

KIC 001435448

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})
001435448-01	OBS	No	305.082211	316.571444	733.8	2.766	8.2	6.4	1.43	6047	4.24	2.90
001435448-02	OBS	No	373.217120	239.173135	1813.4	6.699	12.1	8.5	1.43	6047	6.31	2.21
001435448-03	OBS	No	332.990551	279.887465	1950.9	3.142	12.4	10.2	1.43	6047	6.51	2.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001435448-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001435448-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
001435448-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

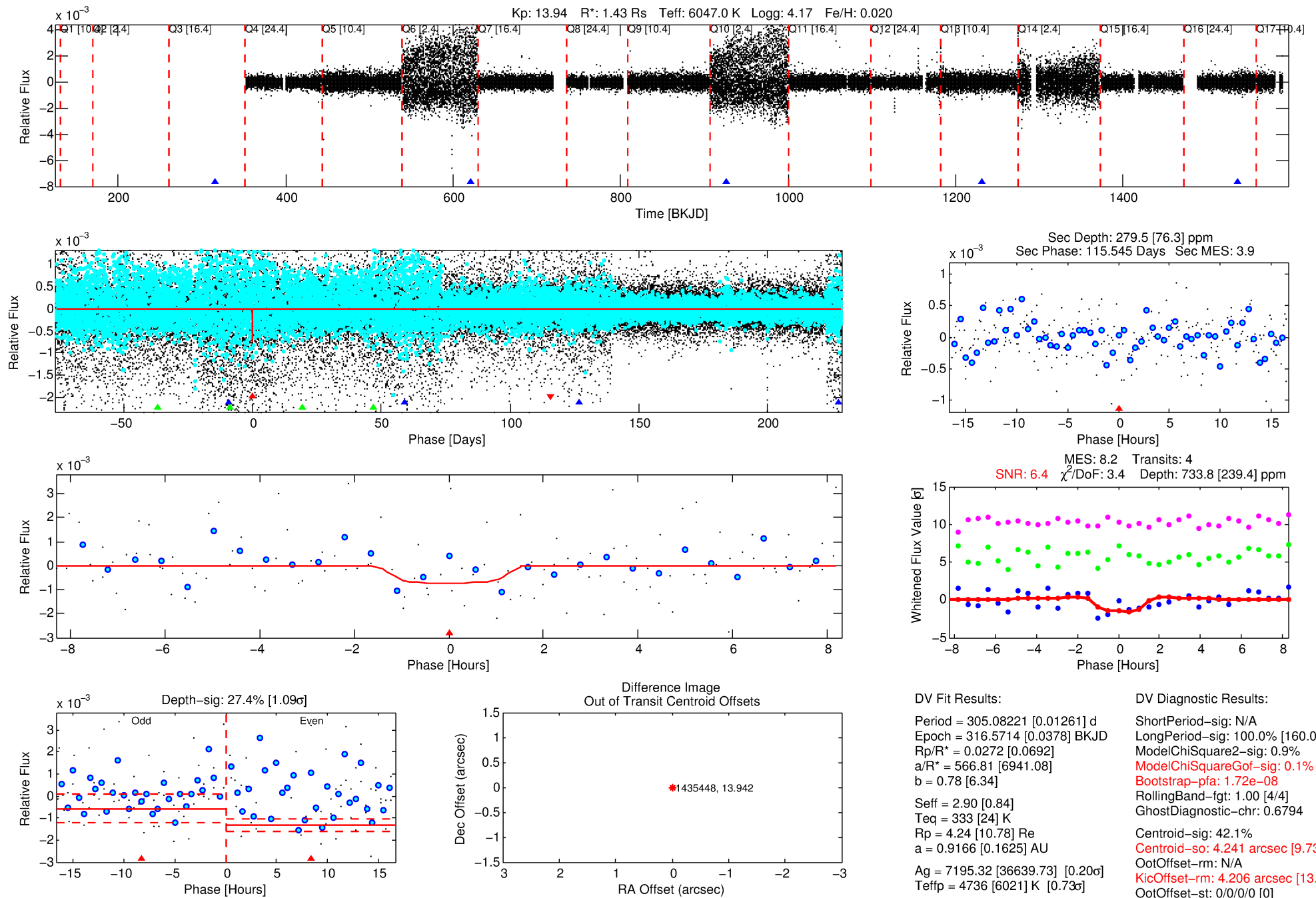
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001435448-01

No Significant Match Found

DV One-Page Summary

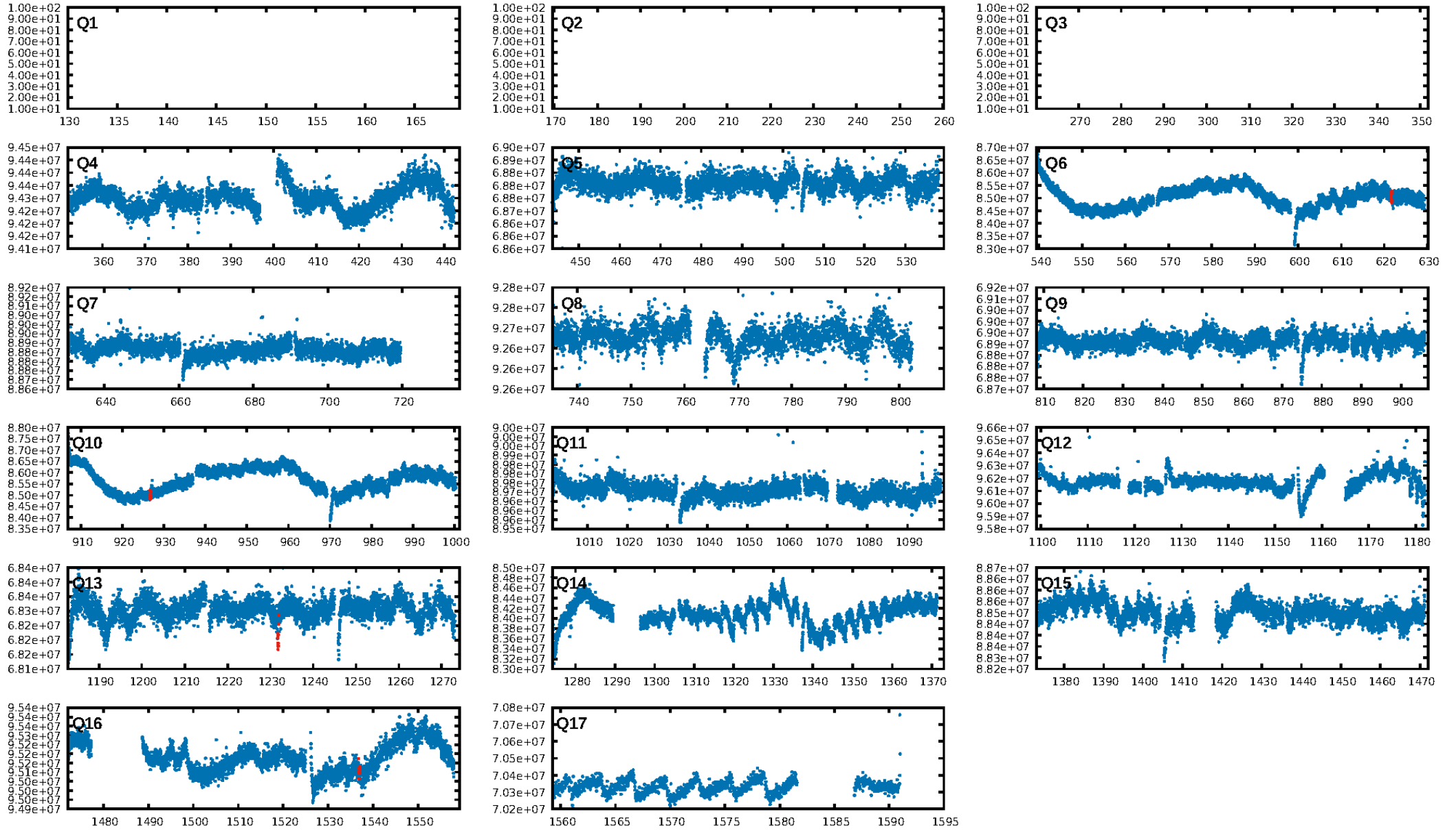
KIC: 1435448 Candidate: 1 of 3 Period: 305.082 d



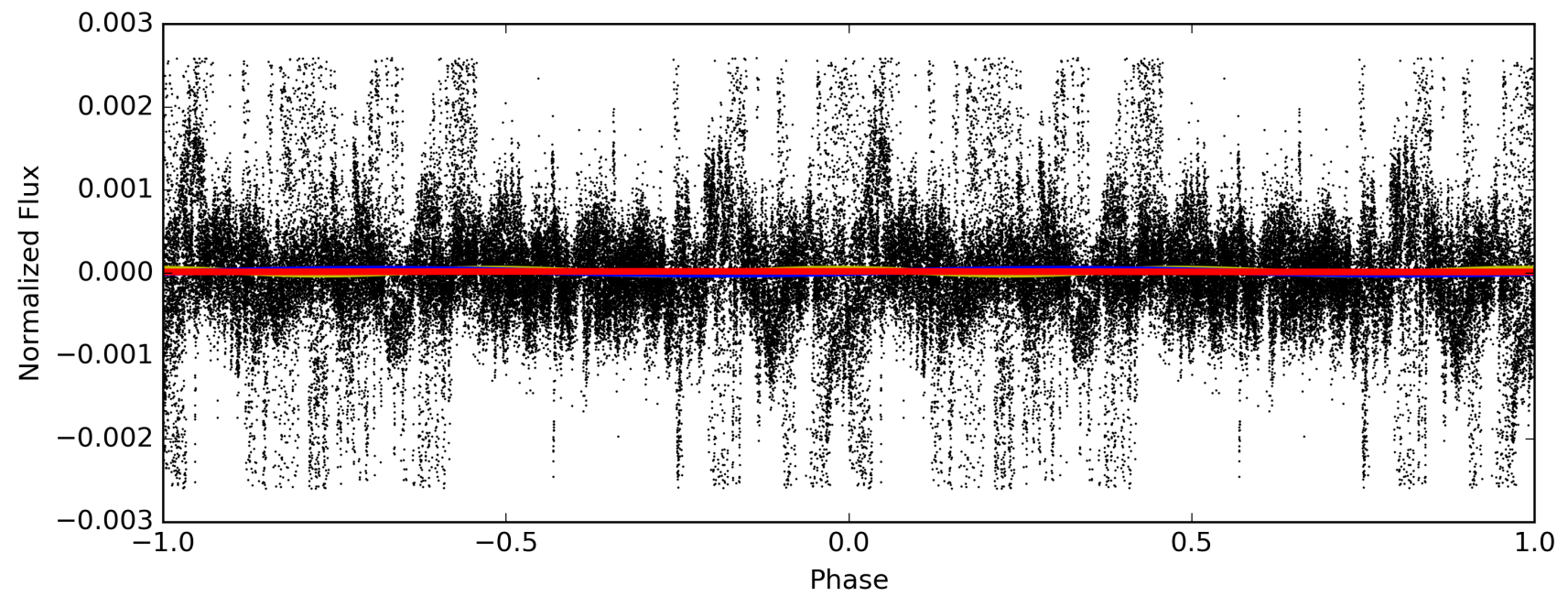
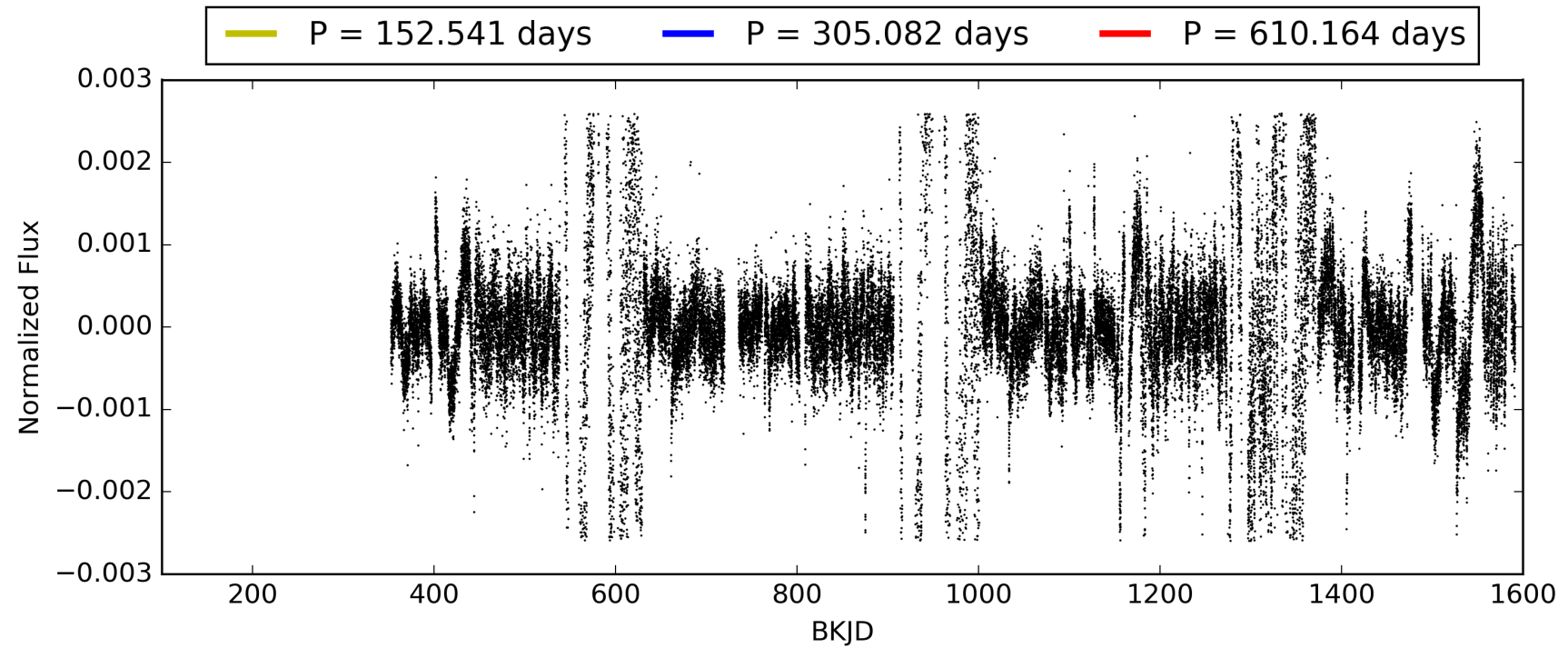
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:05:14 Z

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

TCE 001435448-01, PDC Light Curves

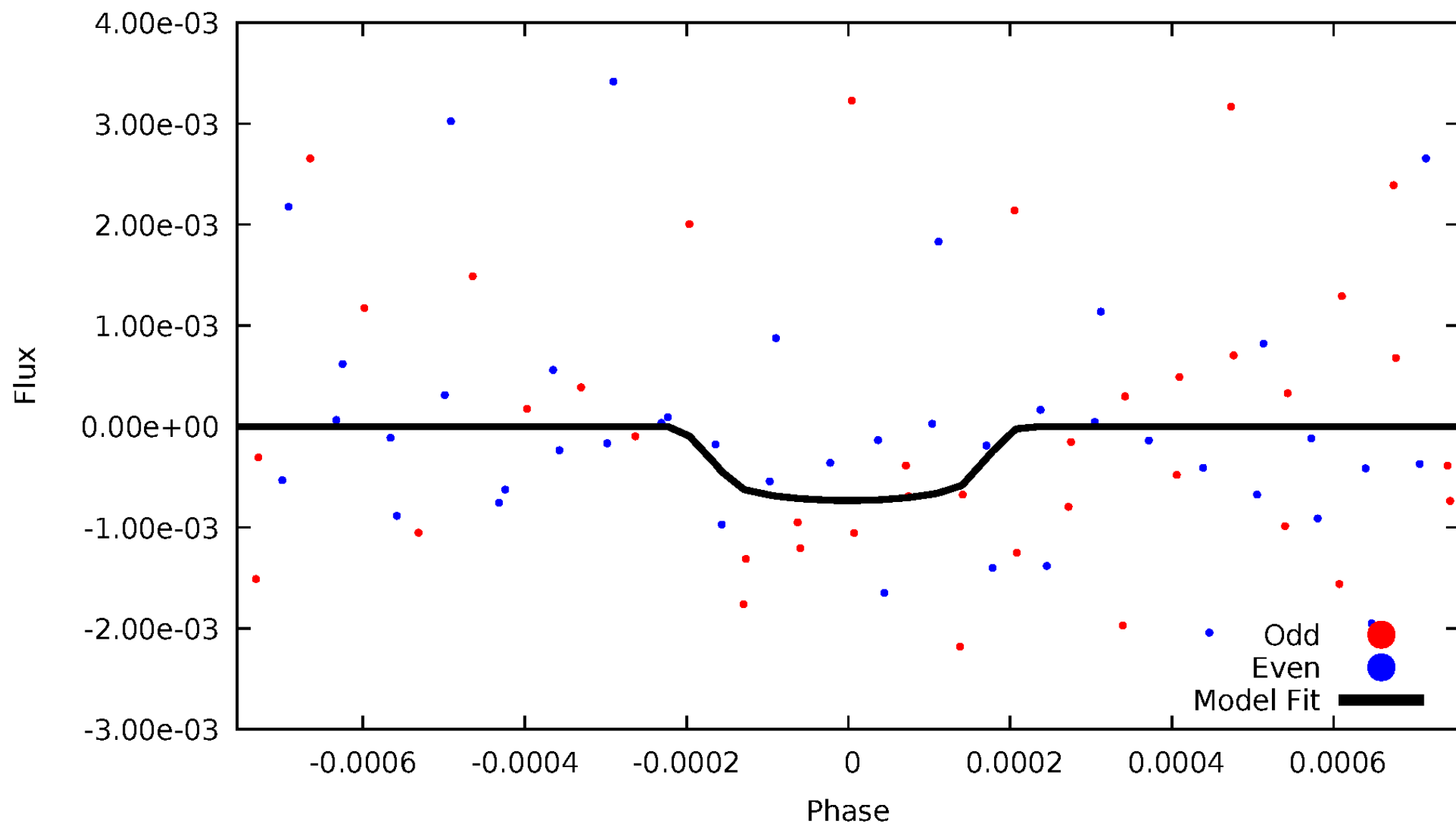


TCE 001435448-01



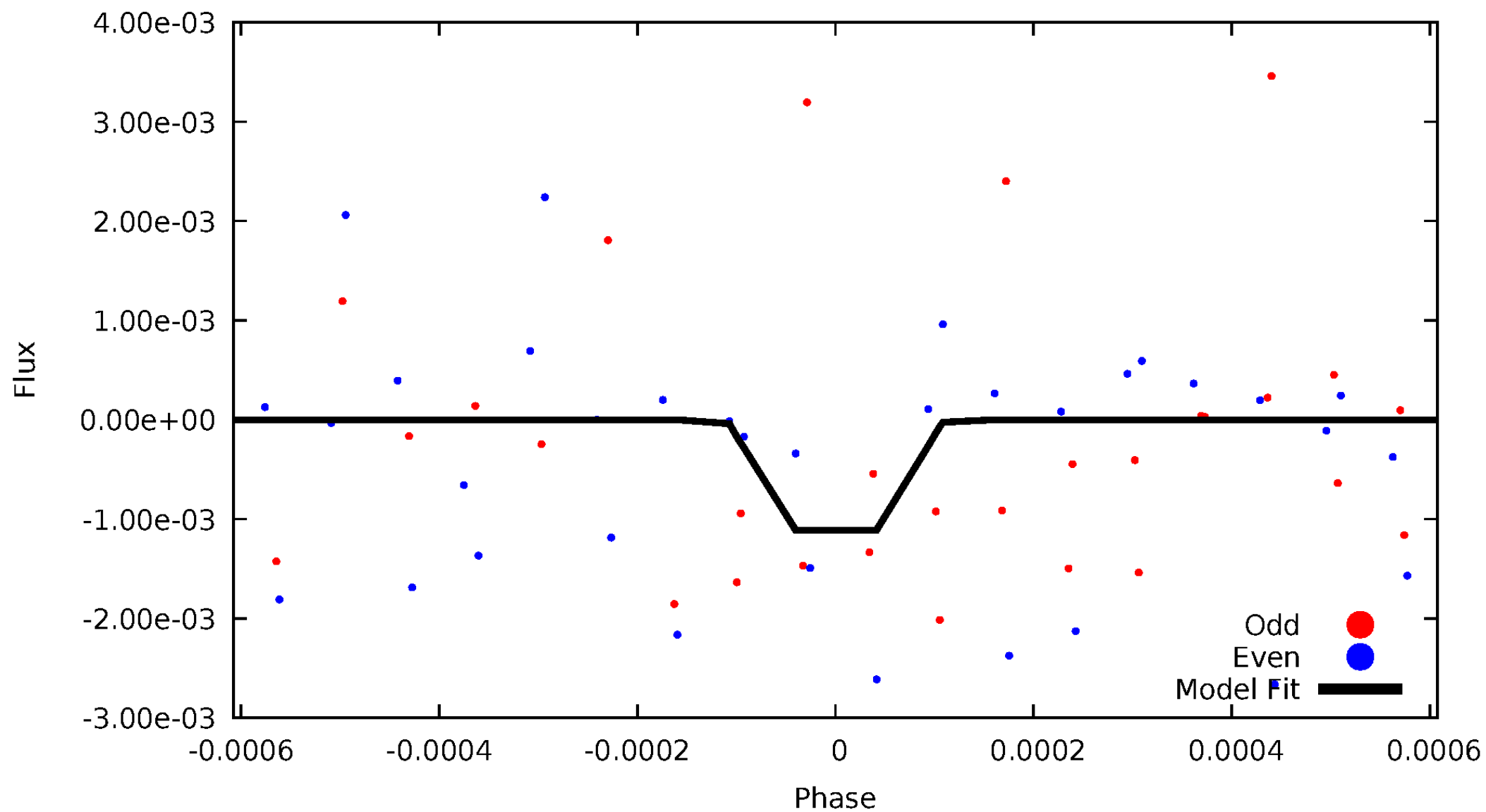
DV Odd/Even

TCE 001435448-01



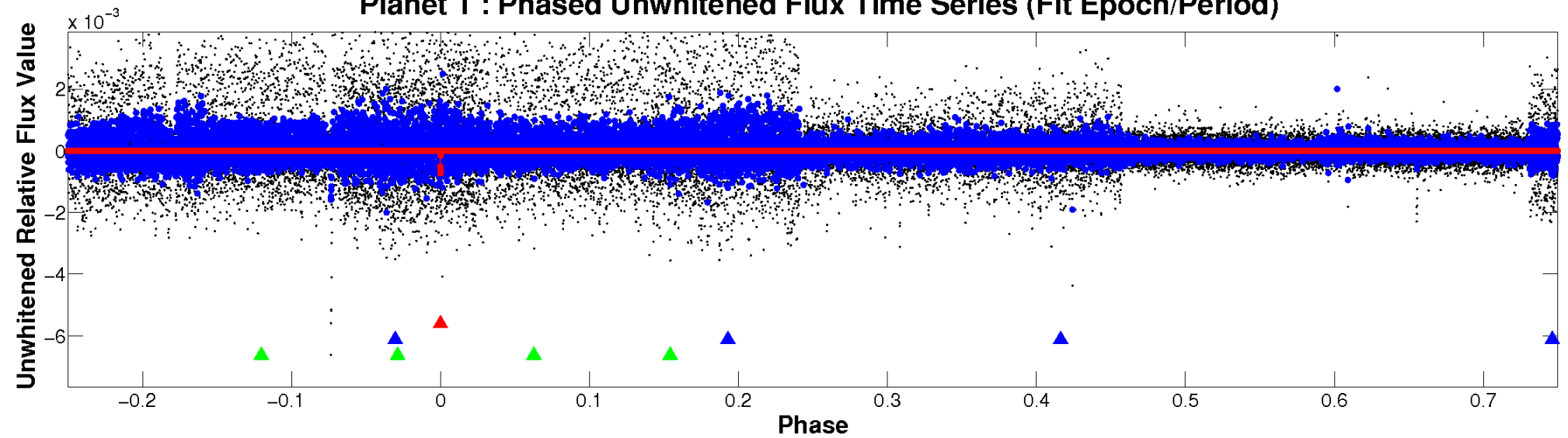
ALT Odd/Even

TCE 001435448-01

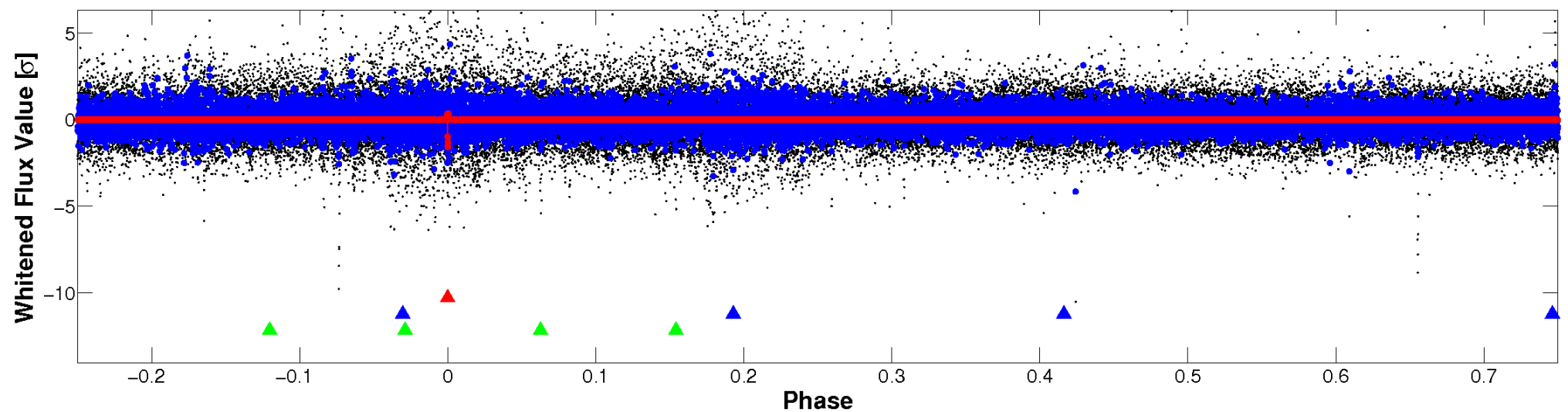


Non-Whitened Vs. Whitened Light Curve

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

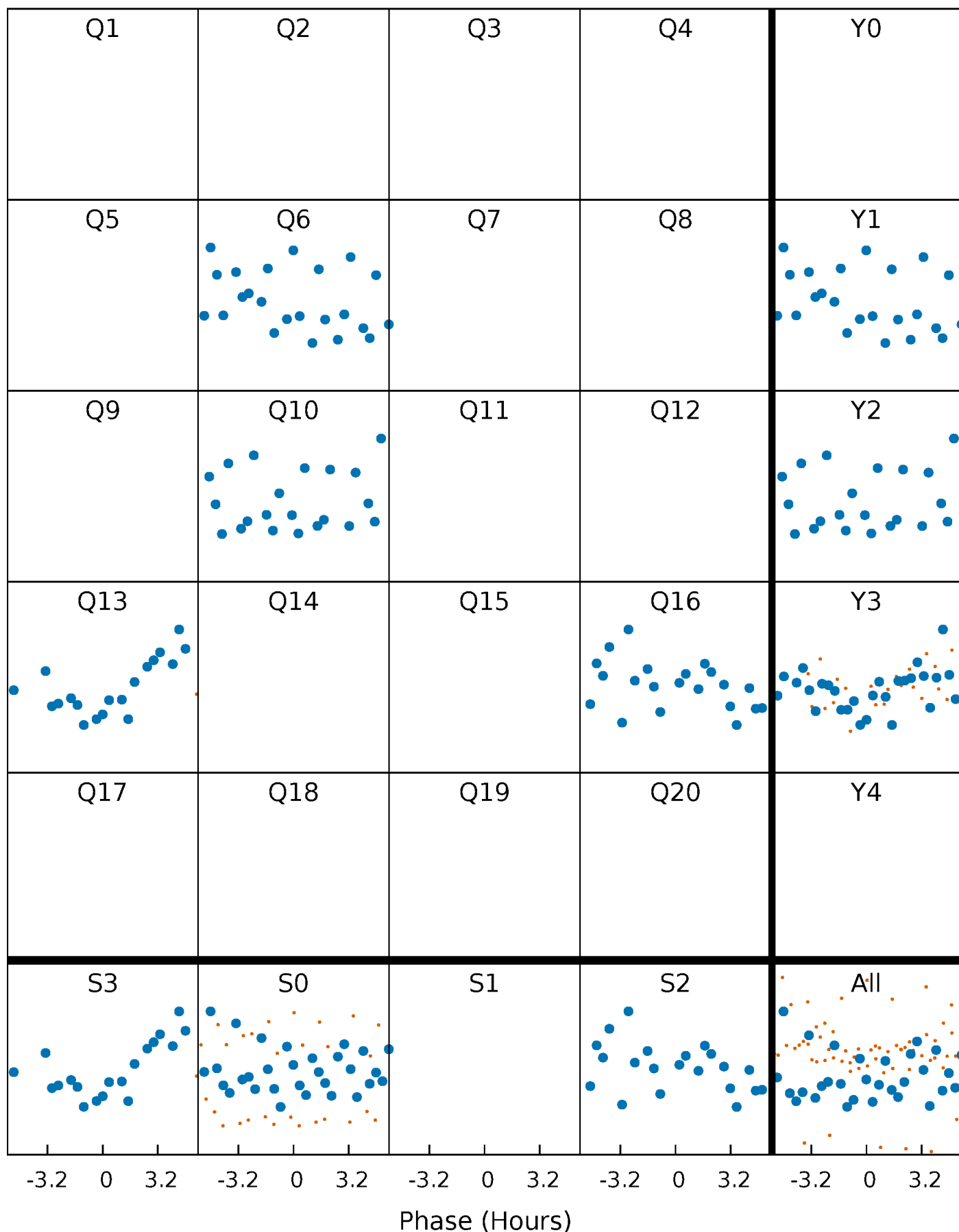


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



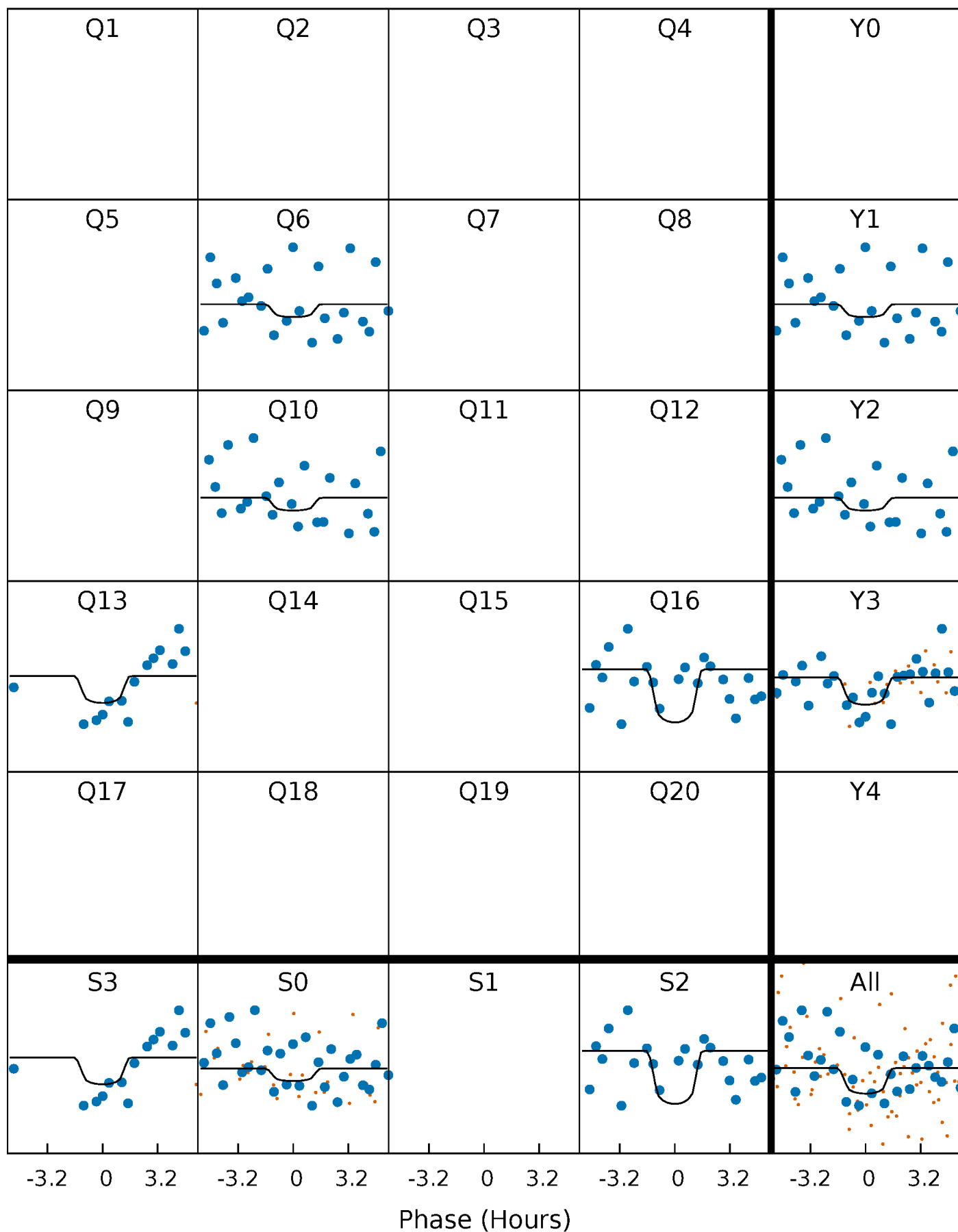
PDC Quarter-Phased Transit Curves

TCE 001435448-01 P=305.082211 Days $T_0=316.571444$ (BKJD)



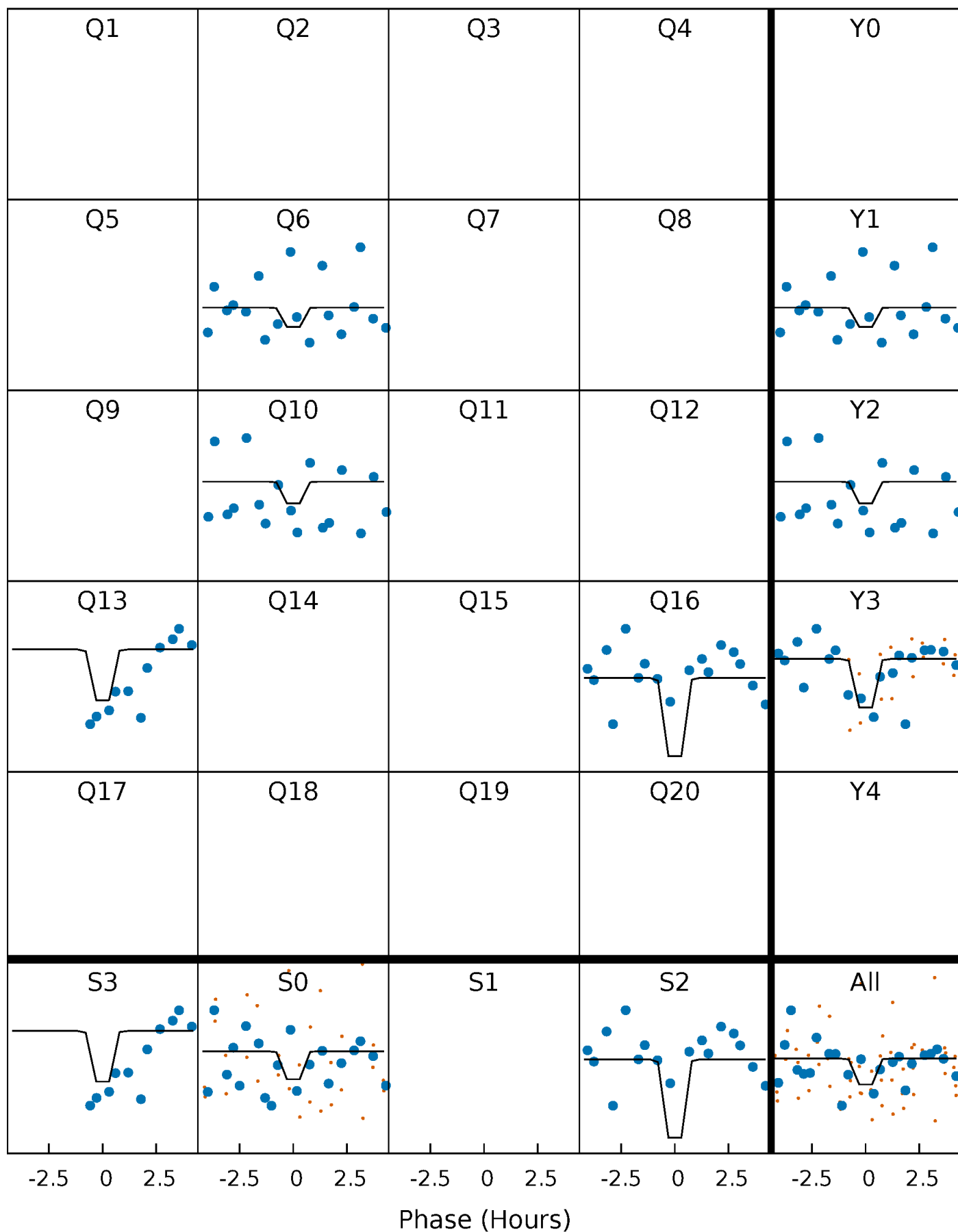
DV Quarter-Phased Transit Curves

TCE 001435448-01 P=305.082211 Days $T_0=316.571444$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

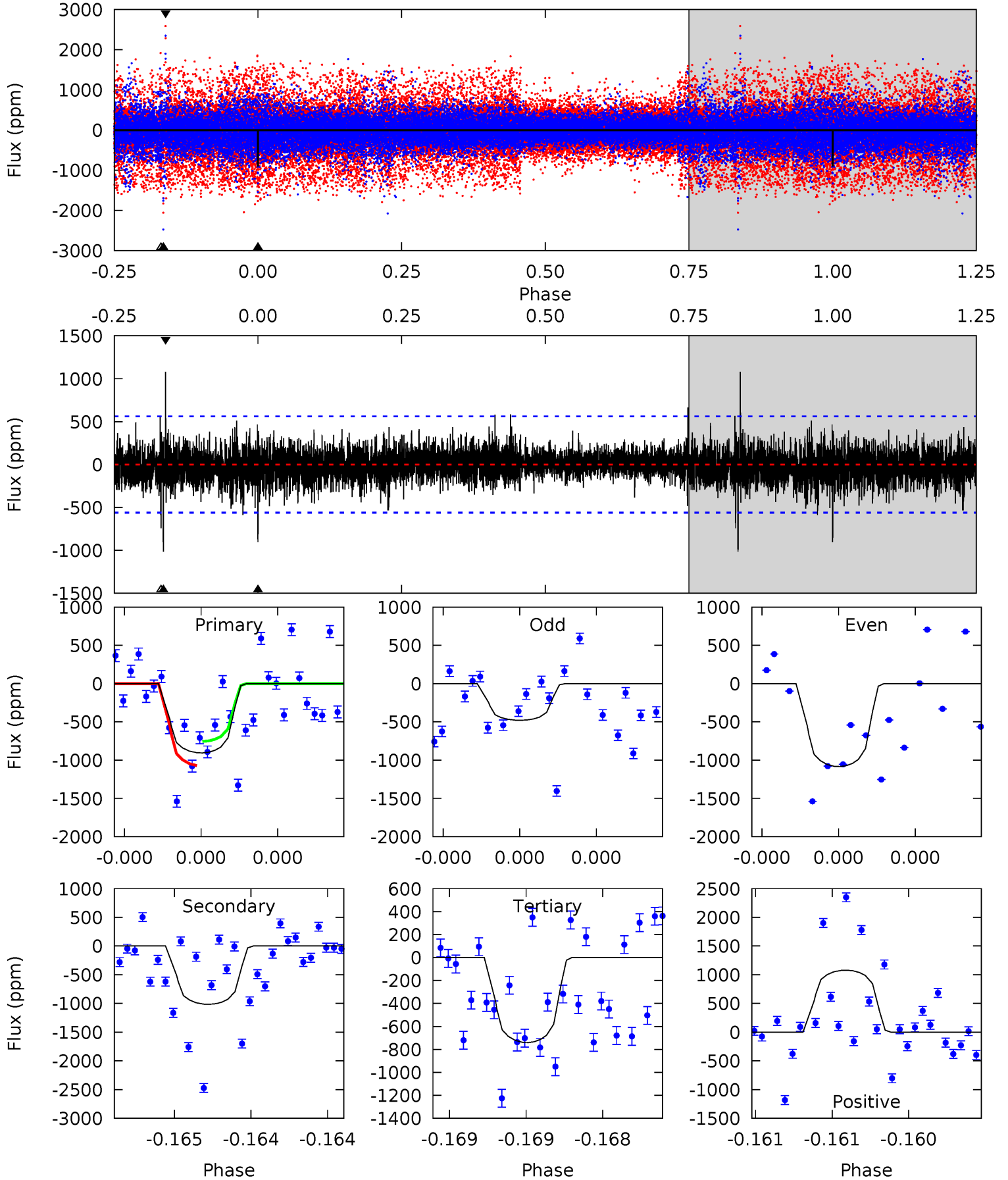
TCE 001435448-01 P=305.073051 Days $T_0=316.590673$ (BKJD)



DV Model-Shift Uniqueness Test

001435448-01, P = 305.082211 Days, E = 316.571444 Days

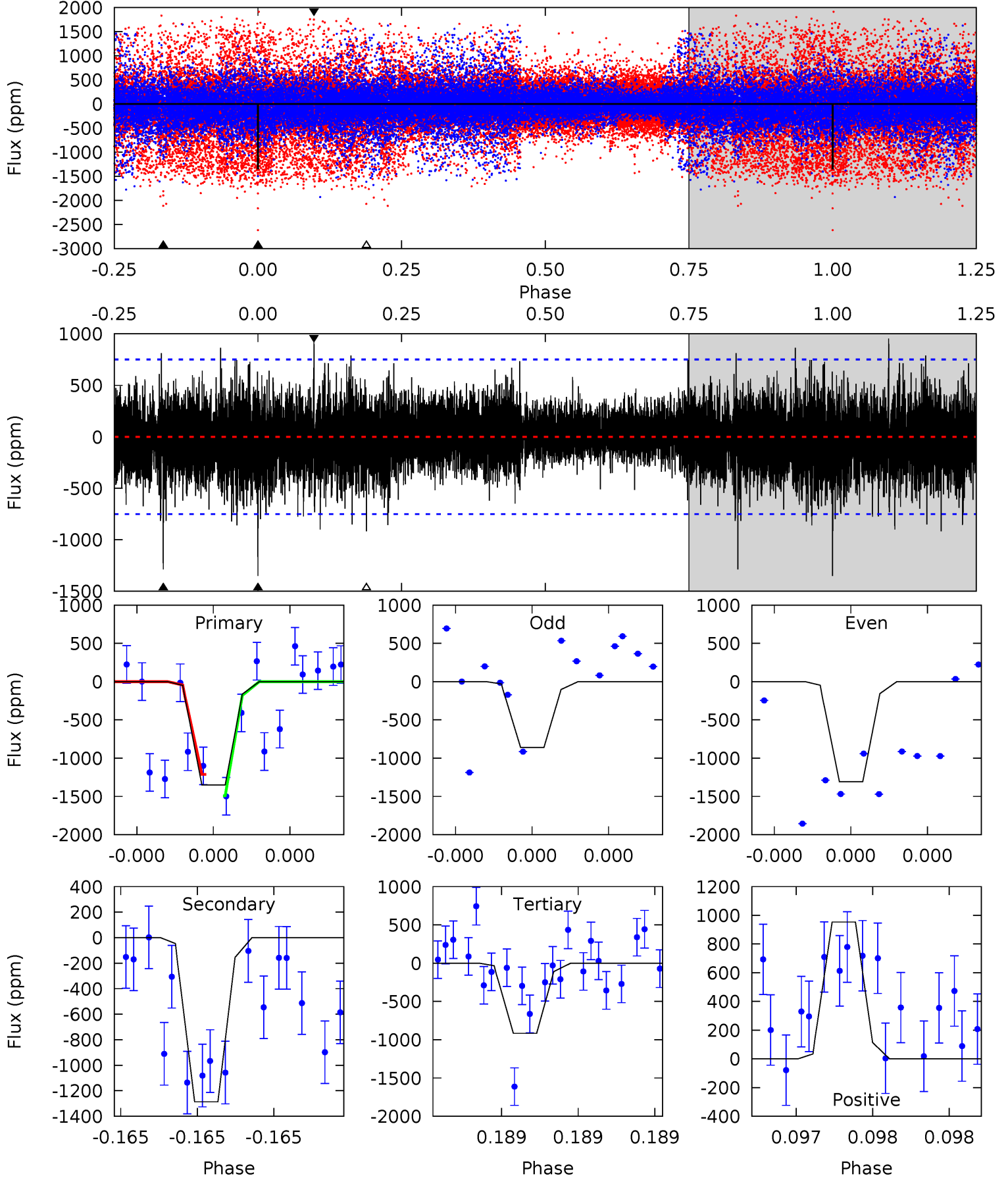
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.07	10.2	7.42	10.8	5.61	3.54	1.30	1.65	-1.74	2.75	-0.64	2.86	1.79	0.52	1.60



Alt Model-Shift Uniqueness Test

001435448-01, P = 305.073051 Days, E = 316.590673 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.2	9.74	6.93	7.21	5.68	3.64	1.43	3.28	3.00	2.80	2.52	1.75	0.73	0.41	1.08



Stellar Parameters For KIC 001435448

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	6047^{+82}_{-82}	$4.173^{+0.168}_{-0.112}$	$0.020^{+0.150}_{-0.150}$	$1.425^{+0.234}_{-0.260}$	$1.102^{+0.108}_{-0.081}$	$0.536^{+0.447}_{-0.178}$
	+1%/-1%	+4%/-3%	+750%/-750%	+16%/-18%	+10%/-7%	+83%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001435448-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1015 ± 100	$8.44^{+8.56}_{-5.62}$	464^{+24}_{-25}	4720^{+3377}_{-1034}	6628^{+52390}_{-5027}
Alt.	-1287 ± 132	$8.82^{+8.62}_{-5.81}$	463^{+22}_{-25}	4919^{+3558}_{-1120}	7908^{+58171}_{-5948}

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 $A_{obs} \gg 1.0$

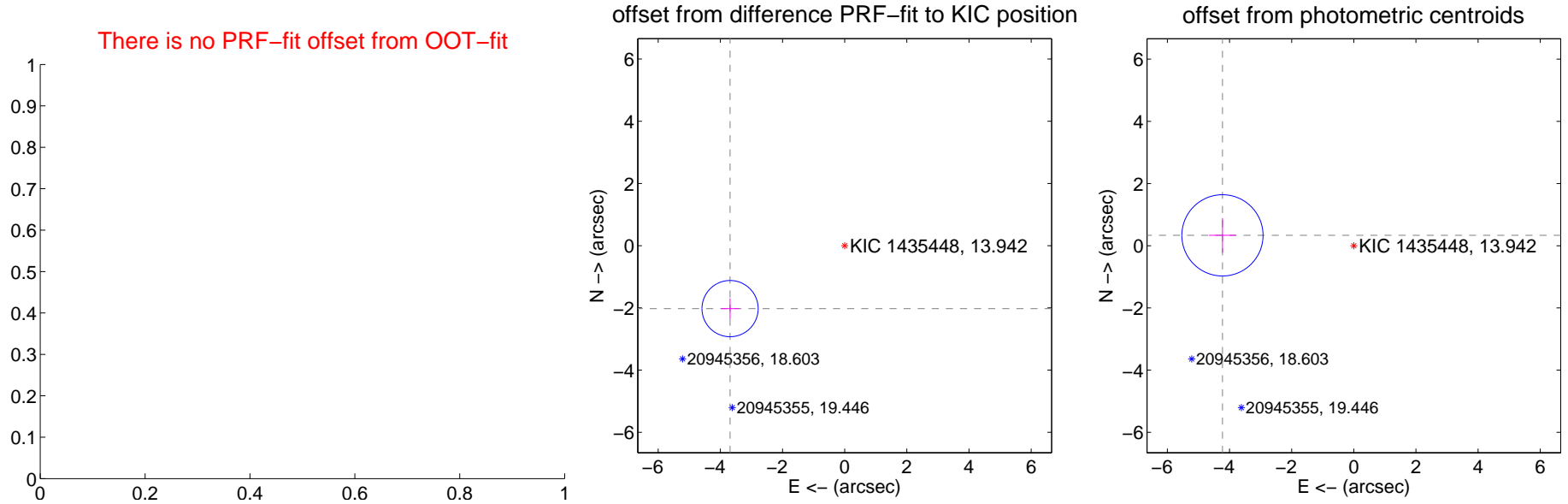
DV Centroid Data

Supplemental centroid analysis for 001435448-01. Kepler magnitude: 13.94. Transit SNR 6.41

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	4.206 ± 0.301	13.96	3.687 ± 0.293	-2.023 ± 0.326
photometric centroid source offset	4.24 ± 0.44	9.73	4.23 ± 0.43	0.33 ± 0.55

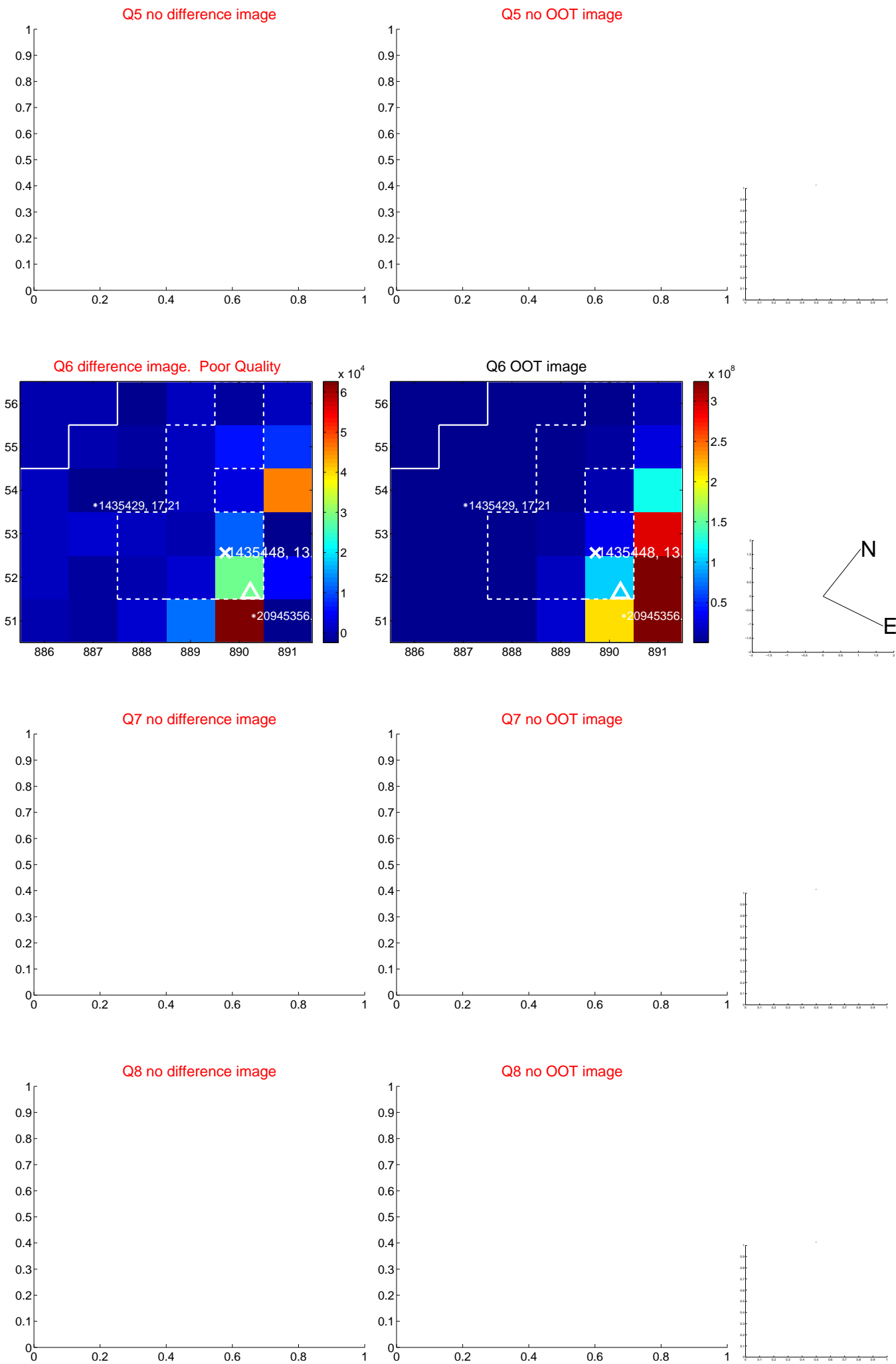


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

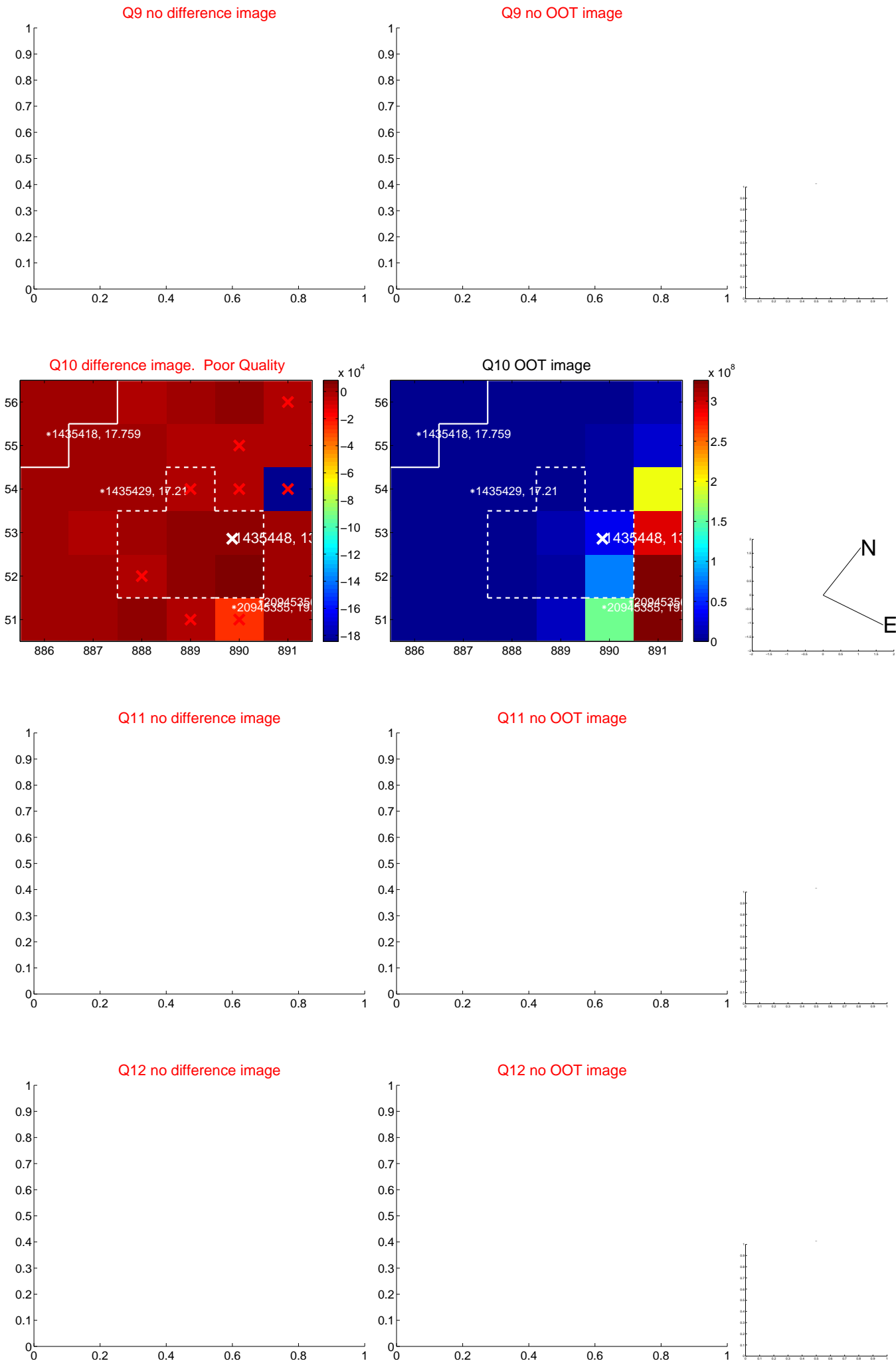
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



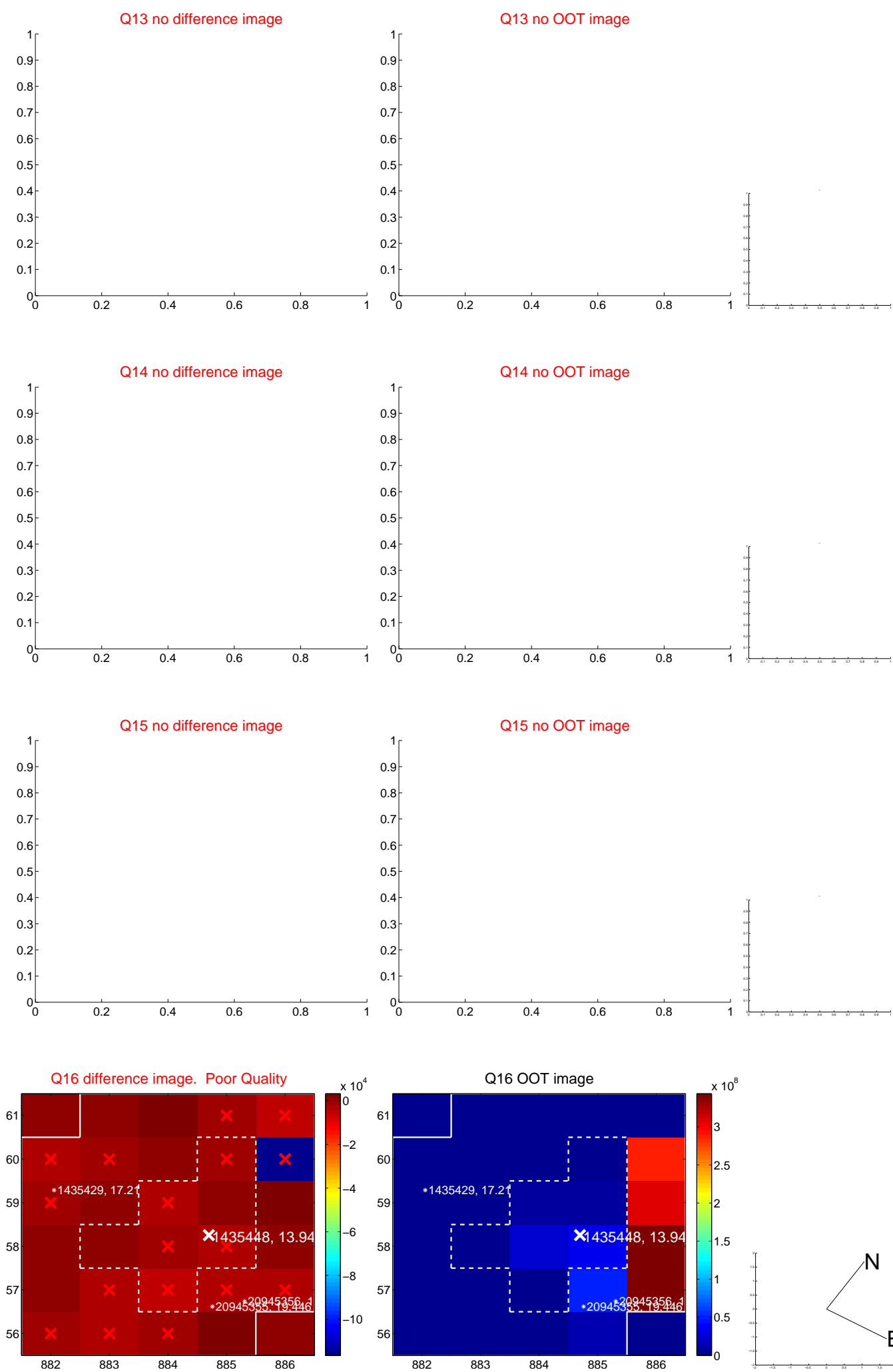
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



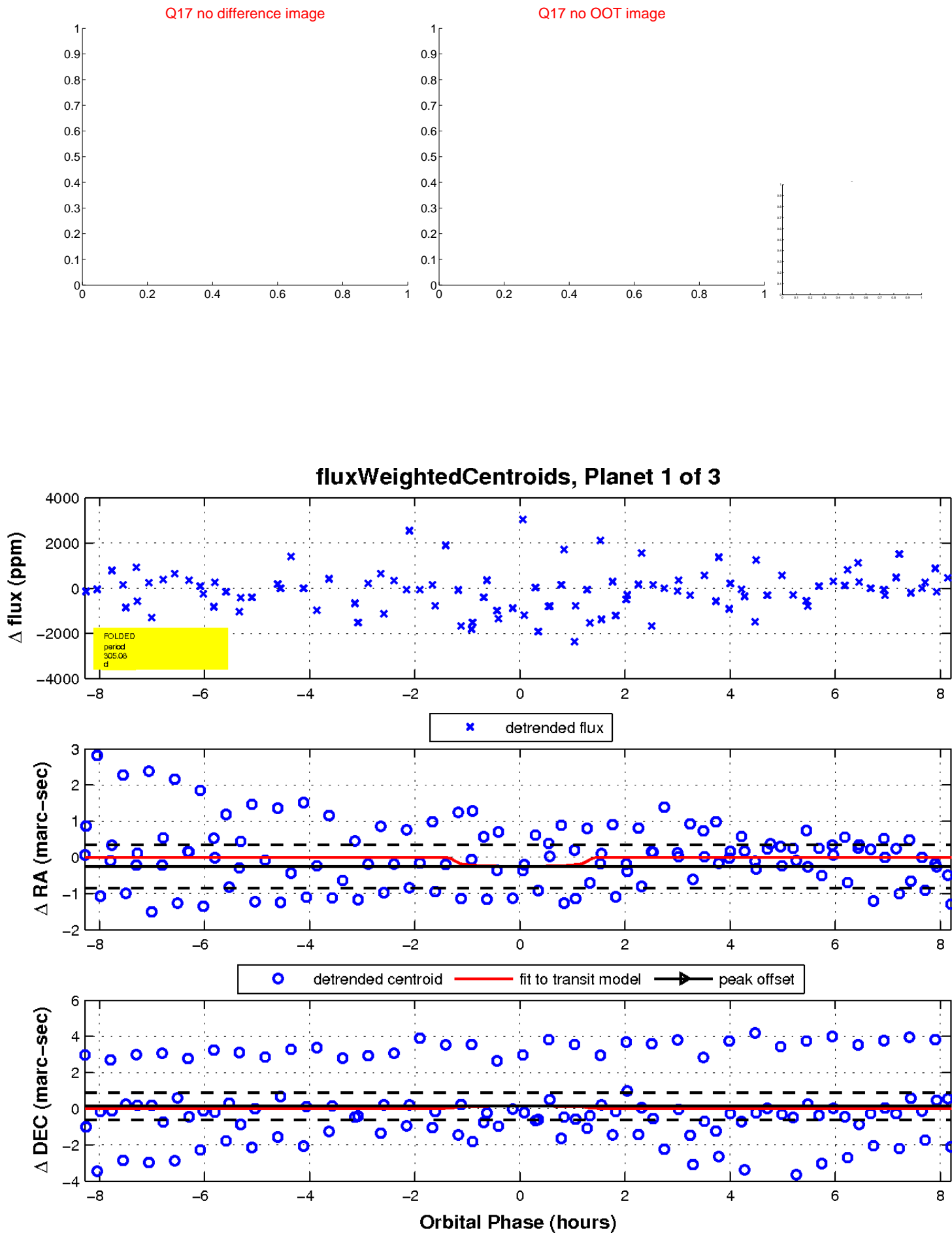
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

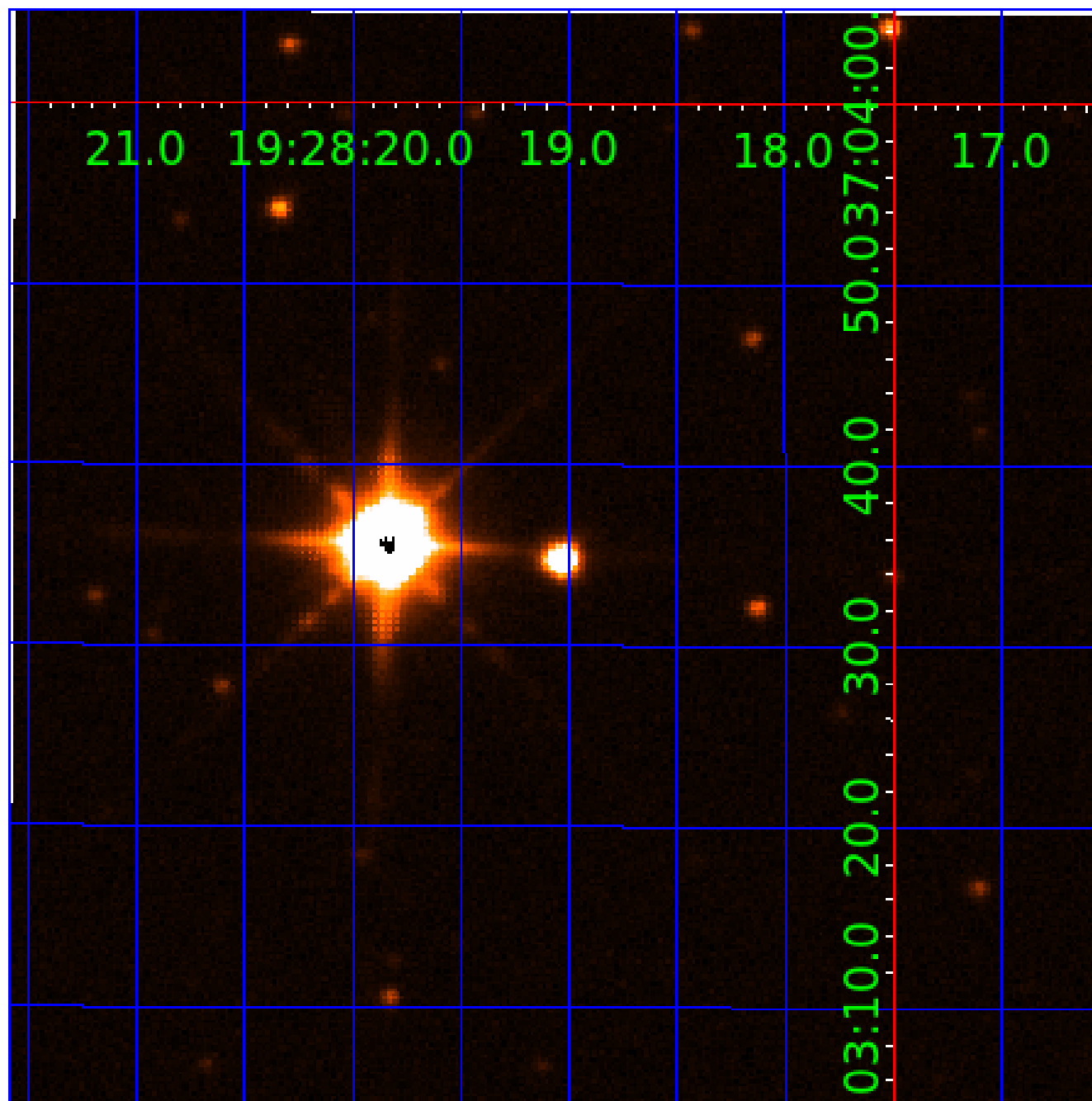


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 001435448

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})
001435448-01	OBS	No	305.082211	316.571444	733.8	2.766	8.2	6.4	1.43	6047	4.24	2.90
001435448-02	OBS	No	373.217120	239.173135	1813.4	6.699	12.1	8.5	1.43	6047	6.31	2.21
001435448-03	OBS	No	332.990551	279.887465	1950.9	3.142	12.4	10.2	1.43	6047	6.51	2.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001435448-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001435448-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
001435448-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

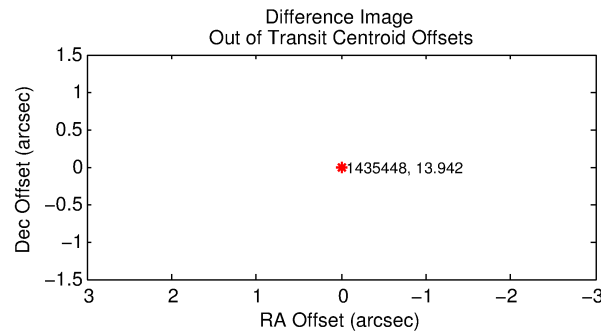
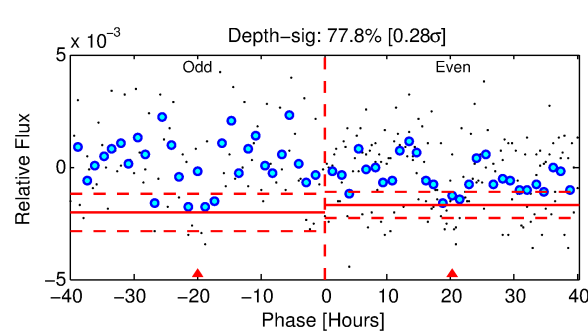
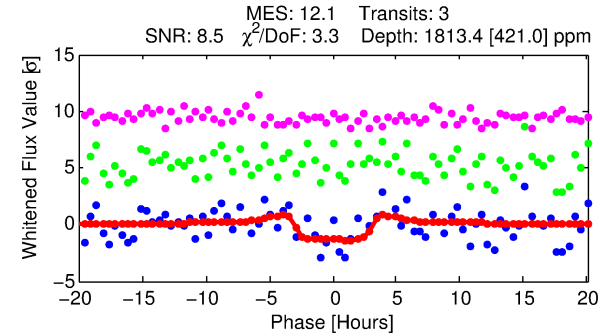
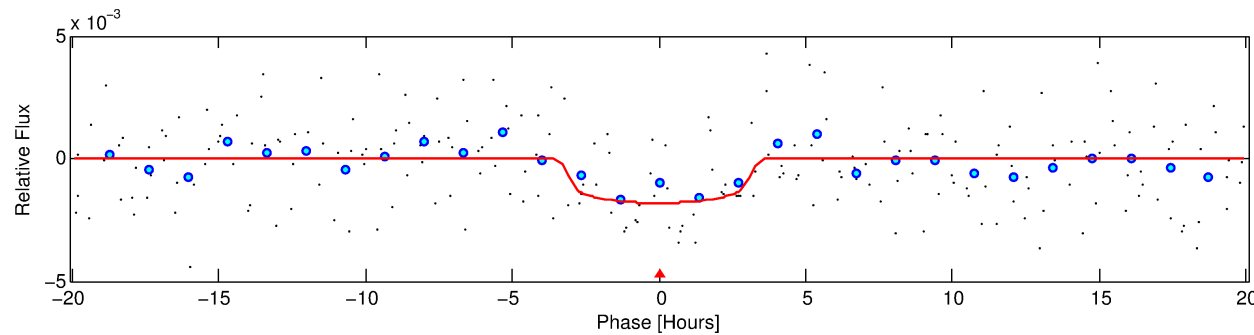
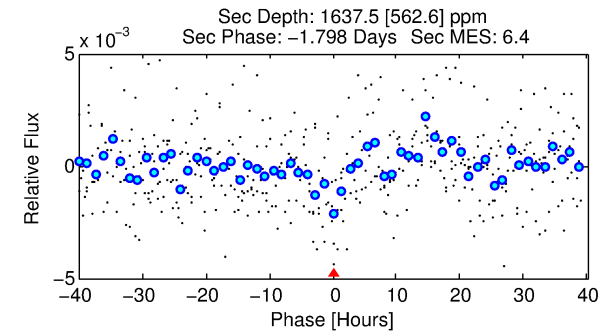
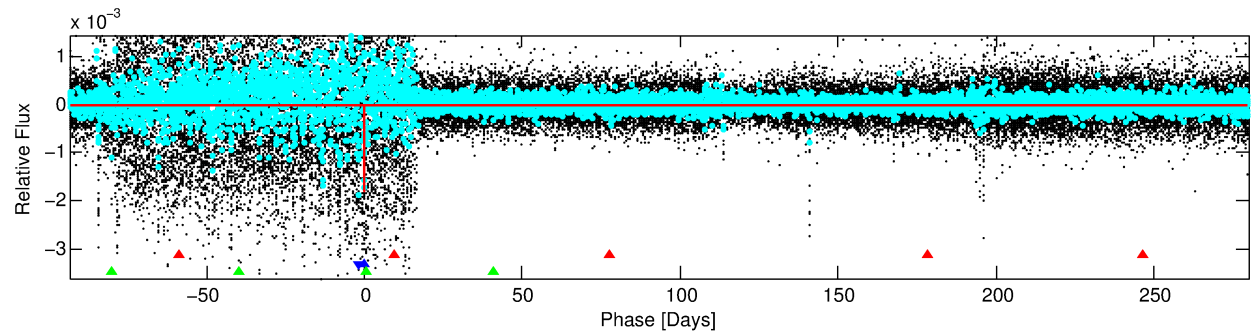
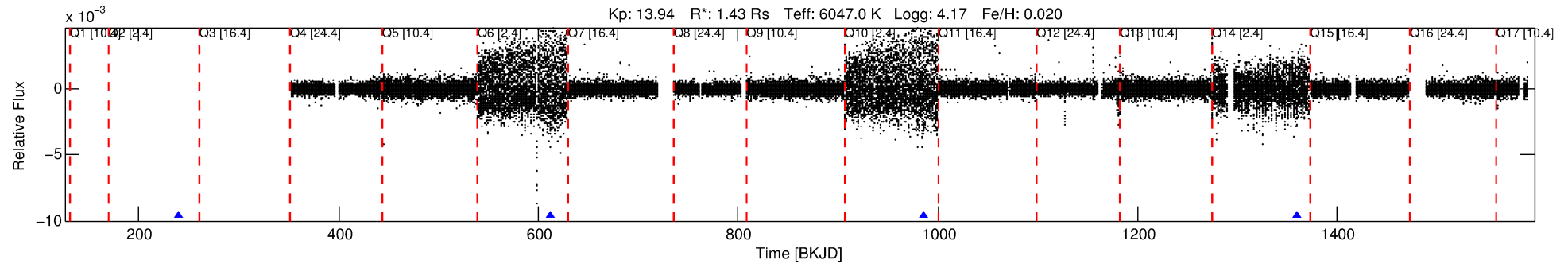
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001435448-02

No Significant Match Found

DV One-Page Summary

KIC: 1435448 Candidate: 2 of 3 Period: 373.217 d



DV Fit Results:

Period = 373.21712 [0.01400] d
Epoch = 239.1731 [0.0294] BKJD
Rp/R* = 0.0406 [0.1099]
a/R* = 368.59 [4680.90]
b = 0.58 [14.88]
Seff = 2.21 [0.64]
Teq = 311 [23] K
Rp = 6.31 [17.13] Re
a = 1.0485 [0.1859] AU
Ag = 24901.17 [135408.31] [0.18σ]
Teffp = 6040 [8201] K [0.70σ]

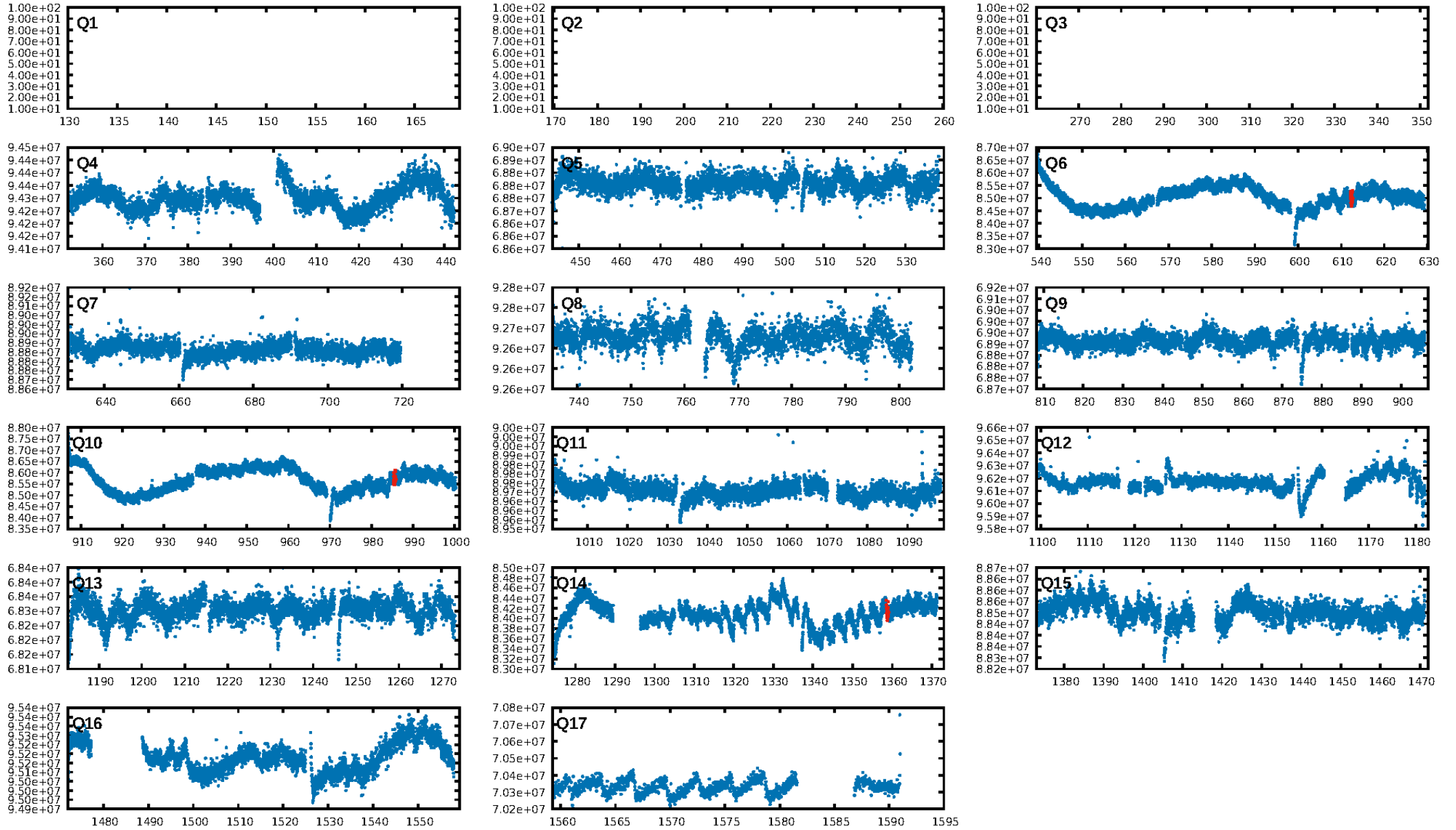
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [130.48σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 95.3%
ModelChiSquareGof-sig: 0.1%
Bootstrap-pfa: 6.10e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.1457
Centroid-sig: 98.4%
Centroid-so: 3.912 arcsec [24.03σ]
OotOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-rm: 2.583 arcsec [3.65σ]
KicOffset-st: 3/0/0 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.67 [2/3]

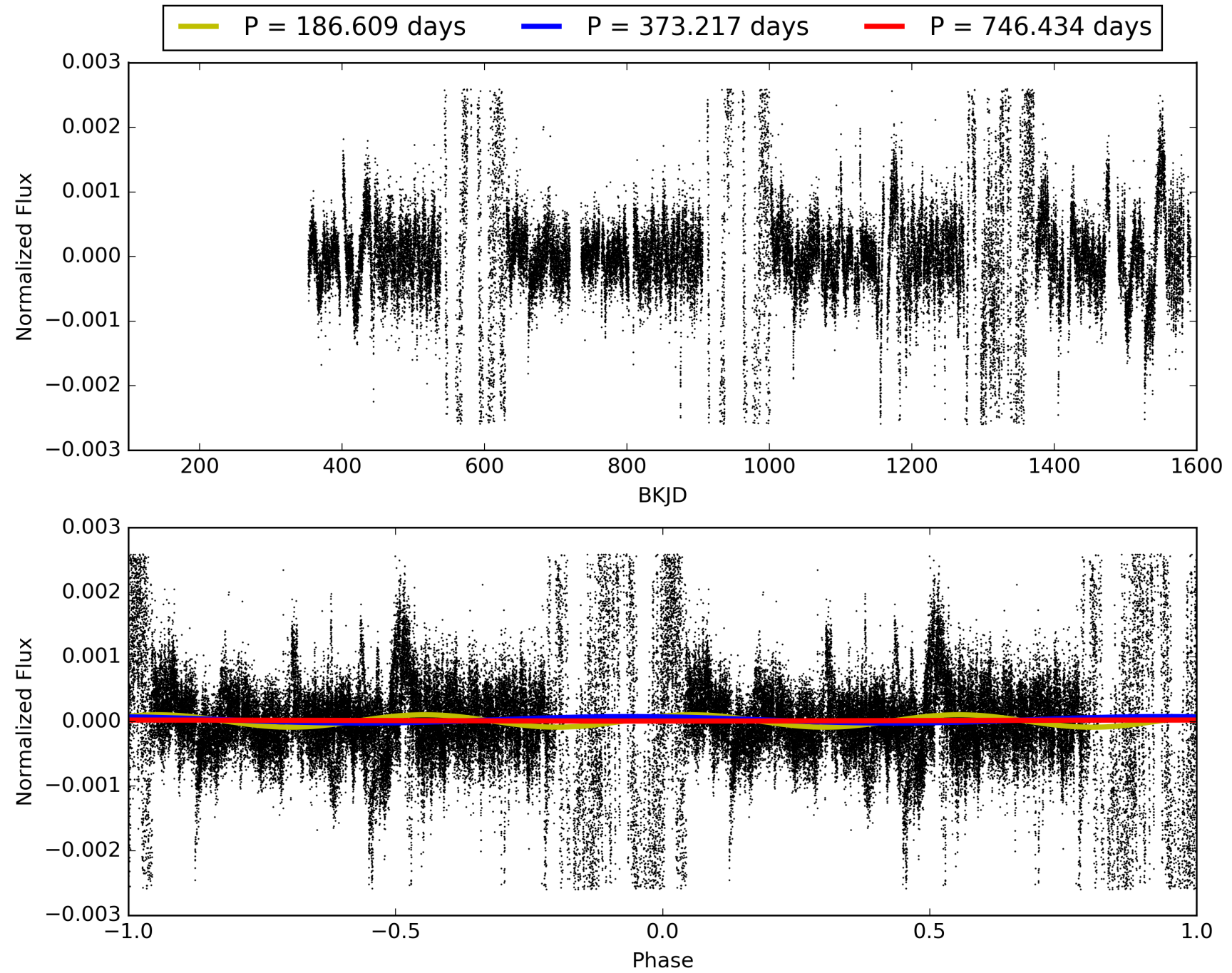
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:05:25 Z

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

TCE 001435448-02, PDC Light Curves

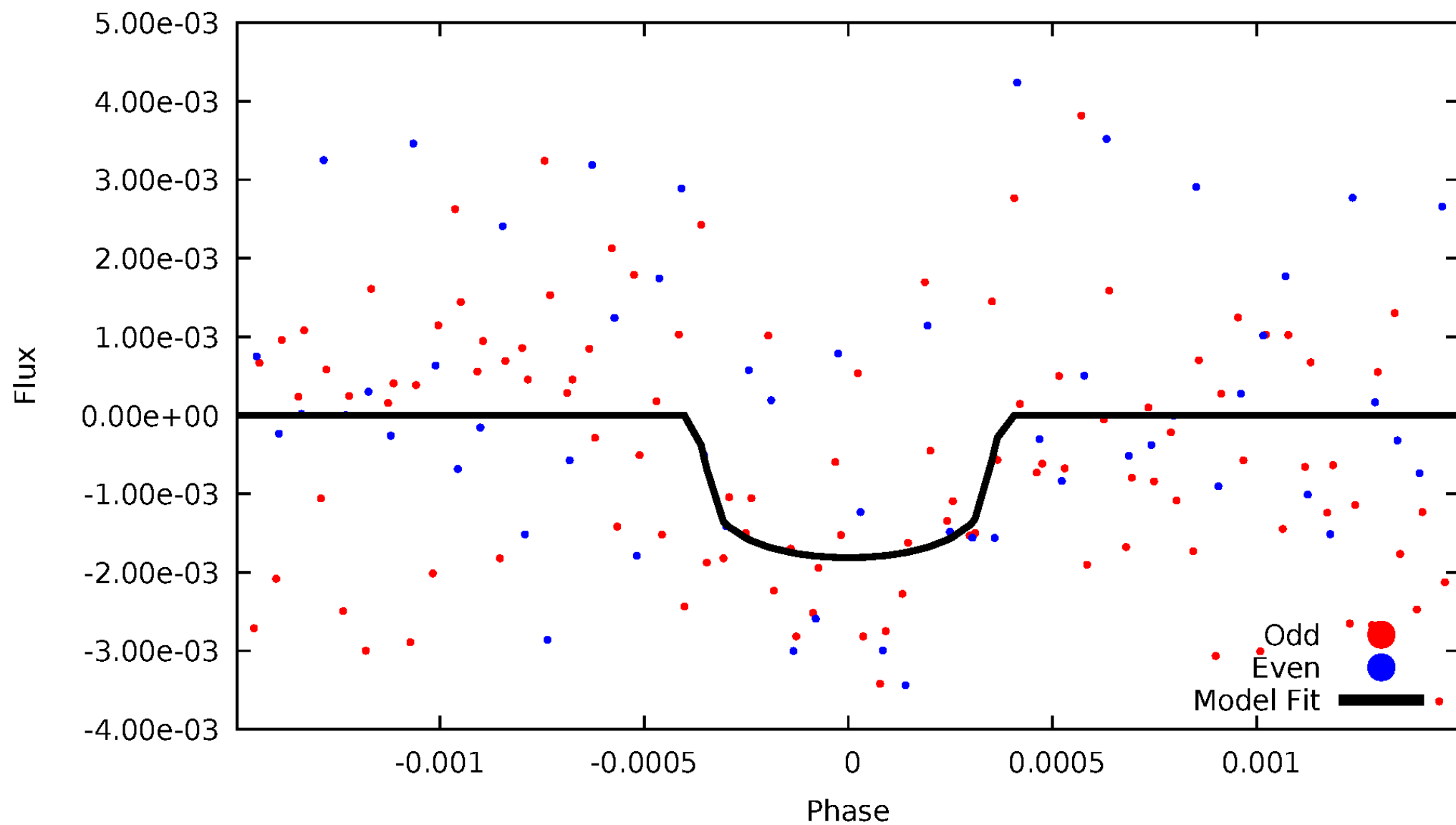


TCE 001435448-02



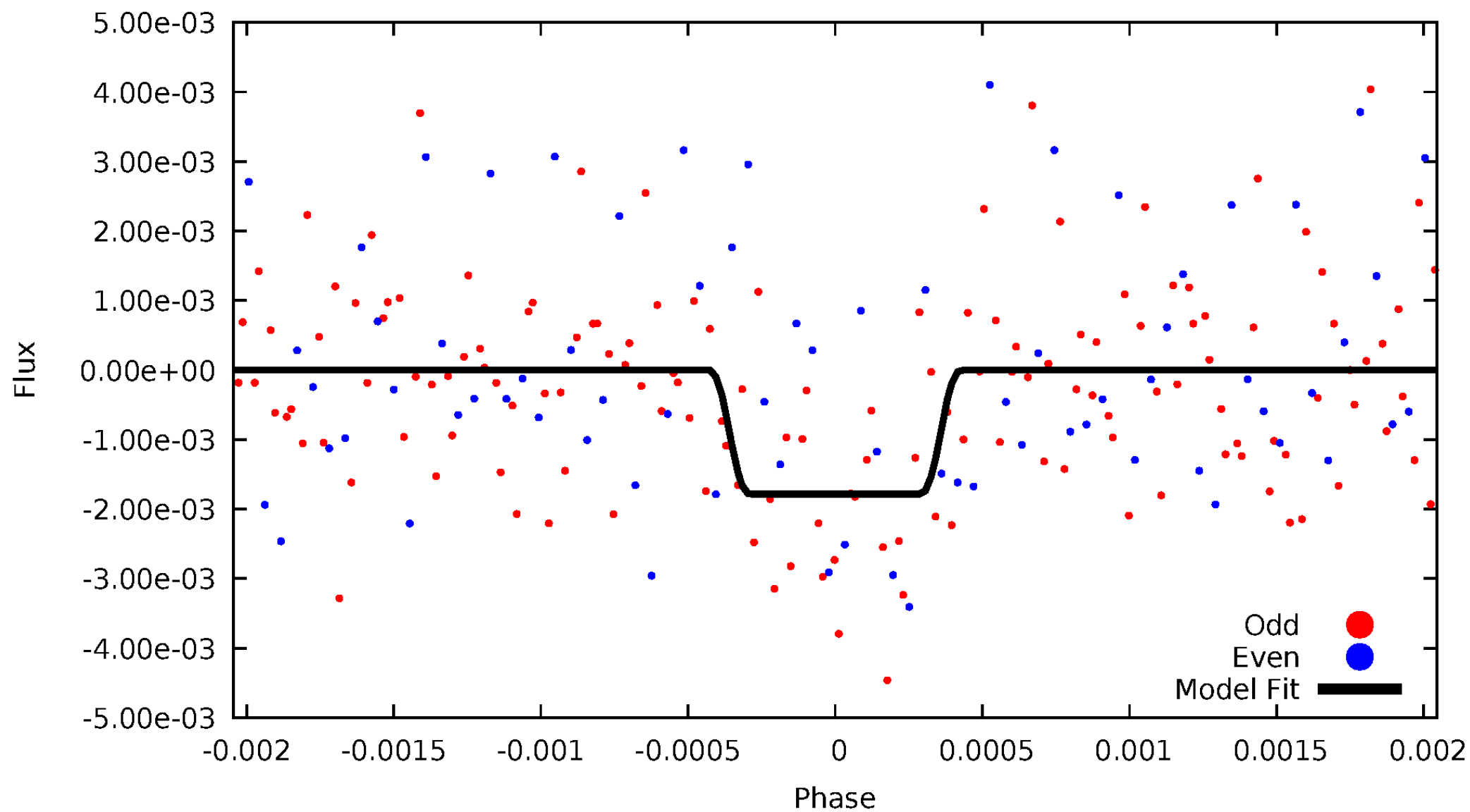
DV Odd/Even

TCE 001435448-02



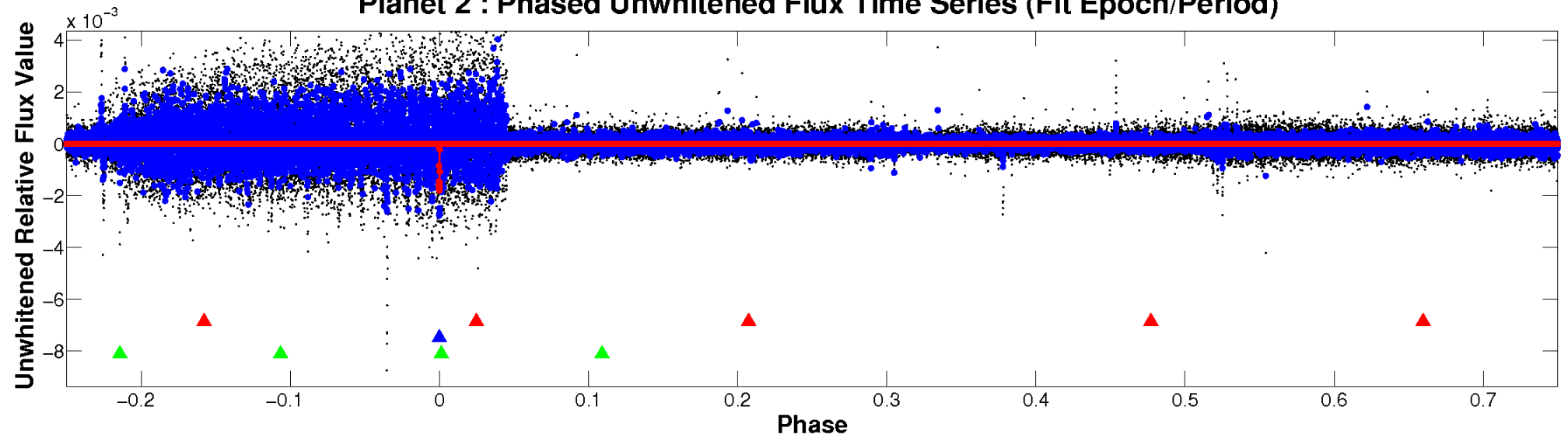
ALT Odd/Even

TCE 001435448-02

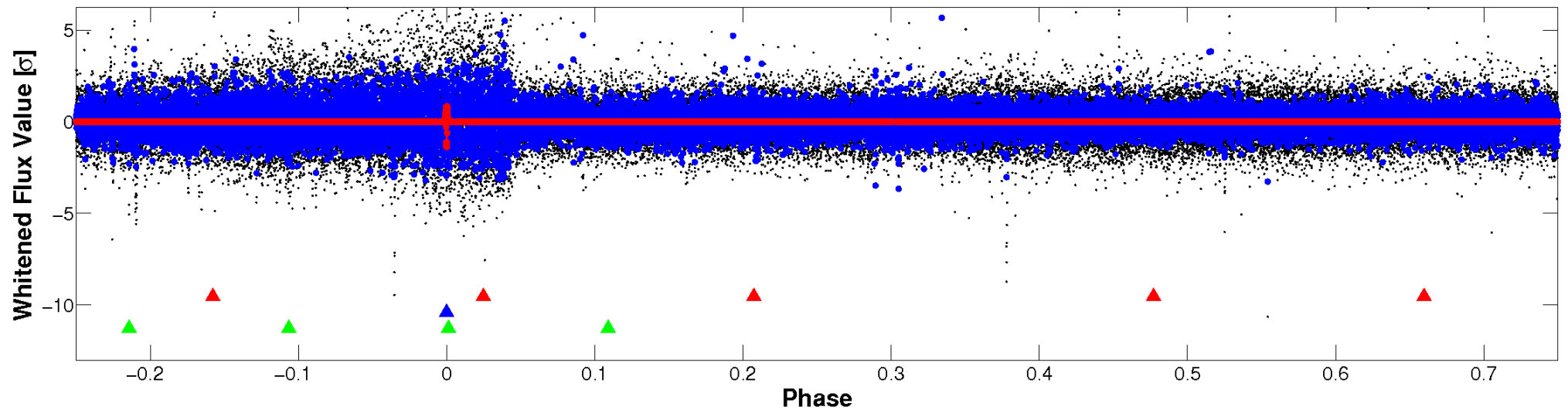


Non-Whitened Vs. Whitened Light Curve

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

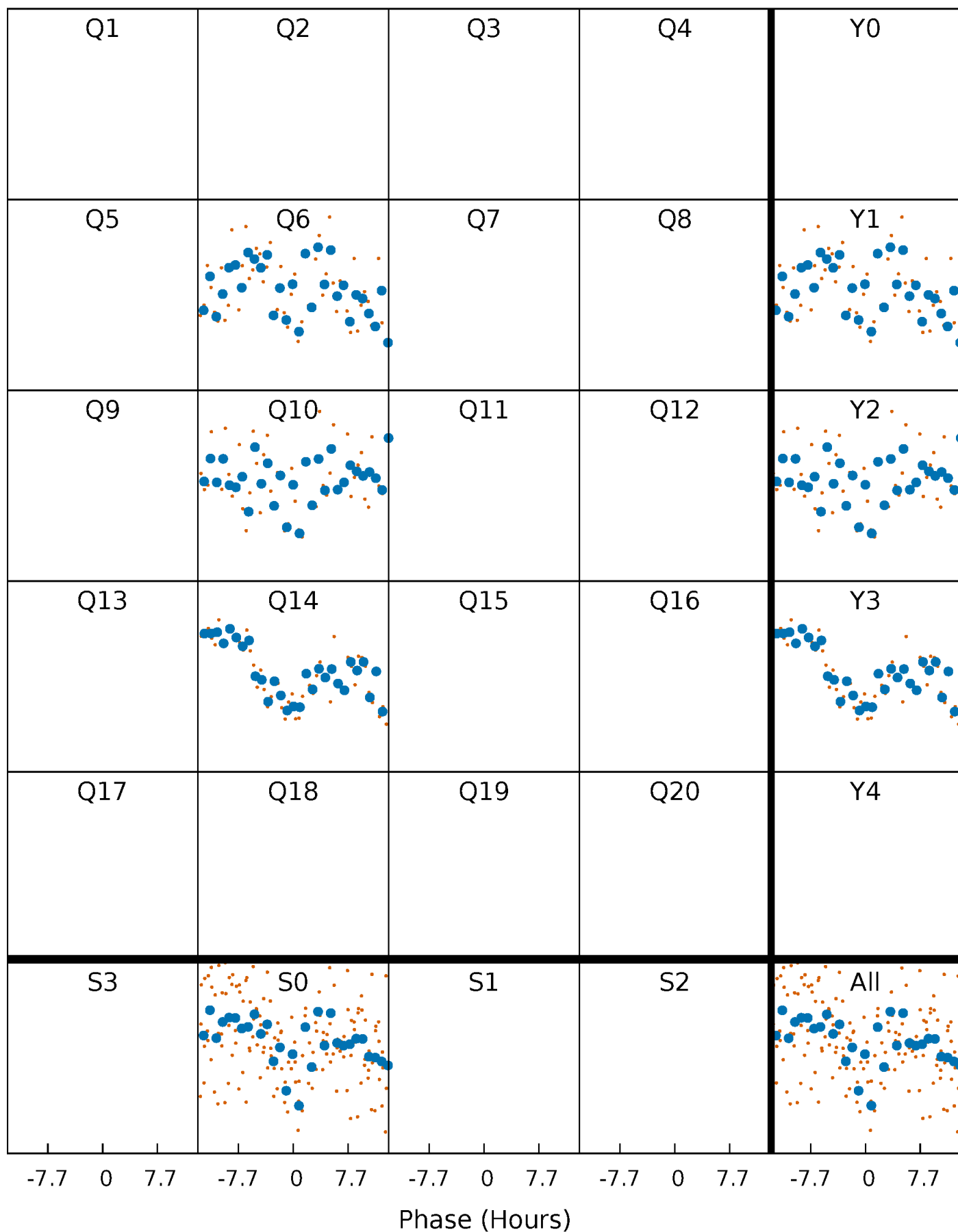


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



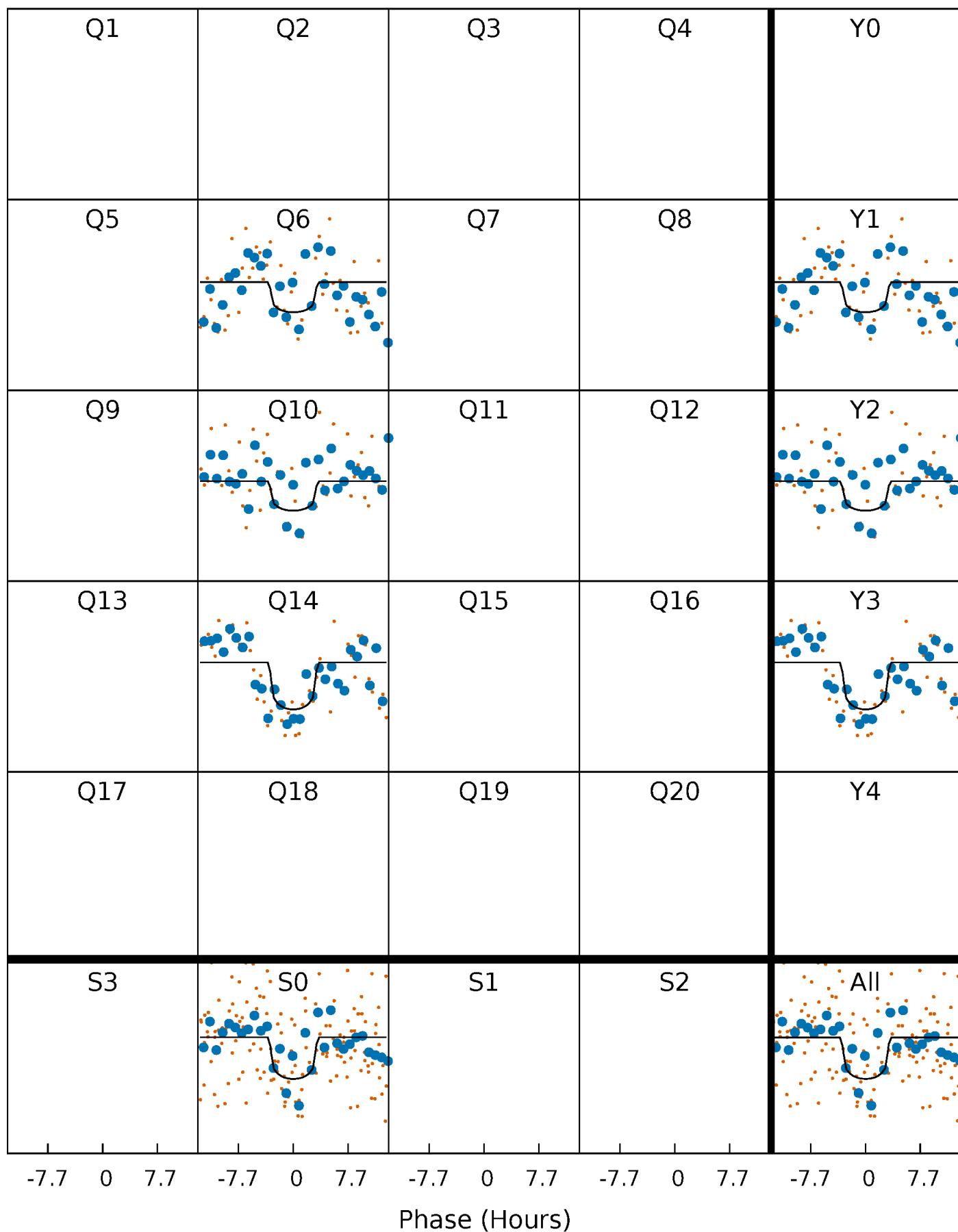
PDC Quarter-Phased Transit Curves

TCE 001435448-02 $P=373.217120$ Days $T_0=239.173135$ (BKJD)



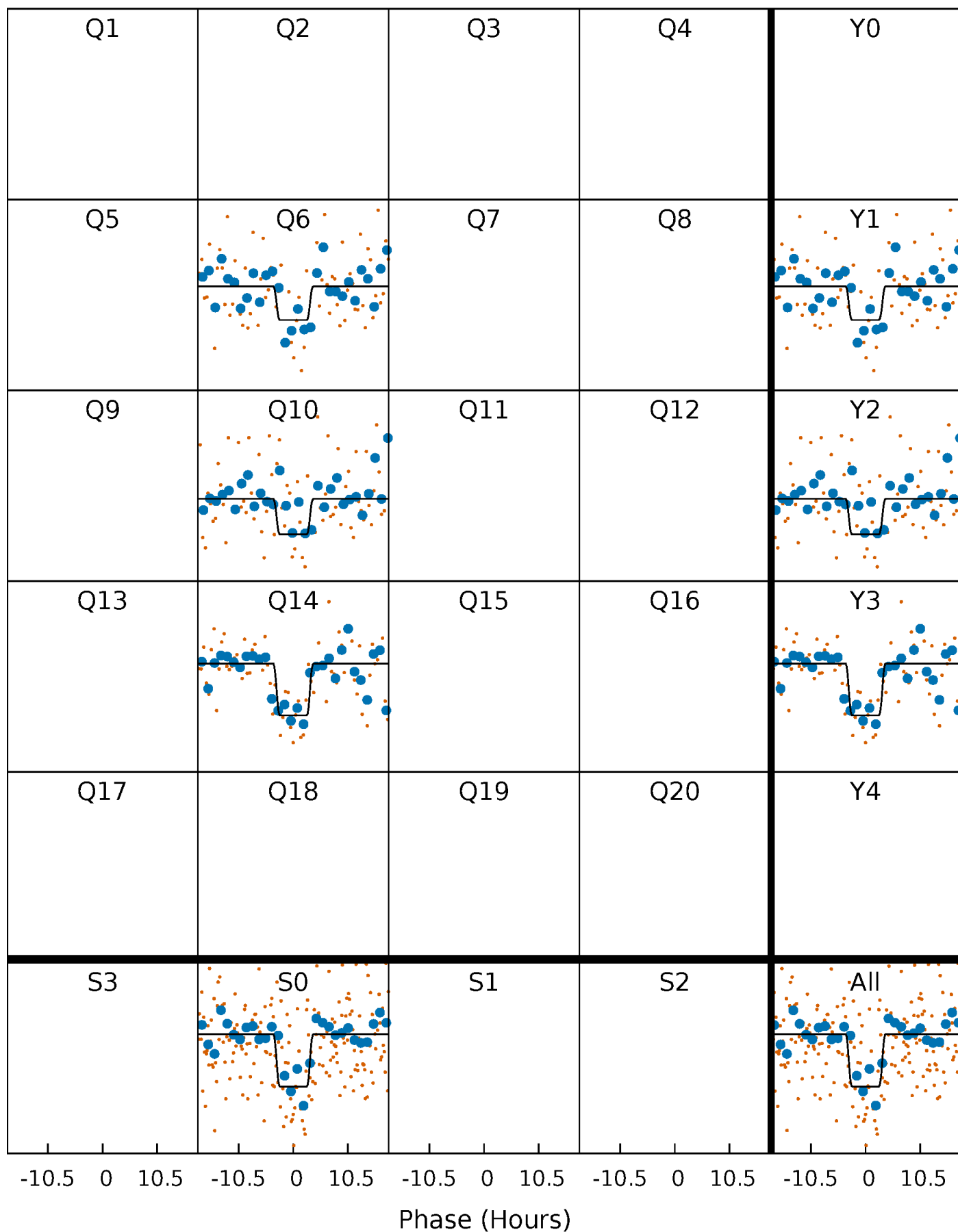
DV Quarter-Phased Transit Curves

TCE 001435448-02 P=373.217120 Days $T_0=239.173135$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

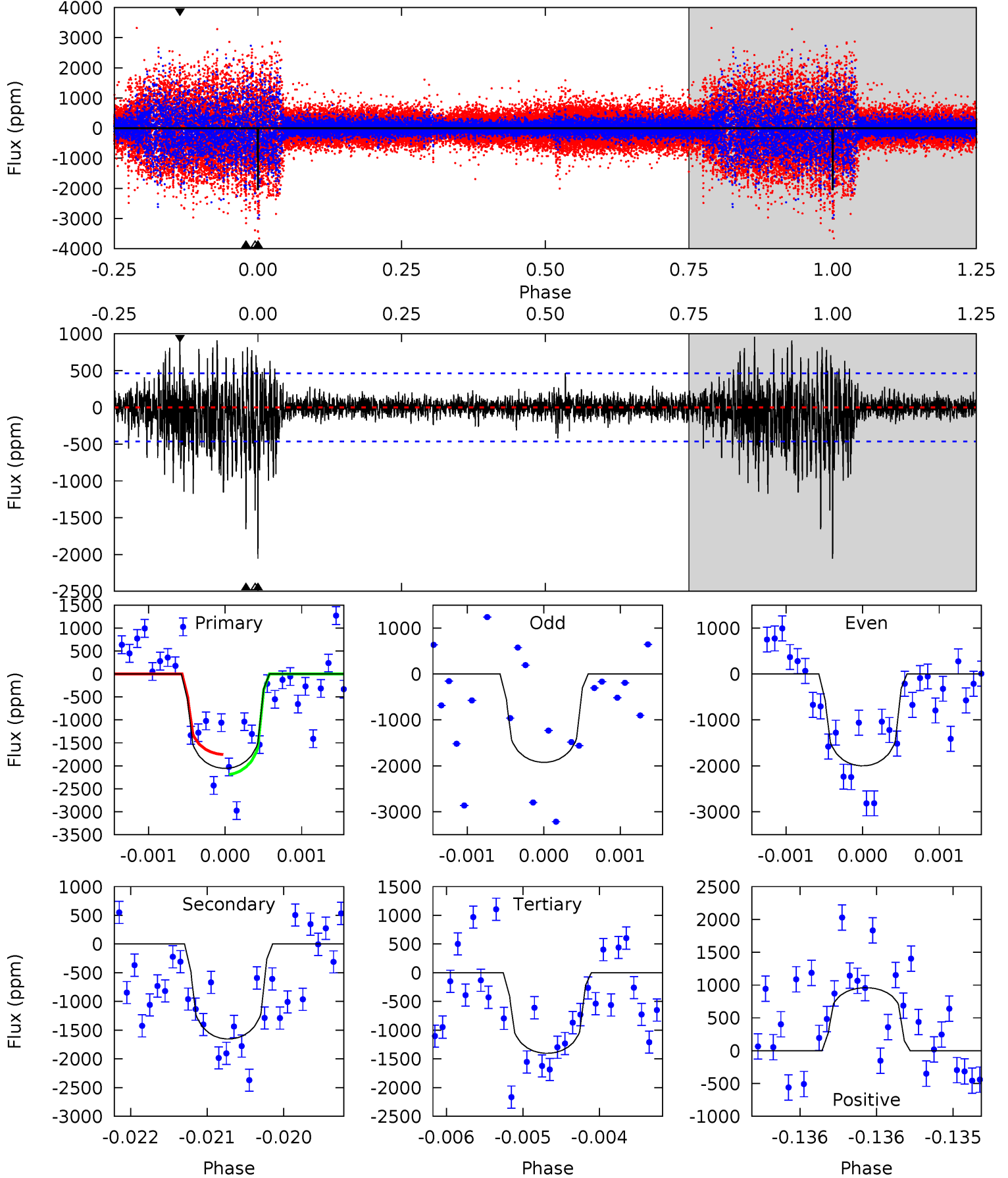
TCE 001435448-02 P=373.212162 Days $T_0=239.141044$ (BKJD)



DV Model-Shift Uniqueness Test

001435448-02, P = 373.217120 Days, E = 239.173135 Days

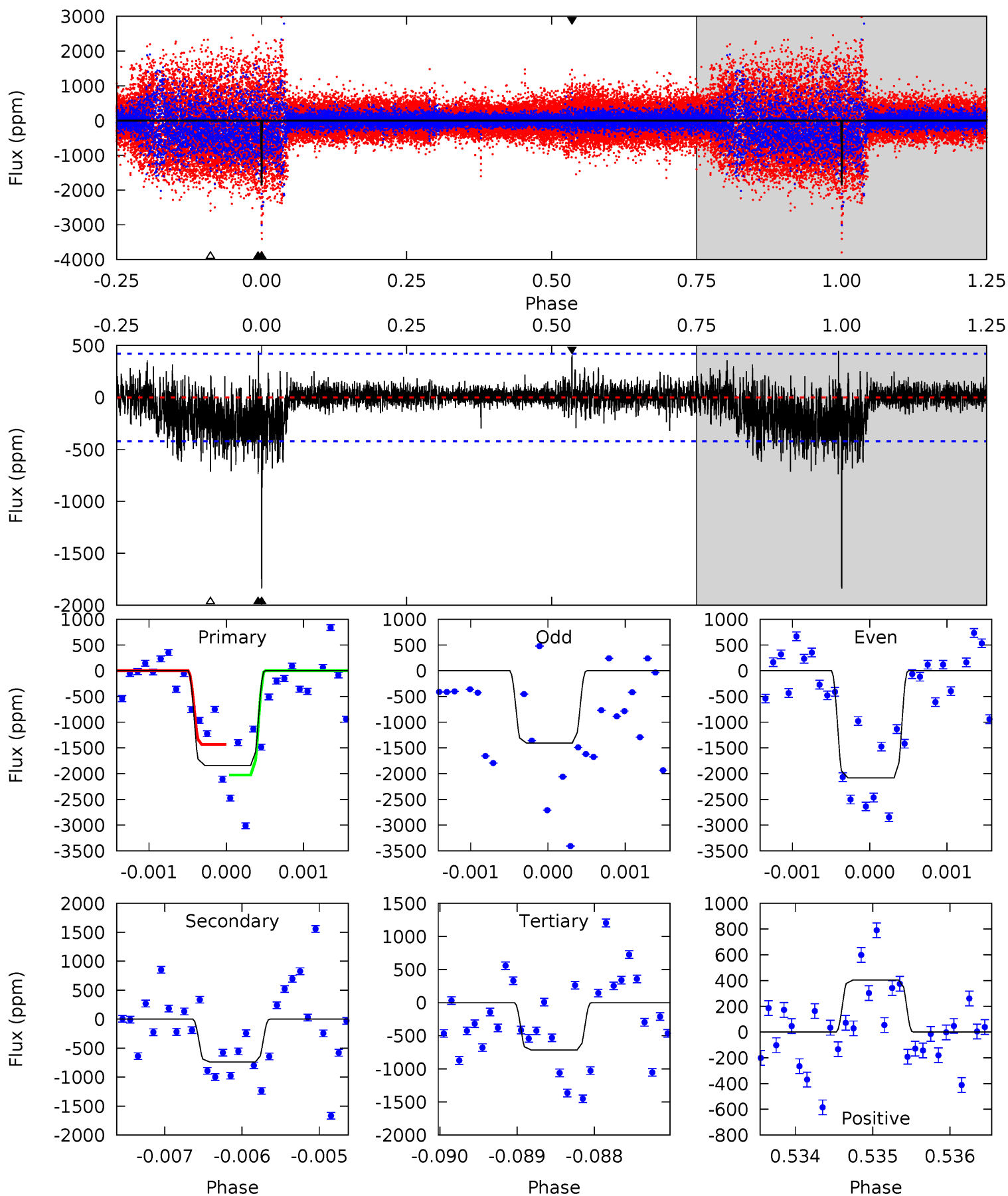
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.4	19.6	16.7	11.4	5.51	3.38	2.11	7.75	13.0	2.98	8.25	0.40	1.06	0.32	2.39



Alt Model-Shift Uniqueness Test

001435448-02, P = 373.212162 Days, E = 239.141044 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.8	9.56	9.27	5.23	5.48	3.33	1.63	14.6	18.6	0.29	4.33	4.09	0.82	0.20	3.72



Stellar Parameters For KIC 001435448

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6047^{+82}_{-82}	$4.173^{+0.168}_{-0.112}$	$0.020^{+0.150}_{-0.150}$	$1.425^{+0.234}_{-0.260}$	$1.102^{+0.108}_{-0.081}$	$0.536^{+0.447}_{-0.178}$
	+1%/-1%	+4%/-3%	+750%/-750%	+16%/-18%	+10%/-7%	+83%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001435448-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1653 ± 84	$13.99^{+13.31}_{-9.33}$	432^{+20}_{-22}	4293^{+2742}_{-877}	5208^{+39151}_{-3861}
Alt.	-738 ± 77	$13.94^{+13.48}_{-8.74}$	433^{+21}_{-21}	3732^{+1821}_{-683}	2291^{+15571}_{-1696}

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 $A_{obs} \gg 1.0$

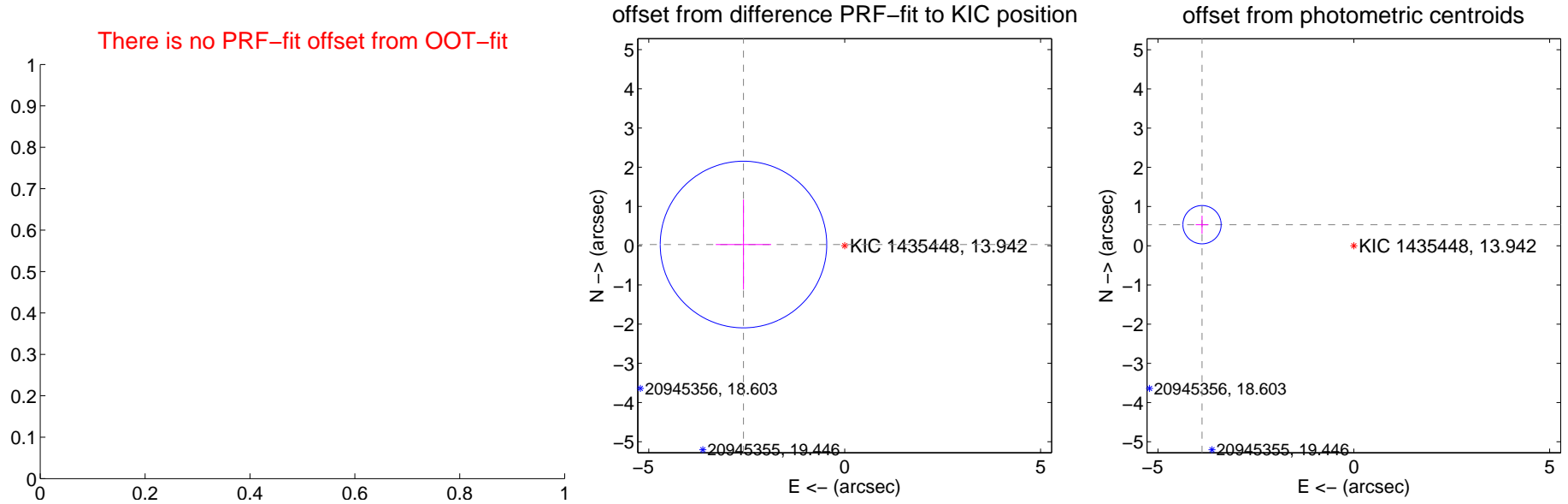
DV Centroid Data

Supplemental centroid analysis for 001435448-02. Kepler magnitude: 13.94. Transit SNR 8.49

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	2.583 \pm 0.708	3.65	2.583 \pm 0.708	0.029 \pm 1.149
photometric centroid source offset	3.91 \pm 0.16	24.03	3.88 \pm 0.16	0.54 \pm 0.23

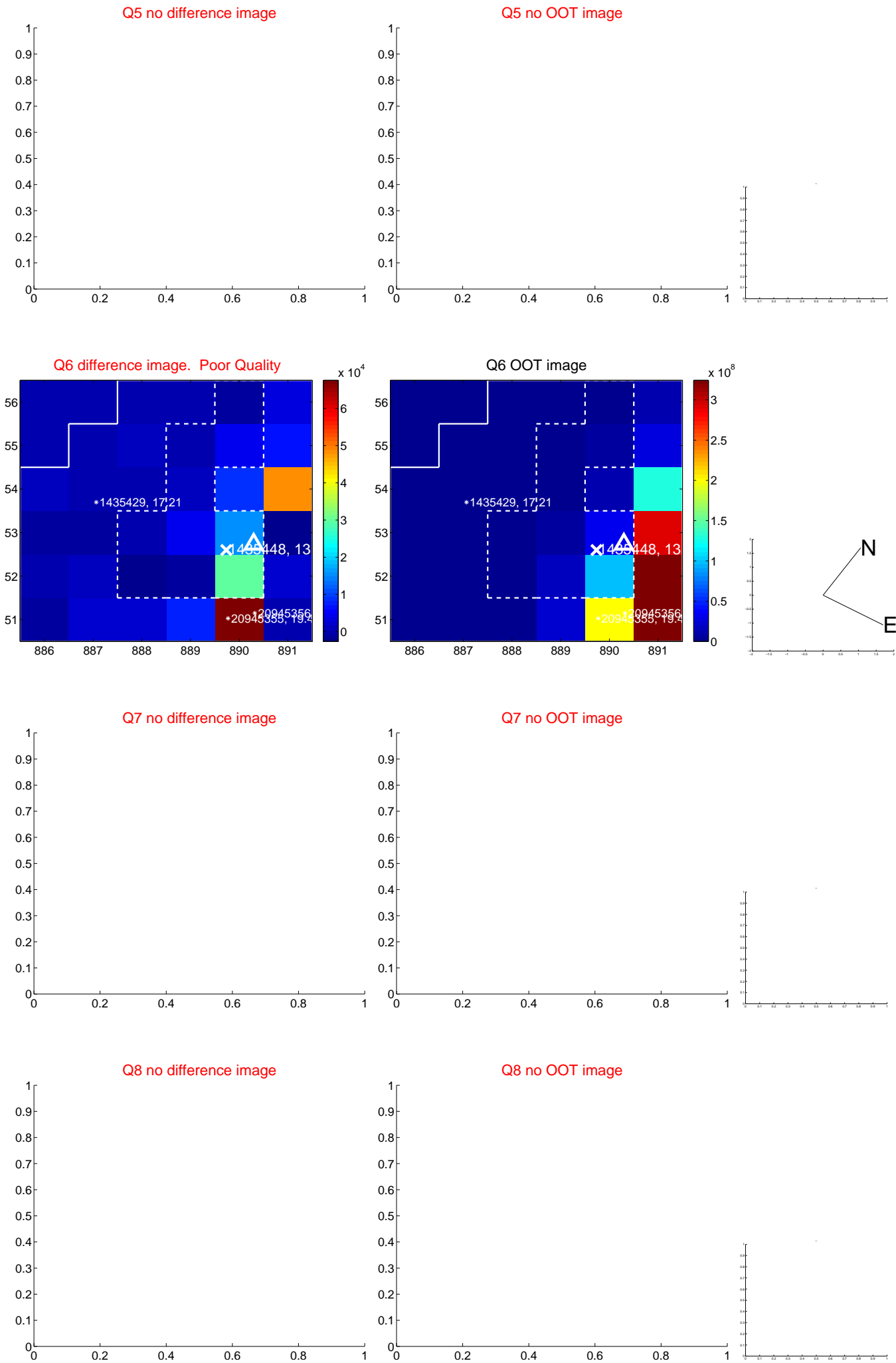


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

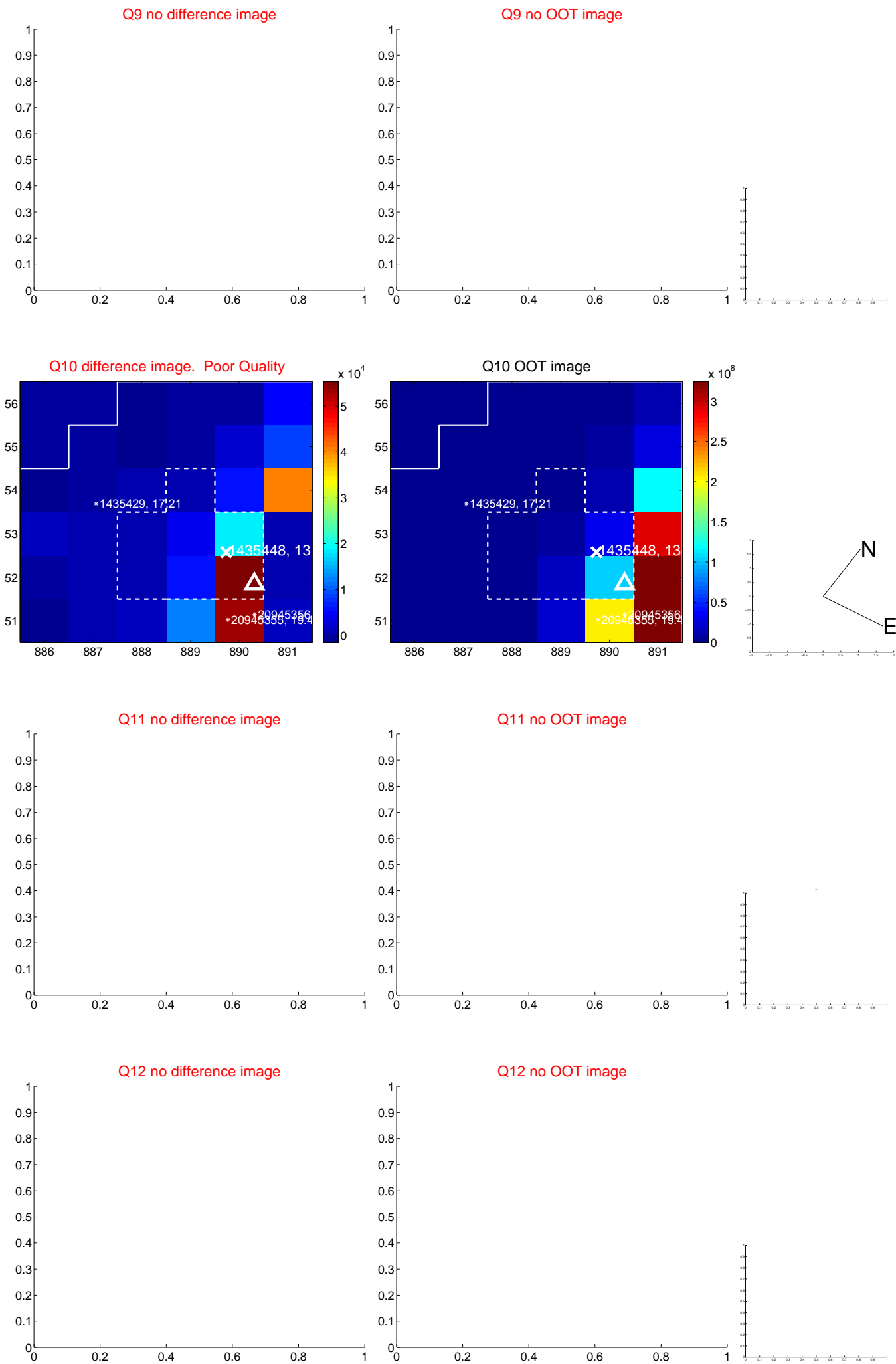
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



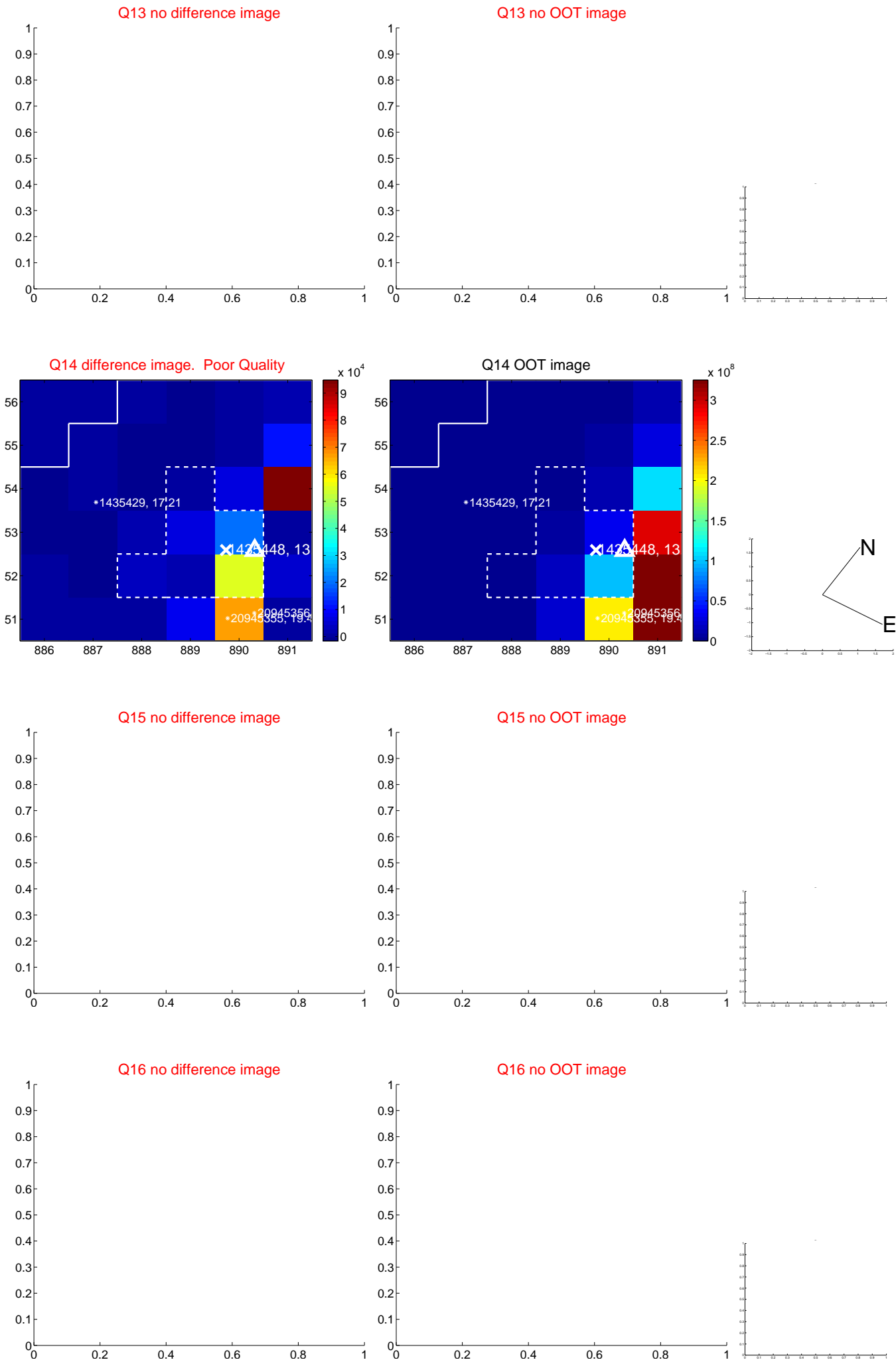
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



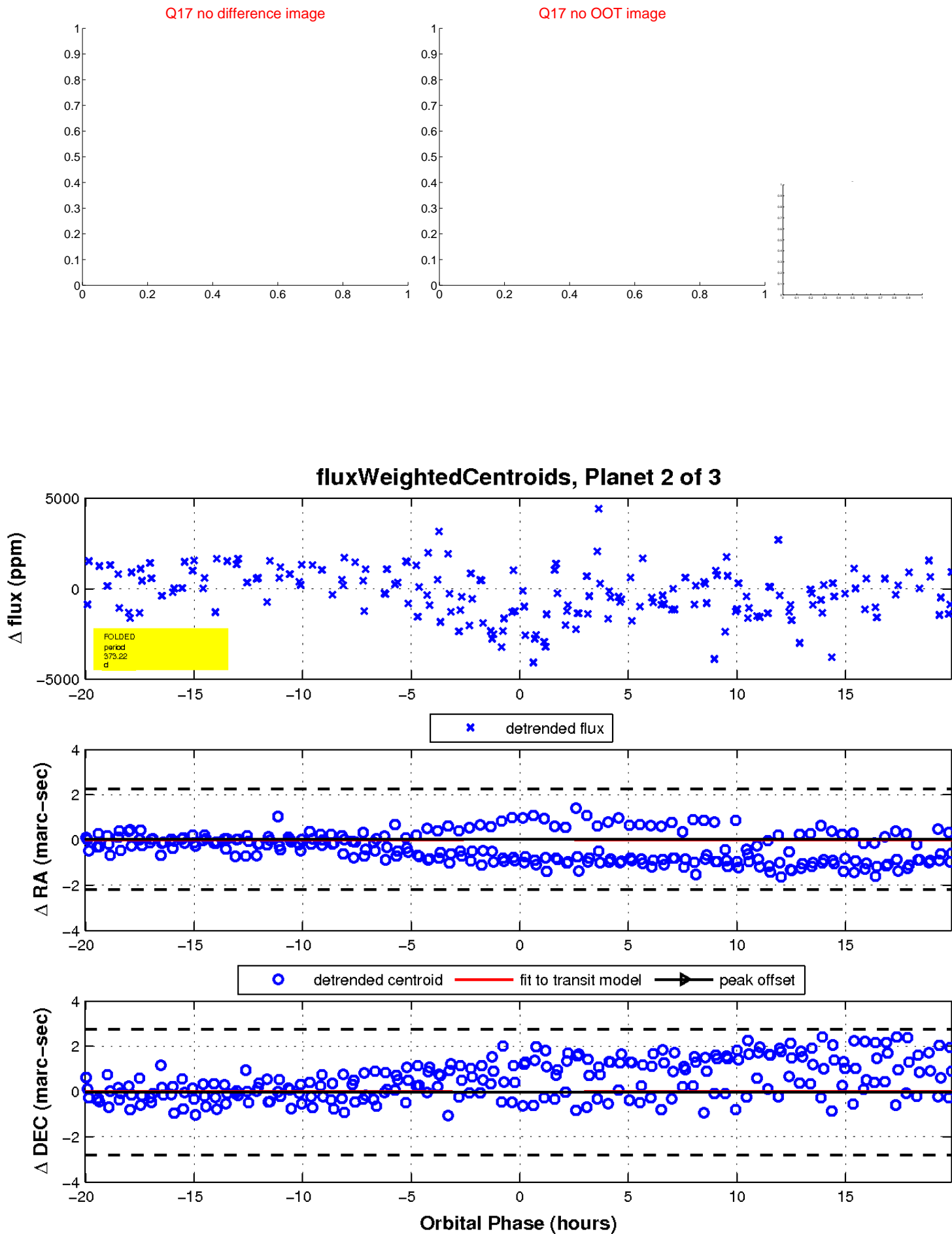
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

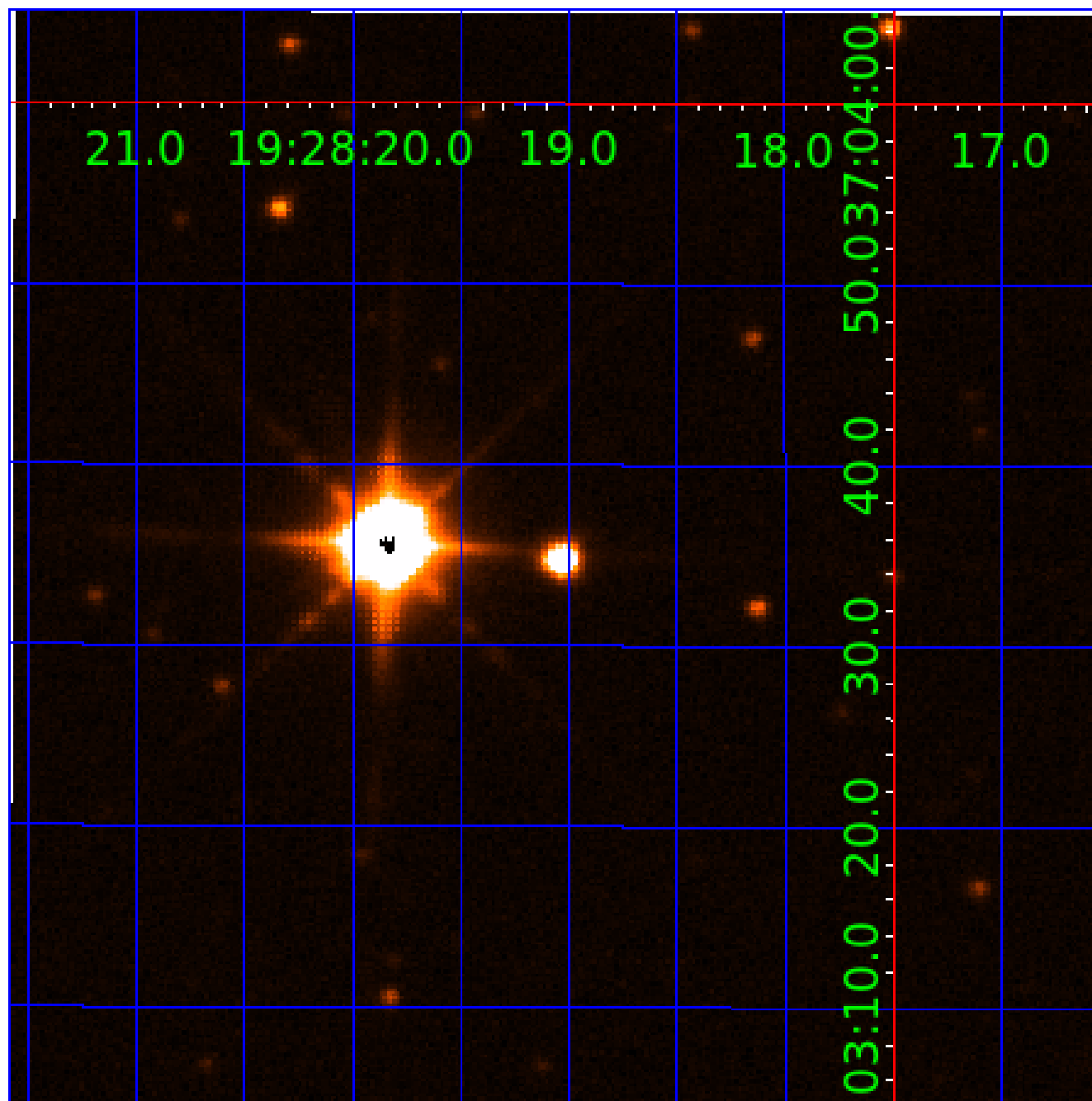


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 001435448

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})
001435448-01	OBS	No	305.082211	316.571444	733.8	2.766	8.2	6.4	1.43	6047	4.24	2.90
001435448-02	OBS	No	373.217120	239.173135	1813.4	6.699	12.1	8.5	1.43	6047	6.31	2.21
001435448-03	OBS	No	332.990551	279.887465	1950.9	3.142	12.4	10.2	1.43	6047	6.51	2.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
001435448-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
001435448-02	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
001435448-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST

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

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

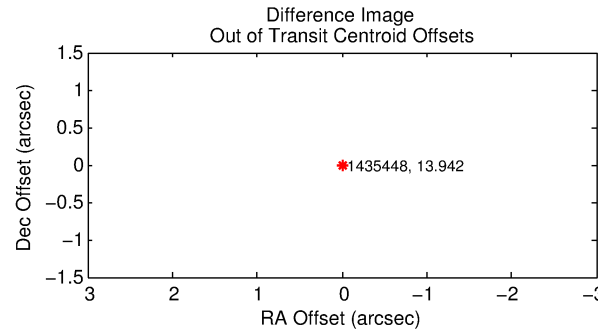
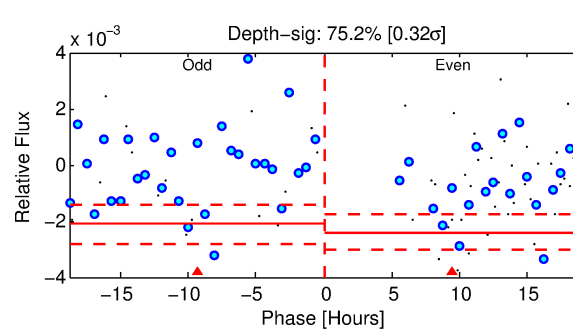
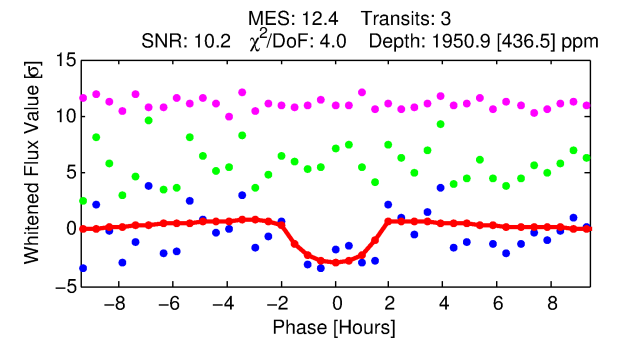
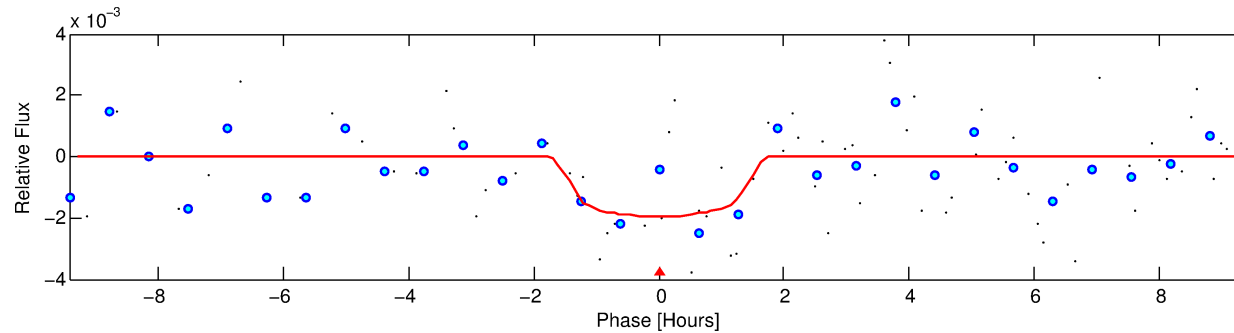
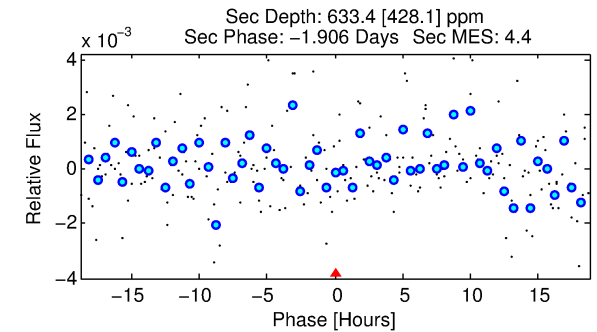
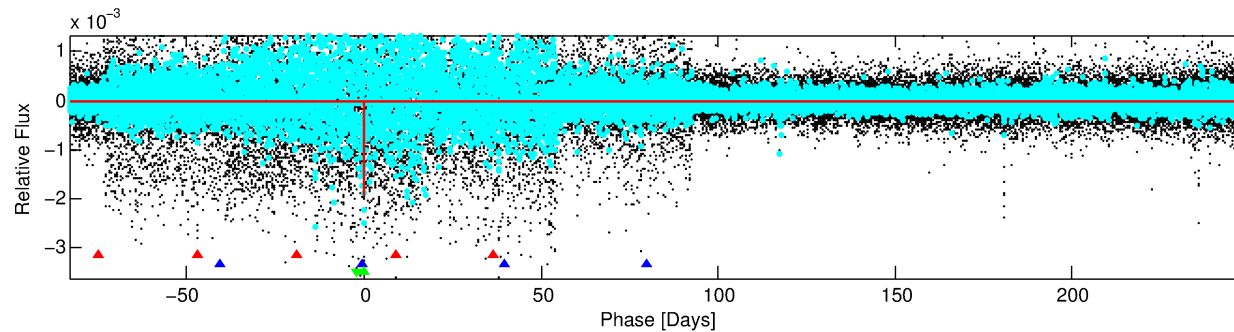
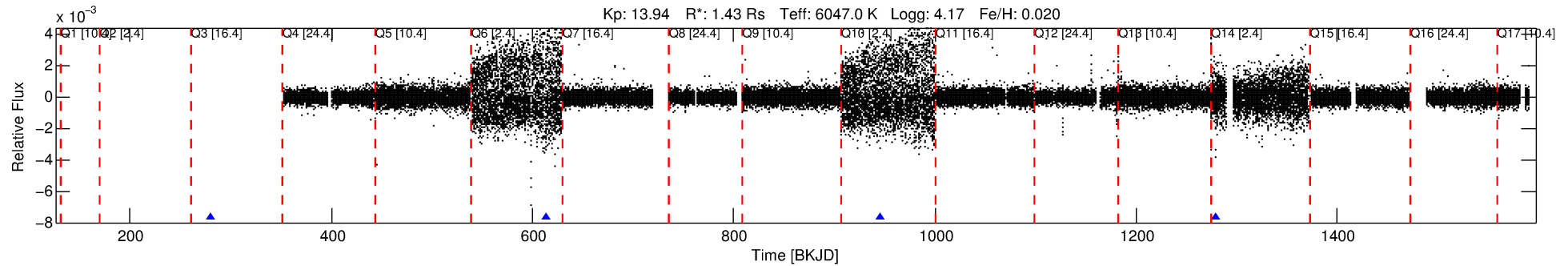
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 001435448-03

No Significant Match Found

DV One-Page Summary

KIC: 1435448 Candidate: 3 of 3 Period: 332.991 d



DV Fit Results:

Period = 332.99055 [0.01128] d
Epoch = 279.8875 [0.0261] BKJD
Rp/R* = 0.0419 [0.0983]
a/R* = 718.84 [7926.01]
b = 0.55 [14.34]
Seff = 2.58 [0.75]
Teq = 323 [23] K
Rp = 6.51 [15.34] Re
a = 0.9717 [0.1722] AU
Ag = 7765.32 [36931.09] [0.21σ]
Teffp = 4689 [5565] K [0.78σ]

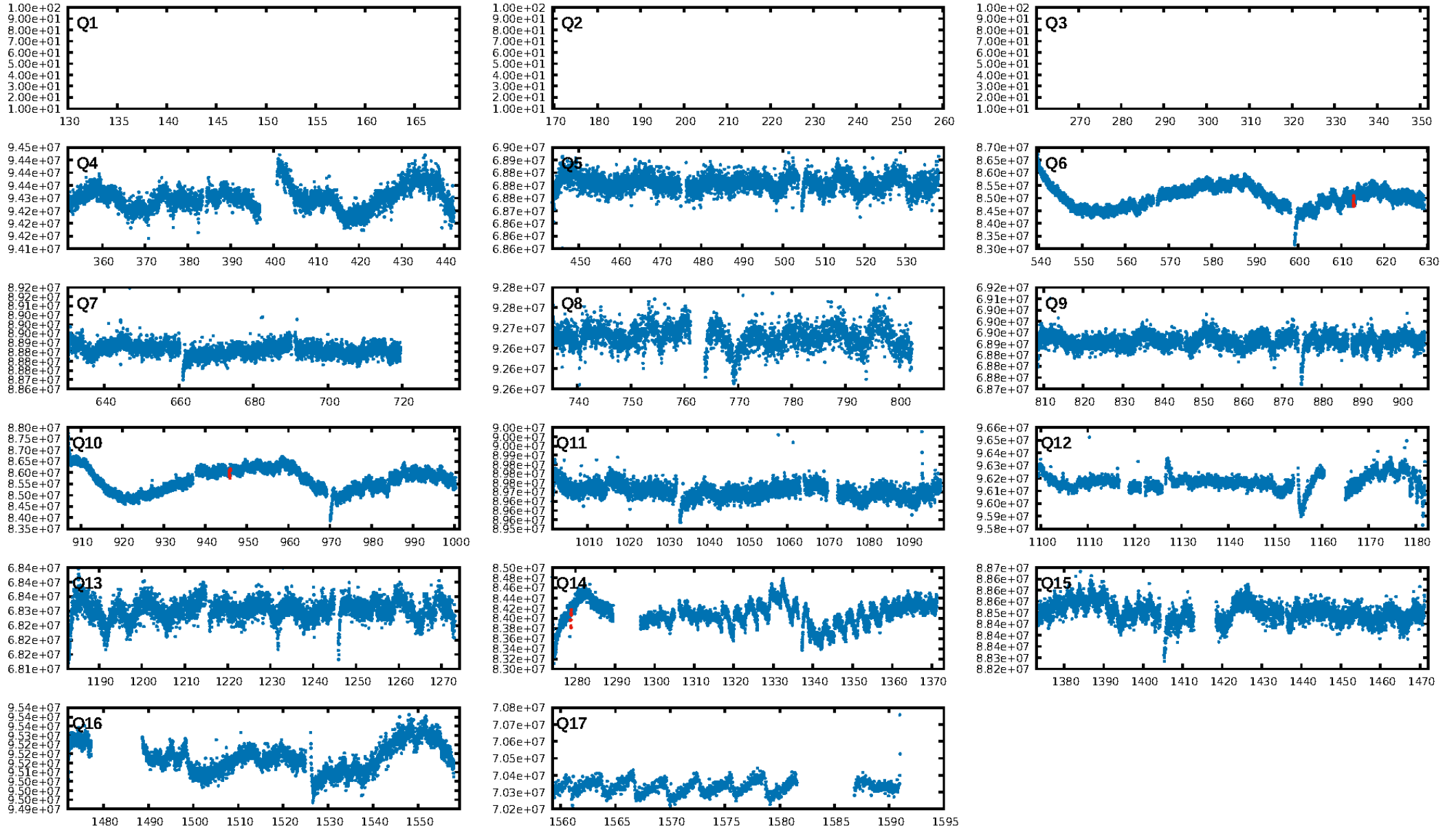
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [160.01σ]
LongPeriod-sig: 100.0% [130.48σ]
ModelChiSquare2-sig: 71.6%
ModelChiSquareGof-sig: 5.0%
Bootstrap-pfa: 5.13e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.02391
Centroid-sig: 0.2%
Centroid-so: 3.627 arcsec [25.34σ]
OotOffset-rm: N/A
KicOffset-rm: 2.459 arcsec [3.94σ]
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 2/0/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [2/2]

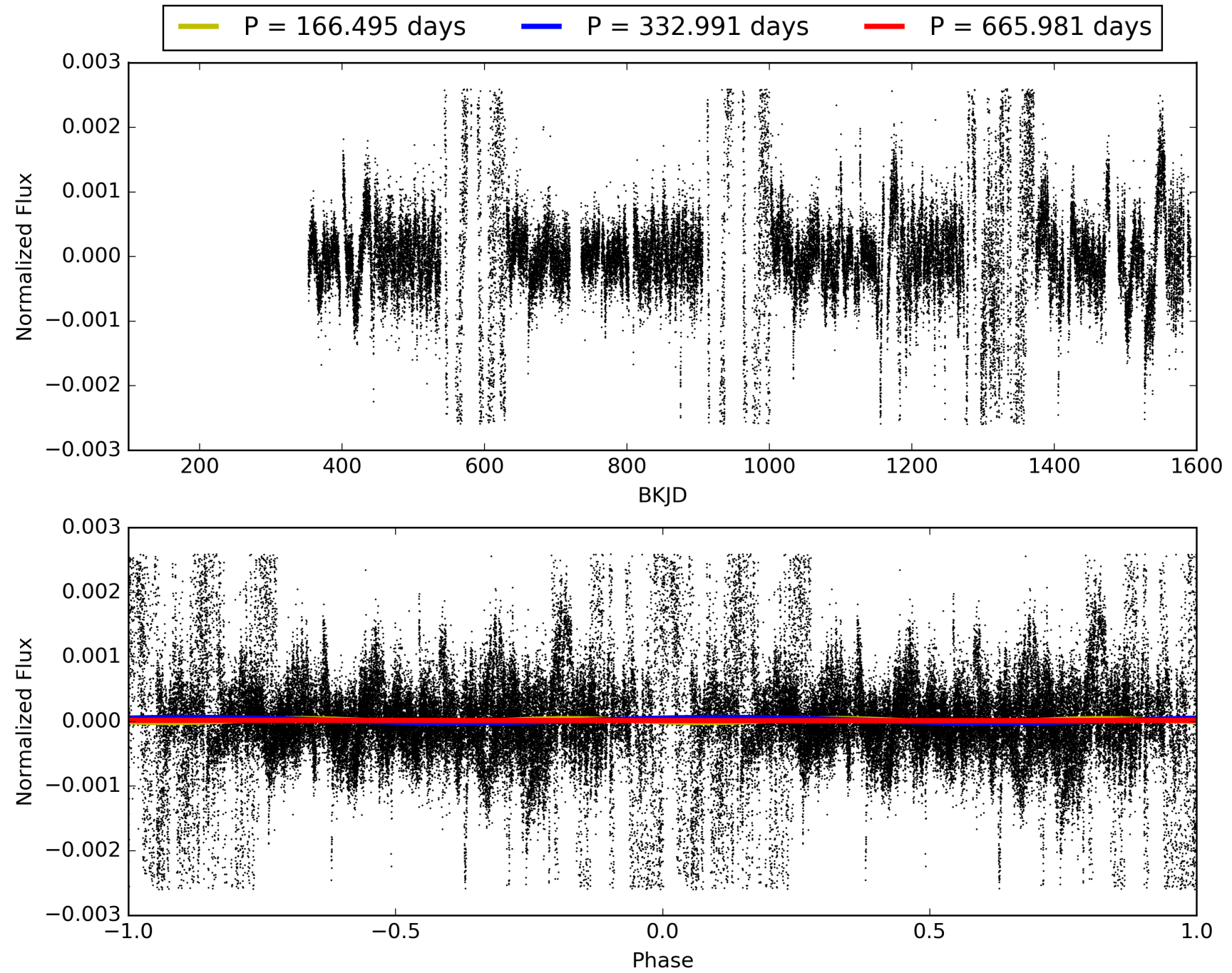
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 12:05:39 Z

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

TCE 001435448-03, PDC Light Curves

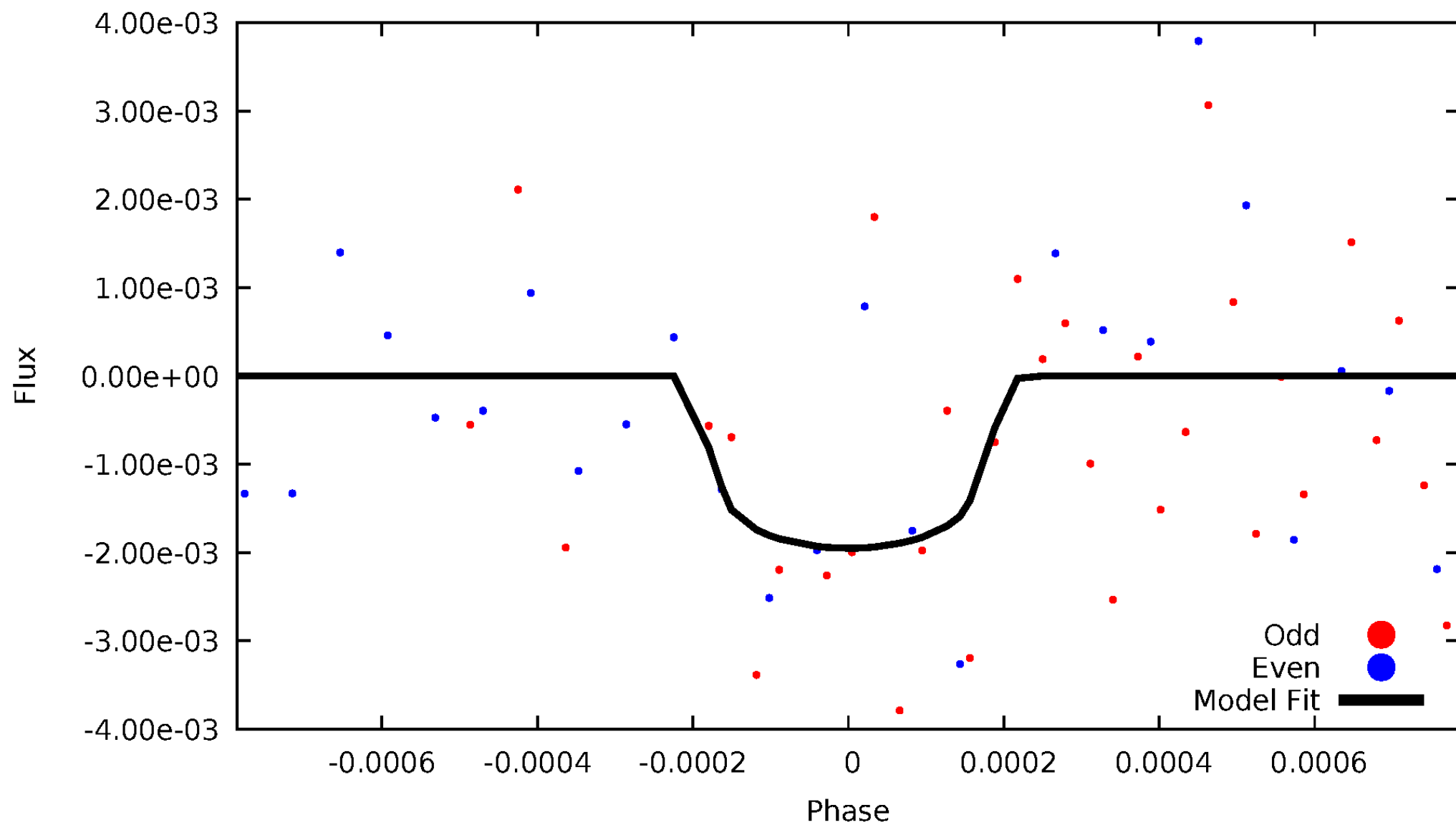


TCE 001435448-03



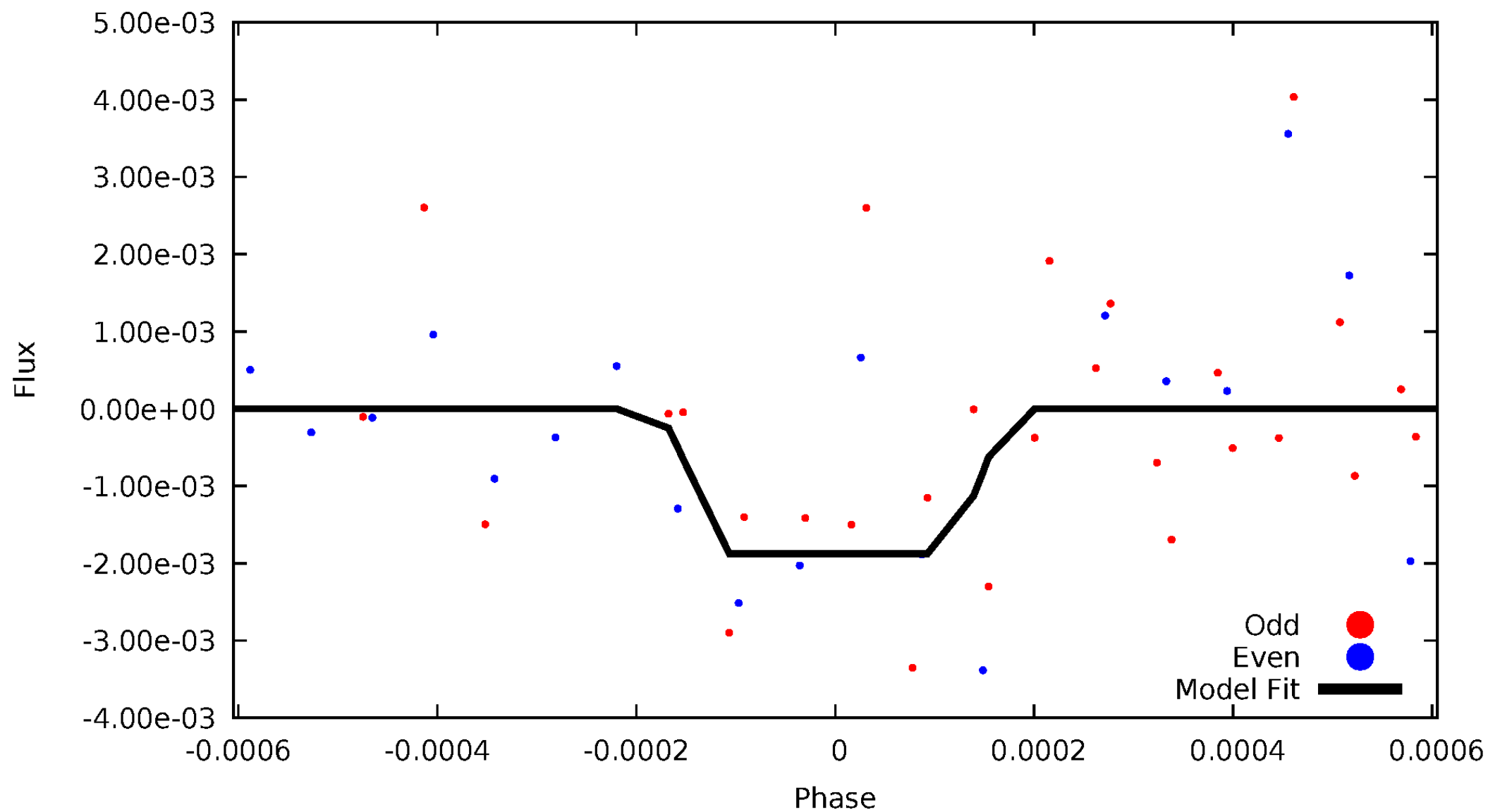
DV Odd/Even

TCE 001435448-03



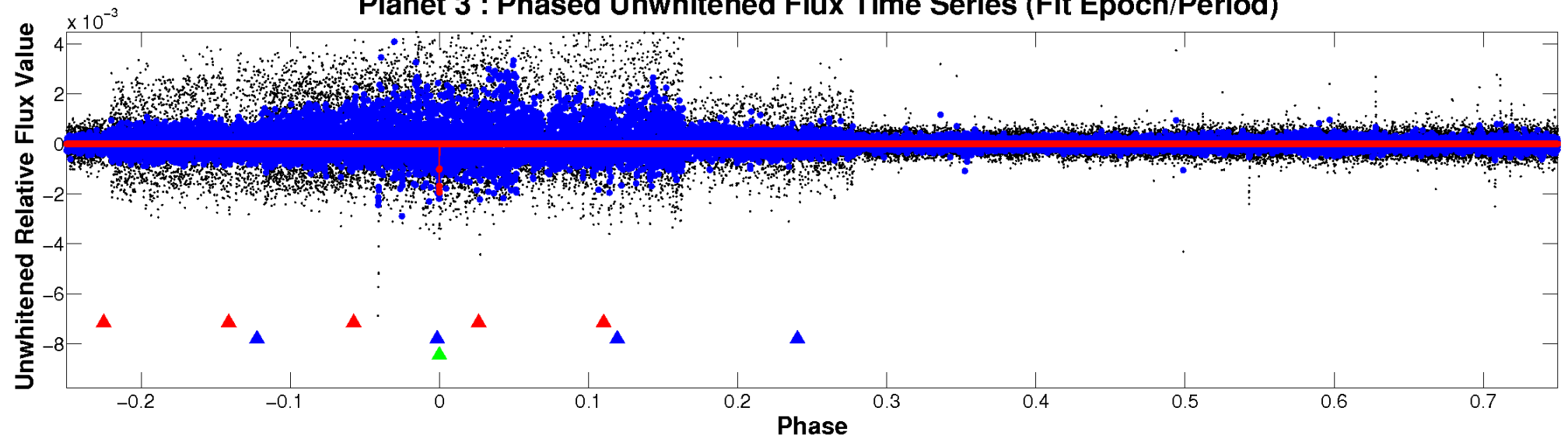
ALT Odd/Even

TCE 001435448-03

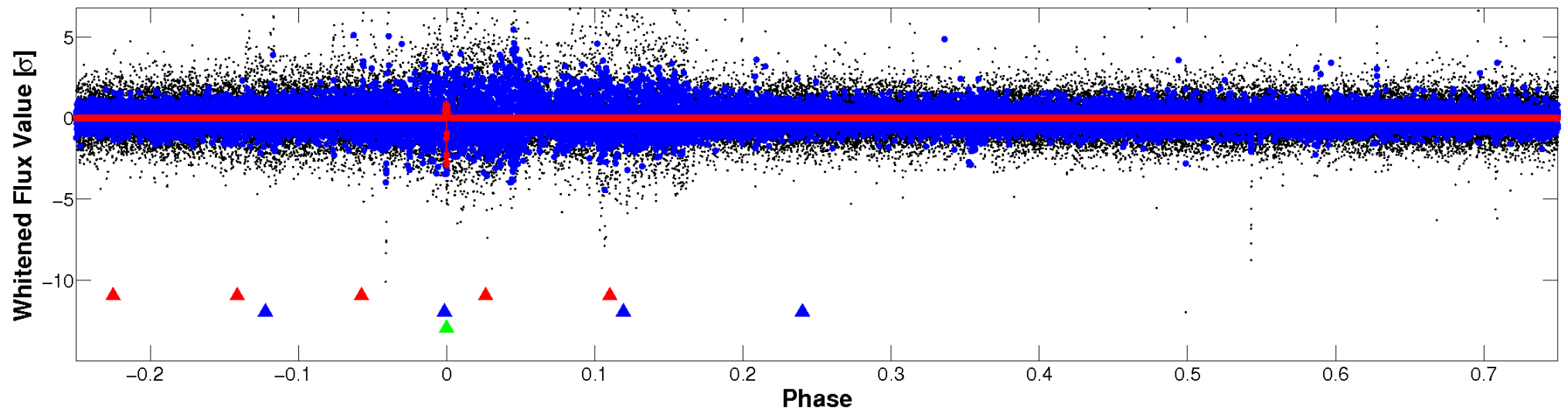


Non-Whitened Vs. Whitened Light Curve

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

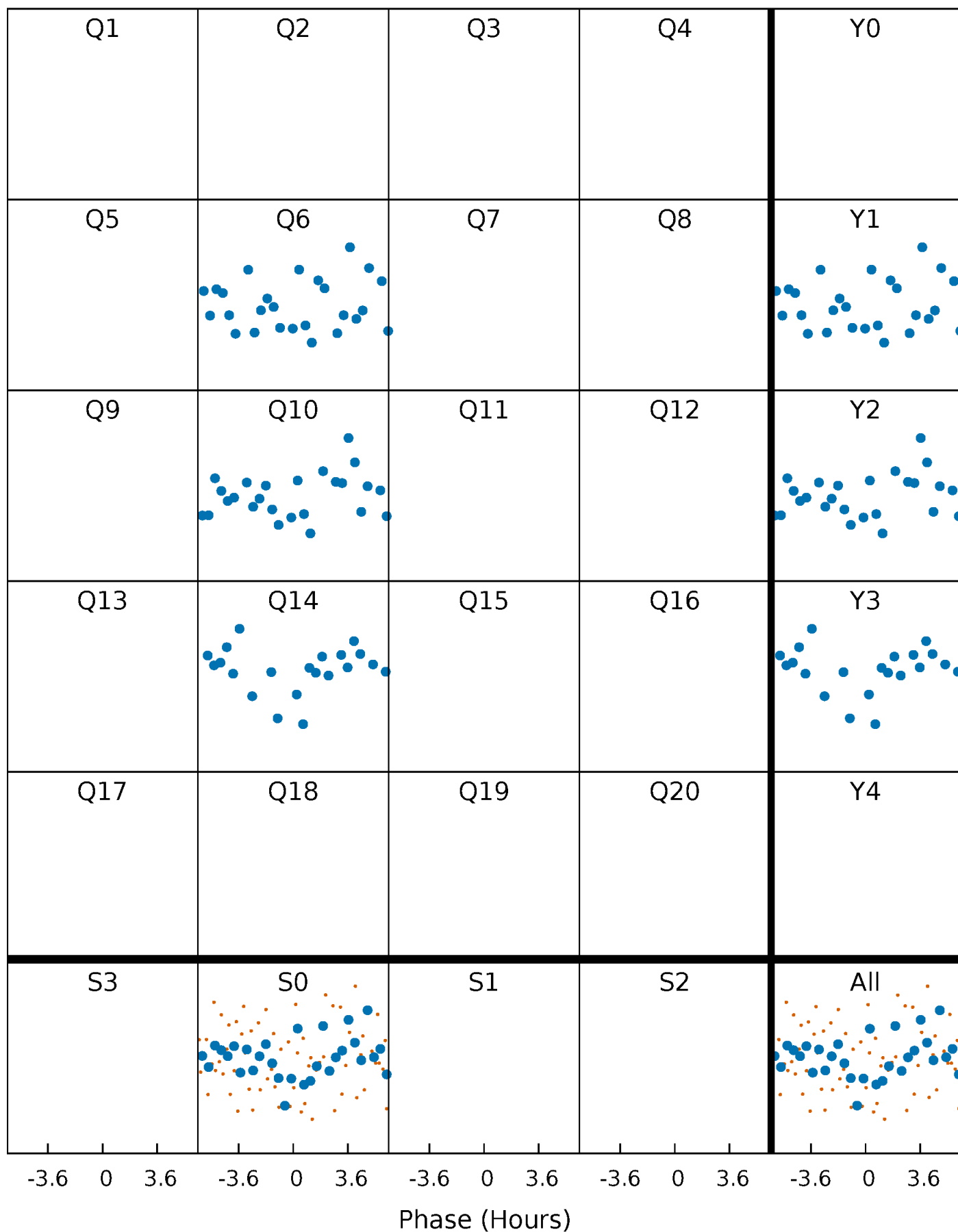


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



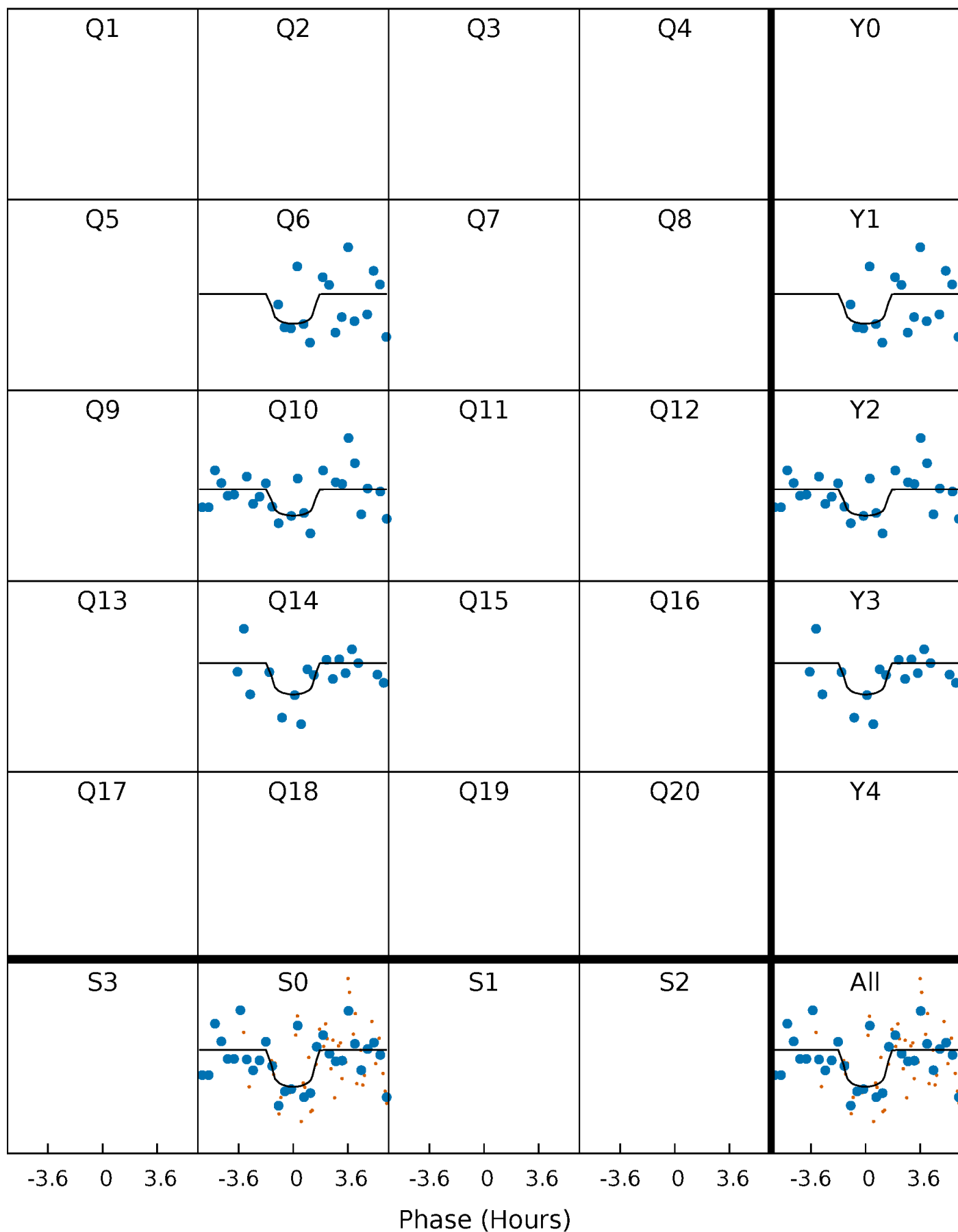
PDC Quarter-Phased Transit Curves

TCE 001435448-03 P=332.990551 Days $T_0=279.887465$ (BKJD)



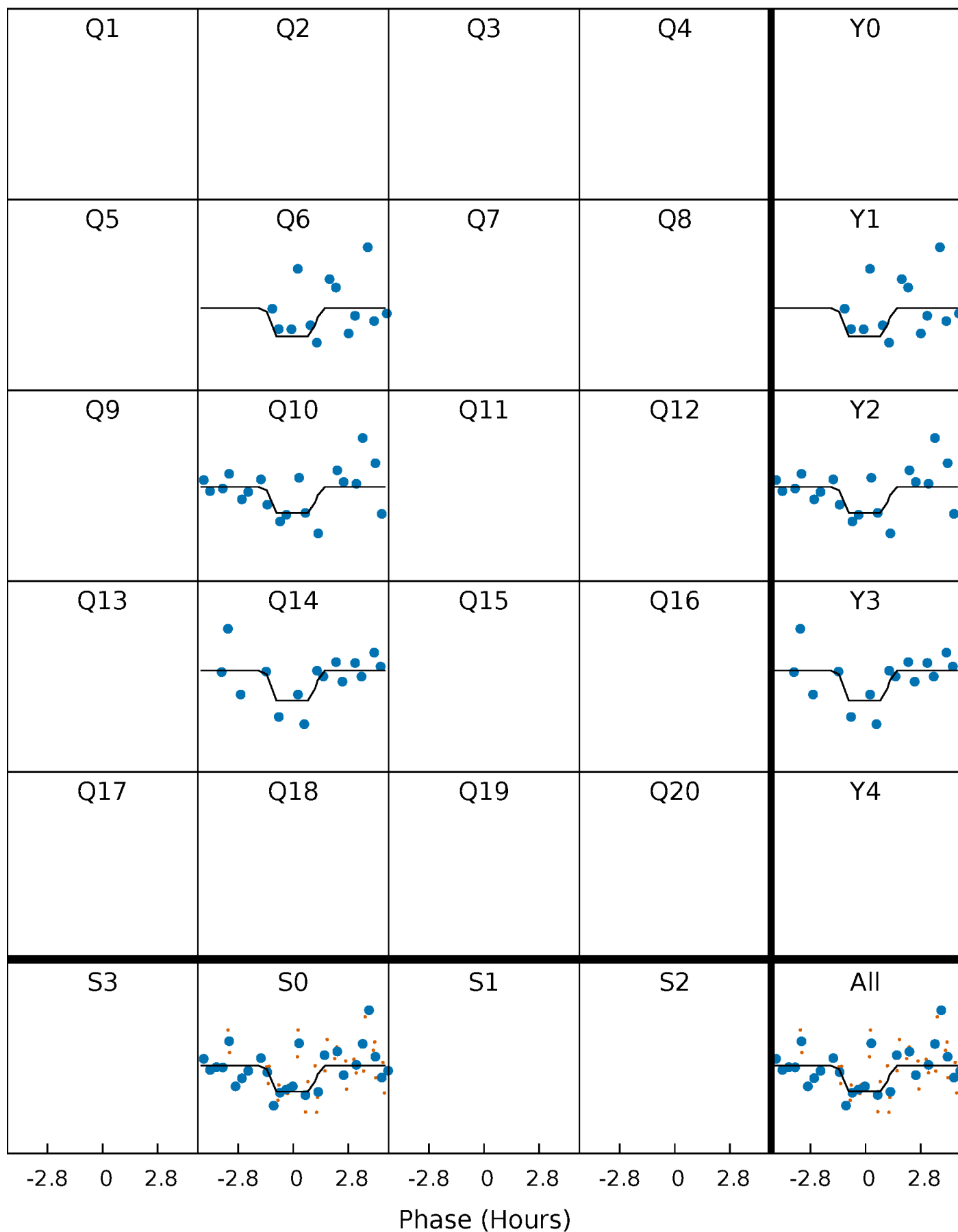
DV Quarter-Phased Transit Curves

TCE 001435448-03 P=332.990551 Days $T_0=279.887465$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

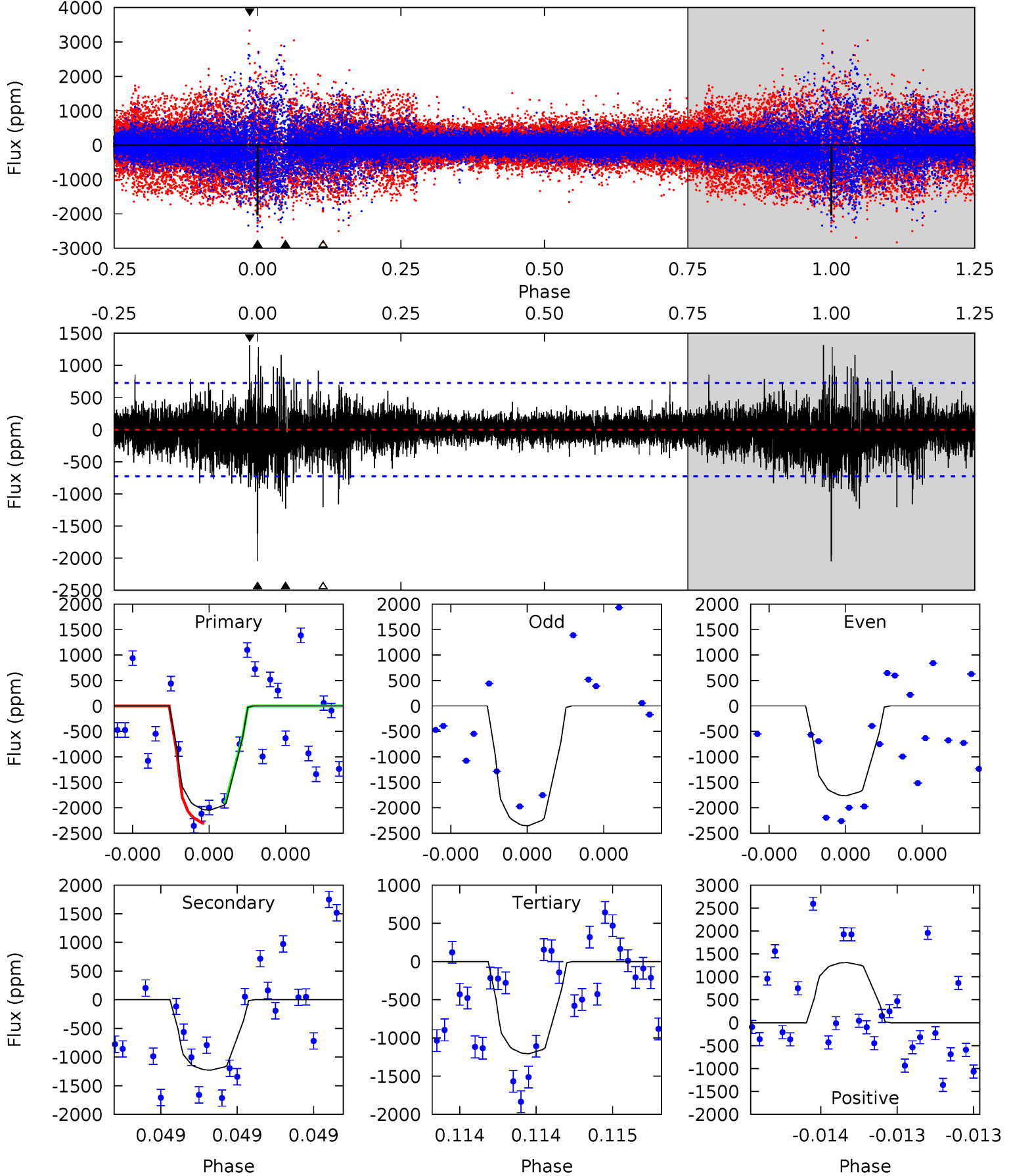
TCE 001435448-03 P=332.988179 Days $T_0=279.890667$ (BKJD)



DV Model-Shift Uniqueness Test

001435448-03, P = 332.990551 Days, E = 279.887465 Days

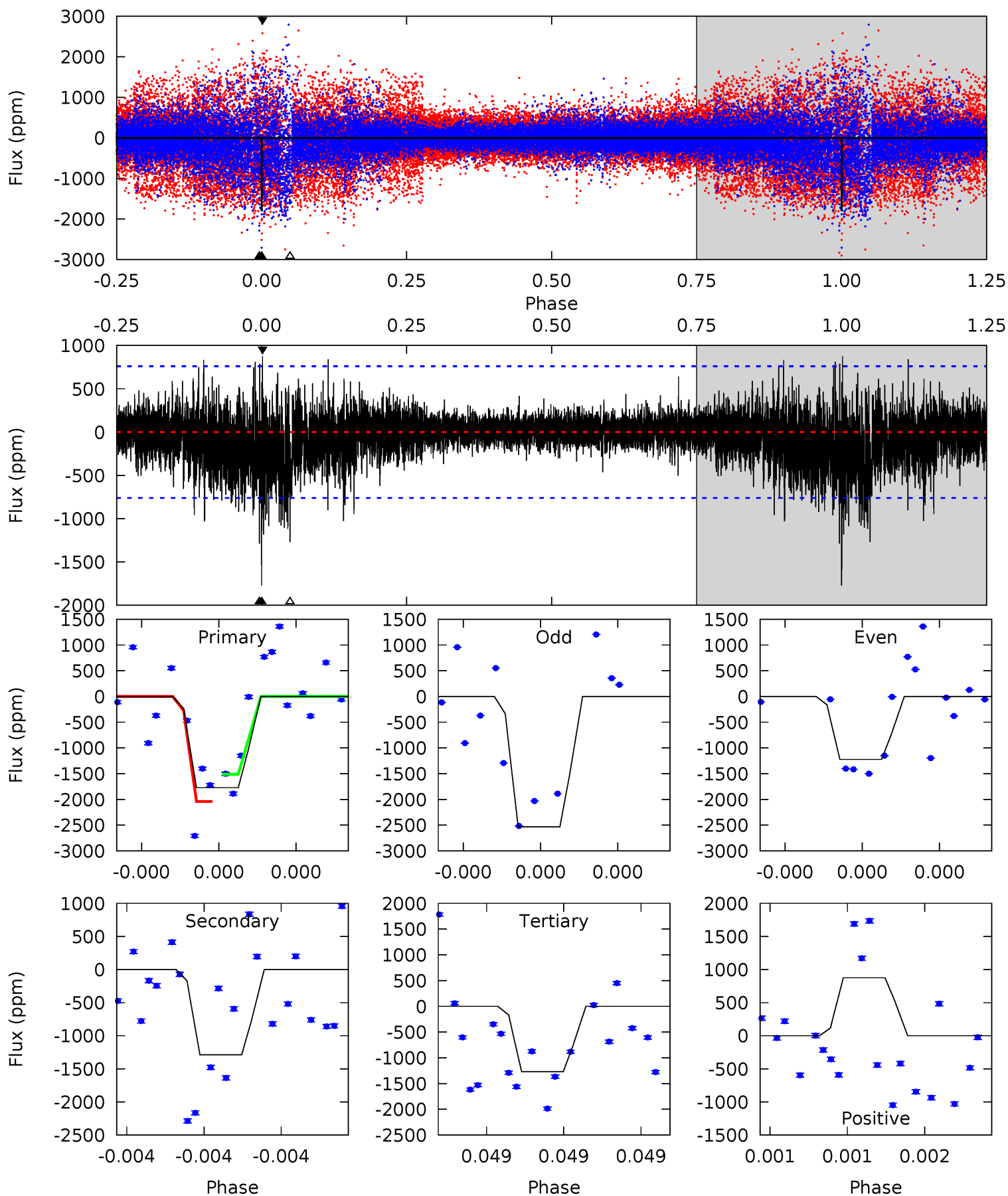
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.8	9.47	9.30	10.1	5.60	3.52	1.35	6.47	5.65	0.17	-0.65	2.32	1.08	0.39	1.56



Alt Model-Shift Uniqueness Test

001435448-03, P = 332.988179 Days, E = 279.890667 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	9.53	9.39	6.48	5.63	3.56	1.33	3.73	6.64	0.15	3.05	4.79	0.86	0.33	1.76



Stellar Parameters For KIC 001435448

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6047^{+82}_{-82}	$4.173^{+0.168}_{-0.112}$	$0.020^{+0.150}_{-0.150}$	$1.425^{+0.234}_{-0.260}$	$1.102^{+0.108}_{-0.081}$	$0.536^{+0.447}_{-0.178}$
	+1%/-1%	+4%/-3%	+750%/-750%	+16%/-18%	+10%/-7%	+83%/-33%
Source	SPE68	SPE68	SPE68	DSEP		

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

Secondary Eclipse Parameters for KIC 001435448-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1228 ± 130	$13.10^{+11.39}_{-8.98}$	449^{+24}_{-26}	4147^{+2582}_{-779}	3616^{+32400}_{-2573}
Alt.	-1287 ± 135	$13.10^{+11.61}_{-8.51}$	449^{+23}_{-25}	4187^{+2410}_{-821}	3849^{+26934}_{-2777}

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 $A_{obs} \gg 1.0$

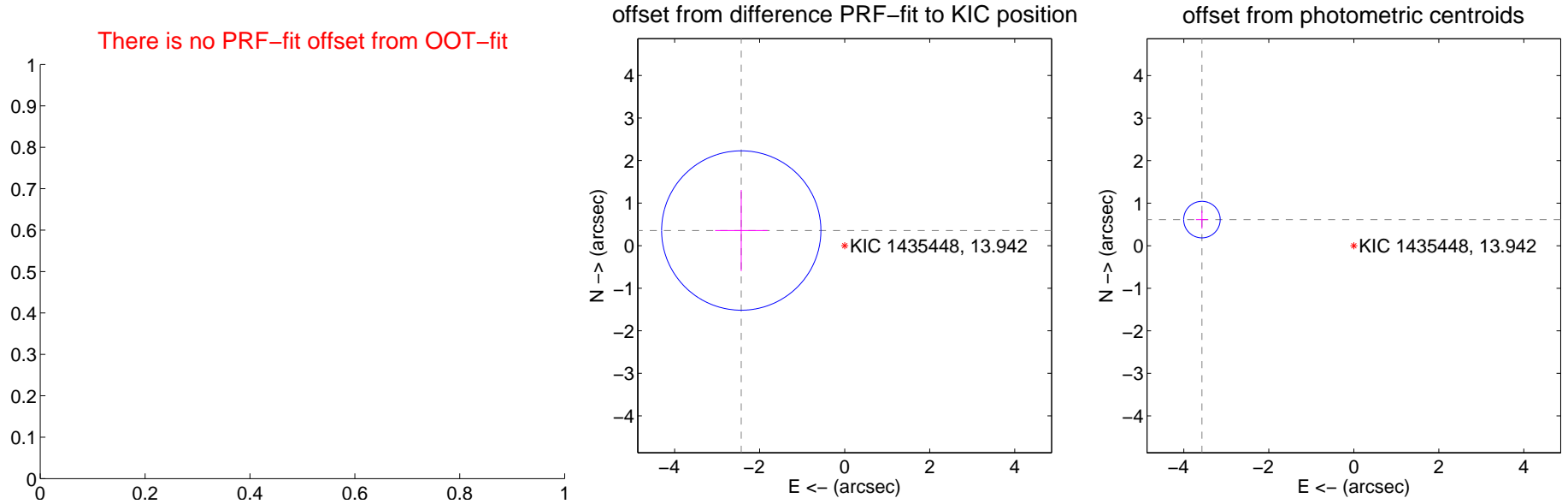
DV Centroid Data

Supplemental centroid analysis for 001435448-03. Kepler magnitude: 13.94. Transit SNR 10.15

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	2.459 ± 0.625	3.94	2.433 ± 0.616	0.356 ± 0.954
photometric centroid source offset	3.63 ± 0.14	25.34	3.57 ± 0.14	0.61 ± 0.21

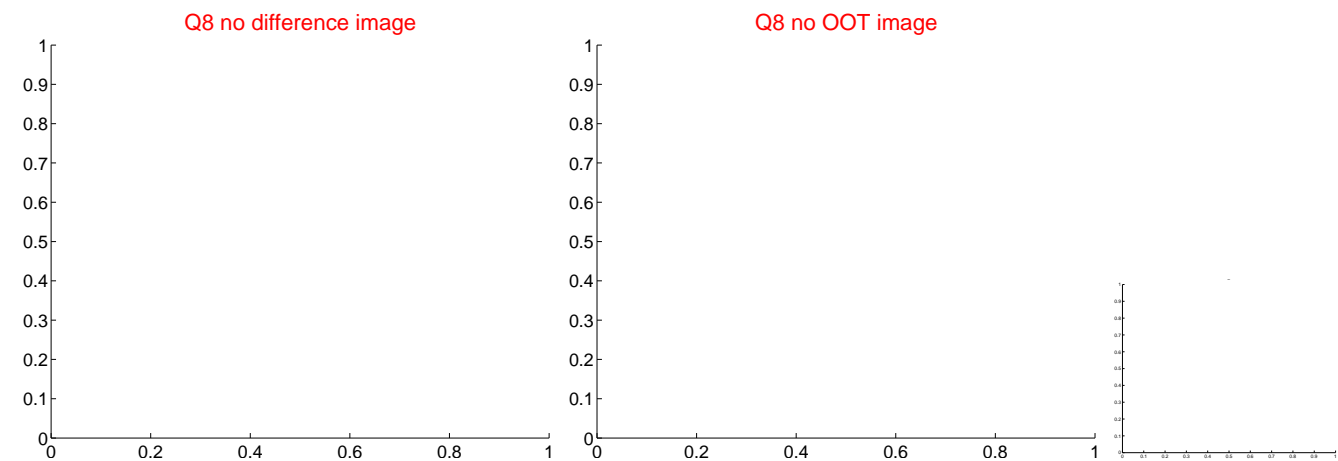
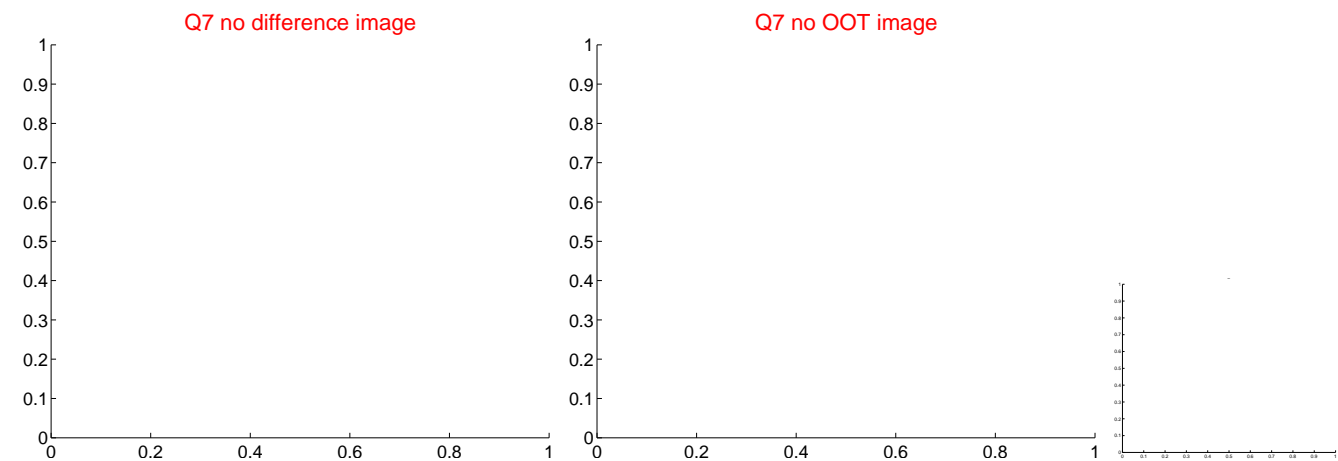
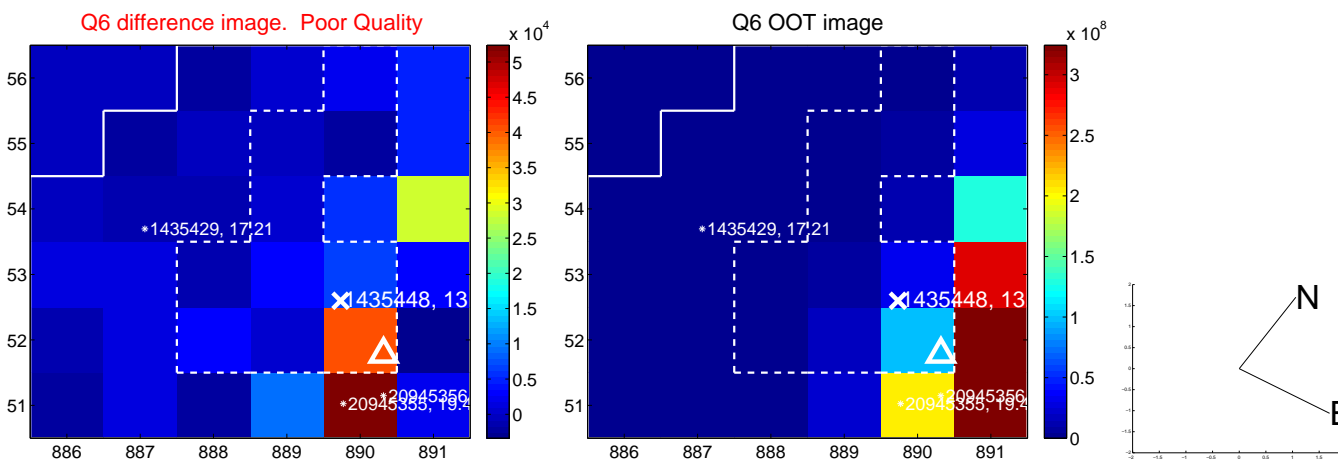
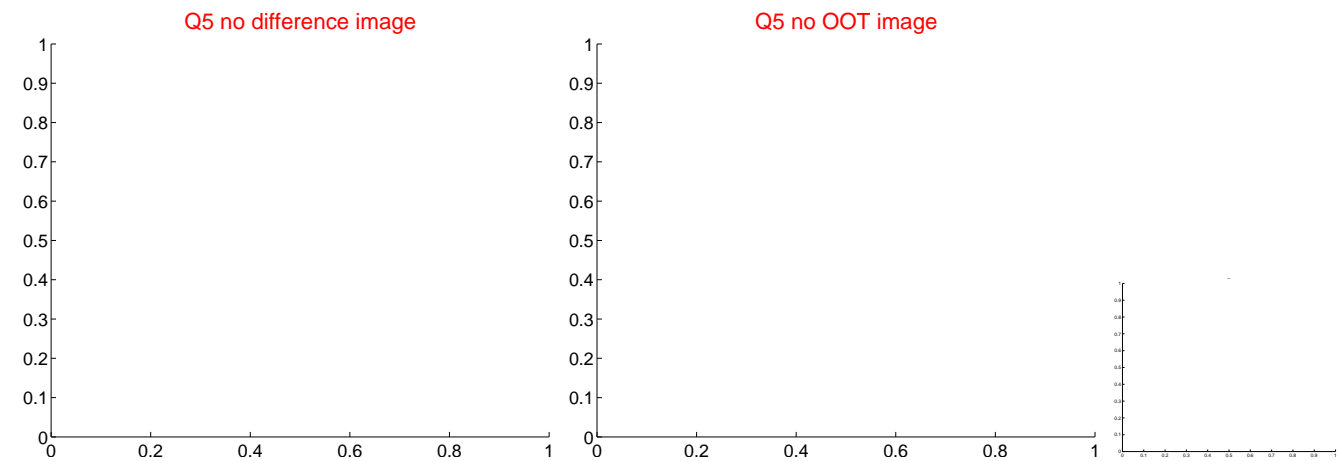


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

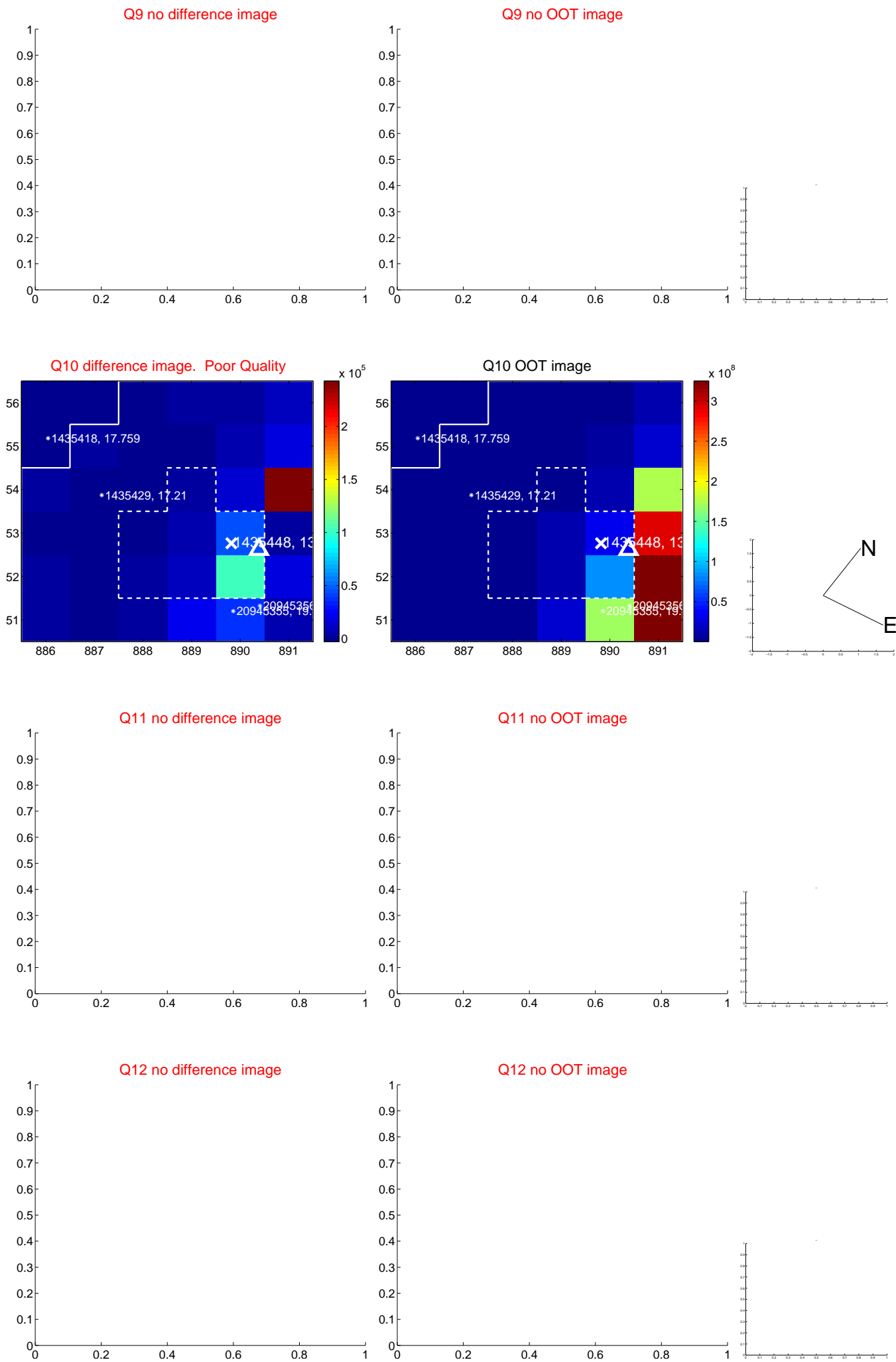
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



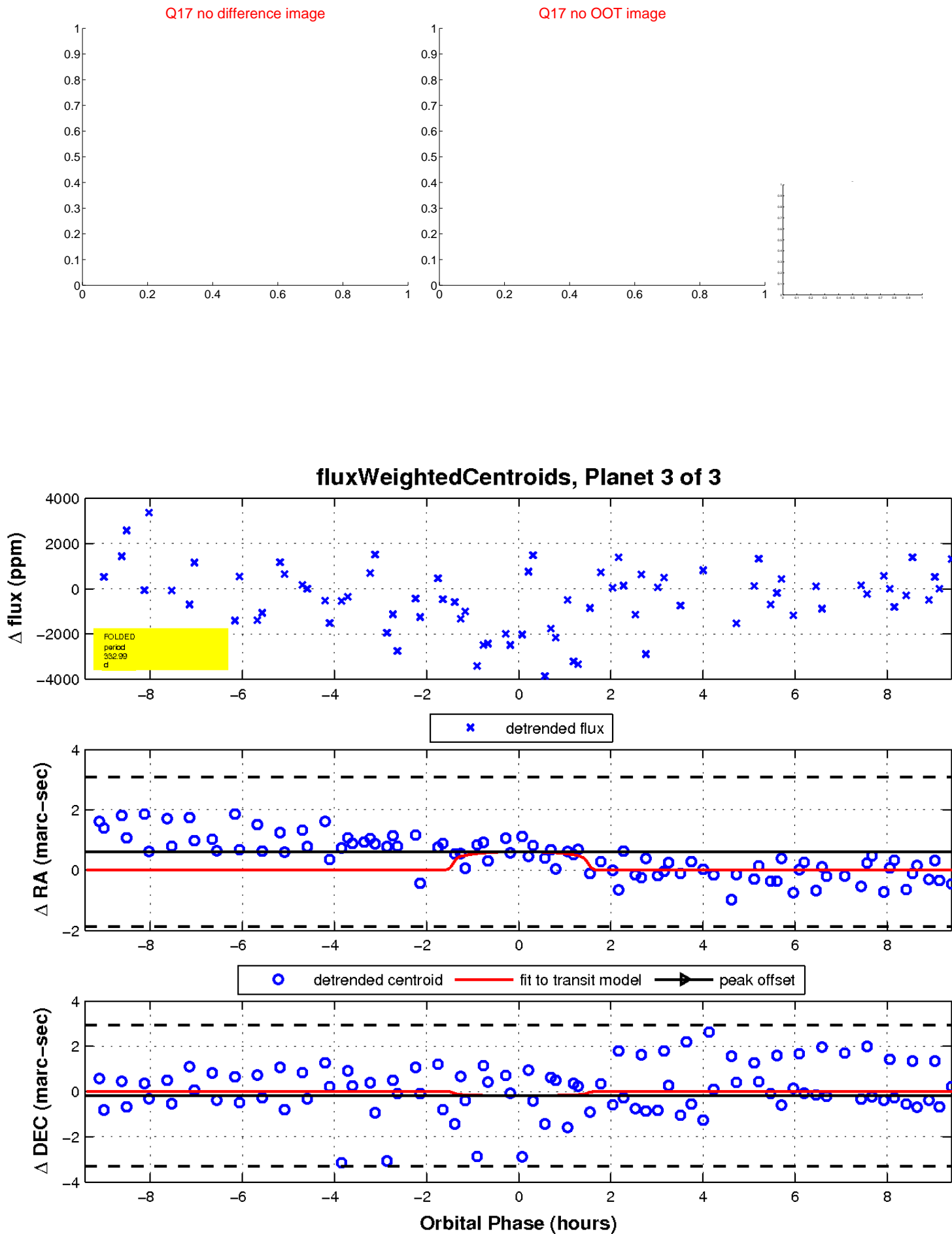
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

