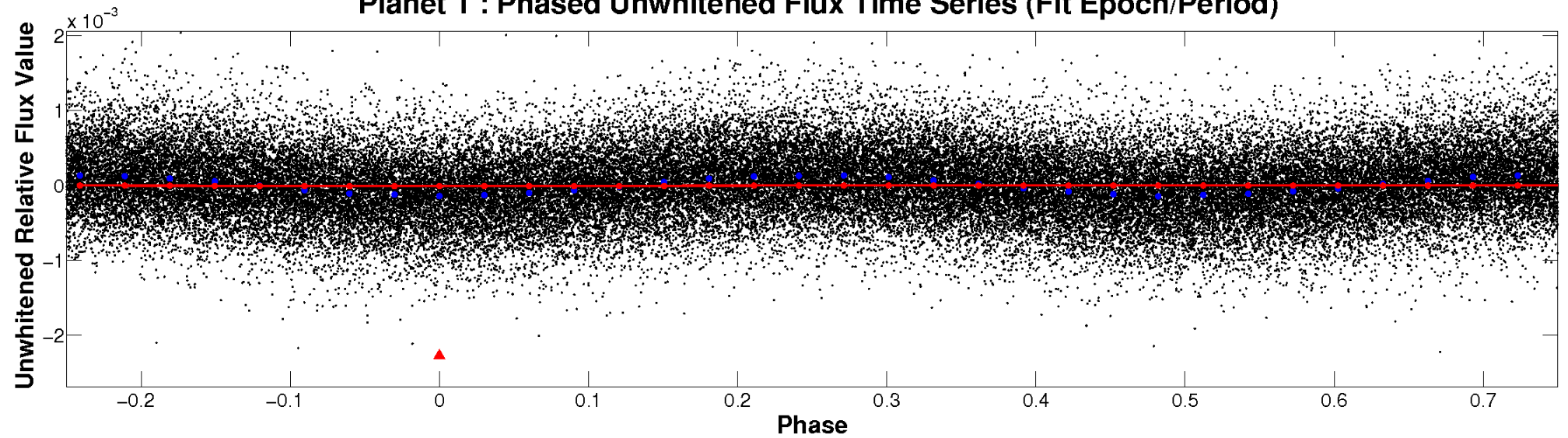
ALT Odd/Even

TCE 008330895-01

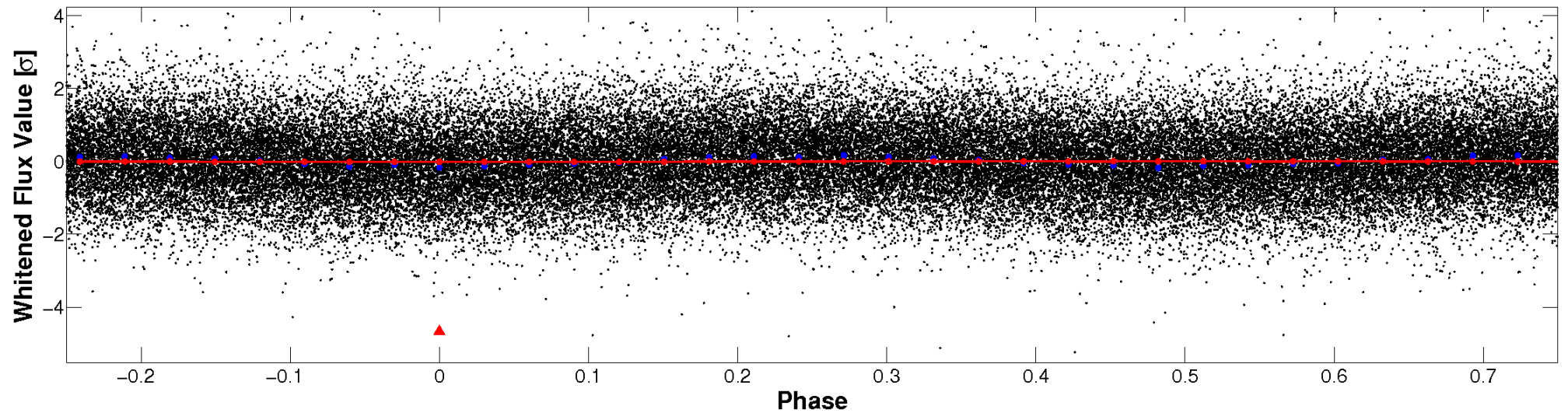


Non-Whitened Vs. Whitened Light Curve

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

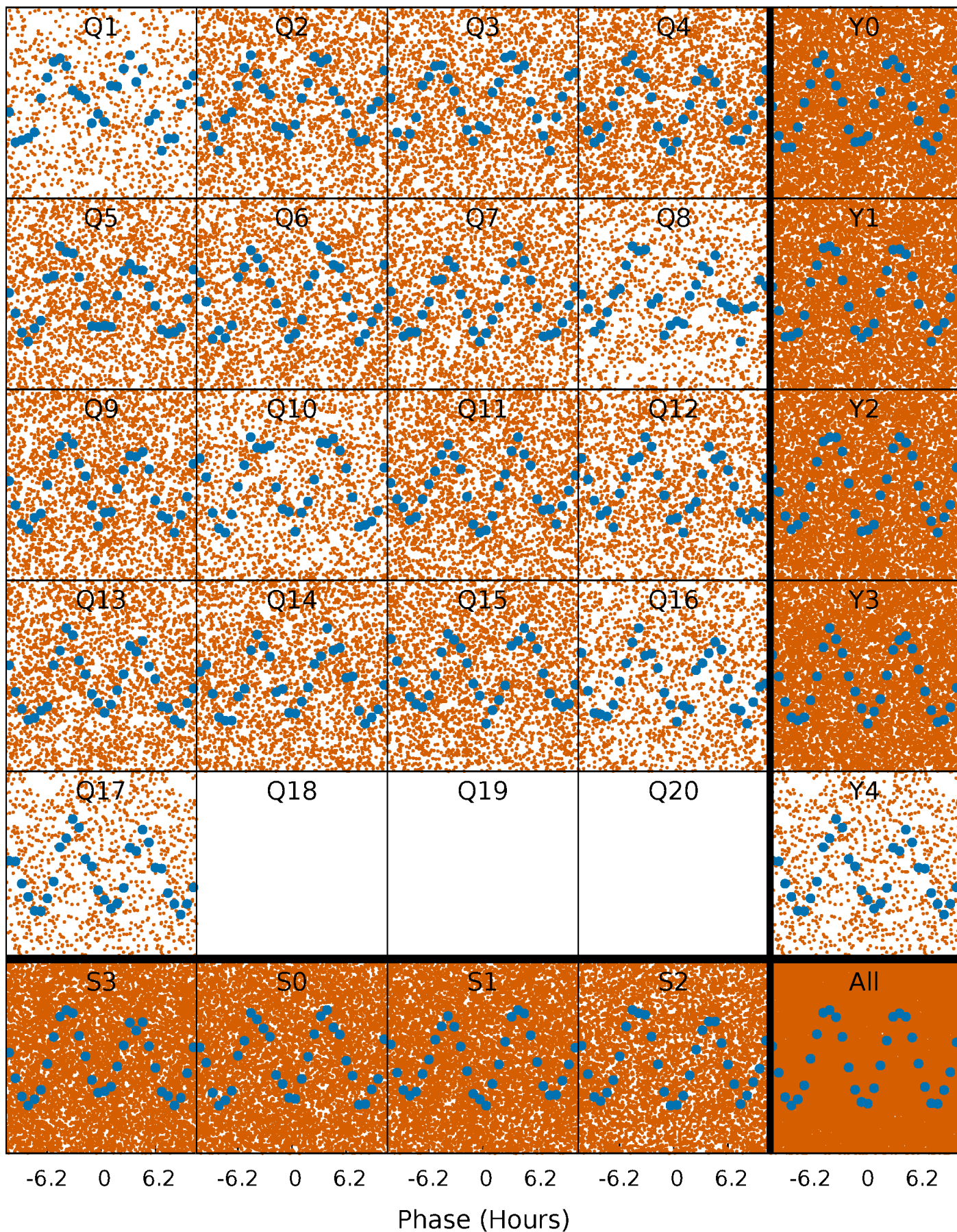


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



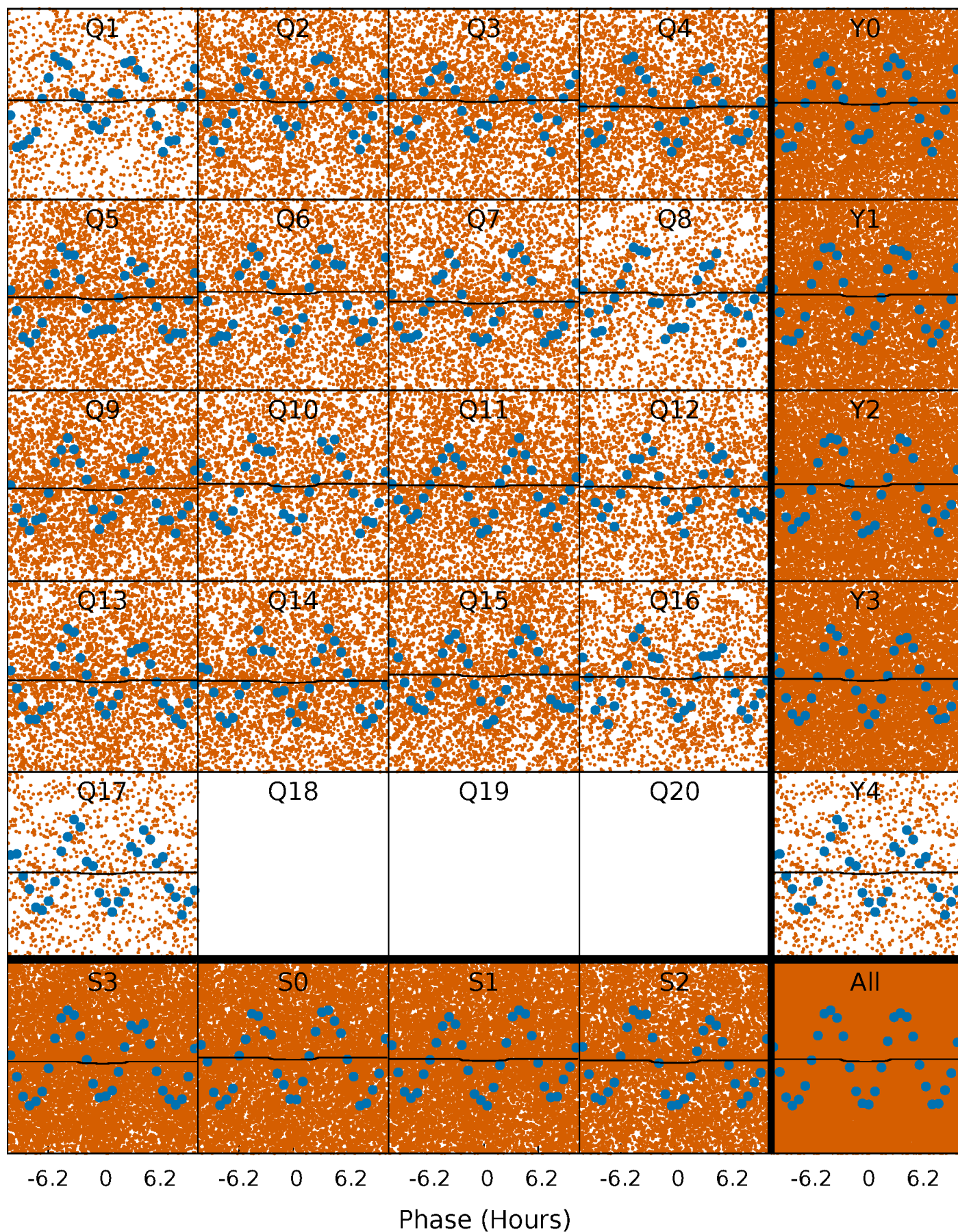
PDC Quarter-Phased Transit Curves

TCE 008330895-01 P= 0.678148 Days $T_0=131.968900$ (BKJD)



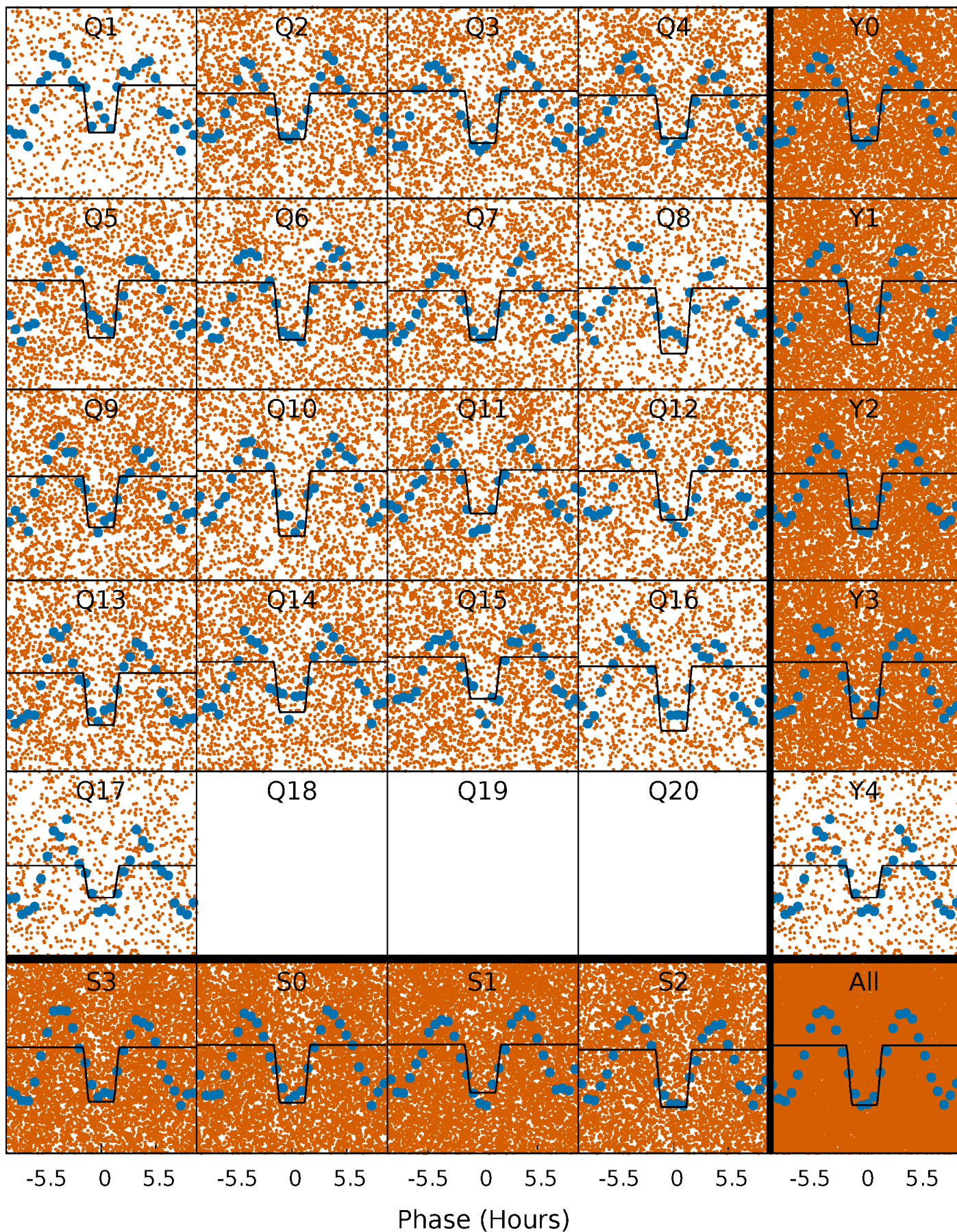
DV Quarter-Phased Transit Curves

TCE 008330895-01 P= 0.678148 Days $T_0=131.968900$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

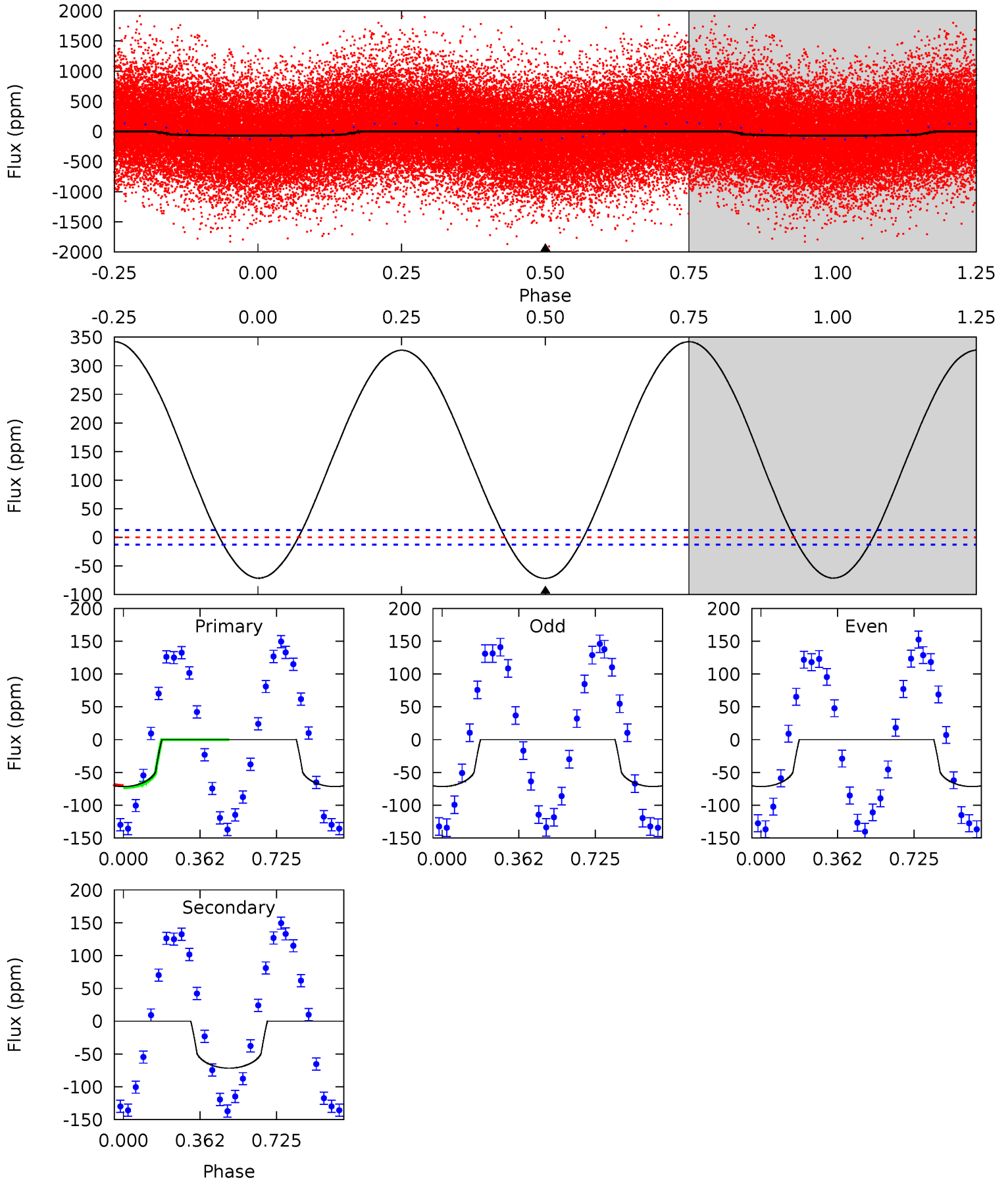
TCE 008330895-01 P= 0.678173 Days $T_0=131.942621$ (BKJD)



DV Model-Shift Uniqueness Test

008330895-01, P = 0.678148 Days, E = 131.290752 Days

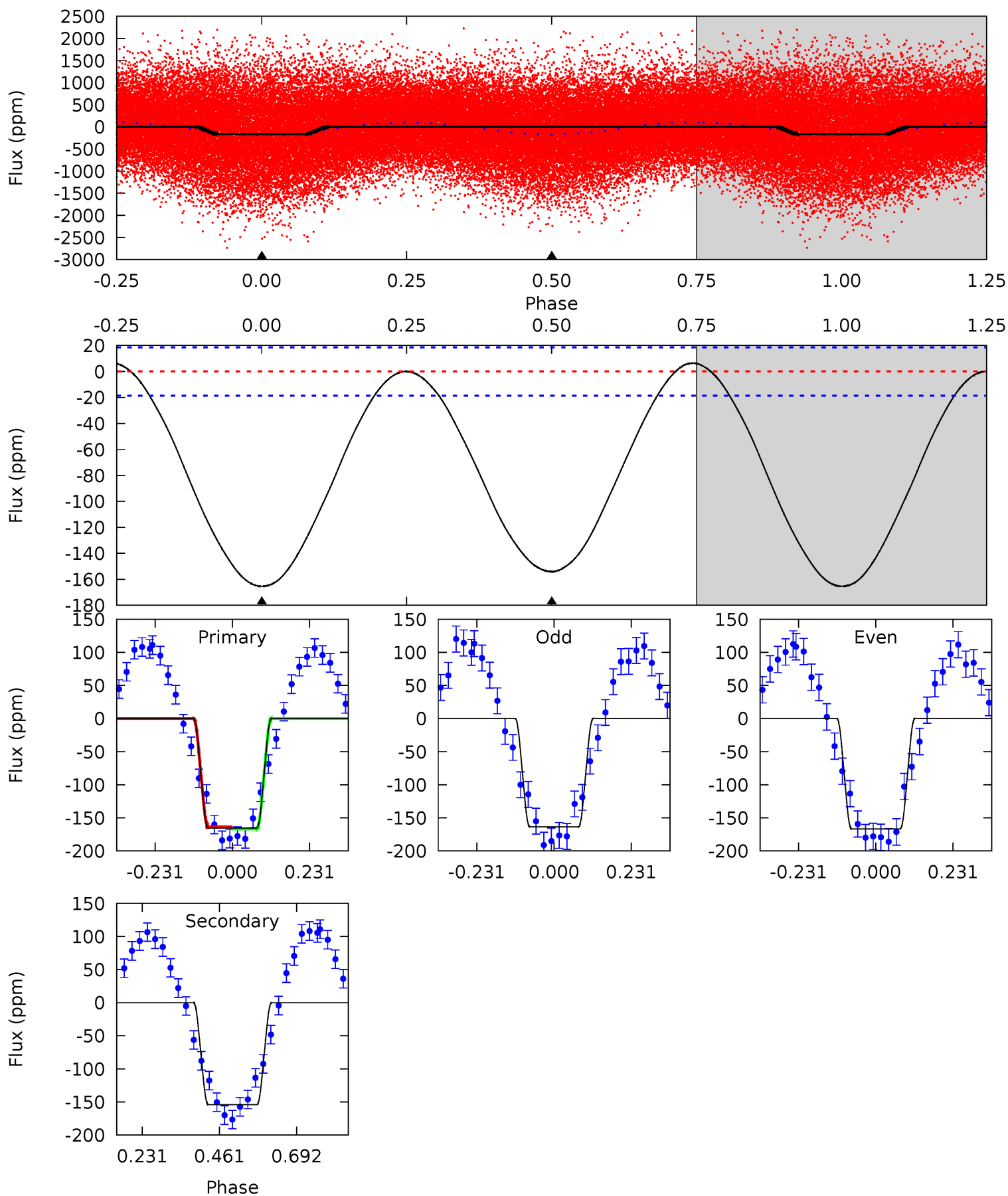
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.1	24.1	0	0	4.29	0.91	24.5	24.1	24.1	24.1	24.1	0.00	1.15	0.83	0.57



Alt Model-Shift Uniqueness Test

008330895-01, P = 0.678173 Days, E = 131.264448 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.0	36.4	0	0	4.39	1.20	0.79	39.0	39.0	36.4	36.4	0.35	1.10	0.04	0.31



Stellar Parameters For KIC 008330895

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7503^{+237}_{-316}	$4.270^{+0.072}_{-0.217}$	$-0.180^{+0.200}_{-0.350}$	$1.458^{+0.541}_{-0.217}$	$1.440^{+0.219}_{-0.197}$	$0.654^{+0.270}_{-0.383}$
	+3%/-4%	+2%/-5%	+111%/-194%	+37%/-15%	+15%/-14%	+41%/-59%
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 008330895-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-72 ± 3	$0.81^{+0.78}_{-0.55}$	4359^{+357}_{-258}	10833^{+24720}_{-3929}	17^{+148}_{-13}
Alt.	-154 ± 4	$2.26^{+0.96}_{-0.94}$	4354^{+338}_{-256}	6975^{+2947}_{-1215}	$4.809^{+8.683}_{-2.463}$

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

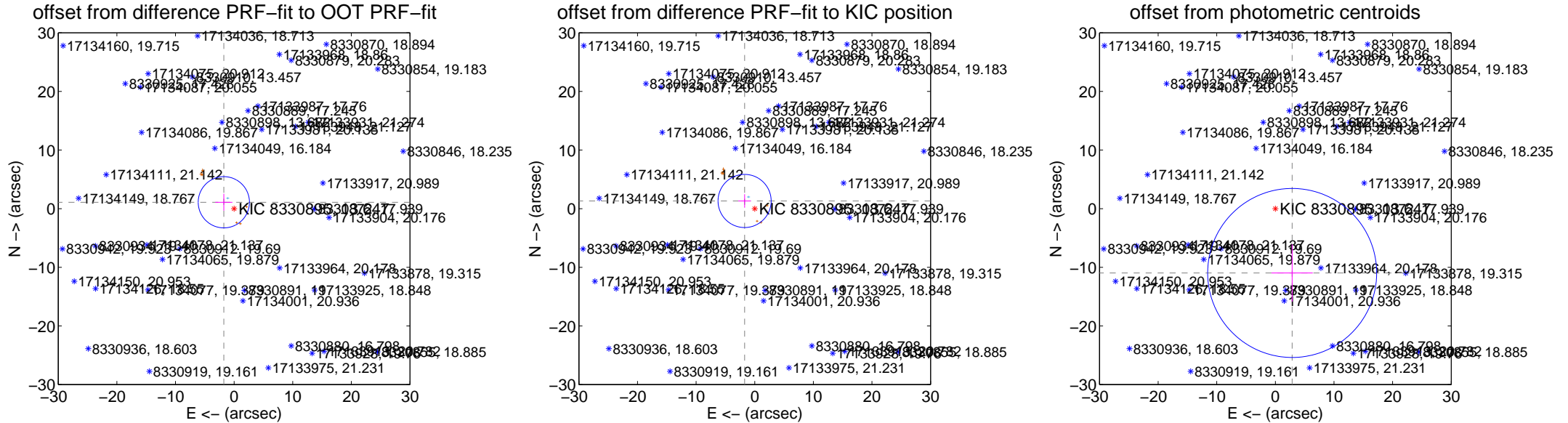
DV Centroid Data

Supplemental centroid analysis for 008330895-01. Kepler magnitude: 13.65. Transit SNR 1.82

There are 1 quarters with good PRF difference image offsets

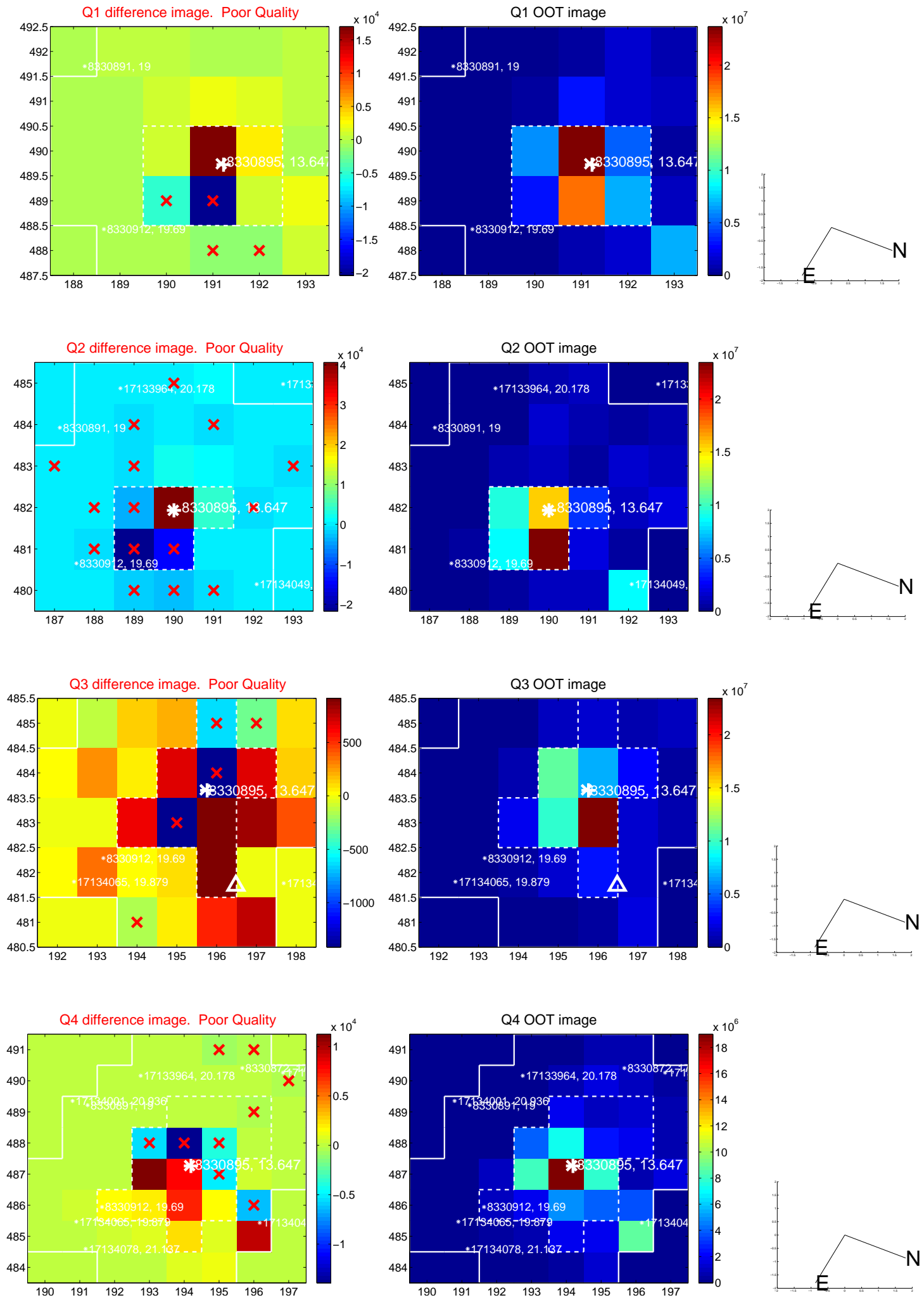
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.064 ± 1.457	1.42	1.752 ± 1.465	1.092 ± 1.435
PRF-fit source offset from KIC position	2.172 ± 1.511	1.44	1.730 ± 1.073	1.313 ± 1.144
photometric centroid source offset	11.33 ± 4.80	2.36	-2.87 ± 3.52	-10.97 ± 4.88

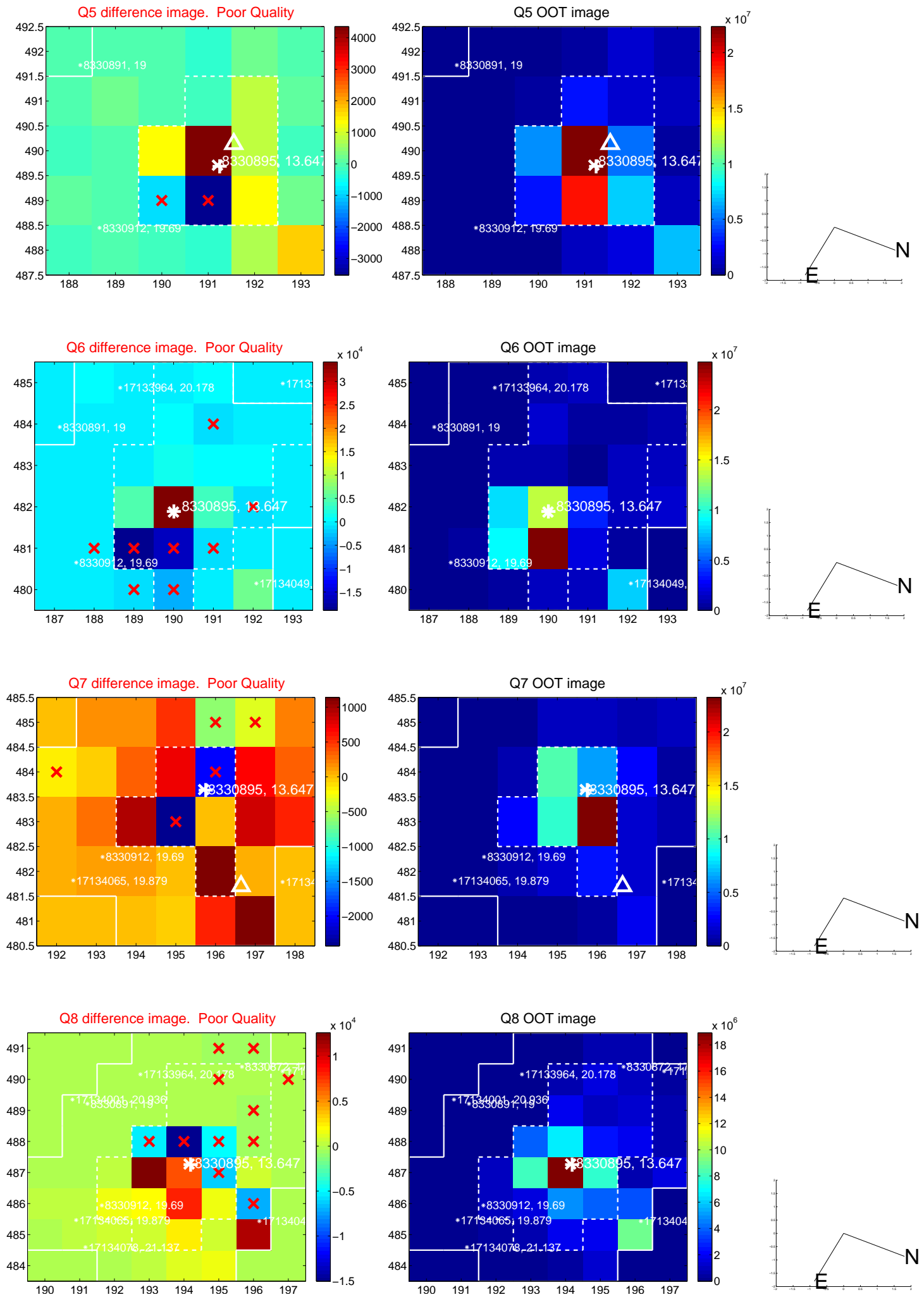


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

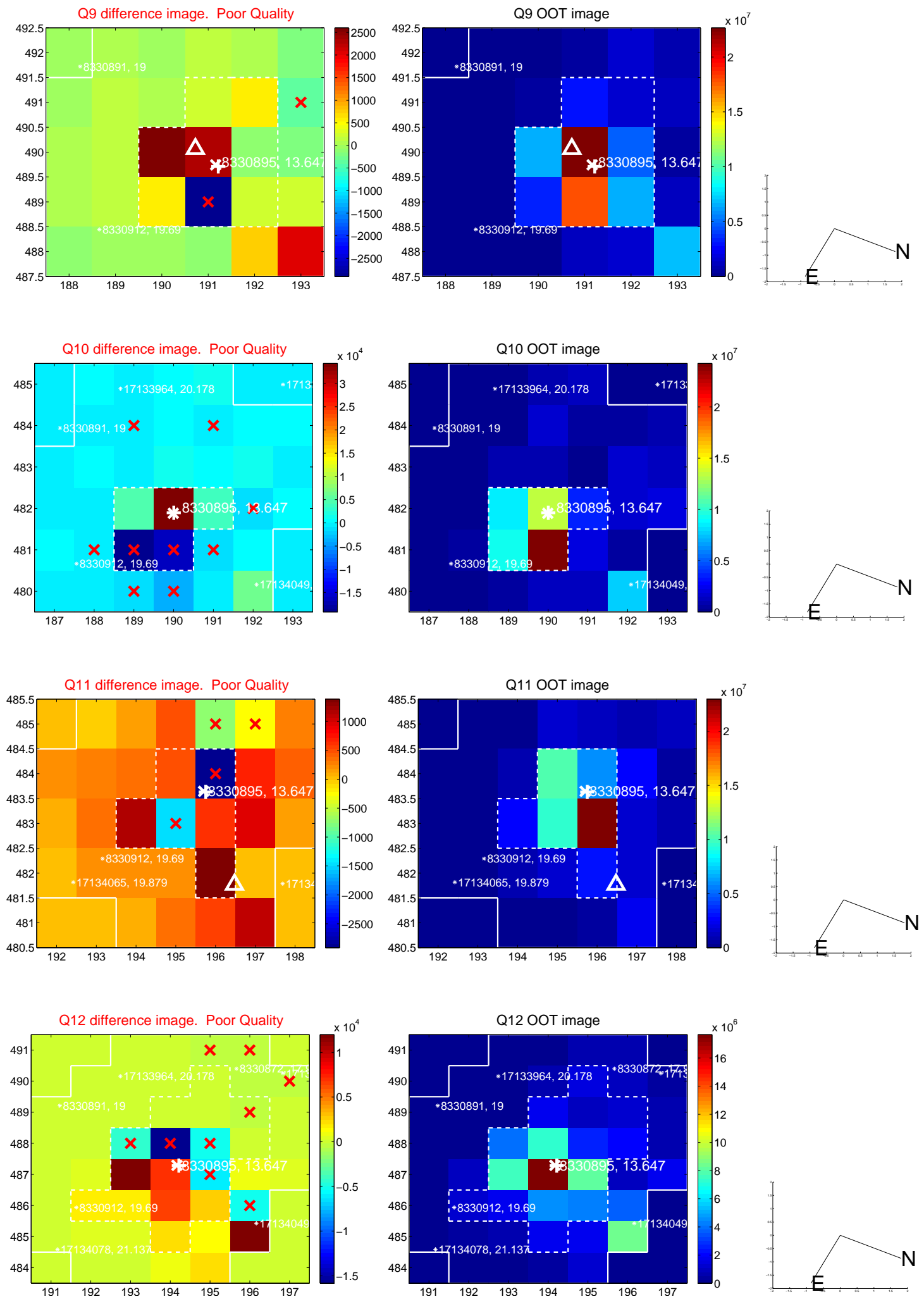
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



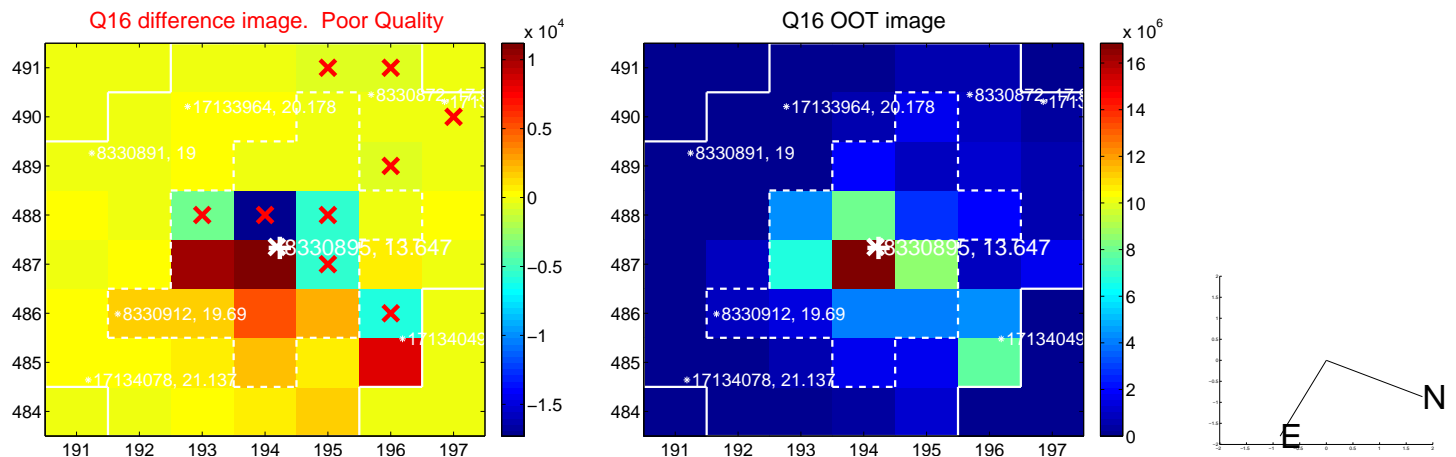
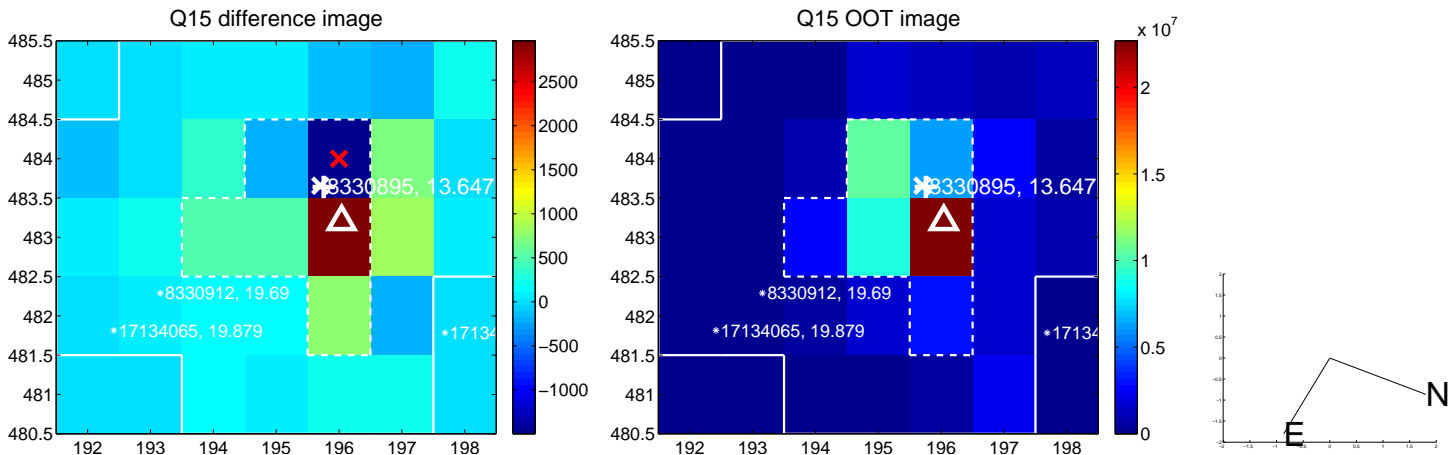
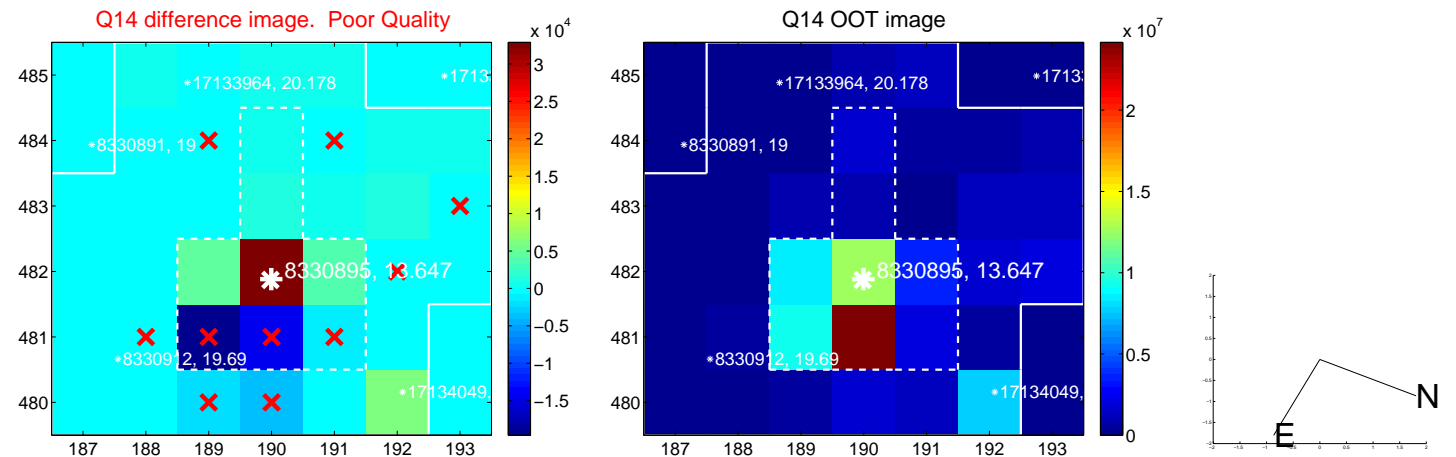
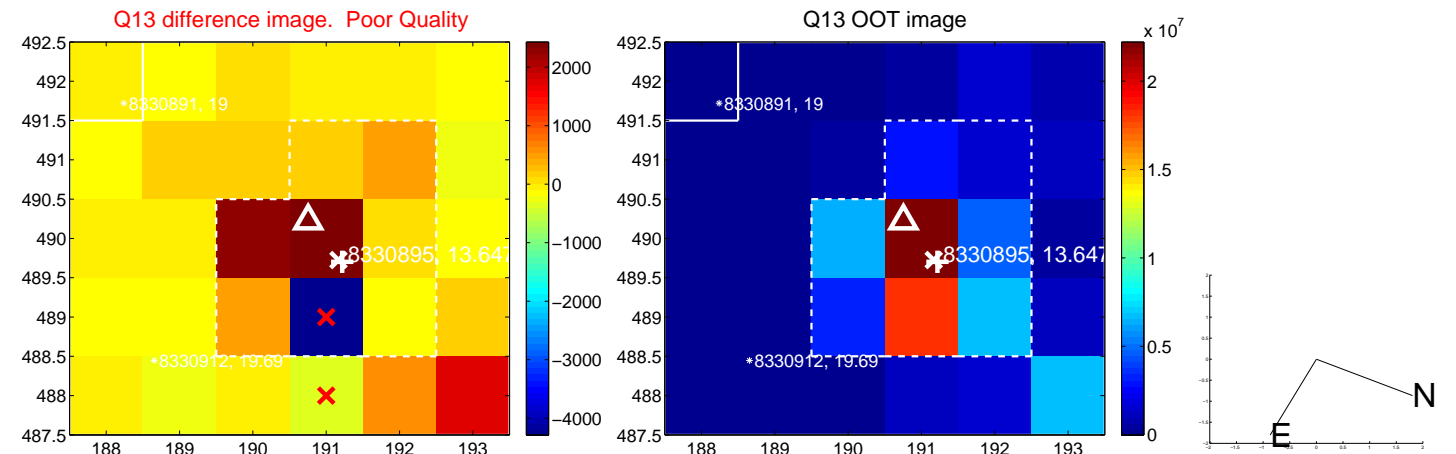
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



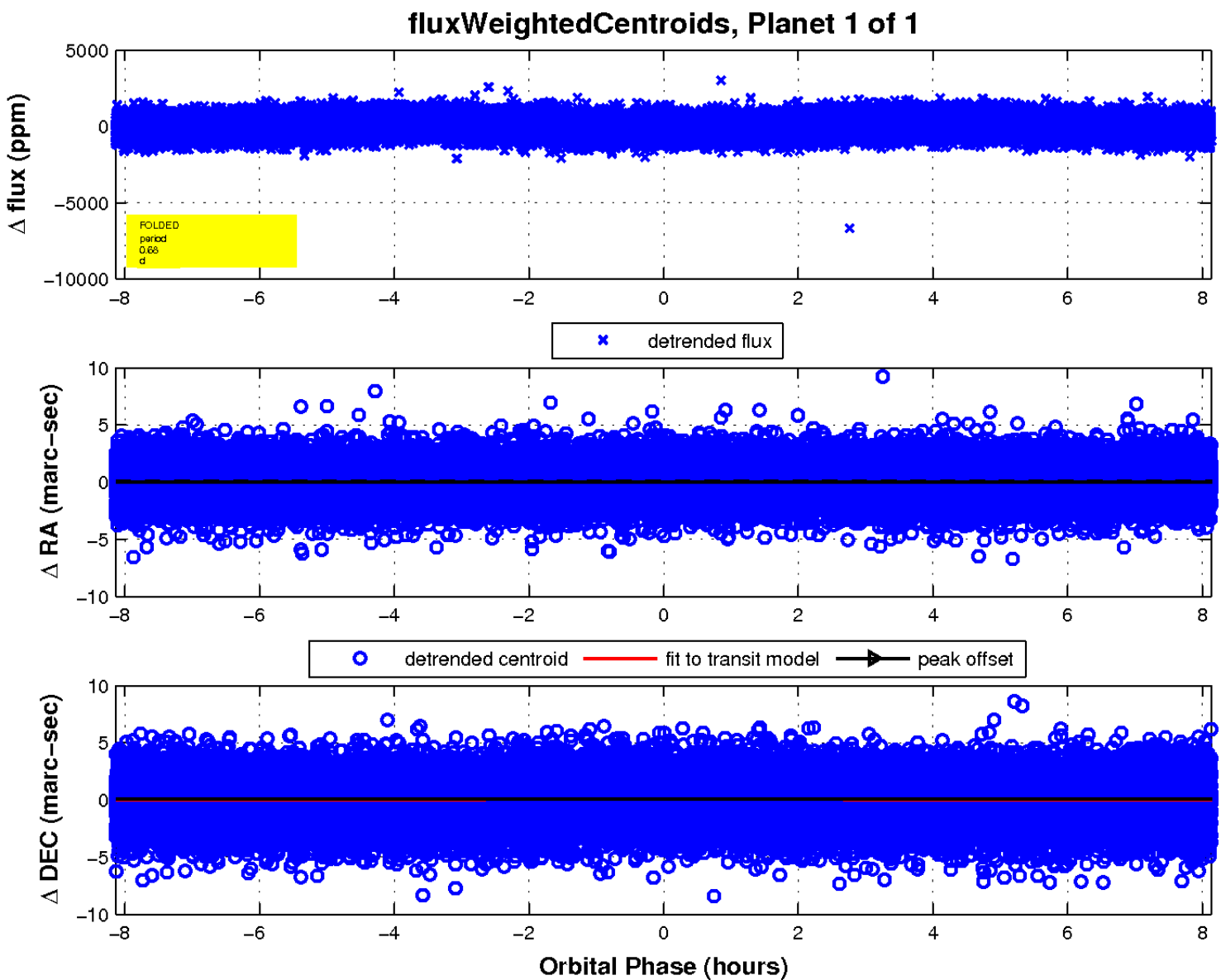
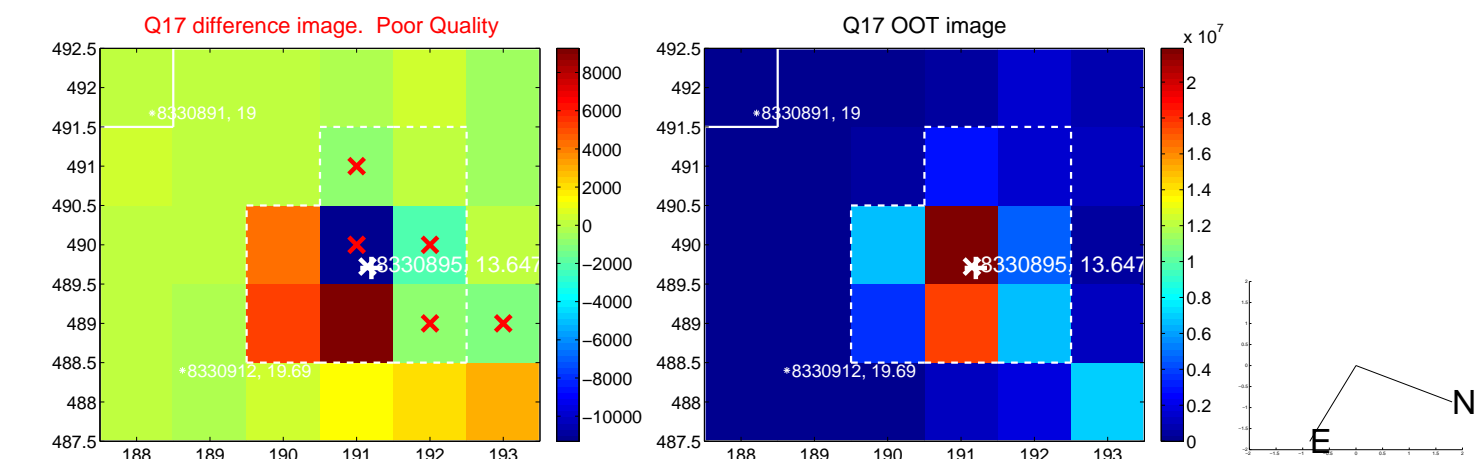
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UKIRT Image

Declination

