

KIC 011288505

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})
011288505-01	OBS	1433.01	19.807834	139.381101	666.2	3.602	19.6	21.1	0.84	5775	2.37	35.93

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288505-01	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.

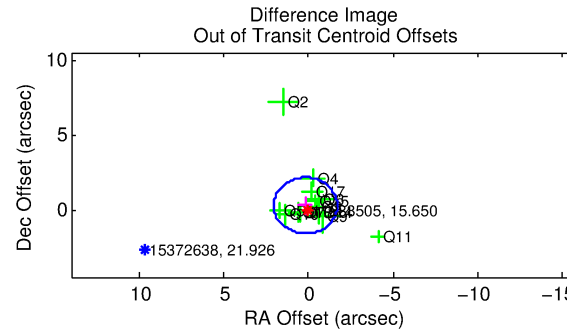
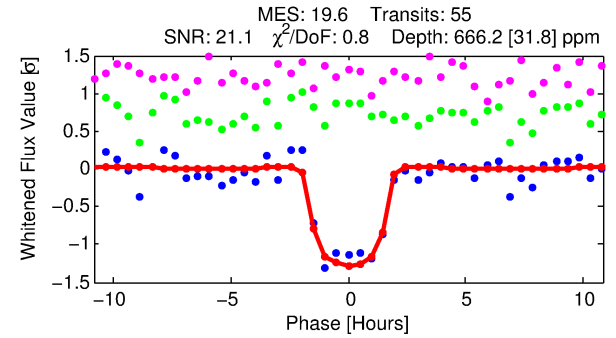
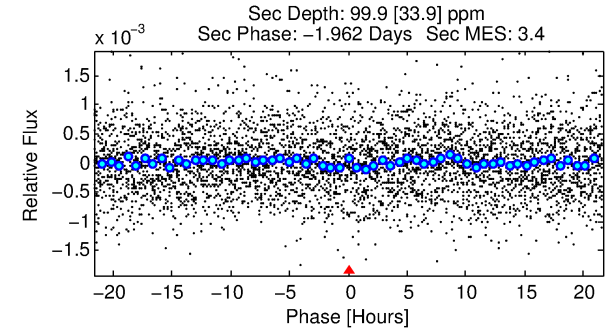
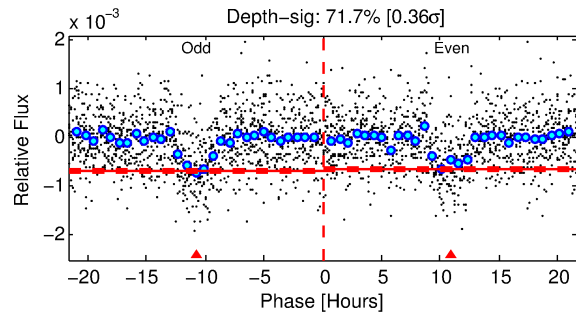
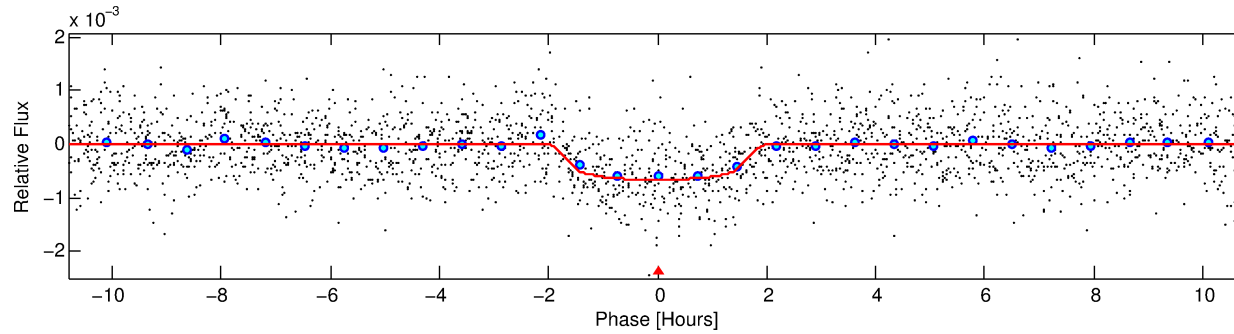
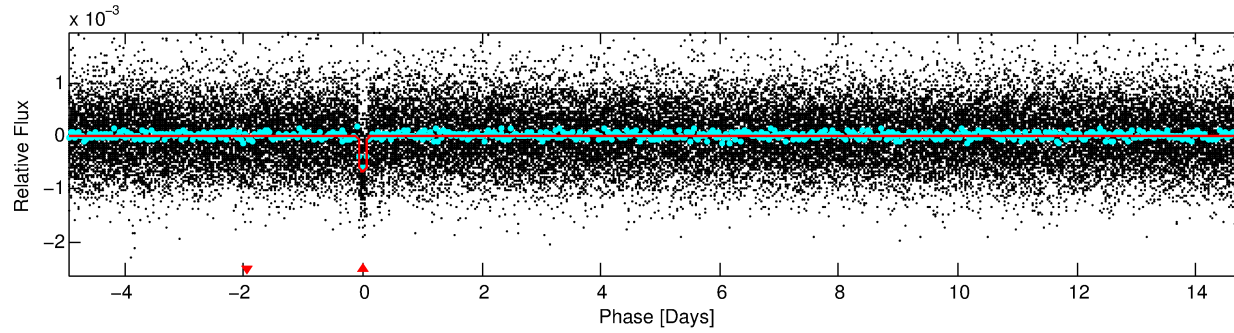
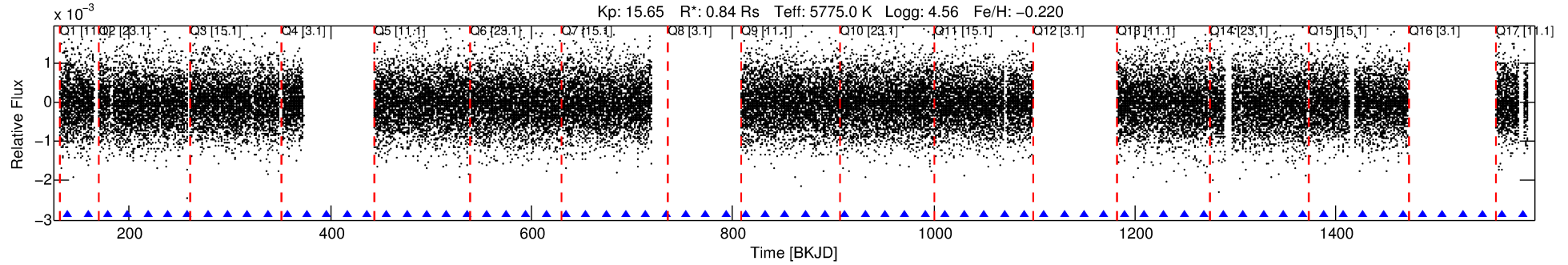
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288505-01

No Significant Match Found

DV One-Page Summary

KIC: 11288505 Candidate: 1 of 1 Period: 19.808 d
KOI: K01433.01 Corr: 0.987



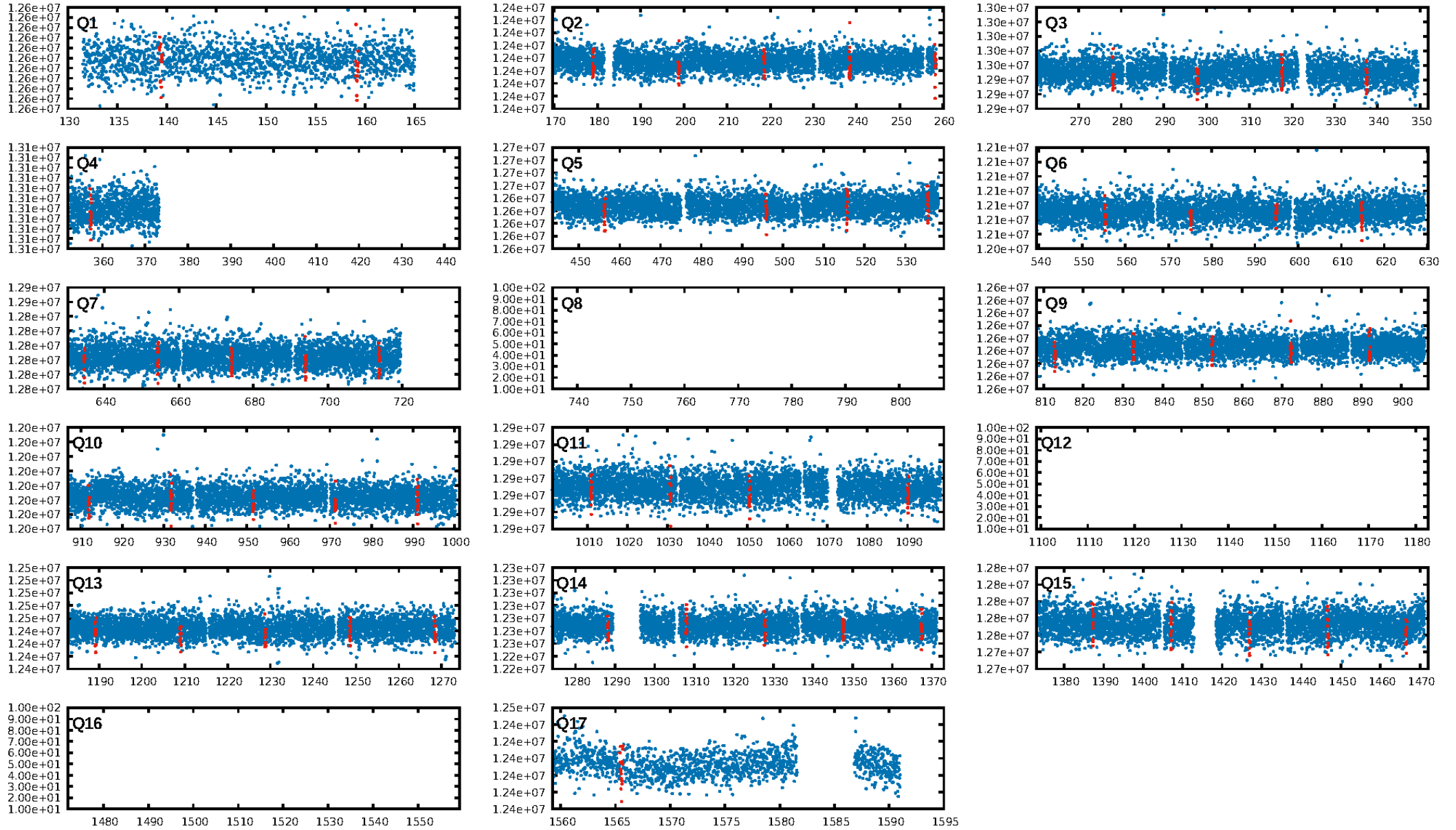
DV Fit Results:

Period = 19.80783 [0.00009] d
Epoch = 139.3811 [0.0038] BKJD
Rp/R* = 0.0258 [0.0103]
a/R* = 28.86 [52.16]
b = 0.76 [1.01]
Seff = 35.93 [11.86]
Teq = 624 [52] K
Rp = 2.37 [1.12] Re
a = 0.1399 [0.0297] AU
Ag = 191.98 [176.30] [1.08 σ]
Teffp = 3593 [784] K [3.78 σ]

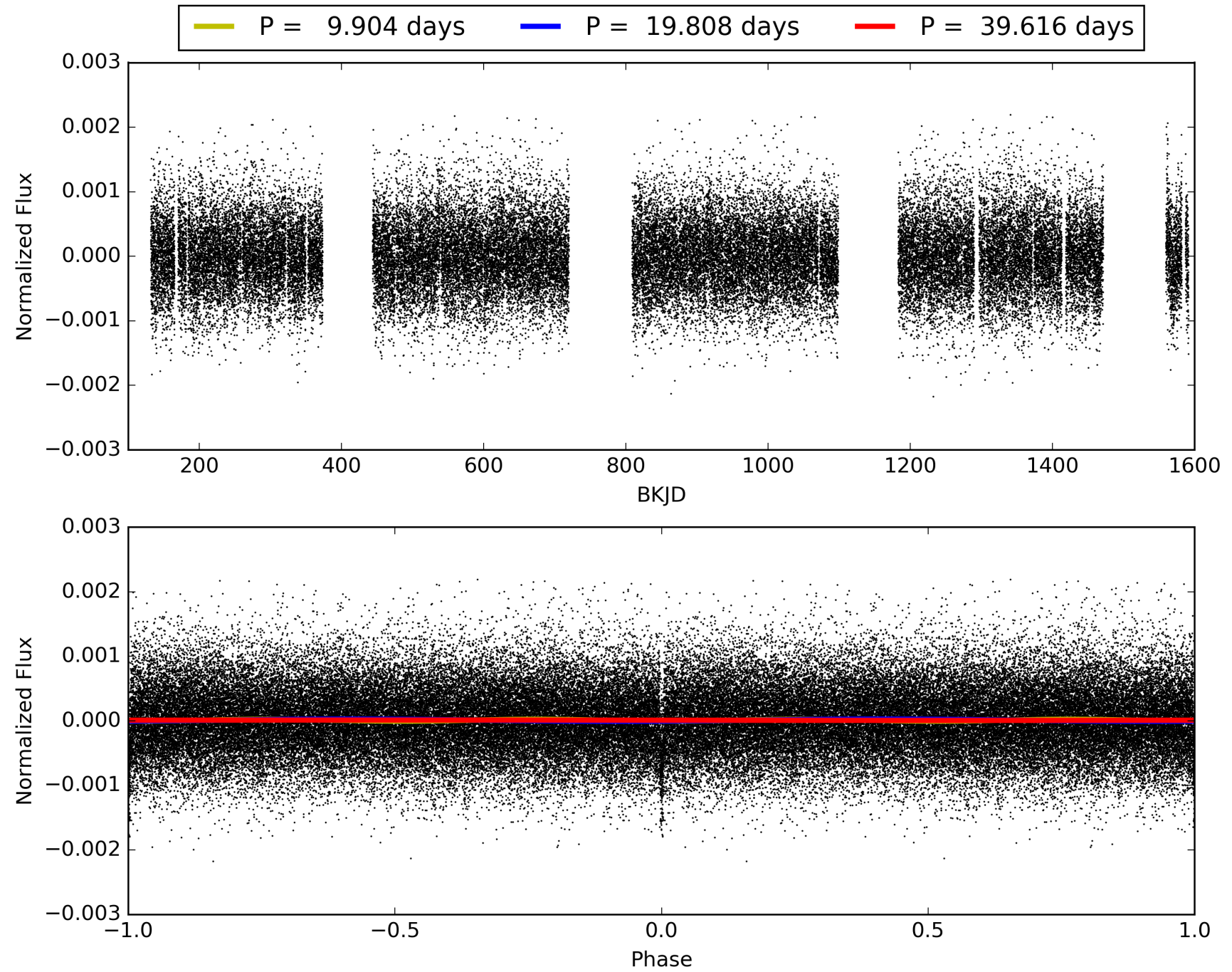
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 99.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.38e-84
RollingBand-fgt: 1.00 [51/51]
GhostDiagnostic-chr: 1.626
Centroid-sig: 3.1%
Centroid-so: 1.090 arcsec [1.52 σ]
OotOffset-rm: 0.332 arcsec [0.53 σ]
KicOffset-rm: 0.238 arcsec [0.47 σ]
OotOffset-st: 4/4/1/4 [13]
KicOffset-st: 4/4/1/4 [13]
DiffImageQuality-fgm: 0.77 [10/13]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 011288505-01, PDC Light Curves

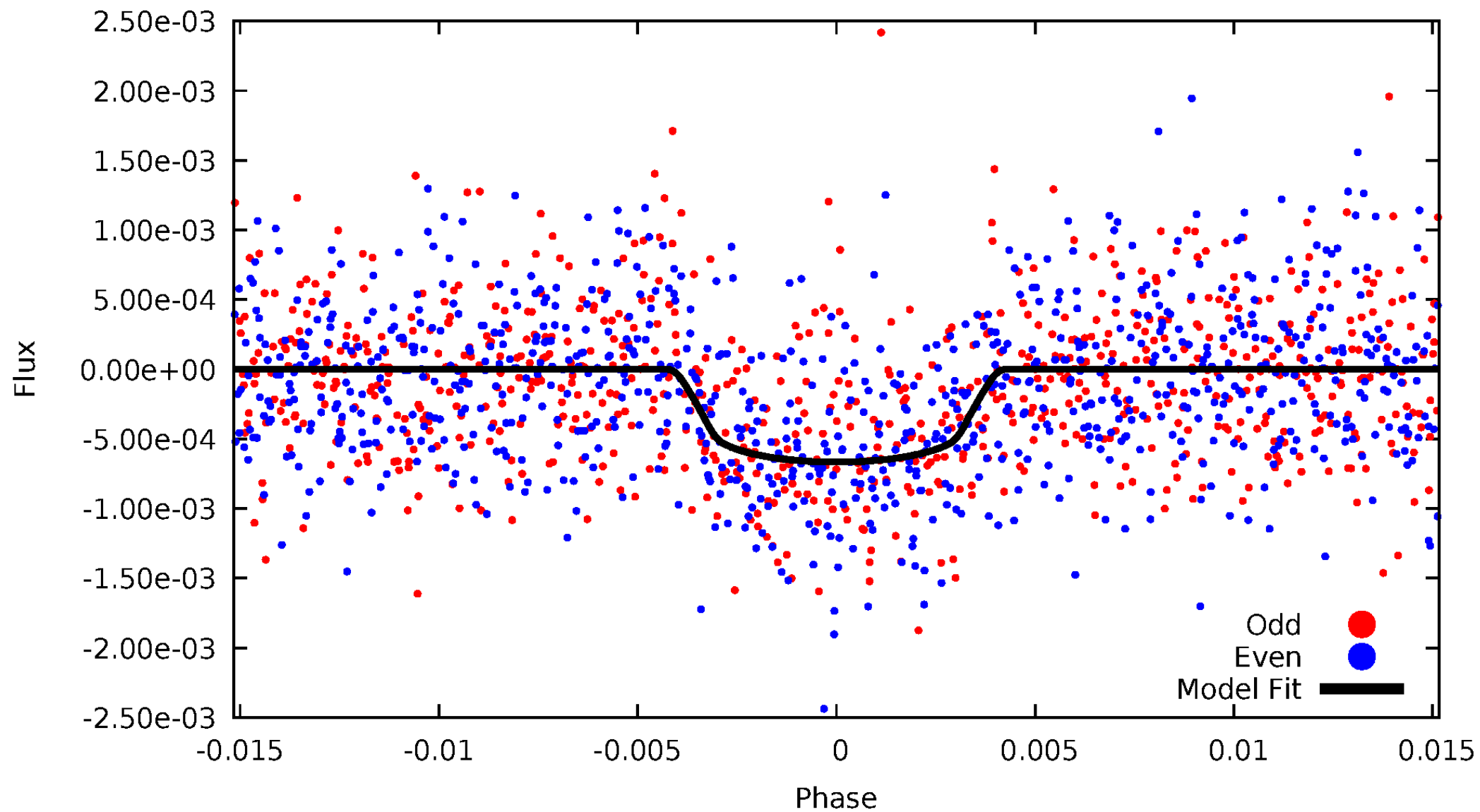


TCE 011288505-01



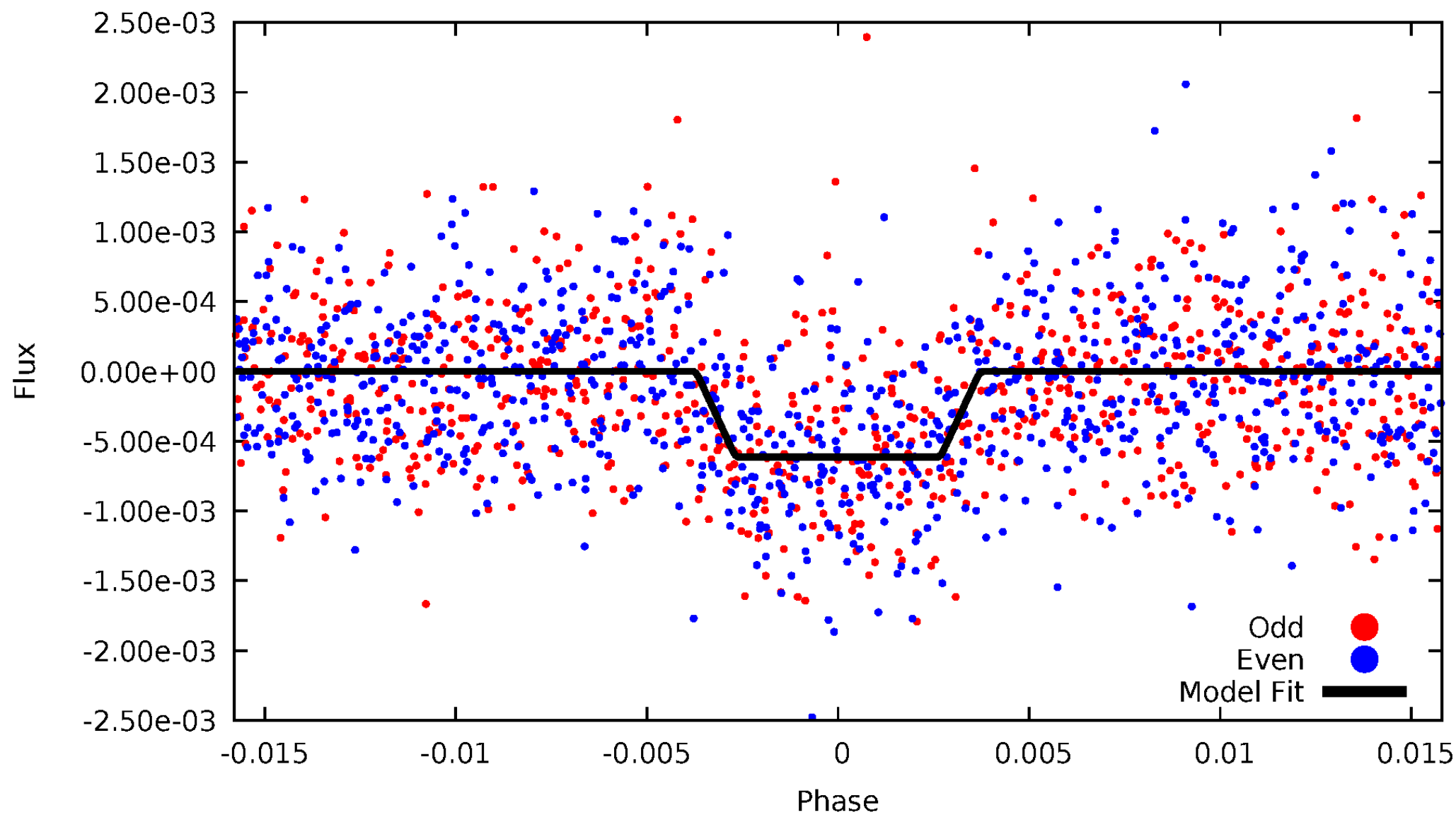
DV Odd/Even

TCE 011288505-01

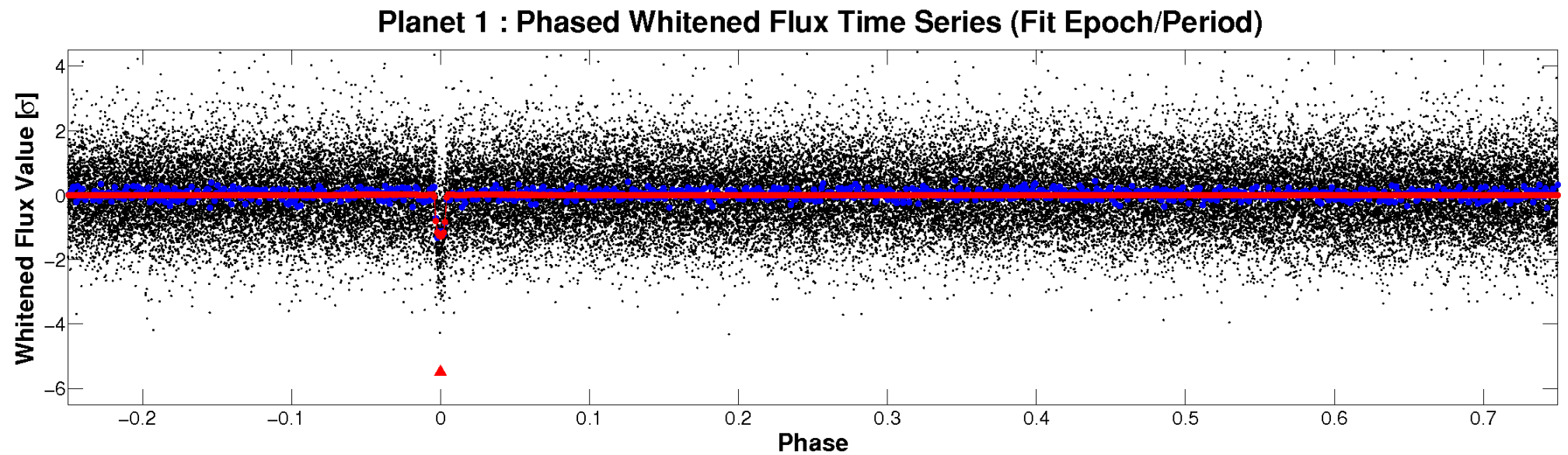
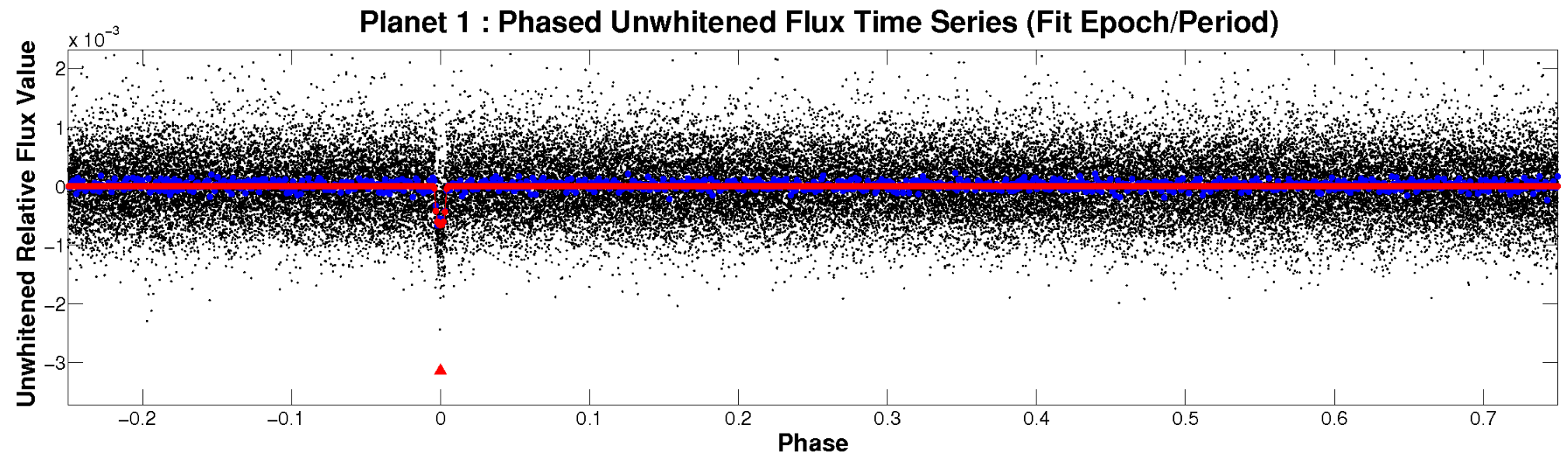


ALT Odd/Even

TCE 011288505-01

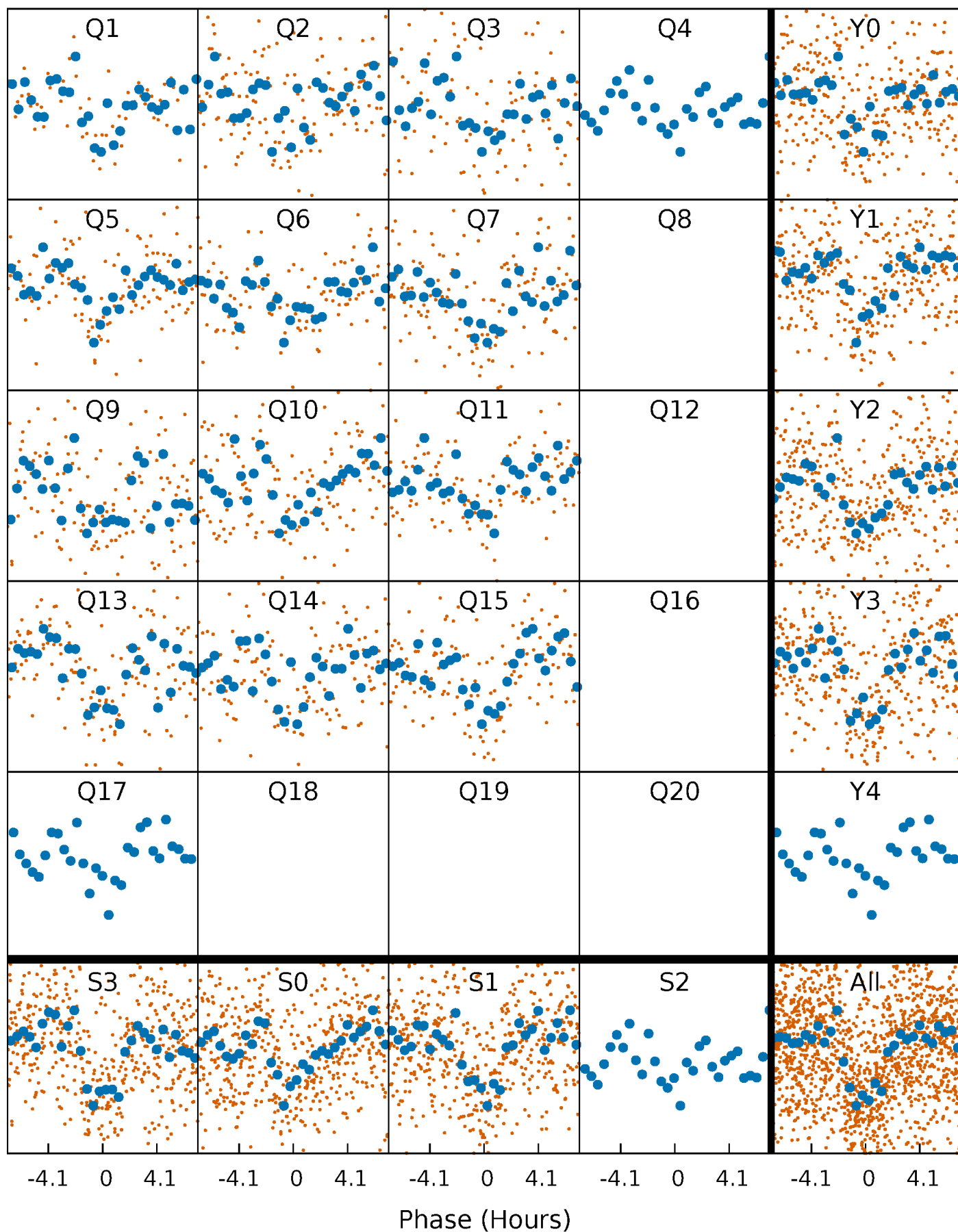


Non-Whitened Vs. Whitened Light Curve



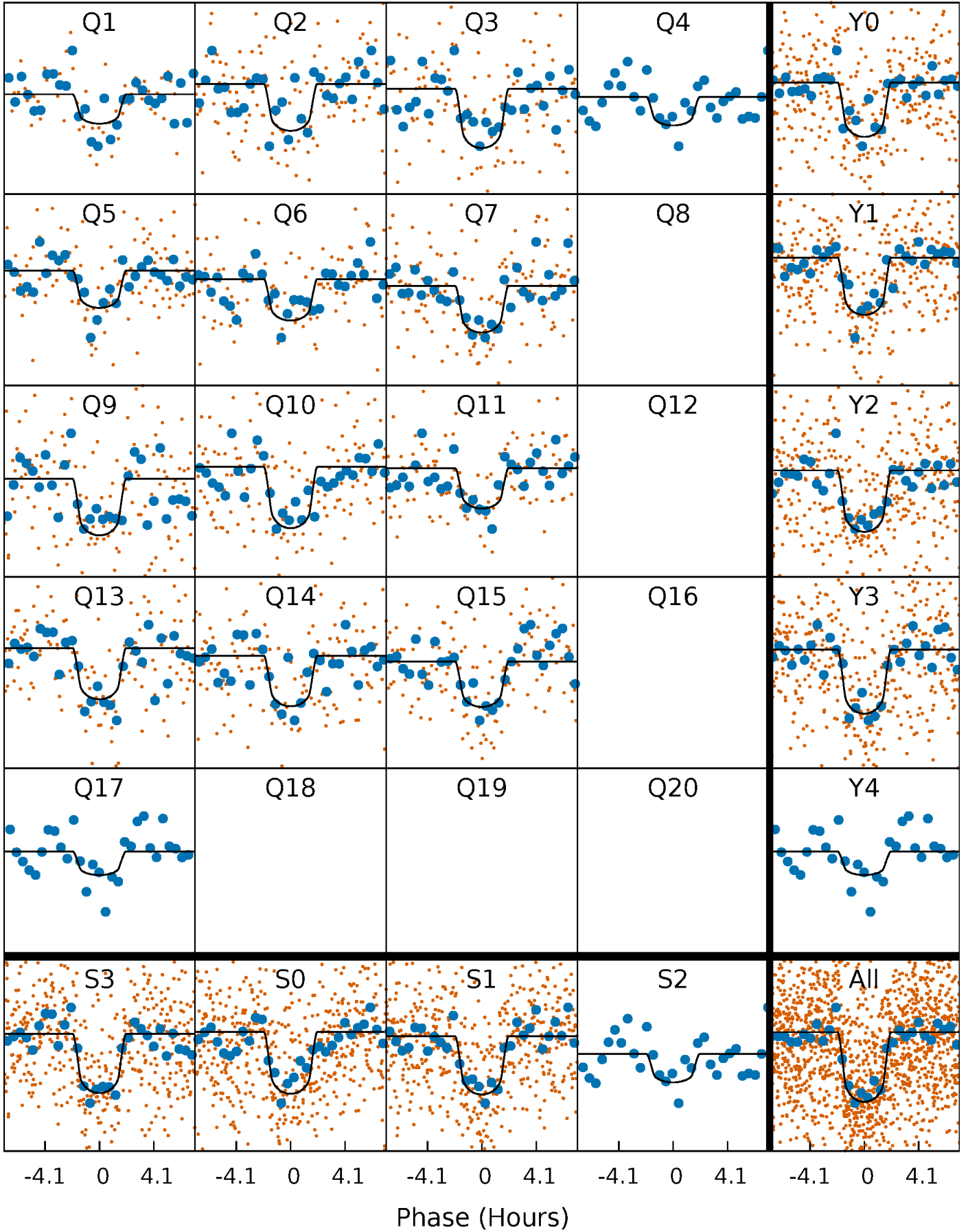
PDC Quarter-Phased Transit Curves

TCE 011288505-01 P= 19.807834 Days $T_0=139.381101$ (BKJD)



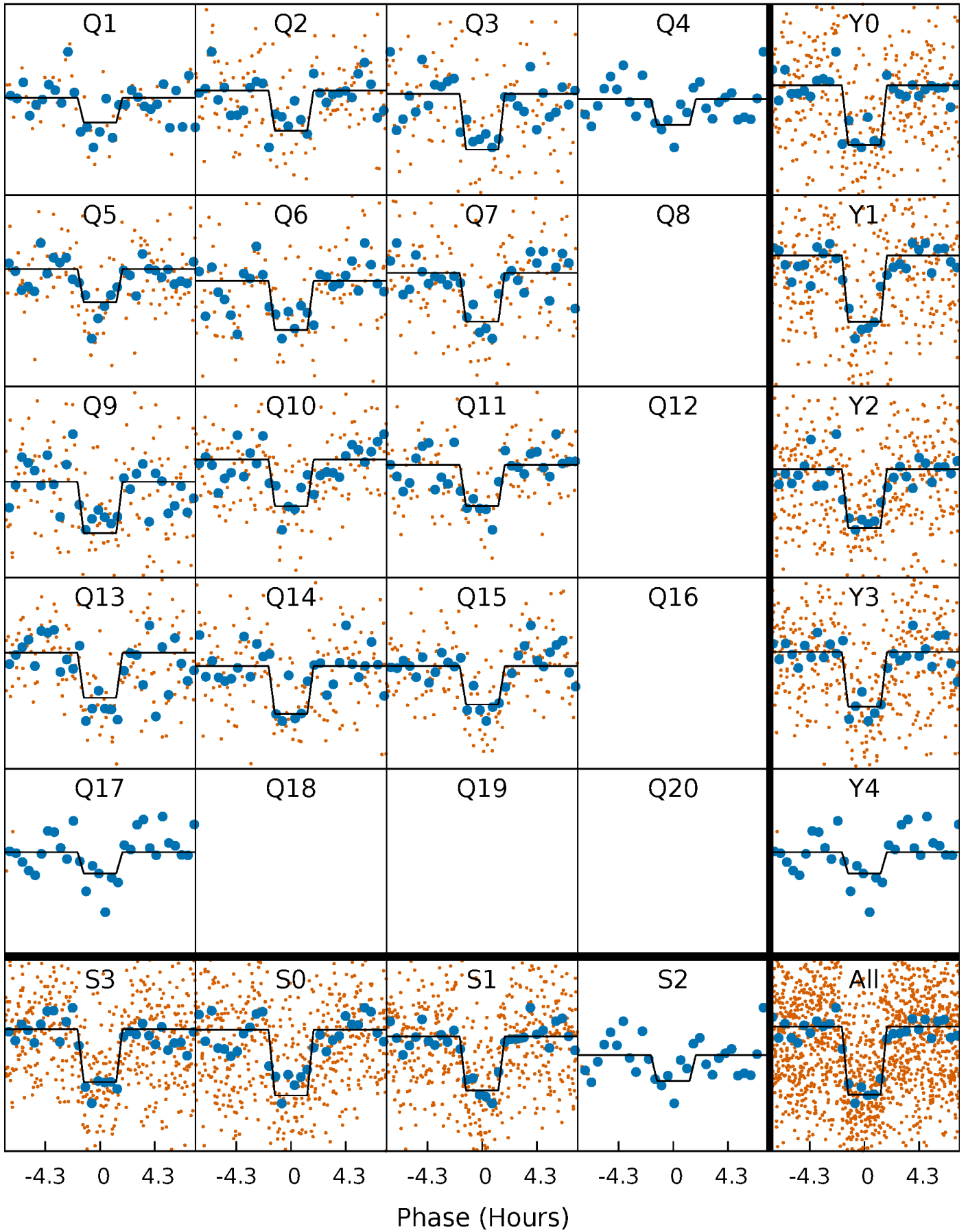
DV Quarter-Phased Transit Curves

TCE 011288505-01 P= 19.807834 Days $T_0=139.381101$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

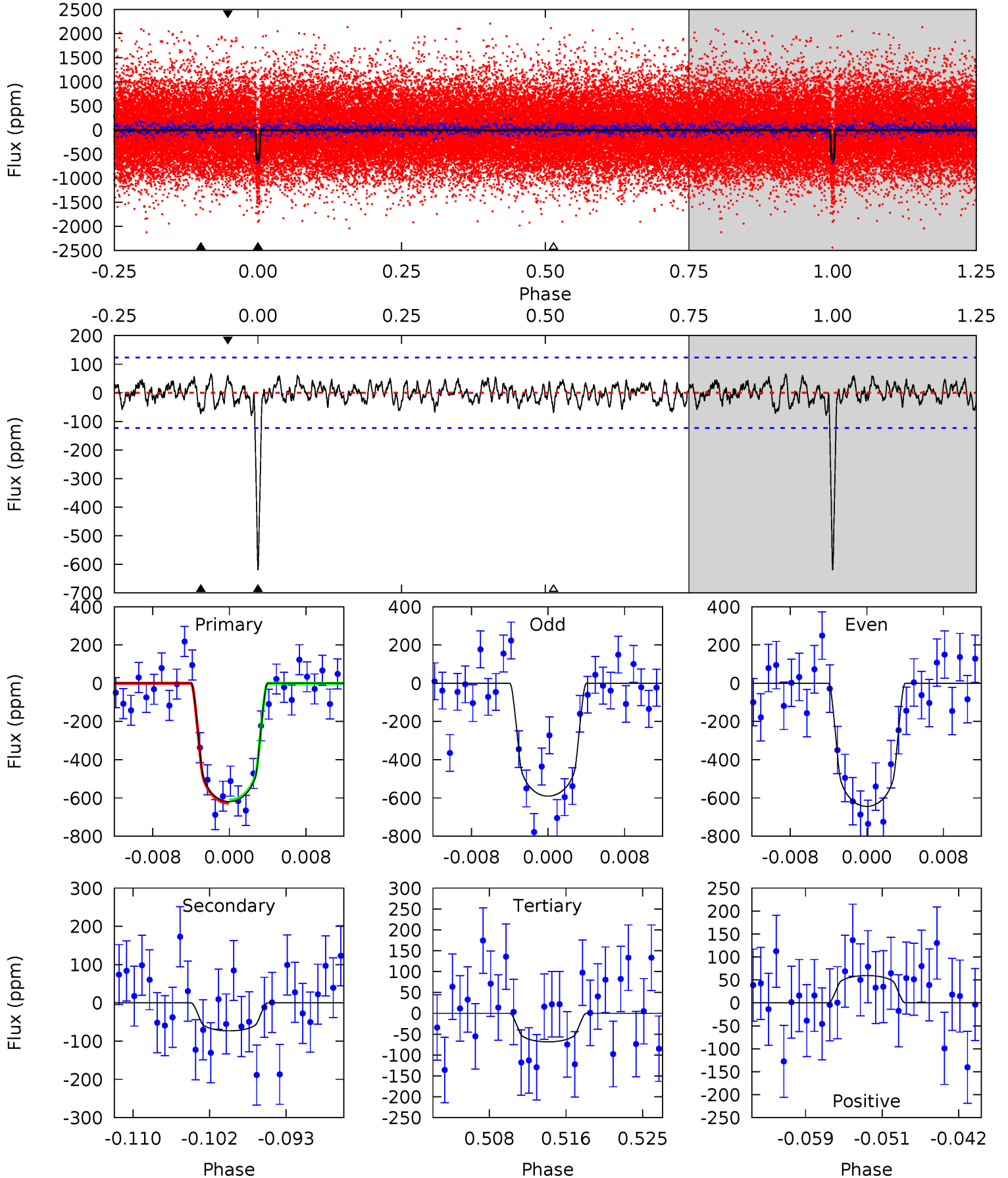
TCE 011288505-01 P= 19.807648 Days $T_0=139.389517$ (BKJD)



DV Model-Shift Uniqueness Test

011288505-01, $P = 19.807834$ Days, $E = 119.573267$ Days

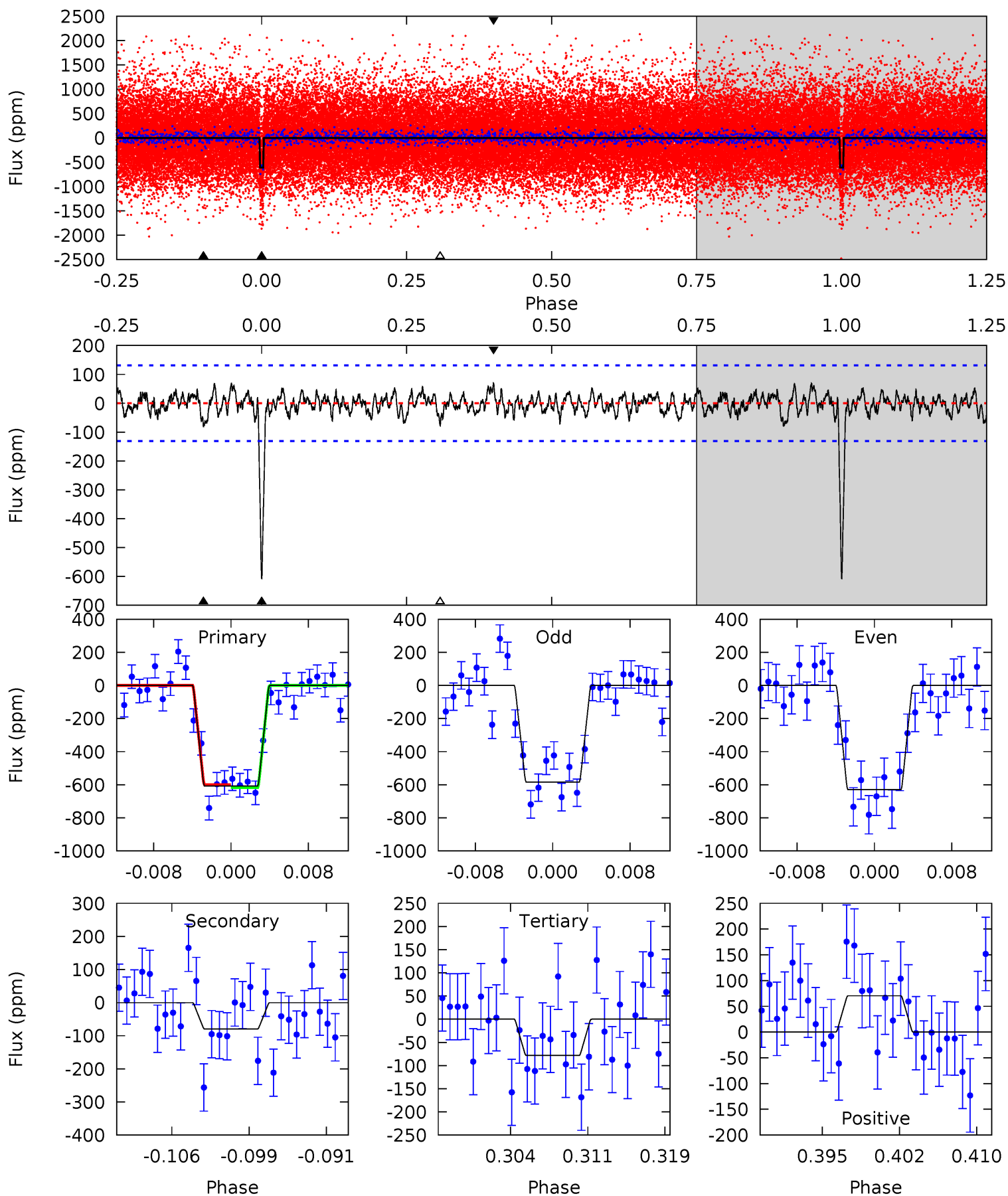
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.4	3.00	2.80	2.44	5.06	2.63	1.06	22.6	22.9	0.20	0.56	1.10	1.01	0.09	0.35



Alt Model-Shift Uniqueness Test

011288505-01, $P = 19.807648$ Days, $E = 119.581869$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.5	3.08	3.03	2.73	5.08	2.67	1.01	20.5	20.8	0.06	0.36	0.88	0.99	0.10	0.36



Stellar Parameters For KIC 011288505

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5775^{+143}_{-172}	$4.558^{+0.032}_{-0.168}$	$-0.220^{+0.300}_{-0.300}$	$0.840^{+0.212}_{-0.071}$	$0.934^{+0.100}_{-0.110}$	$2.219^{+0.377}_{-1.036}$
	+2%/-3%	+1%/-4%	+136%/-136%	+25%/-8%	+11%/-12%	+17%/-47%
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 011288505-01 / KOI 1433.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-73 ± 24	$2.48^{+1.06}_{-1.01}$	890^{+51}_{-34}	3683^{+765}_{-436}	114^{+227}_{-60}
Alt.	-80 ± 26	$2.34^{+1.02}_{-1.04}$	893^{+50}_{-37}	3873^{+890}_{-518}	155^{+330}_{-92}

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

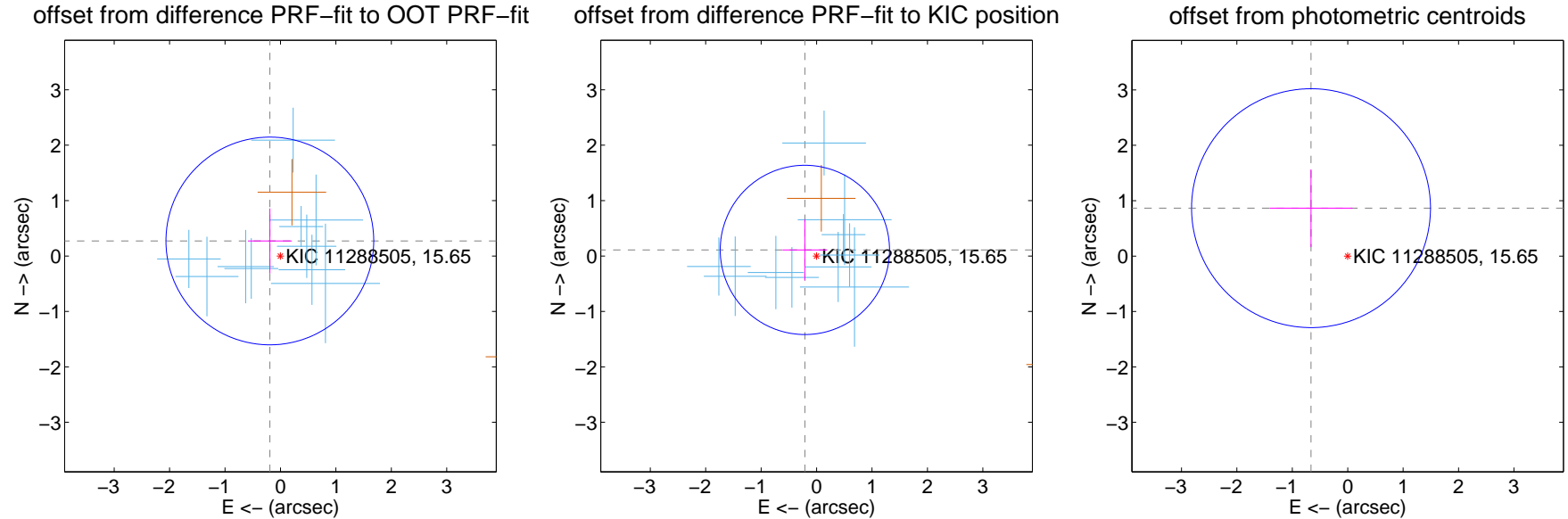
DV Centroid Data

Supplemental centroid analysis for 011288505-01. Kepler magnitude: 15.65. Transit SNR 21.15

There are 10 quarters with good PRF difference image offsets

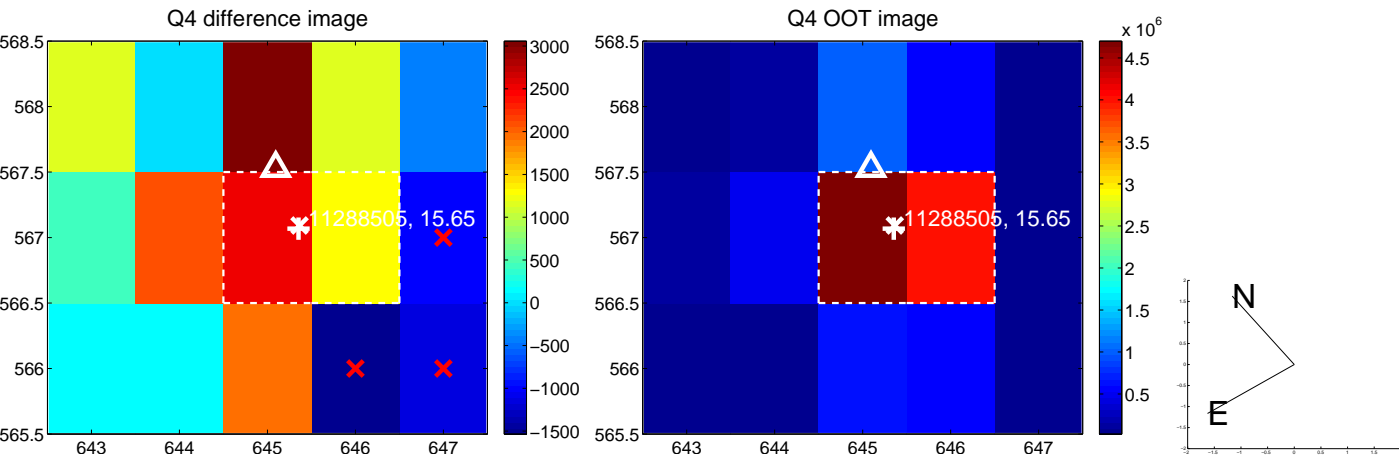
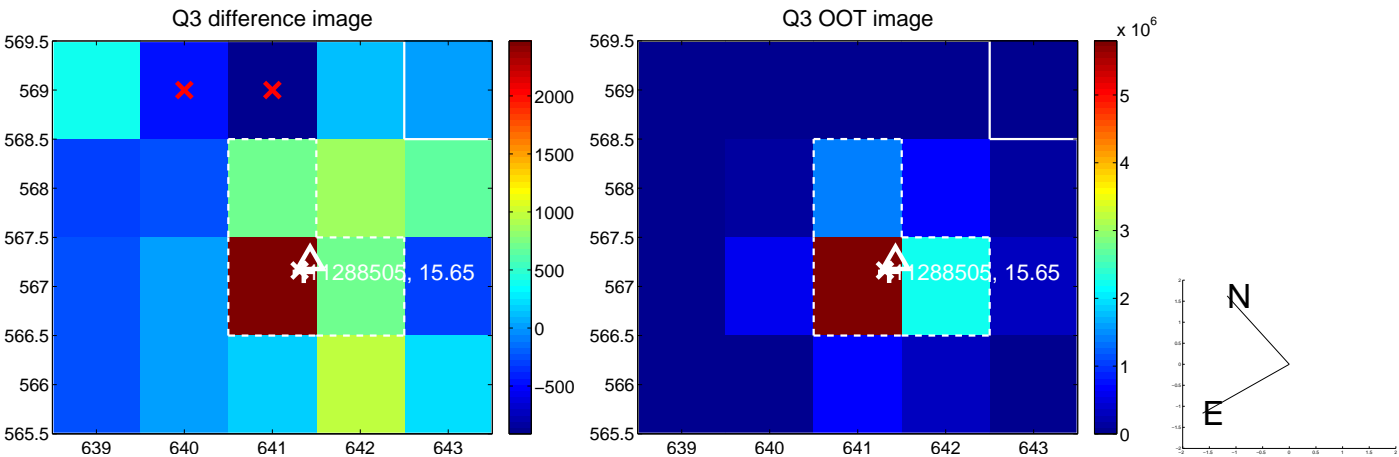
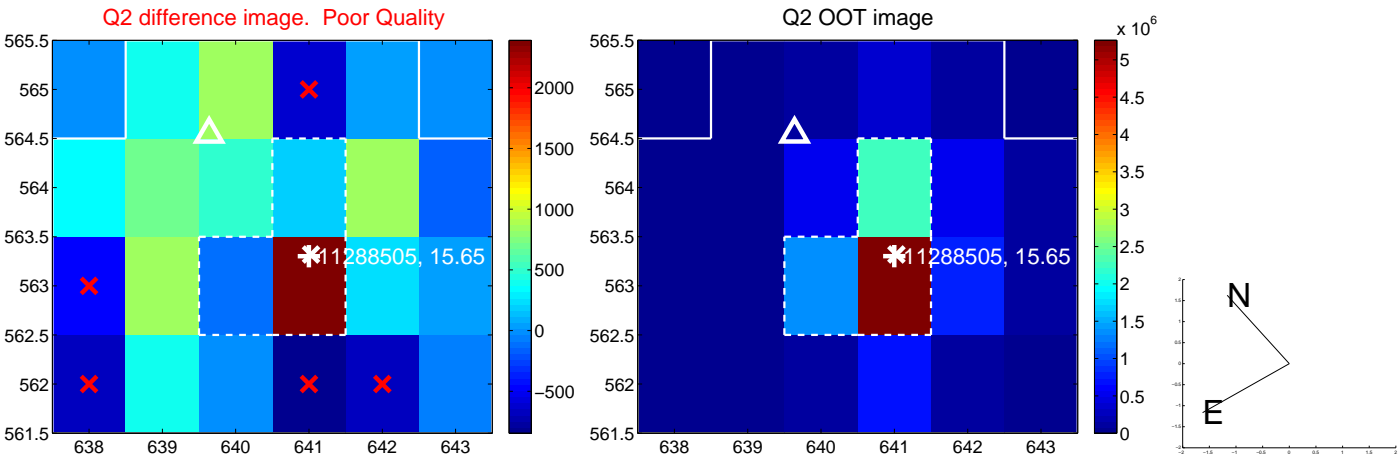
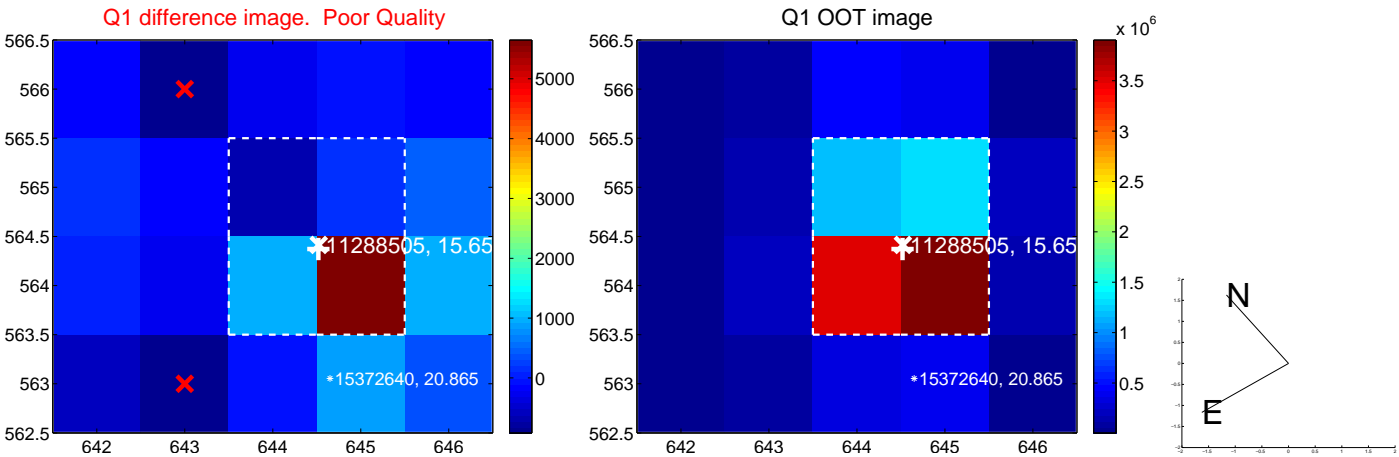
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.332 ± 0.625	0.53	0.191 ± 0.396	0.272 ± 0.586
PRF-fit source offset from KIC position	0.238 ± 0.509	0.47	0.211 ± 0.404	0.110 ± 0.551
photometric centroid source offset	1.09 ± 0.72	1.52	0.66 ± 0.75	0.87 ± 0.70

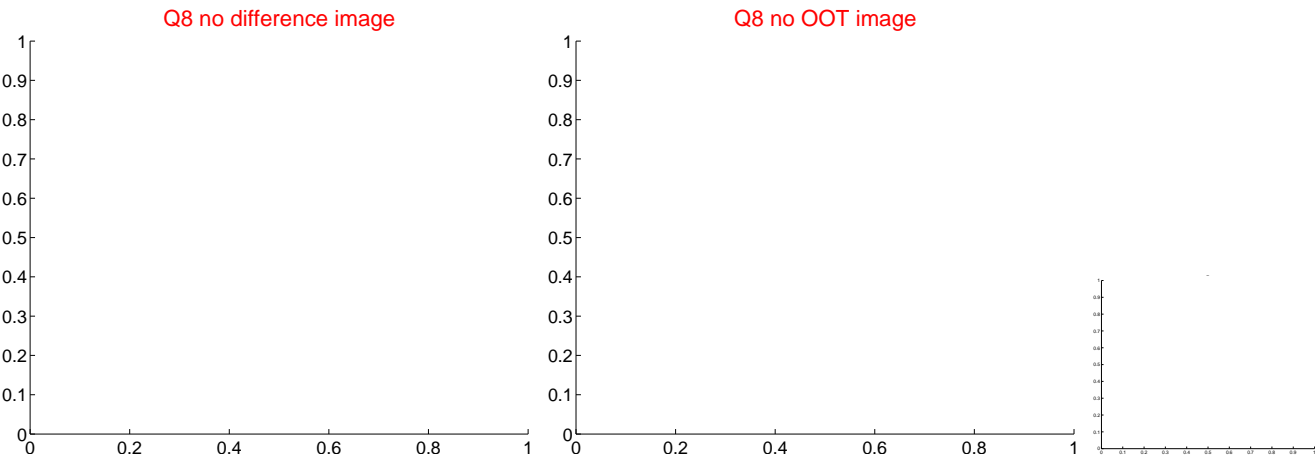
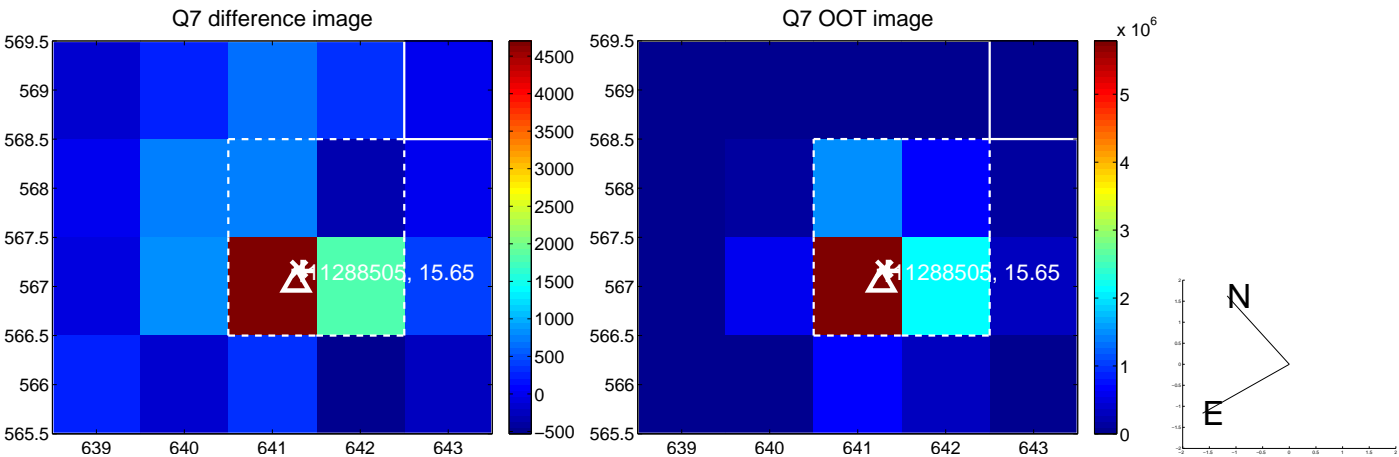
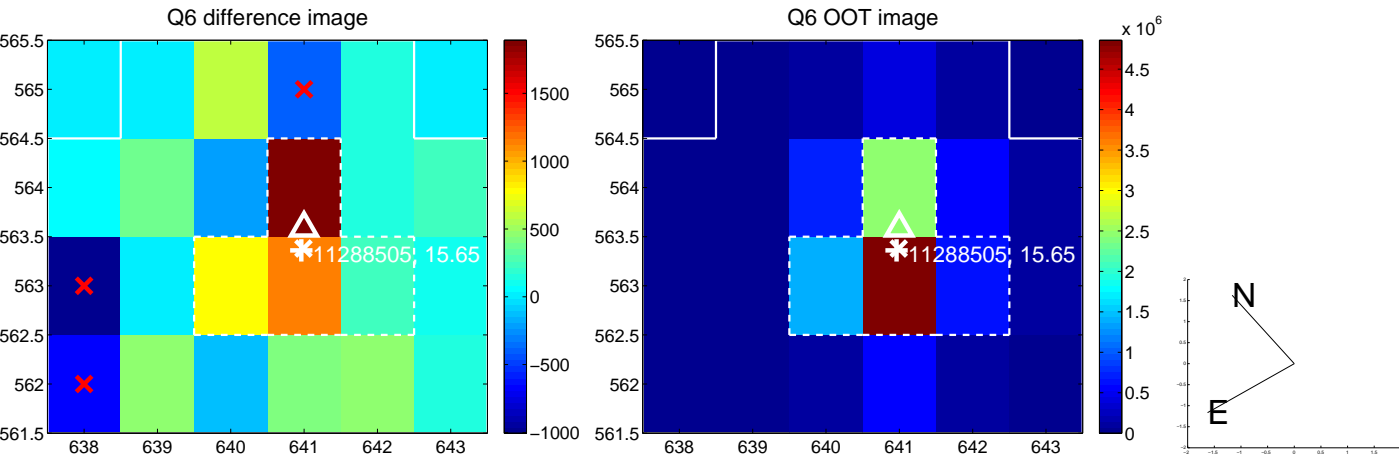
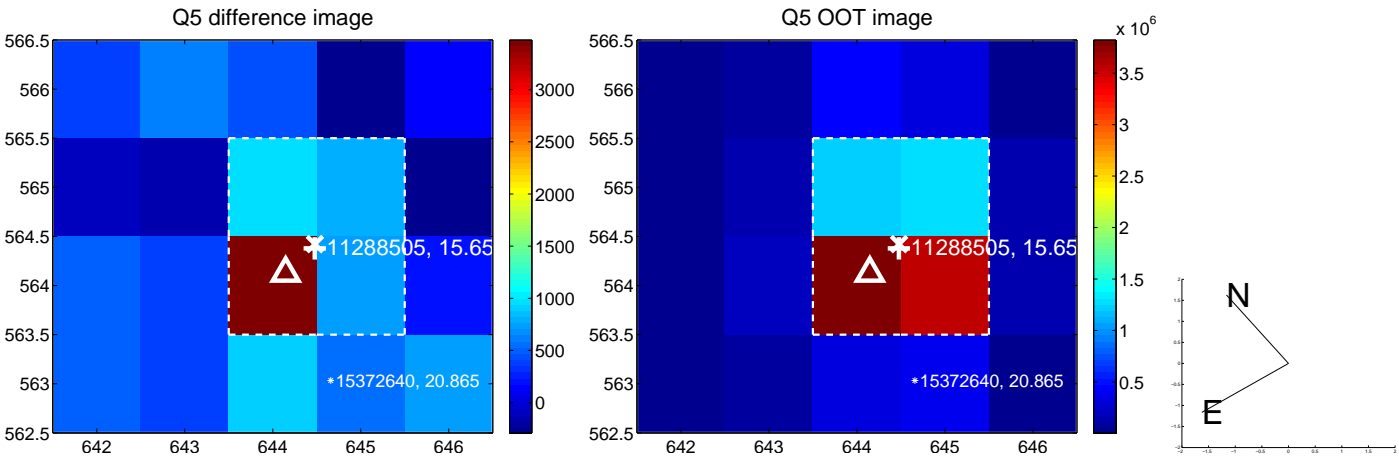


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

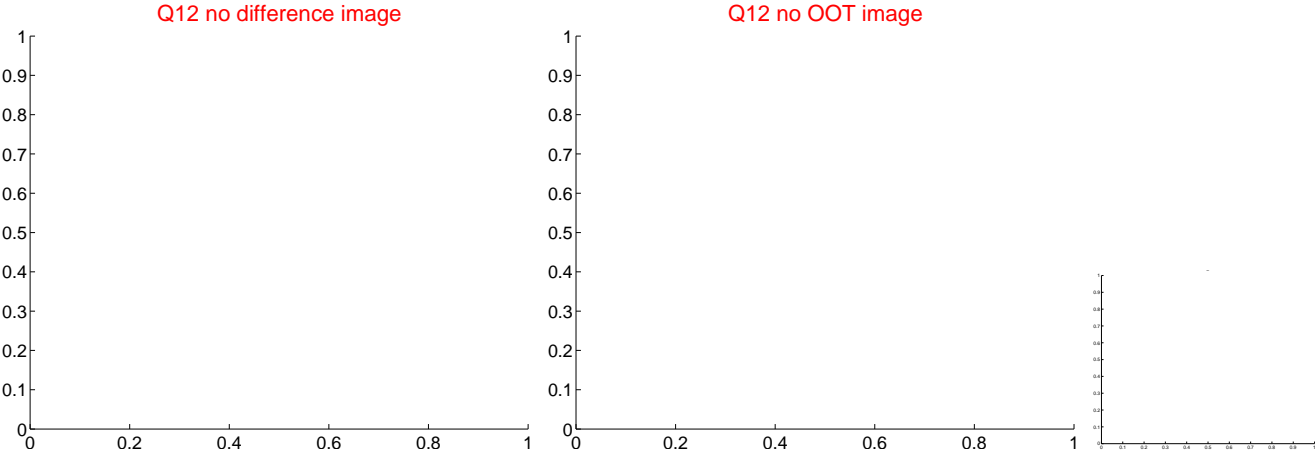
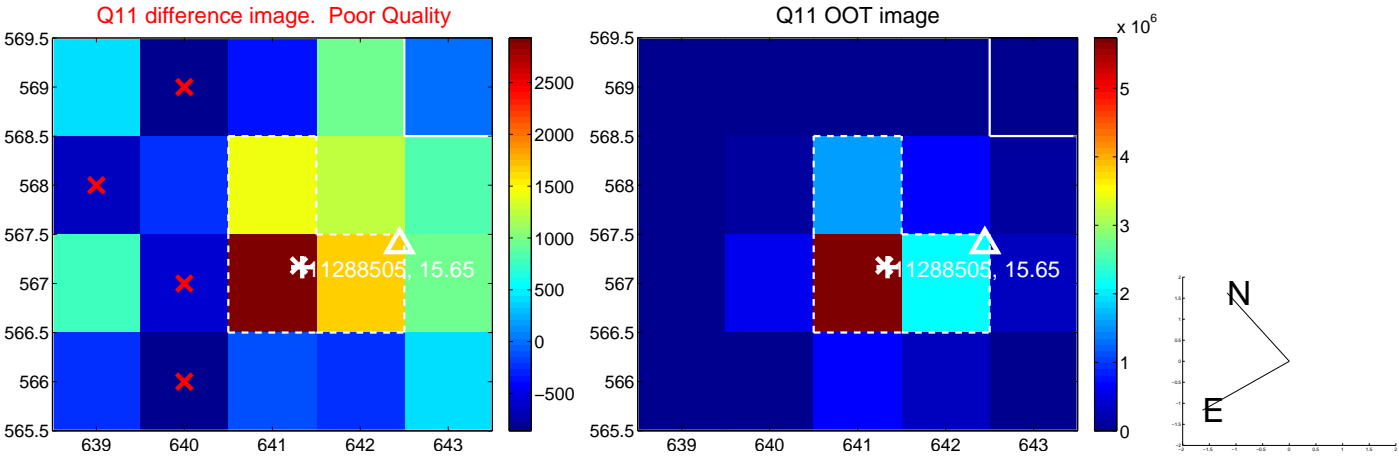
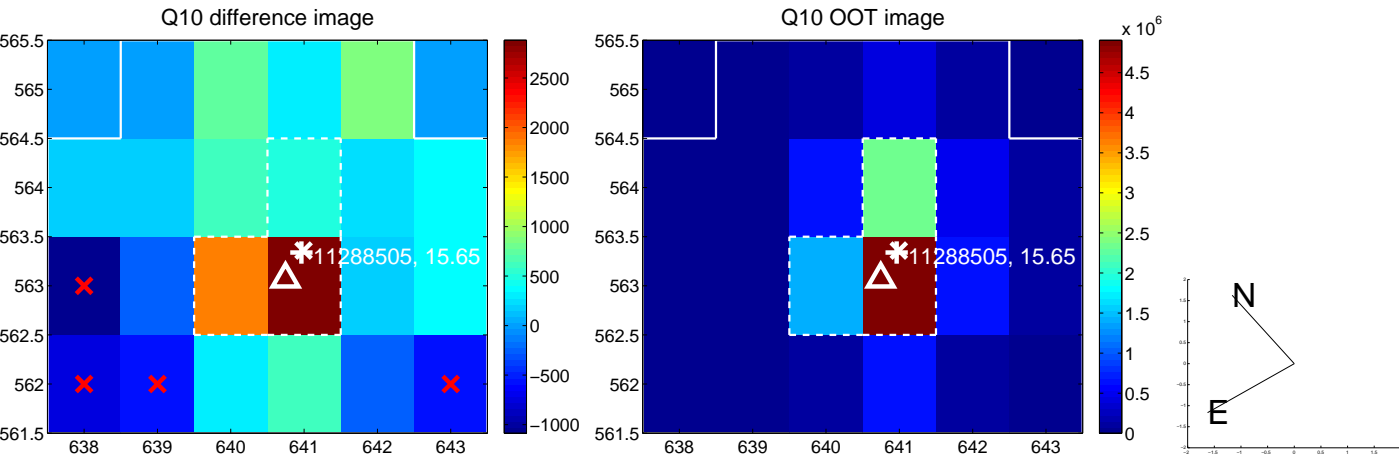
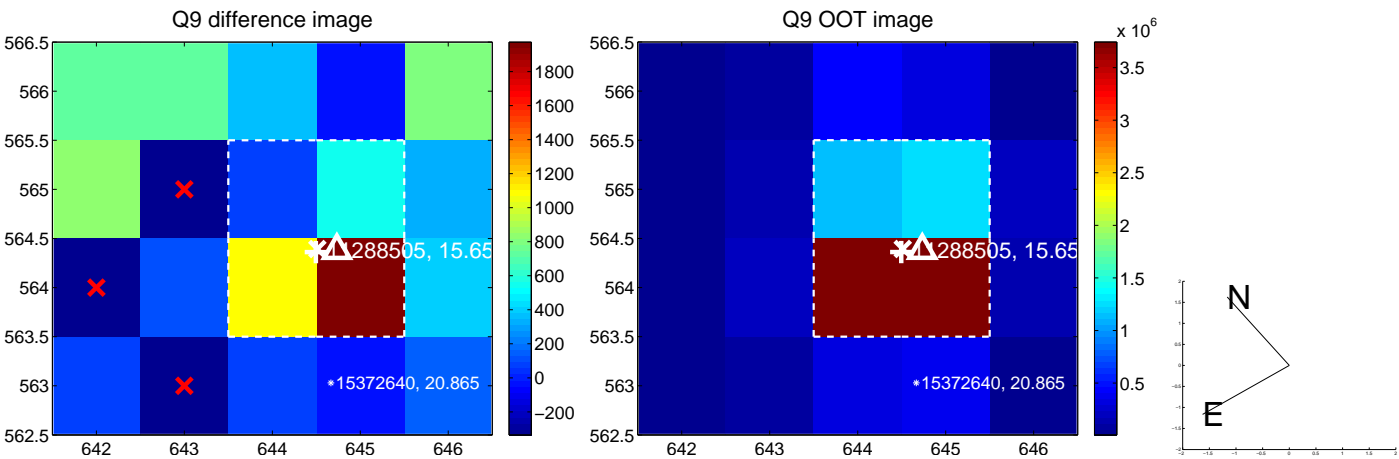
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



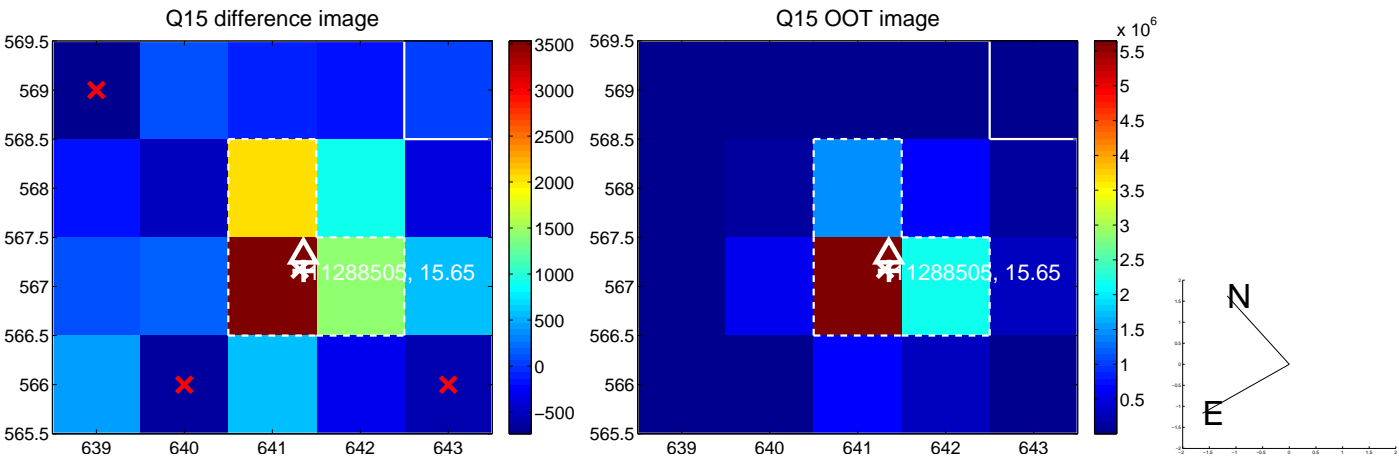
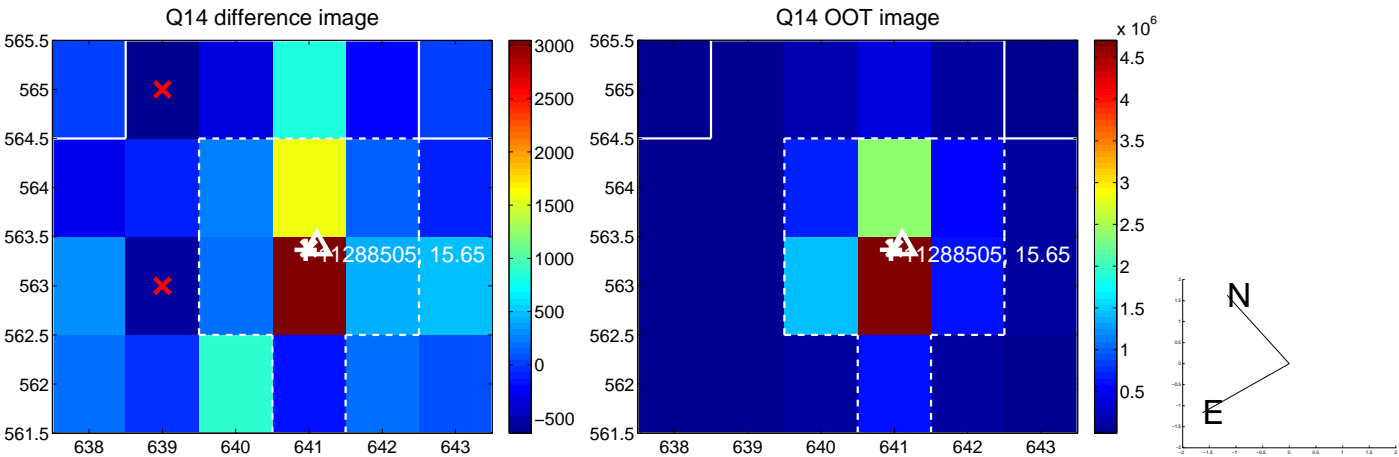
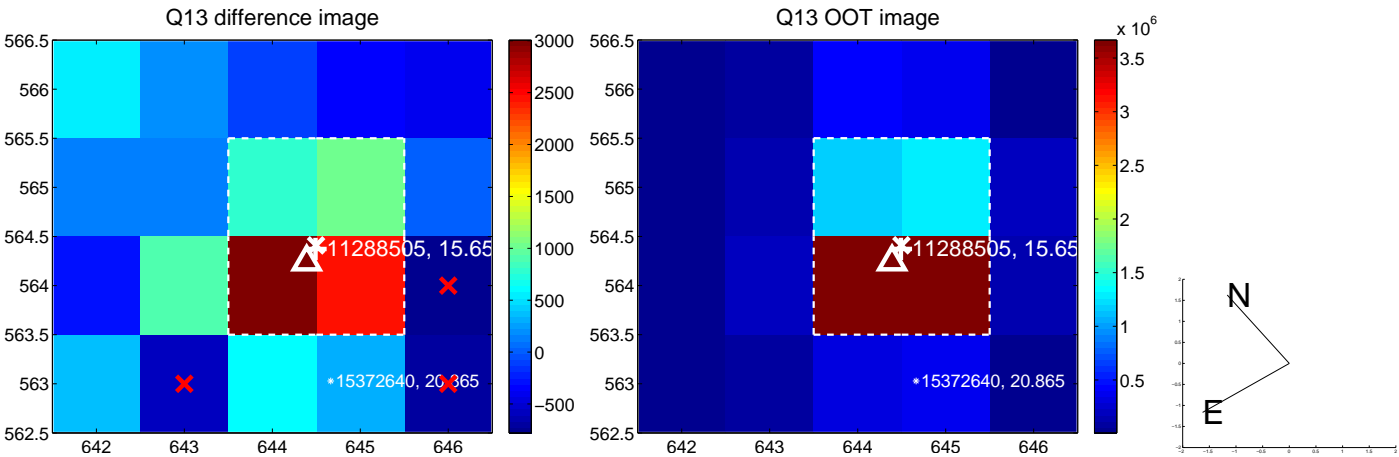
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



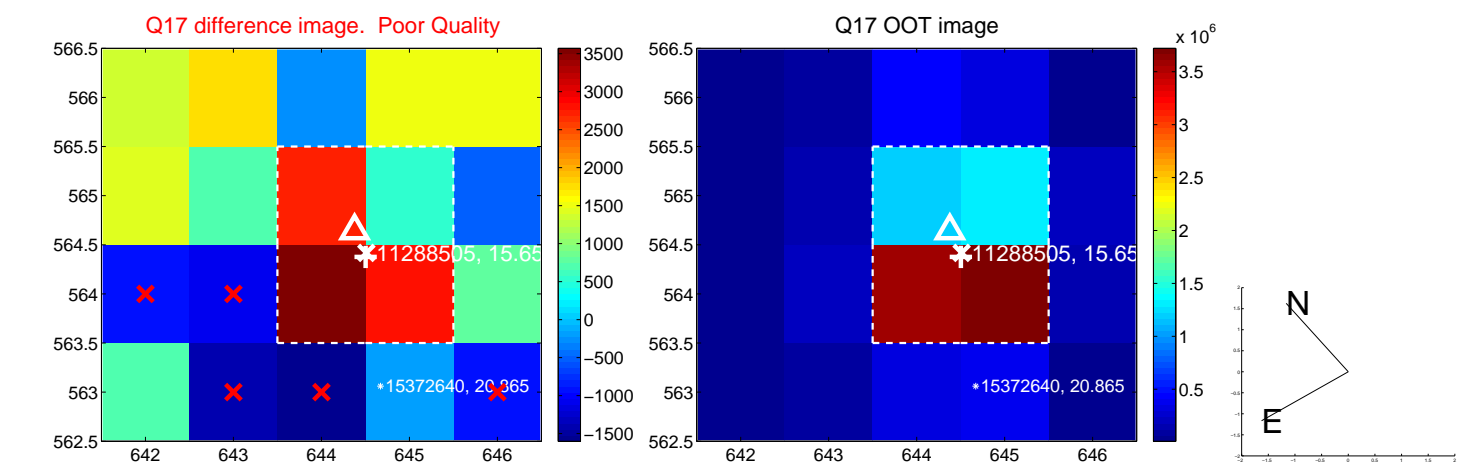
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



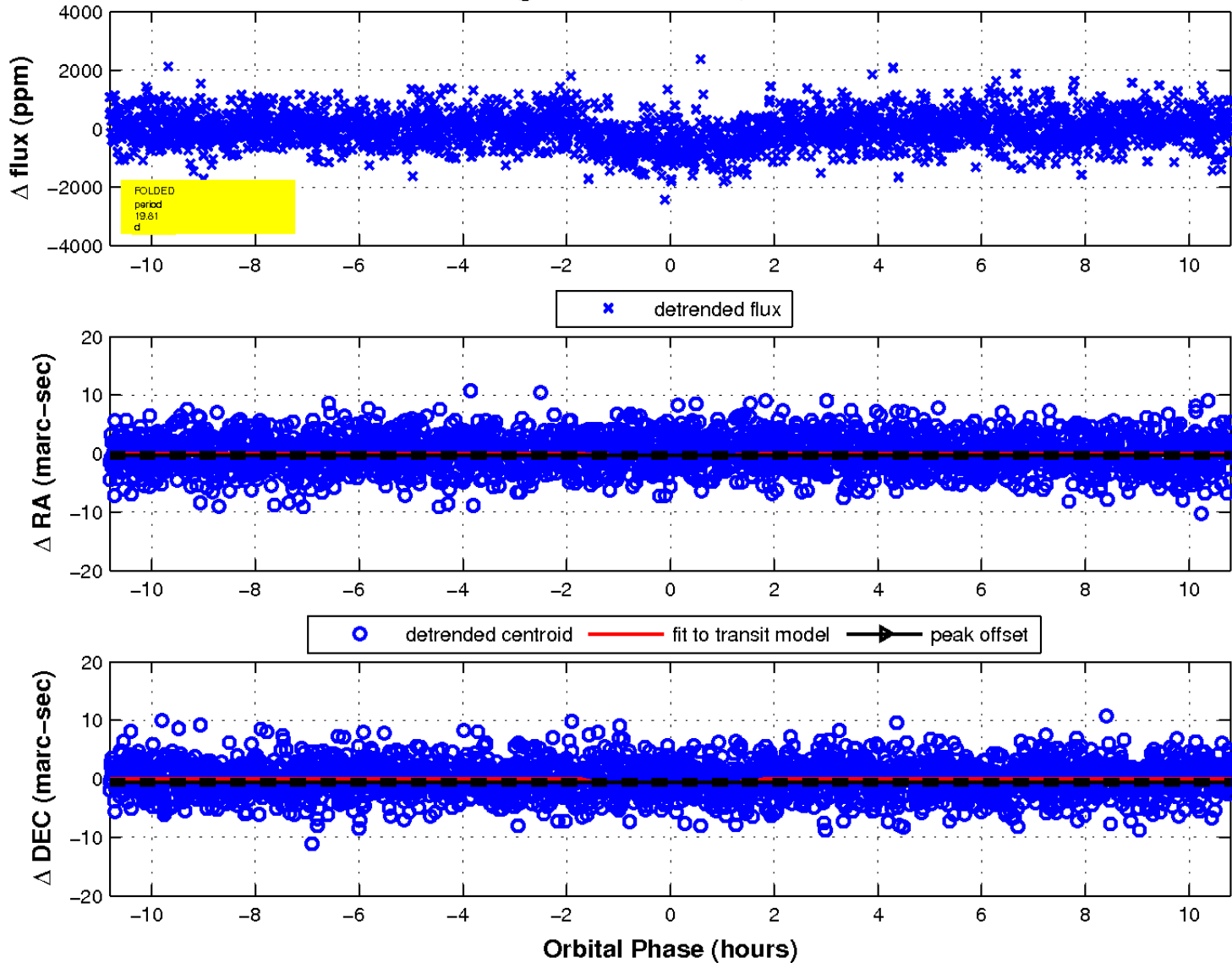
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

