

KIC 011249624

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})
011249624-01	OBS	3553.01	65.583652	182.649478	241557.0	5.031	3078.6	2012.0	0.67	5516	40.36	4.51
011249624-02	OBS	No	65.583632	179.785552	36409.6	5.875	496.8	506.9	0.67	5516	19.92	4.51
011249624-03	OBS	No	65.576640	182.401568	363.7	30.209	7.7	8.9	0.67	5516	1.47	4.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011249624-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_DV—DEEP_V_SHAPED—HAS_SEC_TCE
011249624-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011249624-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—RESIDUAL_TCE

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.

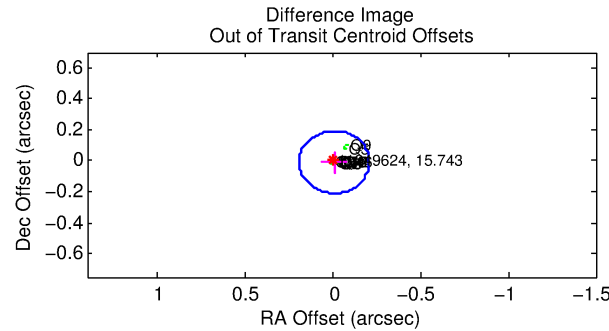
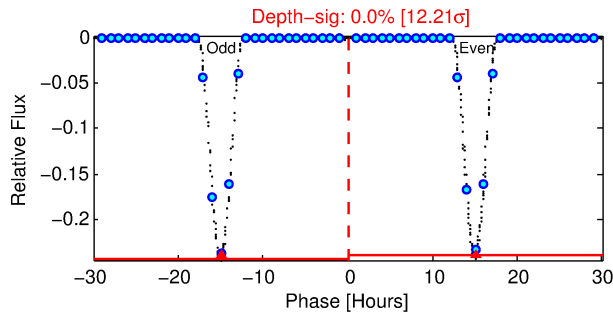
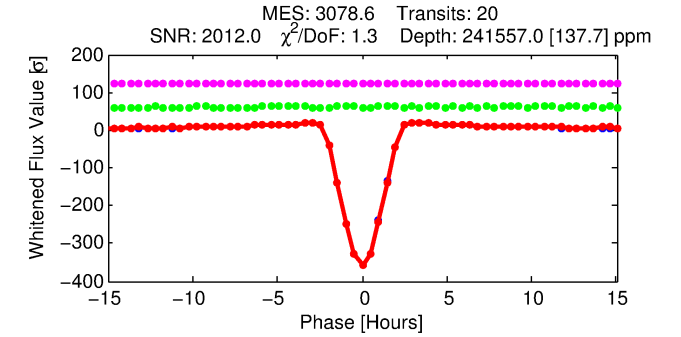
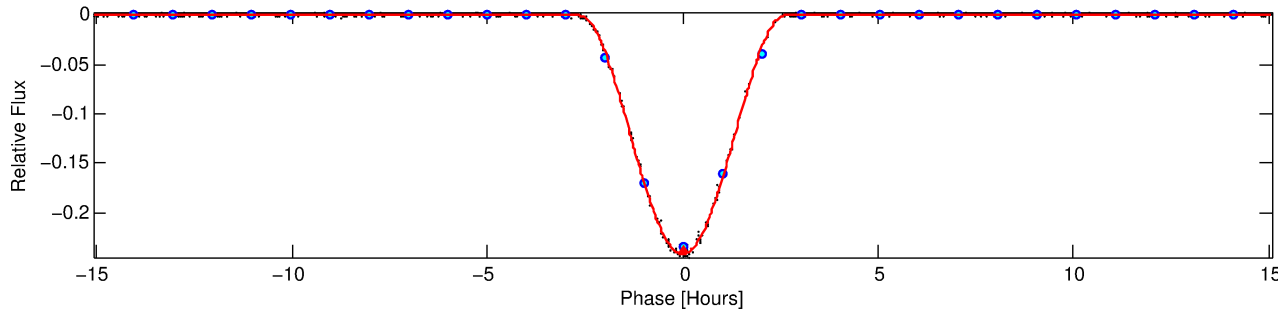
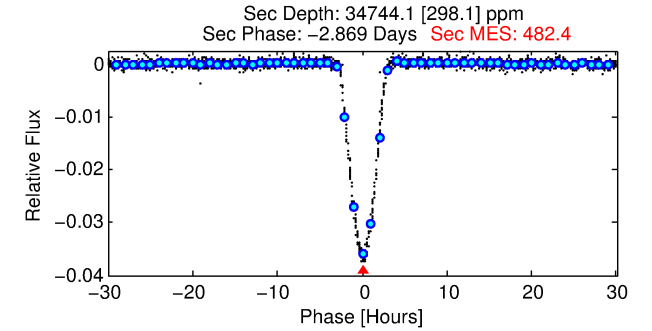
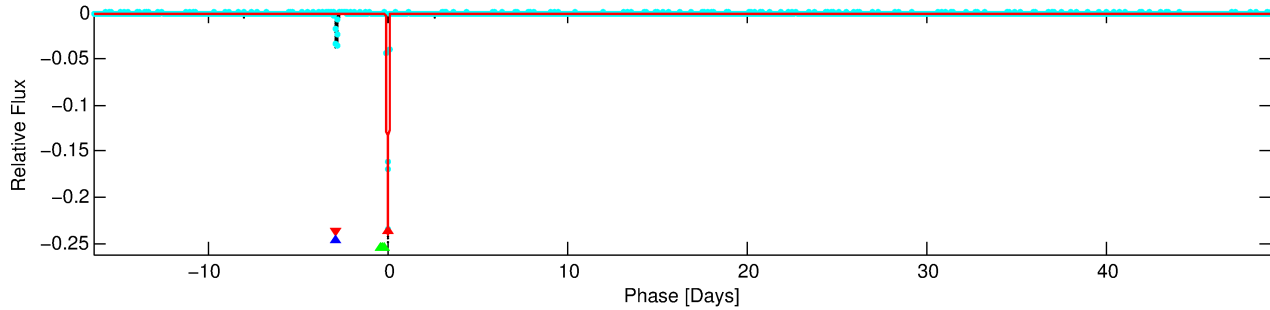
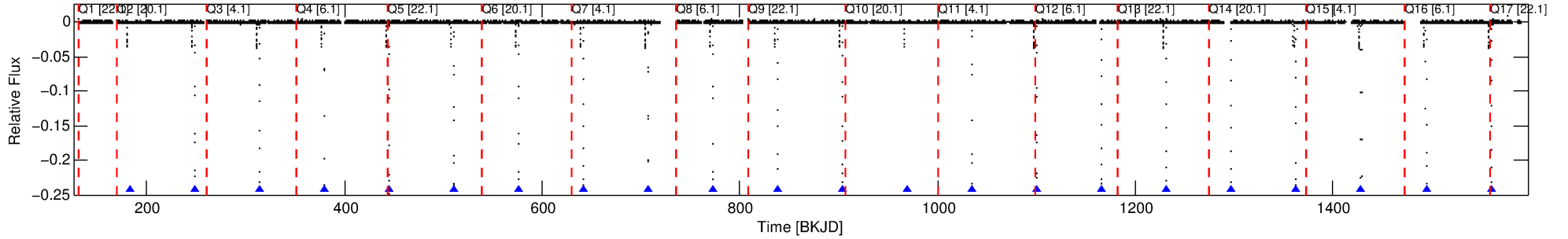
Ephemeris Match Information For 011249624-01

No Significant Match Found

DV One-Page Summary

KIC: 11249624 Candidate: 1 of 3 Period: 65.584 d
KOI: K03553.01 Corr: 0.996

Kp: 15.74 R*: 0.67 Rs Teff: 5516.0 K Logg: 4.65 Fe/H: -0.840



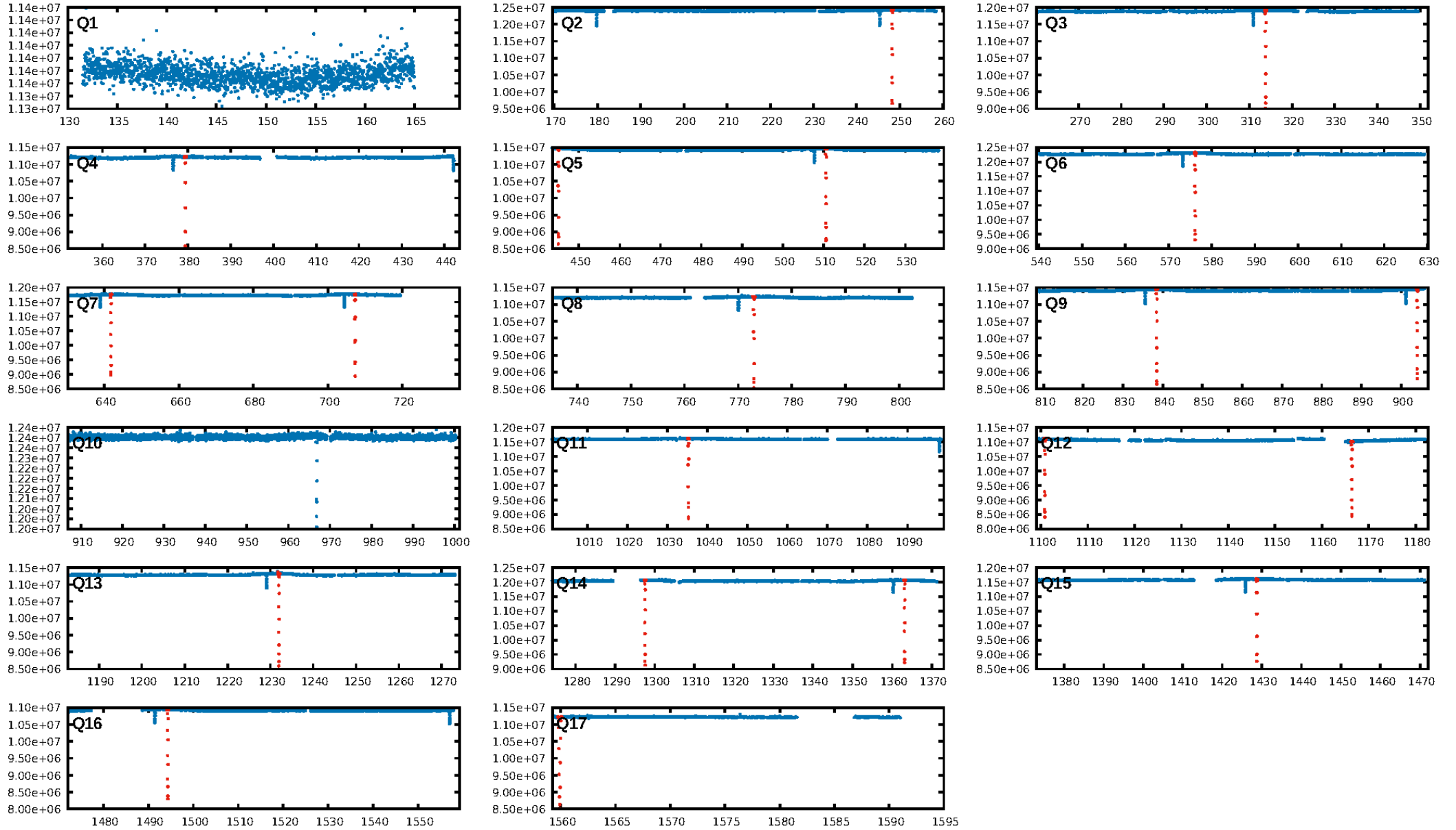
DV Fit Results:

Period = 65.58365 [0.00000] d
Epoch = 182.6495 [0.0000] BKJD
Rp/R* = 0.5553 [0.0316]
a/R* = 138.20 [0.87]
b = 0.70 [0.05]
Seff = 4.51 [0.92]
Teq = 372 [19] K
Rp = 40.36 [5.81] Re
a = 0.2857 [0.0312] AU
Ag = 957.67 [185.30] [5.16σ]
Teffp = 3196 [140] K [20.00σ]

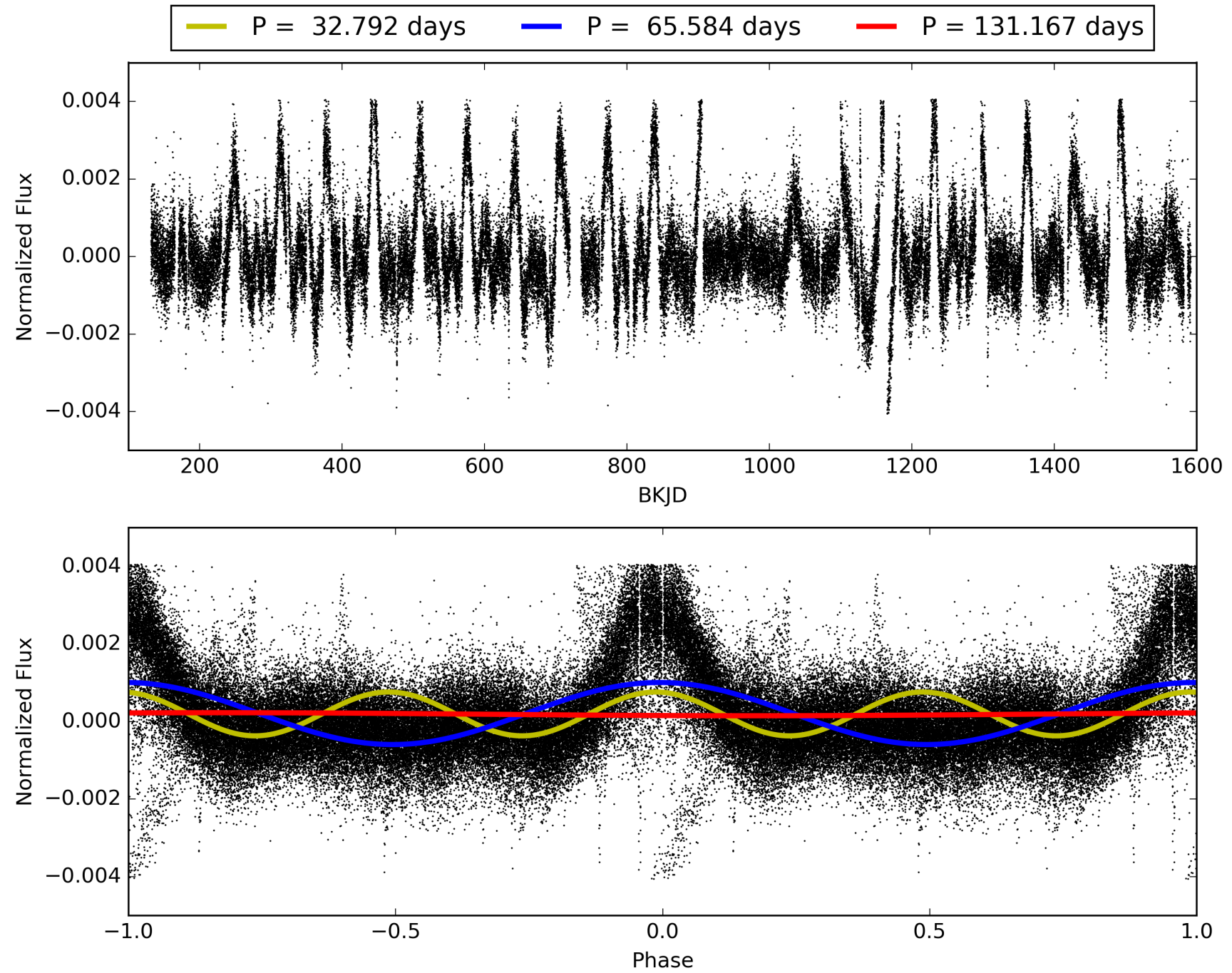
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 10.7%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [19/19]
GhostDiagnostic-chr: 2.869
Centroid-sig: 0.2%
Centroid-so: 0.113 arcsec [27.70σ]
OotOffset-rm: 0.012 arcsec [0.17σ]
KicOffset-rm: 0.023 arcsec [0.33σ]
OotOffset-st: 3/4/4/2 [13]
KicOffset-st: 3/4/4/2 [13]
DiffImageQuality-fgm: 1.00 [13/13]
DiffImageOverlap-fno: 0.00 [0/13]

TCE 011249624-01, PDC Light Curves

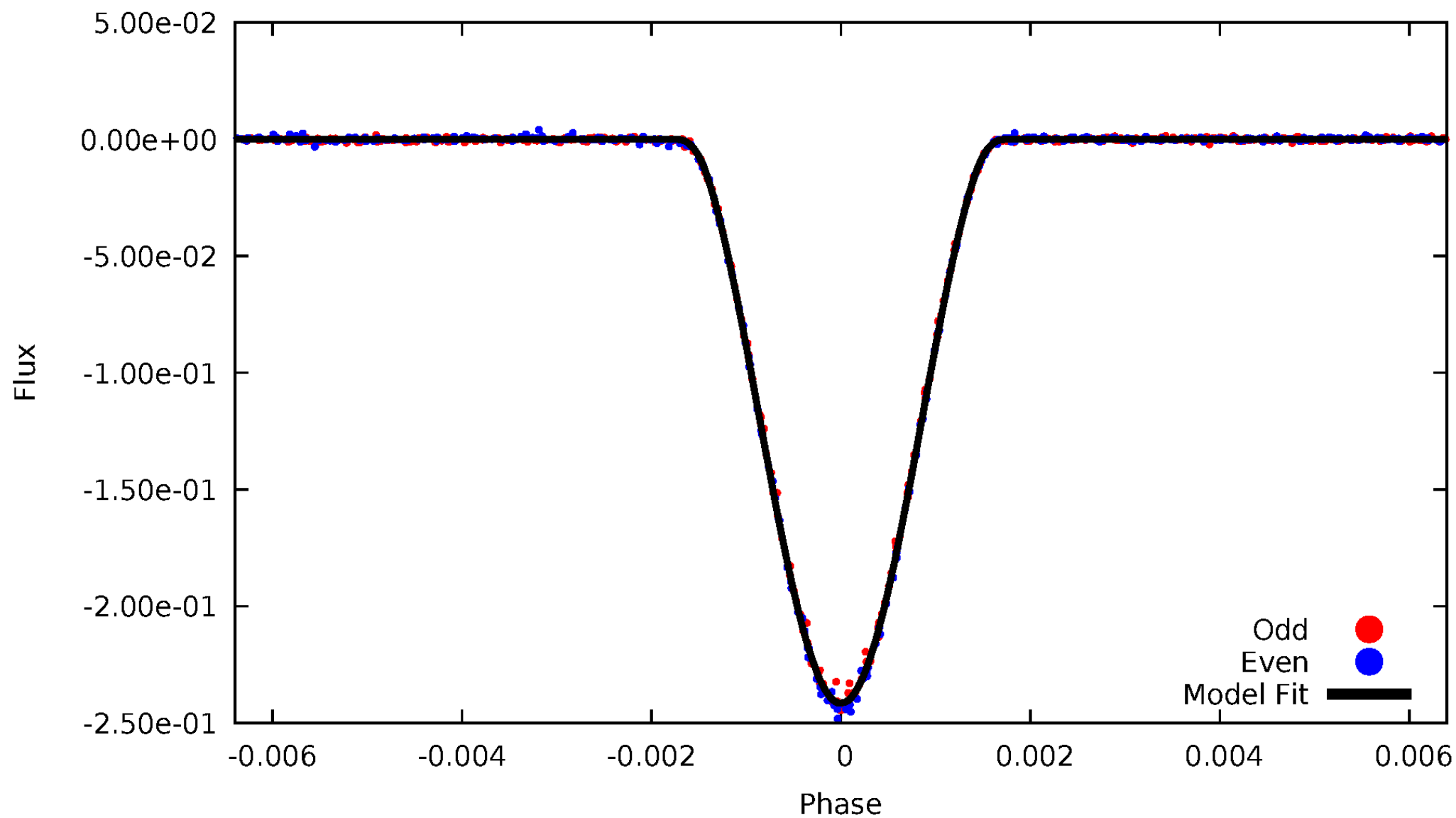


TCE 011249624-01



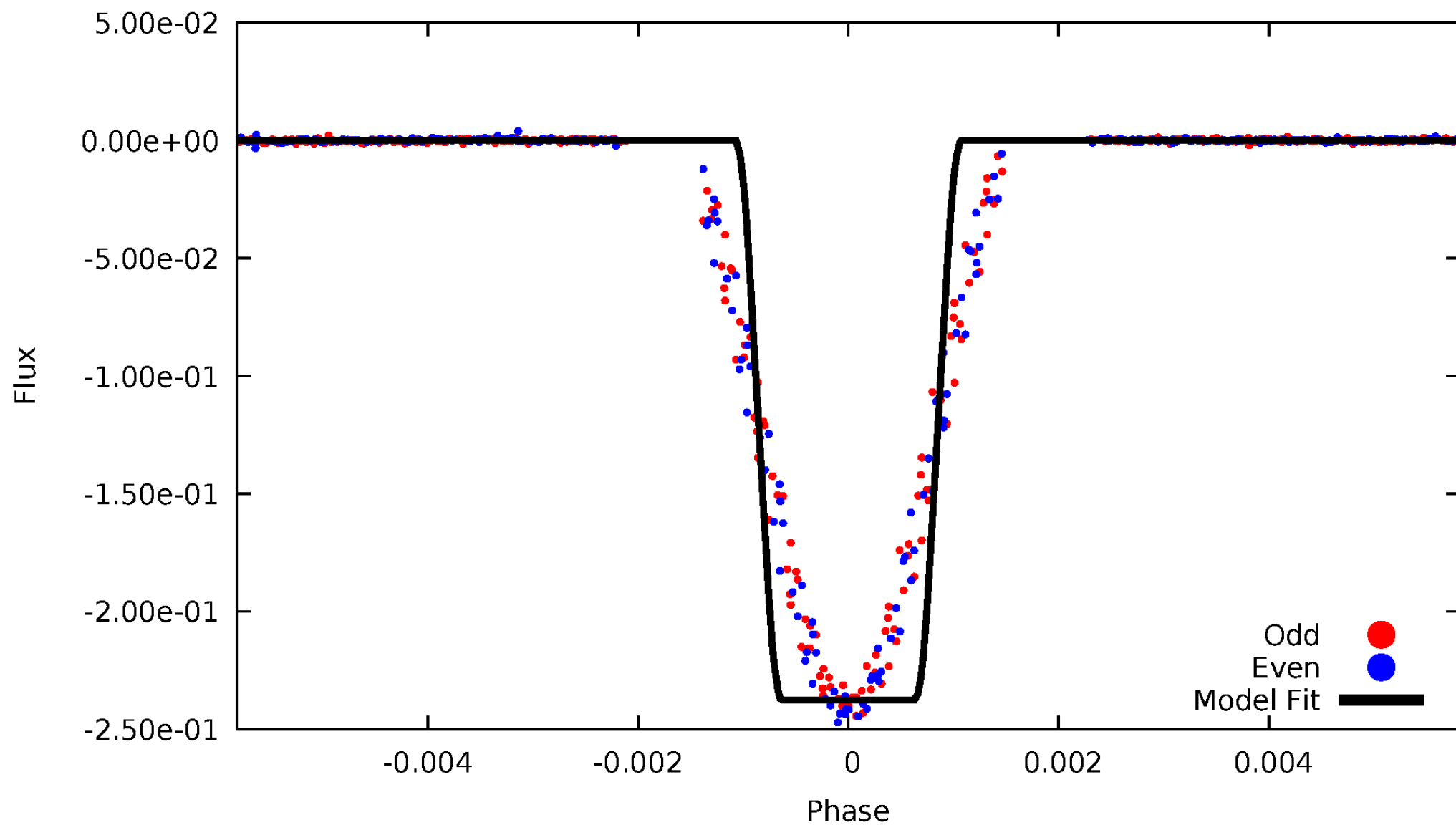
DV Odd/Even

TCE 011249624-01



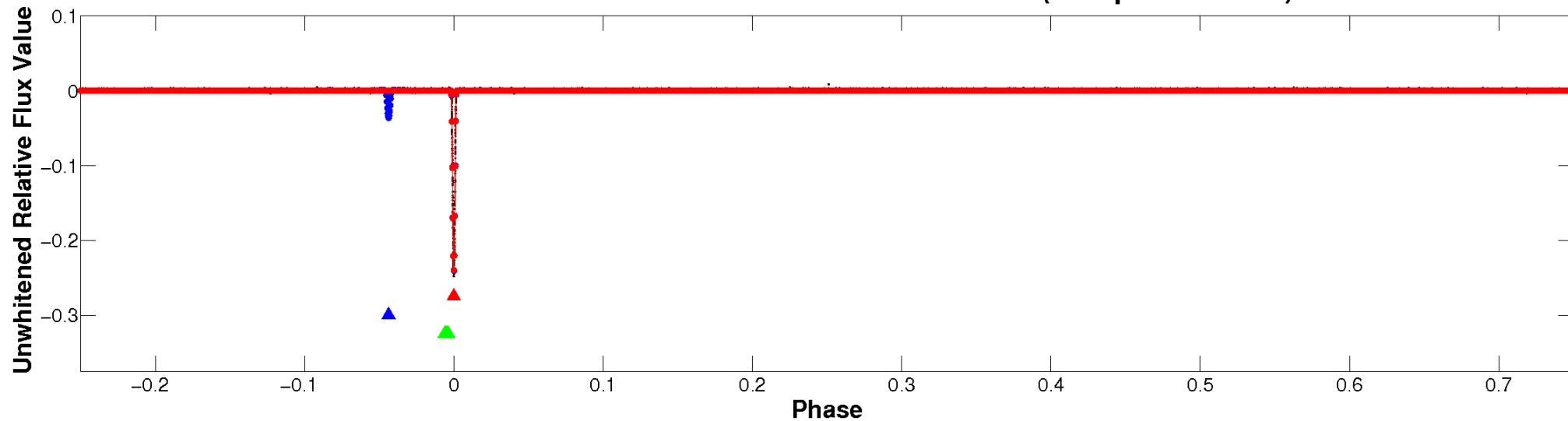
ALT Odd/Even

TCE 011249624-01

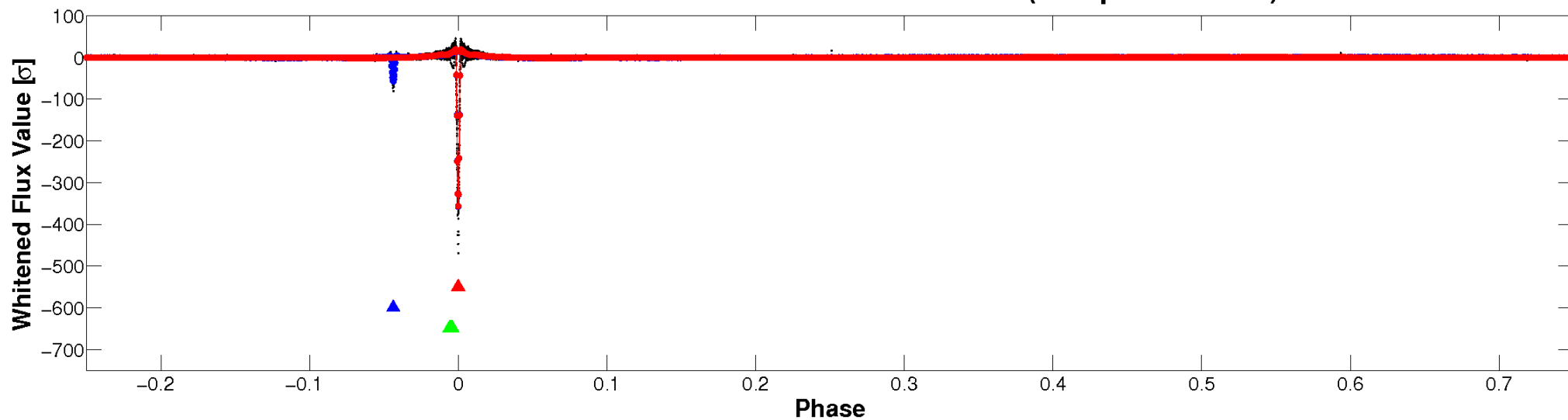


Non-Whitened Vs. Whitened Light Curve

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

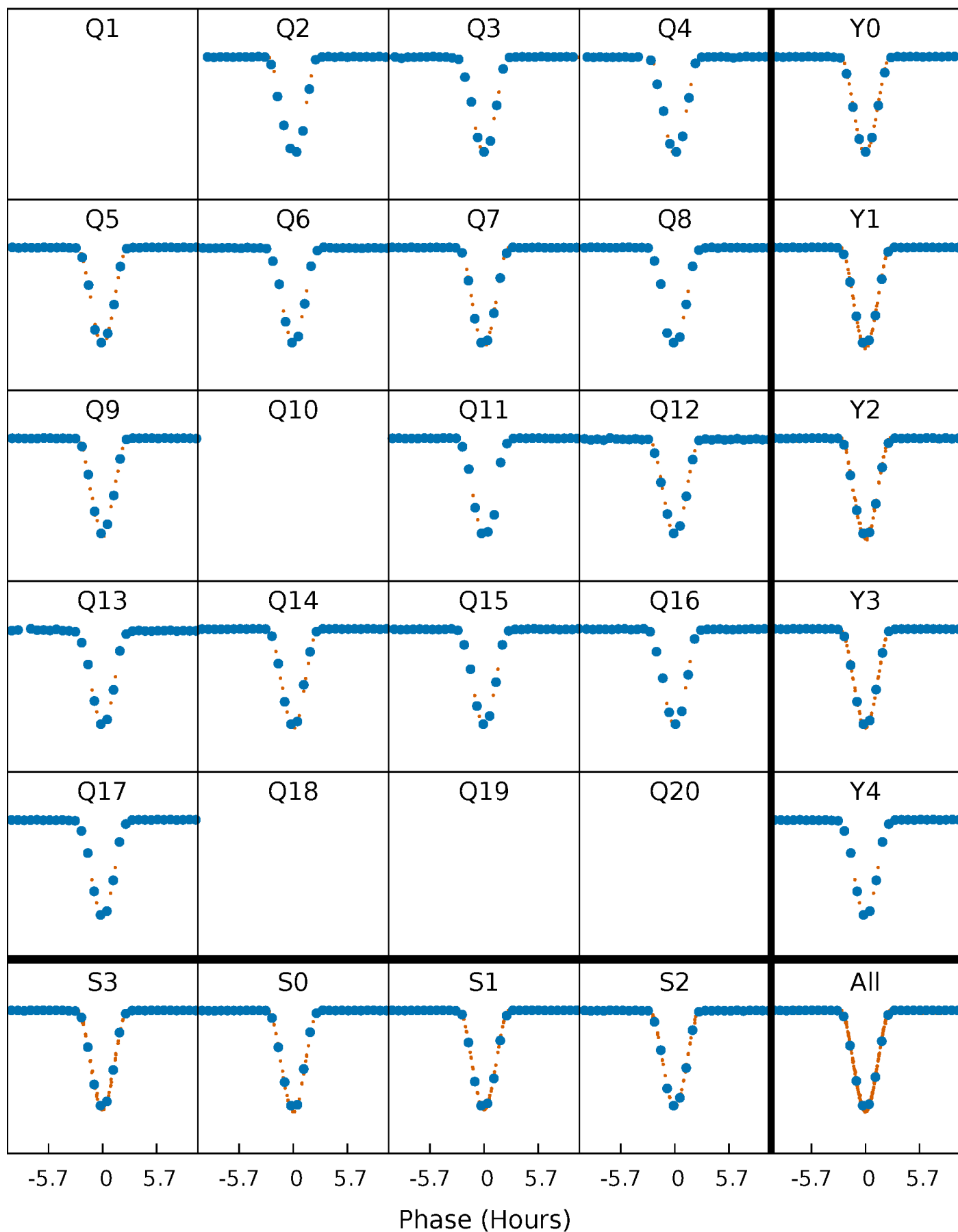


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



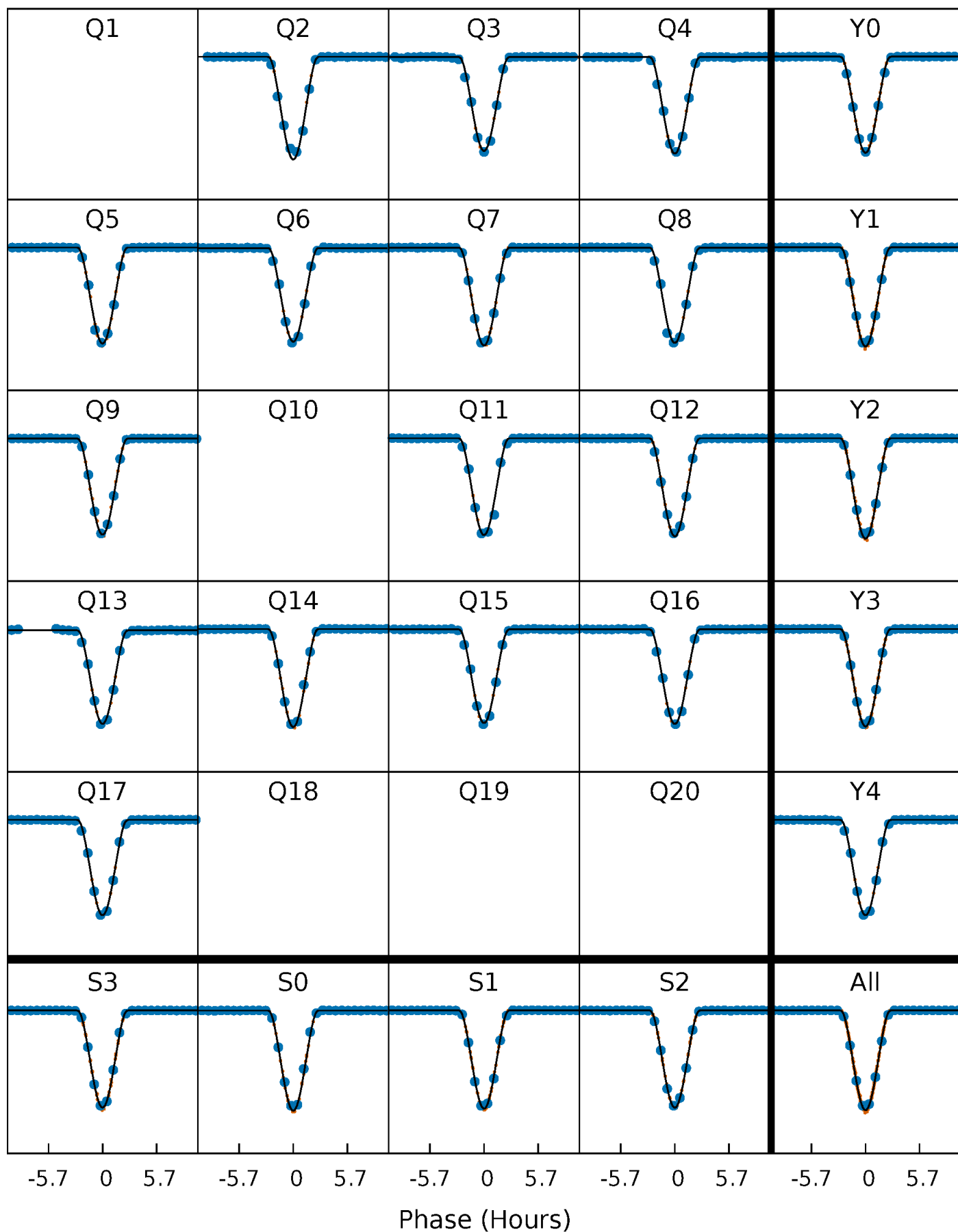
PDC Quarter-Phased Transit Curves

TCE 011249624-01 P= 65.583652 Days $T_0=182.649478$ (BKJD)



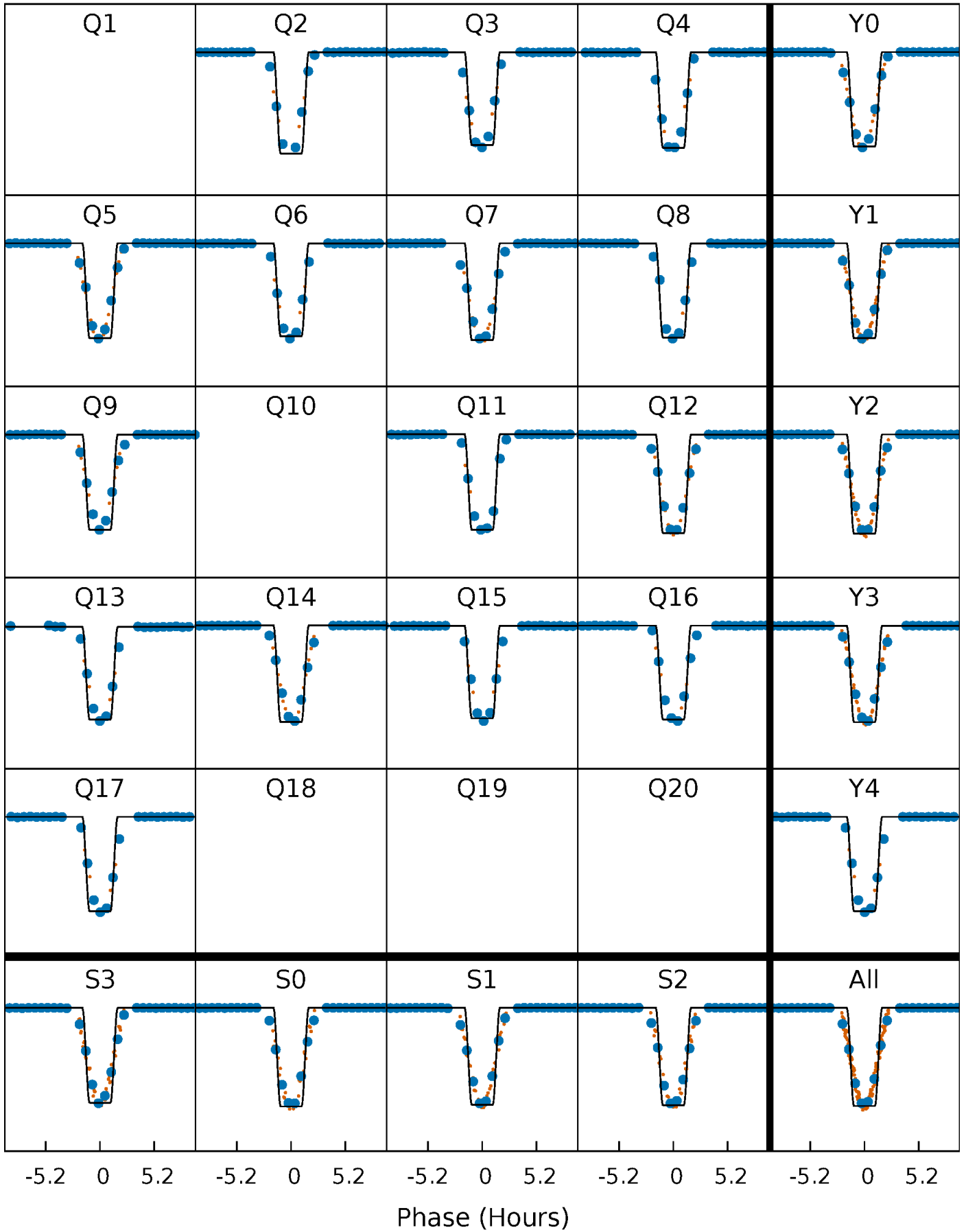
DV Quarter-Phased Transit Curves

TCE 011249624-01 P= 65.583652 Days $T_0=182.649478$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

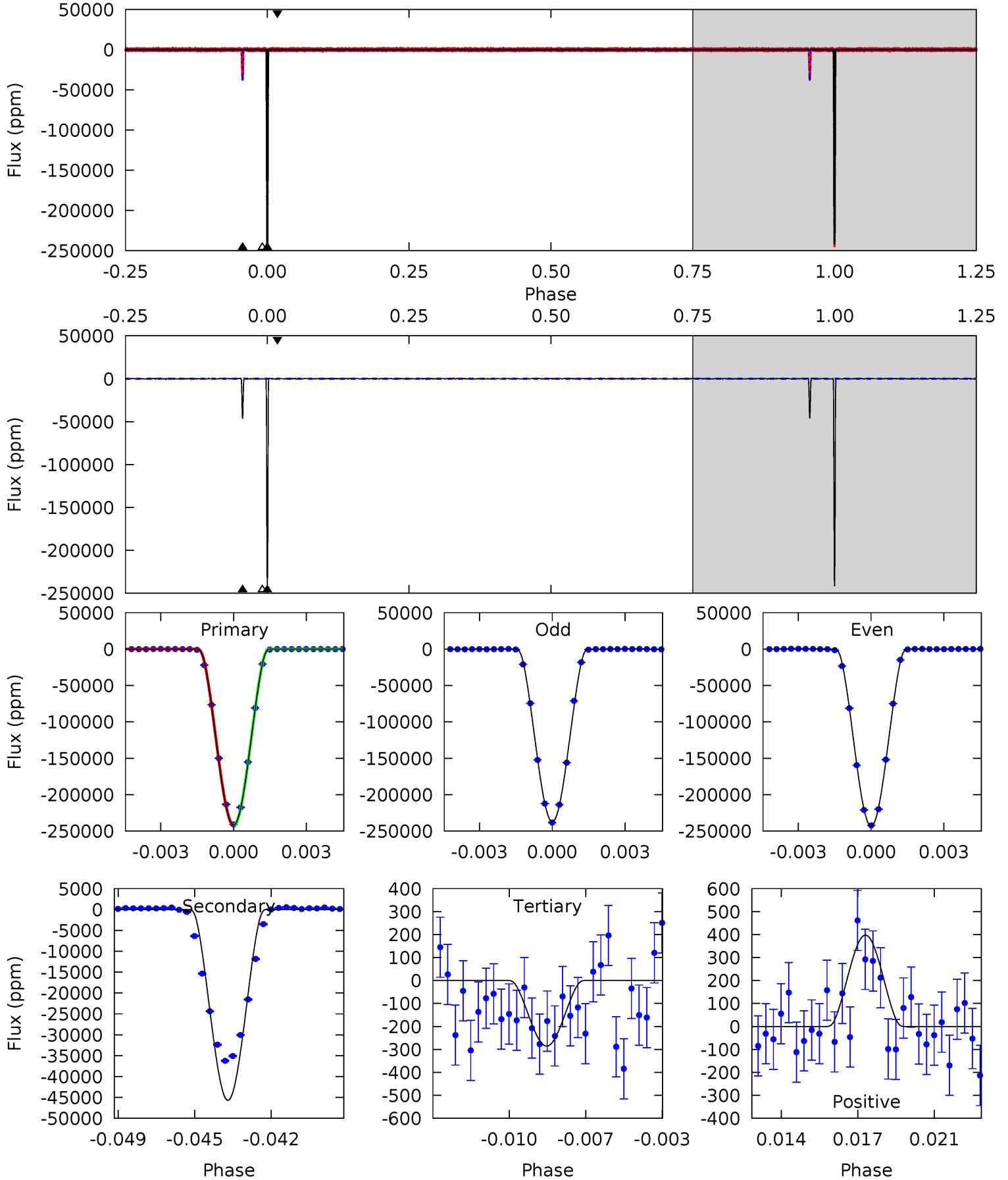
TCE 011249624-01 P= 65.583037 Days $T_0=182.656272$ (BKJD)



DV Model-Shift Uniqueness Test

011249624-01, P = 65.583652 Days, E = 117.065826 Days

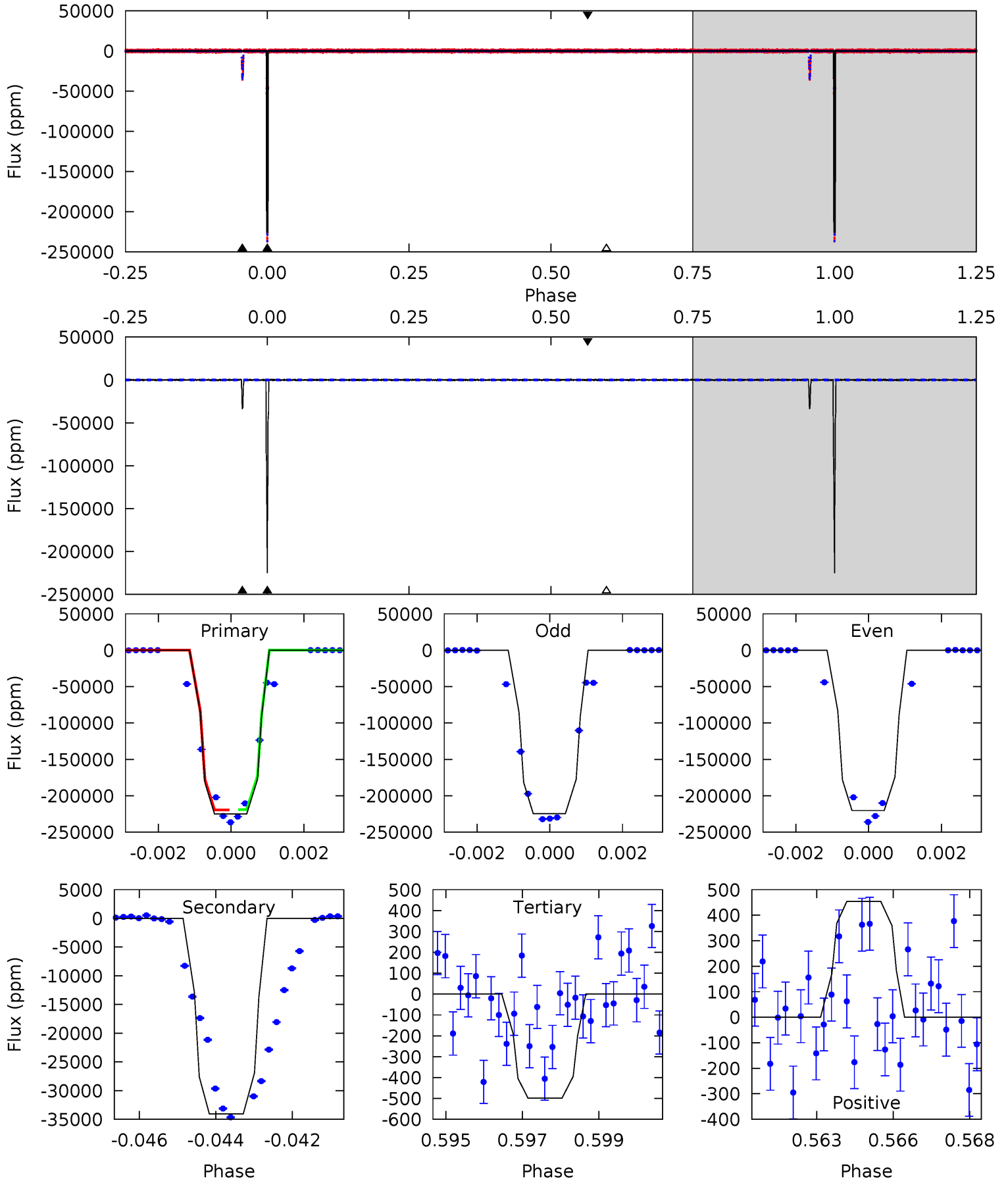
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5614	1061	6.63	9.23	5.23	2.92	2.07	5608	5605	1054	1052	72.7	1.00	0.00	1.84



Alt Model-Shift Uniqueness Test

011249624-01, P = 65.583037 Days, E = 117.073235 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2009	304.2	4.46	4.06	5.32	3.07	5.74	2004	2005	299.7	300.1	14.5	1.00	0.00	0



Stellar Parameters For KIC 011249624

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5516^{+183}_{-166}	$4.650^{+0.036}_{-0.084}$	$-0.840^{+0.300}_{-0.300}$	$0.666^{+0.088}_{-0.041}$	$0.721^{+0.060}_{-0.050}$	$3.443^{+0.515}_{-0.958}$
	+3%/-3%	+1%/-2%	+36%/-36%	+13%/-6%	+8%/-7%	+15%/-28%
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 011249624-01 / KOI 3553.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-45695 ± 43	$40.64^{+3.52}_{-3.07}$	523^{+21}_{-18}	3827^{+123}_{-110}	1287^{+195}_{-178}
Alt.	-34064 ± 112	$35.96^{+3.12}_{-2.69}$	524^{+23}_{-19}	3799^{+131}_{-129}	1212^{+203}_{-171}

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

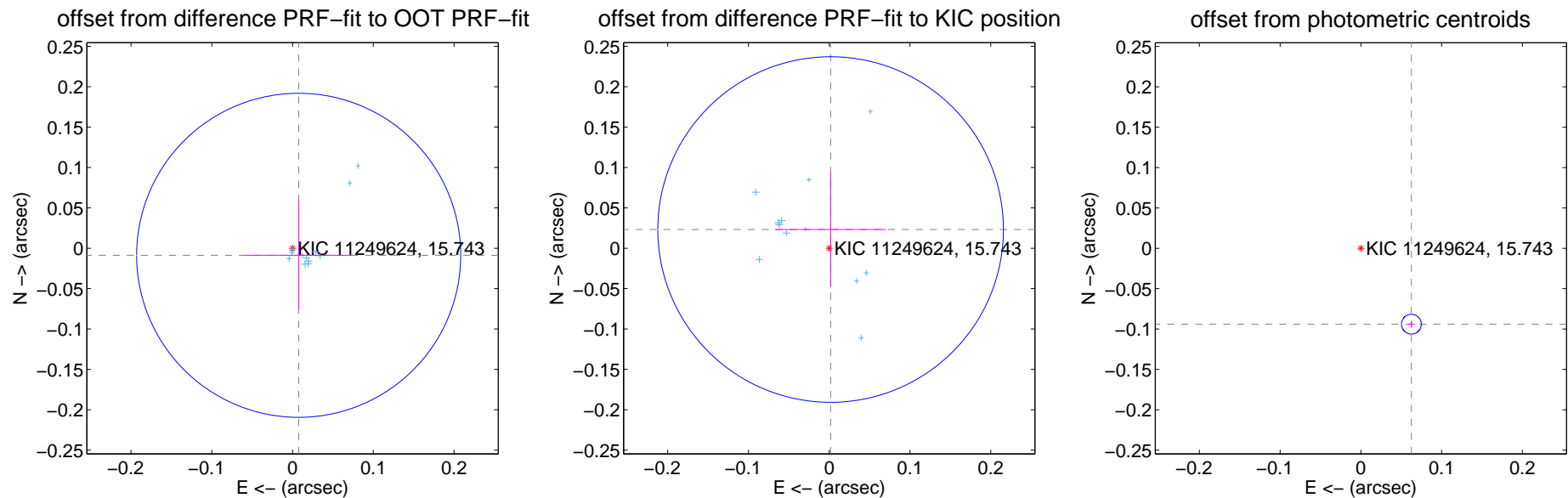
DV Centroid Data

Supplemental centroid analysis for 011249624-01. Kepler magnitude: 15.74. Transit SNR 2011.96

There are 13 quarters with good PRF difference image offsets

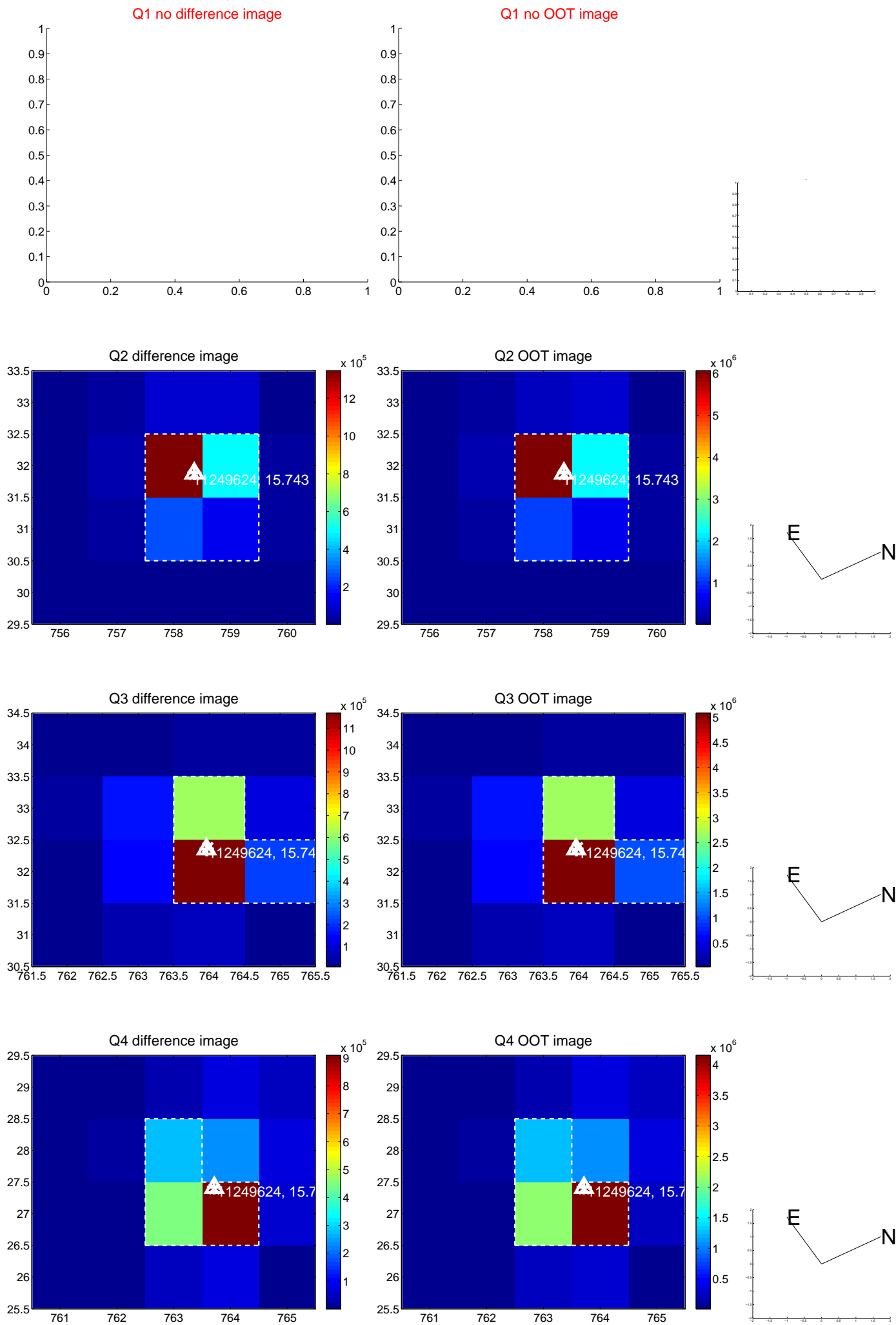
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.012 ± 0.067	0.17	-0.008 ± 0.067	-0.009 ± 0.068
PRF-fit source offset from KIC position	0.023 ± 0.071	0.33	-0.002 ± 0.069	0.023 ± 0.071
photometric centroid source offset	0.11 ± 0.00	27.70	-0.06 ± 0.00	-0.09 ± 0.00

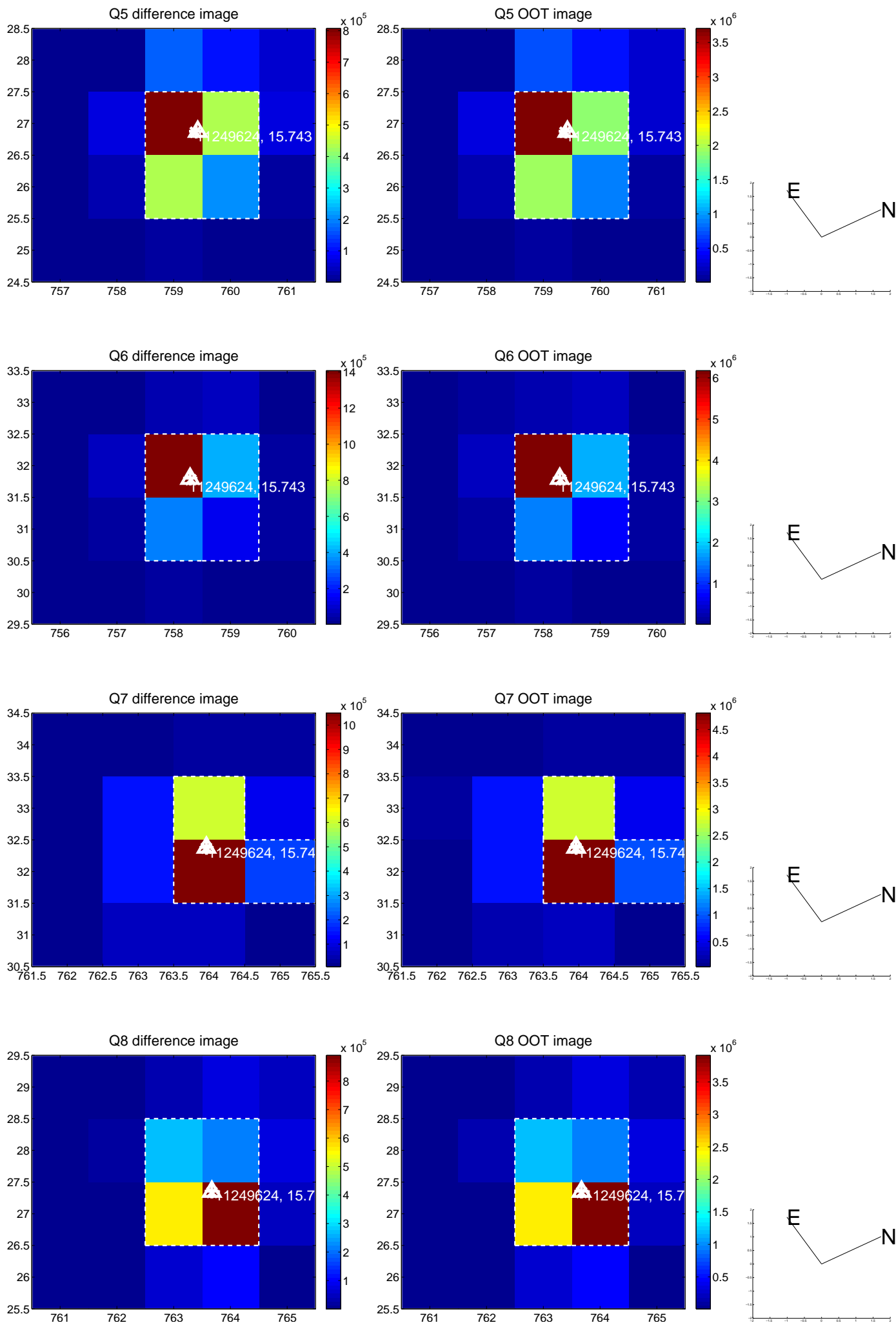


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

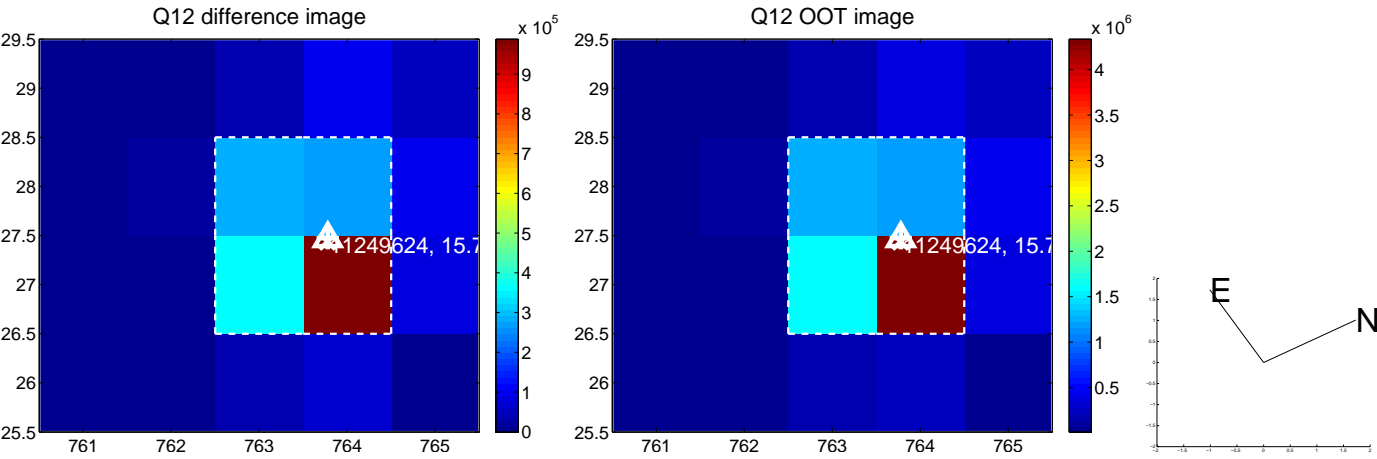
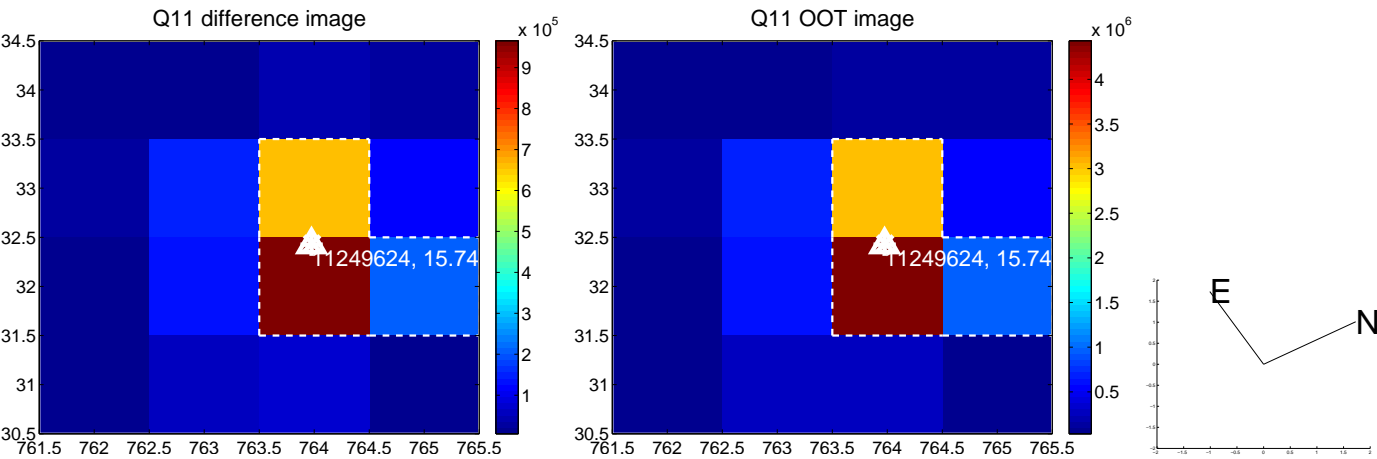
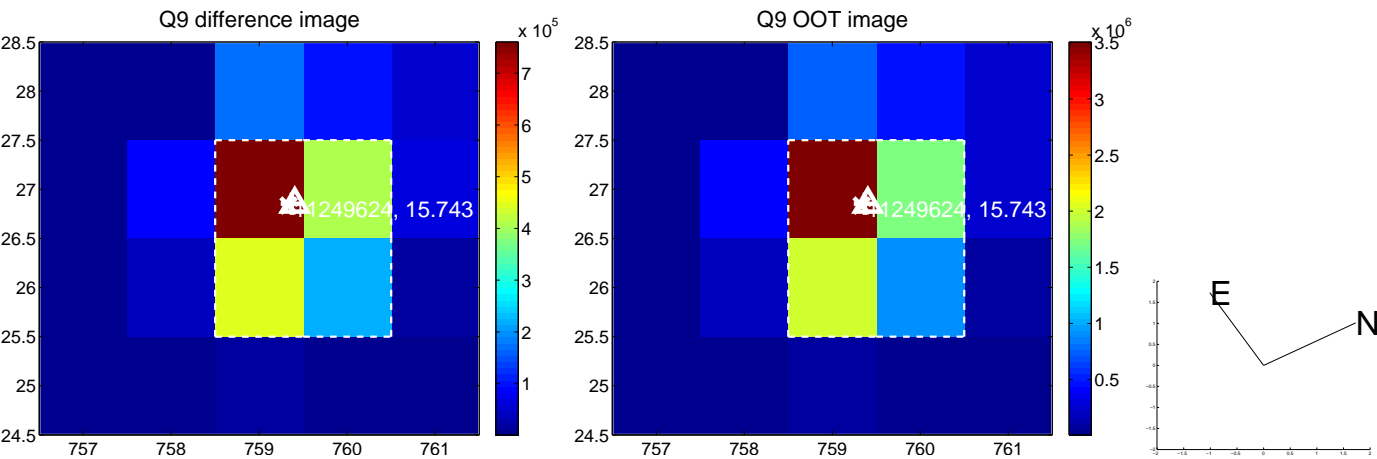
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



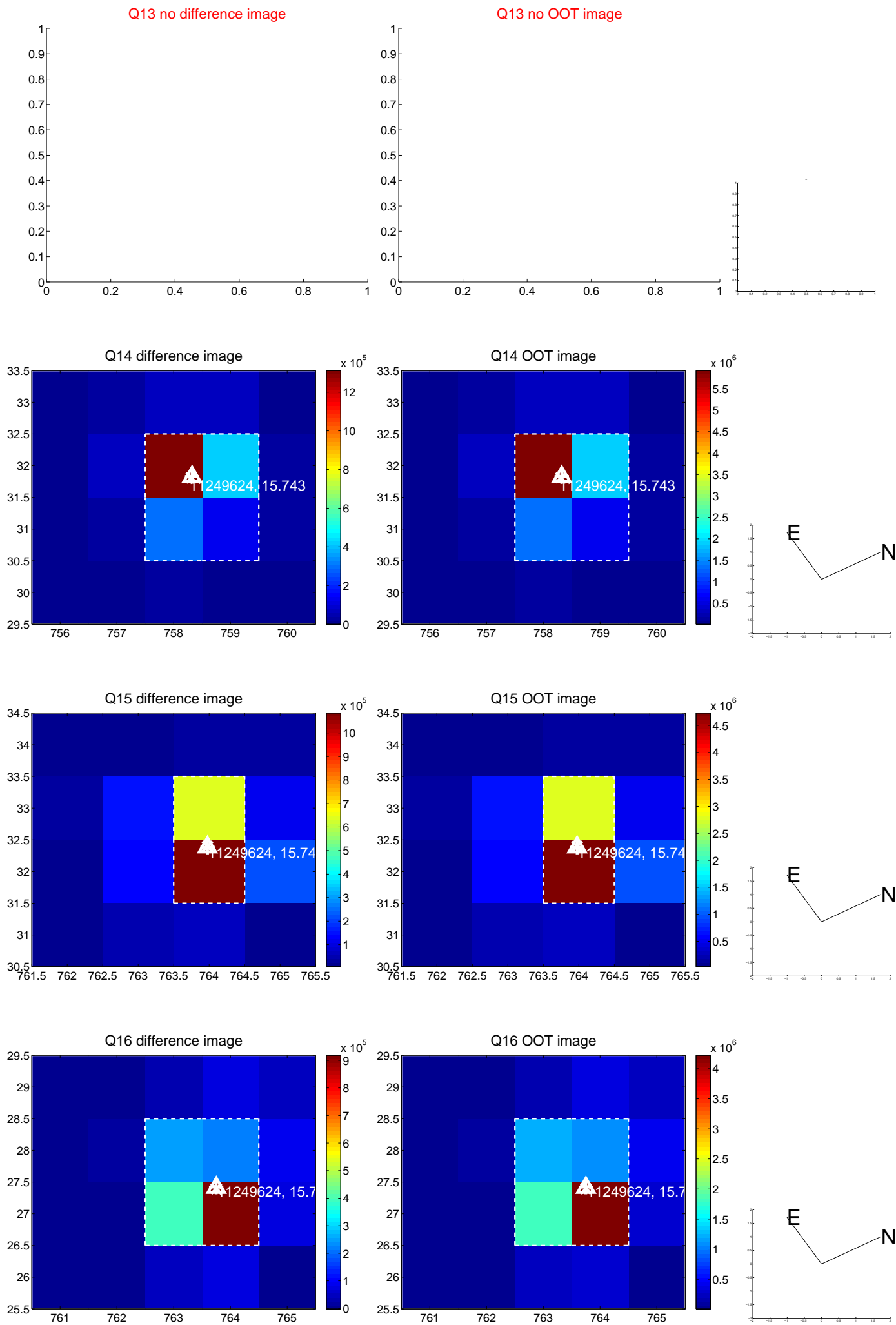
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



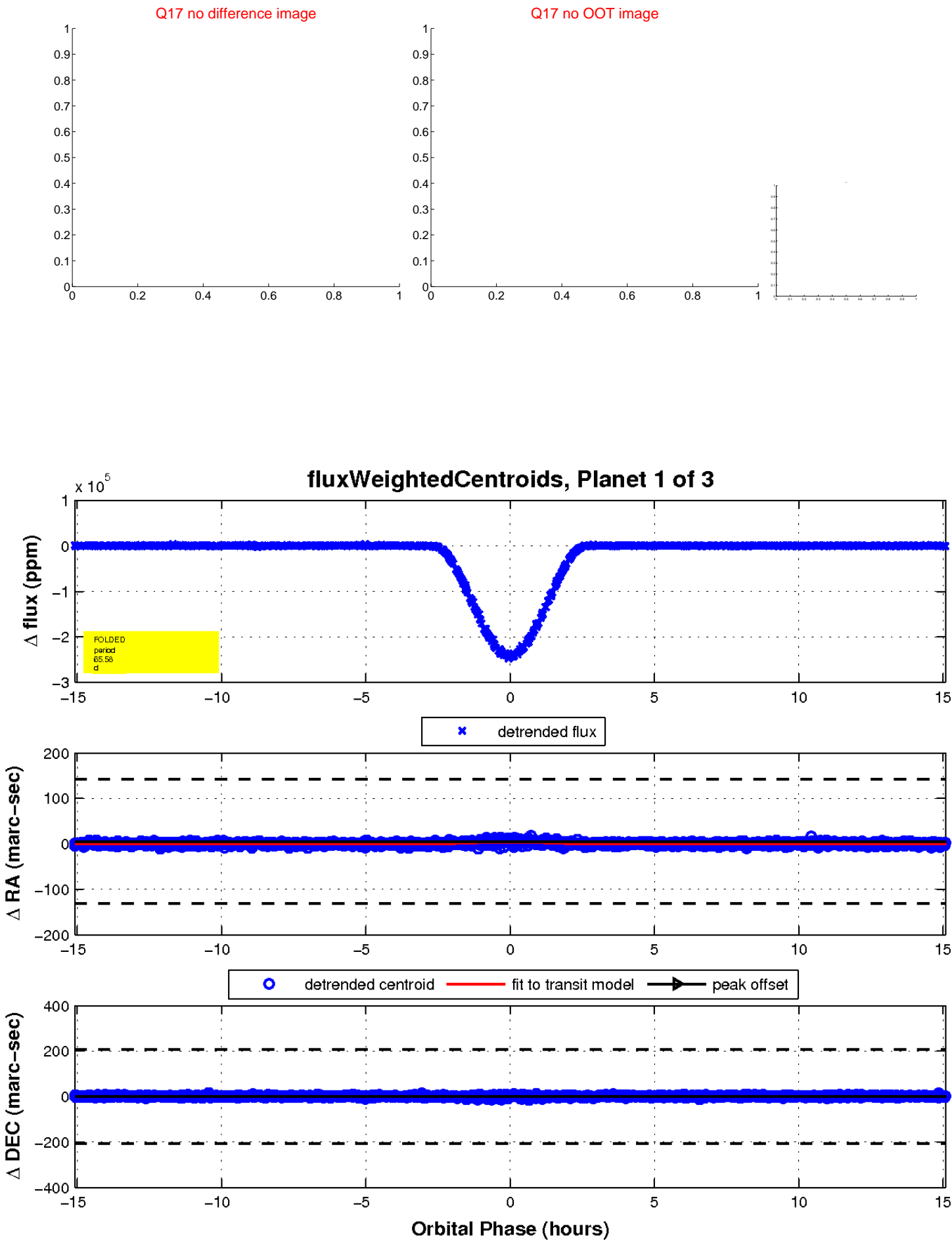
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

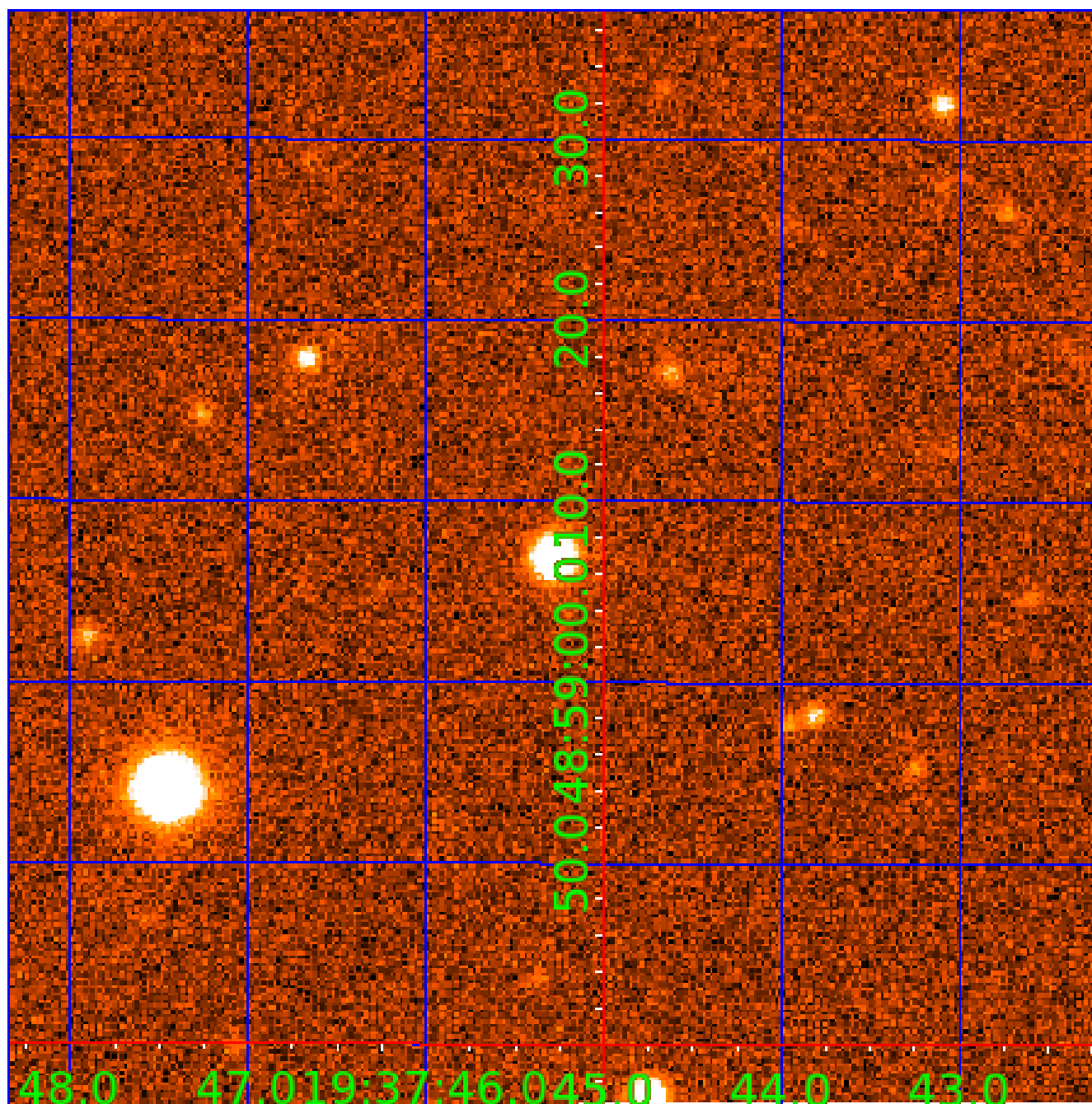


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011249624

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})
011249624-01	OBS	3553.01	65.583652	182.649478	241557.0	5.031	3078.6	2012.0	0.67	5516	40.36	4.51
011249624-02	OBS	No	65.583632	179.785552	36409.6	5.875	496.8	506.9	0.67	5516	19.92	4.51
011249624-03	OBS	No	65.576640	182.401568	363.7	30.209	7.7	8.9	0.67	5516	1.47	4.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011249624-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_DV—DEEP_V_SHAPED—HAS_SEC_TCE
011249624-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011249624-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—RESIDUAL_TCE

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.

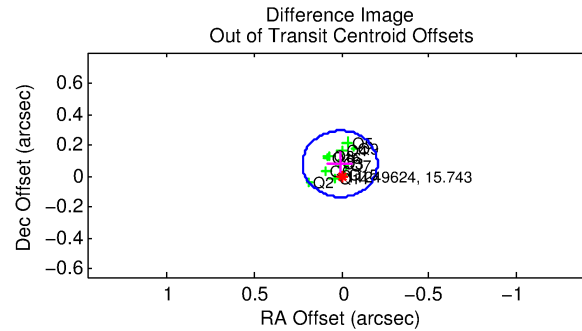
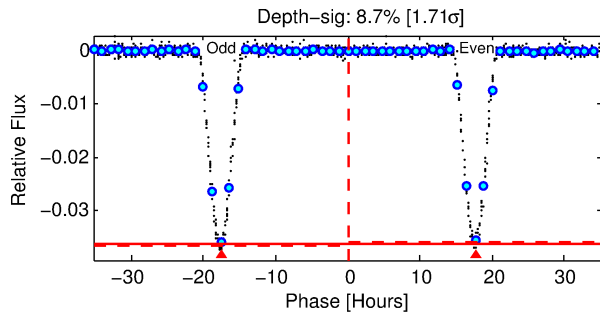
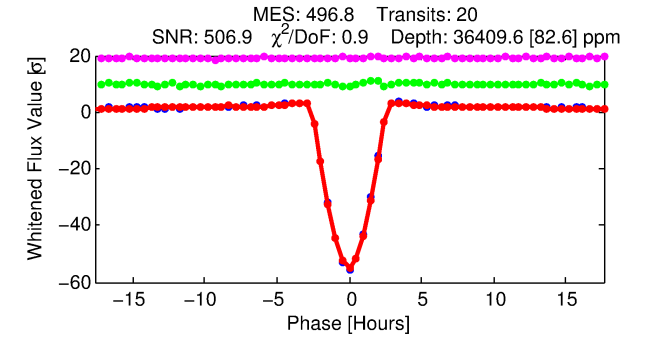
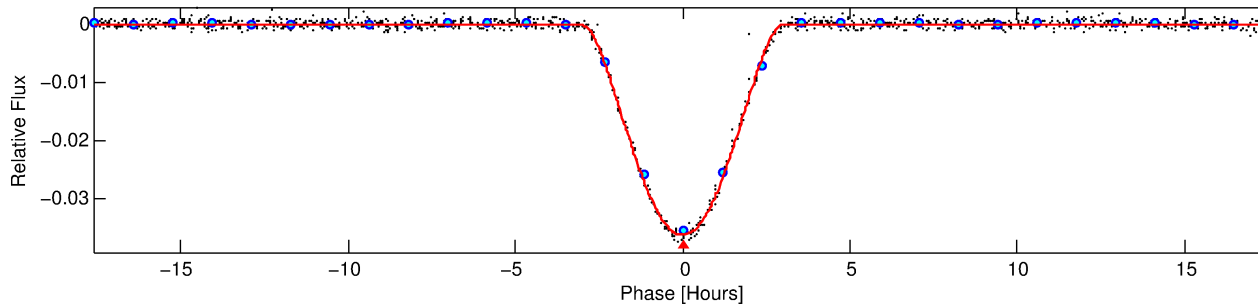
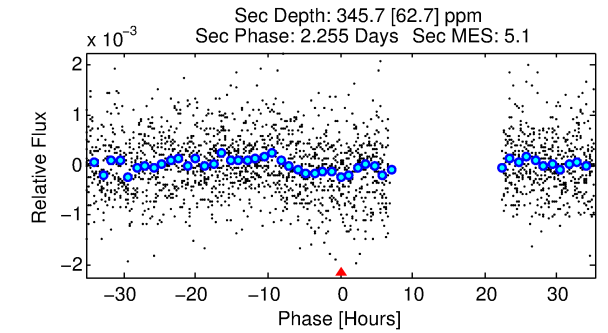
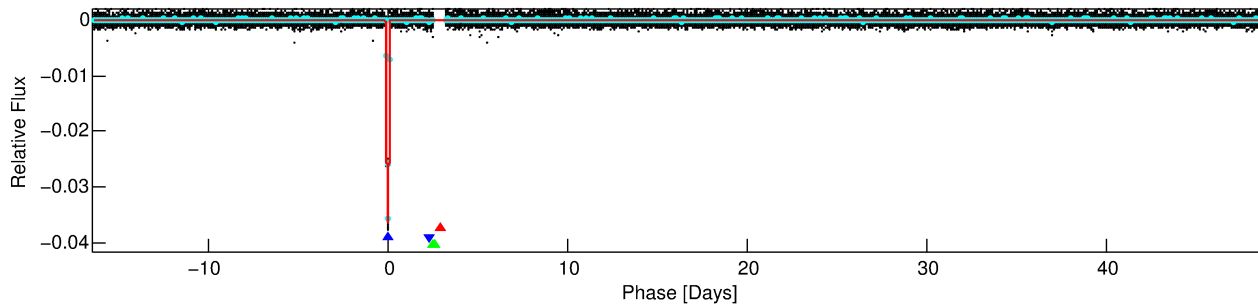
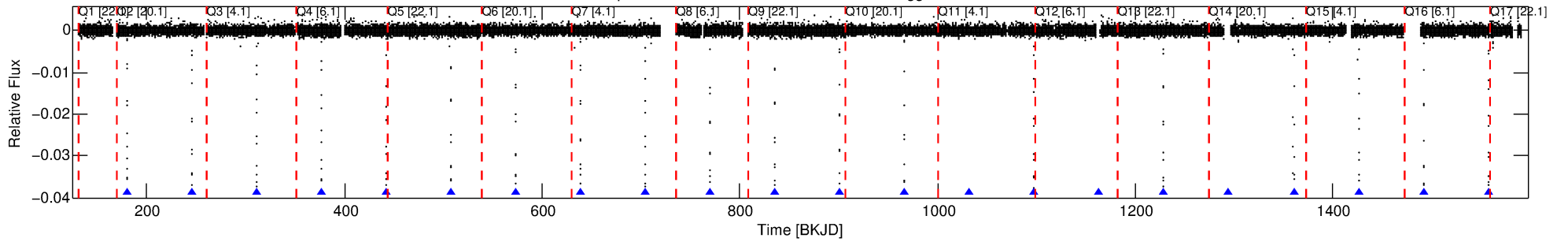
Ephemeris Match Information For 011249624-02

No Significant Match Found

DV One-Page Summary

KIC: 11249624 Candidate: 2 of 3 Period: 65.584 d
KOI: K03553 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.67 Rs Teff: 5516.0 K Logg: 4.65 Fe/H: -0.840



DV Fit Results:

Period = 65.58363 [0.00002] d
Epoch = 179.7856 [0.0002] BKJD
Rp/R* = 0.2741 [0.0281]
a/R* = 71.49 [0.62]
b = 0.96 [0.04]
Seff = 4.51 [0.92]
Teq = 372 [19] K
Rp = 19.92 [3.33] Re
a = 0.2857 [0.0312] AU
Ag = 39.12 [12.32] [3.09σ]
Teffp = 1437 [109] K [9.61σ]

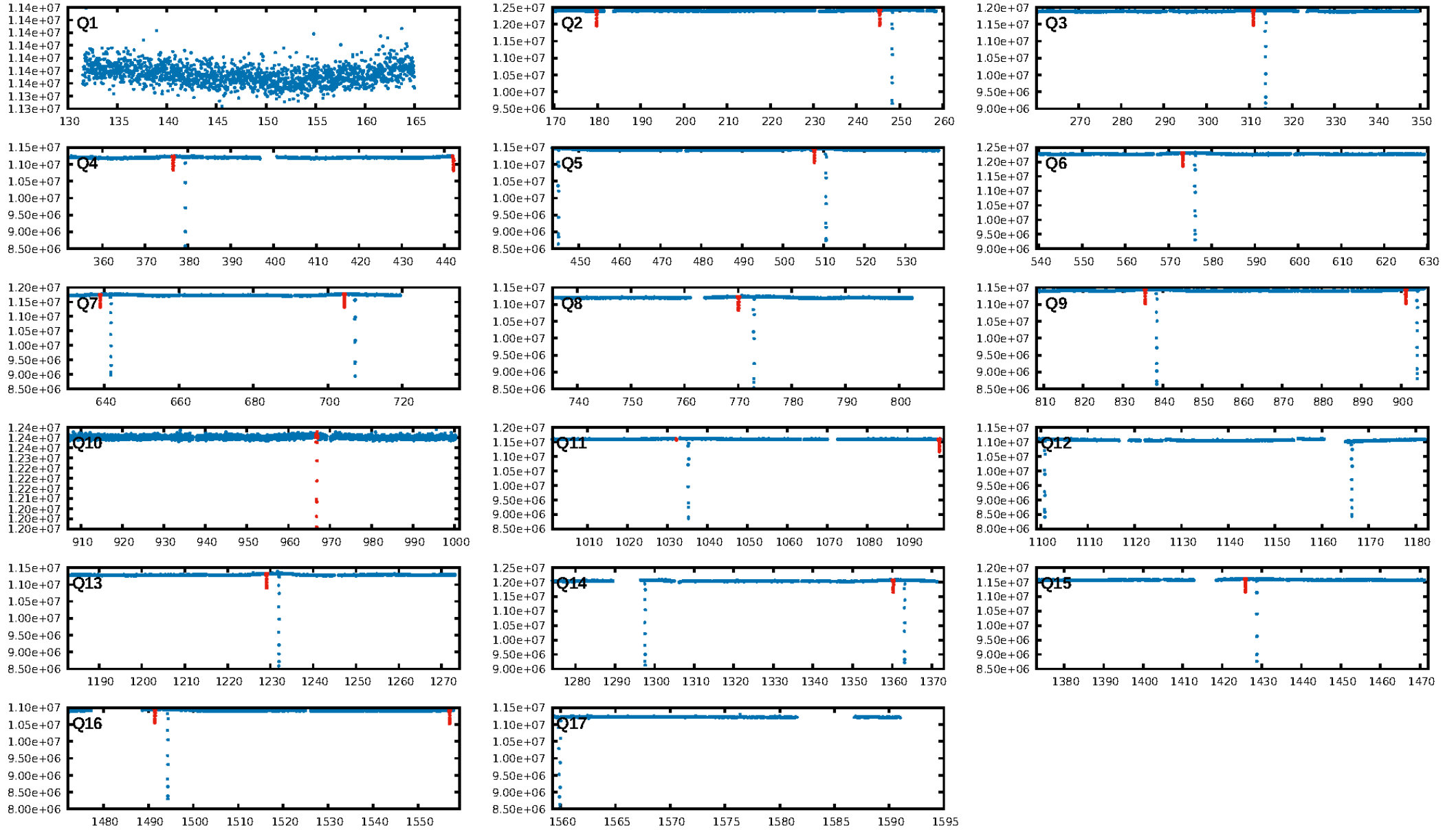
DV Diagnostic Results:

ShortPeriod-sig: 0.4% [0.01σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 56.7%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [20/20]
GhostDiagnostic-chr: 3.455
Centroid-sig: 0.0%
Centroid-so: 0.021 arcsec [0.96σ]
OotOffset-rm: 0.081 arcsec [1.14σ]
KicOffset-rm: 0.112 arcsec [1.45σ]
OotOffset-st: 3/3/3/2 [11]
KicOffset-st: 3/3/3/2 [11]
DiffImageQuality-fgm: 1.00 [11/11]
DiffImageOverlap-fno: 1.00 [11/11]

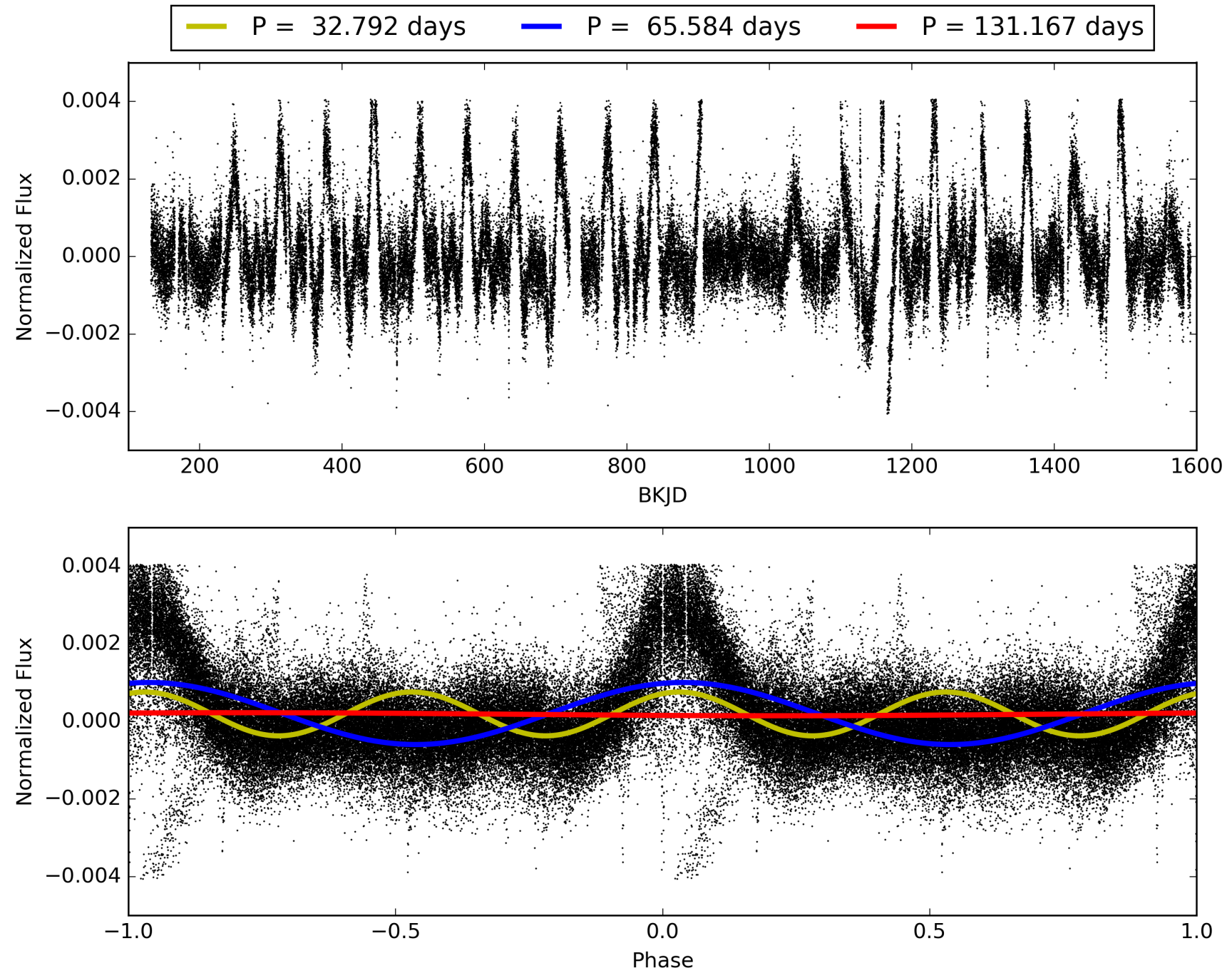
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:27:38 Z

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

TCE 011249624-02, PDC Light Curves

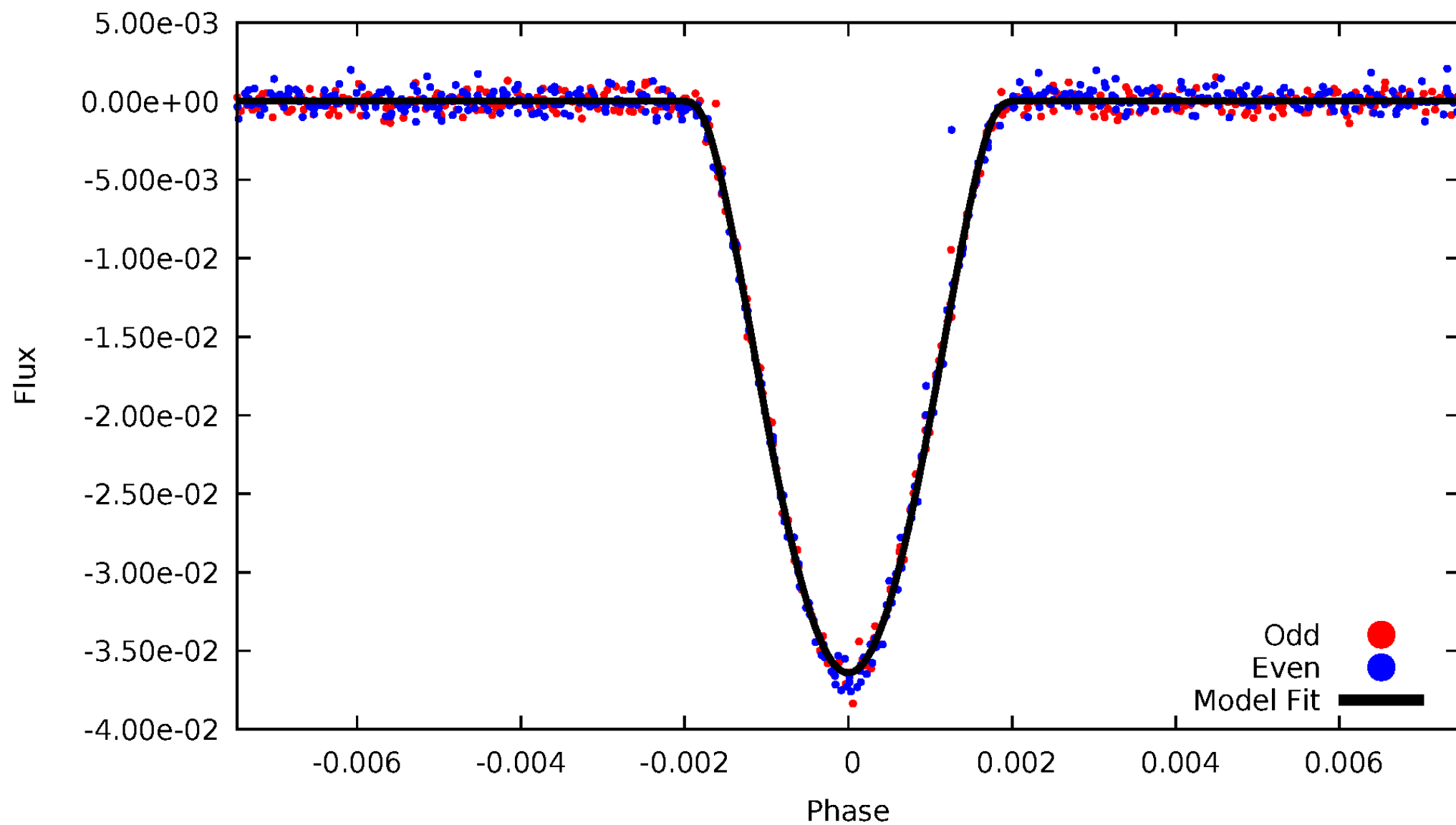


TCE 011249624-02



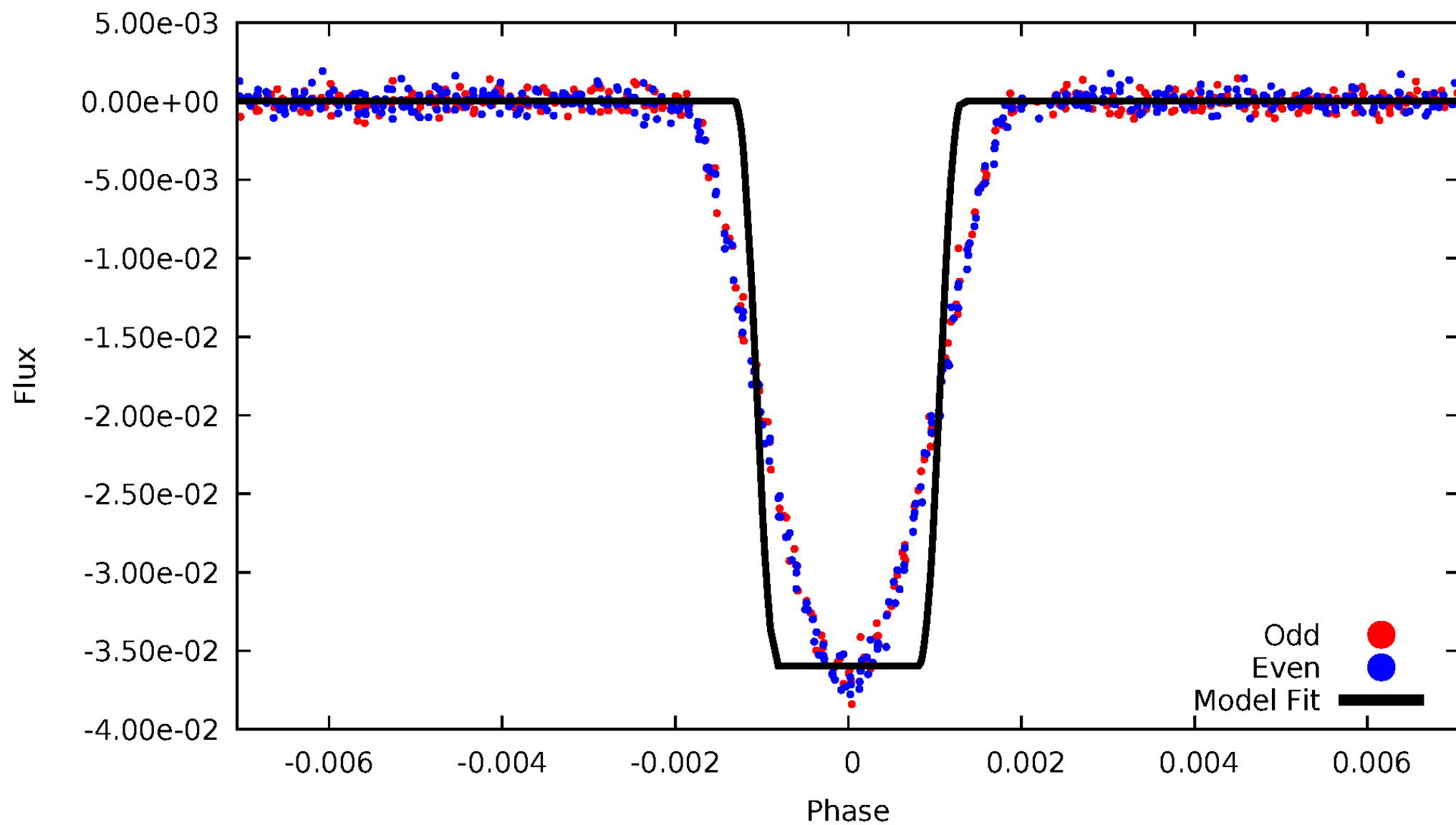
DV Odd/Even

TCE 011249624-02



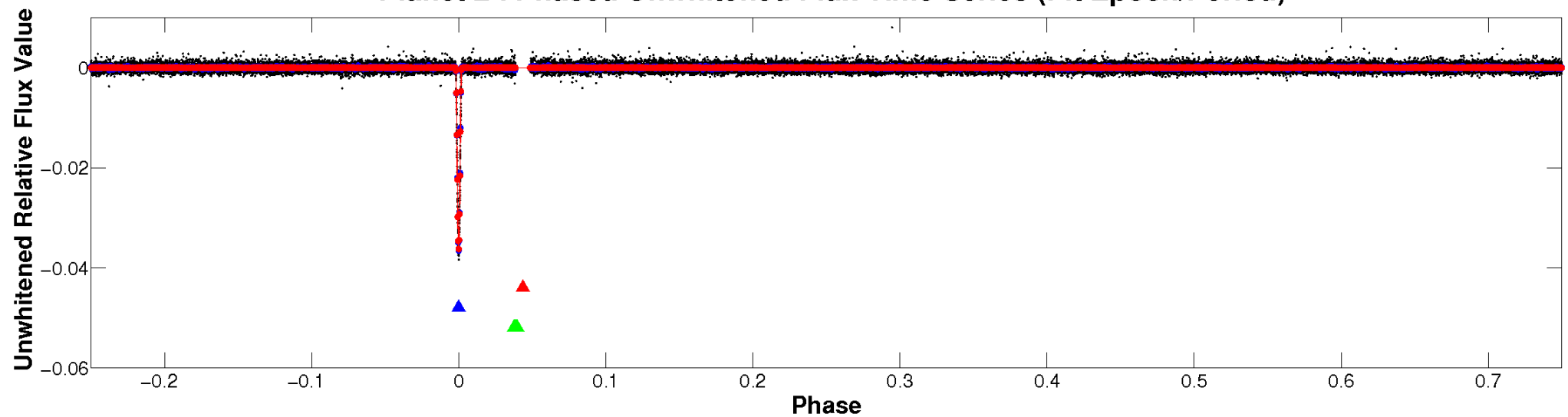
ALT Odd/Even

TCE 011249624-02

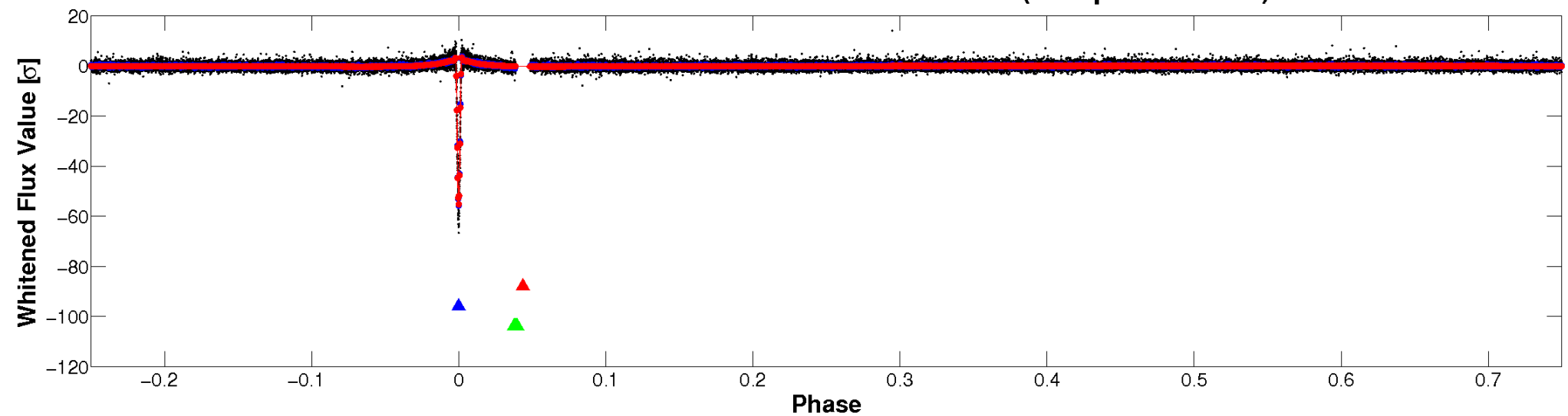


Non-Whitened Vs. Whitened Light Curve

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

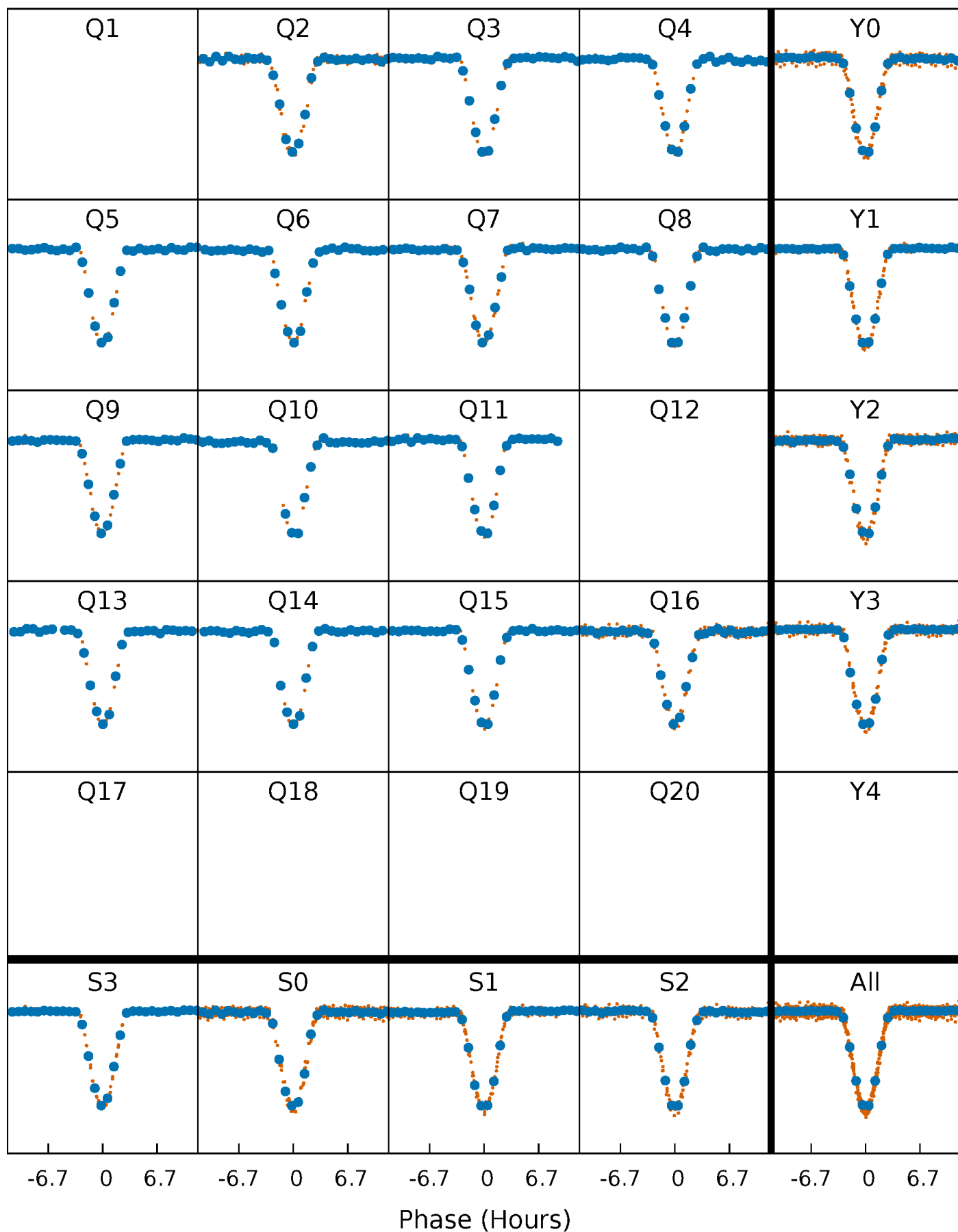


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



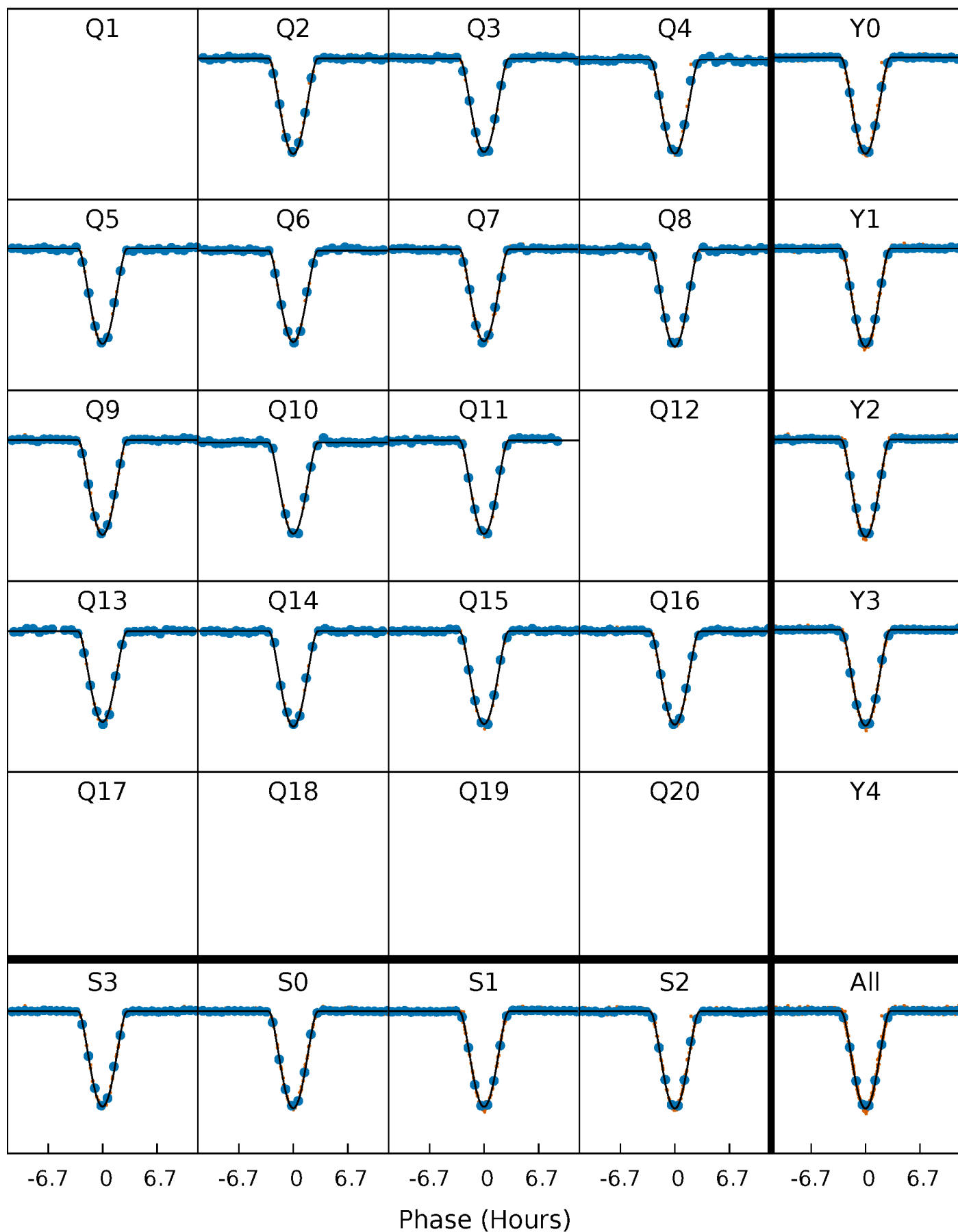
PDC Quarter-Phased Transit Curves

TCE 011249624-02 P= 65.583632 Days $T_0=179.785552$ (BKJD)



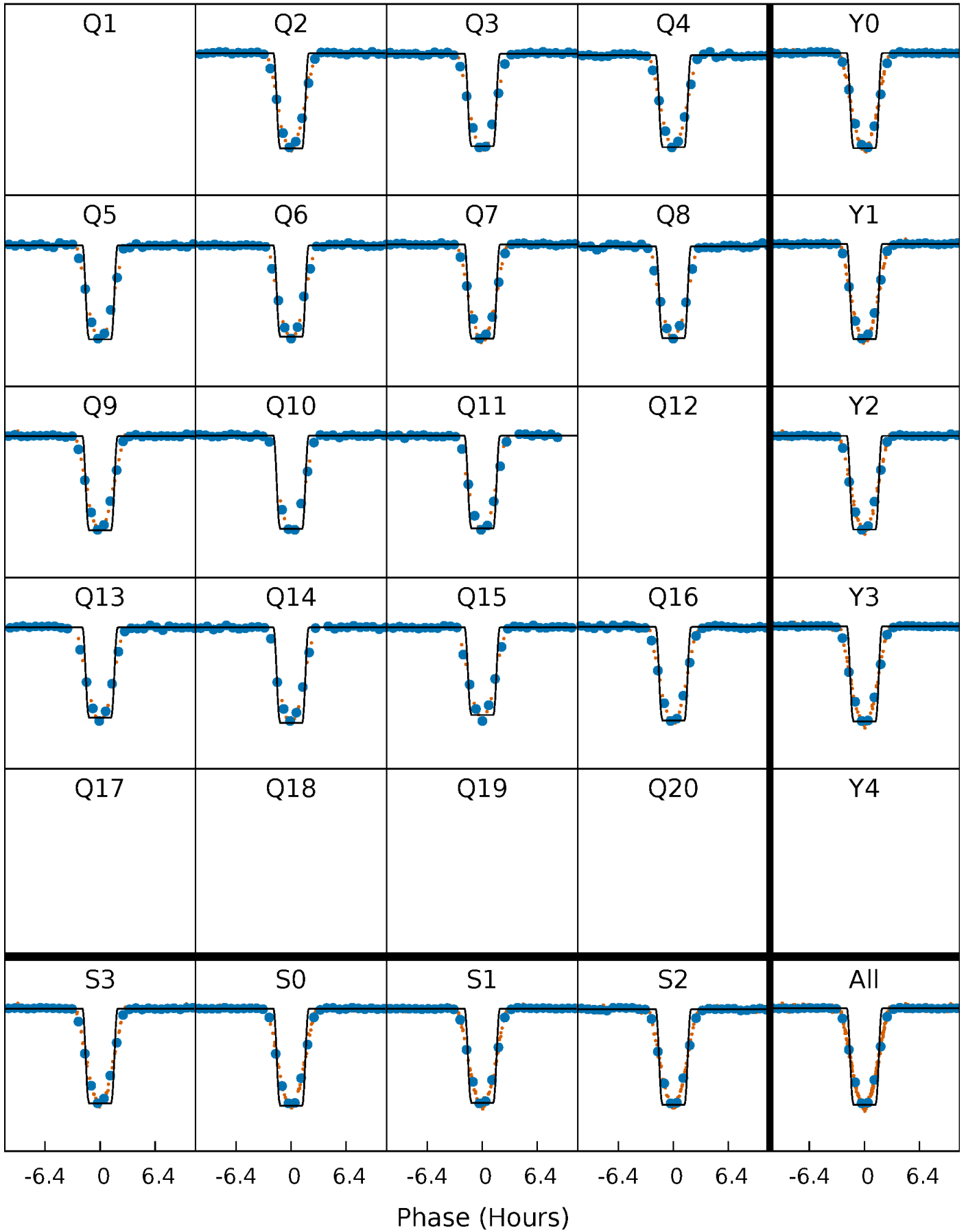
DV Quarter-Phased Transit Curves

TCE 011249624-02 P= 65.583632 Days $T_0=179.785552$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

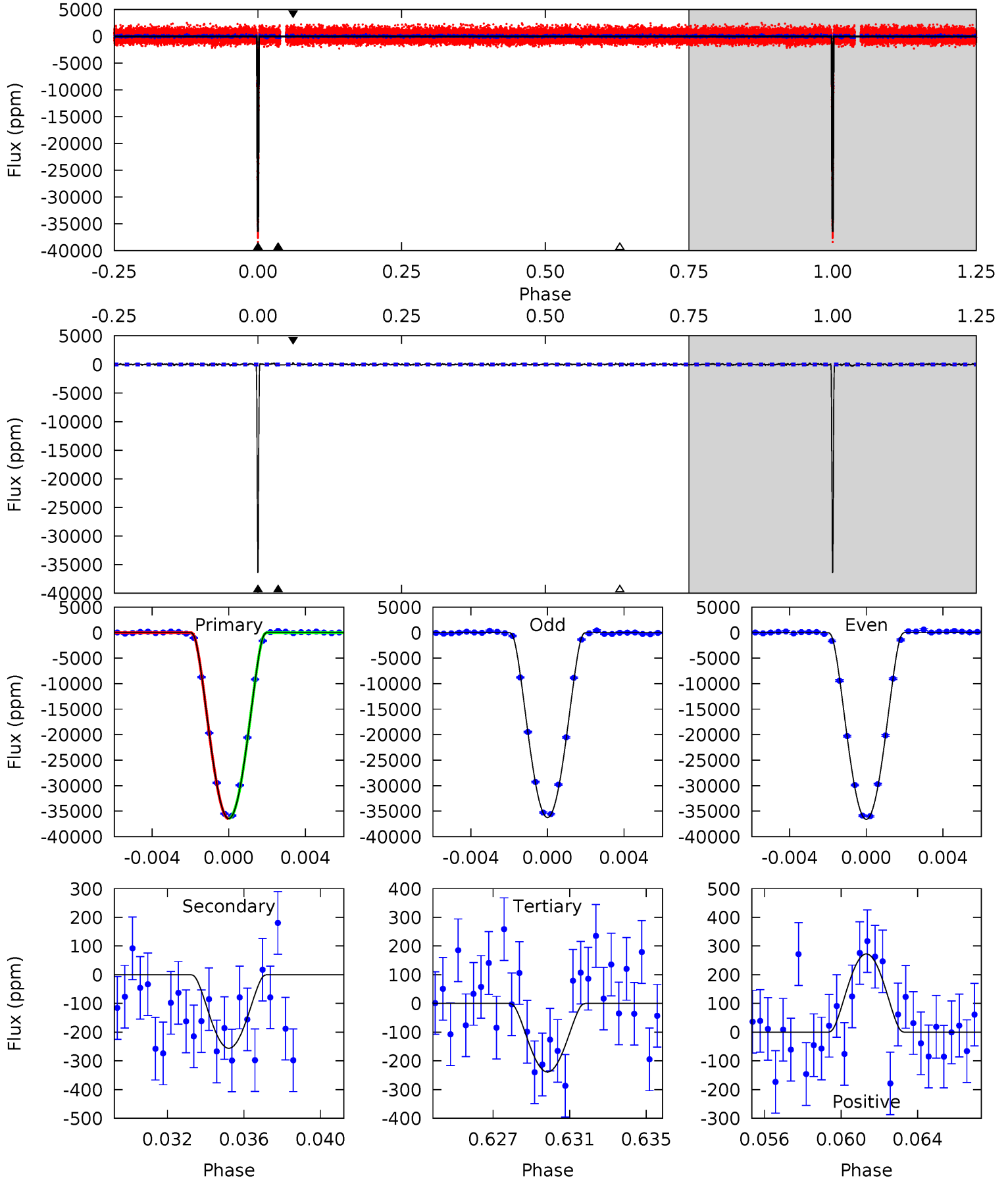
TCE 011249624-02 P= 65.583774 Days $T_0=179.784011$ (BKJD)



DV Model-Shift Uniqueness Test

011249624-02, P = 65.583632 Days, E = 114.201920 Days

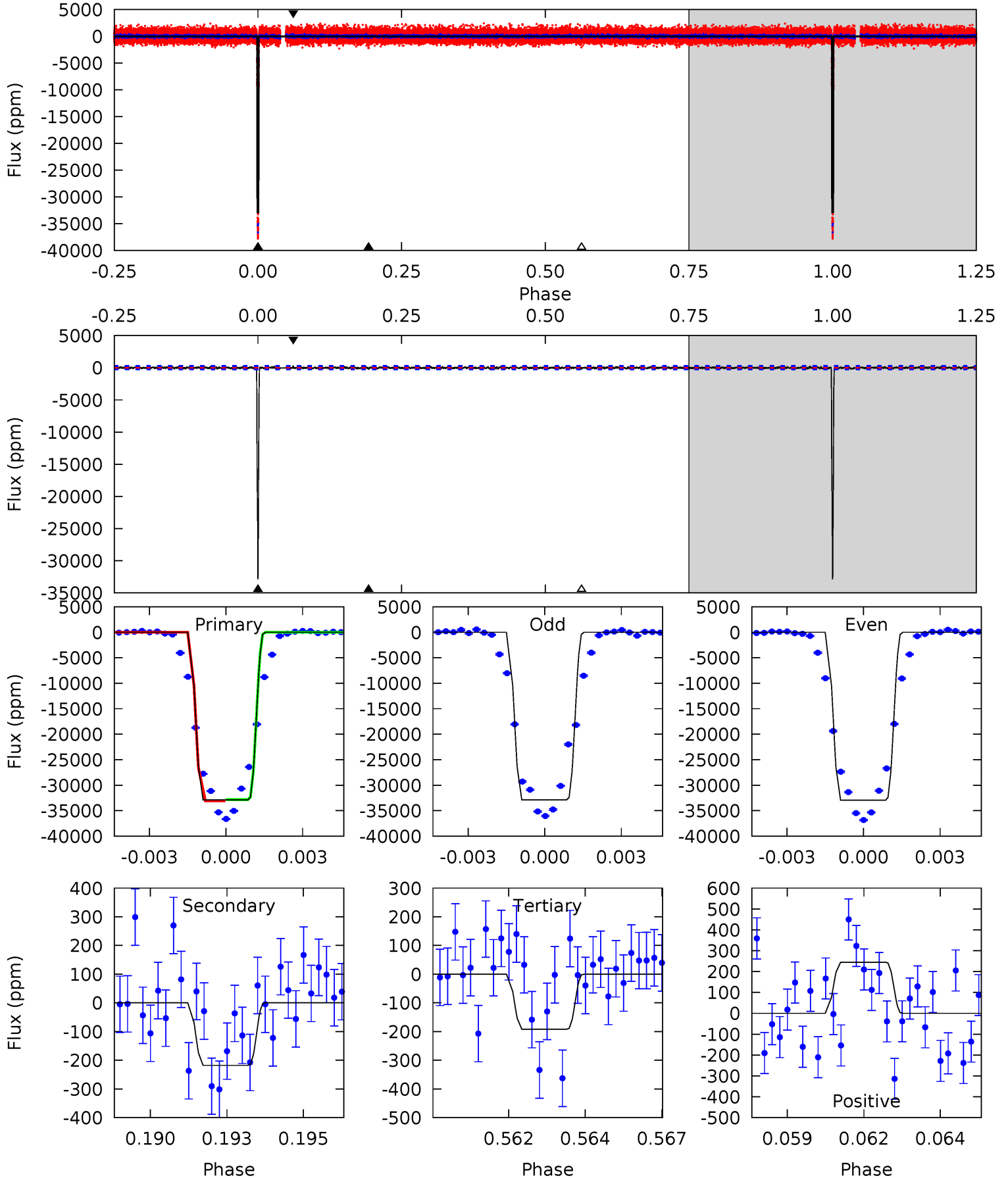
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
984.0	6.91	6.44	7.35	5.20	2.88	1.66	977.5	976.6	0.47	-0.44	4.82	0.95	0.01	0.89



Alt Model-Shift Uniqueness Test

011249624-02, P = 65.583774 Days, E = 114.200237 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
642.0	4.25	3.74	4.78	5.27	3.00	1.10	638.3	637.2	0.51	-0.52	0.86	1.00	0.01	2.72



Stellar Parameters For KIC 011249624

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5516^{+183}_{-166}	$4.650^{+0.036}_{-0.084}$	$-0.840^{+0.300}_{-0.300}$	$0.666^{+0.088}_{-0.041}$	$0.721^{+0.060}_{-0.050}$	$3.443^{+0.515}_{-0.958}$
	+3%/-3%	+1%/-2%	+36%/-36%	+13%/-6%	+8%/-7%	+15%/-28%
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 011249624-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-256 ± 37	$20.21^{+2.55}_{-2.36}$	524^{+23}_{-20}	2262^{+75}_{-80}	28^{+9}_{-7}
Alt.	-218 ± 51	$13.96^{+2.41}_{-2.24}$	523^{+21}_{-20}	2416^{+123}_{-114}	50^{+24}_{-17}

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

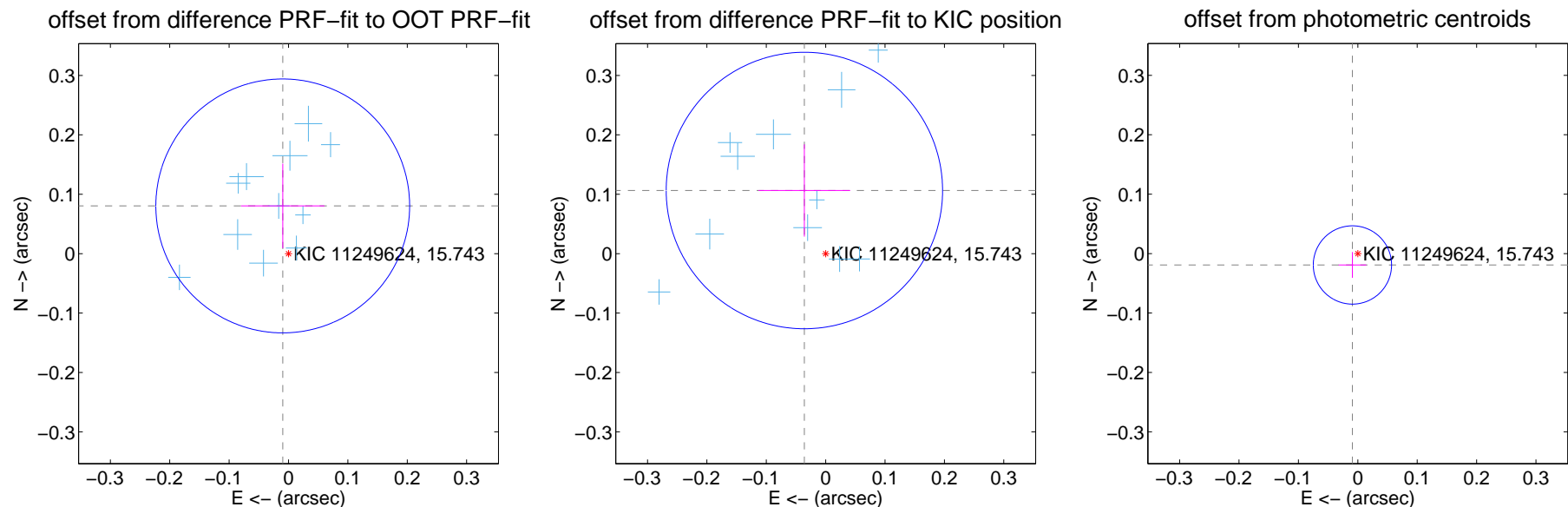
DV Centroid Data

Supplemental centroid analysis for 011249624-02. Kepler magnitude: 15.74. Transit SNR 506.87

There are 11 quarters with good PRF difference image offsets

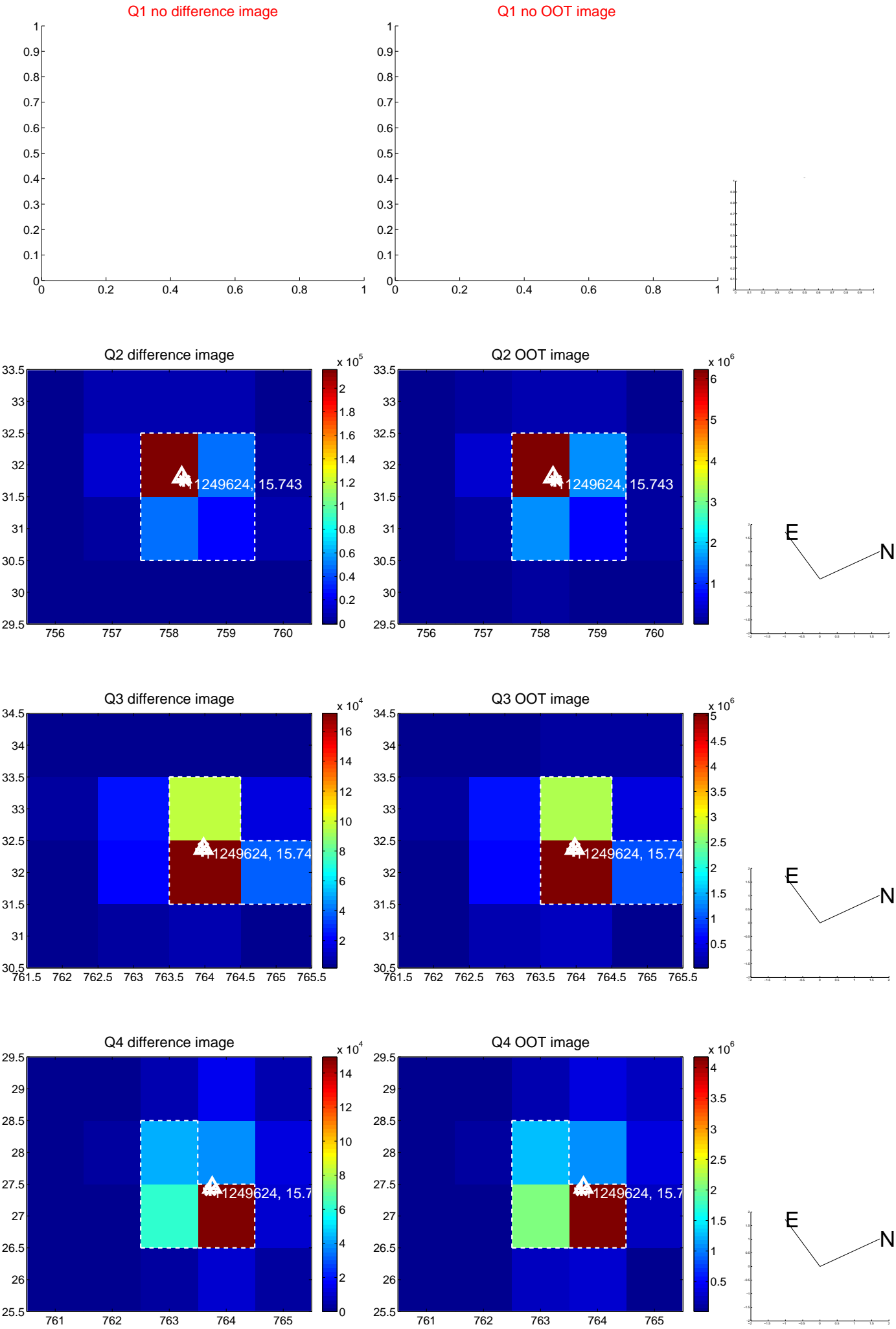
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.081 ± 0.071	1.14	0.010 ± 0.070	0.080 ± 0.071
PRF-fit source offset from KIC position	0.112 ± 0.078	1.45	0.036 ± 0.077	0.106 ± 0.078
photometric centroid source offset	0.02 ± 0.02	0.96	0.01 ± 0.02	-0.02 ± 0.02

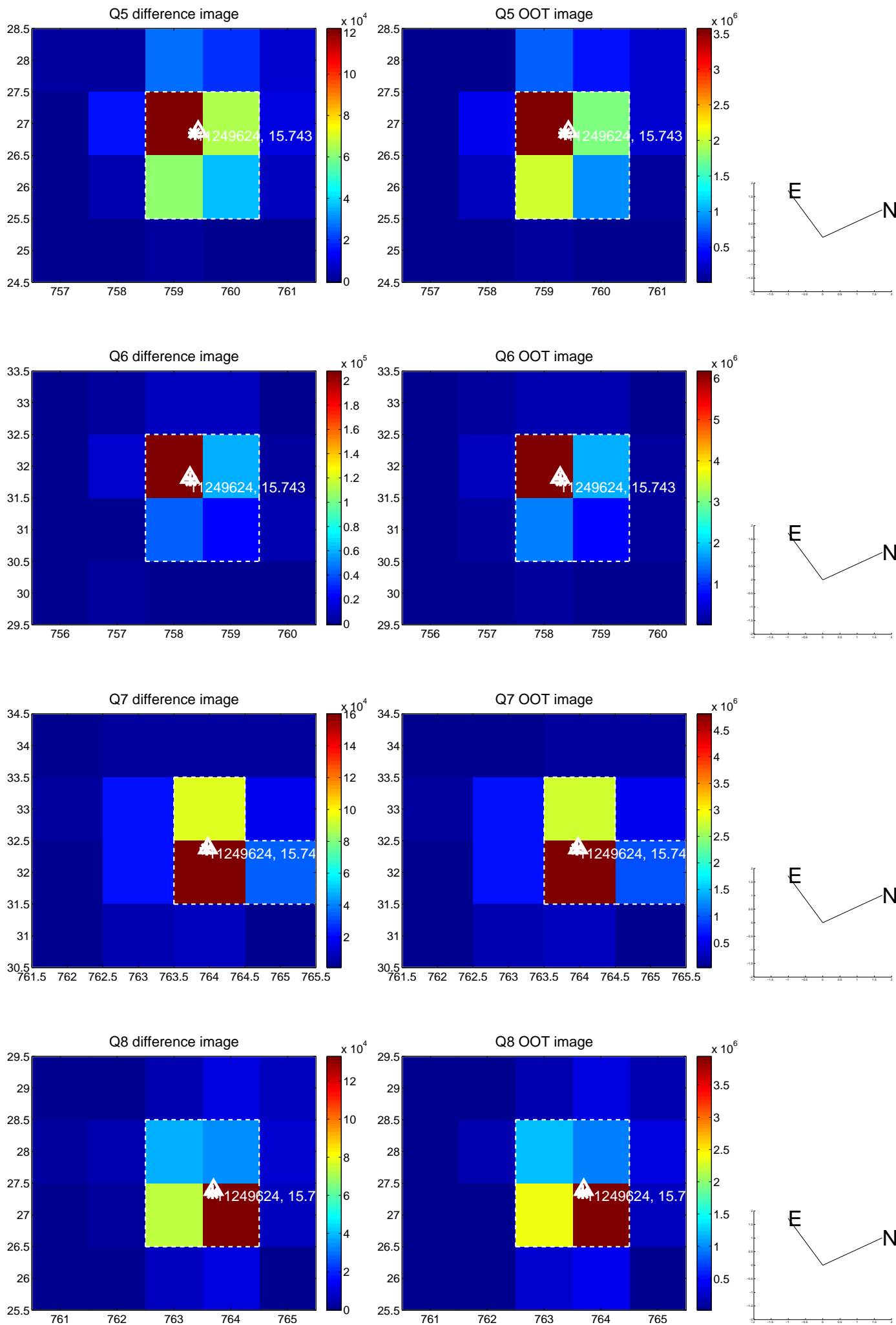


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

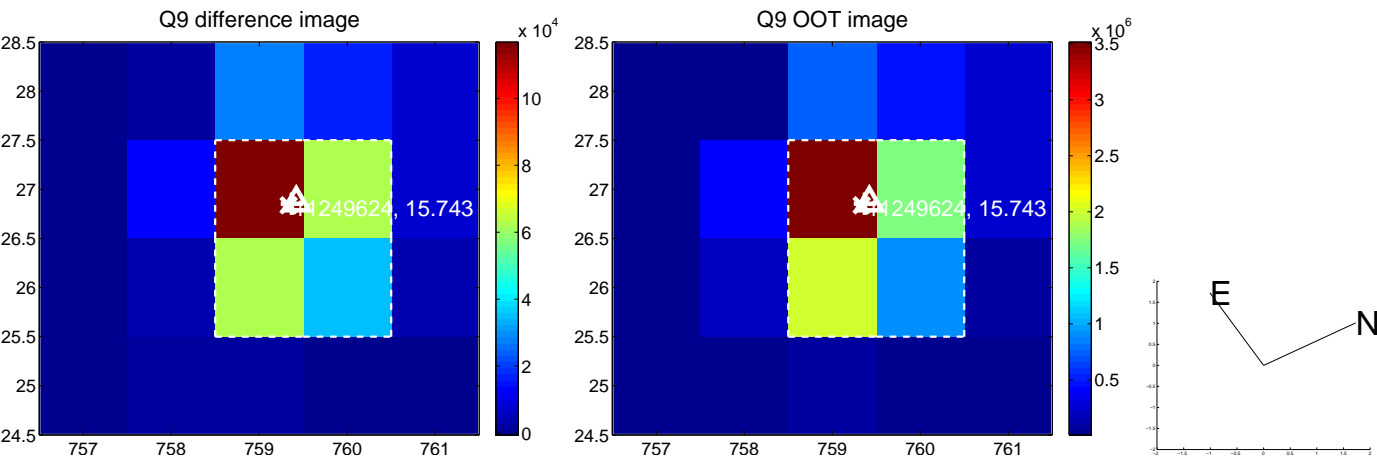
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



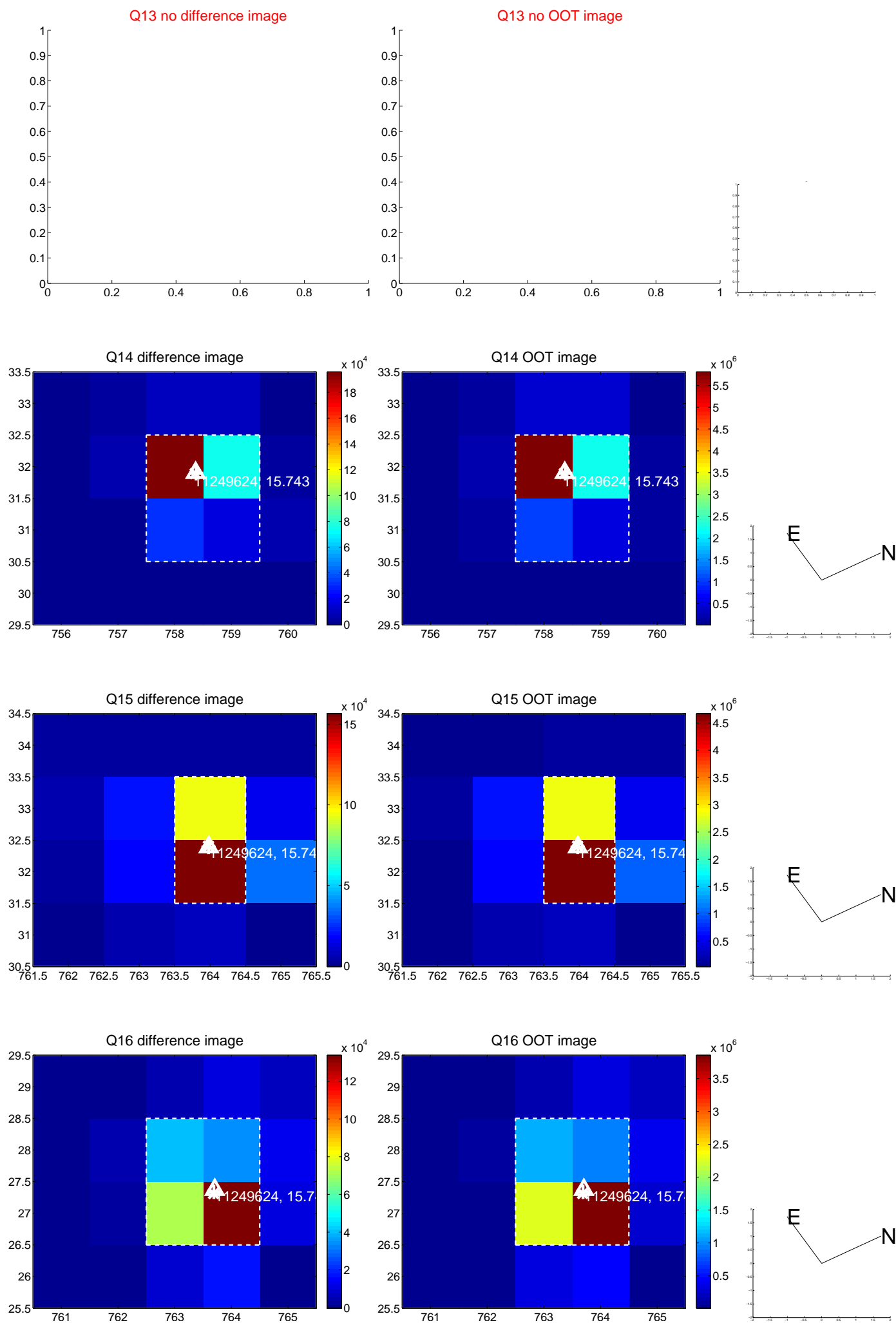
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



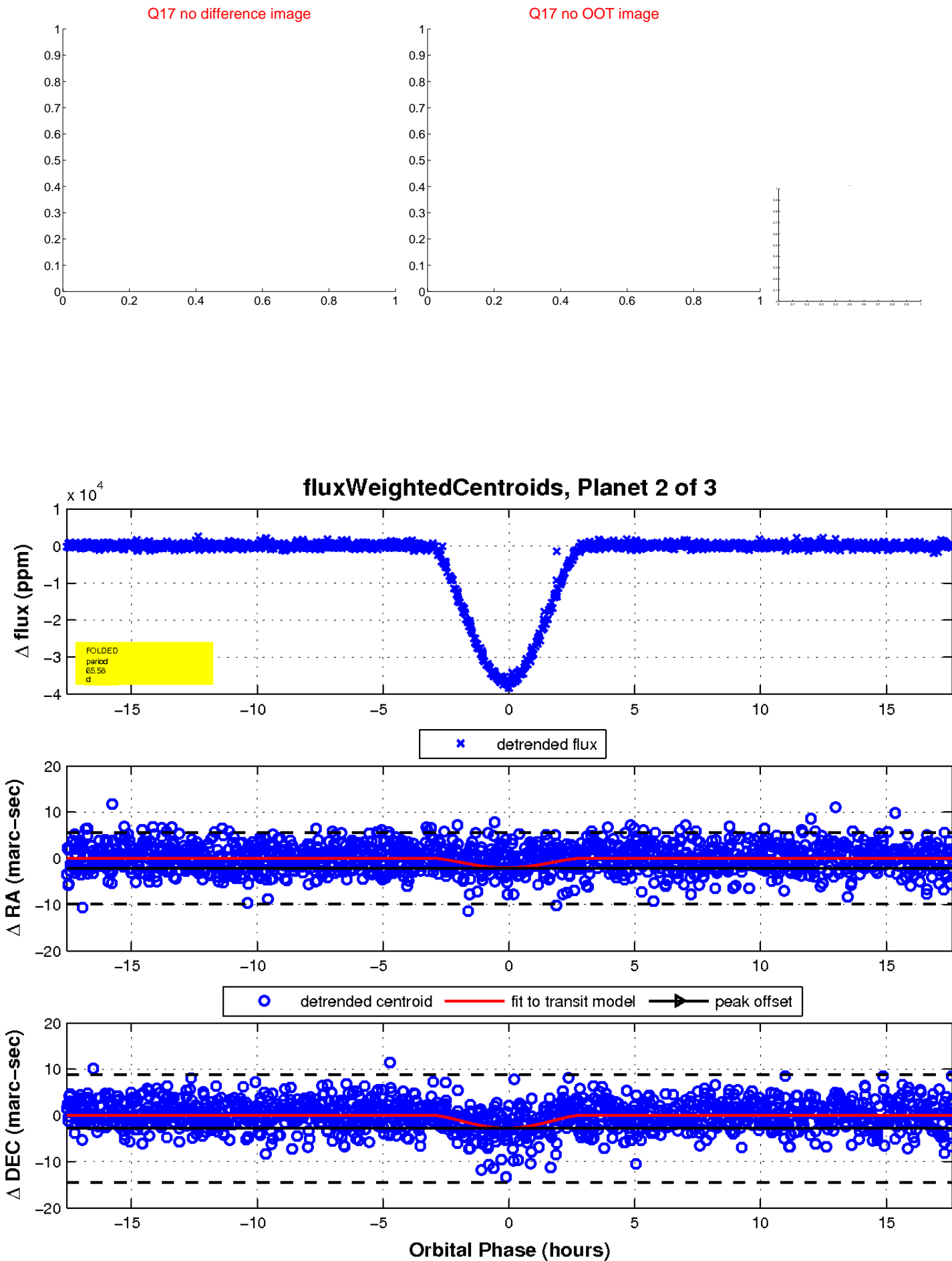
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

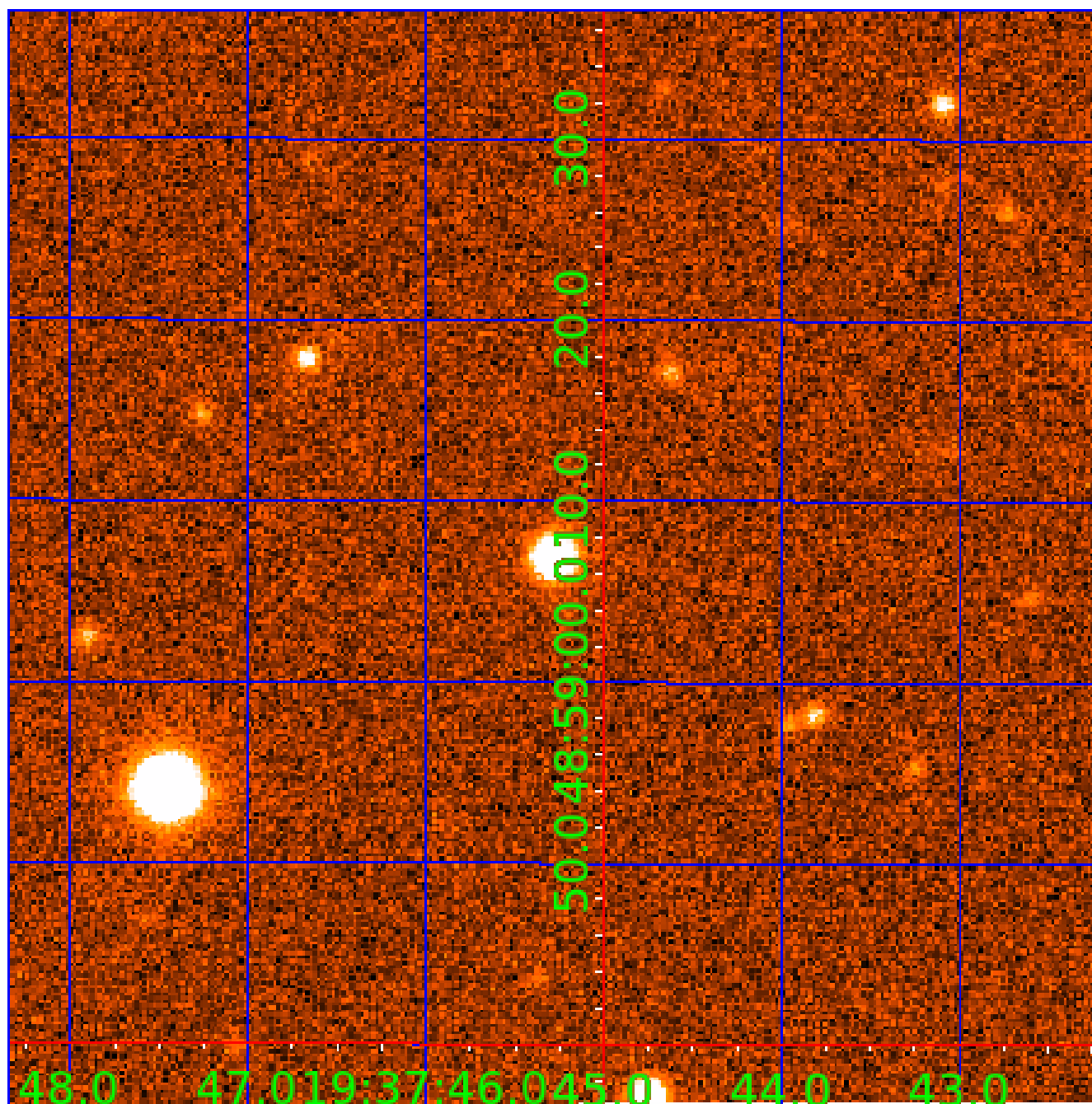


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011249624

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})
011249624-01	OBS	3553.01	65.583652	182.649478	241557.0	5.031	3078.6	2012.0	0.67	5516	40.36	4.51
011249624-02	OBS	No	65.583632	179.785552	36409.6	5.875	496.8	506.9	0.67	5516	19.92	4.51
011249624-03	OBS	No	65.576640	182.401568	363.7	30.209	7.7	8.9	0.67	5516	1.47	4.51

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011249624-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_DV—MOD_SEC_ALT—MOD_ODDEVEN_DV—DEEP_V_SHAPED—HAS_SEC_TCE
011249624-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
011249624-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—LPP_DV—RESIDUAL_TCE

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 011249624-03

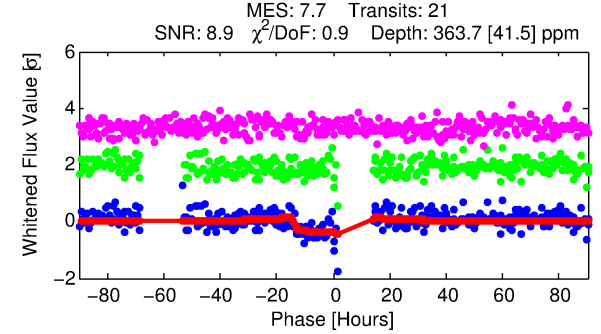
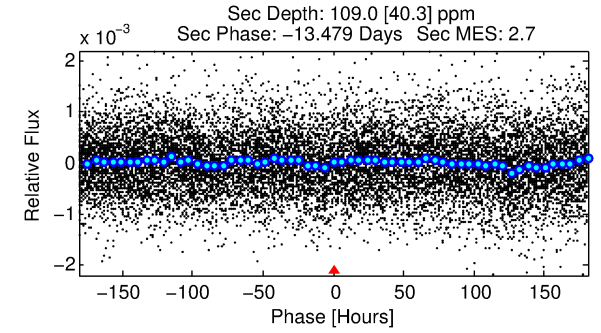
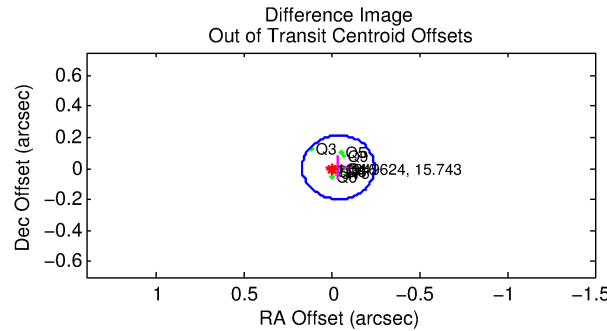
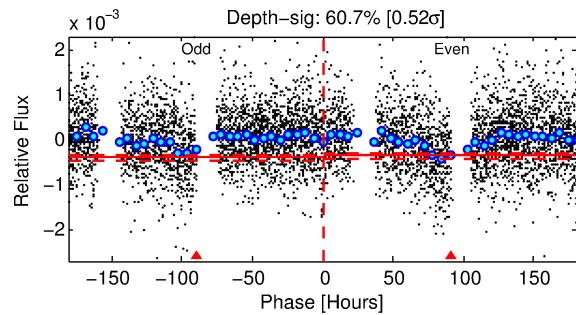
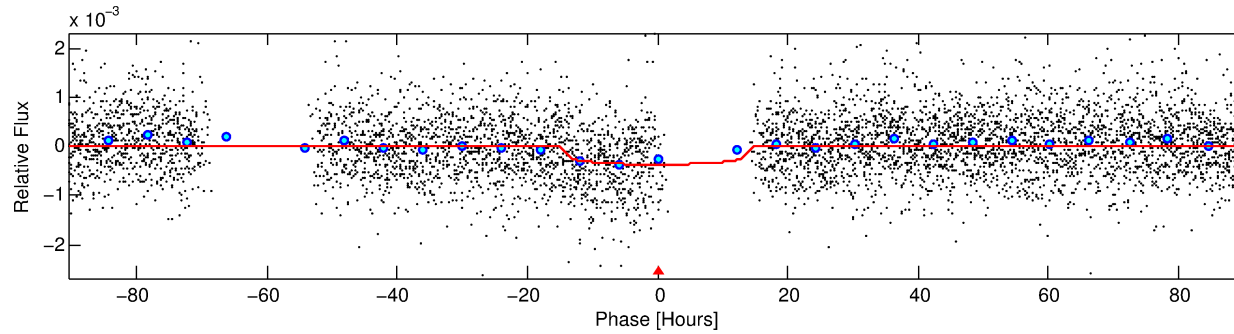
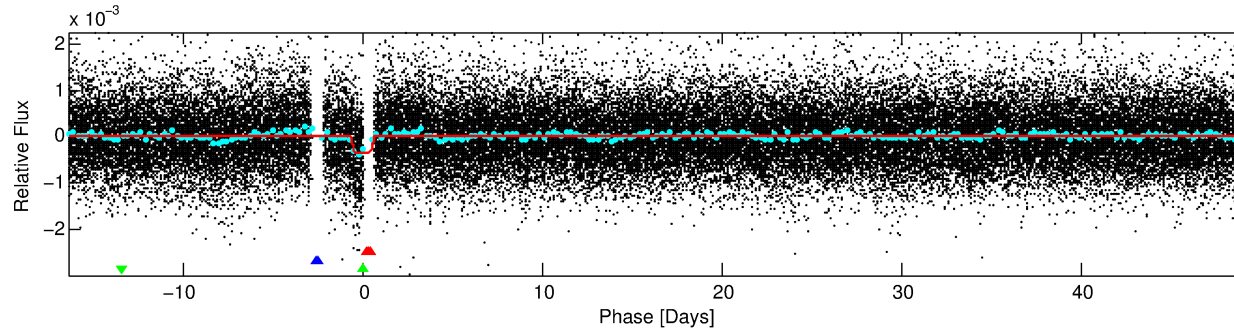
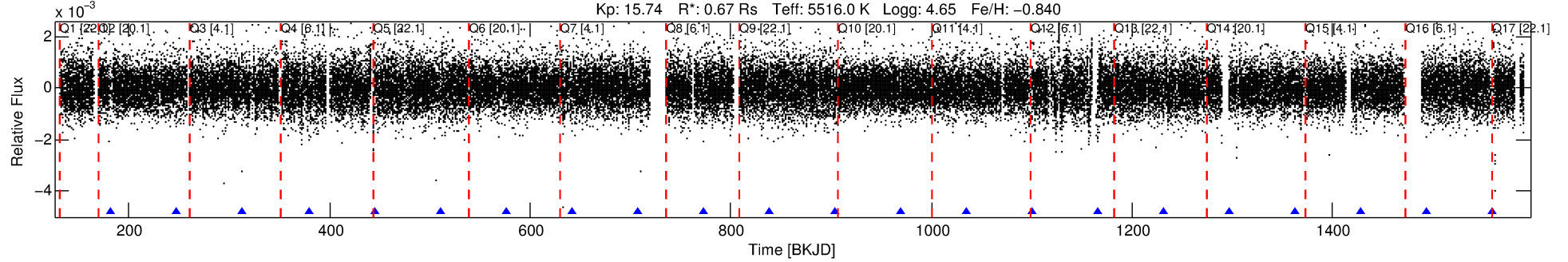
No Significant Match Found

DV One-Page Summary

KIC: 11249624 Candidate: 3 of 3 Period: 65.577 d

KOI: K03553 Corr: No Ephemeris Match

Kp: 15.74 R*: 0.67 Rs Teff: 5516.0 K Logg: 4.65 Fe/H: -0.840



DV Fit Results:

Period = 65.57664 [0.00406] d
Epoch = 182.4016 [0.0557] BKJD
Rp/R* = 0.0202 [0.0025]
a/R* = 8.81 [4.48]
b = 0.87 [0.15]
Seff = 4.51 [0.92]
Teff = 372 [19] K
Rp = 1.47 [0.27] Re
a = 0.2857 [0.0312] AU
Ag = 2277.85 [1076.72] [2.11σ]
Teffp = 3969 [462] K [7.78σ]

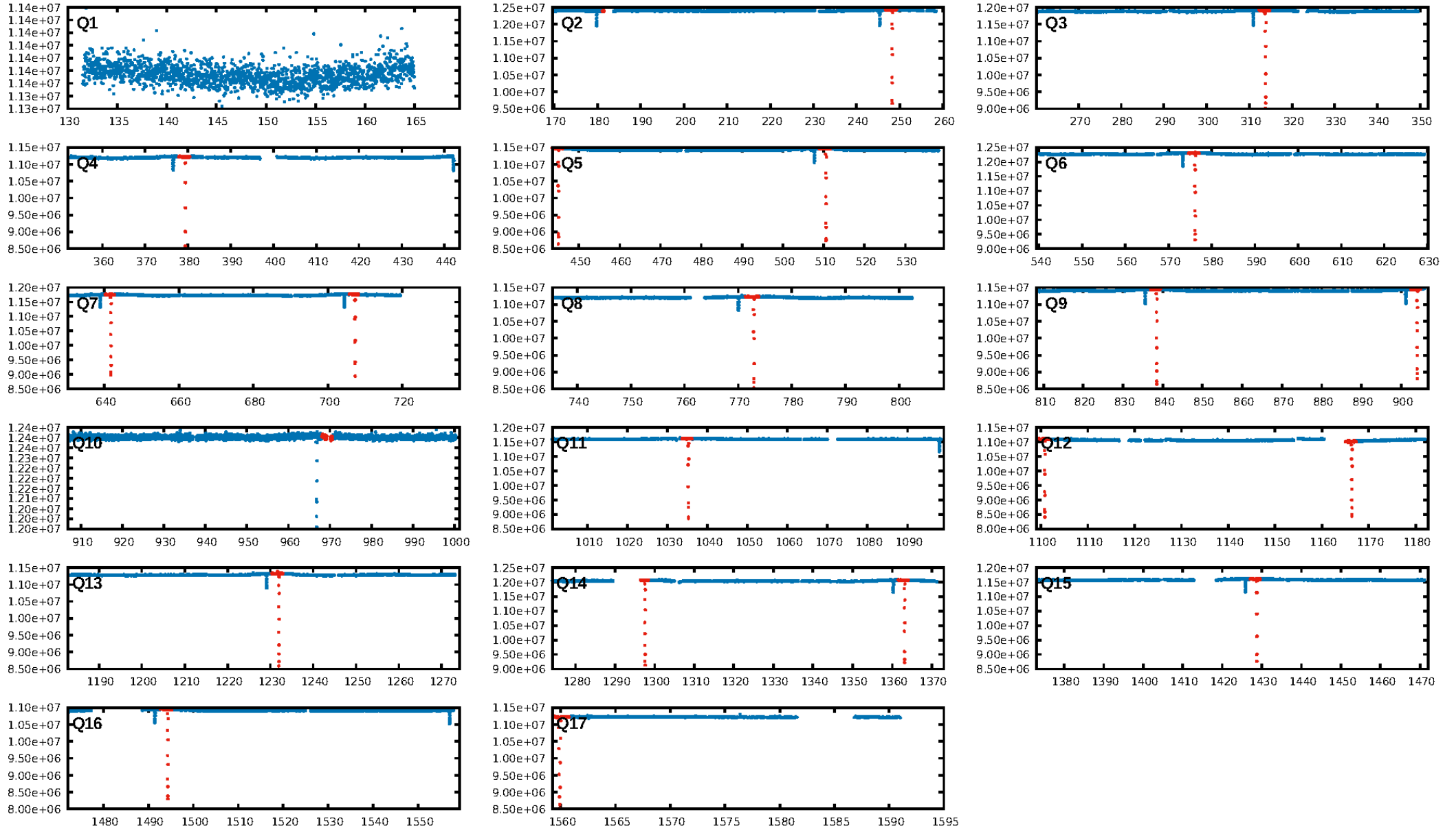
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.4% [0.01σ]
ModelChiSquare2-sig: 97.9%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.06e-14
RollingBand-fgt: 1.00 [20/20]
GhostDiagnostic-chr: 1.019
Centroid-sig: 6.8%
Centroid-so: 1.447 arcsec [1.76σ]
OotOffset-rm: 0.039 arcsec [0.56σ]
KicOffset-rm: 0.010 arcsec [0.14σ]
OotOffset-st: 2/3/3/2 [10]
KicOffset-st: 2/3/3/2 [10]
DiffImageQuality-fgm: 1.00 [10/10]
DiffImageOverlap-fno: 0.00 [0/10]

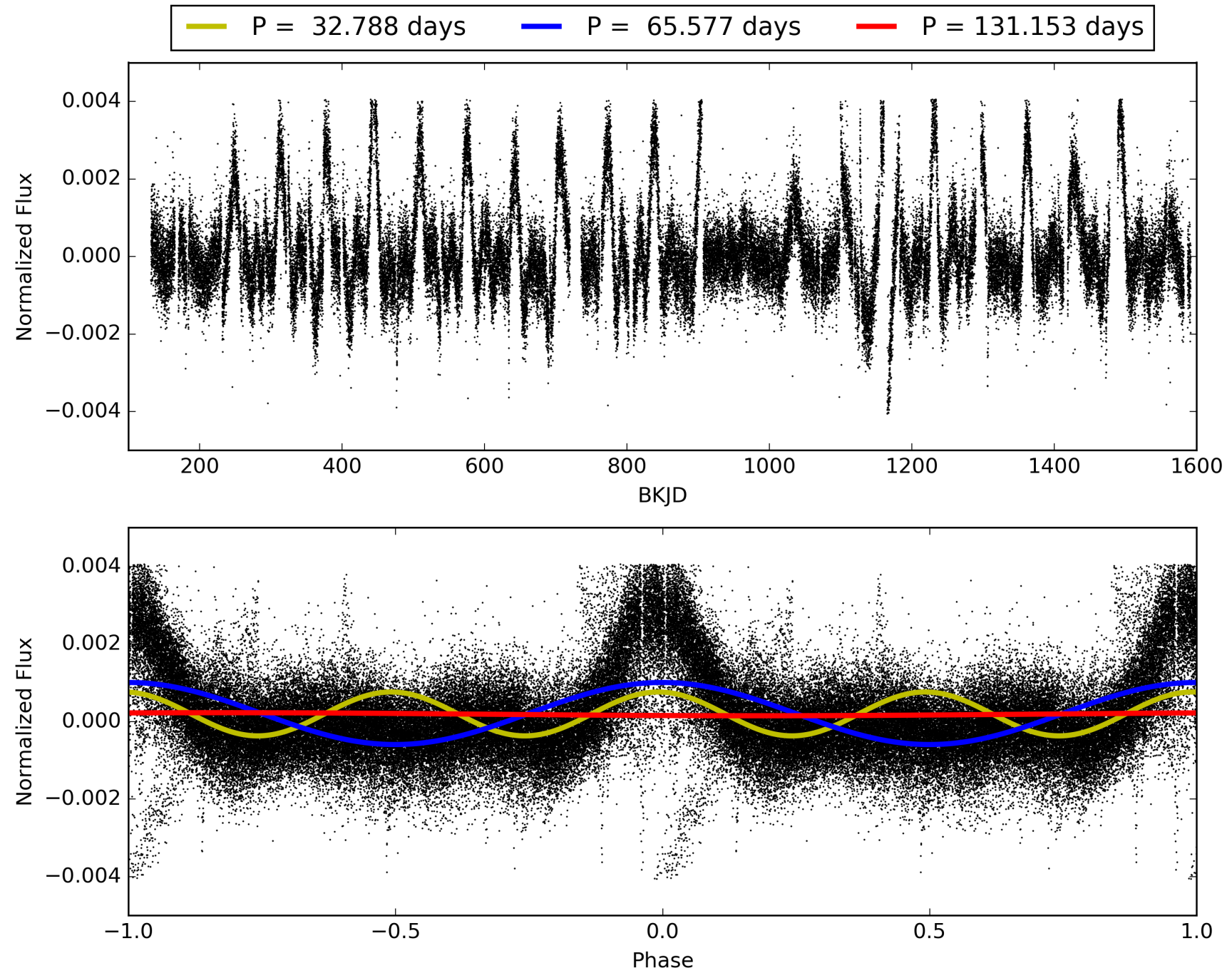
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 10:27:44 Z

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

TCE 011249624-03, PDC Light Curves

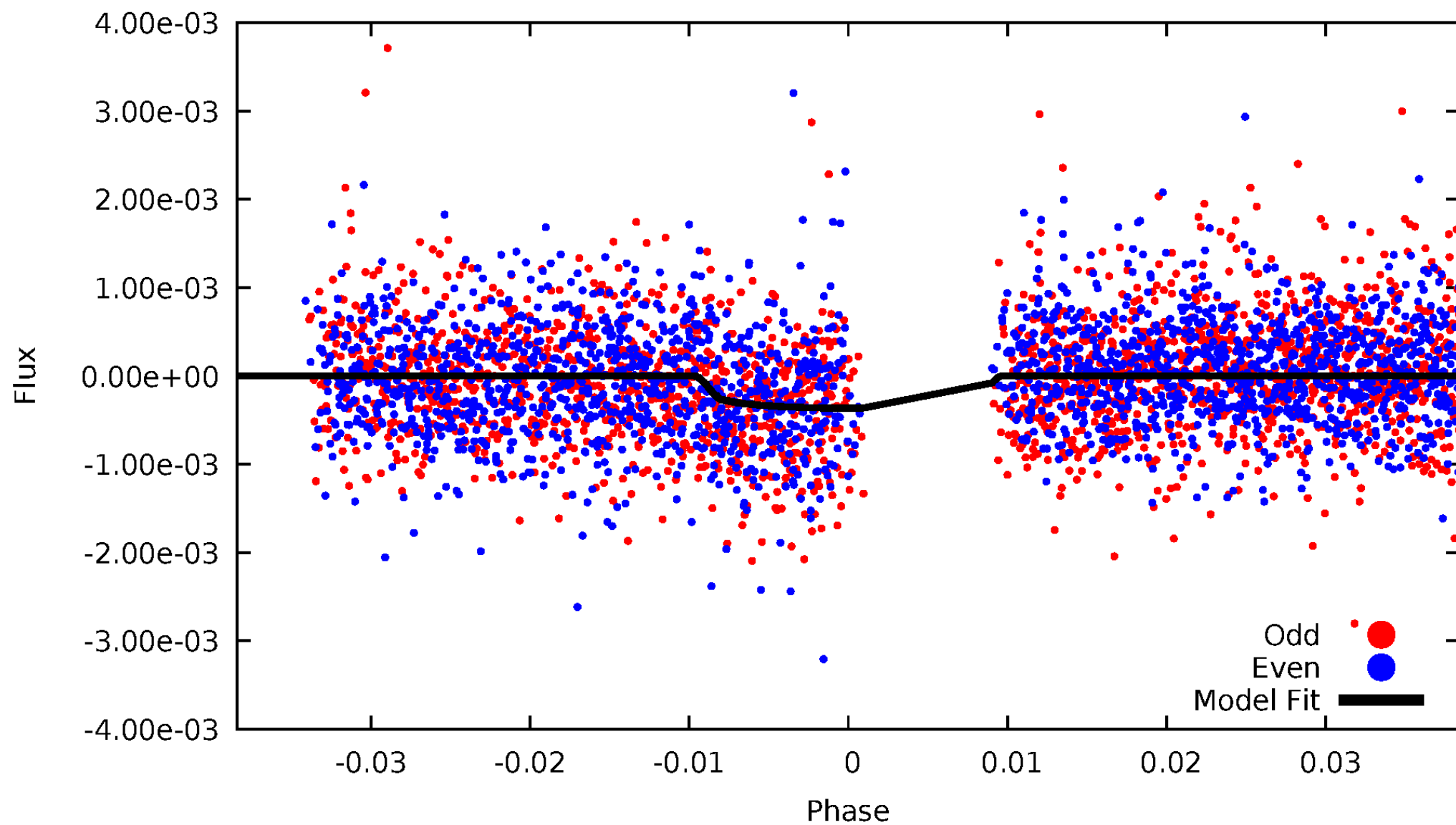


TCE 011249624-03



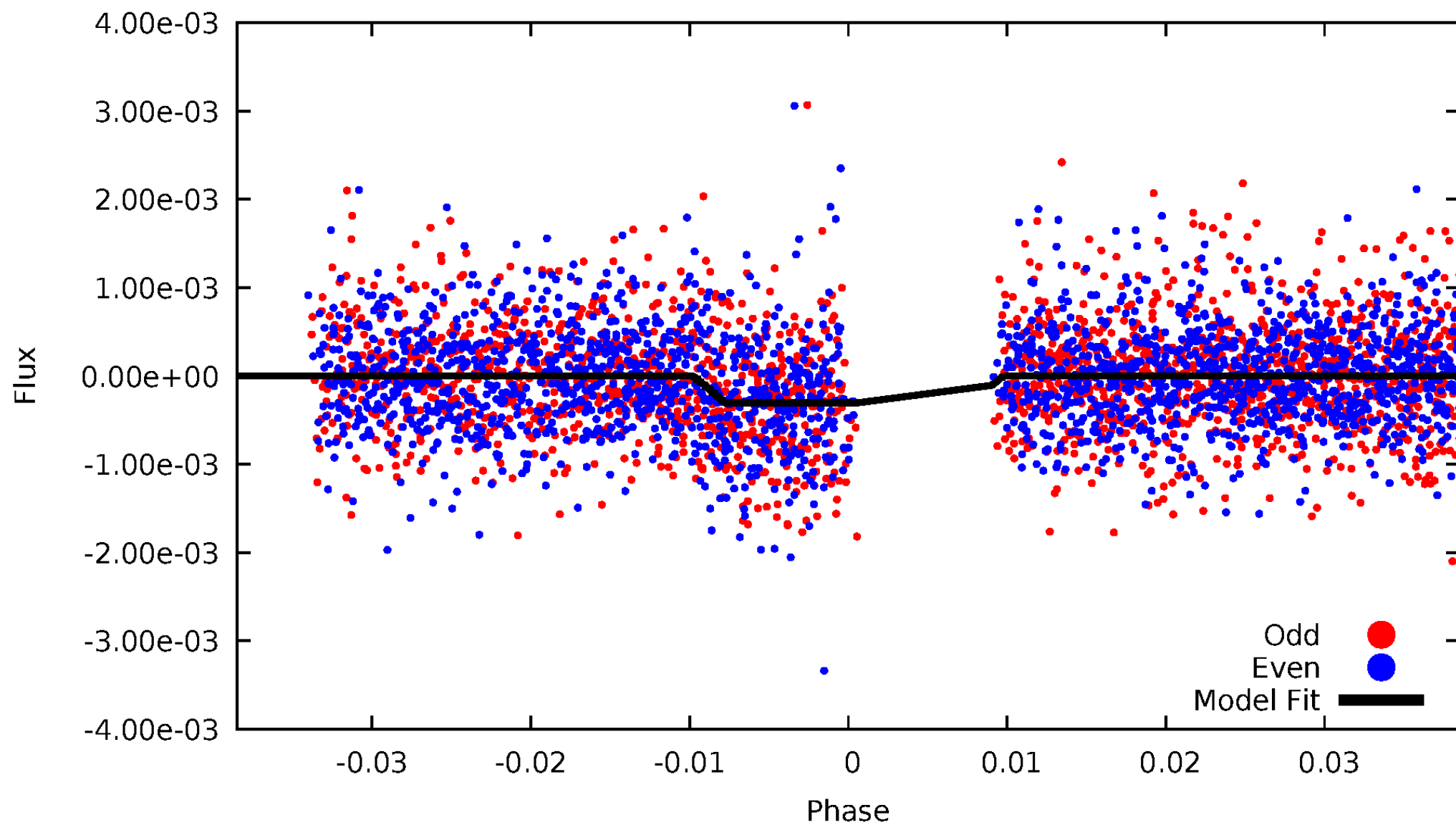
DV Odd/Even

TCE 011249624-03



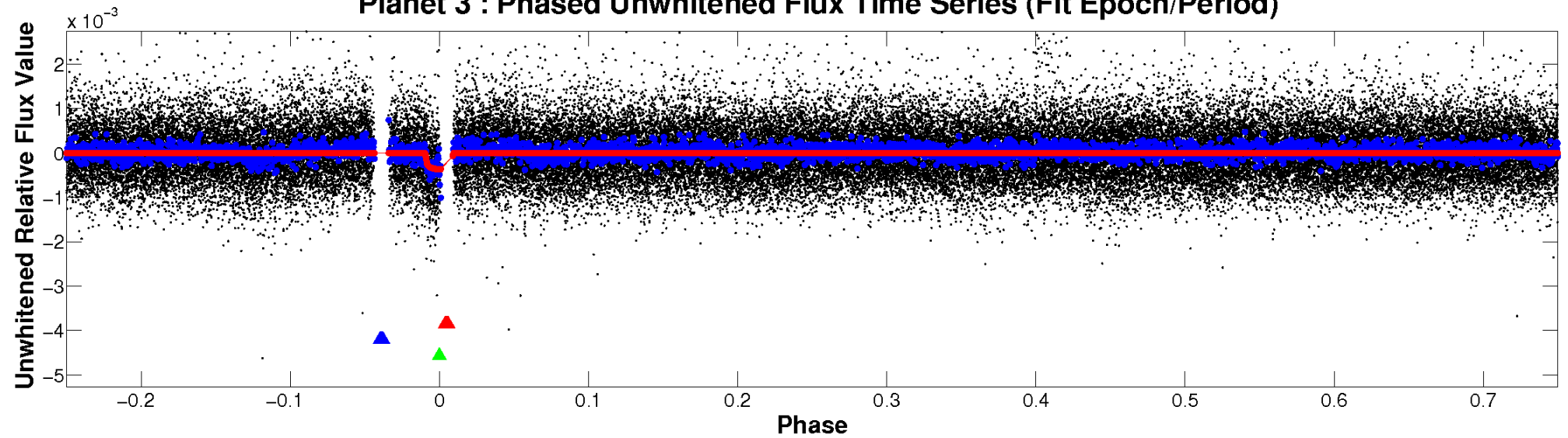
ALT Odd/Even

TCE 011249624-03

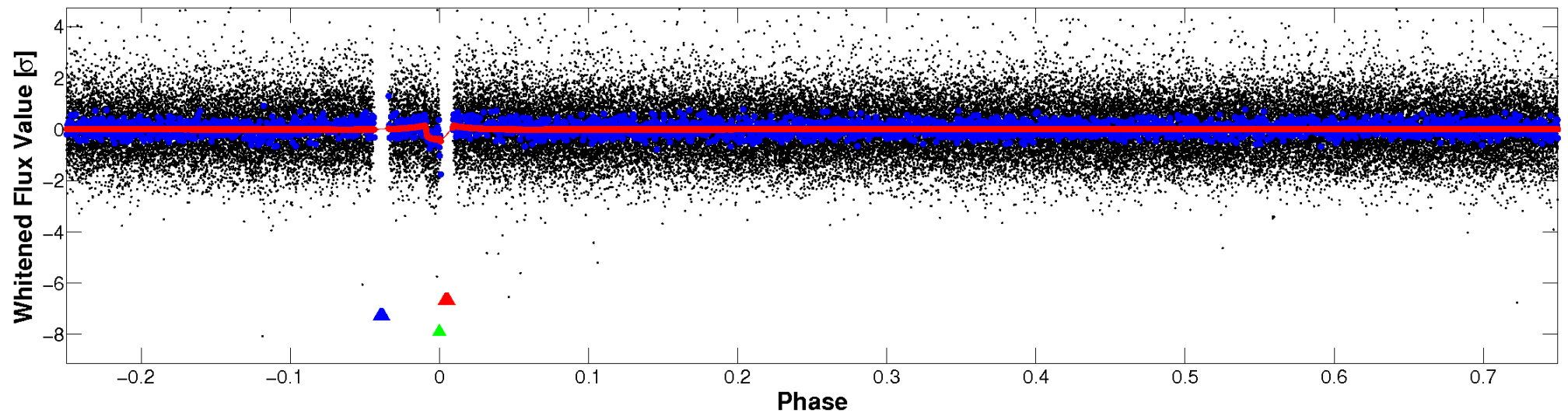


Non-Whitened Vs. Whitened Light Curve

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

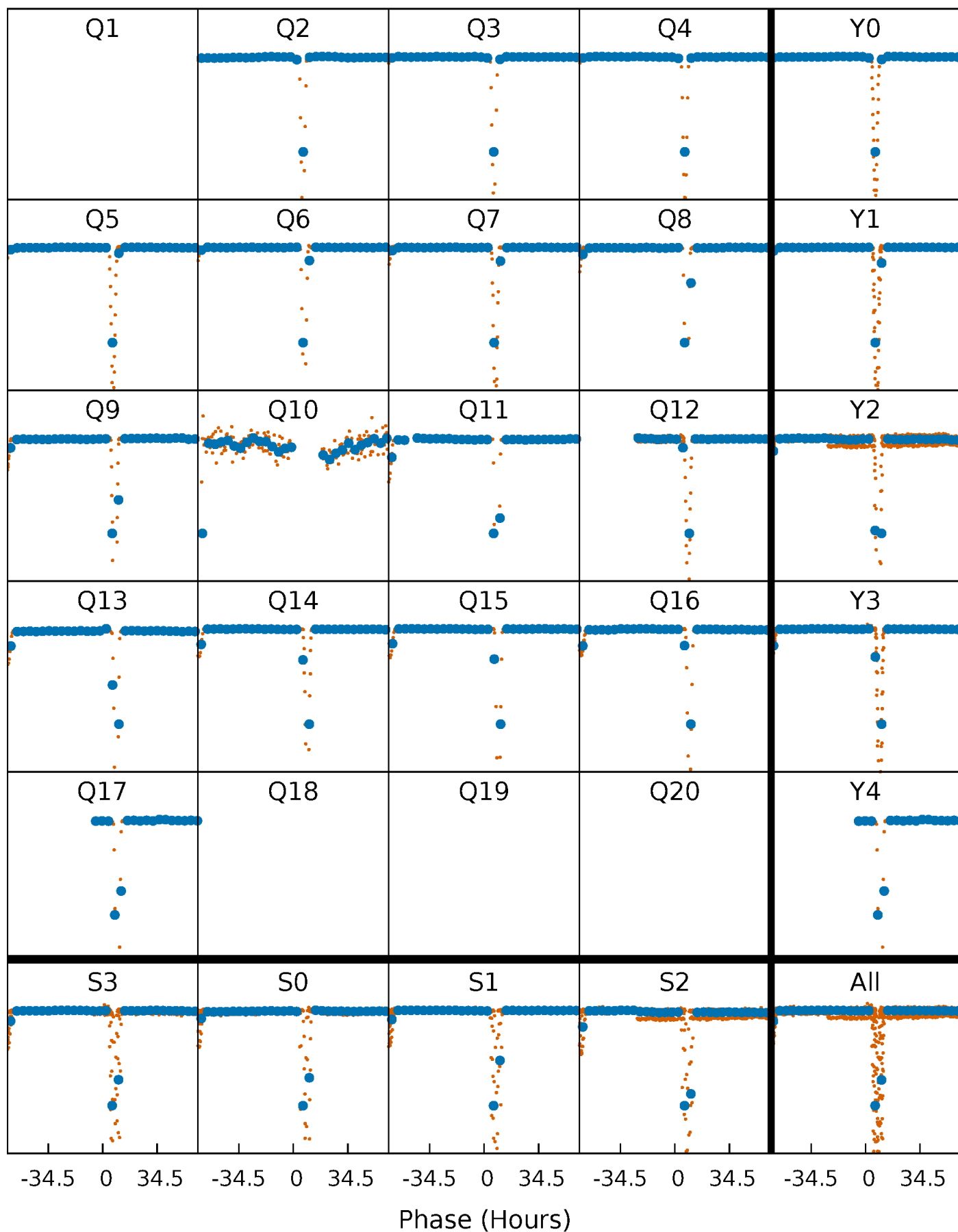


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



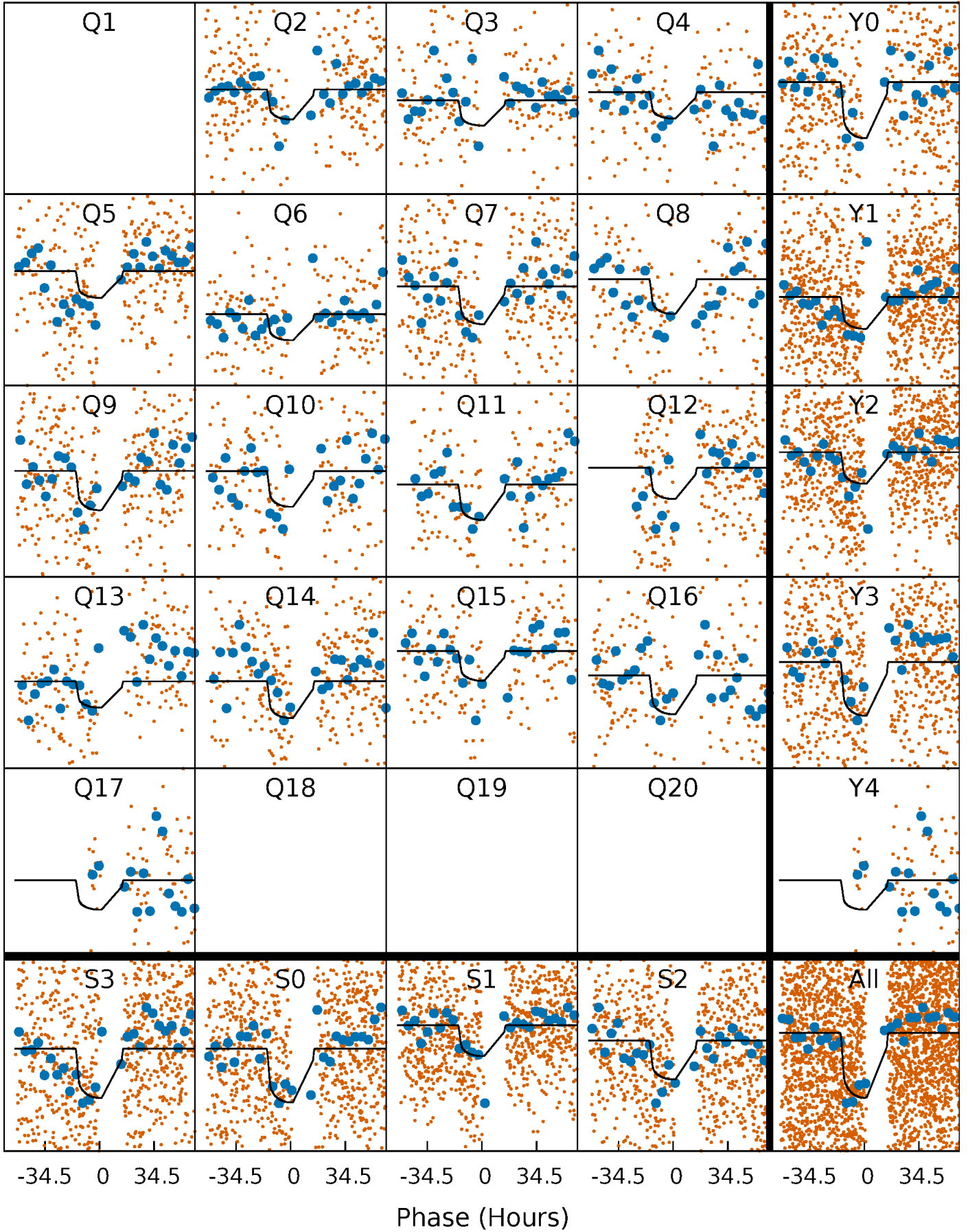
PDC Quarter-Phased Transit Curves

TCE 011249624-03 P= 65.576640 Days $T_0=182.401568$ (BKJD)



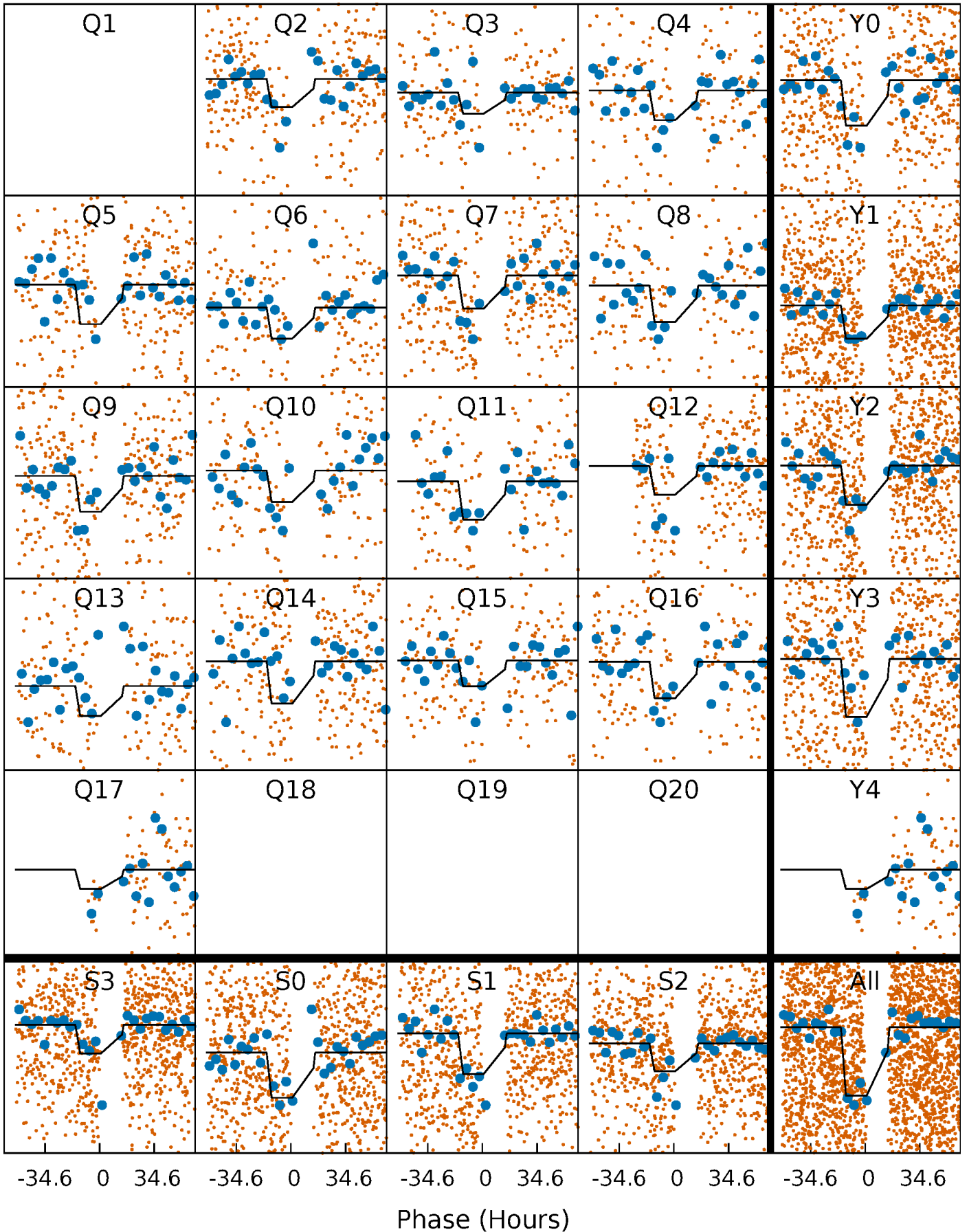
DV Quarter-Phased Transit Curves

TCE 011249624-03 P= 65.576640 Days $T_0=182.401568$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

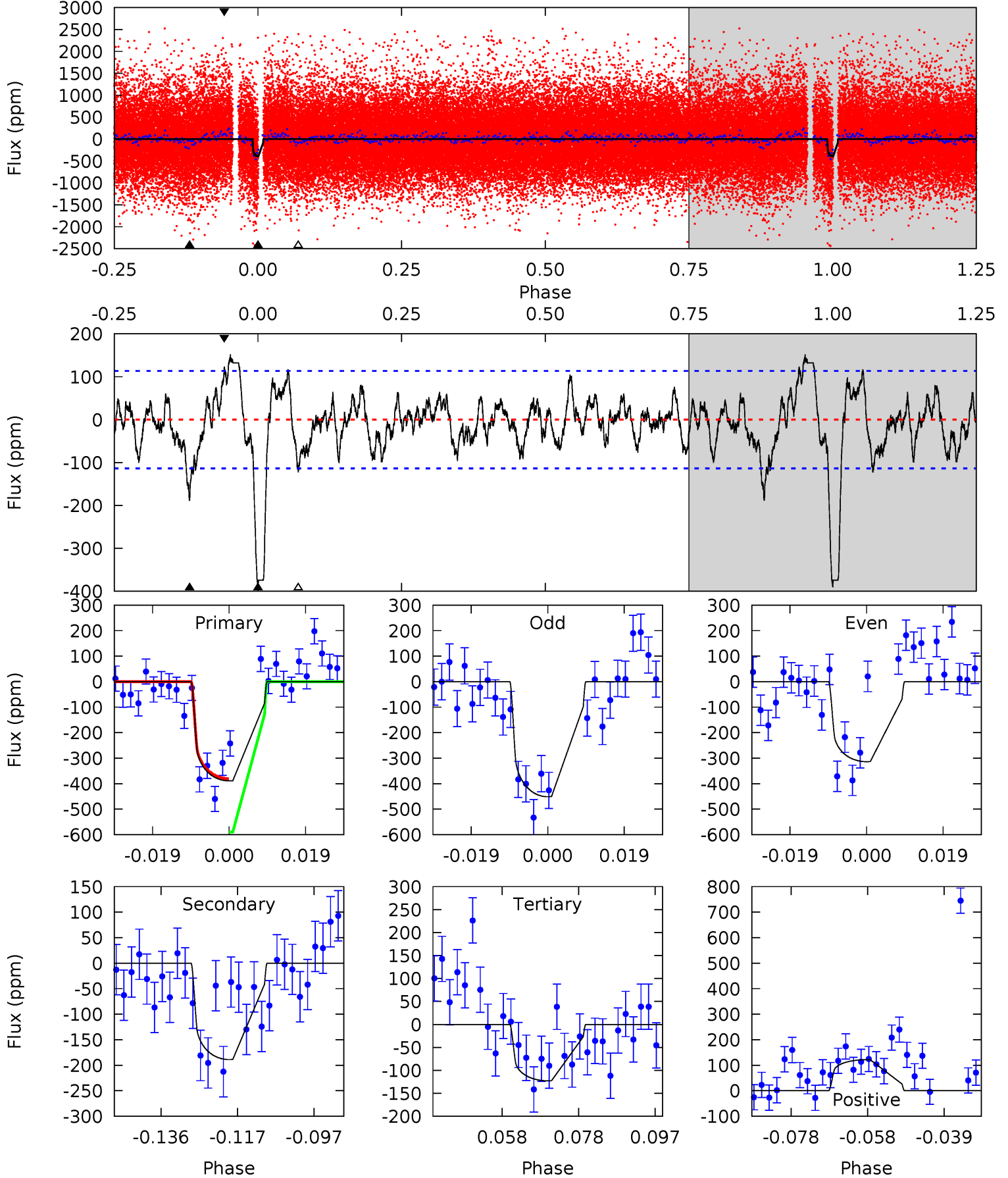
TCE 011249624-03 P= 65.578160 Days $T_0=182.396323$ (BKJD)



DV Model-Shift Uniqueness Test

011249624-03, P = 65.576640 Days, E = 116.824928 Days

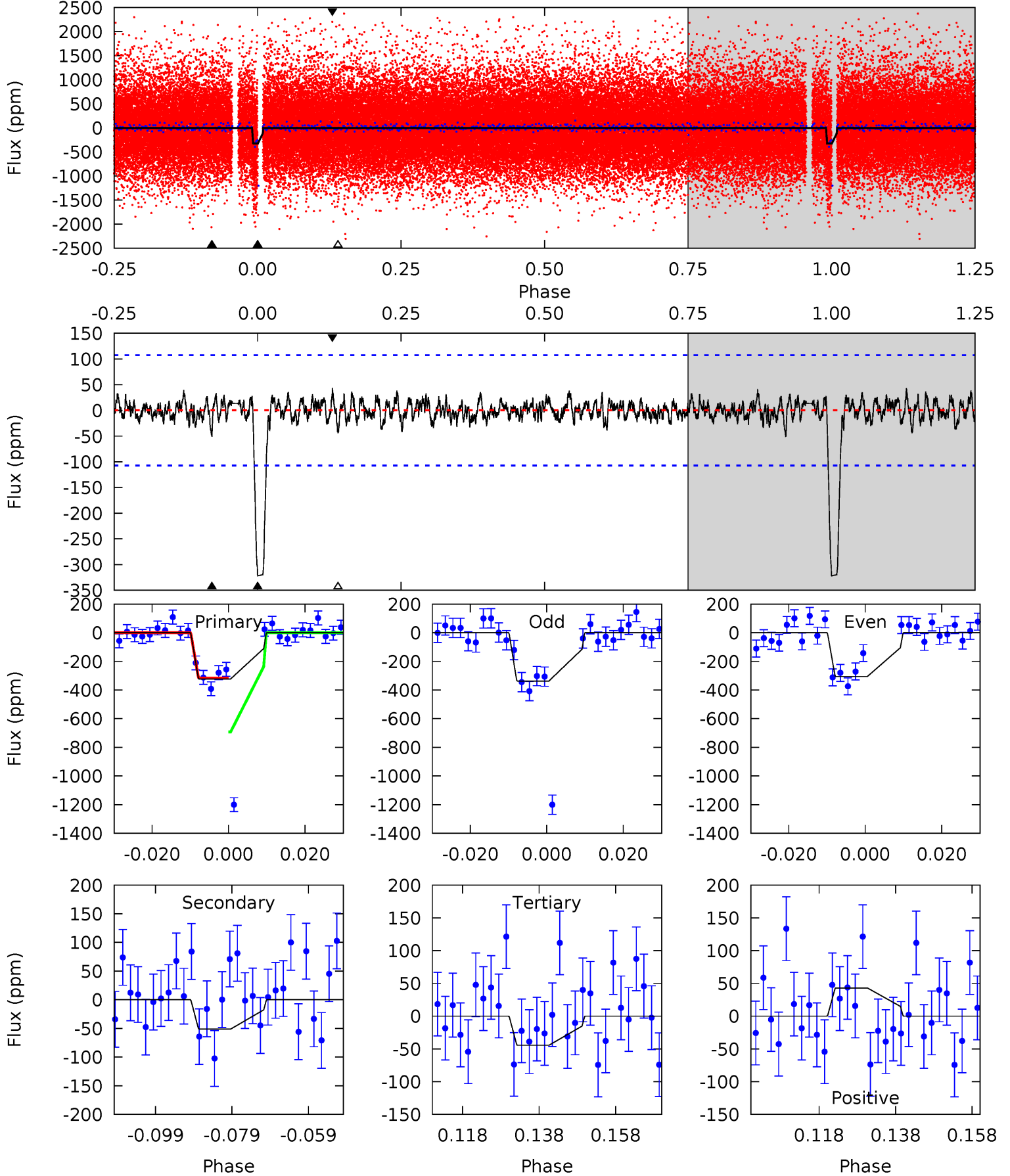
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.8	8.15	5.30	5.25	4.90	2.34	1.92	11.5	11.5	2.85	2.90	2.97	1.02	0.28	1.93



Alt Model-Shift Uniqueness Test

011249624-03, P = 65.578160 Days, E = 116.818163 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.7	2.33	2.02	1.96	4.89	2.33	0.65	12.7	12.7	0.30	0.37	0.71	0.87	0.12	3.53



Stellar Parameters For KIC 011249624

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5516^{+183}_{-166}	$4.650^{+0.036}_{-0.084}$	$-0.840^{+0.300}_{-0.300}$	$0.666^{+0.088}_{-0.041}$	$0.721^{+0.060}_{-0.050}$	$3.443^{+0.515}_{-0.958}$
	+3%/-3%	+1%/-2%	+36%/-36%	+13%/-6%	+8%/-7%	+15%/-28%
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 011249624-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-189 ± 23	$1.48^{+0.22}_{-0.21}$	524^{+21}_{-19}	4678^{+340}_{-267}	3777^{+1493}_{-973}
Alt.	-51 ± 22	$1.30^{+0.20}_{-0.20}$	525^{+20}_{-22}	3852^{+362}_{-372}	1318^{+834}_{-596}

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

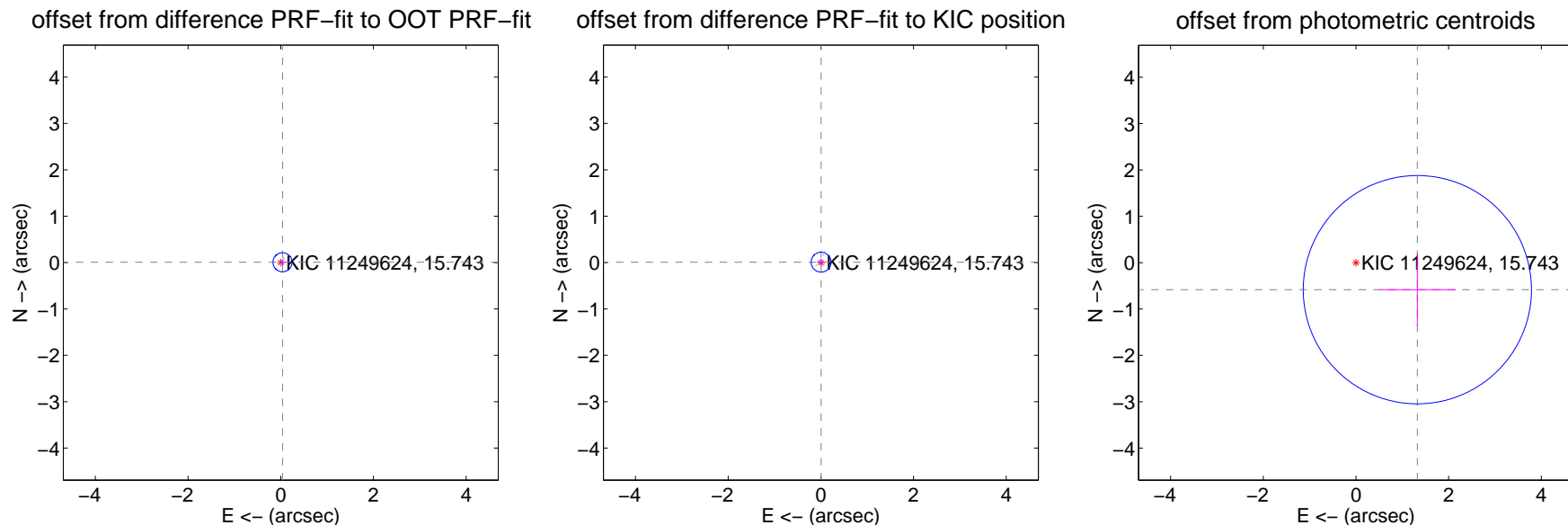
DV Centroid Data

Supplemental centroid analysis for 011249624-03. Kepler magnitude: 15.74. Transit SNR 8.90

There are 10 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	0.039 ± 0.069	0.56	-0.038 ± 0.069	0.007 ± 0.070
PRF-fit source offset from KIC position	0.010 ± 0.072	0.14	-0.005 ± 0.069	0.009 ± 0.071
photometric centroid source offset	1.45 ± 0.82	1.76	-1.32 ± 0.83	-0.58 ± 0.79



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.

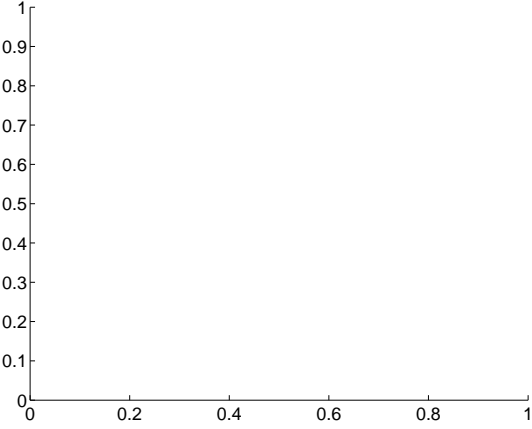
Q1 no difference image



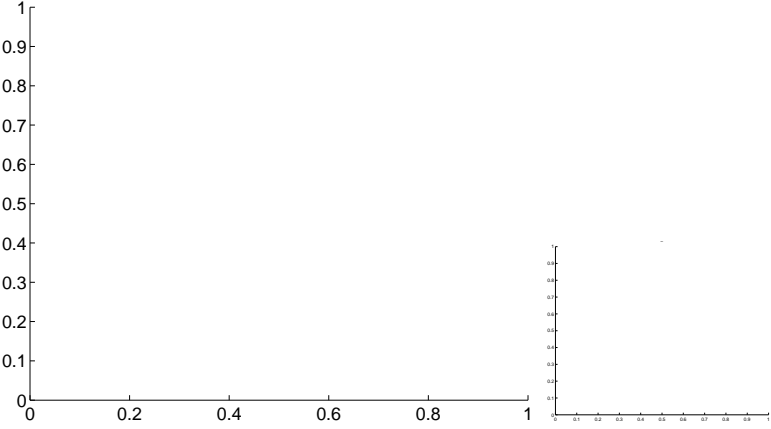
Q1 no OOT image



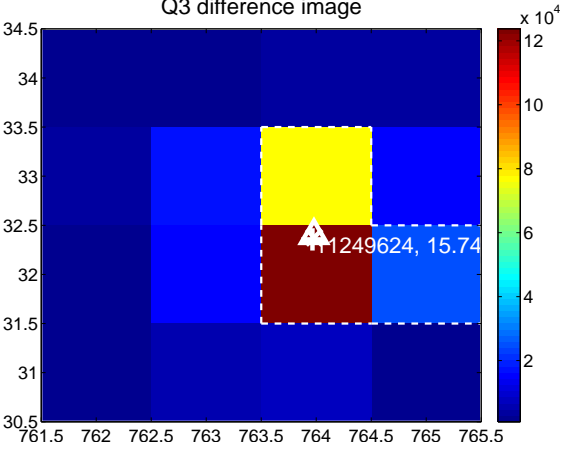
Q2 no difference image



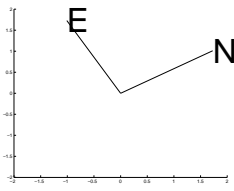
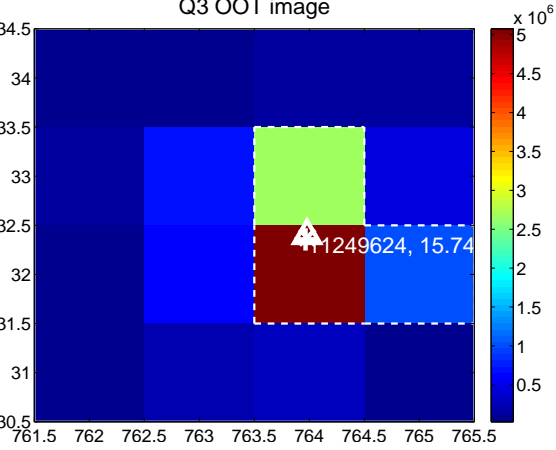
Q2 no OOT image



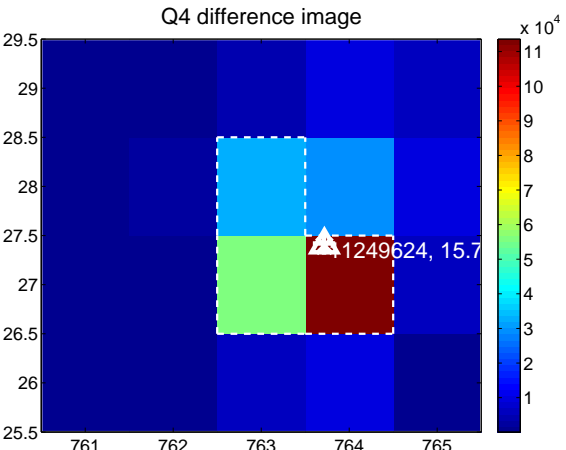
Q3 difference image



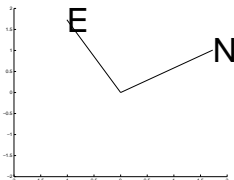
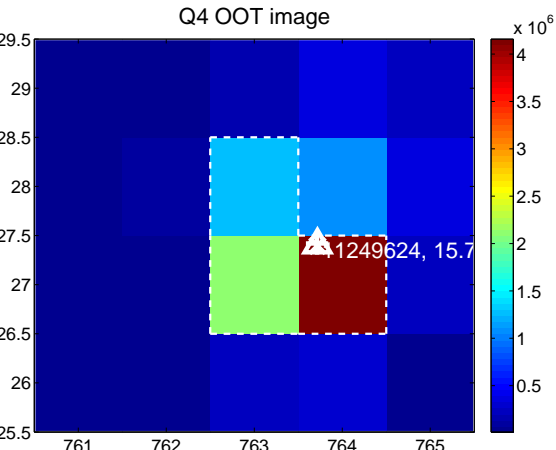
Q3 OOT image



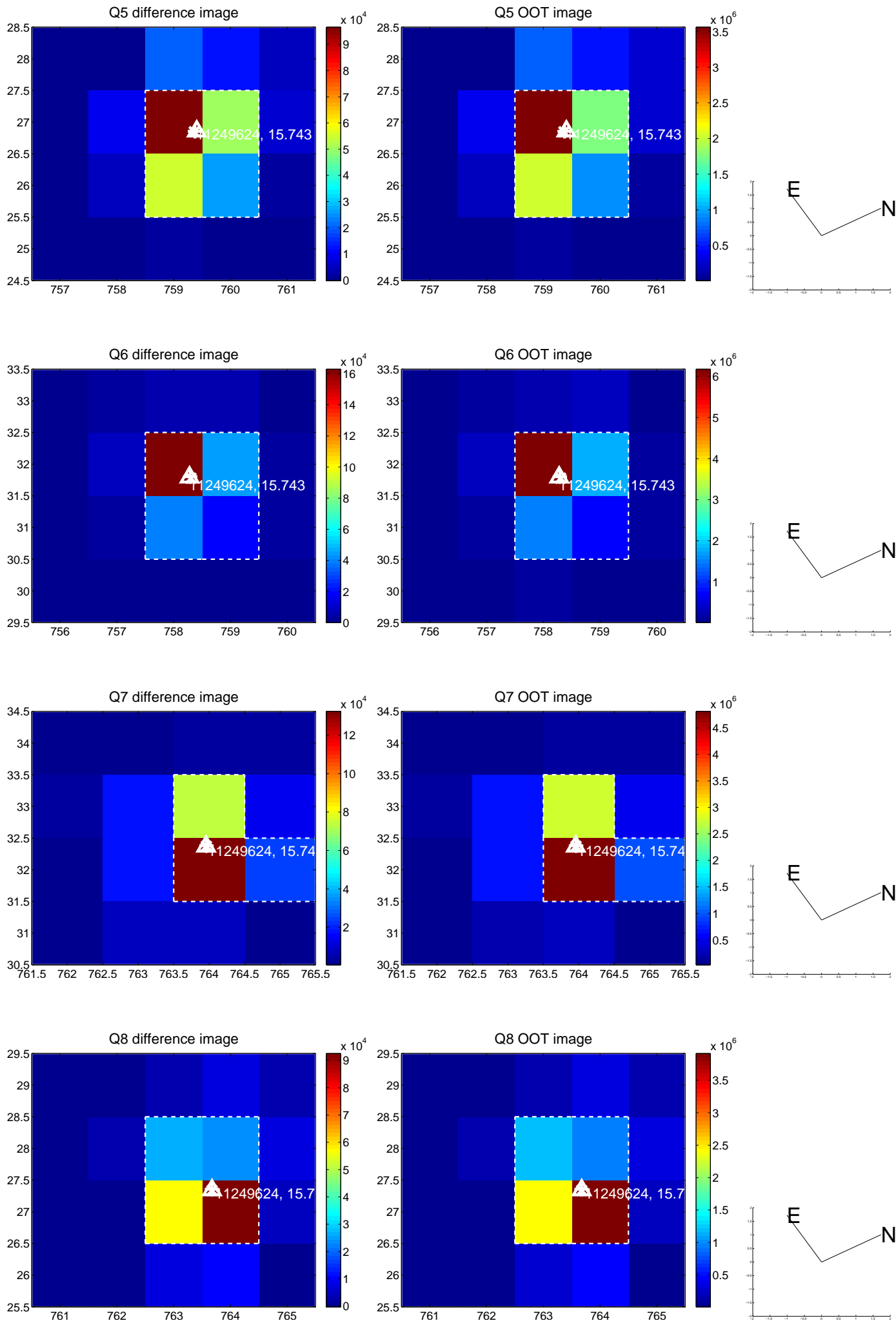
Q4 difference image



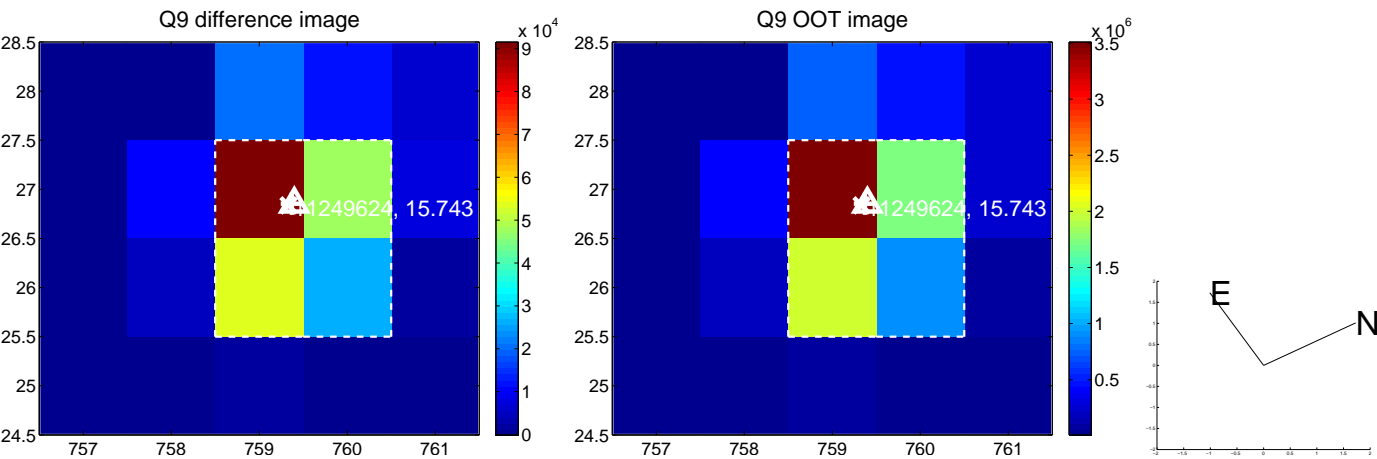
Q4 OOT image



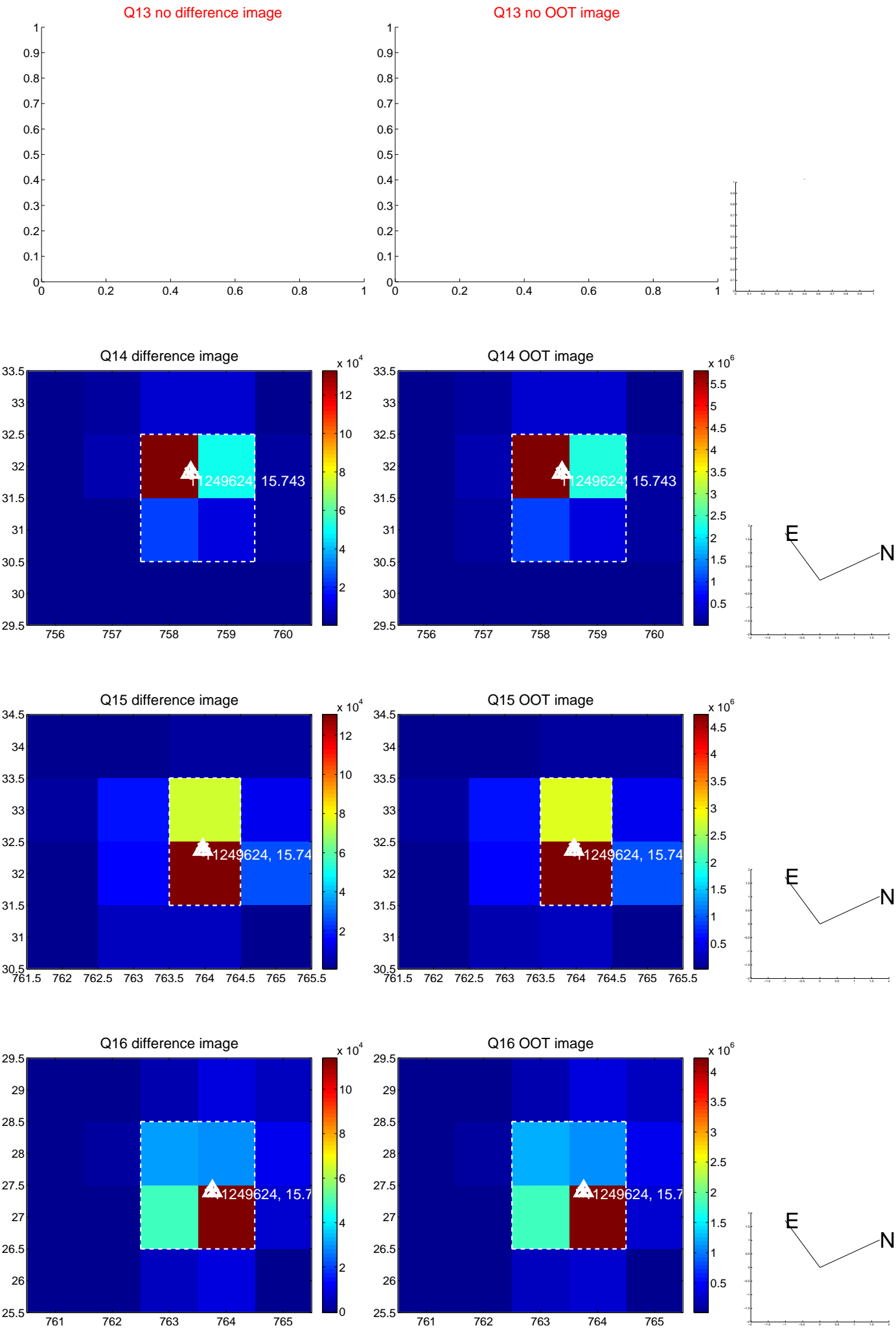
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



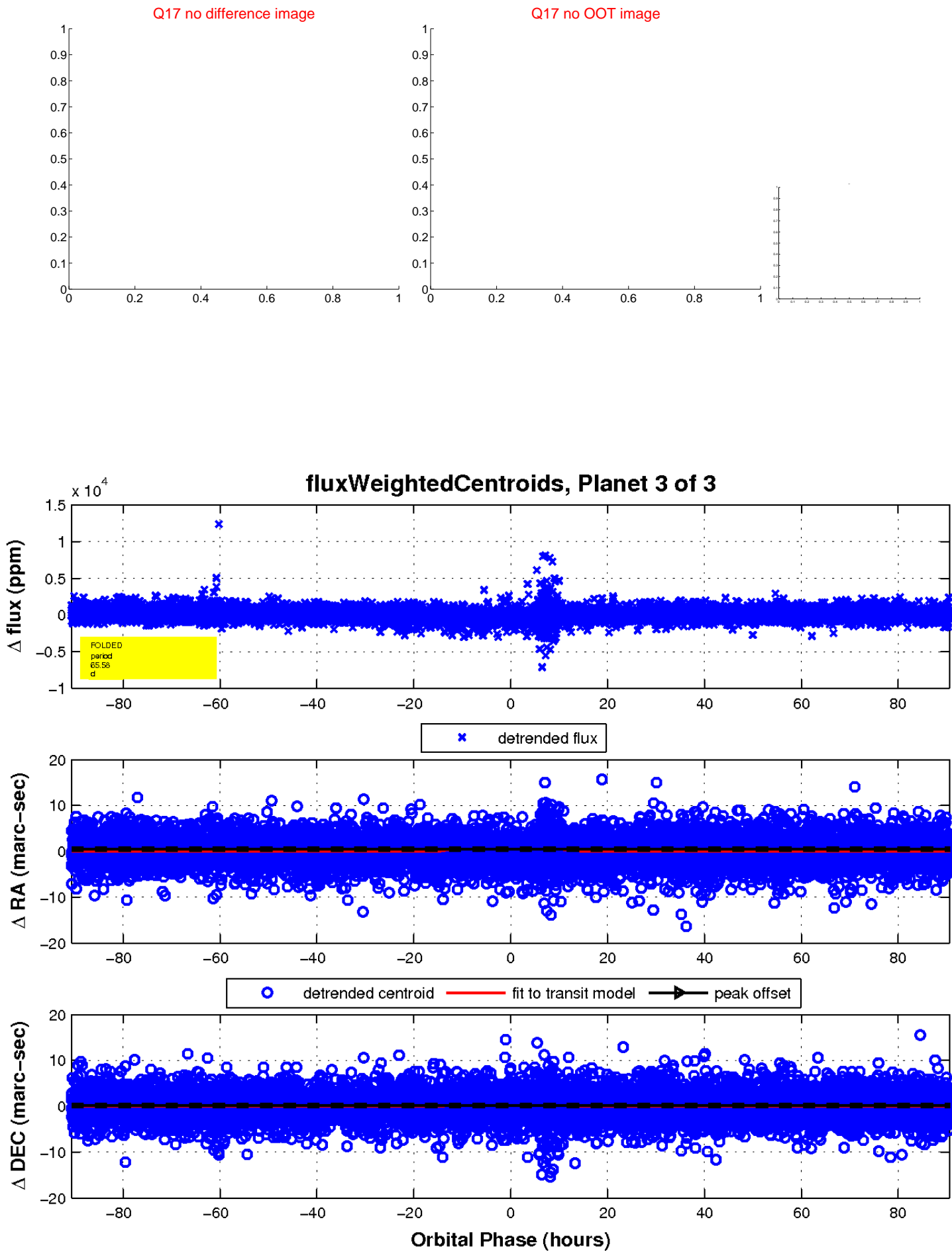
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

