

KIC 003748250

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})
003748250-01	OBS	No	1.307329	132.200737	103.9	2.781	9.3	8.0	1.83	7622	2.16	13146.18
003748250-02	OBS	No	1.307327	131.841713	140.9	3.045	10.6	10.7	1.83	7622	2.51	13146.21
003748250-03	OBS	No	0.743780	131.940215	138.0	6.876	7.4	11.4	1.83	7622	2.18	27886.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003748250-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003748250-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
003748250-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

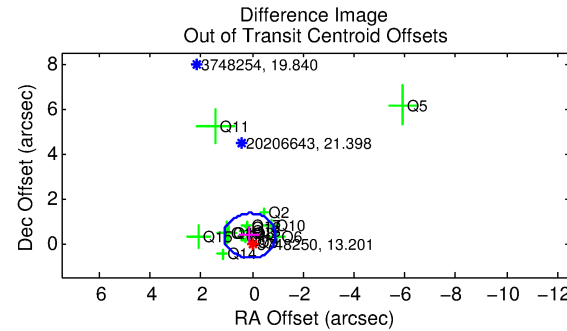
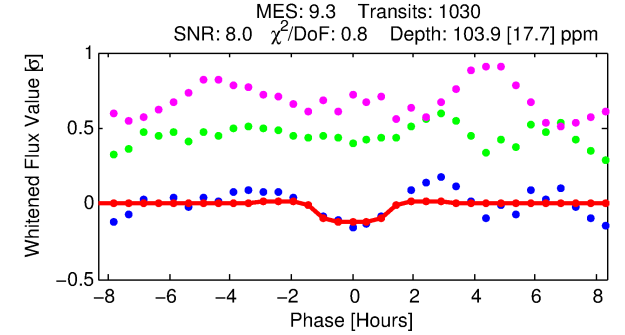
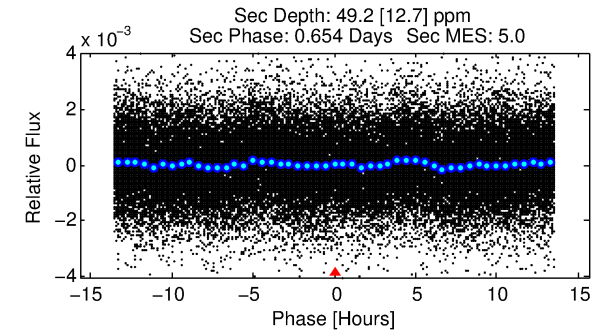
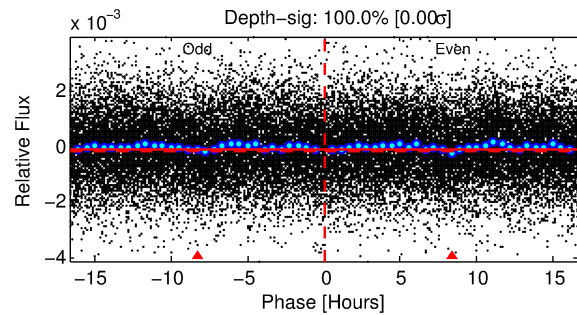
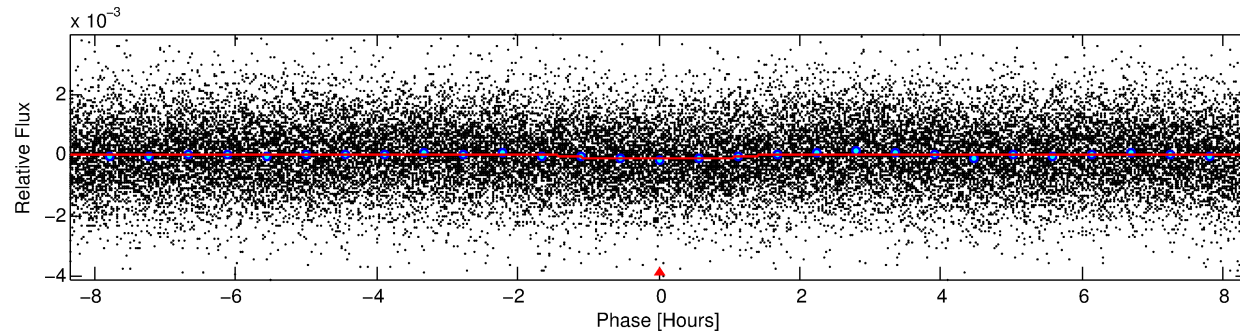
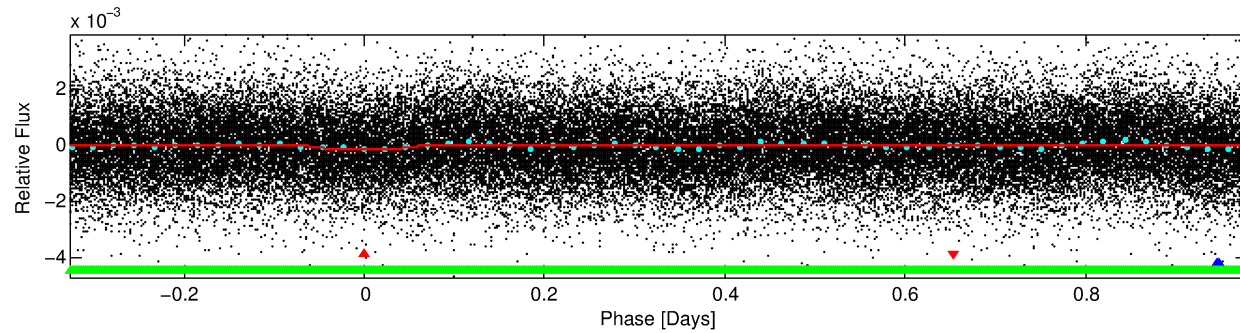
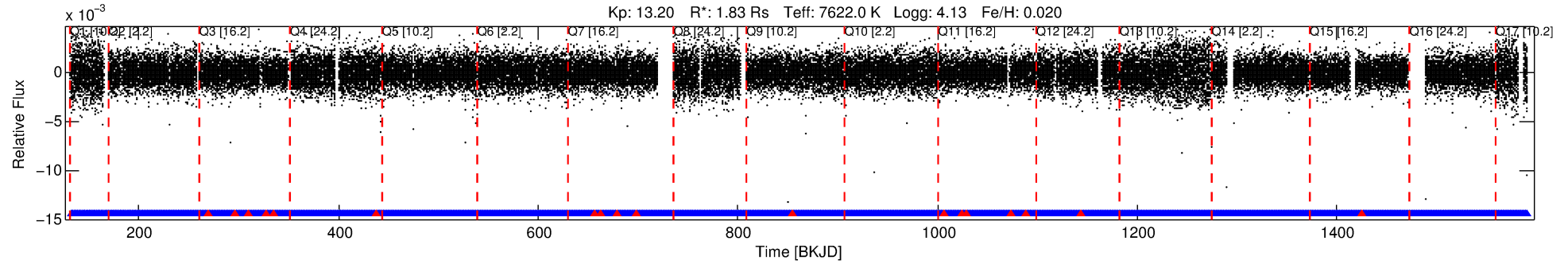
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003748250-01

No Significant Match Found

DV One-Page Summary

KIC: 3748250 Candidate: 1 of 3 Period: 1.307 d



DV Fit Results:

Period = 1.30733 [0.00002] d
Epoch = 132.2007 [0.0051] BKJD
Rp/R* = 0.0108 [0.0084]
a/R* = 1.90 [7.00]
b = 0.90 [1.09]
Seff = 13146.18 [4930.96]
Teff = 2730 [256] K
Rp = 2.16 [1.78] Re
a = 0.0277 [0.0065] AU
Ag = 4.48 [7.19] [0.48 σ]
Teffp = 6142 [2421] K [1.40 σ]

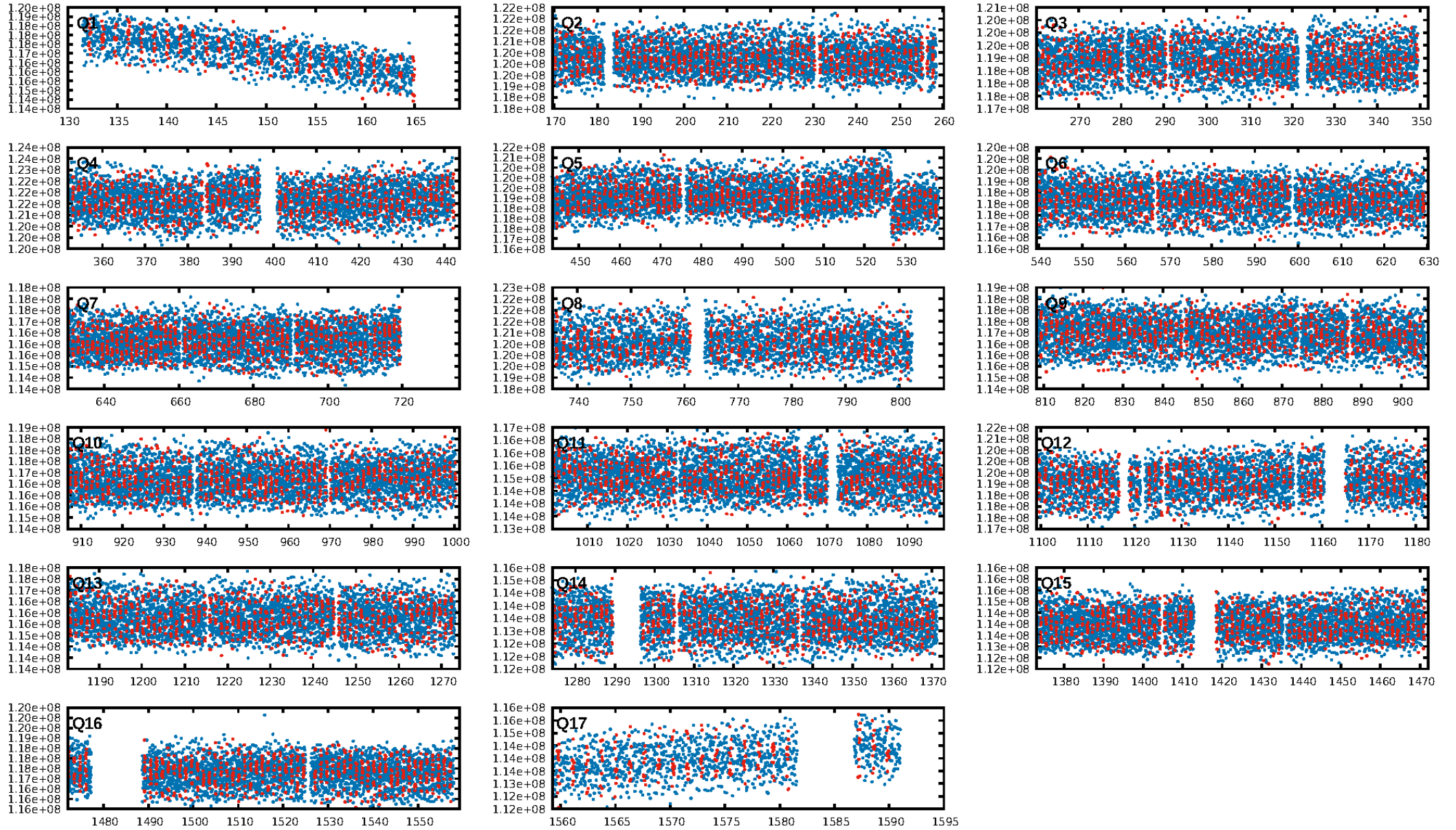
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGoF-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [966/984]
GhostDiagnostic-chr: 1.129
Centroid-sig: N/A
Centroid-so: 0.741 arcsec [2.39 σ]
OotOffset-rm: 0.348 arcsec [1.04 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.257 arcsec [0.84 σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.71 [12/17]
DiffImageOverlap-fno: 0.00 [0/17]

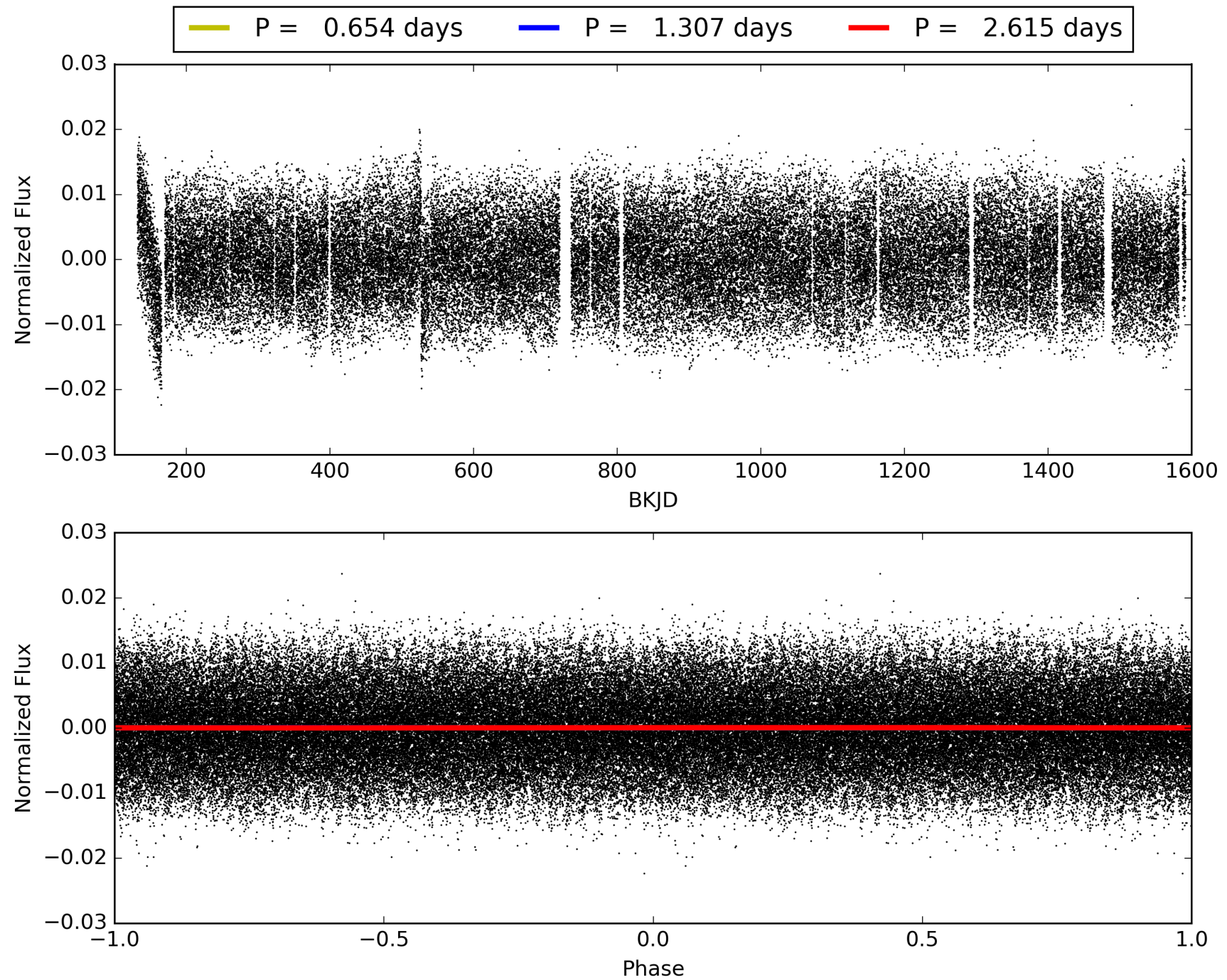
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:04:04 Z

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

TCE 003748250-01, PDC Light Curves

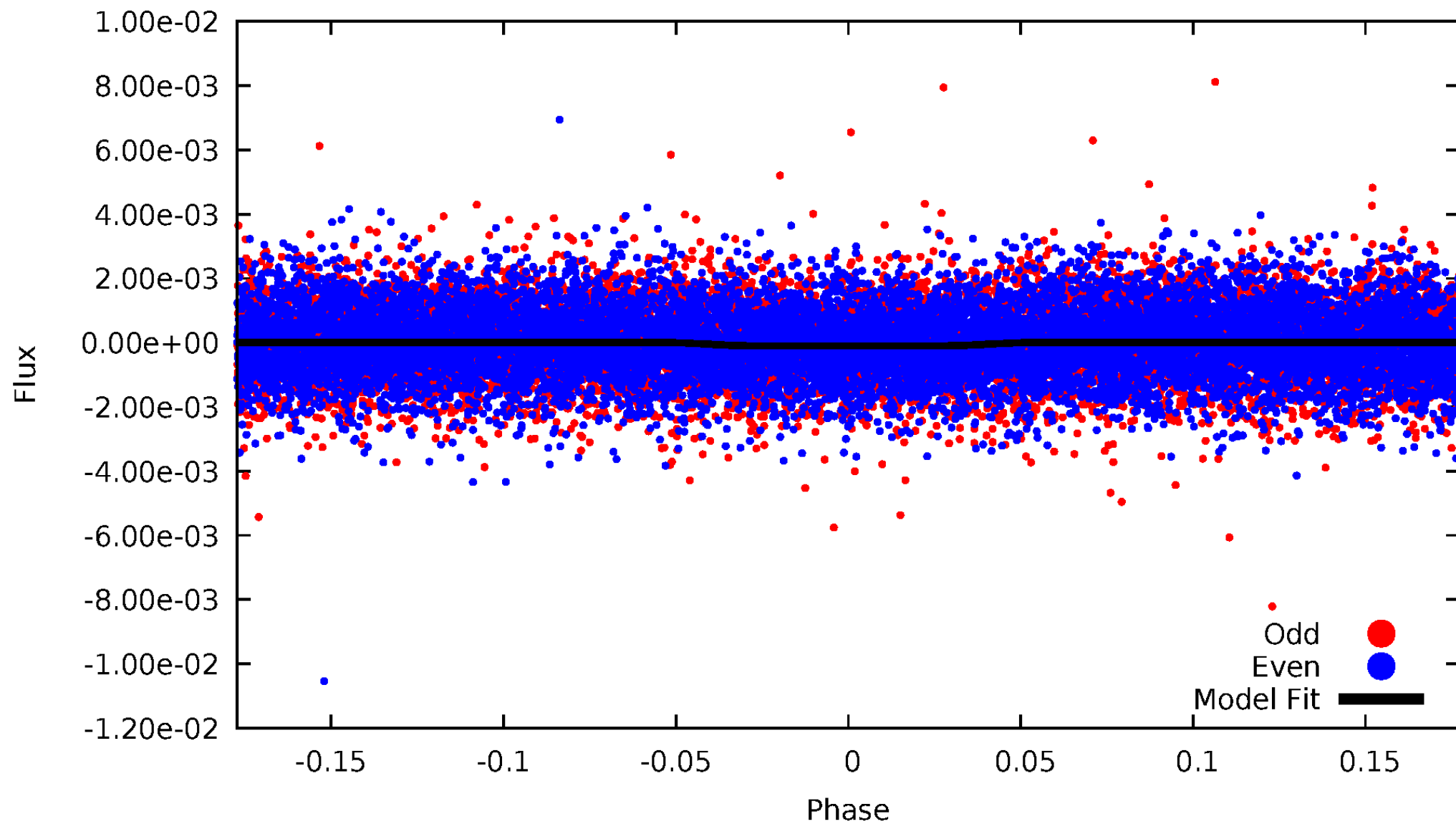


TCE 003748250-01



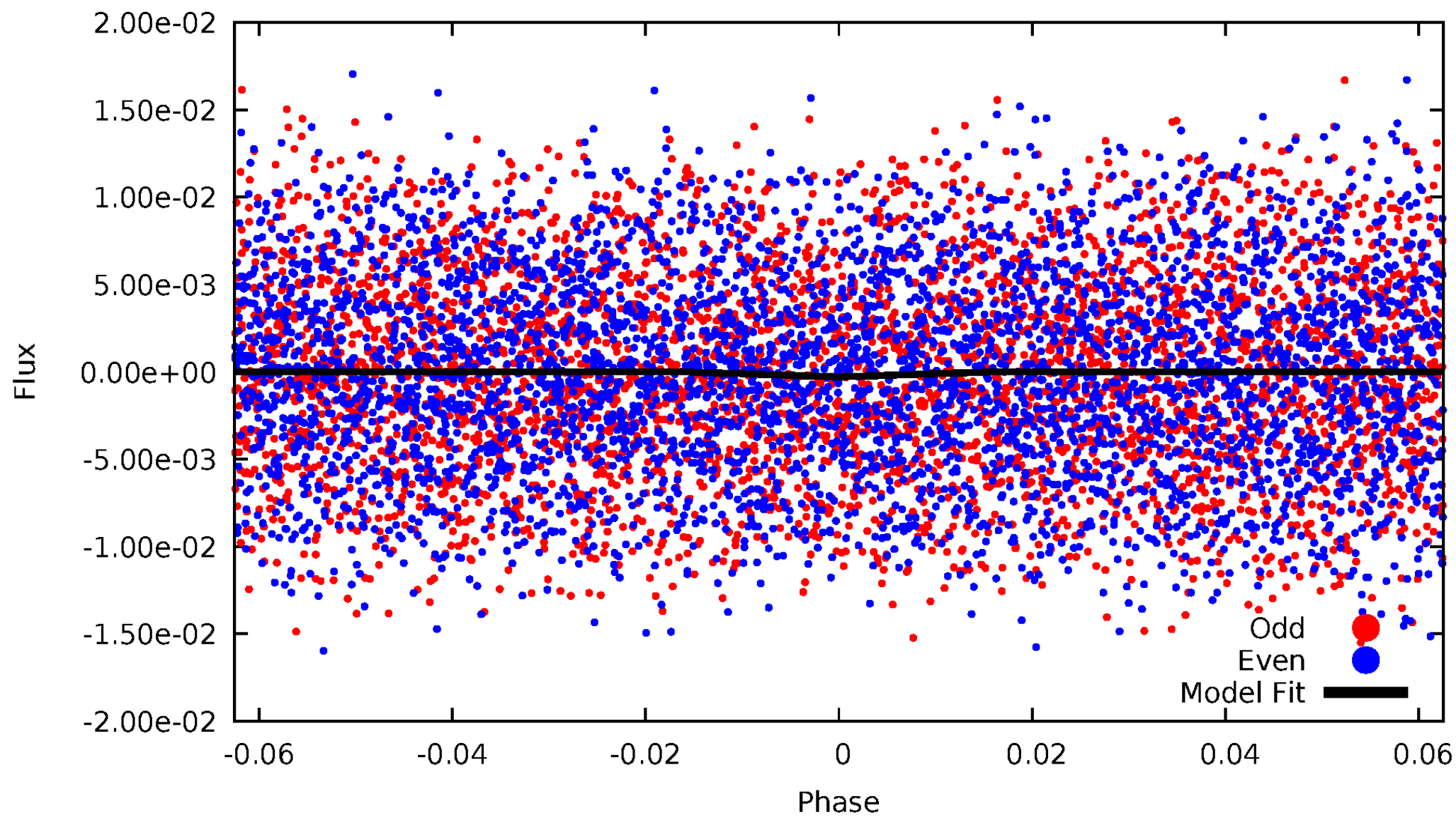
DV Odd/Even

TCE 003748250-01

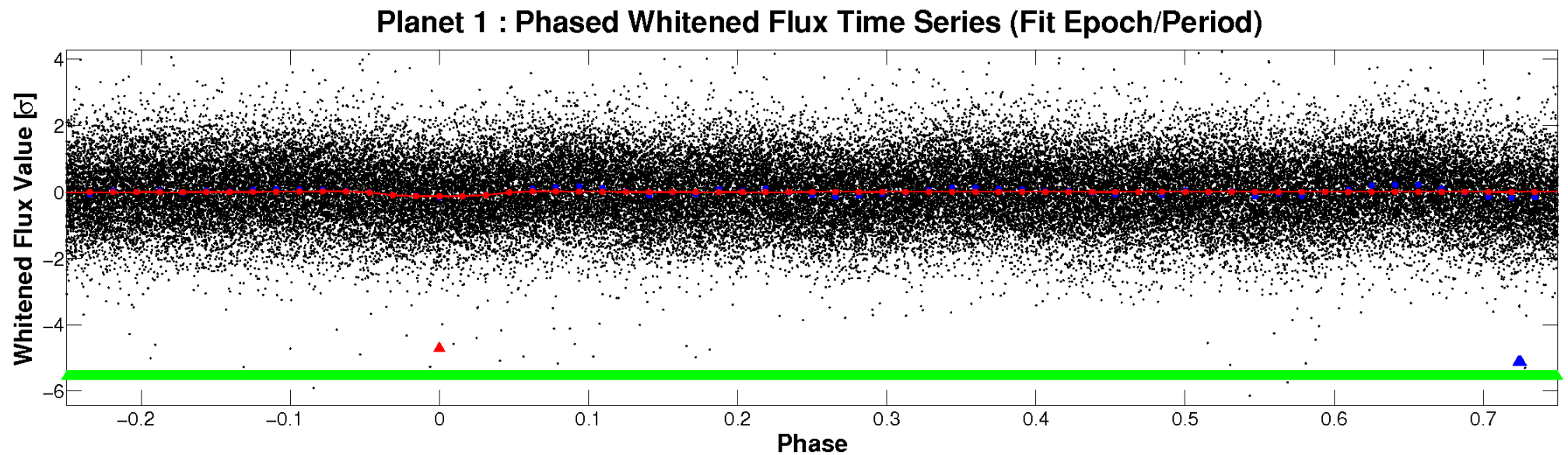
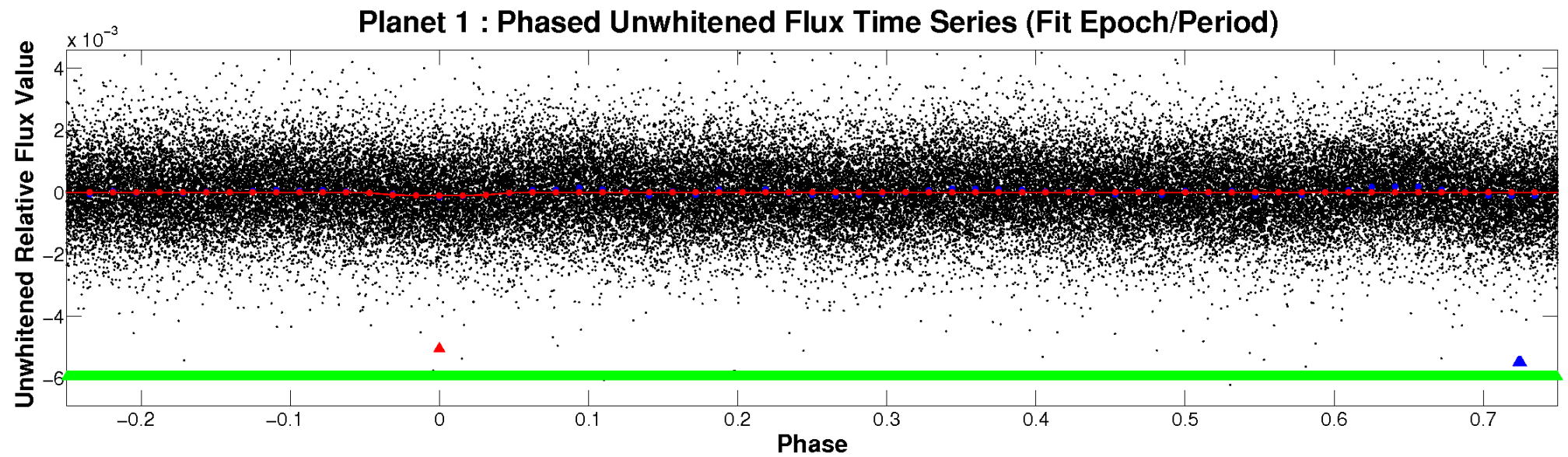


ALT Odd/Even

TCE 003748250-01

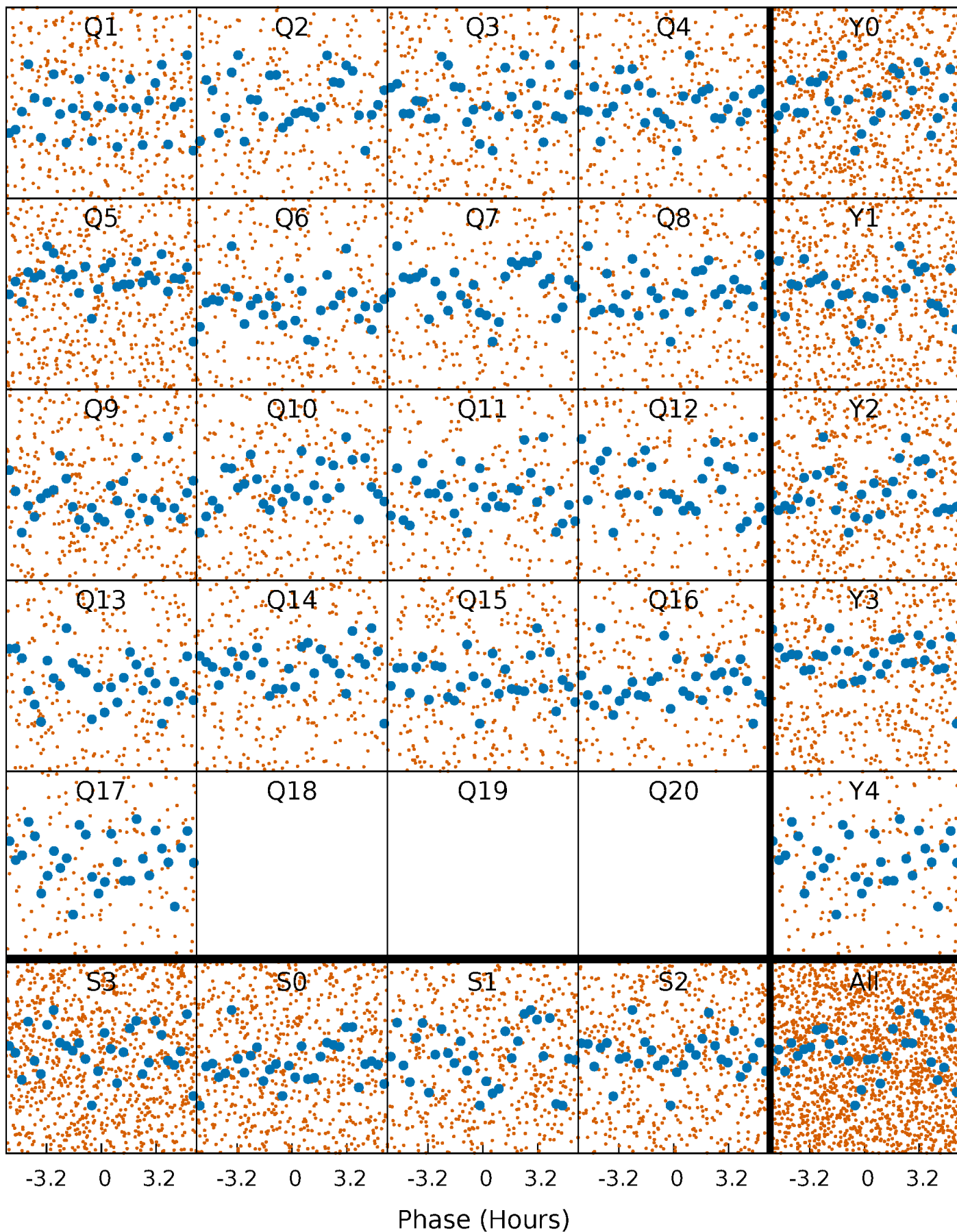


Non-Whitened Vs. Whitened Light Curve



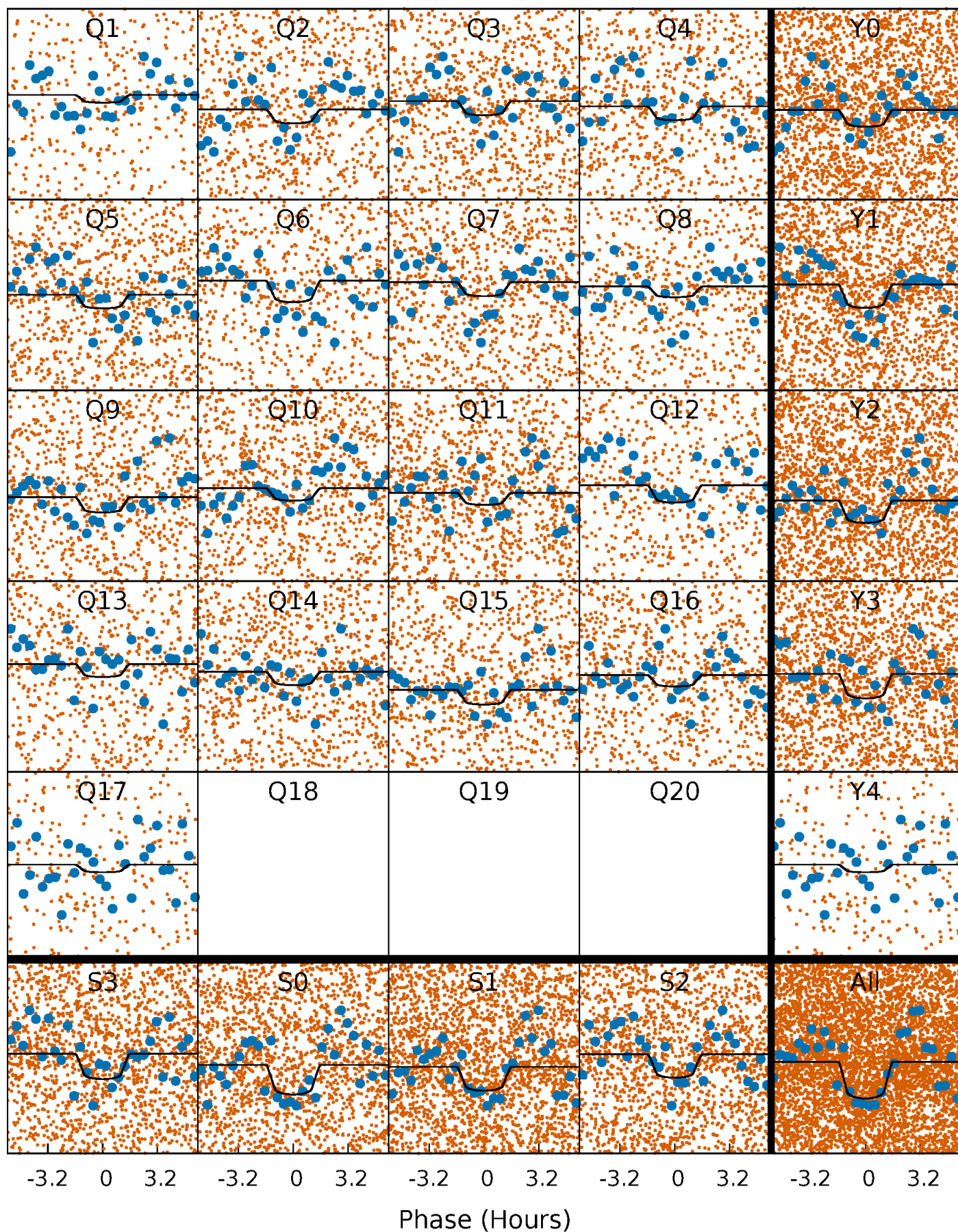
PDC Quarter-Phased Transit Curves

TCE 003748250-01 P= 1.307329 Days $T_0=132.200737$ (BKJD)



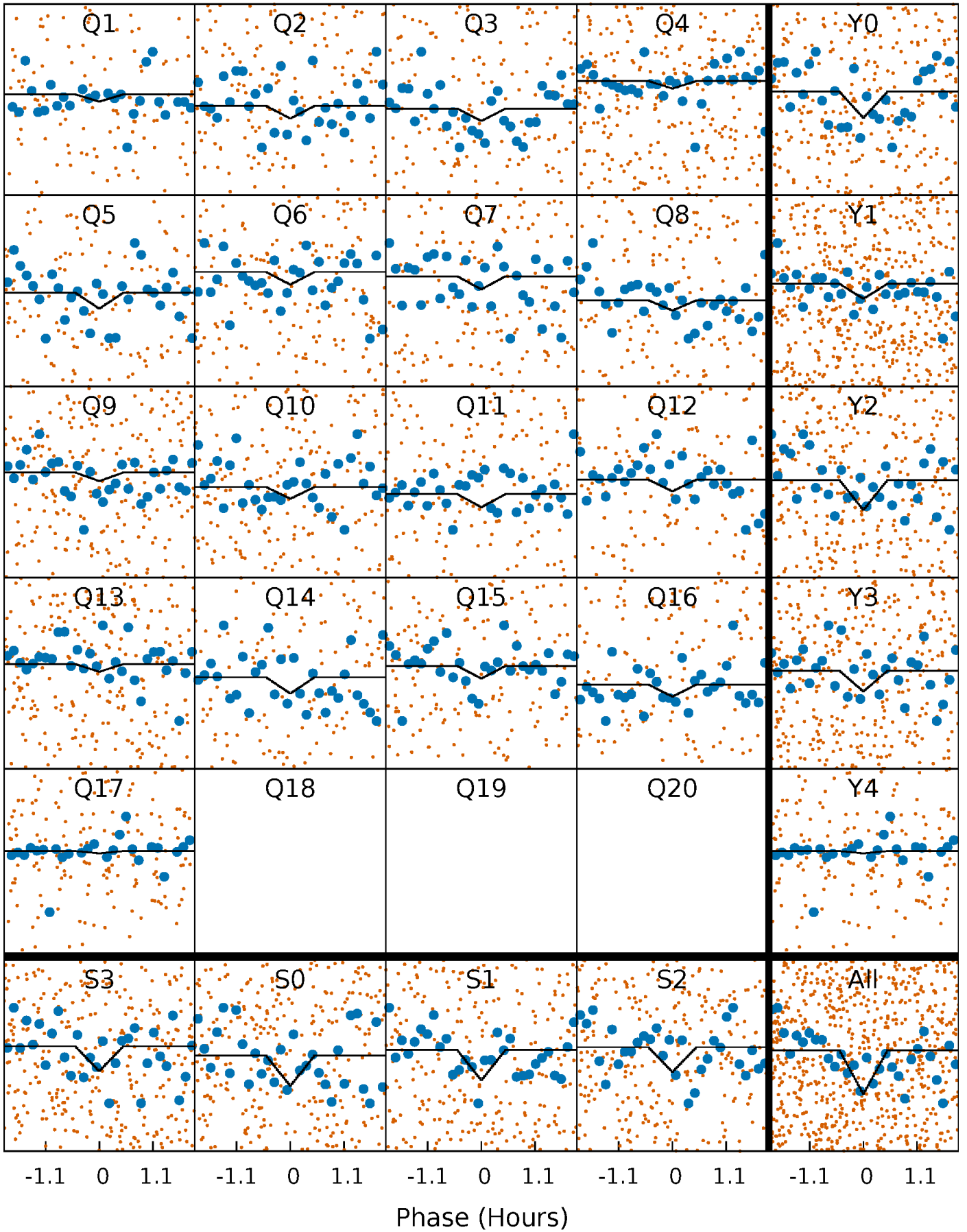
DV Quarter-Phased Transit Curves

TCE 003748250-01 P= 1.307329 Days $T_0=132.200737$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

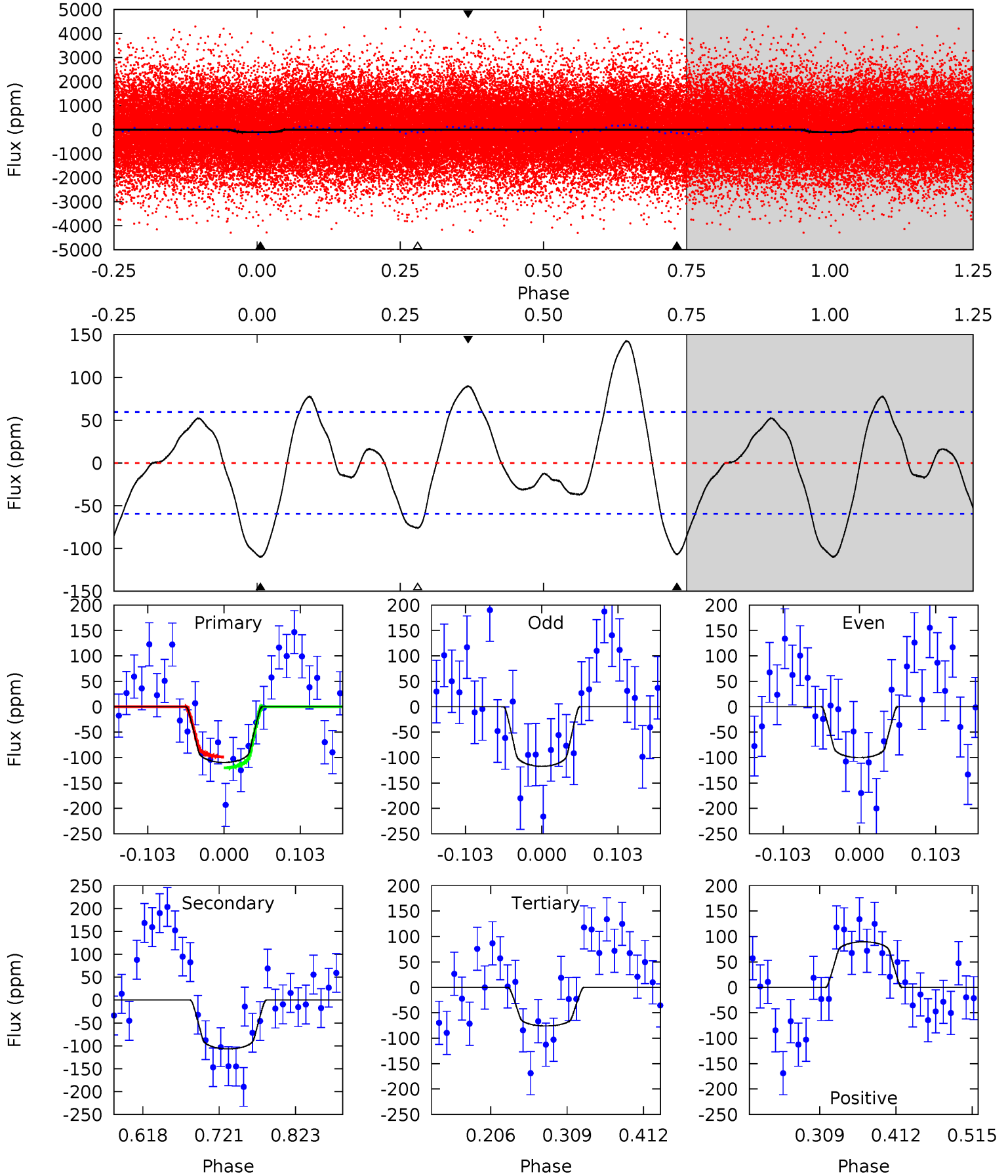
TCE 003748250-01 P= 1.307262 Days $T_0=132.202492$ (BKJD)



DV Model-Shift Uniqueness Test

003748250-01, P = 1.307329 Days, E = 130.893408 Days

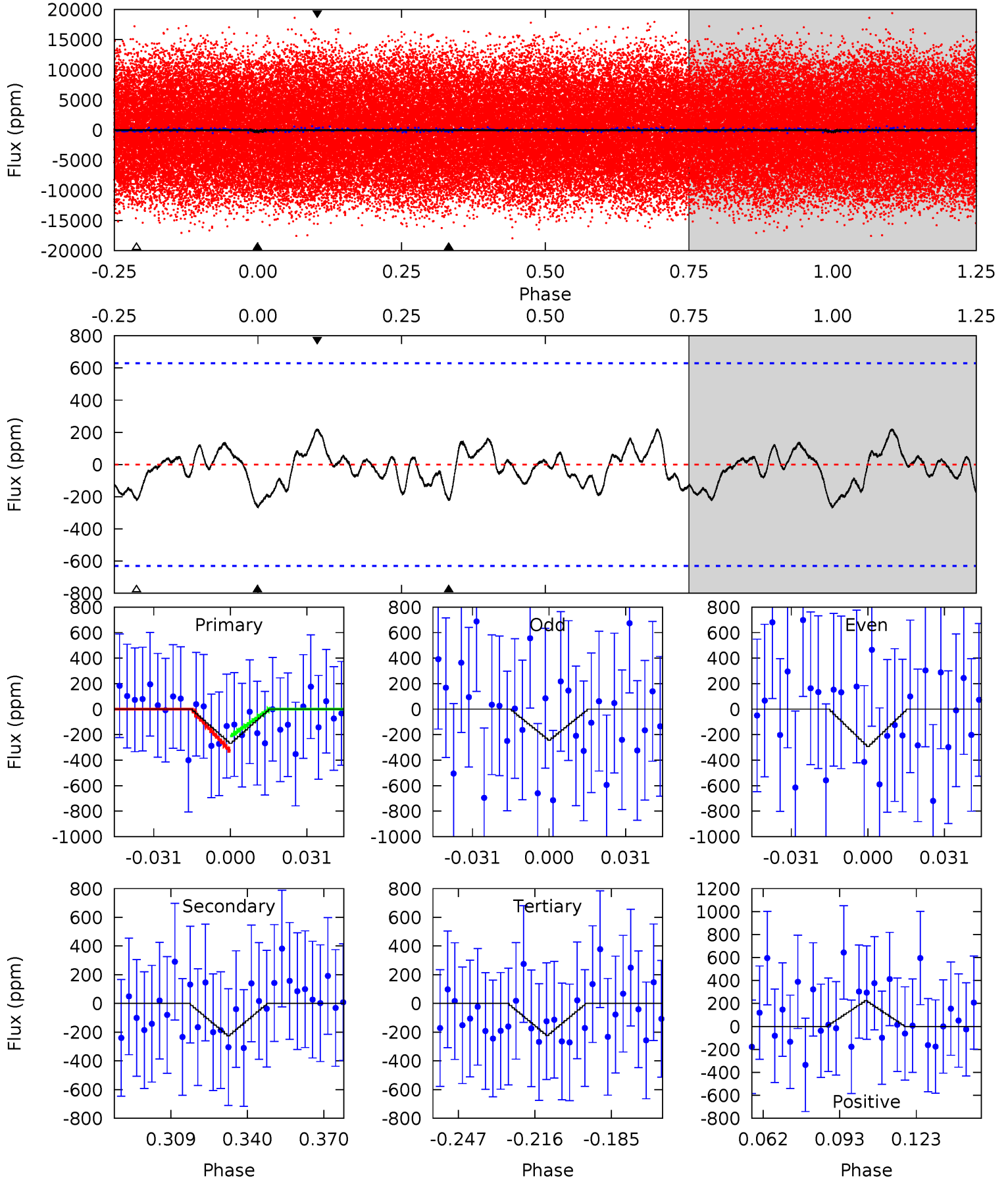
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.43	8.20	5.83	6.88	4.56	1.63	3.40	2.60	1.55	2.37	1.32	0.65	0.90	0.56	0.82



Alt Model-Shift Uniqueness Test

003748250-01, P = 1.307262 Days, E = 130.895230 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.05	1.72	1.70	1.71	4.81	2.16	0.72	0.34	0.34	0.02	0.01	0.19	1.54	0.45	0.46



Stellar Parameters For KIC 003748250

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7622^{+214}_{-322}	$4.135^{+0.105}_{-0.180}$	$0.020^{+0.150}_{-0.350}$	$1.829^{+0.519}_{-0.346}$	$1.662^{+0.204}_{-0.249}$	$0.383^{+0.218}_{-0.188}$
	+3%/-4%	+3%/-4%	+750%/-1750%	+28%/-19%	+12%/-15%	+57%/-49%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003748250-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-107 ± 13	$2.45^{+1.77}_{-1.41}$	3848^{+270}_{-229}	6868^{+5862}_{-1662}	$7.414^{+35.722}_{-4.901}$
Alt.	-225 ± 131	$3.47^{+1.75}_{-1.61}$	3848^{+276}_{-250}	6721^{+3643}_{-1790}	$6.895^{+20.283}_{-4.968}$

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 $A_{obs} \gg 1.0$

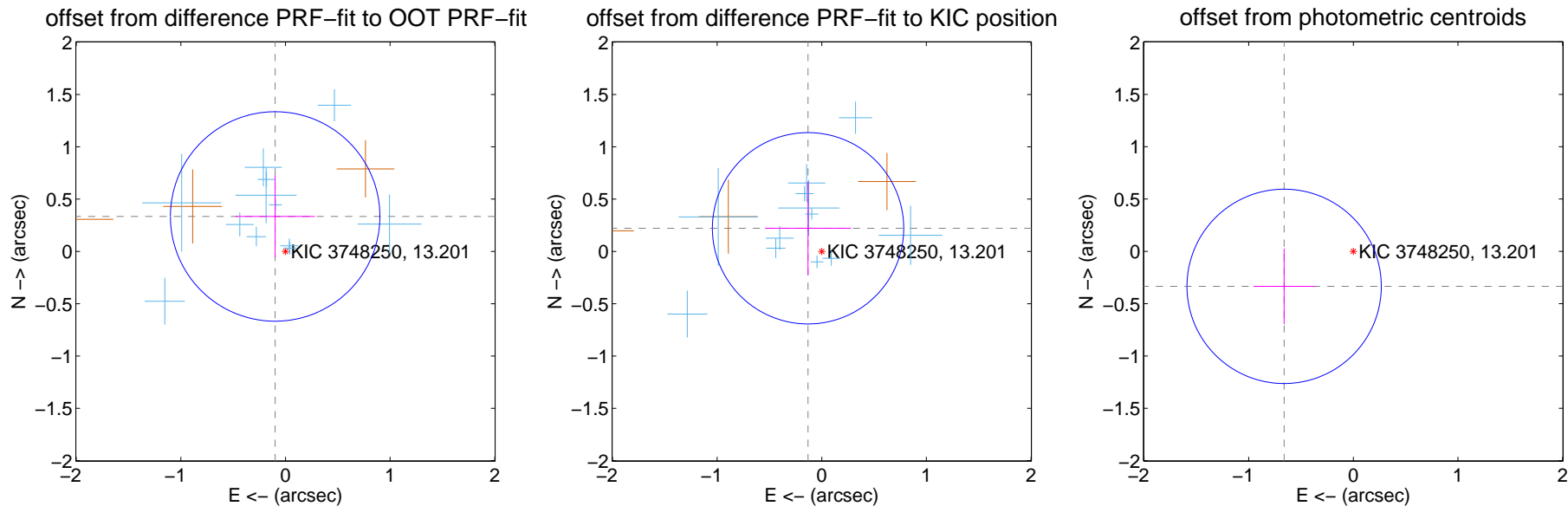
DV Centroid Data

Supplemental centroid analysis for 003748250-01. Kepler magnitude: 13.20. Transit SNR 7.95

There are 12 quarters with good PRF difference image offsets

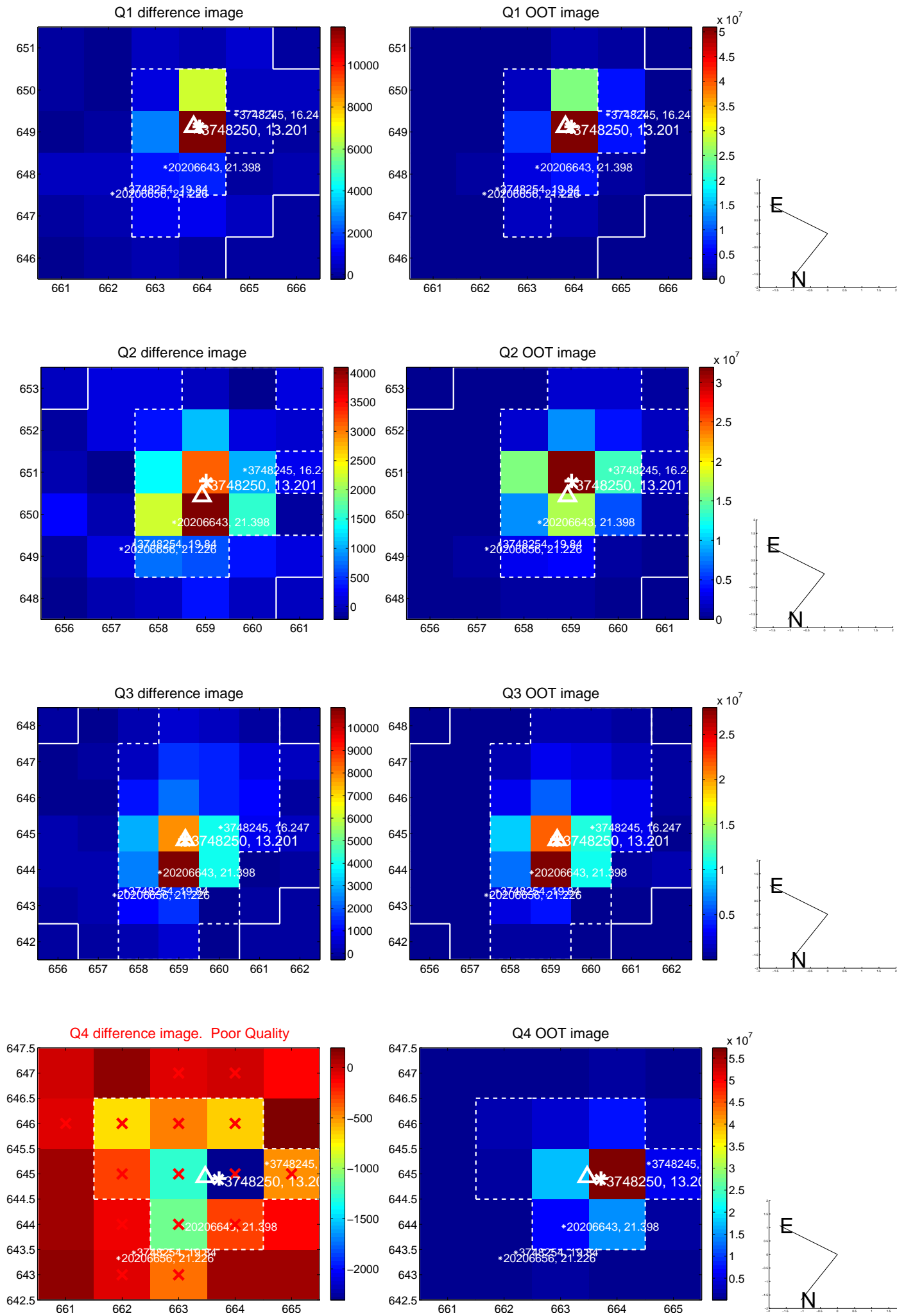
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.348 ± 0.334	1.04	0.099 ± 0.380	0.334 ± 0.394
PRF-fit source offset from KIC position	0.257 ± 0.305	0.84	0.131 ± 0.411	0.221 ± 0.447
photometric centroid source offset	0.74 ± 0.31	2.39	0.66 ± 0.29	-0.33 ± 0.36

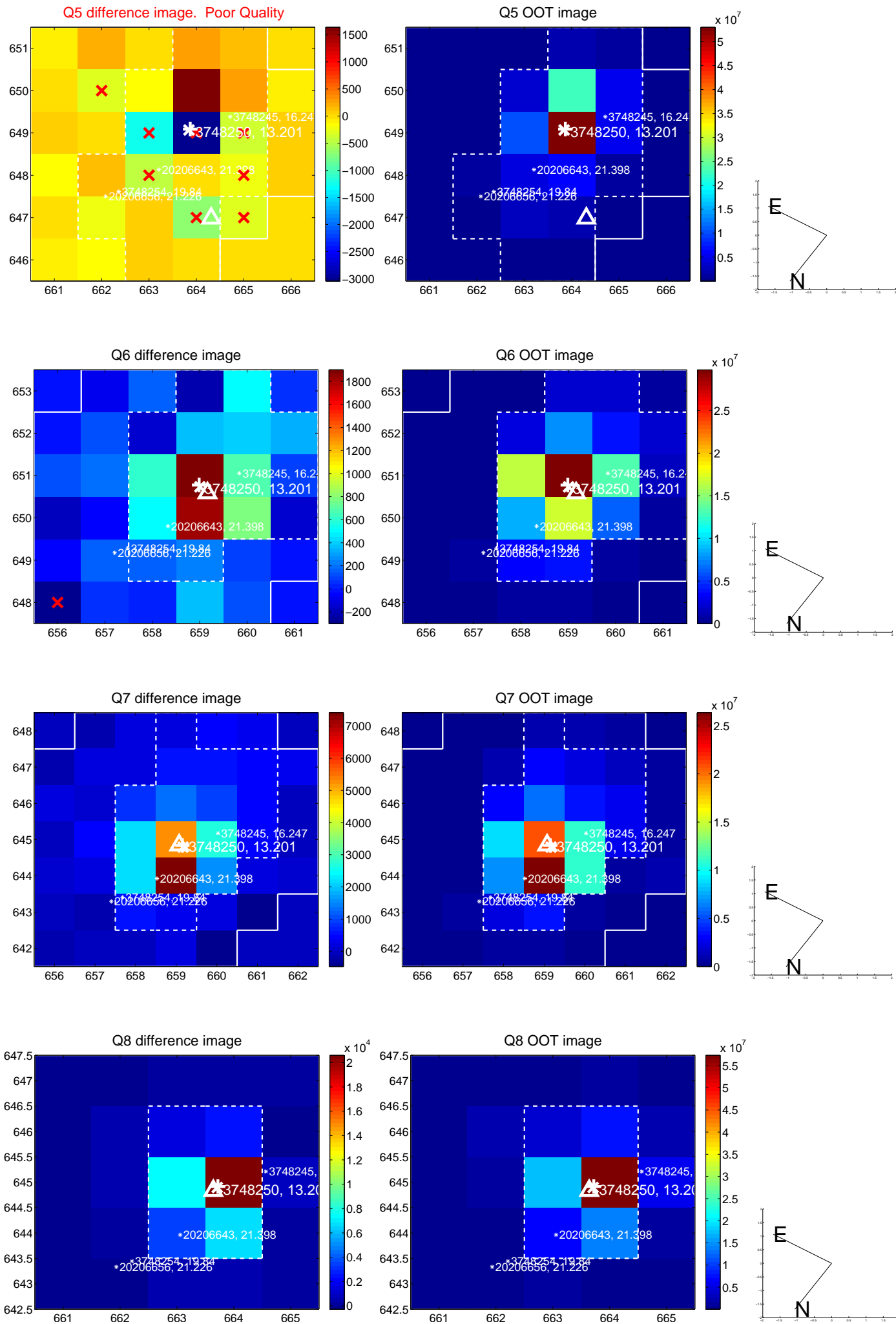


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

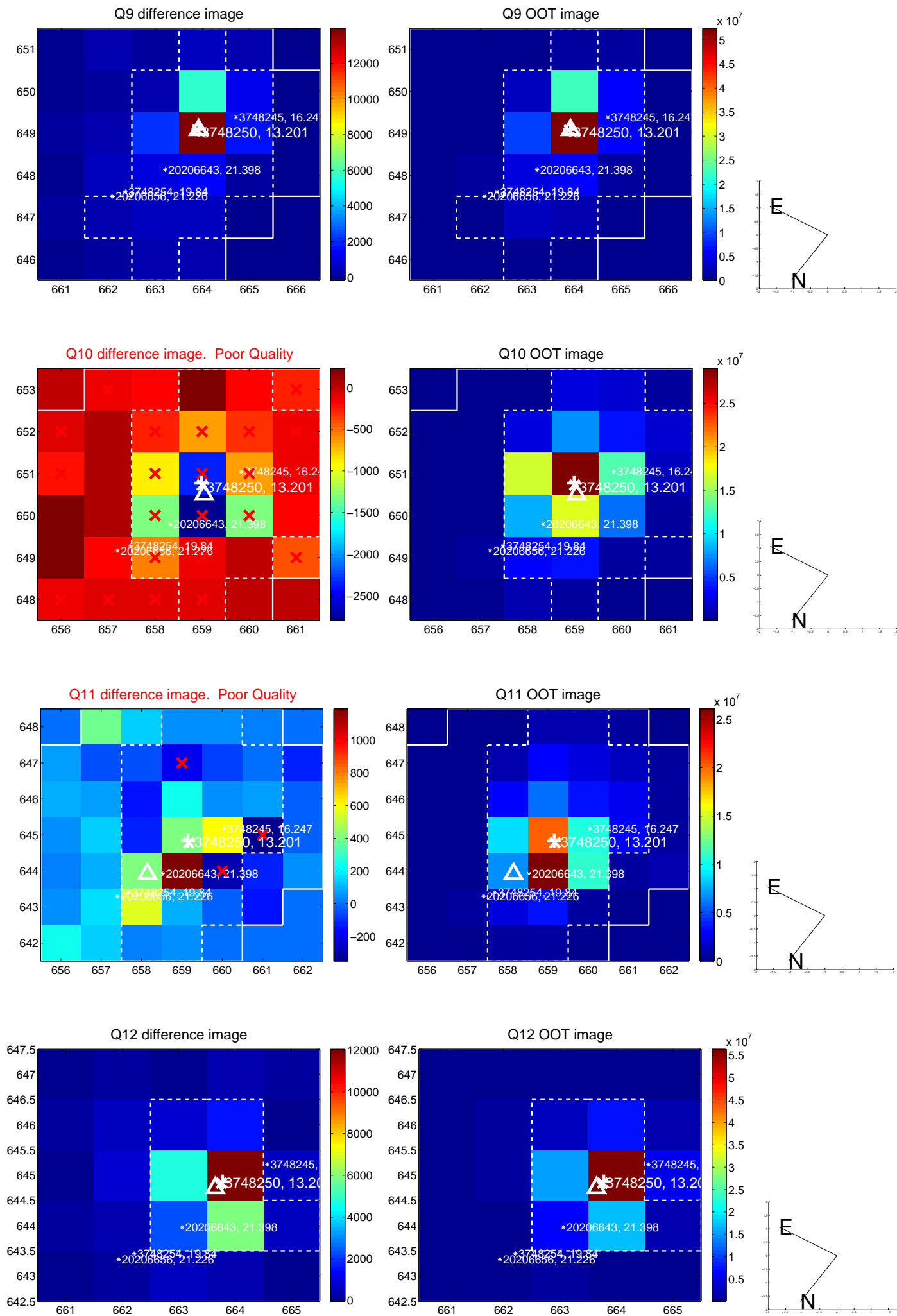
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



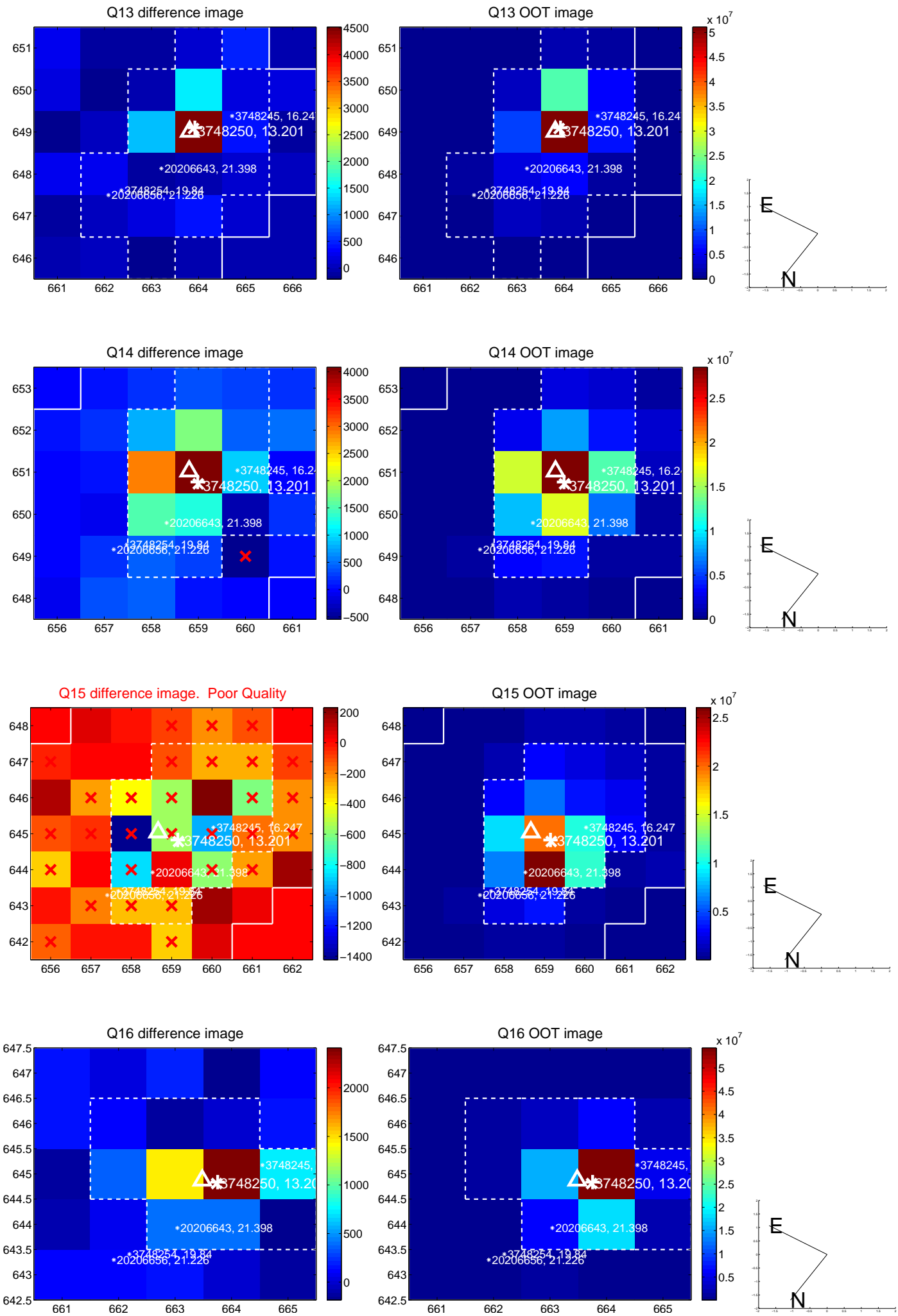
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



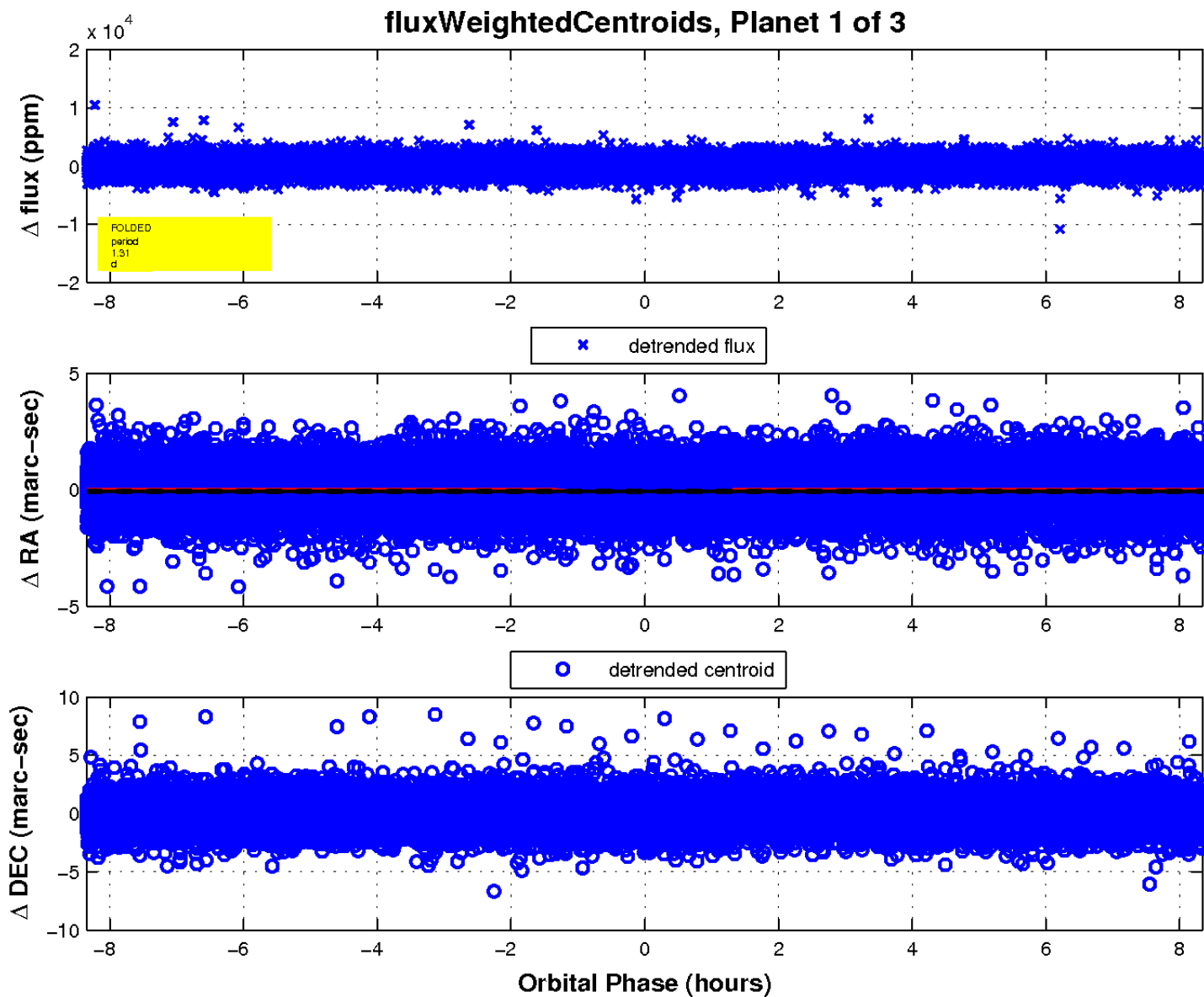
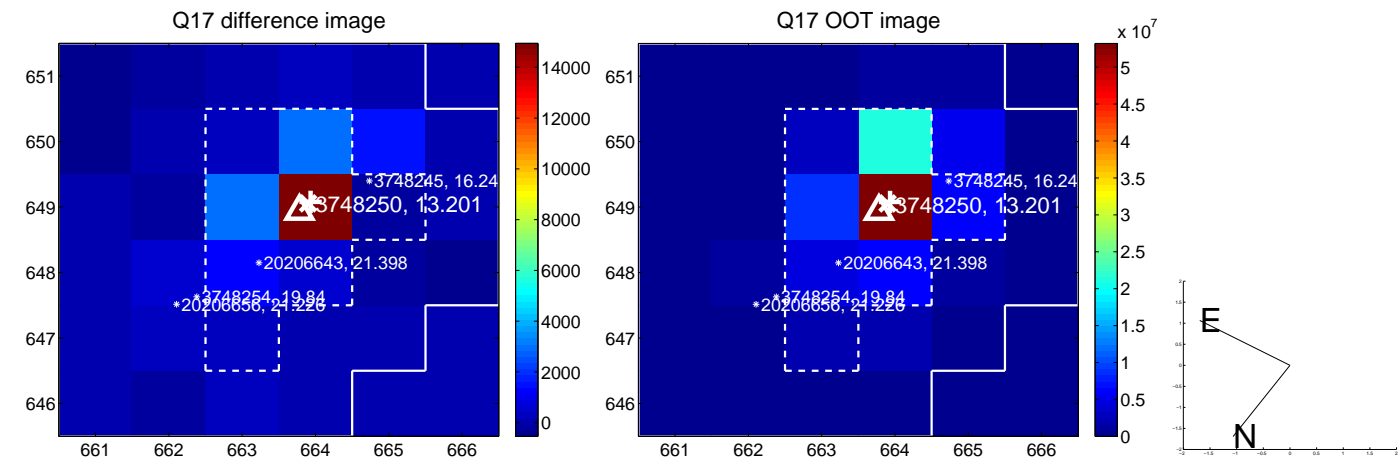
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

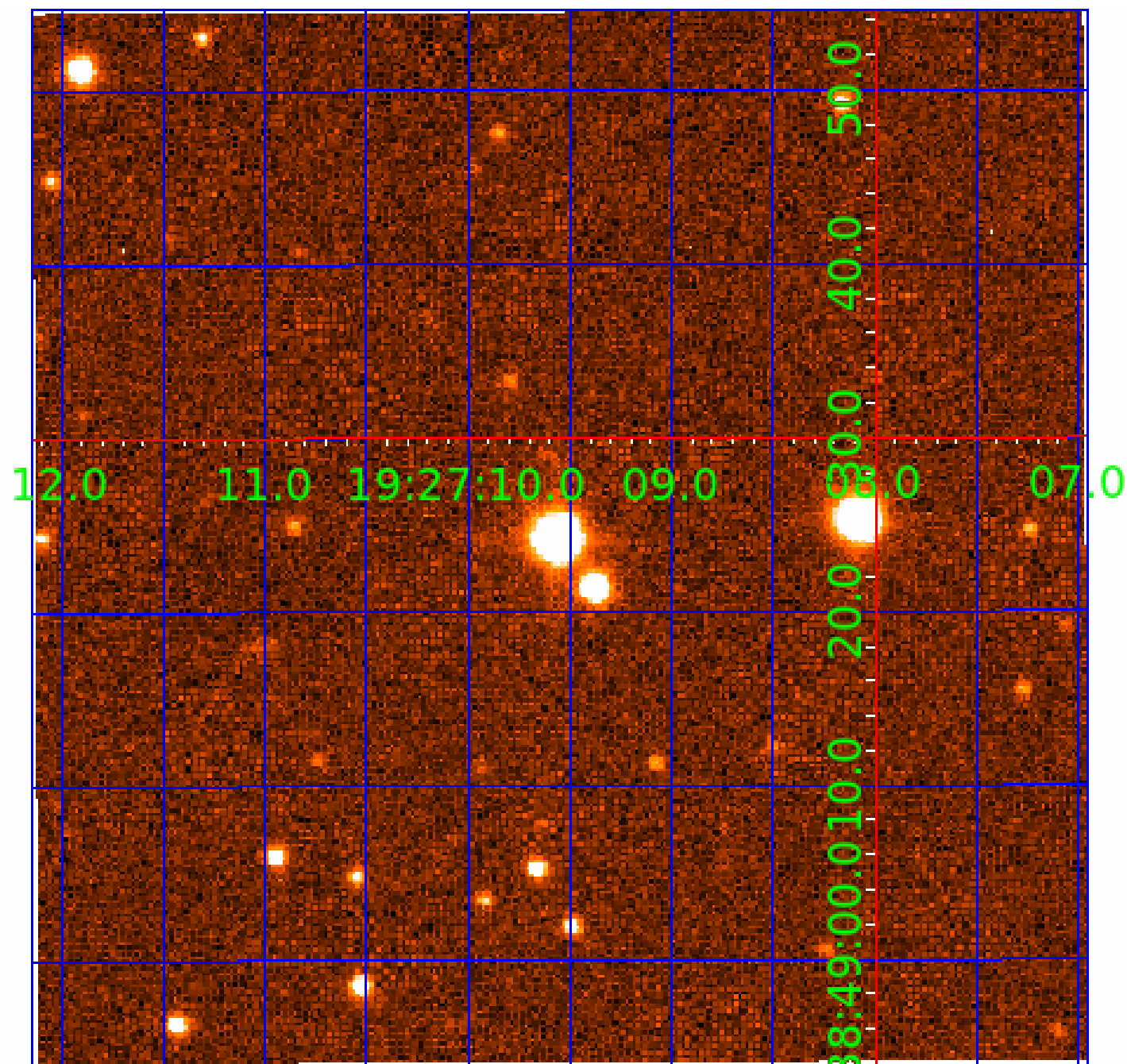


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003748250

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})
003748250-01	OBS	No	1.307329	132.200737	103.9	2.781	9.3	8.0	1.83	7622	2.16	13146.18
003748250-02	OBS	No	1.307327	131.841713	140.9	3.045	10.6	10.7	1.83	7622	2.51	13146.21
003748250-03	OBS	No	0.743780	131.940215	138.0	6.876	7.4	11.4	1.83	7622	2.18	27886.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003748250-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003748250-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
003748250-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

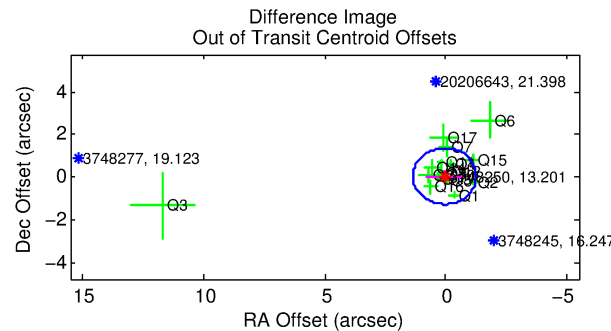
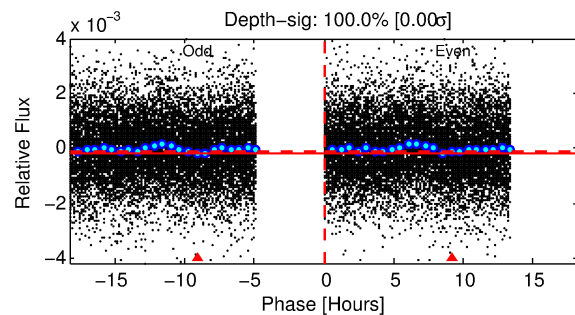
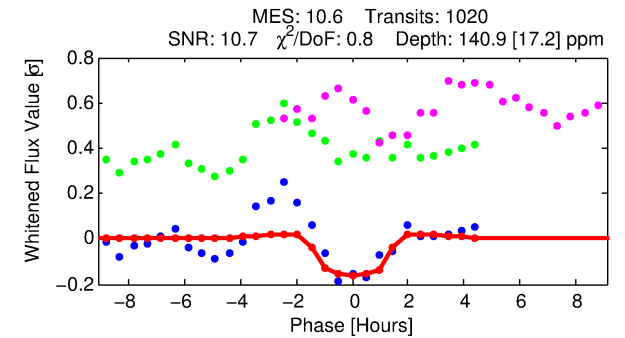
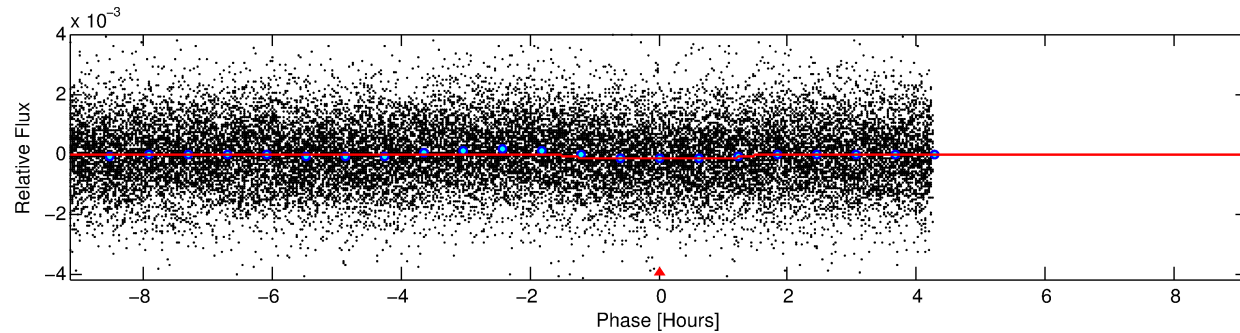
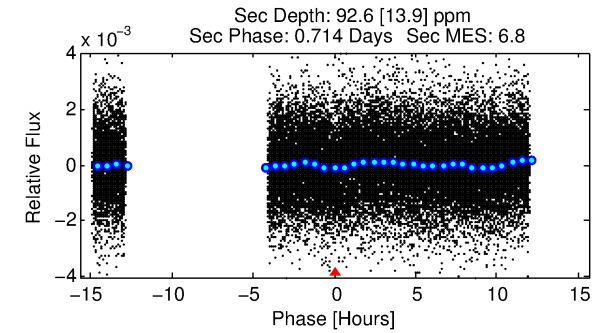
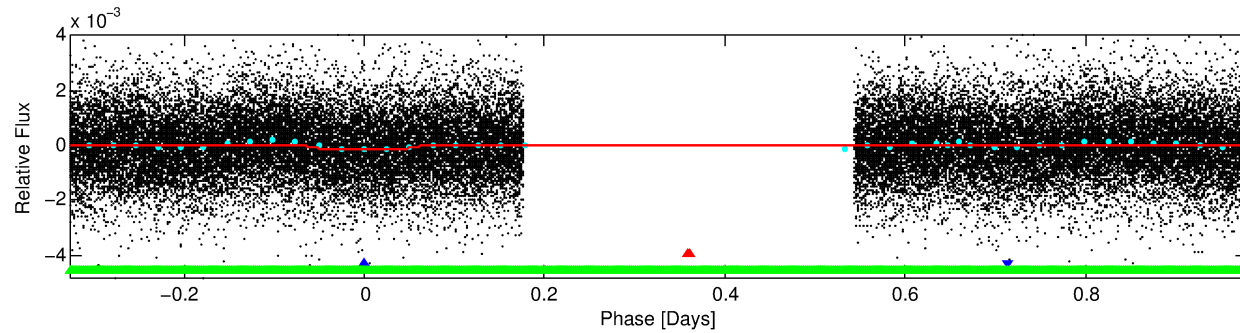
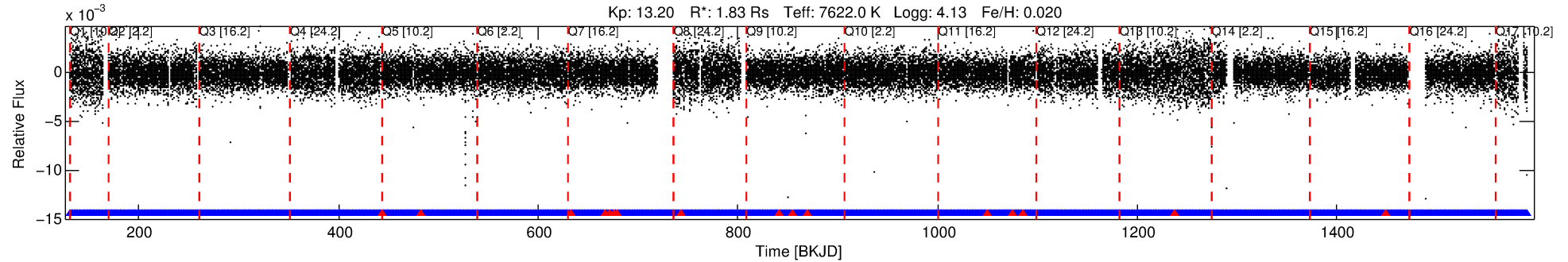
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003748250-02

No Significant Match Found

DV One-Page Summary

KIC: 3748250 Candidate: 2 of 3 Period: 1.307 d



DV Fit Results:

Period = 1.30733 [0.00001] d
Epoch = 131.8417 [0.0039] BKJD
Rp/R* = 0.0126 [0.0060]
a/R* = 1.79 [3.85]
b = 0.90 [0.67]
Seff = 13146.21 [4930.97]
Teq = 2730 [256] K
Rp = 2.51 [1.40] Re
a = 0.0277 [0.0065] AU
Ag = 6.22 [6.38] [0.82σ]
Teffp = 6667 [1641] K [2.37σ]

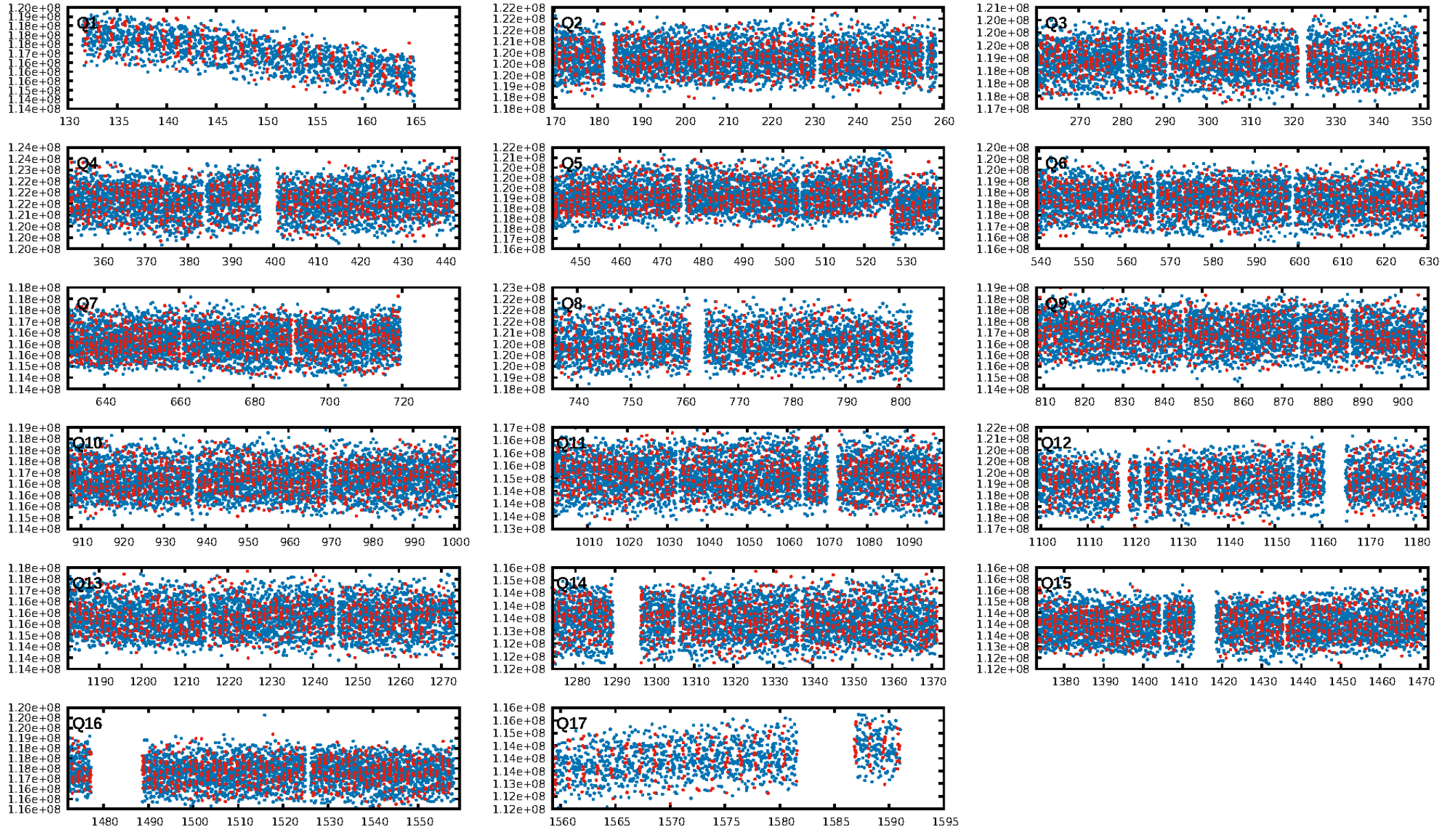
DV Diagnostic Results:

ShortPeriod-sig: 92.8% [1.80σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [957/973]
GhostDiagnostic-chr: 2.305
Centroid-sig: N/A
Centroid-so: 0.605 arcsec [2.34σ]
OotOffset-rm: 0.081 arcsec [0.18σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.094 arcsec [0.16σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.82 [14/17]
DiffImageOverlap-fno: 0.00 [0/17]

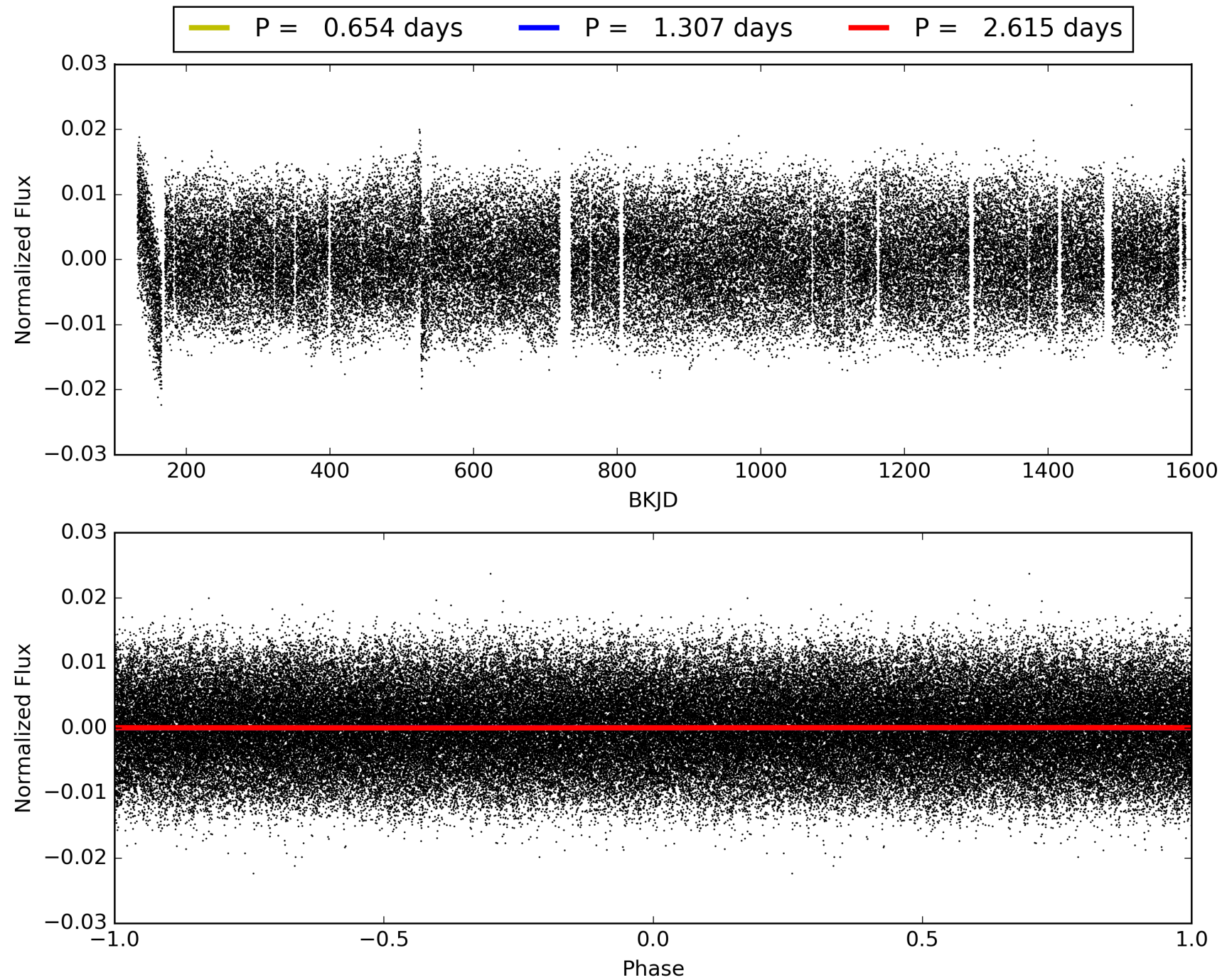
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:04:15 Z

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

TCE 003748250-02, PDC Light Curves

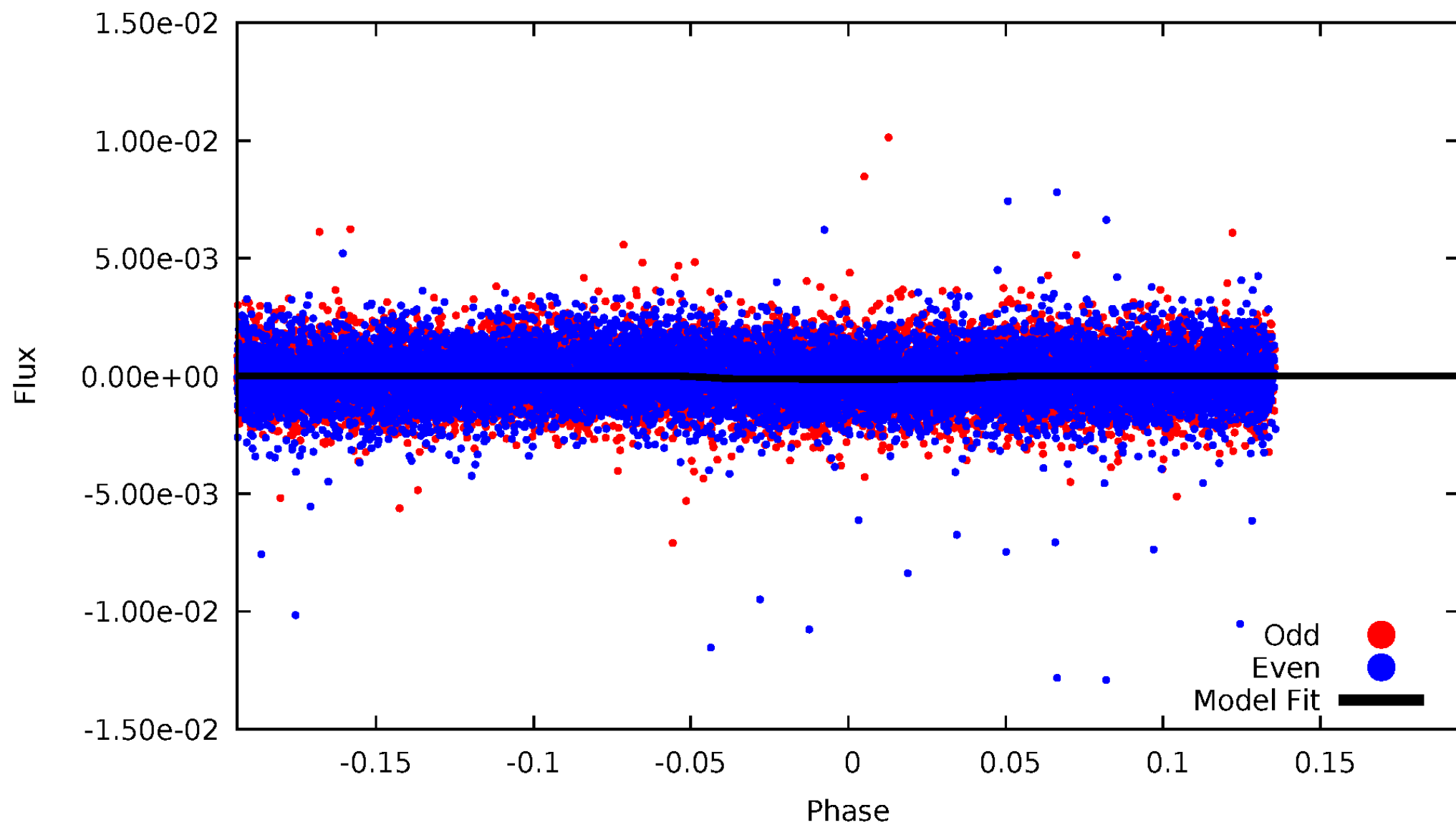


TCE 003748250-02



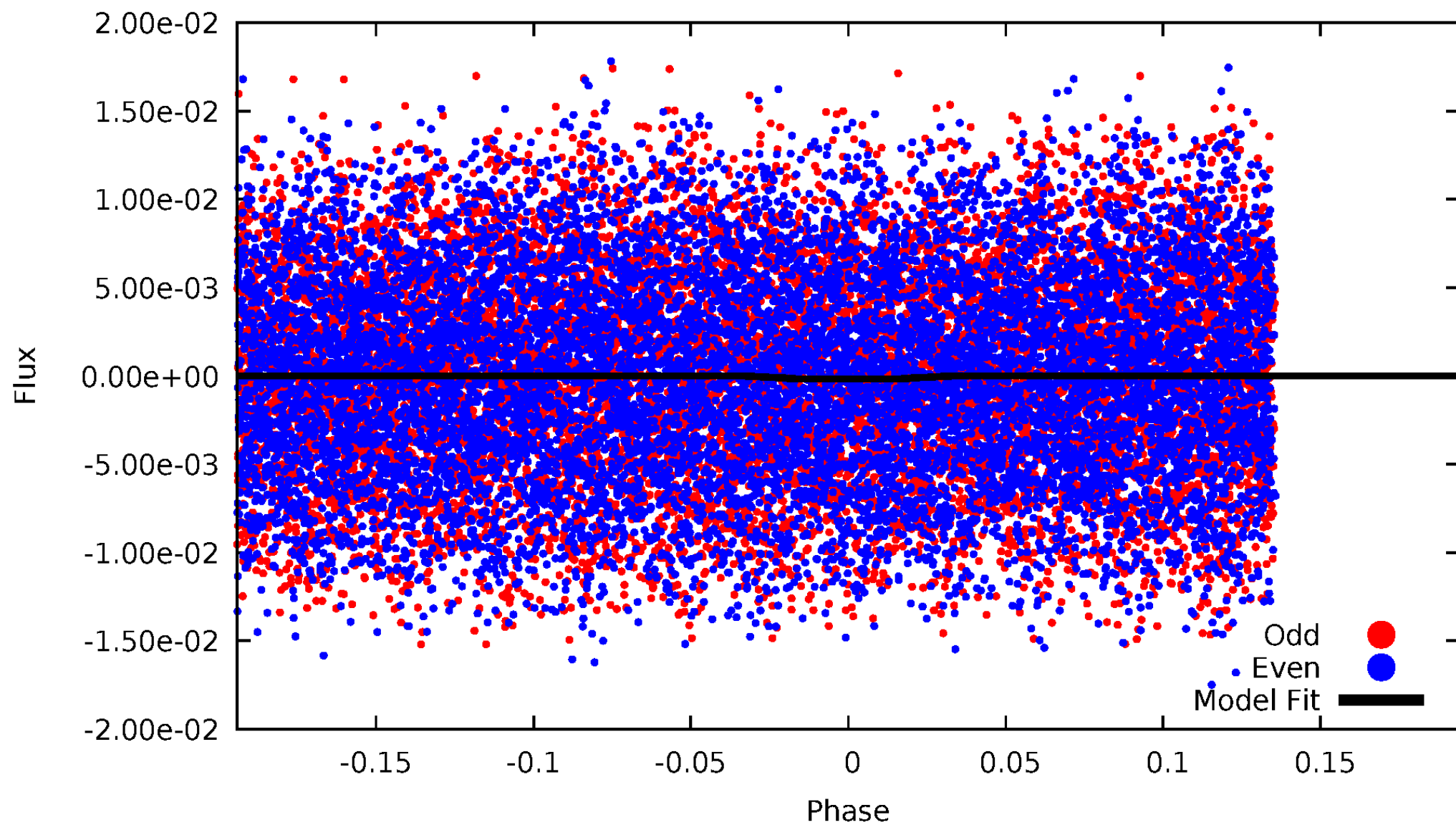
DV Odd/Even

TCE 003748250-02



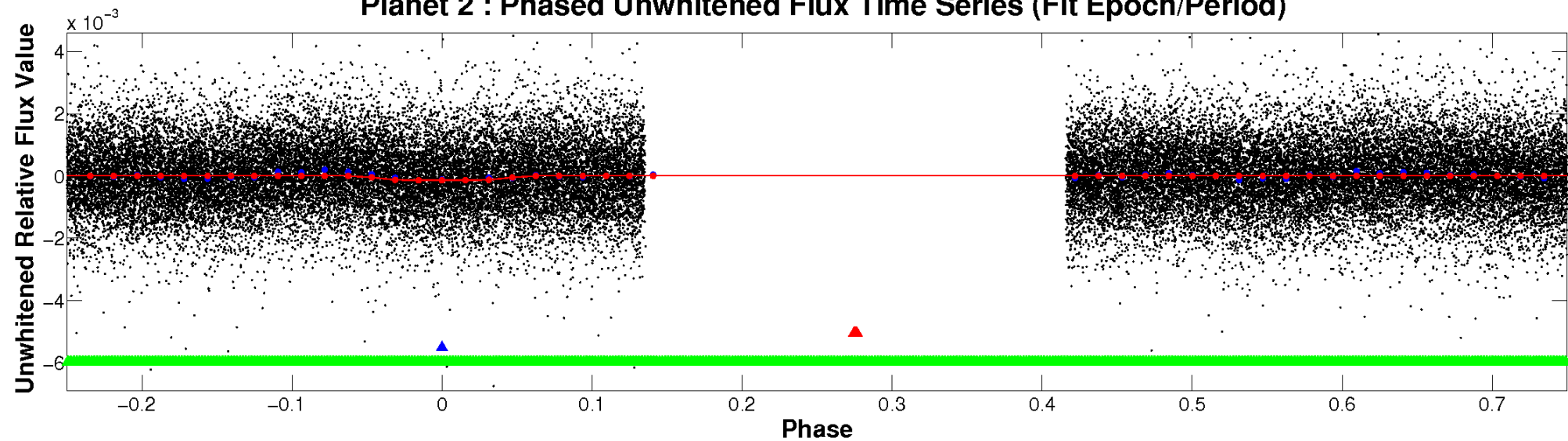
ALT Odd/Even

TCE 003748250-02

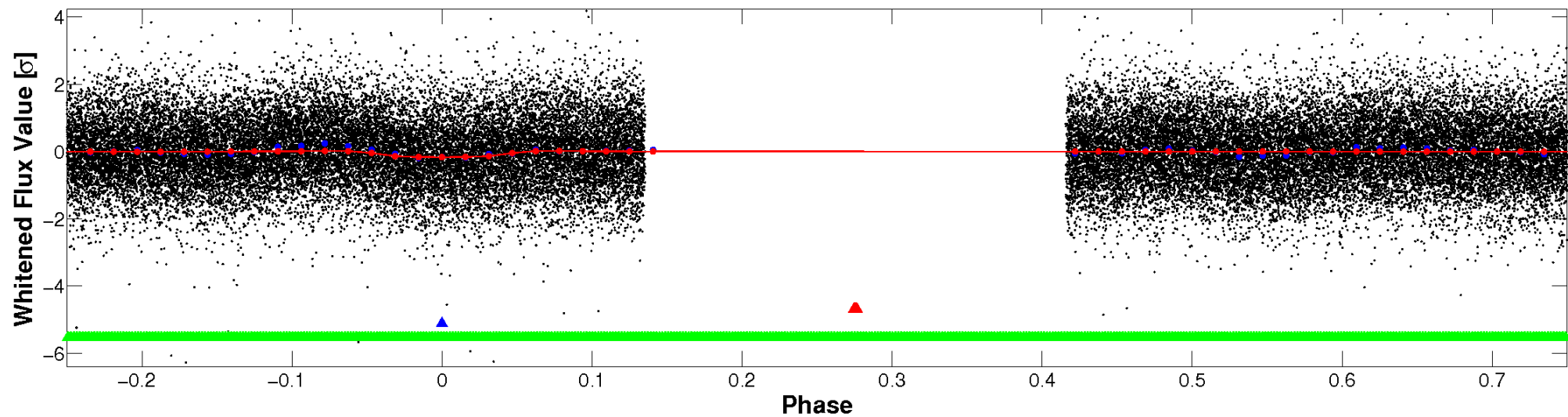


Non-Whitened Vs. Whitened Light Curve

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

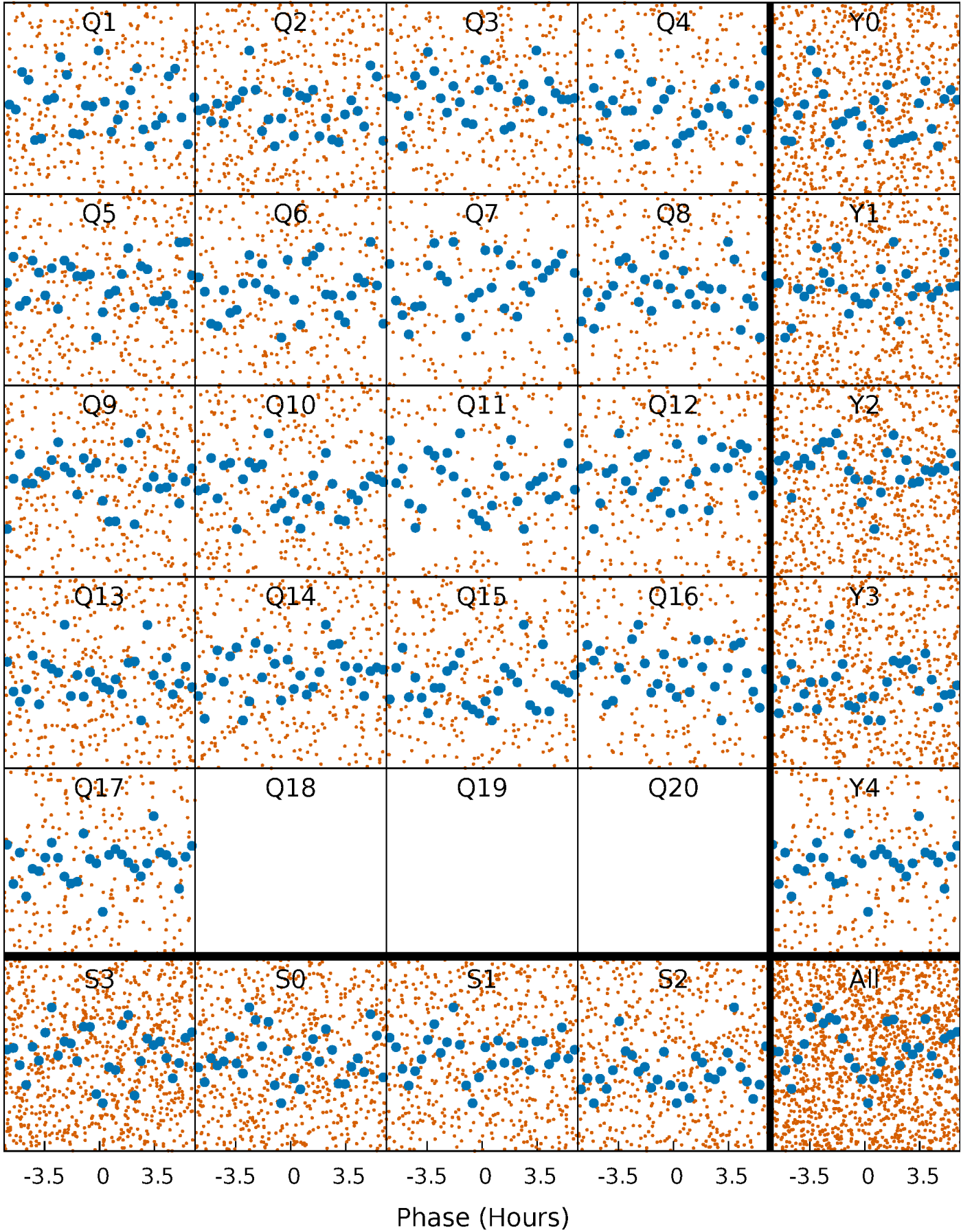


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



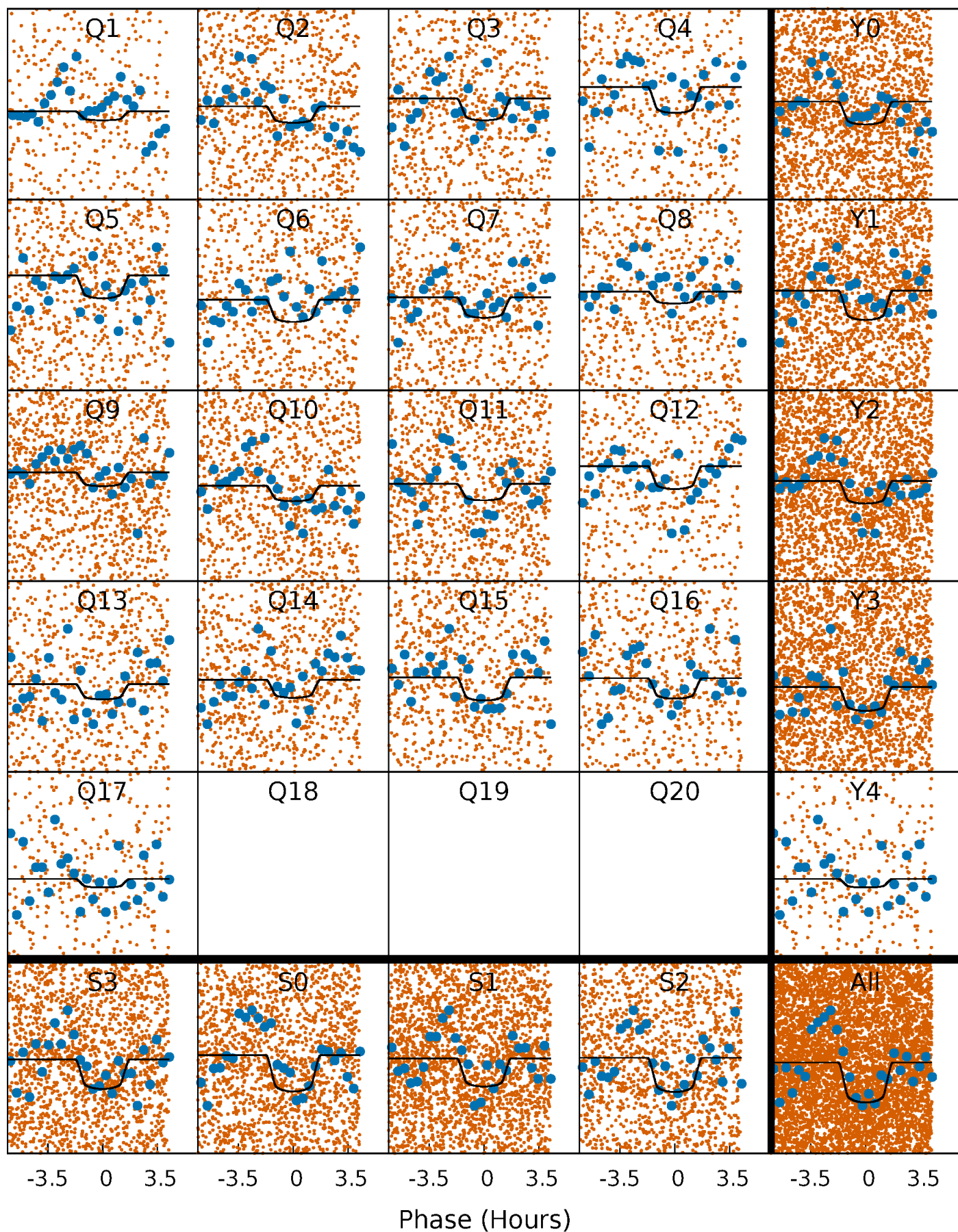
PDC Quarter-Phased Transit Curves

TCE 003748250-02 $P = 1.307327$ Days $T_0 = 131.841713$ (BKJD)



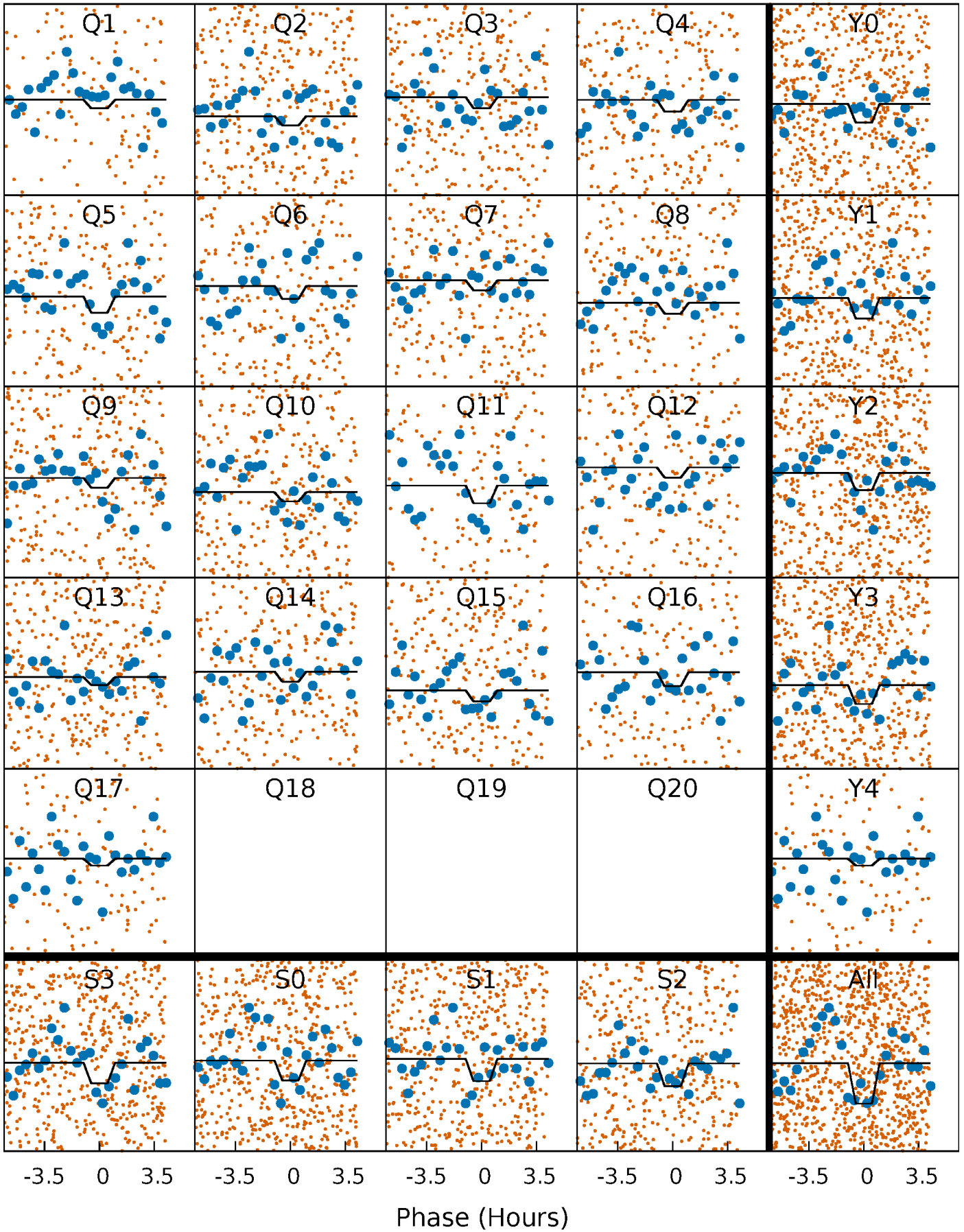
DV Quarter-Phased Transit Curves

TCE 003748250-02 P= 1.307327 Days $T_0=131.841713$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

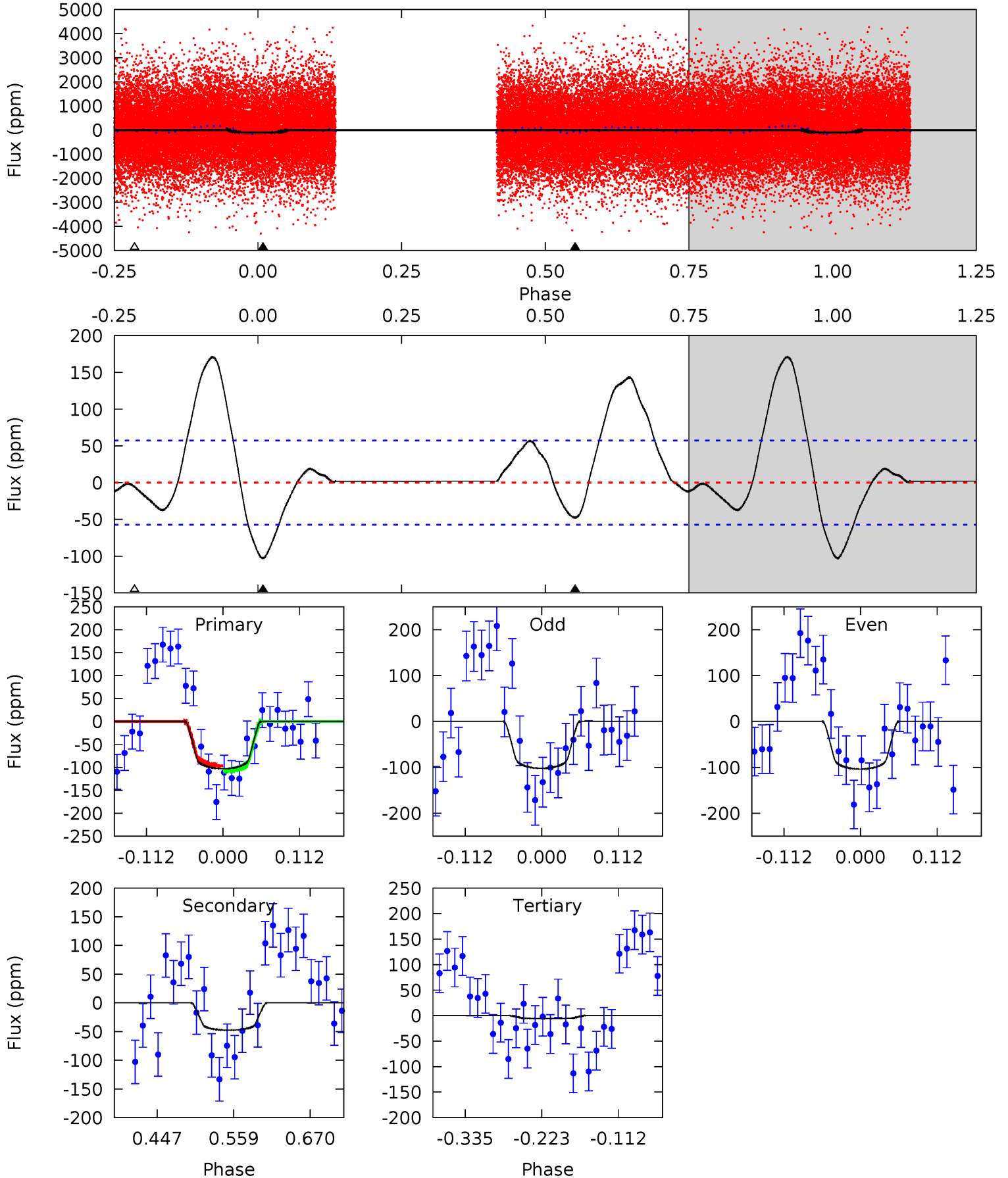
TCE 003748250-02 P= 1.307327 Days $T_0=131.841713$ (BKJD)



DV Model-Shift Uniqueness Test

003748250-02, P = 1.307327 Days, E = 130.534386 Days

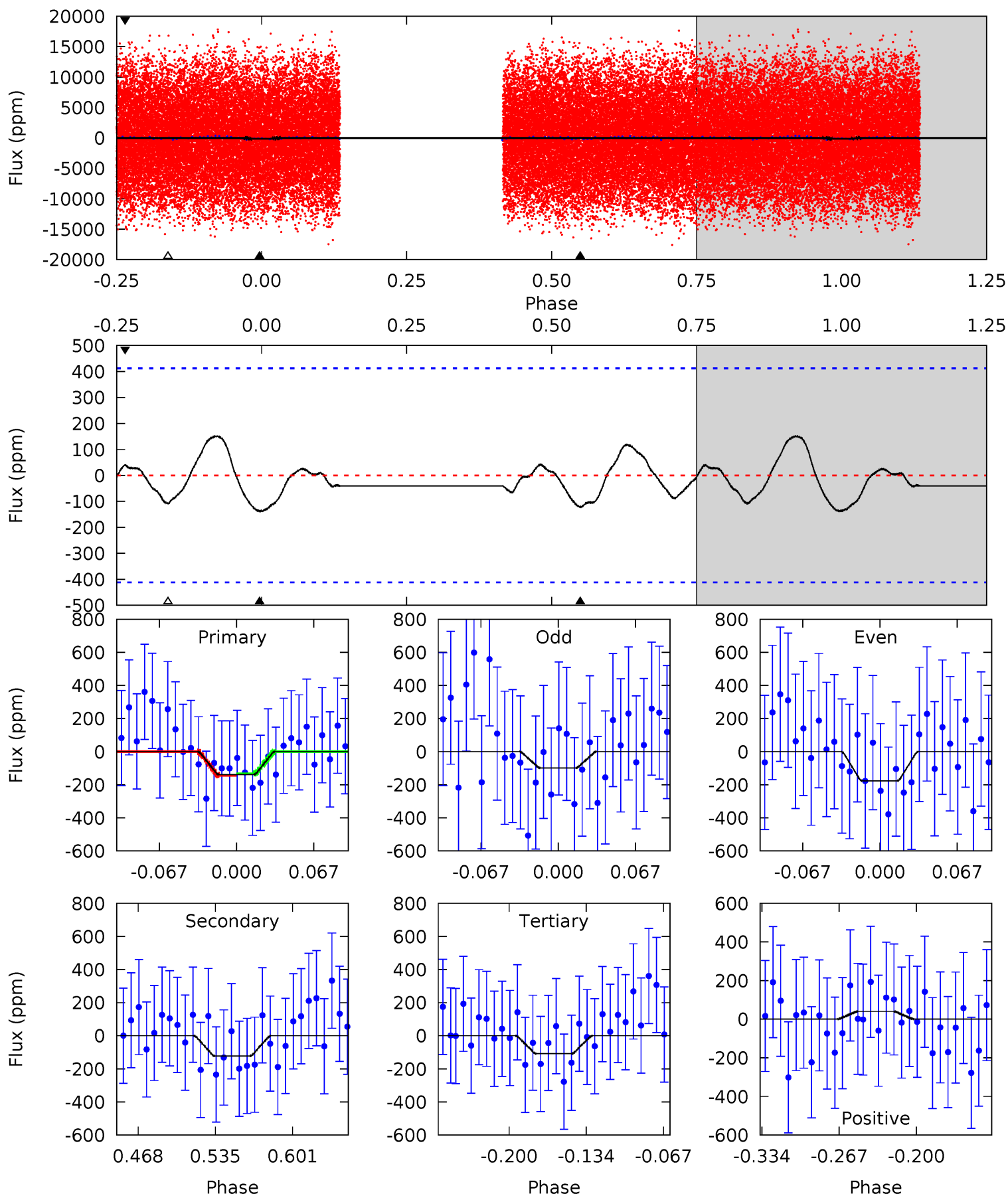
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.16	3.77	0.45	0	4.54	1.59	3.28	7.71	8.16	3.32	3.77	0.07	0.89	0.62	0.42



Alt Model-Shift Uniqueness Test

003748250-02, P = 1.307327 Days, E = 130.534386 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.56	1.38	1.23	0.46	4.65	1.83	0.73	0.33	1.10	0.15	0.92	0.44	0.92	0.52	0.05



Stellar Parameters For KIC 003748250

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7622^{+214}_{-322}	$4.135^{+0.105}_{-0.180}$	$0.020^{+0.150}_{-0.350}$	$1.829^{+0.519}_{-0.346}$	$1.662^{+0.204}_{-0.249}$	$0.383^{+0.218}_{-0.188}$
	+3%/-4%	+3%/-4%	+750%/-1750%	+28%/-19%	+12%/-15%	+57%/-49%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003748250-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-48 ± 13	$2.64^{+1.31}_{-1.16}$	3836^{+281}_{-230}	5317^{+1880}_{-1011}	$2.877^{+5.883}_{-1.697}$
Alt.	-122 ± 89	$2.57^{+1.27}_{-1.17}$	3866^{+250}_{-250}	6814^{+3537}_{-1977}	$7.135^{+19.420}_{-5.270}$

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 $A_{obs} \gg 1.0$

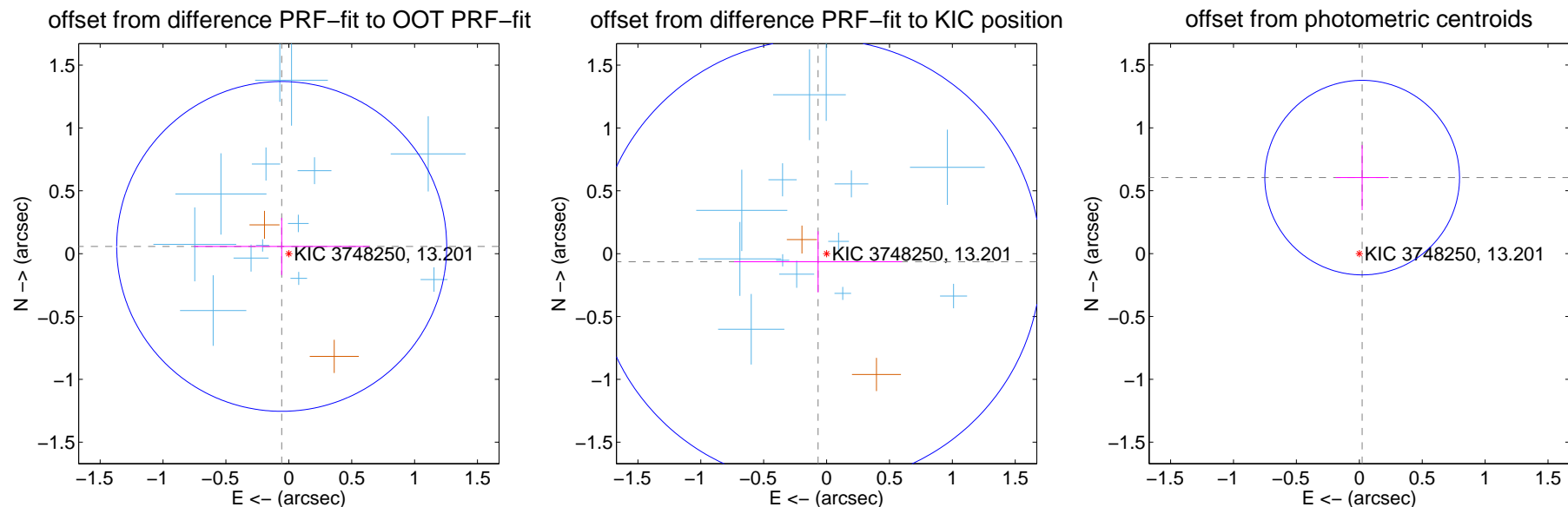
DV Centroid Data

Supplemental centroid analysis for 003748250-02. Kepler magnitude: 13.20. Transit SNR 10.73

There are 14 quarters with good PRF difference image offsets

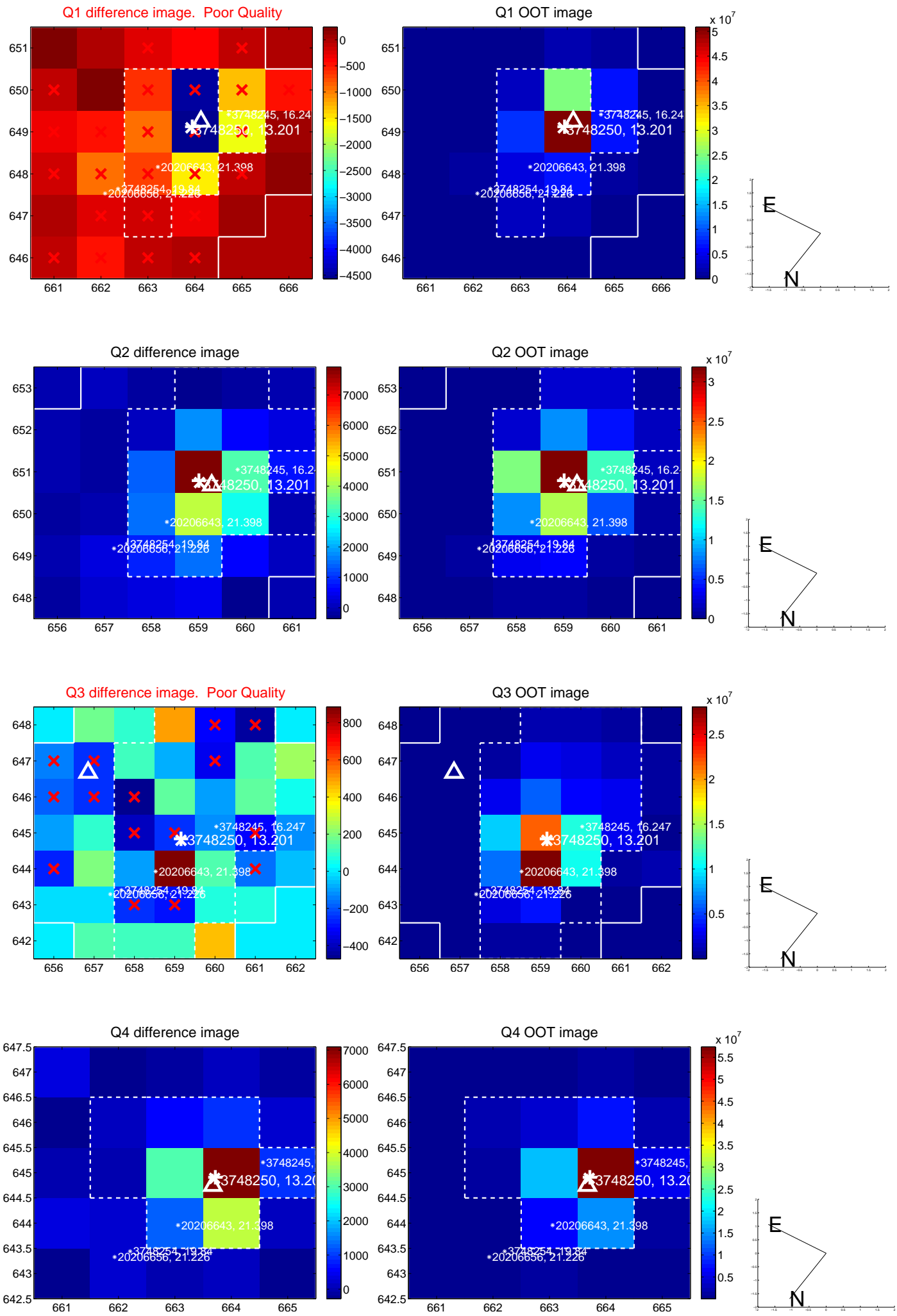
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.081 ± 0.437	0.18	0.057 ± 0.698	0.058 ± 0.228
PRF-fit source offset from KIC position	0.094 ± 0.591	0.16	0.068 ± 0.668	-0.065 ± 0.243
photometric centroid source offset	0.60 ± 0.26	2.34	-0.02 ± 0.21	0.60 ± 0.26

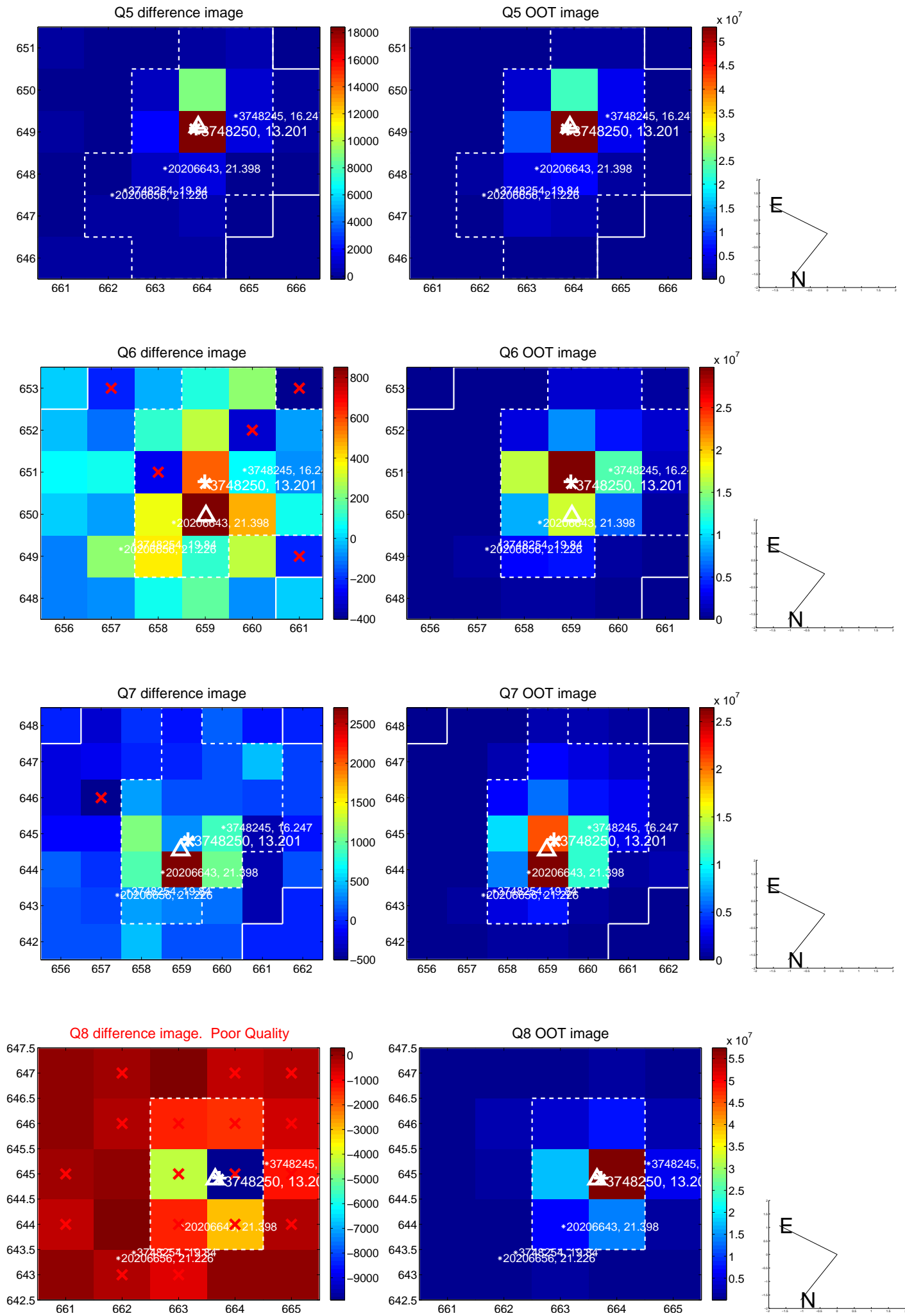


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

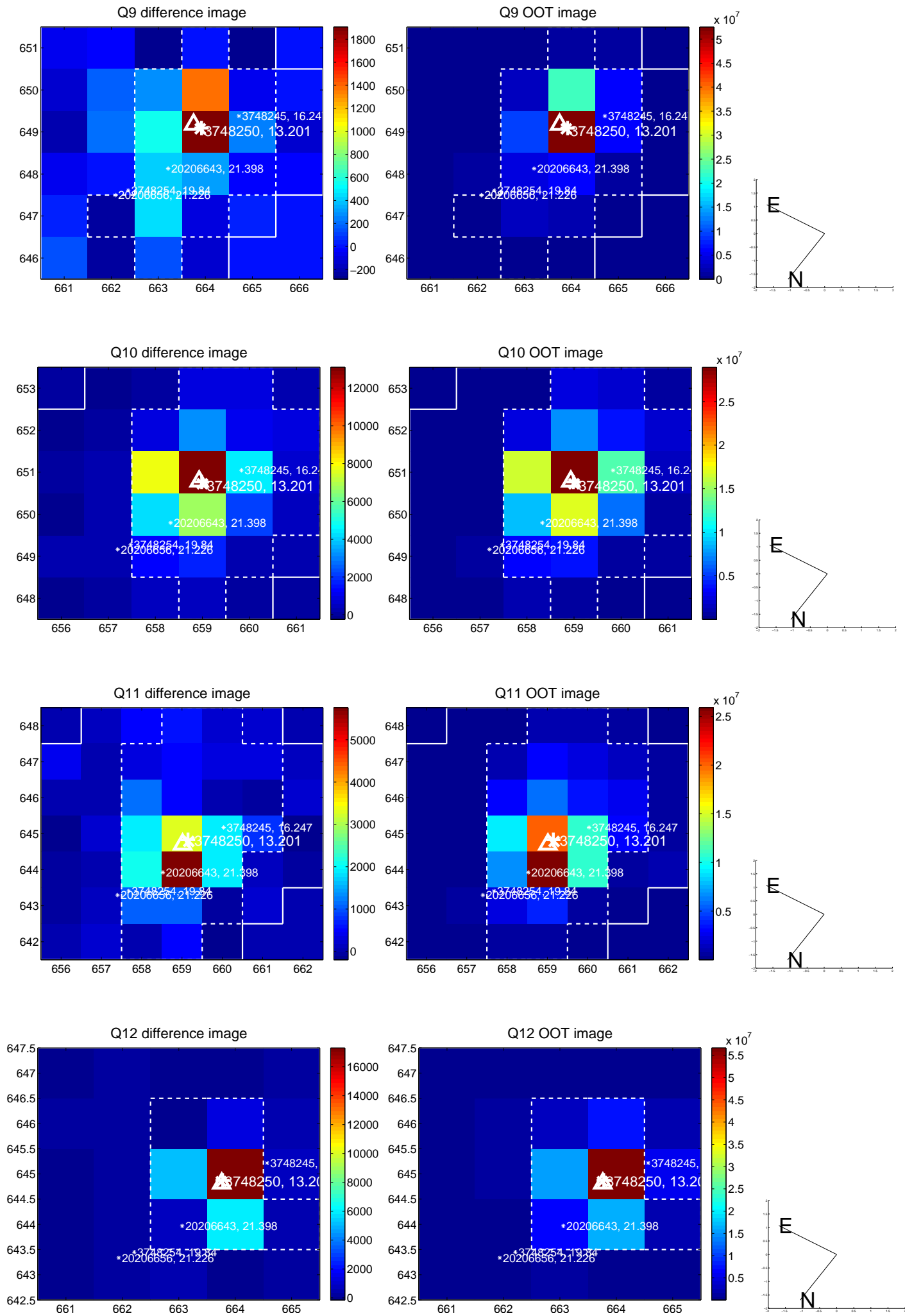
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



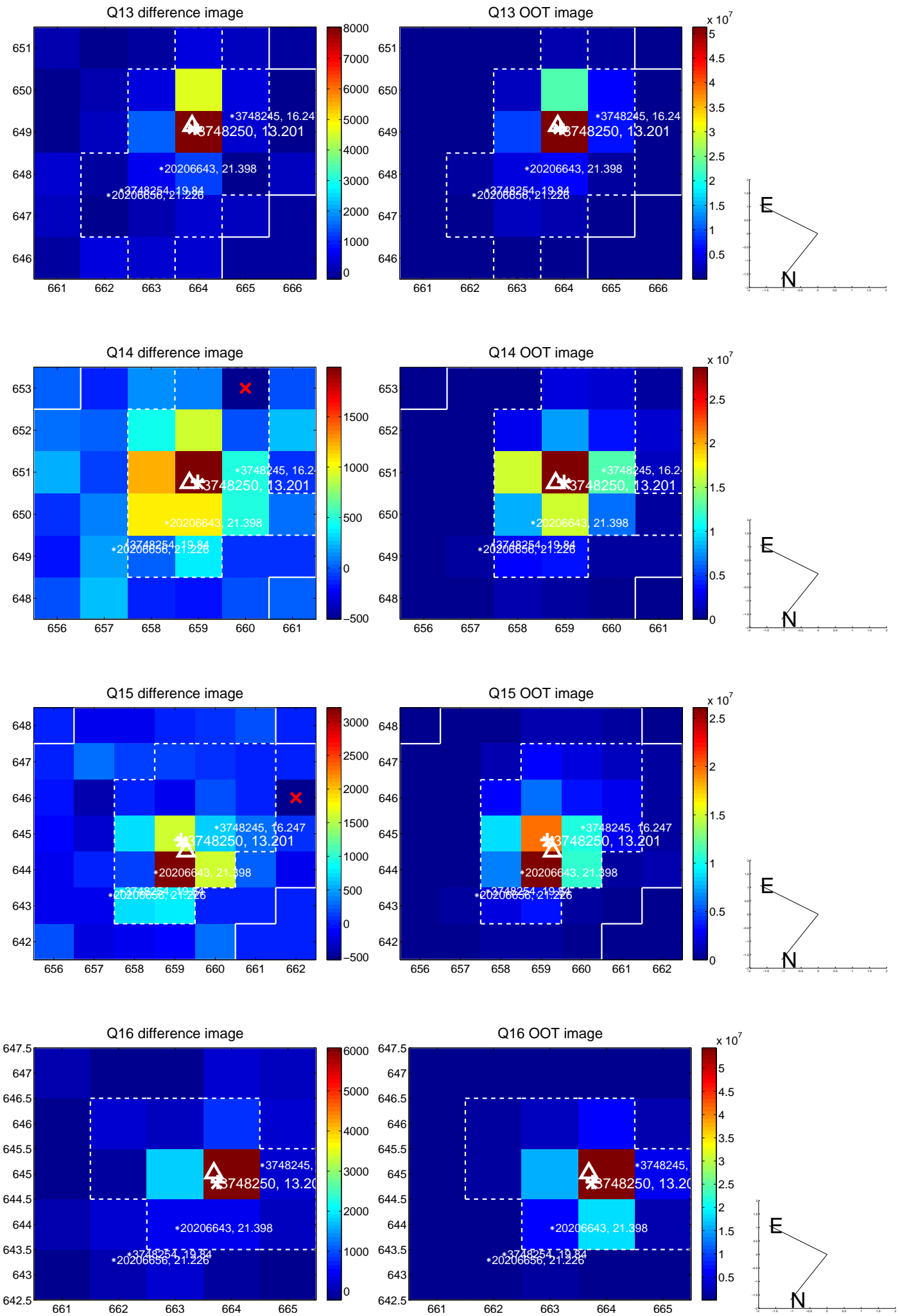
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



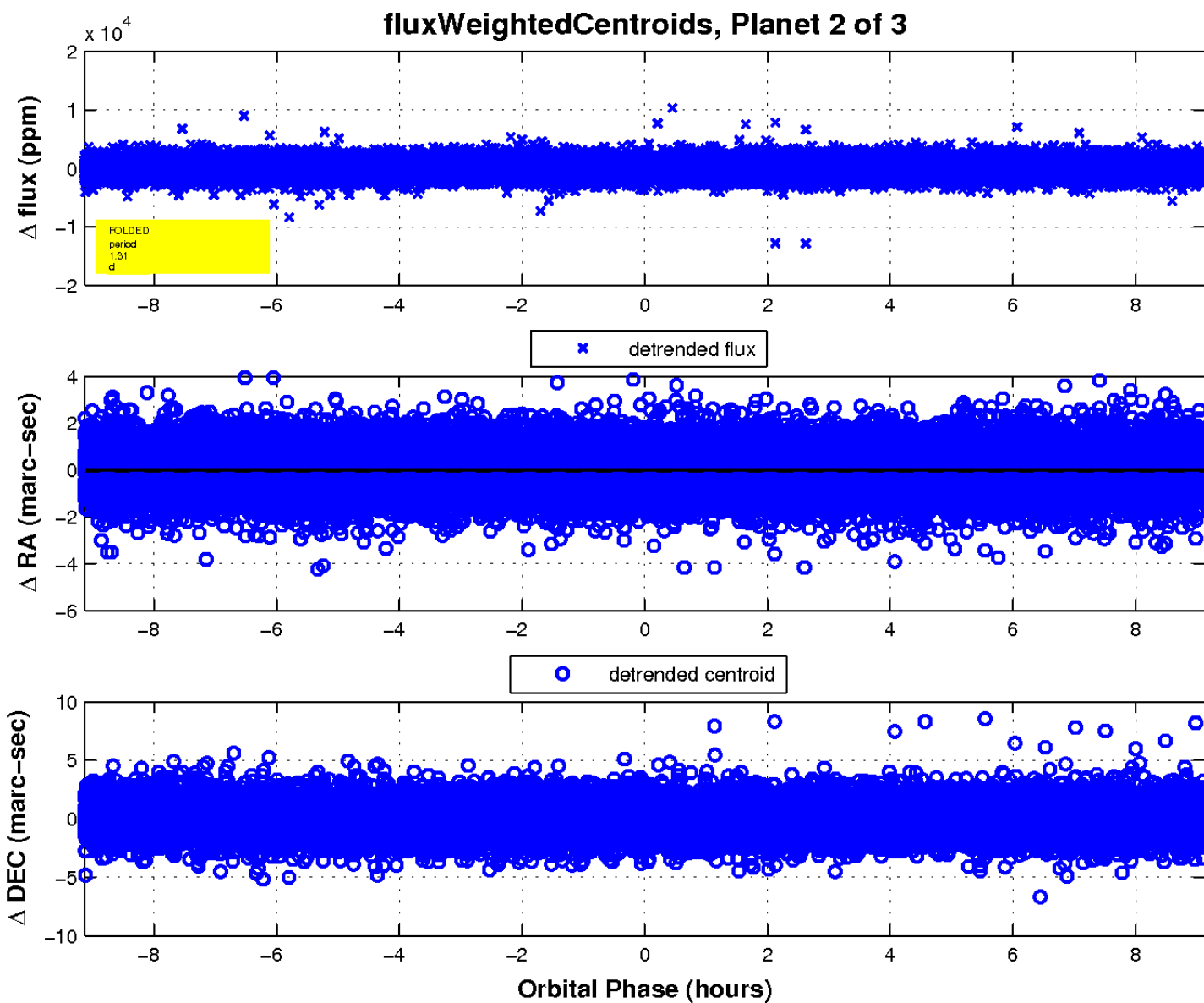
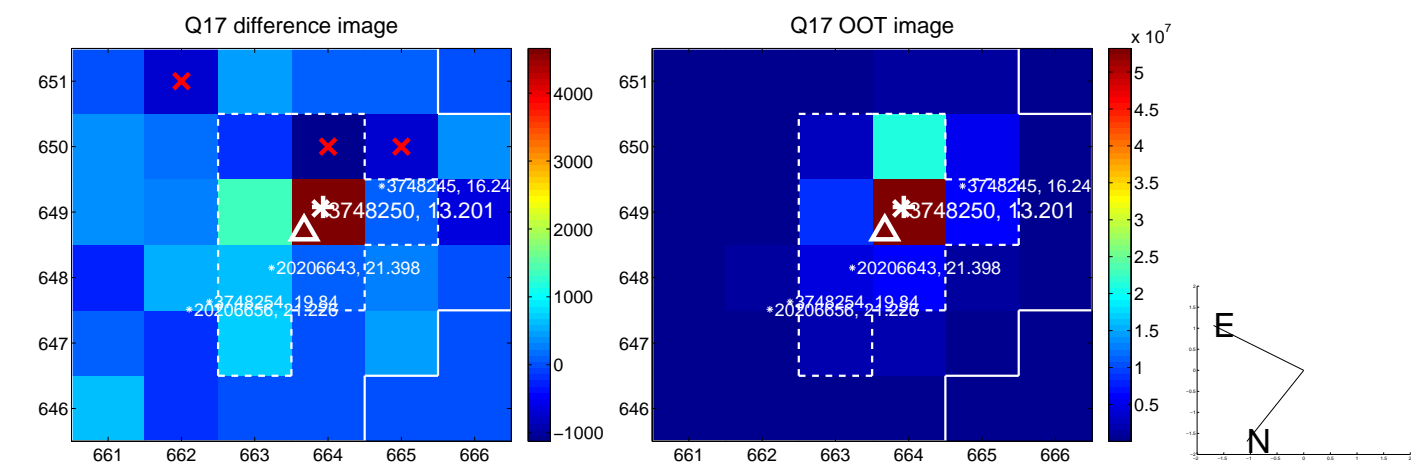
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

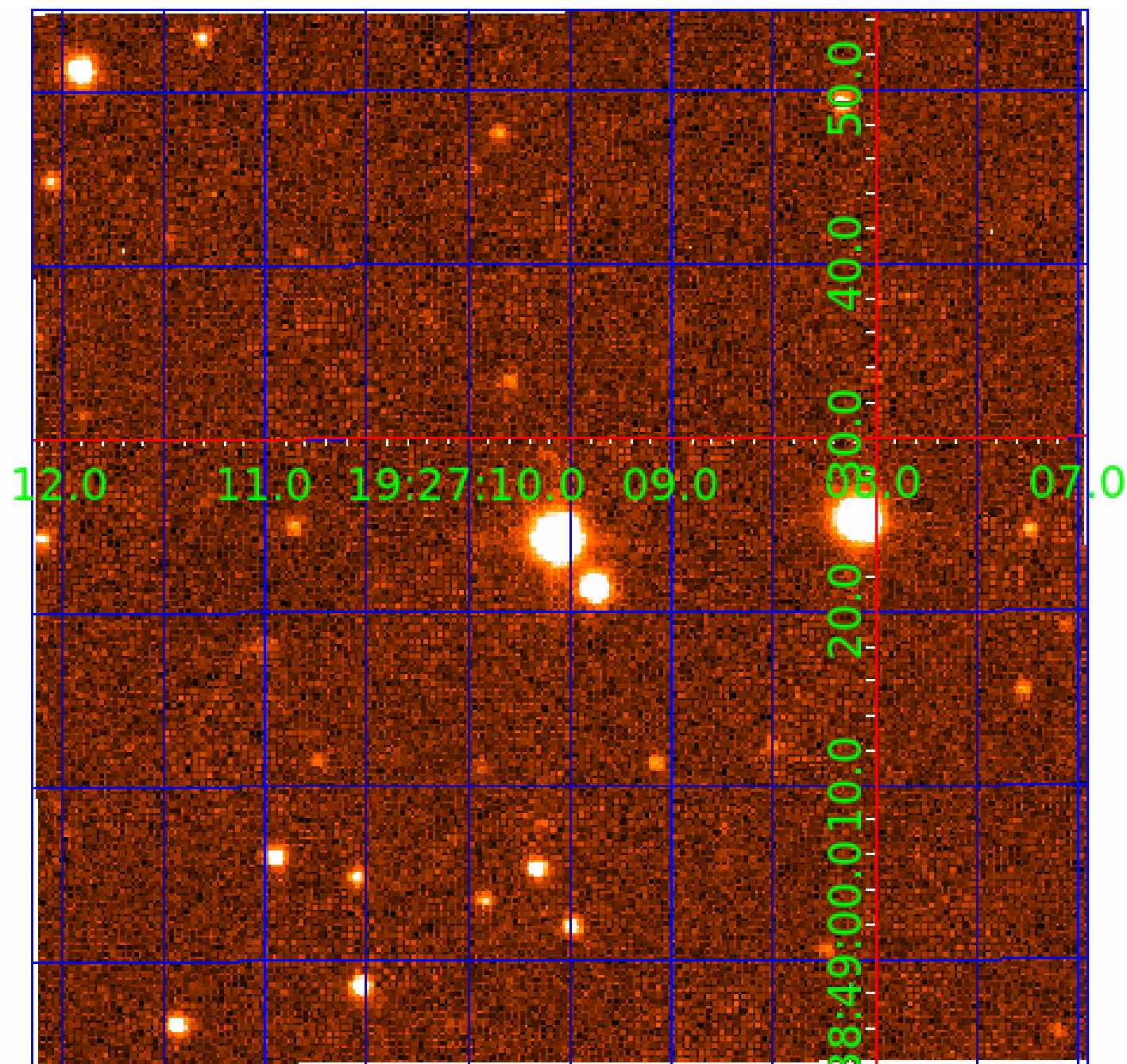


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003748250

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})
003748250-01	OBS	No	1.307329	132.200737	103.9	2.781	9.3	8.0	1.83	7622	2.16	13146.18
003748250-02	OBS	No	1.307327	131.841713	140.9	3.045	10.6	10.7	1.83	7622	2.51	13146.21
003748250-03	OBS	No	0.743780	131.940215	138.0	6.876	7.4	11.4	1.83	7622	2.18	27886.04

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003748250-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
003748250-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD
003748250-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—CENT_FEW_MEAS

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

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

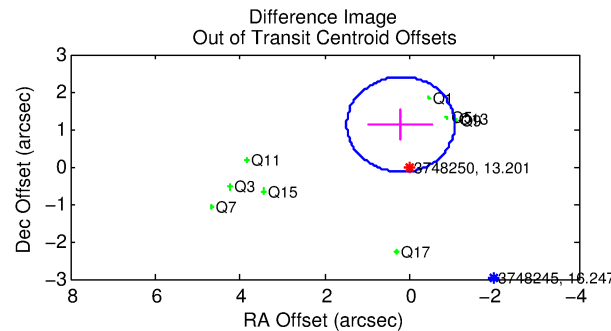
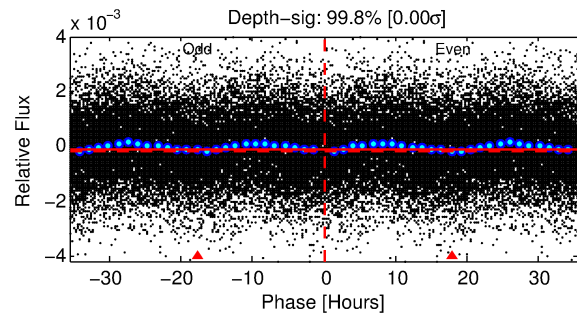
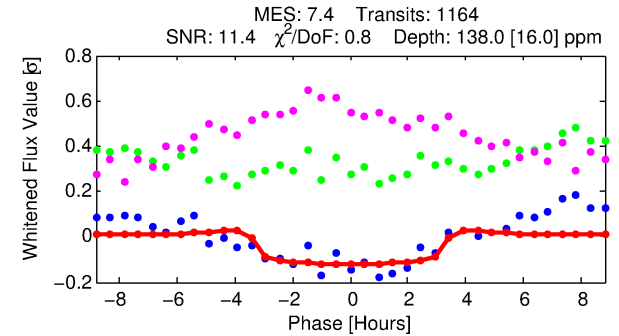
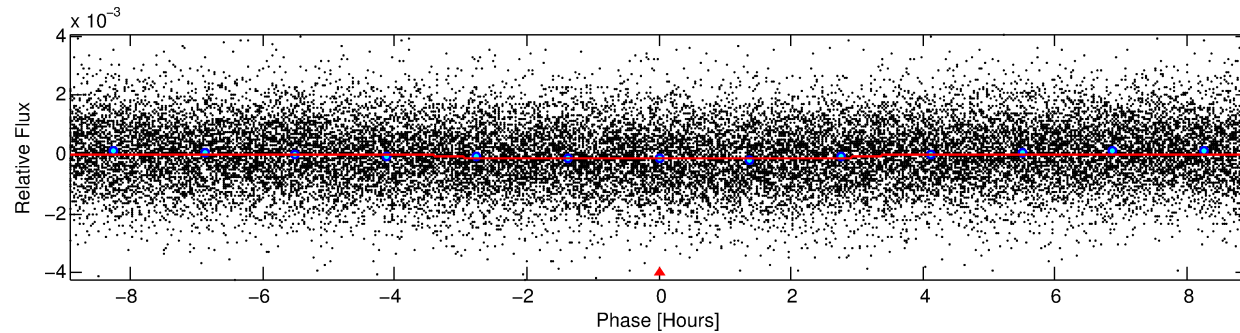
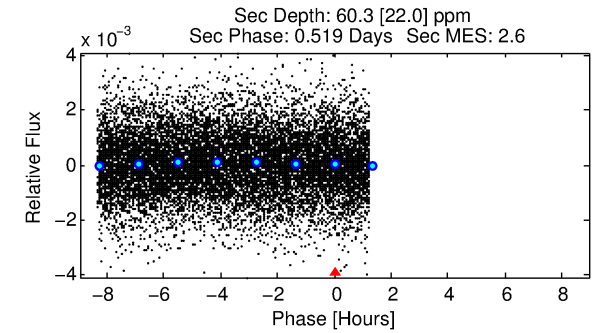
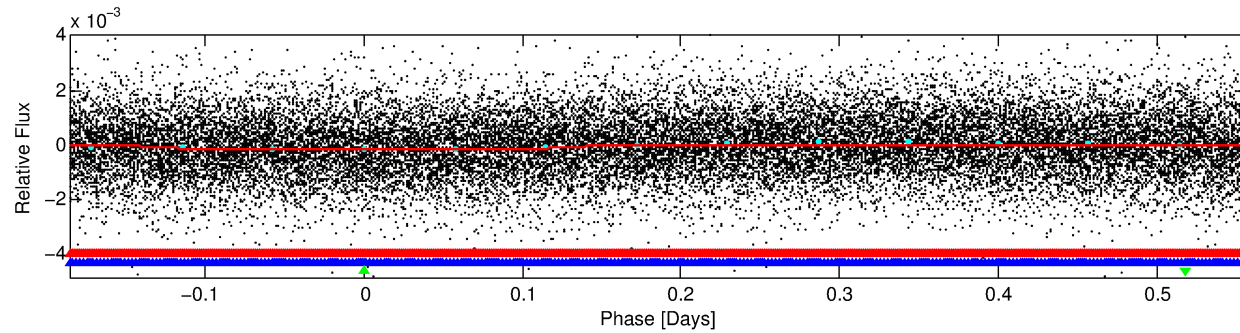
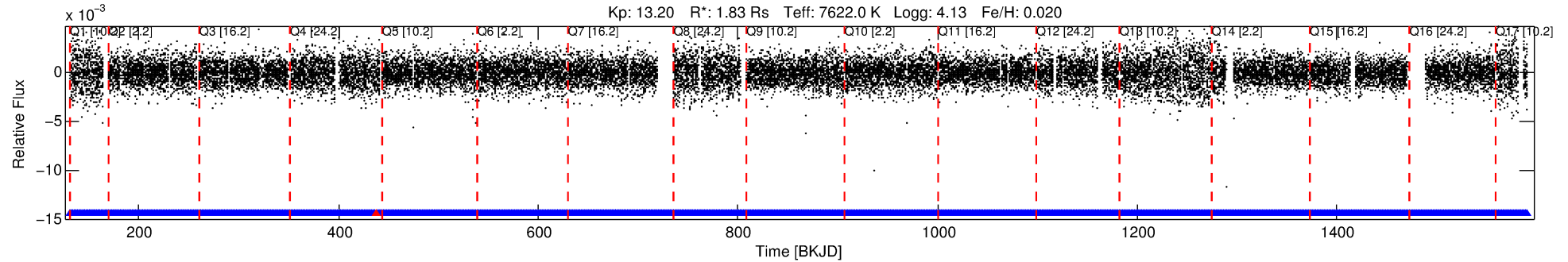
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003748250-03

No Significant Match Found

DV One-Page Summary

KIC: 3748250 Candidate: 3 of 3 Period: 0.744 d



DV Fit Results:

Period = 0.74378 [0.00001] d
Epoch = 131.9402 [0.0054] BKJD
Rp/R* = 0.0109 [0.0090]
a/R* = 1.08 [0.77]
b = 0.02 [280.92]
Seff = 27886.04 [10459.68]
Teq = 3295 [309] K
Rp = 2.18 [1.89] Re
a = 0.0190 [0.0045] AU
Ag = 2.53 [4.34] [0.35σ]
Teffp = 6425 [2714] K [1.15σ]

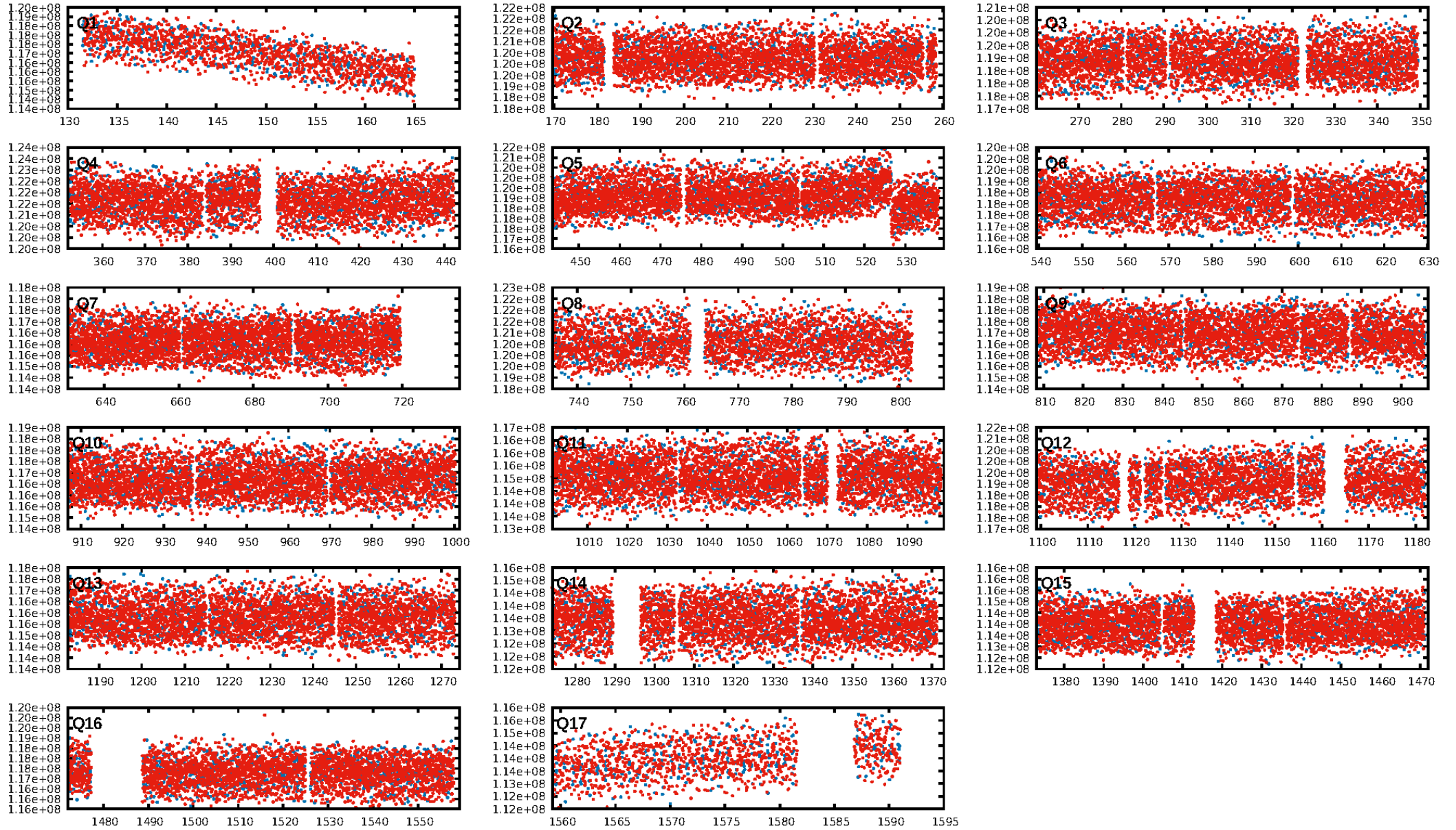
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 92.8% [1.80σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1113/1114]
GhostDiagnostic-chr: 2.233
Centroid-sig: N/A
Centroid-so: 0.107 arcsec [0.75σ]
OotOffset-rm: 1.145 arcsec [2.70σ]
KicOffset-rm: 1.022 arcsec [2.41σ]
OotOffset-st: 0/4/0/5 [9]
KicOffset-st: 0/4/0/5 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 0.00 [0/17]

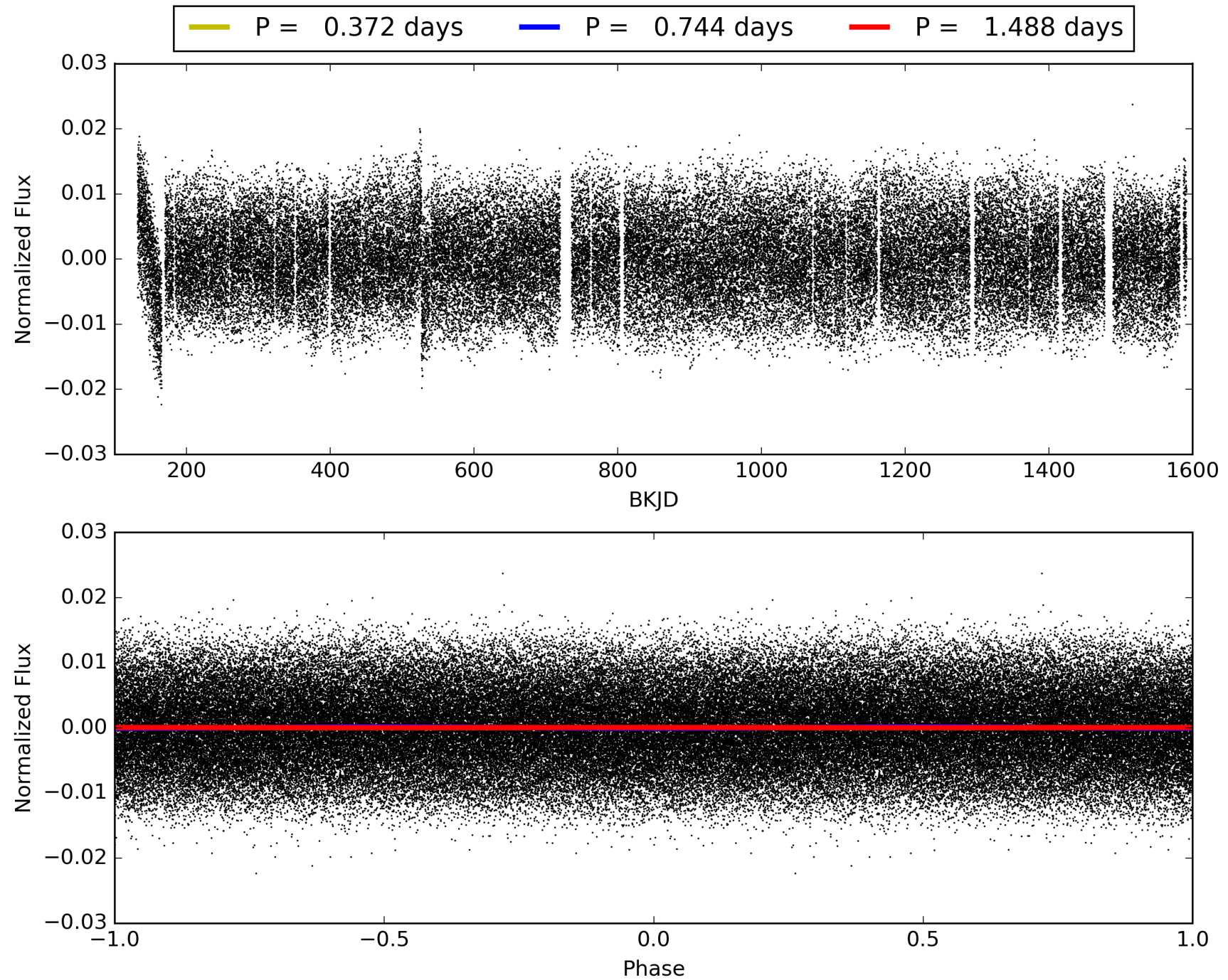
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 03:04:28 Z

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

TCE 003748250-03, PDC Light Curves

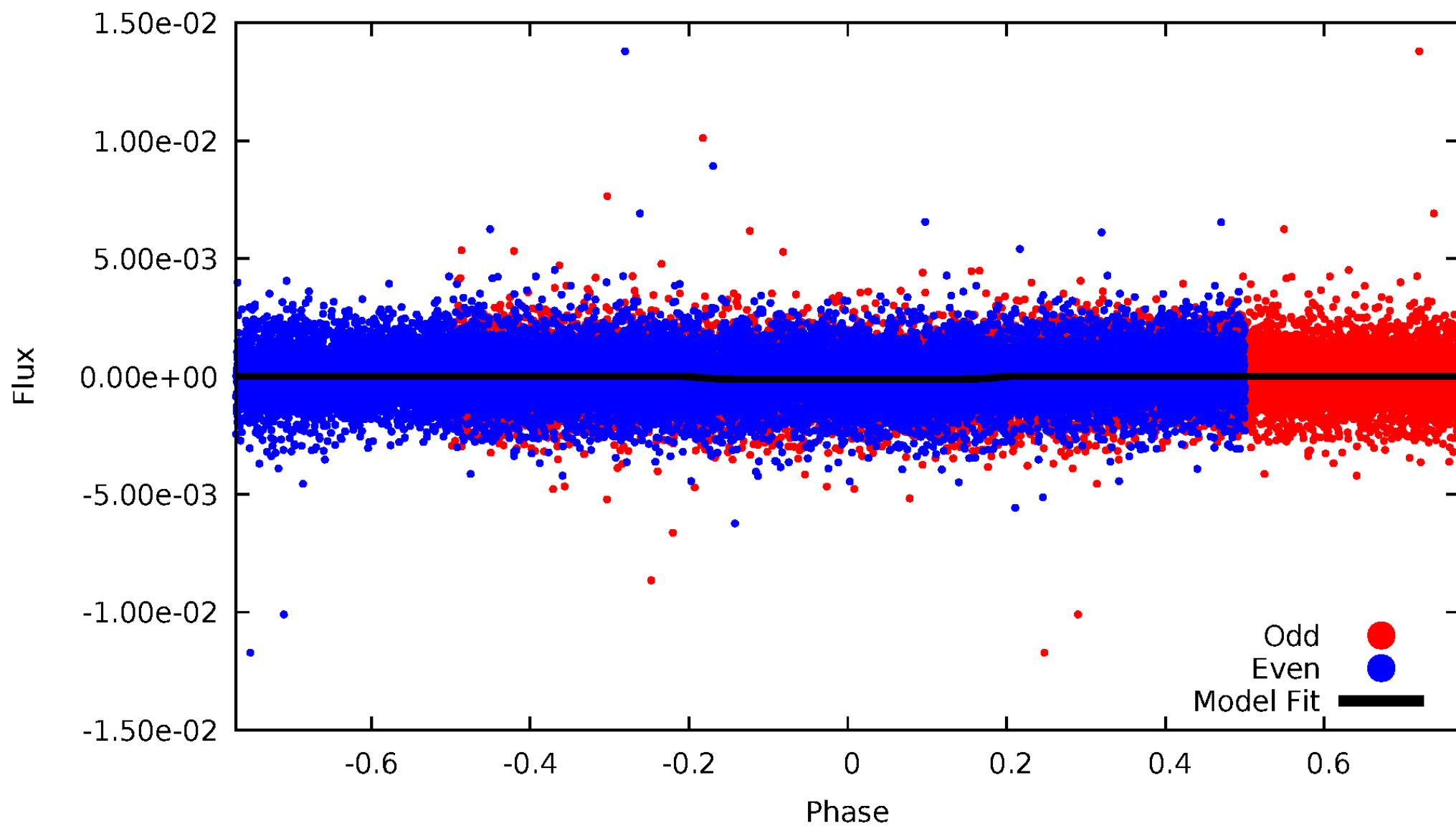


TCE 003748250-03



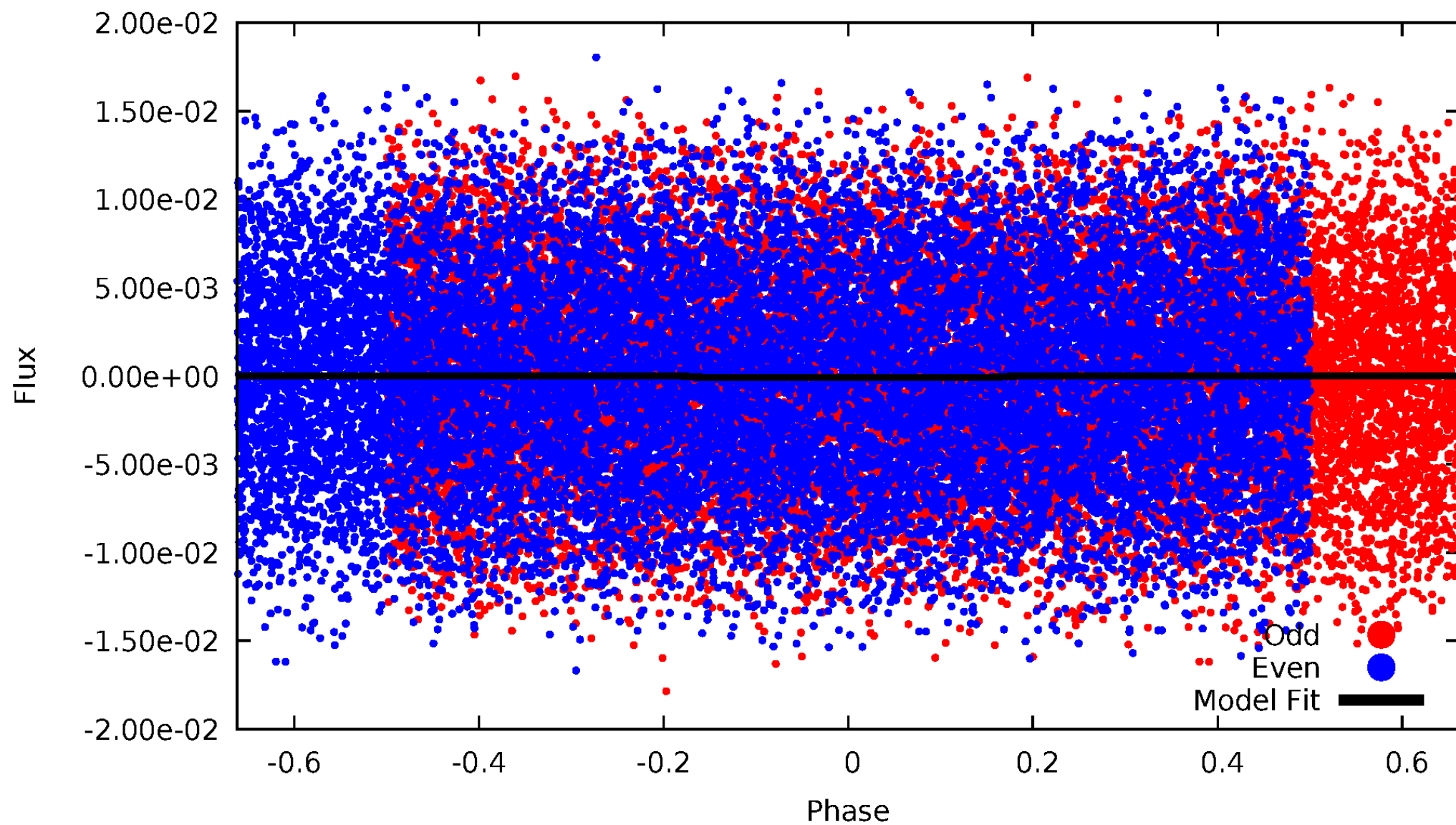
DV Odd/Even

TCE 003748250-03

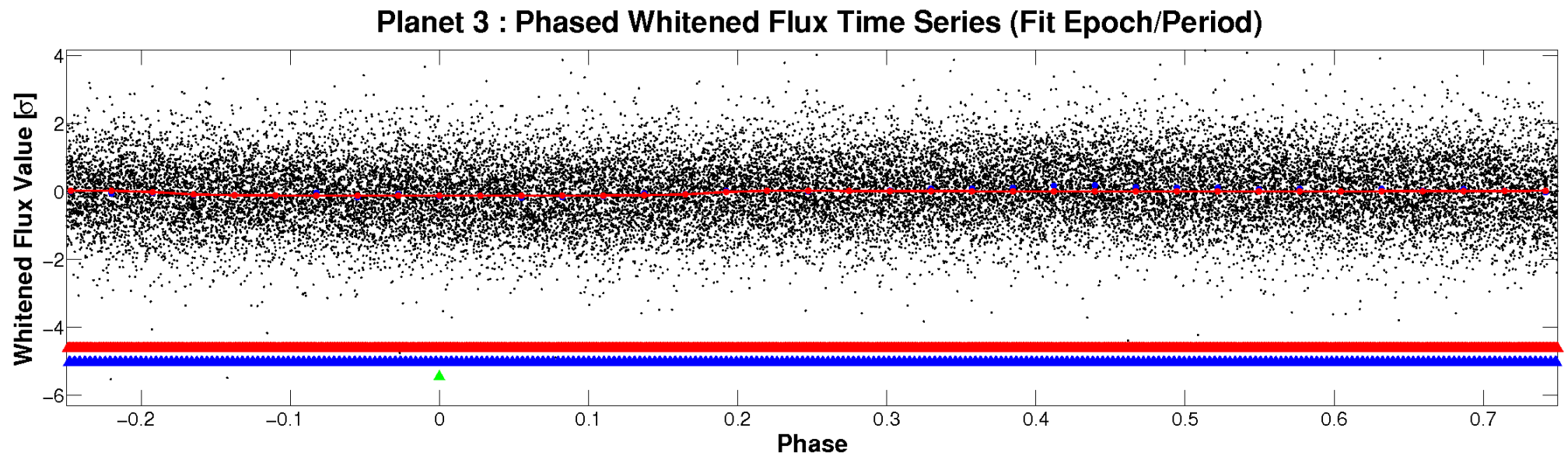
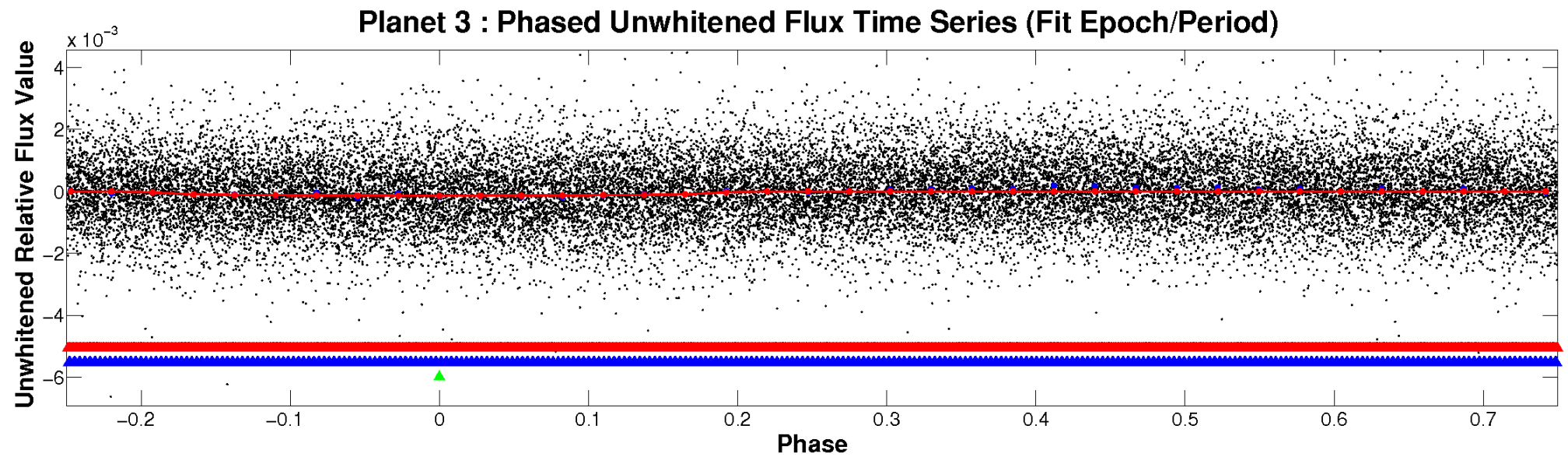


ALT Odd/Even

TCE 003748250-03

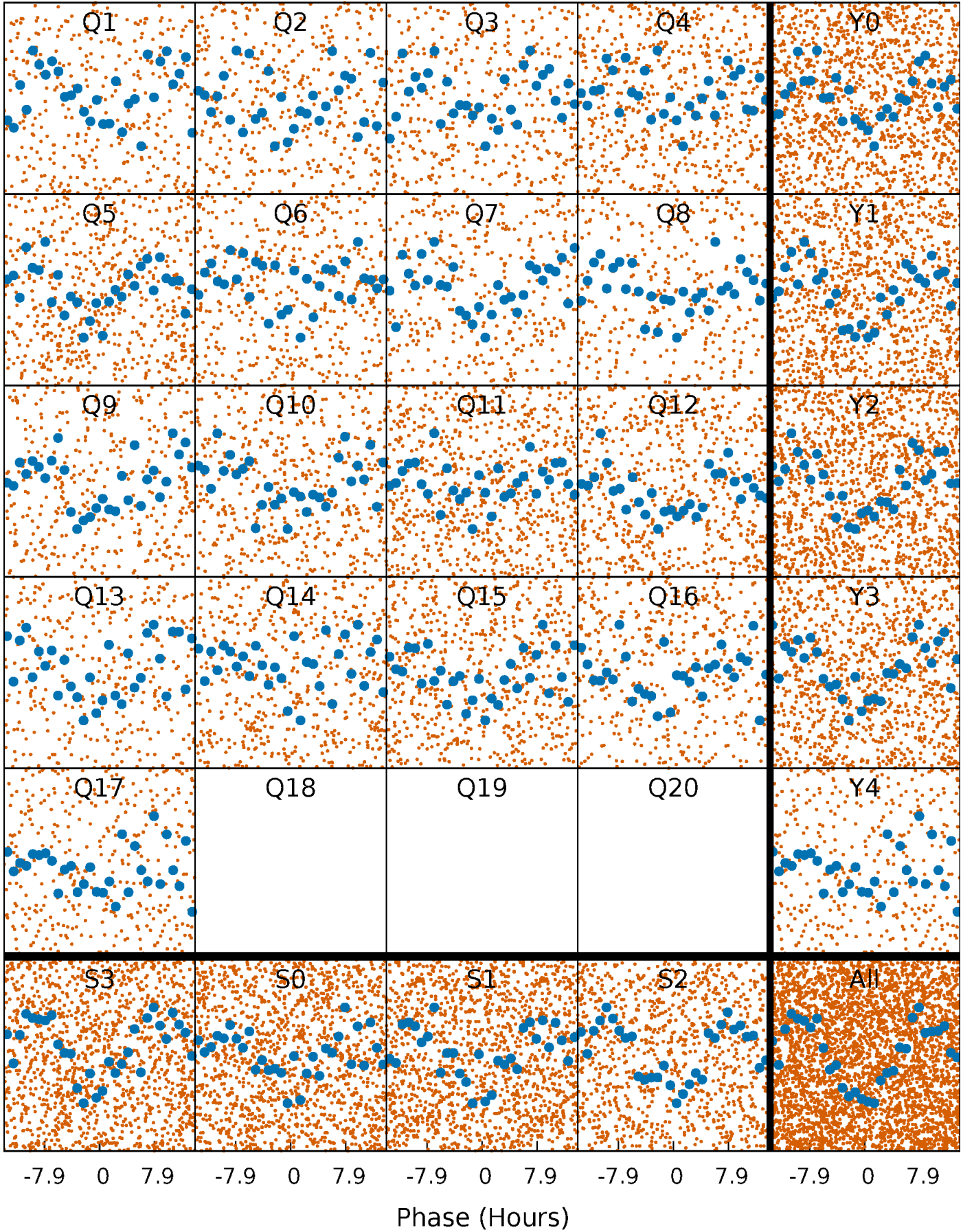


Non-Whitened Vs. Whitened Light Curve



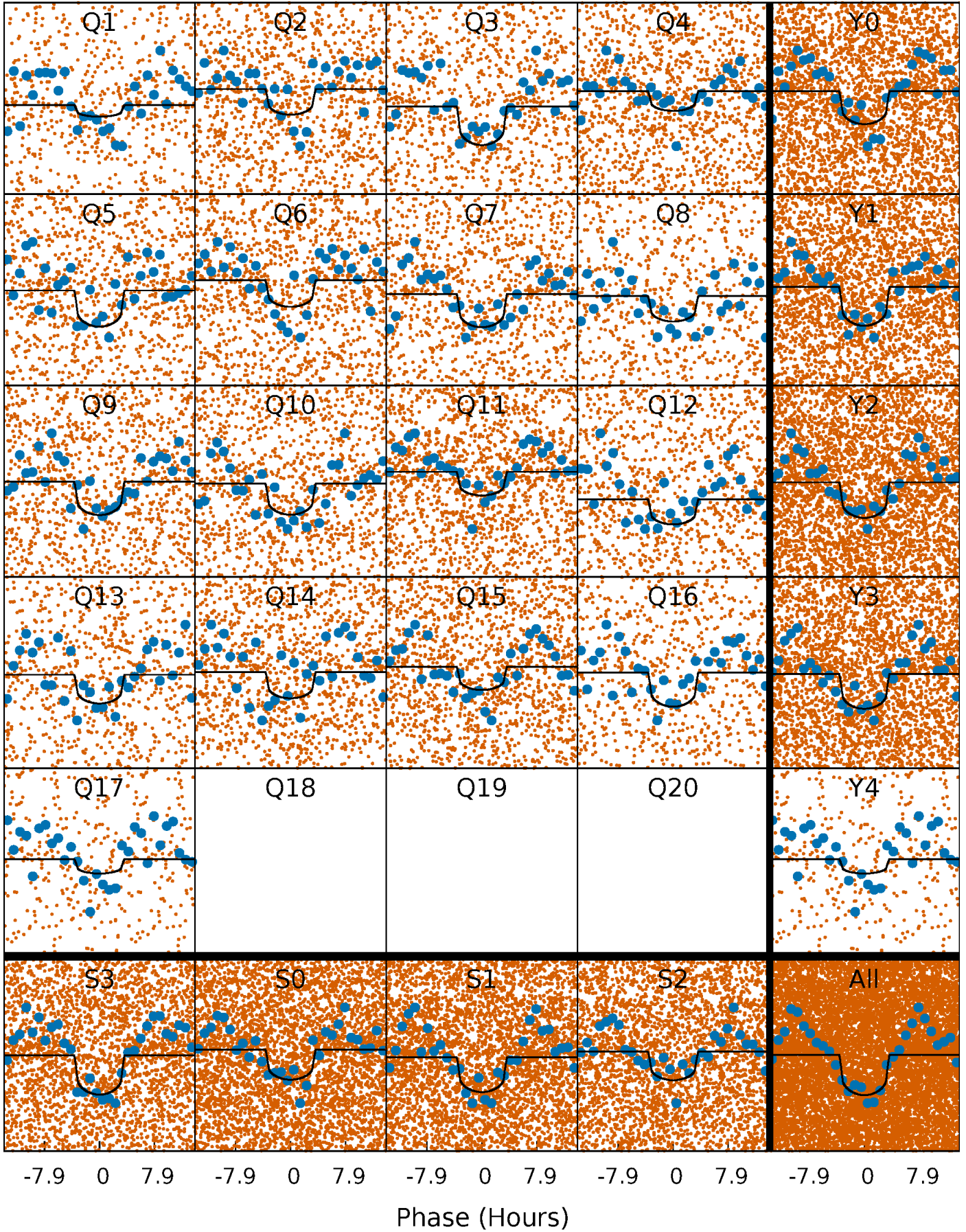
PDC Quarter-Phased Transit Curves

TCE 003748250-03 P= 0.743780 Days $T_0=131.940215$ (BKJD)



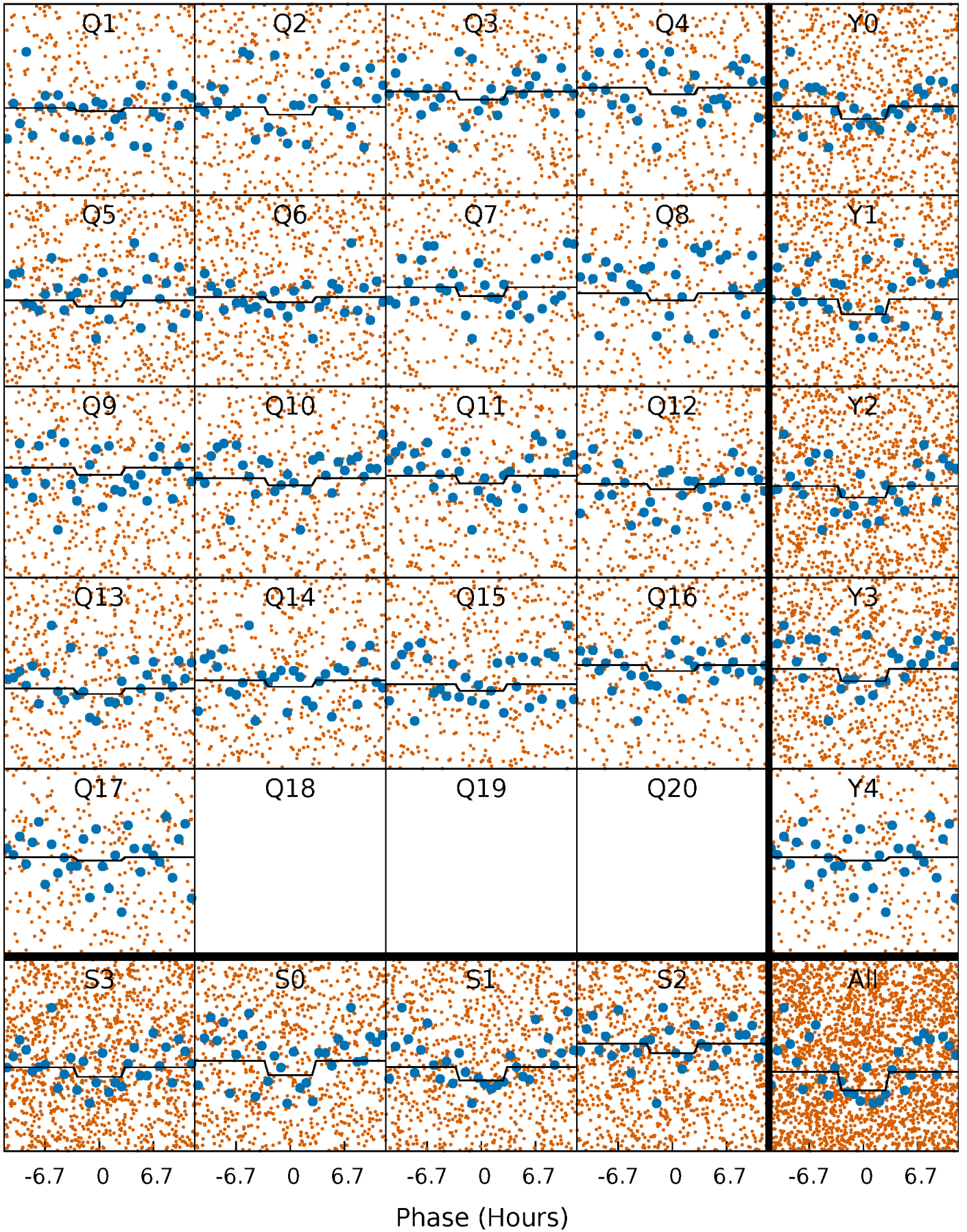
DV Quarter-Phased Transit Curves

TCE 003748250-03 P= 0.743780 Days $T_0=131.940215$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

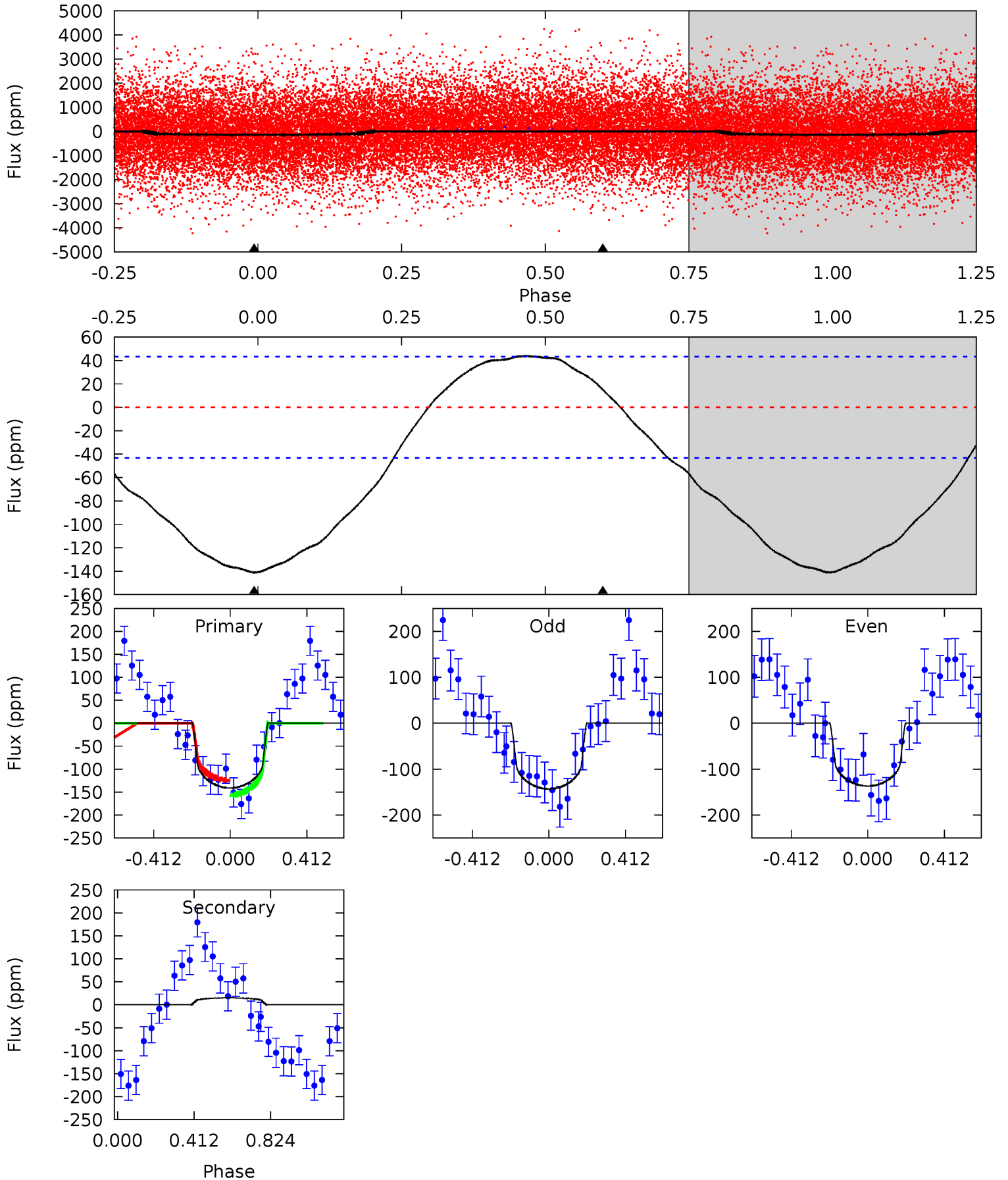
TCE 003748250-03 P= 0.743767 Days $T_0=131.944048$ (BKJD)



DV Model-Shift Uniqueness Test

003748250-03, P = 0.743780 Days, E = 131.196435 Days

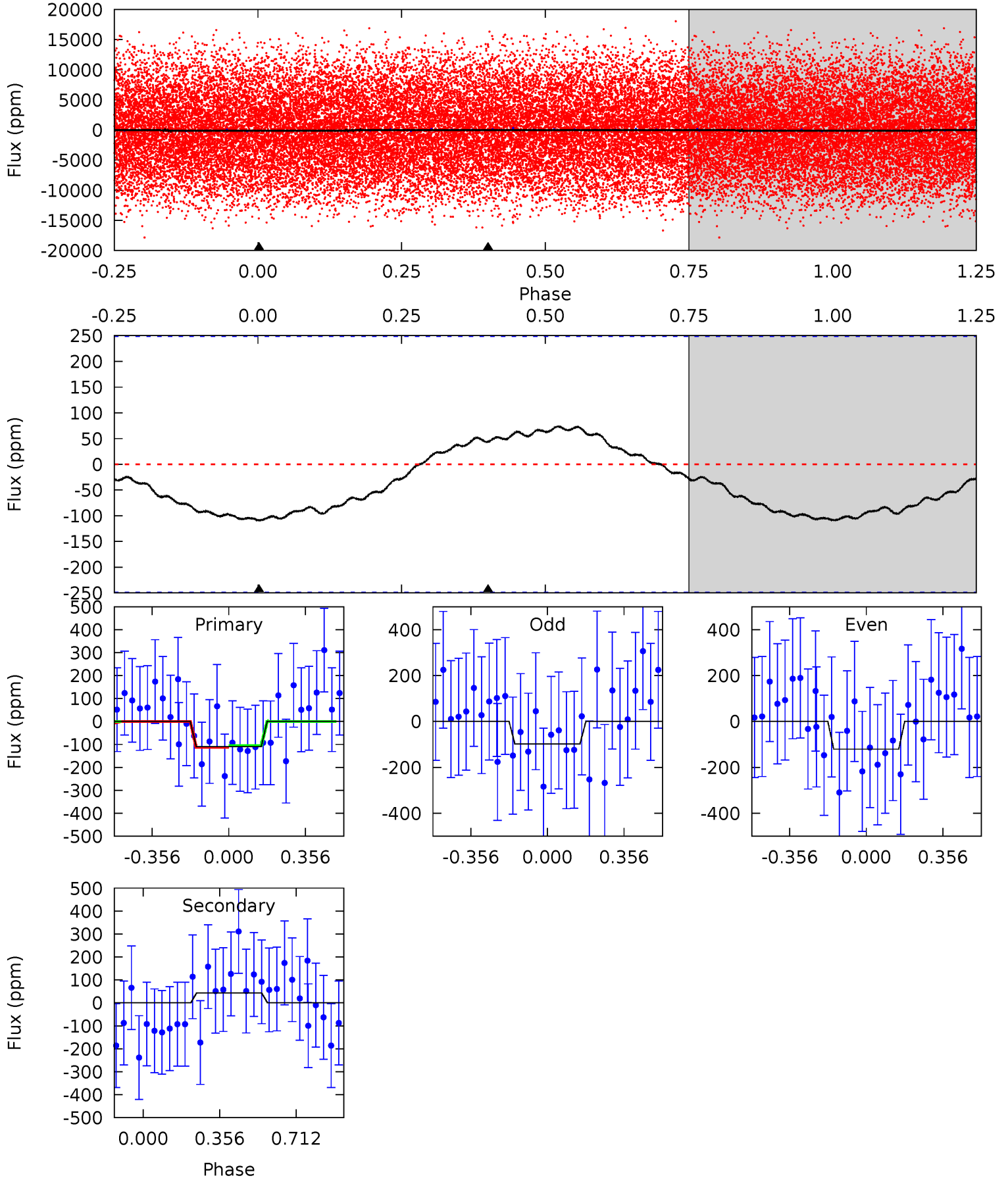
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.9	-1.48	0	0	4.26	0.82	1.76	13.9	13.9	-1.48	-1.48	0.32	1.11	0.24	1.60



Alt Model-Shift Uniqueness Test

003748250-03, P = 0.743767 Days, E = 131.200281 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.88	-0.74	0	0	4.29	0.92	0.25	1.88	1.88	-0.74	-0.74	0.20	1.49	0.40	0.06



Stellar Parameters For KIC 003748250

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7622^{+214}_{-322}	$4.135^{+0.105}_{-0.180}$	$0.020^{+0.150}_{-0.350}$	$1.829^{+0.519}_{-0.346}$	$1.662^{+0.204}_{-0.249}$	$0.383^{+0.218}_{-0.188}$
	+3%/-4%	+3%/-4%	+750%/-1750%	+28%/-19%	+12%/-15%	+57%/-49%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003748250-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	15 ± 10	$2.49^{+1.80}_{-1.38}$	4649^{+341}_{-295}	-4829^{+590}_{-1748}	$-0.435^{+0.341}_{-1.918}$
Alt.	43 ± 58	$2.22^{+1.86}_{-1.30}$	4626^{+351}_{-262}	-5610^{+9408}_{-3522}	$-1.168^{+1.678}_{-7.313}$

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

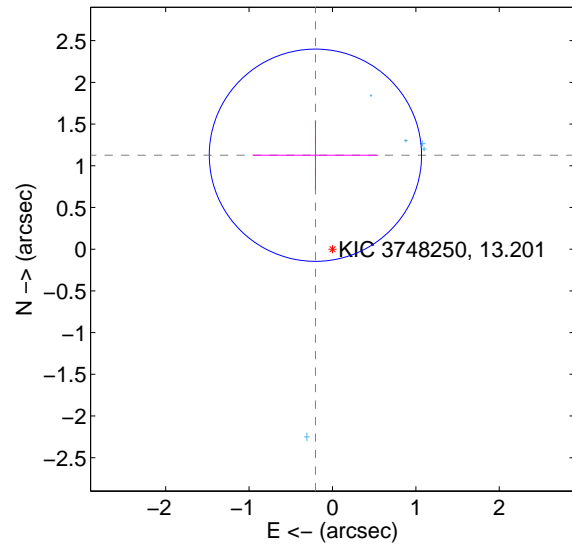
Supplemental centroid analysis for 003748250-03. Kepler magnitude: 13.20. Transit SNR 11.36

There are 5 quarters with good PRF difference image offsets

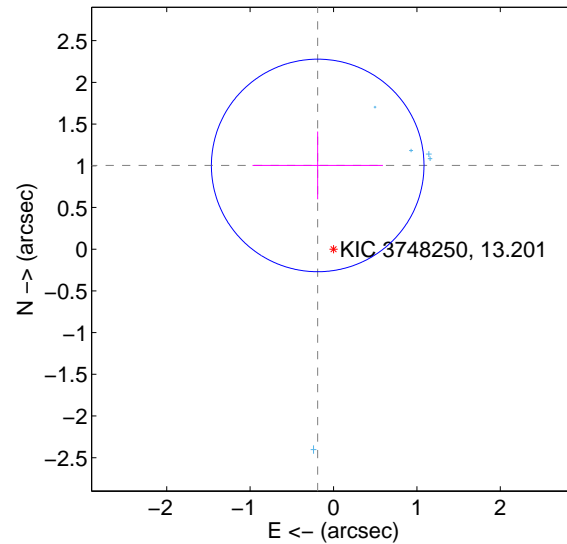
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.145 ± 0.424	2.70	0.204 ± 0.751	1.126 ± 0.409
PRF-fit source offset from KIC position	1.022 ± 0.425	2.41	0.190 ± 0.782	1.004 ± 0.406
photometric centroid source offset	0.11 ± 0.14	0.75	-0.01 ± 0.11	0.11 ± 0.14

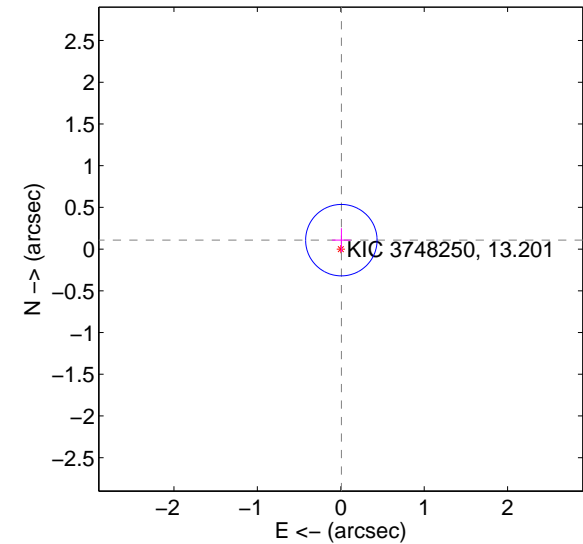
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

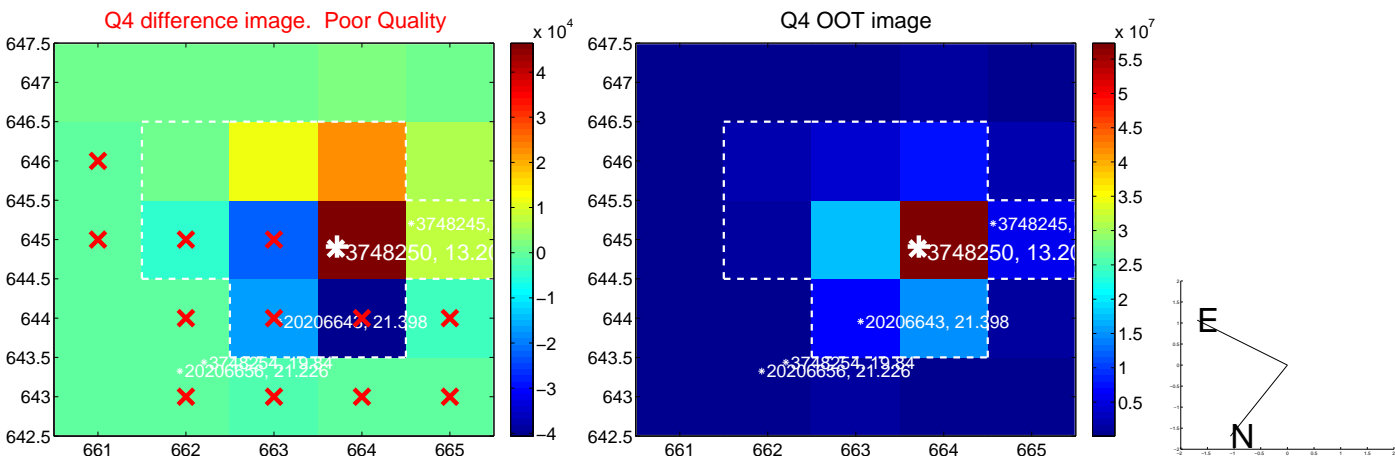
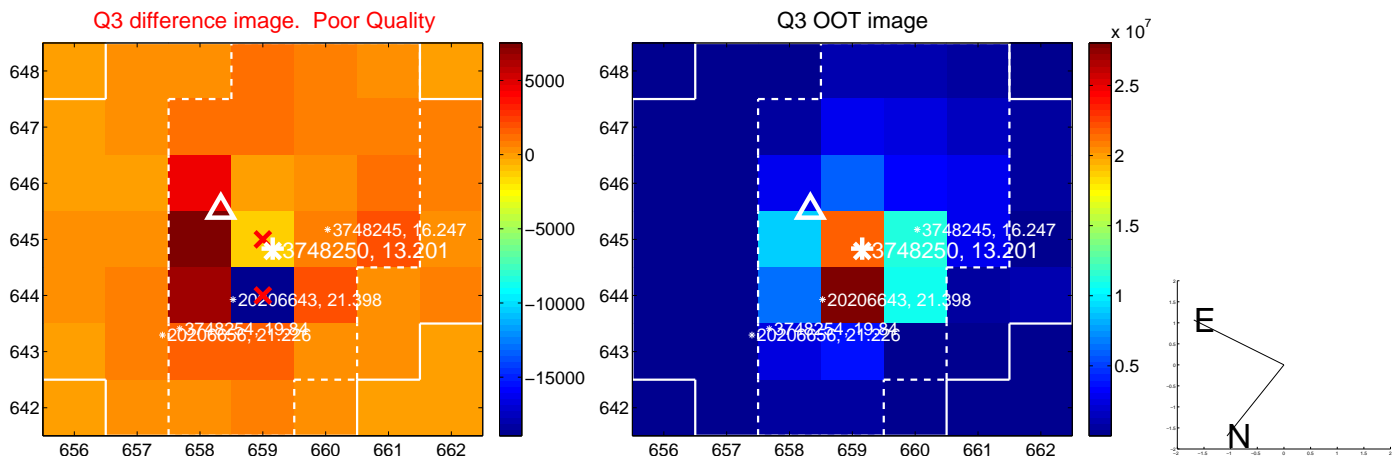
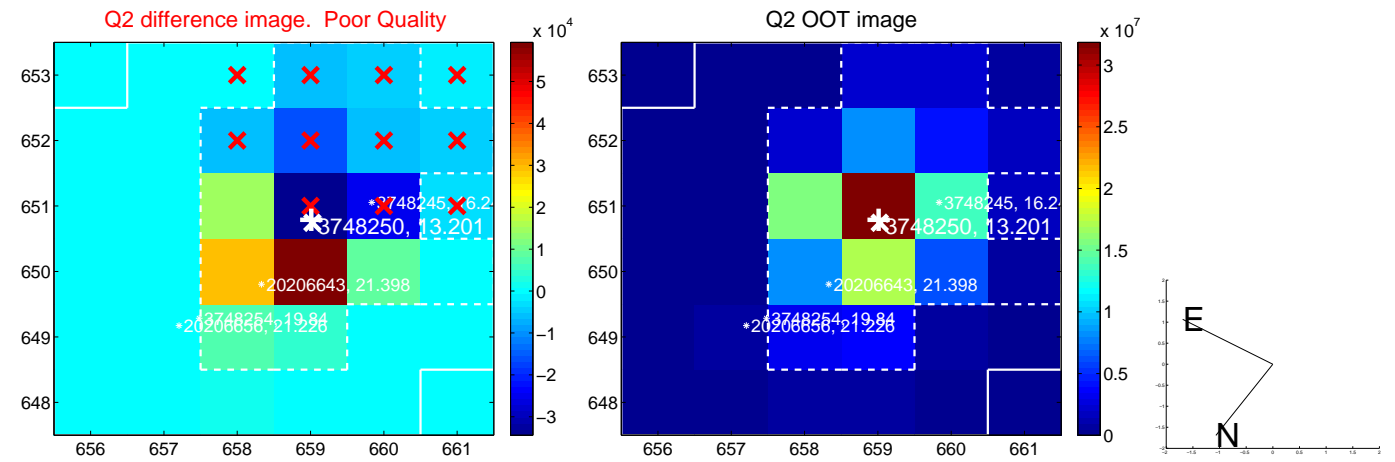
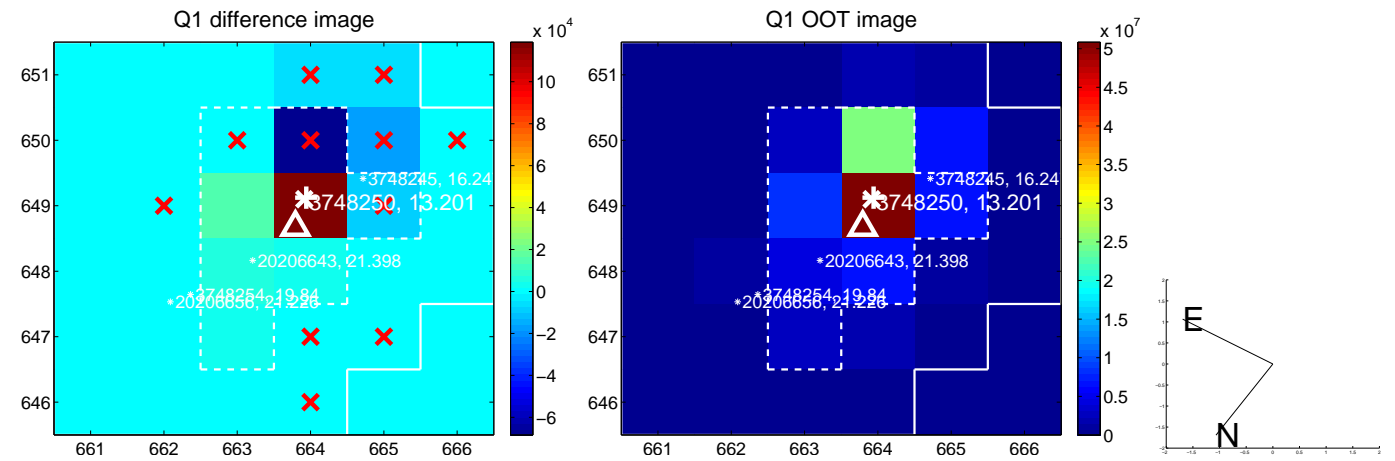


offset from photometric centroids

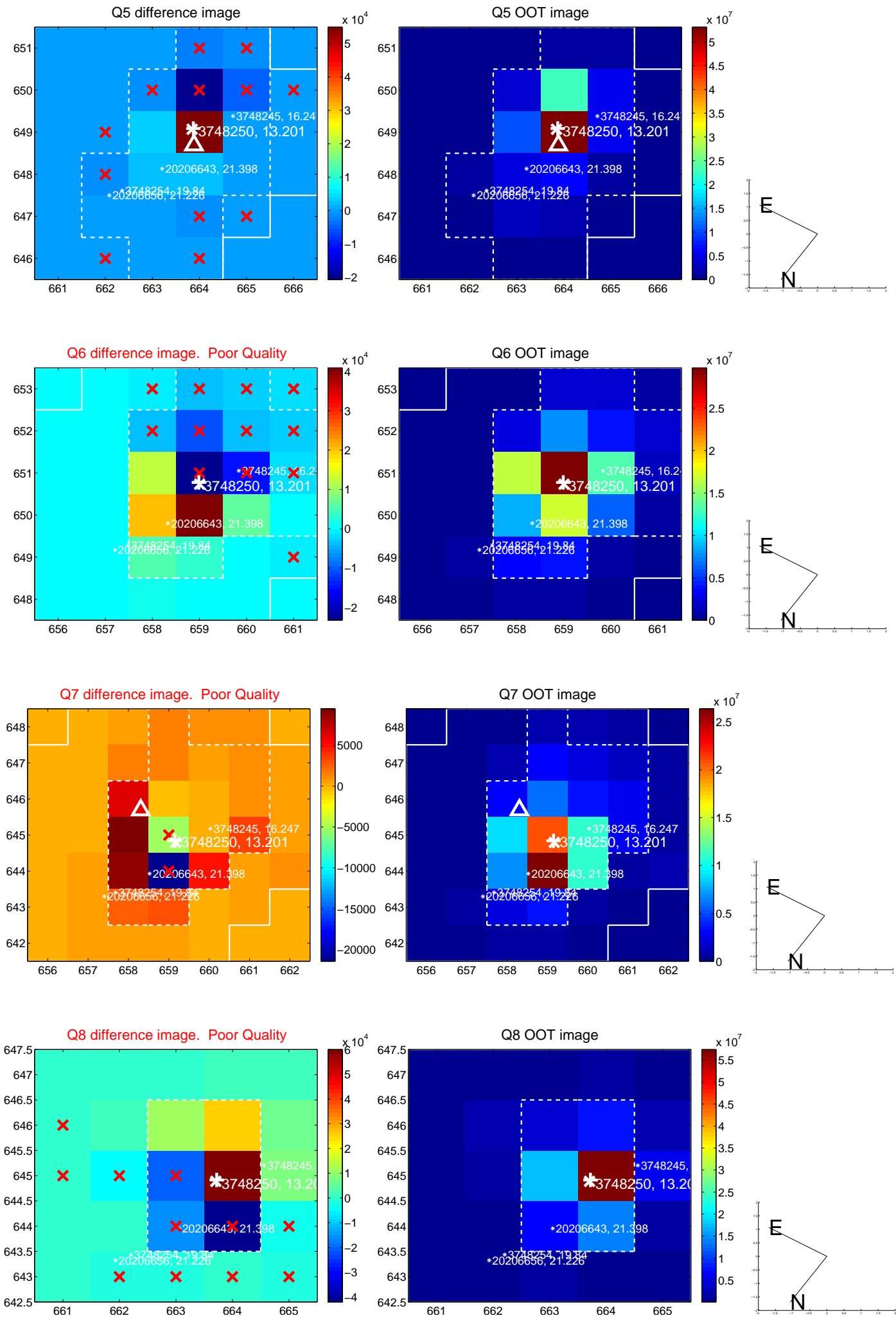


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

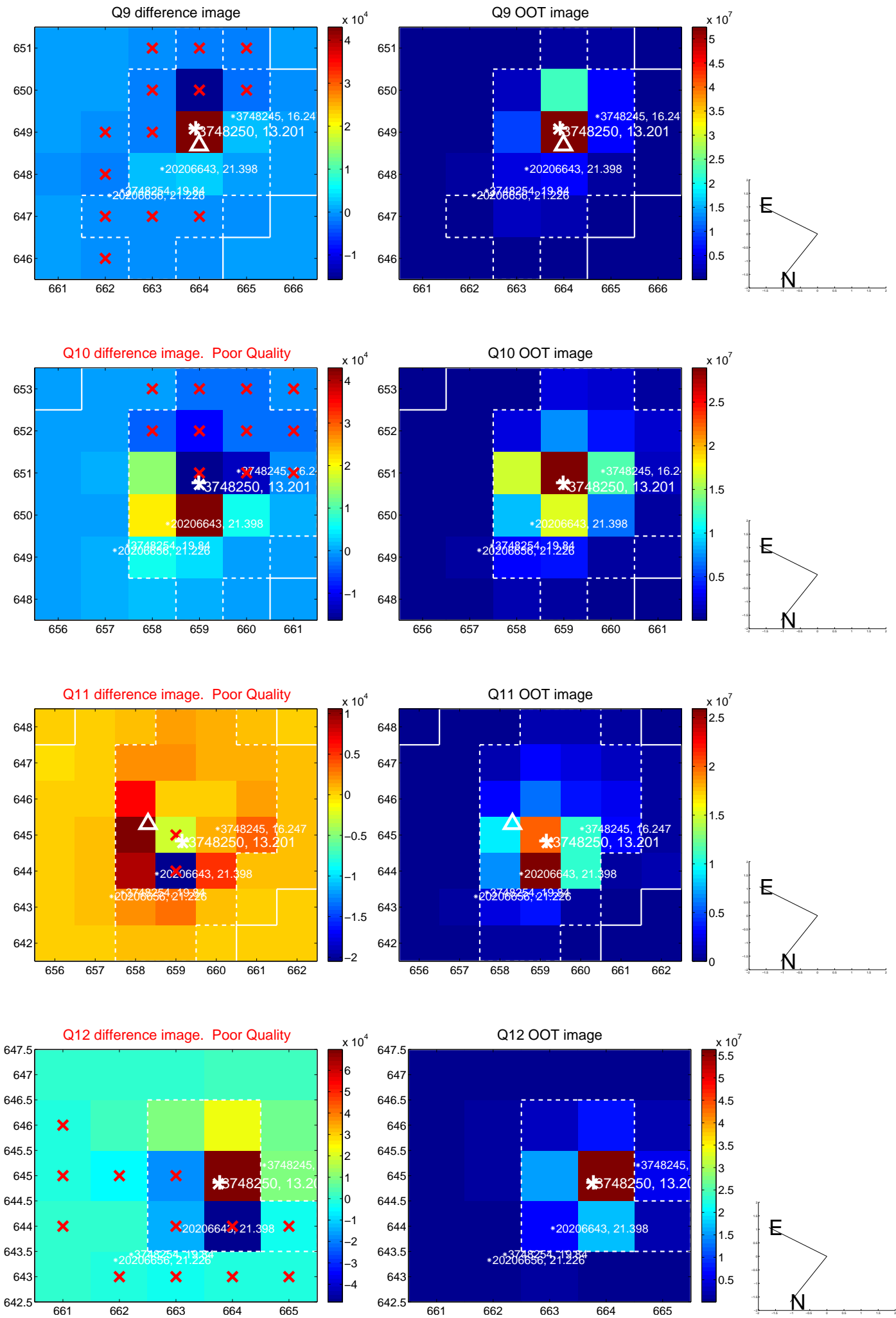
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



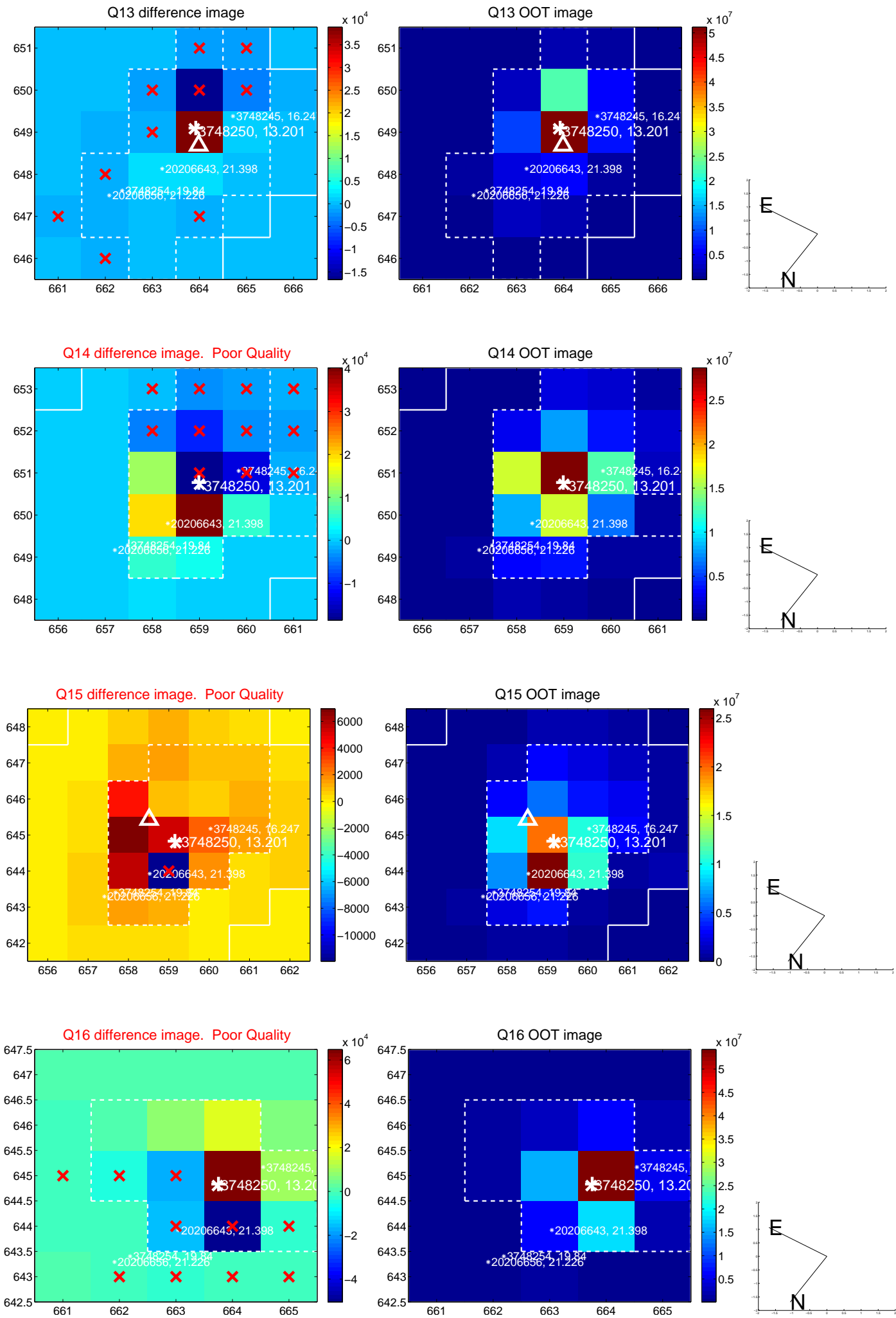
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



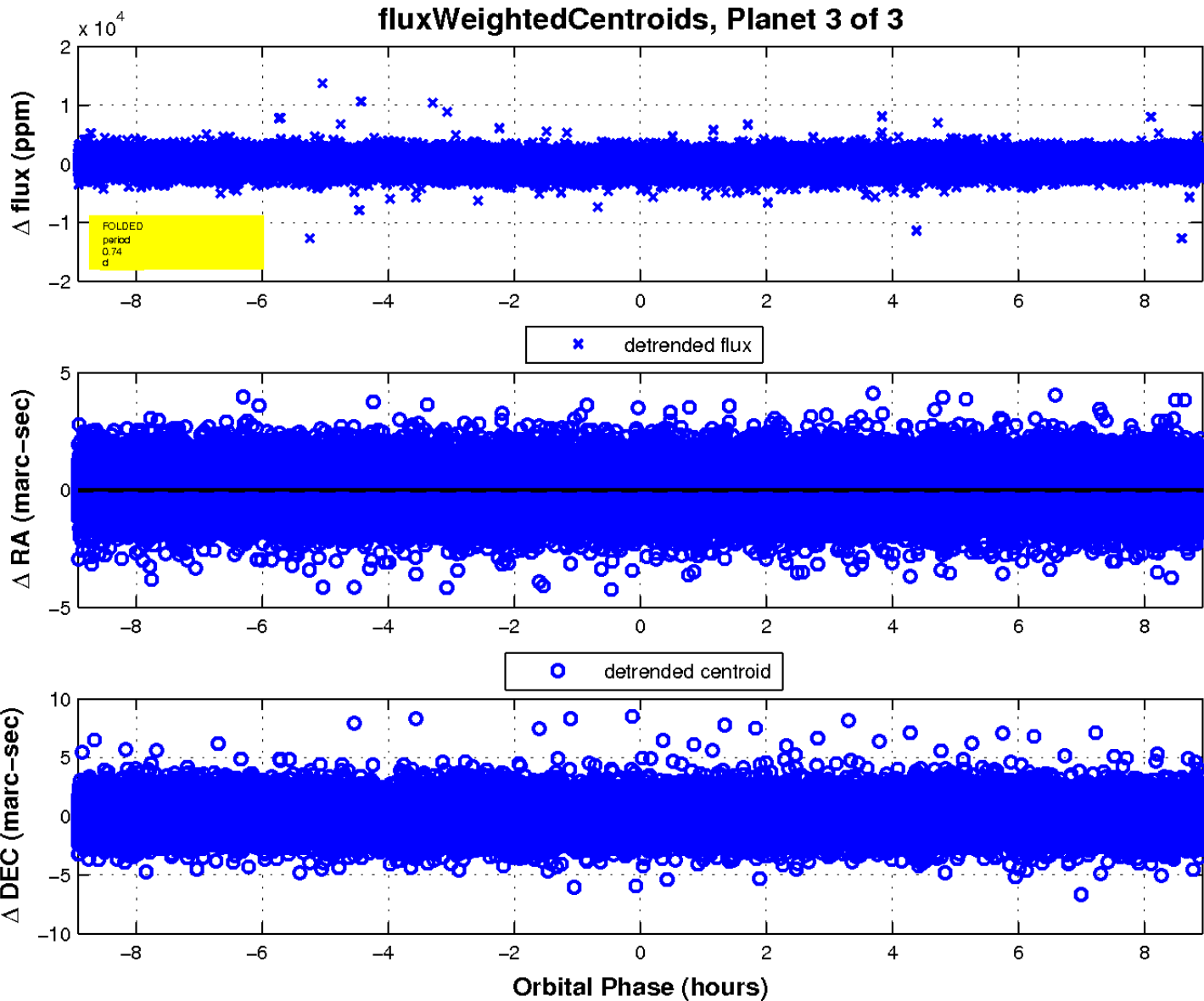
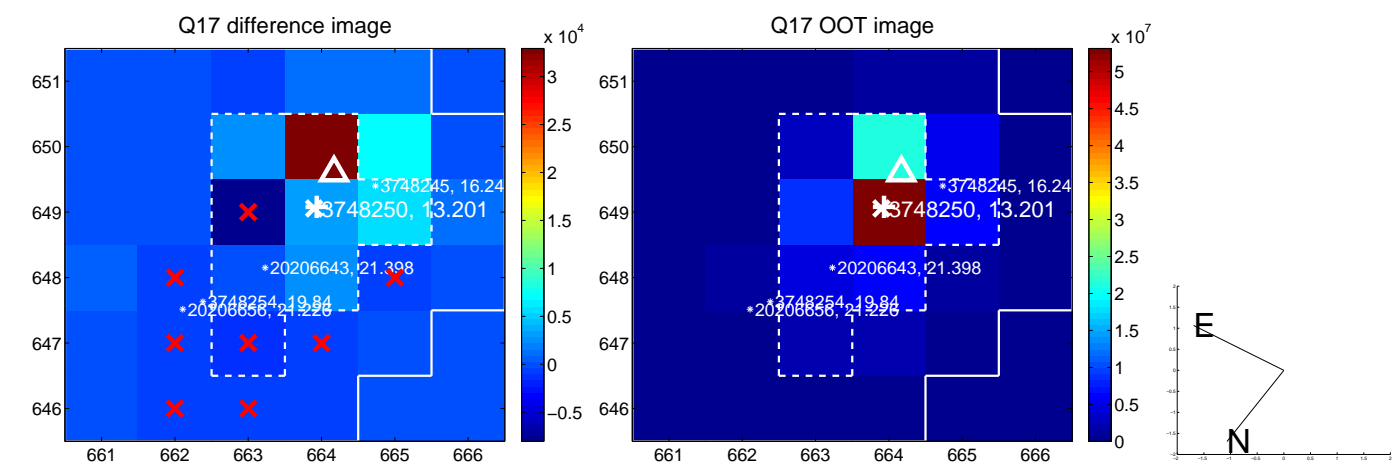
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

