

KIC 006187508

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})
006187508-01	OBS	6672.01	2.284952	132.920977	140.8	1.026	8.6	9.3	0.79	5396	1.14	458.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006187508-01	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.

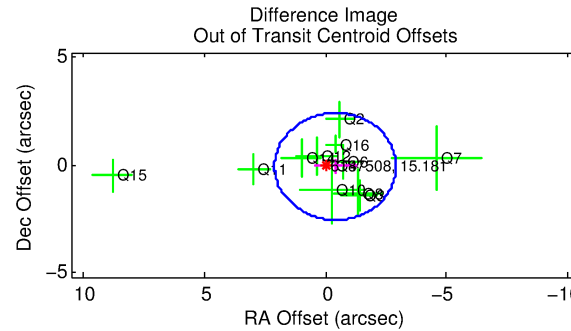
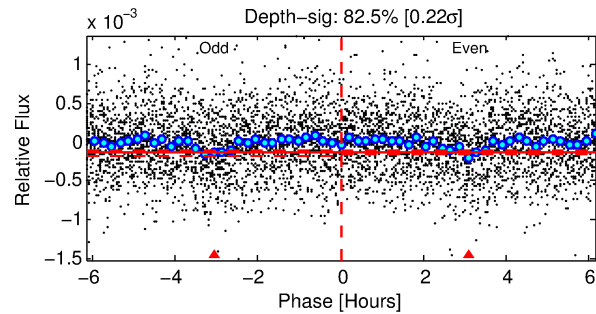
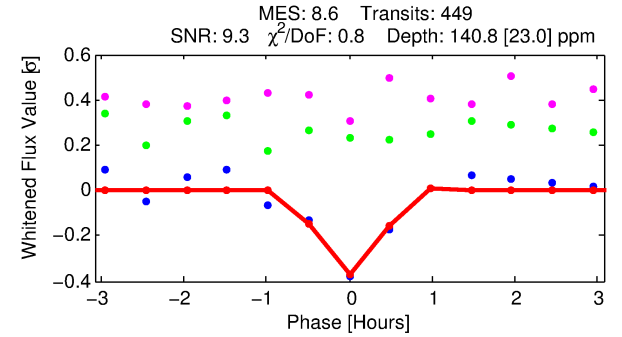
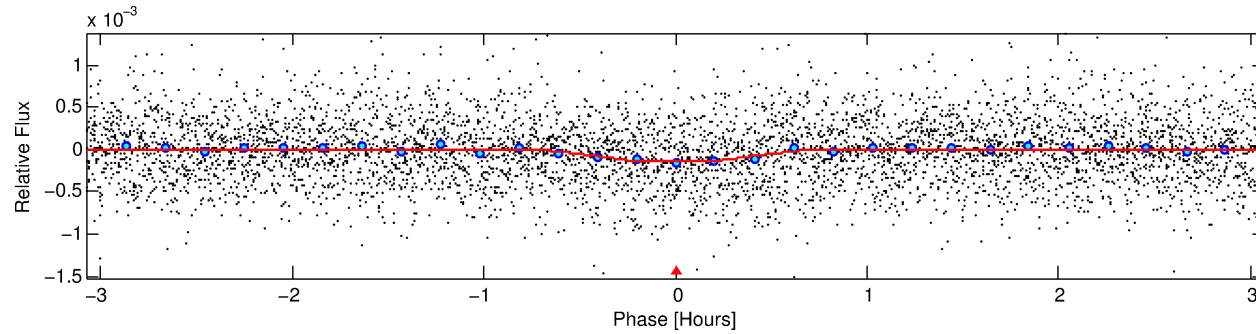
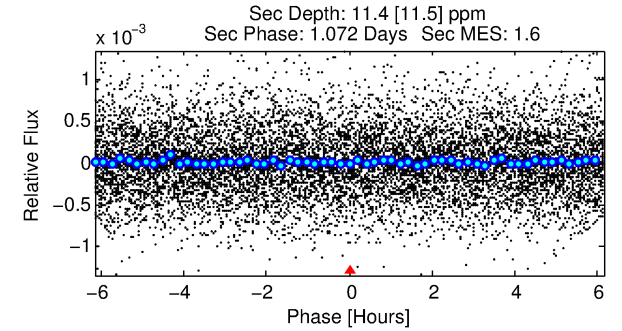
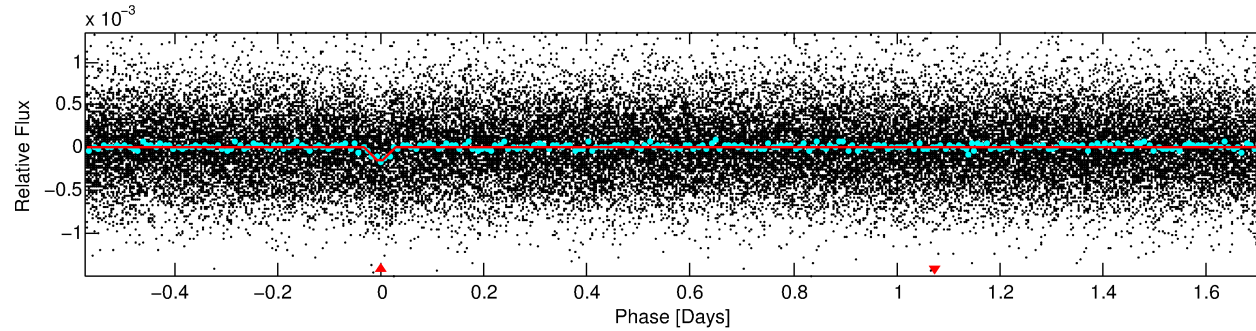
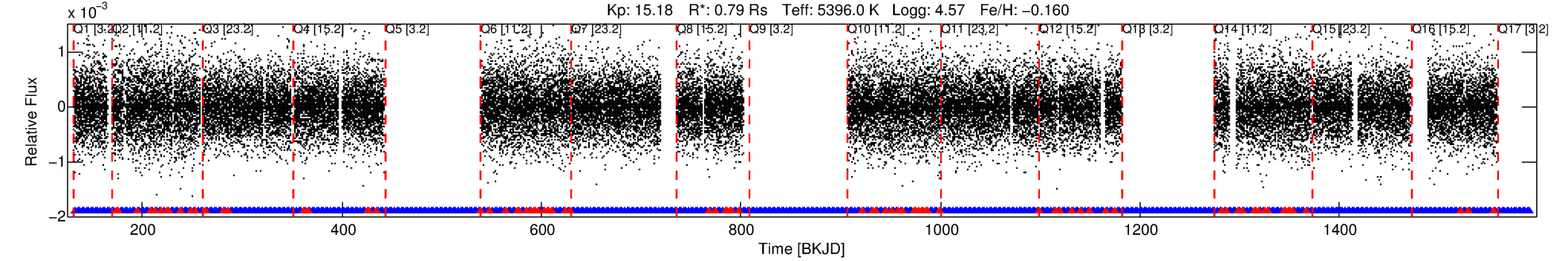
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006187508-01

No Significant Match Found

DV One-Page Summary

KIC: 6187508 Candidate: 1 of 1 Period: 2.285 d
KOI: K06672.01 Corr: 0.958



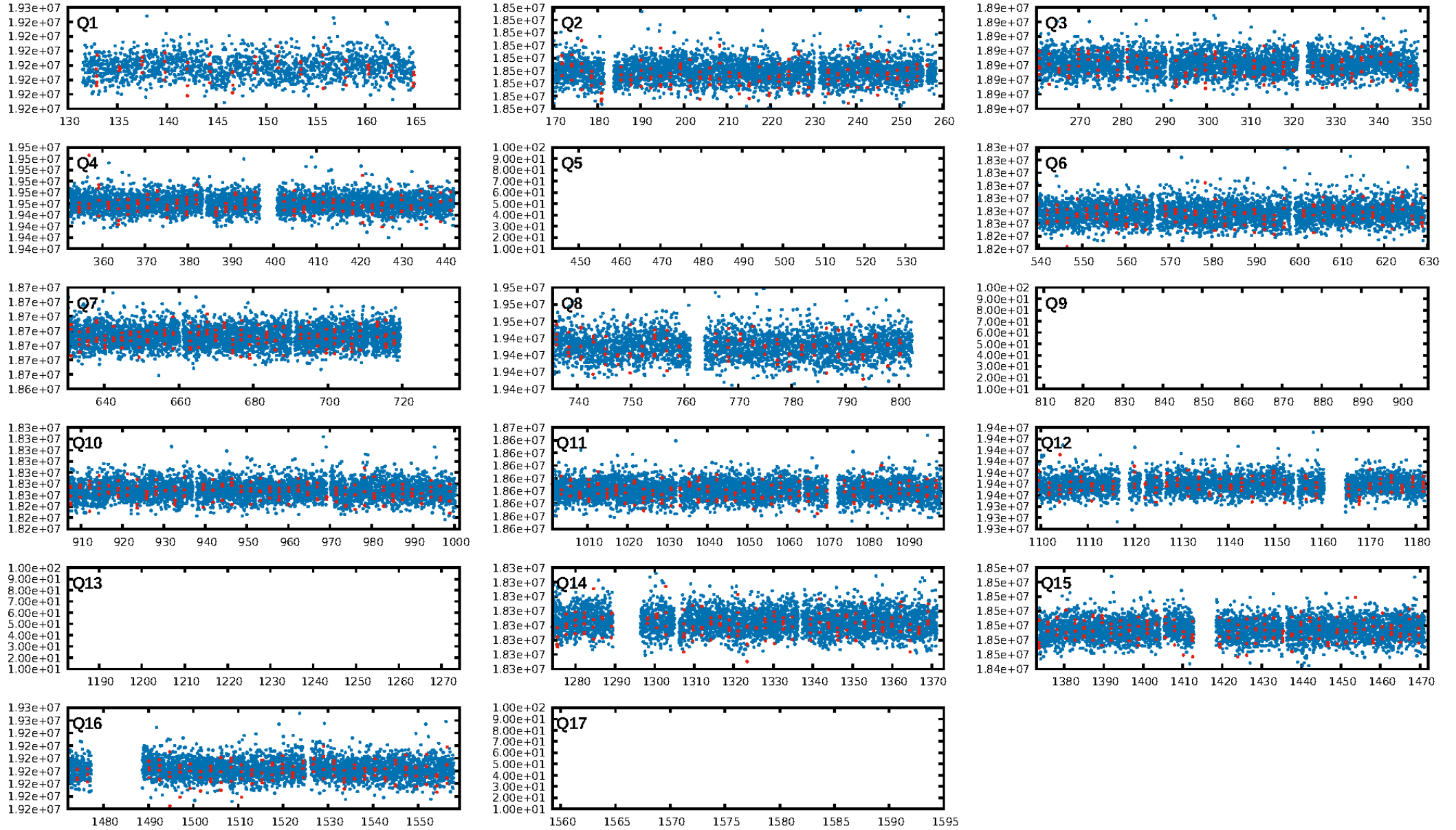
DV Fit Results:

Period = 2.28495 [0.00001] d
Epoch = 132.9210 [0.0020] BKJD
Rp/R* = 0.0132 [0.0148]
a/R* = 7.82 [38.24]
b = 0.90 [1.03]
Seff = 458.56 [110.48]
Teff = 1180 [71] K
Rp = 1.14 [1.29] Re
a = 0.0321 [0.0048] AU
Ag = 4.98 [12.27] [0.32σ]
Teffp = 2725 [1675] K [0.92σ]

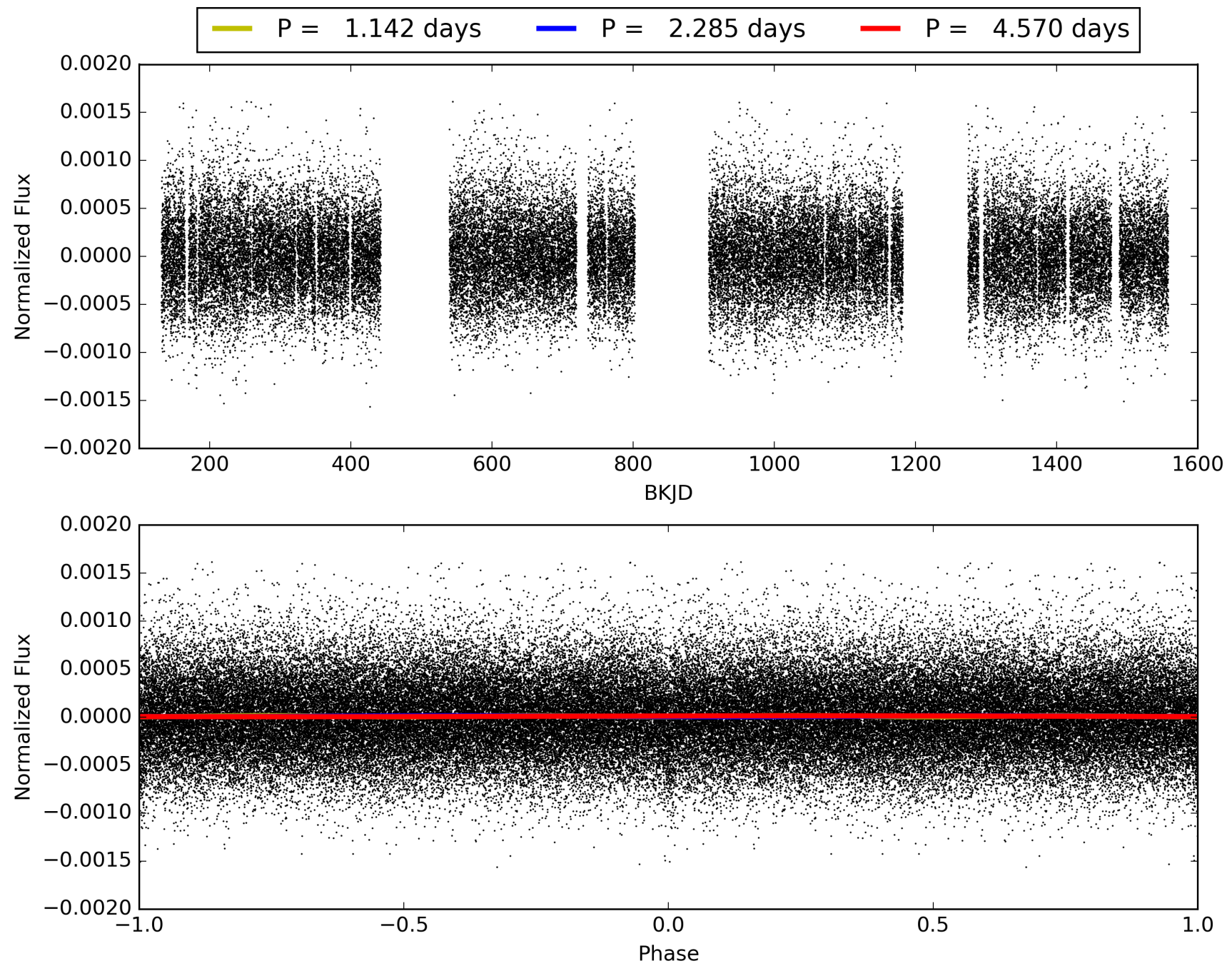
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.99e-18
RollingBand-fgt: 0.81 [351/434]
GhostDiagnostic-chr: 1.455
Centroid-sig: 1.7%
Centroid-so: 2.729 arcsec [1.58σ]
OotOffset-rm: 0.416 arcsec [0.50σ]
KicOffset-rm: 0.325 arcsec [0.36σ]
OotOffset-st: 4/4/4/0 [12]
KicOffset-st: 4/4/4/0 [12]
DiffImageQuality-fgm: 0.25 [3/12]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 006187508-01, PDC Light Curves

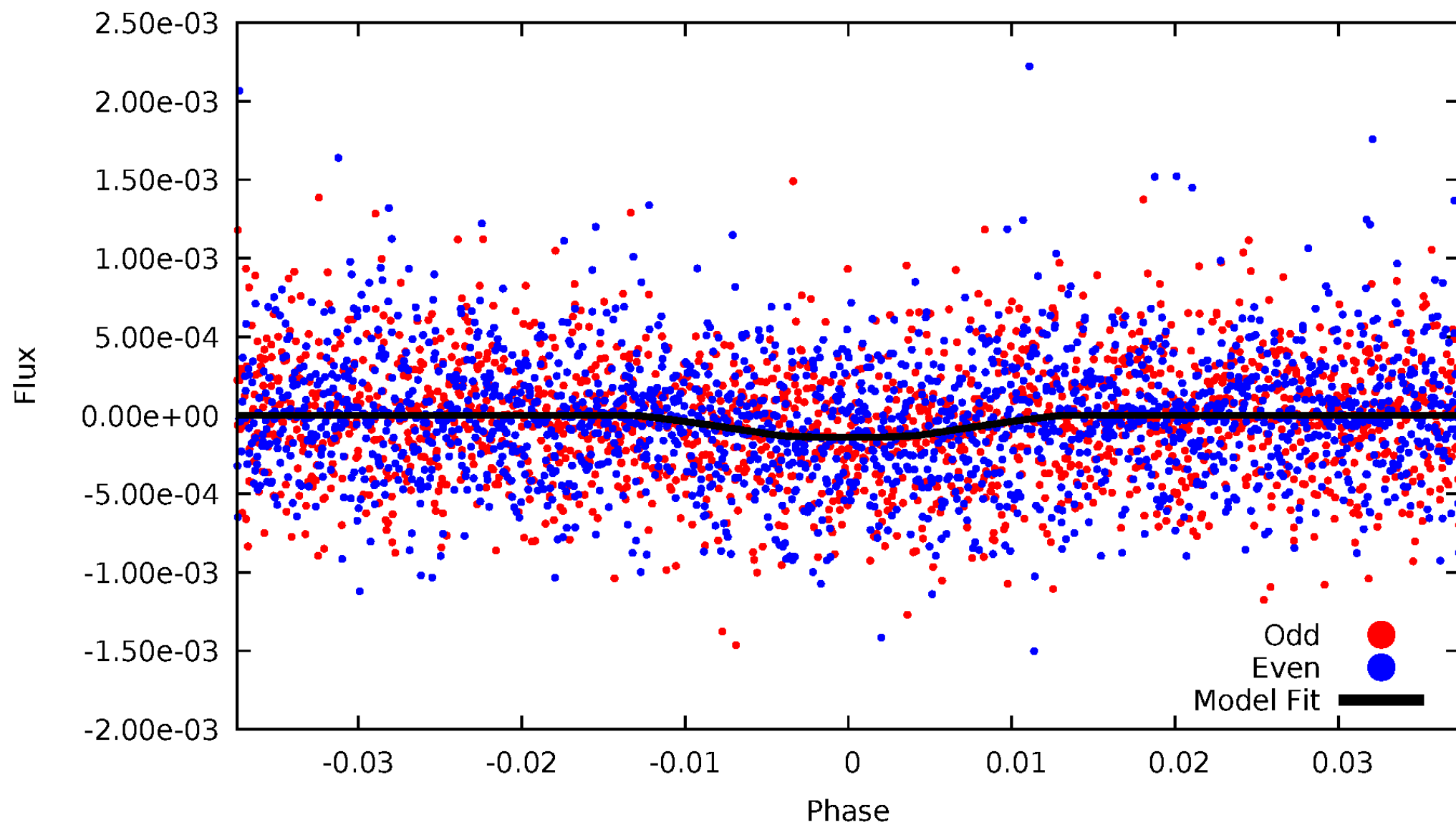


TCE 006187508-01



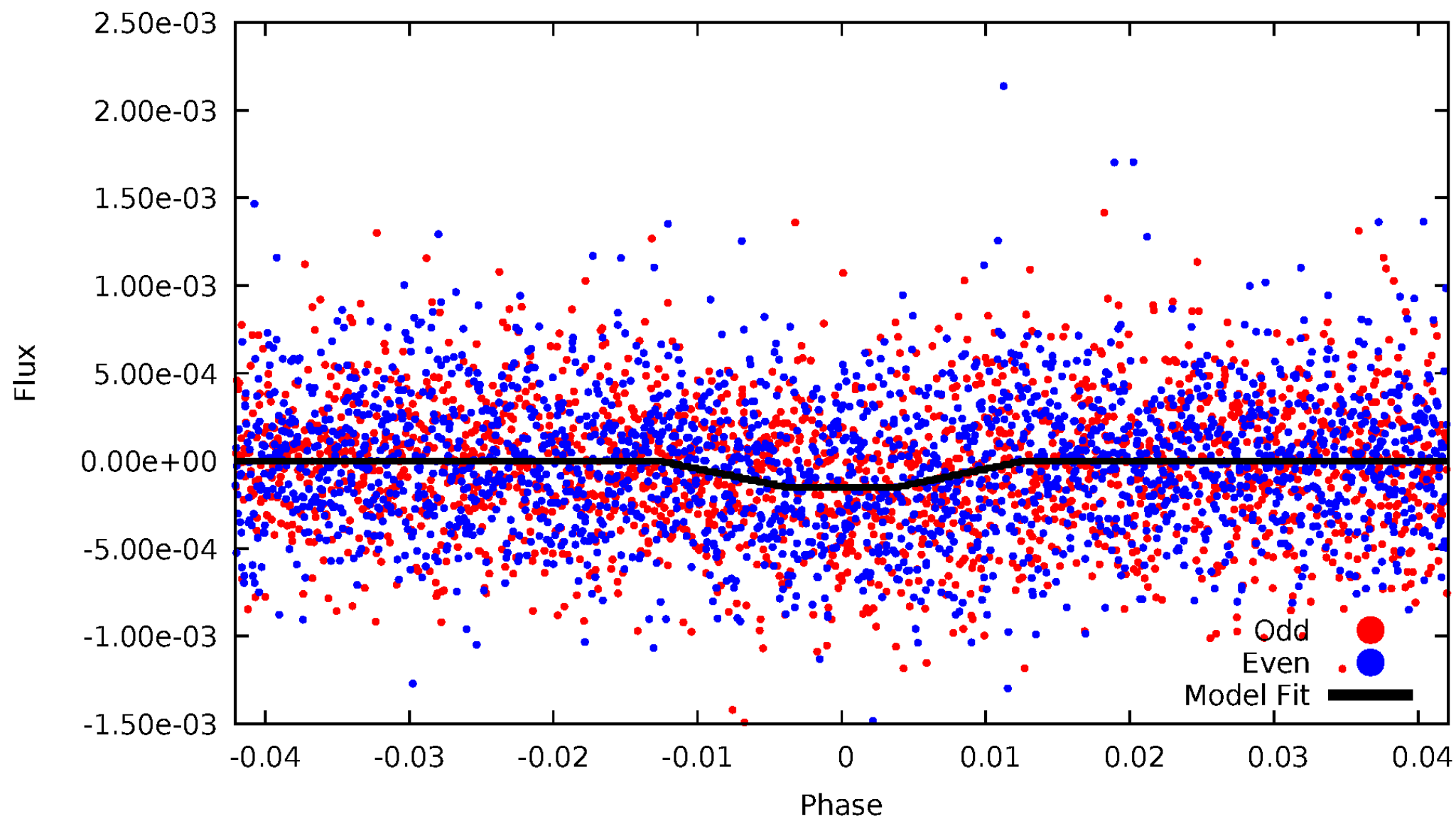
DV Odd/Even

TCE 006187508-01



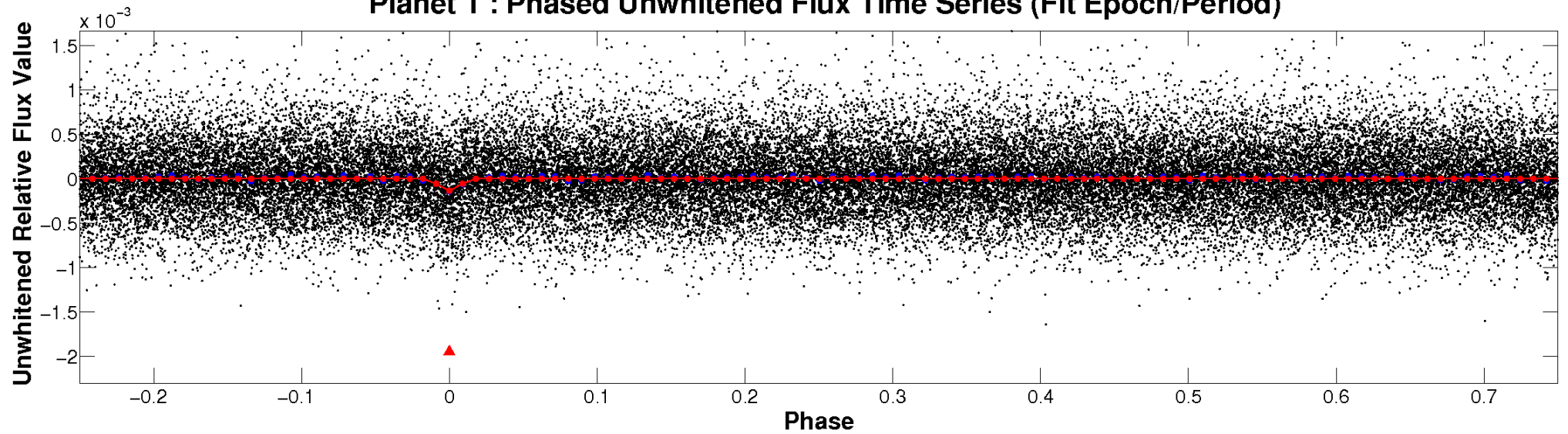
ALT Odd/Even

TCE 006187508-01

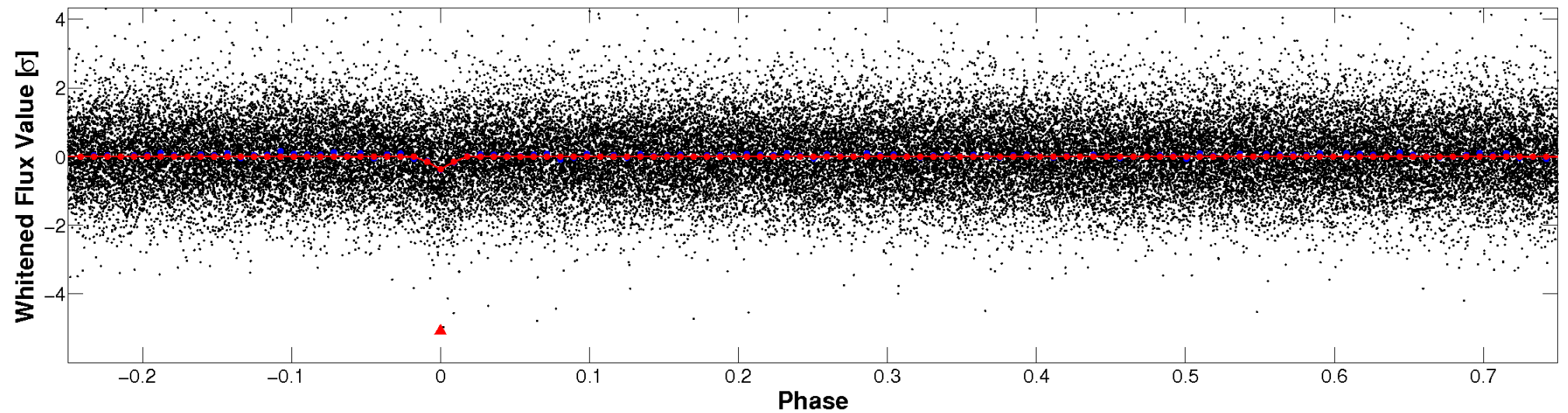


Non-Whitened Vs. Whitened Light Curve

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

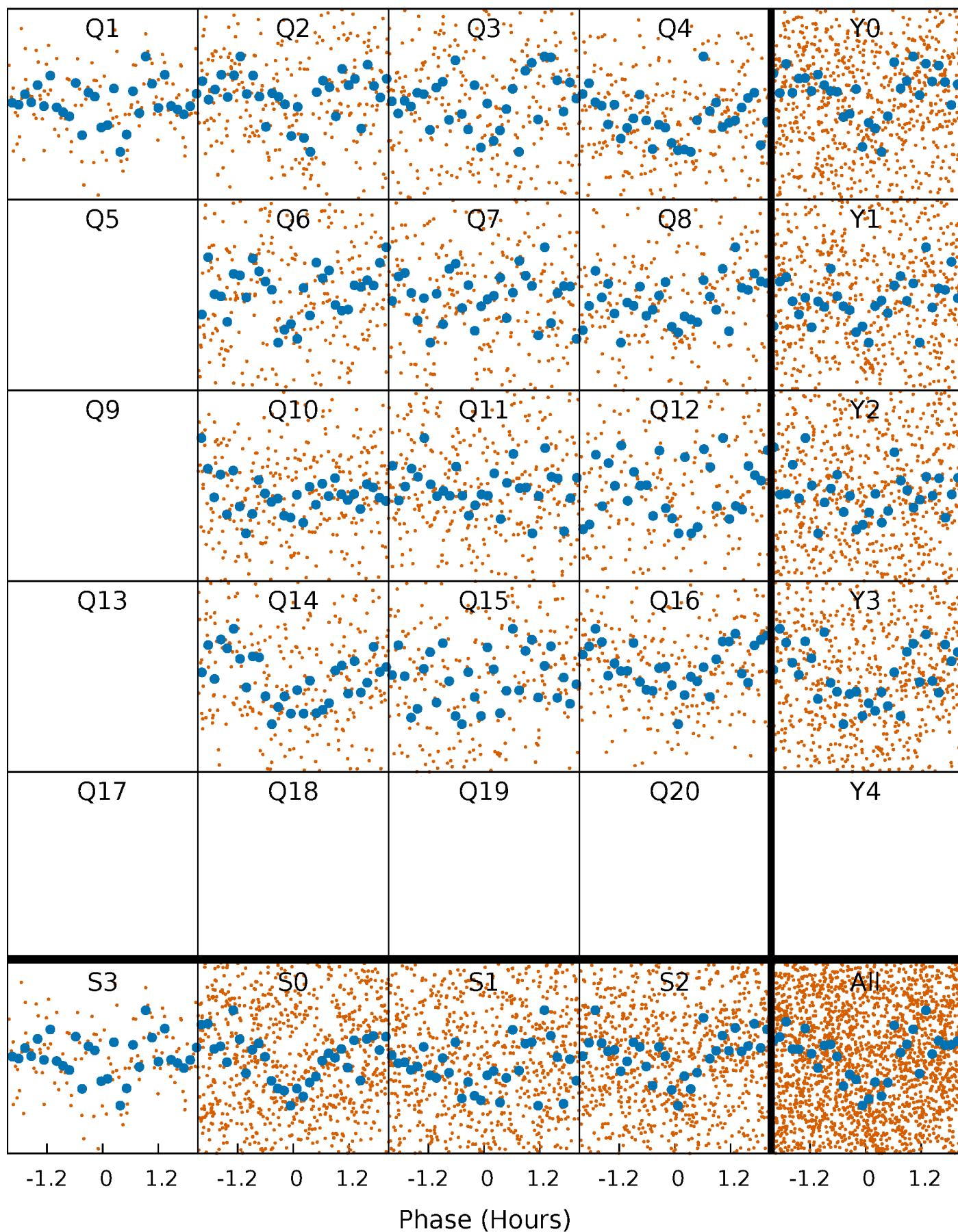


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



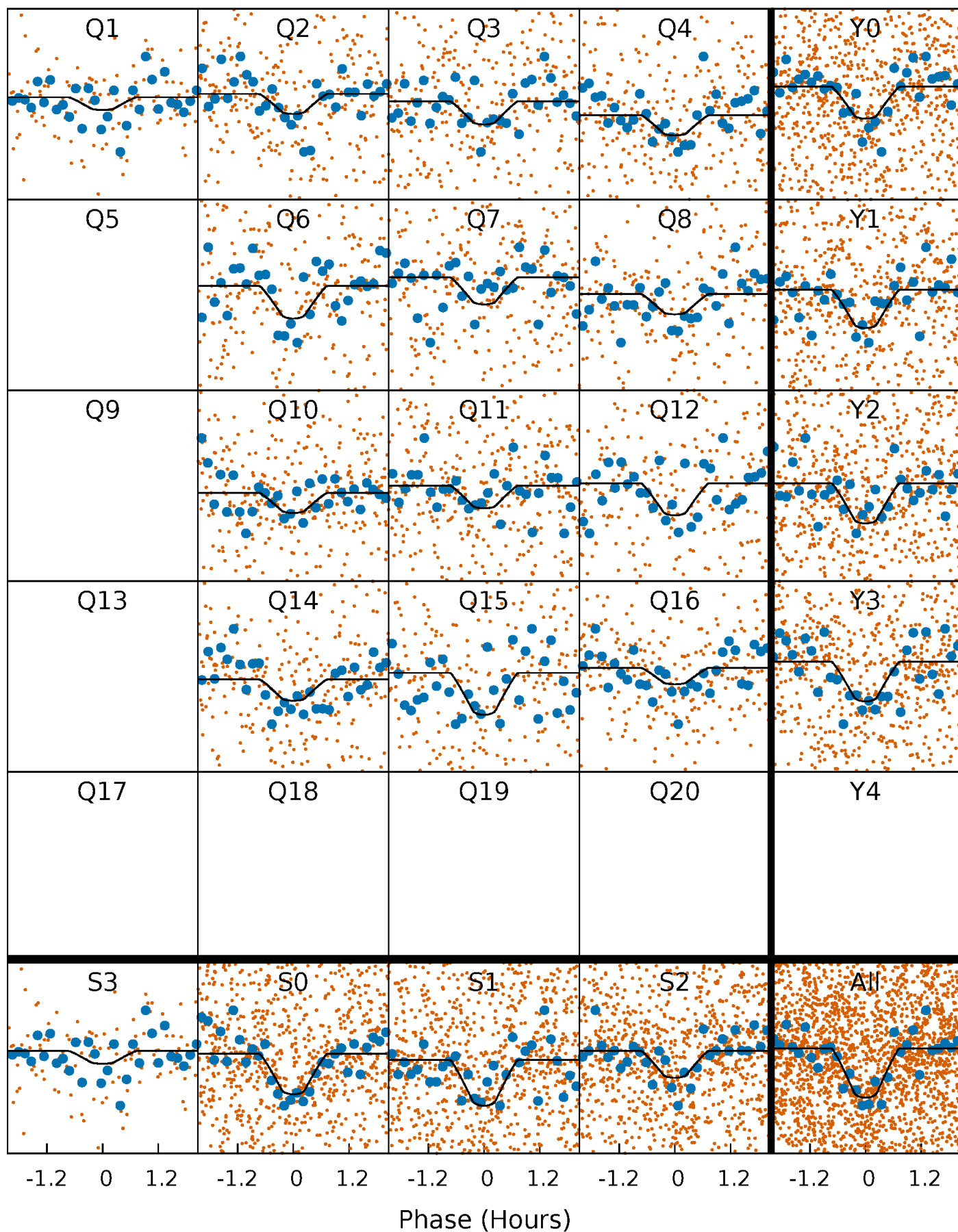
PDC Quarter-Phased Transit Curves

TCE 006187508-01 P= 2.284952 Days $T_0=132.920977$ (BKJD)



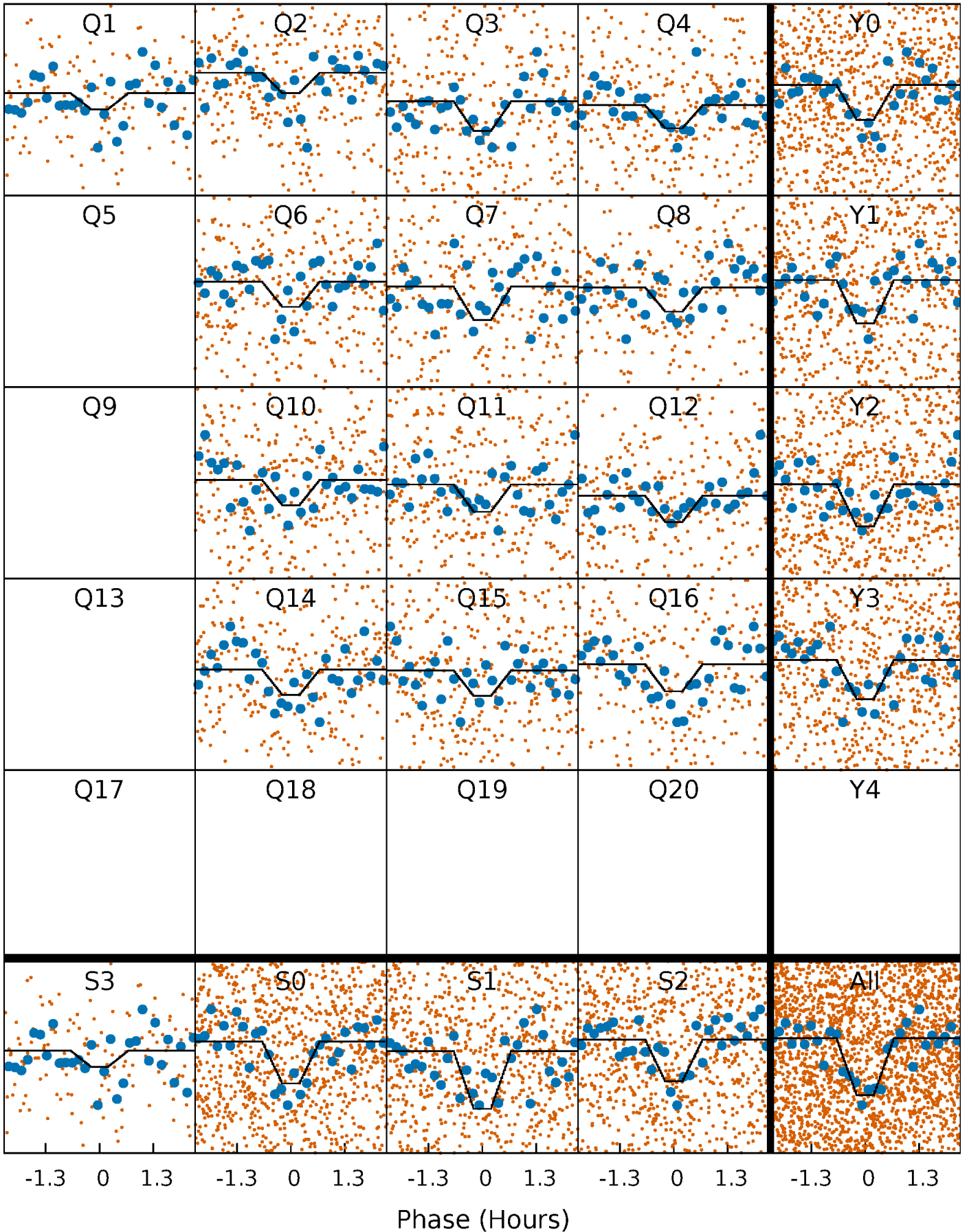
DV Quarter-Phased Transit Curves

TCE 006187508-01 P= 2.284952 Days $T_0=132.920977$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

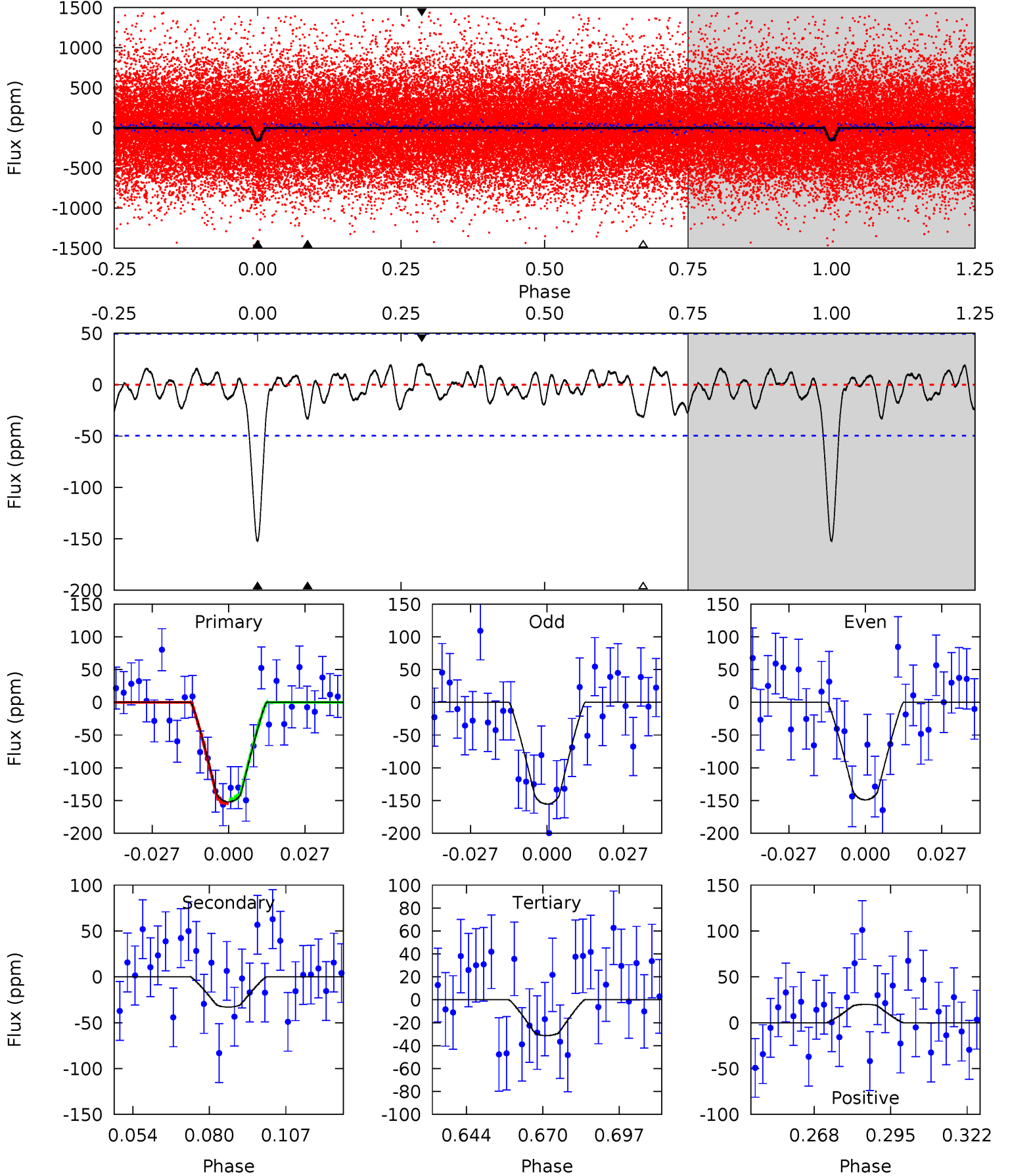
TCE 006187508-01 P= 2.284952 Days $T_0=132.920630$ (BKJD)



DV Model-Shift Uniqueness Test

006187508-01, P = 2.284952 Days, E = 130.636025 Days

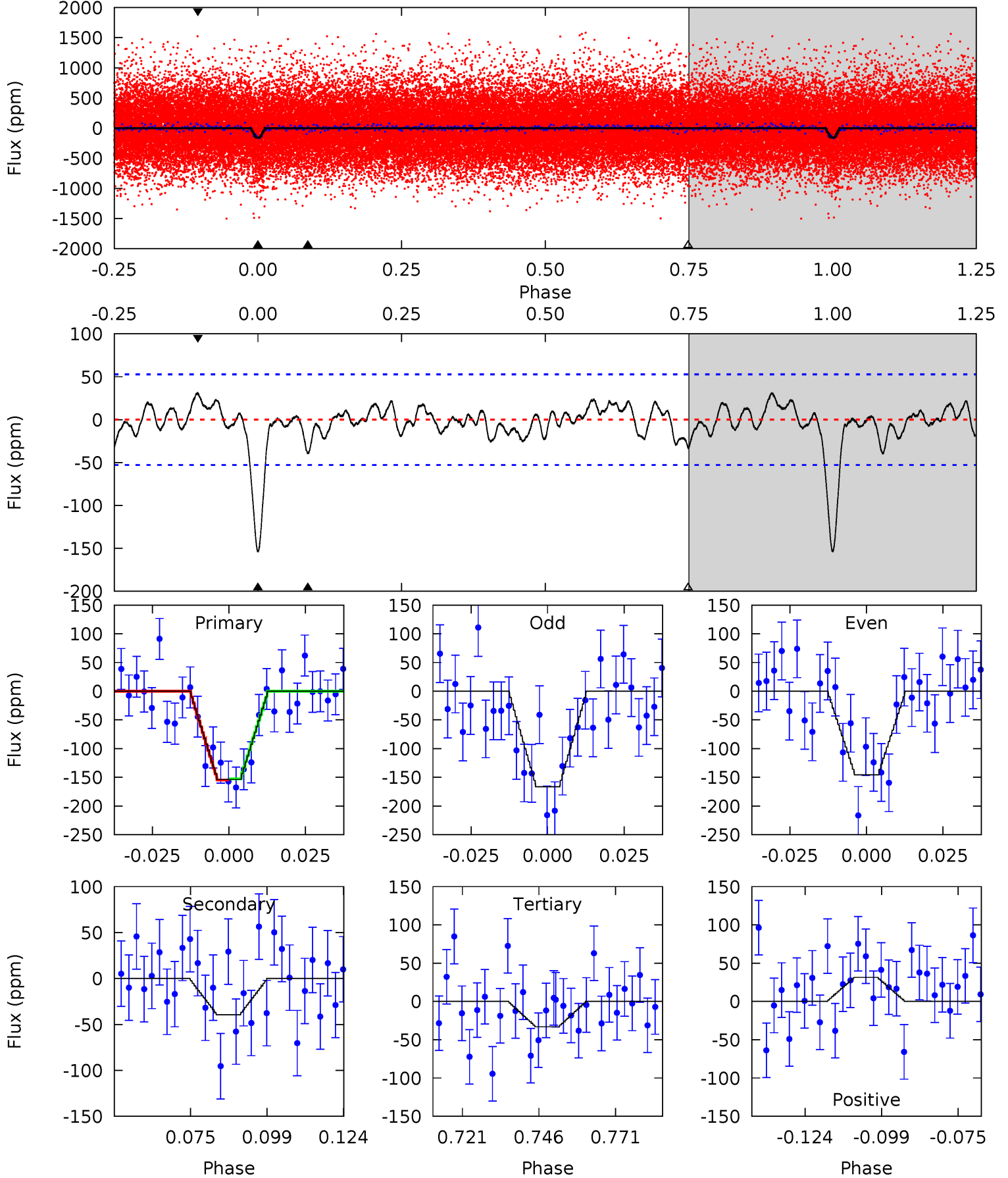
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	3.22	3.05	1.95	4.83	2.21	1.07	11.8	12.9	0.17	1.26	0.31	0.99	0.12	0.24



Alt Model-Shift Uniqueness Test

006187508-01, P = 2.284952 Days, E = 130.635678 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	3.62	3.03	2.88	4.85	2.24	1.18	11.1	11.2	0.58	0.73	0.95	1.01	0.17	0.10



Stellar Parameters For KIC 006187508

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5396^{+159}_{-159}	$4.571^{+0.040}_{-0.112}$	$-0.160^{+0.300}_{-0.300}$	$0.789^{+0.143}_{-0.071}$	$0.845^{+0.087}_{-0.087}$	$2.427^{+0.496}_{-0.853}$
	+3%/-3%	+1%/-2%	+188%/-188%	+18%/-9%	+10%/-10%	+20%/-35%
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 006187508-01 / KOI 6672.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-33 ± 10	$1.48^{+1.24}_{-0.94}$	1675^{+71}_{-71}	3576^{+1625}_{-674}	$8.148^{+53.394}_{-5.766}$
Alt.	-39 ± 11	$1.41^{+1.21}_{-0.90}$	1669^{+81}_{-66}	3764^{+1842}_{-735}	12^{+71}_{-9}

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

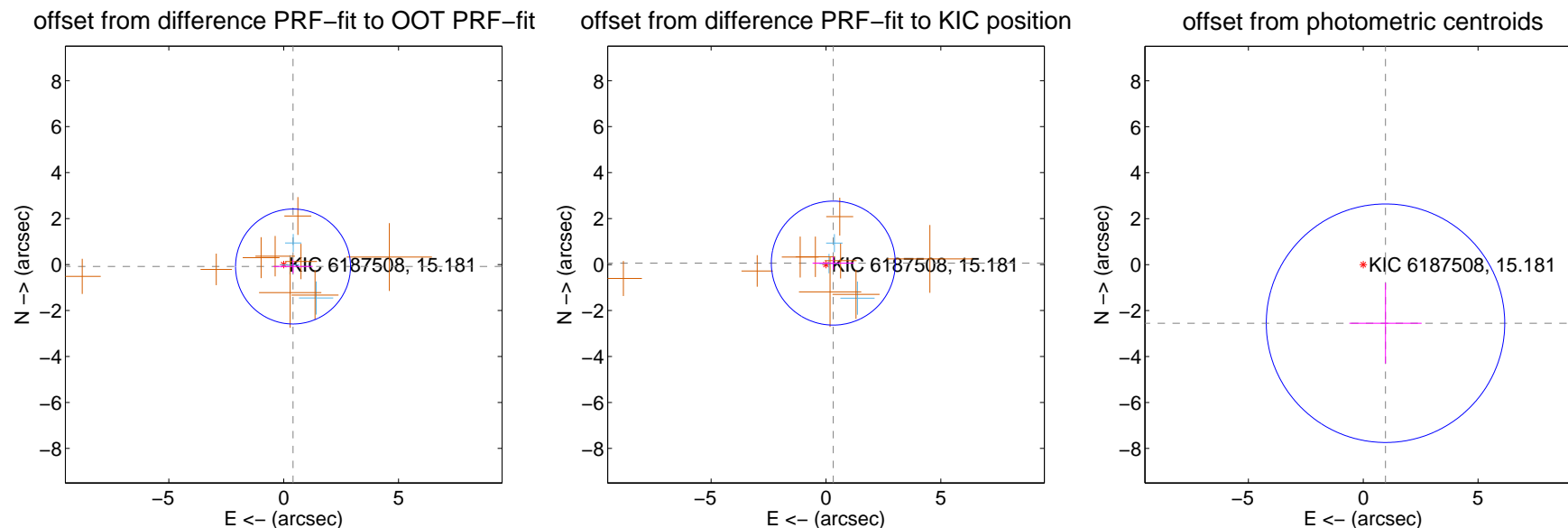
DV Centroid Data

Supplemental centroid analysis for 006187508-01. Kepler magnitude: 15.18. Transit SNR 9.25

There are 3 quarters with good PRF difference image offsets

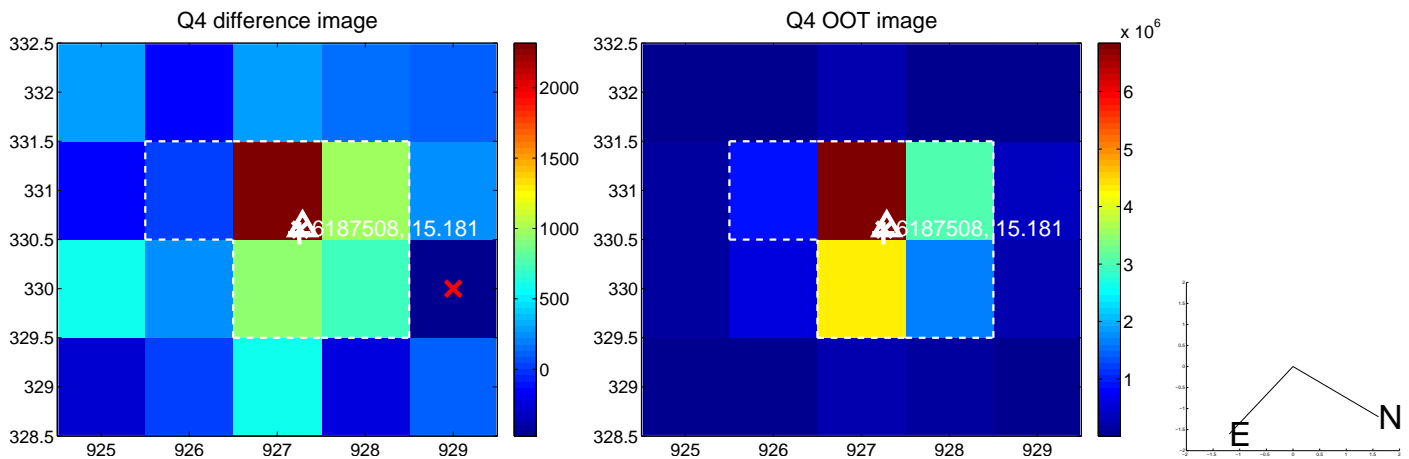
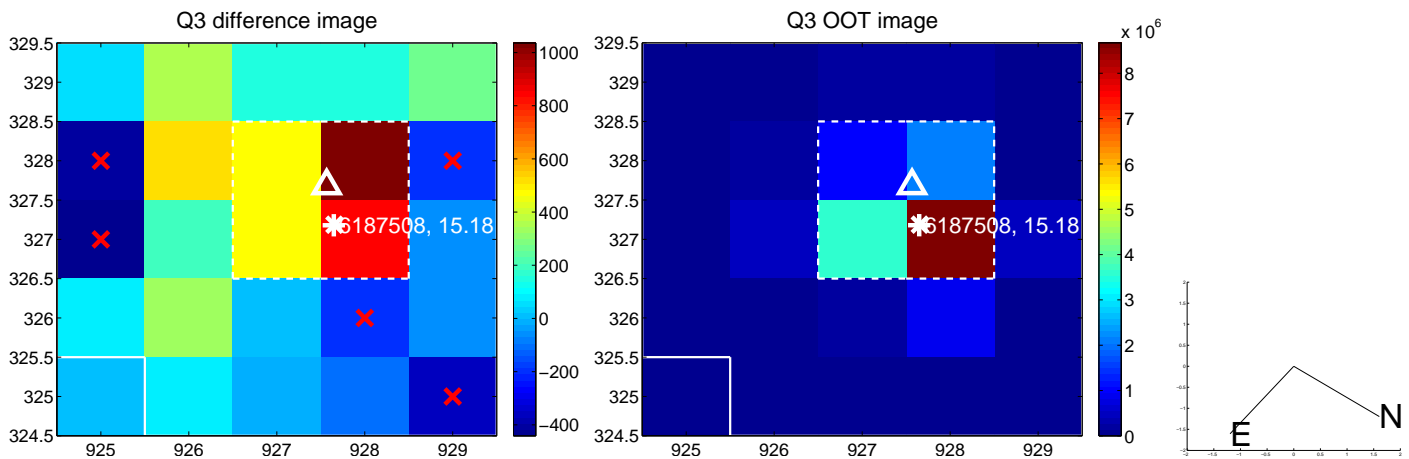
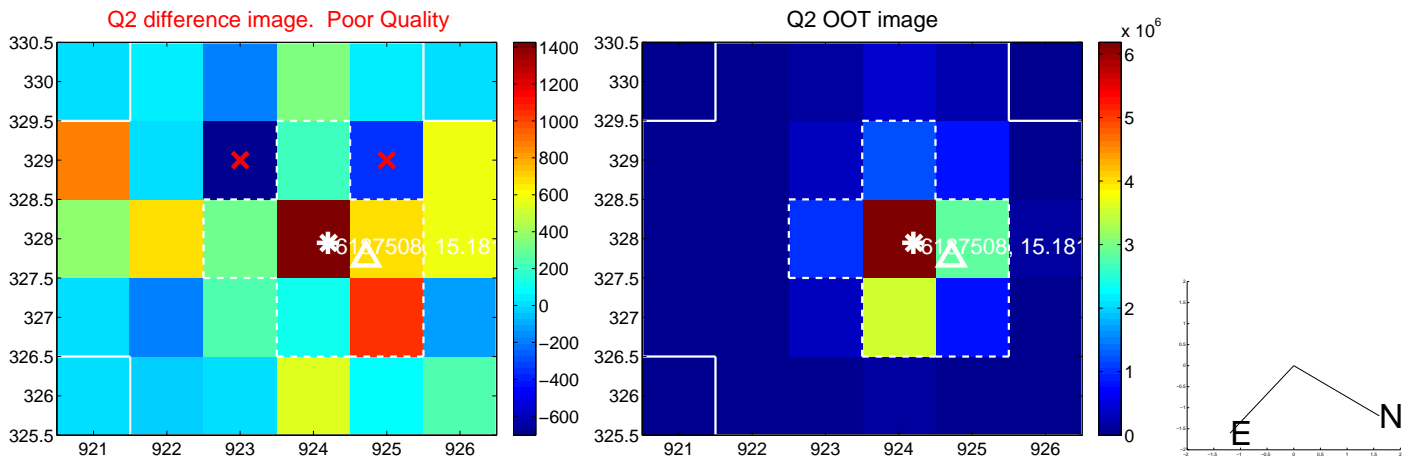
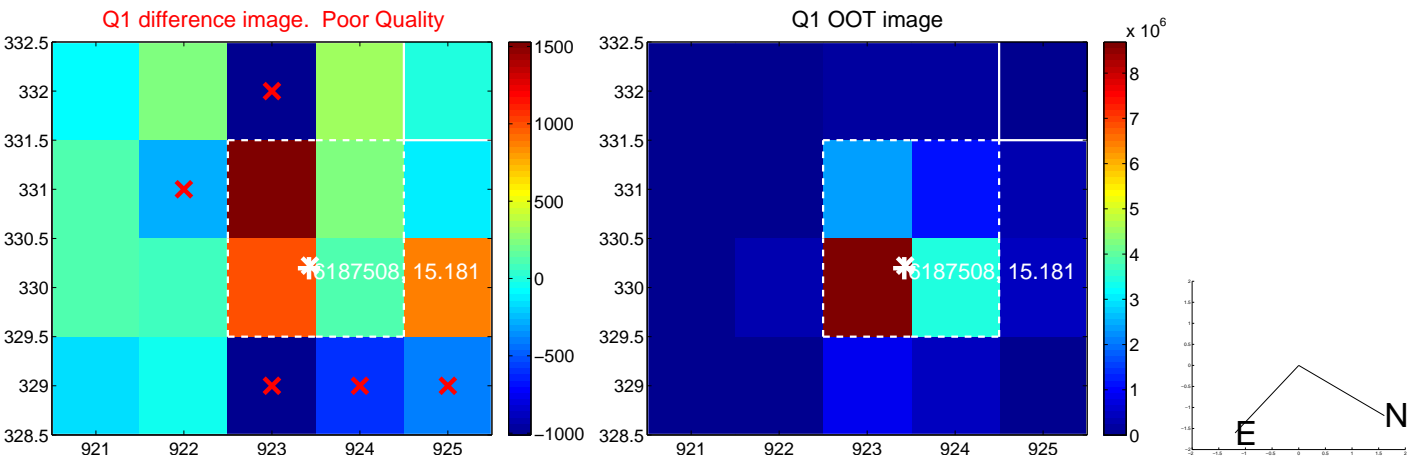
The direct PRF centroid is offset from the target star catalog position by about 0.05 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.416 ± 0.834	0.50	-0.407 ± 0.853	-0.085 ± 0.300
PRF-fit source offset from KIC position	0.325 ± 0.899	0.36	-0.319 ± 0.899	0.063 ± 0.280
photometric centroid source offset	2.73 ± 1.73	1.58	-0.97 ± 1.57	-2.55 ± 1.75

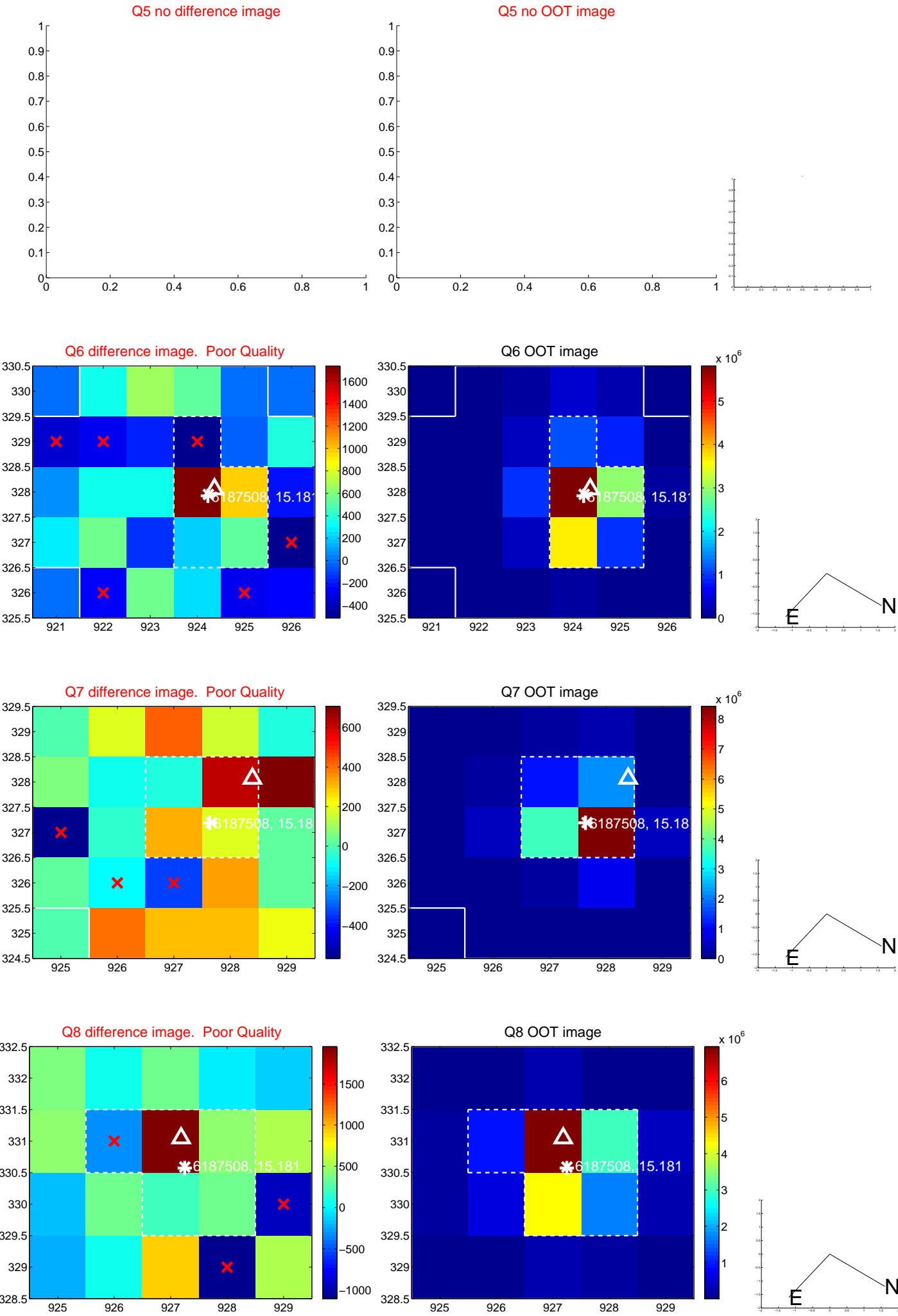


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

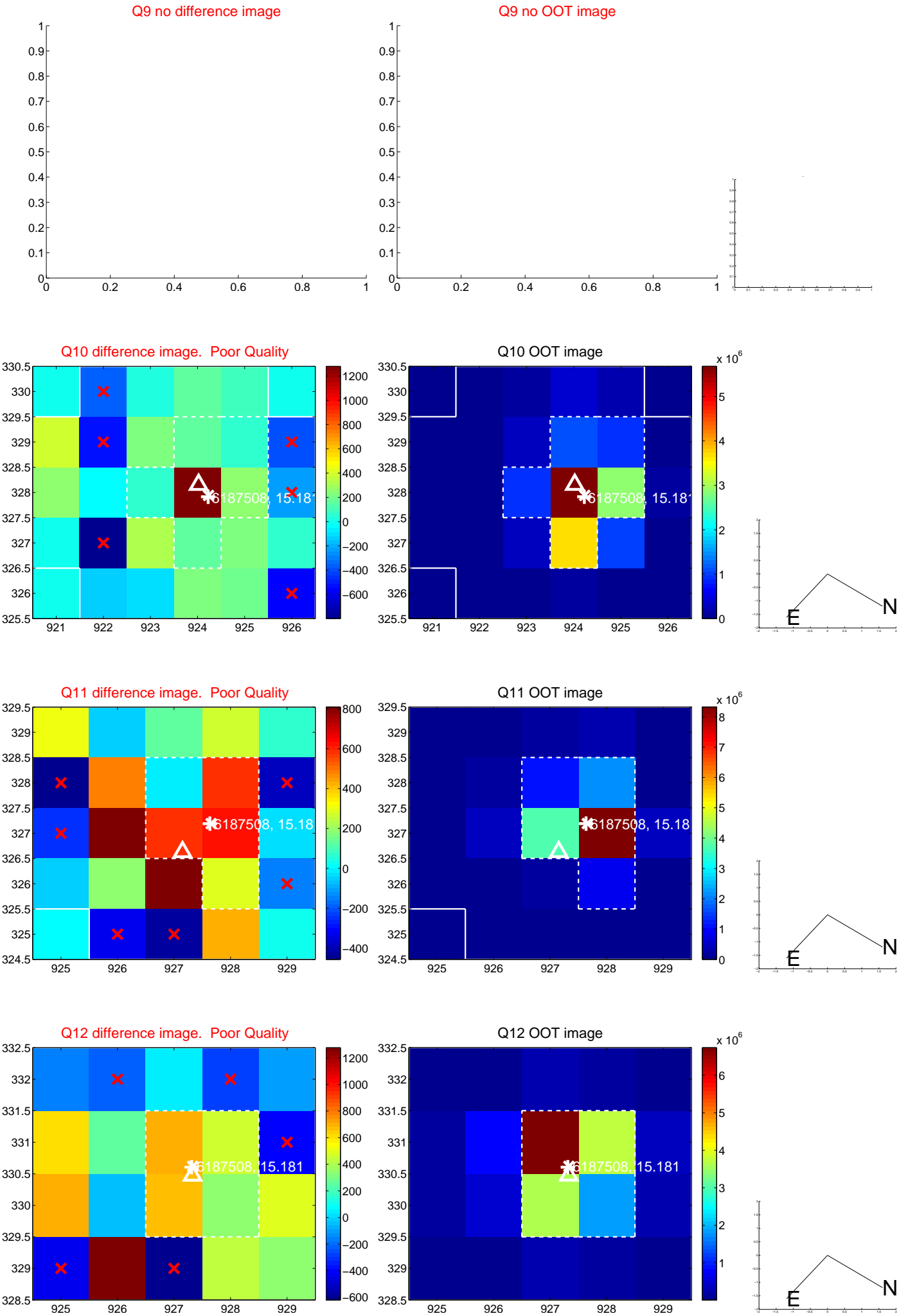
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



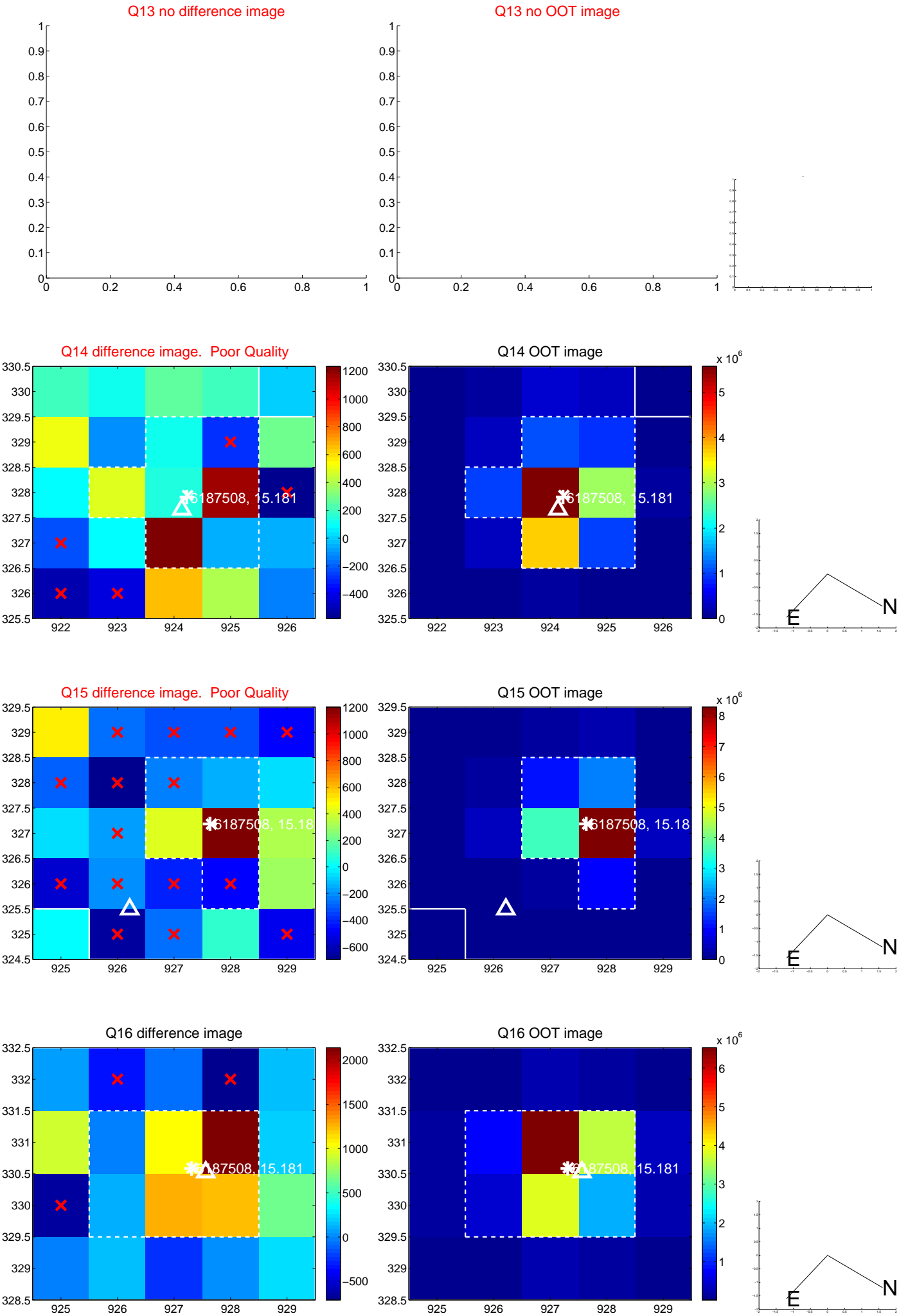
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



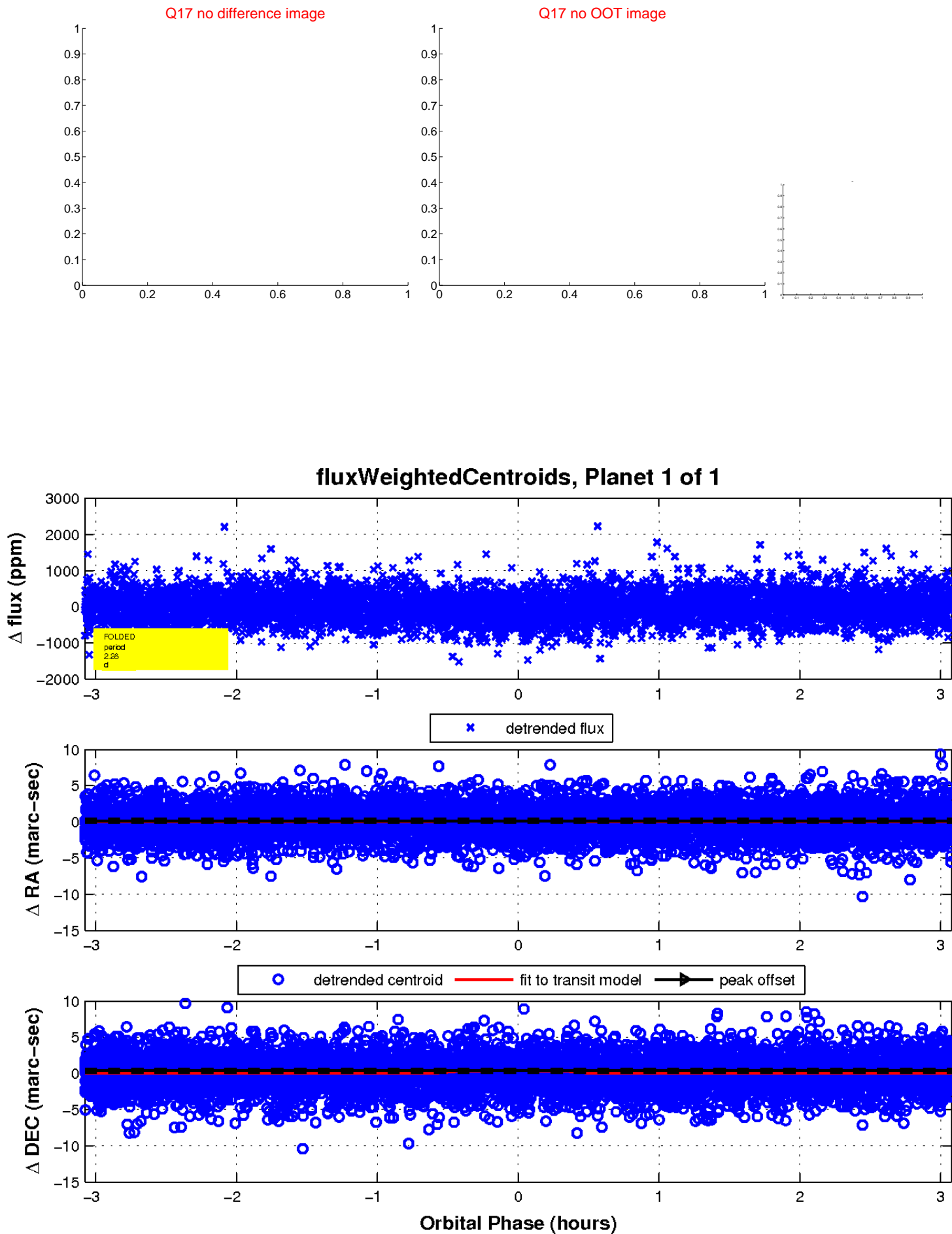
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

