

KIC 011519187

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})
011519187-01	OBS	4625.01	2.440833	133.841956	503.3	0.785	11.0	14.7	0.70	4803	1.97	224.28

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011519187-01	OBS	FP	0.49	0	0	1	0	CENT_RESOLVED_OFFSET

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

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

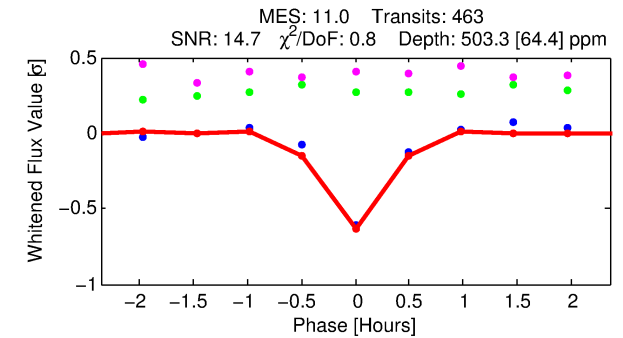
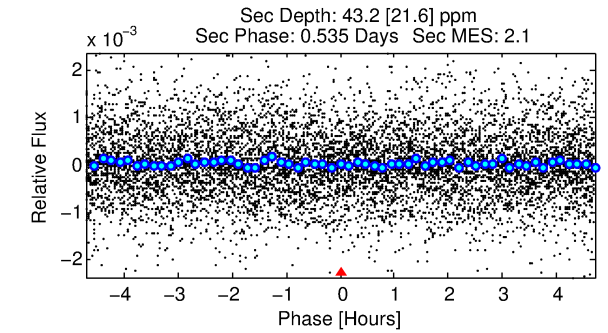
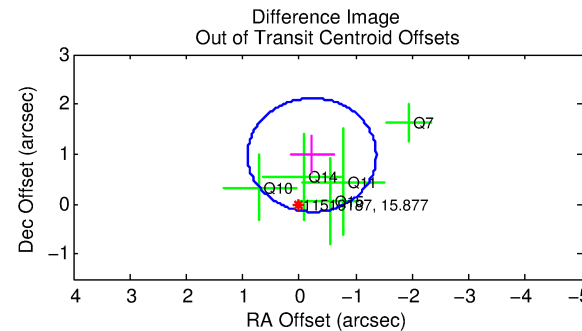
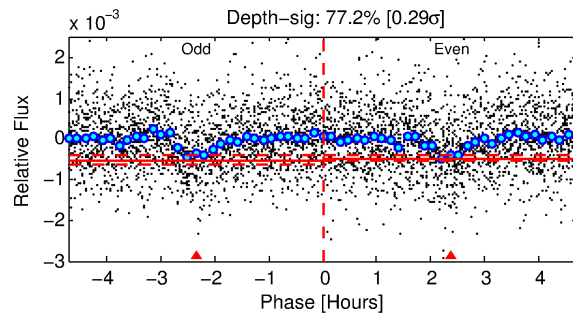
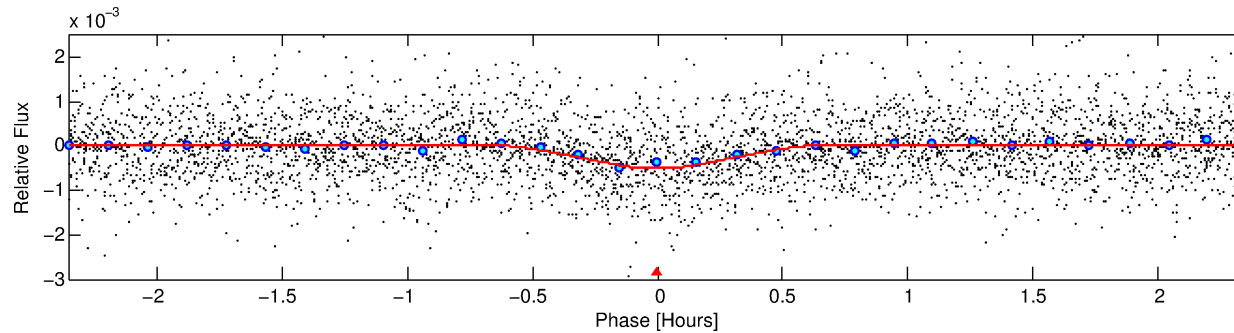
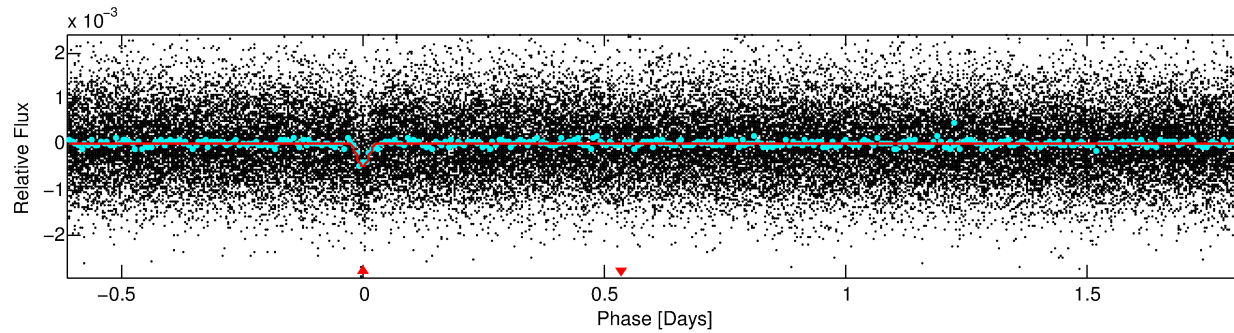
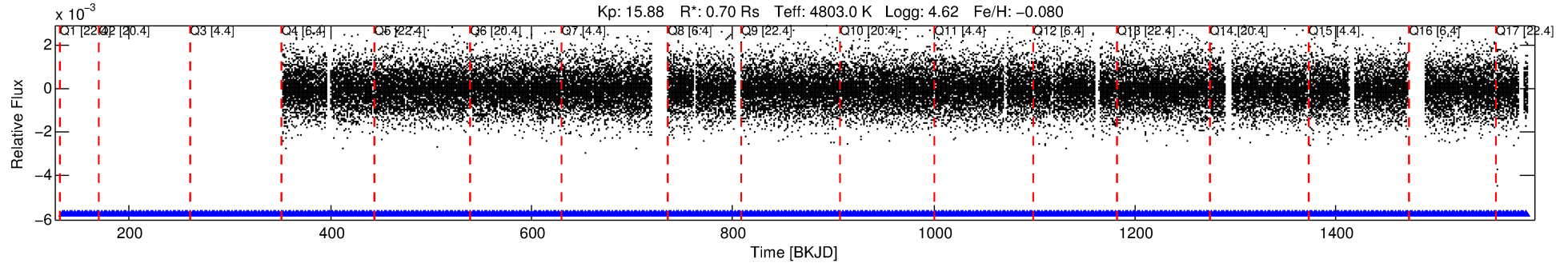
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011519187-01

No Significant Match Found

DV One-Page Summary

KIC: 11519187 Candidate: 1 of 1 Period: 2.441 d
KOI: K04625.01 Corr: 0.830



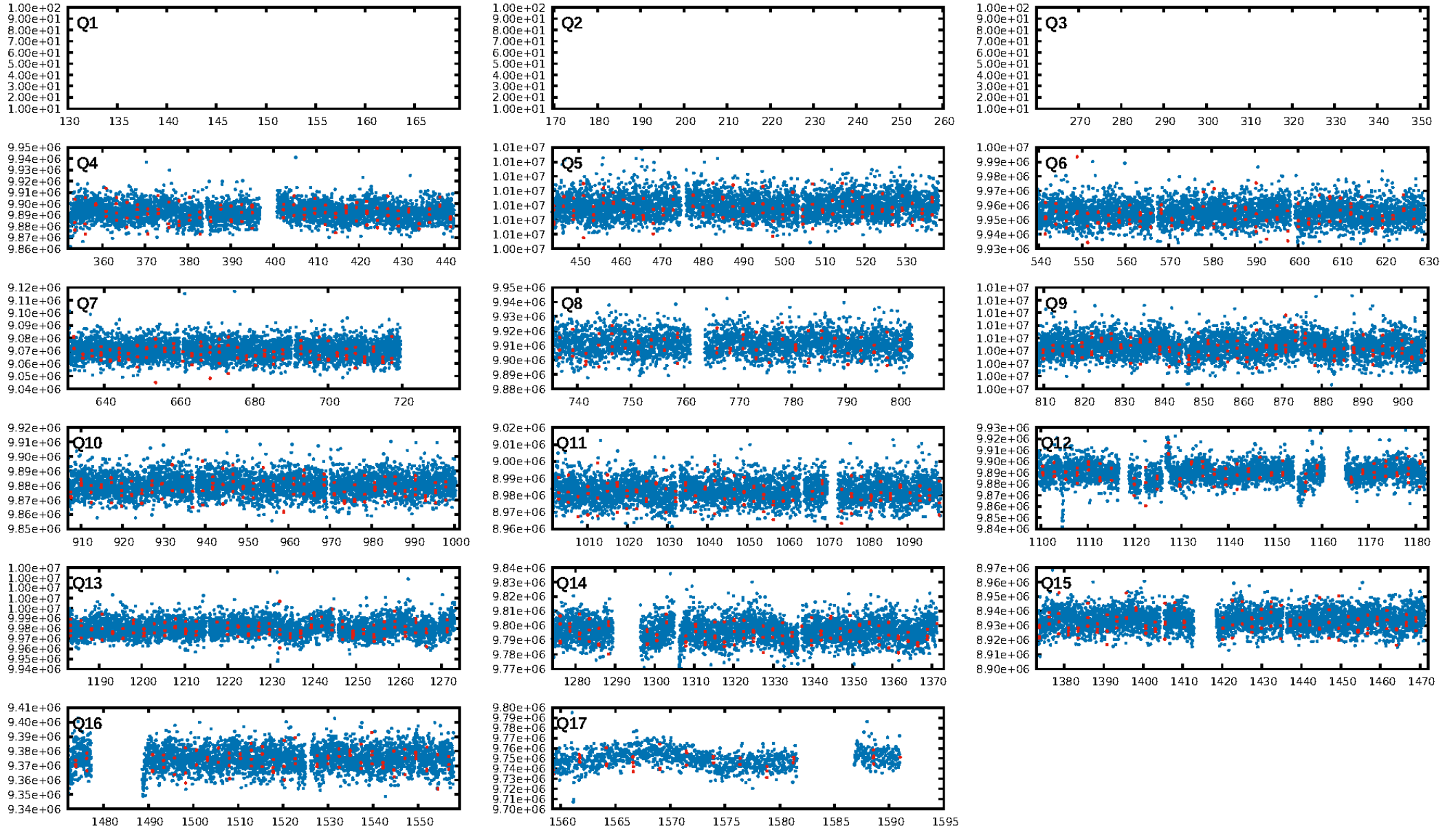
DV Fit Results:

Period = 2.44083 [0.00001] d
Epoch = 133.8420 [0.0010] BKJD
Rp/R* = 0.0258 [0.0147]
a/R* = 11.68 [24.27]
b = 0.90 [0.46]
Seff = 224.28 [40.07]
Teq = 987 [44] K
Rp = 1.97 [1.14] Re
a = 0.0322 [0.0026] AU
Ag = 6.37 [7.93] [0.68 σ]
Teffp = 2424 [757] K [1.90 σ]

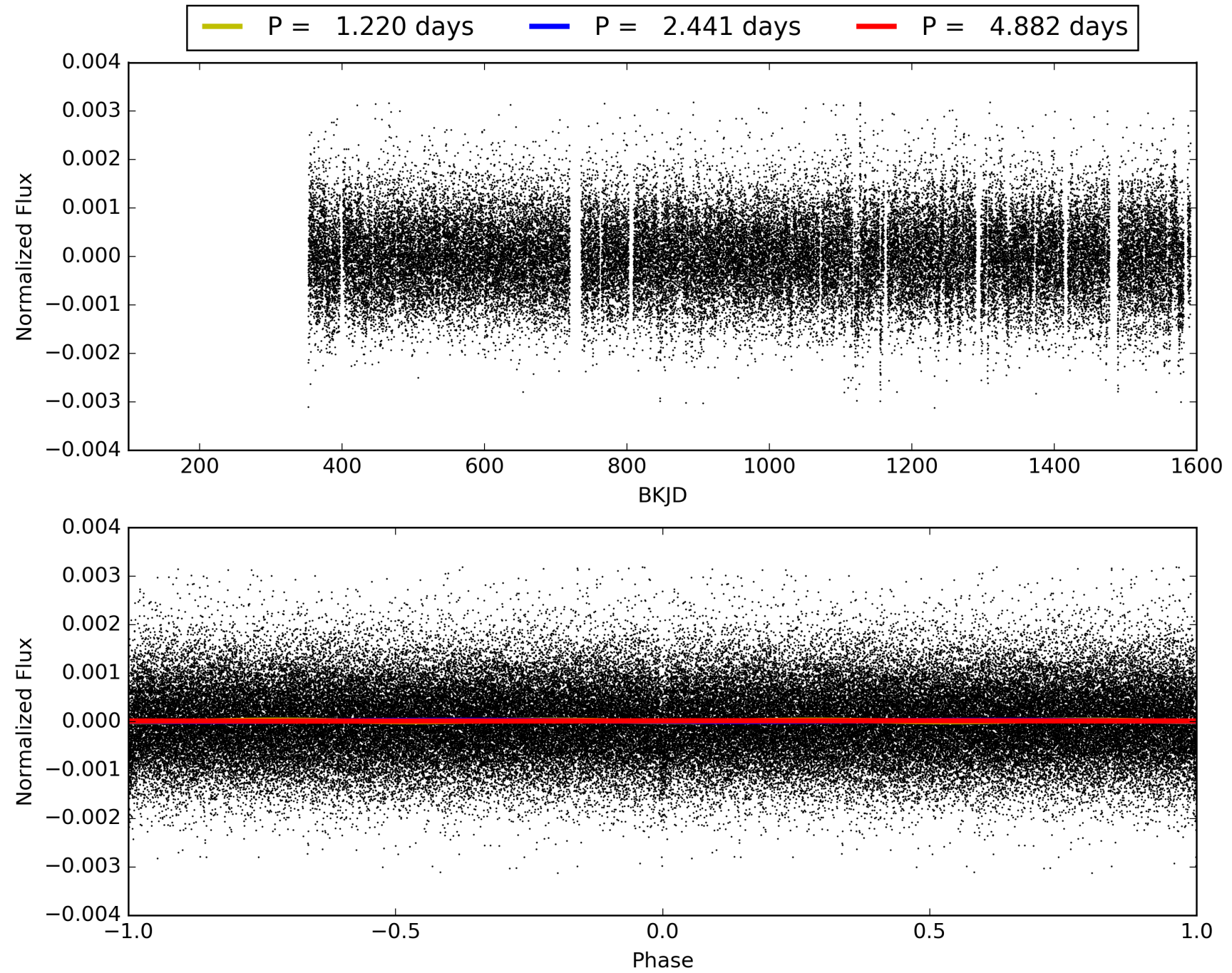
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.12e-27
RollingBand-fgt: 1.00 [451/451]
GhostDiagnostic-chr: -11.68
Centroid-sig: N/A
Centroid-so: 2.681 arcsec [4.32 σ]
OotOffset-rm: 1.007 arcsec [2.66 σ]
KicOffset-rm: 2.072 arcsec [2.68 σ]
OotOffset-st: 2/3/0/0 [5]
KicOffset-st: 2/3/2/1 [8]
DiffImageQuality-fgm: 0.50 [4/8]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011519187-01, PDC Light Curves

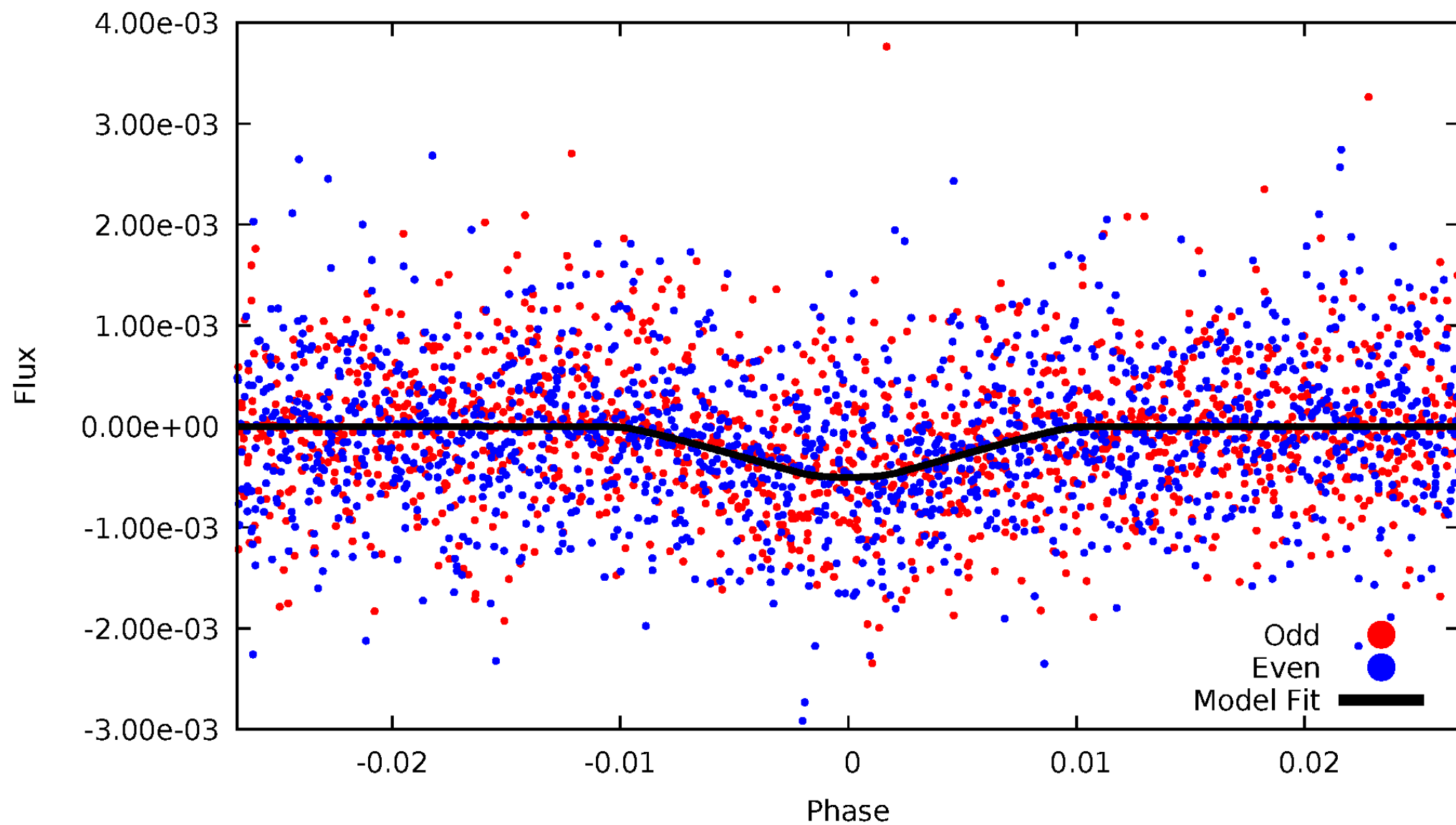


TCE 011519187-01



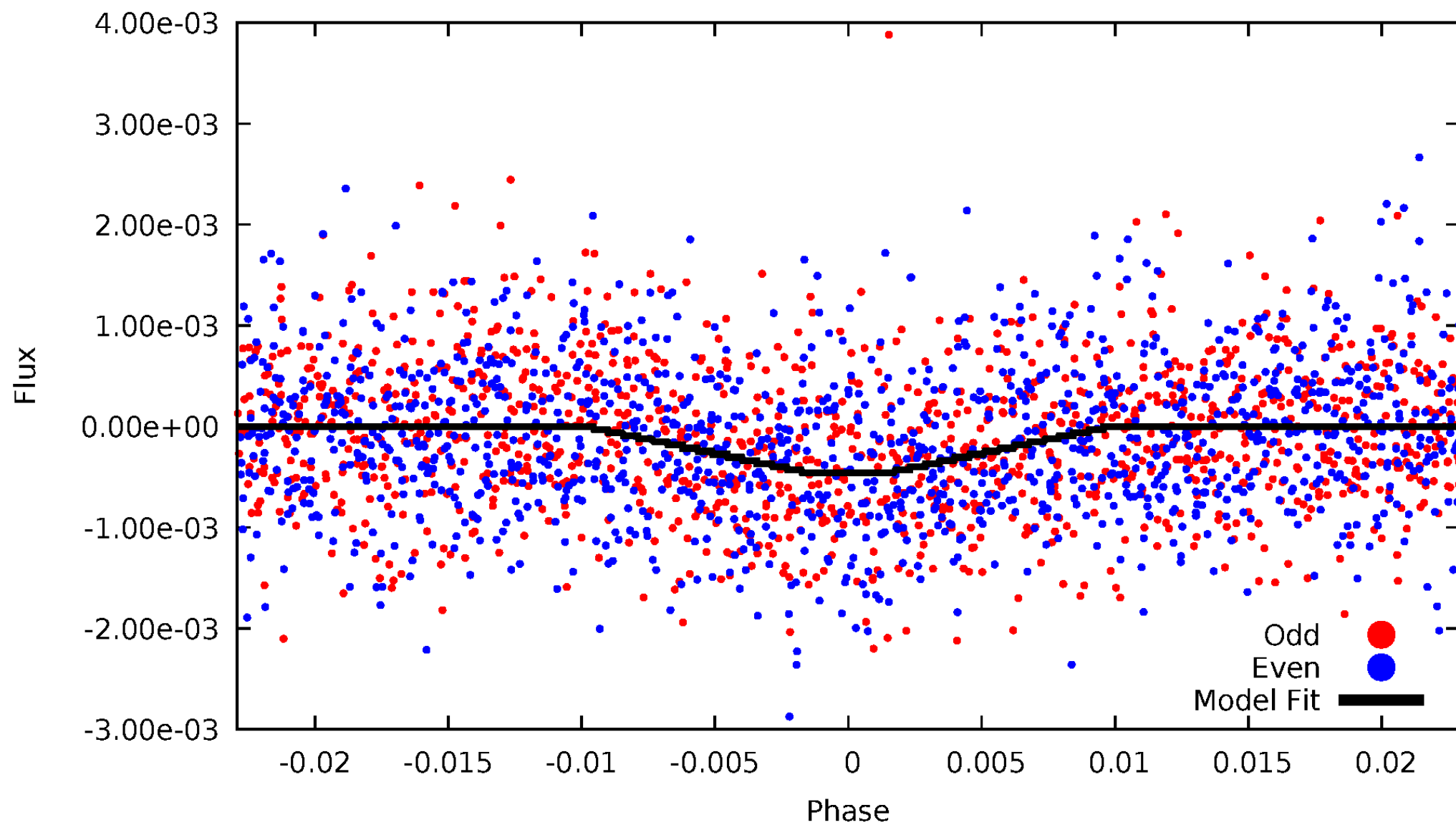
DV Odd/Even

TCE 011519187-01



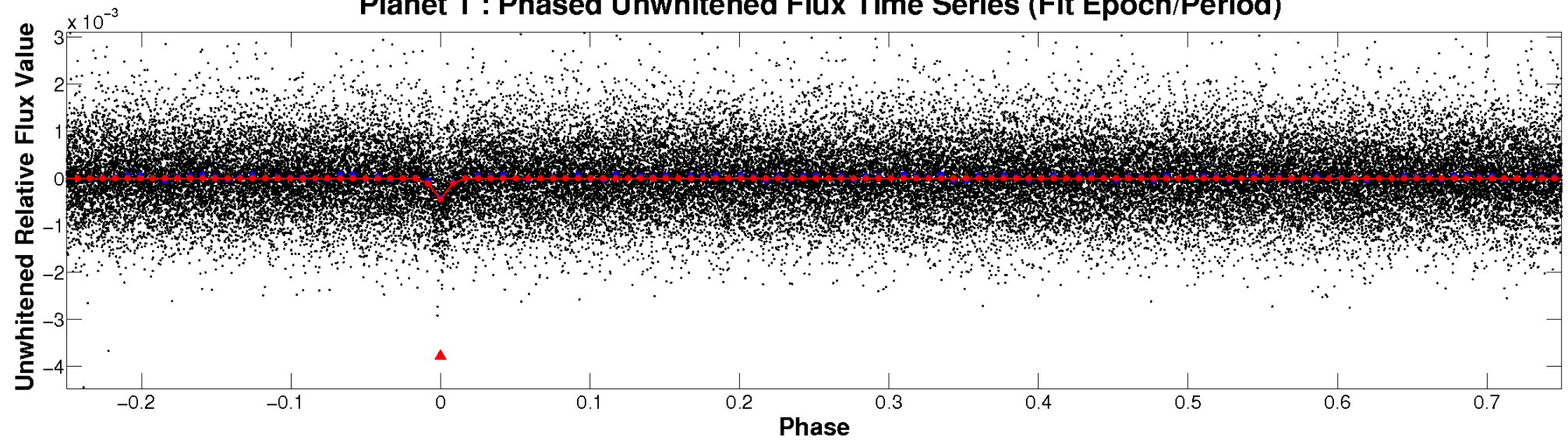
ALT Odd/Even

TCE 011519187-01

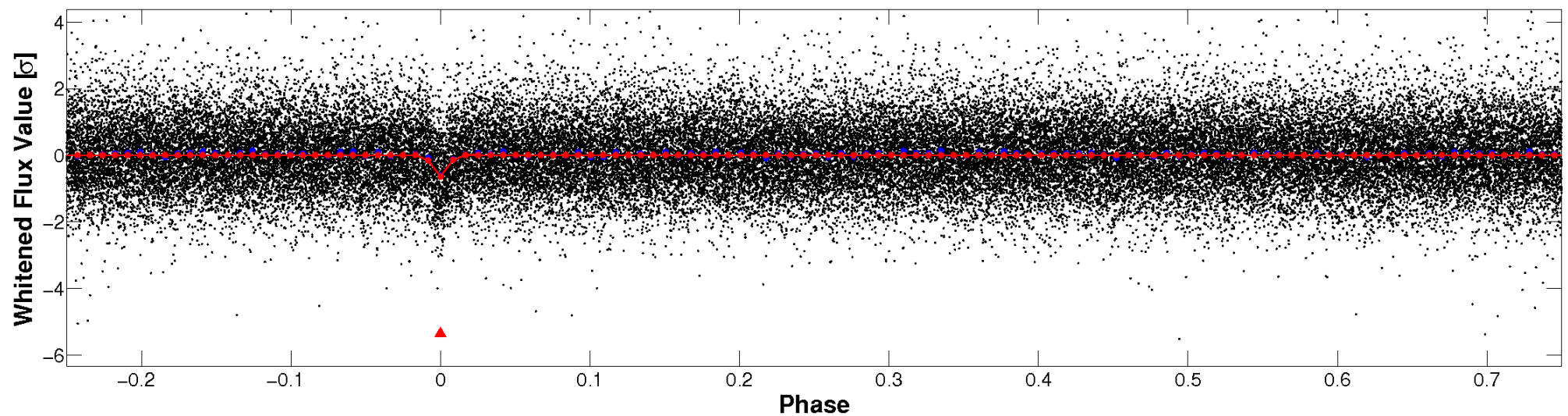


Non-Whitened Vs. Whitened Light Curve

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

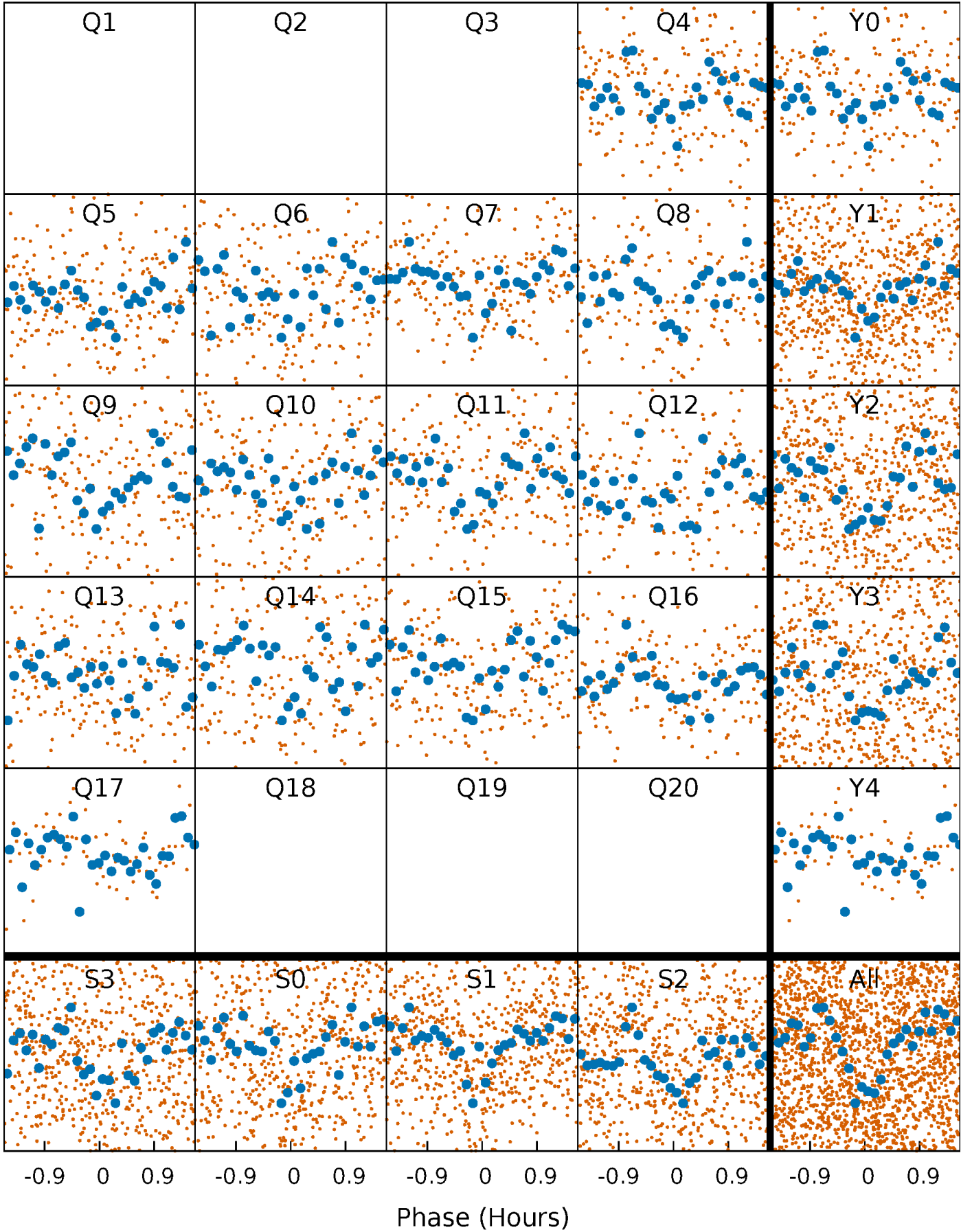


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



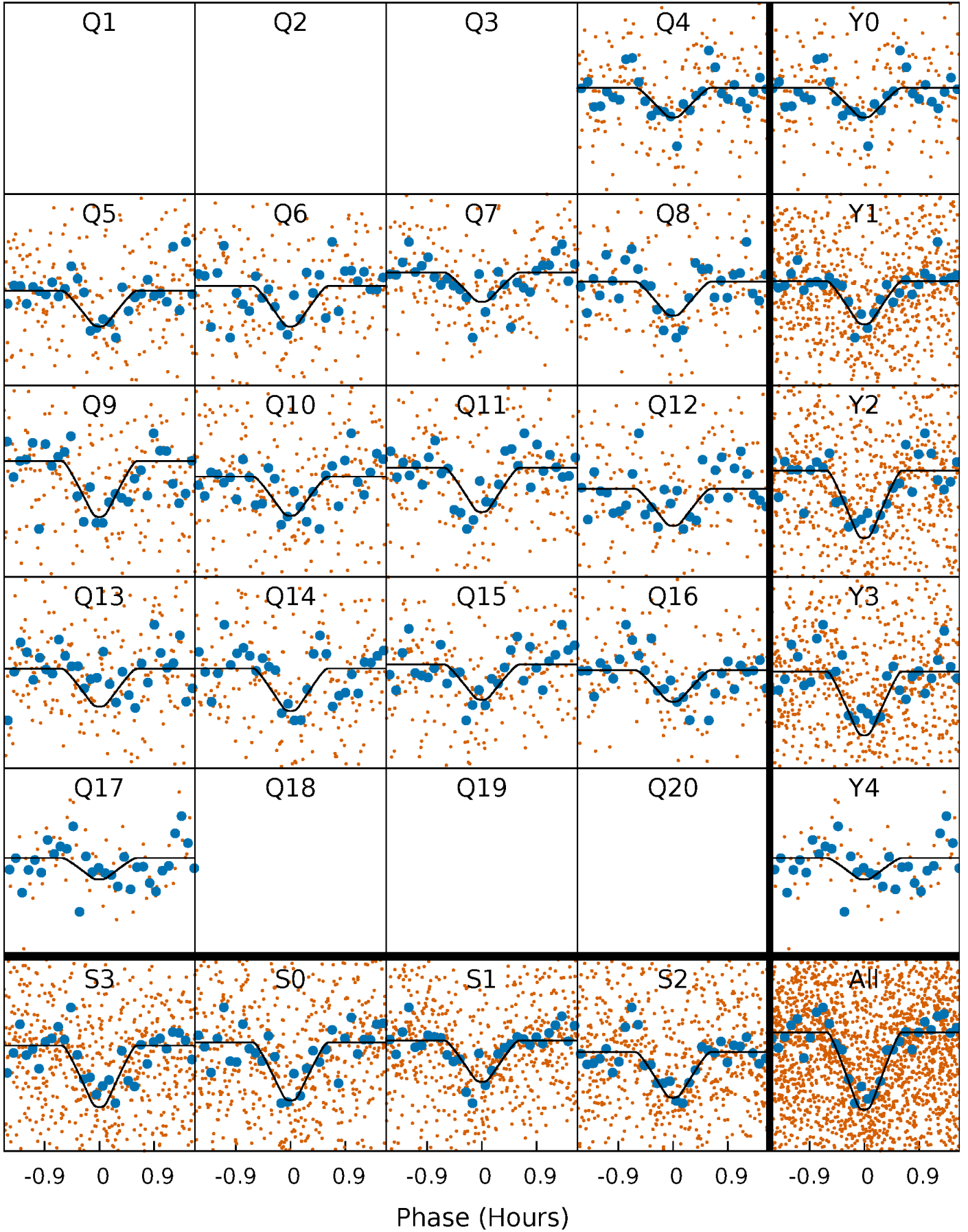
PDC Quarter-Phased Transit Curves

TCE 011519187-01 P= 2.440833 Days $T_0=133.841956$ (BKJD)



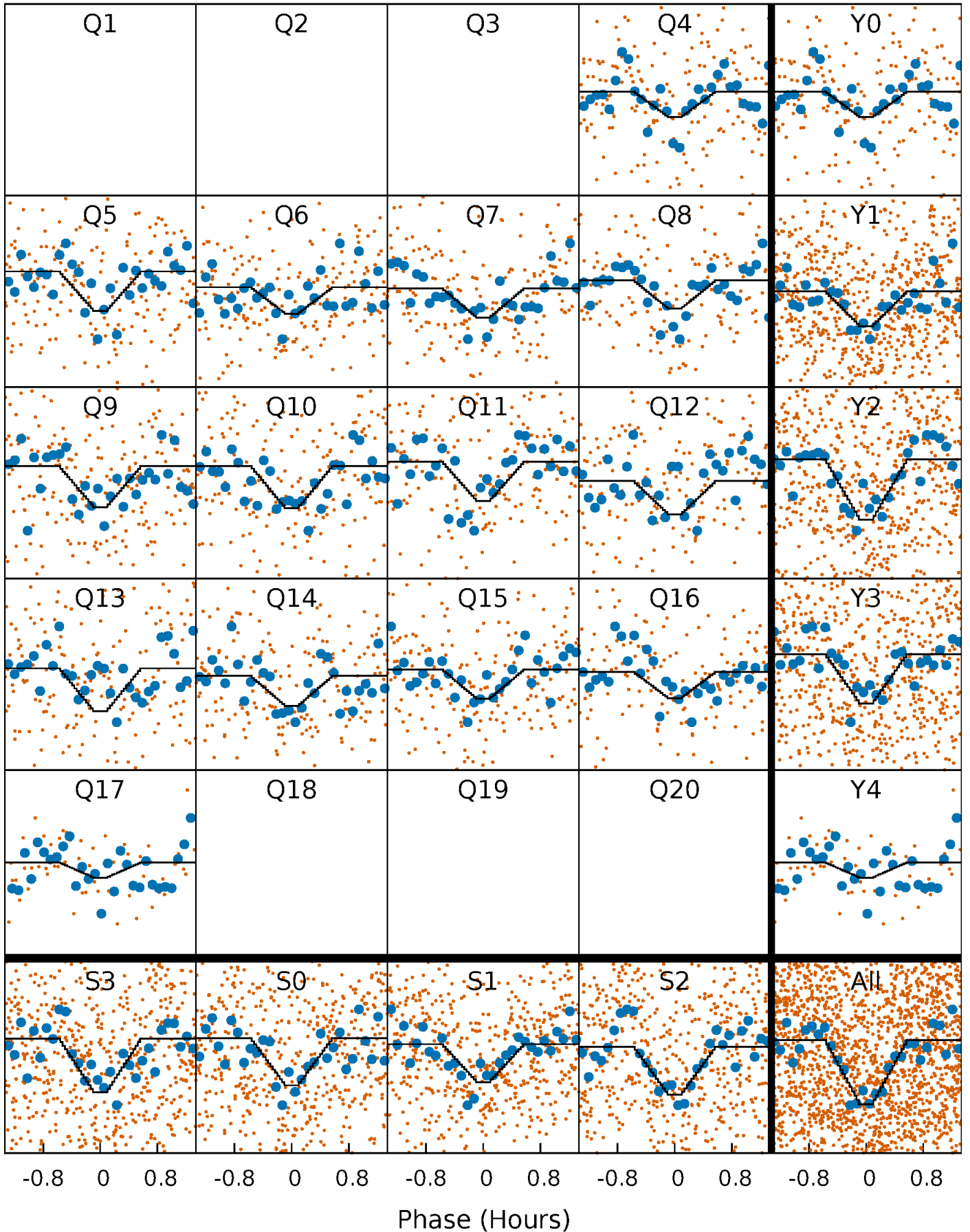
DV Quarter-Phased Transit Curves

TCE 011519187-01 P= 2.440833 Days $T_0=133.841956$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

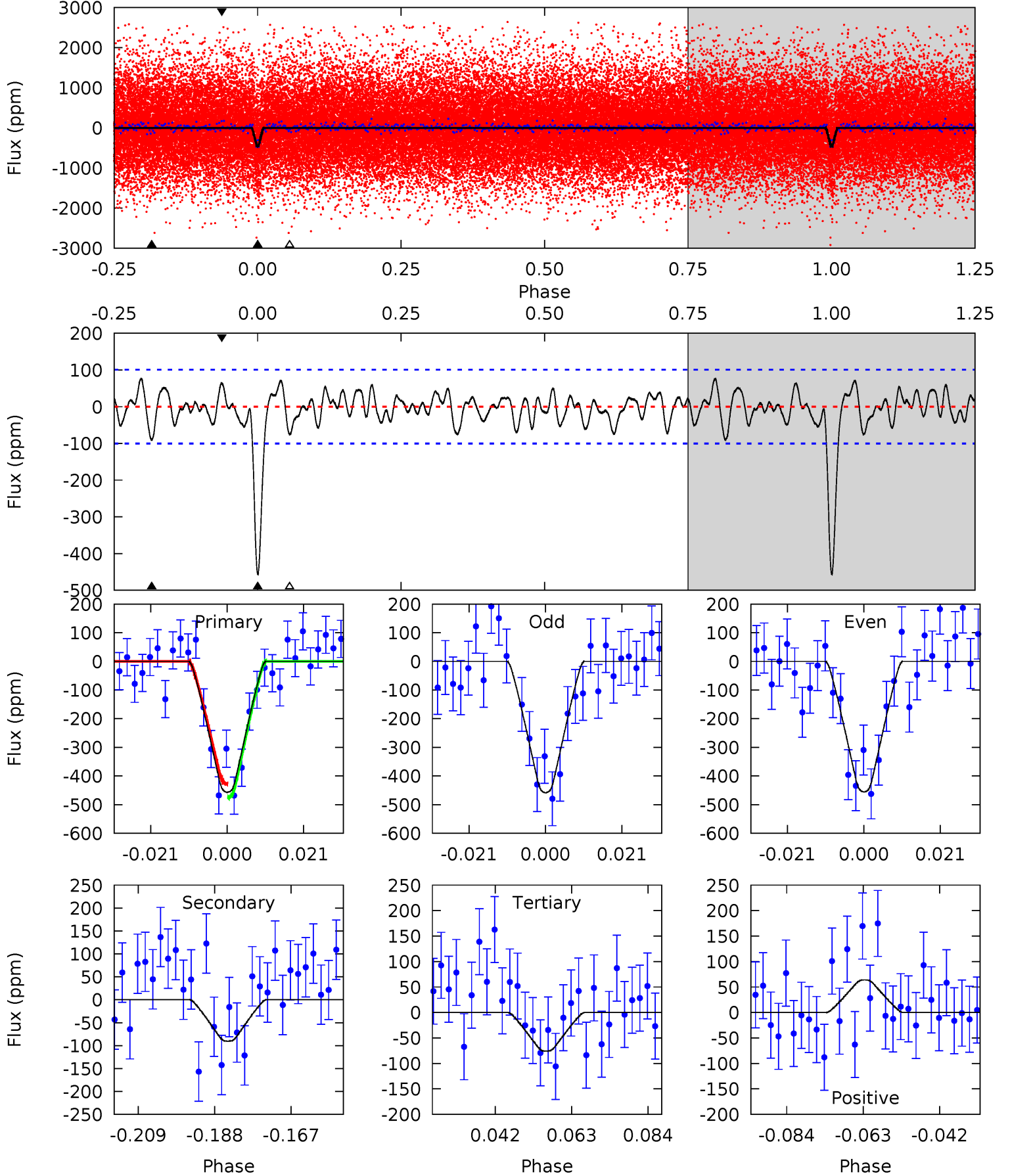
TCE 011519187-01 P= 2.440837 Days $T_0=133.841744$ (BKJD)



DV Model-Shift Uniqueness Test

011519187-01, P = 2.440833 Days, E = 133.841956 Days

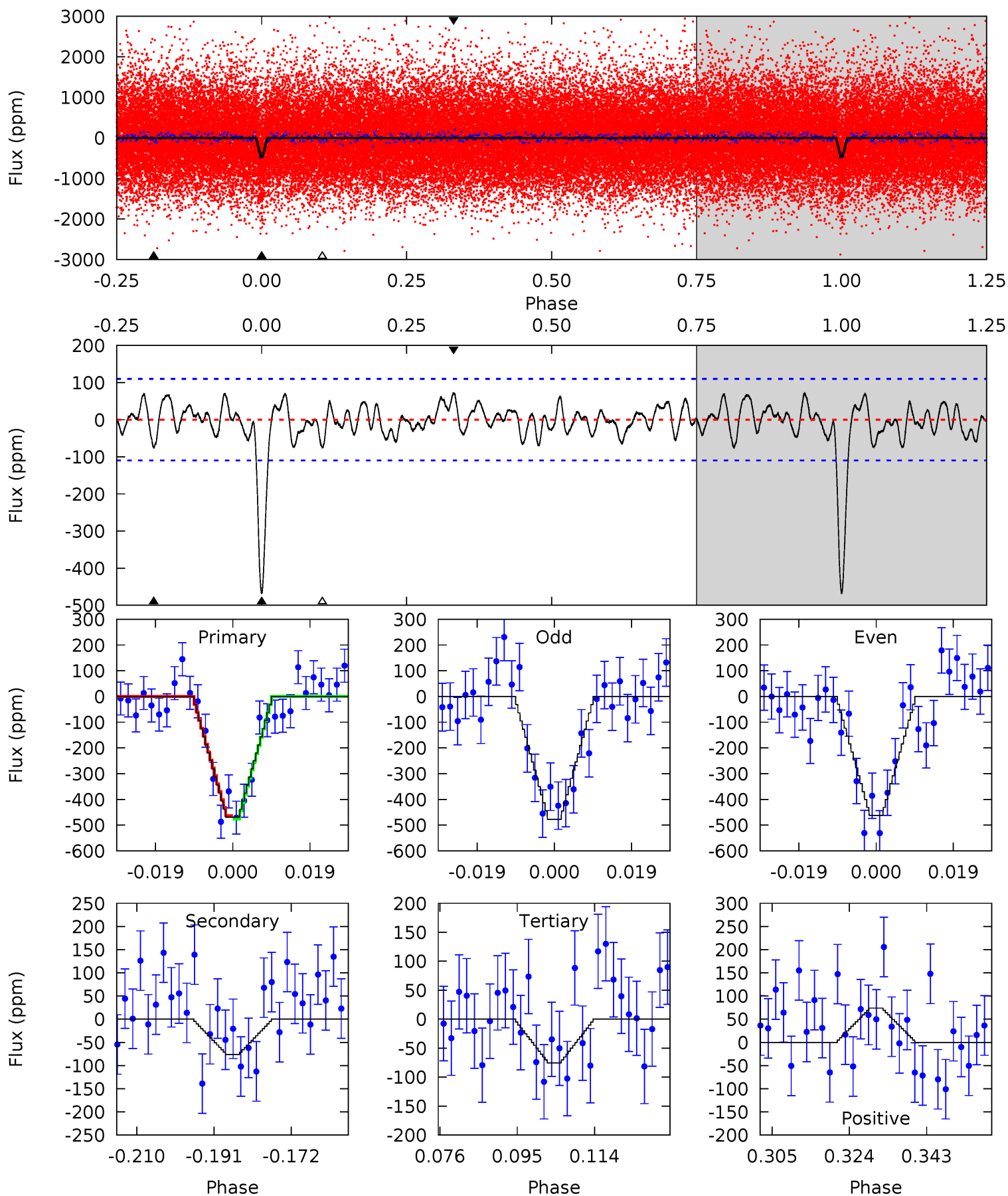
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	4.39	3.68	3.11	4.88	2.31	1.48	18.5	19.1	0.71	1.28	0.07	0.88	0.14	1.20



Alt Model-Shift Uniqueness Test

011519187-01, P = 2.440837 Days, E = 133.841744 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.9	3.40	3.37	3.30	4.90	2.34	1.39	17.6	17.6	0.03	0.10	0.33	0.94	0.14	0.31



Stellar Parameters For KIC 011519187

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4803^{+170}_{-170}	$4.623^{+0.032}_{-0.054}$	$-0.080^{+0.300}_{-0.300}$	$0.698^{+0.074}_{-0.056}$	$0.752^{+0.061}_{-0.075}$	$3.110^{+0.491}_{-0.613}$
	+4%/-4%	+1%/-1%	+375%/-375%	+11%/-8%	+8%/-10%	+16%/-20%
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 011519187-01 / KOI 4625.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-90 ± 21	$2.03^{+1.17}_{-1.10}$	1388^{+55}_{-60}	3343^{+1015}_{-451}	12^{+47}_{-7}
Alt.	-76 ± 22	$1.73^{+1.13}_{-0.93}$	1383^{+62}_{-52}	3384^{+1156}_{-520}	13^{+57}_{-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 $A_{\text{obs}} \gg 1.0$

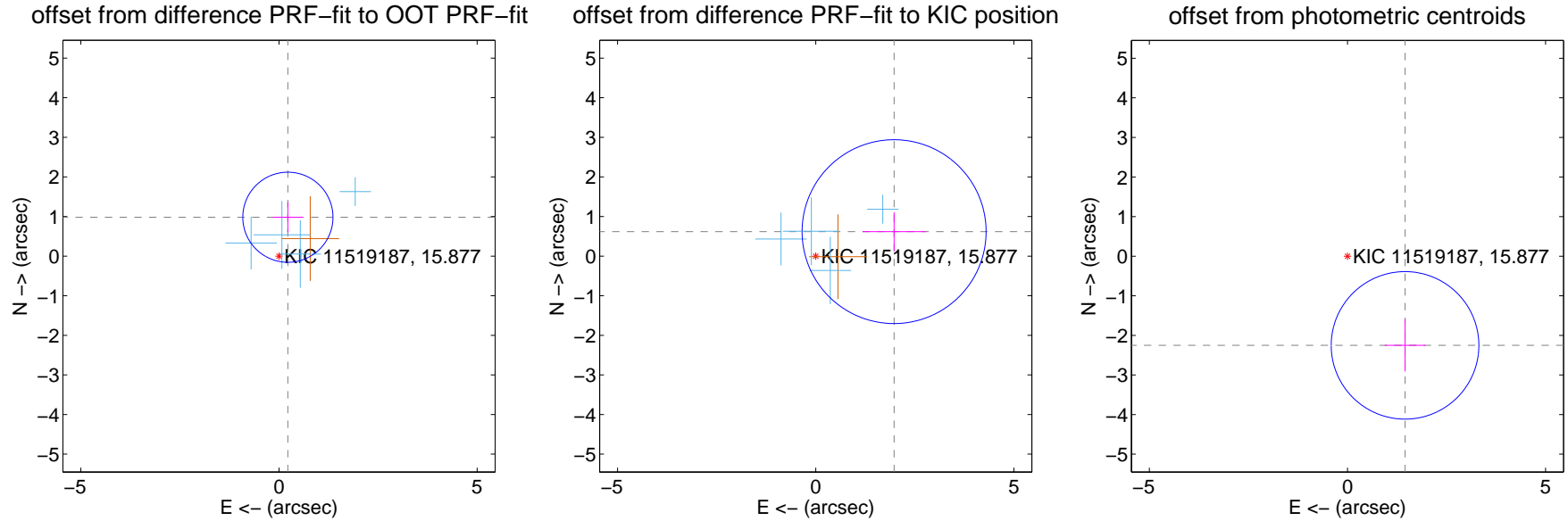
DV Centroid Data

Supplemental centroid analysis for 011519187-01. Kepler magnitude: 15.88. Transit SNR 14.74

There are 4 quarters with good PRF difference image offsets

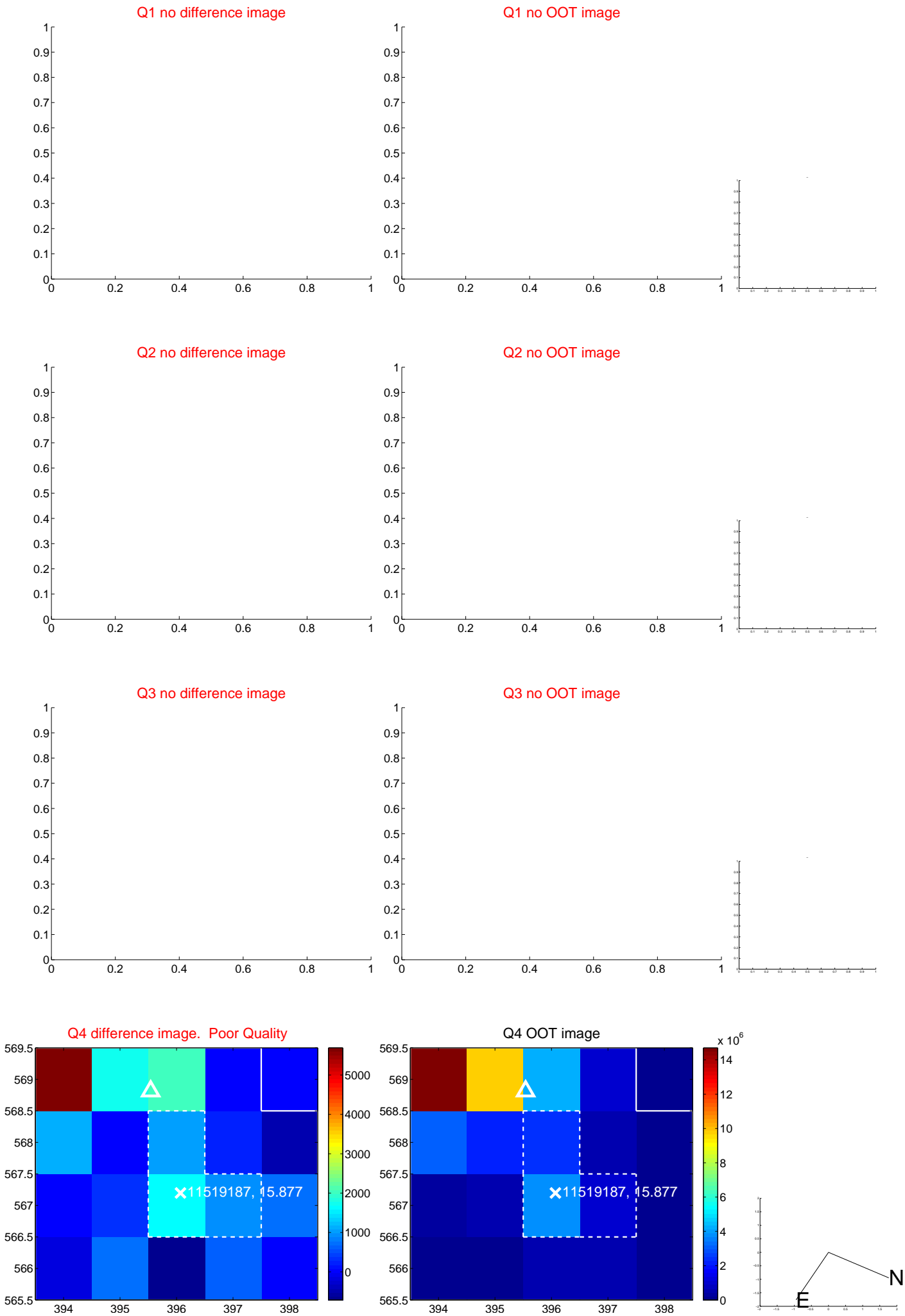
The direct PRF centroid is offset from the target star catalog position by about 0.45 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.007 ± 0.379	2.66	-0.224 ± 0.381	0.982 ± 0.379
PRF-fit source offset from KIC position	2.072 ± 0.774	2.68	-1.978 ± 0.796	0.618 ± 0.492
photometric centroid source offset	2.68 ± 0.62	4.32	-1.45 ± 0.52	-2.25 ± 0.66

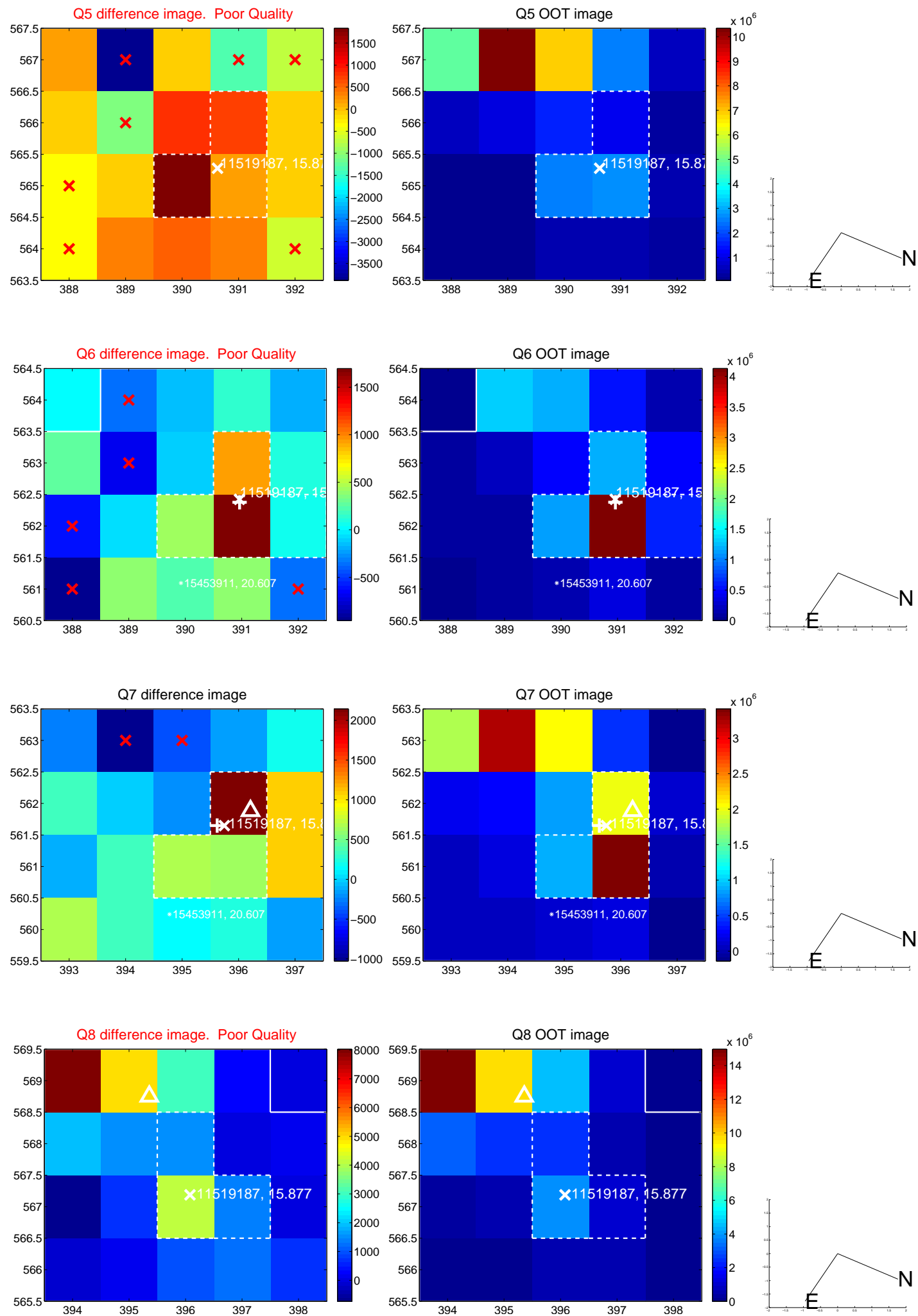


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

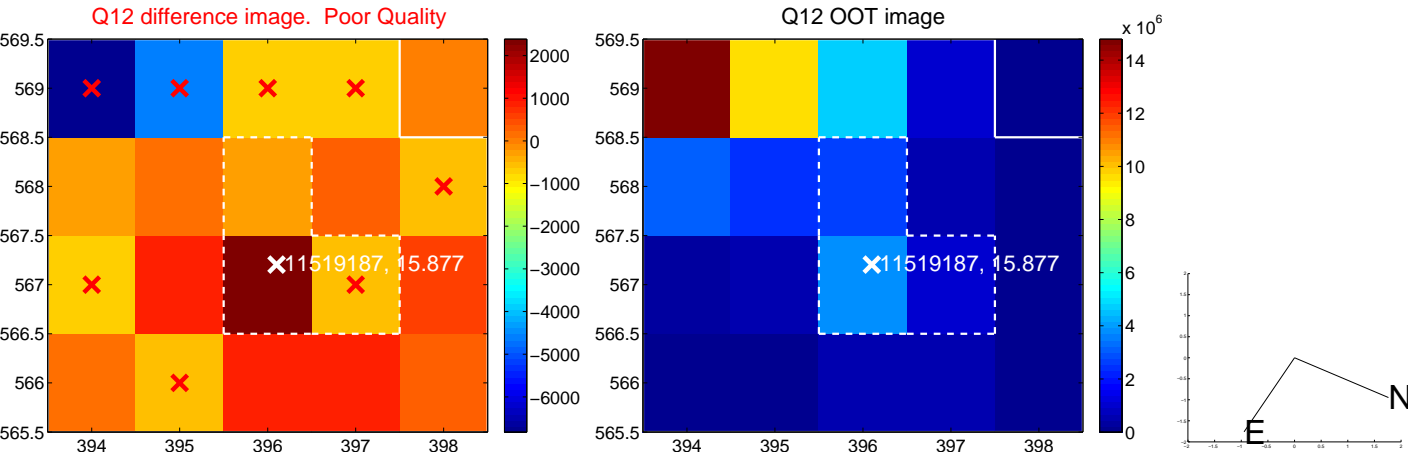
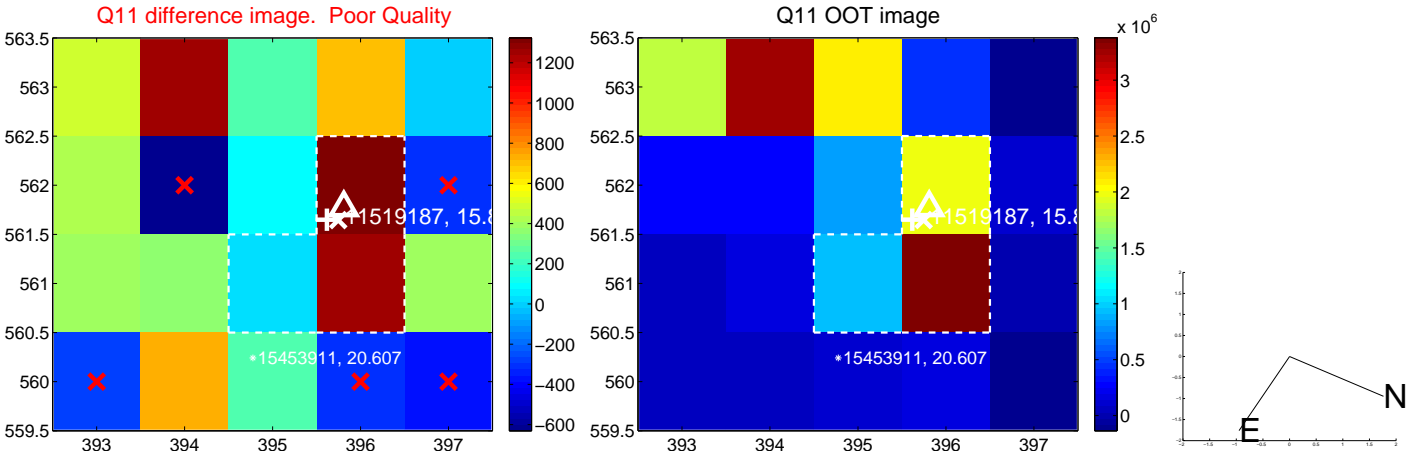
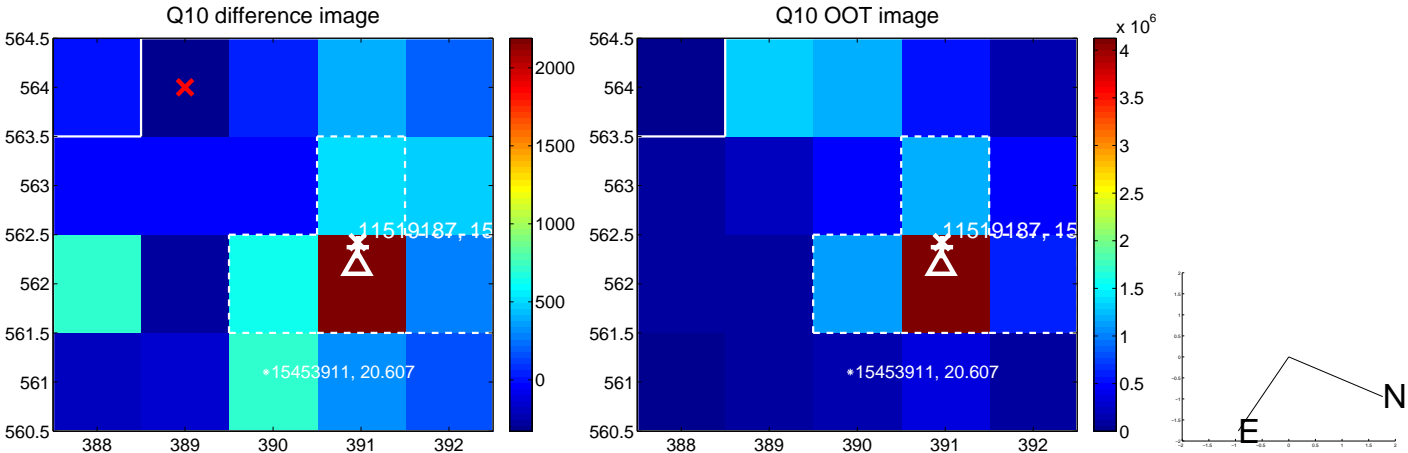
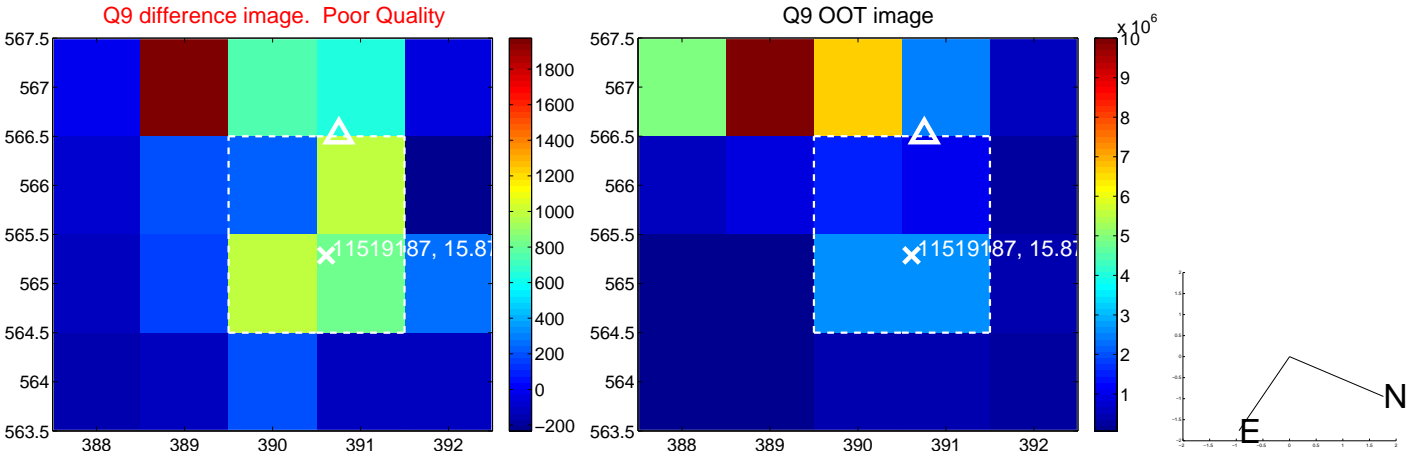
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



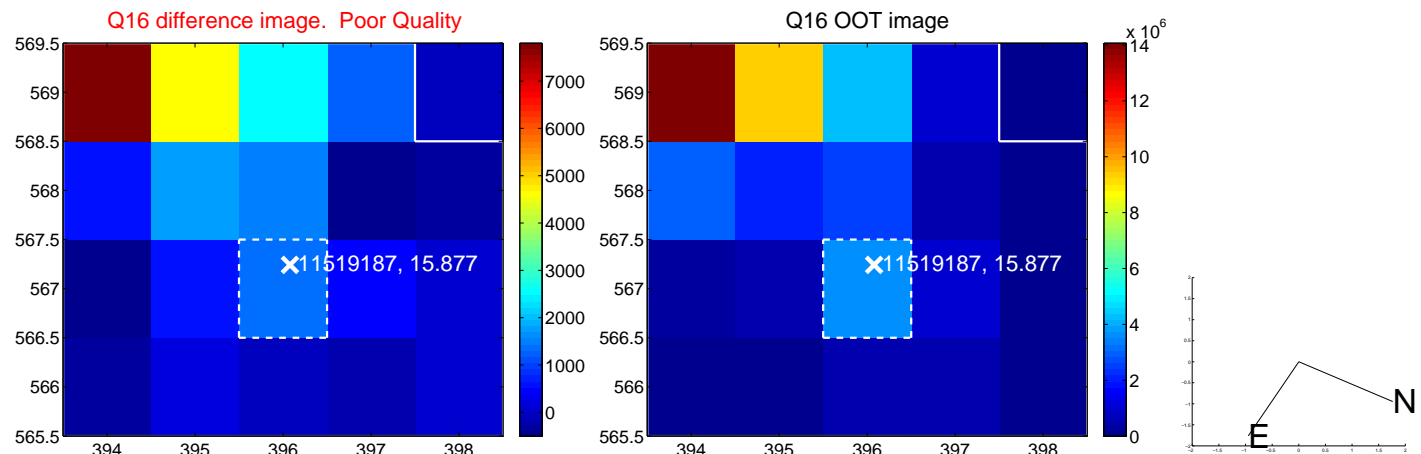
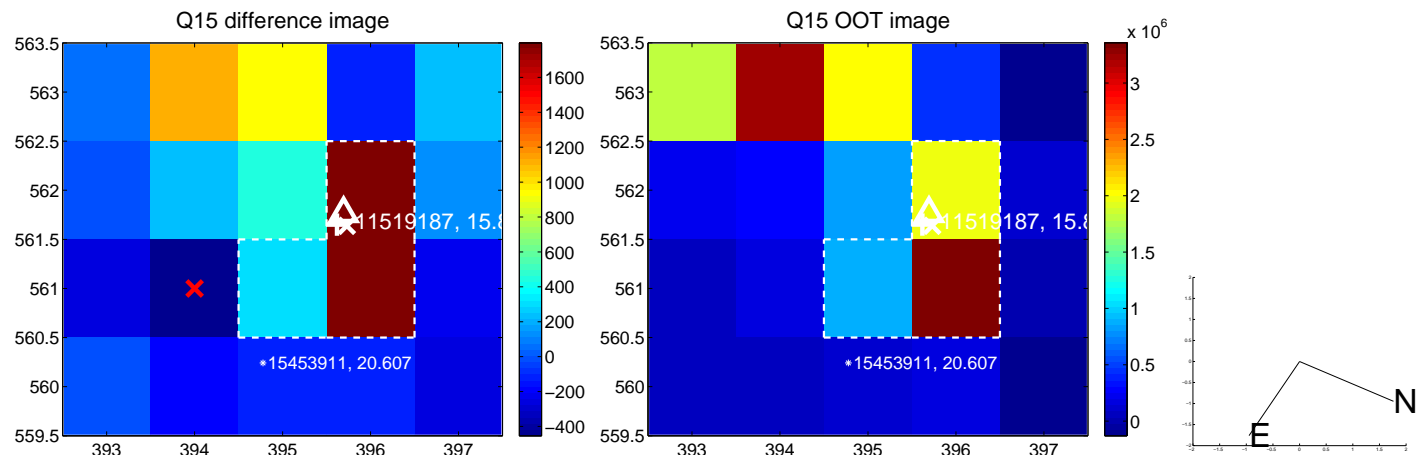
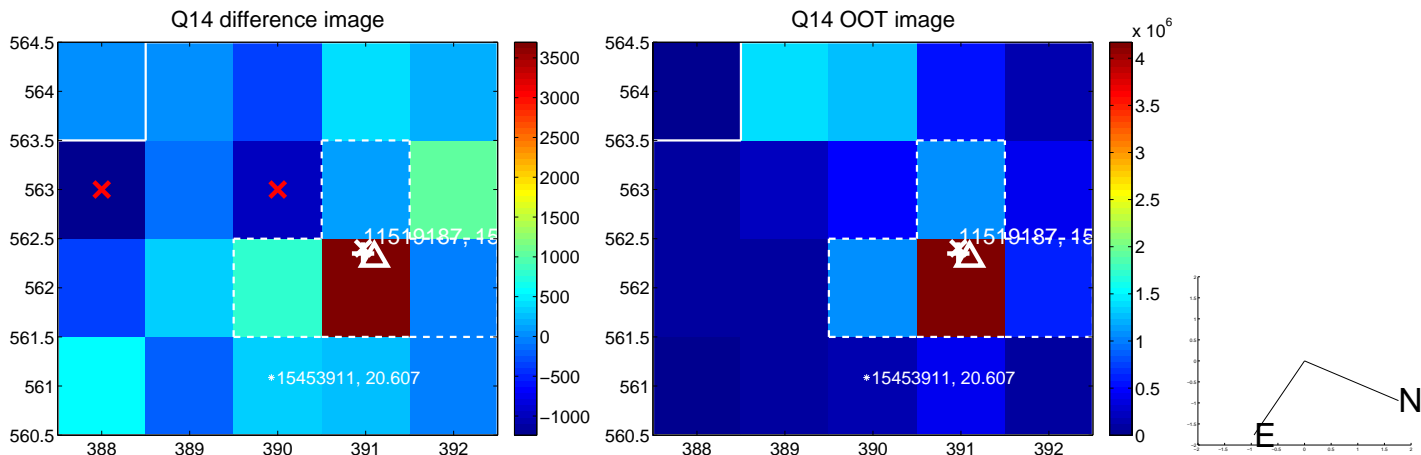
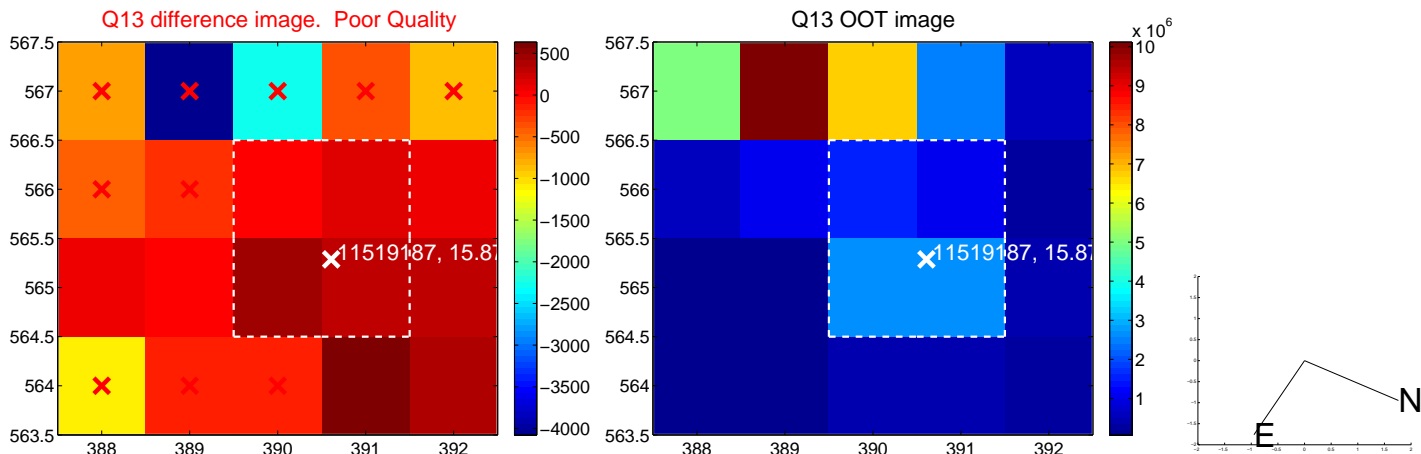
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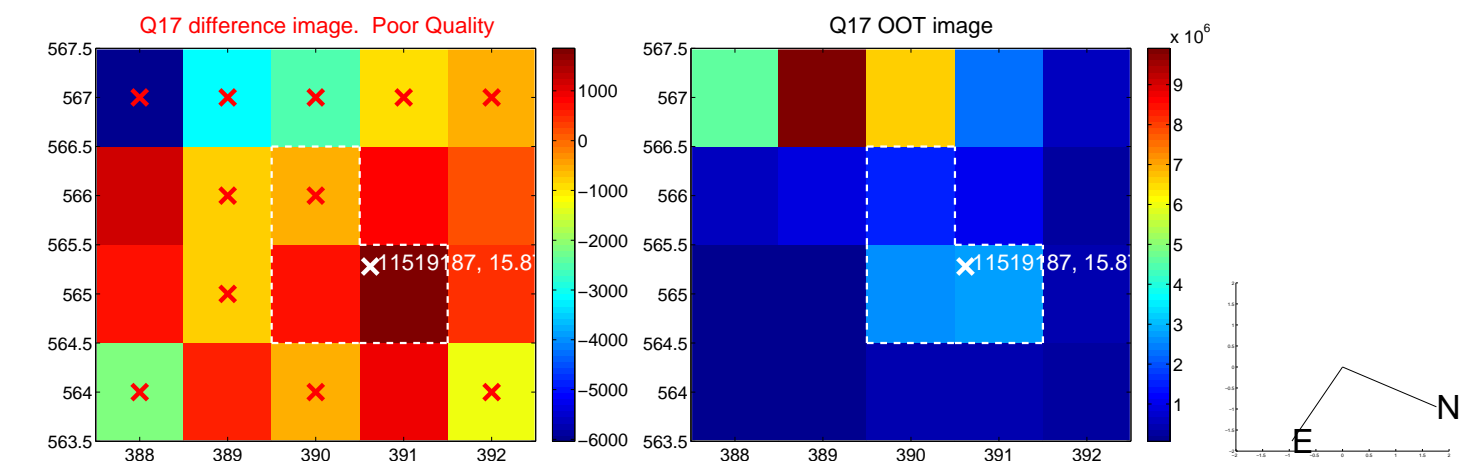
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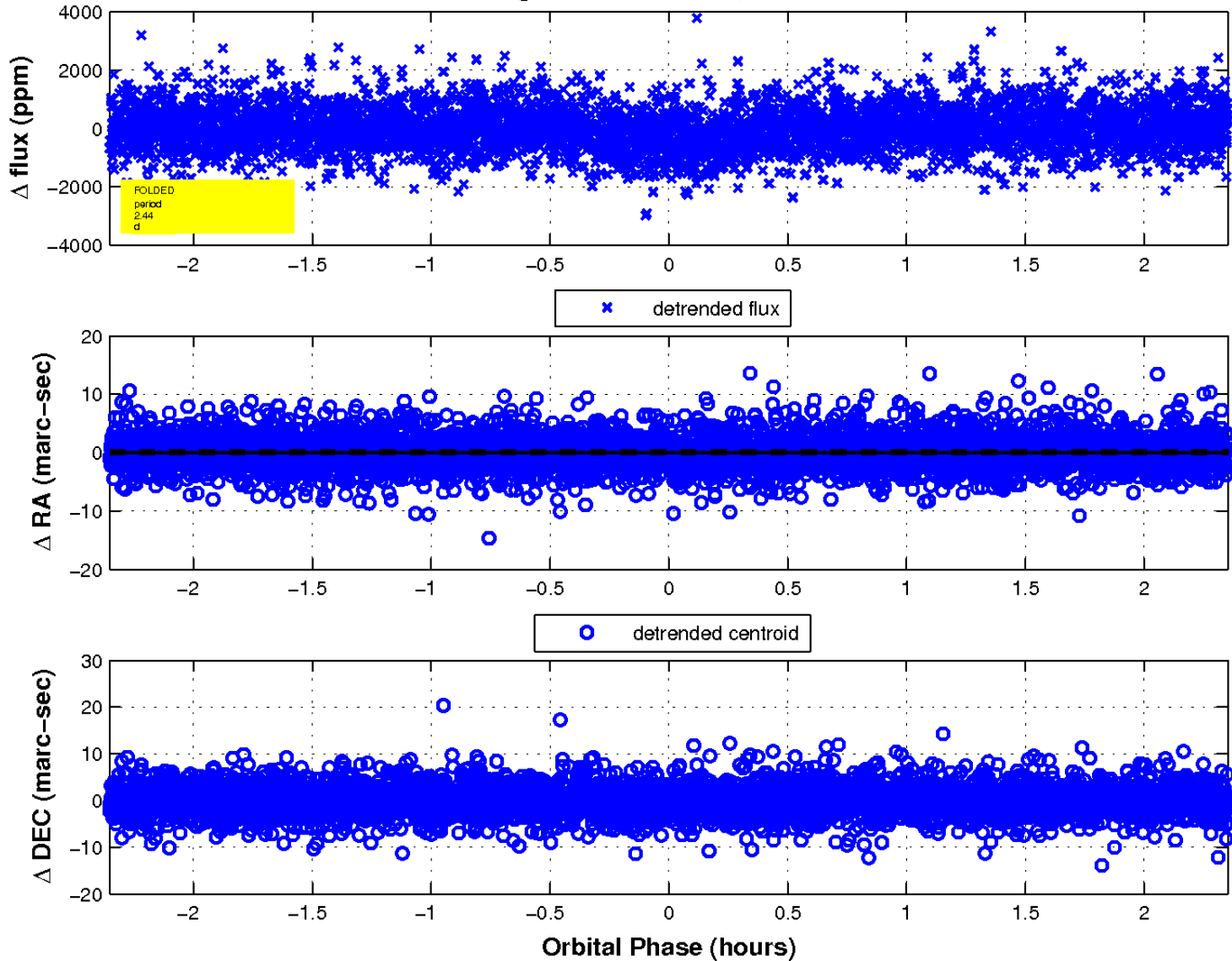
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

