

KIC 007624629

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})
007624629-01	OBS	No	322.464471	373.217792	884.6	18.411	13.8	12.8	154.30	3274	1021.75	2692.38
007624629-02	OBS	No	338.911758	168.087120	8133.4	14.734	14.0	17.8	154.30	3274	1562.88	2519.59
007624629-03	OBS	No	330.288134	185.444894	3100.8	12.687	13.3	9.3	154.30	3274	864.61	2607.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007624629-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
007624629-02	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—CENT_SATURATED
007624629-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_SATURATED

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

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

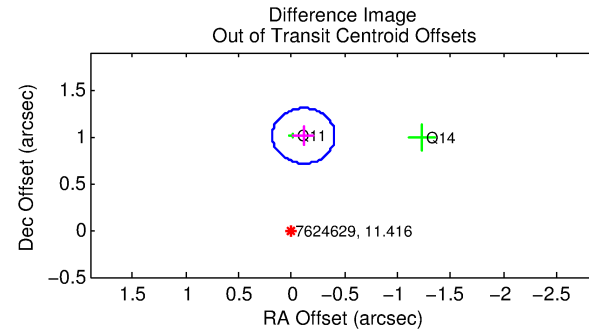
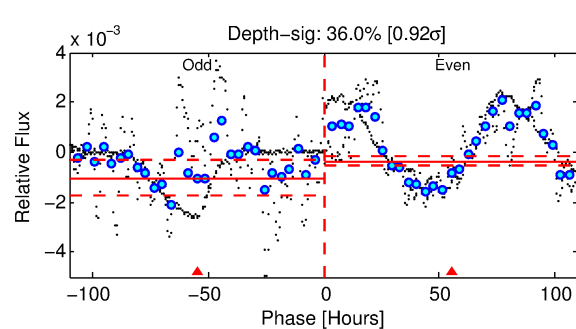
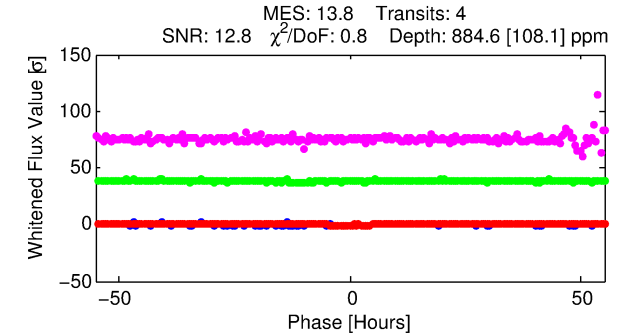
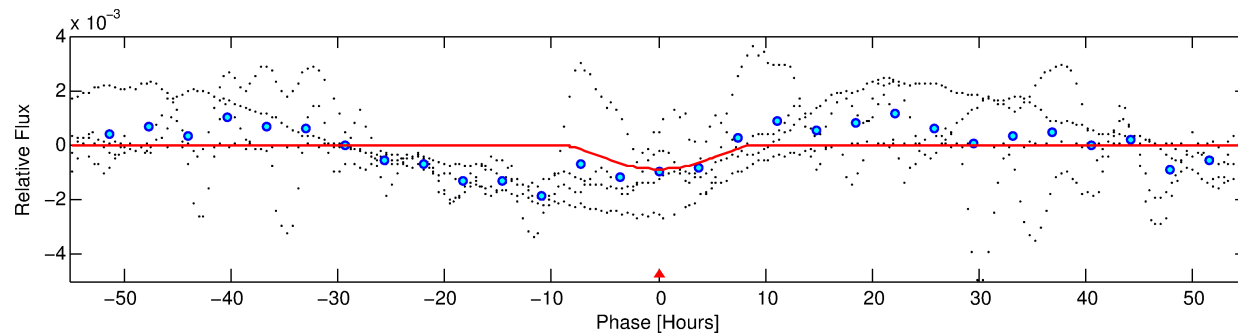
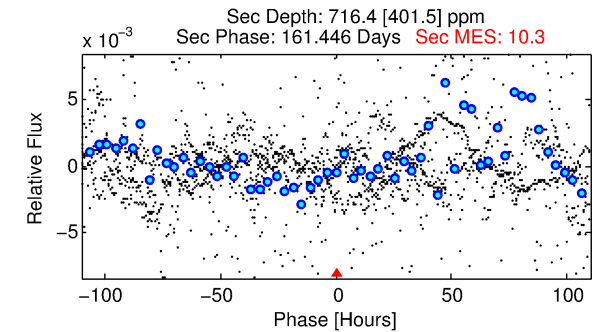
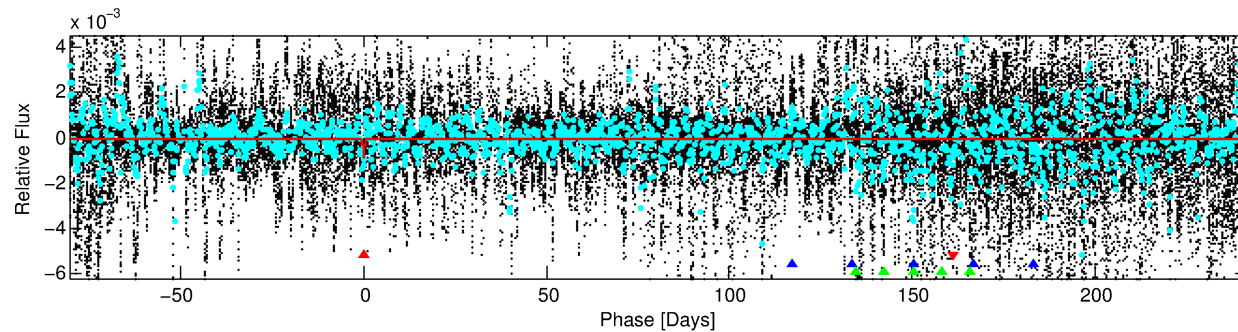
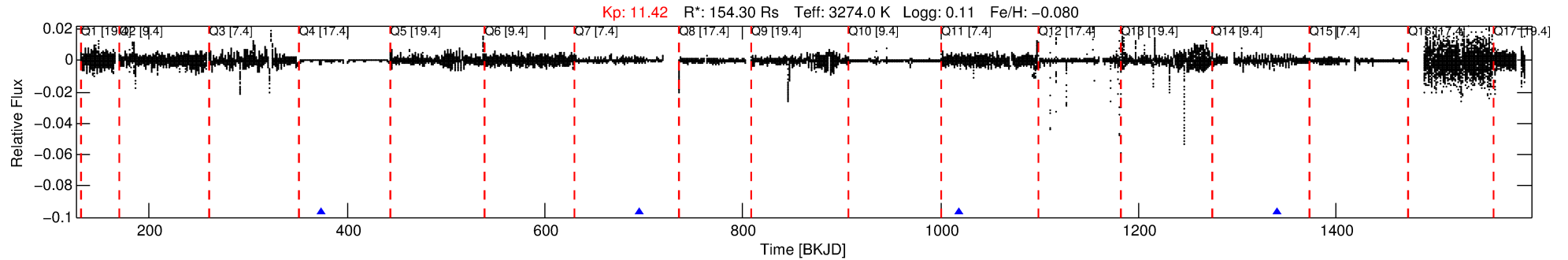
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007624629-01

No Significant Match Found

DV One-Page Summary

KIC: 7624629 Candidate: 1 of 3 Period: 322.464 d



DV Fit Results:

Period = 322.46447 [0.02455] d
Epoch = 373.2178 [0.0080] BKJD
Rp/R* = 0.0607 [0.0534]
a/R* = 47.35 [8.79]
b = 1.00 [0.07]
Seff = 2692.38 [995.00]
Teq = 1837 [170] K
Rp = 1021.75 [916.91] Re
a = 0.9541 [0.1901] AU
Ag = 0.34 [0.65] [-1.02 σ]
Teffp = 2174 [1006] K [0.33 σ]

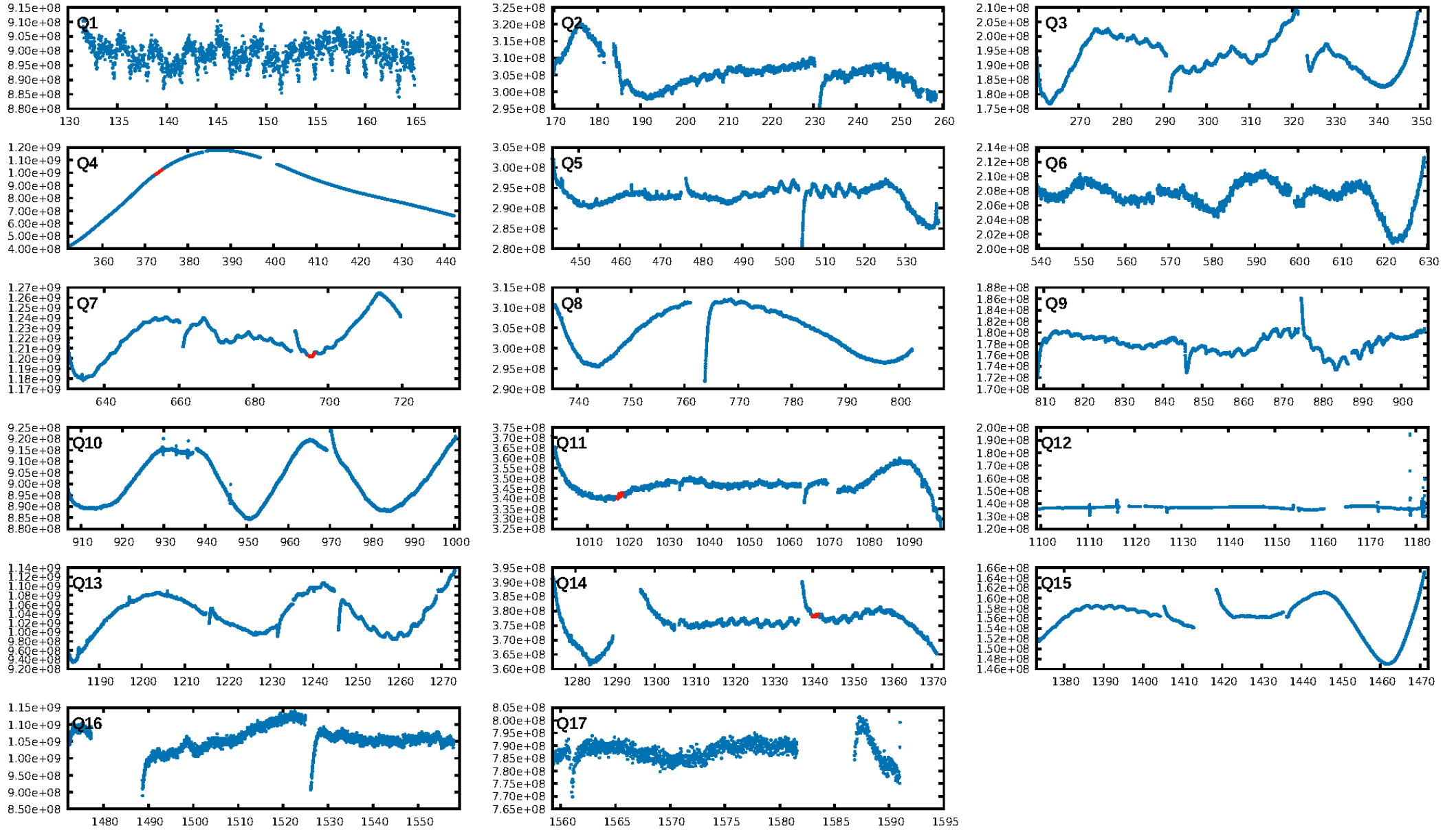
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [8.40 σ]
ModelChiSquare2-sig: 48.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.07e-08
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.012
Centroid-sig: 22.4%
Centroid-so: 1.358 arcsec [1.37 σ]
OotOffset-rm: 1.015 arcsec [10.31 σ]
KicOffset-rm: 0.972 arcsec [3.24 σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

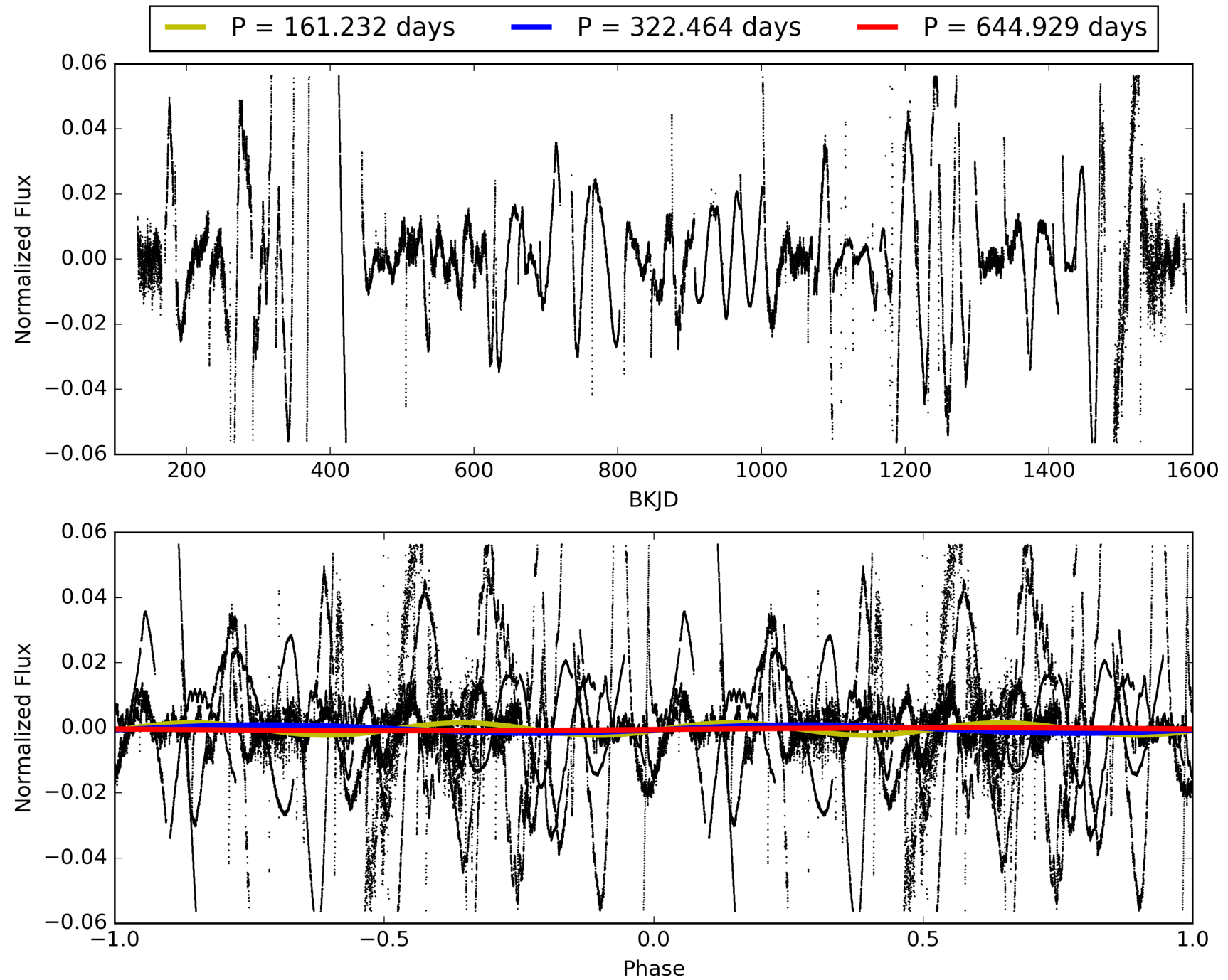
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:01:14 Z

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

TCE 007624629-01, PDC Light Curves

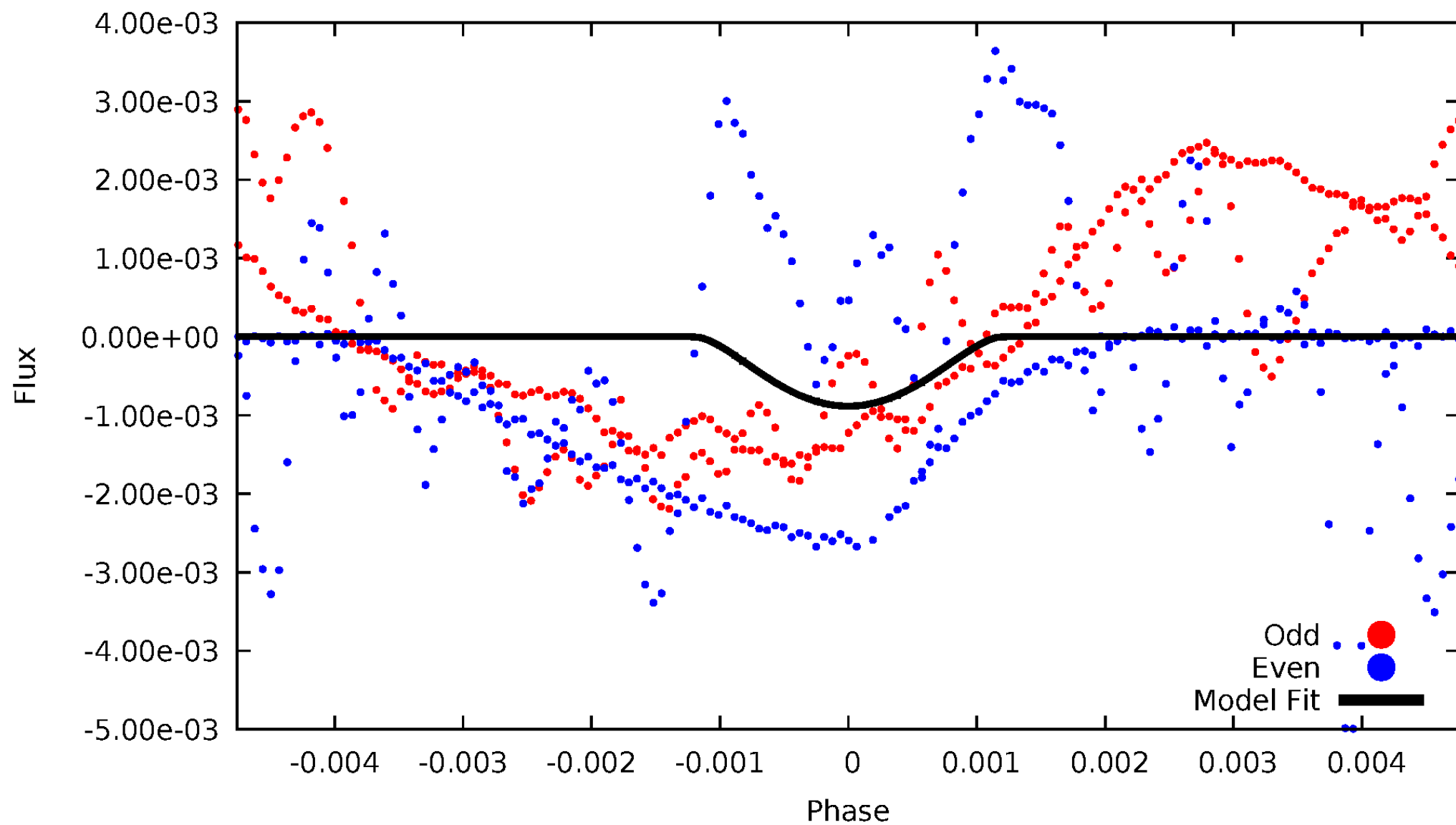


TCE 007624629-01



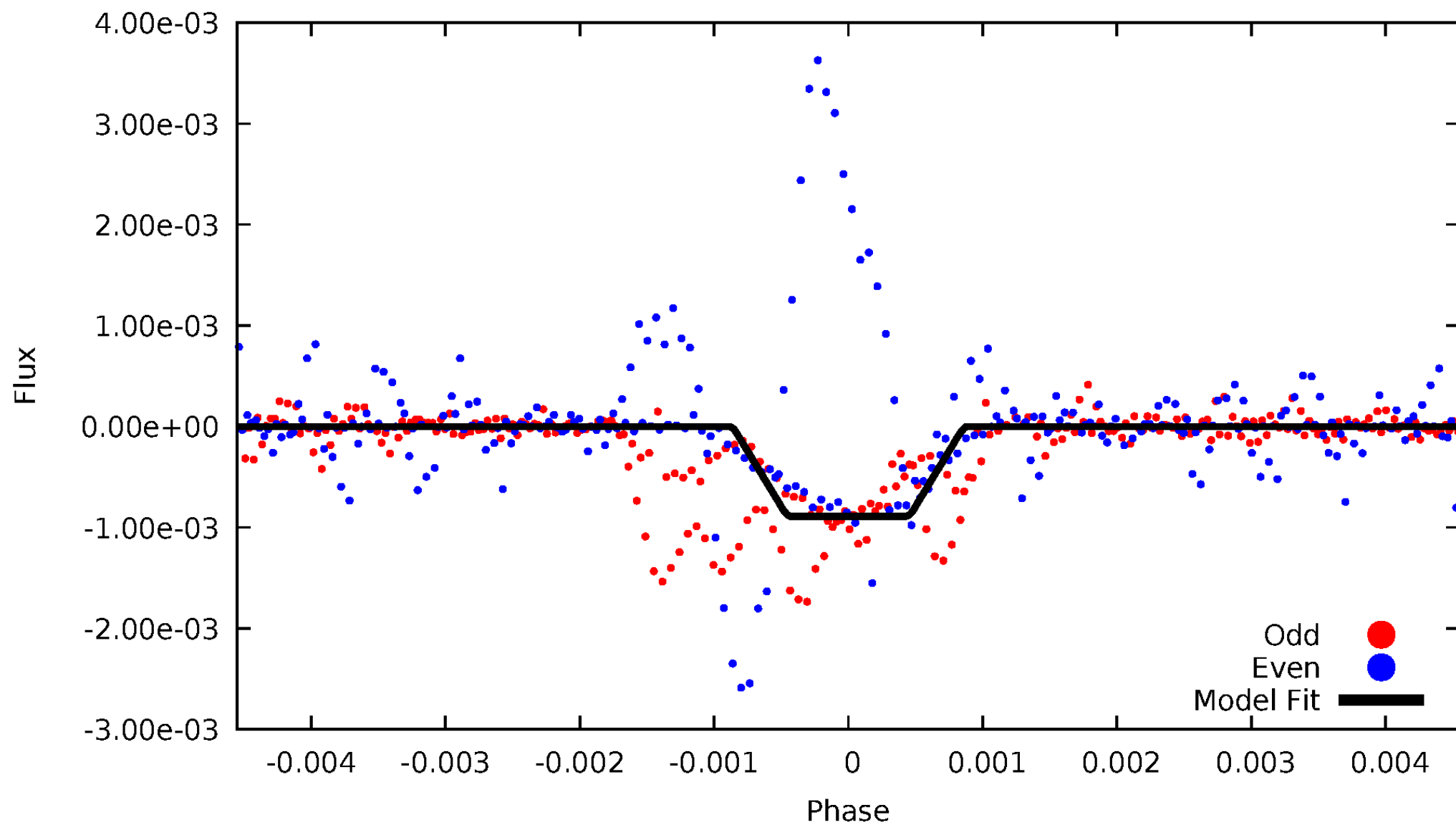
DV Odd/Even

TCE 007624629-01



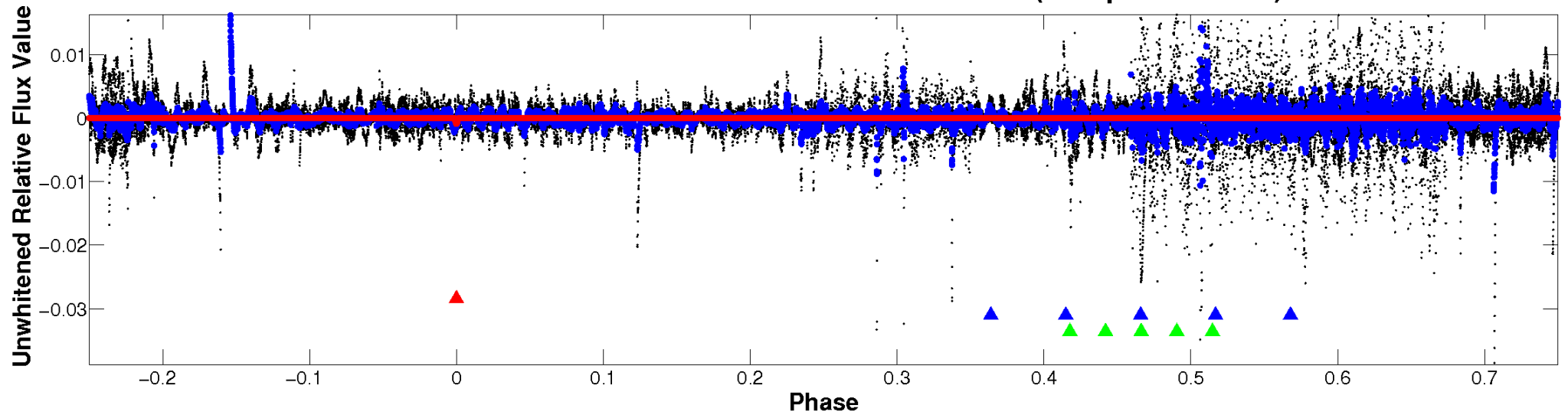
ALT Odd/Even

TCE 007624629-01

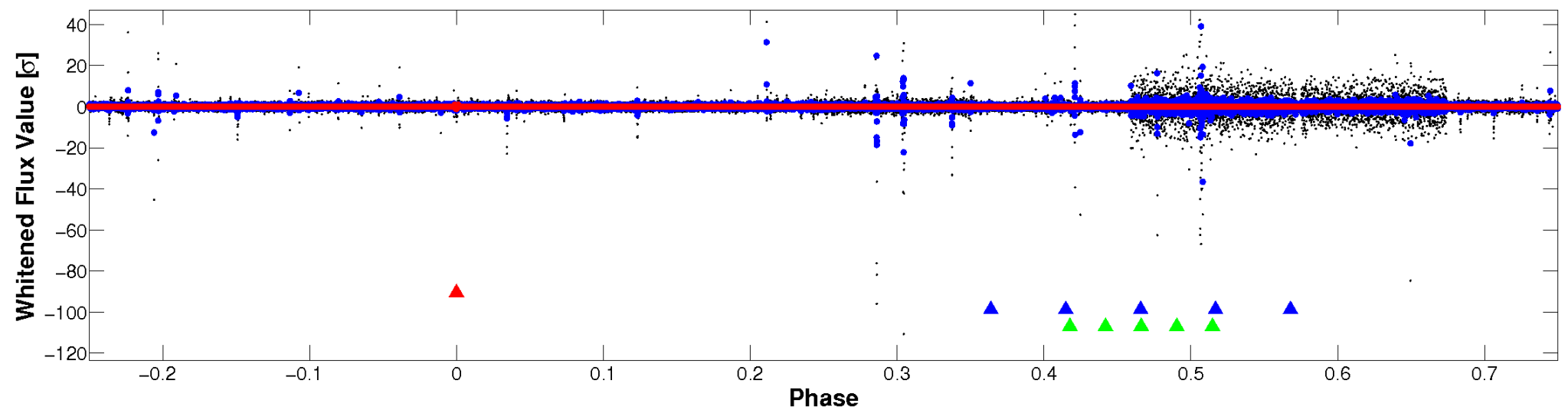


Non-Whitened Vs. Whitened Light Curve

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

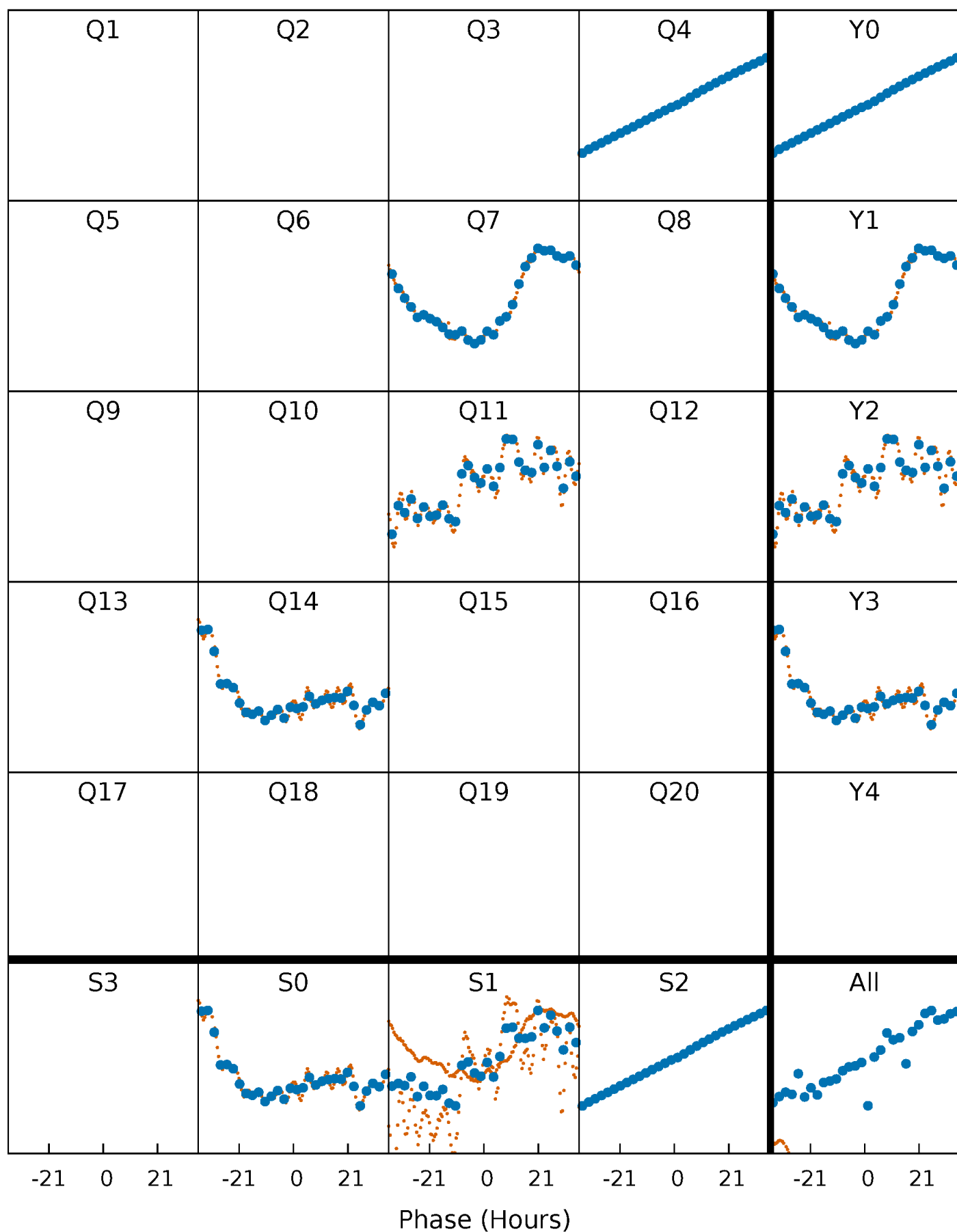


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



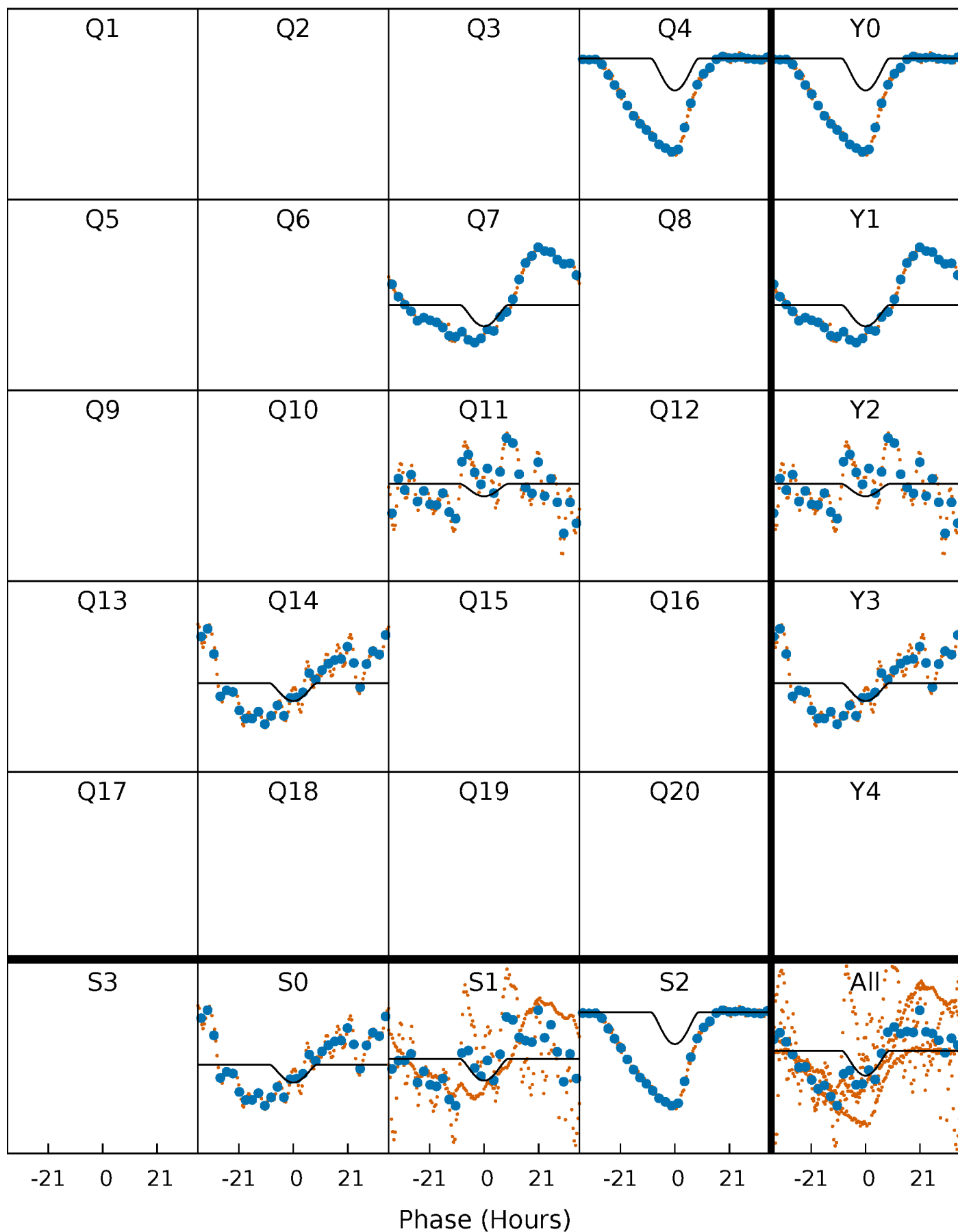
PDC Quarter-Phased Transit Curves

TCE 007624629-01 P=322.464471 Days $T_0=373.217792$ (BKJD)



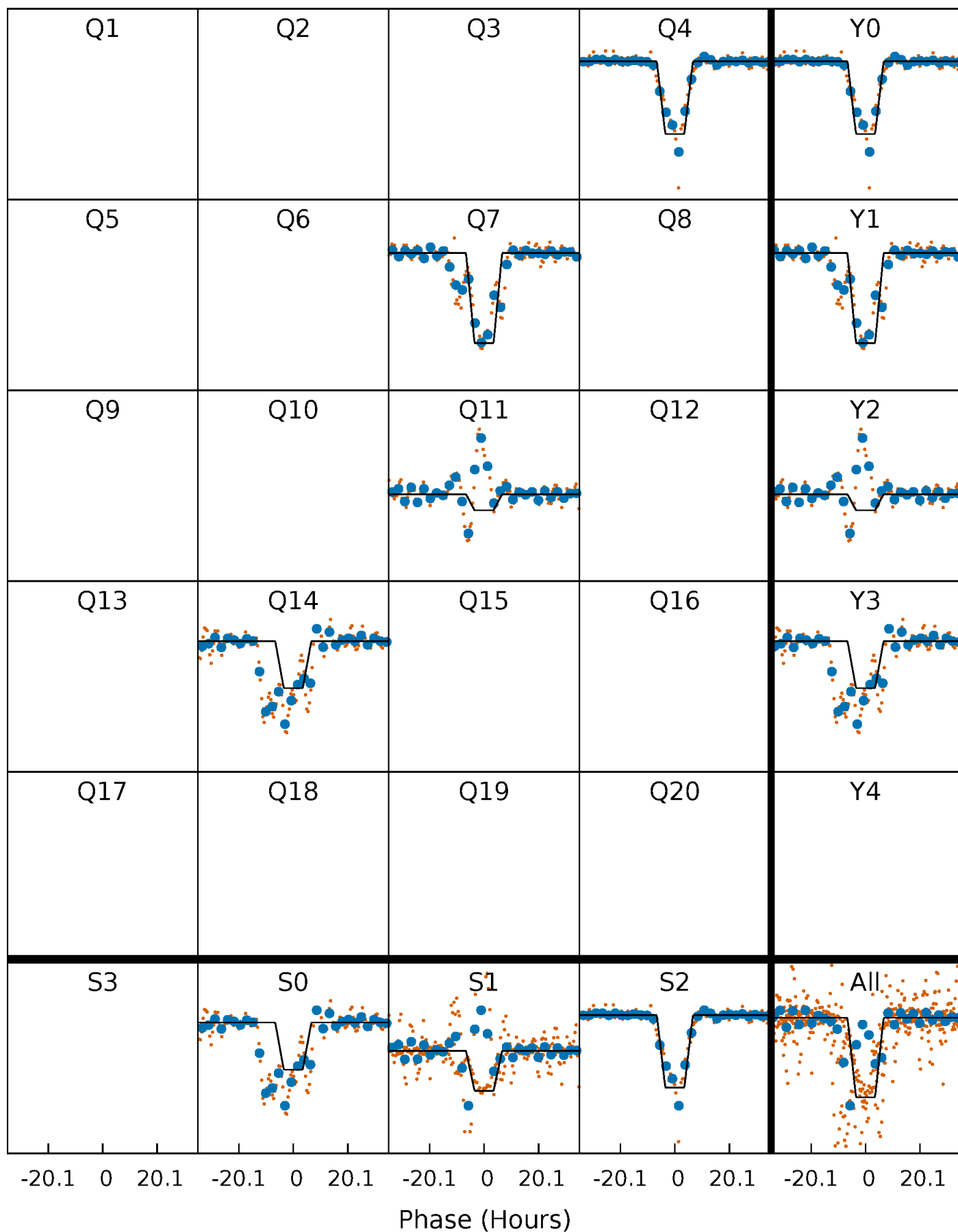
DV Quarter-Phased Transit Curves

TCE 007624629-01 P=322.464471 Days $T_0=373.217792$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

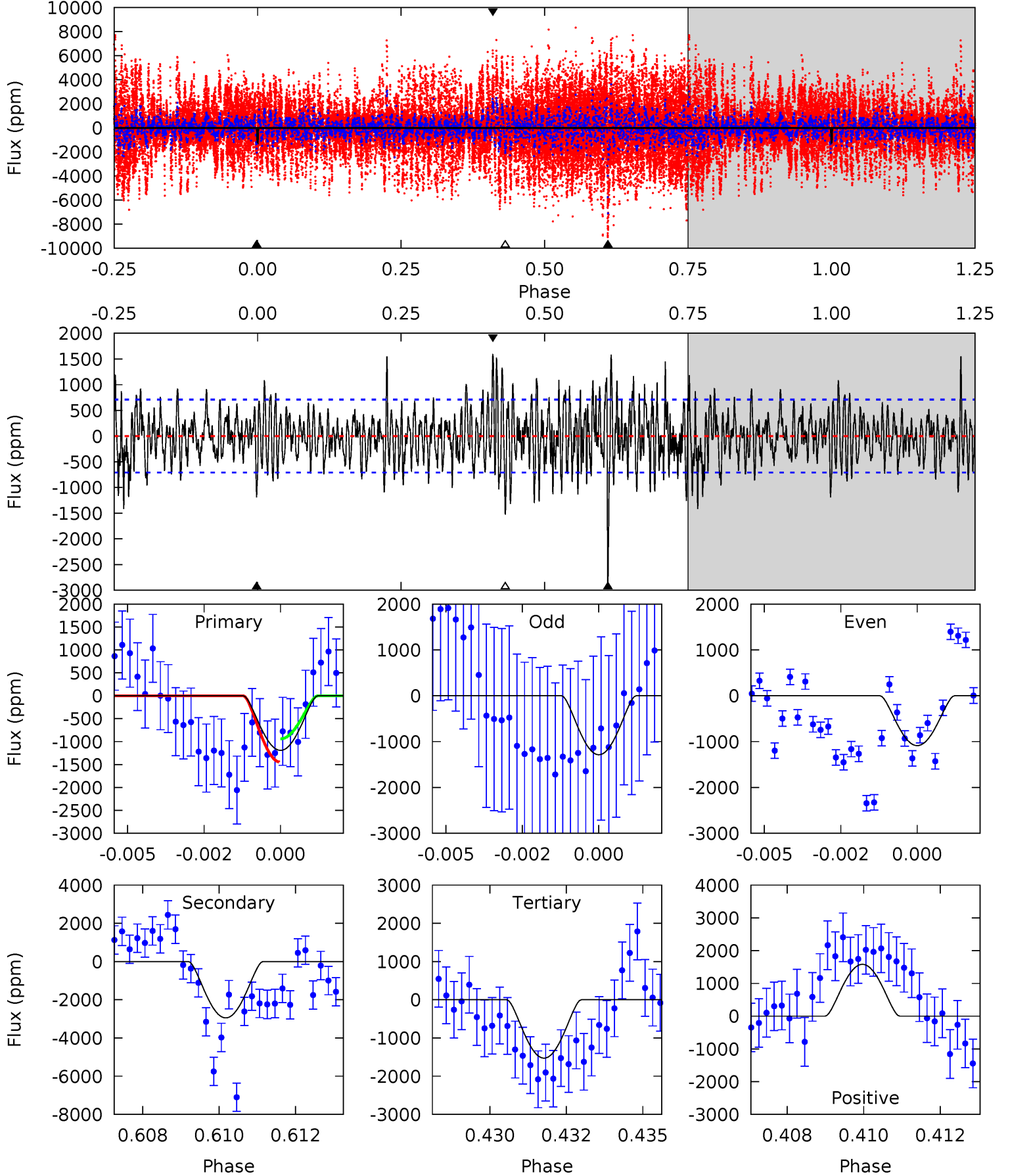
TCE 007624629-01 P=322.346220 Days $T_0=373.222189$ (BKJD)



DV Model-Shift Uniqueness Test

007624629-01, P = 322.464471 Days, E = 50.753321 Days

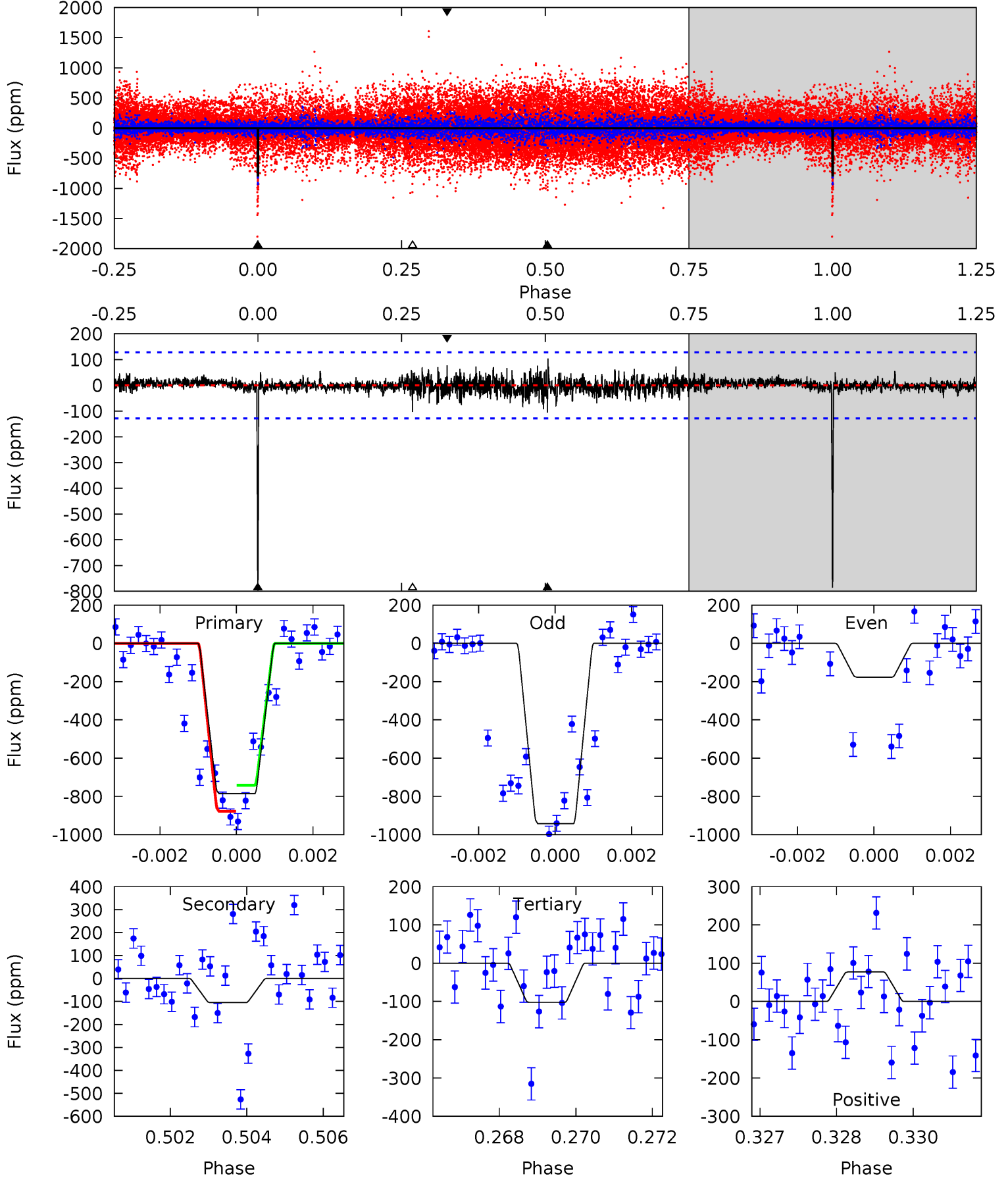
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.89	22.0	11.4	11.8	5.29	3.03	3.46	-2.51	-2.91	10.6	10.2	0.58	0.94	0.35	1.81



Alt Model-Shift Uniqueness Test

007624629-01, P = 322.346220 Days, E = 50.875969 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.8	4.38	4.28	3.22	5.35	3.13	0.81	28.5	29.6	0.11	1.16	14.5	0.48	0.12	2.85



Stellar Parameters For KIC 007624629

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3274^{+117}_{-78}	$0.108^{+0.208}_{-0.052}$	$-0.080^{+0.250}_{-0.150}$	$154.296^{+9.192}_{-27.576}$	$1.114^{+0.207}_{-0.128}$	$0.000^{+0.000}_{-0.000}$
	+4%/-2%	+193%/-48%	+312%/-188%	+6%/-18%	+19%/-11%	+93%/-14%
Source	KIC0	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 007624629-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2950 ± 134	$1144.33^{+849.08}_{-705.13}$	2539^{+110}_{-139}	2931^{+1133}_{-743}	$1.133^{+6.913}_{-0.750}$
Alt.	-105 ± 24	$761.74^{+754.83}_{-506.53}$	2532^{+107}_{-143}	-2404^{+5112}_{-143}	$0.090^{+0.745}_{-0.067}$

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 $A_{obs} \gg 1.0$

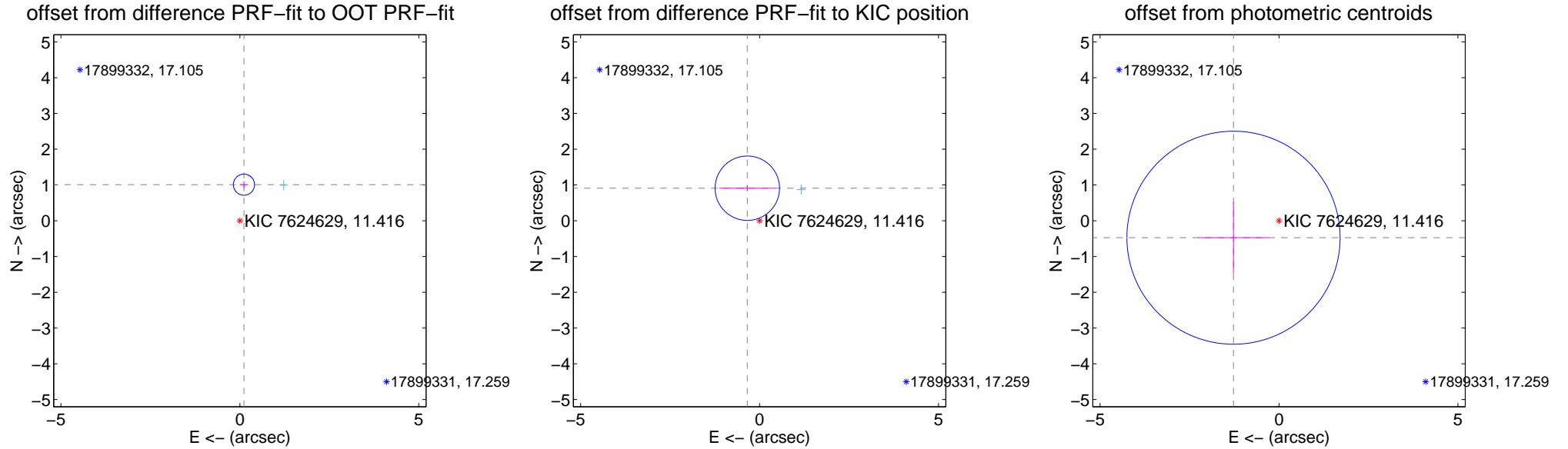
DV Centroid Data

Supplemental centroid analysis for 007624629-01. **Kepler magnitude: 11.42.** Transit SNR 12.81

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.015 ± 0.098	10.31	-0.114 ± 0.092	1.009 ± 0.099
PRF-fit source offset from KIC position	0.972 ± 0.300	3.24	0.343 ± 0.783	0.909 ± 0.069
photometric centroid source offset	1.36 ± 0.99	1.37	1.27 ± 0.99	-0.48 ± 1.00

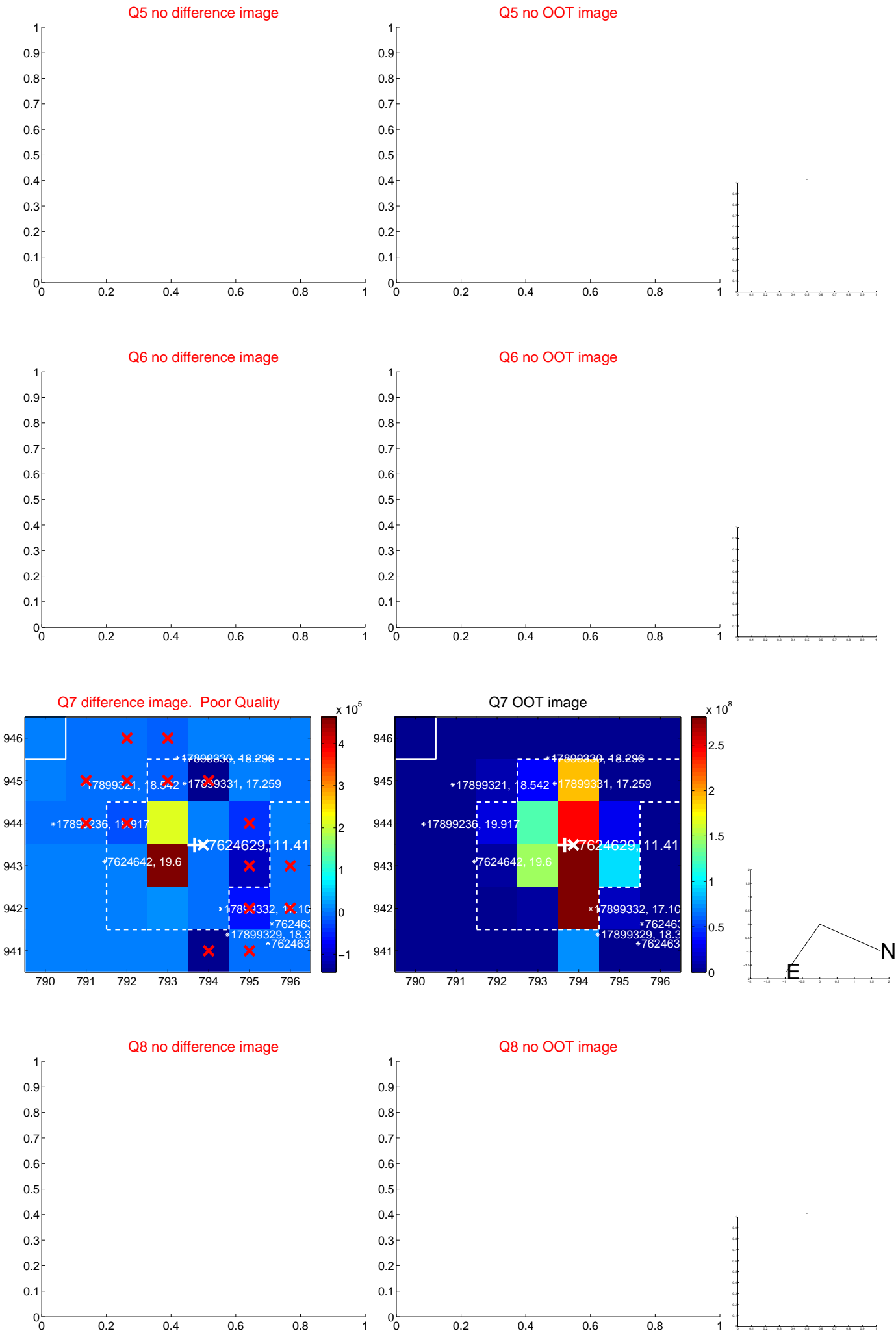


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

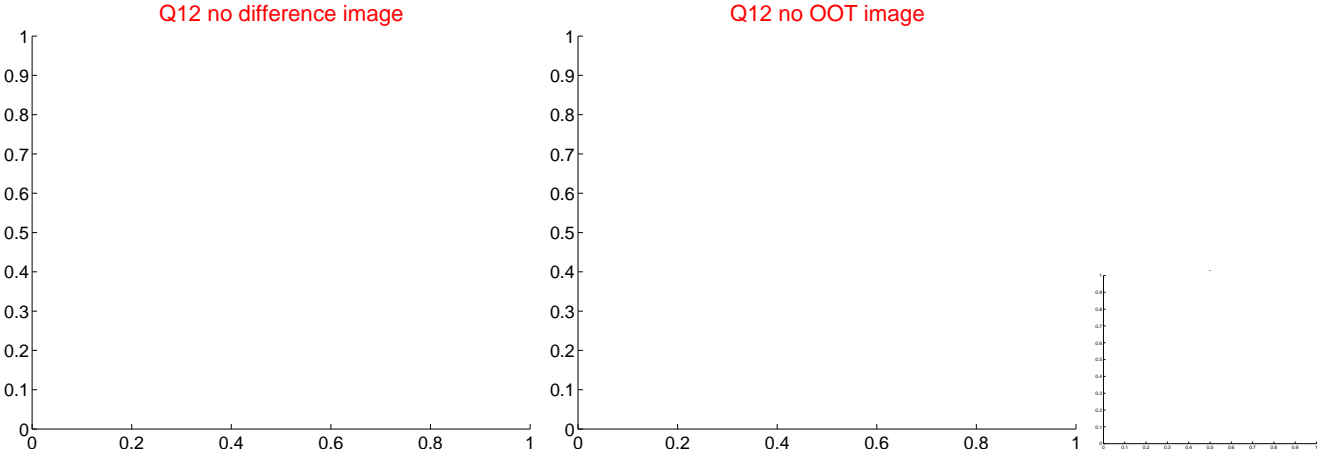
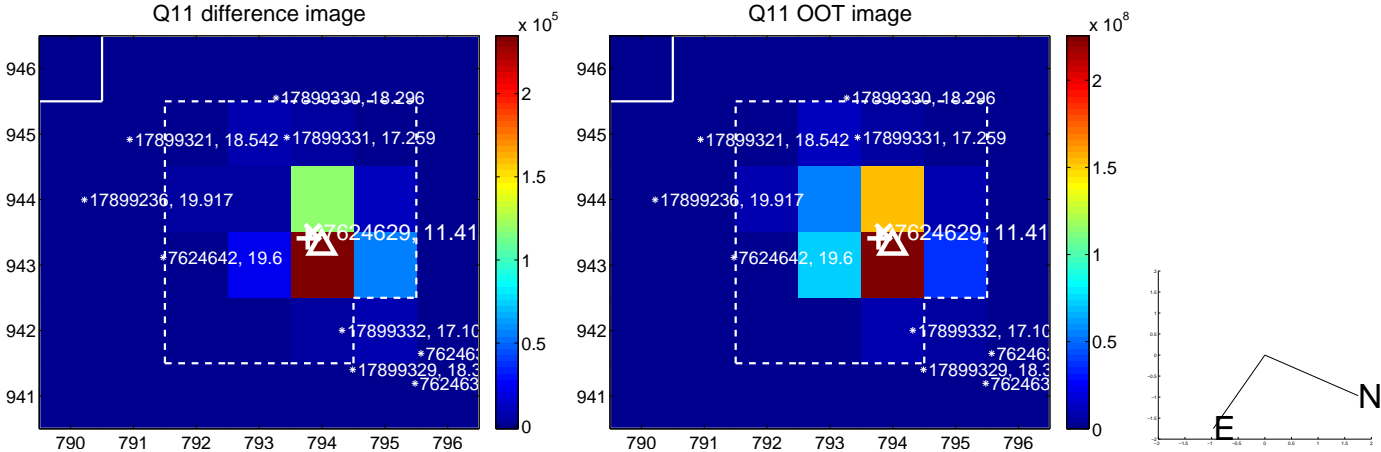
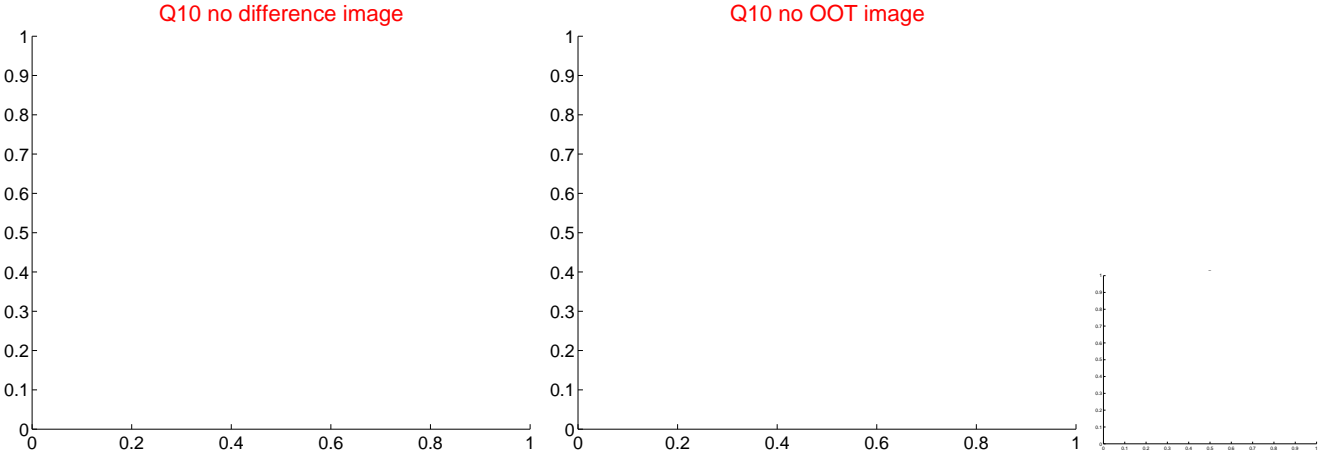
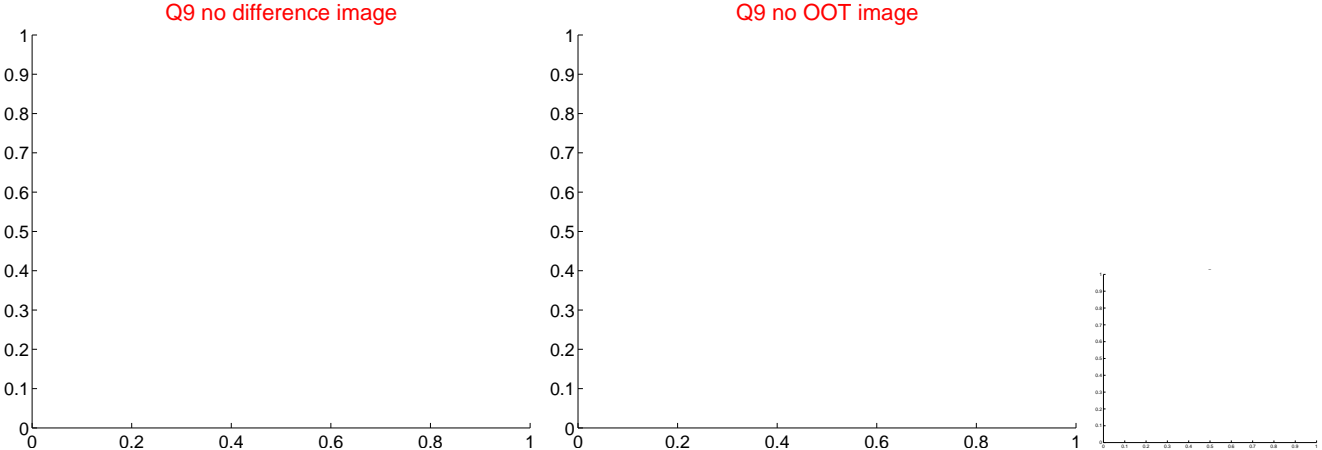
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



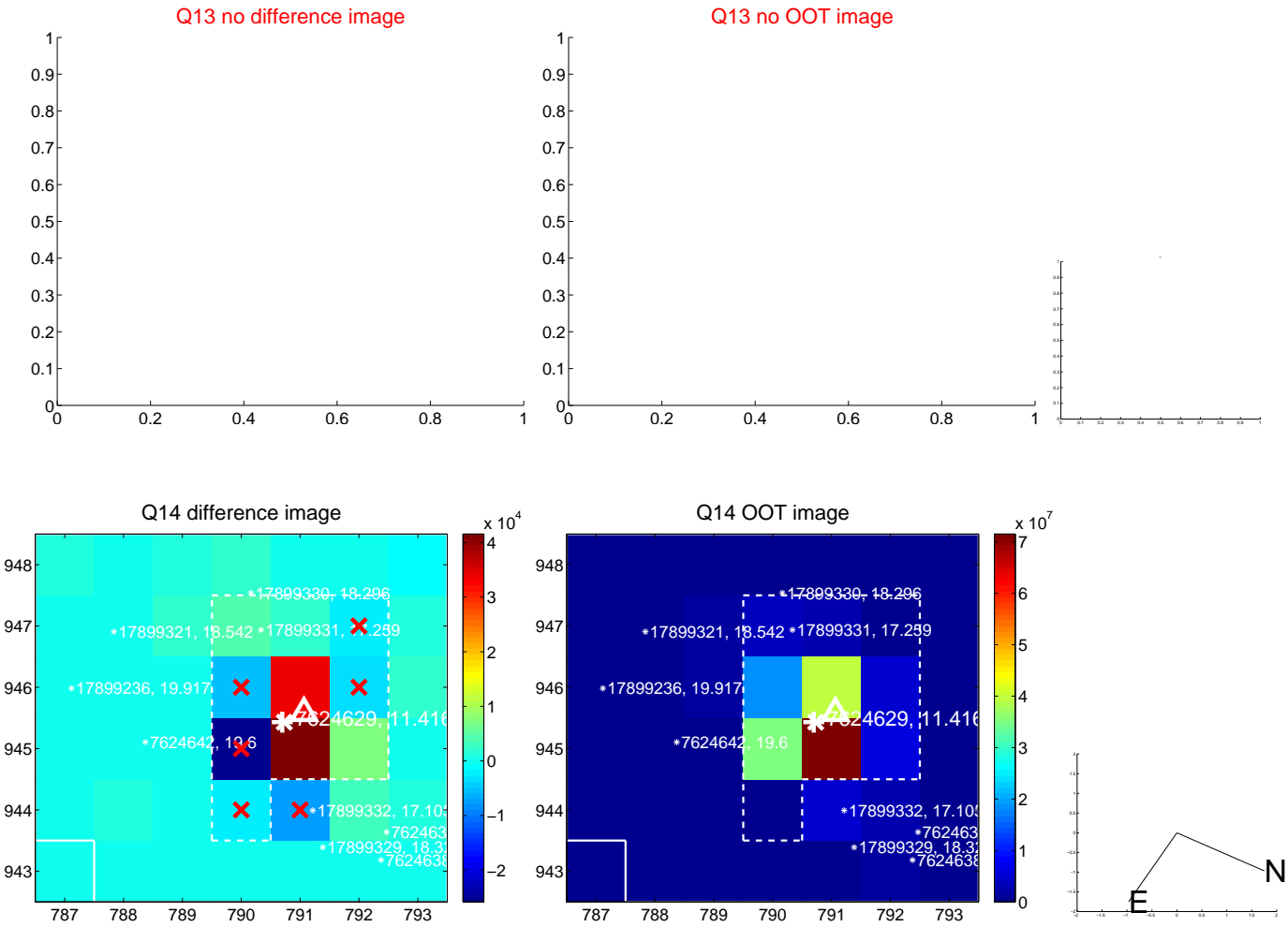
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



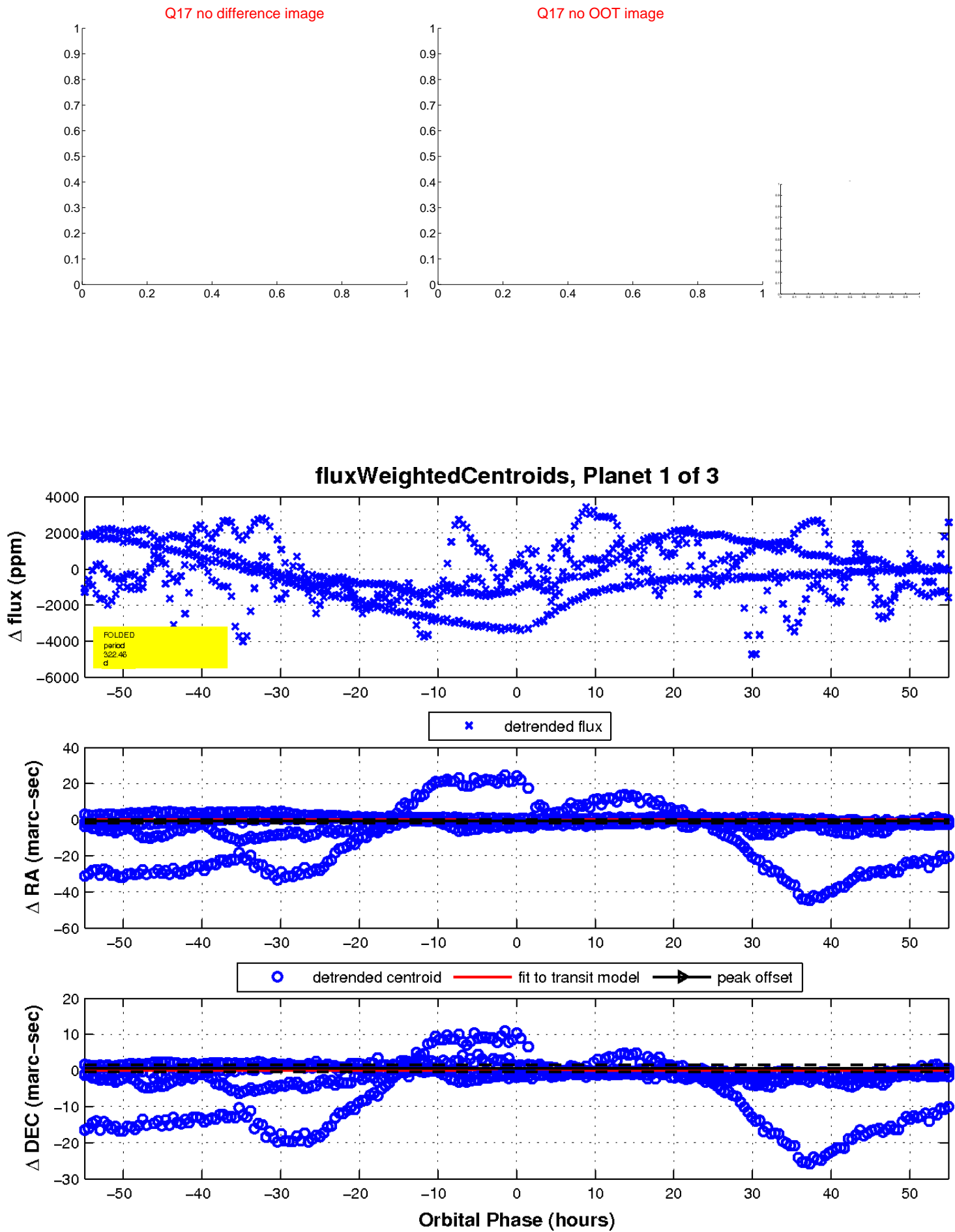
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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

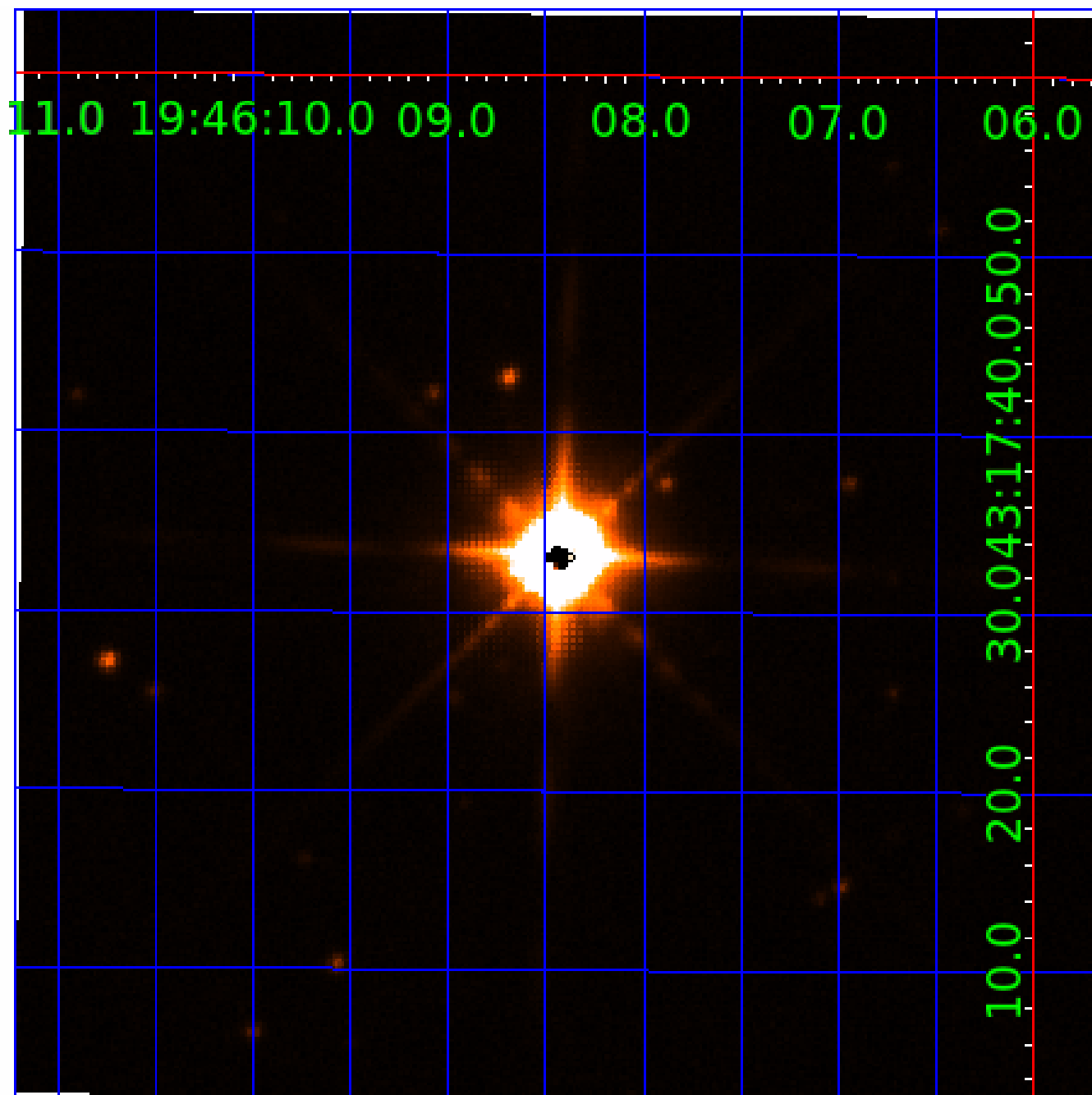


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007624629

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})
007624629-01	OBS	No	322.464471	373.217792	884.6	18.411	13.8	12.8	154.30	3274	1021.75	2692.38
007624629-02	OBS	No	338.911758	168.087120	8133.4	14.734	14.0	17.8	154.30	3274	1562.88	2519.59
007624629-03	OBS	No	330.288134	185.444894	3100.8	12.687	13.3	9.3	154.30	3274	864.61	2607.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007624629-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
007624629-02	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—CENT_SATURATED
007624629-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_SATURATED

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.

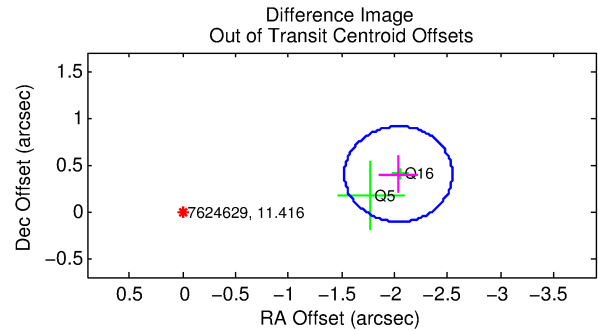
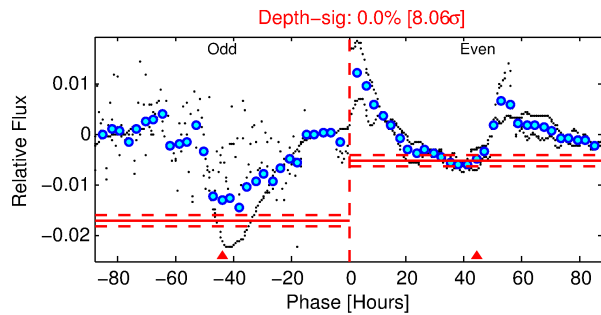
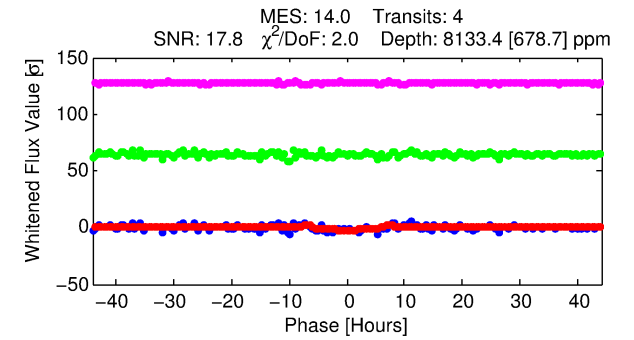
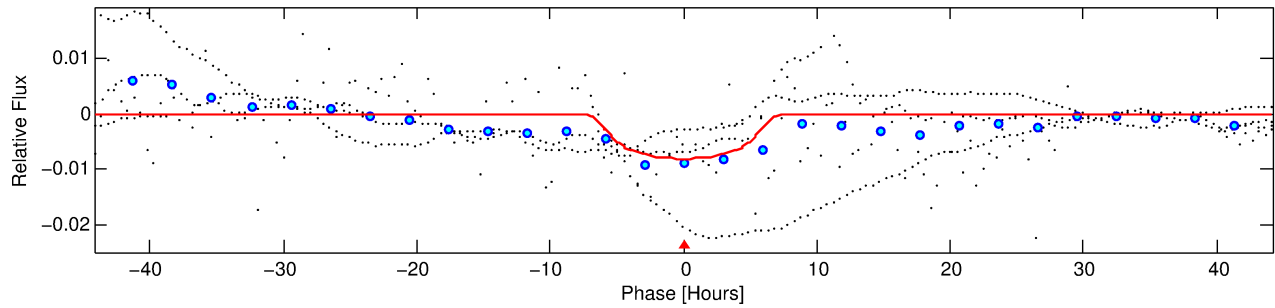
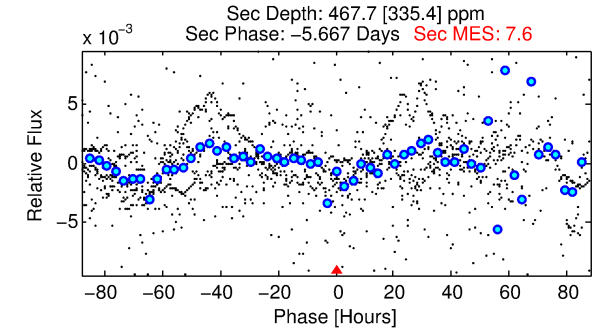
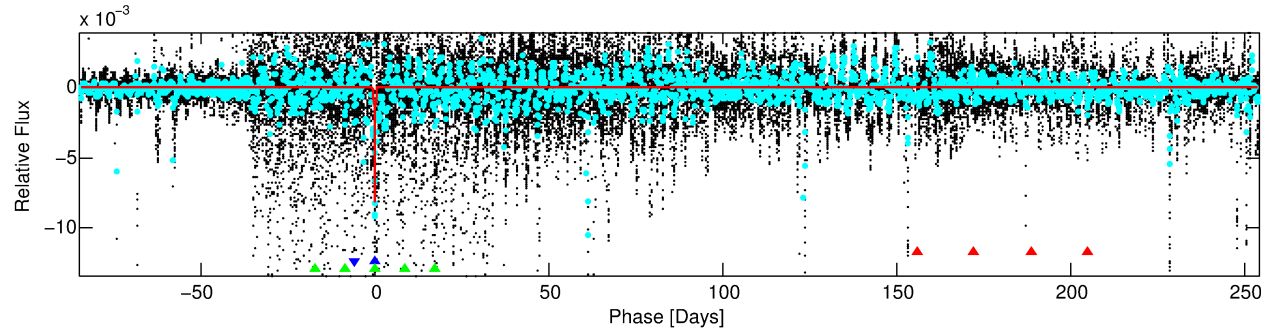
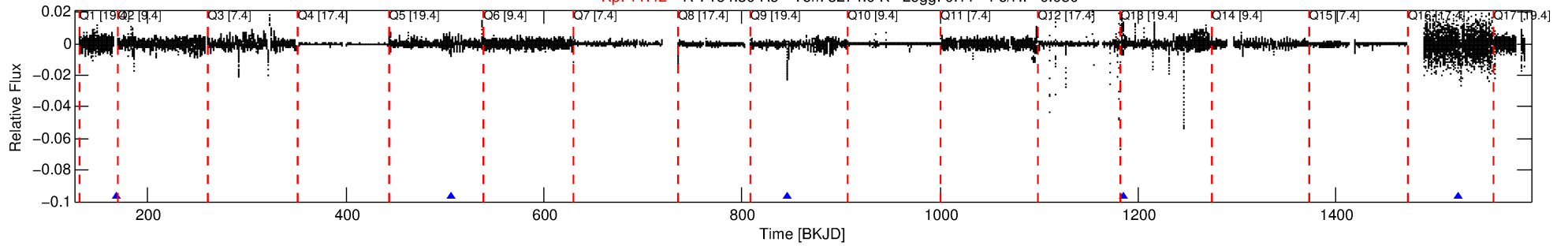
Ephemeris Match Information For 007624629-02

No Significant Match Found

DV One-Page Summary

KIC: 7624629 Candidate: 2 of 3 Period: 338.912 d

Kp: 11.42 R*: 154.30 Rs Teff: 3274.0 K Logg: 0.11 Fe/H: -0.080



DV Fit Results:

Period = 338.91176 [0.00540] d
Epoch = 168.0871 [0.0127] BKJD
Rp/R* = 0.0928 [0.0041]
a/R* = 136.37 [6.88]
b = 0.77 [0.03]
Seff = 2519.59 [931.15]
Teq = 1807 [167] K
Rp = 1562.88 [287.83] Re
a = 0.9863 [0.1965] AU
Ag = 0.10 [0.08] [-10.96σ]
Teffp = 1580 [291] K [-0.67σ]

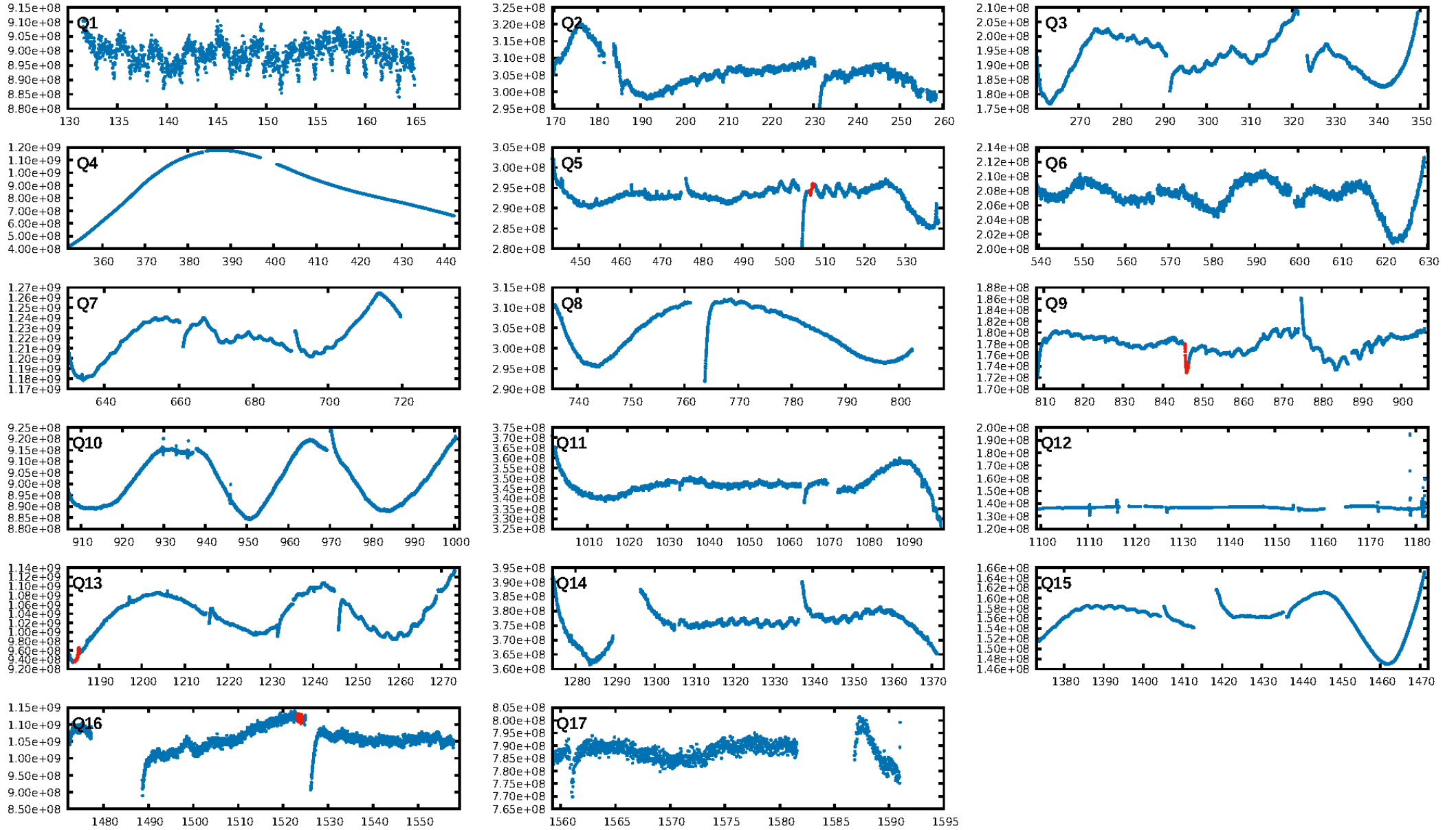
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [10.64σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: 5.96e-08
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.174
Centroid-sig: 9.2%
Centroid-so: 0.417 arcsec [4.26σ]
OotOffset-rm: 2.077 arcsec [12.23σ]
KicOffset-rm: 0.683 arcsec [2.97σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
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DiffImageOverlap-fno: 1.00 [2/2]

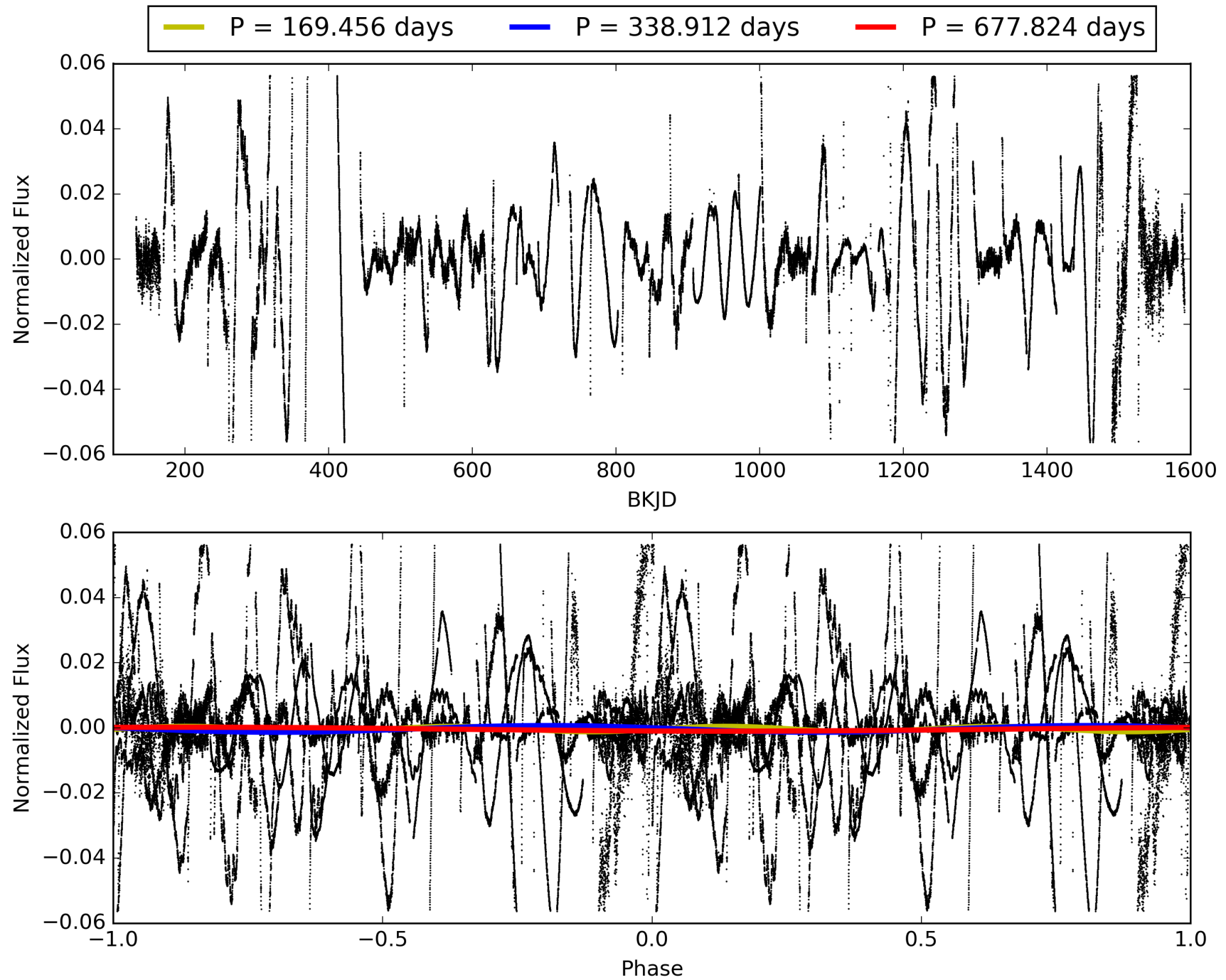
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:01:22 Z

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

TCE 007624629-02, PDC Light Curves

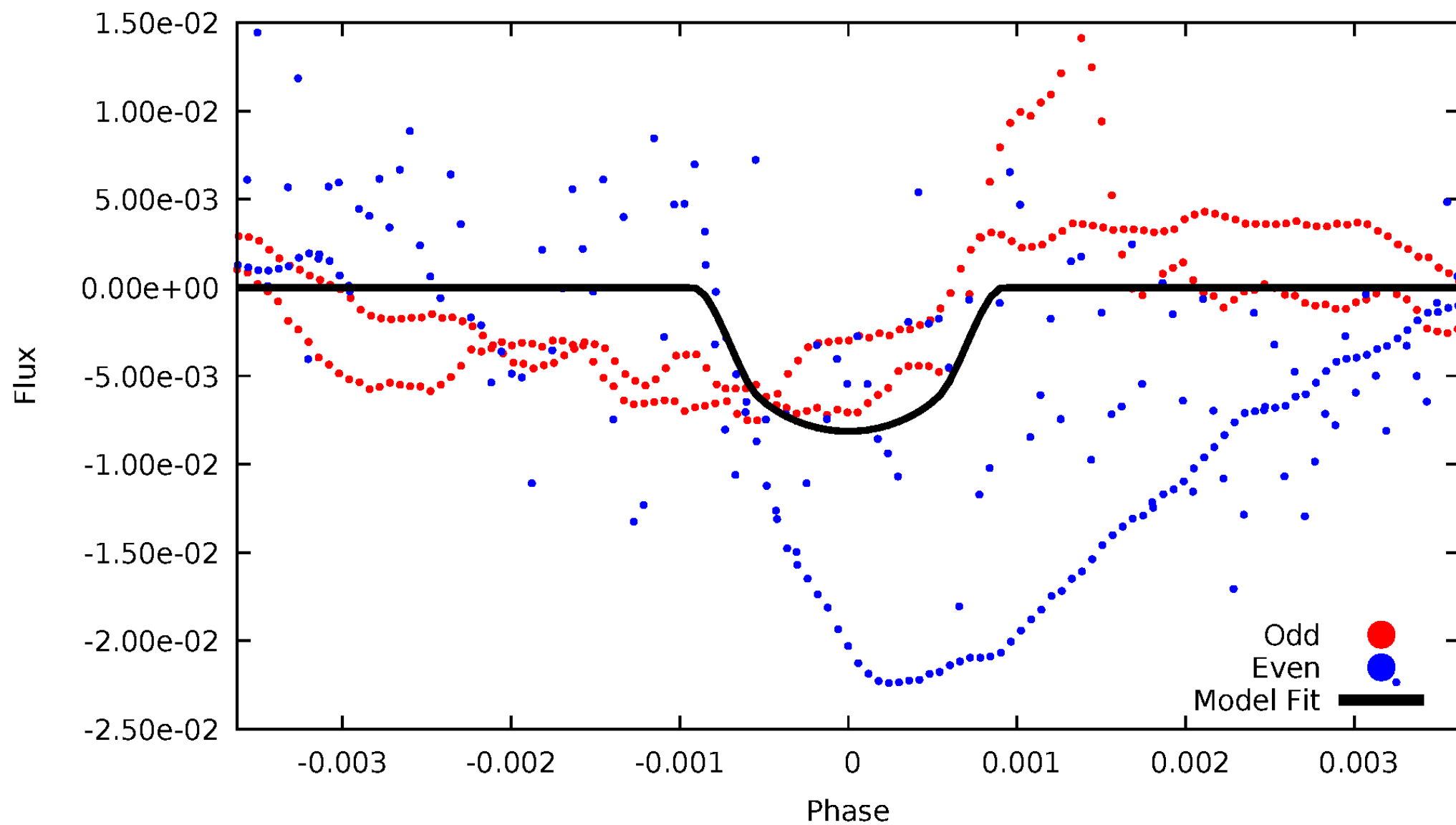


TCE 007624629-02



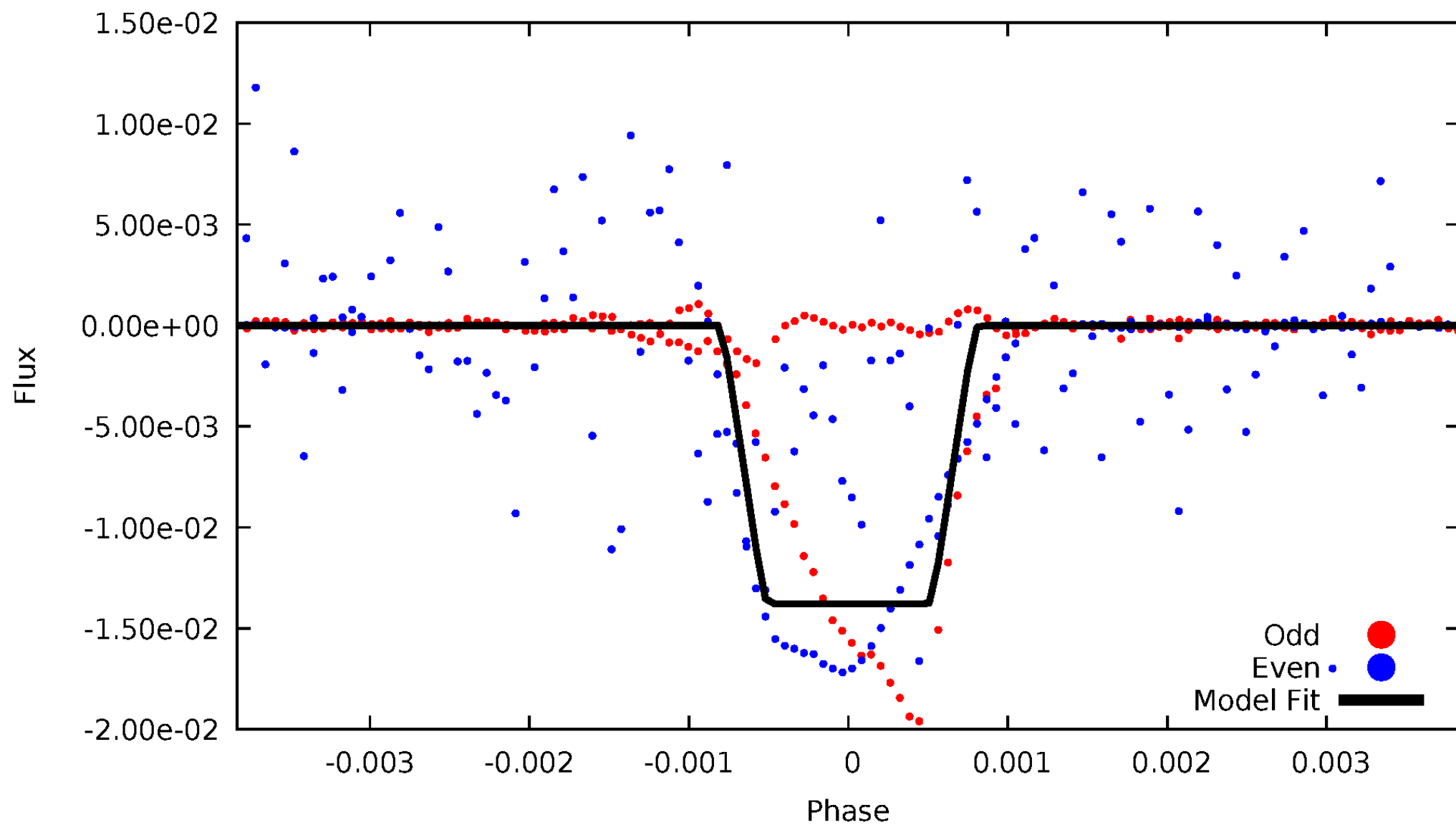
DV Odd/Even

TCE 007624629-02



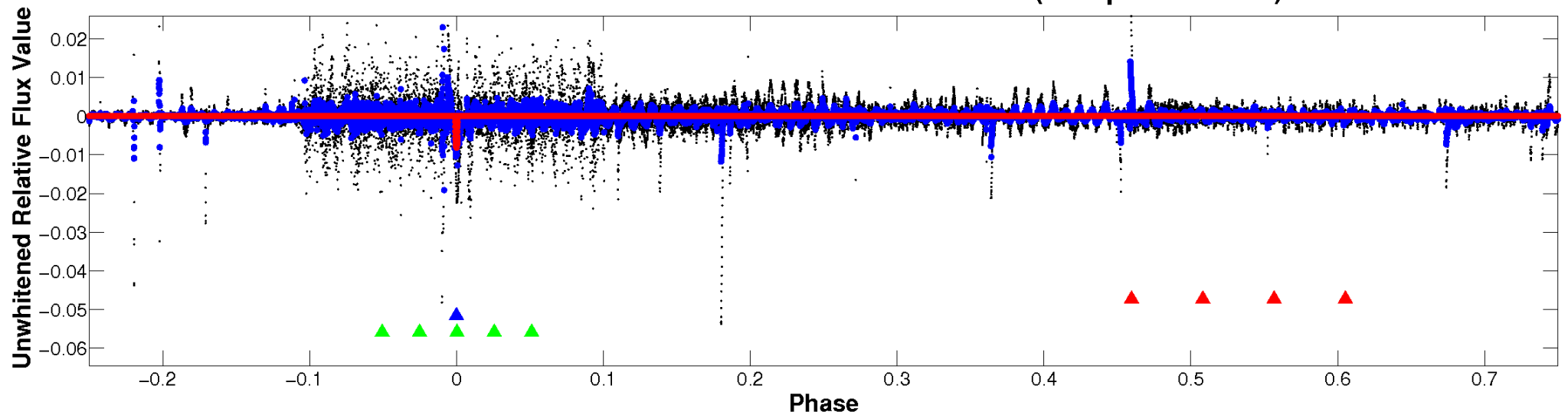
ALT Odd/Even

TCE 007624629-02

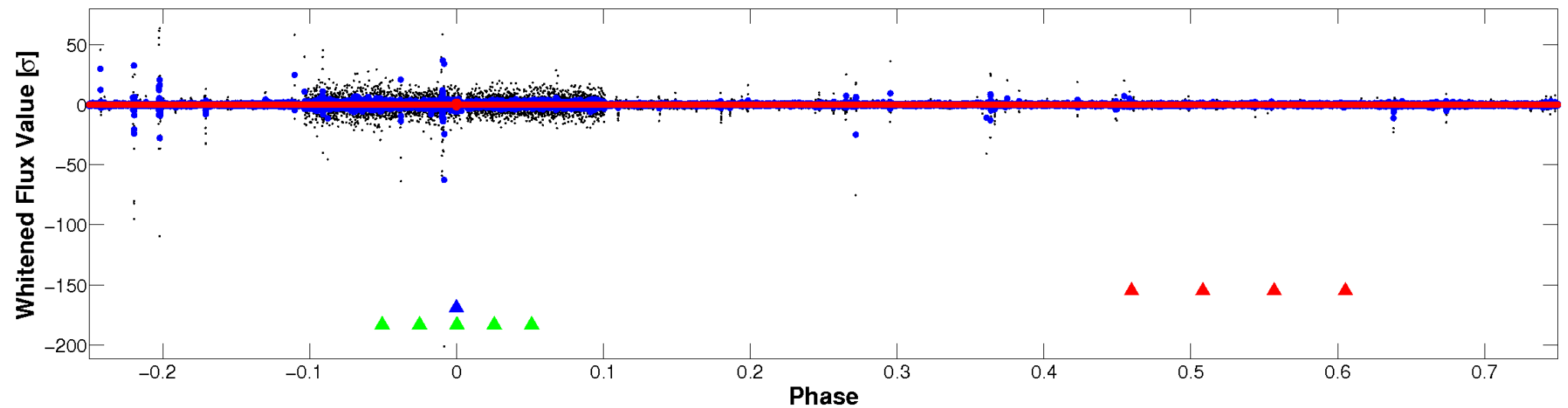


Non-Whitened Vs. Whitened Light Curve

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



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



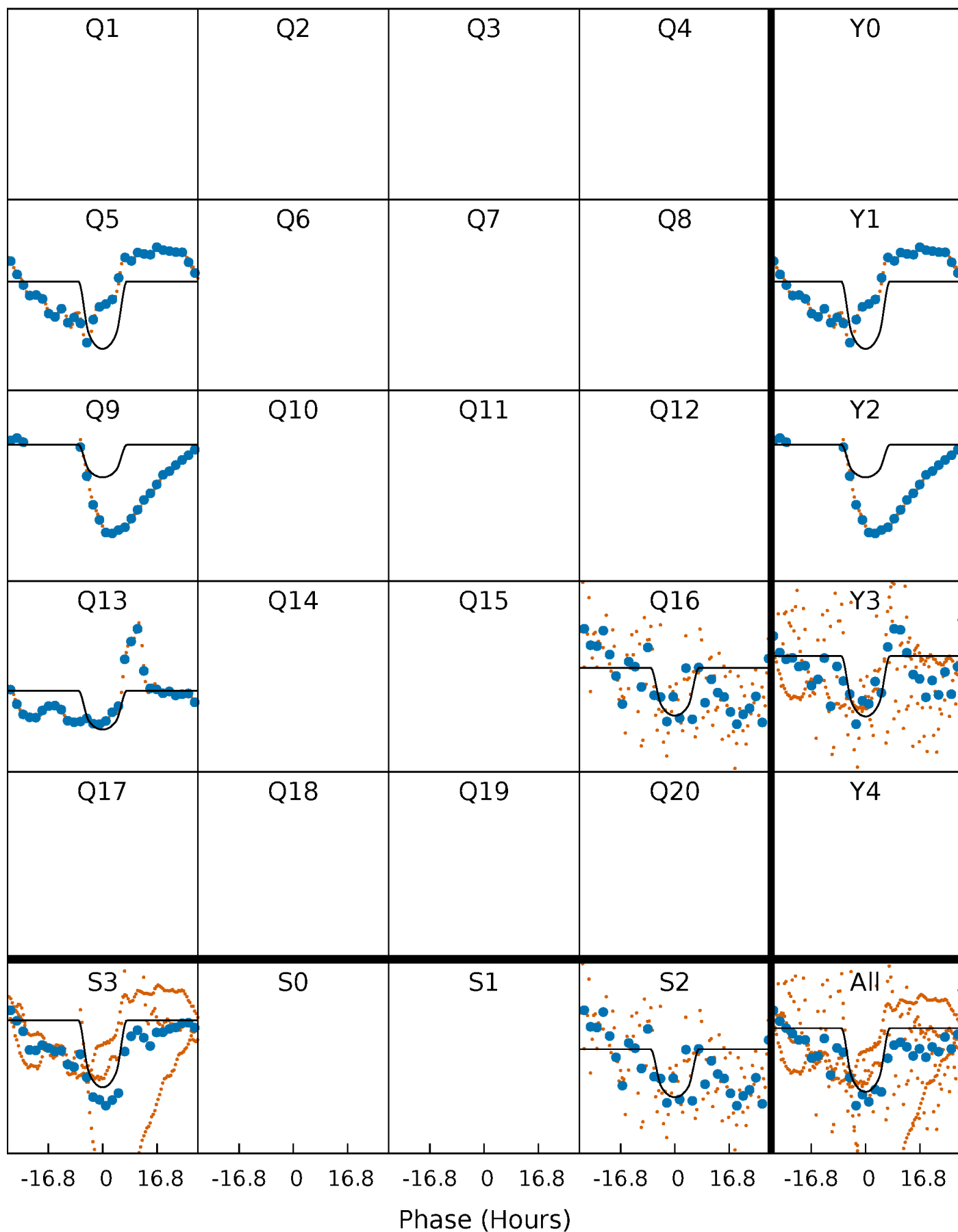
PDC Quarter-Phased Transit Curves

TCE 007624629-02 P=338.911758 Days $T_0=168.087120$ (BKJD)



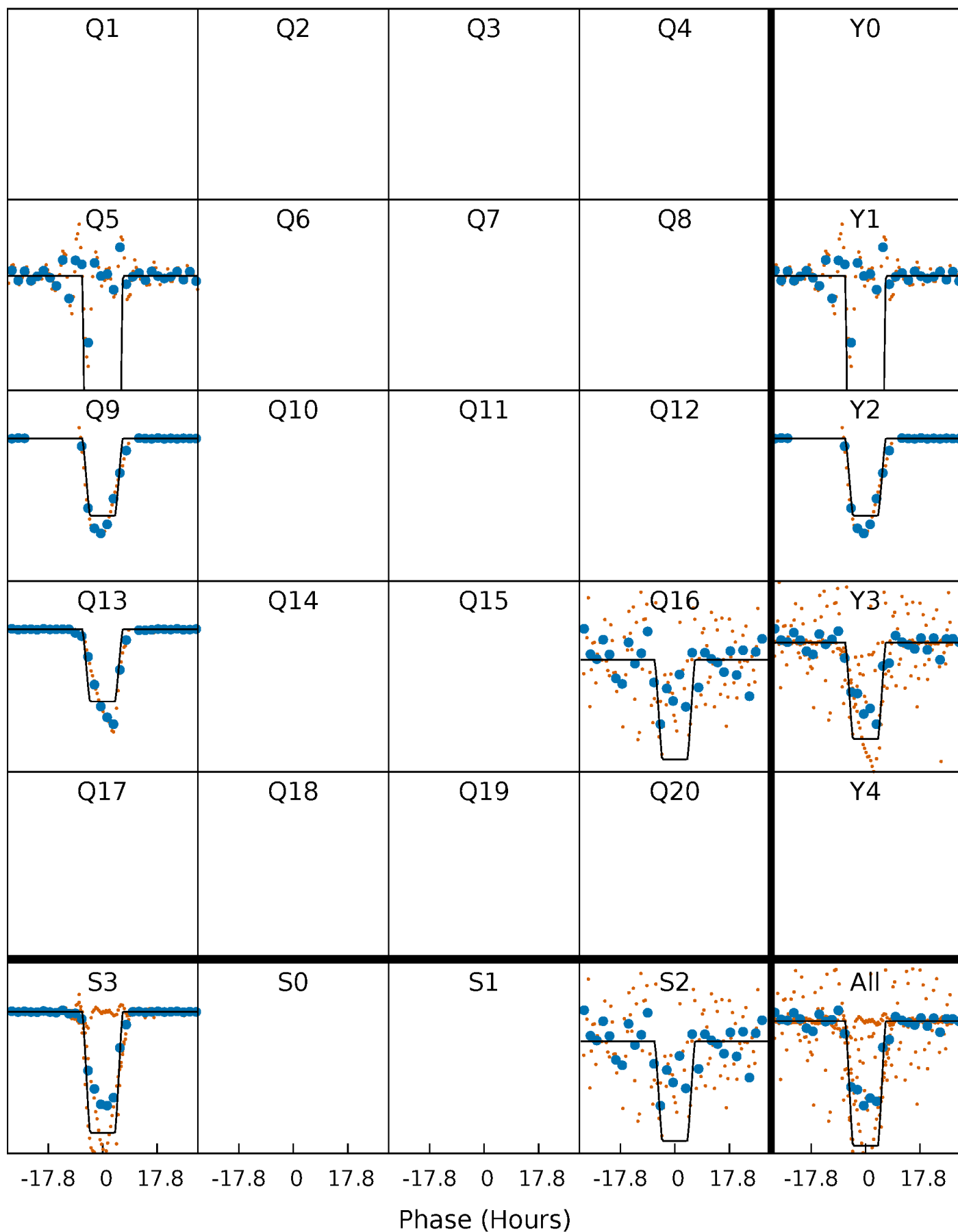
DV Quarter-Phased Transit Curves

TCE 007624629-02 $P=338.911758$ Days $T_0=168.087120$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

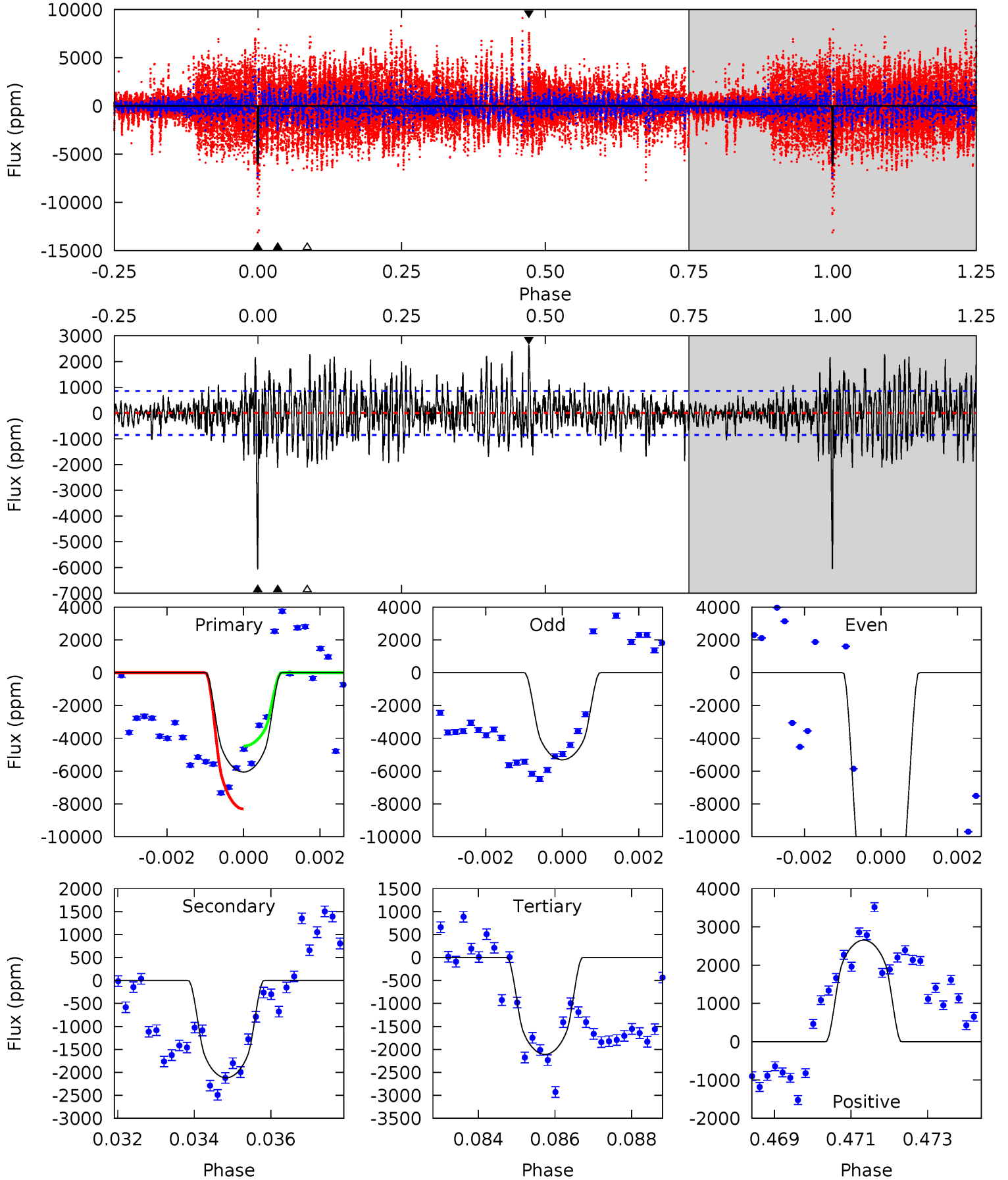
TCE 007624629-02 P=338.931460 Days $T_0=168.080258$ (BKJD)



DV Model-Shift Uniqueness Test

007624629-02, P = 338.911758 Days, E = 168.087120 Days

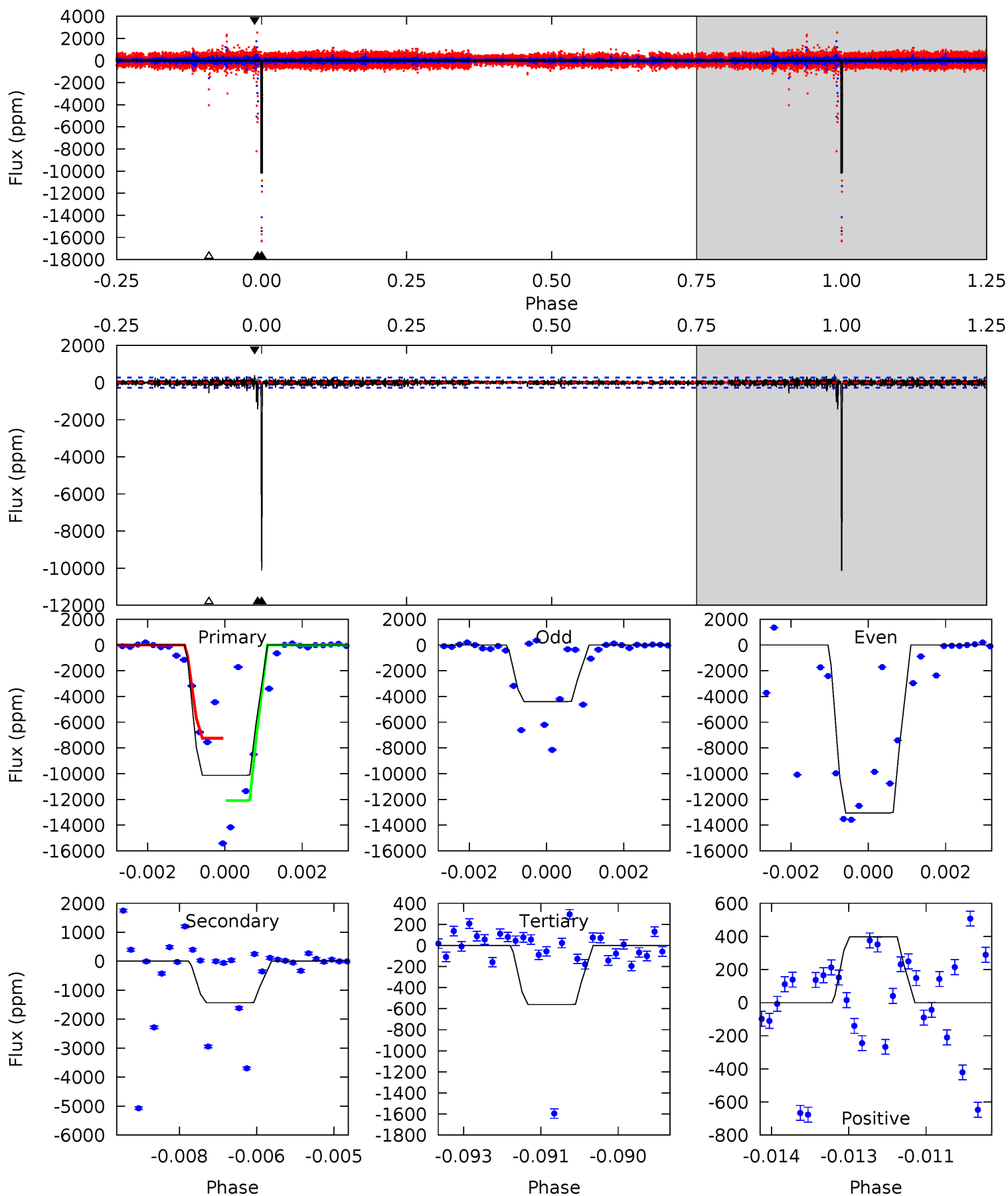
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.9	13.2	13.2	16.6	5.34	3.11	4.18	24.7	21.3	0.07	-3.34	29.2	1.39	0.30	0



Alt Model-Shift Uniqueness Test

007624629-02, P = 338.931460 Days, E = 168.080258 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
197.5	27.9	10.9	7.77	5.37	3.16	1.33	186.6	189.8	16.9	20.1	100.9	0.88	0.04	0



Stellar Parameters For KIC 007624629

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3274^{+117}_{-78}	$0.108^{+0.208}_{-0.052}$	$-0.080^{+0.250}_{-0.150}$	$154.296^{+9.192}_{-27.576}$	$1.114^{+0.207}_{-0.128}$	$0.000^{+0.000}_{-0.000}$
	+4%/-2%	+193%/-48%	+312%/-188%	+6%/-18%	+19%/-11%	+93%/-14%
Source	KIC0	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 007624629-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2119±160	$1532.18^{+126.98}_{-168.43}$	2483^{+116}_{-132}	2408^{+125}_{-131}	$0.500^{+0.130}_{-0.081}$
Alt.	-1429±51	$1957.07^{+142.84}_{-228.70}$	2479^{+118}_{-130}	-2201^{+222}_{-109}	$0.208^{+0.051}_{-0.028}$

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

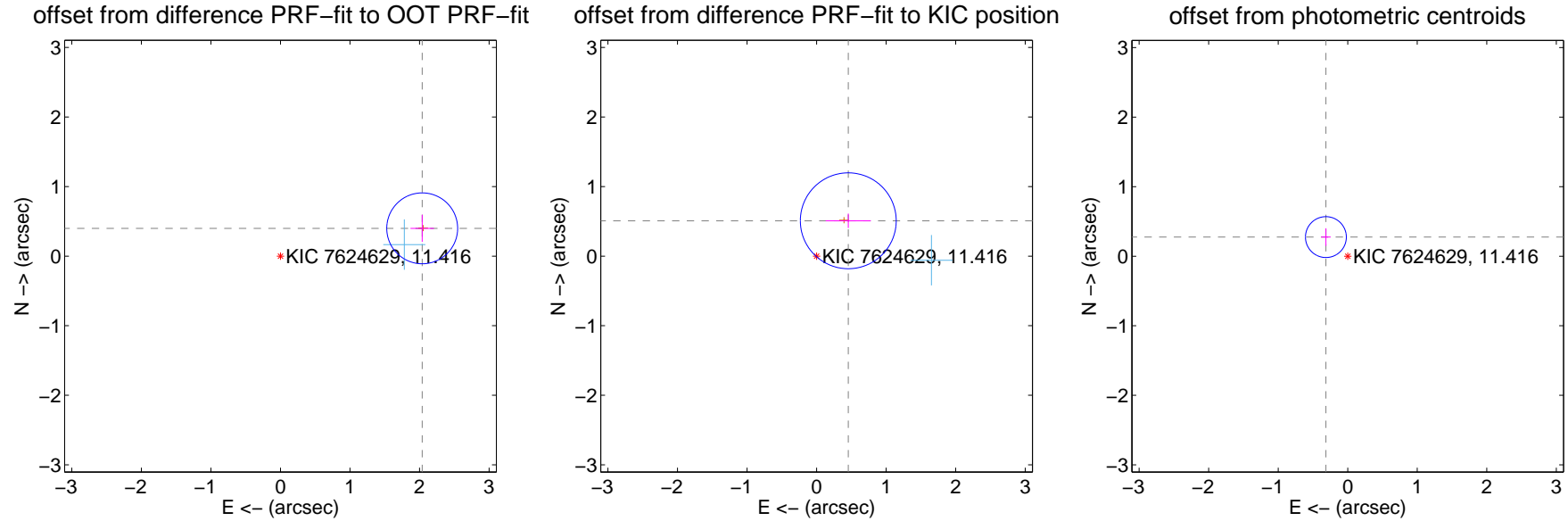
DV Centroid Data

Supplemental centroid analysis for 007624629-02. **Kepler magnitude: 11.42.** Transit SNR 17.77

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.66 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.077 ± 0.170	12.23	-2.038 ± 0.169	0.399 ± 0.194
PRF-fit source offset from KIC position	0.683 ± 0.230	2.97	-0.456 ± 0.324	0.508 ± 0.104
photometric centroid source offset	0.42 ± 0.10	4.26	0.31 ± 0.07	0.27 ± 0.13

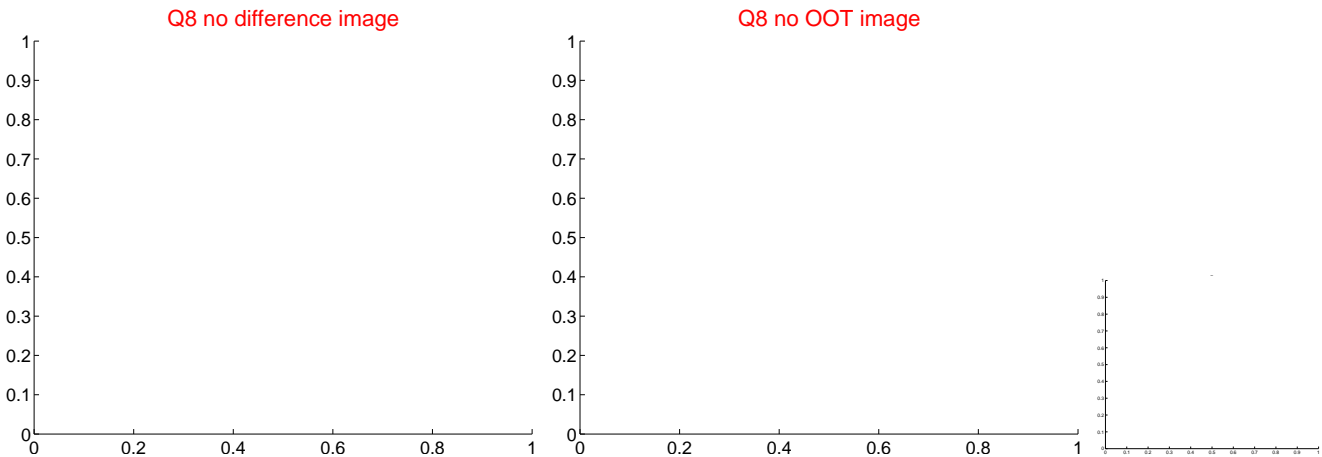
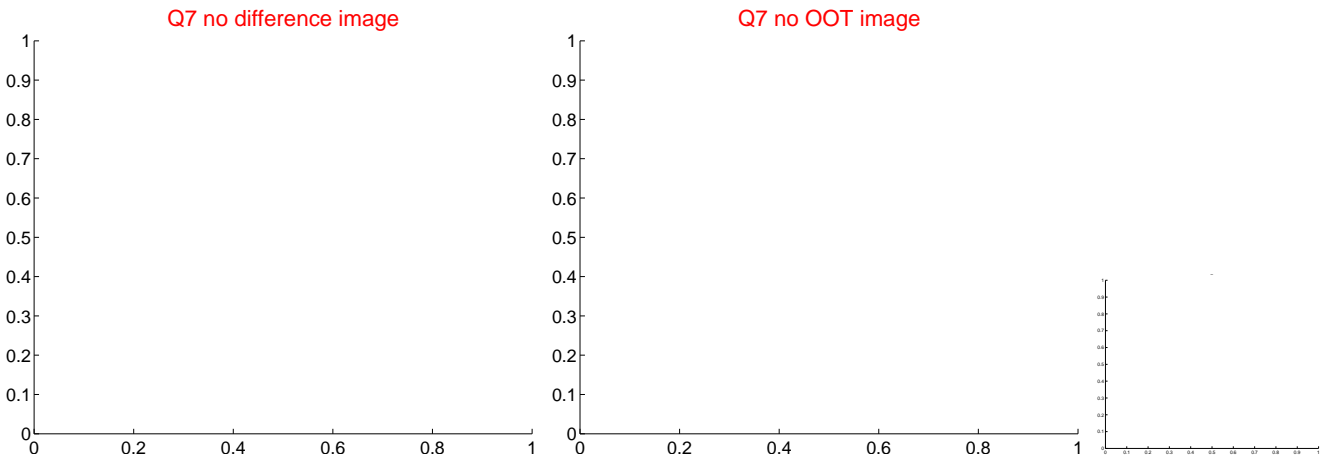
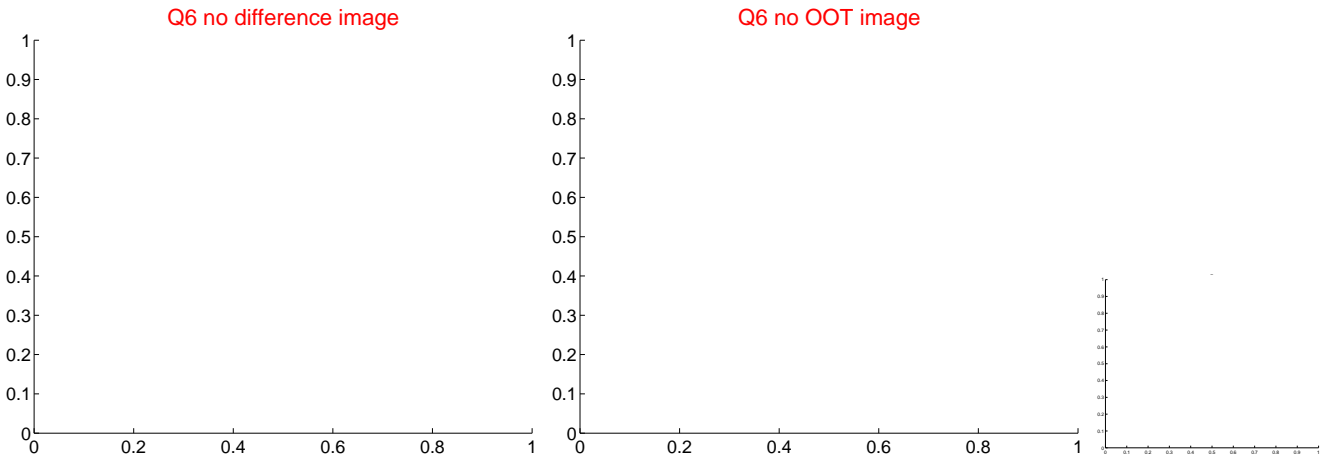
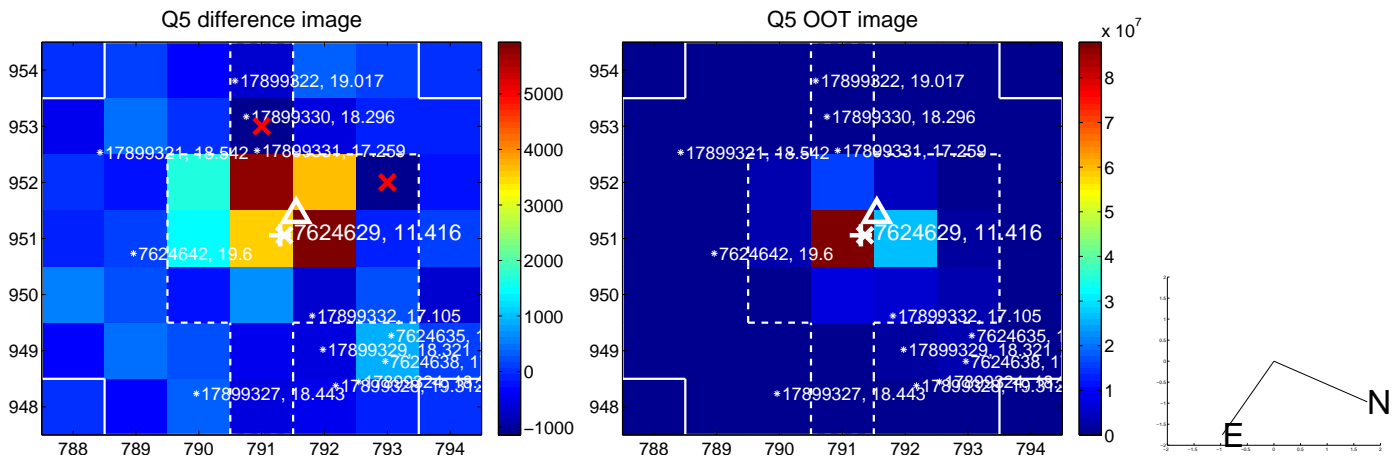


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



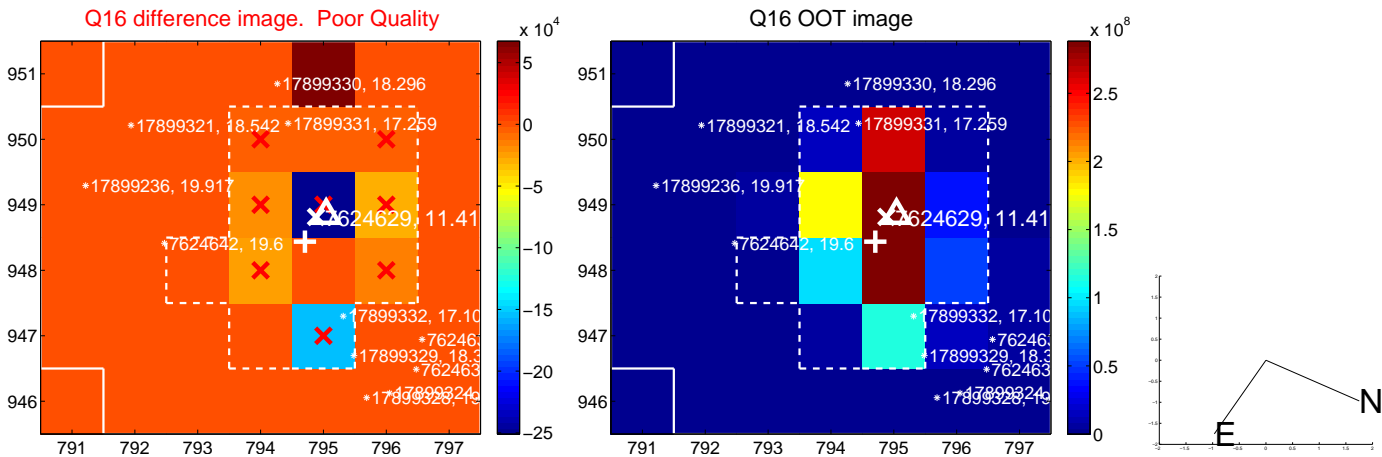
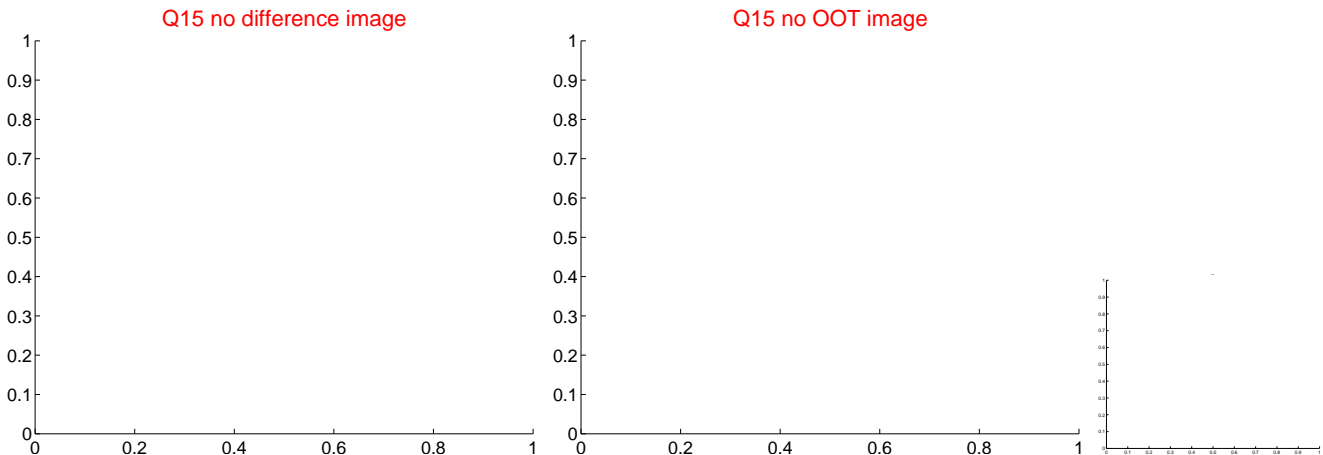
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



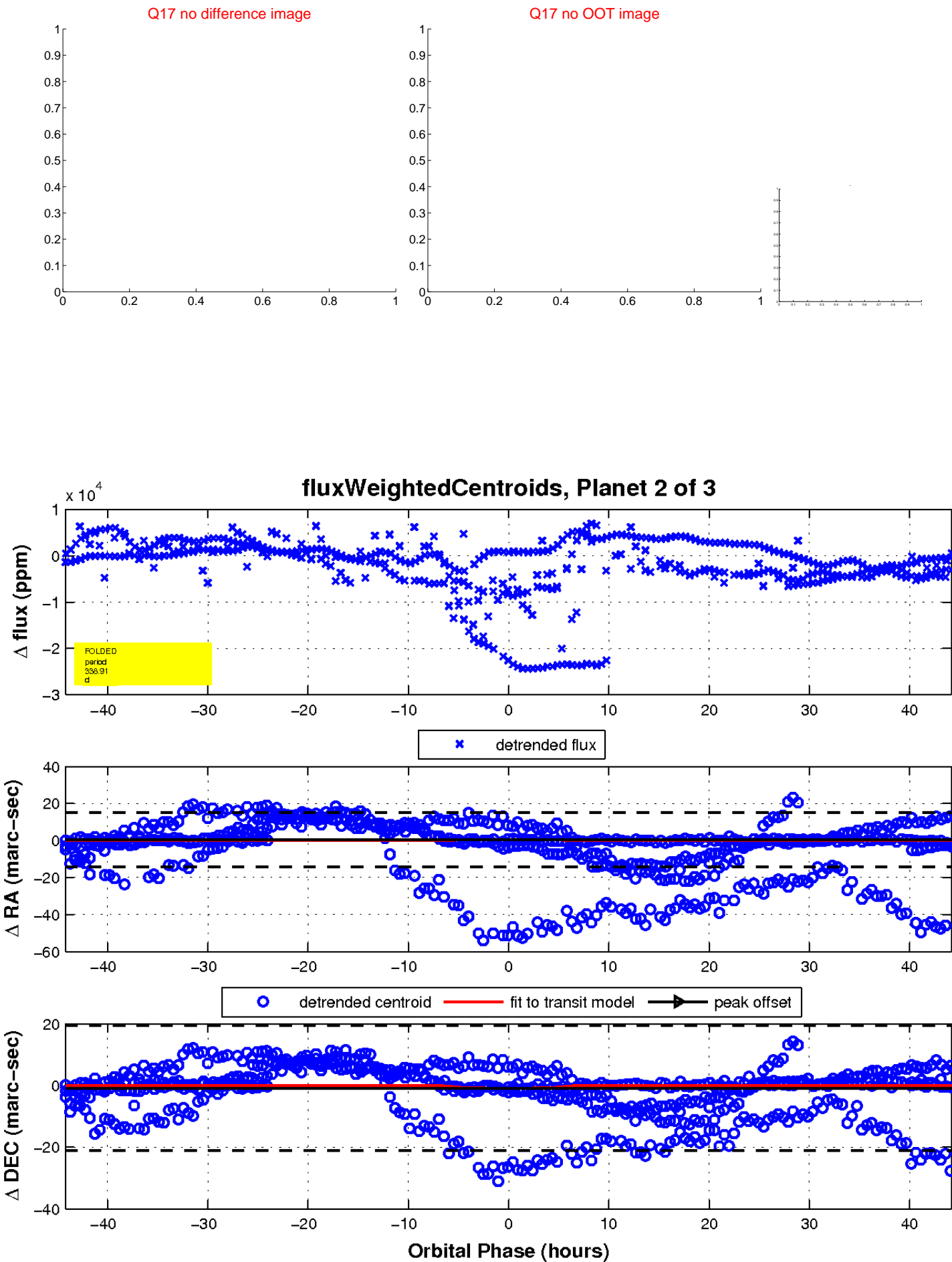
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

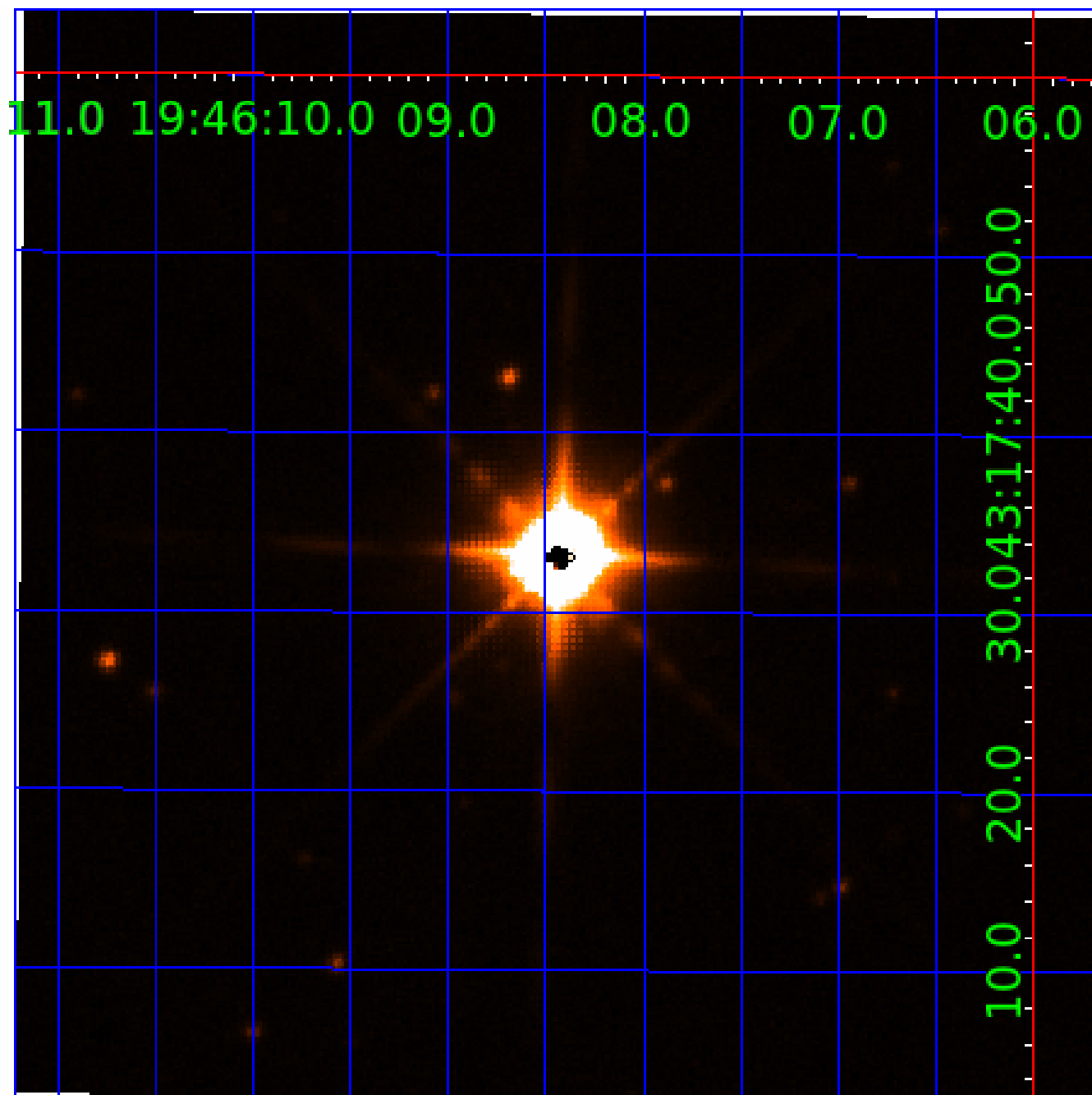


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007624629

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})
007624629-01	OBS	No	322.464471	373.217792	884.6	18.411	13.8	12.8	154.30	3274	1021.75	2692.38
007624629-02	OBS	No	338.911758	168.087120	8133.4	14.734	14.0	17.8	154.30	3274	1562.88	2519.59
007624629-03	OBS	No	330.288134	185.444894	3100.8	12.687	13.3	9.3	154.30	3274	864.61	2607.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007624629-01	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_SATURATED
007624629-02	OBS	FP	0.00	1	0	0	0	LPP_DV—ALL_TRANS_CHASES—CENT_SATURATED
007624629-03	OBS	FP	0.00	1	0	0	0	ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_SATURATED

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

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

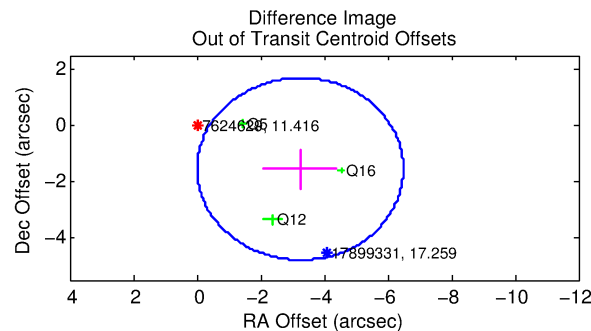
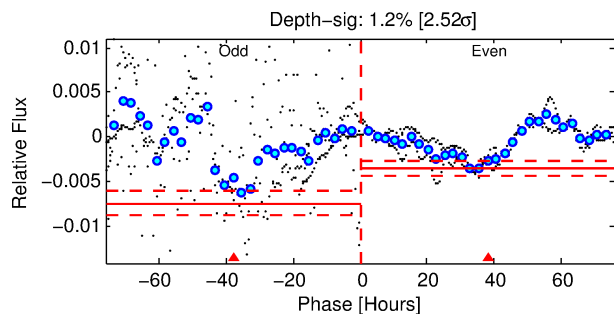
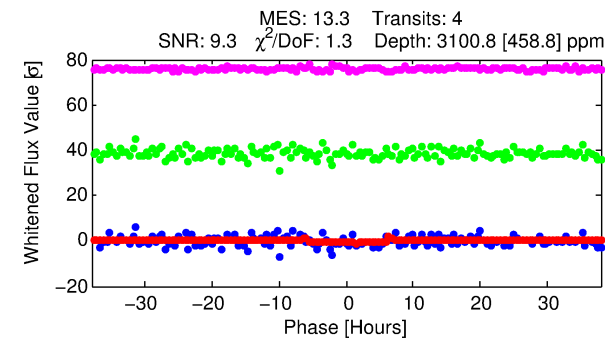
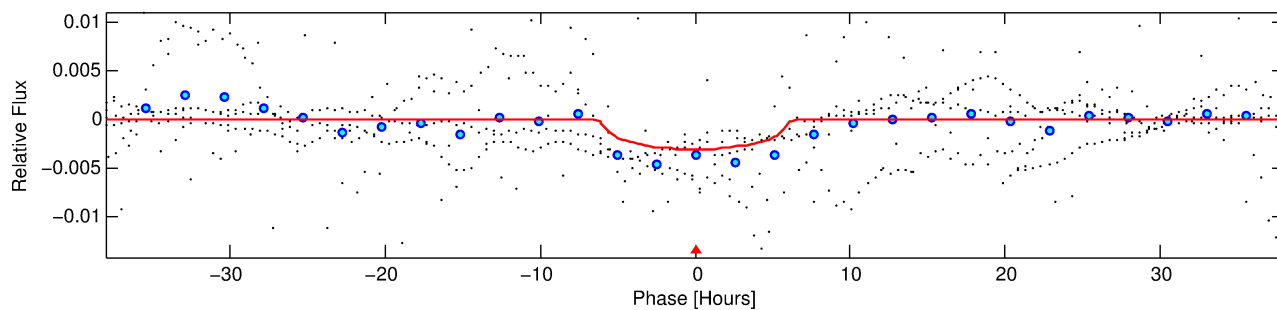
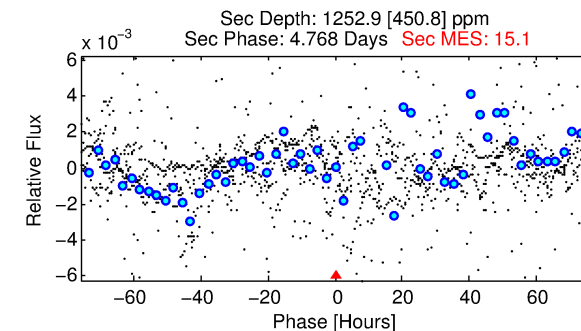
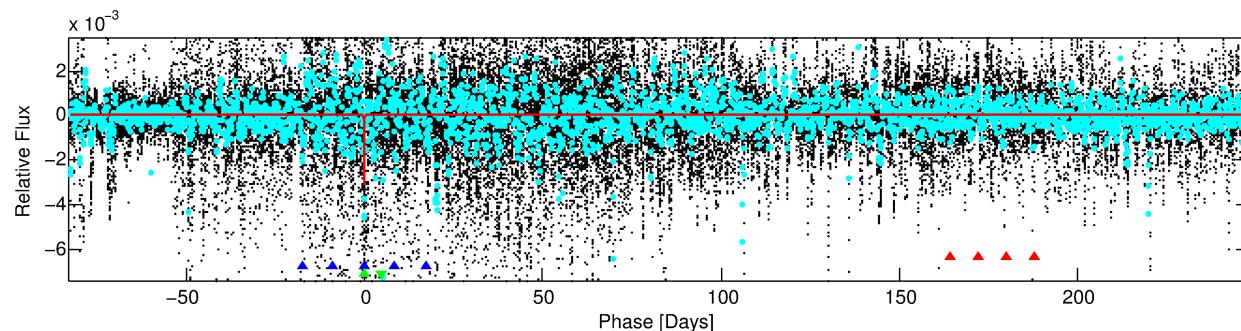
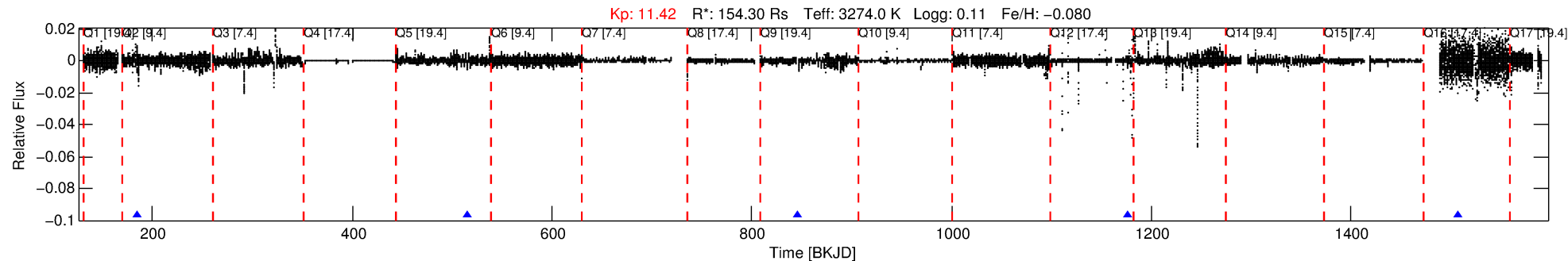
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007624629-03

No Significant Match Found

DV One-Page Summary

KIC: 7624629 Candidate: 3 of 3 Period: 330.288 d



DV Fit Results:

Period = 330.28813 [0.00420] d
Epoch = 185.4449 [0.0086] BKJD
Rp/R* = 0.0514 [0.0058]
a/R* = 175.68 [32.57]
b = 0.57 [0.22]
Seff = 2607.68 [963.70]
Teq = 1822 [168] K
Rp = 864.61 [182.43] Re
a = 0.9695 [0.1931] AU
Ag = 0.87 [0.47] [-0.28σ]
Teffp = 2718 [304] K [2.58σ]

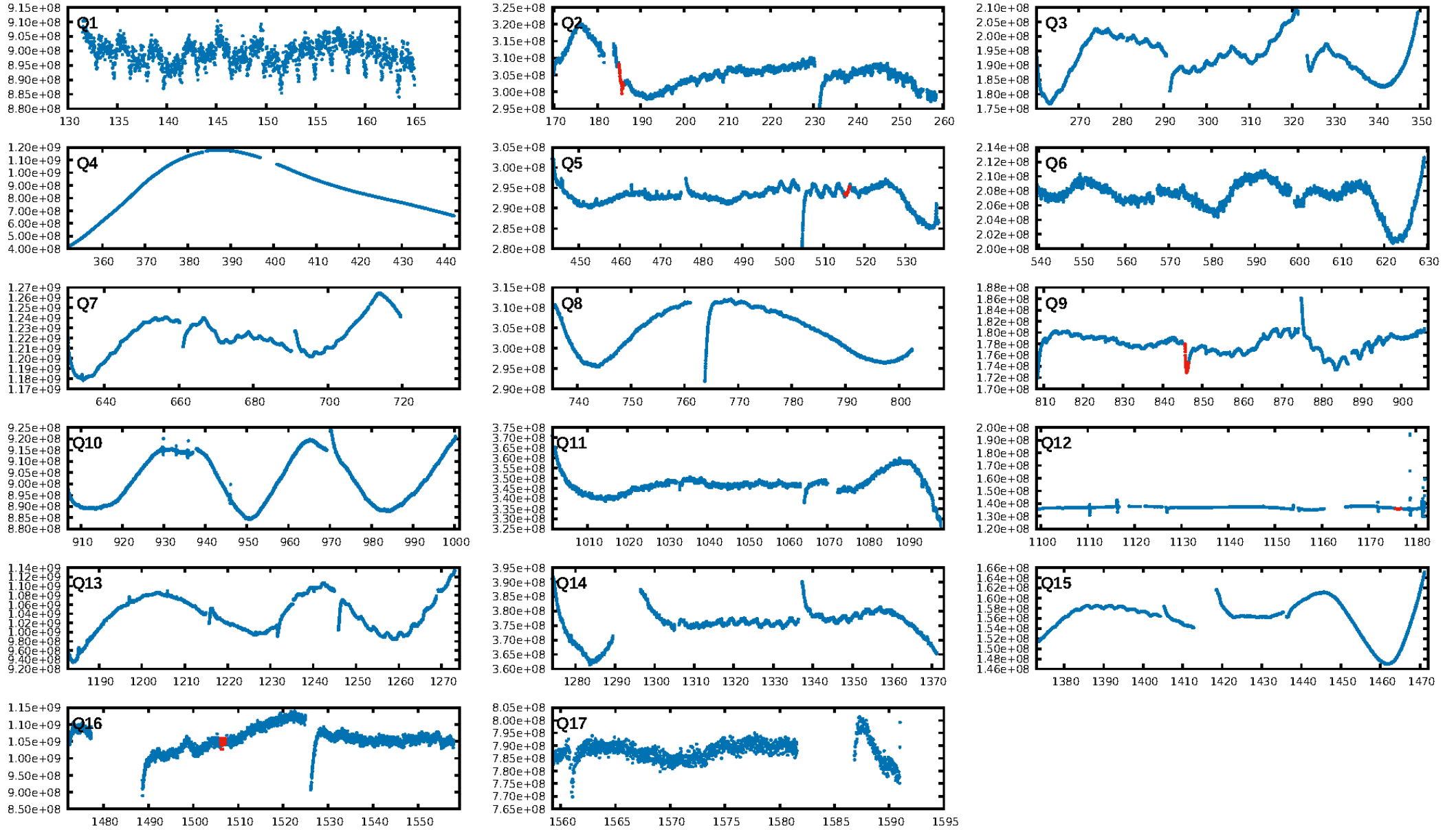
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [8.40σ]
LongPeriod-sig: 100.0% [10.64σ]
ModelChiSquare2-sig: 29.0%
ModelChiSquareGof-sig: 87.6%
Bootstrap-pfa: 1.13e-07
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 1.493
Centroid-sig: 44.1%
Centroid-so: 0.409 arcsec [3.31σ]
OotOffset-rm: 3.598 arcsec [3.33σ]
KicOffset-rm: 2.793 arcsec [4.08σ]
OotOffset-st: 0/0/2/1 [3]
KicOffset-st: 0/0/2/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

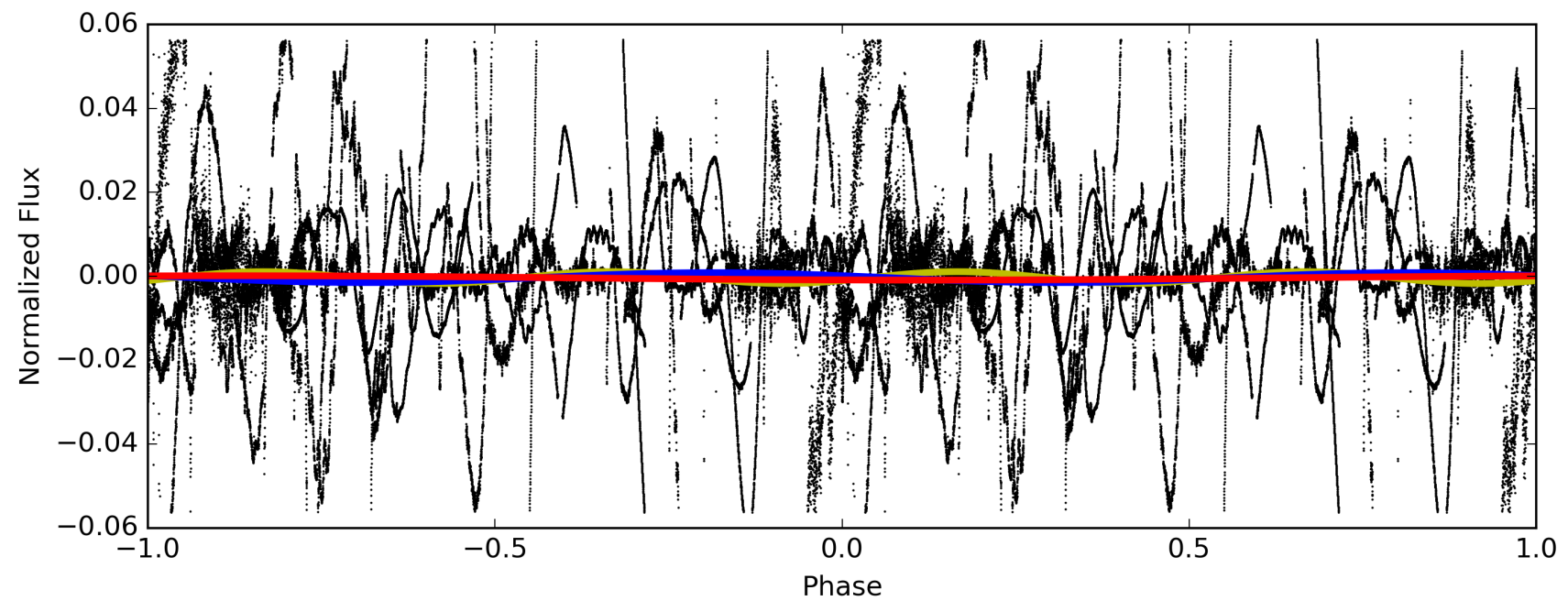
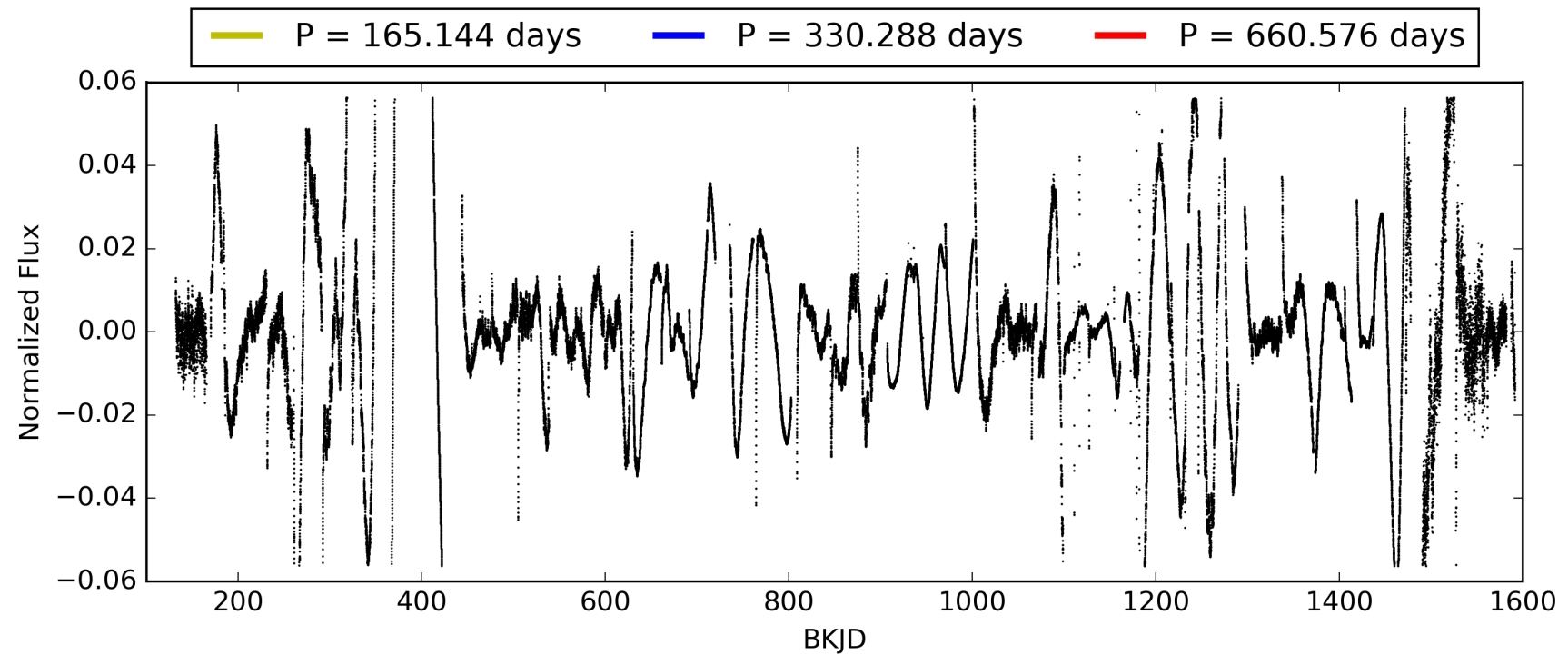
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 06:01:29 Z

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

TCE 007624629-03, PDC Light Curves

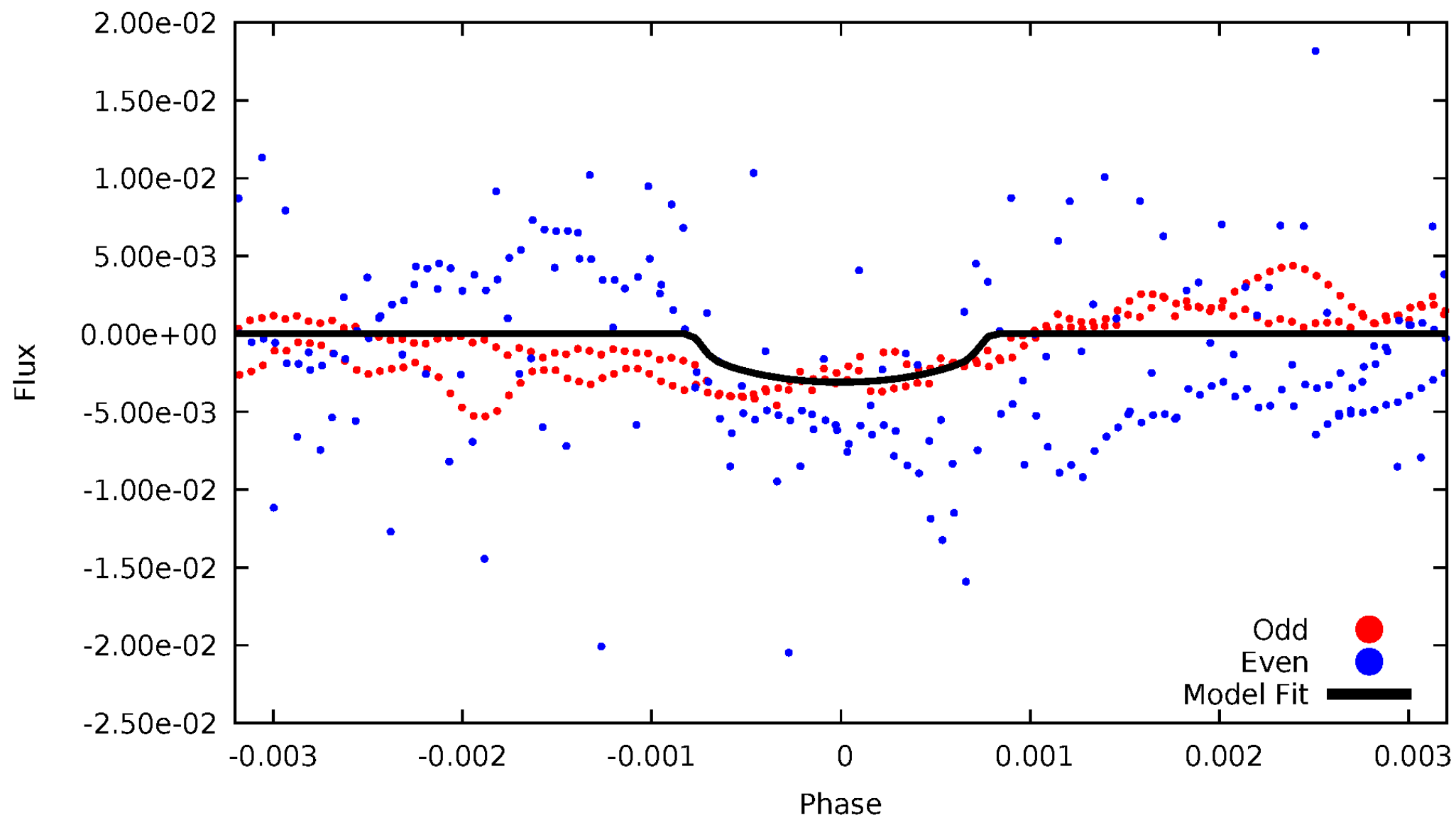


TCE 007624629-03



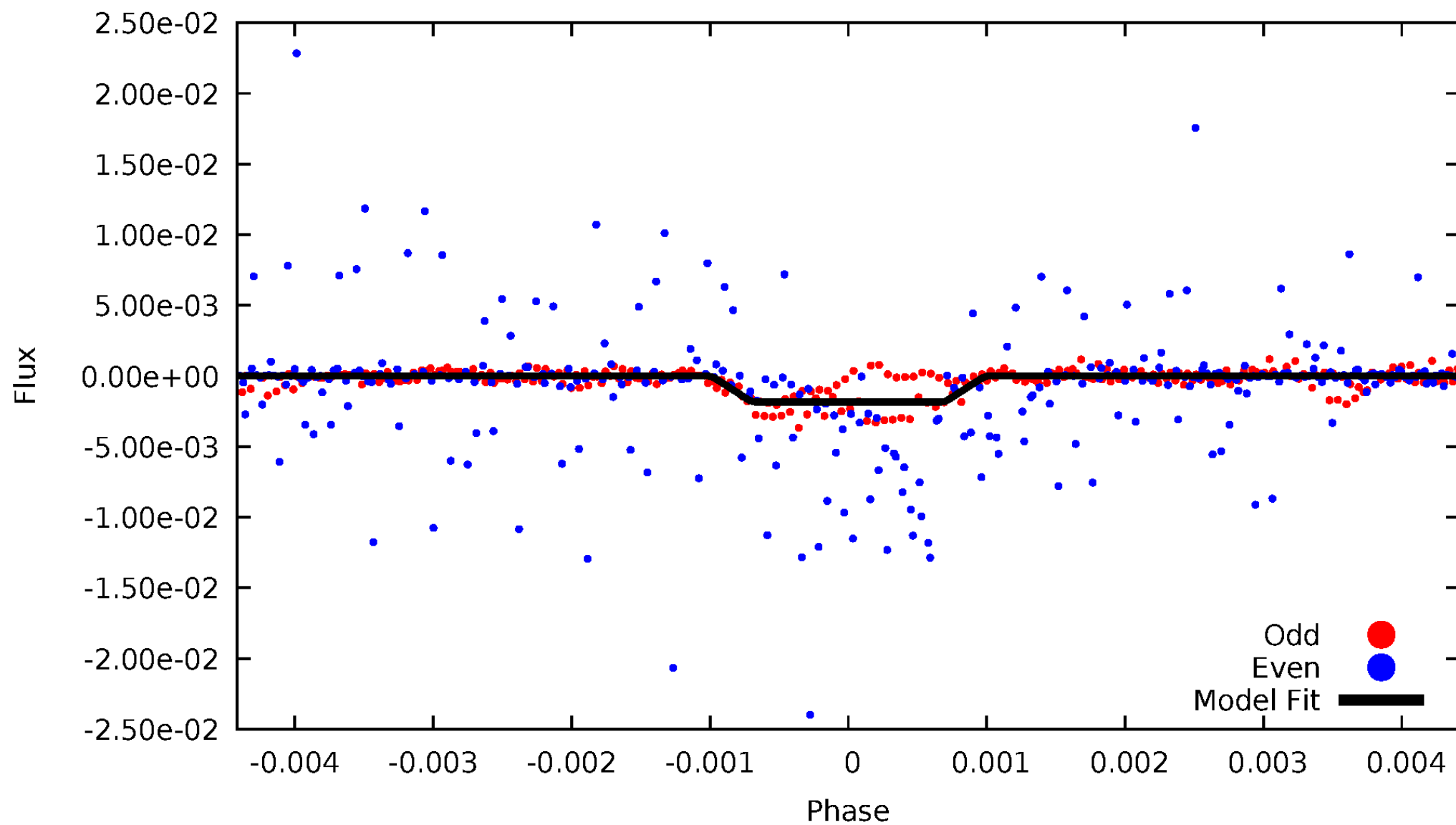
DV Odd/Even

TCE 007624629-03



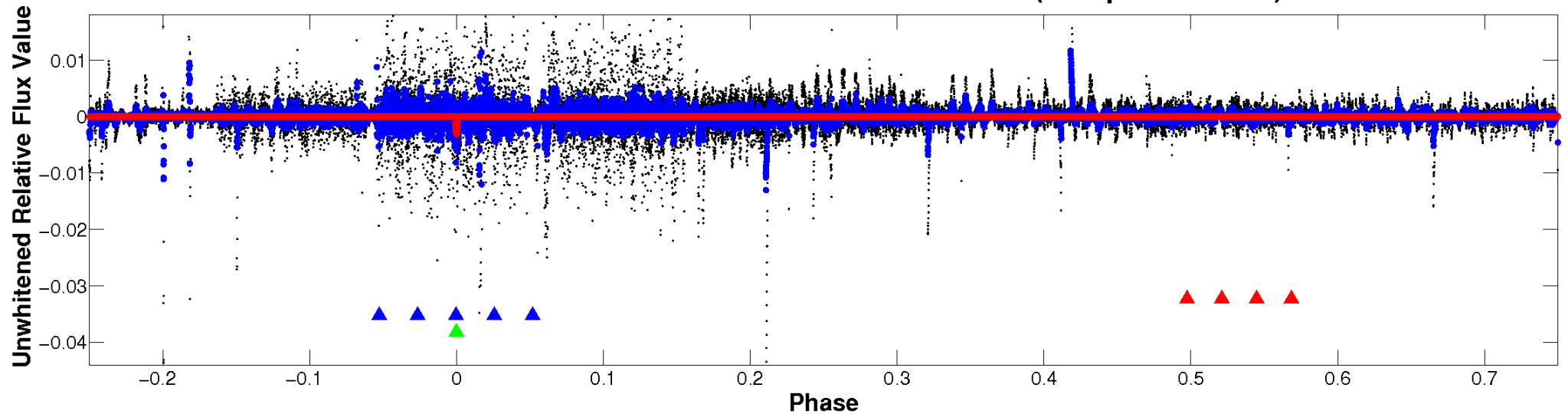
ALT Odd/Even

TCE 007624629-03

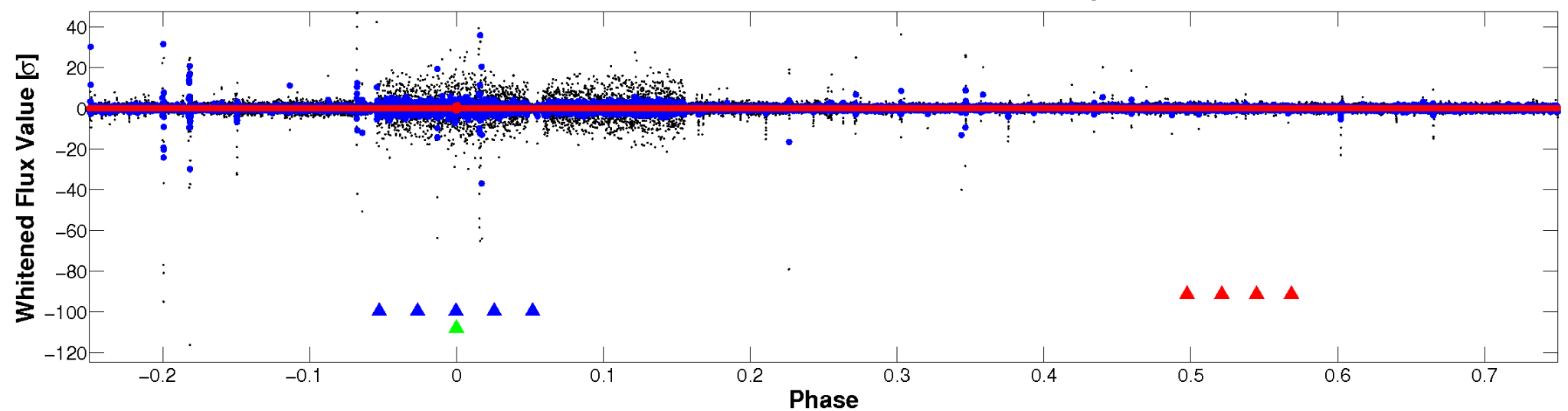


Non-Whitened Vs. Whitened Light Curve

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

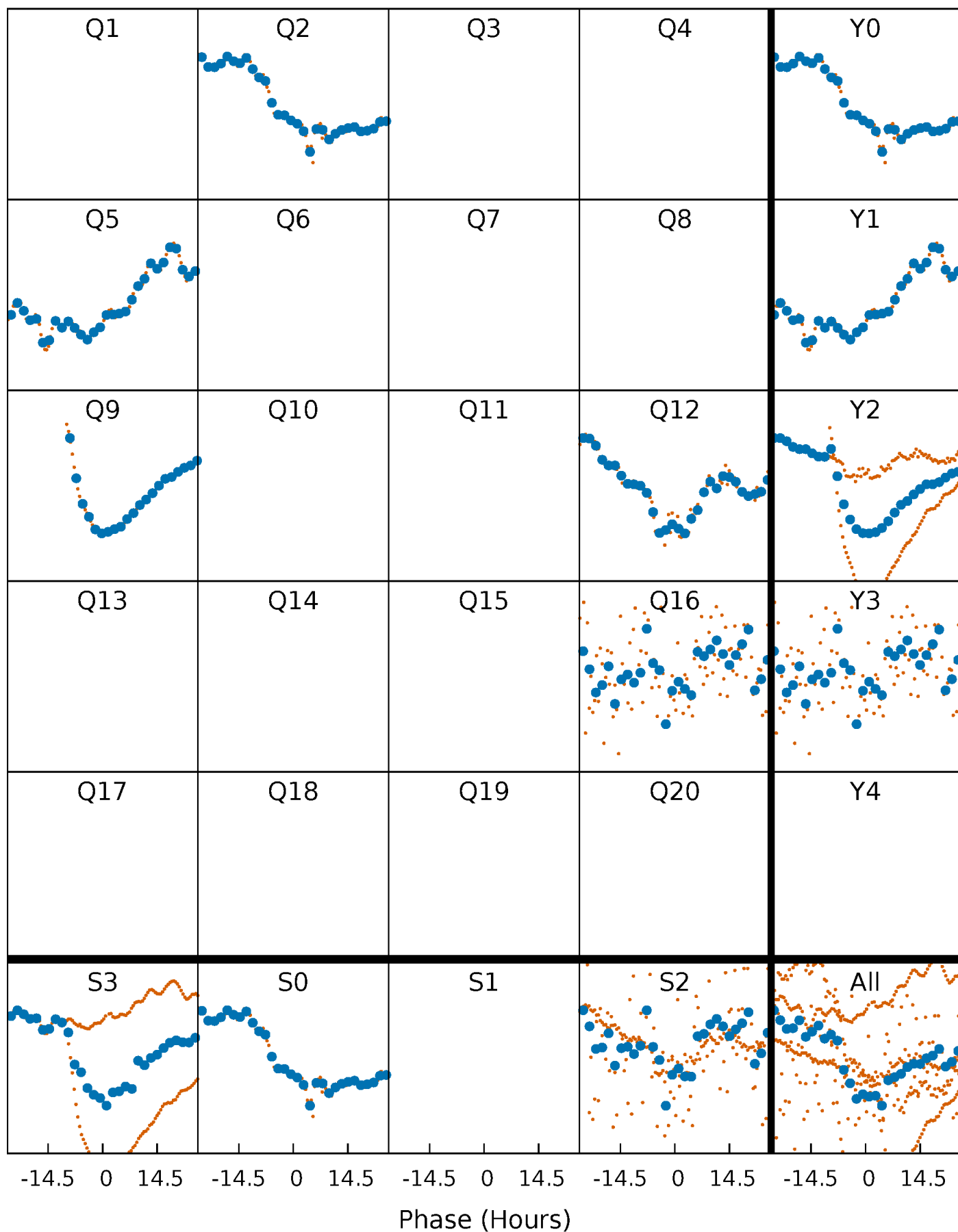


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



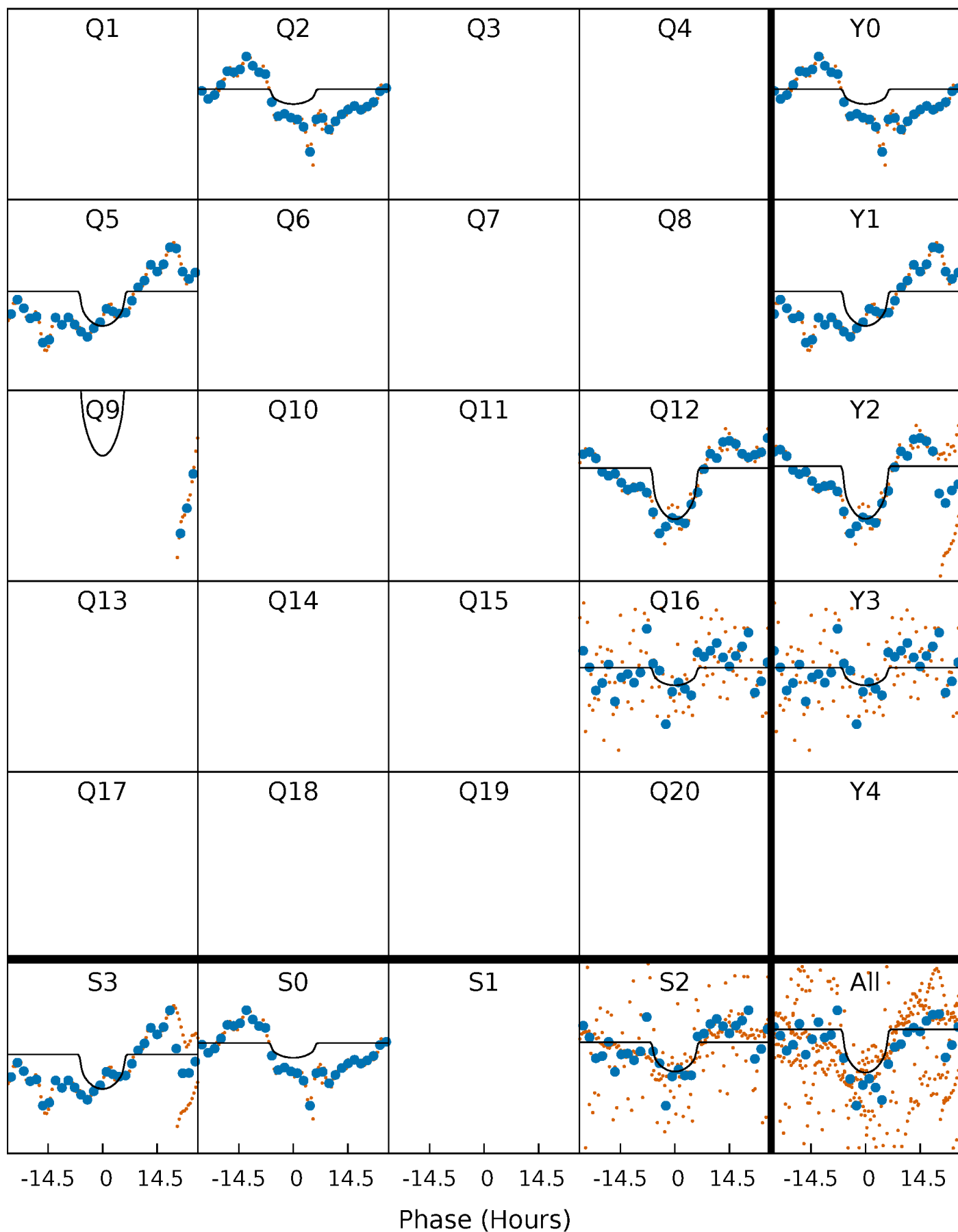
PDC Quarter-Phased Transit Curves

TCE 007624629-03 $P=330.288134$ Days $T_0=185.444894$ (BKJD)



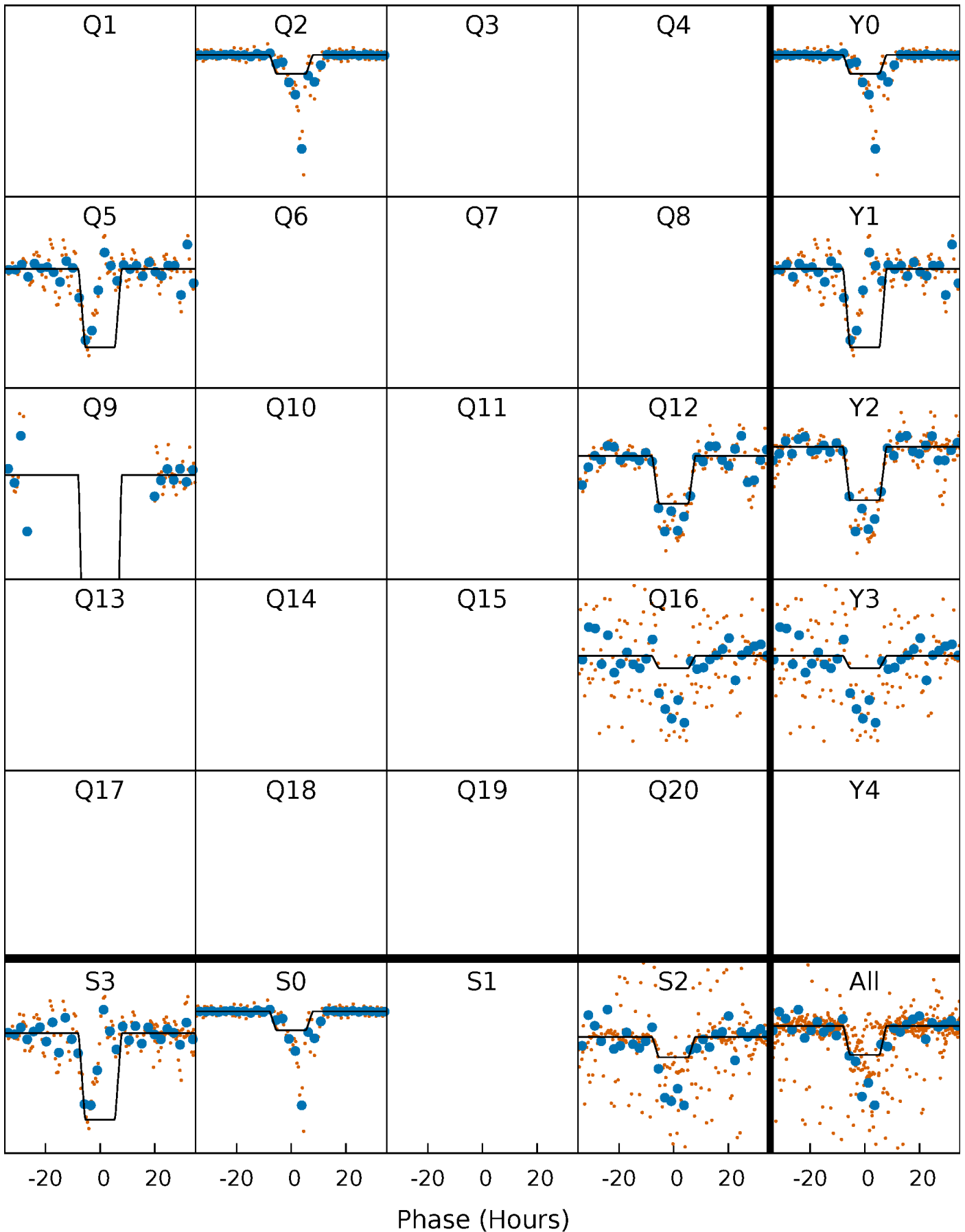
DV Quarter-Phased Transit Curves

TCE 007624629-03 P=330.288134 Days $T_0=185.444894$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

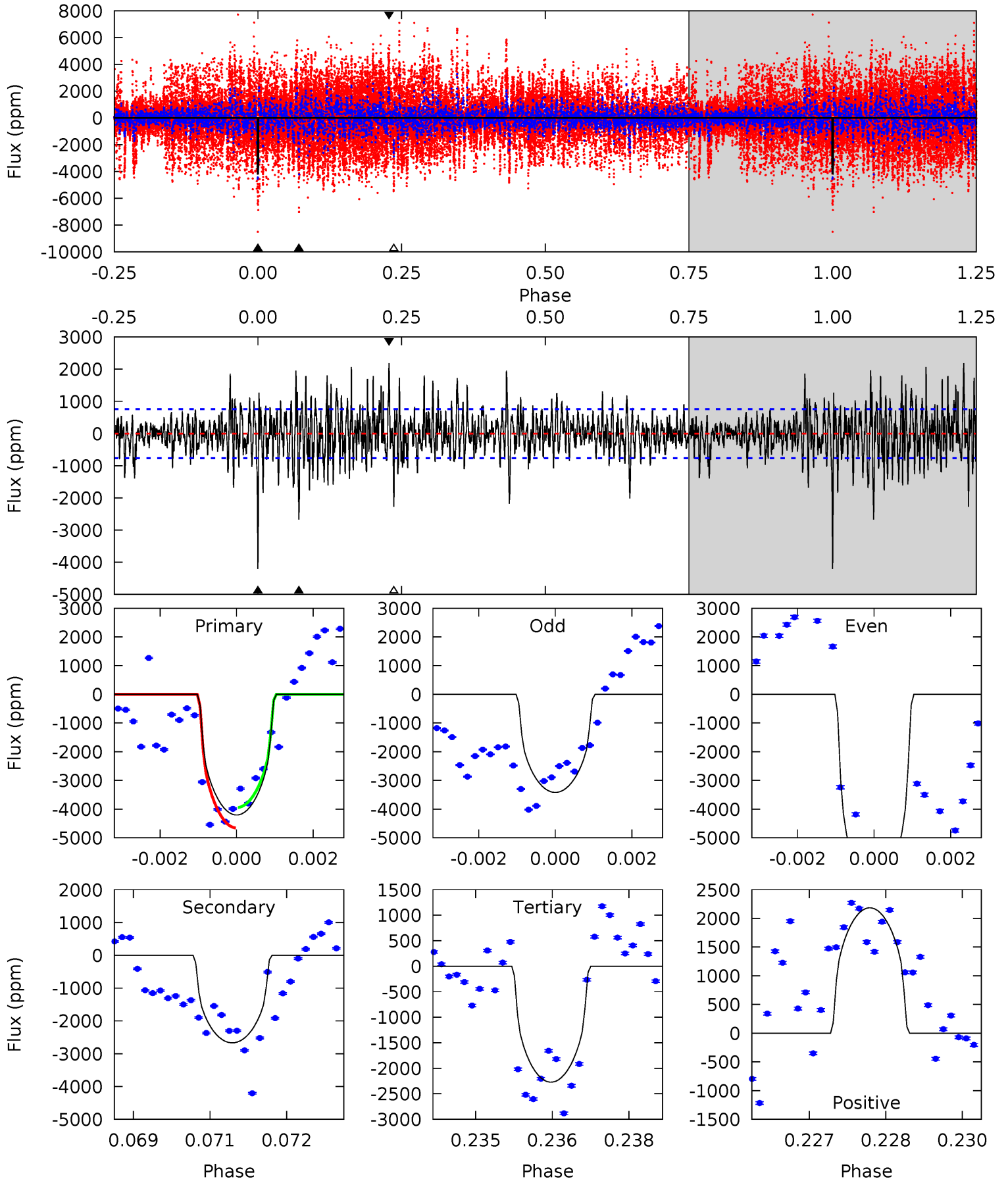
TCE 007624629-03 P=330.281253 Days $T_0=185.472494$ (BKJD)



DV Model-Shift Uniqueness Test

007624629-03, P = 330.288134 Days, E = 185.444894 Days

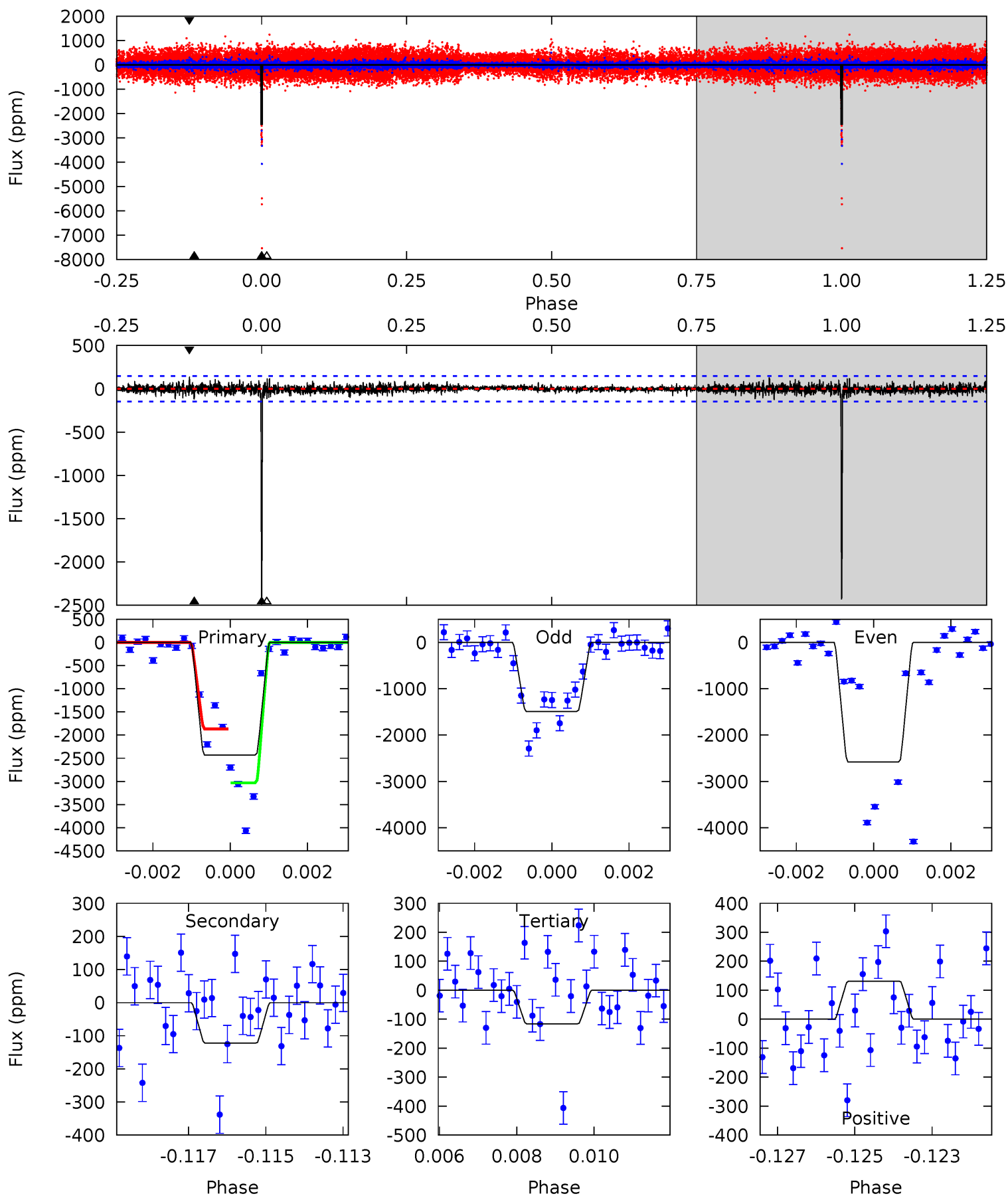
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.6	18.8	16.0	15.4	5.37	3.15	3.83	13.6	14.2	2.79	3.41	10.4	1.15	0.34	2.41



Alt Model-Shift Uniqueness Test

007624629-03, P = 330.281253 Days, E = 185.472494 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
87.6	4.41	4.19	4.73	5.33	3.09	0.88	83.4	82.9	0.22	-0.32	15.2	1.17	0.05	0



Stellar Parameters For KIC 007624629

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	3274^{+117}_{-78}	$0.108^{+0.208}_{-0.052}$	$-0.080^{+0.250}_{-0.150}$	$154.296^{+9.192}_{-27.576}$	$1.114^{+0.207}_{-0.128}$	$0.000^{+0.000}_{-0.000}$
	+4%/-2%	+193%/-48%	+312%/-188%	+6%/-18%	+19%/-11%	+93%/-14%
Source	KIC0	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 007624629-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-2668 ± 142	$843.50^{+120.10}_{-134.85}$	2502^{+114}_{-126}	3217^{+172}_{-156}	$2.024^{+0.800}_{-0.454}$
Alt.	-122 ± 28	$700.99^{+109.46}_{-108.43}$	2508^{+112}_{-128}	-2364^{+158}_{-114}	$0.131^{+0.061}_{-0.042}$

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 $A_{obs} \gg 1.0$

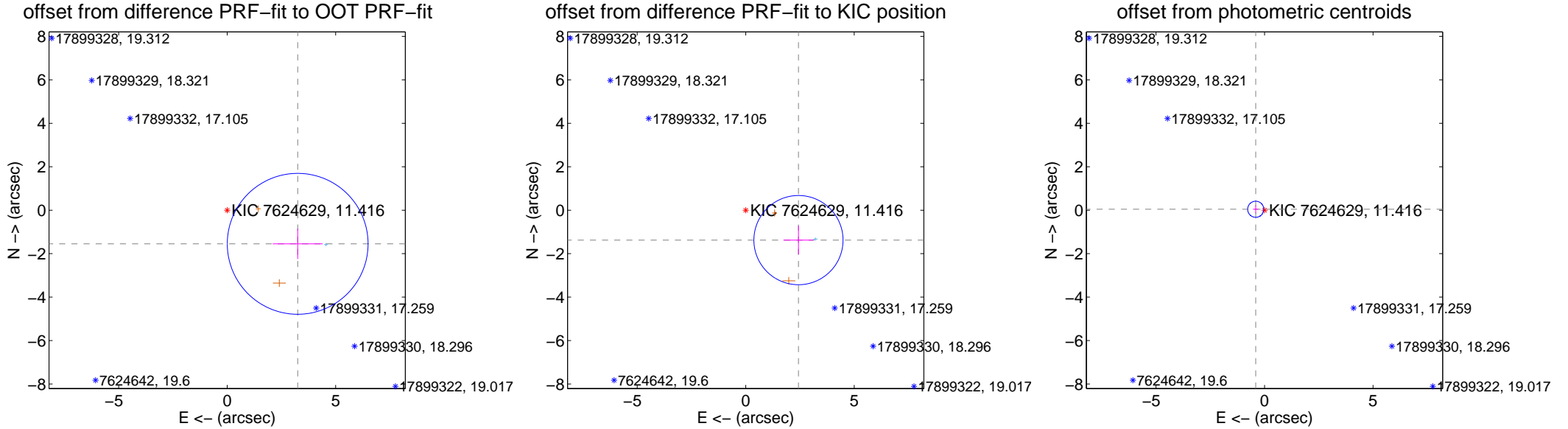
DV Centroid Data

Supplemental centroid analysis for 007624629-03. **Kepler magnitude: 11.42.** Transit SNR 9.32

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 1.36 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.598 ± 1.081	3.33	-3.249 ± 1.150	-1.548 ± 0.699
PRF-fit source offset from KIC position	2.793 ± 0.685	4.08	-2.430 ± 0.693	-1.377 ± 0.656
photometric centroid source offset	0.41 ± 0.12	3.31	0.41 ± 0.12	0.04 ± 0.19

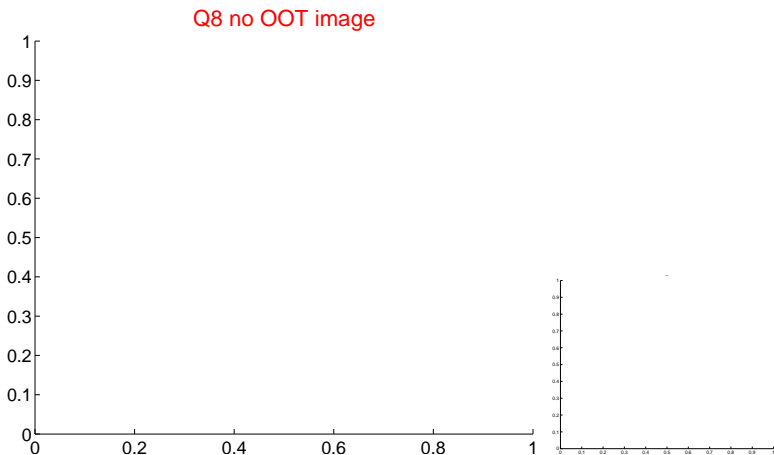
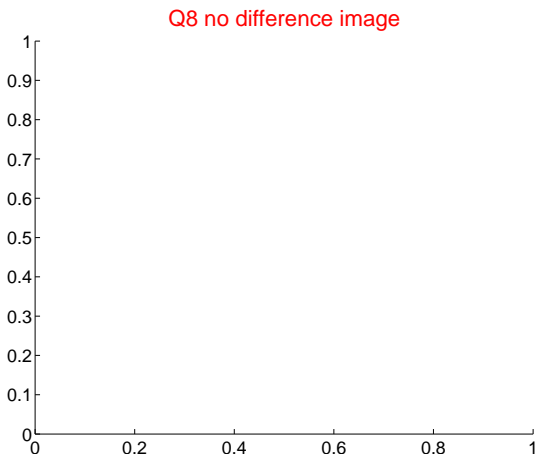
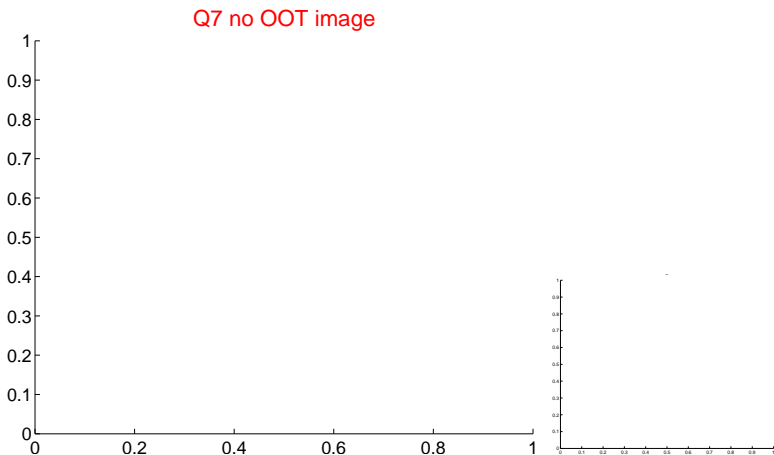
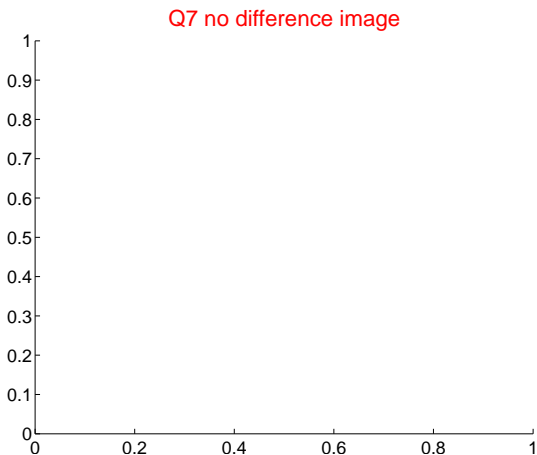
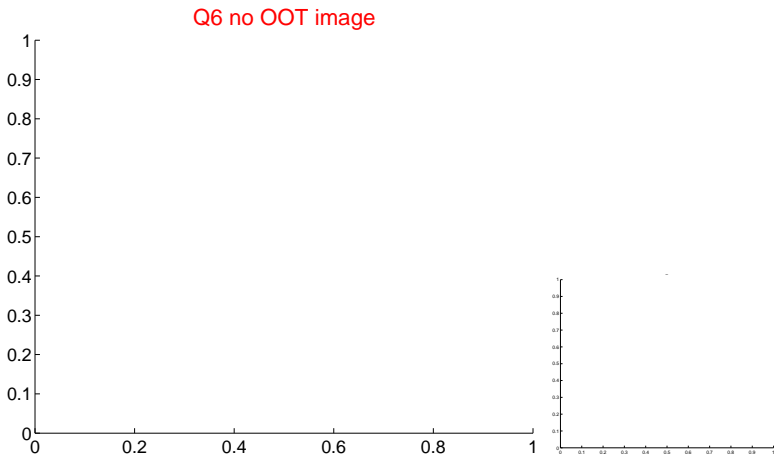
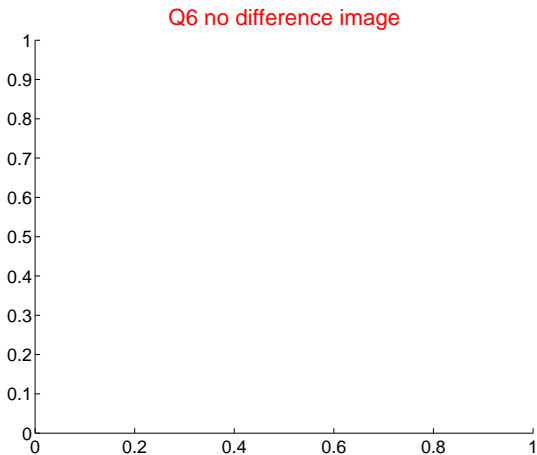
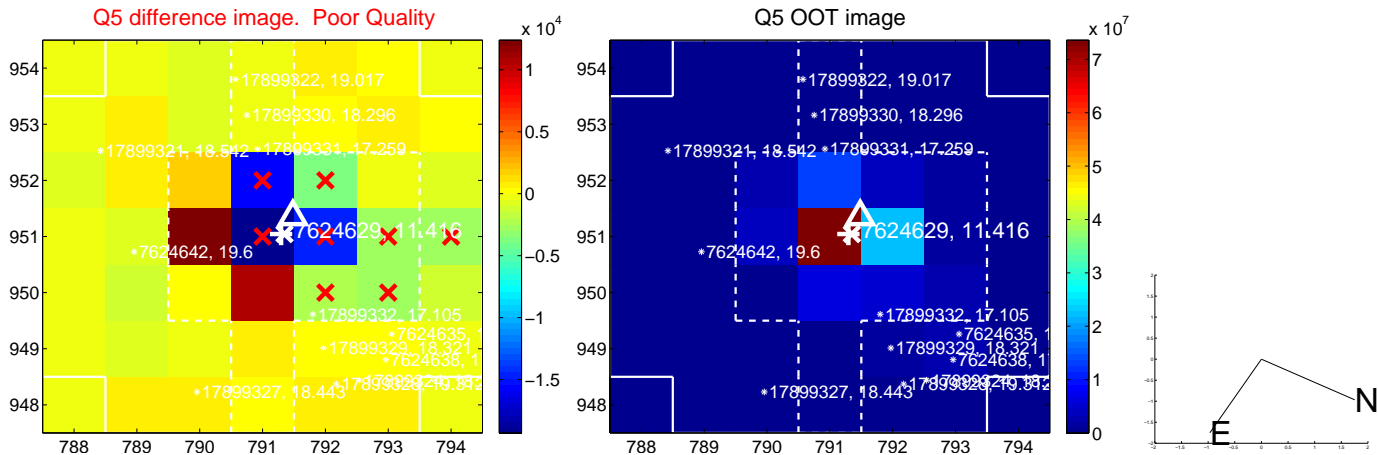


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

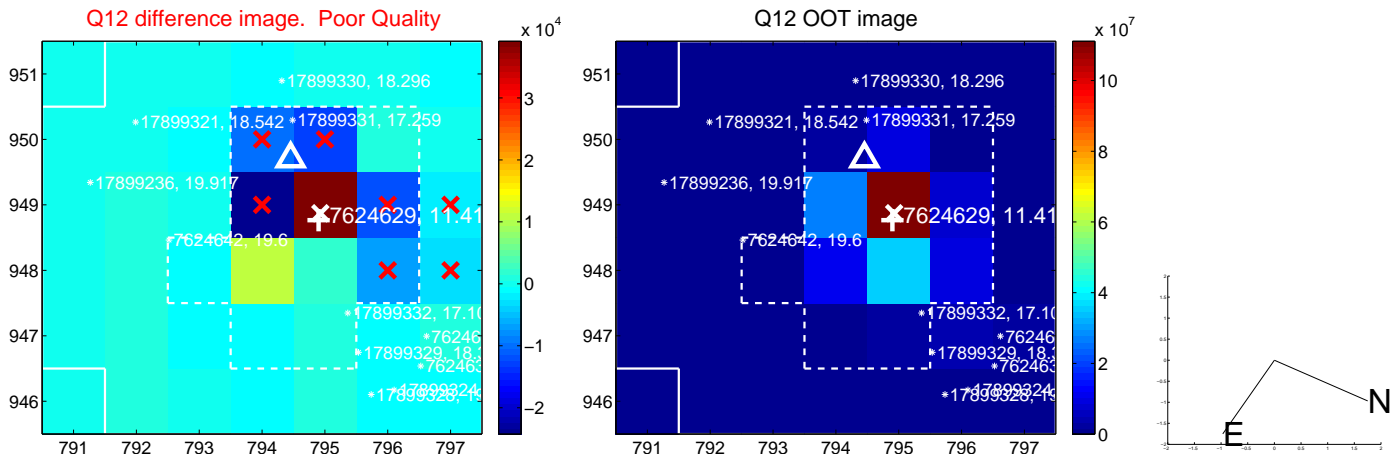
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



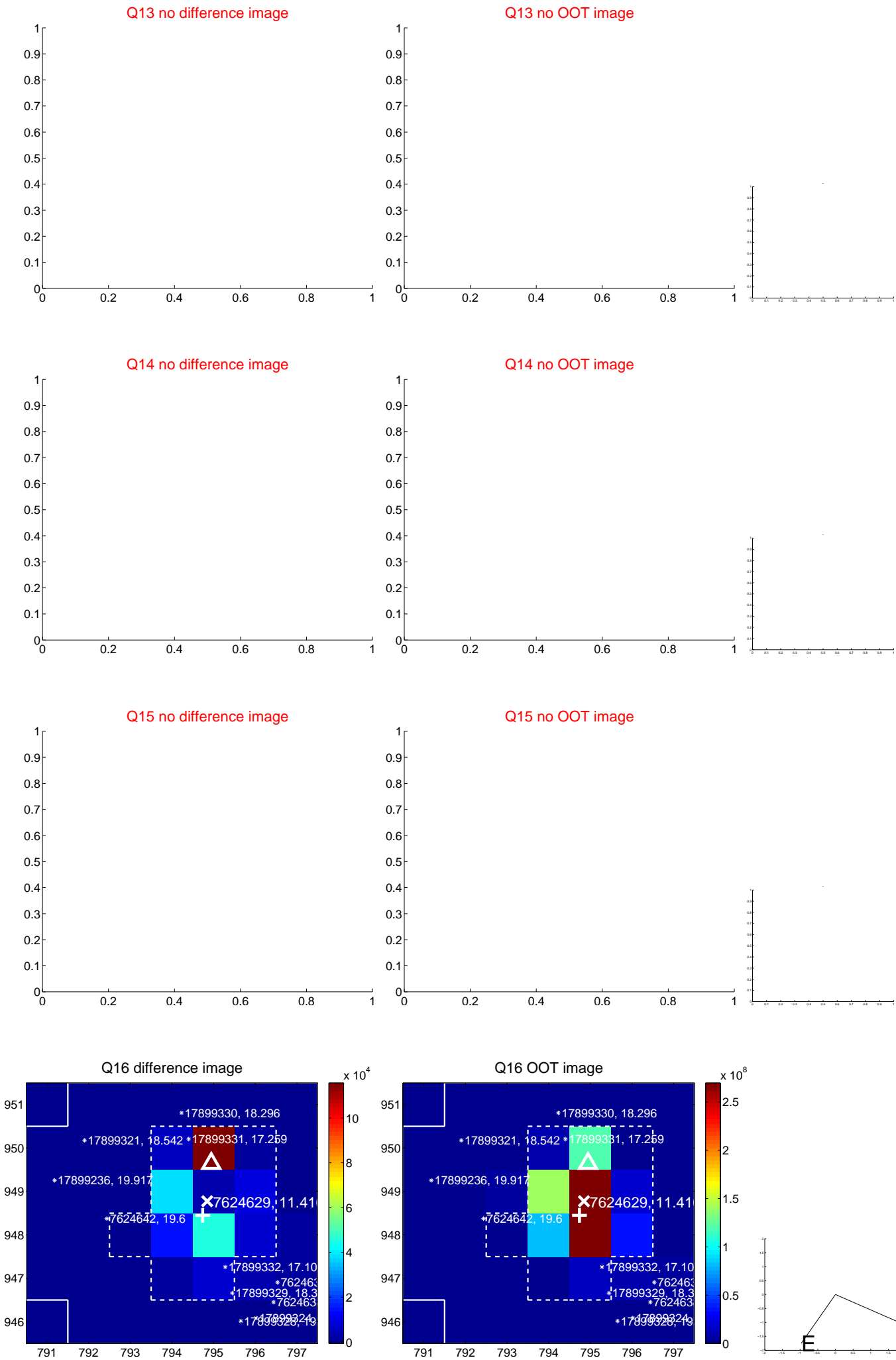
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



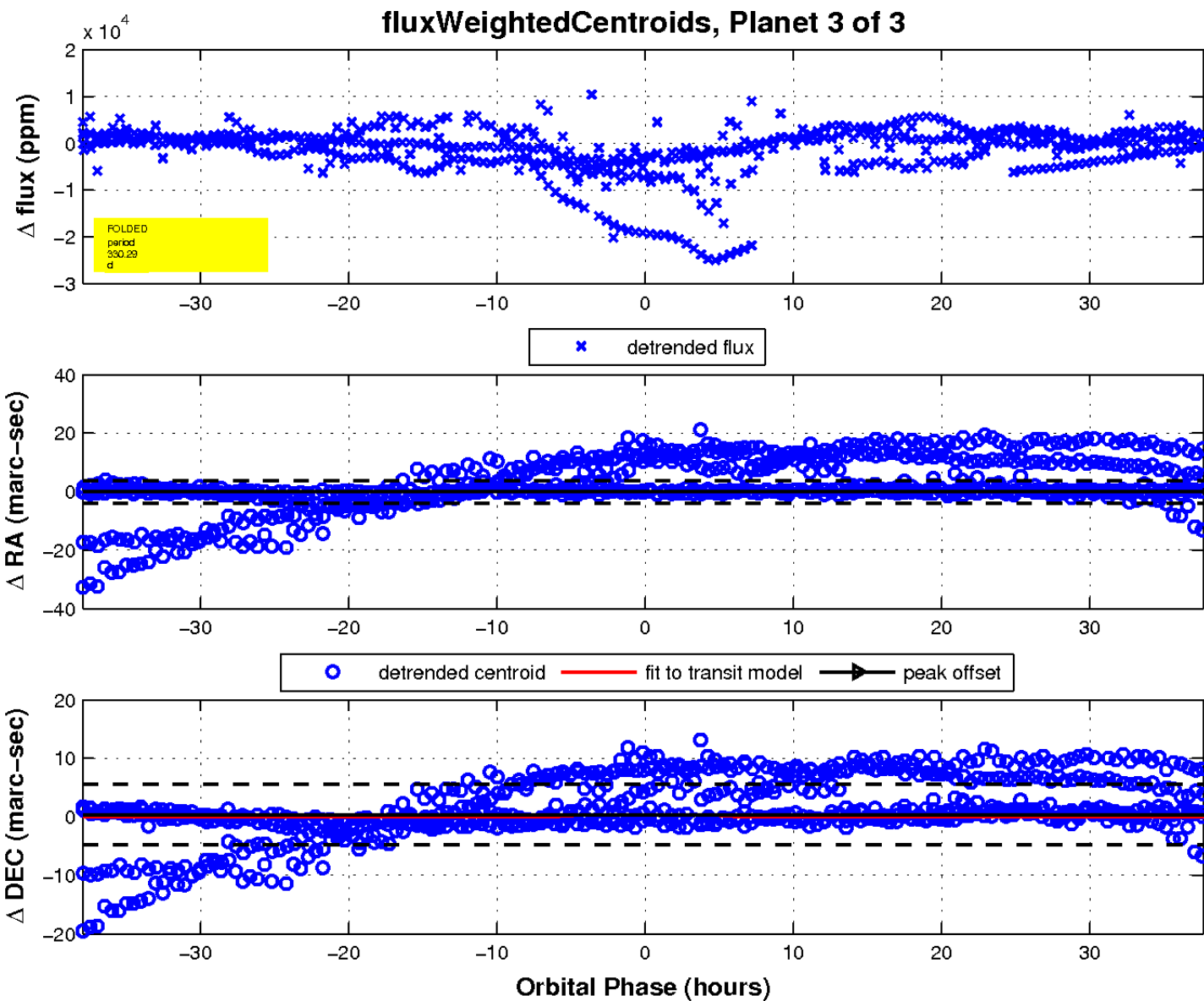
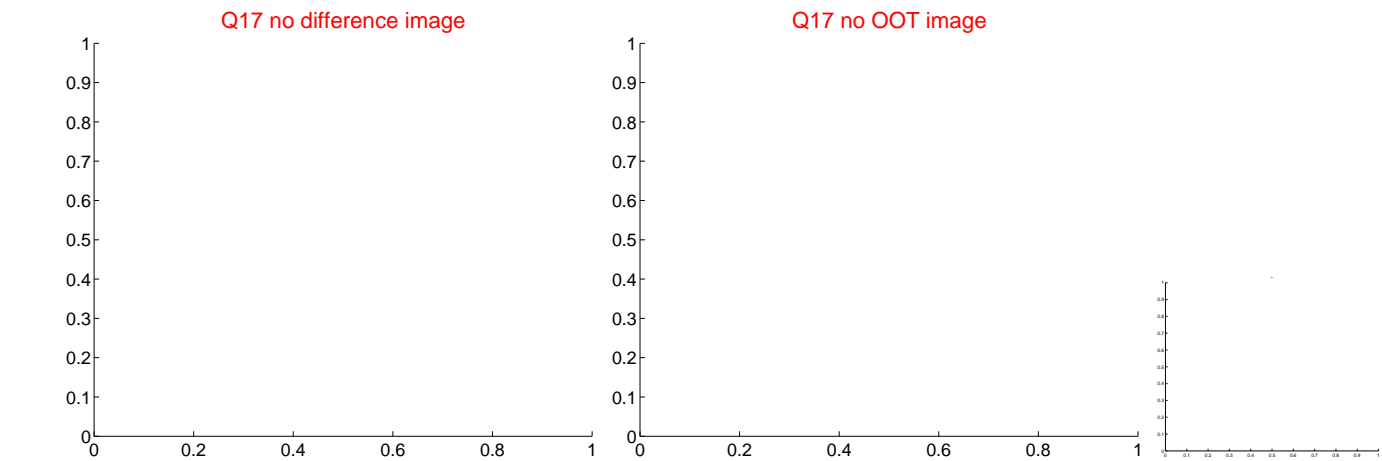
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

