

KIC 002584908

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})
002584908-01	OBS	No	0.604494	131.857190	4.9	7.254	8.3	6.2	2.36	8143	0.54	74285.99

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002584908-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED

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

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

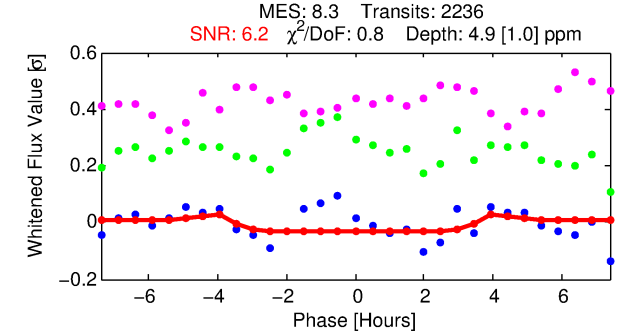
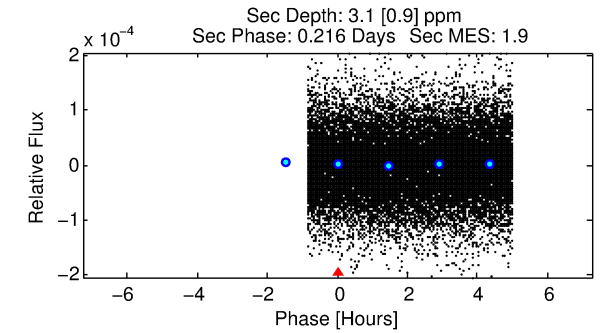
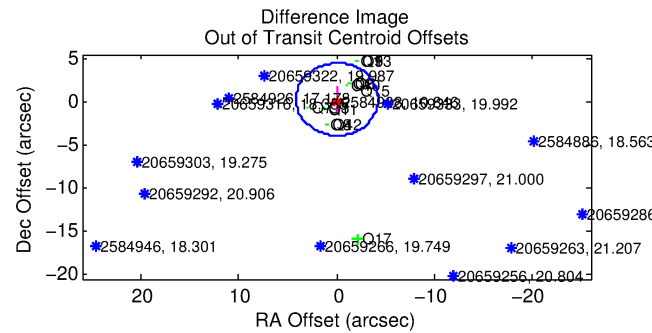
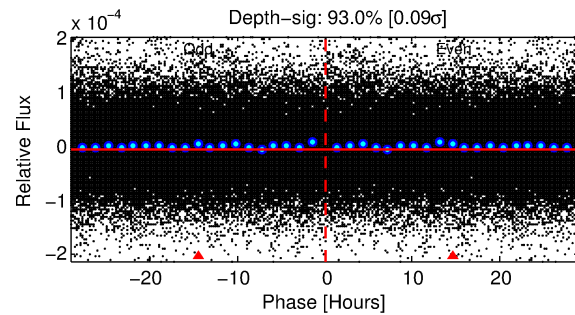
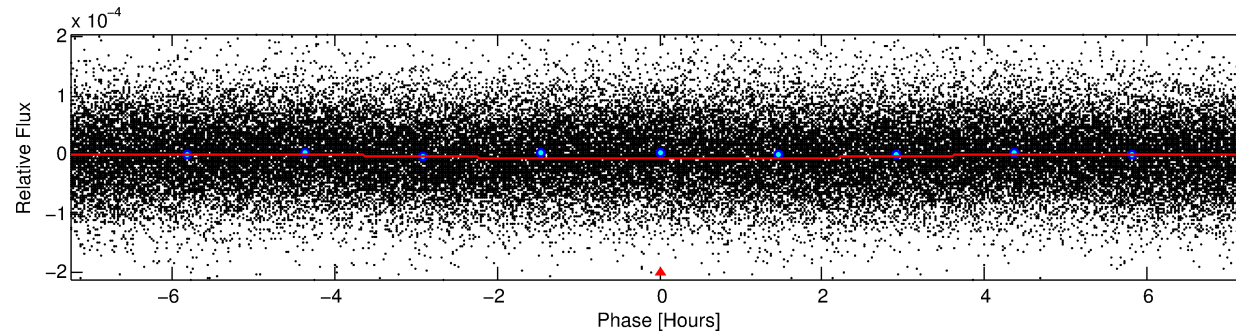
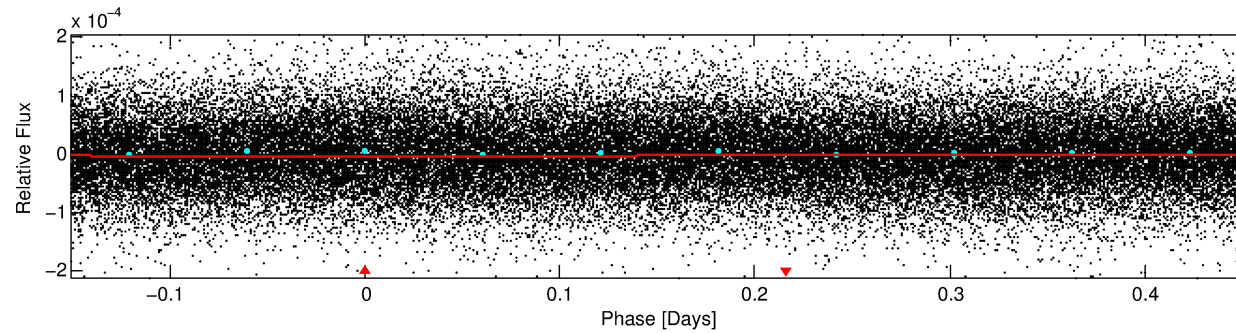
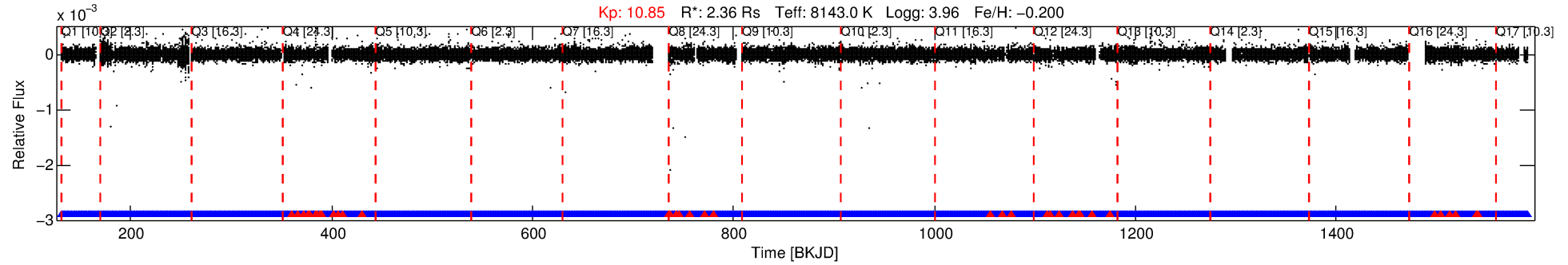
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002584908-01

No Significant Match Found

DV One-Page Summary

KIC: 2584908 Candidate: 1 of 1 Period: 0.604 d



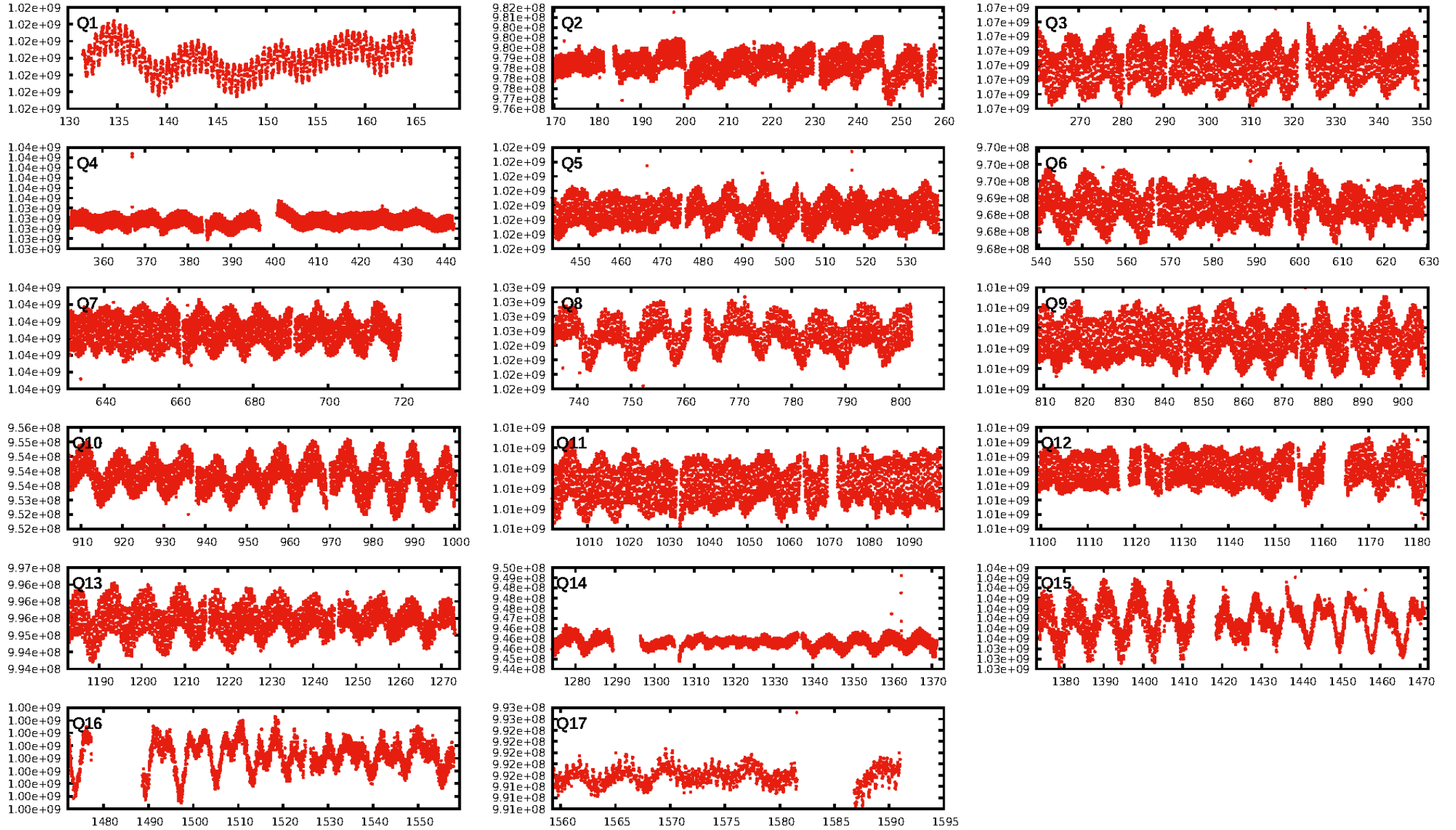
DV Fit Results:

Period = 0.60449 [0.00002] d
Epoch = 131.8572 [0.0058] BKJD
Rp/R* = 0.0021 [0.0008]
a/R* = 1.00 [0.00]
b = 0.49 [3.59]
Seff = 74285.99 [18742.69]
Teff = 8143.0 [266] K
Rp = 0.54 [0.24] Re
a = 0.0172 [0.0029] AU
Ag = 1.70 [1.51] [0.47 σ]
Teffp = 7437 [1584] K [2.01 σ]

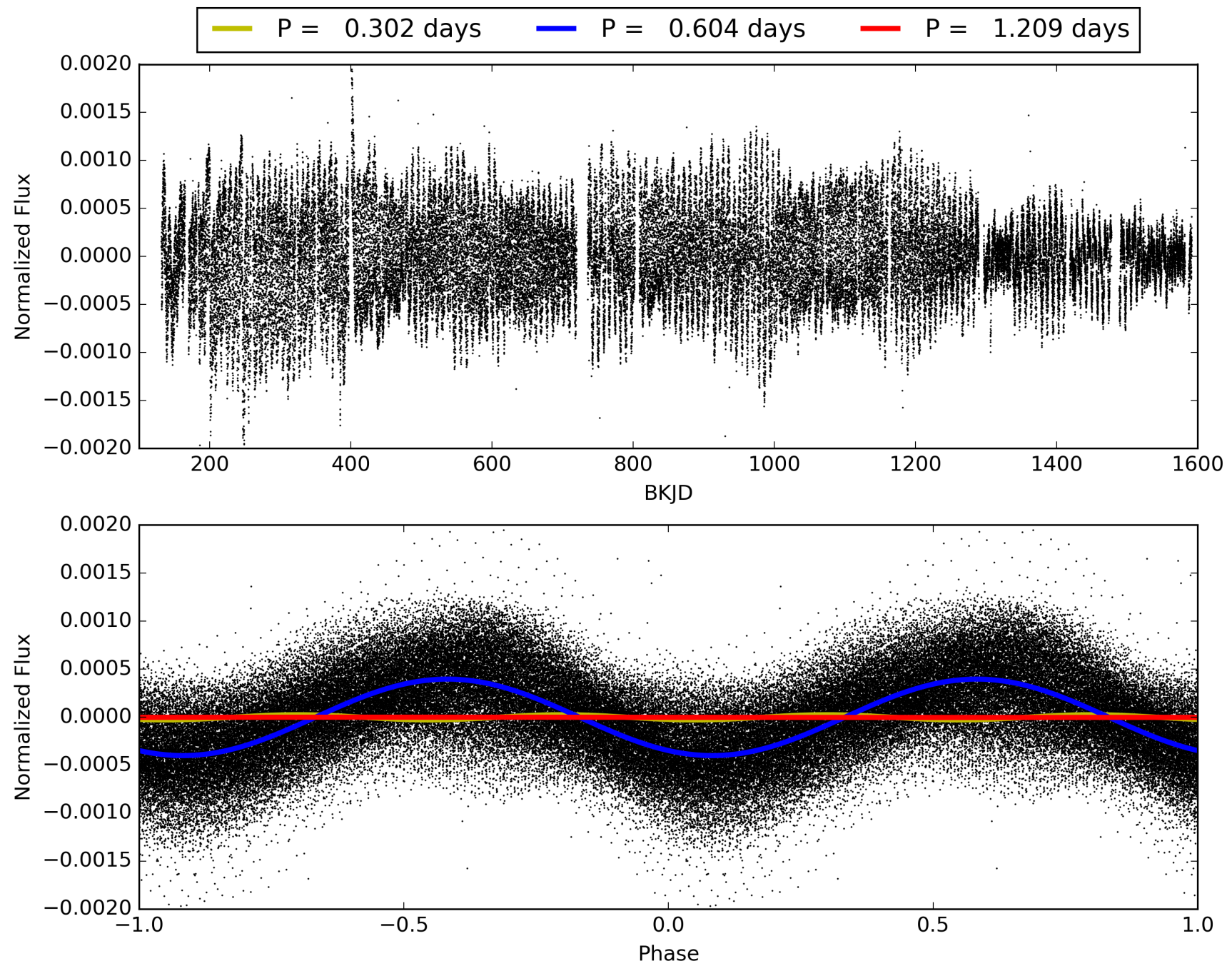
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [2093/2135]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.300 arcsec [0.21 σ]
KicOffset-rm: 0.429 arcsec [0.32 σ]
OotOffset-st: 3/4/3/5 [15]
KicOffset-st: 3/4/3/5 [15]
DiffImageQuality-fgm: 0.80 [12/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 002584908-01, PDC Light Curves

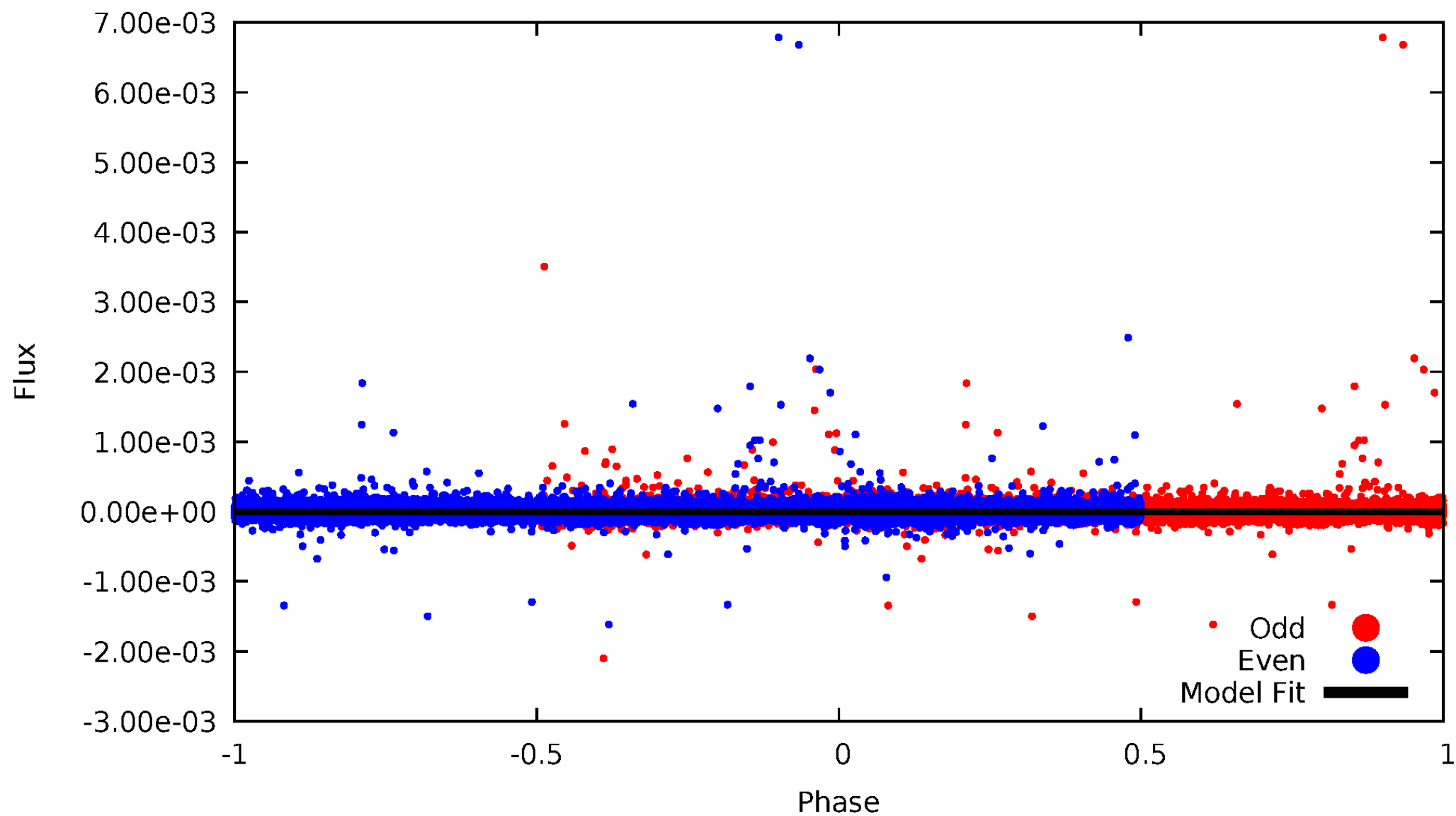


TCE 002584908-01



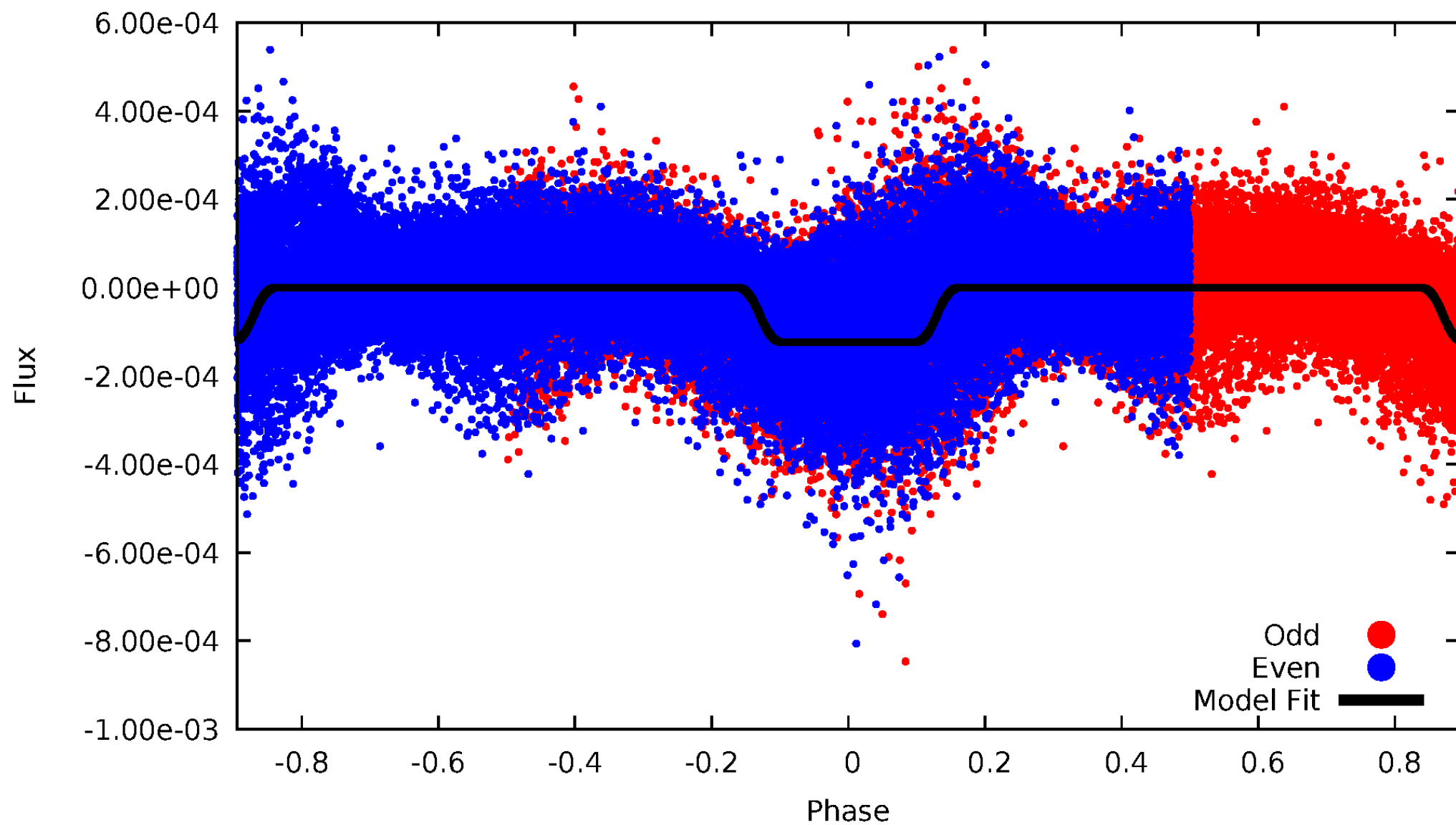
DV Odd/Even

TCE 002584908-01



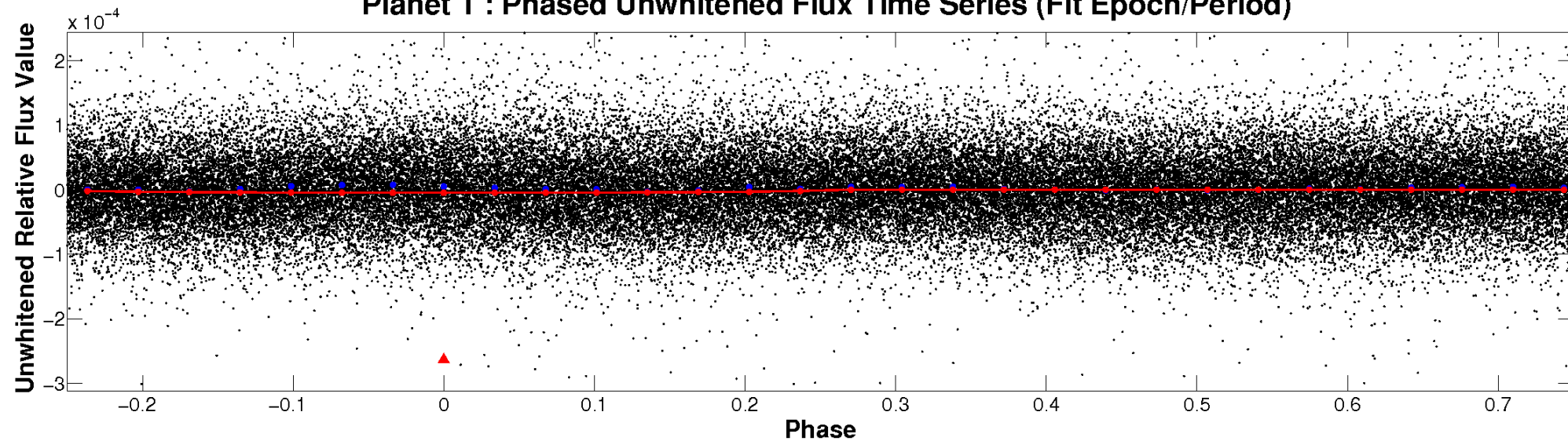
ALT Odd/Even

TCE 002584908-01

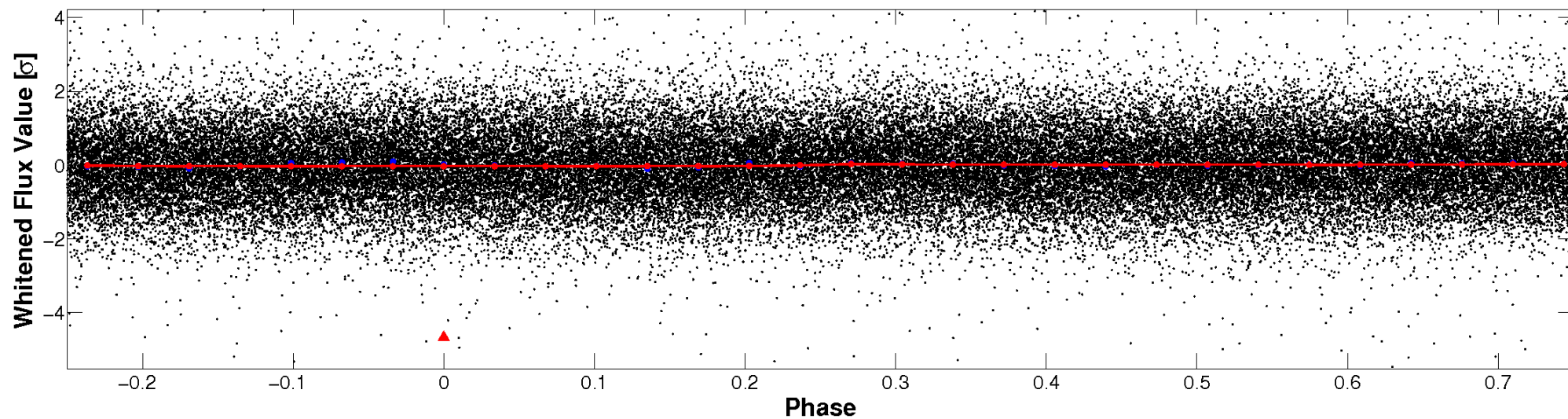


Non-Whitened Vs. Whitened Light Curve

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

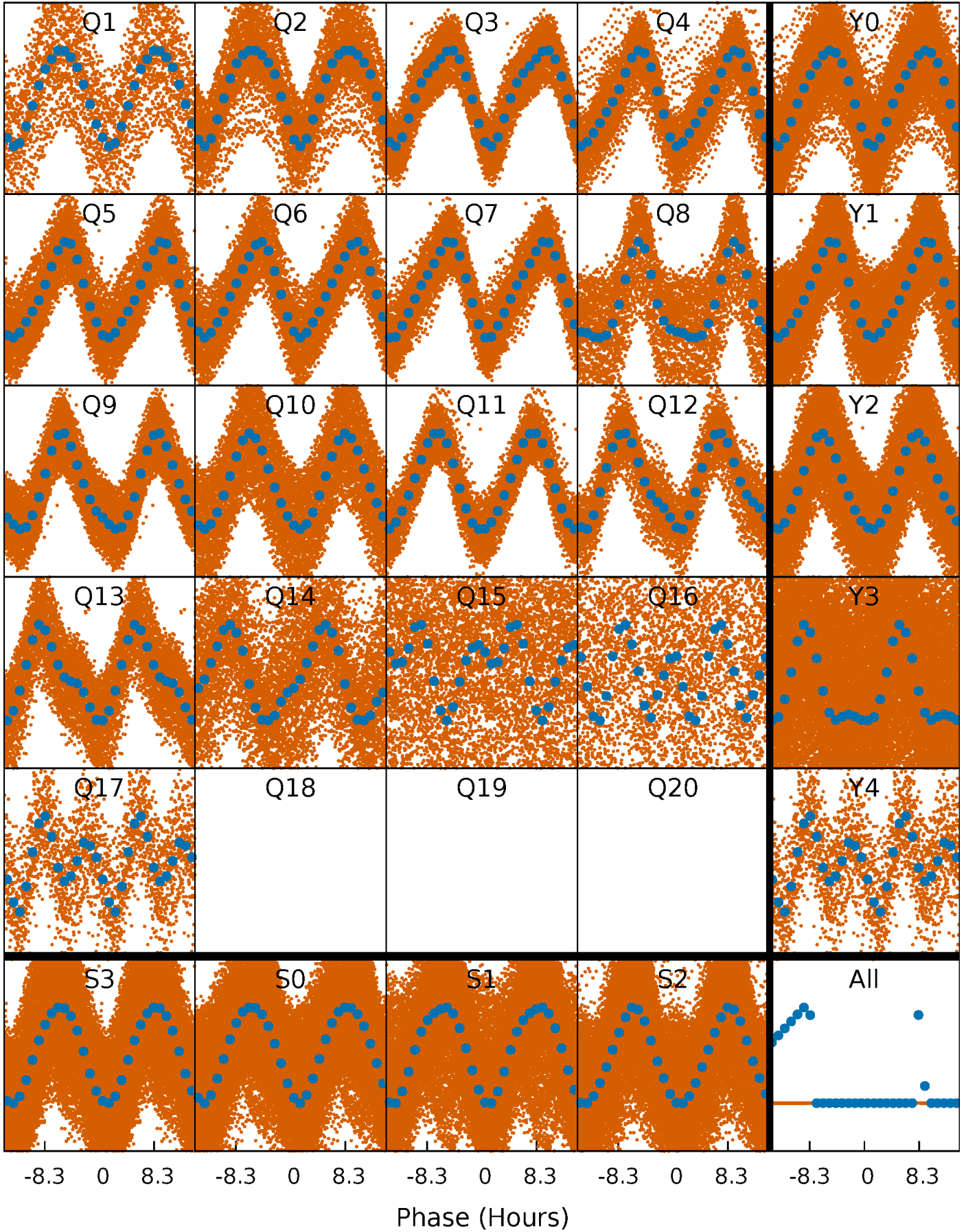


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



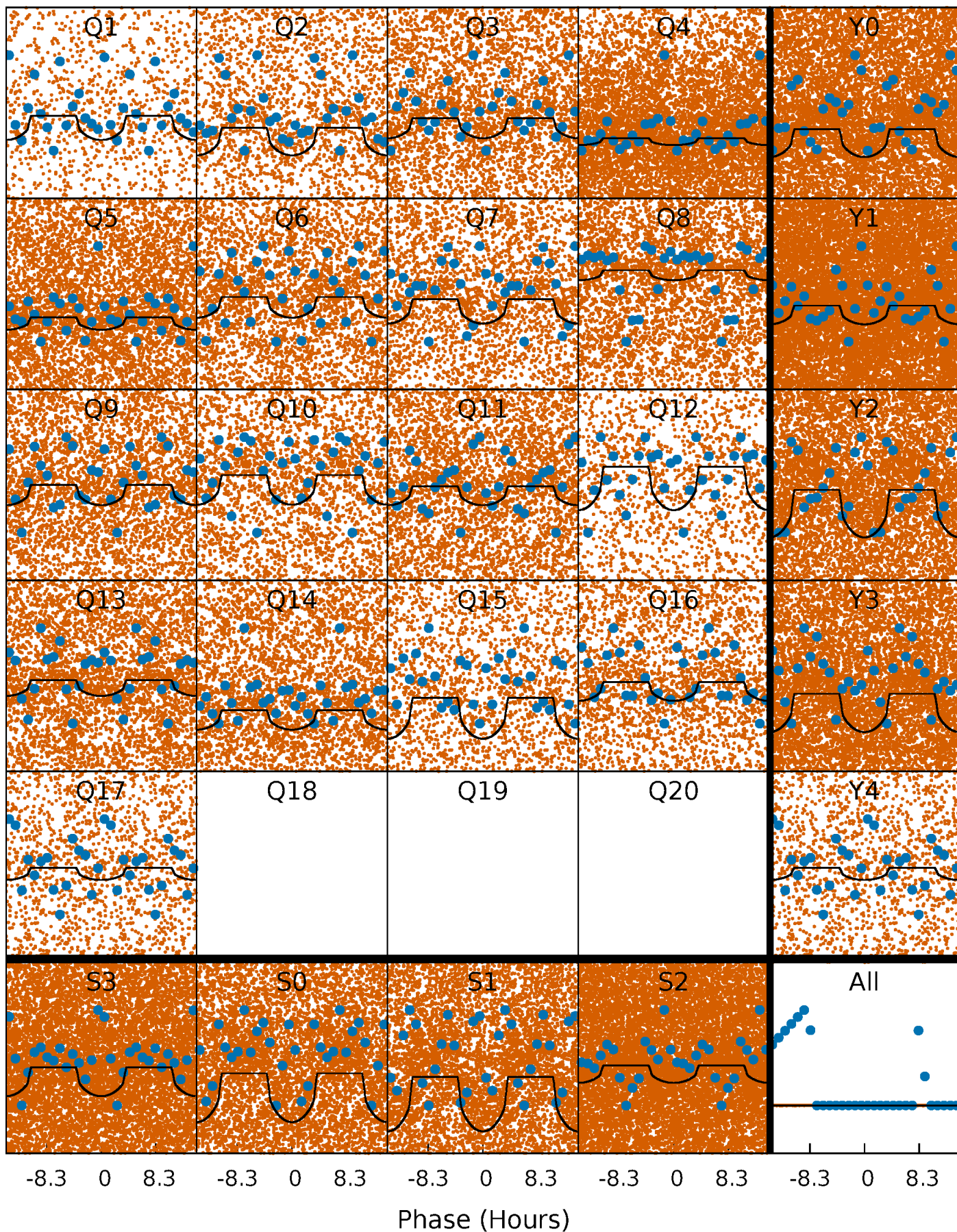
PDC Quarter-Phased Transit Curves

TCE 002584908-01 P= 0.604494 Days $T_0=131.857190$ (BKJD)



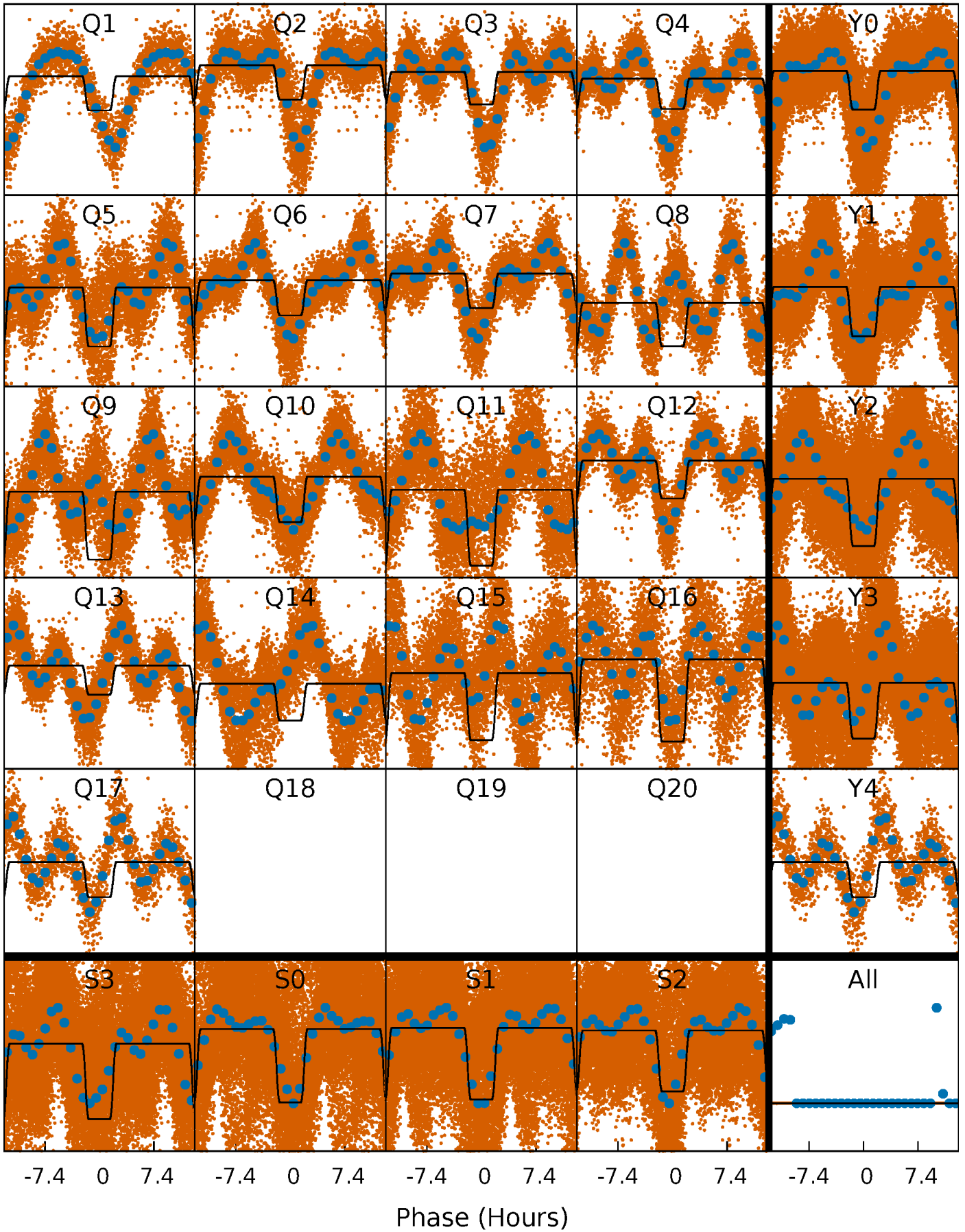
DV Quarter-Phased Transit Curves

TCE 002584908-01 P= 0.604494 Days $T_0=131.857190$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

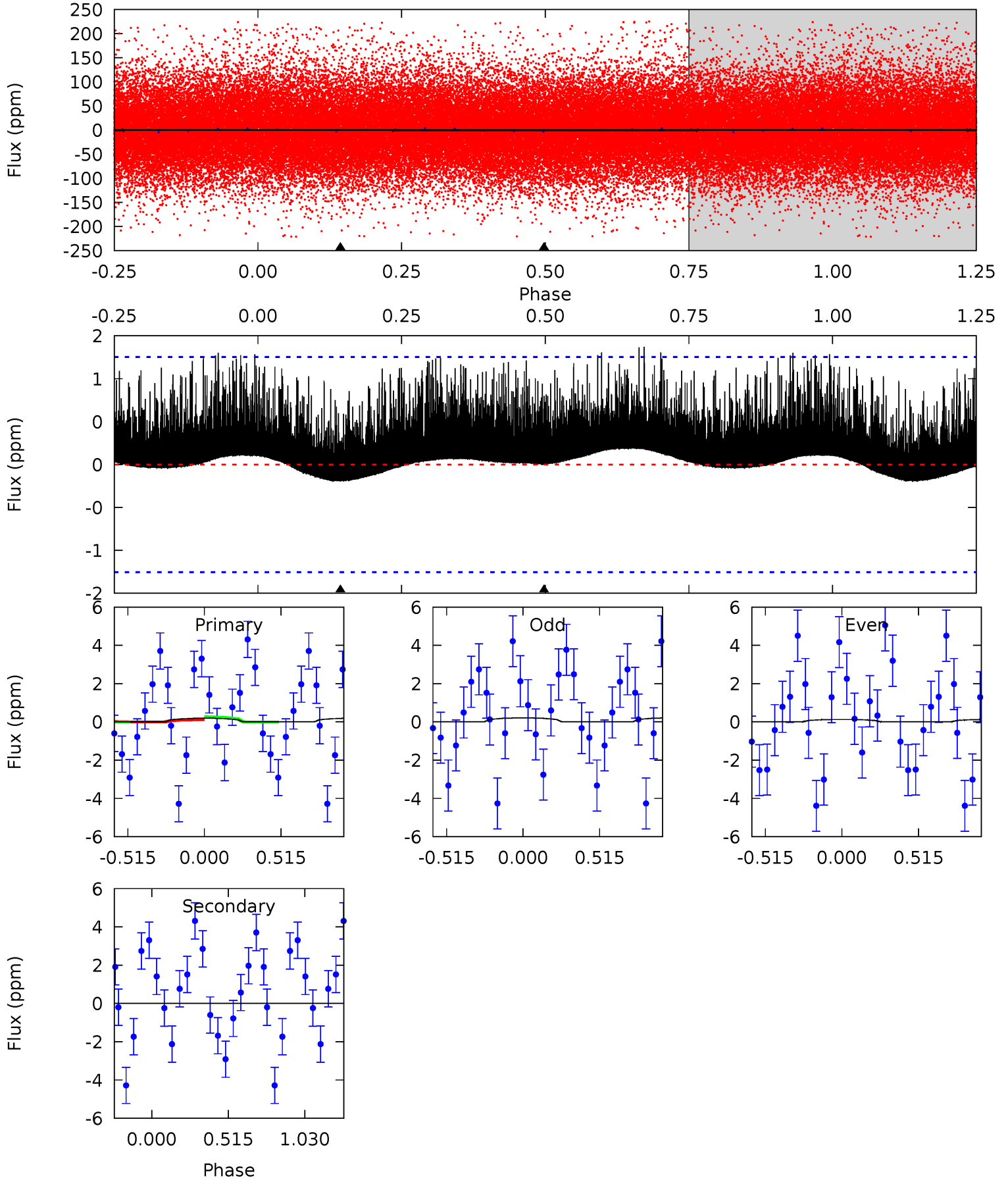
TCE 002584908-01 P= 0.604559 Days $T_0=131.843682$ (BKJD)



DV Model-Shift Uniqueness Test

002584908-01, P = 0.604494 Days, E = 131.252696 Days

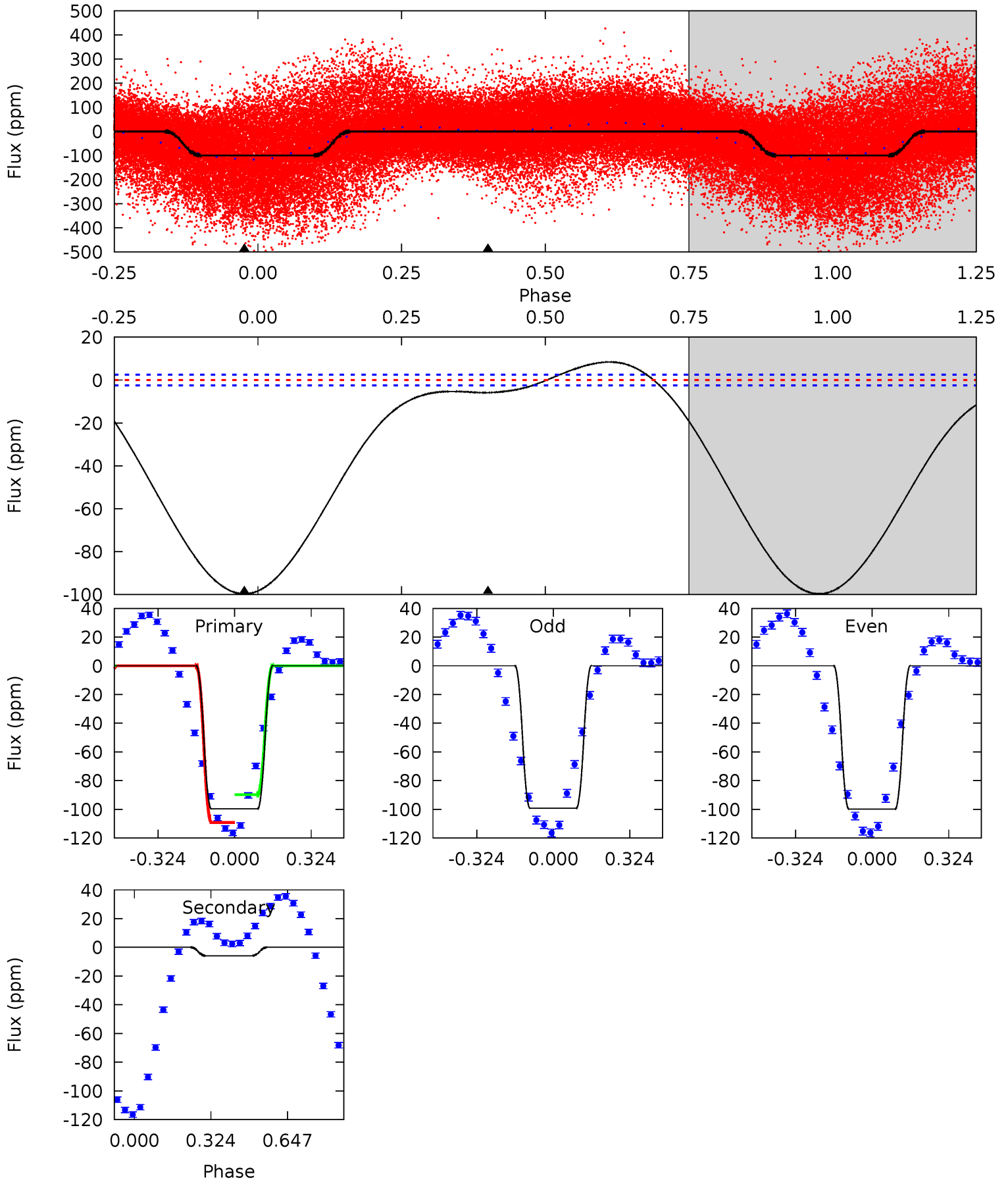
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.65	0	0	0	4.21	0.65	0.39	0.65	0.65	0	0	0.14	6.01	0.88	0.25



Alt Model-Shift Uniqueness Test

002584908-01, P = 0.604559 Days, E = 131.239123 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
170.4	10.0	0	0	4.31	0.99	11.2	170.4	170.4	10.0	10.0	0.56	0.95	0.08	16.1



Stellar Parameters For KIC 002584908

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8143_{-89}^{+73}	$3.960_{-0.080}^{+0.138}$	$-0.200_{-0.150}^{+0.050}$	$2.361_{-0.460}^{+0.248}$	$1.854_{-0.195}^{+0.026}$	$0.198_{-0.050}^{+0.141}$
	+1%/-1%	+3%/-2%	+25%/-75%	+11%/-19%	+1%/-11%	+71%/-25%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 002584908-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 0	$0.53_{-0.21}^{+0.22}$	5868_{-275}^{+195}	-4795_{-553}^{+782}	$-0.009_{-0.195}^{+0.181}$
Alt.	-6 ± 1	$2.78_{-0.33}^{+0.31}$	5852_{-270}^{+206}	-4324_{-207}^{+298}	$0.121_{-0.027}^{+0.036}$

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

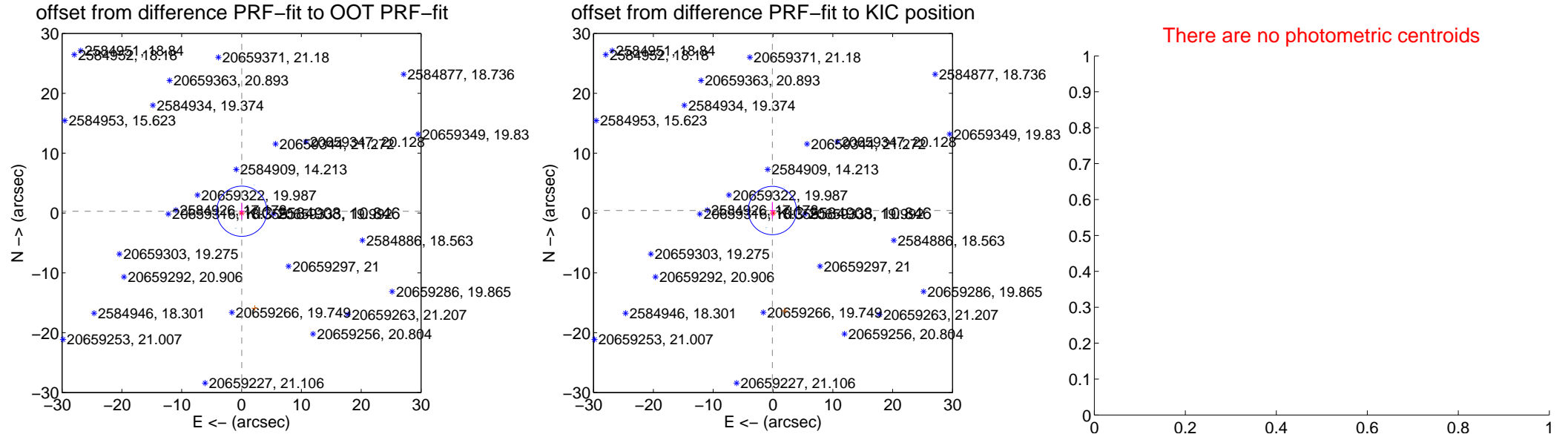
DV Centroid Data

Supplemental centroid analysis for 002584908-01. **Kepler magnitude: 10.85.** Transit SNR 6.18

There are 12 quarters with good PRF difference image offsets

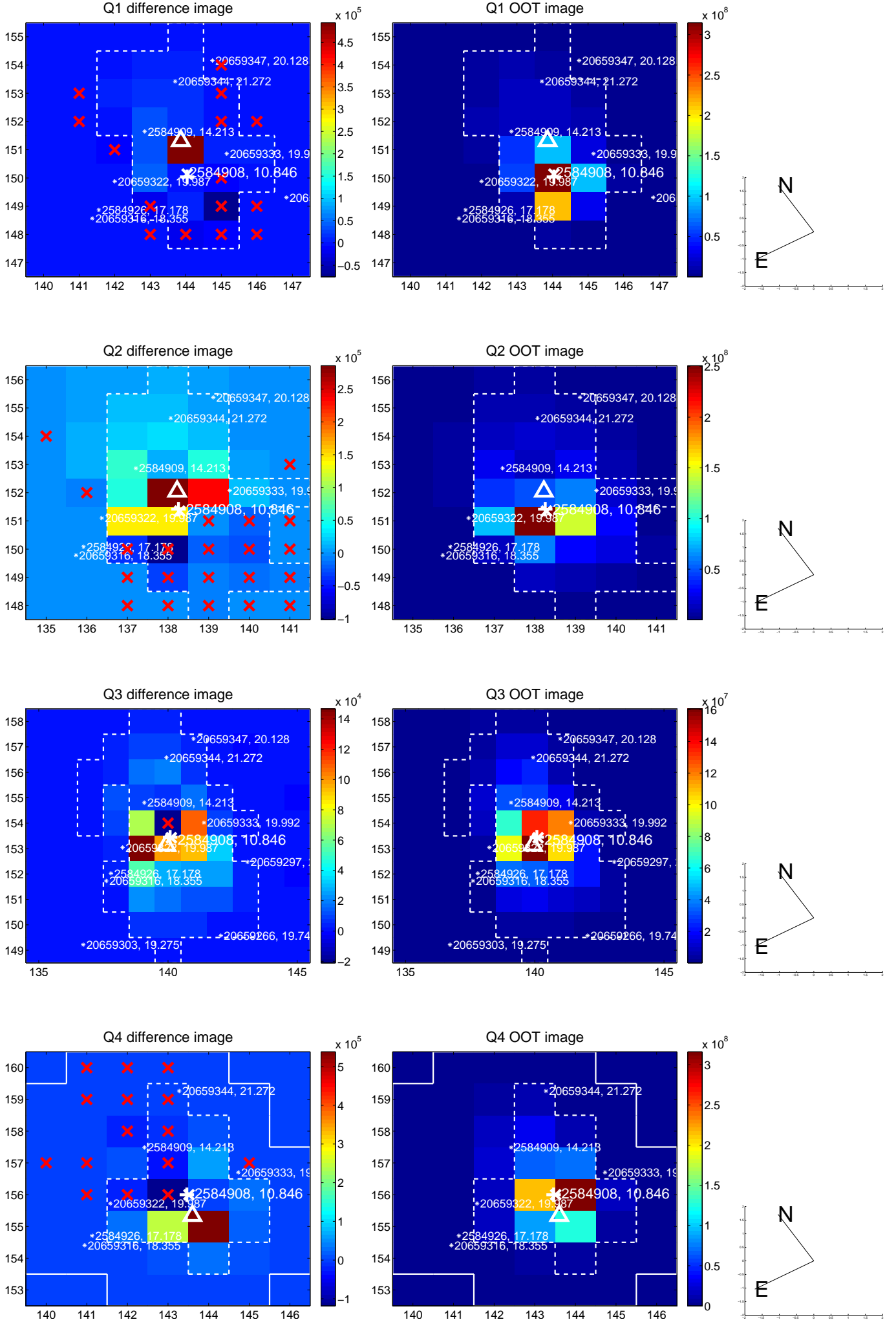
The direct PRF centroid is offset from the target star catalog position by about 0.51 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.300 ± 1.398	0.21	-0.042 ± 0.416	0.297 ± 1.396
PRF-fit source offset from KIC position	0.429 ± 1.347	0.32	0.105 ± 0.447	0.416 ± 1.420
photometric centroid source offset	—	—	—	—

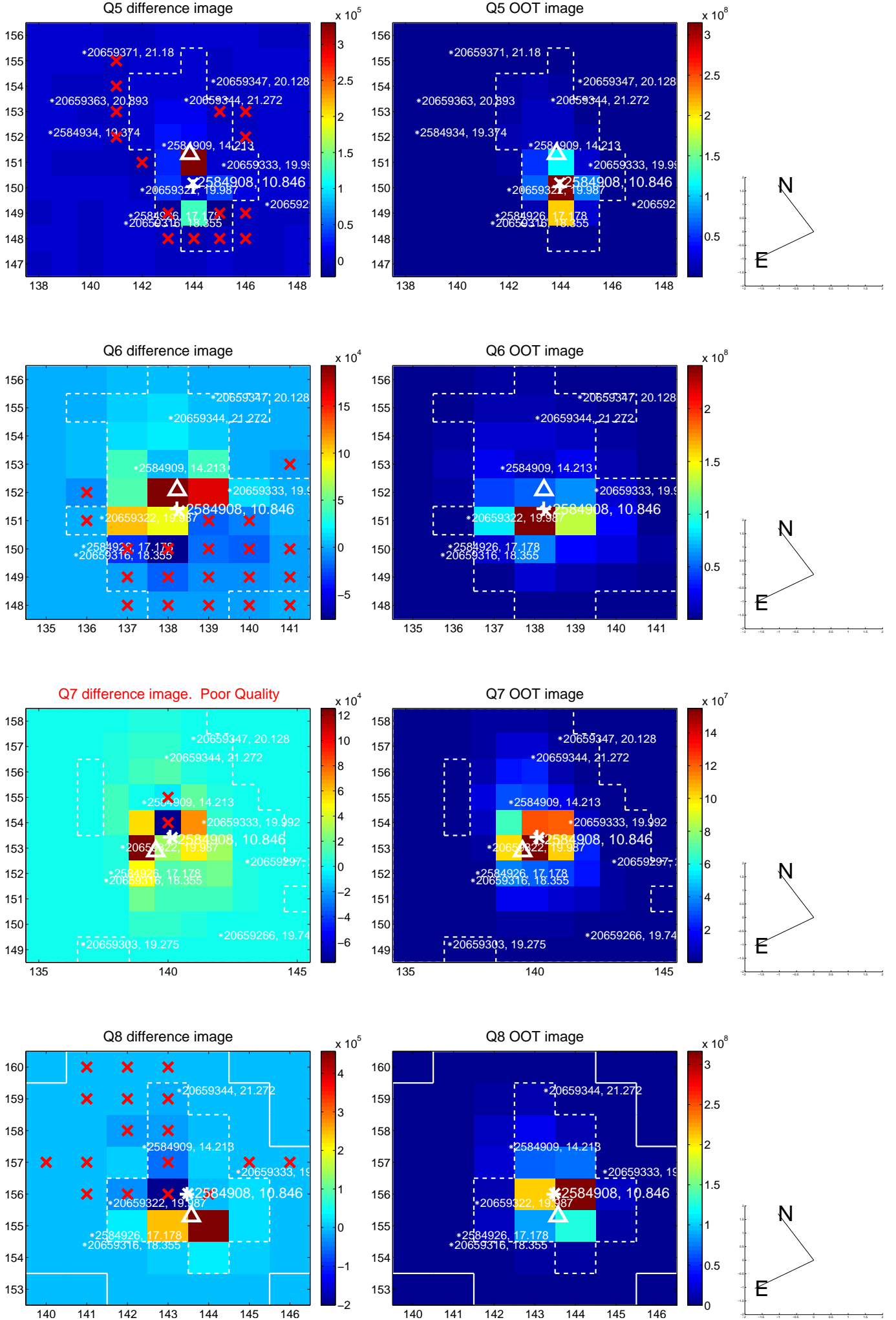


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

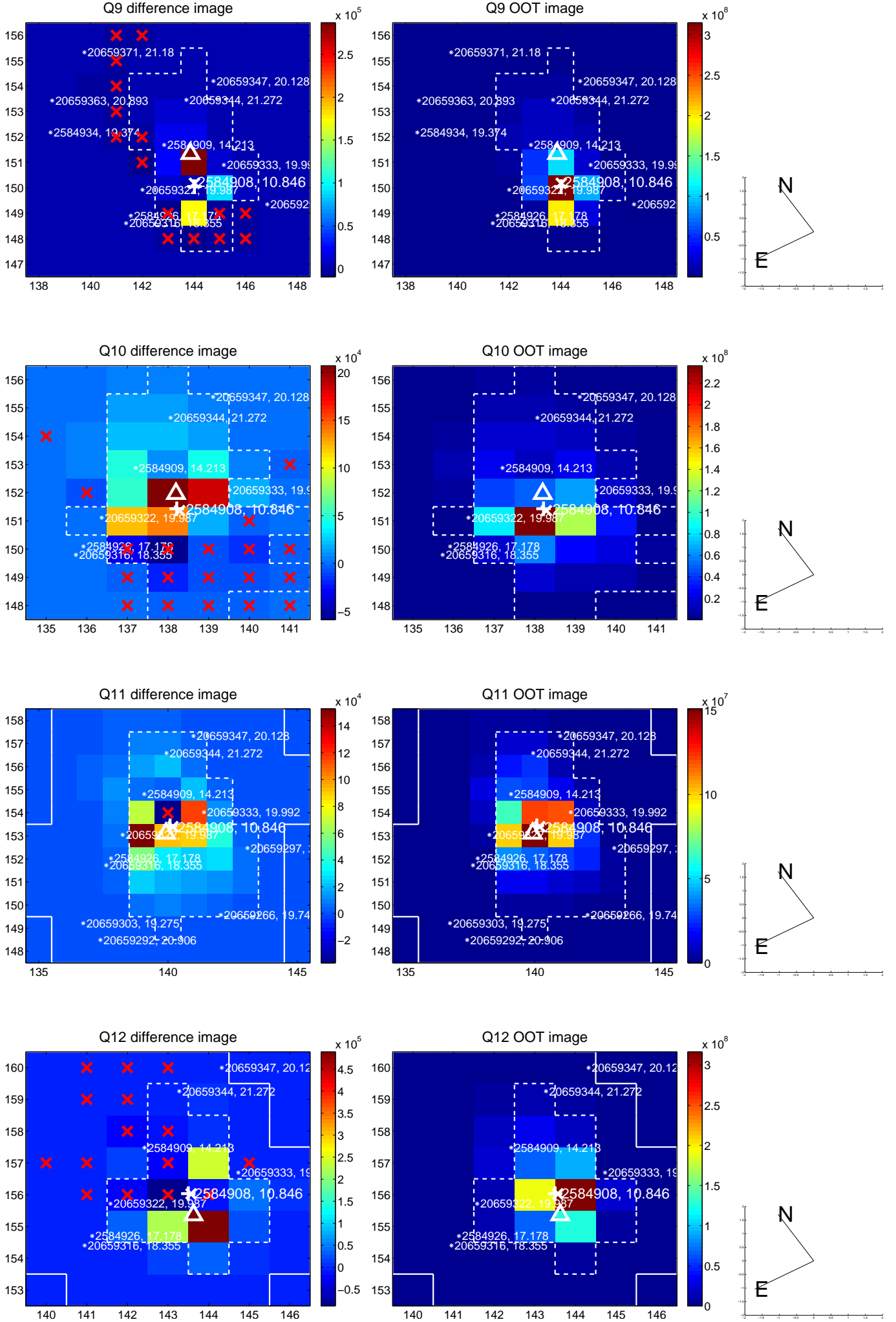
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



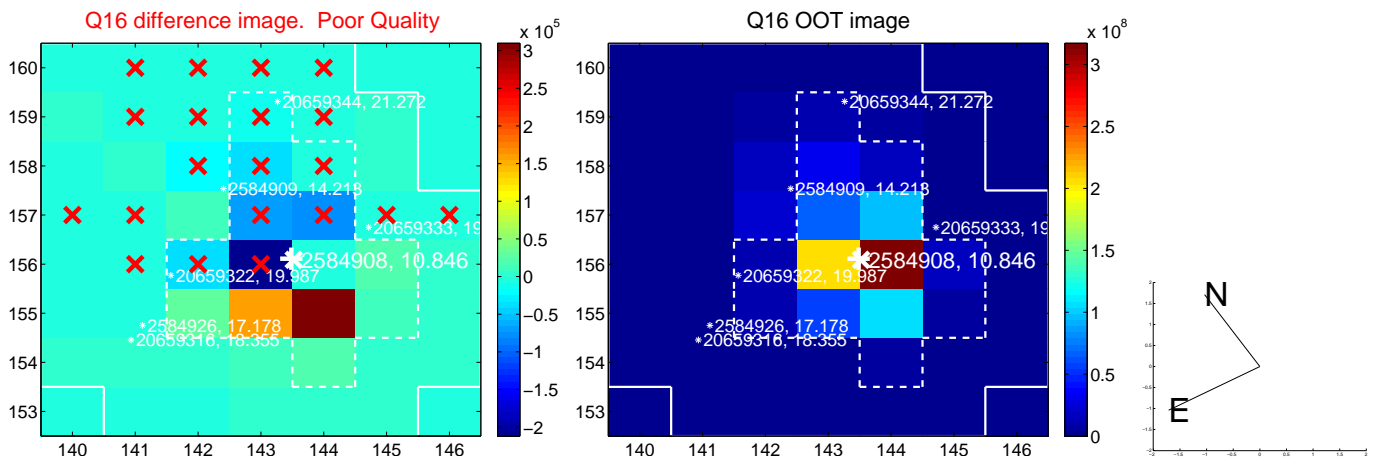
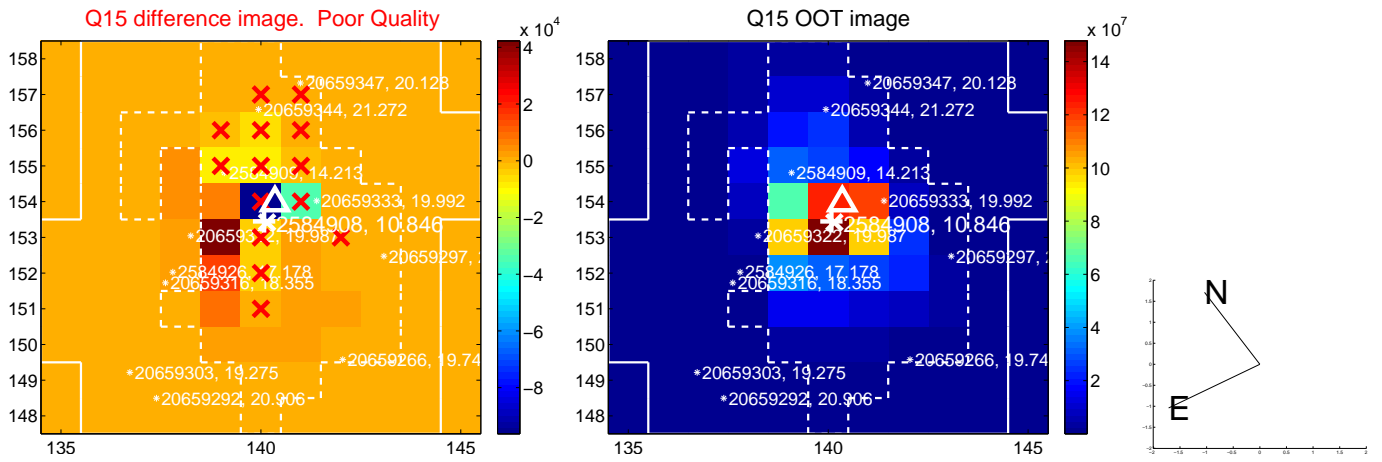
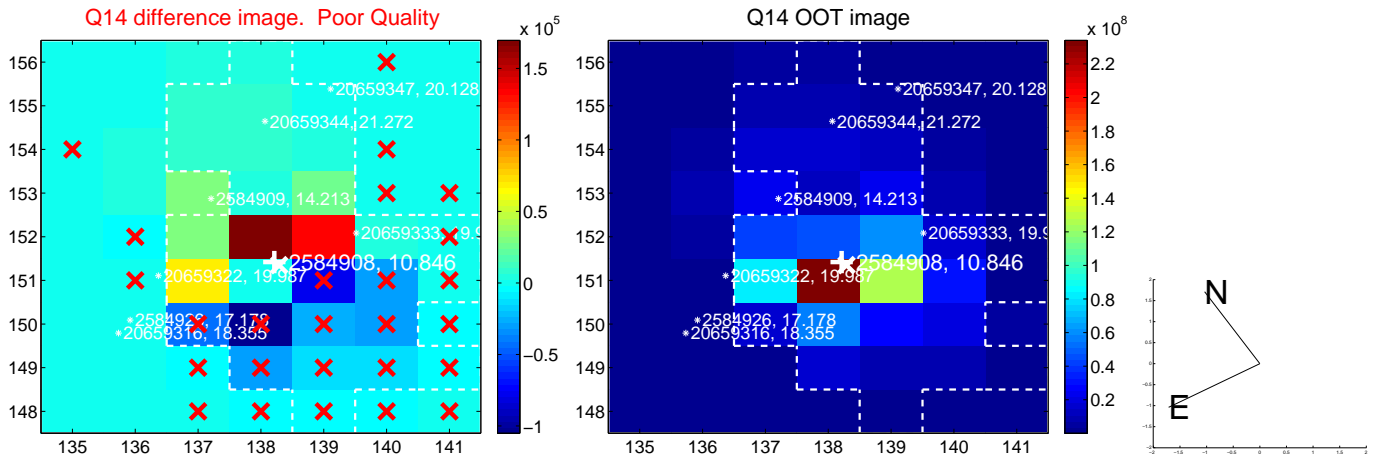
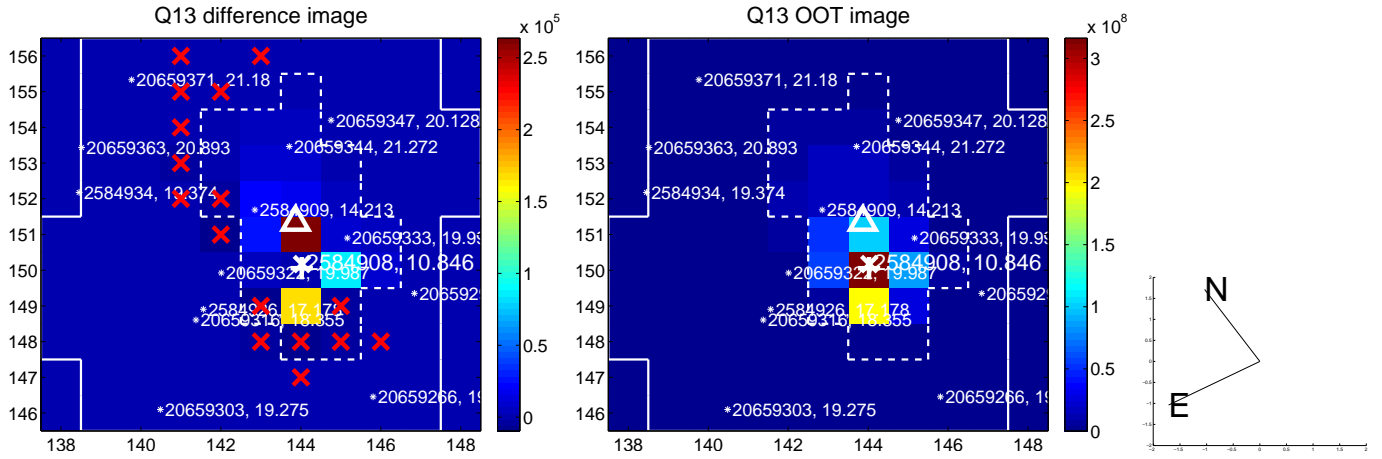
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



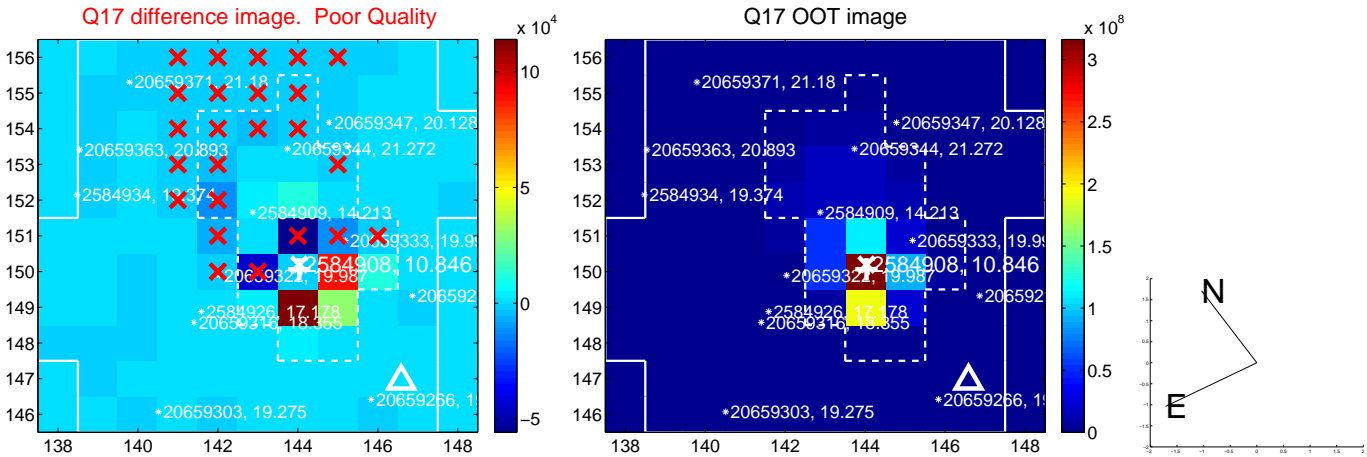
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

