

KIC 011922782

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})
011922782-01	OBS	7495.01	1.756469	132.029576	138107.3	4.169	21226.6	6358.4	1.47	5726	55.93	2662.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011922782-01	OBS	FP	0.00	0	1	0	0	DEPTH_ODDEVEN_DV—DEPTH_ODDEVEN_ALT—MOD_ODDEVEN_DV—MOD_ODDEVEN_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.

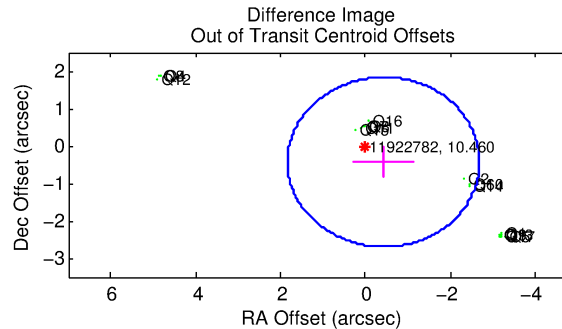
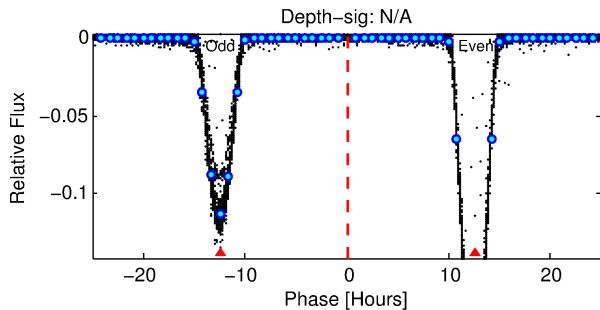
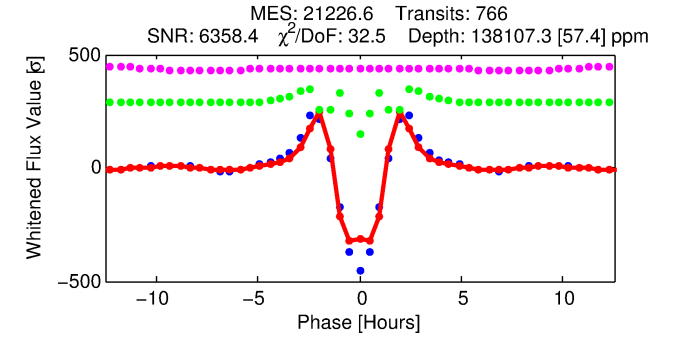
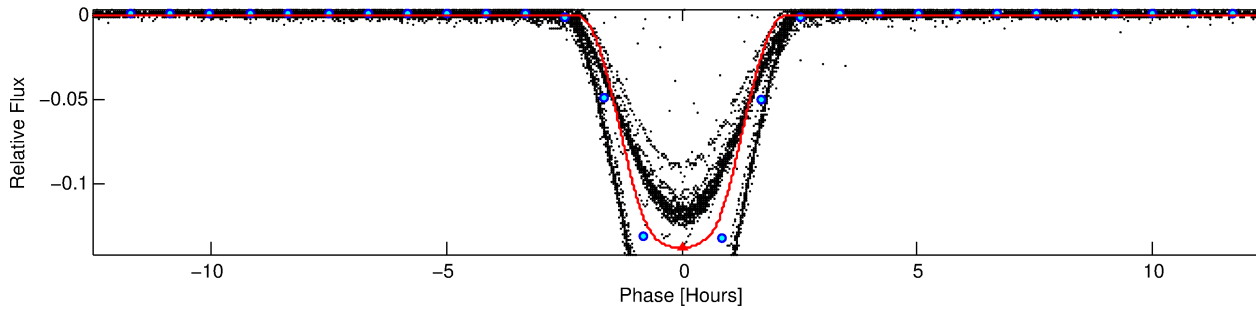
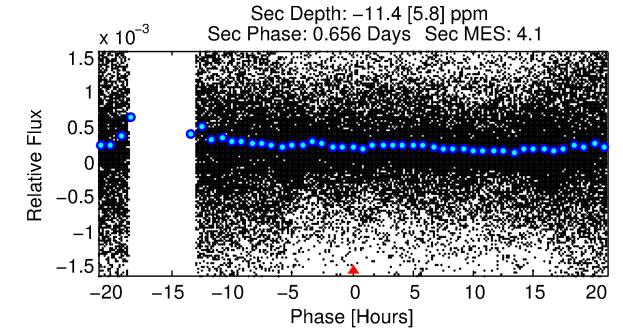
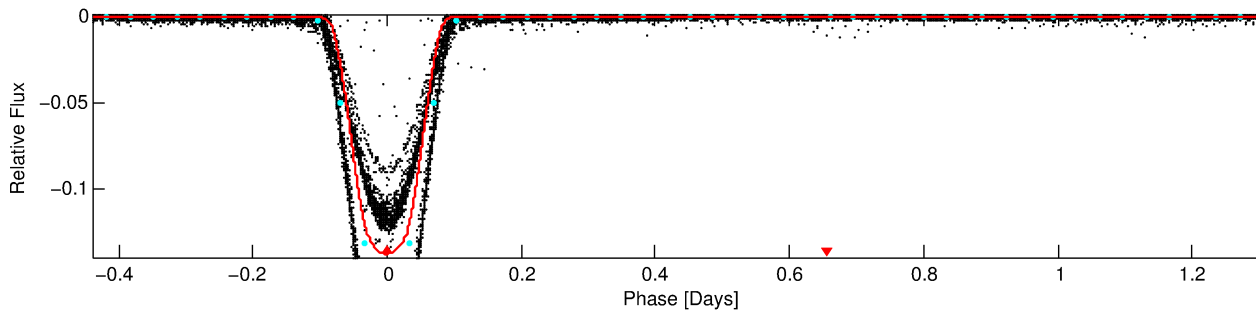
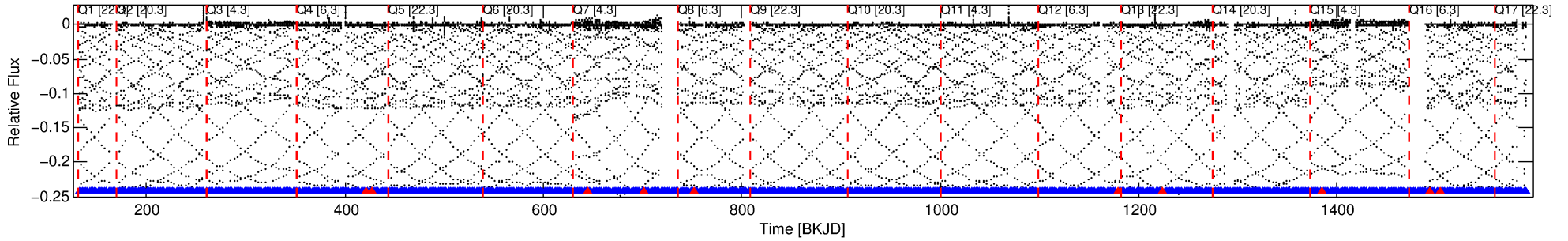
Ephemeris Match Information For 011922782-01

No Significant Match Found

DV One-Page Summary

KIC: 11922782 Candidate: 1 of 1 Period: 1.756 d
KOI: K07495.01 Corr: 0.935

Kp: 10.46 R*: 1.47 Rs Teff: 5726.0 K Logg: 4.08 Fe/H: -0.180



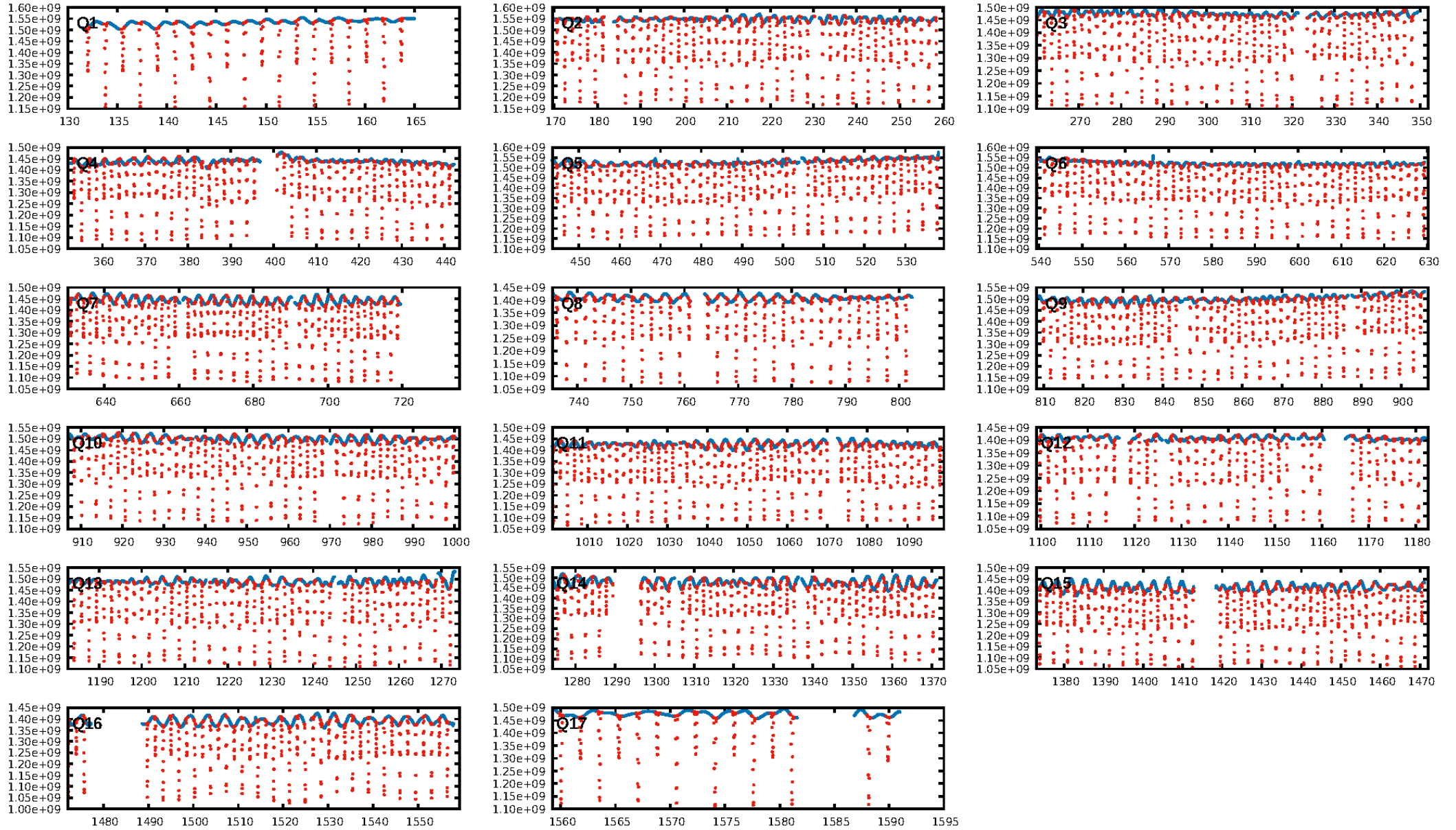
DV Fit Results:

Period = 1.75647 [0.00000] d
Epoch = 132.0296 [0.0000] BKJD
Rp/R* = 0.3498 [0.0001]
a/R* = 4.19 [0.00]
b = 0.44 [0.00]
Seff = 2662.79 [1020.37]
Teff = 1832 [175] K
Rp = 55.93 [13.29] Re
a = 0.0279 [0.0065] AU
Ag = N/A
Teffp = N/A

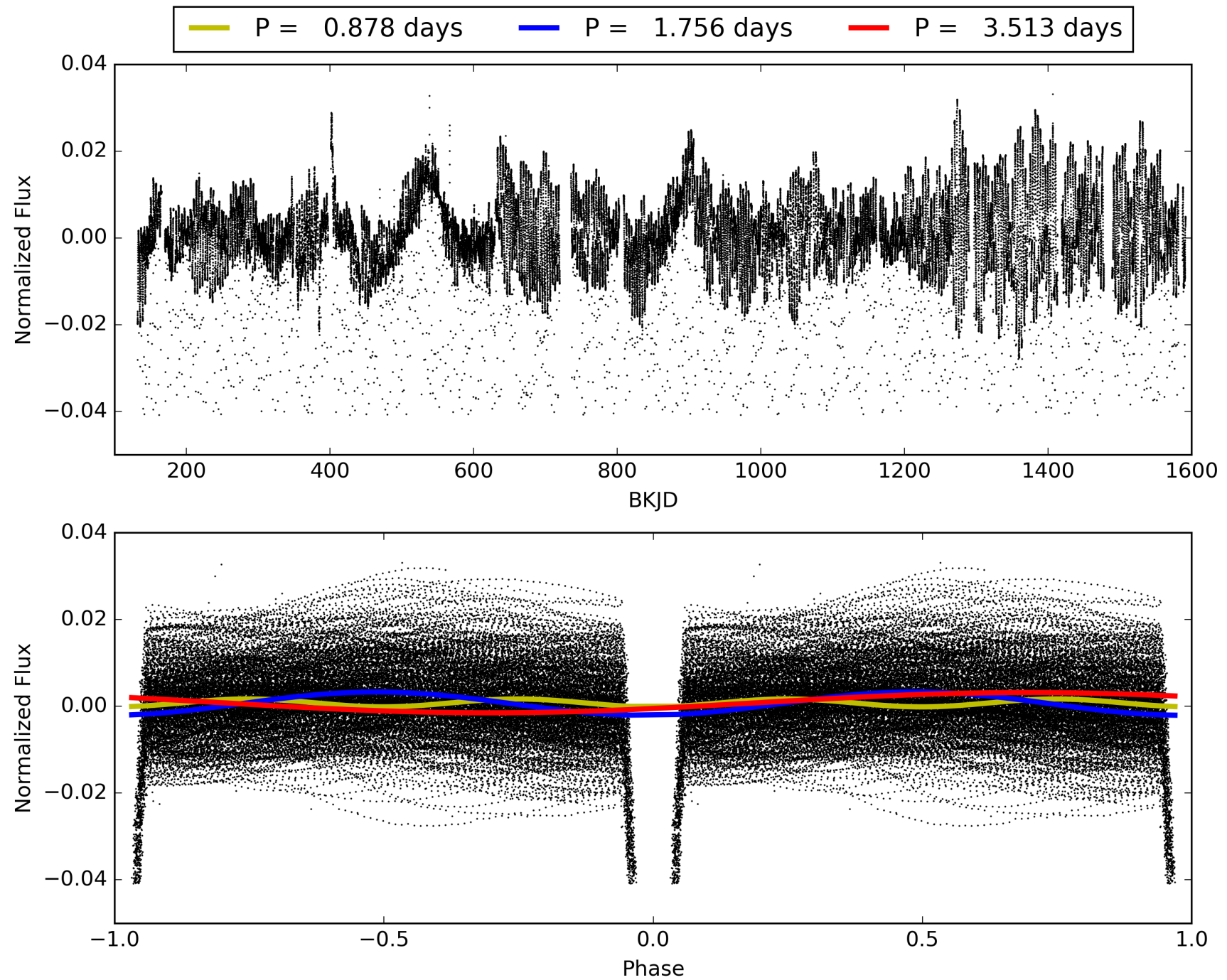
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [722/732]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 0.560 arcsec [1629.55σ]
OotOffset-rm: 0.610 arcsec [0.81σ]
KicOffset-rm: 0.931 arcsec [1.39σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.47 [8/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 011922782-01, PDC Light Curves

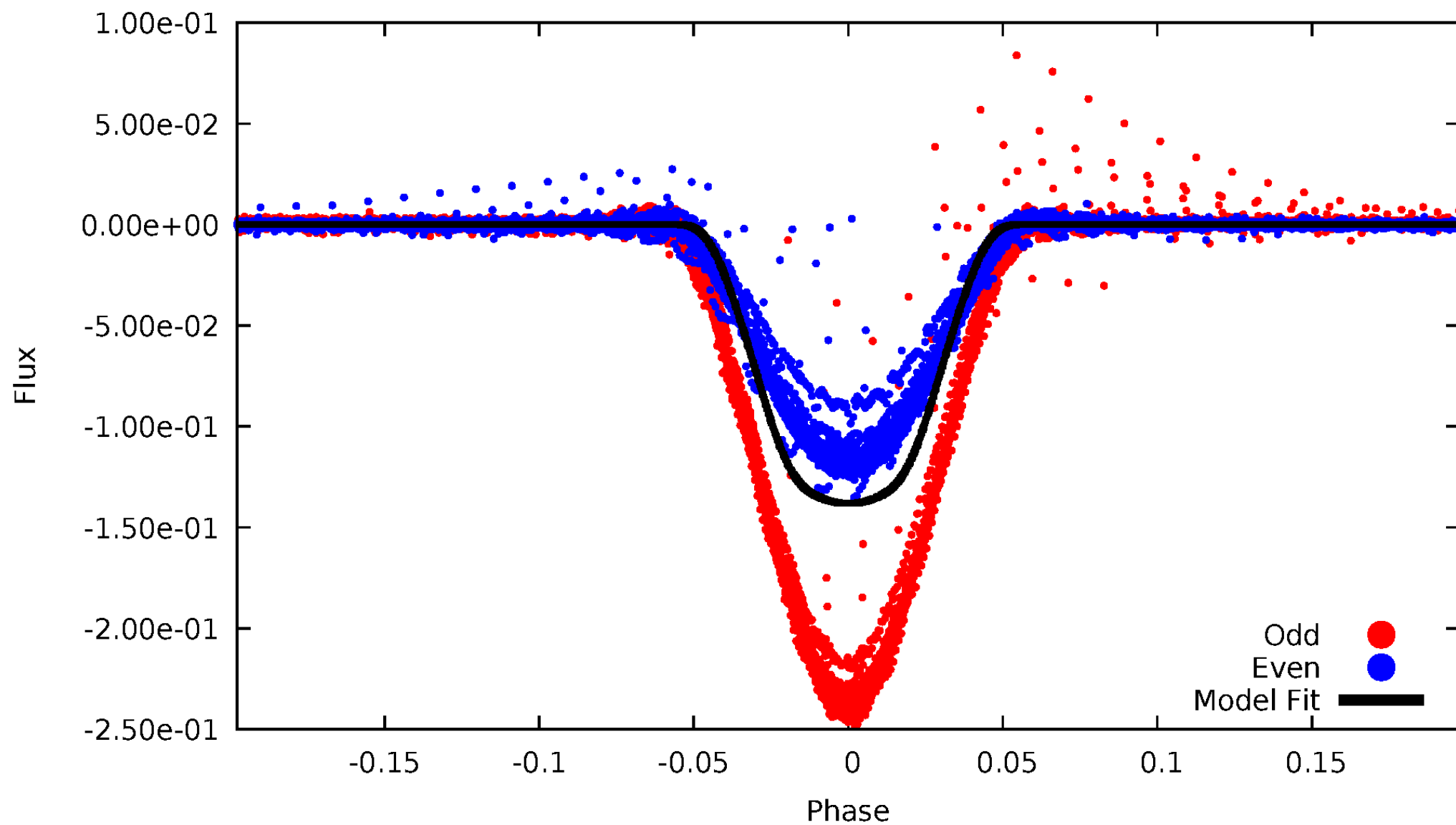


TCE 011922782-01



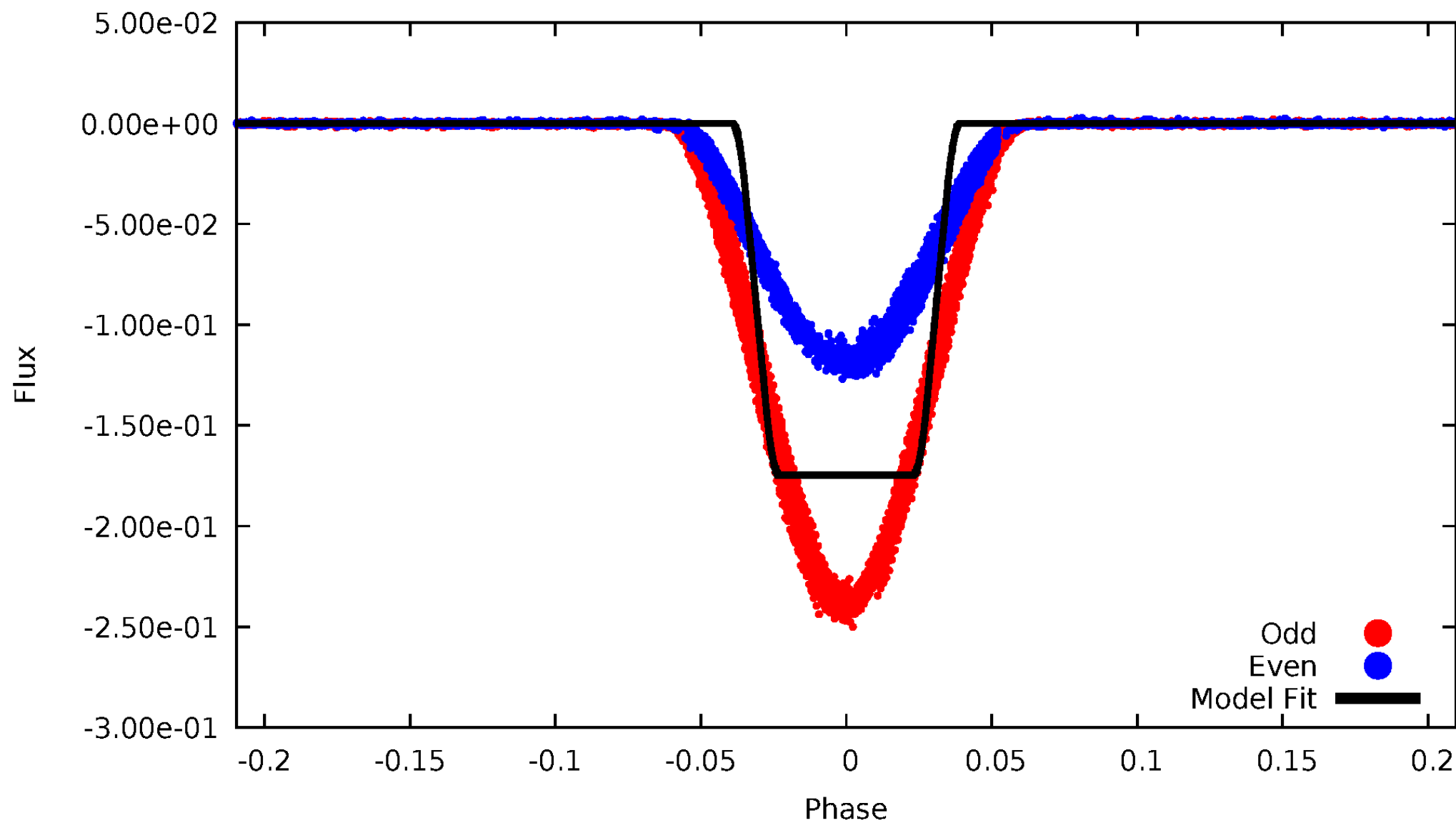
DV Odd/Even

TCE 011922782-01



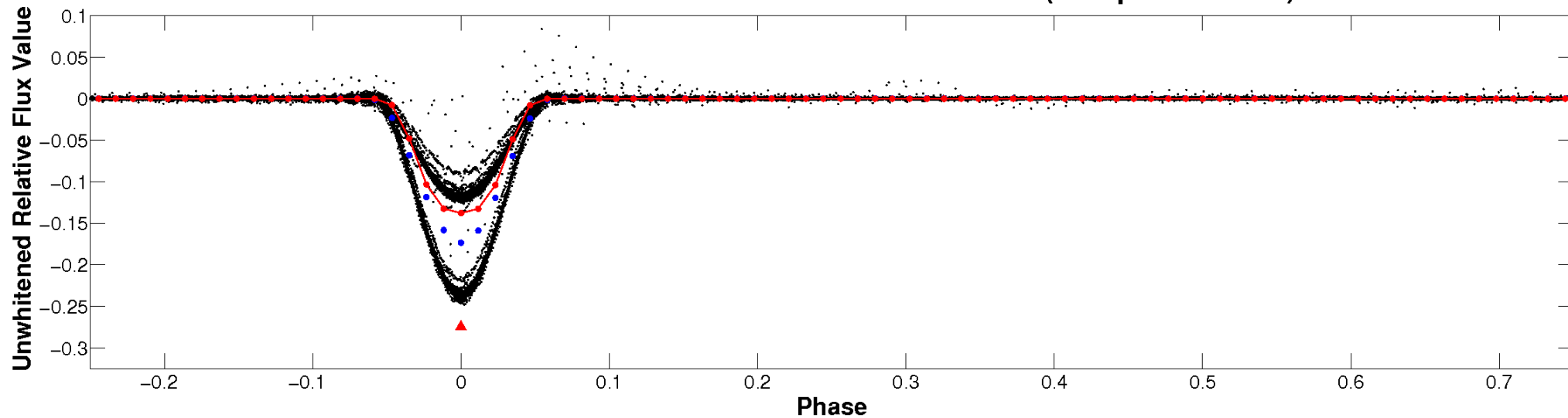
ALT Odd/Even

TCE 011922782-01

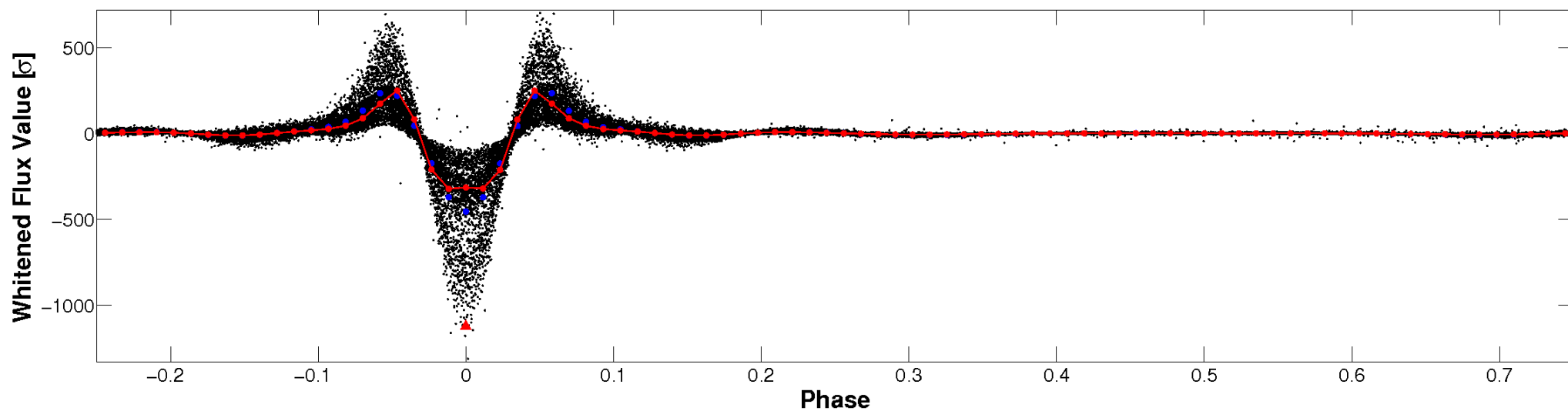


Non-Whitened Vs. Whitened Light Curve

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

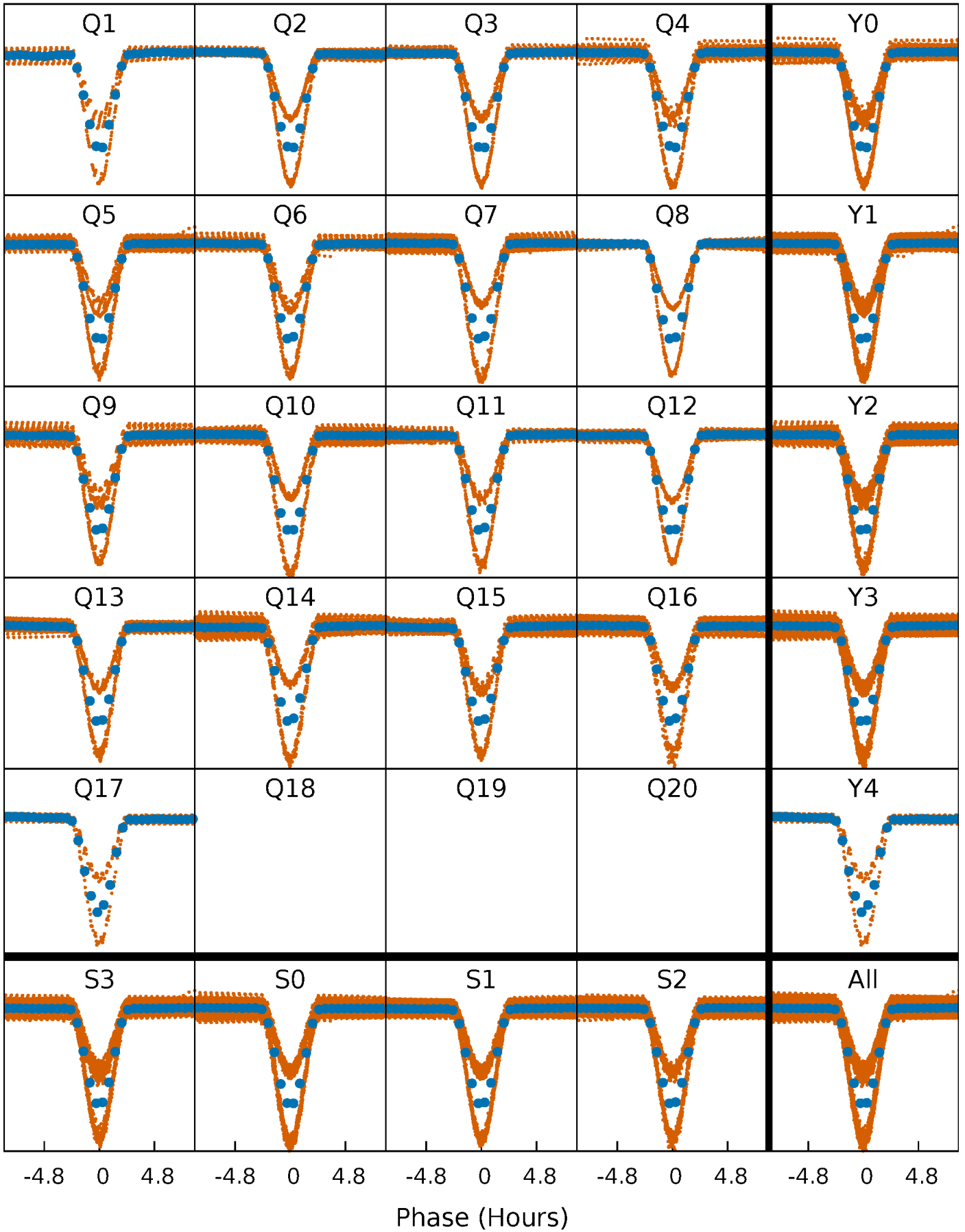


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



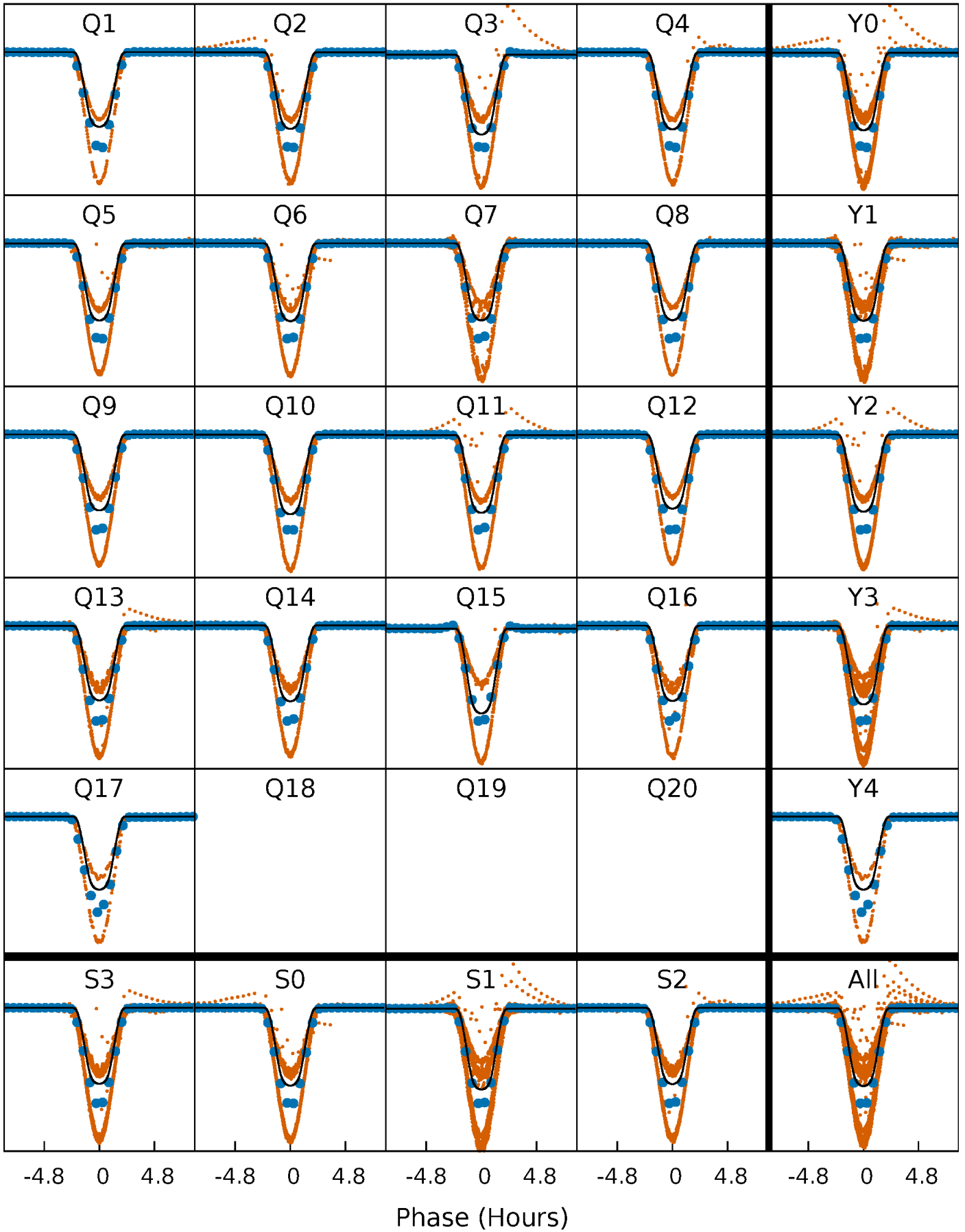
PDC Quarter-Phased Transit Curves

TCE 011922782-01 P= 1.756469 Days $T_0=132.029576$ (BKJD)



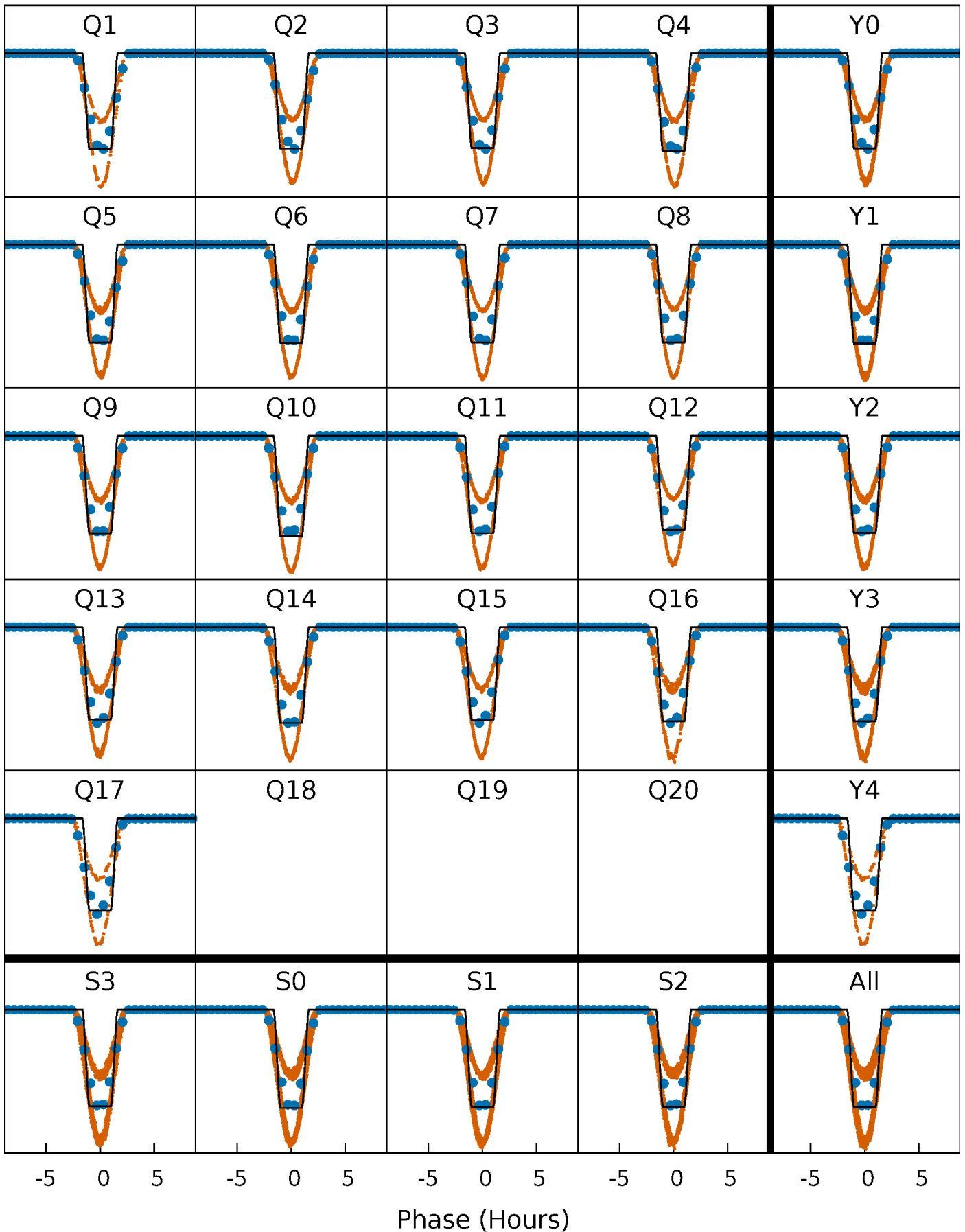
DV Quarter-Phased Transit Curves

TCE 011922782-01 P= 1.756469 Days $T_0=132.029576$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

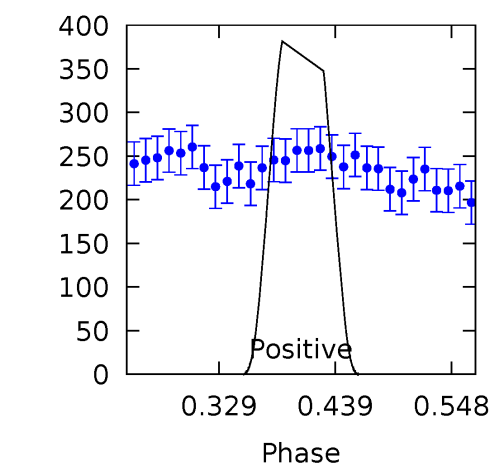
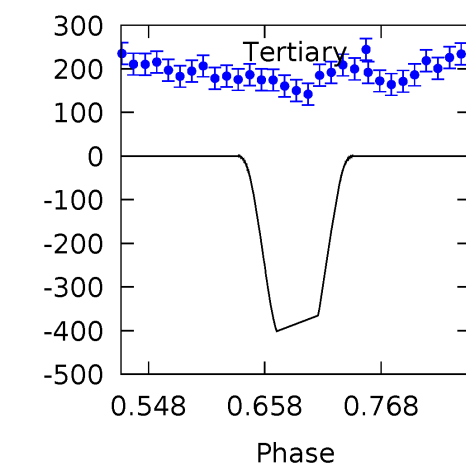
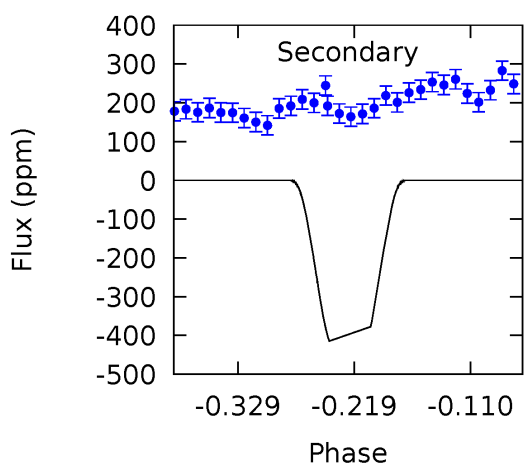
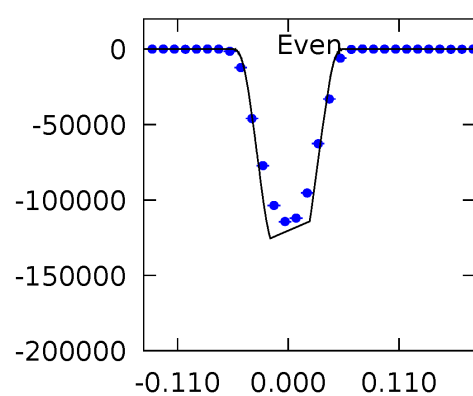
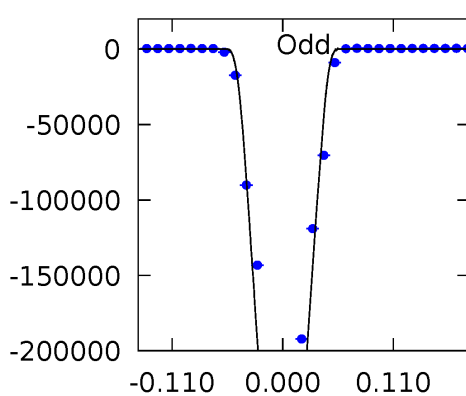
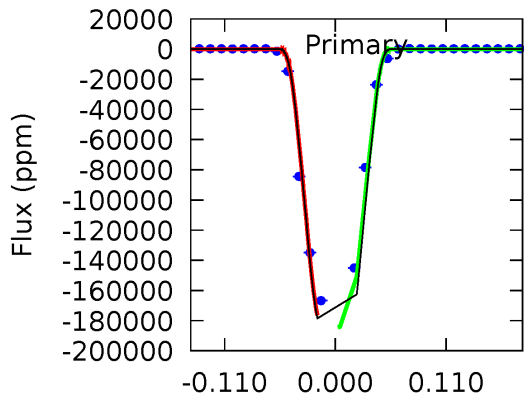
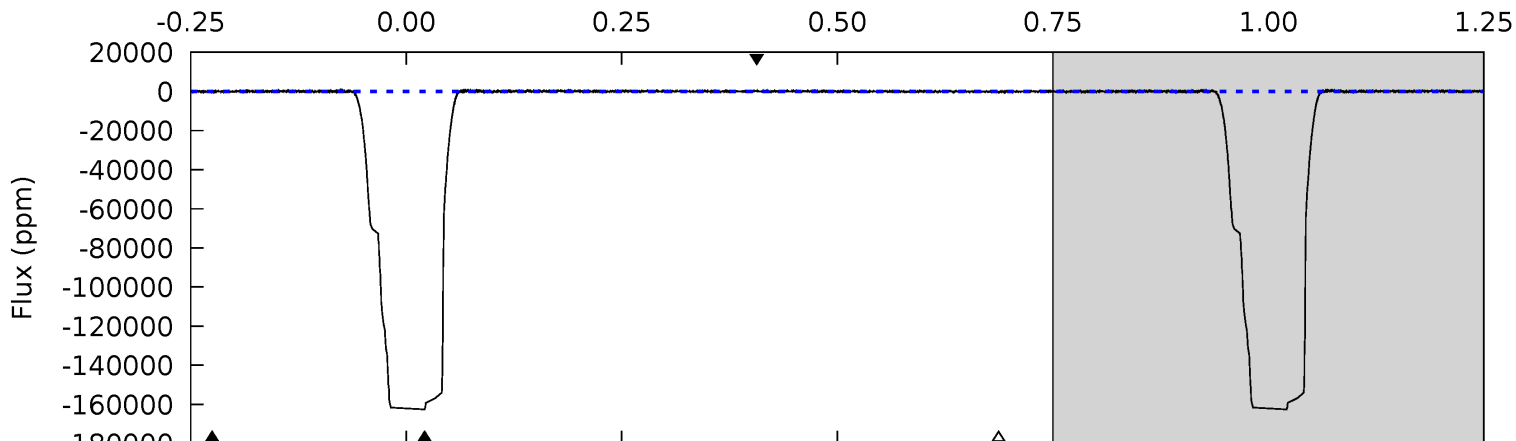
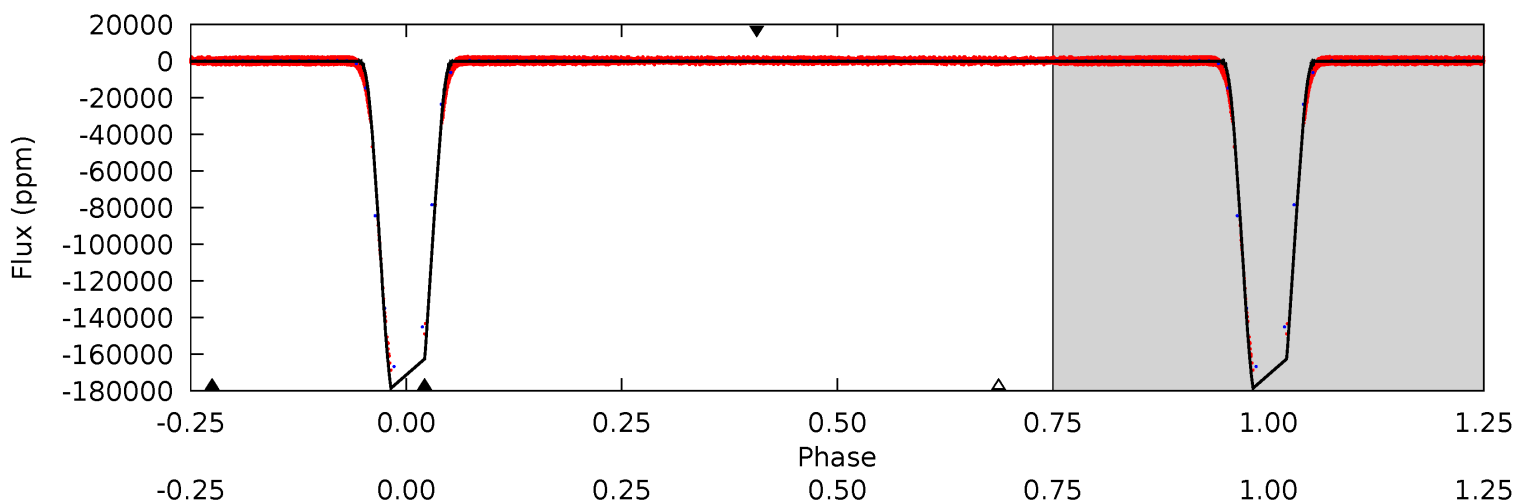
TCE 011922782-01 P= 1.756480 Days $T_0=132.024896$ (BKJD)



DV Model-Shift Uniqueness Test

011922782-01, P = 1.756469 Days, E = 130.273107 Days

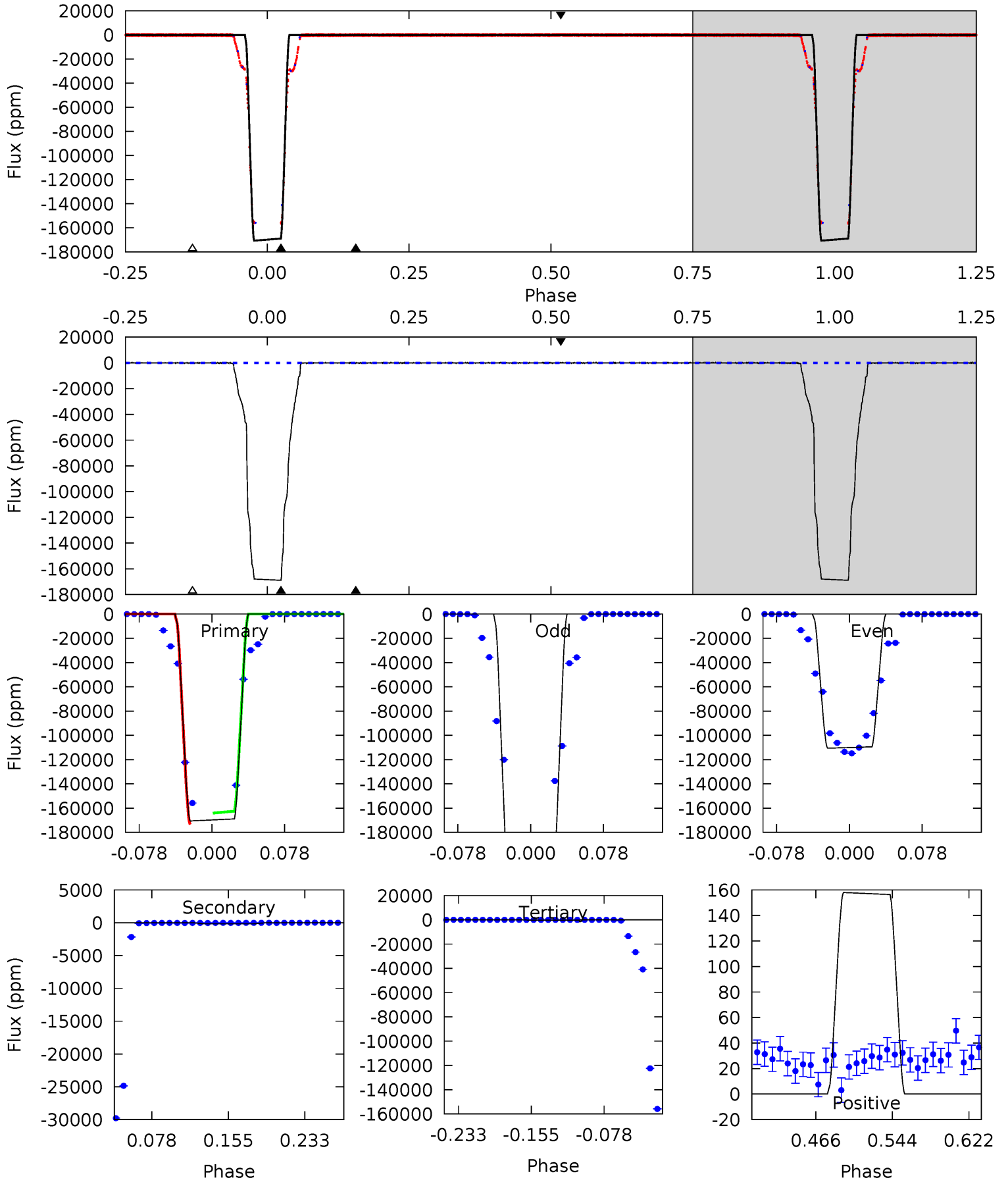
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6984	16.2	15.7	14.9	4.55	1.60	4.68	6968	6969	0.51	1.29	4115	1.20	0.00	0



Alt Model-Shift Uniqueness Test

011922782-01, P = 1.756480 Days, E = 130.268416 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4854	4.78	5.09	4.49	4.62	1.76	5.94	4848	4849	-0.32	0.28	5282	0.79	0.00	0



Stellar Parameters For KIC 011922782

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5726^{+85}_{-68}	$4.077^{+0.224}_{-0.096}$	$-0.180^{+0.150}_{-0.100}$	$1.465^{+0.232}_{-0.348}$	$0.935^{+0.071}_{-0.071}$	$0.419^{+0.475}_{-0.142}$
	+1%/-1%	+5%/-2%	+83%/-56%	+16%/-24%	+8%/-8%	+114%/-34%
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 011922782-01 / KOI 7495.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-377 ± 23	$55.01^{+5.72}_{-6.85}$	2534^{+124}_{-155}	-2740^{+107}_{-85}	$0.053^{+0.016}_{-0.009}$
Alt.	-166 ± 35	$65.88^{+6.36}_{-8.38}$	2542^{+118}_{-177}	-2797^{+112}_{-76}	$0.017^{+0.006}_{-0.004}$

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 $A_{obs} \gg 1.0$

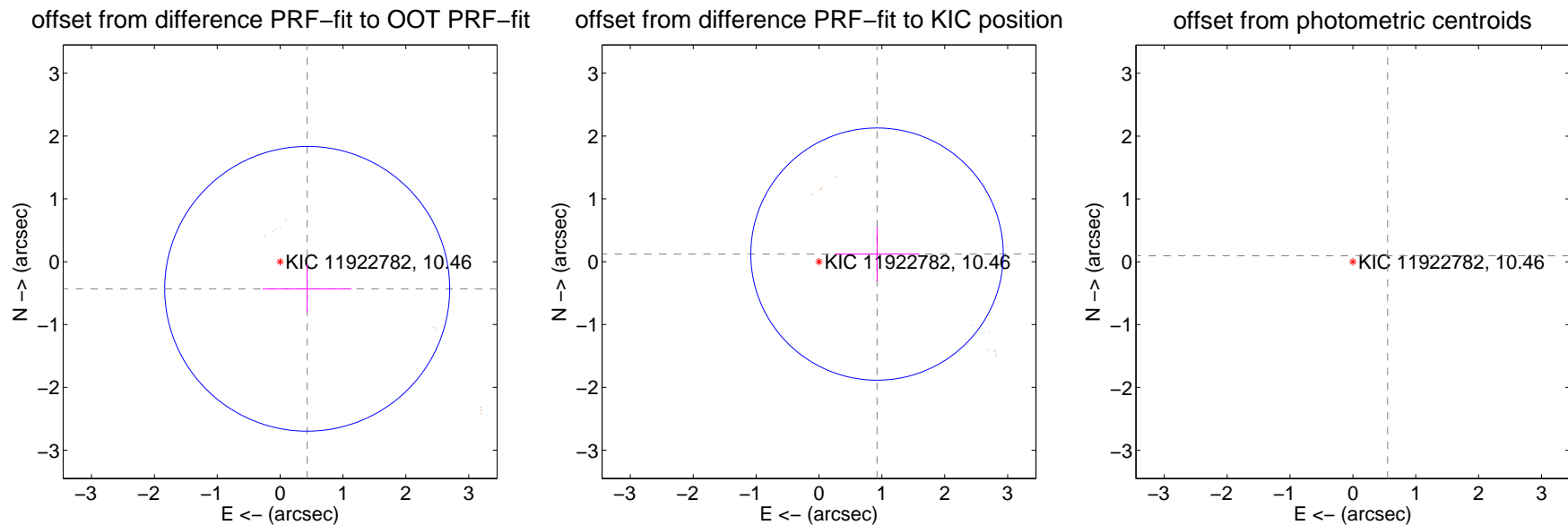
DV Centroid Data

Supplemental centroid analysis for 011922782-01. **Kepler magnitude: 10.46.** Transit SNR 6358.38

There are 8 quarters with good PRF difference image offsets

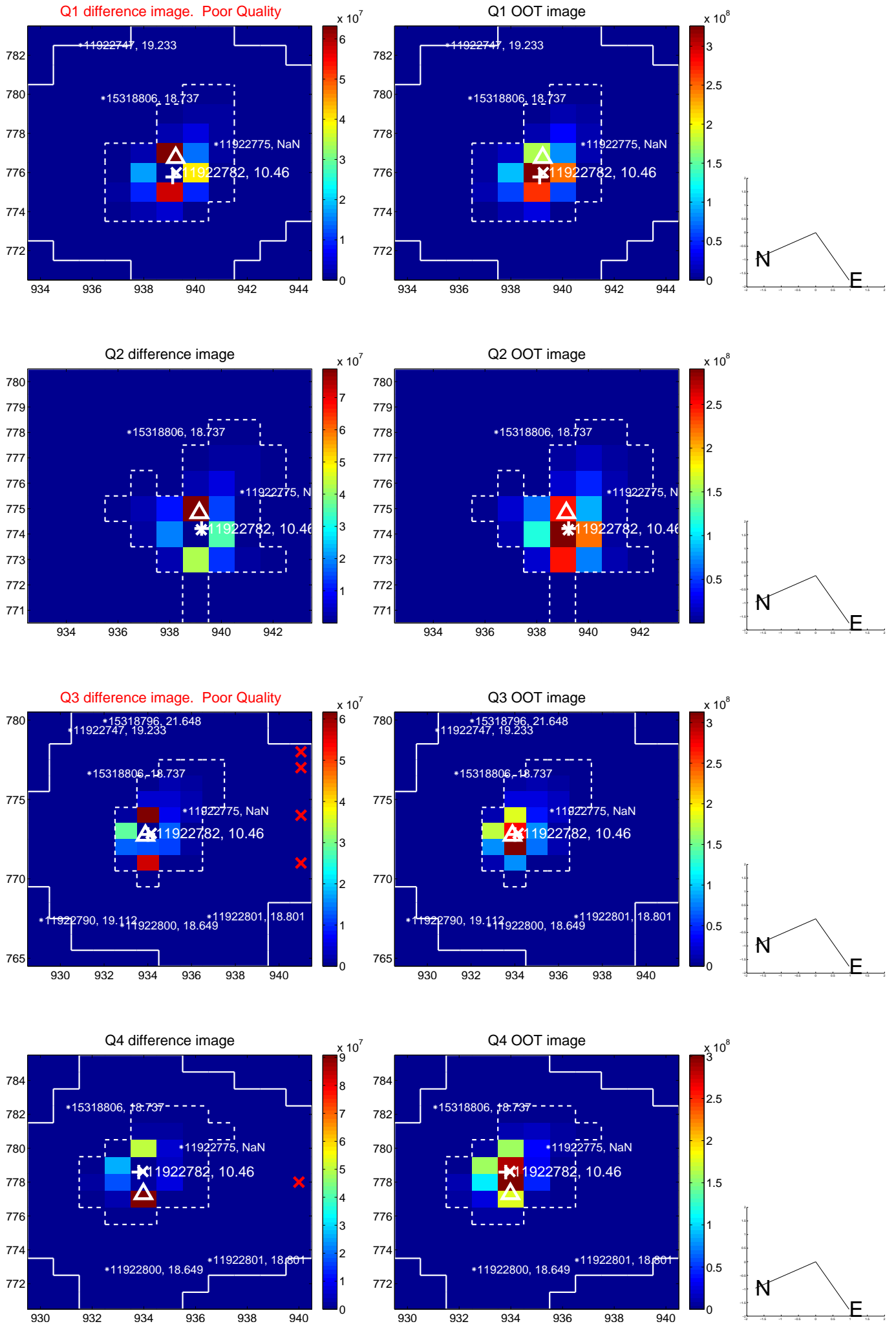
The direct PRF centroid is offset from the target star catalog position by about 1.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.610 ± 0.755	0.81	-0.431 ± 0.706	-0.431 ± 0.383
PRF-fit source offset from KIC position	0.931 ± 0.669	1.39	-0.923 ± 0.672	0.121 ± 0.436
photometric centroid source offset	0.56 ± 0.00	1629.55	-0.55 ± 0.00	0.10 ± 0.00

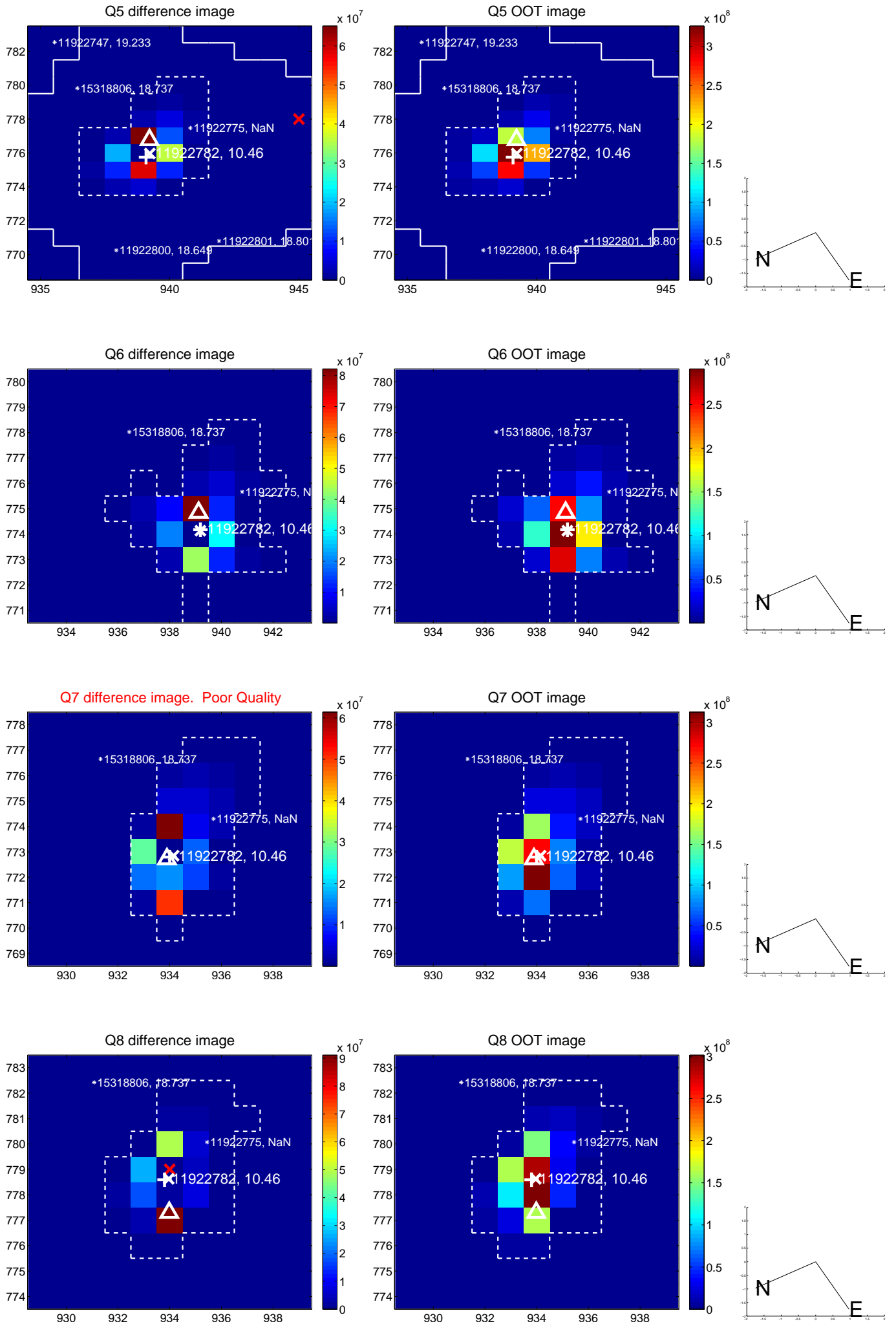


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

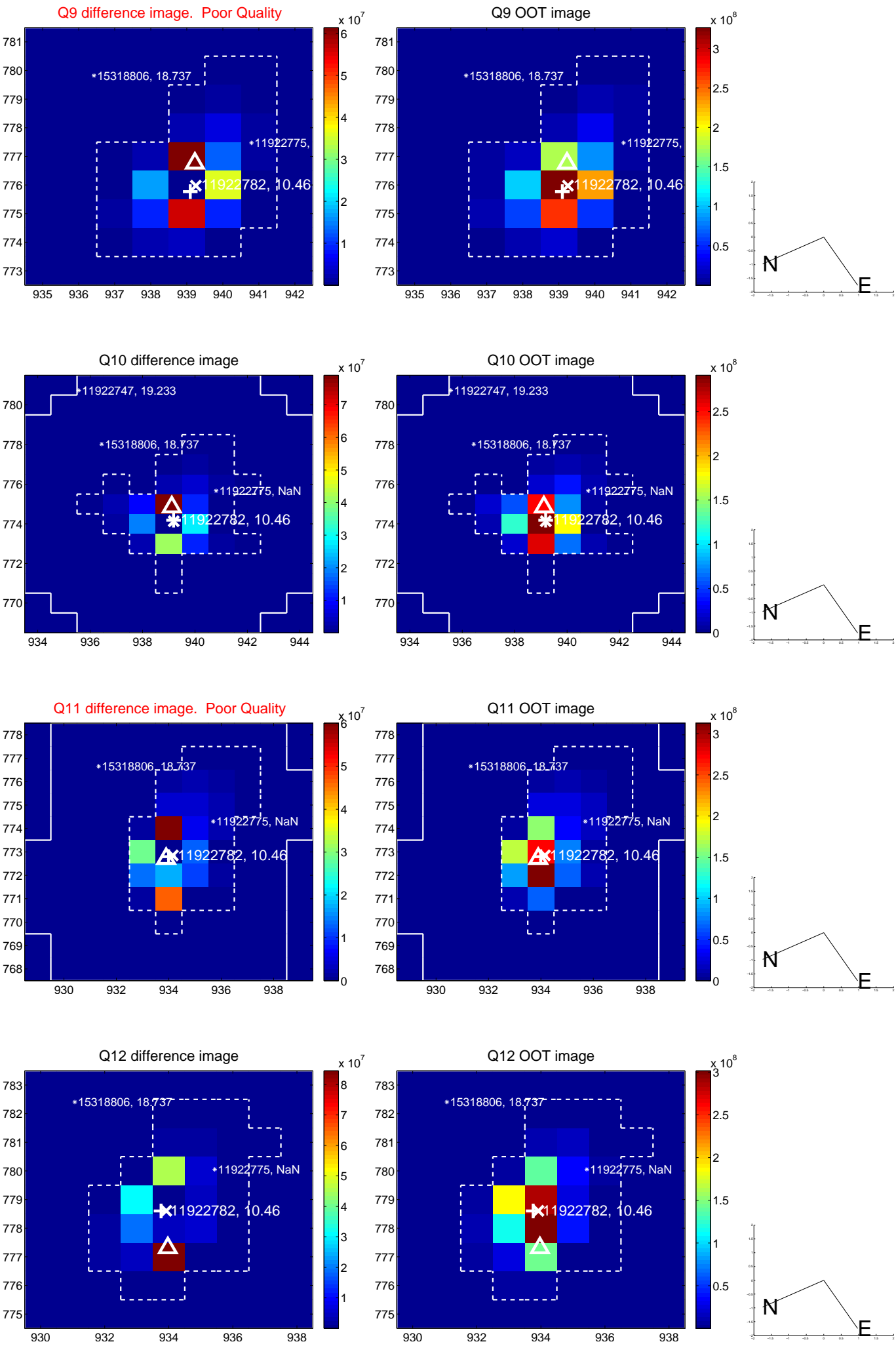
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



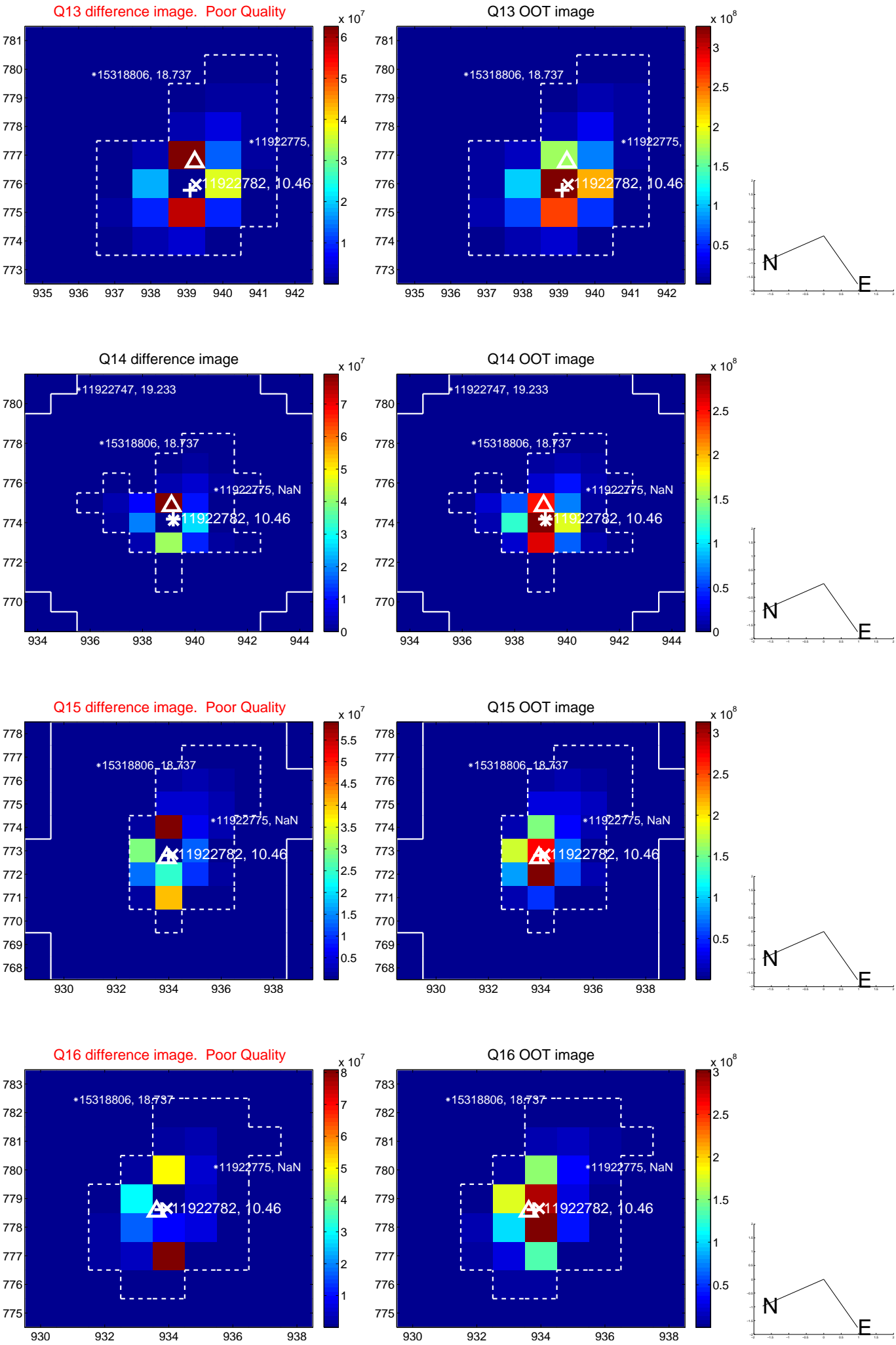
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



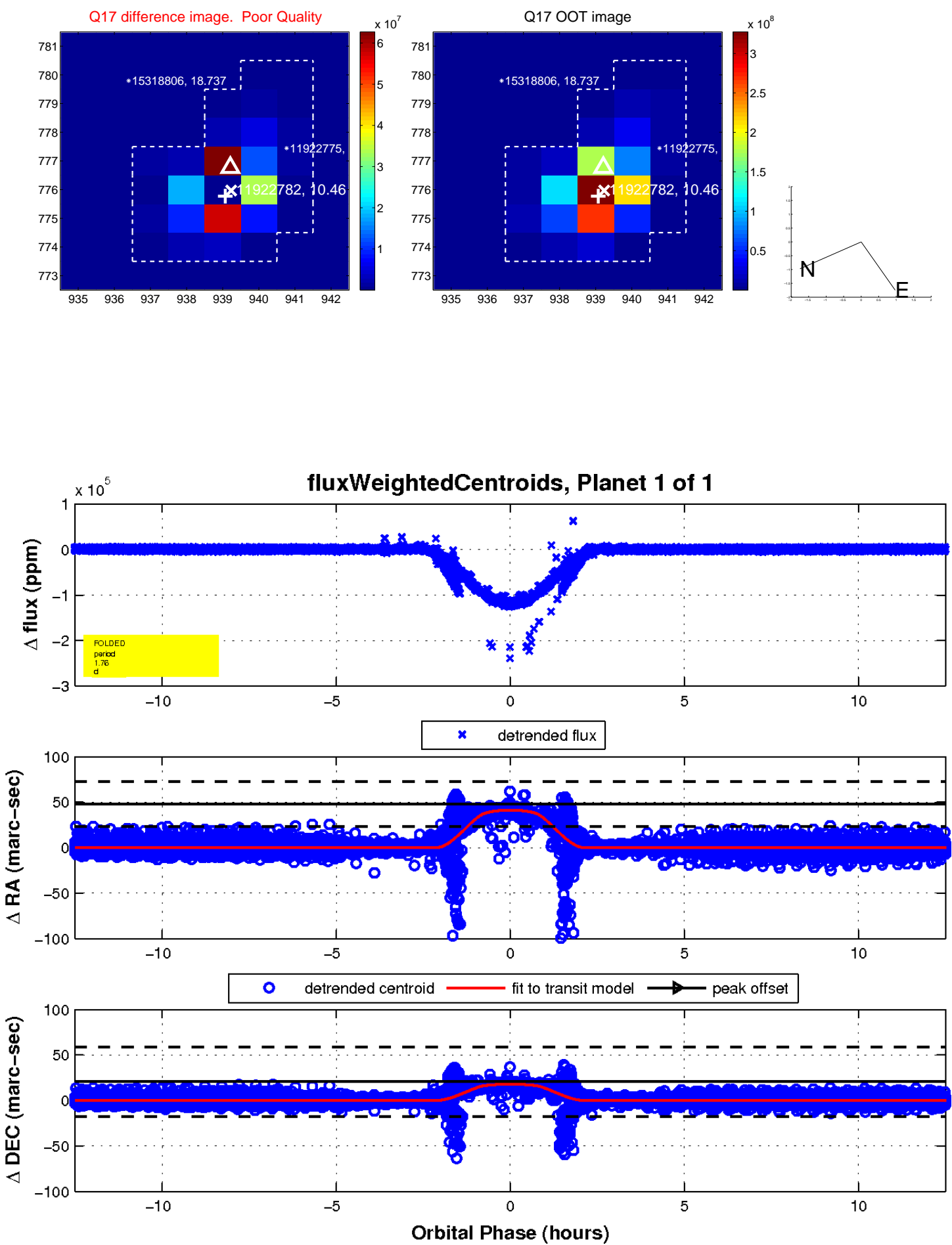
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

