

KIC 005795648

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})
005795648-01	OBS	6016.01	4.553370	135.433906	23498.9	3.214	6098.0	5541.8	1.11	6306	25.04	604.53
005795648-02	OBS	No	4.553360	133.149535	421.2	2.898	109.2	120.7	1.11	6306	4.43	604.54
005795648-03	OBS	No	497.924564	413.480554	468.2	10.745	12.0	7.2	1.11	6306	3.25	1.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005795648-01	OBS	PC	0.80	0	1	0	0	MOD_SEC_DV—PLANET_OCCULT_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE—CENT_SATURATED
005795648-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_SATURATED
005795648-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED

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

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

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

Ephemeris Match Information For 005795648-01

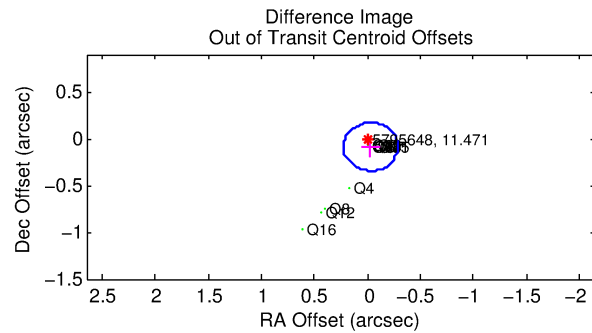
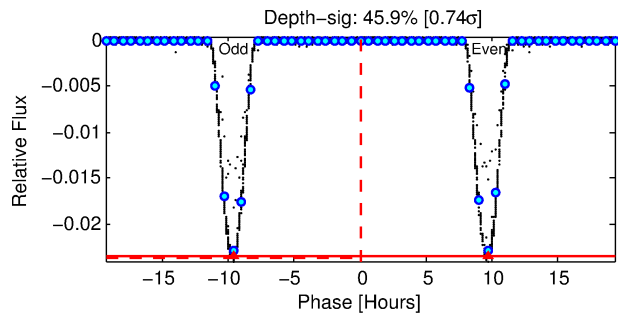
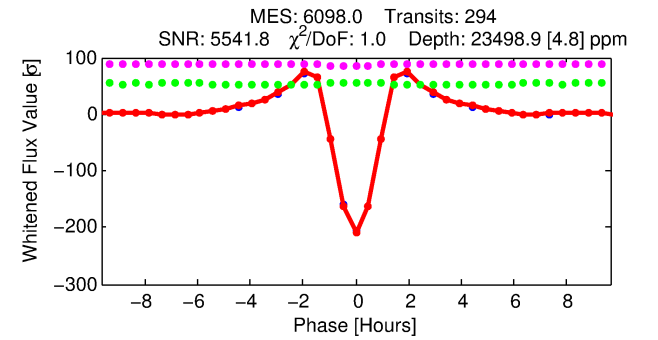
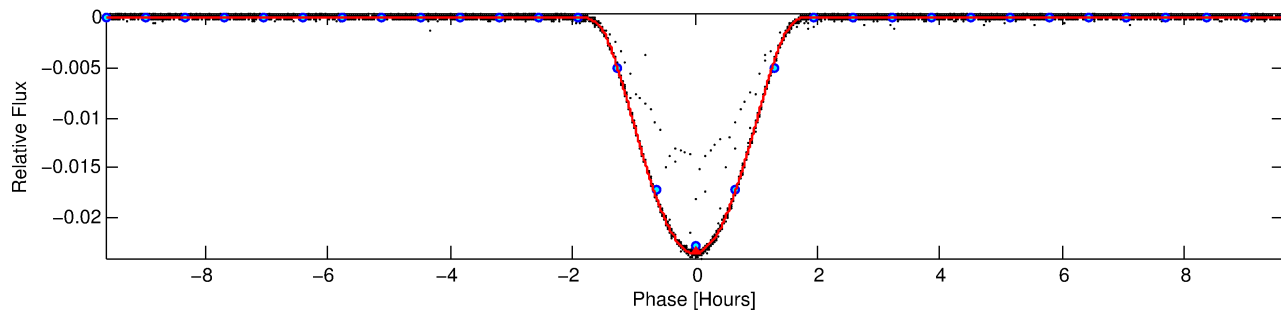
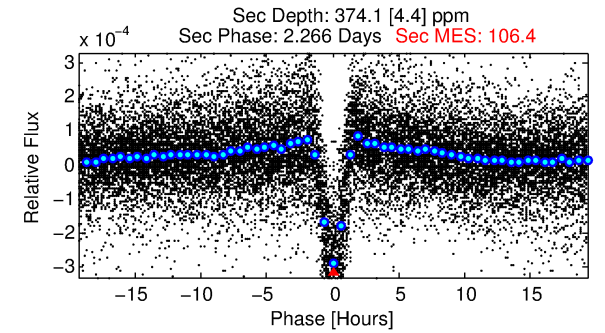
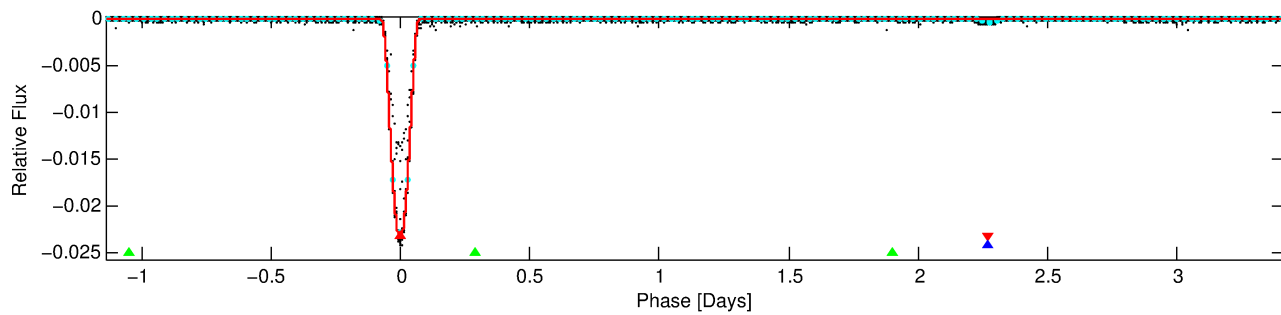
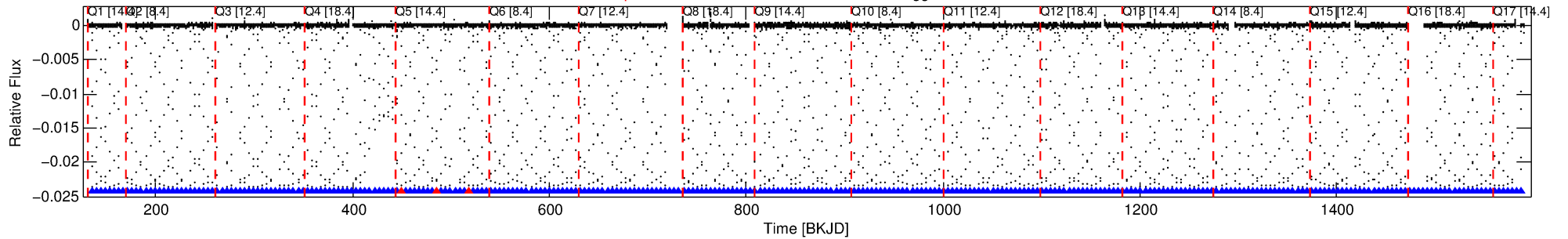
No Significant Match Found

DV One-Page Summary

KIC: 5795648 Candidate: 1 of 3 Period: 4.553 d

KOI: K06016.01 Corr: 0.999

Kp: 11.47 R*: 1.11 Rs Teff: 6306.0 K Logg: 4.35 Fe/H: -0.360



DV Fit Results:

Period = 4.55337 [0.00000] d
Epoch = 135.4339 [0.0000] BKJD
Rp/R* = 0.2069 [0.0009]
a/R* = 8.21 [0.01]
b = 0.94 [0.00]
Seff = 604.53 [171.11]
Teq = 1264 [89] K
Rp = 25.04 [5.51] Re
a = 0.0537 [0.0097] AU
Ag = 0.95 [0.24] [-0.22σ]
Teffp = 1928 [58] K [6.2σ]

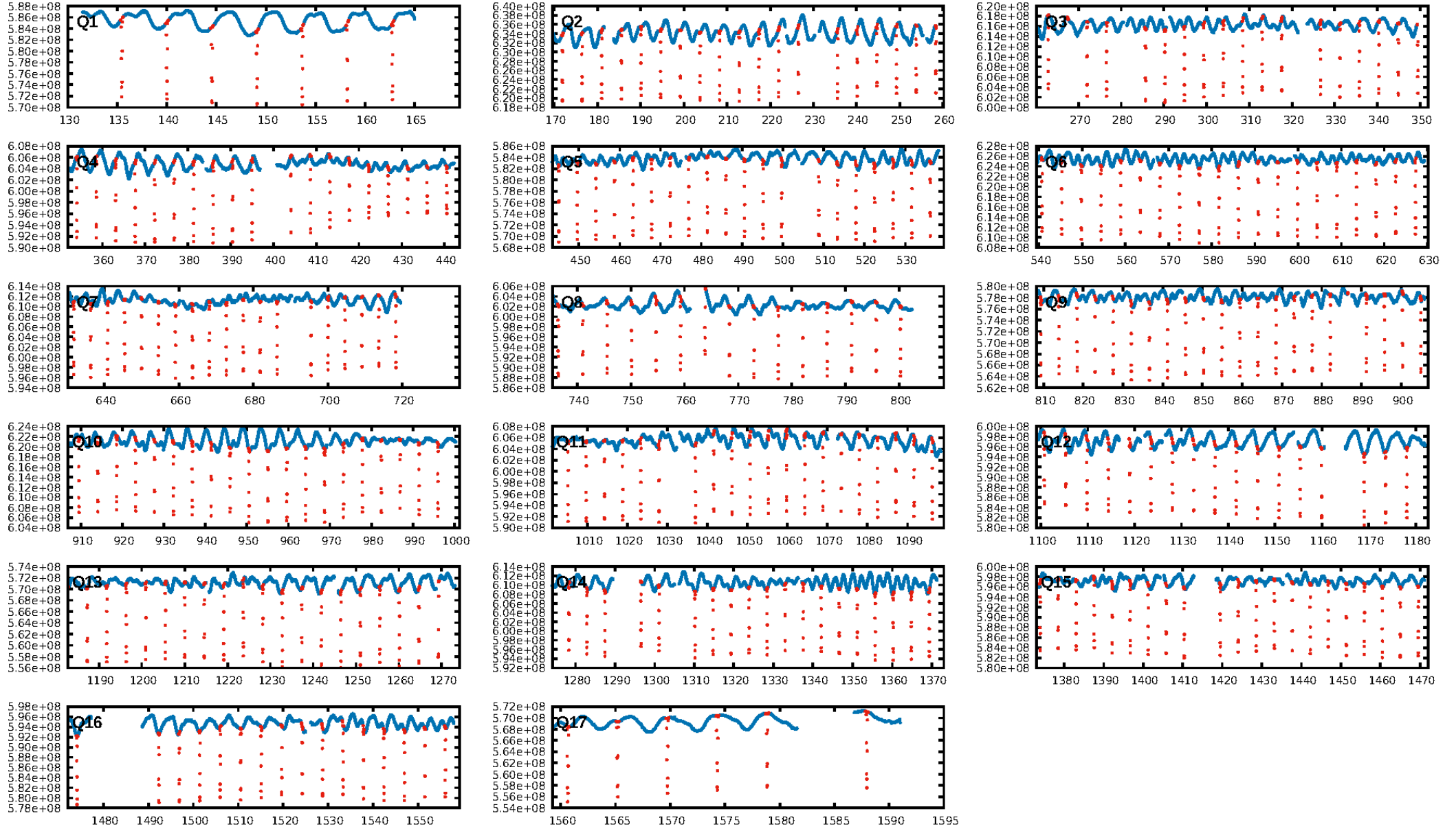
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [1055.78σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.99 [278/281]
GhostDiagnostic-chr: 4.341
Centroid-sig: N/A
Centroid-so: 0.143 arcsec [133.46σ]
OotOffset-rm: 0.093 arcsec [1.08σ]
KicOffset-rm: 0.057 arcsec [0.65σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

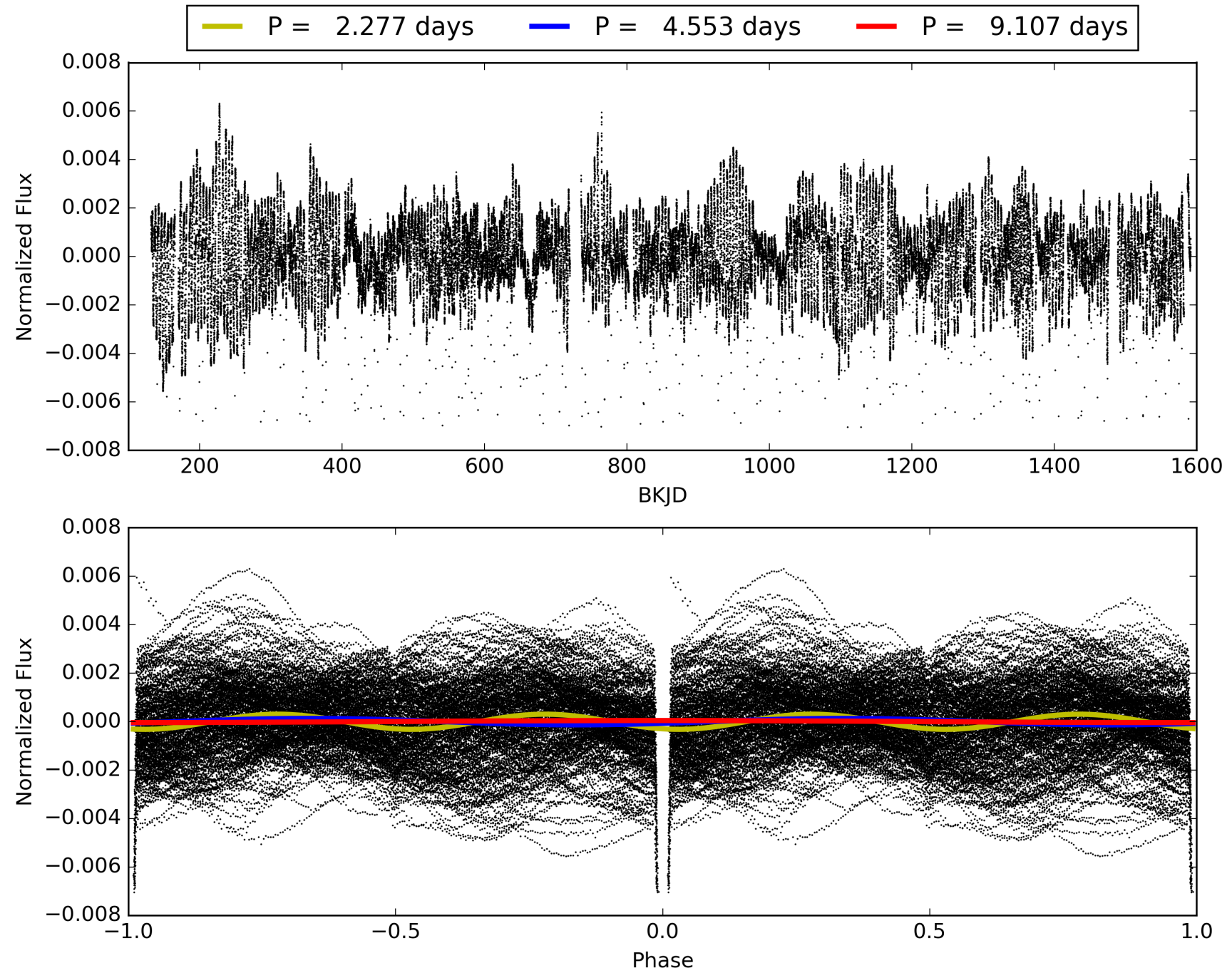
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:55:45 Z

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

TCE 005795648-01, PDC Light Curves

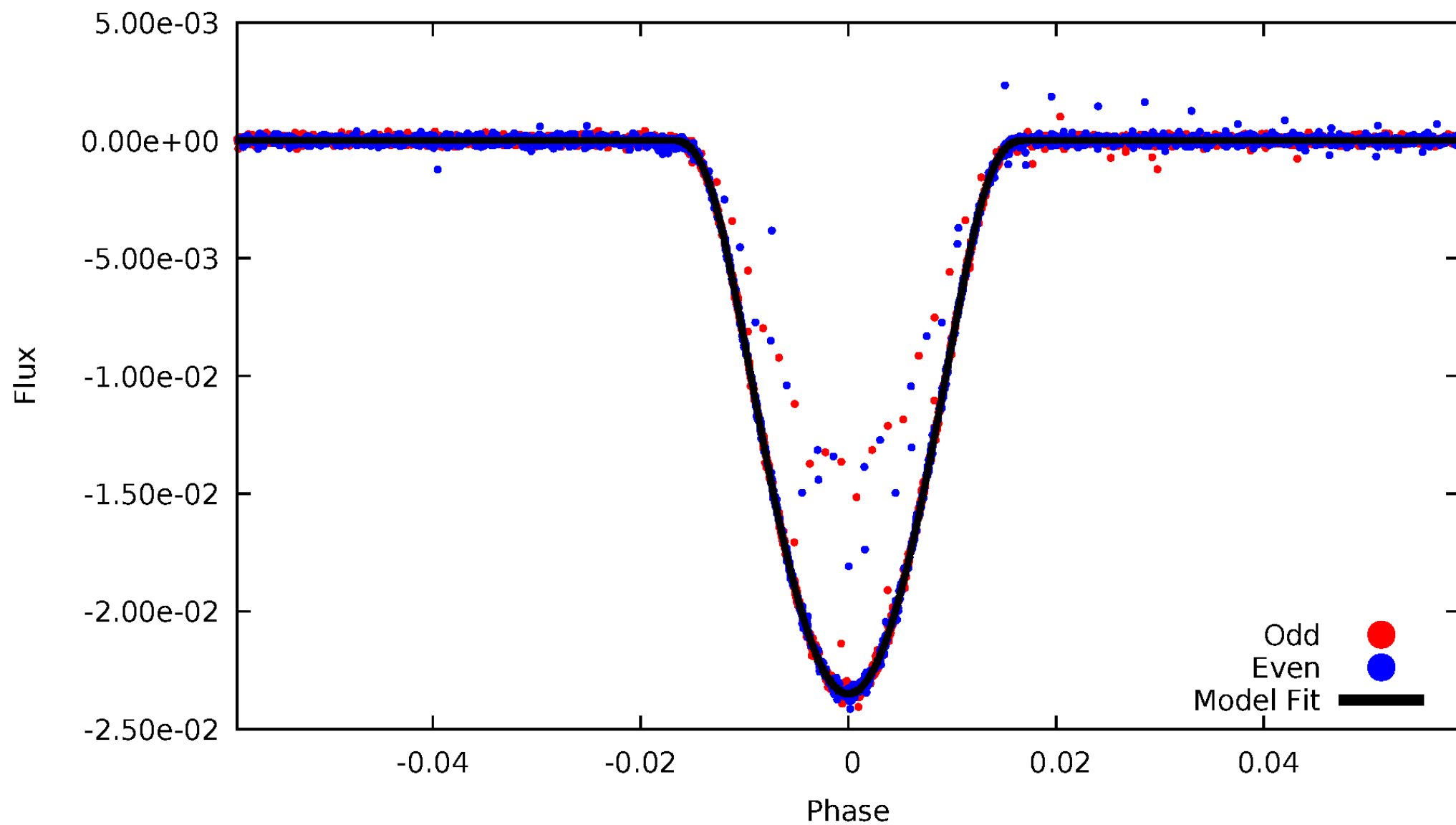


TCE 005795648-01



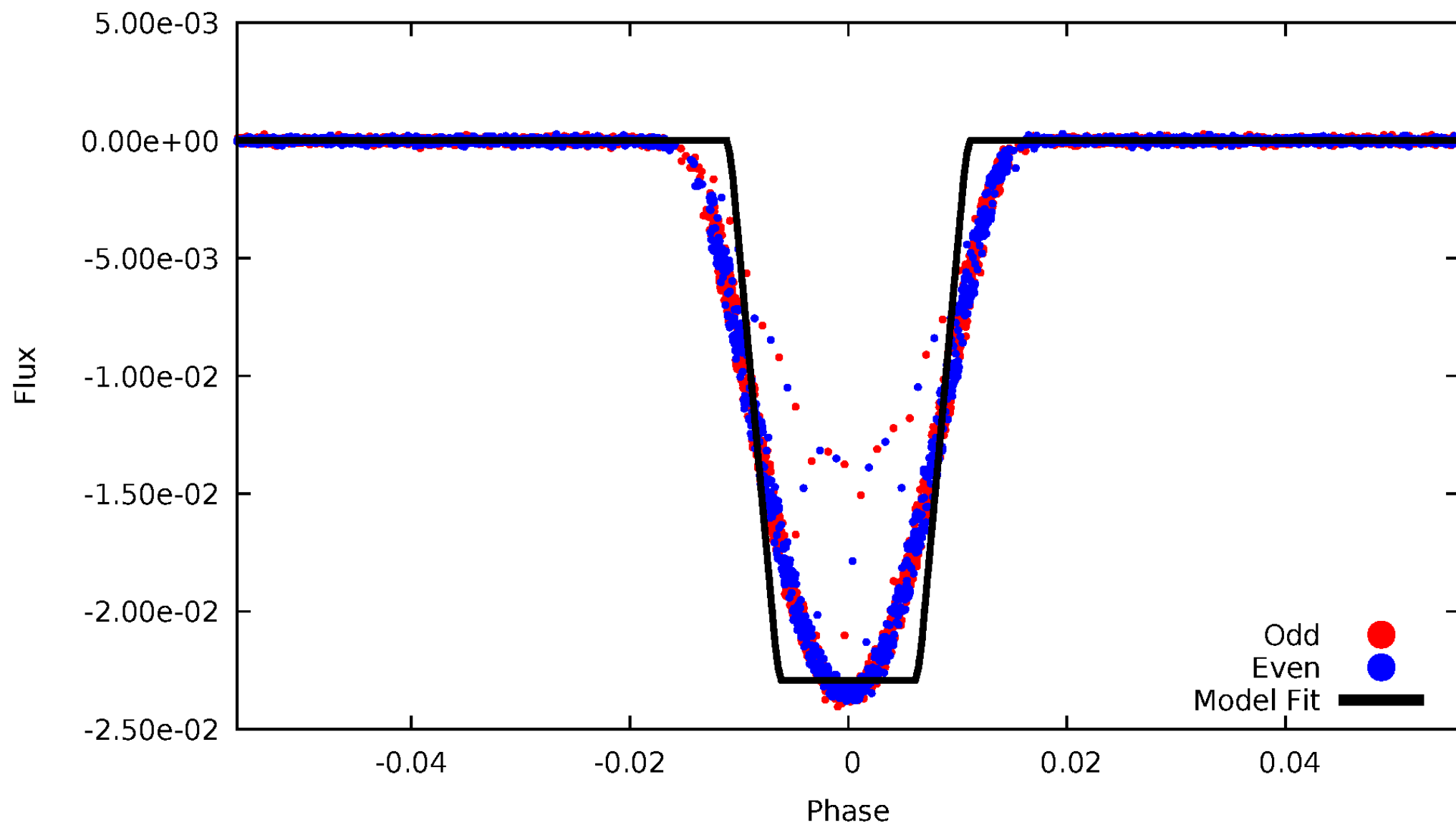
DV Odd/Even

TCE 005795648-01



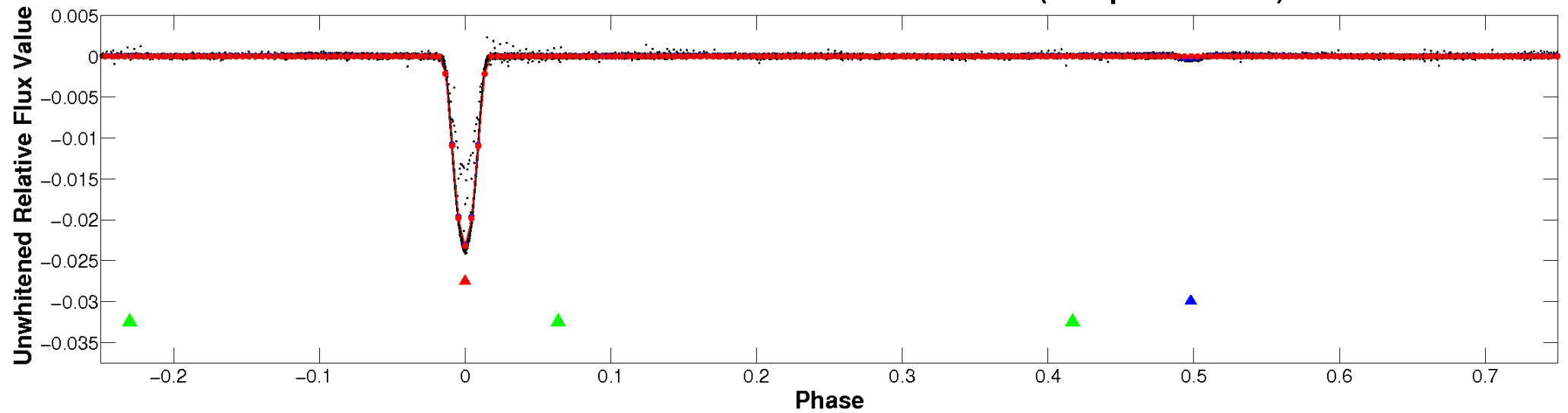
ALT Odd/Even

TCE 005795648-01

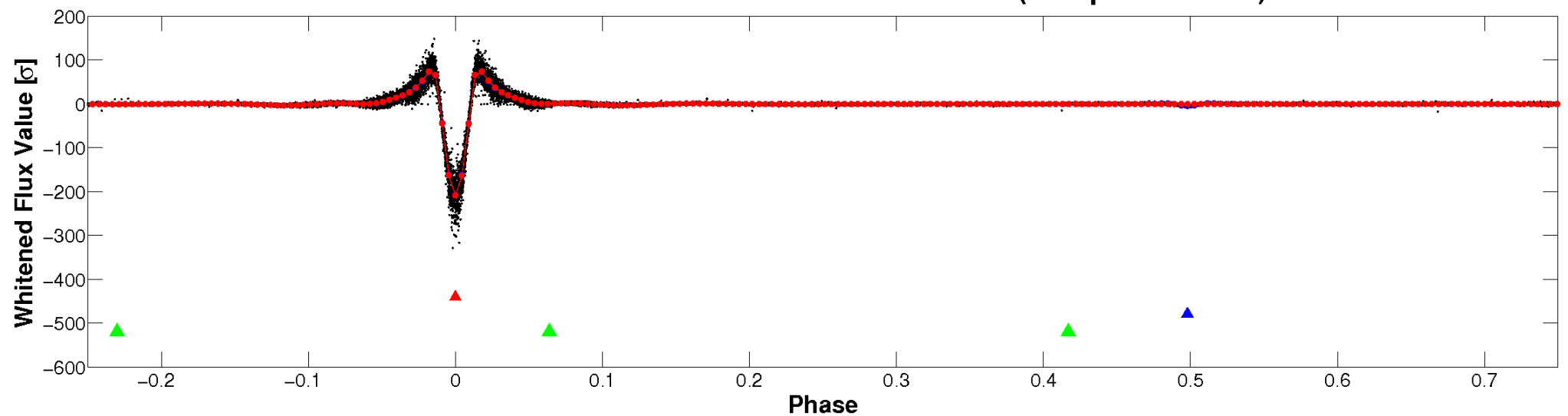


Non-Whitened Vs. Whitened Light Curve

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

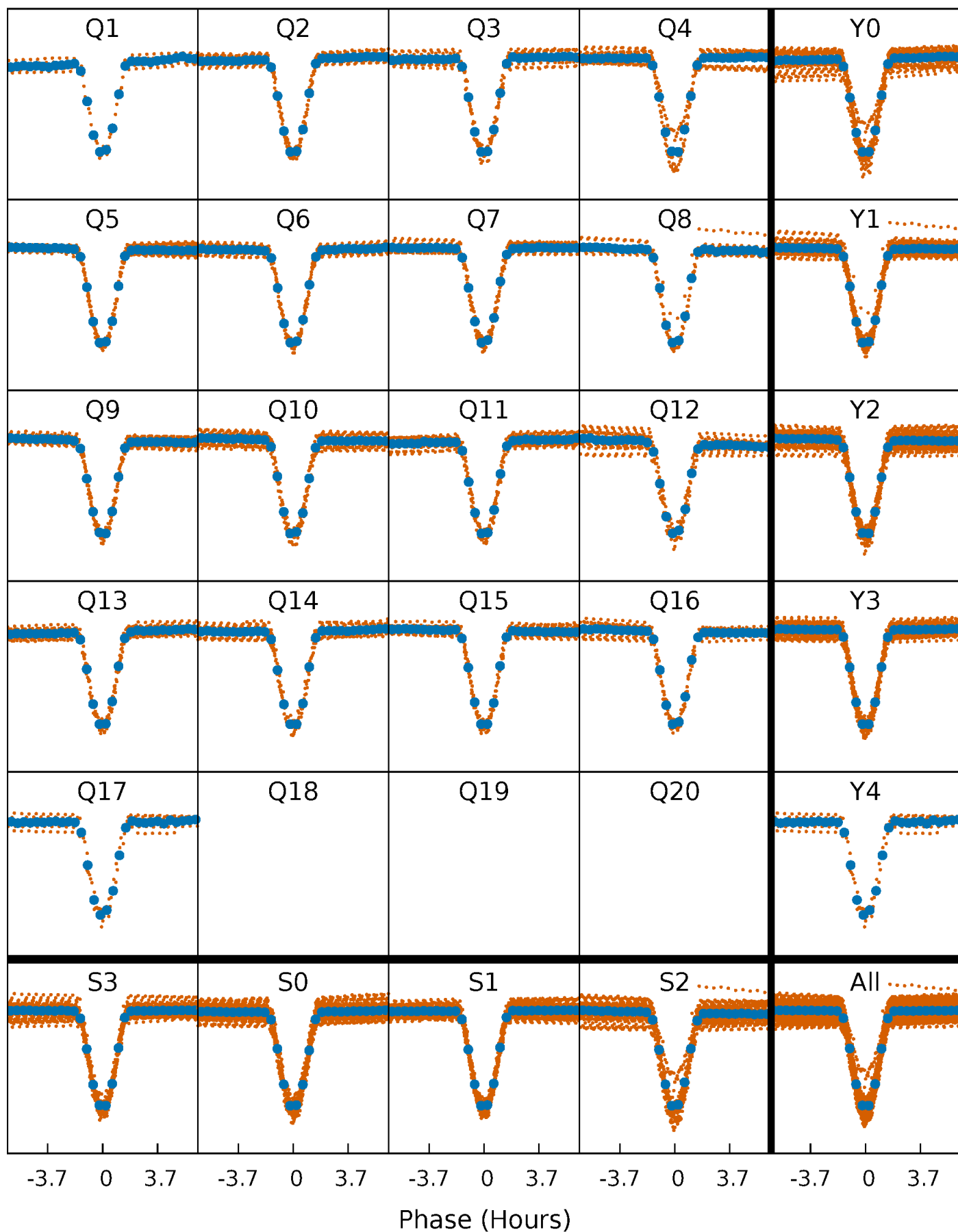


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



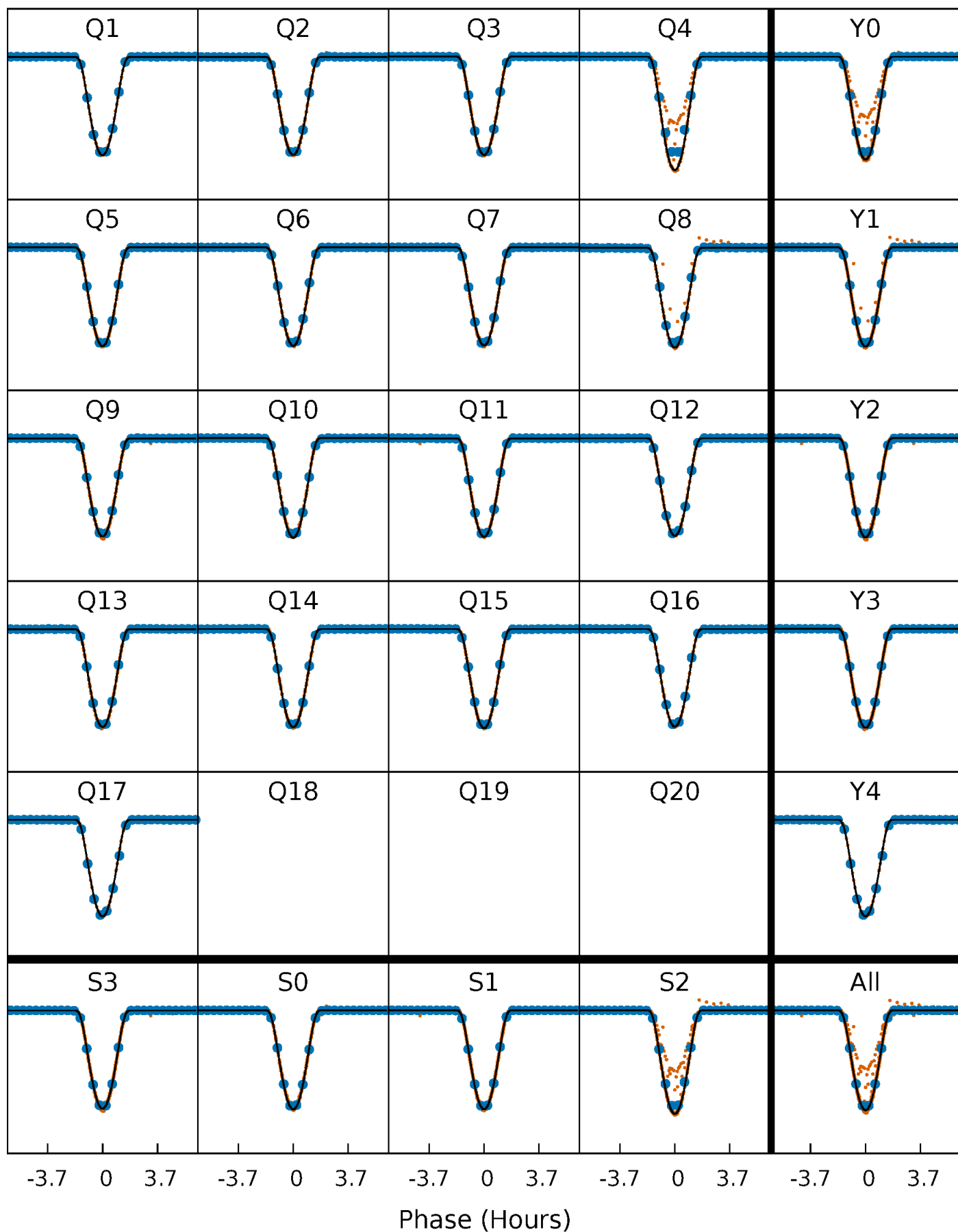
PDC Quarter-Phased Transit Curves

TCE 005795648-01 P= 4.553370 Days $T_0=135.433906$ (BKJD)



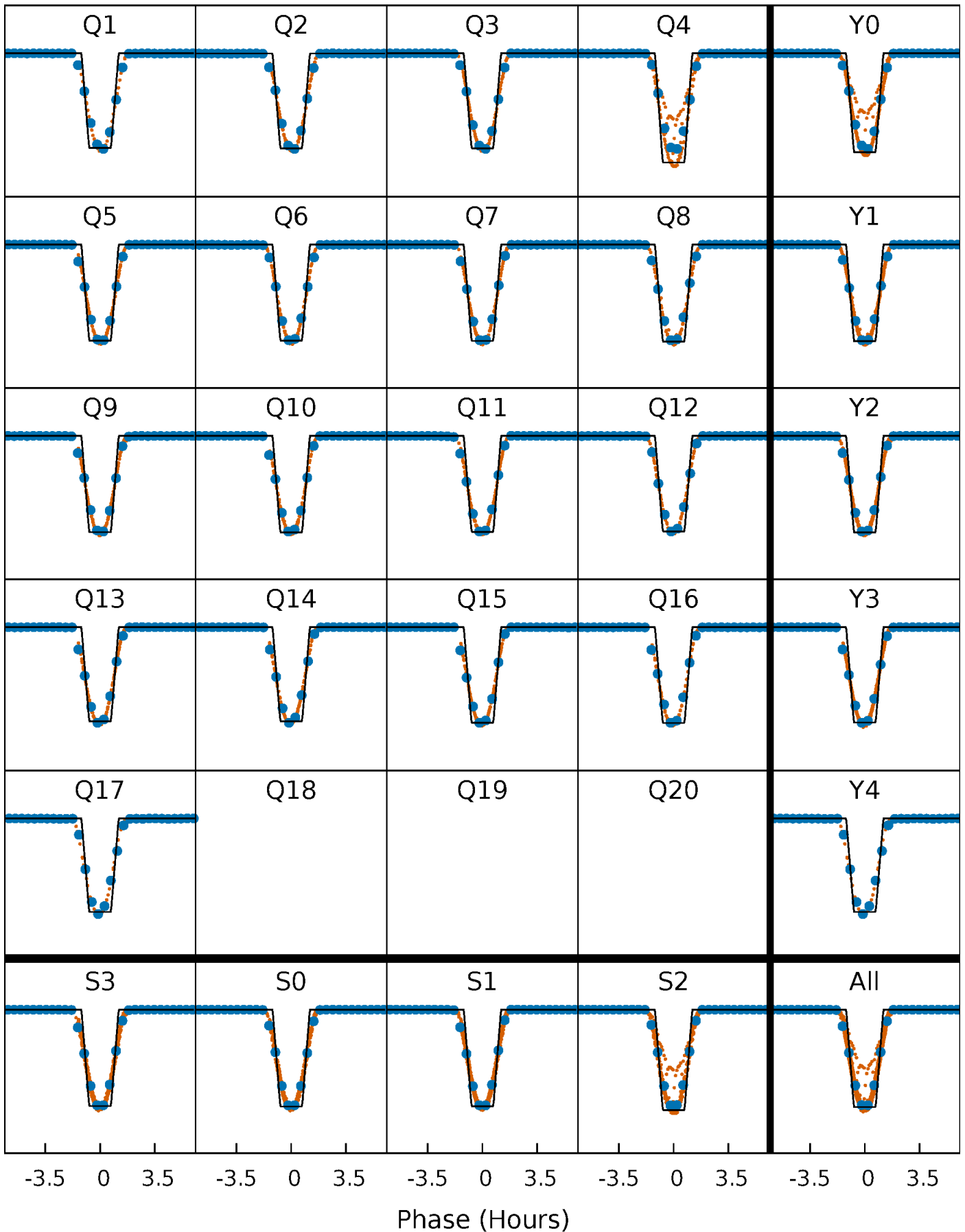
DV Quarter-Phased Transit Curves

TCE 005795648-01 P= 4.553370 Days $T_0=135.433906$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

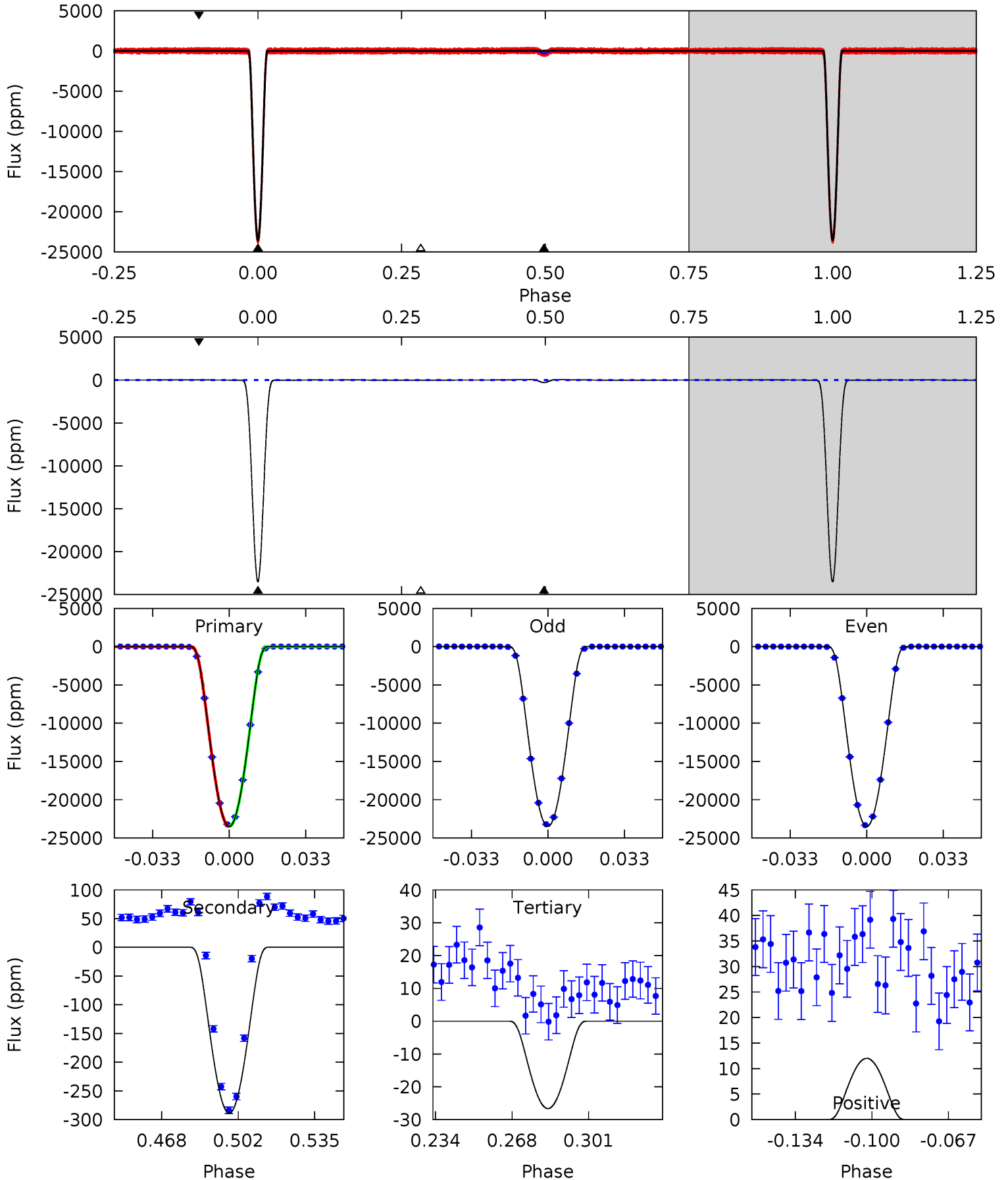
TCE 005795648-01 P= 4.553388 Days $T_0=135.431153$ (BKJD)



DV Model-Shift Uniqueness Test

005795648-01, P = 4.553370 Days, E = 130.880536 Days

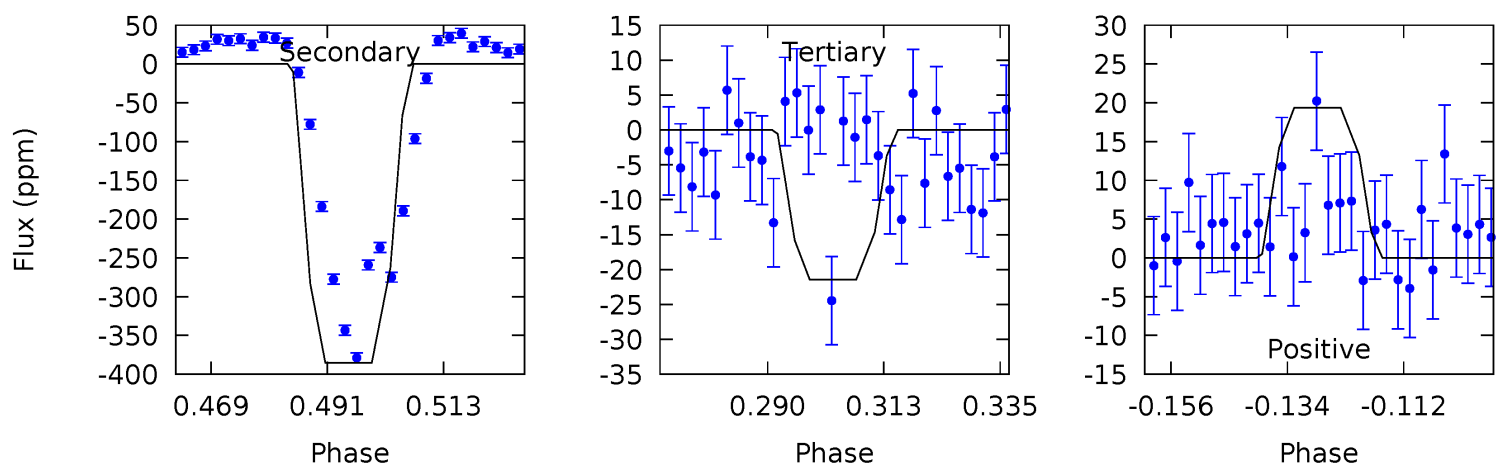
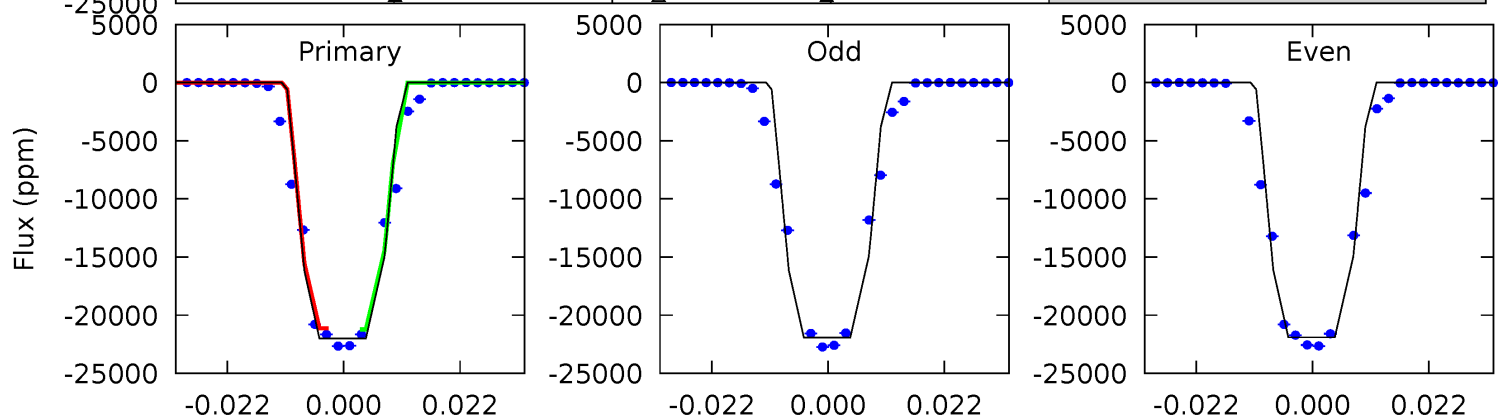
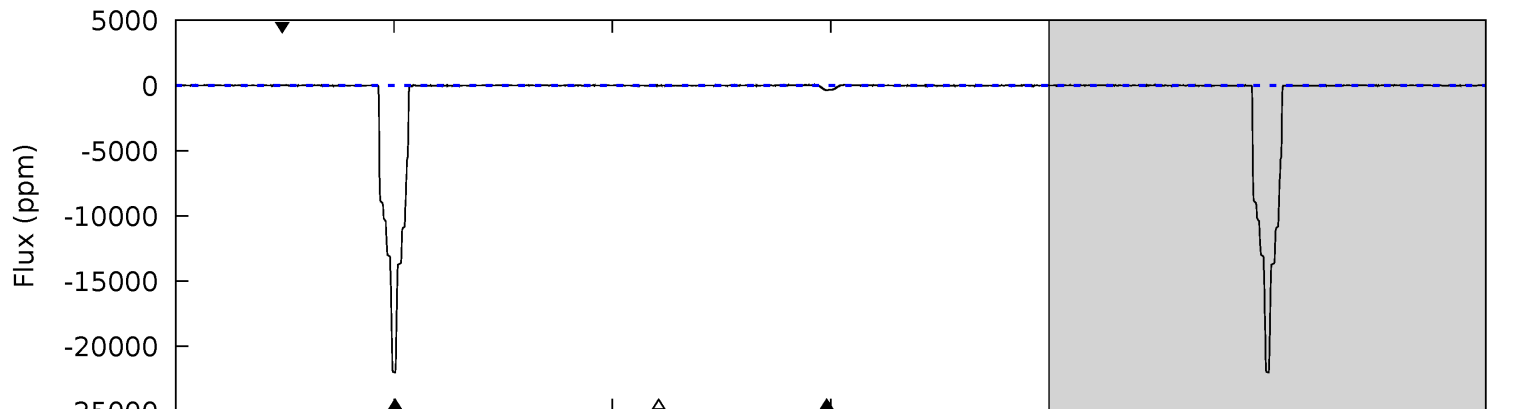
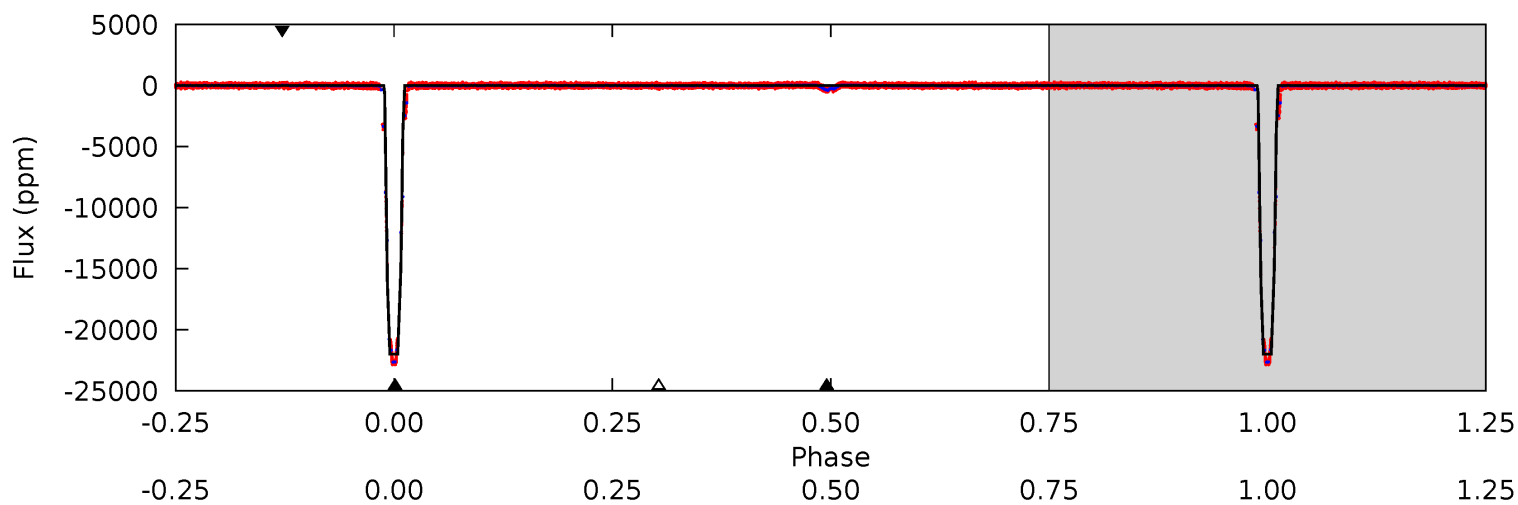
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11358	139.7	12.9	5.80	4.79	2.13	6.39	11345	11352	126.8	133.9	0.59	0.99	0.00	2.04



Alt Model-Shift Uniqueness Test

005795648-01, P = 4.553388 Days, E = 130.877765 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4604	80.6	4.49	4.05	4.87	2.28	1.58	4599	4600	76.1	76.5	0.97	0.99	0.00	0



Stellar Parameters For KIC 005795648

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6306^{+157}_{-189}	$4.346^{+0.113}_{-0.137}$	$-0.360^{+0.300}_{-0.300}$	$1.109^{+0.244}_{-0.162}$	$0.991^{+0.135}_{-0.110}$	$1.025^{+0.535}_{-0.414}$
	+2%/-3%	+3%/-3%	+83%/-83%	+22%/-15%	+14%/-11%	+52%/-40%
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 005795648-01 / KOI 6016.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-289 ± 2	$24.92^{+3.07}_{-2.06}$	1769^{+100}_{-90}	2451^{+50}_{-62}	$0.733^{+0.135}_{-0.143}$
Alt.	-385 ± 5	$18.32^{+2.22}_{-1.61}$	1773^{+99}_{-94}	2882^{+43}_{-51}	$1.801^{+0.333}_{-0.343}$

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

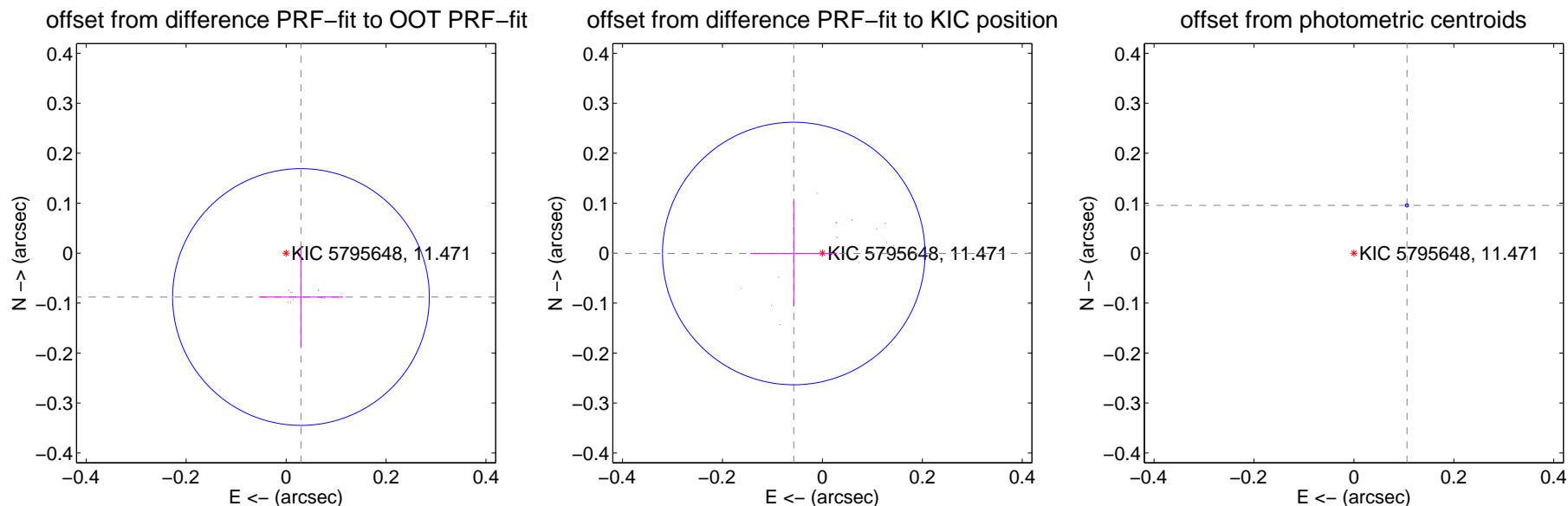
DV Centroid Data

Supplemental centroid analysis for 005795648-01. **Kepler magnitude: 11.47.** Transit SNR 5541.77

There are 17 quarters with good PRF difference image offsets

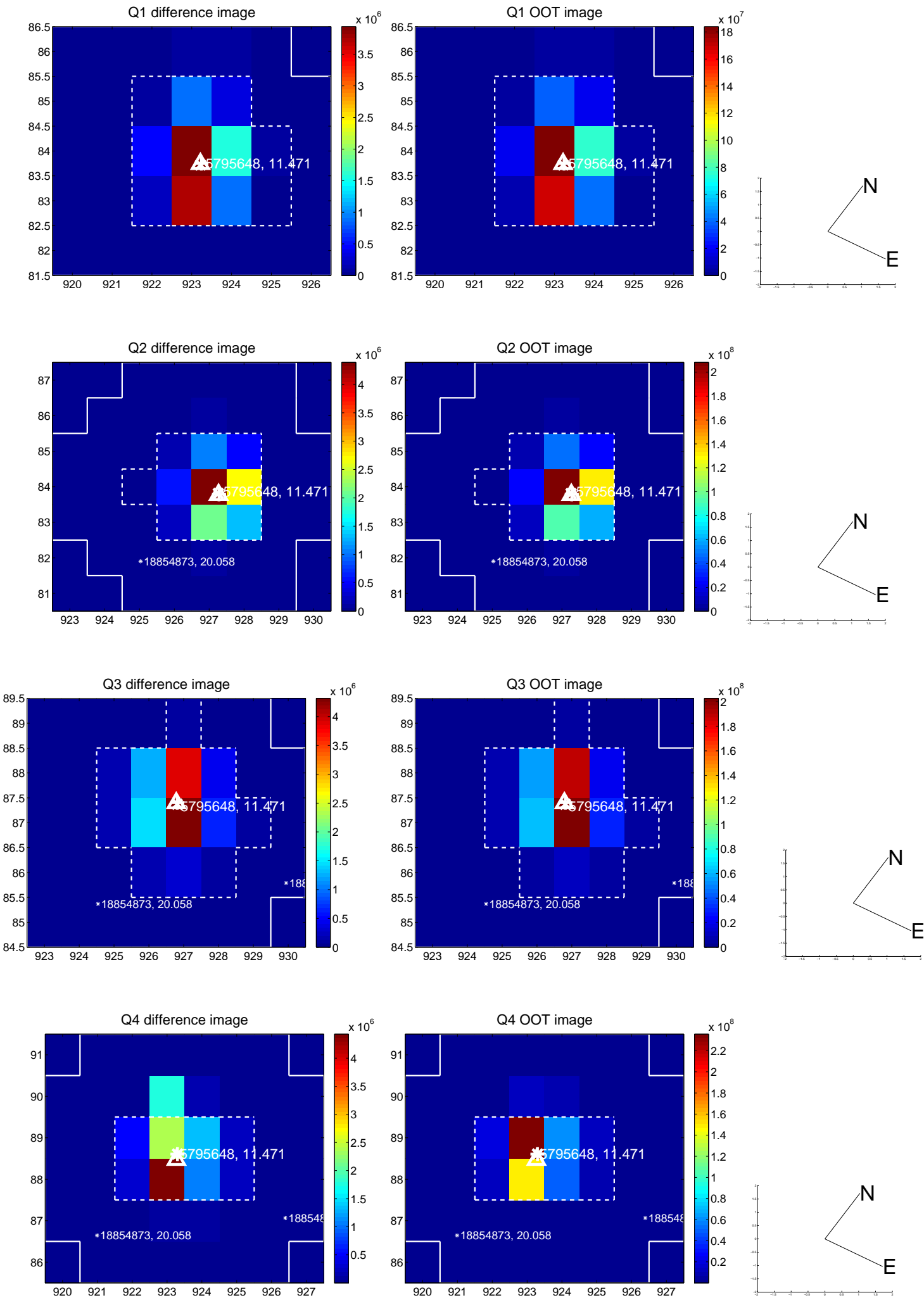
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.093 ± 0.086	1.08	-0.030 ± 0.084	-0.088 ± 0.099
PRF-fit source offset from KIC position	0.057 ± 0.088	0.65	0.057 ± 0.087	-0.001 ± 0.106
photometric centroid source offset	0.14 ± 0.00	133.46	-0.11 ± 0.00	0.10 ± 0.00

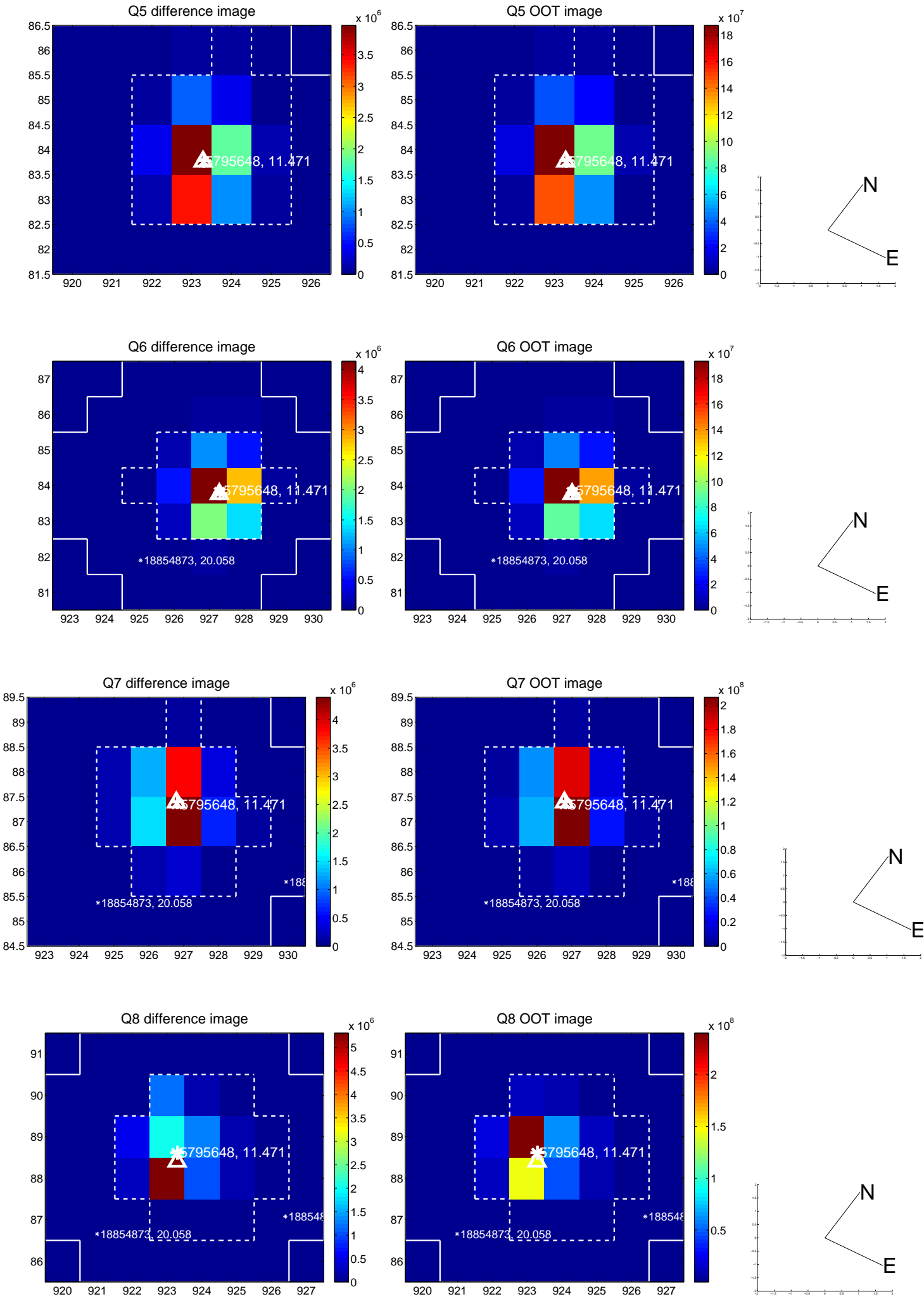


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

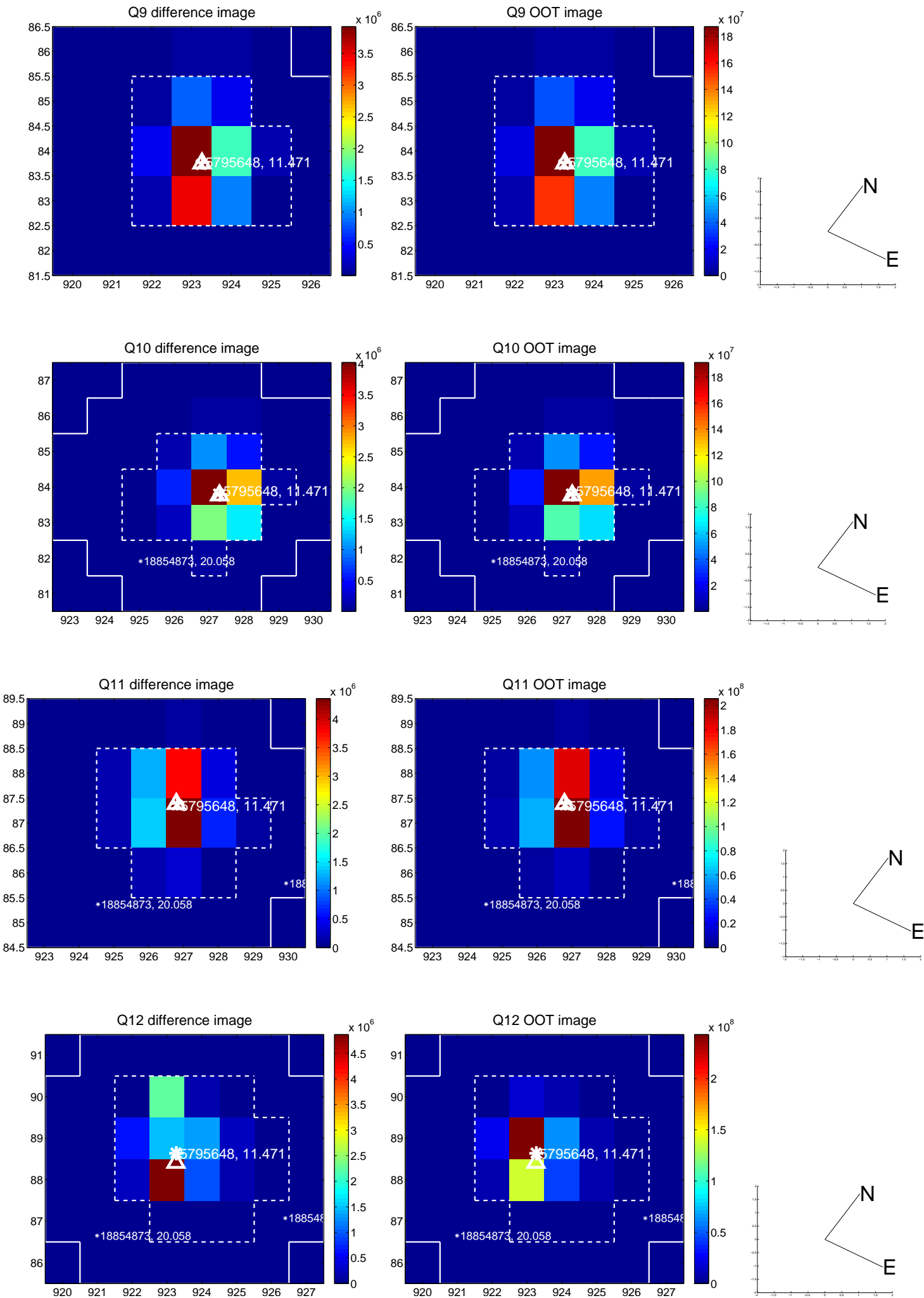
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



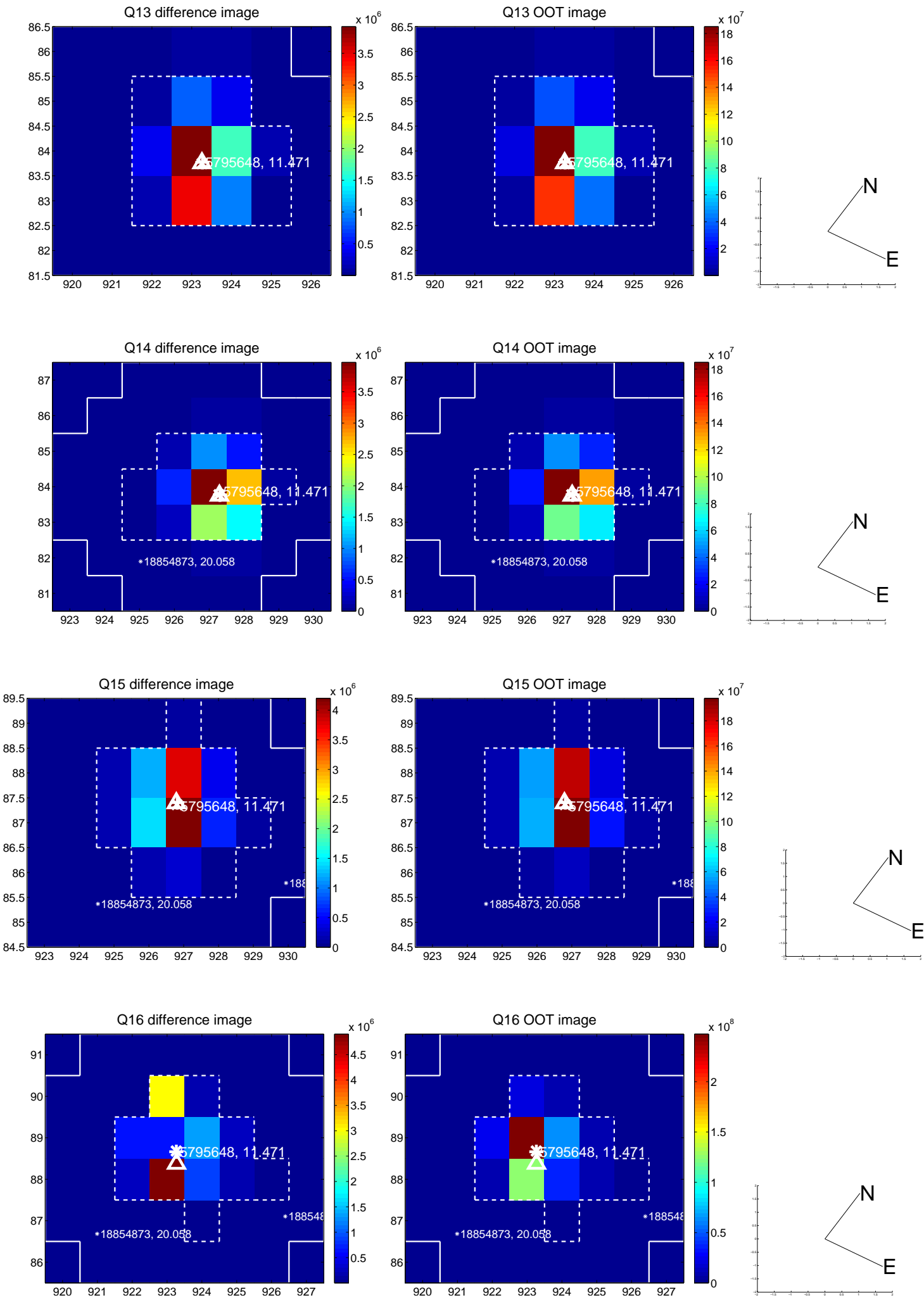
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



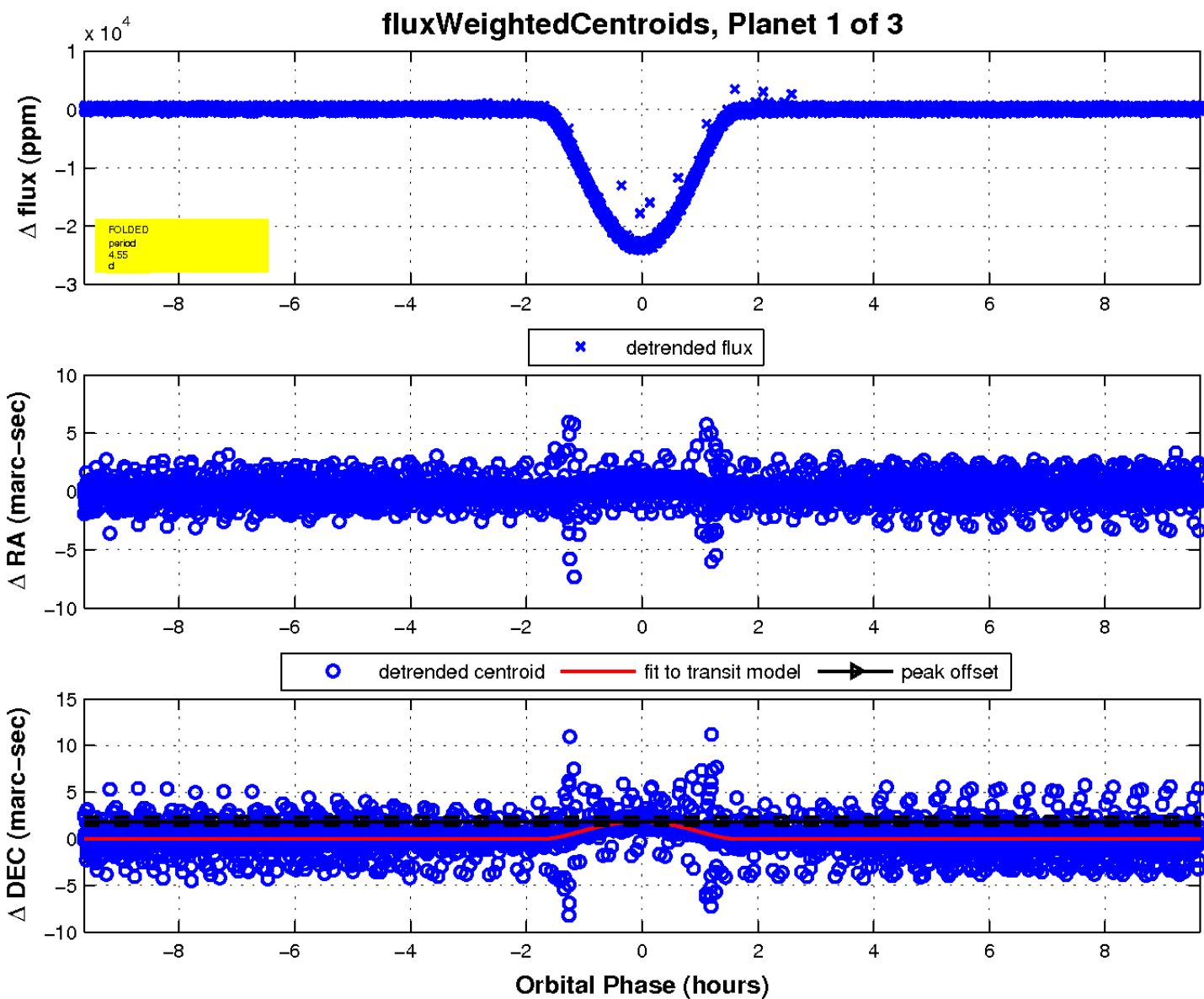
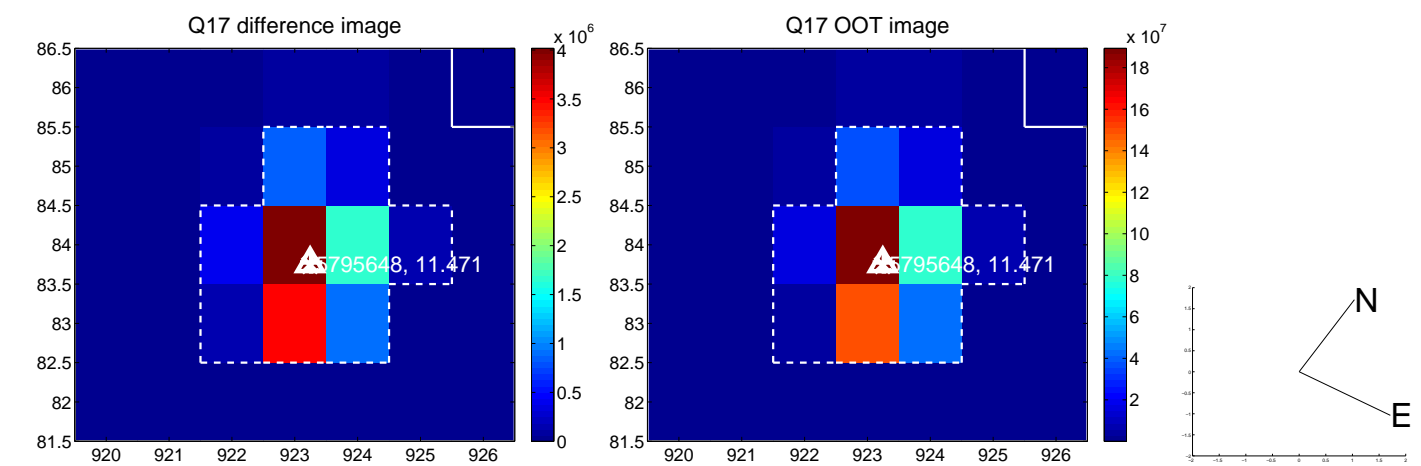
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

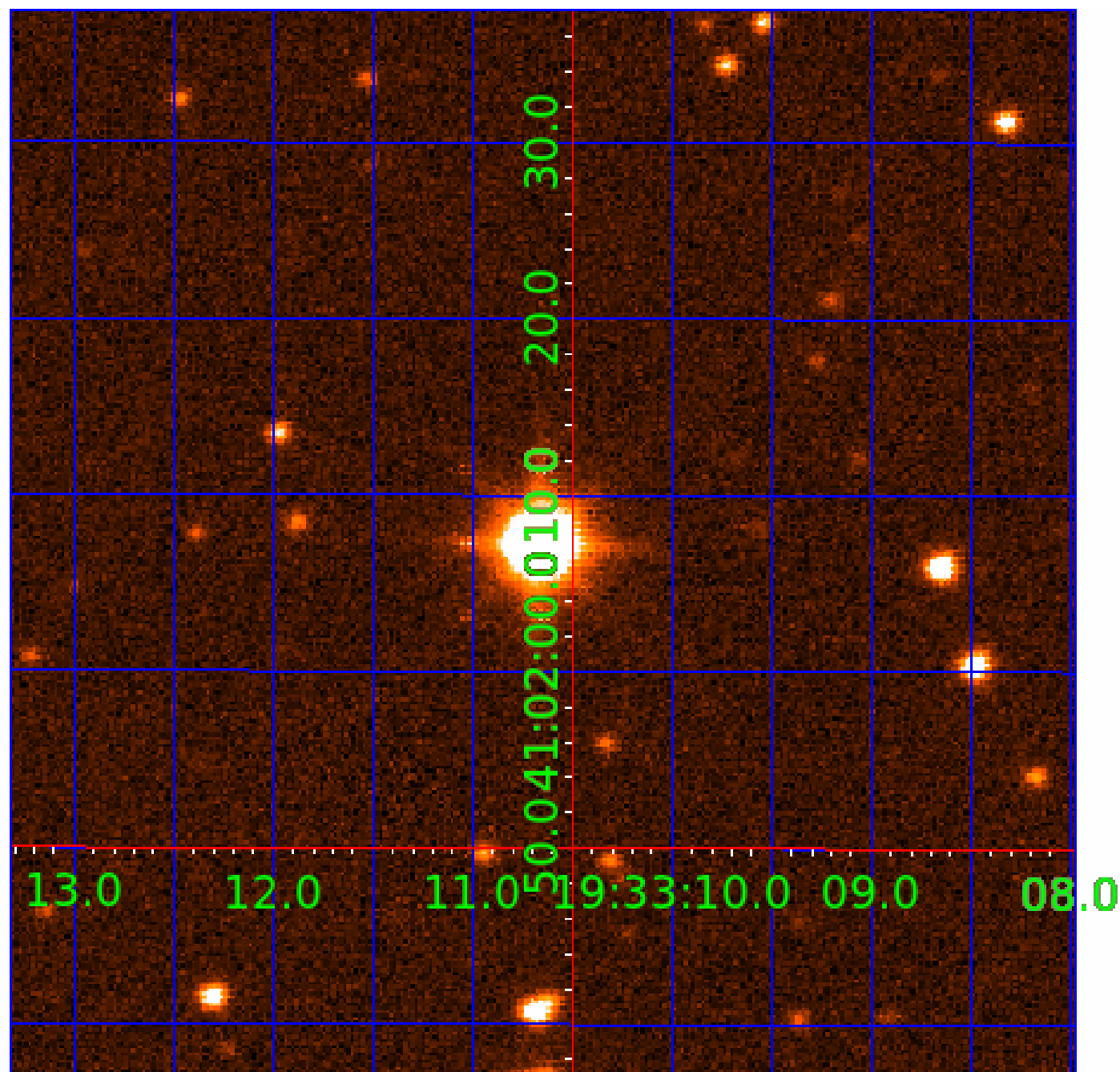


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005795648

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})
005795648-01	OBS	6016.01	4.553370	135.433906	23498.9	3.214	6098.0	5541.8	1.11	6306	25.04	604.53
005795648-02	OBS	No	4.553360	133.149535	421.2	2.898	109.2	120.7	1.11	6306	4.43	604.54
005795648-03	OBS	No	497.924564	413.480554	468.2	10.745	12.0	7.2	1.11	6306	3.25	1.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005795648-01	OBS	PC	0.80	0	1	0	0	MOD_SEC_DV—PLANET_OCCULT_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE—CENT_SATURATED
005795648-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_SATURATED
005795648-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED

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

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

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

Ephemeris Match Information For 005795648-02

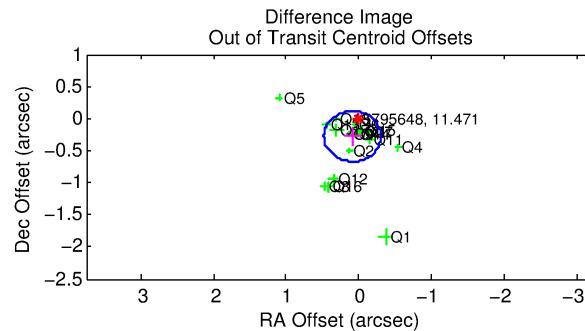
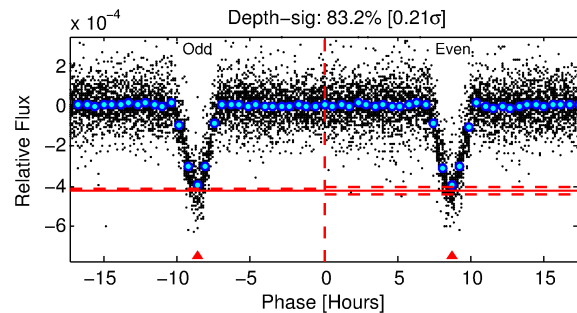
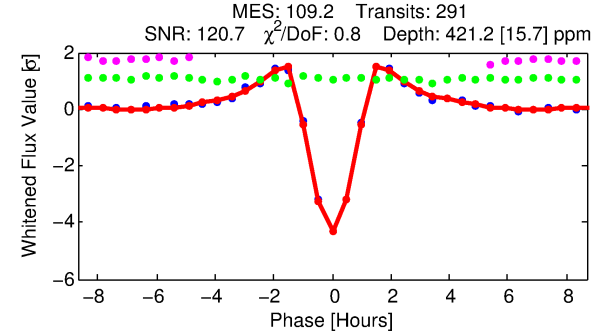
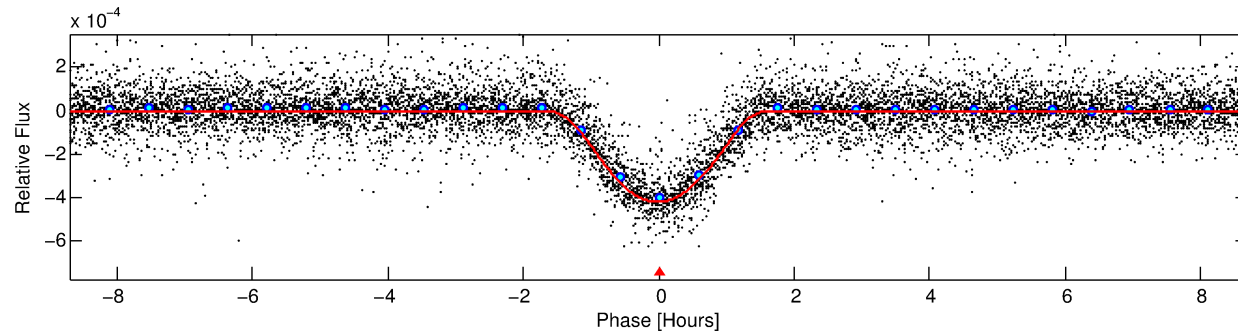
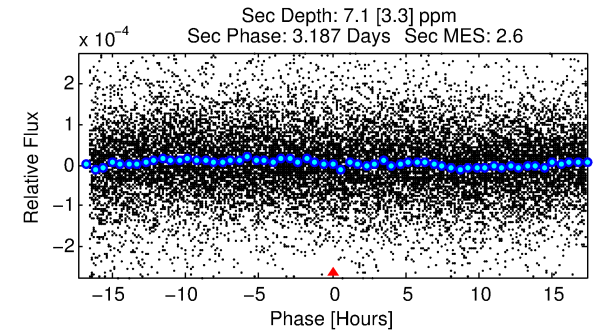
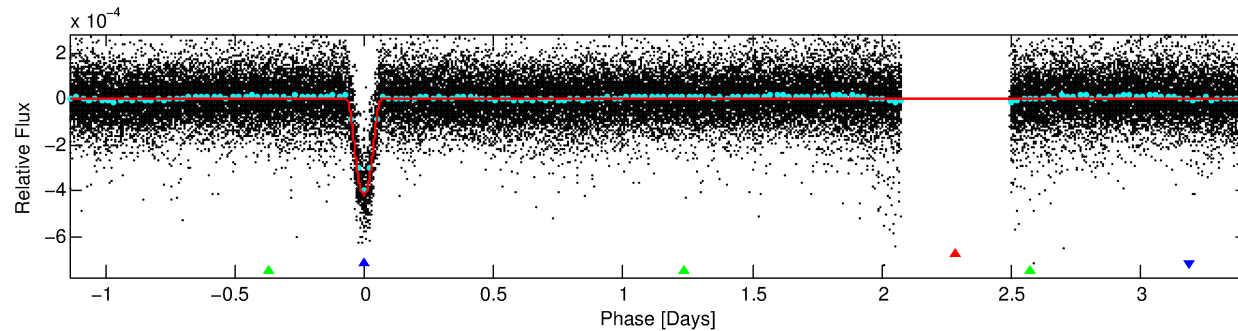
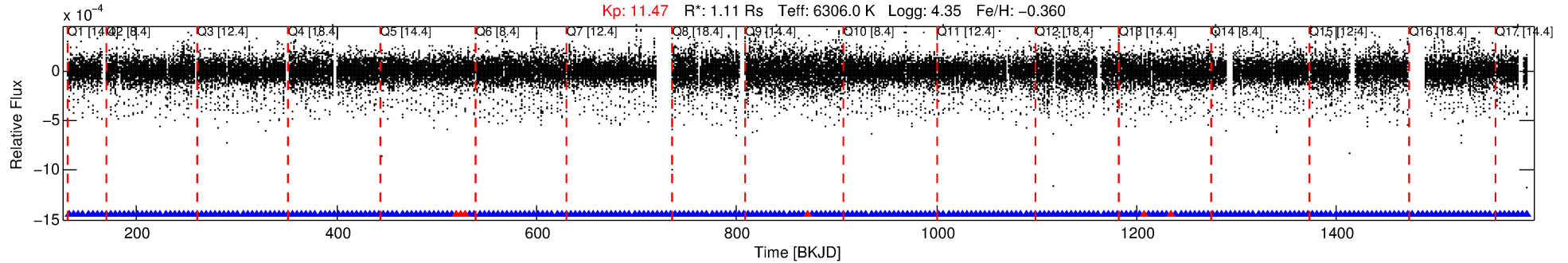
No Significant Match Found

DV One-Page Summary

KIC: 5795648 Candidate: 2 of 3 Period: 4.553 d

KOI: K06016 Corr: No Ephemeris Match

Kp: 11.47 R*: 1.11 Rs Teff: 6306.0 K Logg: 4.35 Fe/H: -0.360



DV Fit Results:

Period = 4.55336 [0.00000] d
Epoch = 133.1495 [0.0004] BKJD
Rp/R* = 0.0366 [0.0101]
a/R* = 3.44 [0.22]
b = 1.00 [0.02]
Seff = 604.54 [171.11]
Teq = 1264 [89] K
Rp = 4.43 [1.56] Re
a = 0.0537 [0.0097] AU
Ag = 0.57 [0.43] [-0.99σ]
Teffp = 1698 [309] K [1.35σ]

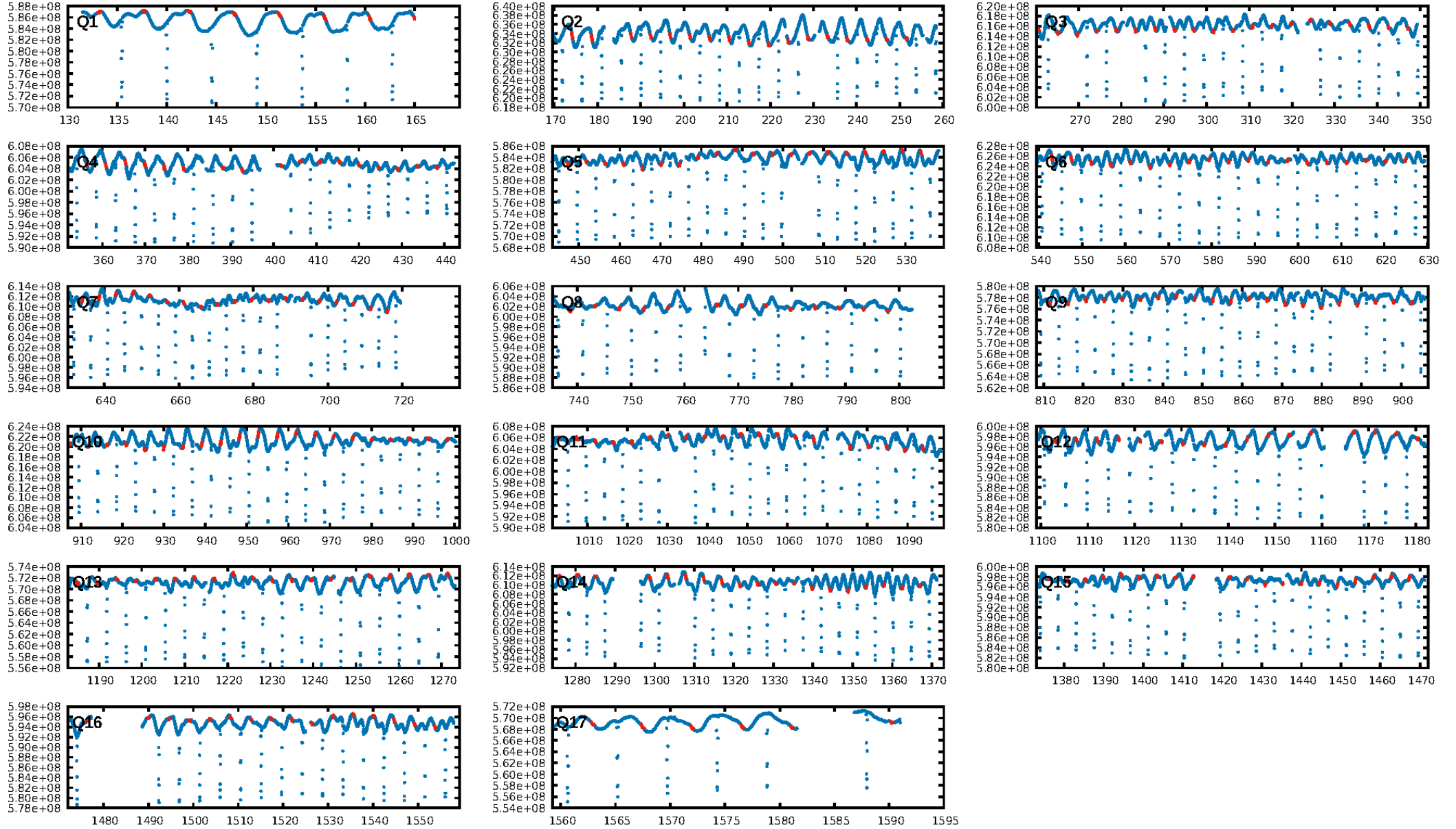
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.98 [271/277]
GhostDiagnostic-chr: 3.273
Centroid-sig: N/A
Centroid-so: 0.078 arcsec [1.30σ]
OotOffset-rm: 0.293 arcsec [2.25σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.257 arcsec [2.16σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

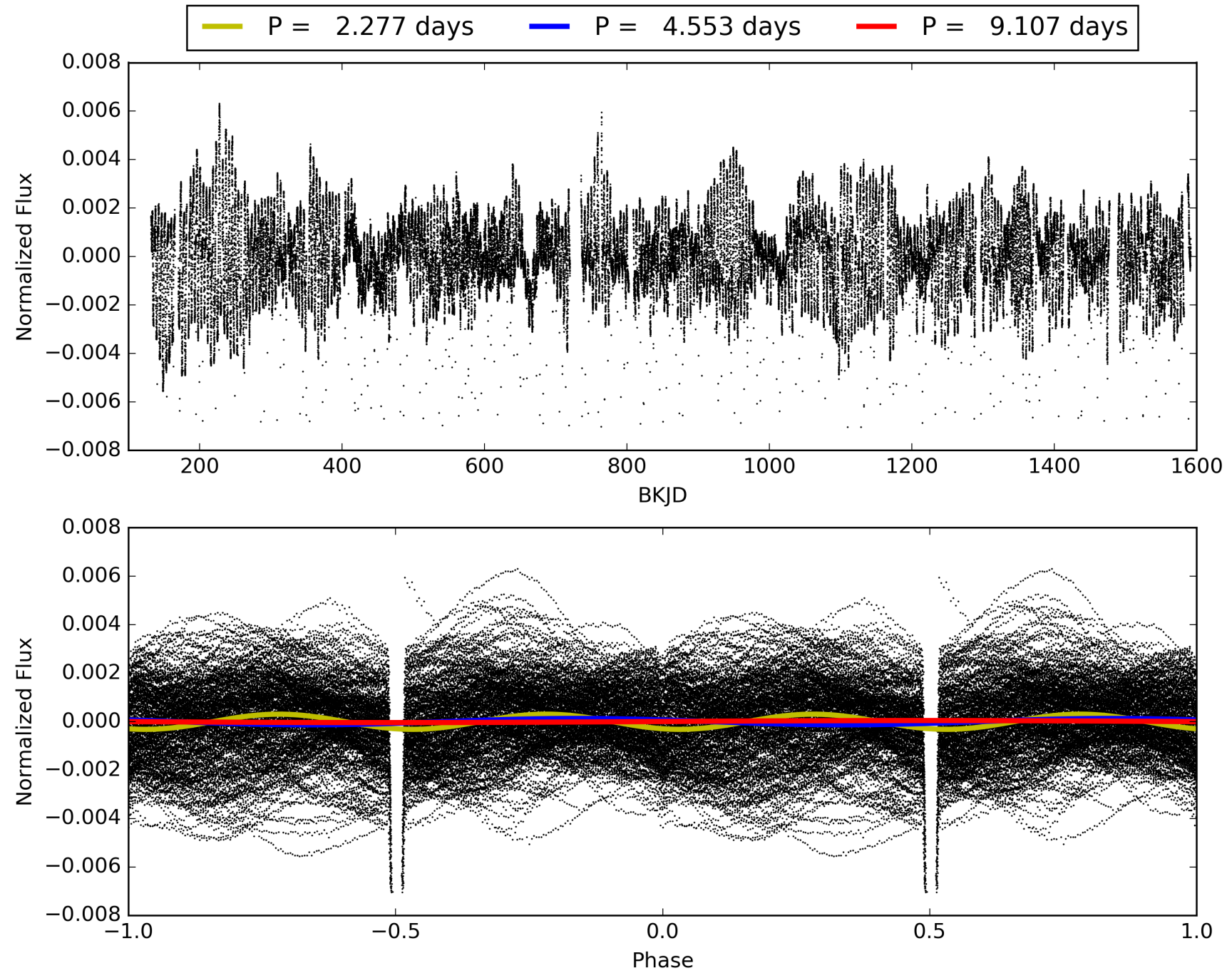
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:55:50 Z

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

TCE 005795648-02, PDC Light Curves

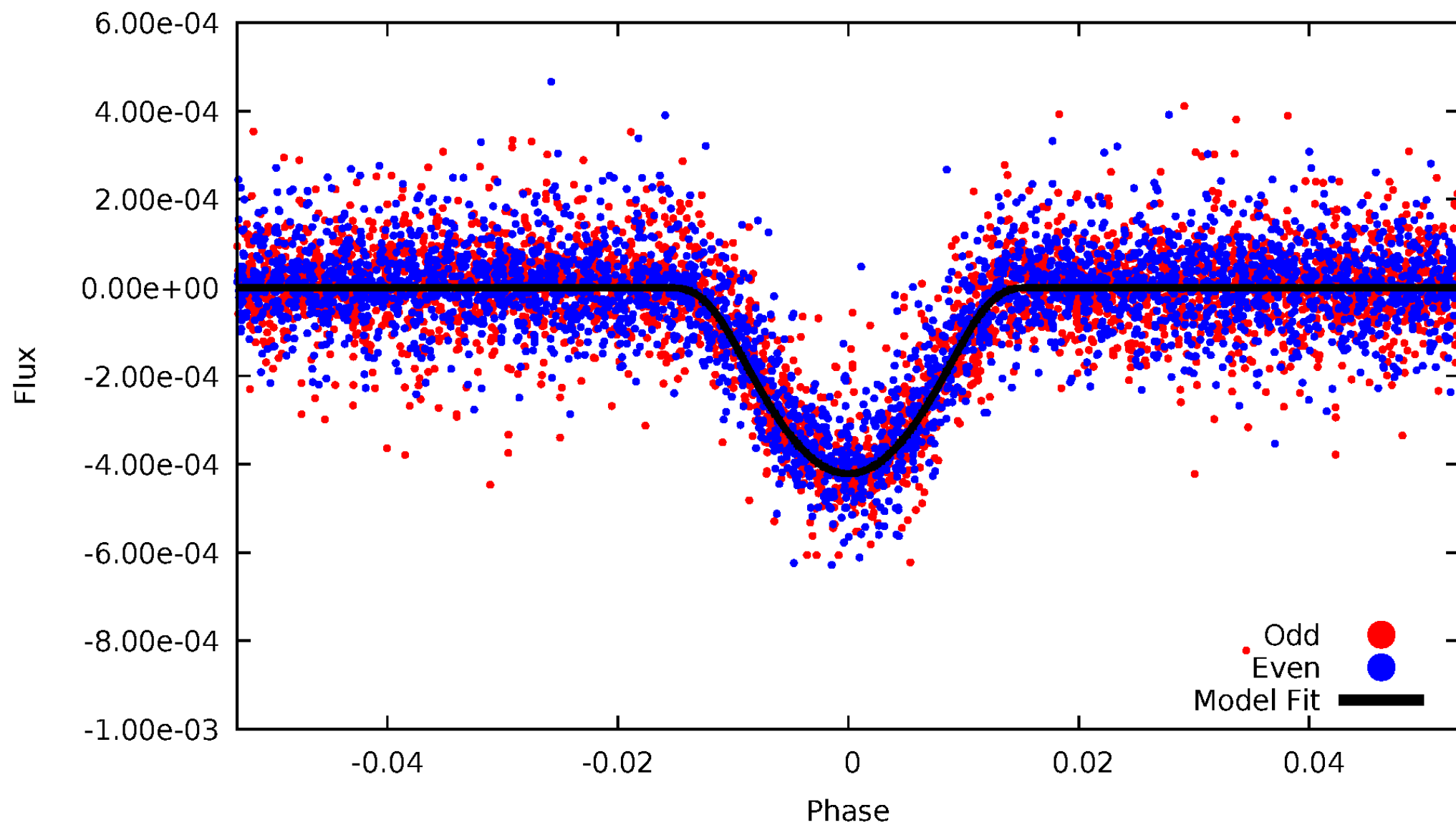


TCE 005795648-02



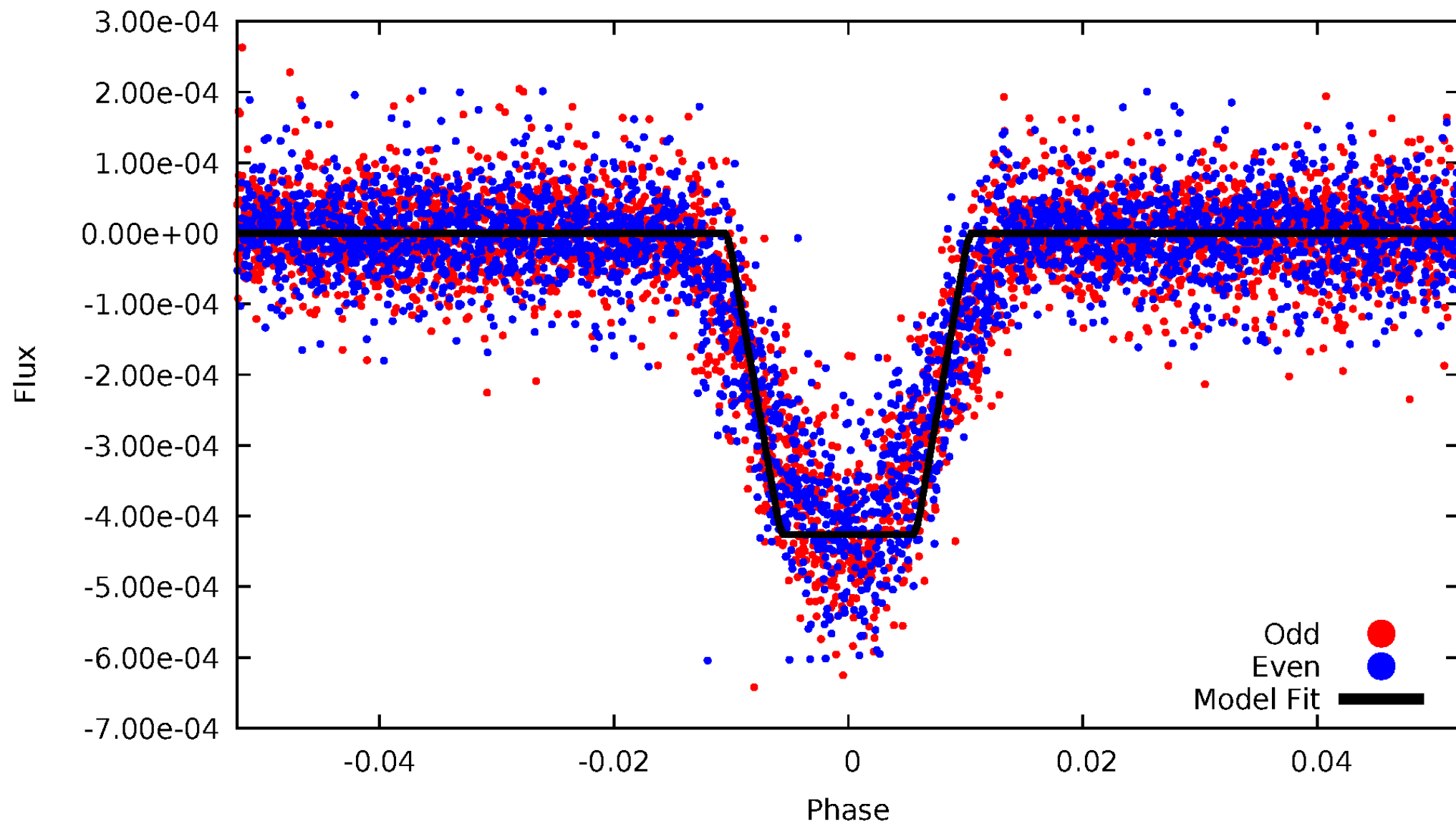
DV Odd/Even

TCE 005795648-02



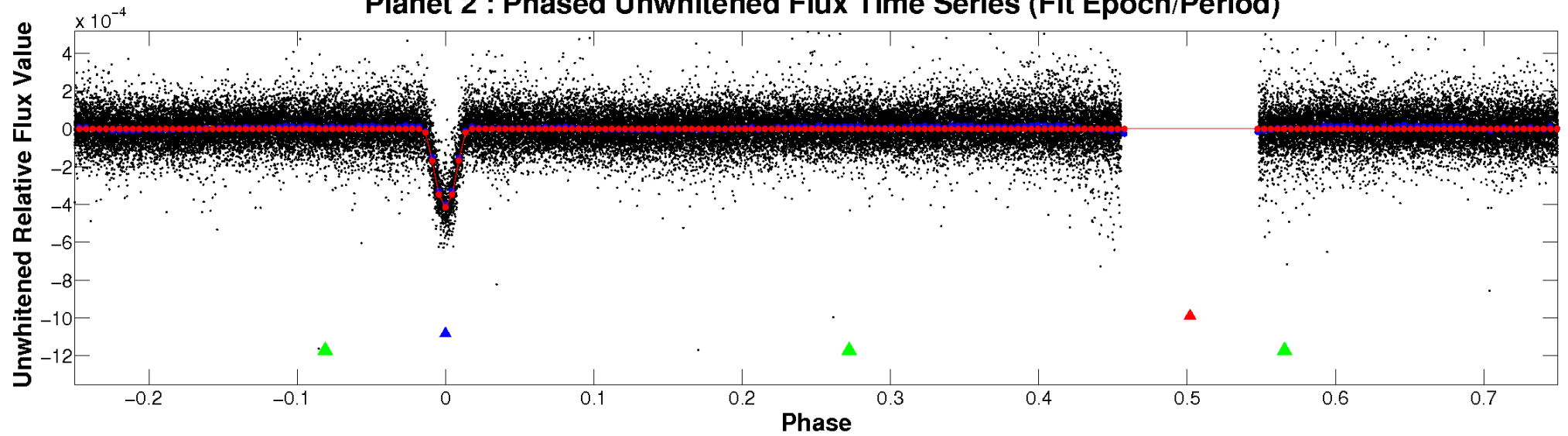
ALT Odd/Even

TCE 005795648-02

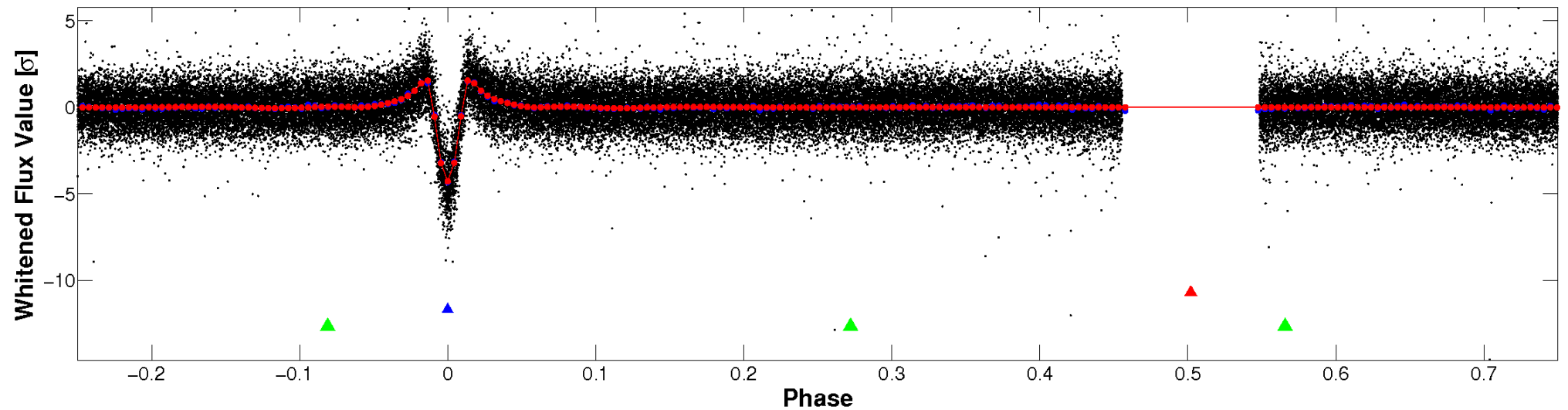


Non-Whitened Vs. Whitened Light Curve

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

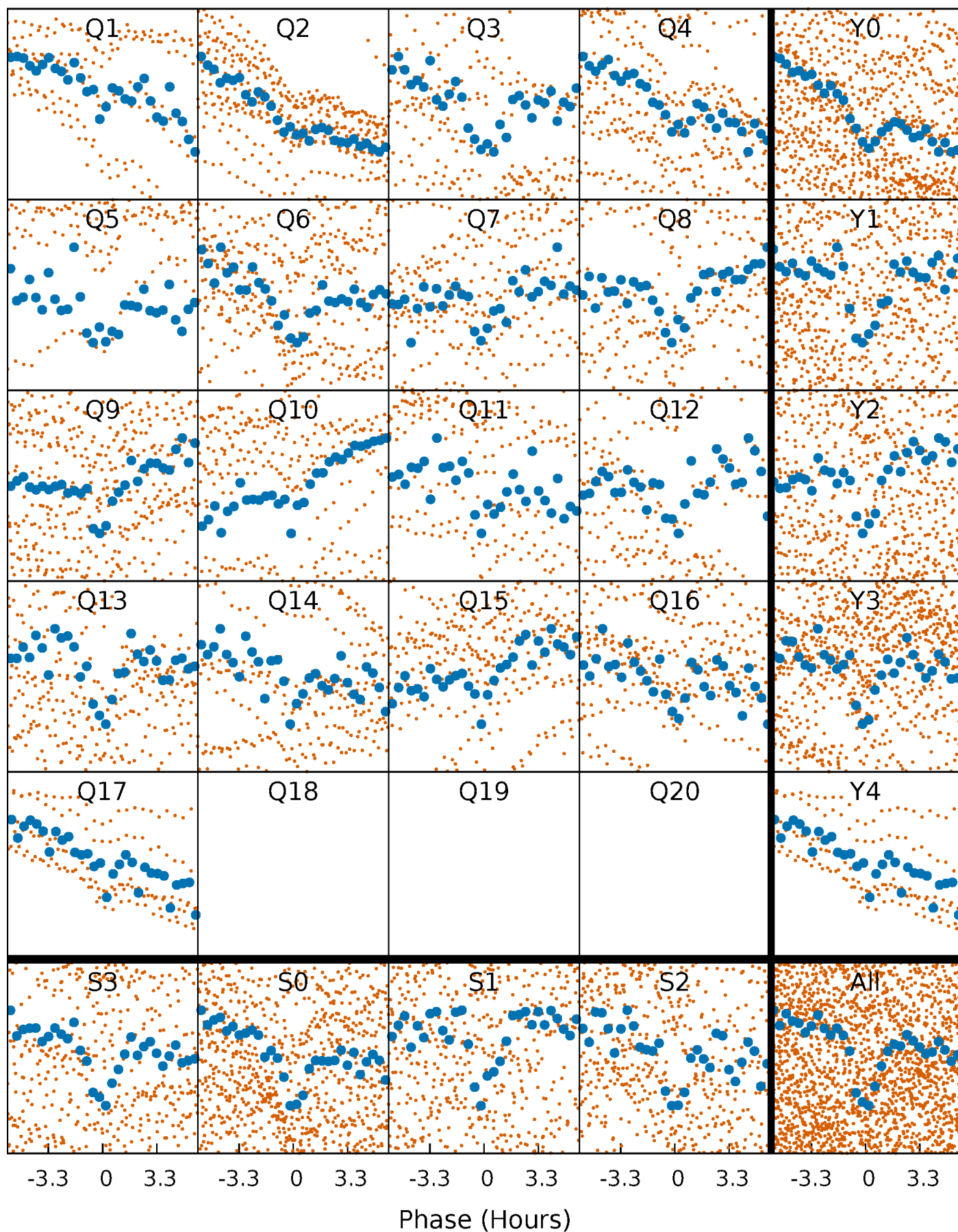


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



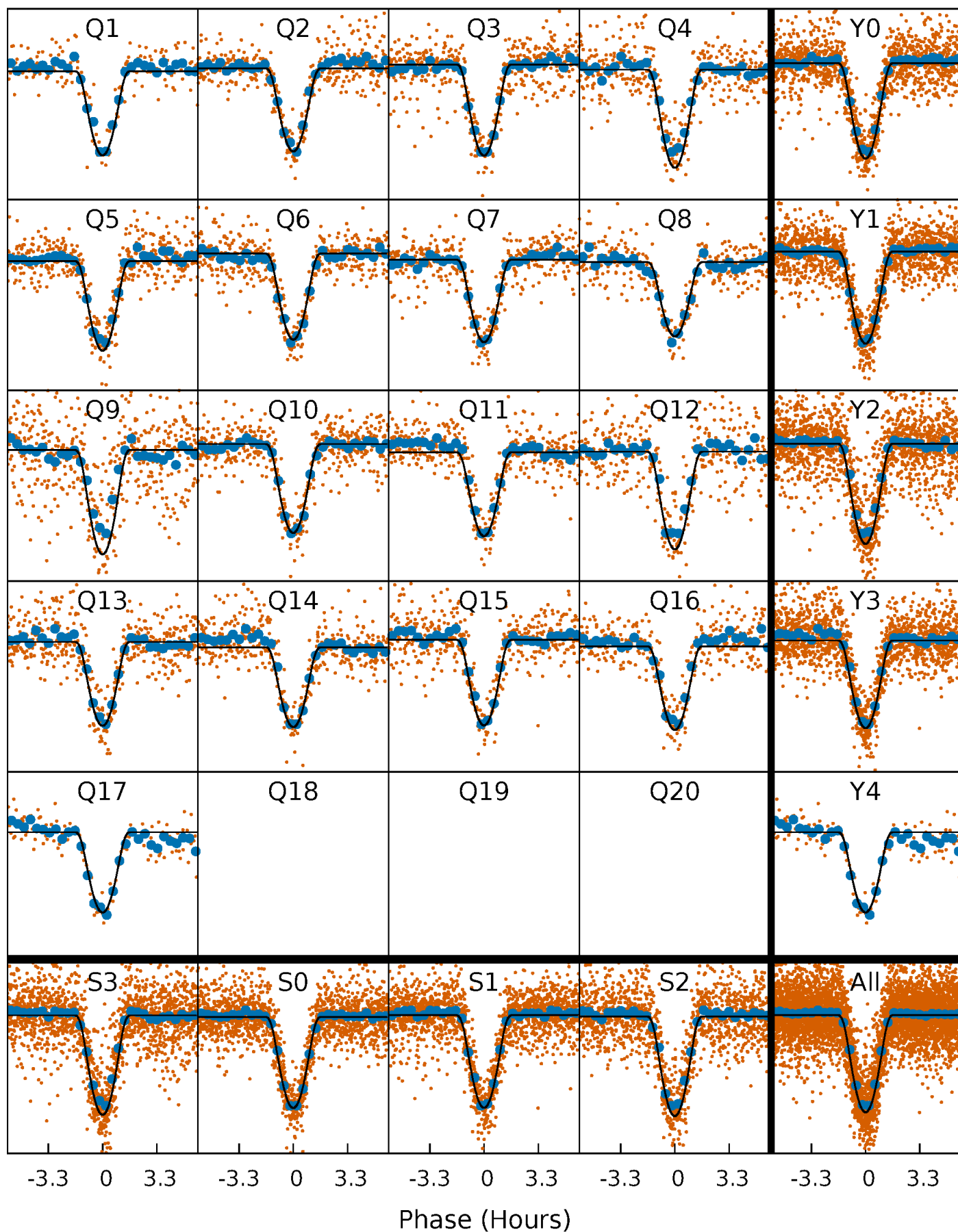
PDC Quarter-Phased Transit Curves

TCE 005795648-02 P= 4.553360 Days $T_0=133.149535$ (BKJD)



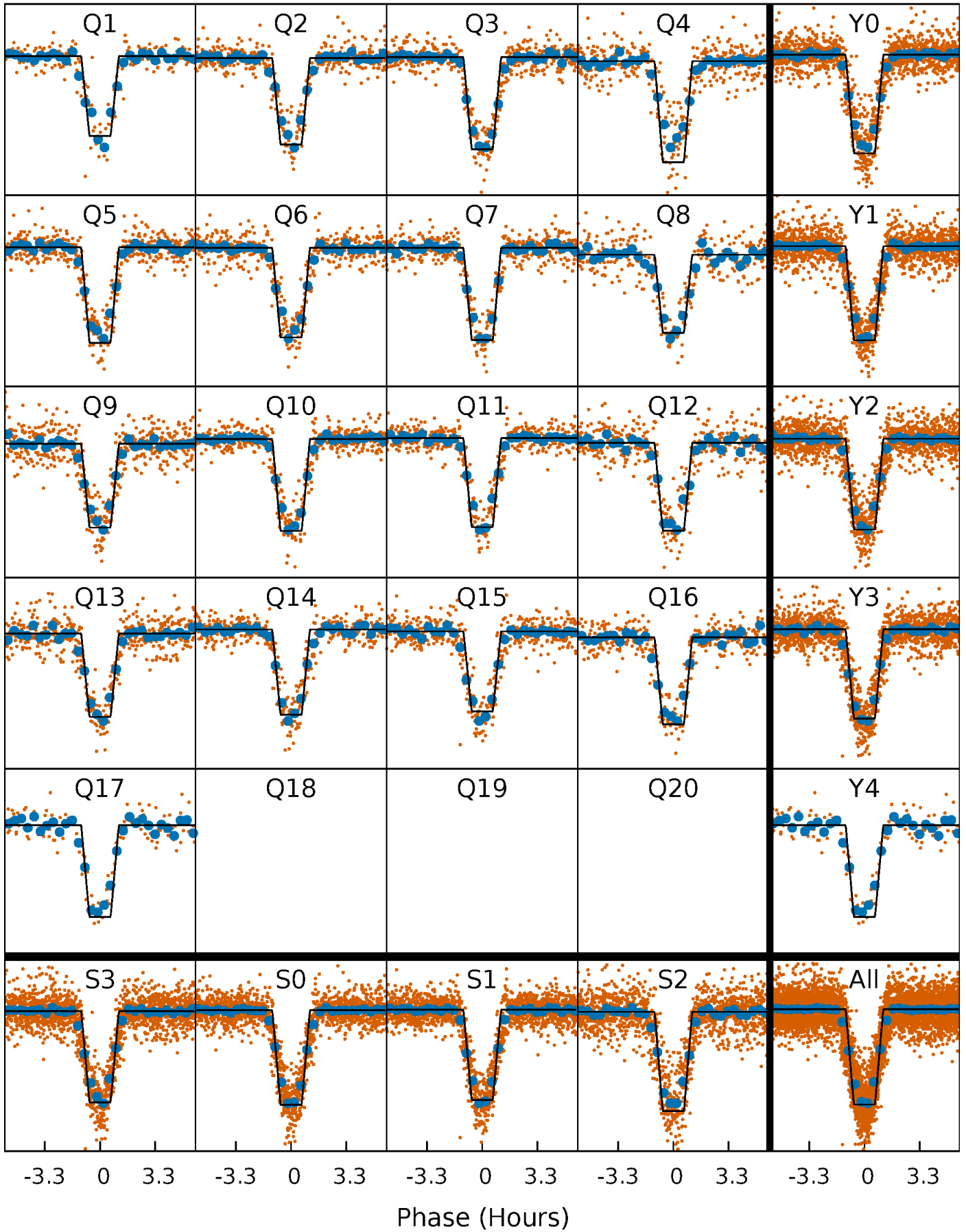
DV Quarter-Phased Transit Curves

TCE 005795648-02 P= 4.553360 Days $T_0=133.149535$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

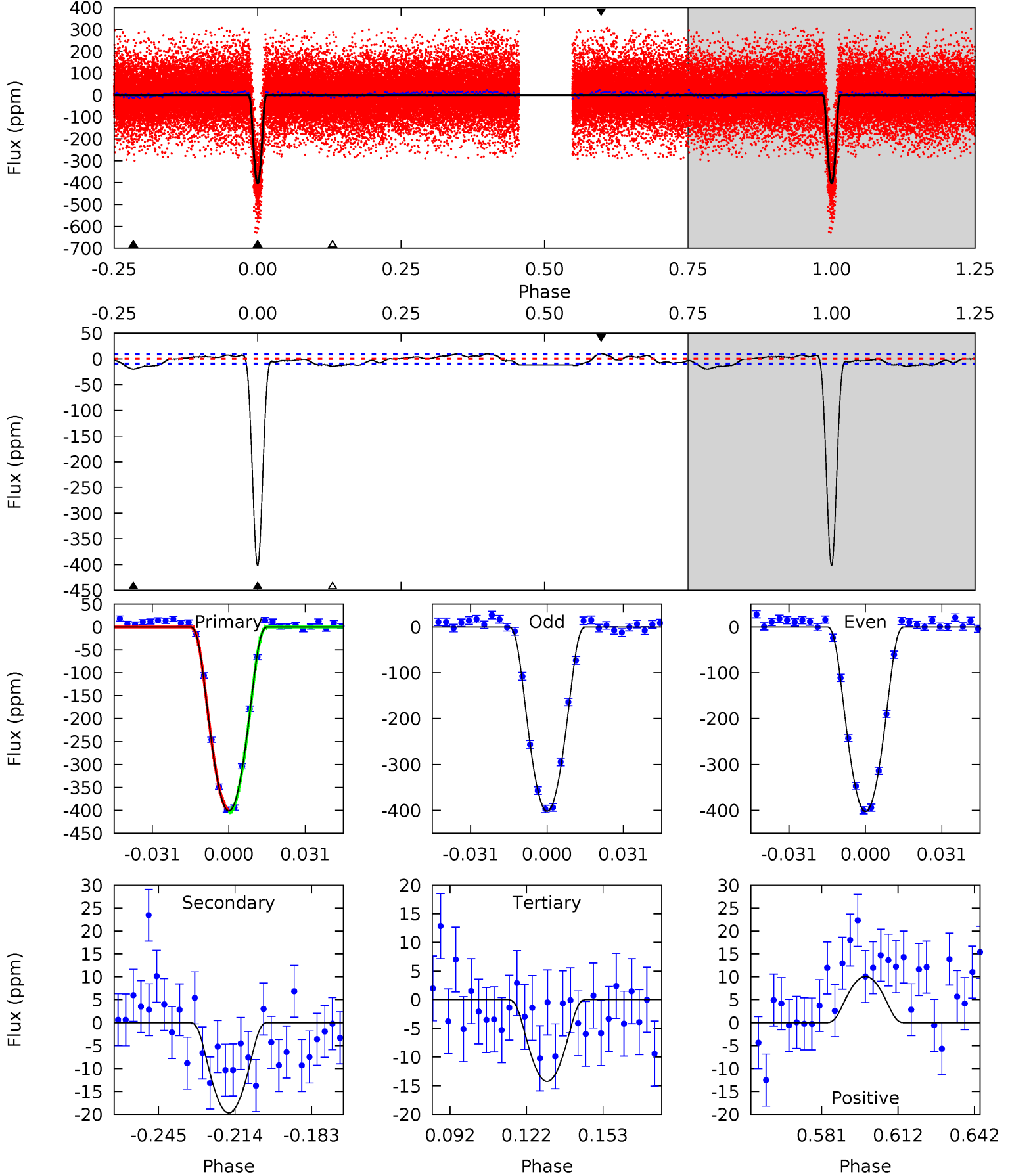
TCE 005795648-02 P= 4.553379 Days $T_0=133.146883$ (BKJD)



DV Model-Shift Uniqueness Test

005795648-02, P = 4.553360 Days, E = 128.596175 Days

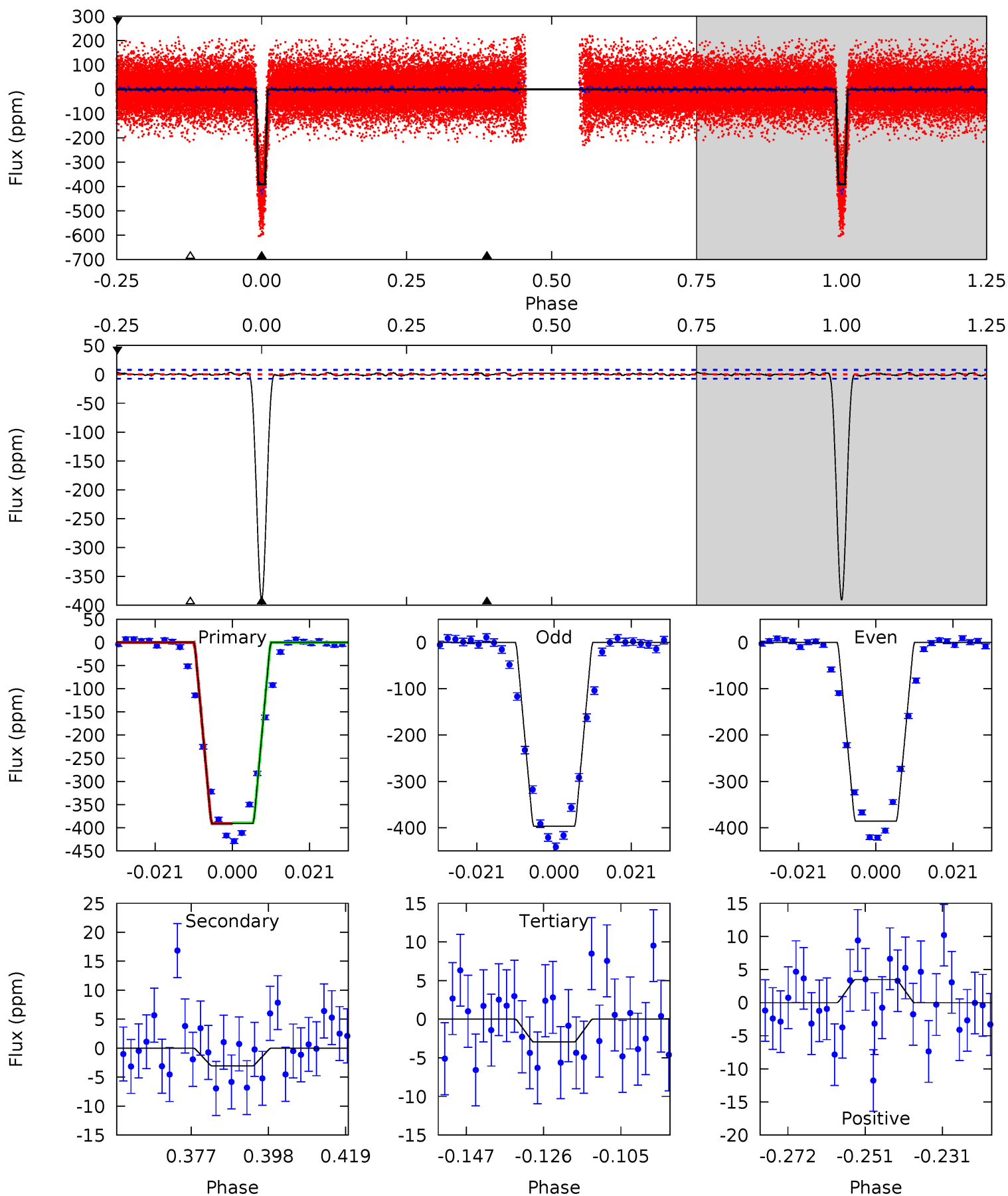
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
216.1	10.6	7.67	5.42	4.81	2.16	3.53	208.4	210.6	2.92	5.17	0.18	0.98	0.02	1.82



Alt Model-Shift Uniqueness Test

005795648-02, P = 4.553379 Days, E = 128.593504 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
248.3	1.94	1.86	2.22	4.88	2.31	0.81	246.4	246.1	0.08	-0.27	3.54	1.00	0.01	0.62



Stellar Parameters For KIC 005795648

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6306^{+157}_{-189}	$4.346^{+0.113}_{-0.137}$	$-0.360^{+0.300}_{-0.300}$	$1.109^{+0.244}_{-0.162}$	$0.991^{+0.135}_{-0.110}$	$1.025^{+0.535}_{-0.414}$
	+2%/-3%	+3%/-3%	+83%/-83%	+22%/-15%	+14%/-11%	+52%/-40%
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 005795648-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-20 ± 2	$4.46^{+1.30}_{-1.30}$	1766^{+98}_{-88}	2815^{+340}_{-234}	$1.586^{+1.602}_{-0.651}$
Alt.	-3 ± 2	$2.56^{+1.37}_{-1.27}$	1772^{+108}_{-95}	2439^{+651}_{-4451}	$0.727^{+2.145}_{-0.493}$

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

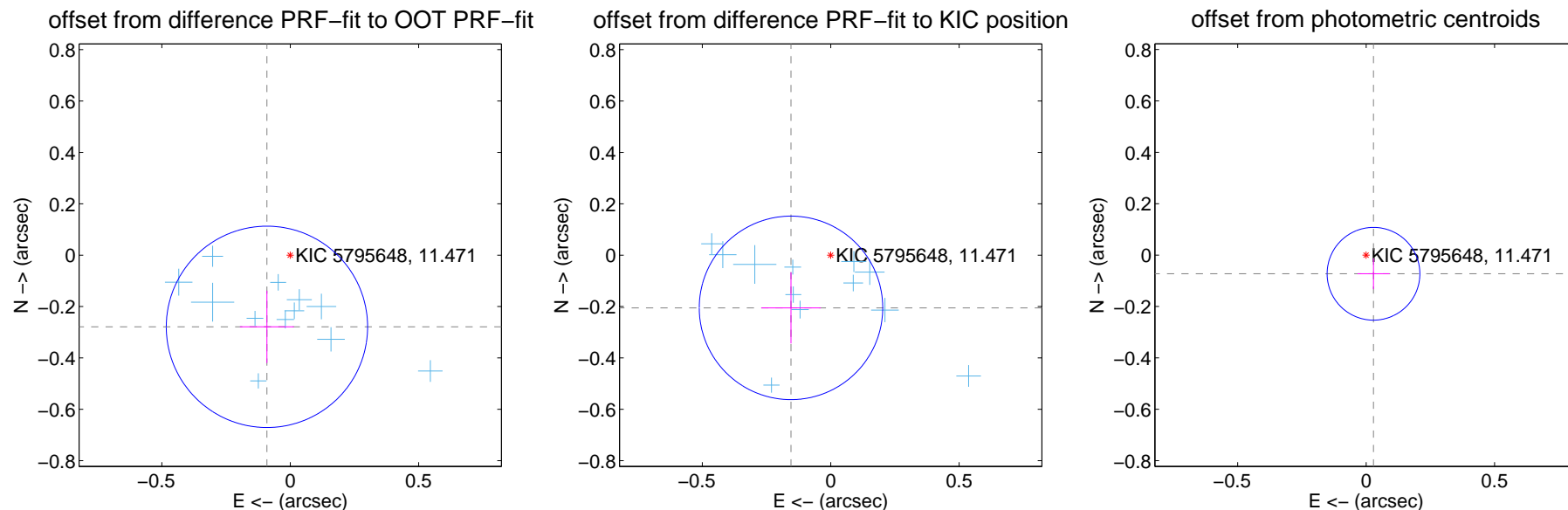
DV Centroid Data

Supplemental centroid analysis for 005795648-02. **Kepler magnitude: 11.47.** Transit SNR 120.70

There are 17 quarters with good PRF difference image offsets

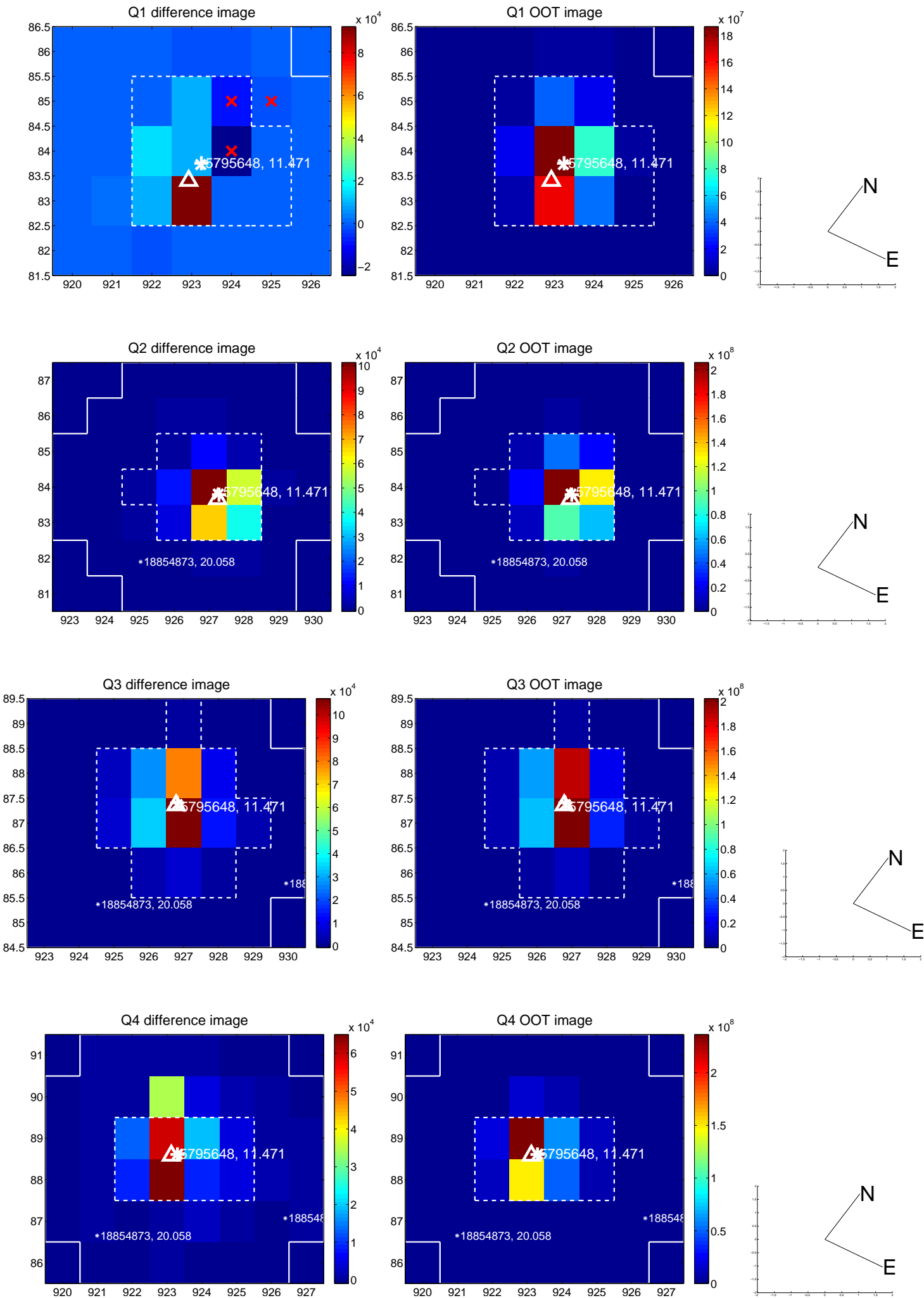
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.293 ± 0.131	2.25	0.091 ± 0.105	-0.279 ± 0.141
PRF-fit source offset from KIC position	0.257 ± 0.119	2.16	0.155 ± 0.116	-0.205 ± 0.139
photometric centroid source offset	0.08 ± 0.06	1.30	-0.03 ± 0.06	-0.07 ± 0.06

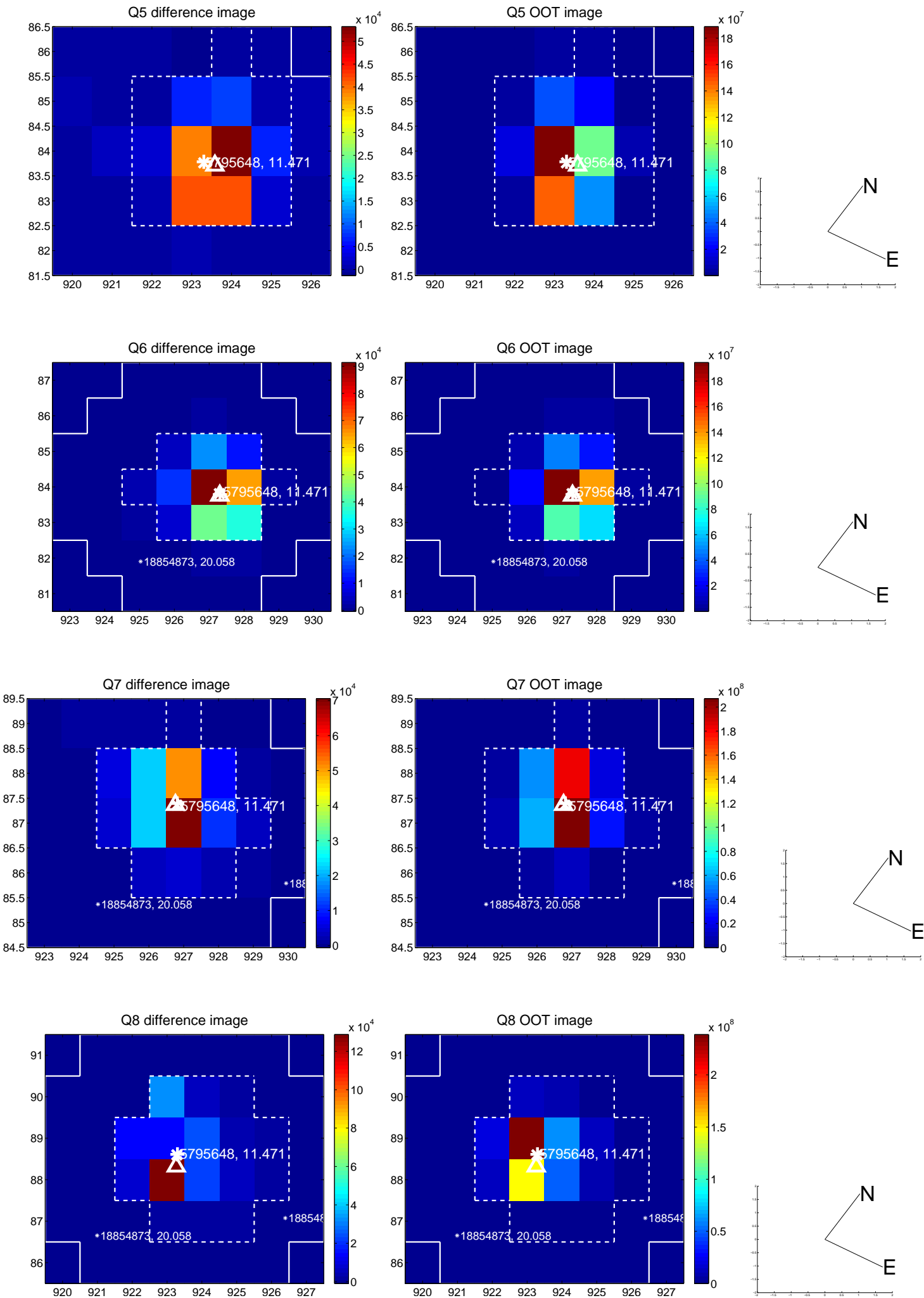


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

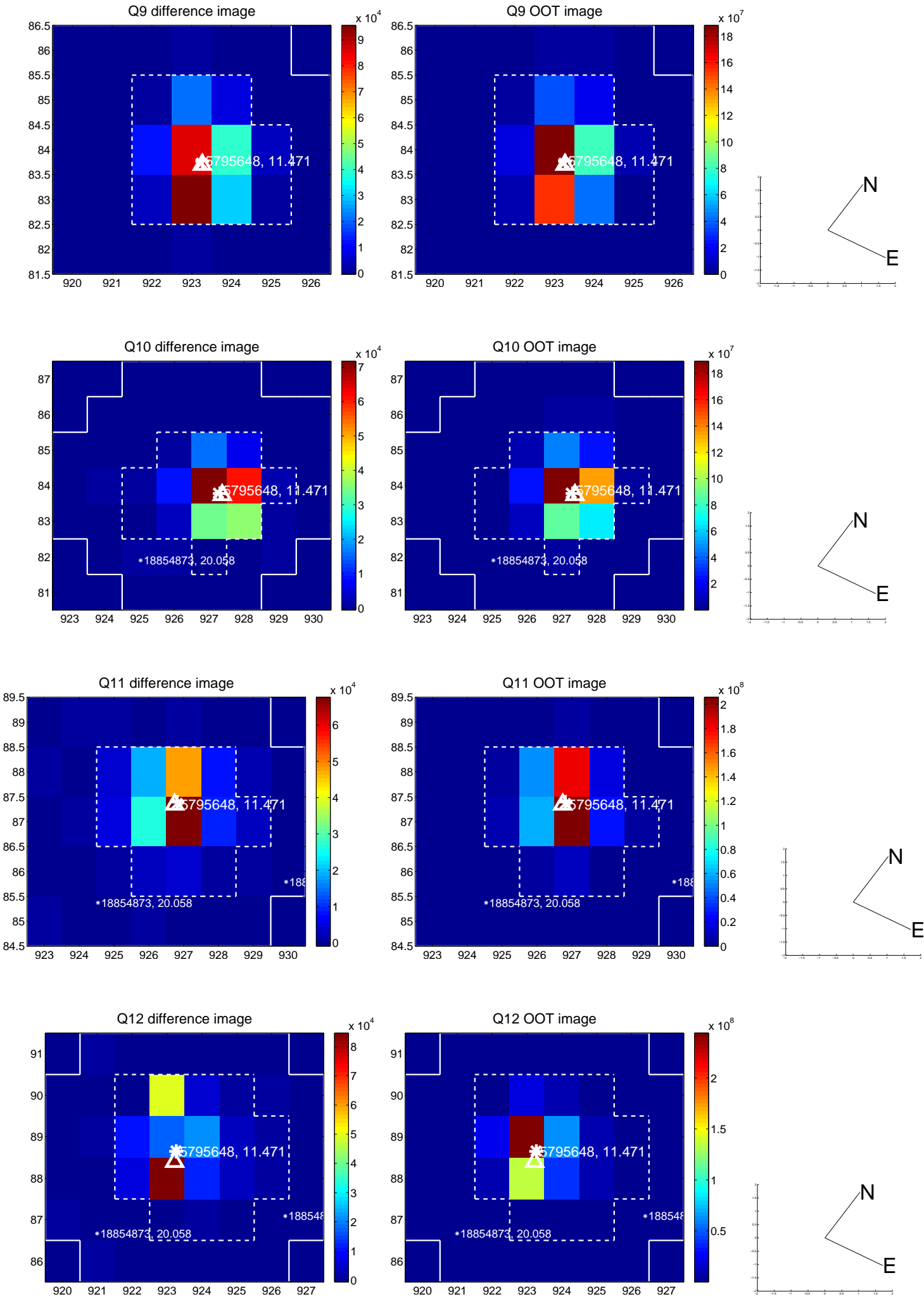
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



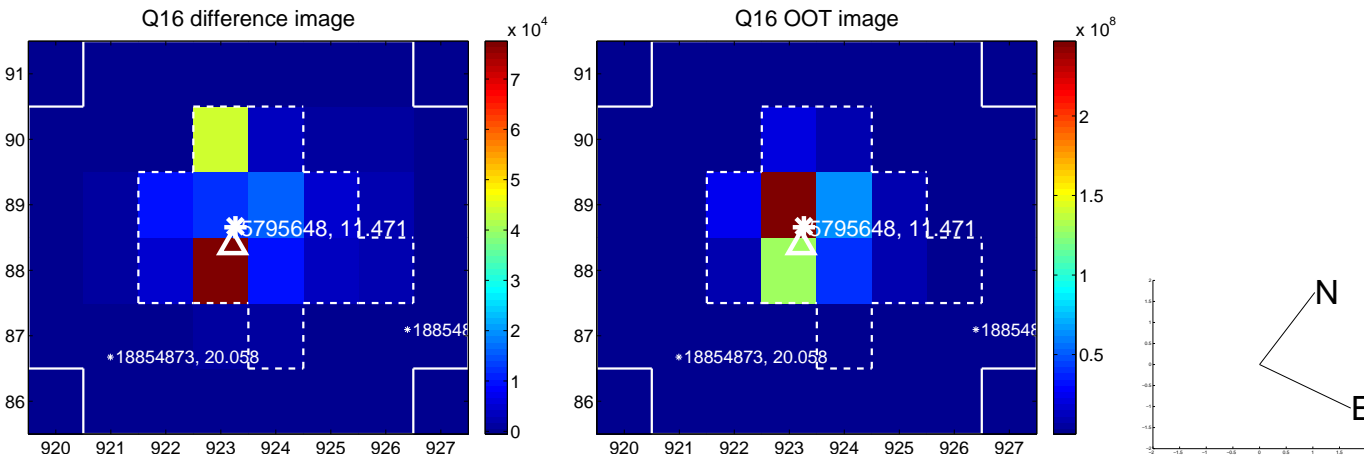
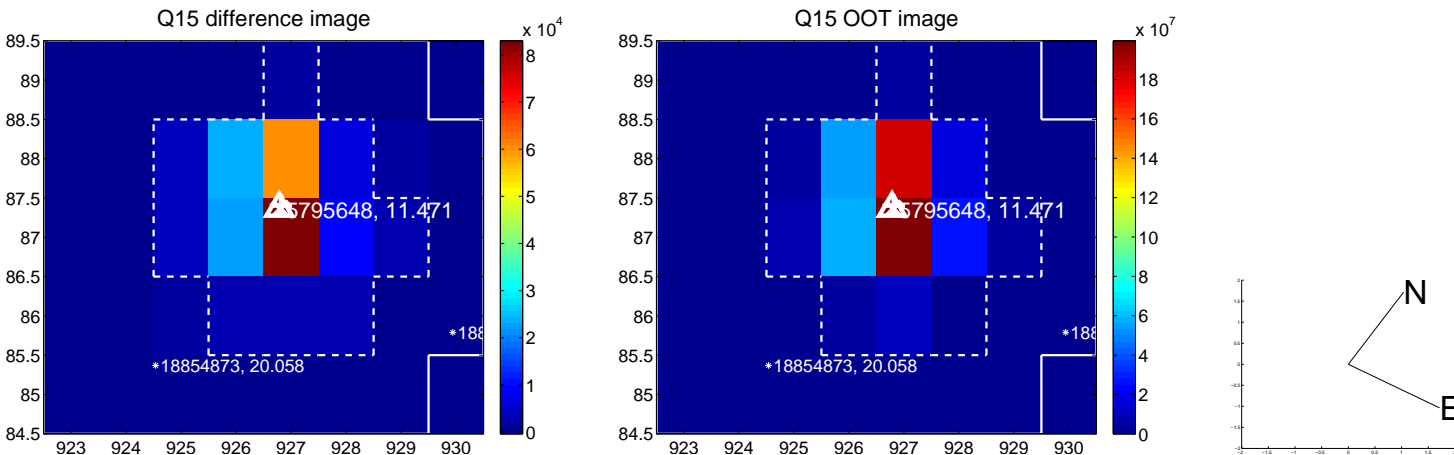
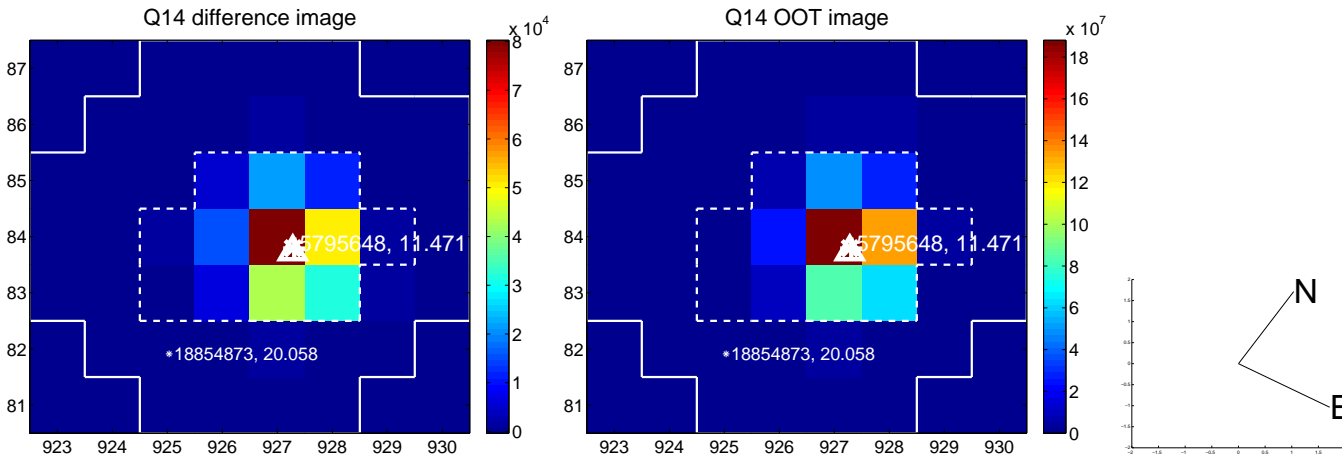
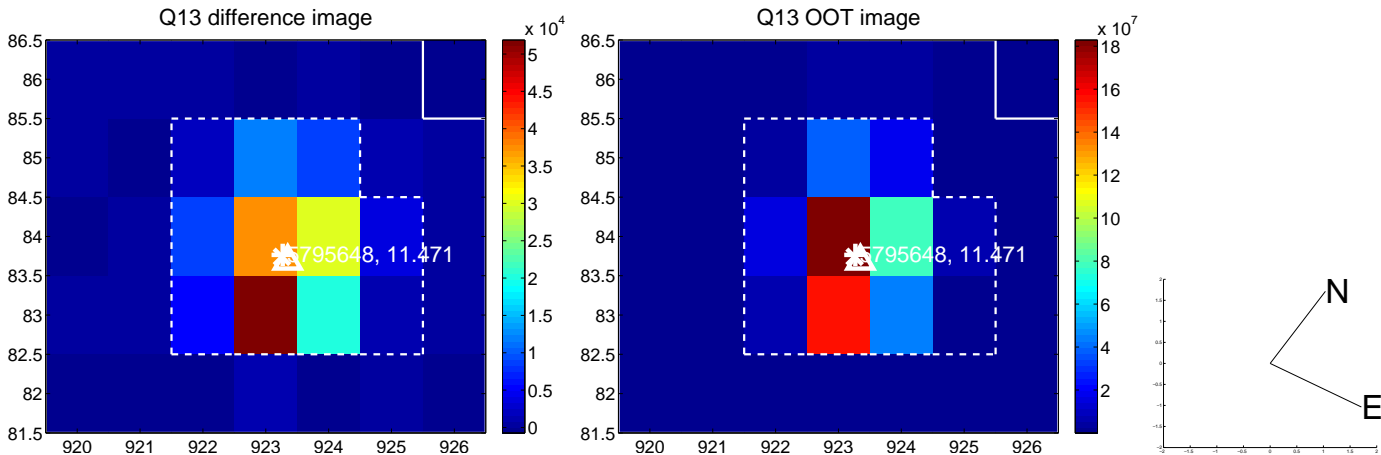
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



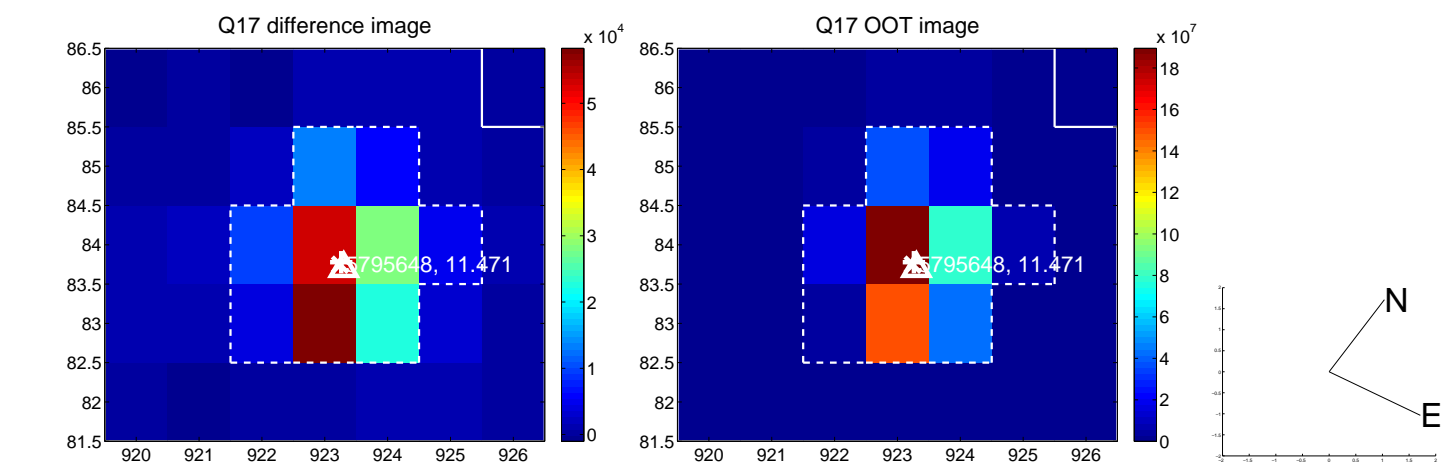
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



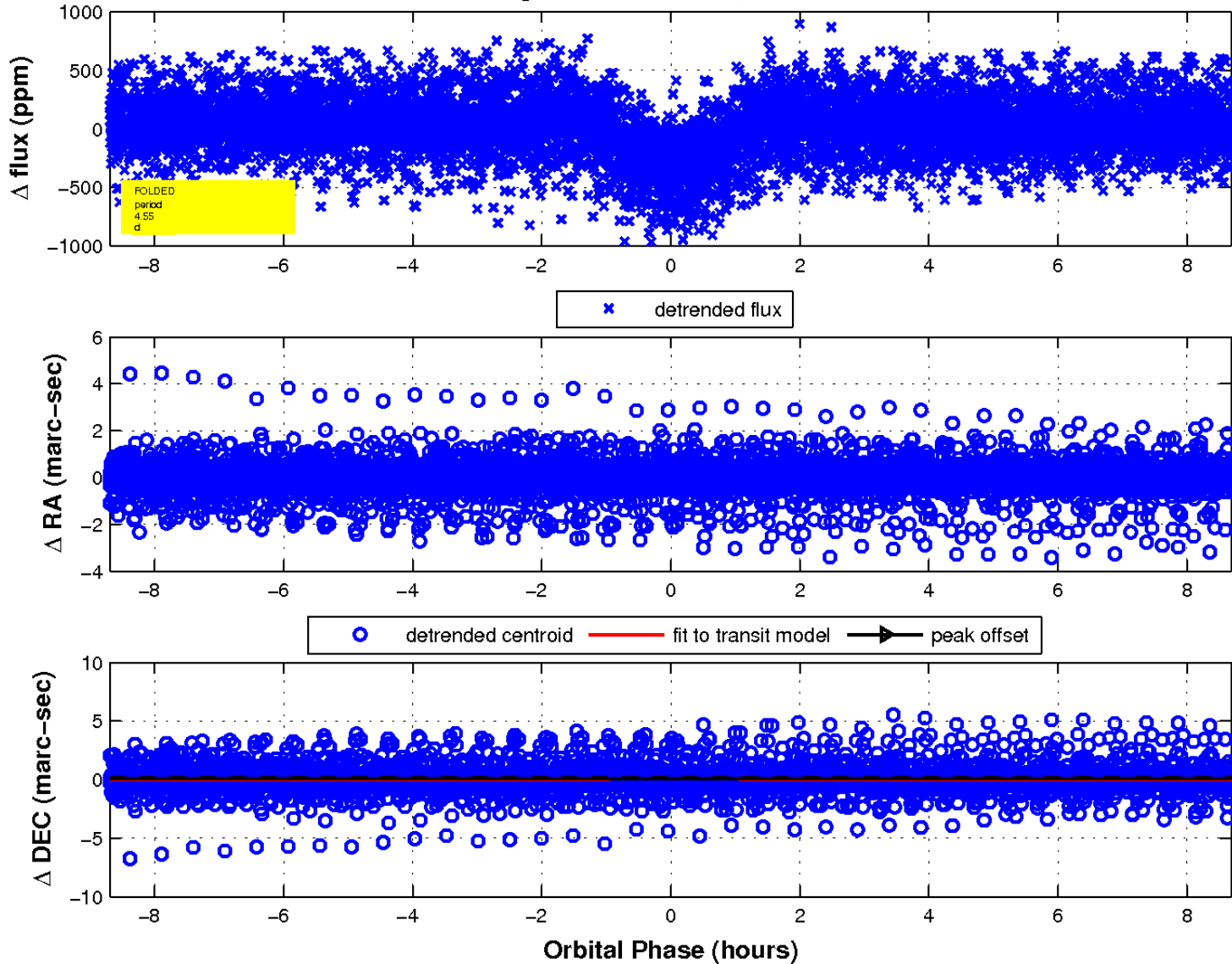
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

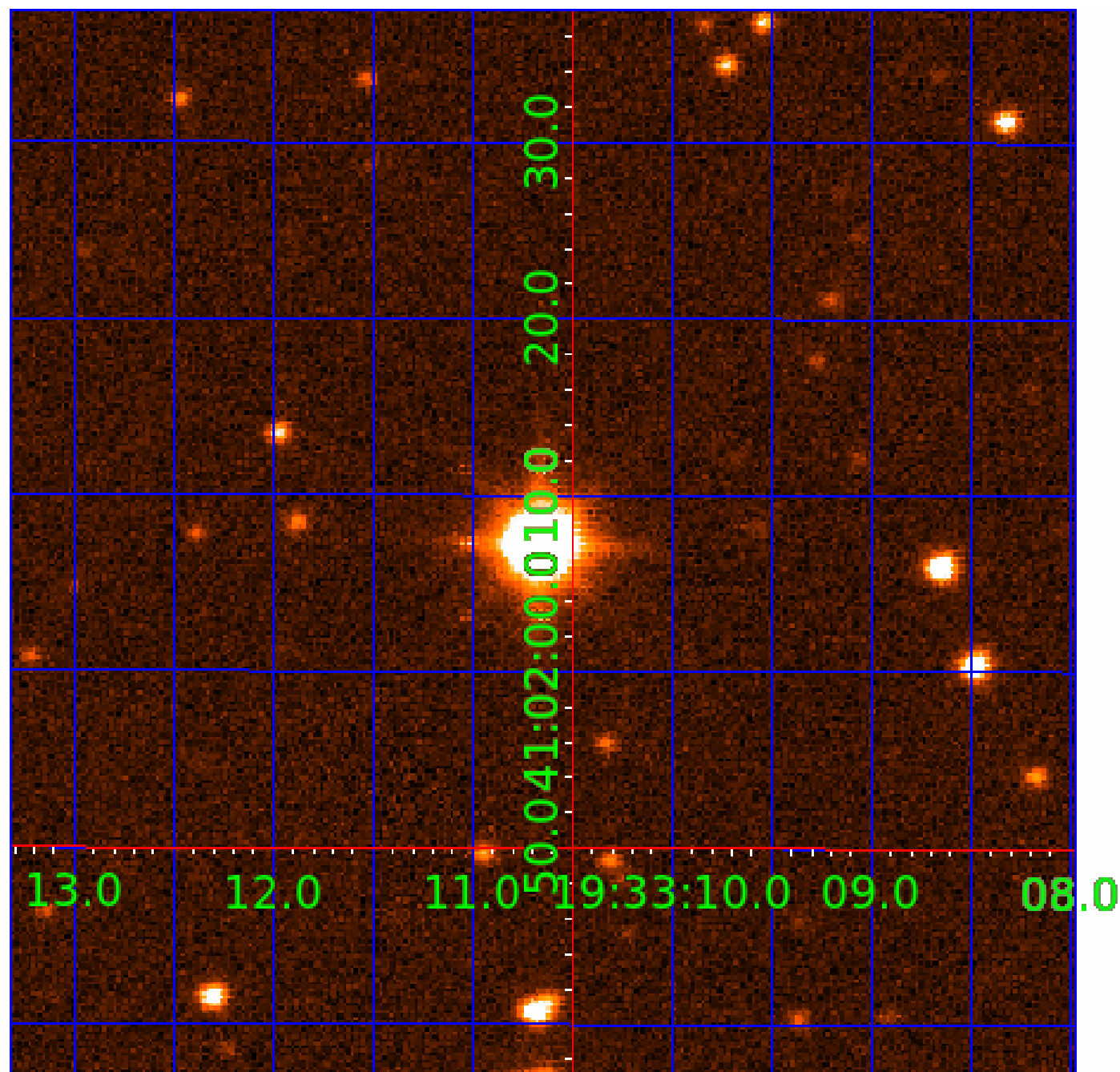


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 005795648

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})
005795648-01	OBS	6016.01	4.553370	135.433906	23498.9	3.214	6098.0	5541.8	1.11	6306	25.04	604.53
005795648-02	OBS	No	4.553360	133.149535	421.2	2.898	109.2	120.7	1.11	6306	4.43	604.54
005795648-03	OBS	No	497.924564	413.480554	468.2	10.745	12.0	7.2	1.11	6306	3.25	1.16

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005795648-01	OBS	PC	0.80	0	1	0	0	MOD_SEC_DV—PLANET_OCCULT_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE—CENT_SATURATED
005795648-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_SATURATED
005795648-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_SATURATED

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

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

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

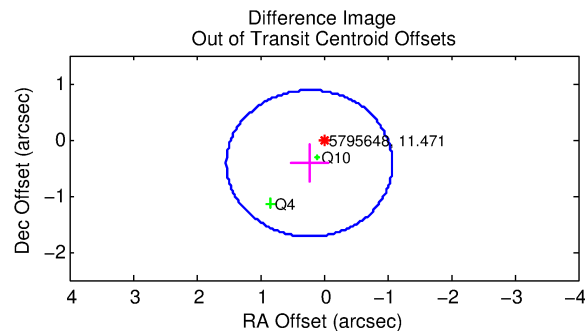
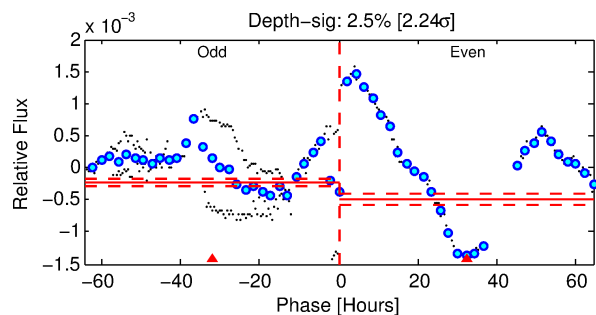
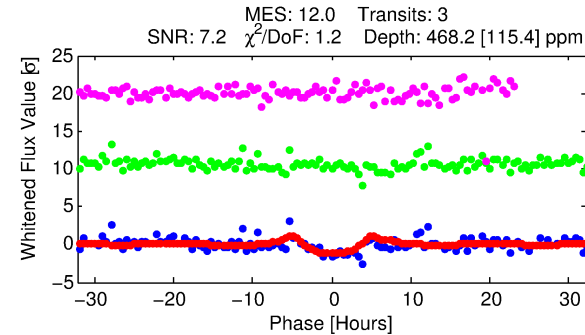
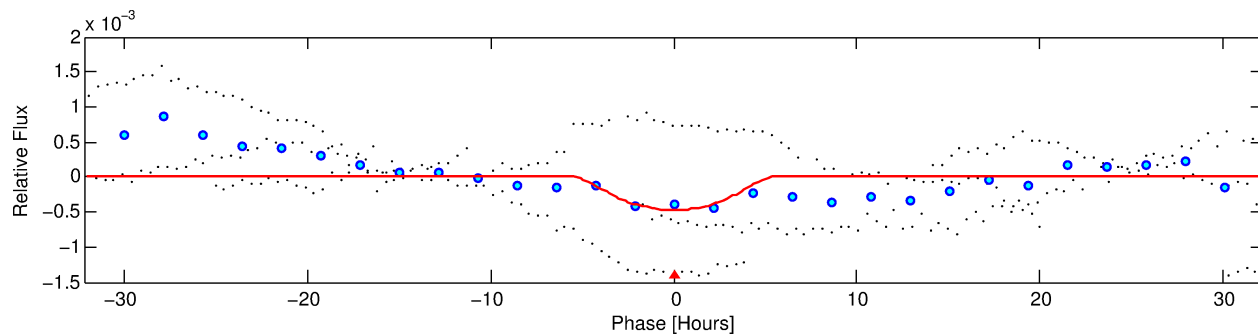
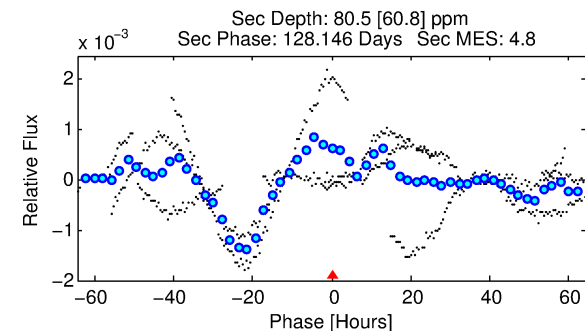
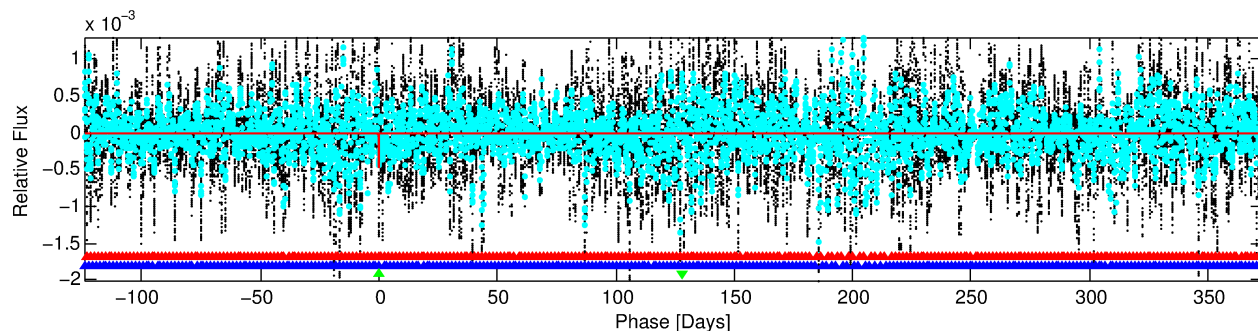
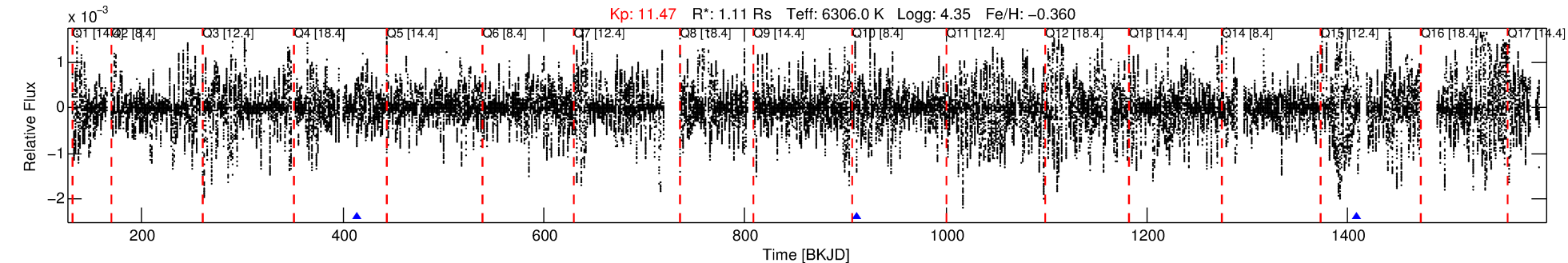
Ephemeris Match Information For 005795648-03

No Significant Match Found

DV One-Page Summary

KIC: 5795648 Candidate: 3 of 3 Period: 497.925 d
KOI: K06016 Corr: No Ephemeris Match

Kp: 11.47 R*: 1.11 Rs Teff: 6306.0 K Logg: 4.35 Fe/H: -0.360



DV Fit Results:

Period = 497.92456 [0.01669] d
Epoch = 413.4806 [0.0193] BKJD
Rp/R* = 0.0269 [0.0061]
a/R* = 111.09 [18.02]
b = 0.98 [0.02]
Seff = 1.16 [0.33]
Teq = 264 [19] K
Rp = 3.25 [1.02] Re
a = 1.2277 [0.2216] AU
Ag = 6306.36 [5781.09] [1.09σ]
Teffp = 3643 [809] K [4.18σ]

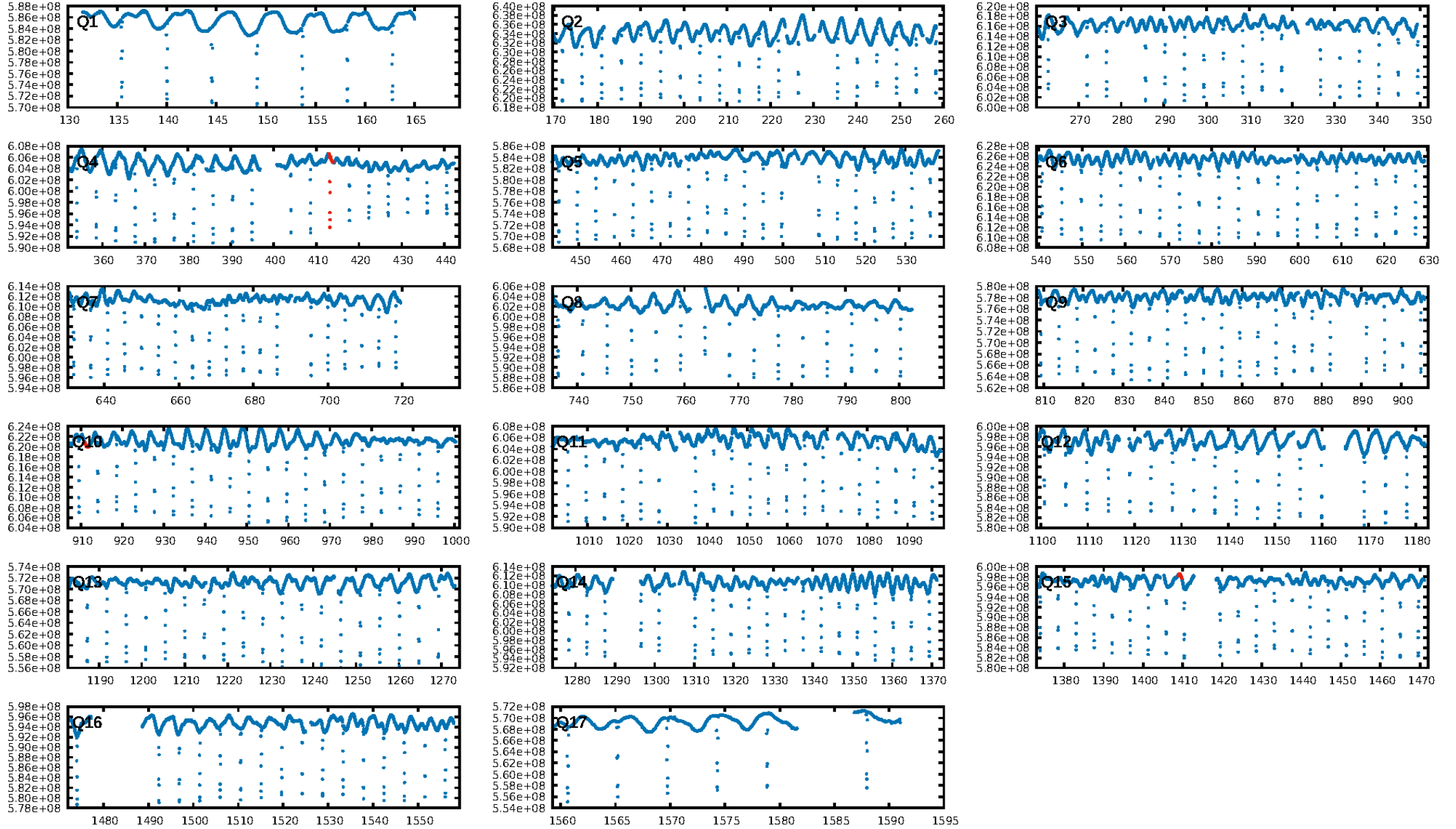
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1055.78σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 18.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.91e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.8083
Centroid-sig: N/A
Centroid-so: 0.693 arcsec [1.67σ]
OotOffset-rm: 0.481 arcsec [1.11σ]
KicOffset-rm: 0.424 arcsec [0.67σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-st: 1/0/1/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 0.00 [0/2]

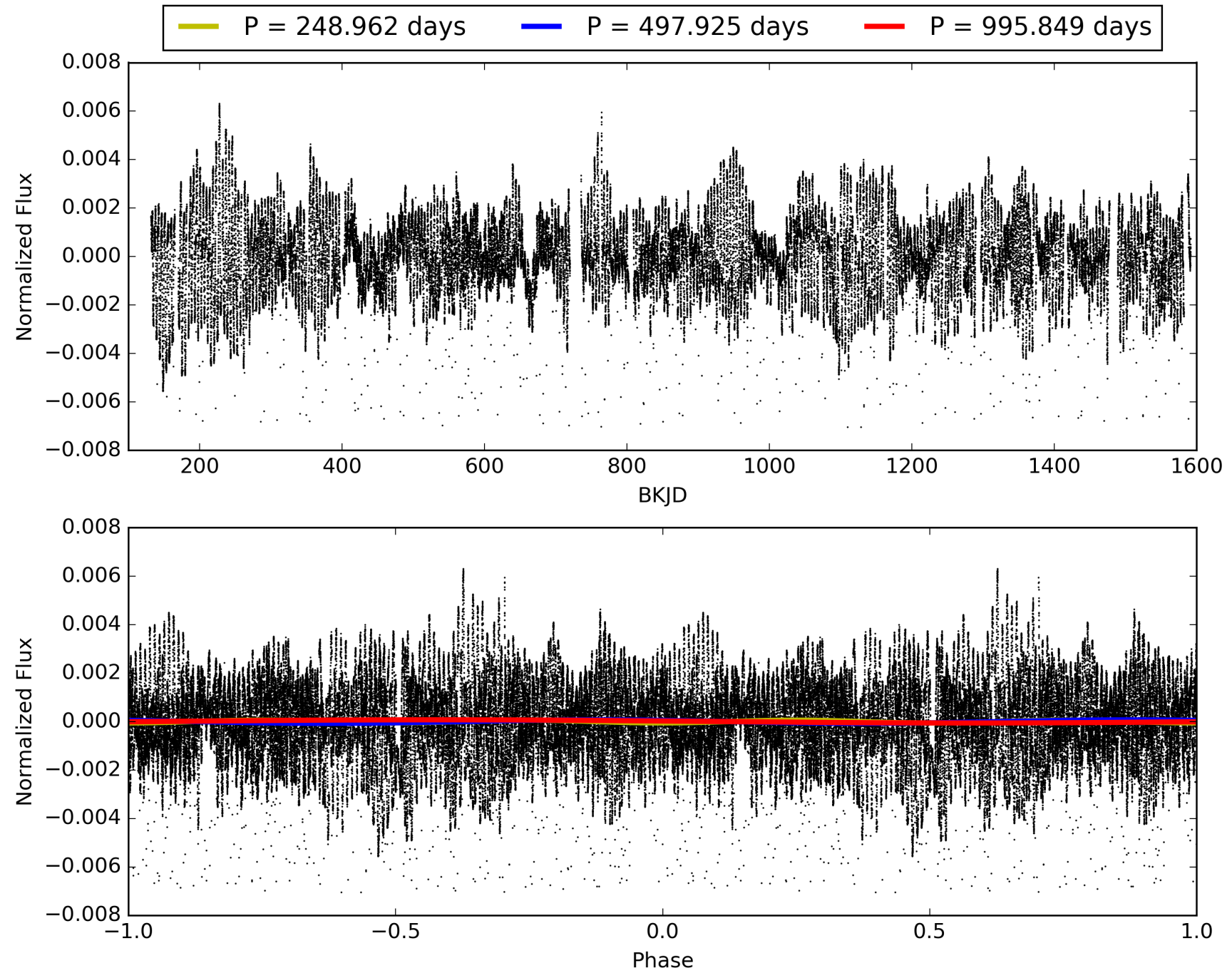
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:56:01 Z

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

TCE 005795648-03, PDC Light Curves

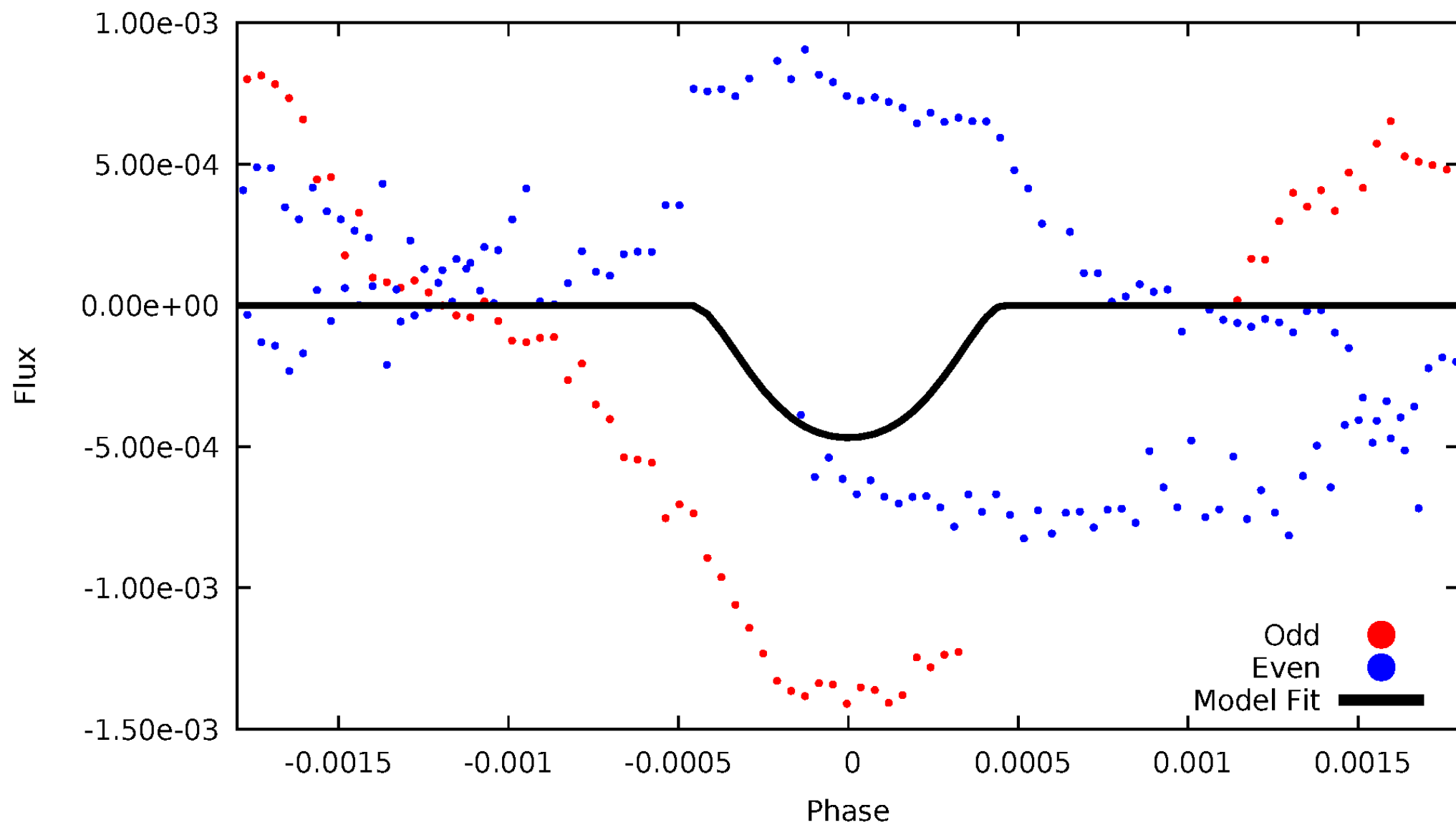


TCE 005795648-03



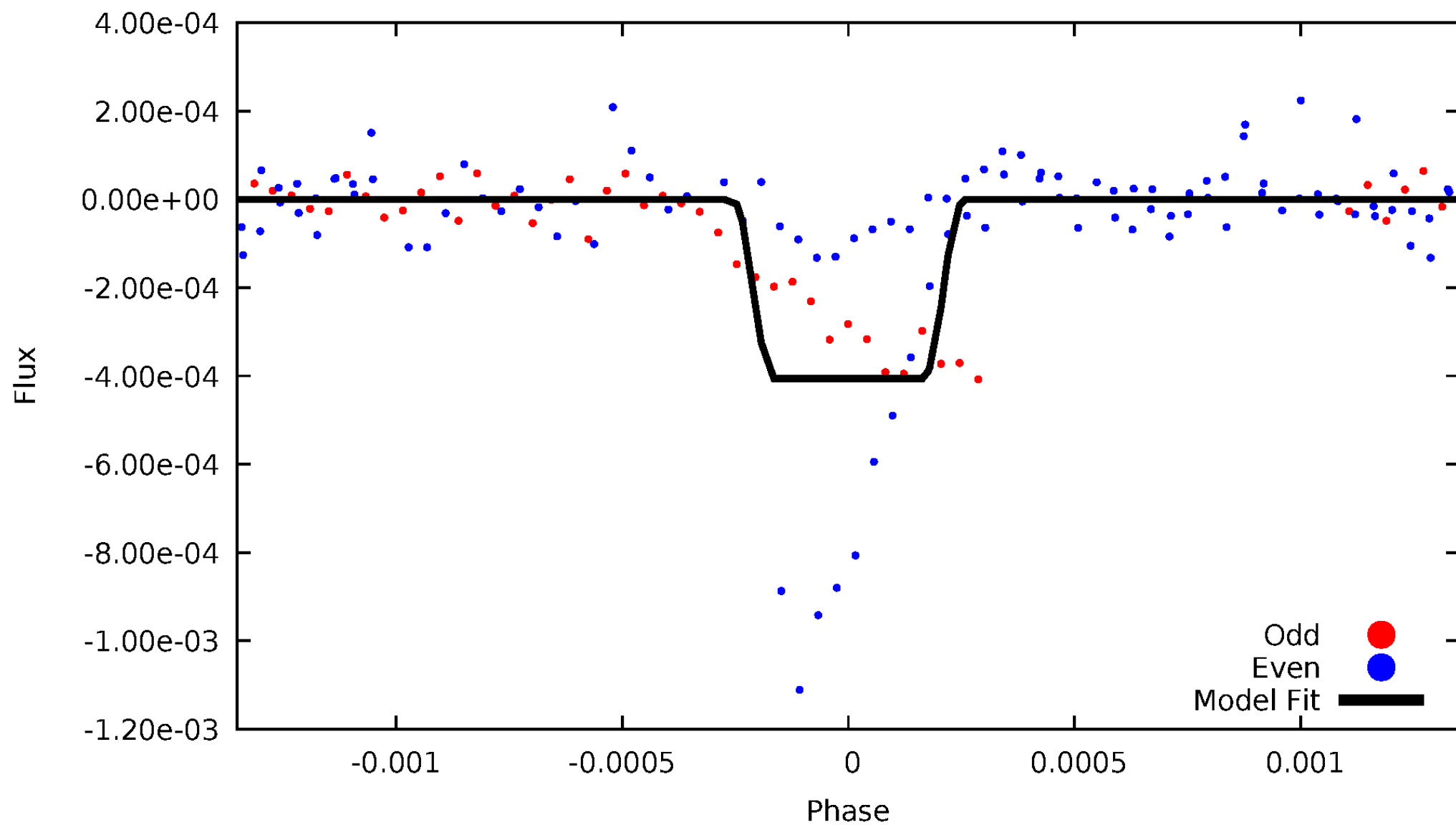
DV Odd/Even

TCE 005795648-03



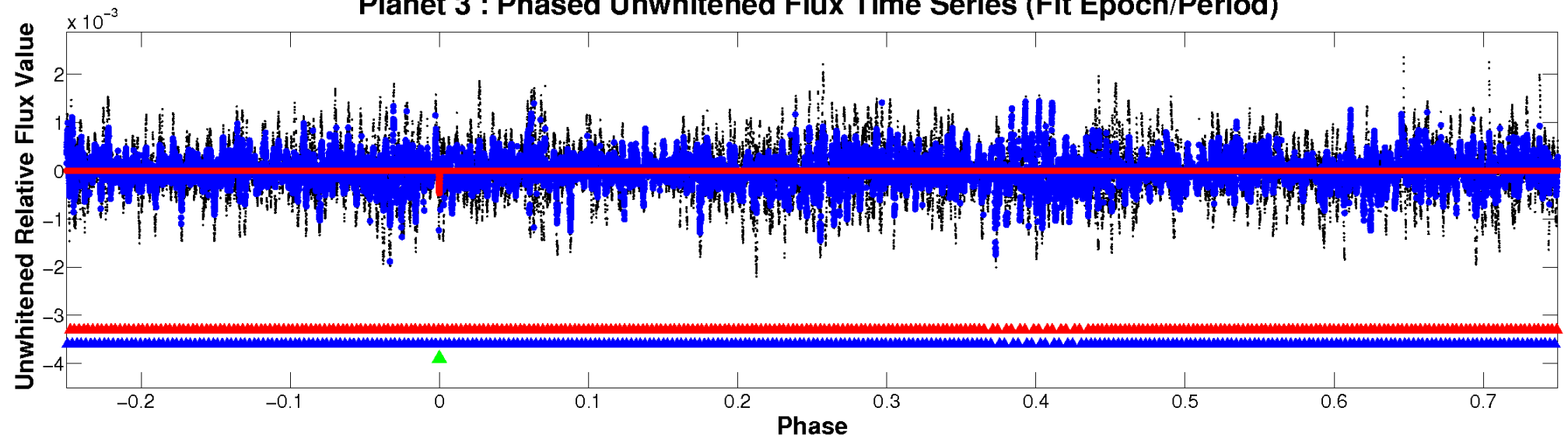
ALT Odd/Even

TCE 005795648-03

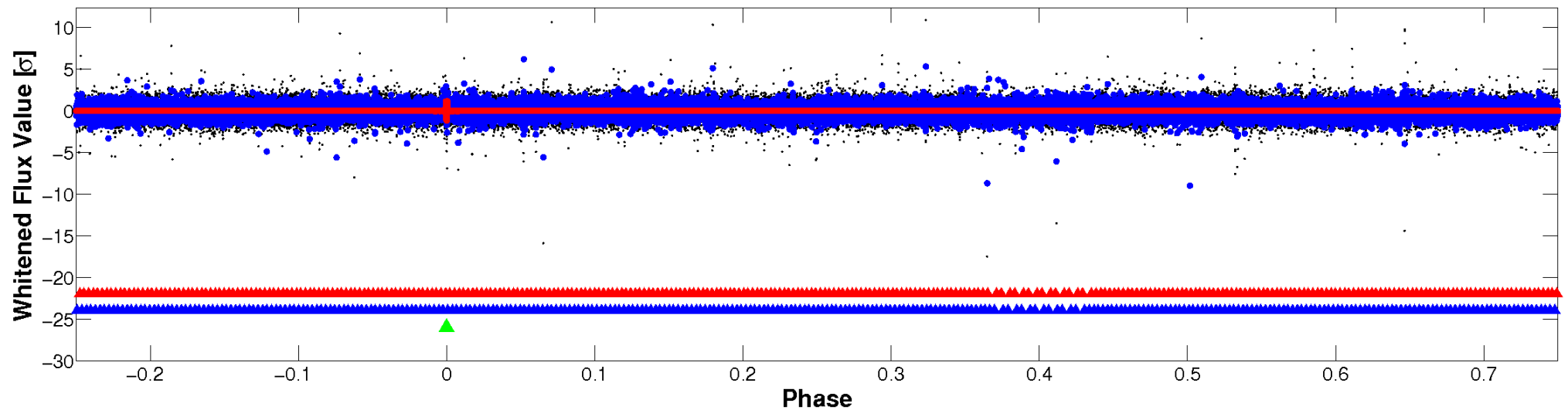


Non-Whitened Vs. Whitened Light Curve

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



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



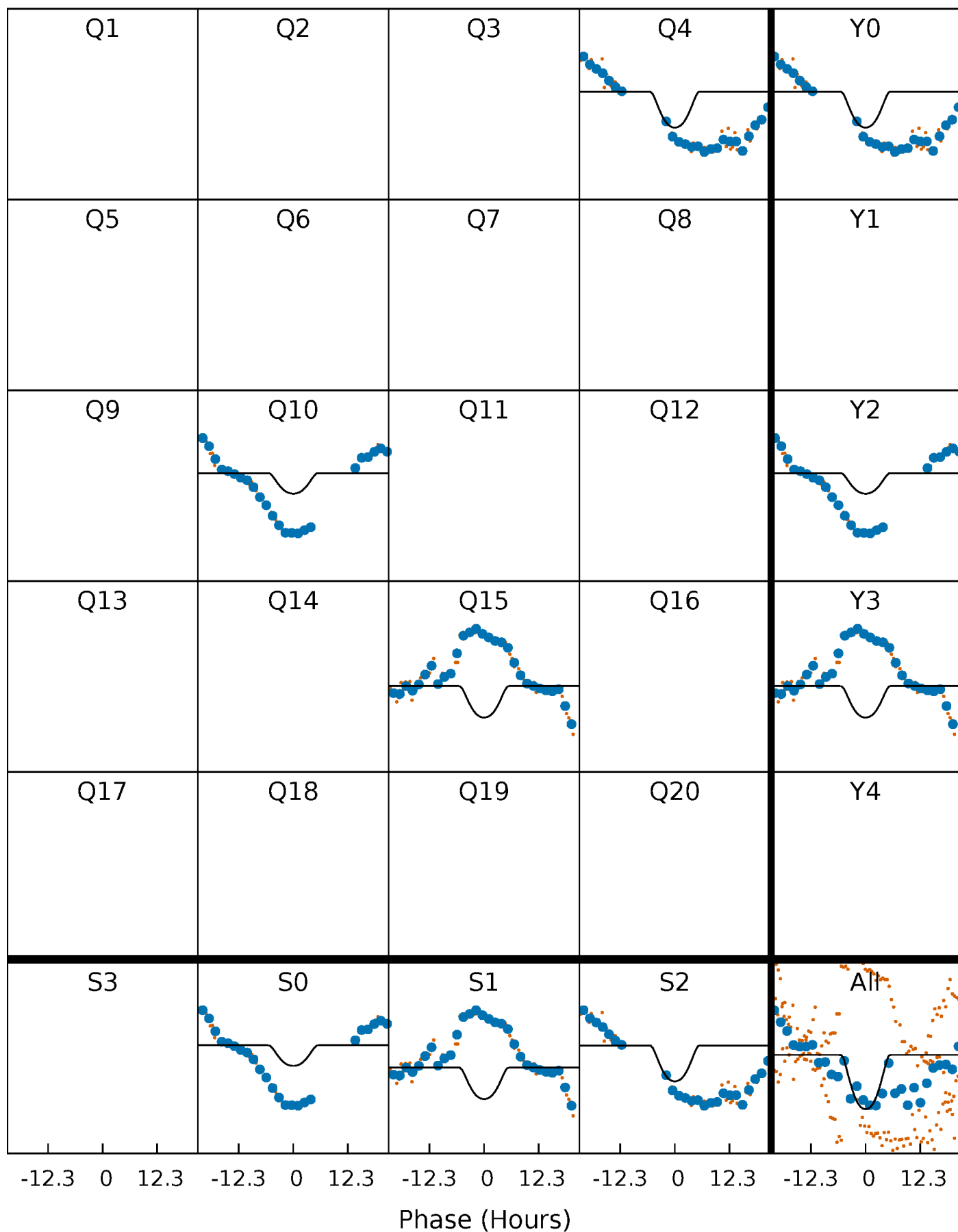
PDC Quarter-Phased Transit Curves

TCE 005795648-03 $P=497.924564$ Days $T_0=413.480554$ (BKJD)



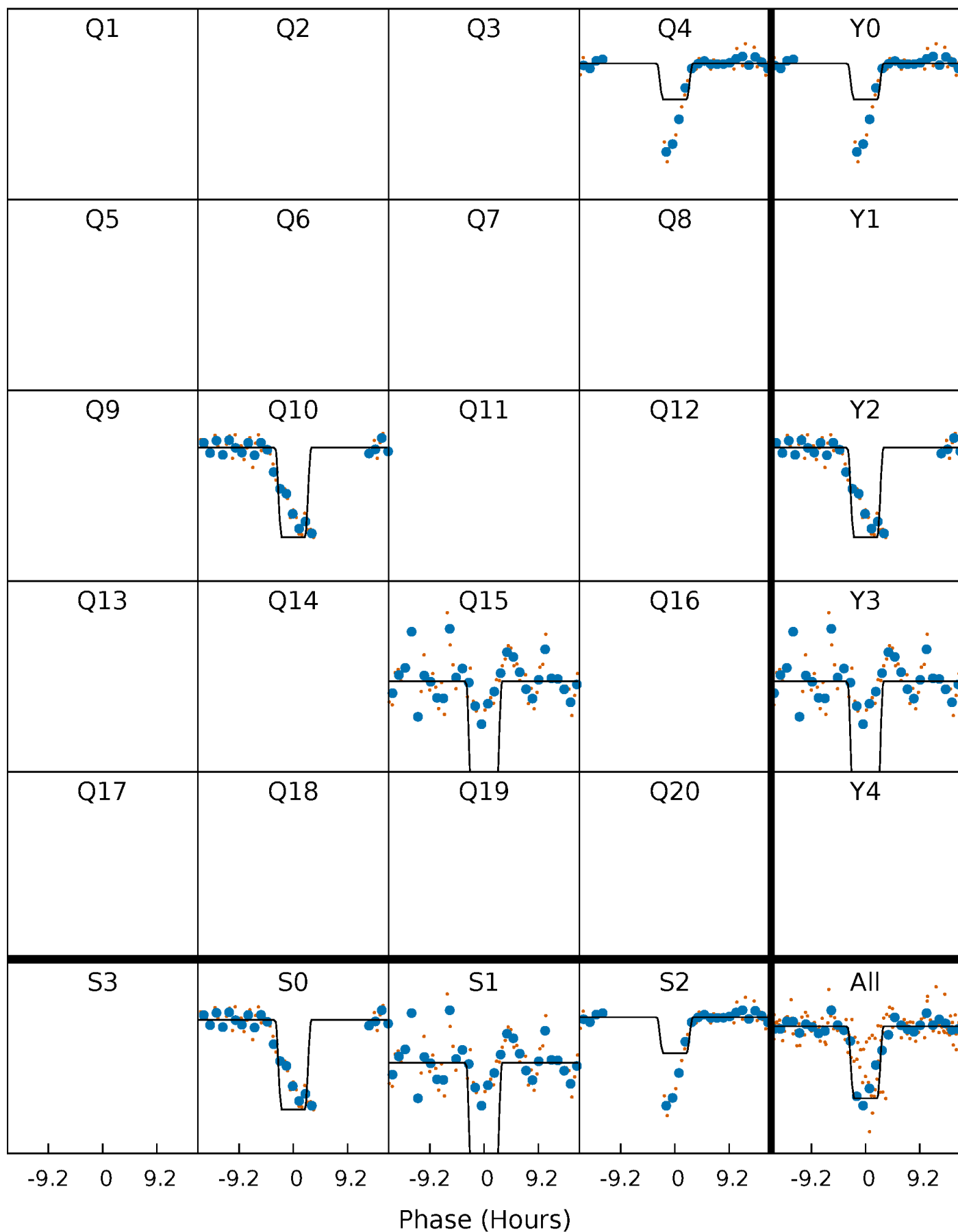
DV Quarter-Phased Transit Curves

TCE 005795648-03 $P=497.924564$ Days $T_0=413.480554$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

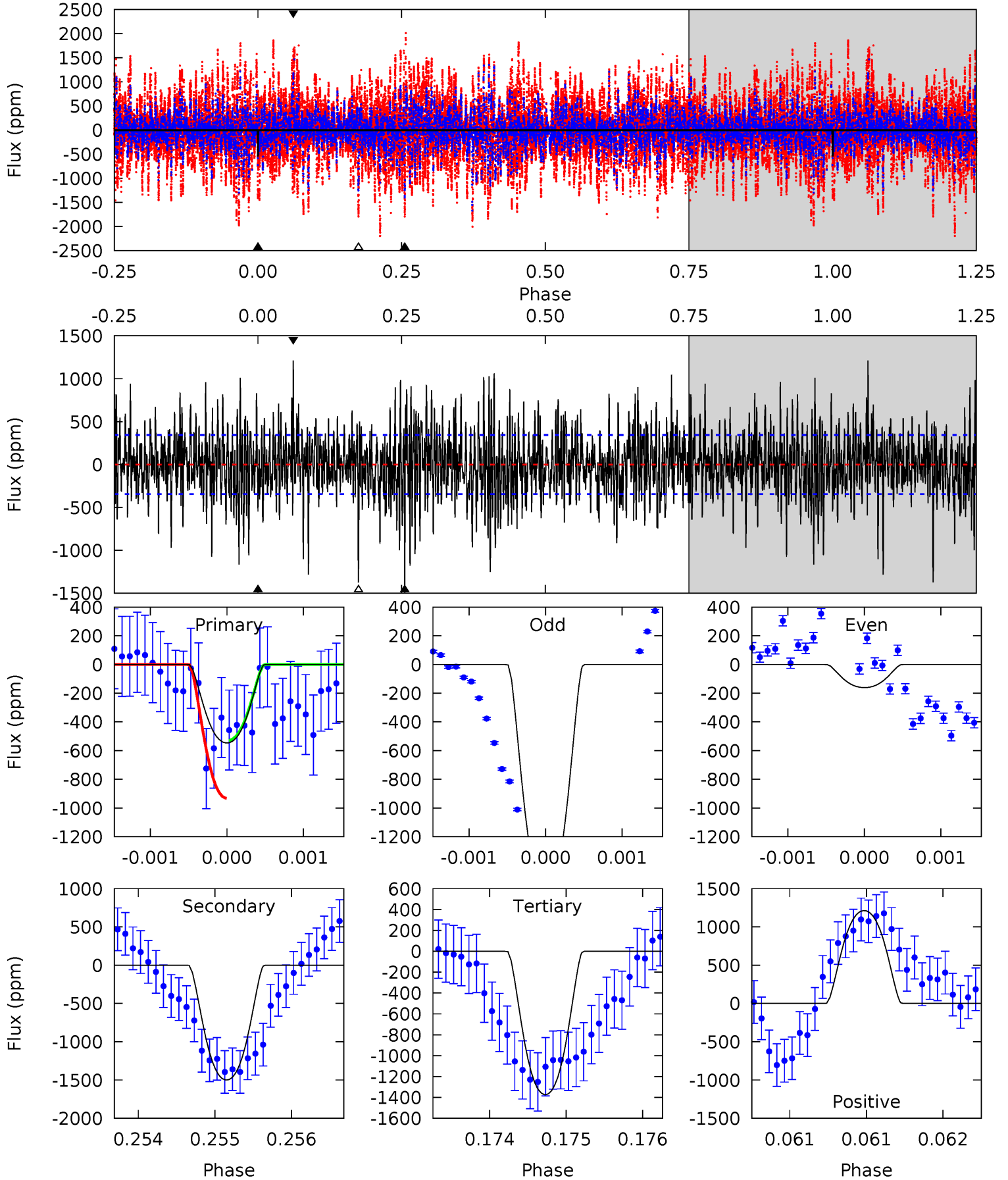
TCE 005795648-03 P=497.938612 Days $T_0=413.484981$ (BKJD)



DV Model-Shift Uniqueness Test

005795648-03, P = 497.924564 Days, E = 413.480554 Days

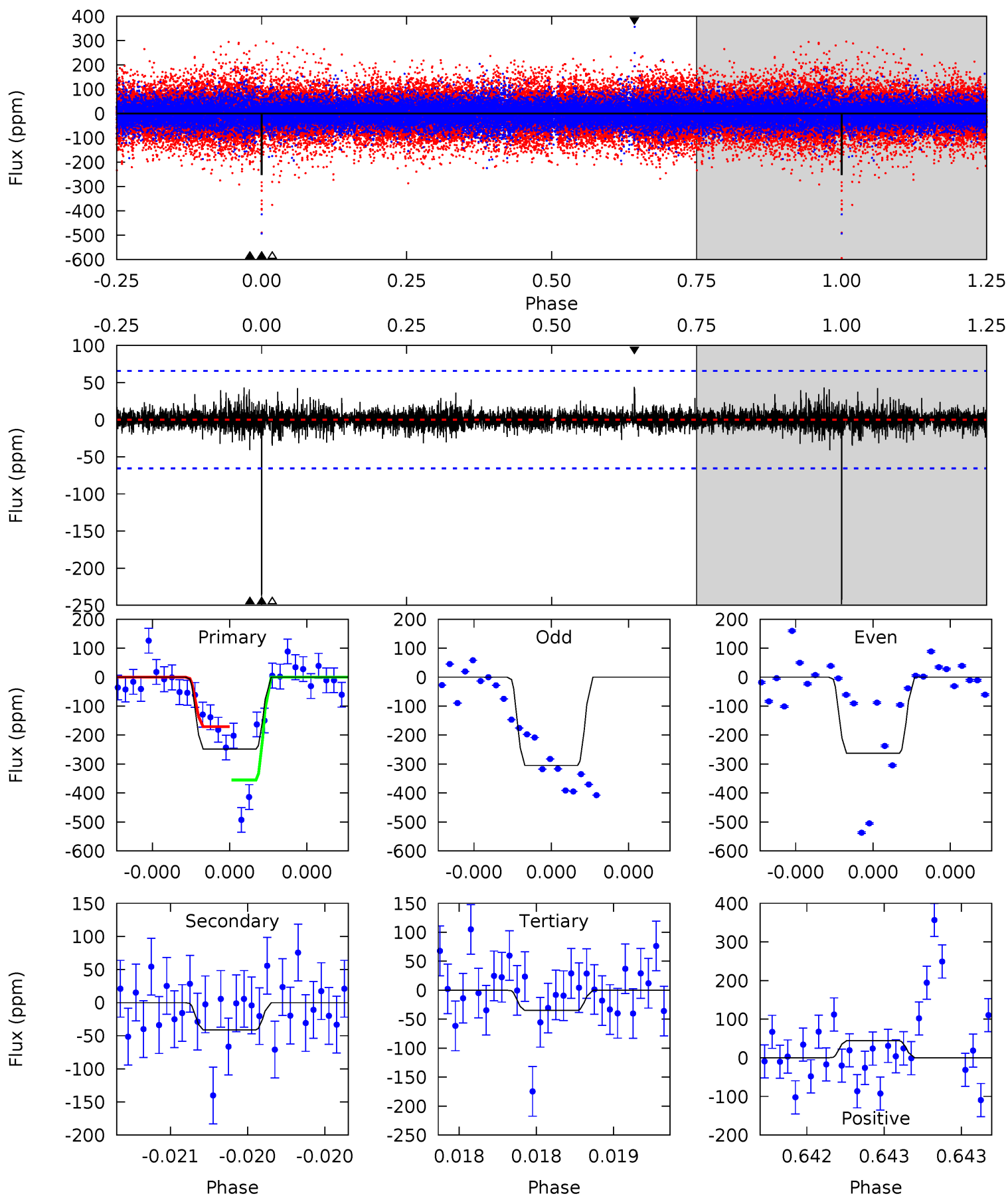
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.69	23.8	21.8	19.3	5.46	3.31	5.27	-13.1	-10.6	2.01	4.57	10.9	0.64	0.45	3.11



Alt Model-Shift Uniqueness Test

005795648-03, P = 497.938612 Days, E = 413.484981 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.1	3.49	2.97	3.75	5.58	3.49	0.61	18.2	17.4	0.52	-0.26	1.80	1.17	0.15	7.67



Stellar Parameters For KIC 005795648

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6306^{+157}_{-189}	$4.346^{+0.113}_{-0.137}$	$-0.360^{+0.300}_{-0.300}$	$1.109^{+0.244}_{-0.162}$	$0.991^{+0.135}_{-0.110}$	$1.025^{+0.535}_{-0.414}$
	+2%/-3%	+3%/-3%	+83%/-83%	+22%/-15%	+14%/-11%	+52%/-40%
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 005795648-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1500 ± 63	$3.27^{+0.88}_{-0.83}$	369^{+22}_{-17}	7706^{+1468}_{-928}	116440^{+89509}_{-44868}
Alt.	-41 ± 12	$2.42^{+0.81}_{-0.72}$	370^{+21}_{-19}	3881^{+560}_{-383}	5512^{+6045}_{-2579}

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

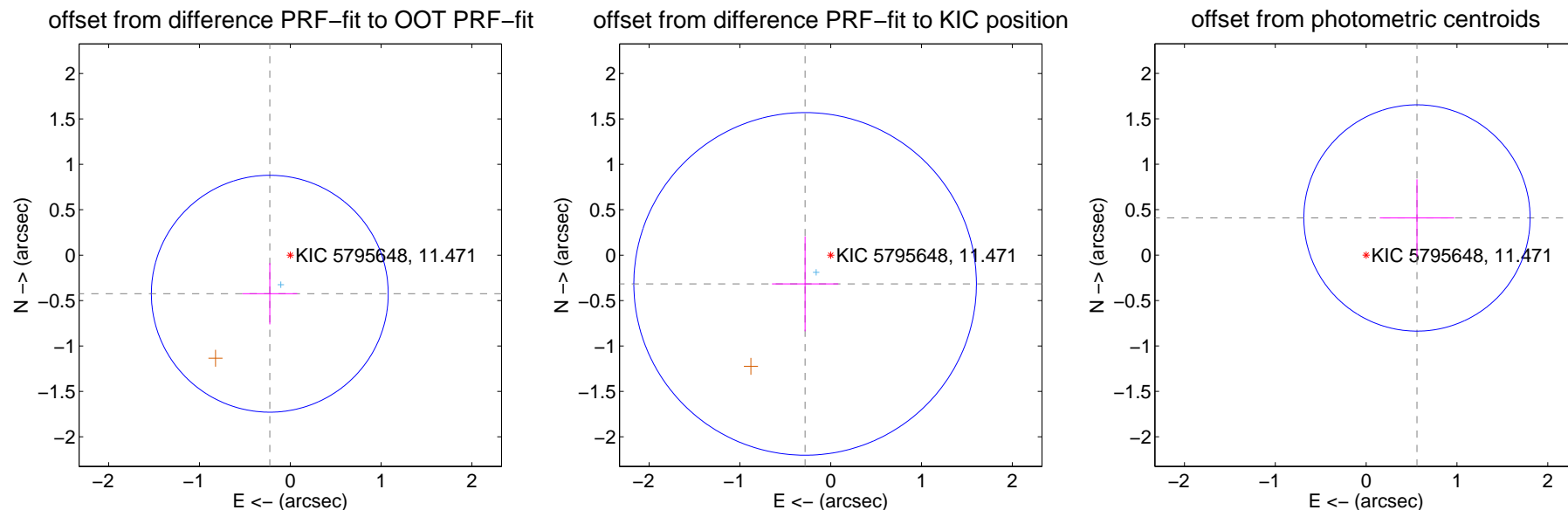
DV Centroid Data

Supplemental centroid analysis for 005795648-03. **Kepler magnitude: 11.47.** Transit SNR 7.22

There are 1 quarters with good PRF difference image offsets

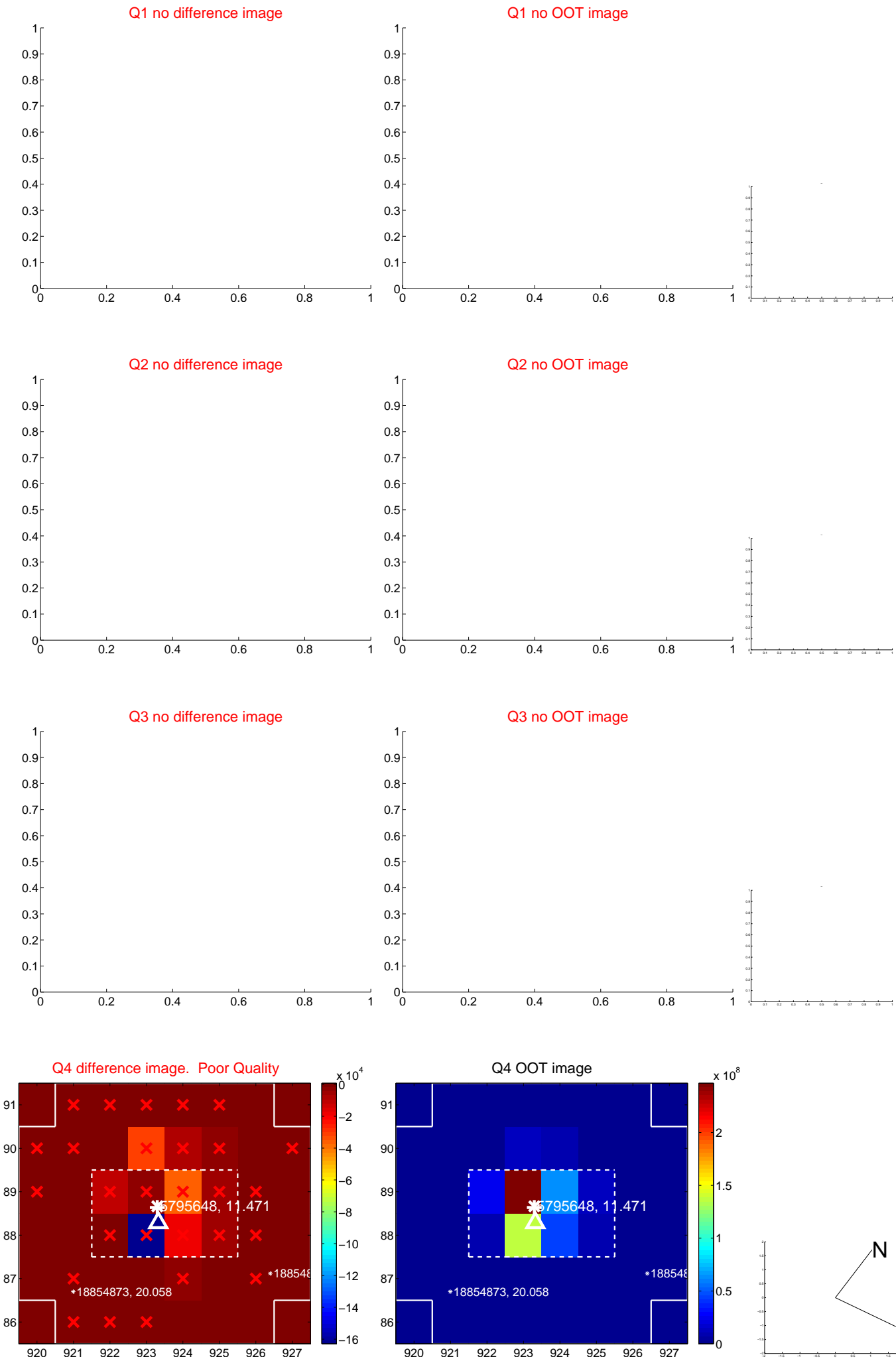
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.481 ± 0.435	1.11	0.225 ± 0.301	-0.425 ± 0.337
PRF-fit source offset from KIC position	0.424 ± 0.629	0.67	0.282 ± 0.365	-0.317 ± 0.522
photometric centroid source offset	0.69 ± 0.42	1.67	-0.56 ± 0.41	0.41 ± 0.43



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.

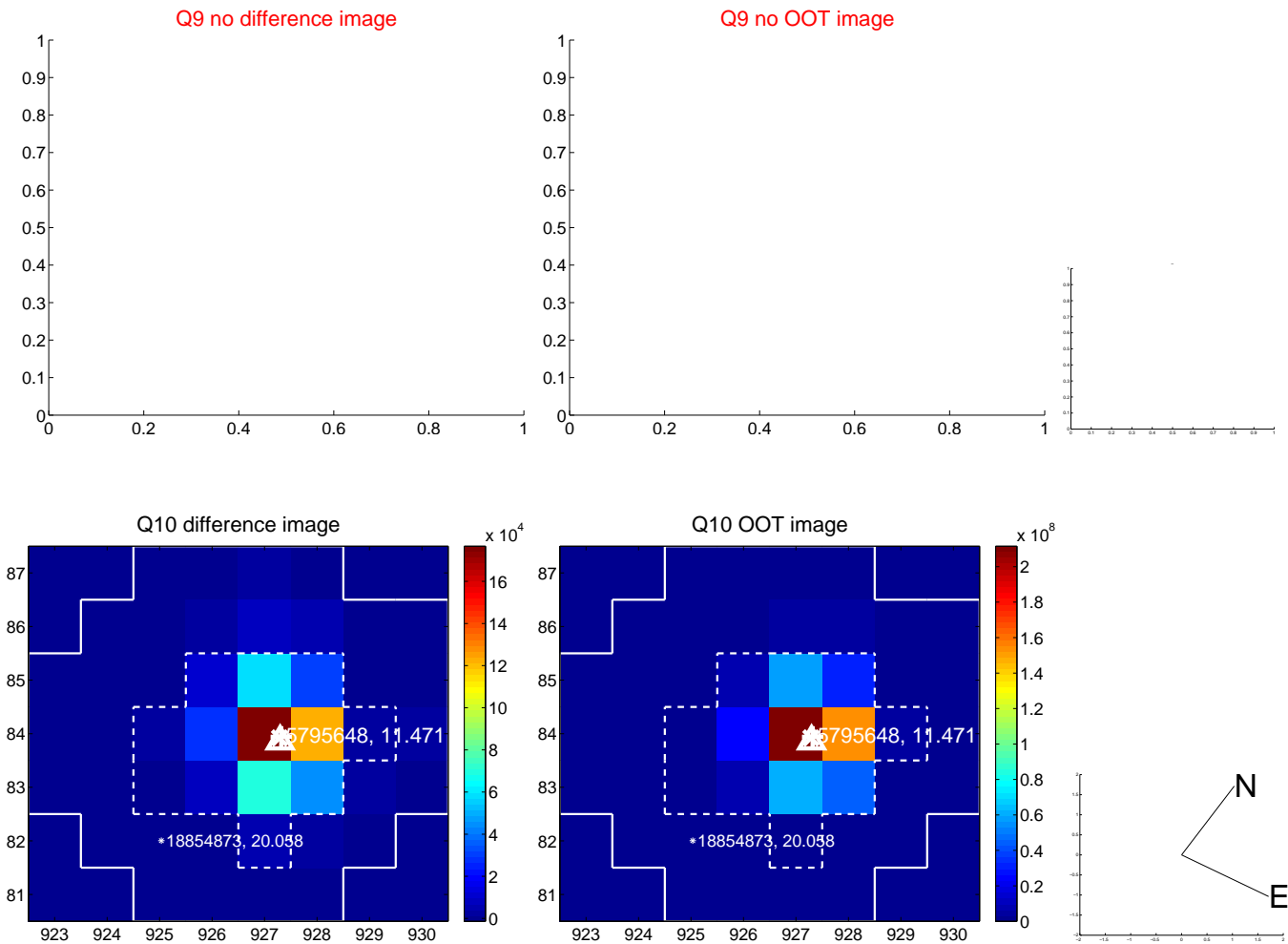
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



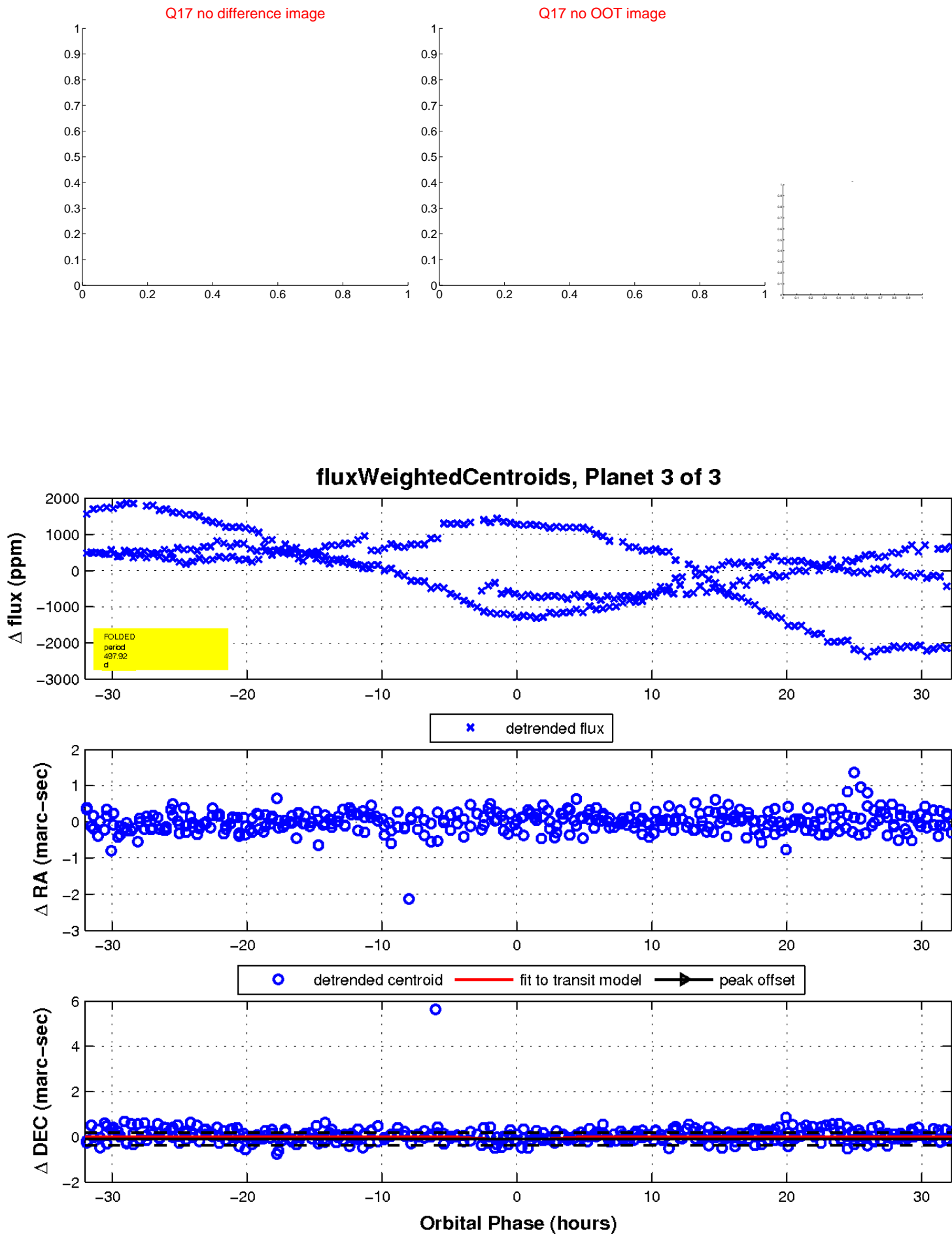
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

