

KIC 011414684

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})
011414684-01	OBS	No	1.400951	132.561742	65.6	5.515	9.7	10.0	19.41	4534	15.20	0.00

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011414684-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—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.

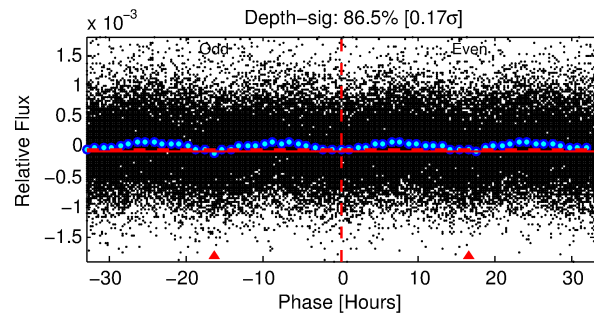
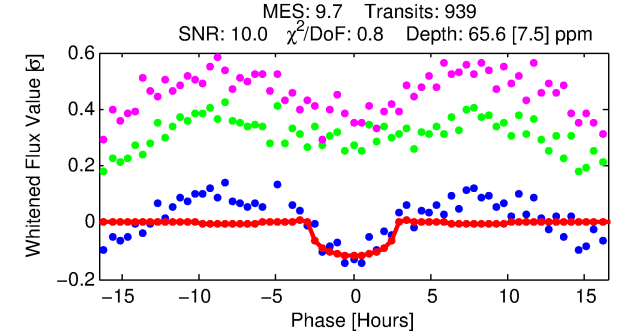
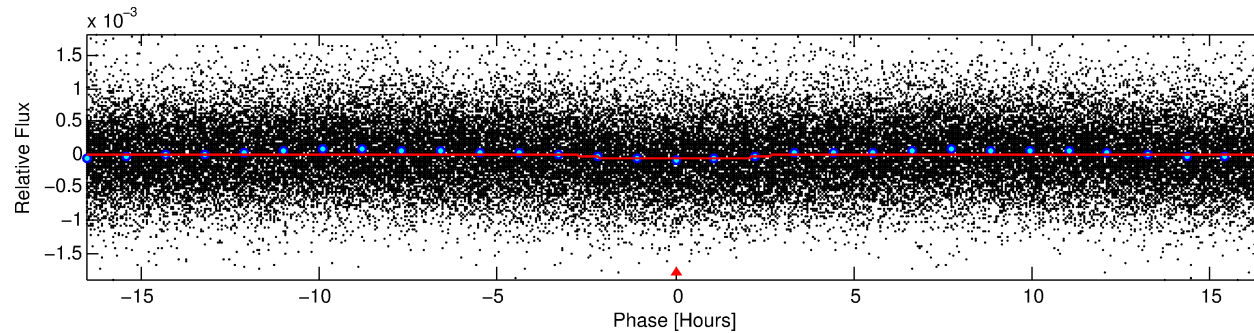
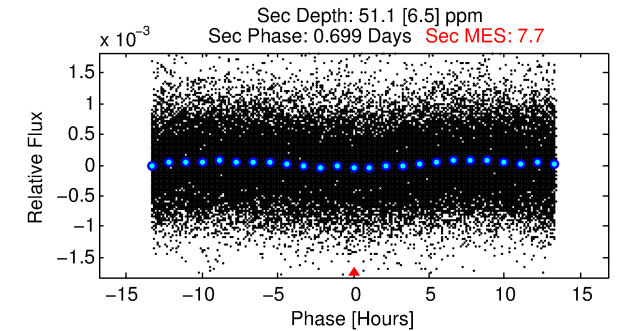
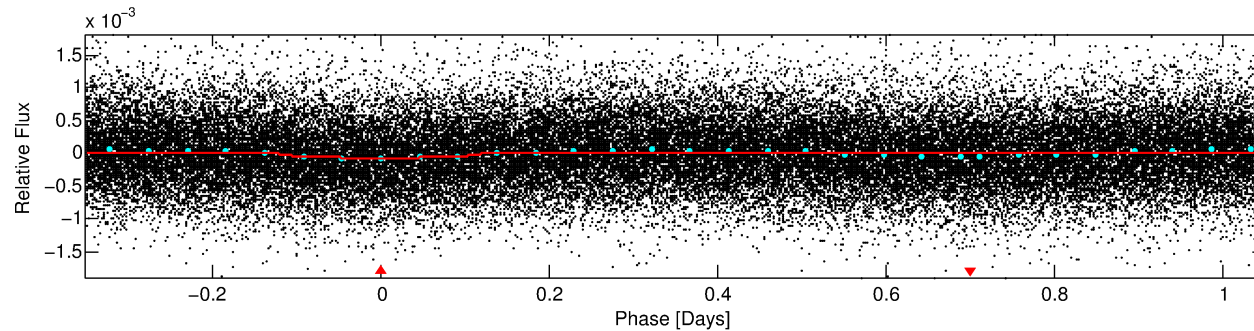
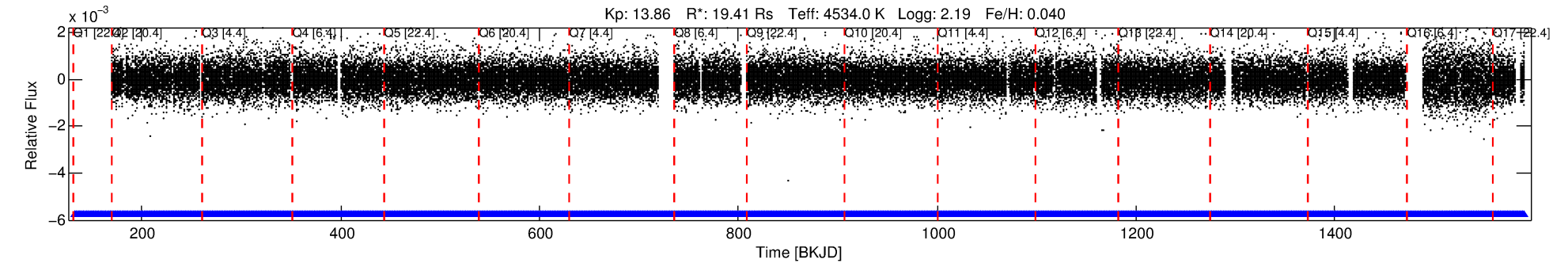
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011414684-01

No Significant Match Found

DV One-Page Summary

KIC: 11414684 Candidate: 1 of 1 Period: 1.401 d



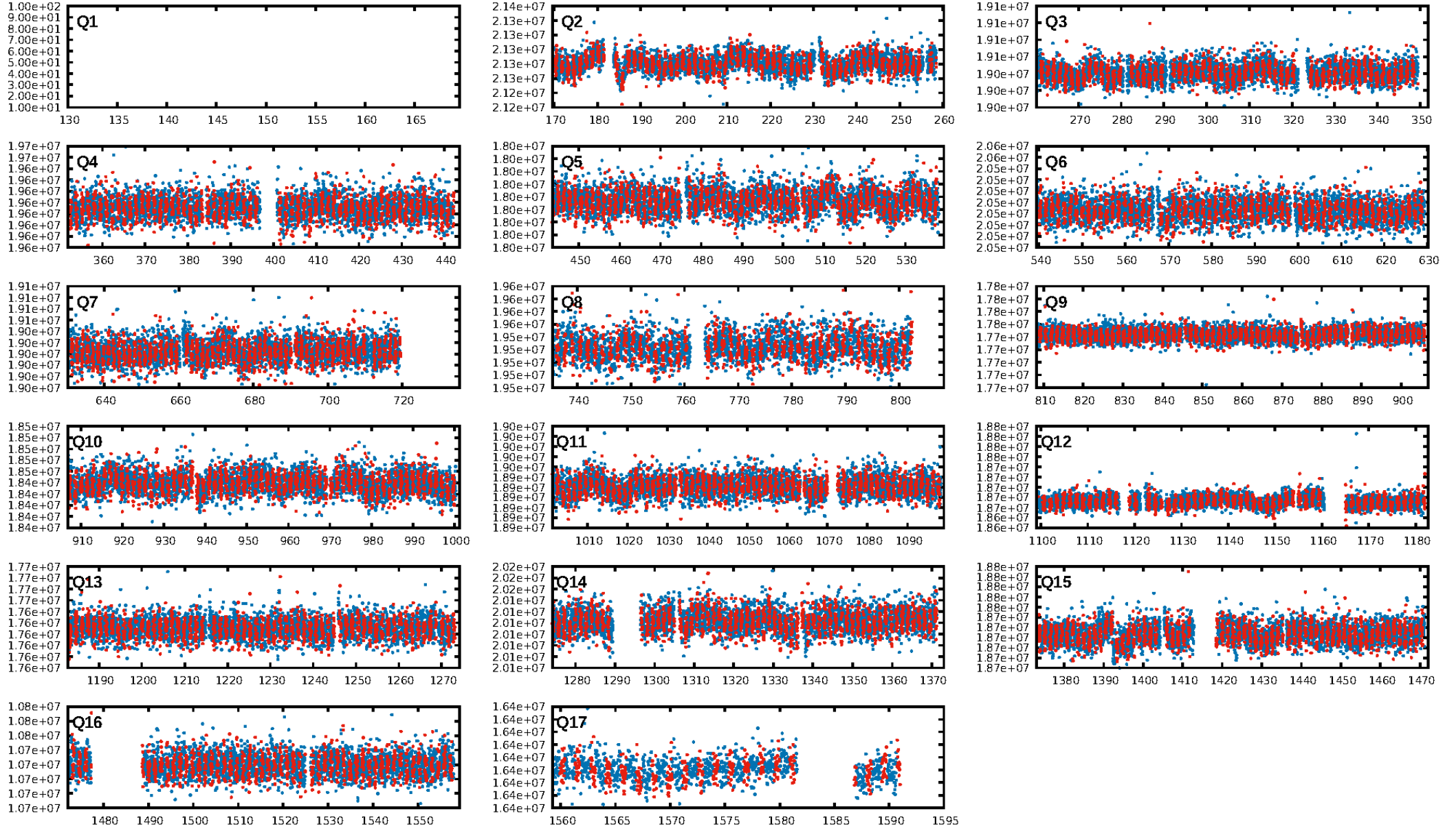
DV Fit Results:

Period = 1.40095 [0.00002] d
Epoch = 132.5617 [0.0067] BKJD
Rp/R* = 0.0072 [0.0074]
a/R* = 1.98 [4.44]
b = 0.28 [10.15]
Seff = N/A
Teq = N/A
Rp = 15.20 [16.07] Re
a = N/A
Ag = N/A
Teffp = N/A

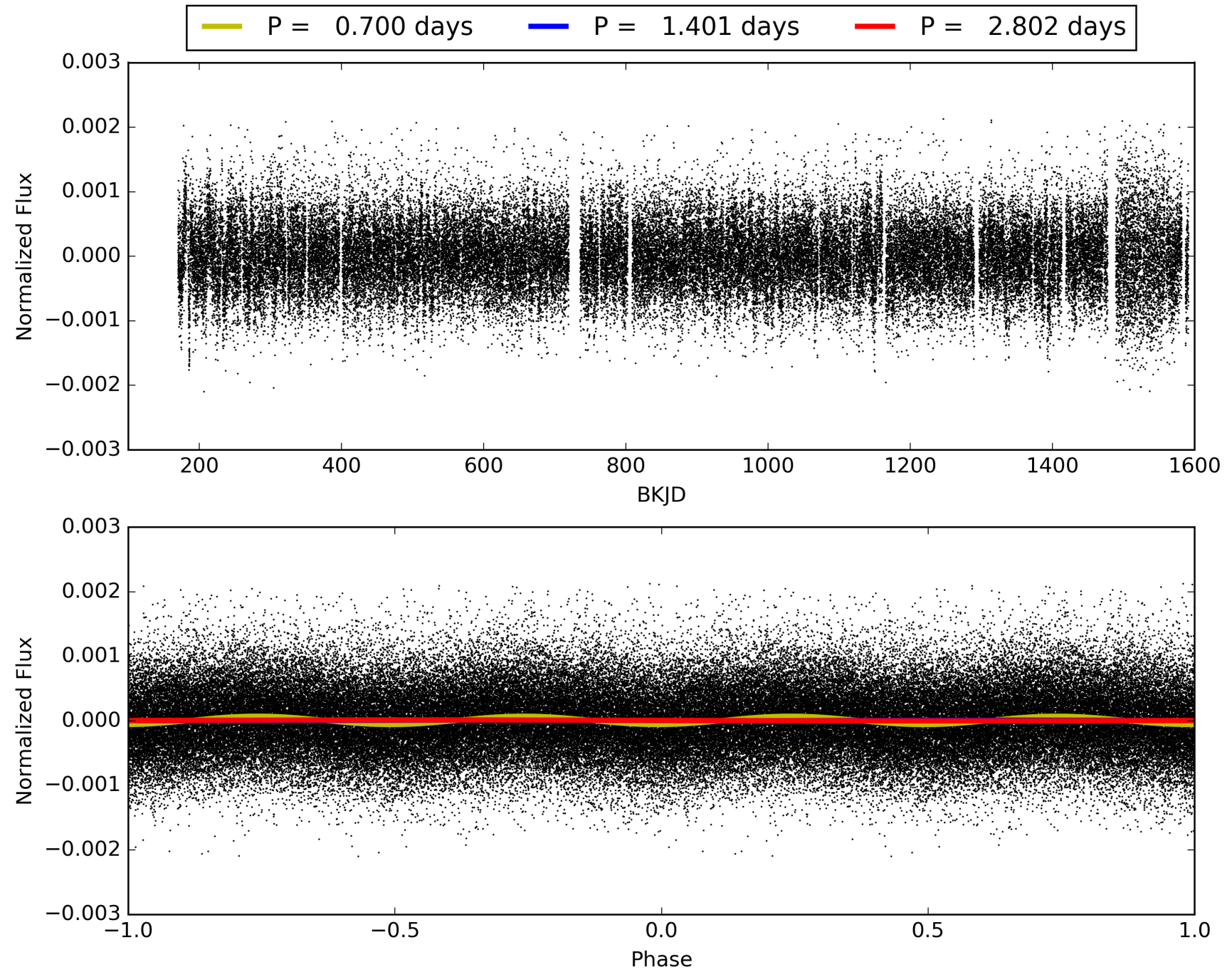
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: 9.35e-20
RollingBand-fgt: 1.00 [919/919]
GhostDiagnostic-chr: -0.7614
Centroid-sig: 0.0%
Centroid-so: 5.170 arcsec [5.22σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [16/16]

TCE 011414684-01, PDC Light Curves

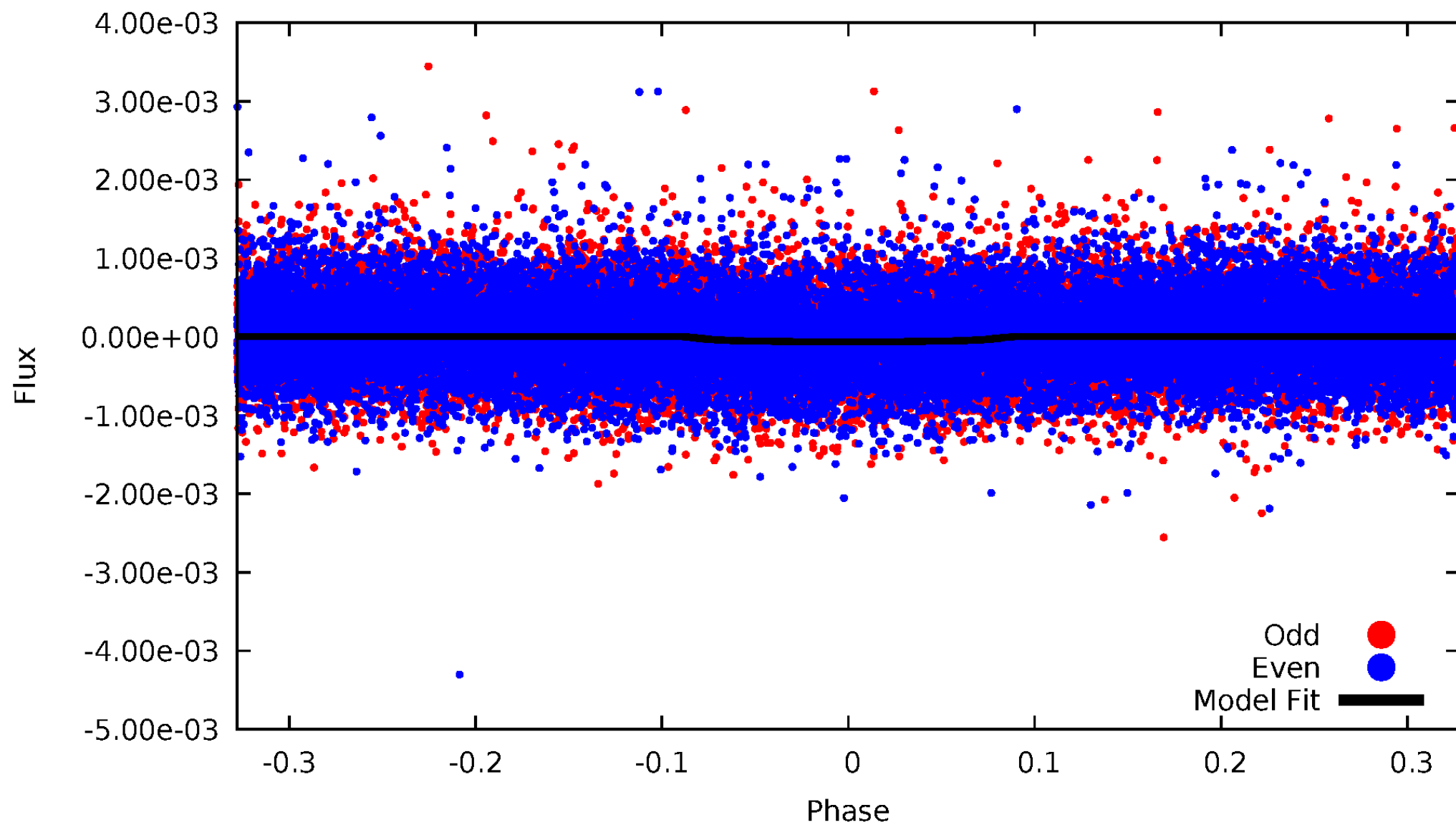


TCE 011414684-01



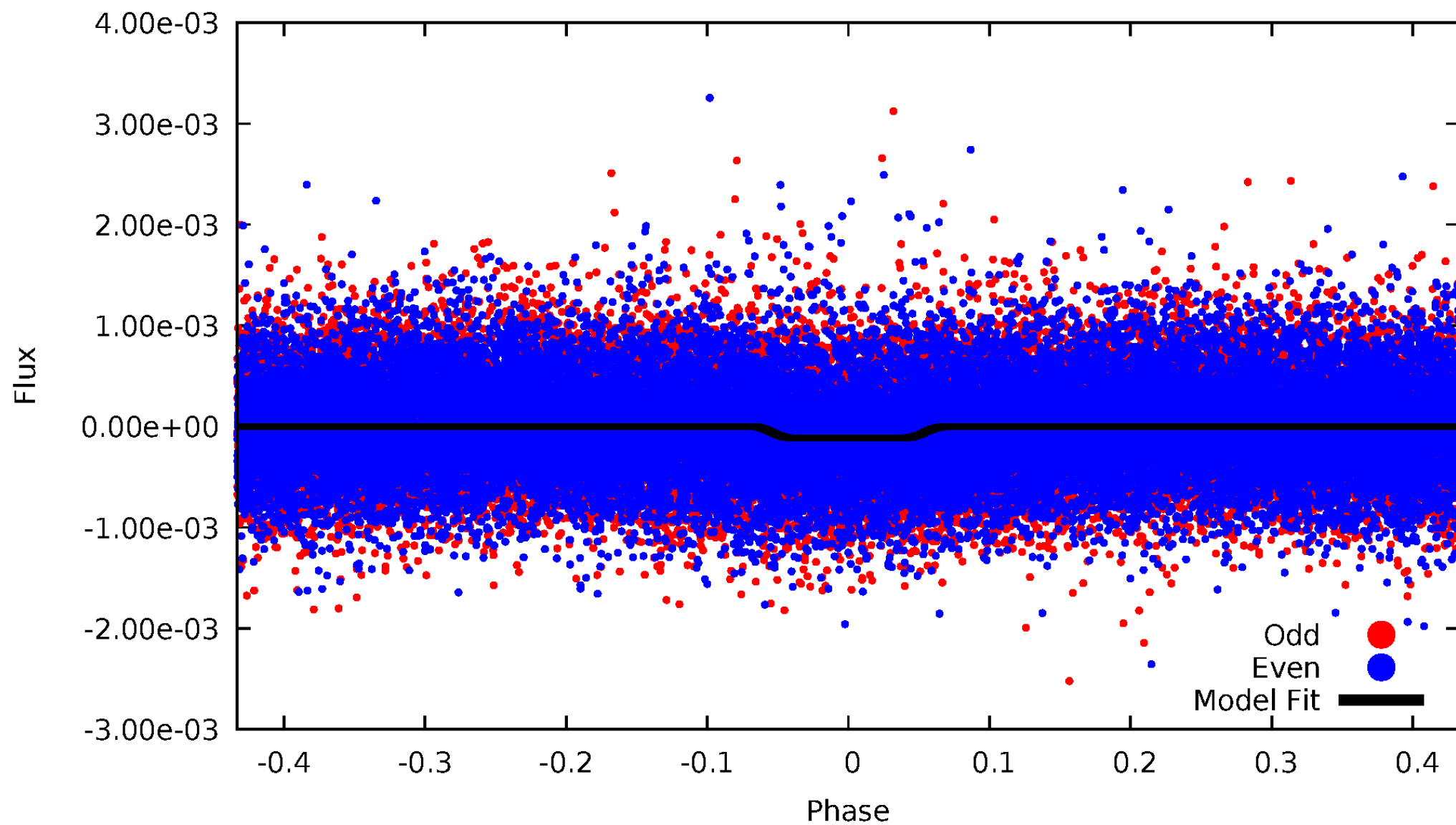
DV Odd/Even

TCE 011414684-01



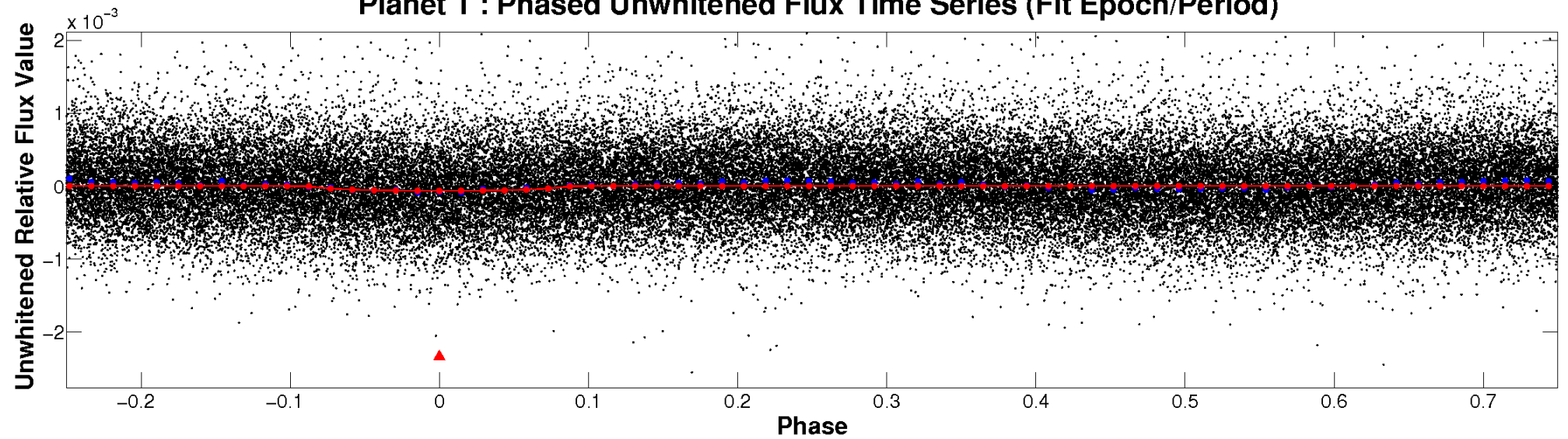
ALT Odd/Even

TCE 011414684-01

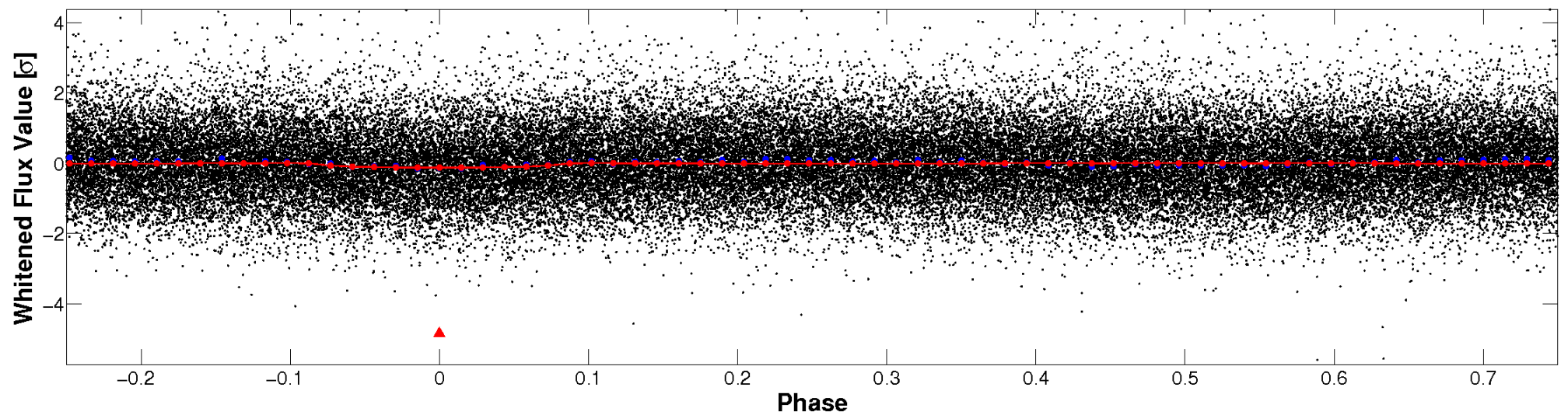


Non-Whitened Vs. Whitened Light Curve

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

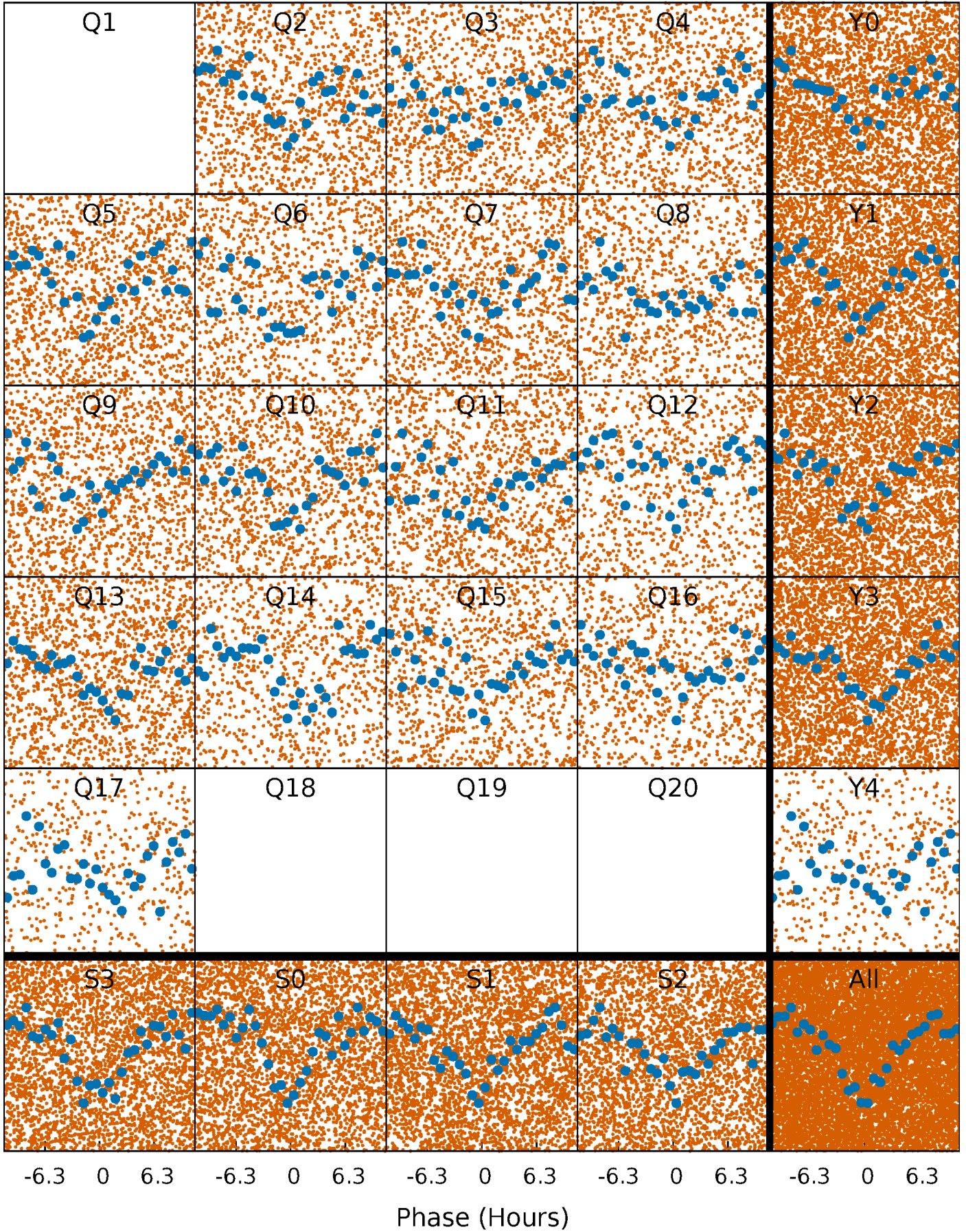


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



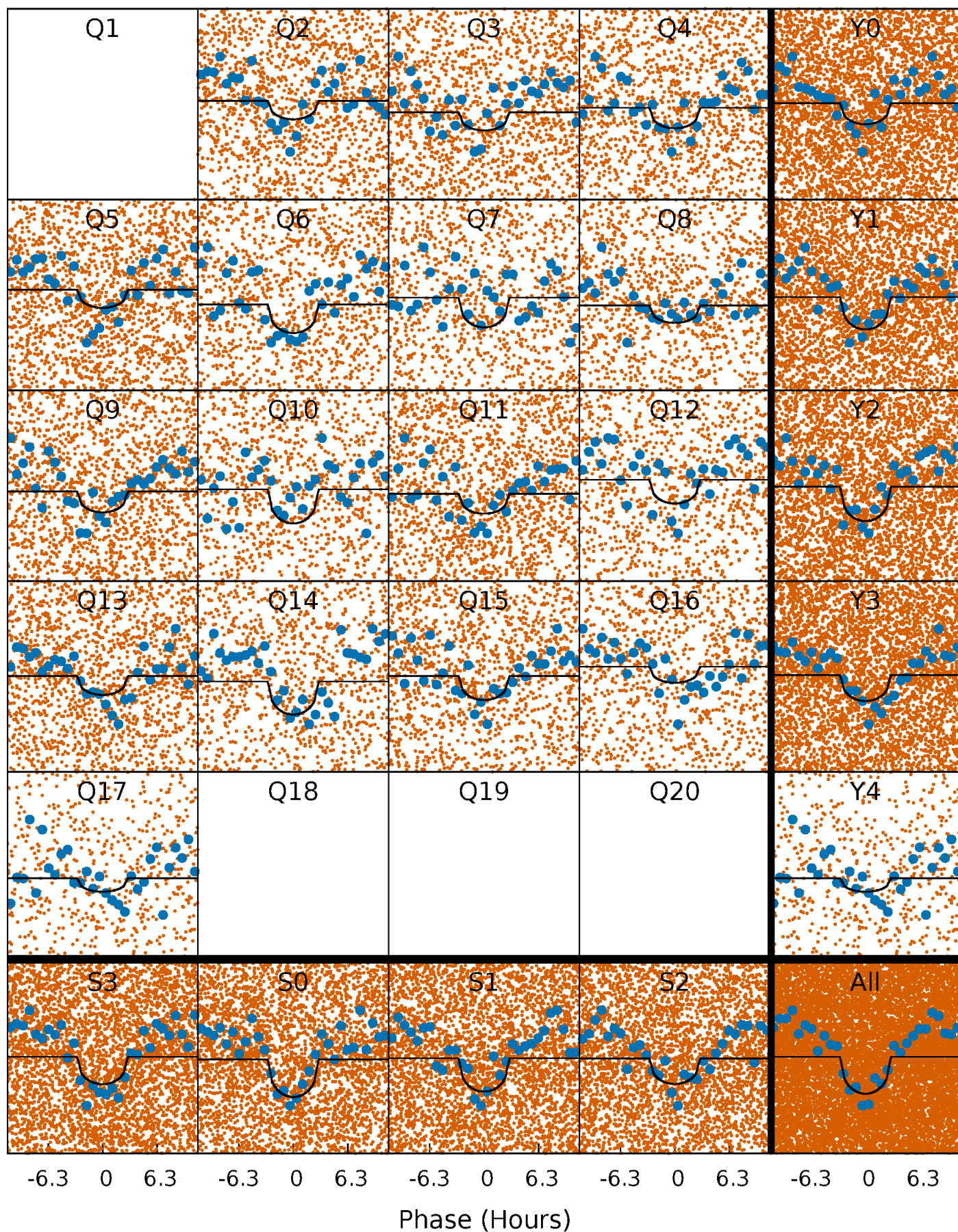
PDC Quarter-Phased Transit Curves

TCE 011414684-01 P= 1.400951 Days $T_0=132.561742$ (BKJD)



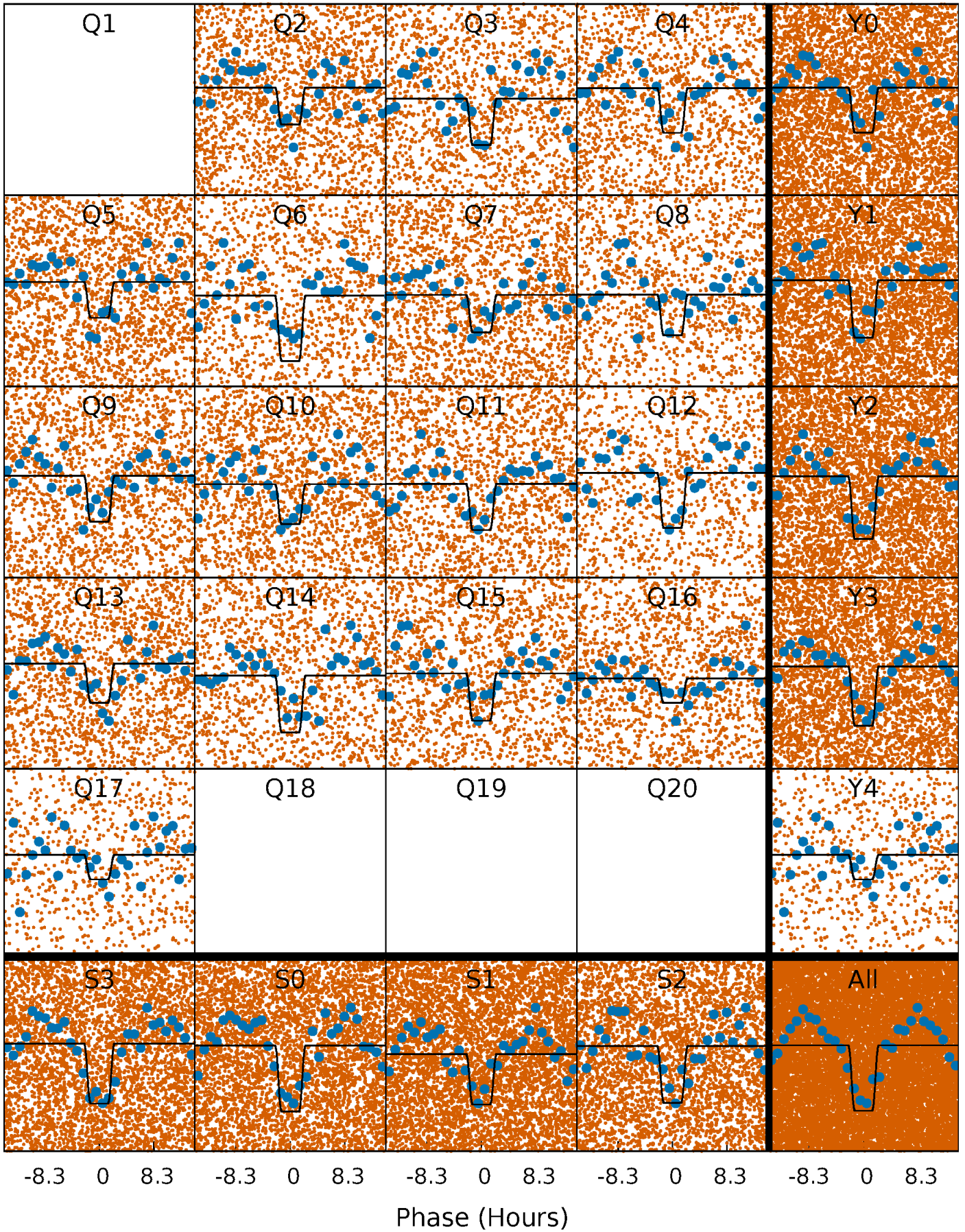
DV Quarter-Phased Transit Curves

TCE 011414684-01 P= 1.400951 Days $T_0=132.561742$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

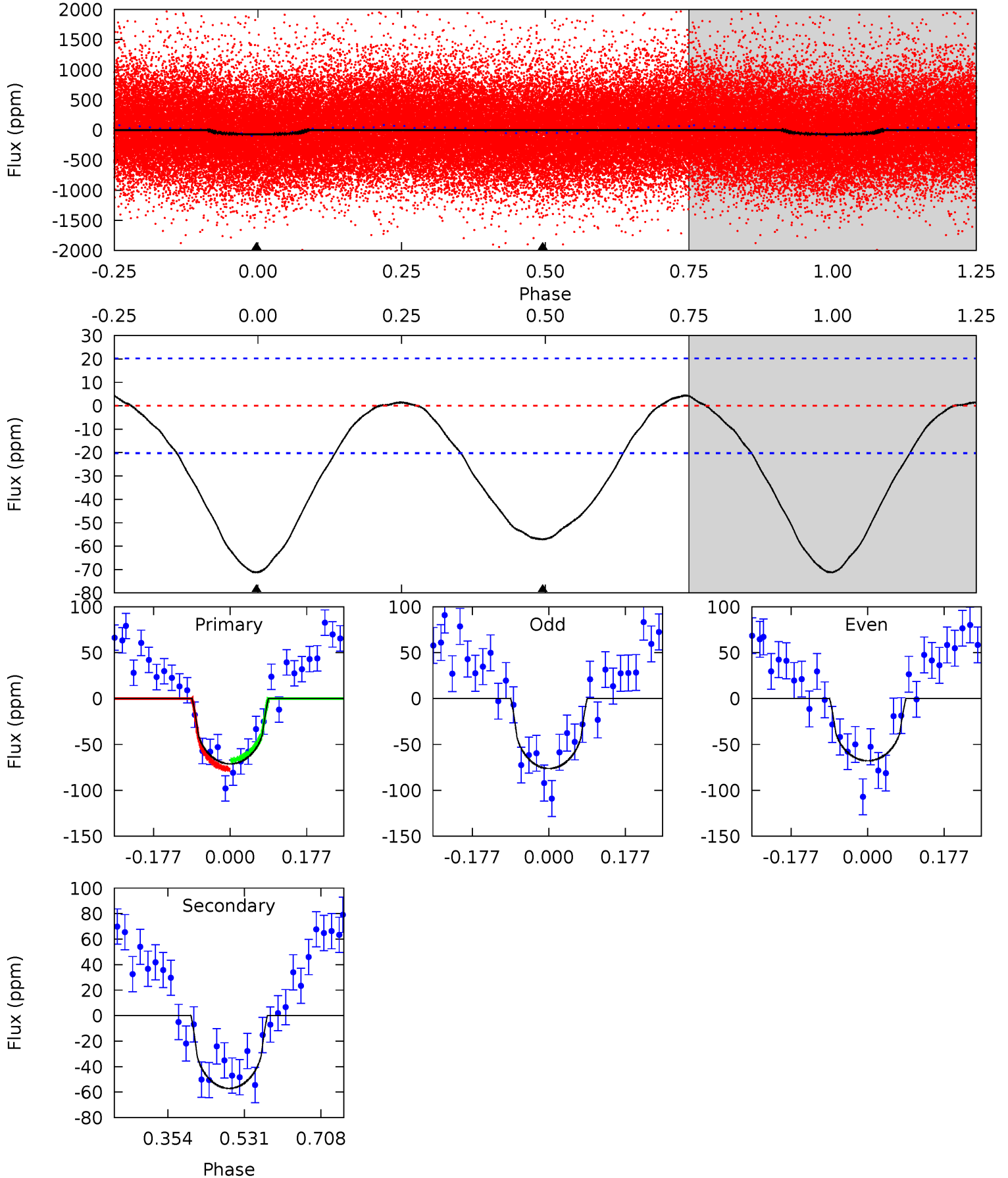
TCE 011414684-01 P= 1.401000 Days $T_0=132.530795$ (BKJD)



DV Model-Shift Uniqueness Test

011414684-01, P = 1.400951 Days, E = 132.561742 Days

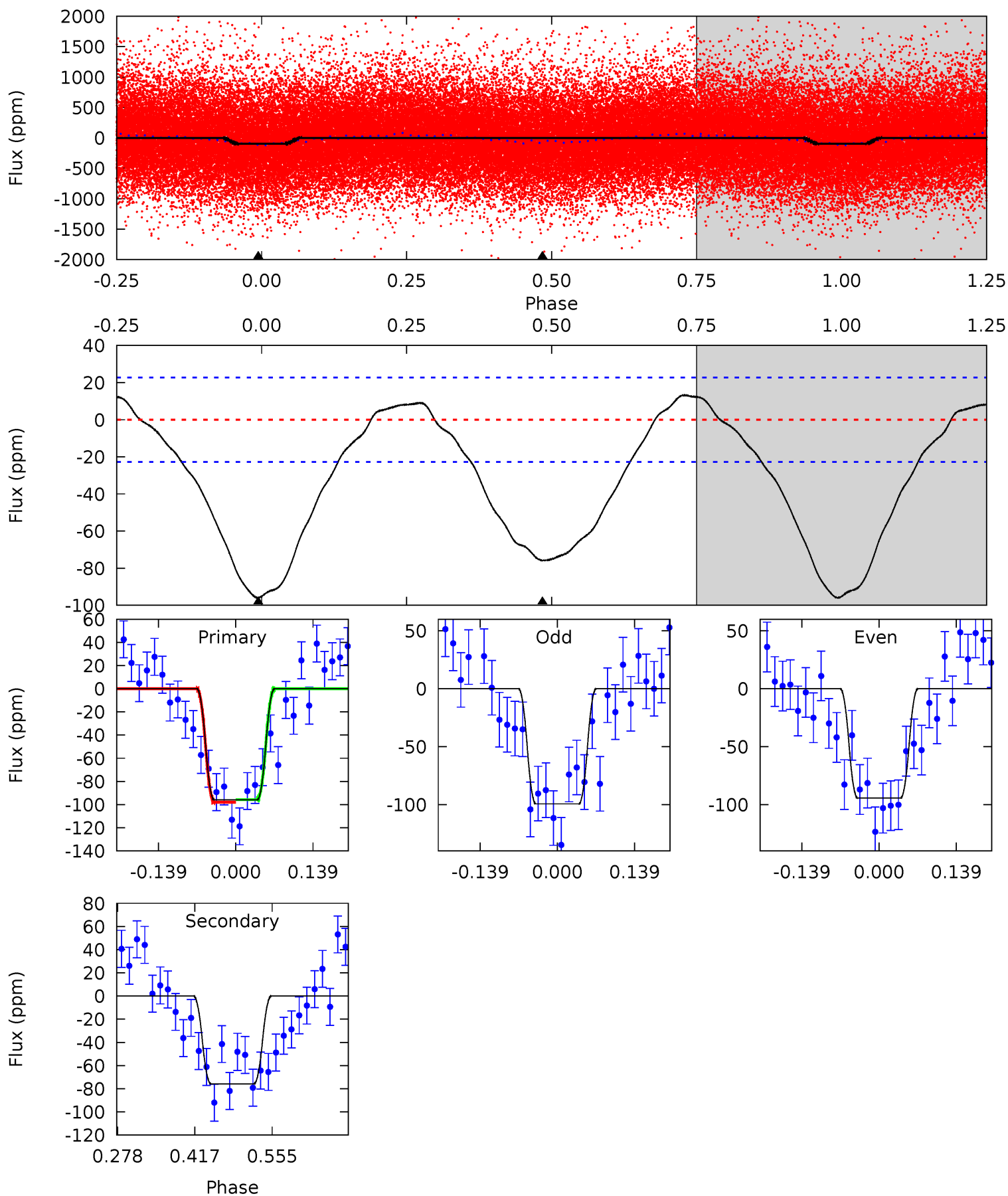
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.6	12.5	0	0	4.44	1.35	0.73	15.6	15.6	12.5	12.5	0.94	0.95	0.06	1.07



Alt Model-Shift Uniqueness Test

011414684-01, P = 1.401000 Days, E = 132.530795 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.0	15.0	0	0	4.50	1.48	2.08	19.0	19.0	15.0	15.0	0.50	1.08	0.12	0.23



Stellar Parameters For KIC 011414684

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4534^{+90}_{-136}	$2.187^{+0.033}_{-0.030}$	$0.040^{+0.200}_{-0.300}$	$19.409^{+4.649}_{-4.649}$	$2.109^{+1.242}_{-0.931}$	$0.000^{+0.000}_{-0.000}$
	+2%/-3%	+2%/-1%	+500%/-750%	+24%/-24%	+59%/-44%	+36%/-14%
Source	PHO54	AST54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011414684-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-57 ± 5	$18.38^{+15.94}_{-11.24}$	6952^{+271}_{-268}	-4981^{+10467}_{-456}	$0.093^{+0.516}_{-0.065}$
Alt.	-76 ± 5	$25.52^{+16.85}_{-14.48}$	6958^{+245}_{-288}	-5105^{+8988}_{-362}	$0.069^{+0.283}_{-0.044}$

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 $A_{obs} \gg 1.0$

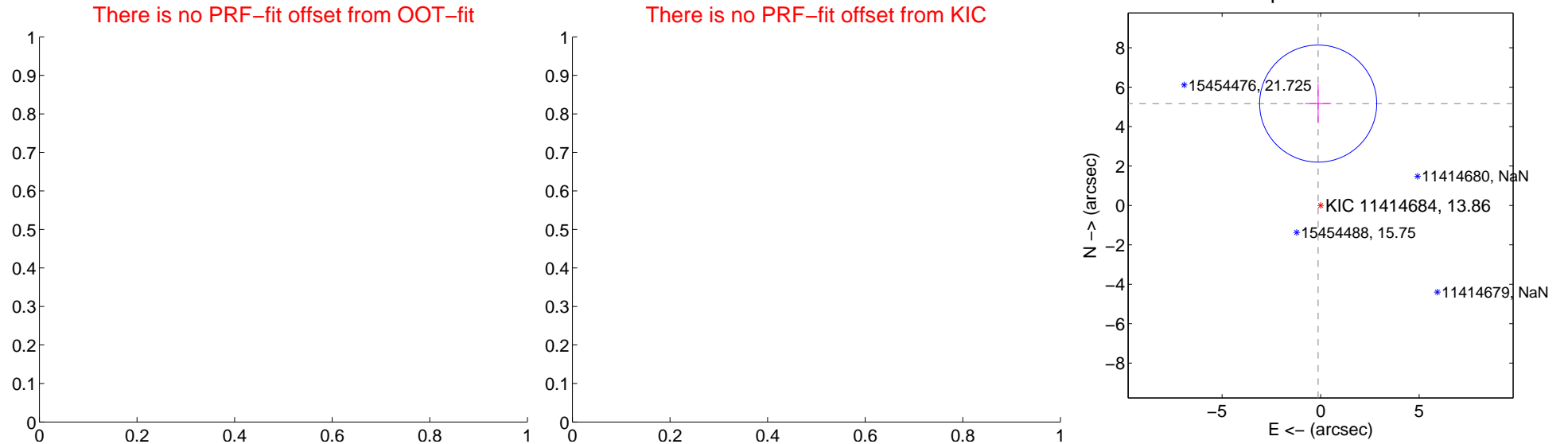
DV Centroid Data

Supplemental centroid analysis for 011414684-01. Kepler magnitude: 13.86. Transit SNR 10.04

There are 0 quarters with good PRF difference image offsets

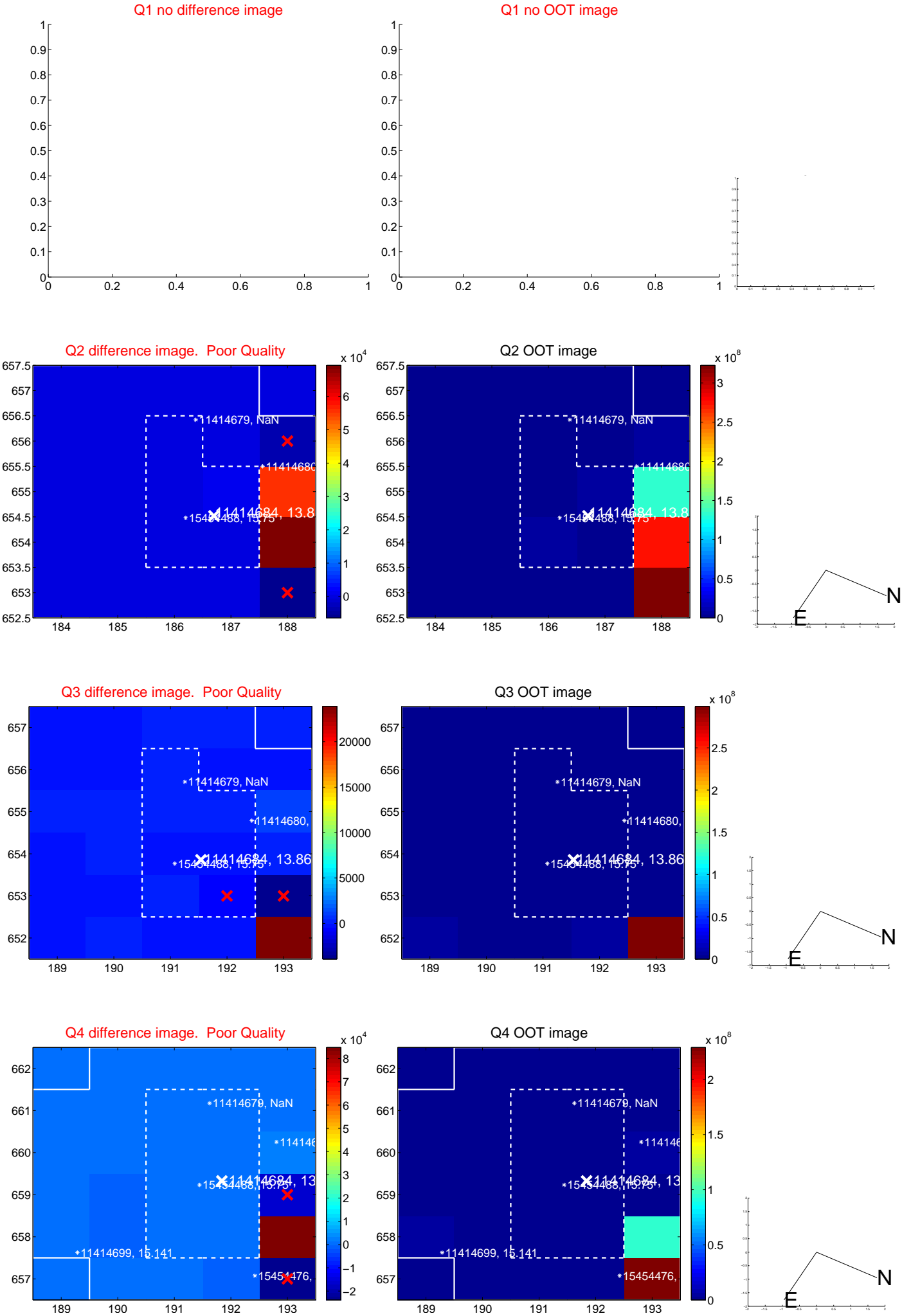
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	5.17 ± 0.99	5.22	0.12 ± 0.66	5.17 ± 0.99

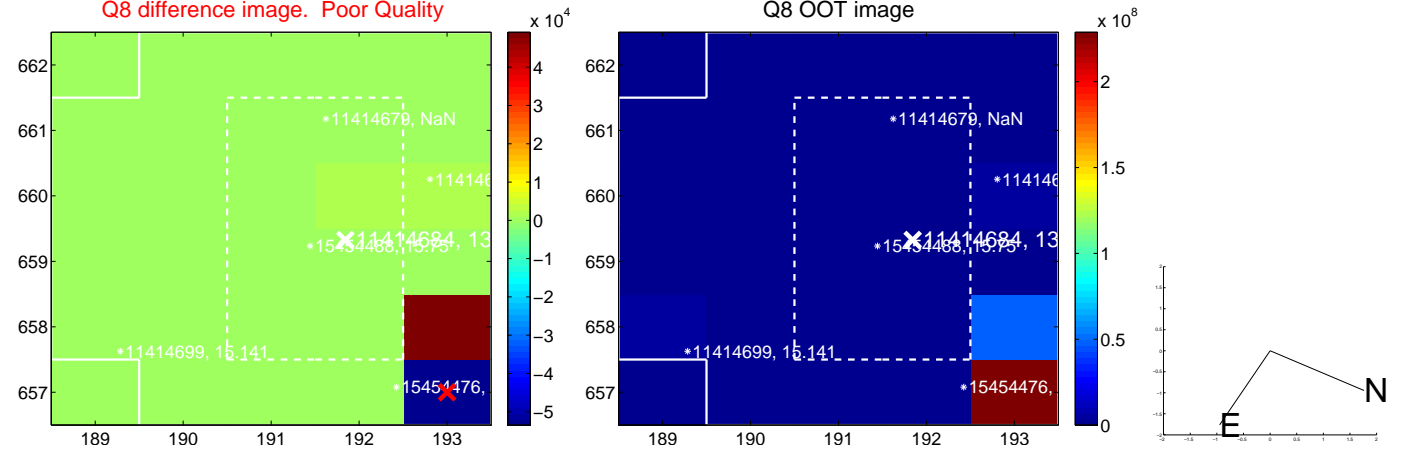
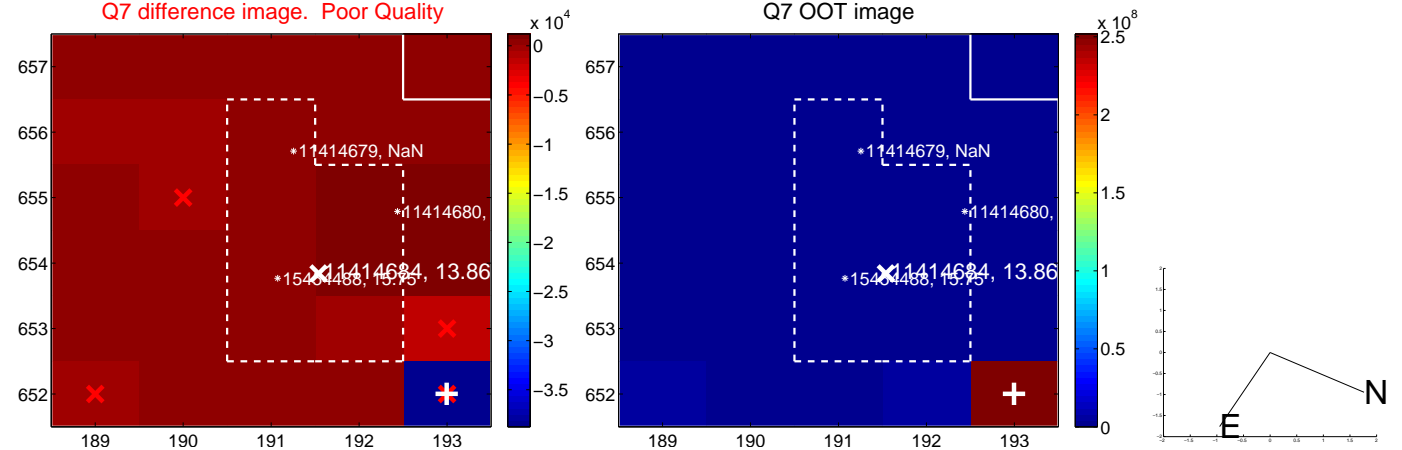
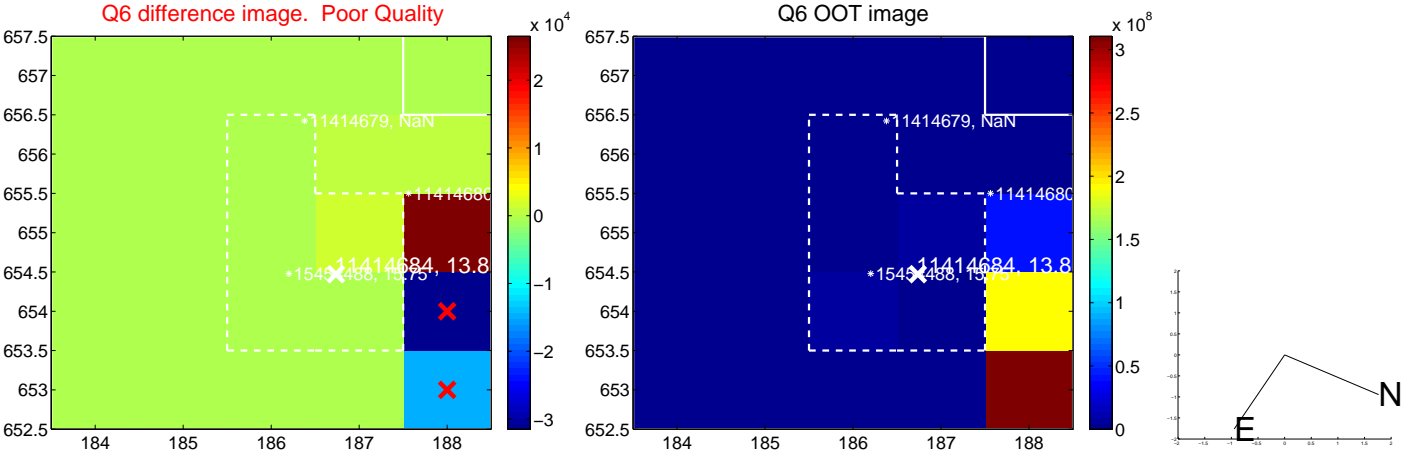
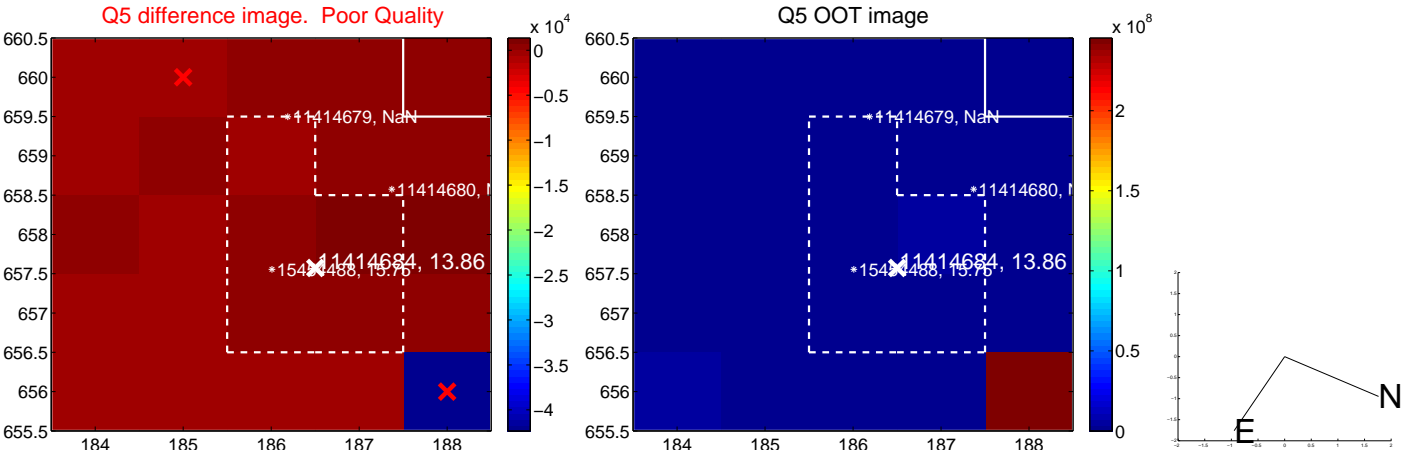


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

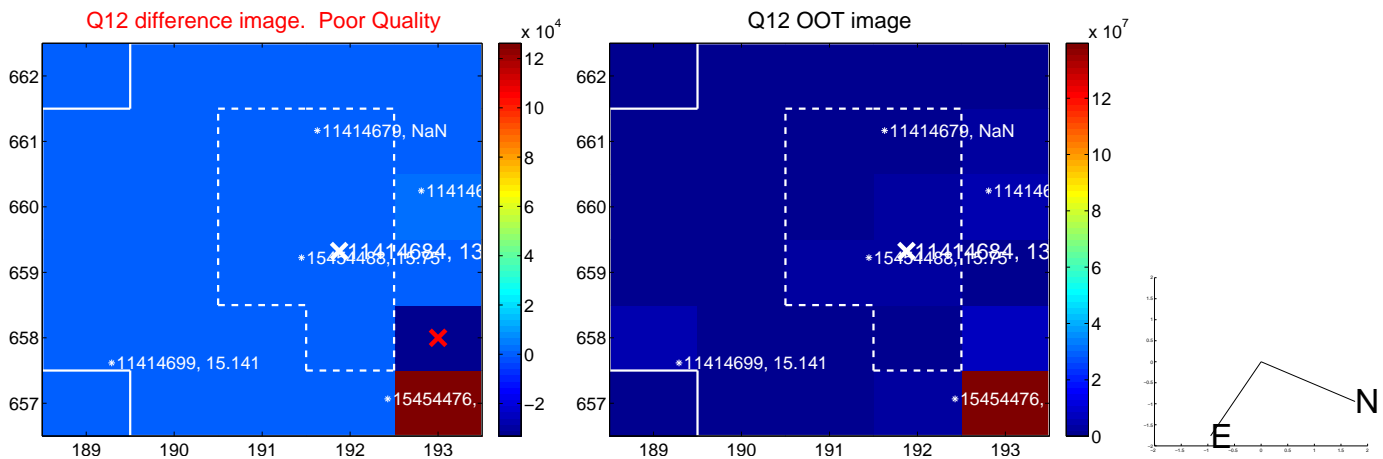
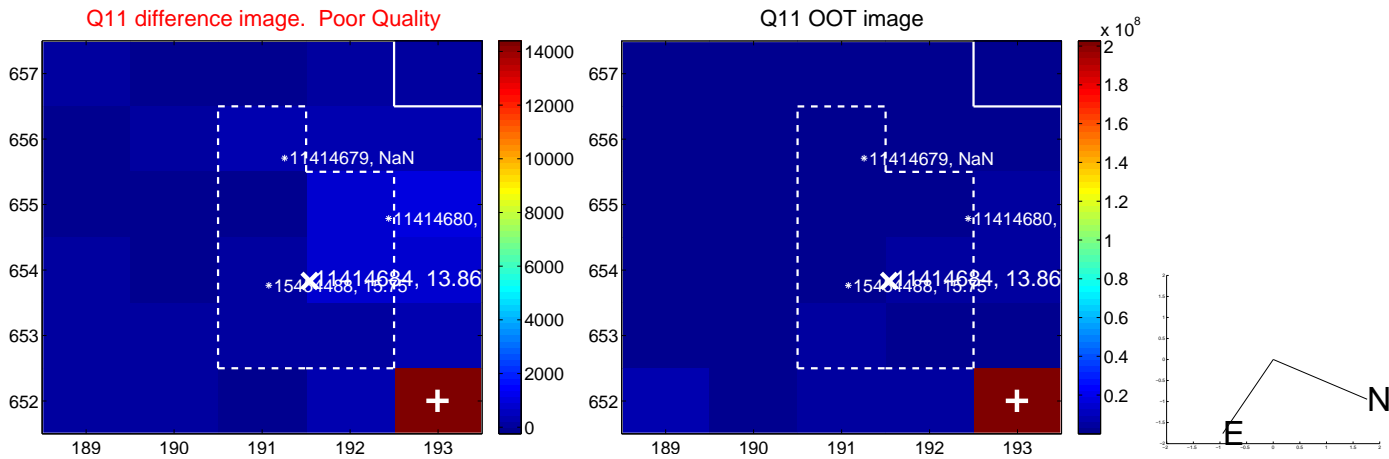
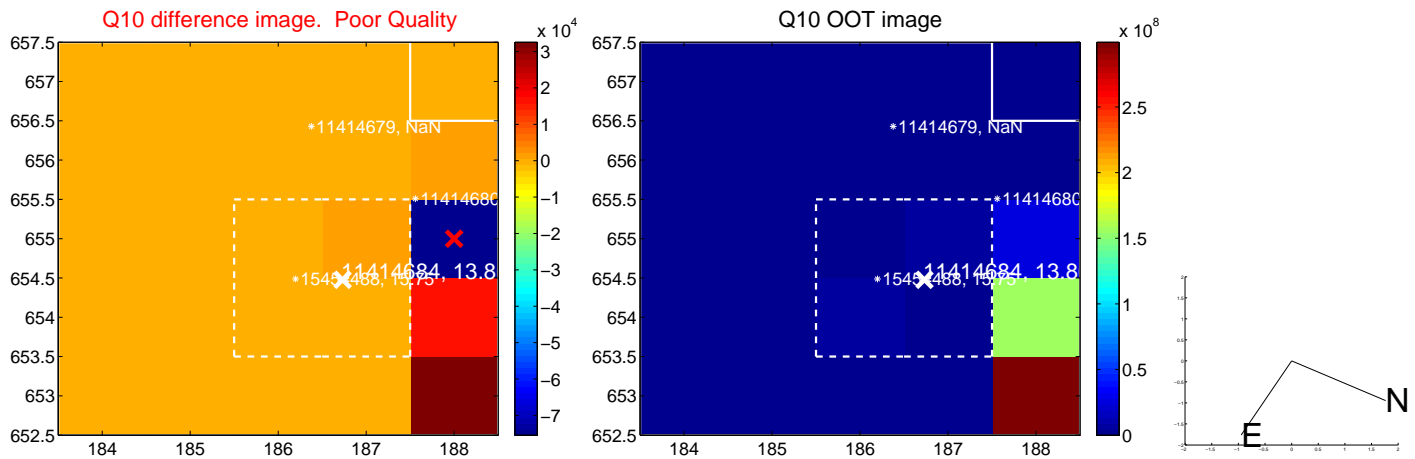
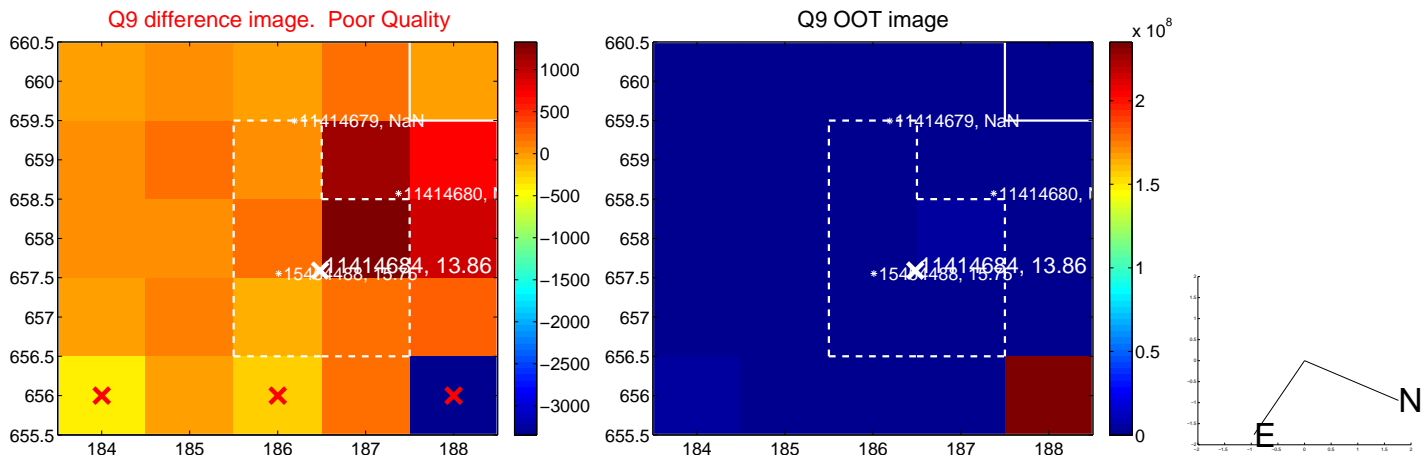
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



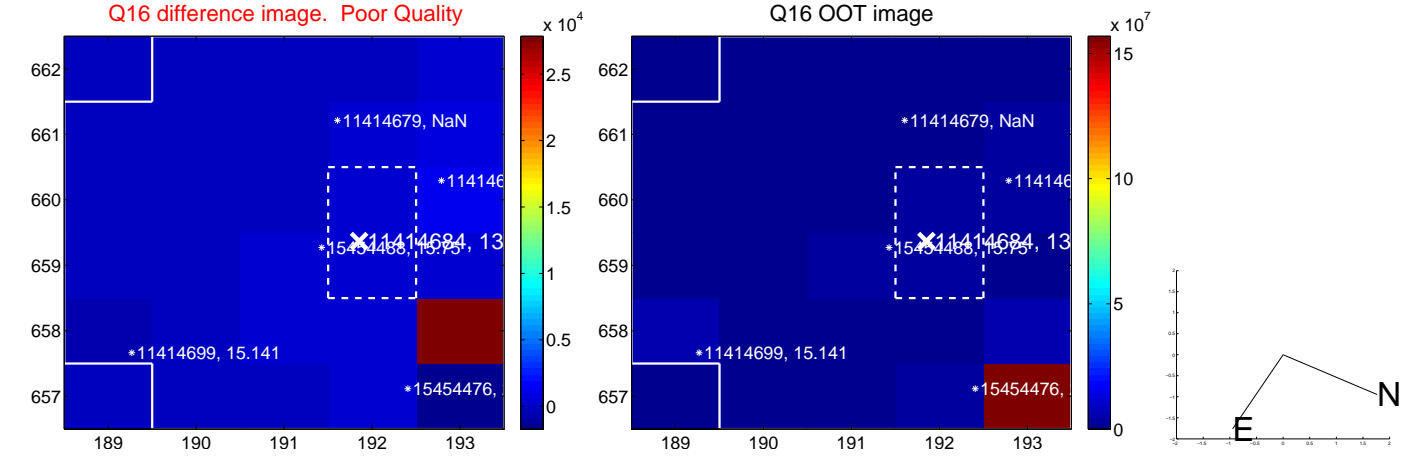
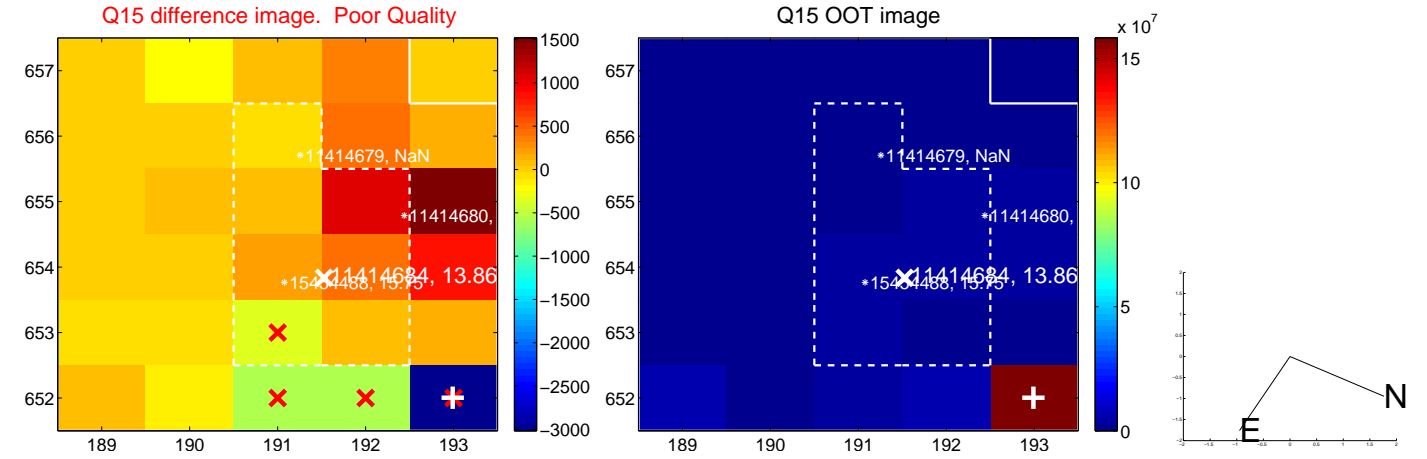
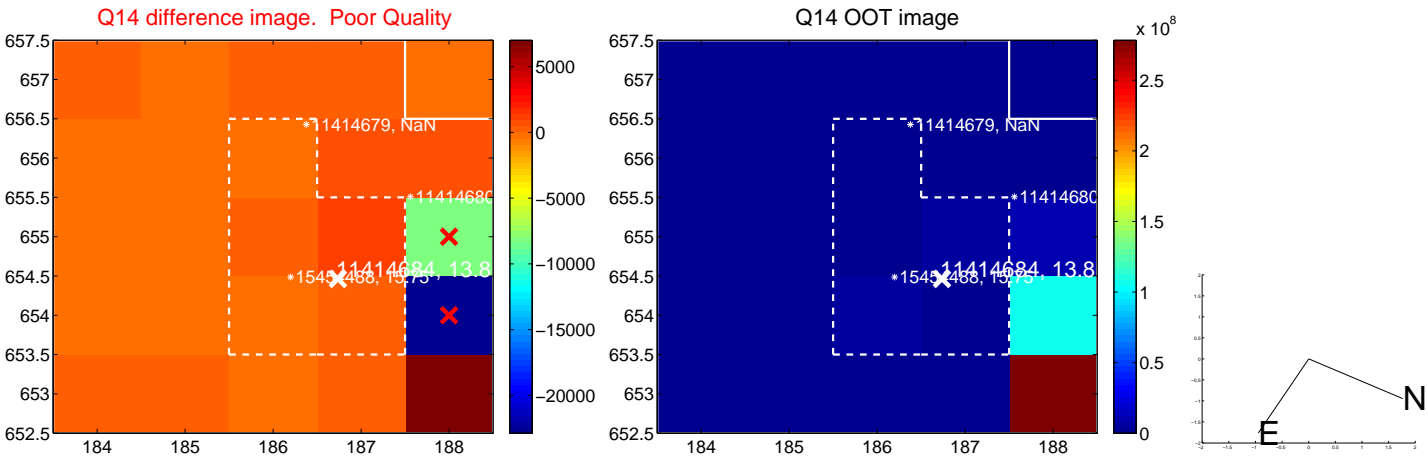
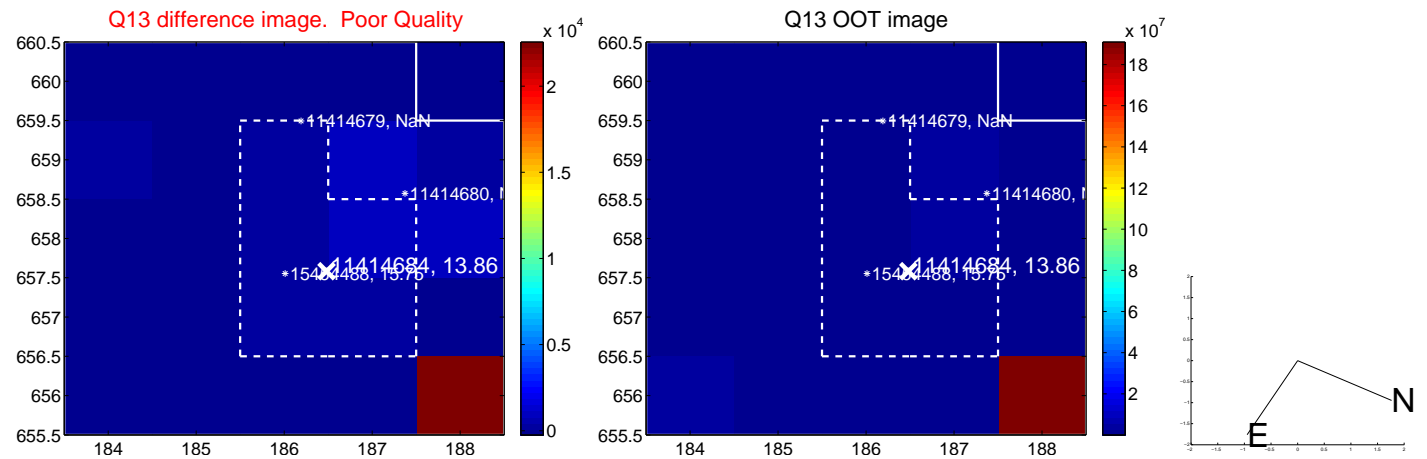
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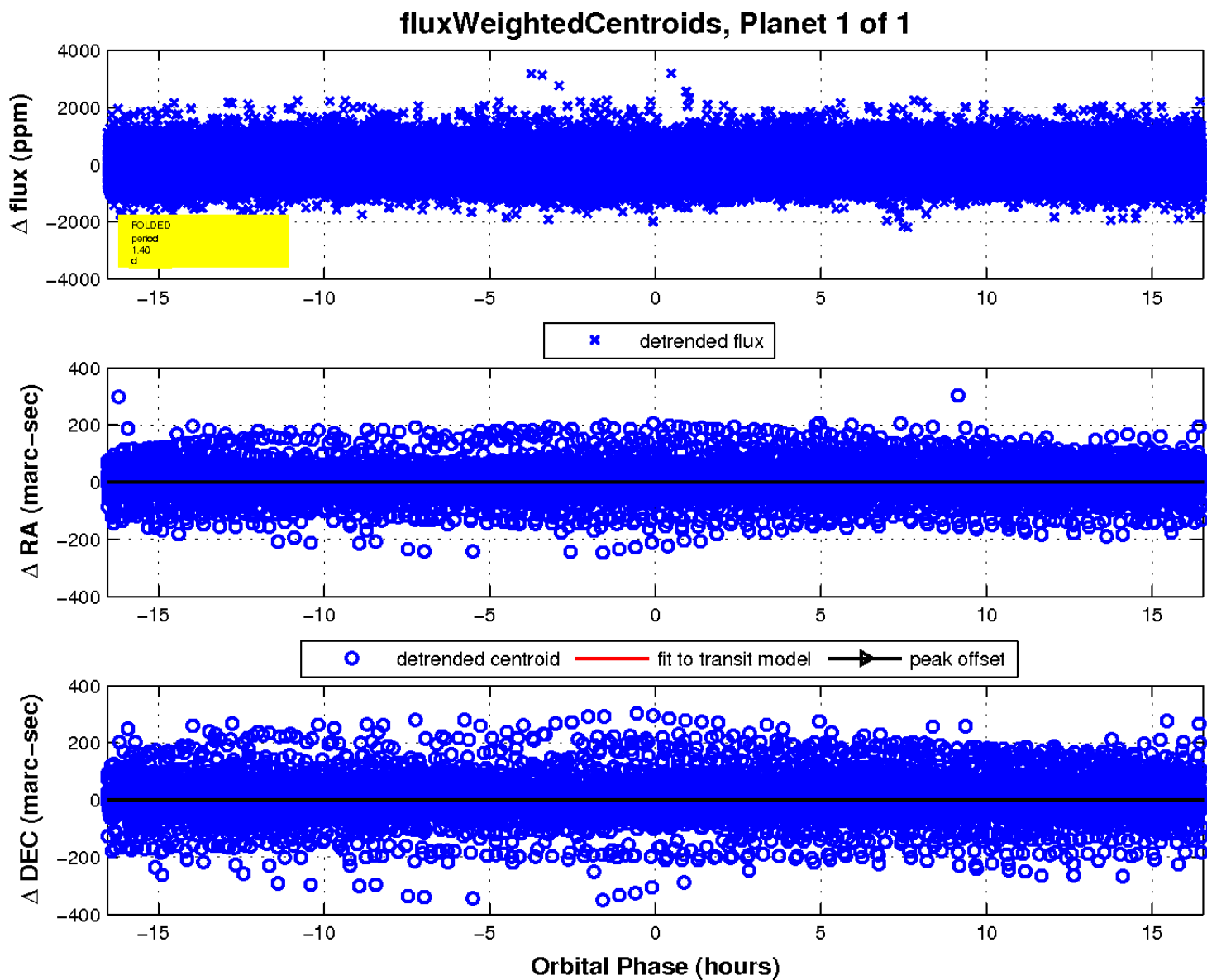
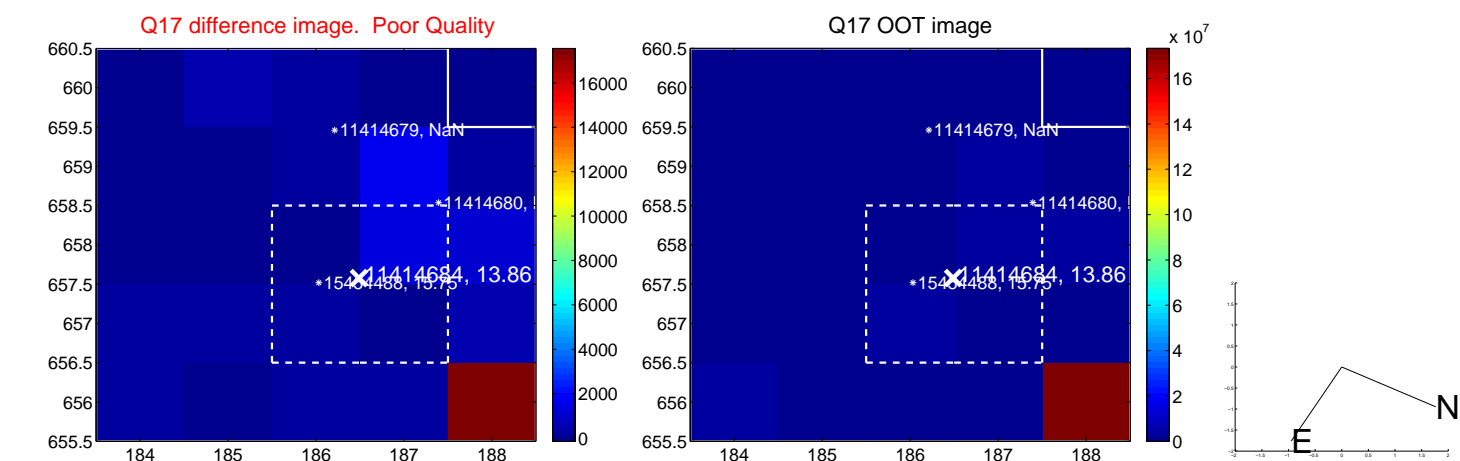
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UKIRT Image

