

KIC 011499263

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})
011499263-01	OBS	3620.01	46.698198	167.698517	54117.9	3.565	1034.0	930.6	0.76	5772	25.57	11.33

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011499263-01	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED

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.

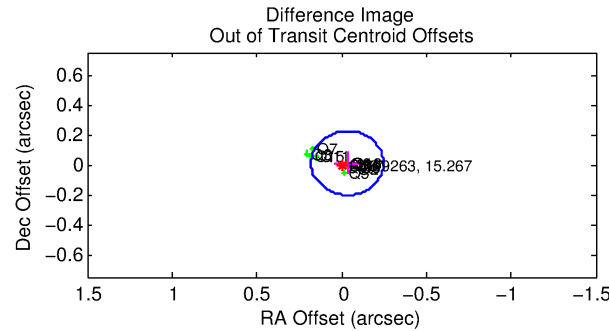
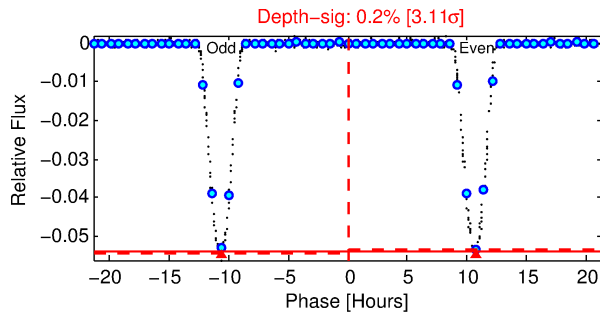
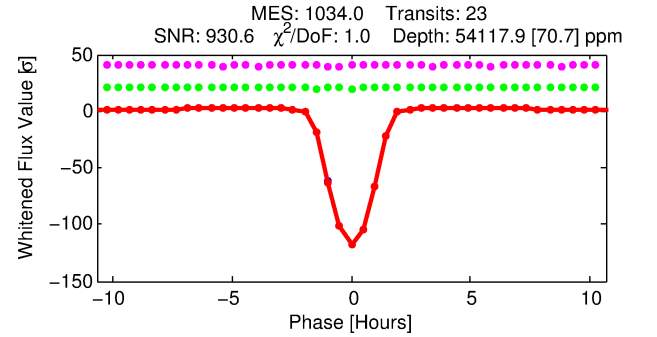
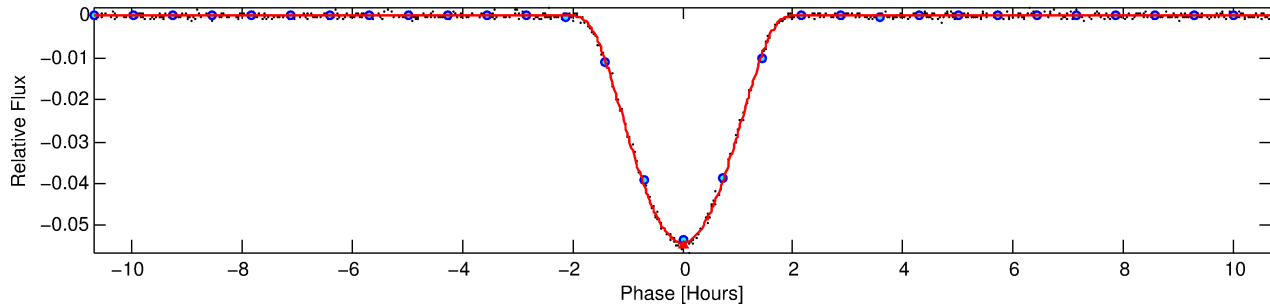
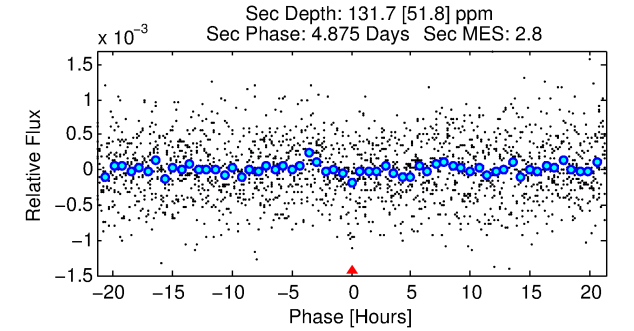
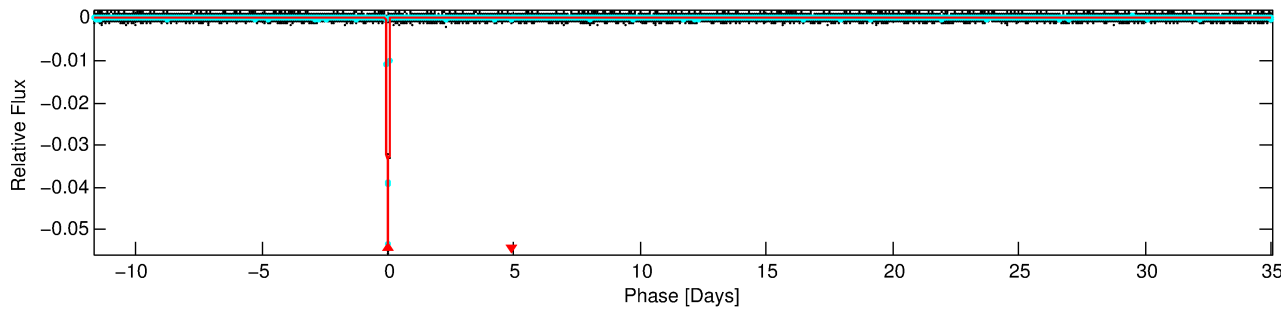
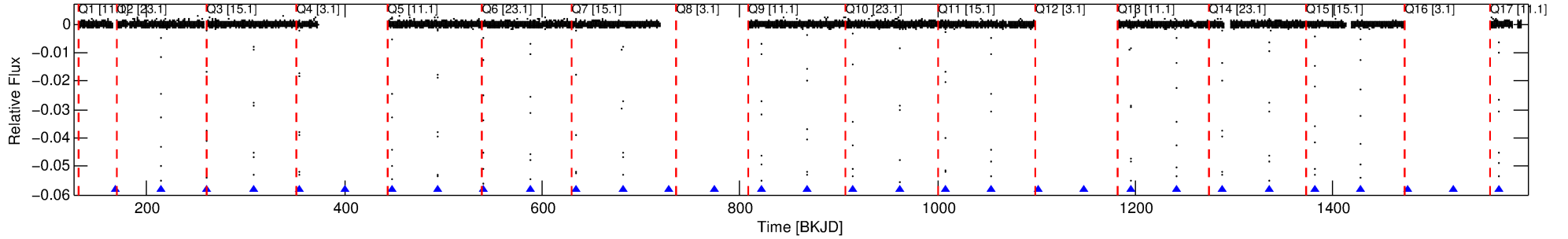
Ephemeris Match Information For 011499263-01

No Significant Match Found

DV One-Page Summary

KIC: 11499263 Candidate: 1 of 1 Period: 46.698 d
KOI: K03620.01 Corr: 0.998

Kp: 15.27 R*: 0.76 Rs Teff: 5772.0 K Logg: 4.52 Fe/H: -1.080



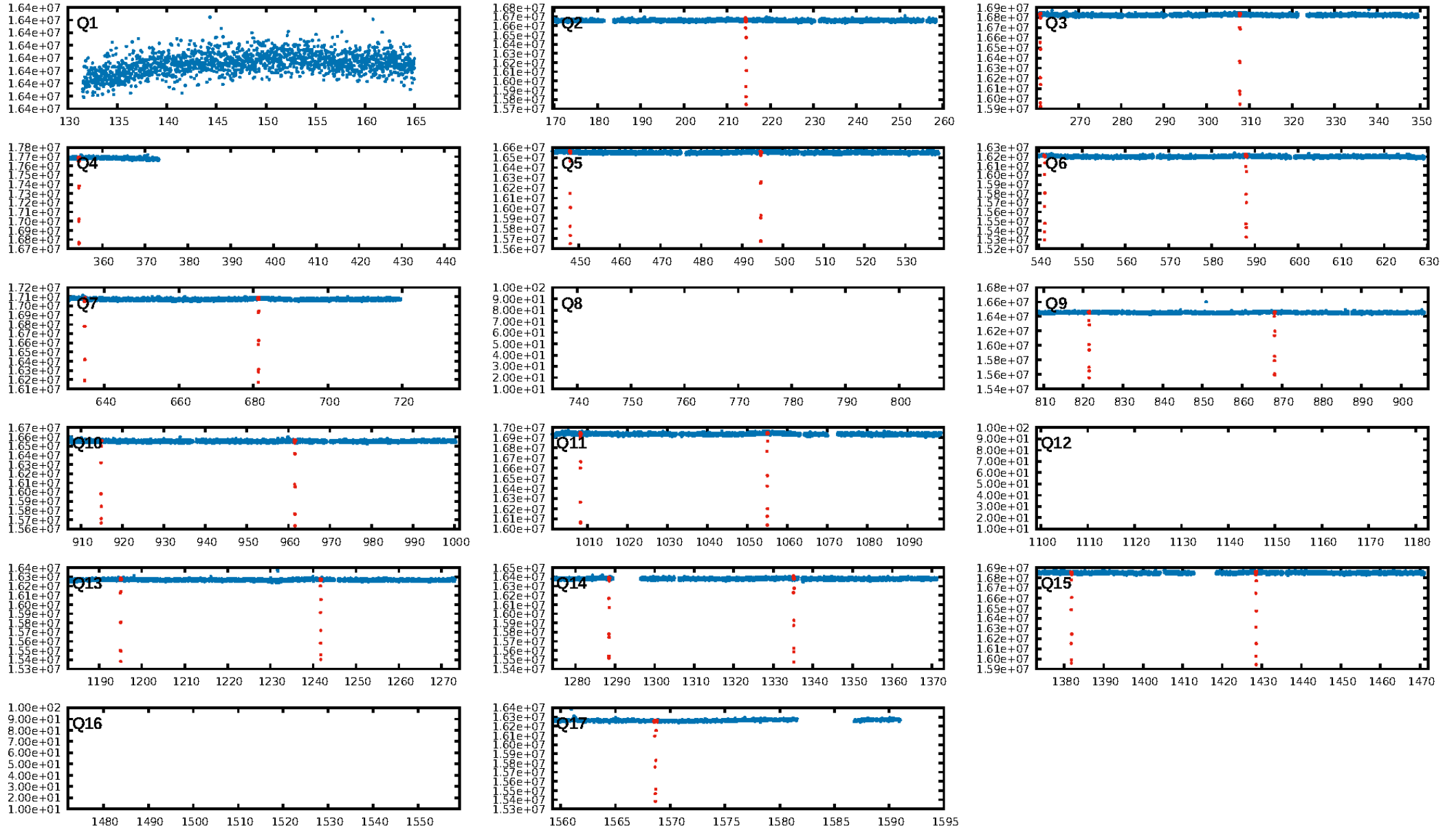
DV Fit Results:

Period = 46.69820 [0.00001] d
Epoch = 167.6985 [0.0001] BKJD
Rp/R* = 0.3099 [0.0167]
a/R* = 93.26 [0.40]
b = 0.92 [0.03]
Seff = 11.33 [2.72]
Teq = 468 [28] K
Rp = 25.57 [4.03] Re
a = 0.2240 [0.0297] AU
Ag = 5.56 [2.53] [1.80σ]
Teffp = 1111 [119] K [5.27σ]

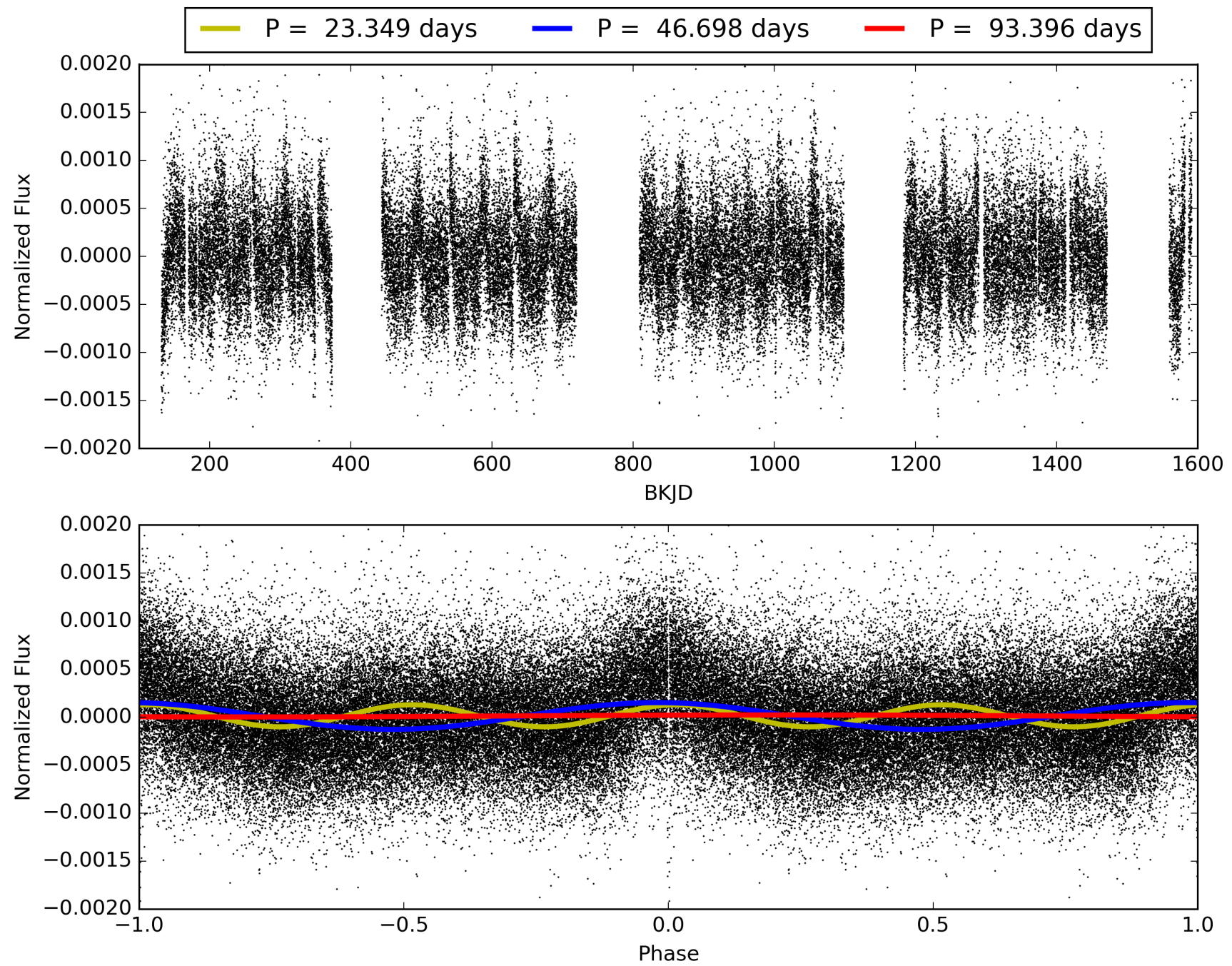
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [21/21]
GhostDiagnostic-chr: 5.931
Centroid-sig: 0.0%
Centroid-so: 0.251 arcsec [16.54σ]
OotOffset-rm: 0.035 arcsec [0.49σ]
KicOffset-rm: 0.205 arcsec [2.89σ]
OotOffset-st: 4/4/1/4 [13]
KicOffset-st: 4/4/1/4 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 1.00 [13/13]

TCE 011499263-01, PDC Light Curves

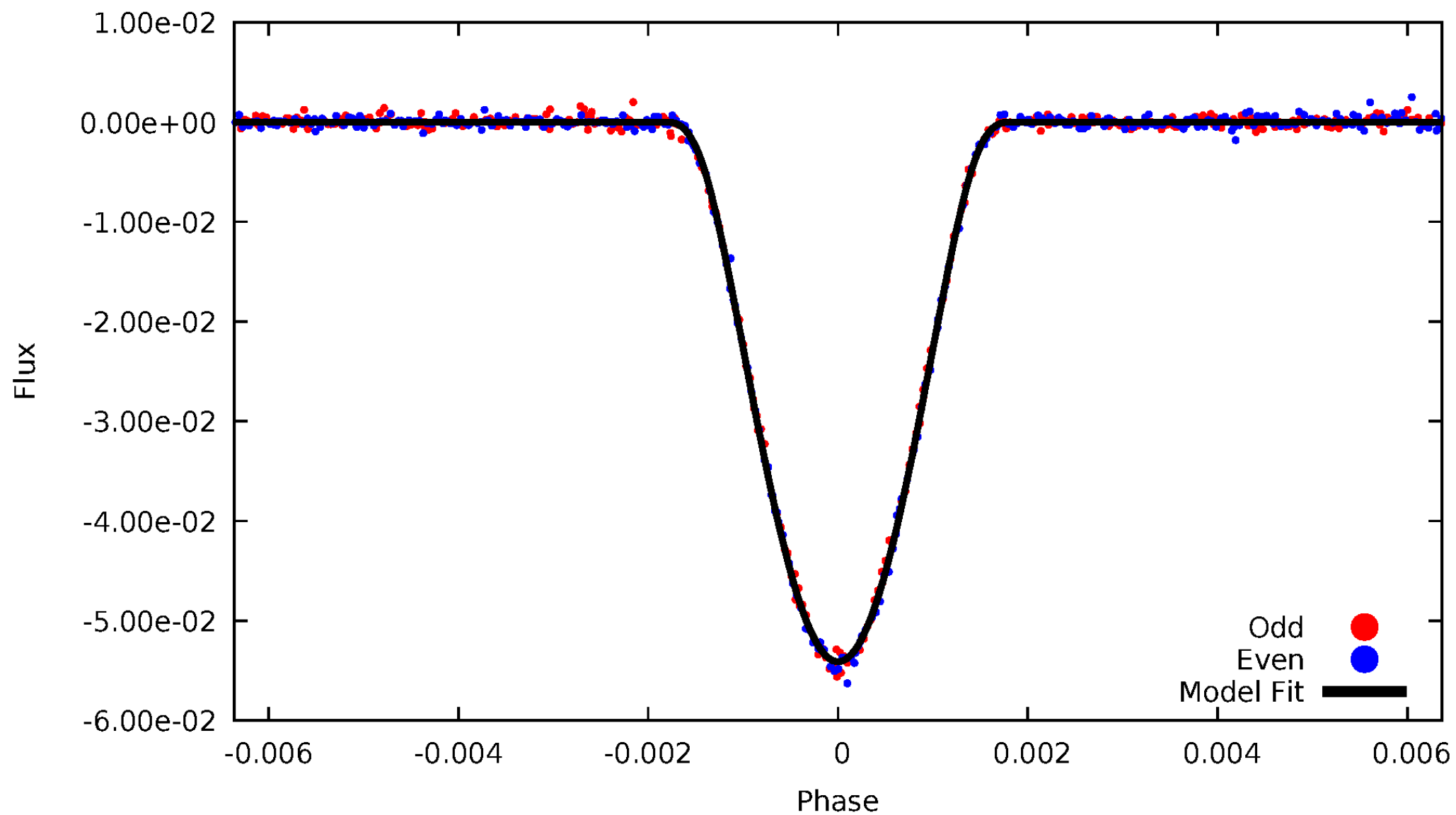


TCE 011499263-01



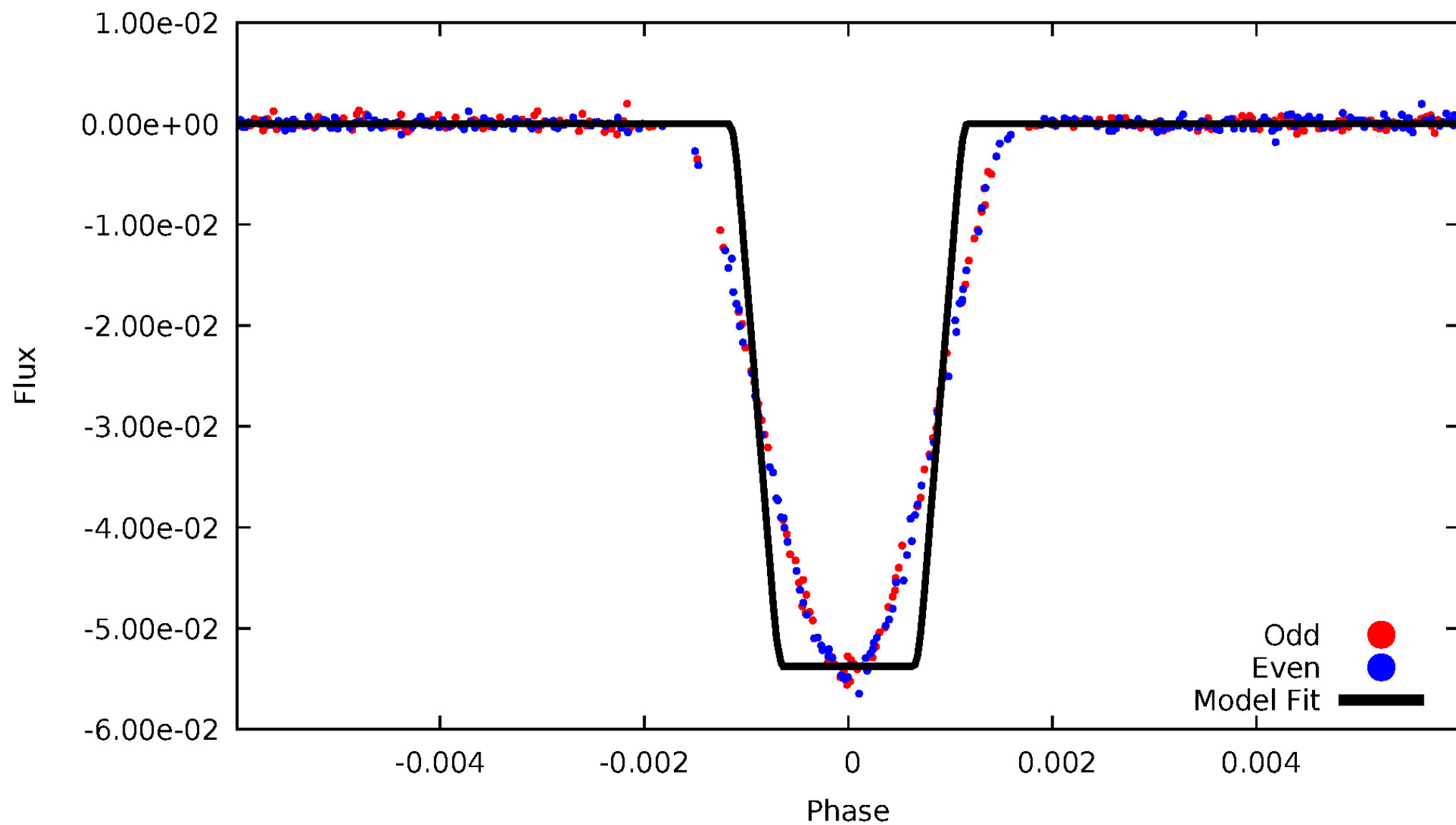
DV Odd/Even

TCE 011499263-01



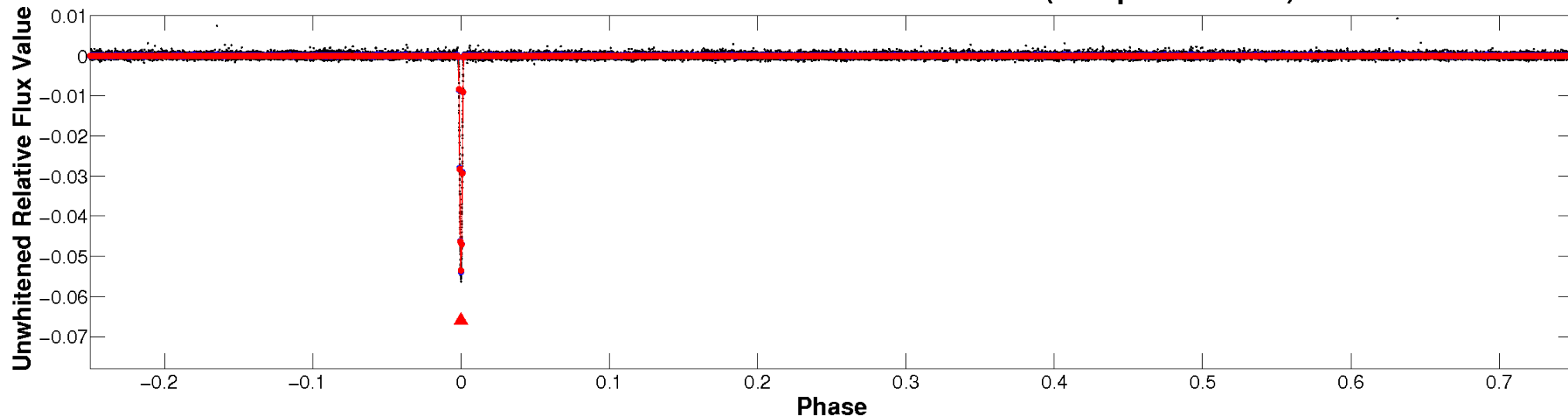
ALT Odd/Even

TCE 011499263-01

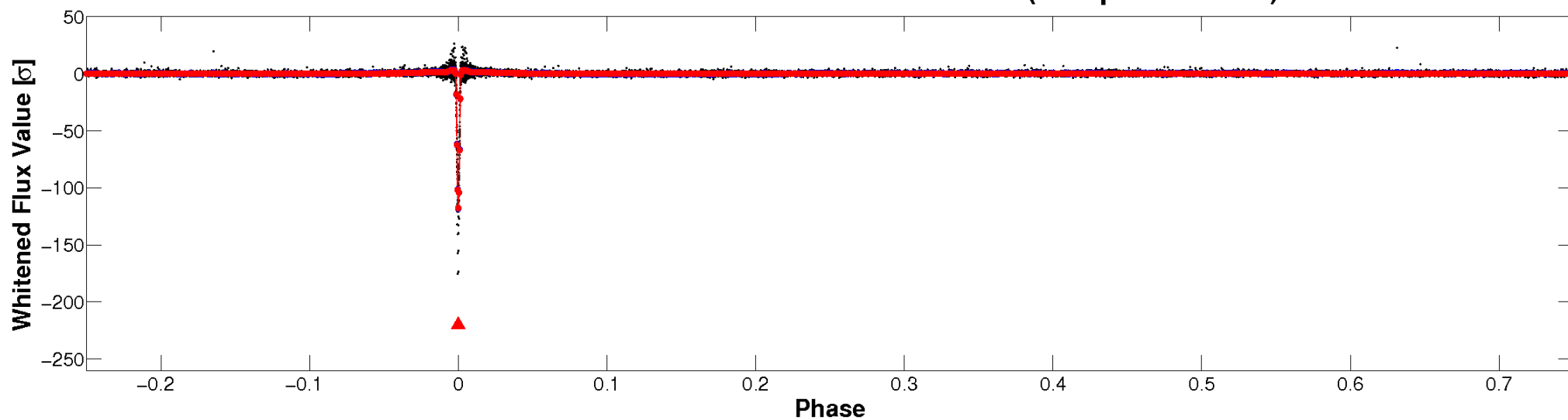


Non-Whitened Vs. Whitened Light Curve

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

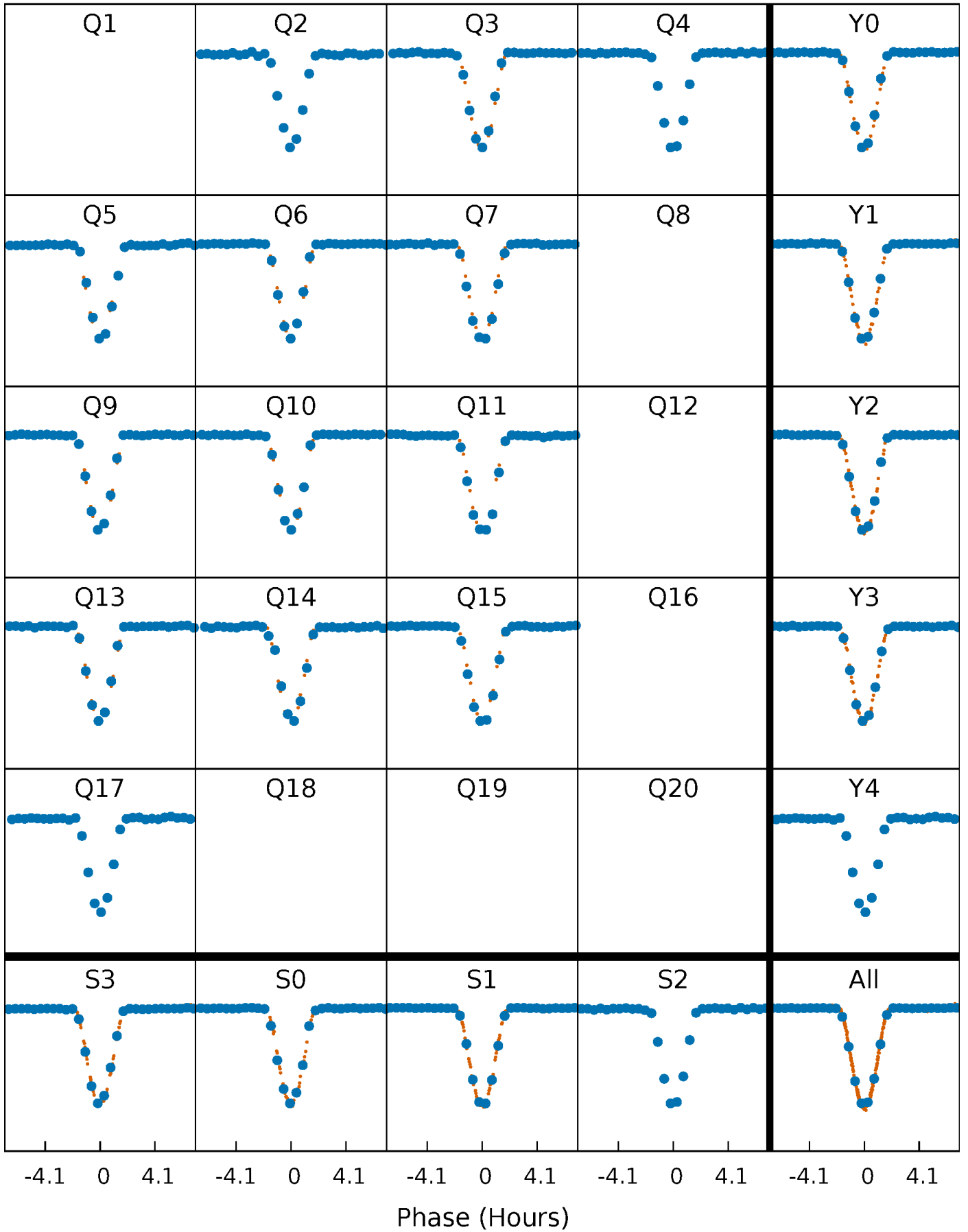


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



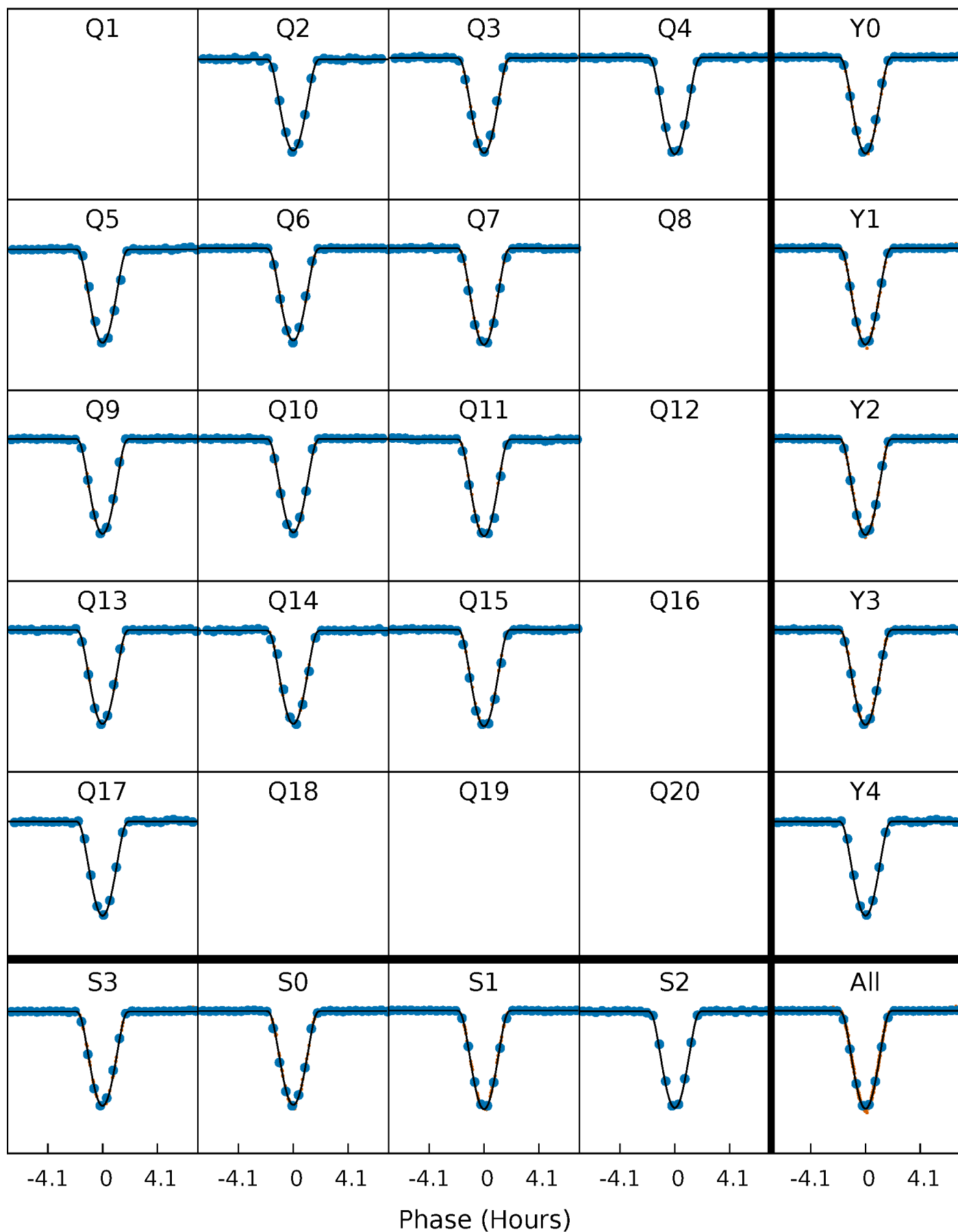
PDC Quarter-Phased Transit Curves

TCE 011499263-01 P= 46.698198 Days $T_0=167.698517$ (BKJD)



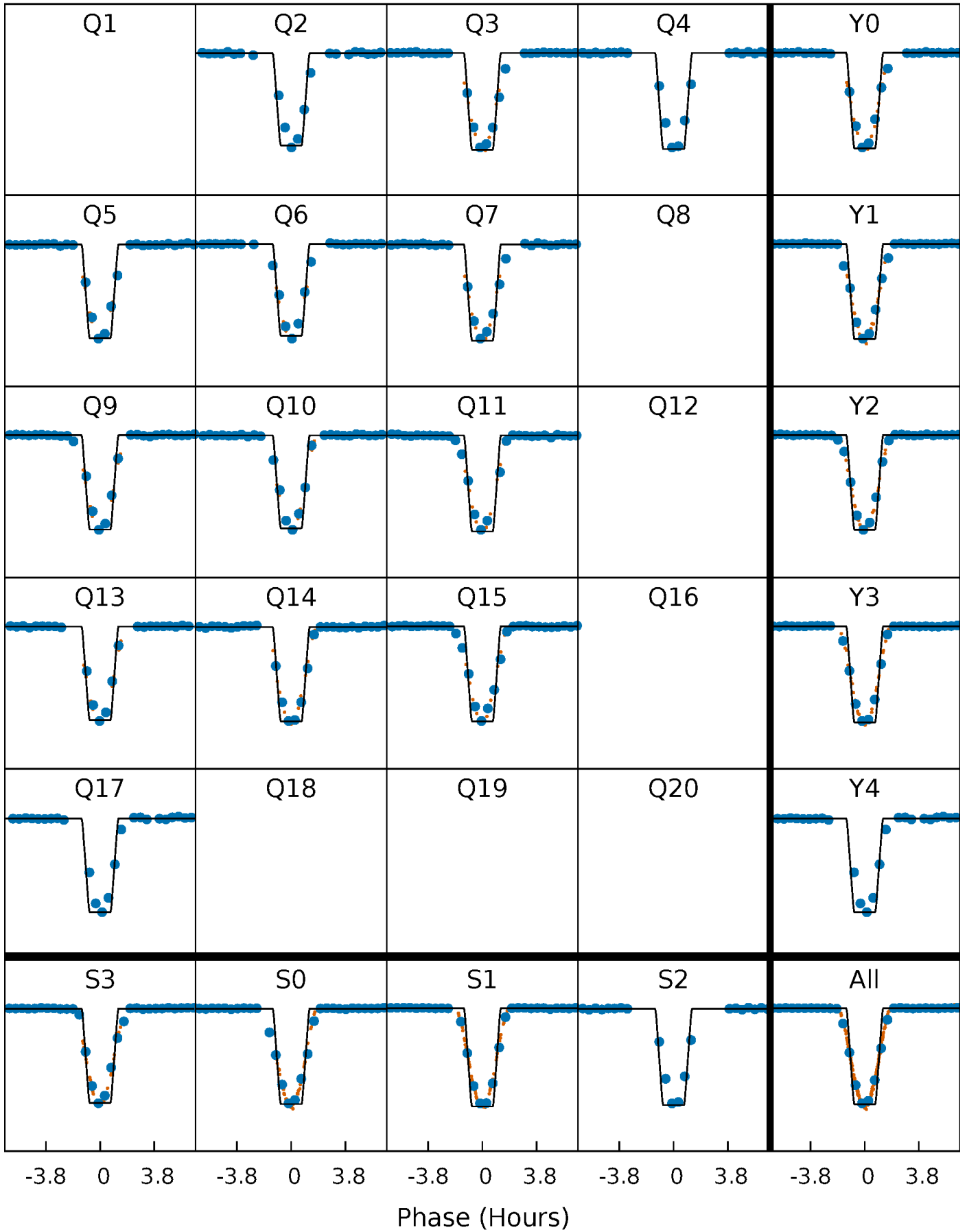
DV Quarter-Phased Transit Curves

TCE 011499263-01 P= 46.698198 Days $T_0=167.698517$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

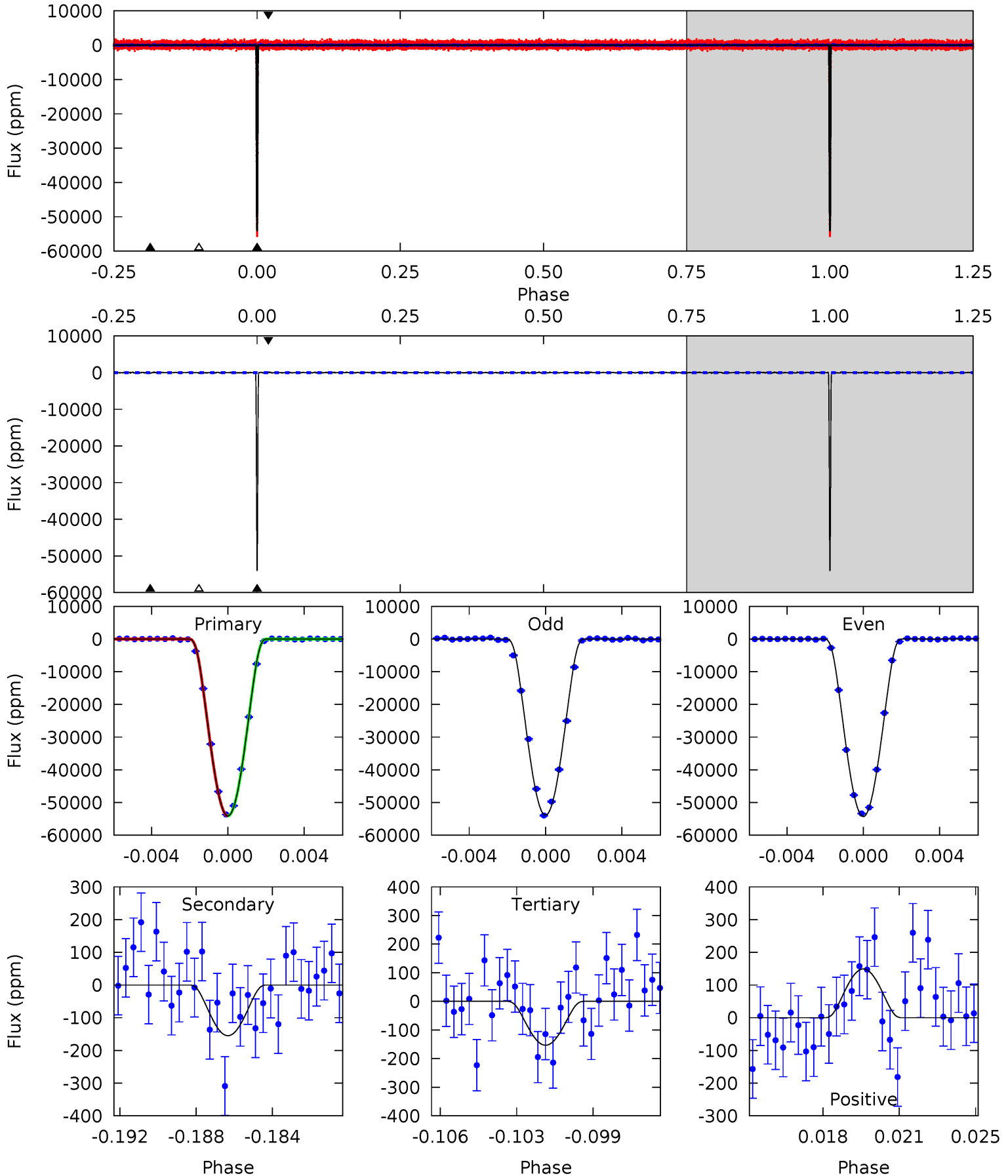
TCE 011499263-01 P= 46.698244 Days $T_0=167.697845$ (BKJD)



DV Model-Shift Uniqueness Test

011499263-01, P = 46.698198 Days, E = 121.000319 Days

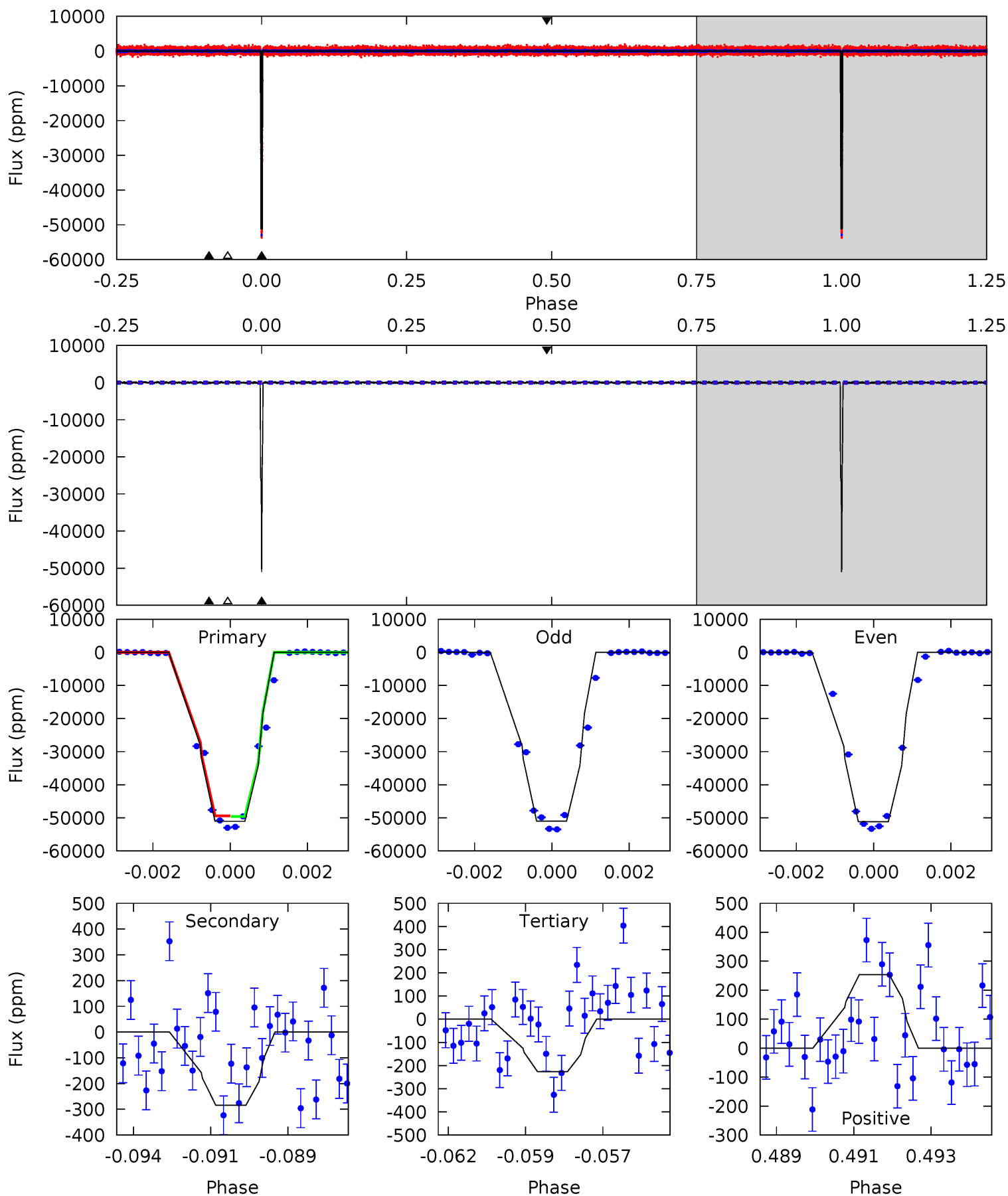
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1710	4.90	4.85	4.71	5.22	2.92	1.54	1706	1706	0.05	0.18	6.68	1.00	0.00	0.66



Alt Model-Shift Uniqueness Test

011499263-01, P = 46.698244 Days, E = 120.999601 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
855.5	4.77	3.80	4.25	5.30	3.05	1.89	851.7	851.3	0.97	0.52	1.93	1.00	0.00	0



Stellar Parameters For KIC 011499263

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5772^{+187}_{-170}	$4.518^{+0.115}_{-0.104}$	$-1.080^{+0.300}_{-0.300}$	$0.756^{+0.112}_{-0.084}$	$0.687^{+0.079}_{-0.023}$	$2.241^{+1.102}_{-0.679}$
	+3%/-3%	+3%/-2%	+28%/-28%	+15%/-11%	+11%/-3%	+49%/-30%
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 011499263-01 / KOI 3620.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-155 ± 32	$25.63^{+2.73}_{-2.16}$	653^{+32}_{-30}	2116^{+63}_{-62}	$6.573^{+1.870}_{-1.704}$
Alt.	-285 ± 60	$19.26^{+2.17}_{-1.91}$	652^{+34}_{-29}	2432^{+87}_{-89}	21^{+8}_{-6}

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 $A_{obs} \gg 1.0$

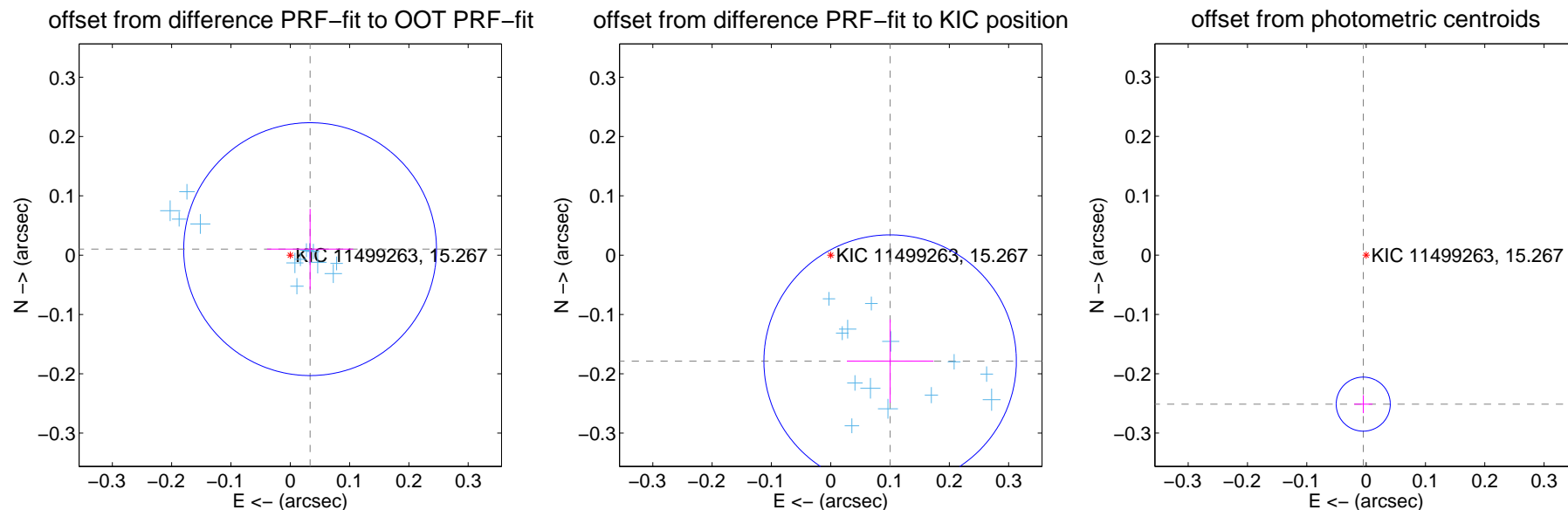
DV Centroid Data

Supplemental centroid analysis for 011499263-01. Kepler magnitude: 15.27. Transit SNR 930.59

There are 13 quarters with good PRF difference image offsets

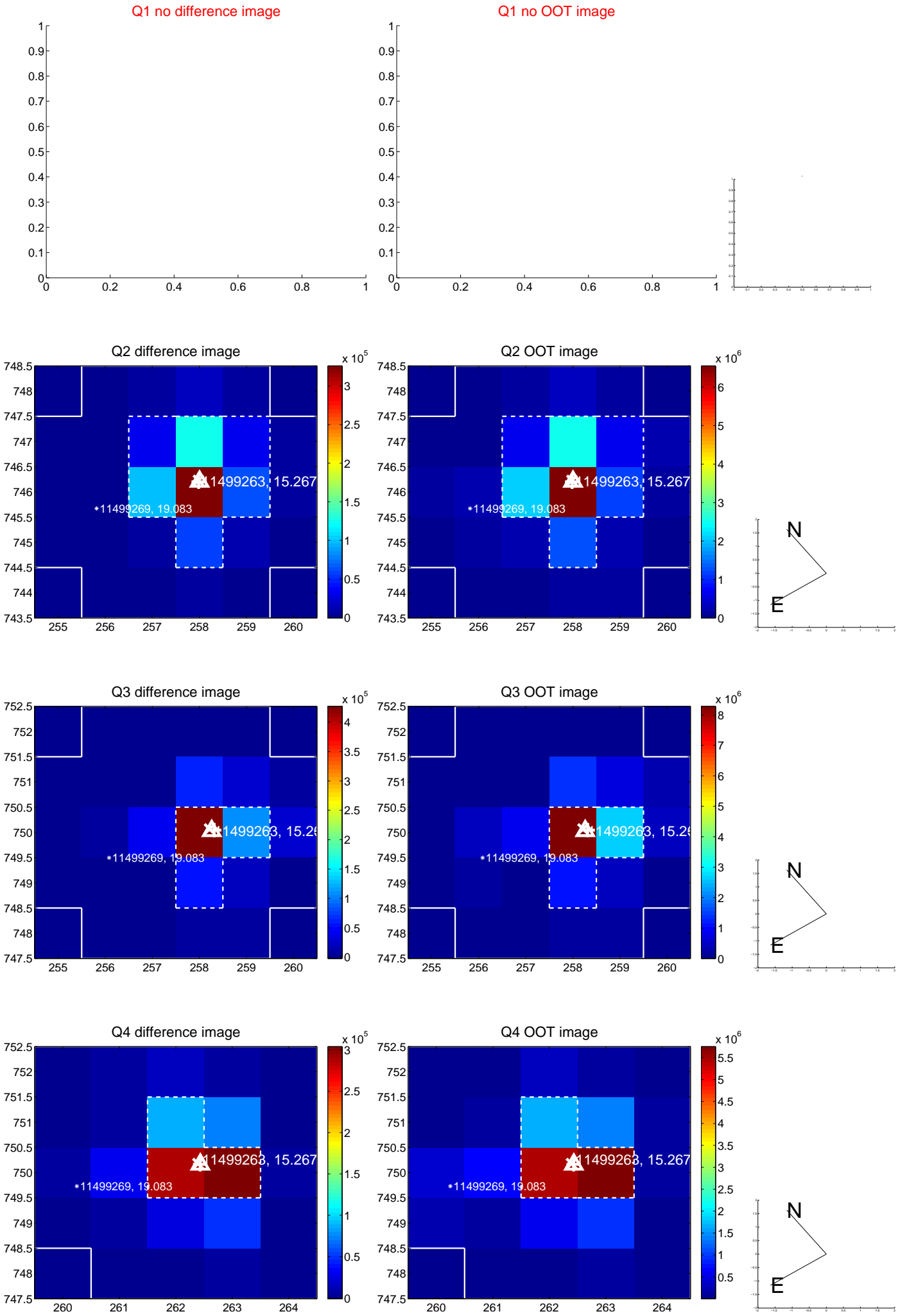
The direct PRF centroid is offset from the target star catalog position by about 0.32 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.035 ± 0.071	0.49	-0.033 ± 0.073	0.010 ± 0.068
PRF-fit source offset from KIC position	0.205 ± 0.071	2.89	-0.100 ± 0.073	-0.179 ± 0.070
photometric centroid source offset	0.25 ± 0.02	16.54	0.00 ± 0.02	-0.25 ± 0.02

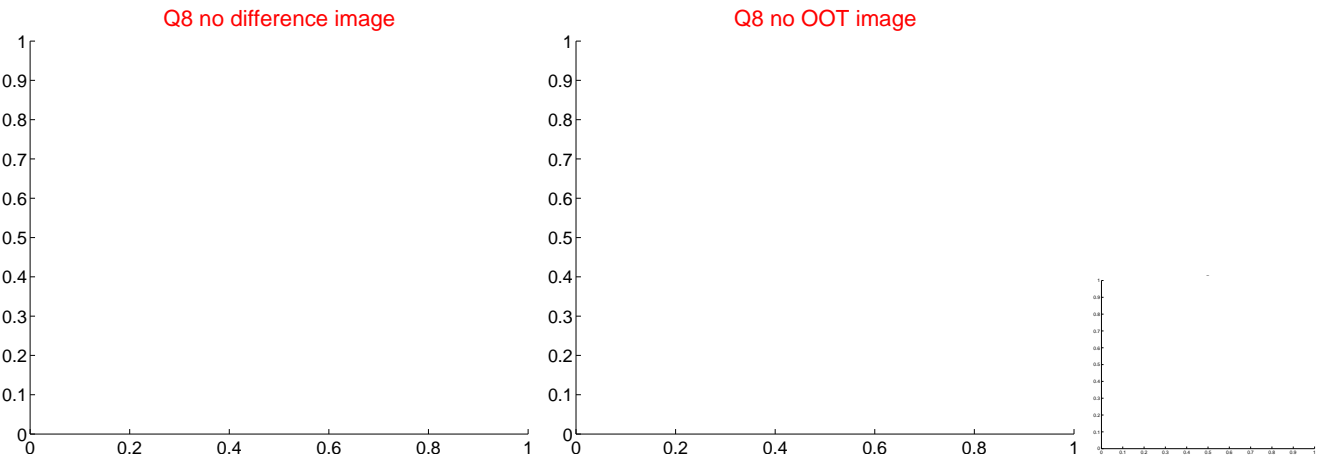
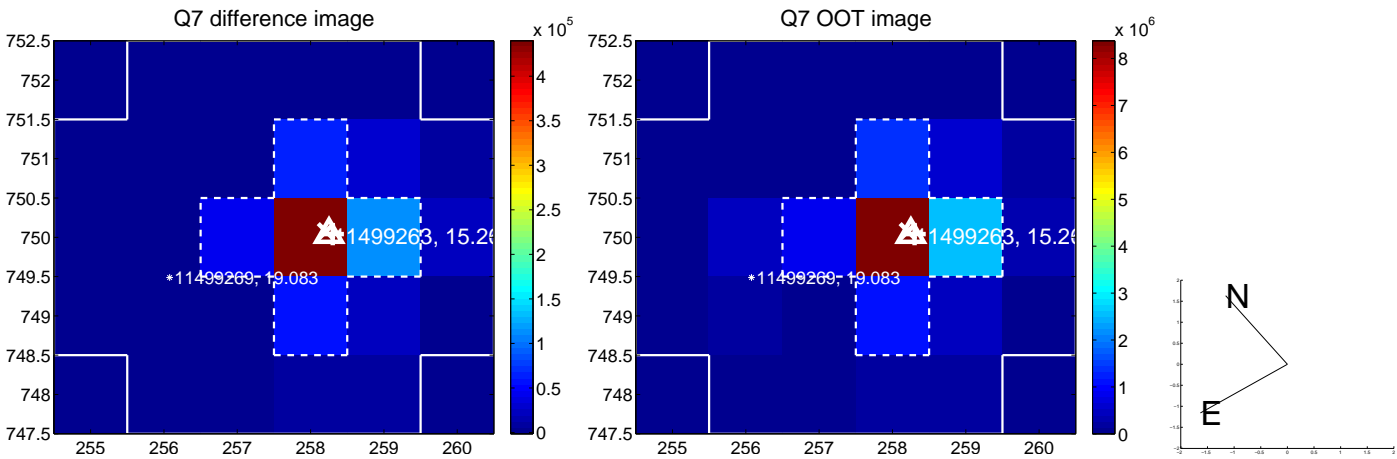
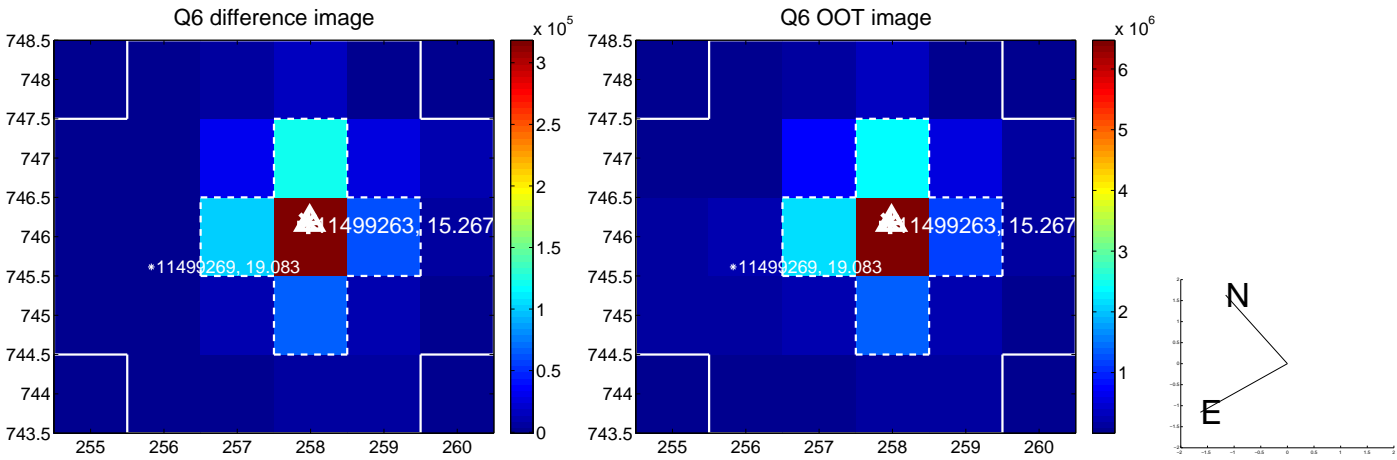
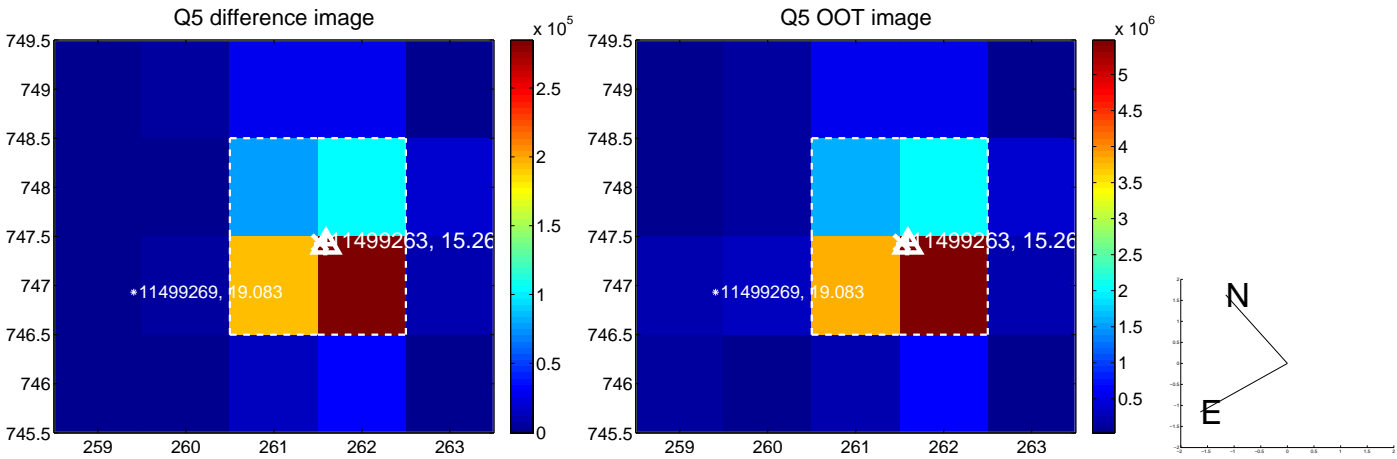


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

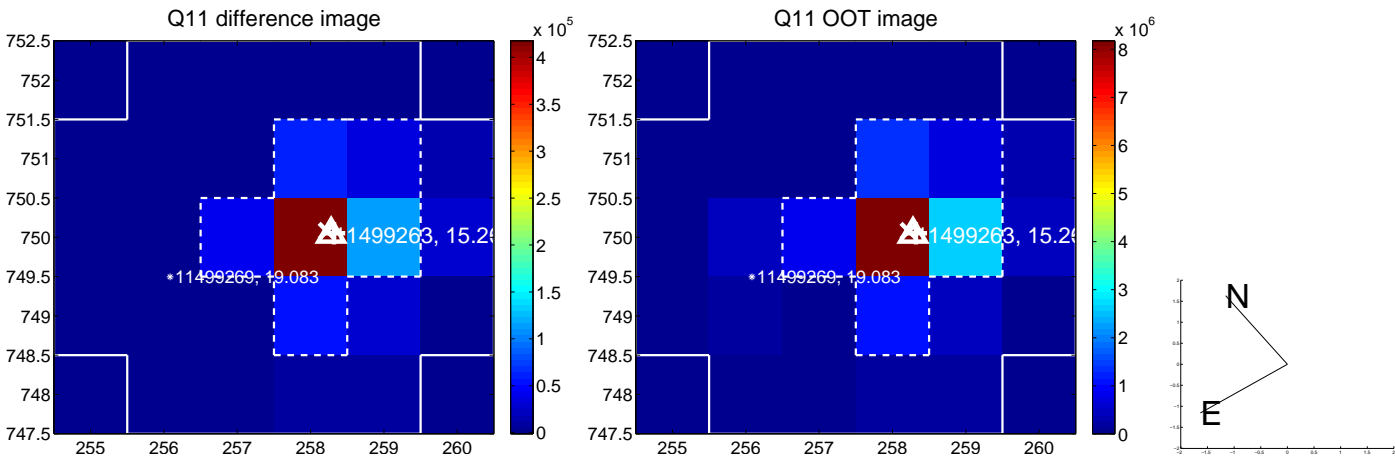
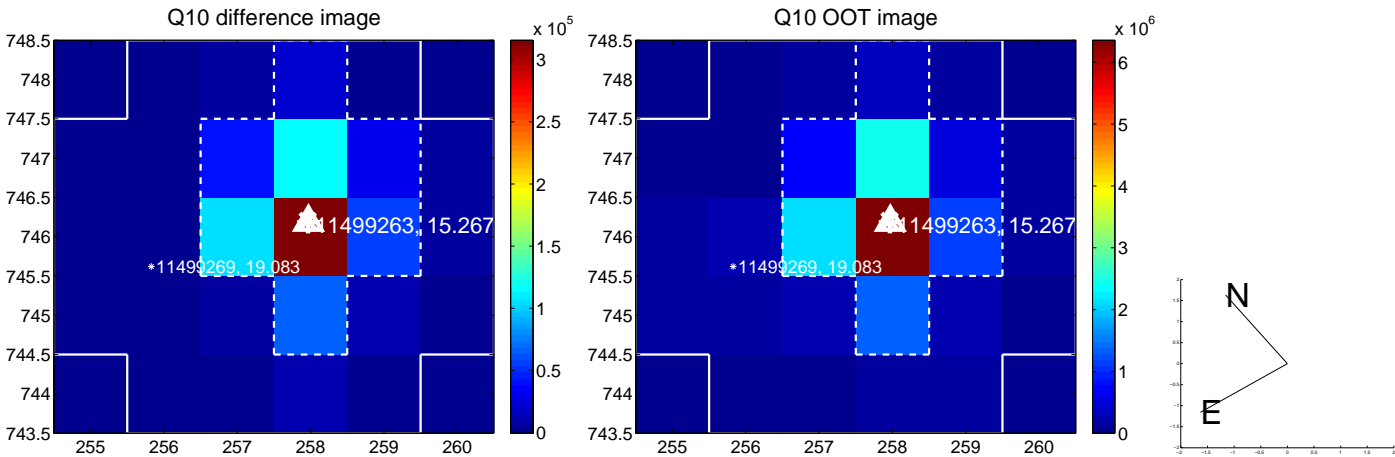
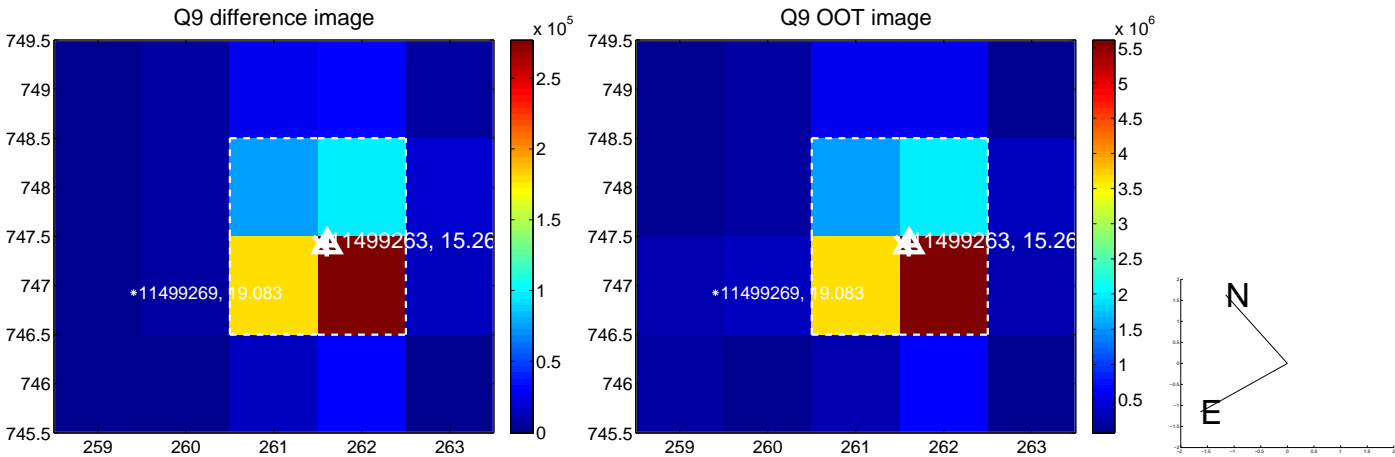
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



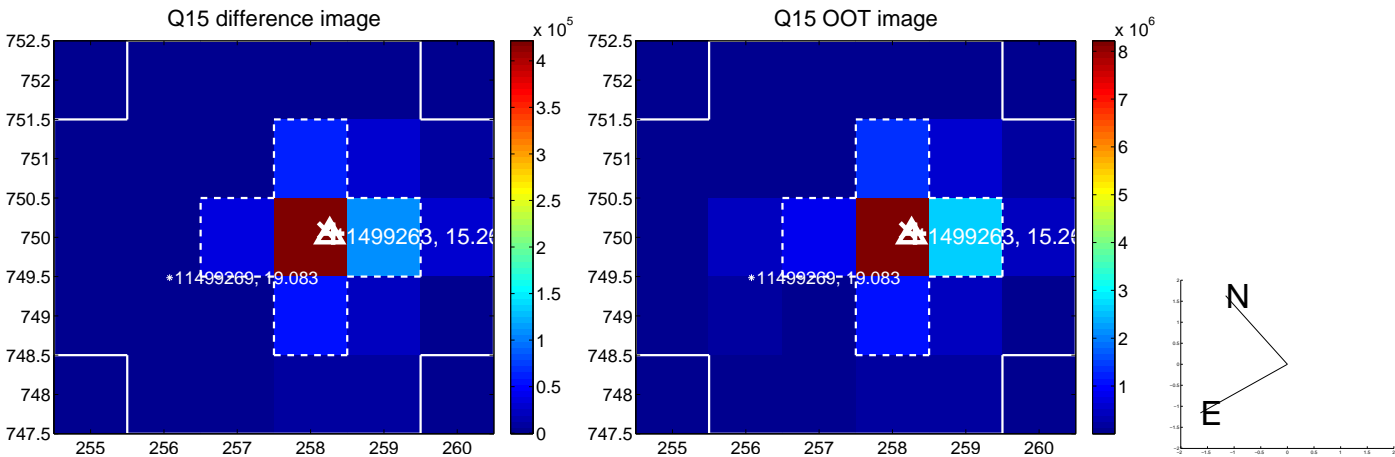
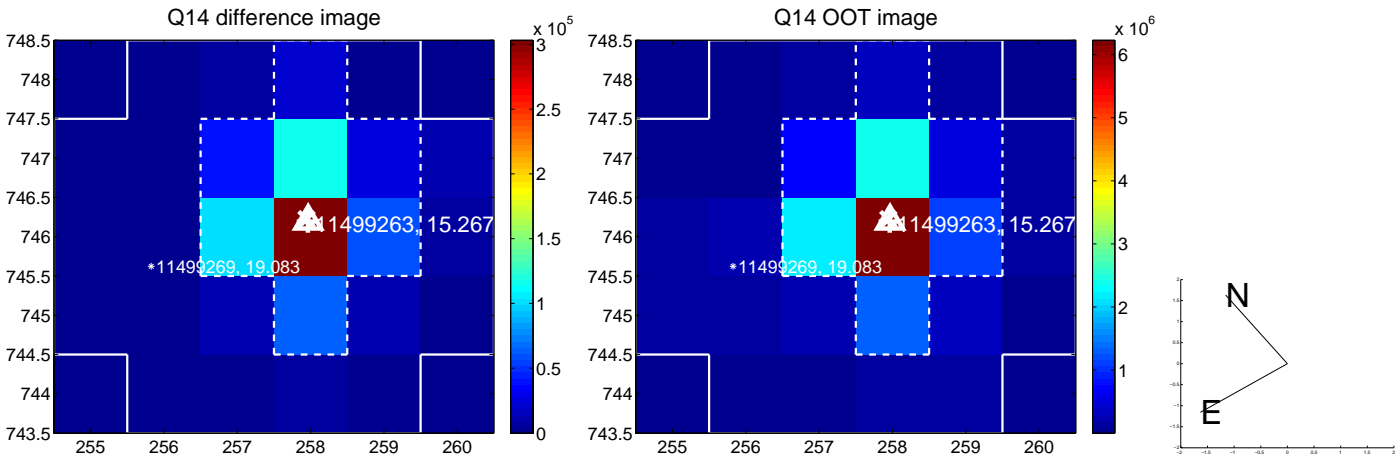
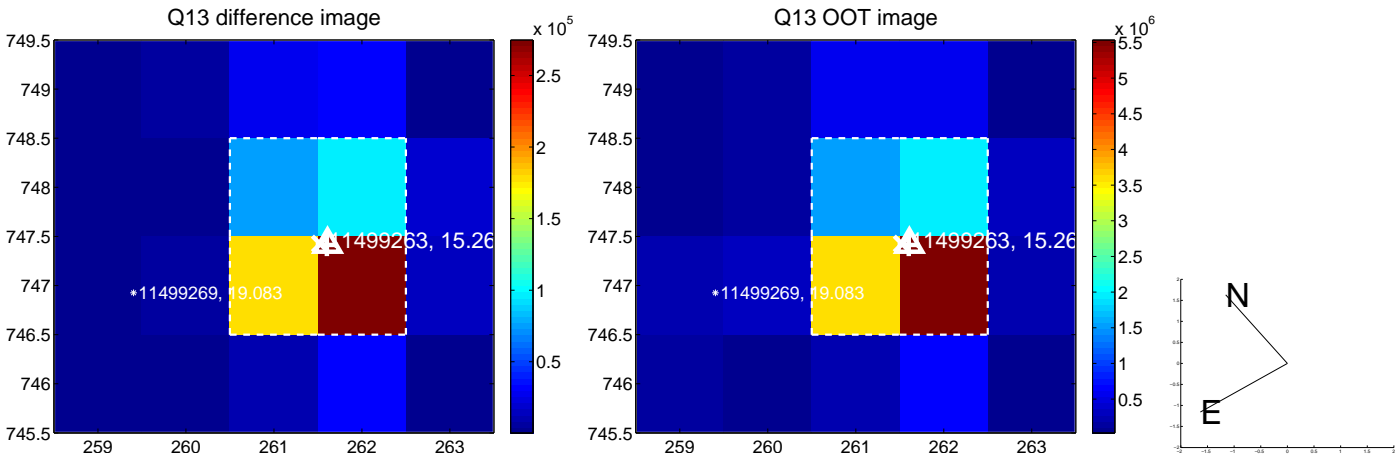
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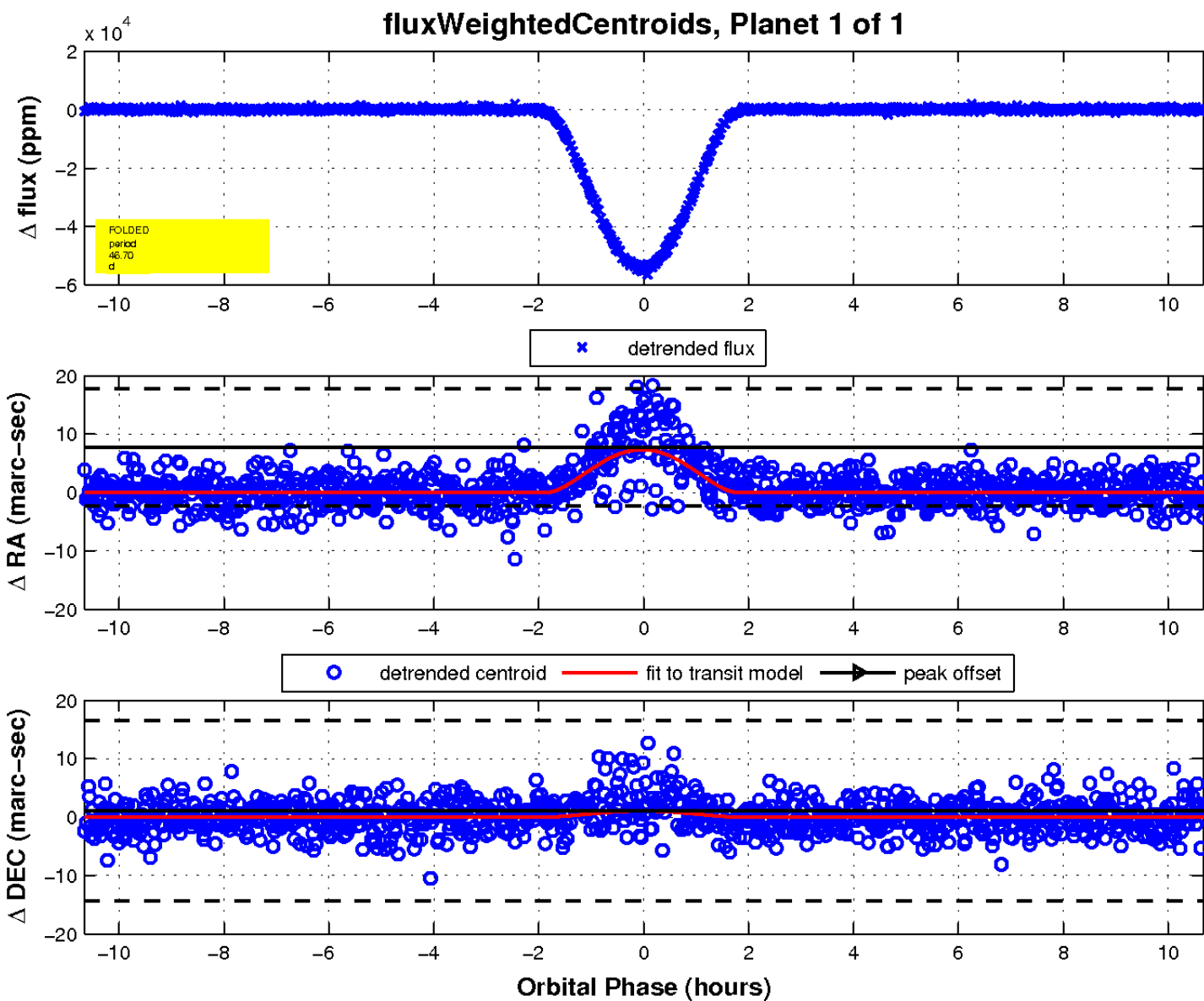
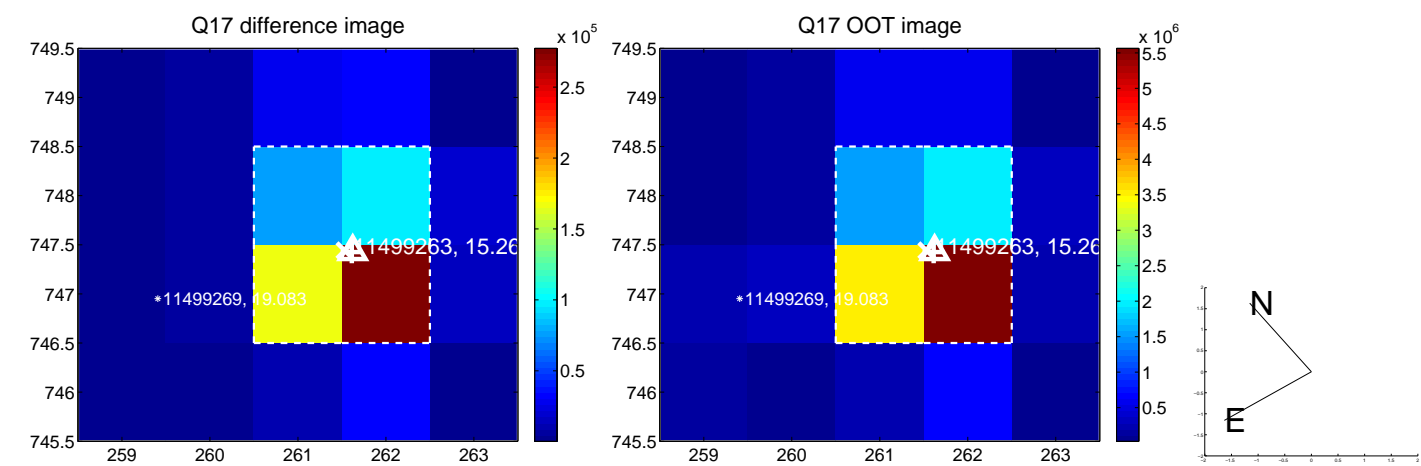
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UKIRT Image

