

KIC 005897645

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})
005897645-01	OBS	No	1.825014	132.853045	7.6	6.206	7.6	4.4	1.91	7068	0.54	7264.95
005897645-02	OBS	No	192.734082	176.353715	121.4	15.502	8.6	6.7	1.91	7068	2.27	14.55
005897645-03	OBS	No	25.707032	150.777588	48.6	12.023	7.5	6.9	1.91	7068	1.46	213.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005897645-01	OBS	FP	0.00	1	0	0	0	LPP_DV
005897645-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
005897645-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—HALO_GHOST

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

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

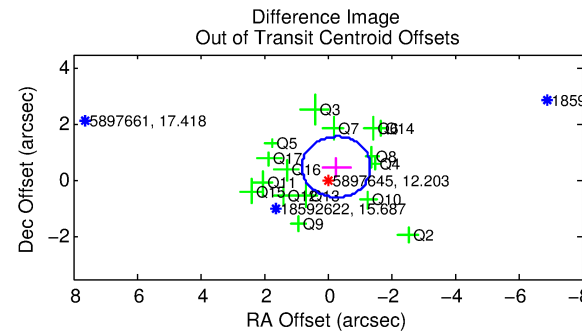
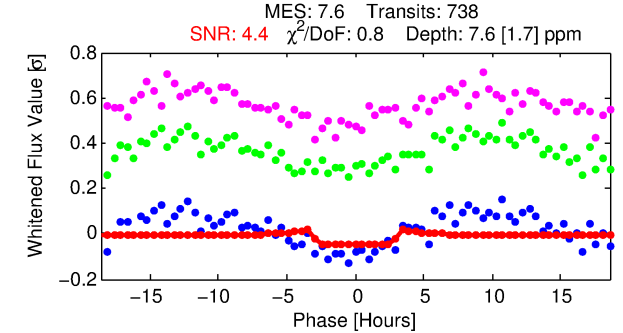
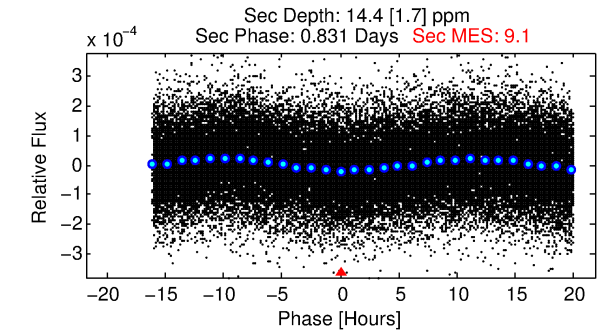
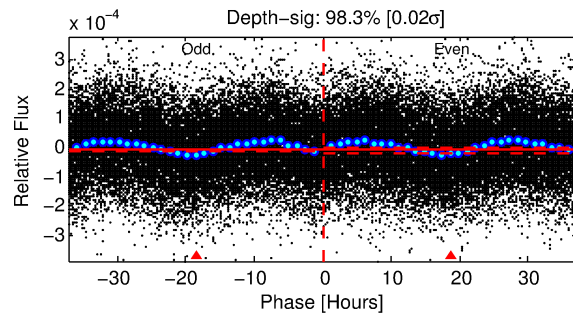
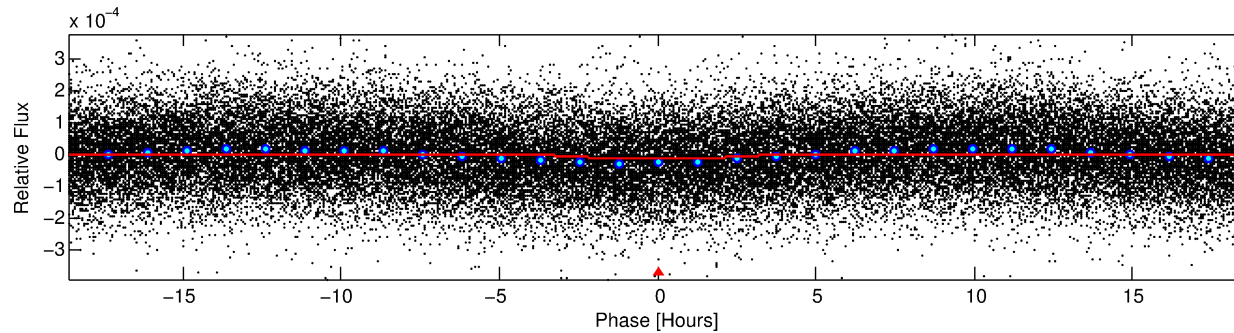
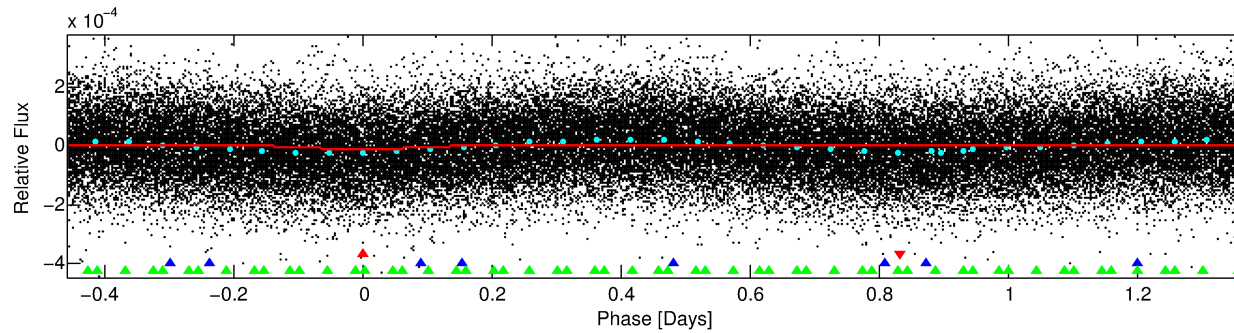
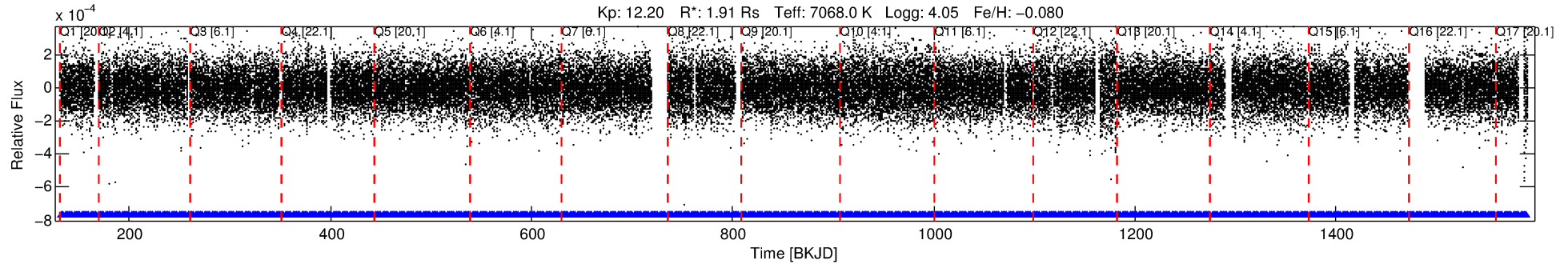
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005897645-01

No Significant Match Found

DV One-Page Summary

KIC: 5897645 Candidate: 1 of 3 Period: 1.825 d



DV Fit Results:

Period = 1.82501 [0.00004] d
Epoch = 132.8530 [0.0097] BKJD
Rp/R* = 0.0026 [0.0017]
a/R* = 2.27 [6.81]
b = 0.25 [13.74]
Seff = 7264.95 [2369.18]
Teq = 2354 [192] K
Rp = 0.53 [0.37] Re
a = 0.0335 [0.0065] AU
Ag = 31.25 [41.91] [0.72 σ]
Teffp = 8606 [2837] K [2.20 σ]

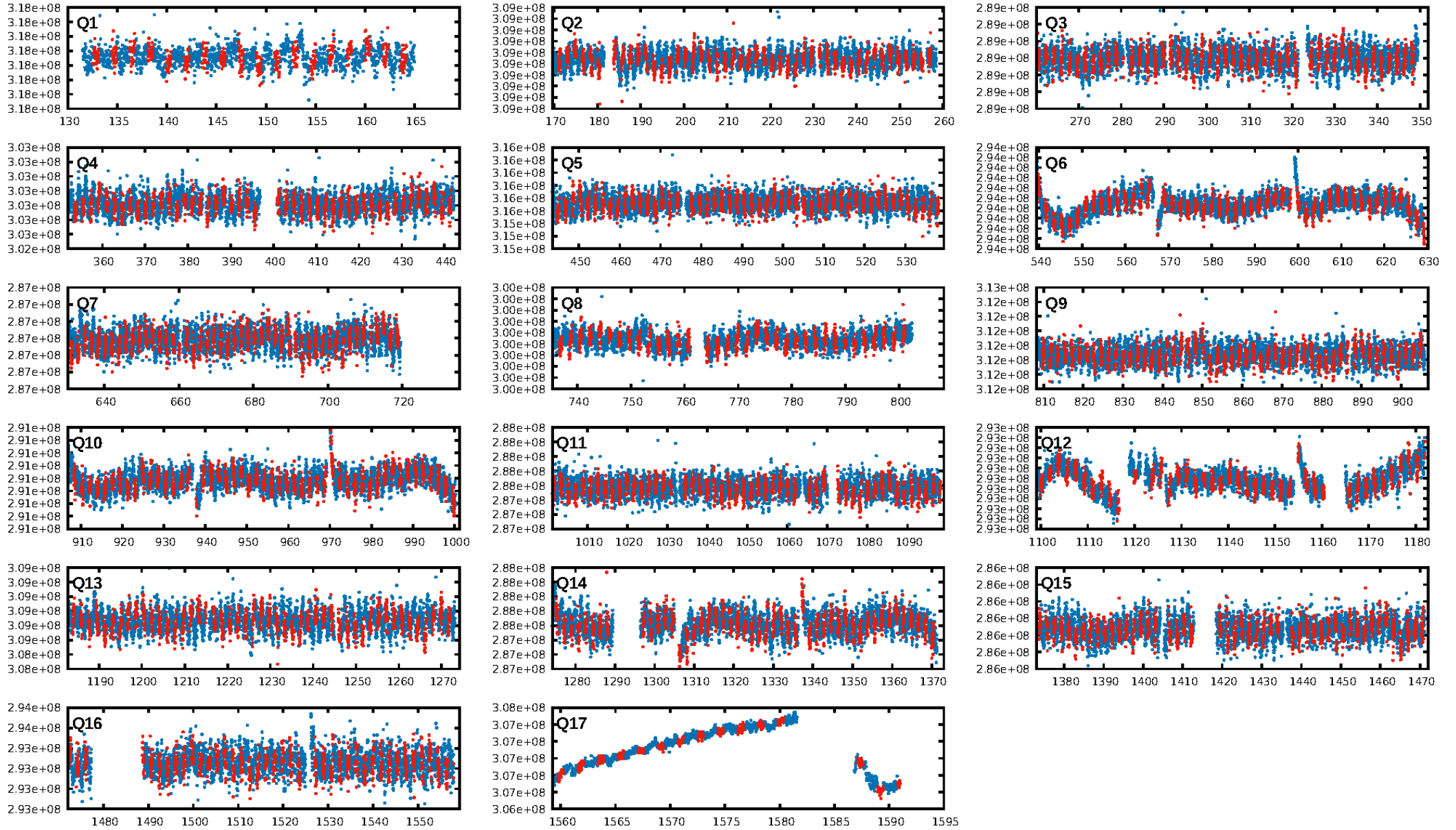
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [42.36 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.07e-10
RollingBand-fgt: 1.00 [705/705]
GhostDiagnostic-chr: 75.39
Centroid-sig: 0.4%
Centroid-so: 2.885 arcsec [1.65 σ]
OotOffset-rm: 0.558 arcsec [1.55 σ]
KicOffset-rm: 0.528 arcsec [1.45 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

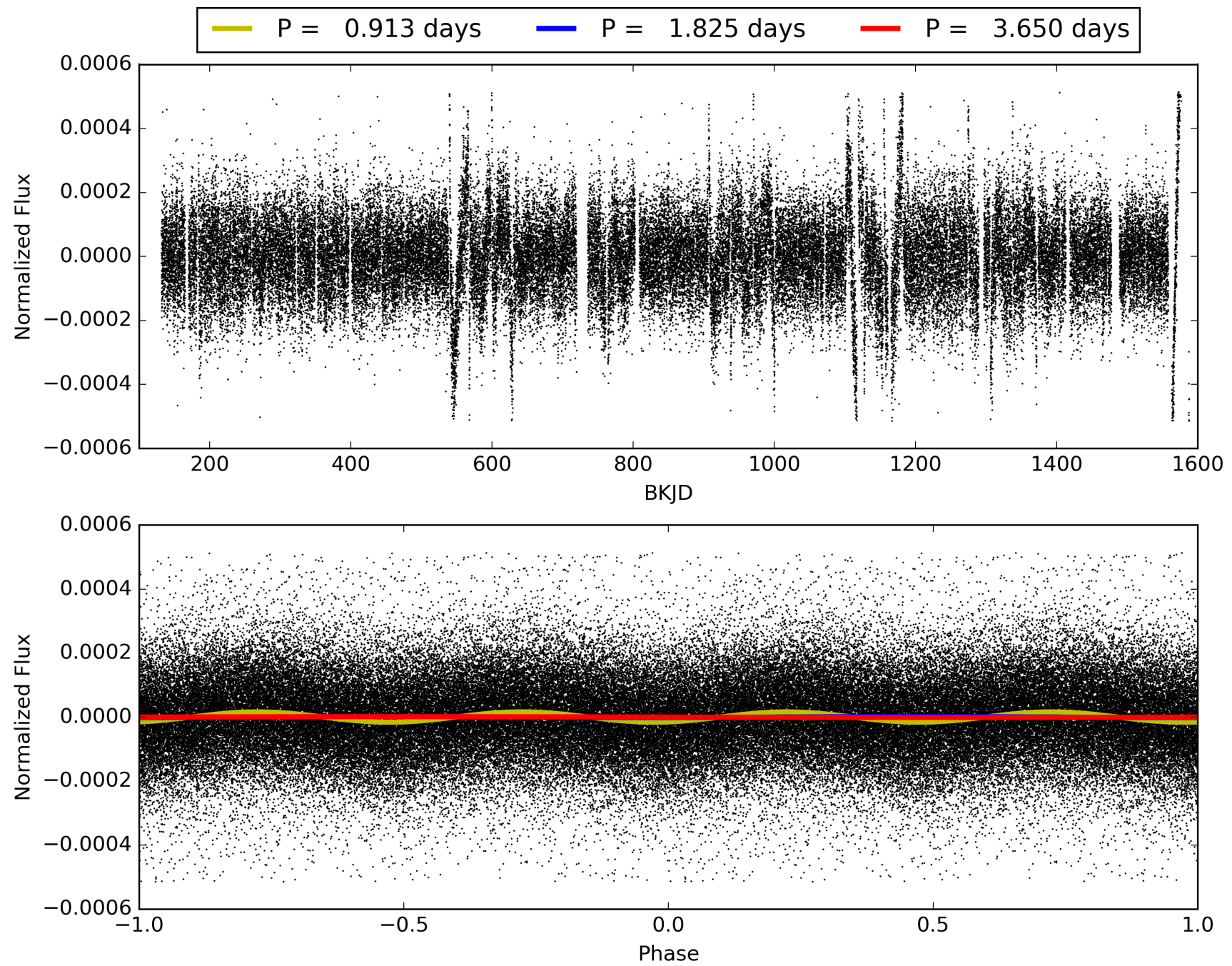
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:19:45 Z

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

TCE 005897645-01, PDC Light Curves

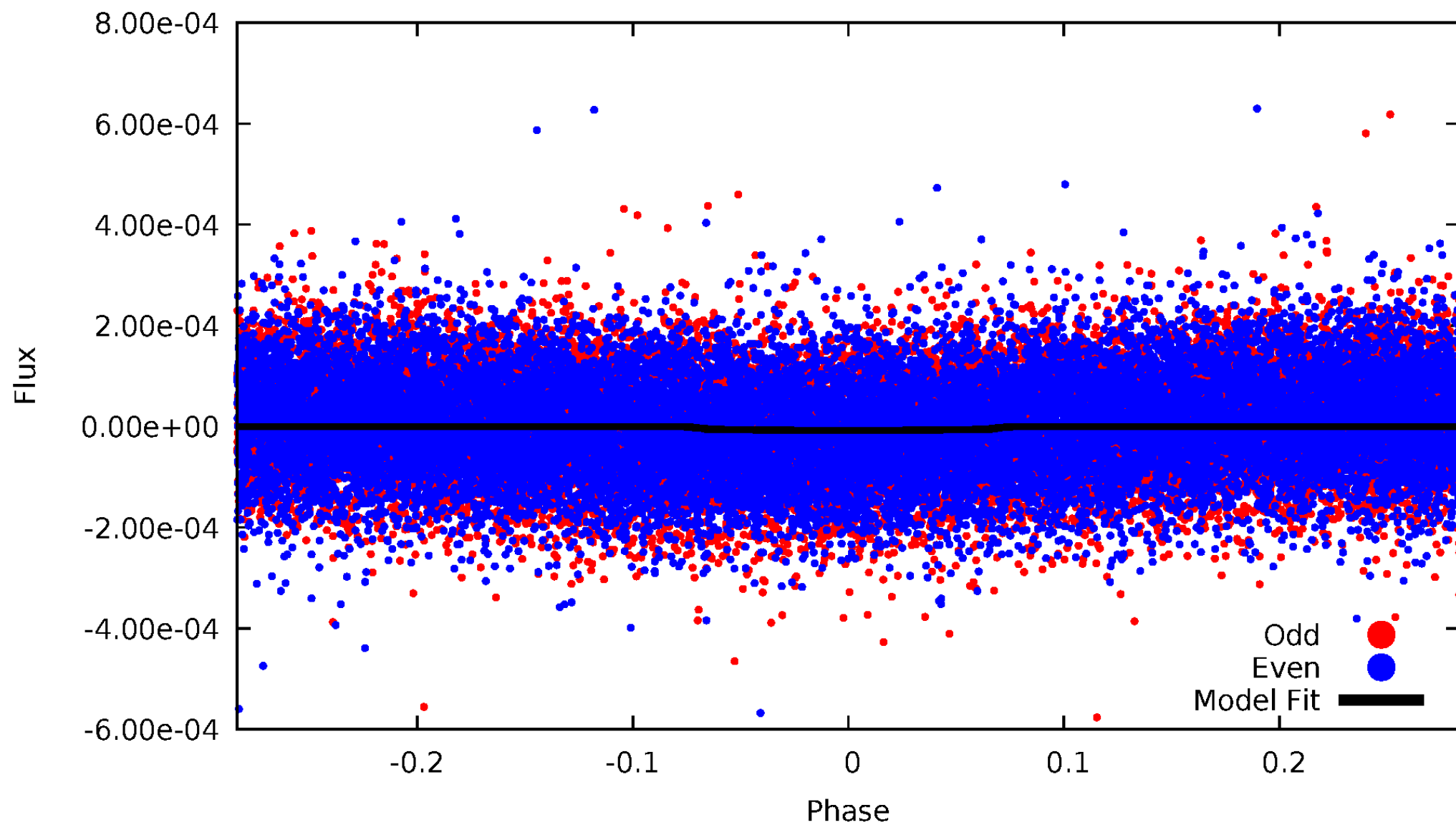


TCE 005897645-01



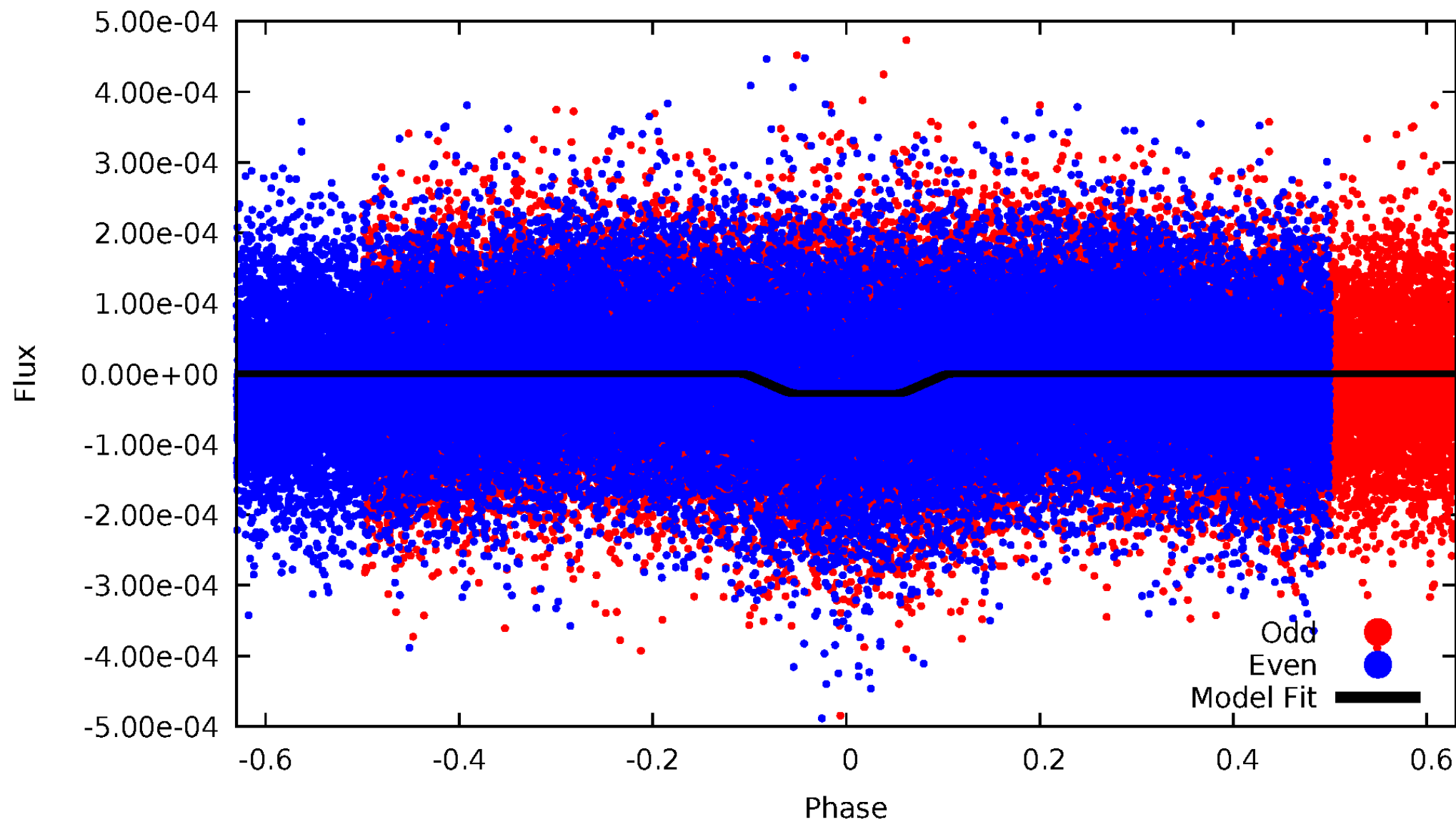
DV Odd/Even

TCE 005897645-01

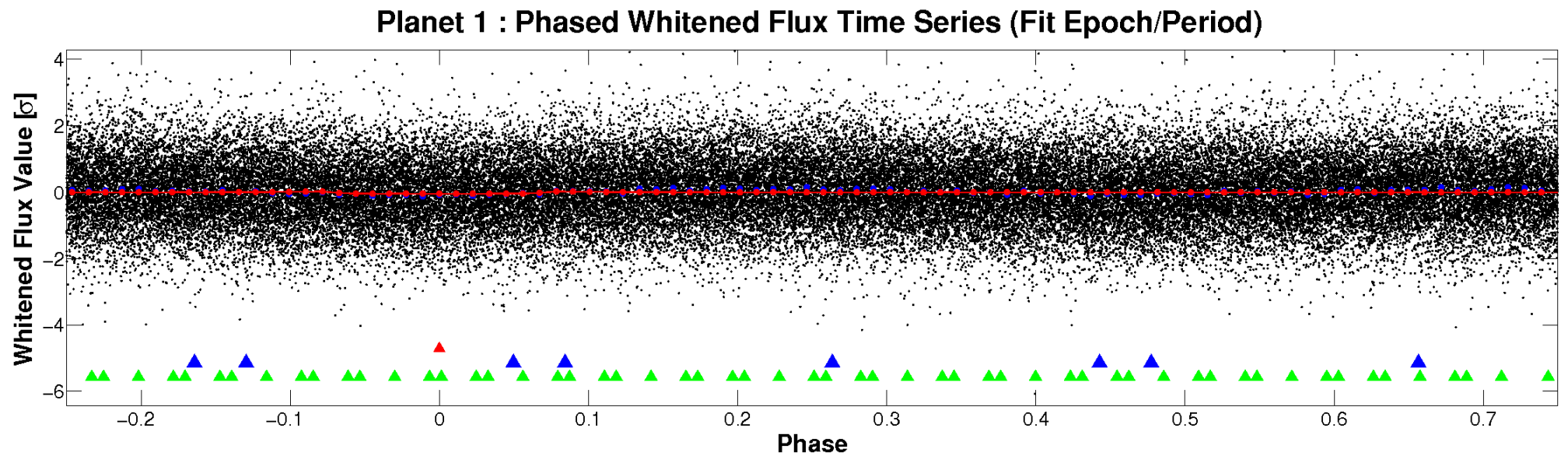
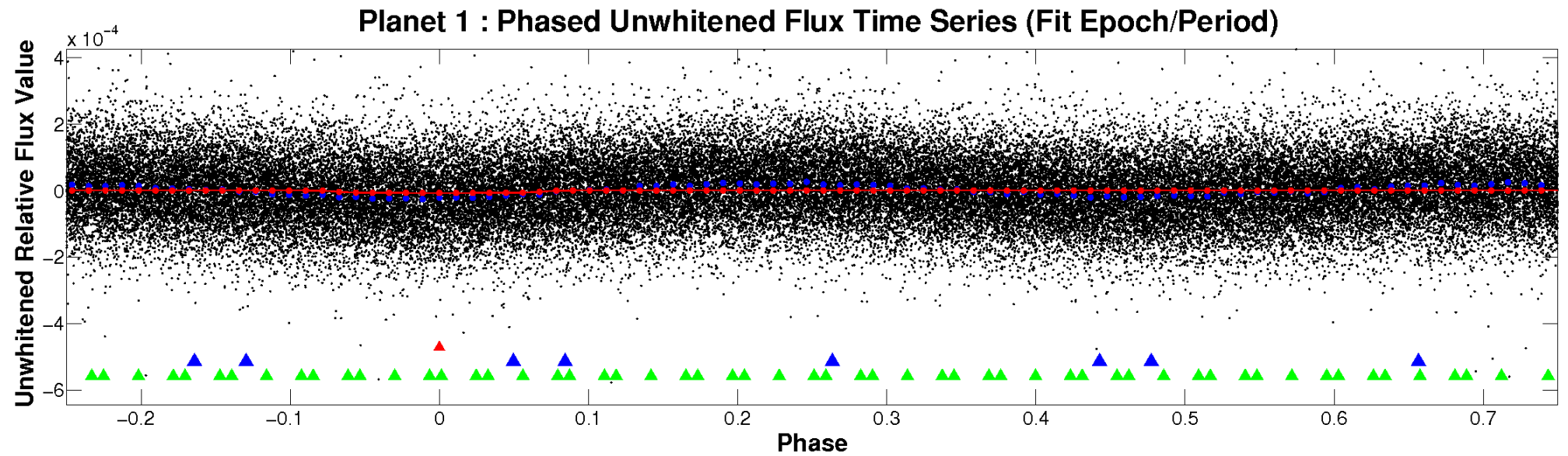


ALT Odd/Even

TCE 005897645-01

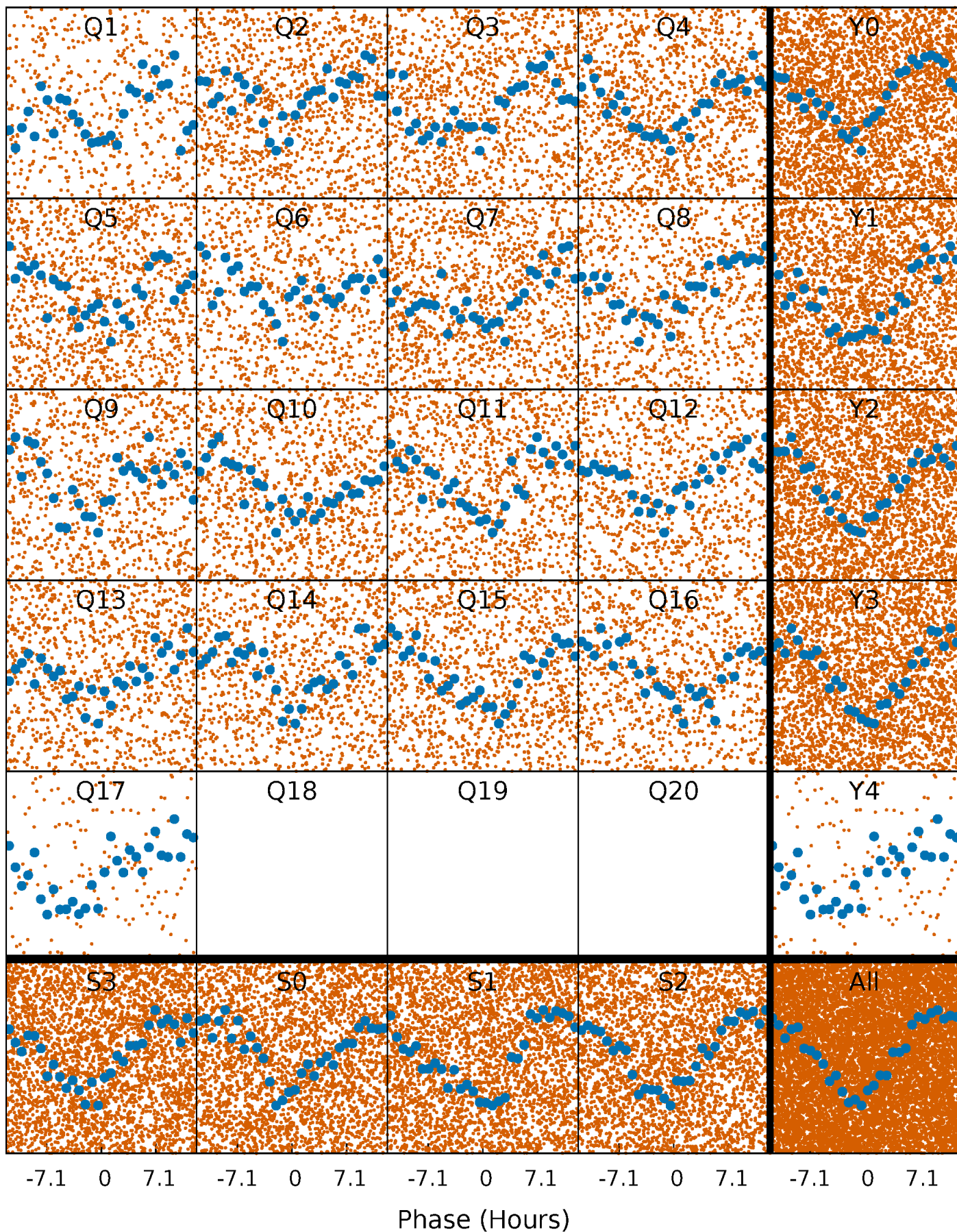


Non-Whitened Vs. Whitened Light Curve



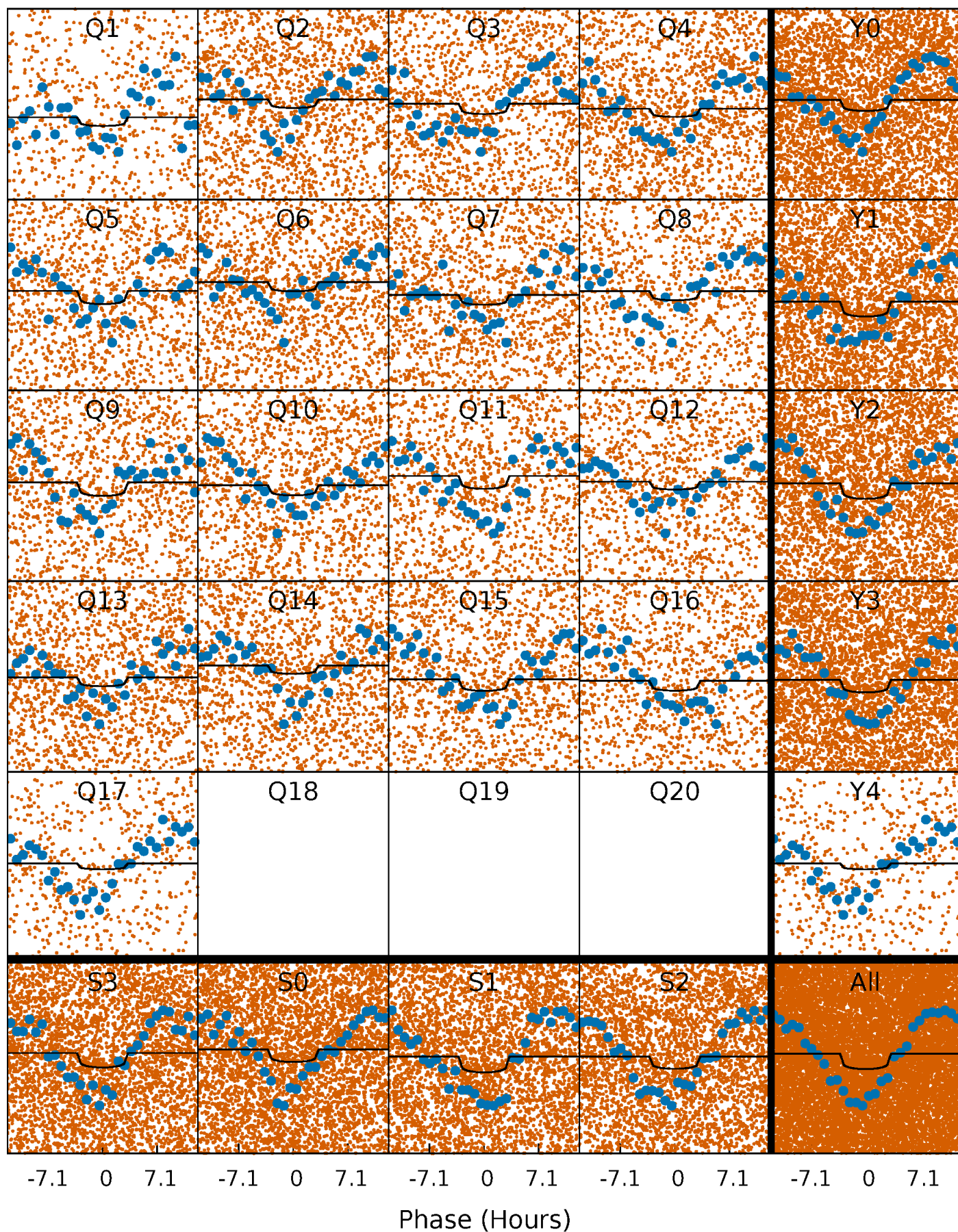
PDC Quarter-Phased Transit Curves

TCE 005897645-01 P= 1.825014 Days $T_0=132.853045$ (BKJD)



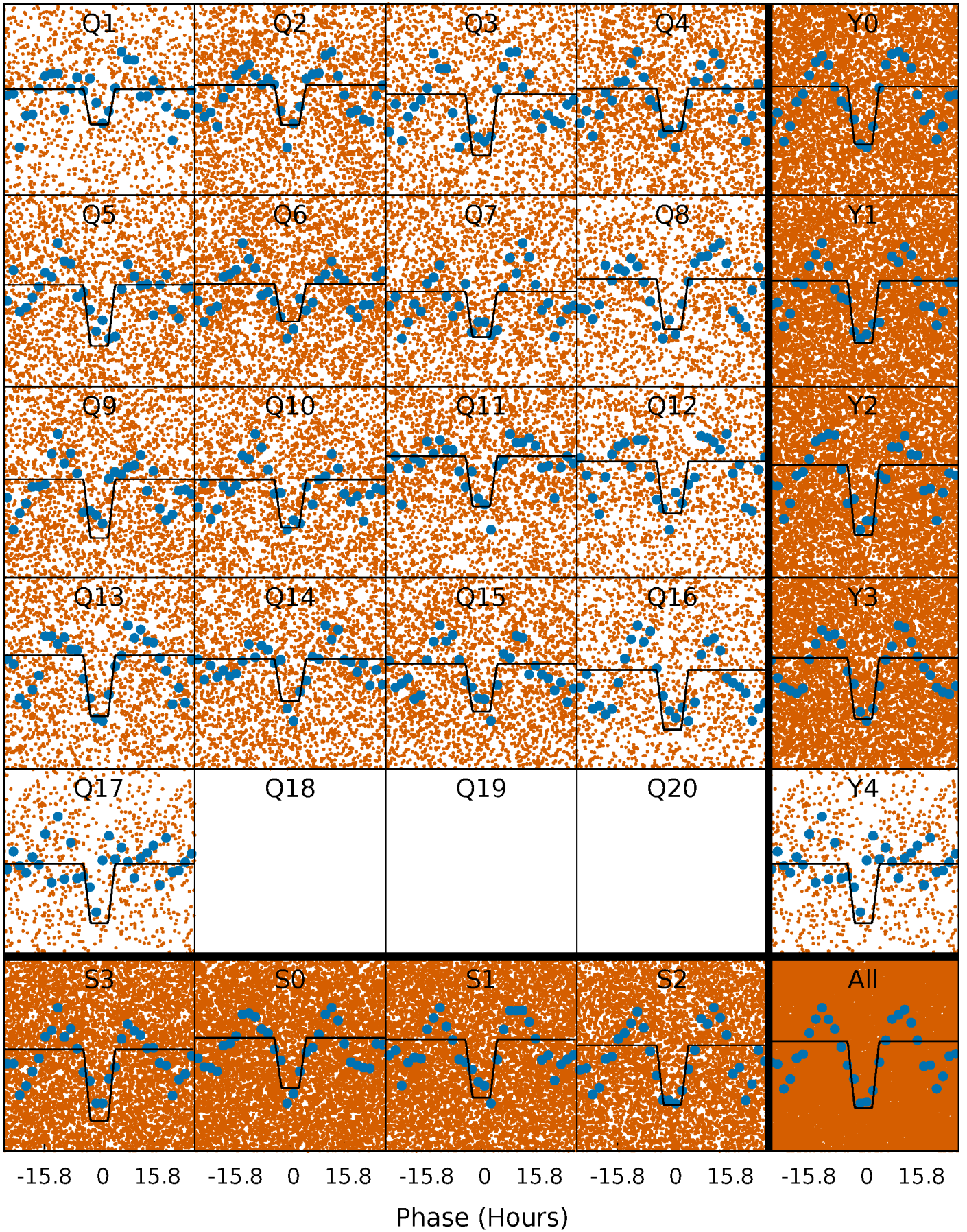
DV Quarter-Phased Transit Curves

TCE 005897645-01 P= 1.825014 Days $T_0=132.853045$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

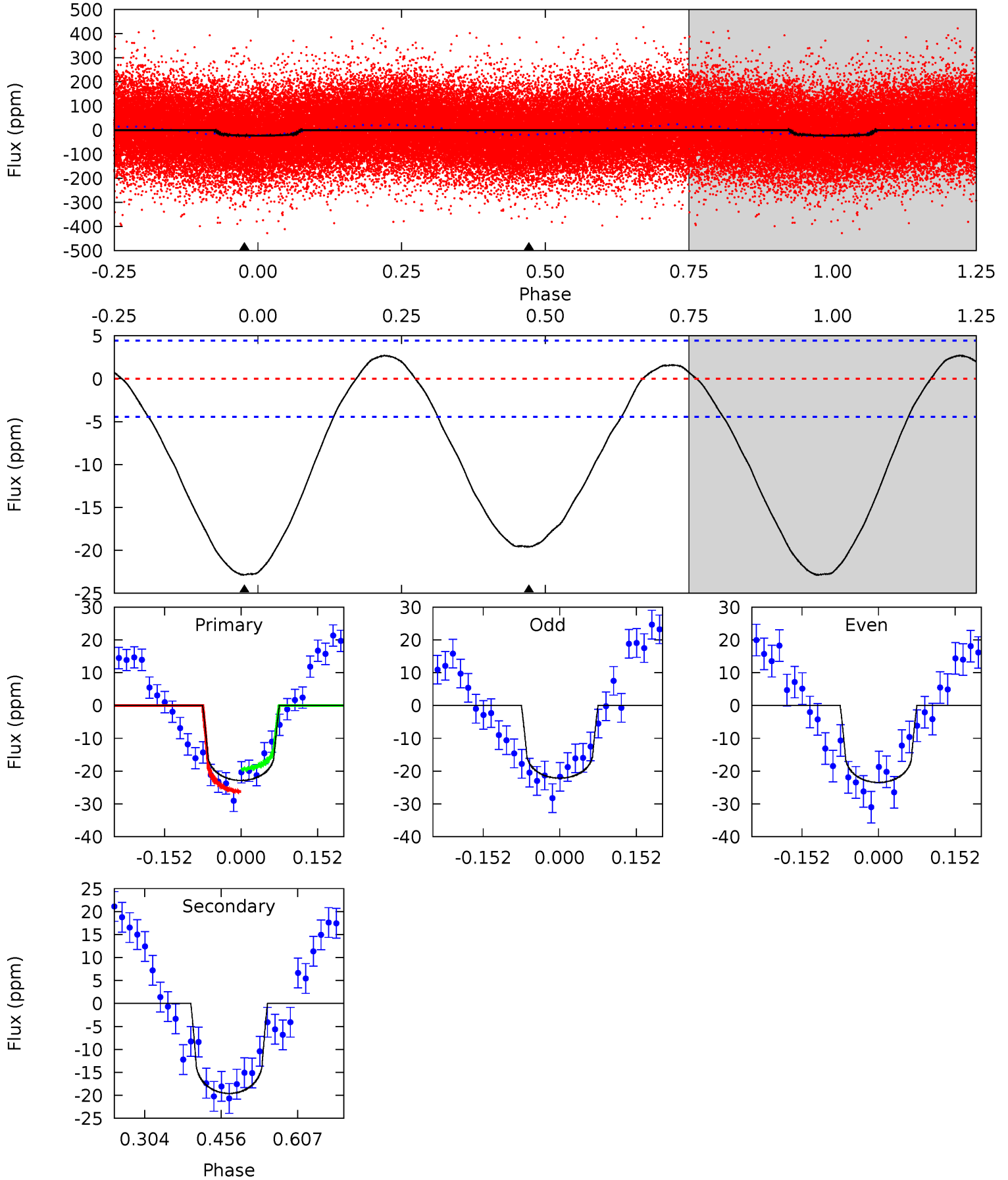
TCE 005897645-01 P= 1.825080 Days $T_0=132.787867$ (BKJD)



DV Model-Shift Uniqueness Test

005897645-01, P = 1.825014 Days, E = 131.028031 Days

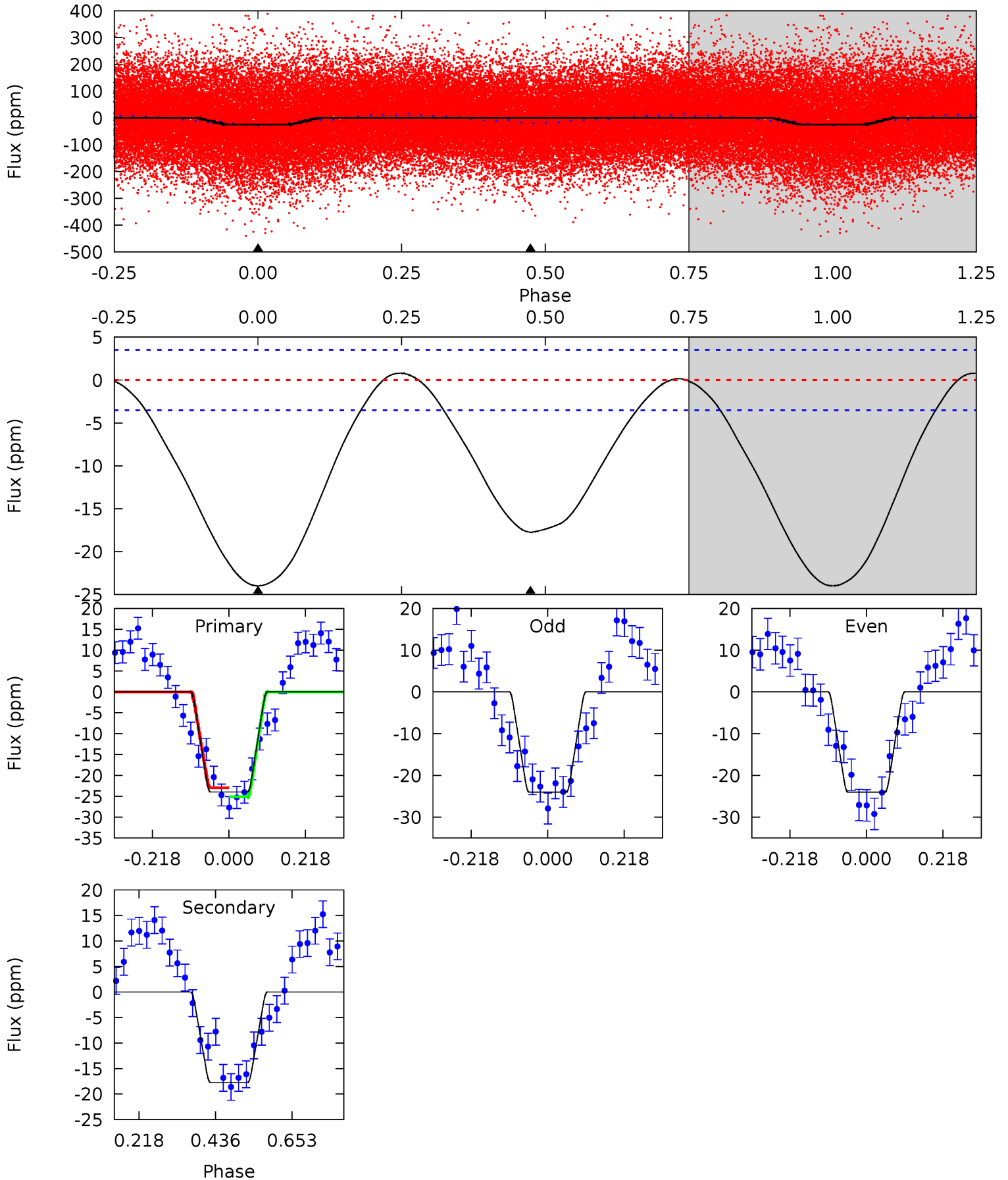
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
23.0	19.7	0	0	4.48	1.43	2.41	23.0	23.0	19.7	19.7	0.66	1.02	0.11	3.43



Alt Model-Shift Uniqueness Test

005897645-01, P = 1.825080 Days, E = 130.962787 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.9	22.1	0	0	4.40	1.23	0.79	29.9	29.9	22.1	22.1	0.02	1.01	0.03	1.35



Stellar Parameters For KIC 005897645

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7068^{+197}_{-271}	$4.054^{+0.160}_{-0.131}$	$-0.080^{+0.250}_{-0.350}$	$1.911^{+0.430}_{-0.430}$	$1.508^{+0.185}_{-0.246}$	$0.304^{+0.271}_{-0.124}$
	+3%/-4%	+4%/-3%	+312%/-438%	+23%/-23%	+12%/-16%	+89%/-41%
Source	PHO1	FLK73	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 005897645-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-20 ± 1	$0.56^{+0.35}_{-0.28}$	3277^{+210}_{-214}	9572^{+8433}_{-2551}	40^{+126}_{-25}
Alt.	-18 ± 1	$1.10^{+0.35}_{-0.37}$	3269^{+213}_{-213}	6152^{+1429}_{-773}	$8.980^{+11.231}_{-3.808}$

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

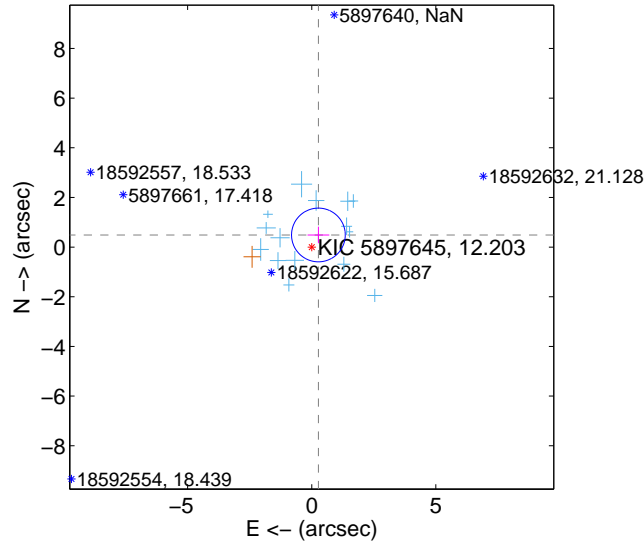
Supplemental centroid analysis for 005897645-01. Kepler magnitude: 12.20. Transit SNR 4.44

There are 15 quarters with good PRF difference image offsets

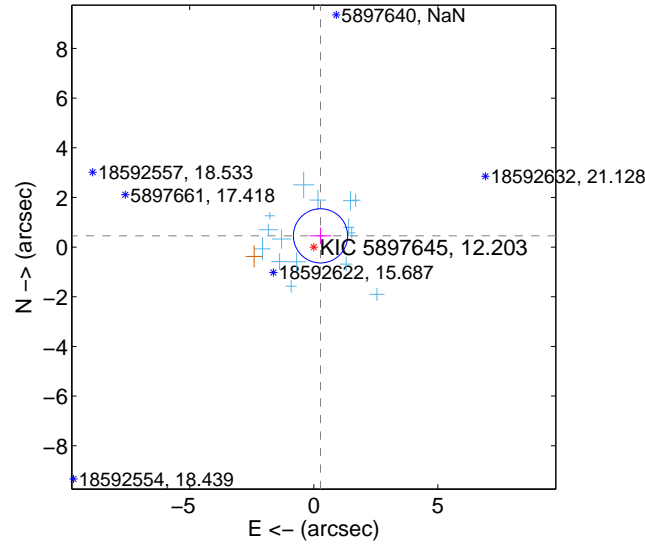
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.558 ± 0.361	1.55	-0.269 ± 0.439	0.489 ± 0.333
PRF-fit source offset from KIC position	0.528 ± 0.364	1.45	-0.271 ± 0.441	0.453 ± 0.332
photometric centroid source offset	2.89 ± 1.75	1.65	-1.78 ± 1.73	-2.27 ± 1.76

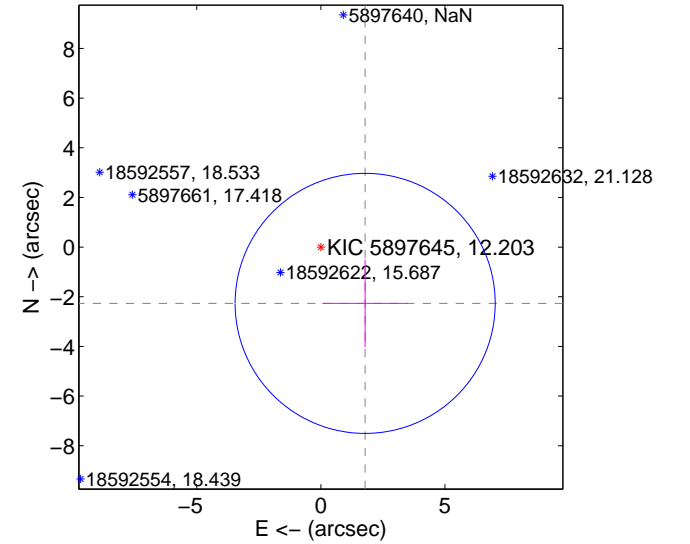
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

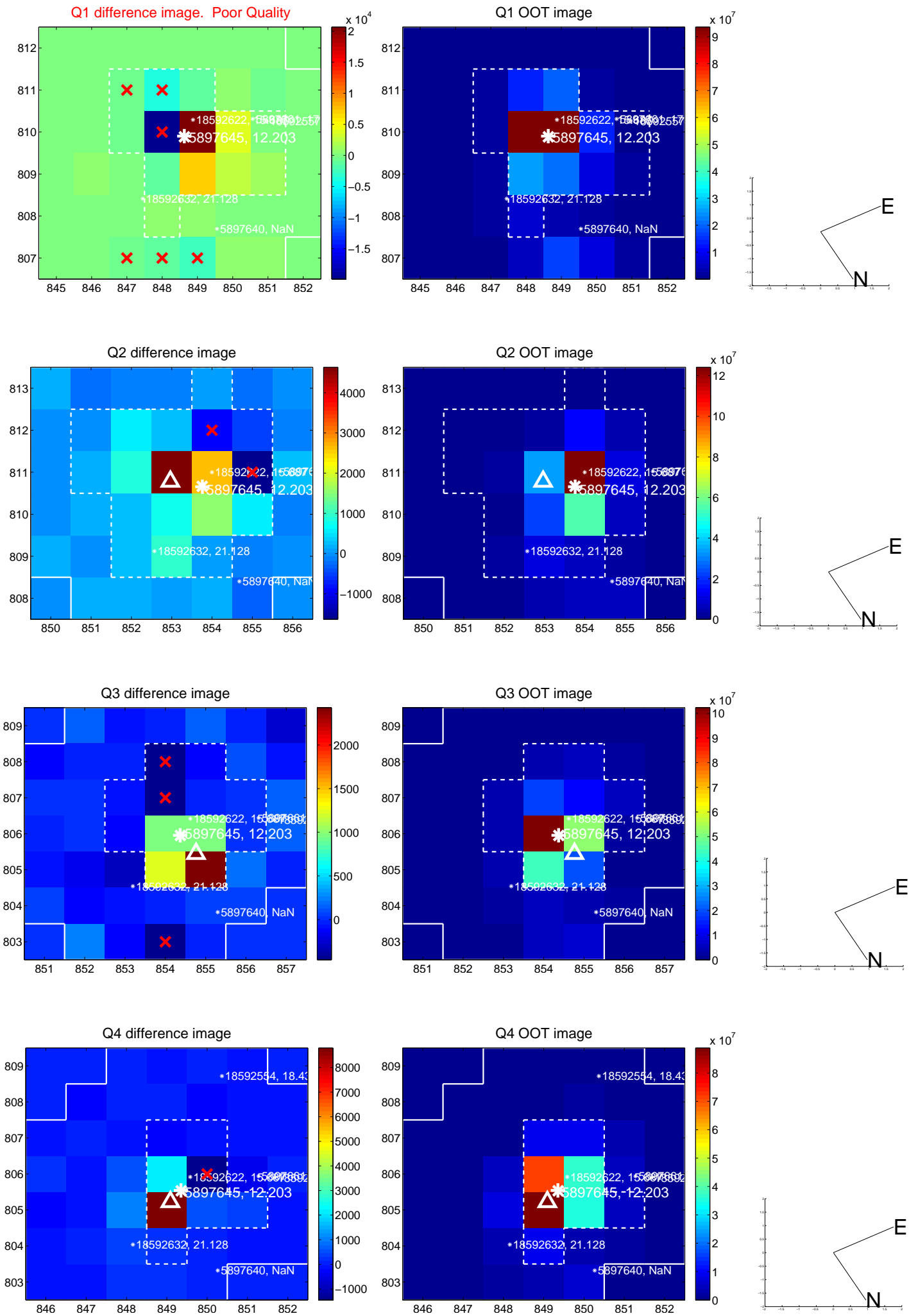


offset from photometric centroids

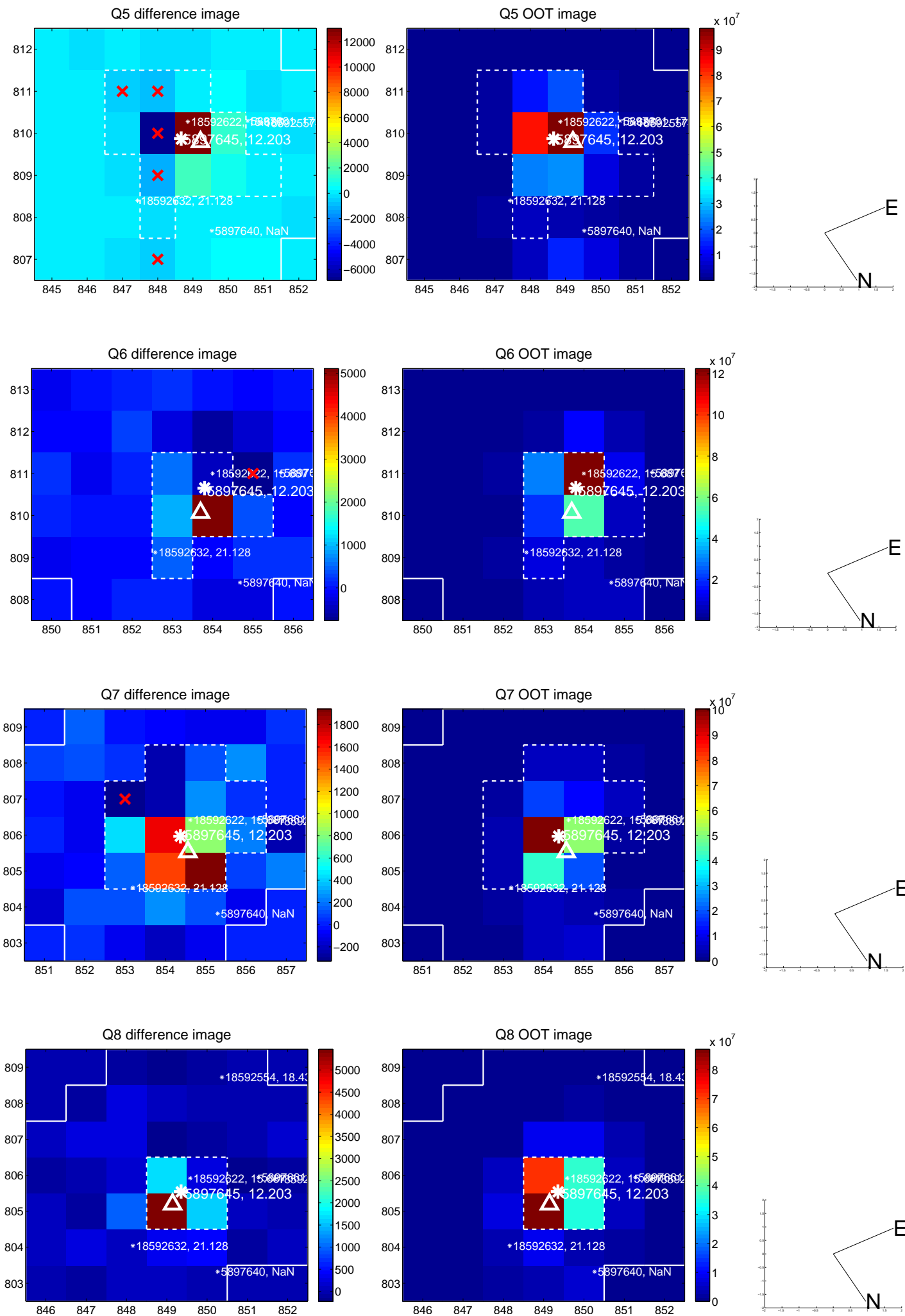


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

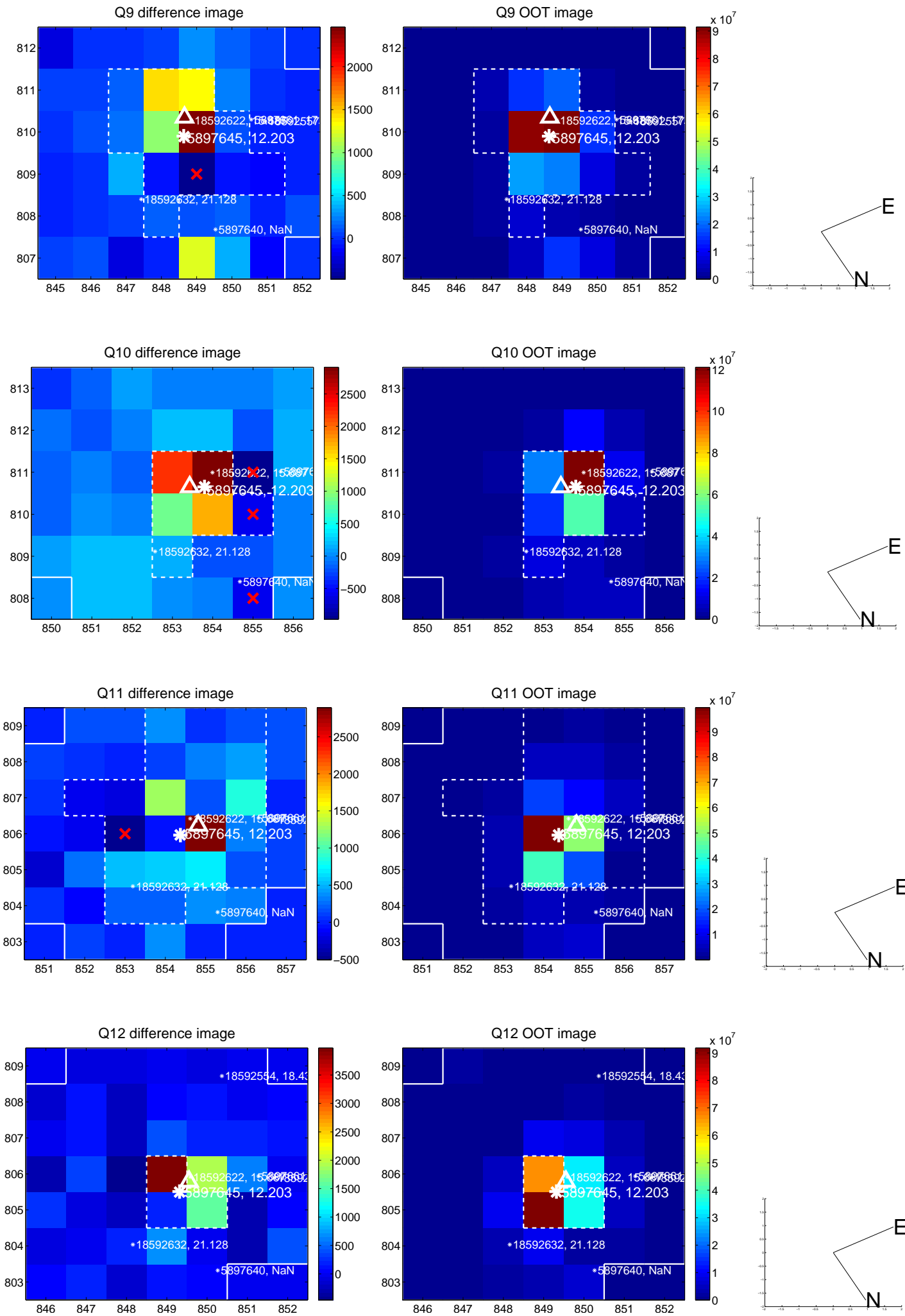
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



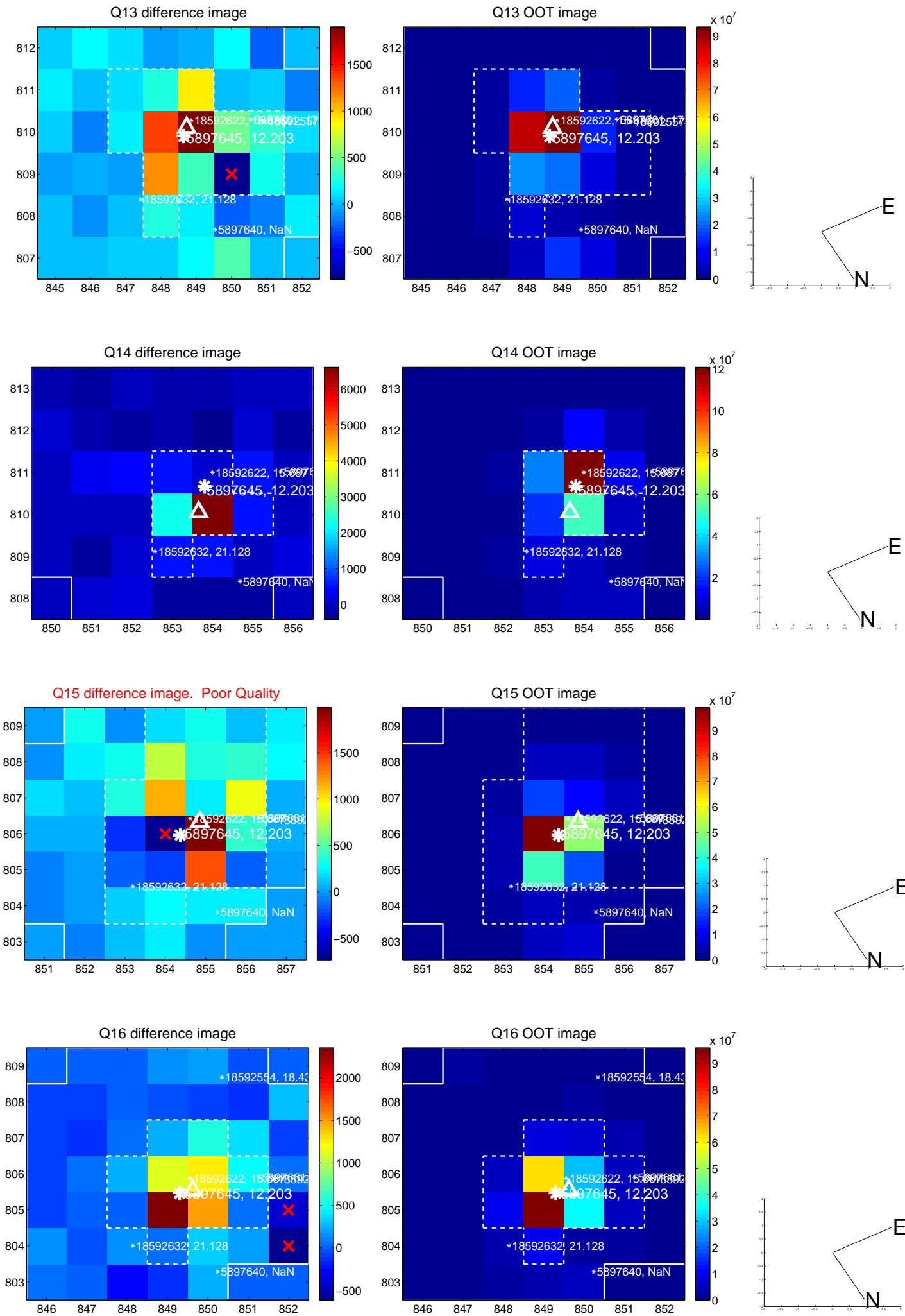
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



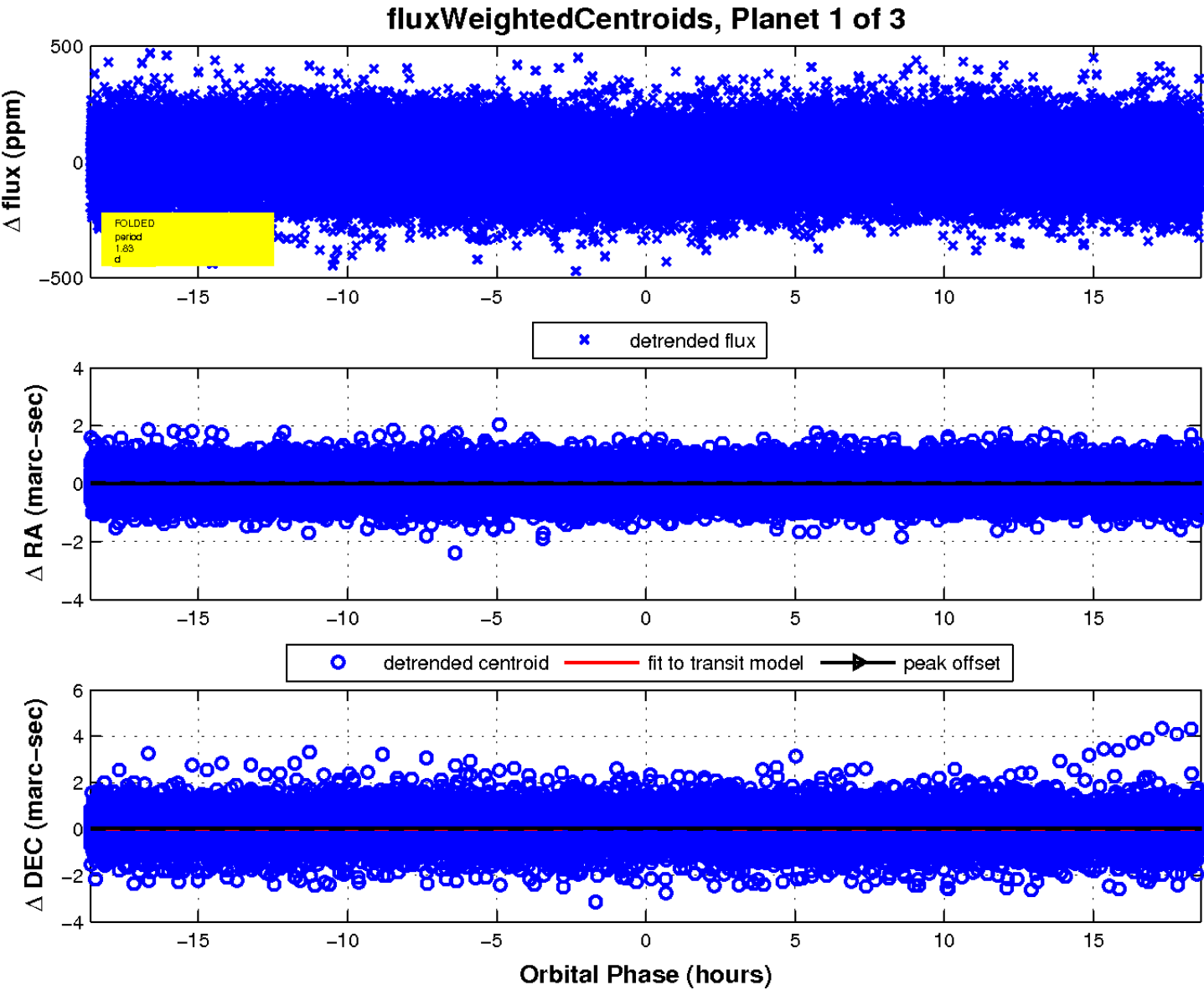
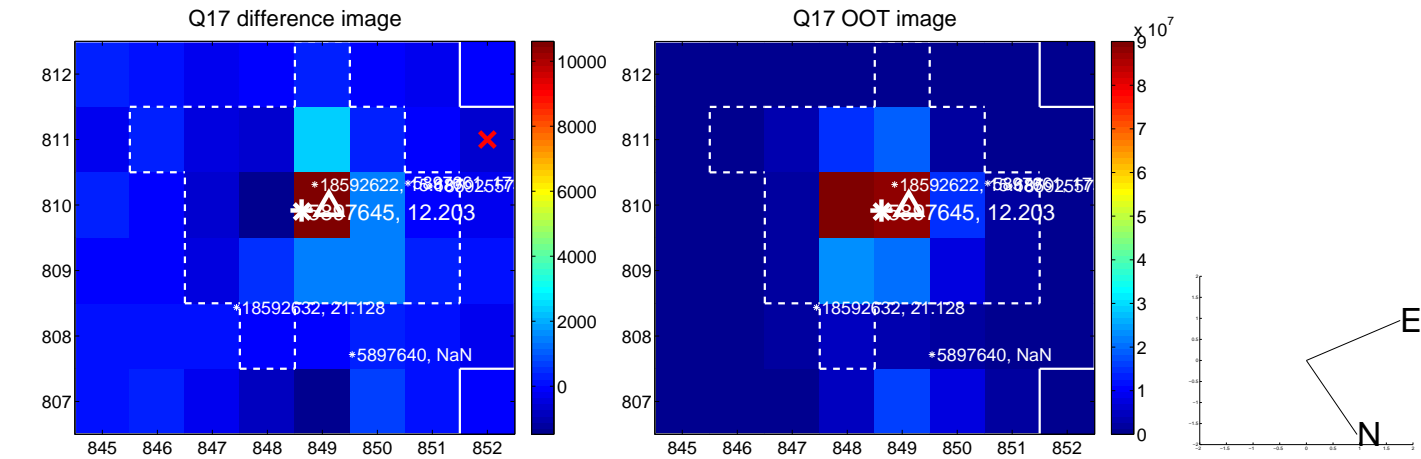
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

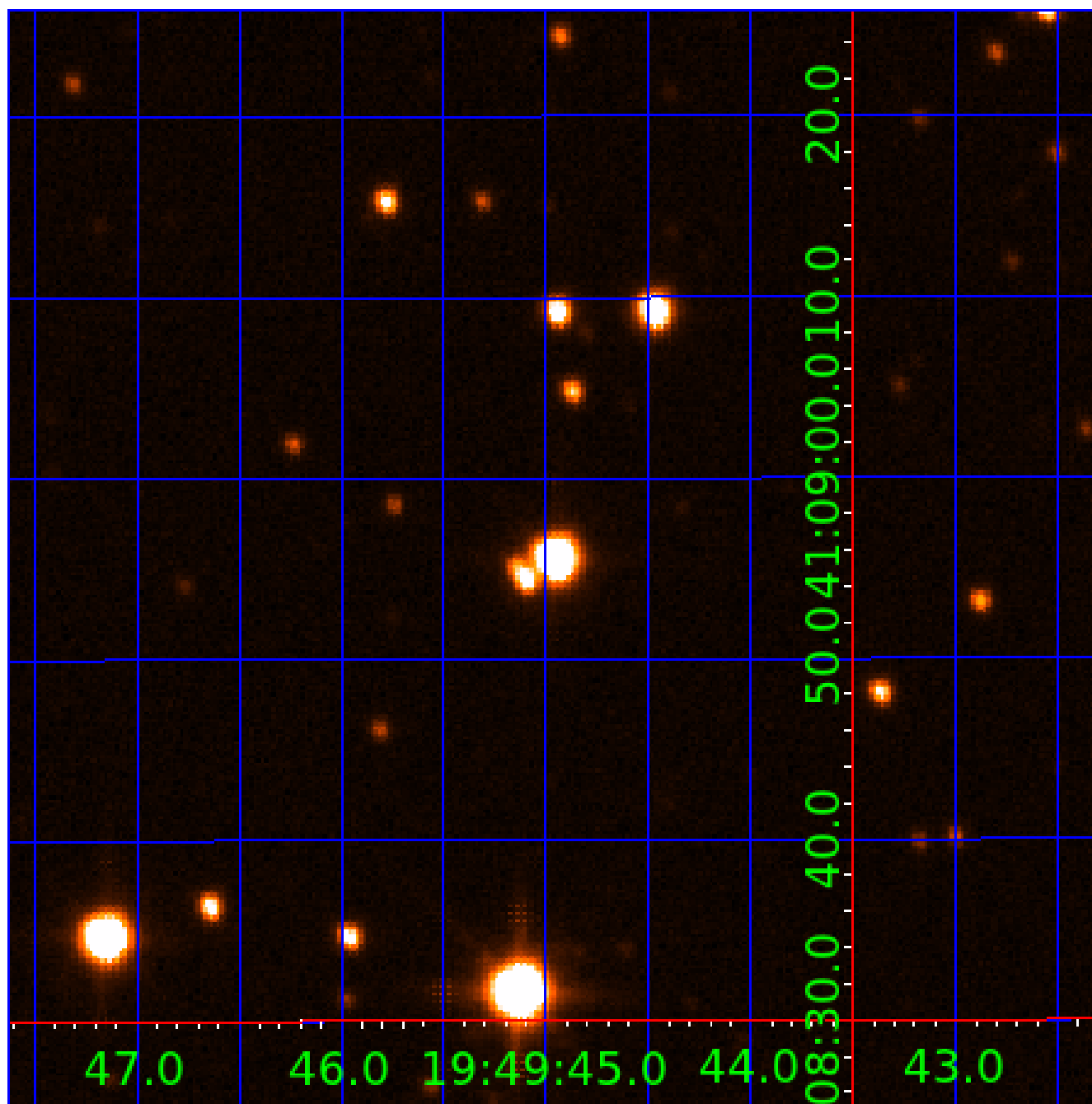


white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005897645

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})
005897645-01	OBS	No	1.825014	132.853045	7.6	6.206	7.6	4.4	1.91	7068	0.54	7264.95
005897645-02	OBS	No	192.734082	176.353715	121.4	15.502	8.6	6.7	1.91	7068	2.27	14.55
005897645-03	OBS	No	25.707032	150.777588	48.6	12.023	7.5	6.9	1.91	7068	1.46	213.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005897645-01	OBS	FP	0.00	1	0	0	0	LPP_DV
005897645-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
005897645-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—HALO_GHOST

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

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

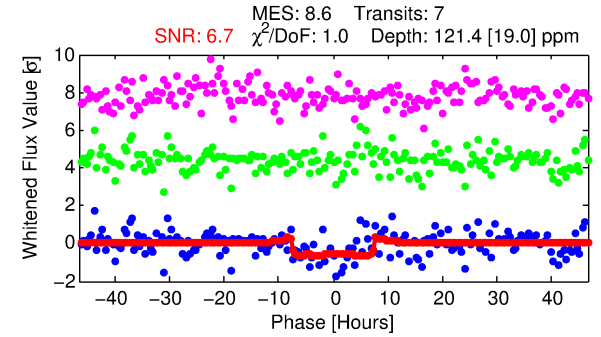
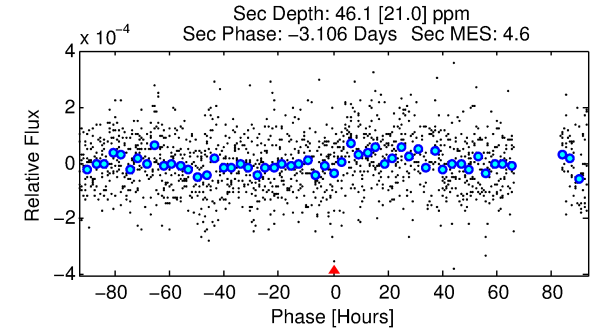
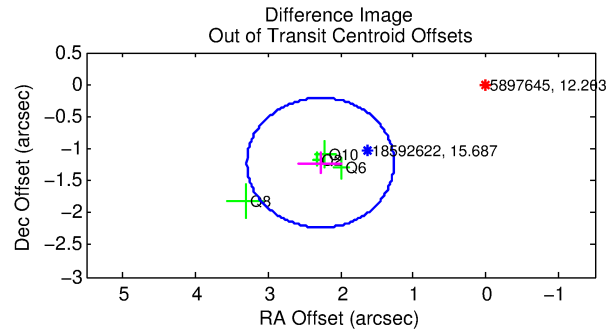
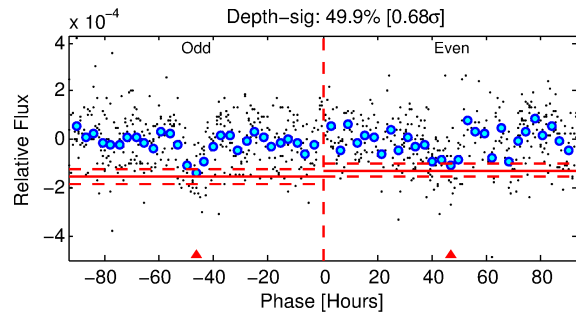
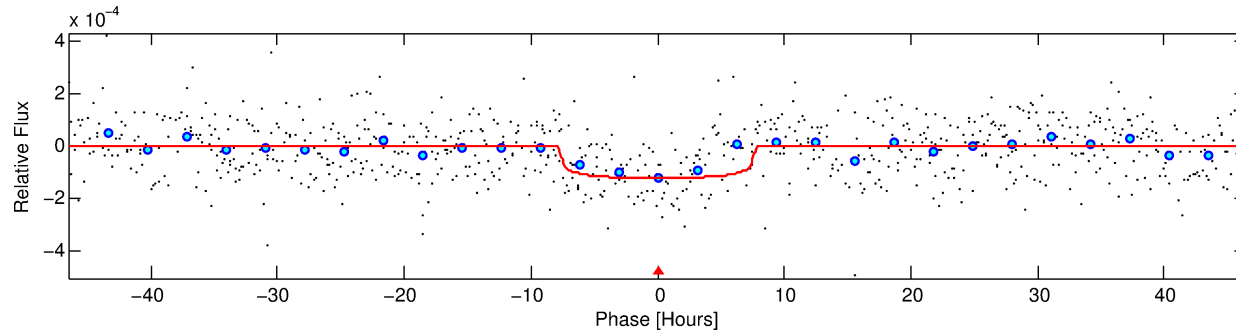
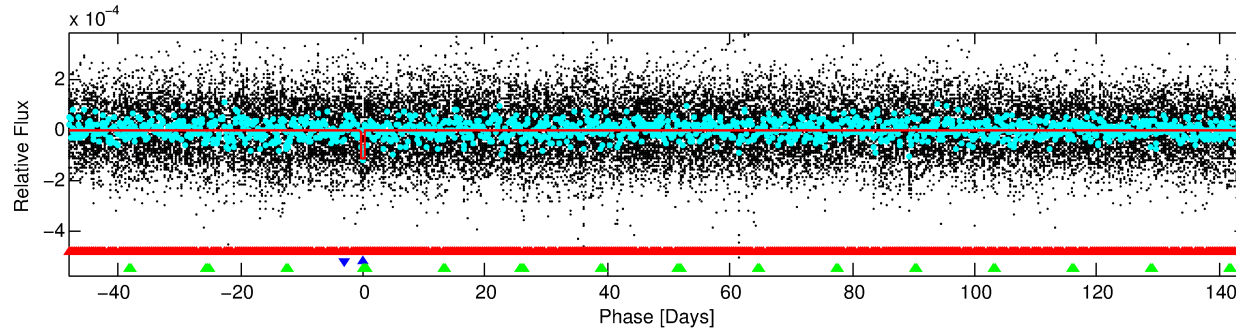
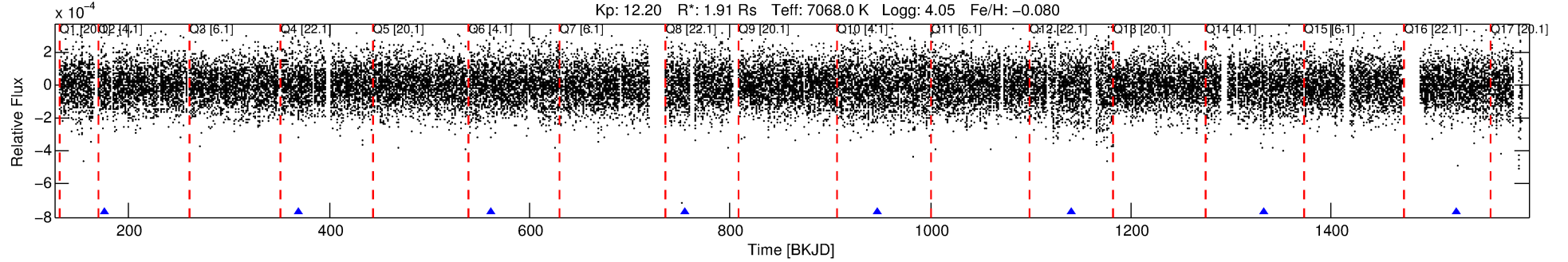
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005897645-02

No Significant Match Found

DV One-Page Summary

KIC: 5897645 Candidate: 2 of 3 Period: 192.734 d



DV Fit Results:

Period = 192.73408 [0.00414] d
Epoch = 176.3537 [0.0158] BKJD
Rp/R* = 0.0109 [0.0029]
a/R* = 66.92 [99.93]
b = 0.72 [0.98]
Seff = 14.55 [4.75]
Teq = 498 [41] K
Rp = 2.27 [0.79] Re
a = 0.7490 [0.1452] AU
Ag = 2765.79 [2100.88] [1.32 σ]
Teffp = 5584 [1004] K [5.06 σ]

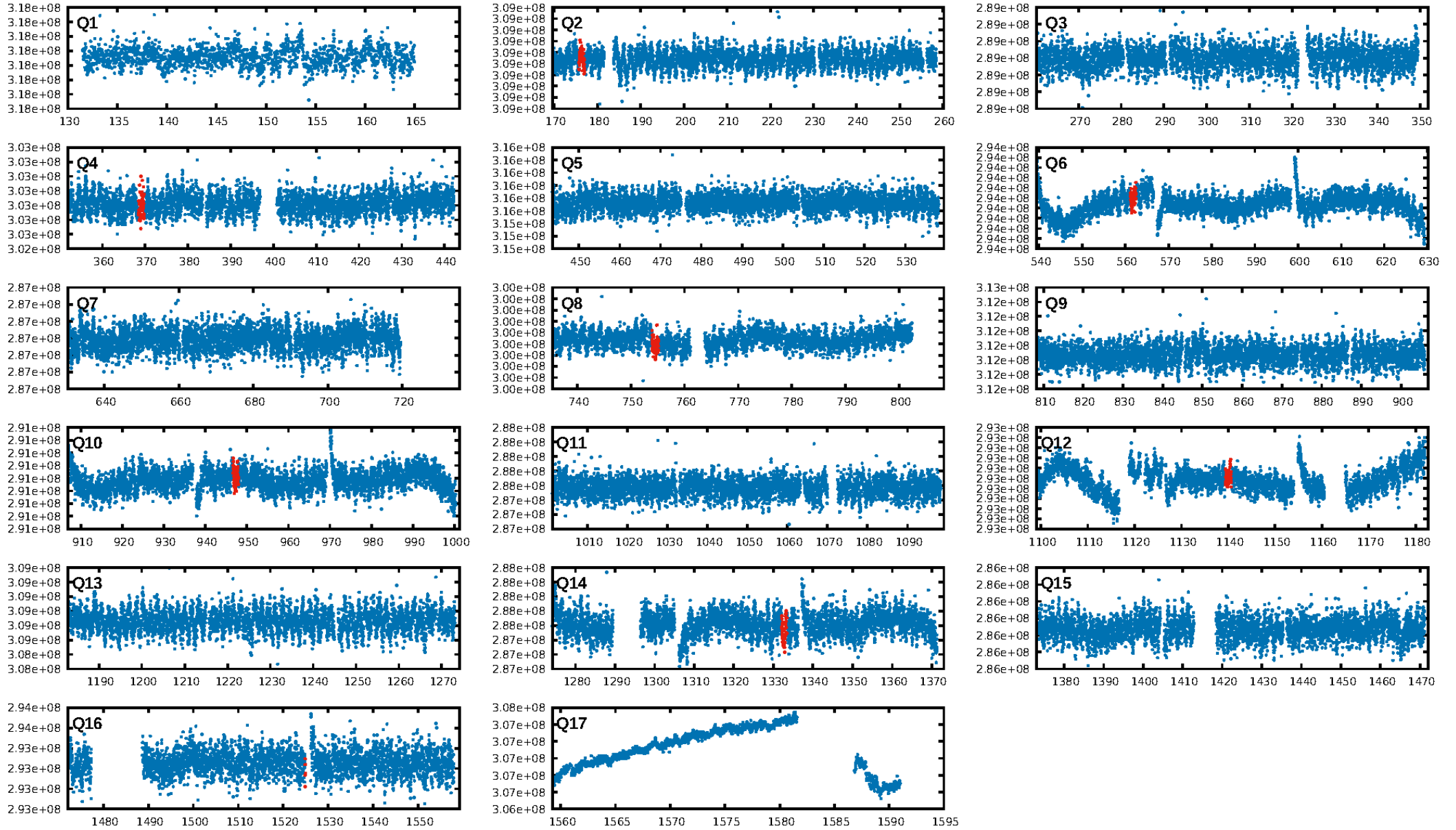
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [204.33 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 32.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.67e-11
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -18.68
Centroid-sig: 14.9%
Centroid-so: 1.532 arcsec [1.76 σ]
OotOffset-rm: 2.584 arcsec [7.67 σ]
KicOffset-rm: 2.616 arcsec [9.72 σ]
OotOffset-st: 3/0/1/0 [4]
KicOffset-st: 3/0/1/0 [4]
DiffImageQuality-fgm: 0.50 [2/4]
DiffImageOverlap-fno: 0.00 [0/7]

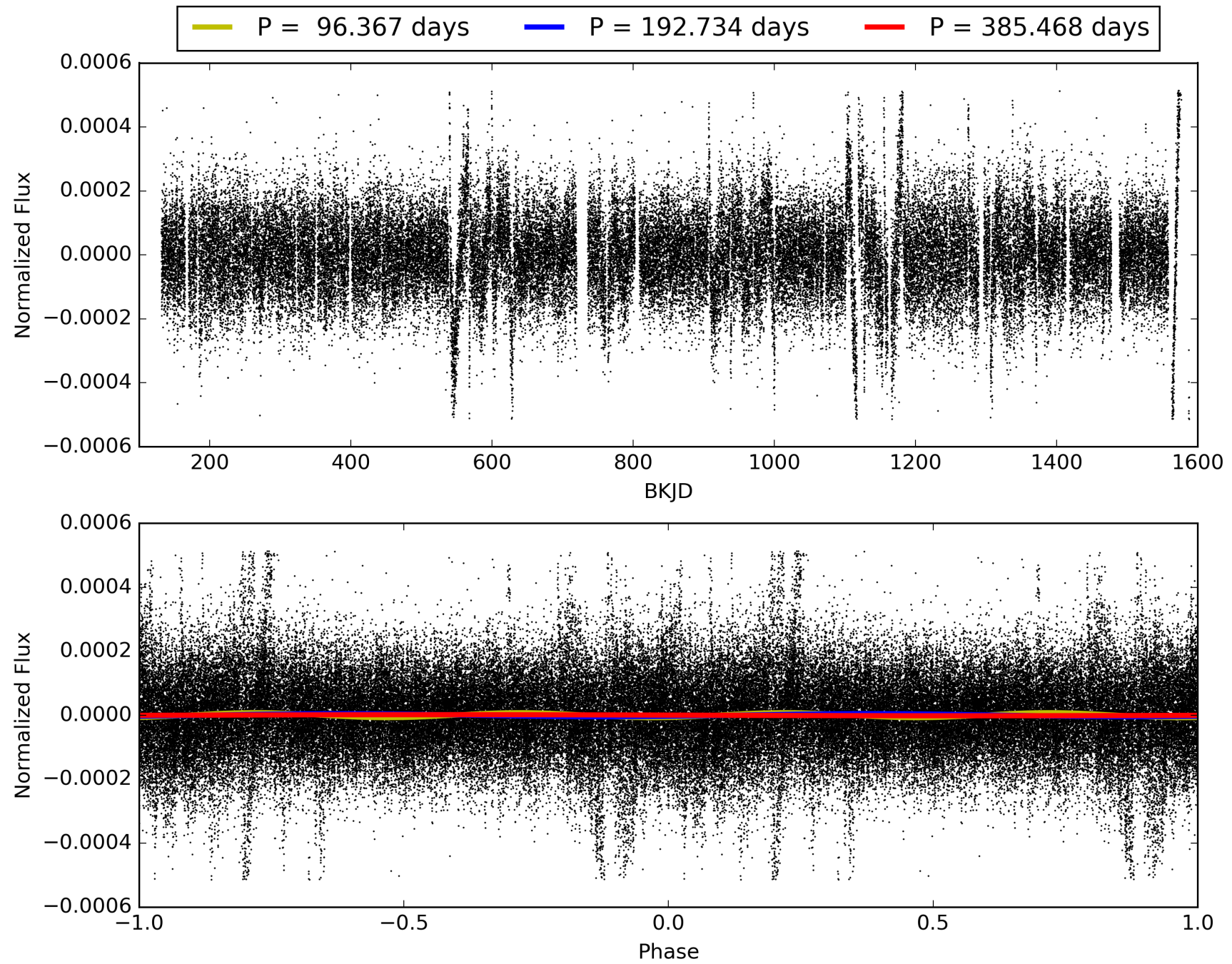
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:19:56 Z

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

TCE 005897645-02, PDC Light Curves

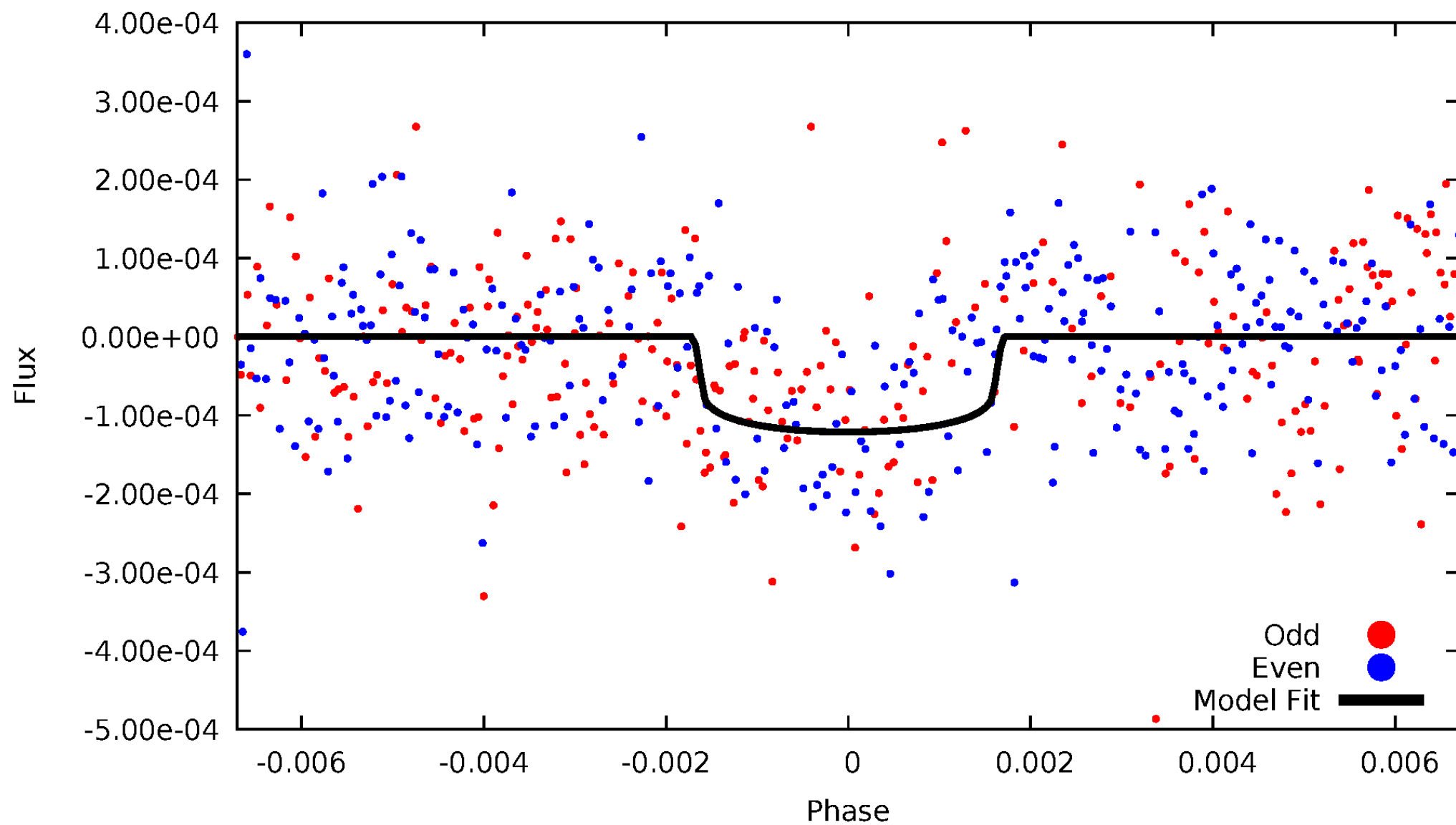


TCE 005897645-02



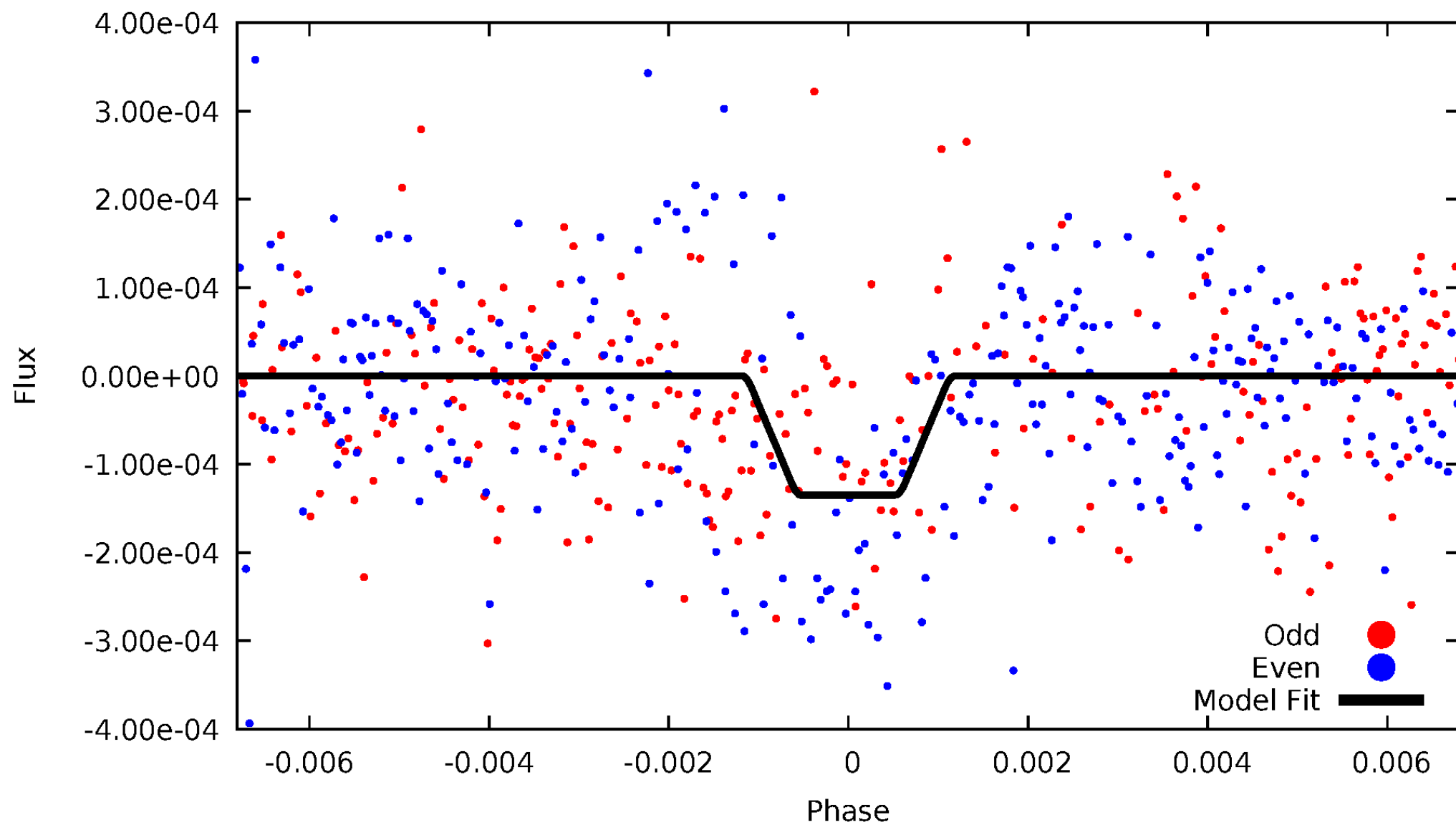
DV Odd/Even

TCE 005897645-02



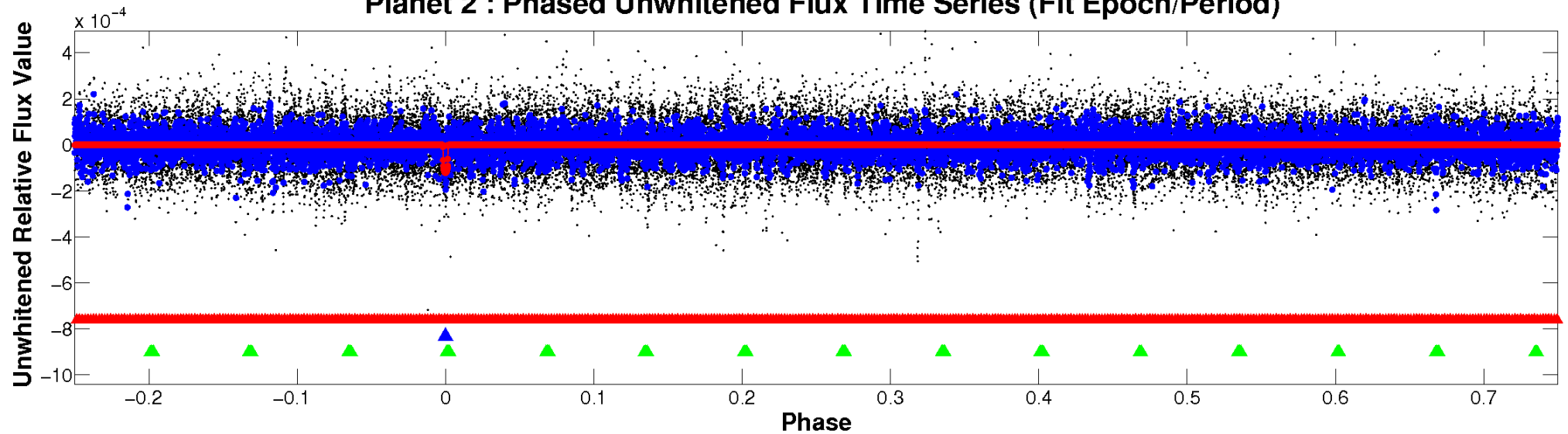
ALT Odd/Even

TCE 005897645-02

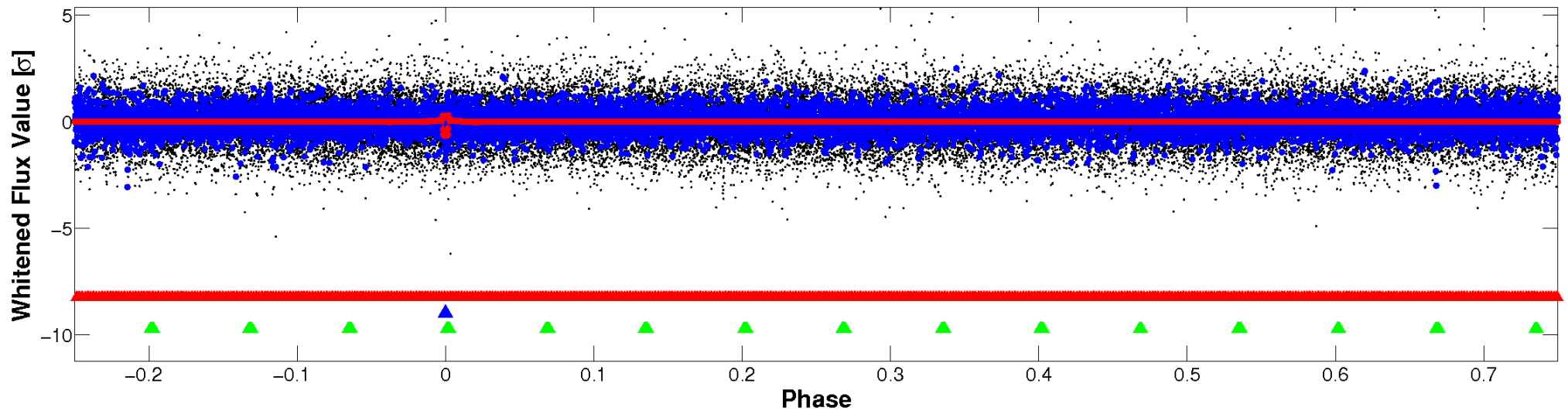


Non-Whitened Vs. Whitened Light Curve

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

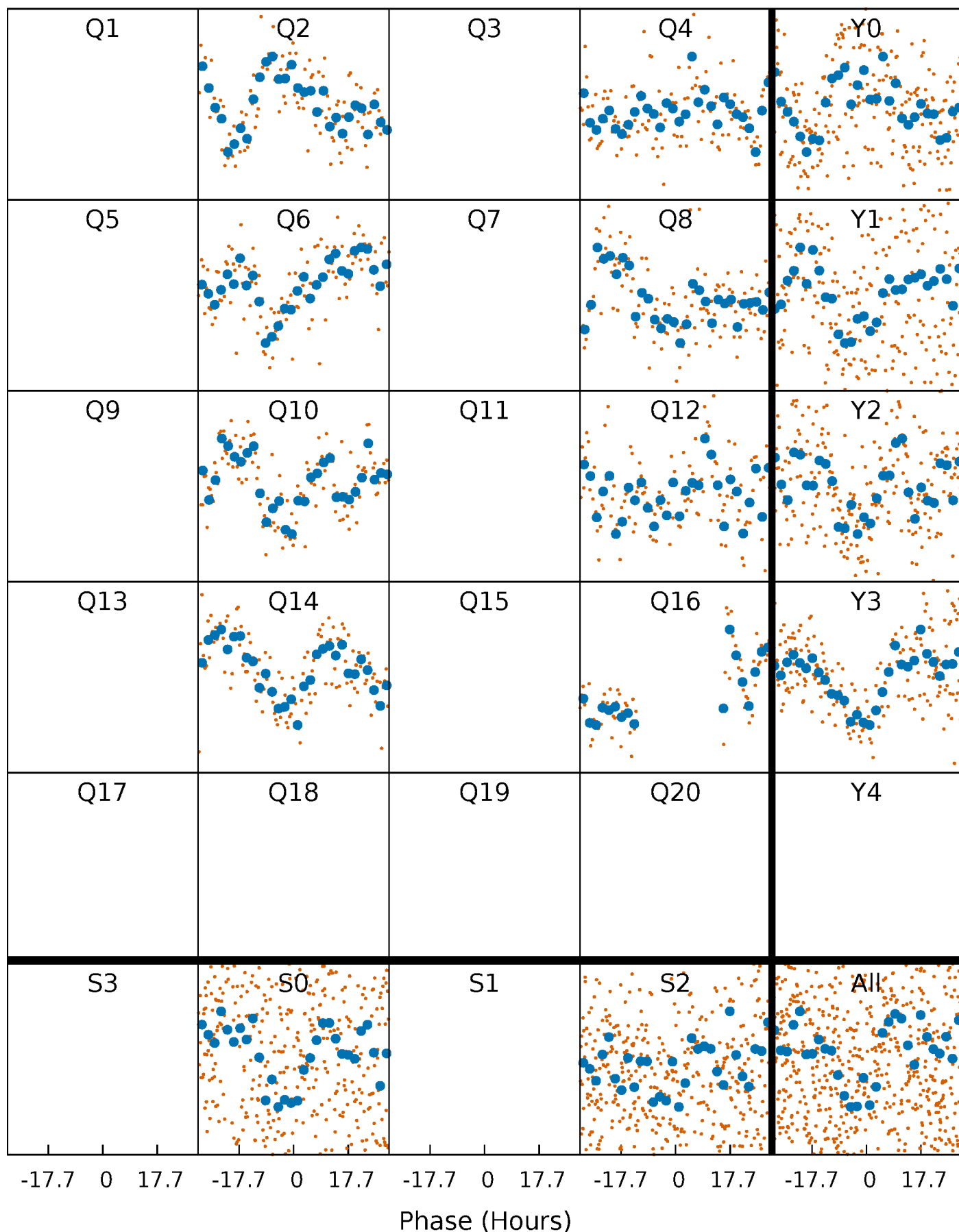


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 005897645-02 P=192.734082 Days $T_0=176.353715$ (BKJD)



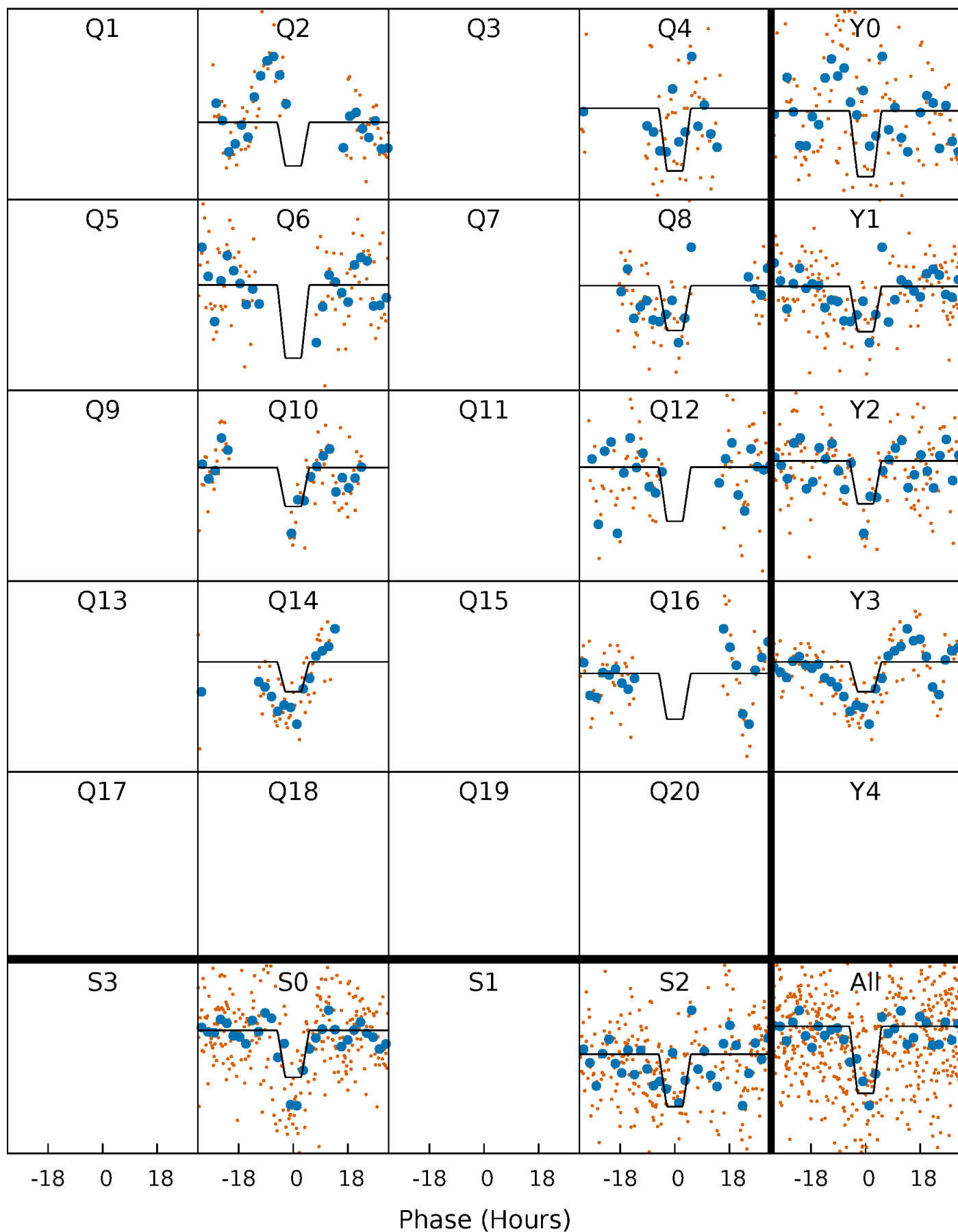
DV Quarter-Phased Transit Curves

TCE 005897645-02 P=192.734082 Days $T_0=176.353715$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

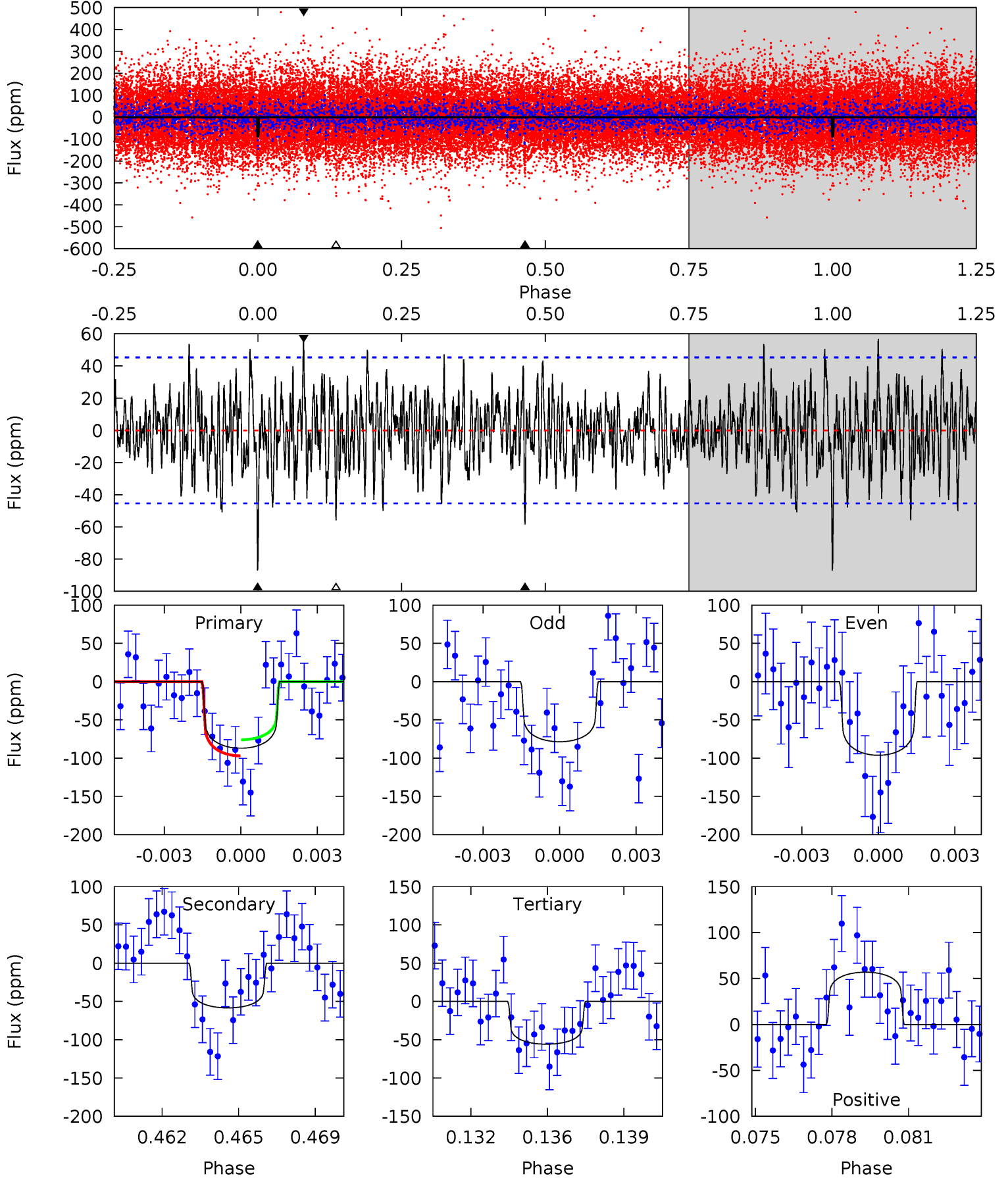
TCE 005897645-02 P=192.736149 Days $T_0=176.346113$ (BKJD)



DV Model-Shift Uniqueness Test

005897645-02, P = 192.734082 Days, E = 176.353715 Days

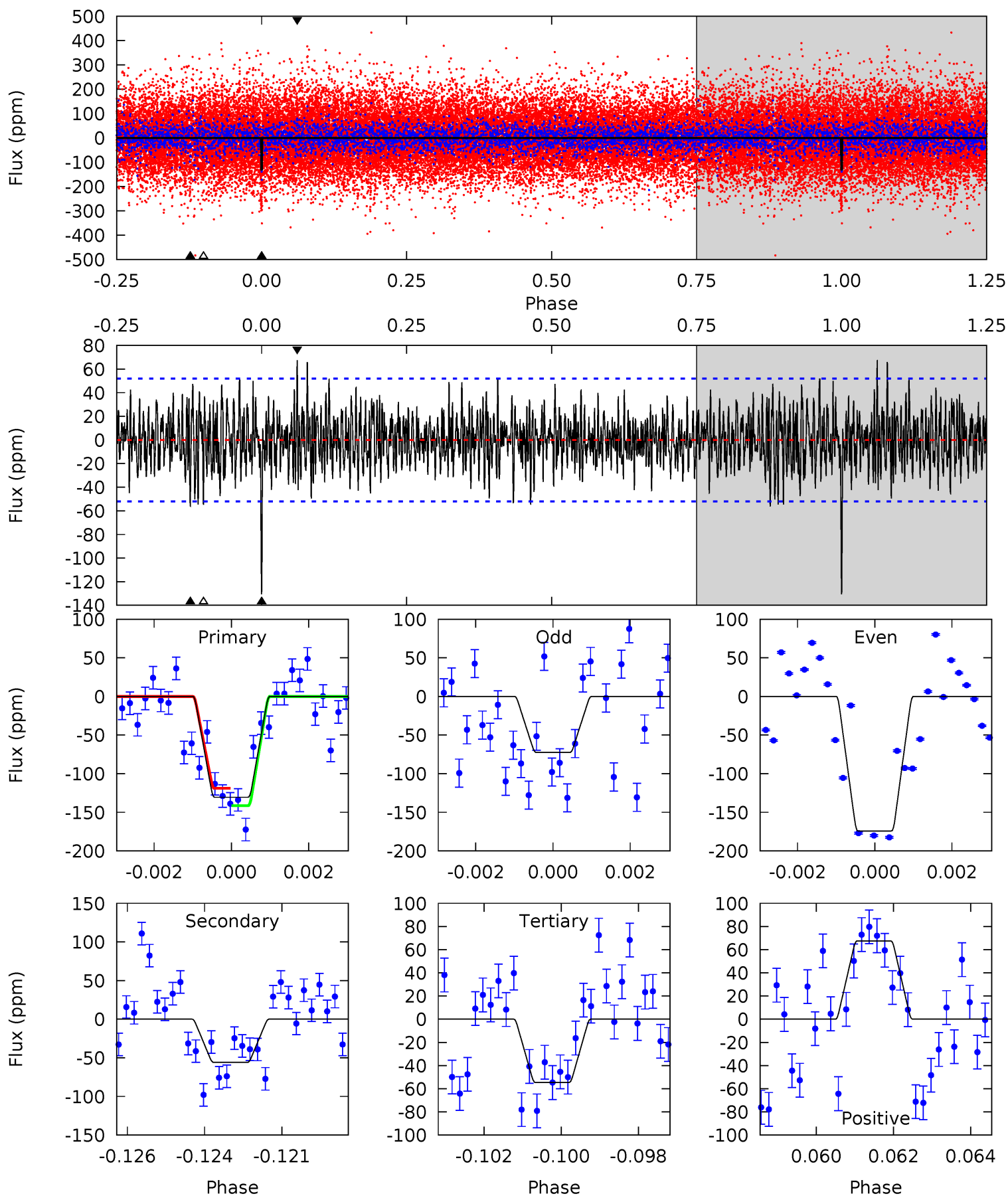
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.0	6.73	6.43	6.56	5.23	2.93	2.02	3.60	3.48	0.30	0.18	1.02	1.00	0.40	1.21



Alt Model-Shift Uniqueness Test

005897645-02, P = 192.736149 Days, E = 176.346113 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	5.71	5.57	6.88	5.29	3.04	1.84	7.74	6.42	0.14	-1.18	5.23	1.00	0.34	1.14



Stellar Parameters For KIC 005897645

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7068^{+197}_{-271}	$4.054^{+0.160}_{-0.131}$	$-0.080^{+0.250}_{-0.350}$	$1.911^{+0.430}_{-0.430}$	$1.508^{+0.185}_{-0.246}$	$0.304^{+0.271}_{-0.124}$
	+3%/-4%	+4%/-3%	+312%/-438%	+23%/-23%	+12%/-16%	+89%/-41%
Source	PHO1	FLK73	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 005897645-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-58 ± 9	$2.23^{+0.70}_{-0.62}$	692^{+39}_{-46}	5880^{+1005}_{-709}	3621^{+3333}_{-1554}
Alt.	-56 ± 10	$2.39^{+0.68}_{-0.65}$	694^{+41}_{-45}	5620^{+971}_{-590}	3021^{+2597}_{-1273}

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

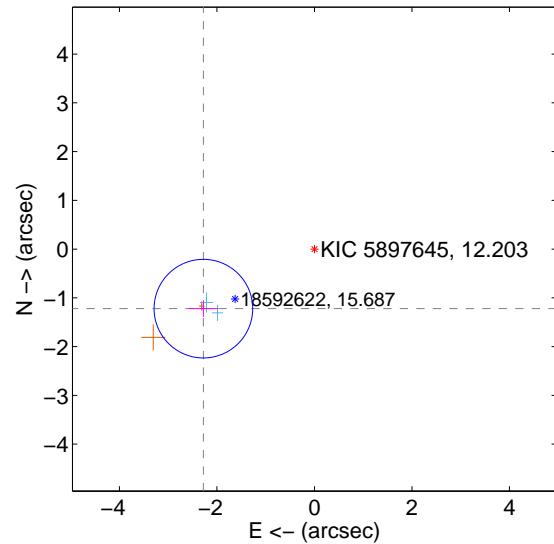
Supplemental centroid analysis for 005897645-02. Kepler magnitude: 12.20. Transit SNR 6.69

There are 2 quarters with good PRF difference image offsets

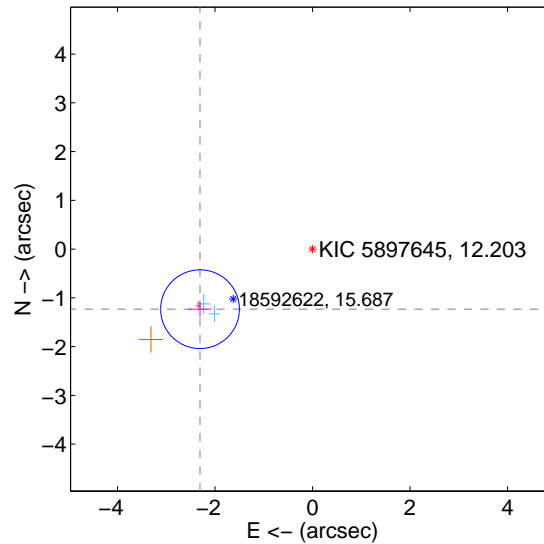
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.584 ± 0.337	7.67	2.278 ± 0.301	-1.221 ± 0.171
PRF-fit source offset from KIC position	2.616 ± 0.269	9.72	2.307 ± 0.236	-1.232 ± 0.160
photometric centroid source offset	1.53 ± 0.87	1.76	-1.33 ± 0.88	0.76 ± 0.83

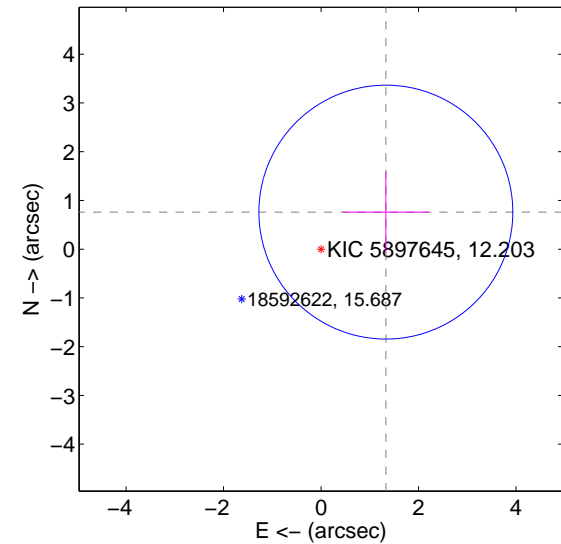
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

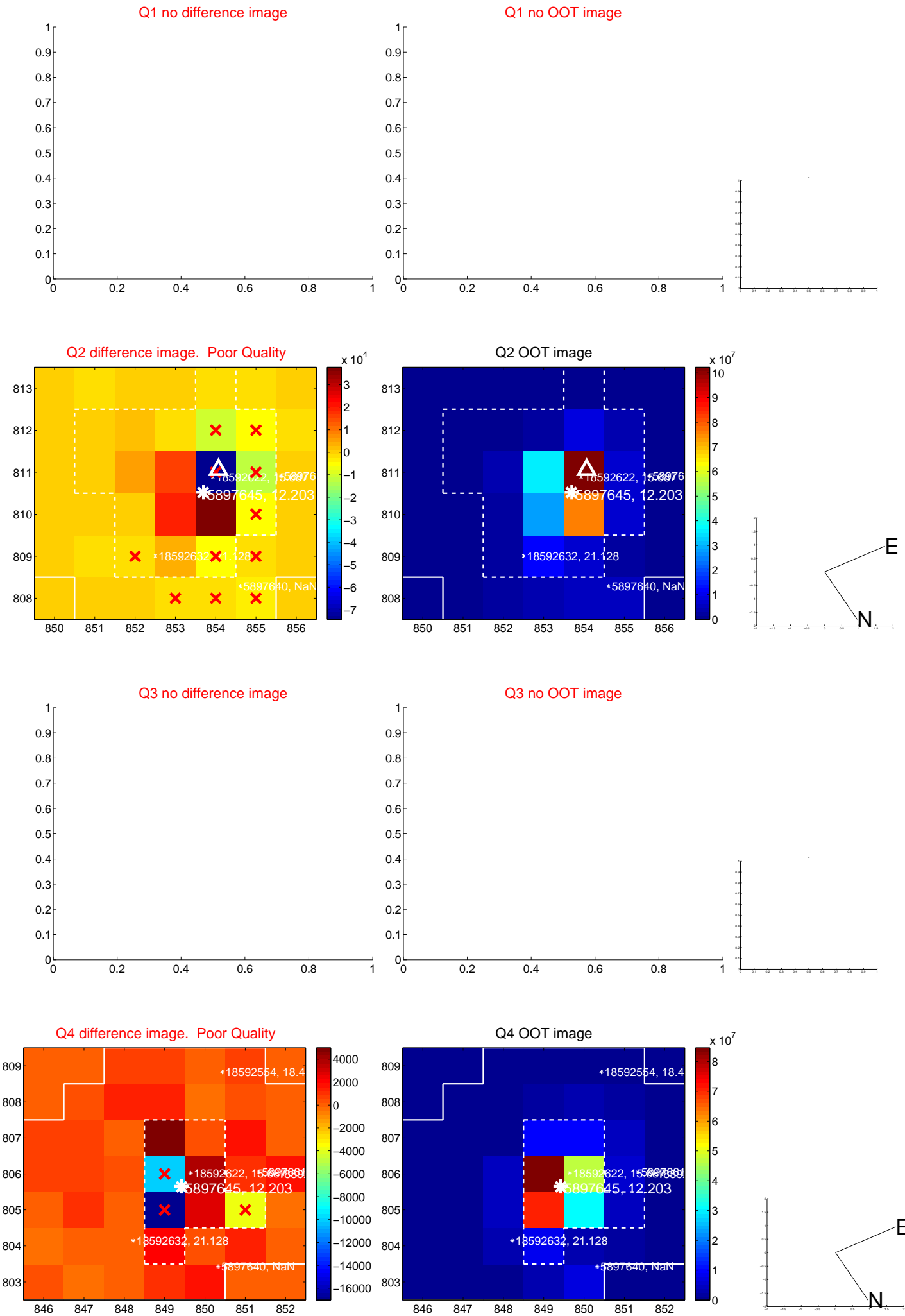


offset from photometric centroids

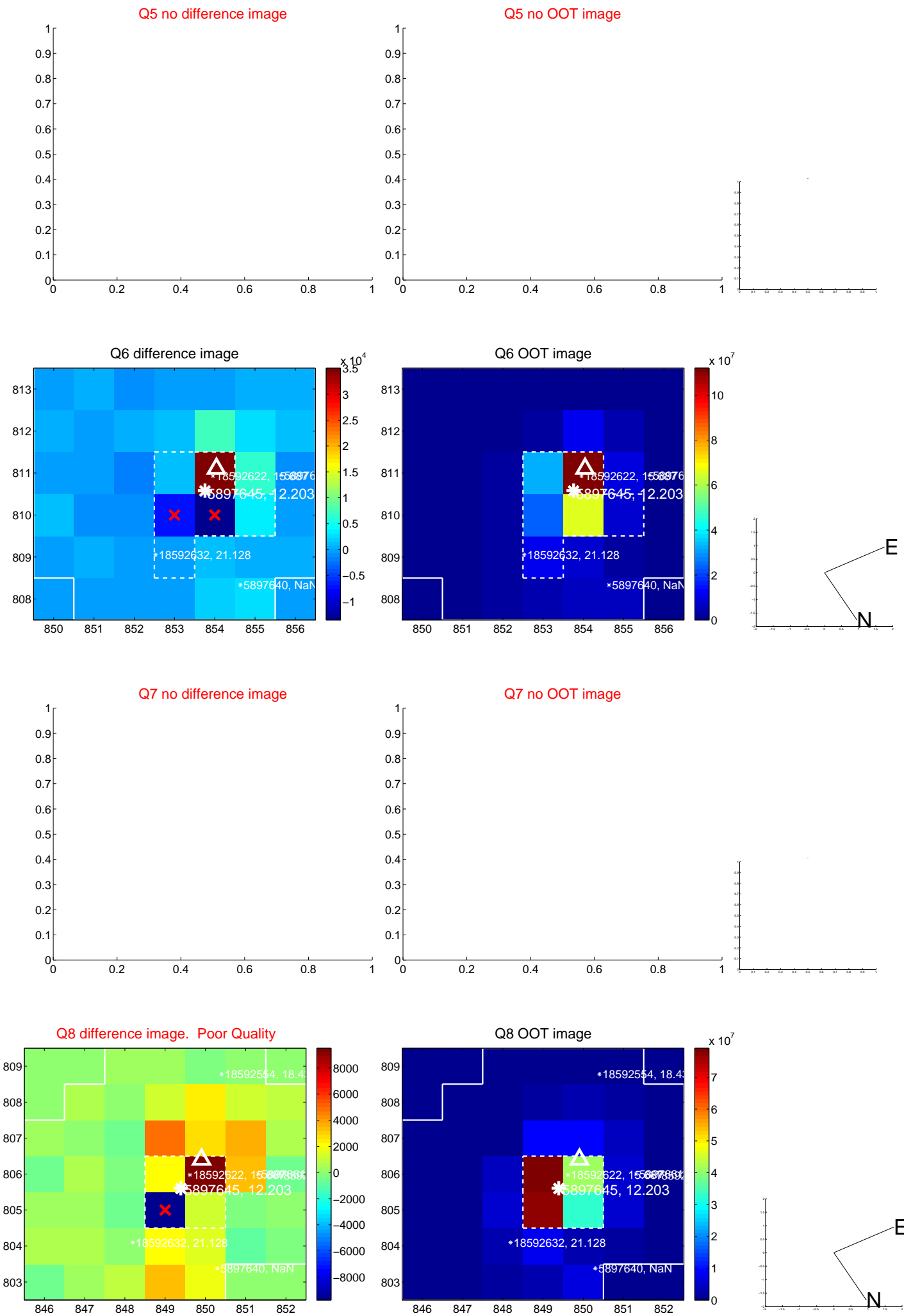


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

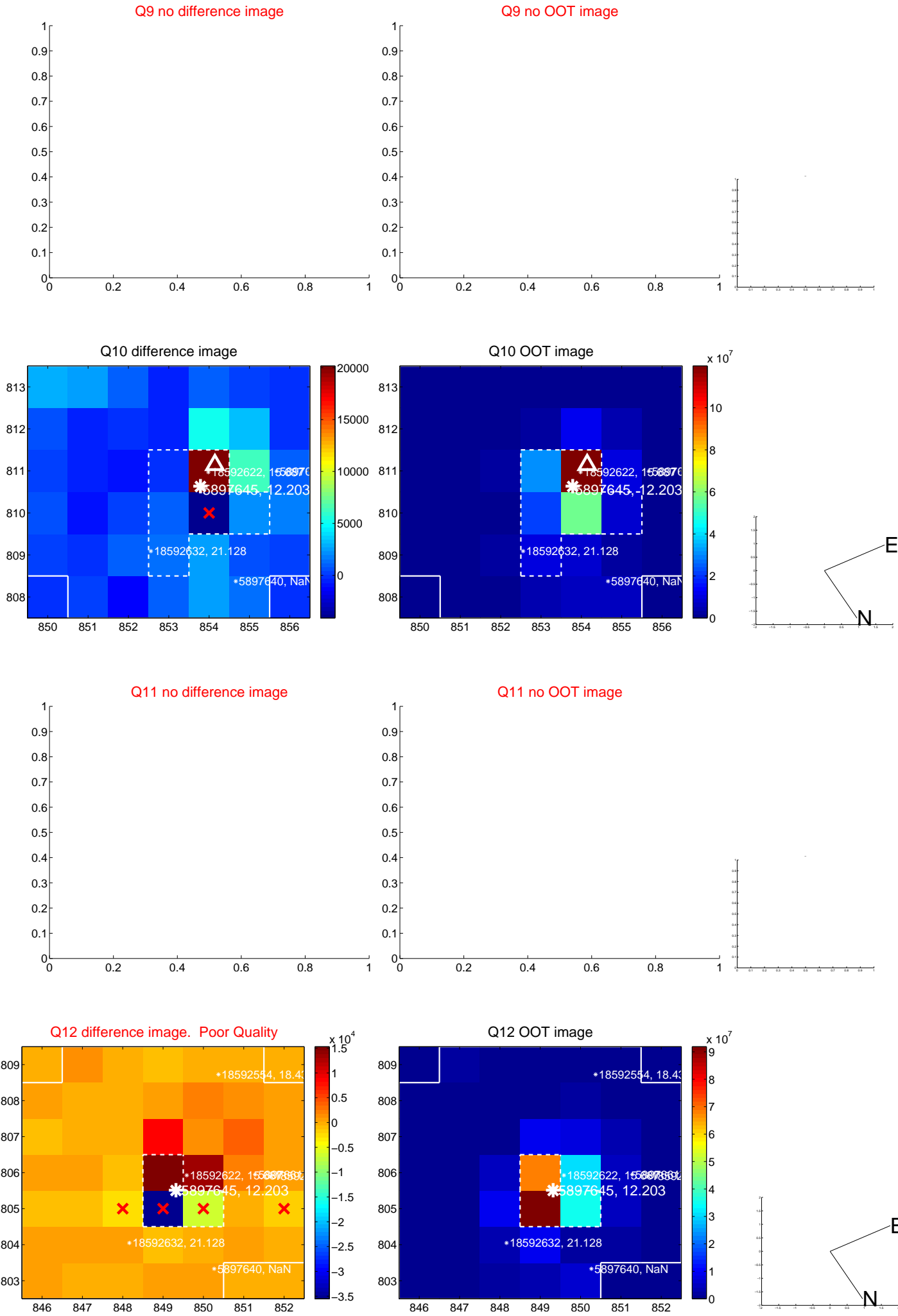
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



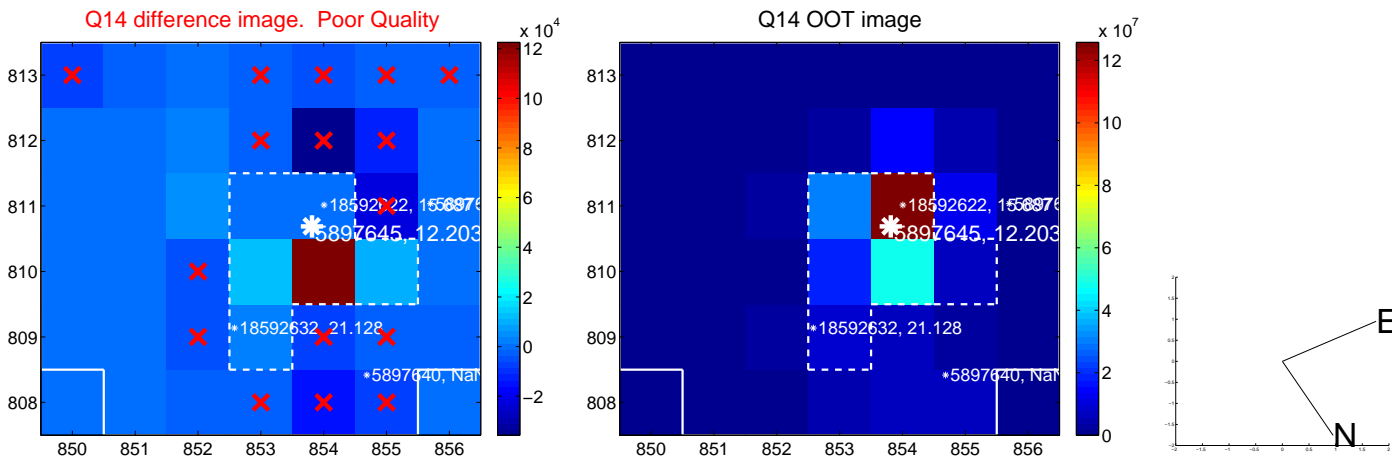
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



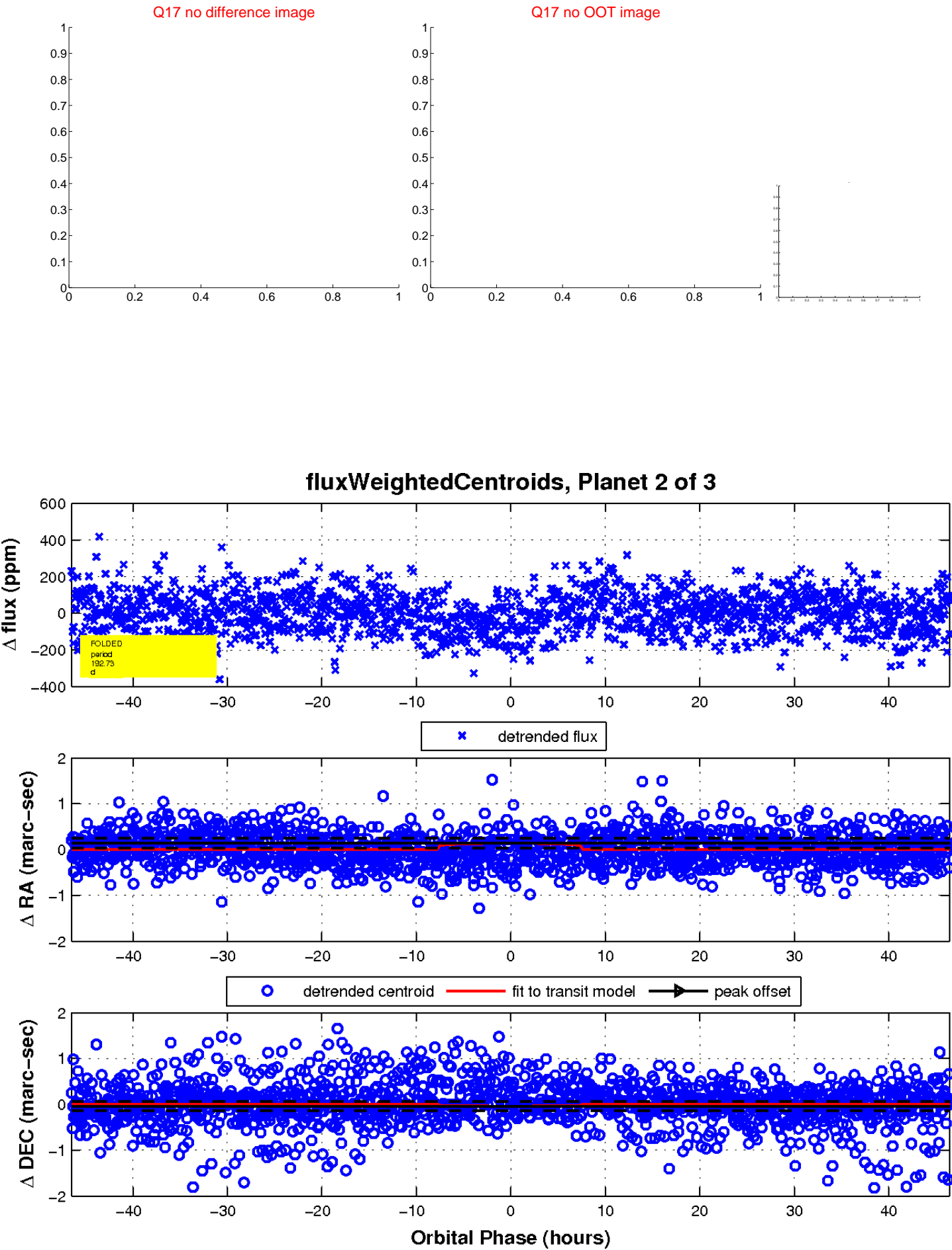
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

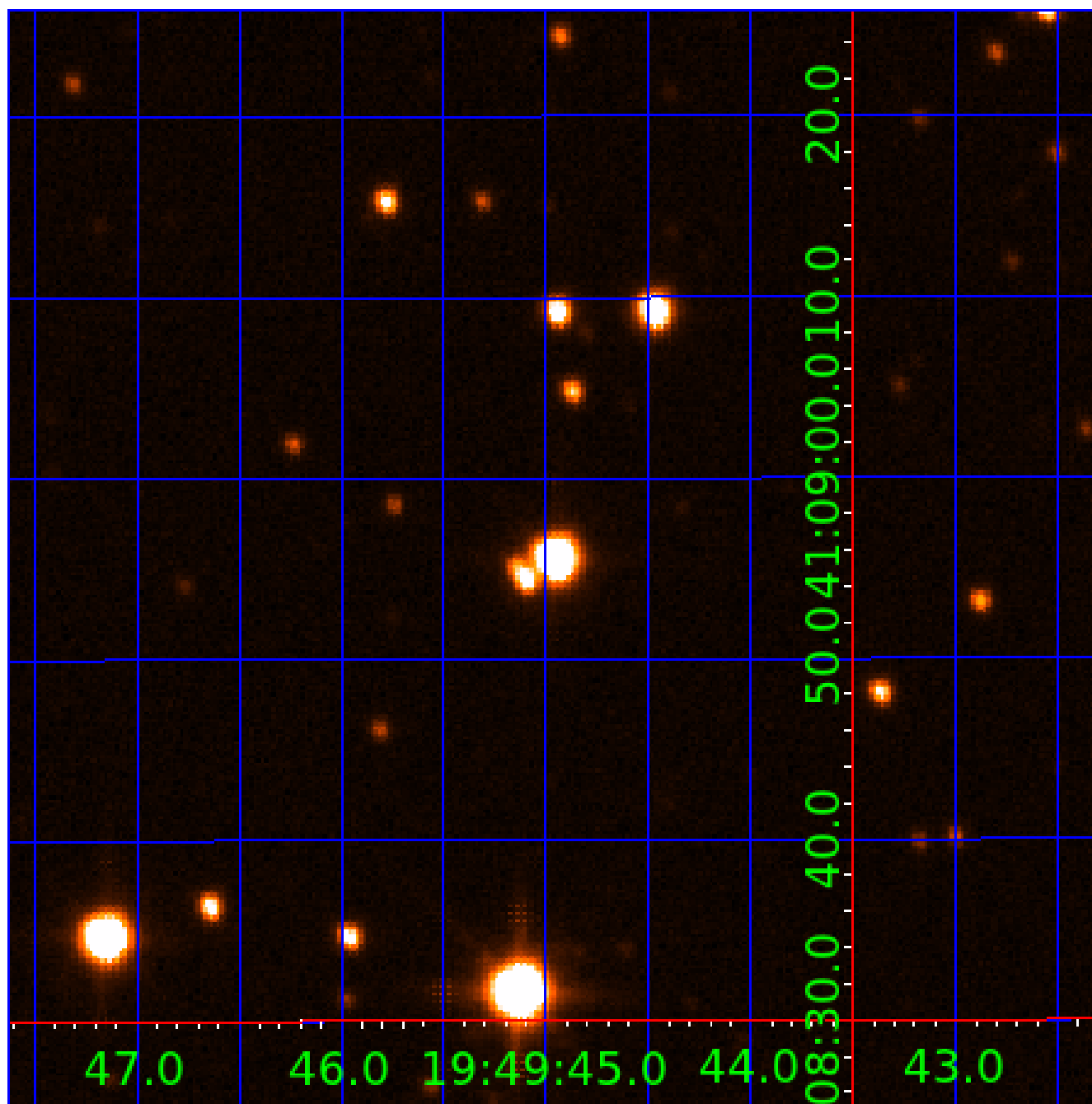


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005897645

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})
005897645-01	OBS	No	1.825014	132.853045	7.6	6.206	7.6	4.4	1.91	7068	0.54	7264.95
005897645-02	OBS	No	192.734082	176.353715	121.4	15.502	8.6	6.7	1.91	7068	2.27	14.55
005897645-03	OBS	No	25.707032	150.777588	48.6	12.023	7.5	6.9	1.91	7068	1.46	213.56

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005897645-01	OBS	FP	0.00	1	0	0	0	LPP_DV
005897645-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—INCONSISTENT_TRANS—CENT_FEW_MEAS
005897645-03	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_RUBBLE_ZUMA—HALO_GHOST

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

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

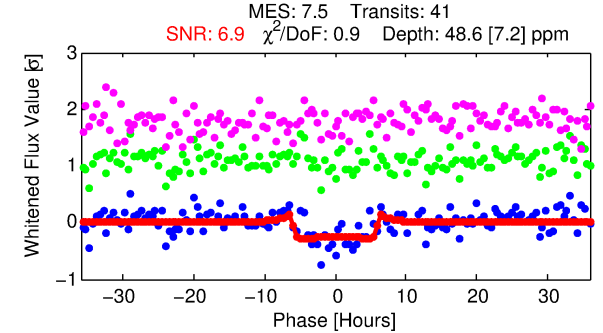
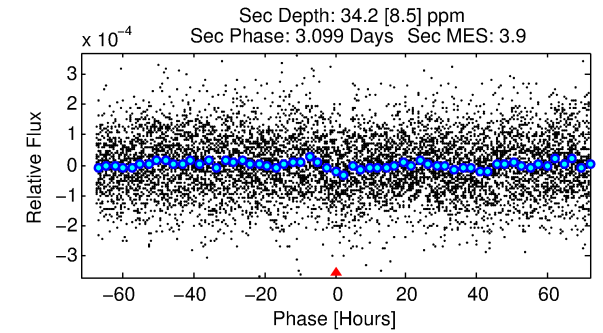
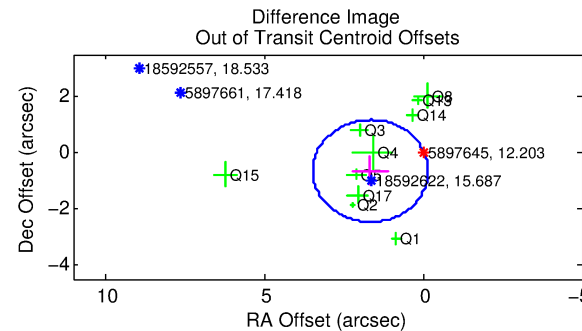
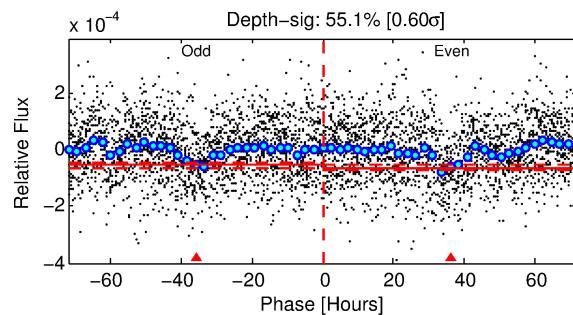
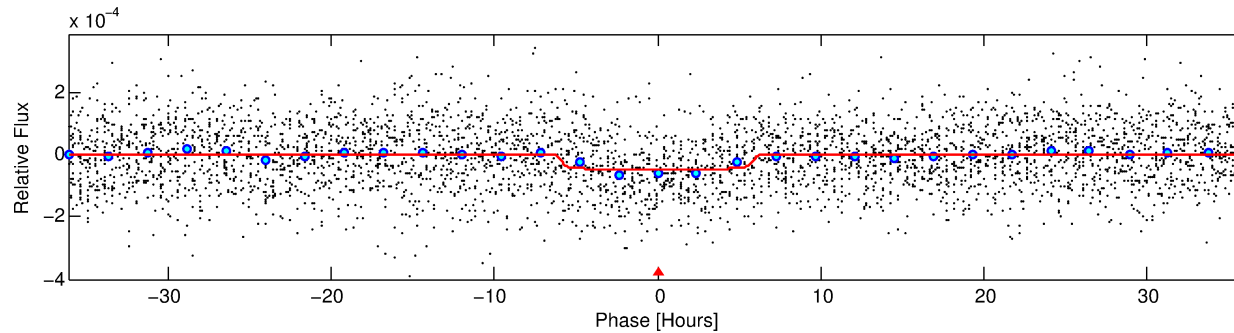
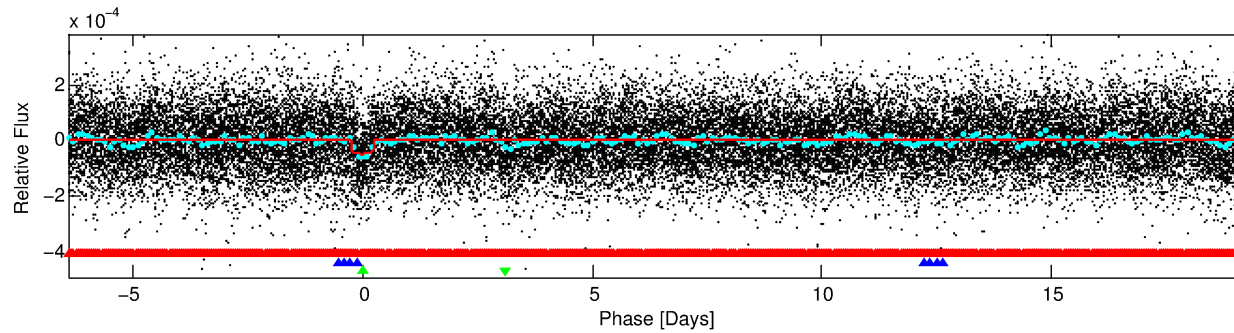
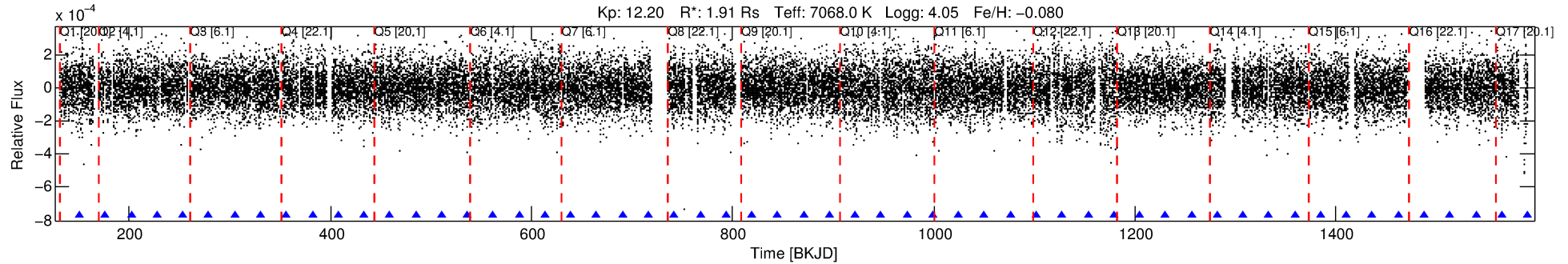
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005897645-03

No Significant Match Found

DV One-Page Summary

KIC: 5897645 Candidate: 3 of 3 Period: 25.707 d



DV Fit Results:

Period = 25.70703 [0.00047] d
Epoch = 150.7776 [0.0159] BKJD
Rp/R* = 0.0070 [0.0021]
a/R* = 10.56 [18.95]
b = 0.77 [0.94]
Seff = 213.56 [69.64]
Teq = 975 [79] K
Rp = 1.46 [0.55] Re
a = 0.1955 [0.0379] AU
Ag = 339.24 [245.01] [1.38 σ]
Teffp = 6468 [1099] K [4.98 σ]

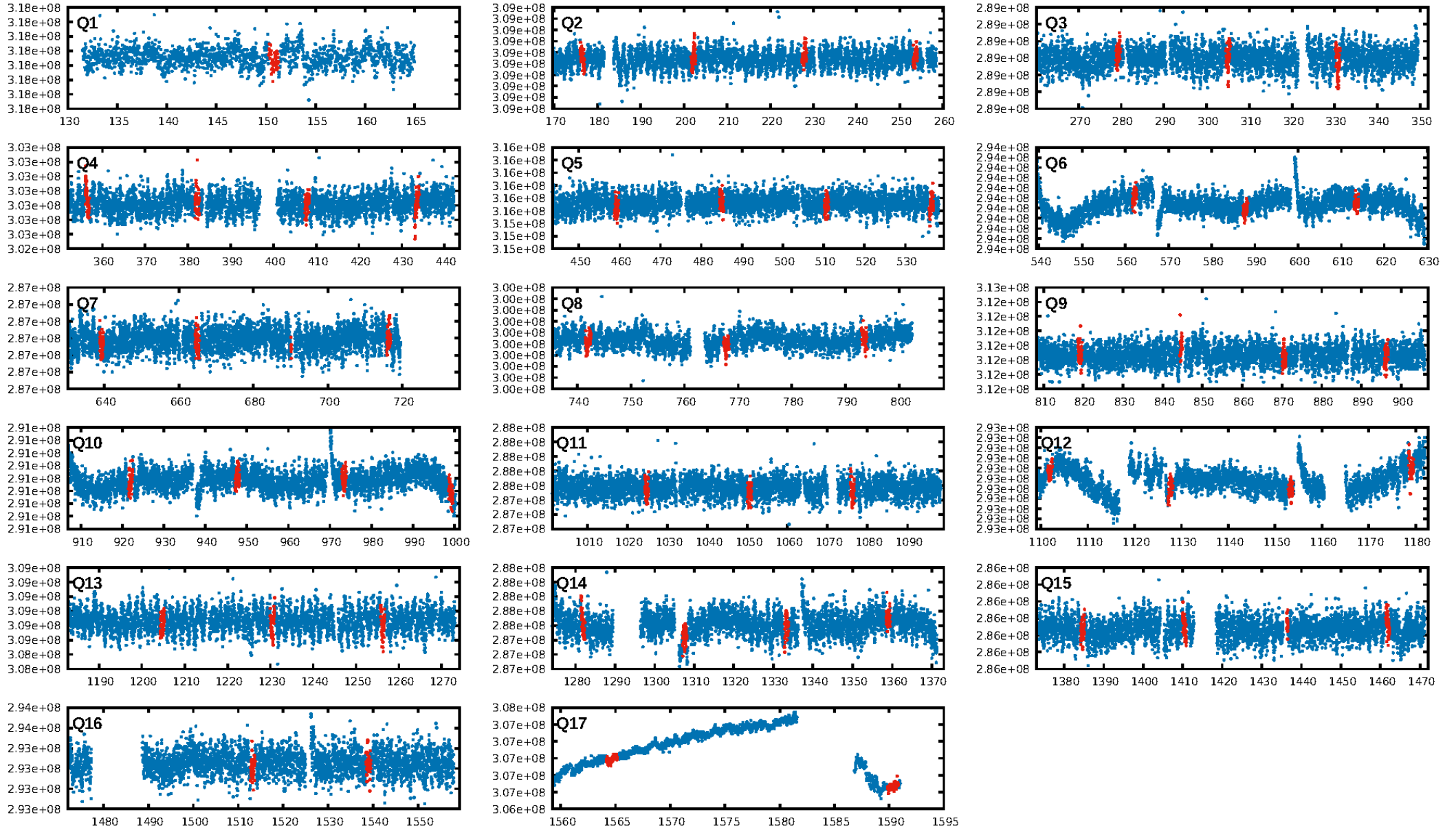
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [42.36 σ]
LongPeriod-sig: 100.0% [204.33 σ]
ModelChiSquare2-sig: 79.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.03e-09
RollingBand-fgt: 1.00 [38/38]
GhostDiagnostic-chr: 0.1273
Centroid-sig: 0.0%
Centroid-so: 1.666 arcsec [1.92 σ]
OotOffset-rm: 1.775 arcsec [2.93 σ]
KicOffset-rm: 1.789 arcsec [2.87 σ]
OotOffset-st: 2/2/2/4 [10]
KicOffset-st: 2/2/2/4 [10]
DiffImageQuality-fgm: 0.30 [3/10]
DiffImageOverlap-fno: 0.00 [0/17]

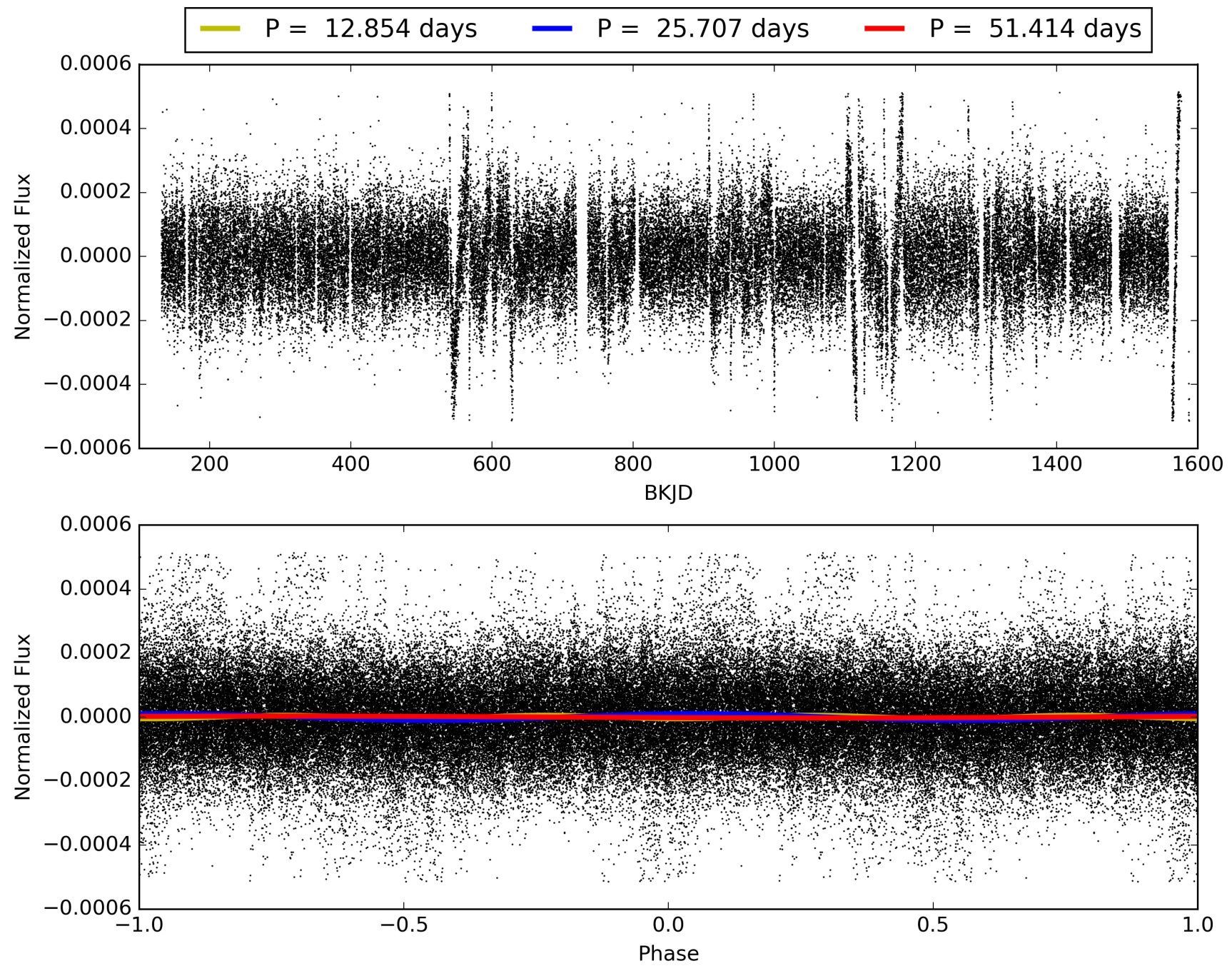
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:20:01 Z

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

TCE 005897645-03, PDC Light Curves

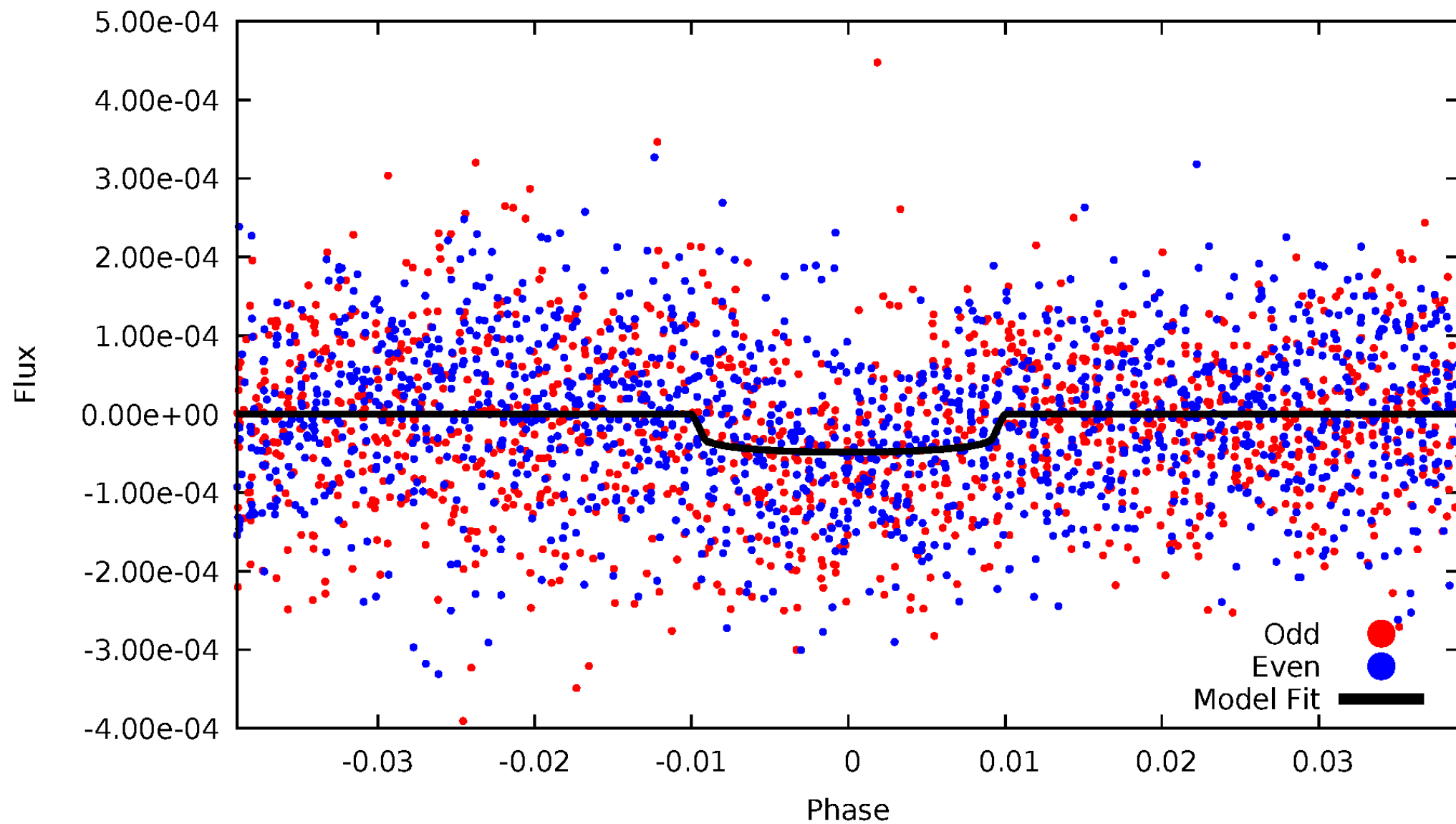


TCE 005897645-03



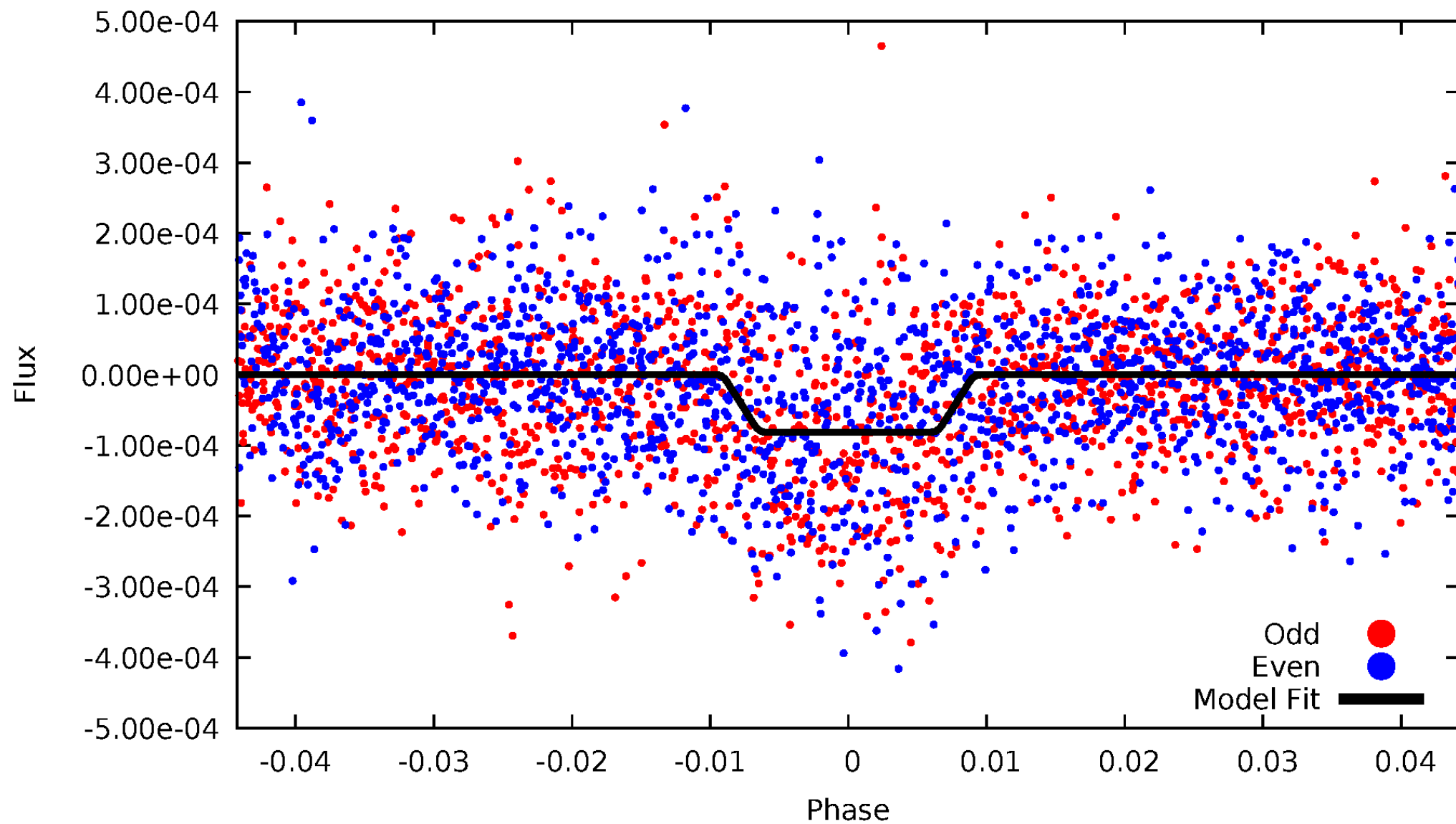
DV Odd/Even

TCE 005897645-03



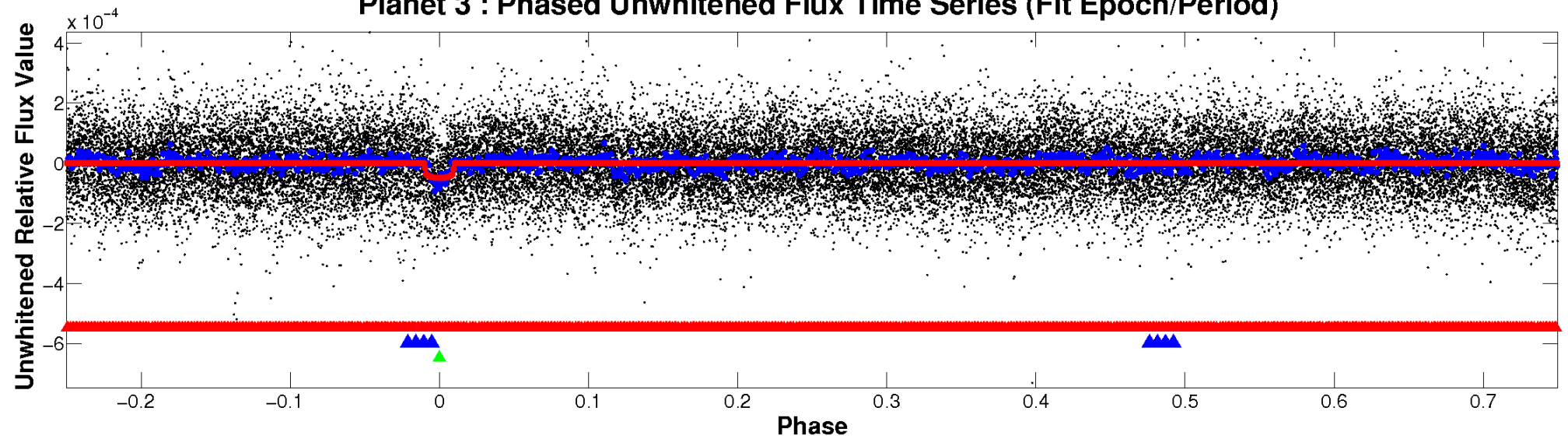
ALT Odd/Even

TCE 005897645-03

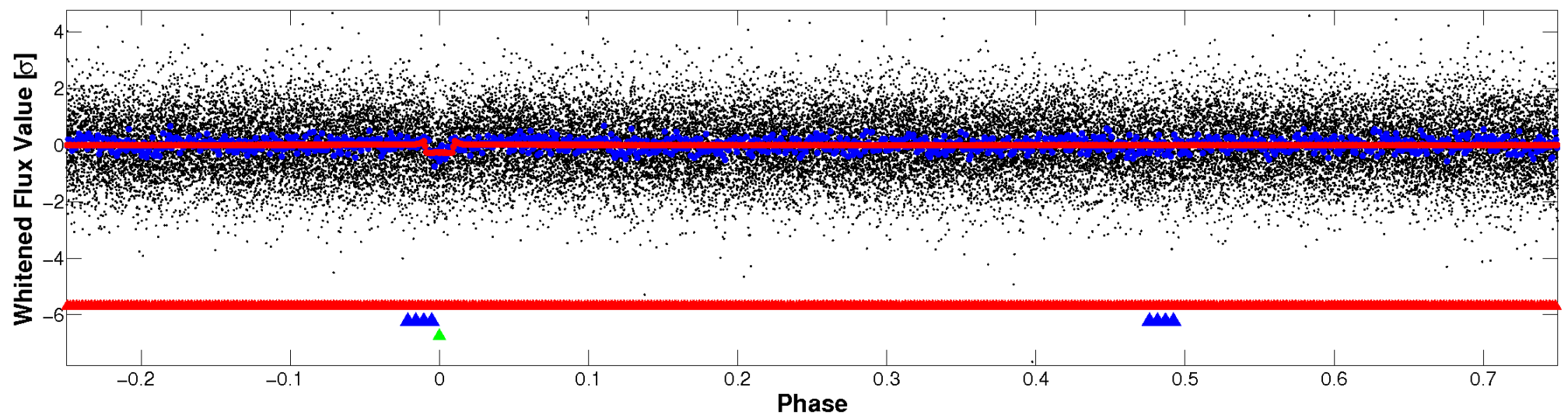


Non-Whitened Vs. Whitened Light Curve

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

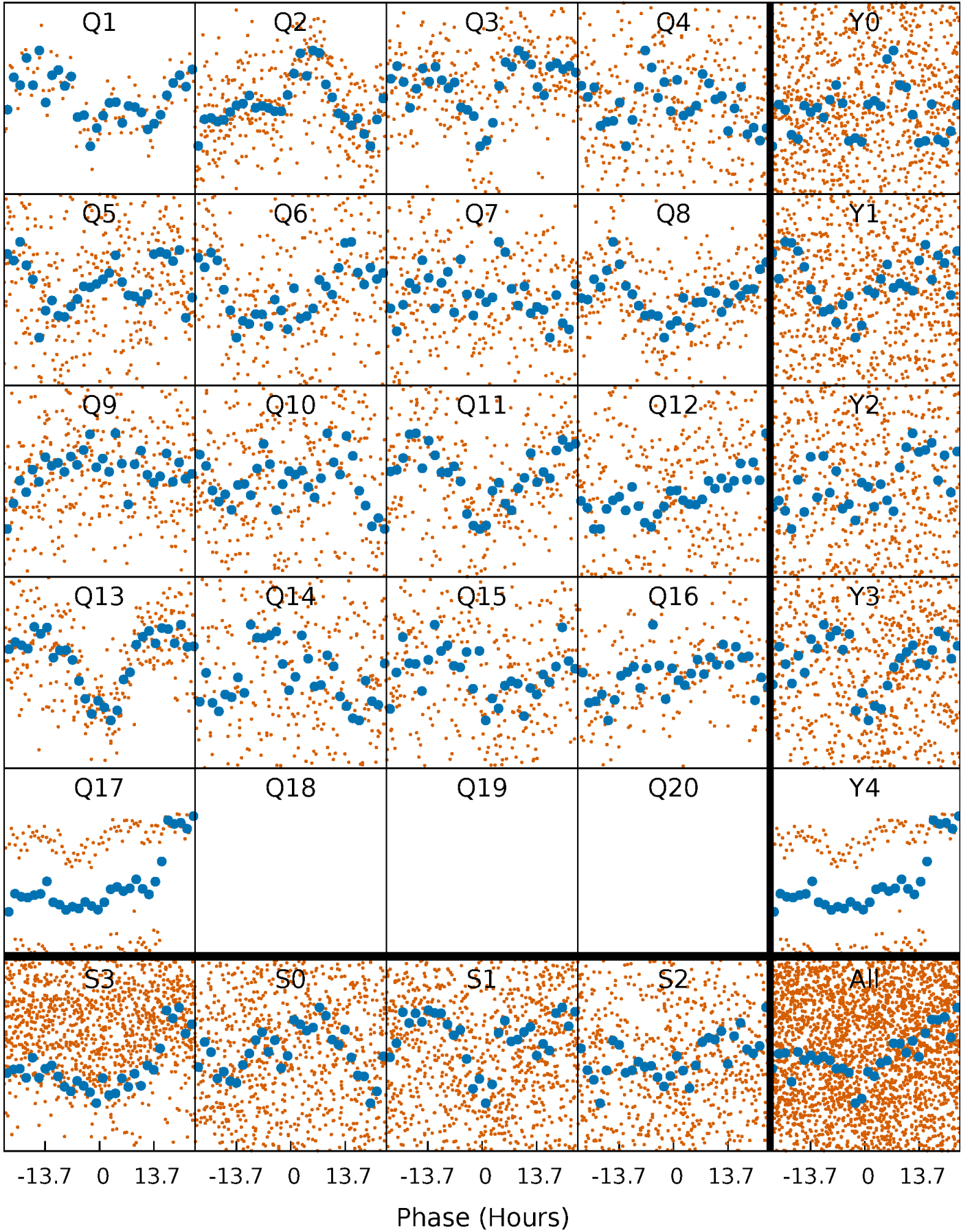


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



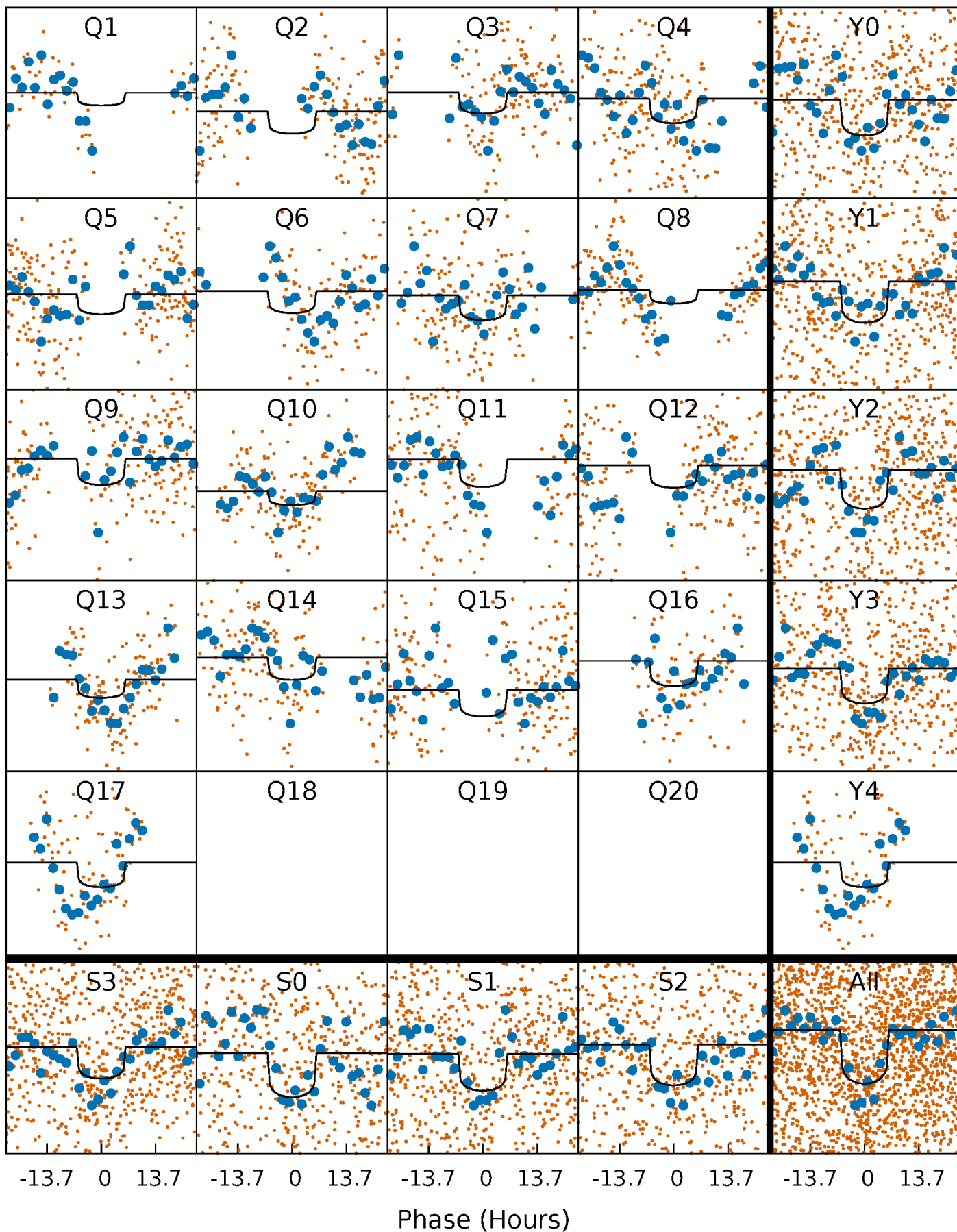
PDC Quarter-Phased Transit Curves

TCE 005897645-03 P= 25.707032 Days $T_0=150.777588$ (BKJD)



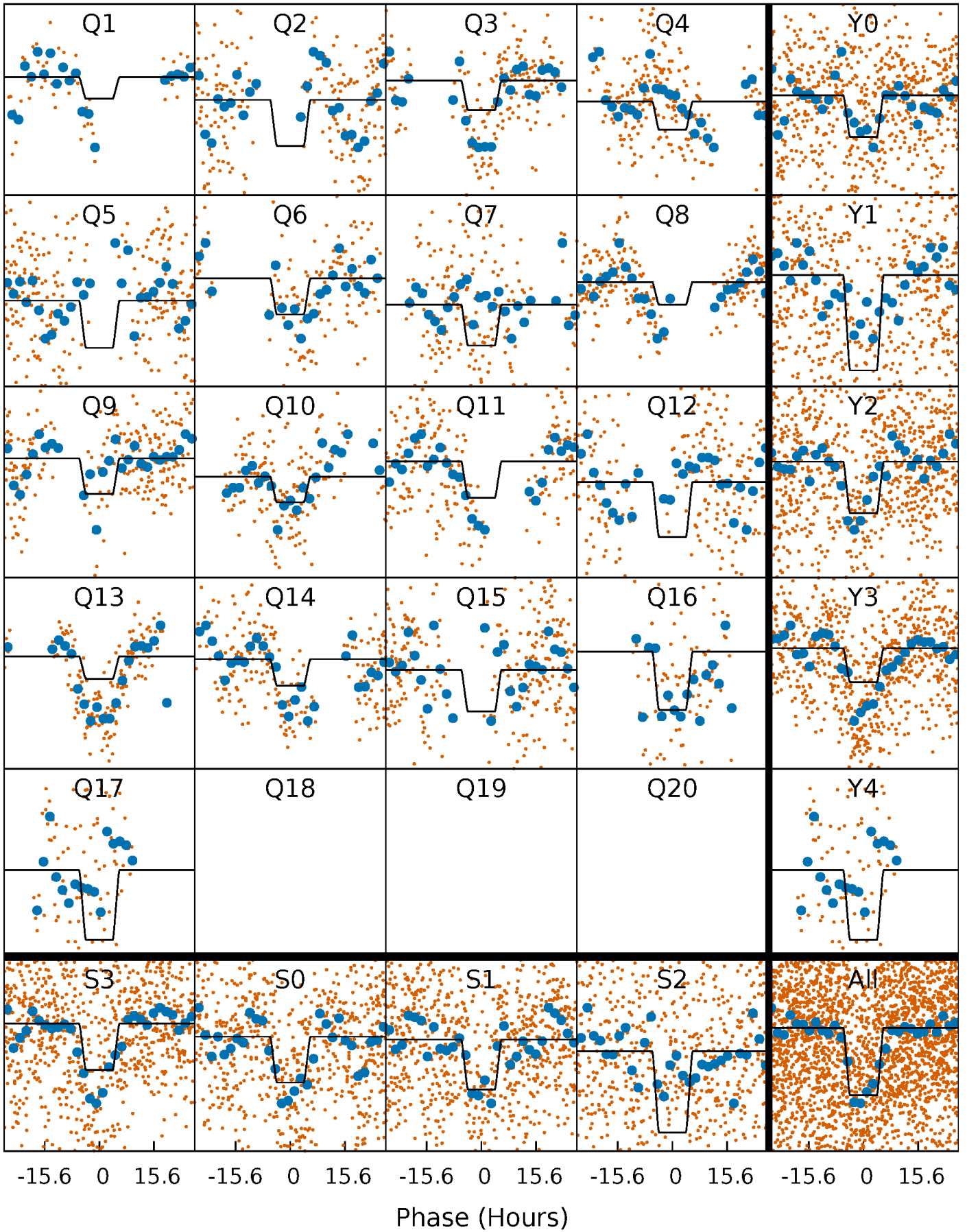
DV Quarter-Phased Transit Curves

TCE 005897645-03 P= 25.707032 Days $T_0=150.777588$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

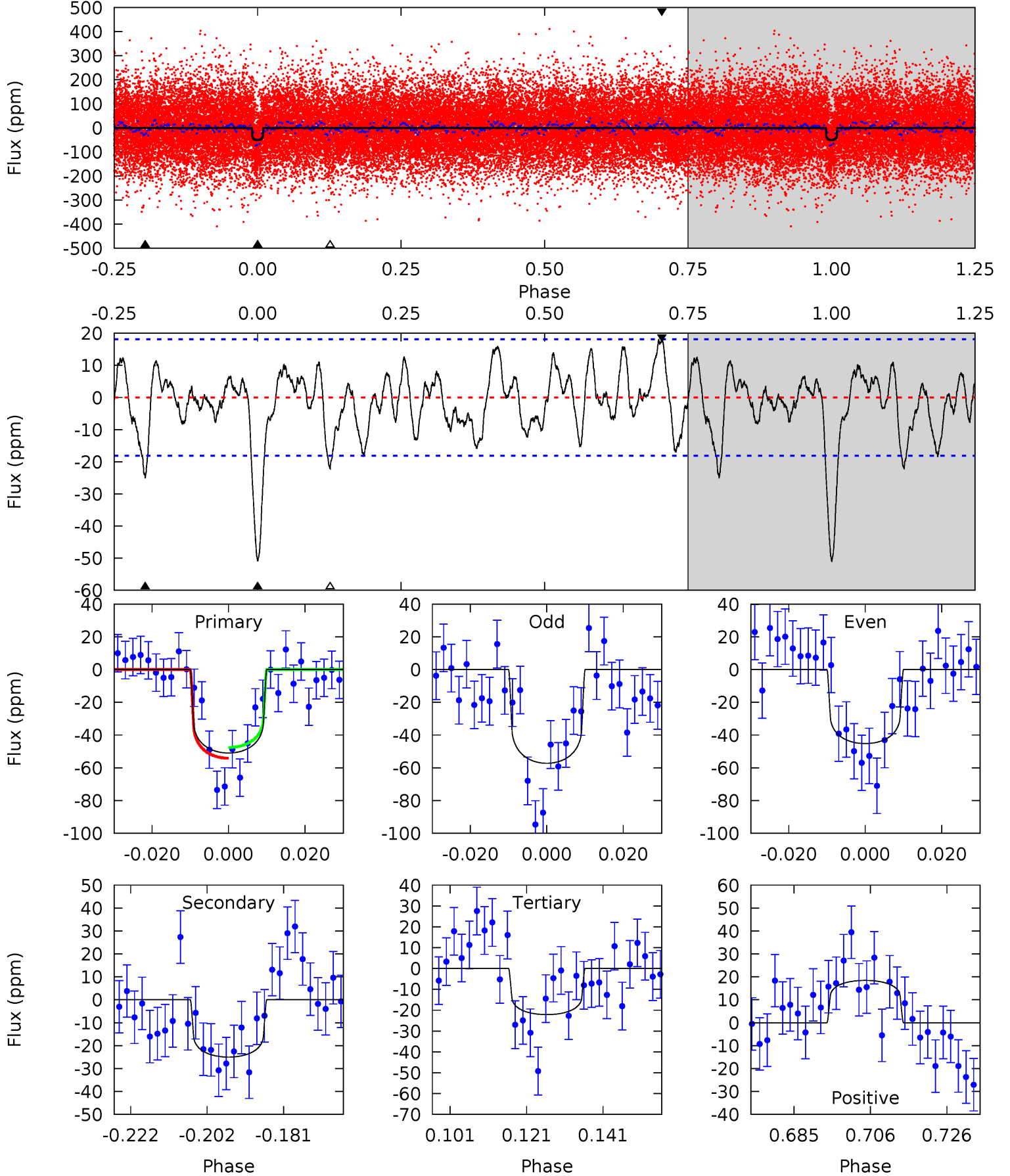
TCE 005897645-03 P= 25.708168 Days $T_0=150.753182$ (BKJD)



DV Model-Shift Uniqueness Test

005897645-03, P = 25.707032 Days, E = 125.070556 Days

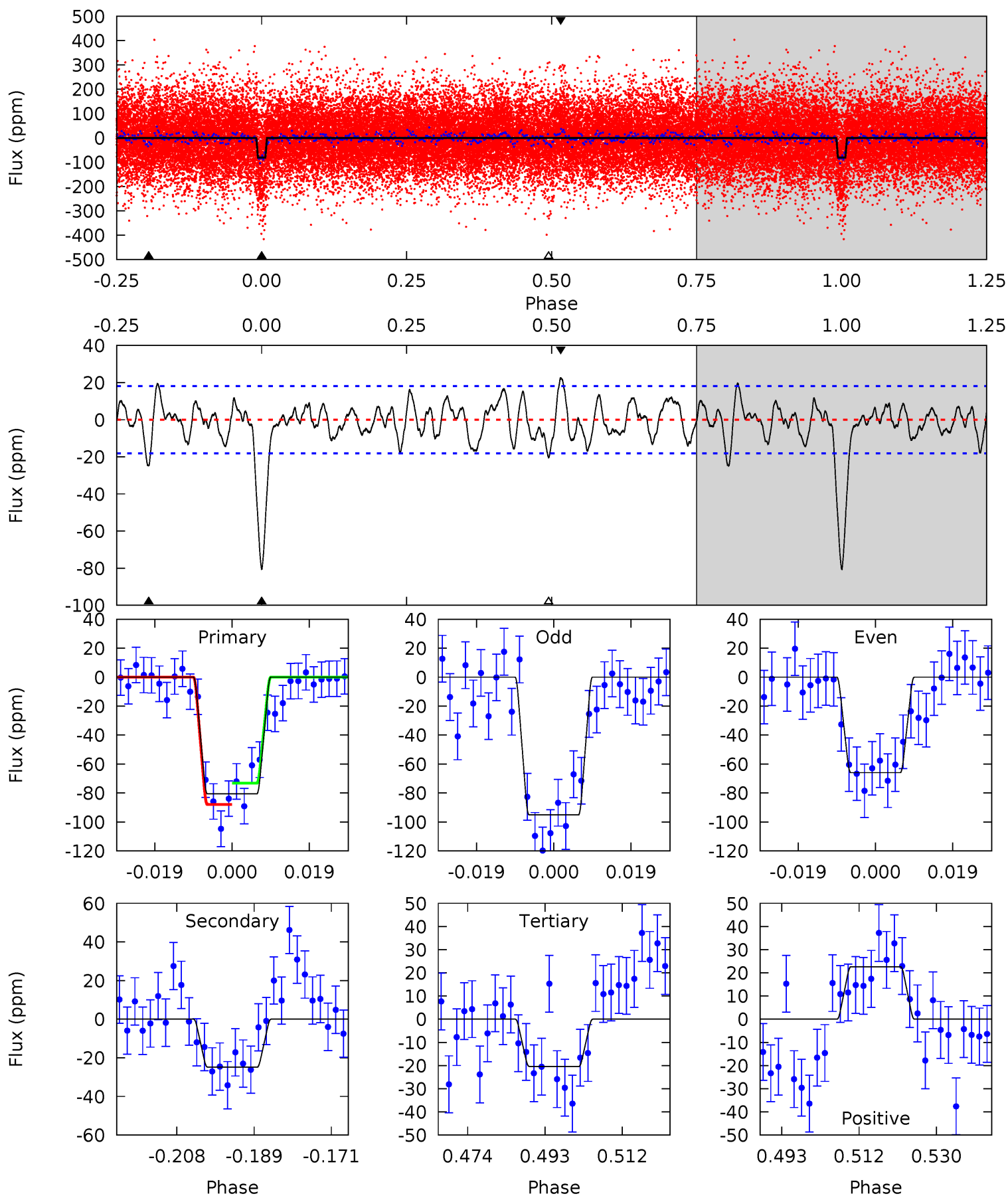
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.8	6.75	5.98	4.98	4.89	2.32	2.09	7.78	8.78	0.78	1.77	1.62	1.05	0.27	0.89



Alt Model-Shift Uniqueness Test

005897645-03, P = 25.708168 Days, E = 125.045014 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.8	6.72	5.52	6.12	4.90	2.35	2.14	16.3	15.7	1.20	0.60	3.94	1.37	0.22	1.99



Stellar Parameters For KIC 005897645

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7068^{+197}_{-271}	$4.054^{+0.160}_{-0.131}$	$-0.080^{+0.250}_{-0.350}$	$1.911^{+0.430}_{-0.430}$	$1.508^{+0.185}_{-0.246}$	$0.304^{+0.271}_{-0.124}$
	+3%/-4%	+4%/-3%	+312%/-438%	+23%/-23%	+12%/-16%	+89%/-41%
Source	PHO1	FLK73	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 005897645-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-25 ± 4	$1.43^{+0.52}_{-0.47}$	1359^{+83}_{-87}	5916^{+1362}_{-732}	250^{+305}_{-115}
Alt.	-25 ± 4	$1.84^{+0.55}_{-0.49}$	1355^{+82}_{-93}	5259^{+803}_{-528}	152^{+139}_{-65}

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

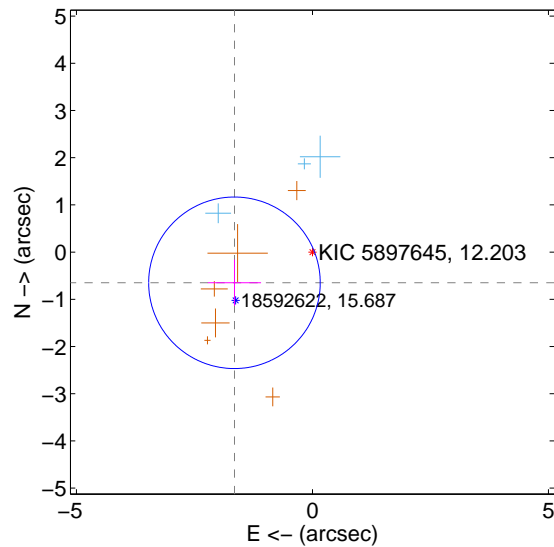
Supplemental centroid analysis for 005897645-03. Kepler magnitude: 12.20. Transit SNR 6.87

There are 3 quarters with good PRF difference image offsets

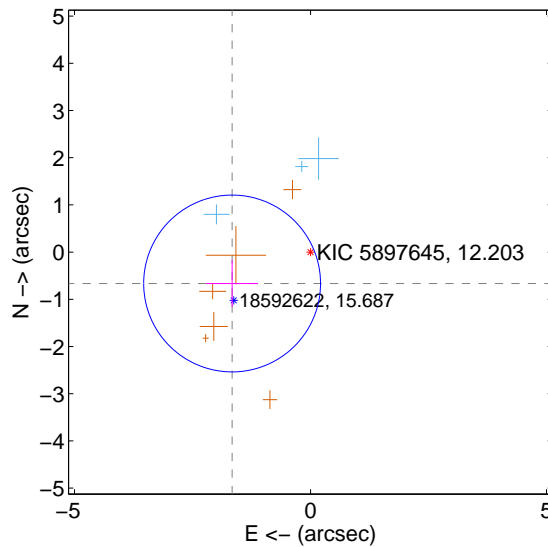
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.775 ± 0.606	2.93	1.652 ± 0.564	-0.650 ± 0.491
PRF-fit source offset from KIC position	1.789 ± 0.624	2.87	1.661 ± 0.548	-0.665 ± 0.495
photometric centroid source offset	1.67 ± 0.87	1.92	0.59 ± 0.87	-1.56 ± 0.87

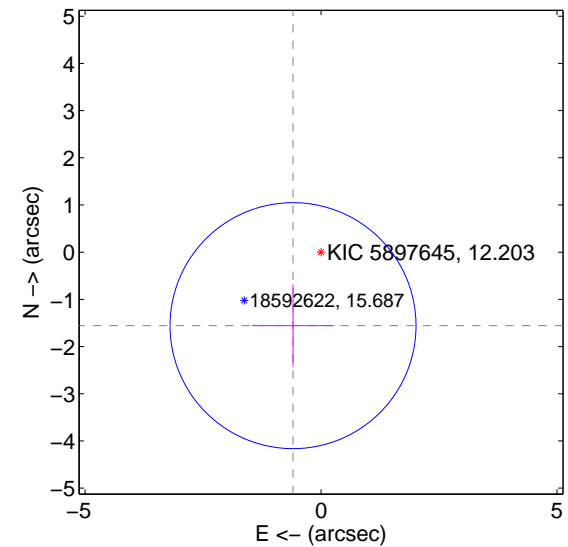
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

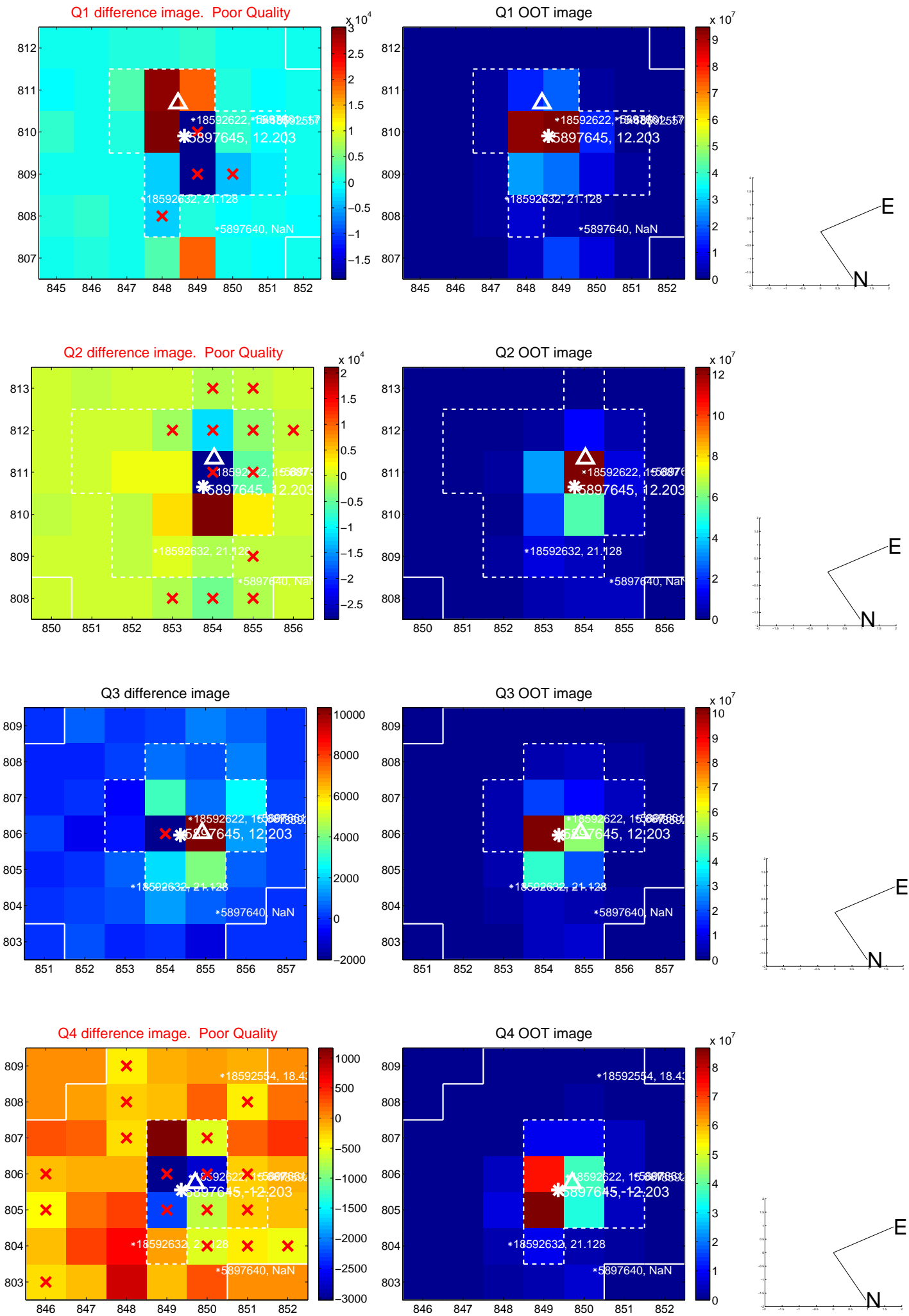


offset from photometric centroids

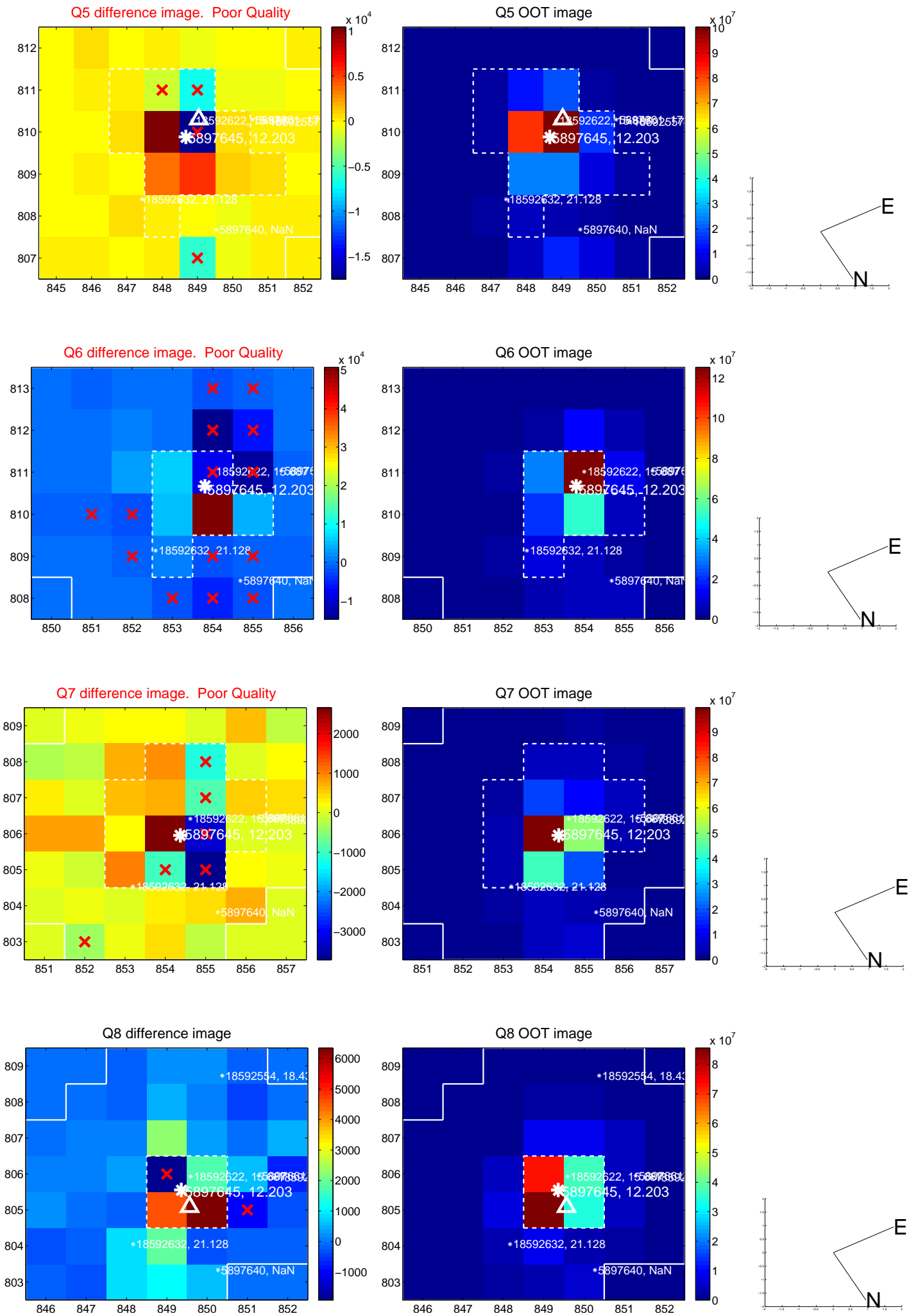


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

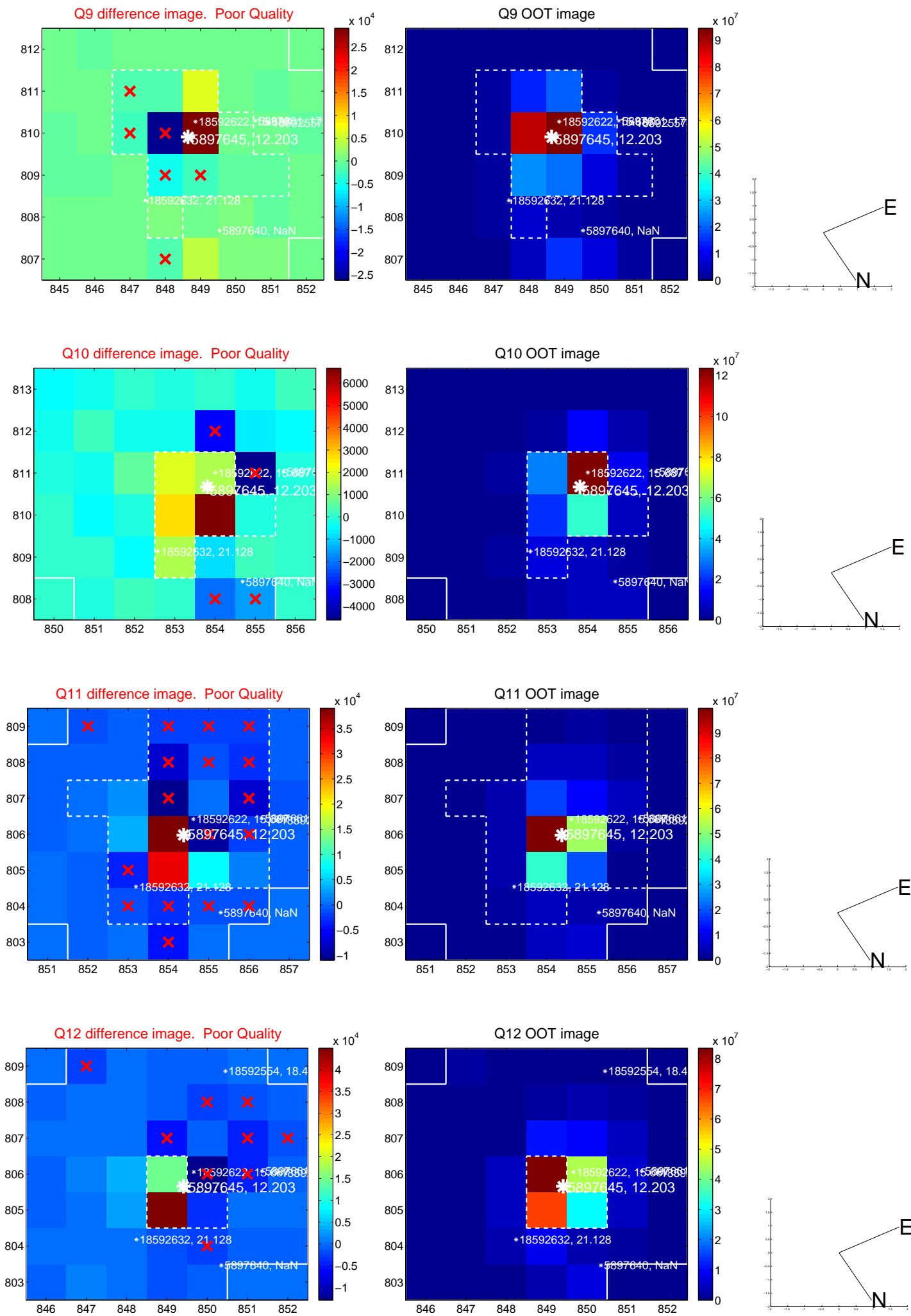
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



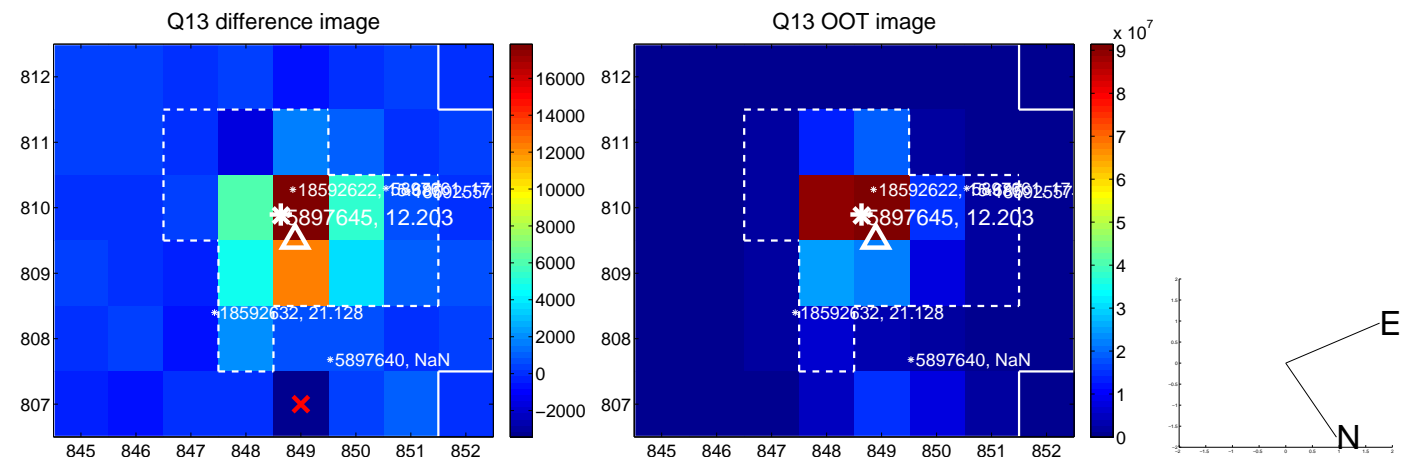
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



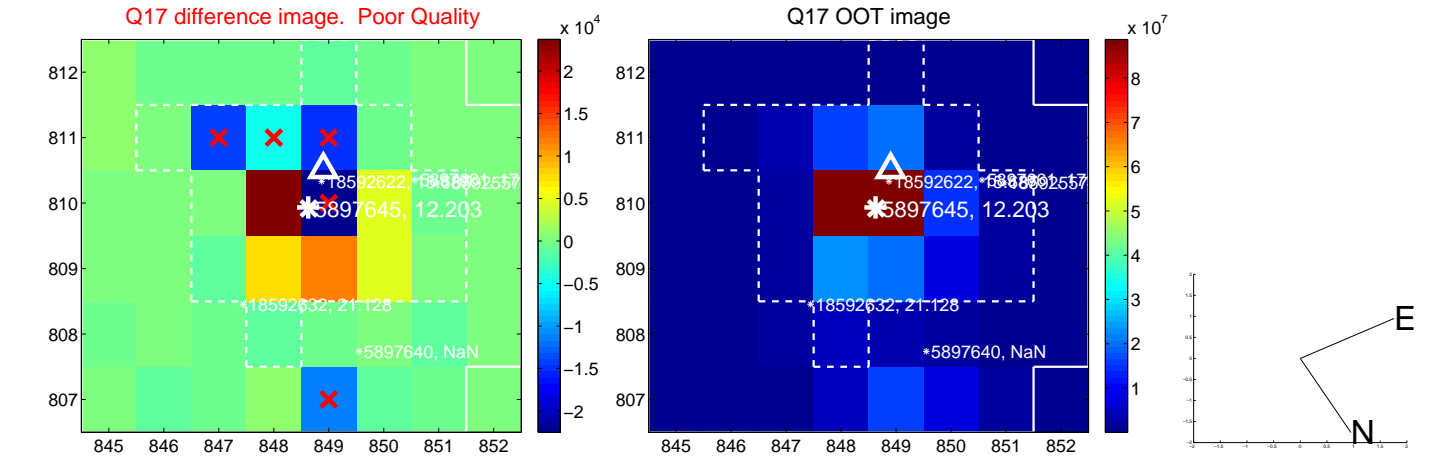
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



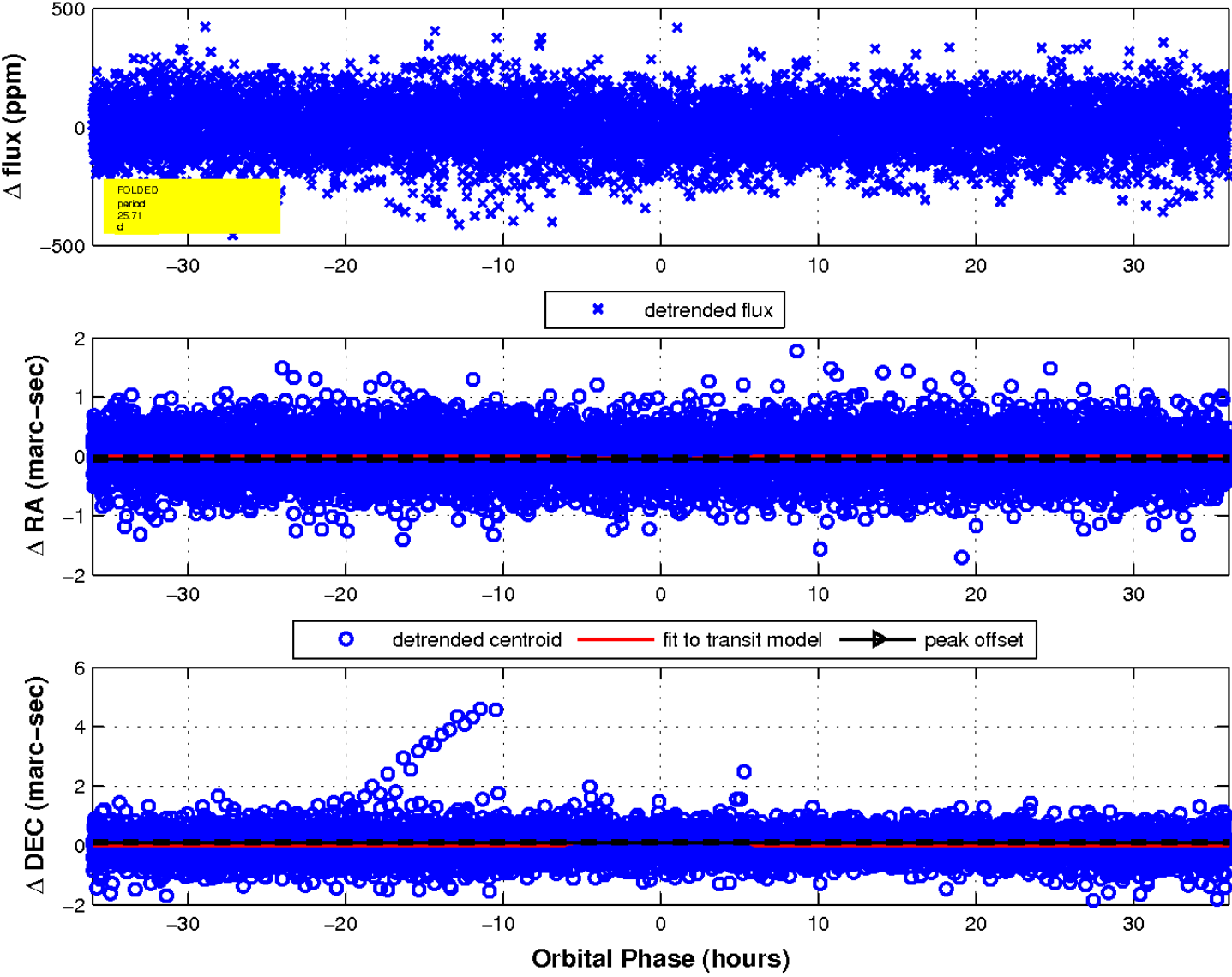
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

