

KIC 004926962

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})
004926962-01	OBS	No	329.504777	433.416843	512.6	10.500	18.2	-1.0	2.47	5035	5.46	4.50
004926962-02	OBS	No	317.057147	298.693611	1686.7	4.010	22.8	4.7	2.47	5035	13.24	4.74
004926962-03	OBS	No	458.387009	217.461504	2517.8	5.673	15.0	6.0	2.47	5035	12.18	2.90
004926962-04	OBS	No	334.836462	450.418265	1911.8	18.092	13.3	3.6	2.47	5035	12.21	4.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004926962-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS
004926962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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.

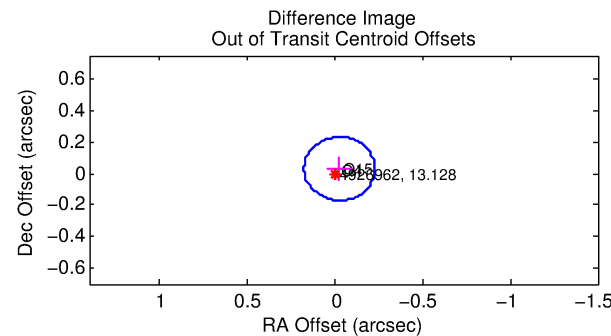
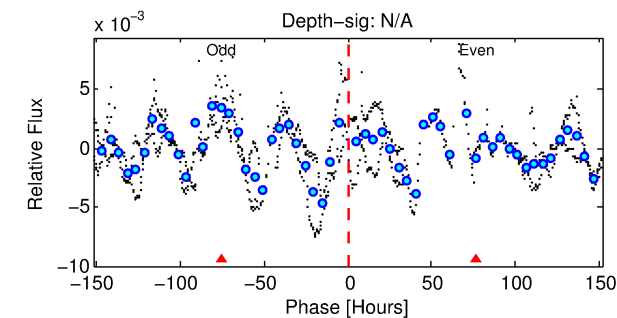
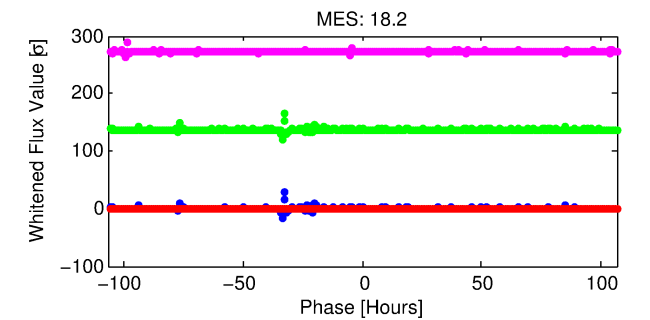
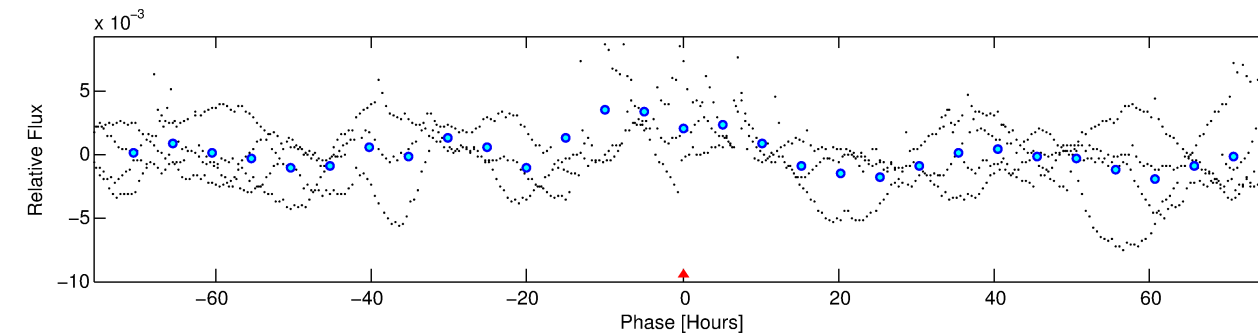
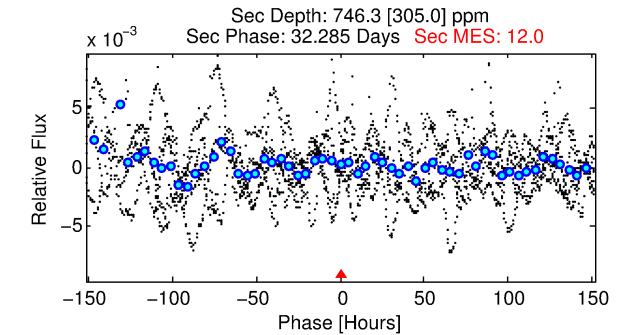
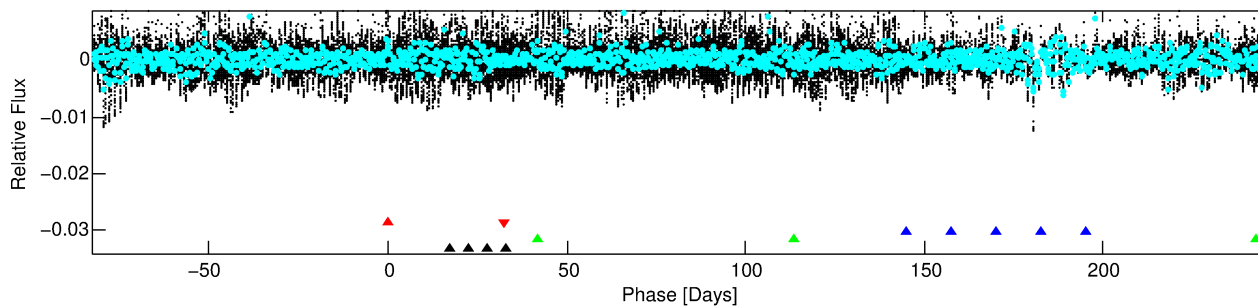
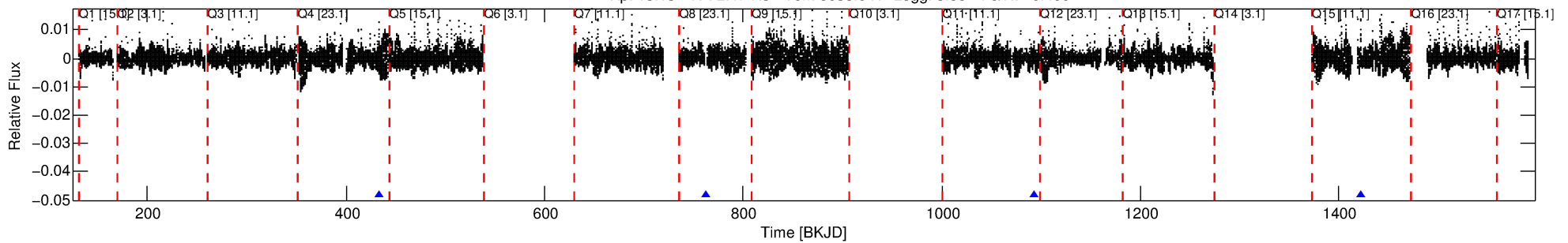
Ephemeris Match Information For 004926962-01

No Significant Match Found

DV One-Page Summary

KIC: 4926962 Candidate: 1 of 4 Period: 329.505 d

Kp: 13.13 R*: 2.47 Rs Teff: 5035.0 K Logg: 3.58 Fe/H: -0.400



TPS TCE Results:

Period = 329.50478 d
Epoch = 433.4168 BKJD

DV fit results are unavailable

DV Diagnostic Results:

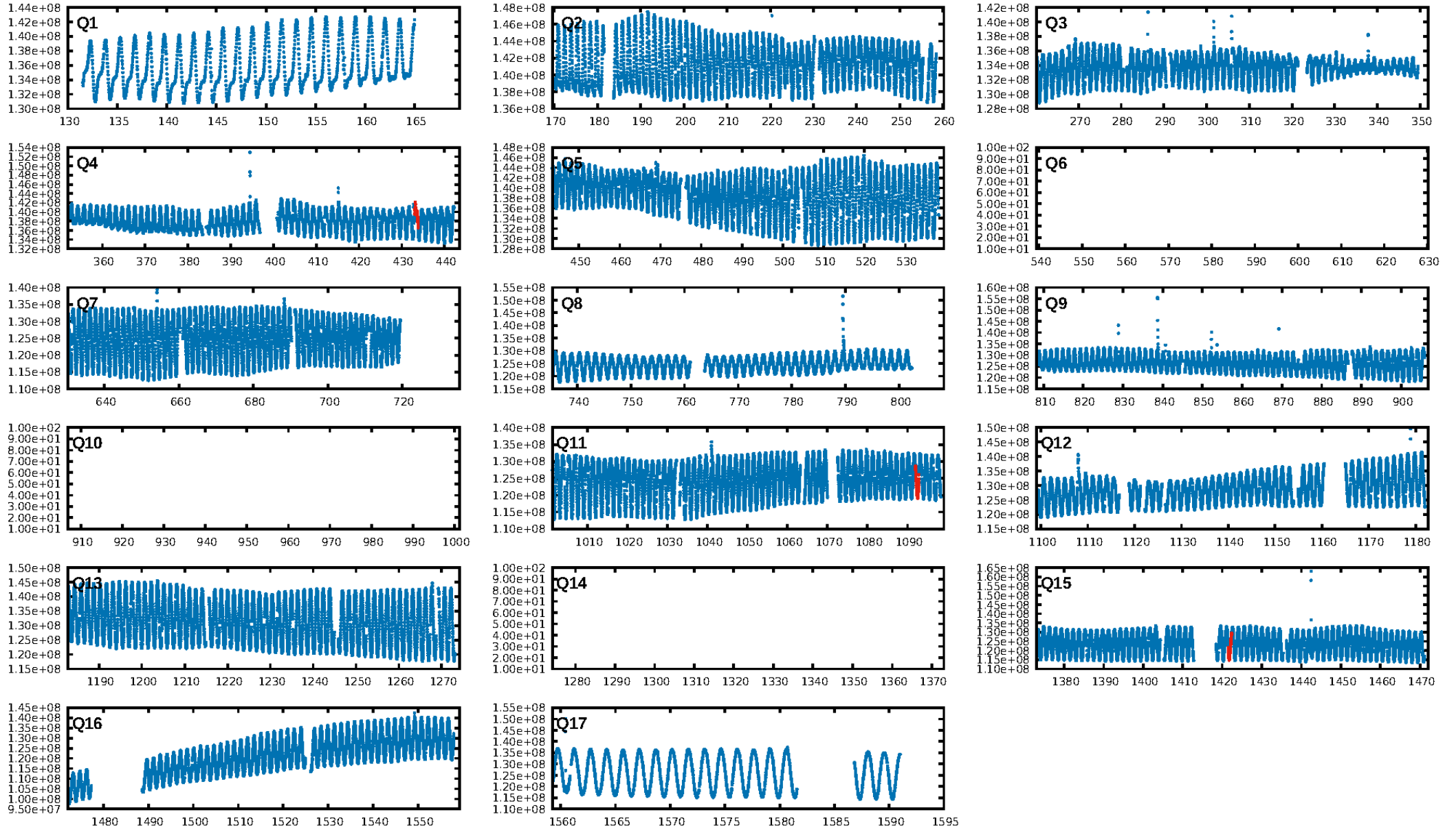
ShortPeriod-sig: 100.0% [26.58σ]
LongPeriod-sig: 100.0% [6.12σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.36e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.103

Centroid-sig: 0.2%
Centroid-so: 0.138 arcsec [5.99σ]
OotOffset-rm: 0.042 arcsec [0.62σ]
KicOffset-rm: 0.172 arcsec [2.34σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

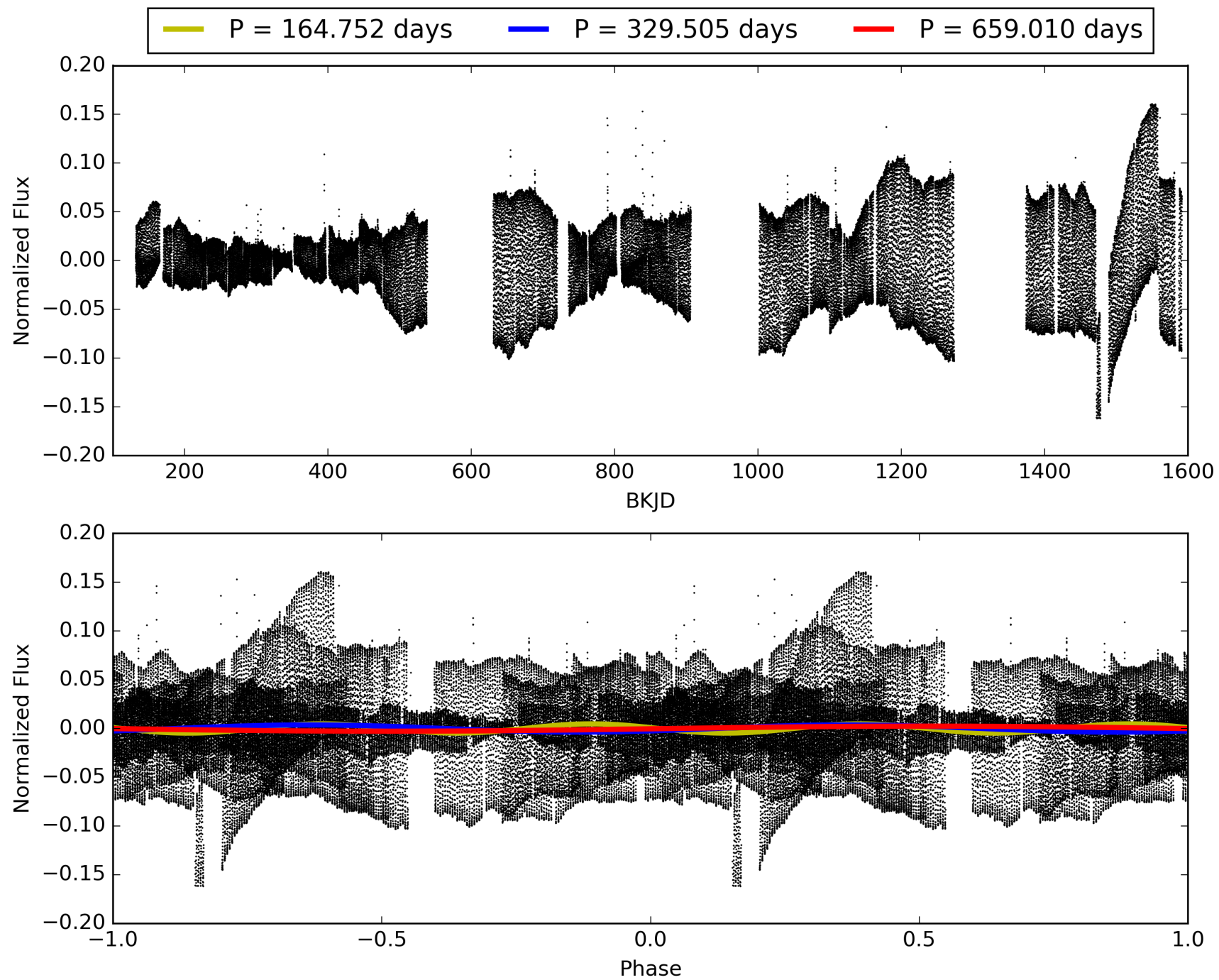
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 11:35:15 Z

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

TCE 004926962-01, PDC Light Curves

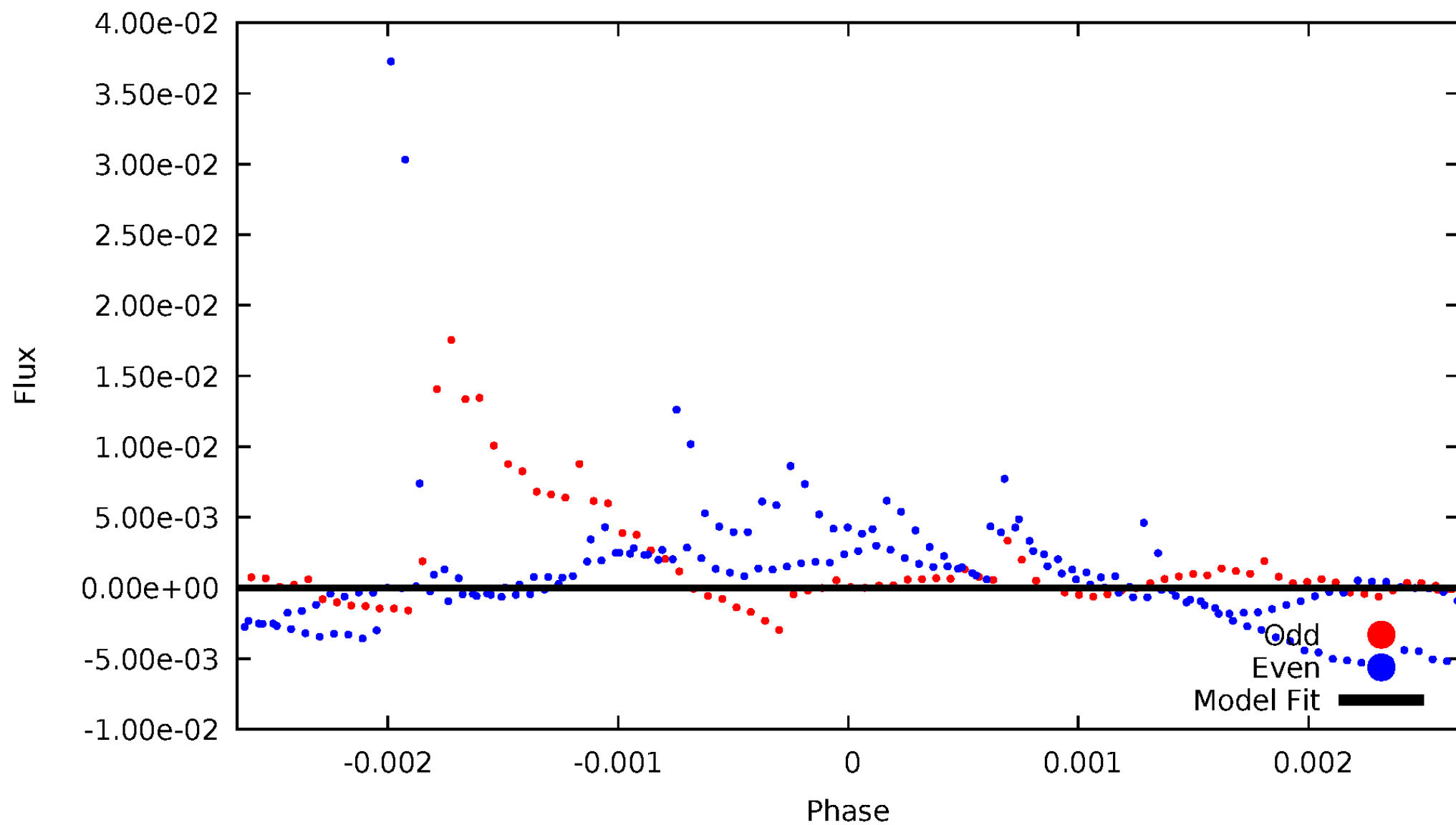


TCE 004926962-01



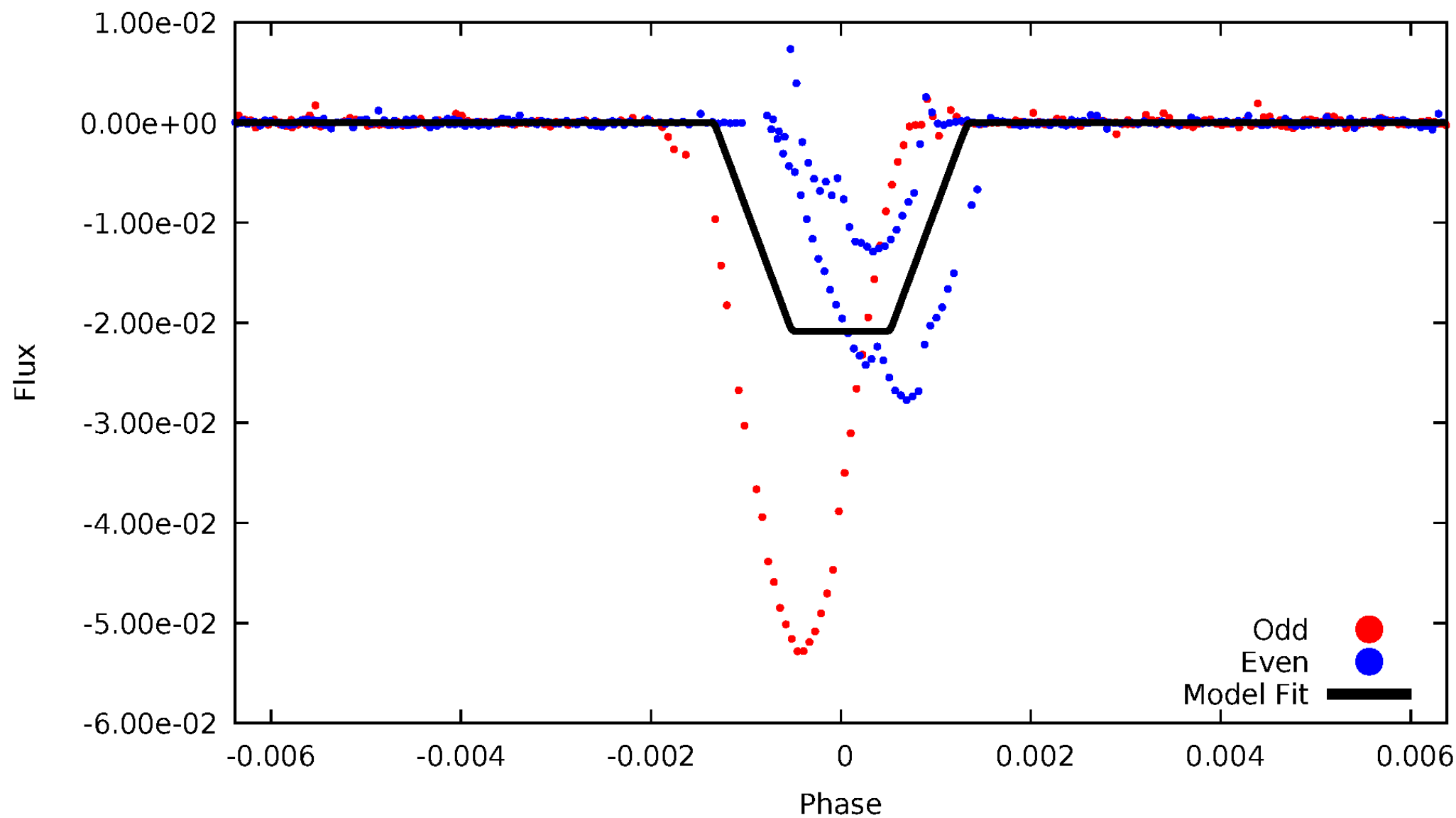
DV Odd/Even

TCE 004926962-01



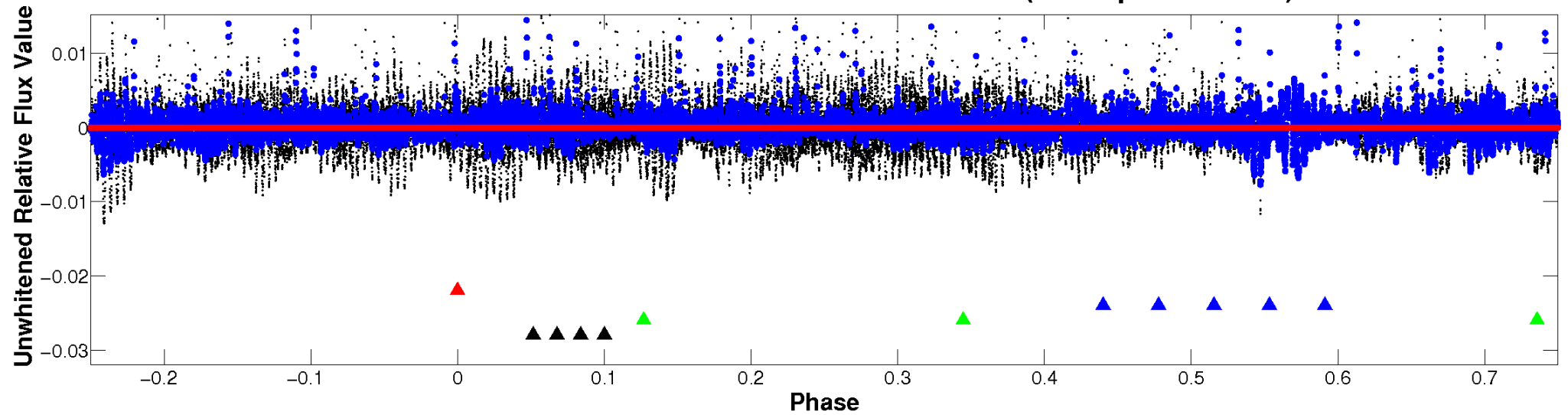
ALT Odd/Even

TCE 004926962-01



Non-Whitened Vs. Whitened Light Curve

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

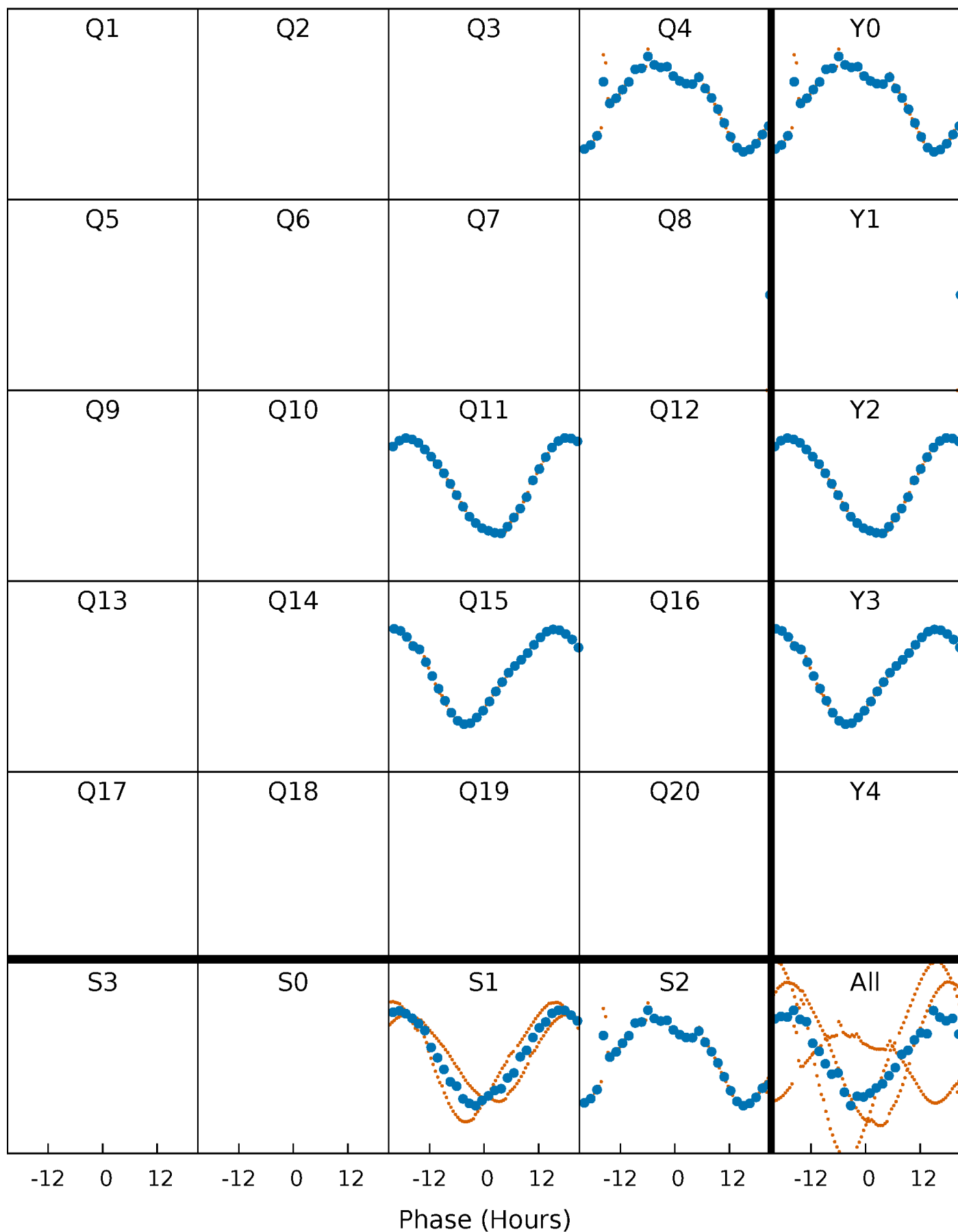


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



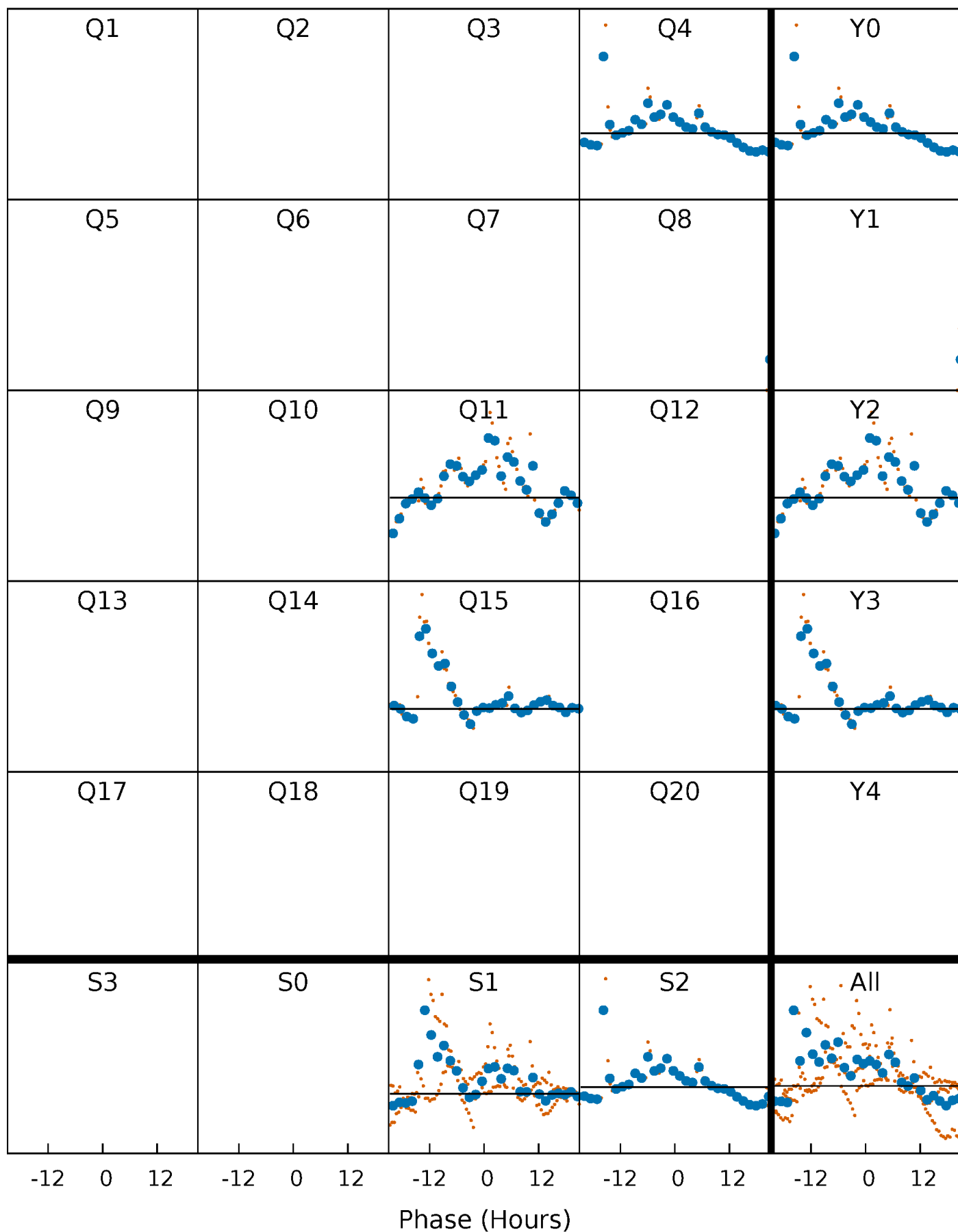
PDC Quarter-Phased Transit Curves

TCE 004926962-01 P=329.504777 Days $T_0=433.416843$ (BKJD)



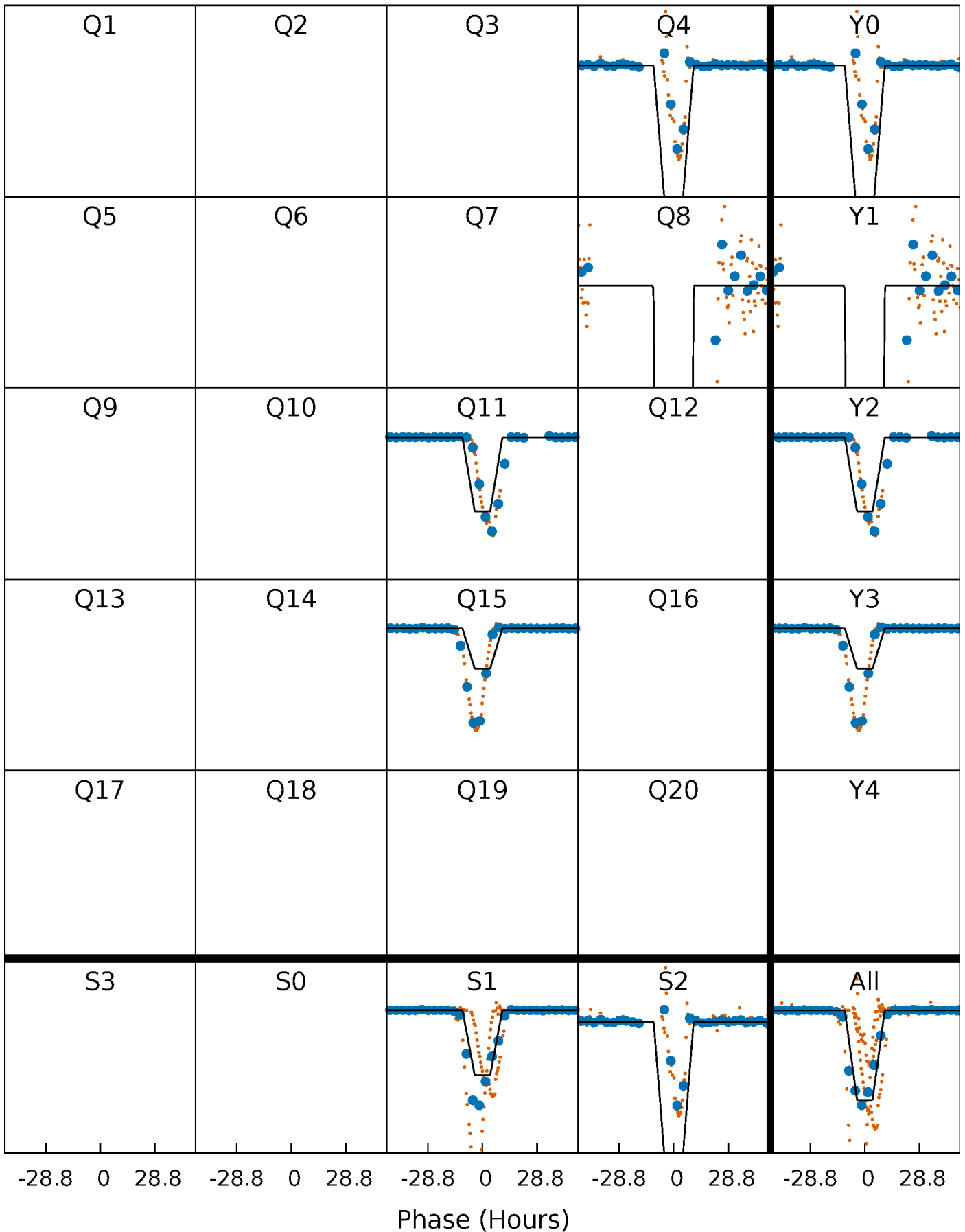
DV Quarter-Phased Transit Curves

TCE 004926962-01 P=329.504777 Days $T_0=433.416843$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

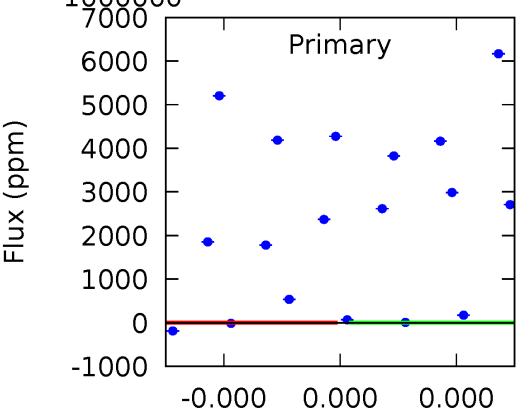
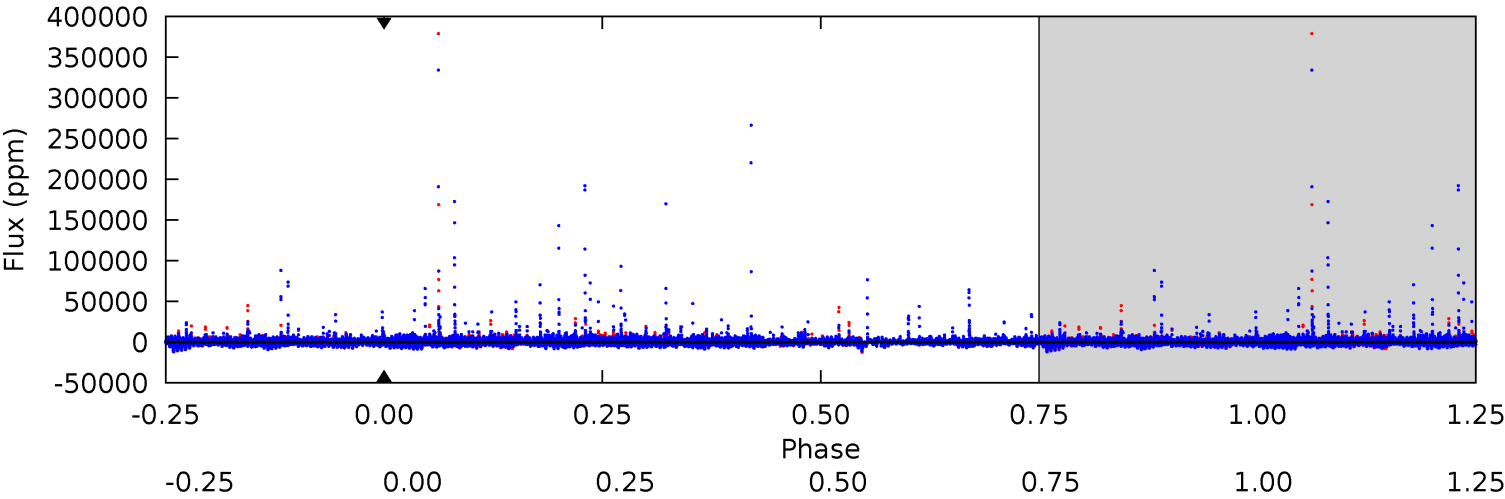
TCE 004926962-01 P=329.504777 Days $T_0=433.345415$ (BKJD)



DV Model-Shift Uniqueness Test

004926962-01, P = 329.504777 Days, E = 103.912066 Days

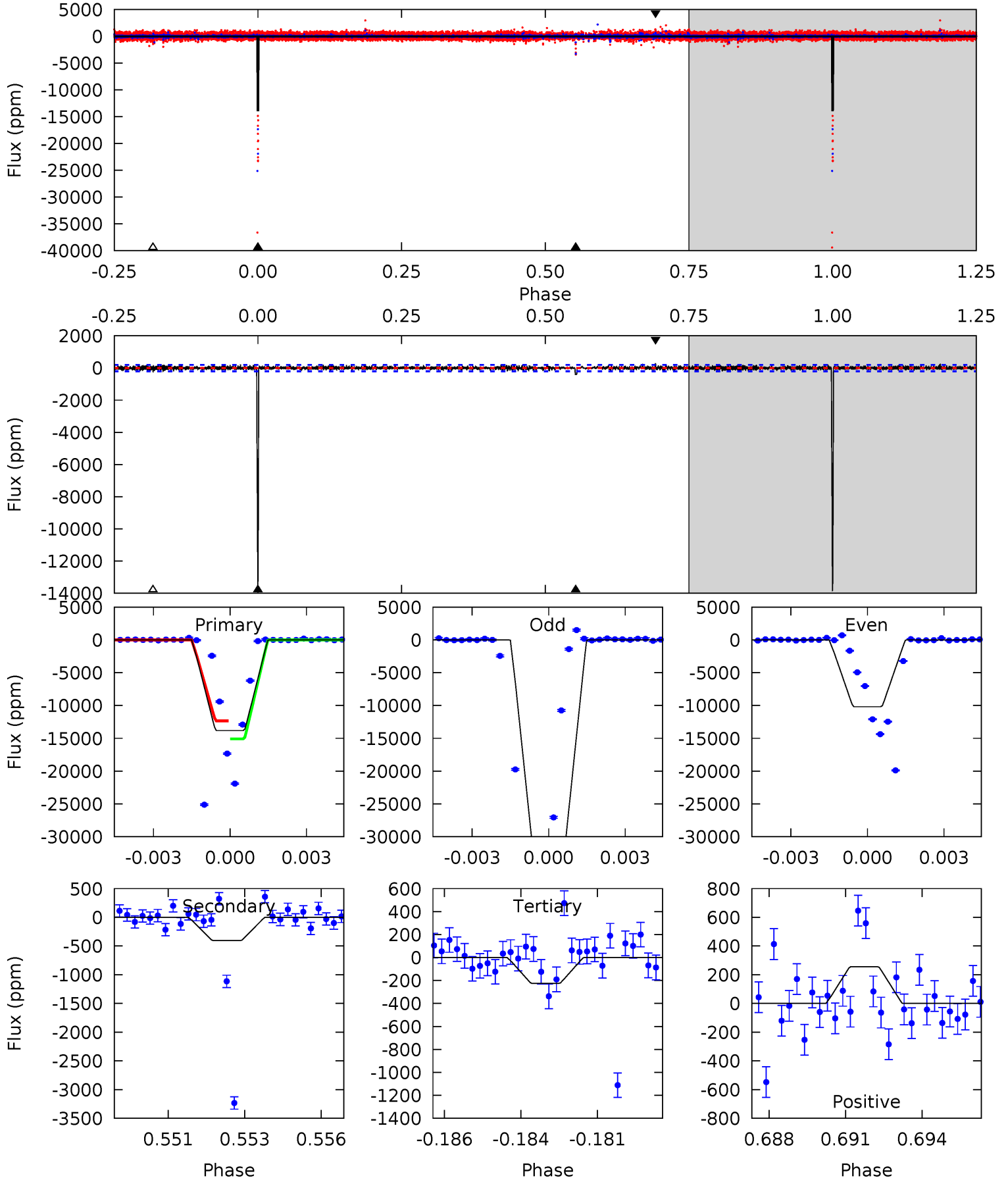
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

004926962-01, P = 329.504777 Days, E = 103.840638 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
366.4	10.8	5.97	6.79	5.27	3.00	1.27	360.4	359.6	4.81	3.99	344.9	1.04	0.02	0



Stellar Parameters For KIC 004926962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5035^{+119}_{-163}	$3.581^{+1.042}_{-0.347}$	$-0.400^{+0.250}_{-0.350}$	$2.473^{+1.455}_{-1.940}$	$0.849^{+0.242}_{-0.198}$	$0.079^{+3.474}_{-0.060}$
	+2%/-3%	+29%/-10%	+62%/-87%	+59%/-78%	+29%/-23%	+4395%/-76%
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 004926962-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$17.79^{+22.85}_{-12.32}$	503^{+84}_{-104}	-3939^{+17559}_{-10782}	$-2115.738^{+218056.814}_{-270647.113}$
Alt.	-406 ± 38	$37.65^{+33.14}_{-22.16}$	509^{+83}_{-112}	2575^{+608}_{-282}	124^{+602}_{-91}

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

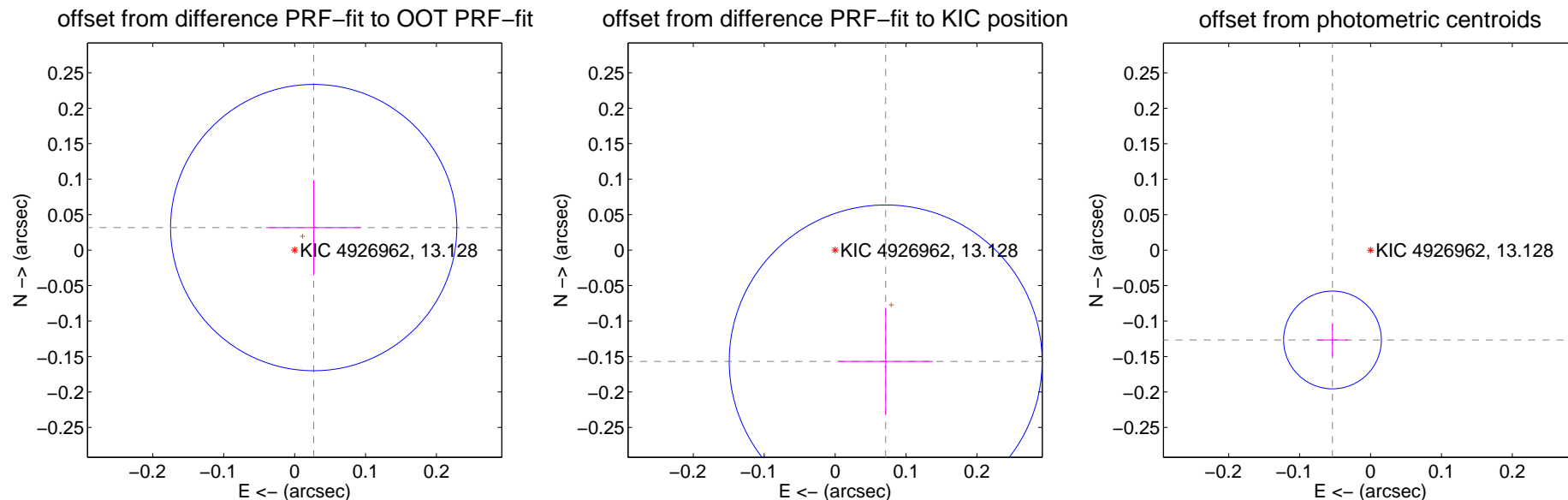
DV Centroid Data

Supplemental centroid analysis for 004926962-01. Kepler magnitude: 13.13. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

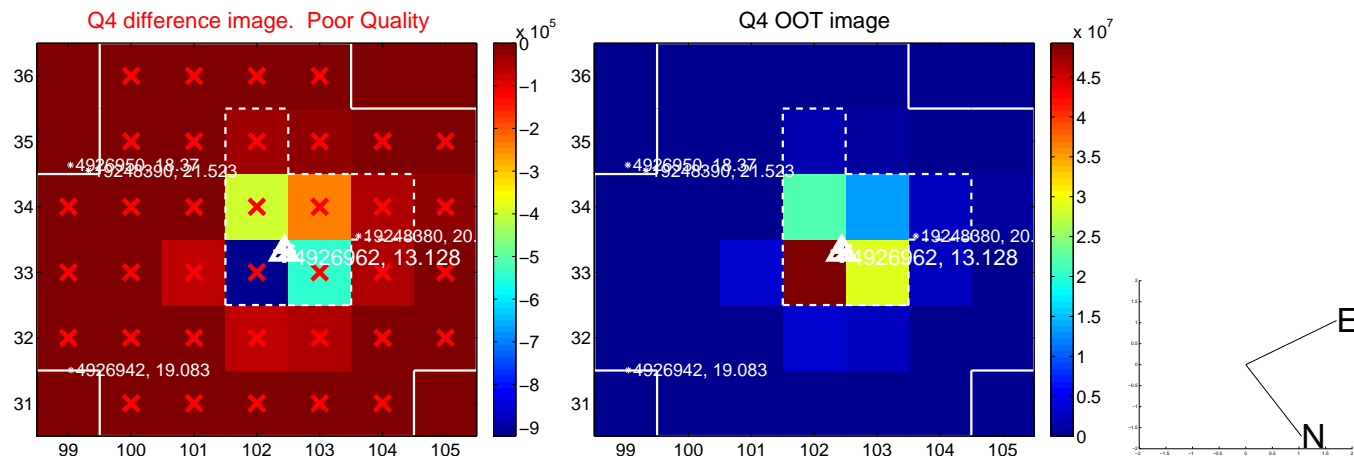
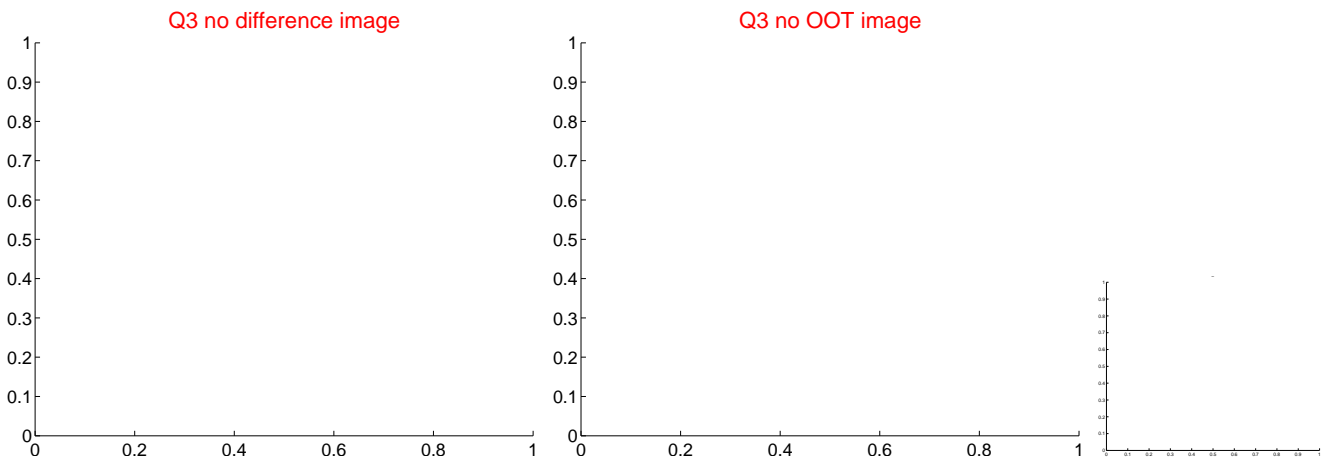
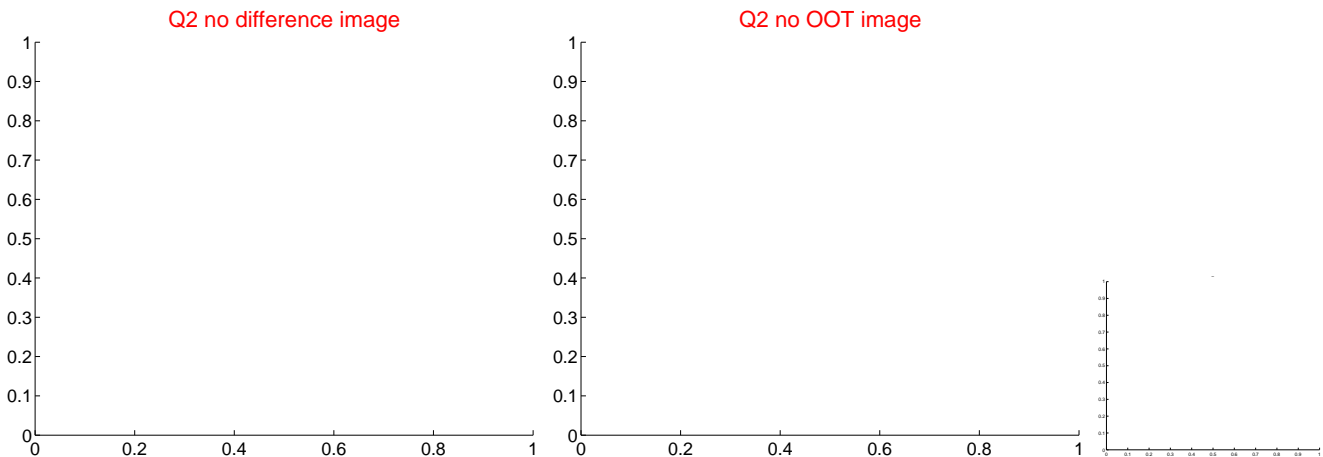
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.042 ± 0.067	0.62	-0.027 ± 0.067	0.032 ± 0.067
PRF-fit source offset from KIC position	0.172 ± 0.074	2.34	-0.071 ± 0.067	-0.157 ± 0.076
photometric centroid source offset	0.14 ± 0.02	5.99	0.05 ± 0.02	-0.13 ± 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



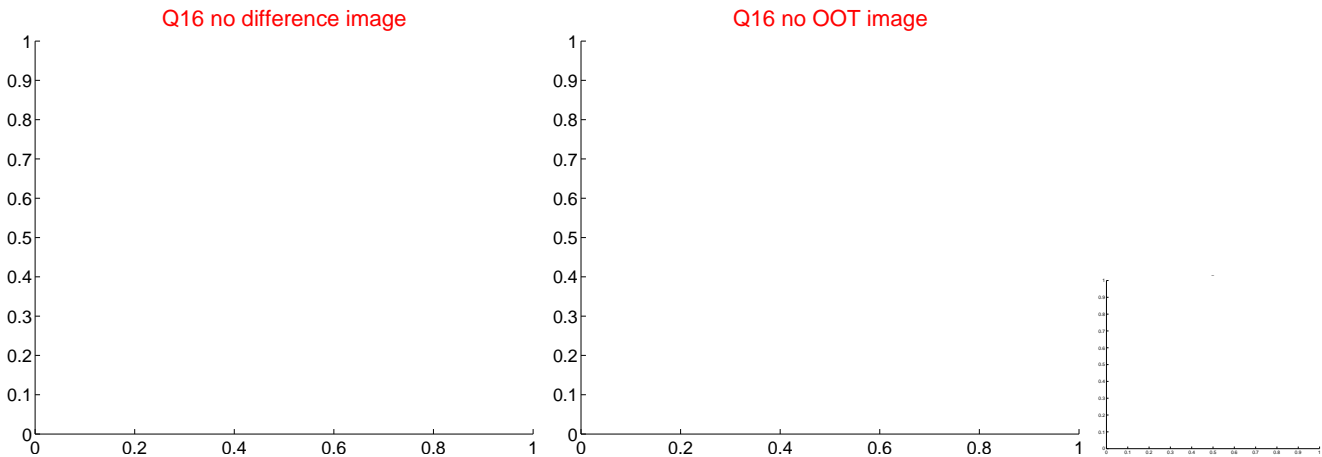
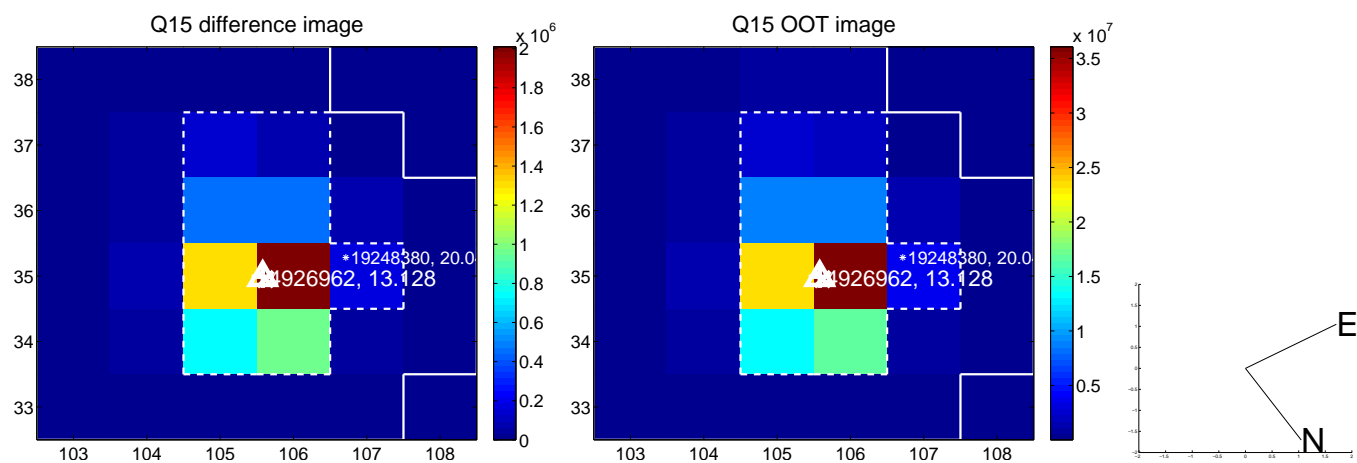
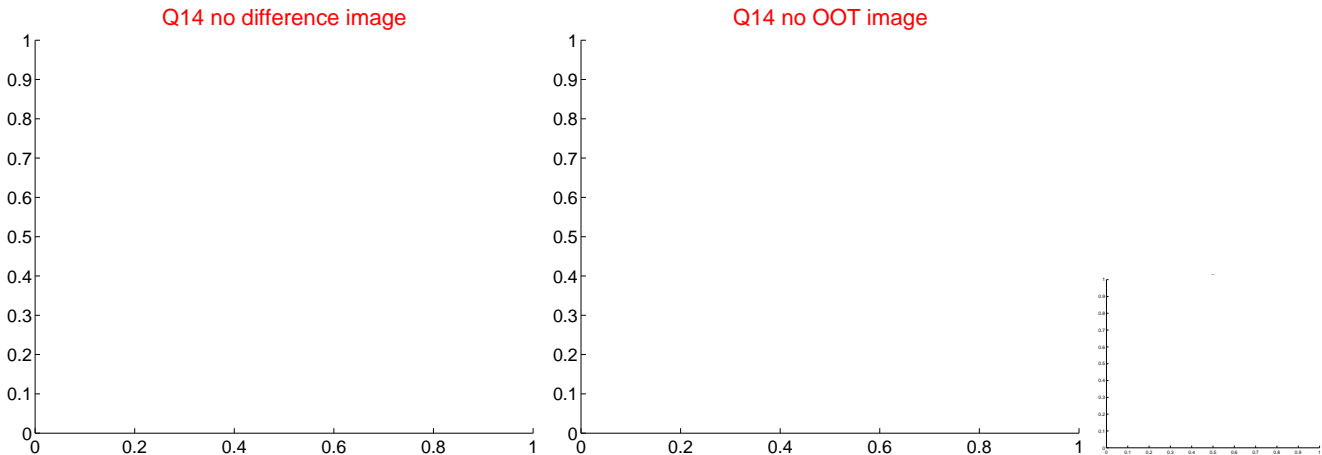
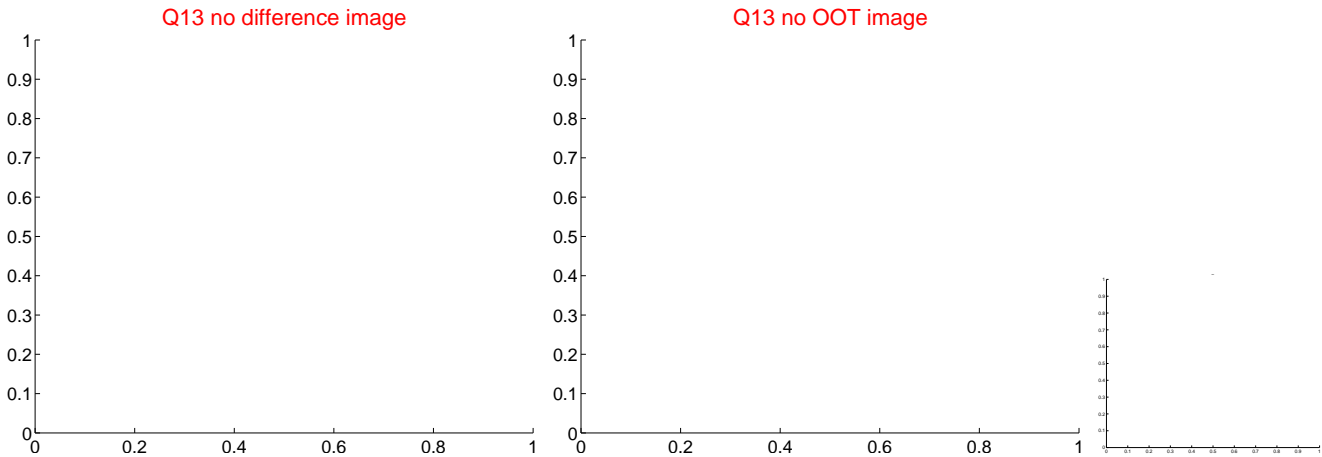
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



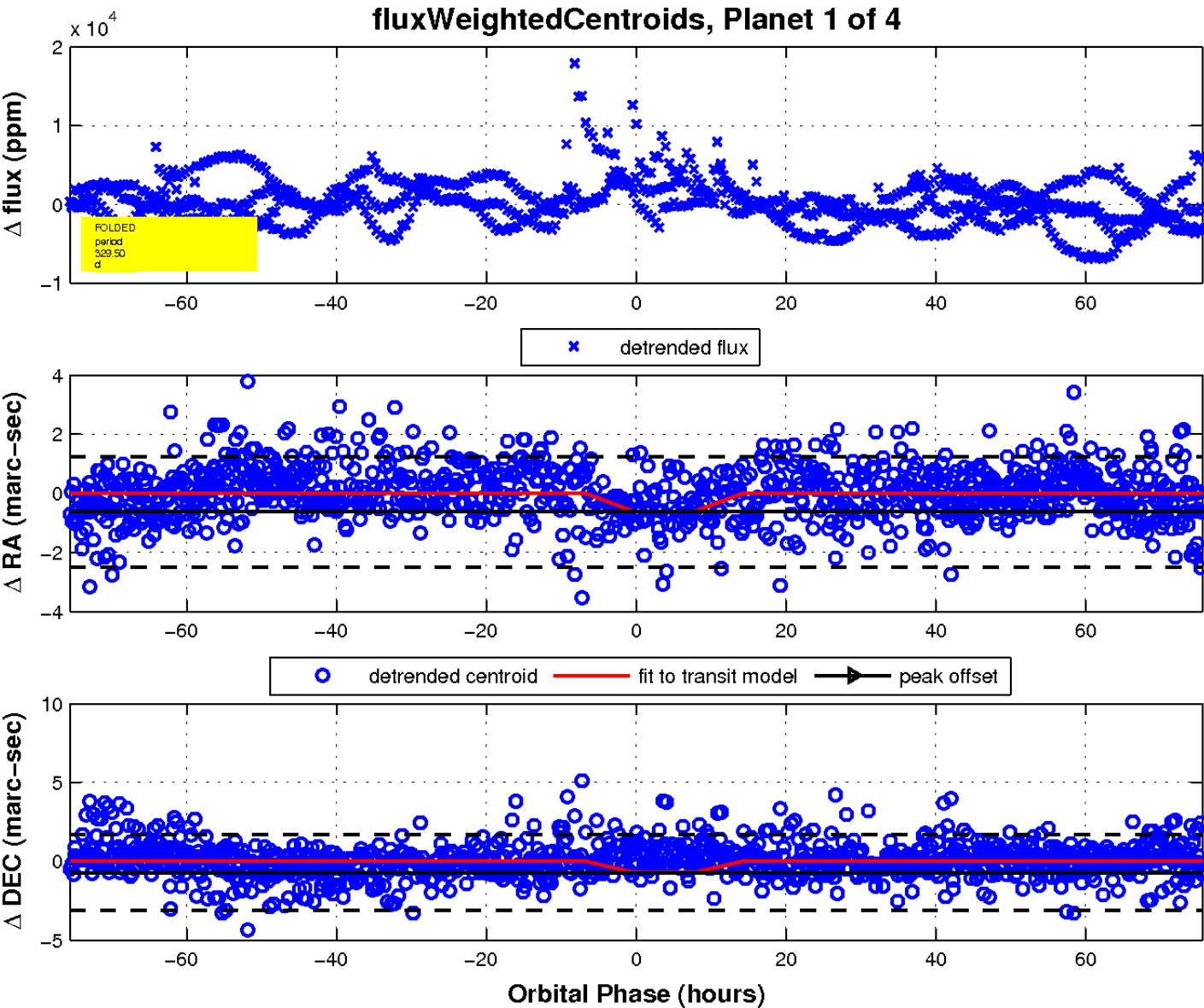
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



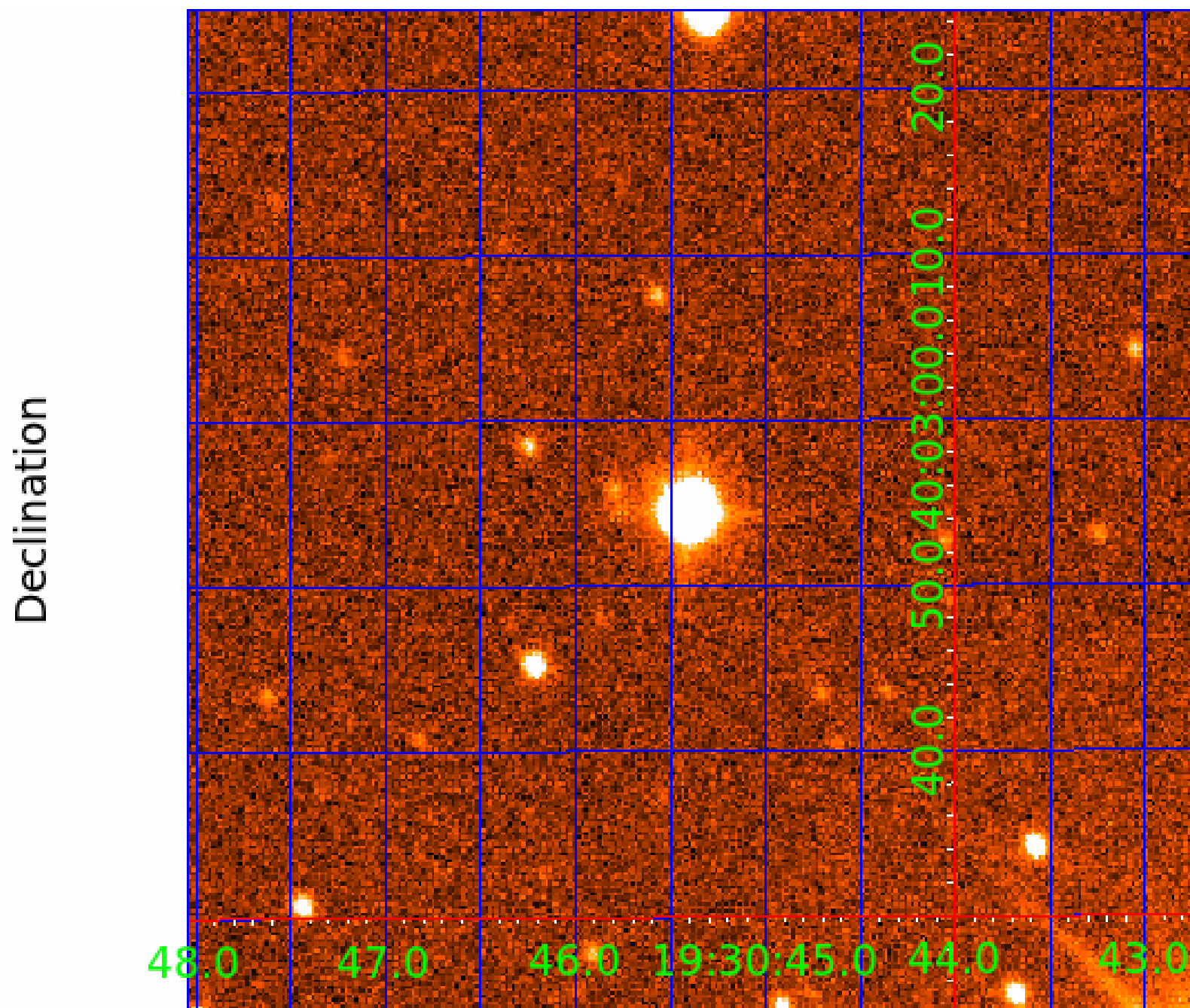
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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UKIRT Image



KIC 004926962

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})
004926962-01	OBS	No	329.504777	433.416843	512.6	10.500	18.2	-1.0	2.47	5035	5.46	4.50
004926962-02	OBS	No	317.057147	298.693611	1686.7	4.010	22.8	4.7	2.47	5035	13.24	4.74
004926962-03	OBS	No	458.387009	217.461504	2517.8	5.673	15.0	6.0	2.47	5035	12.18	2.90
004926962-04	OBS	No	334.836462	450.418265	1911.8	18.092	13.3	3.6	2.47	5035	12.21	4.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004926962-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS
004926962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

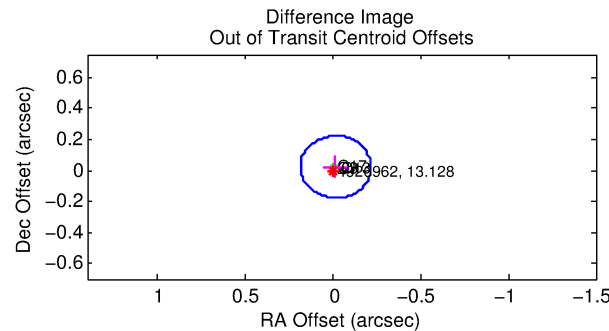
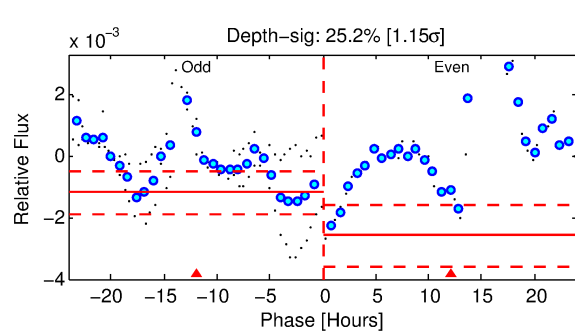
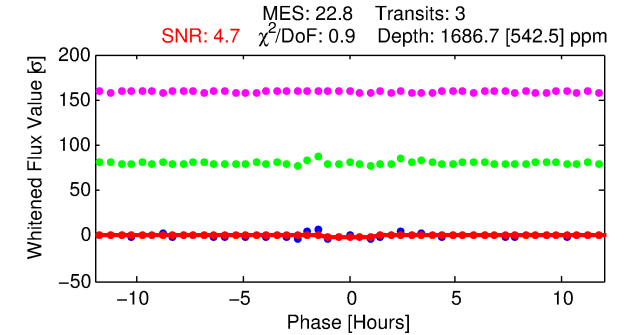
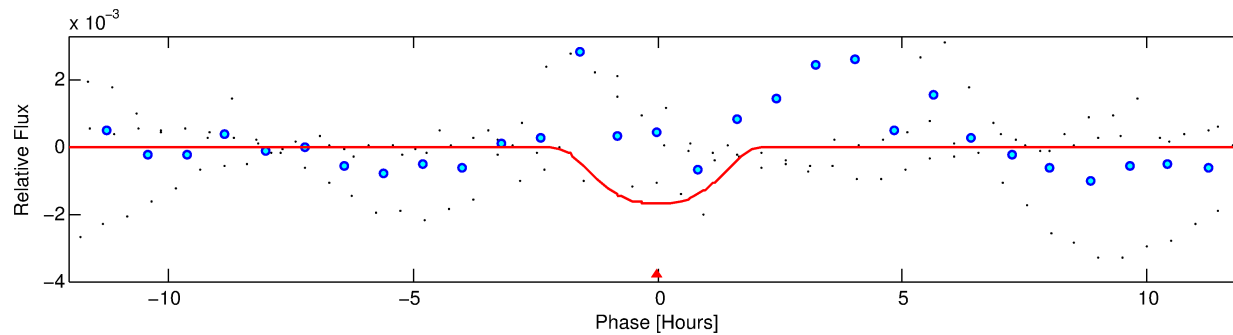
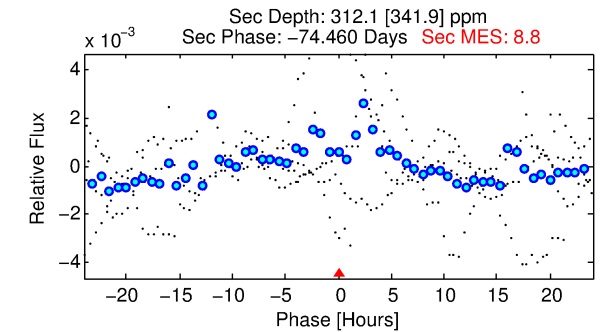
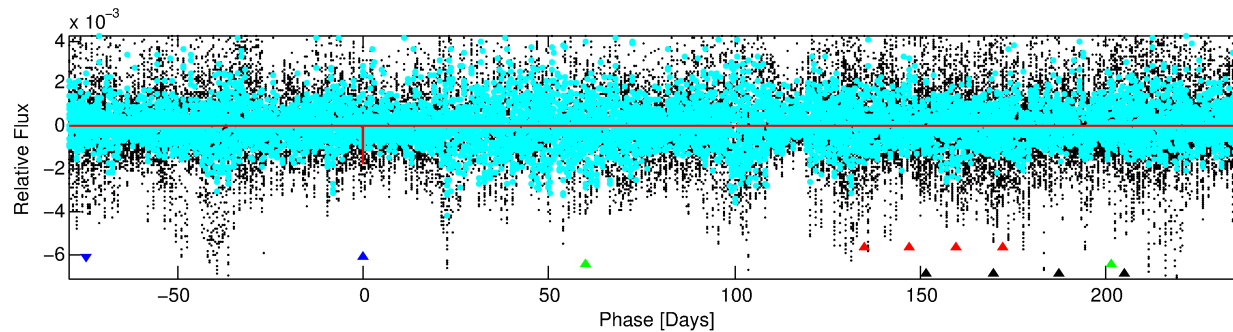
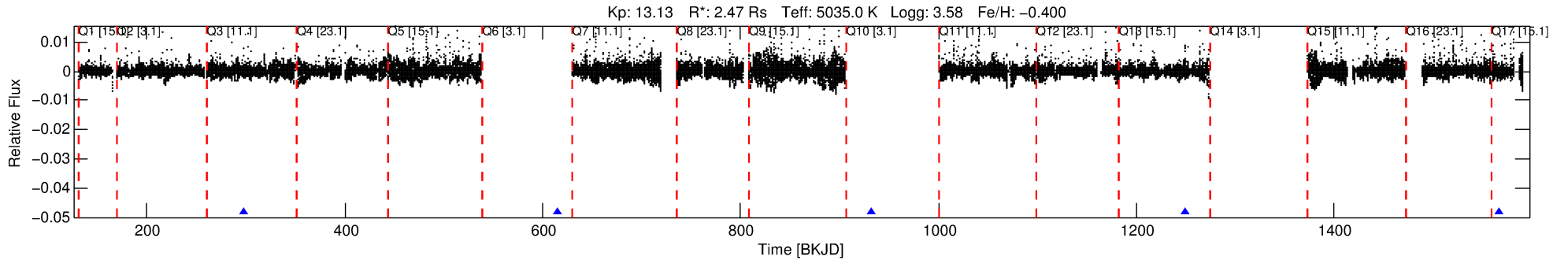
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004926962-02

No Significant Match Found

DV One-Page Summary

KIC: 4926962 Candidate: 2 of 4 Period: 317.057 d



DV Fit Results:

Period = 317.05715 [0.00394] d
Epoch = 298.6936 [0.0116] BKJD
Rp/R* = 0.0491 [0.0089]
a/R* = 273.86 [45.44]
b = 0.95 [0.02]
Seff = 4.74 [8.00]
Teq = 376 [159] K
Rp = 13.24 [10.66] Re
a = 0.8622 [0.8239] AU
Ag = 727.75 [1485.01] [0.49σ]
Teffp = 3021 [877] K [2.97σ]

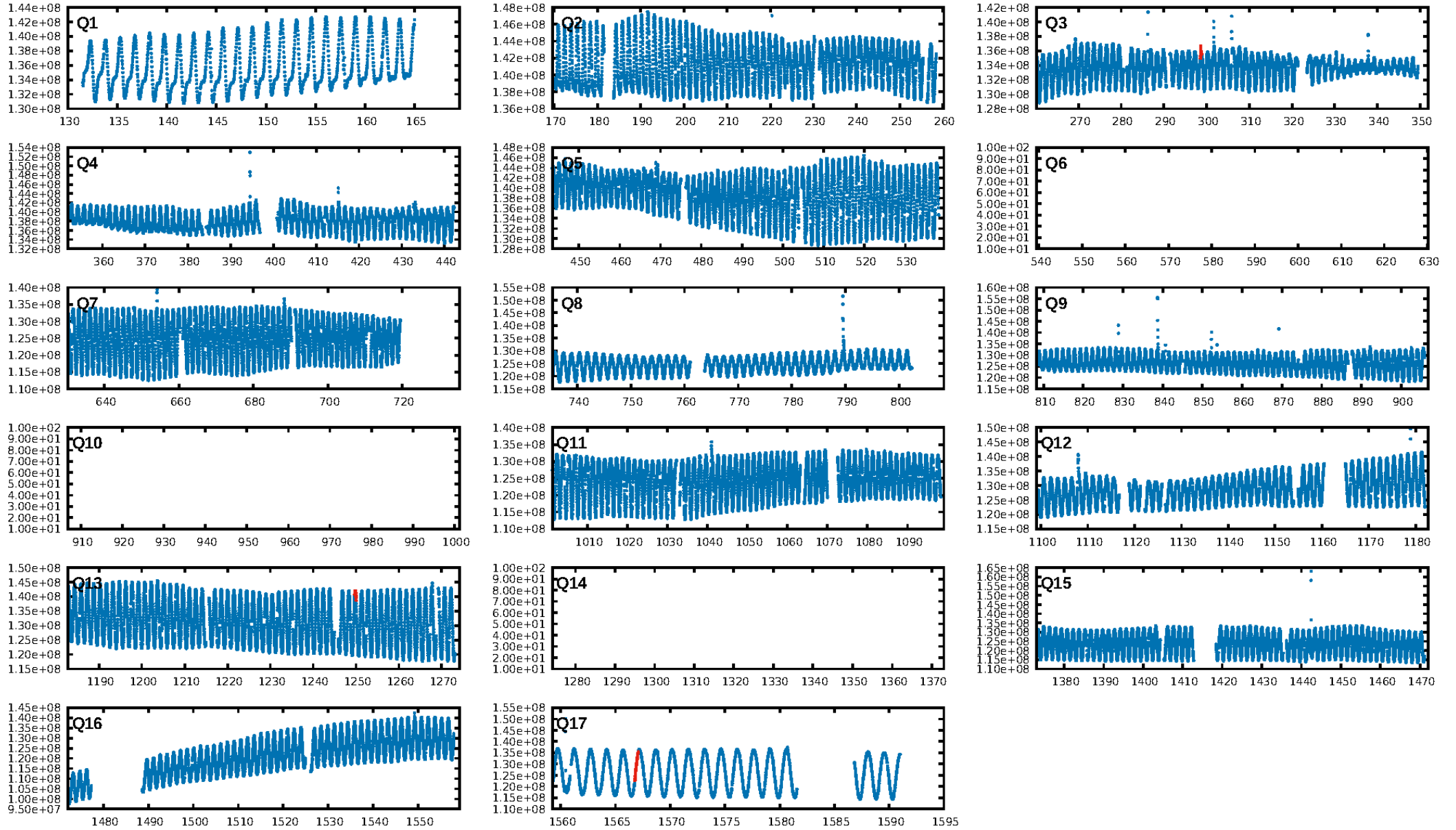
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [26.58σ]
ModelChiSquare2-sig: 66.4%
ModelChiSquareGof-sig: 98.6%
Bootstrap-pfa: 3.11e-16
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 1.153
Centroid-sig: 31.9%
Centroid-so: 0.094 arcsec [0.25σ]
OotOffset-rm: 0.028 arcsec [0.42σ]
KicOffset-rm: 0.077 arcsec [1.14σ]
OotOffset-st: 0/1/0/2 [3]
KicOffset-st: 0/1/0/2 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 1.00 [3/3]

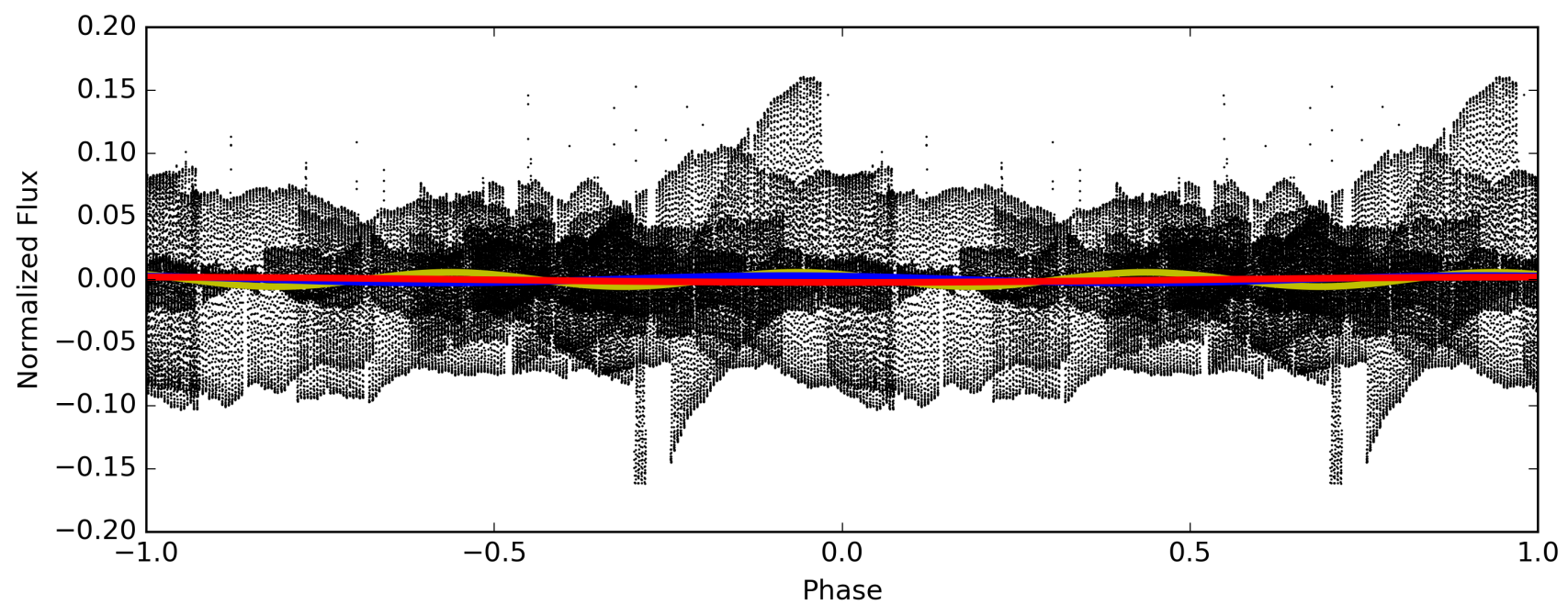
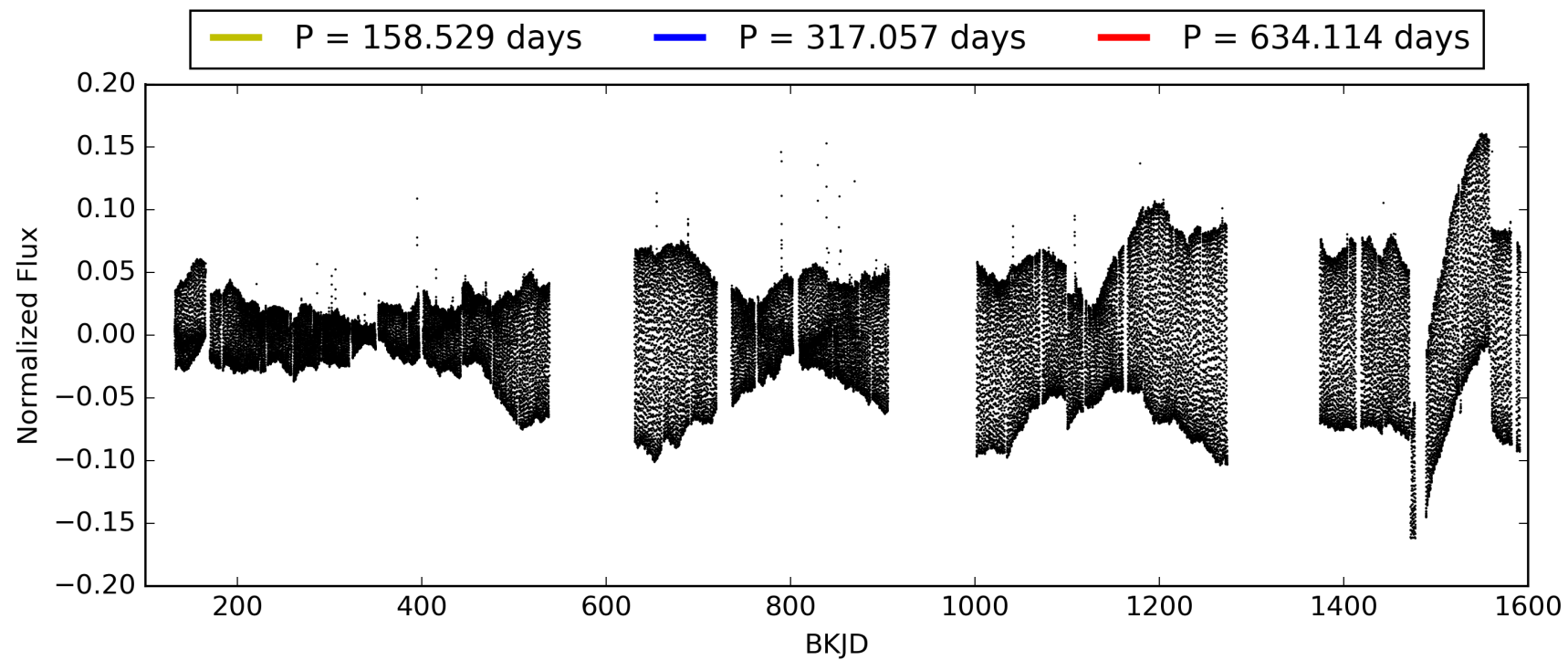
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 11:35:26 Z

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TCE 004926962-02, PDC Light Curves

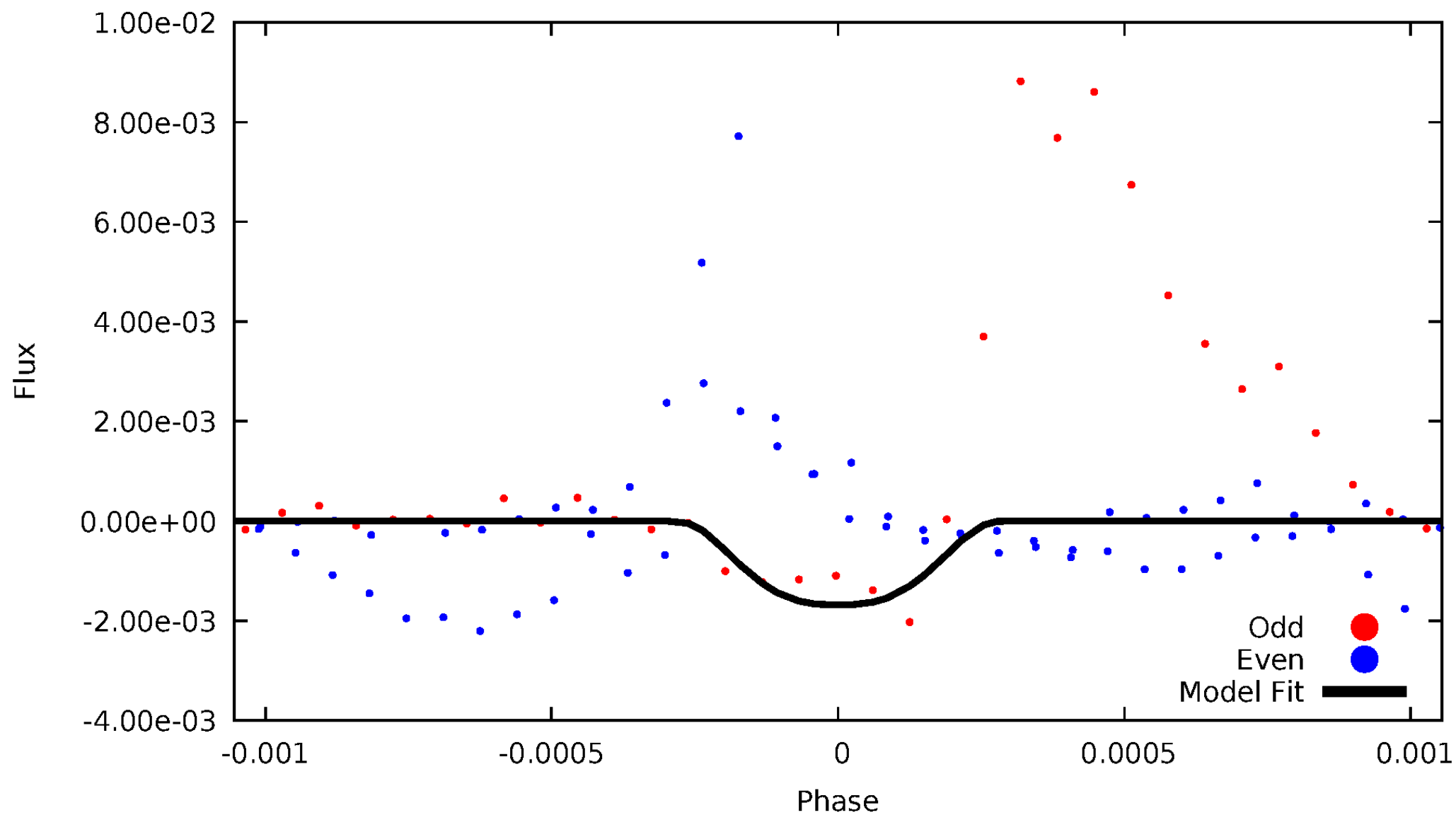


TCE 004926962-02



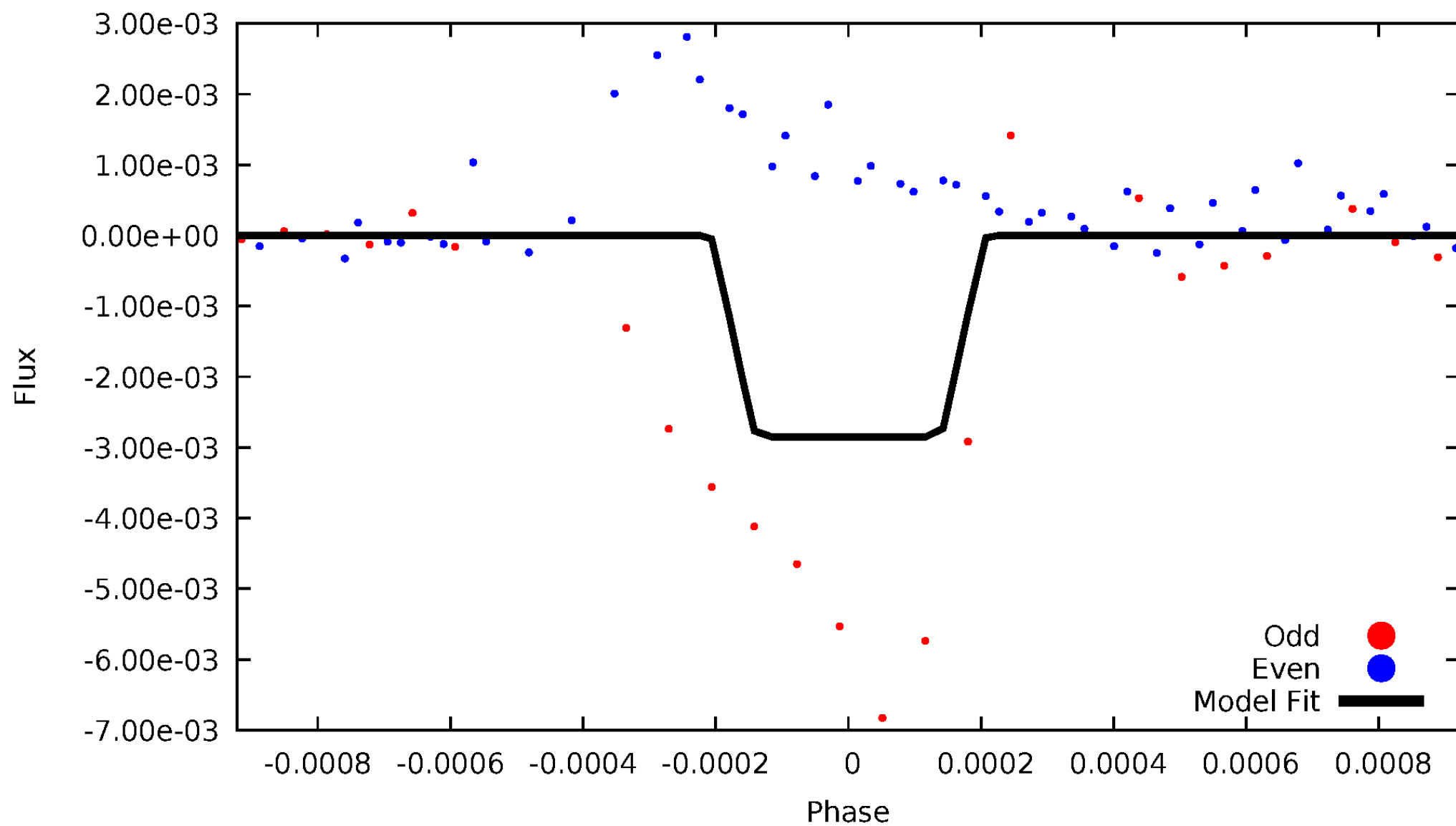
DV Odd/Even

TCE 004926962-02



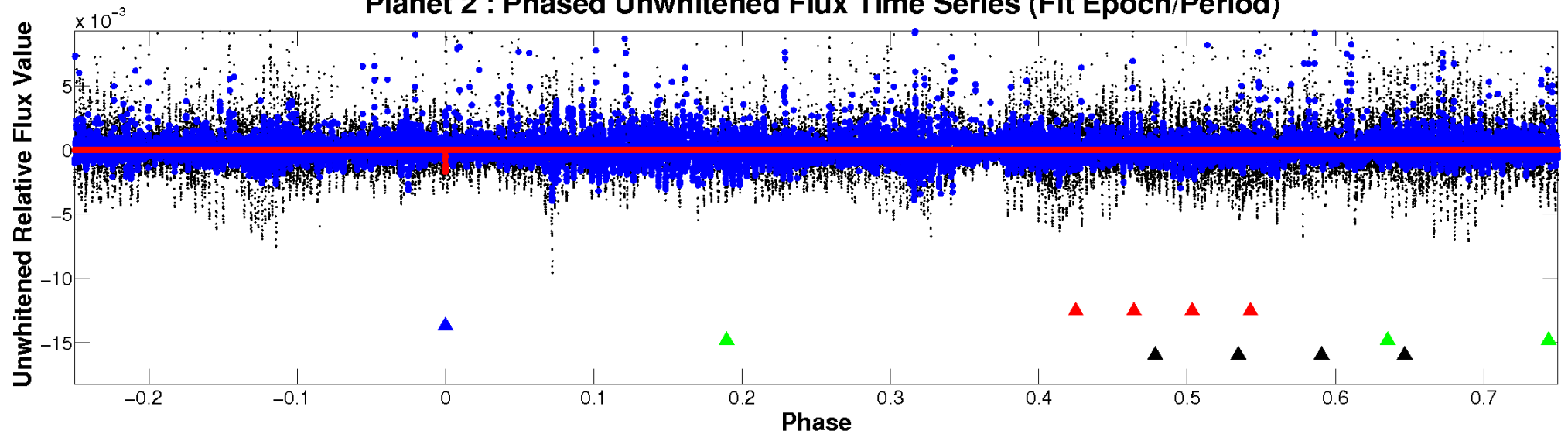
ALT Odd/Even

TCE 004926962-02

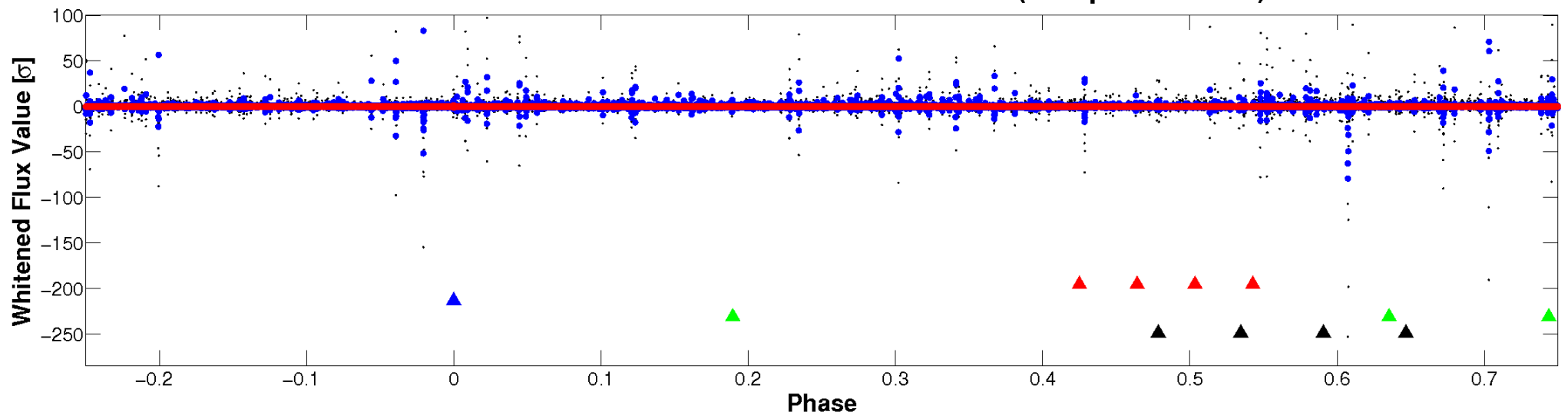


Non-Whitened Vs. Whitened Light Curve

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

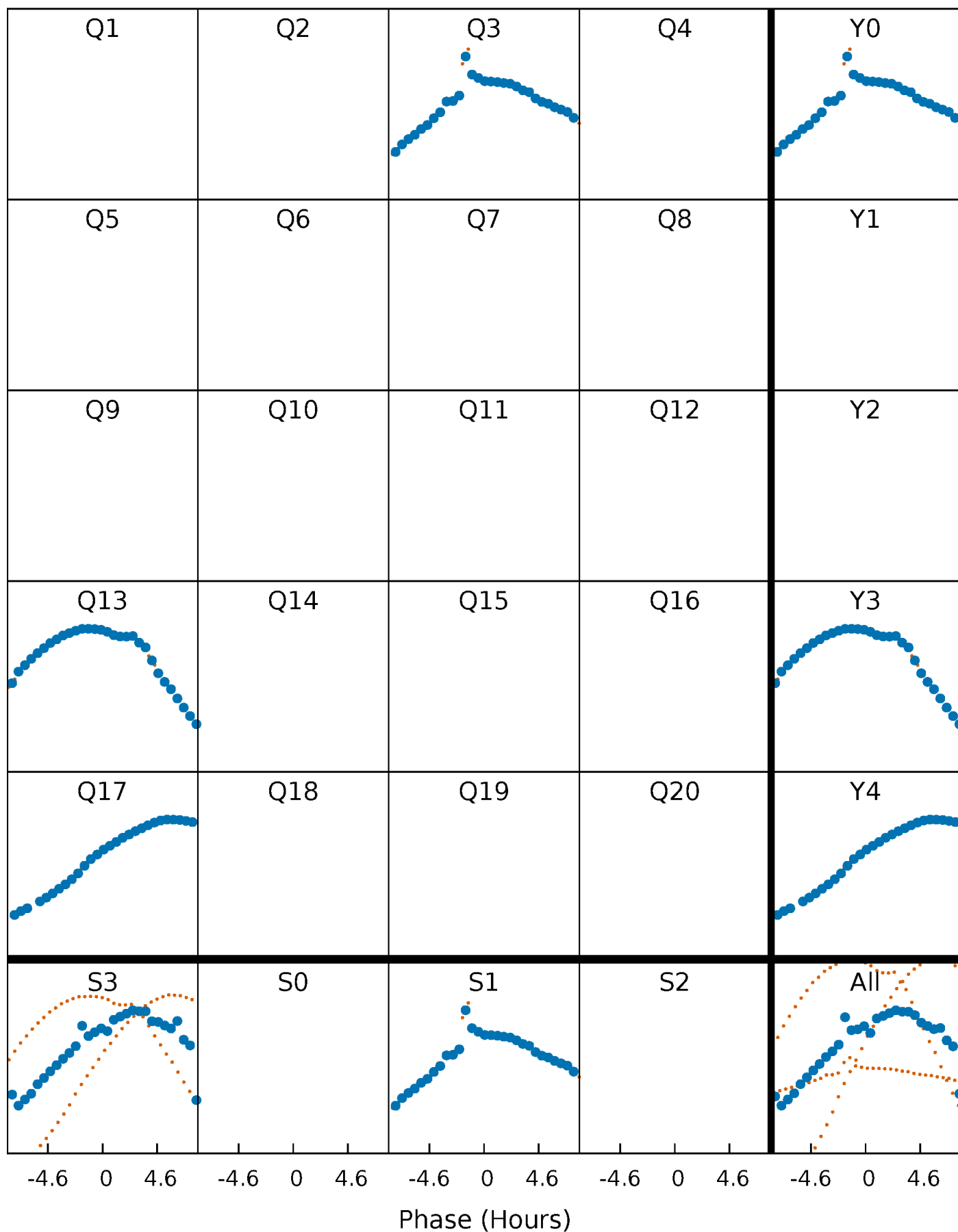


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



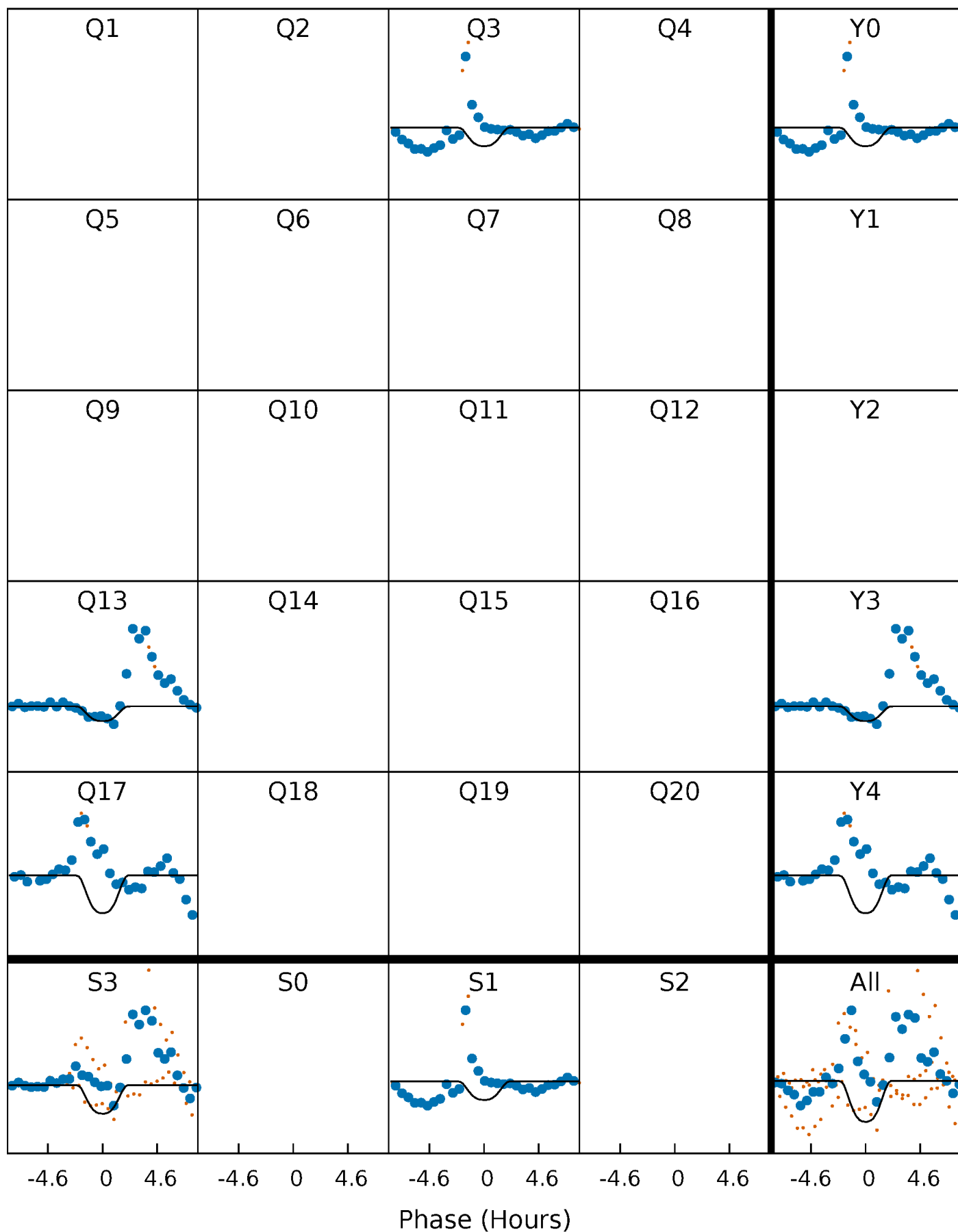
PDC Quarter-Phased Transit Curves

TCE 004926962-02 $P=317.057147$ Days $T_0=298.693610$ (BKJD)



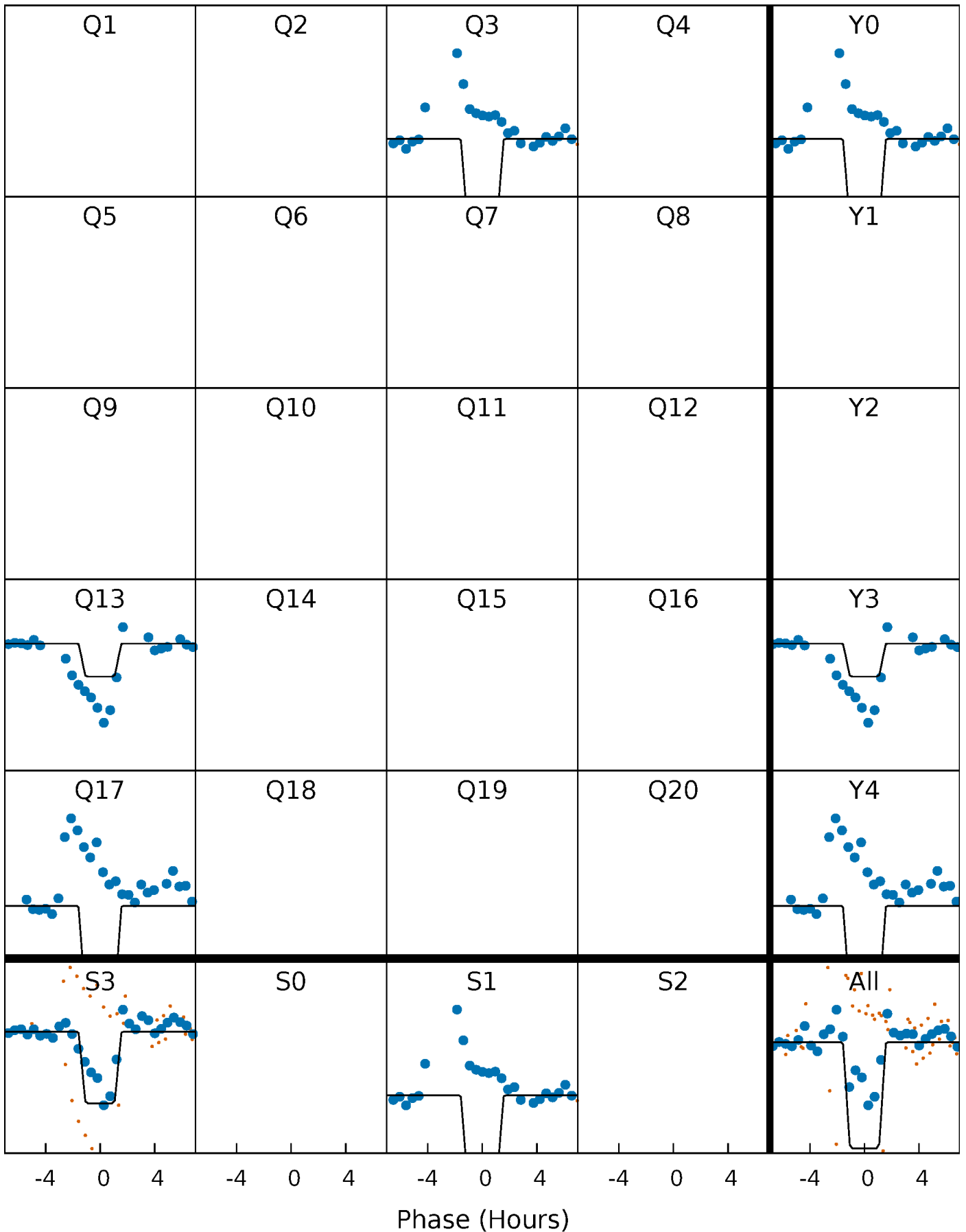
DV Quarter-Phased Transit Curves

TCE 004926962-02 $P=317.057147$ Days $T_0=298.693610$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

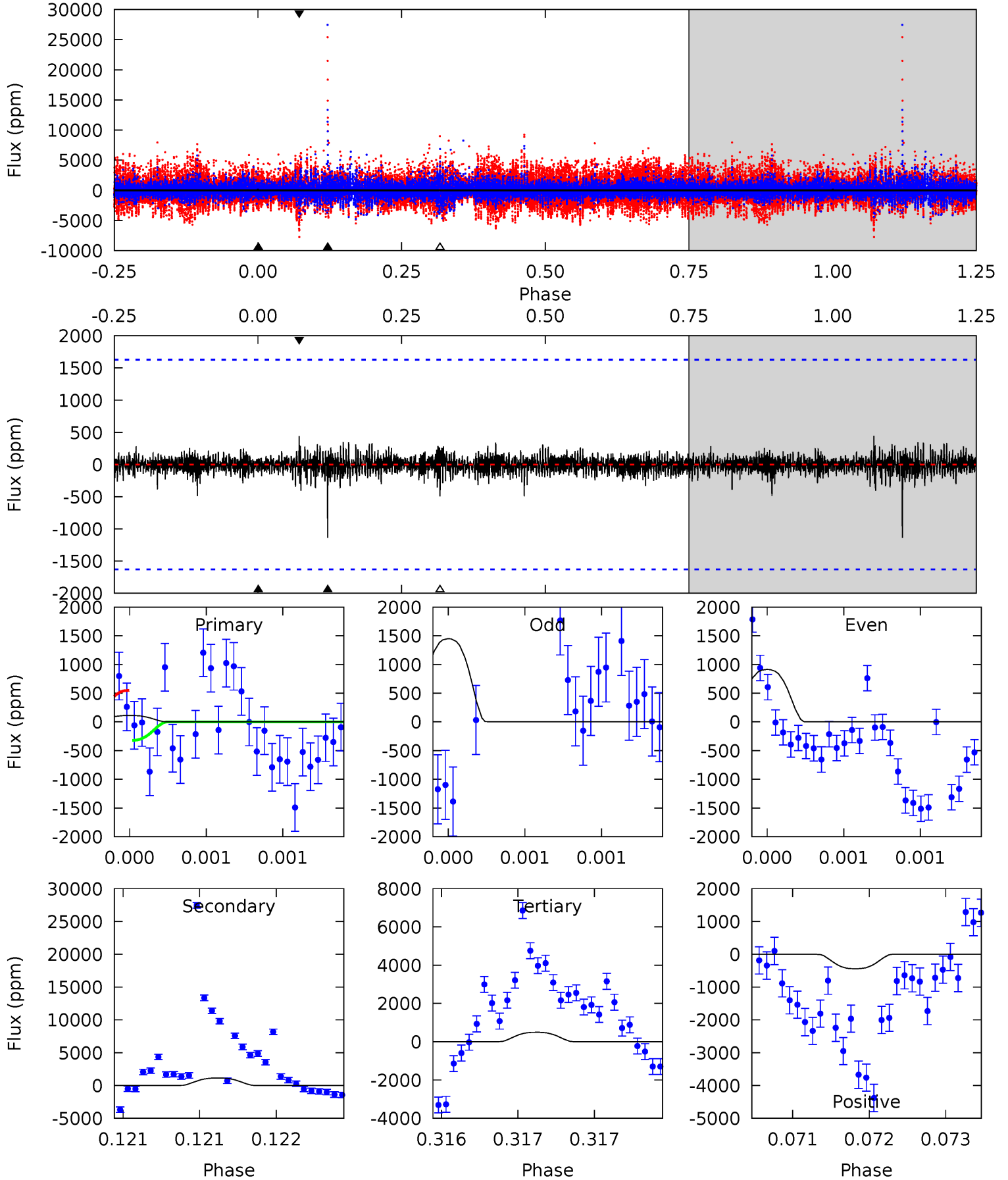
TCE 004926962-02 P=317.050735 Days $T_0=298.736239$ (BKJD)



DV Model-Shift Uniqueness Test

004926962-02, $P = 317.057147$ Days, $E = 298.693610$ Days

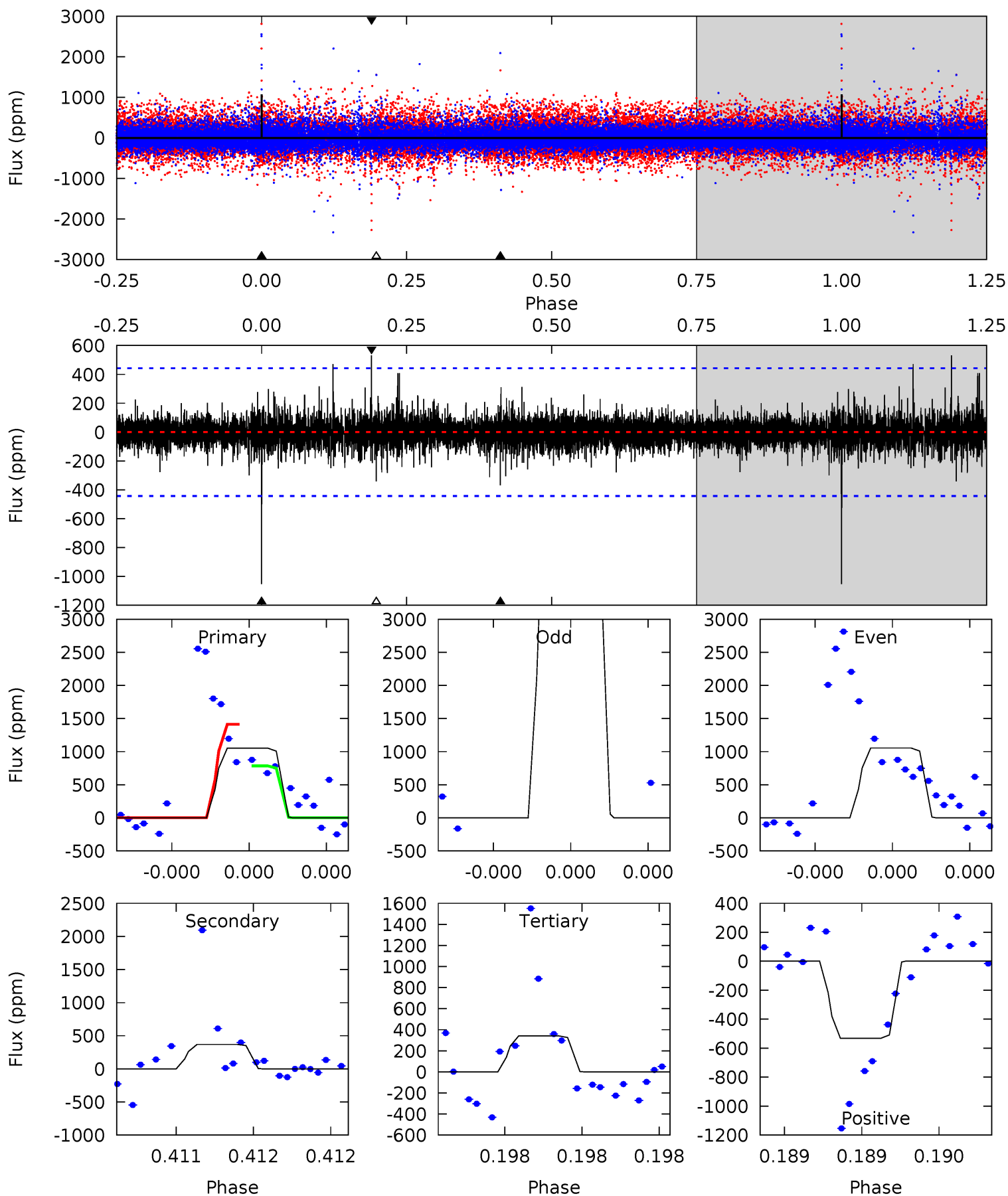
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.38	3.87	1.68	1.51	5.55	3.44	0.33	-1.30	-1.13	2.19	2.36	0.65	0.38	0.28	0.38



Alt Model-Shift Uniqueness Test

004926962-02, P = 317.050735 Days, E = 298.736239 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	4.66	4.32	6.73	5.61	3.54	0.81	9.01	6.60	0.35	-2.07	18.2	-1.13	0.34	0



Stellar Parameters For KIC 004926962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5035^{+119}_{-163}	$3.581^{+1.042}_{-0.347}$	$-0.400^{+0.250}_{-0.350}$	$2.473^{+1.455}_{-1.940}$	$0.849^{+0.242}_{-0.198}$	$0.079^{+3.474}_{-0.060}$
	+2%/-3%	+29%/-10%	+62%/-87%	+59%/-78%	+29%/-23%	+4395%/-76%
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 004926962-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1137 ± 294	$12.64^{+6.06}_{-4.97}$	520^{+84}_{-109}	4328^{+370}_{-347}	2903^{+5072}_{-1635}
Alt.	-368 ± 79	$13.95^{+6.41}_{-6.10}$	515^{+89}_{-123}	3450^{+248}_{-204}	783^{+1713}_{-422}

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

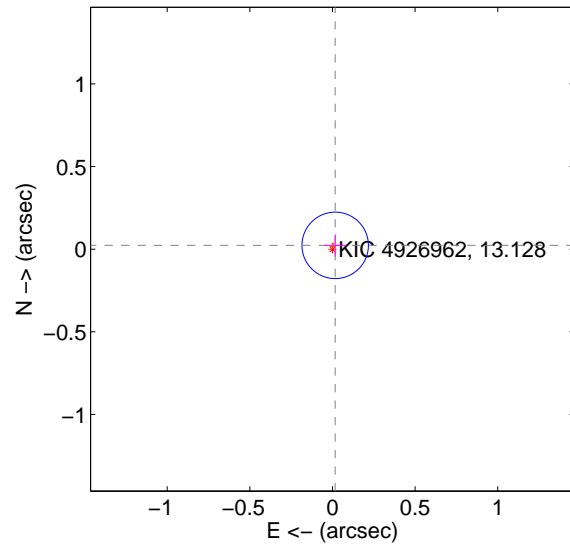
Supplemental centroid analysis for 004926962-02. Kepler magnitude: 13.13. Transit SNR 4.70

There are 0 quarters with good PRF difference image offsets

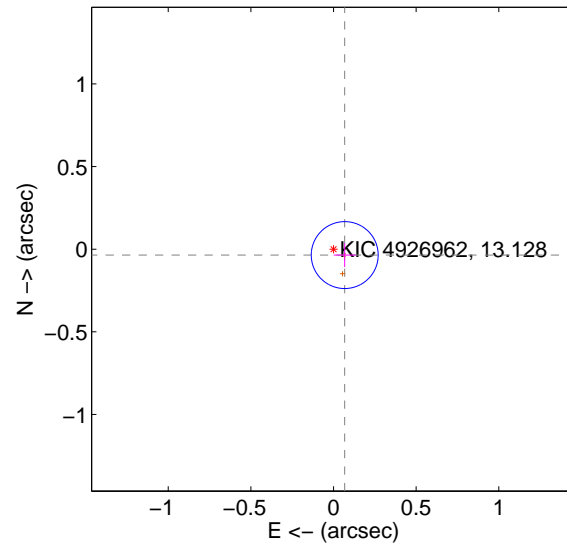
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.028 ± 0.067	0.42	-0.016 ± 0.067	0.023 ± 0.067
PRF-fit source offset from KIC position	0.077 ± 0.067	1.14	-0.068 ± 0.067	-0.036 ± 0.072
photometric centroid source offset	0.09 ± 0.38	0.25	-0.07 ± 0.43	0.06 ± 0.29

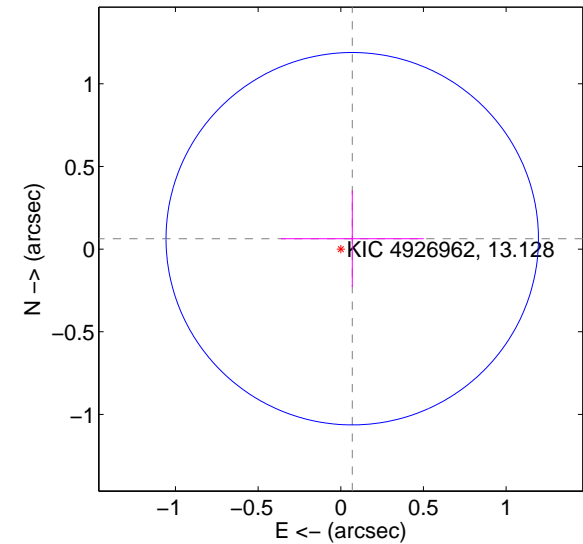
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

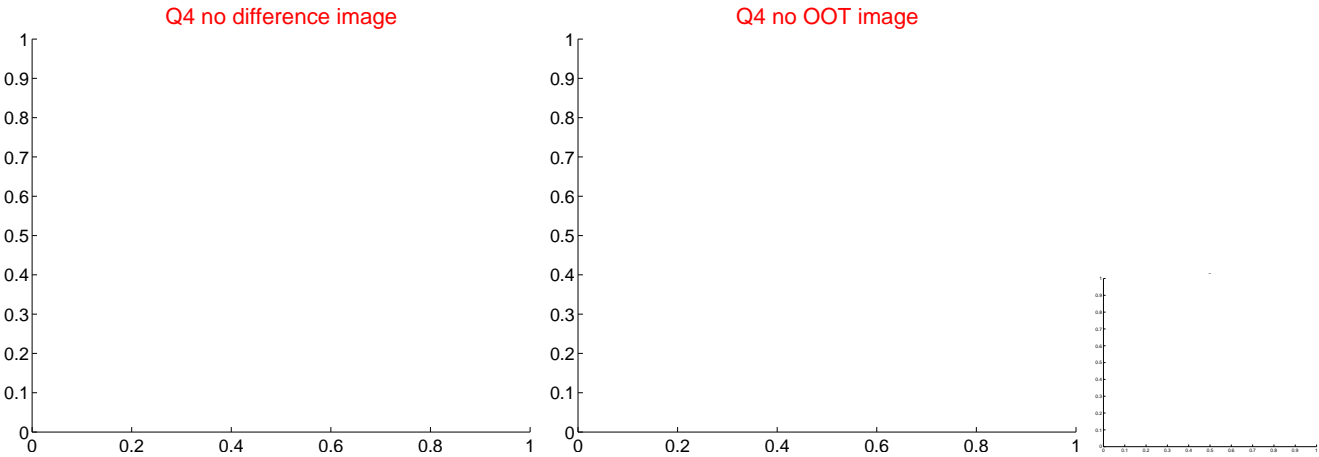
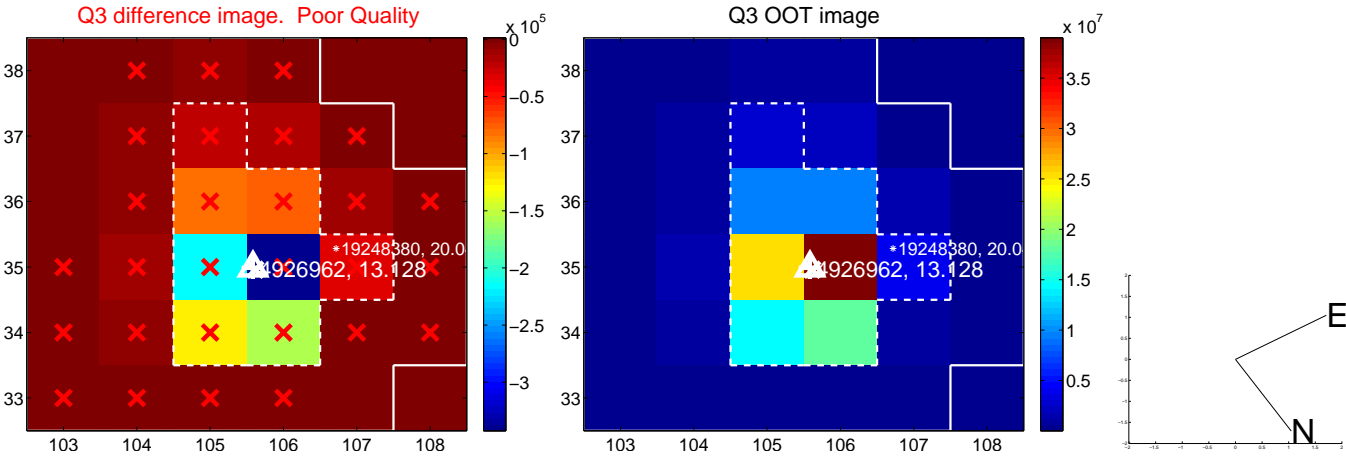
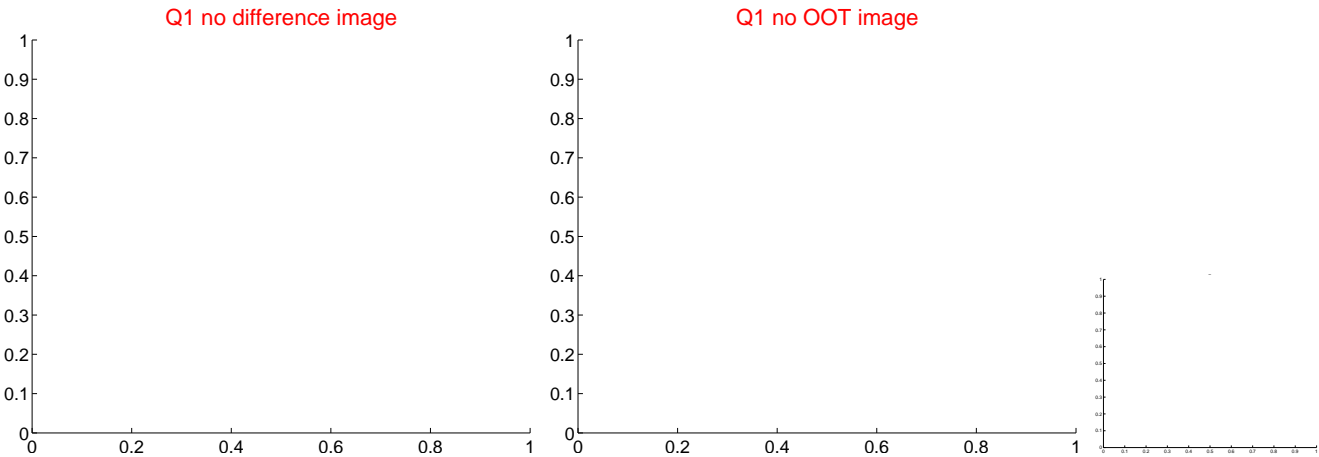


offset from photometric centroids



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.



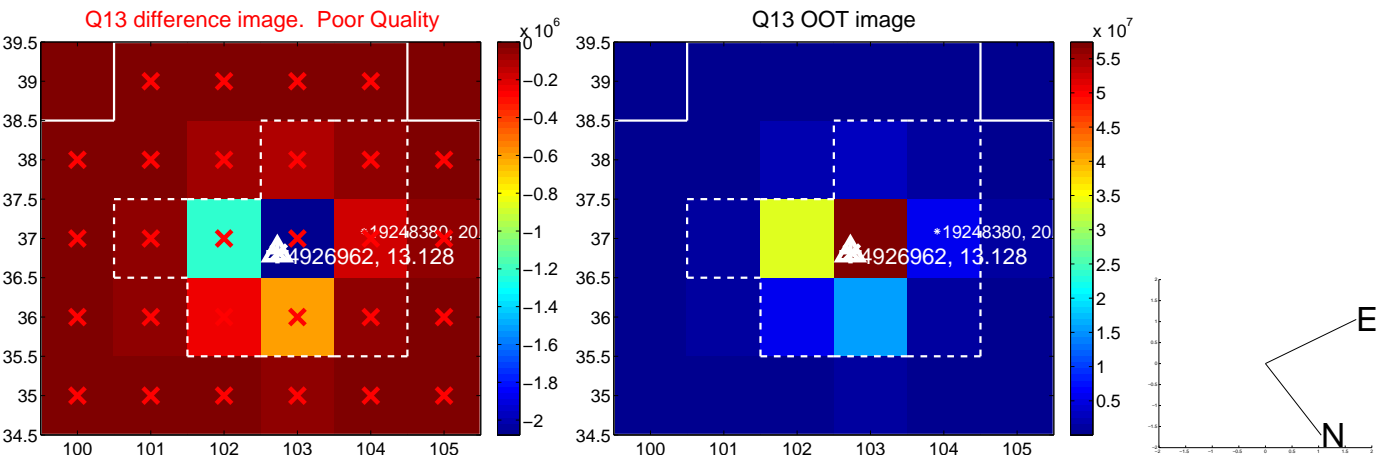
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



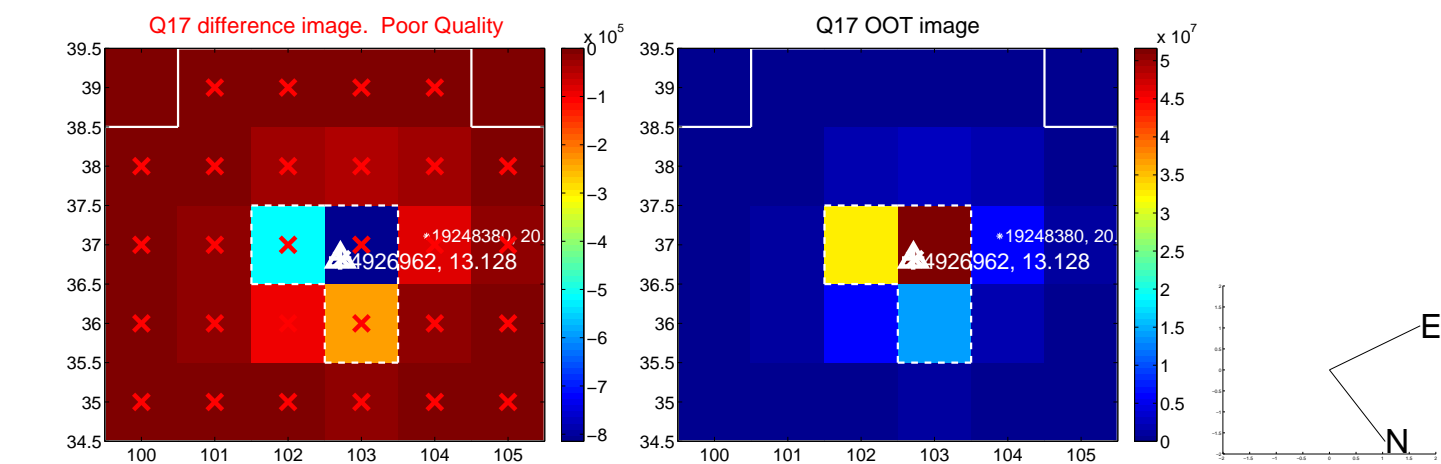
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



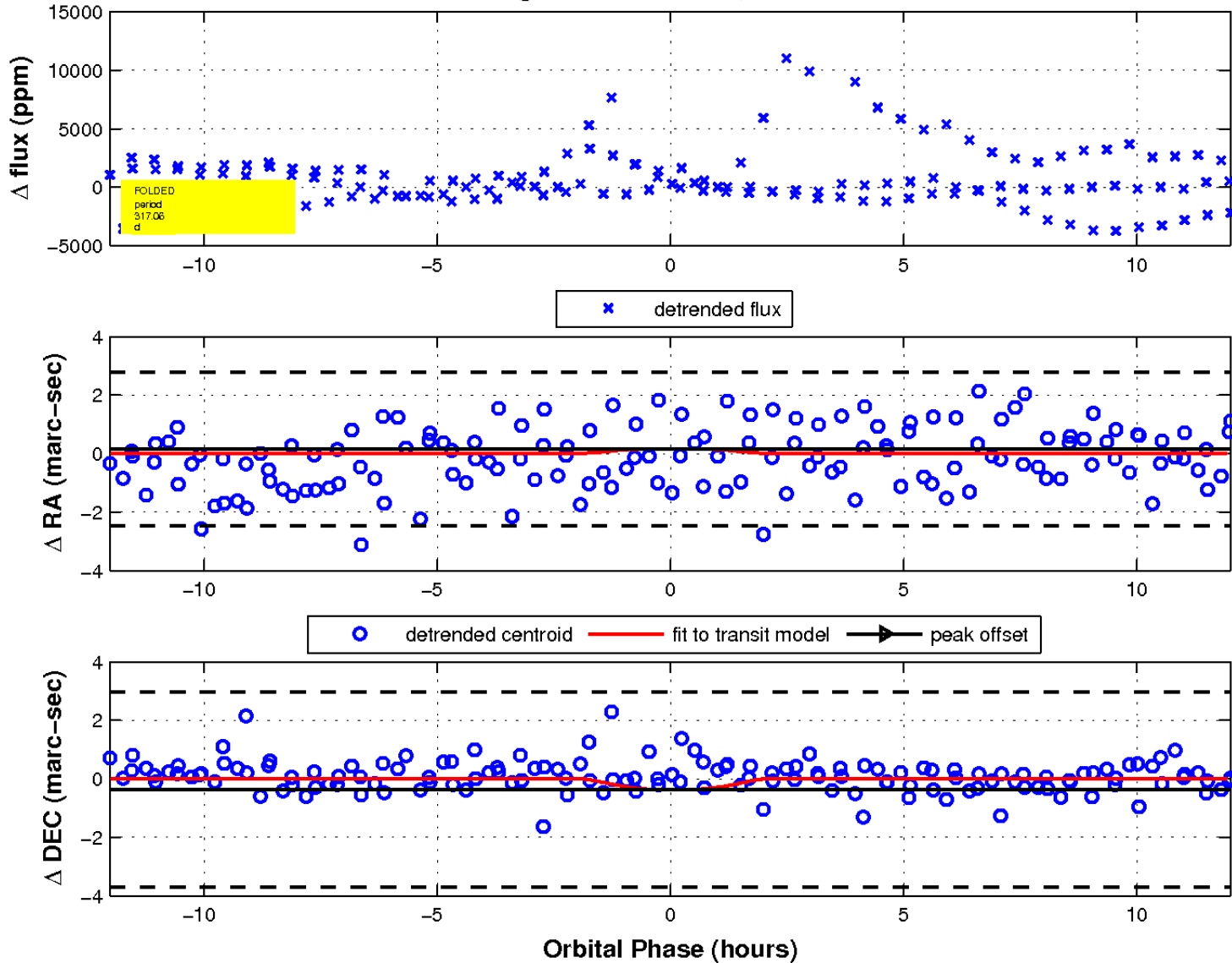
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

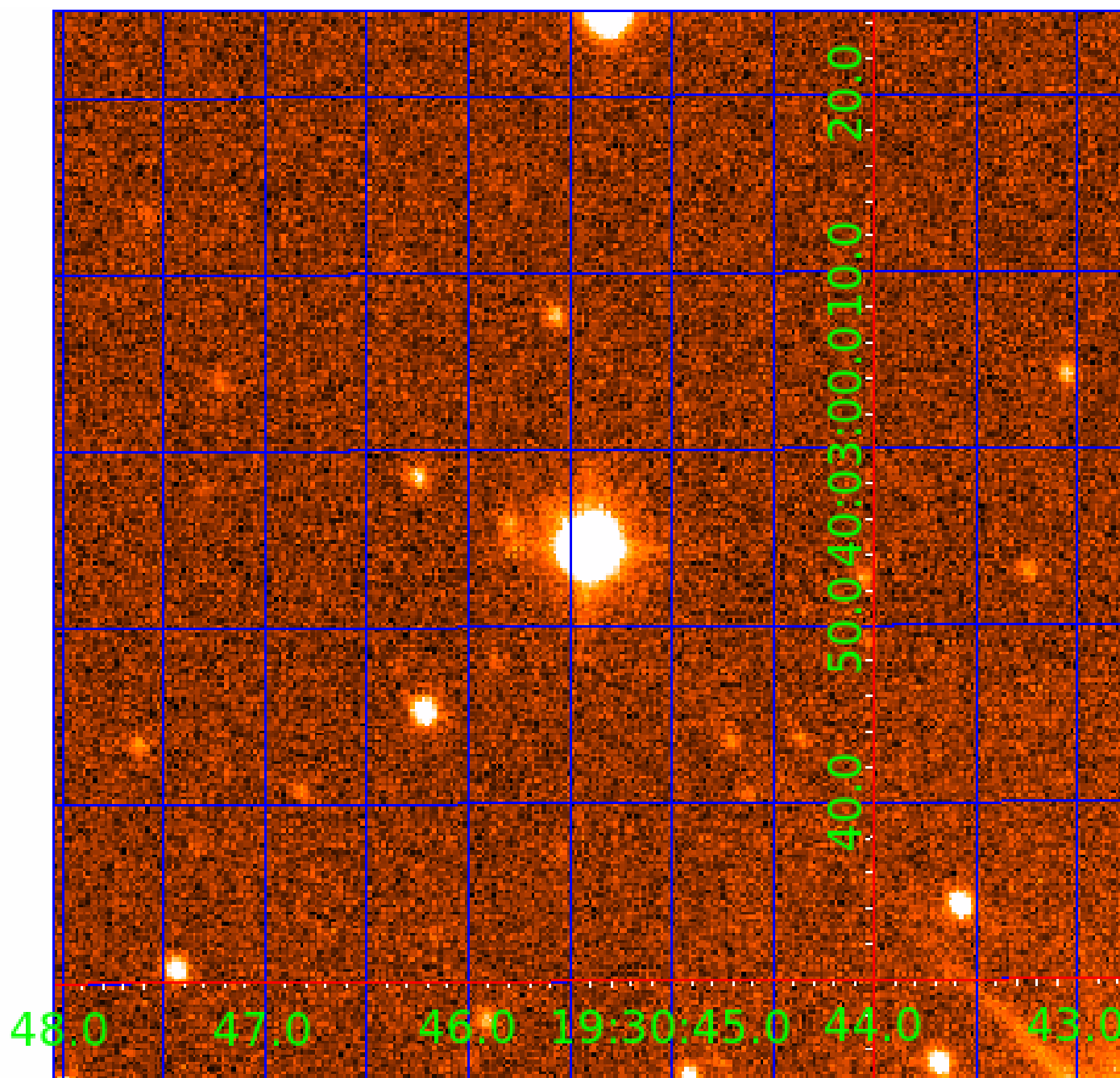


fluxWeightedCentroids, Planet 2 of 4



UKIRT Image

Declination



KIC 004926962

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})
004926962-01	OBS	No	329.504777	433.416843	512.6	10.500	18.2	-1.0	2.47	5035	5.46	4.50
004926962-02	OBS	No	317.057147	298.693611	1686.7	4.010	22.8	4.7	2.47	5035	13.24	4.74
004926962-03	OBS	No	458.387009	217.461504	2517.8	5.673	15.0	6.0	2.47	5035	12.18	2.90
004926962-04	OBS	No	334.836462	450.418265	1911.8	18.092	13.3	3.6	2.47	5035	12.21	4.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004926962-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS
004926962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

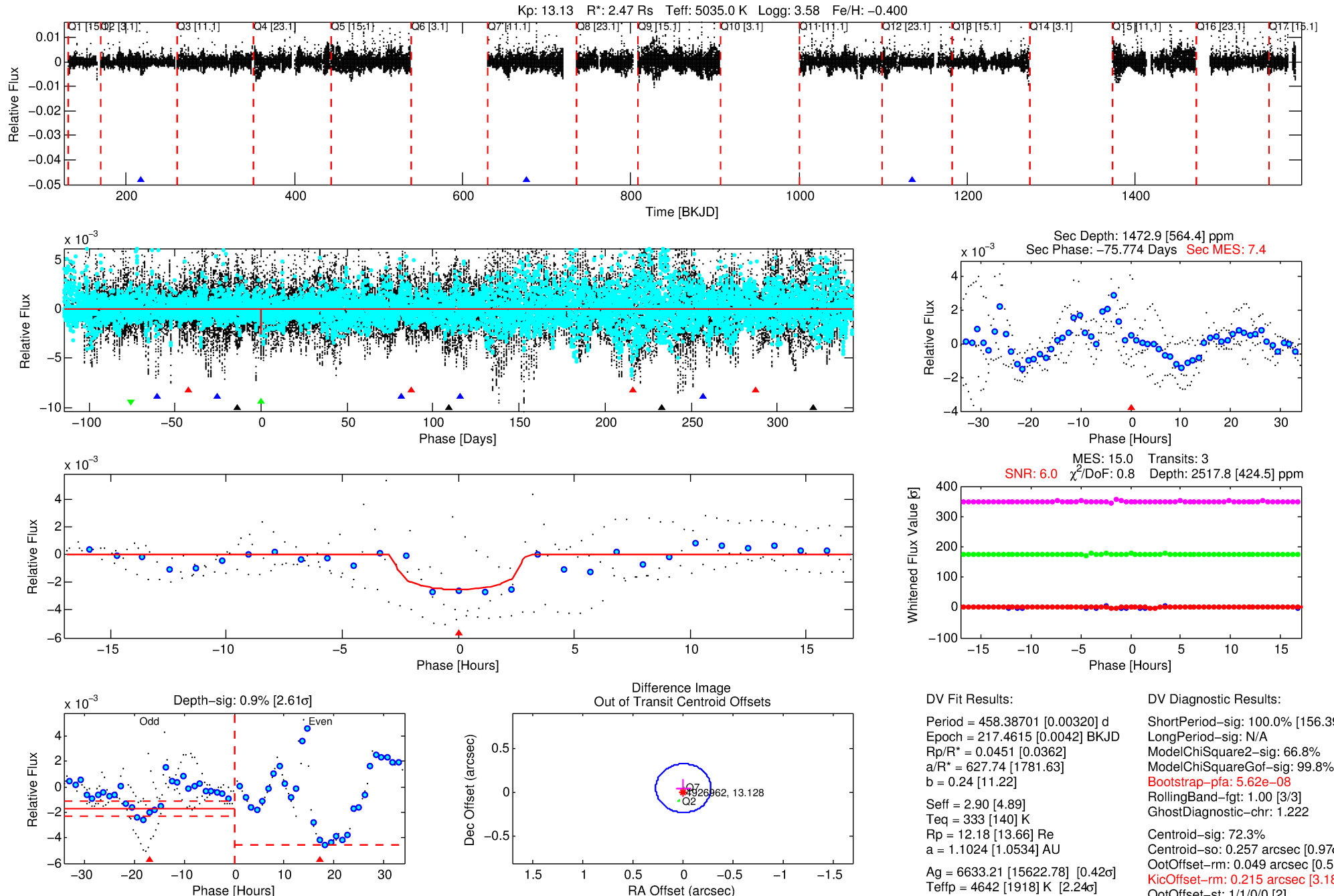
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004926962-03

No Significant Match Found

DV One-Page Summary

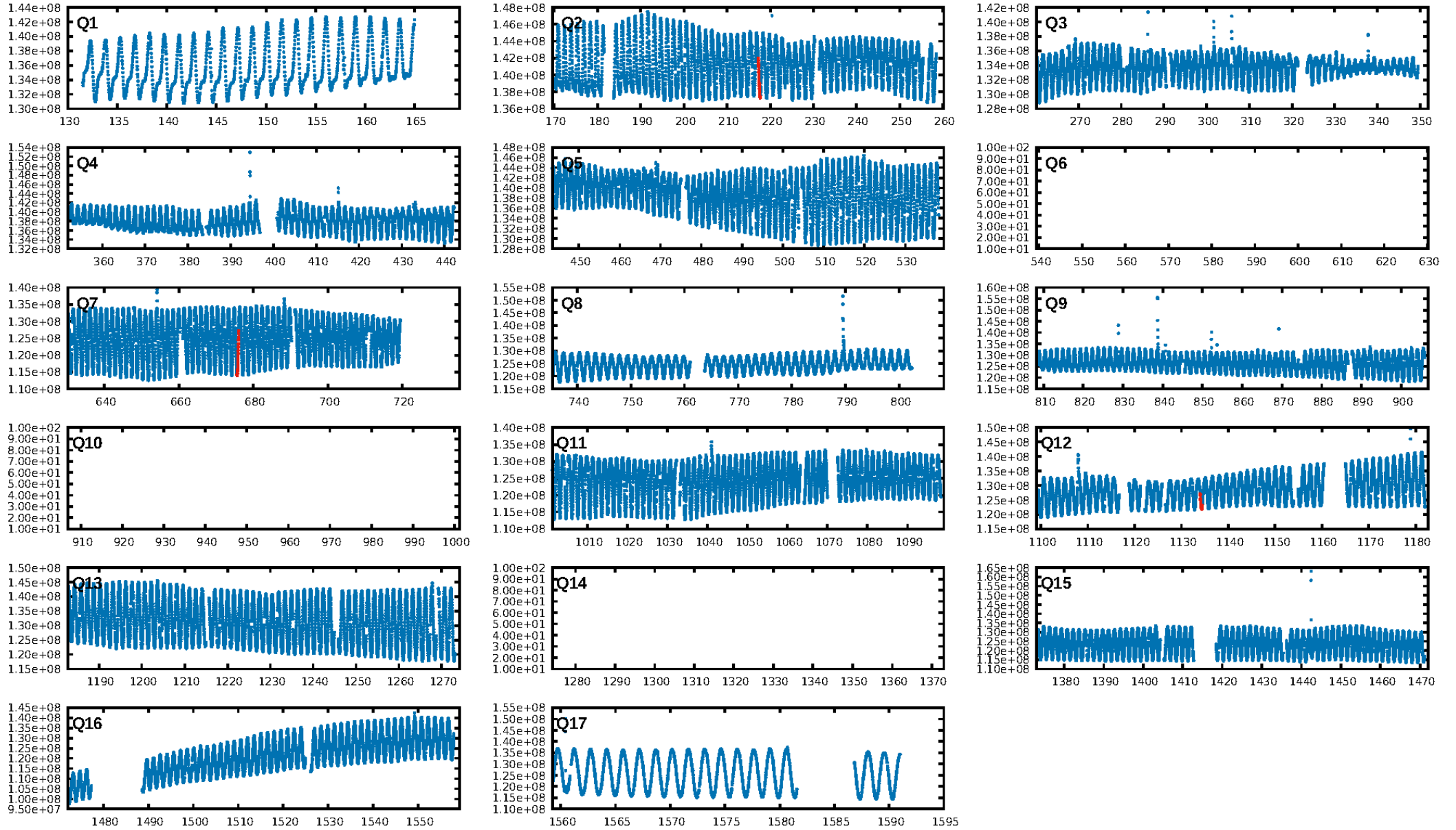
KIC: 4926962 Candidate: 3 of 4 Period: 458.387 d



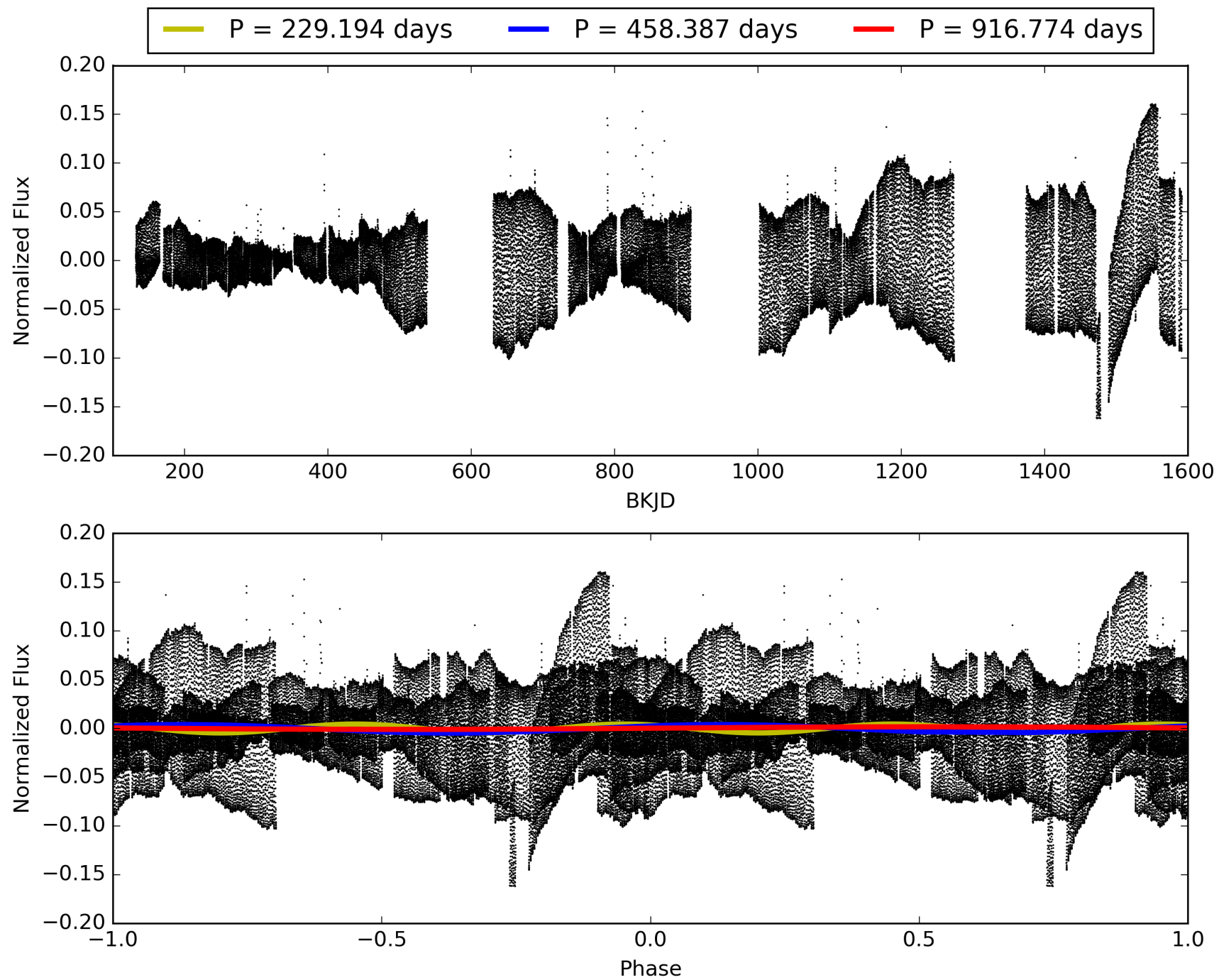
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 11:35:37 Z

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

TCE 004926962-03, PDC Light Curves

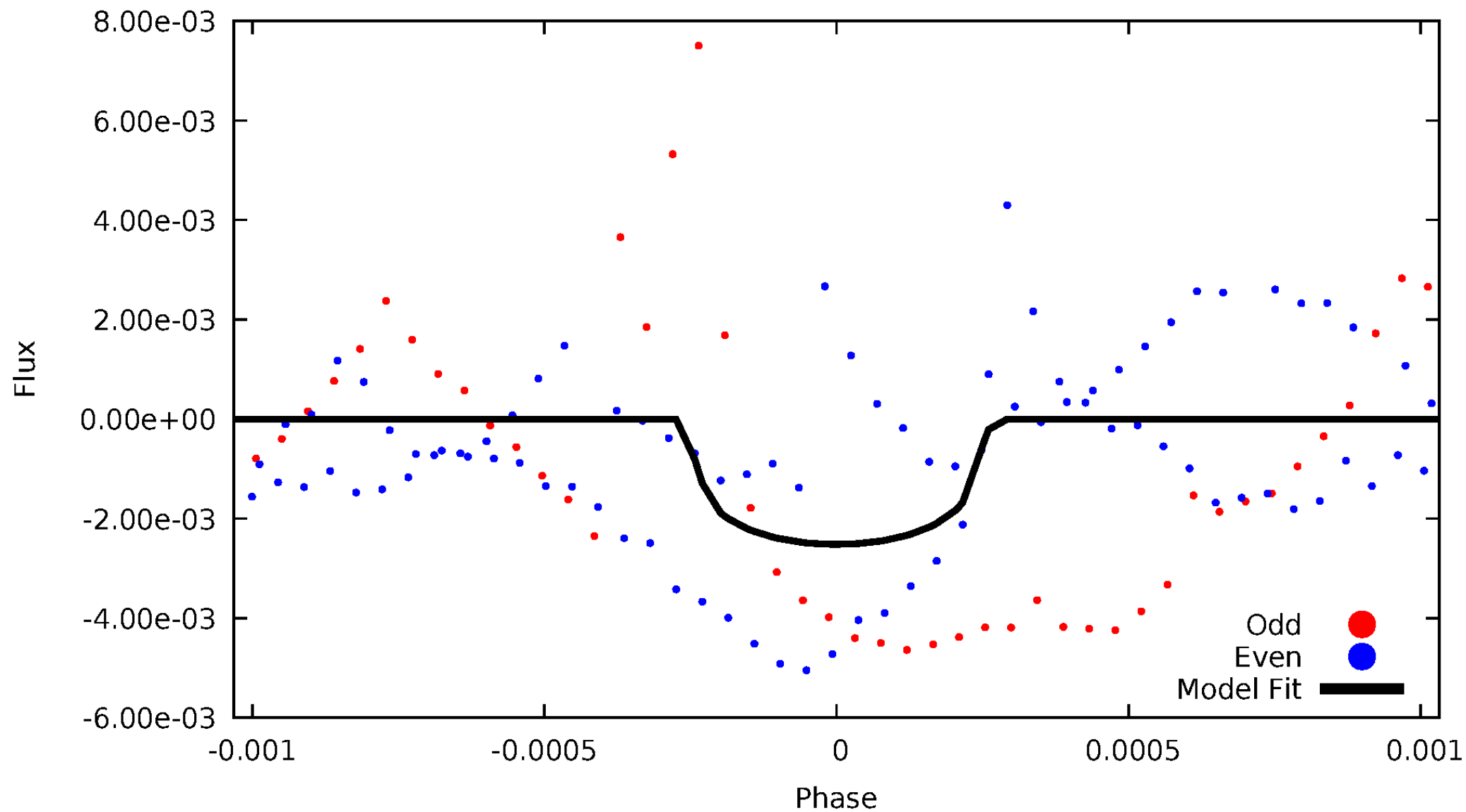


TCE 004926962-03



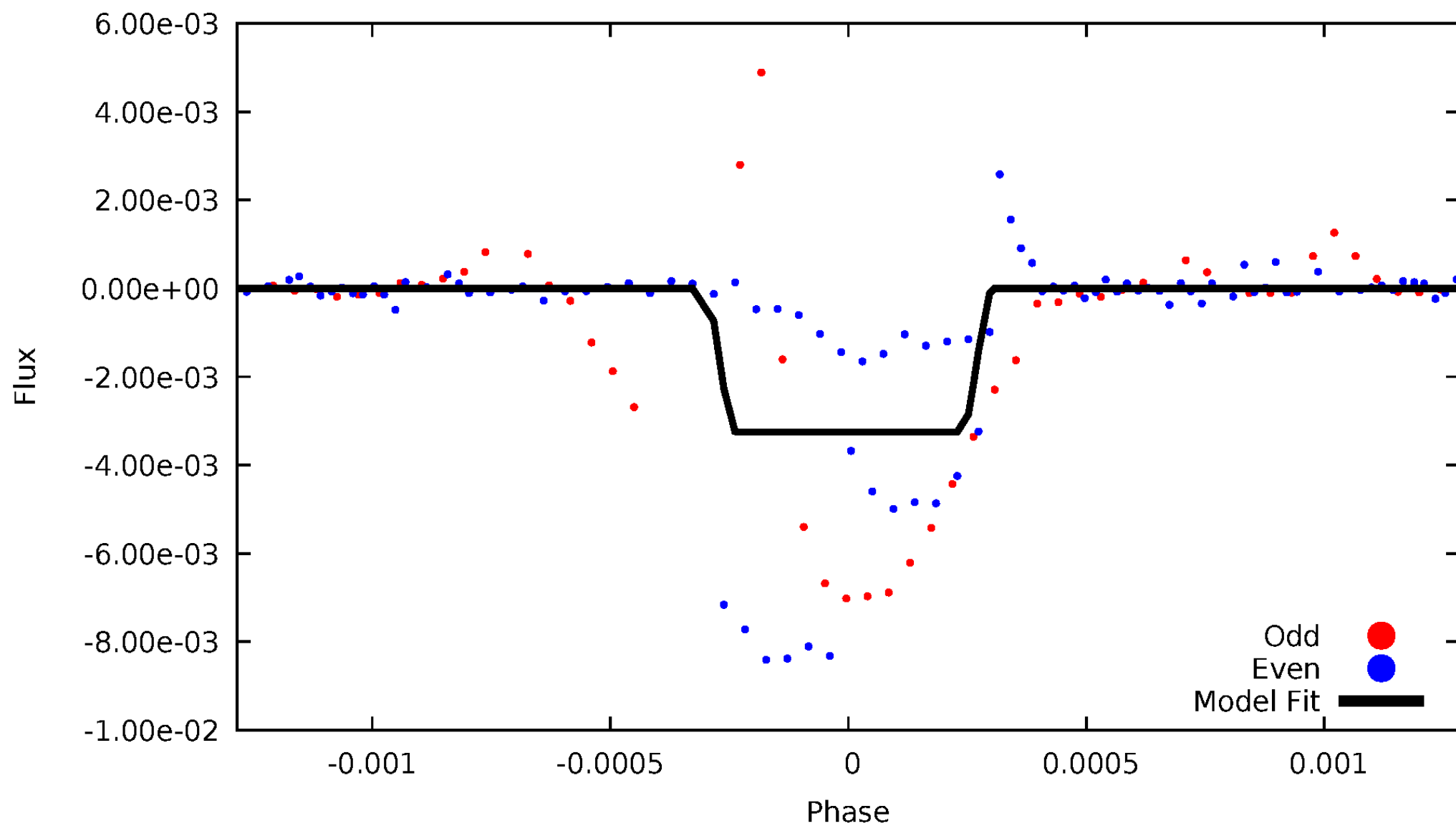
DV Odd/Even

TCE 004926962-03



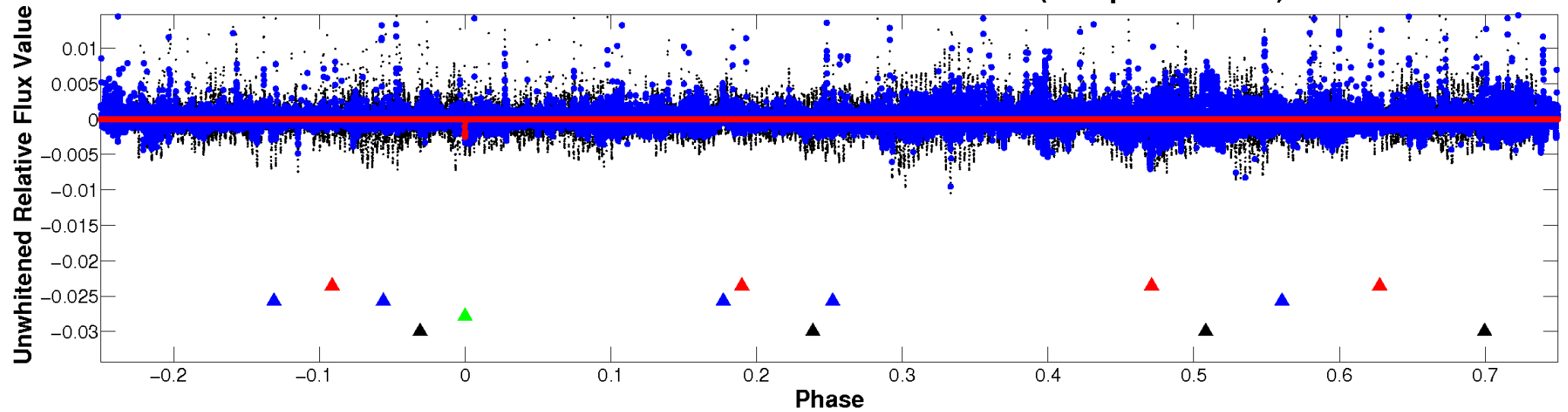
ALT Odd/Even

TCE 004926962-03

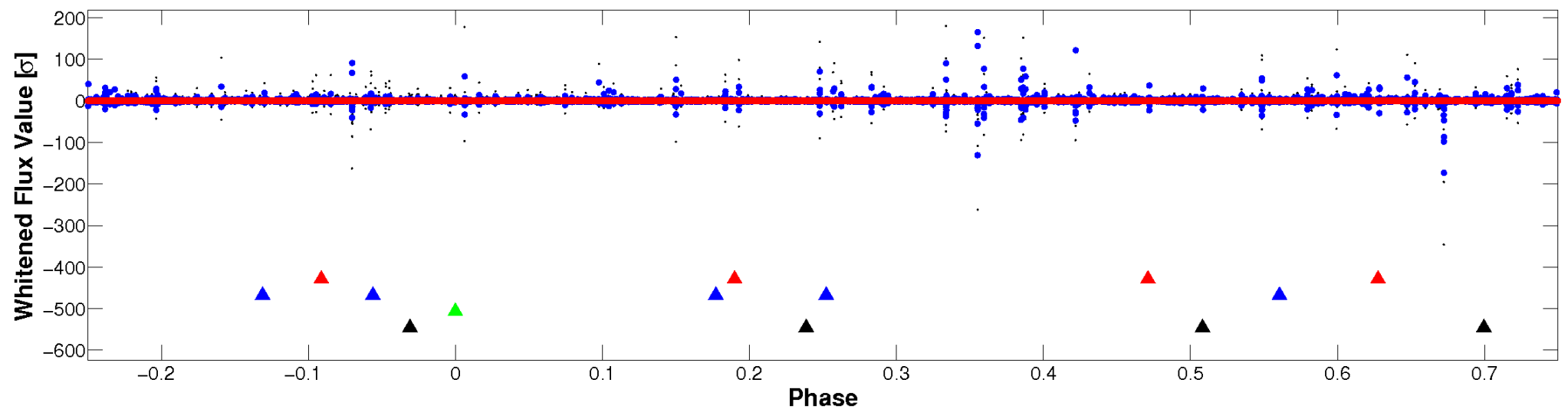


Non-Whitened Vs. Whitened Light Curve

Planet 3 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

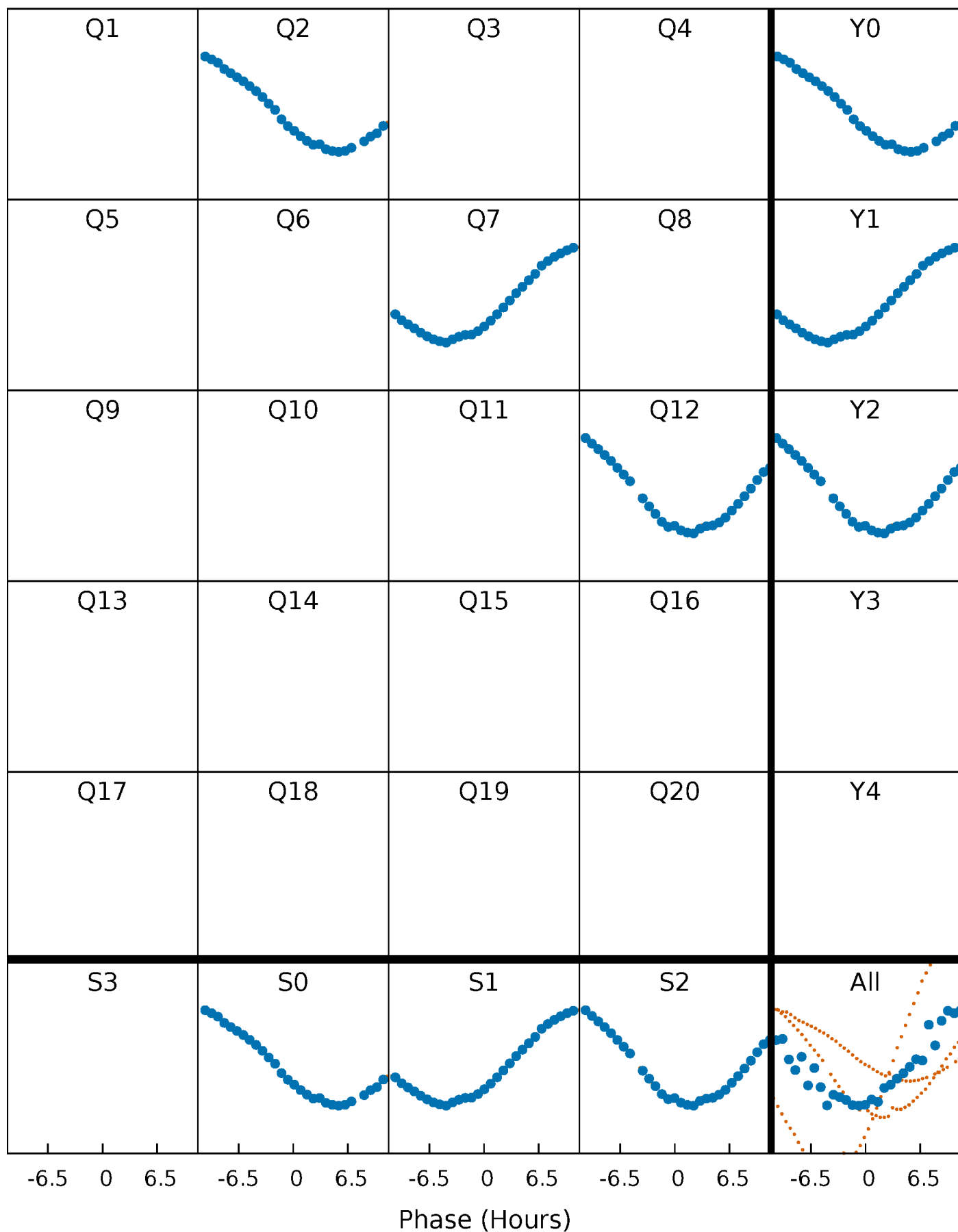


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



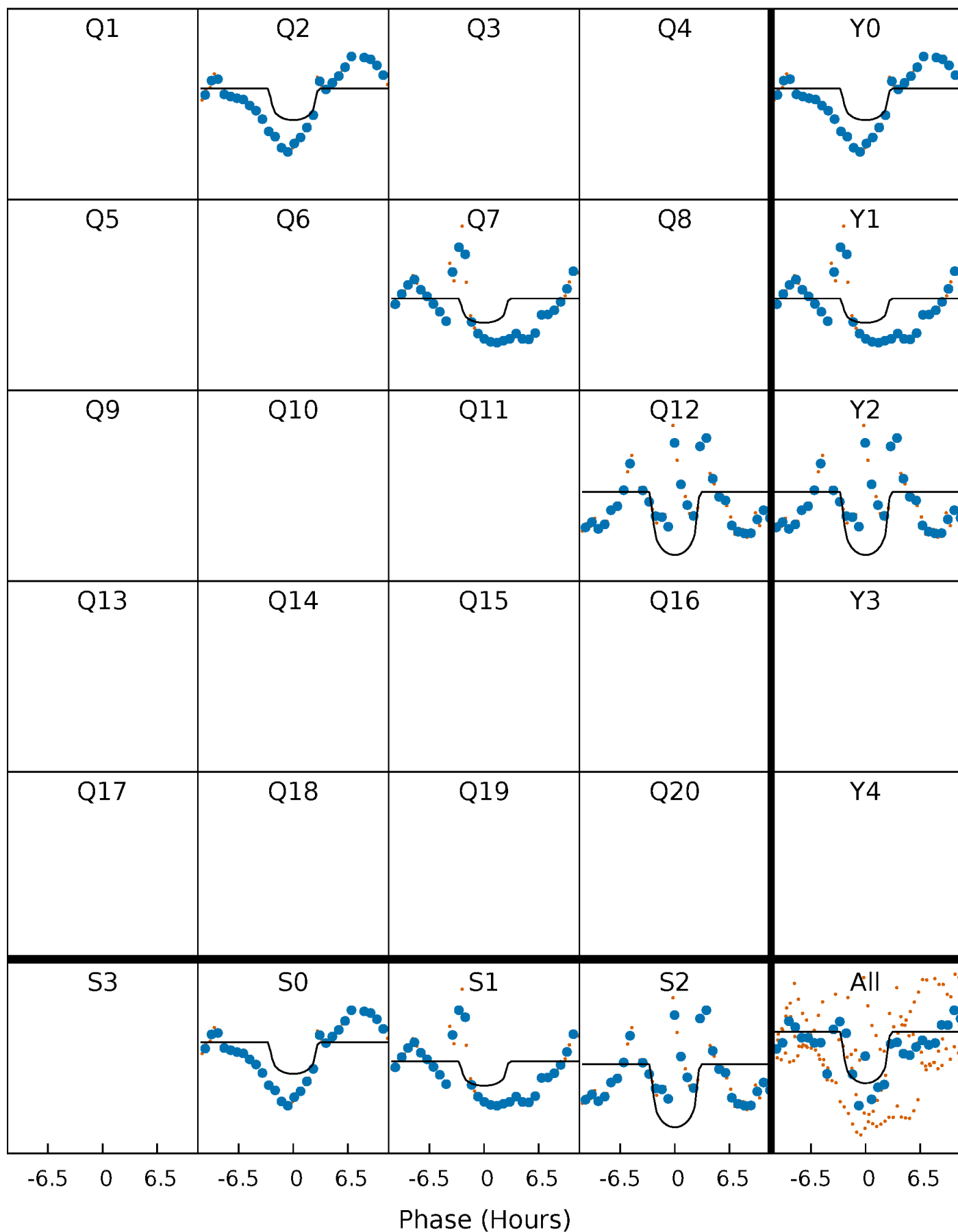
PDC Quarter-Phased Transit Curves

TCE 004926962-03 P=458.387009 Days $T_0=217.461503$ (BKJD)



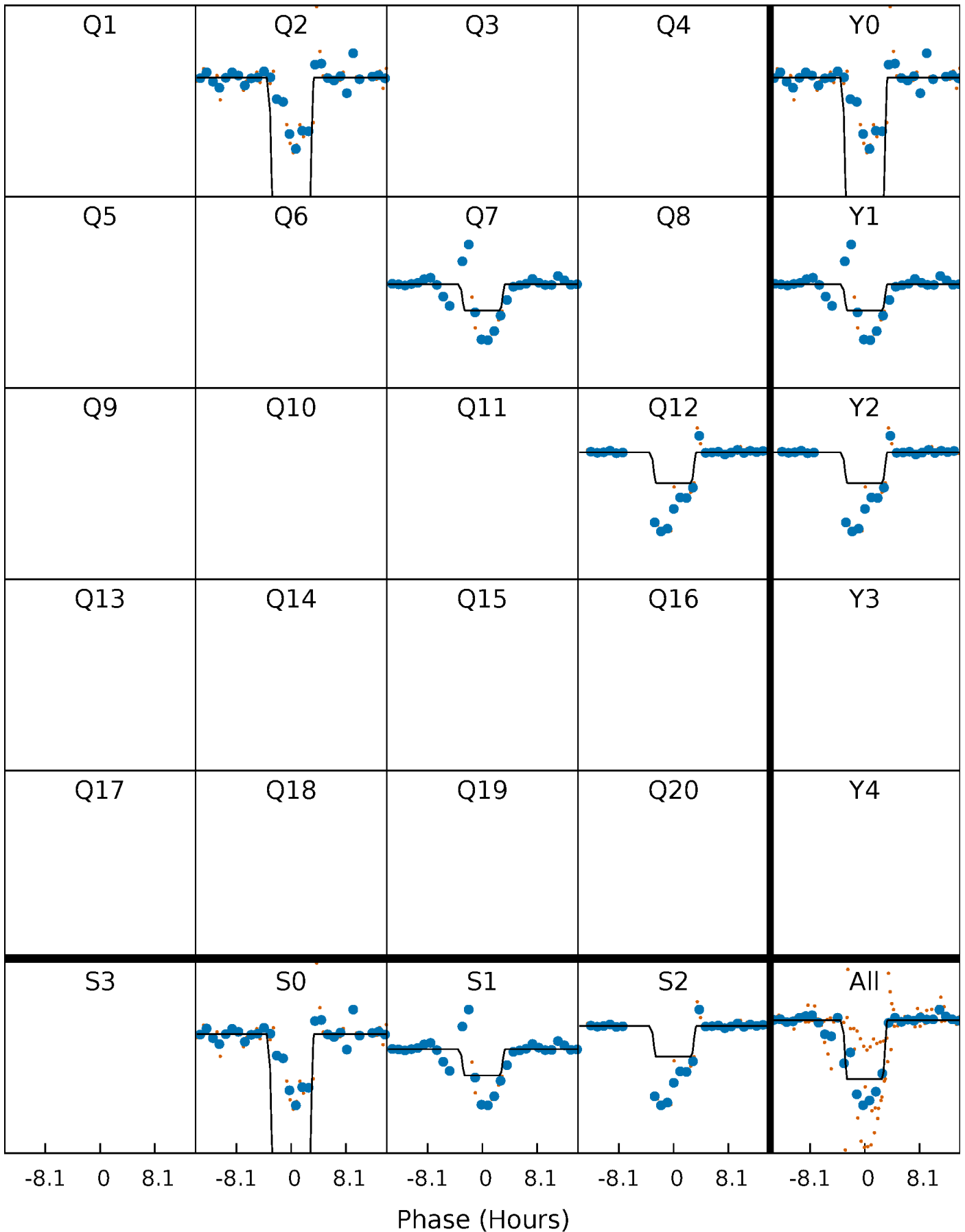
DV Quarter-Phased Transit Curves

TCE 004926962-03 $P=458.387009$ Days $T_0=217.461503$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

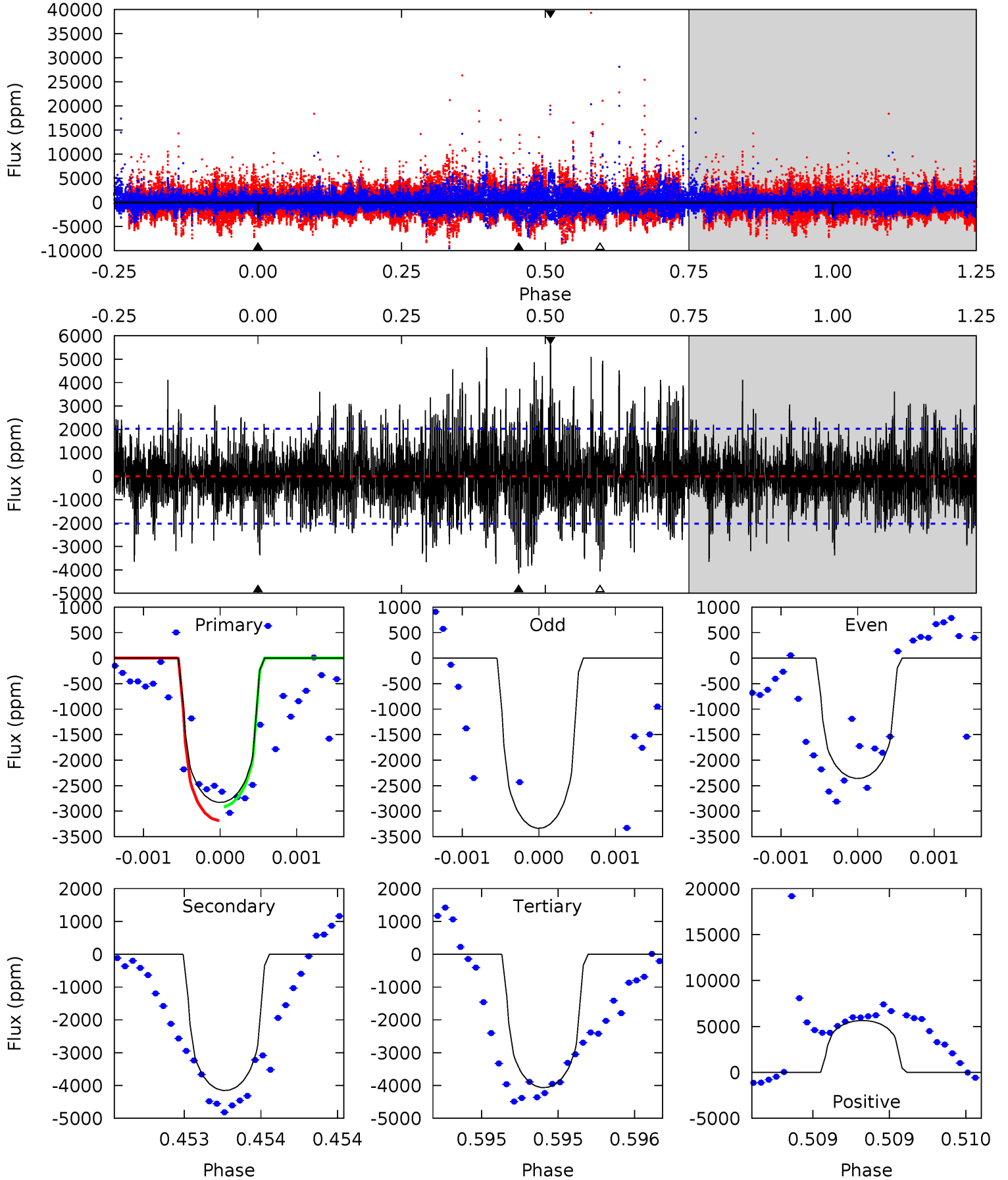
TCE 004926962-03 P=458.399674 Days $T_0=217.424464$ (BKJD)



DV Model-Shift Uniqueness Test

004926962-03, P = 458.387009 Days, E = 217.461503 Days

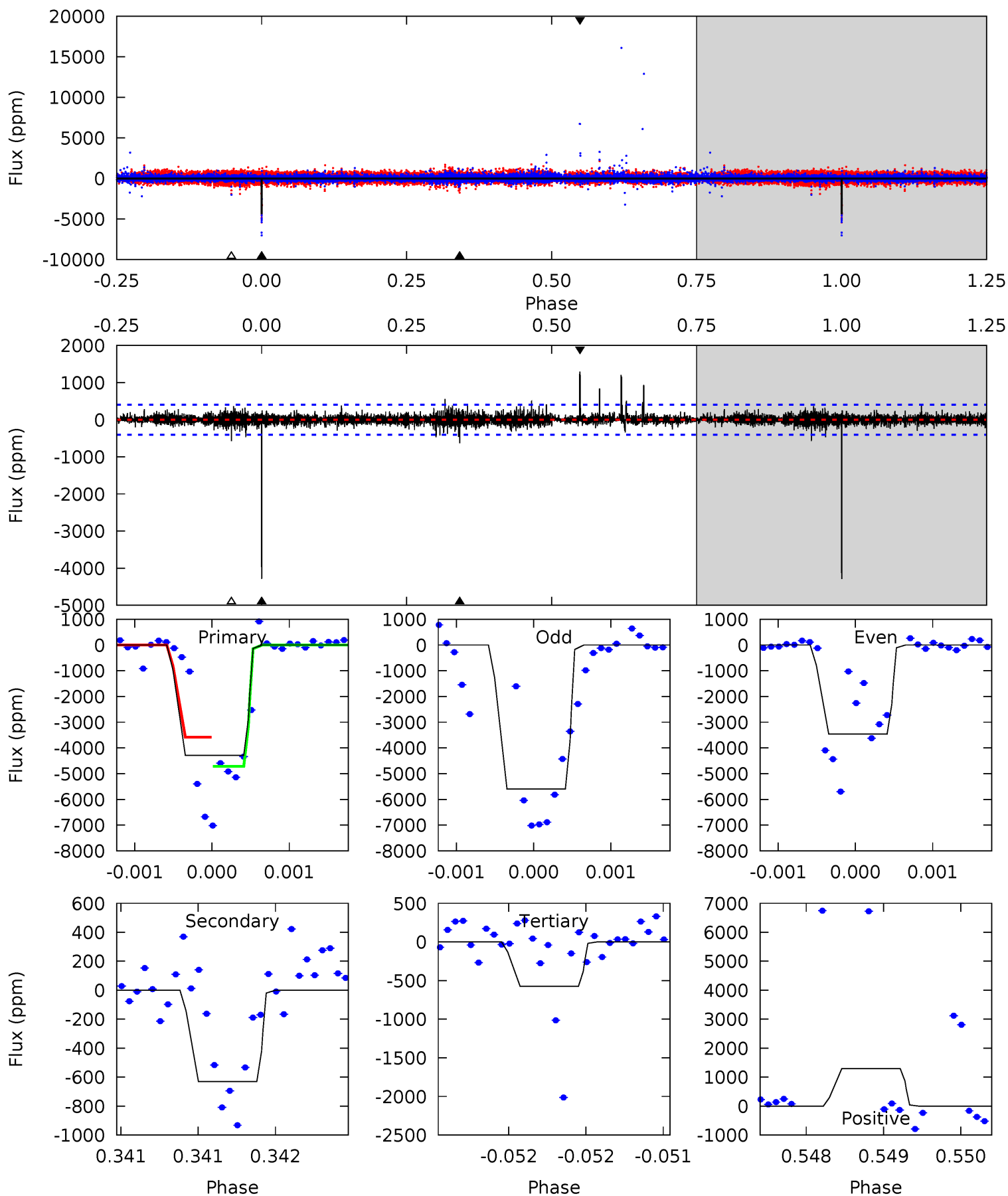
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.76	11.4	11.2	15.5	5.57	3.48	3.25	-3.40	-7.74	0.24	-4.10	0.86	0.80	0.58	0.36



Alt Model-Shift Uniqueness Test

004926962-03, P = 458.399674 Days, E = 217.424464 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
58.6	8.62	7.84	17.7	5.55	3.45	1.21	50.8	40.9	0.77	-9.10	14.7	0.96	0.23	7.67



Stellar Parameters For KIC 004926962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5035^{+119}_{-163}	$3.581^{+1.042}_{-0.347}$	$-0.400^{+0.250}_{-0.350}$	$2.473^{+1.455}_{-1.940}$	$0.849^{+0.242}_{-0.198}$	$0.079^{+3.474}_{-0.060}$
	+2%/-3%	+29%/-10%	+62%/-87%	+59%/-78%	+29%/-23%	+4395%/-76%
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 004926962-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-4152 ± 364	$12.35^{+10.48}_{-7.76}$	459^{+70}_{-95}	5547^{+3216}_{-1040}	$18170^{+121413}_{-13079}$
Alt.	-630 ± 73	$14.72^{+12.31}_{-9.19}$	456^{+75}_{-95}	3627^{+1156}_{-491}	1928^{+11651}_{-1347}

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

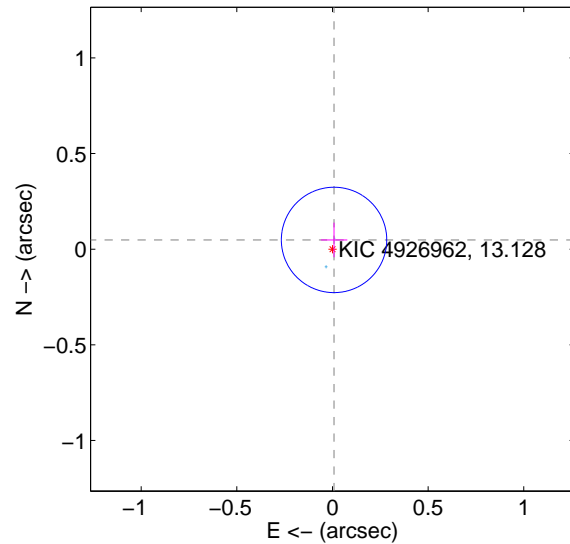
Supplemental centroid analysis for 004926962-03. Kepler magnitude: 13.13. Transit SNR 6.02

There are 2 quarters with good PRF difference image offsets

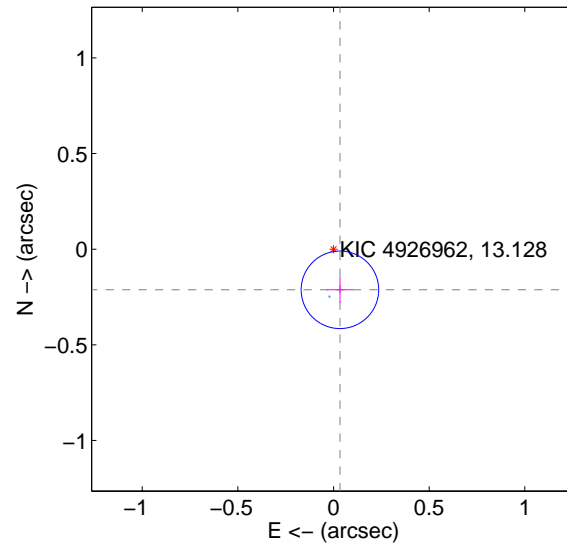
The direct PRF centroid is offset from the target star catalog position by about 0.27 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.049 ± 0.092	0.53	-0.008 ± 0.069	0.048 ± 0.090
PRF-fit source offset from KIC position	0.215 ± 0.068	3.18	-0.034 ± 0.069	-0.212 ± 0.068
photometric centroid source offset	0.26 ± 0.27	0.97	-0.03 ± 0.23	-0.26 ± 0.27

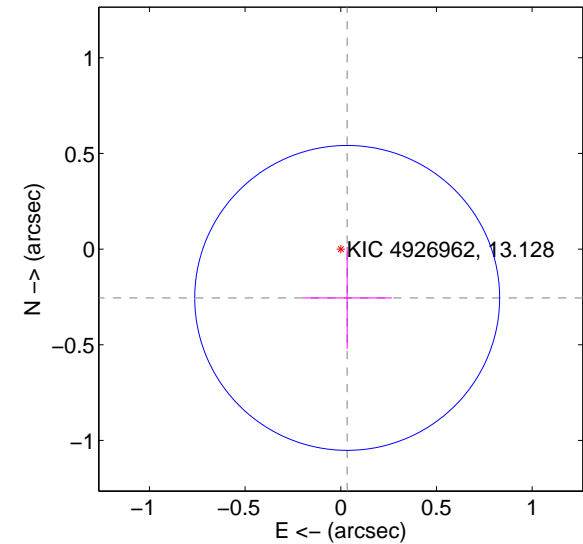
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

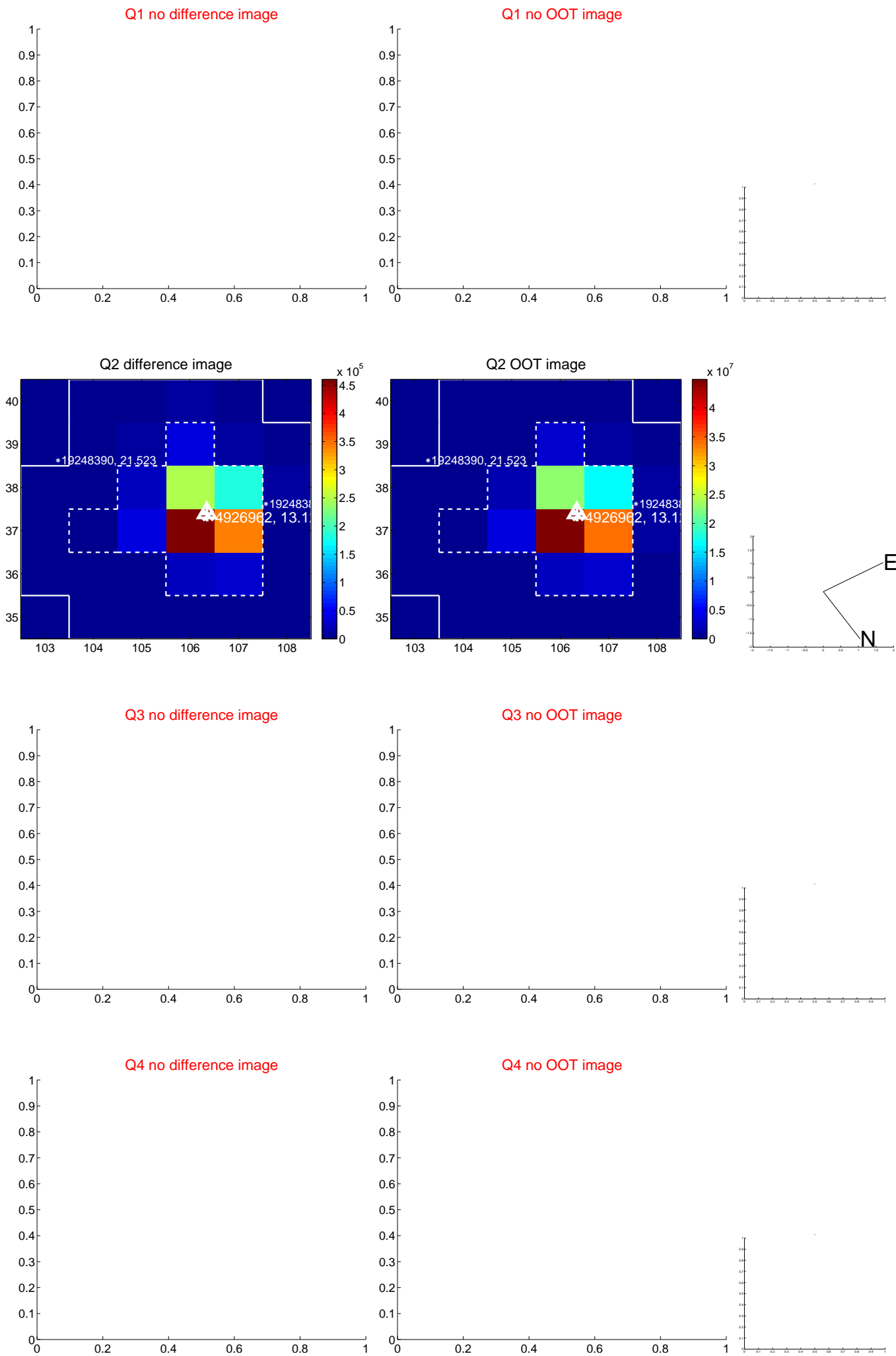


offset from photometric centroids

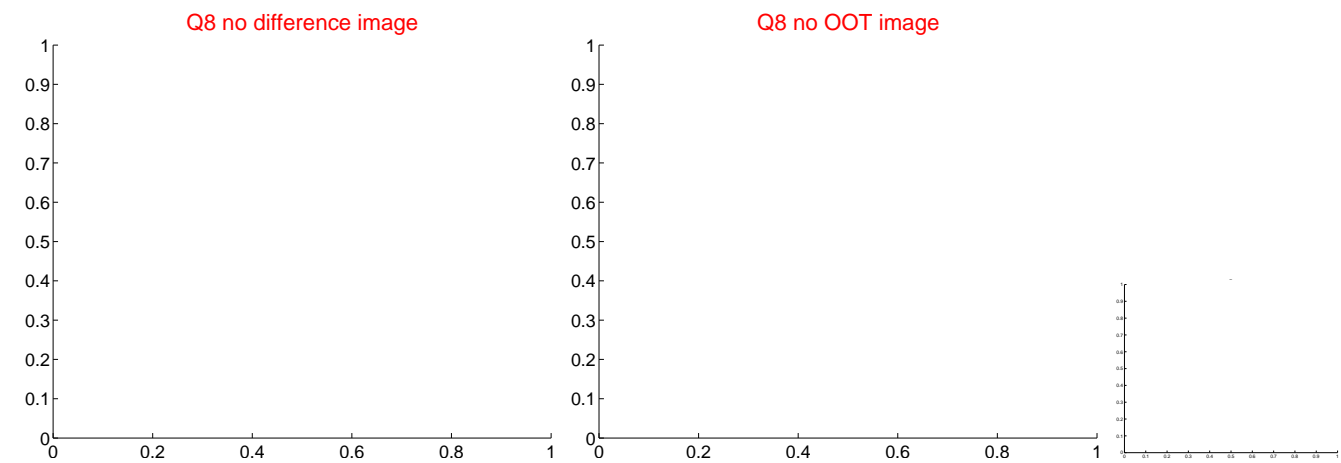
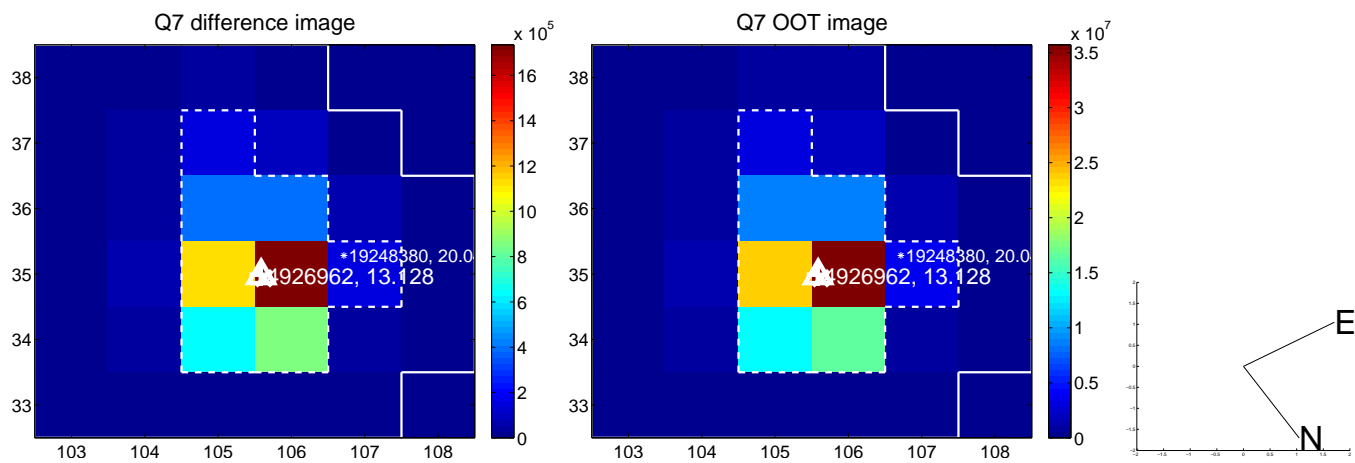
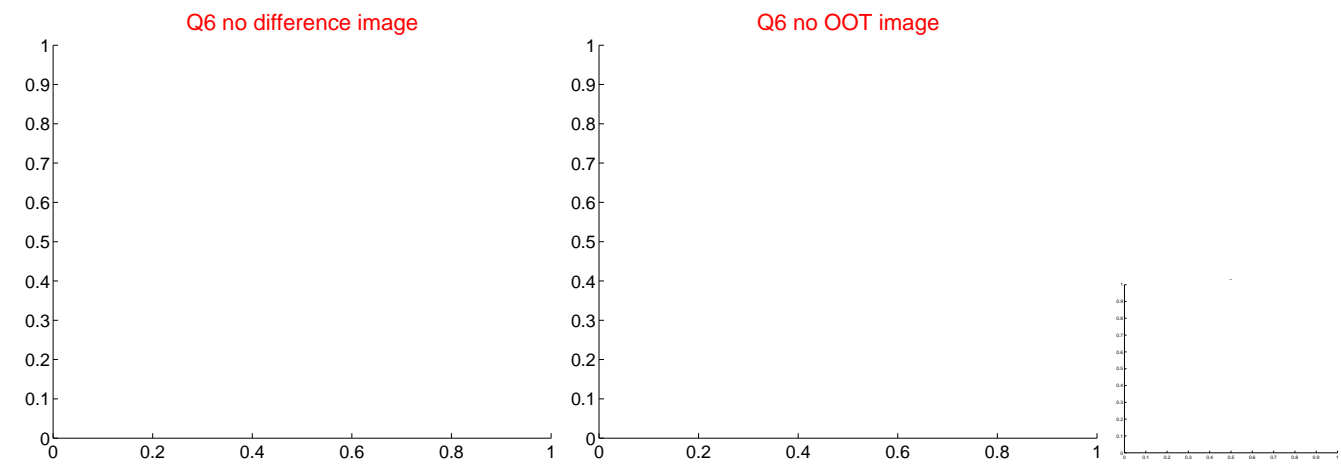
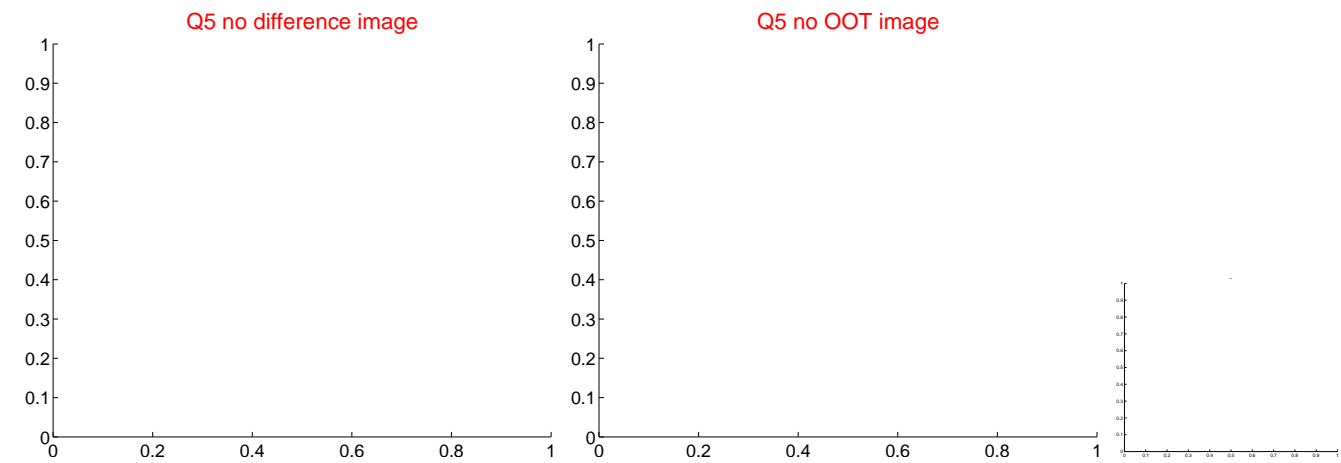


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



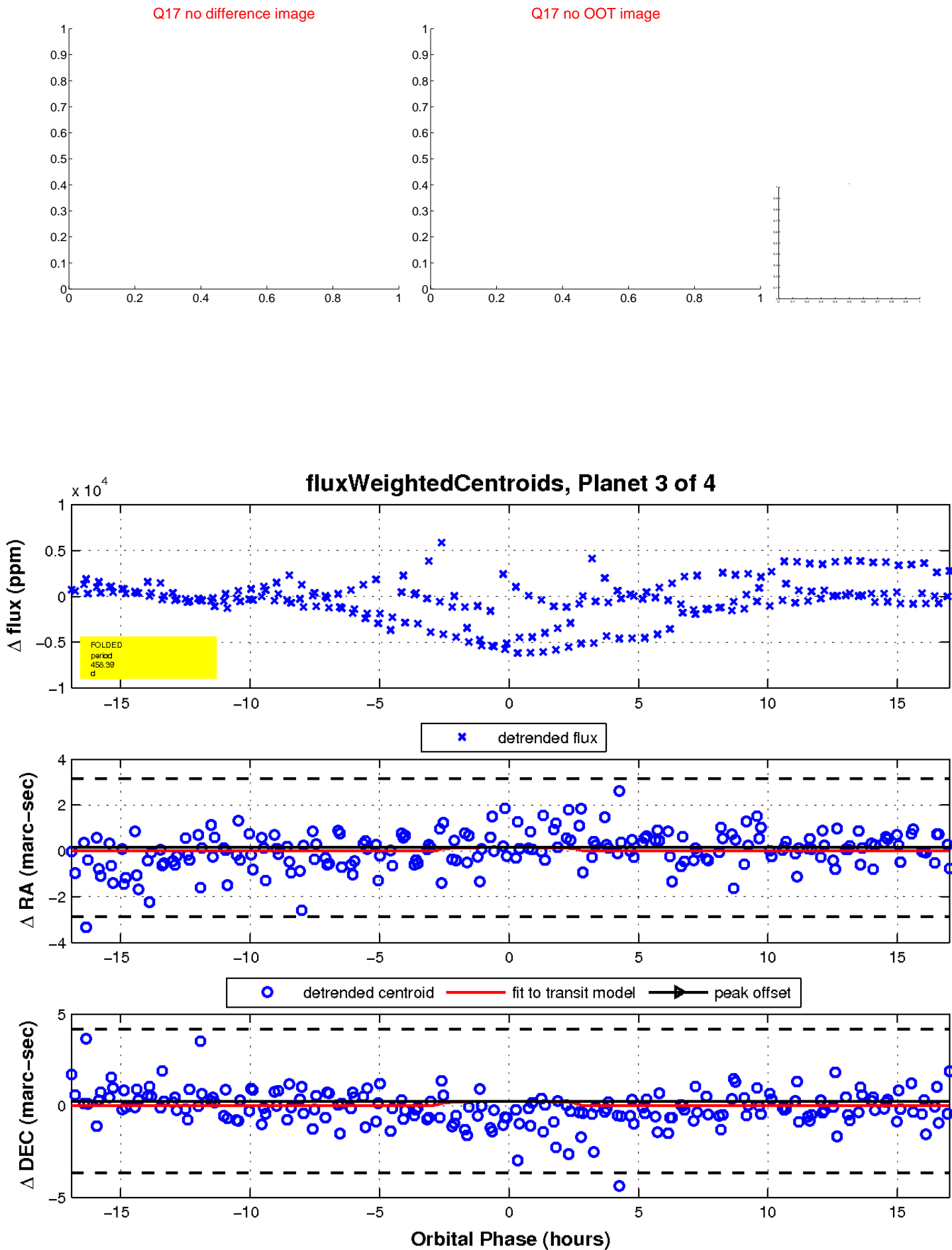
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

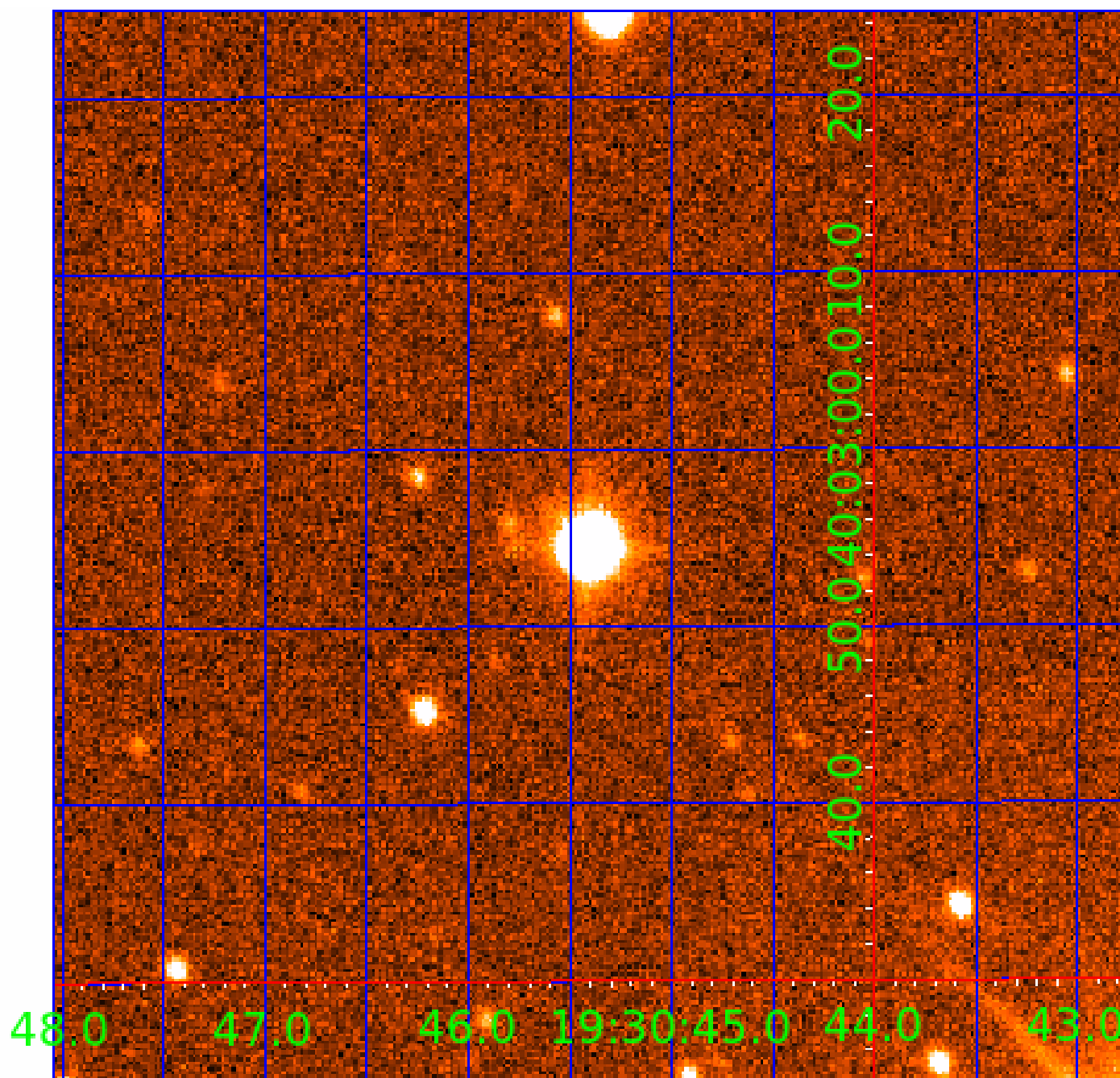


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 004926962

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})
004926962-01	OBS	No	329.504777	433.416843	512.6	10.500	18.2	-1.0	2.47	5035	5.46	4.50
004926962-02	OBS	No	317.057147	298.693611	1686.7	4.010	22.8	4.7	2.47	5035	13.24	4.74
004926962-03	OBS	No	458.387009	217.461504	2517.8	5.673	15.0	6.0	2.47	5035	12.18	2.90
004926962-04	OBS	No	334.836462	450.418265	1911.8	18.092	13.3	3.6	2.47	5035	12.21	4.41

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004926962-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS
004926962-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004926962-04	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

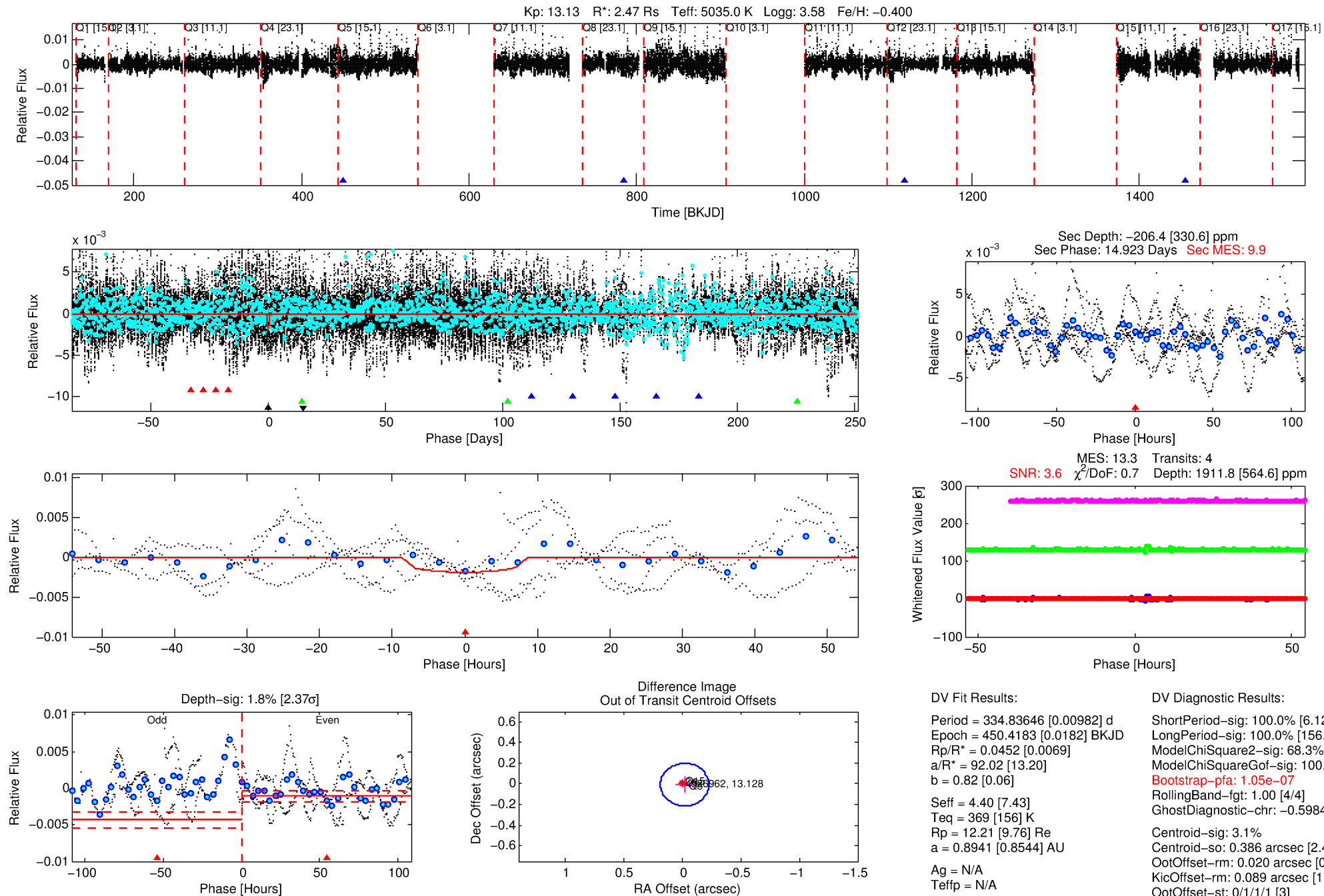
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004926962-04

No Significant Match Found

DV One-Page Summary

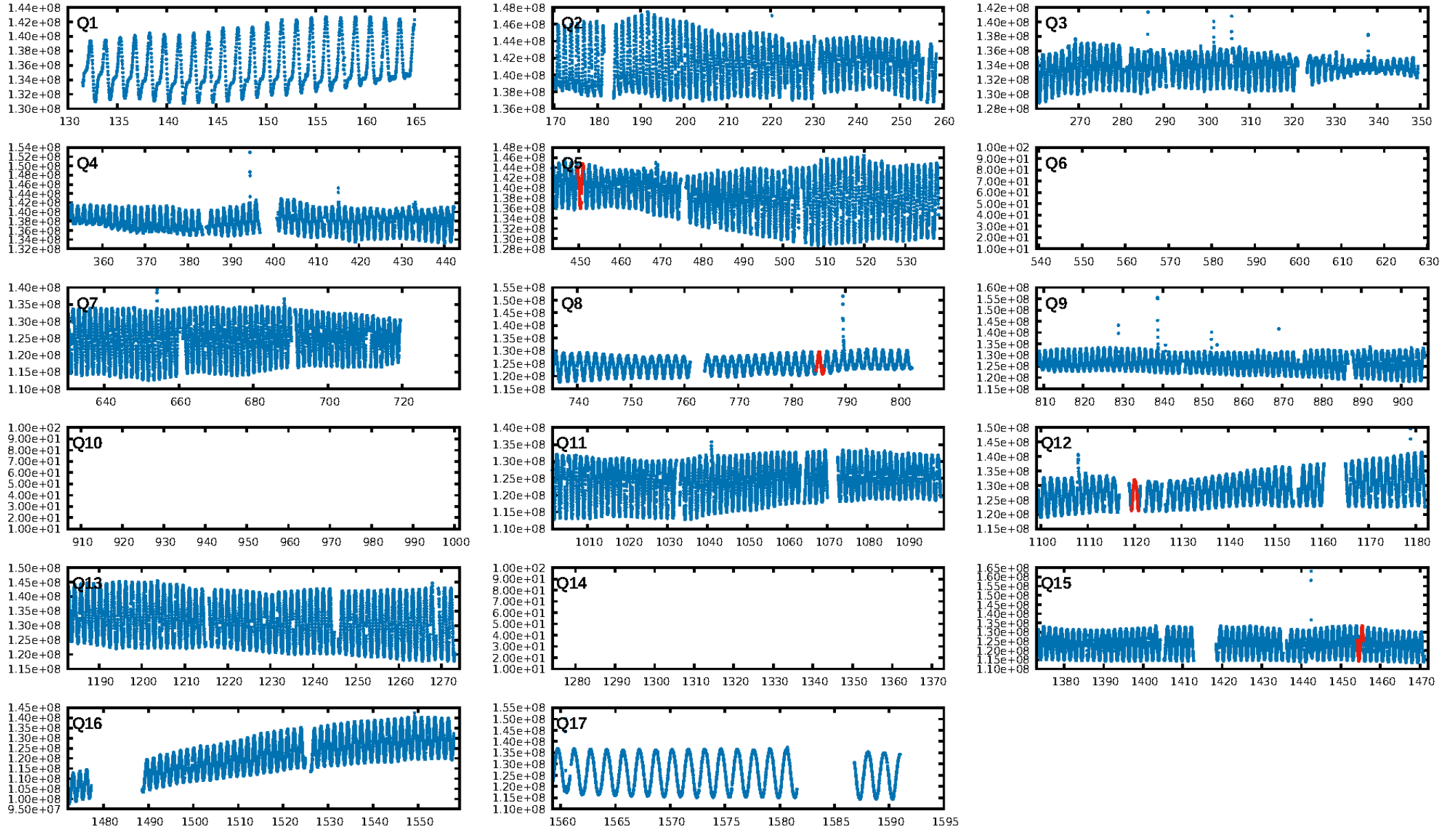
KIC: 4926962 Candidate: 4 of 4 Period: 334.836 d



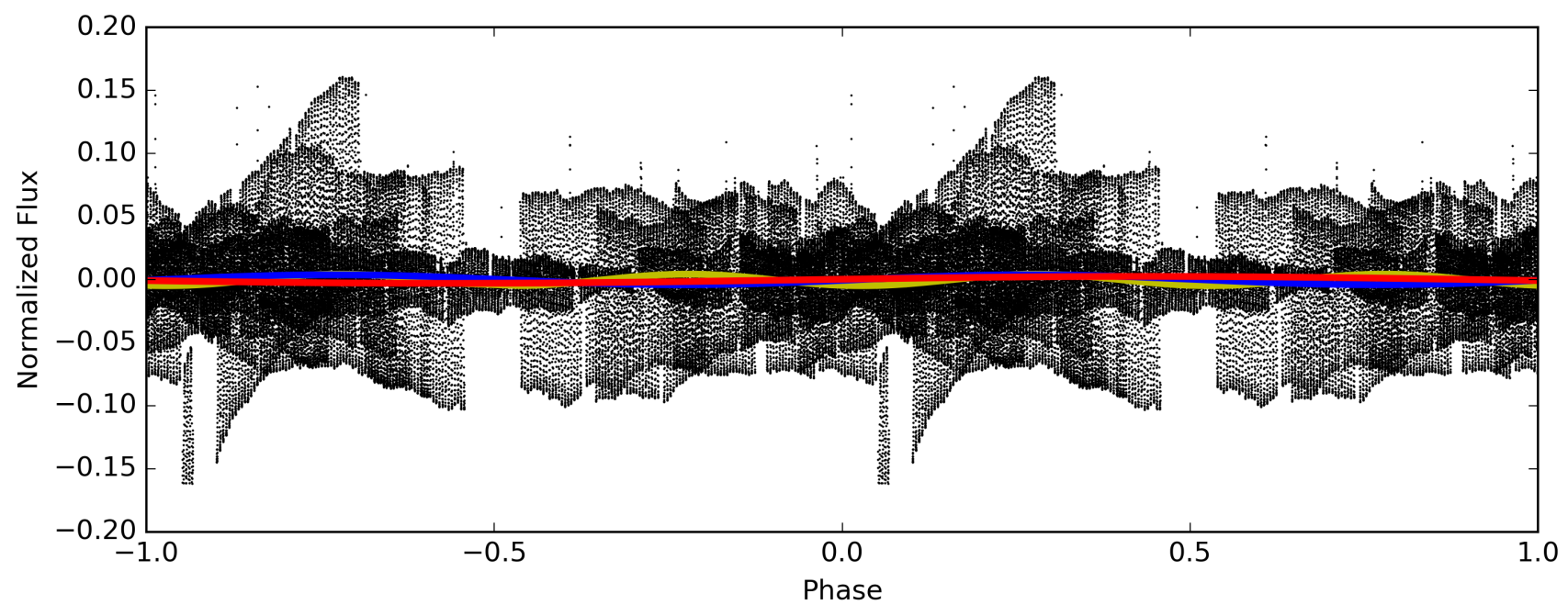
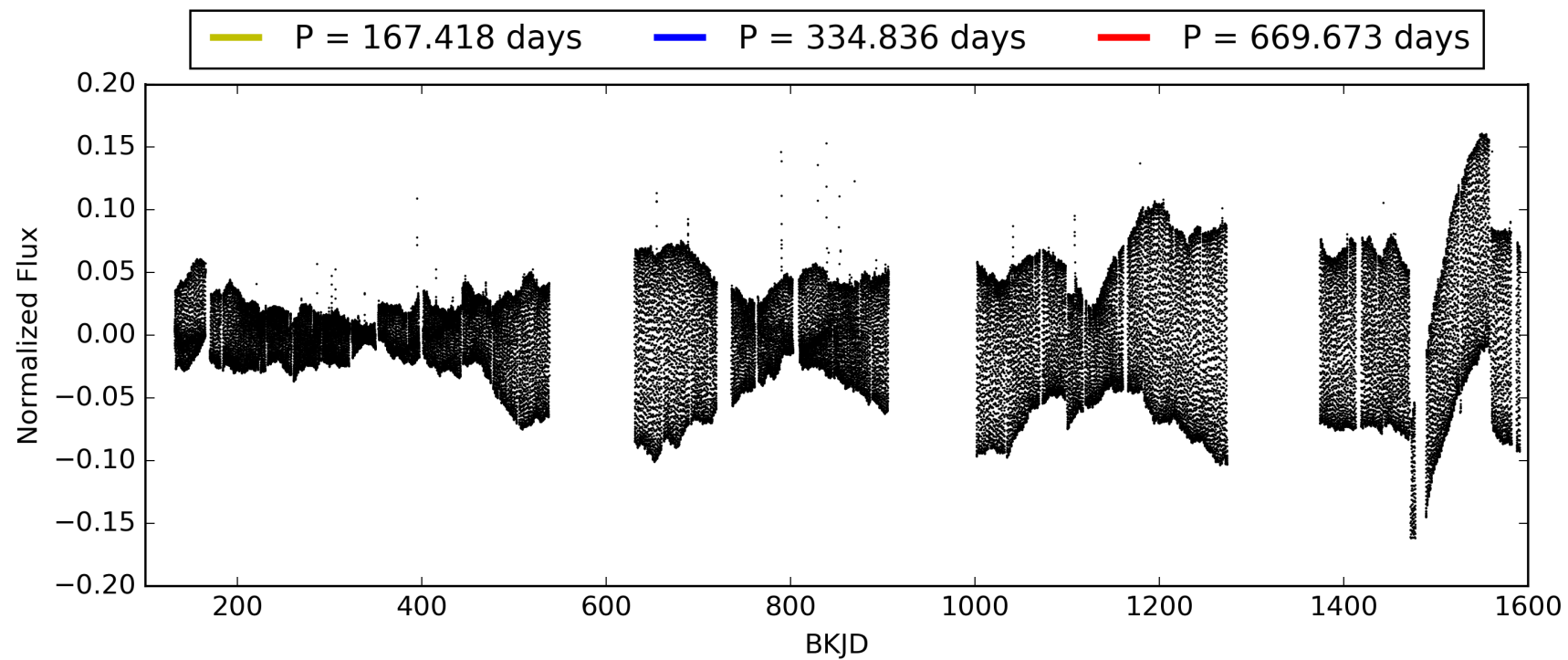
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 11:35:44 Z

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

TCE 004926962-04, PDC Light Curves

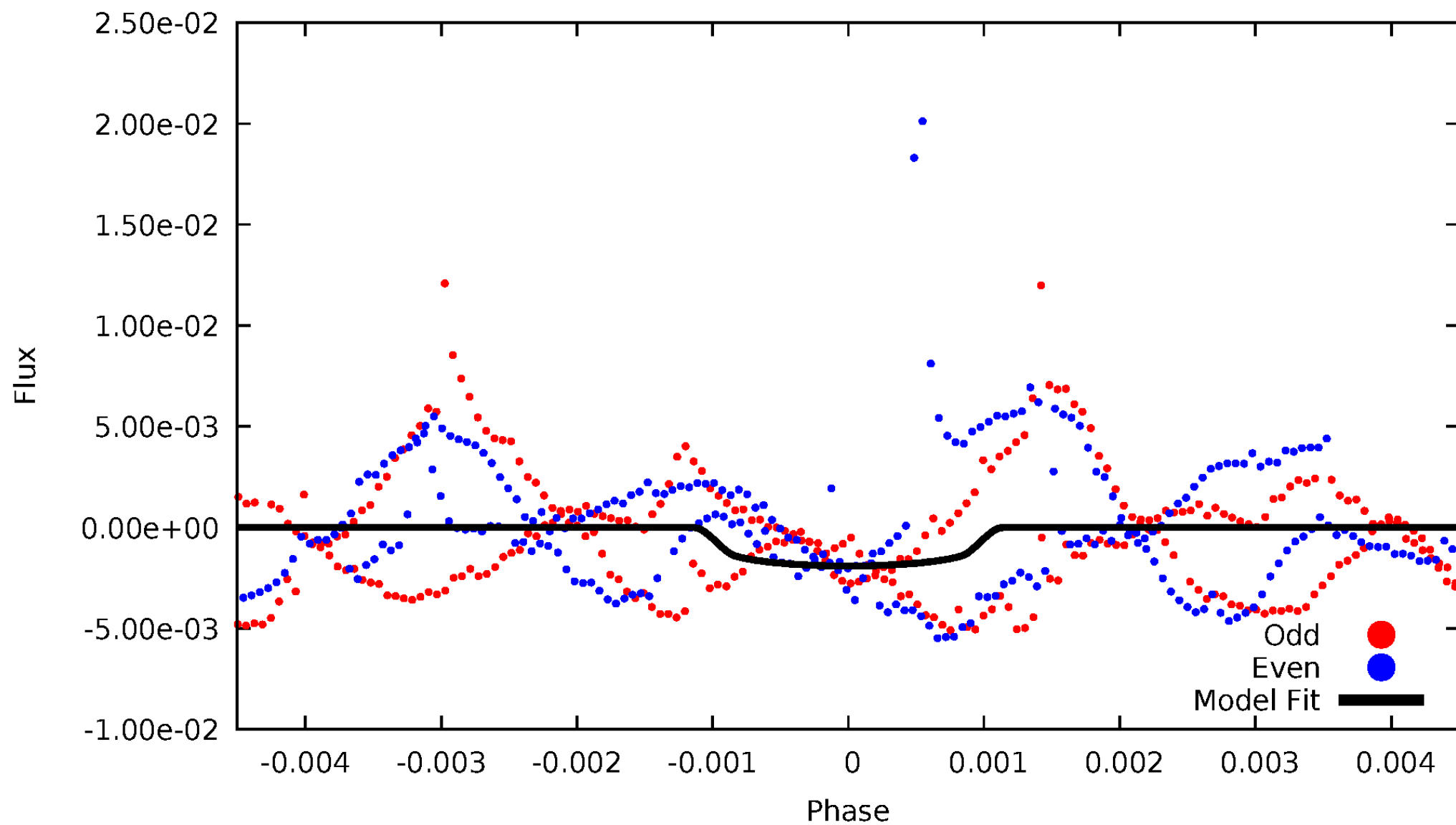


TCE 004926962-04



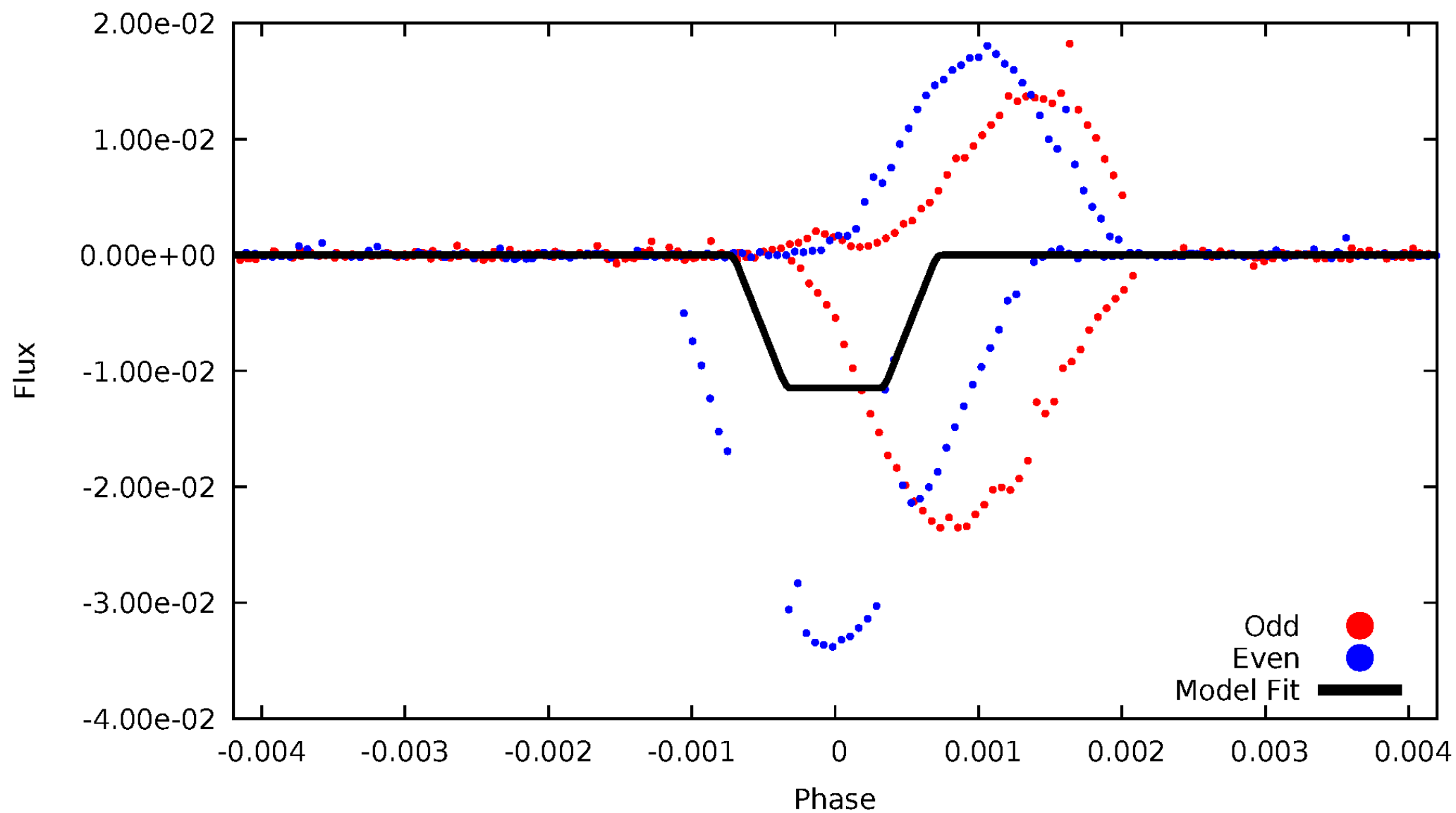
DV Odd/Even

TCE 004926962-04



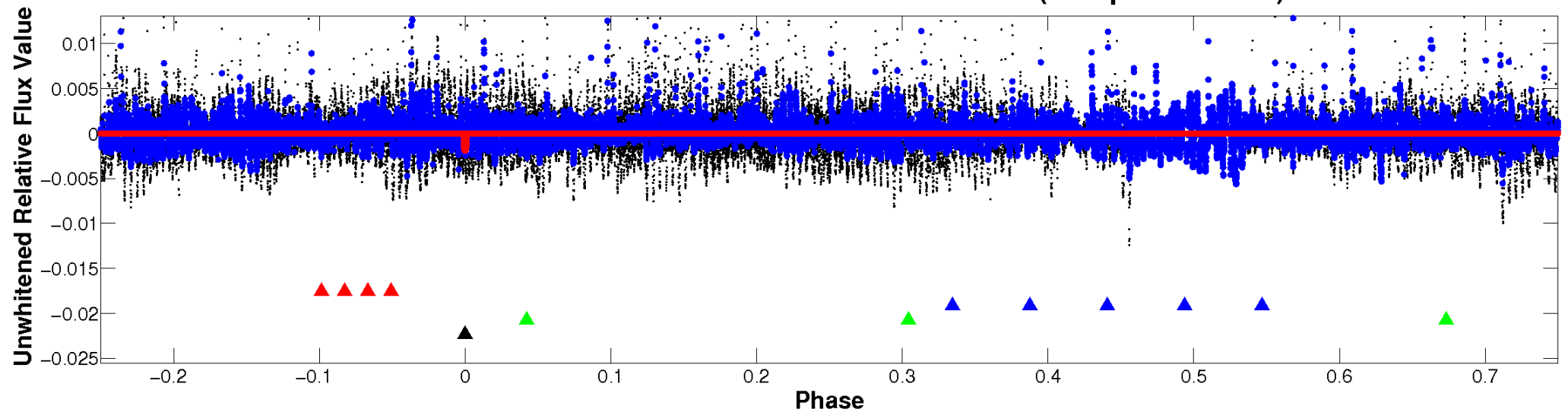
ALT Odd/Even

TCE 004926962-04

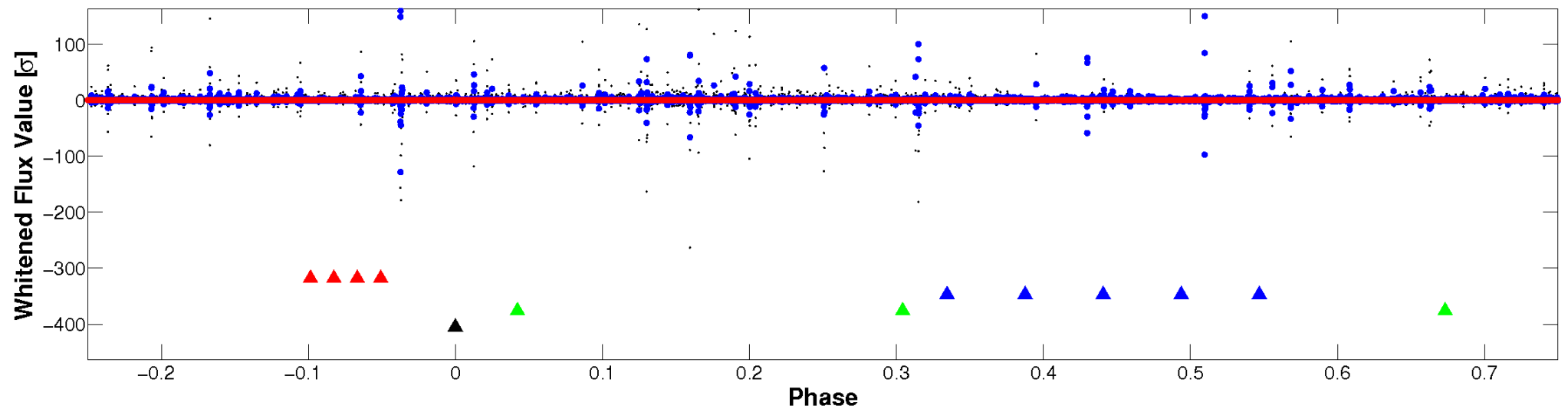


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

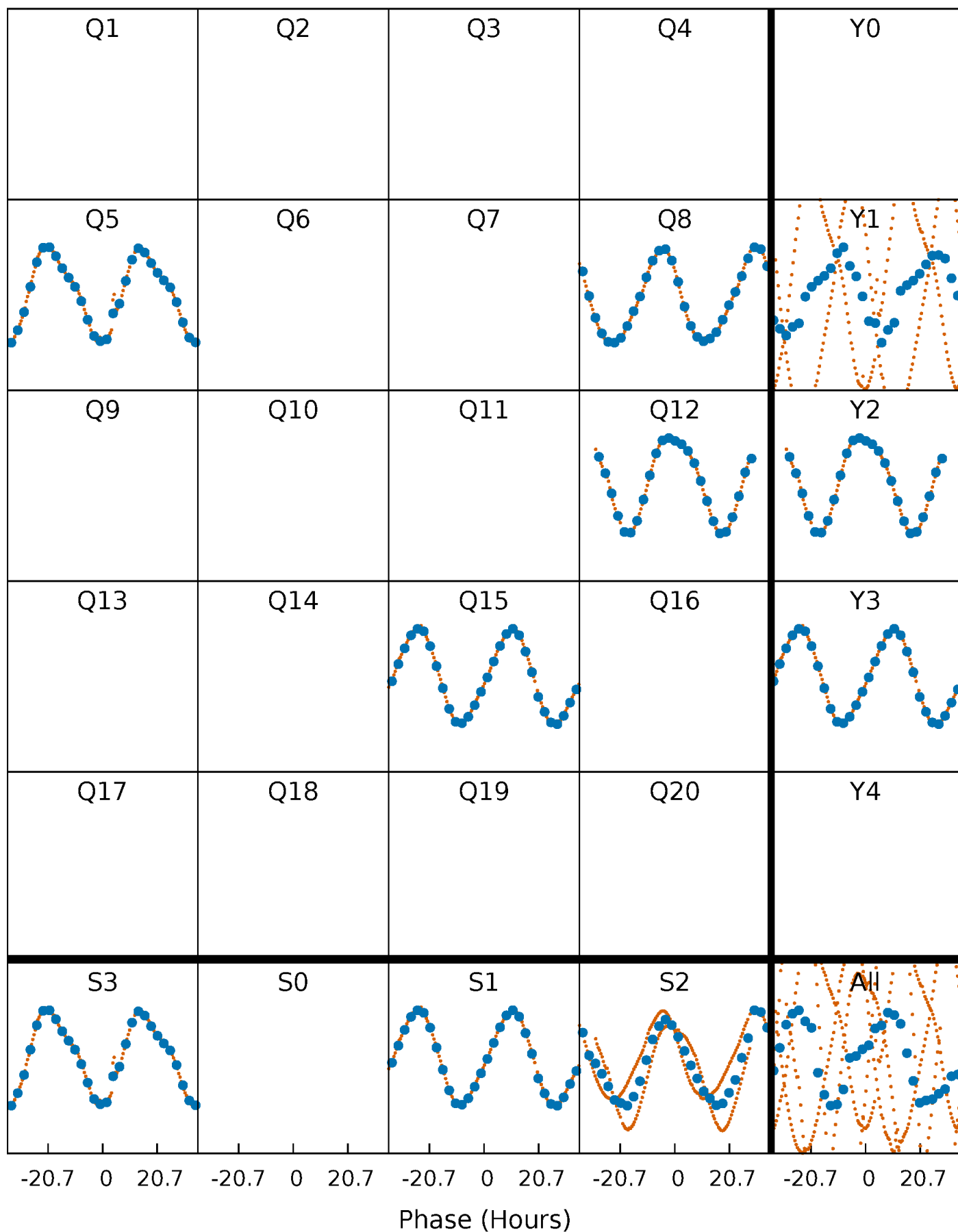


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



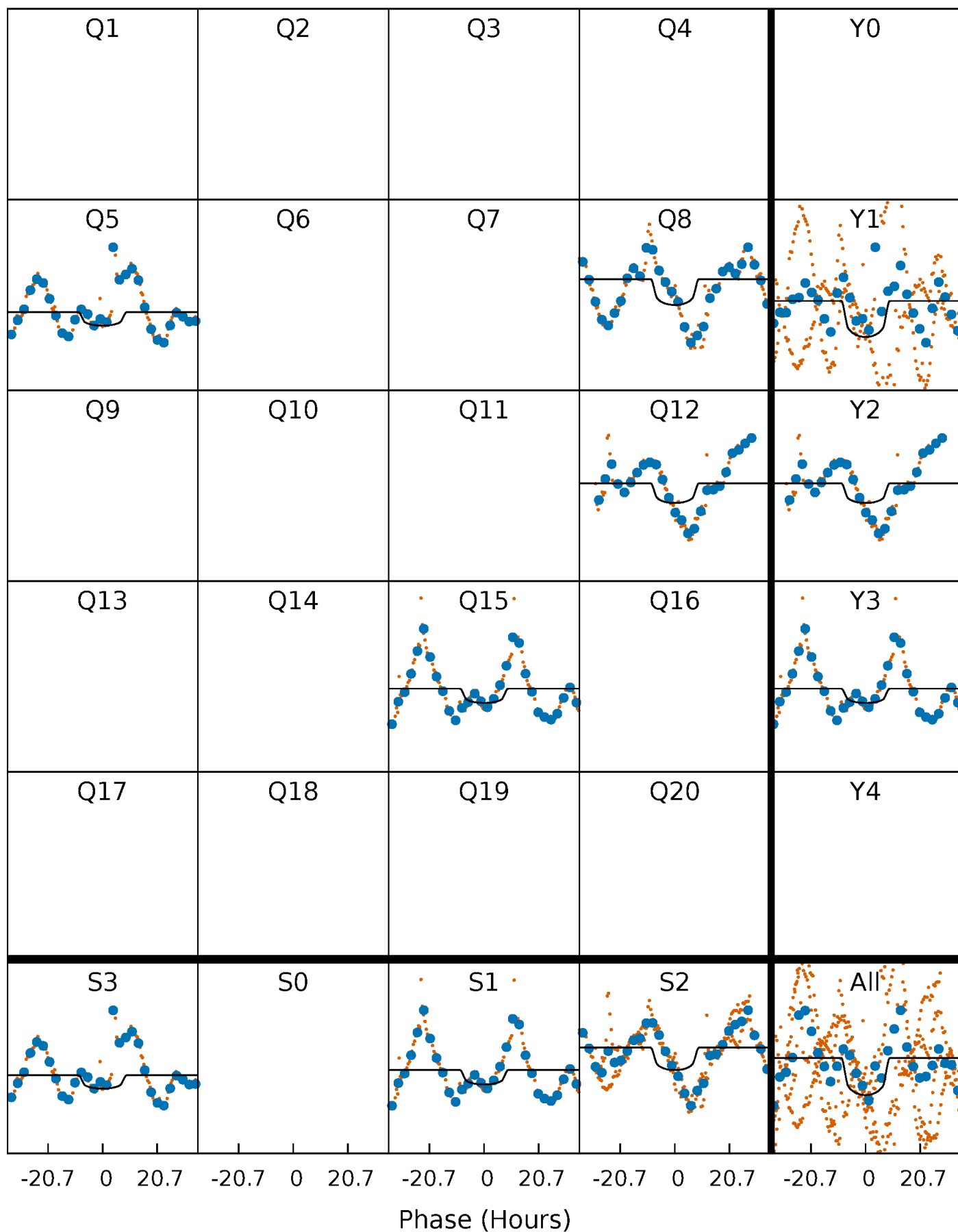
PDC Quarter-Phased Transit Curves

TCE 004926962-04 $P=334.836462$ Days $T_0=450.418265$ (BKJD)



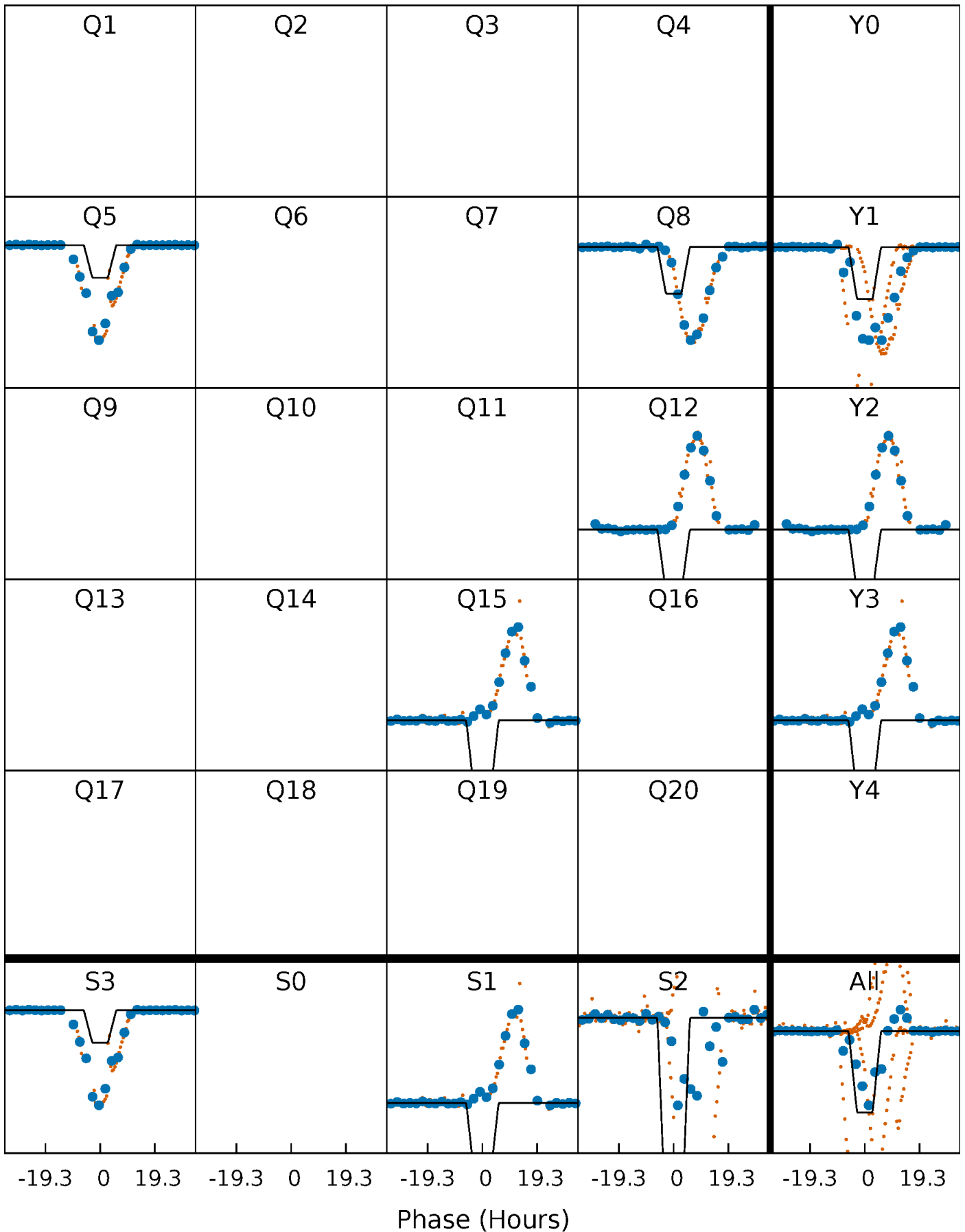
DV Quarter-Phased Transit Curves

TCE 004926962-04 $P=334.836462$ Days $T_0=450.418265$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

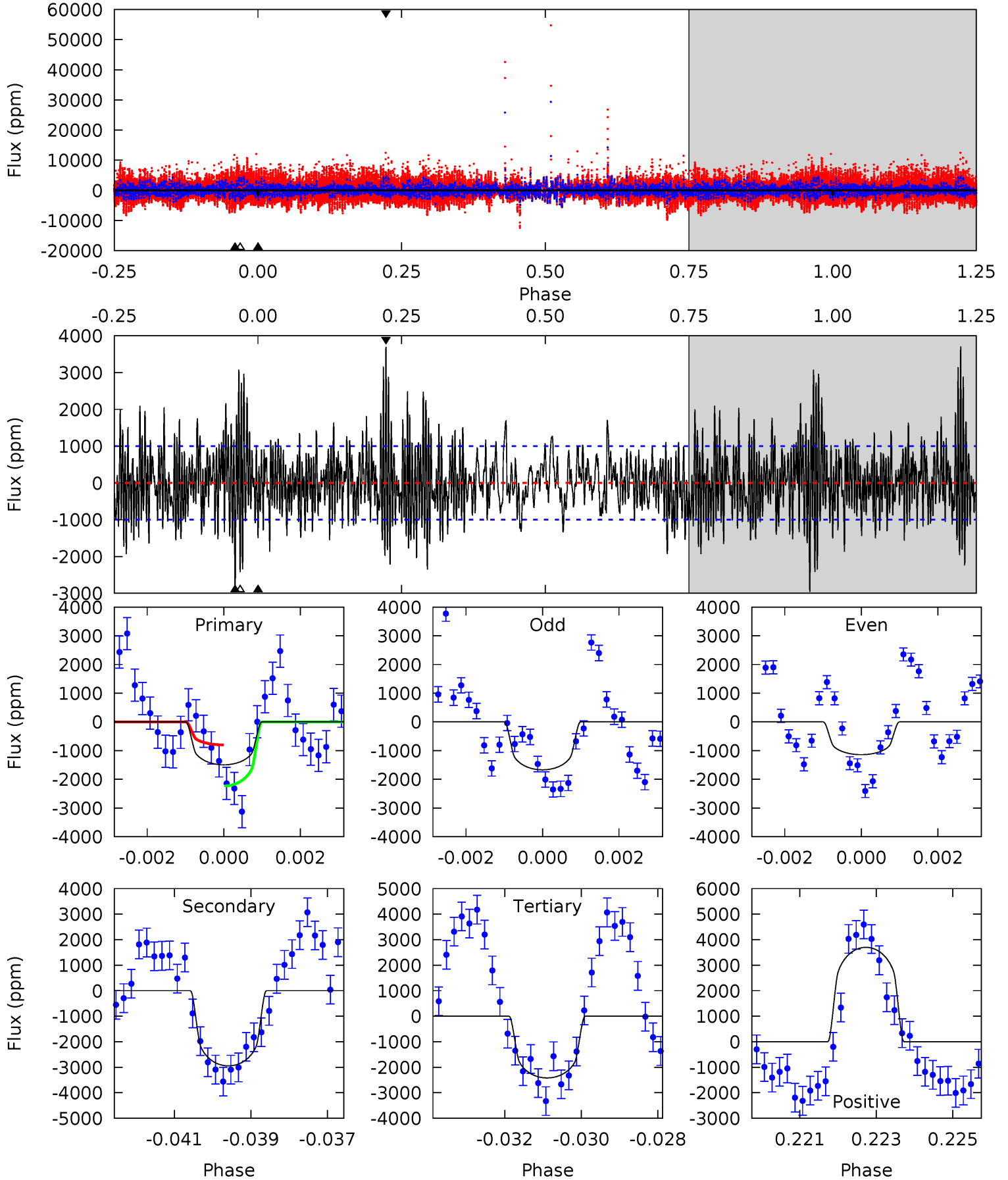
TCE 004926962-04 P=334.797069 Days $T_0=450.464108$ (BKJD)



DV Model-Shift Uniqueness Test

004926962-04, P = 334.836462 Days, E = 115.581803 Days

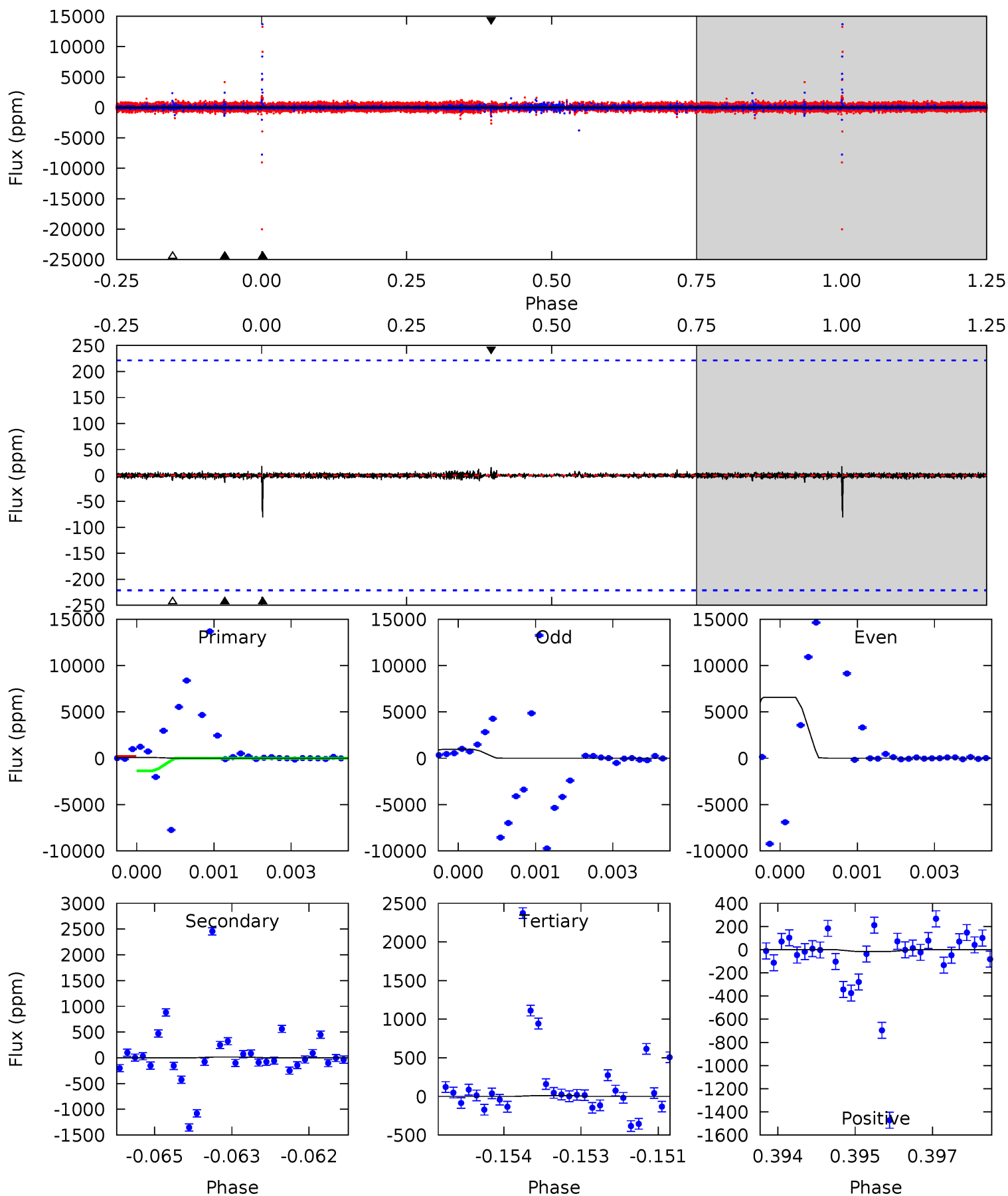
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.94	15.6	12.8	19.6	5.30	3.05	4.30	-4.90	-11.7	2.80	-4.00	1.27	0.62	0.56	3.80



Alt Model-Shift Uniqueness Test

004926962-04, P = 334.797069 Days, E = 115.667039 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.97	0.34	0.25	0.38	5.39	3.19	0.05	1.71	1.58	0.09	-0.04	65.5	2.02	0.18	13.7



Stellar Parameters For KIC 004926962

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5035^{+119}_{-163}	$3.581^{+1.042}_{-0.347}$	$-0.400^{+0.250}_{-0.350}$	$2.473^{+1.455}_{-1.940}$	$0.849^{+0.242}_{-0.198}$	$0.079^{+3.474}_{-0.060}$
	+2%/-3%	+29%/-10%	+62%/-87%	+59%/-78%	+29%/-23%	+4395%/-76%
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 004926962-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2947 ± 188	$11.79^{+4.99}_{-4.56}$	506^{+83}_{-108}	5422^{+500}_{-367}	9559^{+15656}_{-4735}
Alt.	-14 ± 41	$28.52^{+10.28}_{-10.42}$	510^{+78}_{-102}	1932^{+320}_{-4026}	$6.789^{+30.384}_{-24.152}$

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

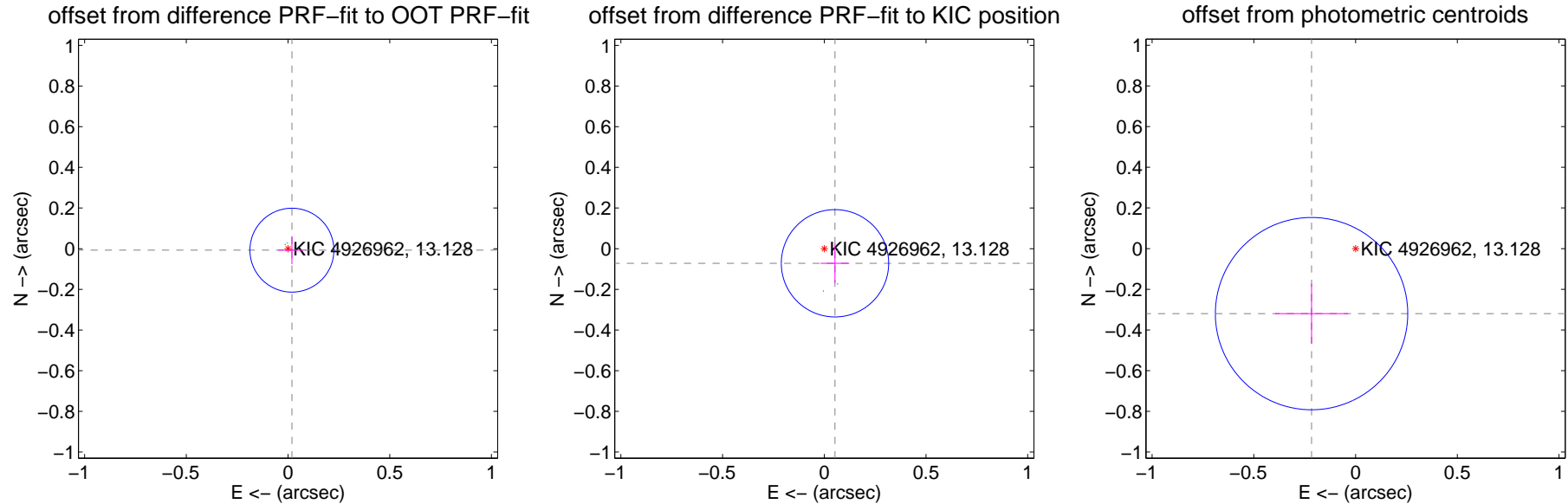
DV Centroid Data

Supplemental centroid analysis for 004926962-04. Kepler magnitude: 13.13. Transit SNR 3.61

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.020 ± 0.069	0.30	-0.019 ± 0.068	-0.007 ± 0.068
PRF-fit source offset from KIC position	0.089 ± 0.088	1.01	-0.053 ± 0.070	-0.072 ± 0.096
photometric centroid source offset	0.39 ± 0.16	2.45	0.22 ± 0.18	-0.32 ± 0.15

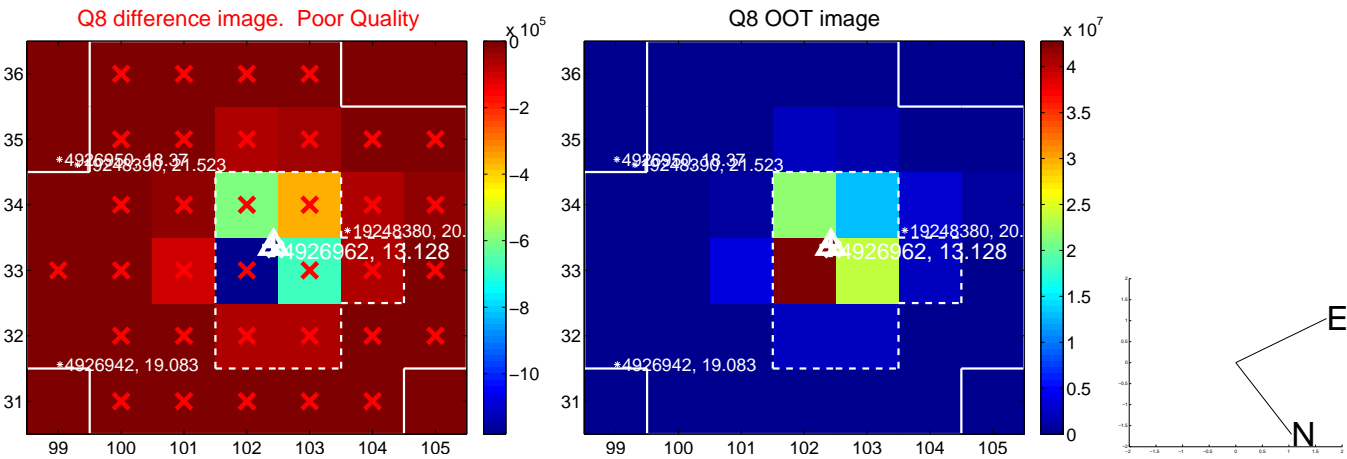
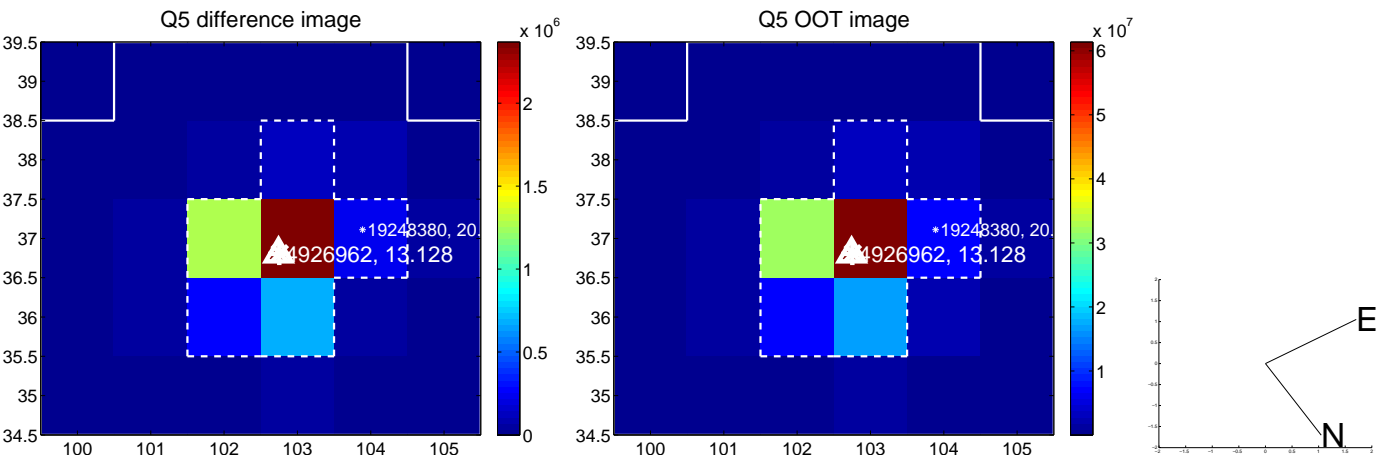


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



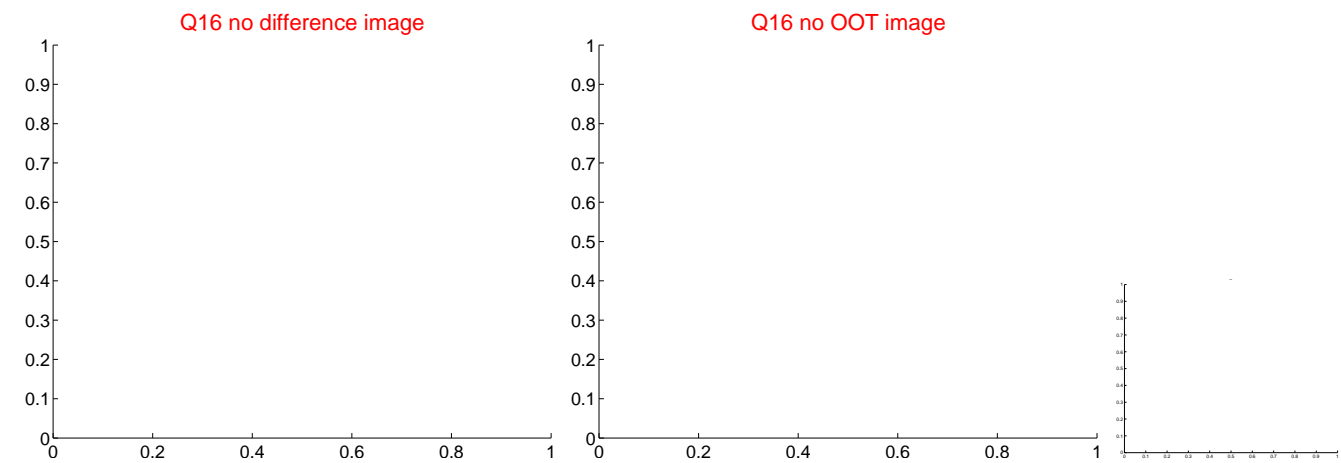
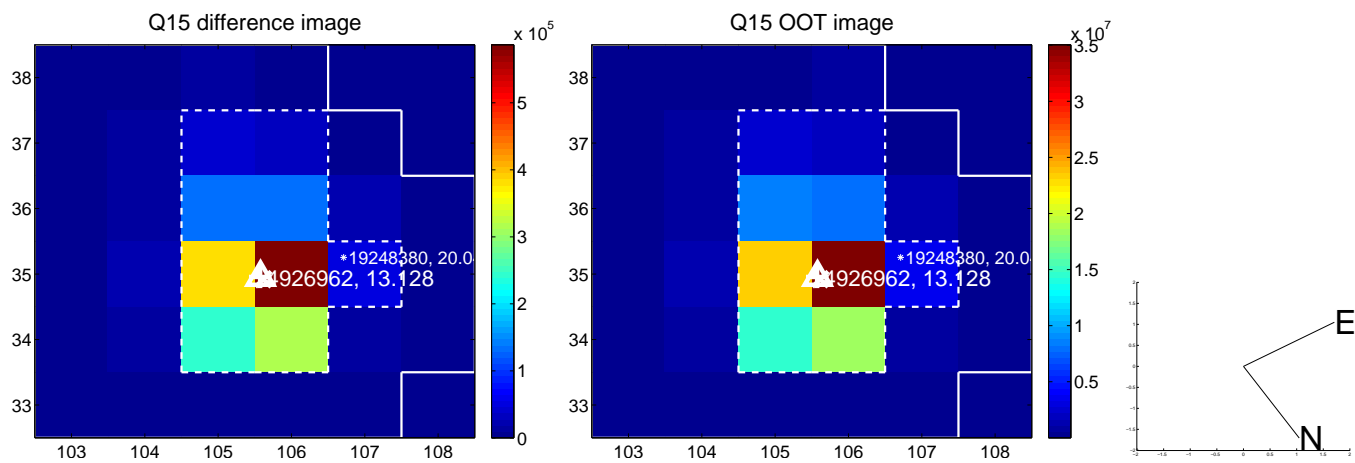
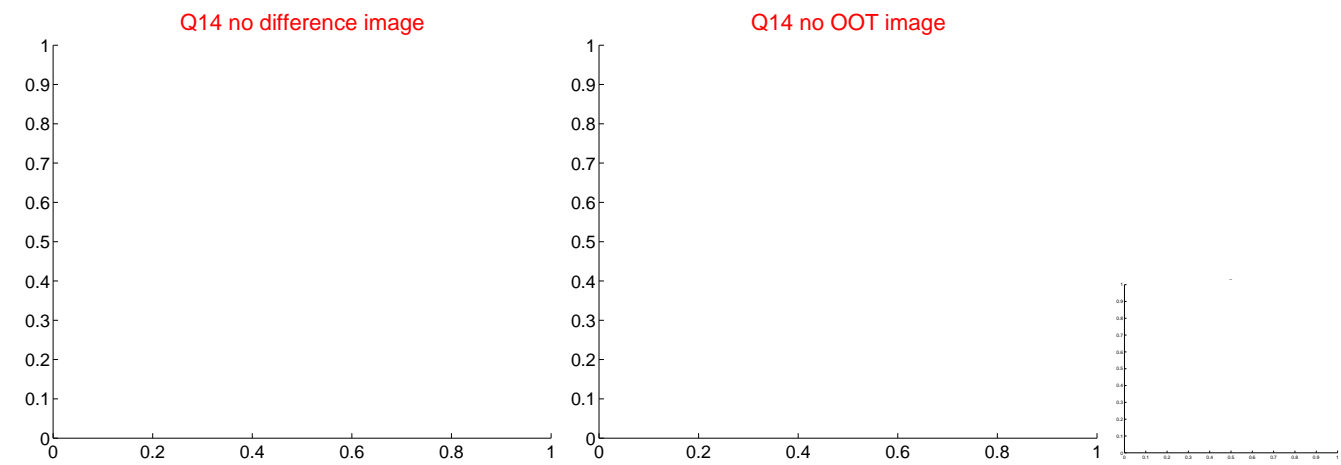
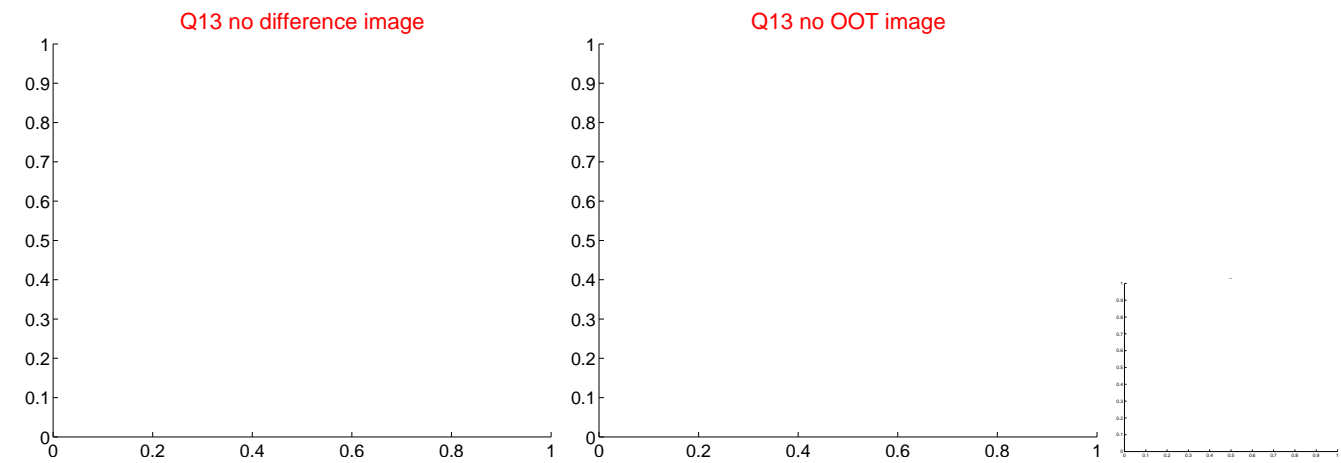
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



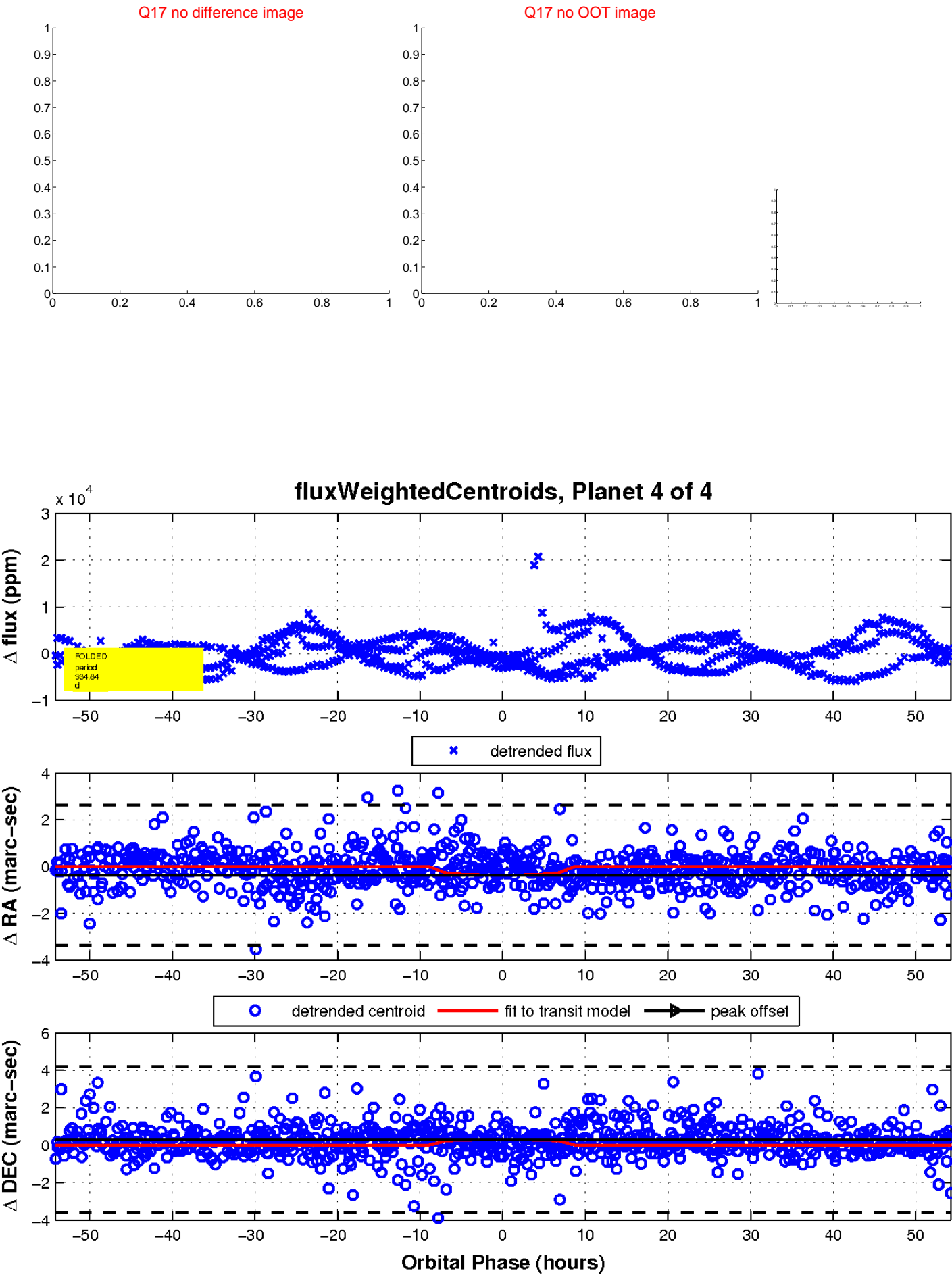
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

