

KIC 007132015

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})
007132015-01	OBS	6834.01	6.994898	136.655031	96.9	1.452	7.4	7.5	229.91	3681	243.01	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007132015-01	OBS	FP	0.00	0	0	1	0	PLANET_IN_STAR—CENT_RESOLVED_OFFSET—HALO_GHOST

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

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

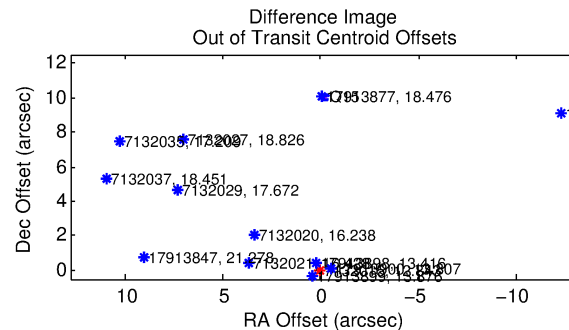
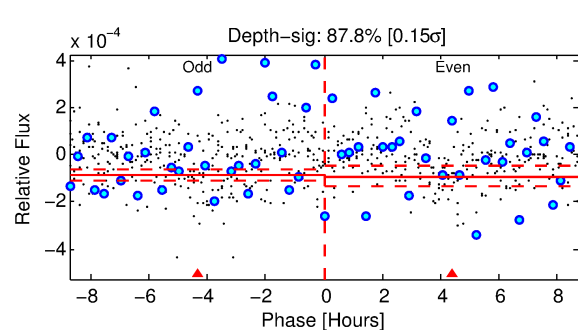
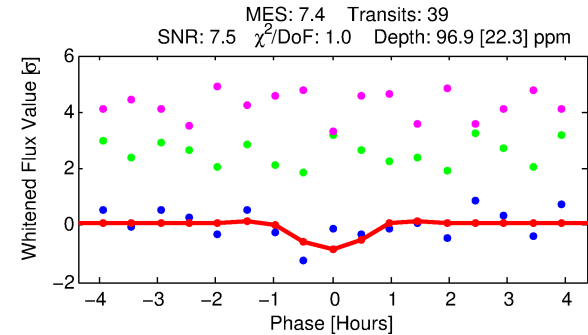
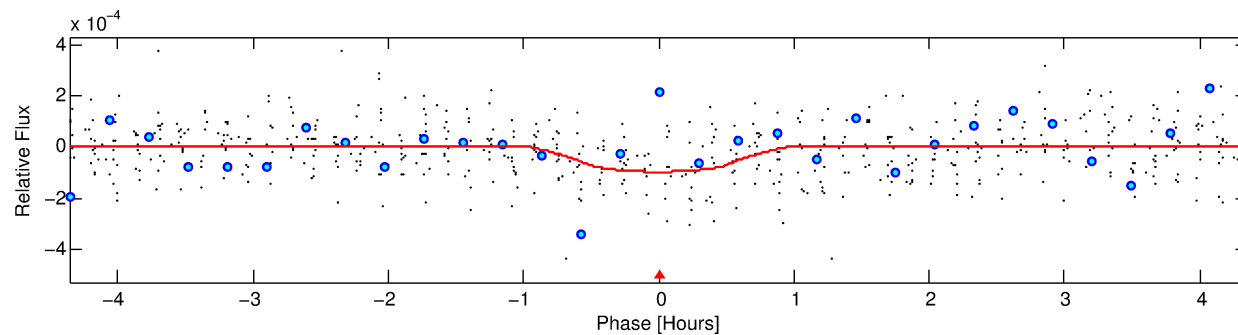
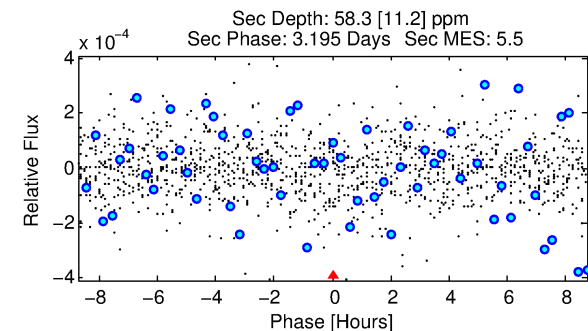
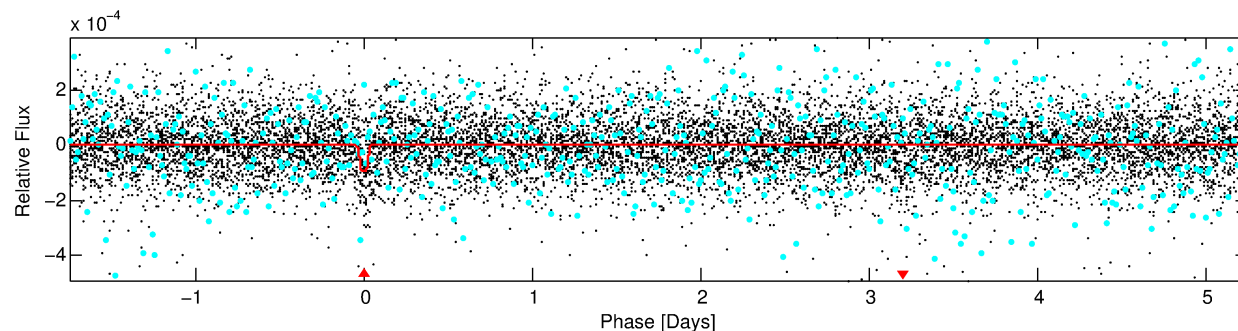
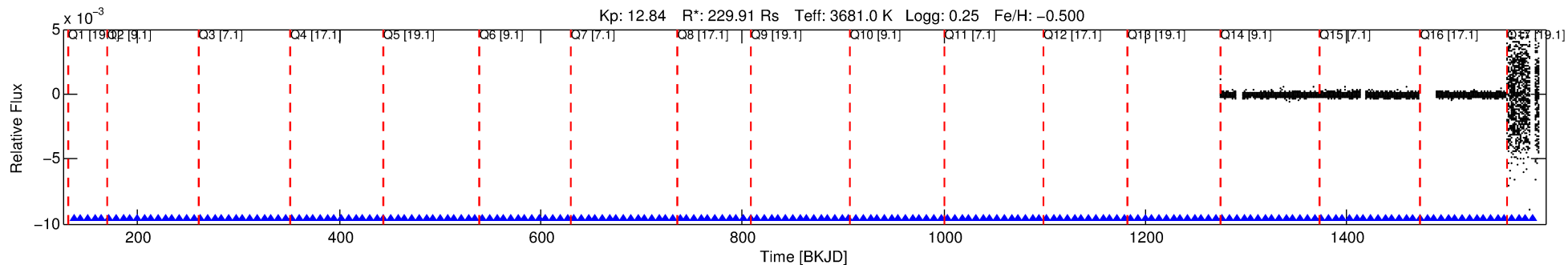
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007132015-01

No Significant Match Found

DV One-Page Summary

KIC: 7132015 Candidate: 1 of 1 Period: 6.995 d
KOI: K06834.01 Corr: 0.773



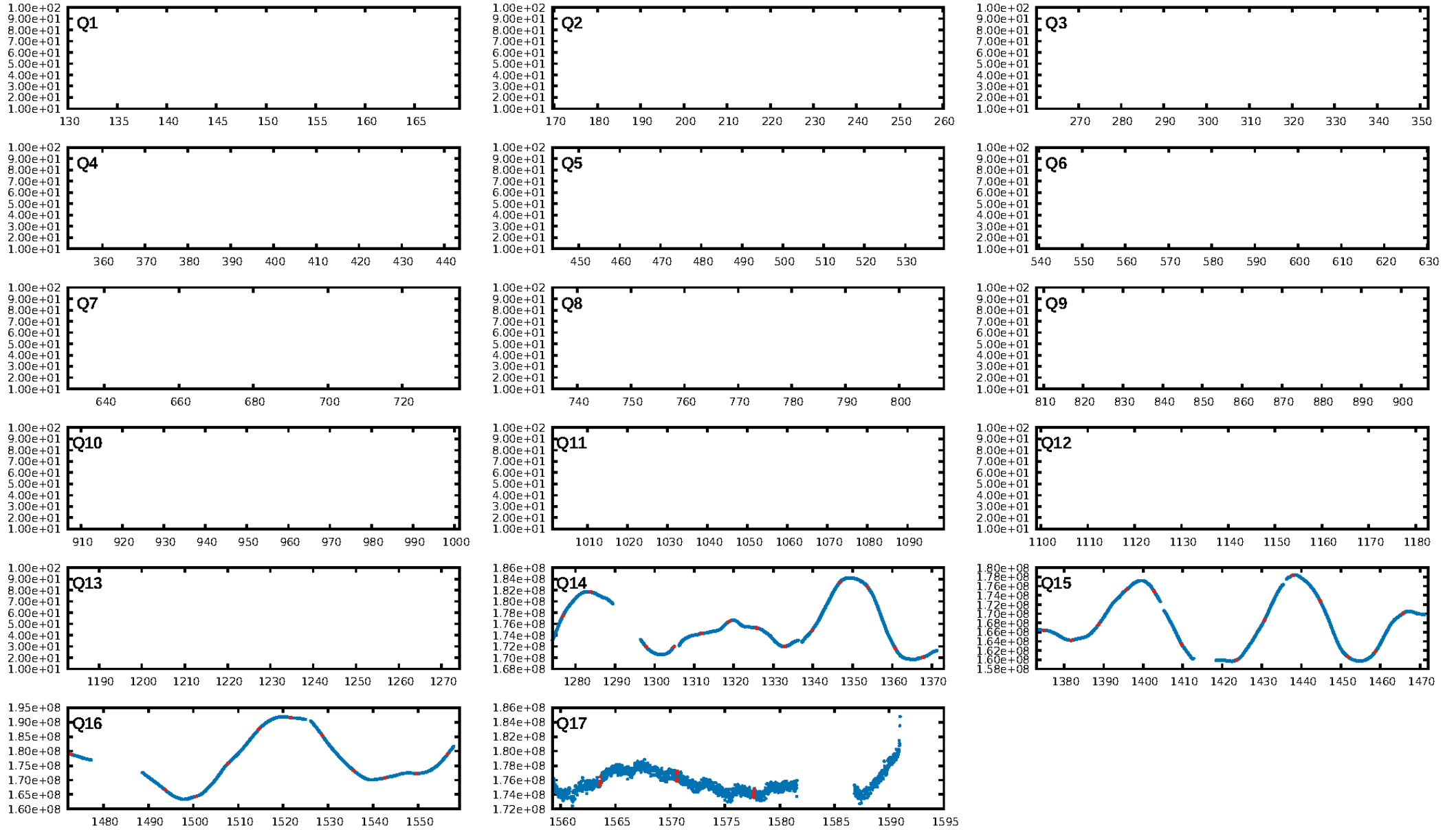
DV Fit Results:

Period = 6.99490 [0.00005] d
Epoch = 136.6550 [0.0075] BKJD
 $R_p/R_* = 0.0097$ [0.0123]
 $a/R_* = 26.97$ [85.57]
 $b = 0.70$ [2.48]
 $\text{Seff} = \text{N/A}$
 $\text{Teq} = \text{N/A}$
 $R_p = 243.01$ [332.29] Re
 $a = \text{N/A}$
 $\text{Ag} = \text{N/A}$
 $\text{Teffp} = \text{N/A}$

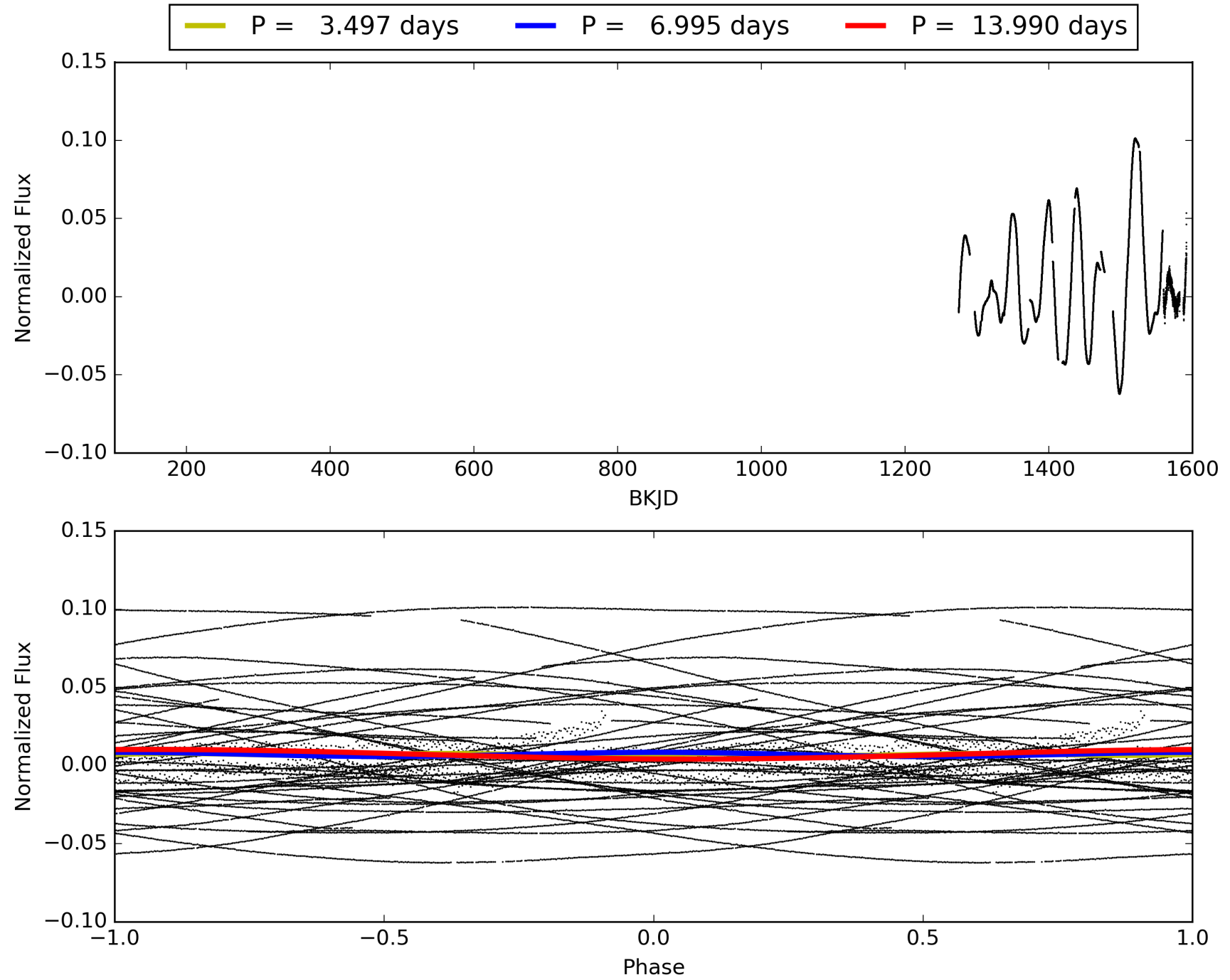
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 38.6%
ModelChiSquareGof-sig: 99.7%
Bootstrap-pfa: 5.49e-12
RollingBand-fgt: 1.00 [36/36]
GhostDiagnostic-chr: -0.0722
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 10.017 arcsec [146.17σ]
KicOffset-rm: 9.969 arcsec [145.46σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [4/4]

TCE 007132015-01, PDC Light Curves

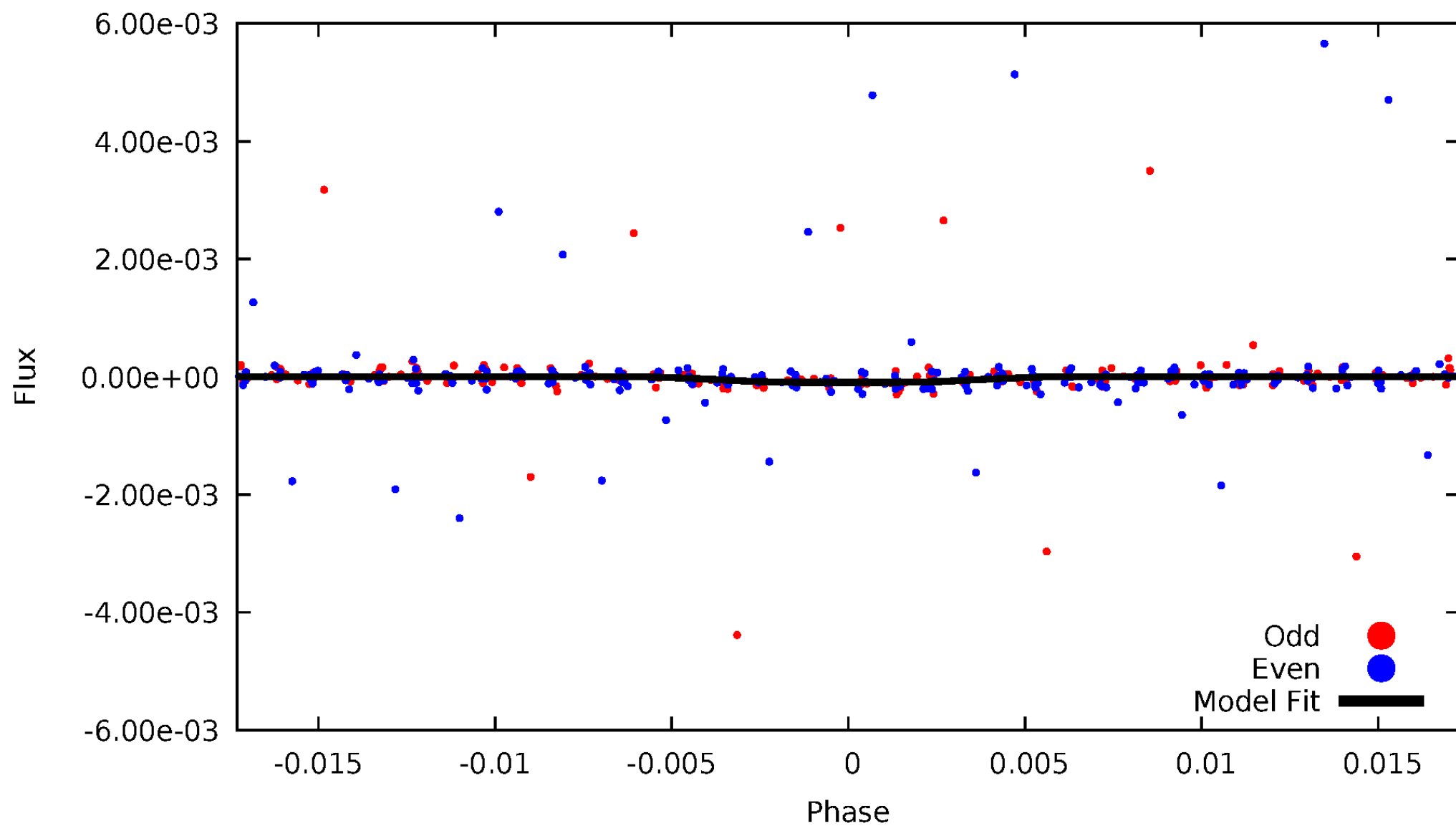


TCE 007132015-01



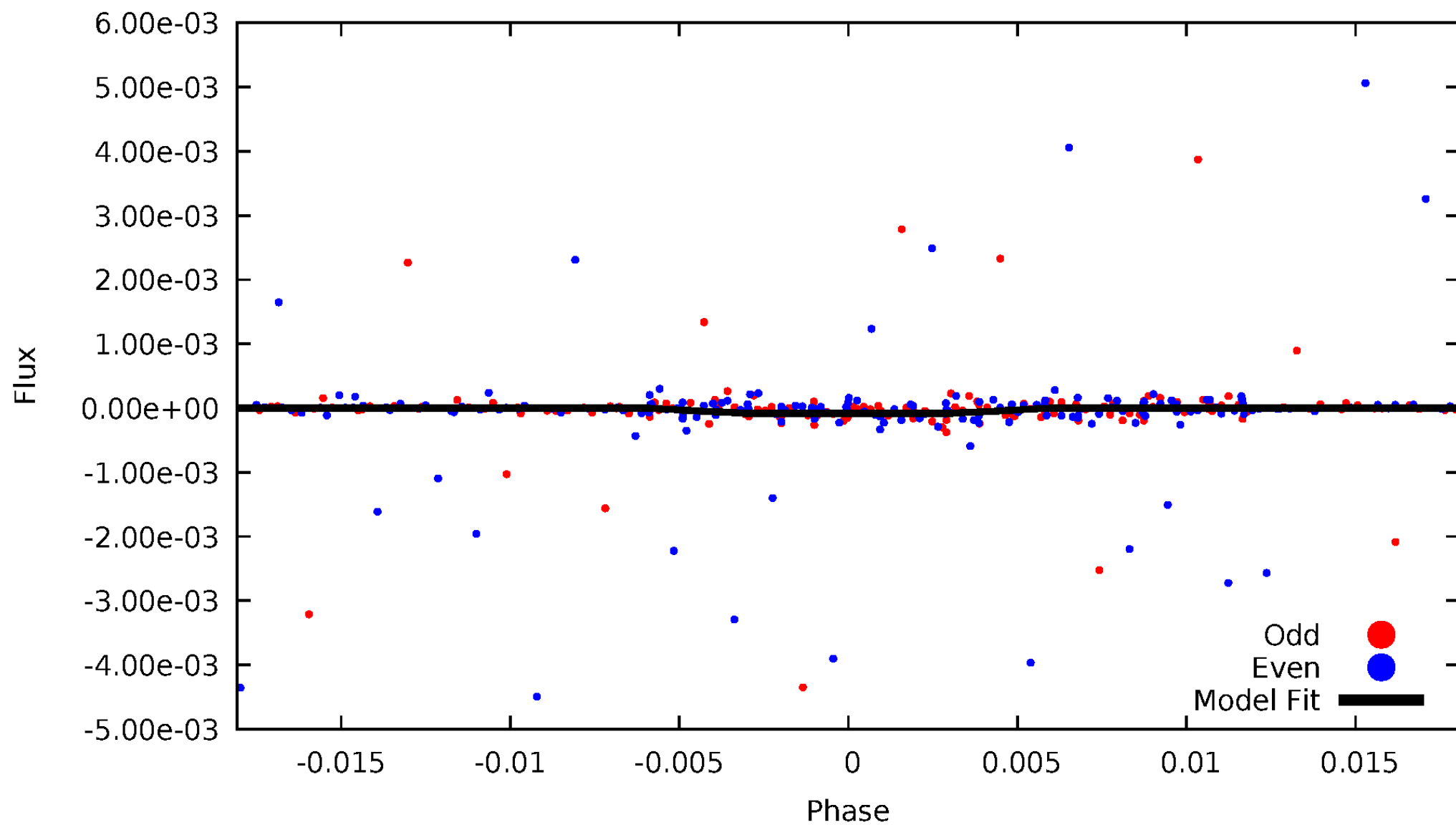
DV Odd/Even

TCE 007132015-01



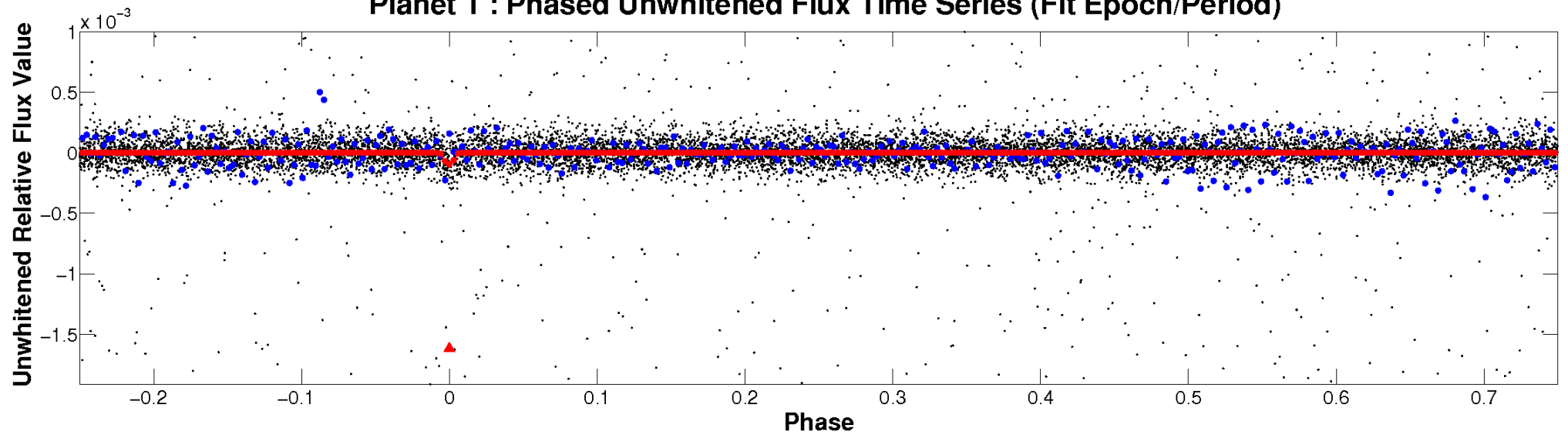
ALT Odd/Even

TCE 007132015-01

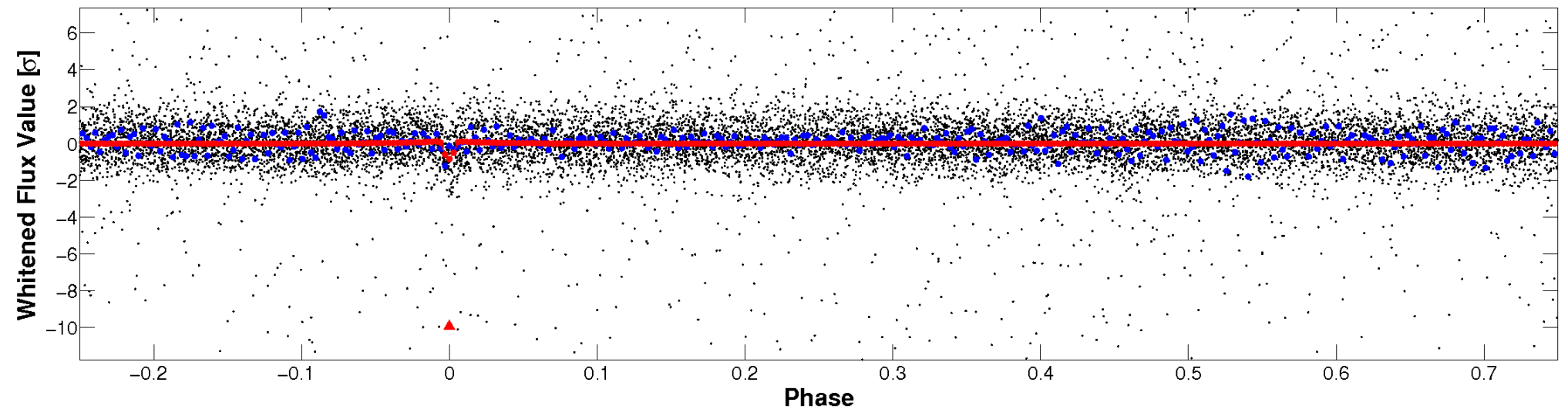


Non-Whitened Vs. Whitened Light Curve

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

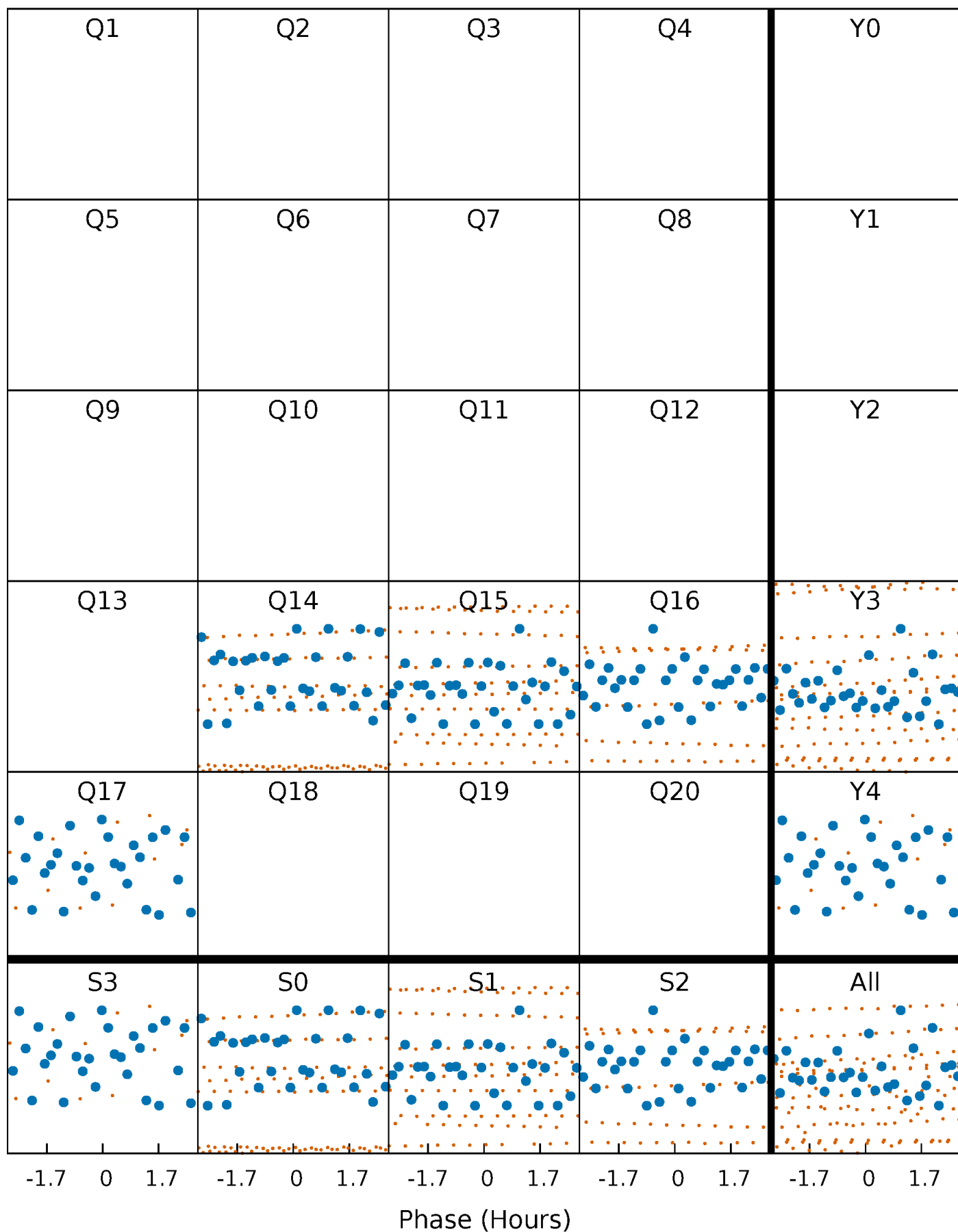


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



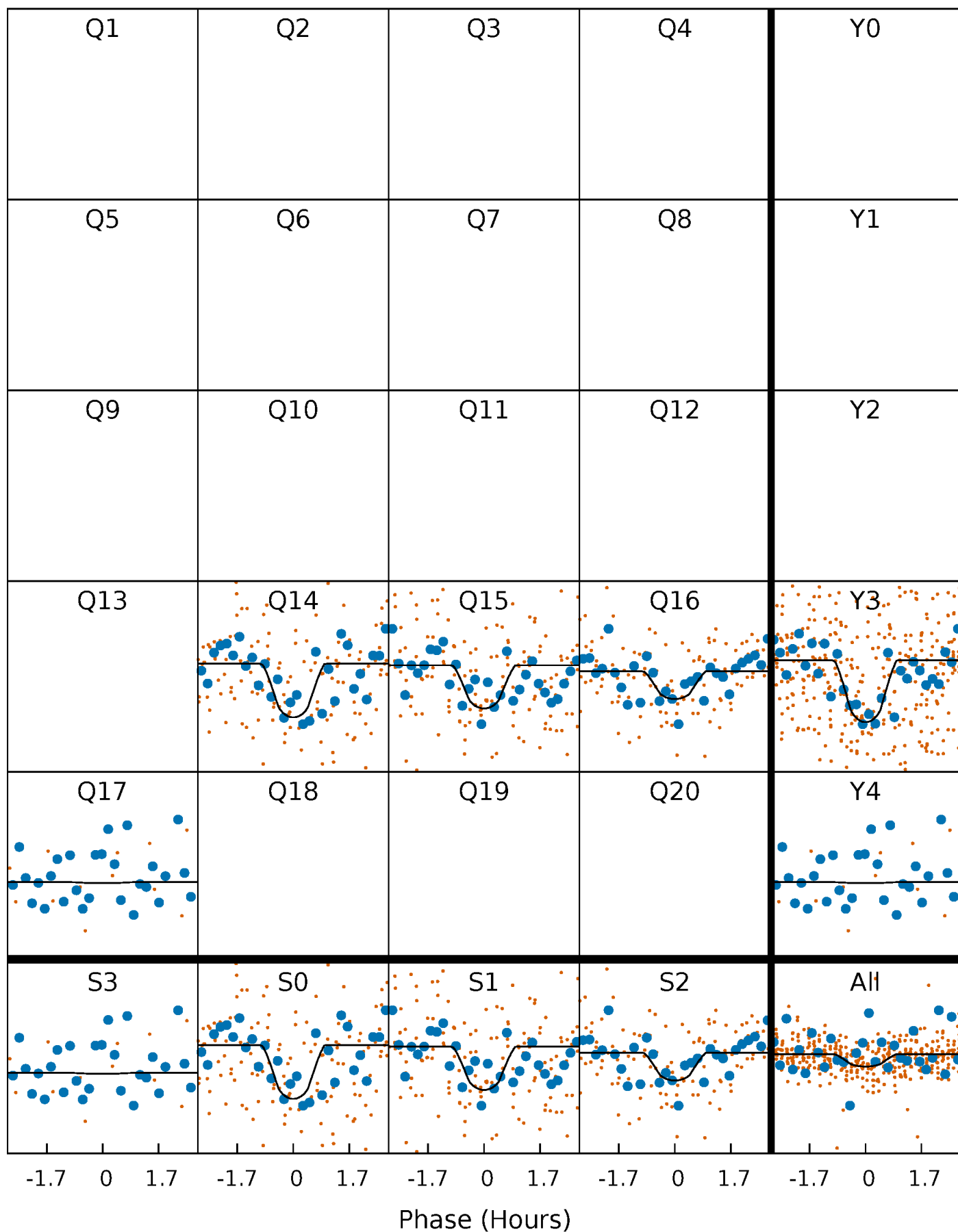
PDC Quarter-Phased Transit Curves

TCE 007132015-01 P= 6.994898 Days $T_0=136.655031$ (BKJD)



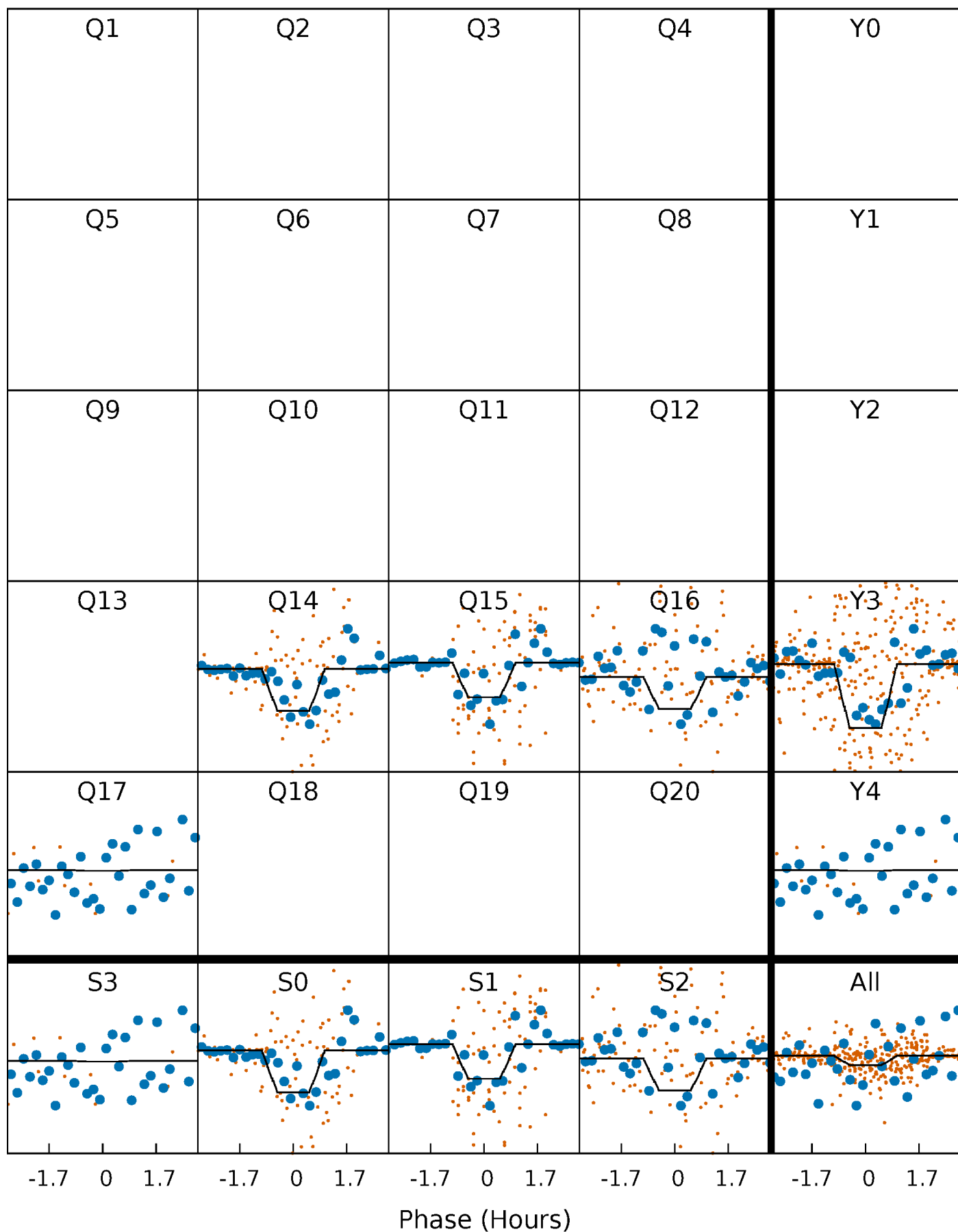
DV Quarter-Phased Transit Curves

TCE 007132015-01 P= 6.994898 Days $T_0=136.655031$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

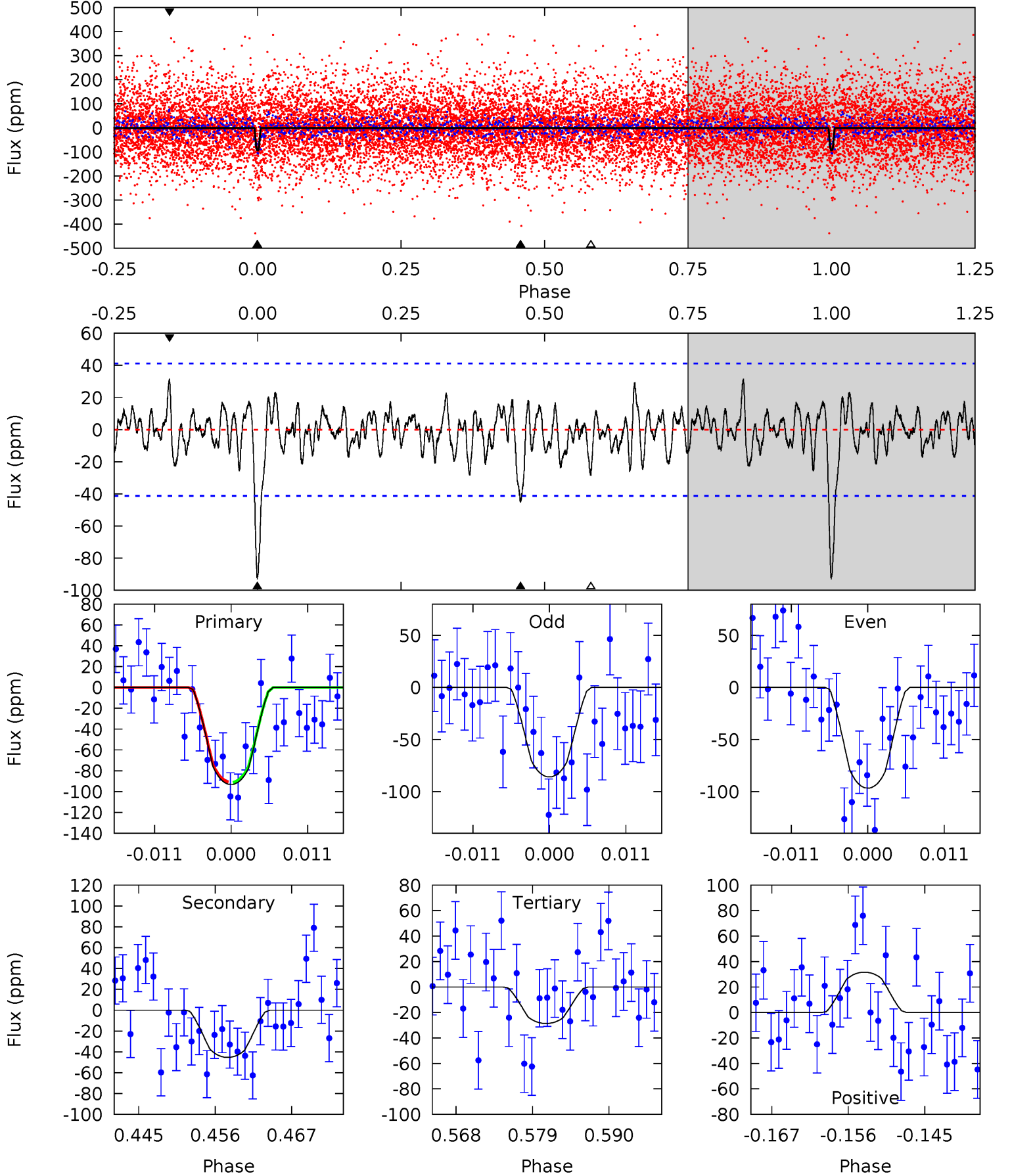
TCE 007132015-01 P= 6.994800 Days $T_0=136.662464$ (BKJD)



DV Model-Shift Uniqueness Test

007132015-01, P = 6.994898 Days, E = 136.655031 Days

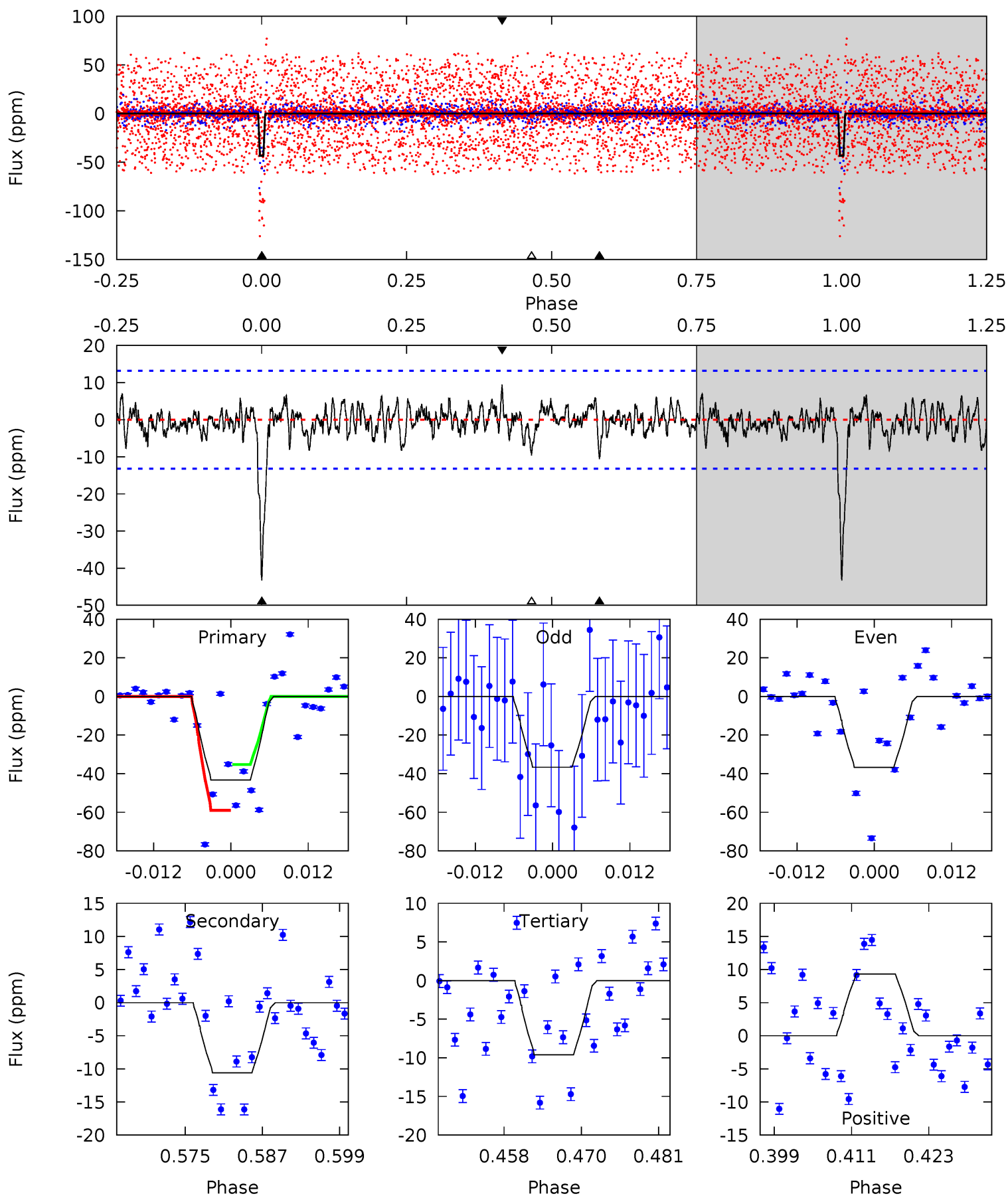
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	5.50	3.48	3.84	5.01	2.54	1.24	7.84	7.47	2.02	1.66	0.66	-0.24	0.25	0



Alt Model-Shift Uniqueness Test

007132015-01, P = 6.994800 Days, E = 136.662464 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	4.01	3.64	3.54	5.00	2.52	1.06	12.8	12.9	0.38	0.48	0.03	2.12	0.18	0



Stellar Parameters For KIC 007132015

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	3681^{+43}_{-94}	$0.250^{+0.136}_{-0.032}$	$-0.500^{+0.050}_{-0.200}$	$229.908^{+12.904}_{-116.137}$	$3.426^{+0.069}_{-2.395}$	$0.000^{+0.000}_{-0.000}$
	+1%/-3%	+54%/-13%	+10%/-40%	+6%/-51%	+2%/-70%	+173%/-22%
Source	SPE74	SPE74	SPE74	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007132015-01 / KOI 6834.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-45 ± 8	$288.57^{+270.73}_{-183.55}$	10391^{+272}_{-566}	-7514^{+677}_{-381}	$0.003^{+0.019}_{-0.002}$
Alt.	-11 ± 3	$311.07^{+269.38}_{-192.56}$	10363^{+268}_{-614}	-7557^{+599}_{-336}	$0.001^{+0.004}_{-0.000}$

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 $A_{obs} \gg 1.0$

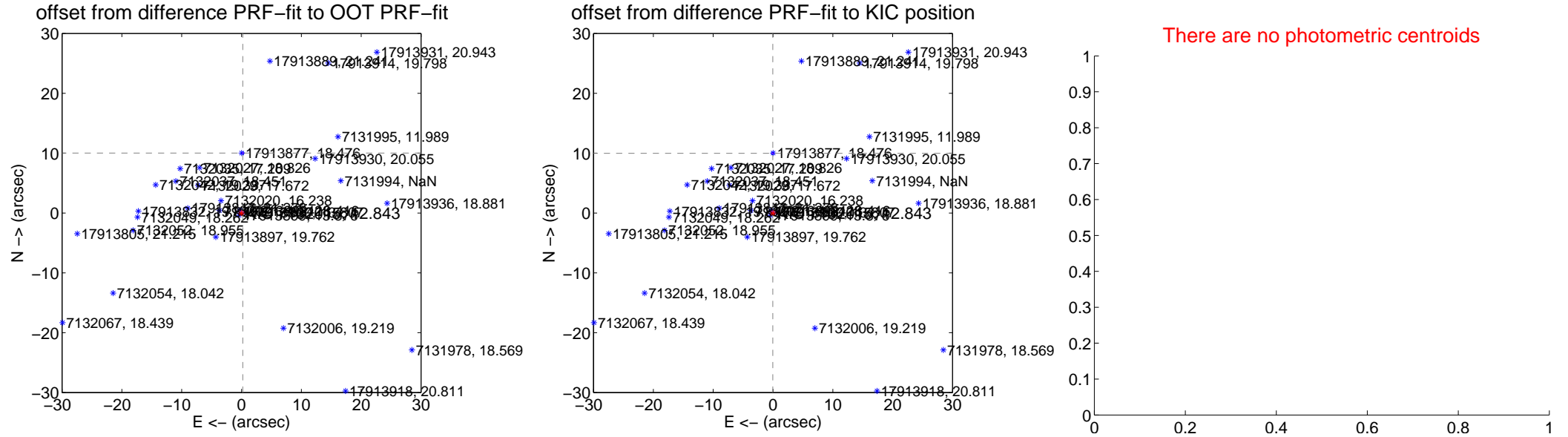
DV Centroid Data

Supplemental centroid analysis for 007132015-01. Kepler magnitude: 12.84. Transit SNR 7.51

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	10.017 ± 0.069	146.17	-0.203 ± 0.073	10.015 ± 0.069
PRF-fit source offset from KIC position	9.969 ± 0.069	145.46	0.037 ± 0.073	9.968 ± 0.069
photometric centroid source offset	—	—	—	—

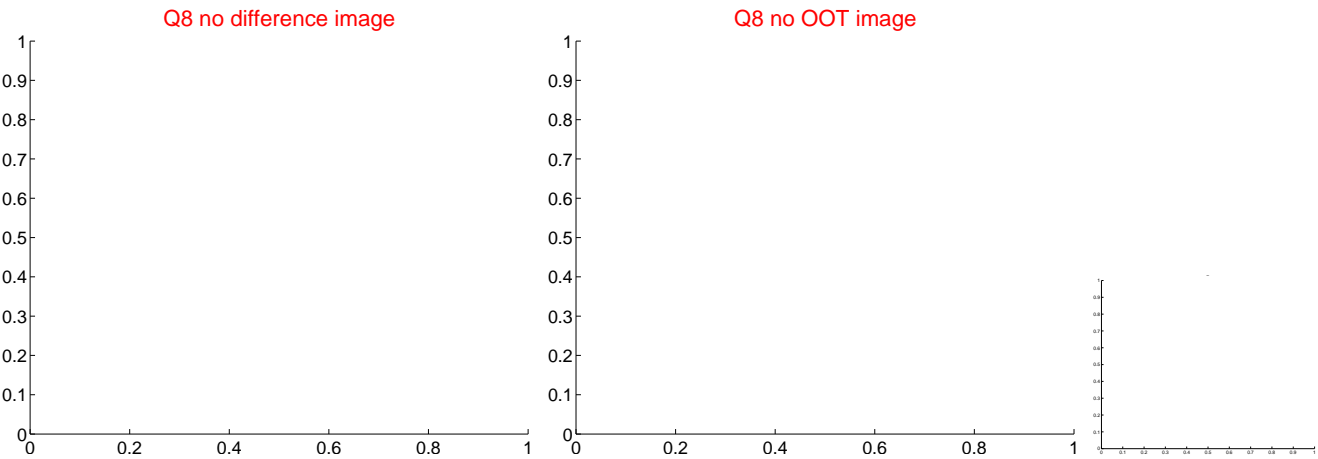
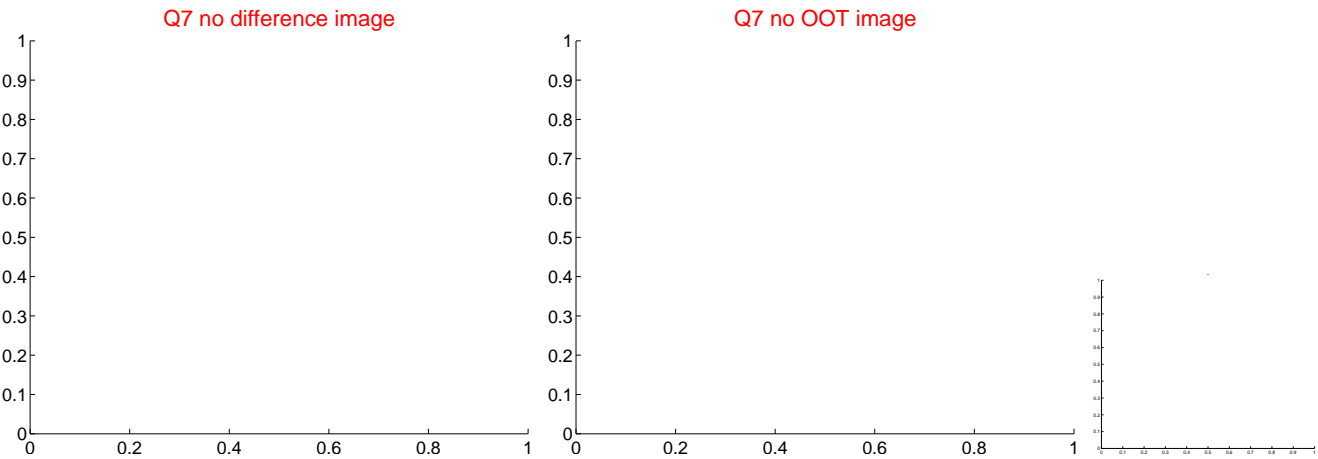
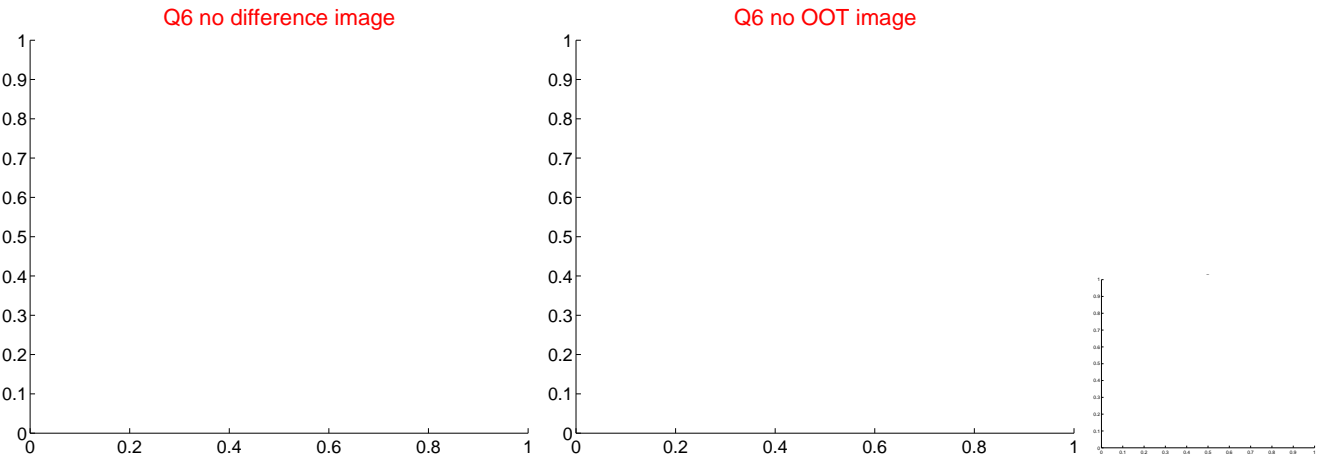
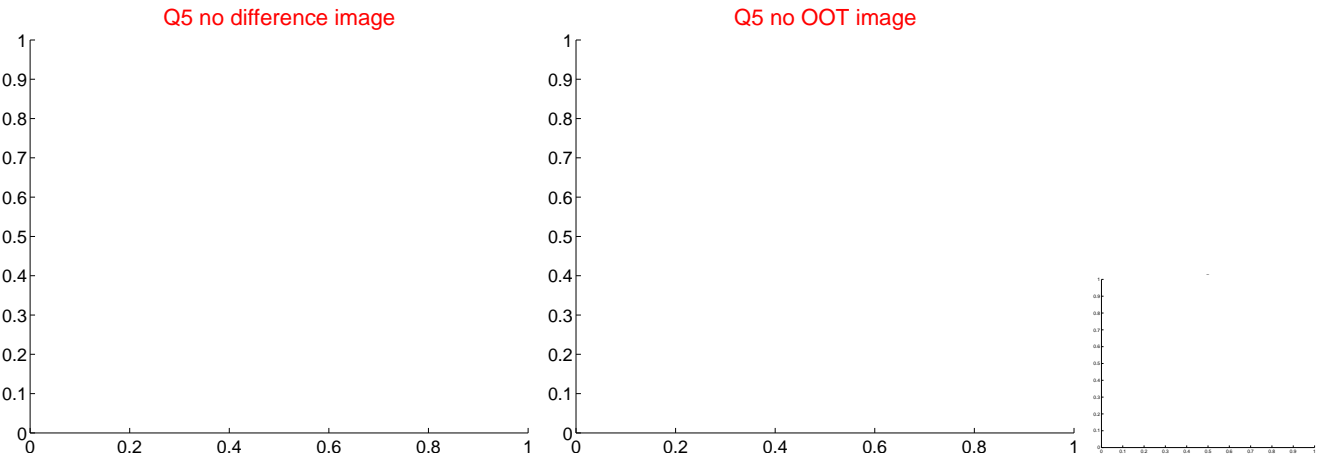


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



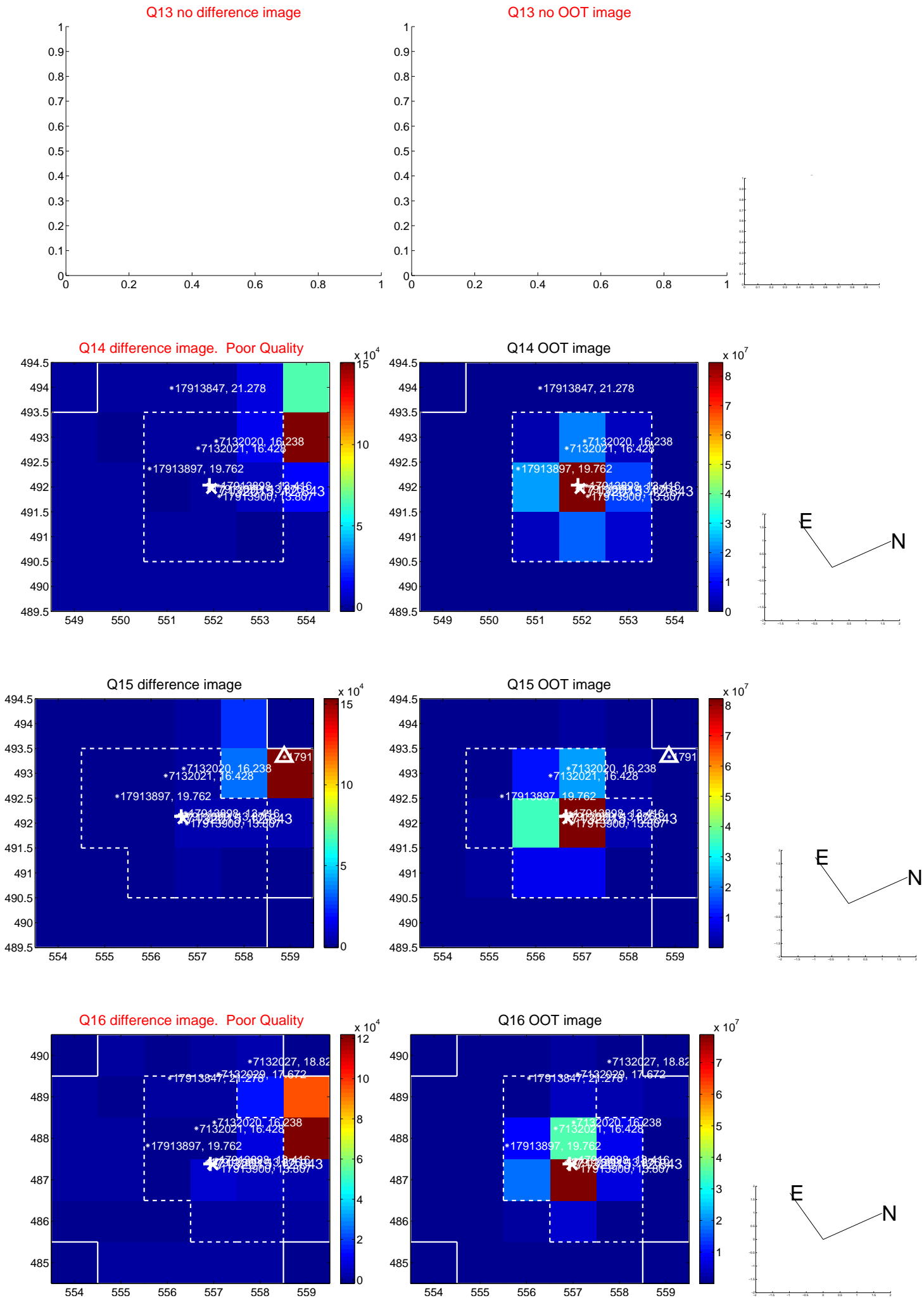
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



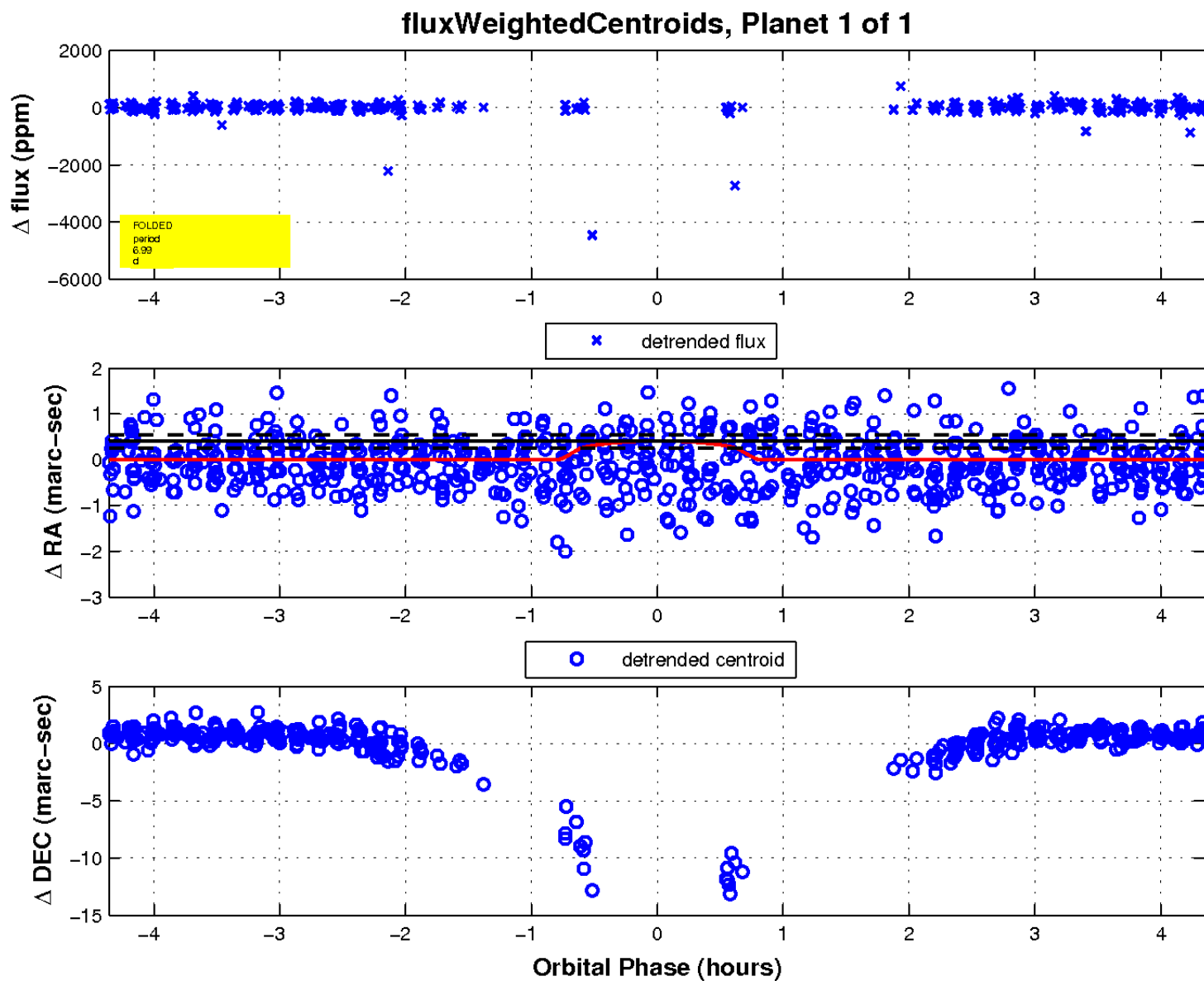
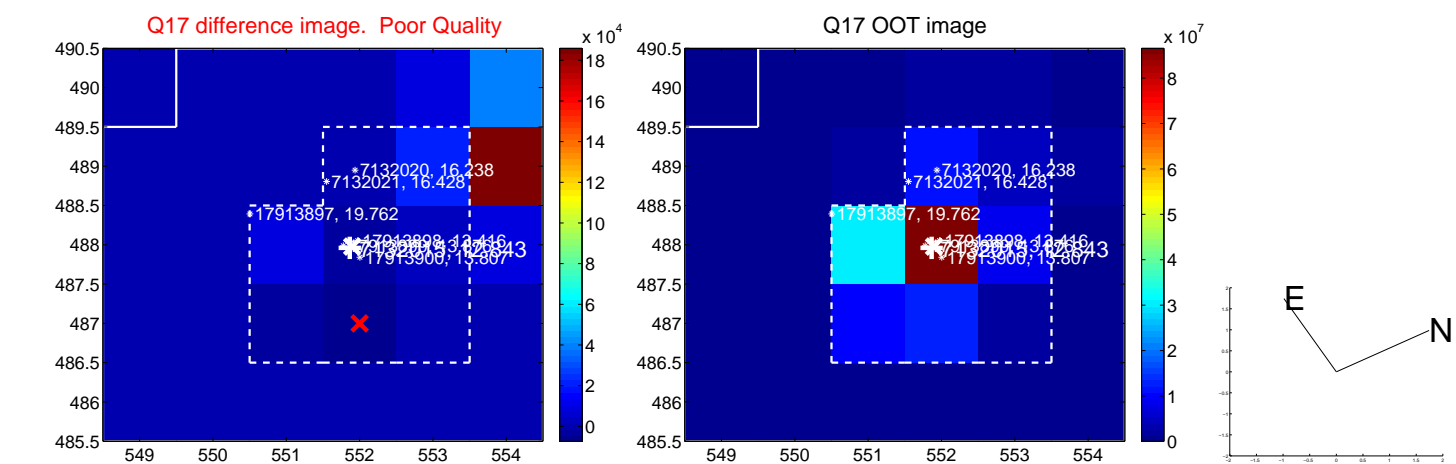
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UKIRT Image

Declination

