

KIC 010132618

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})
010132618-01	OBS	No	1.347865	132.563322	76.7	5.000	10.7	-1.0	1.80	6590	1.59	7859.79
010132618-02	OBS	No	1.347925	131.848236	25.8	4.570	12.9	12.8	1.80	6590	1.25	7859.32
010132618-03	OBS	No	23.671065	132.540569	219.9	1.491	7.9	5.9	1.80	6590	2.96	172.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010132618-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—HALO_GHOST
010132618-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010132618-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_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.

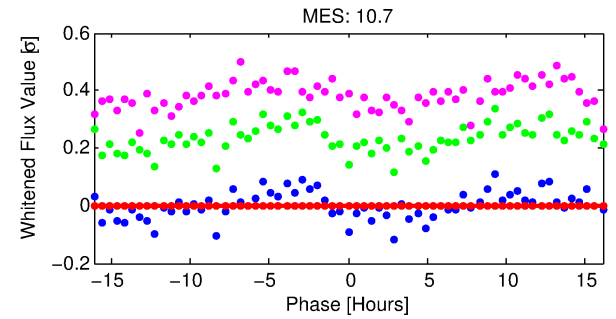
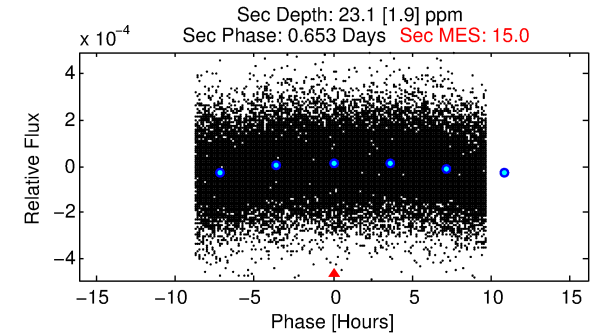
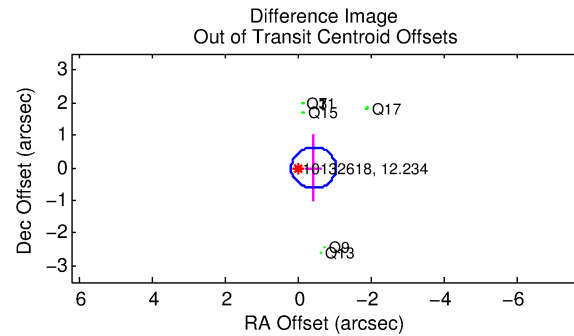
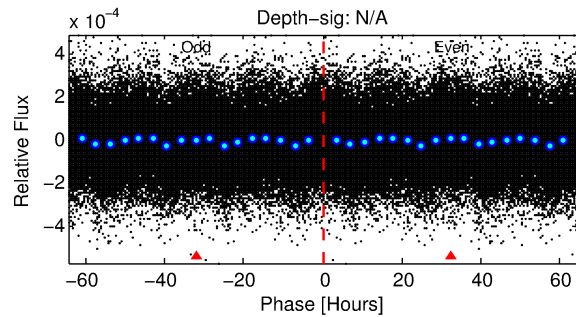
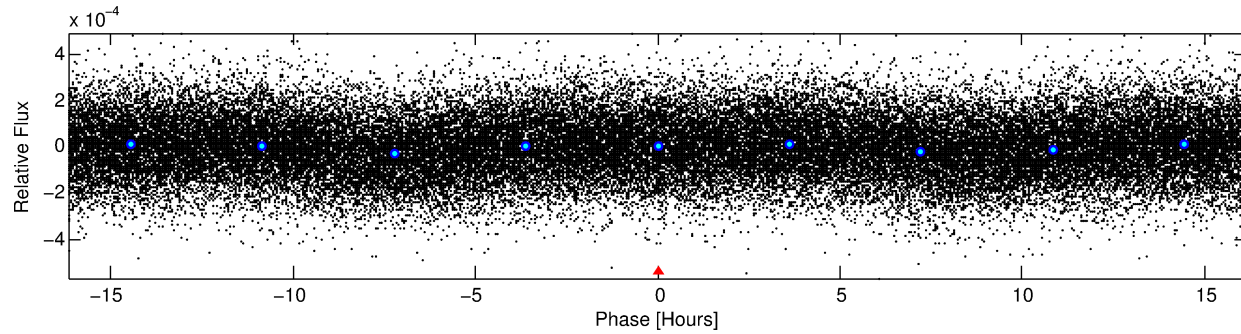
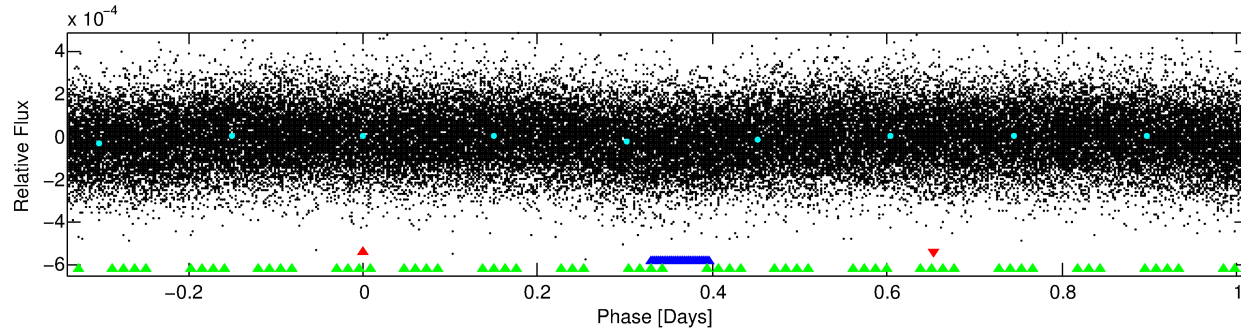
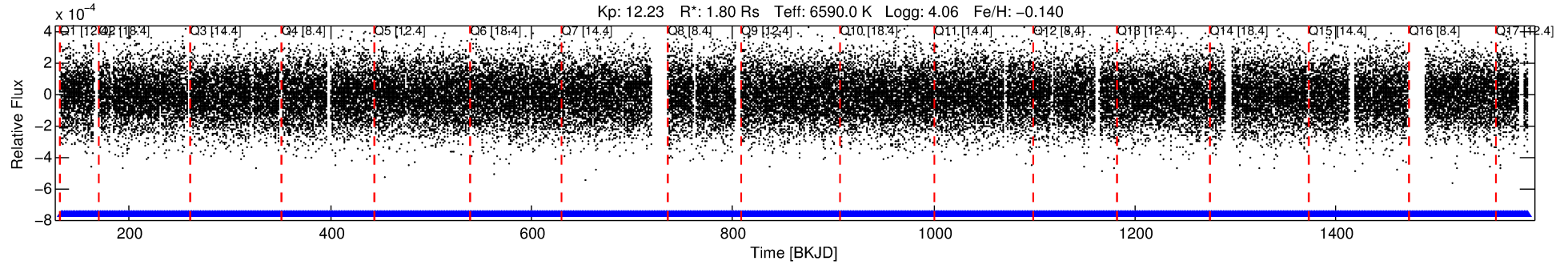
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010132618-01

No Significant Match Found

DV One-Page Summary

KIC: 10132618 Candidate: 1 of 3 Period: 1.348 d



TPS TCE Results:

Period = 1.34786 d
Epoch = 132.5633 BKJD

DV fit results are unavailable

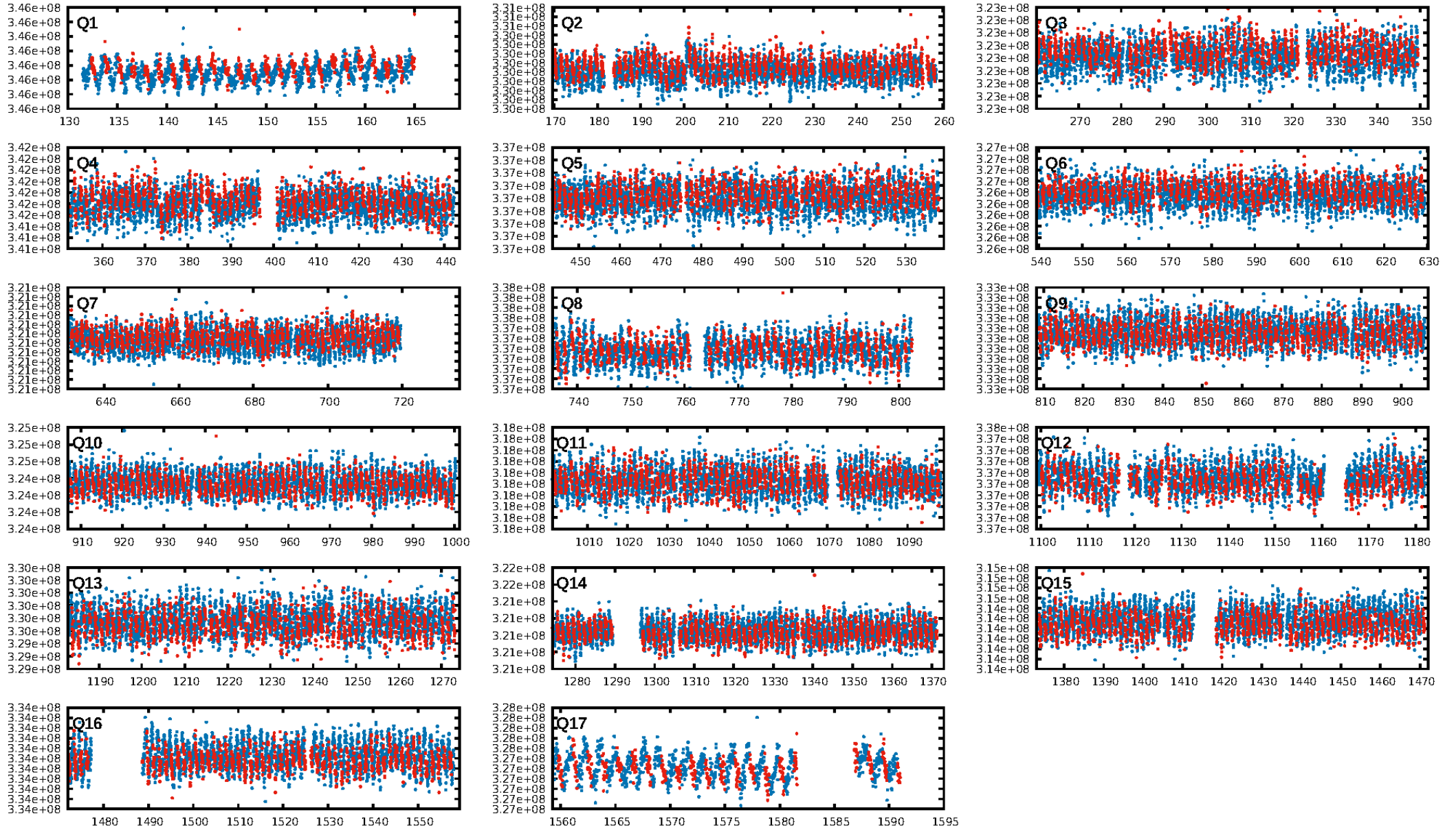
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.57e-37
RollingBand-fgt: 1.00 [971/971]
GhostDiagnostic-chr: -0.121
Centroid-sig: 0.0%
Centroid-so: 0.200 arcsec [1.82σ]
OotOffset-rm: 0.423 arcsec [2.04σ]
KicOffset-rm: 0.481 arcsec [1.30σ]
OotOffset-st: 0/4/0/3 [7]
KicOffset-st: 0/4/0/3 [7]
DiffImageQuality-fgm: 0.71 [5/7]
DiffImageOverlap-fno: 0.00 [0/17]

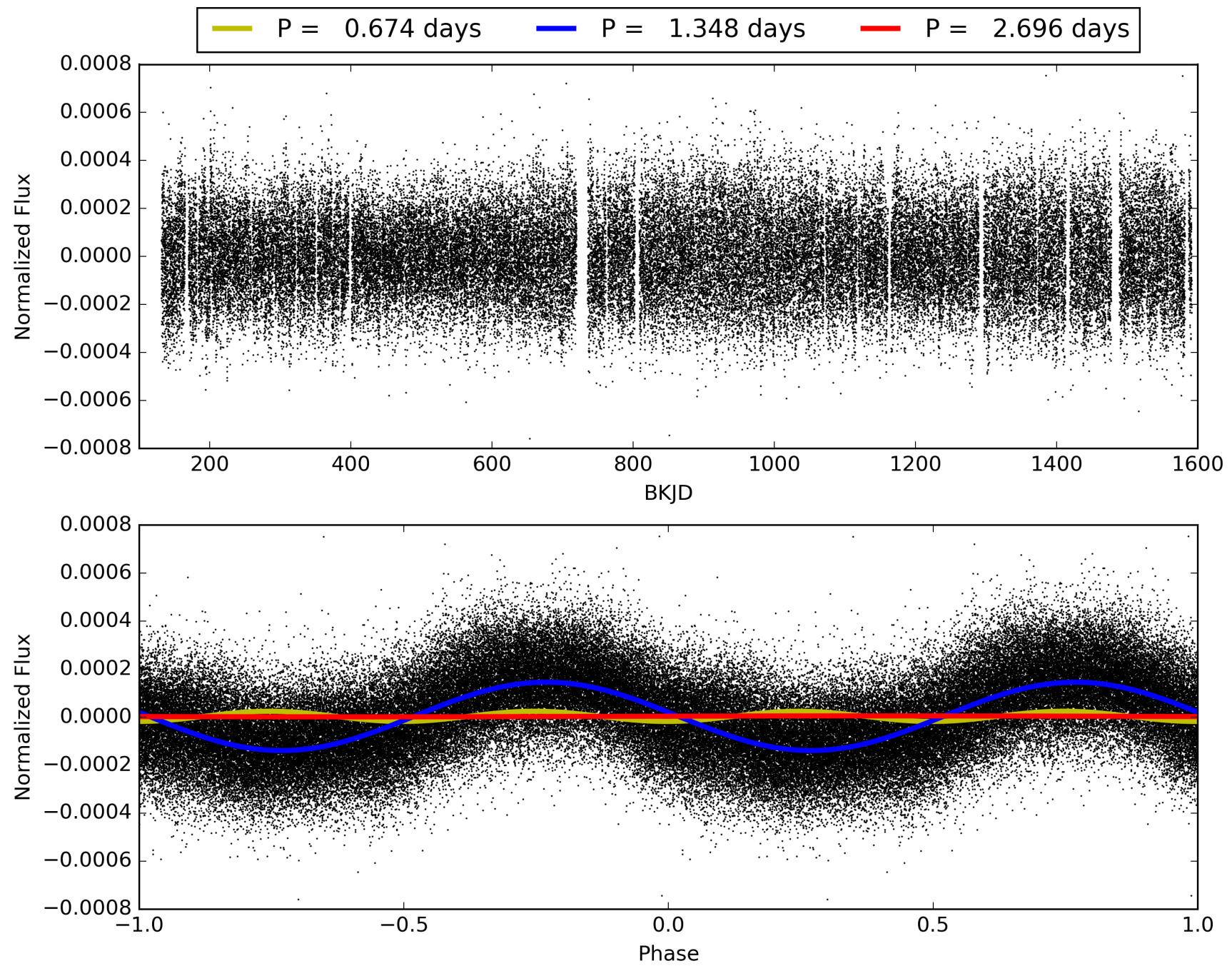
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:43:15 Z

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

TCE 010132618-01, PDC Light Curves

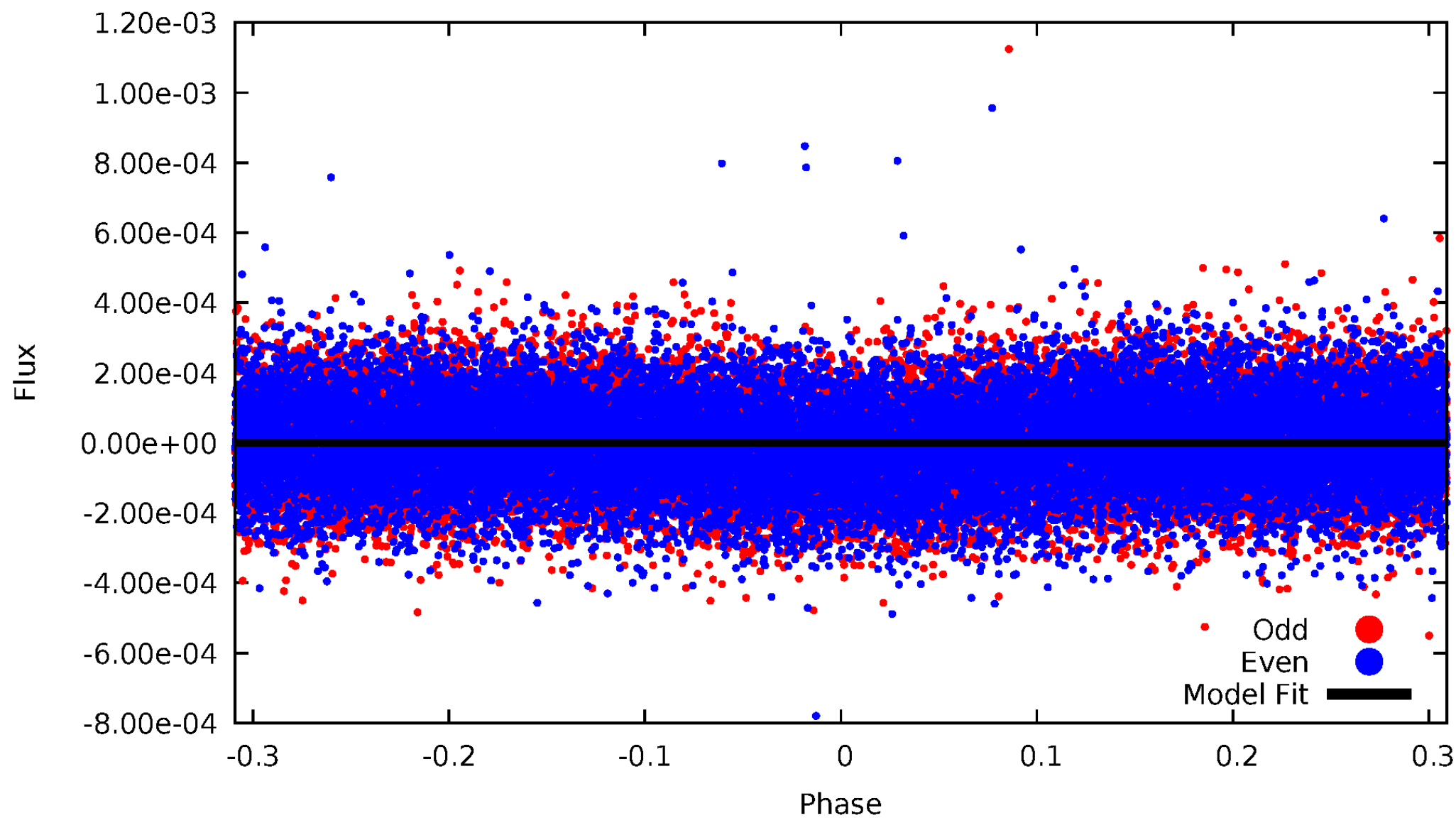


TCE 010132618-01



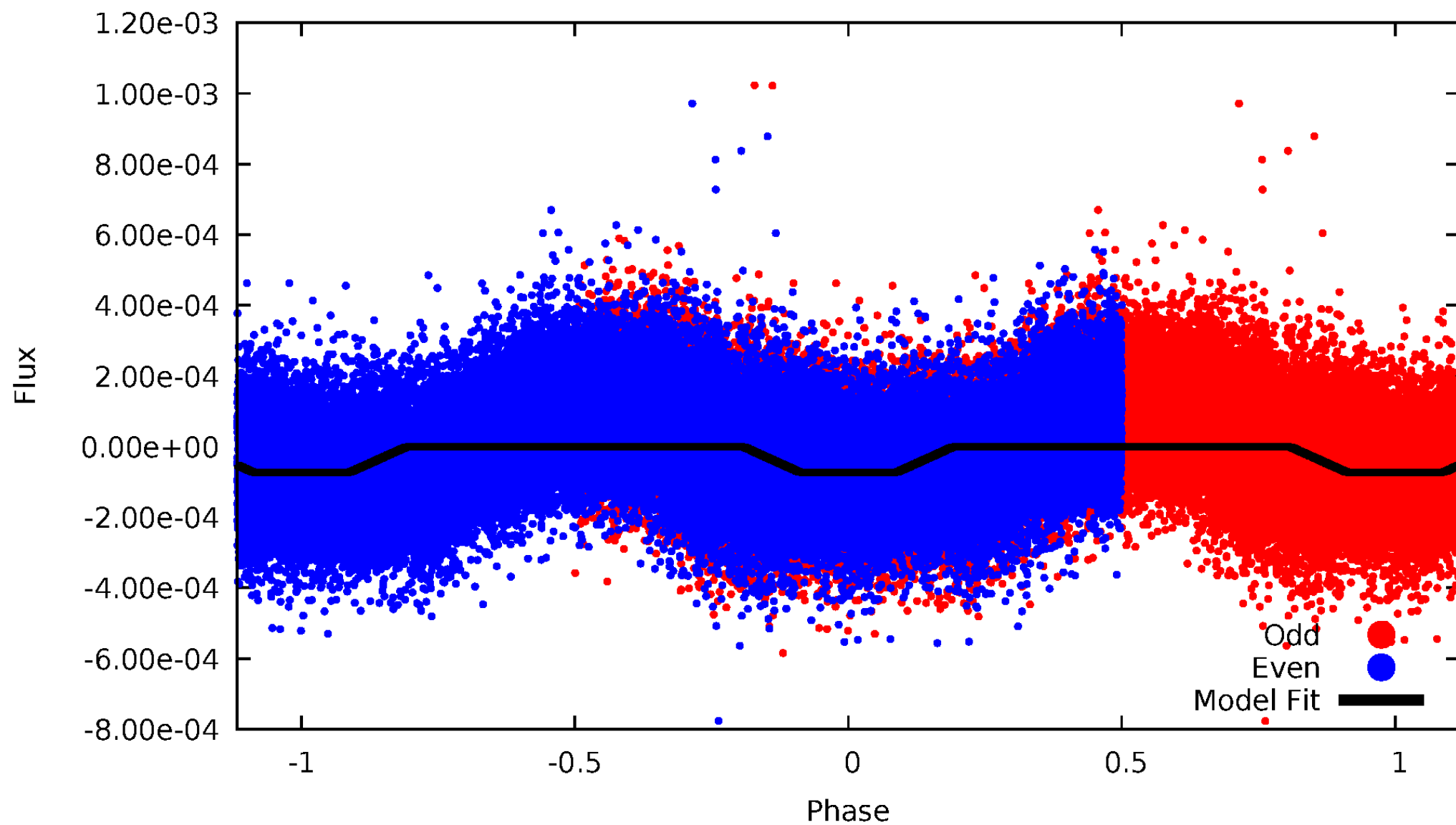
DV Odd/Even

TCE 010132618-01



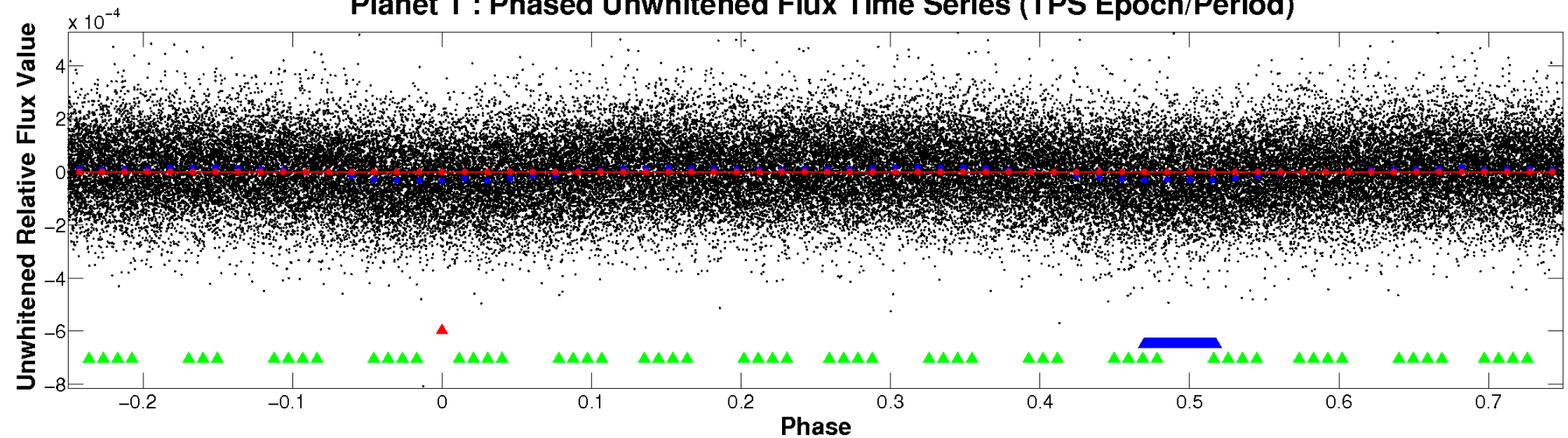
ALT Odd/Even

TCE 010132618-01

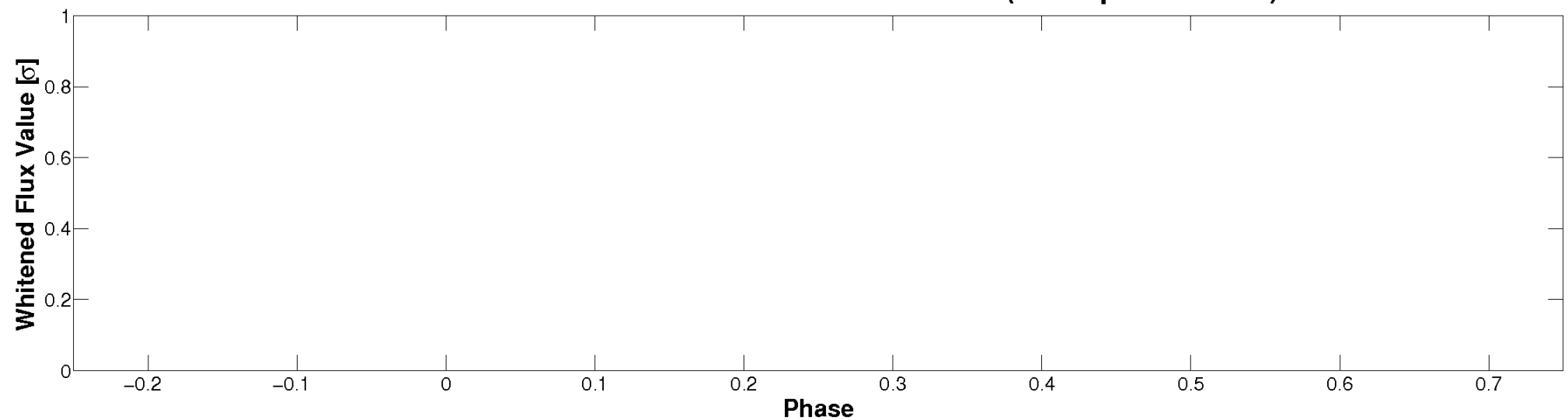


Non-Whitened Vs. Whitened Light Curve

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

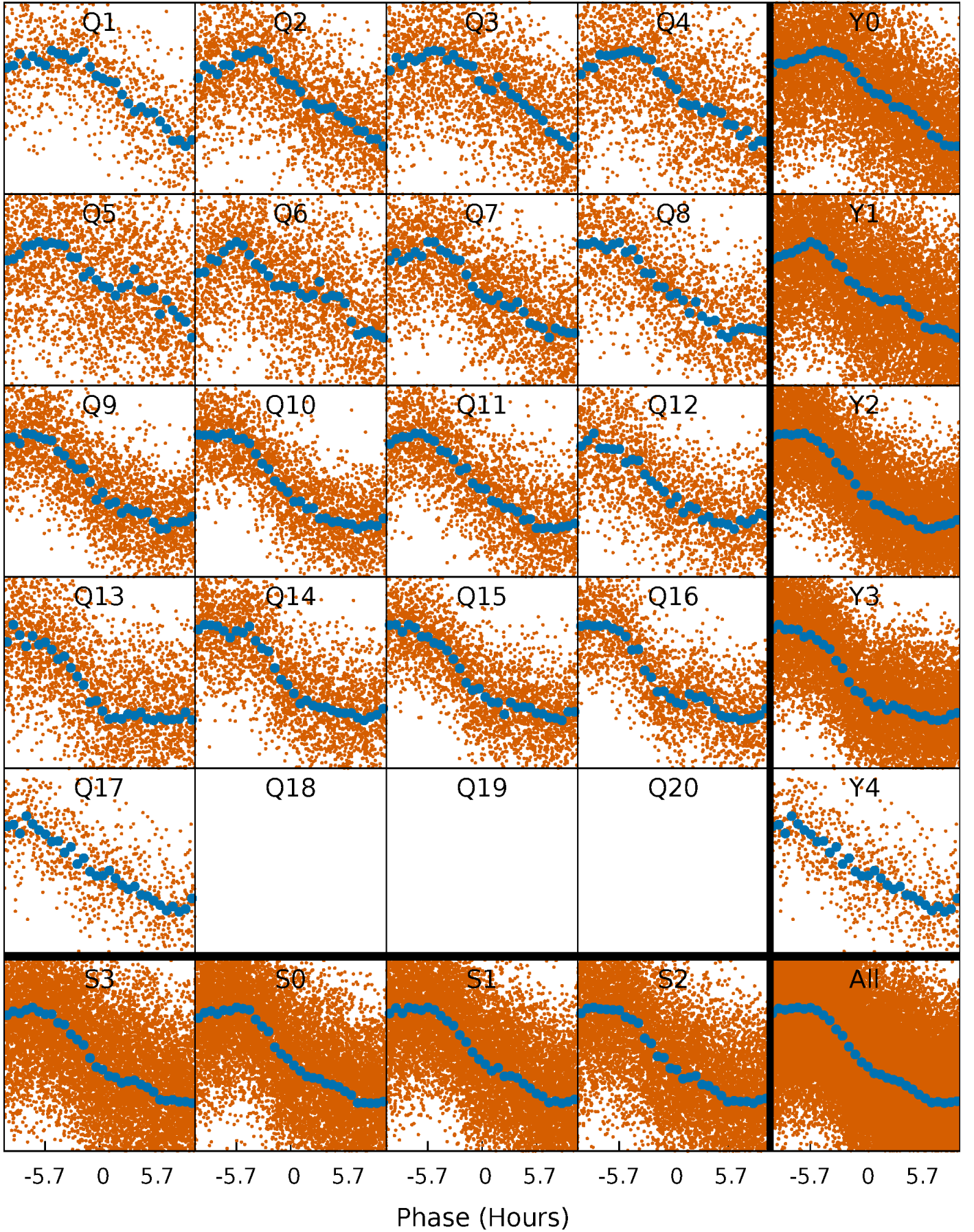


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



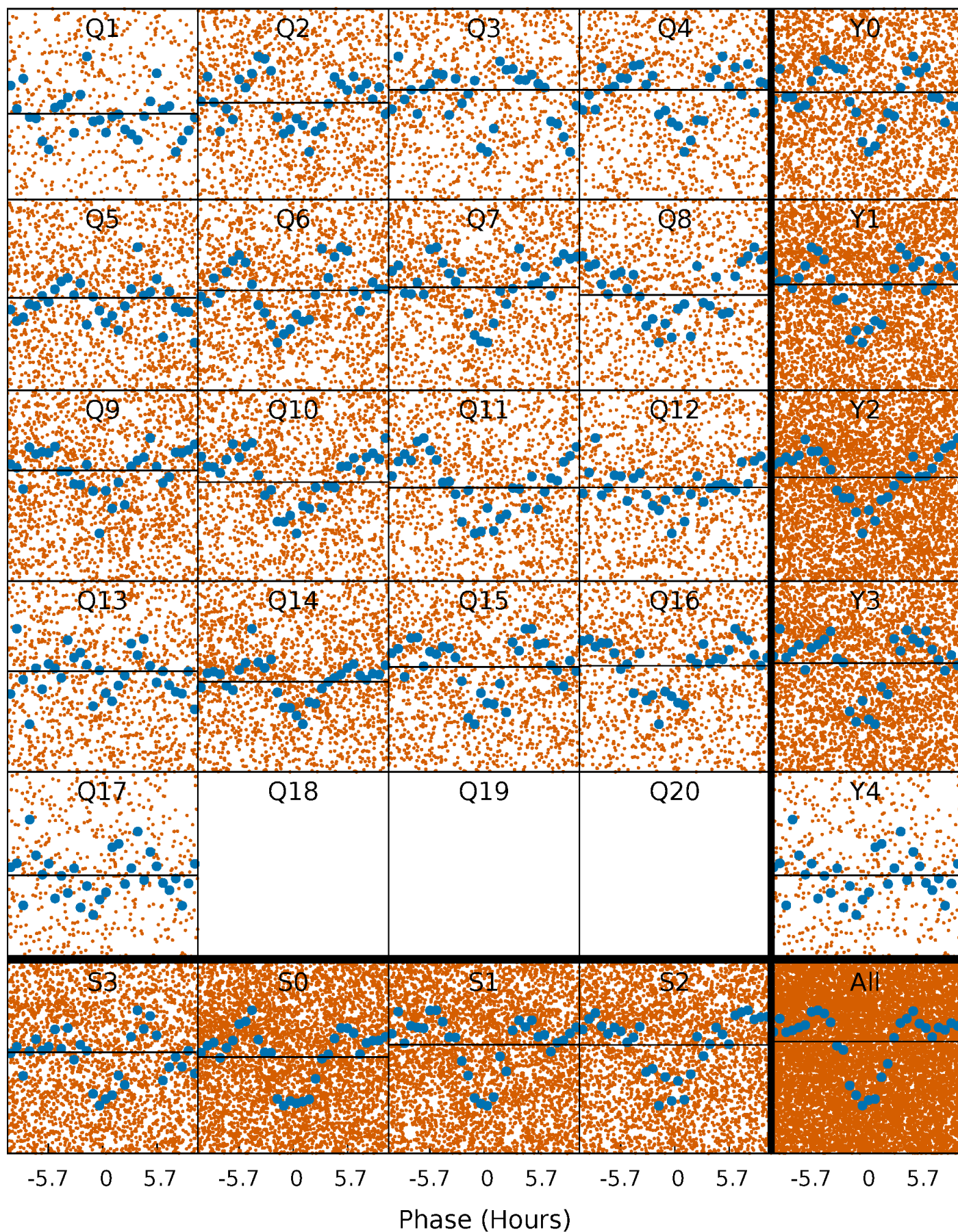
PDC Quarter-Phased Transit Curves

TCE 010132618-01 P= 1.347865 Days $T_0=132.563322$ (BKJD)



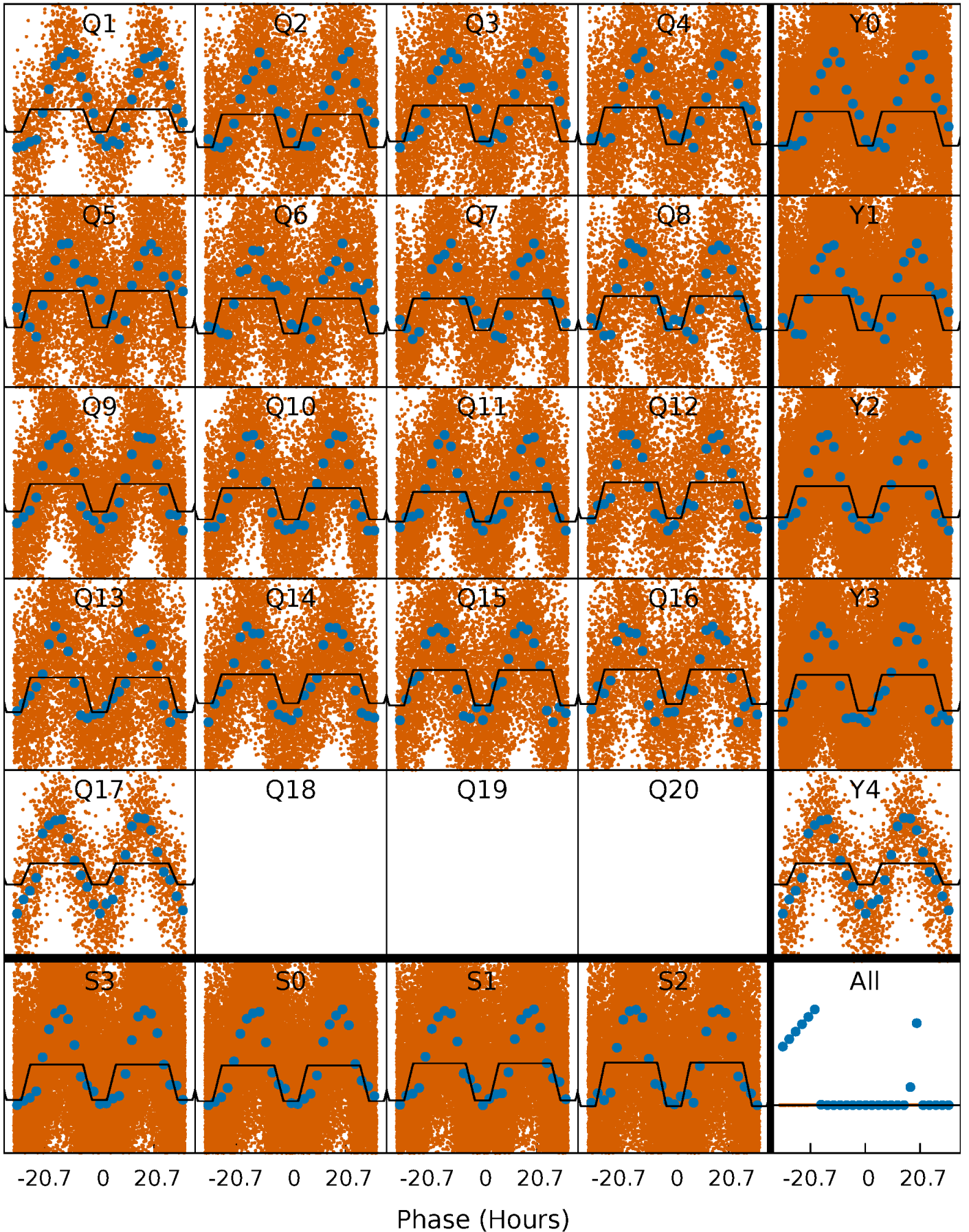
DV Quarter-Phased Transit Curves

TCE 010132618-01 P= 1.347865 Days $T_0=132.563322$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

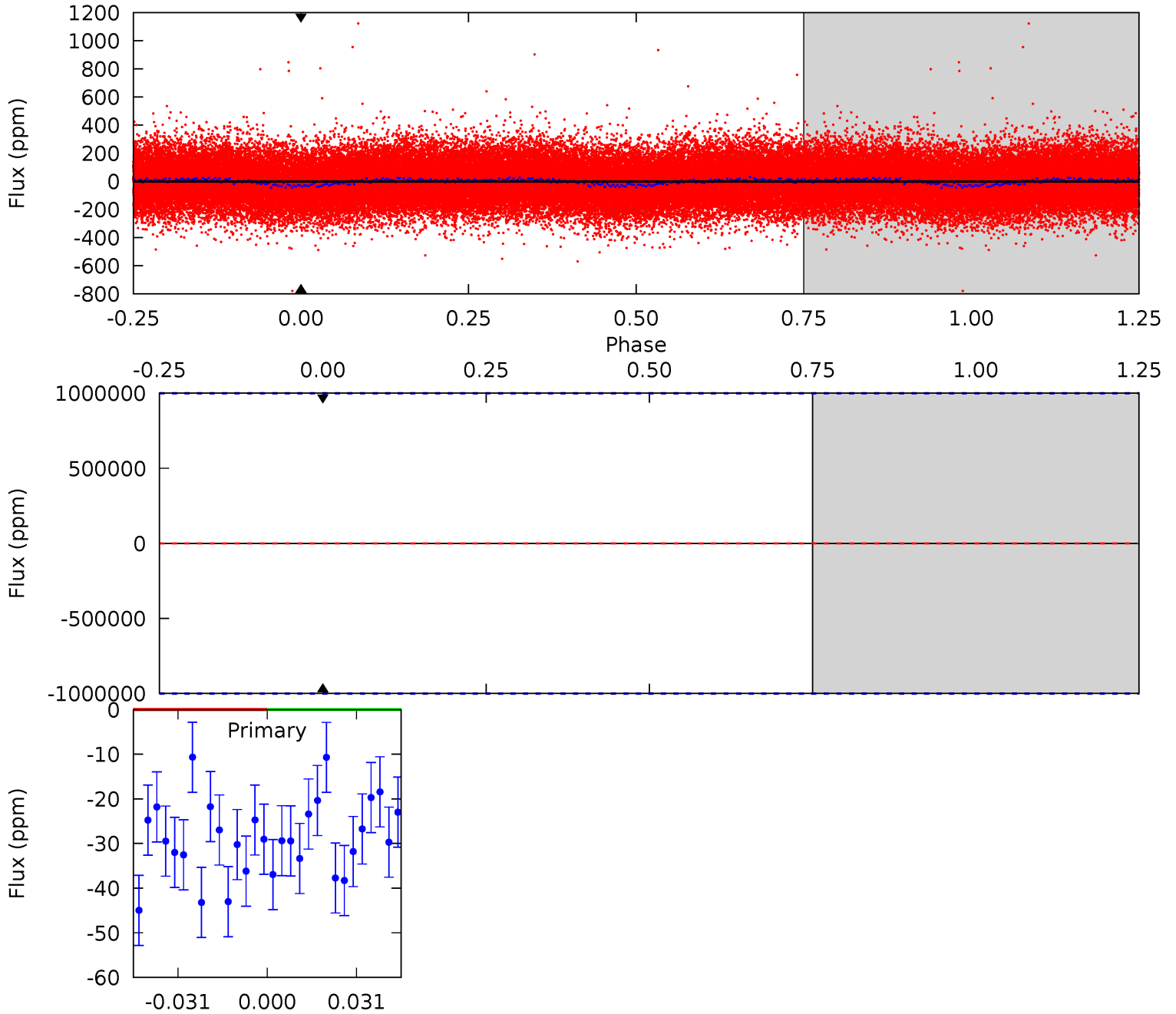
TCE 010132618-01 P= 1.347865 Days $T_0=132.866238$ (BKJD)



DV Model-Shift Uniqueness Test

010132618-01, P = 1.347865 Days, E = 131.215457 Days

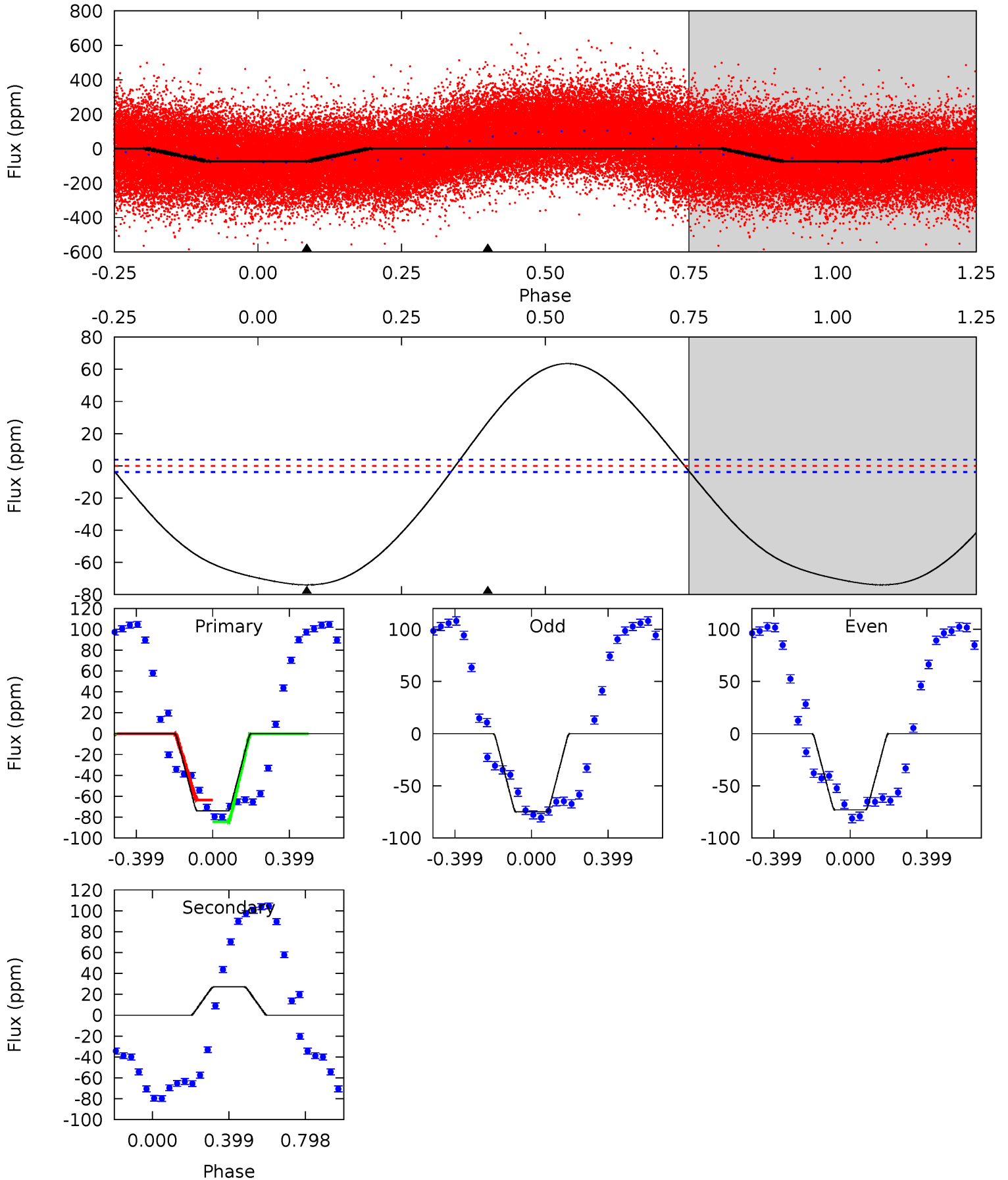
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010132618-01, P = 1.347865 Days, E = 130.170508 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
81.6	-29.9	0	0	4.27	0.84	14.2	81.6	81.6	-29.9	-29.9	1.10	1.04	0.46	11.9



Stellar Parameters For KIC 010132618

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6590^{+181}_{-250}	$4.058^{+0.264}_{-0.176}$	$-0.140^{+0.250}_{-0.300}$	$1.802^{+0.494}_{-0.603}$	$1.361^{+0.182}_{-0.273}$	$0.328^{+0.548}_{-0.156}$
	+3%/-4%	+7%/-4%	+179%/-214%	+27%/-33%	+13%/-20%	+167%/-48%
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 010132618-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$13.71^{+13.14}_{-9.54}$	3342^{+250}_{-293}	-4287^{+38050}_{-25316}	$-0.921^{+446.756}_{-371.120}$
Alt.	27 ± 1	$13.22^{+14.19}_{-9.48}$	3330^{+271}_{-289}	-3452^{+216}_{-515}	$-0.058^{+0.044}_{-0.660}$

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

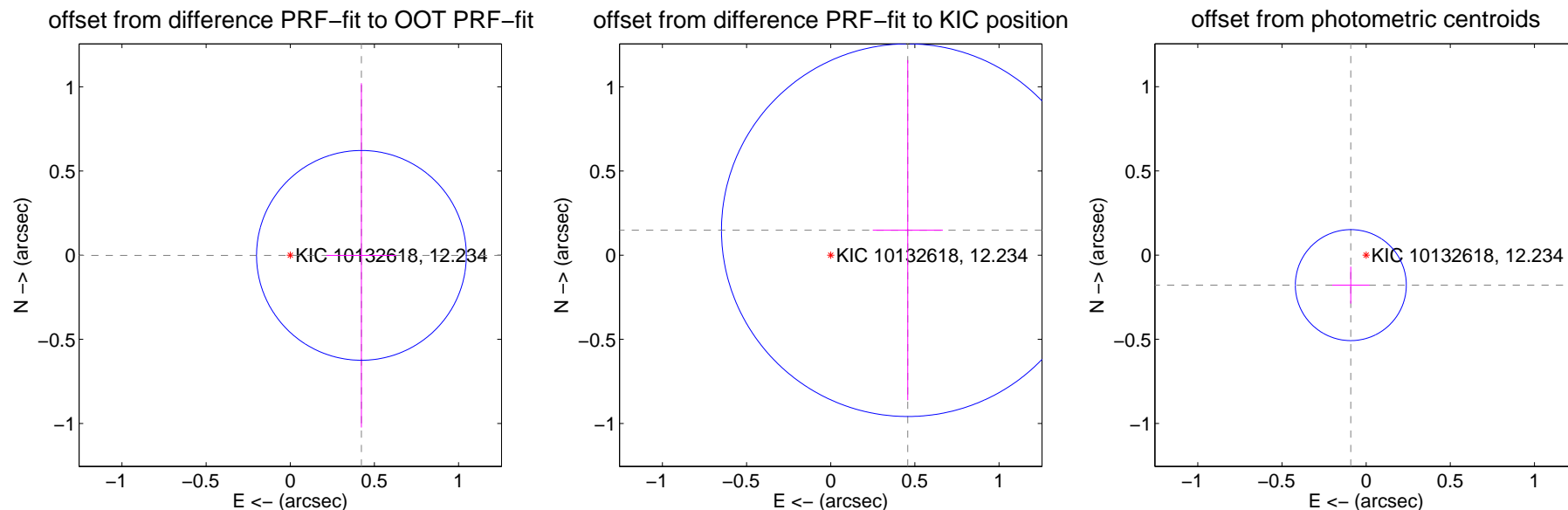
DV Centroid Data

Supplemental centroid analysis for 010132618-01. Kepler magnitude: 12.23. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

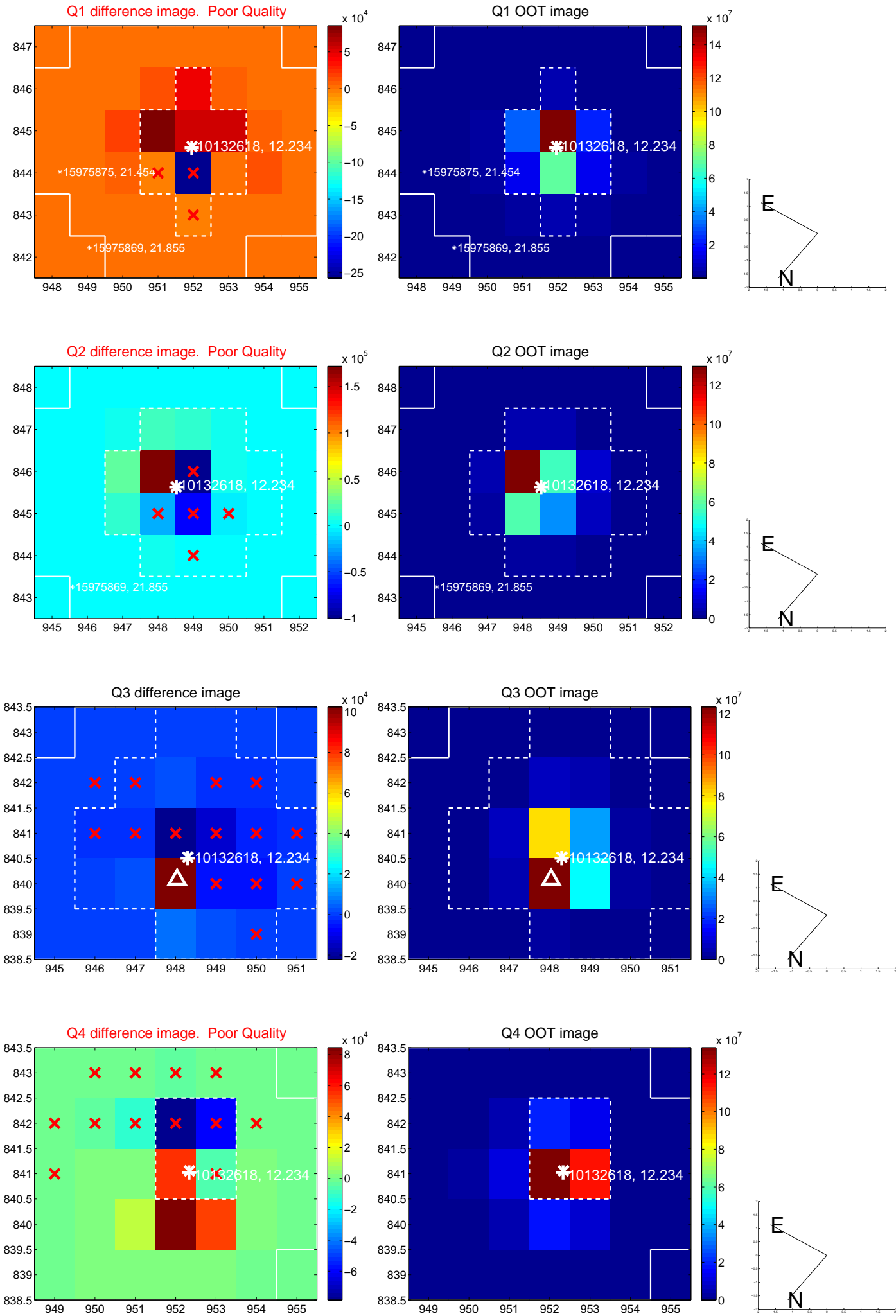
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.423 ± 0.208	2.04	-0.423 ± 0.208	-0.001 ± 1.022
PRF-fit source offset from KIC position	0.481 ± 0.369	1.30	-0.458 ± 0.208	0.148 ± 1.010
photometric centroid source offset	0.20 ± 0.11	1.82	0.09 ± 0.11	-0.18 ± 0.11

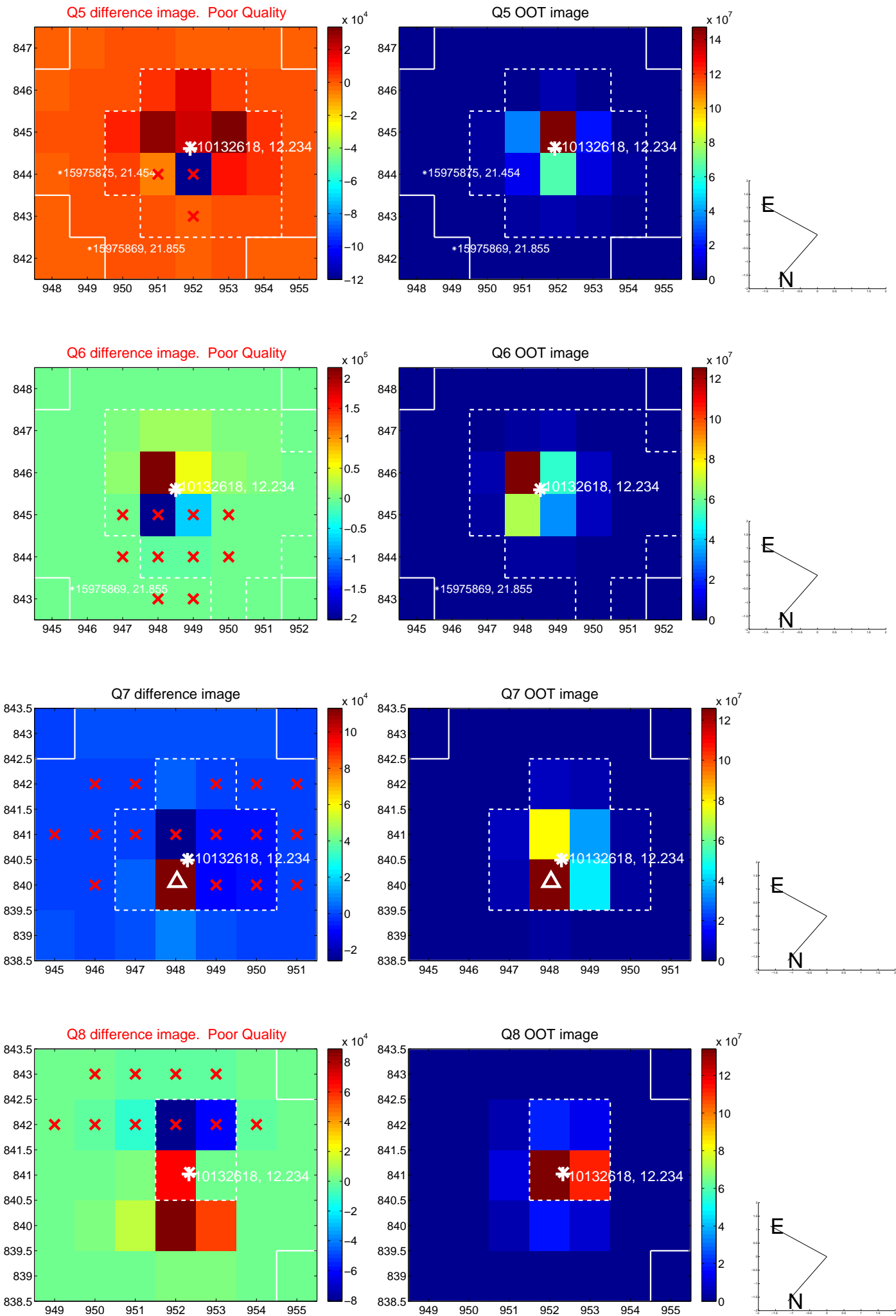


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

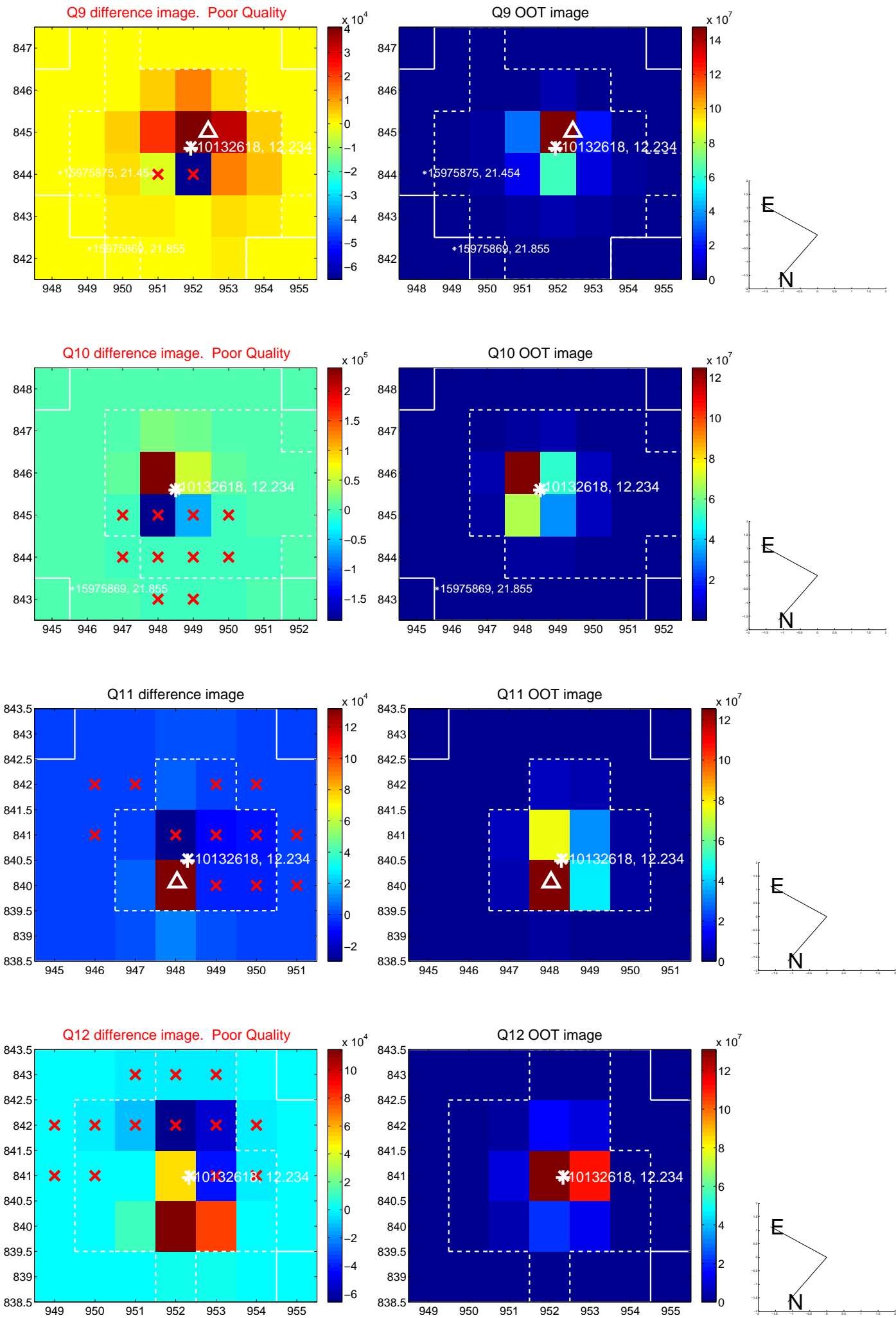
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



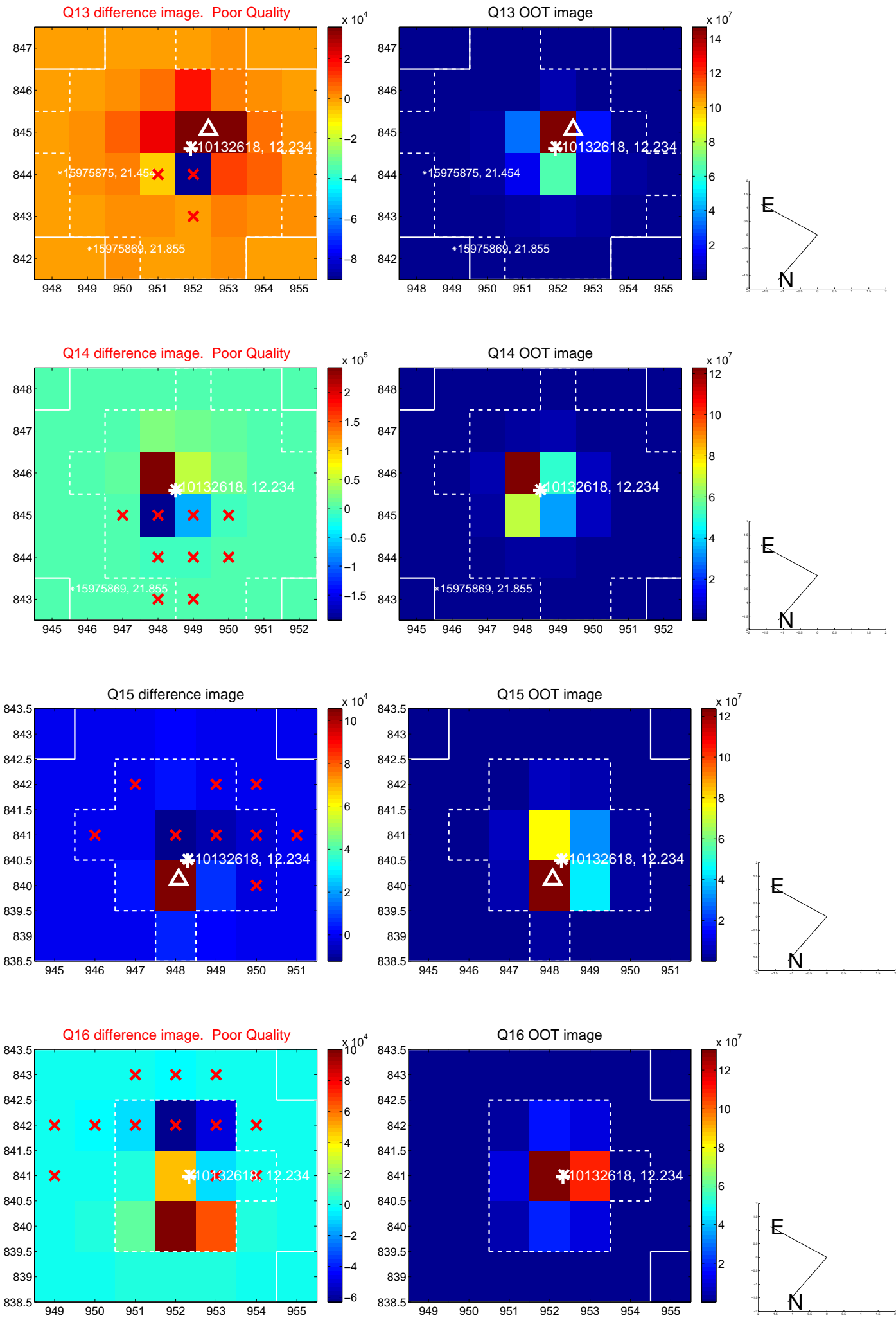
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



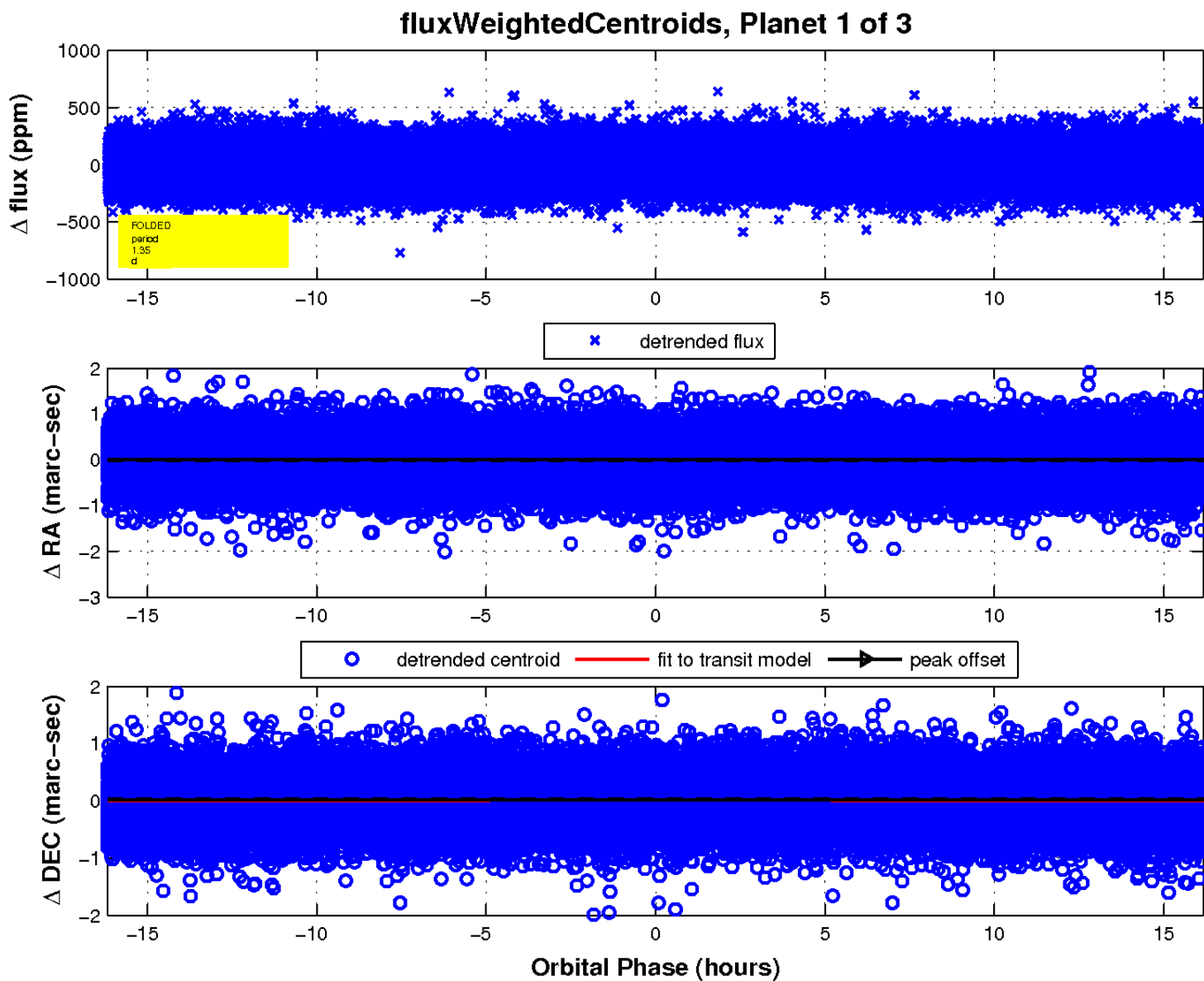
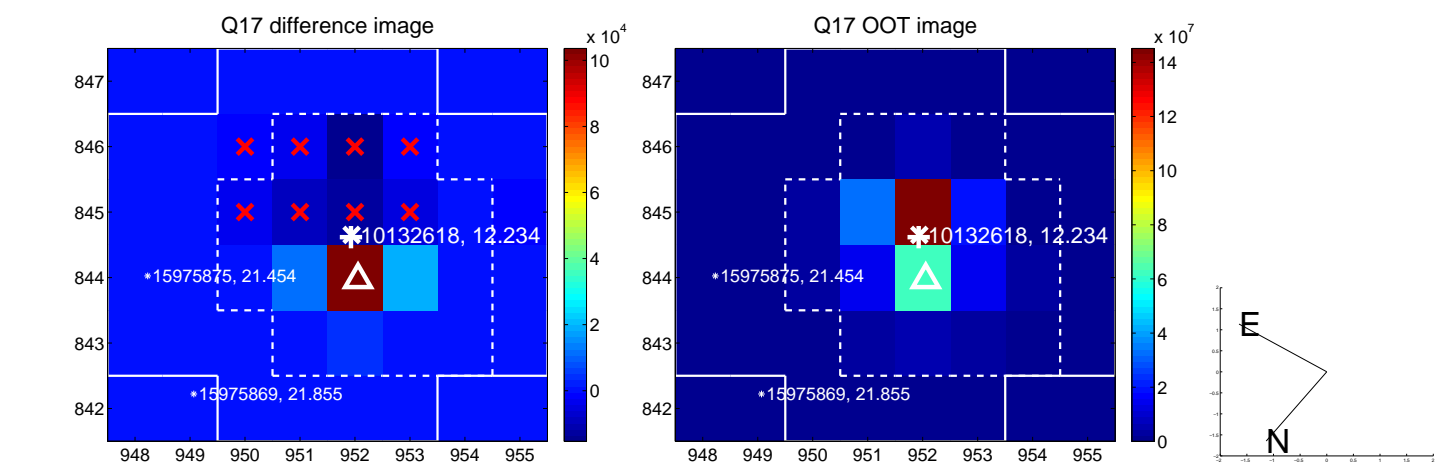
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

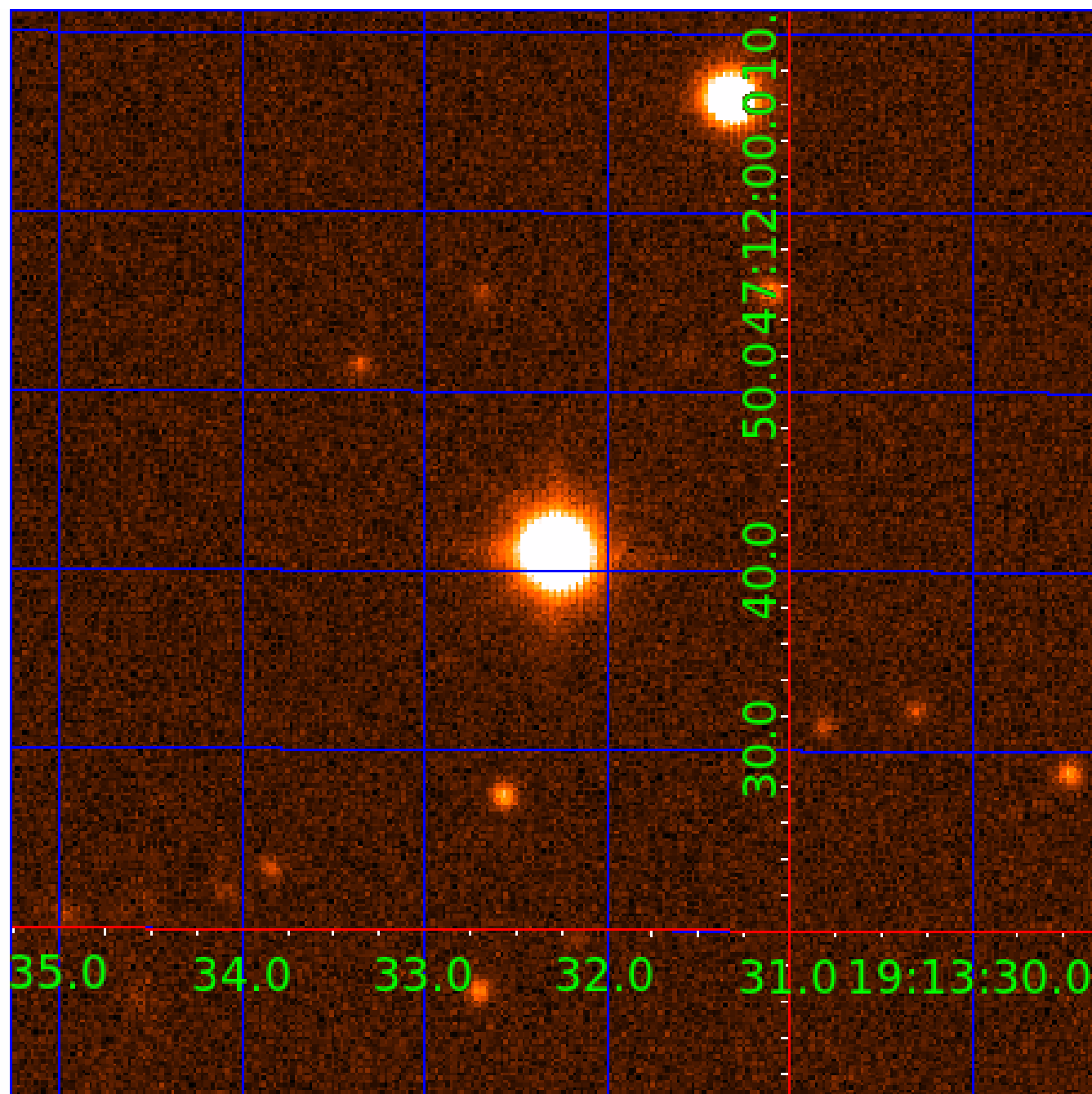


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010132618

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})
010132618-01	OBS	No	1.347865	132.563322	76.7	5.000	10.7	-1.0	1.80	6590	1.59	7859.79
010132618-02	OBS	No	1.347925	131.848236	25.8	4.570	12.9	12.8	1.80	6590	1.25	7859.32
010132618-03	OBS	No	23.671065	132.540569	219.9	1.491	7.9	5.9	1.80	6590	2.96	172.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010132618-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—HALO_GHOST
010132618-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010132618-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_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.

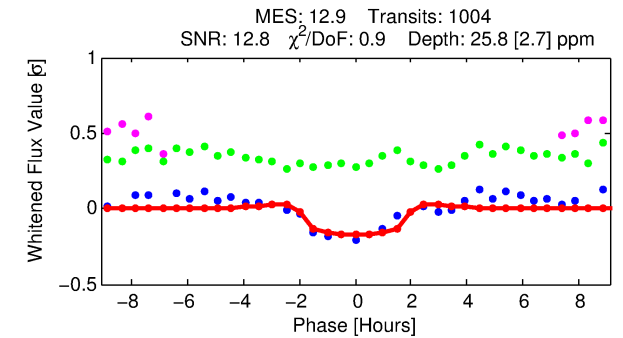
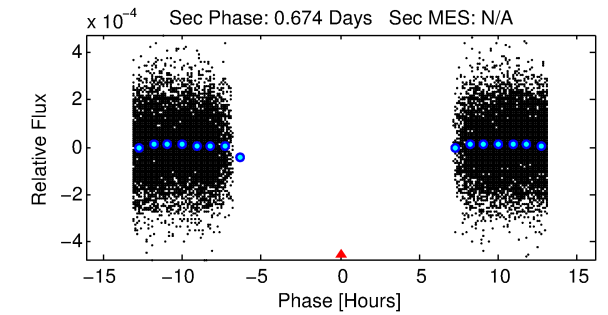
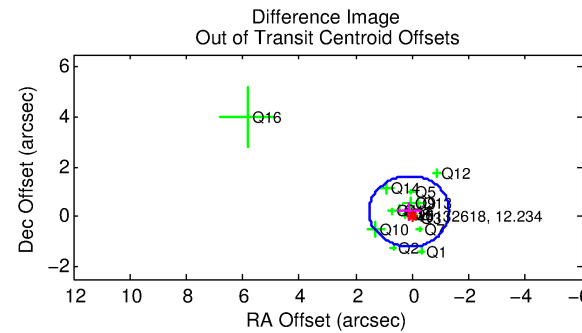
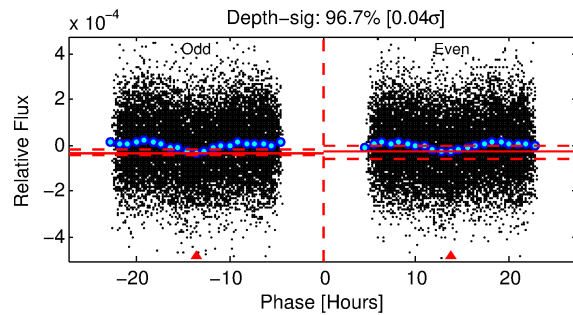
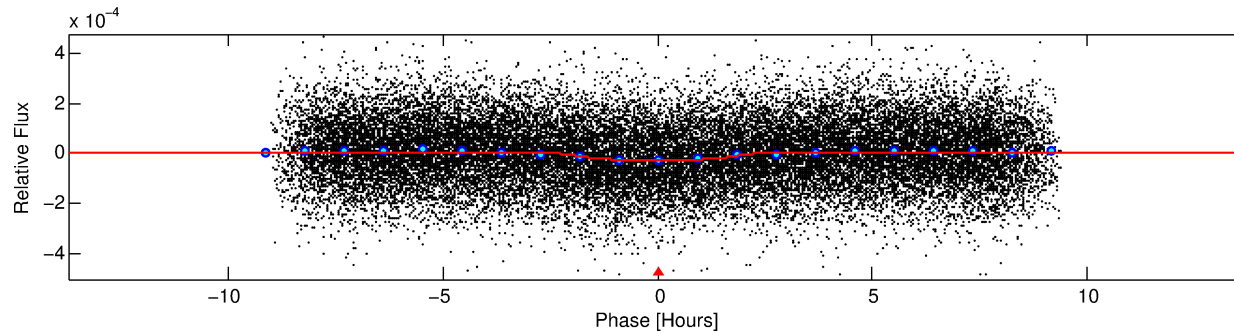
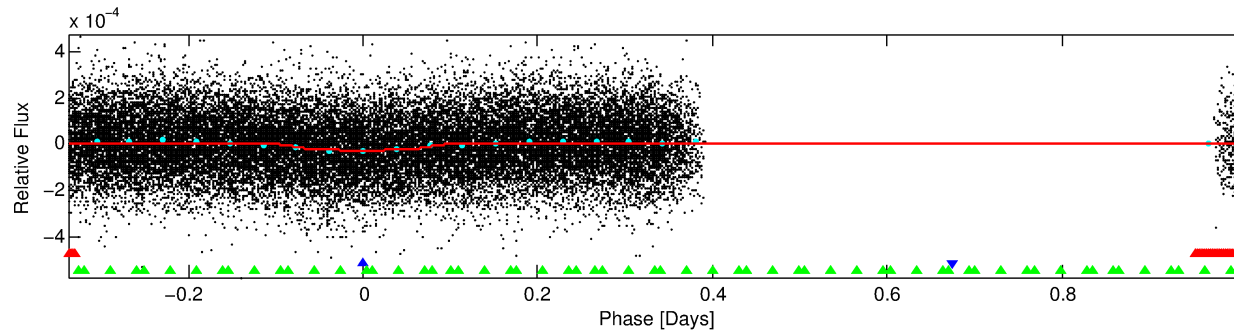
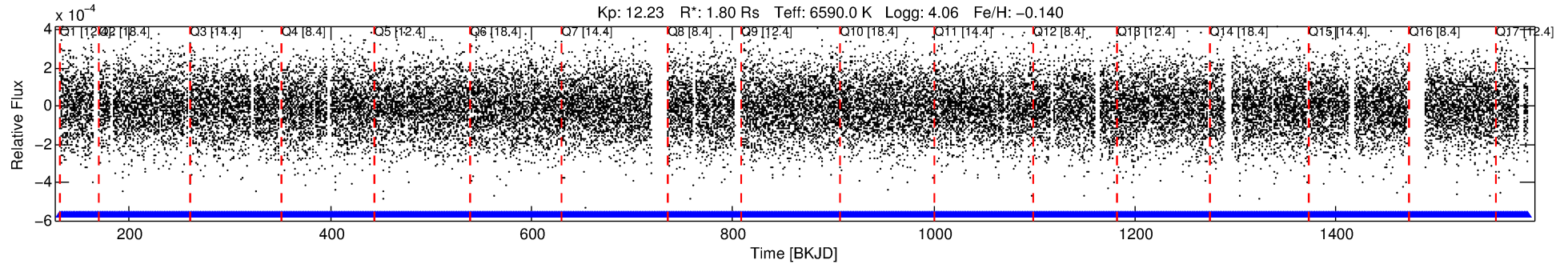
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010132618-02

No Significant Match Found

DV One-Page Summary

KIC: 10132618 Candidate: 2 of 3 Period: 1.348 d



DV Fit Results:

Period = 1.34792 [0.00001] d
Epoch = 131.8482 [0.0042] BKJD
Rp/R* = 0.0064 [0.0004]
a/R* = 1.08 [0.03]
b = 0.99 [0.01]
Seff = 7859.32 [3826.33]
Teq = 2401 [292] K
Rp = 1.25 [0.43] Re
a = 0.0264 [0.0080] AU

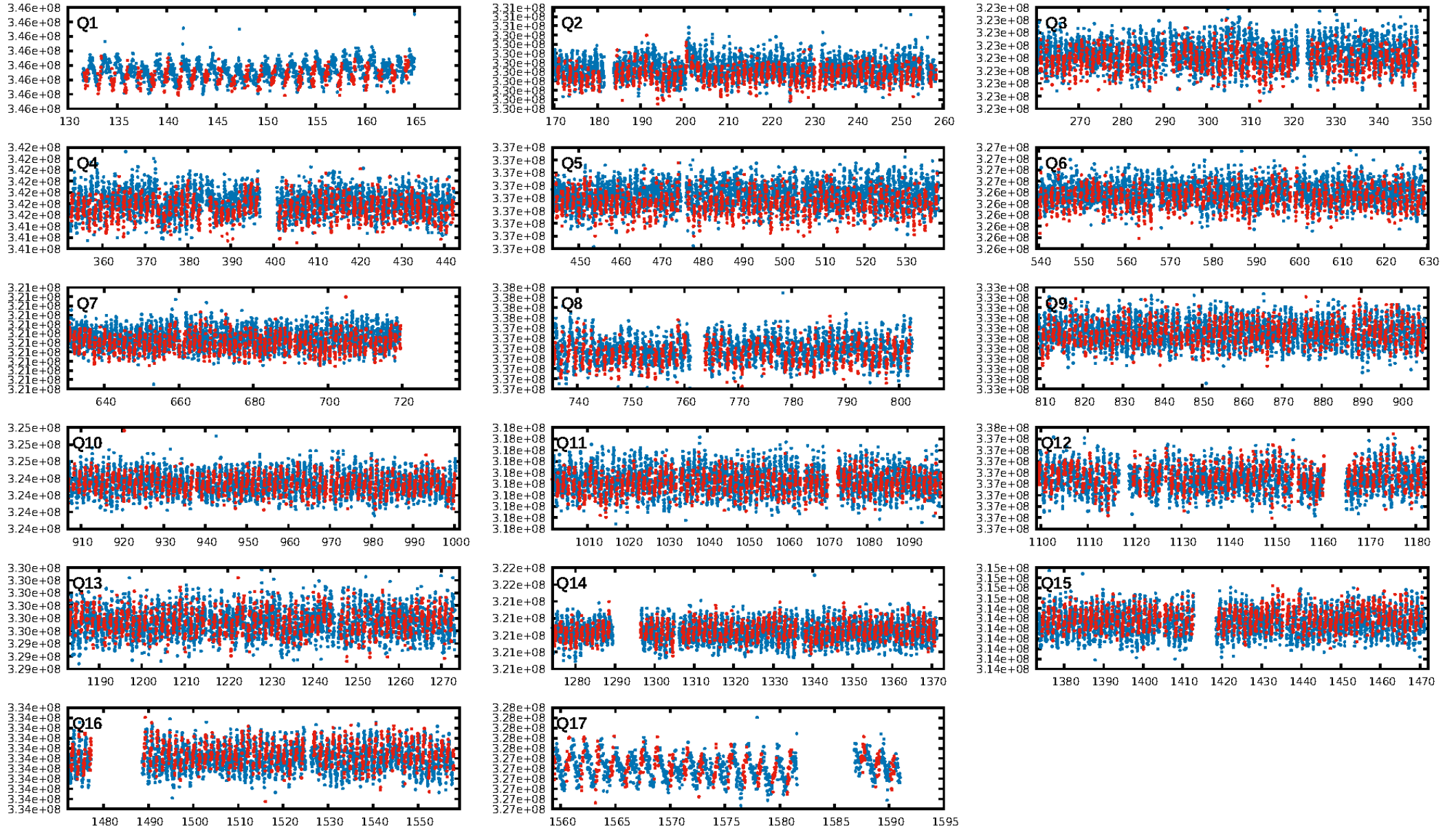
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 100.0% [111.46 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.09e-49
RollingBand-fgt: 1.00 [959/959]
GhostDiagnostic-chr: 1.133
Centroid-sig: 39.9%
Centroid-so: 0.317 arcsec [0.66 σ]
OotOffset-rm: 0.236 arcsec [0.50 σ]
KicOffset-rm: 0.295 arcsec [0.78 σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 0.93 [14/15]
DiffImageOverlap-fno: 0.00 [0/17]

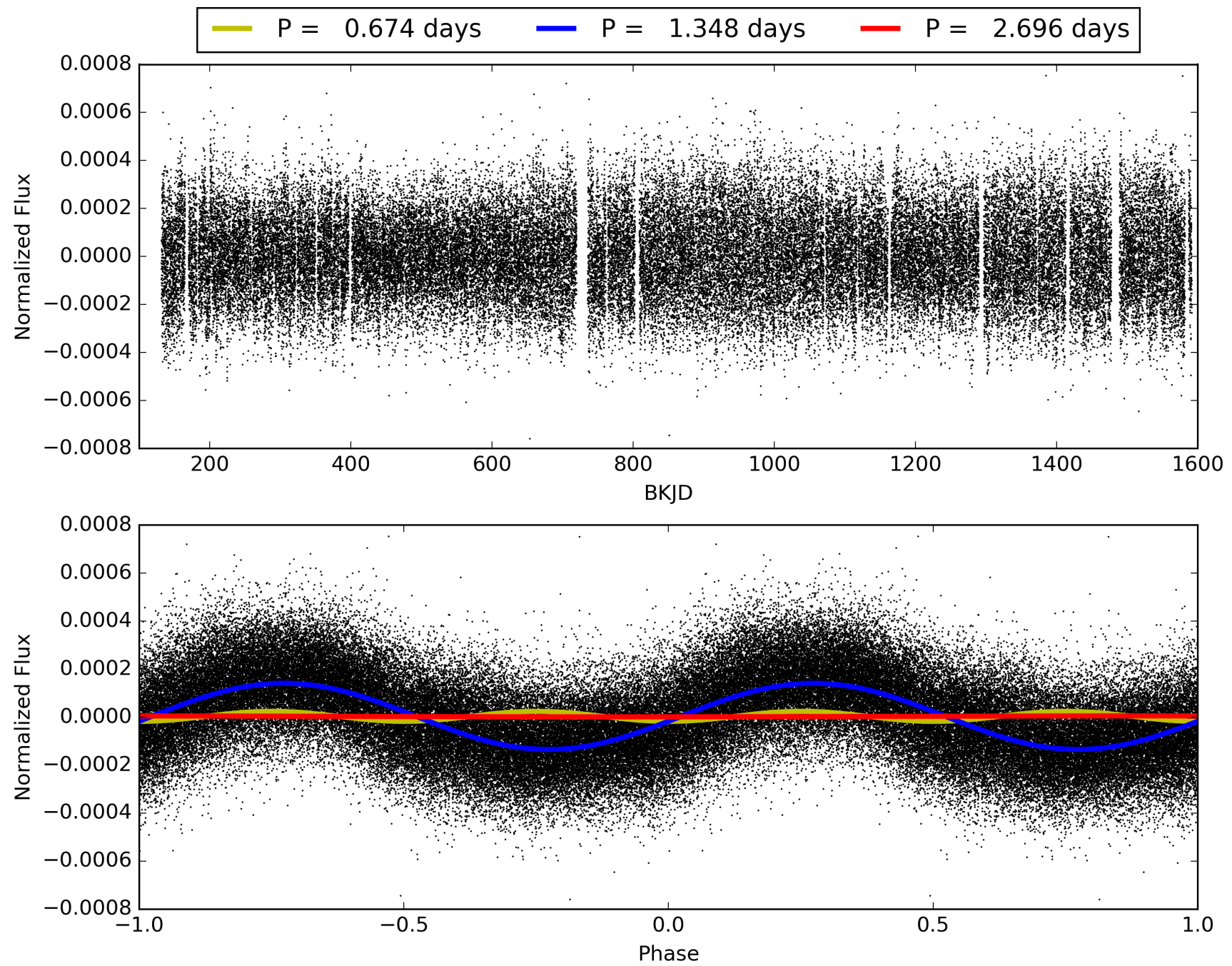
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:43:29 Z

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

TCE 010132618-02, PDC Light Curves

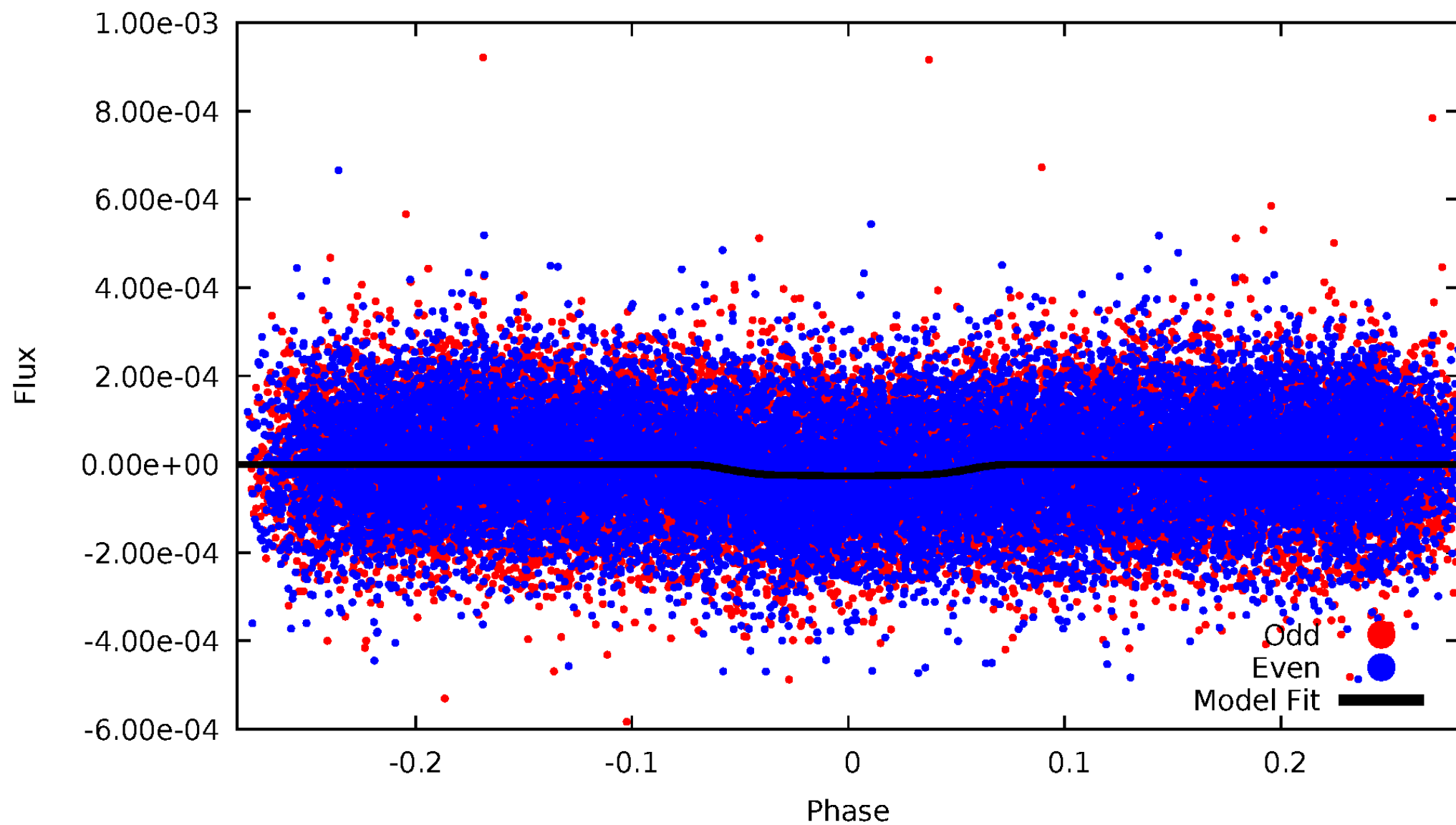


TCE 010132618-02



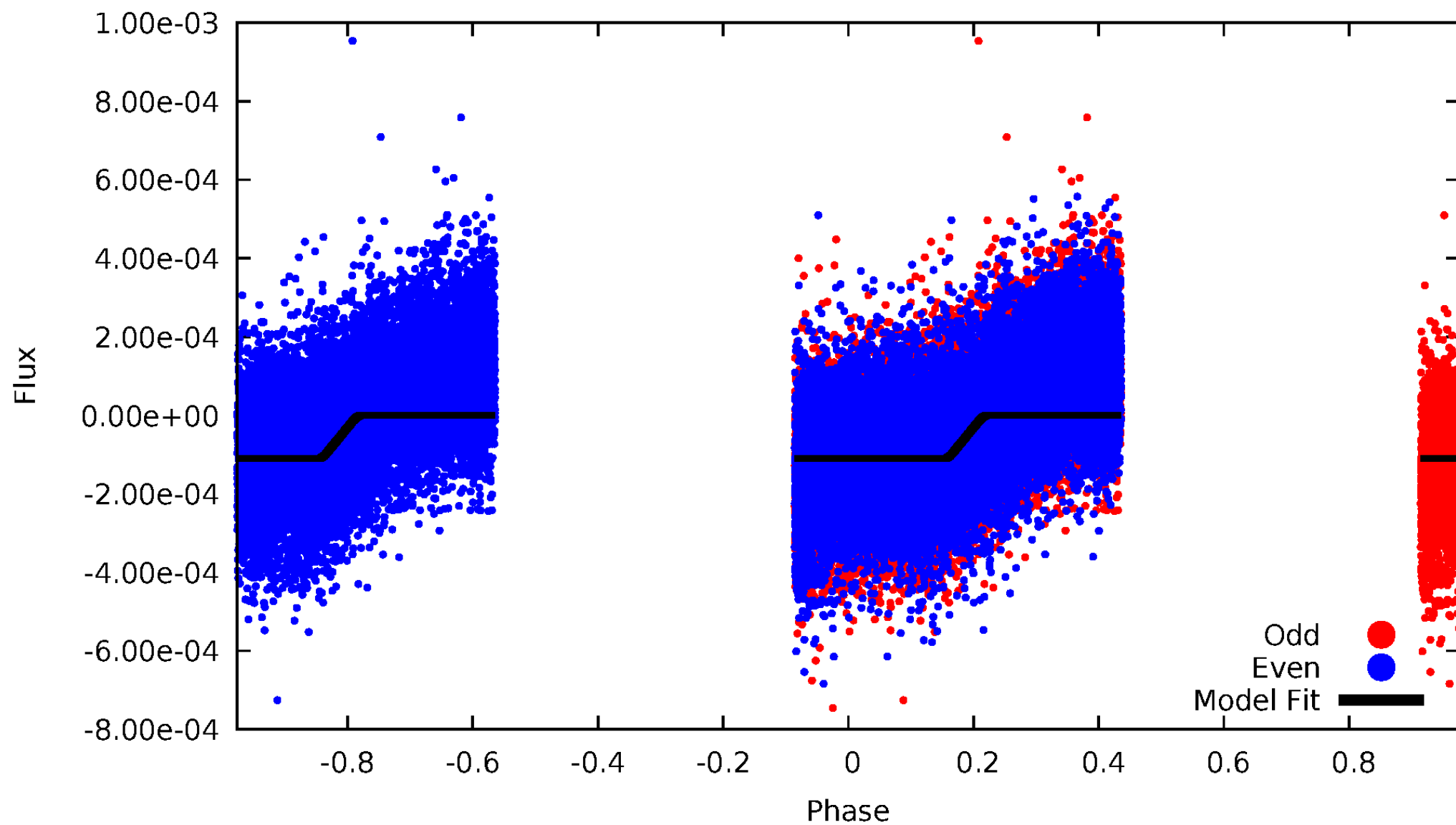
DV Odd/Even

TCE 010132618-02



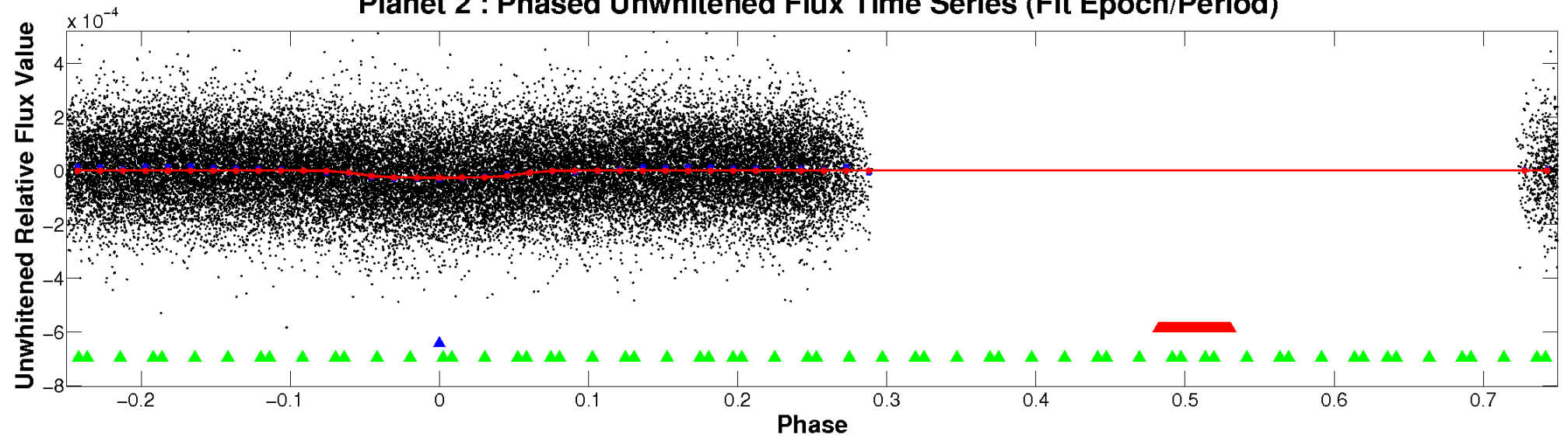
ALT Odd/Even

TCE 010132618-02

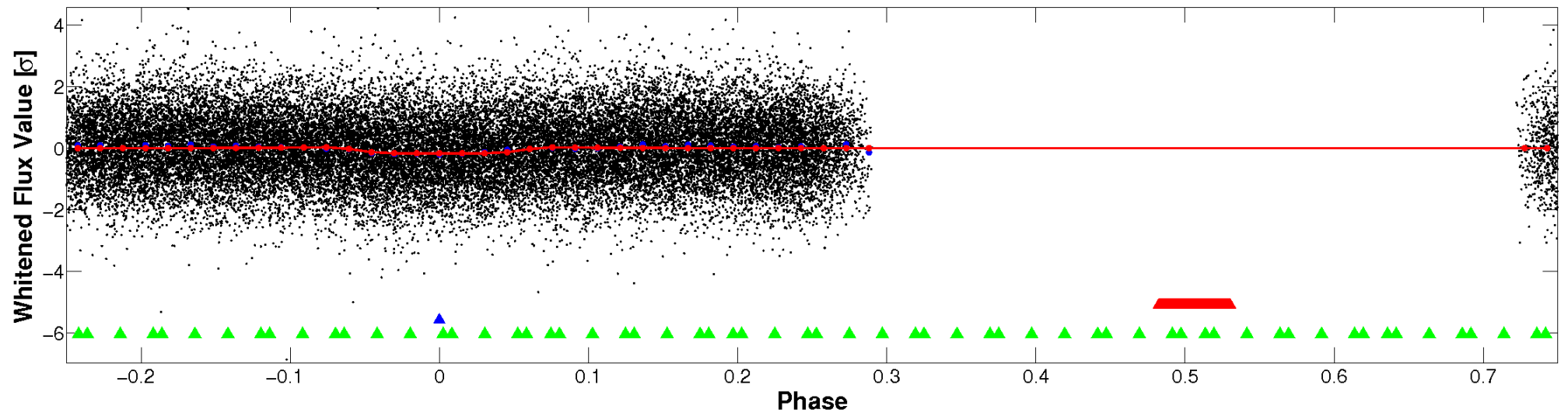


Non-Whitened Vs. Whitened Light Curve

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

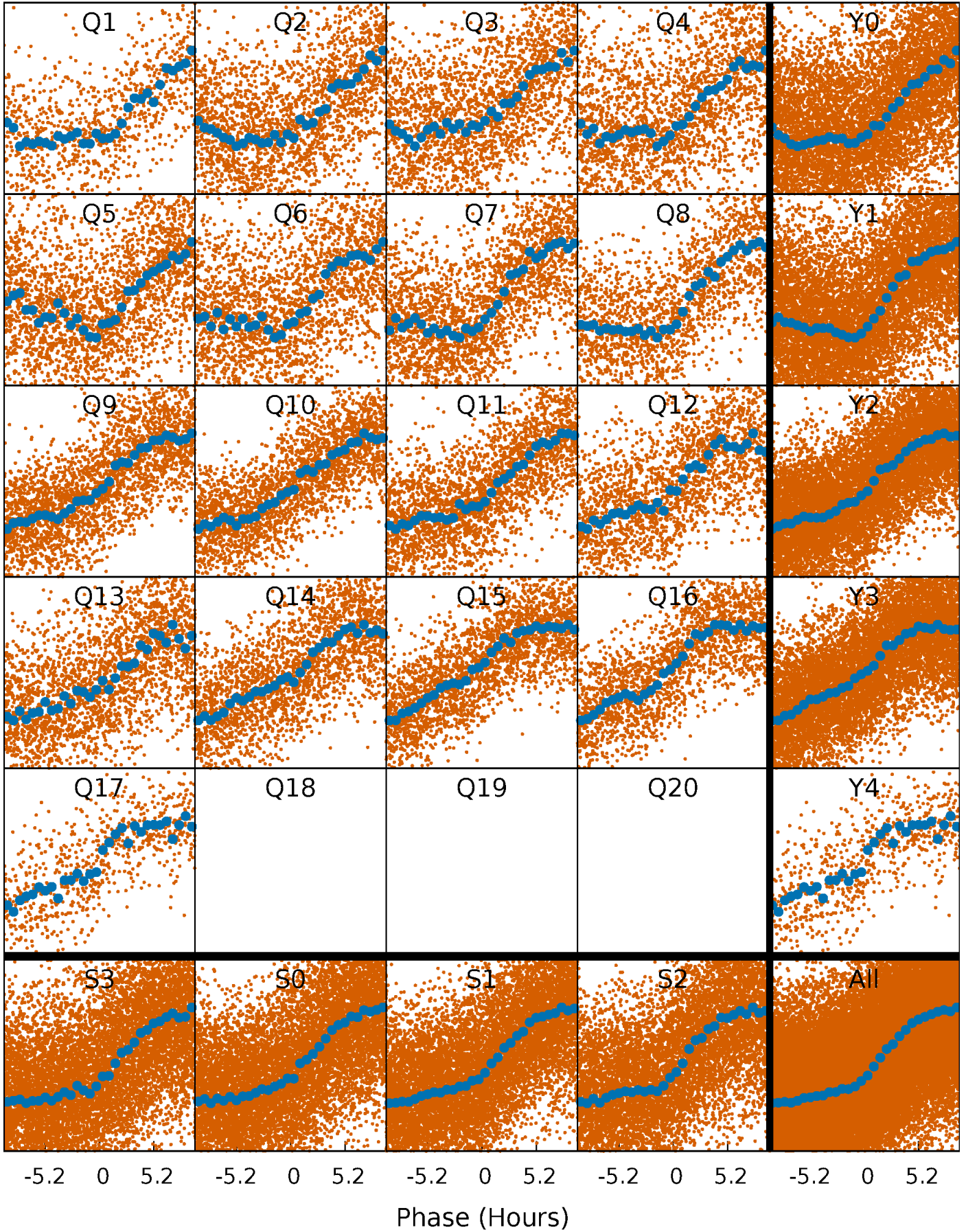


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



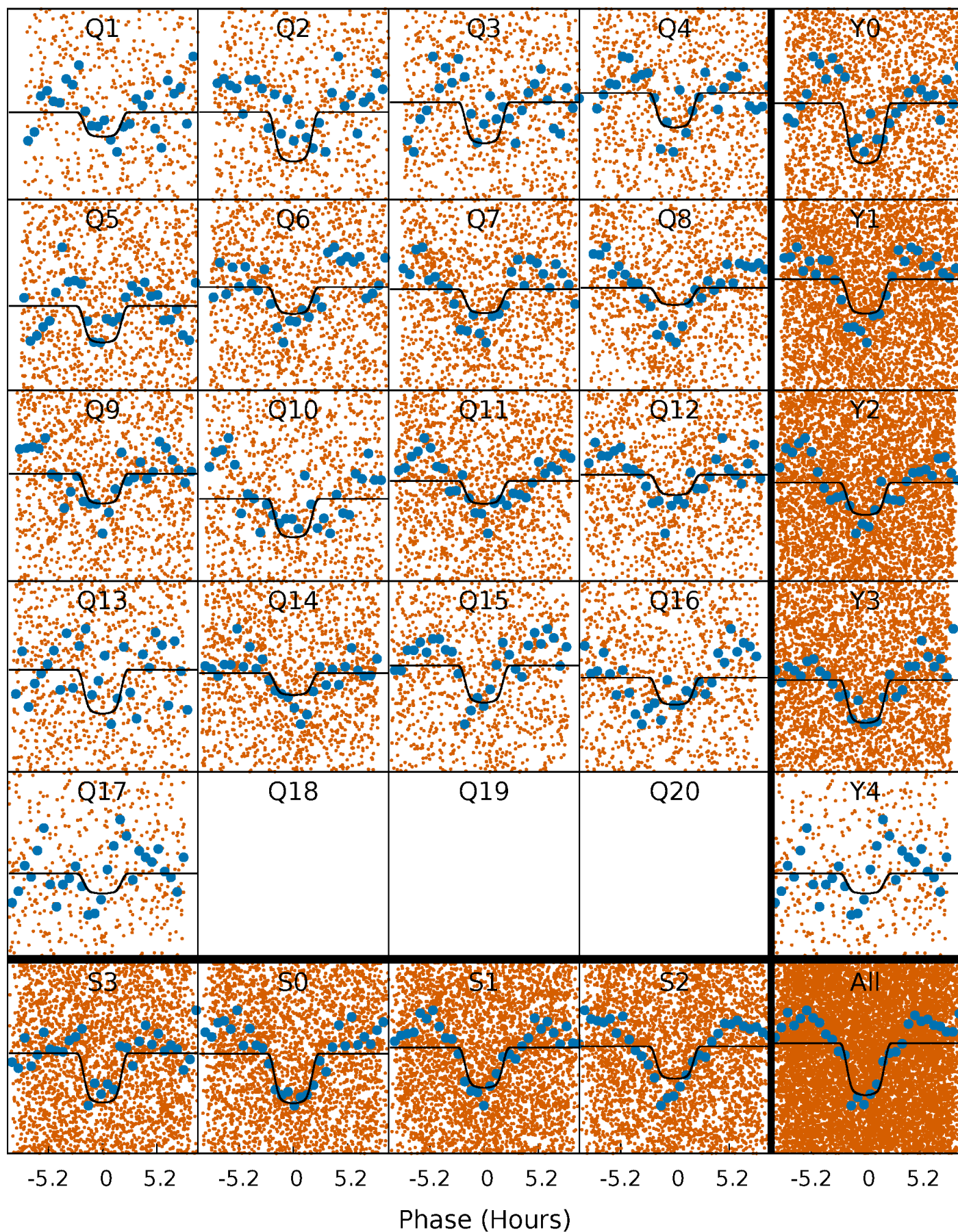
PDC Quarter-Phased Transit Curves

TCE 010132618-02 P= 1.347925 Days $T_0=131.848236$ (BKJD)



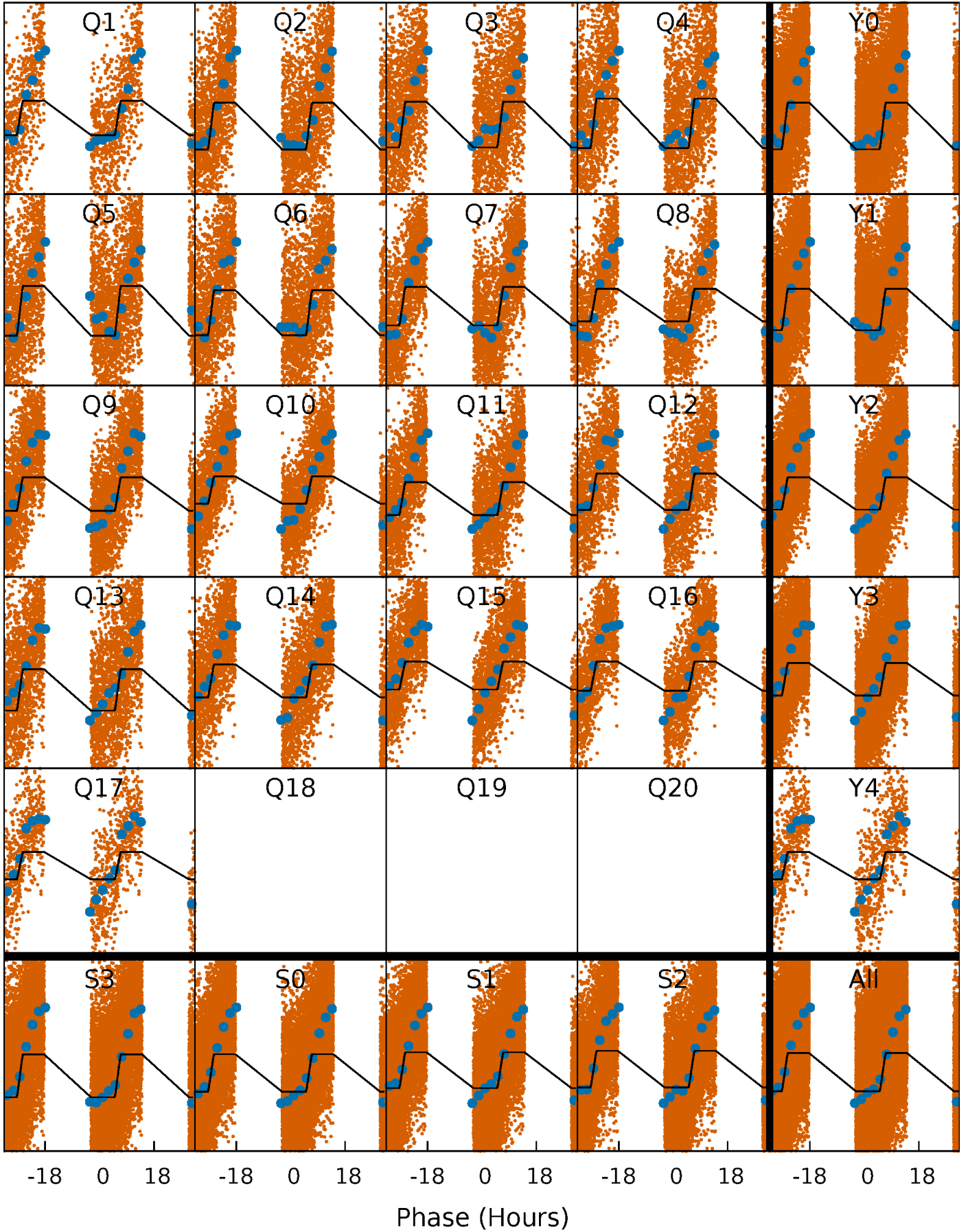
DV Quarter-Phased Transit Curves

TCE 010132618-02 P= 1.347925 Days $T_0=131.848236$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

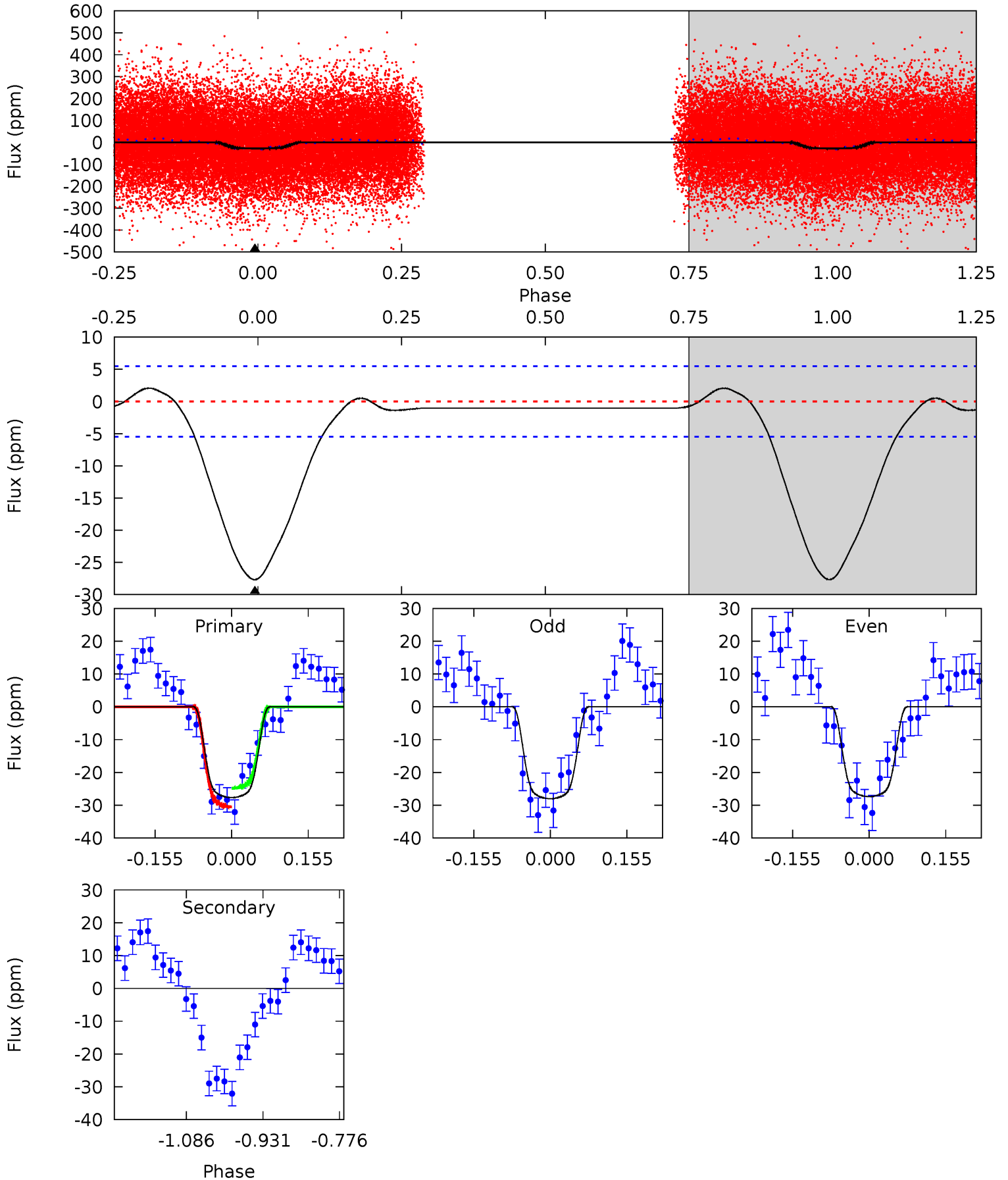
TCE 010132618-02 P= 1.347865 Days $T_0=131.653312$ (BKJD)



DV Model-Shift Uniqueness Test

010132618-02, P = 1.347925 Days, E = 130.500311 Days

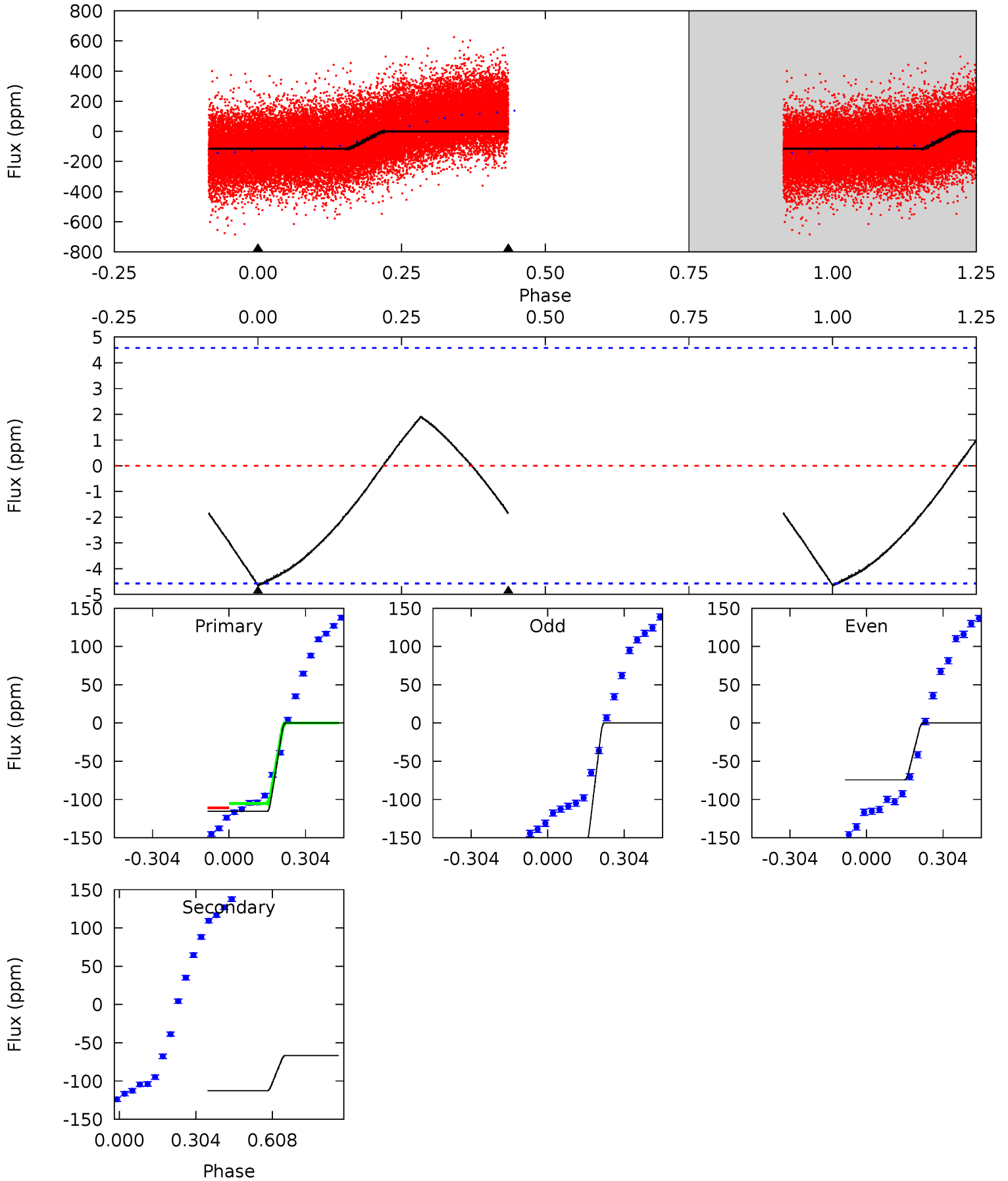
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.6	0	0	0	4.47	1.42	0.93	22.6	22.6	0	0	0.27	1.11	0.07	2.34



Alt Model-Shift Uniqueness Test

010132618-02, P = 1.347865 Days, E = 130.305447 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.40	1.76	0	0	4.33	1.03	0.44	4.40	4.40	1.76	1.76	1.57	0	0.29	0



Stellar Parameters For KIC 010132618

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6590^{+181}_{-250}	$4.058^{+0.264}_{-0.176}$	$-0.140^{+0.250}_{-0.300}$	$1.802^{+0.494}_{-0.603}$	$1.361^{+0.182}_{-0.273}$	$0.328^{+0.548}_{-0.156}$
	+3%/-4%	+7%/-4%	+179%/-214%	+27%/-33%	+13%/-20%	+167%/-48%
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 010132618-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1	$1.24^{+0.22}_{-0.24}$	3339^{+266}_{-304}	-3328^{+5393}_{-401}	$-0.022^{+0.330}_{-0.317}$
Alt.	-2 ± 1	$2.04^{+0.34}_{-0.36}$	3311^{+268}_{-284}	-2920^{+779}_{-337}	$0.159^{+0.128}_{-0.094}$

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 $A_{obs} \gg 1.0$

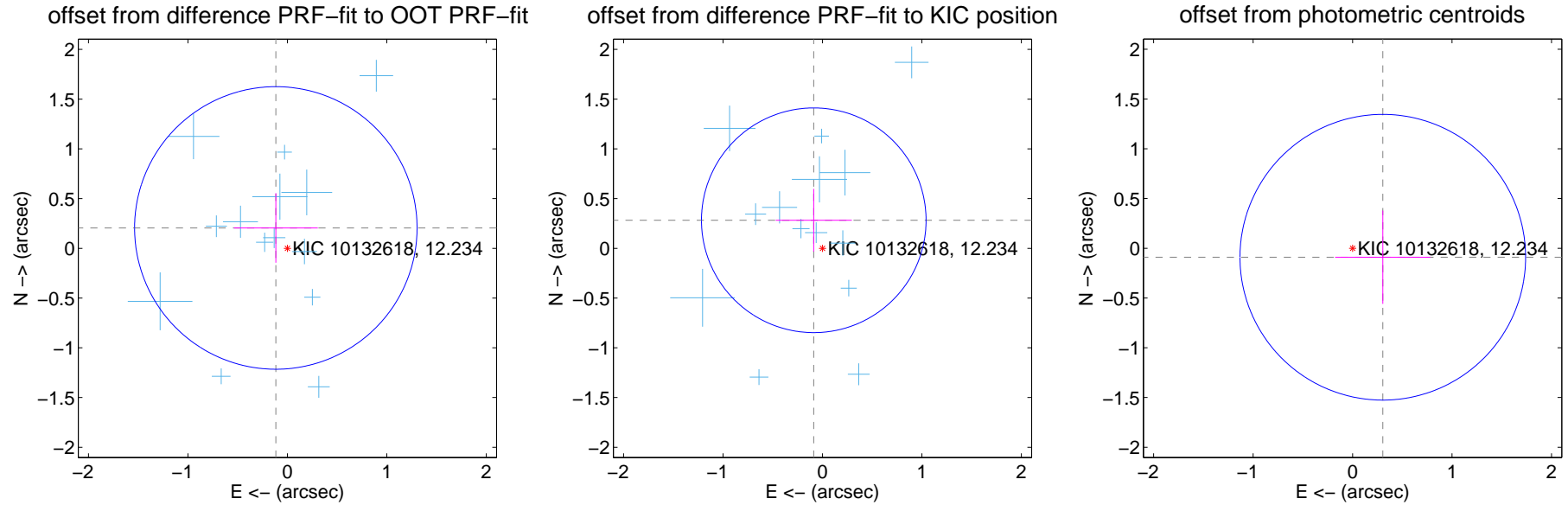
DV Centroid Data

Supplemental centroid analysis for 010132618-02. Kepler magnitude: 12.23. Transit SNR 12.79

There are 14 quarters with good PRF difference image offsets

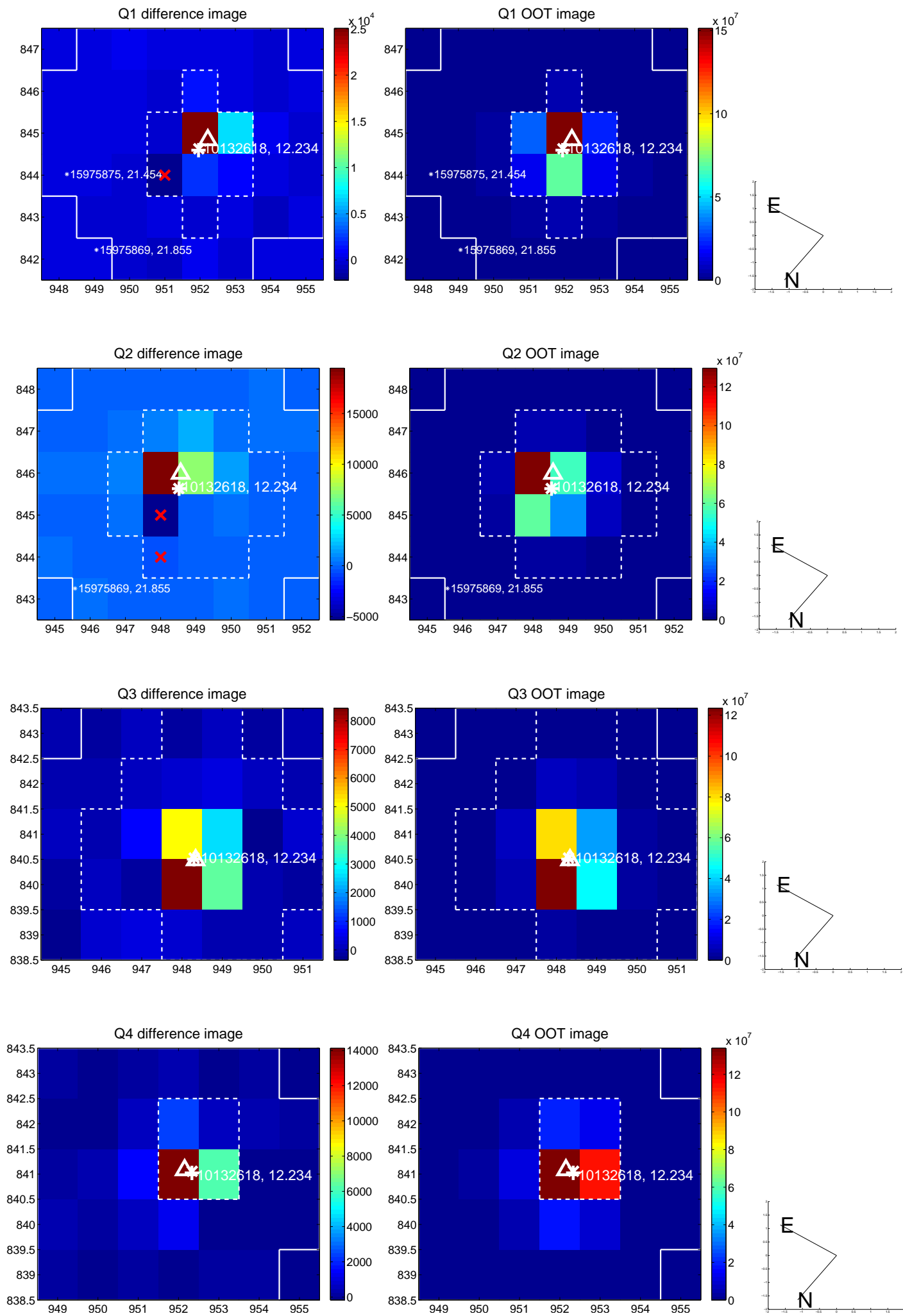
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.236 ± 0.473	0.50	0.116 ± 0.422	0.205 ± 0.350
PRF-fit source offset from KIC position	0.295 ± 0.376	0.78	0.088 ± 0.383	0.282 ± 0.316
photometric centroid source offset	0.32 ± 0.48	0.66	-0.30 ± 0.48	-0.09 ± 0.47

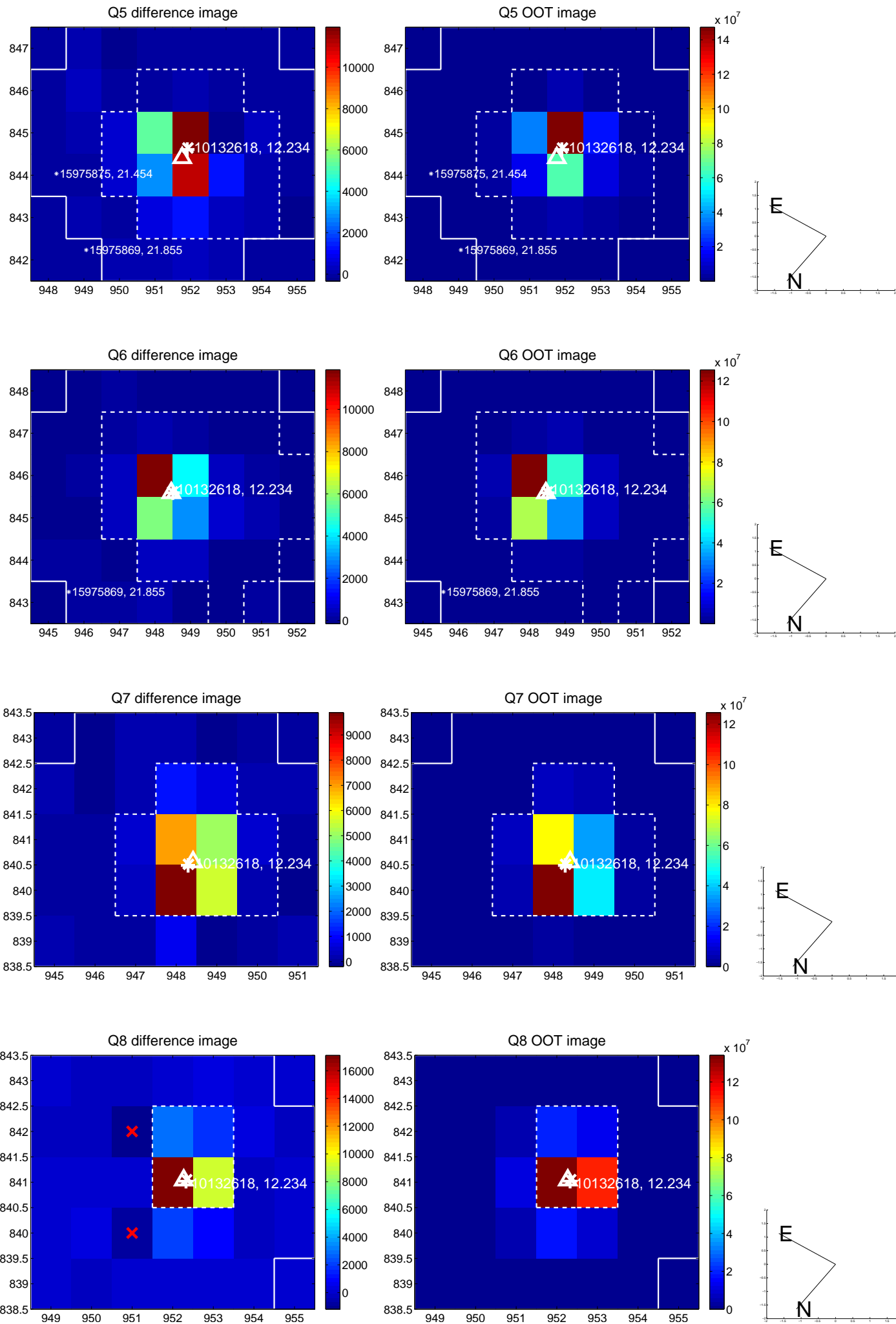


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

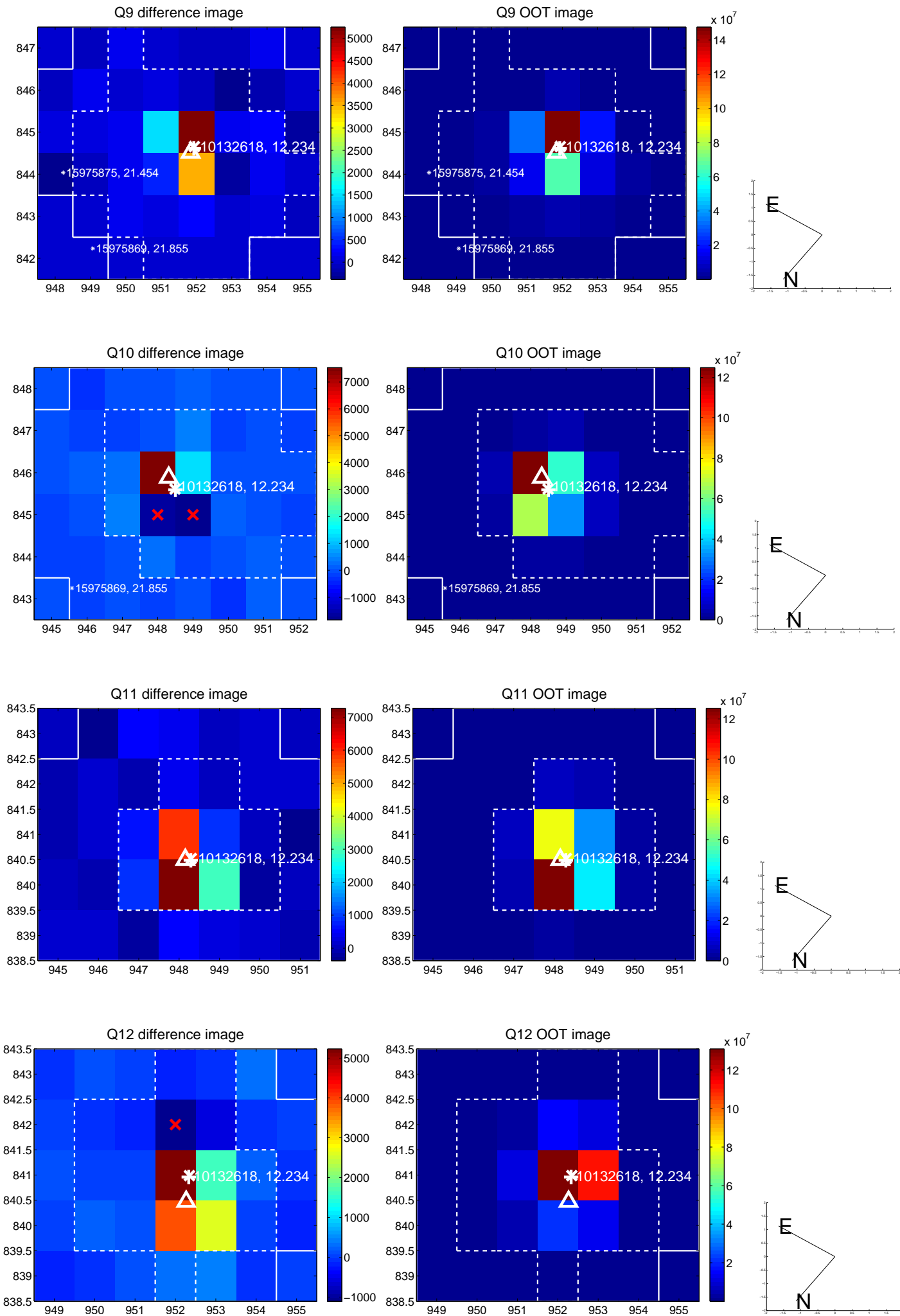
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



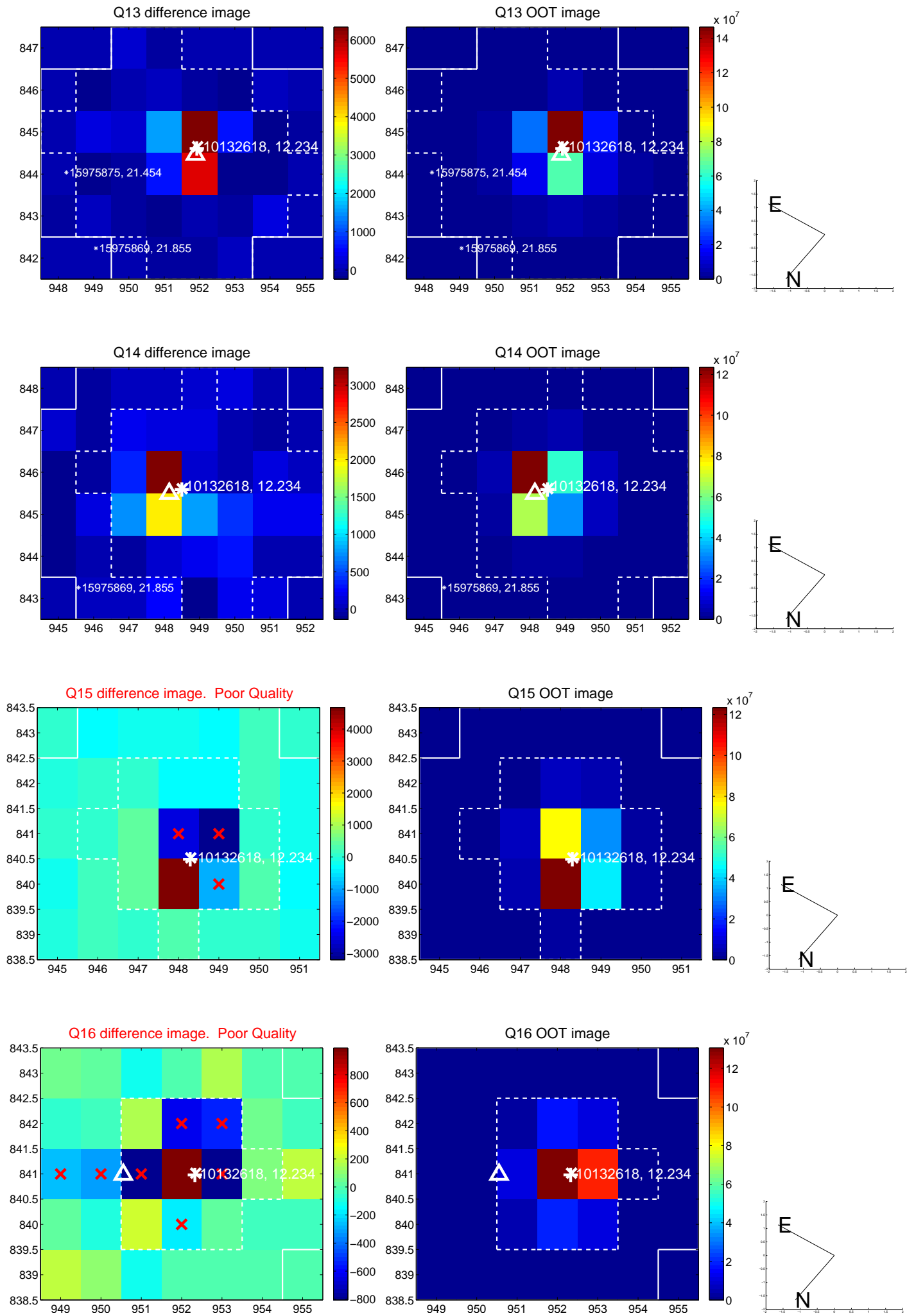
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



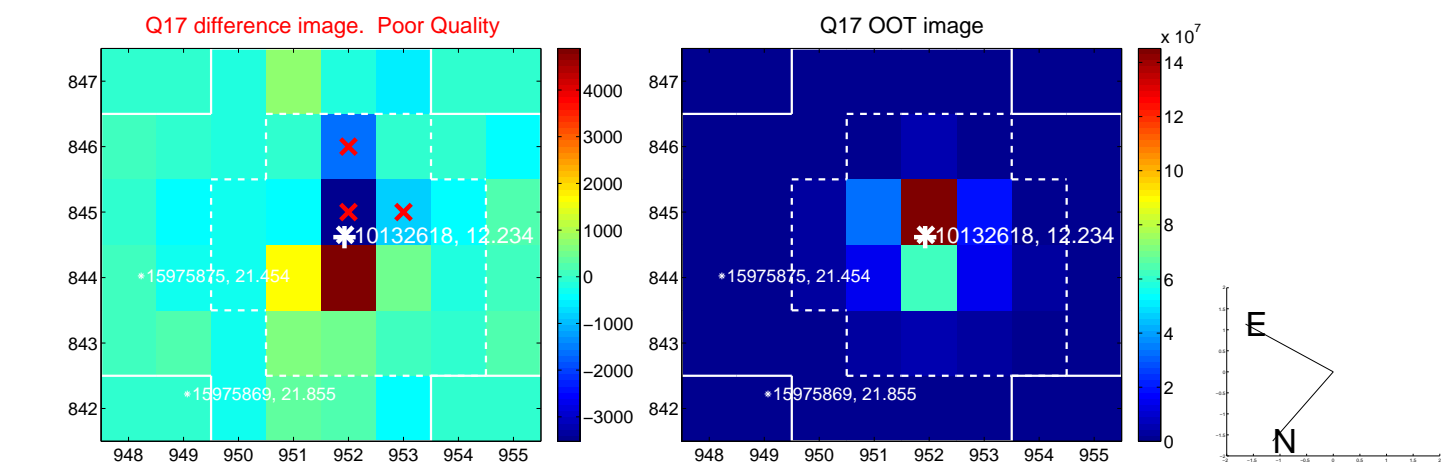
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



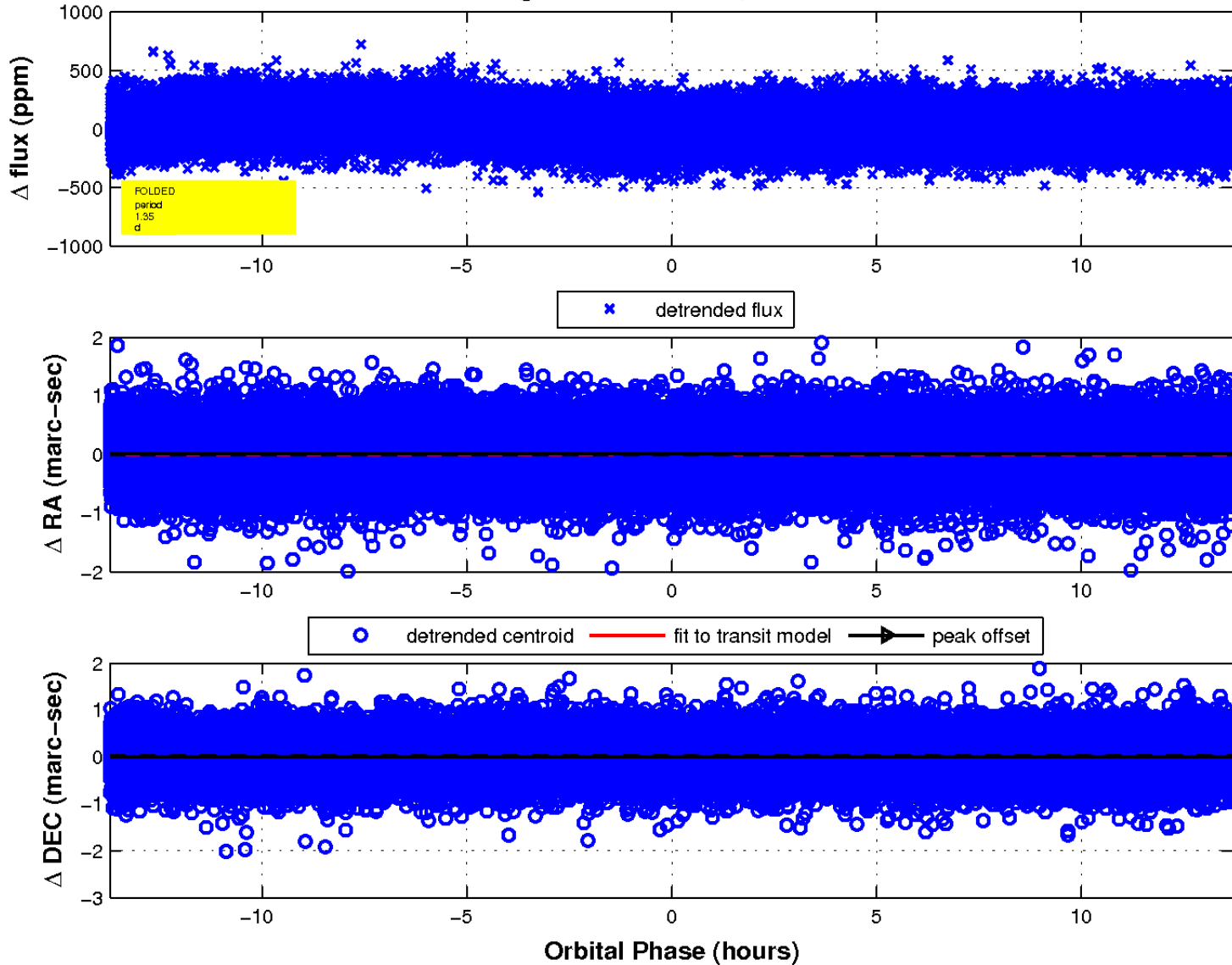
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

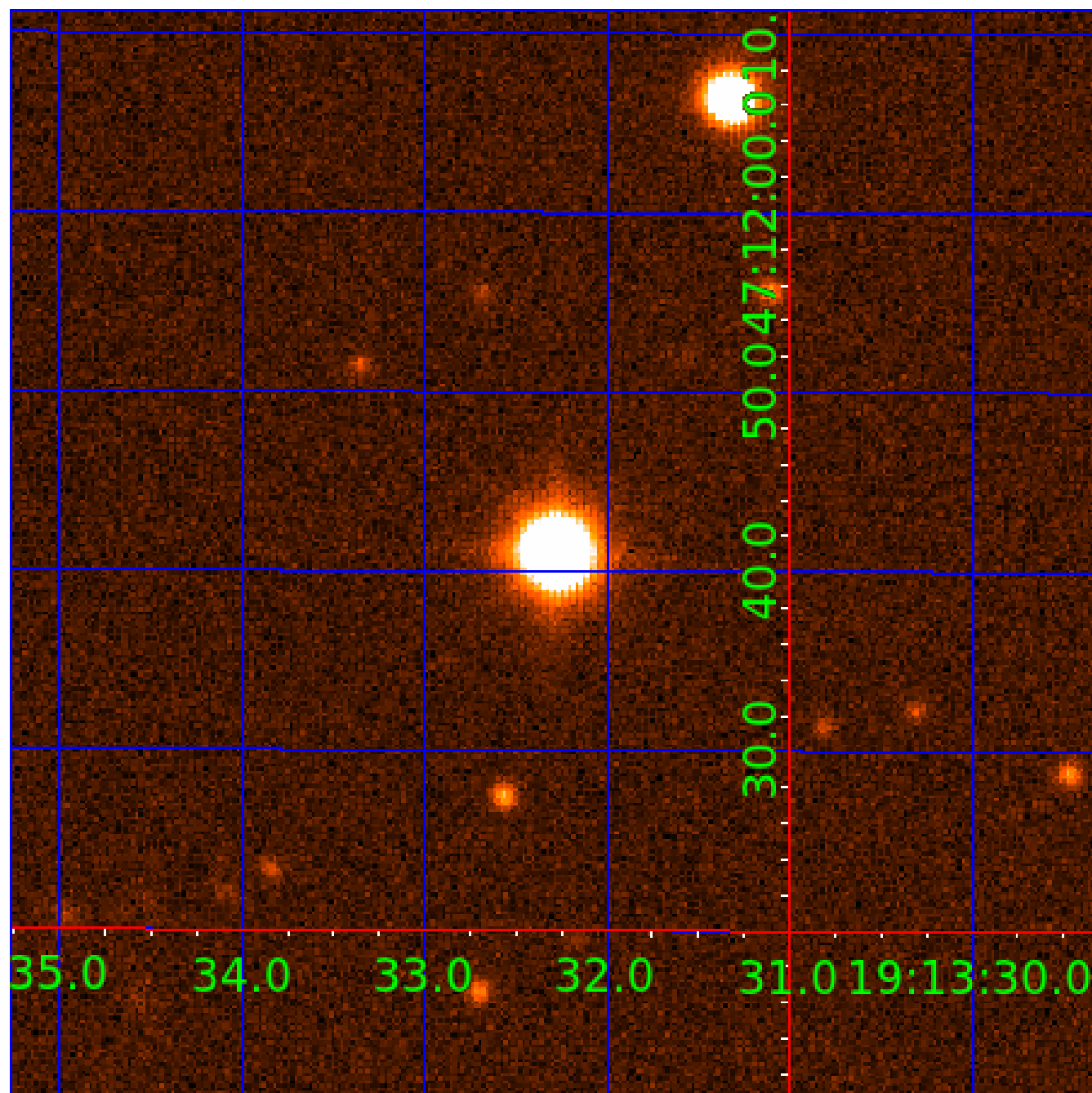


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 010132618

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})
010132618-01	OBS	No	1.347865	132.563322	76.7	5.000	10.7	-1.0	1.80	6590	1.59	7859.79
010132618-02	OBS	No	1.347925	131.848236	25.8	4.570	12.9	12.8	1.80	6590	1.25	7859.32
010132618-03	OBS	No	23.671065	132.540569	219.9	1.491	7.9	5.9	1.80	6590	2.96	172.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010132618-01	OBS	FP	0.00	1	0	1	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS—HALO_GHOST
010132618-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD
010132618-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_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.

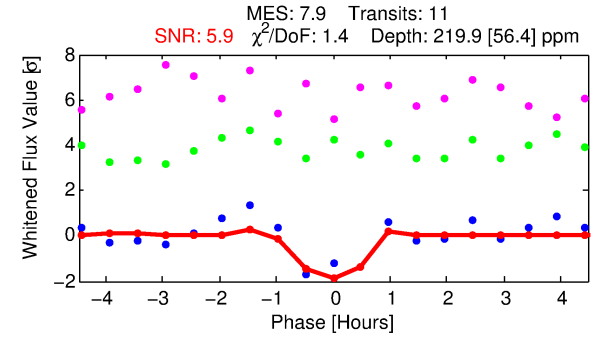
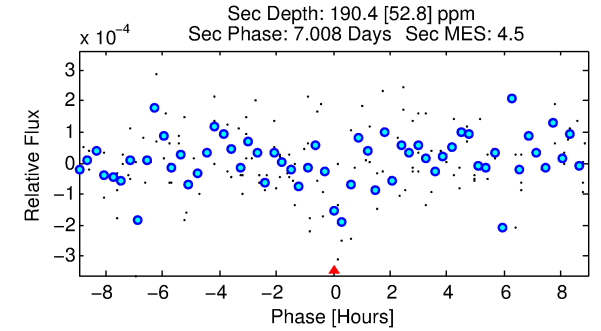
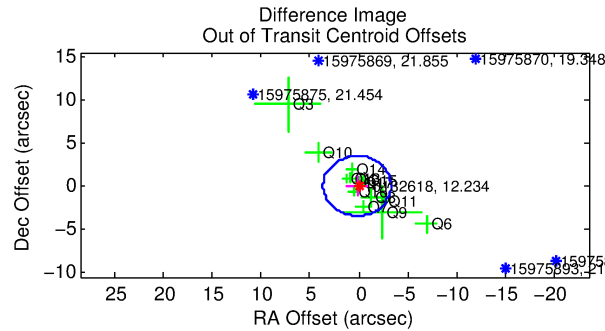
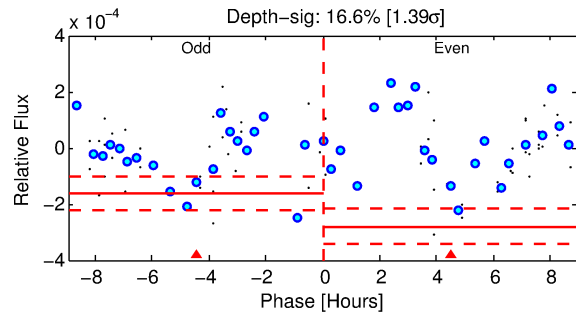
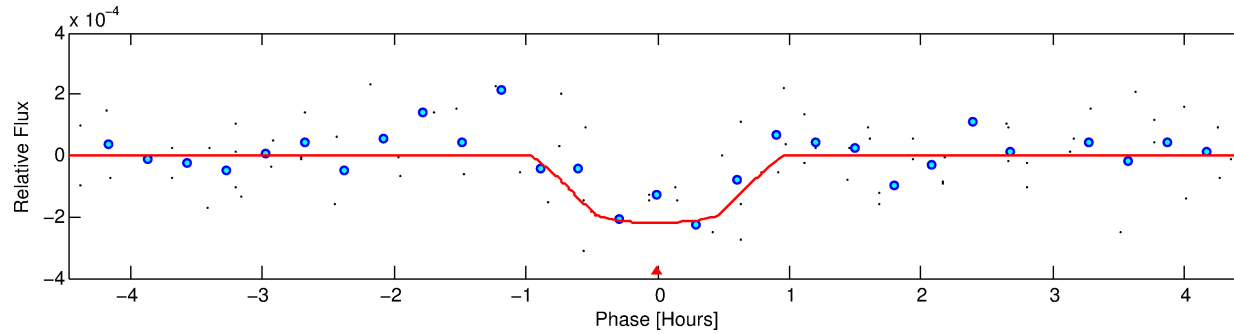
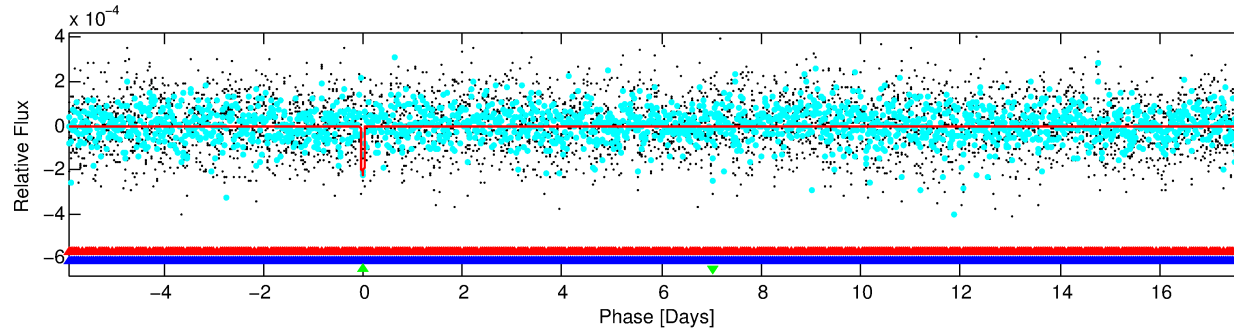
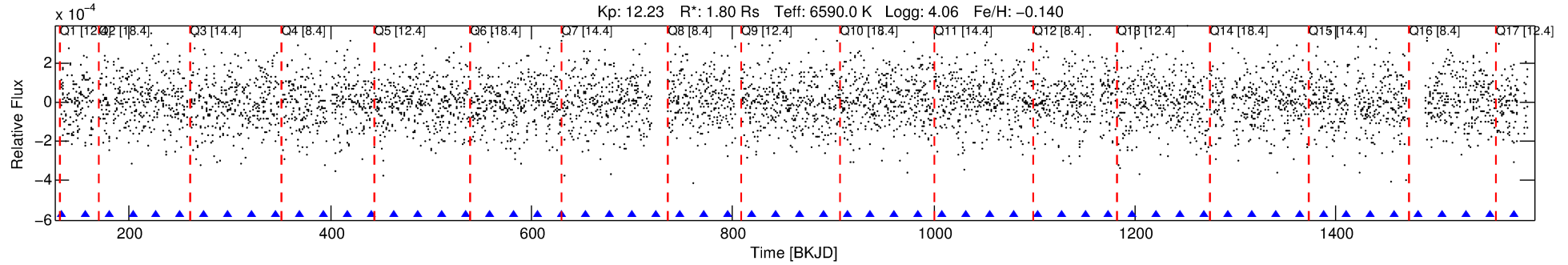
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010132618-03

No Significant Match Found

DV One-Page Summary

KIC: 10132618 Candidate: 3 of 3 Period: 23.671 d



DV Fit Results:

Period = 23.67106 [0.00026] d
Epoch = 132.5406 [0.0112] BKJD
Rp/R* = 0.0150 [0.0259]
a/R* = 76.10 [733.59]
b = 0.80 [4.43]
Seff = 172.18 [83.83]
Teq = 924 [112] K
Rp = 2.96 [5.18] Re
a = 0.1785 [0.0538] AU
Ag = 381.49 [1327.72] [0.29 σ]
Teffp = 6312 [5448] K [0.99 σ]

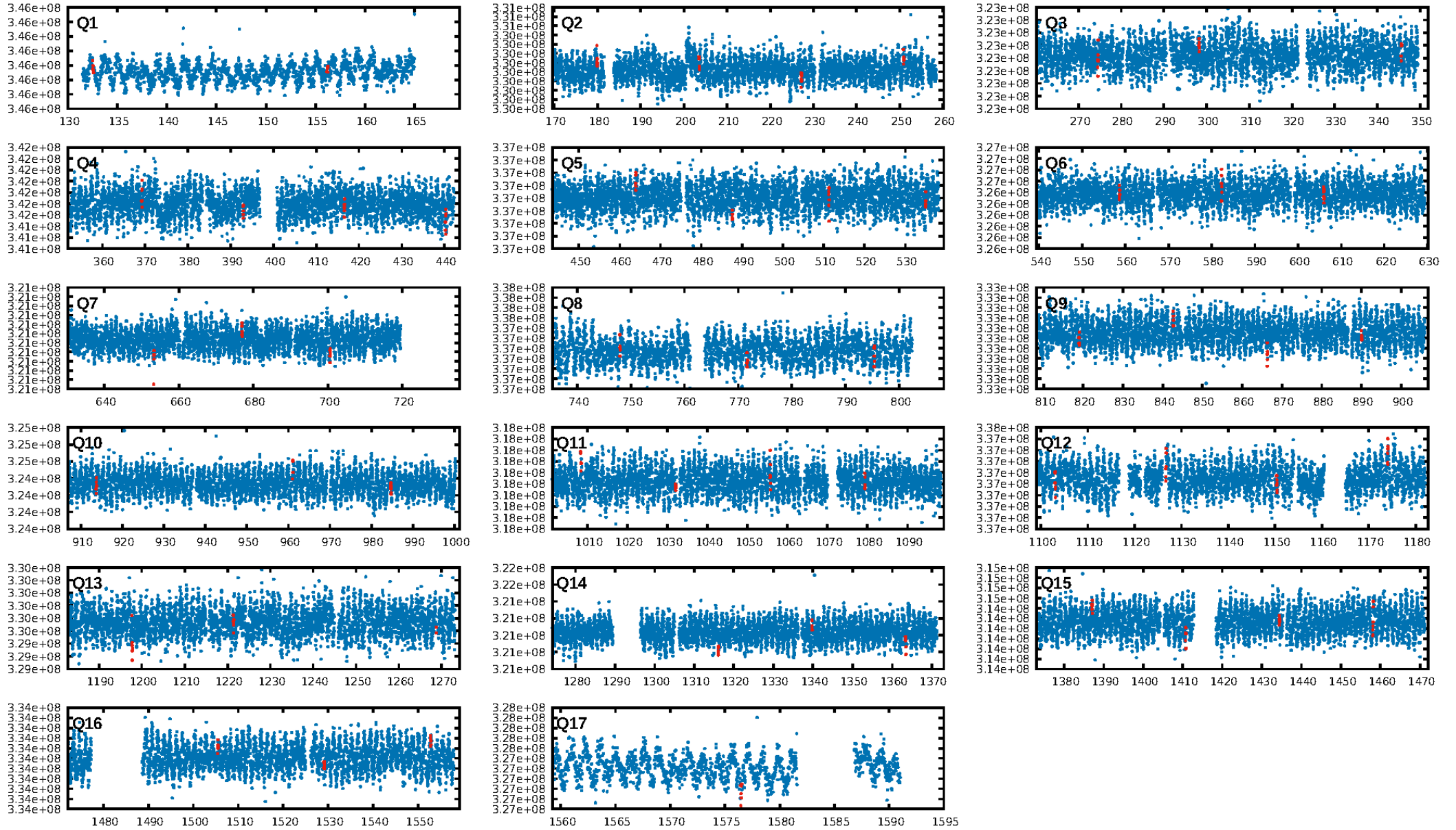
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [111.46 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 3.7%
ModelChiSquareGof-sig: 98.1%
Bootstrap-pfa: 5.57e-13
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.658
Centroid-sig: 4.0%
Centroid-so: 0.643 arcsec [1.78 σ]
OotOffset-rm: 0.207 arcsec [0.18 σ]
KicOffset-rm: 0.253 arcsec [0.20 σ]
OotOffset-st: 3/4/3/3 [13]
KicOffset-st: 3/4/3/3 [13]
DiffImageQuality-fgm: 0.54 [7/13]
DiffImageOverlap-fno: 0.18 [3/17]

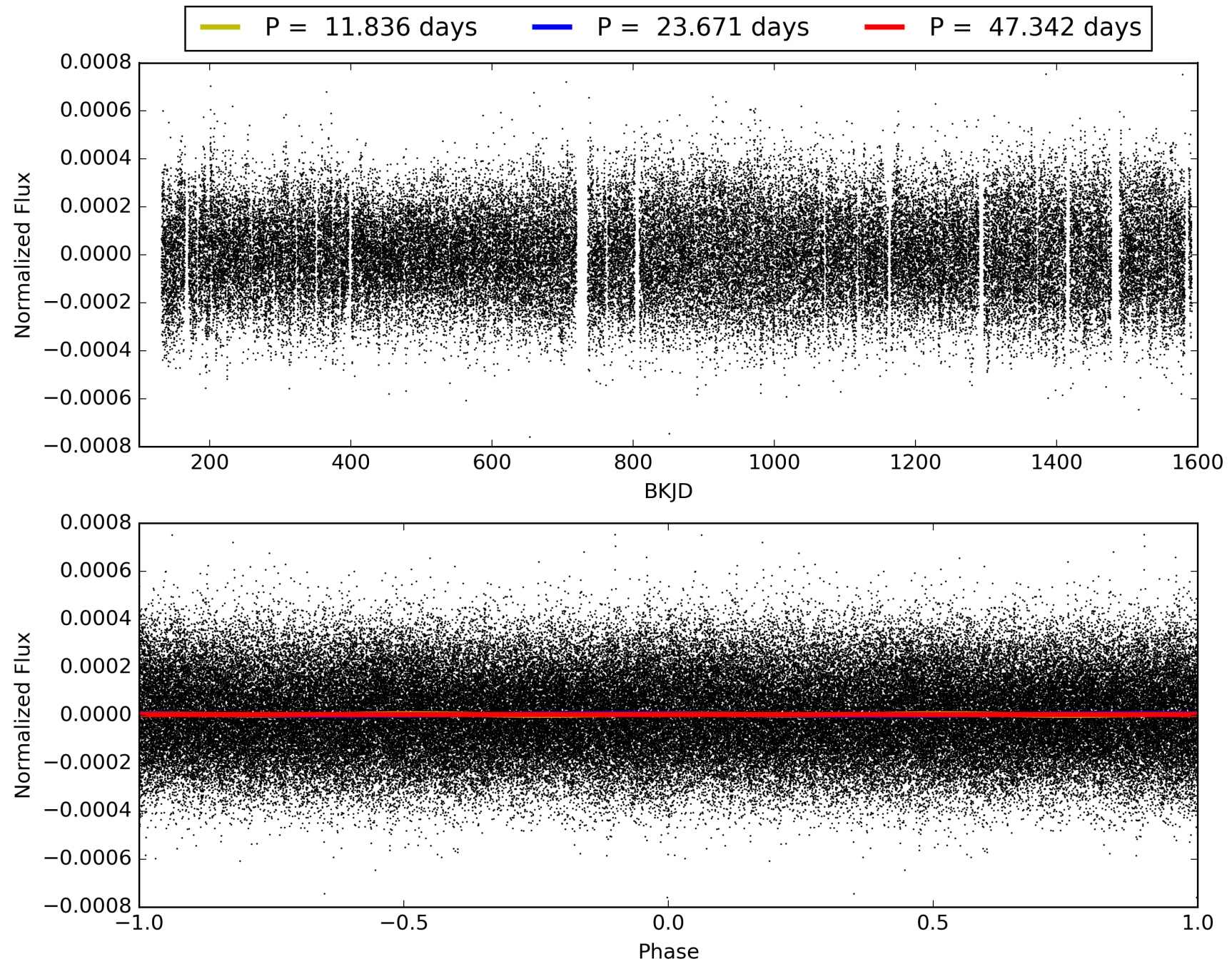
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:43:35 Z

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

TCE 010132618-03, PDC Light Curves

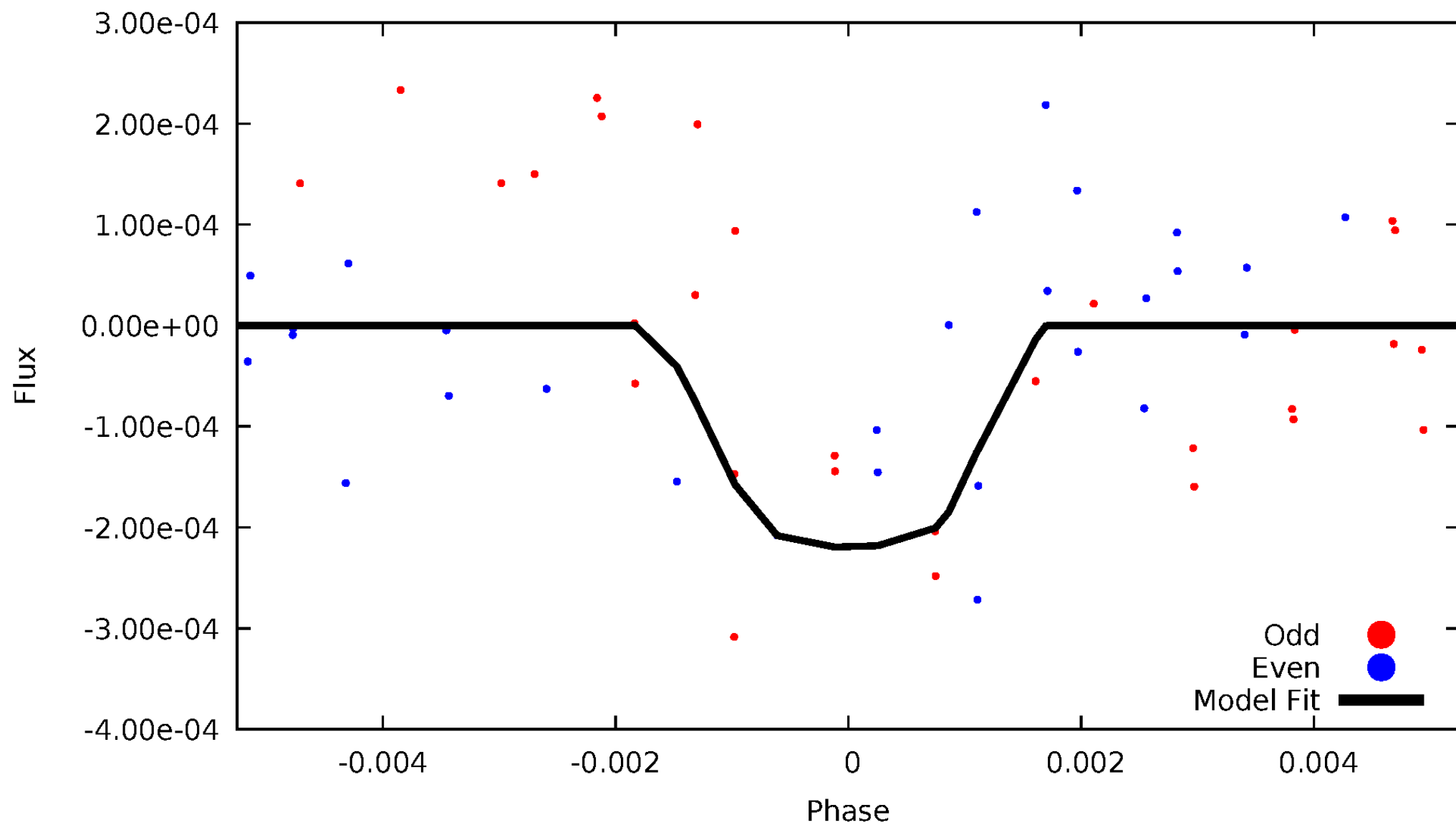


TCE 010132618-03



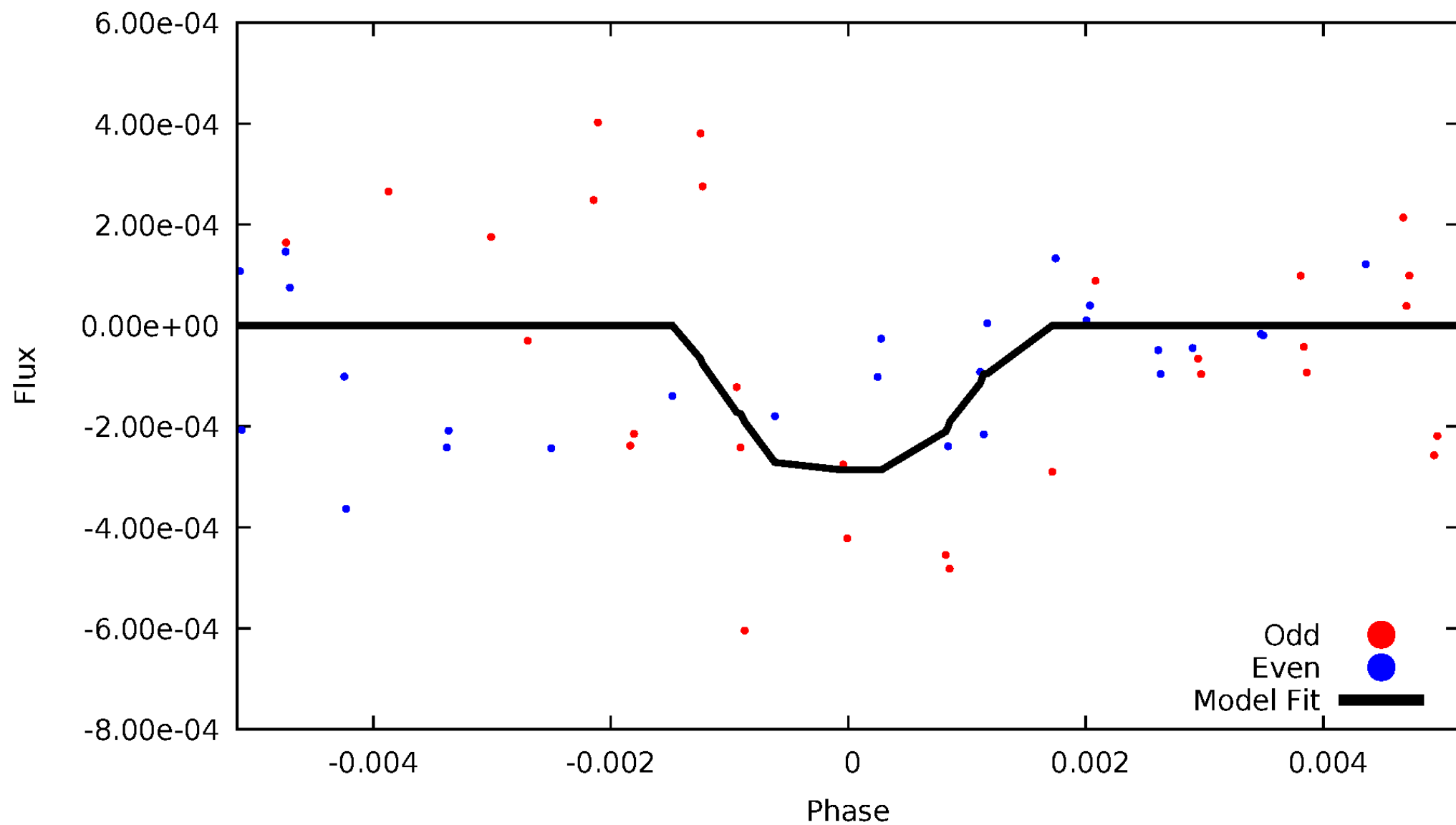
DV Odd/Even

TCE 010132618-03

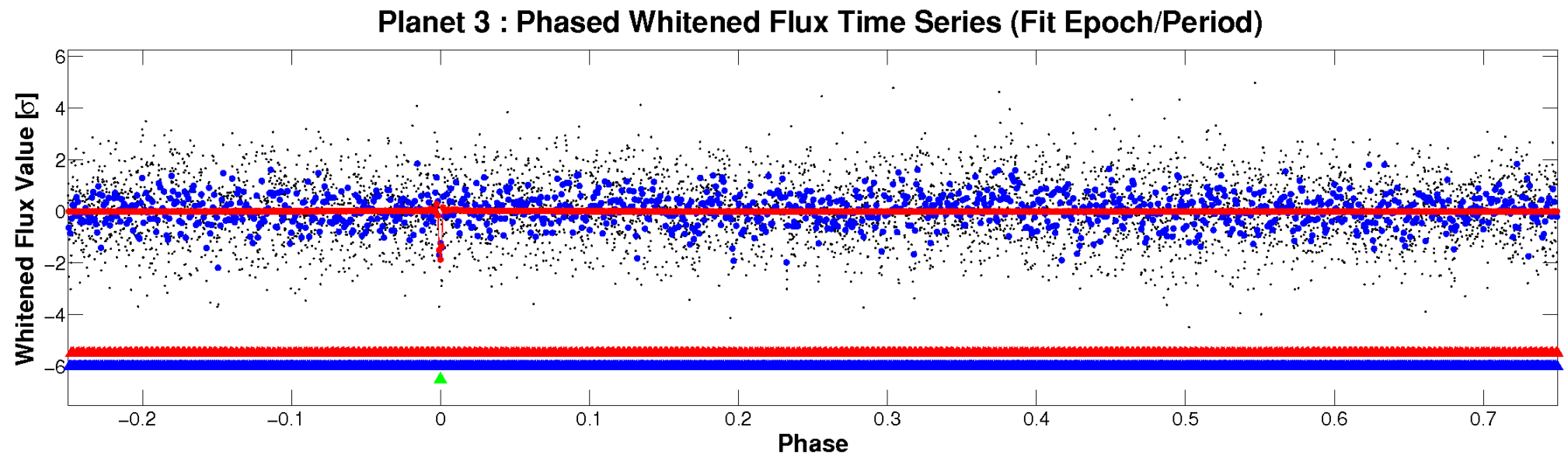
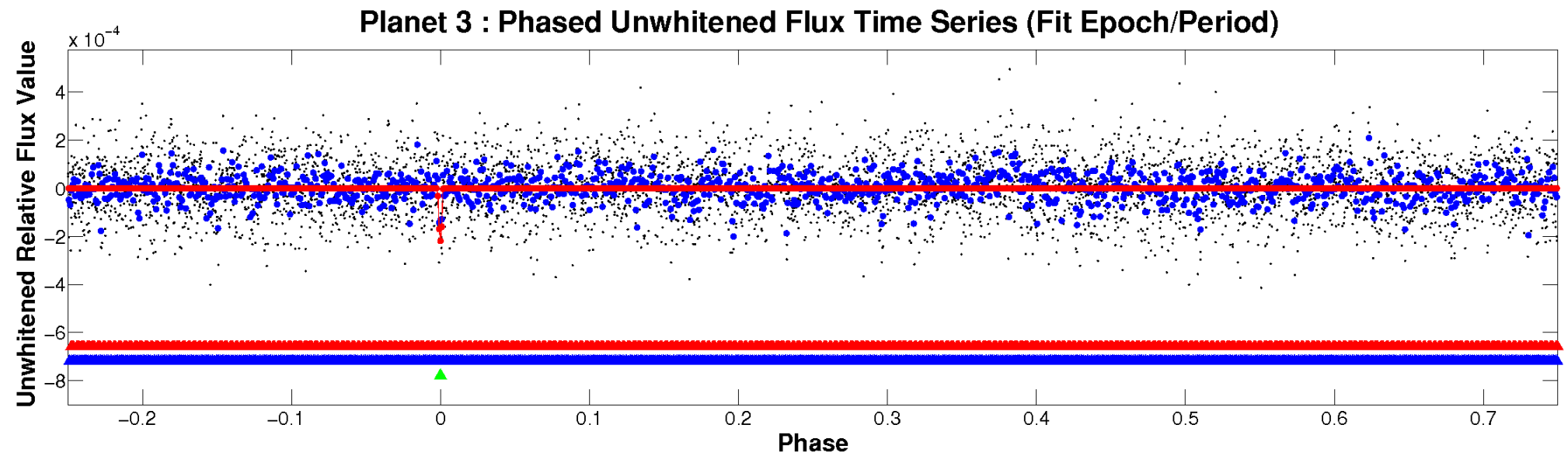


ALT Odd/Even

TCE 010132618-03

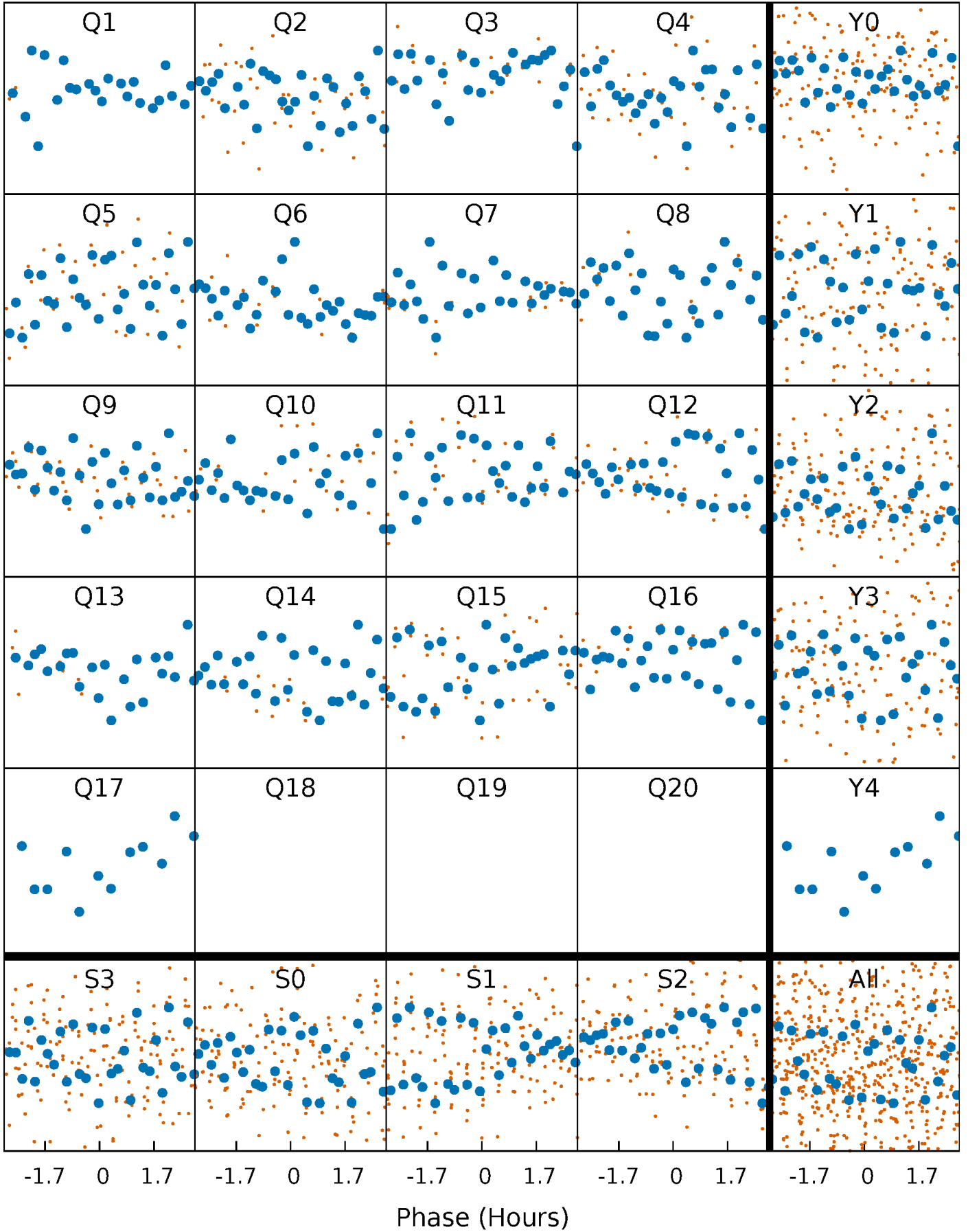


Non-Whitened Vs. Whitened Light Curve



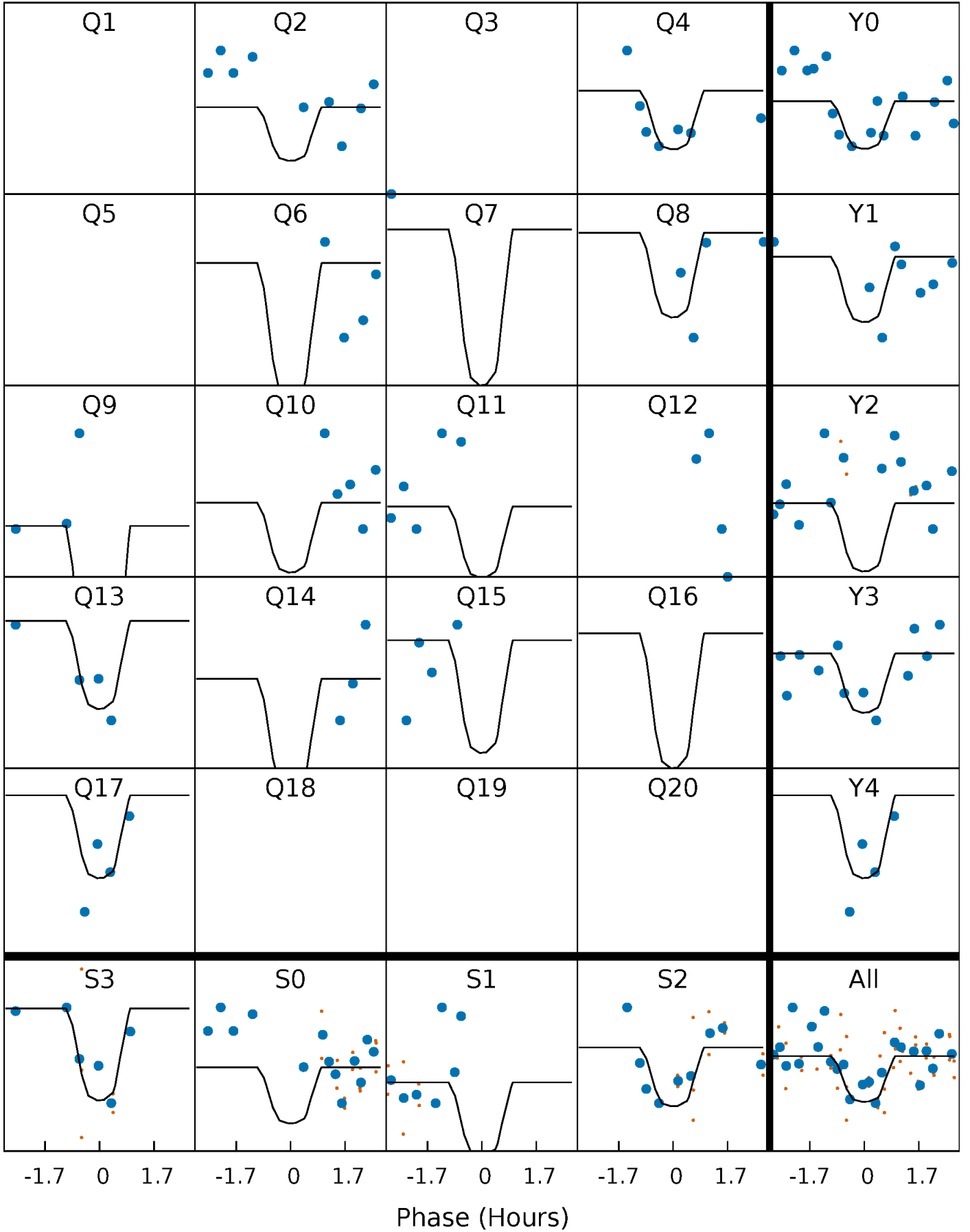
PDC Quarter-Phased Transit Curves

TCE 010132618-03 P= 23.671065 Days $T_0=132.540569$ (BKJD)



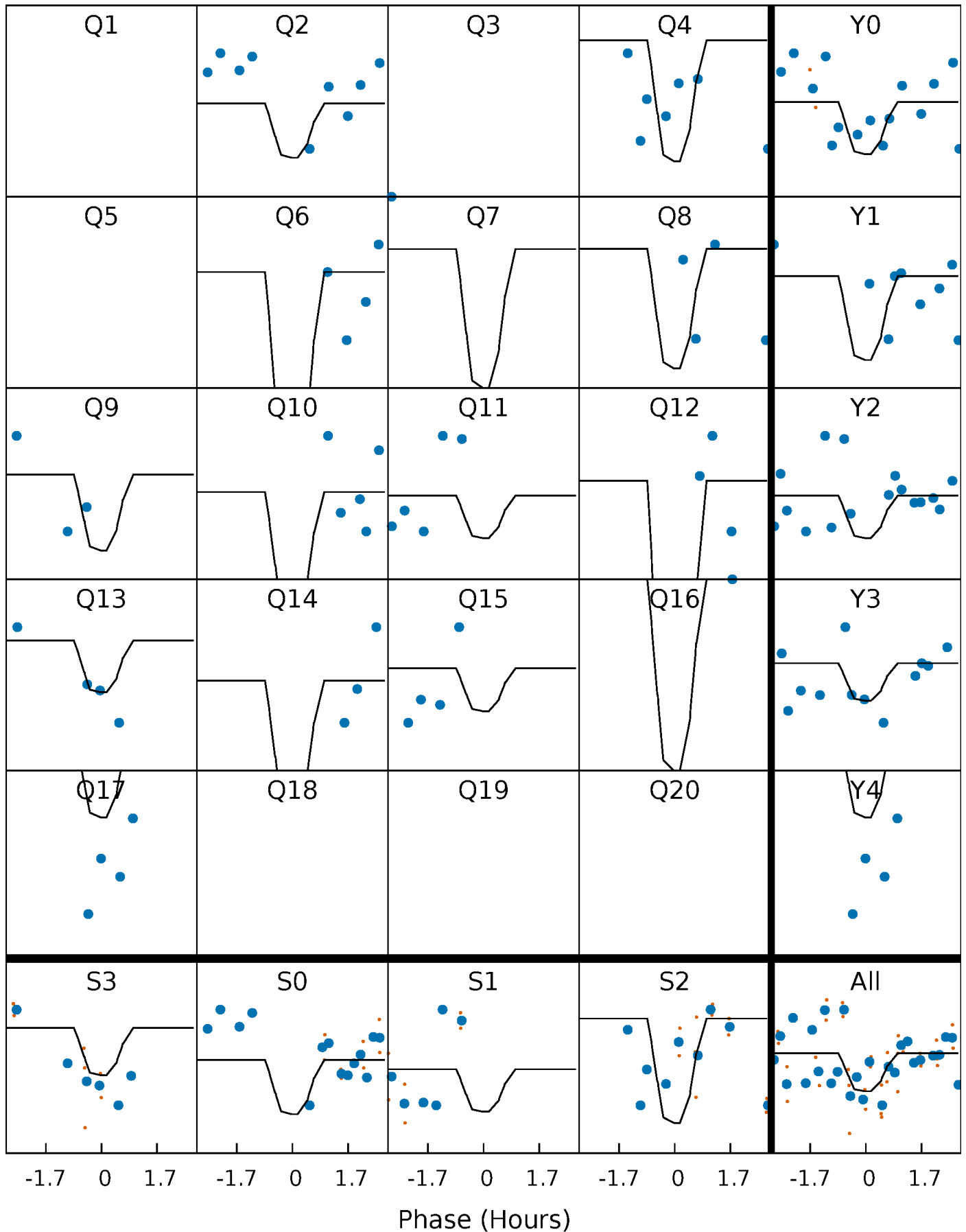
DV Quarter-Phased Transit Curves

TCE 010132618-03 P= 23.671065 Days $T_0=132.540569$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

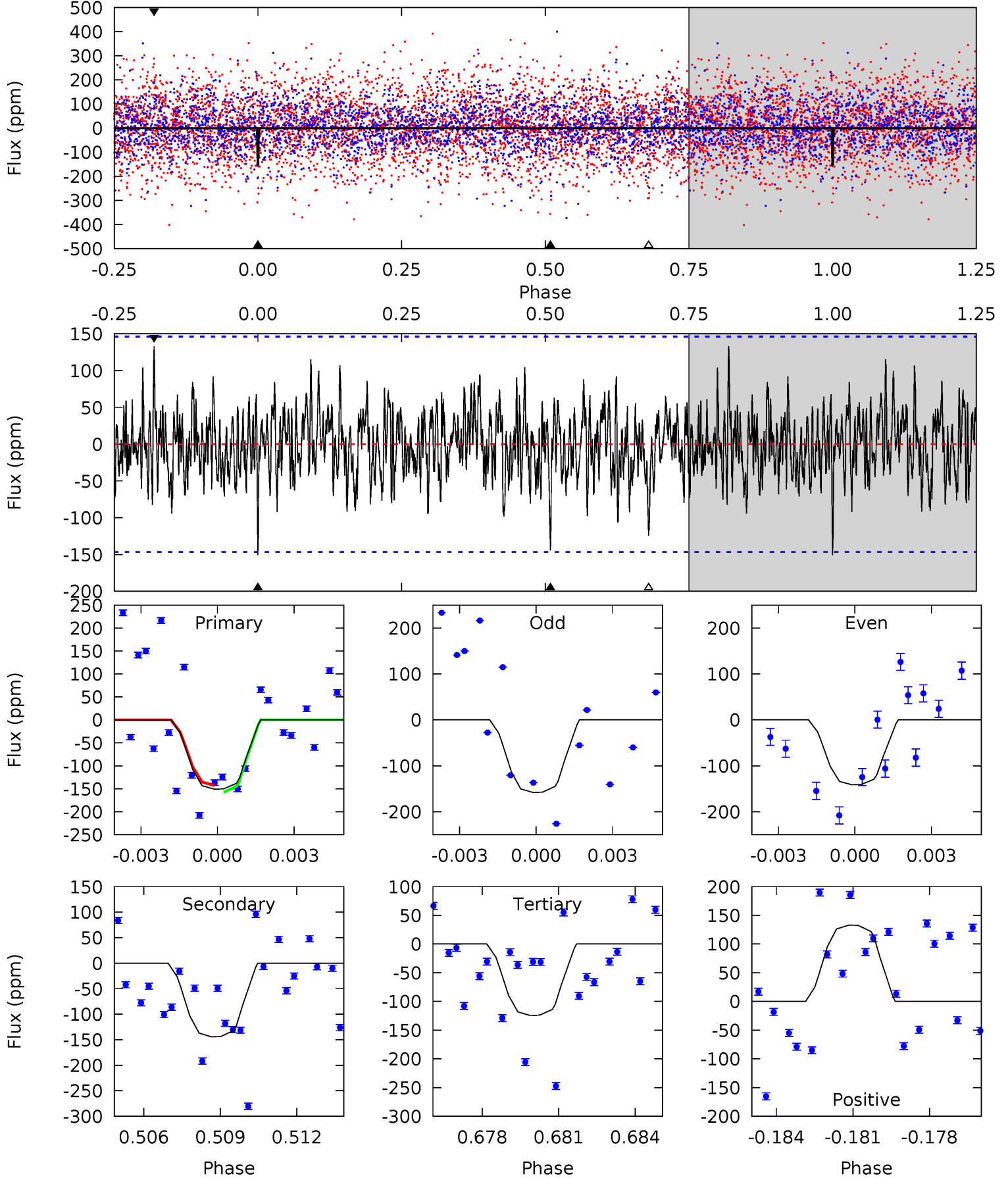
TCE 010132618-03 P= 23.671010 Days $T_0=132.541393$ (BKJD)



DV Model-Shift Uniqueness Test

010132618-03, P = 23.671065 Days, E = 108.869504 Days

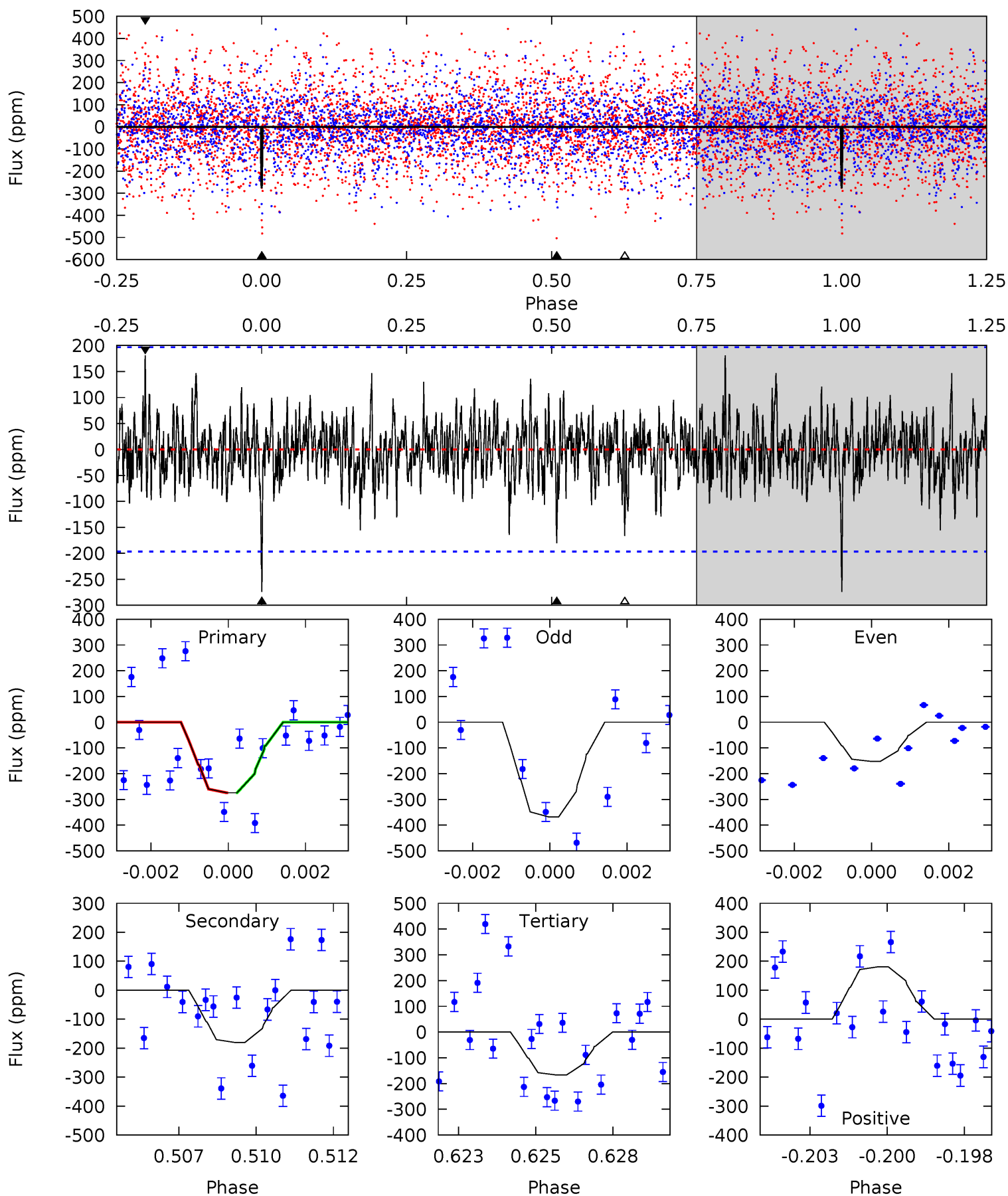
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.42	5.18	4.47	4.78	5.25	2.97	1.37	0.95	0.64	0.71	0.41	0.30	1.02	0.47	0.26



Alt Model-Shift Uniqueness Test

010132618-03, P = 23.671010 Days, E = 108.870383 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.38	4.85	4.48	4.87	5.29	3.03	1.22	2.89	2.51	0.37	-0.02	2.92	1.14	0.40	0.00



Stellar Parameters For KIC 010132618

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6590^{+181}_{-250}	$4.058^{+0.264}_{-0.176}$	$-0.140^{+0.250}_{-0.300}$	$1.802^{+0.494}_{-0.603}$	$1.361^{+0.182}_{-0.273}$	$0.328^{+0.548}_{-0.156}$
	+3%/-4%	+7%/-4%	+179%/-214%	+27%/-33%	+13%/-20%	+167%/-48%
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 010132618-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-144 ± 28	$4.94^{+4.13}_{-3.26}$	1291^{+95}_{-113}	4612^{+3120}_{-847}	101^{+708}_{-69}
Alt.	-180 ± 37	$5.05^{+4.29}_{-3.36}$	1278^{+110}_{-109}	4812^{+3570}_{-1028}	125^{+972}_{-92}

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 $A_{obs} \gg 1.0$

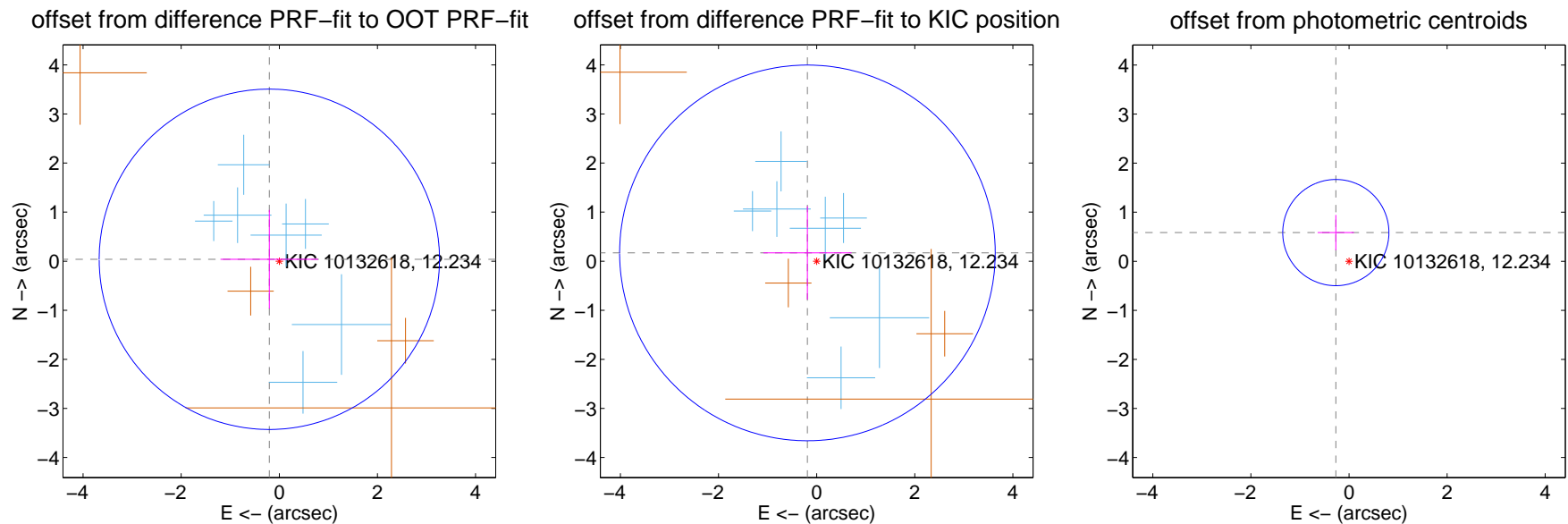
DV Centroid Data

Supplemental centroid analysis for 010132618-03. Kepler magnitude: 12.23. Transit SNR 5.89

There are 7 quarters with good PRF difference image offsets

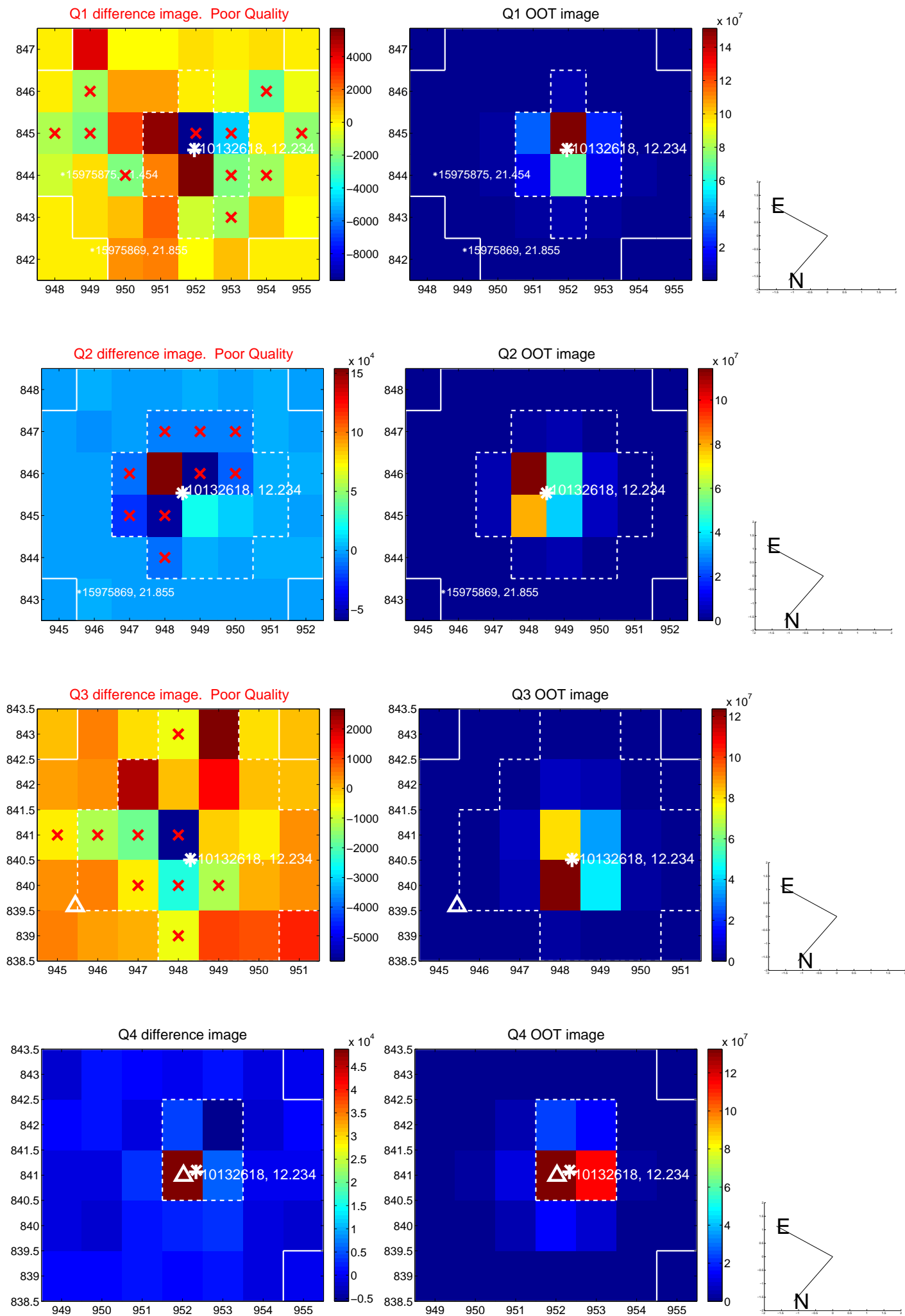
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.207 ± 1.156	0.18	0.203 ± 0.996	0.039 ± 1.007
PRF-fit source offset from KIC position	0.253 ± 1.276	0.20	0.188 ± 0.899	0.169 ± 0.950
photometric centroid source offset	0.64 ± 0.36	1.78	0.27 ± 0.37	0.58 ± 0.36

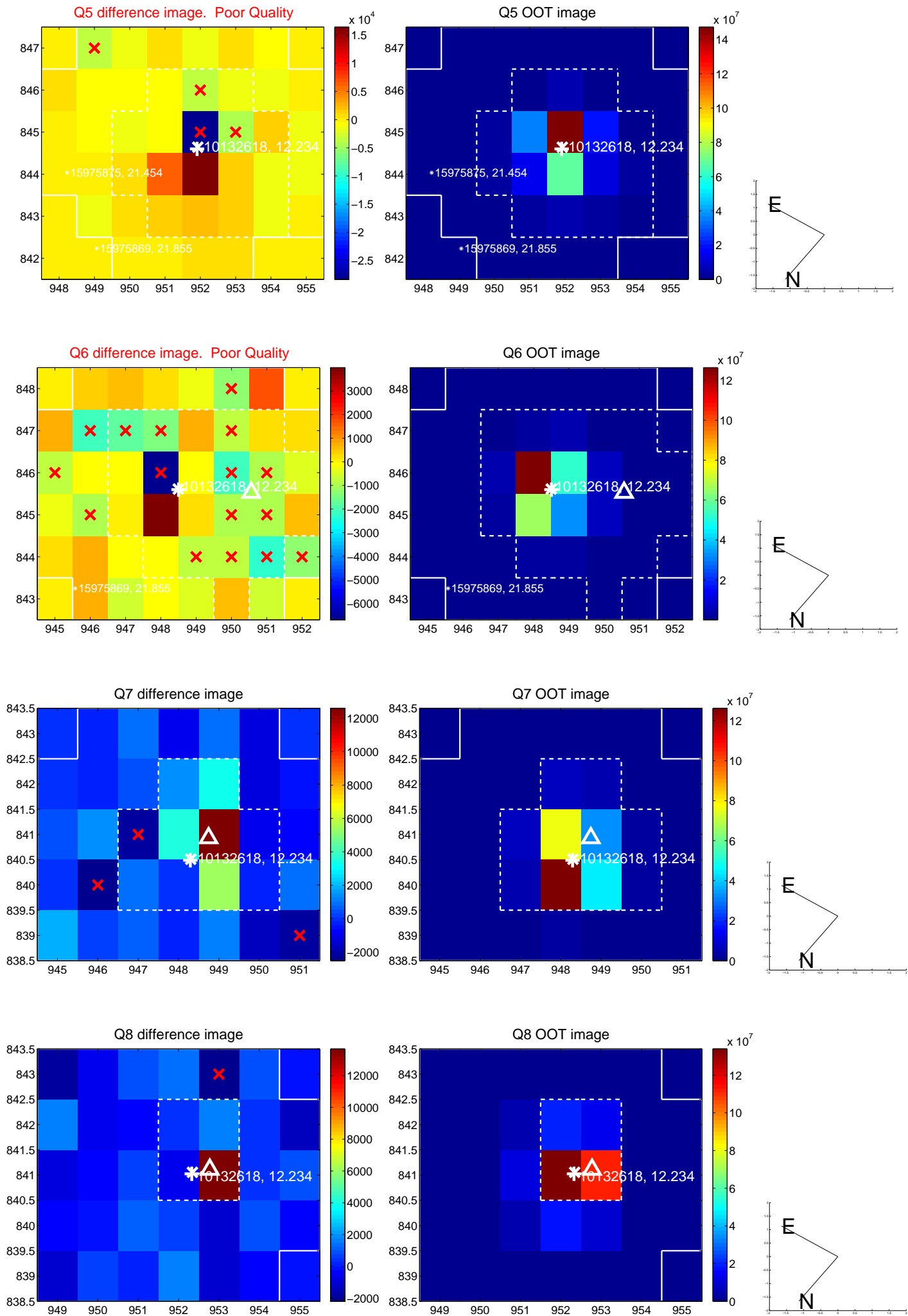


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

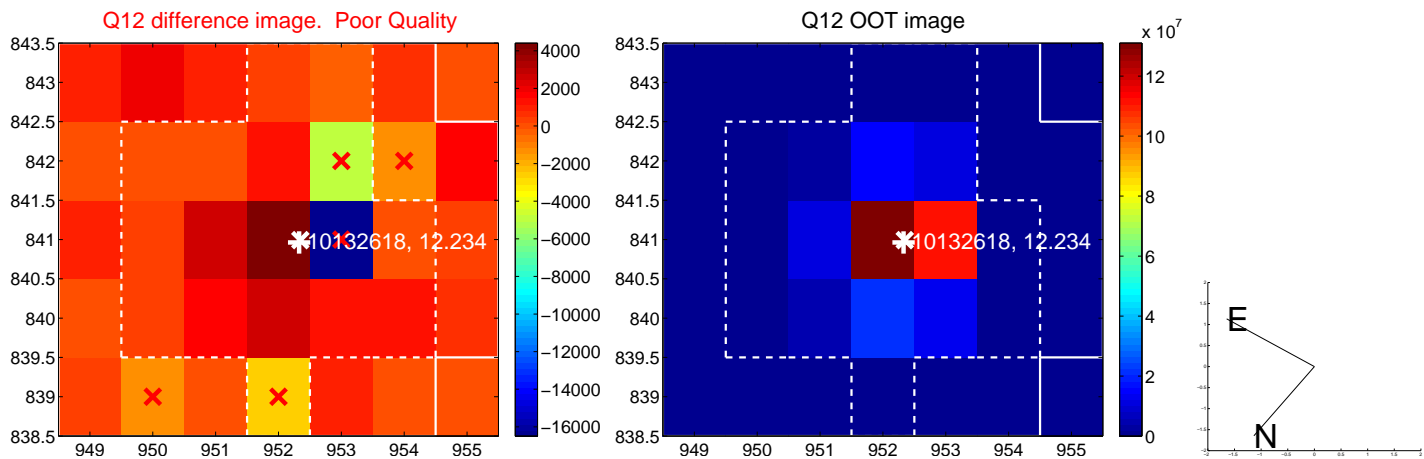
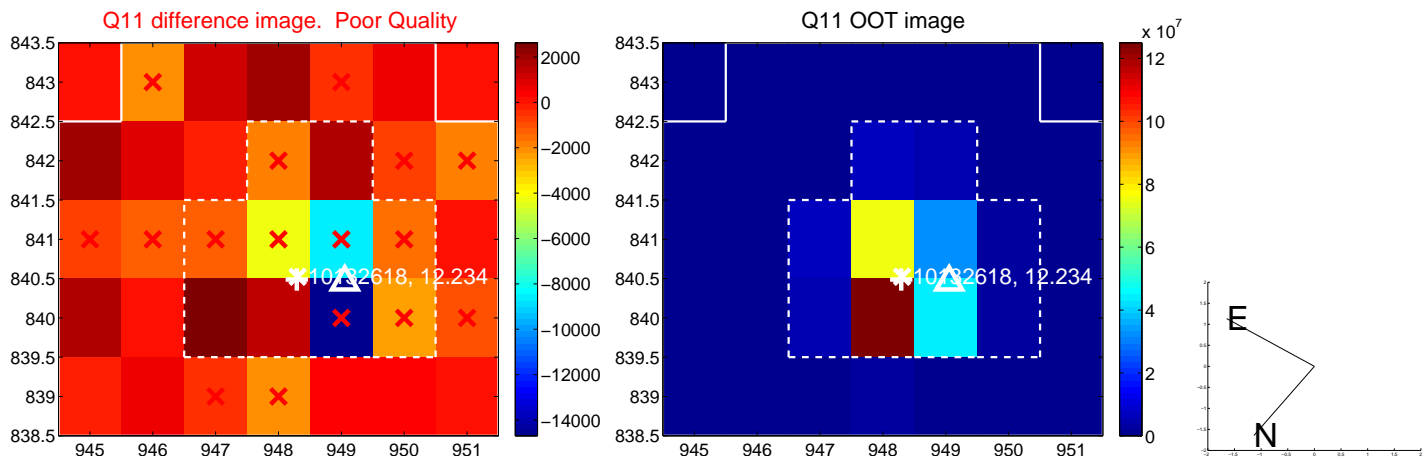
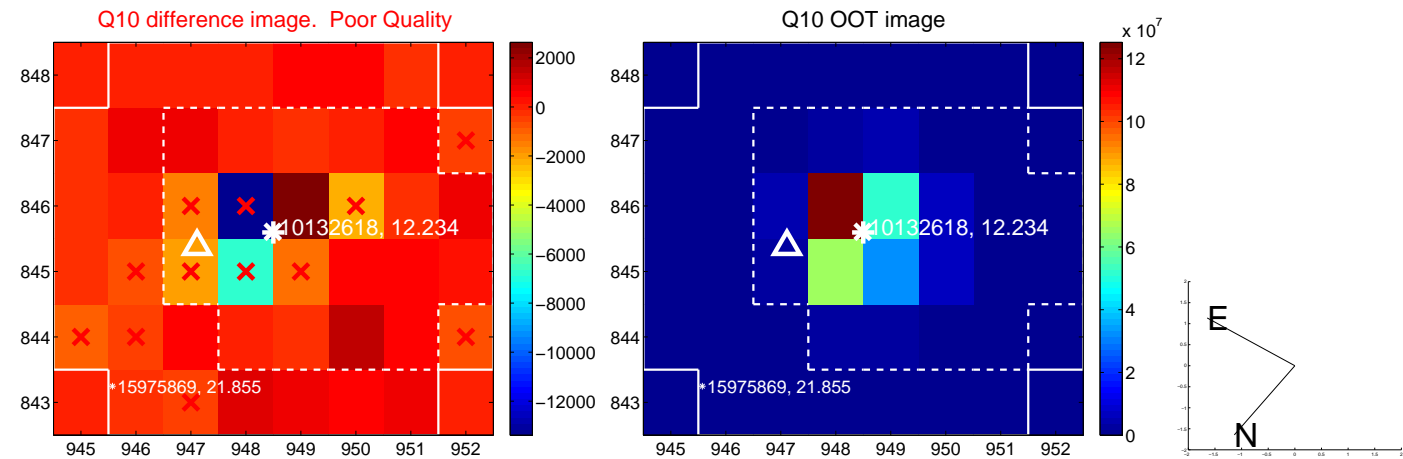
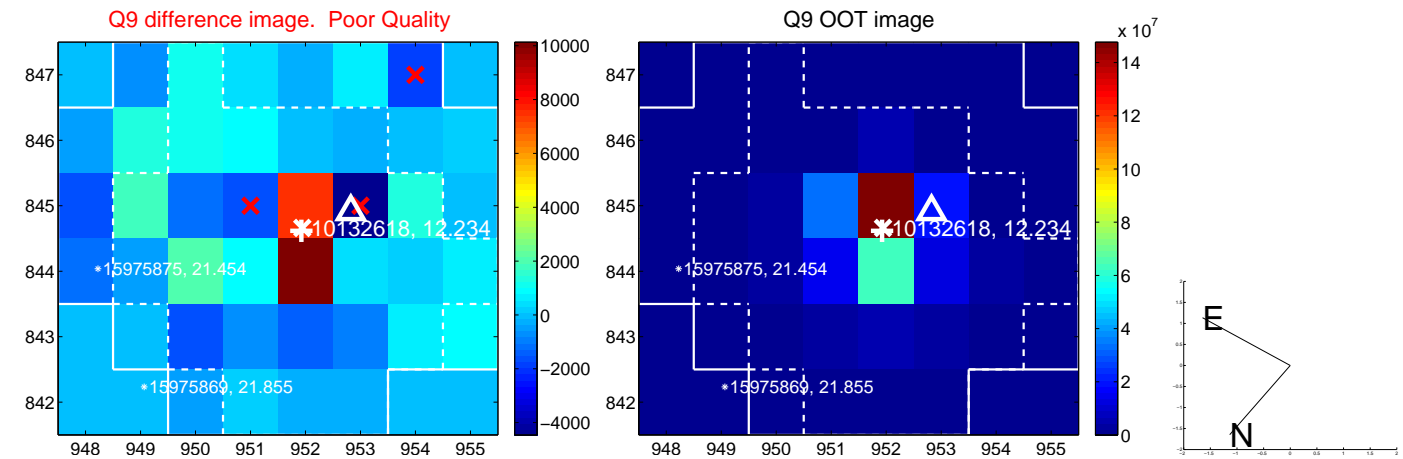
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



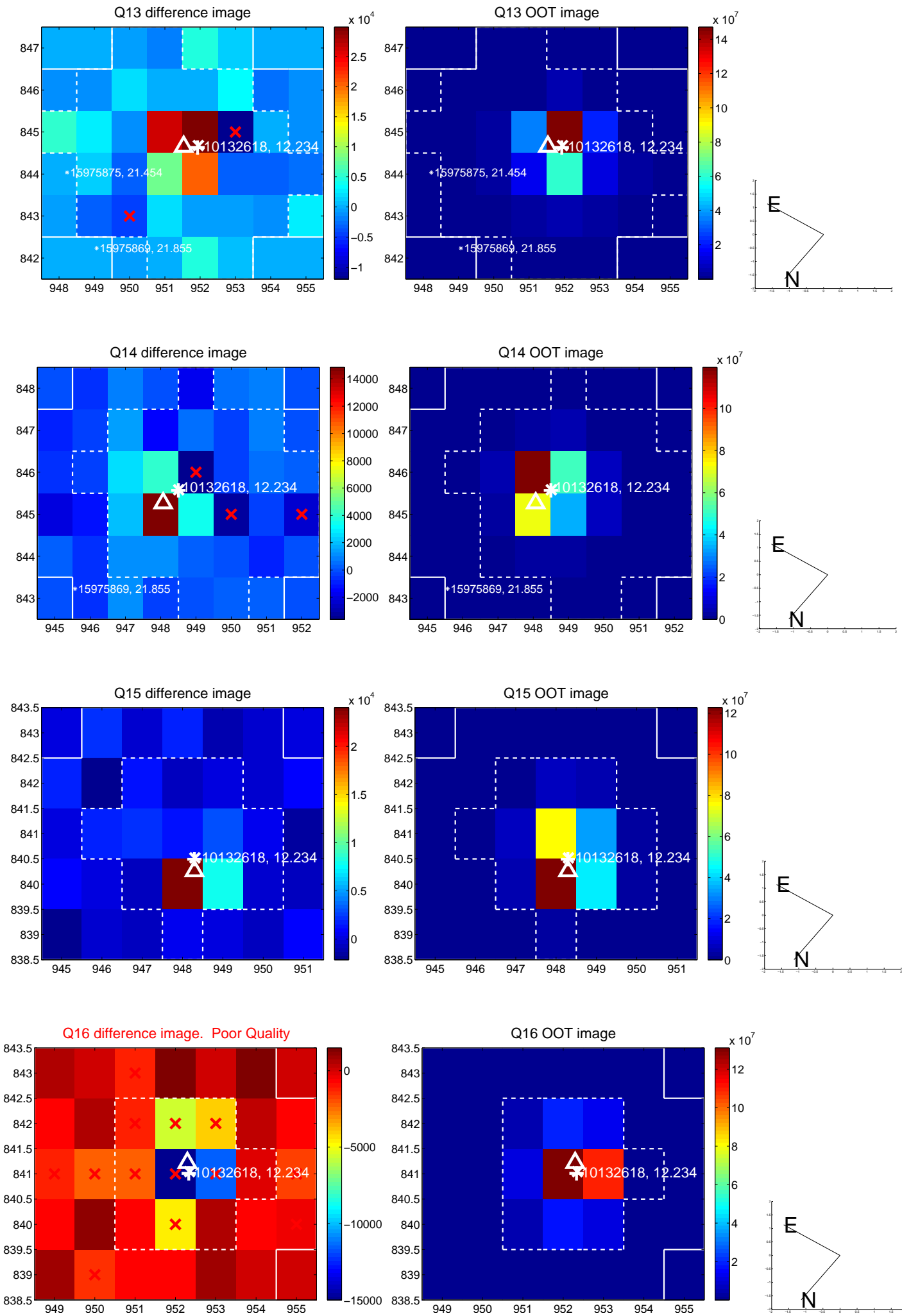
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



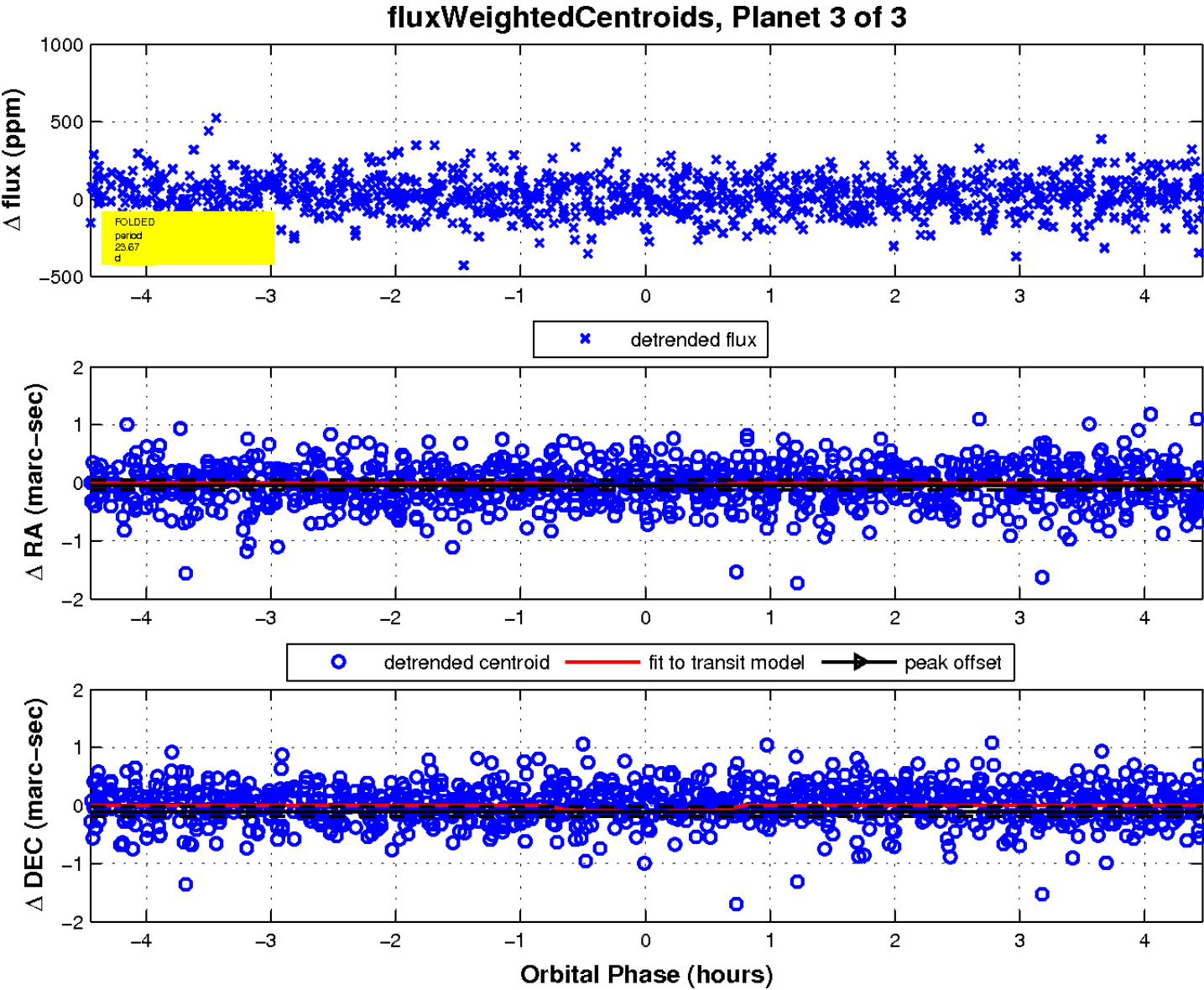
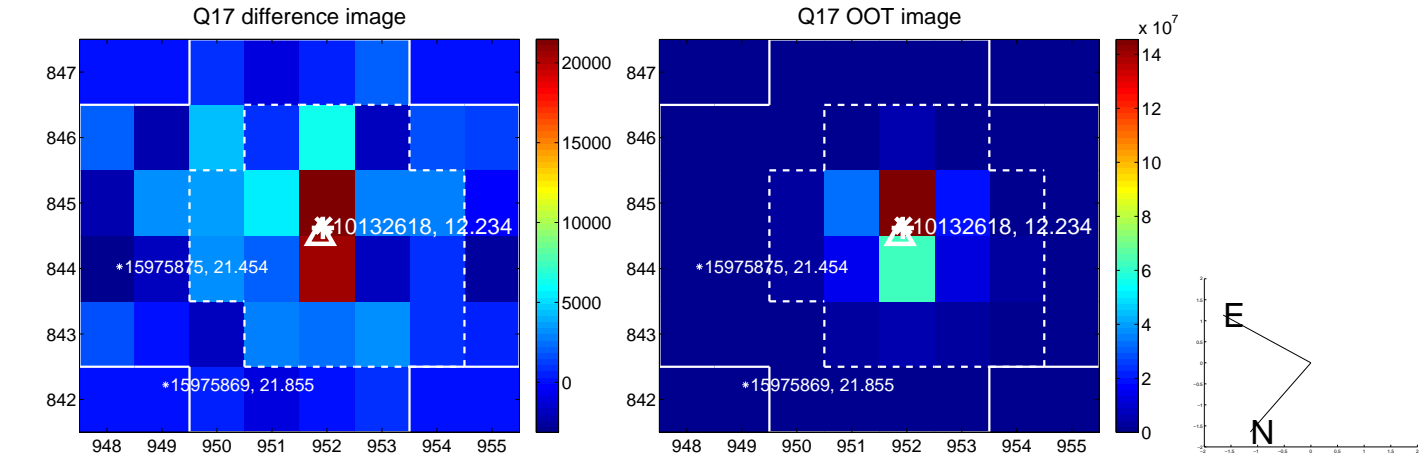
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

