

KIC 008490255

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})
008490255-01	OBS	No	2.222207	133.597715	3.5	13.923	11.4	1.9	2.75	6706	0.53	9053.91
008490255-02	OBS	No	2.222223	132.532672	486.6	3.500	15.8	-1.0	2.75	6706	6.11	9053.83
008490255-03	OBS	No	9.617122	134.919349	74.0	14.327	8.1	5.1	2.75	6706	2.67	1283.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008490255-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008490255-02	OBS	FP	0.00	1	0	0	0	LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_NOFITS
008490255-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

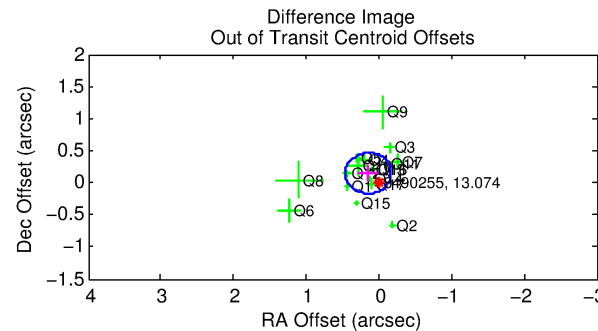
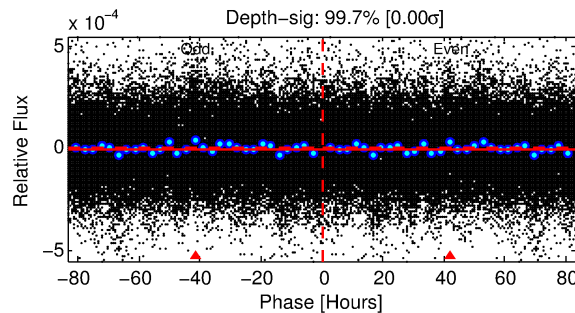
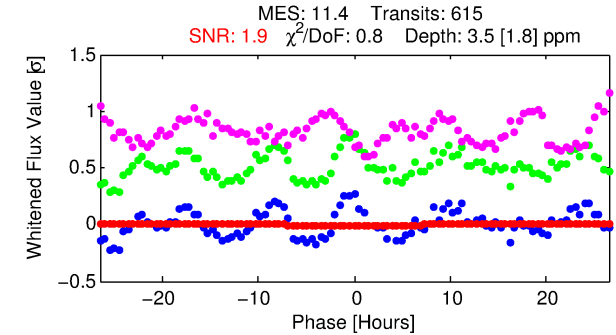
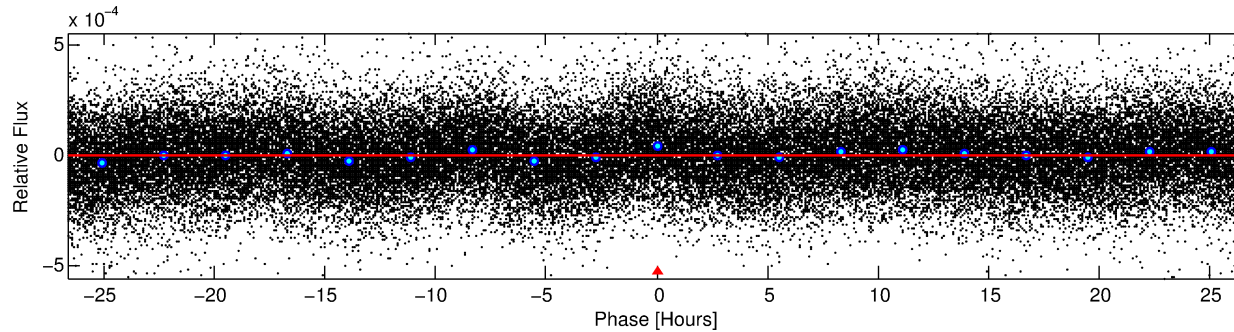
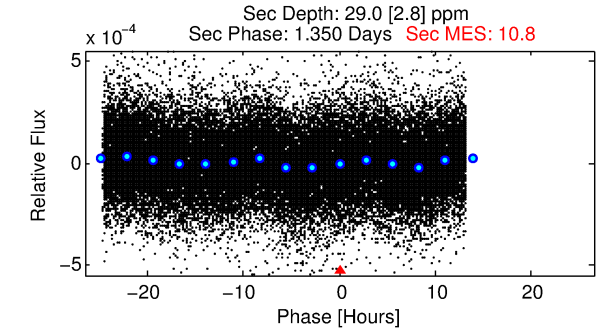
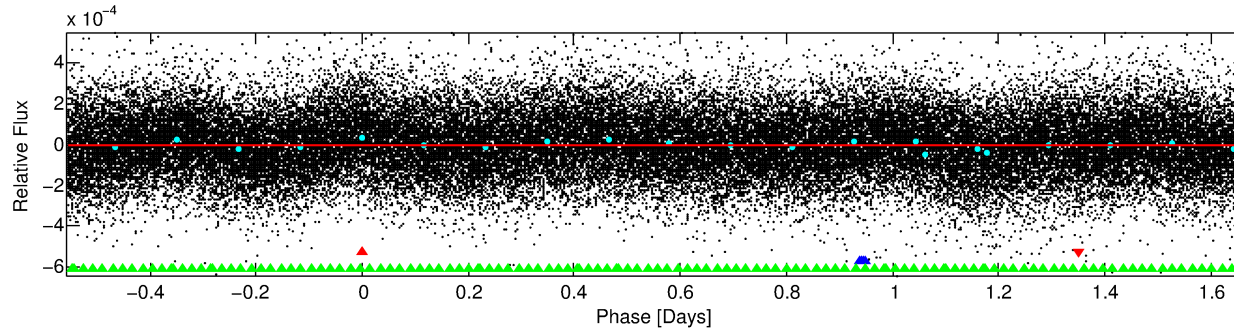
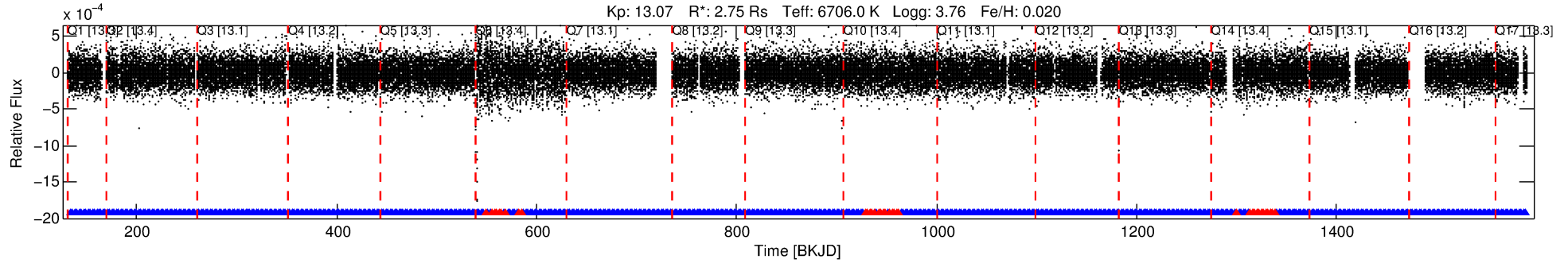
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008490255-01

No Significant Match Found

DV One-Page Summary

KIC: 8490255 Candidate: 1 of 3 Period: 2.222 d



DV Fit Results:

Period = 2.22221 [0.00018] d
Epoch = 133.5977 [0.0432] BKJD
Rp/R* = 0.0018 [0.0026]
a/R* = 1.32 [4.56]
b = 0.40 [17.41]
Seff = 9053.91 [4636.37]
Teq = 2487 [318] K
Rp = 0.52 [0.80] Re
a = 0.0388 [0.0120] AU
Ag = 87.44 [263.41] [0.33σ]
Teffp = 11760 [8744] K [1.06σ]

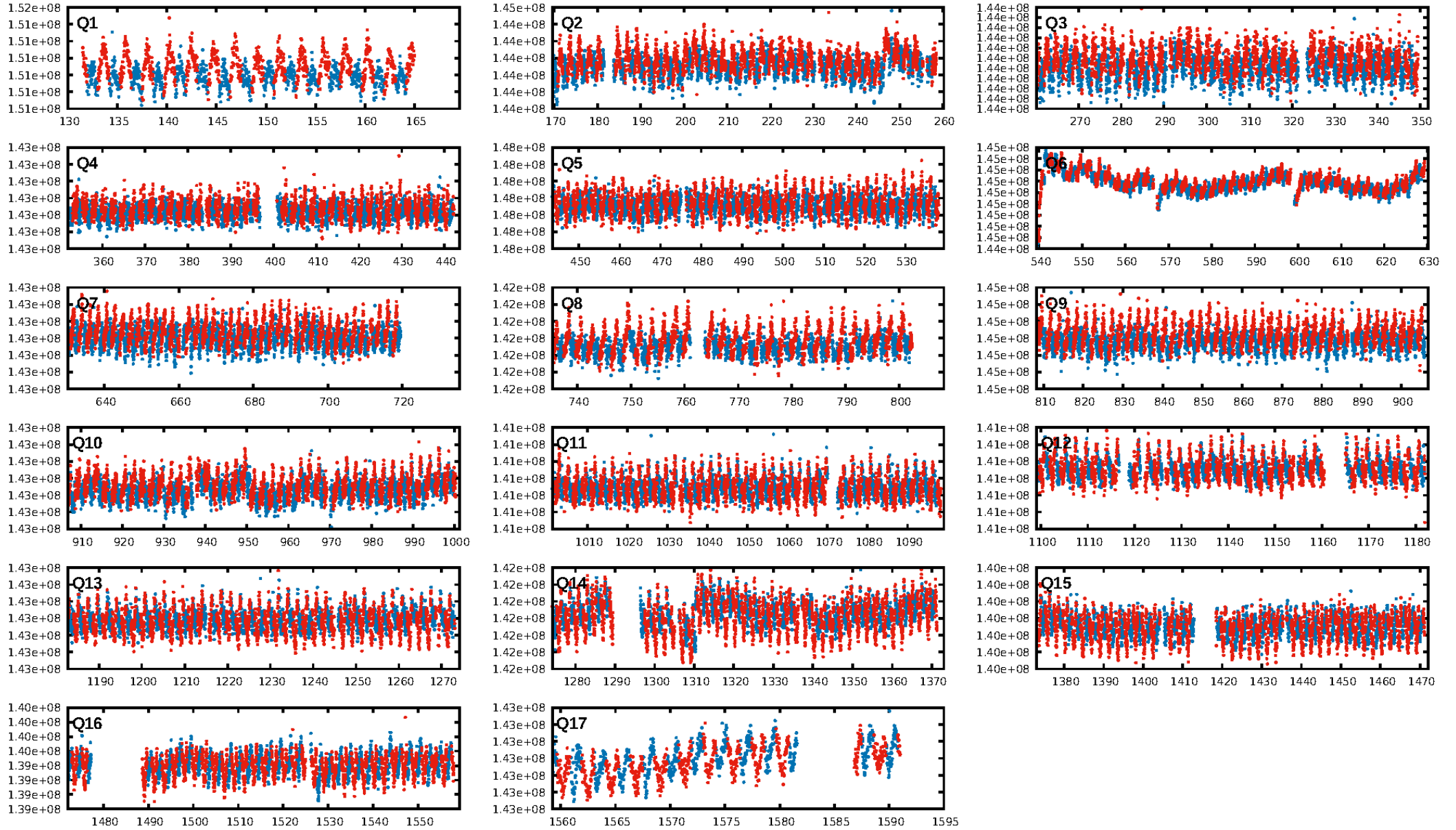
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 9.80e-146
RollingBand-fgt: 0.94 [551/587]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.211 arcsec [2.01σ]
KicOffset-rm: 0.218 arcsec [2.06σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 0.00 [0/17]

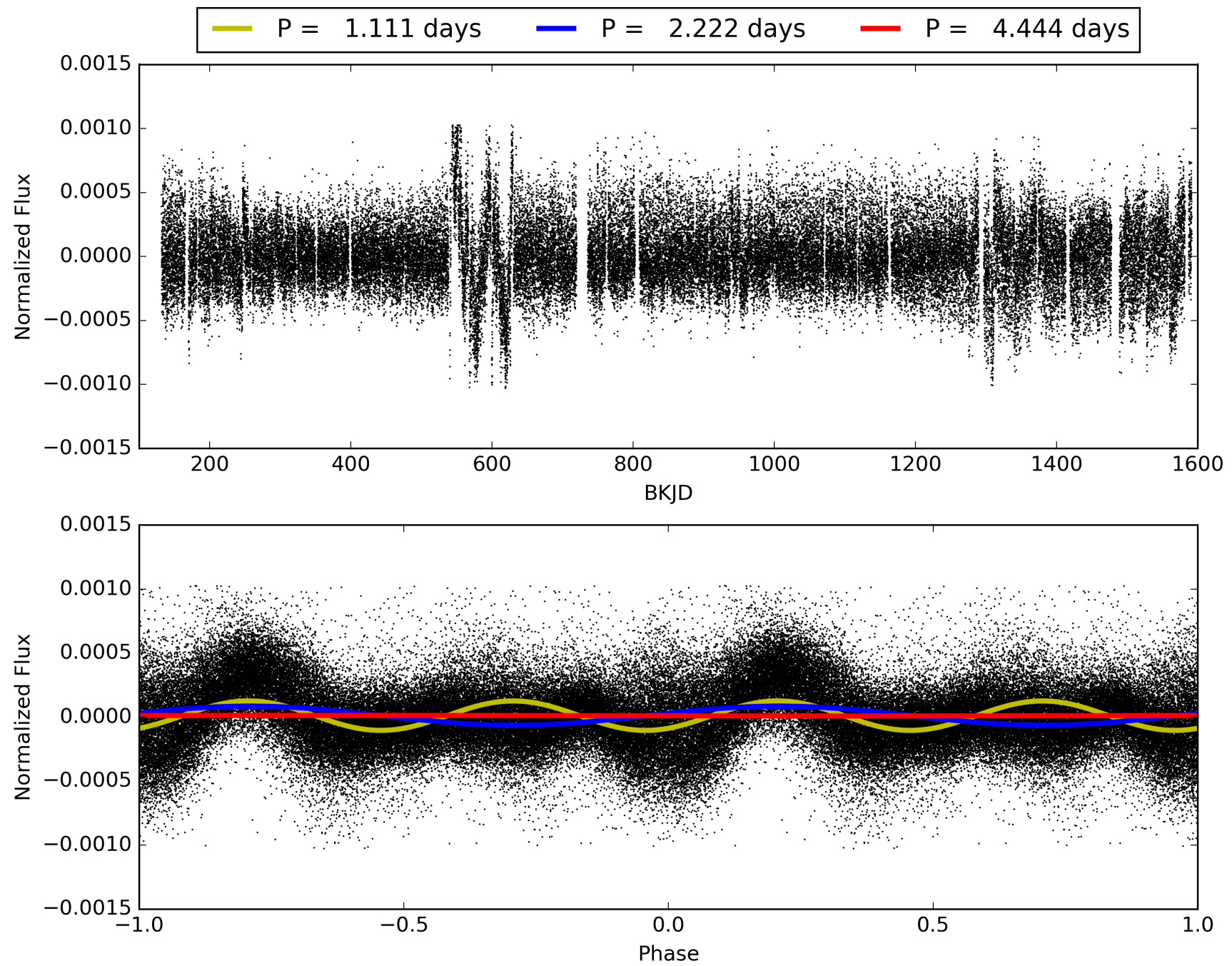
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:20:48 Z

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

TCE 008490255-01, PDC Light Curves

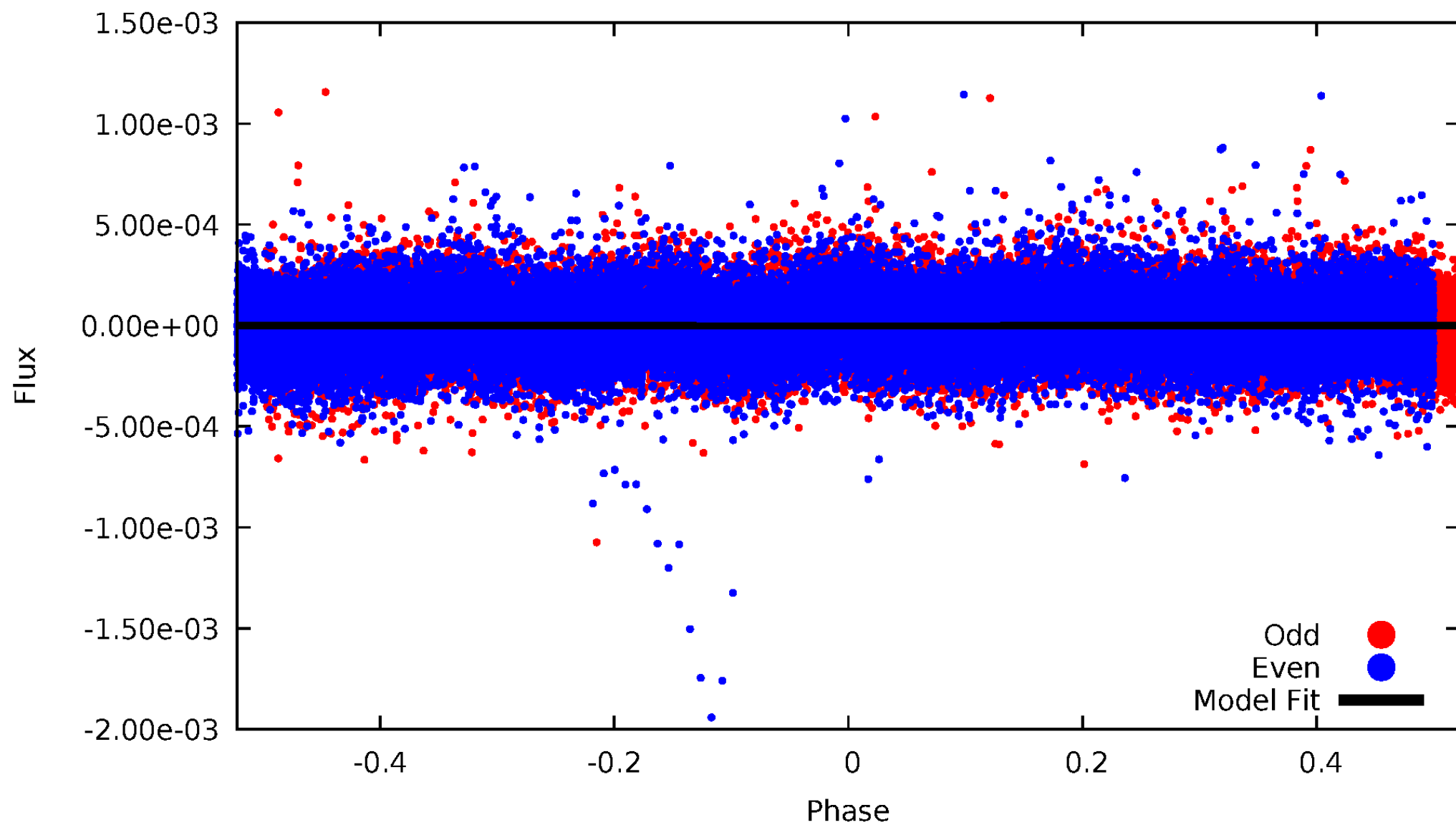


TCE 008490255-01



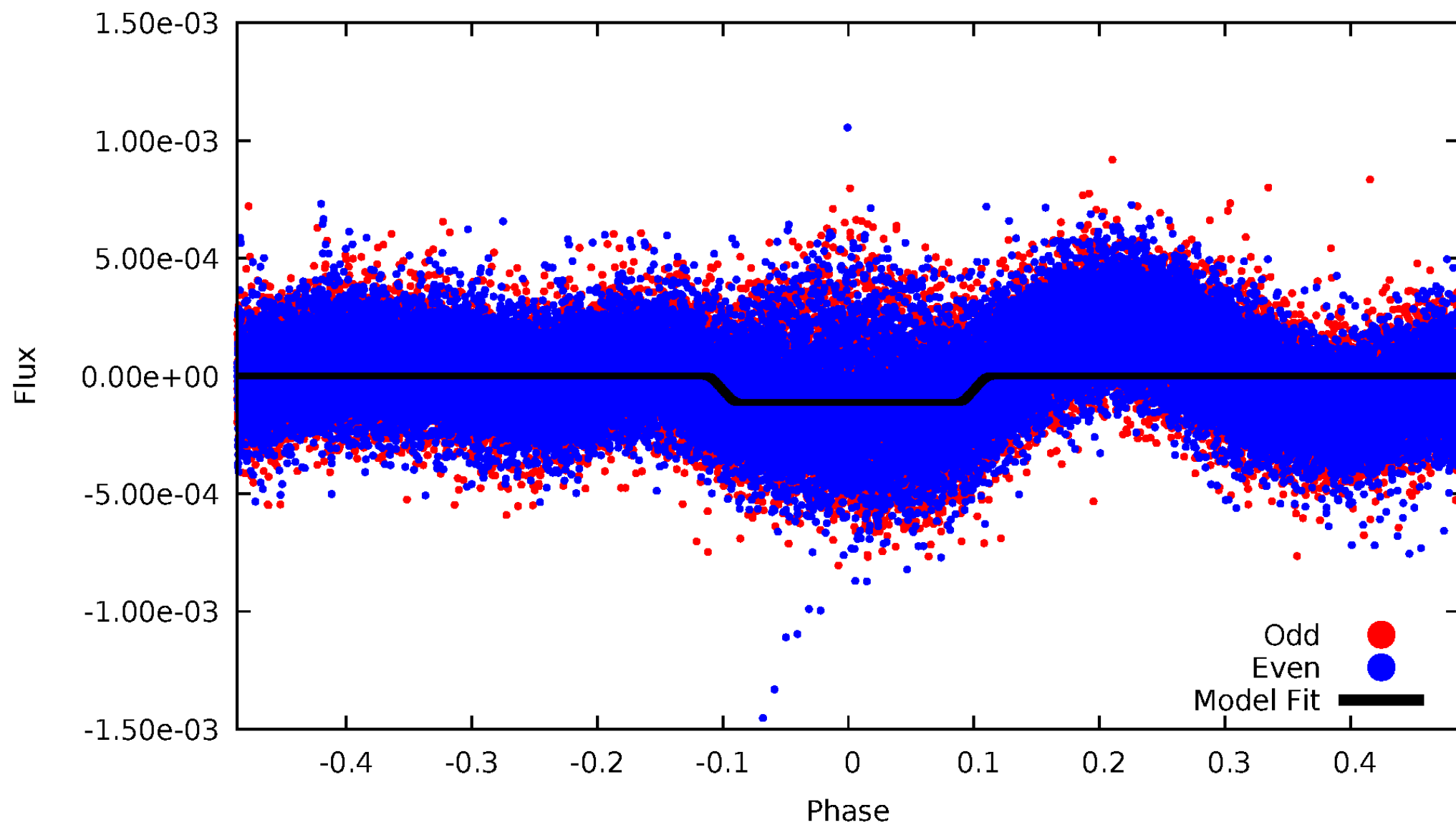
DV Odd/Even

TCE 008490255-01

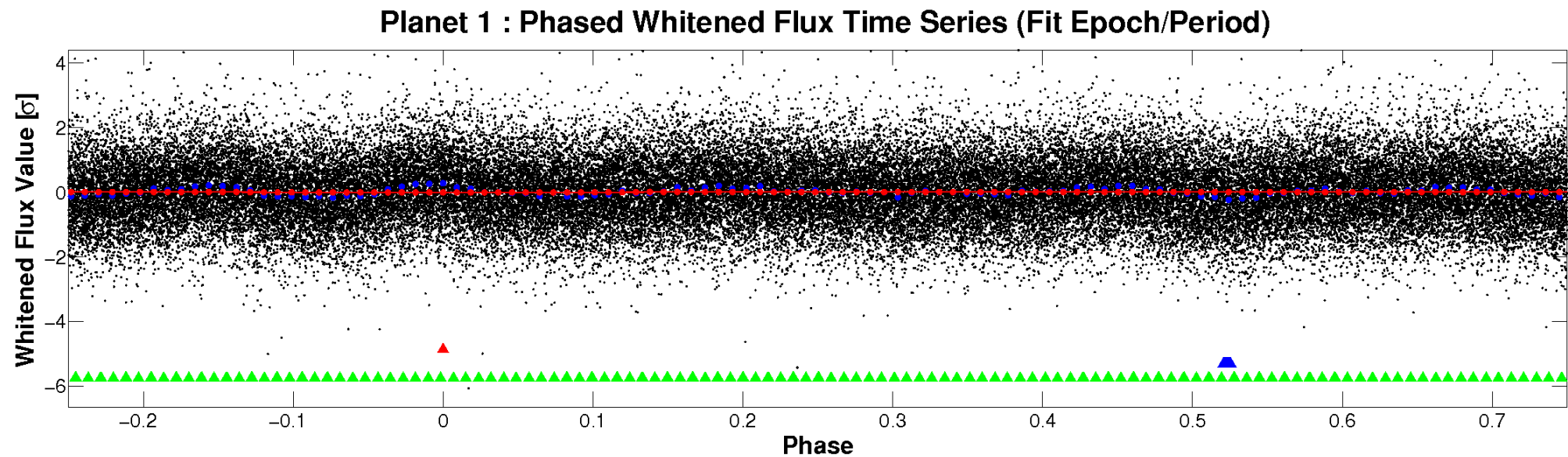
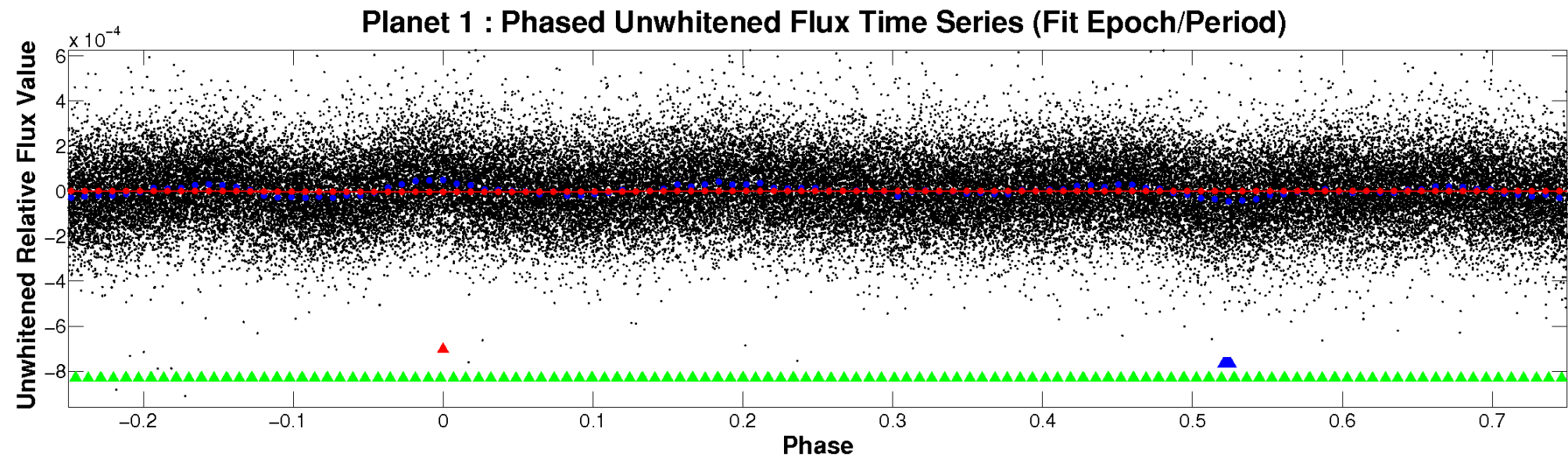


ALT Odd/Even

TCE 008490255-01

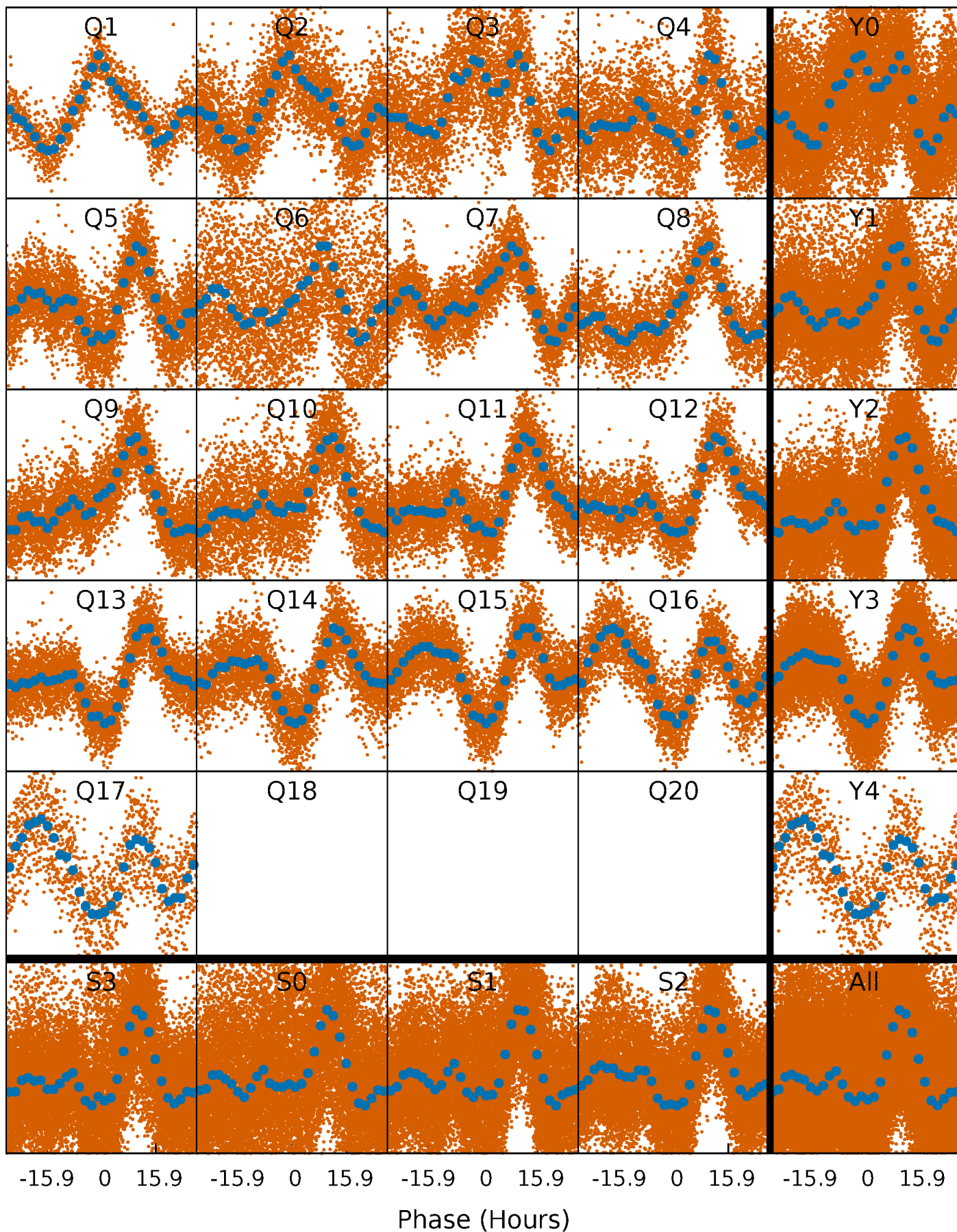


Non-Whitened Vs. Whitened Light Curve



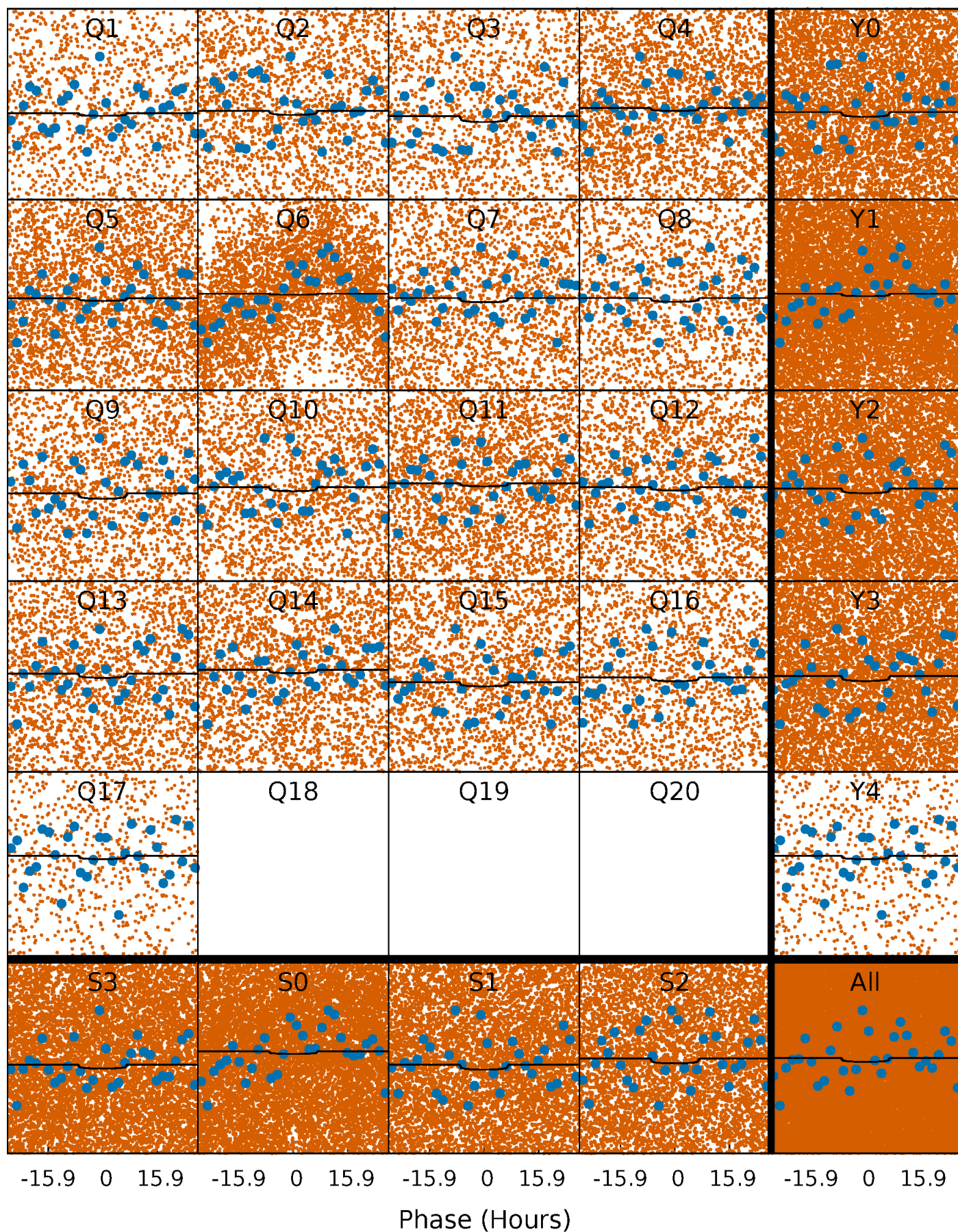
PDC Quarter-Phased Transit Curves

TCE 008490255-01 P= 2.222207 Days $T_0=133.597715$ (BKJD)



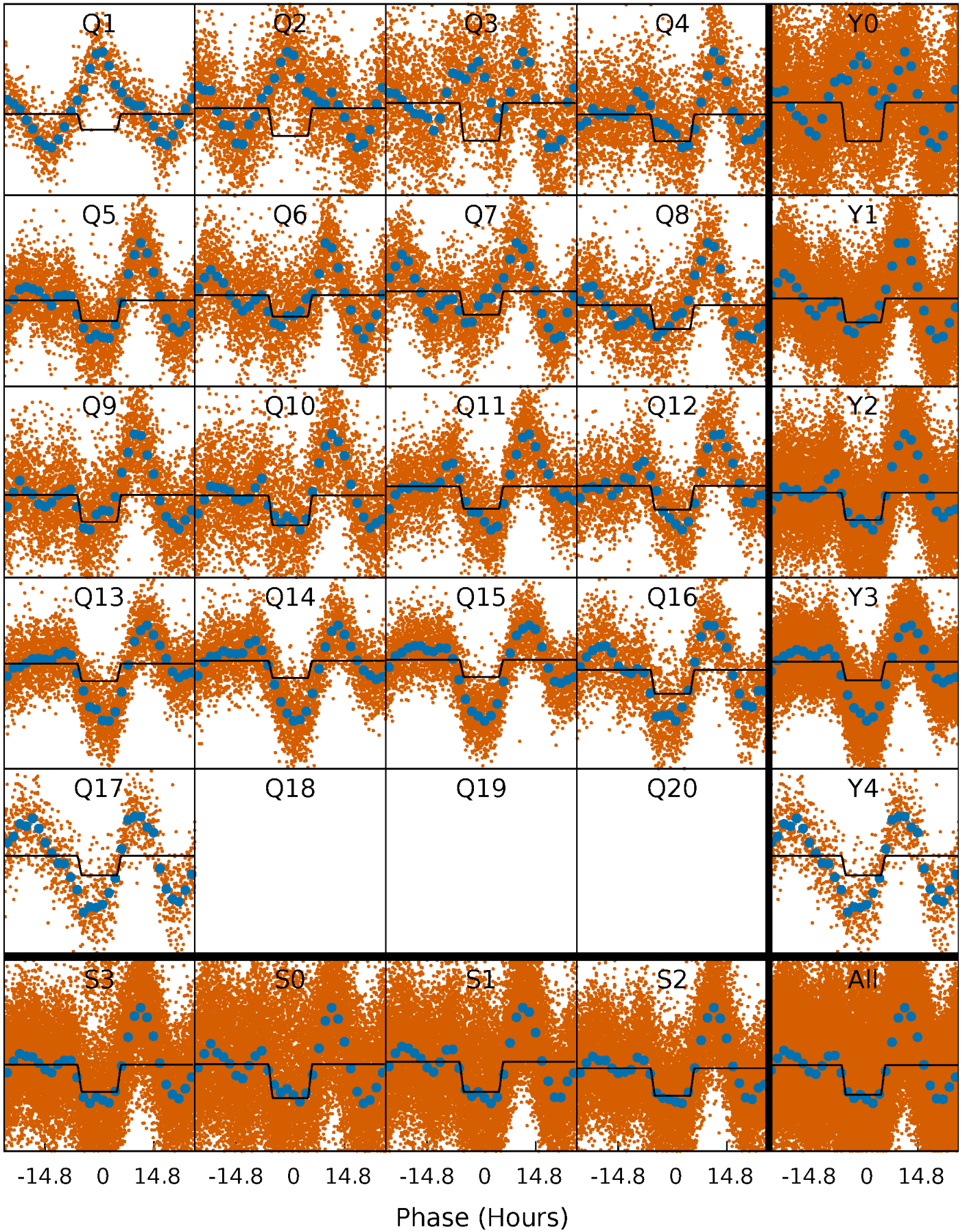
DV Quarter-Phased Transit Curves

TCE 008490255-01 P= 2.222207 Days $T_0=133.597715$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

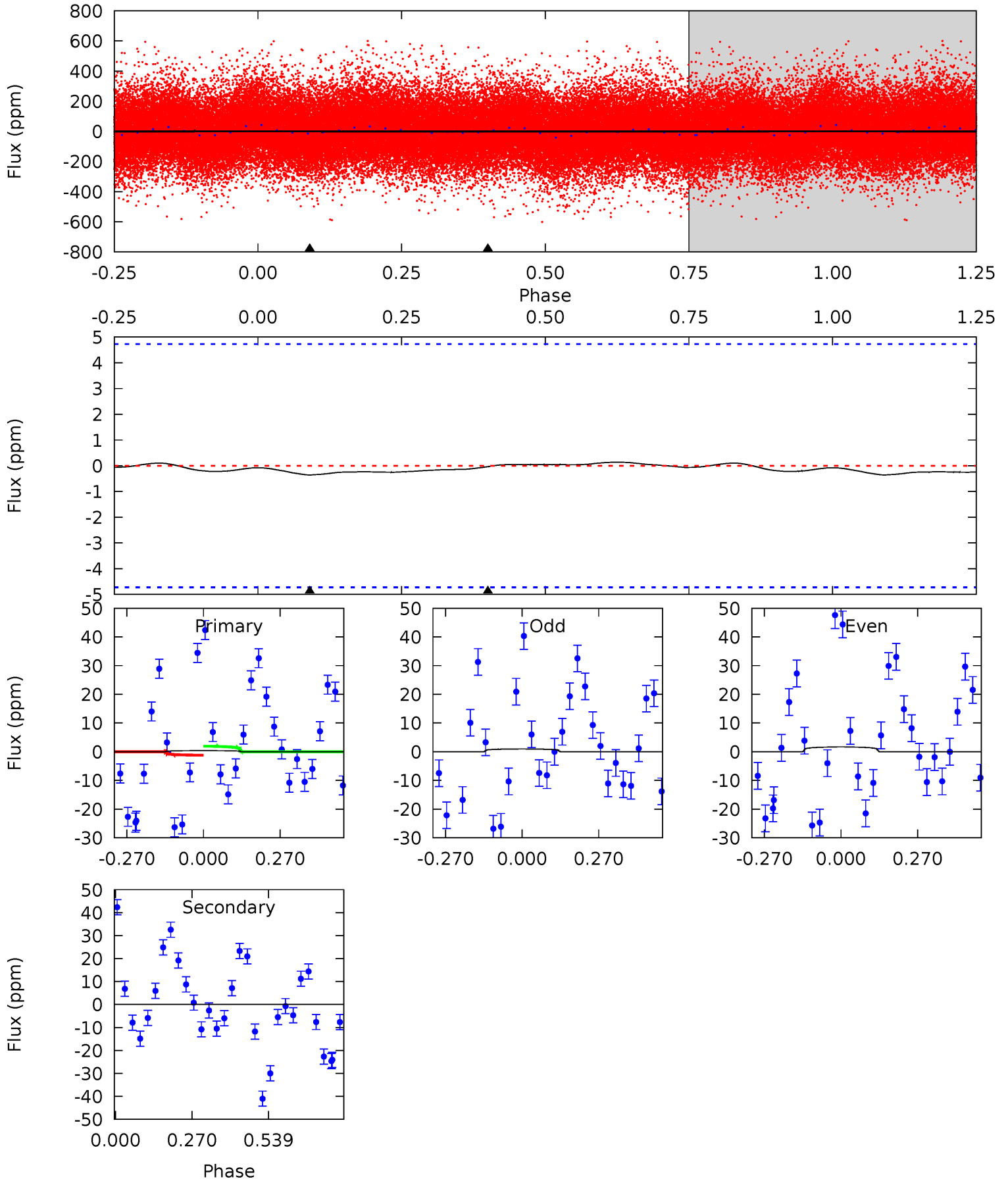
TCE 008490255-01 P= 2.222310 Days $T_0=133.551918$ (BKJD)



DV Model-Shift Uniqueness Test

008490255-01, P = 2.222207 Days, E = 131.375508 Days

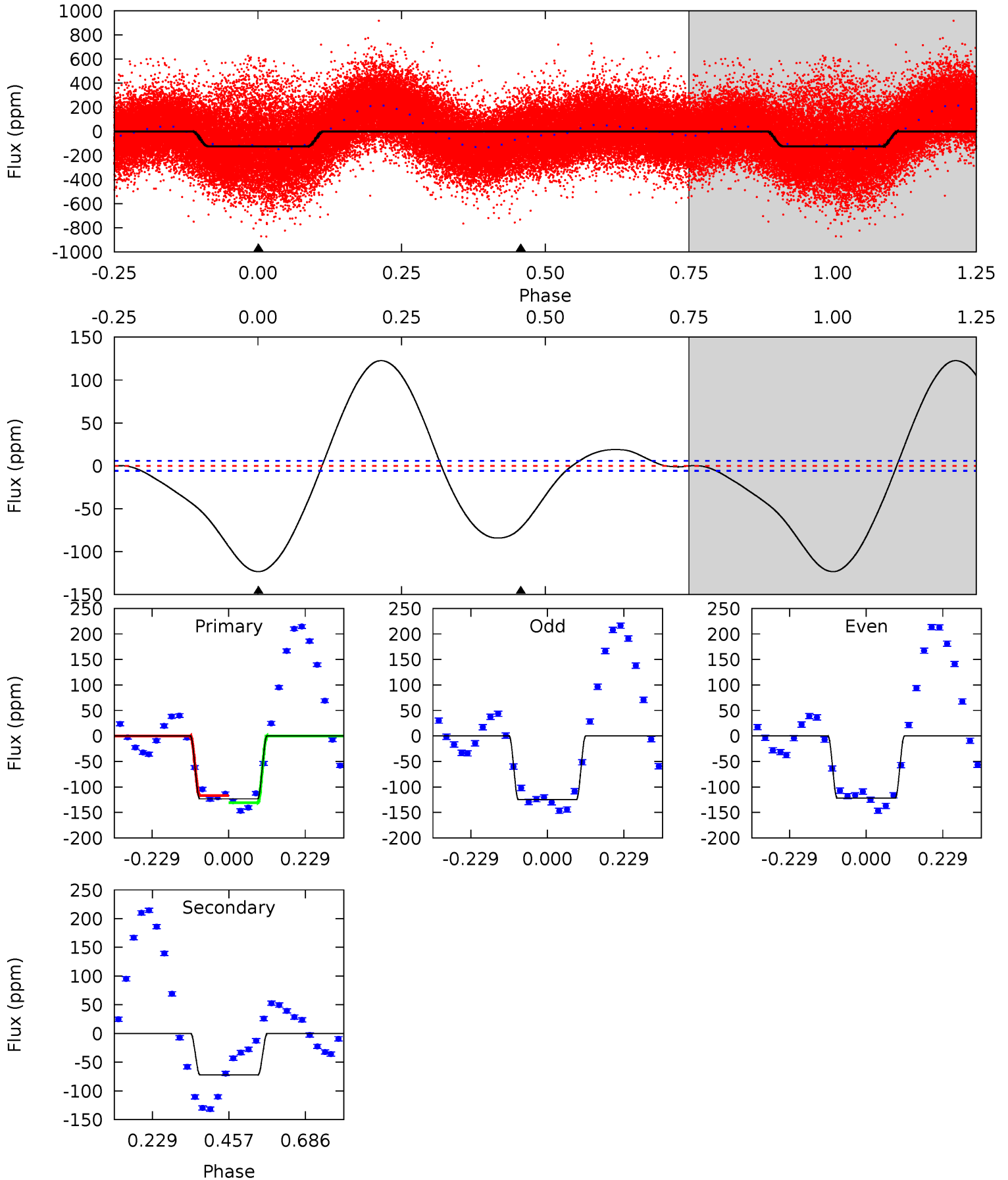
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.33	0.03	0	0	4.35	1.10	0.04	0.33	0.33	0.03	0.03	0.33	-0.36	0.28	0.32



Alt Model-Shift Uniqueness Test

008490255-01, P = 2.222310 Days, E = 131.329608 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
94.1	55.0	0	0	4.39	1.20	22.0	94.1	94.1	55.0	55.0	1.12	1.00	0.50	4.39



Stellar Parameters For KIC 008490255

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6706^{+166}_{-216}	$3.760^{+0.292}_{-0.097}$	$0.020^{+0.250}_{-0.250}$	$2.746^{+0.508}_{-0.871}$	$1.581^{+0.239}_{-0.263}$	$0.108^{+0.196}_{-0.039}$
	+2%/-3%	+8%/-3%	+1250%/-1250%	+18%/-32%	+15%/-17%	+182%/-36%
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 008490255-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-0 \pm 1	$0.76^{+0.66}_{-0.50}$	3401^{+213}_{-276}	-3258^{+7987}_{-1720}	$0.044^{+2.768}_{-2.669}$
Alt.	-72 \pm 1	$2.97^{+0.93}_{-0.84}$	3394^{+226}_{-293}	5925^{+930}_{-662}	$6.822^{+5.952}_{-2.847}$

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

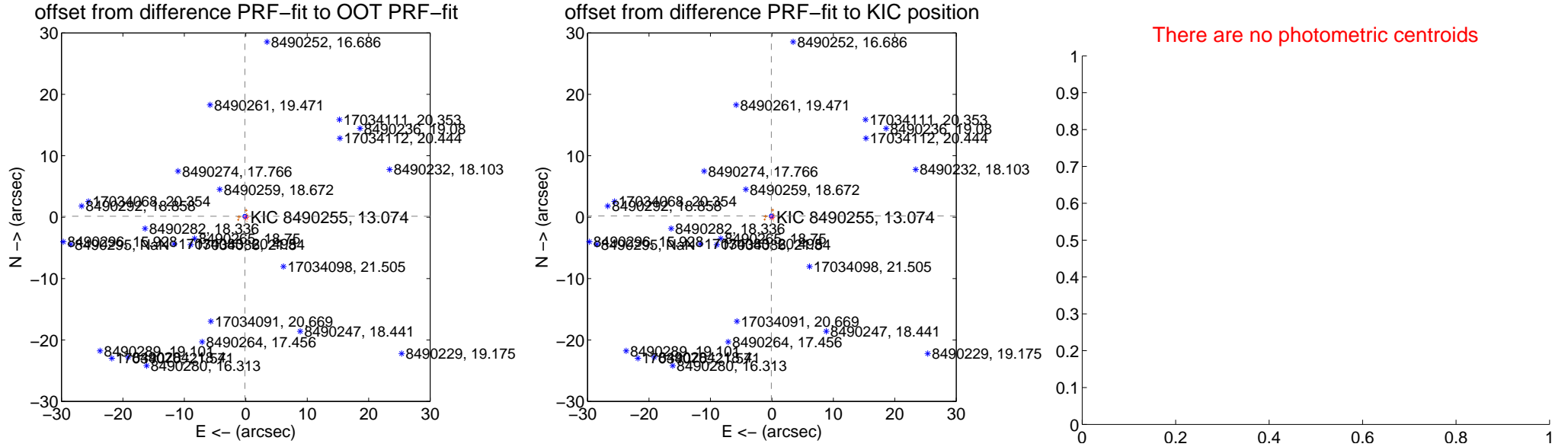
DV Centroid Data

Supplemental centroid analysis for 008490255-01. Kepler magnitude: 13.07. Transit SNR 1.93

There are 10 quarters with good PRF difference image offsets

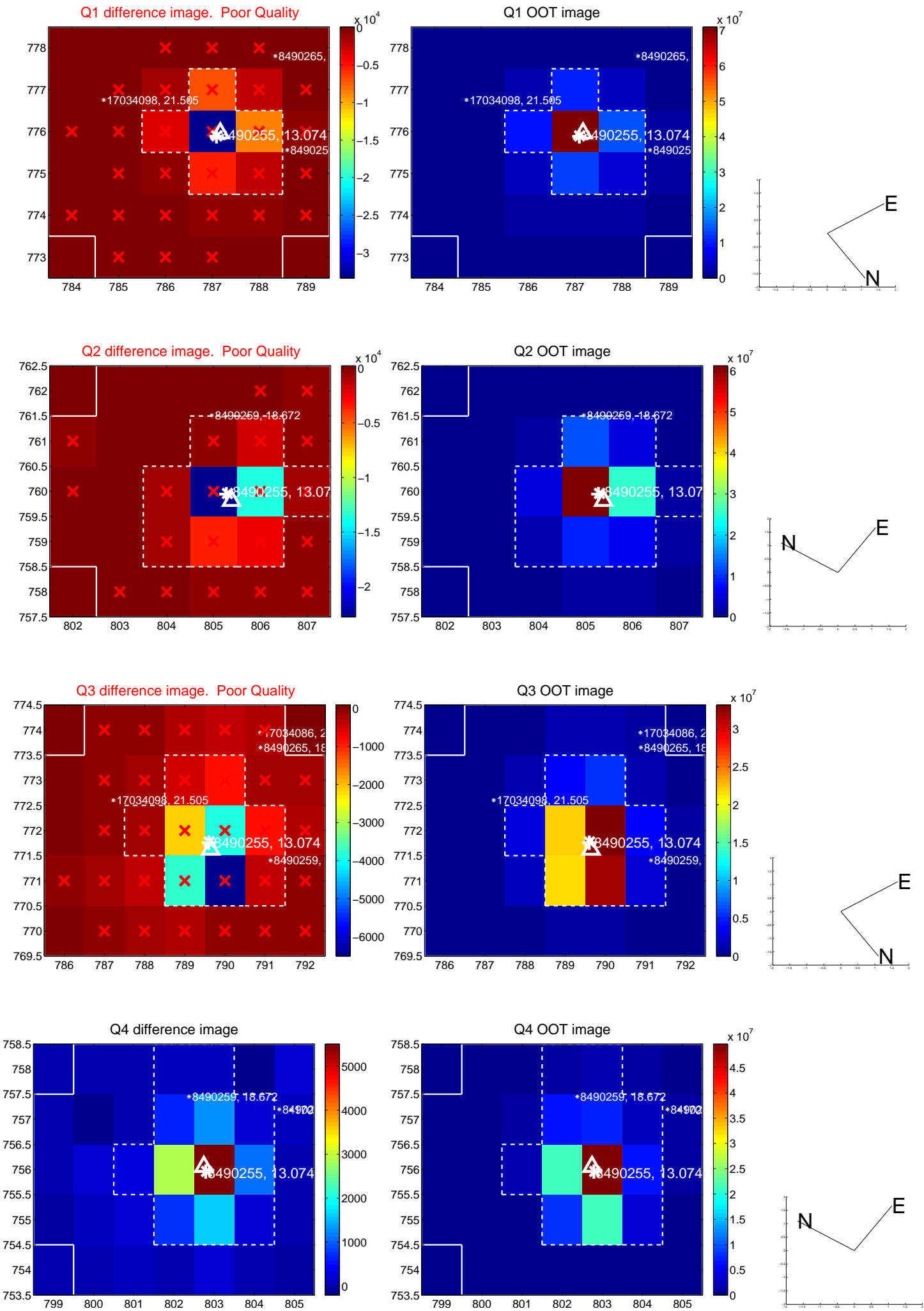
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.211 ± 0.105	2.01	0.151 ± 0.119	0.147 ± 0.117
PRF-fit source offset from KIC position	0.218 ± 0.106	2.06	0.098 ± 0.115	0.195 ± 0.119
photometric centroid source offset	—	—	—	—

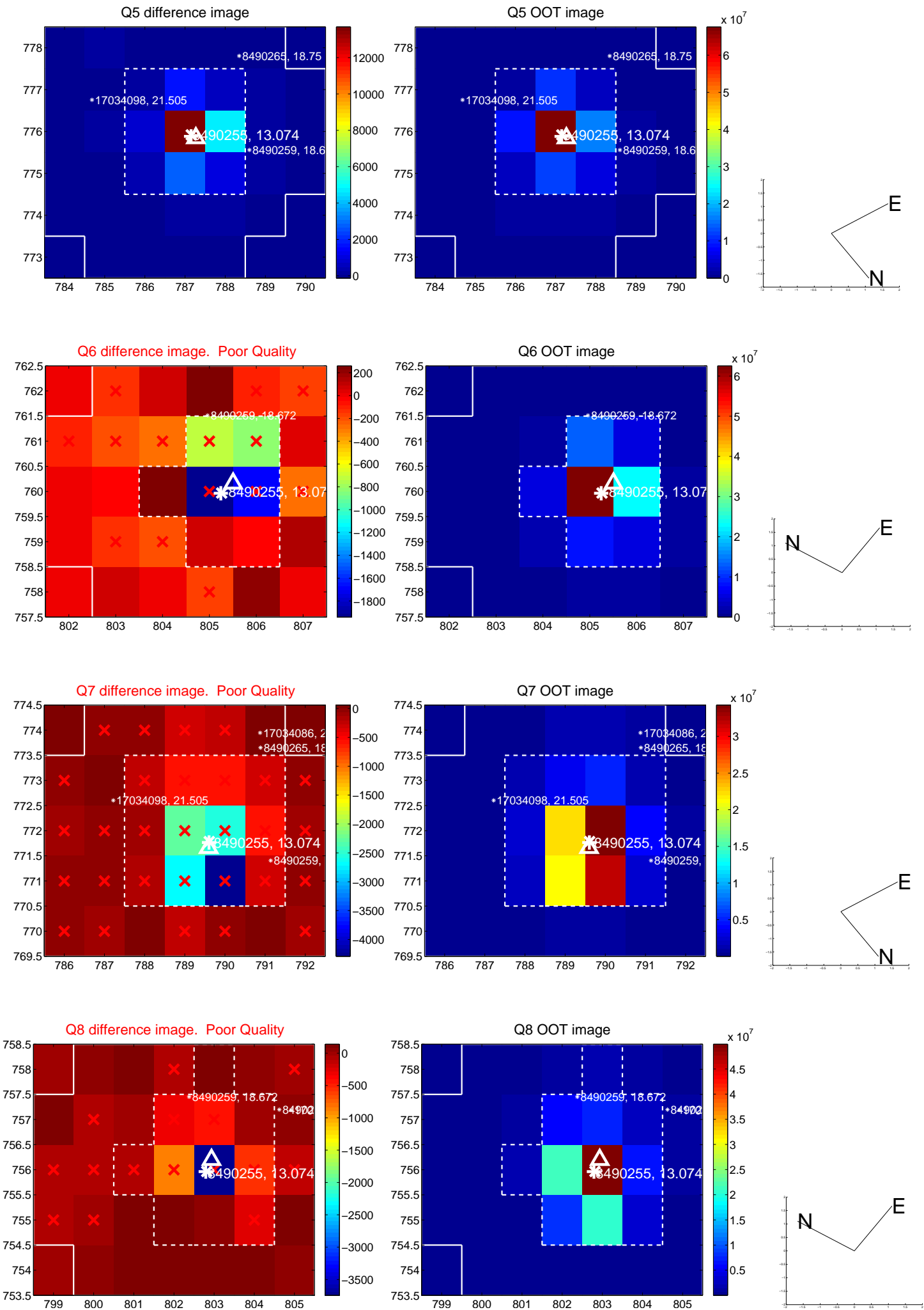


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

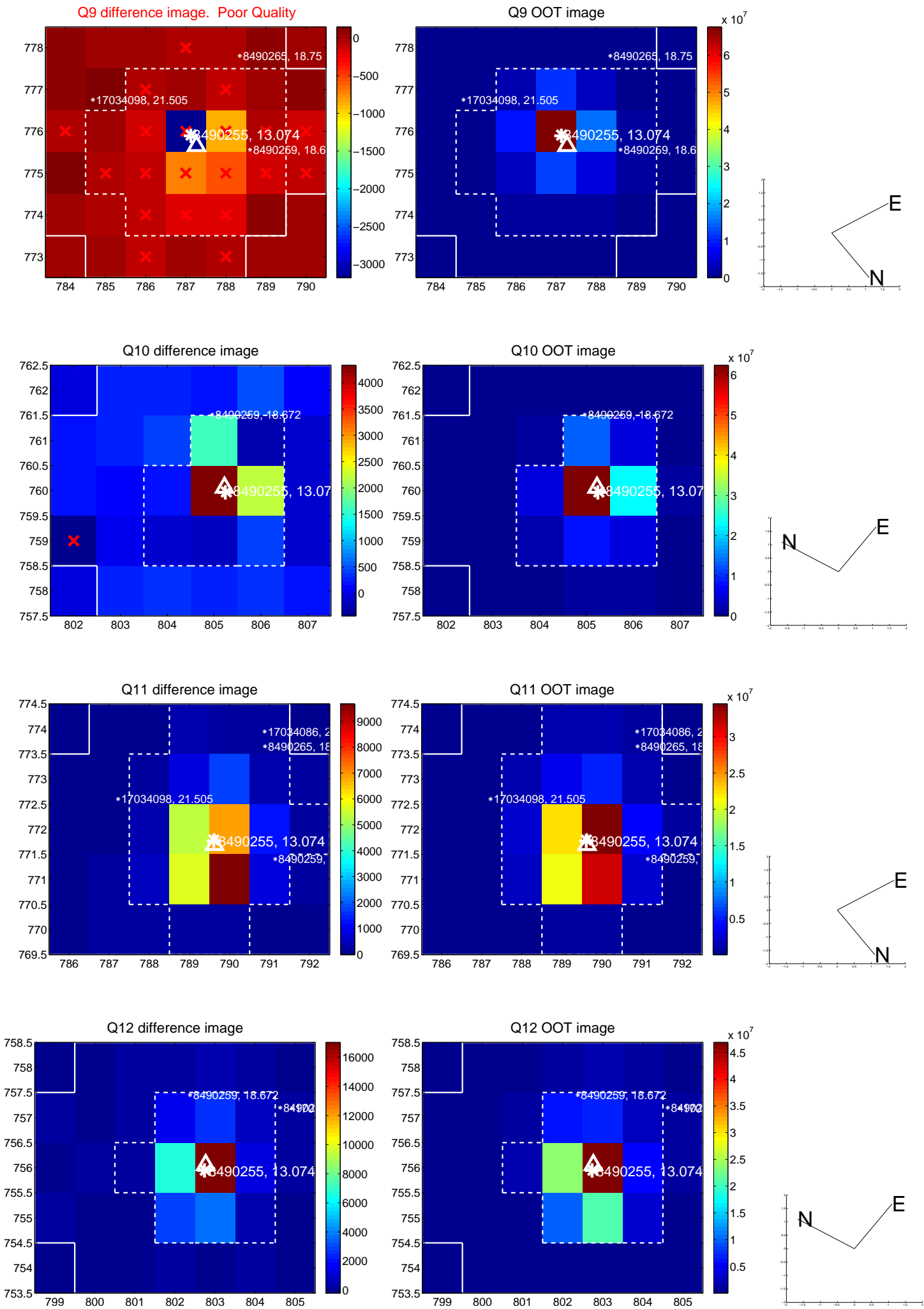
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



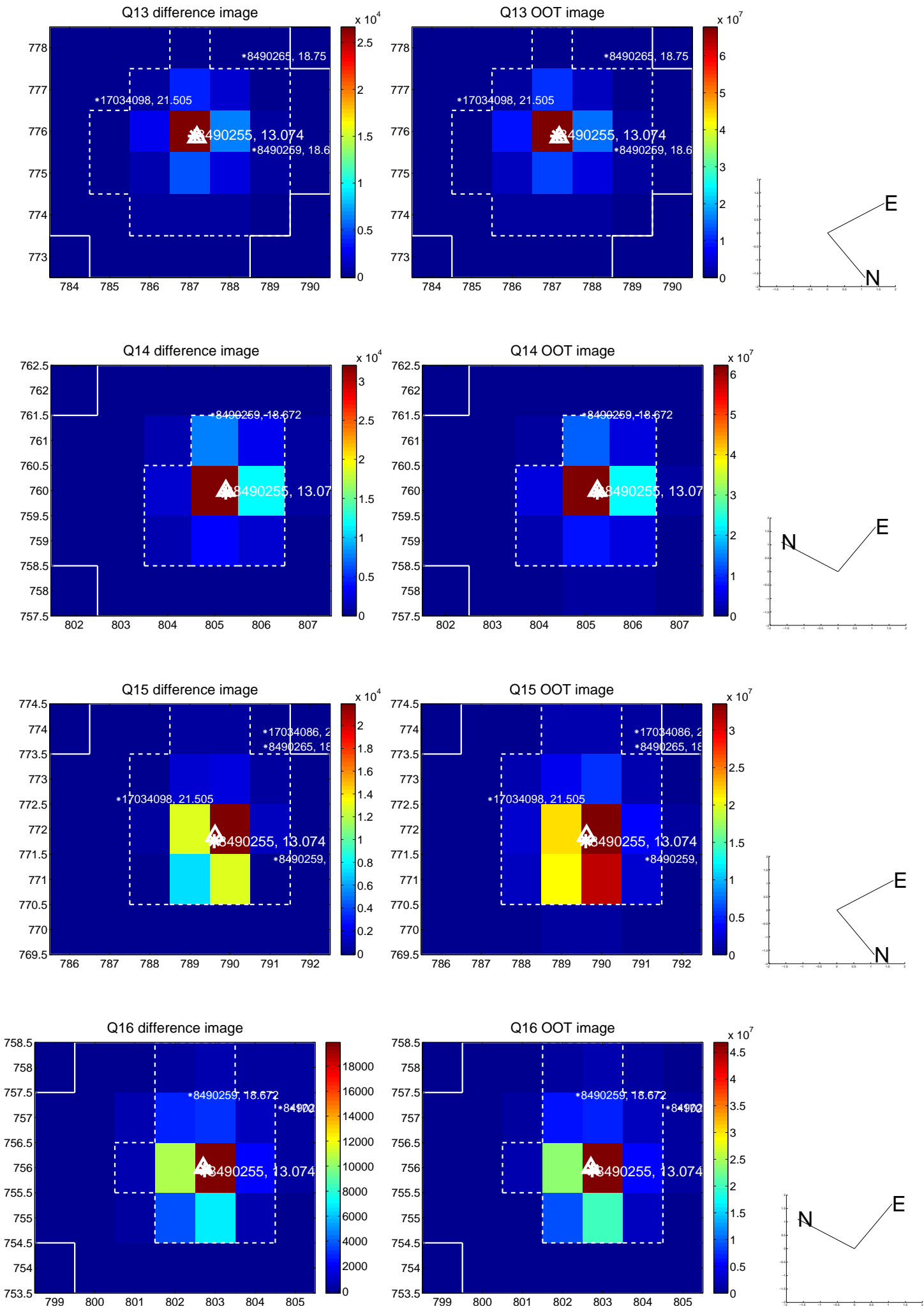
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



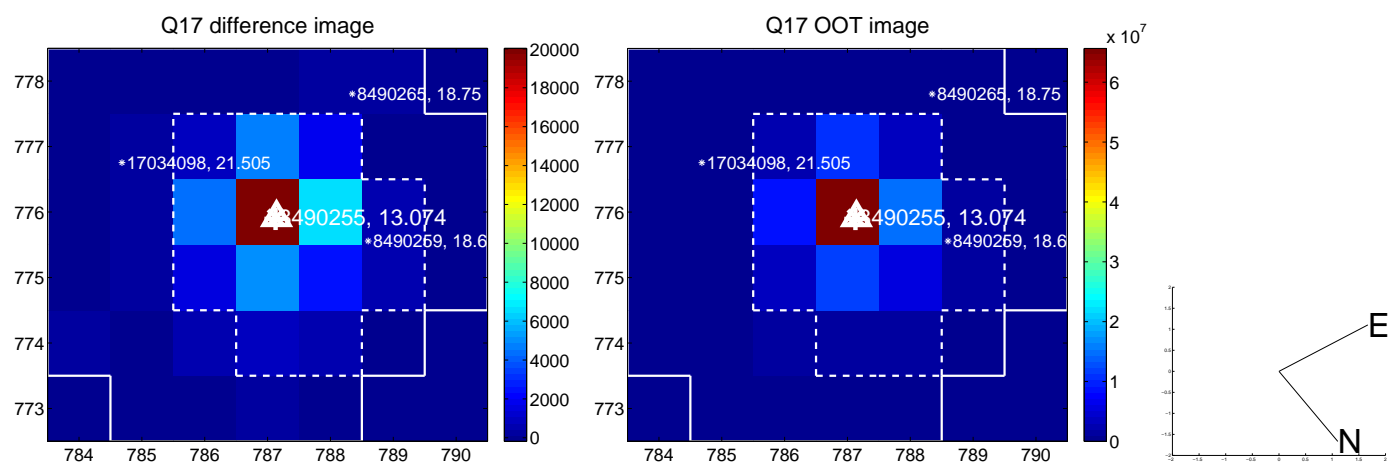
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

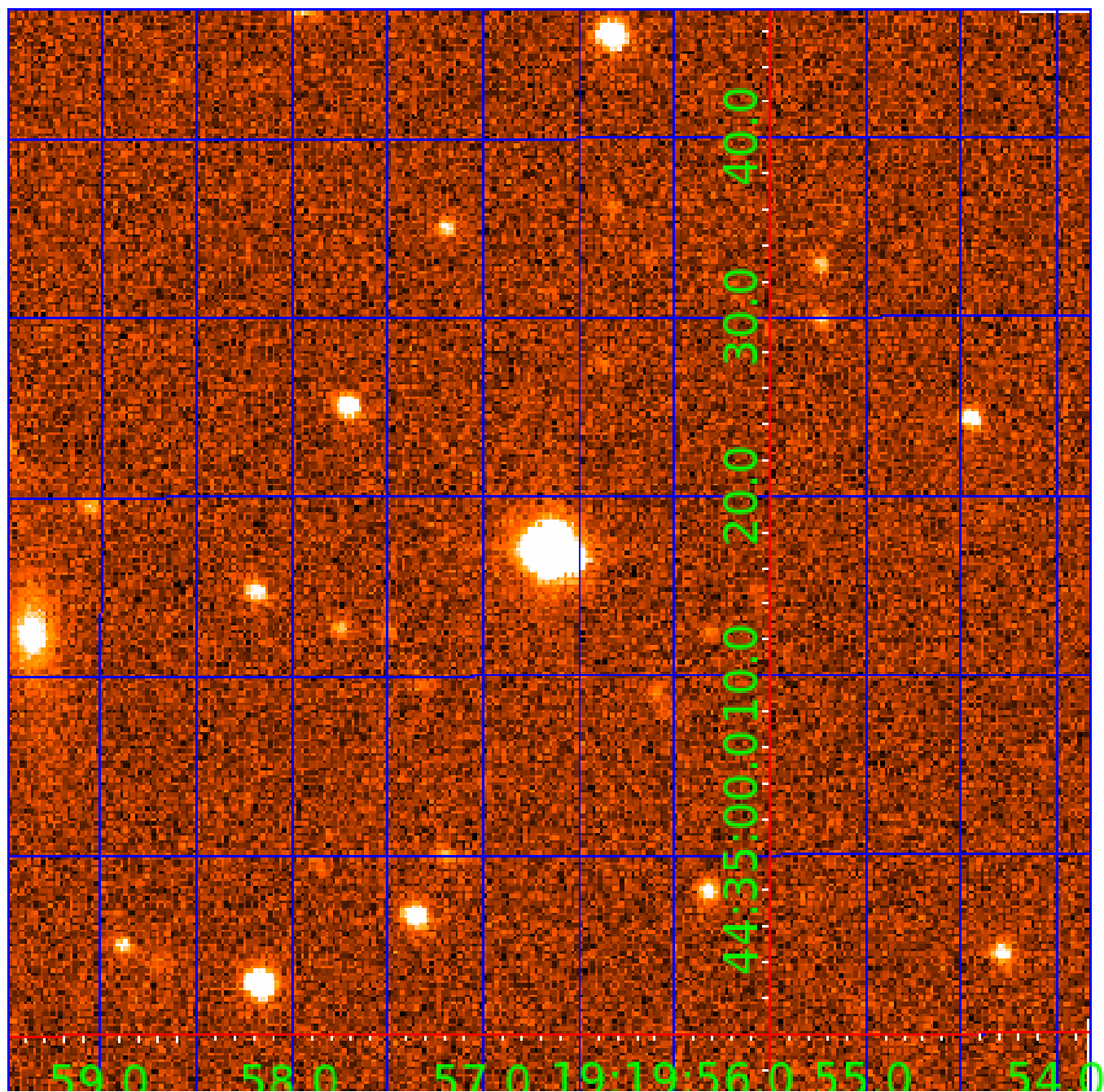


folded centroid time series figure for this object.



UKIRT Image

Declination



KIC 008490255

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})
008490255-01	OBS	No	2.222207	133.597715	3.5	13.923	11.4	1.9	2.75	6706	0.53	9053.91
008490255-02	OBS	No	2.222223	132.532672	486.6	3.500	15.8	-1.0	2.75	6706	6.11	9053.83
008490255-03	OBS	No	9.617122	134.919349	74.0	14.327	8.1	5.1	2.75	6706	2.67	1283.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008490255-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008490255-02	OBS	FP	0.00	1	0	0	0	LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_NOFITS
008490255-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

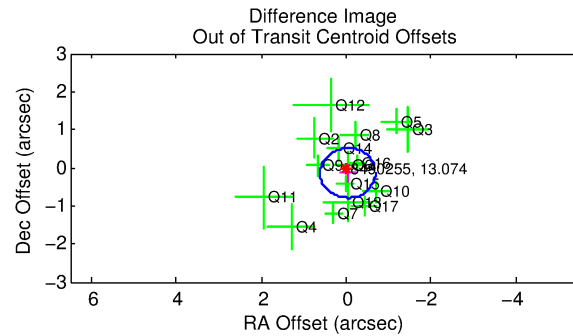
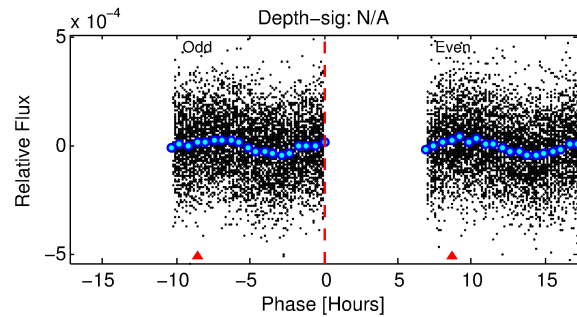
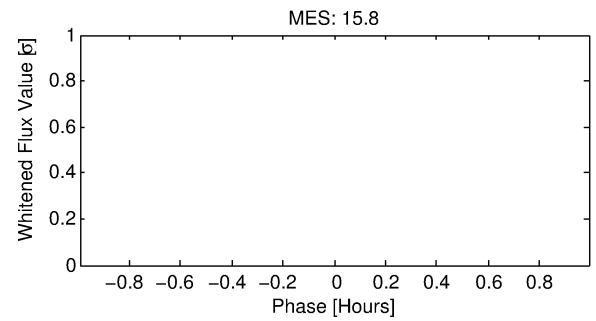
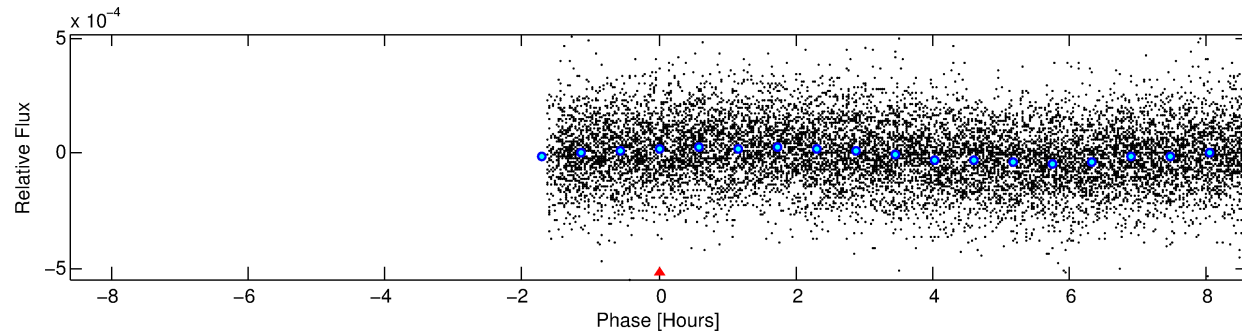
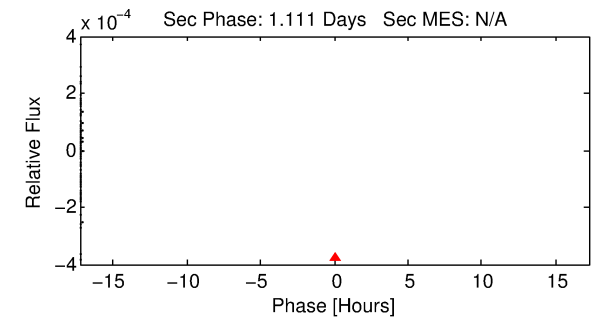
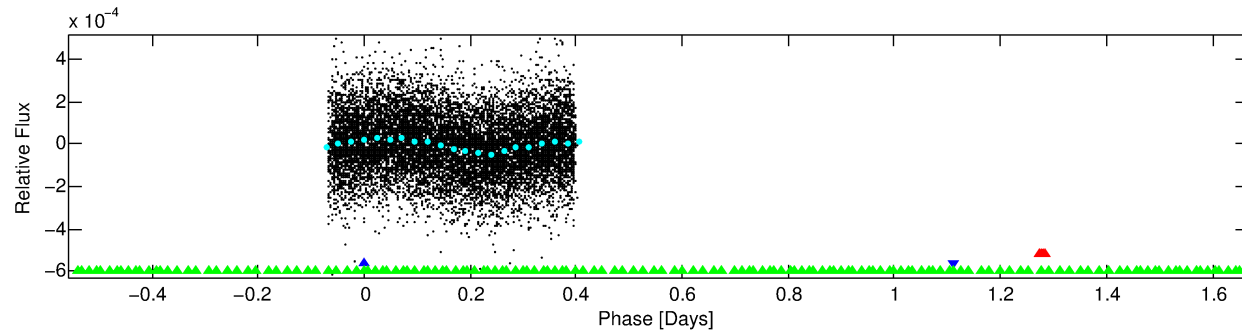
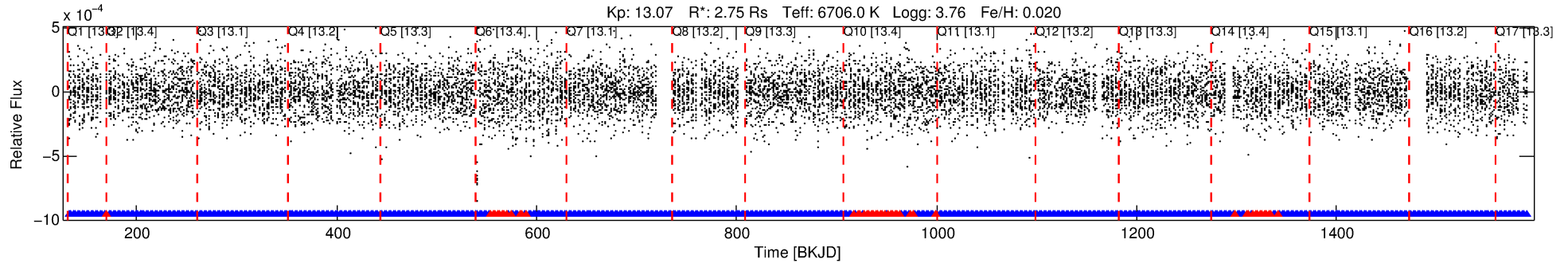
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008490255-02

No Significant Match Found

DV One-Page Summary

KIC: 8490255 Candidate: 2 of 3 Period: 2.222 d



TPS TCE Results:

Period = 2.22222 d
Epoch = 132.5327 BKJD

DV fit results are unavailable

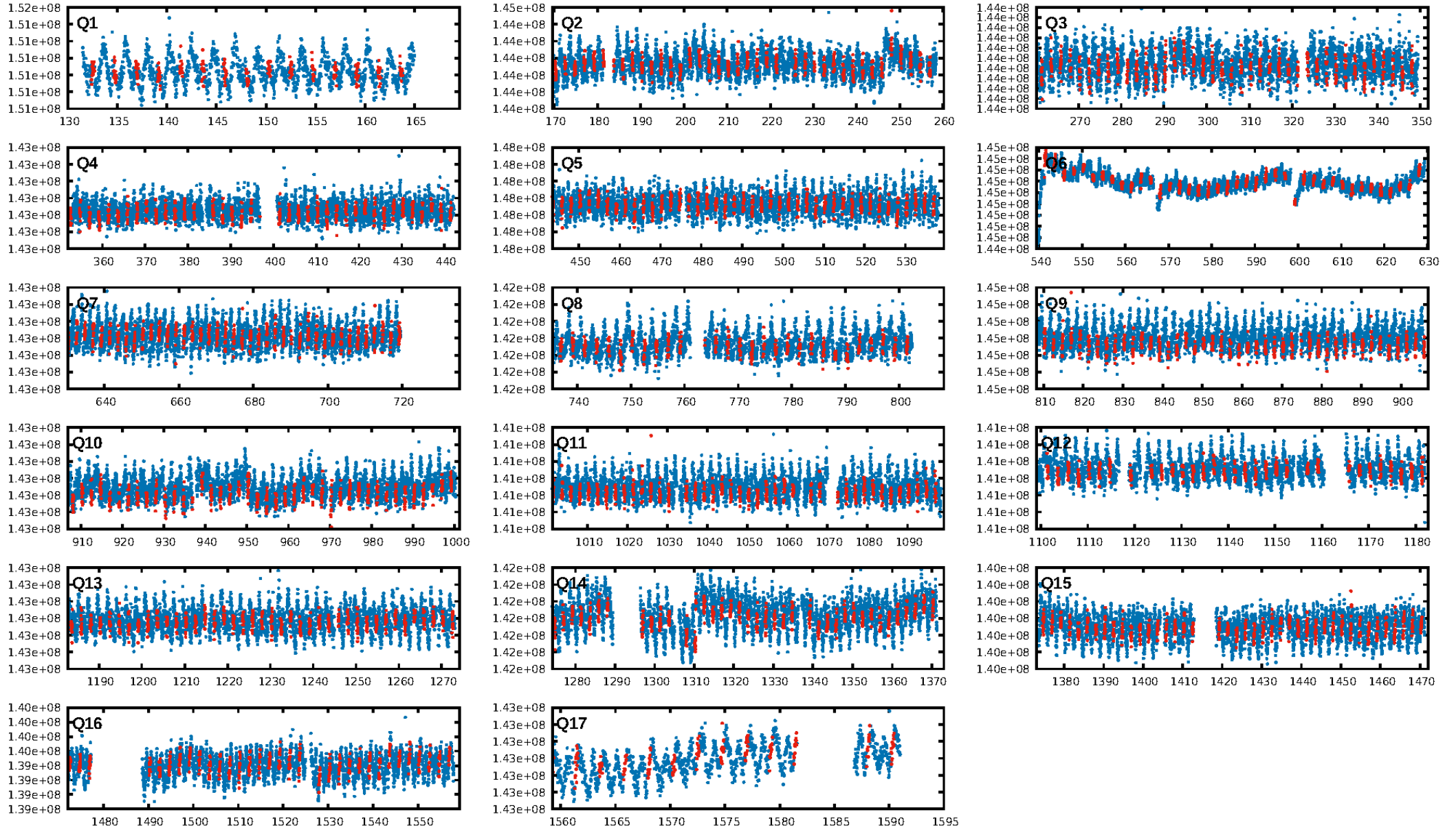
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [12.03σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.05e-224
RollingBand-fgt: 0.92 [527/575]
GhostDiagnostic-chr: -1.047
Centroid-sig: 2.7%
Centroid-so: 1.598 arcsec [1.34σ]
OotOffset-rm: 0.143 arcsec [0.66σ]
KicOffset-rm: 0.131 arcsec [0.67σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.88 [14/16]
DiffImageOverlap-fno: 1.00 [17/17]

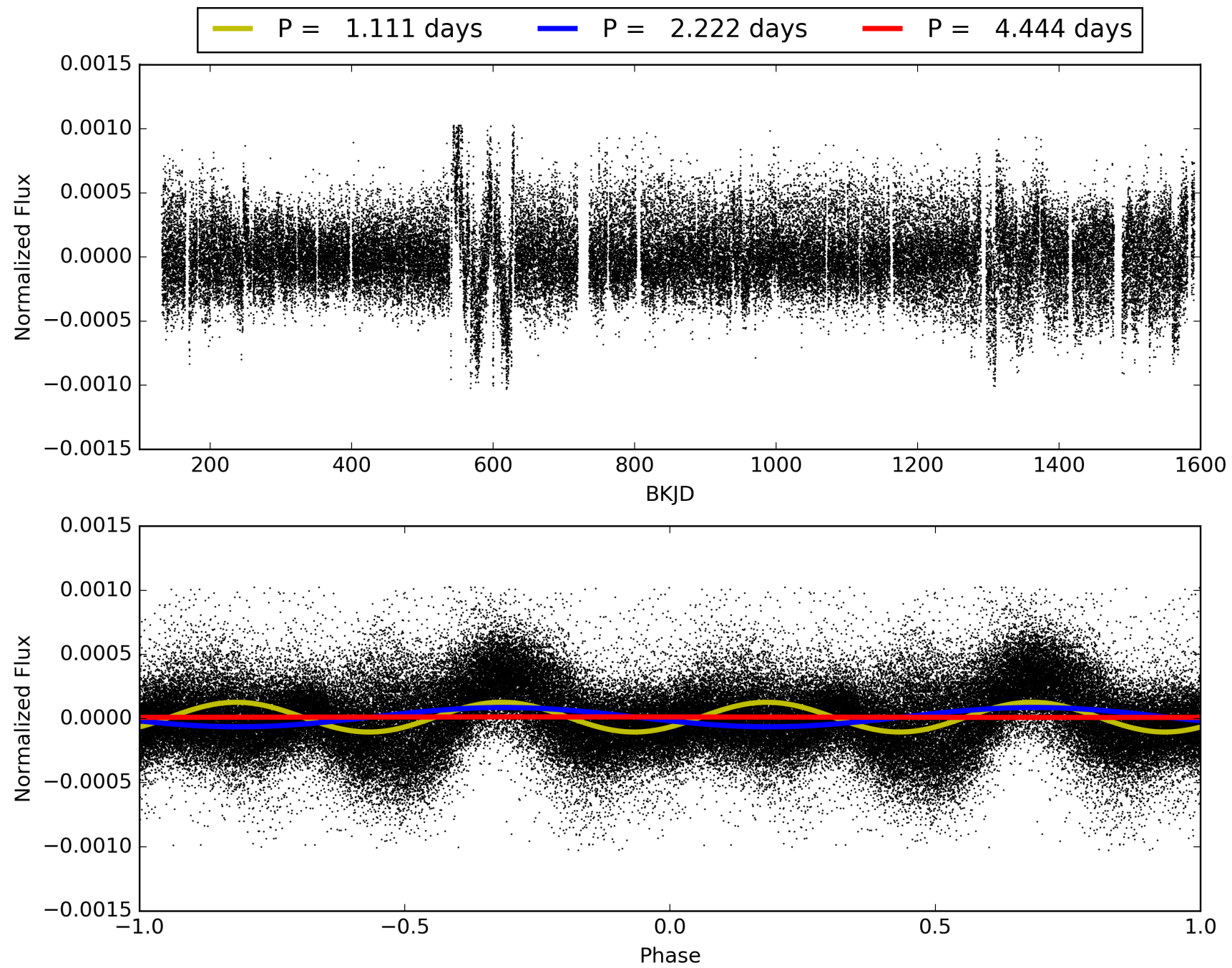
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:20:59 Z

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

TCE 008490255-02, PDC Light Curves

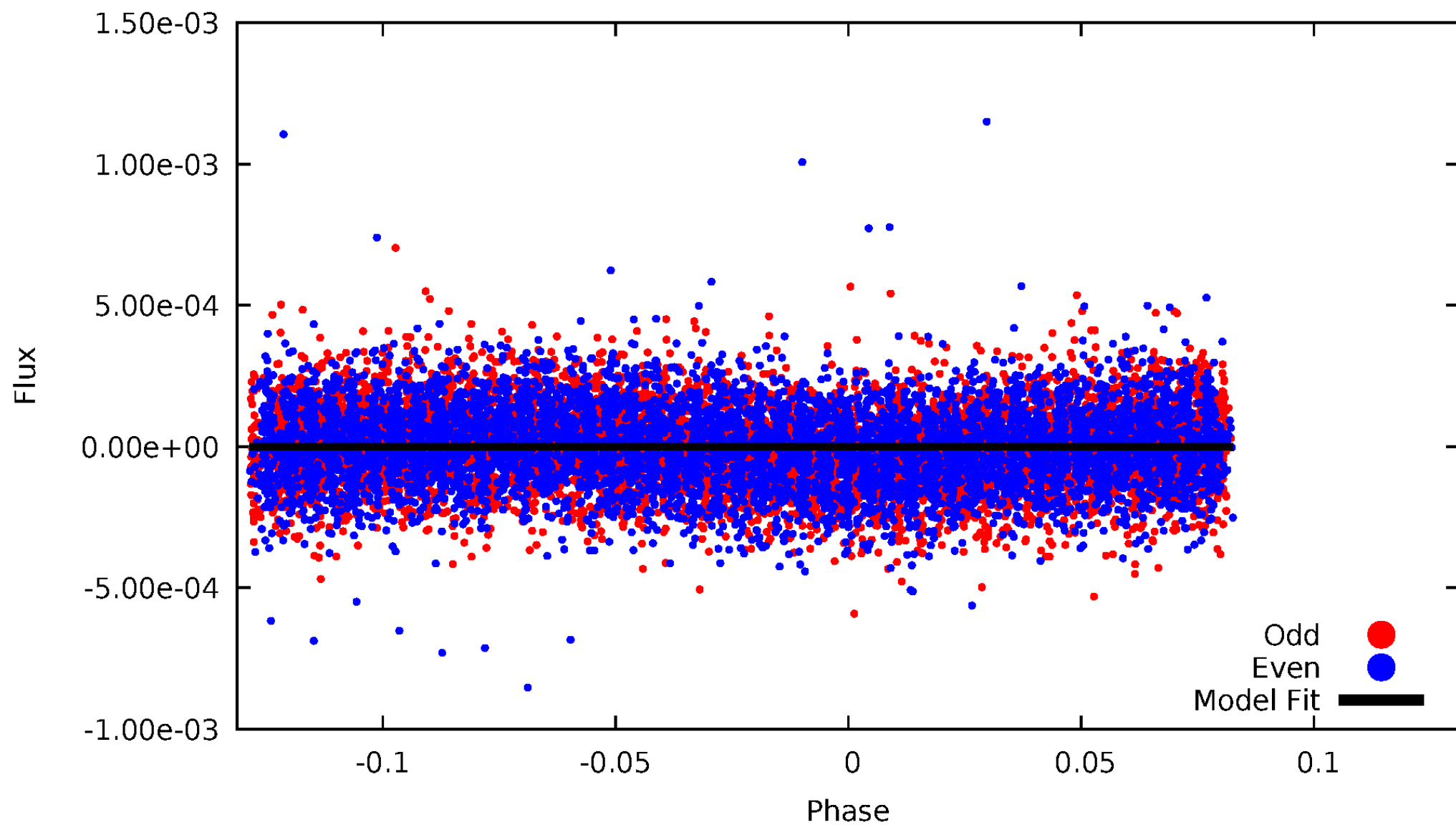


TCE 008490255-02



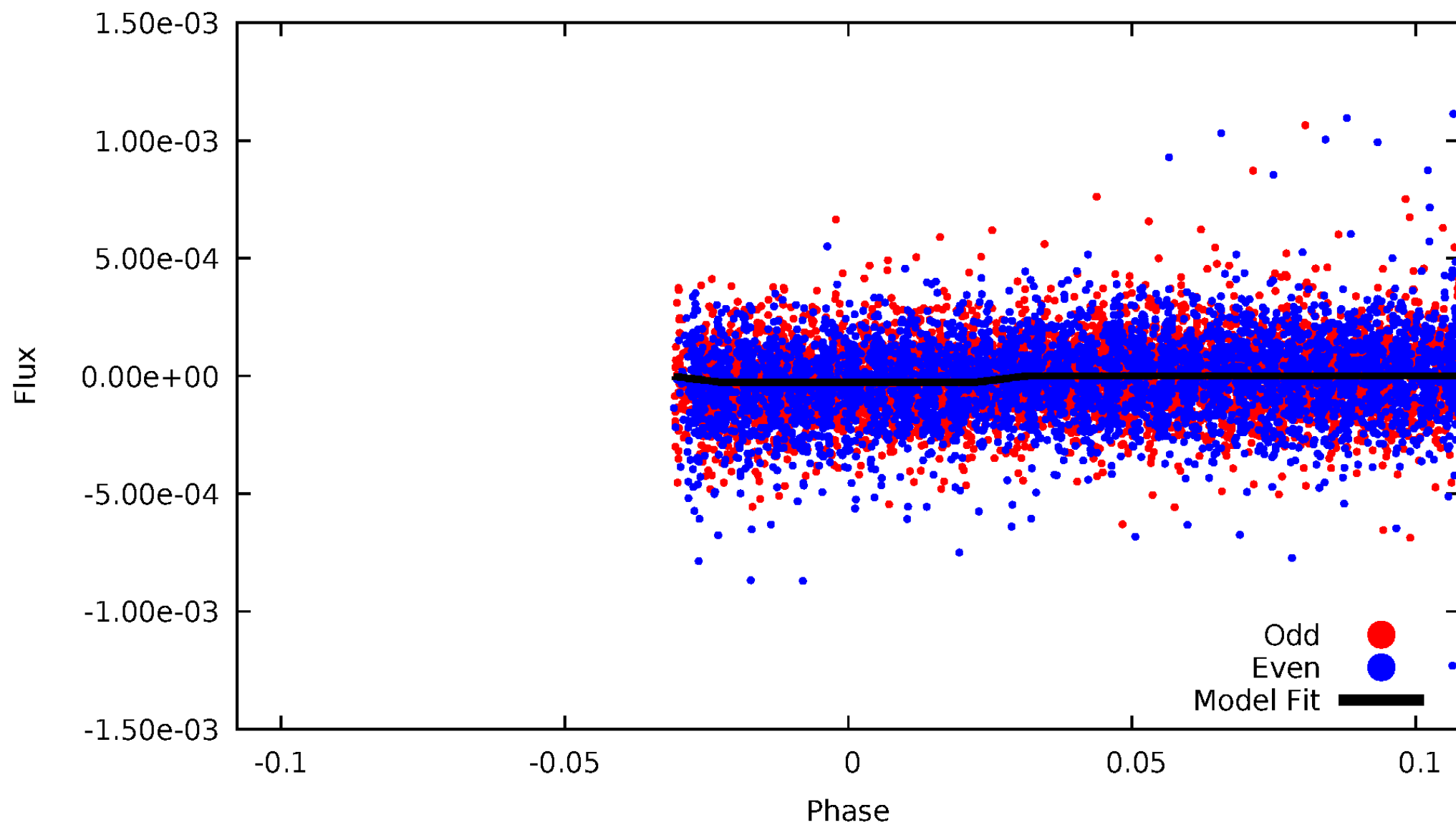
DV Odd/Even

TCE 008490255-02



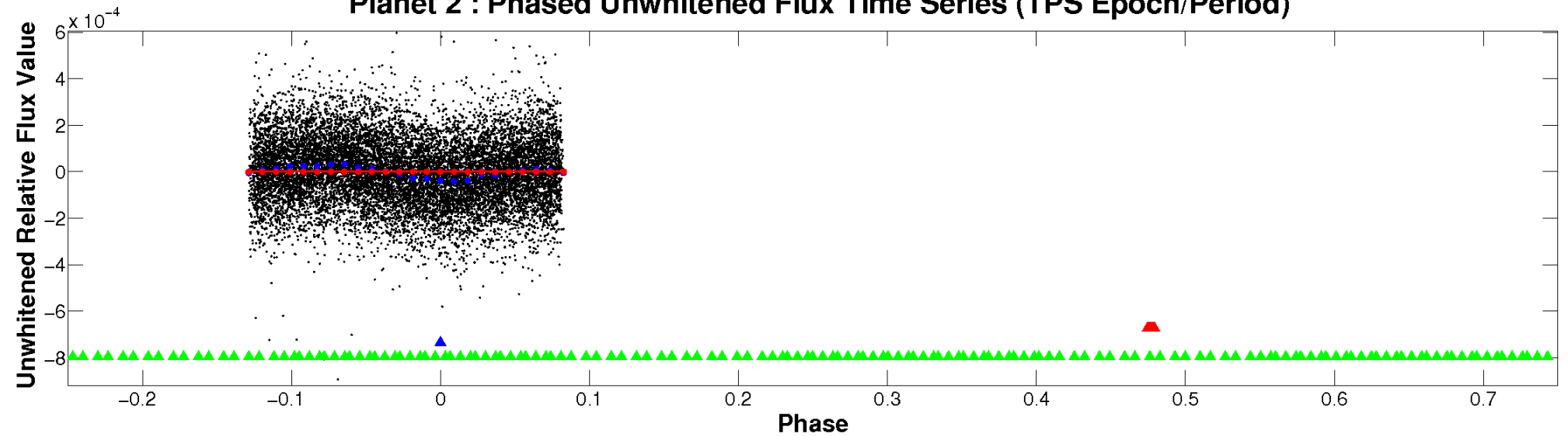
ALT Odd/Even

TCE 008490255-02

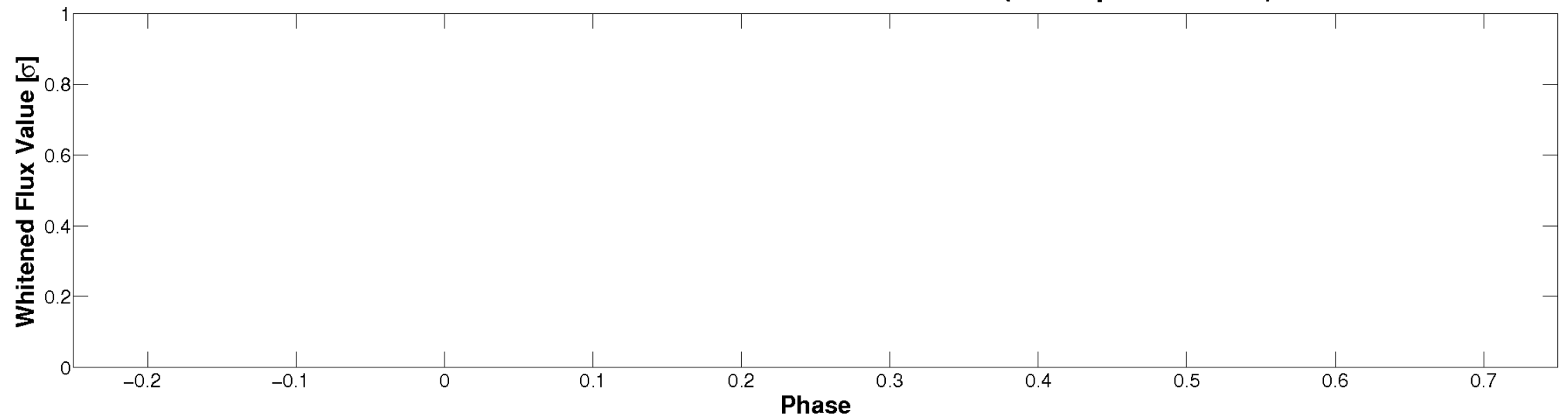


Non-Whitened Vs. Whitened Light Curve

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

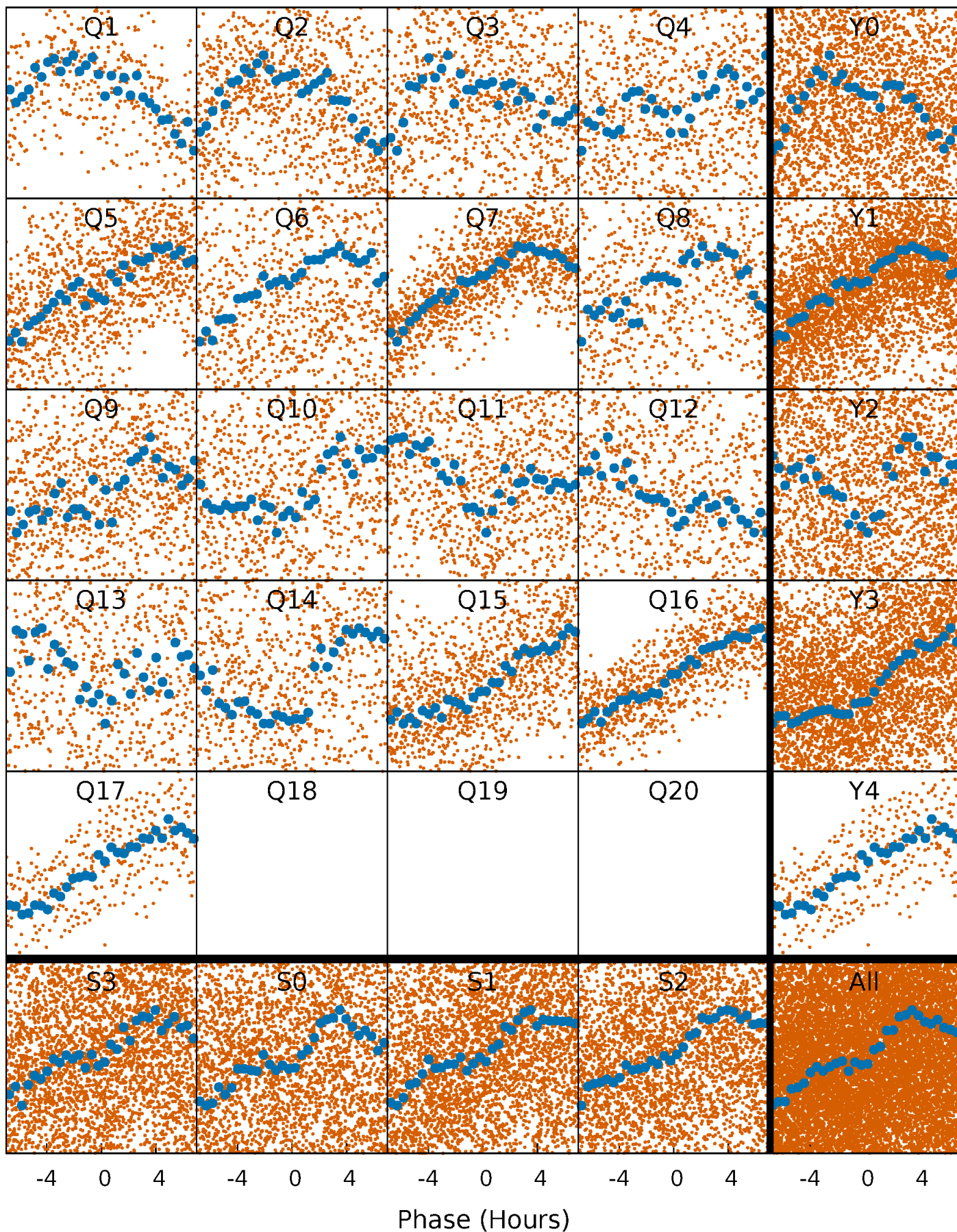


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



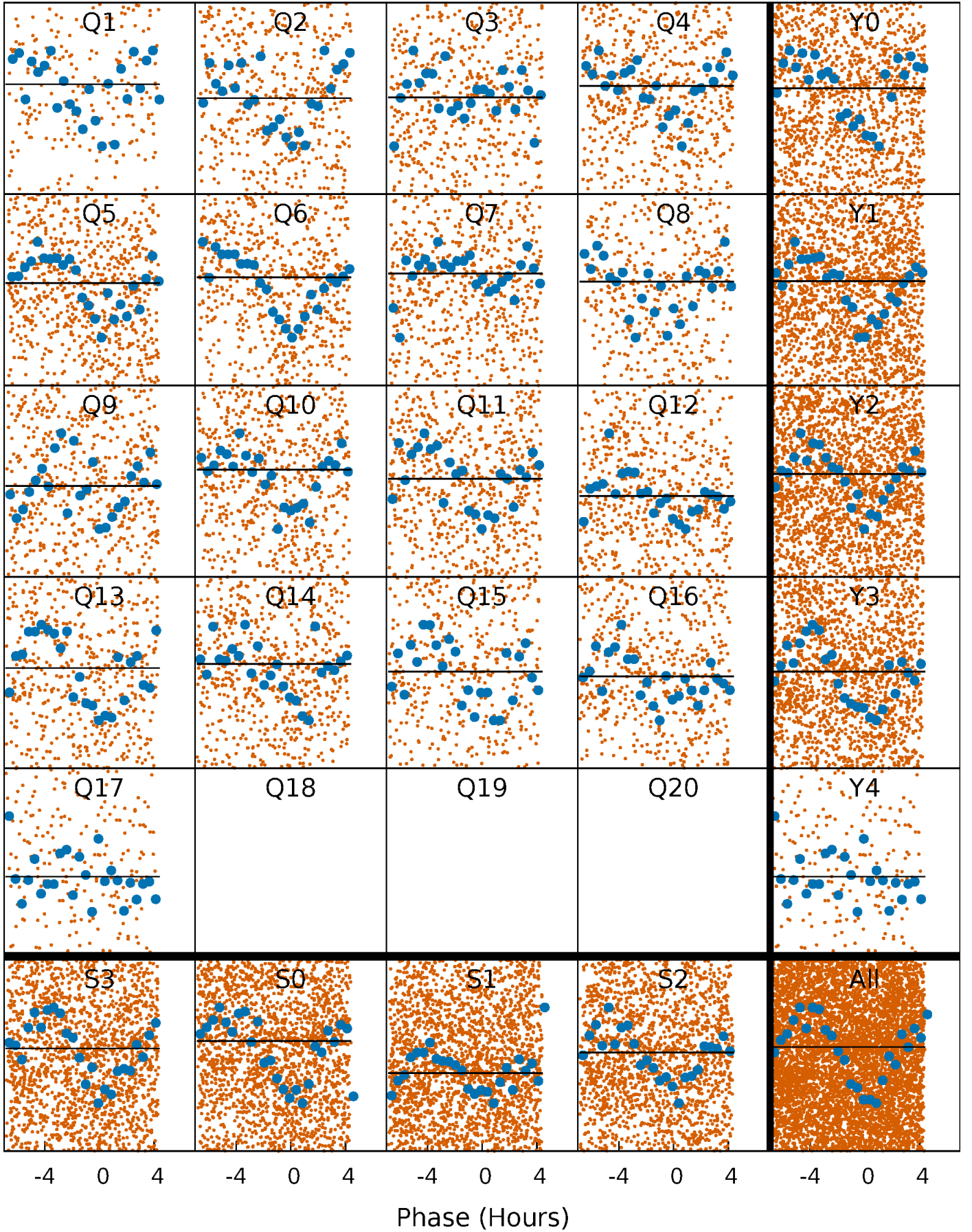
PDC Quarter-Phased Transit Curves

TCE 008490255-02 P= 2.222223 Days $T_0=132.532672$ (BKJD)



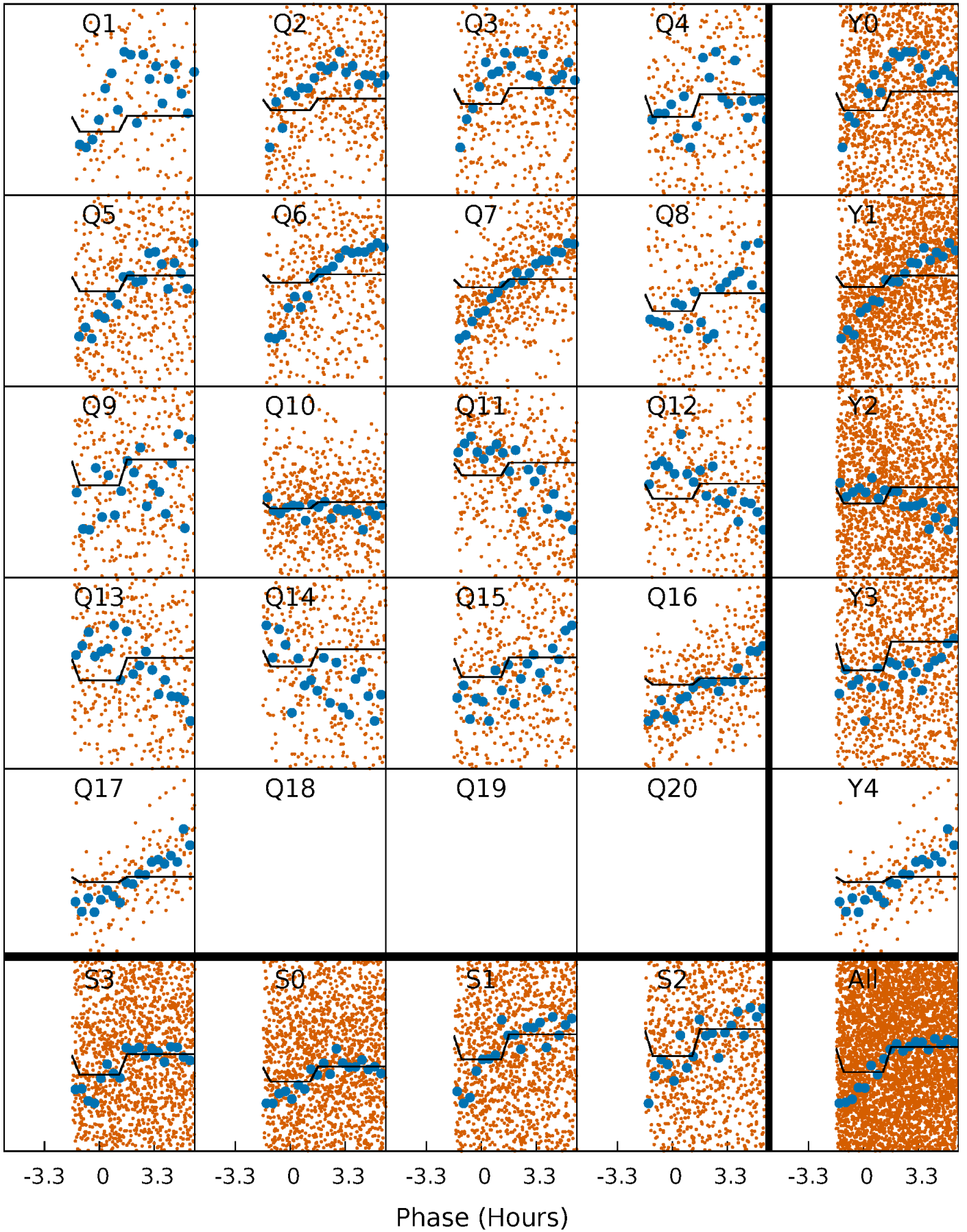
DV Quarter-Phased Transit Curves

TCE 008490255-02 P= 2.222223 Days $T_0=132.532672$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

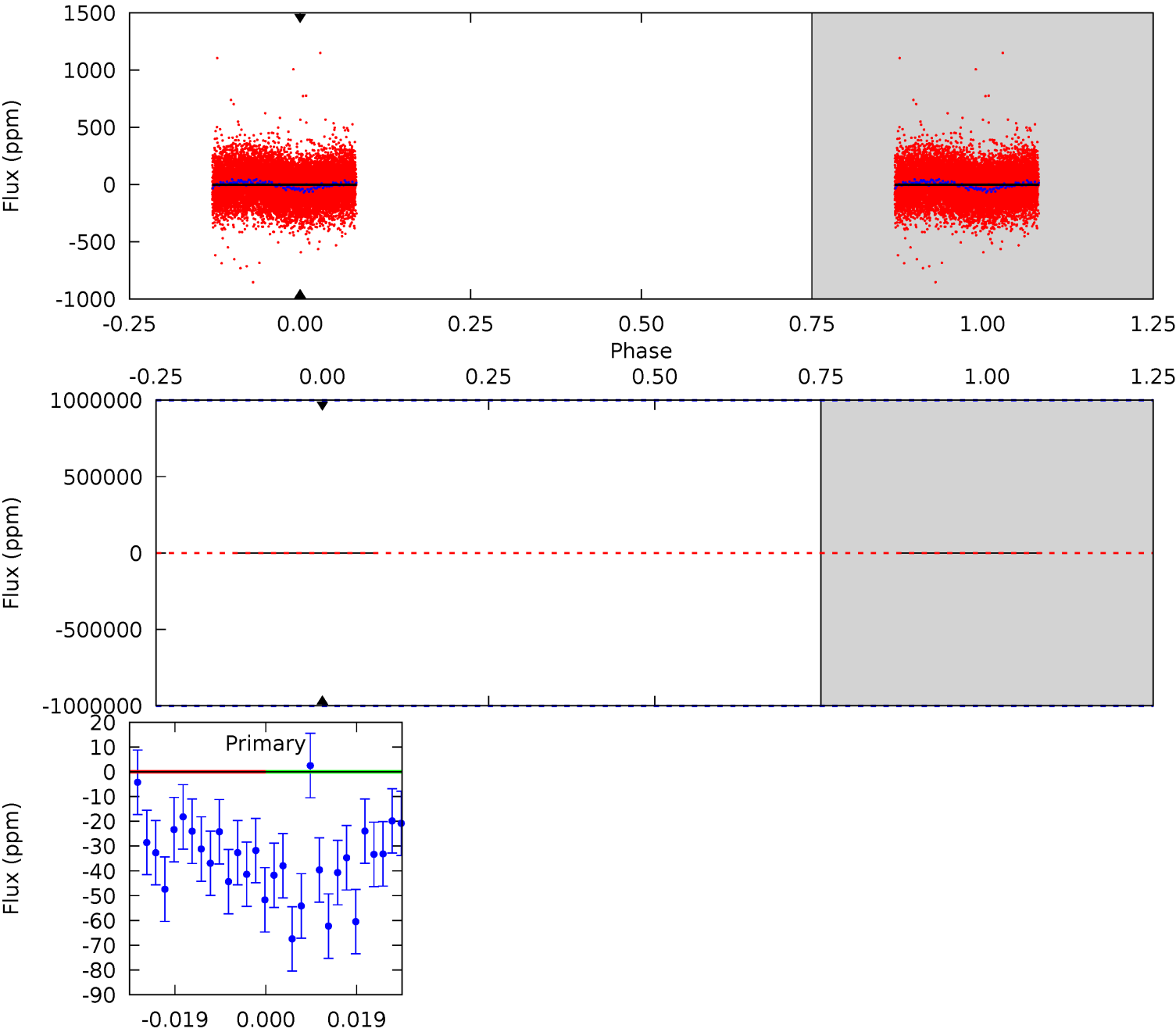
TCE 008490255-02 $P = 2.222223$ Days $T_0 = 132.315392$ (BKJD)



DV Model-Shift Uniqueness Test

008490255-02, P = 2.222223 Days, E = 130.310449 Days

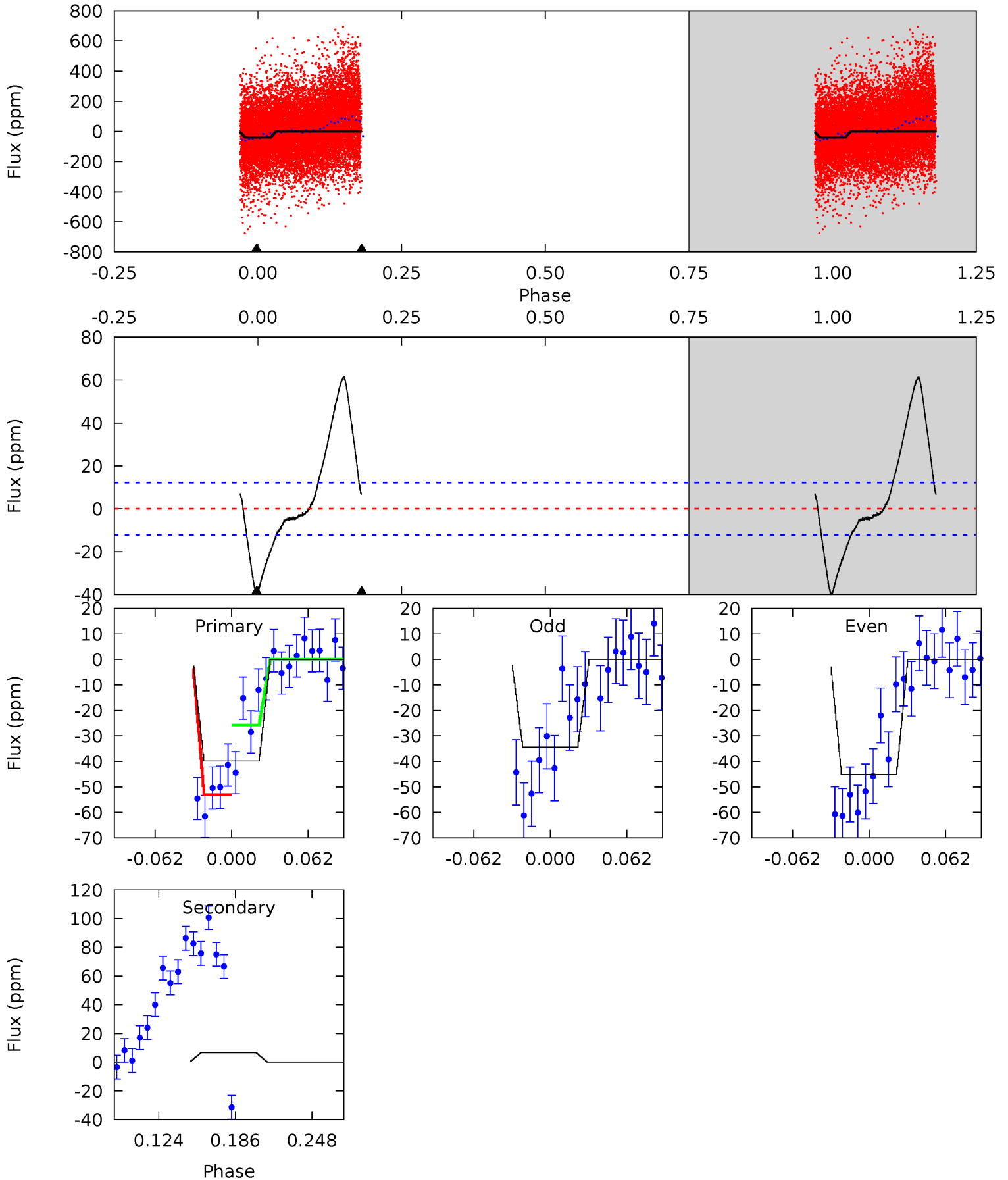
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008490255-02, P = 2.222223 Days, E = 130.093169 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	-2.57	0	0	4.66	1.87	3.65	15.3	15.3	-2.57	-2.57	2.06	1.04	0.61	4.98



Stellar Parameters For KIC 008490255

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6706^{+166}_{-216}	$3.760^{+0.292}_{-0.097}$	$0.020^{+0.250}_{-0.250}$	$2.746^{+0.508}_{-0.871}$	$1.581^{+0.239}_{-0.263}$	$0.108^{+0.196}_{-0.039}$
	+2%/-3%	+8%/-3%	+1250%/-1250%	+18%/-32%	+15%/-17%	+182%/-36%
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 008490255-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$20.88^{+22.60}_{-14.21}$	3389^{+205}_{-290}	4334^{+30223}_{-26215}	$1.962^{+439.155}_{-206.160}$
Alt.	7 ± 3	$19.81^{+21.18}_{-14.41}$	3398^{+217}_{-294}	-3391^{+181}_{-234}	$-0.013^{+0.011}_{-0.149}$

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

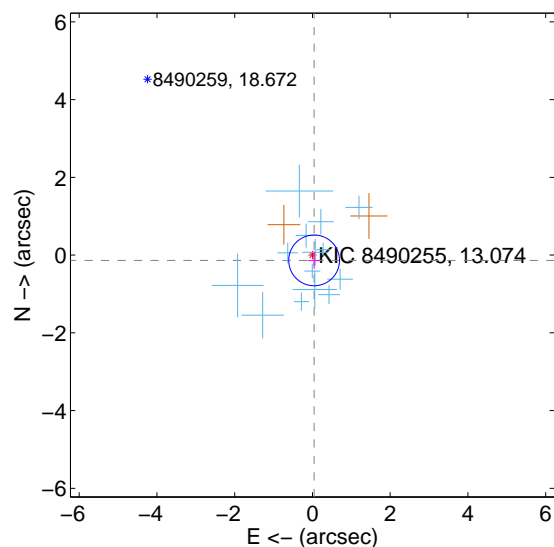
Supplemental centroid analysis for 008490255-02. Kepler magnitude: 13.07. Transit SNR -1.00

There are 14 quarters with good PRF difference image offsets

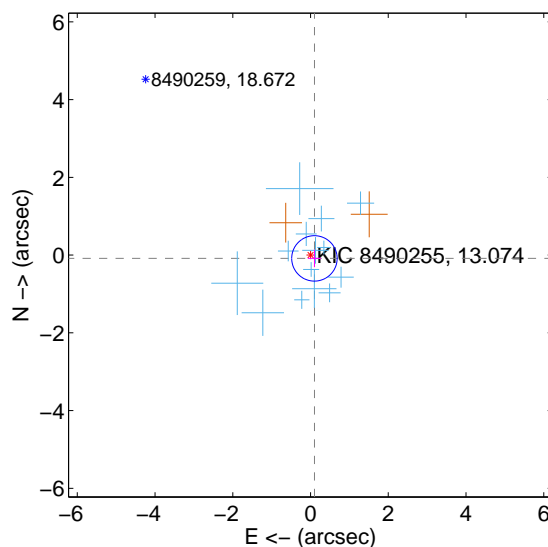
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.143 ± 0.218	0.66	-0.043 ± 0.169	-0.136 ± 0.222
PRF-fit source offset from KIC position	0.131 ± 0.195	0.67	-0.100 ± 0.170	-0.085 ± 0.225
photometric centroid source offset	1.60 ± 1.20	1.34	0.74 ± 1.11	-1.42 ± 1.22

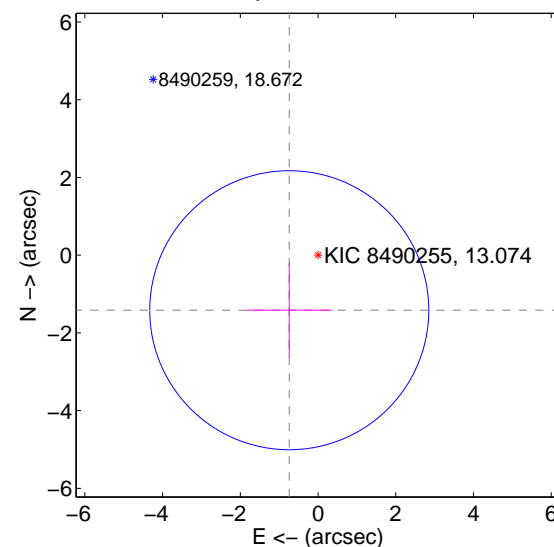
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

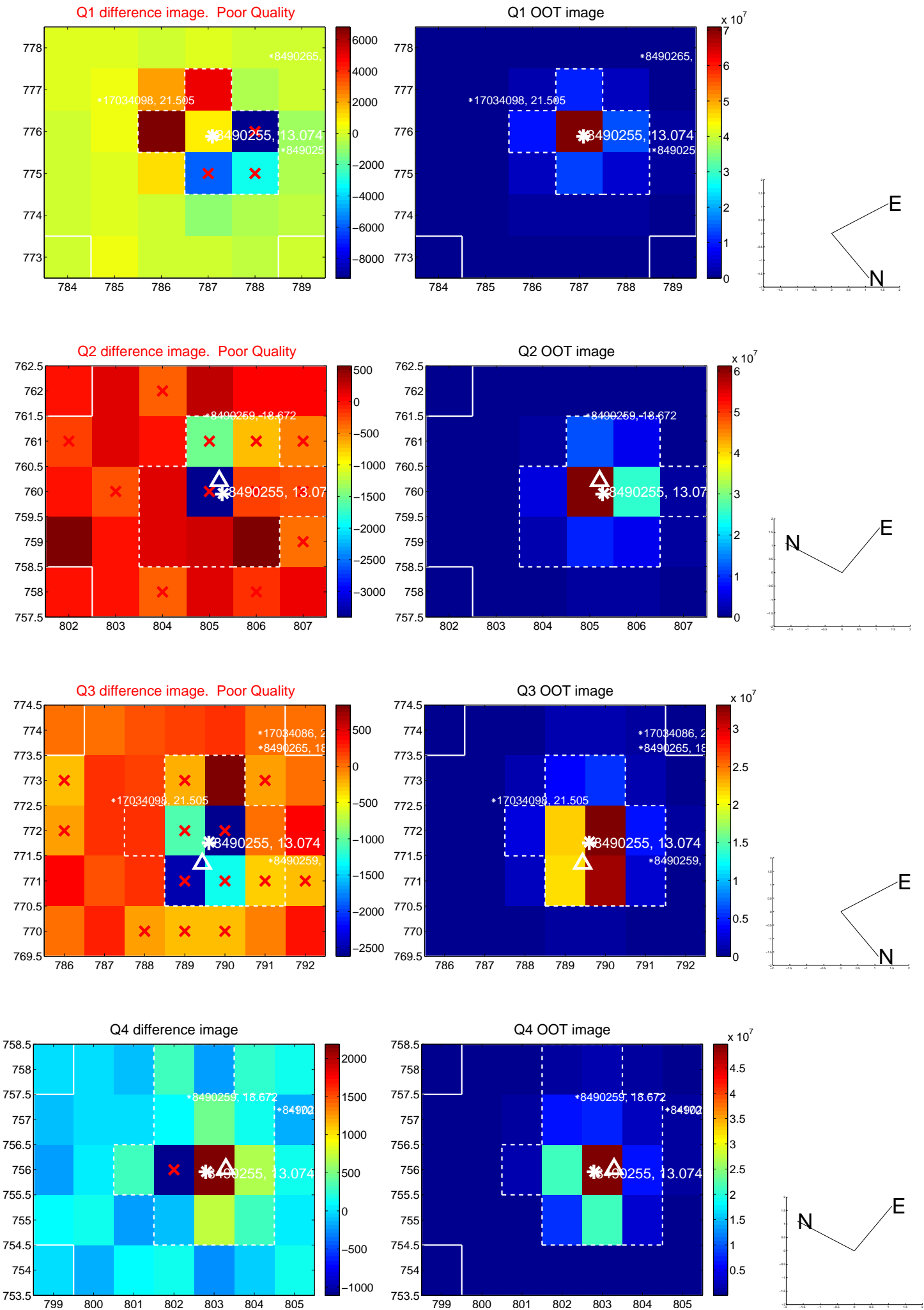


offset from photometric centroids

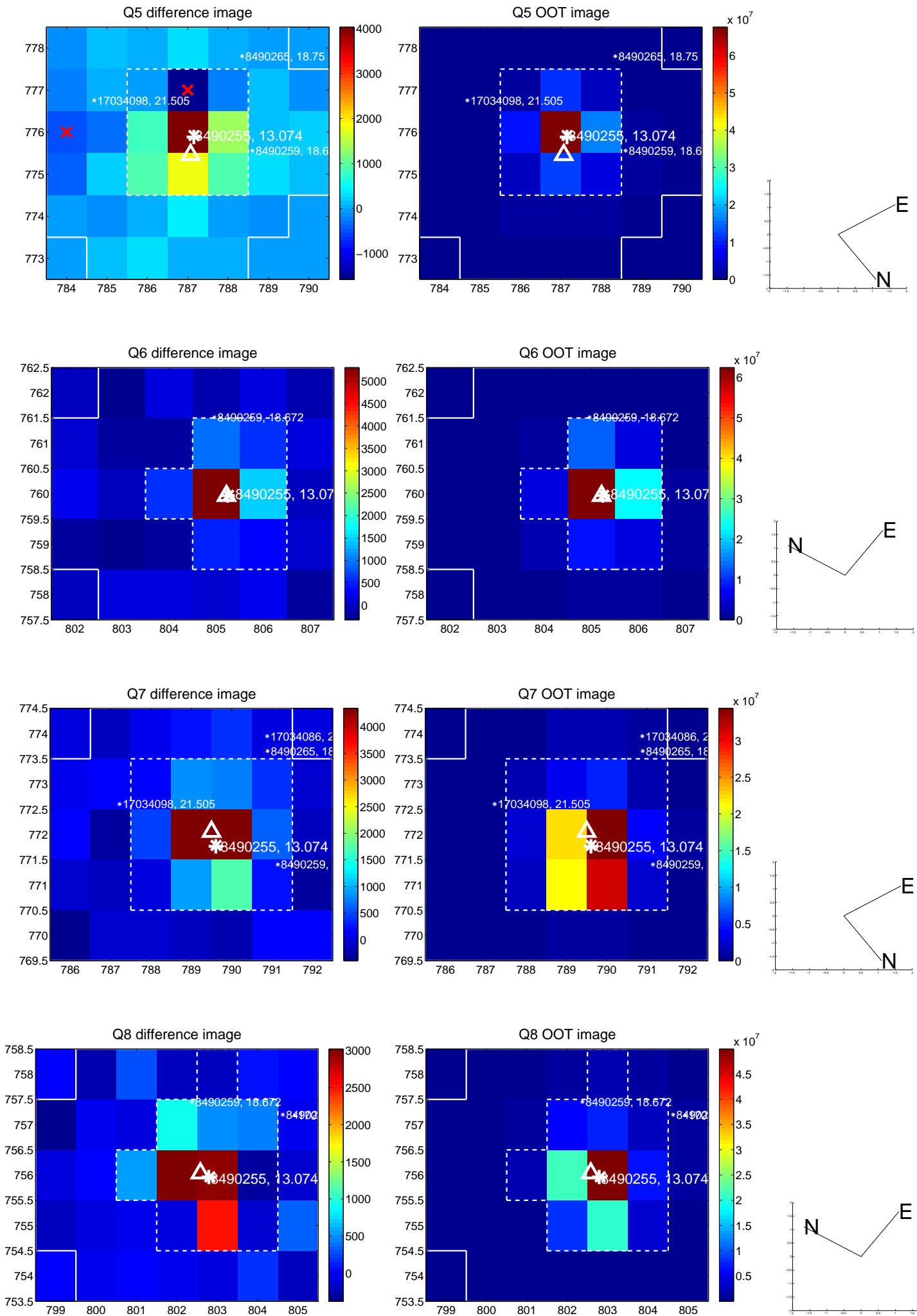


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

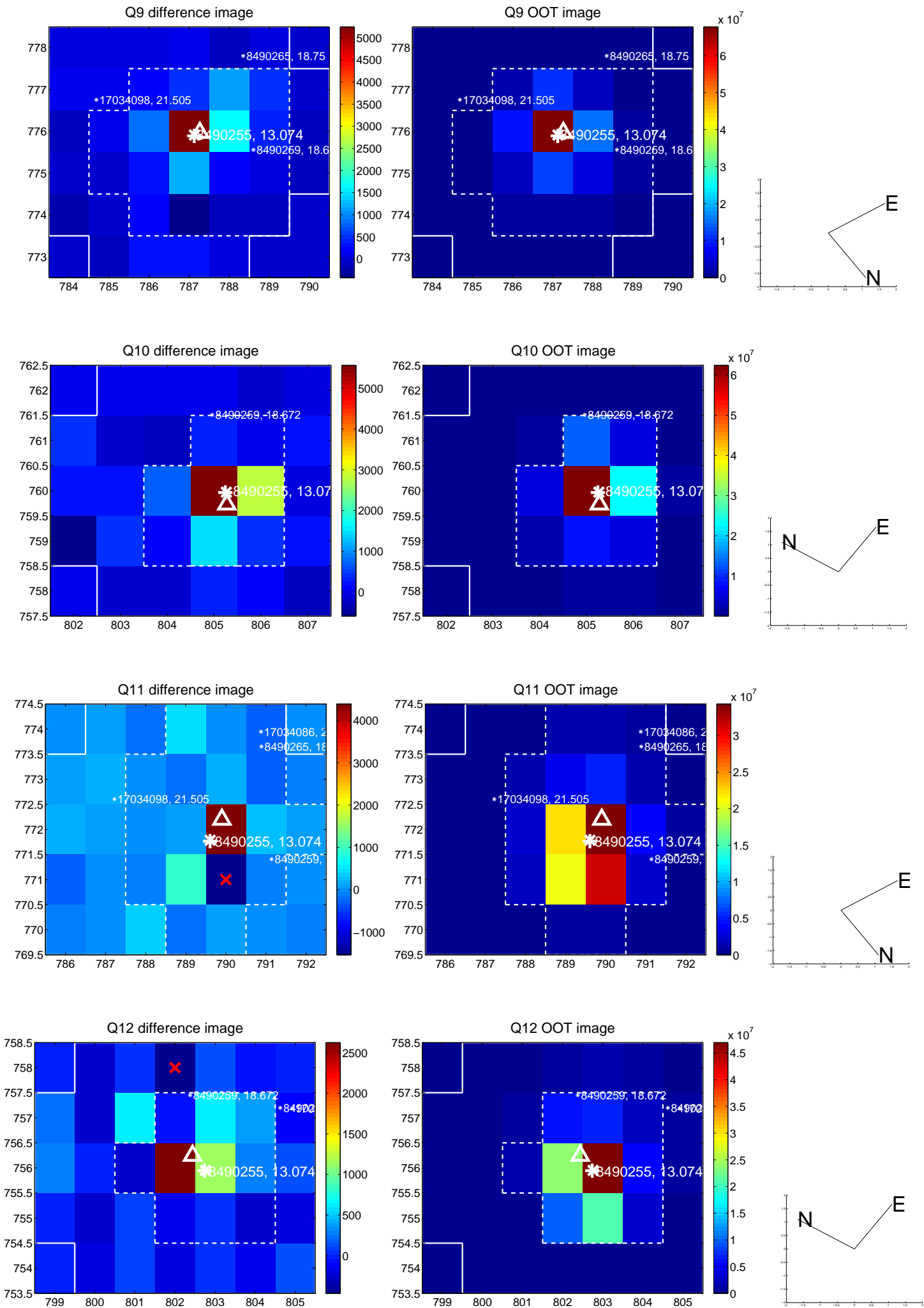
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



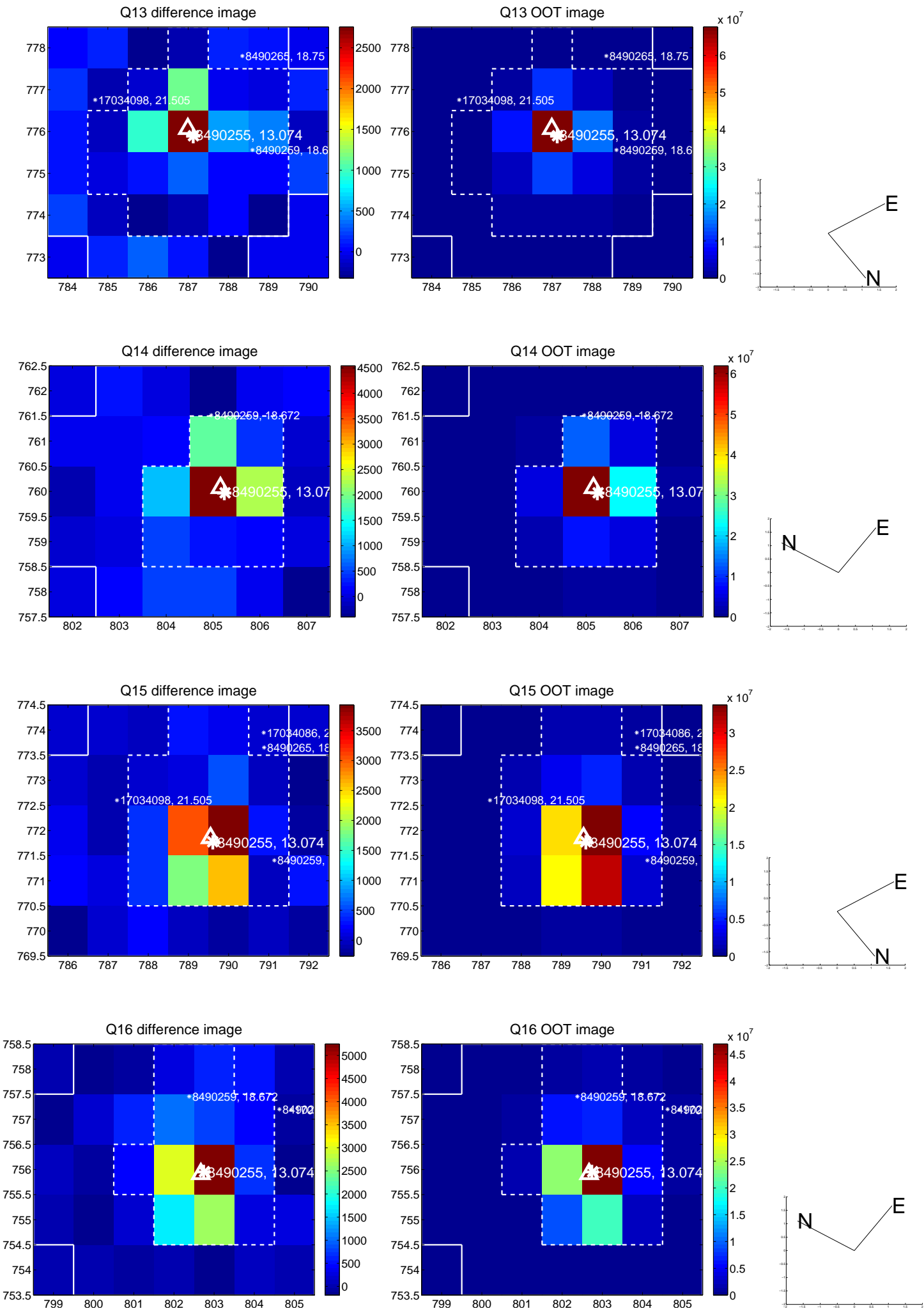
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



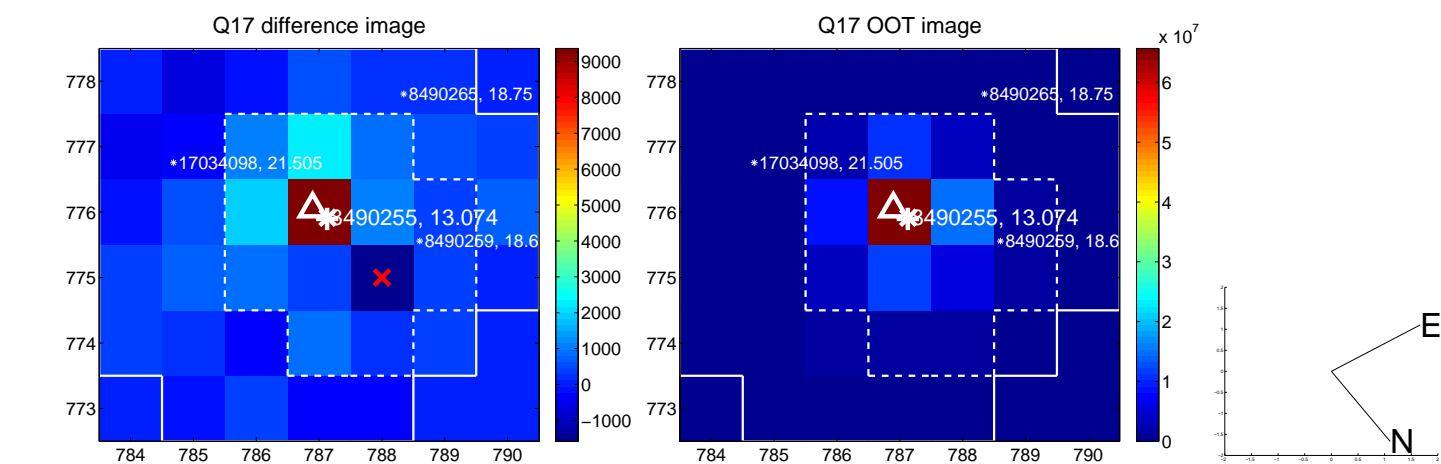
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



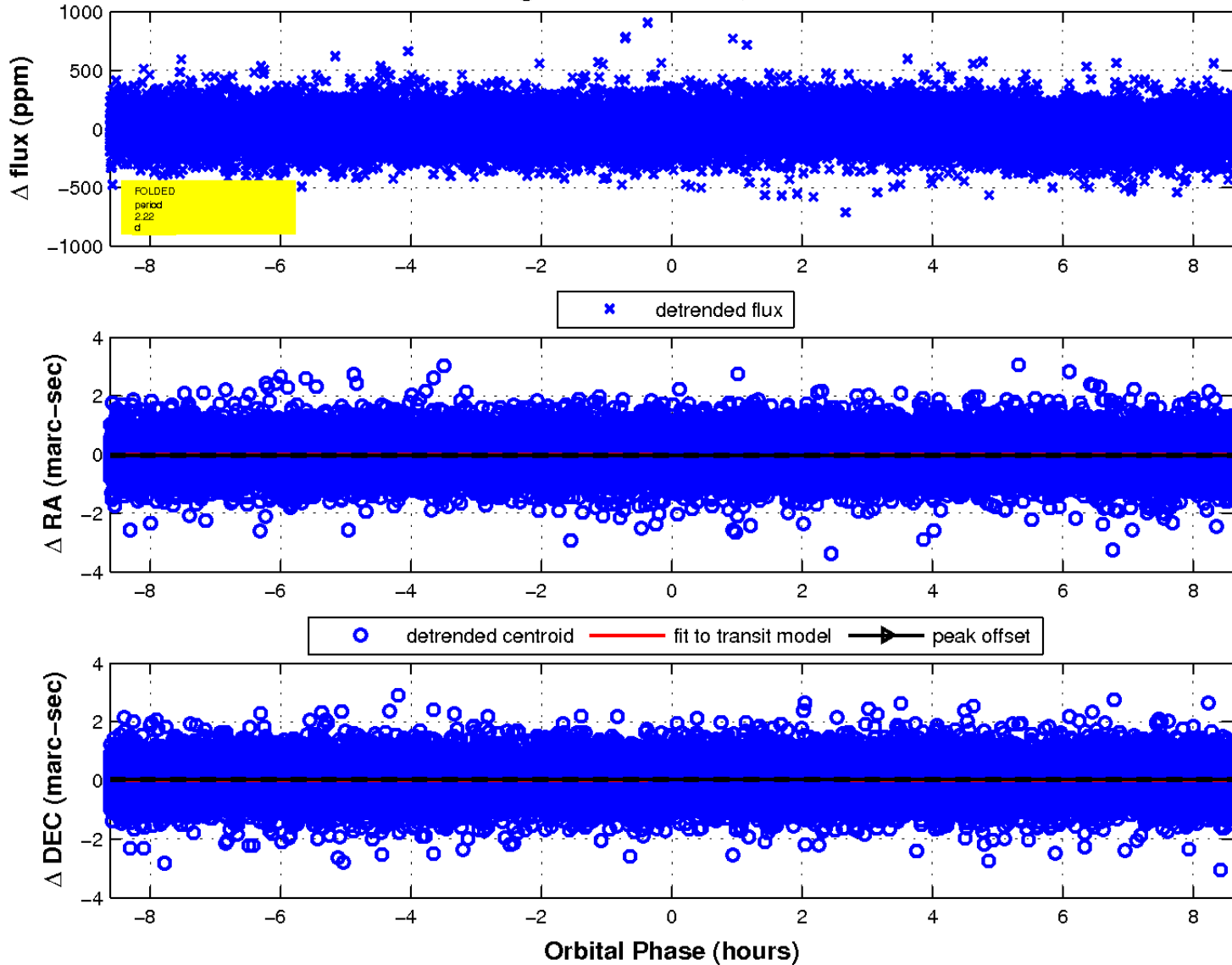
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

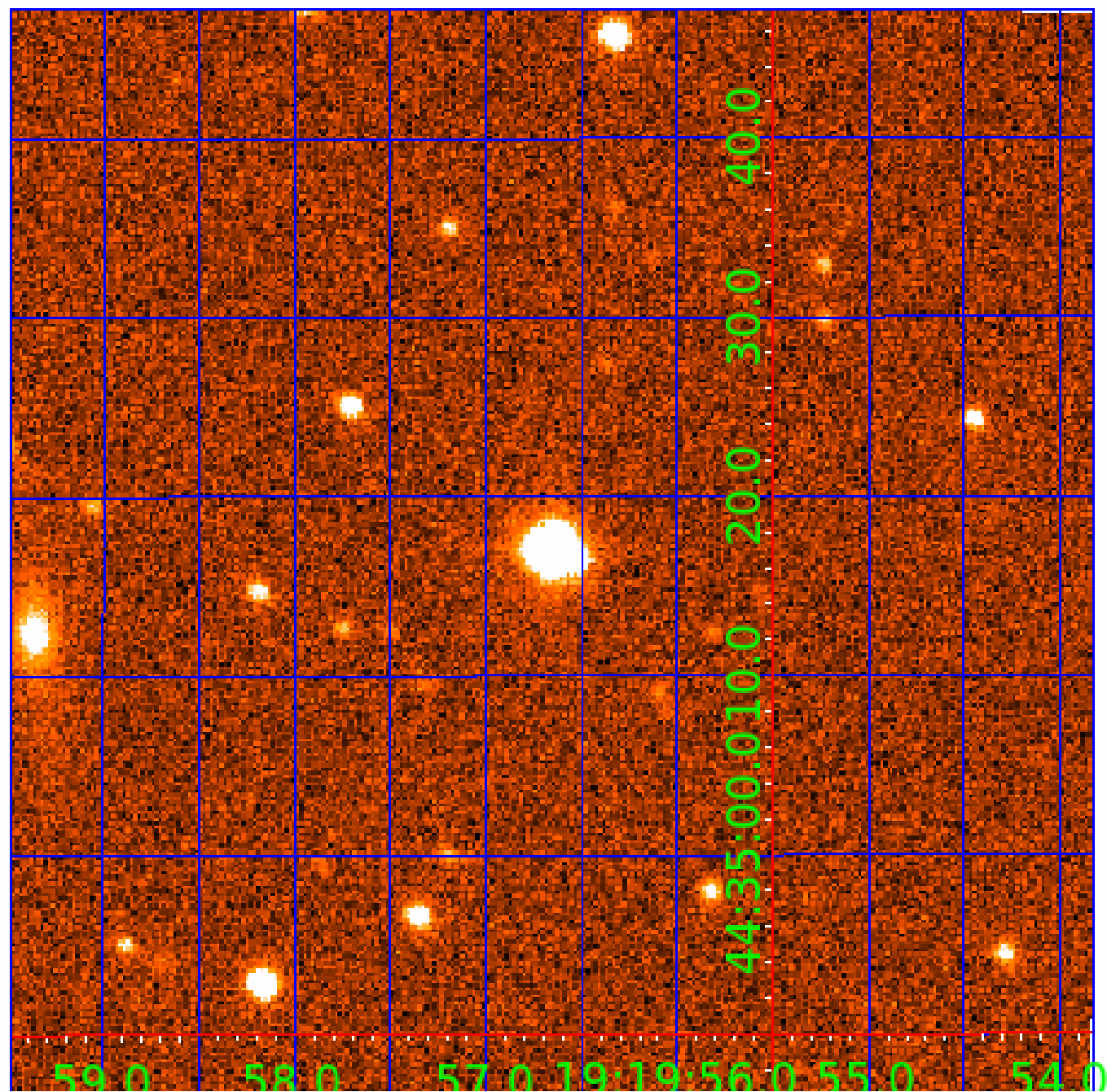


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 008490255

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})
008490255-01	OBS	No	2.222207	133.597715	3.5	13.923	11.4	1.9	2.75	6706	0.53	9053.91
008490255-02	OBS	No	2.222223	132.532672	486.6	3.500	15.8	-1.0	2.75	6706	6.11	9053.83
008490255-03	OBS	No	9.617122	134.919349	74.0	14.327	8.1	5.1	2.75	6706	2.67	1283.77

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008490255-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008490255-02	OBS	FP	0.00	1	0	0	0	LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_NOFITS
008490255-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT

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

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

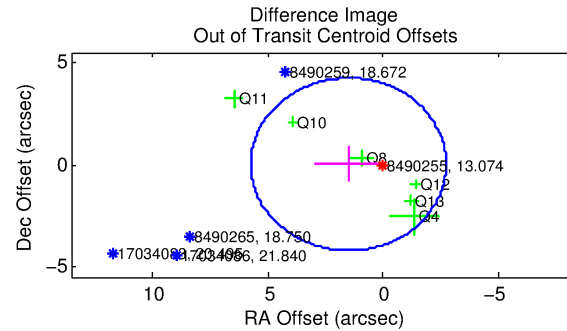
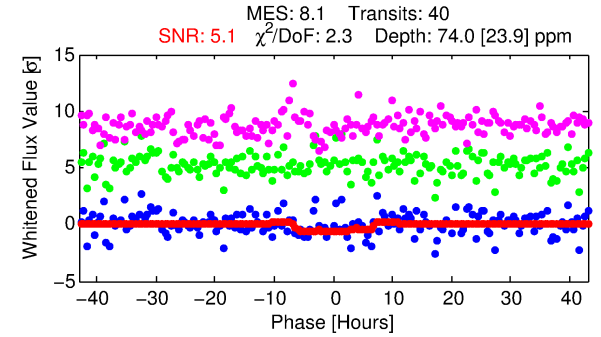
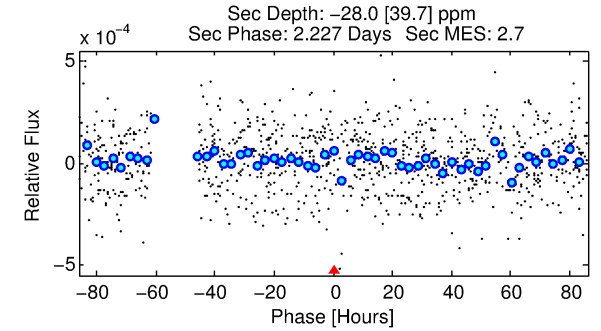
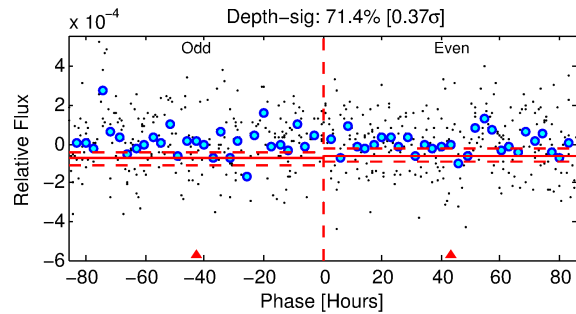
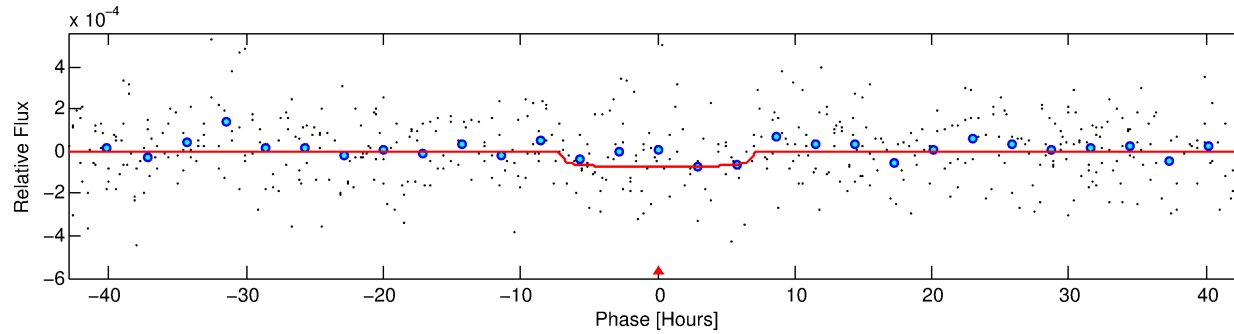
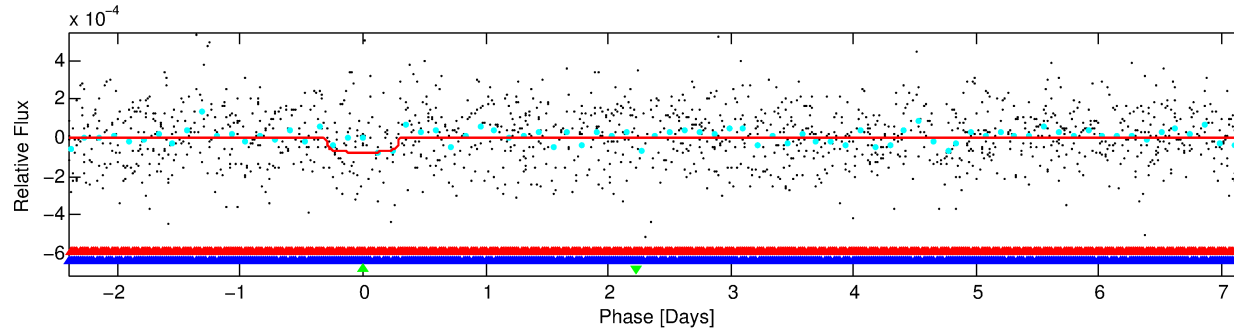
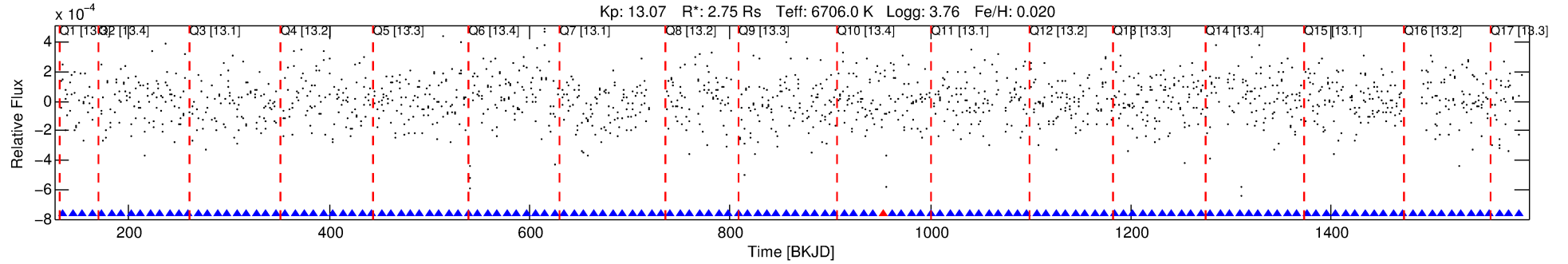
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008490255-03

No Significant Match Found

DV One-Page Summary

KIC: 8490255 Candidate: 3 of 3 Period: 9.617 d



DV Fit Results:

Period = 9.61712 [0.00076] d
Epoch = 134.9193 [0.0669] BKJD
Rp/R* = 0.0089 [0.0061]
a/R* = 2.89 [9.69]
b = 0.86 [1.21]
Seff = 1283.77 [657.40]
Teq = 1526 [195] K
Rp = 2.67 [2.01] Re
a = 0.1032 [0.0318] AU
Ag = N/A
Teffp = N/A

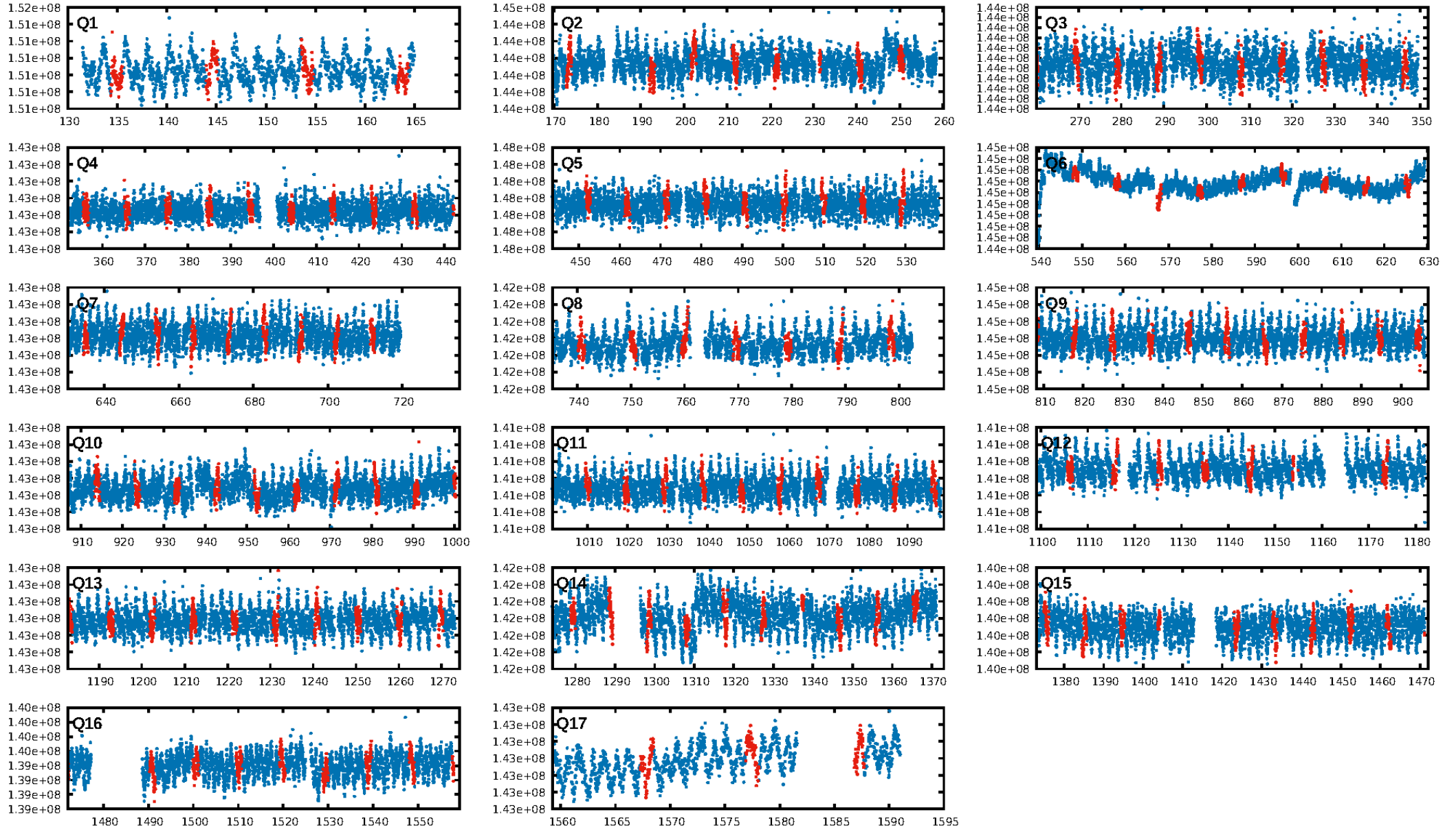
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [12.03 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.76e-211
RollingBand-fgt: 0.97 [38/39]
GhostDiagnostic-chr: 3.976
Centroid-sig: 25.1%
Centroid-so: 0.523 arcsec [1.03 σ]
OotOffset-rm: 1.508 arcsec [1.07 σ]
OotOffset-st: 1/1/3/1 [6]
KicOffset-rm: 1.451 arcsec [1.00 σ]
KicOffset-st: 1/1/3/1 [6]
DiffImageQuality-fgm: 0.17 [1/6]
DiffImageOverlap-fno: 0.00 [0/17]

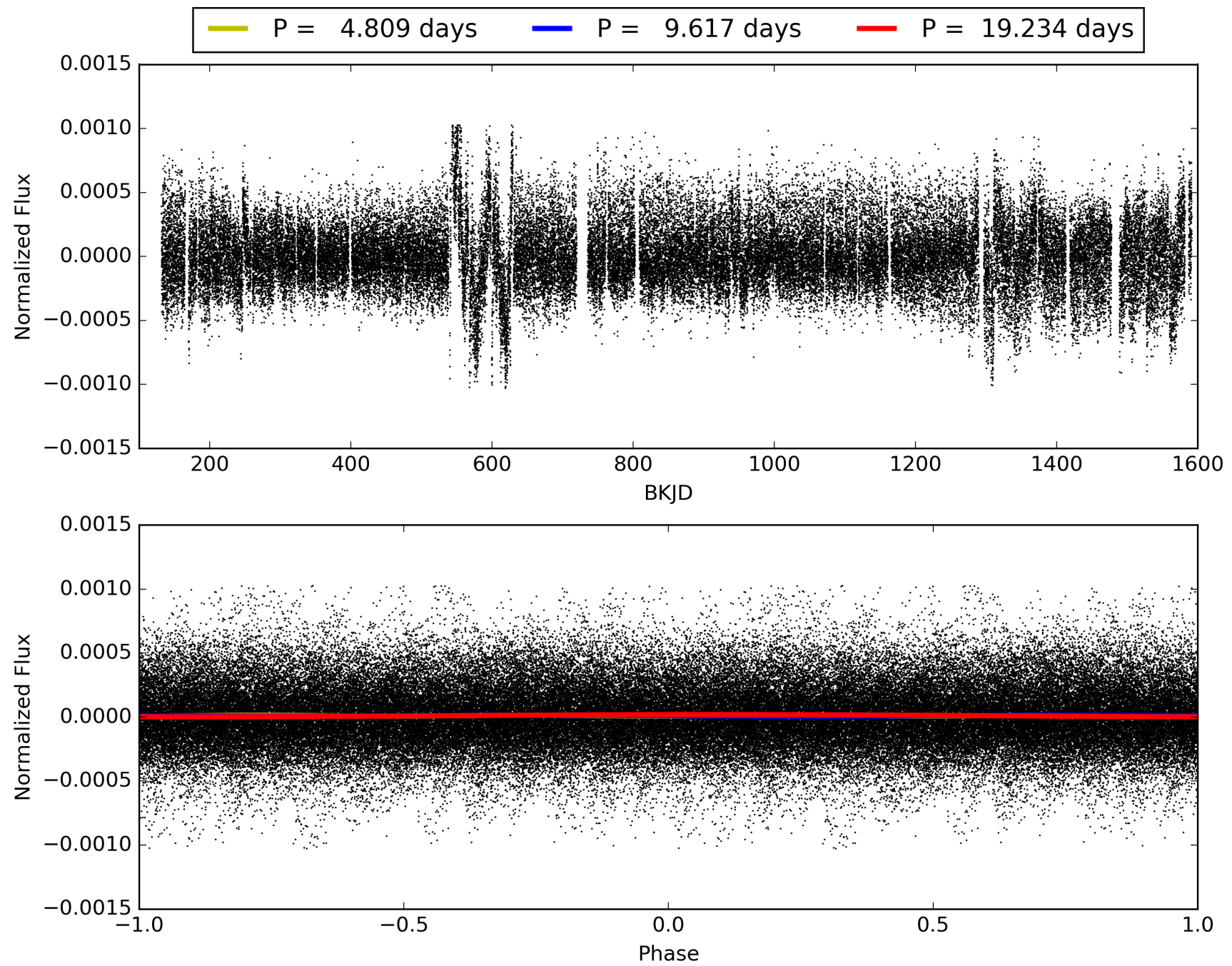
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:21:04 Z

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

TCE 008490255-03, PDC Light Curves

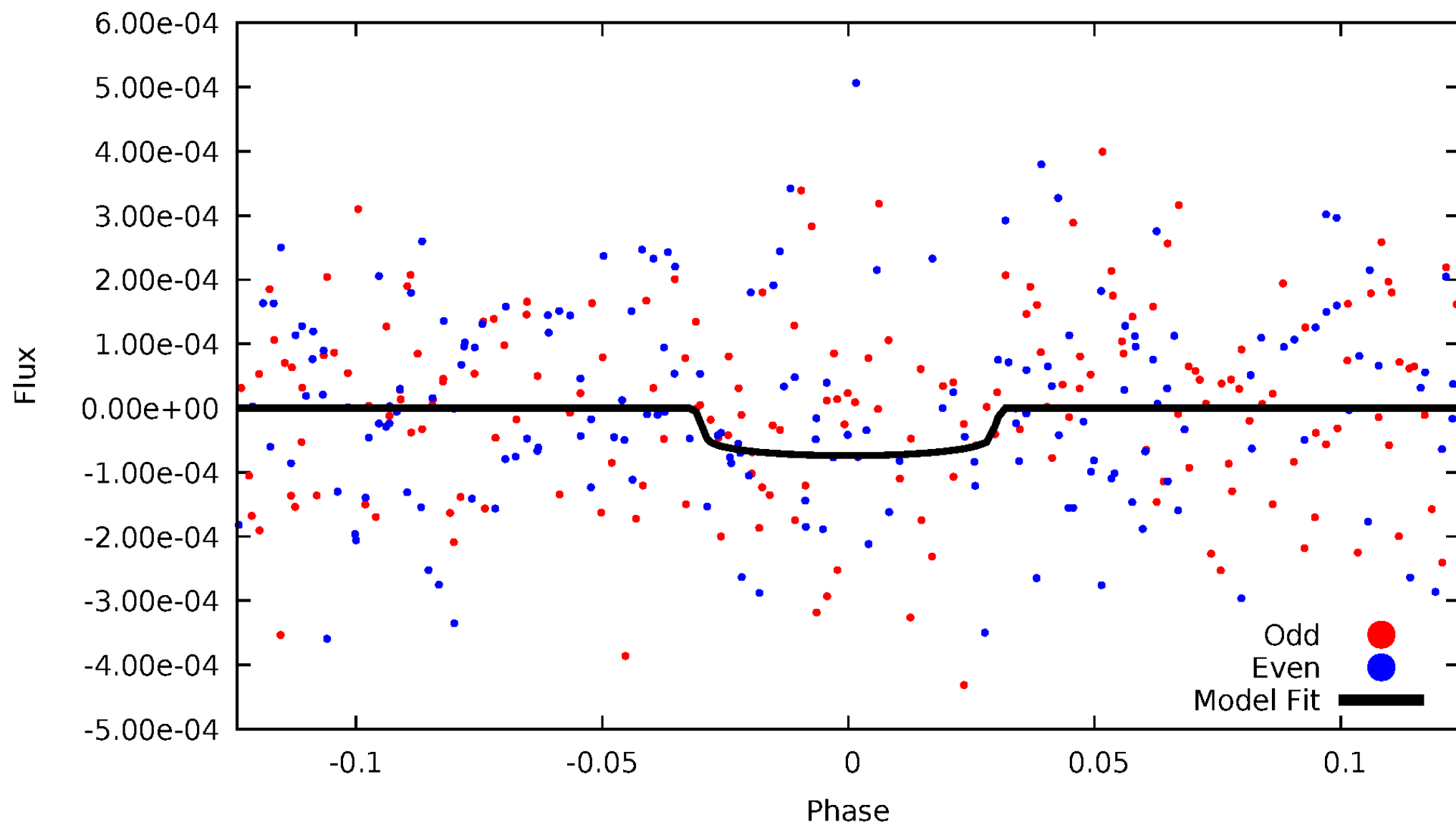


TCE 008490255-03



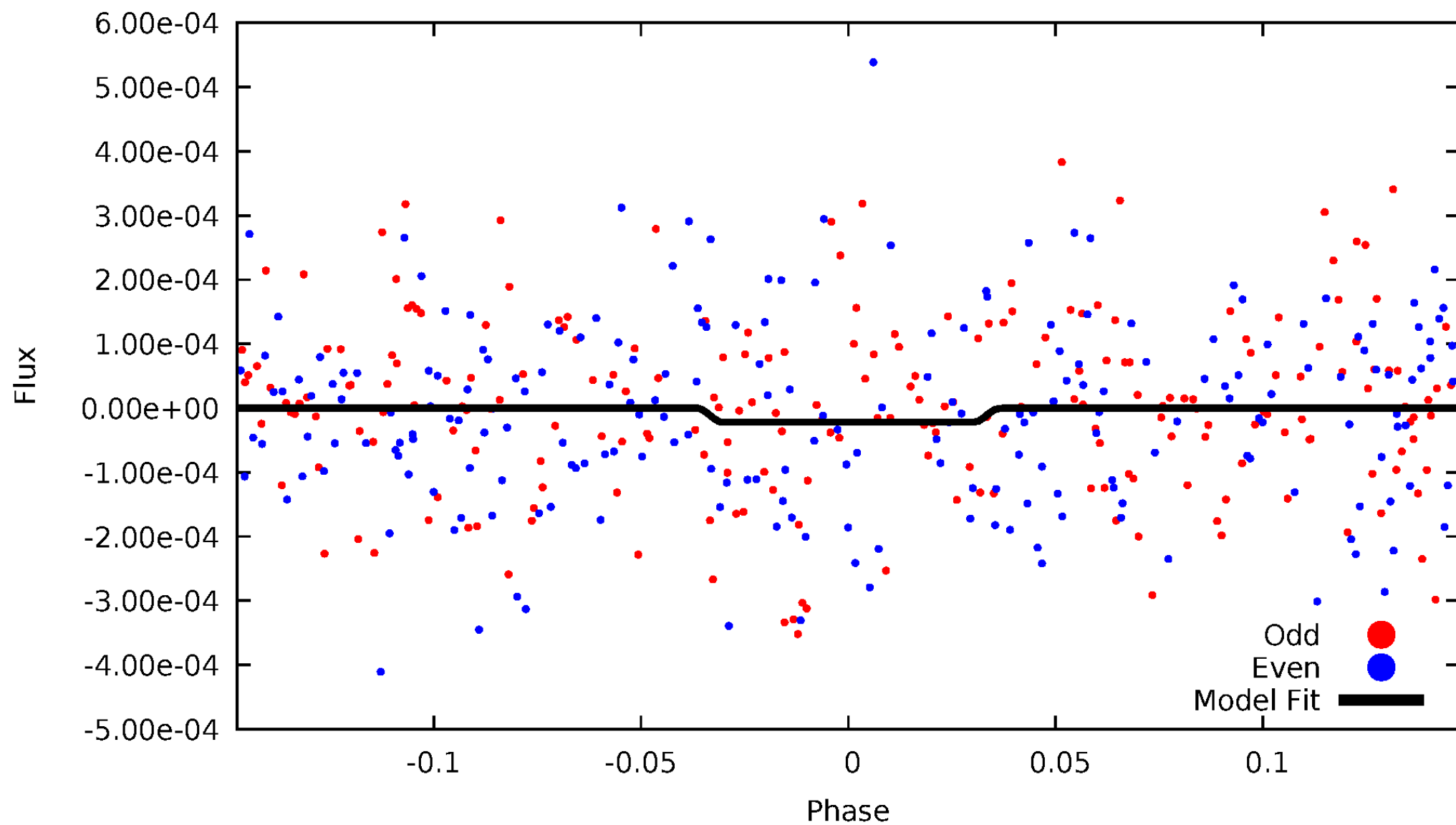
DV Odd/Even

TCE 008490255-03



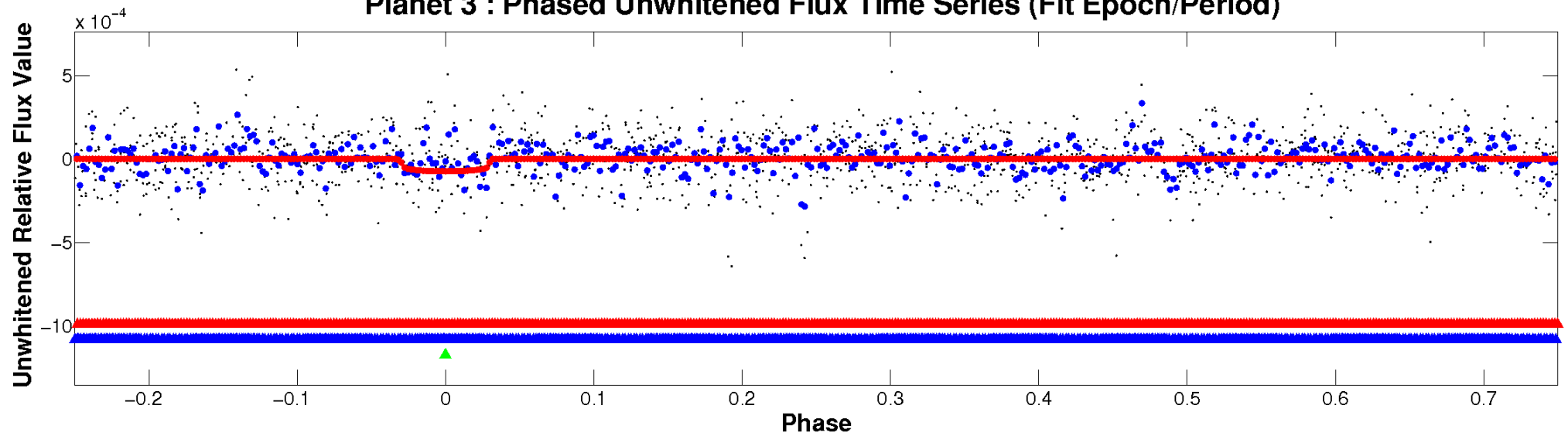
ALT Odd/Even

TCE 008490255-03

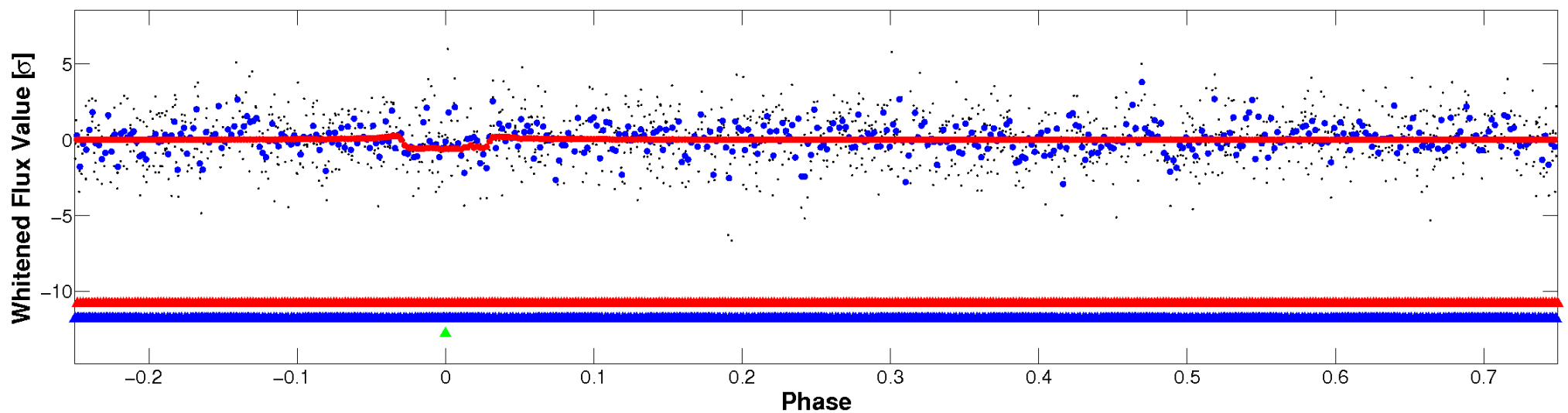


Non-Whitened Vs. Whitened Light Curve

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

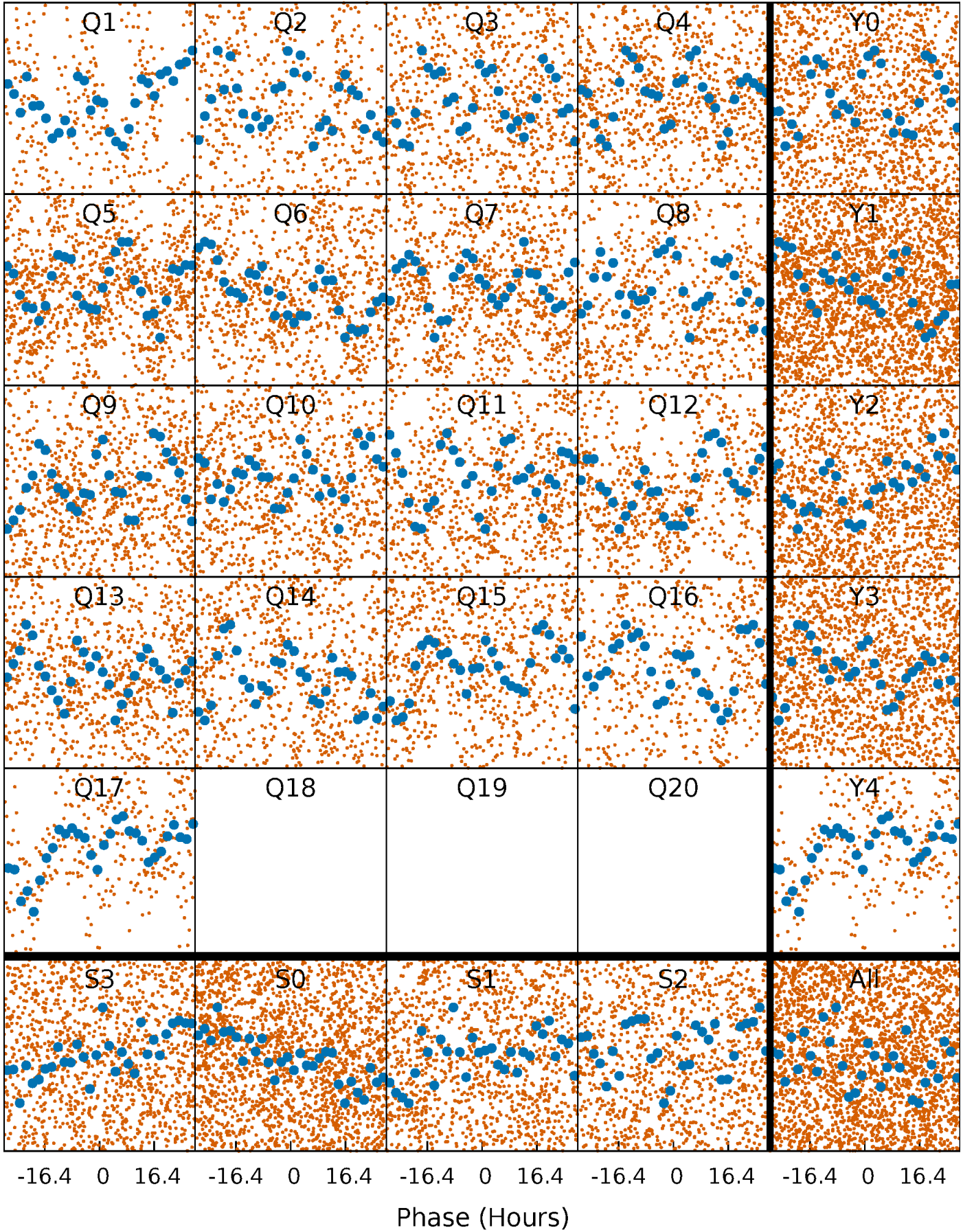


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



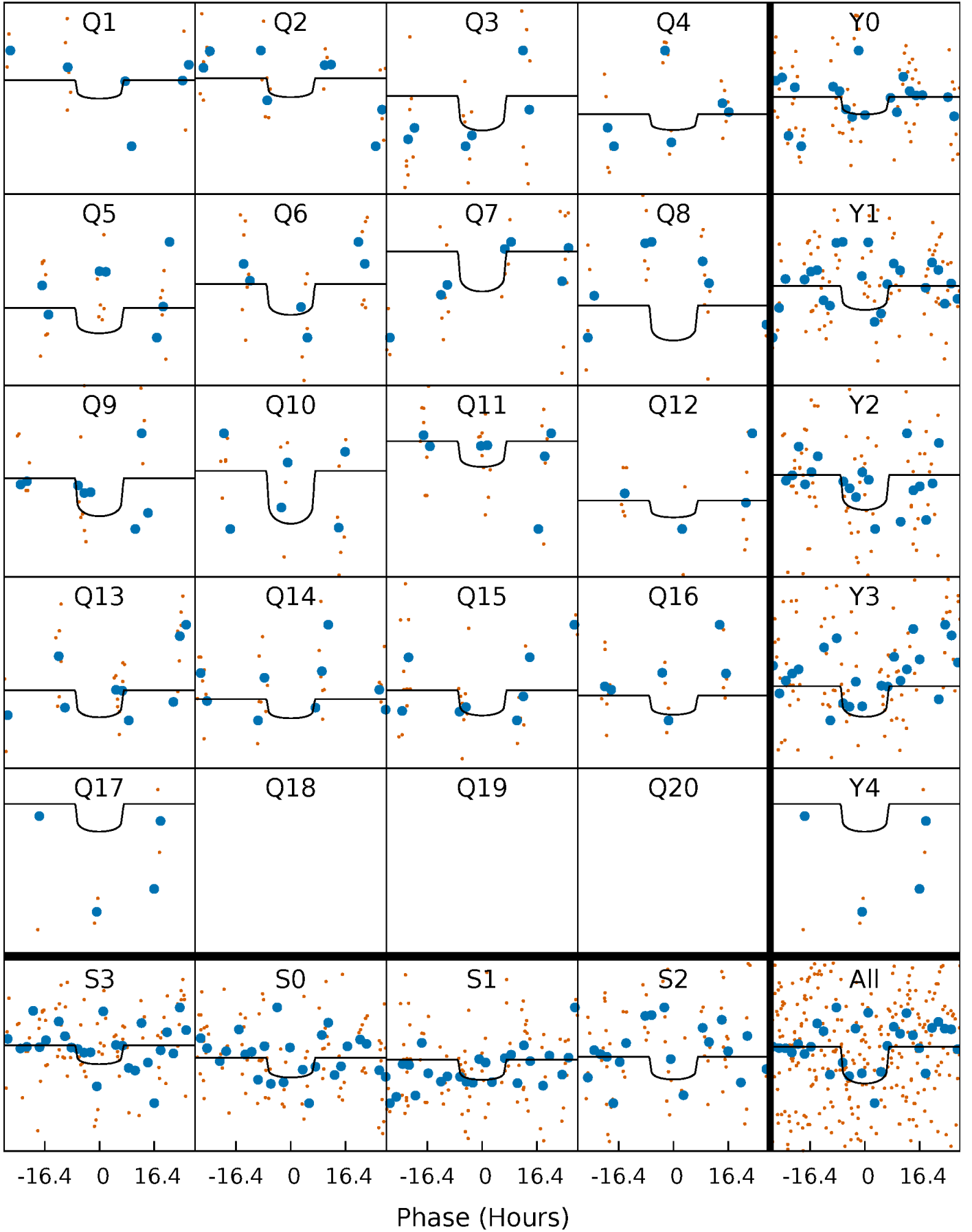
PDC Quarter-Phased Transit Curves

TCE 008490255-03 P= 9.617122 Days $T_0=134.919349$ (BKJD)



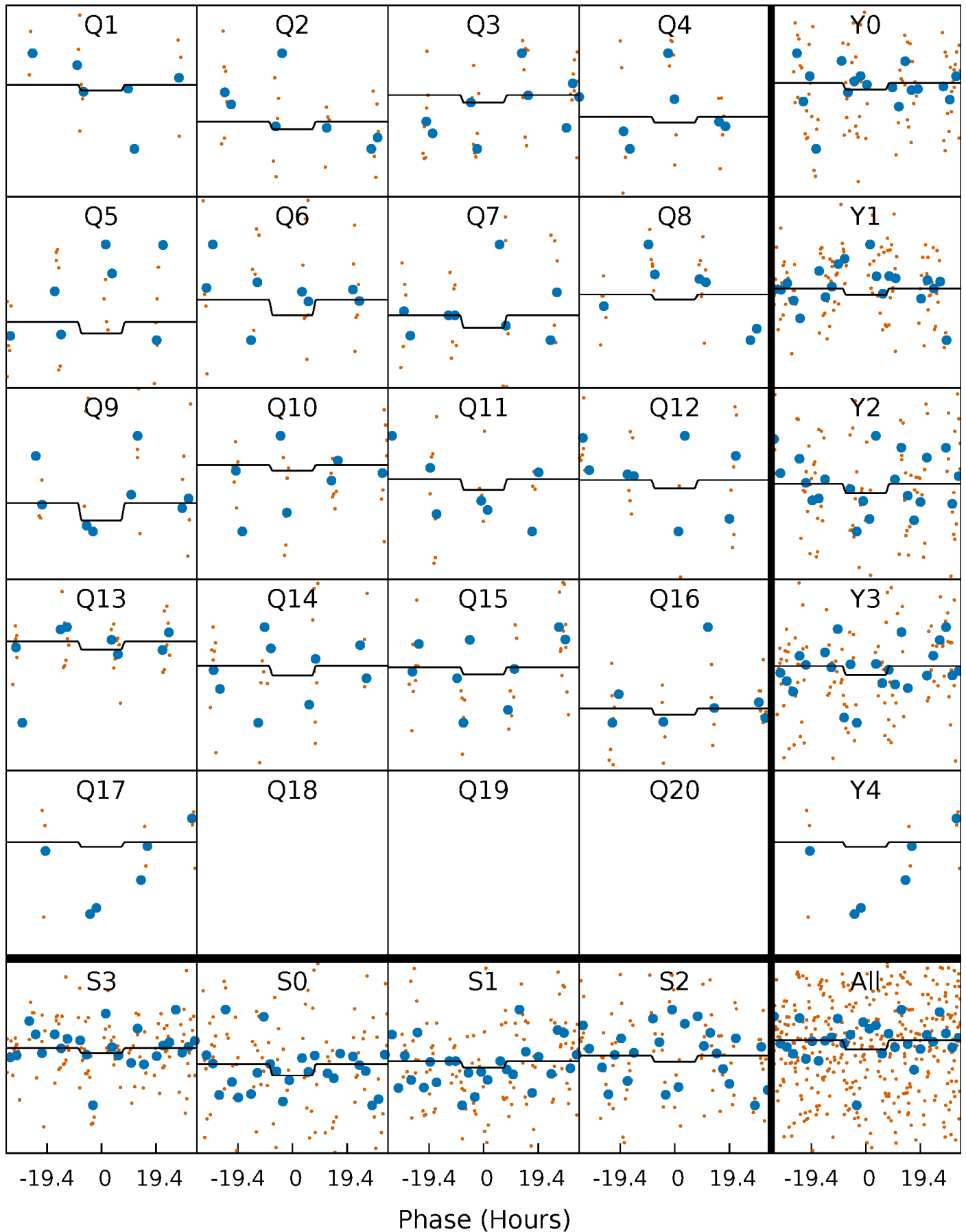
DV Quarter-Phased Transit Curves

TCE 008490255-03 P= 9.617122 Days $T_0=134.919349$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

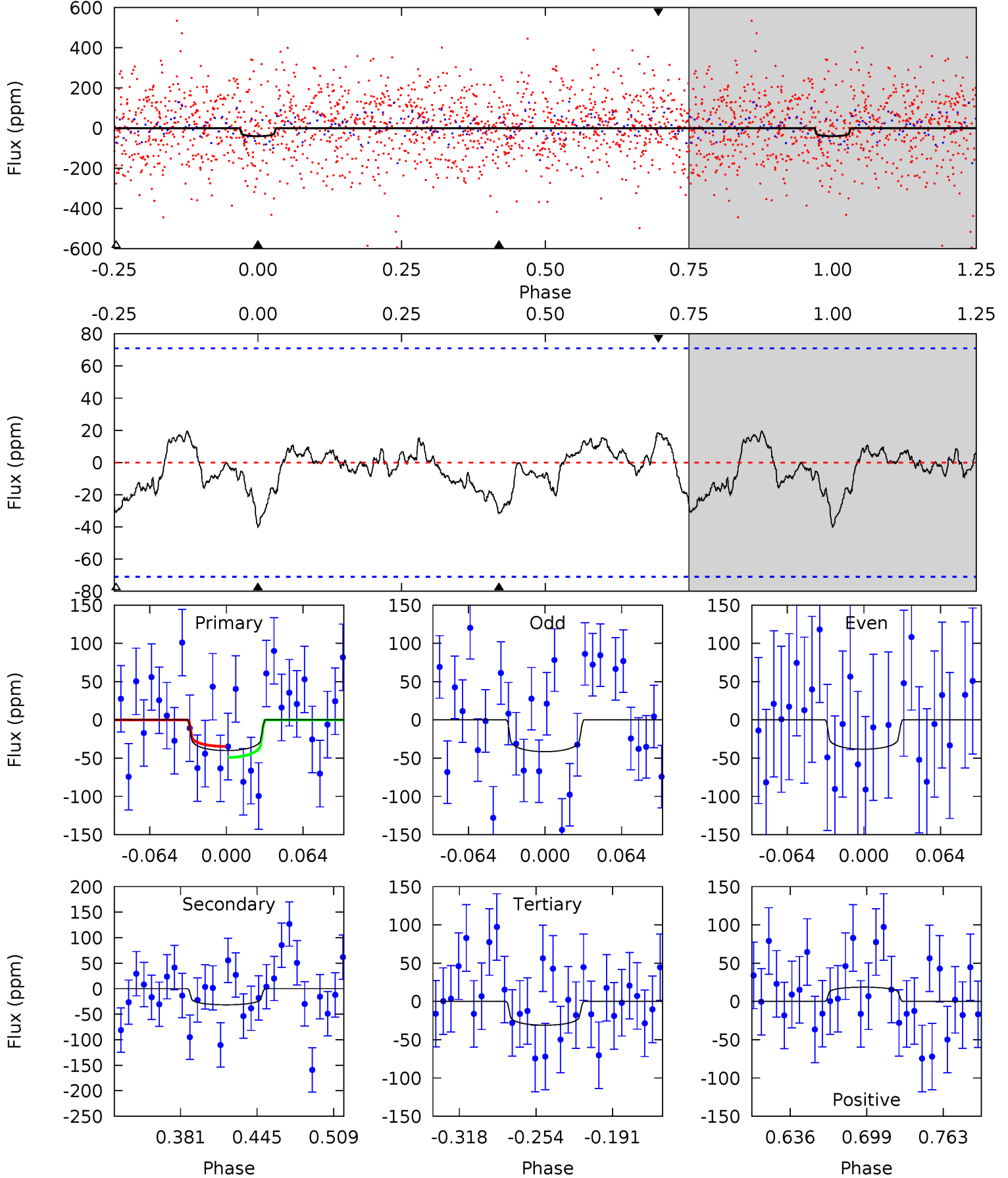
TCE 008490255-03 P= 9.618259 Days $T_0=134.835696$ (BKJD)



DV Model-Shift Uniqueness Test

008490255-03, P = 9.617122 Days, E = 125.302227 Days

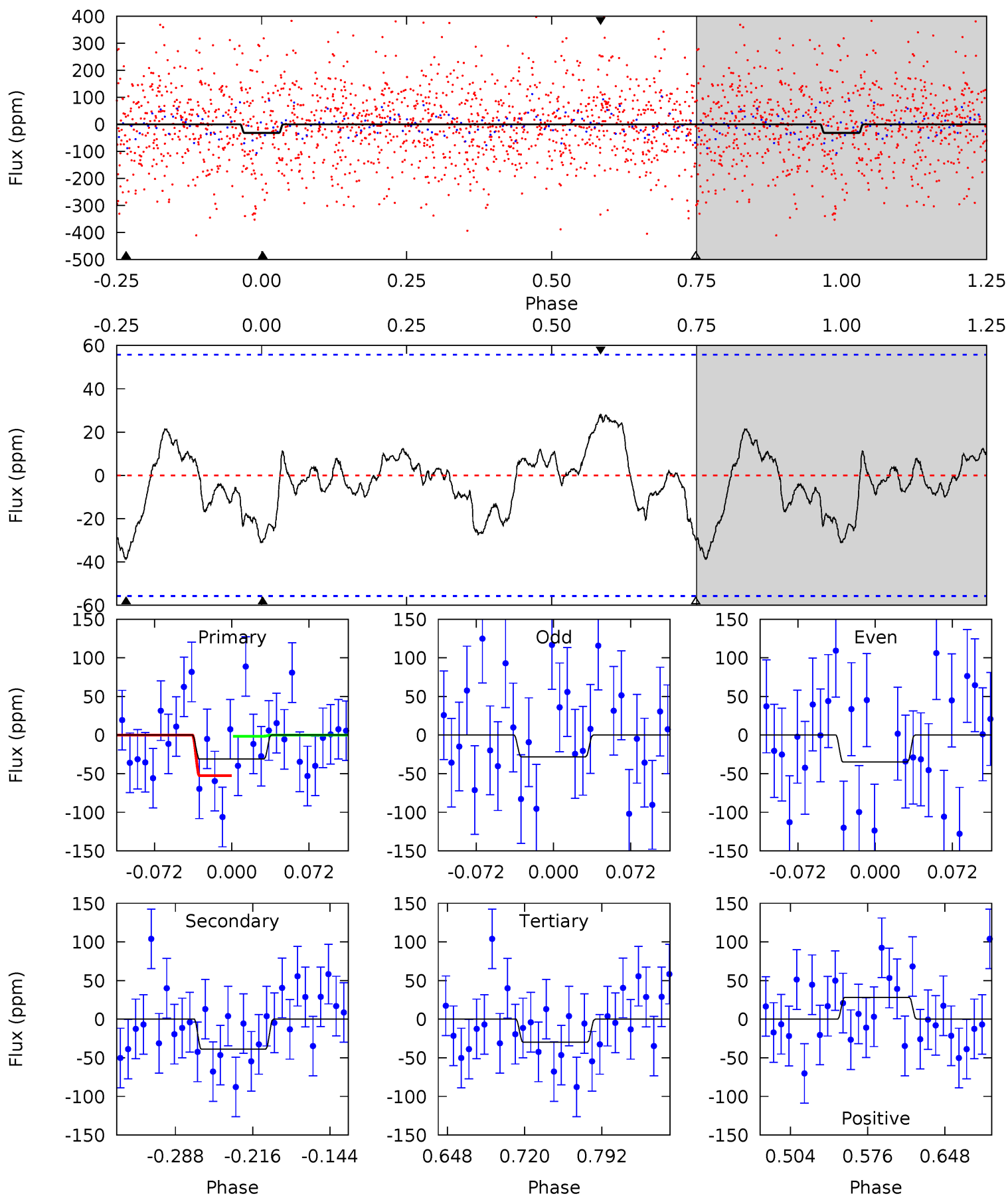
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.63	2.08	2.03	1.23	4.66	1.86	0.71	0.60	1.40	0.04	0.85	0.11	0.56	0.33	0.47



Alt Model-Shift Uniqueness Test

008490255-03, P = 9.618259 Days, E = 125.217437 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.58	3.21	2.47	2.34	4.63	1.80	1.02	0.11	0.24	0.75	0.87	0.27	-1.27	0.42	2.13



Stellar Parameters For KIC 008490255

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6706^{+166}_{-216}	$3.760^{+0.292}_{-0.097}$	$0.020^{+0.250}_{-0.250}$	$2.746^{+0.508}_{-0.871}$	$1.581^{+0.239}_{-0.263}$	$0.108^{+0.196}_{-0.039}$
	+2%/-3%	+8%/-3%	+1250%/-1250%	+18%/-32%	+15%/-17%	+182%/-36%
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 008490255-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-32 ± 15	$2.65^{+1.90}_{-1.52}$	2093^{+128}_{-164}	5124^{+2867}_{-1111}	25^{+114}_{-18}
Alt.	-39 ± 12	$1.80^{+1.60}_{-1.23}$	2091^{+132}_{-182}	6529^{+8220}_{-1747}	70^{+670}_{-53}

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

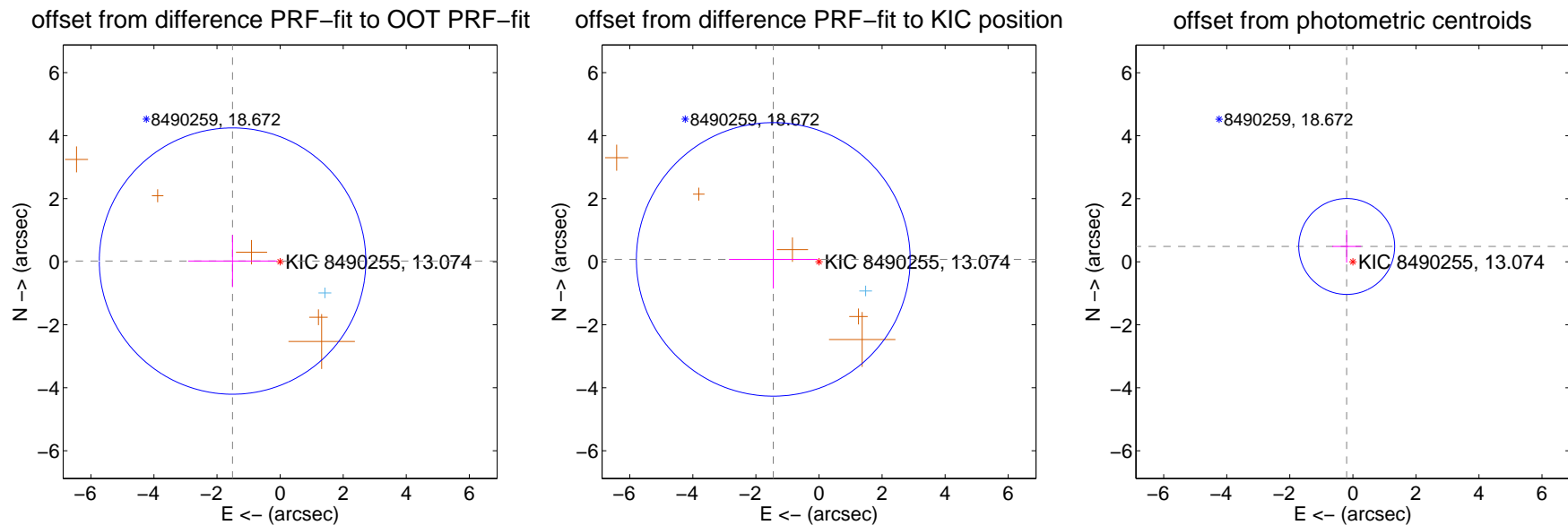
DV Centroid Data

Supplemental centroid analysis for 008490255-03. Kepler magnitude: 13.07. Transit SNR 5.06

There are 1 quarters with good PRF difference image offsets

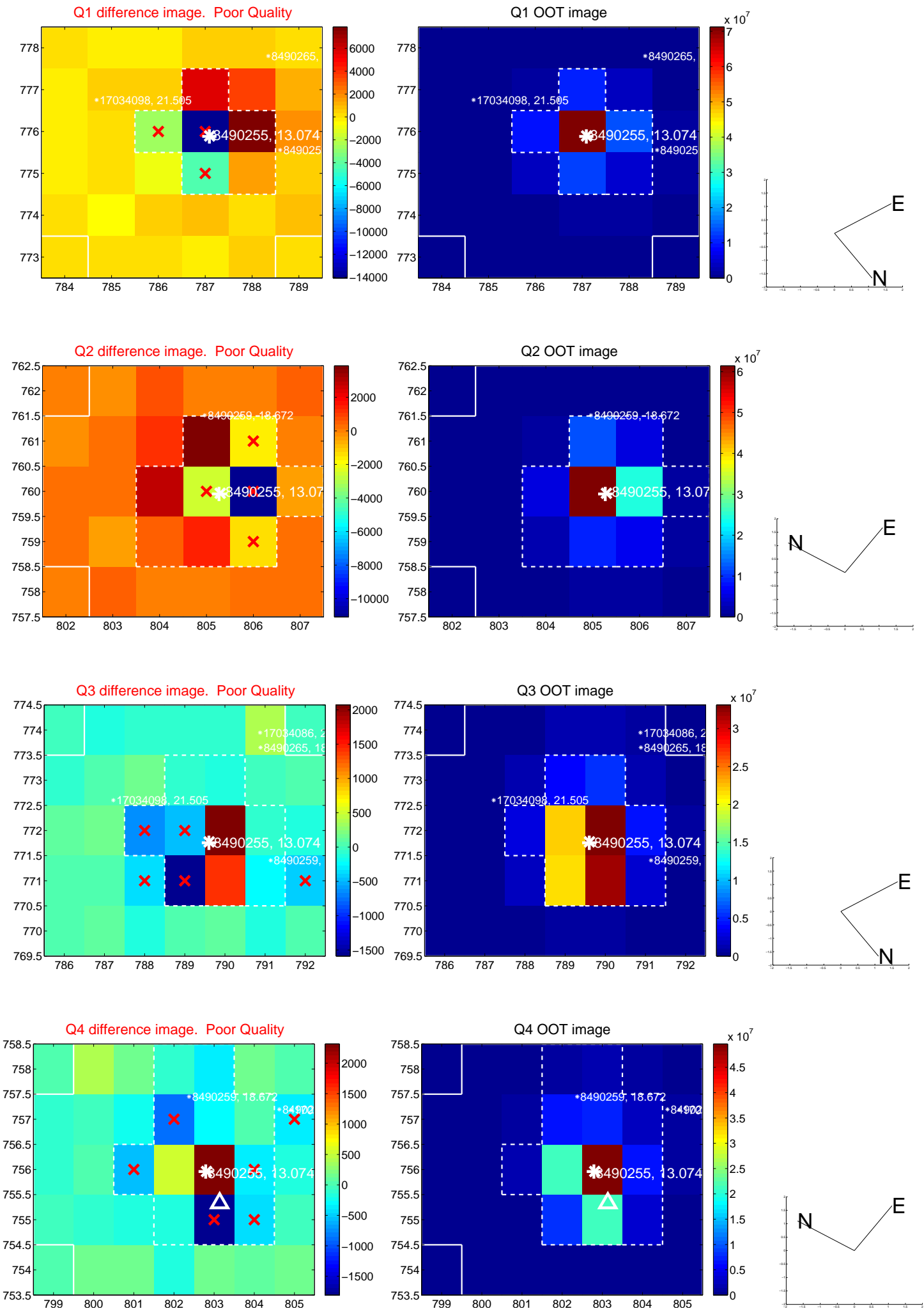
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.508 ± 1.408	1.07	1.508 ± 1.409	0.020 ± 0.826
PRF-fit source offset from KIC position	1.451 ± 1.447	1.00	1.449 ± 1.404	0.074 ± 0.926
photometric centroid source offset	0.52 ± 0.51	1.03	0.20 ± 0.46	0.49 ± 0.51

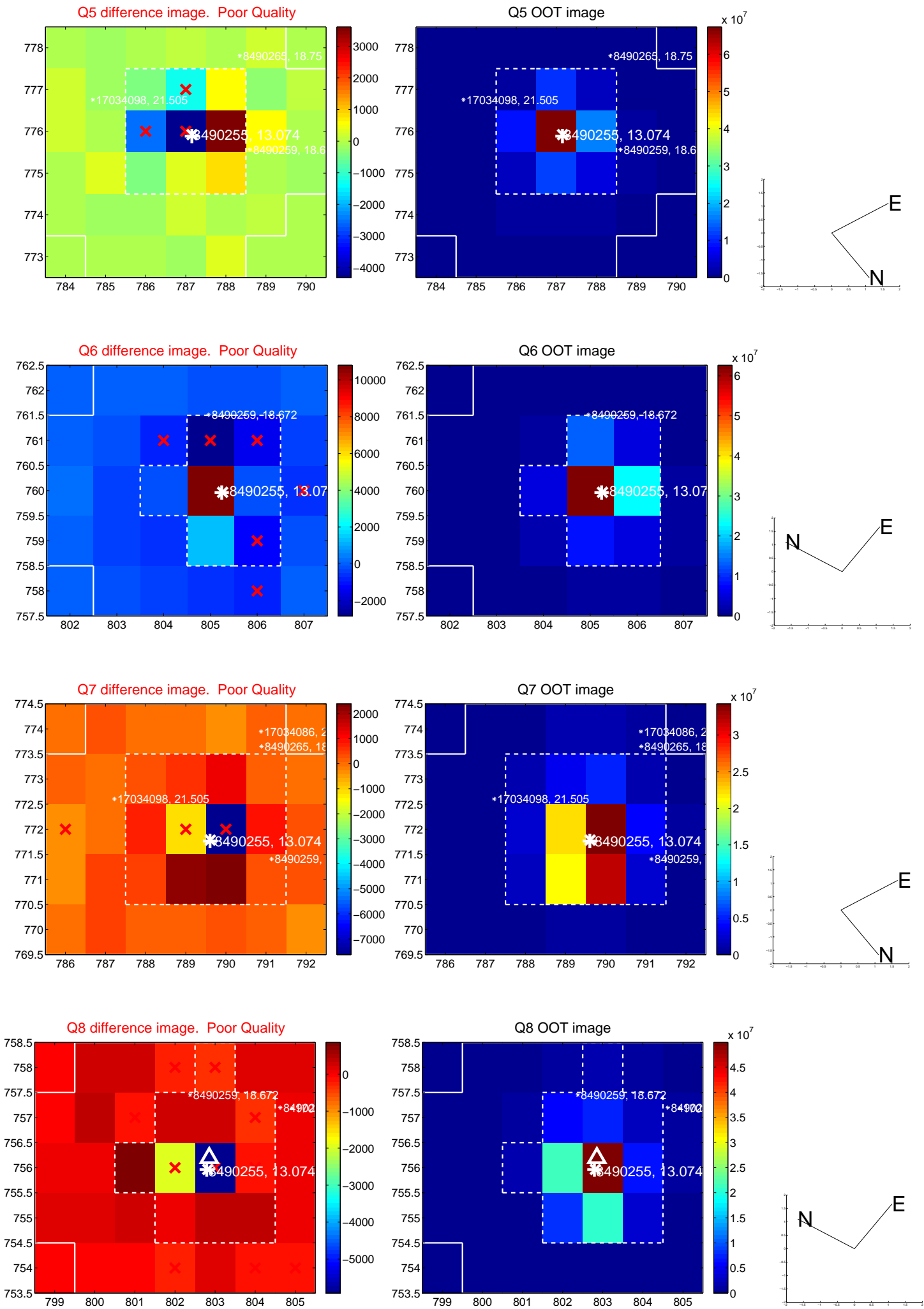


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

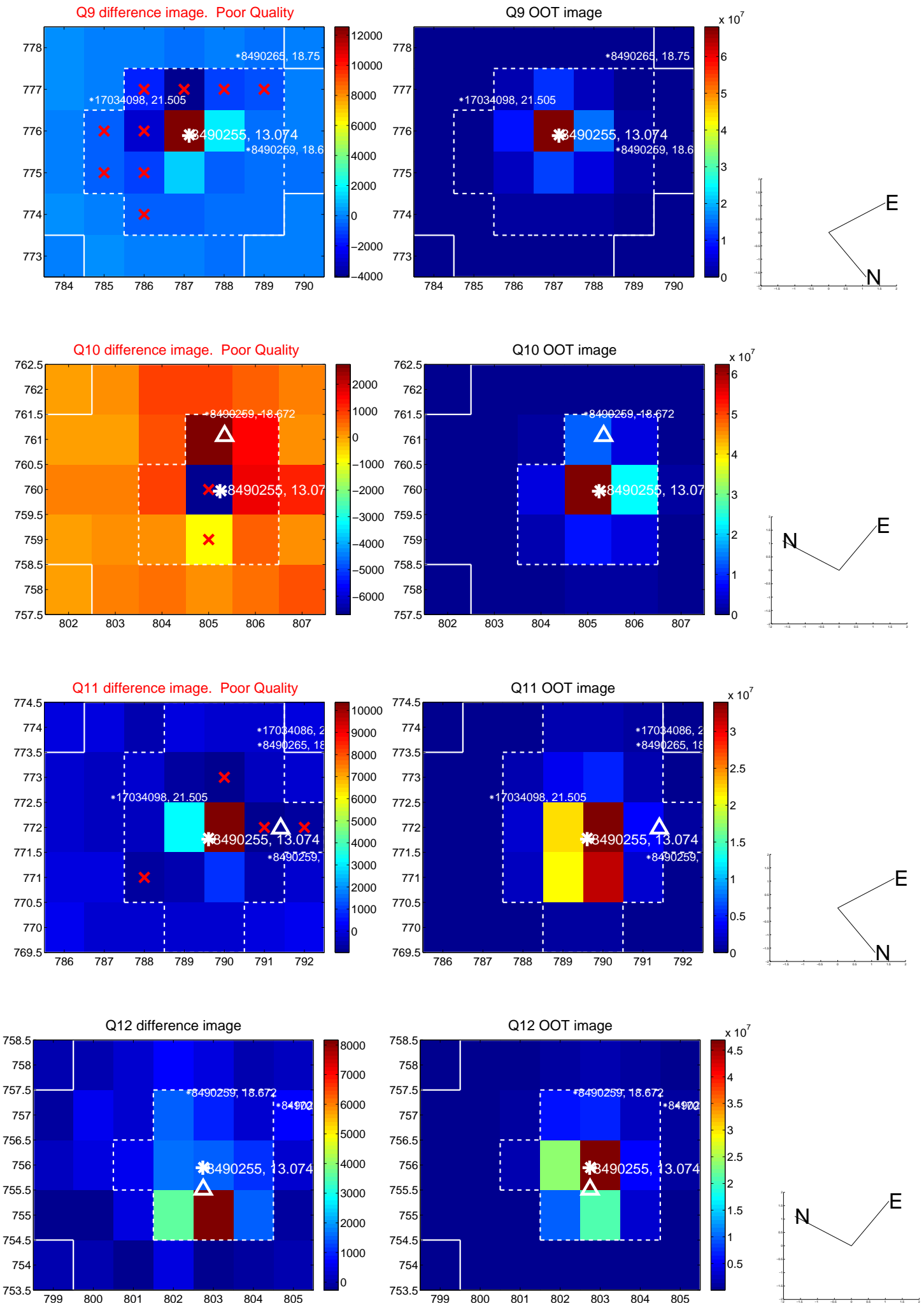
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



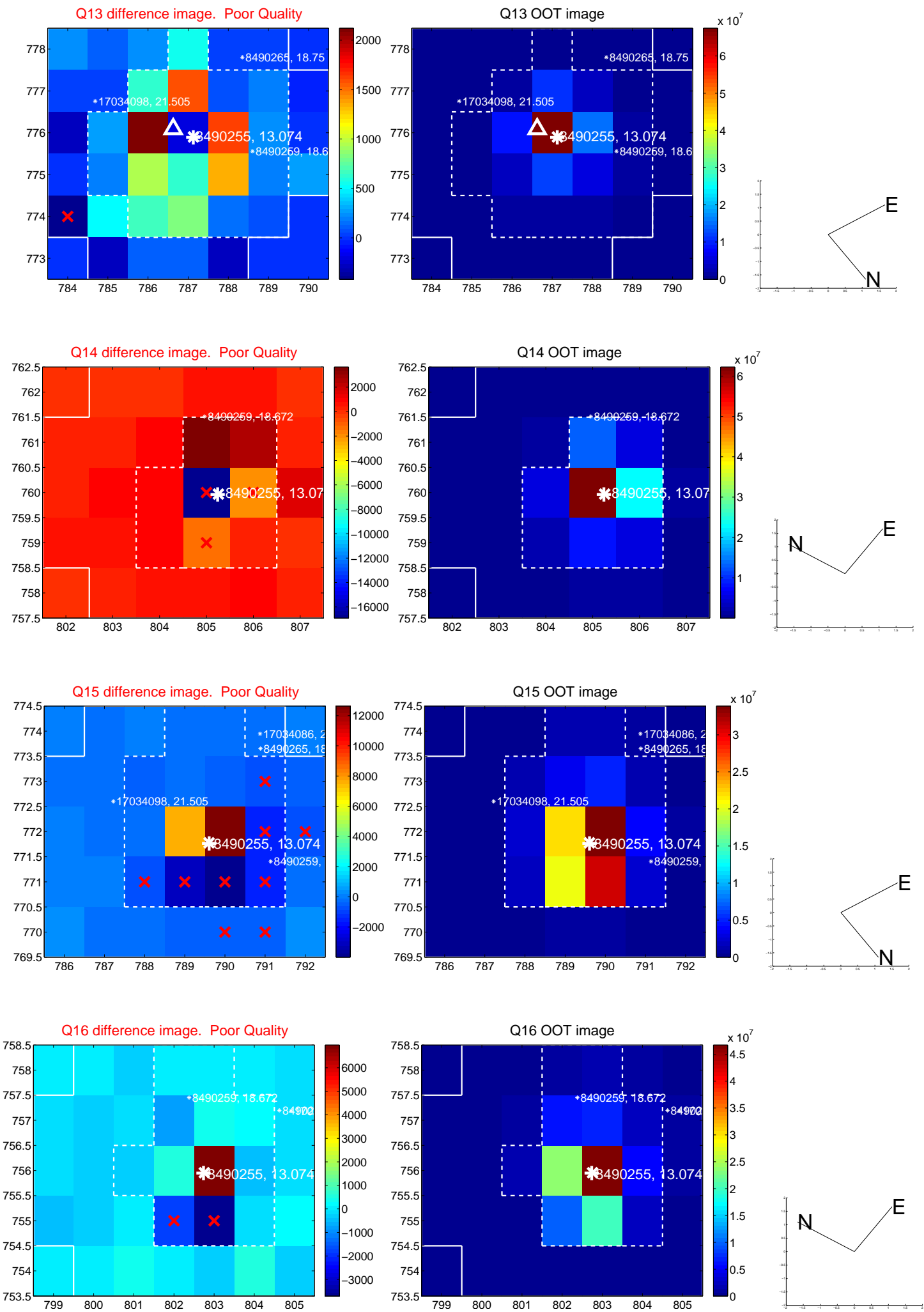
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



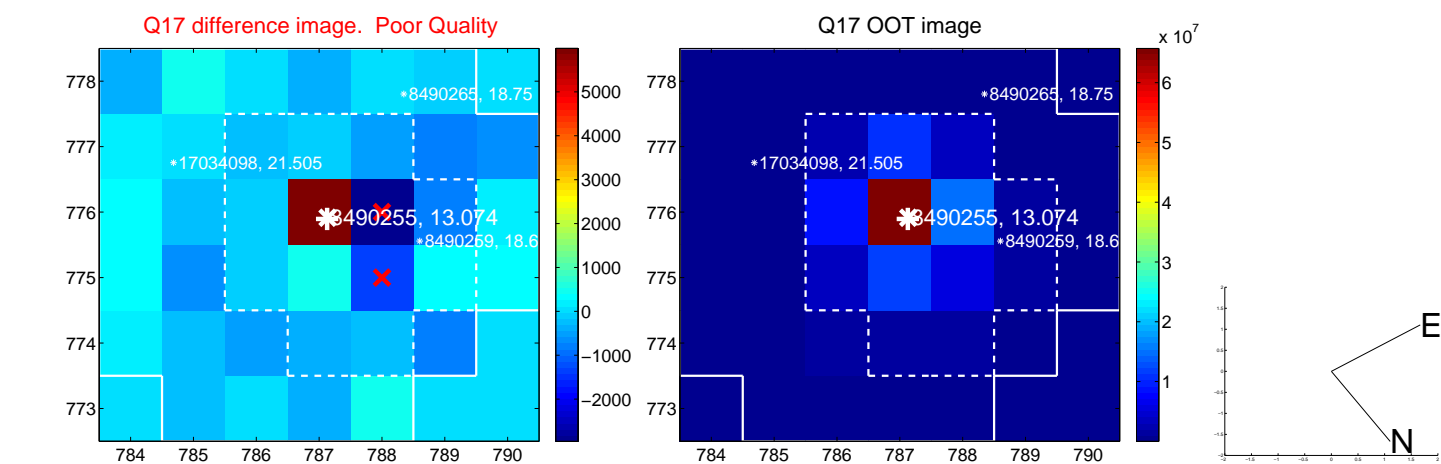
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



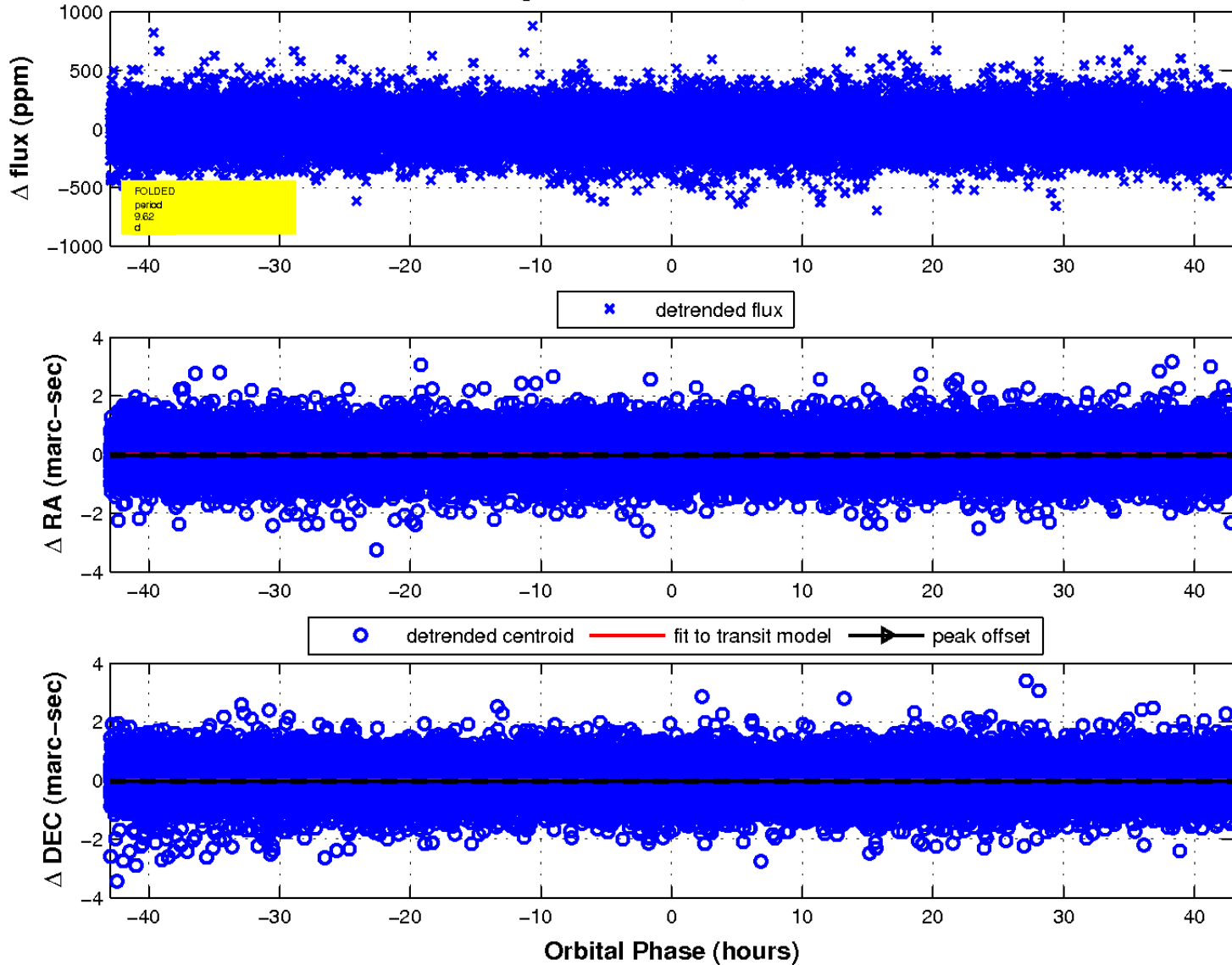
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

