

KIC 008265204

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})
008265204-01	OBS	No	1.240012	132.135065	5.2	9.378	9.4	3.1	1.90	6777	0.45	11725.50
008265204-02	OBS	No	9.801249	137.557277	228.3	1.720	15.7	11.4	1.90	6777	3.08	744.72
008265204-03	OBS	No	14.471051	144.295274	355.4	0.899	12.8	13.0	1.90	6777	4.22	442.96
008265204-04	OBS	No	5.850505	133.107353	252.3	0.626	10.7	12.4	1.90	6777	3.31	1481.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008265204-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
008265204-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
008265204-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008265204-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

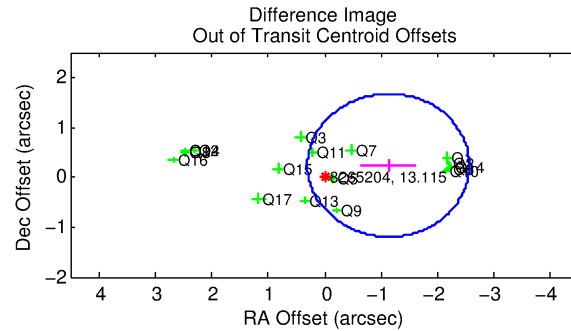
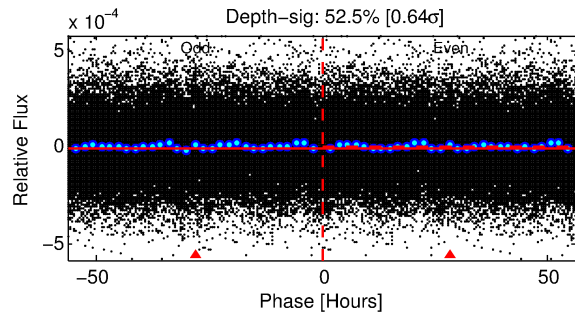
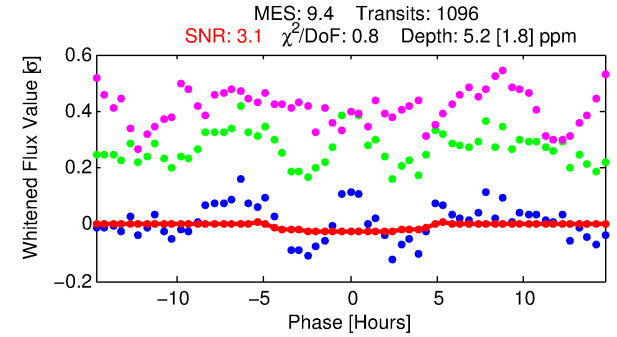
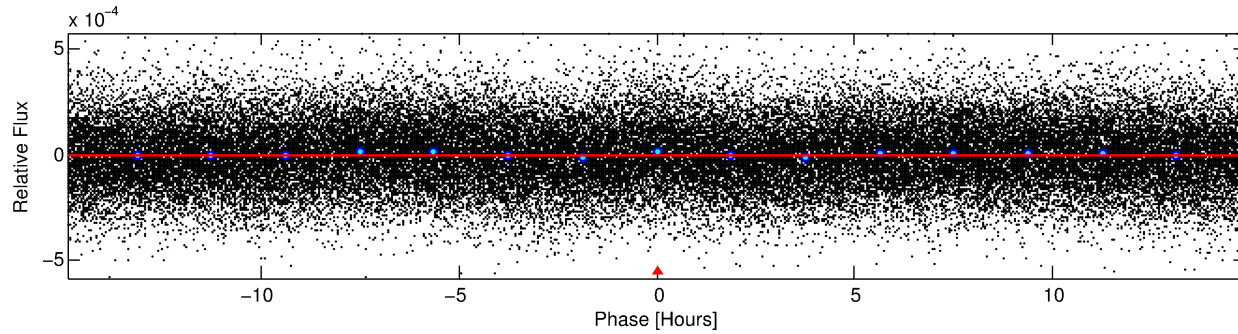
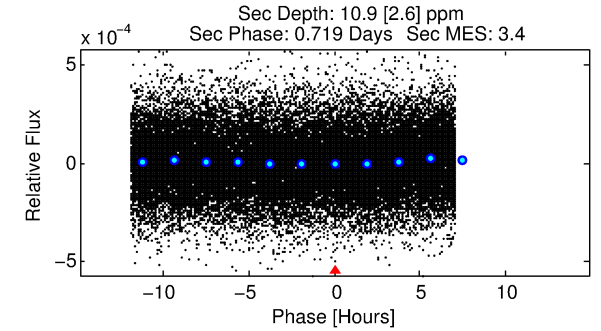
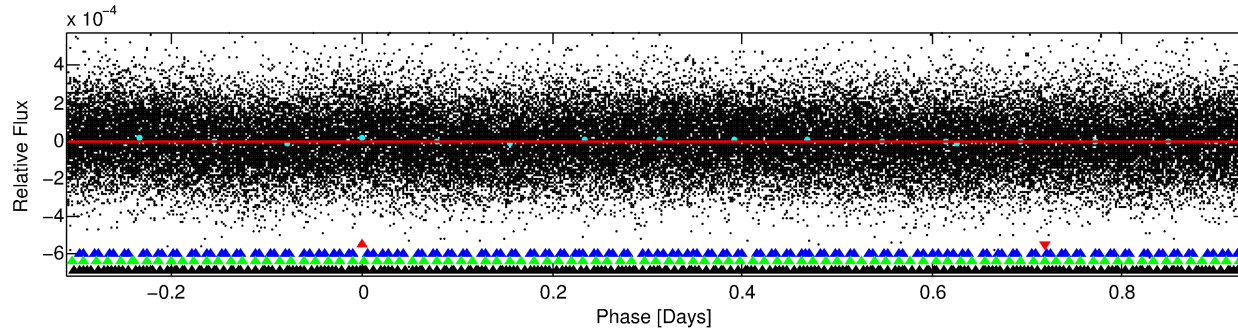
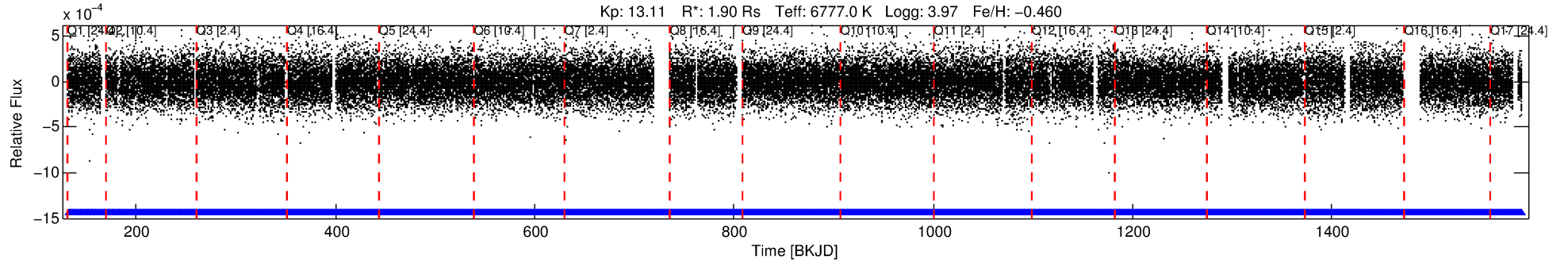
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008265204-01

No Significant Match Found

DV One-Page Summary

KIC: 8265204 Candidate: 1 of 4 Period: 1.240 d



DV Fit Results:

Period = 1.24001 [0.00006] d
Epoch = 132.1351 [0.0208] BKJD
Rp/R* = 0.0022 [0.0034]
a/R* = 1.16 [2.72]
b = 0.44 [16.35]
Seff = 11725.50 [7439.94]
Teq = 2653 [421] K
Rp = 0.45 [0.73] Re
a = 0.0241 [0.0090] AU
Ag = 17.48 [56.98] [0.29σ]
Teffp = 8388 [6722] K [0.85σ]

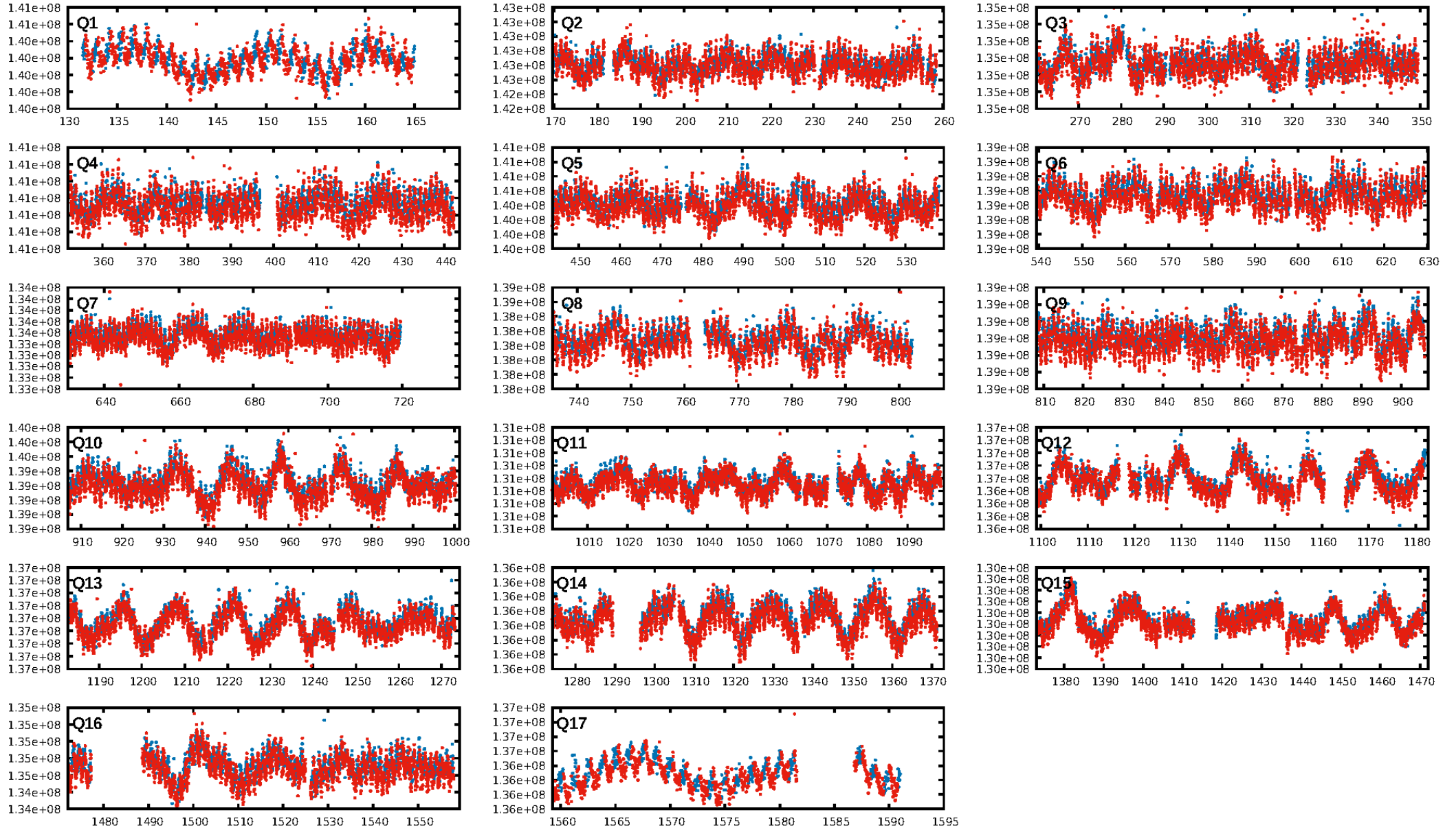
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [11.77σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.64e-38
RollingBand-fgt: 1.00 [1046/1046]
GhostDiagnostic-chr: 0.2792
Centroid-sig: 7.8%
Centroid-so: 4.465 arcsec [1.31σ]
OotOffset-rm: 1.153 arcsec [2.42σ]
KicOffset-rm: 1.057 arcsec [2.25σ]
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]

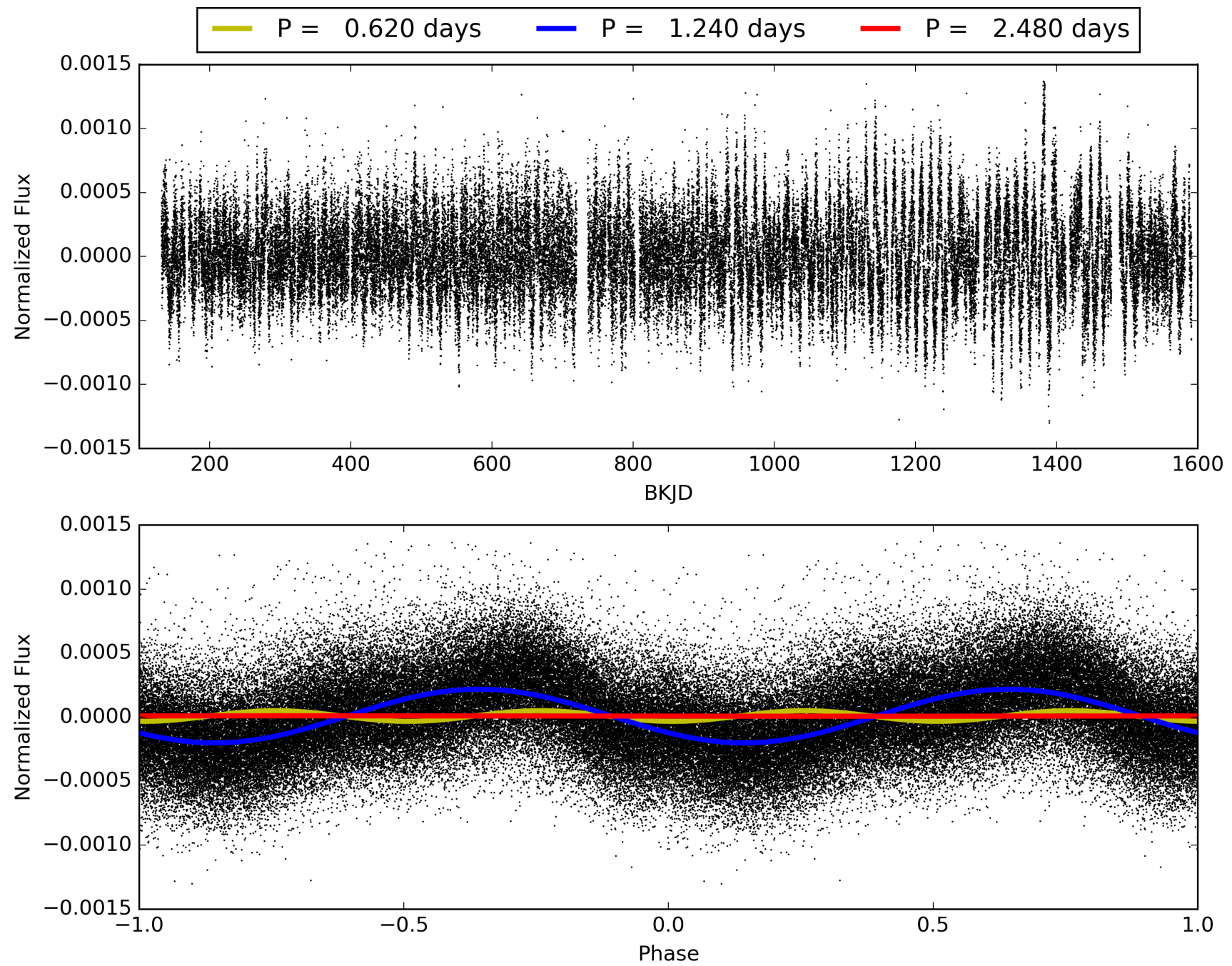
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:27:25 Z

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

TCE 008265204-01, PDC Light Curves

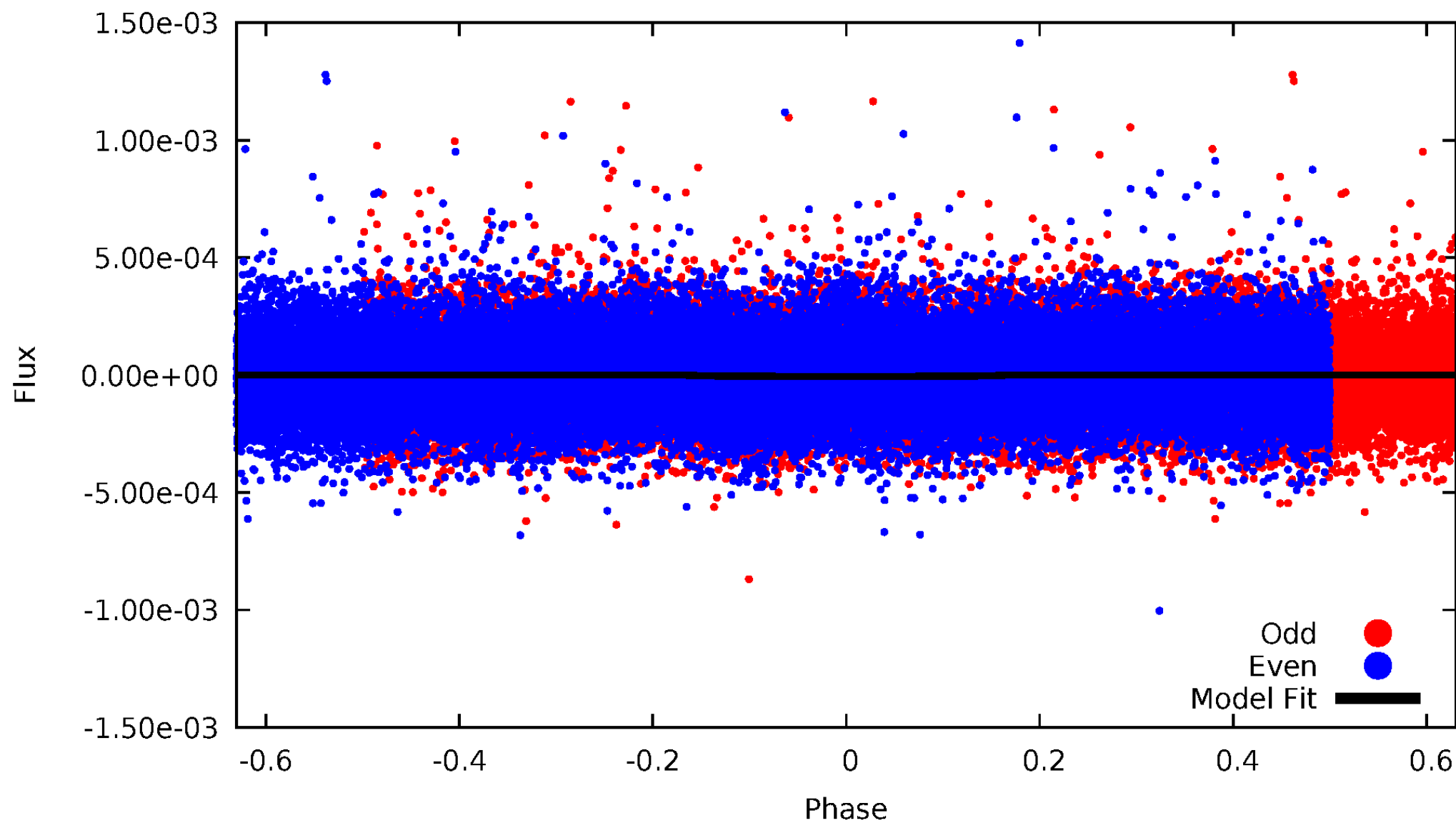


TCE 008265204-01



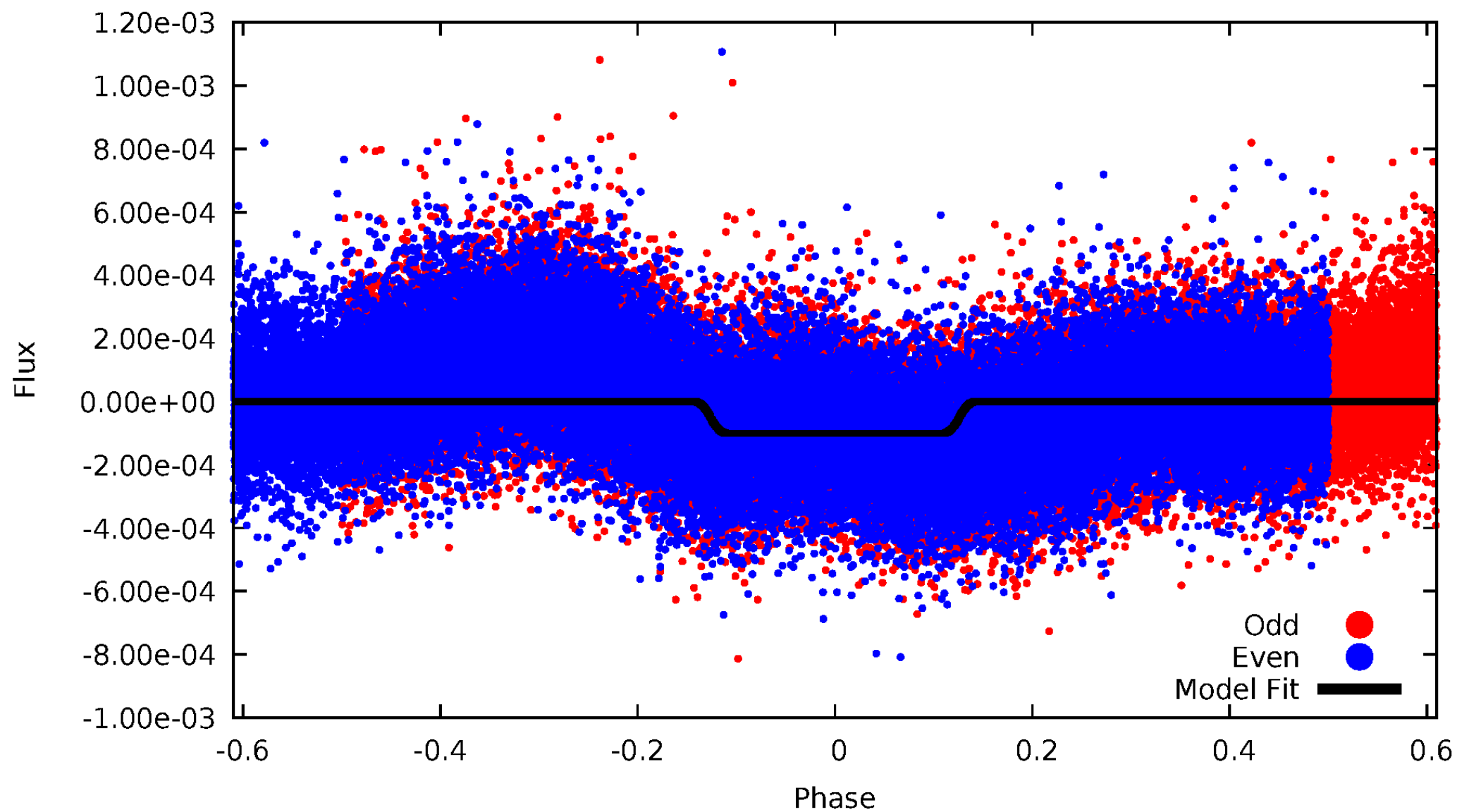
DV Odd/Even

TCE 008265204-01

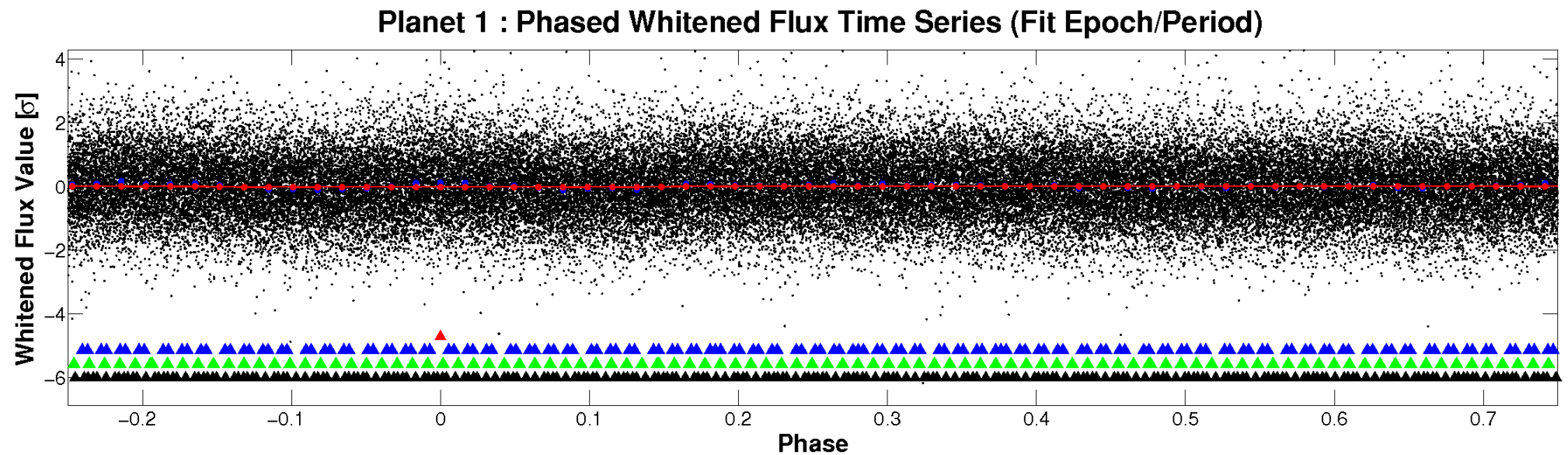
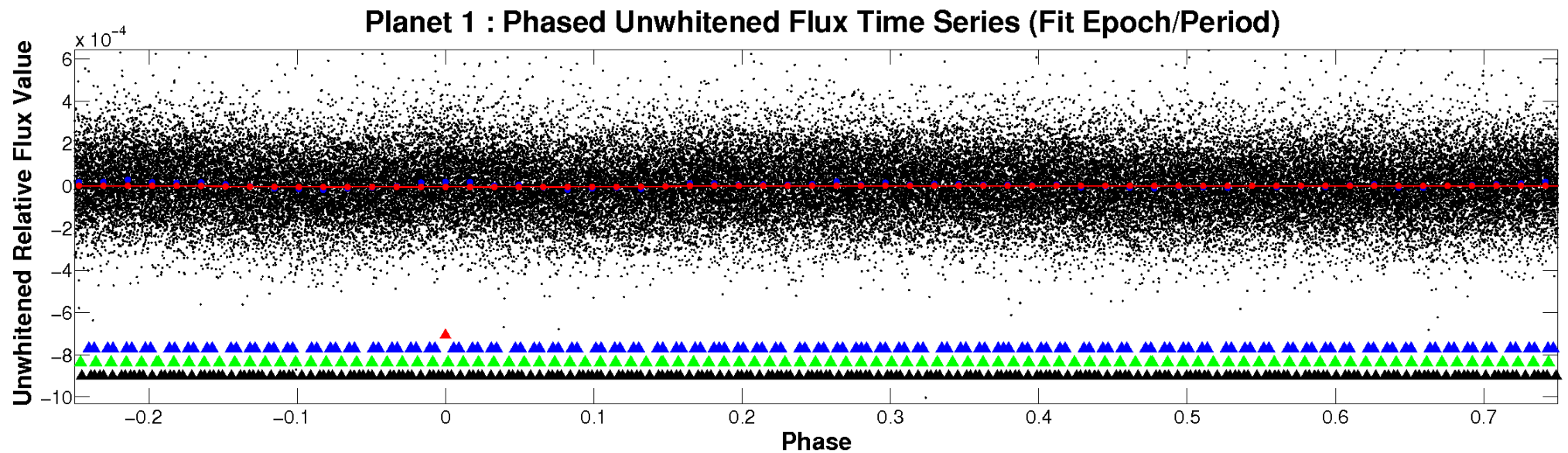


ALT Odd/Even

TCE 008265204-01

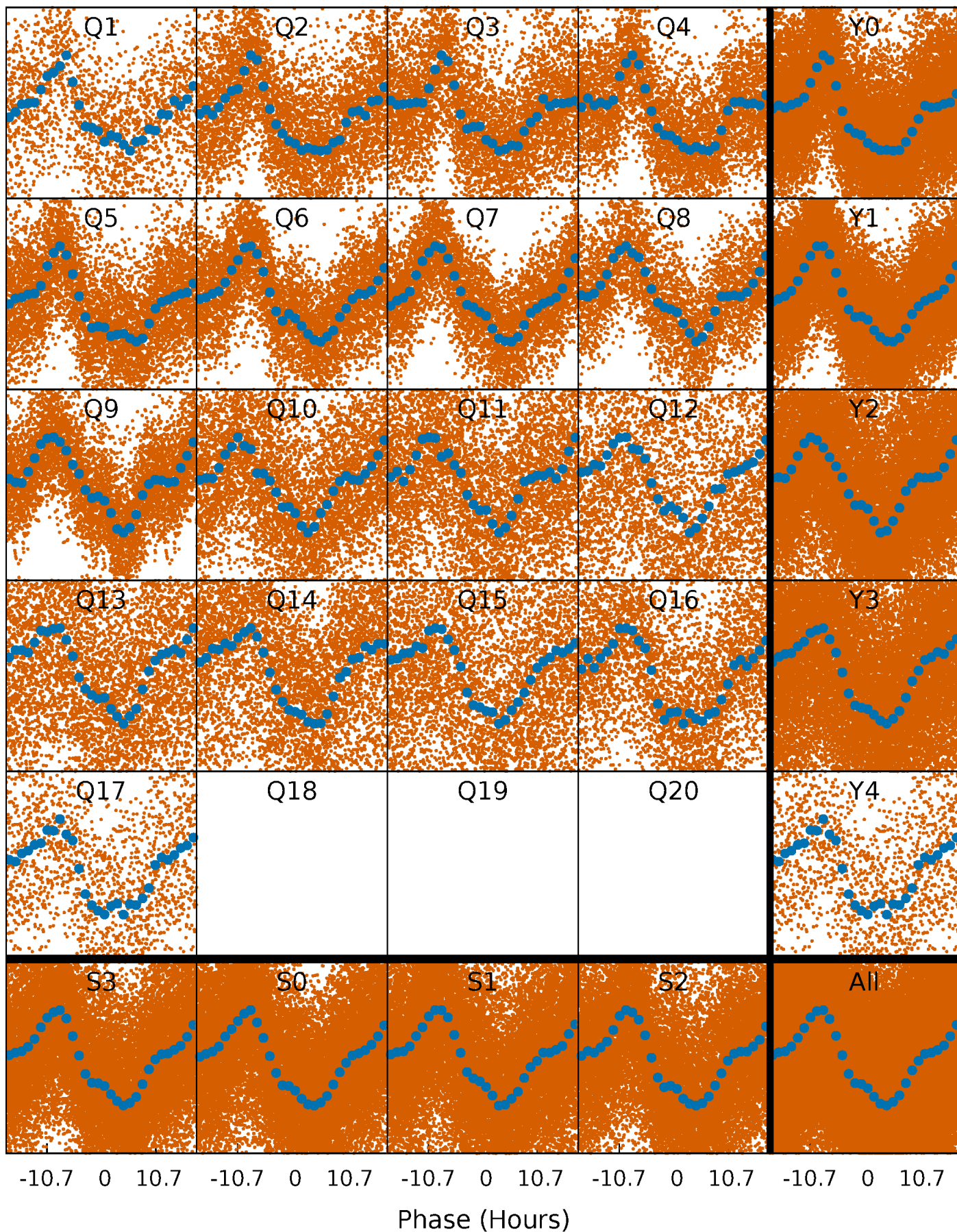


Non-Whitened Vs. Whitened Light Curve



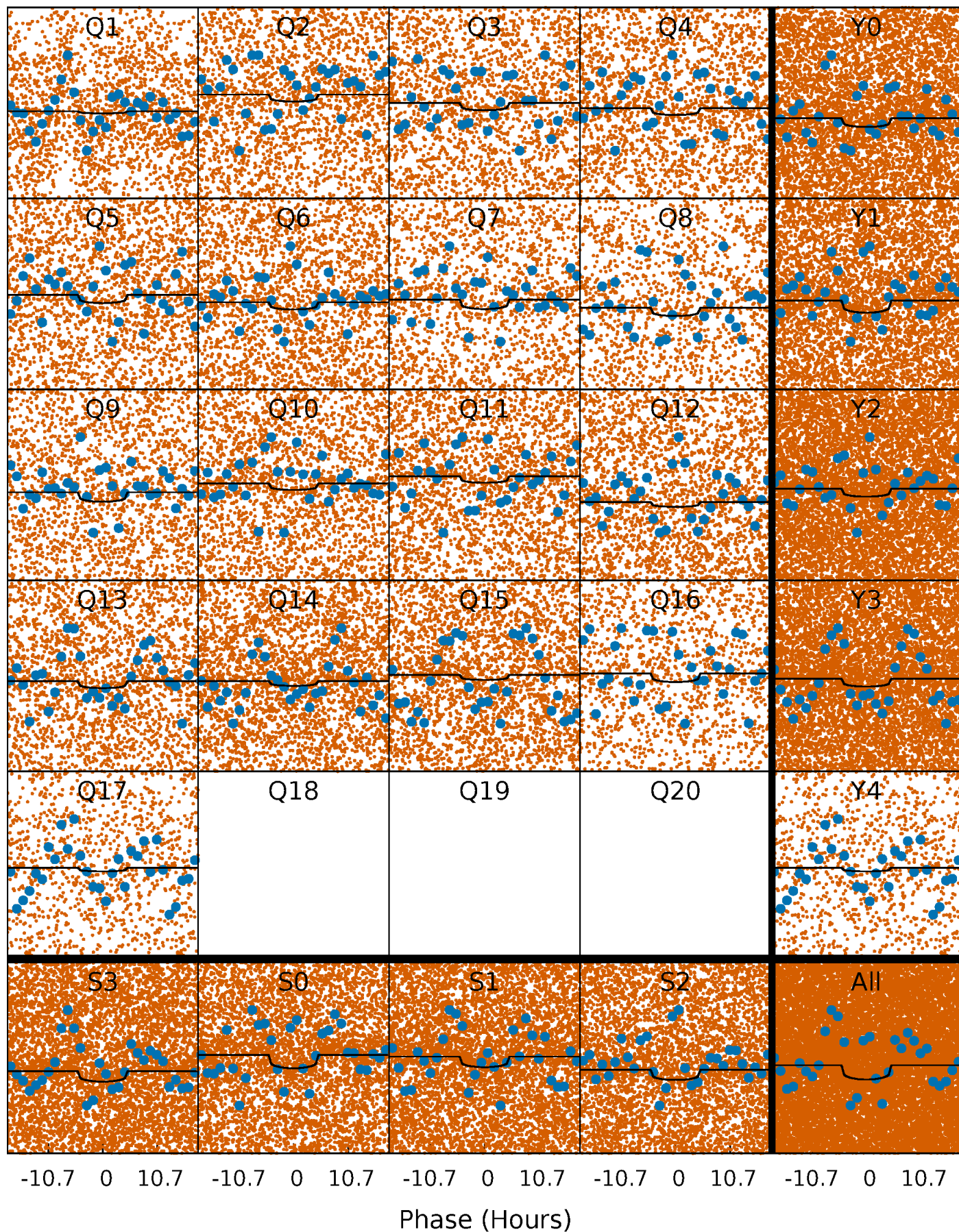
PDC Quarter-Phased Transit Curves

TCE 008265204-01 P= 1.240012 Days $T_0=132.135065$ (BKJD)



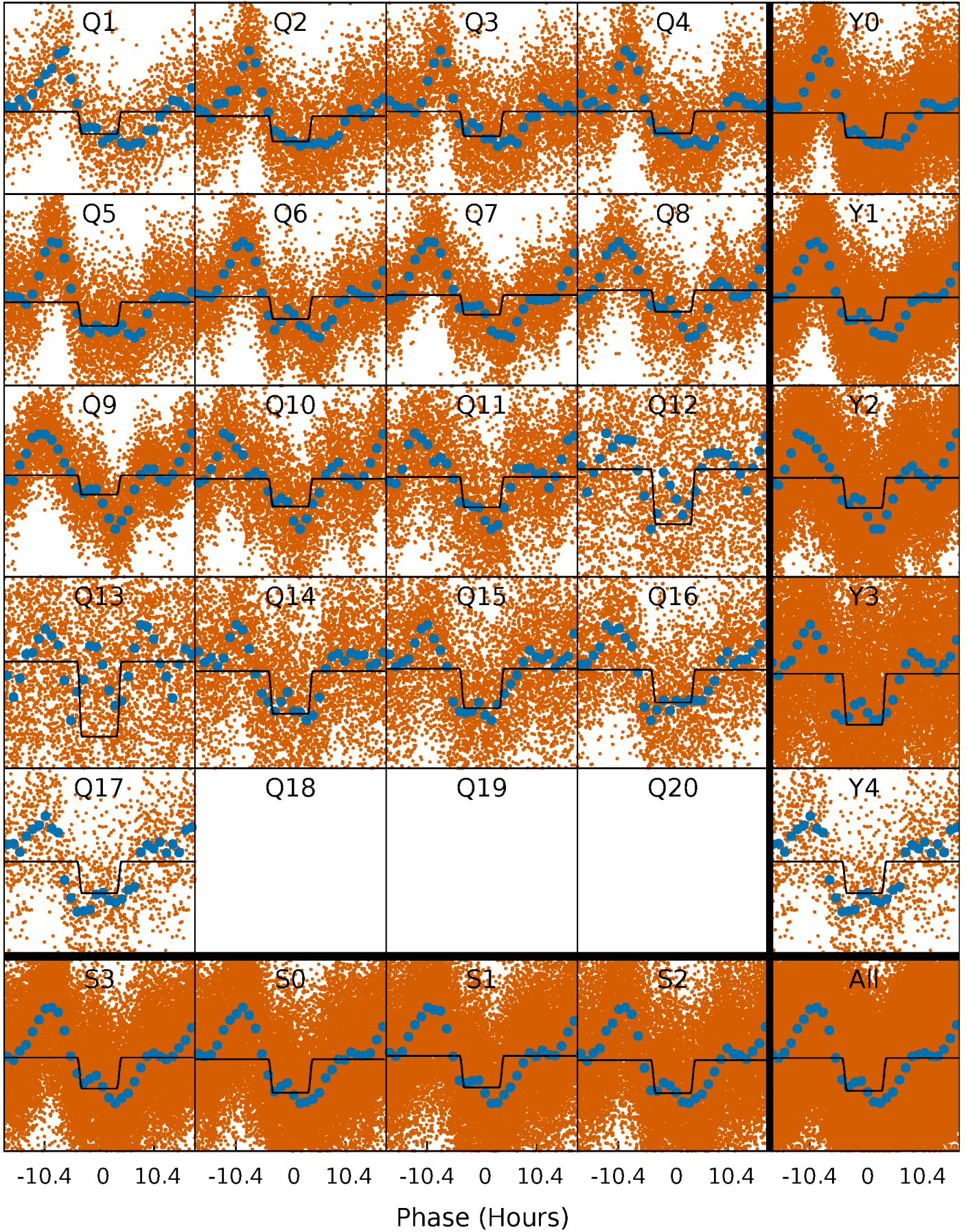
DV Quarter-Phased Transit Curves

TCE 008265204-01 P= 1.240012 Days $T_0=132.135065$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

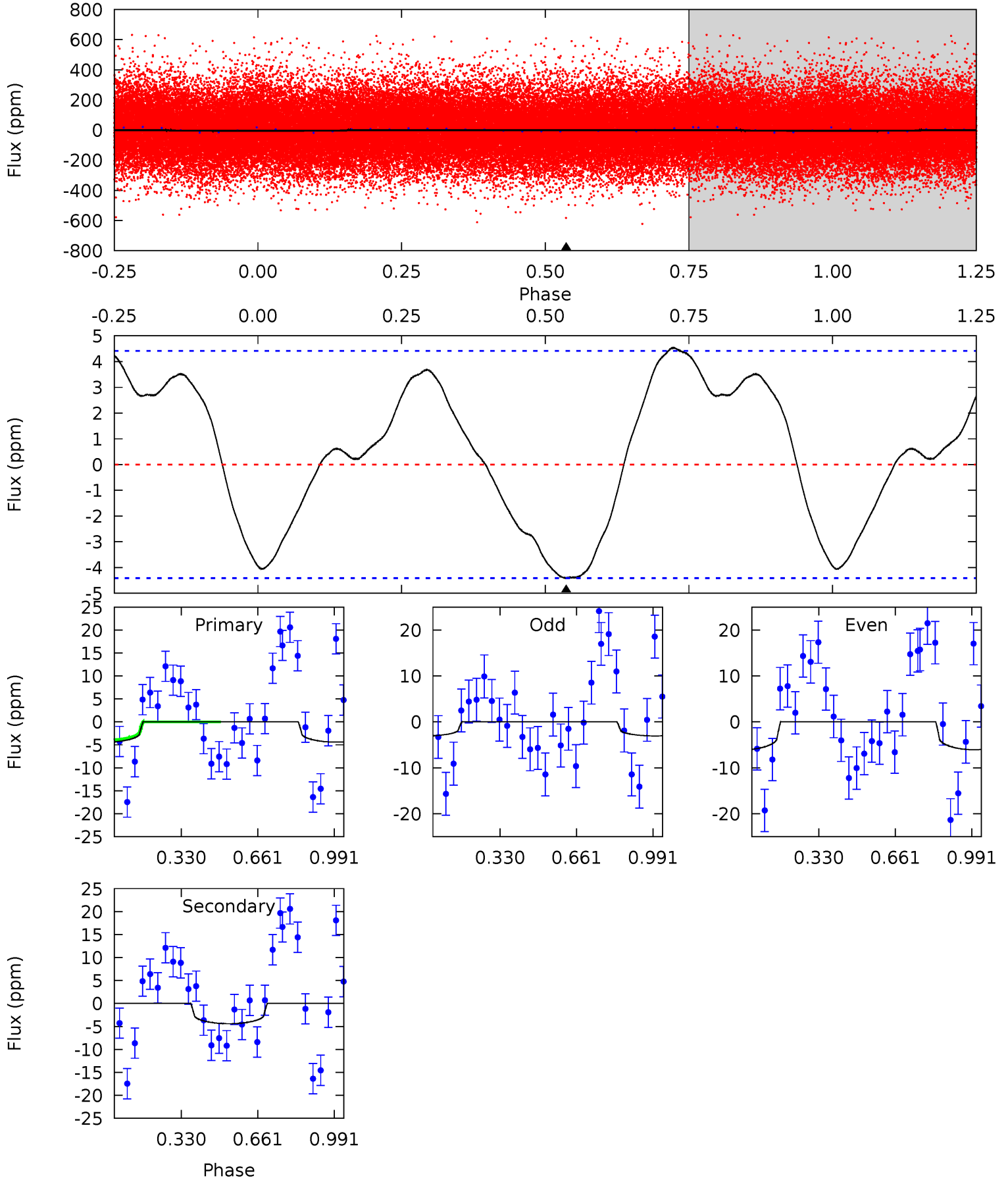
TCE 008265204-01 P= 1.240101 Days $T_0=132.130375$ (BKJD)



DV Model-Shift Uniqueness Test

008265204-01, P = 1.240012 Days, E = 130.895053 Days

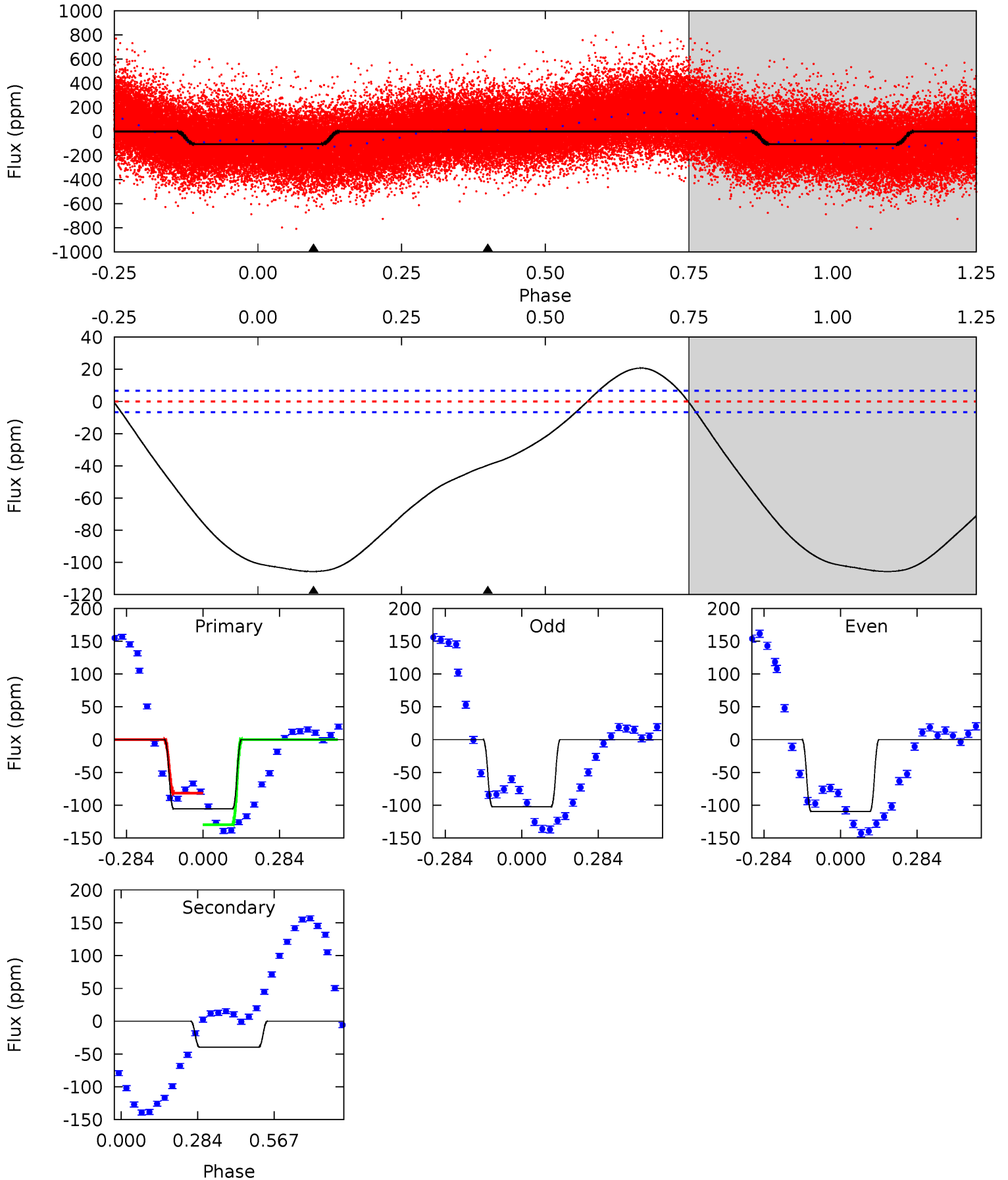
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.31	4.31	0	0	4.31	0.97	2.10	4.31	4.31	4.31	4.31	1.48	0.87	0.51	0.56



Alt Model-Shift Uniqueness Test

008265204-01, P = 1.240101 Days, E = 130.890274 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
69.2	25.9	0	0	4.34	1.07	10.5	69.2	69.2	25.9	25.9	2.32	0.99	0.16	17.1



Stellar Parameters For KIC 008265204

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6777^{+214}_{-262}	$3.966^{+0.368}_{-0.147}$	$-0.460^{+0.250}_{-0.300}$	$1.901^{+0.464}_{-0.696}$	$1.219^{+0.182}_{-0.203}$	$0.250^{+0.670}_{-0.110}$
	+3%/-4%	+9%/-4%	+54%/-65%	+24%/-37%	+15%/-17%	+268%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008265204-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-4 ± 1	$0.59^{+0.60}_{-0.41}$	3635^{+311}_{-393}	5423^{+5953}_{-1477}	$3.956^{+36.520}_{-3.001}$
Alt.	-40 ± 2	$2.01^{+0.82}_{-0.74}$	3653^{+298}_{-373}	5224^{+1173}_{-702}	$3.099^{+4.599}_{-1.495}$

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

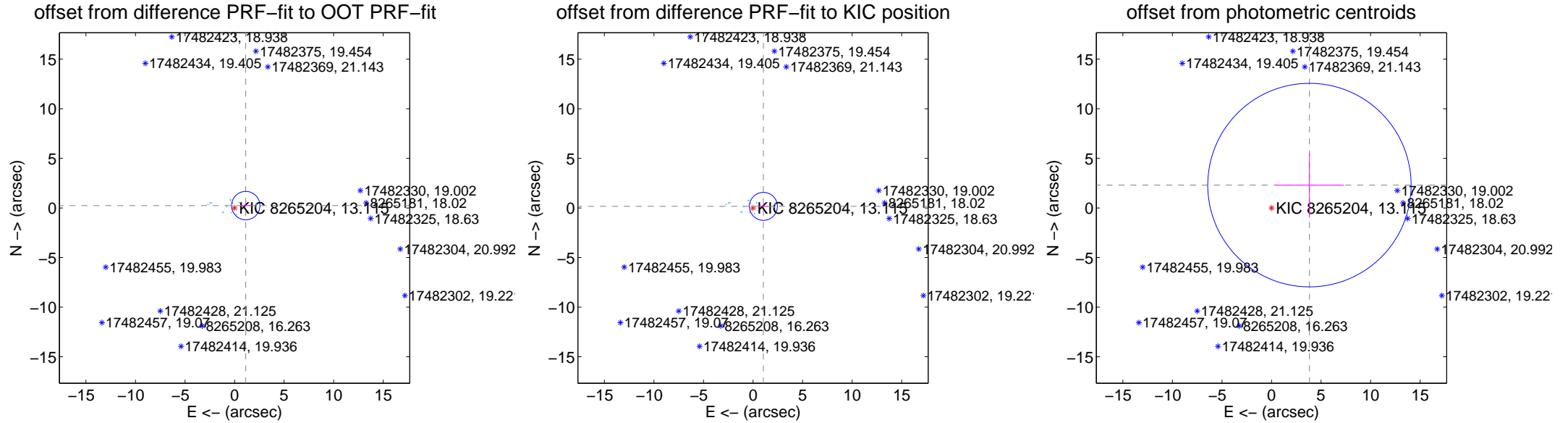
DV Centroid Data

Supplemental centroid analysis for 008265204-01. Kepler magnitude: 13.12. Transit SNR 3.08

There are 17 quarters with good PRF difference image offsets

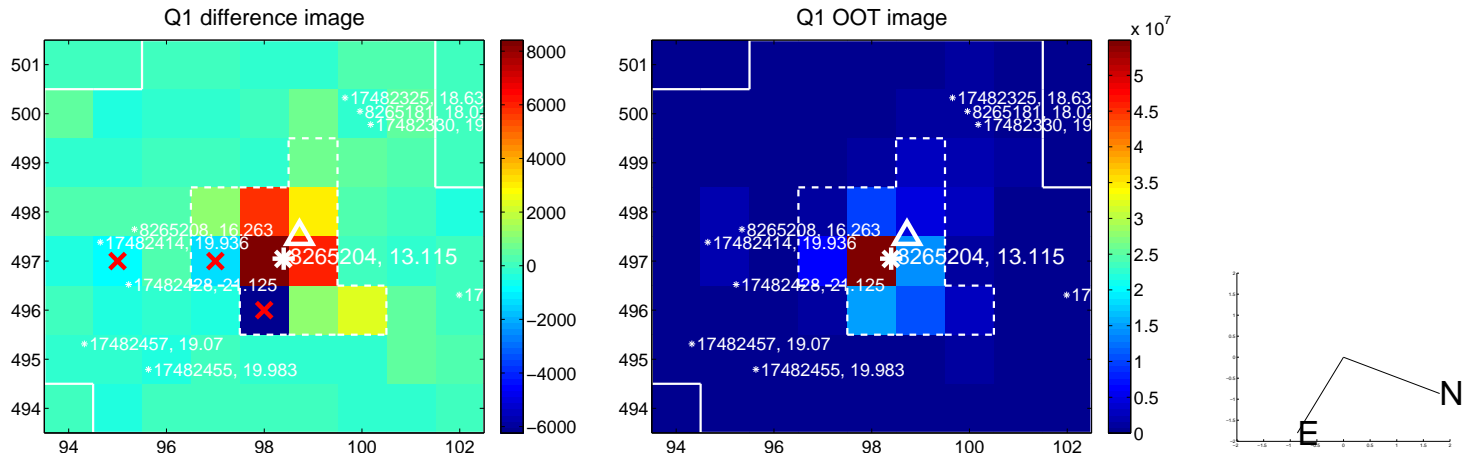
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.153 ± 0.477	2.42	-1.128 ± 0.487	0.237 ± 0.100
PRF-fit source offset from KIC position	1.057 ± 0.470	2.25	-1.045 ± 0.475	0.160 ± 0.107
photometric centroid source offset	4.47 ± 3.42	1.31	-3.83 ± 3.47	2.30 ± 3.27

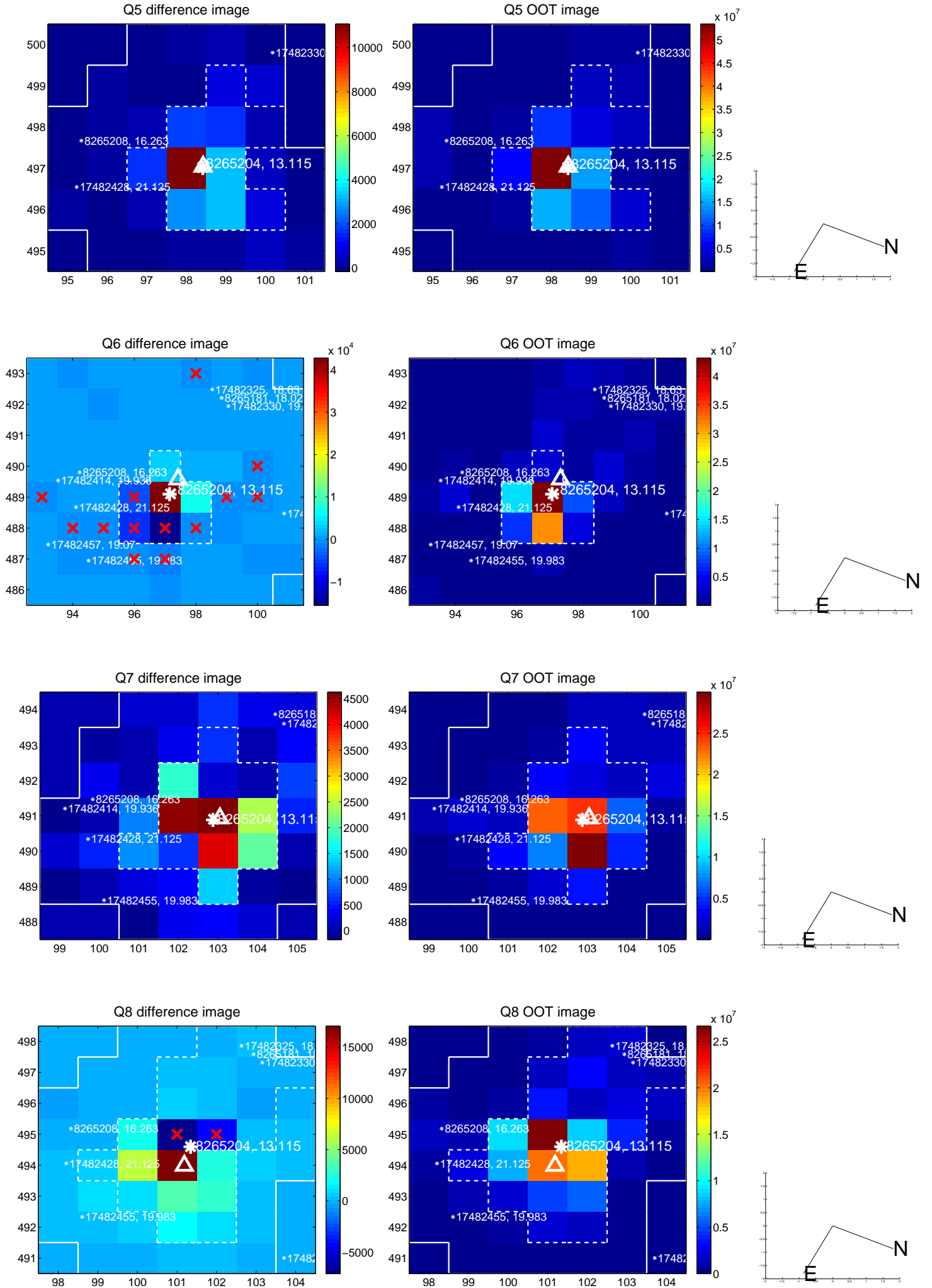


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

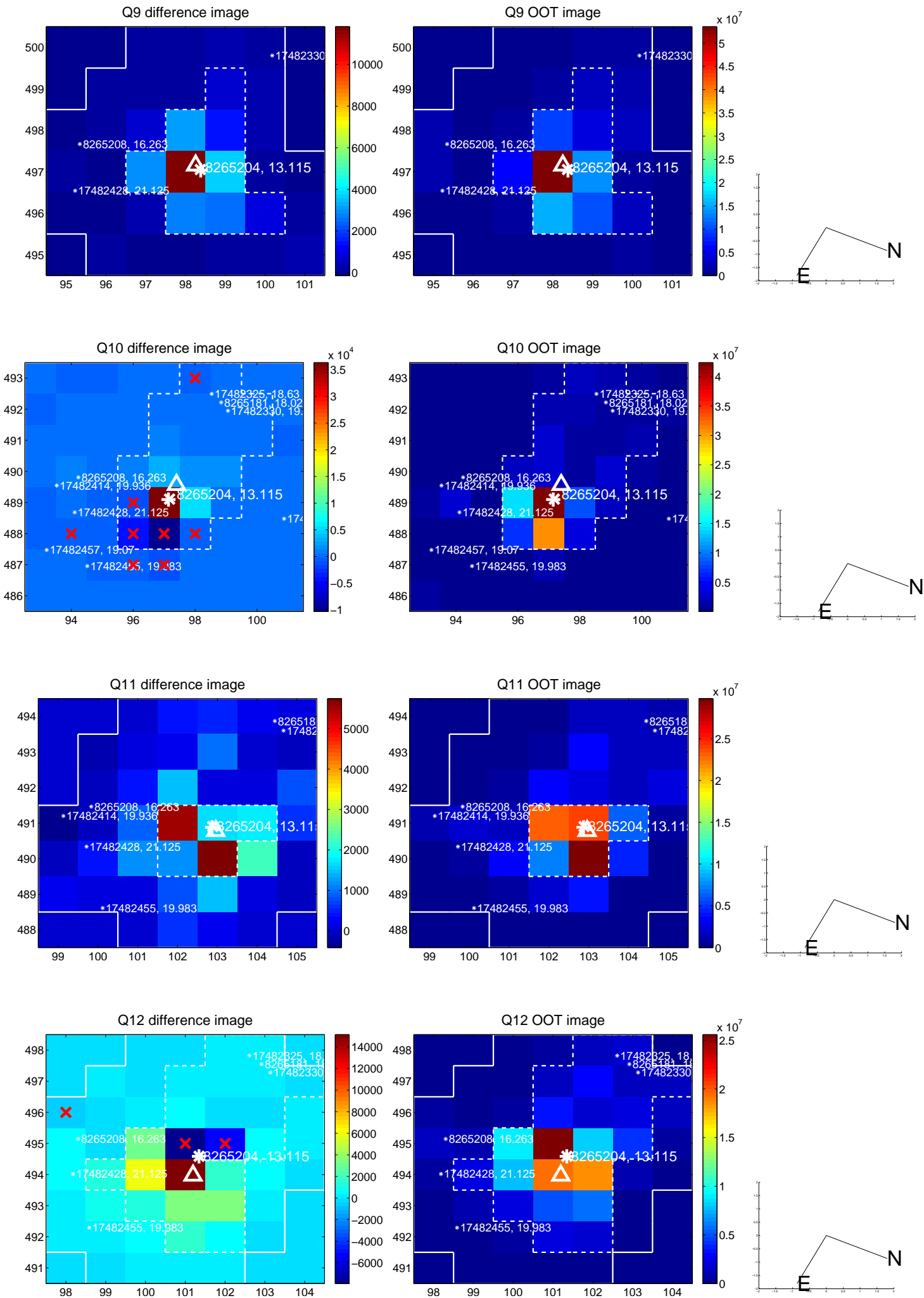
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



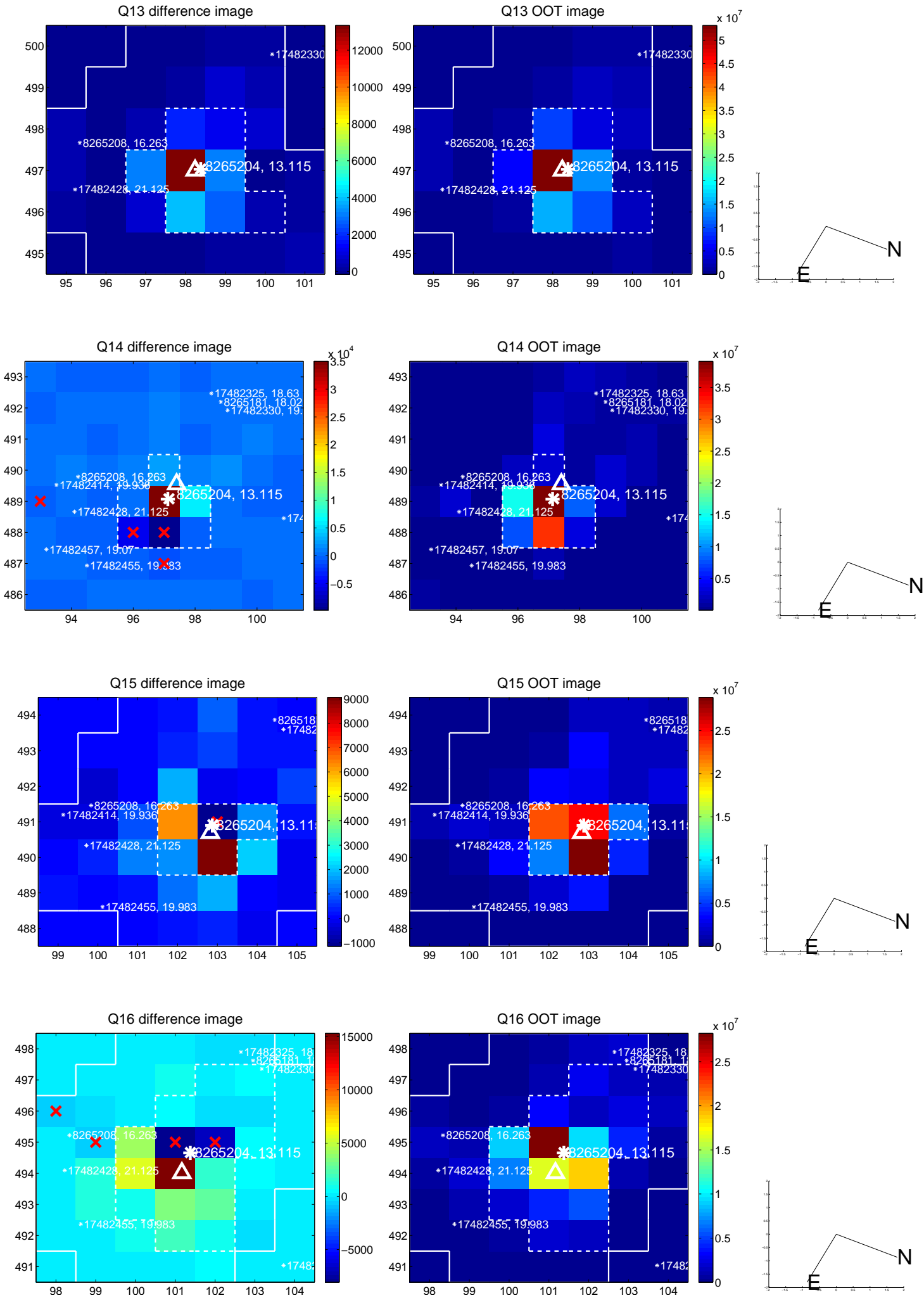
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



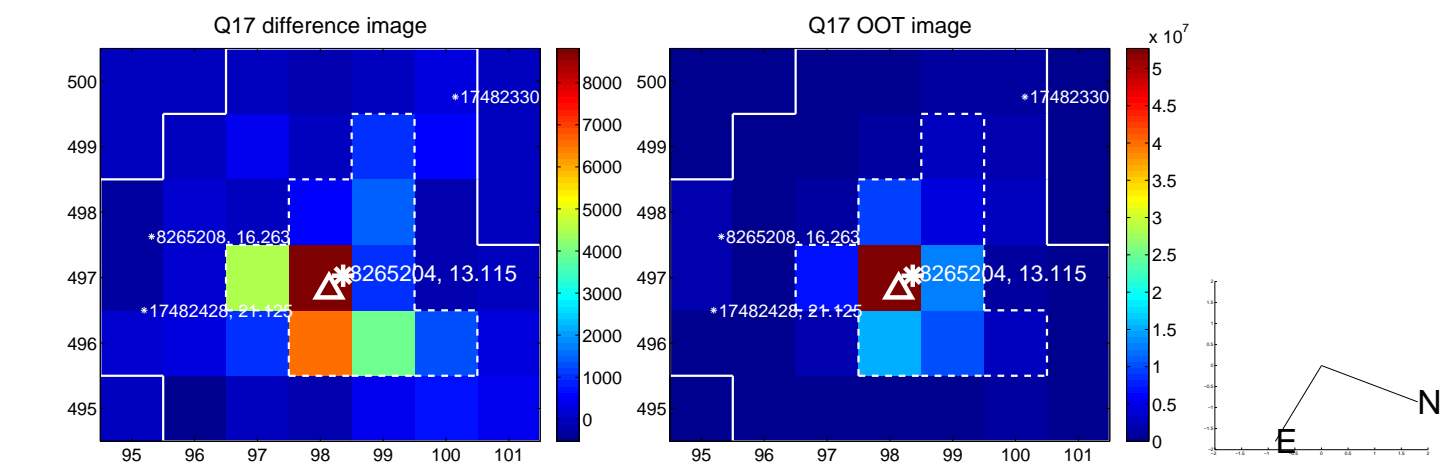
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



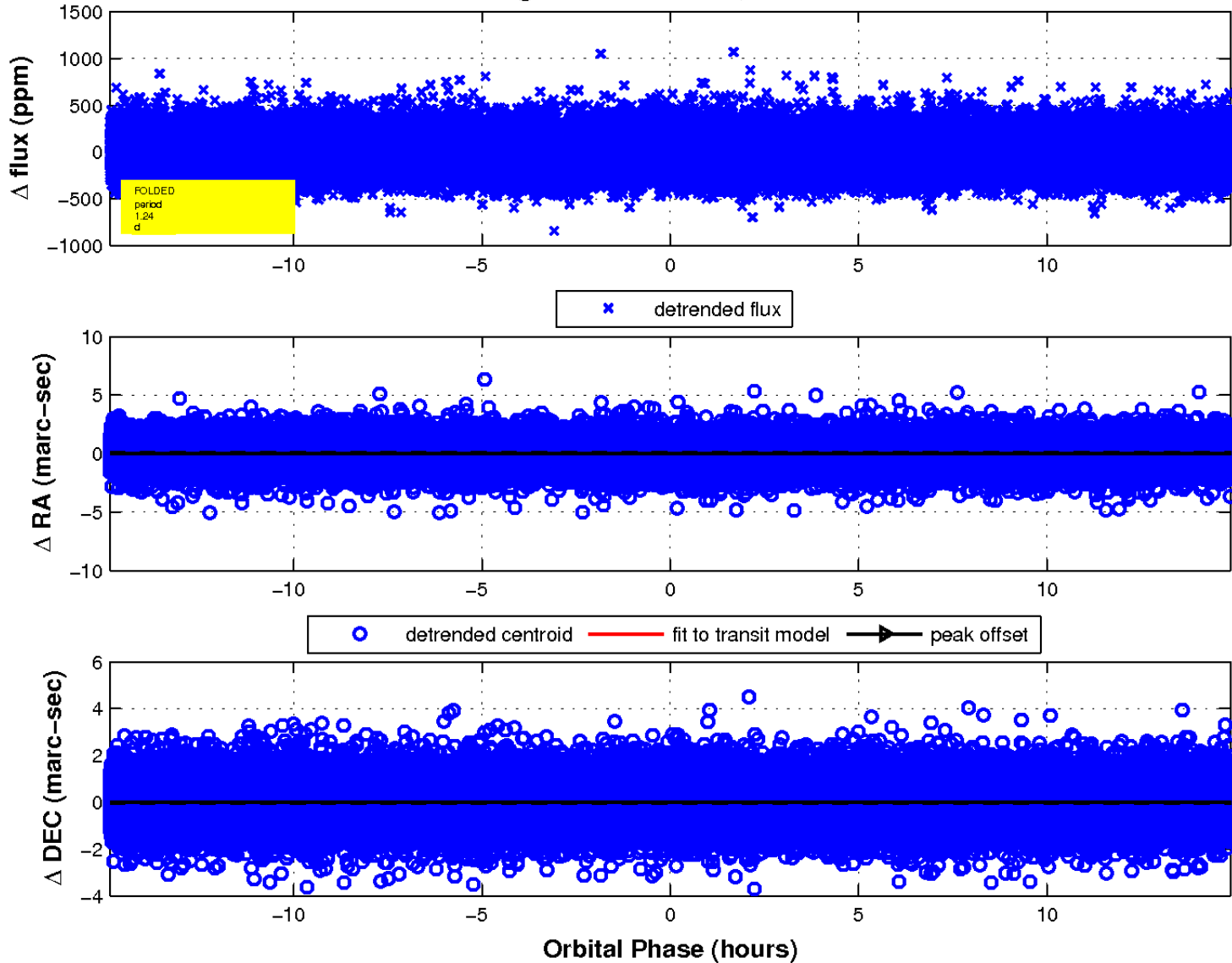
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

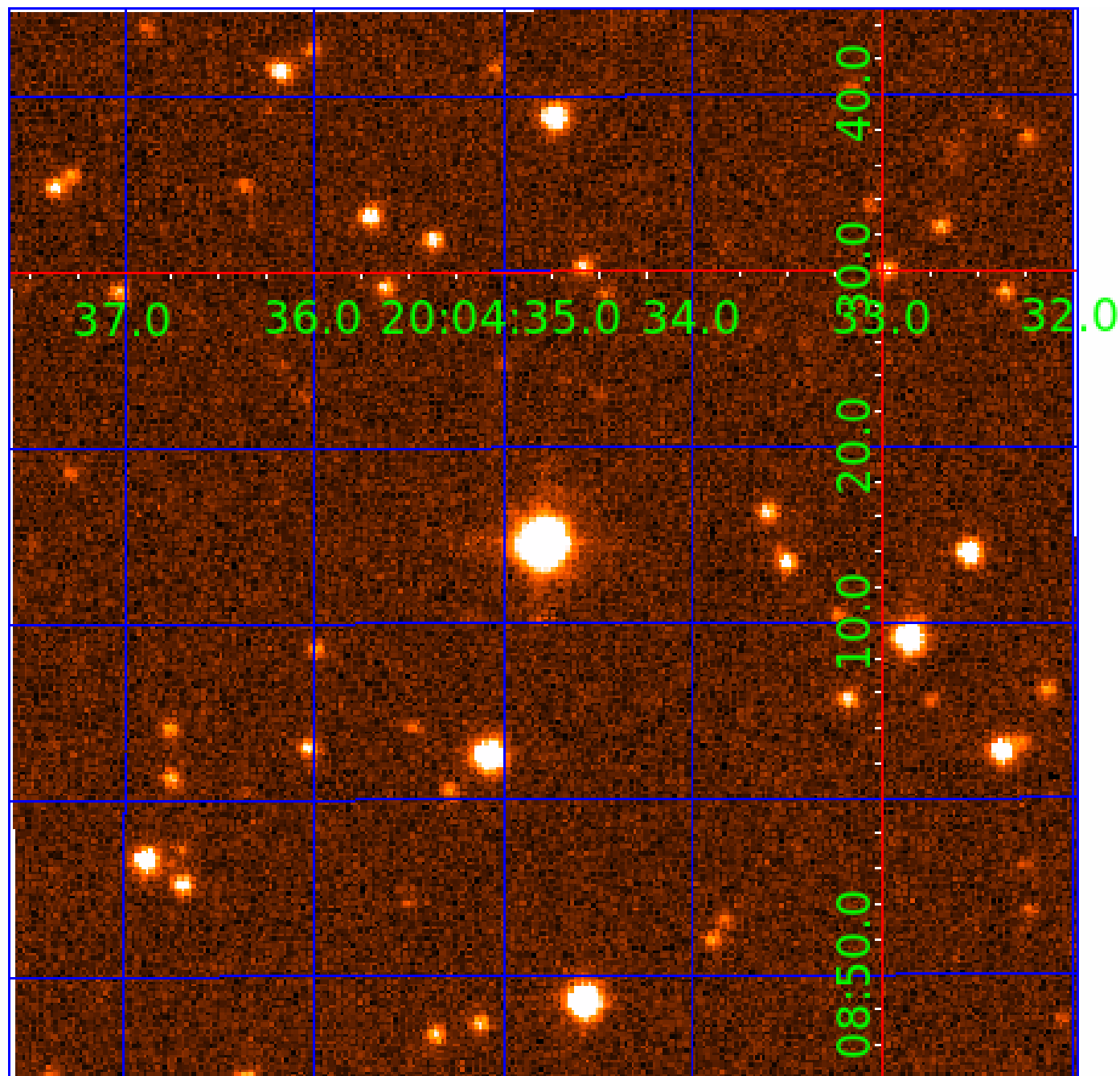


fluxWeightedCentroids, Planet 1 of 4



UKIRT Image

Declination



KIC 008265204

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})
008265204-01	OBS	No	1.240012	132.135065	5.2	9.378	9.4	3.1	1.90	6777	0.45	11725.50
008265204-02	OBS	No	9.801249	137.557277	228.3	1.720	15.7	11.4	1.90	6777	3.08	744.72
008265204-03	OBS	No	14.471051	144.295274	355.4	0.899	12.8	13.0	1.90	6777	4.22	442.96
008265204-04	OBS	No	5.850505	133.107353	252.3	0.626	10.7	12.4	1.90	6777	3.31	1481.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008265204-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
008265204-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
008265204-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008265204-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

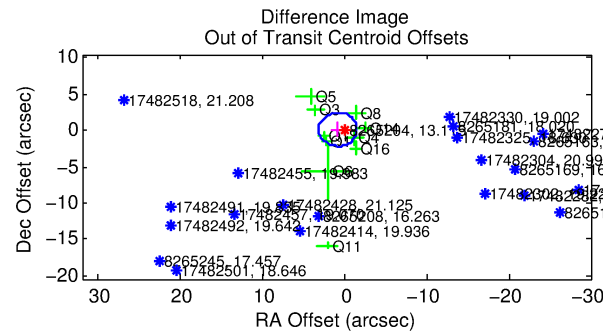
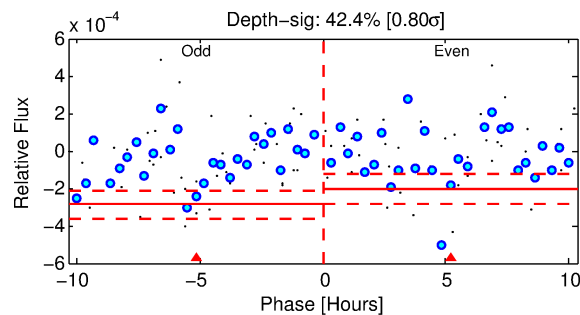
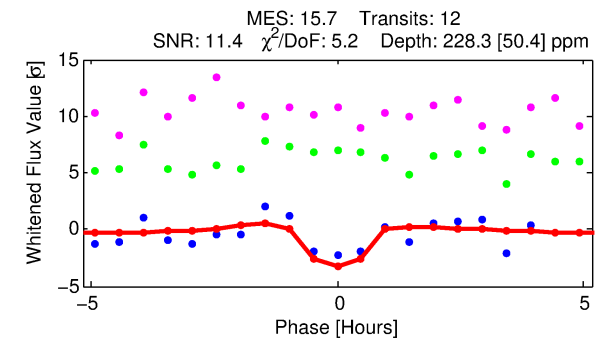
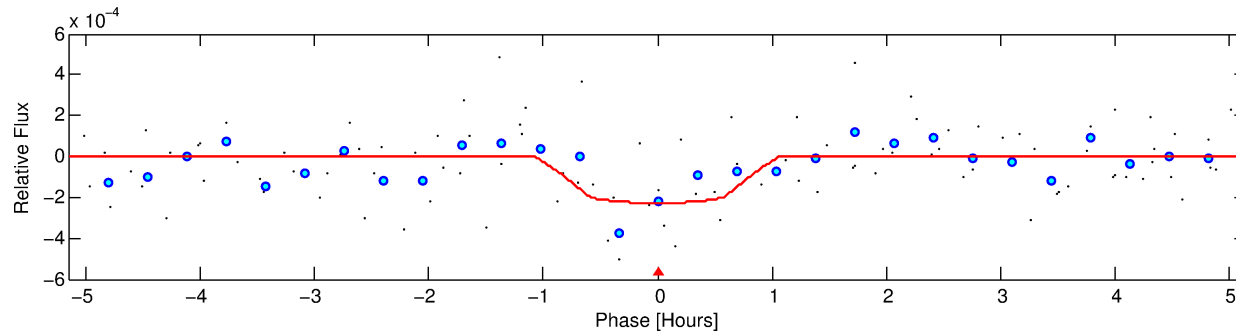
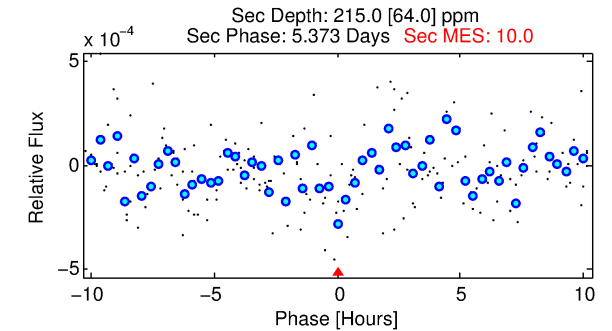
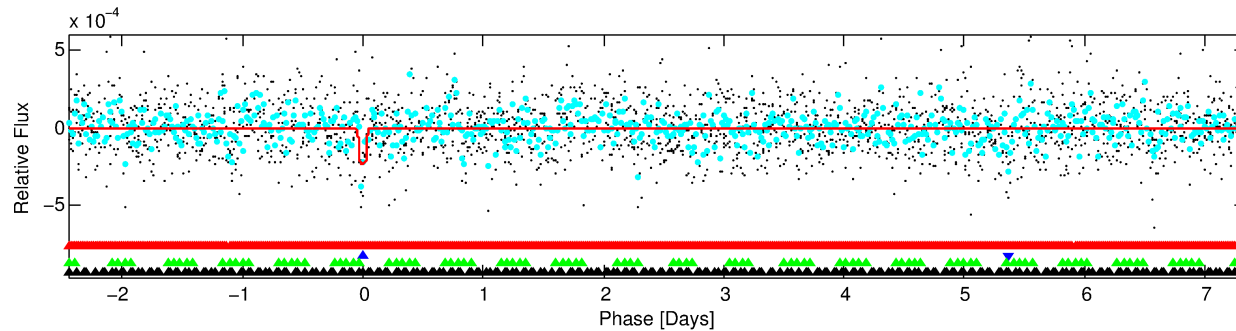
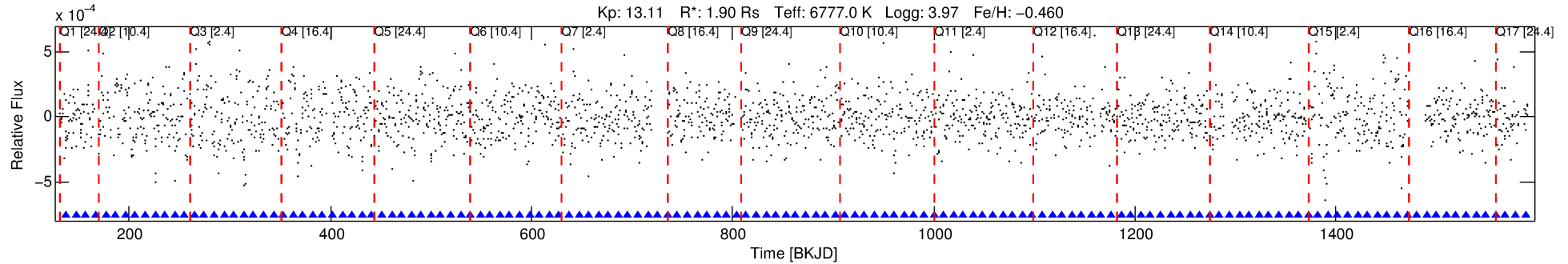
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008265204-02

No Significant Match Found

DV One-Page Summary

KIC: 8265204 Candidate: 2 of 4 Period: 9.801 d



DV Fit Results:

Period = 9.80125 [0.00016] d
Epoch = 137.5573 [0.0095] BKJD
Rp/R* = 0.0148 [0.0204]
a/R* = 32.28 [255.28]
b = 0.69 [5.98]
Seff = 744.72 [472.53]
Teq = 1332 [211] K
Rp = 3.08 [4.39] Re
a = 0.0958 [0.0357] AU
Ag = 114.46 [324.78] [0.35σ]
Teffp = 6736 [4672] K [1.16σ]

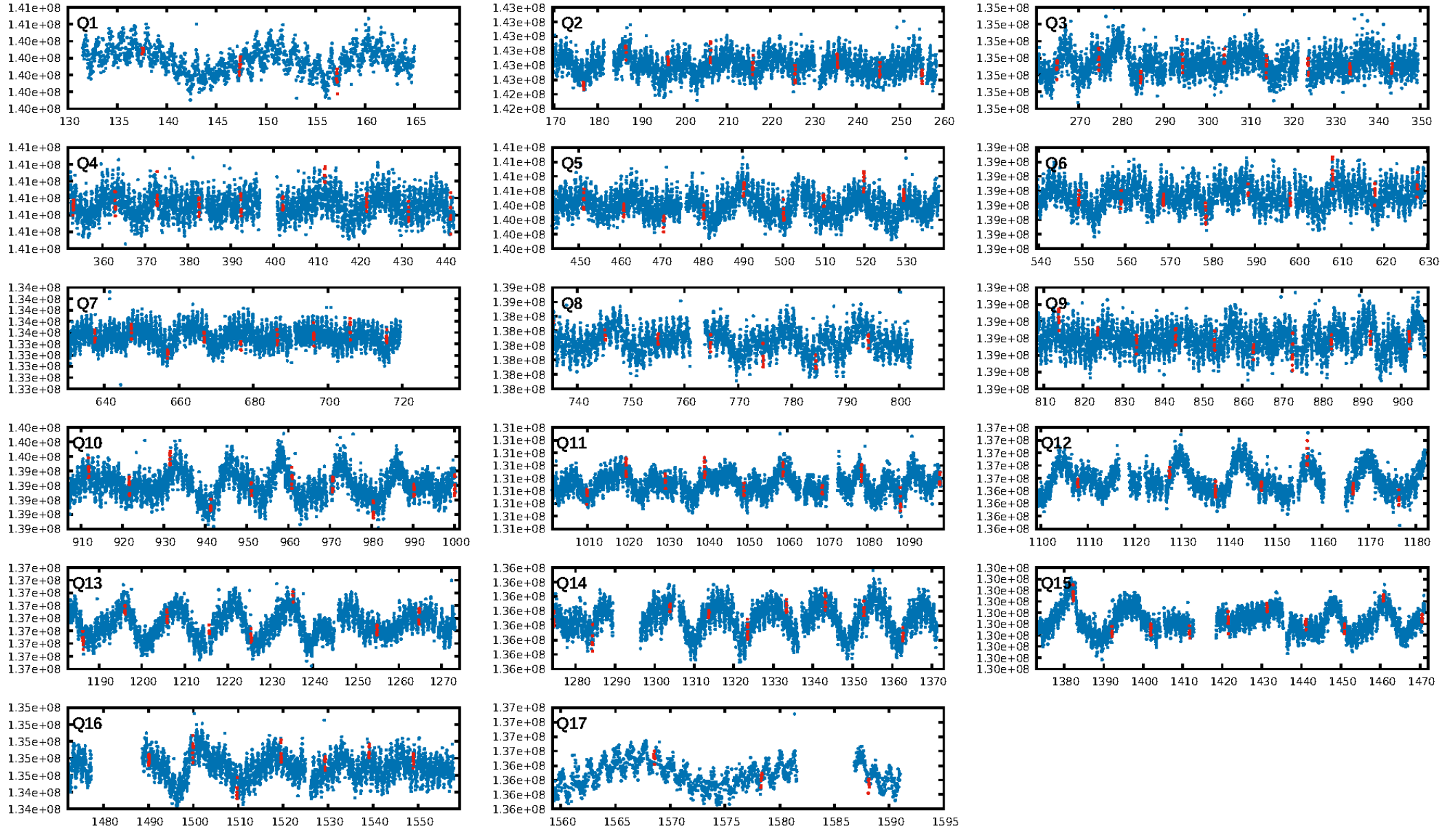
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [51.80σ]
LongPeriod-sig: 100.0% [57.74σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 1.1%
Bootstrap-pfa: 8.12e-30
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: -1.614
Centroid-sig: 56.0%
Centroid-so: 0.314 arcsec [0.65σ]
OotOffset-rm: 0.870 arcsec [1.12σ]
OotOffset-st: 2/2/3/3 [10]
KicOffset-rm: 0.873 arcsec [1.11σ]
KicOffset-st: 2/2/3/3 [10]
DiffImageQuality-fgm: 0.00 [0/10]
DiffImageOverlap-fno: 0.94 [16/17]

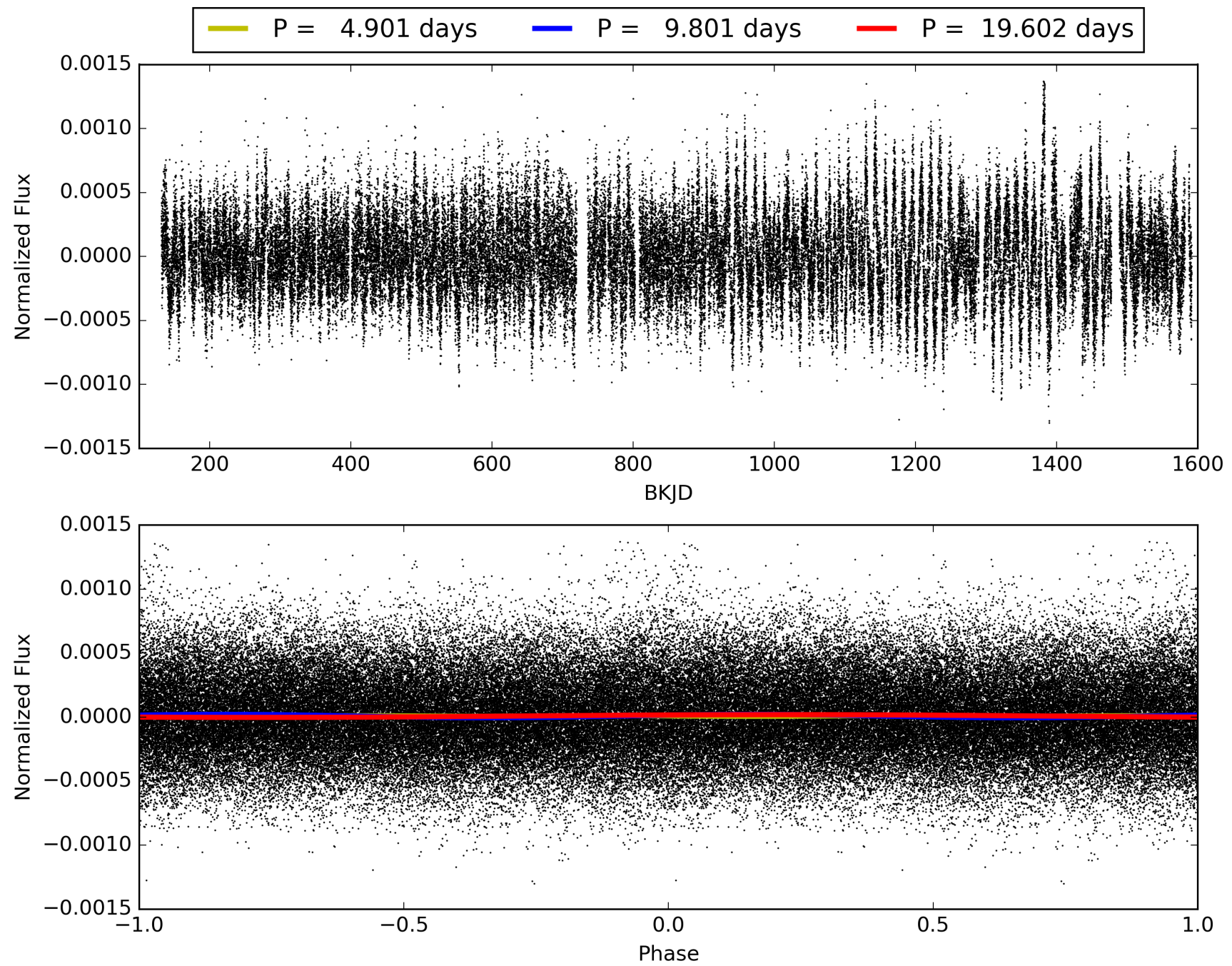
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:27:37 Z

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

TCE 008265204-02, PDC Light Curves

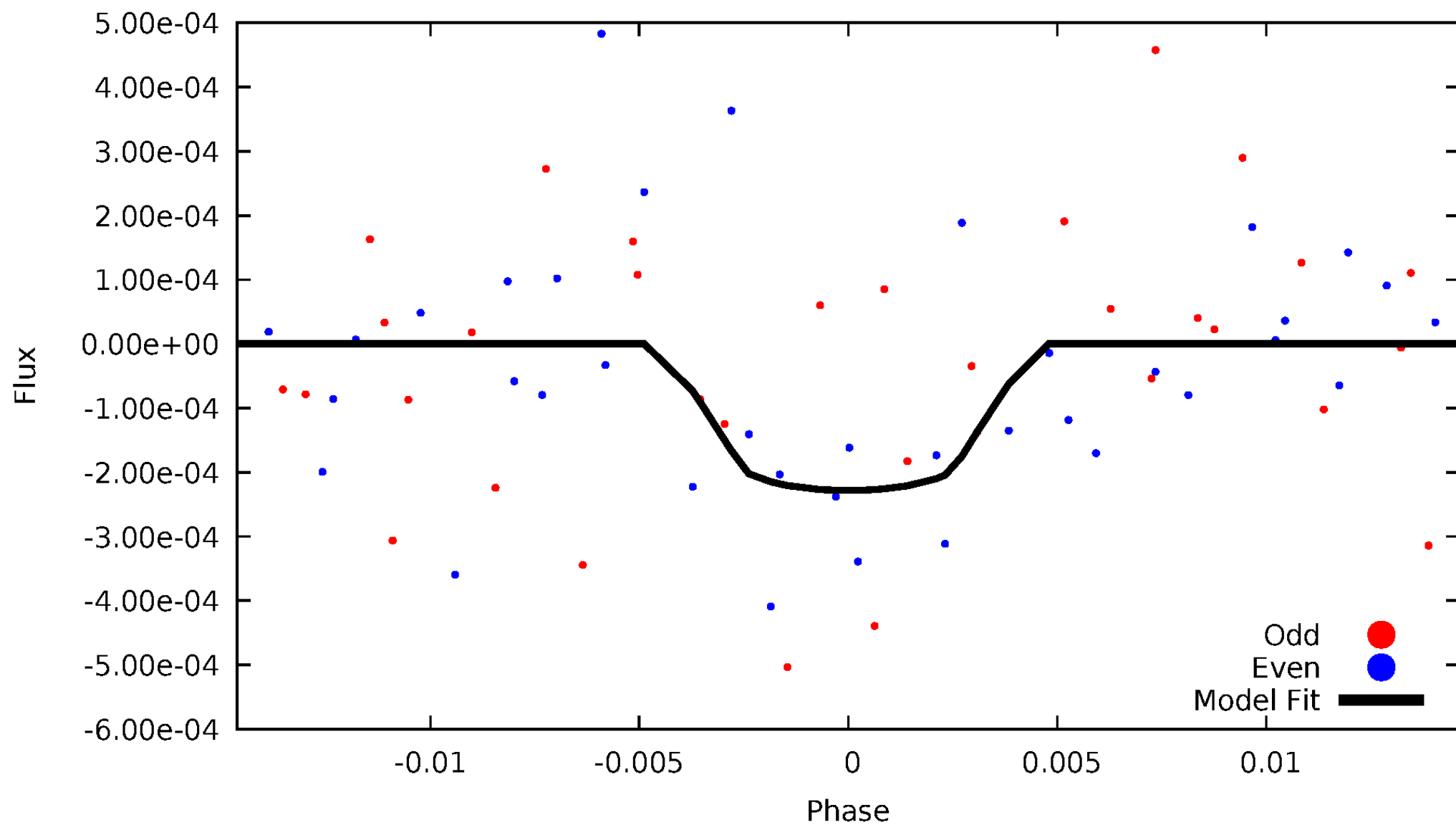


TCE 008265204-02



DV Odd/Even

TCE 008265204-02

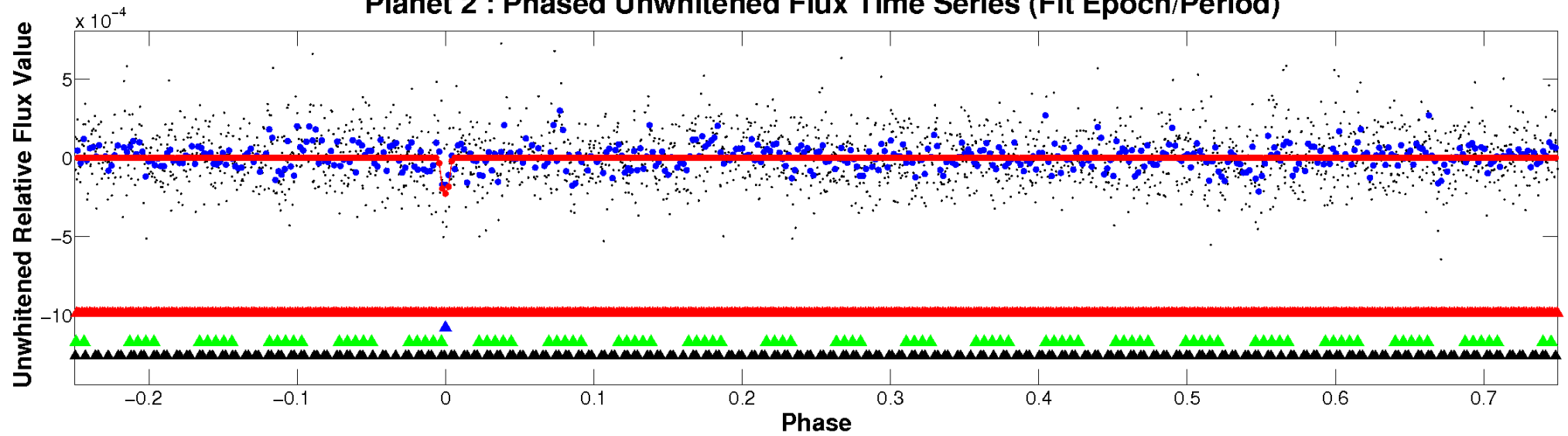


ALT Odd/Even

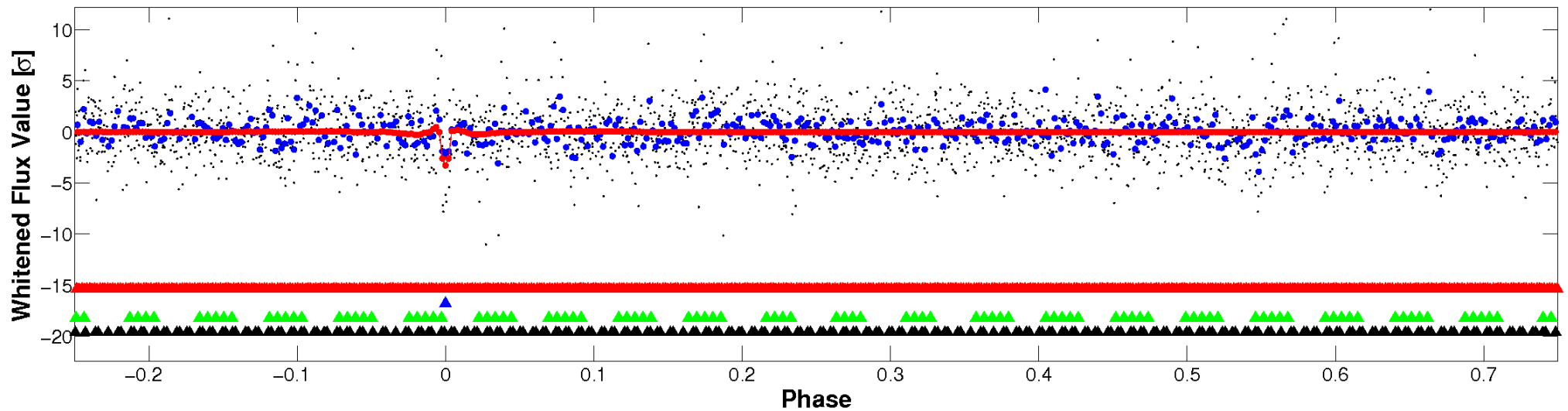
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

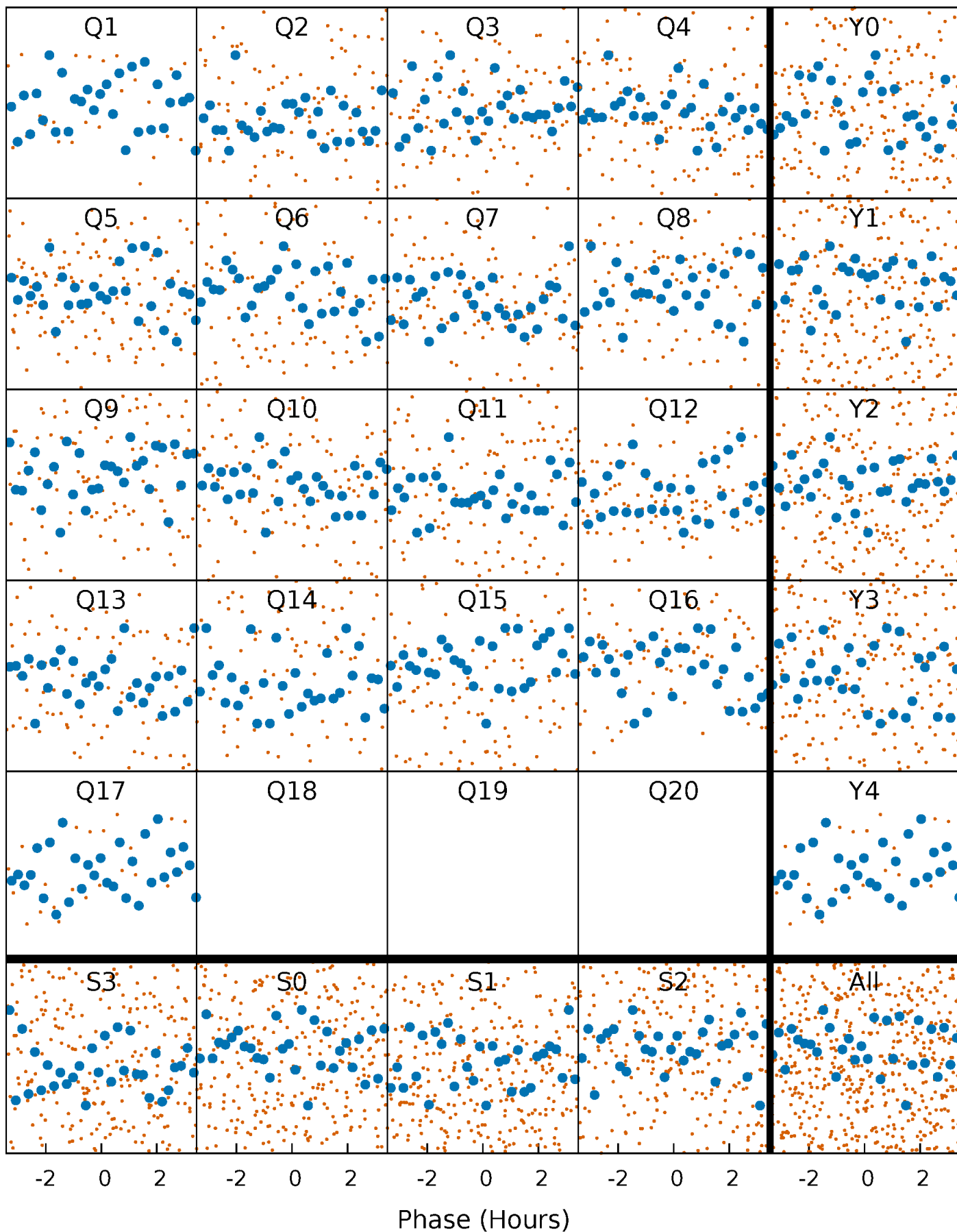


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



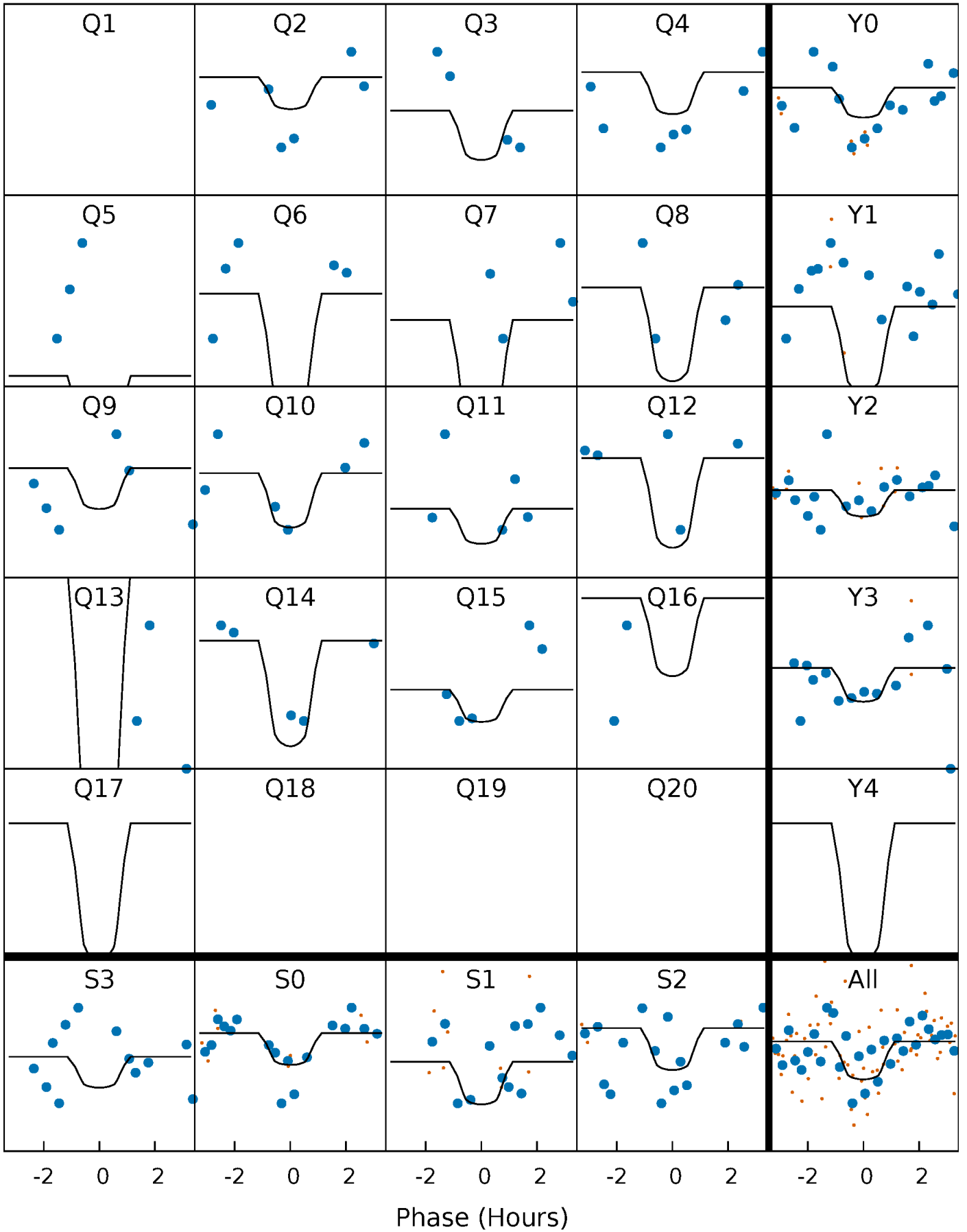
PDC Quarter-Phased Transit Curves

TCE 008265204-02 P= 9.801249 Days $T_0=137.557277$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 008265204-02 P= 9.801249 Days $T_0=137.557277$ (BKJD)

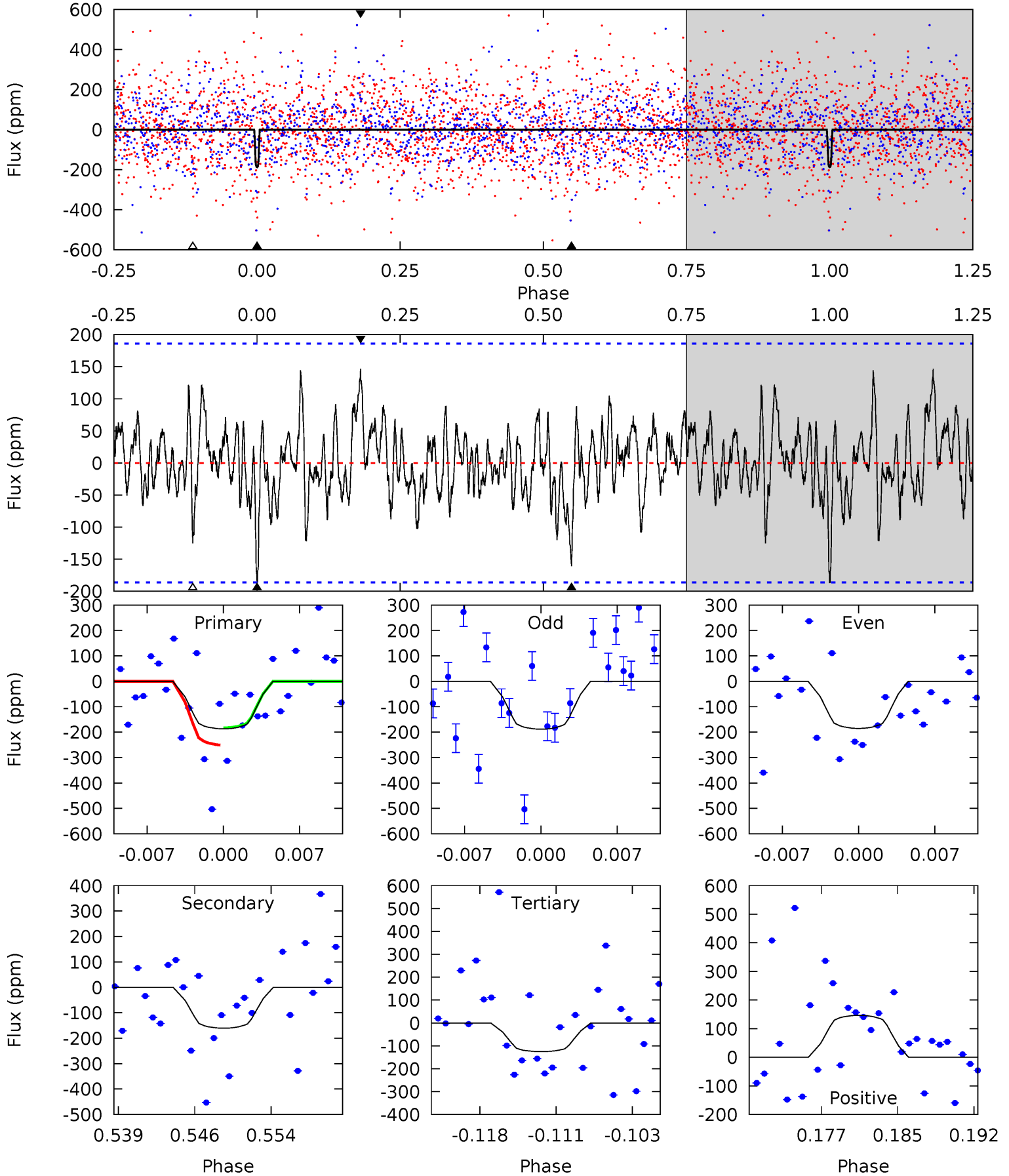


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

008265204-02, P = 9.801249 Days, E = 127.756028 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.11	4.39	3.43	4.00	5.08	2.68	1.24	1.69	1.11	0.96	0.38	0.04	1.05	0.44	0.90



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 008265204

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6777^{+214}_{-262}	$3.966^{+0.368}_{-0.147}$	$-0.460^{+0.250}_{-0.300}$	$1.901^{+0.464}_{-0.696}$	$1.219^{+0.182}_{-0.203}$	$0.250^{+0.670}_{-0.110}$
	+3%/-4%	+9%/-4%	+54%/-65%	+24%/-37%	+15%/-17%	+268%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008265204-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-161 ± 37	$4.11^{+3.51}_{-2.58}$	1832^{+141}_{-194}	5275^{+3393}_{-1176}	49^{+281}_{-35}
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

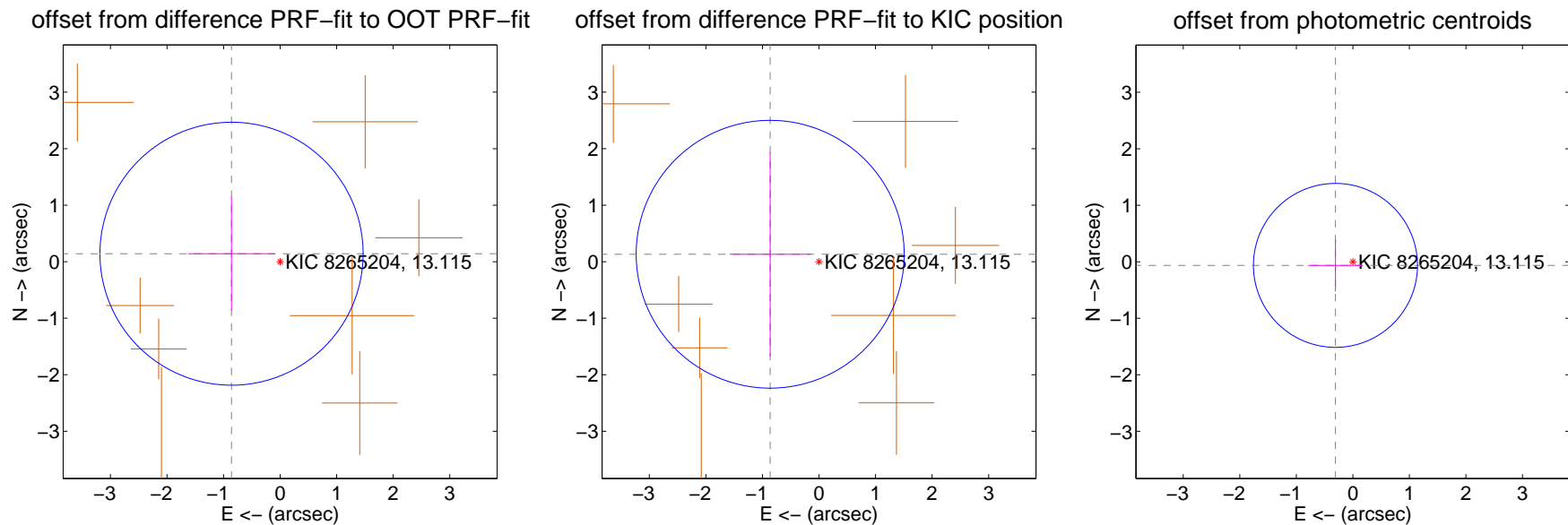
DV Centroid Data

Supplemental centroid analysis for 008265204-02. Kepler magnitude: 13.12. Transit SNR 11.38

There are 0 quarters with good PRF difference image offsets

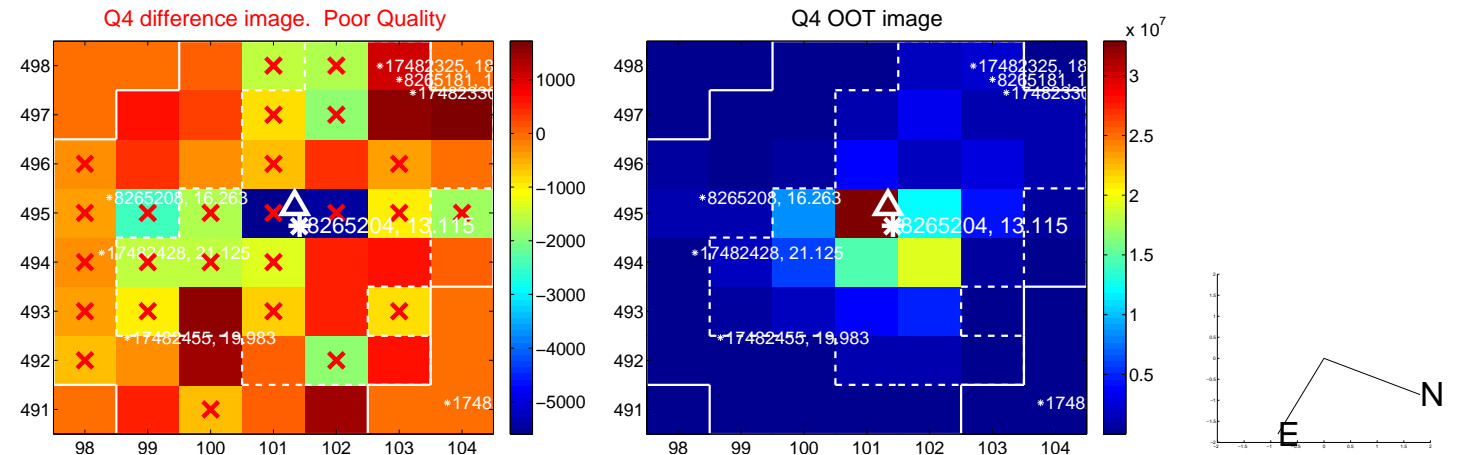
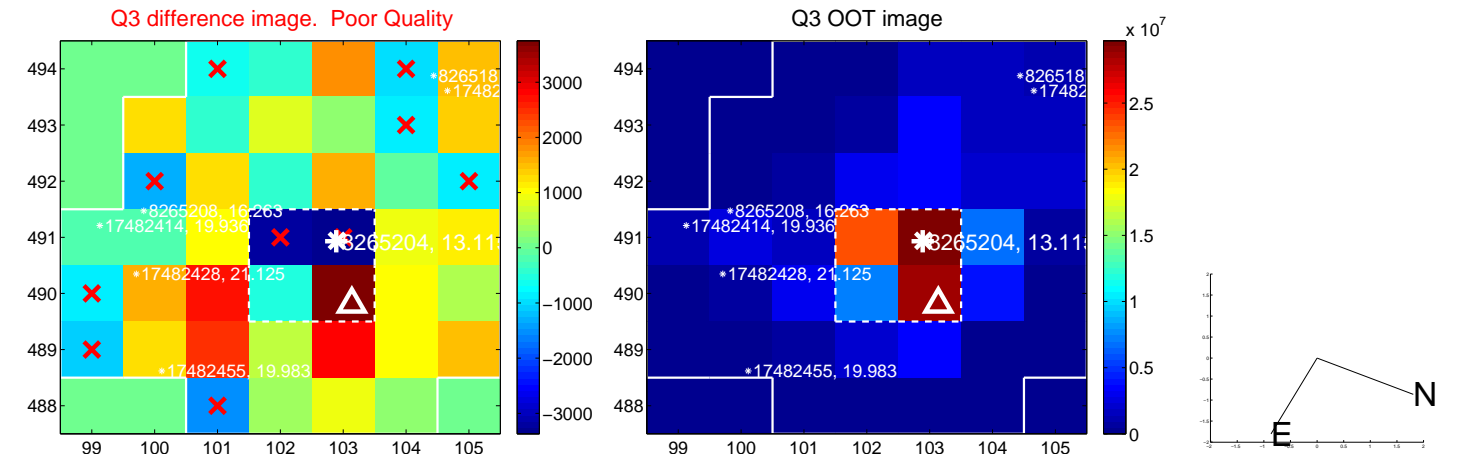
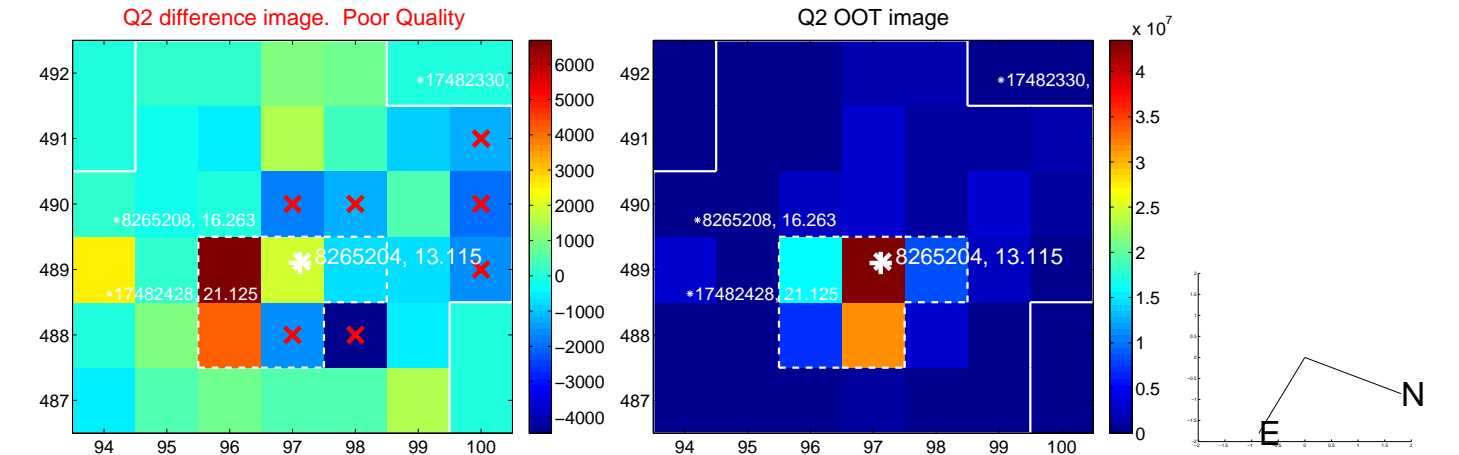
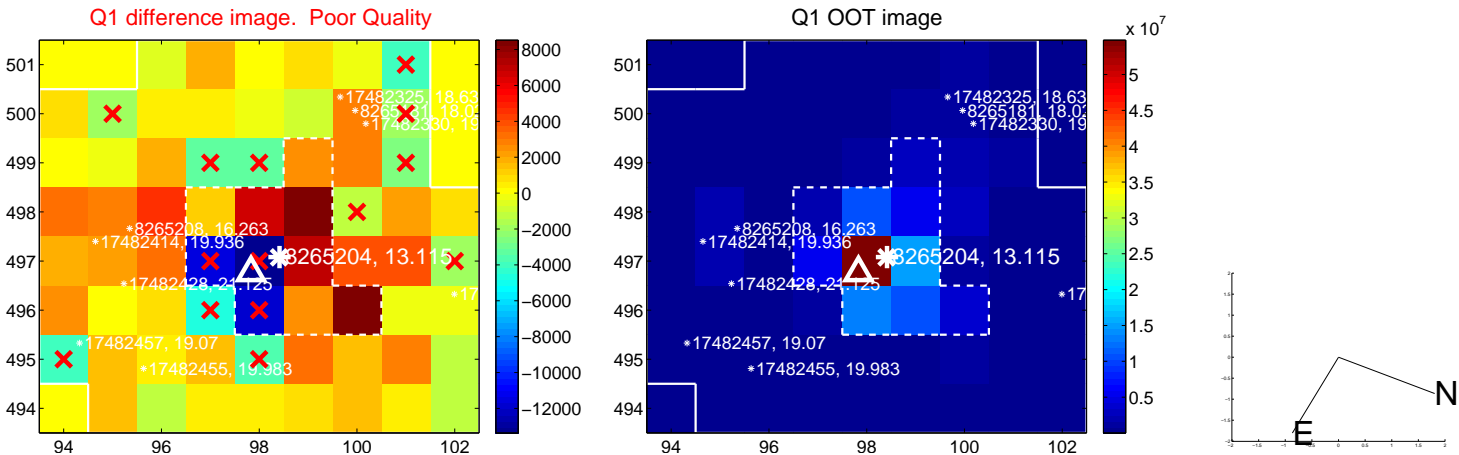
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.870 ± 0.775	1.12	0.859 ± 0.768	0.141 ± 1.004
PRF-fit source offset from KIC position	0.873 ± 0.789	1.11	0.863 ± 0.715	0.132 ± 1.803
photometric centroid source offset	0.31 ± 0.48	0.65	0.31 ± 0.48	-0.06 ± 0.46

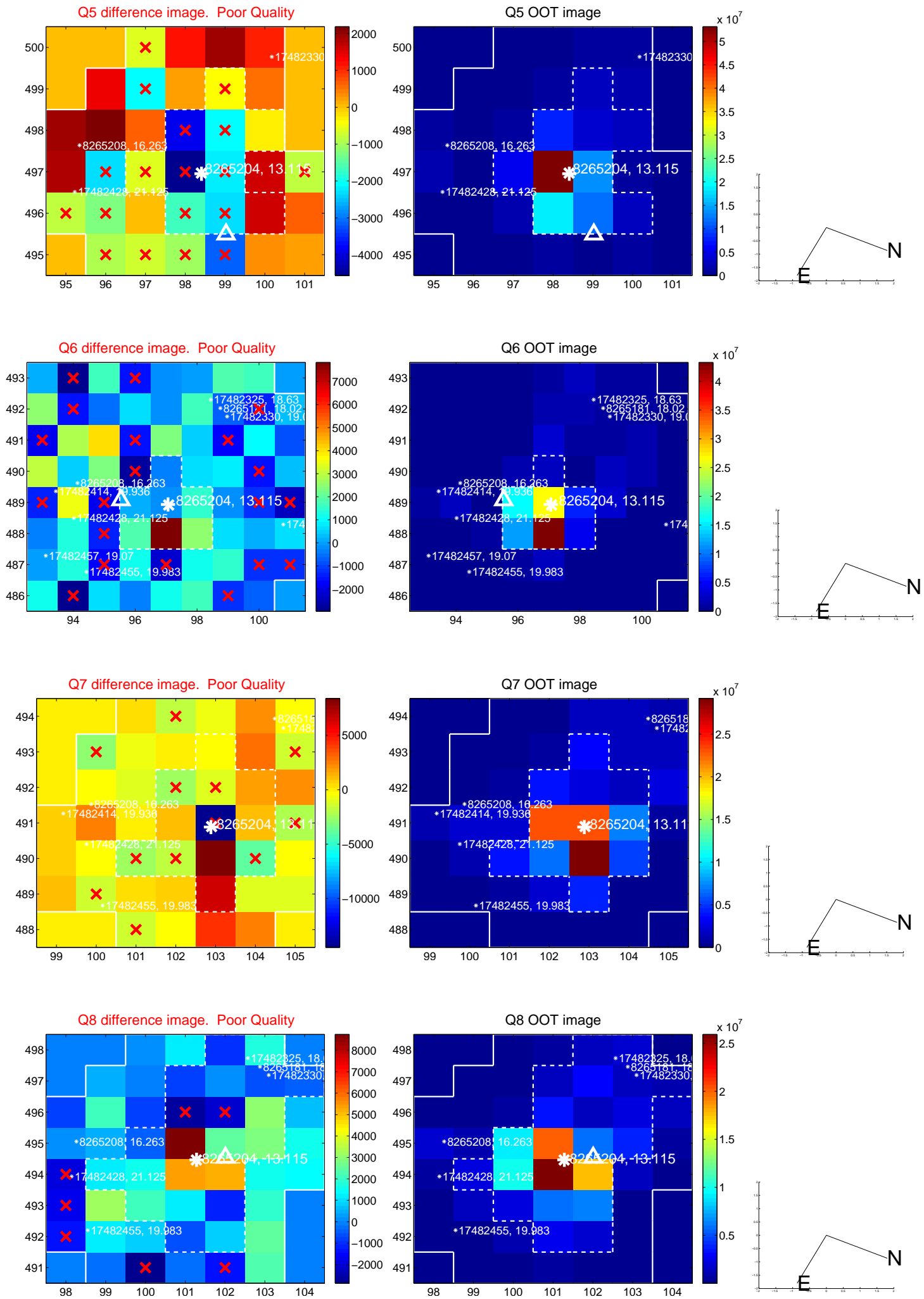


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

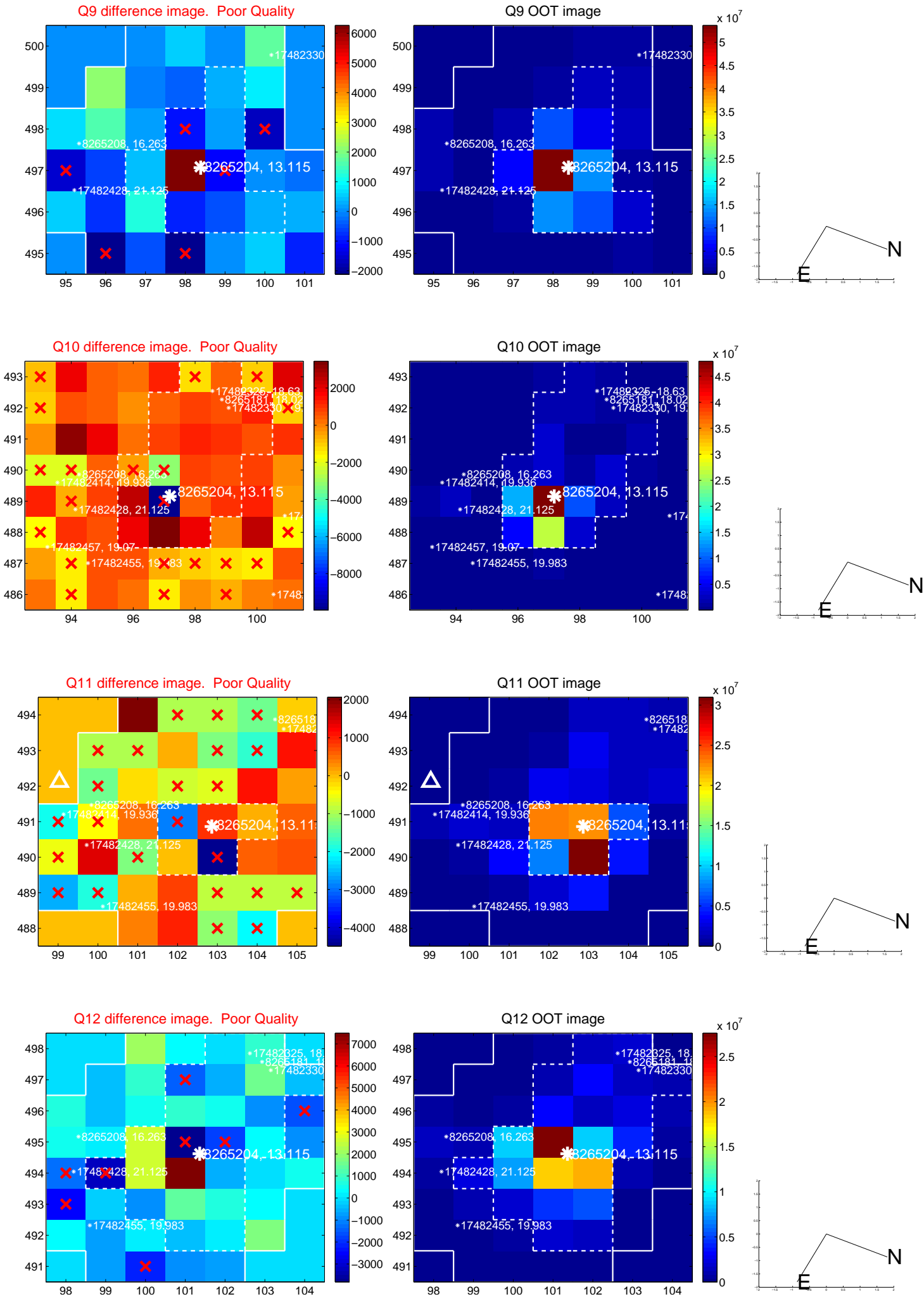
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



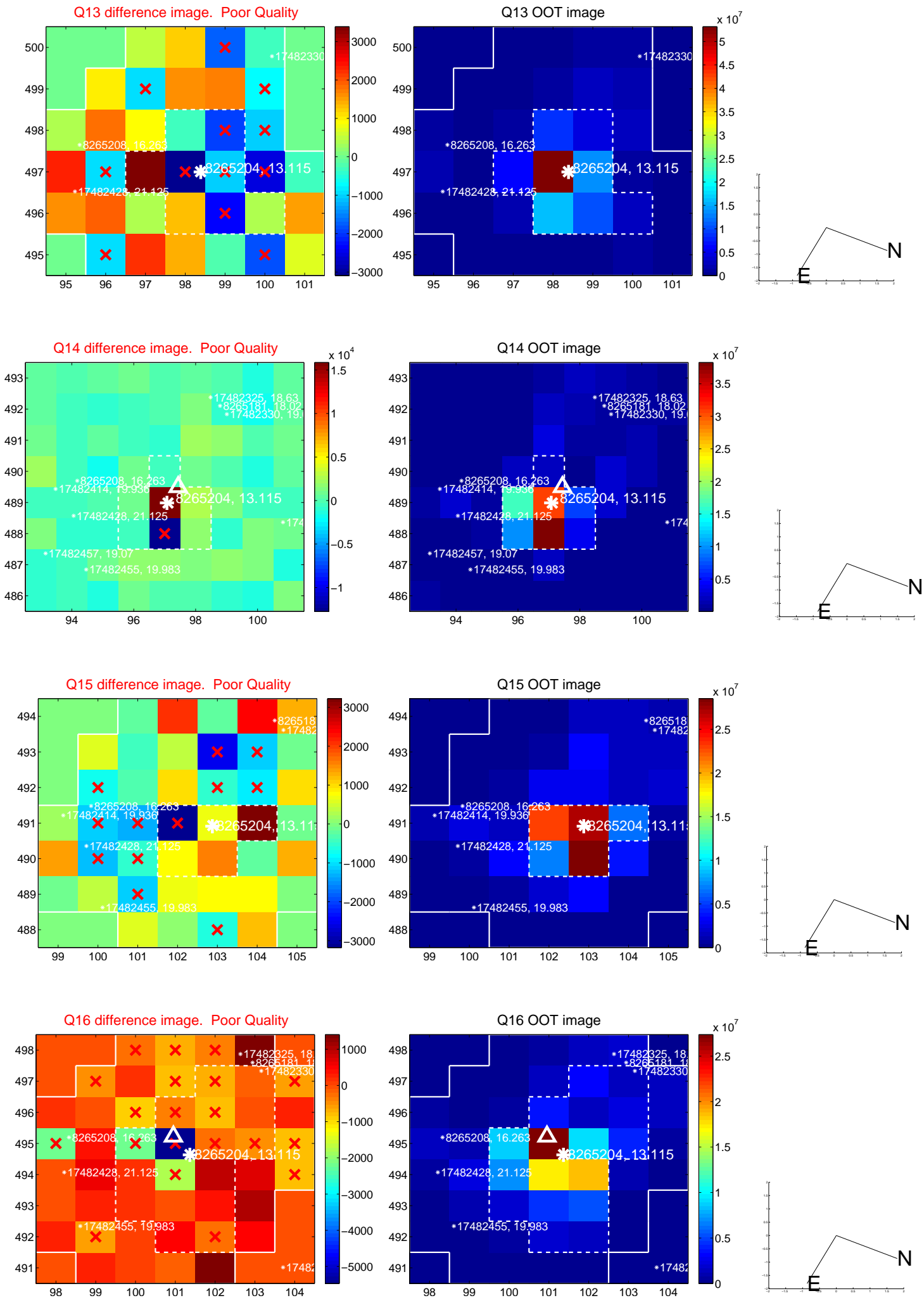
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



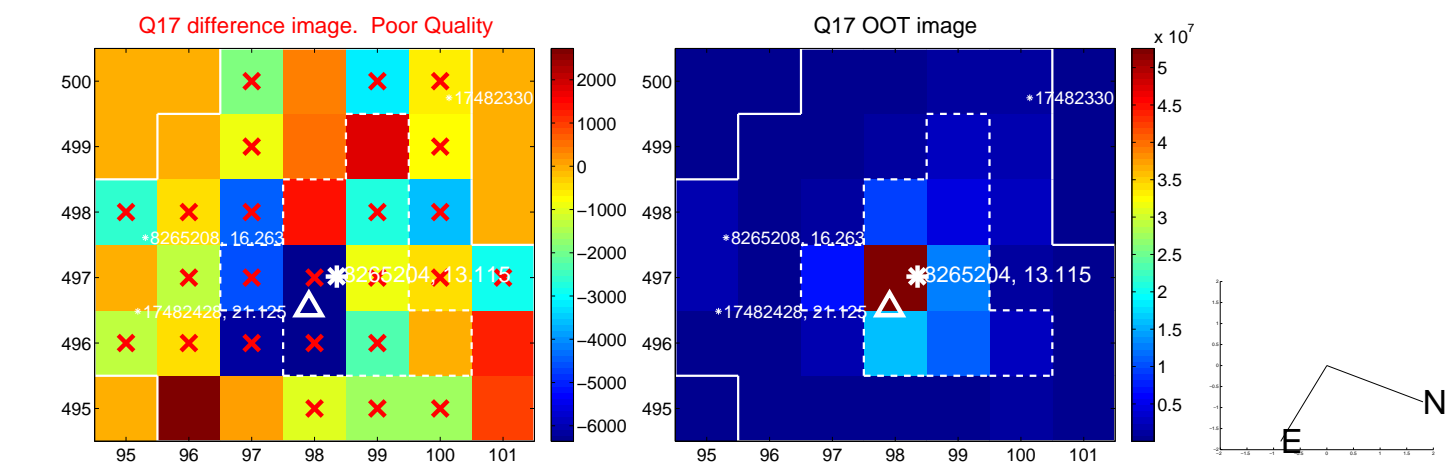
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



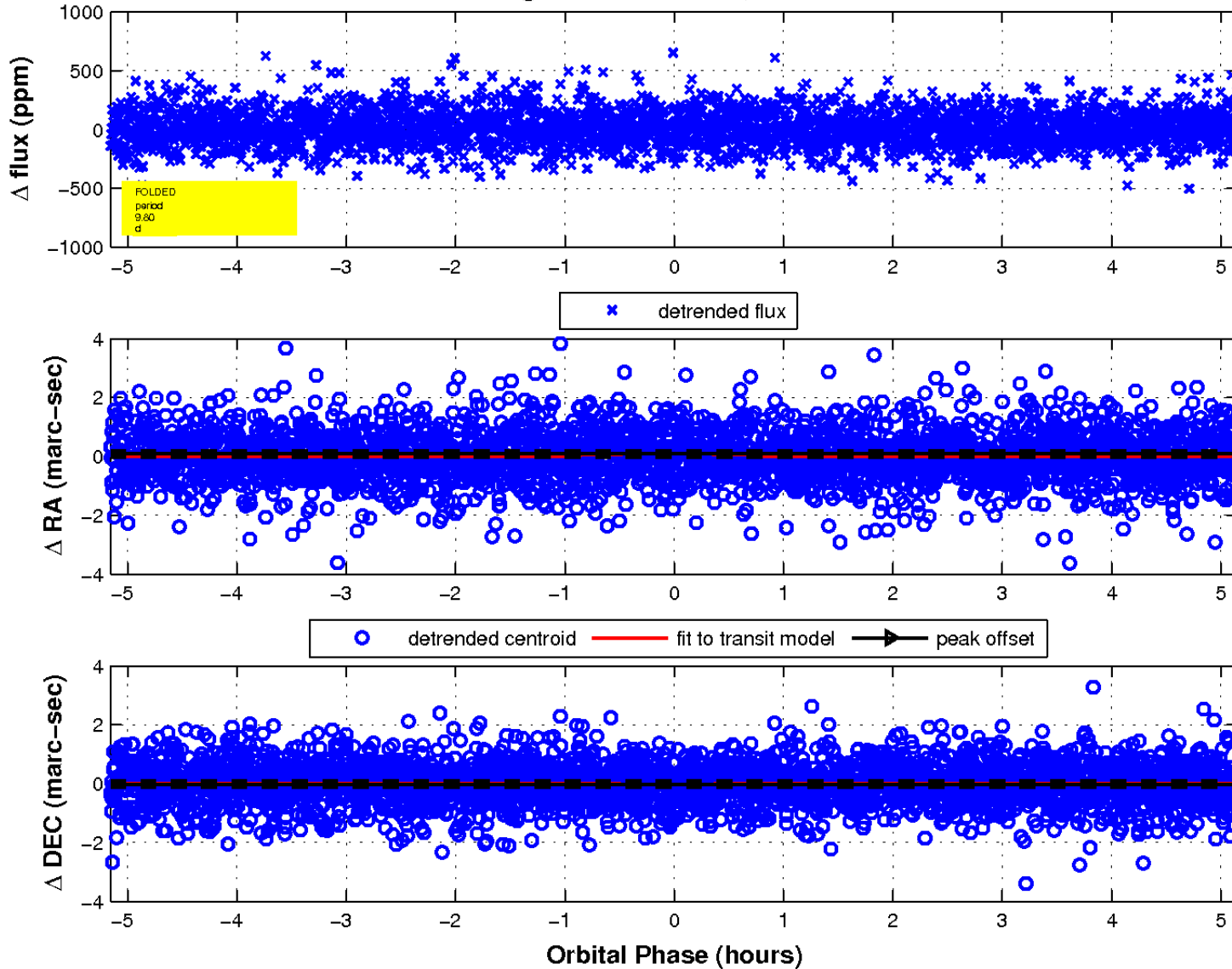
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

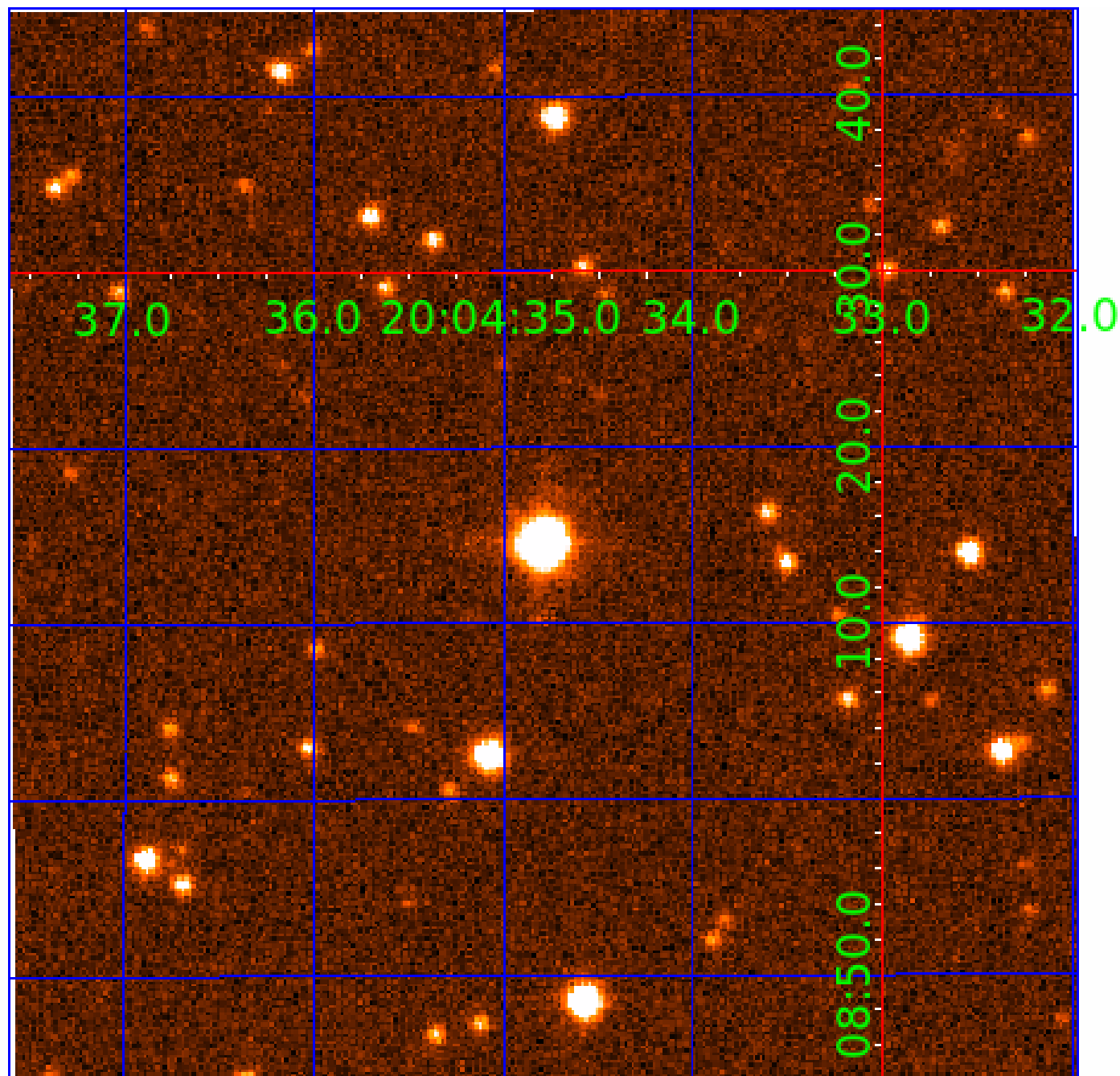


fluxWeightedCentroids, Planet 2 of 4



UKIRT Image

Declination



KIC 008265204

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})
008265204-01	OBS	No	1.240012	132.135065	5.2	9.378	9.4	3.1	1.90	6777	0.45	11725.50
008265204-02	OBS	No	9.801249	137.557277	228.3	1.720	15.7	11.4	1.90	6777	3.08	744.72
008265204-03	OBS	No	14.471051	144.295274	355.4	0.899	12.8	13.0	1.90	6777	4.22	442.96
008265204-04	OBS	No	5.850505	133.107353	252.3	0.626	10.7	12.4	1.90	6777	3.31	1481.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008265204-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
008265204-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
008265204-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008265204-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

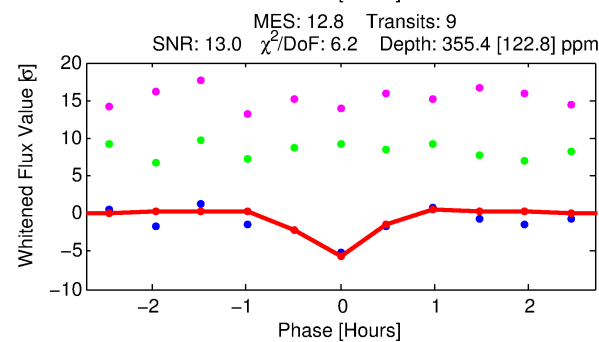
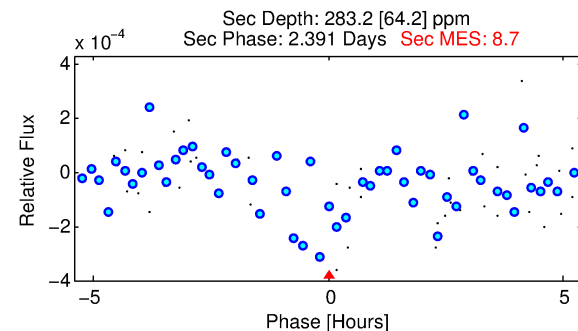
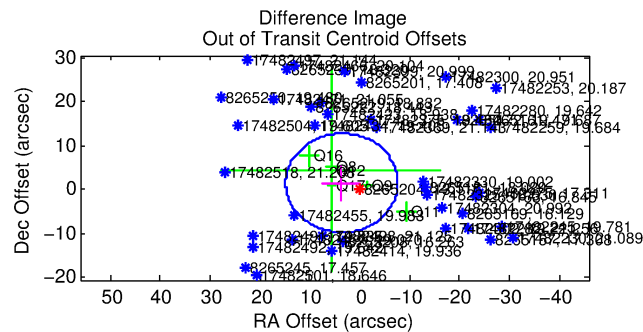
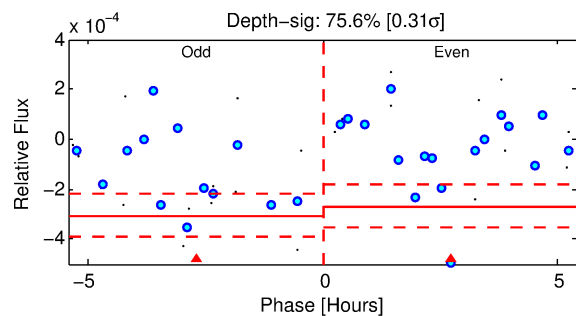
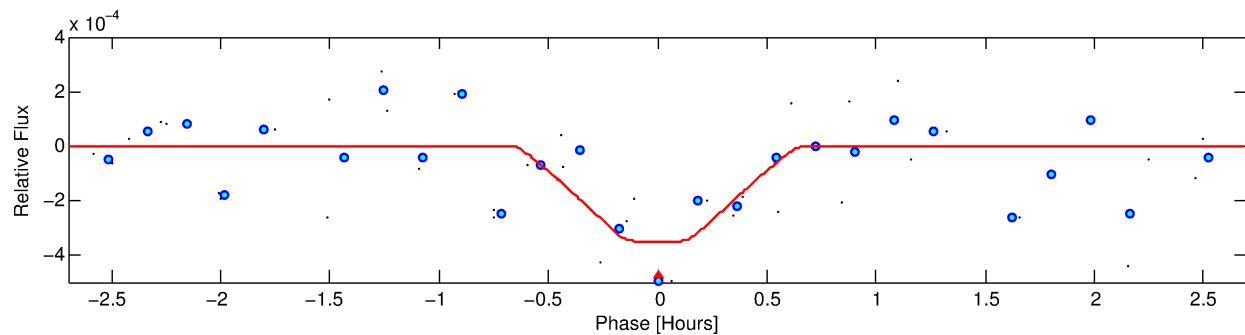
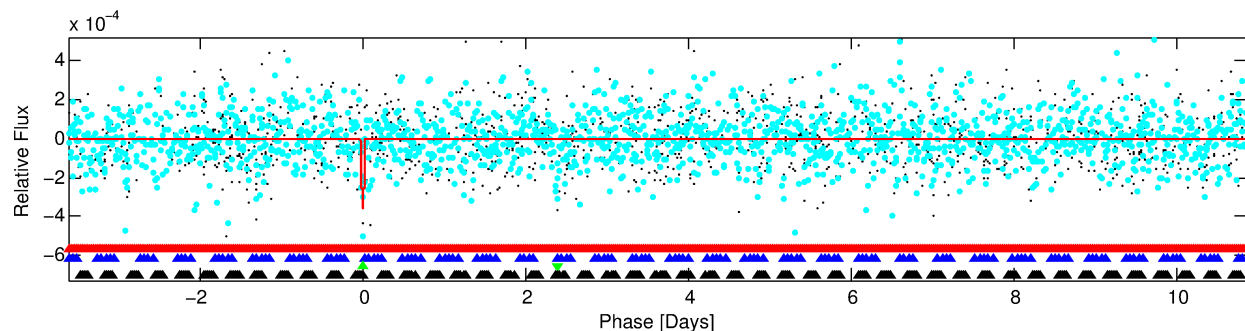
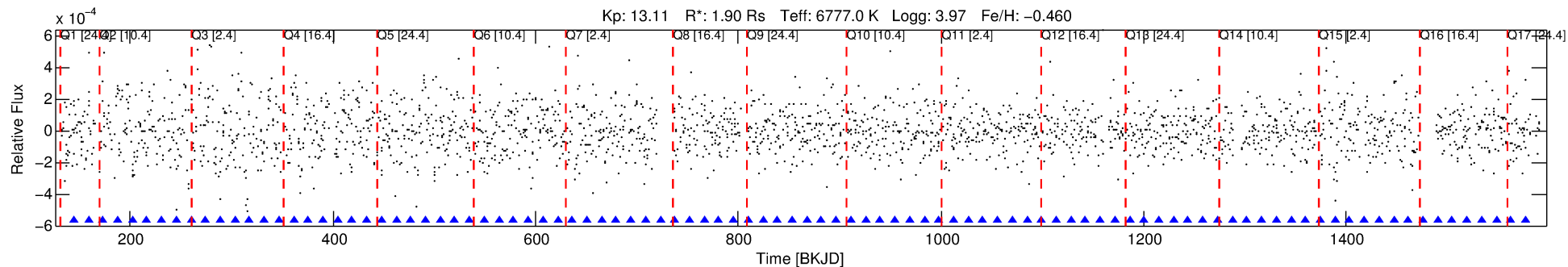
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008265204-03

No Significant Match Found

DV One-Page Summary

KIC: 8265204 Candidate: 3 of 4 Period: 14.471 d



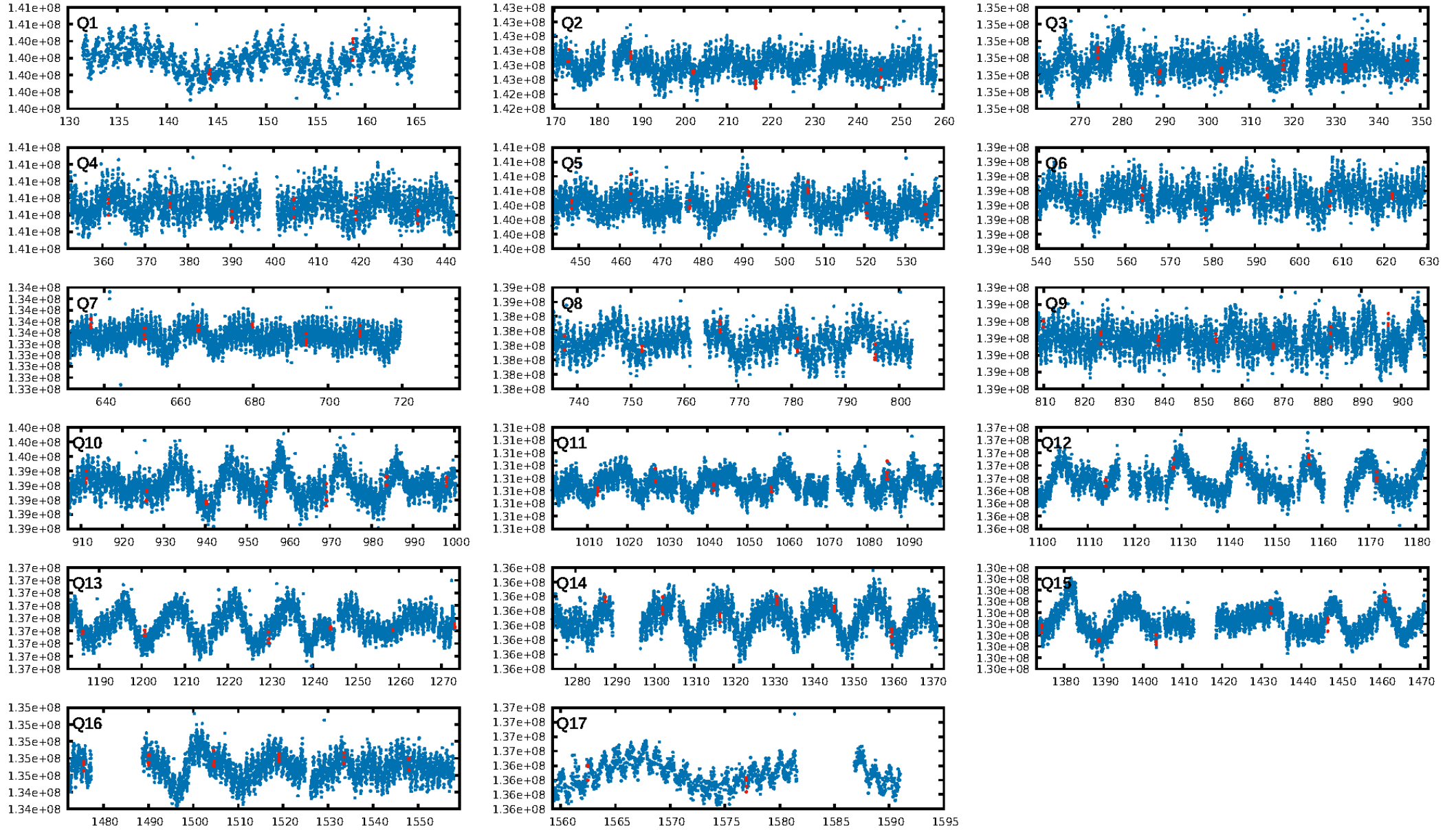
DV Fit Results:

Period = 14.47105 [0.00010] d
Epoch = 144.2953 [0.0039] BKJD
Rp/R* = 0.0203 [0.0231]
a/R* = 58.79 [372.40]
b = 0.90 [1.36]
Seff = 442.96 [281.06]
Teq = 1170 [186] K
Rp = 4.22 [5.03] Re
a = 0.1242 [0.0464] AU
Ag = 134.85 [318.40] [0.42 σ]
Teffp = 6163 [3520] K [1.42 σ]

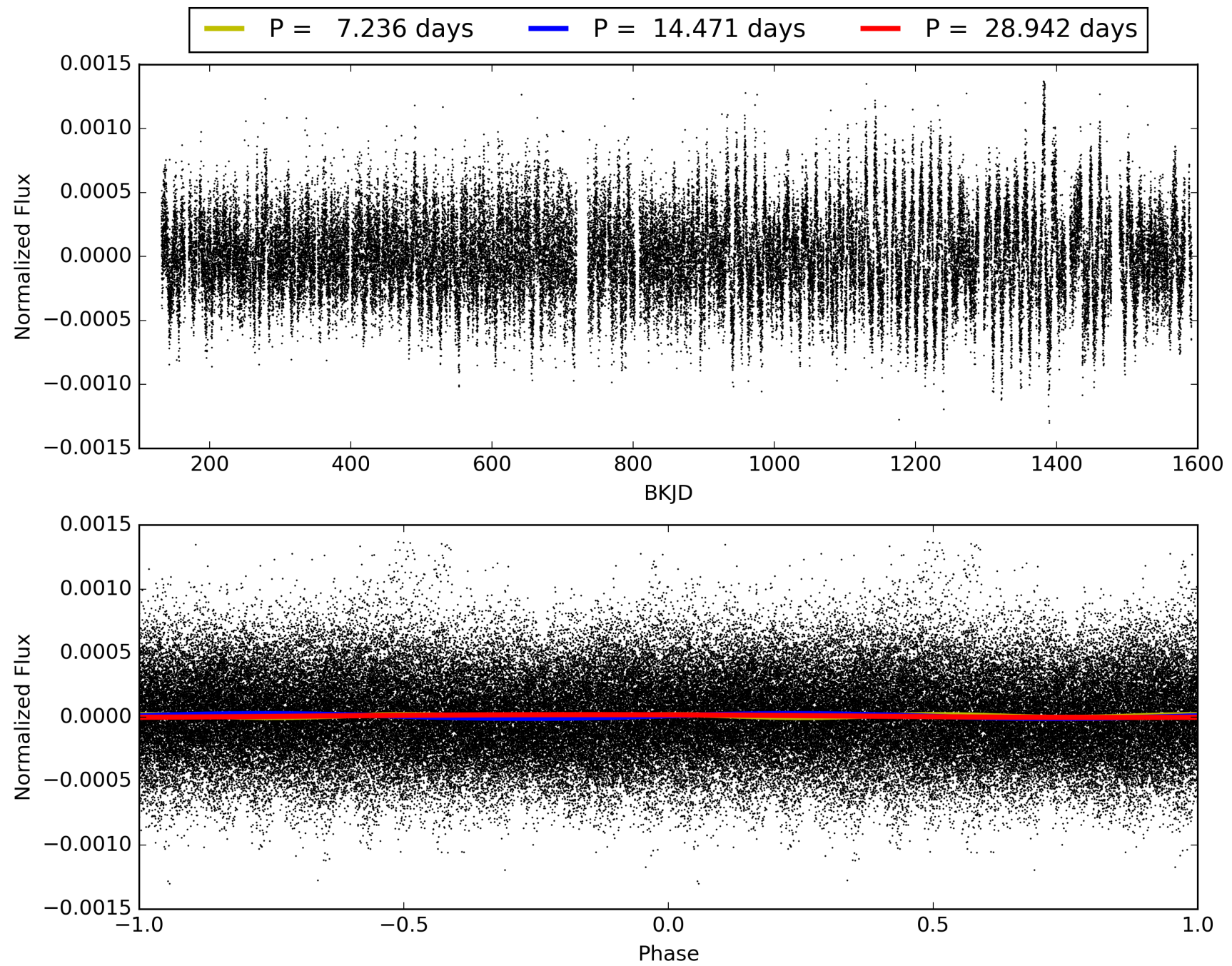
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [57.74 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.3%
Bootstrap-pfa: 1.61e-20
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -0.6398
Centroid-sig: 90.0%
Centroid-so: 0.779 arcsec [1.39 σ]
OotOffset-rm: 3.878 arcsec [1.04 σ]
KicOffset-rm: 3.915 arcsec [1.05 σ]
OotOffset-st: 0/1/3/2 [6]
KicOffset-st: 0/1/3/2 [6]
DiffImageQuality-fgm: 0.00 [0/6]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008265204-03, PDC Light Curves

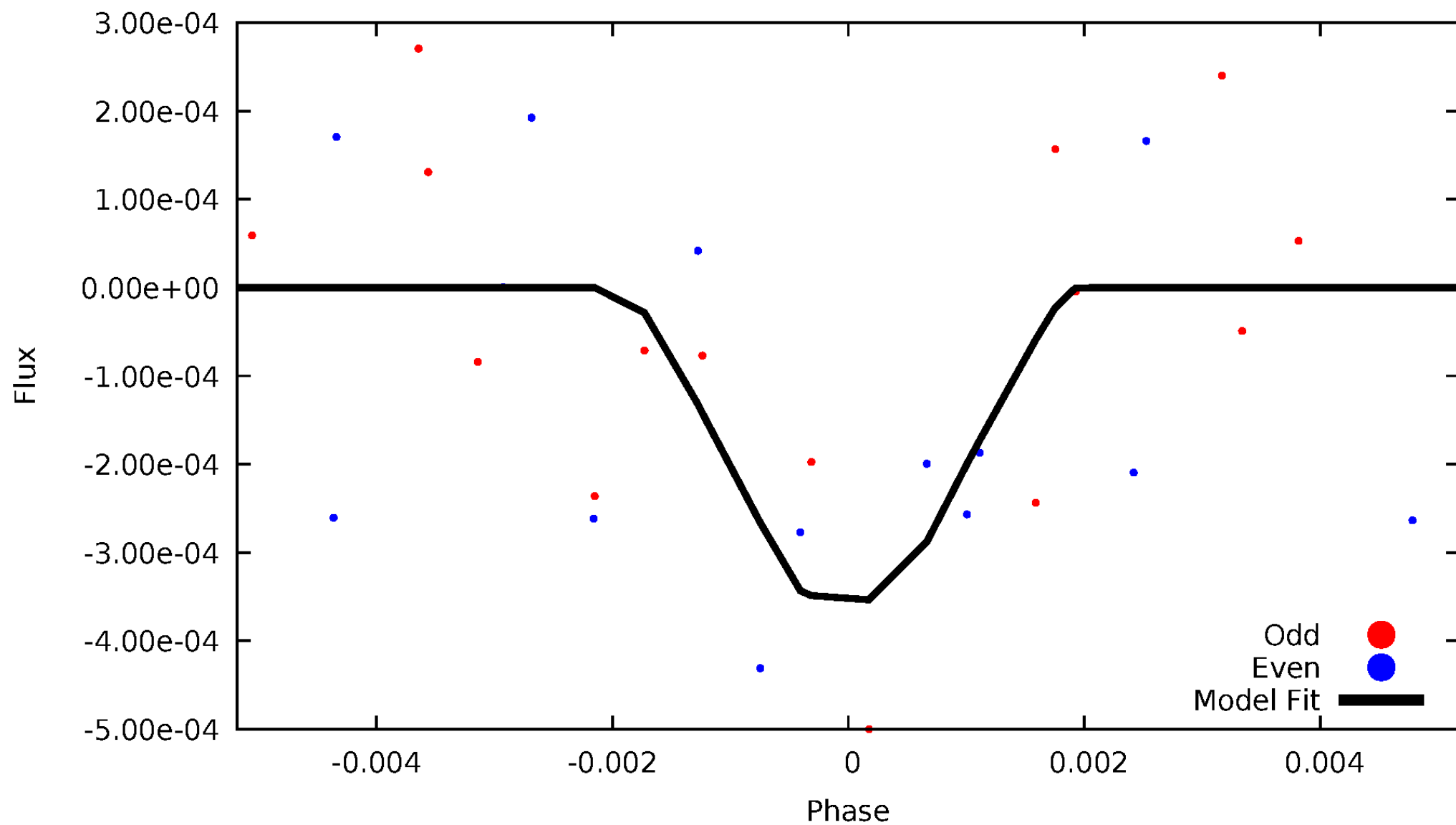


TCE 008265204-03



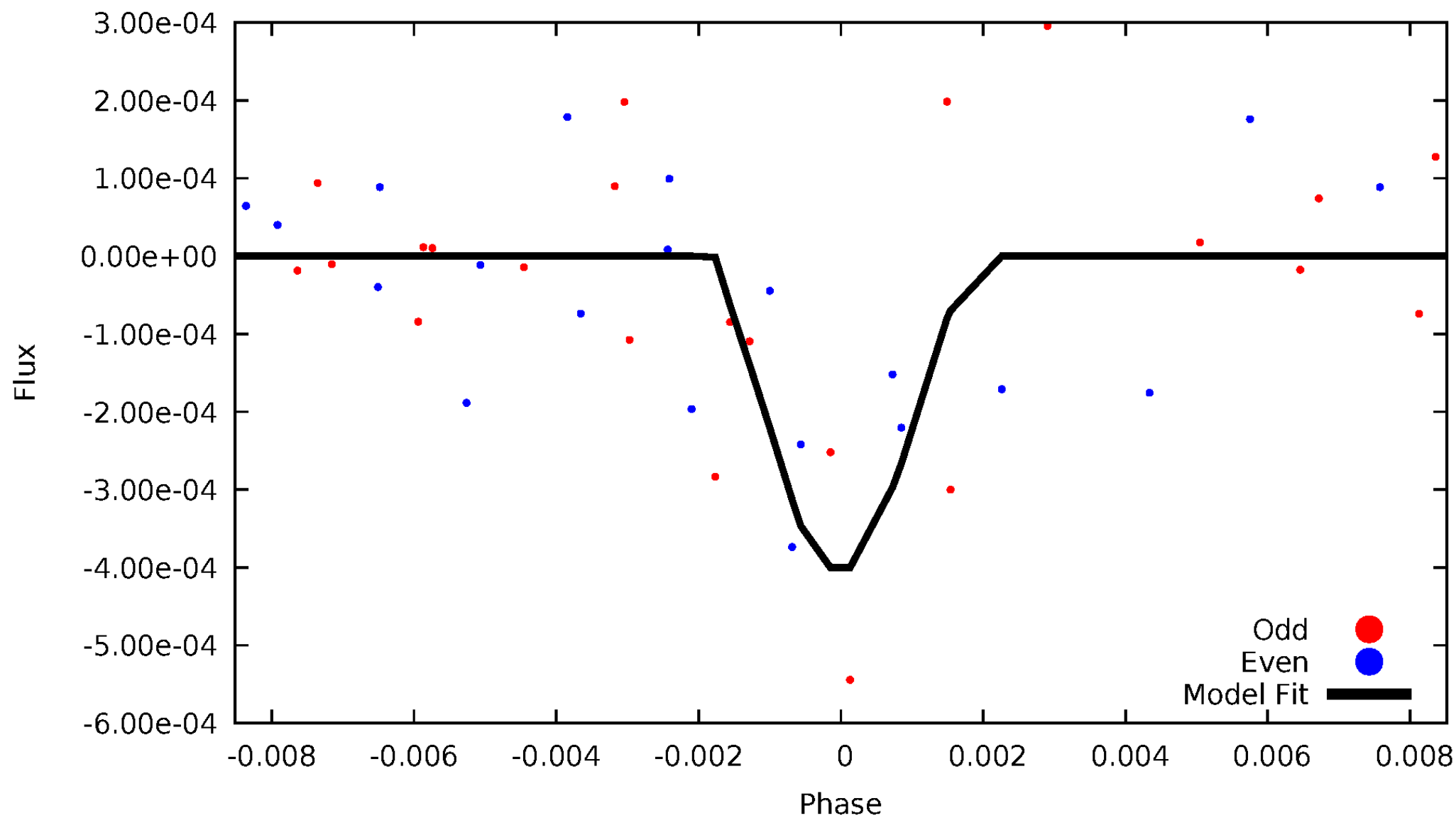
DV Odd/Even

TCE 008265204-03



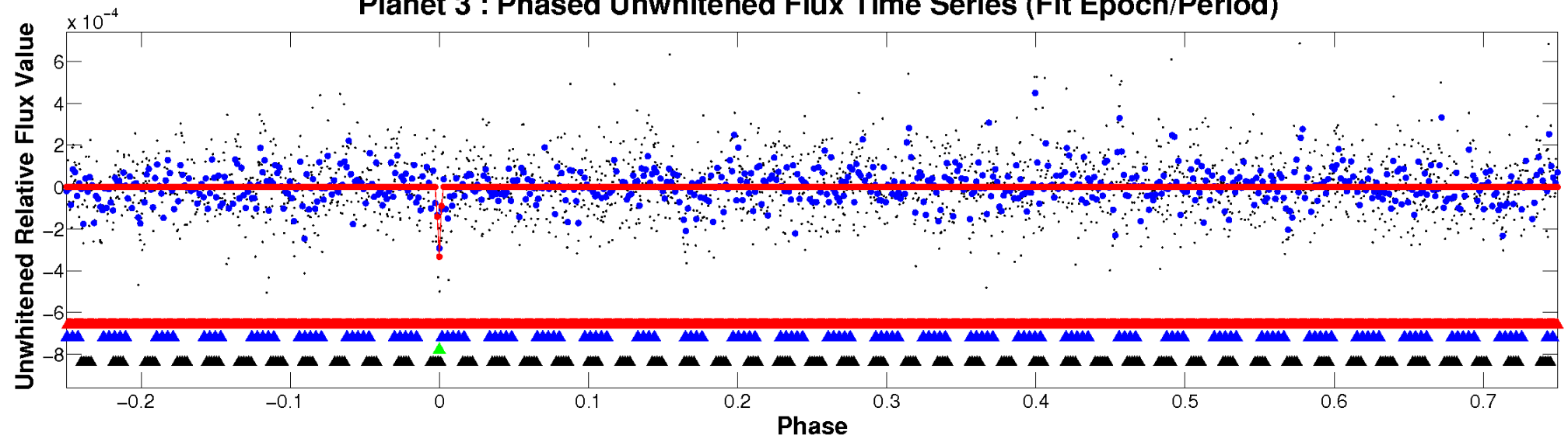
ALT Odd/Even

TCE 008265204-03

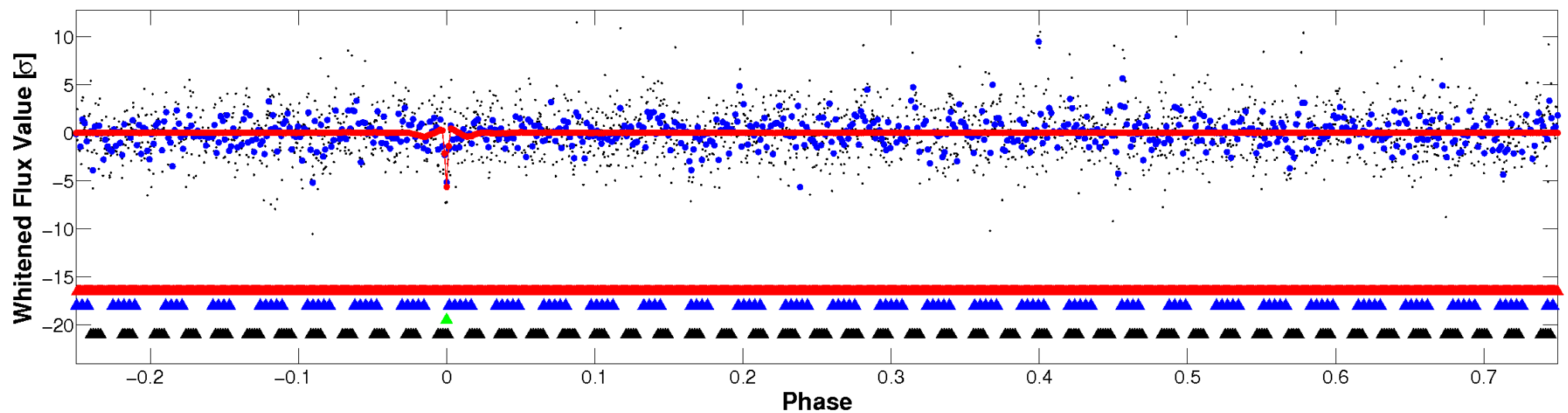


Non-Whitened Vs. Whitened Light Curve

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

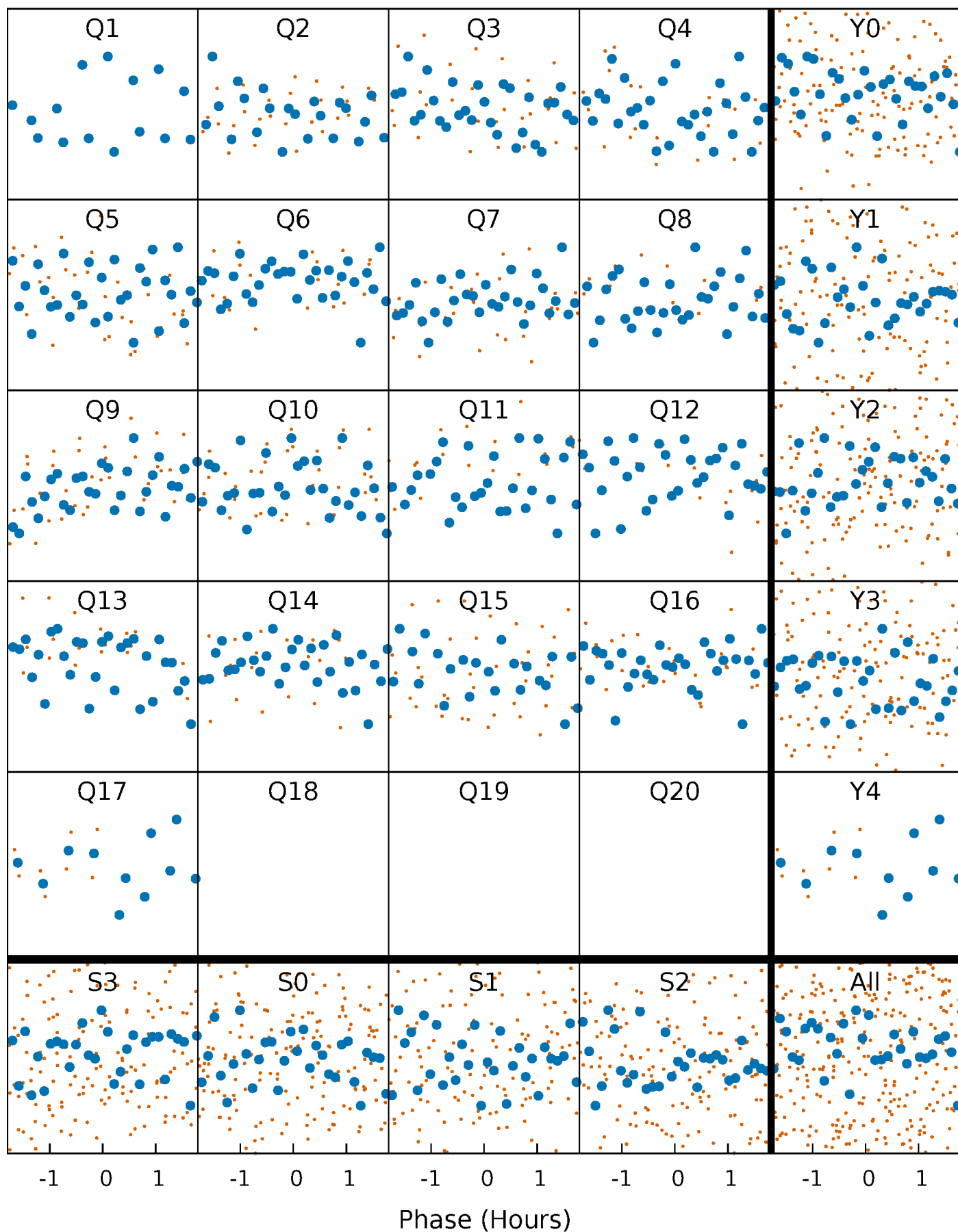


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



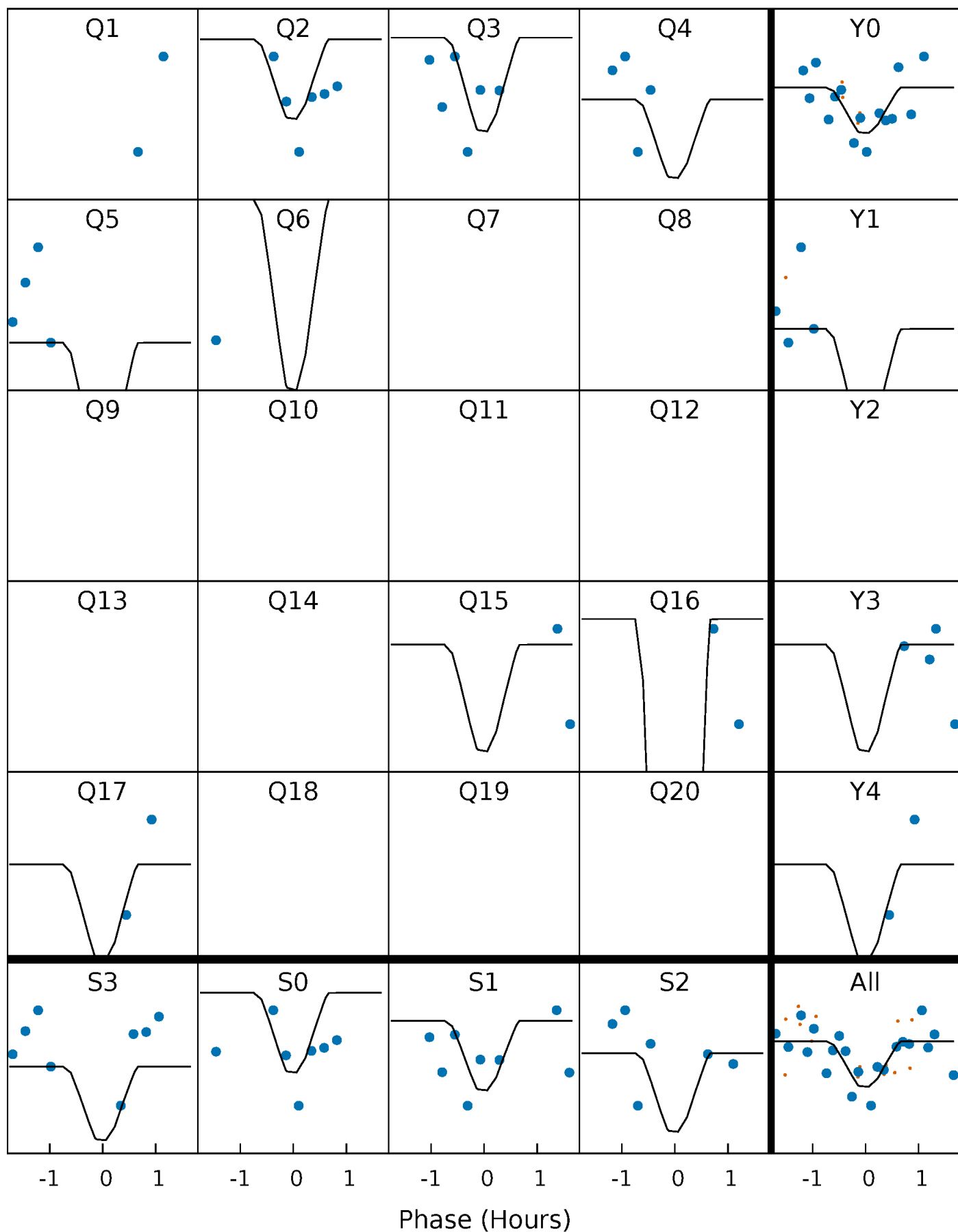
PDC Quarter-Phased Transit Curves

TCE 008265204-03 P= 14.471051 Days $T_0=144.295274$ (BKJD)



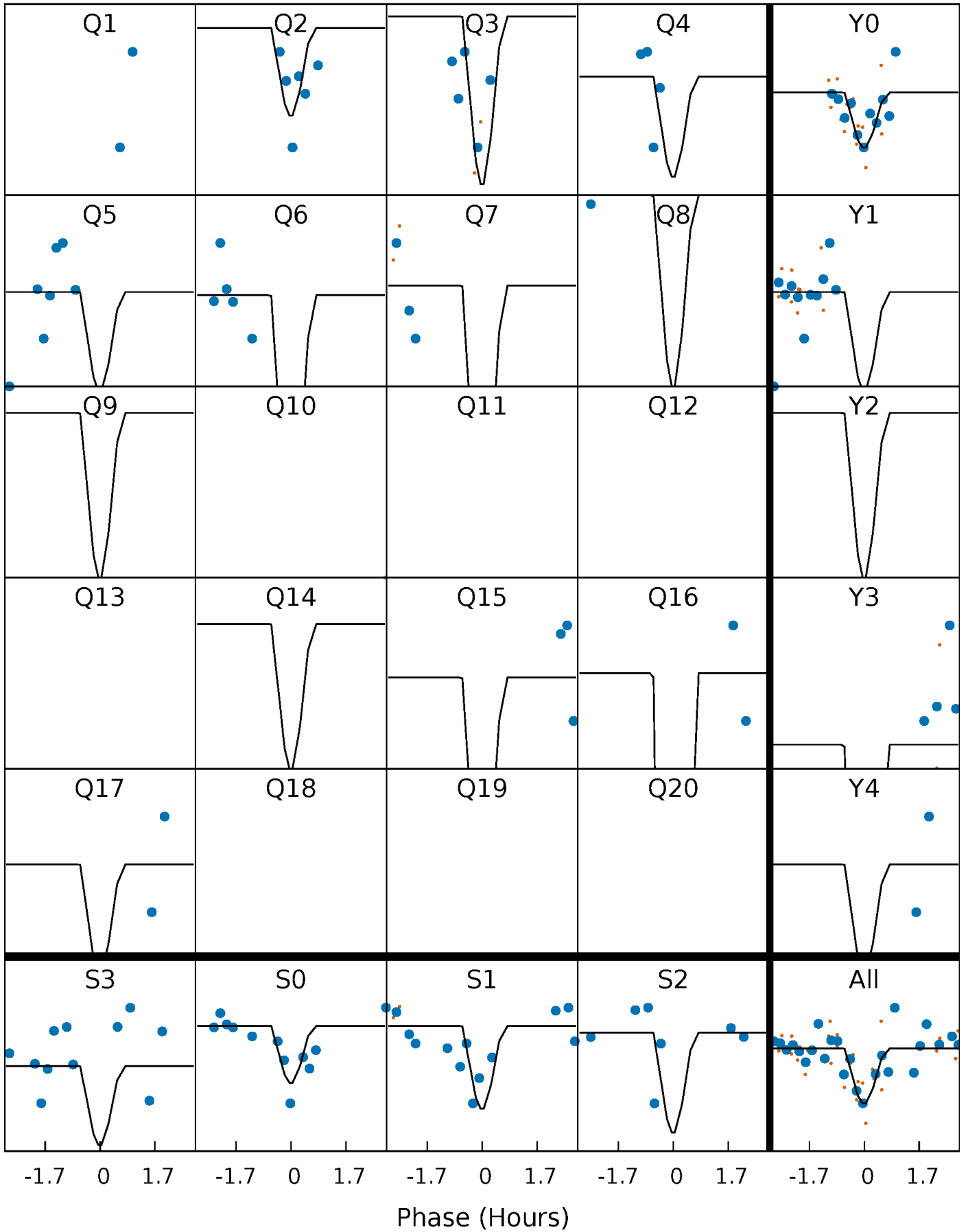
DV Quarter-Phased Transit Curves

TCE 008265204-03 P= 14.471051 Days $T_0=144.295274$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

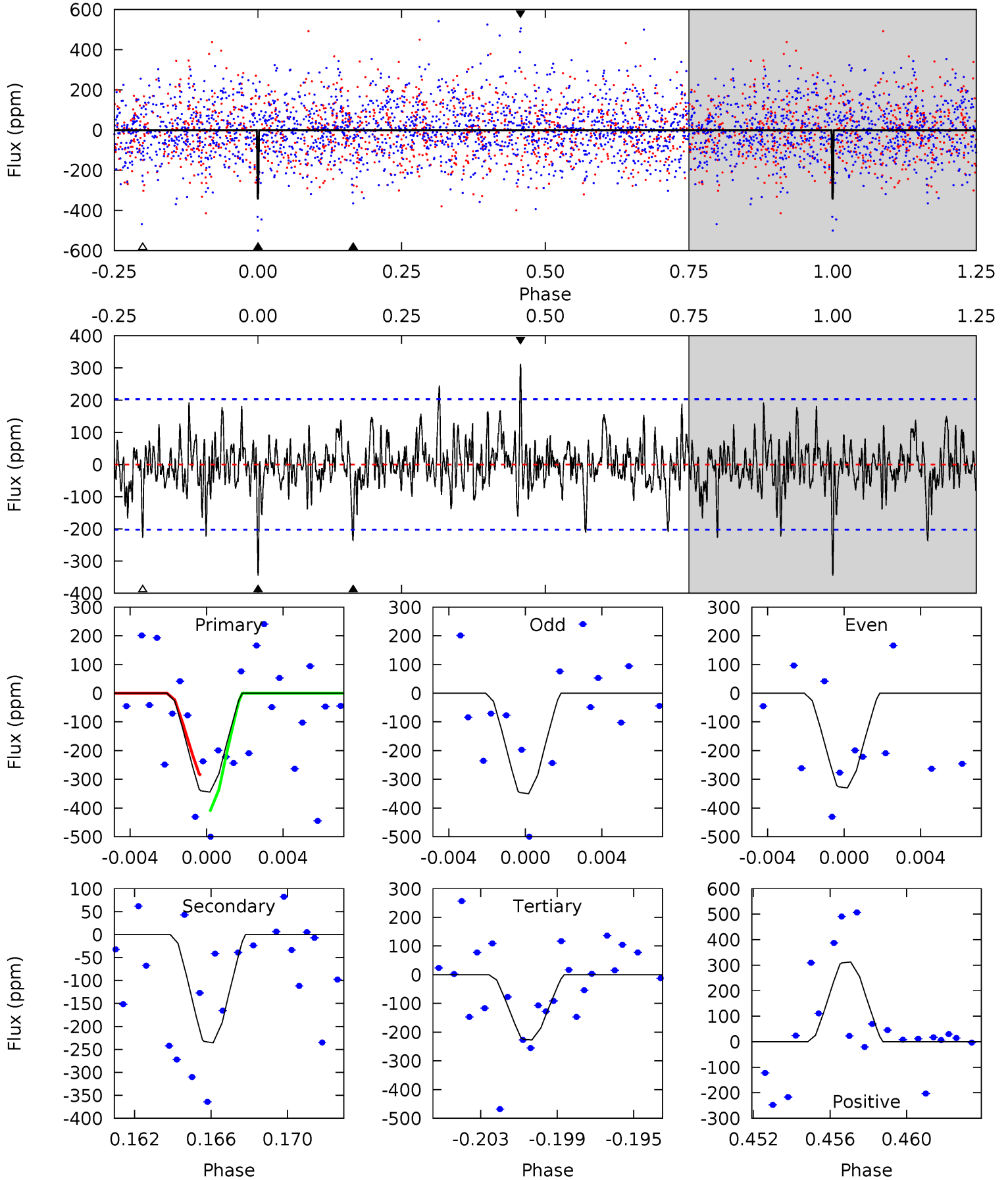
TCE 008265204-03 P= 14.470531 Days $T_0=144.299605$ (BKJD)



DV Model-Shift Uniqueness Test

008265204-03, P = 14.471051 Days, E = 129.824223 Days

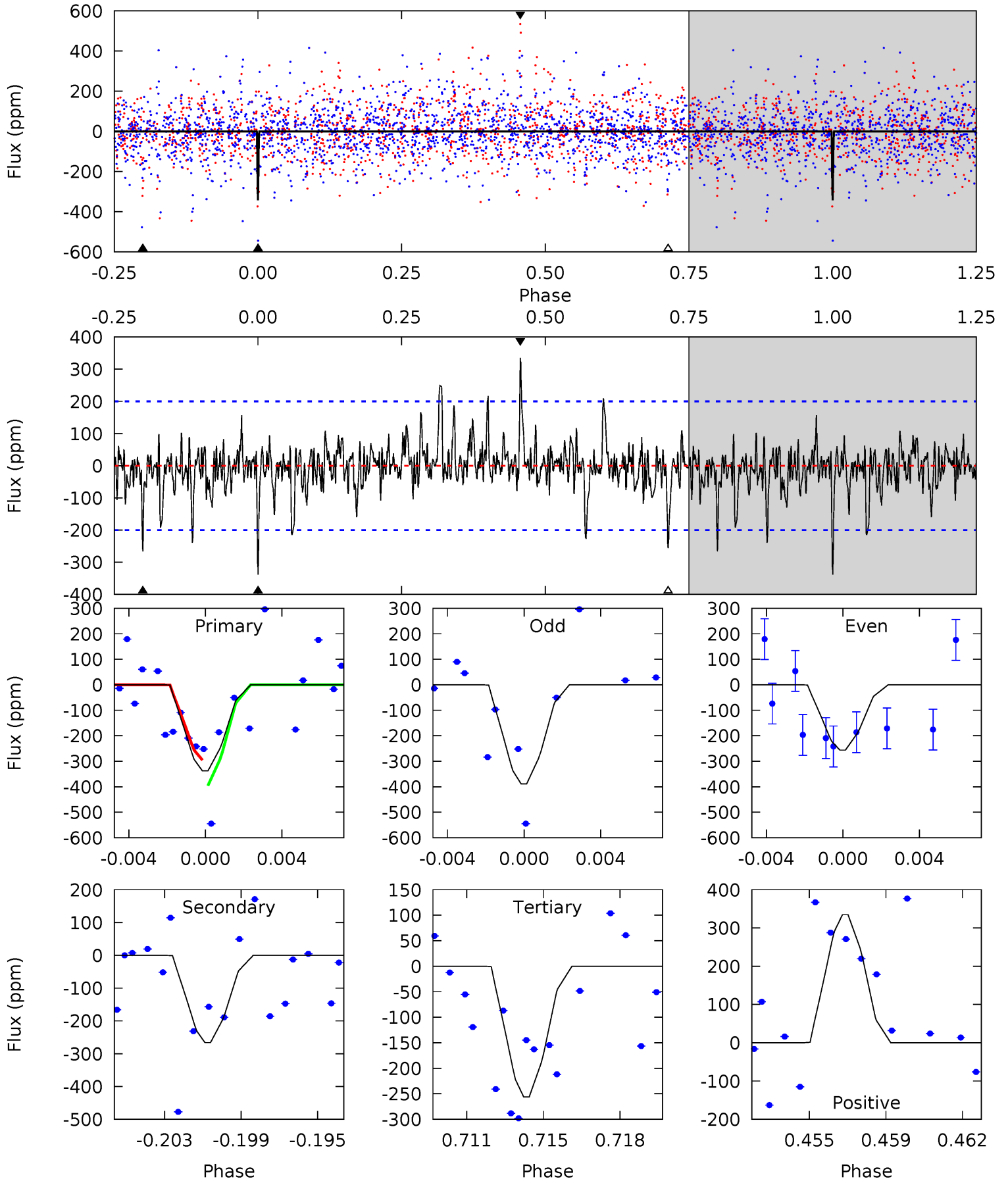
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.83	6.04	5.83	8.01	5.19	2.87	1.64	3.01	0.82	0.21	-1.98	0.25	0.97	0.48	1.62



Alt Model-Shift Uniqueness Test

008265204-03, P = 14.470531 Days, E = 129.829074 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.79	6.92	6.66	8.71	5.21	2.89	1.51	2.13	0.08	0.26	-1.79	1.81	1.13	0.50	1.33



Stellar Parameters For KIC 008265204

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6777^{+214}_{-262}	$3.966^{+0.368}_{-0.147}$	$-0.460^{+0.250}_{-0.300}$	$1.901^{+0.464}_{-0.696}$	$1.219^{+0.182}_{-0.203}$	$0.250^{+0.670}_{-0.110}$
	+3%/-4%	+9%/-4%	+54%/-65%	+24%/-37%	+15%/-17%	+268%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008265204-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-236 ± 39	$4.78^{+4.43}_{-3.11}$	1607^{+130}_{-159}	5320^{+4406}_{-1168}	85^{+685}_{-62}
Alt.	-266 ± 38	$5.09^{+3.96}_{-3.28}$	1595^{+130}_{-166}	5376^{+4140}_{-1127}	88^{+600}_{-60}

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 $A_{obs} \gg 1.0$

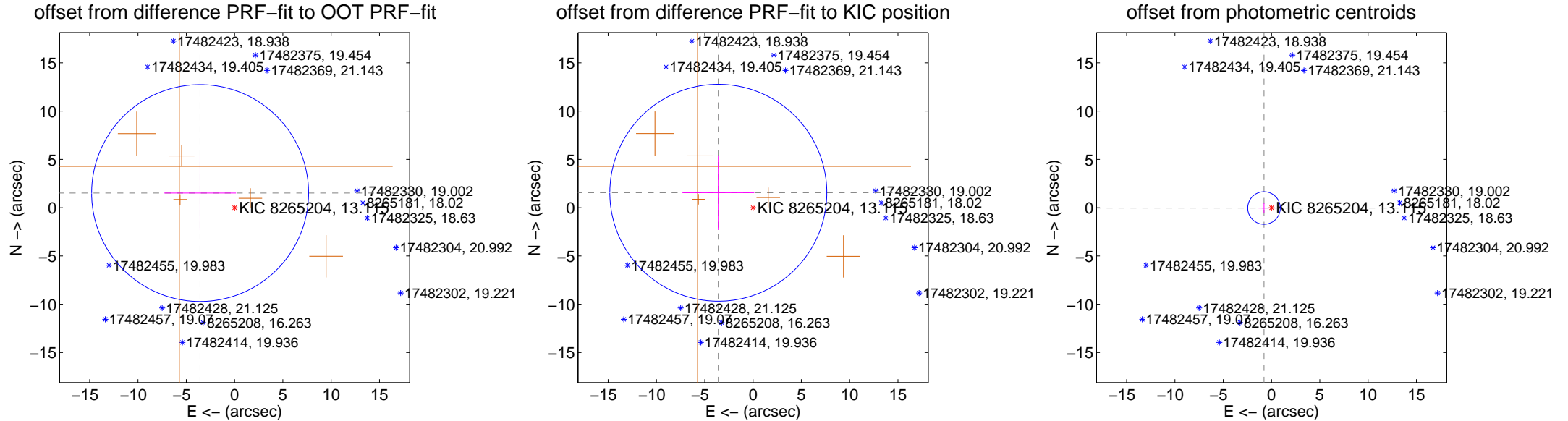
DV Centroid Data

Supplemental centroid analysis for 008265204-03. Kepler magnitude: 13.12. Transit SNR 13.03

There are 0 quarters with good PRF difference image offsets

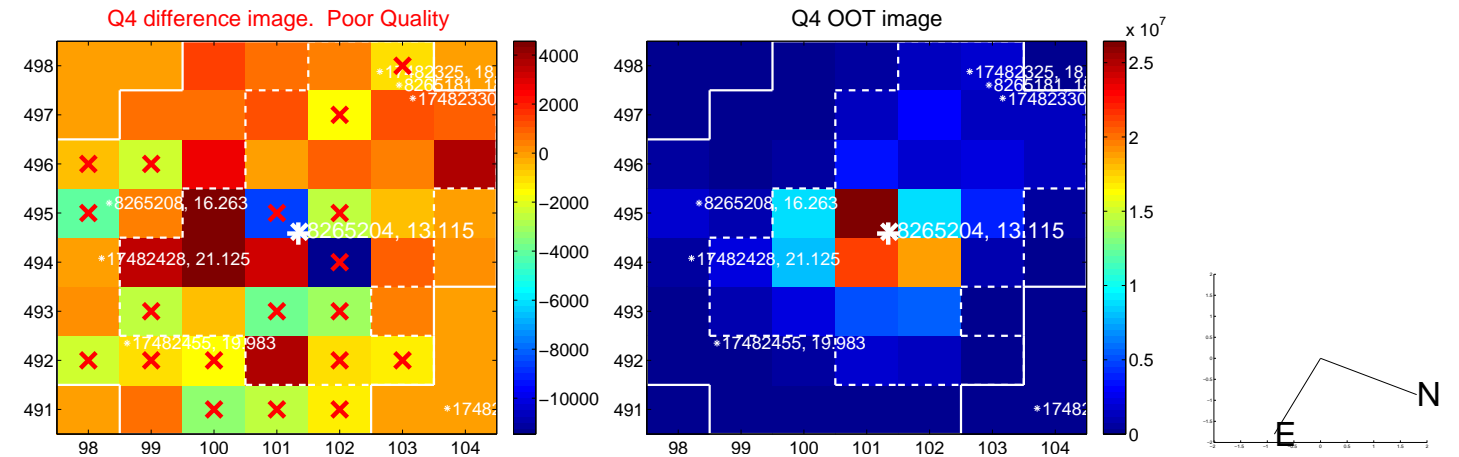
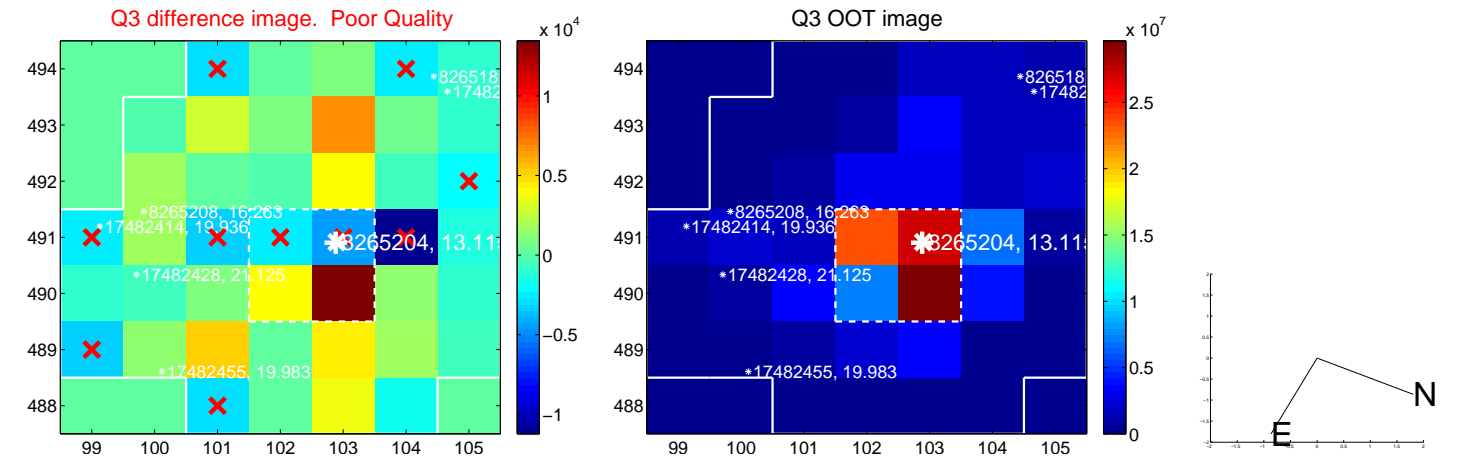
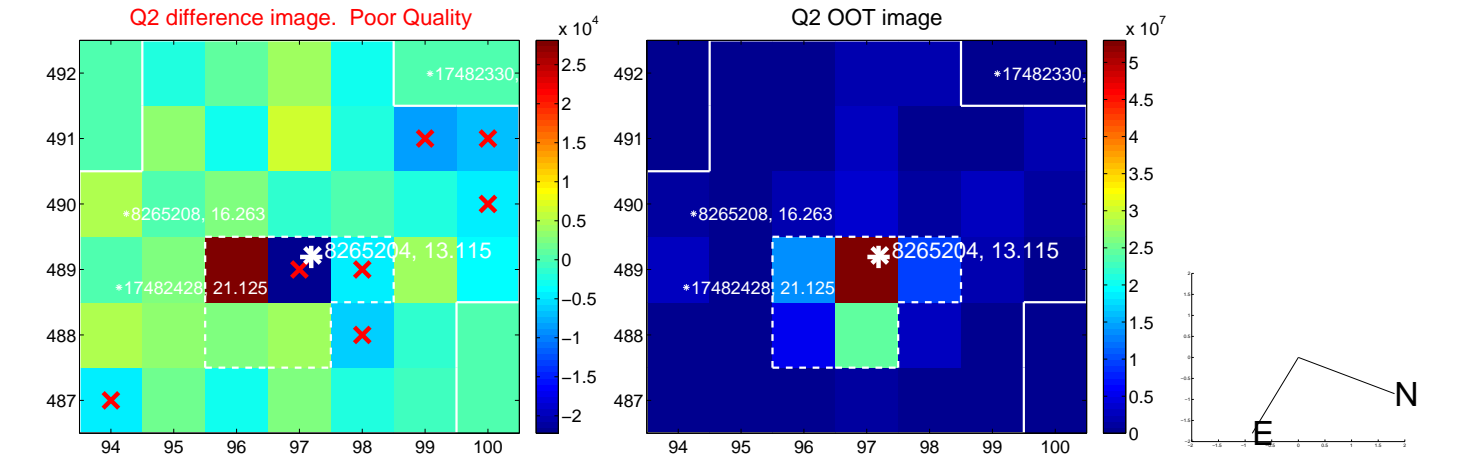
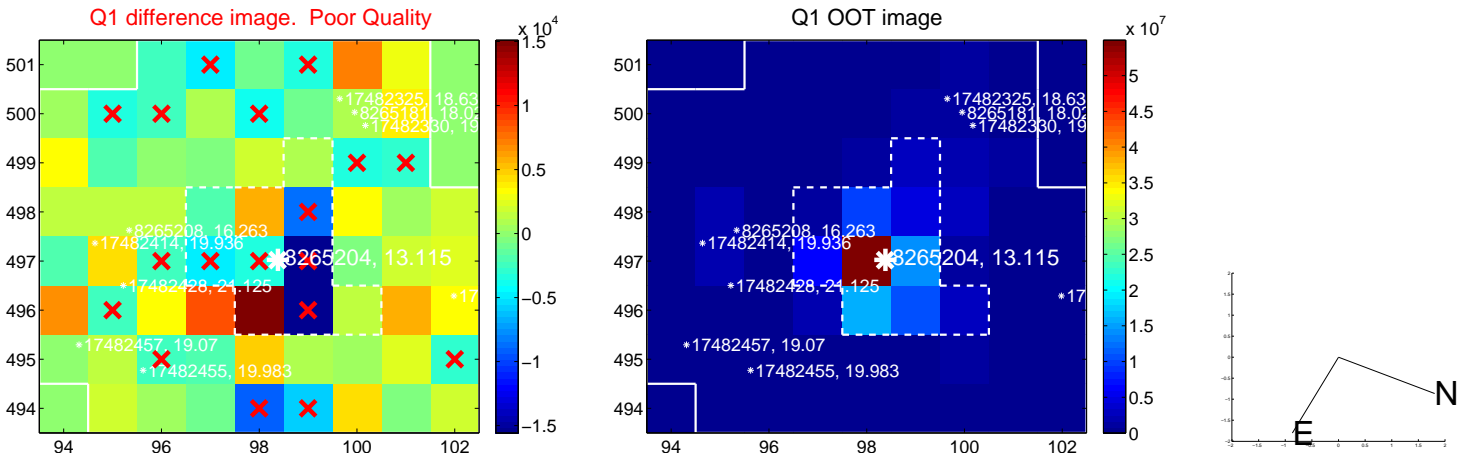
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.878 ± 3.743	1.04	3.569 ± 3.721	1.516 ± 3.863
PRF-fit source offset from KIC position	3.915 ± 3.744	1.05	3.596 ± 3.721	1.548 ± 3.863
photometric centroid source offset	0.78 ± 0.56	1.39	0.78 ± 0.56	-0.03 ± 0.53

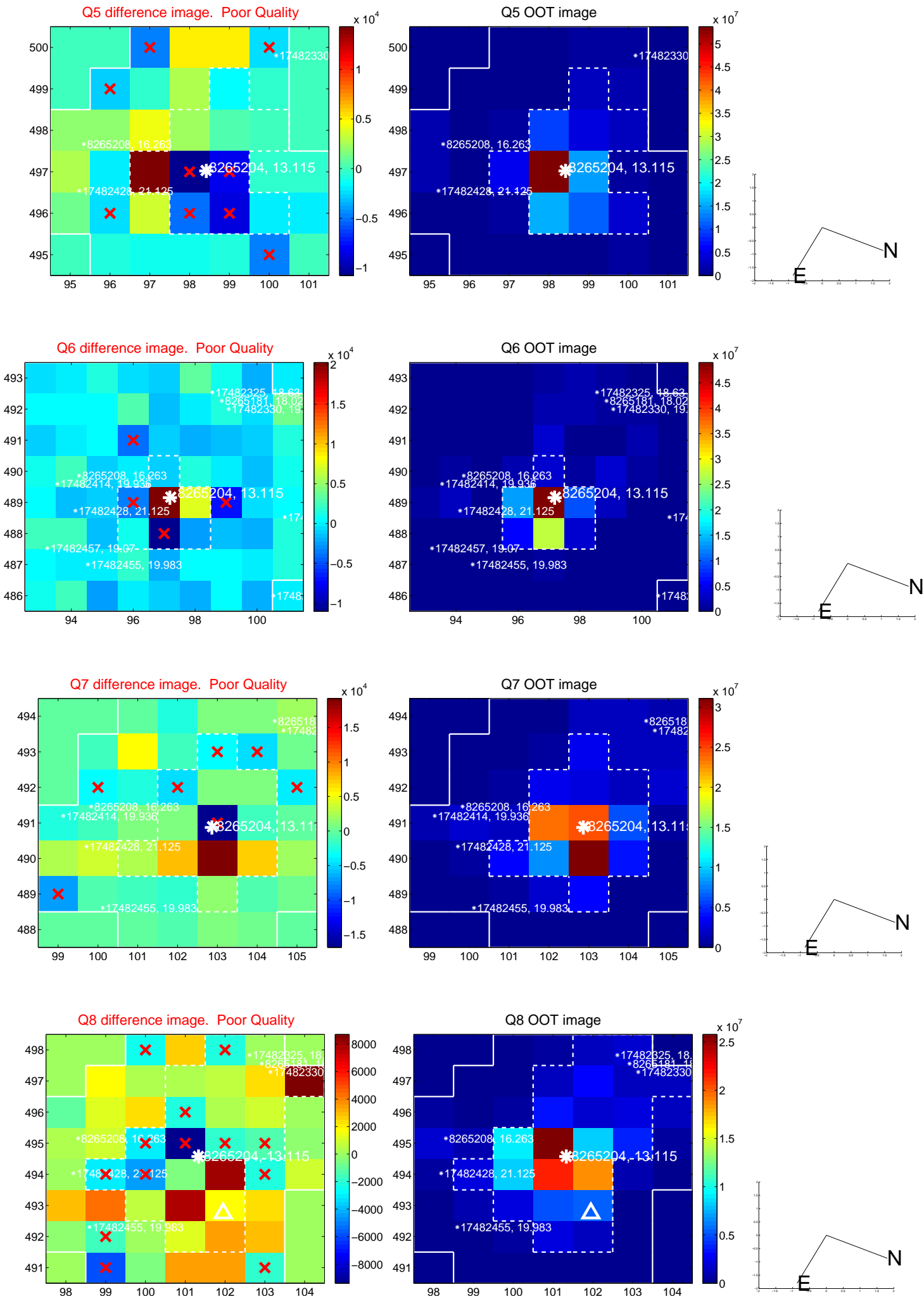


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

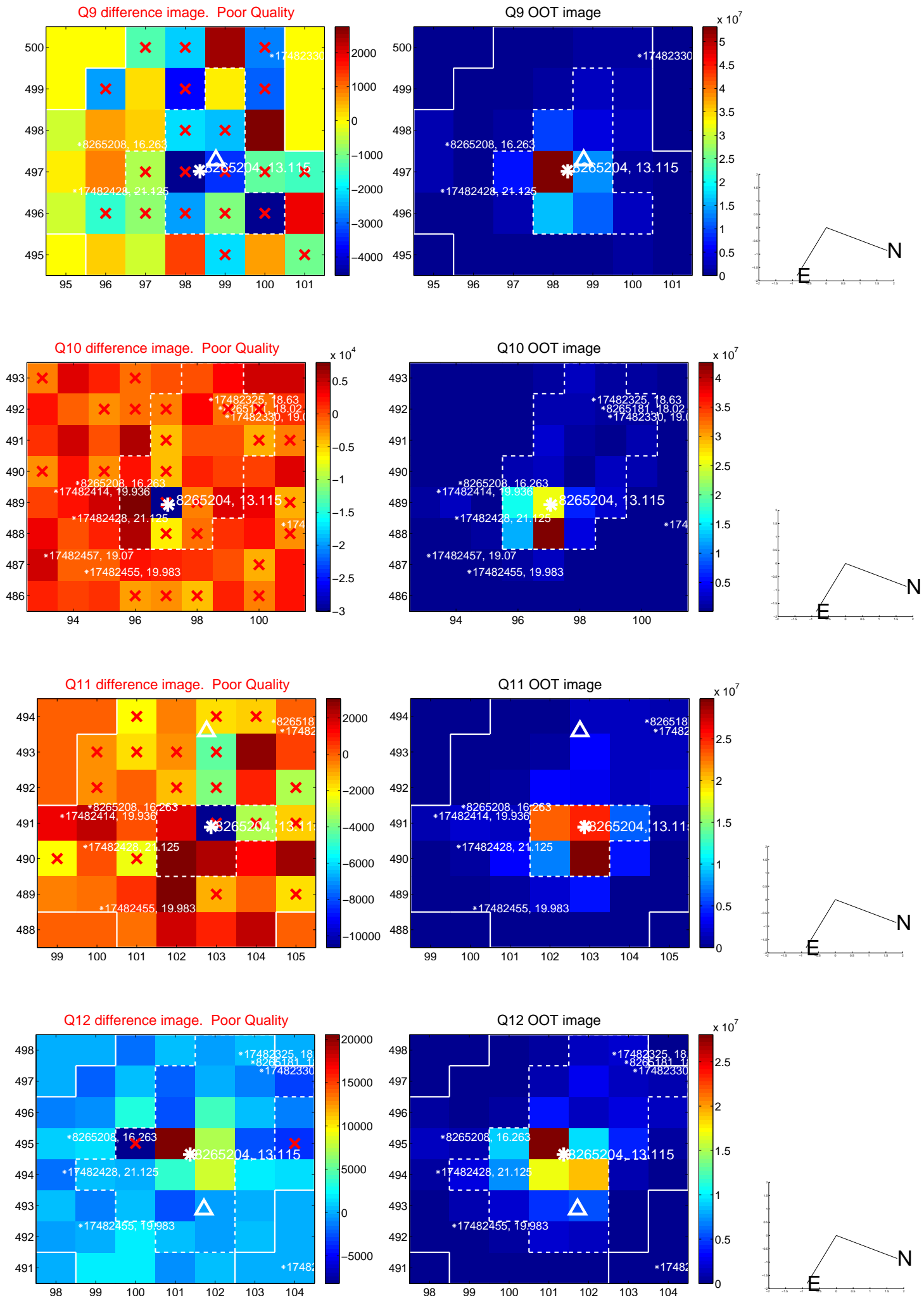
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



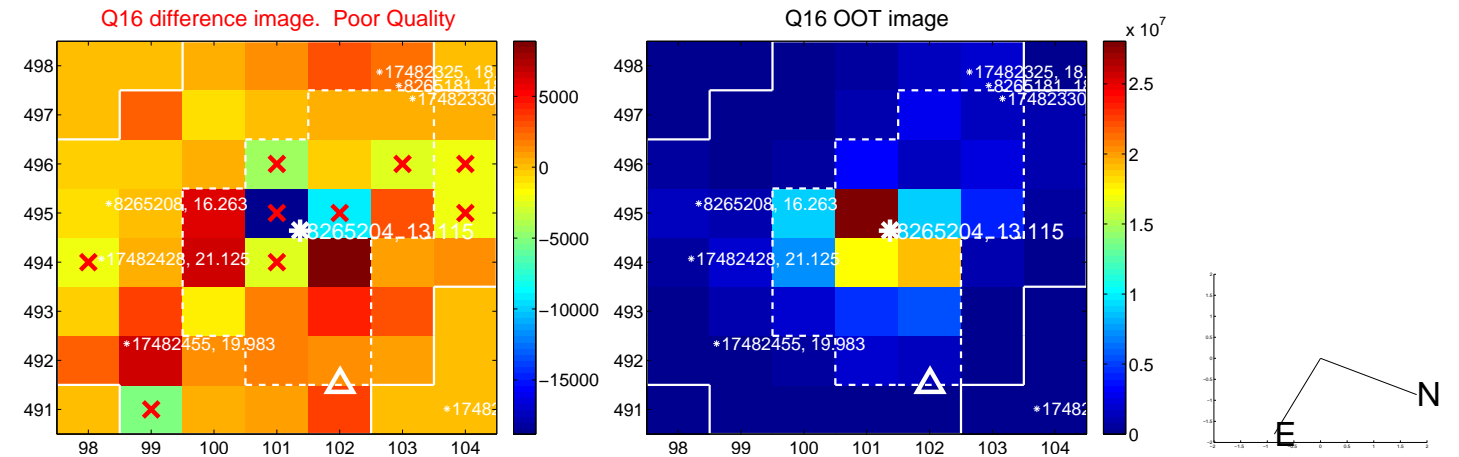
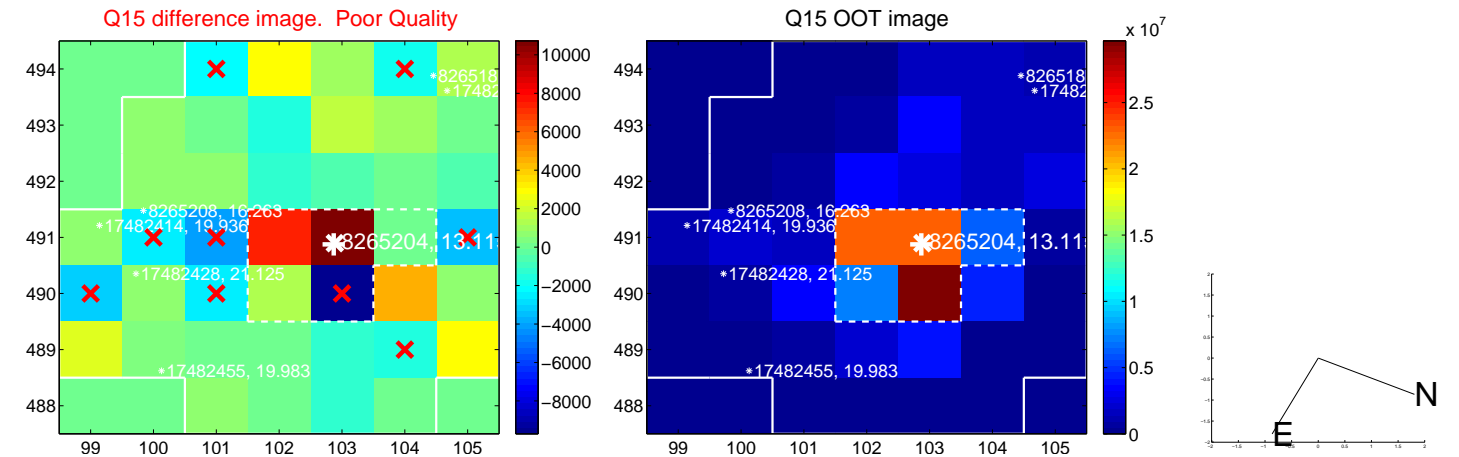
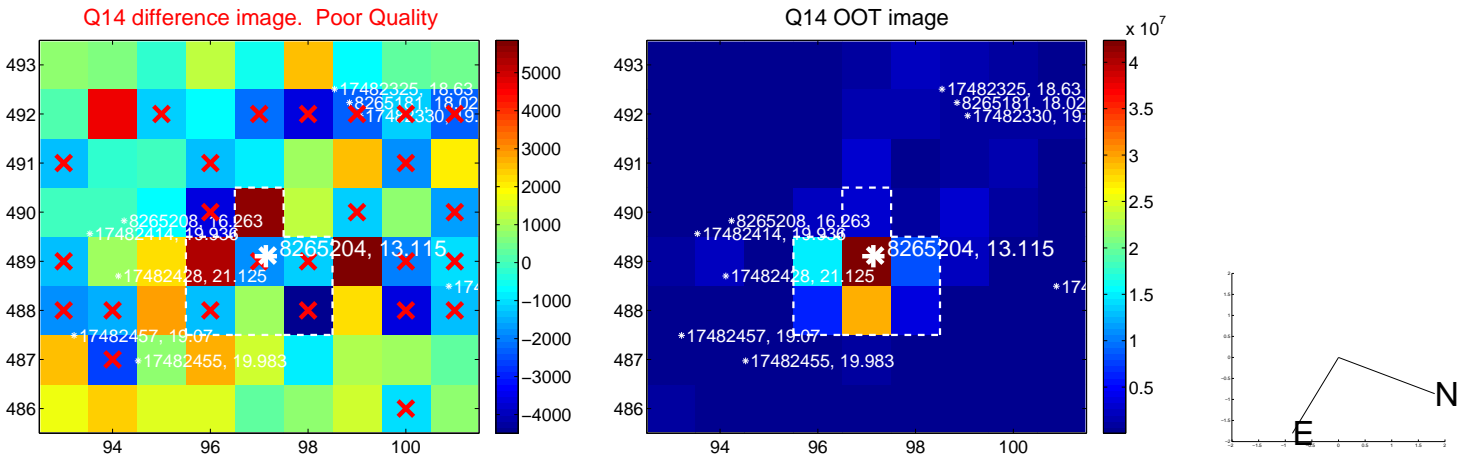
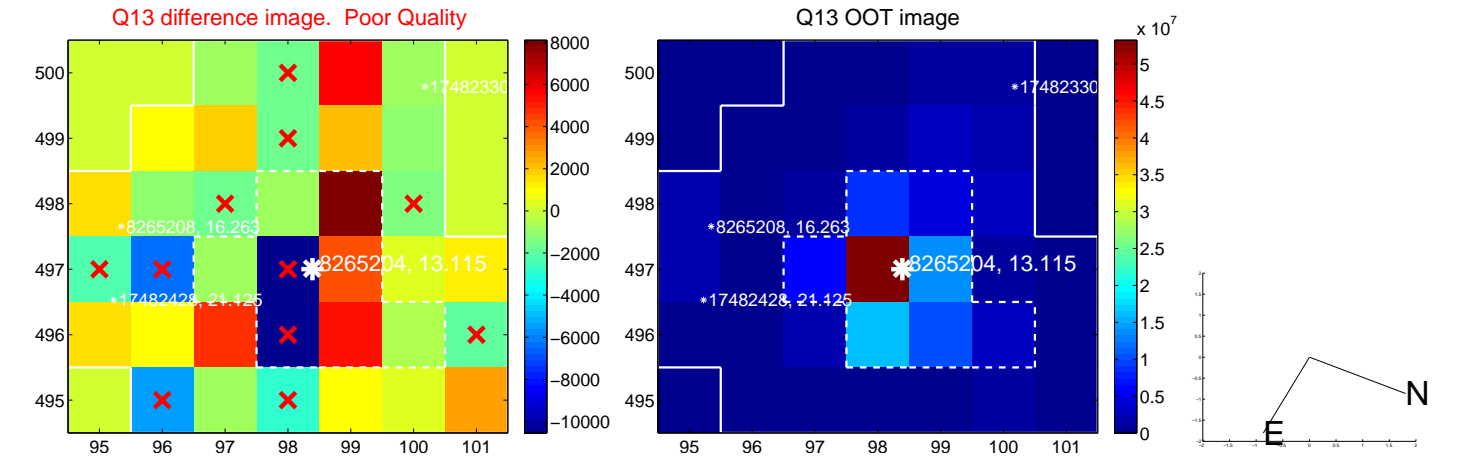
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



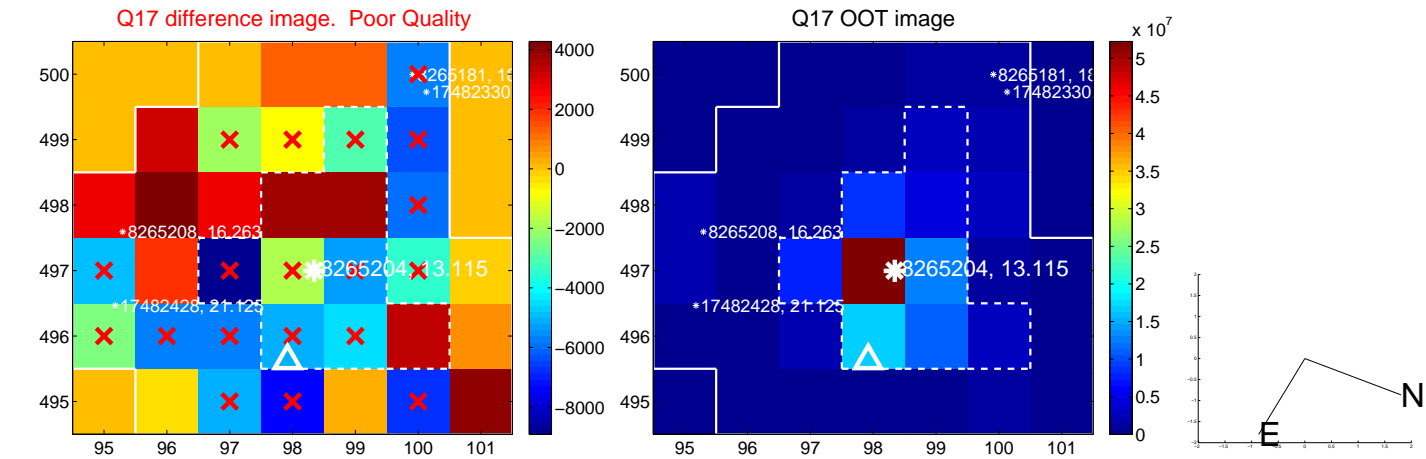
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



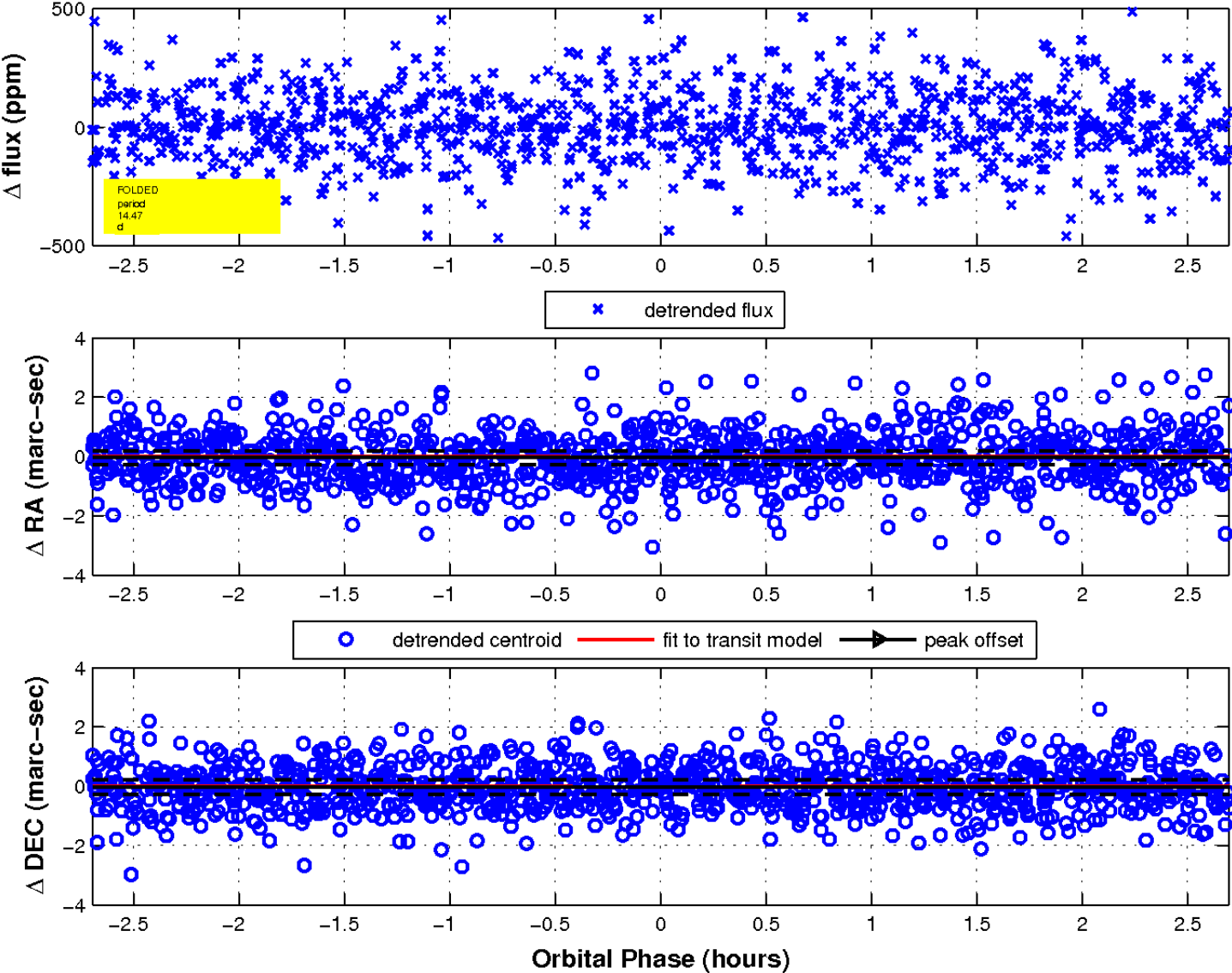
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

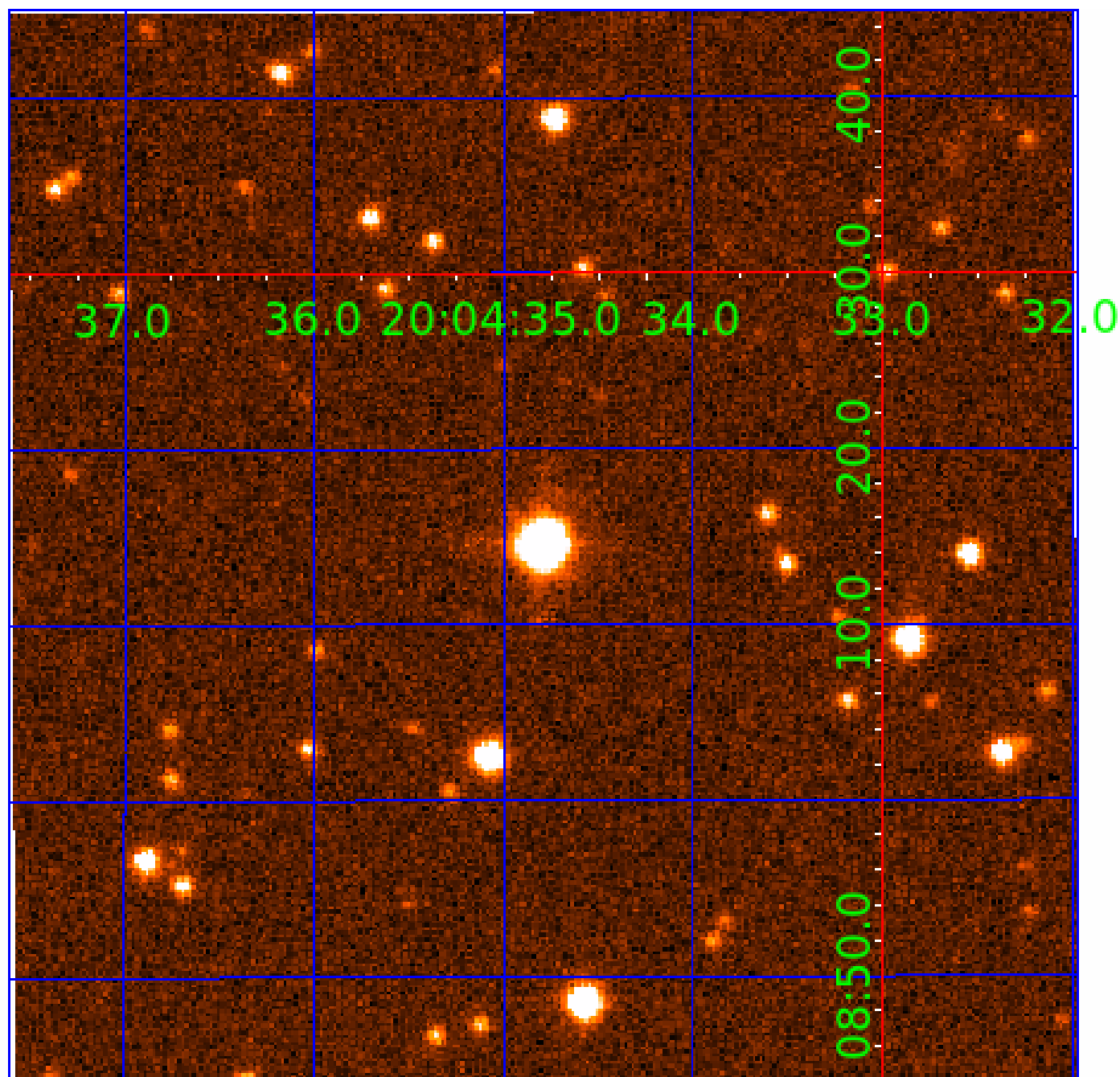


fluxWeightedCentroids, Planet 3 of 4



UKIRT Image

Declination



KIC 008265204

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})
008265204-01	OBS	No	1.240012	132.135065	5.2	9.378	9.4	3.1	1.90	6777	0.45	11725.50
008265204-02	OBS	No	9.801249	137.557277	228.3	1.720	15.7	11.4	1.90	6777	3.08	744.72
008265204-03	OBS	No	14.471051	144.295274	355.4	0.899	12.8	13.0	1.90	6777	4.22	442.96
008265204-04	OBS	No	5.850505	133.107353	252.3	0.626	10.7	12.4	1.90	6777	3.31	1481.75

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008265204-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
008265204-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV
008265204-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008265204-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

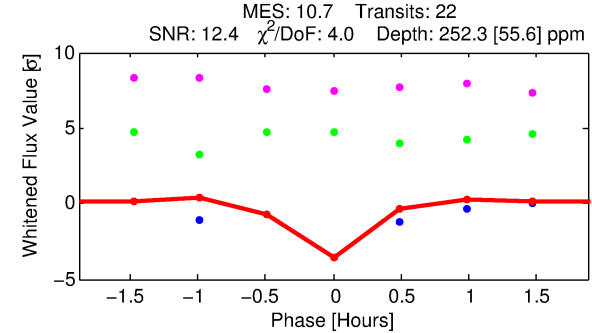
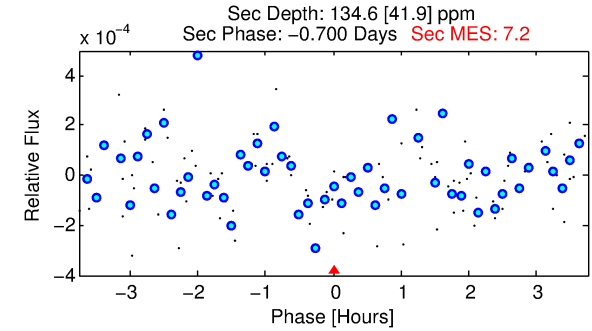
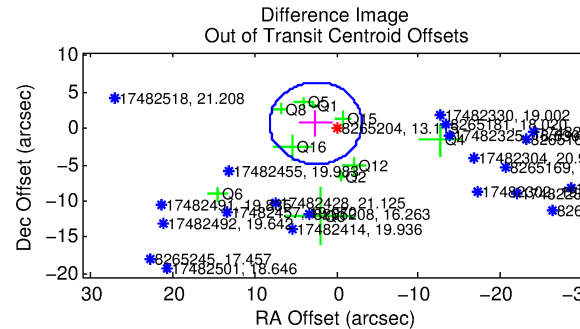
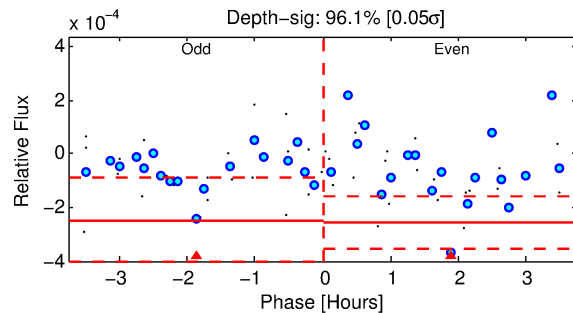
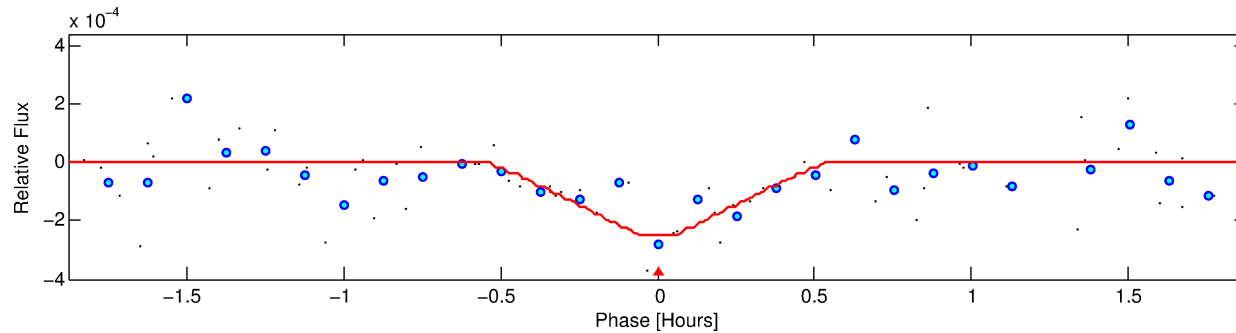
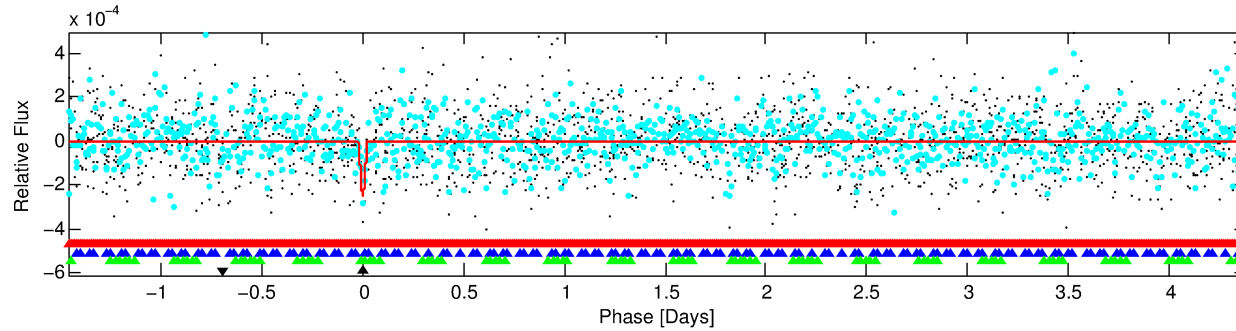
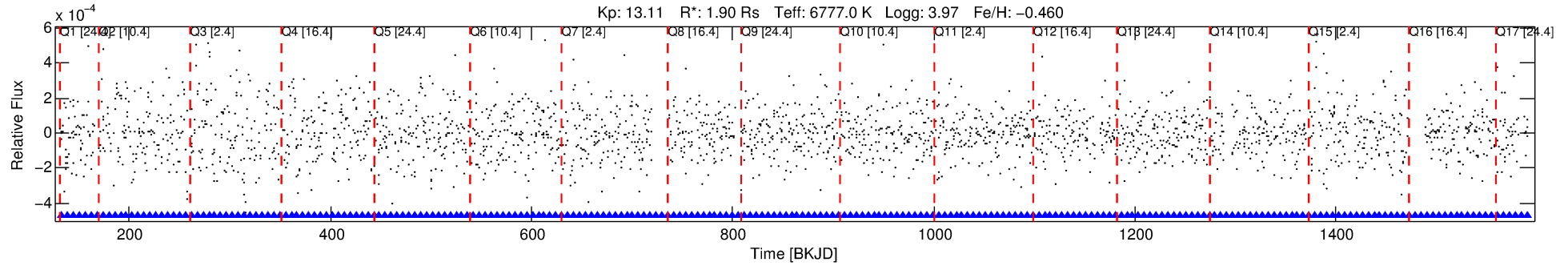
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008265204-04

No Significant Match Found

DV One-Page Summary

KIC: 8265204 Candidate: 4 of 4 Period: 5.851 d



DV Fit Results:

Period = 5.85050 [0.00004] d
Epoch = 133.1074 [0.0036] BKJD
Rp/R* = 0.0159 [0.0195]
a/R* = 52.56 [377.46]
b = 0.70 [5.19]
Seff = 1481.75 [940.18]
Reff = 1582 [251] K
Rp = 3.31 [4.22] Re
a = 0.0679 [0.0253] AU
Ag = 31.17 [79.09] [0.38 σ]
Teffp = 5780 [3563] K [1.18 σ]

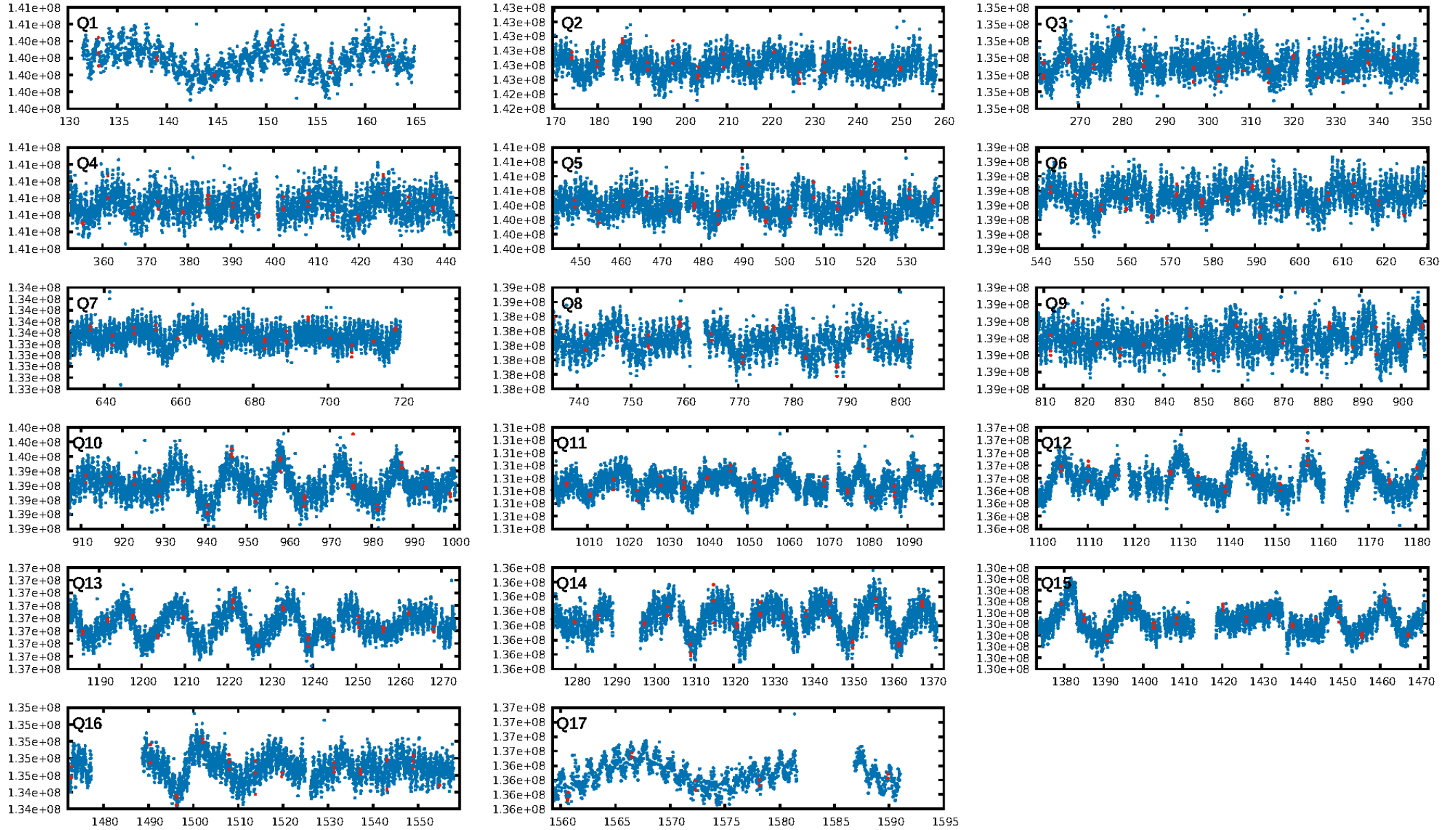
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [11.77 σ]
LongPeriod-sig: 100.0% [51.80 σ]
ModelChiSquare2-sig: 25.4%
ModelChiSquareGof-sig: 90.8%
Bootstrap-pfa: 4.39e-16
RollingBand-fgt: 1.00 [21/21]
GhostDiagnostic-chr: 4.37
Centroid-sig: 1.6%
Centroid-so: 1.654 arcsec [2.83 σ]
OotOffset-rm: 2.631 arcsec [1.40 σ]
KicOffset-rm: 2.646 arcsec [1.33 σ]
OotOffset-st: 2/2/4/2 [10]
KicOffset-st: 2/2/4/2 [10]
DiffImageQuality-fgm: 0.10 [1/10]
DiffImageOverlap-fno: 1.00 [17/17]

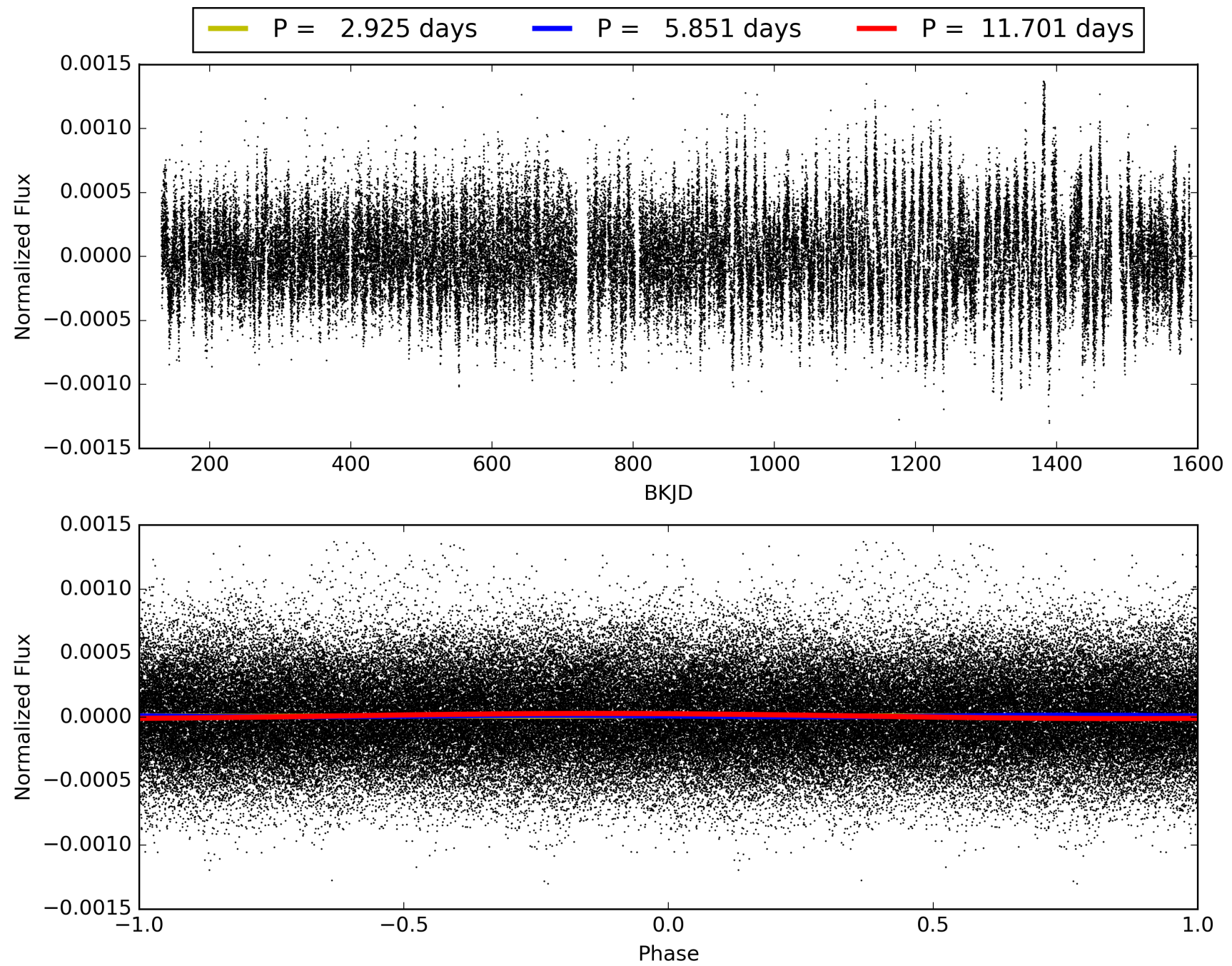
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 19:27:43 Z

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

TCE 008265204-04, PDC Light Curves

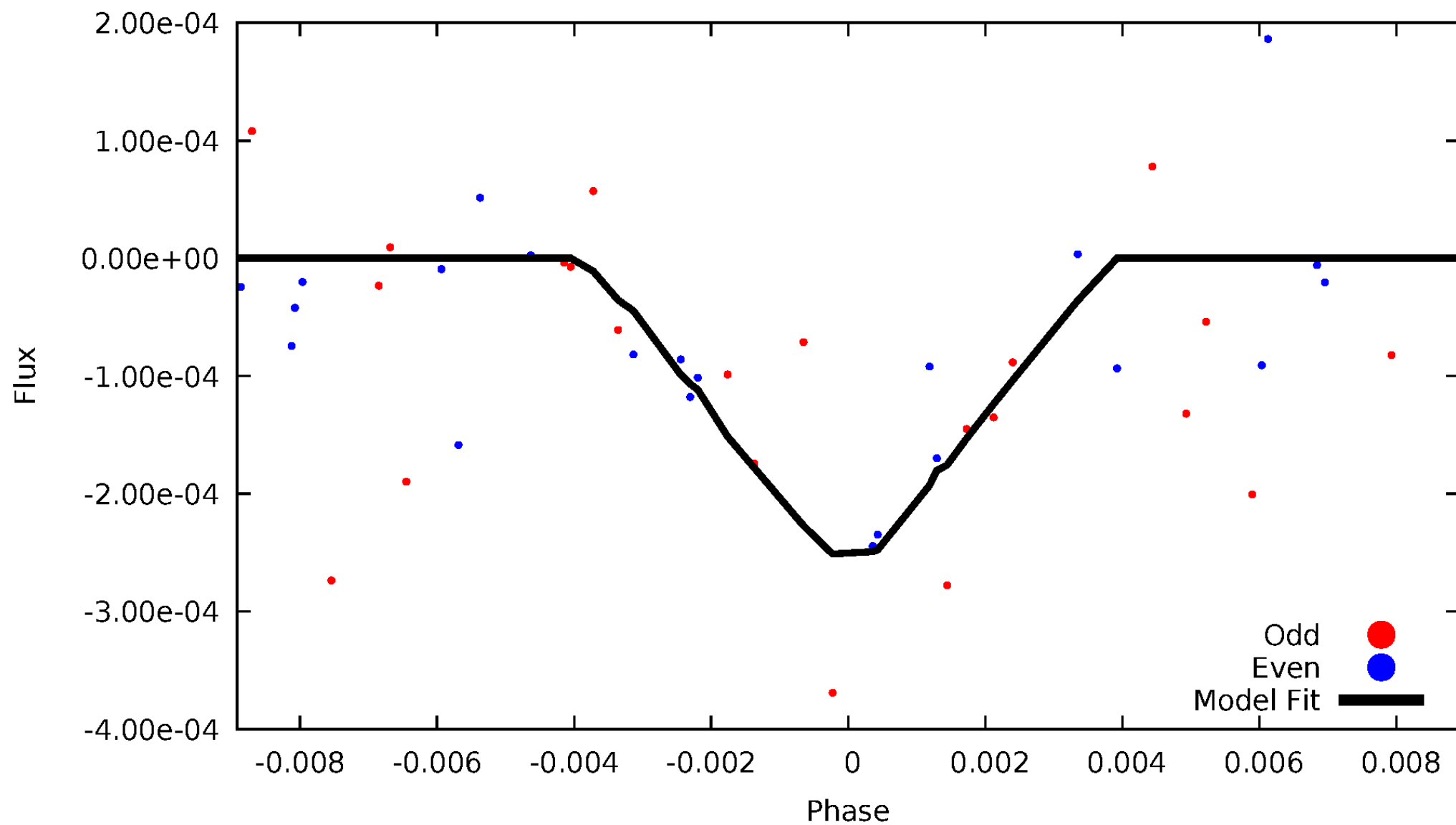


TCE 008265204-04



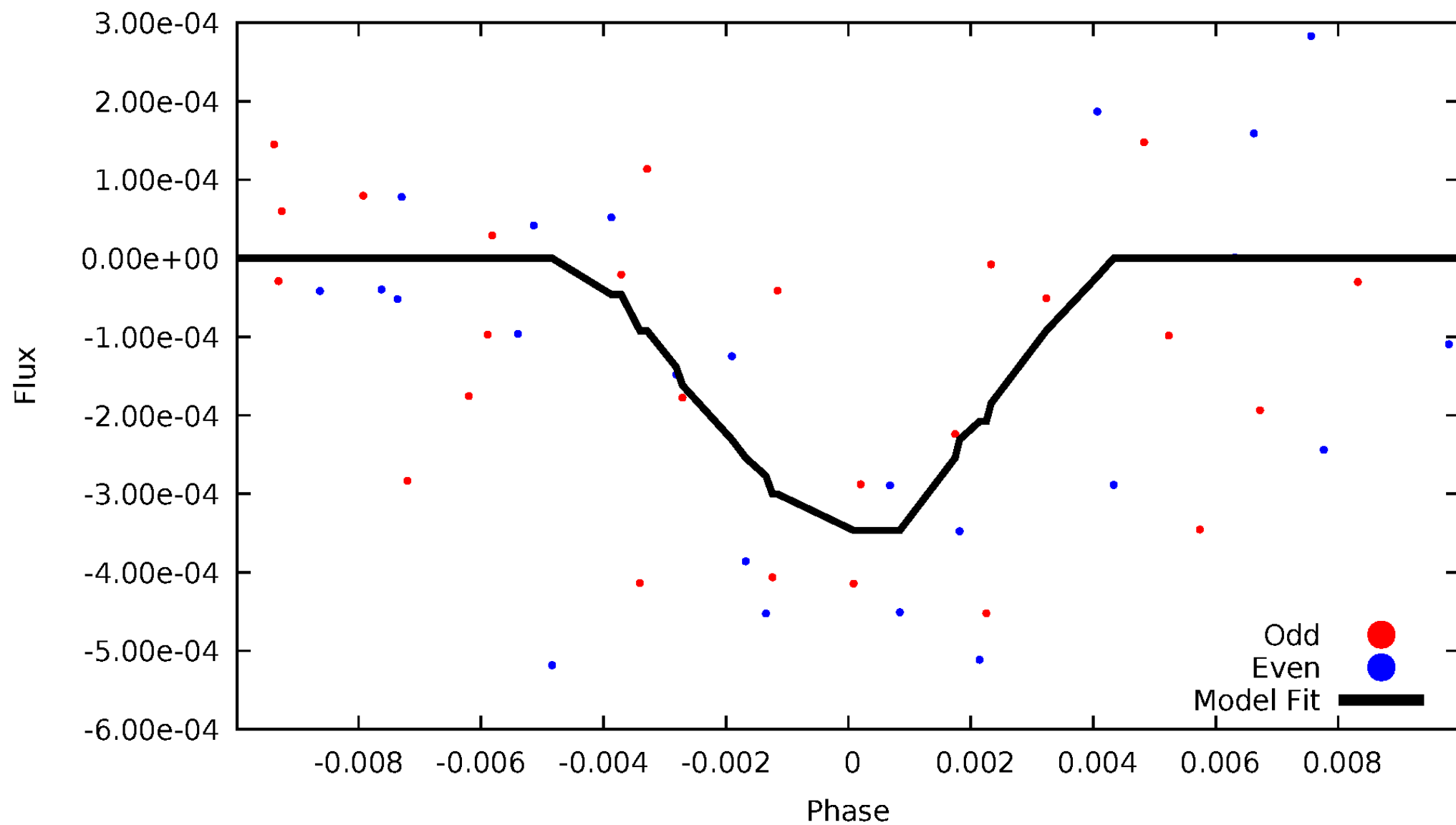
DV Odd/Even

TCE 008265204-04



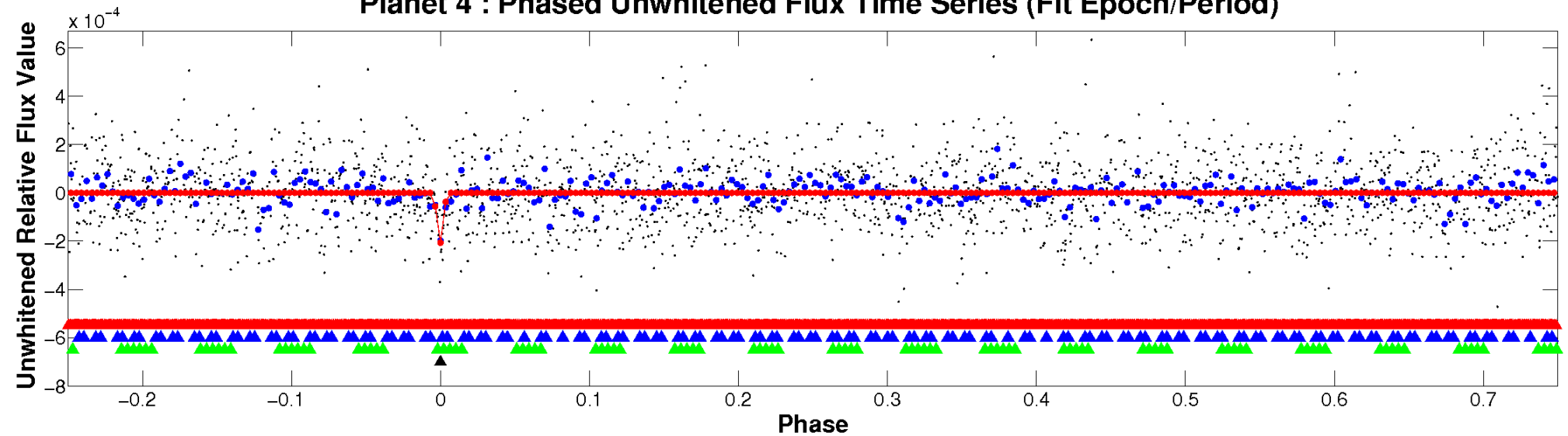
ALT Odd/Even

TCE 008265204-04

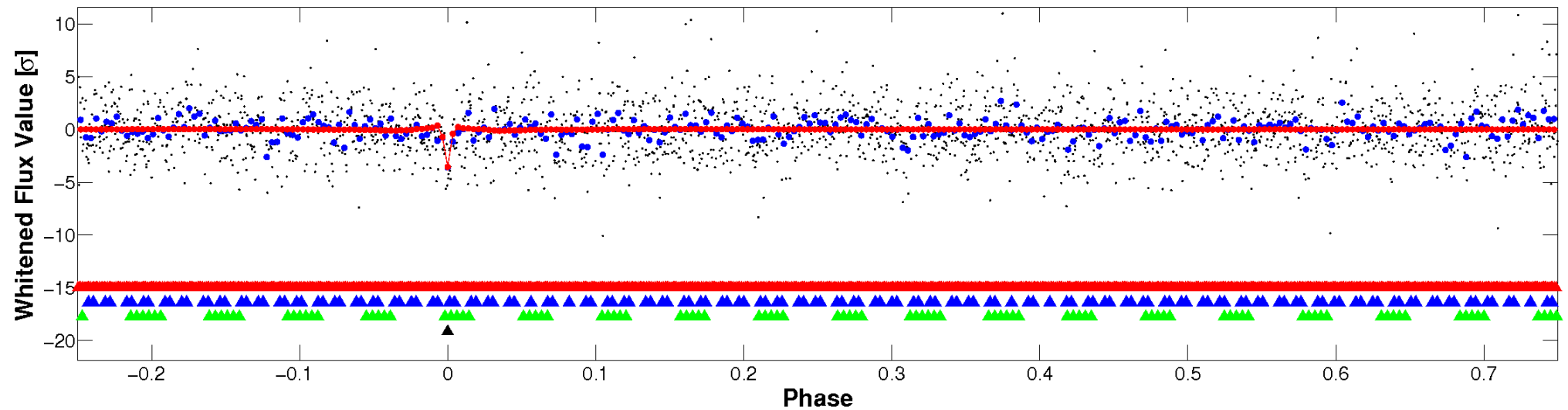


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

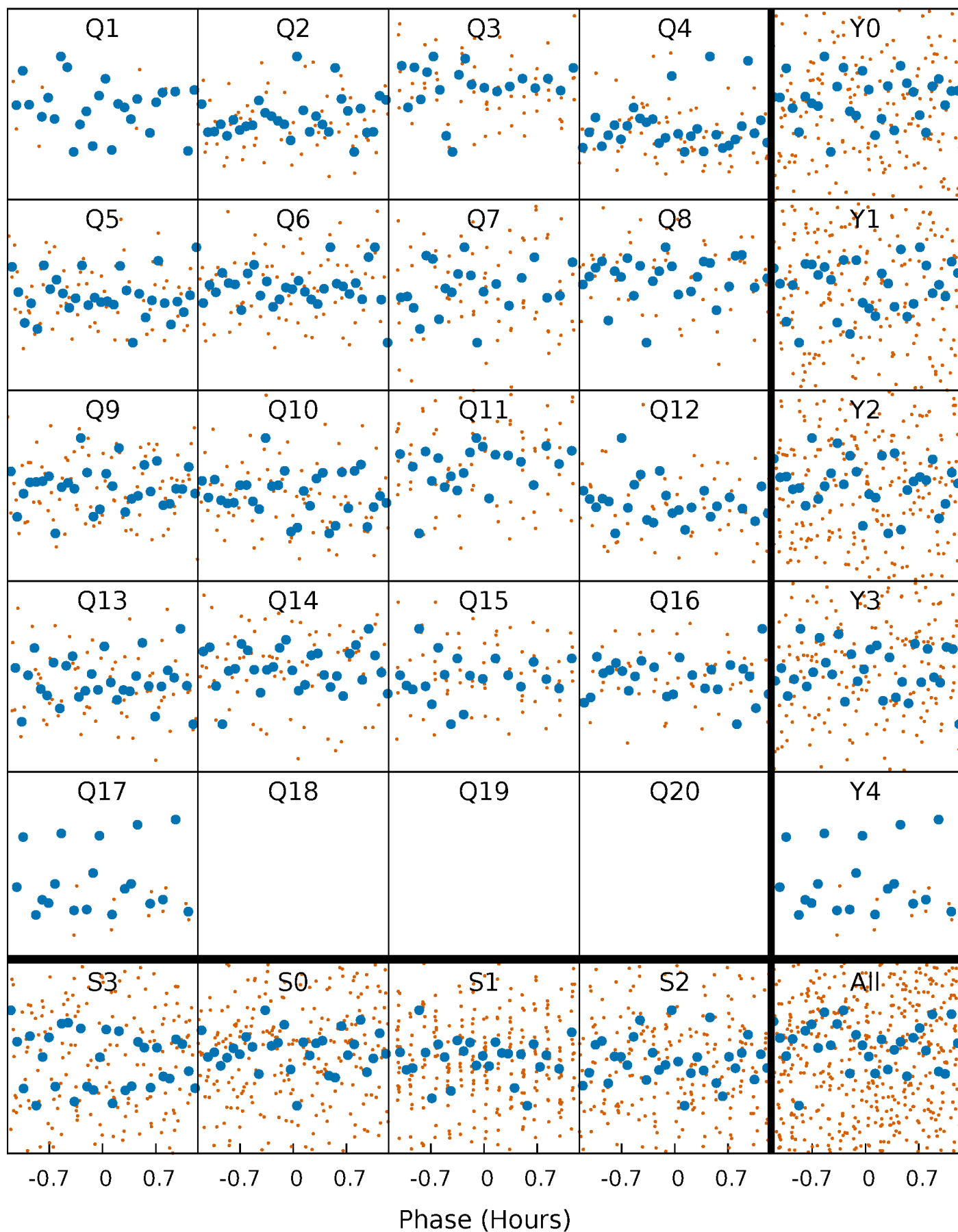


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



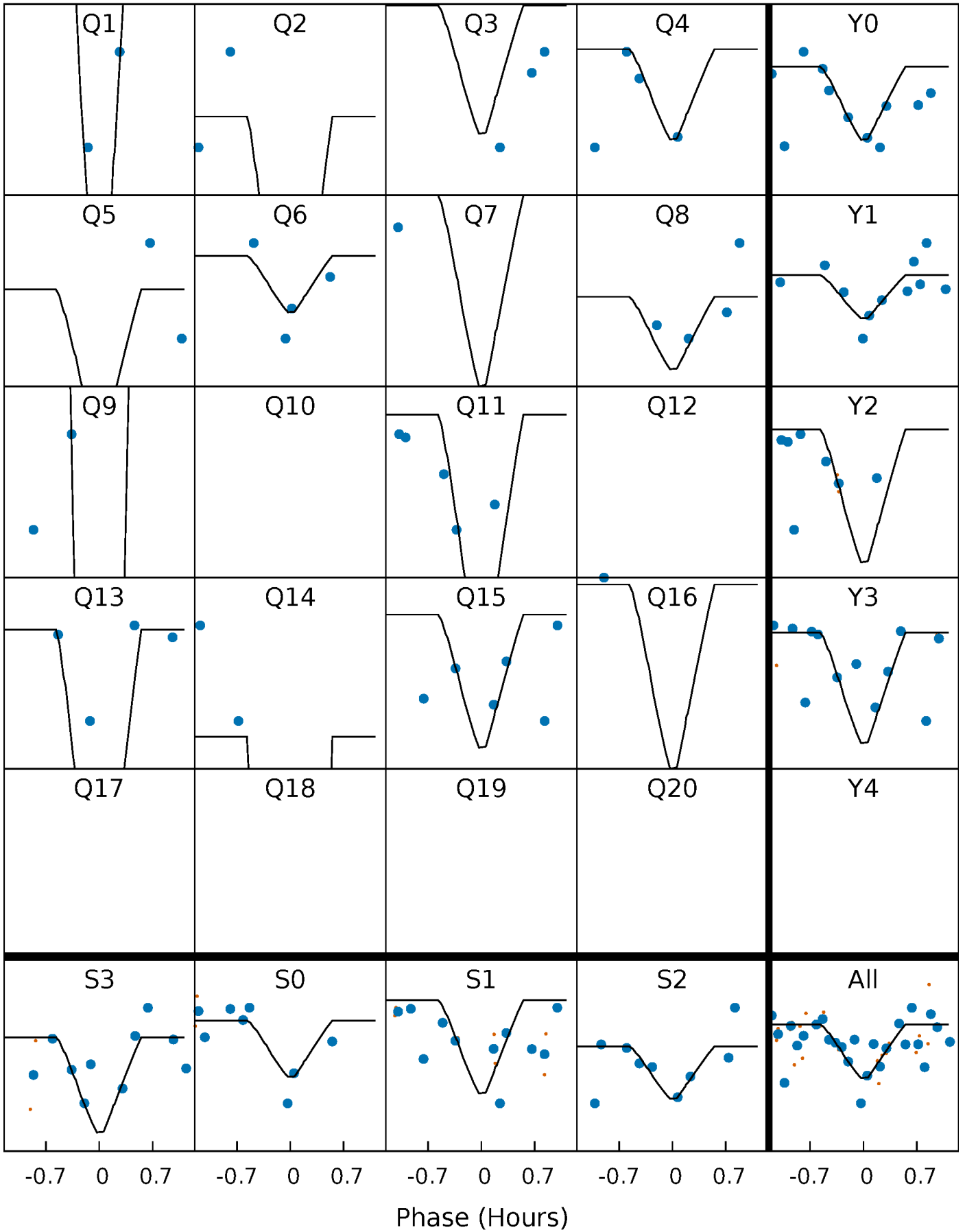
PDC Quarter-Phased Transit Curves

TCE 008265204-04 P= 5.850505 Days $T_0=133.107353$ (BKJD)



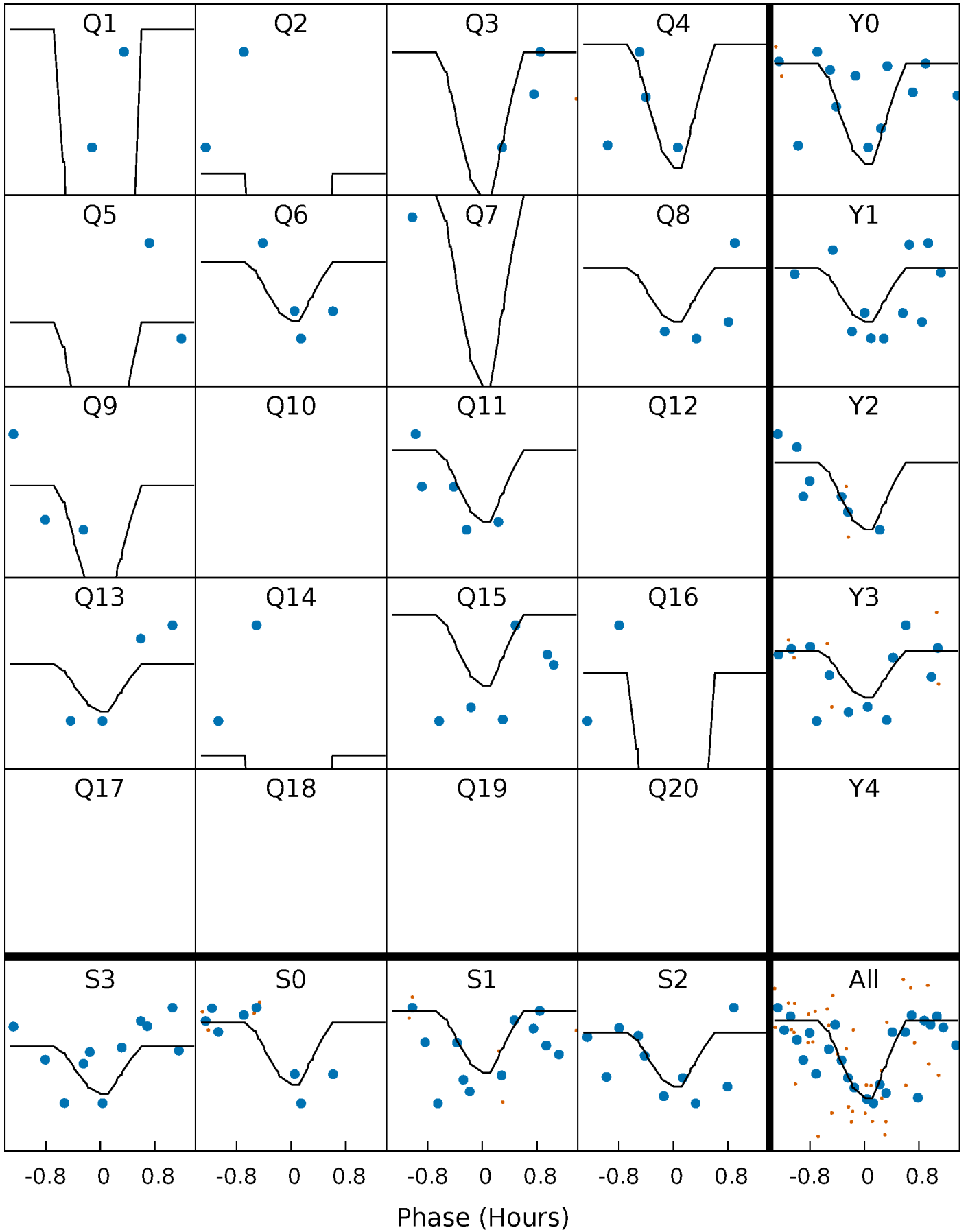
DV Quarter-Phased Transit Curves

TCE 008265204-04 P= 5.850505 Days $T_0=133.107353$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

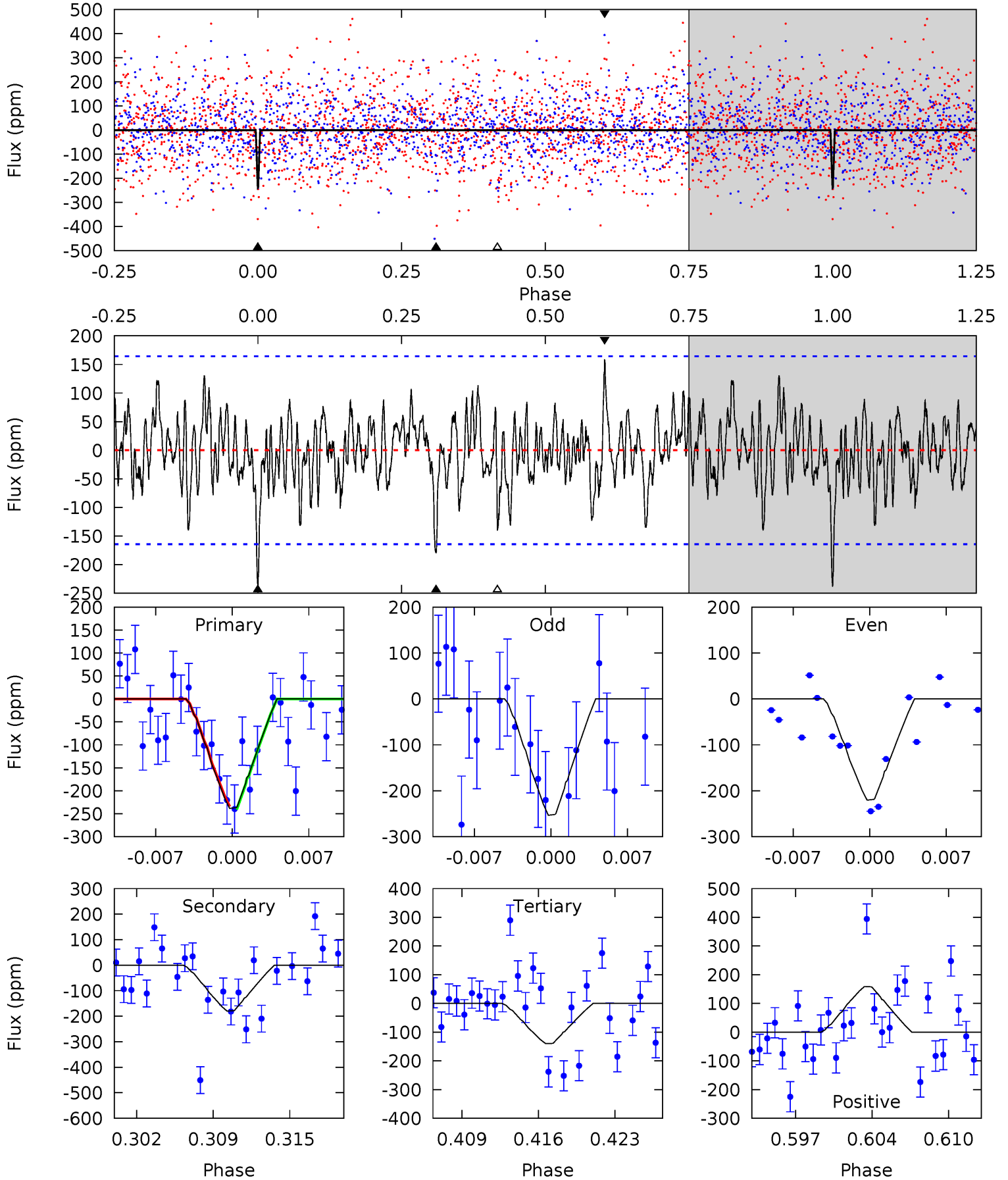
TCE 008265204-04 P= 5.850488 Days $T_0=133.106116$ (BKJD)



DV Model-Shift Uniqueness Test

008265204-04, P = 5.850505 Days, E = 127.256848 Days

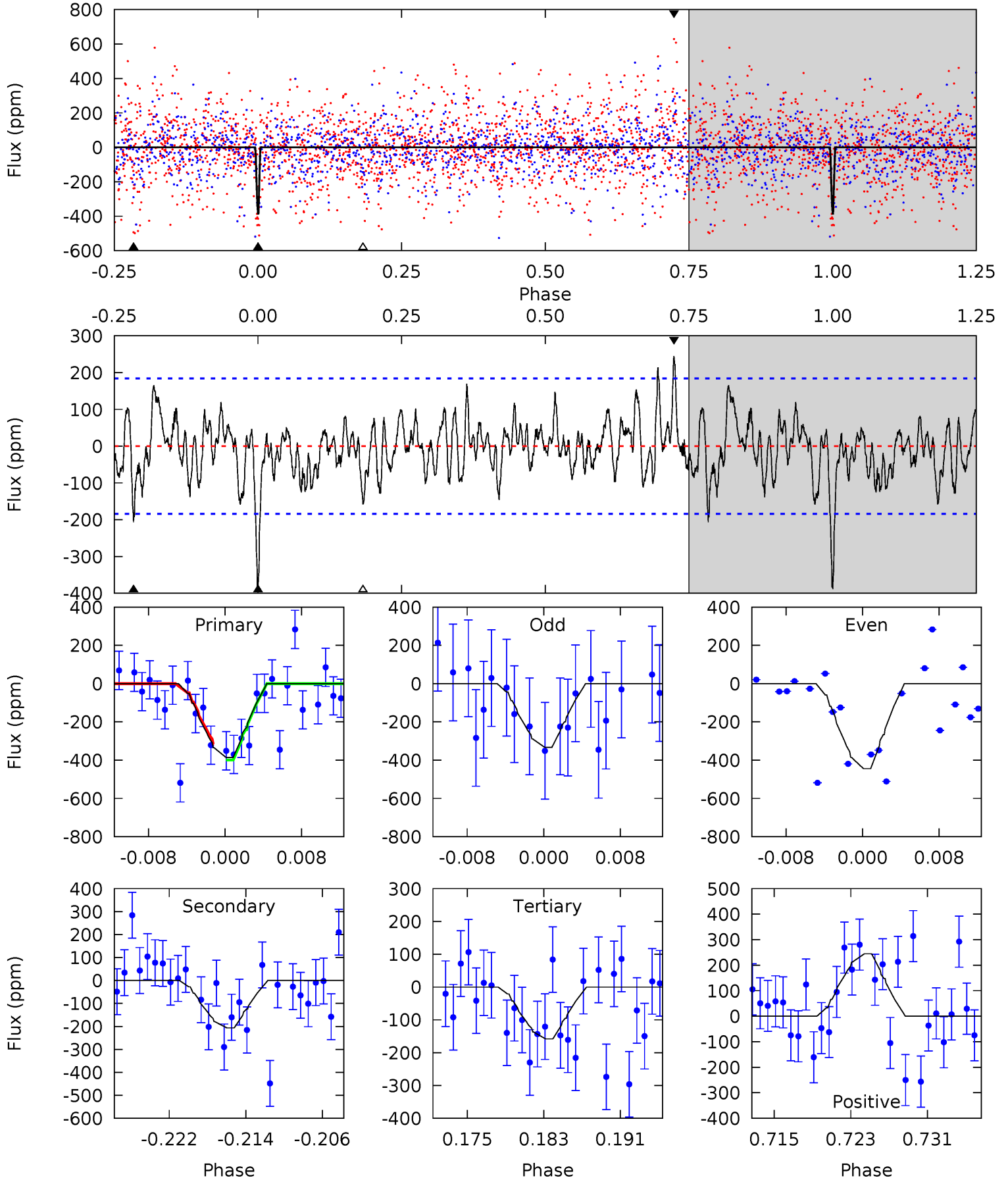
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.40	5.58	4.35	4.94	5.10	2.71	1.51	3.05	2.47	1.23	0.64	0.51	1.00	0.40	0.09



Alt Model-Shift Uniqueness Test

008265204-04, P = 5.850488 Days, E = 127.255628 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	5.70	4.36	6.74	5.07	2.65	1.74	6.27	3.89	1.34	-1.05	1.54	0.82	0.39	1.17



Stellar Parameters For KIC 008265204

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6777^{+214}_{-262}	$3.966^{+0.368}_{-0.147}$	$-0.460^{+0.250}_{-0.300}$	$1.901^{+0.464}_{-0.696}$	$1.219^{+0.182}_{-0.203}$	$0.250^{+0.670}_{-0.110}$
	+3%/-4%	+9%/-4%	+54%/-65%	+24%/-37%	+15%/-17%	+268%/-44%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 008265204-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-180 ± 32	$4.11^{+3.44}_{-2.79}$	2155^{+189}_{-213}	5396^{+5061}_{-1250}	27^{+245}_{-19}
Alt.	-207 ± 36	$4.48^{+3.47}_{-2.89}$	2146^{+193}_{-218}	5347^{+3612}_{-1112}	26^{+169}_{-18}

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 $A_{obs} \gg 1.0$

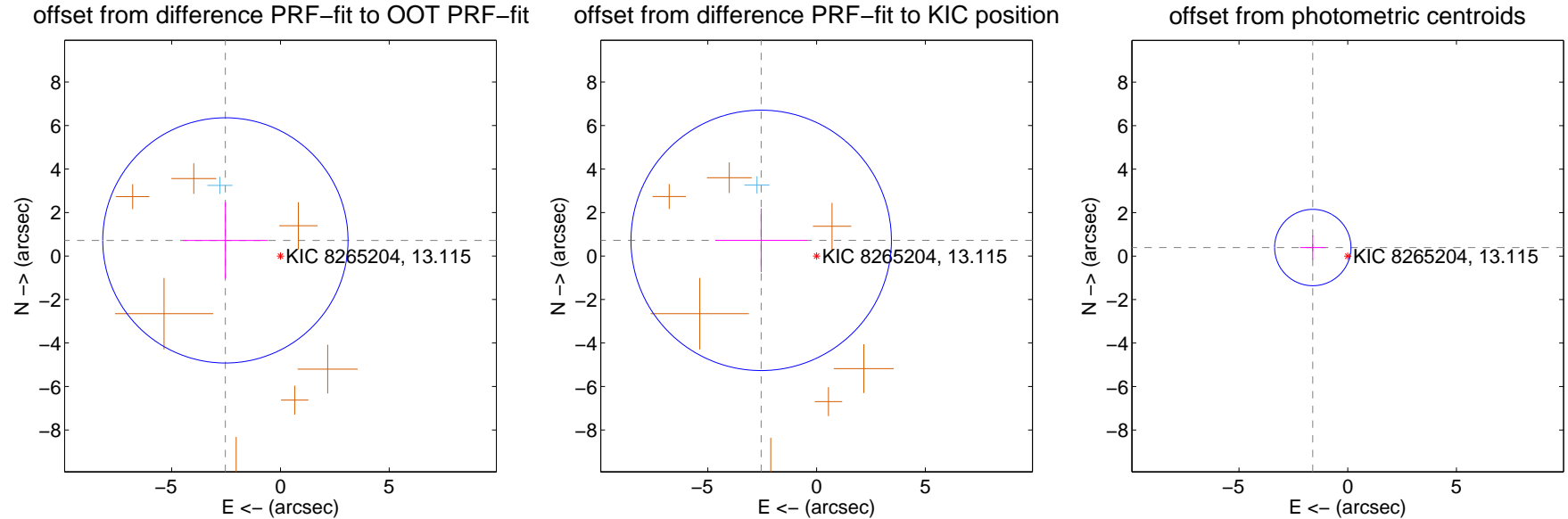
DV Centroid Data

Supplemental centroid analysis for 008265204-04. Kepler magnitude: 13.12. Transit SNR 12.36

There are 1 quarters with good PRF difference image offsets

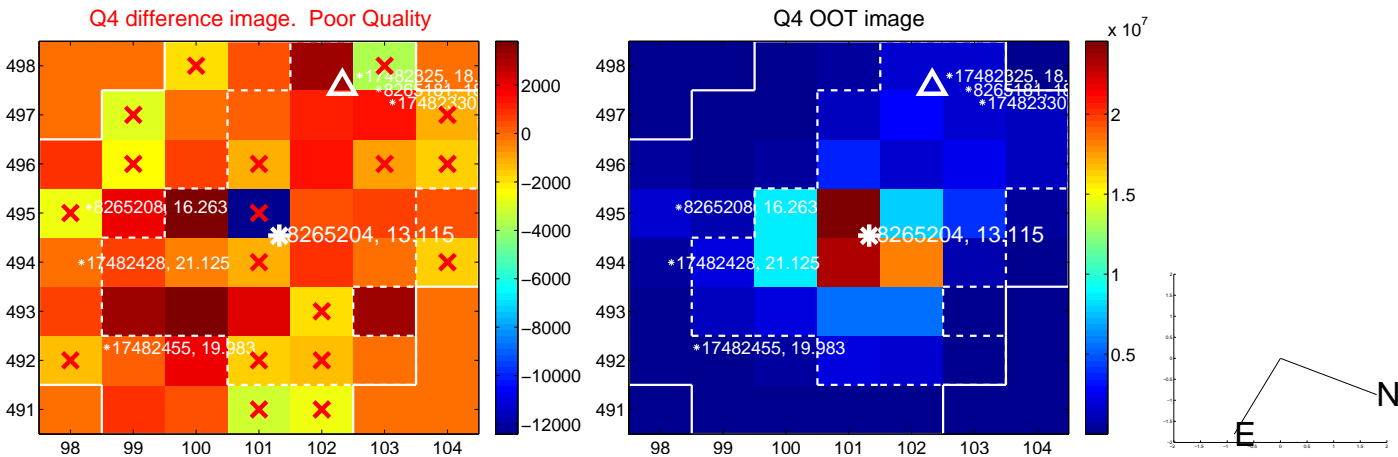
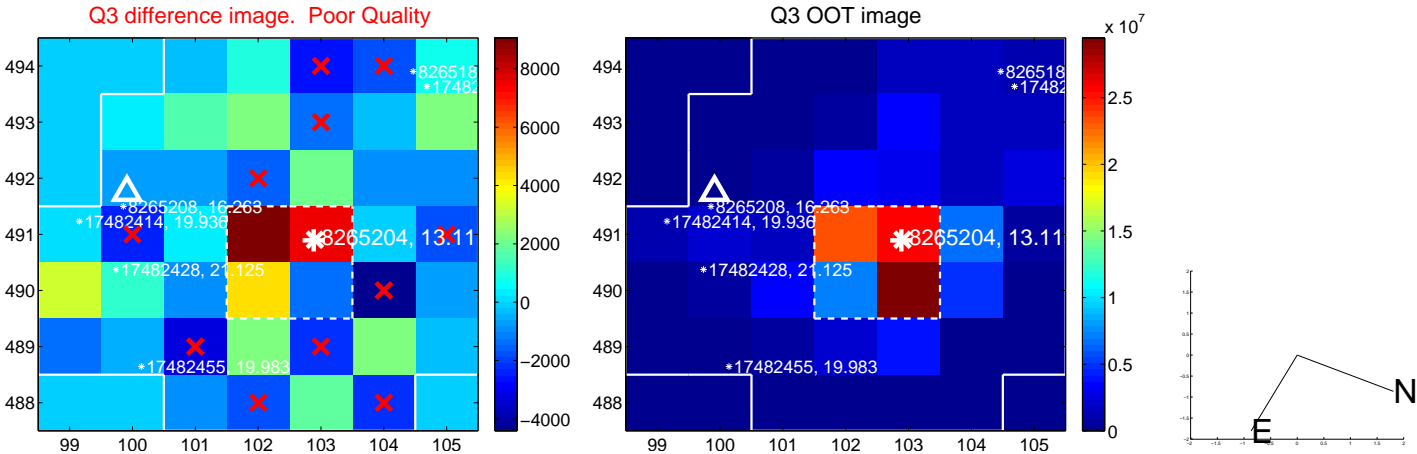
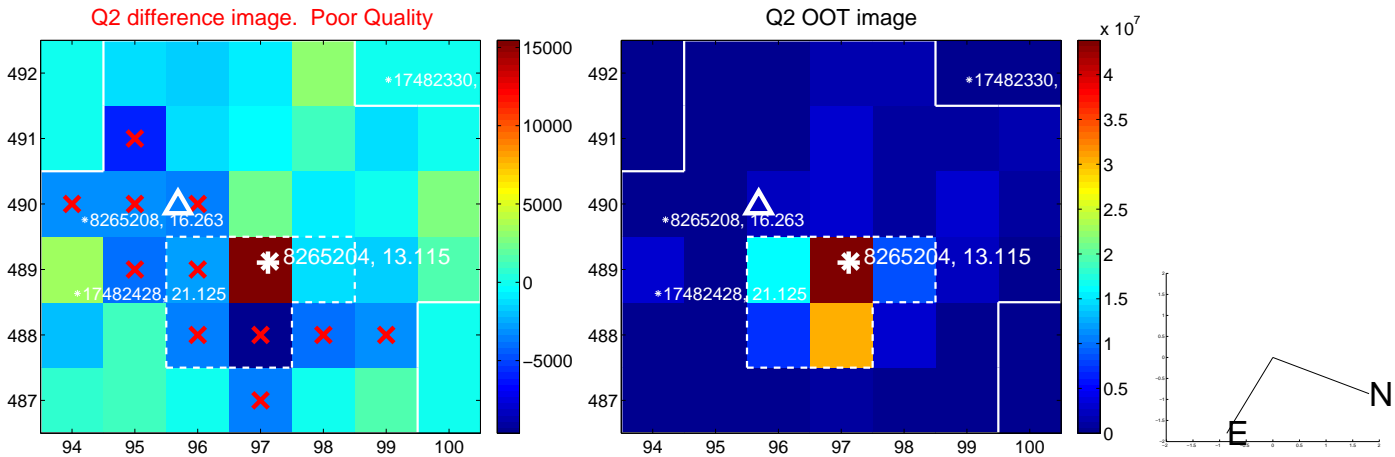
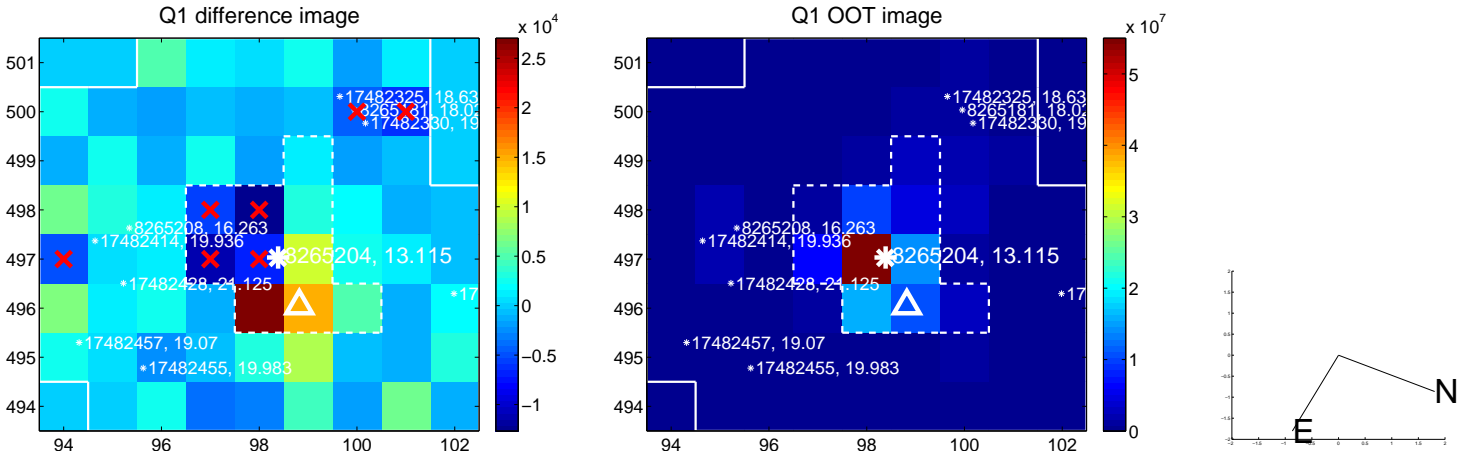
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.631 ± 1.879	1.40	2.531 ± 1.951	0.718 ± 1.759
PRF-fit source offset from KIC position	2.646 ± 1.996	1.33	2.546 ± 2.108	0.720 ± 1.460
photometric centroid source offset	1.65 ± 0.59	2.83	1.61 ± 0.59	0.39 ± 0.56

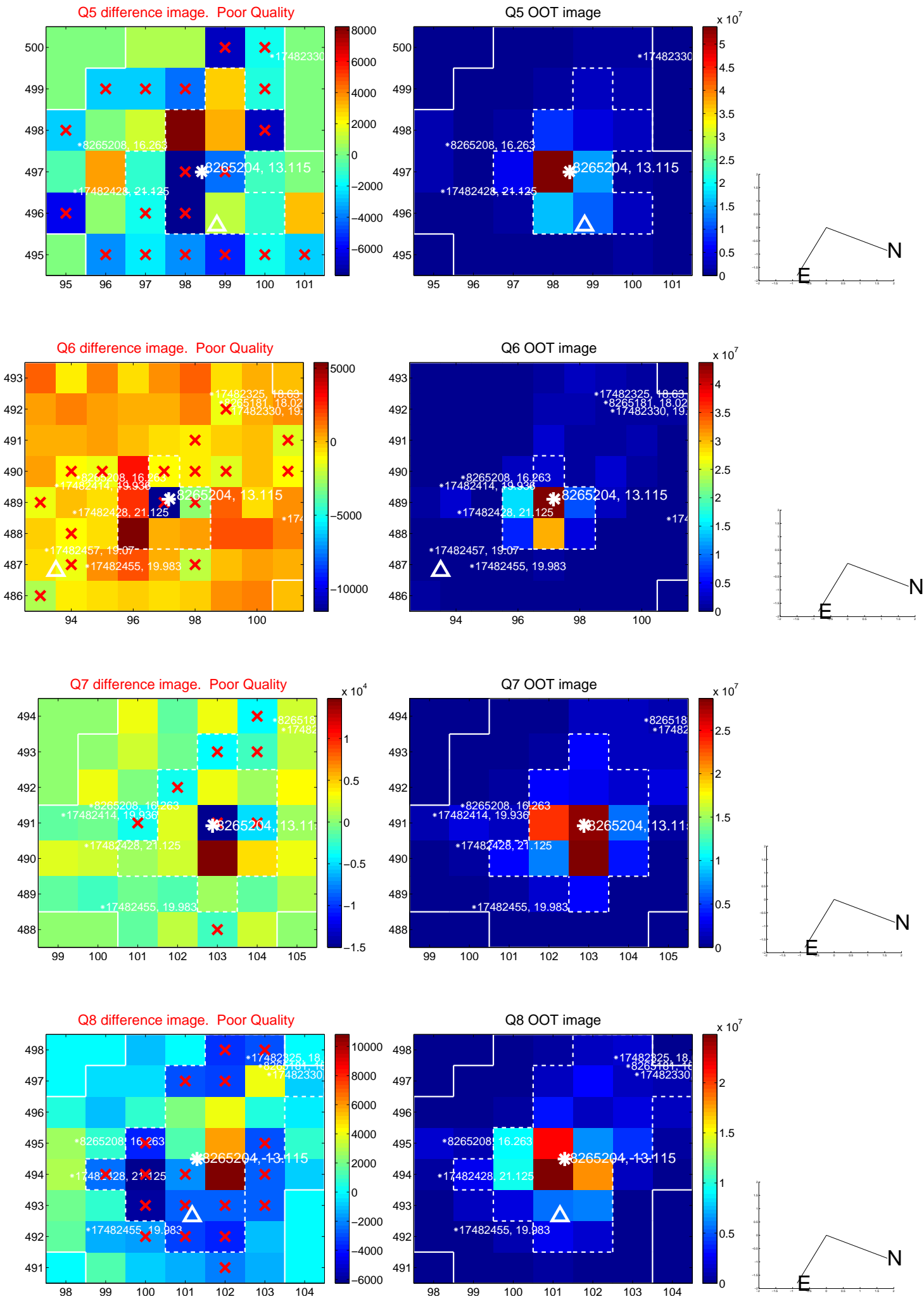


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

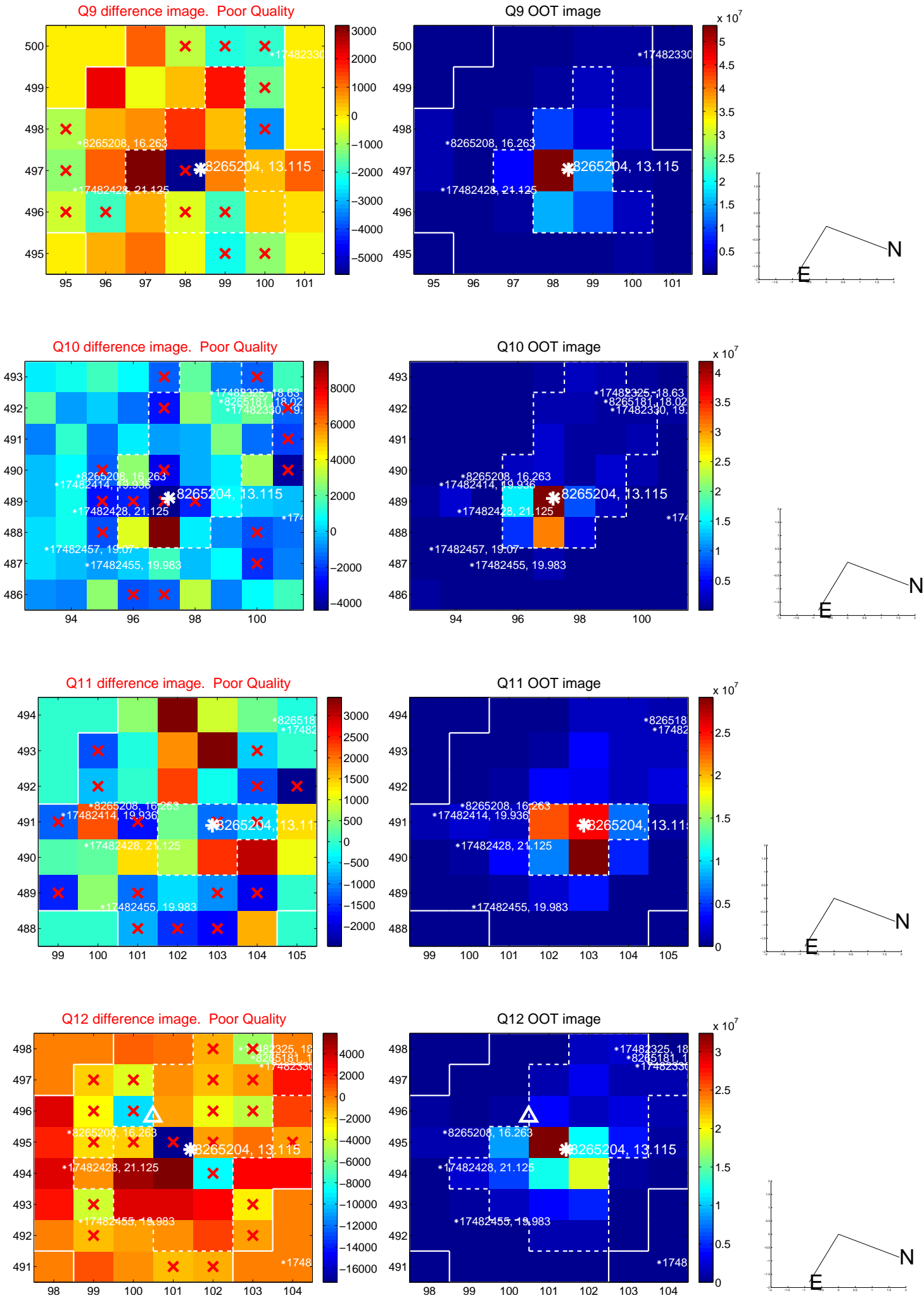
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



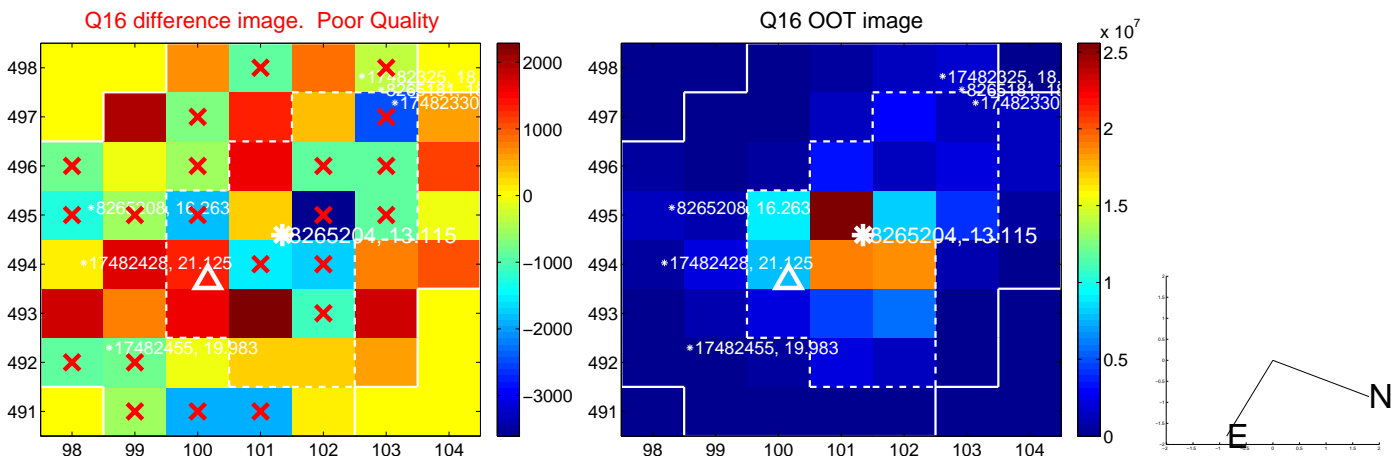
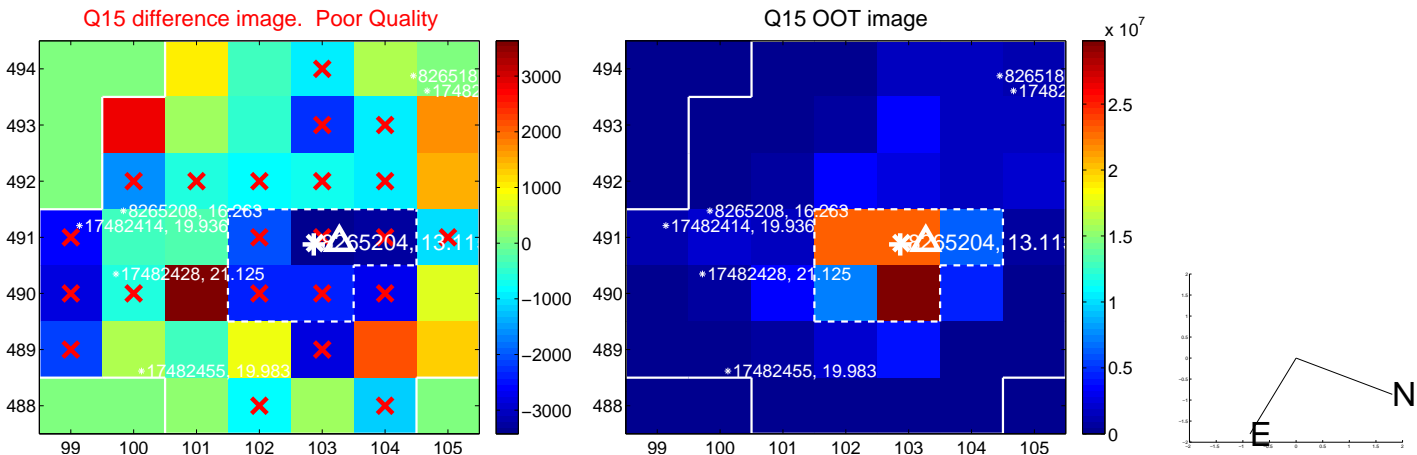
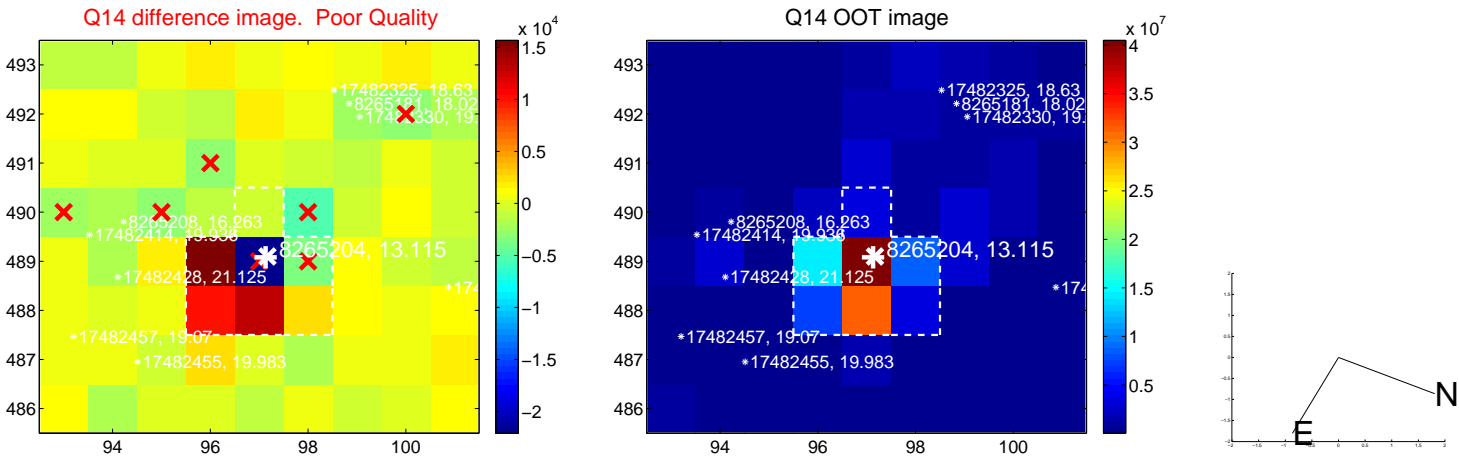
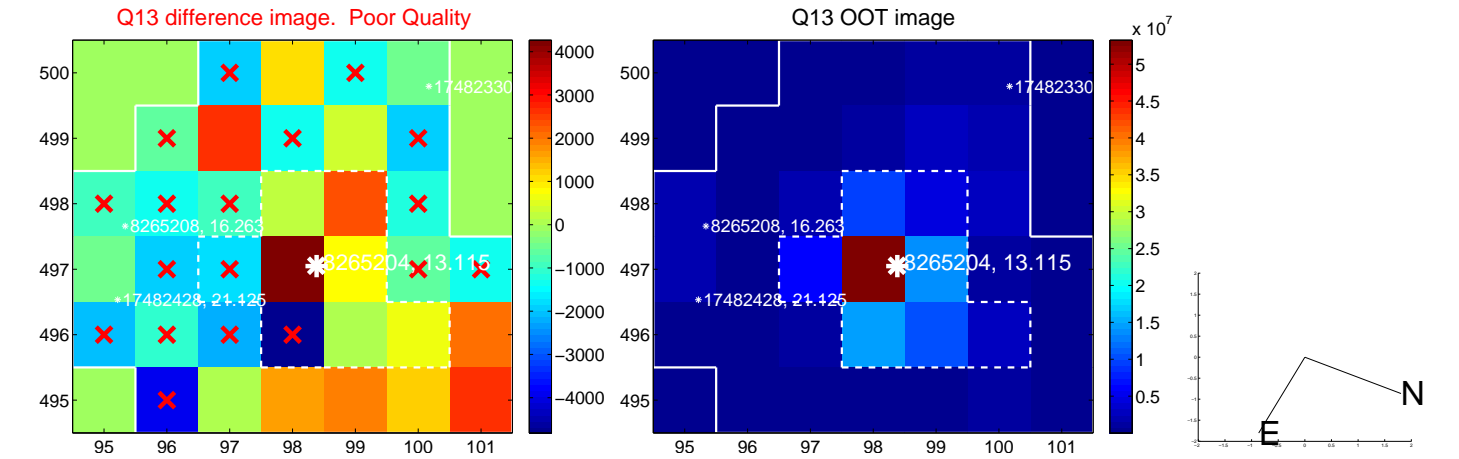
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



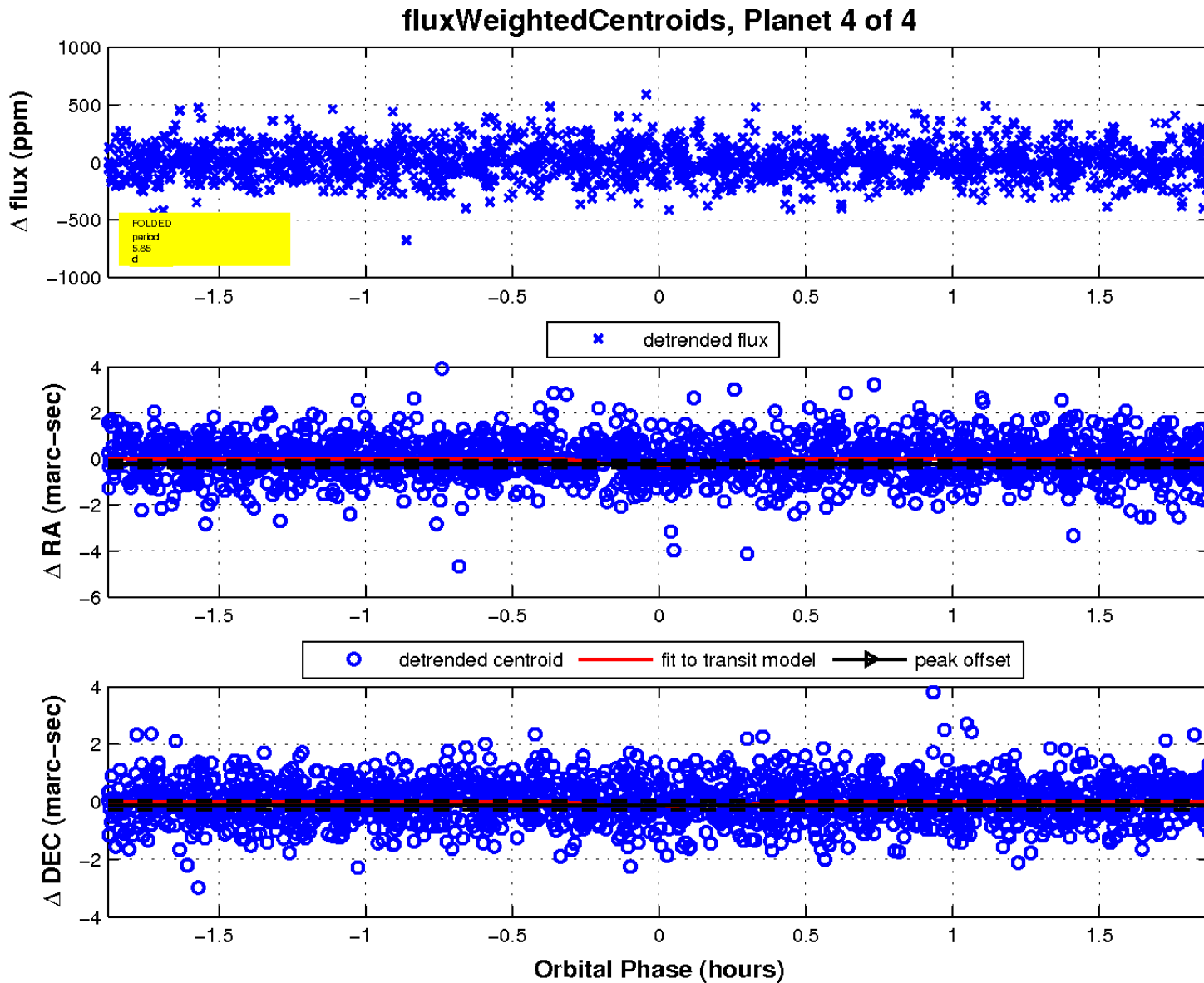
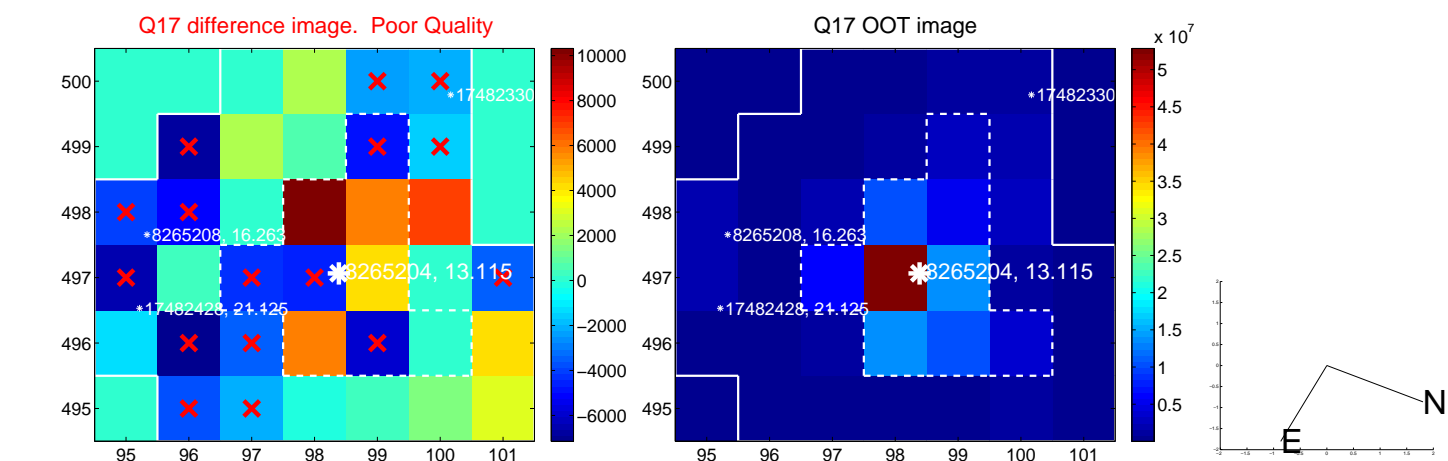
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

