

KIC 008389948

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R _★ (R _☉)	T _★ (K)	R _p (R _⊕)	S _p (S _⊕)
008389948-01	OBS	No	1.005967	132.301771	1.3	11.177	13.7	5.3	4.41	8939	0.55	148739.97

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008389948-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

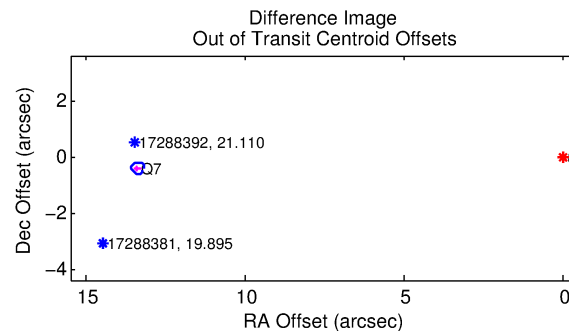
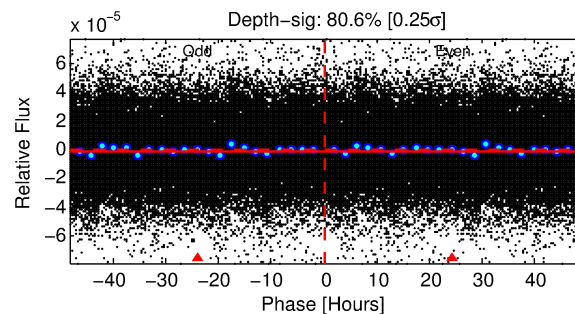
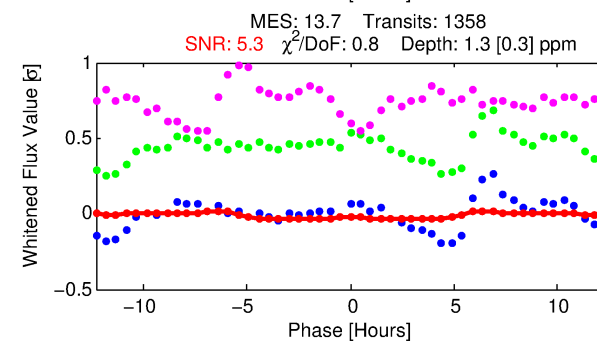
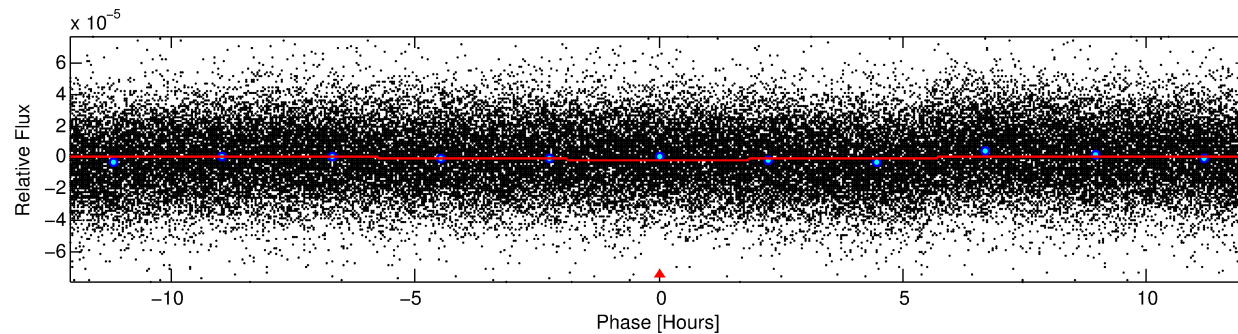
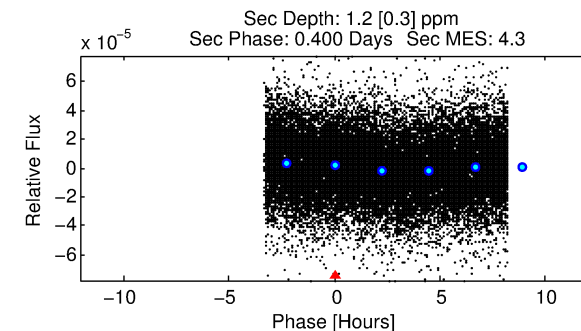
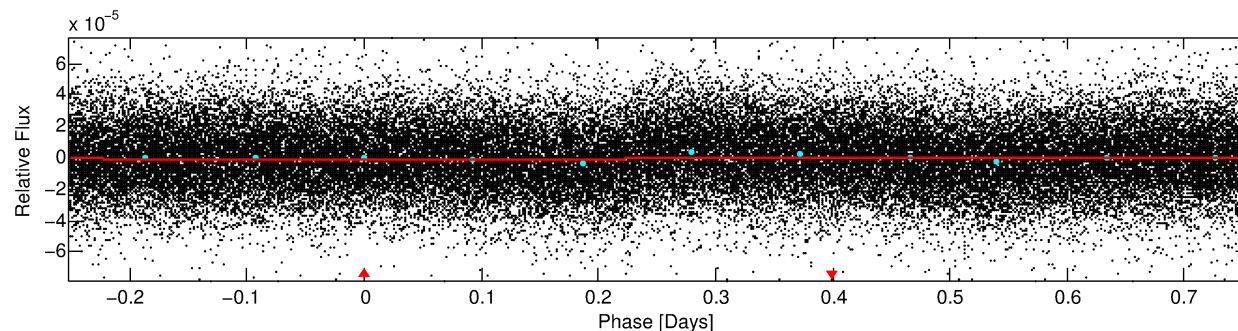
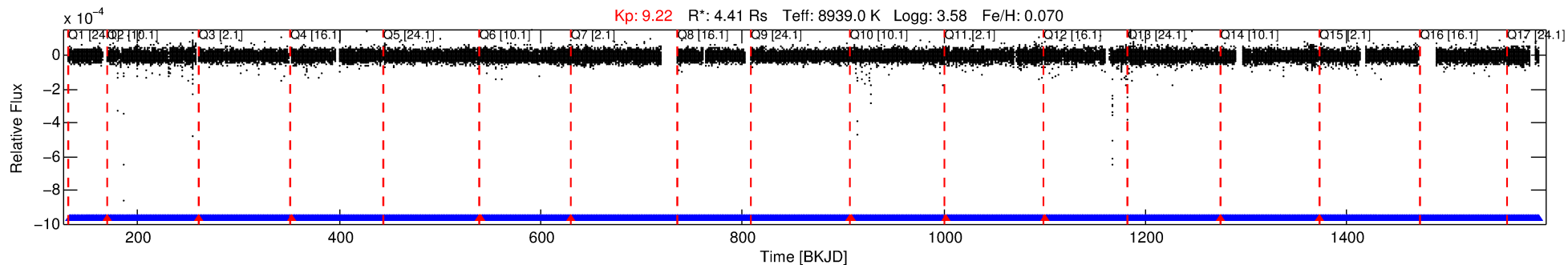
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008389948-01

No Significant Match Found

DV One-Page Summary

KIC: 8389948 Candidate: 1 of 1 Period: 1.006 d



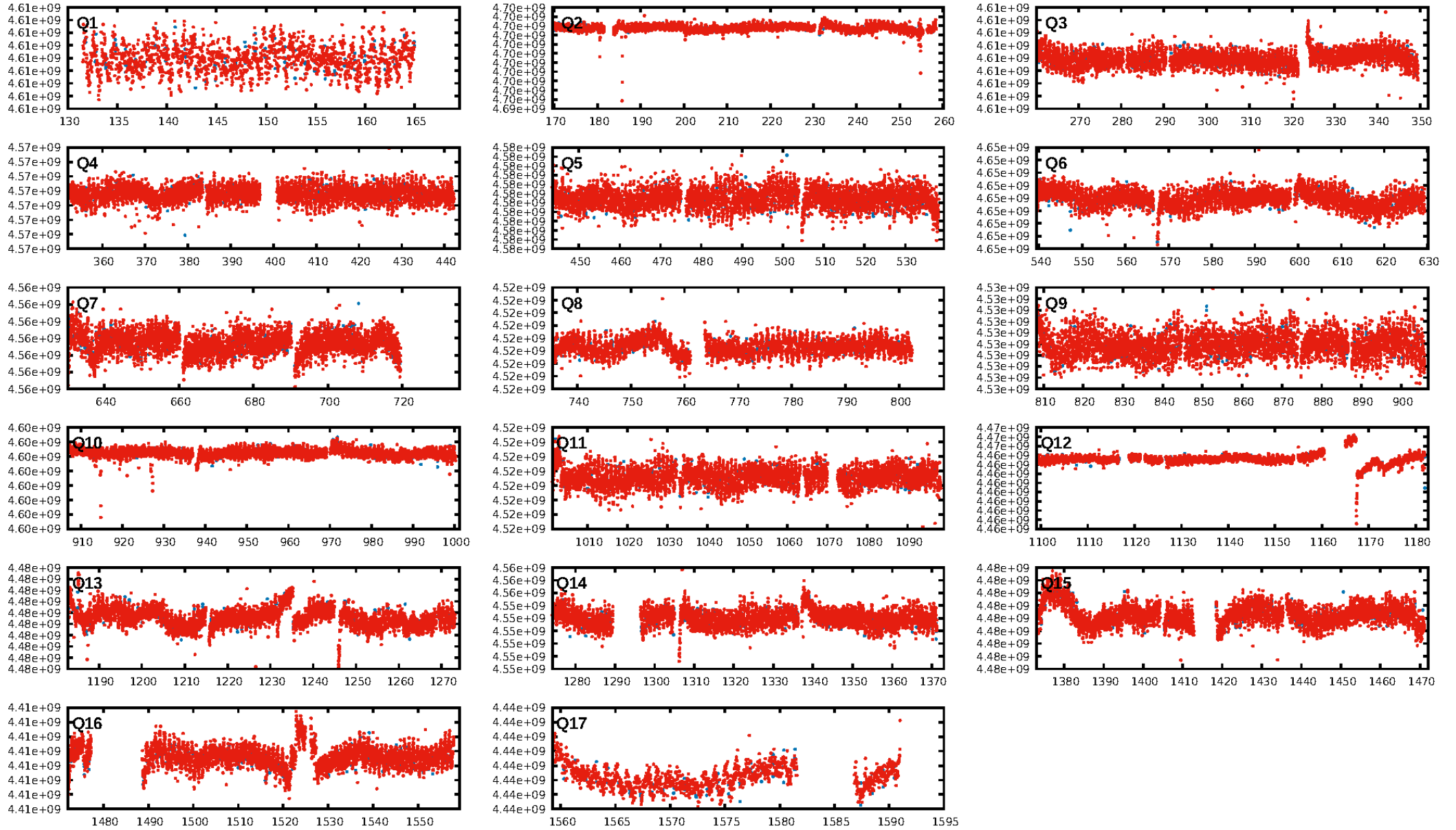
DV Fit Results:

Period = 1.00597 [0.00003] d
Epoch = 132.3018 [0.0099] BKJD
Rp/R* = 0.0011 [0.0007]
a/R* = 1.00 [0.03]
b = 0.80 [1.97]
Seff = 148739.97 [146636.81]
Teq = 5008 [1234] K
Rp = 0.55 [0.46] Re
a = 0.0274 [0.0161] AU
Ag = 1.66 [2.60] [0.25σ]
Teffp = 8792 [2742] K [1.26σ]

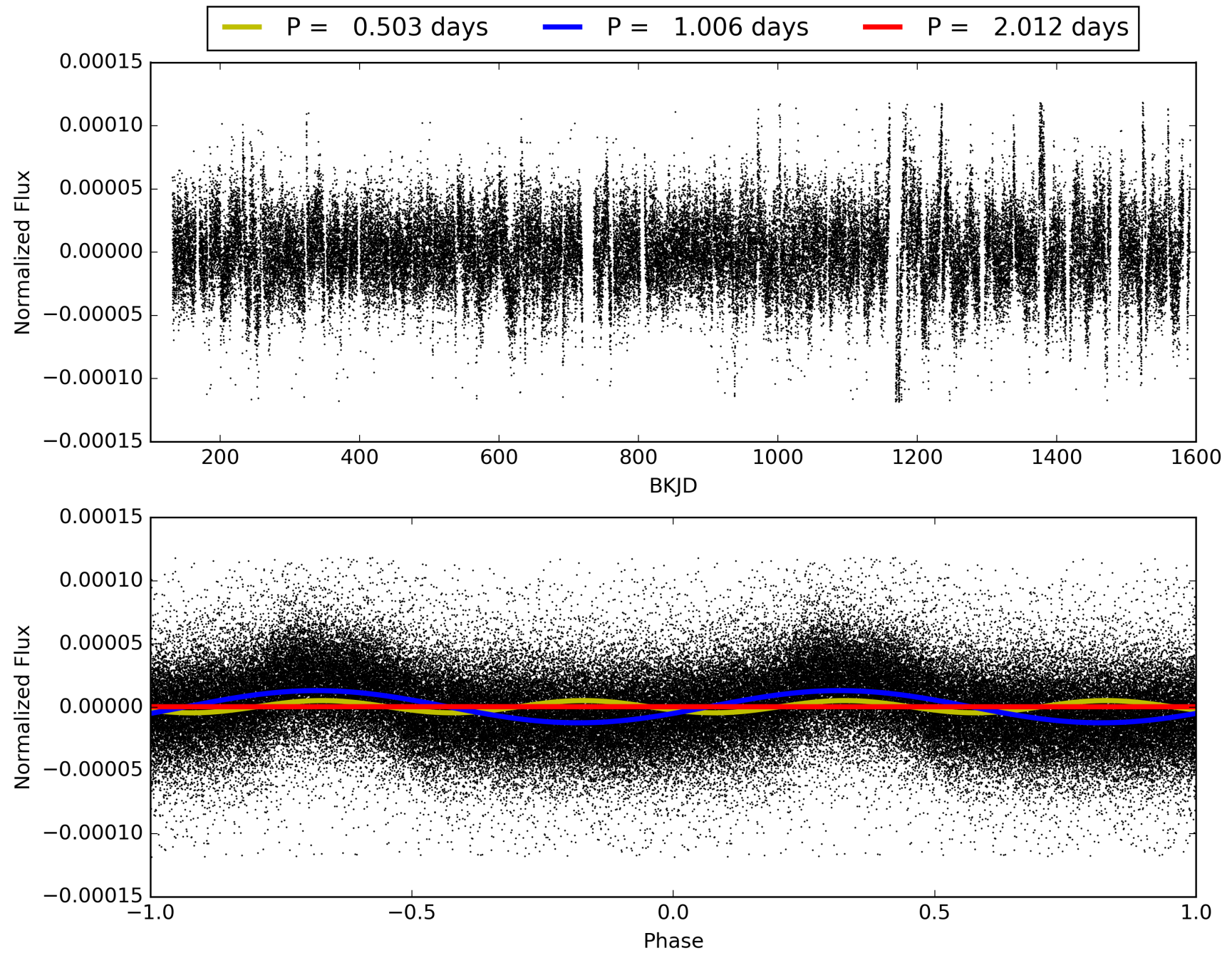
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1281/1297]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 13.390 arcsec [198.82σ]
KicOffset-rm: 11.297 arcsec [167.75σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008389948-01, PDC Light Curves

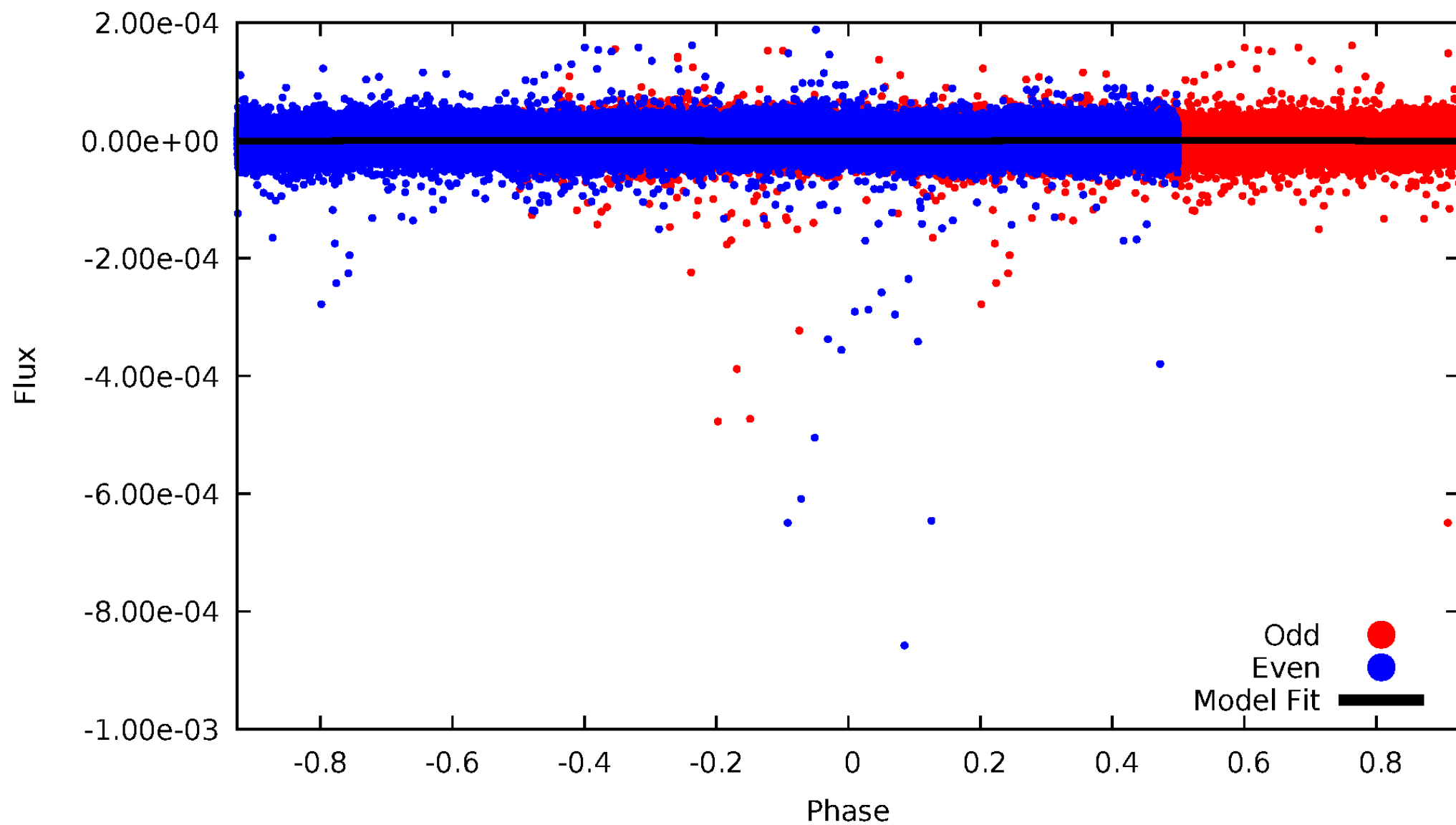


TCE 008389948-01



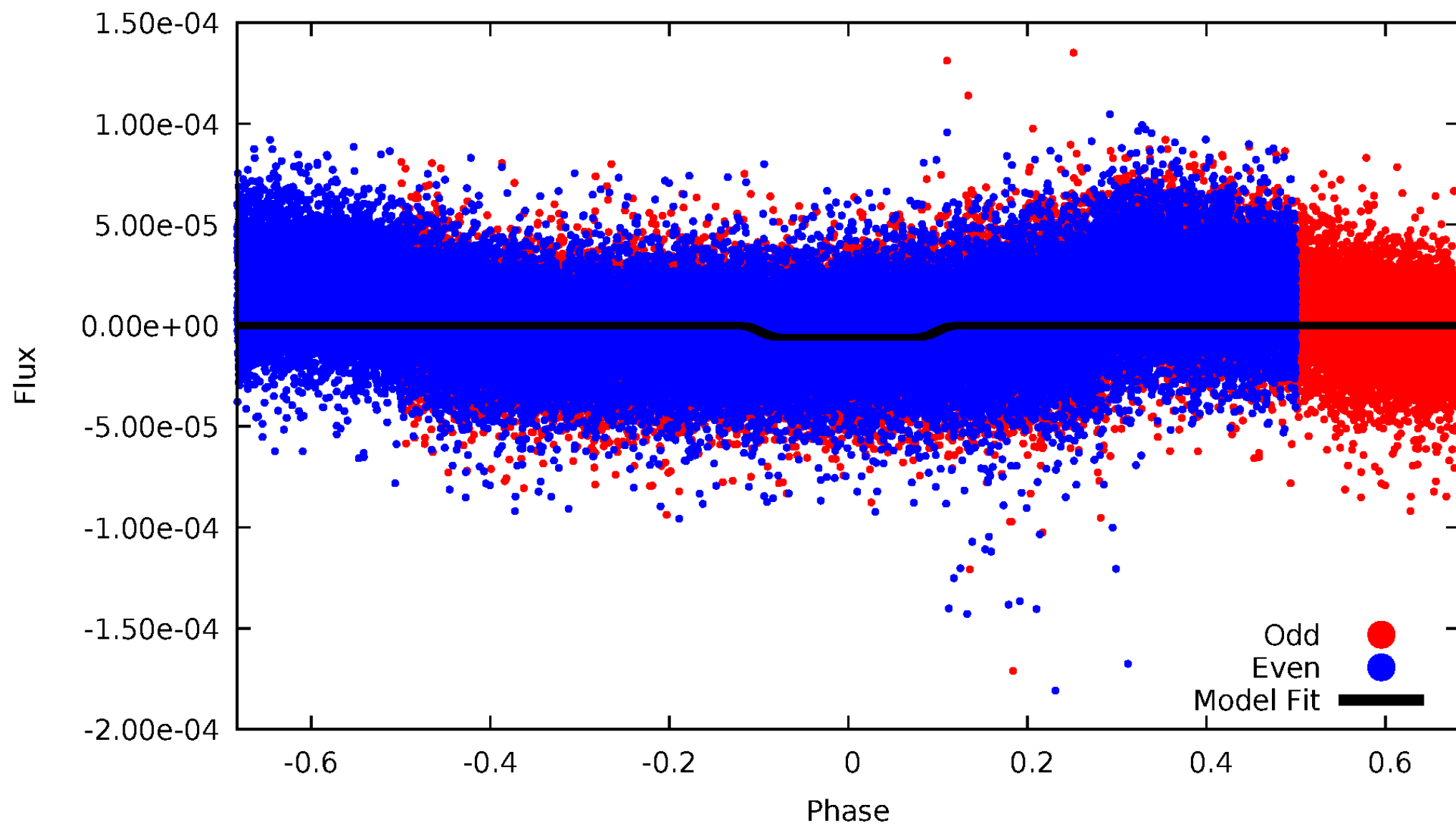
DV Odd/Even

TCE 008389948-01

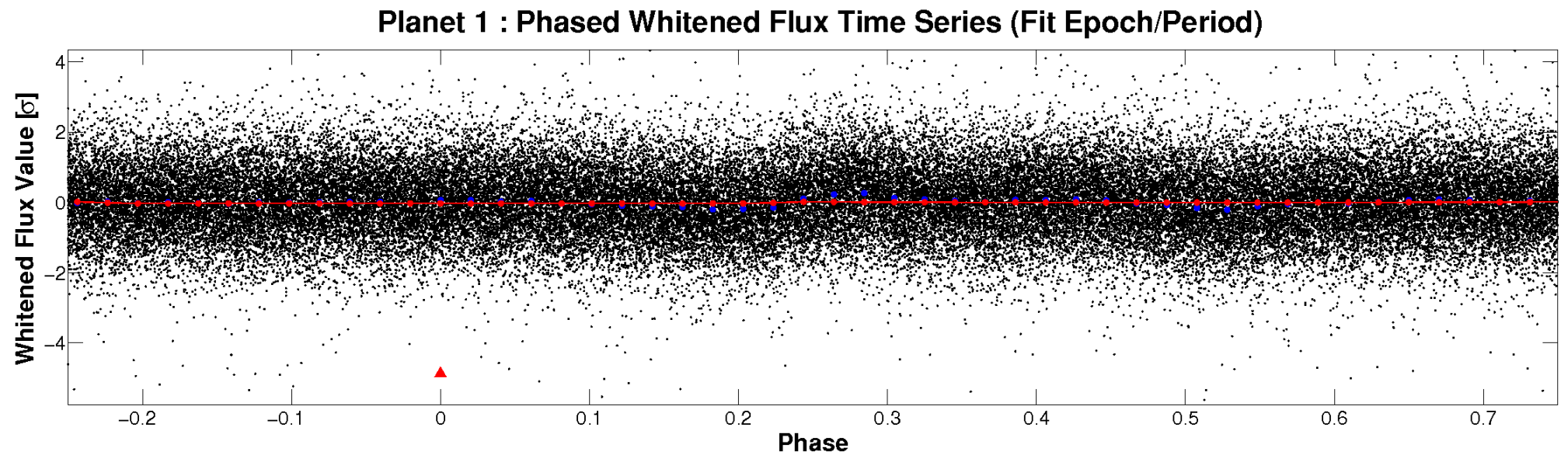
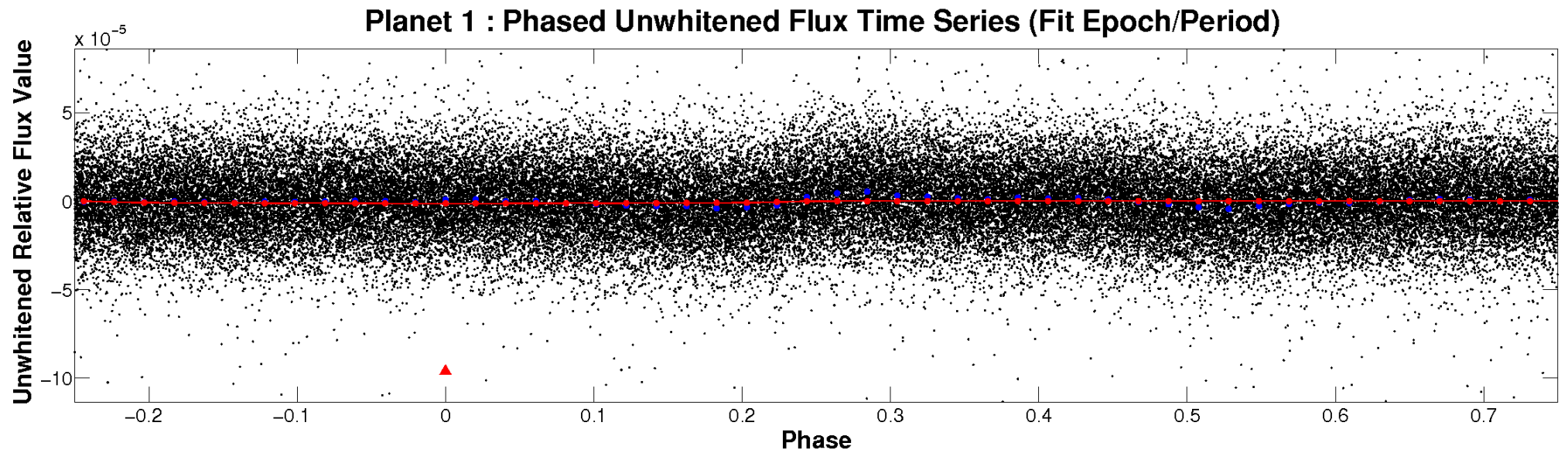


ALT Odd/Even

TCE 008389948-01

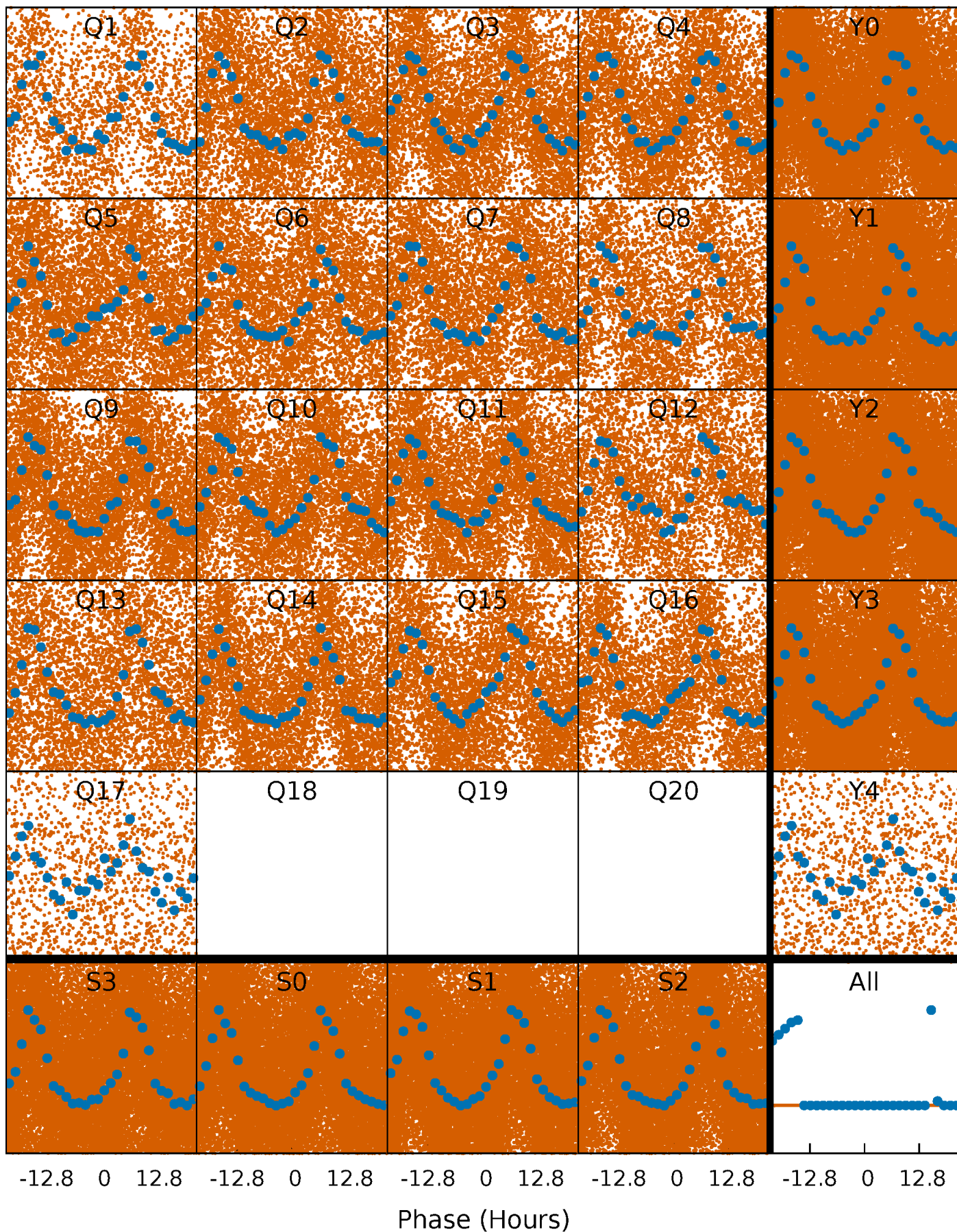


Non-Whitened Vs. Whitened Light Curve



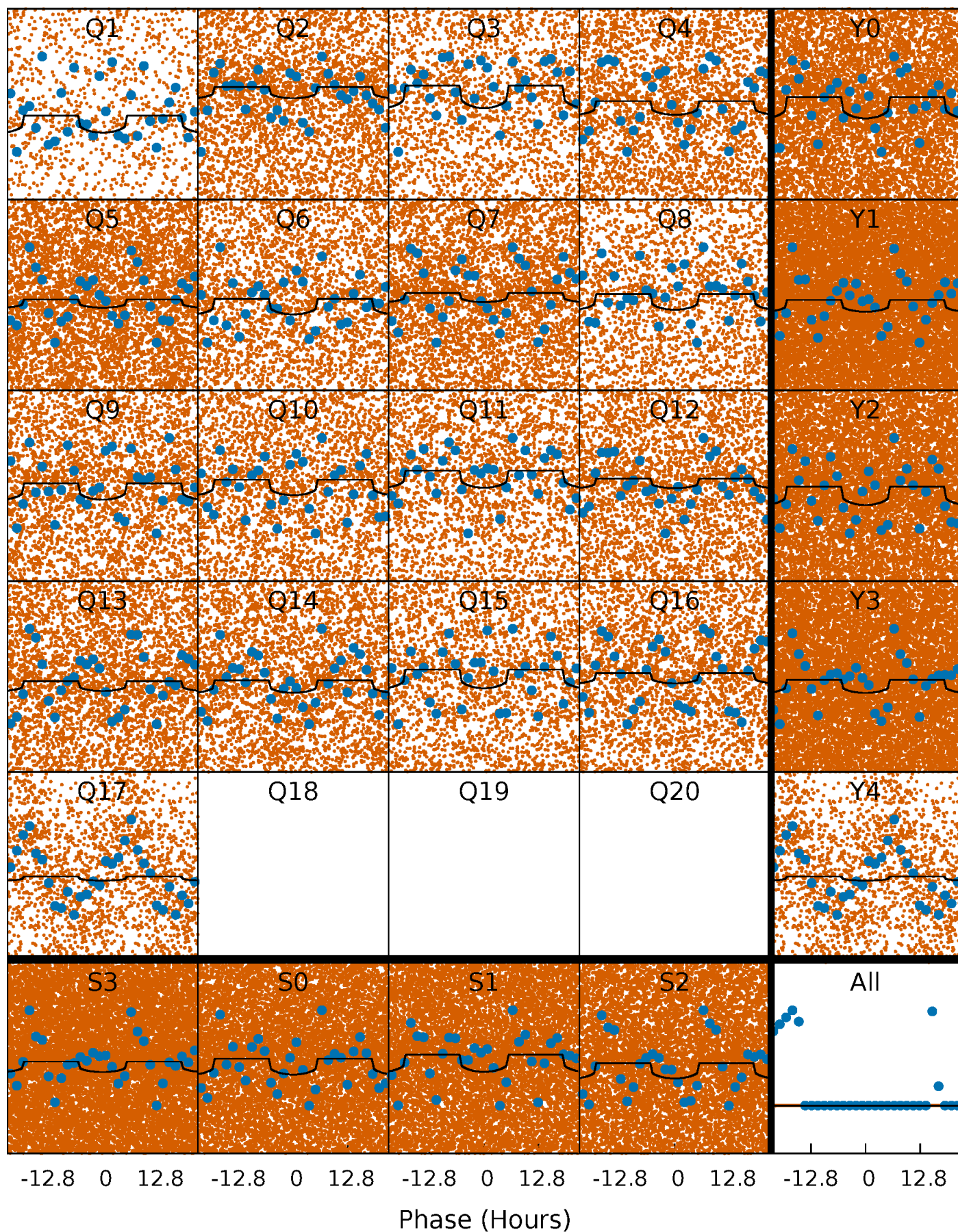
PDC Quarter-Phased Transit Curves

TCE 008389948-01 P= 1.005967 Days $T_0=132.301771$ (BKJD)



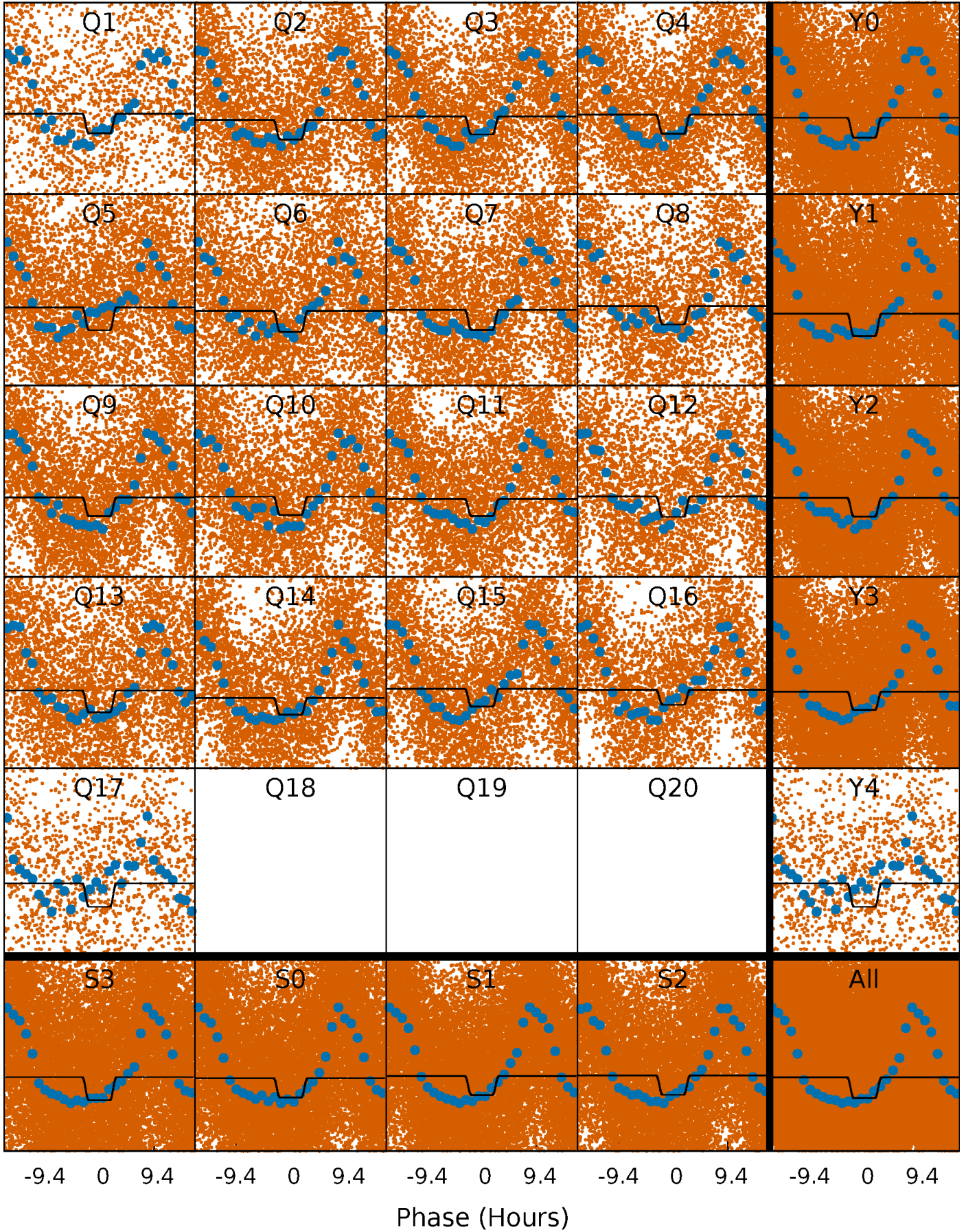
DV Quarter-Phased Transit Curves

TCE 008389948-01 P= 1.005967 Days $T_0=132.301771$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

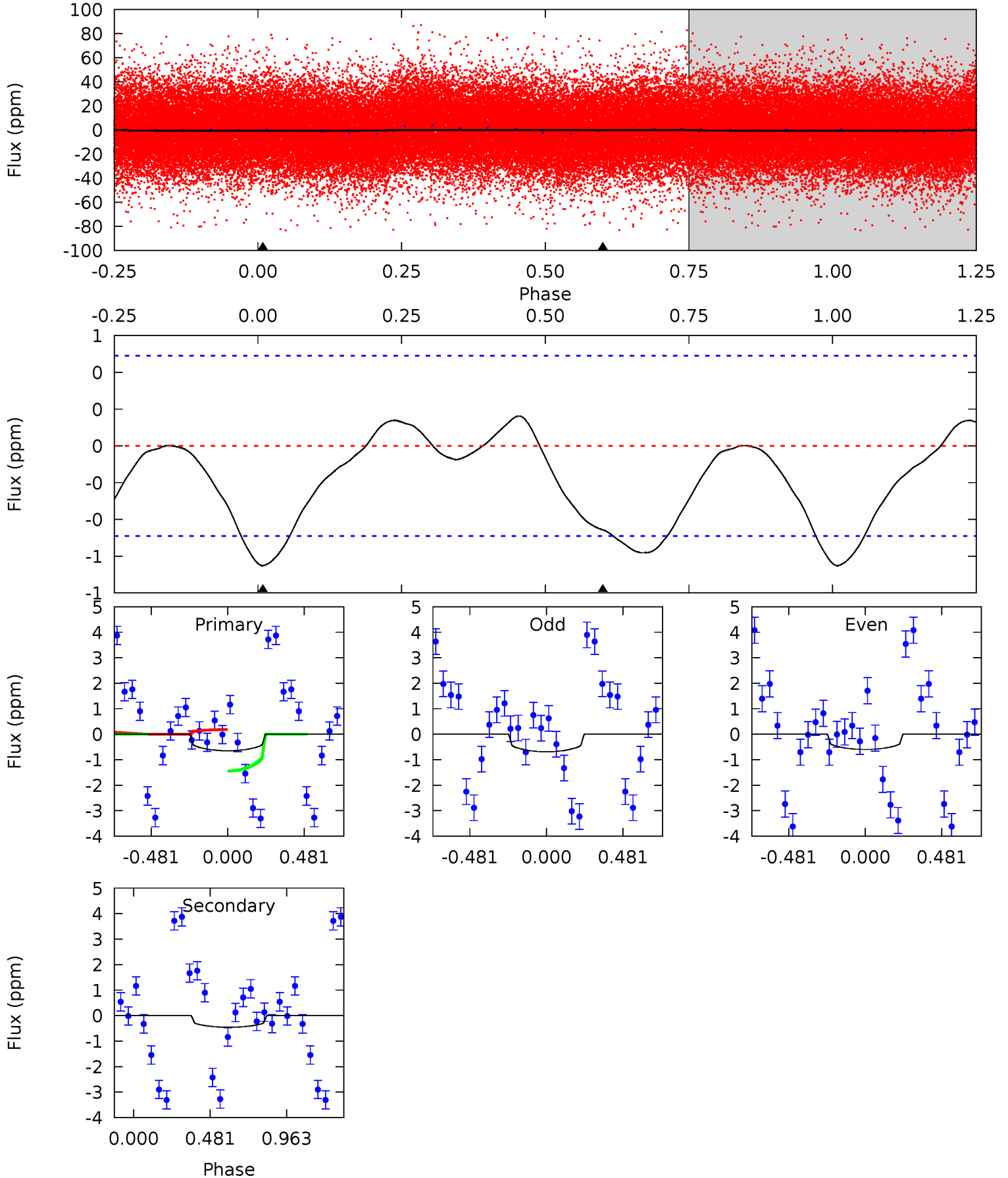
TCE 008389948-01 P= 1.005955 Days $T_0=132.254603$ (BKJD)



DV Model-Shift Uniqueness Test

008389948-01, P = 1.005967 Days, E = 131.295804 Days

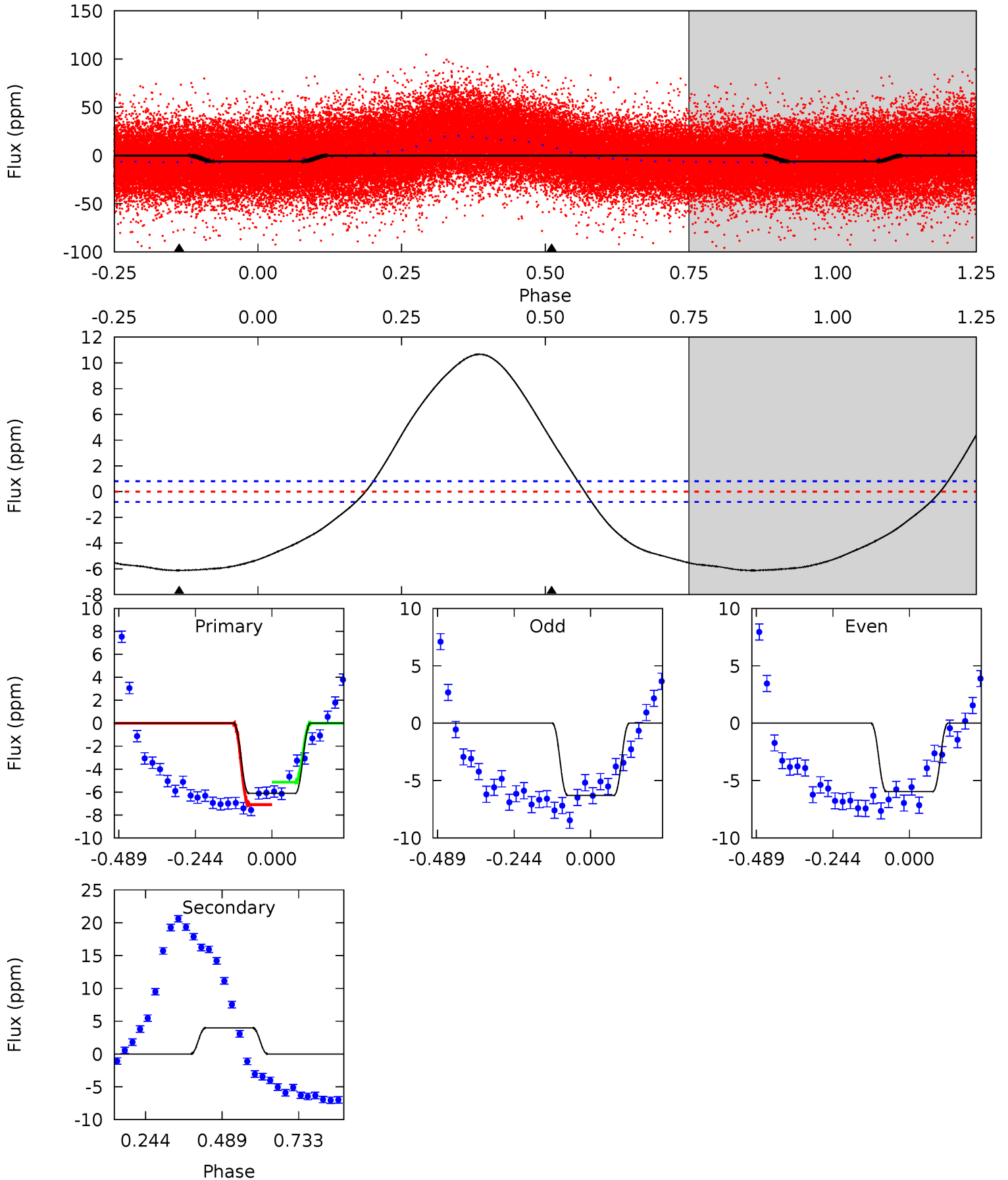
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.61	3.93	0	0	4.22	0.70	0.62	5.61	5.61	3.93	3.93	0.39	1.08	0.20	5.46



Alt Model-Shift Uniqueness Test

008389948-01, P = 1.005955 Days, E = 131.248648 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.1	-21.7	0	0	4.37	1.16	13.7	33.1	33.1	-21.7	-21.7	0.88	1.06	0.64	5.59



Stellar Parameters For KIC 008389948

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8939^{+243}_{-452}	$3.580^{+0.576}_{-0.064}$	$0.070^{+0.250}_{-0.600}$	$4.413^{+0.639}_{-2.557}$	$2.699^{+0.269}_{-1.074}$	$0.044^{+0.345}_{-0.009}$
	+3%/-5%	+16%/-2%	+357%/-857%	+14%/-58%	+10%/-40%	+781%/-21%
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 008389948-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 ± 0	$0.48^{+0.32}_{-0.28}$	6648^{+520}_{-906}	5692^{+3986}_{-9206}	$0.804^{+3.239}_{-0.540}$
Alt.	4 ± 0	$0.97^{+0.43}_{-0.40}$	6577^{+551}_{-1024}	-8313^{+1039}_{-2032}	$-1.693^{+0.840}_{-2.684}$

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 $A_{obs} \gg 1.0$

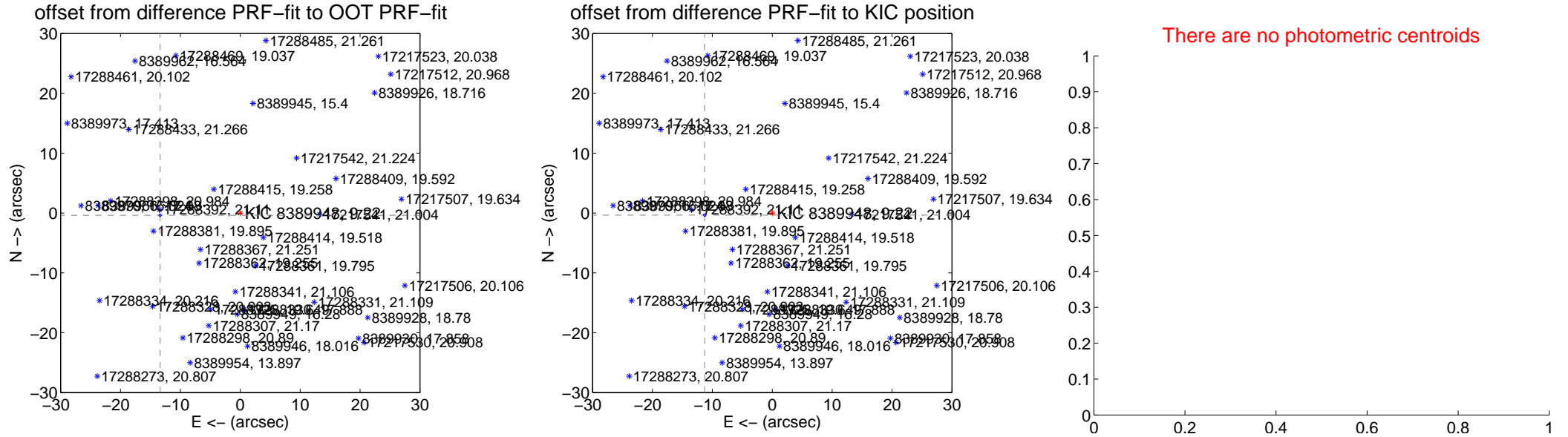
DV Centroid Data

Supplemental centroid analysis for 008389948-01. **Kepler magnitude: 9.22.** Transit SNR 5.29

There are 0 quarters with good PRF difference image offsets

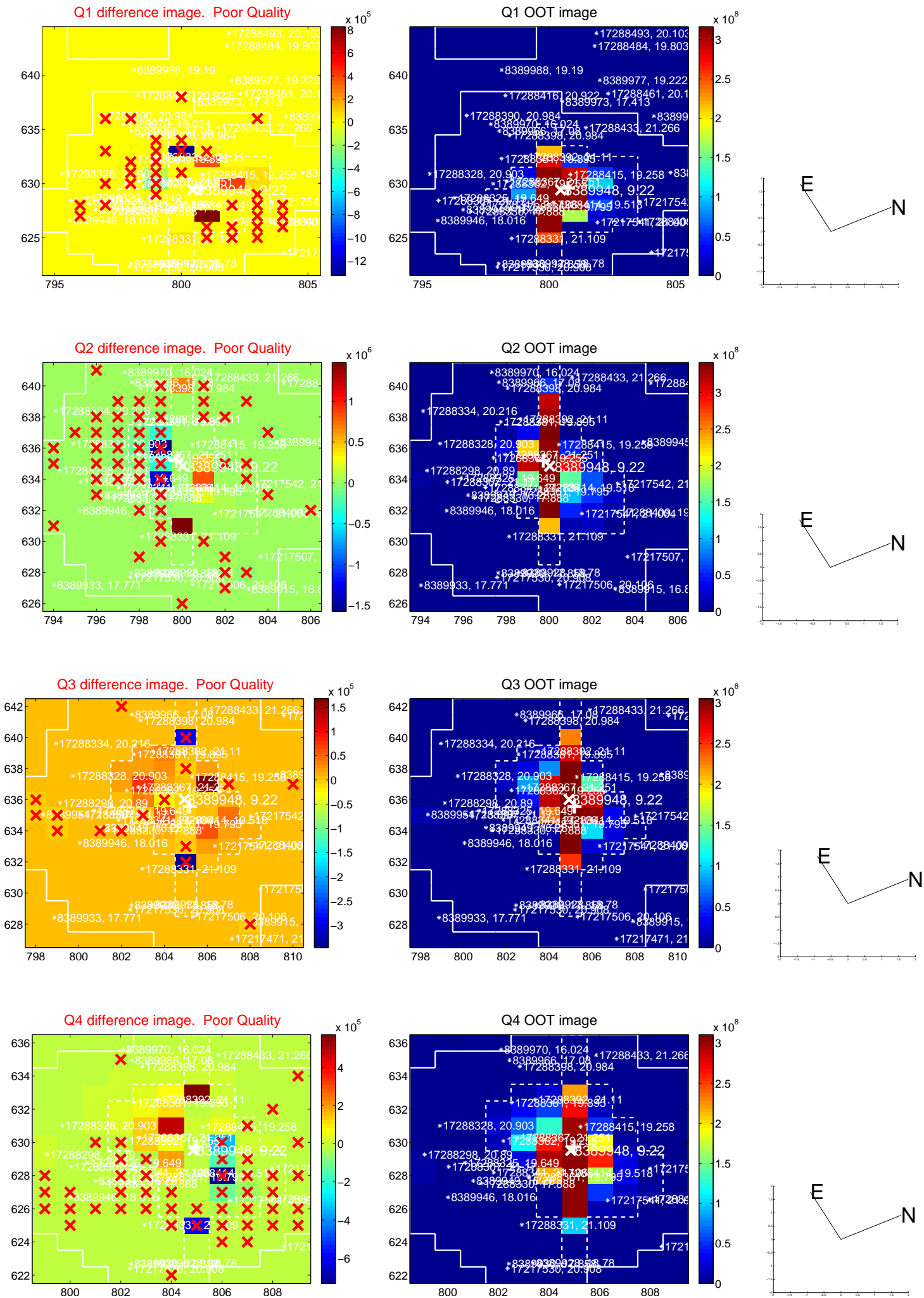
The OOT PRF centroid is offset from the target star catalog position by about 2.09 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	13.390 \pm 0.067	198.82	13.385 \pm 0.067	-0.375 \pm 0.068
PRF-fit source offset from KIC position	11.297 \pm 0.067	167.75	11.292 \pm 0.067	-0.344 \pm 0.068
photometric centroid source offset	—	—	—	—

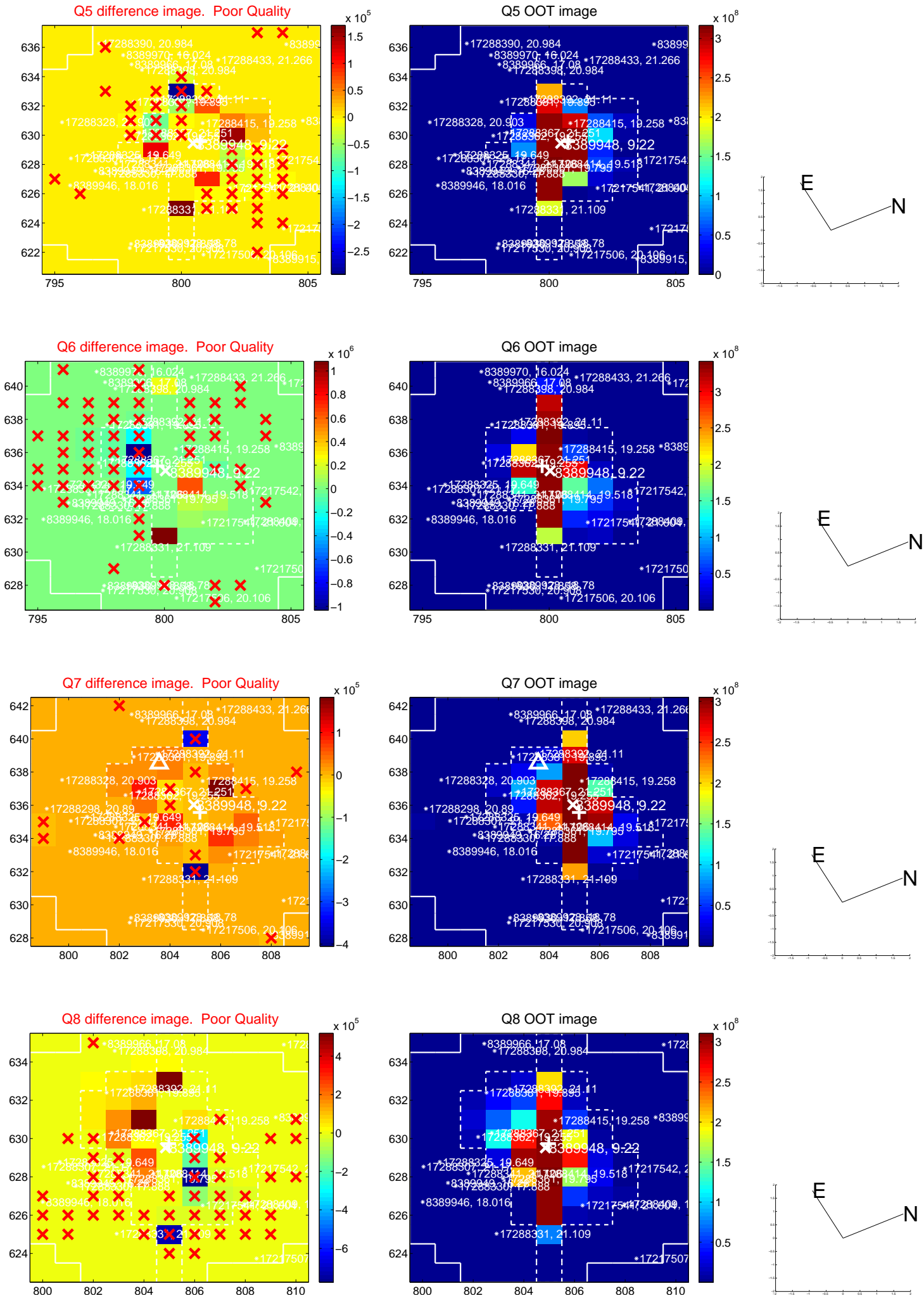


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

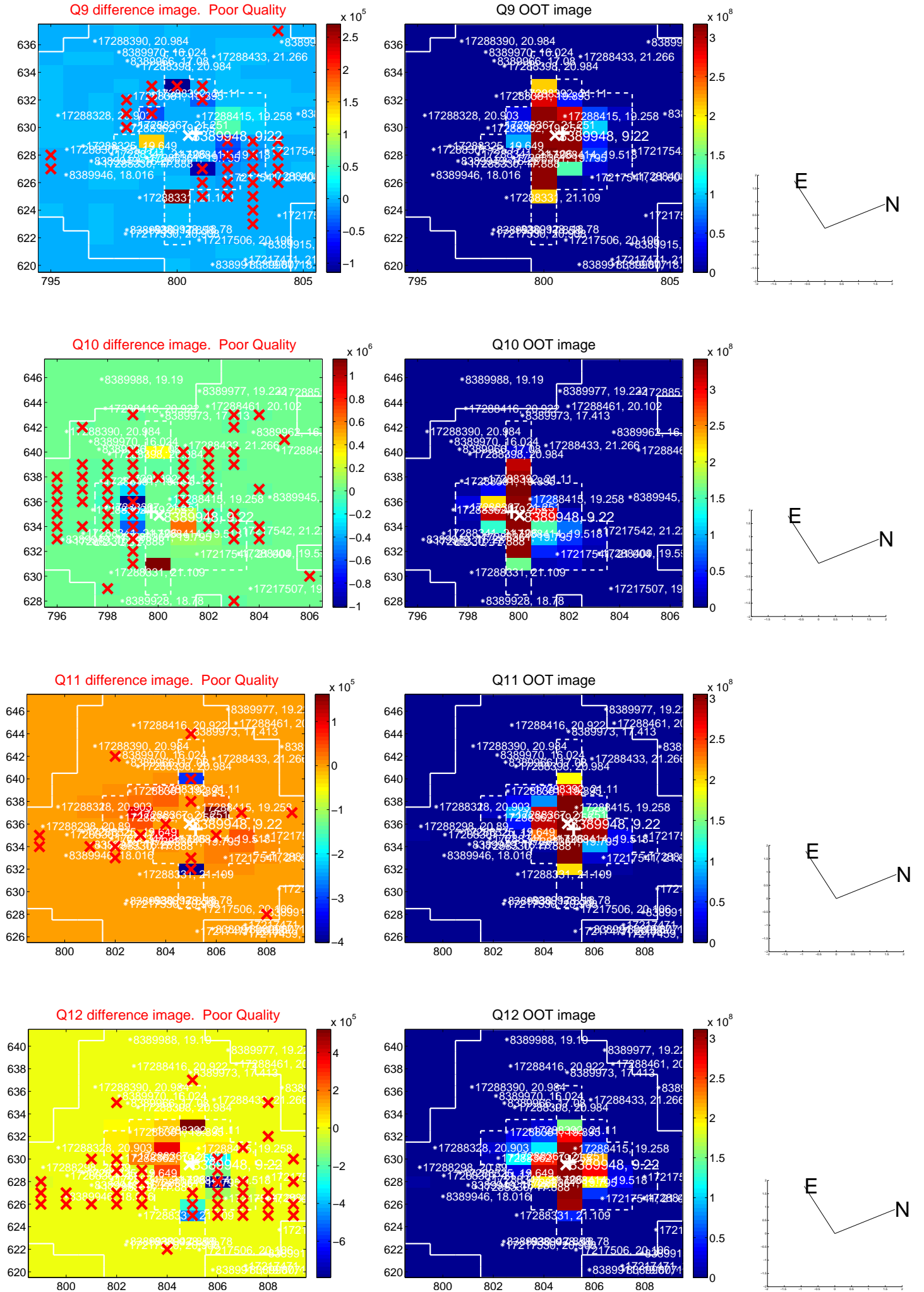
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



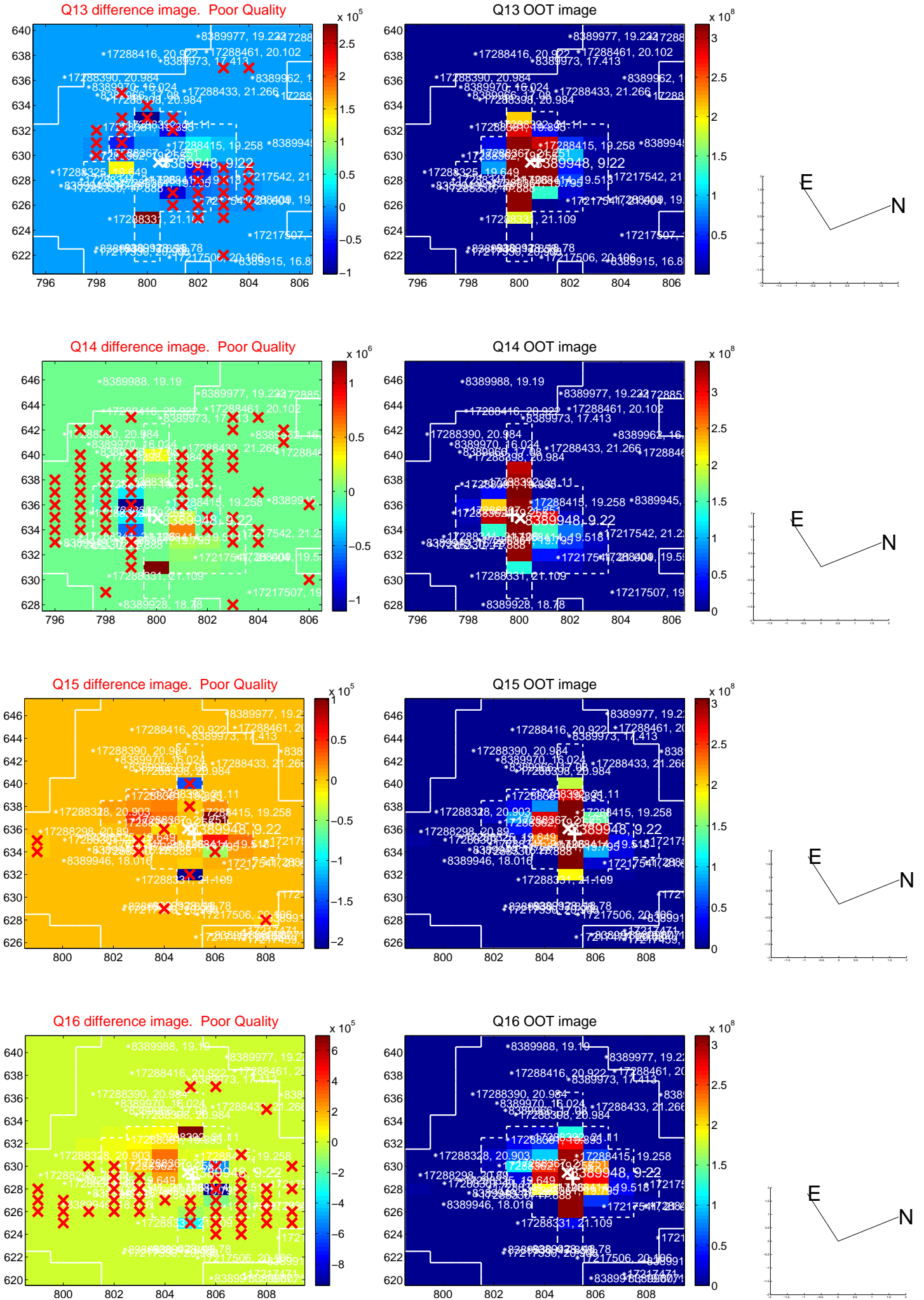
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



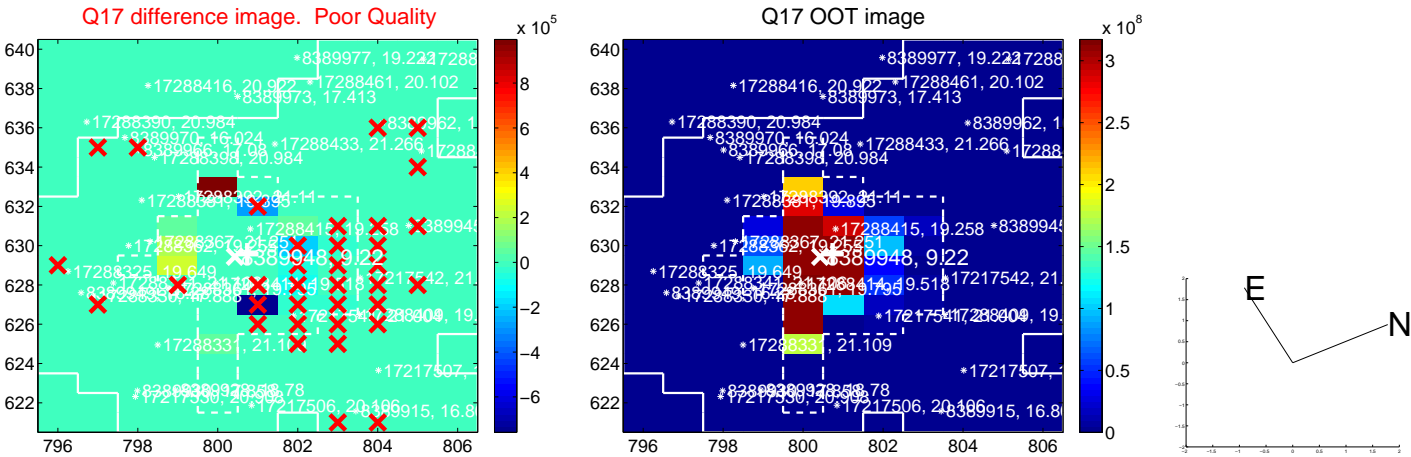
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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



folded centroid time series figure for this object.

UKIRT Image

Declination

