

KIC 002694640

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})
002694640-01	OBS	No	0.921166	132.151744	242.3	6.981	123.0	9.8	5.08	4764	10.86	0.00
002694640-02	OBS	No	0.921855	131.817244	11763.9	1.500	151.1	-1.0	5.08	4764	53.41	36885.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002694640-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
002694640-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS

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

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

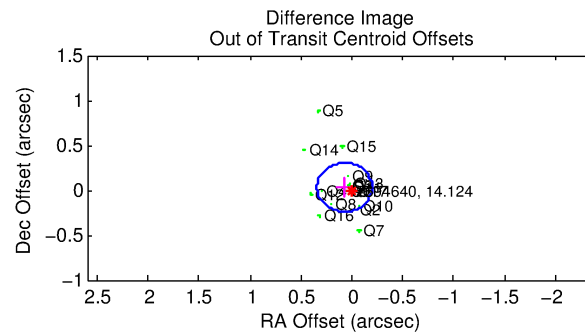
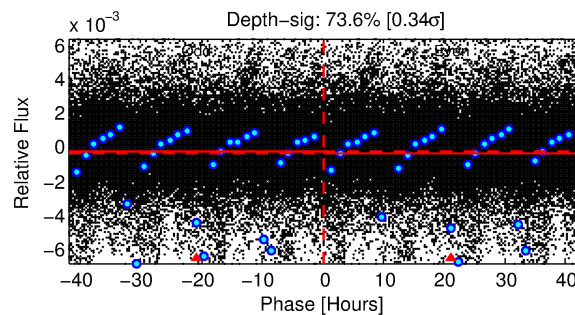
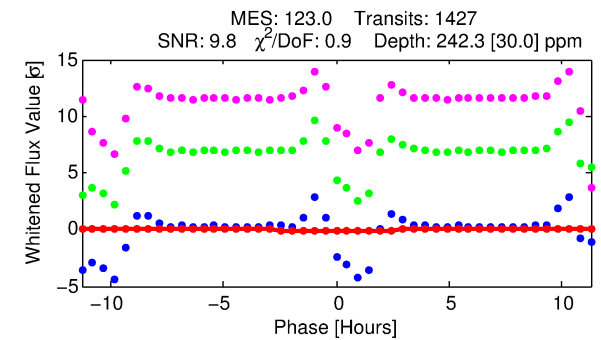
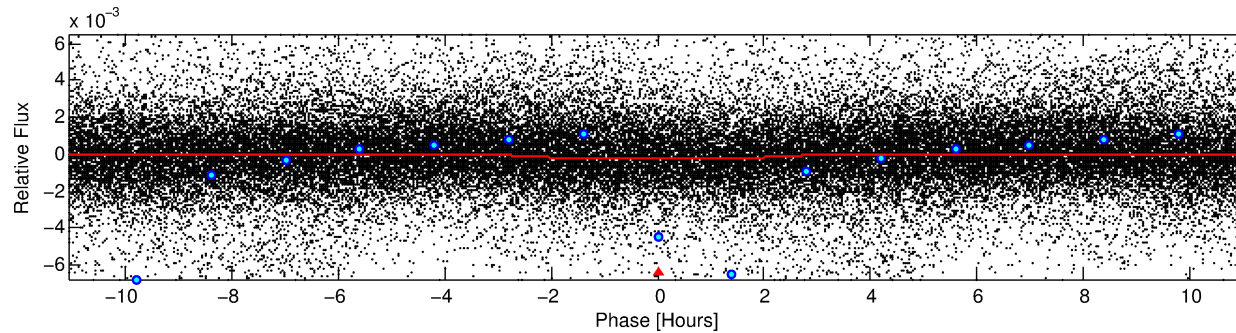
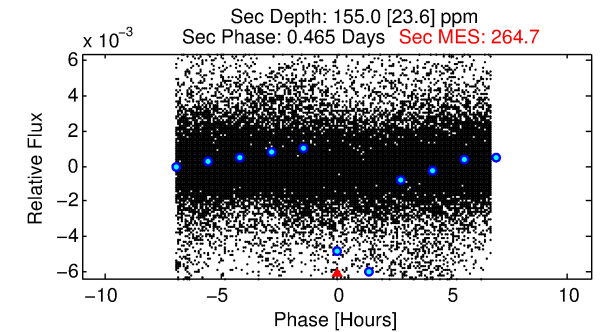
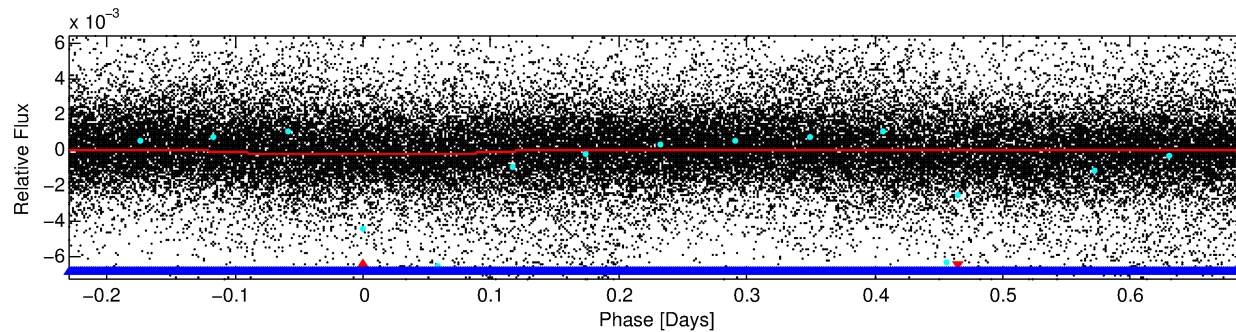
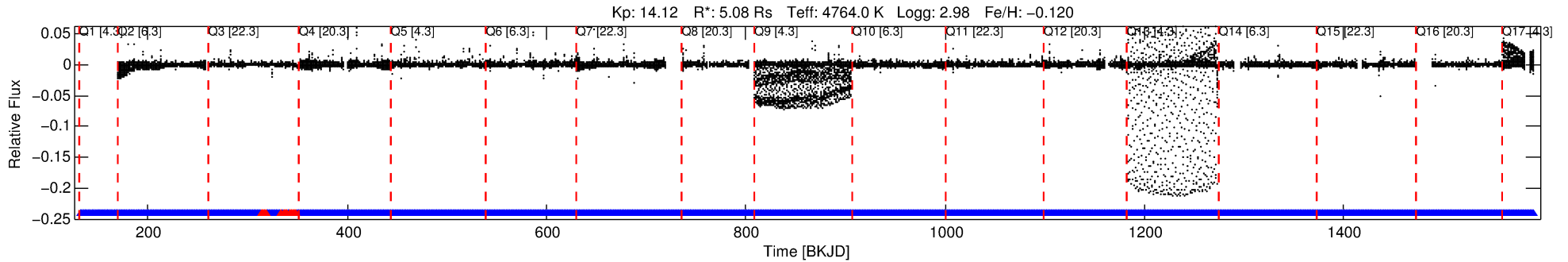
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002694640-01

No Significant Match Found

DV One-Page Summary

KIC: 2694640 Candidate: 1 of 2 Period: 0.921 d



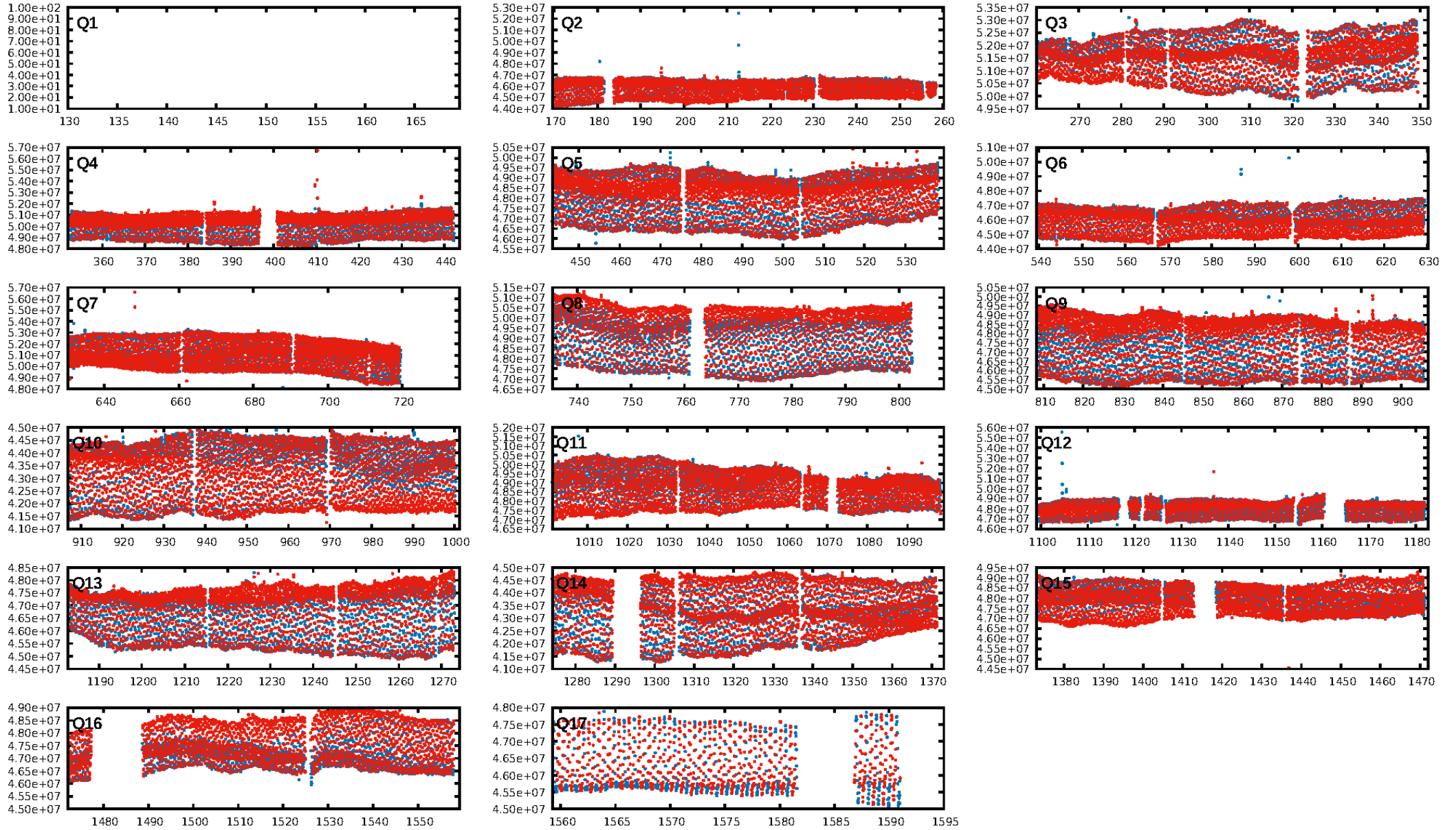
DV Fit Results:

Period = 0.92117 [0.00001] d
Epoch = 132.1517 [0.0058] BKJD
Rp/R* = 0.0196 [0.0013]
a/R* = 1.04 [0.01]
b = 0.96 [0.01]
Seff = N/A
Teq = N/A
Rp = 10.86 [6.87] Re
a = N/A
Ag = N/A
Teffp = N/A

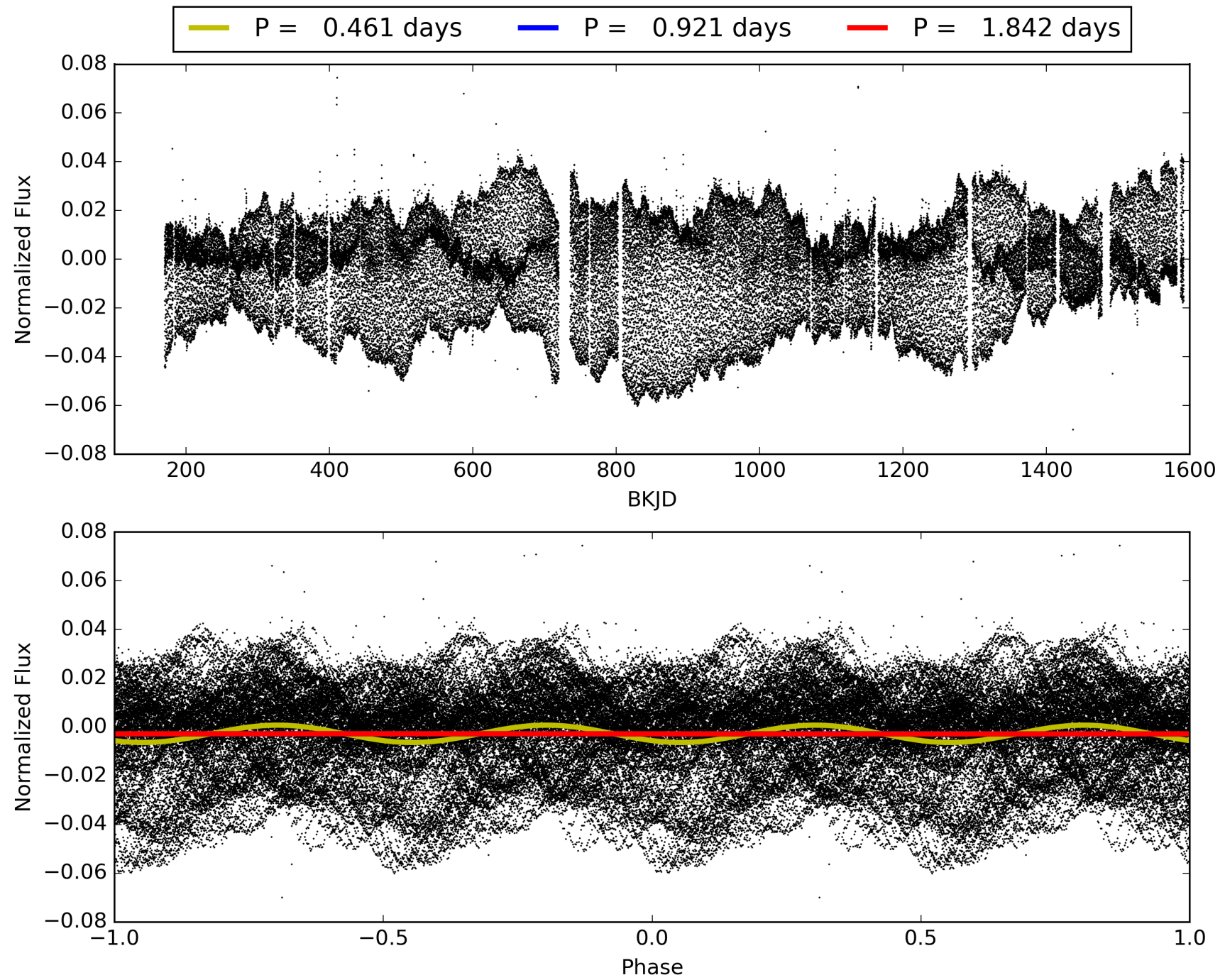
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.2% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [1384/1399]
GhostDiagnostic-chr: 1.931
Centroid-sig: 8.9%
Centroid-so: 0.628 arcsec [2.86σ]
OotOffset-rm: 0.078 arcsec [0.87σ]
KicOffset-rm: 0.072 arcsec [0.82σ]
OotOffset-st: 4/4/4 [16]
KicOffset-st: 4/4/4 [16]
DiffImageQuality-fgm: 0.69 [11/16]
DiffImageOverlap-fno: 1.00 [16/16]

TCE 002694640-01, PDC Light Curves

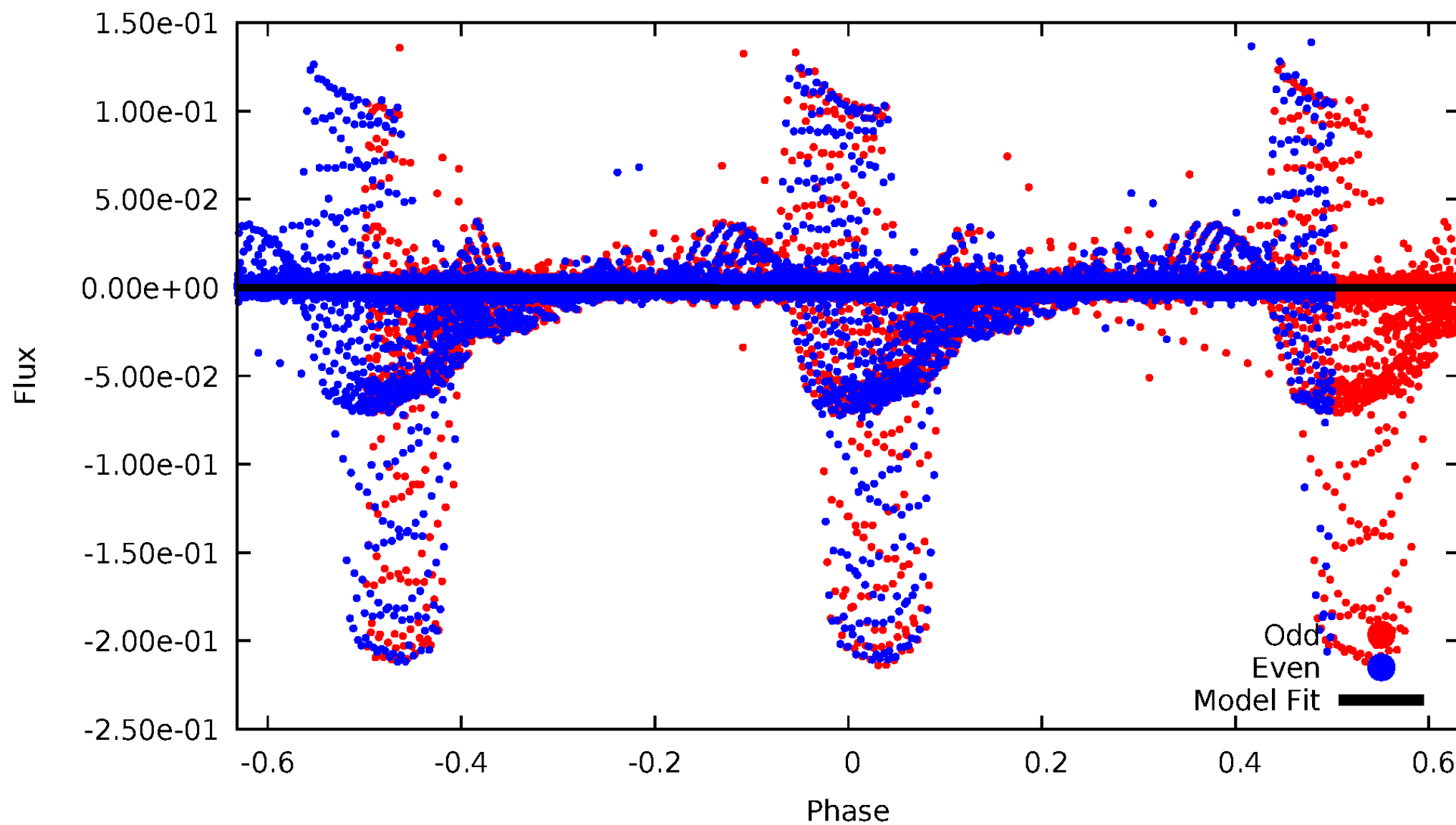


TCE 002694640-01



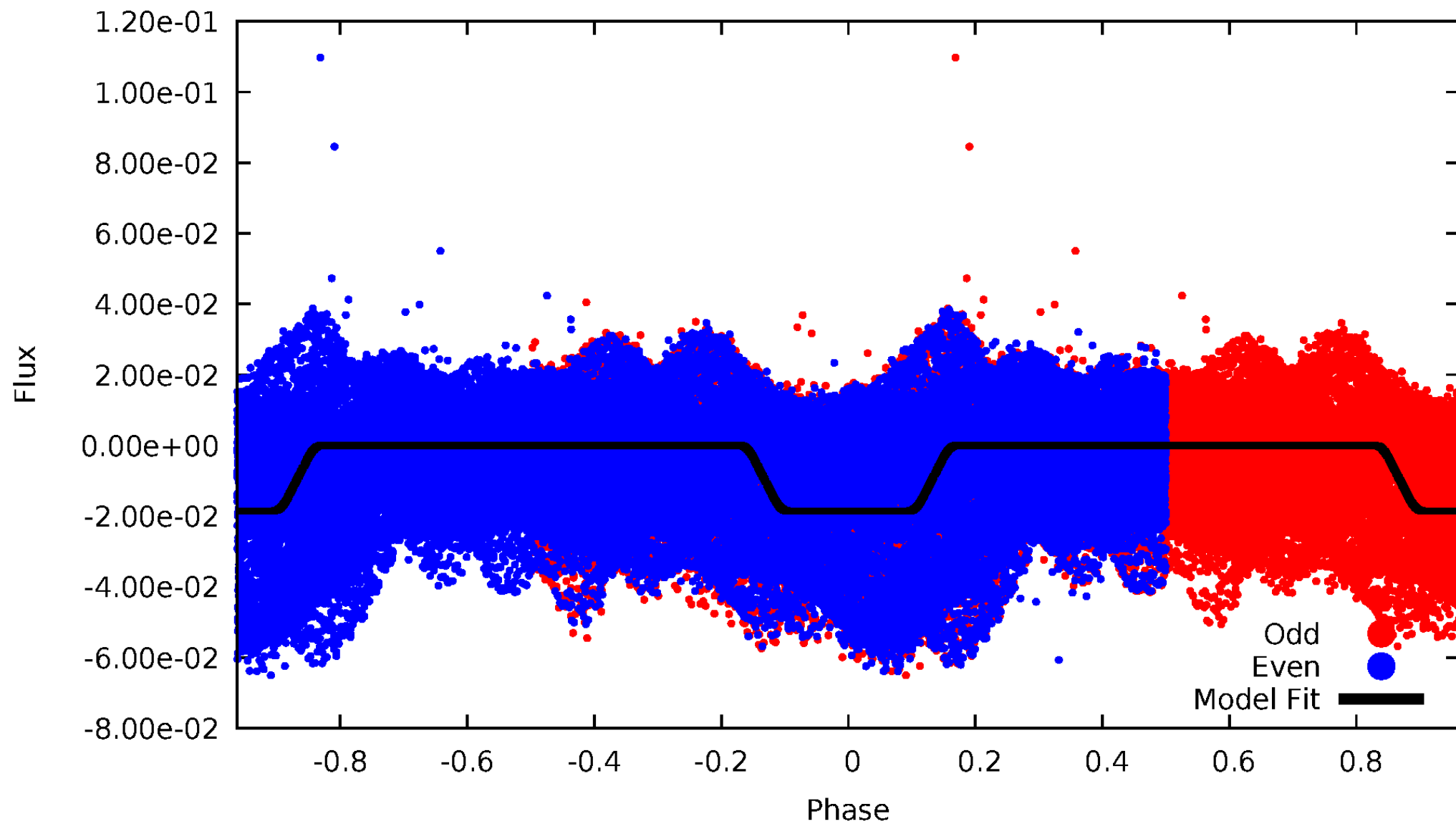
DV Odd/Even

TCE 002694640-01



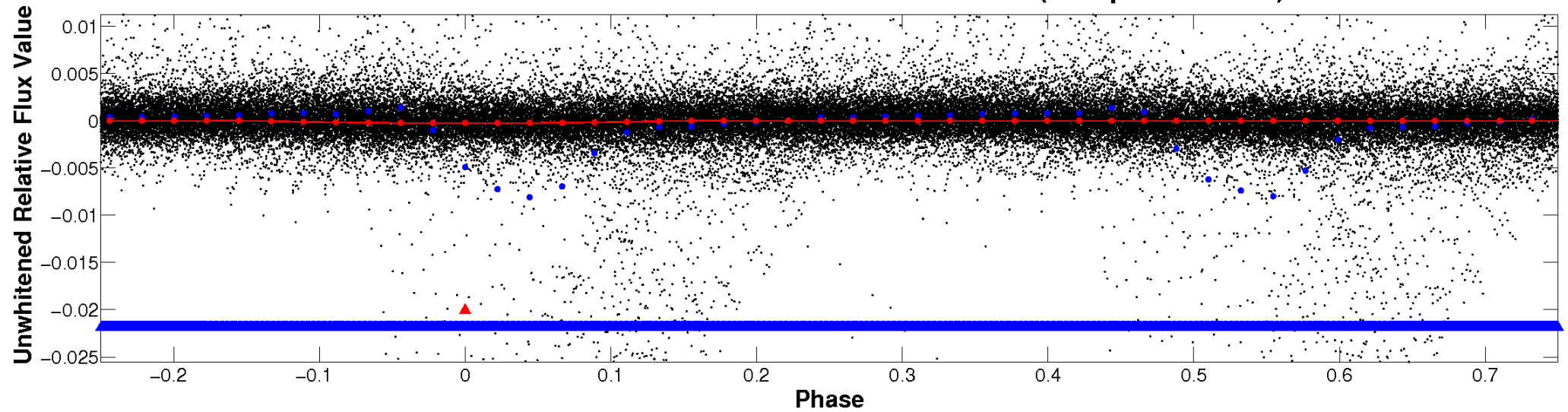
ALT Odd/Even

TCE 002694640-01

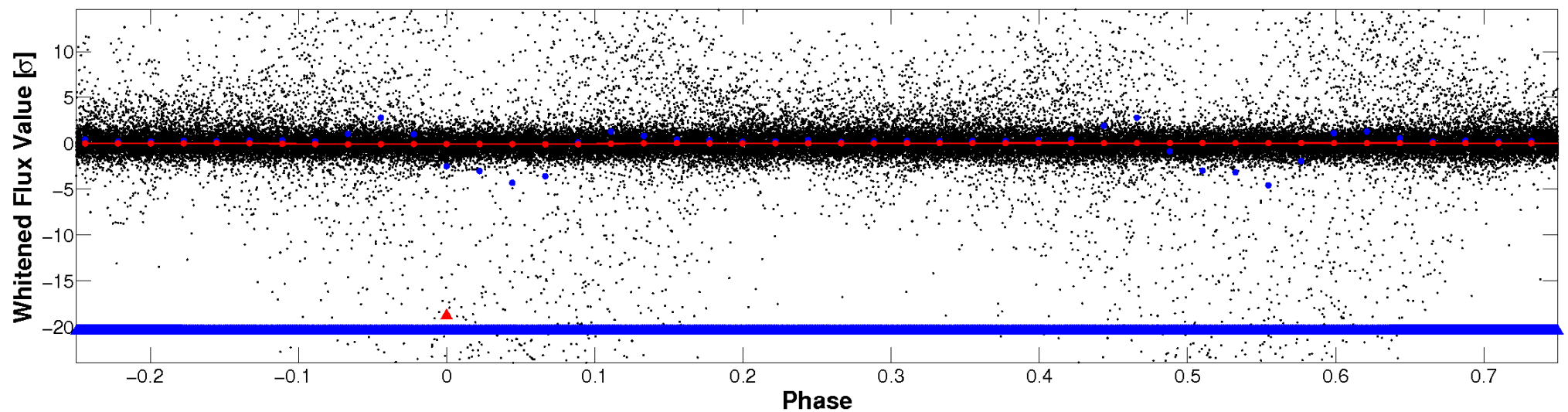


Non-Whitened Vs. Whitened Light Curve

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

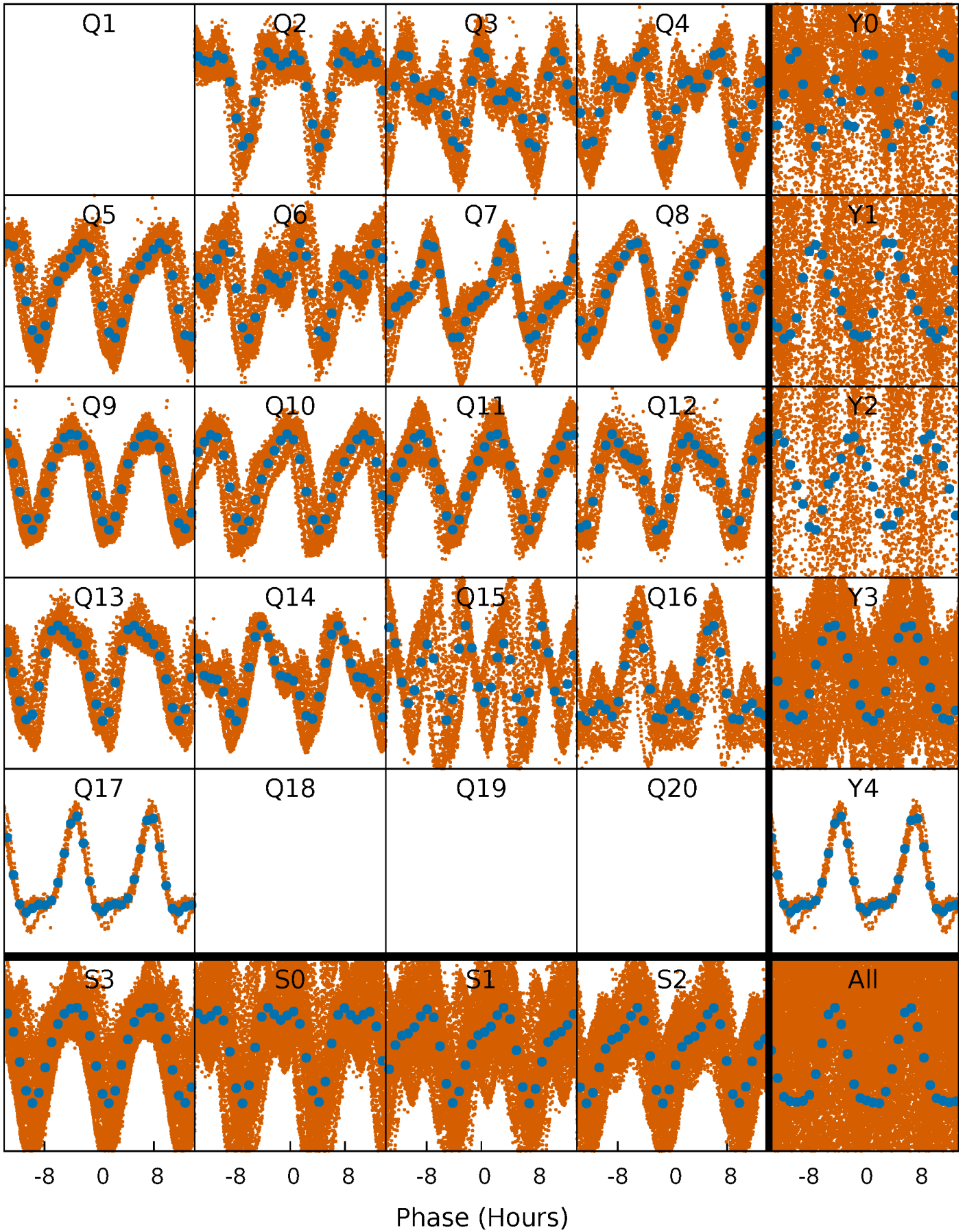


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



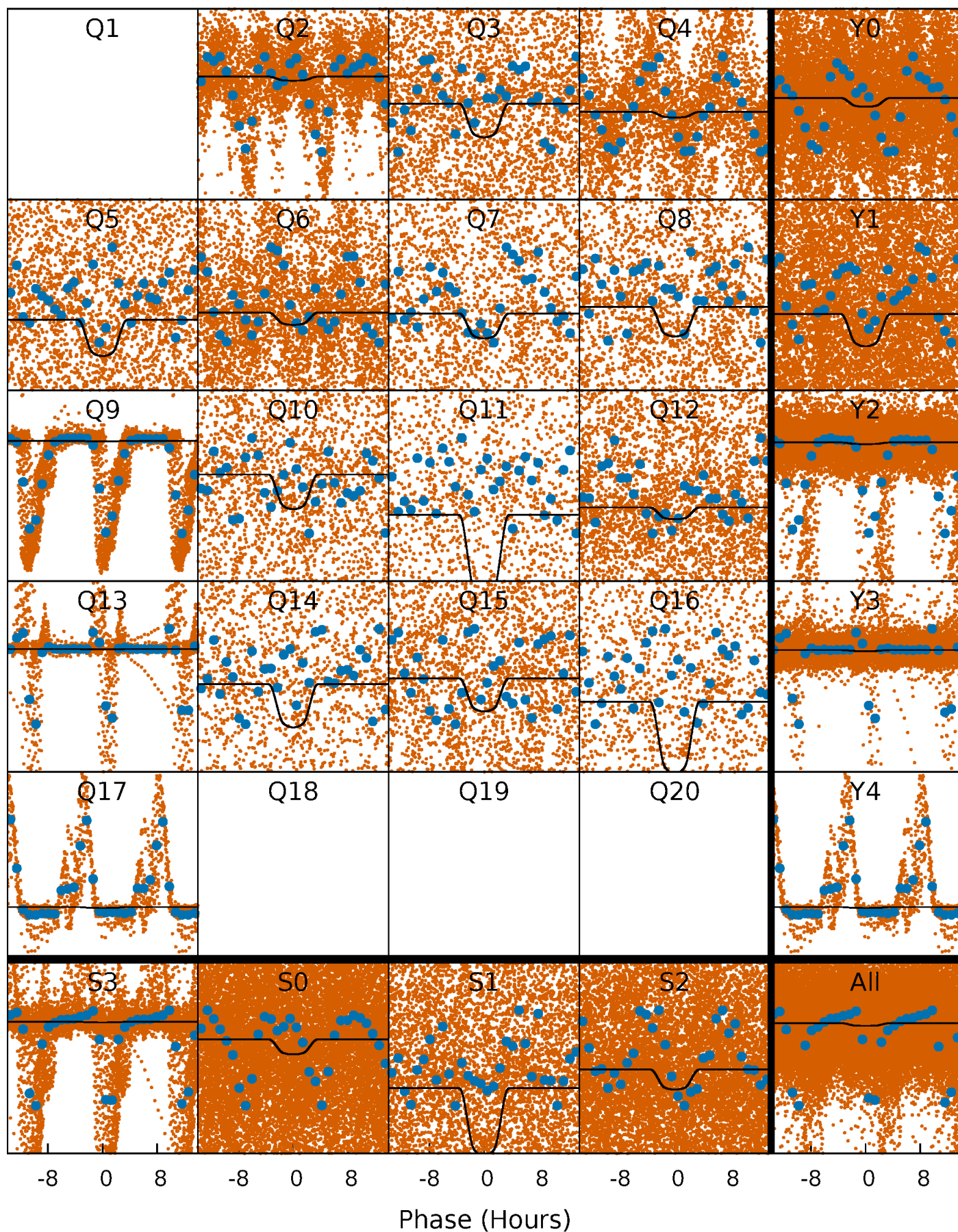
PDC Quarter-Phased Transit Curves

TCE 002694640-01 P= 0.921166 Days $T_0=132.151744$ (BKJD)



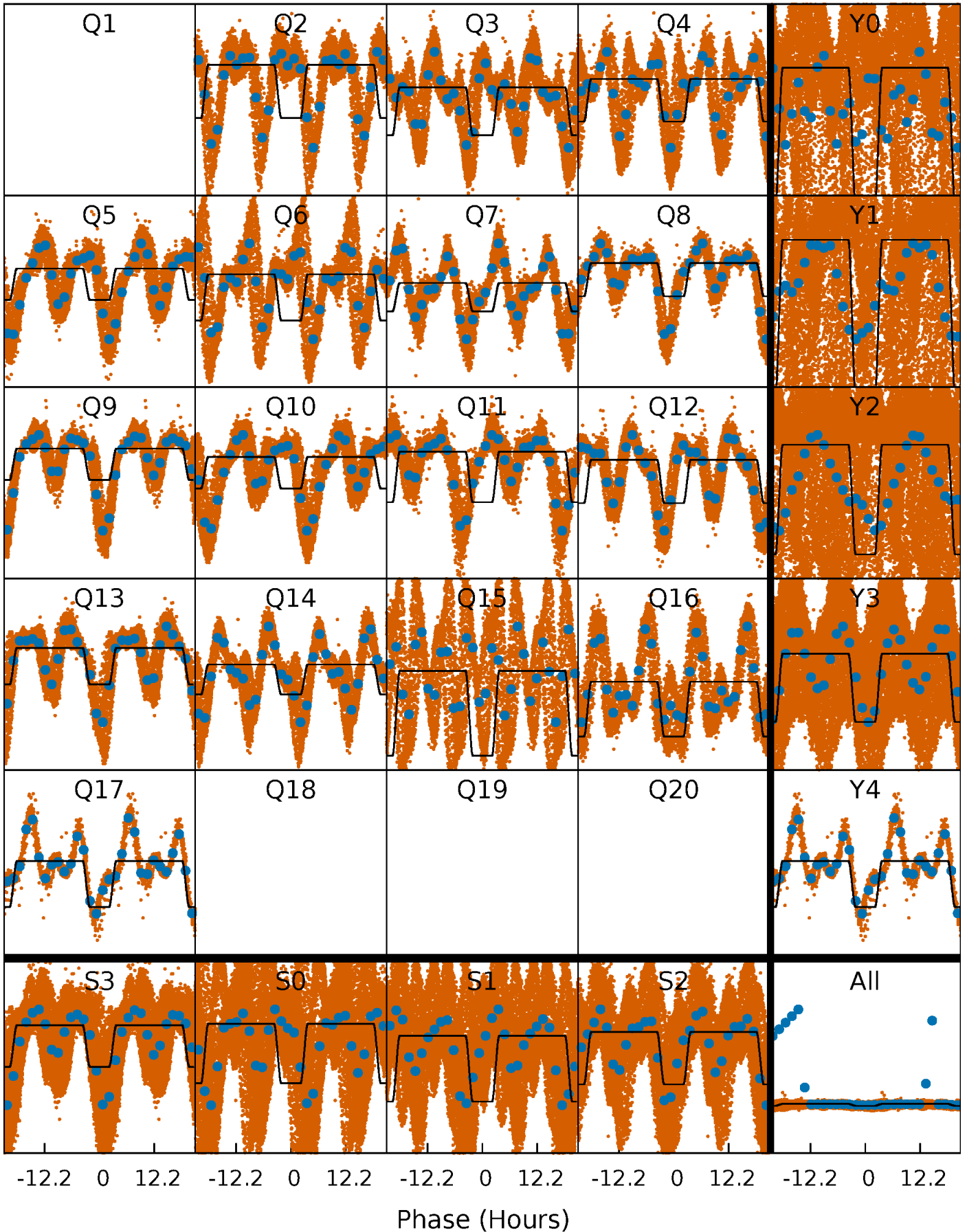
DV Quarter-Phased Transit Curves

TCE 002694640-01 P= 0.921166 Days $T_0=132.151744$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

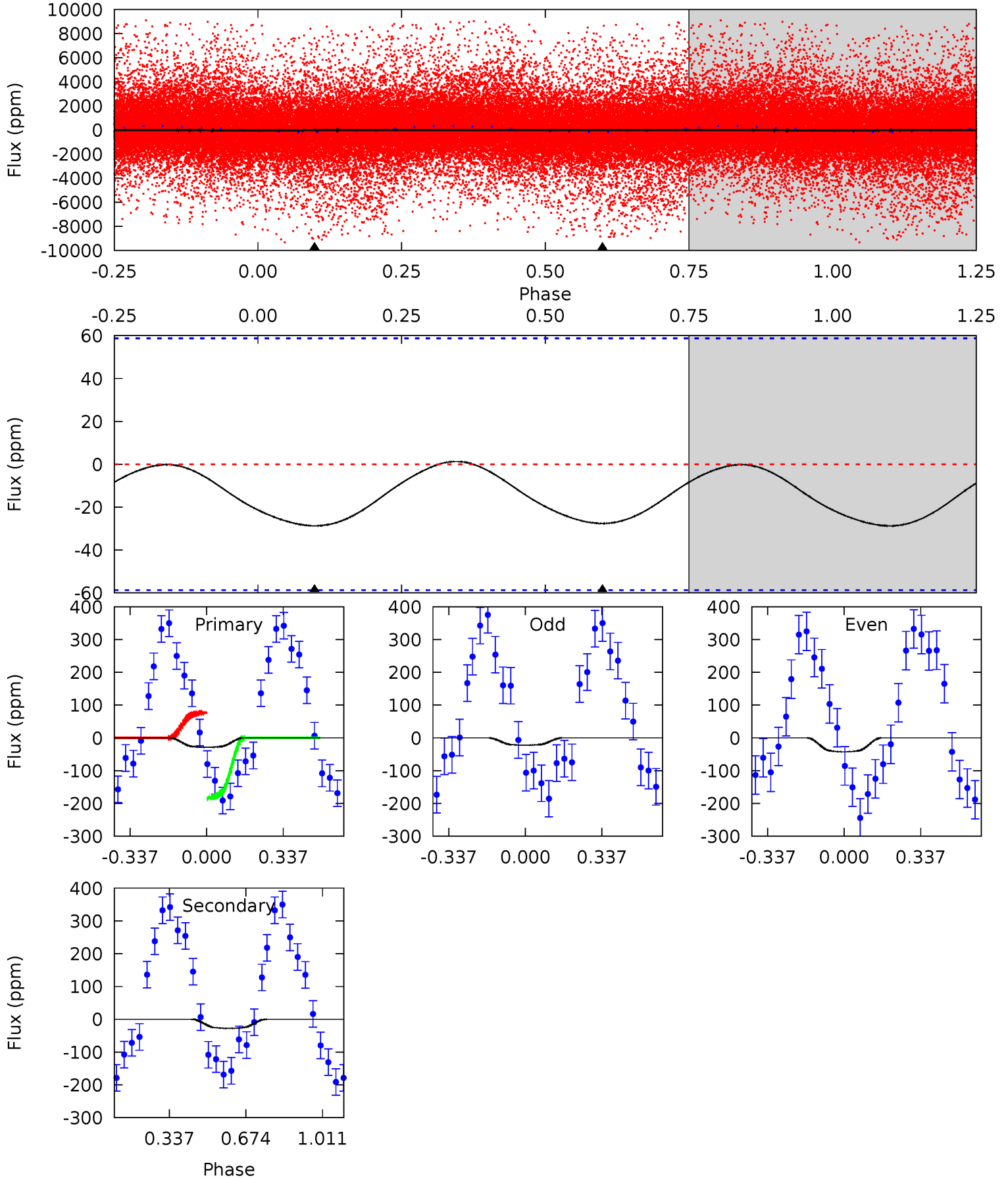
TCE 002694640-01 P= 0.921202 Days $T_0=132.127698$ (BKJD)



DV Model-Shift Uniqueness Test

002694640-01, P = 0.921166 Days, E = 132.151744 Days

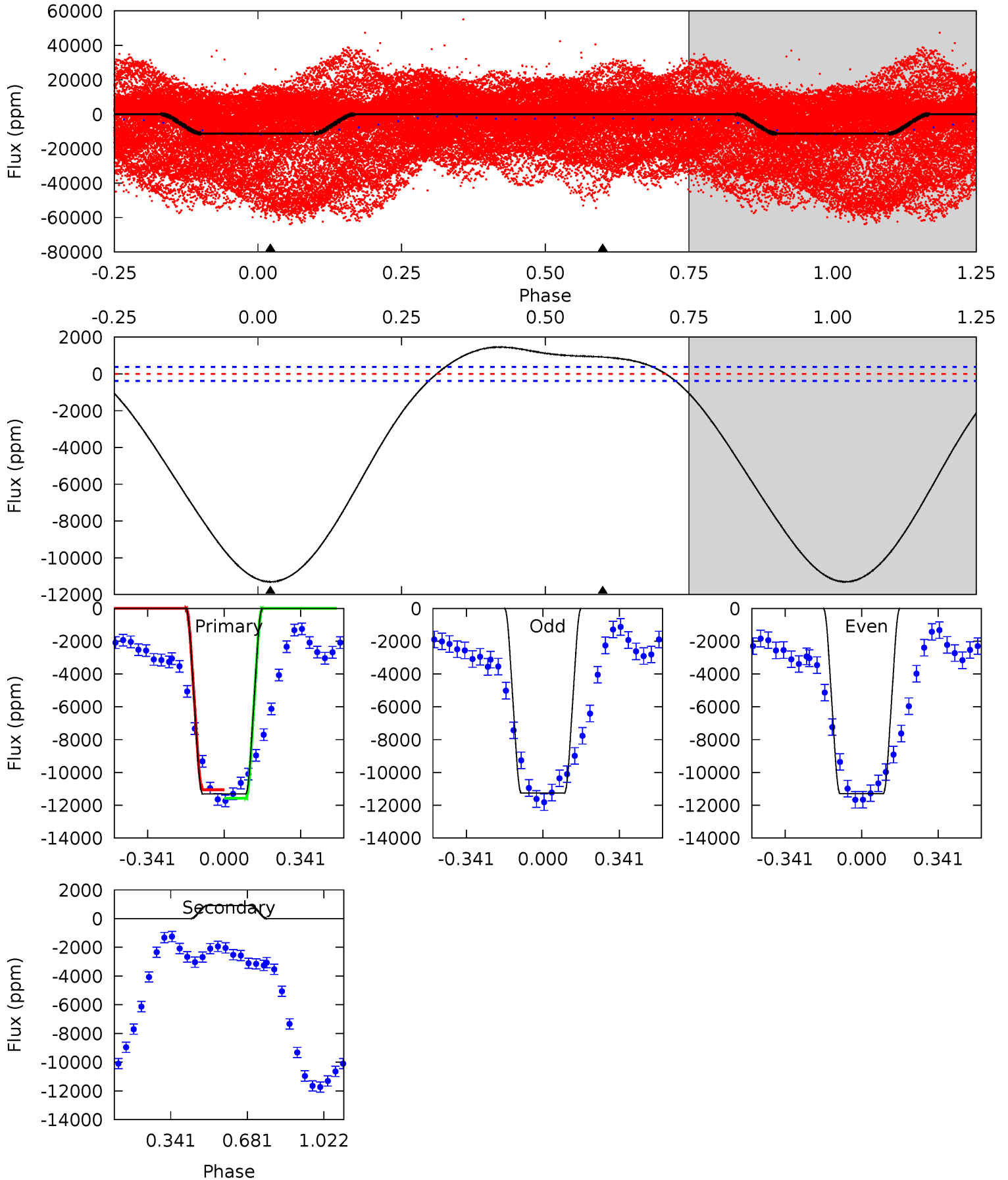
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.10	2.02	0	0	4.30	0.96	0.06	2.10	2.10	2.02	2.02	0.75	12.8	0.04	3.78



Alt Model-Shift Uniqueness Test

002694640-01, P = 0.921202 Days, E = 132.127698 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
126.9	-10.3	0	0	4.30	0.95	8.87	126.9	126.9	-10.3	-10.3	0.15	1.24	0.11	2.49



Stellar Parameters For KIC 002694640

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4764^{+144}_{-108}	$2.985^{+0.445}_{-0.364}$	$-0.120^{+0.300}_{-0.200}$	$5.075^{+3.192}_{-1.862}$	$0.908^{+0.327}_{-0.151}$	$0.010^{+0.035}_{-0.007}$
	+3%/-2%	+15%/-12%	+250%/-167%	+63%/-37%	+36%/-17%	+359%/-69%
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 002694640-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-28 ± 14	$10.88^{+4.07}_{-2.39}$	4919^{+797}_{-565}	-4058^{+402}_{-576}	$0.042^{+0.039}_{-0.025}$
Alt.	914 ± 89	$74.74^{+27.21}_{-16.13}$	4912^{+736}_{-582}	-4260^{+339}_{-465}	$-0.029^{+0.013}_{-0.019}$

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

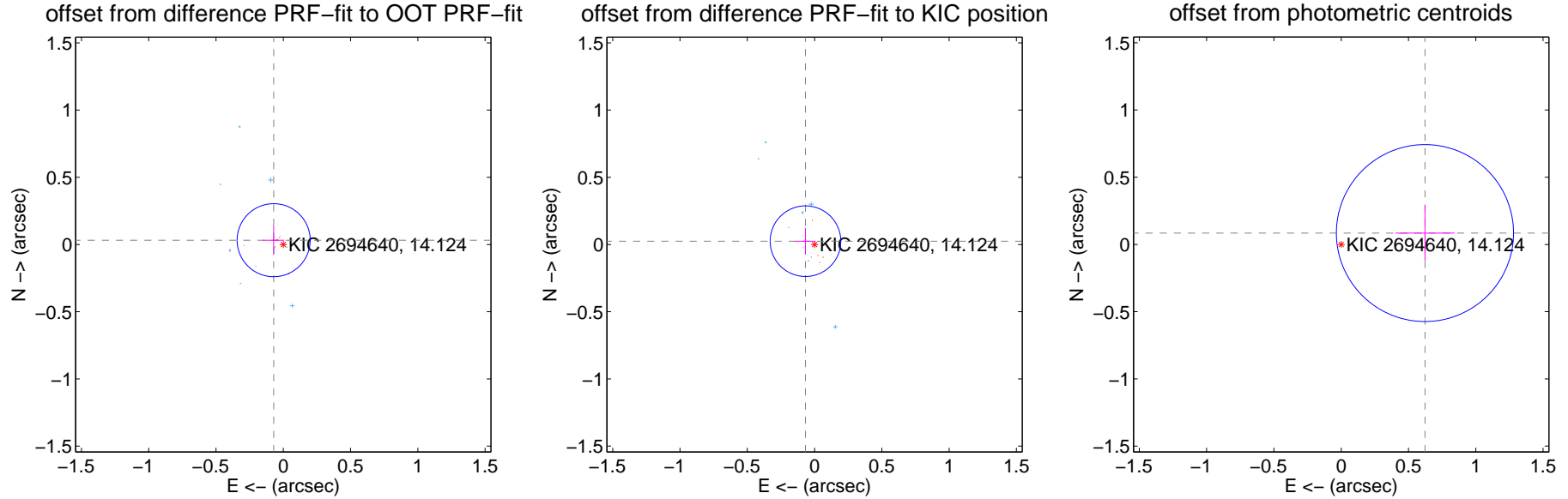
DV Centroid Data

Supplemental centroid analysis for 002694640-01. Kepler magnitude: 14.12. Transit SNR 9.82

There are 11 quarters with good PRF difference image offsets

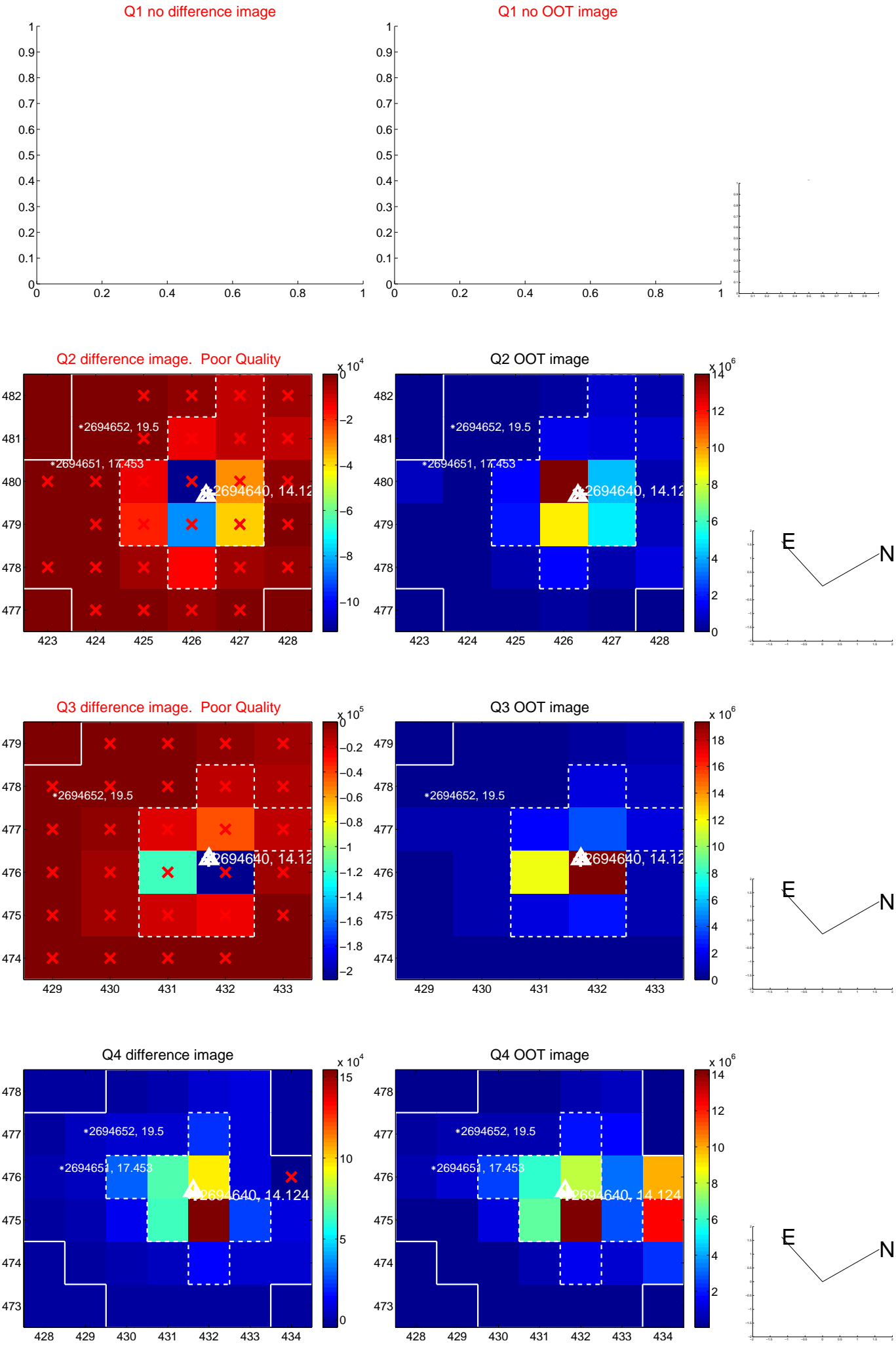
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.078 ± 0.091	0.87	0.071 ± 0.079	0.032 ± 0.108
PRF-fit source offset from KIC position	0.072 ± 0.088	0.82	0.068 ± 0.076	0.025 ± 0.099
photometric centroid source offset	0.63 ± 0.22	2.86	-0.62 ± 0.22	0.08 ± 0.21

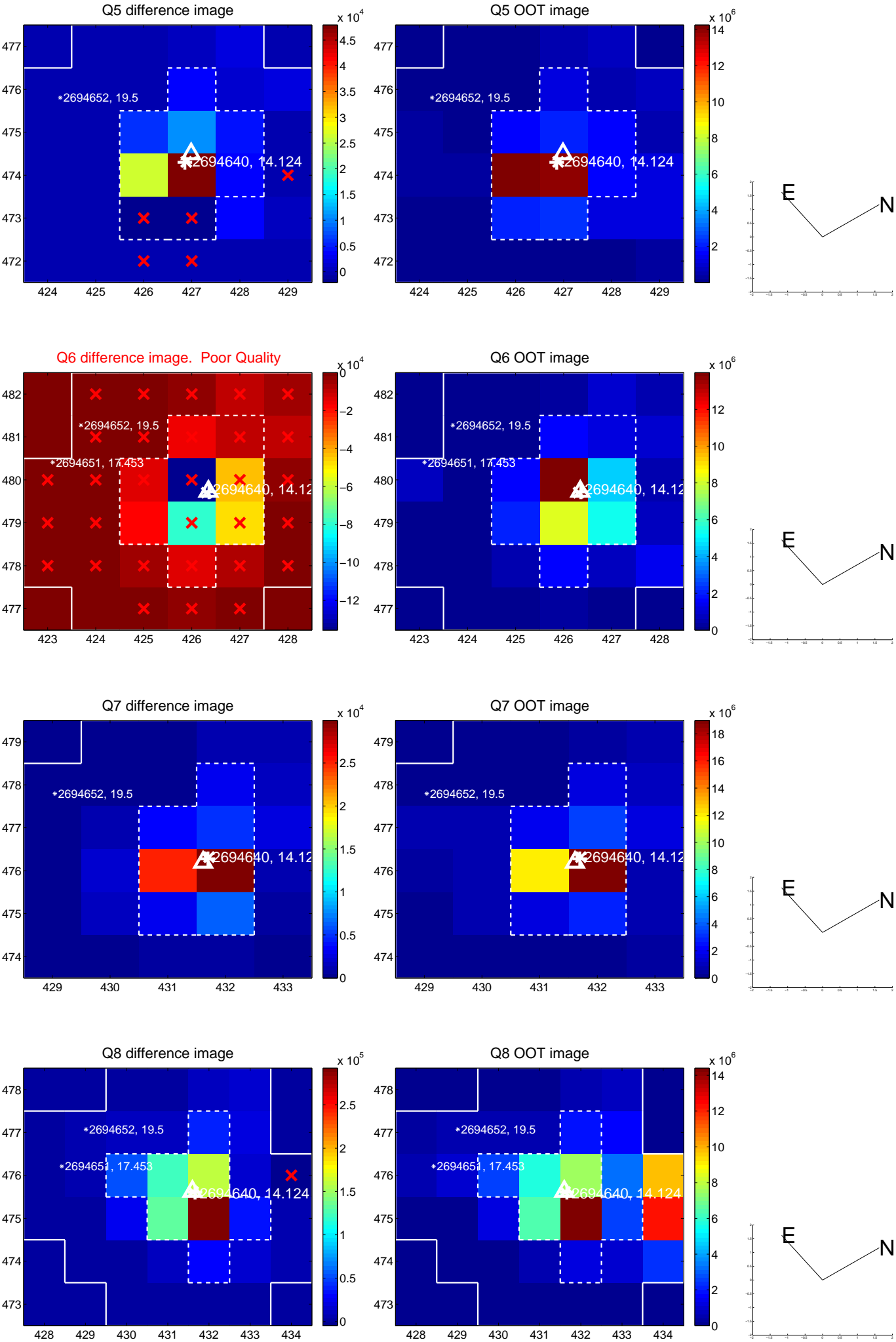


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

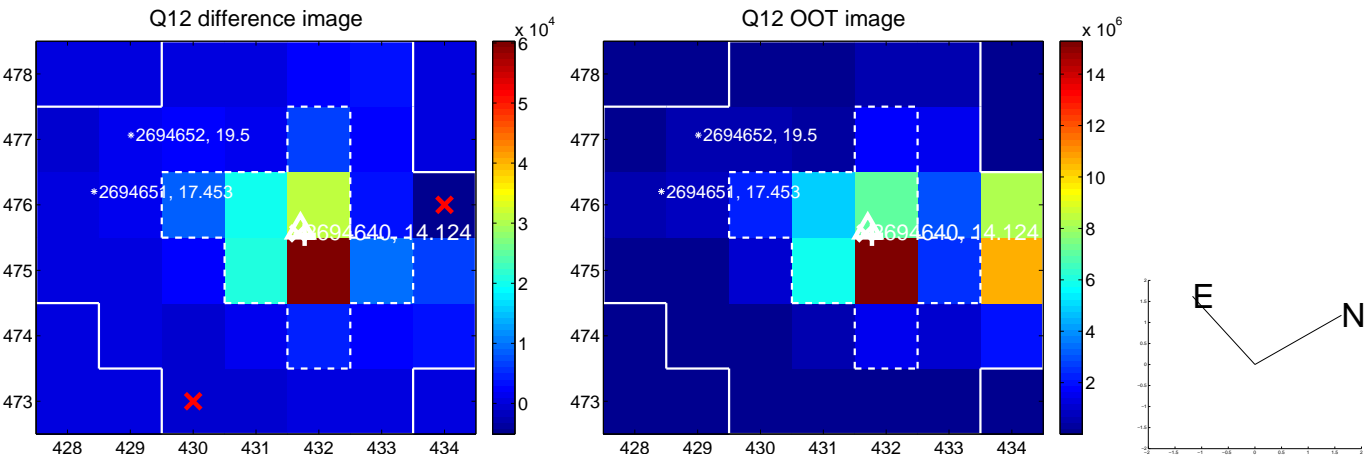
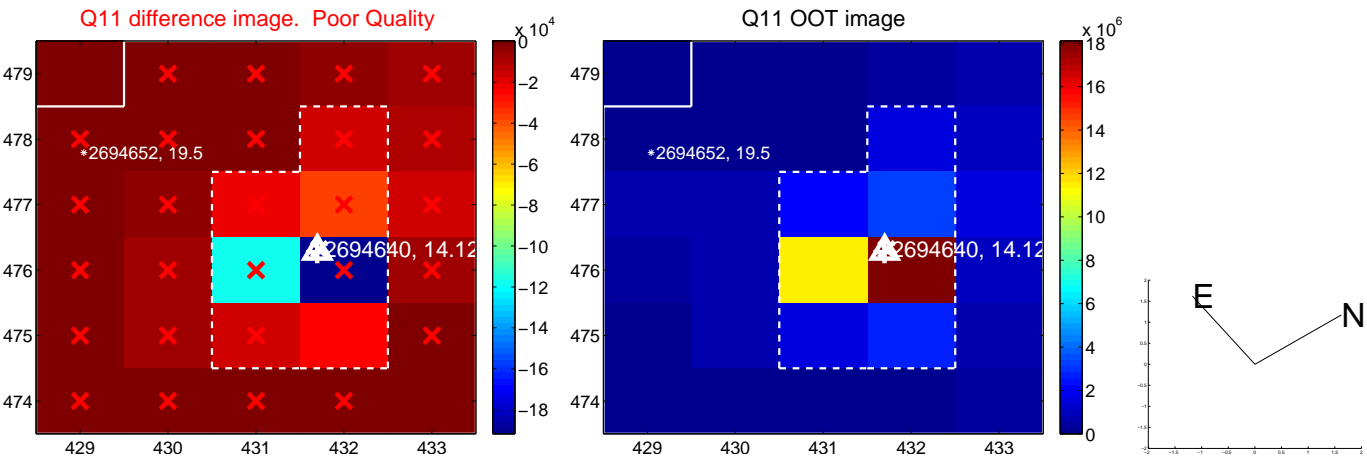
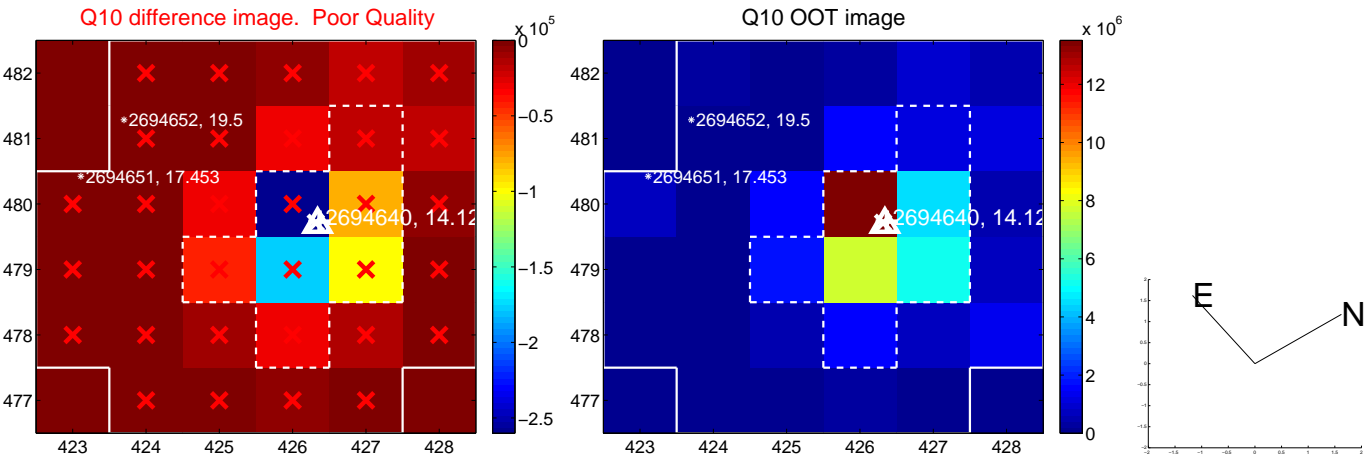
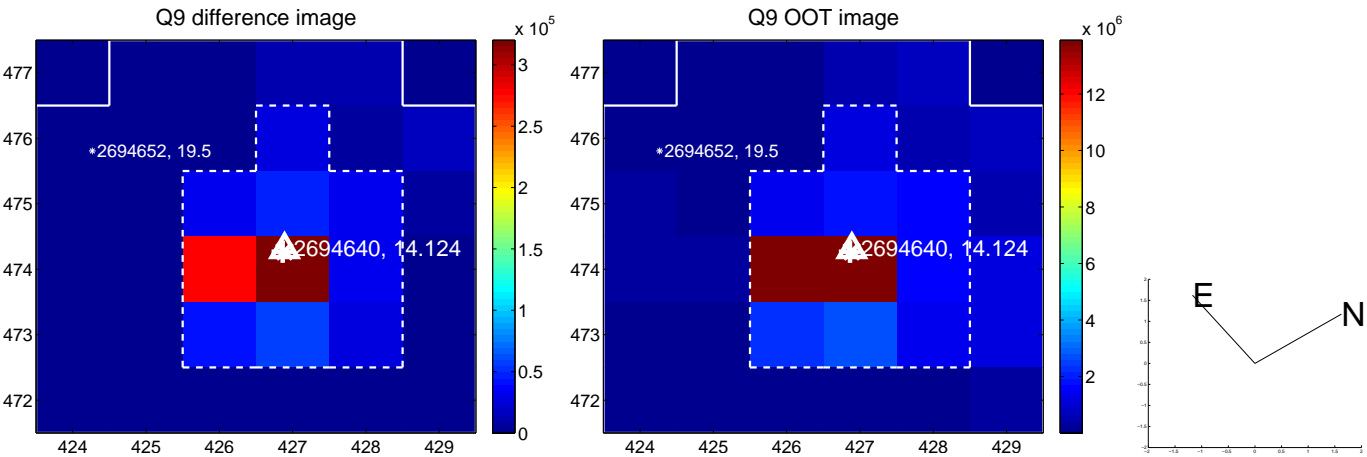
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



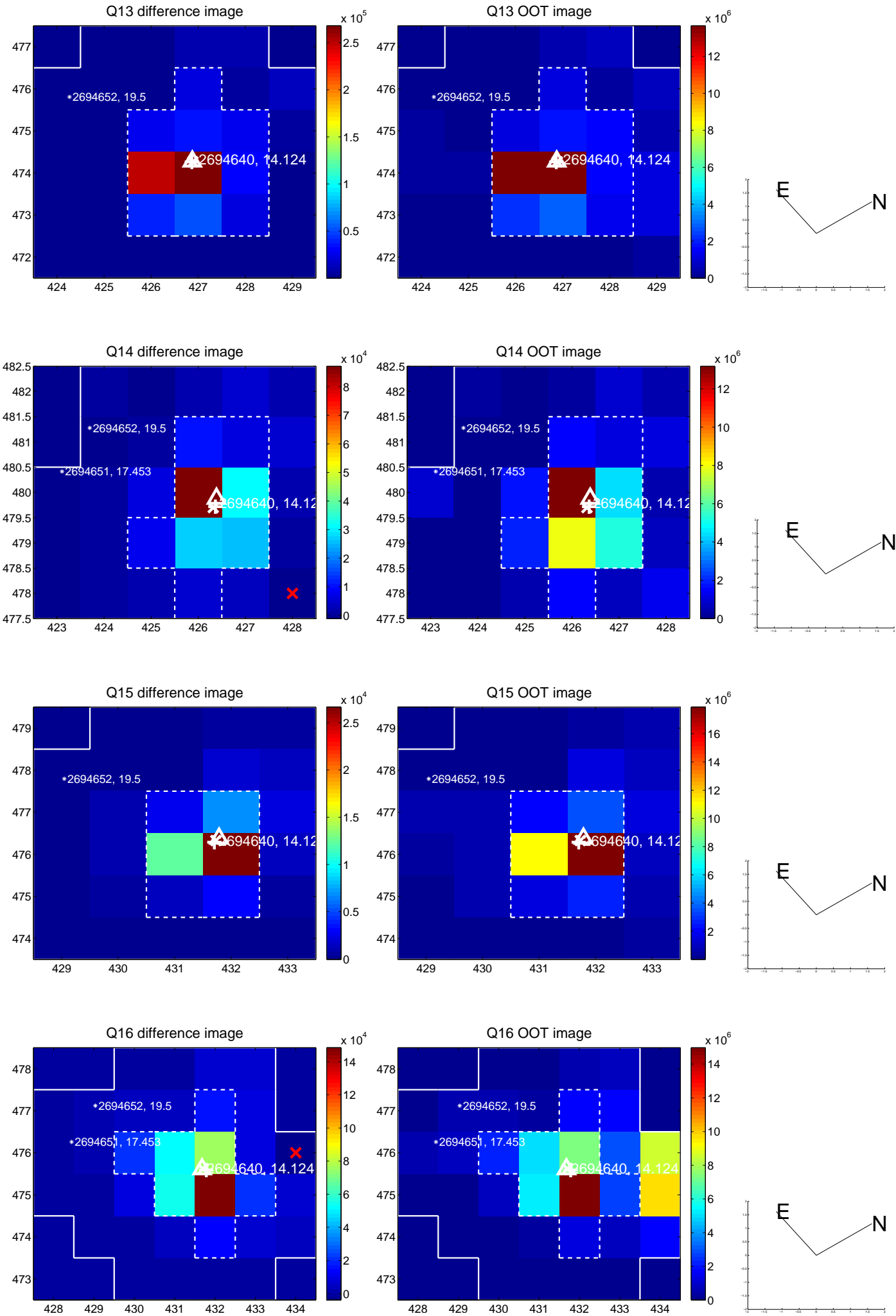
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



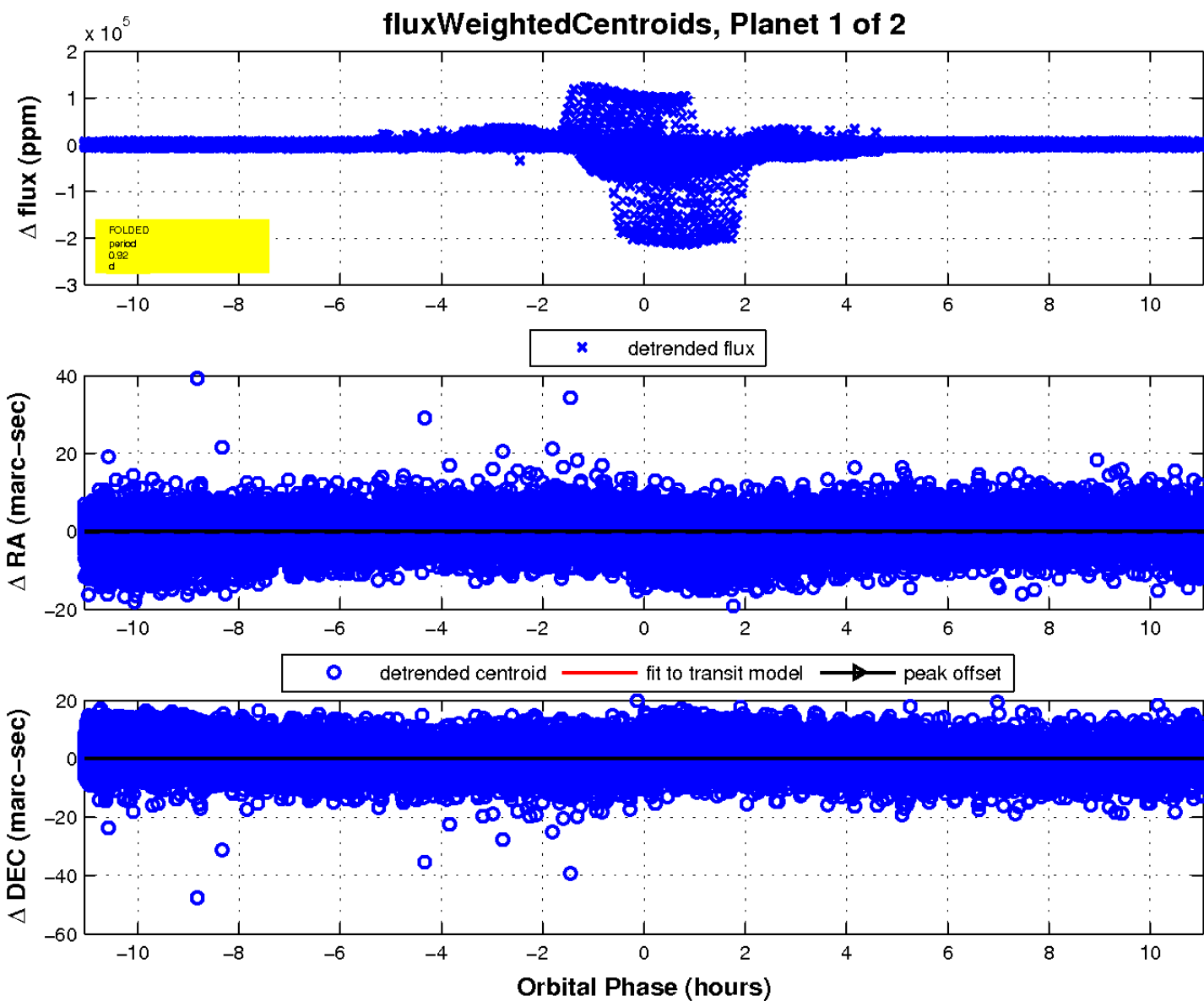
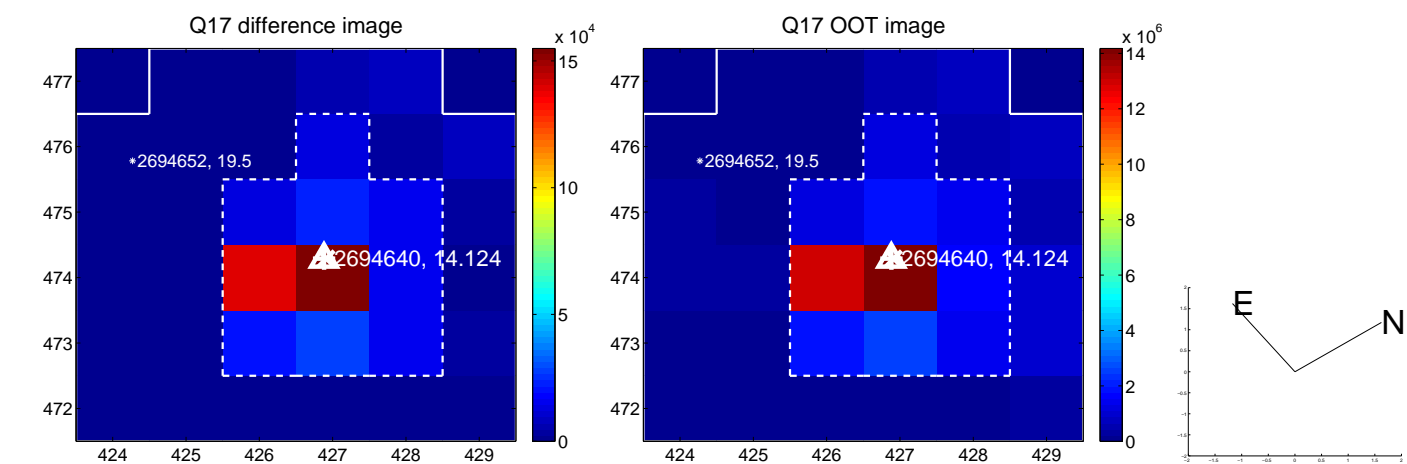
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

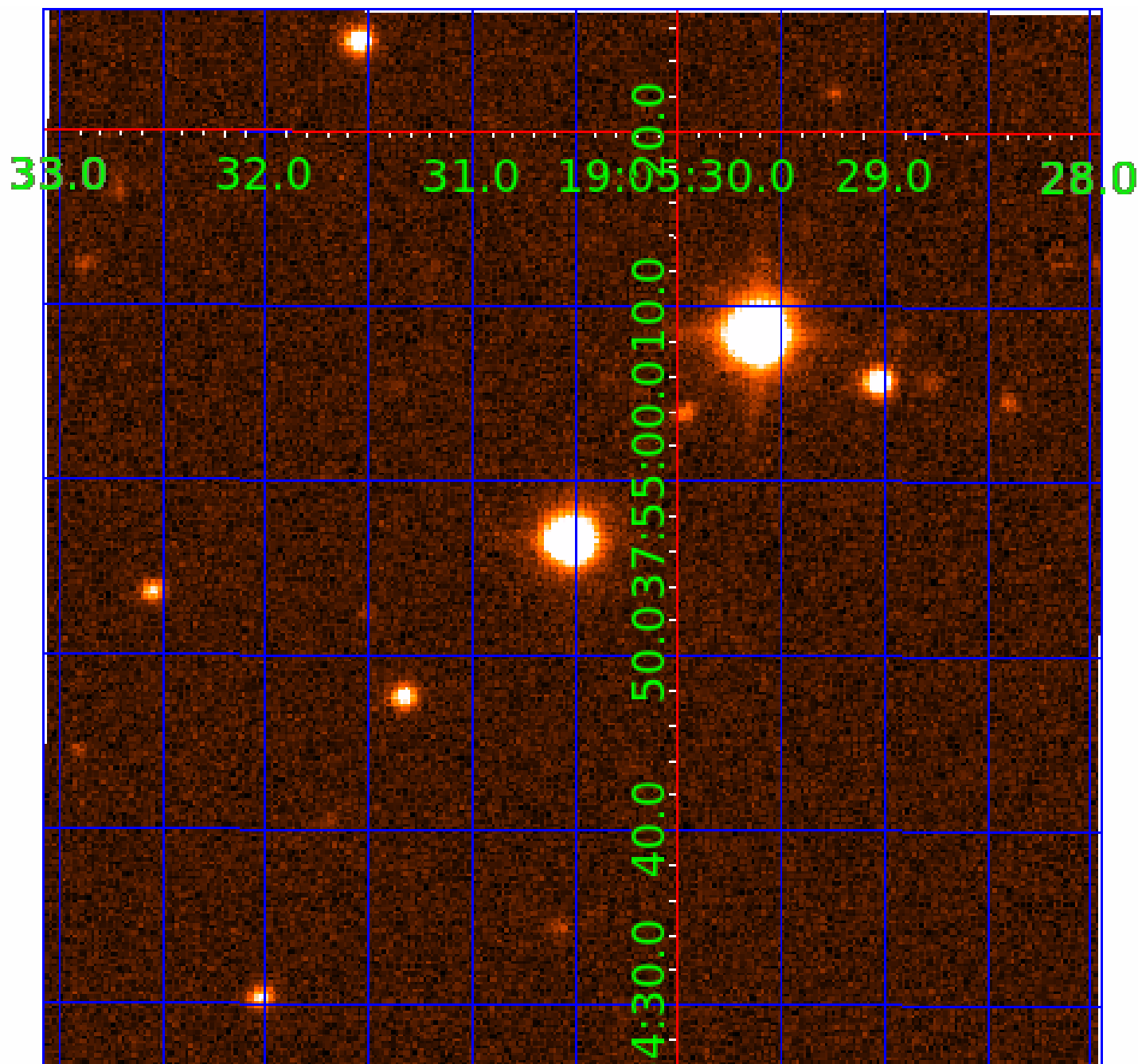


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 002694640

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})
002694640-01	OBS	No	0.921166	132.151744	242.3	6.981	123.0	9.8	5.08	4764	10.86	0.00
002694640-02	OBS	No	0.921855	131.817244	11763.9	1.500	151.1	-1.0	5.08	4764	53.41	36885.45

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002694640-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT
002694640-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_NOFITS

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.

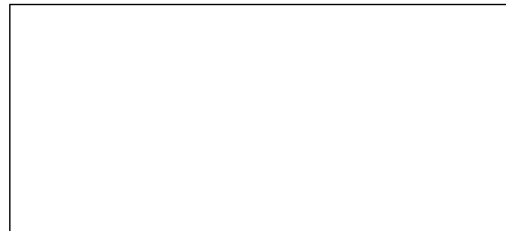
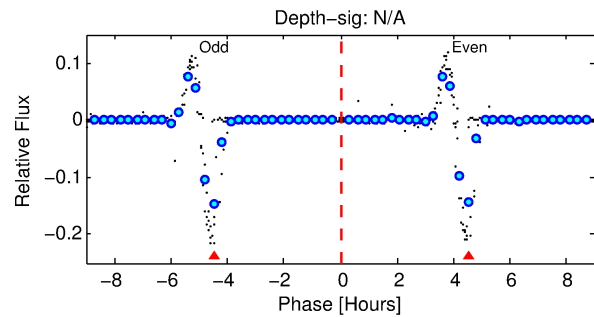
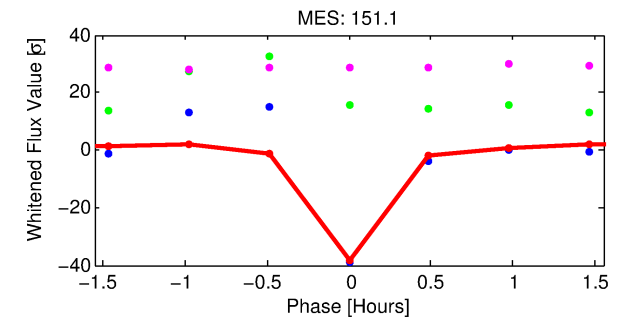
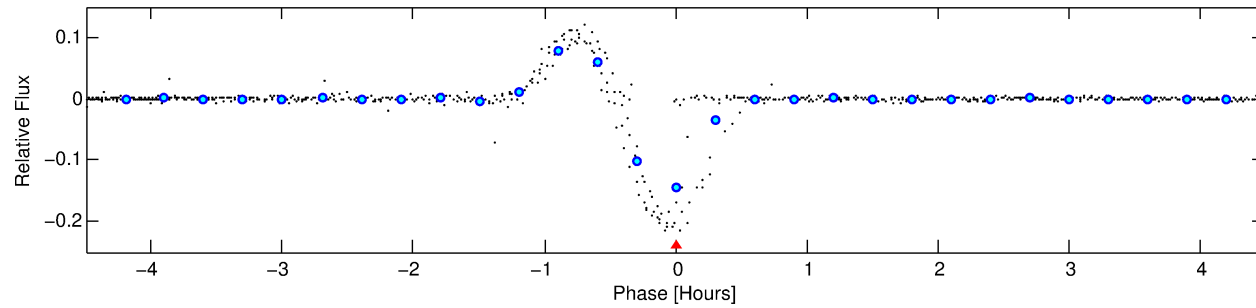
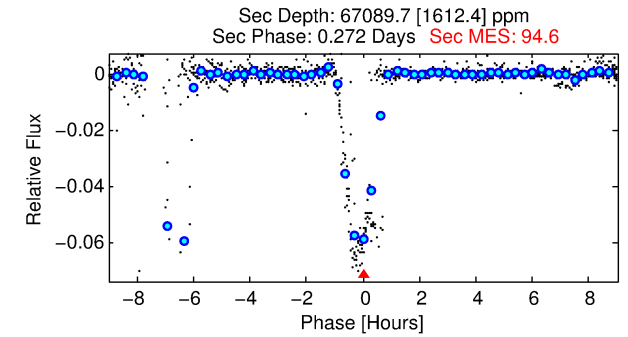
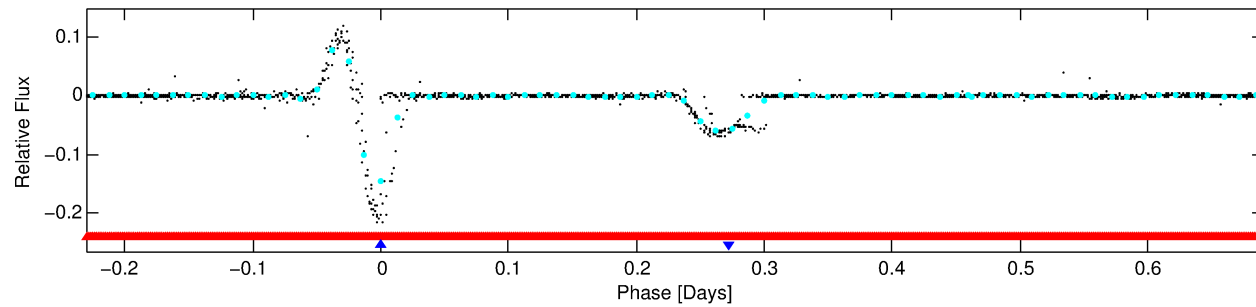
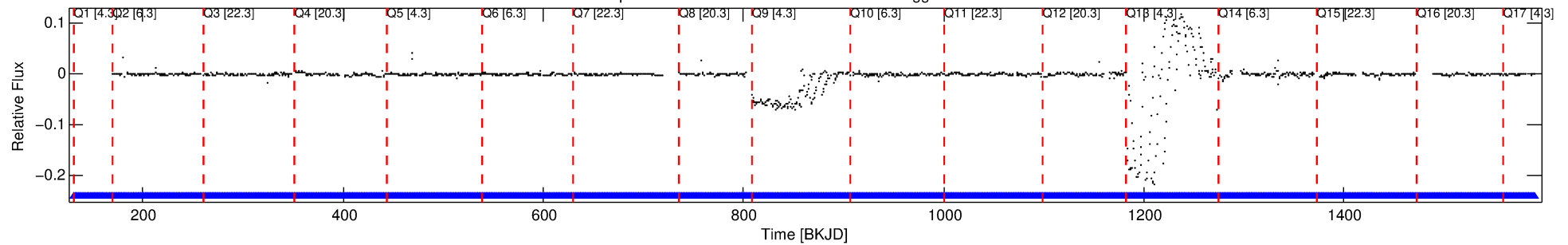
Ephemeris Match Information For 002694640-02

No Significant Match Found

DV One-Page Summary

KIC: 2694640 Candidate: 2 of 2 Period: 0.922 d

Kp: 14.12 R*: 5.08 Rs Teff: 4764.0 K Logg: 2.98 Fe/H: -0.120



TPS TCE Results:

Period = 0.92186 d
Epoch = 131.8172 BKJD

DV fit results are unavailable

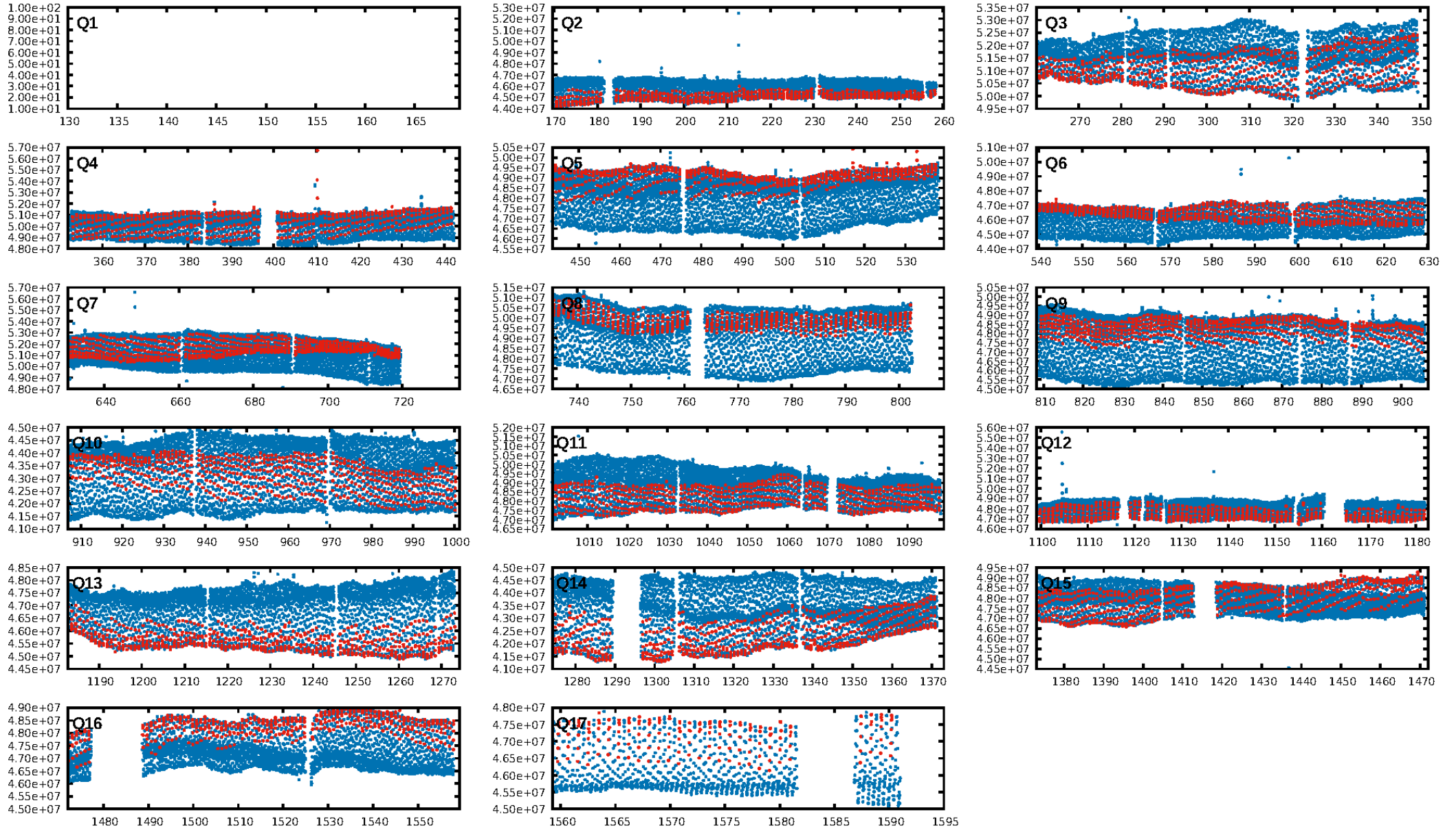
DV Diagnostic Results:

ShortPeriod-sig: 0.2% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
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: N/A

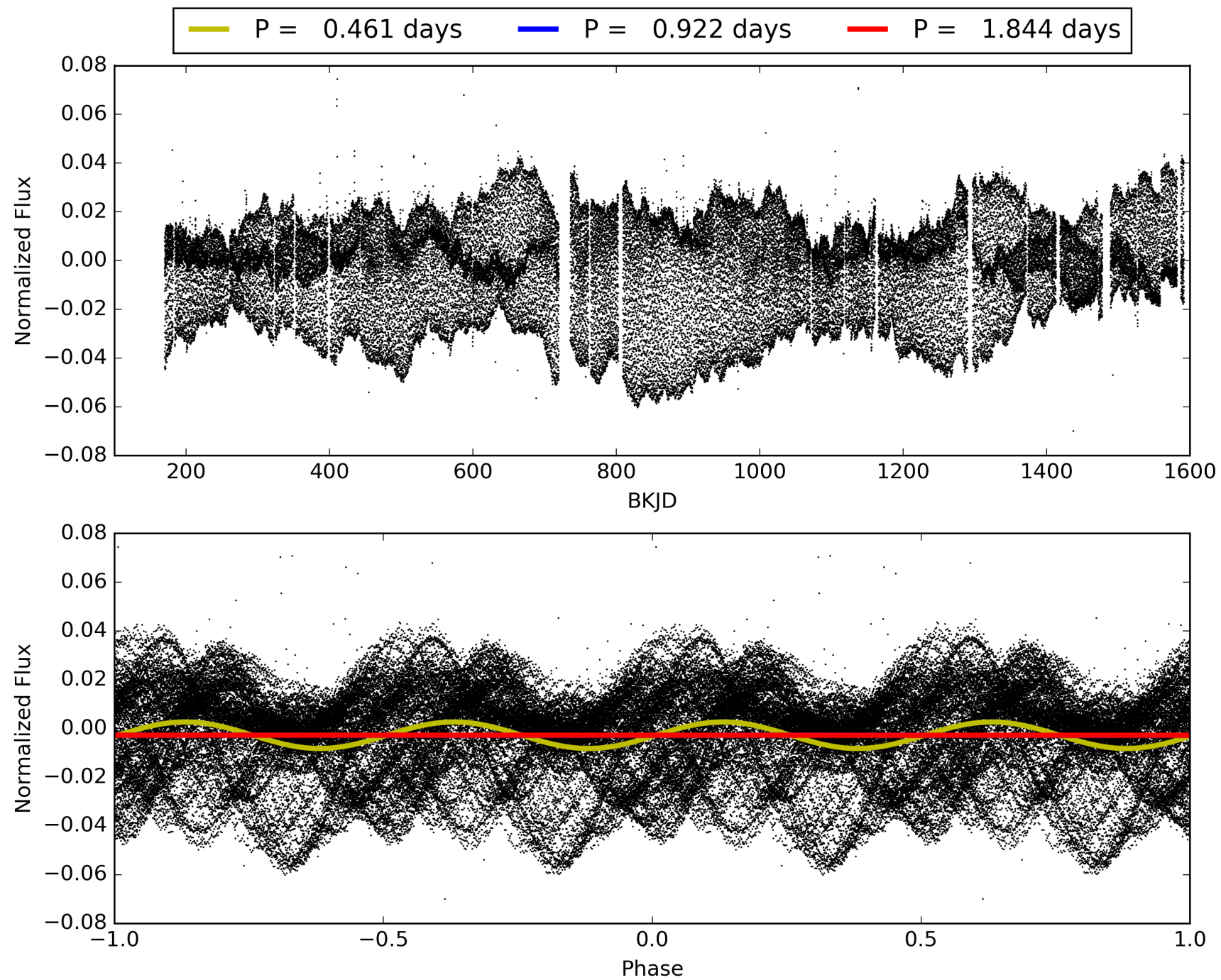
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 02:11:36 Z

This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 002694640-02, PDC Light Curves

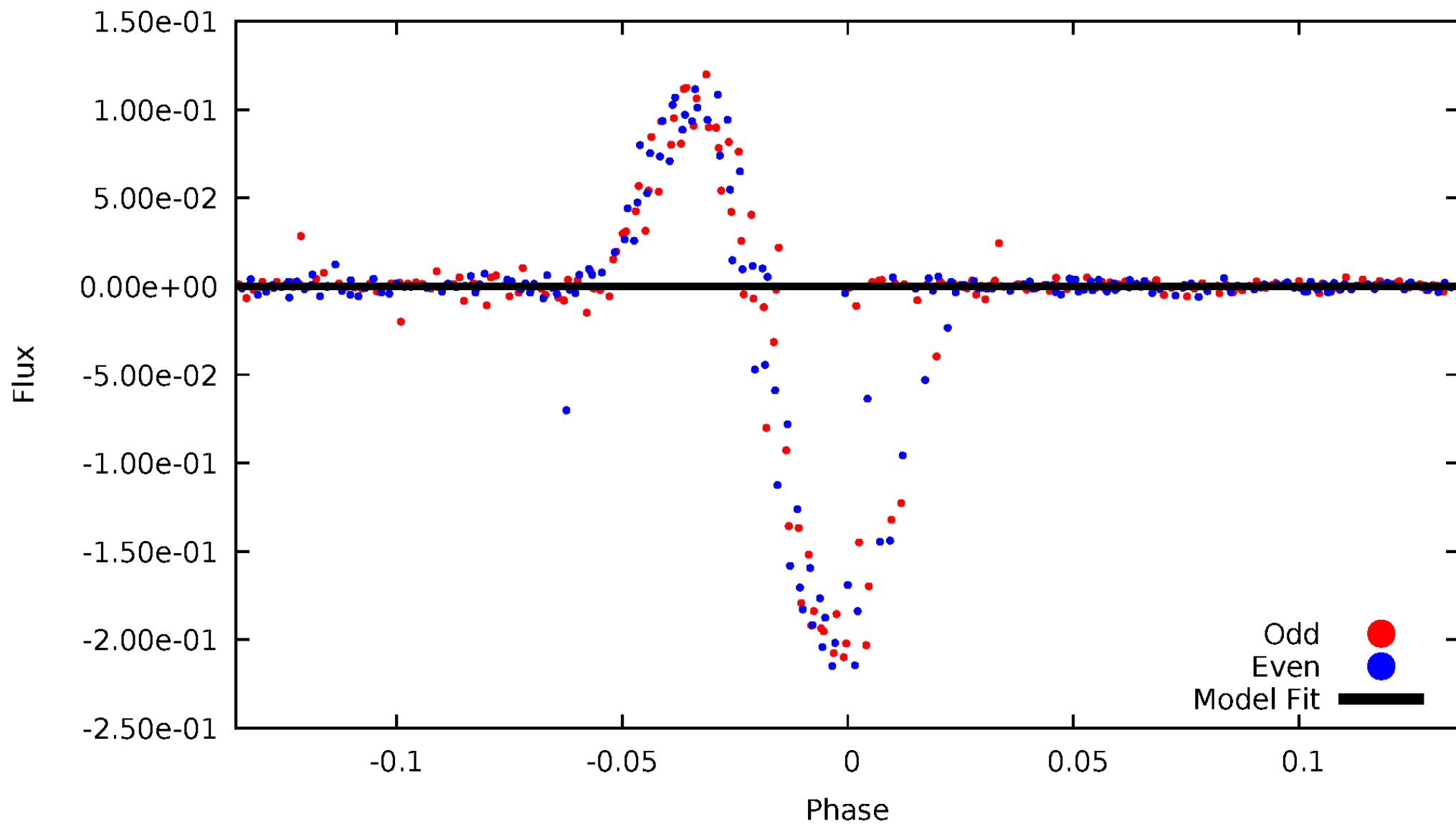


TCE 002694640-02



DV Odd/Even

TCE 002694640-02

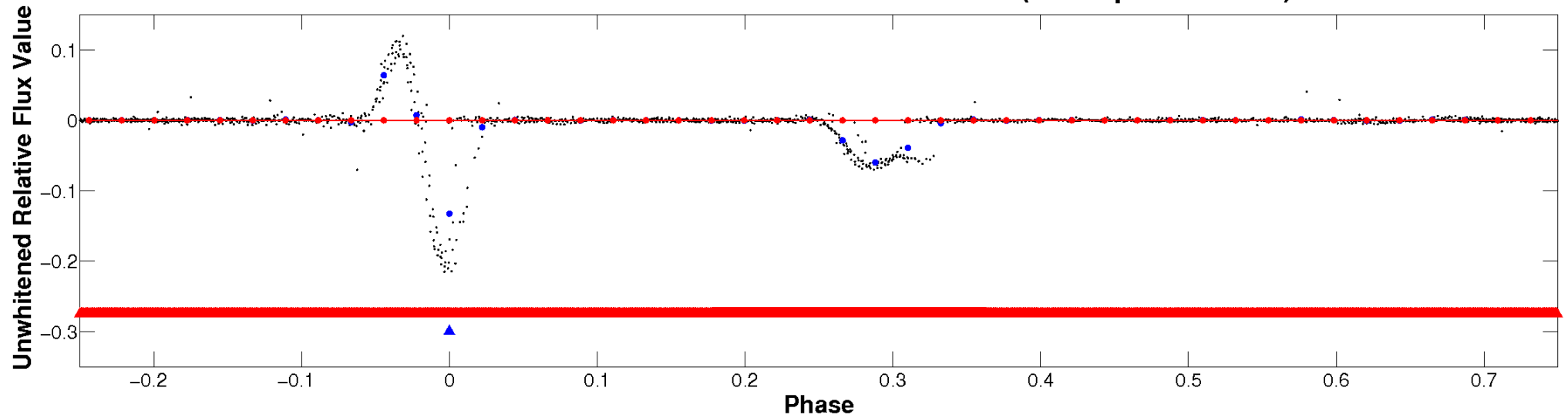


ALT Odd/Even

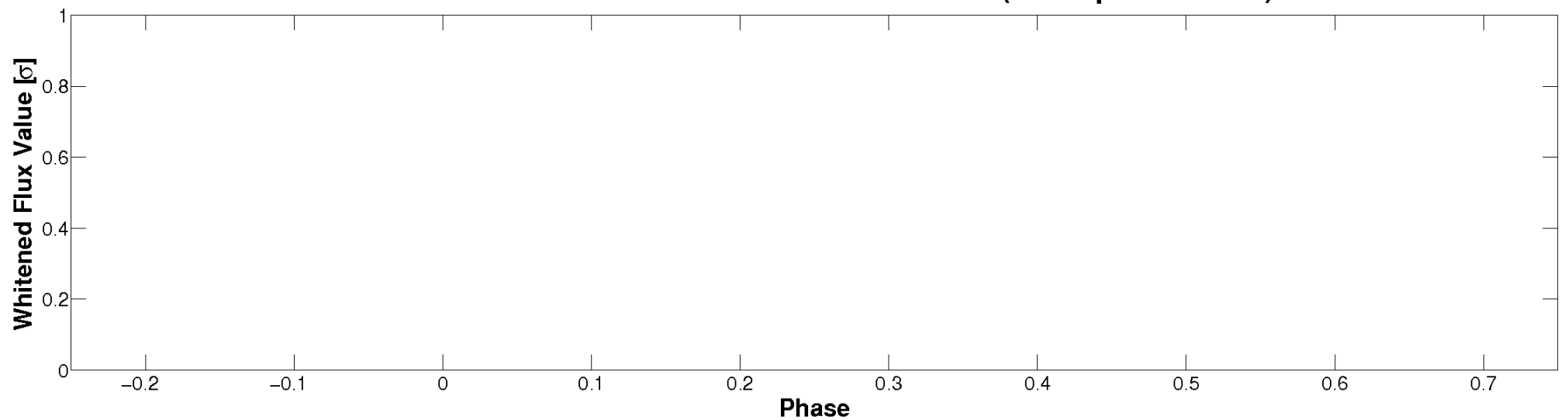
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

Planet 2 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

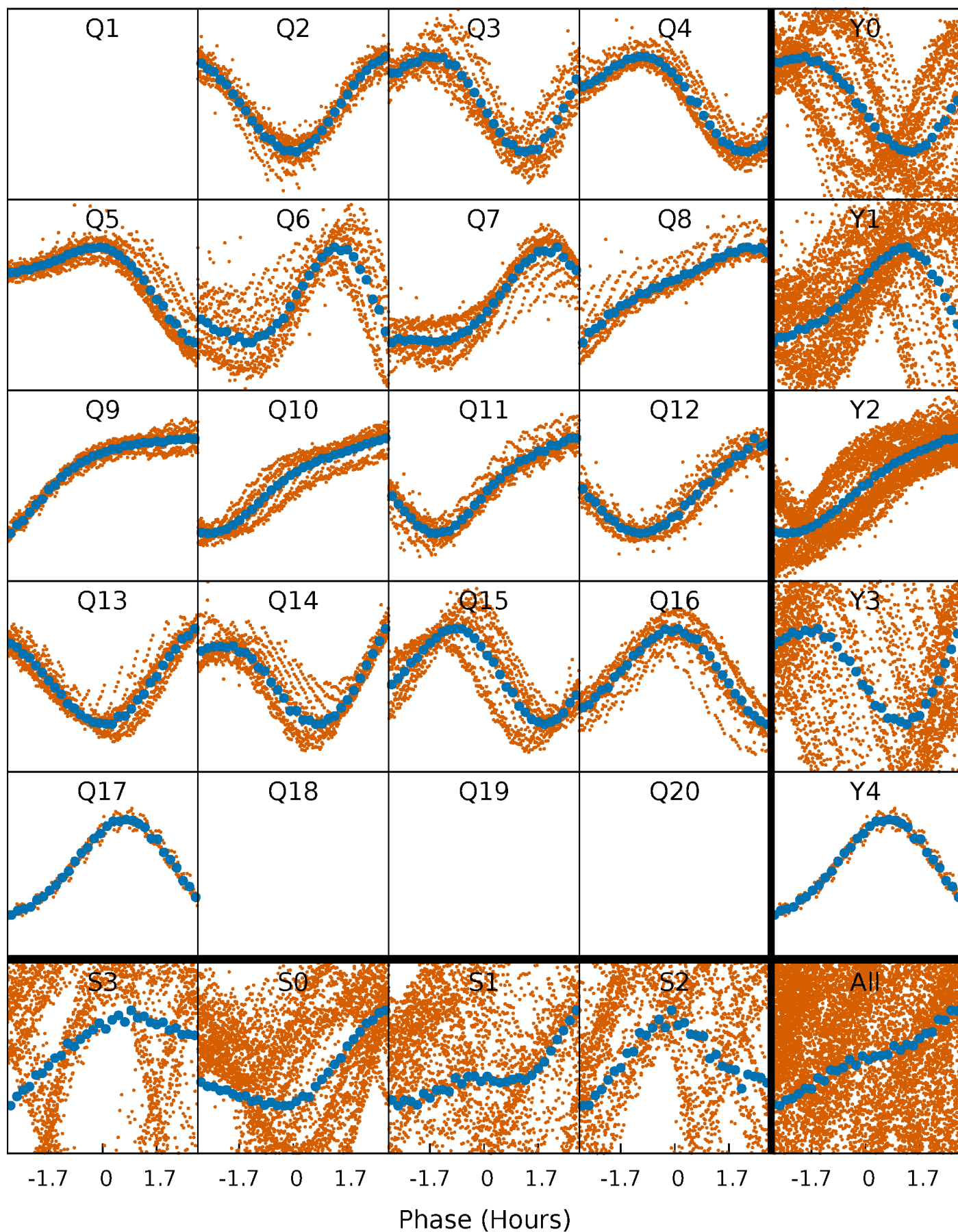


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



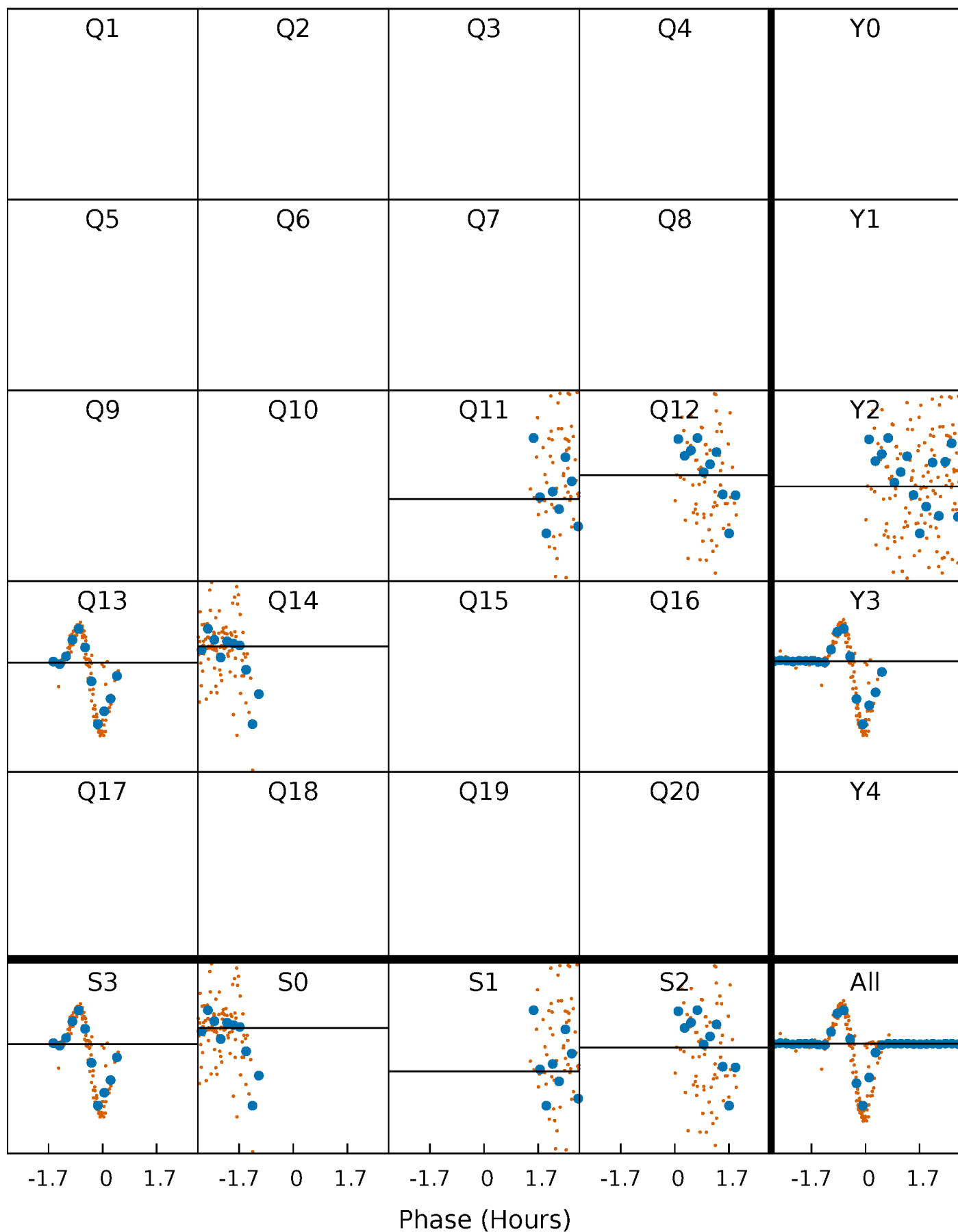
PDC Quarter-Phased Transit Curves

TCE 002694640-02 P= 0.921855 Days $T_0=131.817244$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 002694640-02 P= 0.921855 Days $T_0=131.817244$ (BKJD)

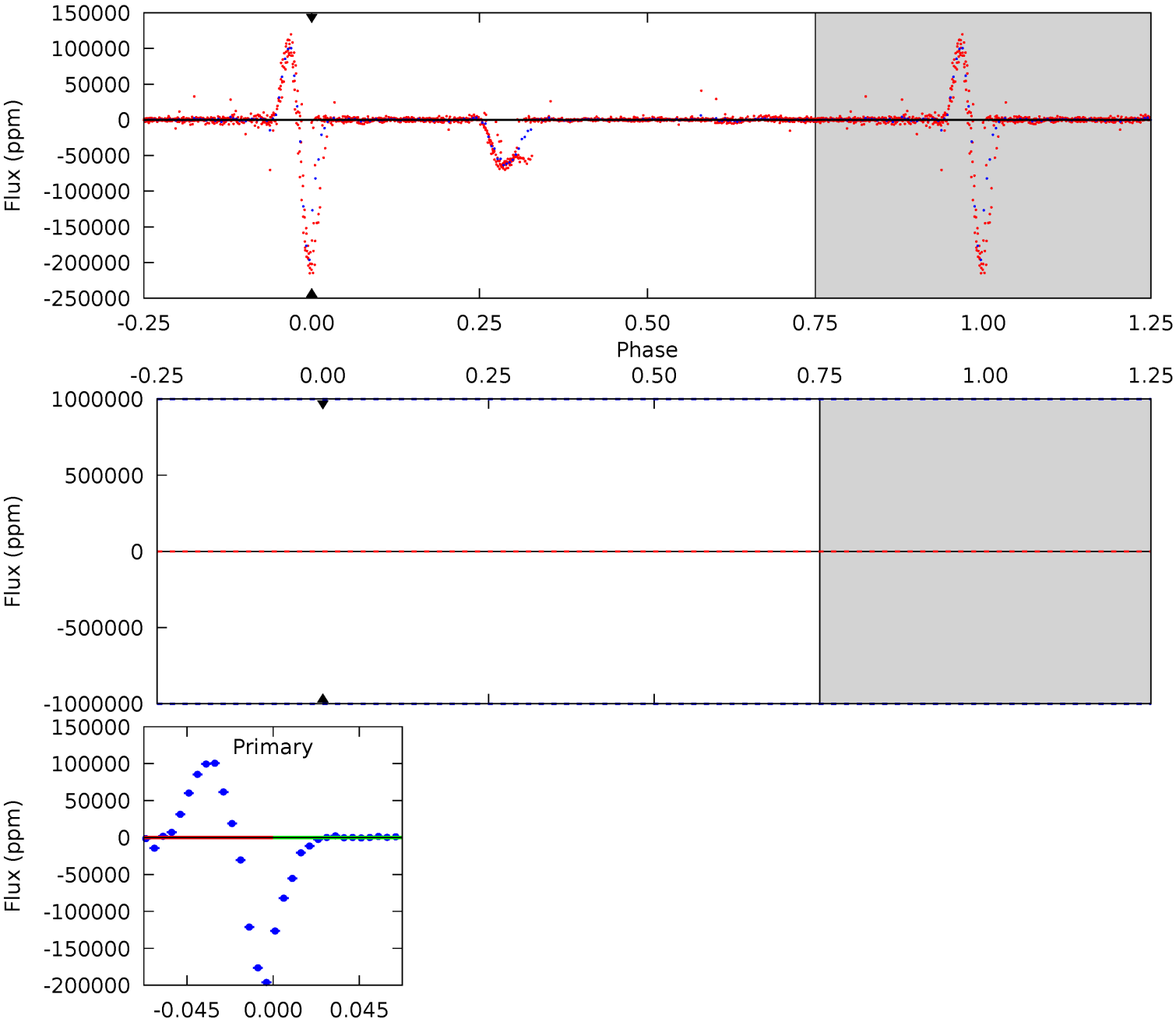


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

002694640-02, P = 0.921855 Days, E = 131.817244 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 002694640

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4764^{+144}_{-108}	$2.985^{+0.445}_{-0.364}$	$-0.120^{+0.300}_{-0.200}$	$5.075^{+3.192}_{-1.862}$	$0.908^{+0.327}_{-0.151}$	$0.010^{+0.035}_{-0.007}$
	+3%/-2%	+15%/-12%	+250%/-167%	+63%/-37%	+36%/-17%	+359%/-69%
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 002694640-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$63.27^{+63.65}_{-39.90}$	4930^{+767}_{-574}	-4097^{+13888}_{-4669}	$0.091^{+8.888}_{-6.368}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

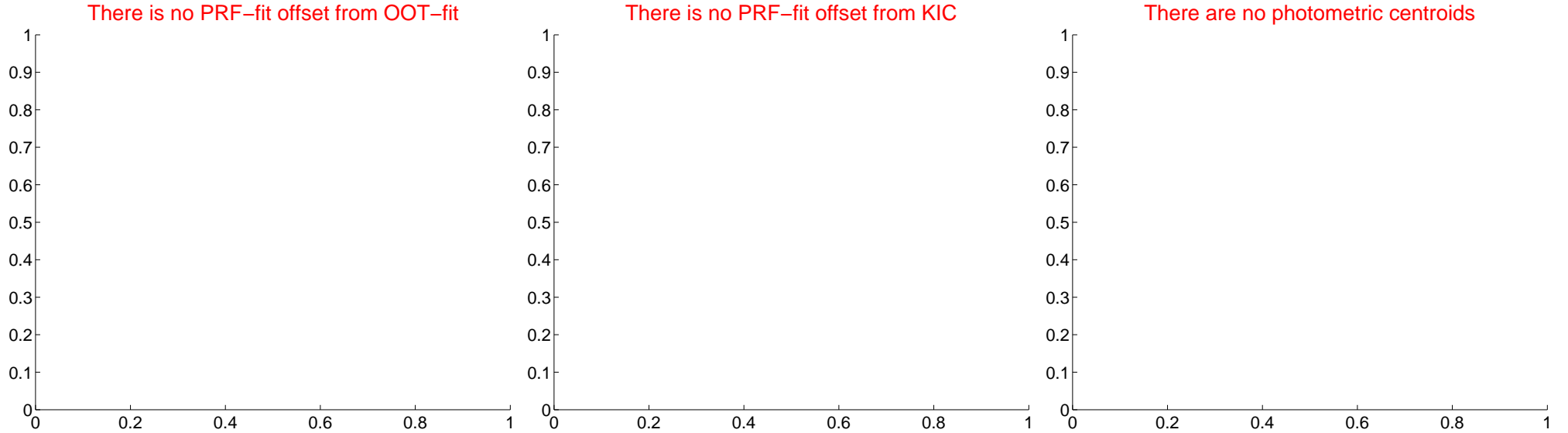
DV Centroid Data

Supplemental centroid analysis for 002694640-02. Kepler magnitude: 14.12. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

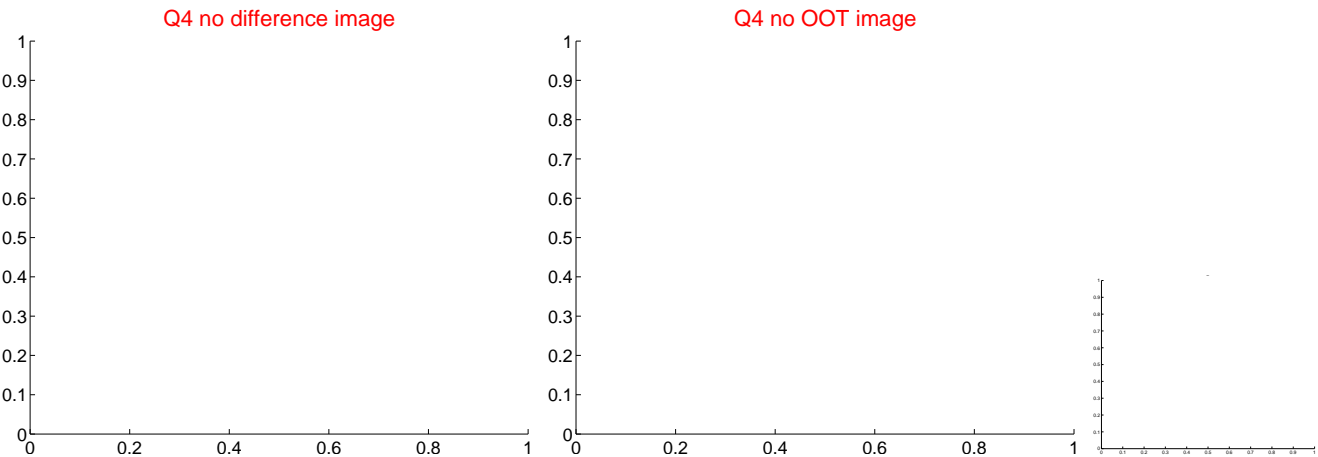
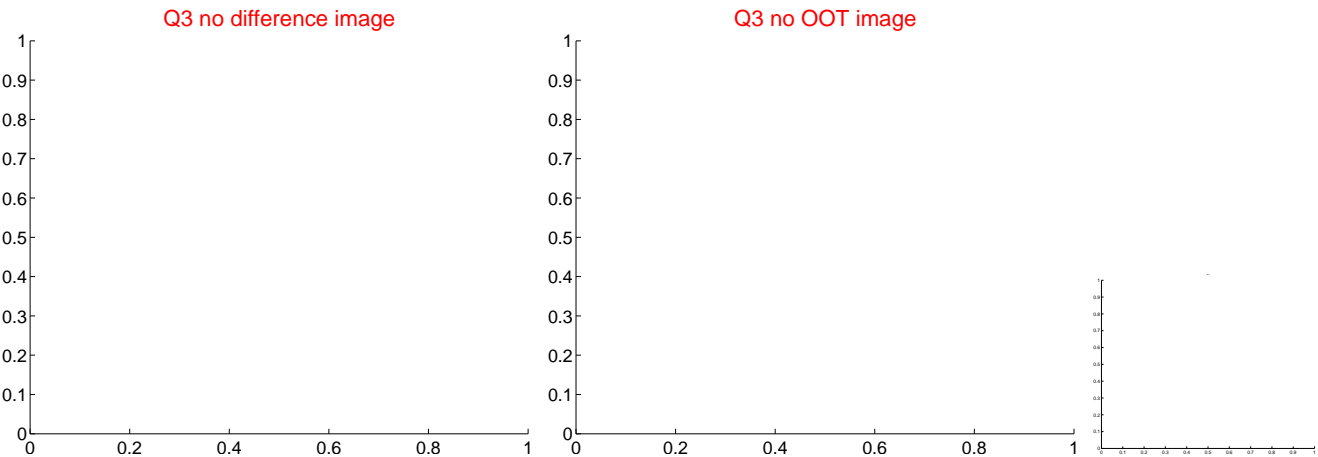
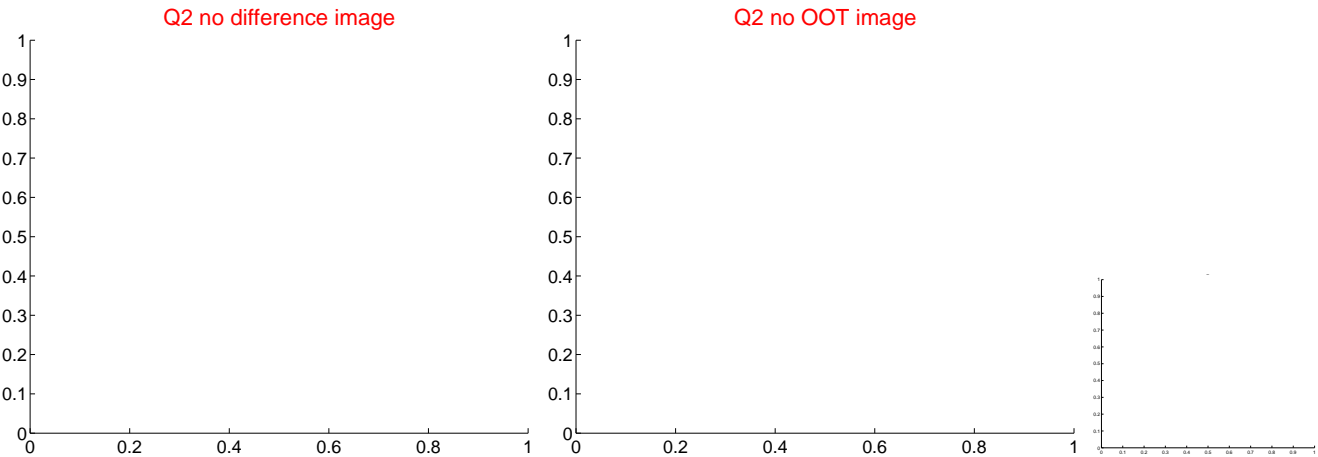
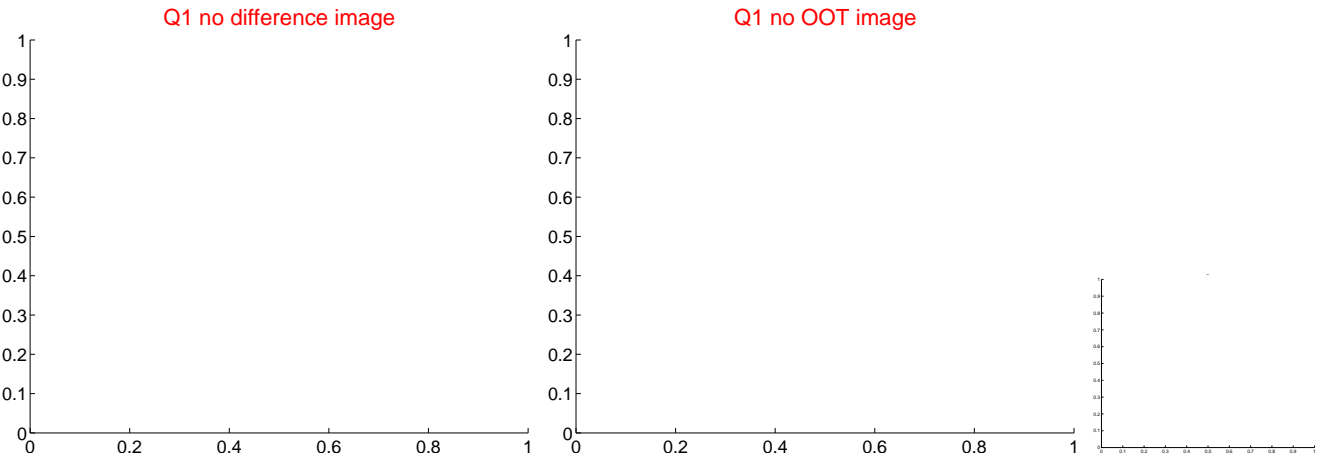
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	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	—	—	—	—

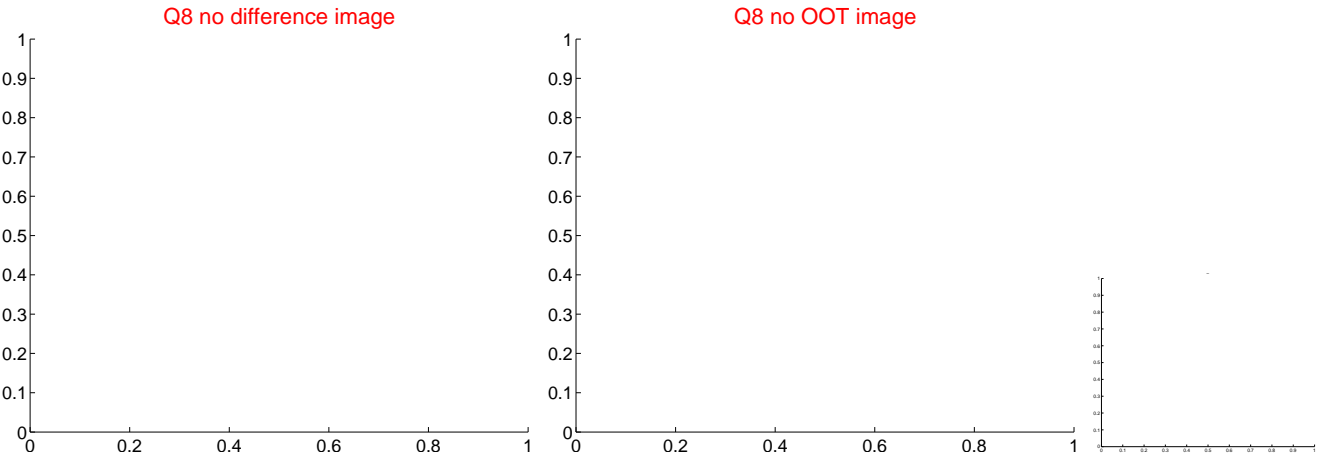
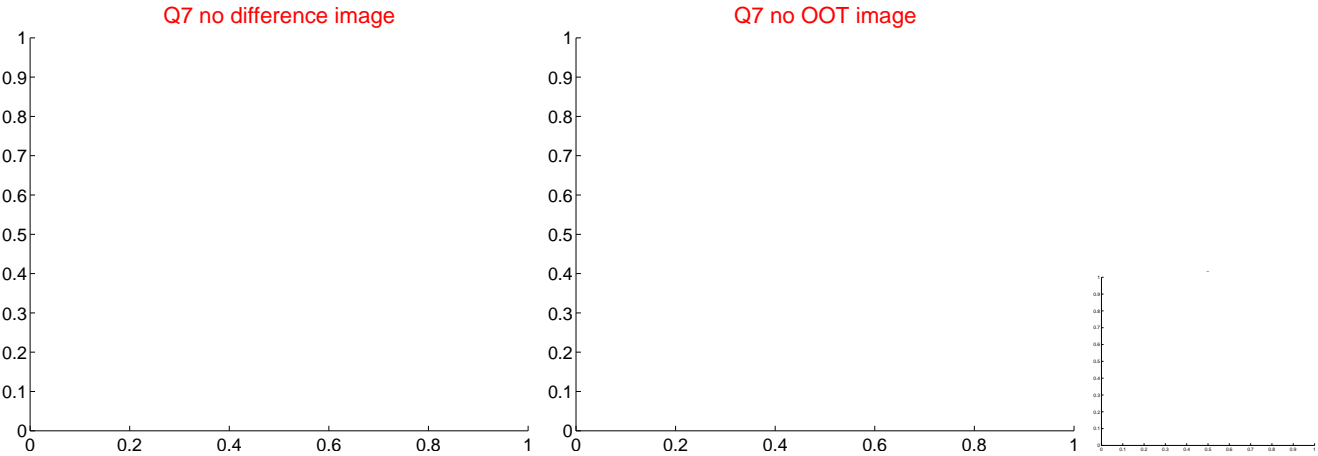
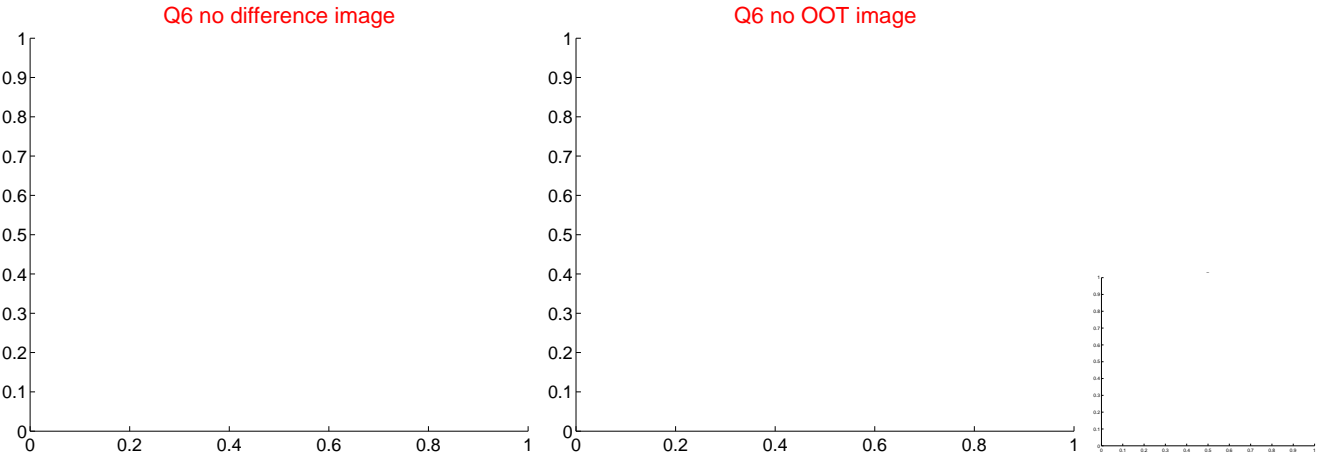
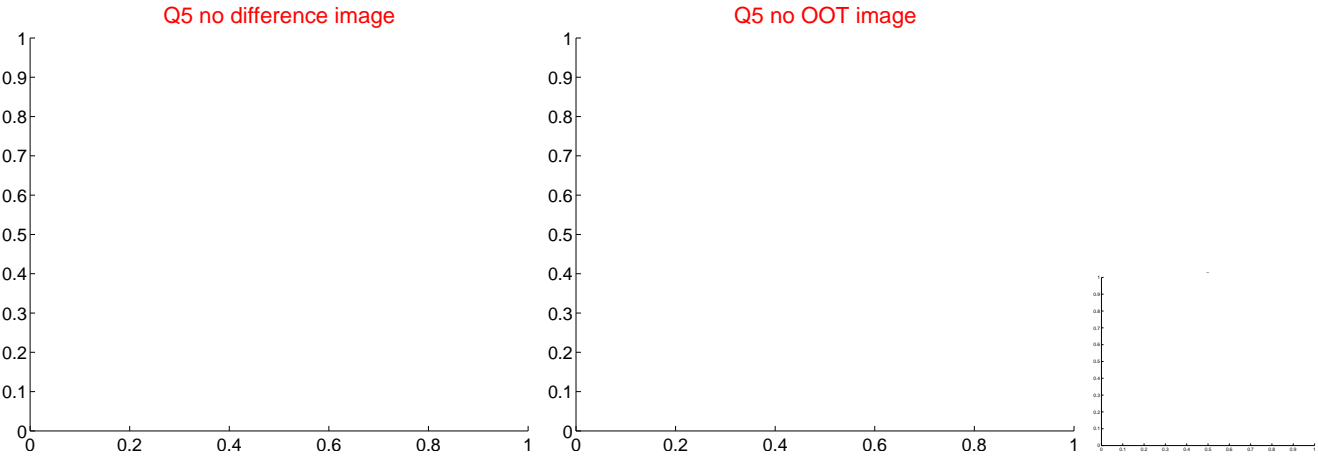


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

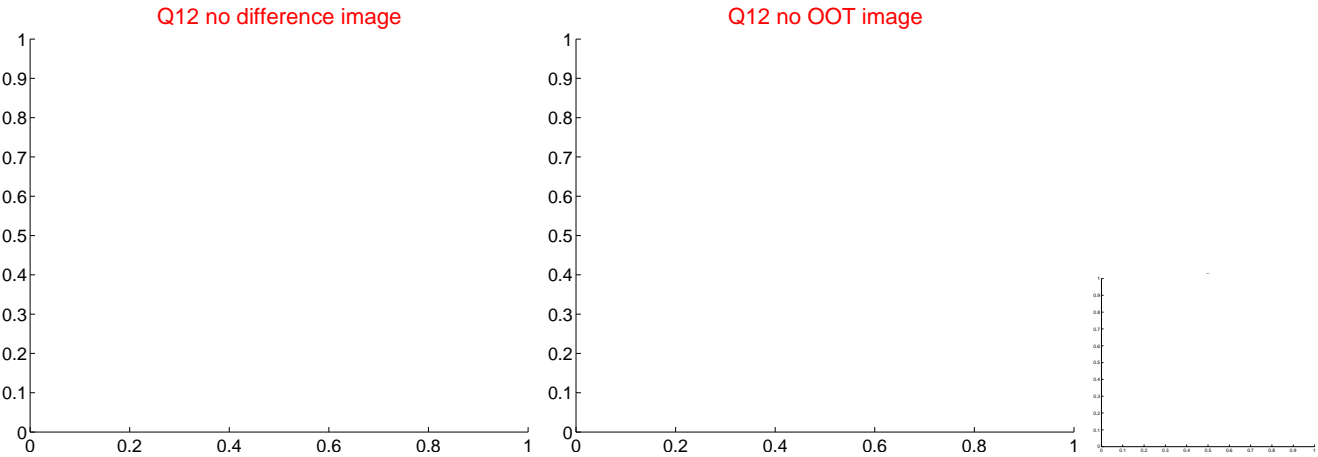
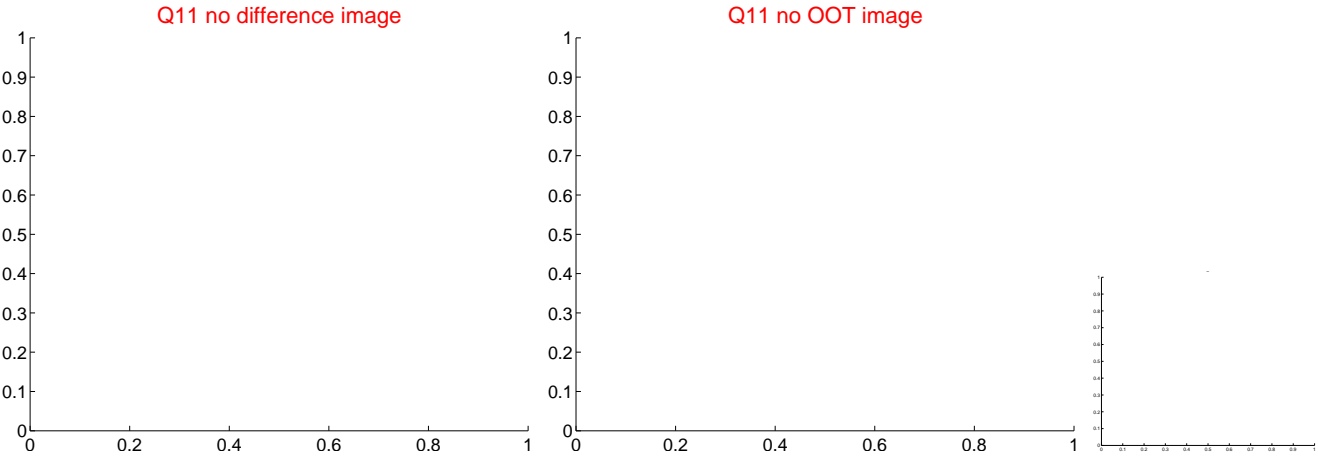
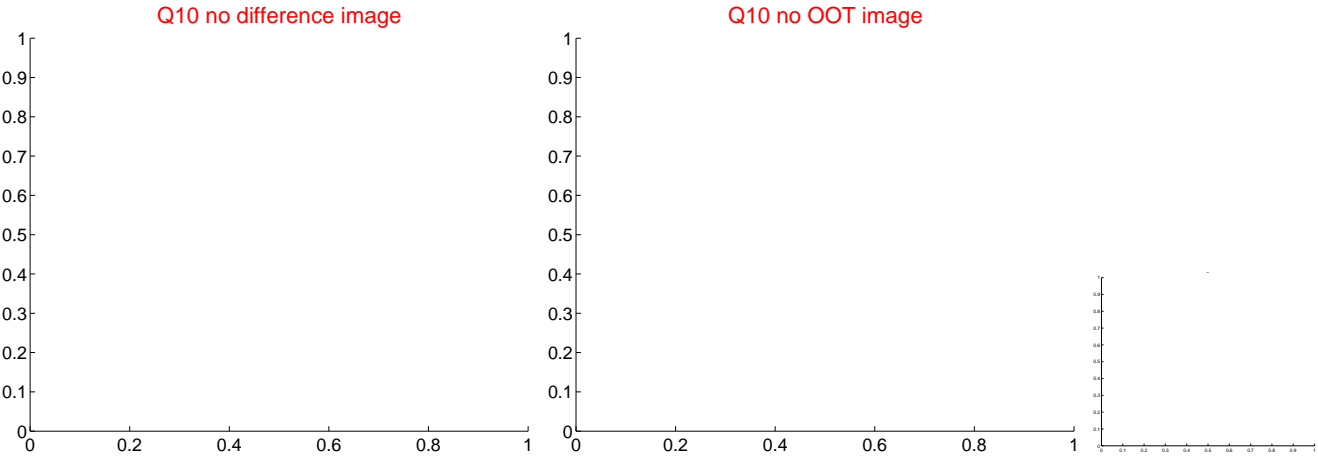
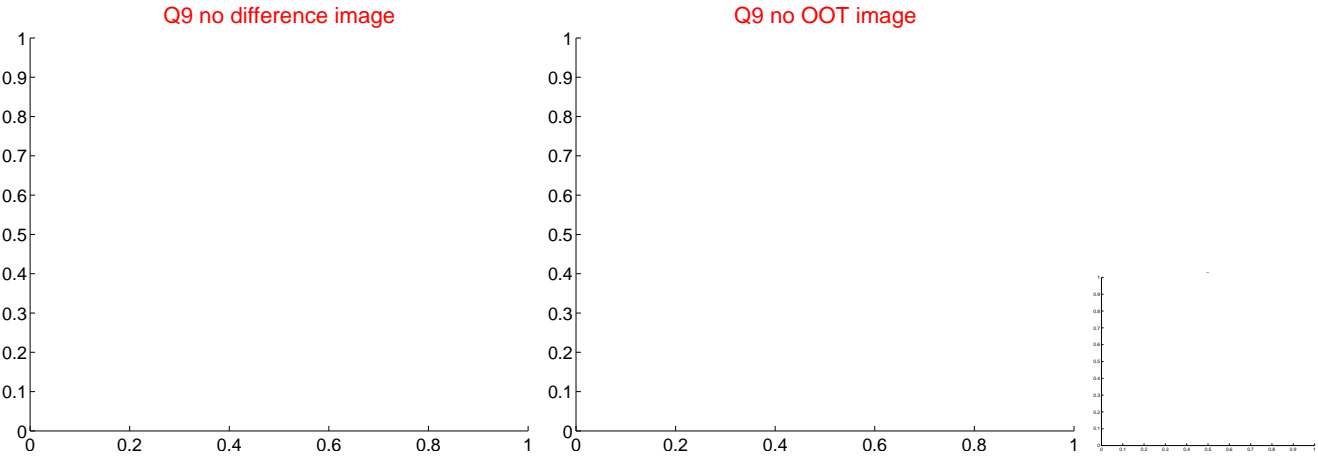
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



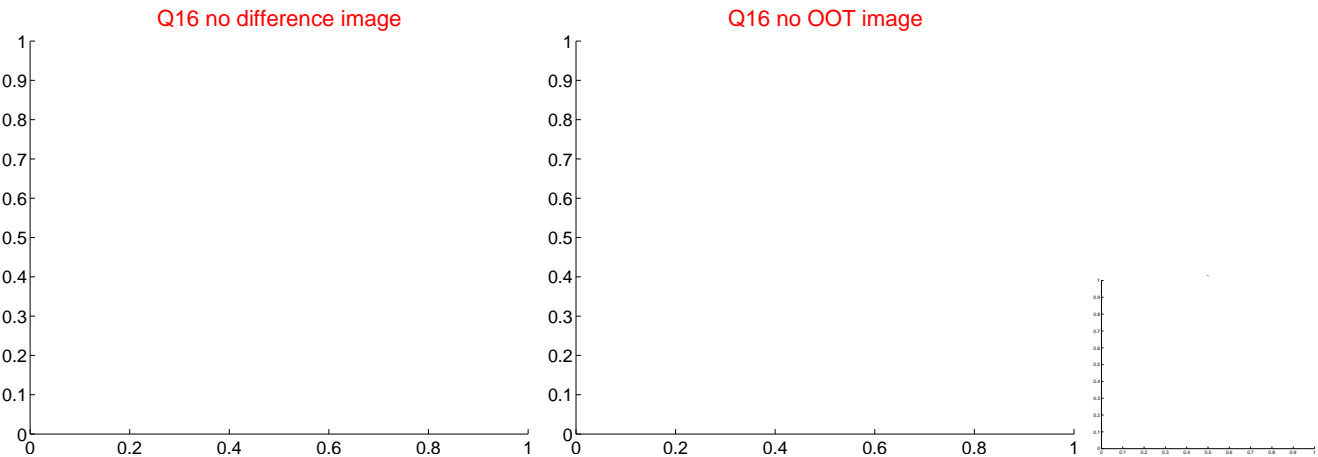
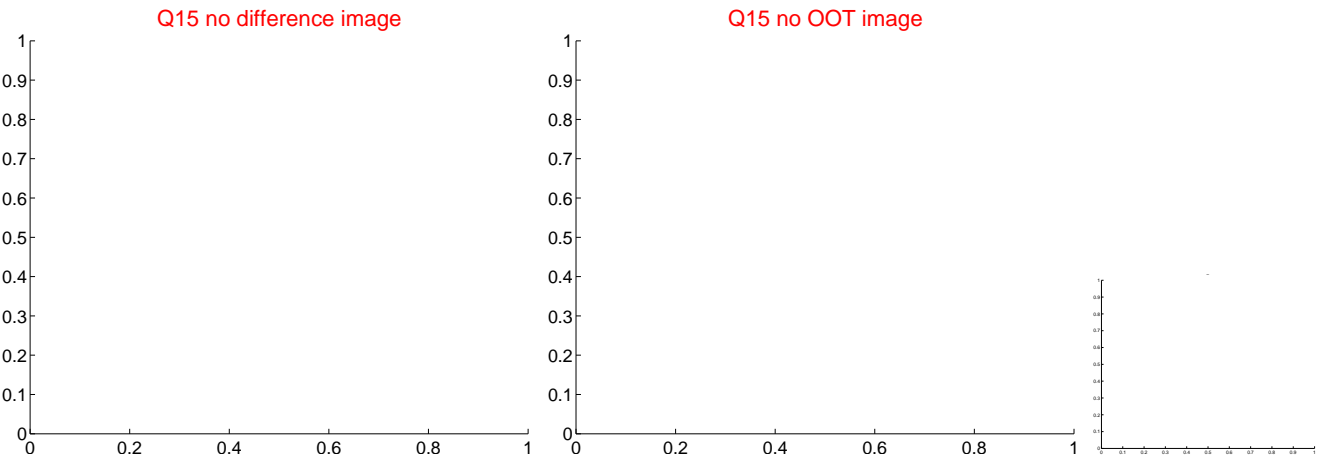
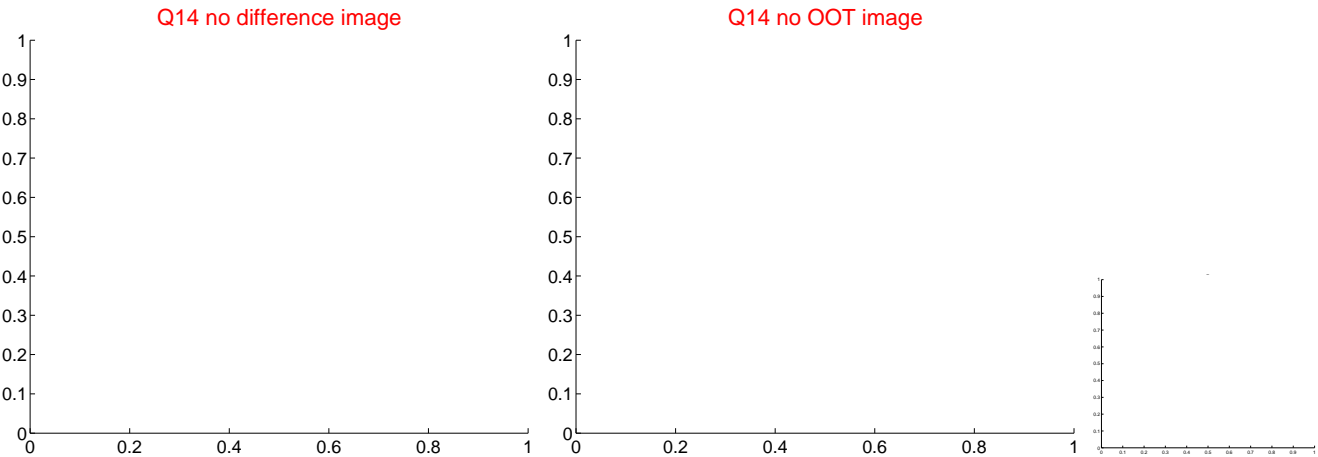
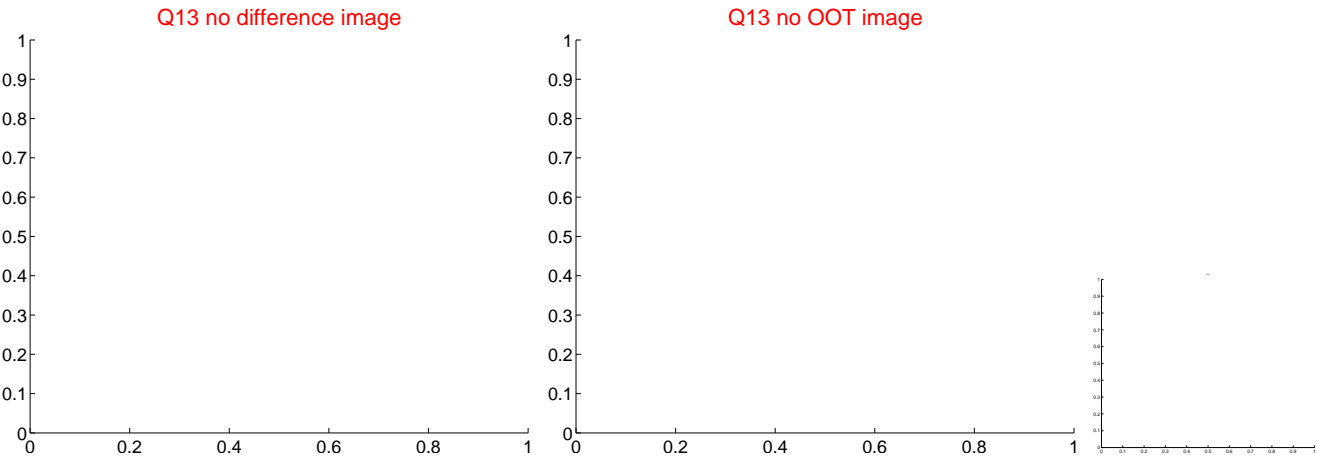
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



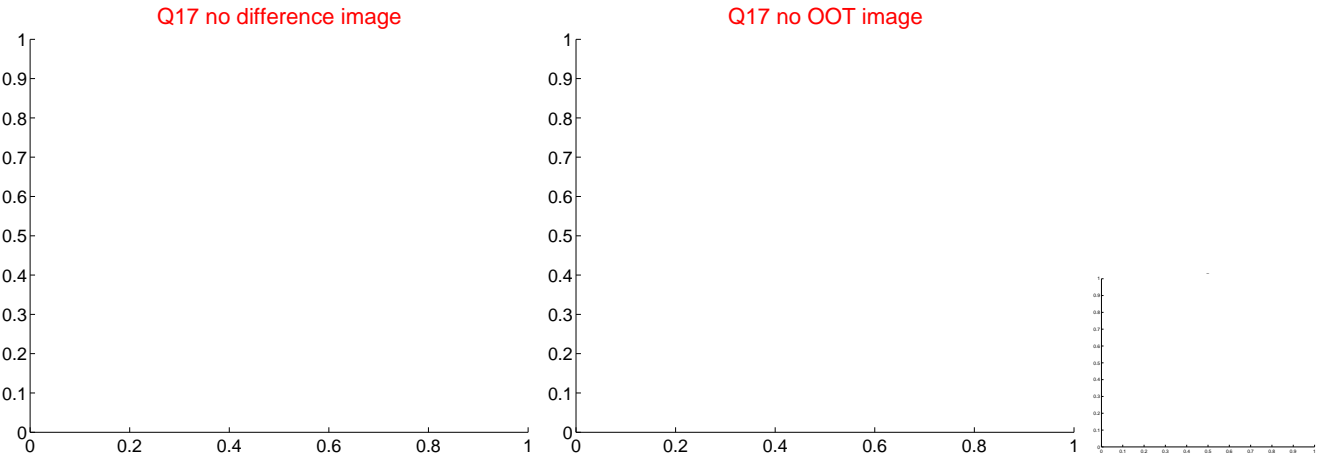
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

