

KIC 011723926

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})
011723926-01	OBS	No	1.069418	131.656827	221.6	2.500	9.6	-1.0	2.33	7272	3.52	22282.73
011723926-02	OBS	No	1.069263	132.088971	3.8	4.563	8.7	1.8	2.33	7272	0.54	22287.03
011723926-03	OBS	No	31.059001	146.526581	202.9	3.334	7.7	8.4	2.33	7272	5.80	249.60
011723926-04	OBS	No	29.257157	152.029734	193.1	1.457	7.7	7.8	2.33	7272	3.43	270.31
011723926-05	OBS	No	428.736511	460.885023	213.5	7.378	7.7	7.5	2.33	7272	3.92	7.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011723926-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS
011723926-02	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011723926-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT
011723926-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT
011723926-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

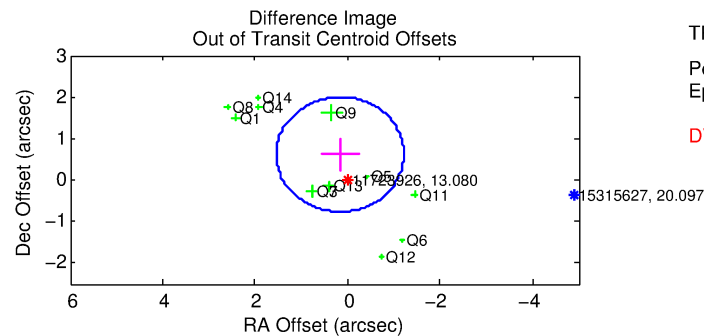
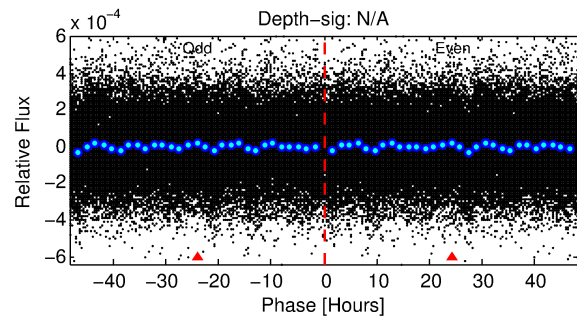
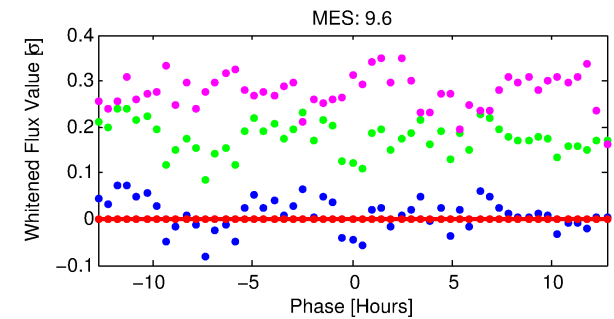
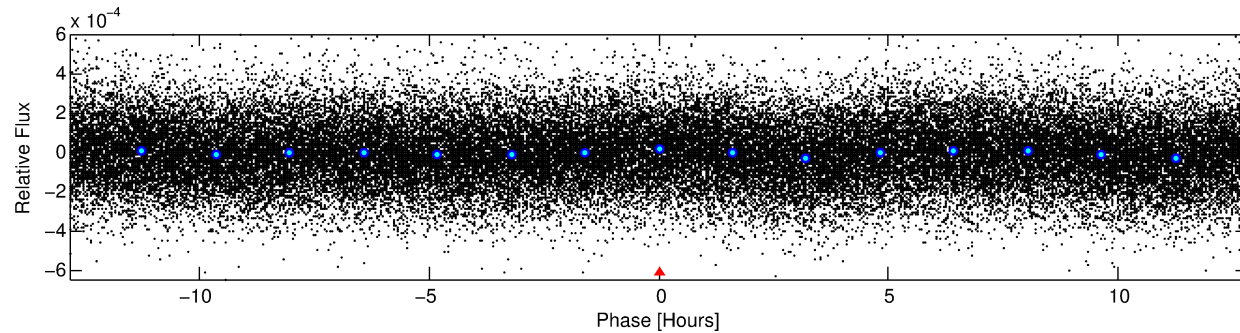
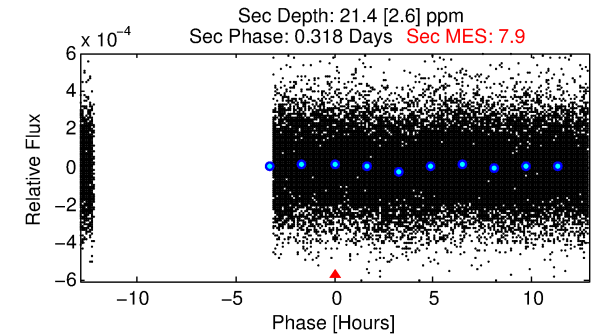
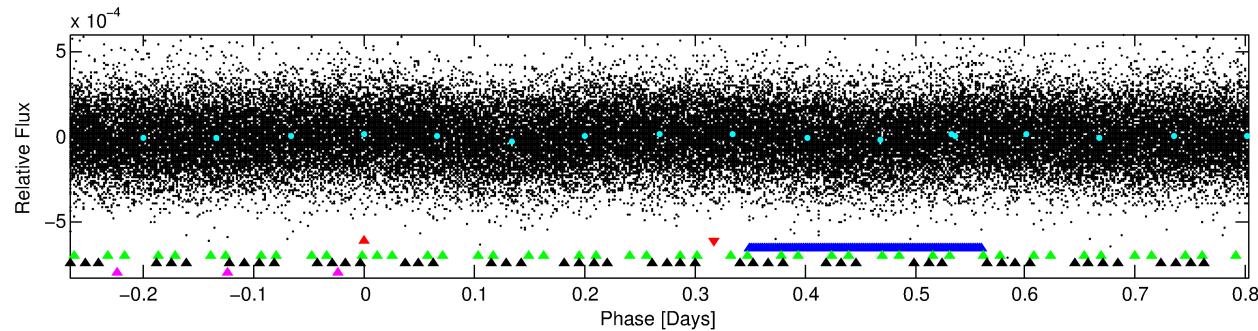
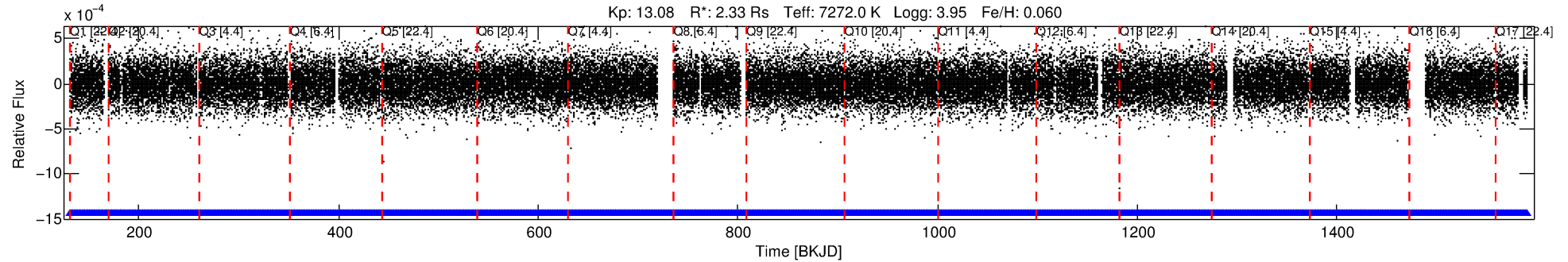
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011723926-01

No Significant Match Found

DV One-Page Summary

KIC: 11723926 Candidate: 1 of 5 Period: 1.069 d



TPS TCE Results:

Period = 1.06942 d
Epoch = 131.6568 BKJD

DV fit results are unavailable

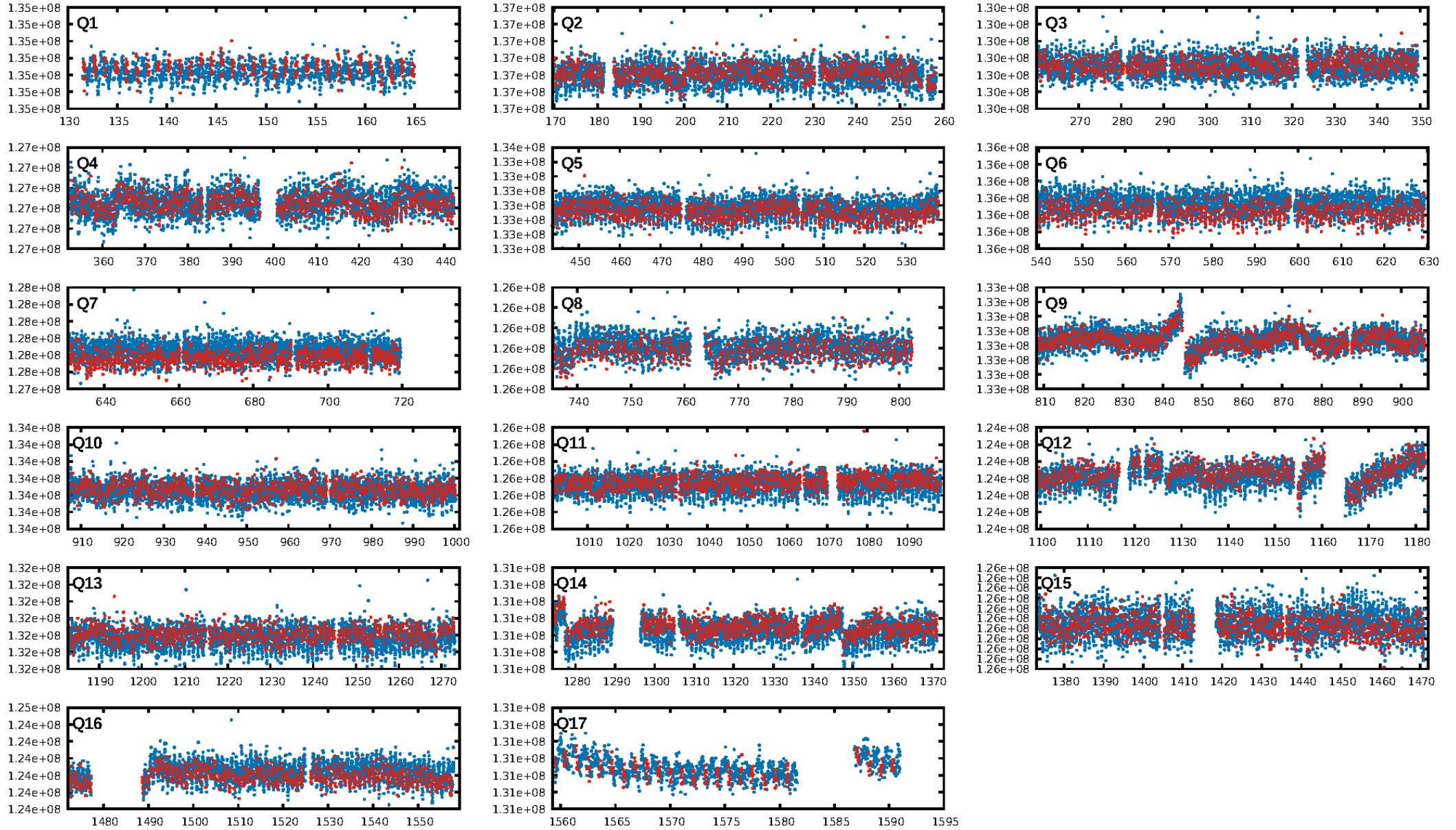
DV Diagnostic Results:

ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: 100.0% [233.79σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 7.87e-14
RollingBand-fgt: 1.00 [1208/1208]
GhostDiagnostic-chr: 5.28
Centroid-sig: 63.3%
Centroid-so: 0.174 arcsec [0.43σ]
OotOffset-rm: 0.643 arcsec [1.40σ]
KicOffset-rm: 0.609 arcsec [1.59σ]
OotOffset-st: 2/3/3/4 [12]
KicOffset-st: 2/3/3/4 [12]
DiffImageQuality-fgm: 0.42 [5/12]
DiffImageOverlap-fno: 0.00 [0/17]

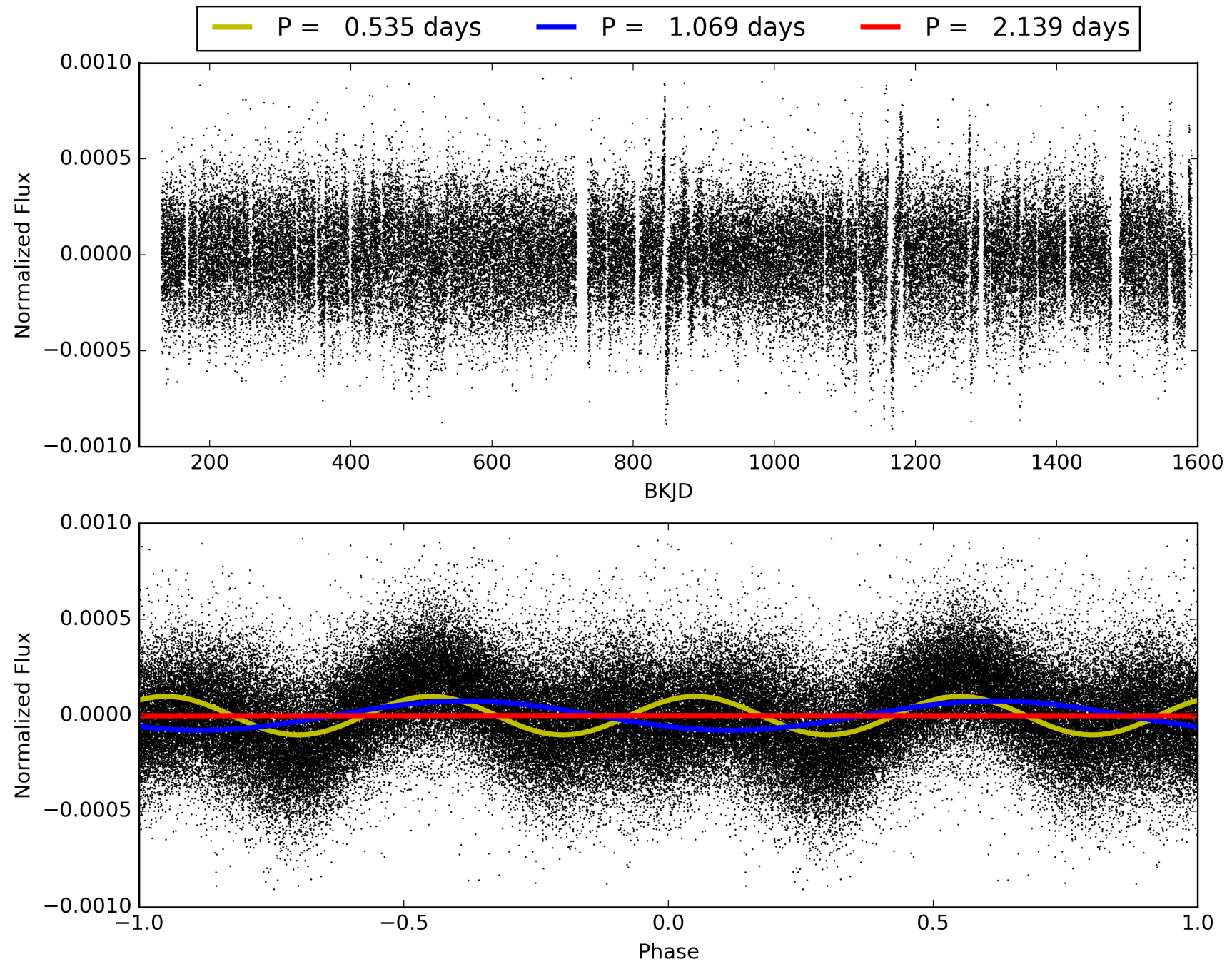
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:19:17 Z

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

TCE 011723926-01, PDC Light Curves

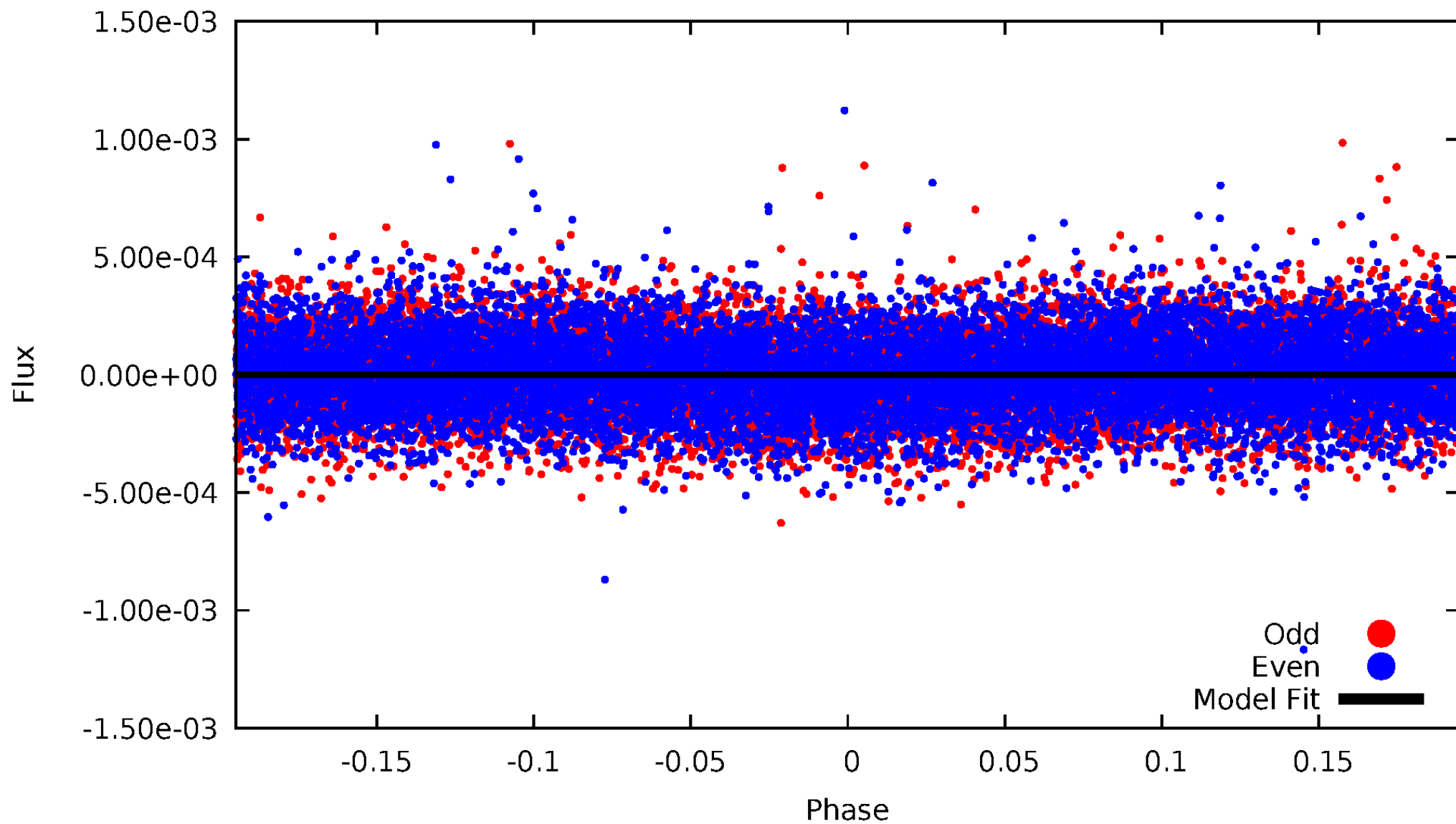


TCE 011723926-01



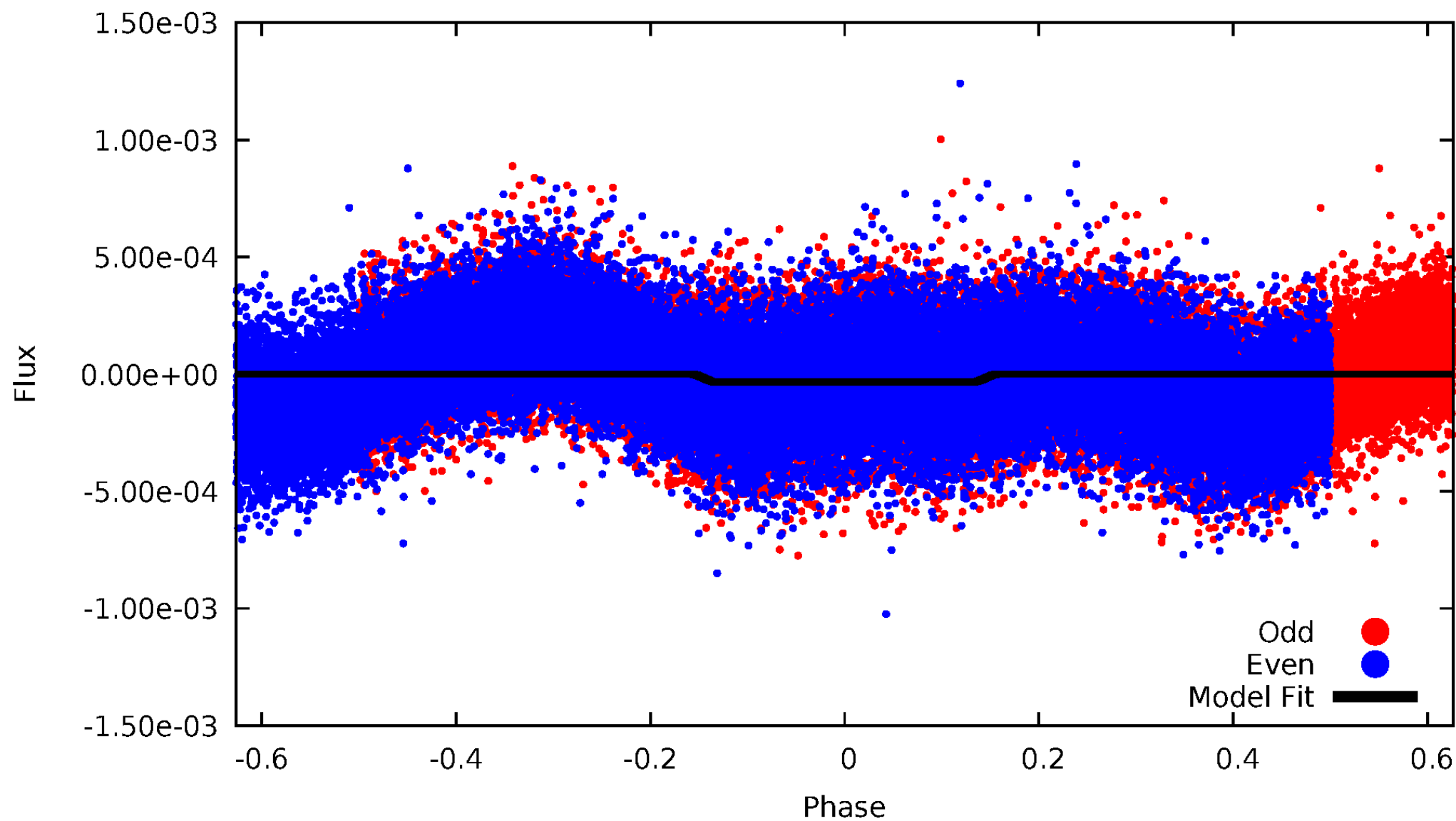
DV Odd/Even

TCE 011723926-01

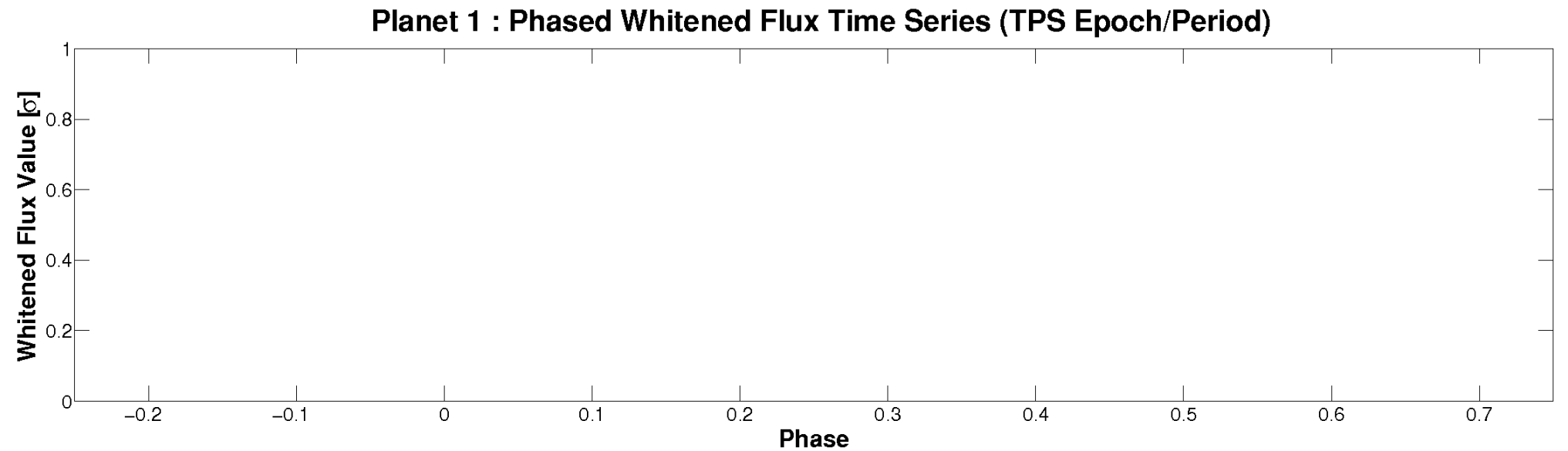
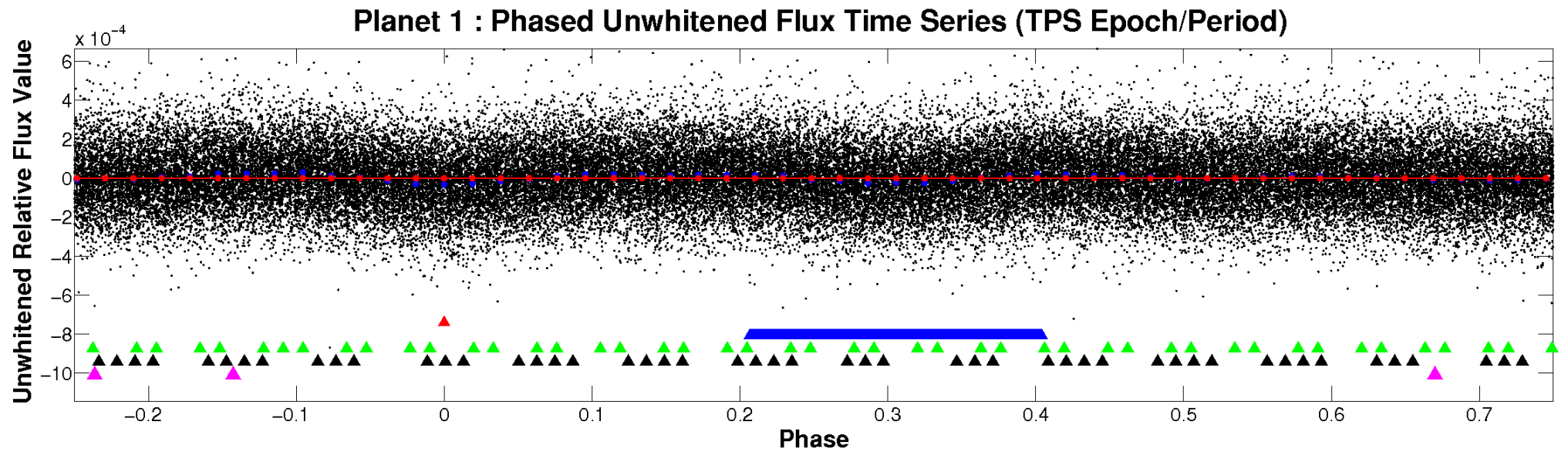


ALT Odd/Even

TCE 011723926-01

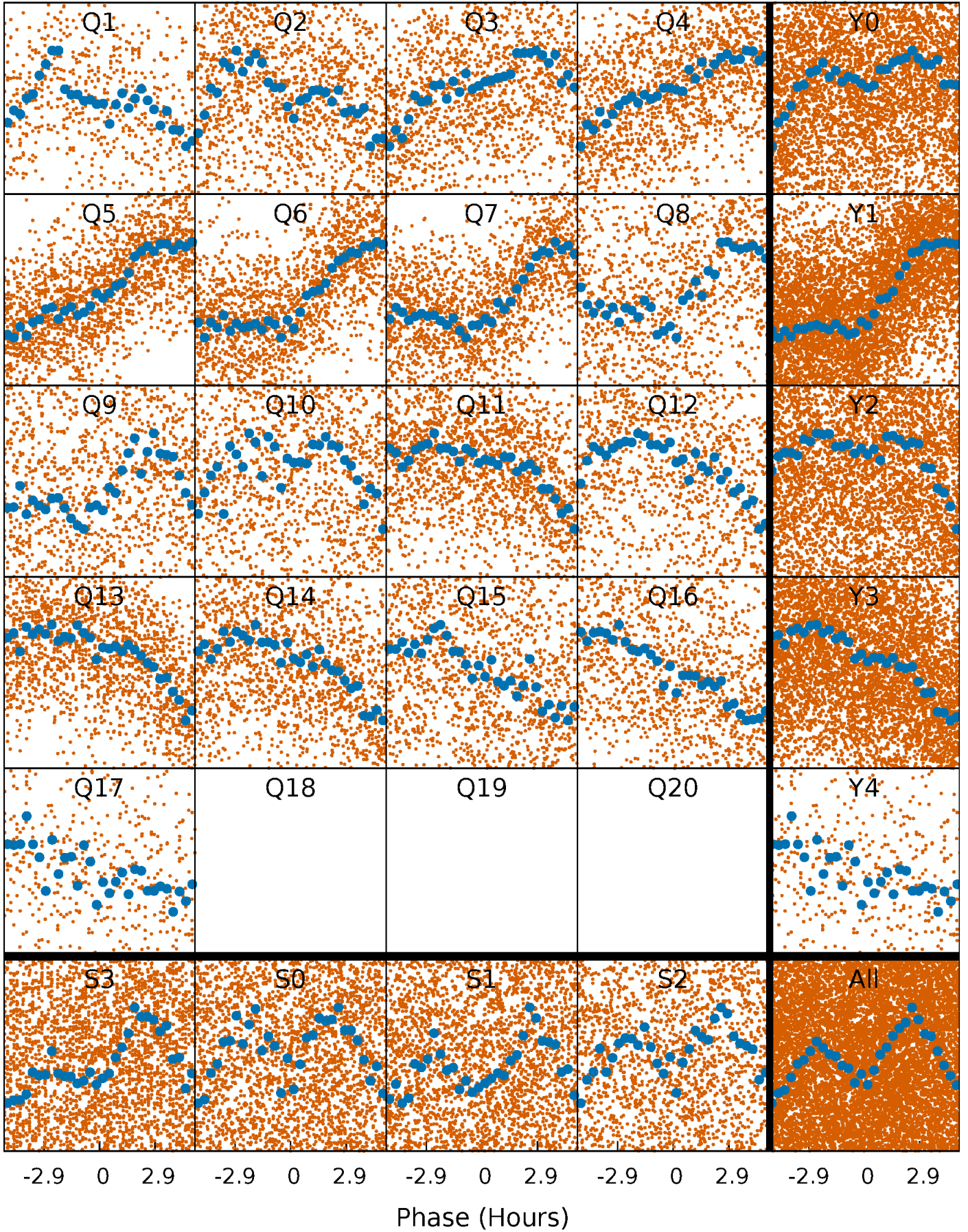


Non-Whitened Vs. Whitened Light Curve



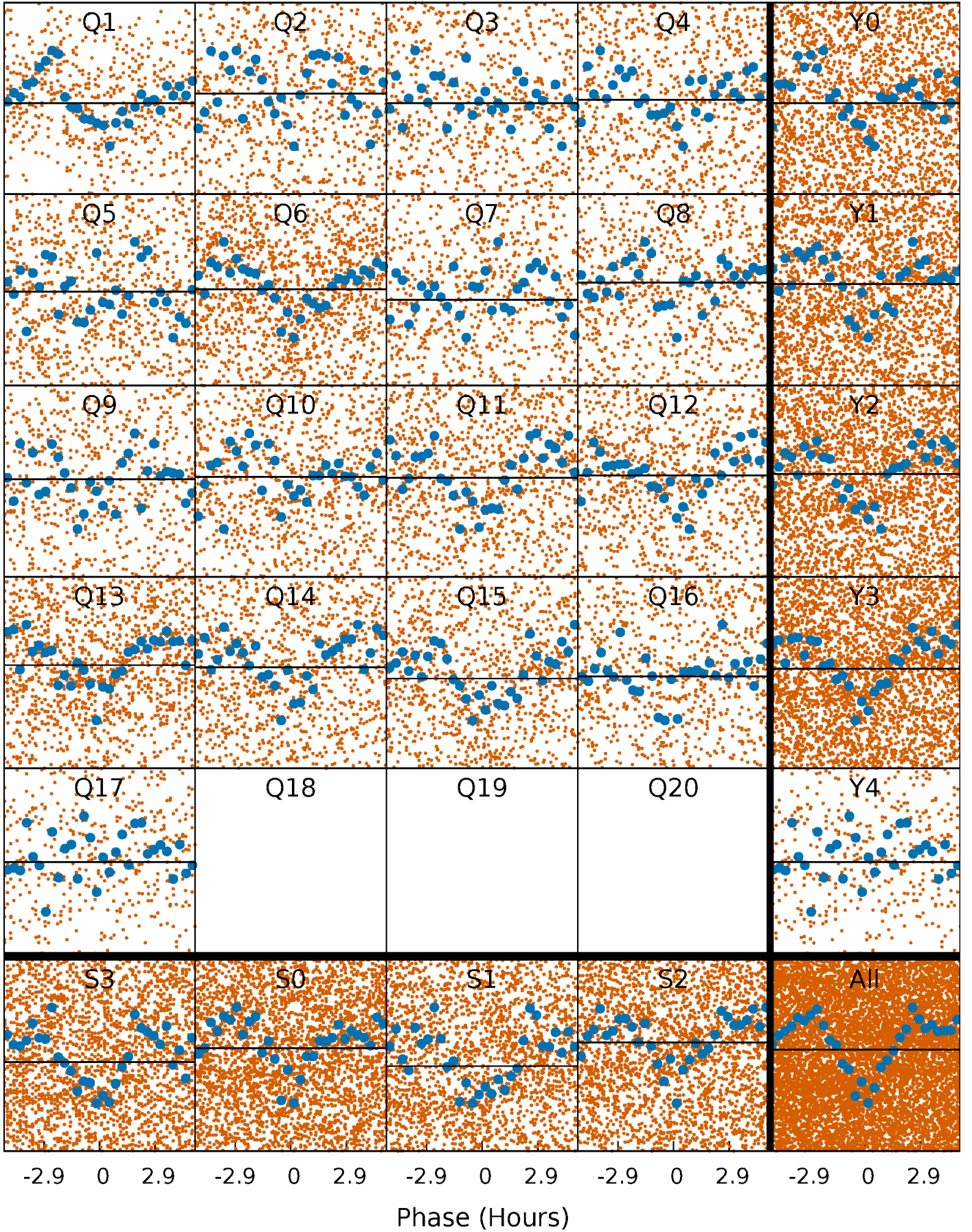
PDC Quarter-Phased Transit Curves

TCE 011723926-01 P= 1.069418 Days $T_0=131.656827$ (BKJD)



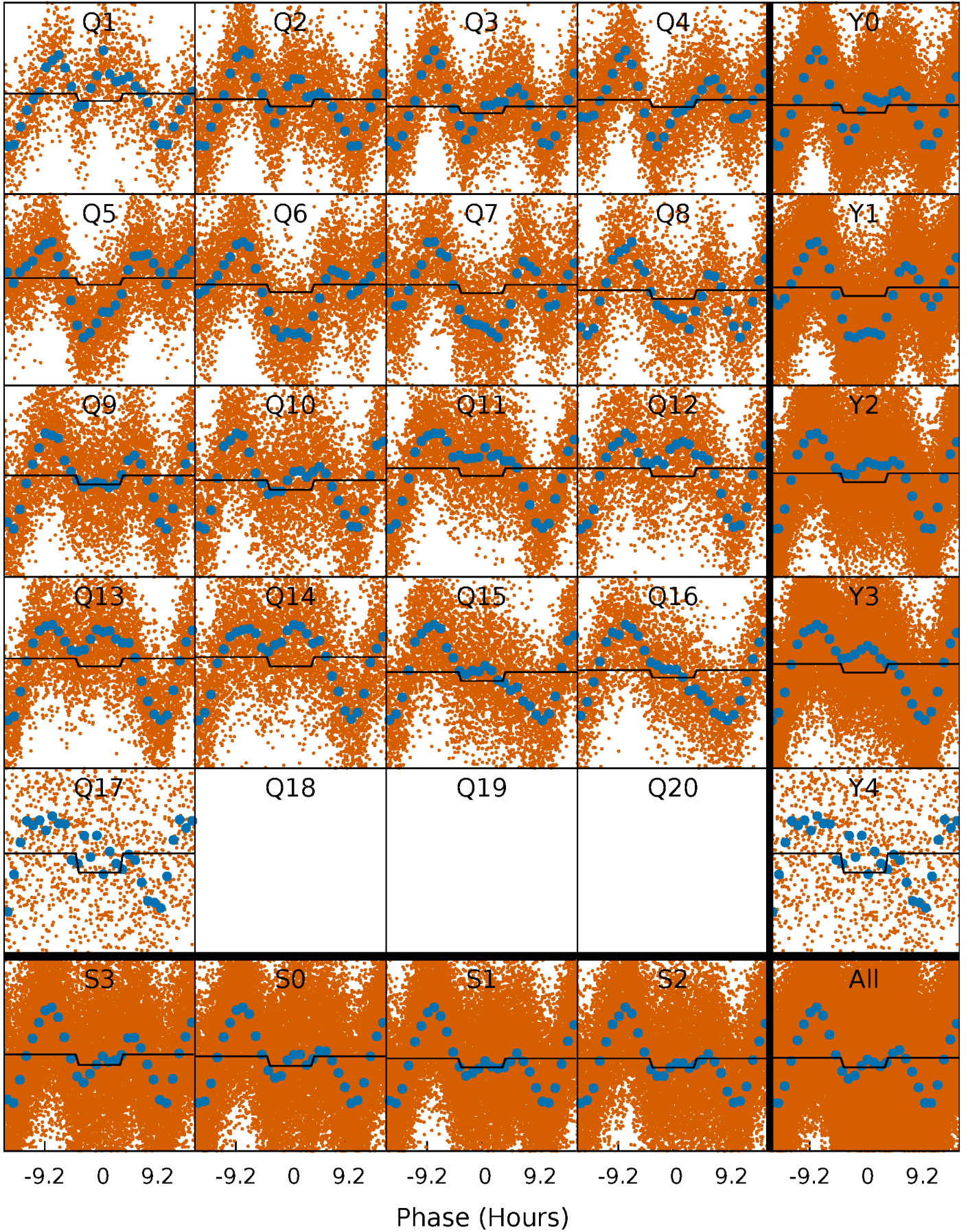
DV Quarter-Phased Transit Curves

TCE 011723926-01 P= 1.069418 Days $T_0=131.656827$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

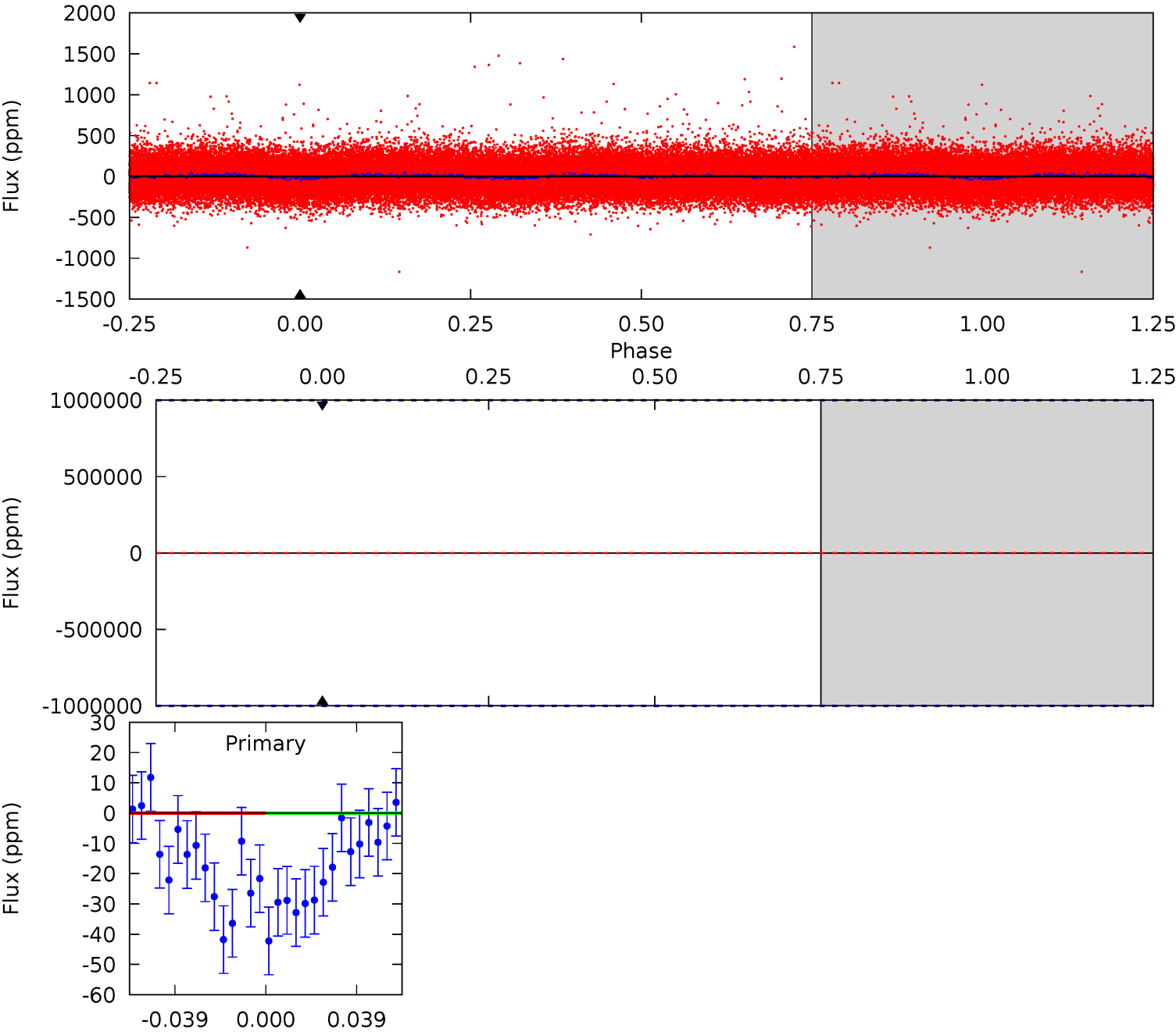
TCE 011723926-01 P= 1.069418 Days $T_0=131.528559$ (BKJD)



DV Model-Shift Uniqueness Test

011723926-01, P = 1.069418 Days, E = 130.587409 Days

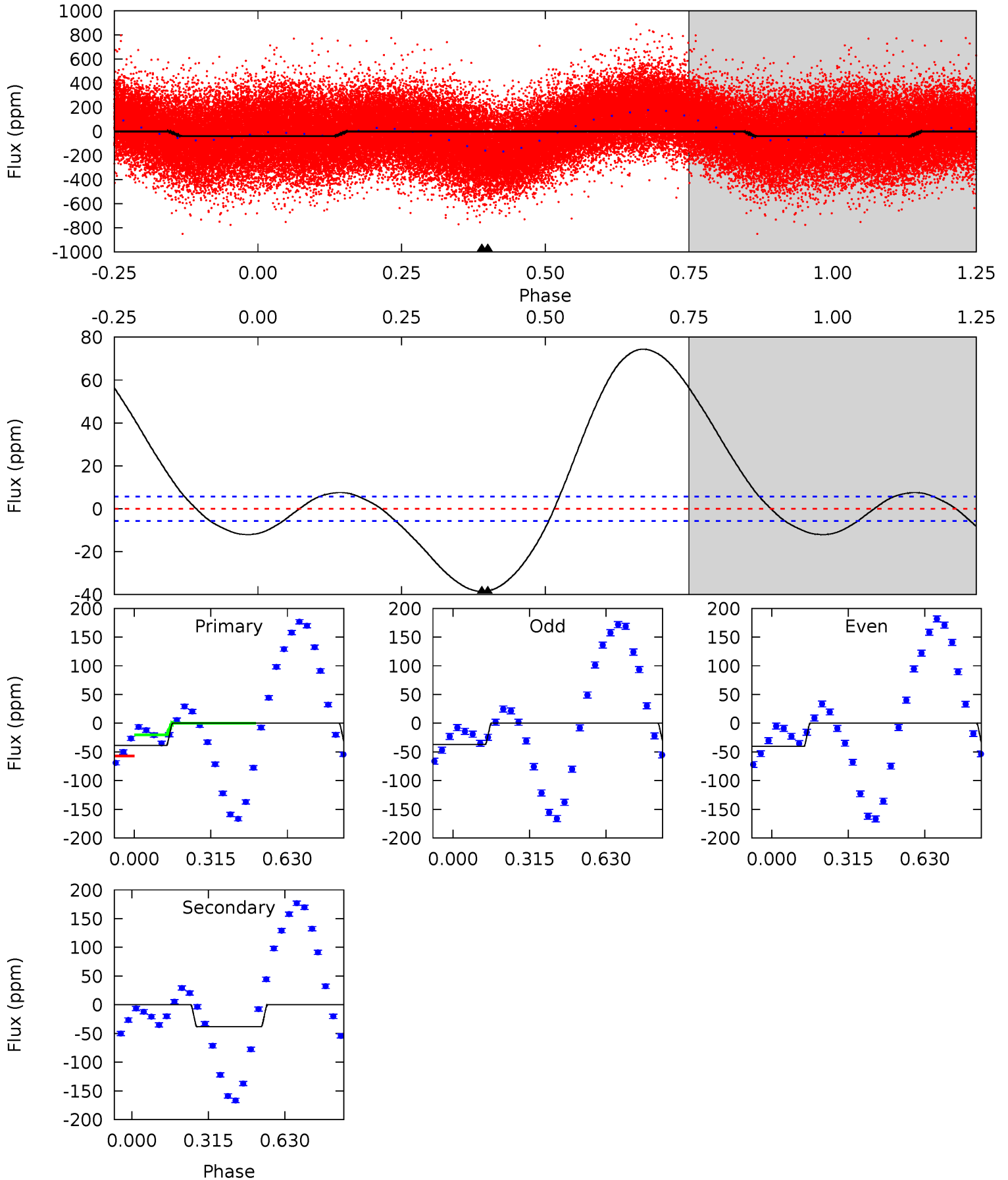
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011723926-01, P = 1.069418 Days, E = 130.459141 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.4	29.1	0	0	4.32	1.01	19.5	29.4	29.4	29.1	29.1	1.28	1.99	0.66	13.0



Stellar Parameters For KIC 011723926

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7272^{+226}_{-327}	$3.948^{+0.240}_{-0.160}$	$0.060^{+0.200}_{-0.350}$	$2.328^{+0.585}_{-0.715}$	$1.752^{+0.186}_{-0.345}$	$0.196^{+0.313}_{-0.078}$
	+3%/-4%	+6%/-4%	+333%/-583%	+25%/-31%	+11%/-20%	+160%/-40%
Source	PHO1	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 011723926-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$17.92^{+20.41}_{-12.19}$	4318^{+332}_{-368}	-5774^{+36530}_{-34493}	$-1.667^{+141.541}_{-202.840}$
Alt.	-38 ± 1	$17.60^{+18.60}_{-12.25}$	4312^{+341}_{-365}	-3676^{+6959}_{-278}	$0.040^{+0.409}_{-0.031}$

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

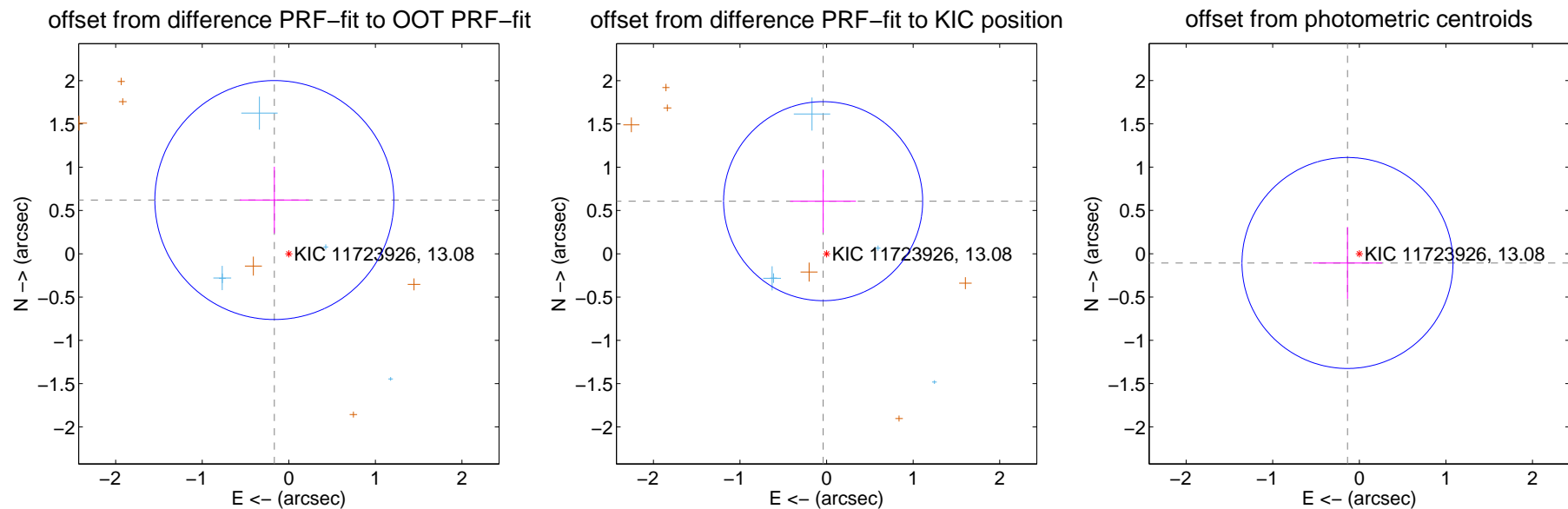
DV Centroid Data

Supplemental centroid analysis for 011723926-01. Kepler magnitude: 13.08. Transit SNR -1.00

There are 5 quarters with good PRF difference image offsets

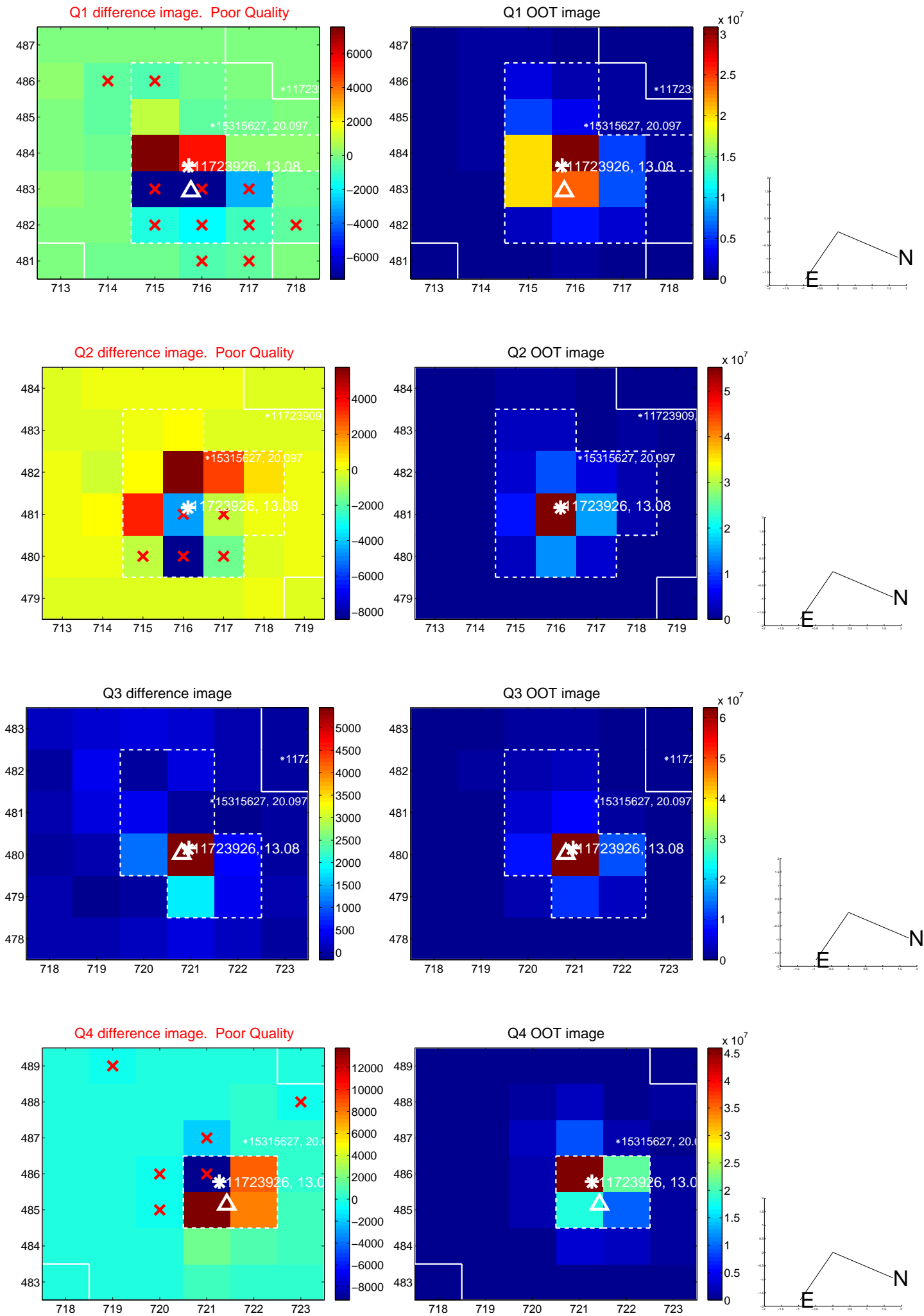
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.643 ± 0.460	1.40	0.167 ± 0.399	0.621 ± 0.385
PRF-fit source offset from KIC position	0.609 ± 0.383	1.59	0.040 ± 0.380	0.608 ± 0.364
photometric centroid source offset	0.17 ± 0.41	0.43	0.14 ± 0.40	-0.11 ± 0.42

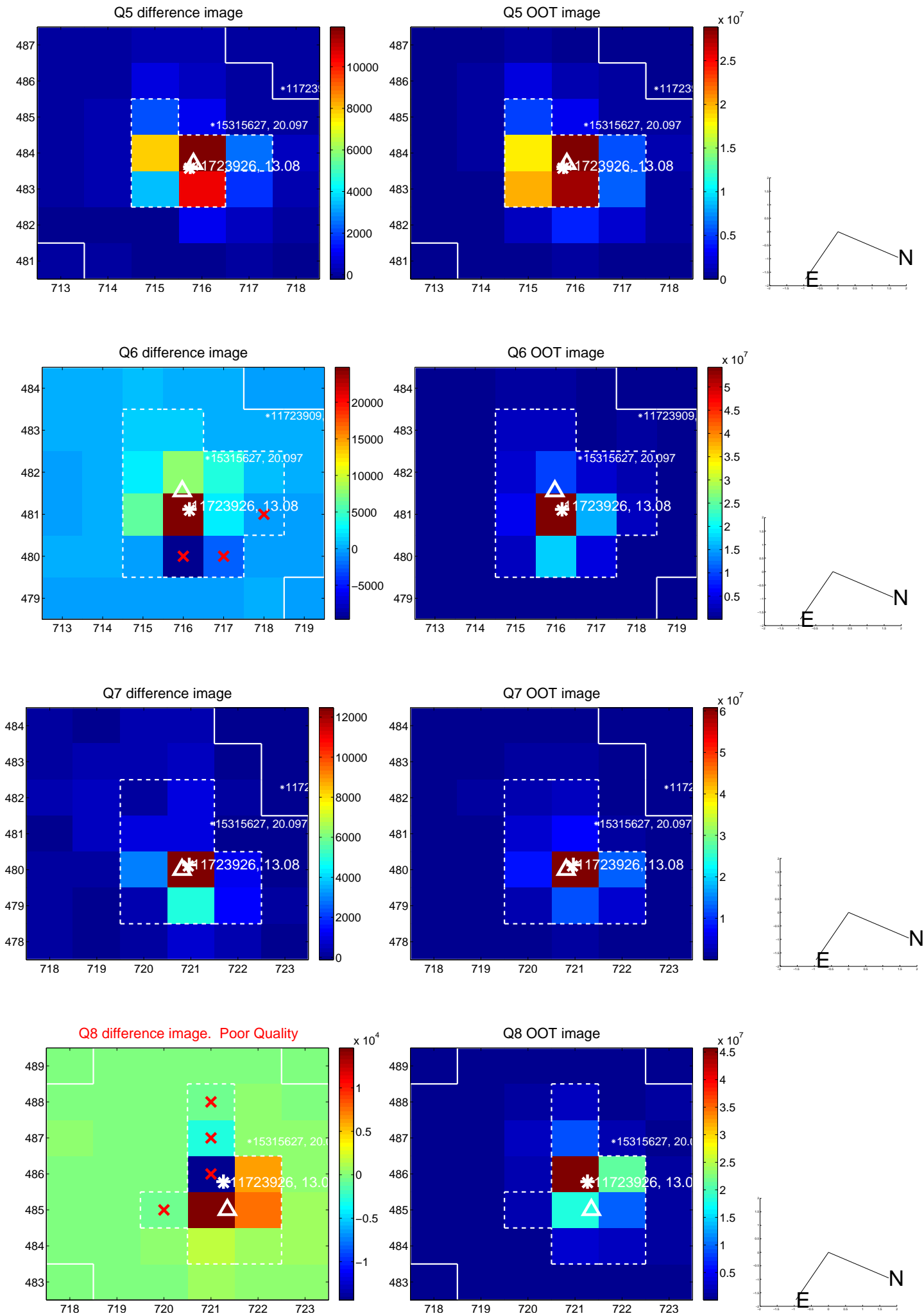


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

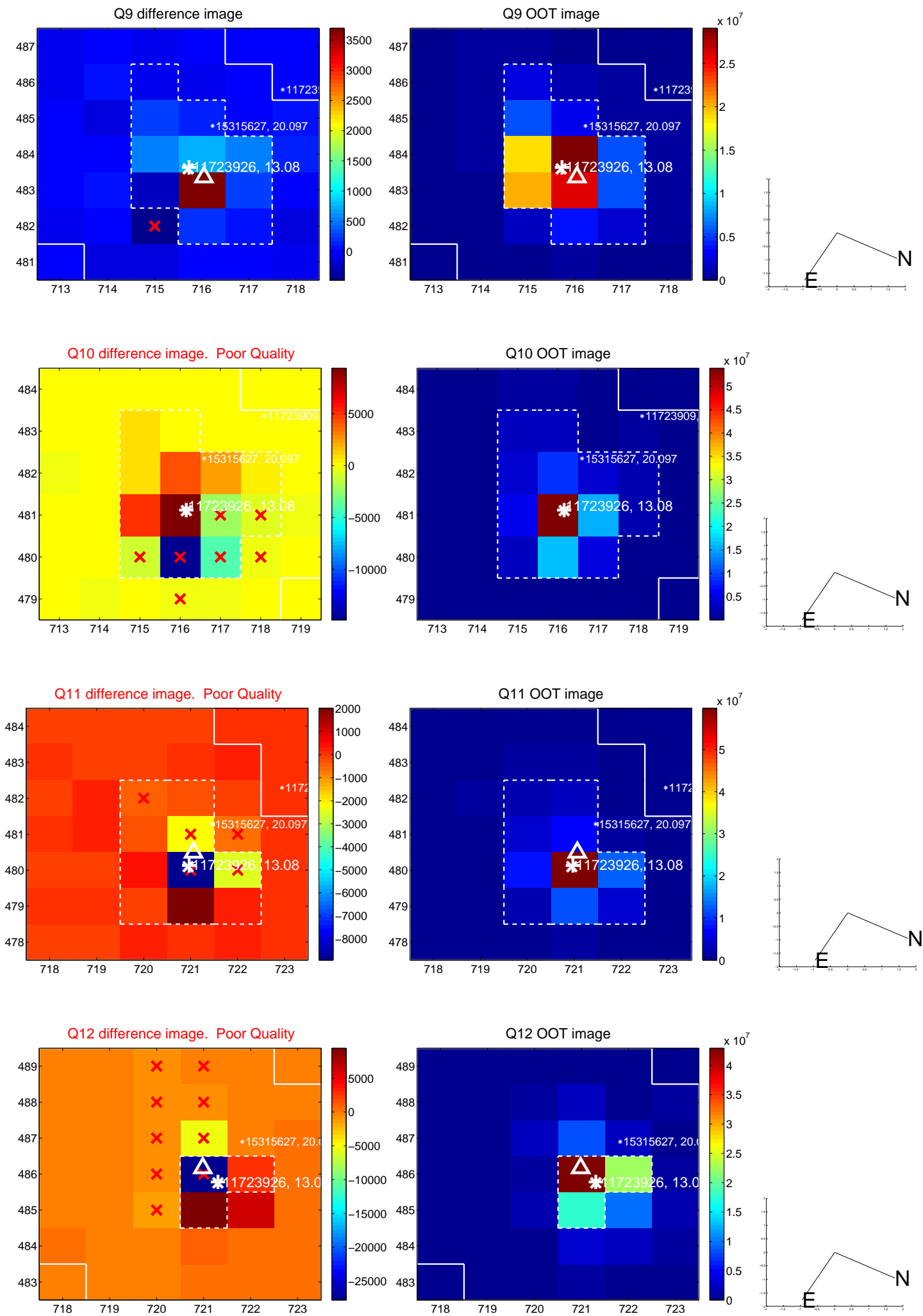
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



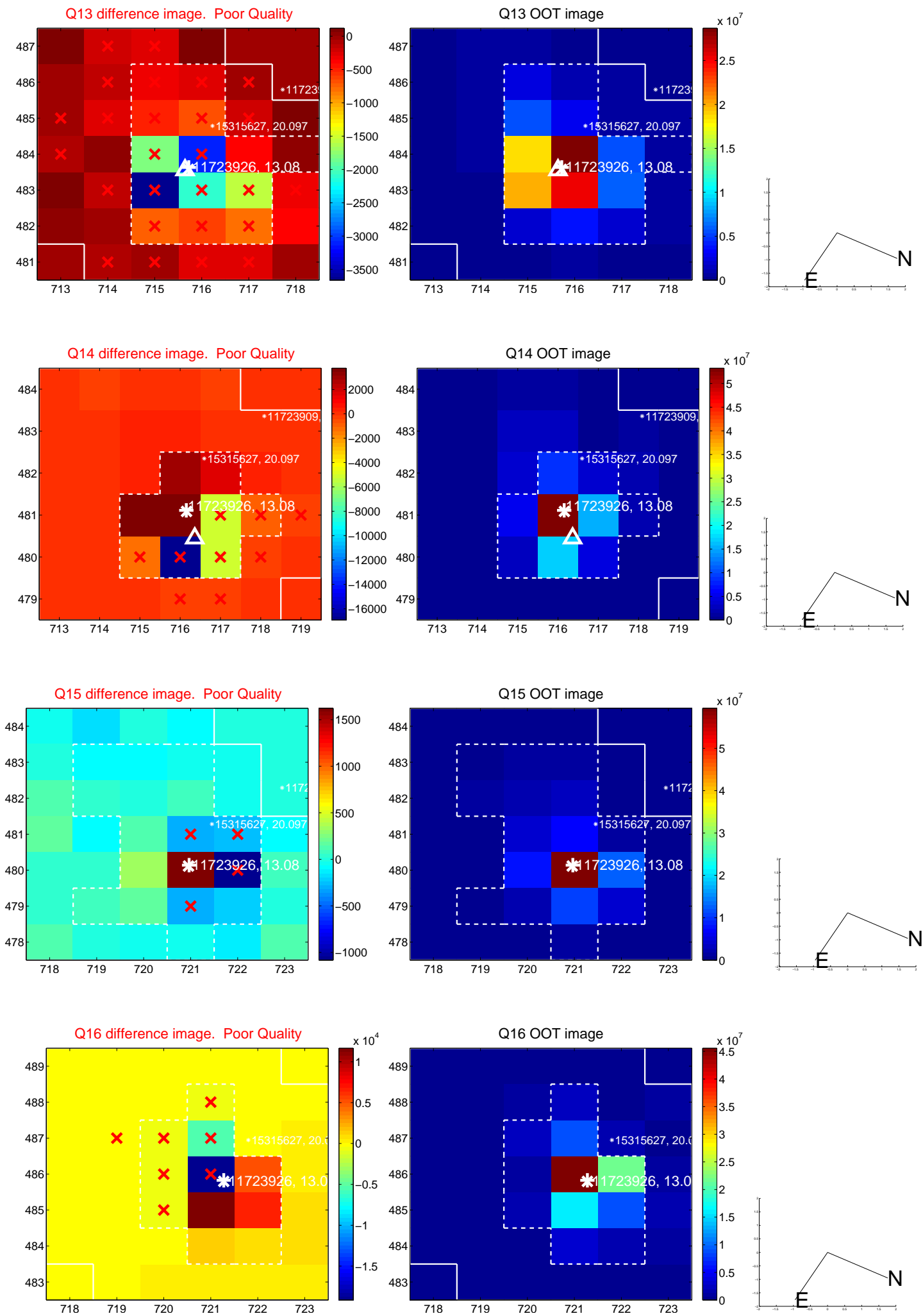
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



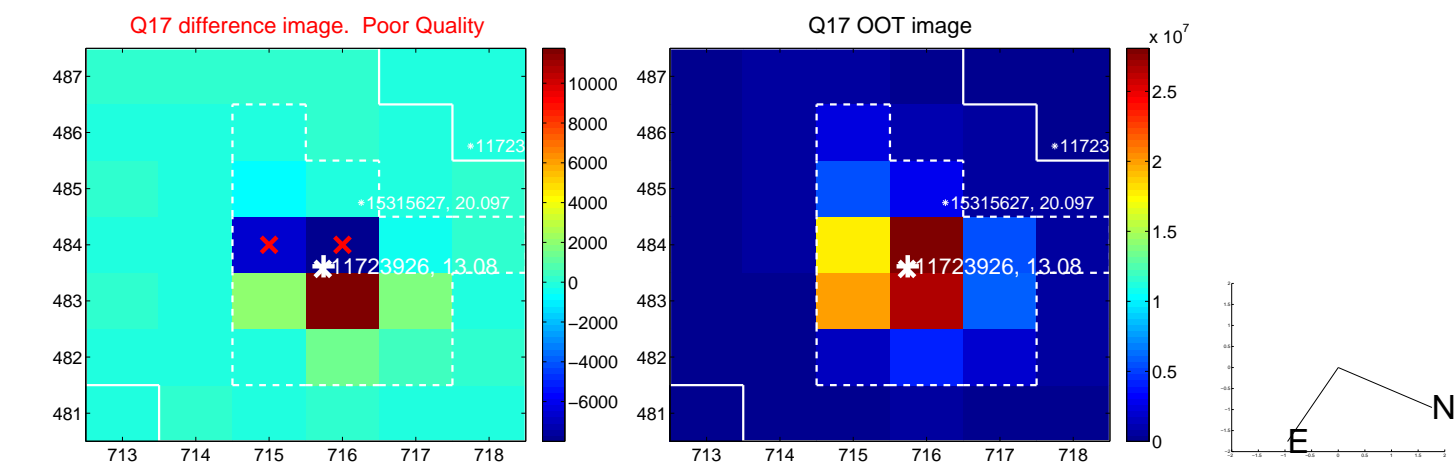
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



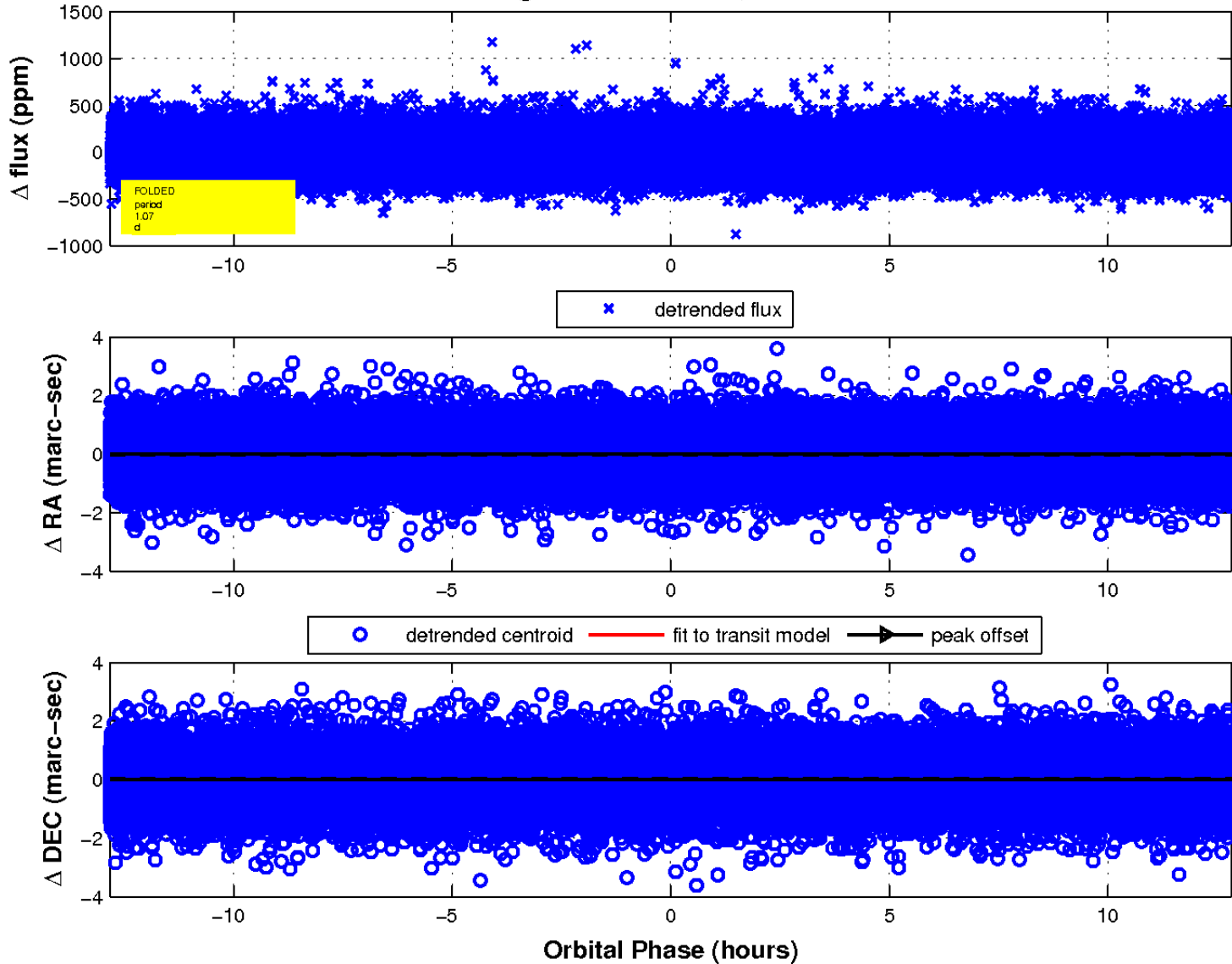
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

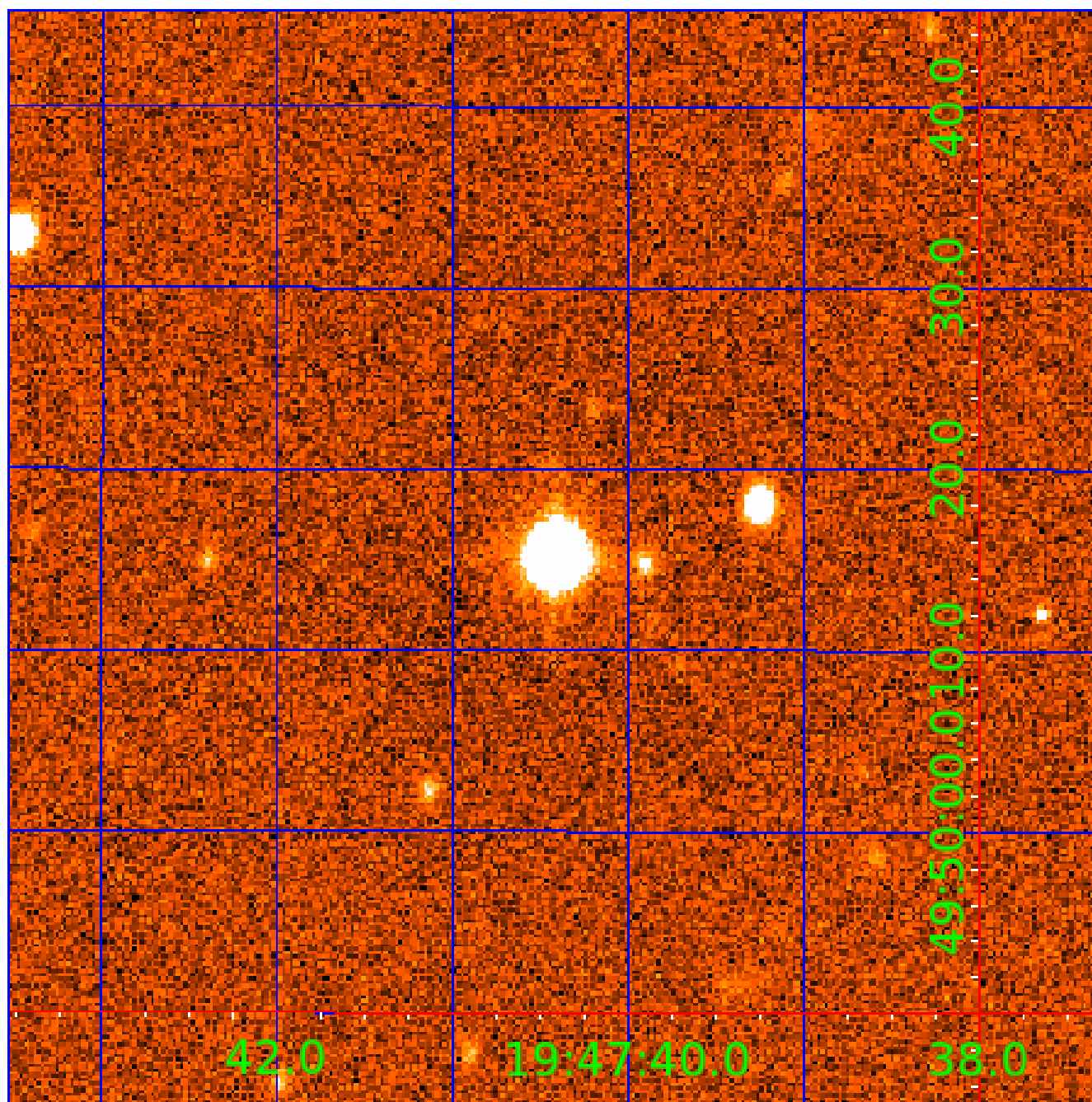


fluxWeightedCentroids, Planet 1 of 5



UKIRT Image

Declination



KIC 011723926

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})
011723926-01	OBS	No	1.069418	131.656827	221.6	2.500	9.6	-1.0	2.33	7272	3.52	22282.73
011723926-02	OBS	No	1.069263	132.088971	3.8	4.563	8.7	1.8	2.33	7272	0.54	22287.03
011723926-03	OBS	No	31.059001	146.526581	202.9	3.334	7.7	8.4	2.33	7272	5.80	249.60
011723926-04	OBS	No	29.257157	152.029734	193.1	1.457	7.7	7.8	2.33	7272	3.43	270.31
011723926-05	OBS	No	428.736511	460.885023	213.5	7.378	7.7	7.5	2.33	7272	3.92	7.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011723926-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS
011723926-02	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011723926-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT
011723926-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT
011723926-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

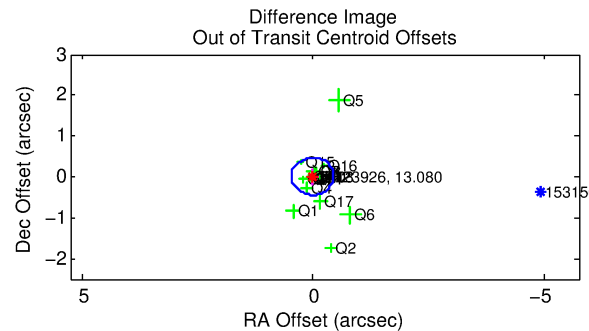
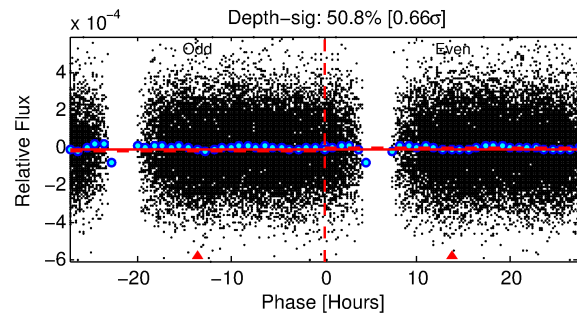
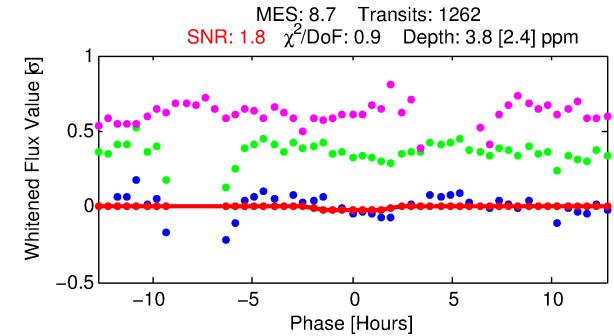
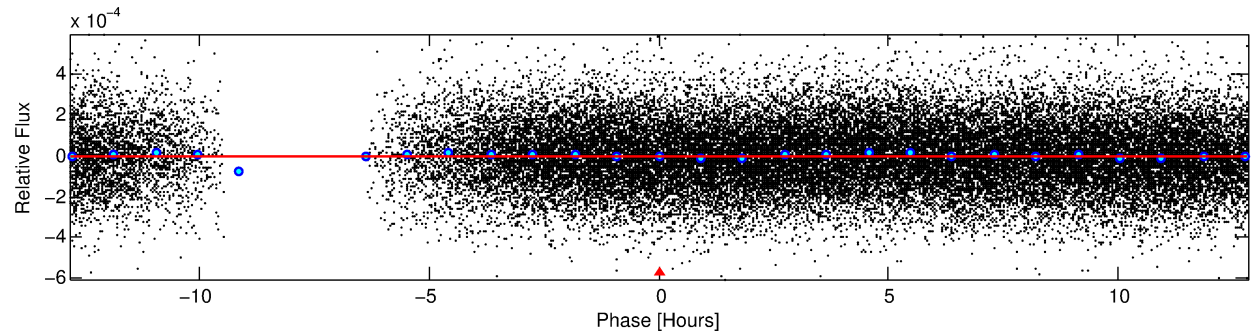
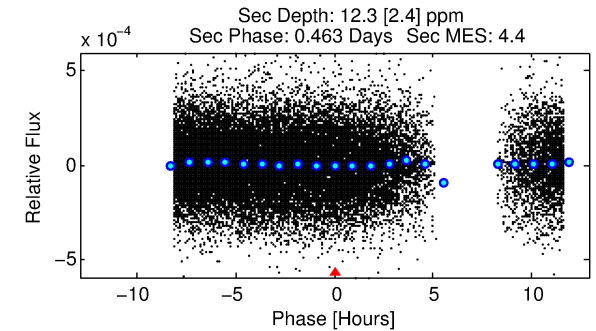
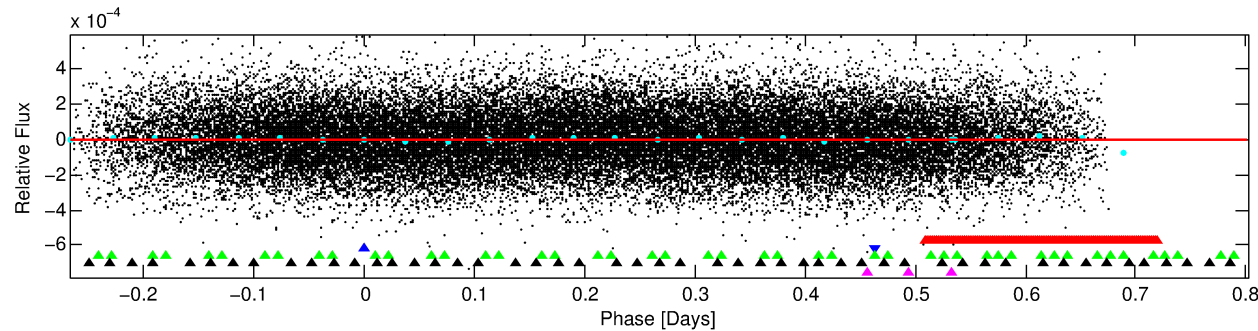
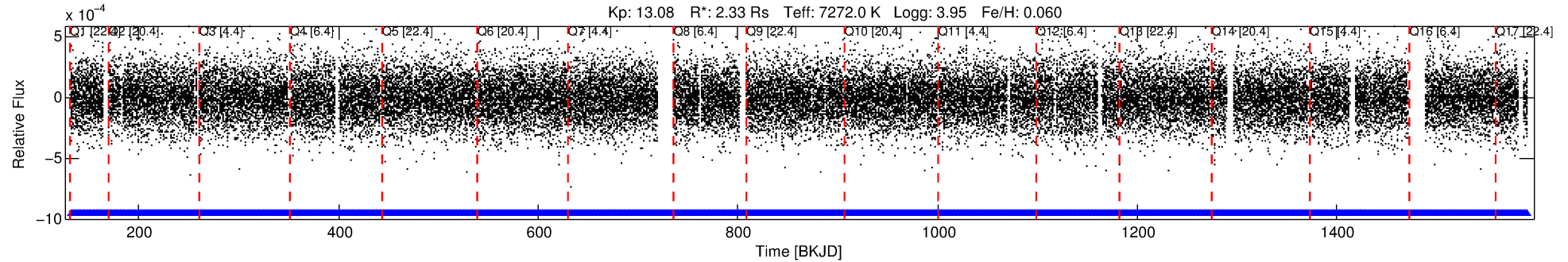
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011723926-02

No Significant Match Found

DV One-Page Summary

KIC: 11723926 Candidate: 2 of 5 Period: 1.069 d



DV Fit Results:

Period = 1.06926 [0.00007] d
Epoch = 132.0890 [0.0232] BKJD
Rp/R* = 0.0021 [0.0018]
a/R* = 1.18 [1.69]
b = 0.92 [0.82]
Seff = 22287.03 [10213.33]
Teq = 3116 [357] K
Rp = 0.54 [0.48] Re
a = 0.0247 [0.0068] AU
Ag = 14.14 [24.64] [0.53σ]
Teffp = 9341 [3971] K [1.56σ]

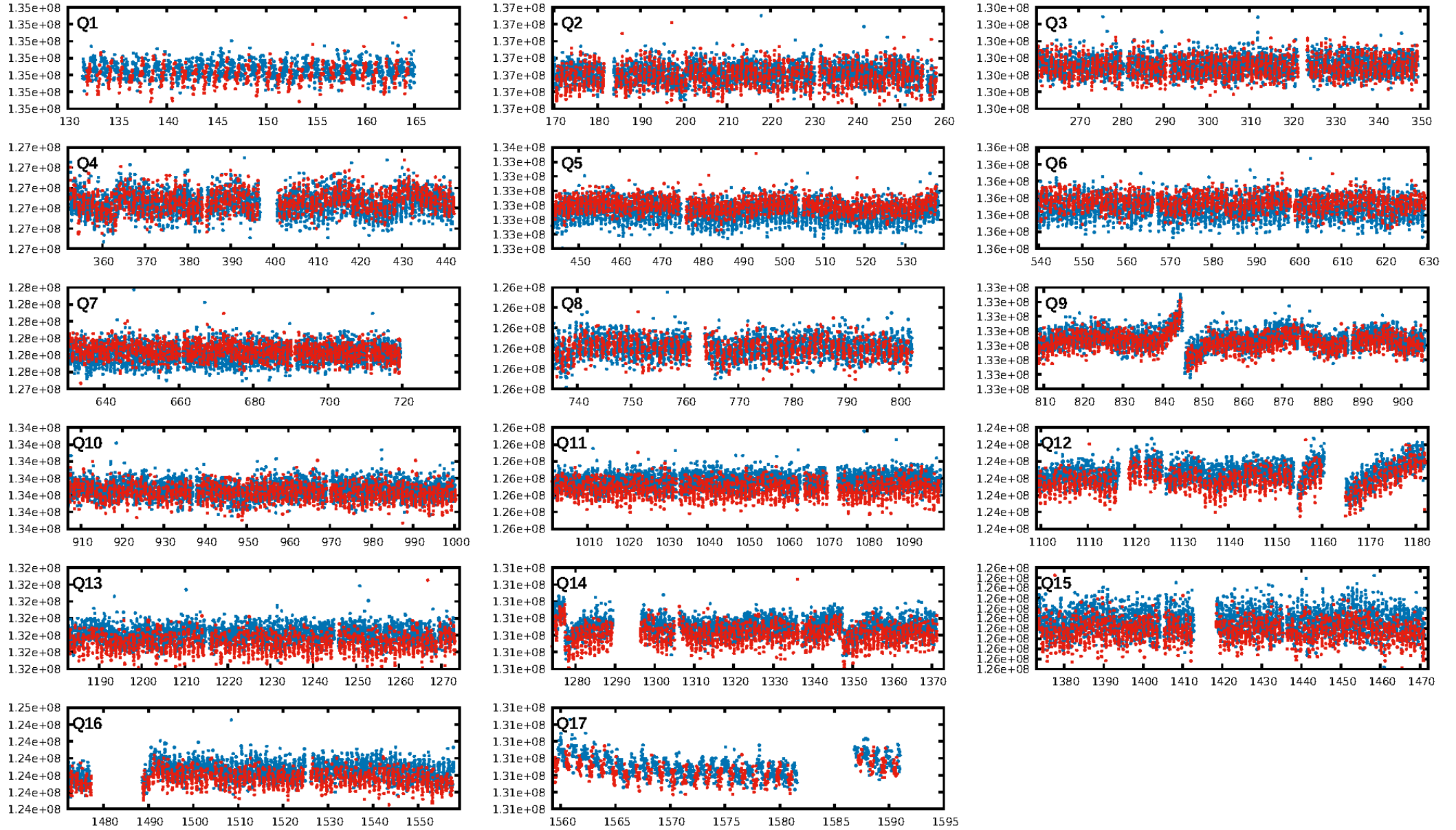
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.83e-11
RollingBand-fgt: 1.00 [1206/1206]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.017 arcsec [0.11σ]
KicOffset-rm: 0.115 arcsec [1.12σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

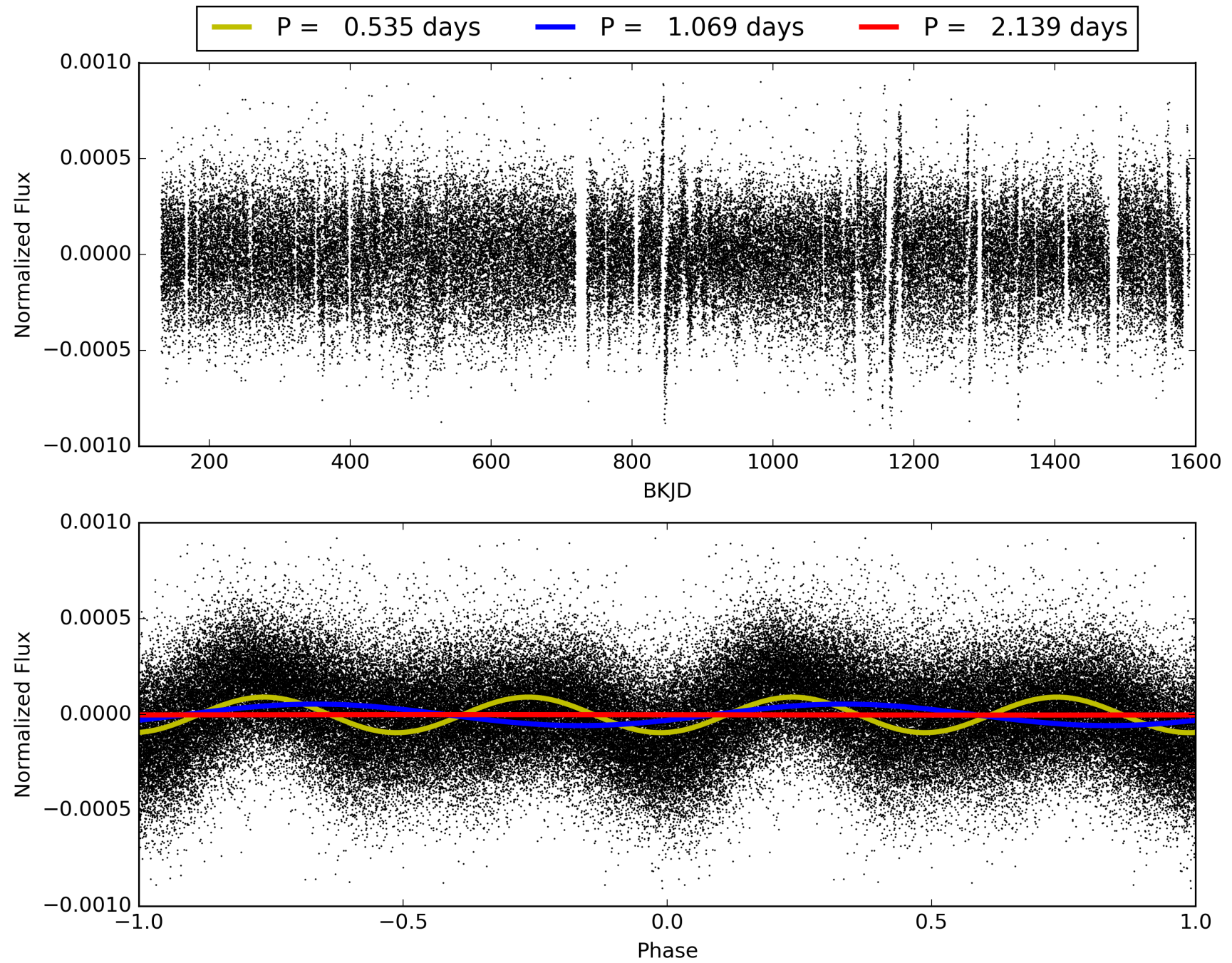
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:19:31 Z

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

TCE 011723926-02, PDC Light Curves

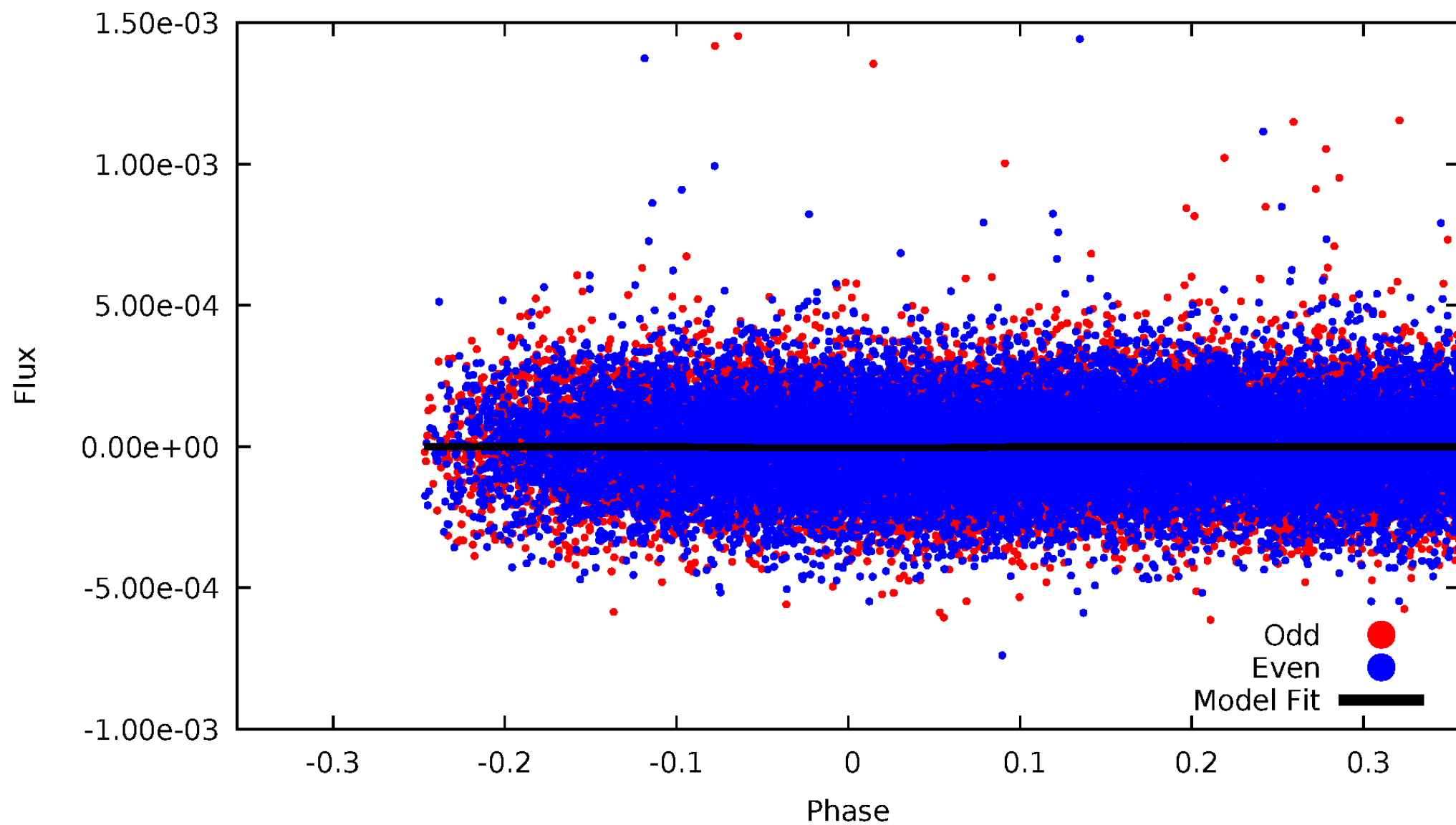


TCE 011723926-02



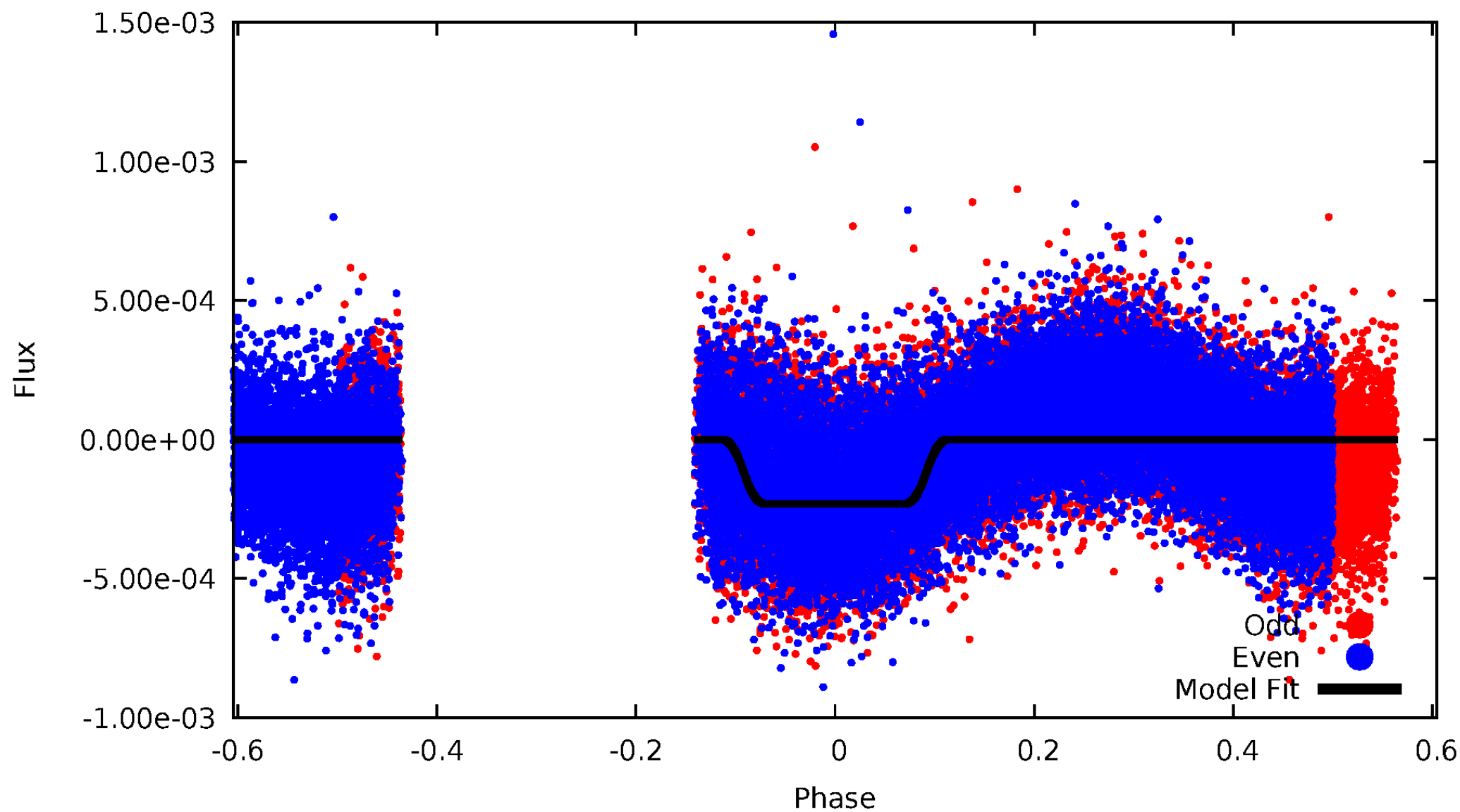
DV Odd/Even

TCE 011723926-02



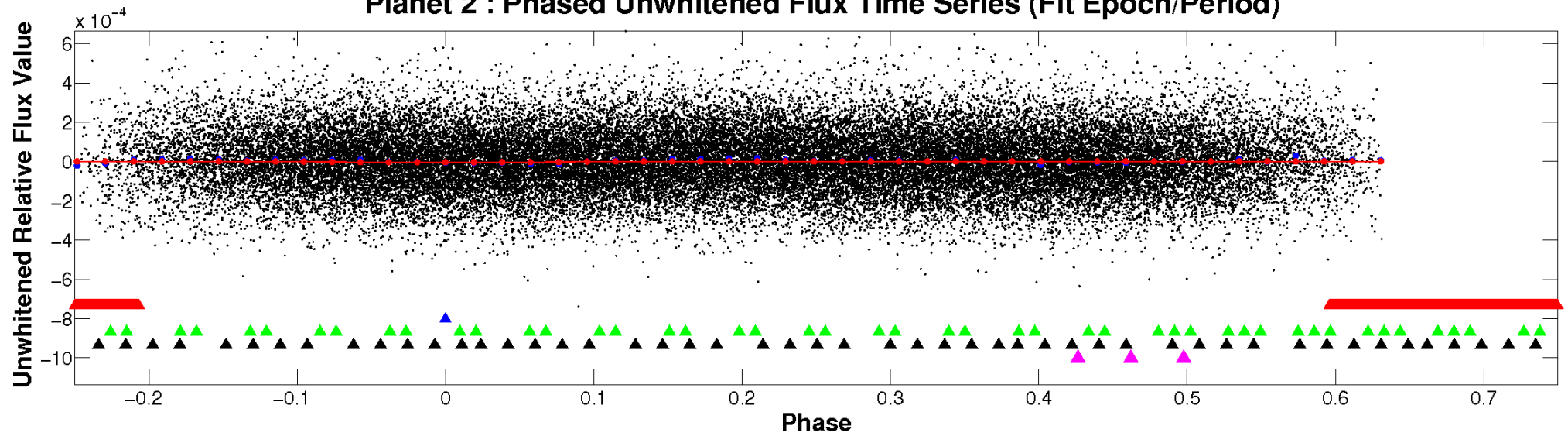
ALT Odd/Even

TCE 011723926-02

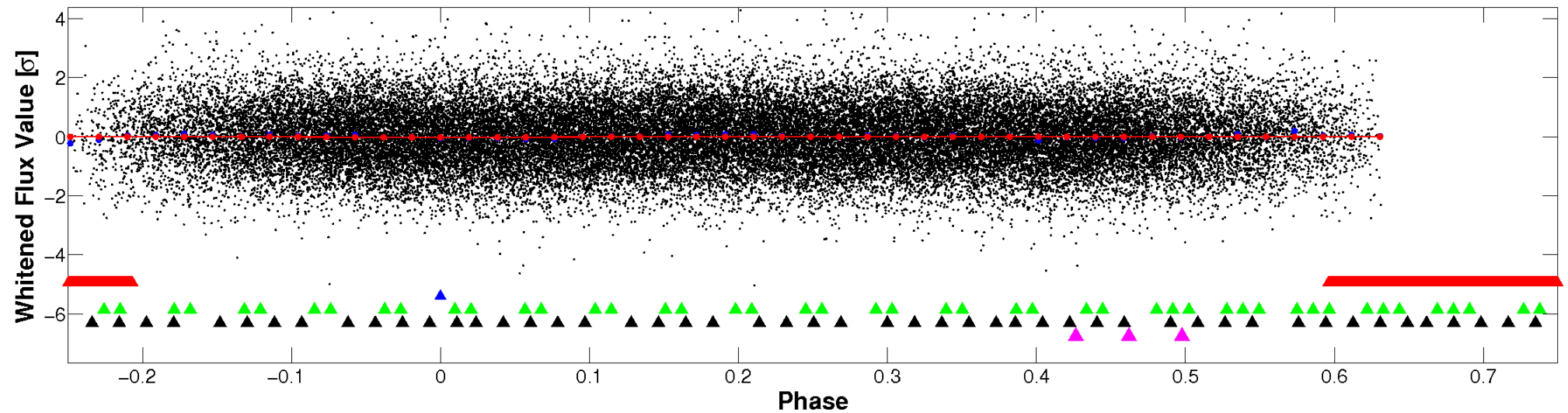


Non-Whitened Vs. Whitened Light Curve

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

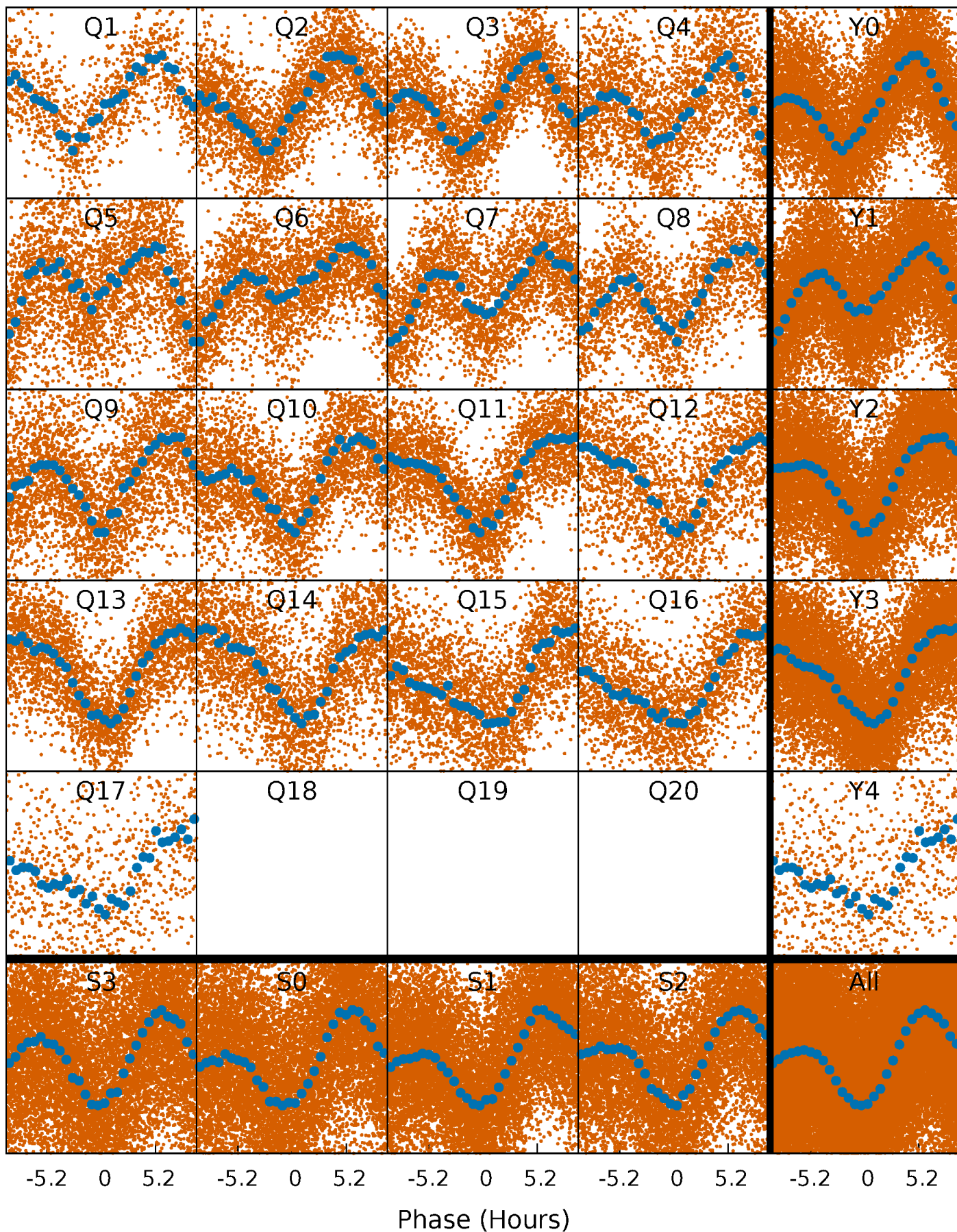


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



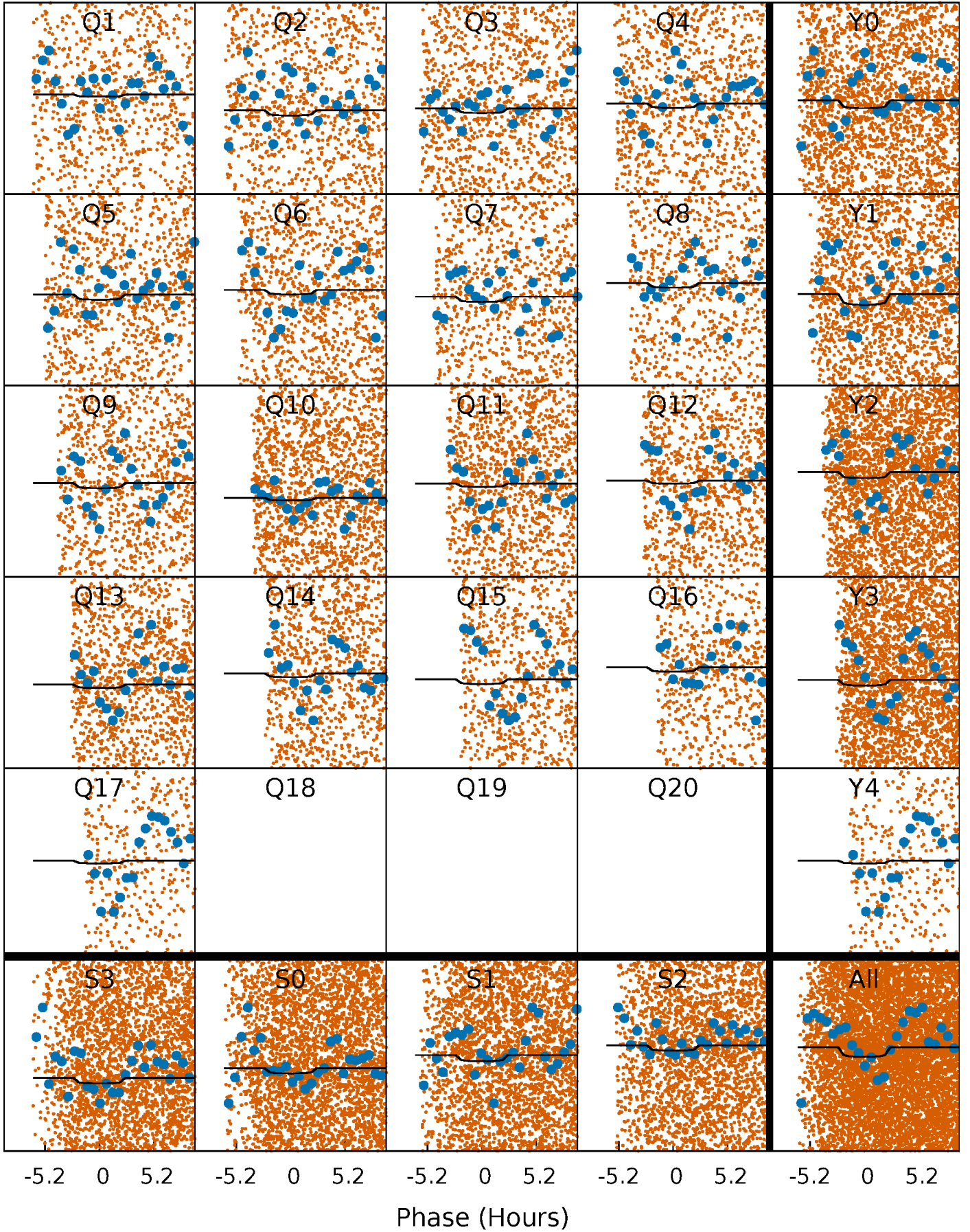
PDC Quarter-Phased Transit Curves

TCE 011723926-02 P= 1.069263 Days $T_0=132.088971$ (BKJD)



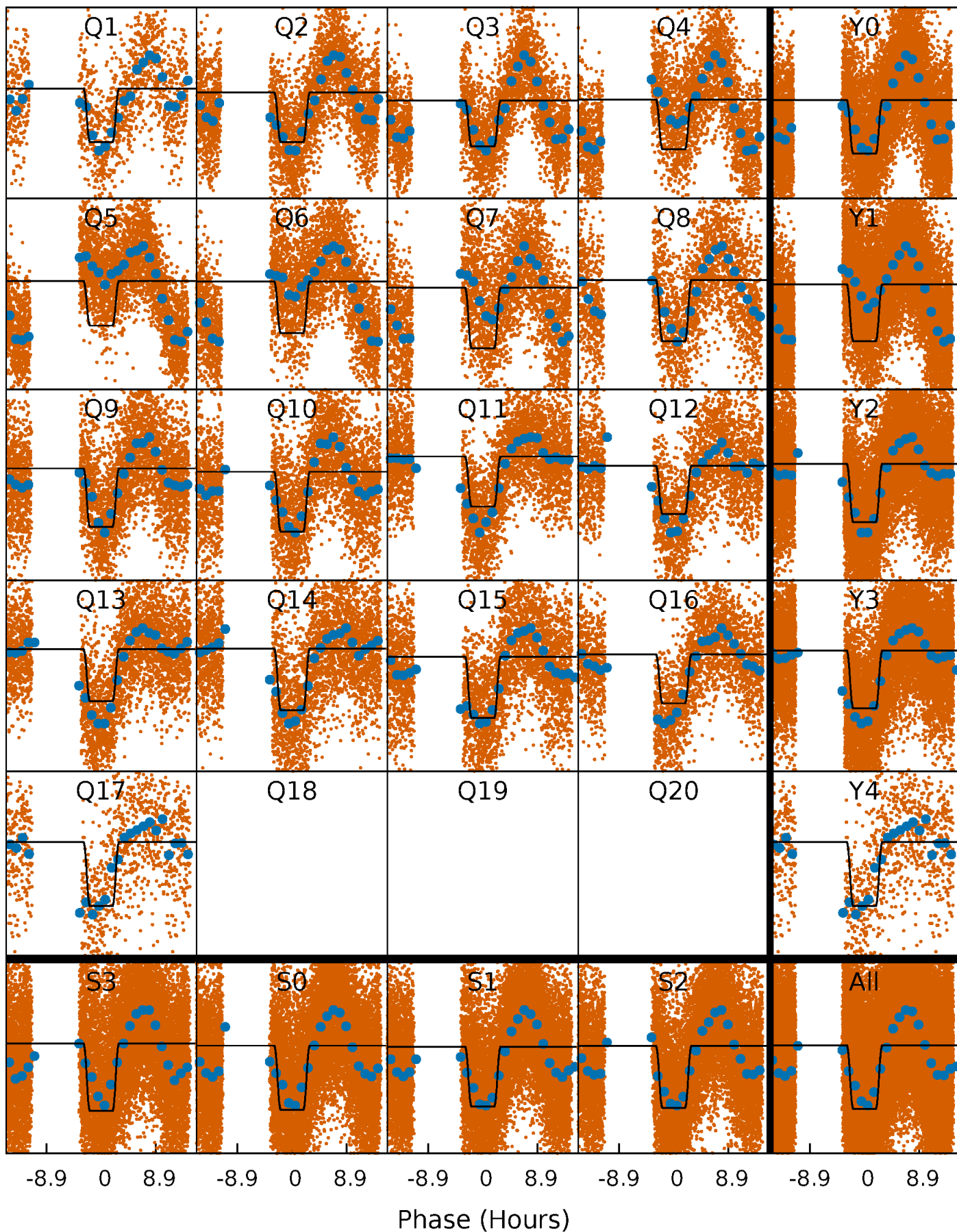
DV Quarter-Phased Transit Curves

TCE 011723926-02 P= 1.069263 Days $T_0=132.088971$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

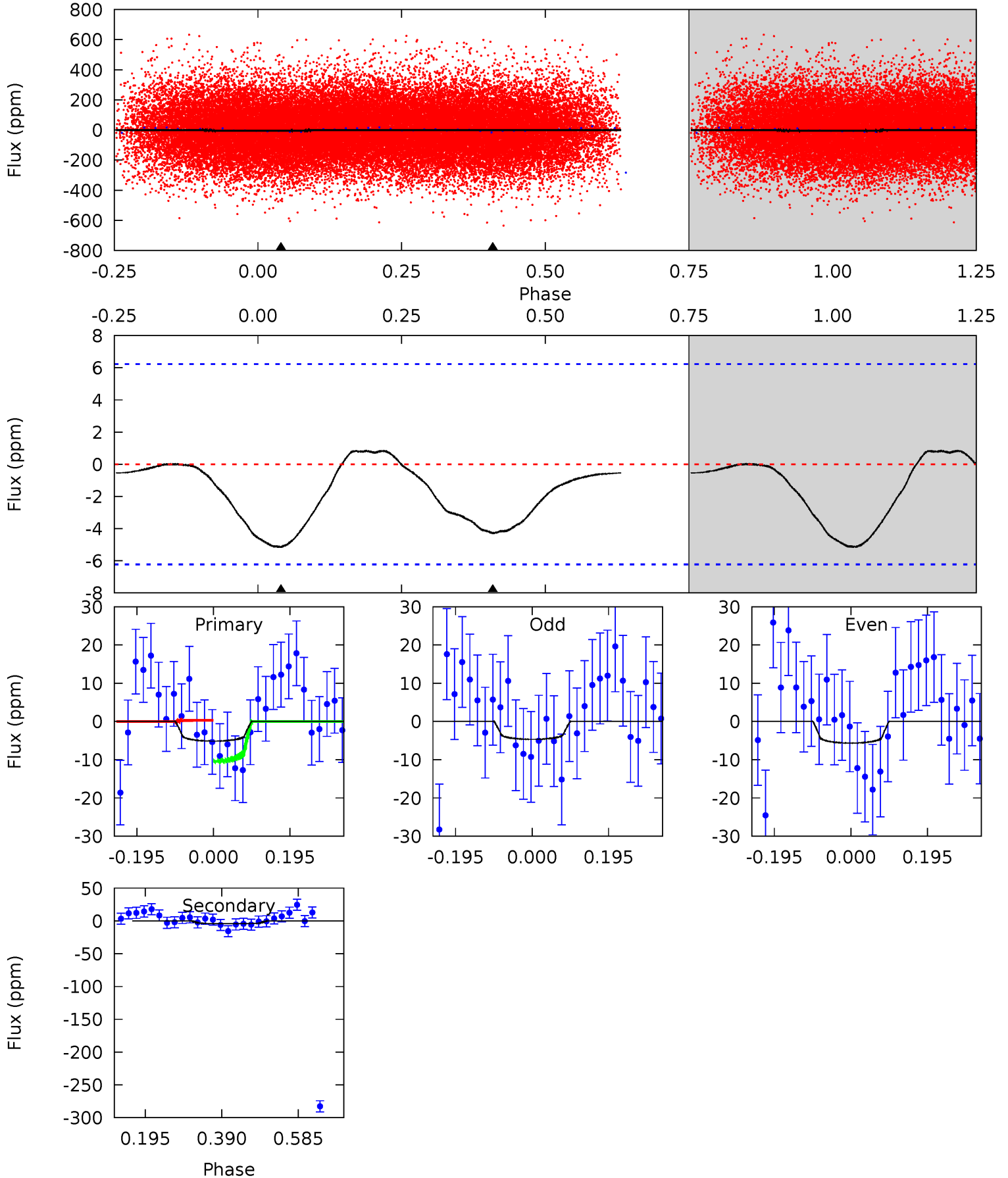
TCE 011723926-02 P= 1.069402 Days $T_0=131.975215$ (BKJD)



DV Model-Shift Uniqueness Test

011723926-02, P = 1.069263 Days, E = 131.019708 Days

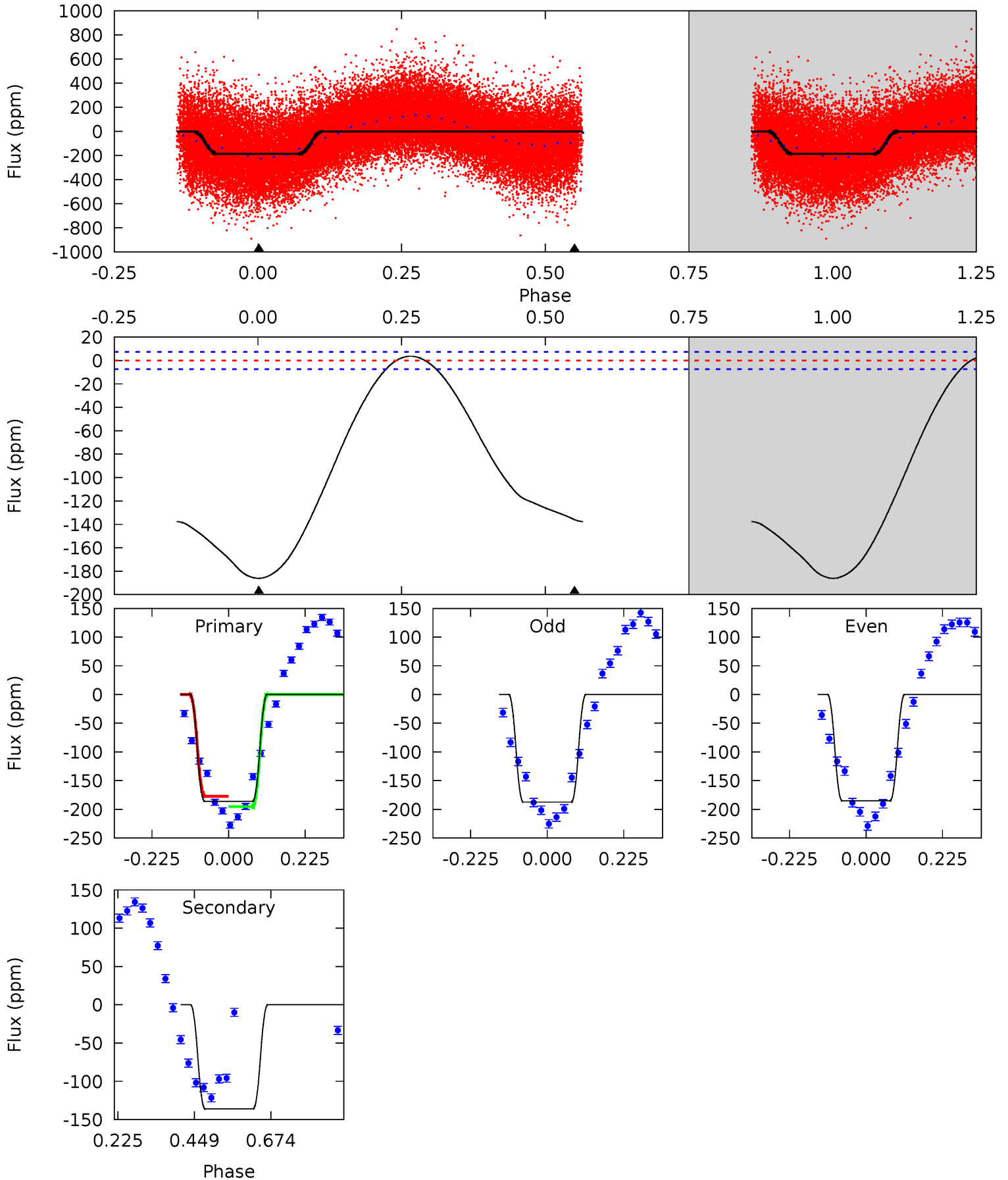
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.65	3.04	0	0	4.42	1.30	0.36	3.65	3.65	3.04	3.04	0.35	1.09	0.14	3.56



Alt Model-Shift Uniqueness Test

011723926-02, P = 1.069402 Days, E = 130.905813 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
111.4	81.4	0	0	4.39	1.21	3.17	111.4	111.4	81.4	81.4	0.75	0.92	0.02	5.41



Stellar Parameters For KIC 011723926

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7272^{+226}_{-327}	$3.948^{+0.240}_{-0.160}$	$0.060^{+0.200}_{-0.350}$	$2.328^{+0.585}_{-0.715}$	$1.752^{+0.186}_{-0.345}$	$0.196^{+0.313}_{-0.078}$
	+3%/-4%	+6%/-4%	+333%/-583%	+25%/-31%	+11%/-20%	+160%/-40%
Source	PHO1	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 011723926-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-4 ± 1	$0.58^{+0.45}_{-0.37}$	4306^{+334}_{-353}	6486^{+6290}_{-1734}	$3.875^{+25.964}_{-2.693}$
Alt.	-136 ± 2	$3.74^{+0.80}_{-0.72}$	4307^{+342}_{-356}	6141^{+518}_{-406}	$3.240^{+1.561}_{-1.015}$

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

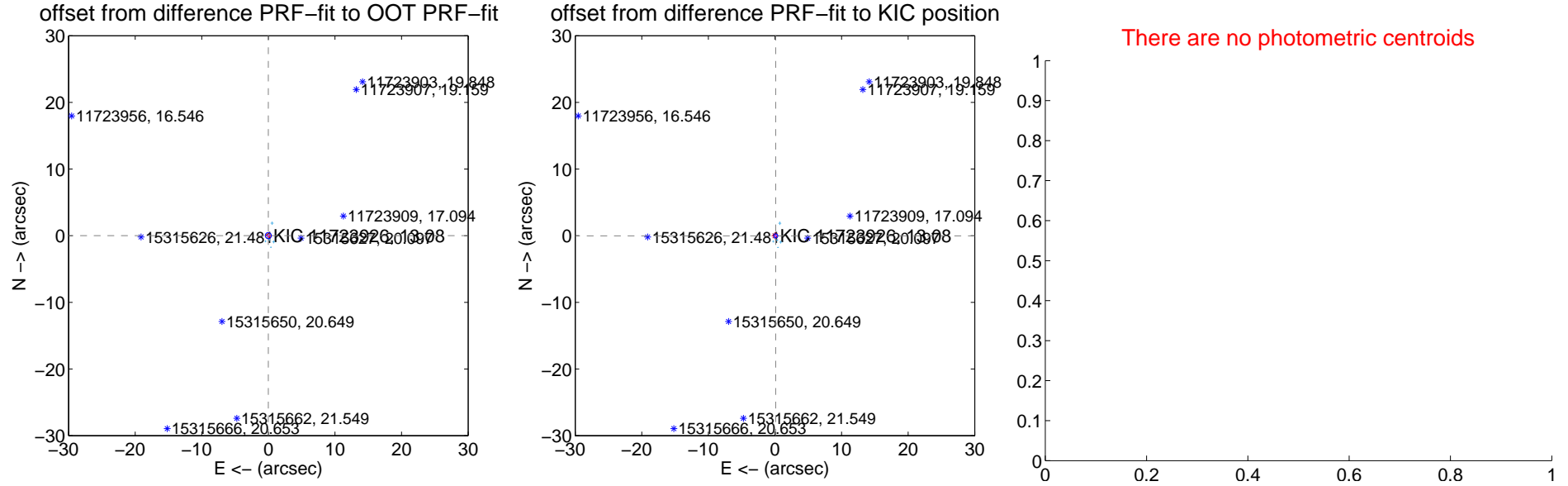
DV Centroid Data

Supplemental centroid analysis for 011723926-02. Kepler magnitude: 13.08. Transit SNR 1.83

There are 17 quarters with good PRF difference image offsets

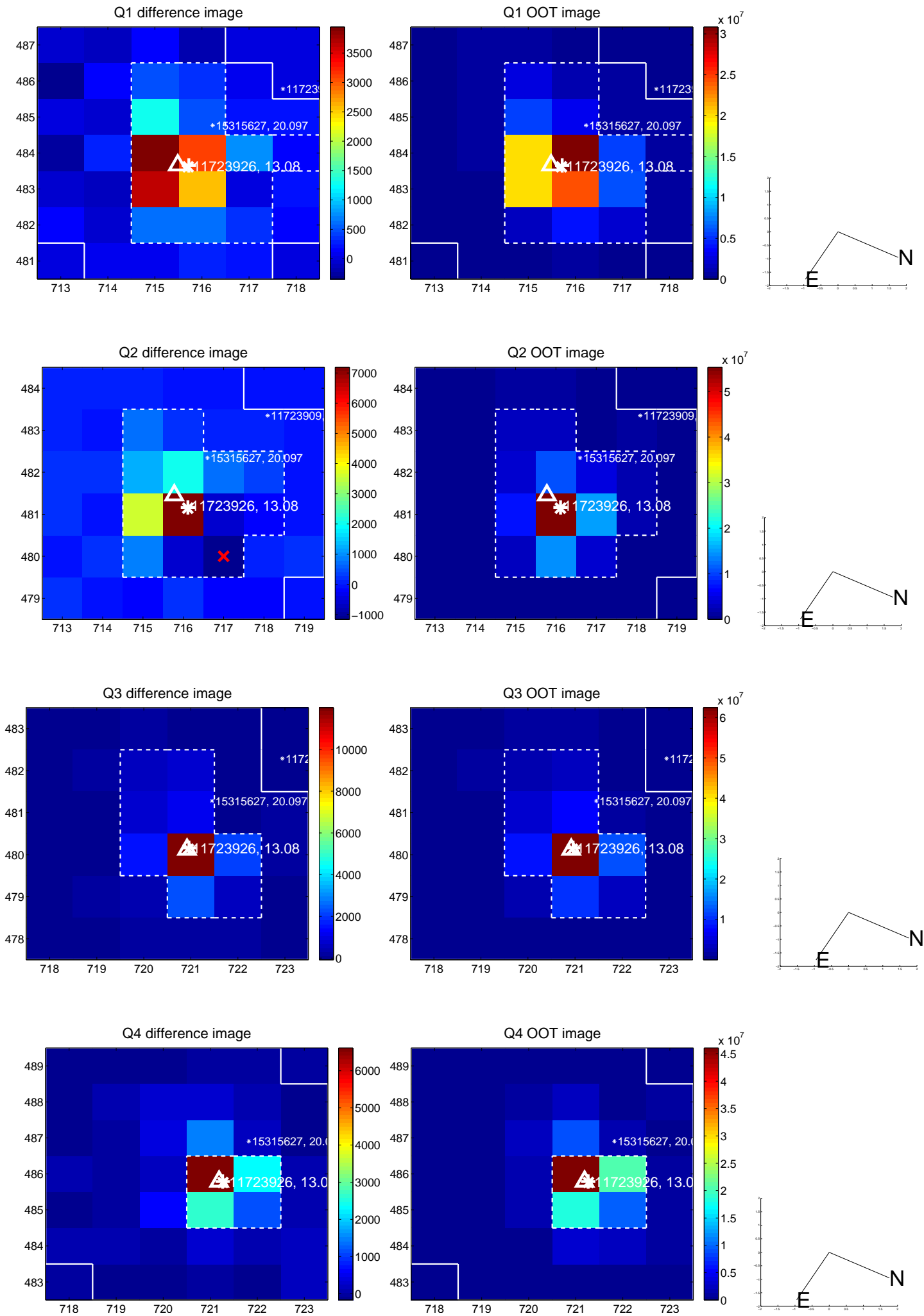
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.017 ± 0.152	0.11	0.011 ± 0.100	0.014 ± 0.184
PRF-fit source offset from KIC position	0.115 ± 0.103	1.12	-0.112 ± 0.099	-0.027 ± 0.195
photometric centroid source offset	—	—	—	—

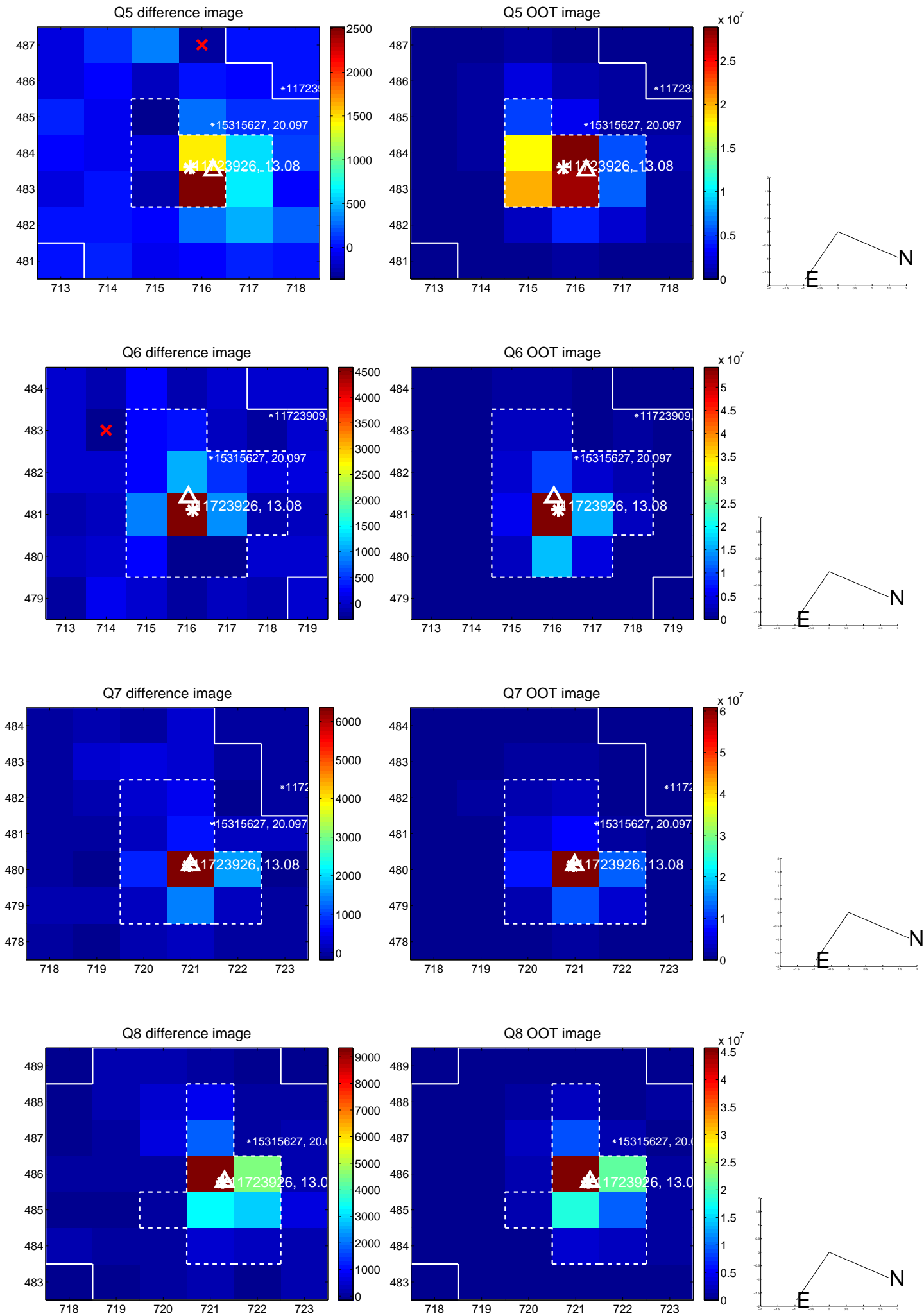


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

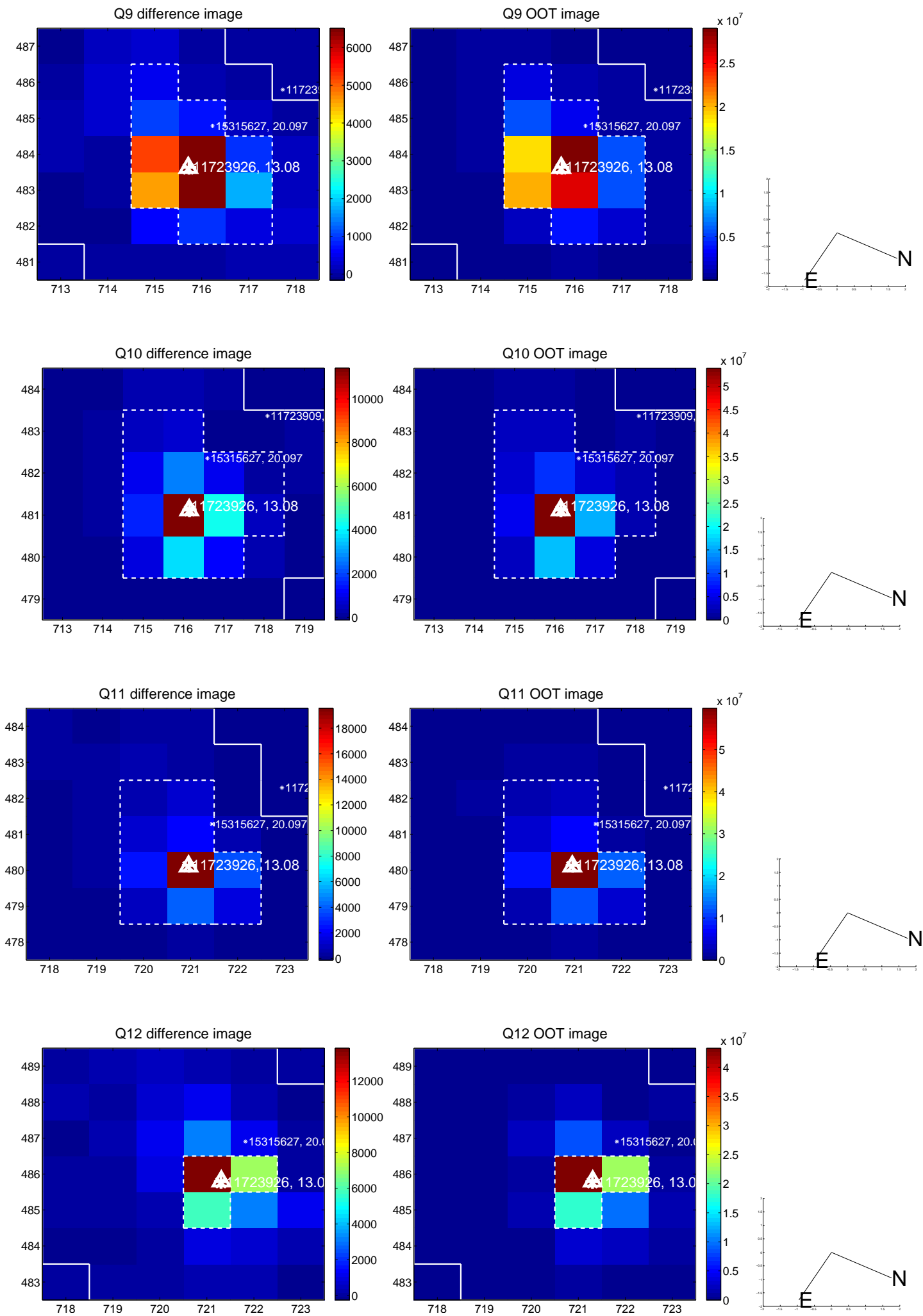
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



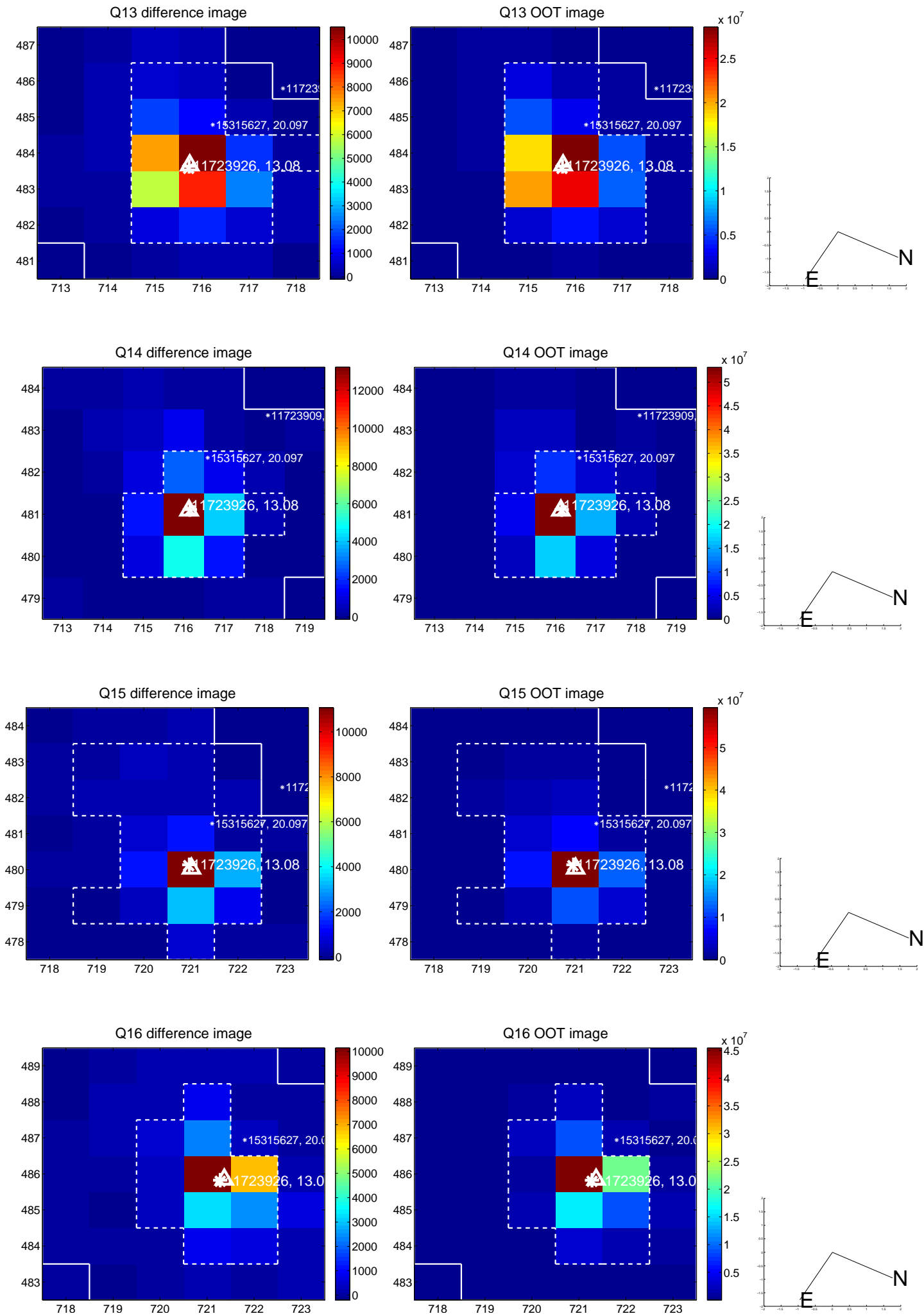
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



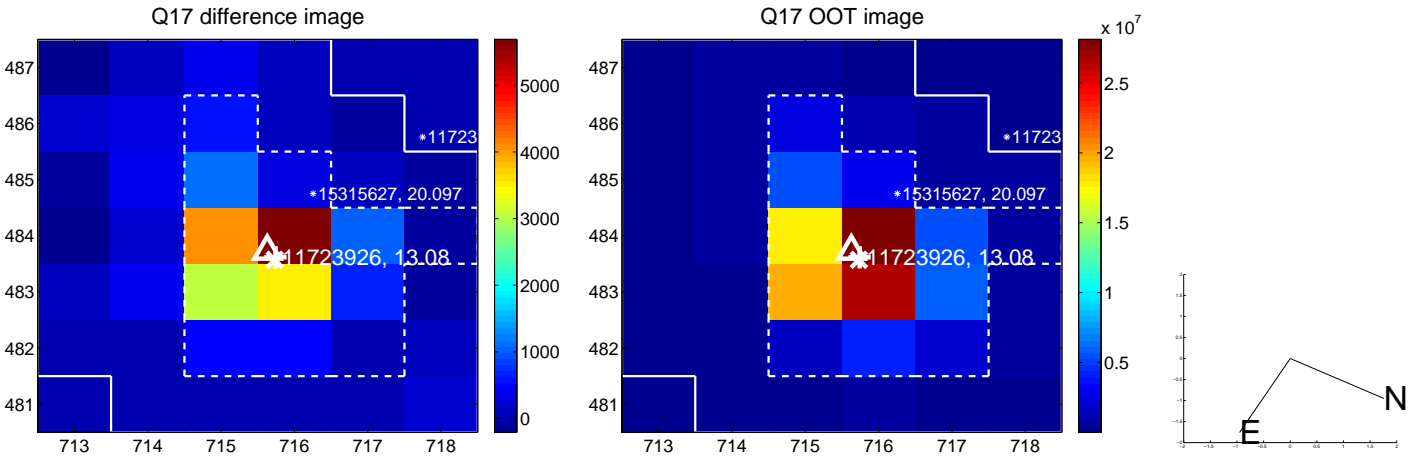
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



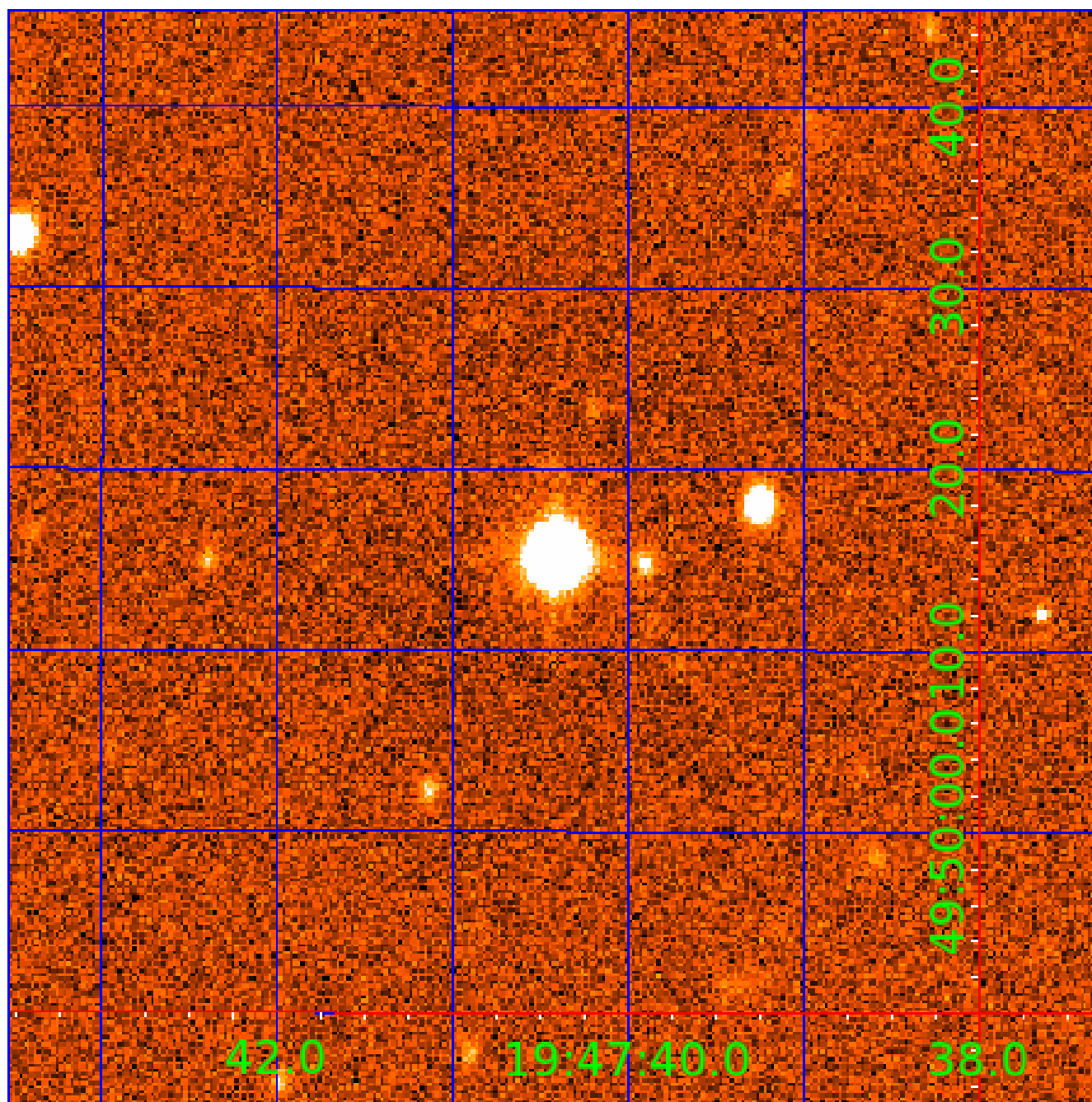
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image

Declination



KIC 011723926

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})
011723926-01	OBS	No	1.069418	131.656827	221.6	2.500	9.6	-1.0	2.33	7272	3.52	22282.73
011723926-02	OBS	No	1.069263	132.088971	3.8	4.563	8.7	1.8	2.33	7272	0.54	22287.03
011723926-03	OBS	No	31.059001	146.526581	202.9	3.334	7.7	8.4	2.33	7272	5.80	249.60
011723926-04	OBS	No	29.257157	152.029734	193.1	1.457	7.7	7.8	2.33	7272	3.43	270.31
011723926-05	OBS	No	428.736511	460.885023	213.5	7.378	7.7	7.5	2.33	7272	3.92	7.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011723926-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS
011723926-02	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011723926-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT
011723926-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT
011723926-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

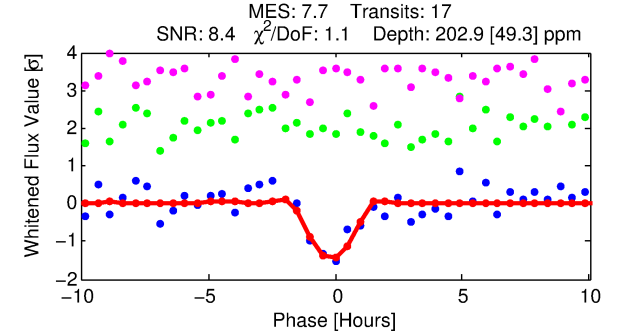
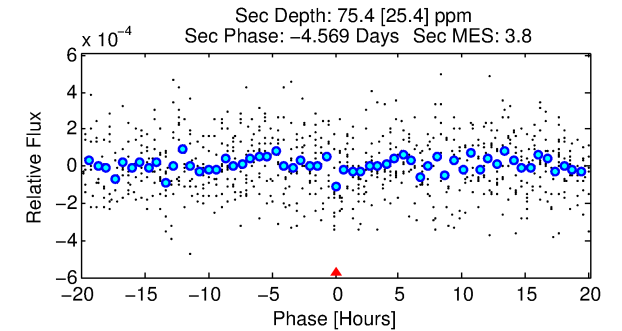
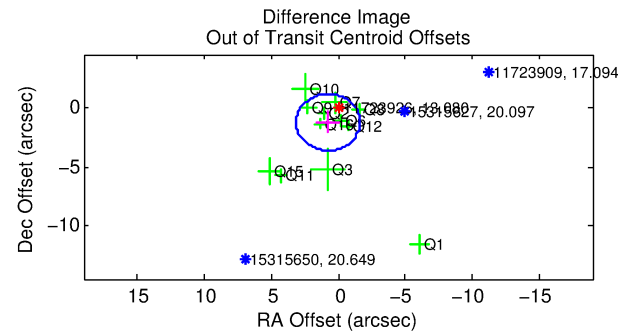
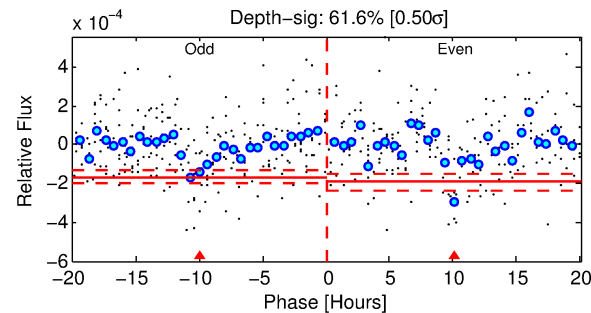
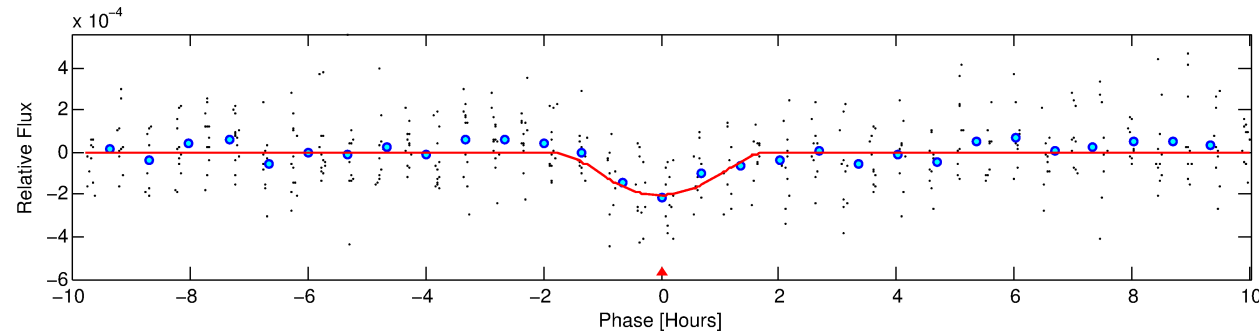
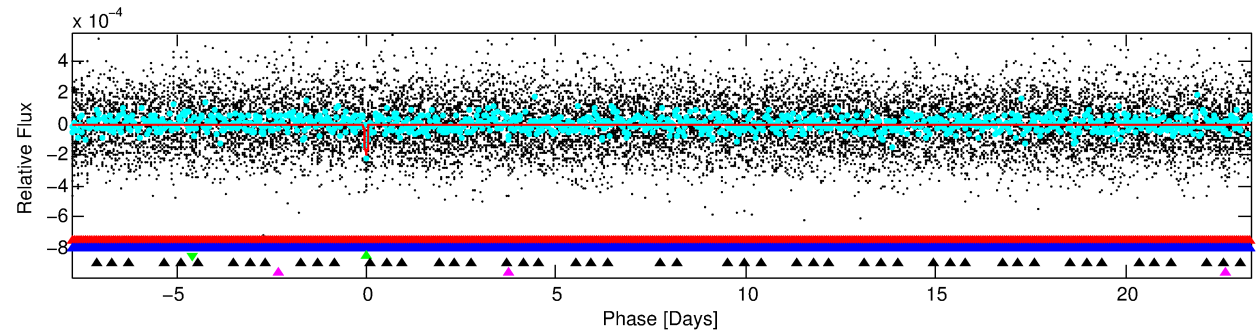
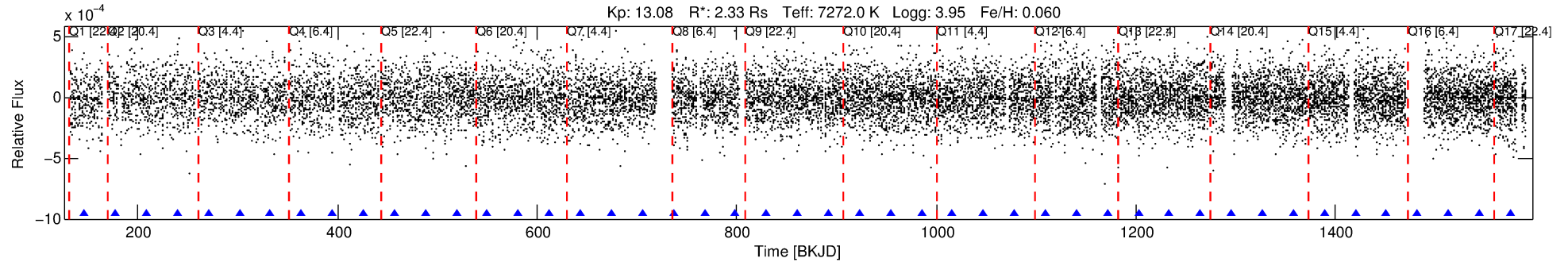
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011723926-03

No Significant Match Found

DV One-Page Summary

KIC: 11723926 Candidate: 3 of 5 Period: 31.059 d



DV Fit Results:

Period = 31.05900 [0.00050] d
Epoch = 146.5266 [0.0167] BKJD
Rp/R* = 0.0228 [0.0762]
a/R* = 16.63 [17.78]
b = 1.00 [0.13]
Seff = 249.60 [114.38]
Teq = 1014 [116] K
Rp = 5.80 [19.45] Re
a = 0.2332 [0.0642] AU
Ag = 67.13 [449.94] [0.15σ]
Teffp = 4486 [7504] K [0.46σ]

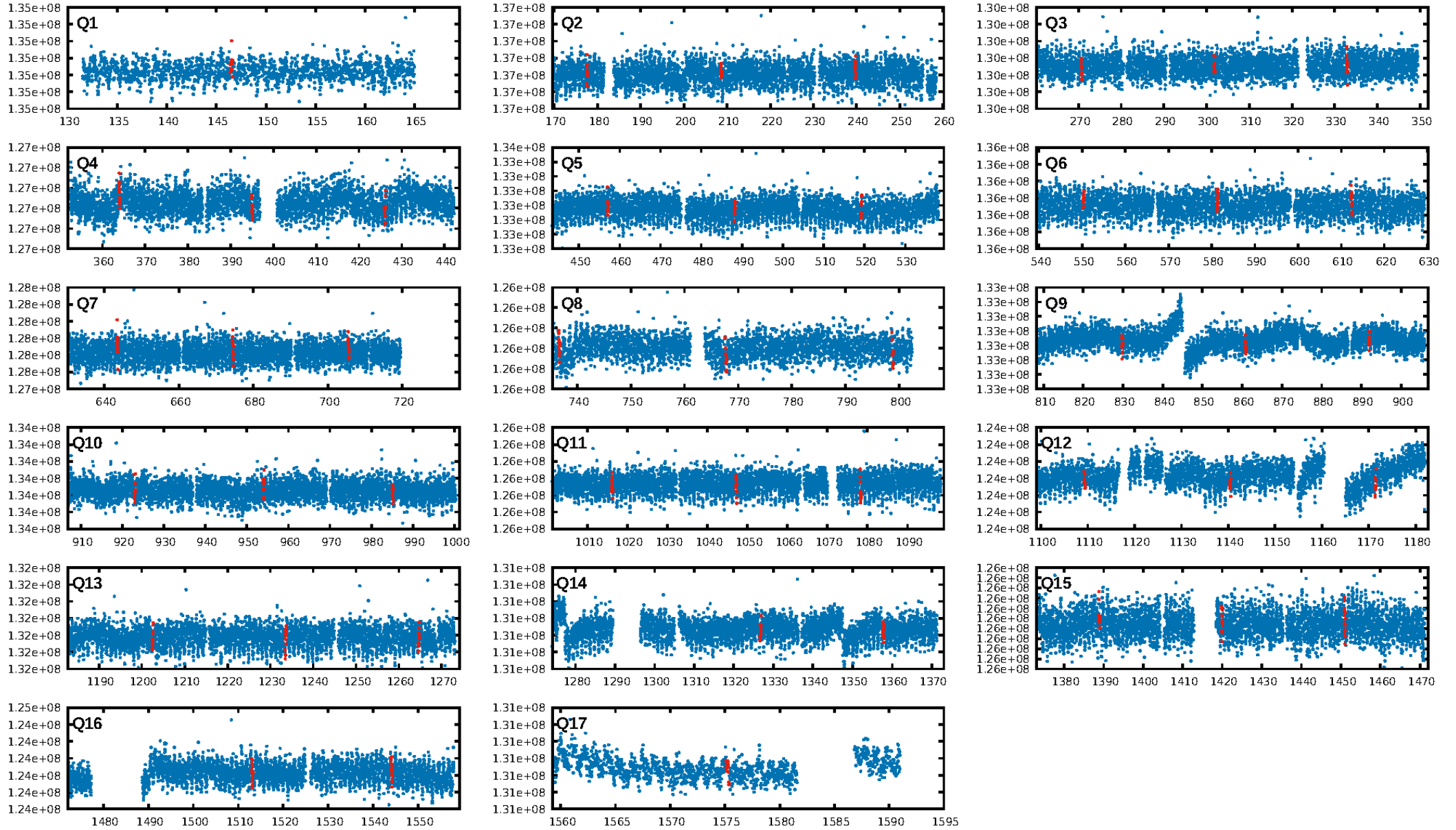
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [11.89σ]
LongPeriod-sig: 100.0% [1178.90σ]
ModelChiSquare2-sig: 28.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.52e-09
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: 1.08
Centroid-sig: 0.3%
Centroid-so: 1.554 arcsec [2.06σ]
OotOffset-rm: 1.464 arcsec [1.84σ]
OotOffset-st: 3/4/3/2 [12]
KicOffset-rm: 1.449 arcsec [1.85σ]
KicOffset-st: 3/4/3/2 [12]
DiffImageQuality-fgm: 0.33 [4/12]
DiffImageOverlap-fno: 0.00 [0/17]

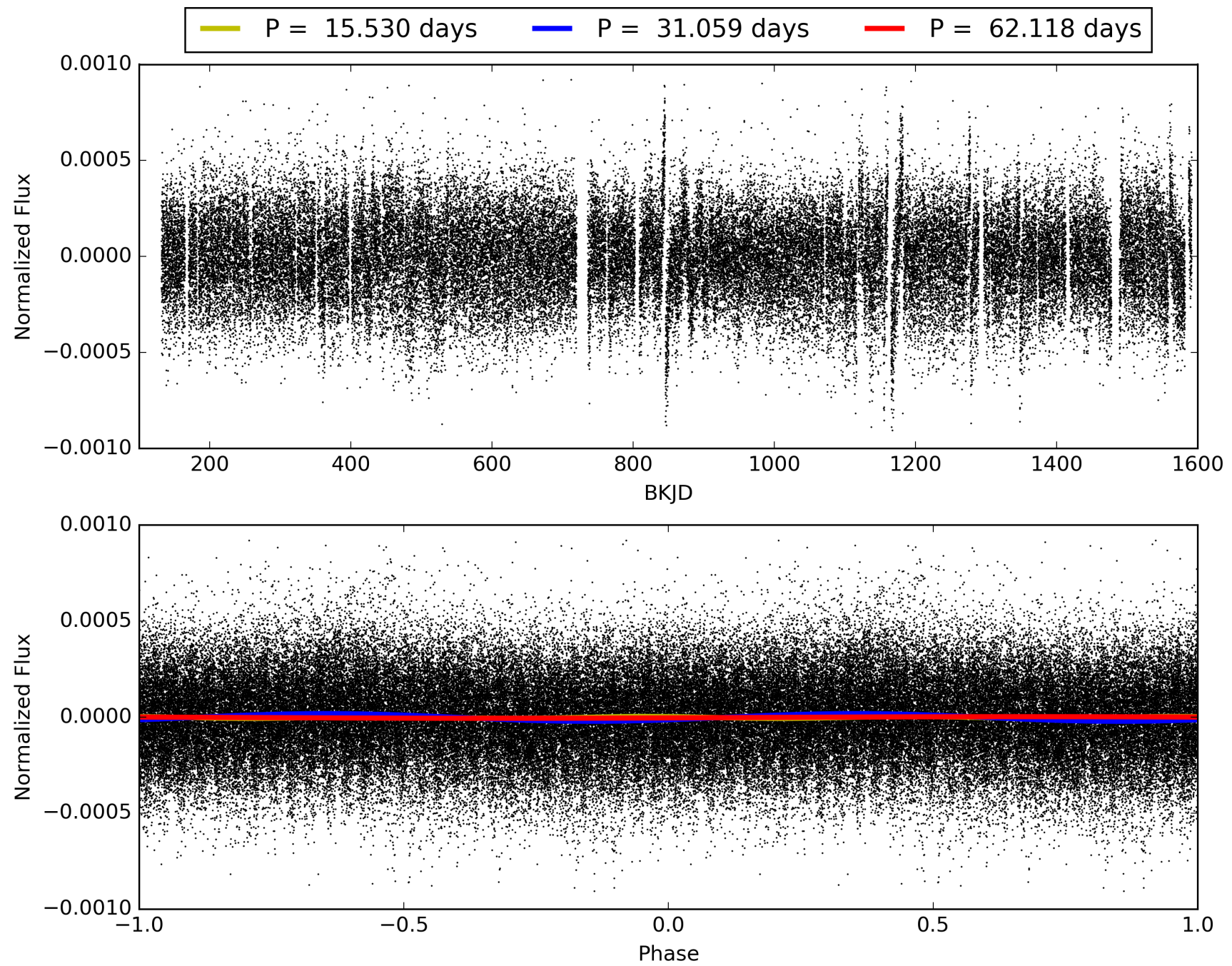
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:19:39 Z

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

TCE 011723926-03, PDC Light Curves

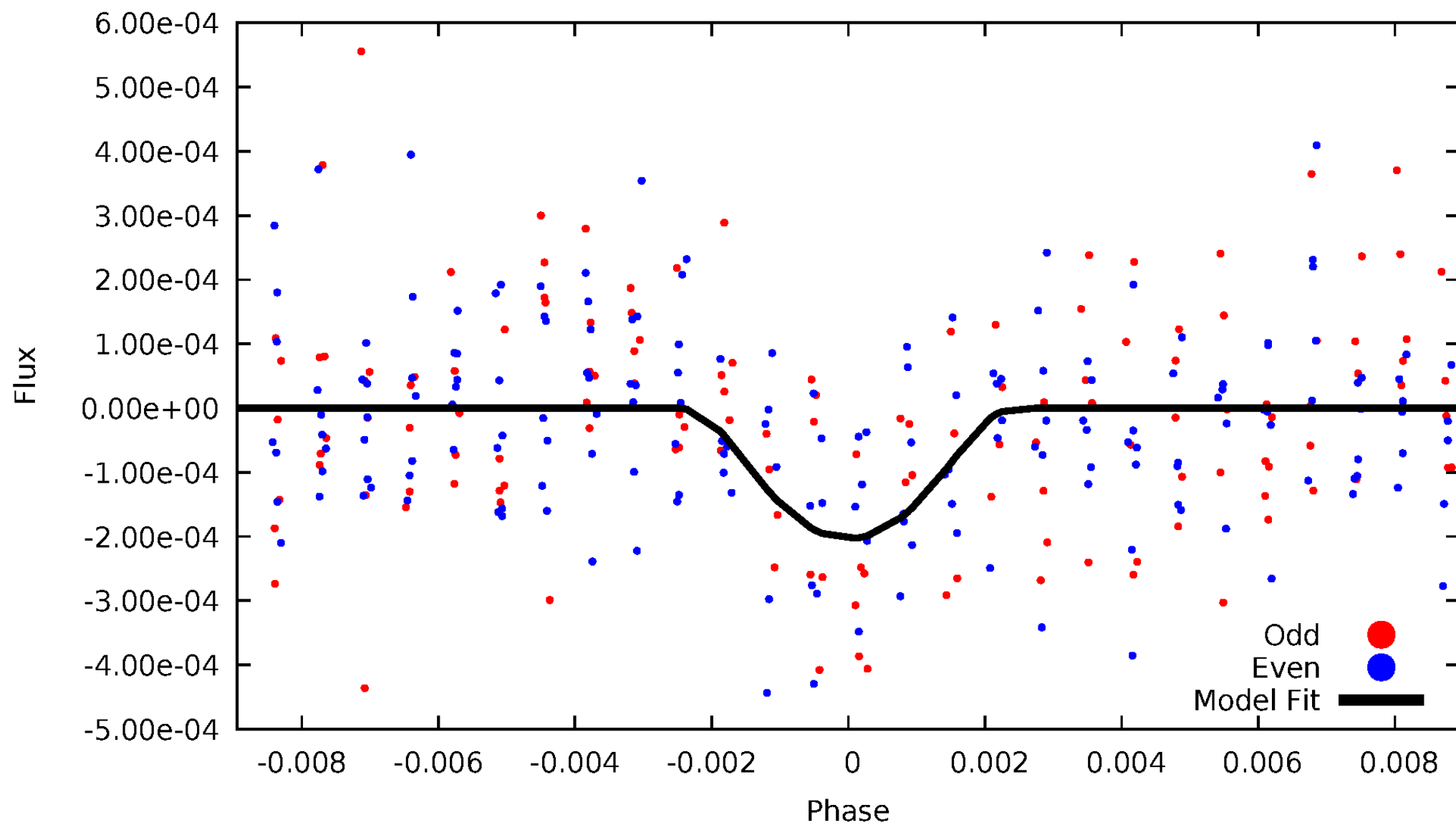


TCE 011723926-03



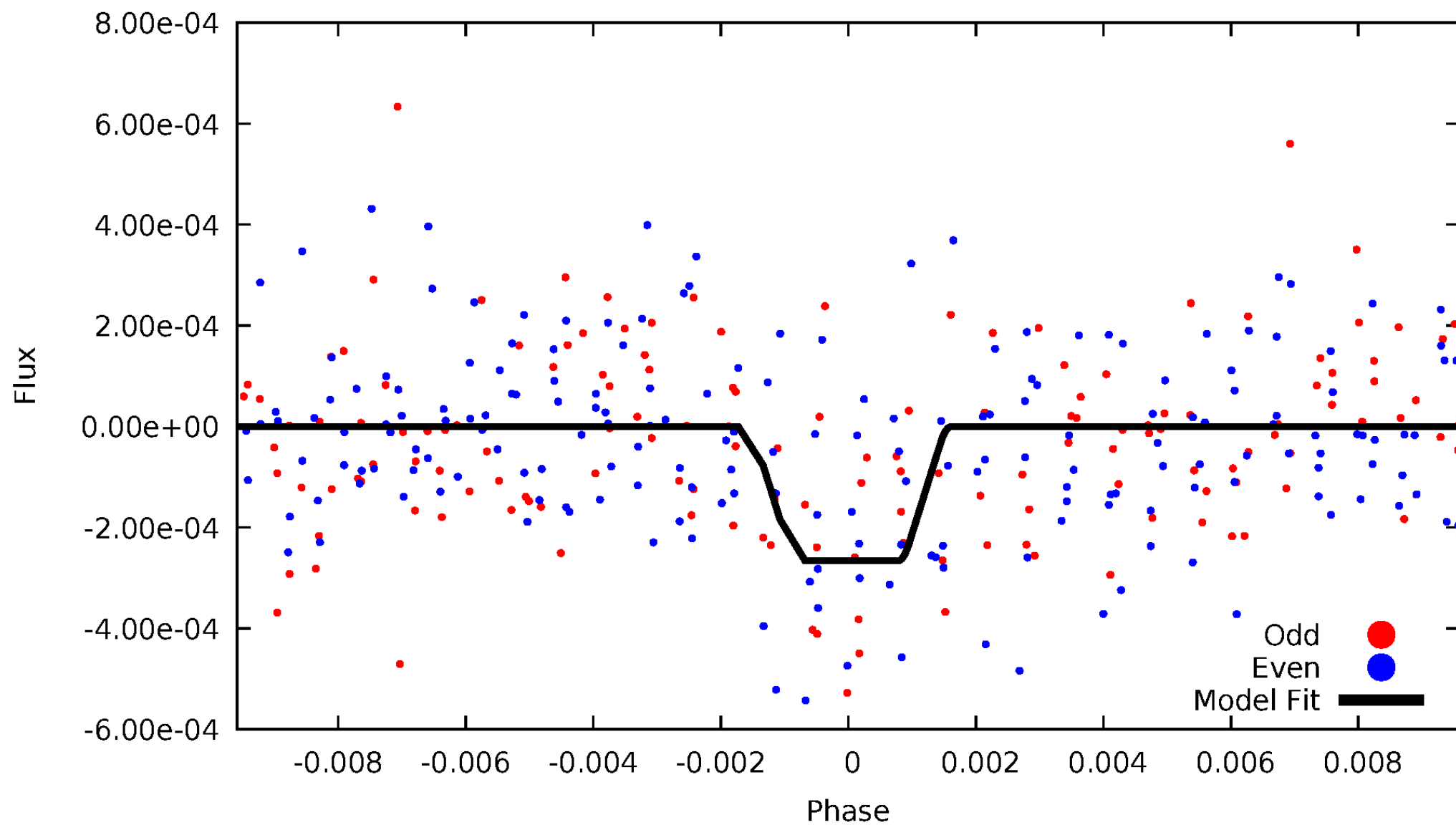
DV Odd/Even

TCE 011723926-03

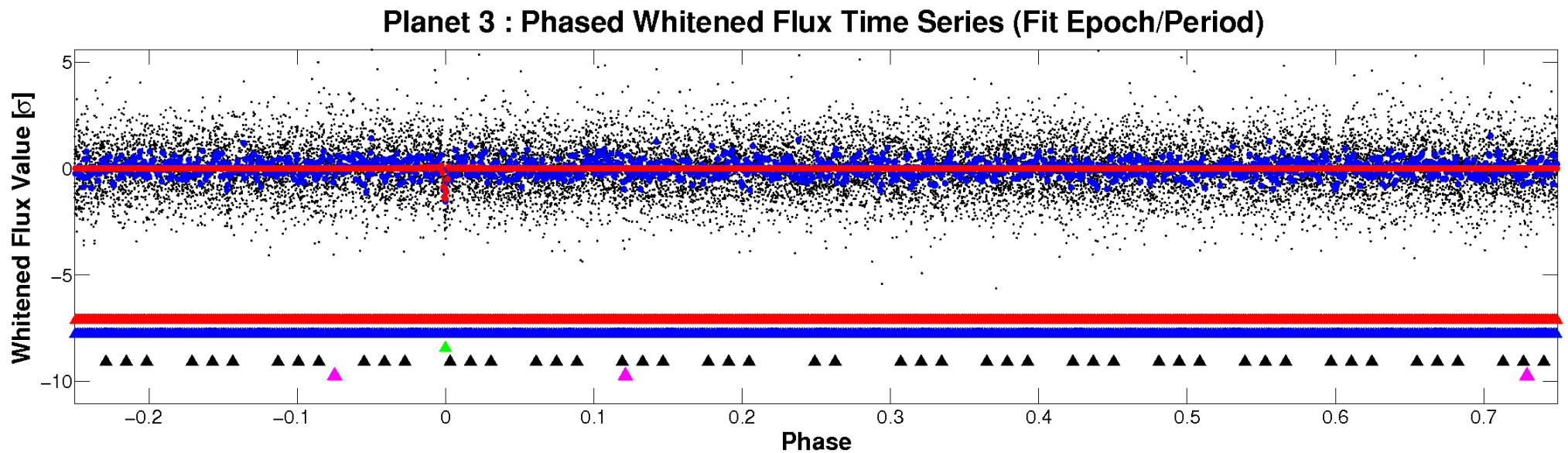
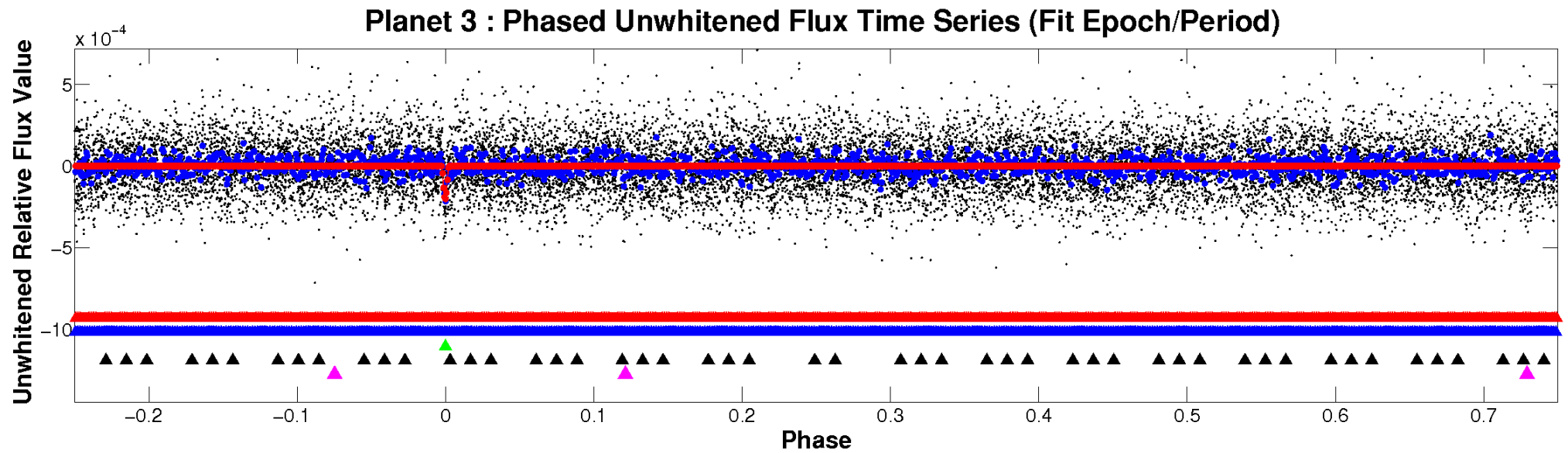


ALT Odd/Even

TCE 011723926-03

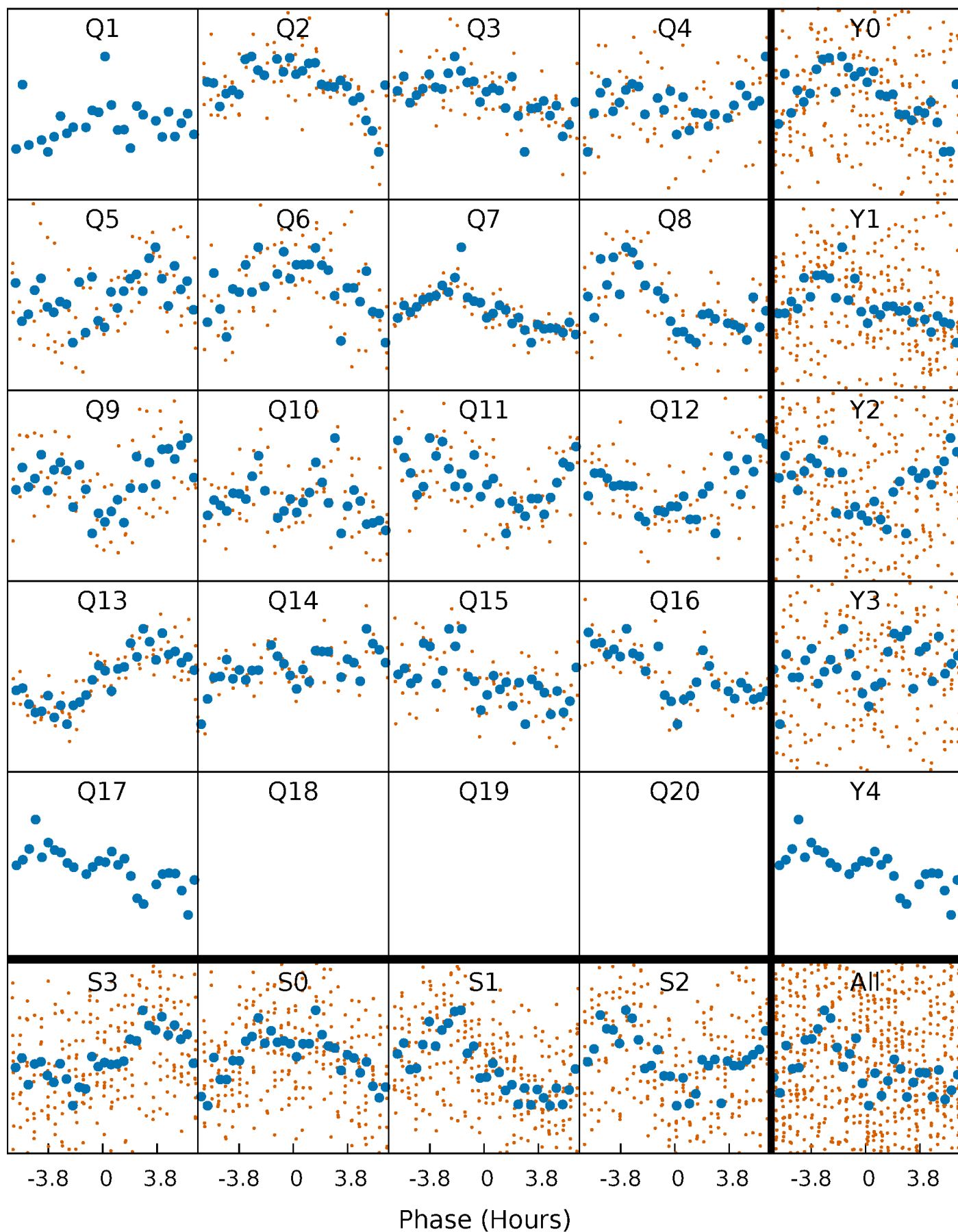


Non-Whitened Vs. Whitened Light Curve



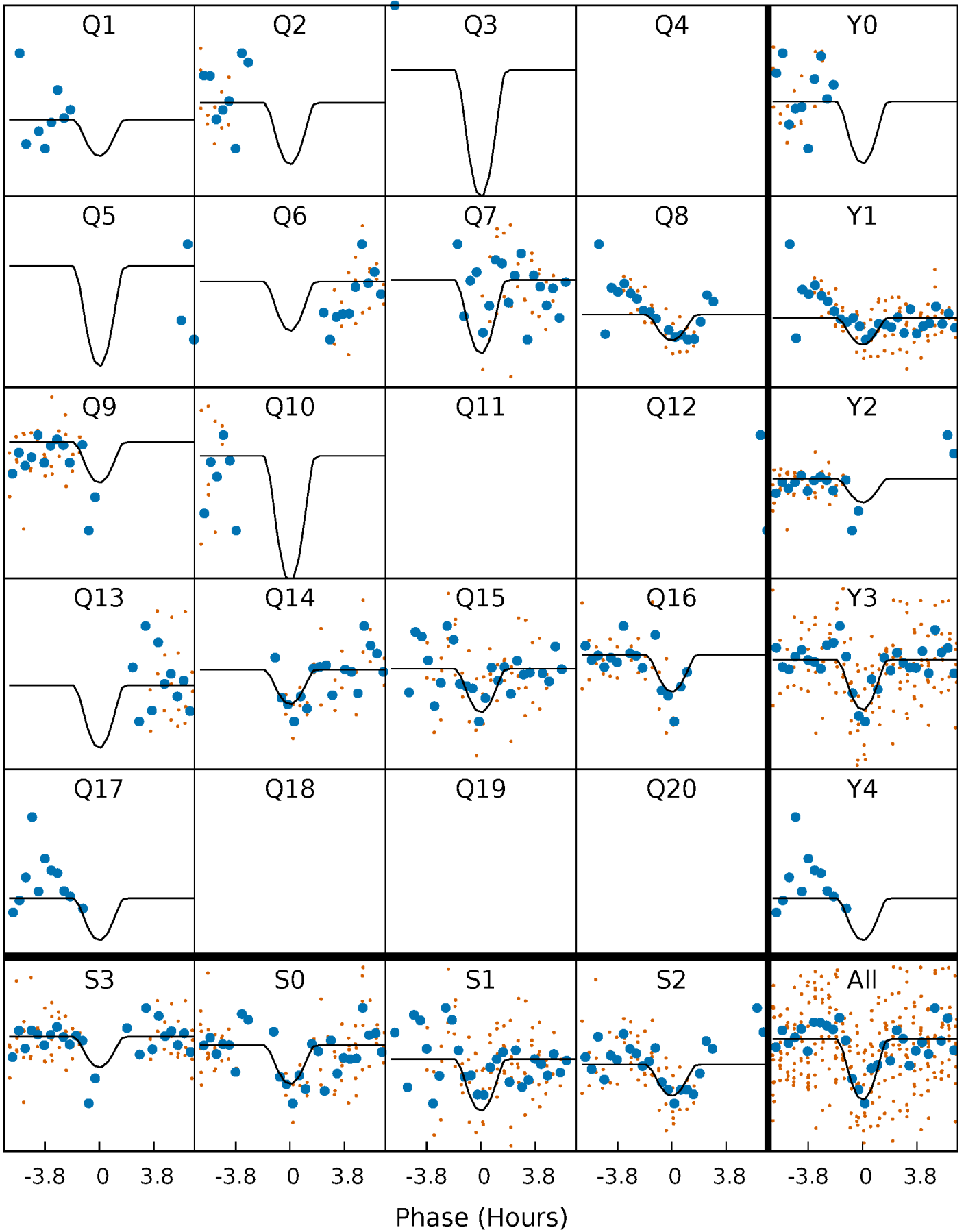
PDC Quarter-Phased Transit Curves

TCE 011723926-03 P= 31.059001 Days $T_0=146.526581$ (BKJD)



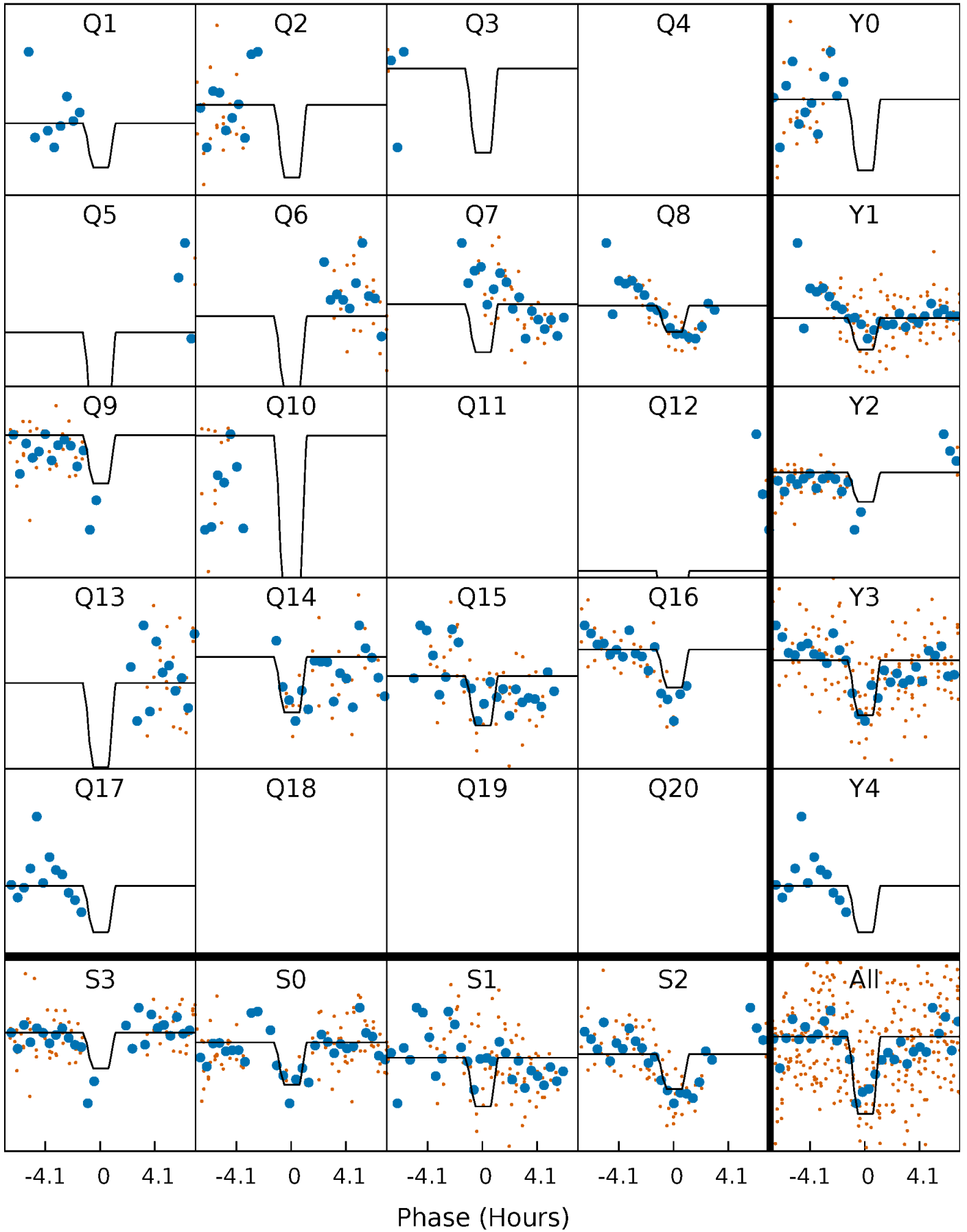
DV Quarter-Phased Transit Curves

TCE 011723926-03 P= 31.059001 Days $T_0=146.526581$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

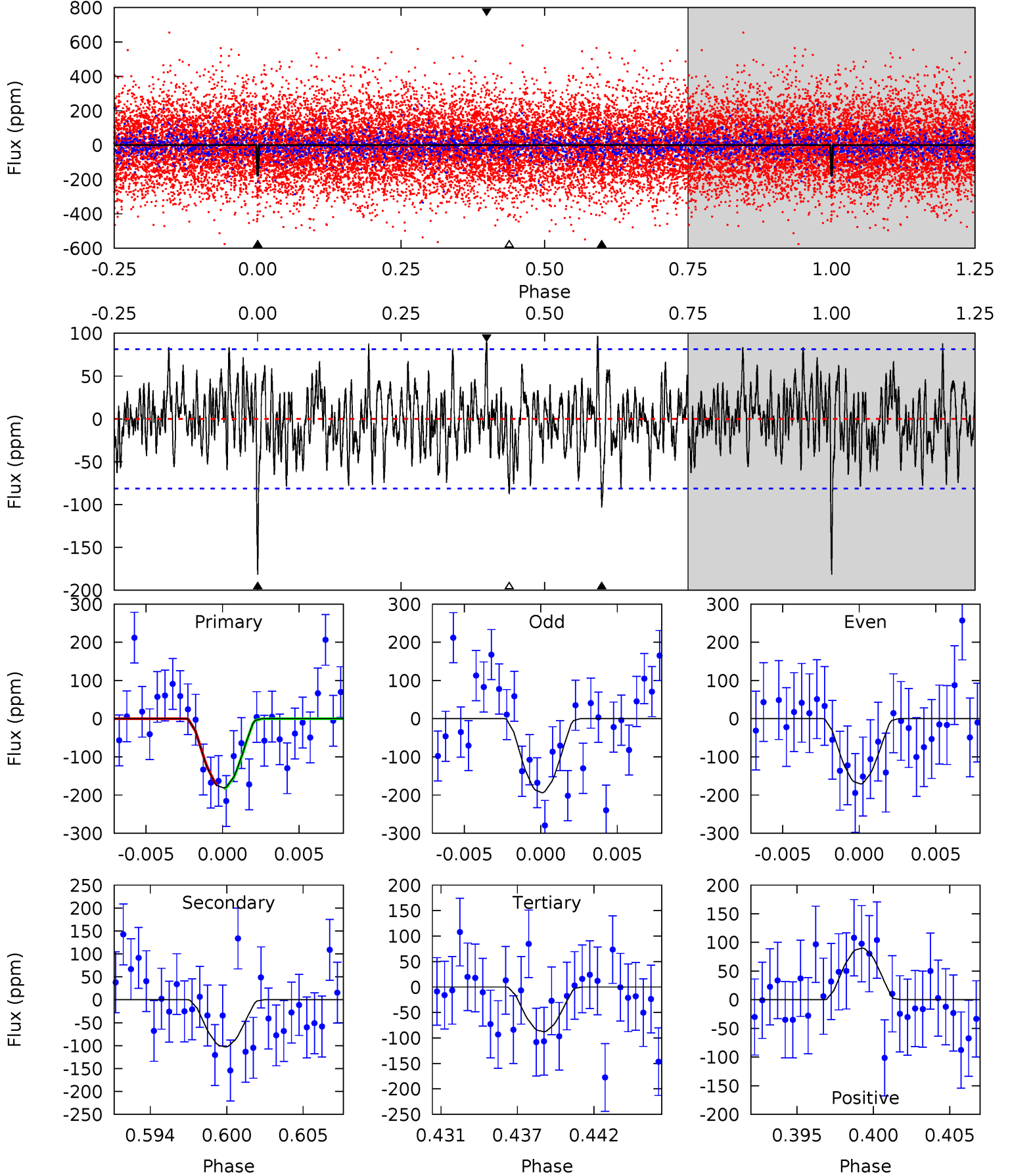
TCE 011723926-03 P= 31.059317 Days $T_0=146.517880$ (BKJD)



DV Model-Shift Uniqueness Test

011723926-03, $P = 31.059001$ Days, $E = 115.467580$ Days

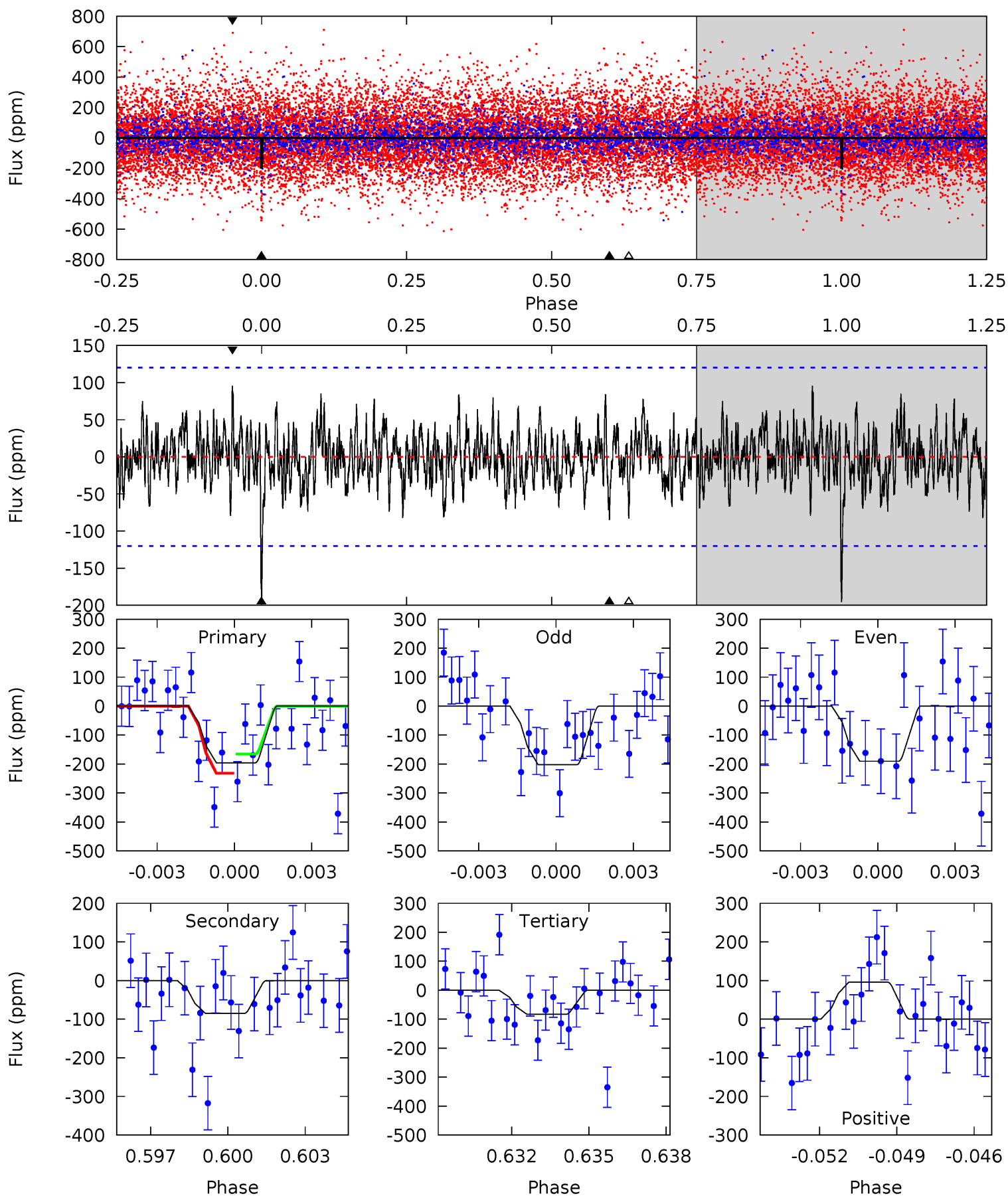
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	6.53	5.56	5.72	5.15	2.79	1.86	5.93	5.78	0.97	0.82	0.72	0.87	0.35	0.30



Alt Model-Shift Uniqueness Test

011723926-03, P = 31.059317 Days, E = 115.458563 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.56	3.72	3.64	4.18	5.26	2.98	1.29	4.92	4.38	0.07	-0.47	0.26	0.91	0.33	1.45



Stellar Parameters For KIC 011723926

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7272^{+226}_{-327}	$3.948^{+0.240}_{-0.160}$	$0.060^{+0.200}_{-0.350}$	$2.328^{+0.585}_{-0.715}$	$1.752^{+0.186}_{-0.345}$	$0.196^{+0.313}_{-0.078}$
	+3%/-4%	+6%/-4%	+333%/-583%	+25%/-31%	+11%/-20%	+160%/-40%
Source	PHO1	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 011723926-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-103±16	$14.23^{+15.36}_{-9.80}$	1410^{+111}_{-126}	3499^{+1784}_{-701}	15^{+140}_{-12}
Alt.	-85±23	$14.85^{+15.63}_{-10.06}$	1405^{+107}_{-122}	3288^{+1679}_{-613}	10^{+98}_{-8}

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 $A_{obs} \gg 1.0$

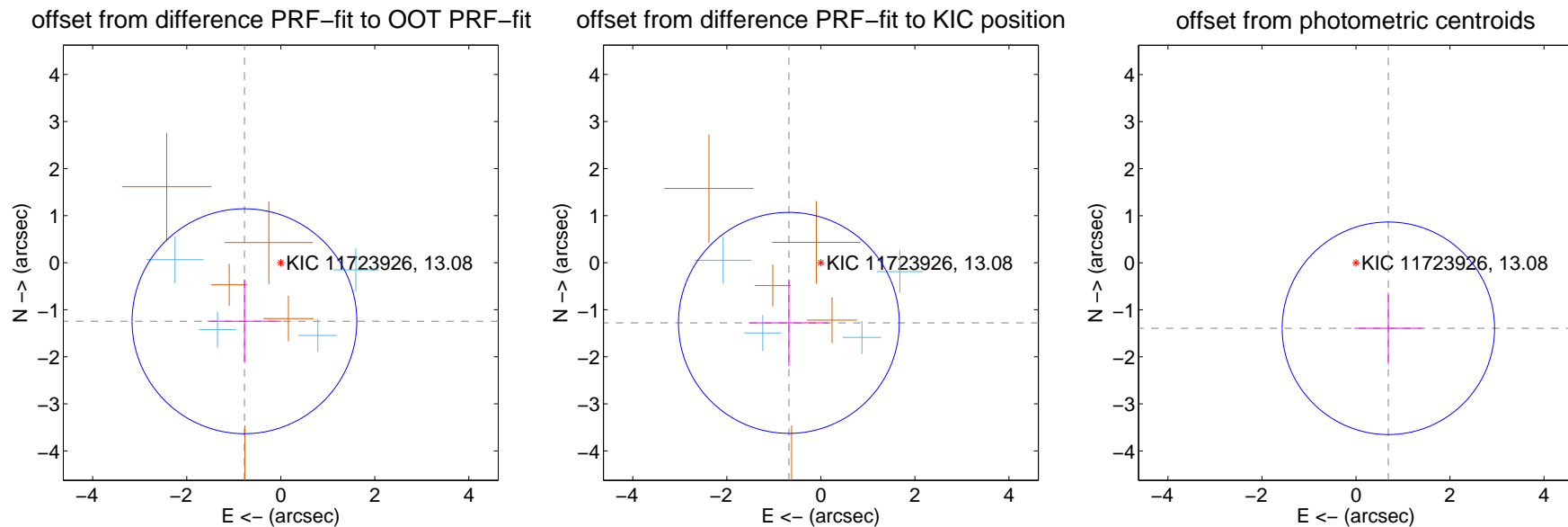
DV Centroid Data

Supplemental centroid analysis for 011723926-03. Kepler magnitude: 13.08. Transit SNR 8.38

There are 4 quarters with good PRF difference image offsets

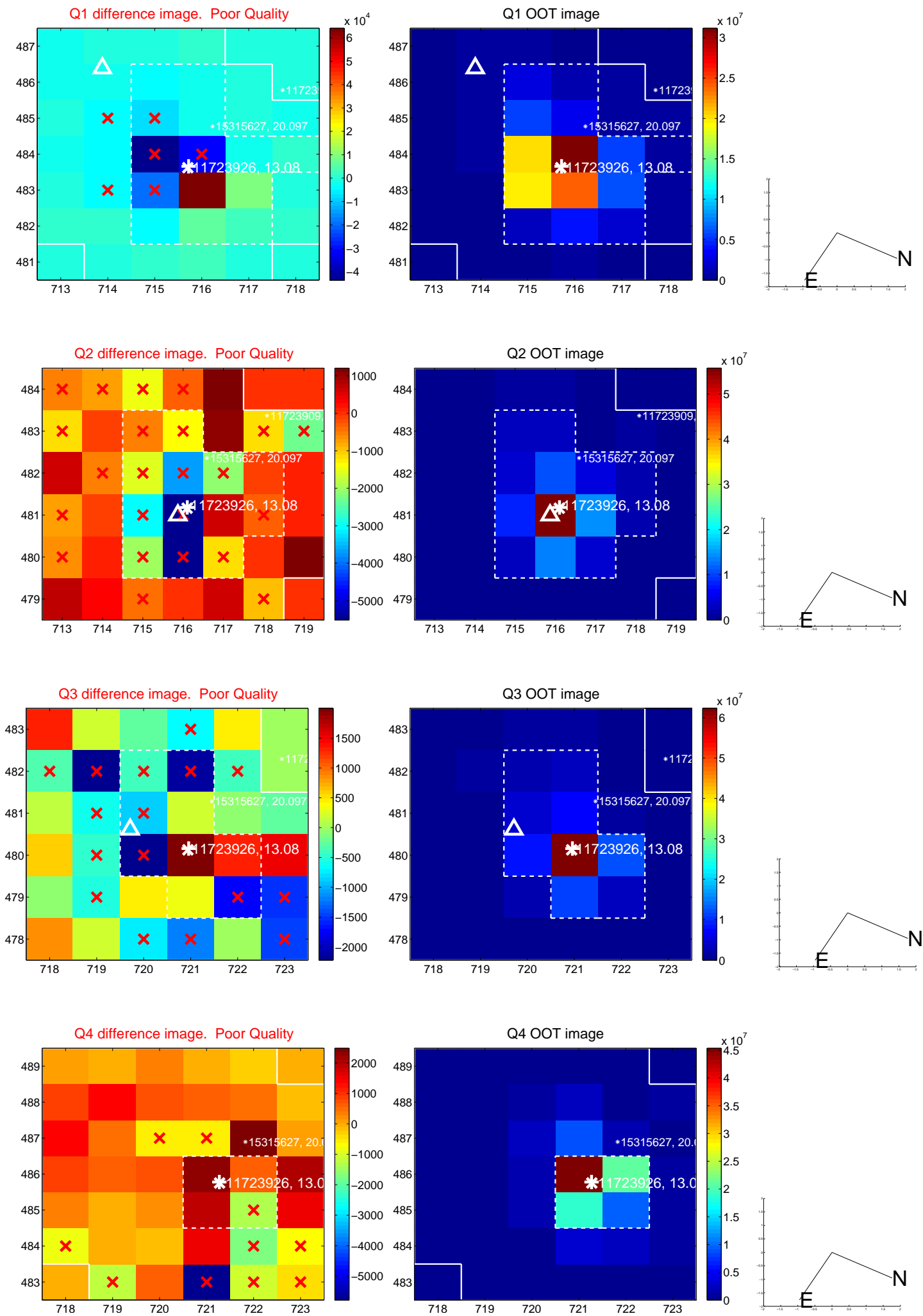
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.464 ± 0.797	1.84	0.772 ± 0.782	-1.244 ± 0.887
PRF-fit source offset from KIC position	1.449 ± 0.783	1.85	0.680 ± 0.846	-1.279 ± 0.919
photometric centroid source offset	1.55 ± 0.75	2.06	-0.69 ± 0.72	-1.39 ± 0.76

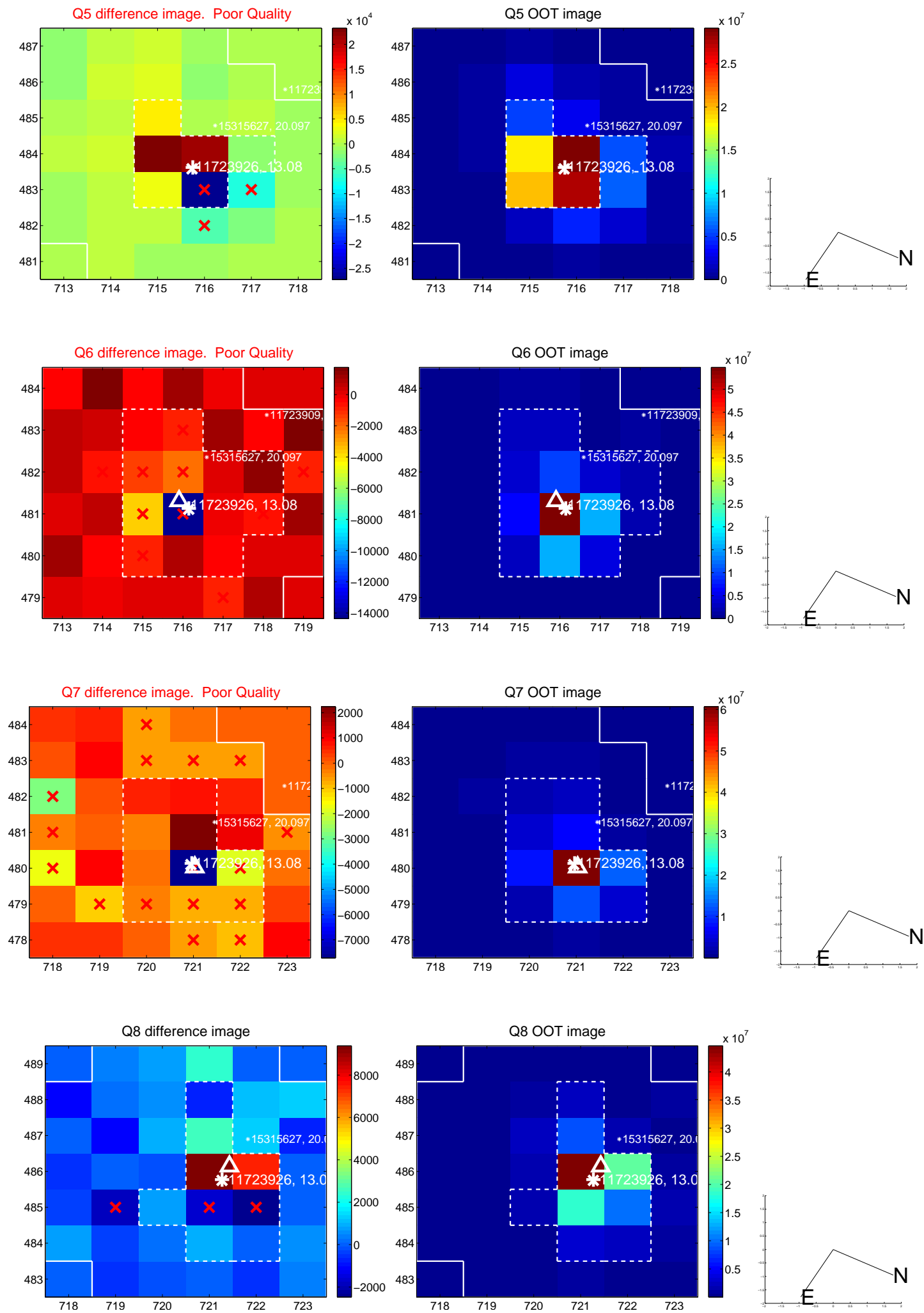


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

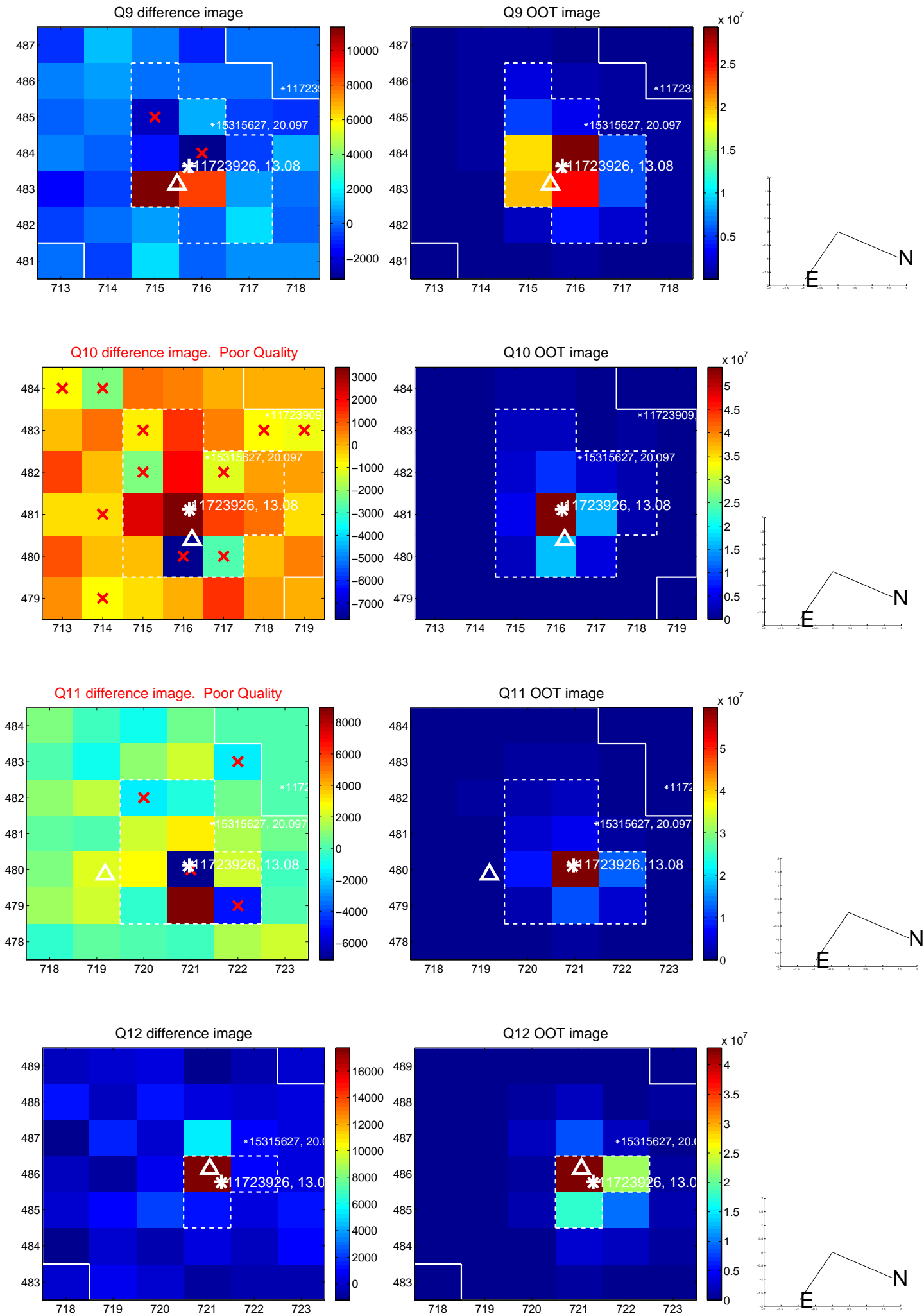
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



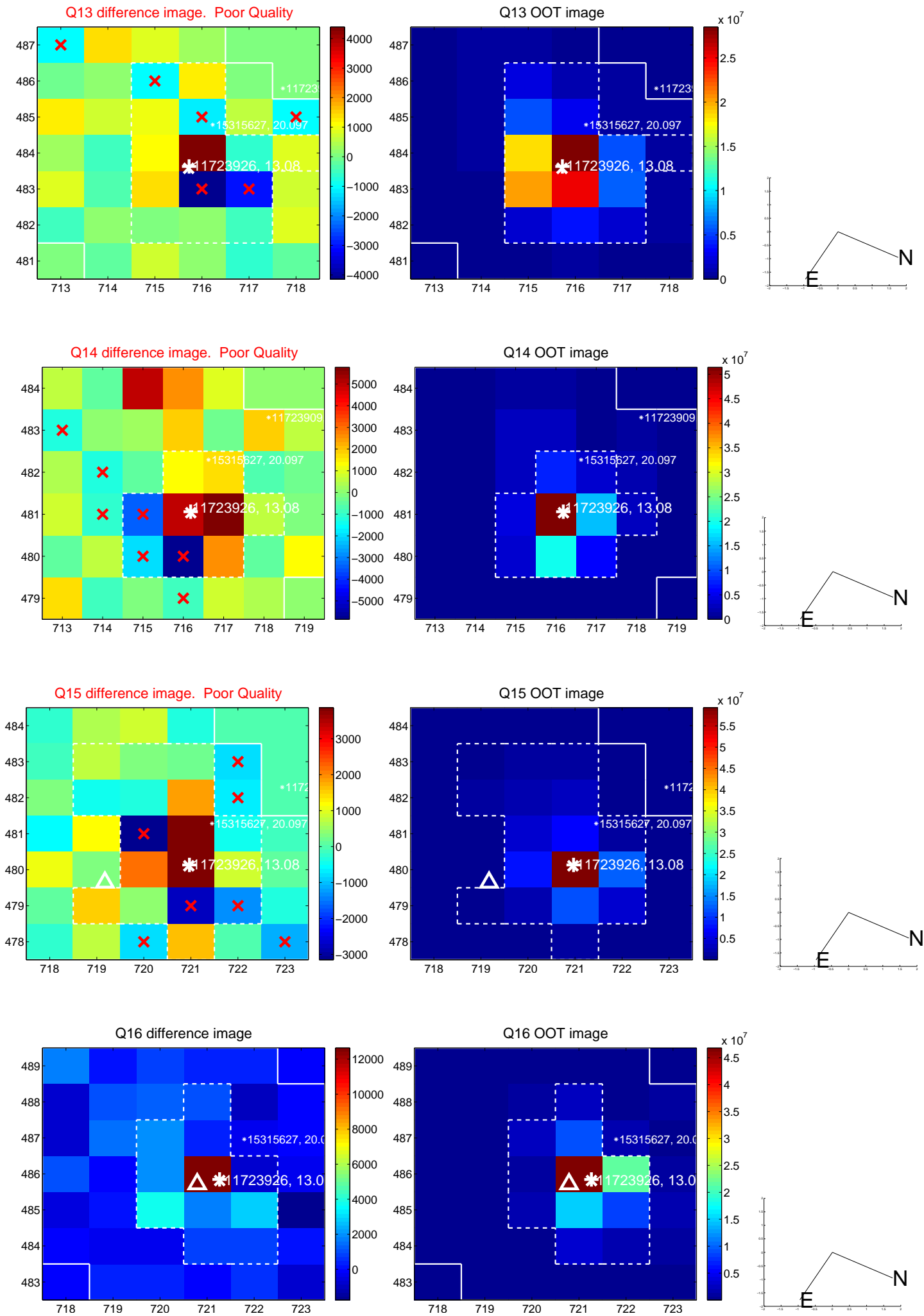
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



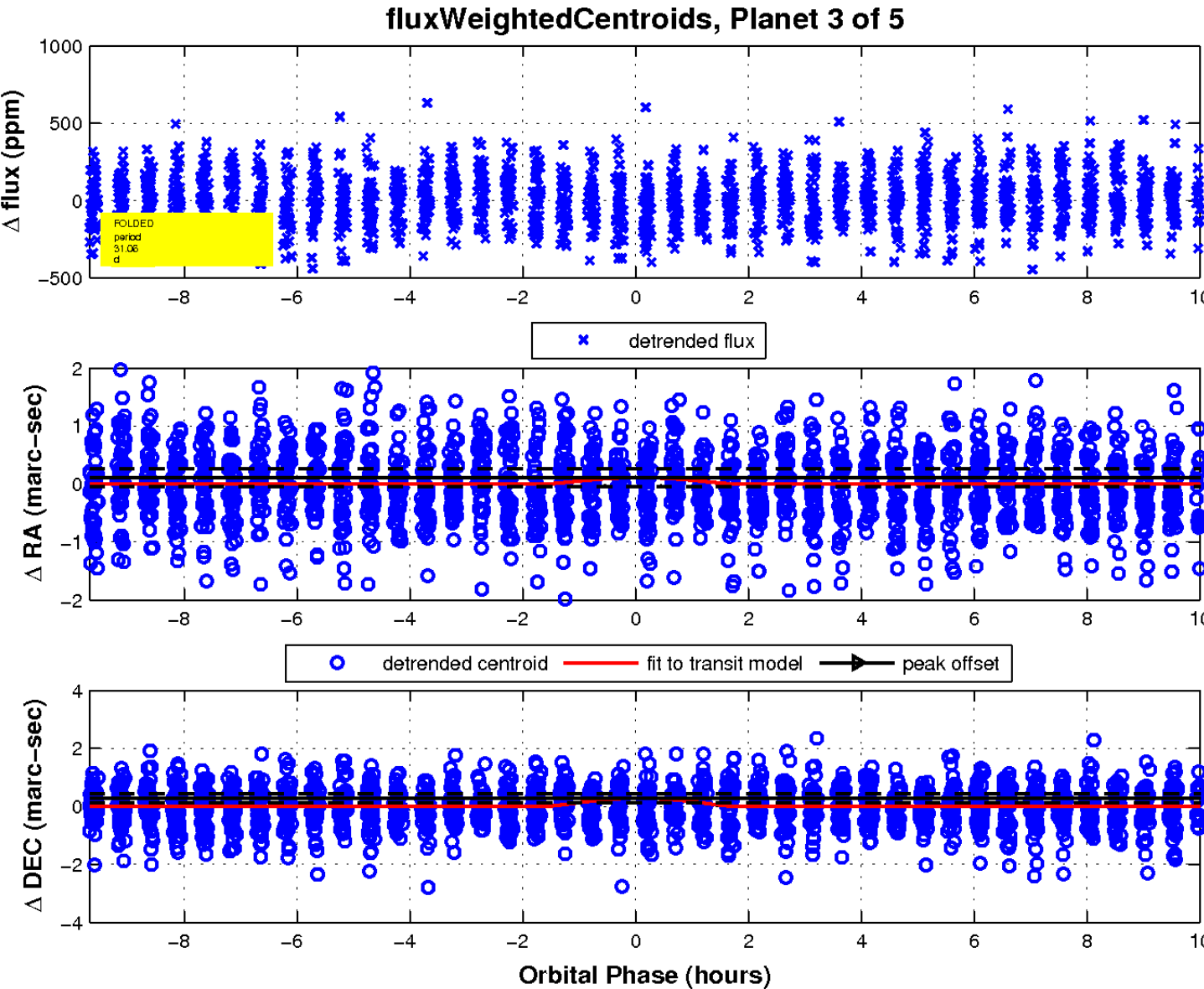
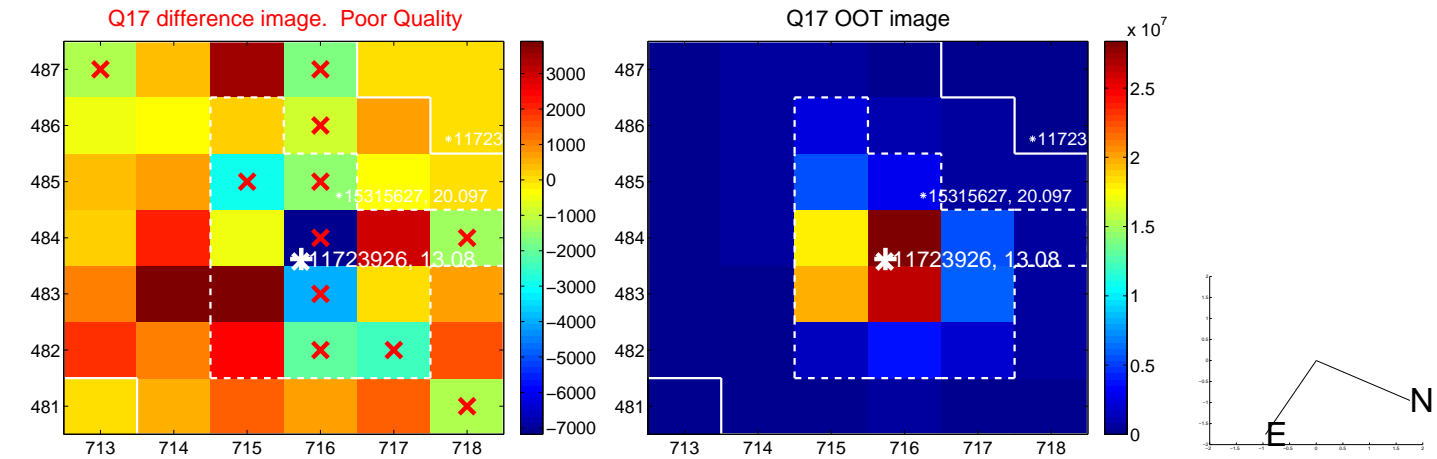
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

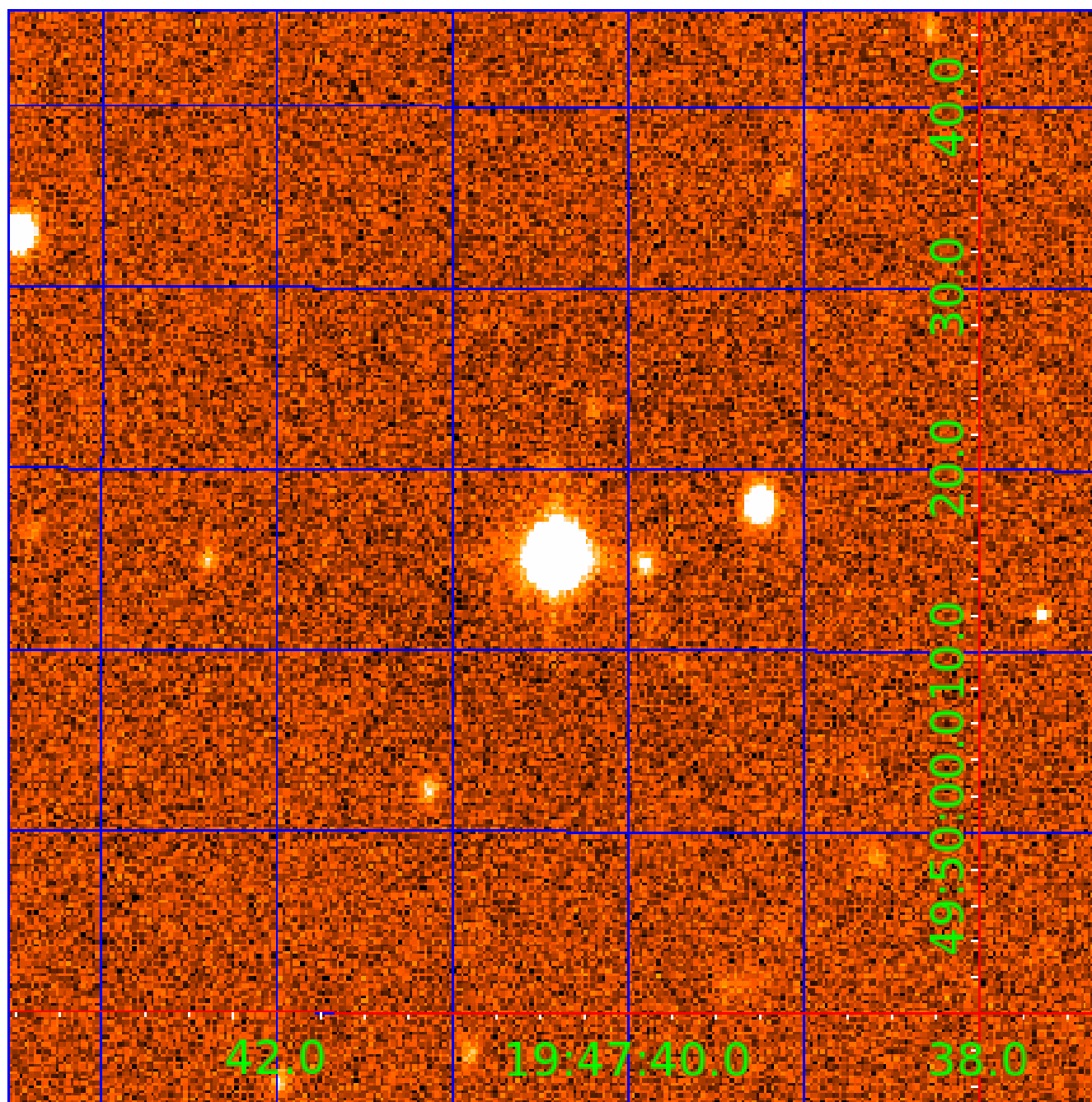


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011723926

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})
011723926-01	OBS	No	1.069418	131.656827	221.6	2.500	9.6	-1.0	2.33	7272	3.52	22282.73
011723926-02	OBS	No	1.069263	132.088971	3.8	4.563	8.7	1.8	2.33	7272	0.54	22287.03
011723926-03	OBS	No	31.059001	146.526581	202.9	3.334	7.7	8.4	2.33	7272	5.80	249.60
011723926-04	OBS	No	29.257157	152.029734	193.1	1.457	7.7	7.8	2.33	7272	3.43	270.31
011723926-05	OBS	No	428.736511	460.885023	213.5	7.378	7.7	7.5	2.33	7272	3.92	7.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011723926-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS
011723926-02	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011723926-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT
011723926-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT
011723926-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

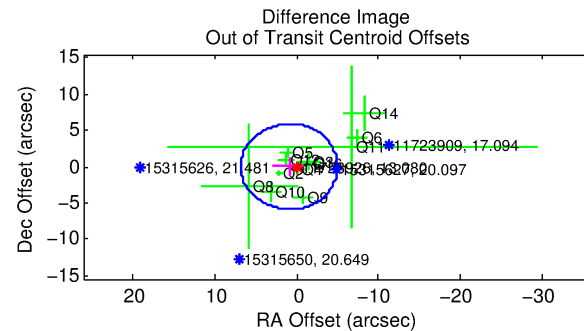
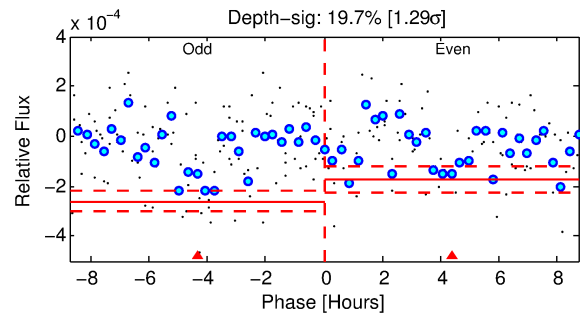
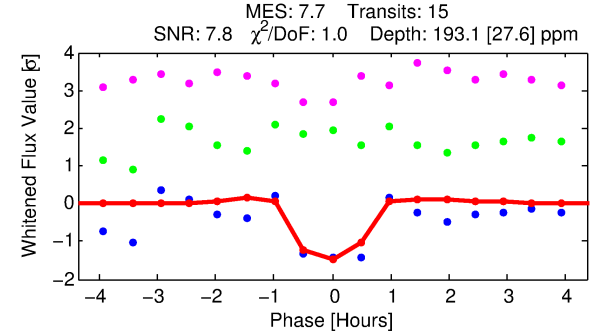
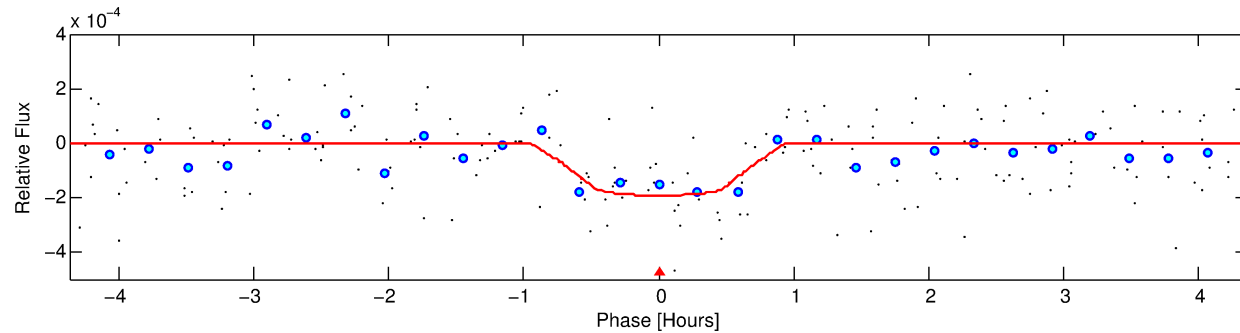
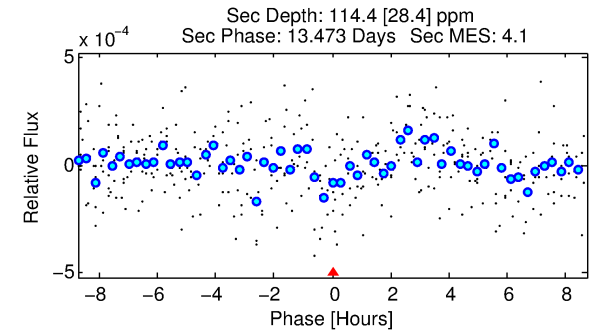
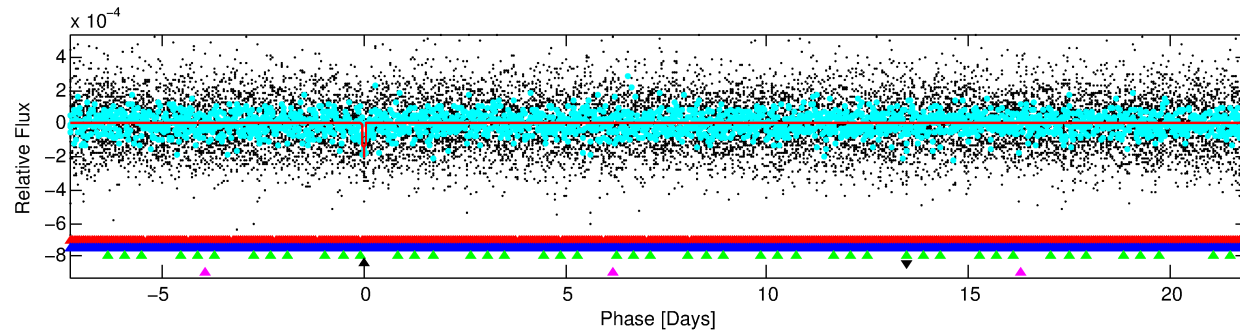
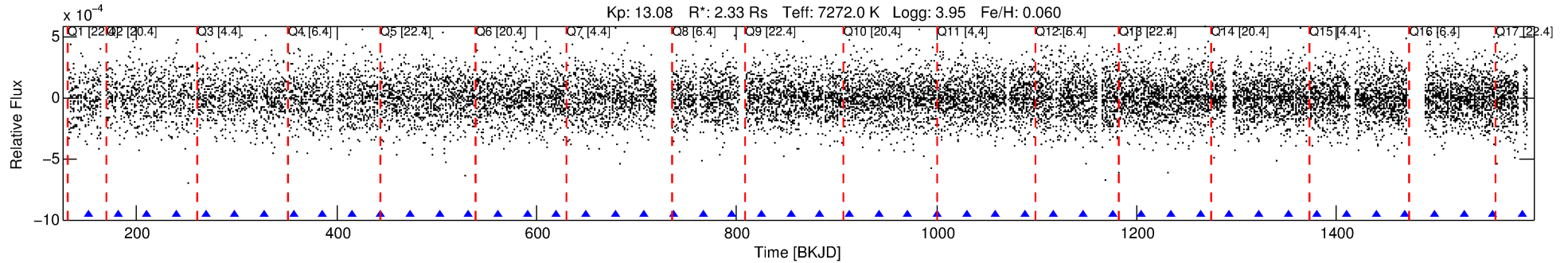
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011723926-04

No Significant Match Found

DV One-Page Summary

KIC: 11723926 Candidate: 4 of 5 Period: 29.257 d



DV Fit Results:

Period = 29.25716 [0.00022] d
Epoch = 152.0297 [0.0062] BKJD
Rp/R* = 0.0135 [0.0080]
a/R* = 122.38 [432.71]
b = 0.63 [3.47]
Seff = 270.31 [123.87]
Teq = 1034 [118] K
Rp = 3.43 [2.29] Re
a = 0.2241 [0.0617] AU
Ag = 269.08 [345.84] [0.78σ]
Teffp = 6474 [1987] K [2.73σ]

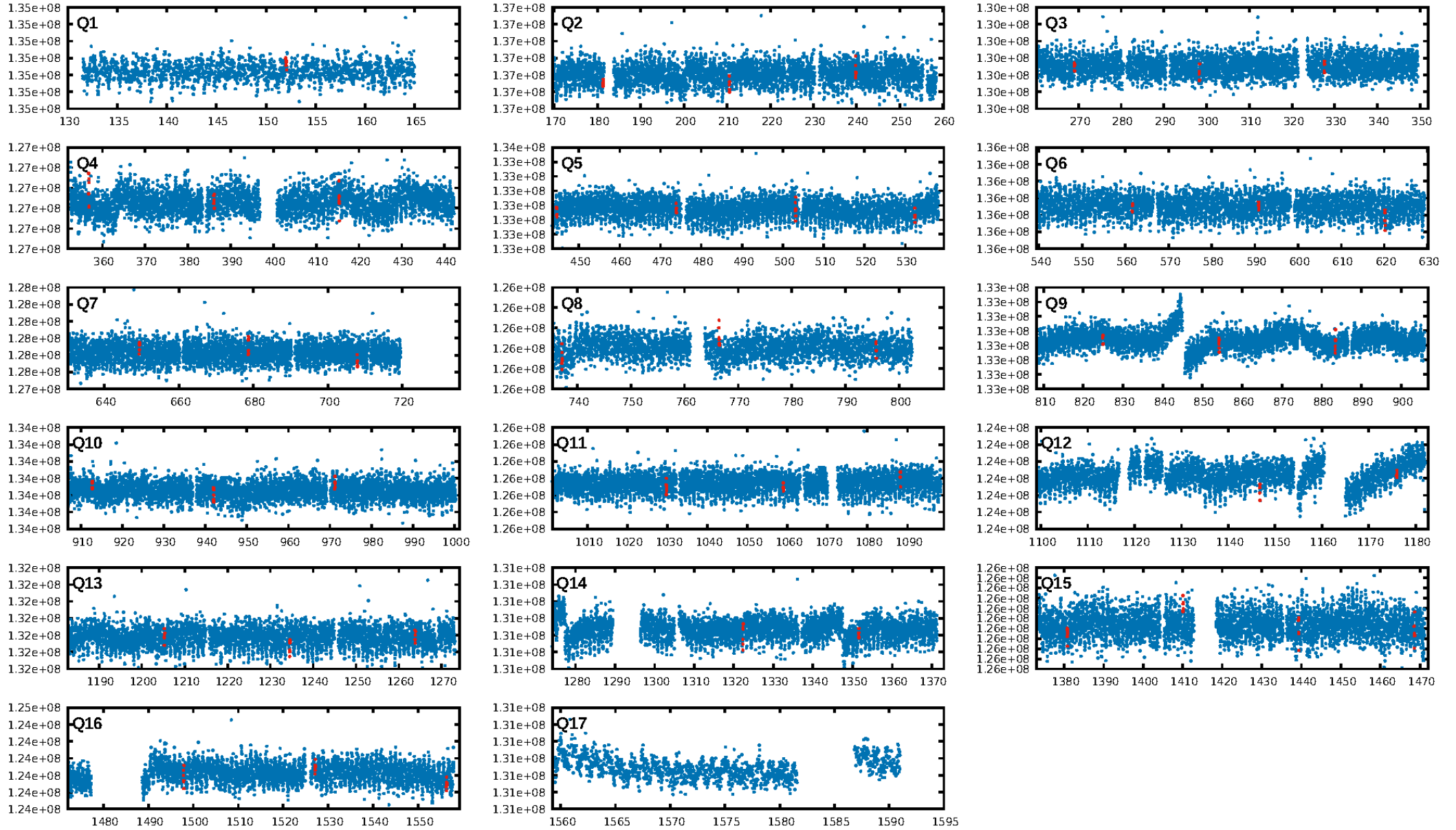
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [233.79σ]
LongPeriod-sig: 100.0% [11.89σ]
ModelChiSquare2-sig: 64.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 8.31e-10
RollingBand-fgt: 1.00 [15/15]
GhostDiagnostic-chr: -6.352
Centroid-sig: 2.5%
Centroid-so: 1.472 arcsec [1.64σ]
OotOffset-rm: 0.881 arcsec [0.45σ]
KicOffset-rm: 0.763 arcsec [0.39σ]
OotOffset-st: 4/2/4/2 [12]
KicOffset-st: 4/2/4/2 [12]
DiffImageQuality-fgm: 0.33 [4/12]
DiffImageOverlap-fno: 0.00 [0/16]

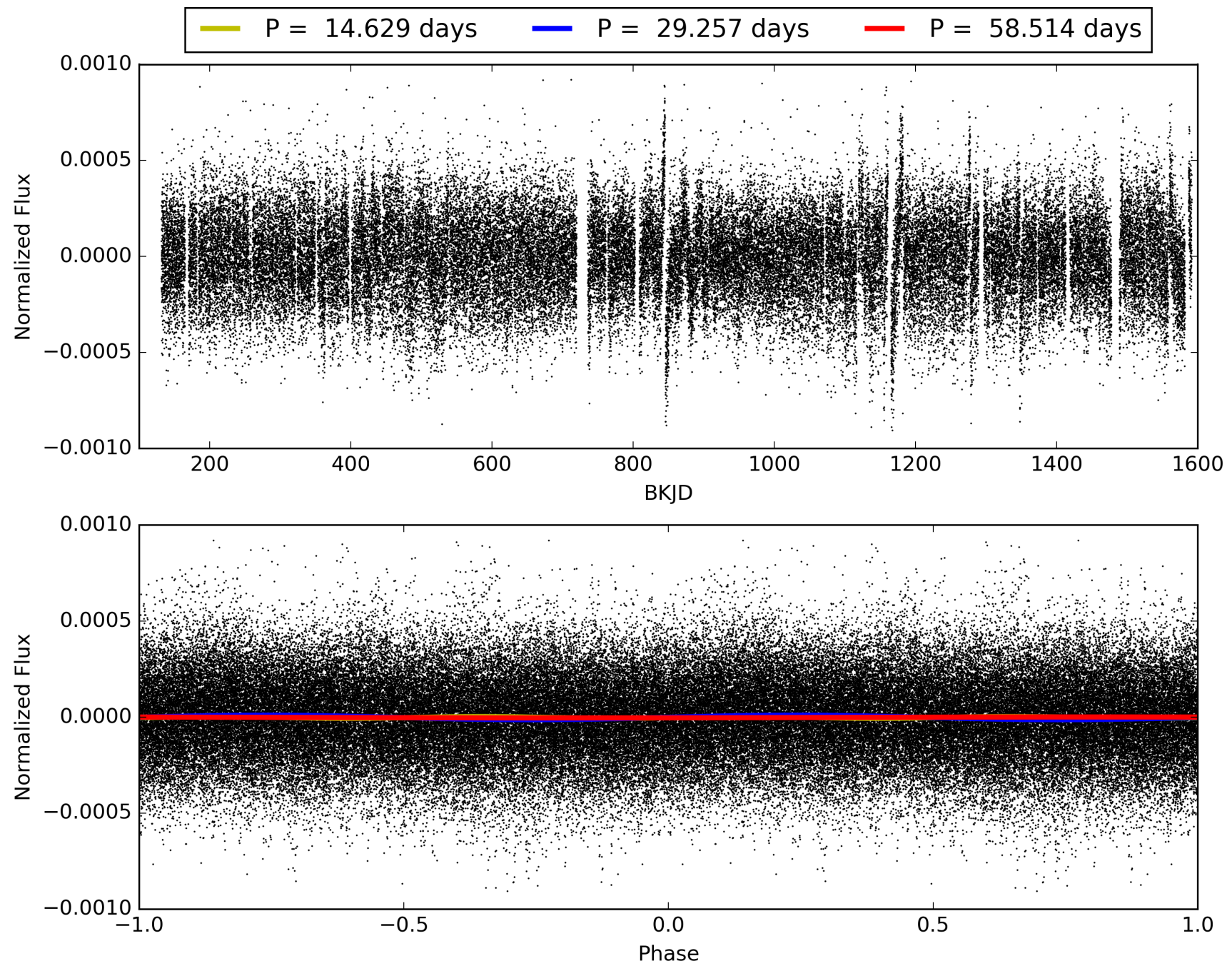
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:19:44 Z

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

TCE 011723926-04, PDC Light Curves

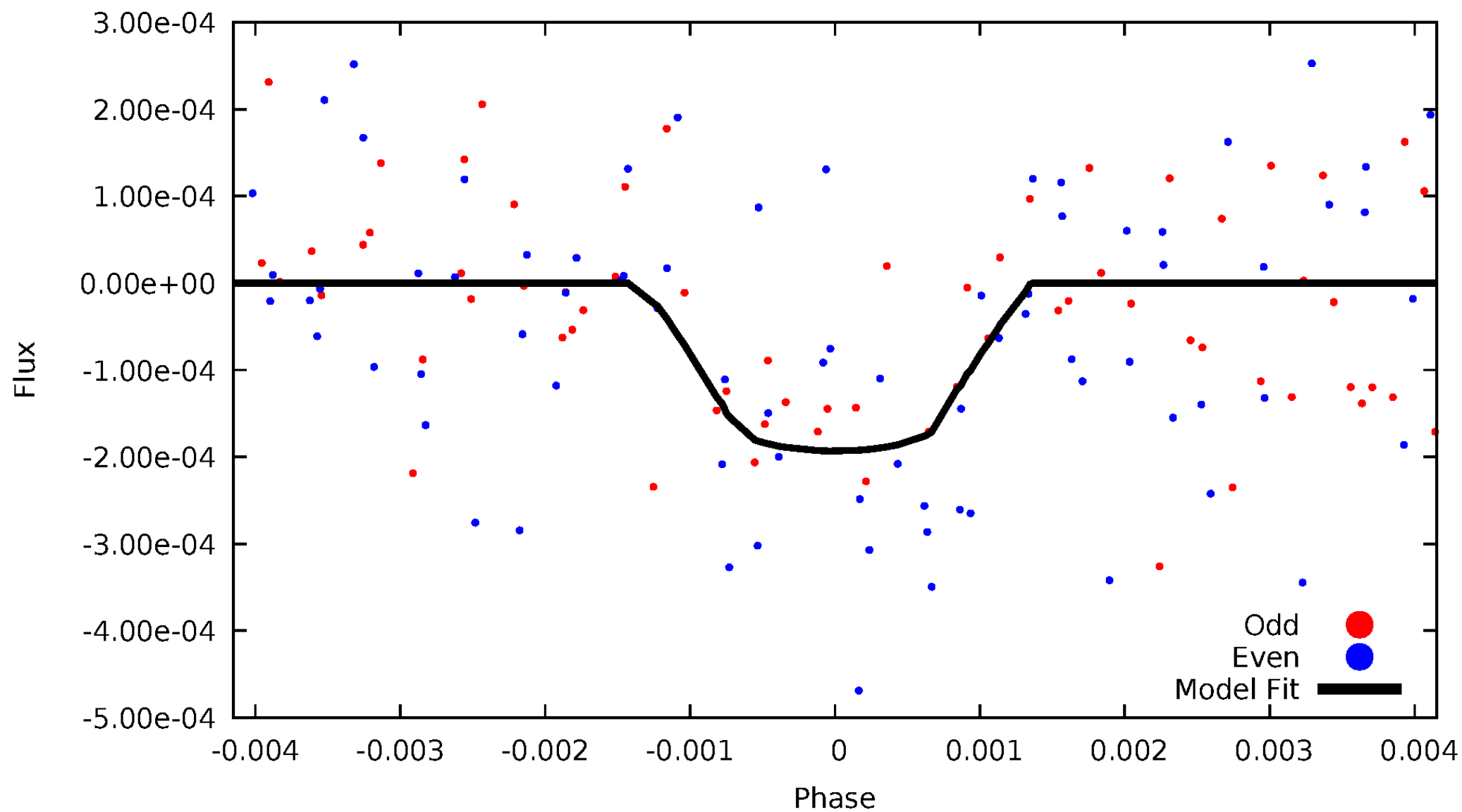


TCE 011723926-04



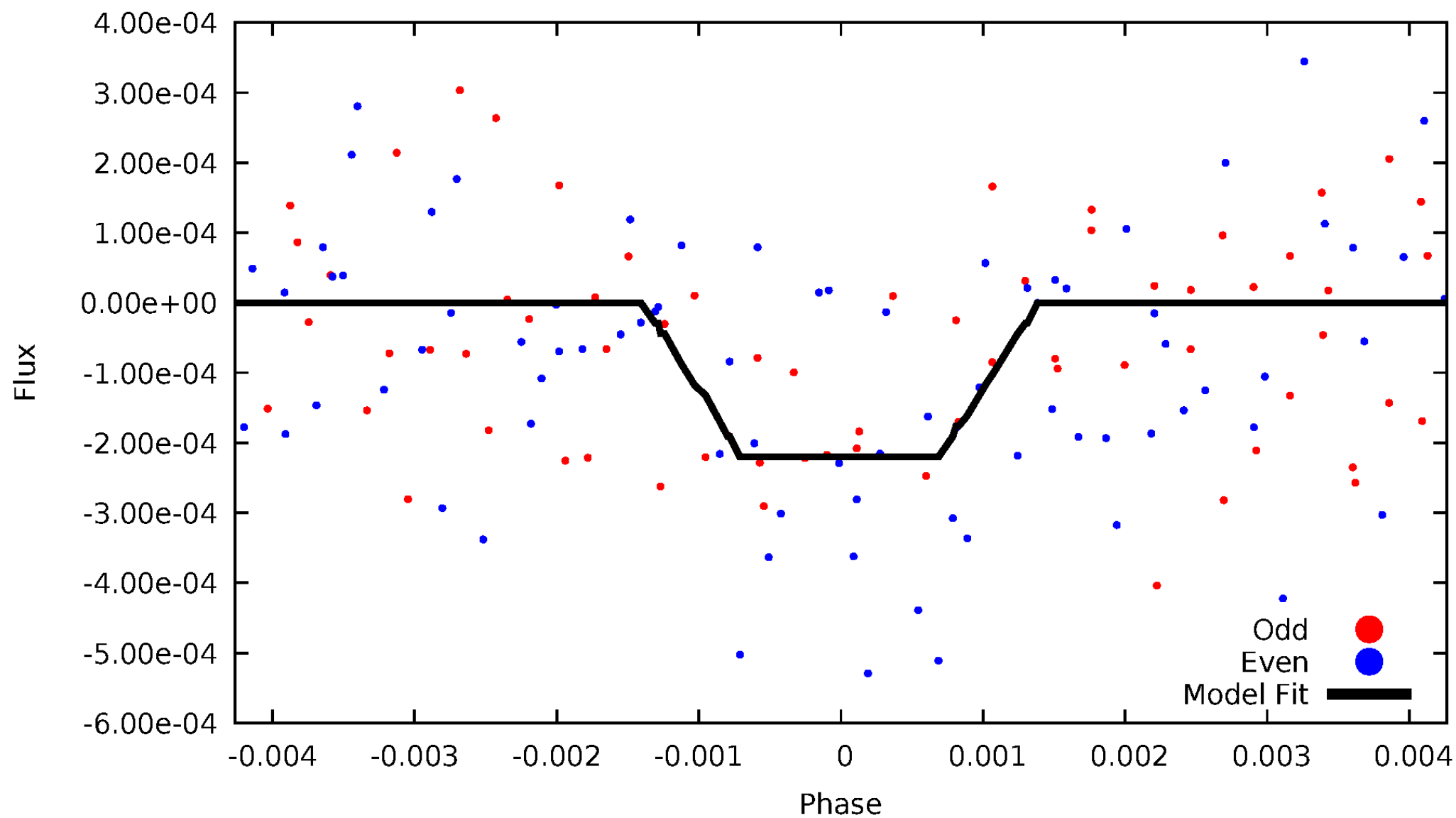
DV Odd/Even

TCE 011723926-04



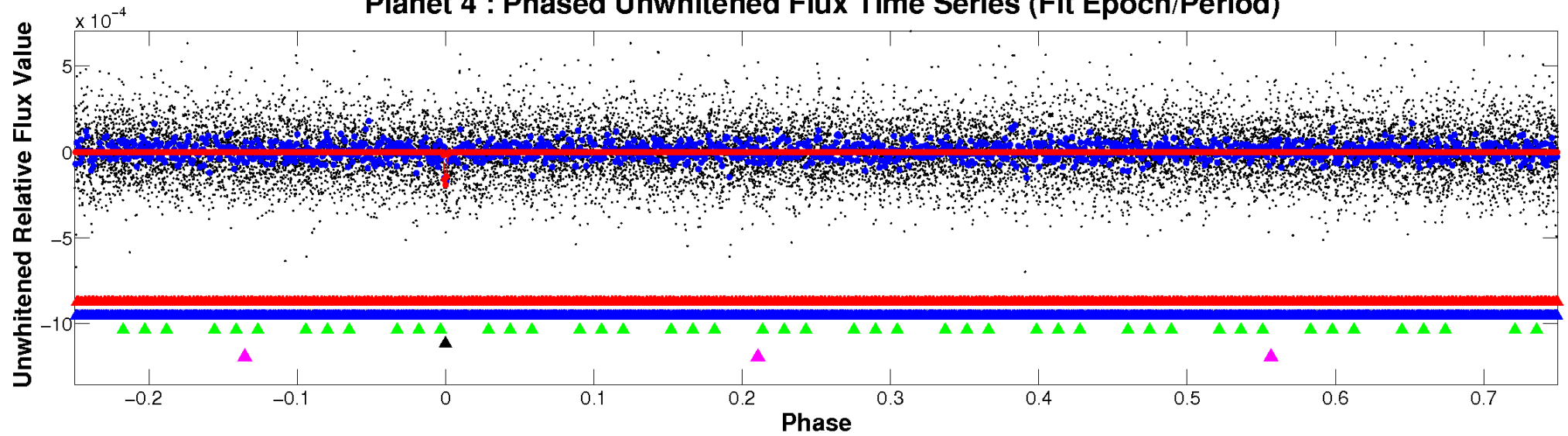
ALT Odd/Even

TCE 011723926-04

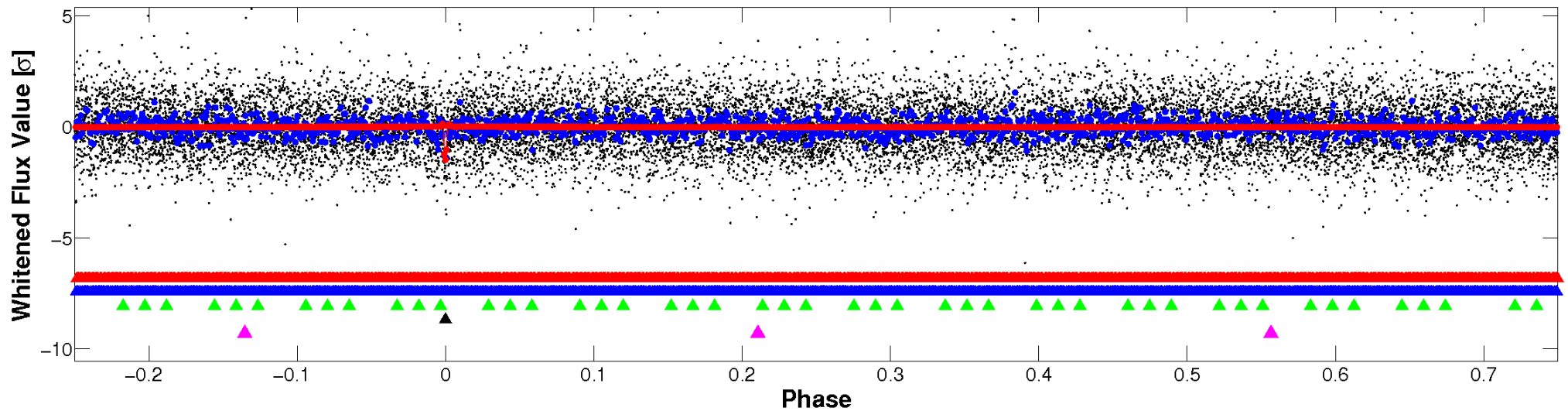


Non-Whitened Vs. Whitened Light Curve

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

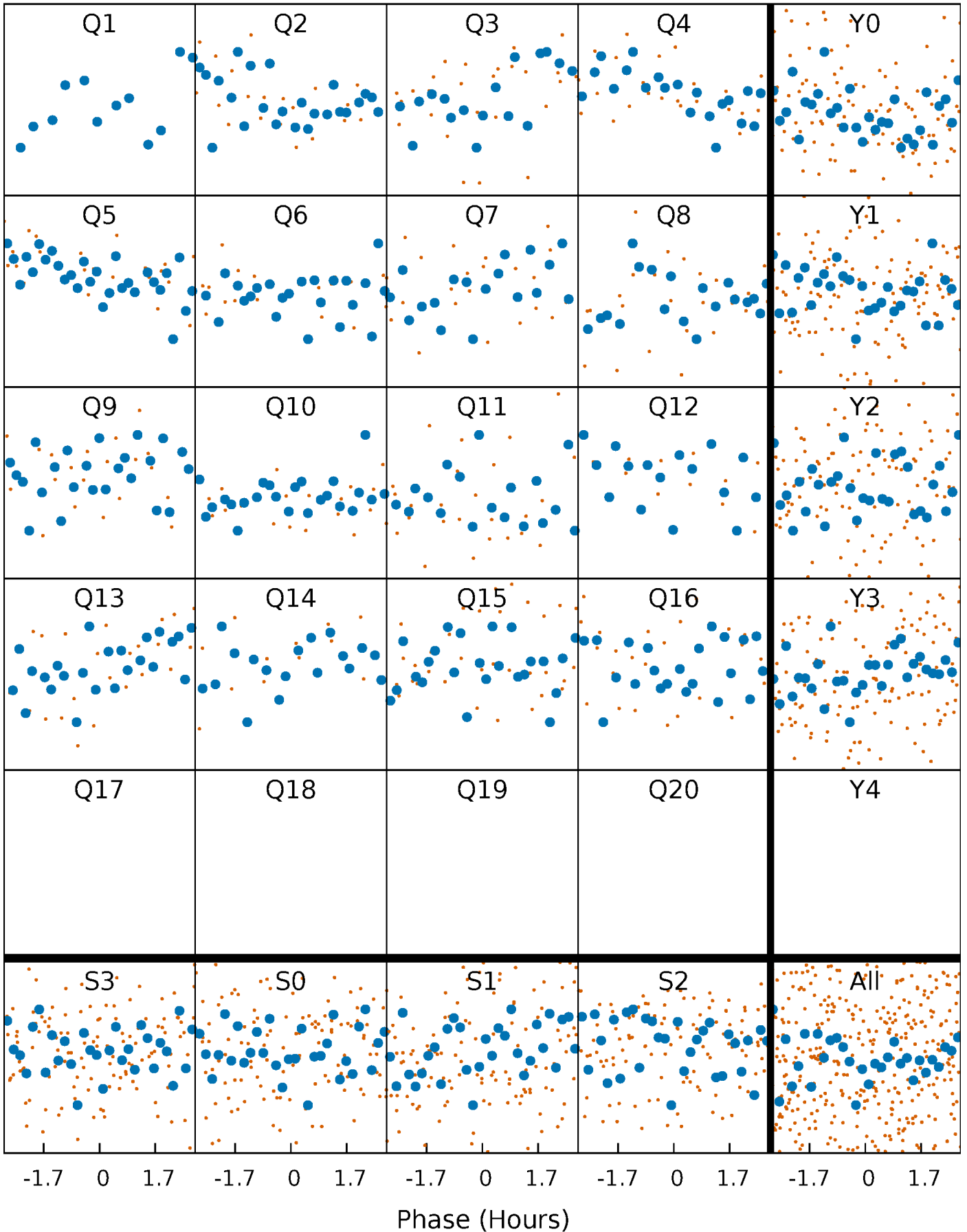


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



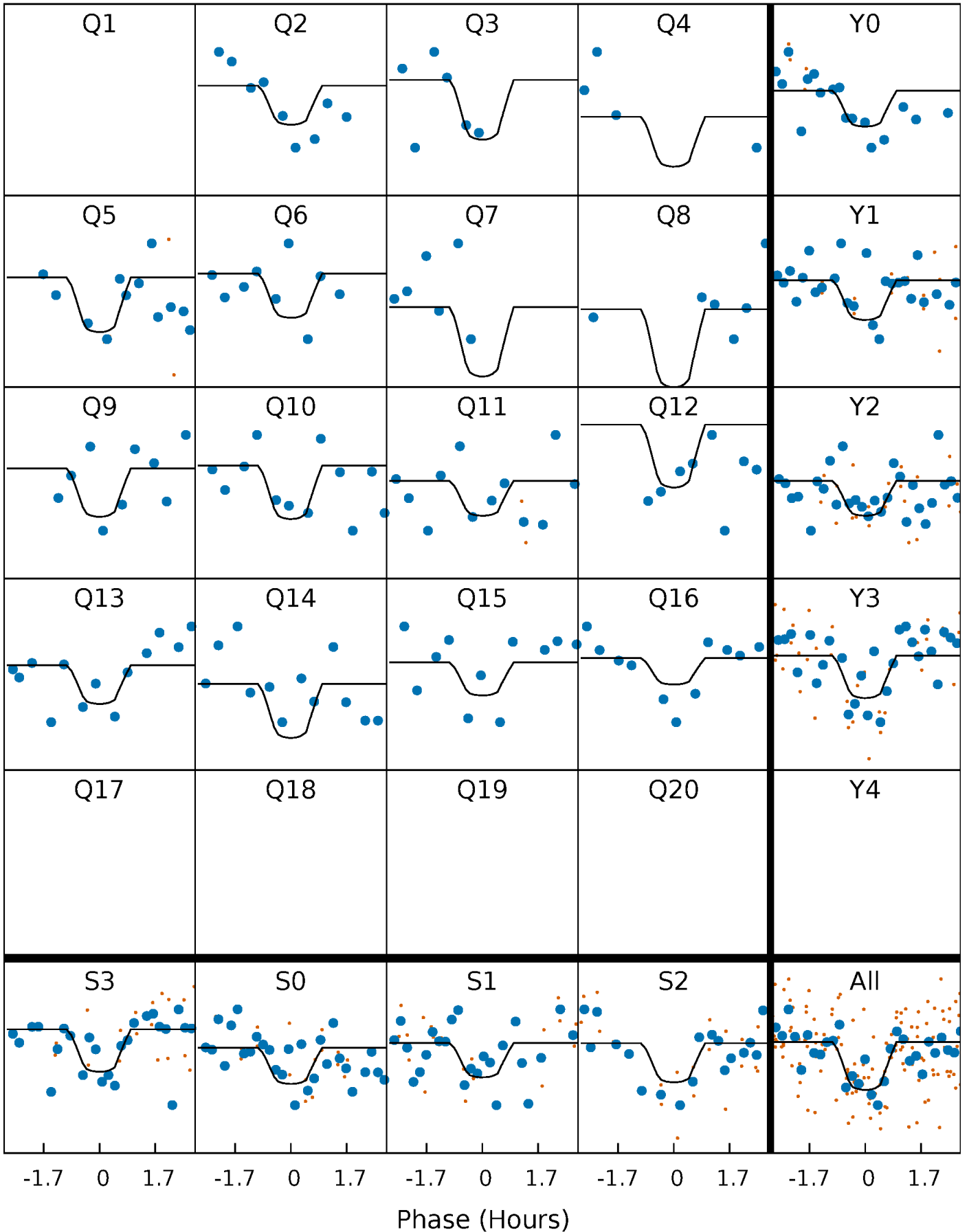
PDC Quarter-Phased Transit Curves

TCE 011723926-04 P= 29.257157 Days $T_0=152.029734$ (BKJD)



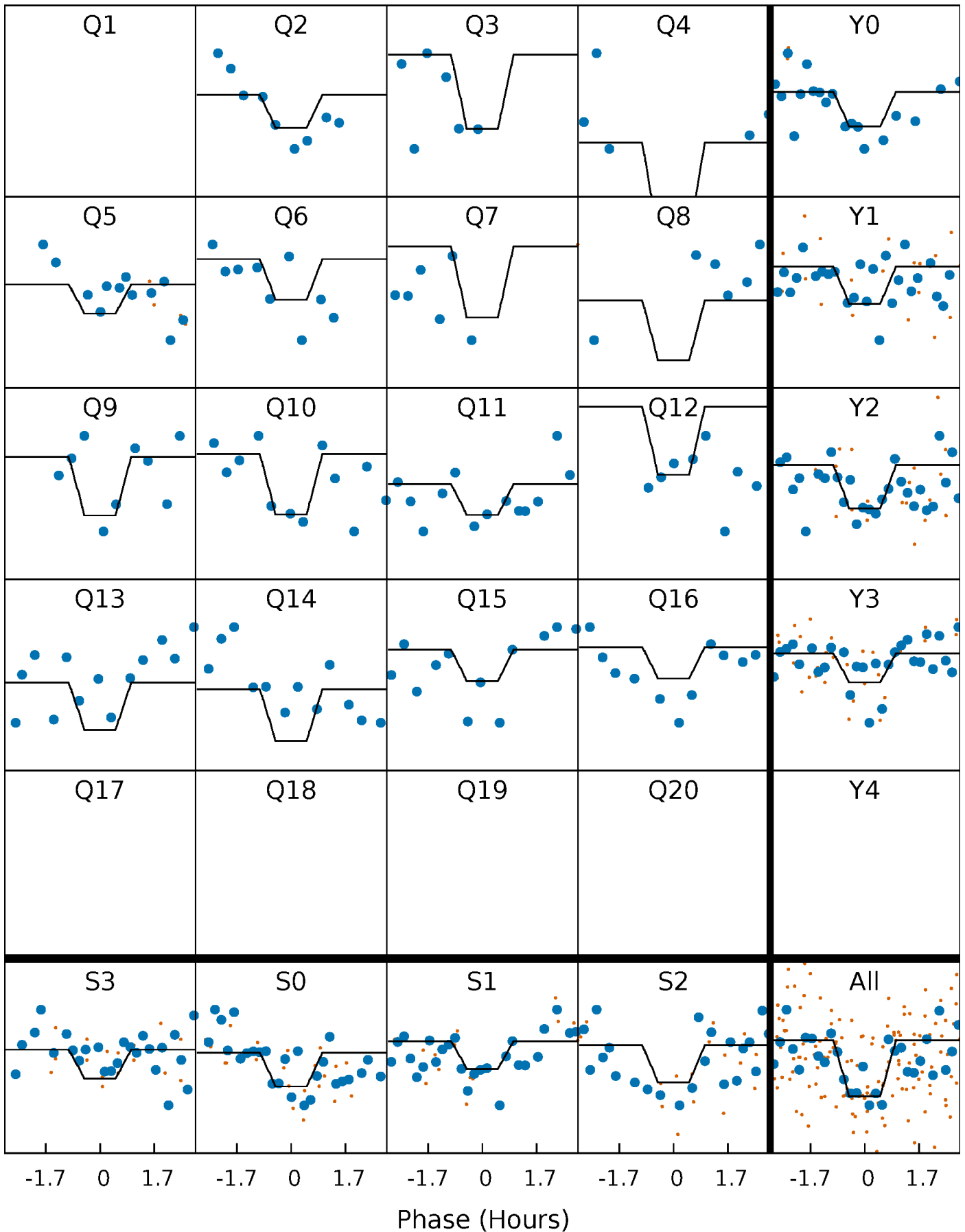
DV Quarter-Phased Transit Curves

TCE 011723926-04 P= 29.257157 Days $T_0=152.029734$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

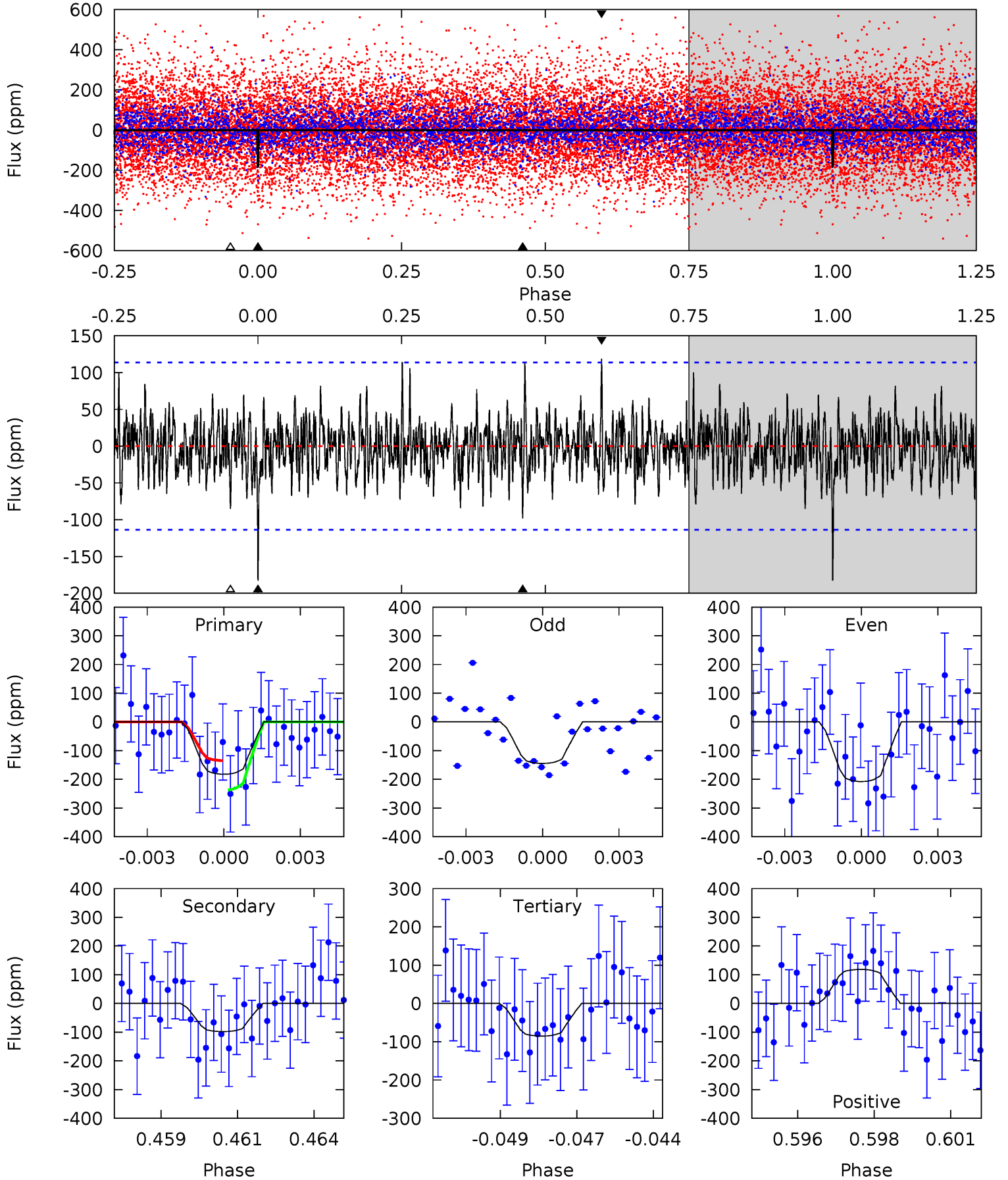
TCE 011723926-04 P= 29.257041 Days $T_0=152.034268$ (BKJD)



DV Model-Shift Uniqueness Test

011723926-04, P = 29.257157 Days, E = 122.772577 Days

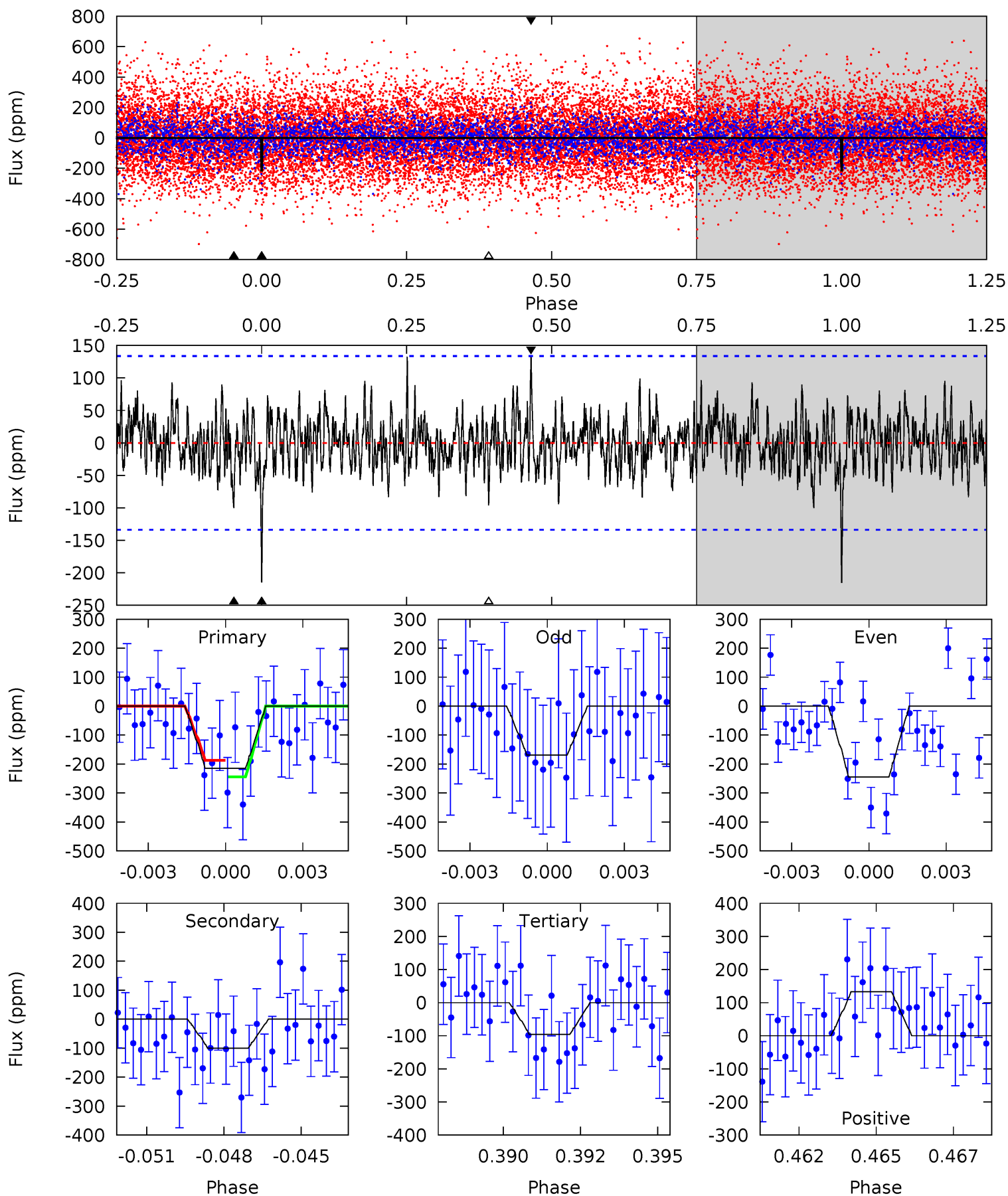
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.48	4.56	3.96	5.52	5.28	3.01	1.37	4.52	2.97	0.60	-0.96	1.45	0.99	0.39	2.38



Alt Model-Shift Uniqueness Test

011723926-04, P = 29.257041 Days, E = 122.777227 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.47	3.96	3.79	5.25	5.27	3.00	1.31	4.68	3.23	0.17	-1.29	1.51	0.95	0.38	1.13



Stellar Parameters For KIC 011723926

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7272^{+226}_{-327}	$3.948^{+0.240}_{-0.160}$	$0.060^{+0.200}_{-0.350}$	$2.328^{+0.585}_{-0.715}$	$1.752^{+0.186}_{-0.345}$	$0.196^{+0.313}_{-0.078}$
	+3%/-4%	+6%/-4%	+333%/-583%	+25%/-31%	+11%/-20%	+160%/-40%
Source	PHO1	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 011723926-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-98 ± 22	$3.36^{+2.11}_{-1.74}$	1431^{+108}_{-129}	5994^{+3195}_{-1189}	234^{+766}_{-151}
Alt.	-100 ± 25	$3.65^{+2.14}_{-1.77}$	1430^{+115}_{-115}	5803^{+2686}_{-1136}	191^{+604}_{-118}

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

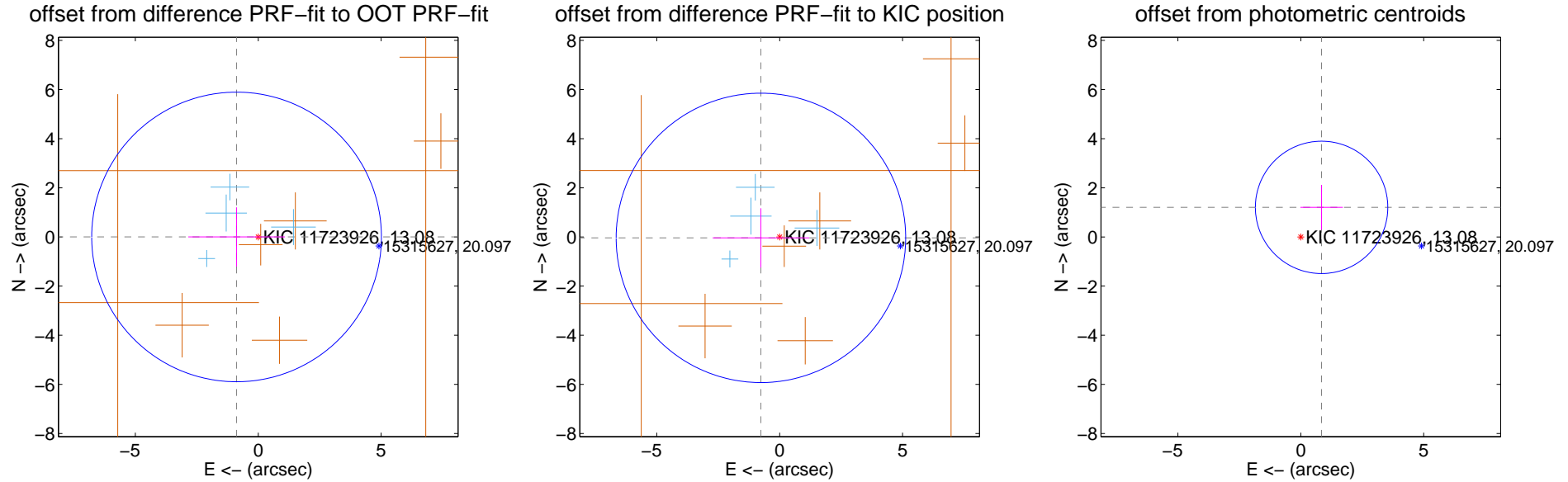
DV Centroid Data

Supplemental centroid analysis for 011723926-04. Kepler magnitude: 13.08. Transit SNR 7.76

There are 4 quarters with good PRF difference image offsets

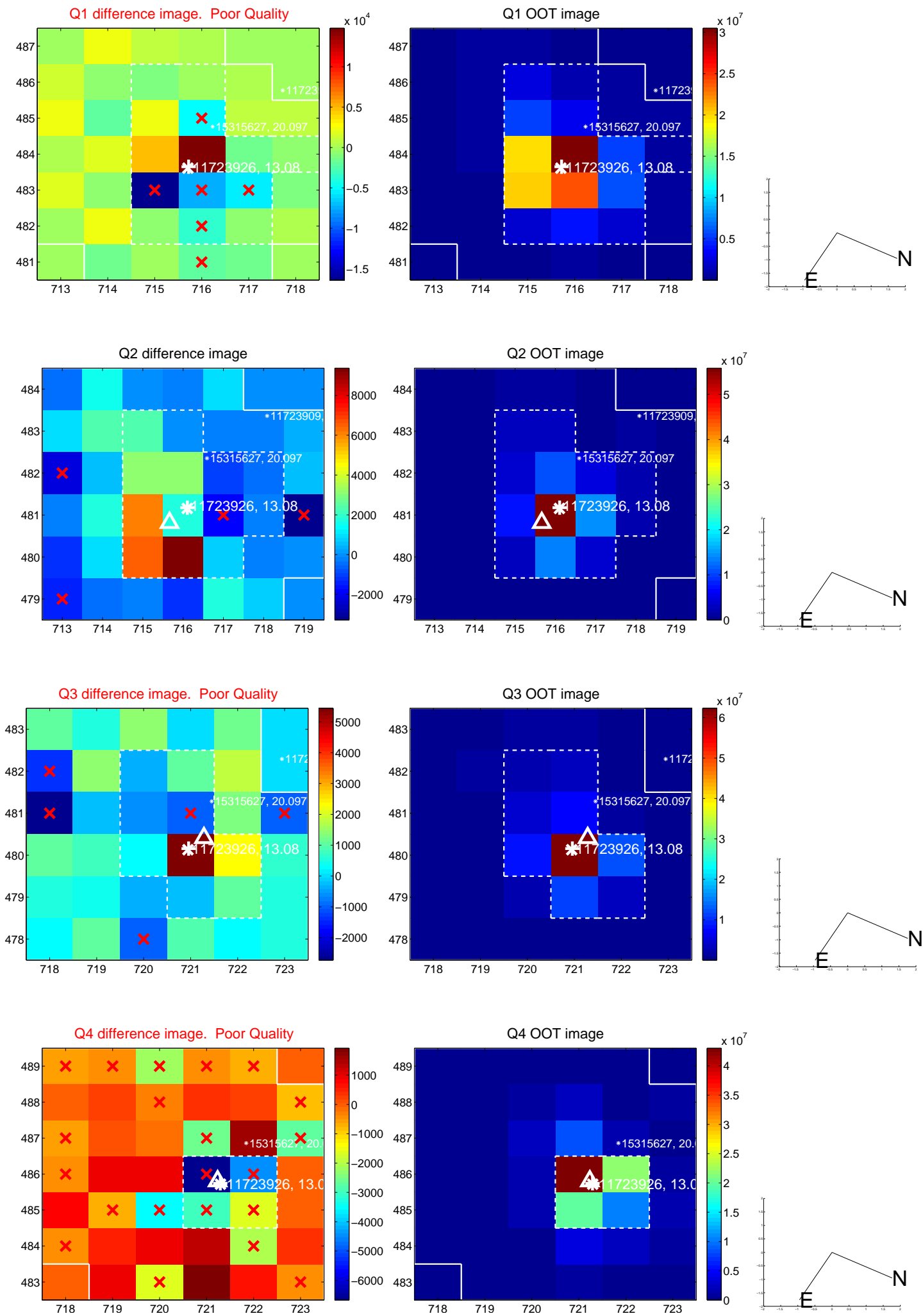
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.881 ± 1.965	0.45	0.881 ± 1.965	0.000 ± 1.207
PRF-fit source offset from KIC position	0.763 ± 1.963	0.39	0.762 ± 1.965	-0.038 ± 1.207
photometric centroid source offset	1.47 ± 0.90	1.64	-0.85 ± 0.86	1.20 ± 0.91

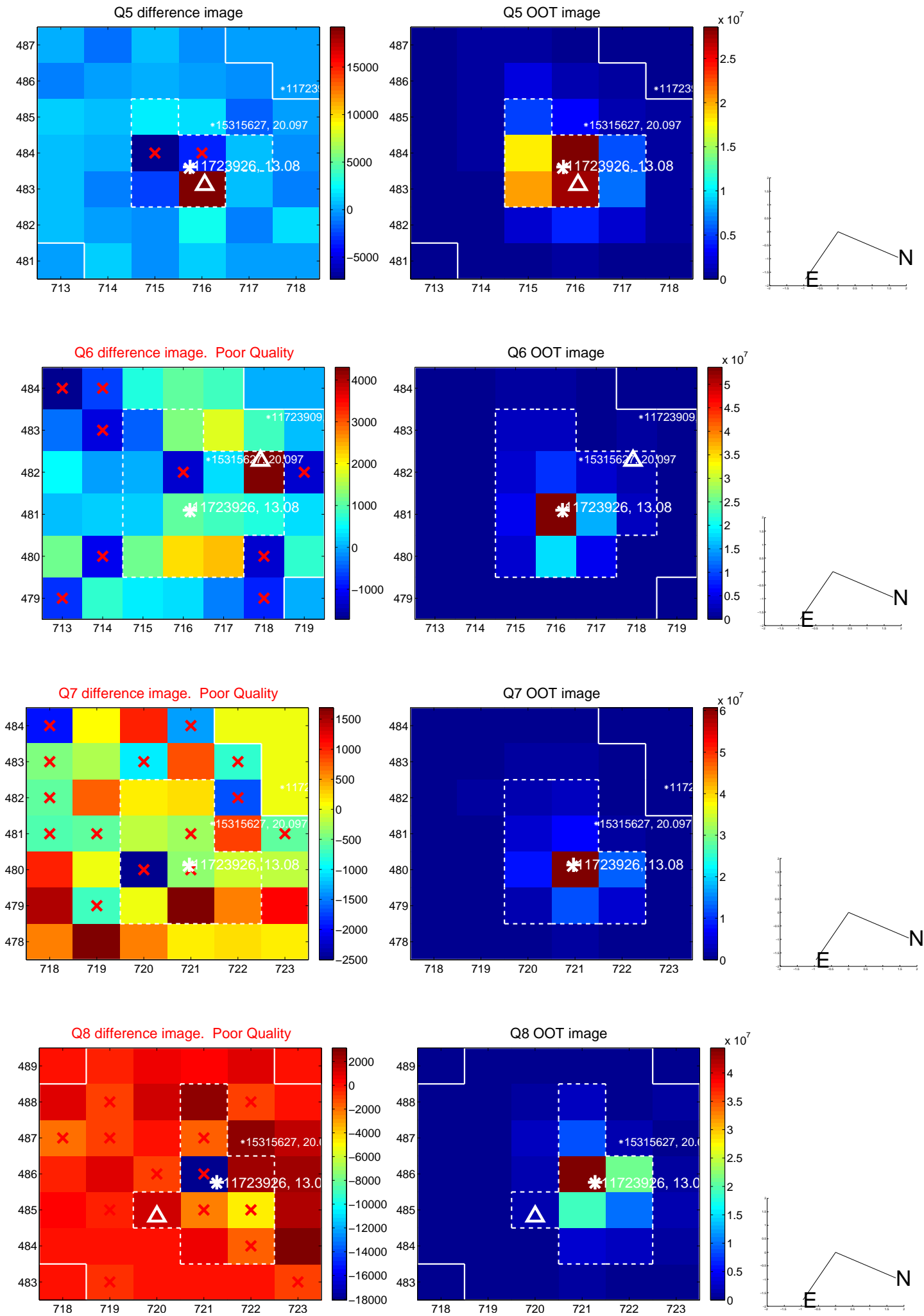


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

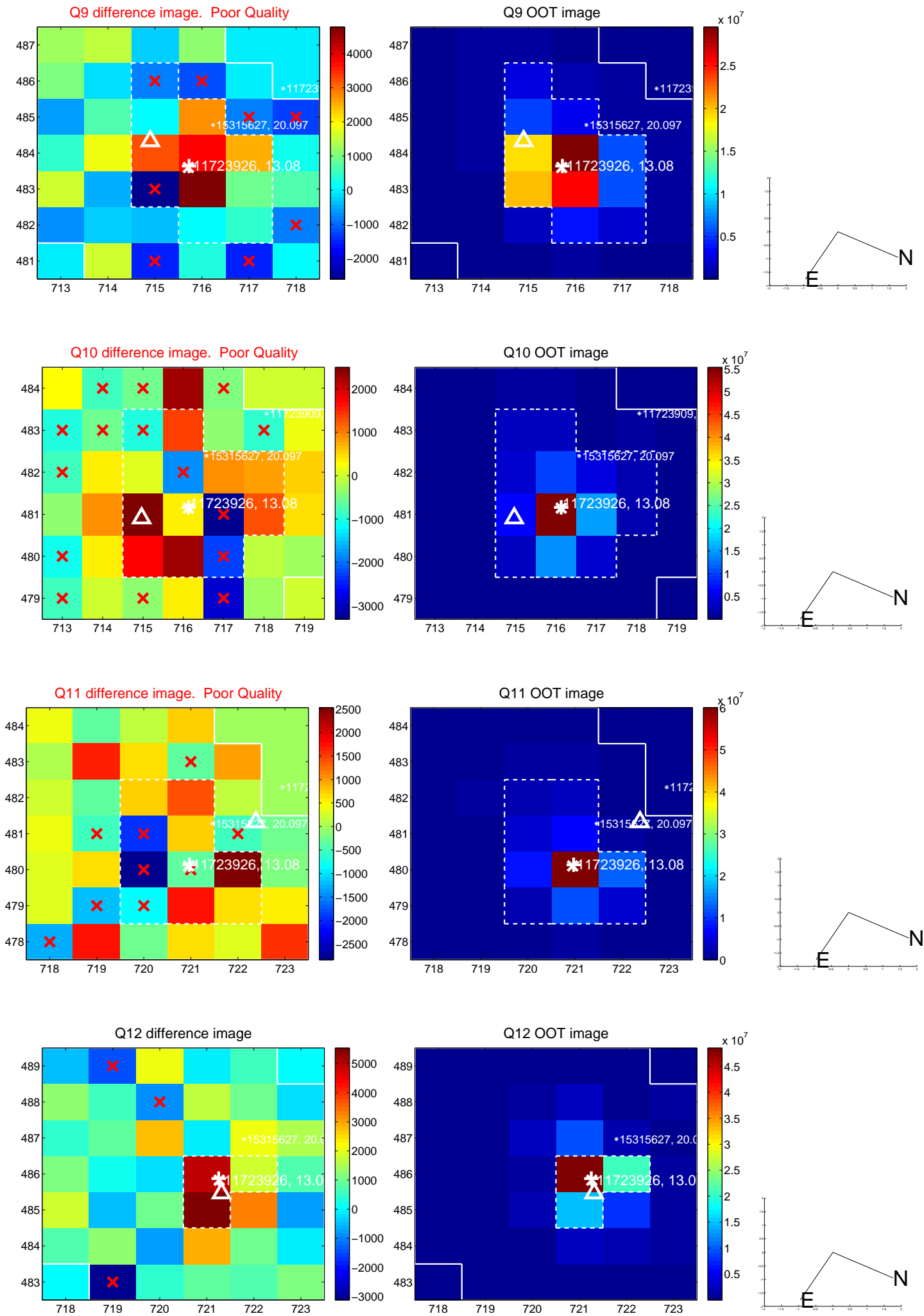
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



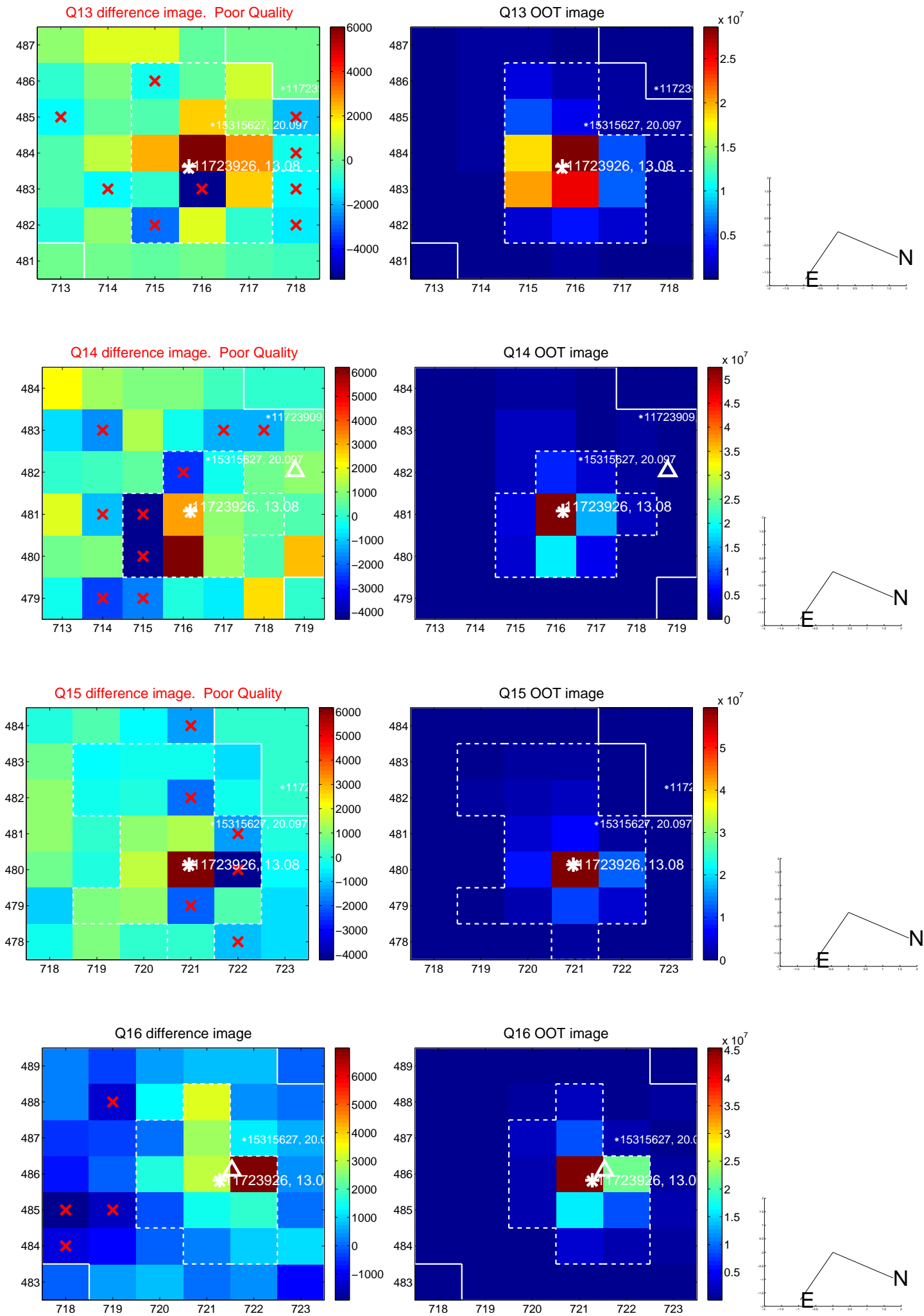
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



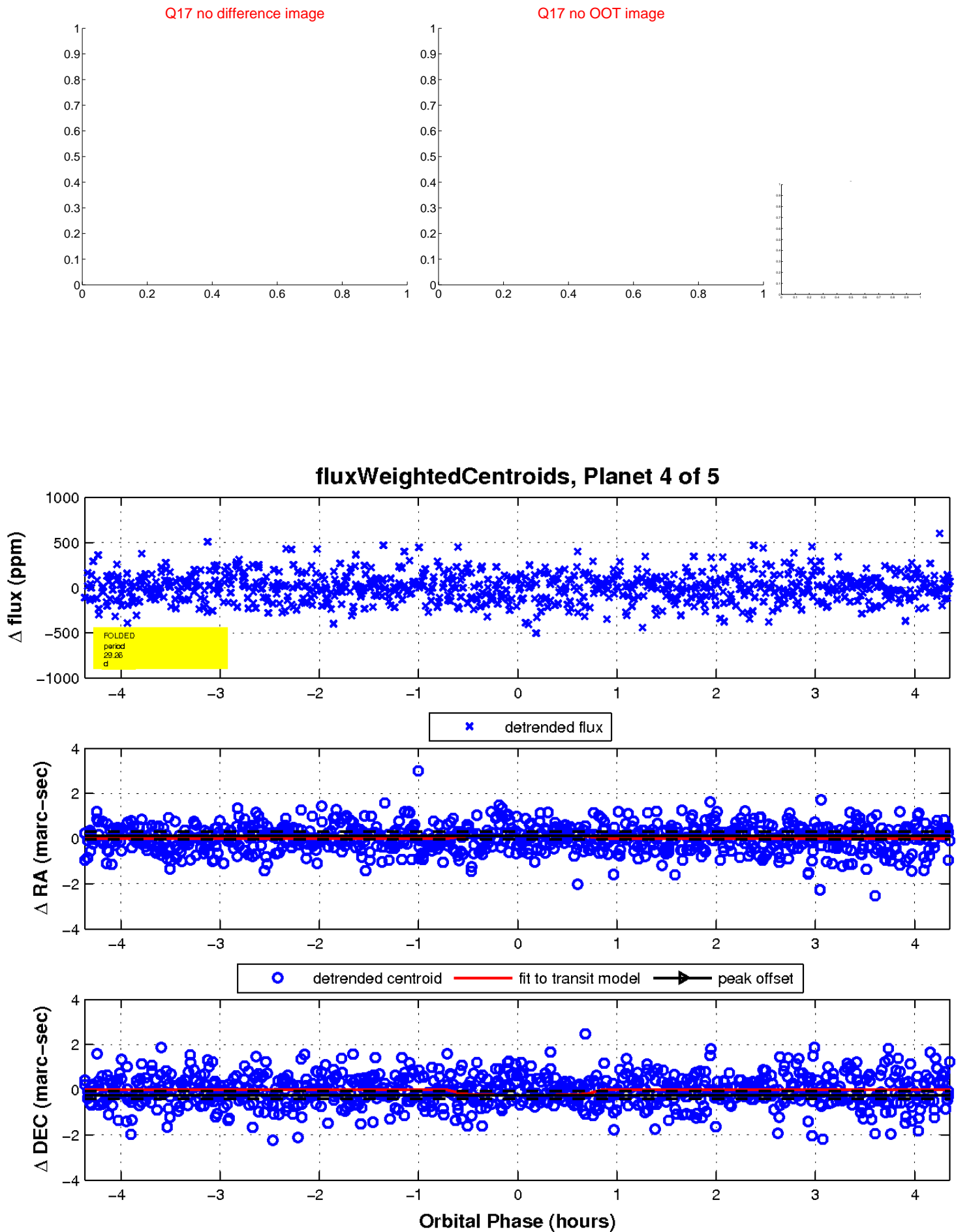
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

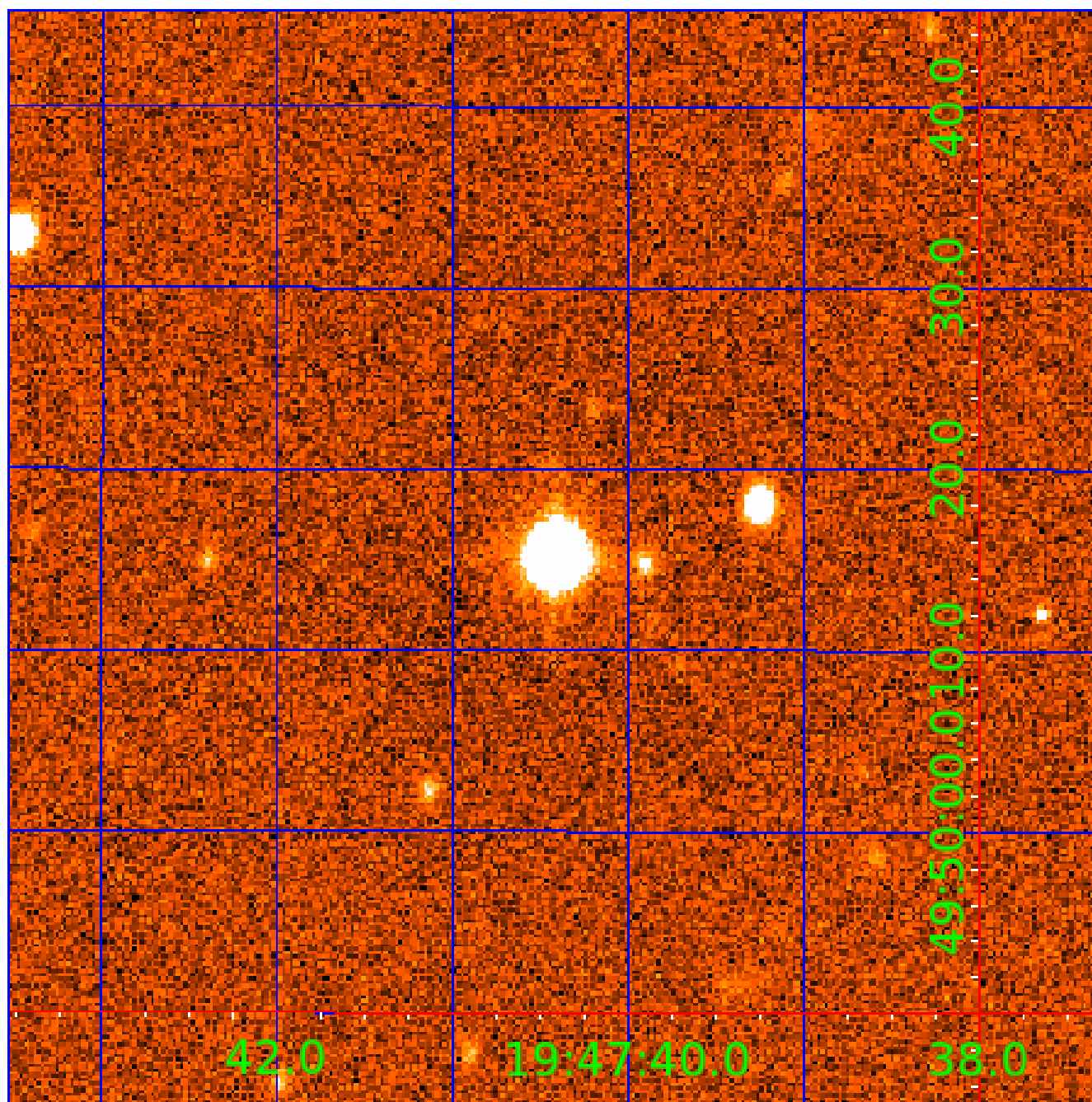


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011723926

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})
011723926-01	OBS	No	1.069418	131.656827	221.6	2.500	9.6	-1.0	2.33	7272	3.52	22282.73
011723926-02	OBS	No	1.069263	132.088971	3.8	4.563	8.7	1.8	2.33	7272	0.54	22287.03
011723926-03	OBS	No	31.059001	146.526581	202.9	3.334	7.7	8.4	2.33	7272	5.80	249.60
011723926-04	OBS	No	29.257157	152.029734	193.1	1.457	7.7	7.8	2.33	7272	3.43	270.31
011723926-05	OBS	No	428.736511	460.885023	213.5	7.378	7.7	7.5	2.33	7272	3.92	7.54

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011723926-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_NOFITS
011723926-02	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011723926-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_ALT
011723926-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT
011723926-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS

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

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

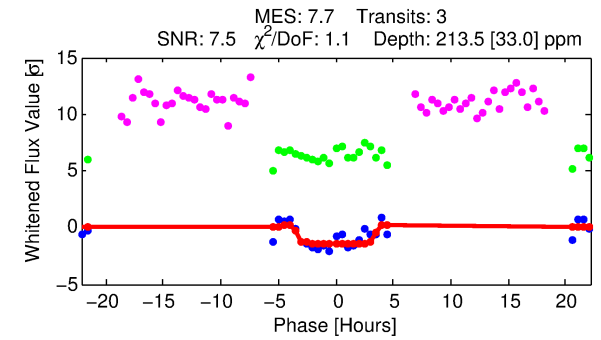
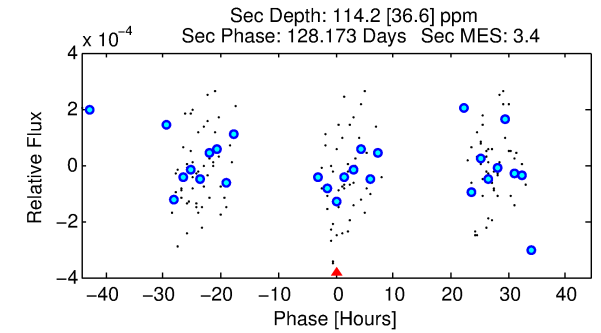
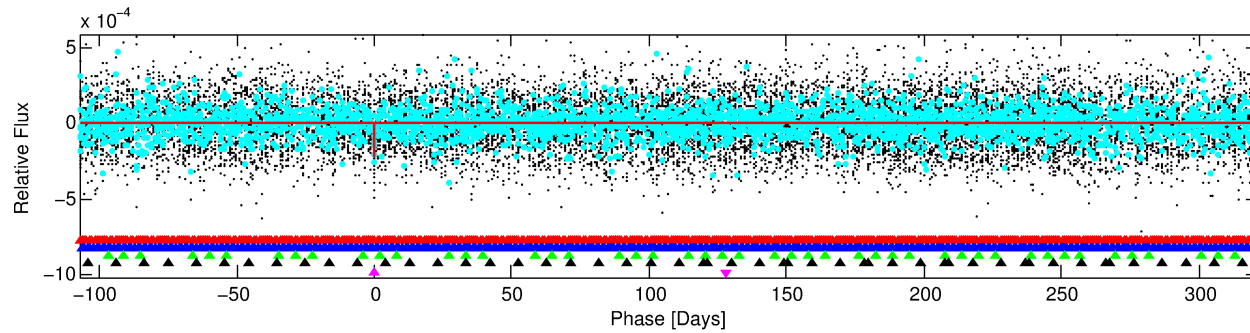
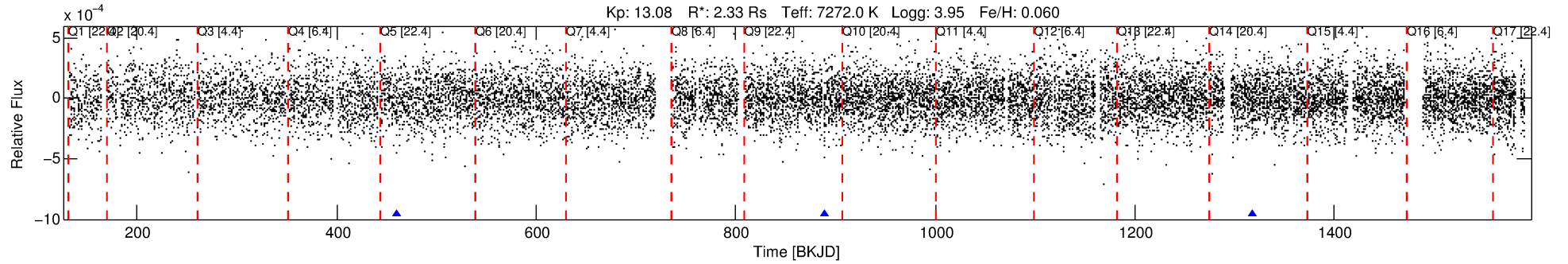
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011723926-05

No Significant Match Found

DV One-Page Summary

KIC: 11723926 Candidate: 5 of 5 Period: 428.737 d

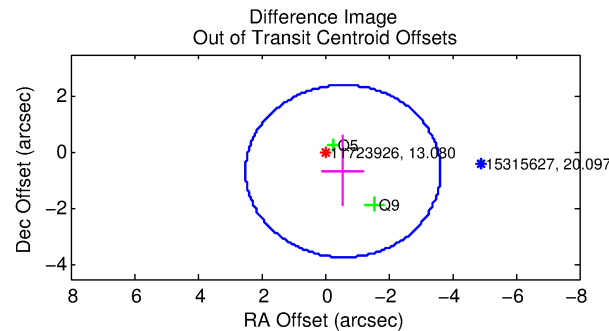
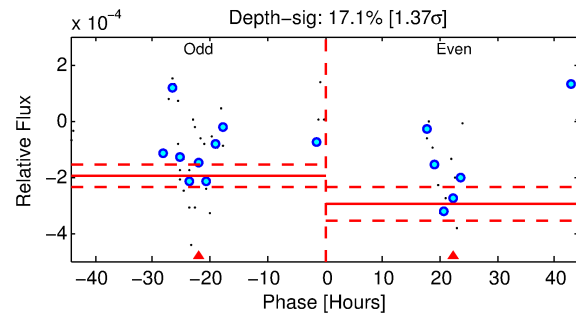
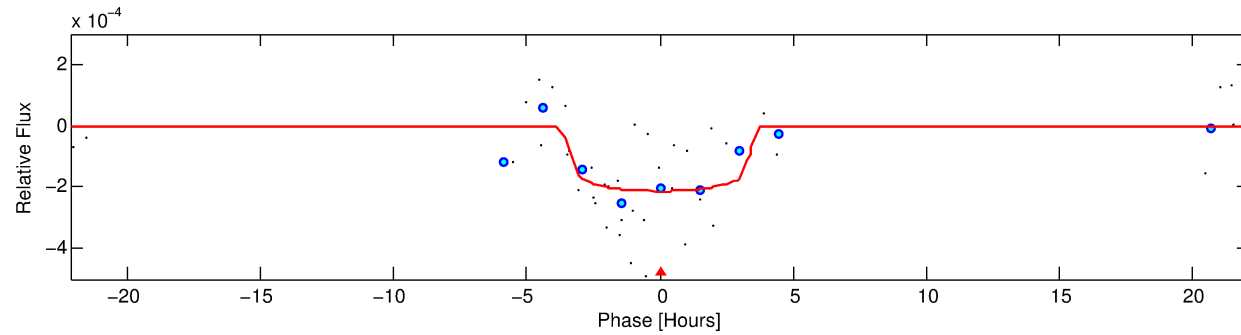


DV Fit Results:

Period = 428.73651 [0.01282] d
Epoch = 460.8850 [0.0233] BKJD
Rp/R* = 0.0154 [0.0052]
a/R* = 214.35 [424.49]
b = 0.89 [0.46]
Seff = 7.54 [3.45]
Teq = 423 [48] K
Rp = 3.92 [1.78] Re
a = 1.3422 [0.3697] AU
Ag = 7353.52 [6274.12] [1.17σ]
Teffp = 6049 [1154] K [4.87σ]

DV Diagnostic Results:

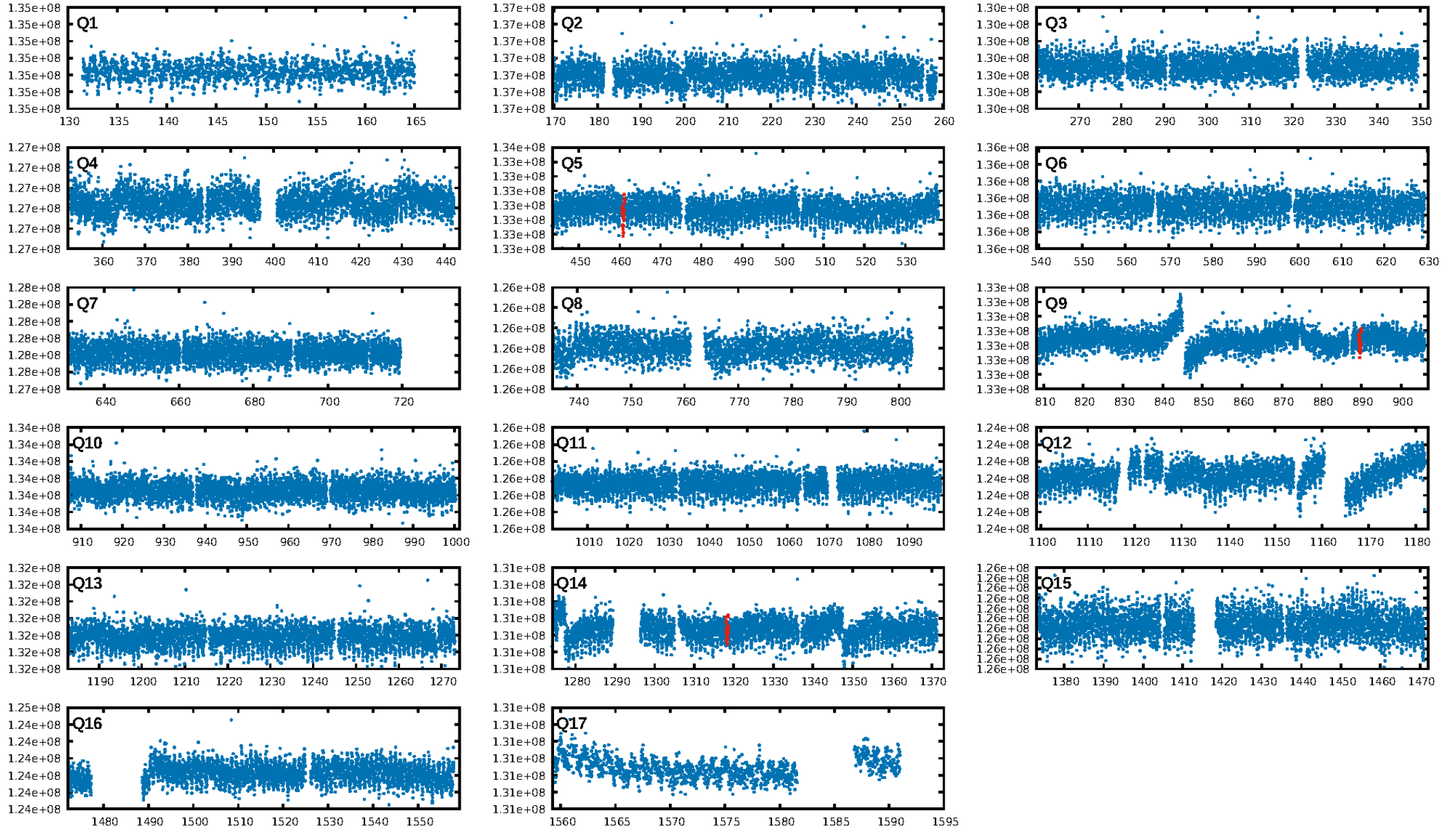
ShortPeriod-sig: 100.0% [1178.90σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 16.2%
ModelChiSquareGof-sig: 98.5%
Bootstrap-pfa: 5.92e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.7352
Centroid-sig: 51.1%
Centroid-so: 1.506 arcsec [1.03σ]
OotOffset-rm: 0.873 arcsec [0.85σ]
OotOffset-st: 0/0/0/2 [2]
KicOffset-rm: 0.998 arcsec [1.04σ]
KicOffset-st: 0/0/0/2 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 0.00 [0/3]



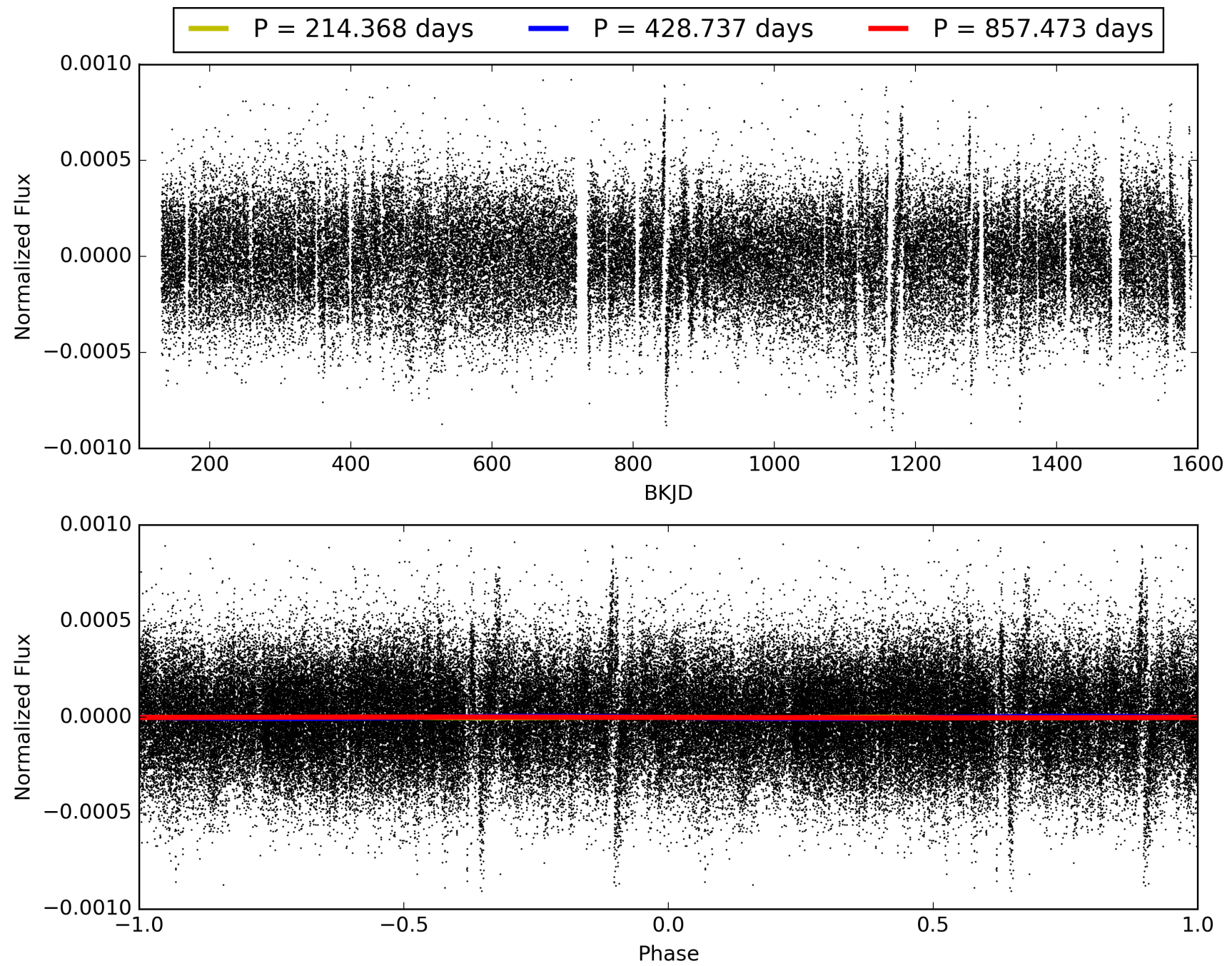
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:19:49 Z

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

TCE 011723926-05, PDC Light Curves

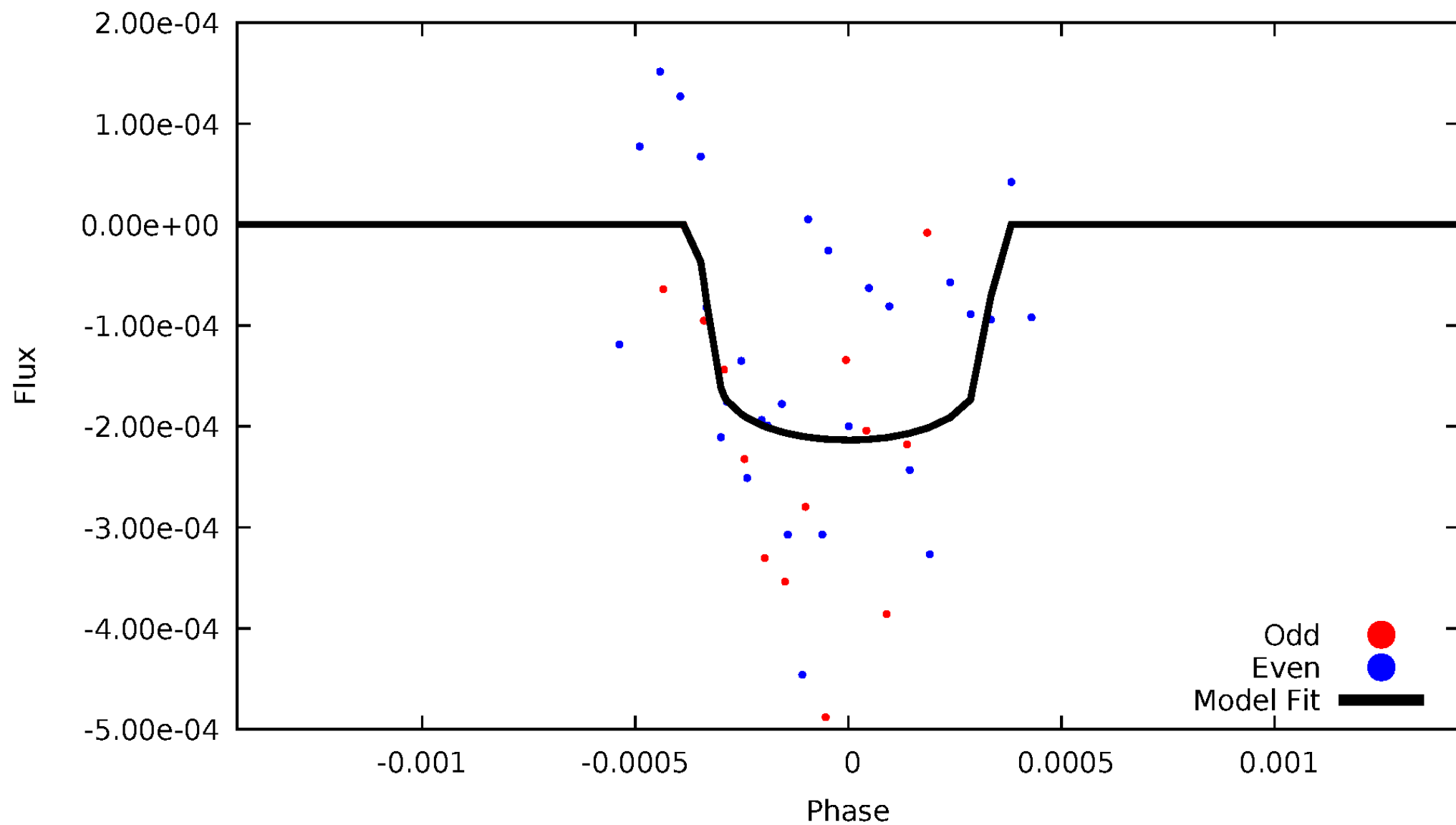


TCE 011723926-05



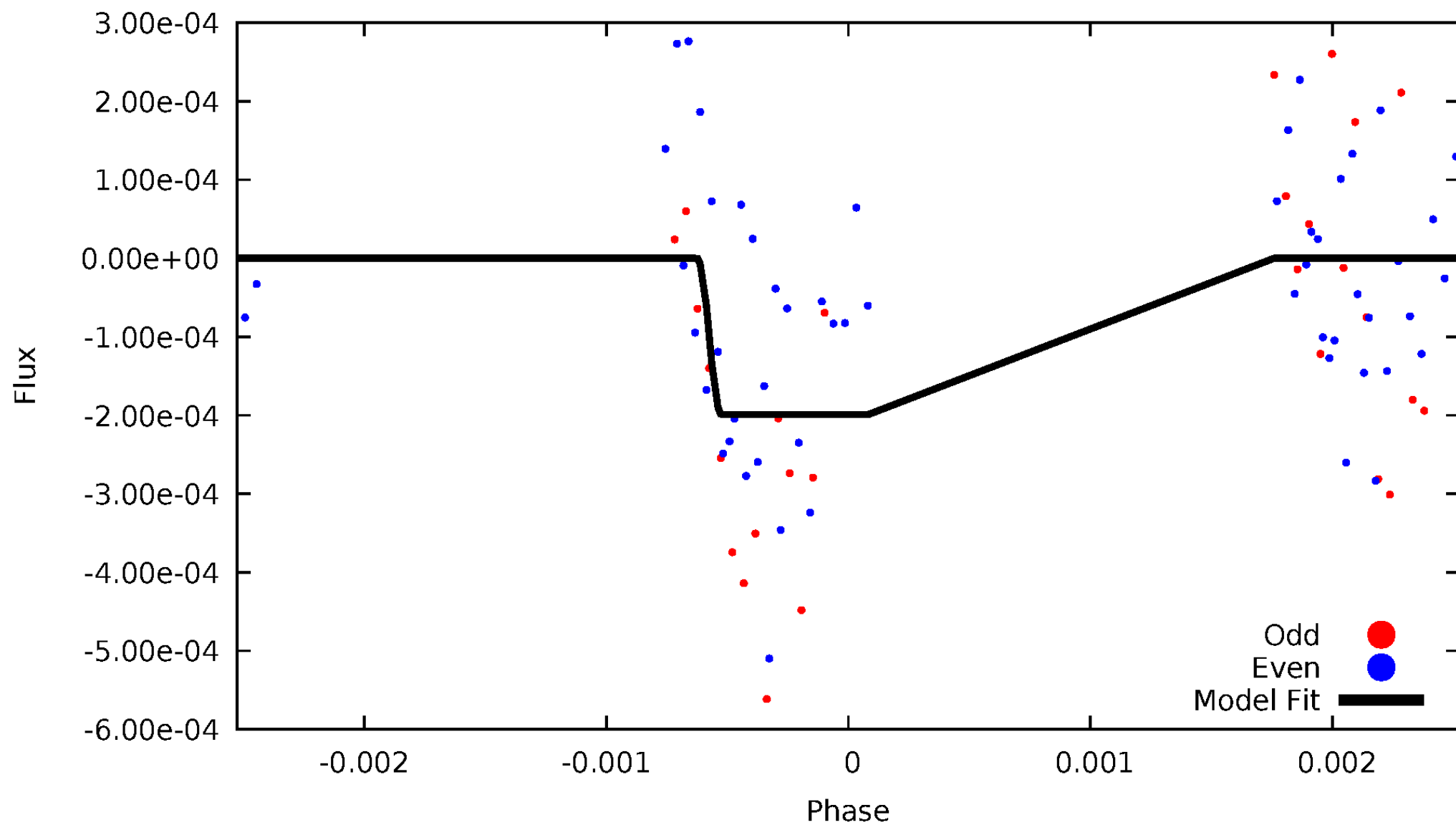
DV Odd/Even

TCE 011723926-05



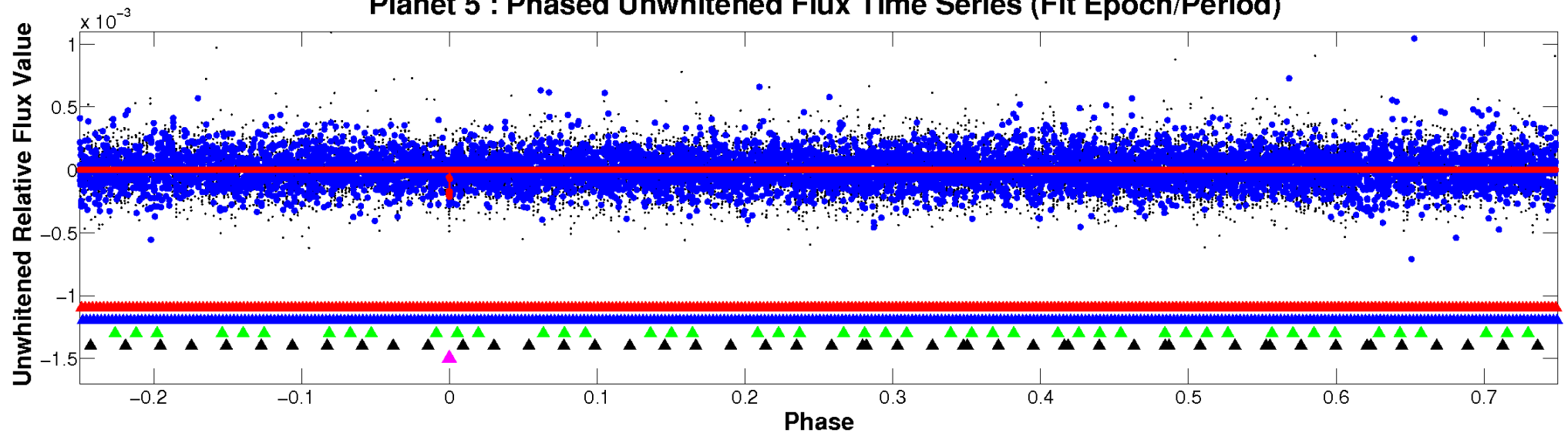
ALT Odd/Even

TCE 011723926-05

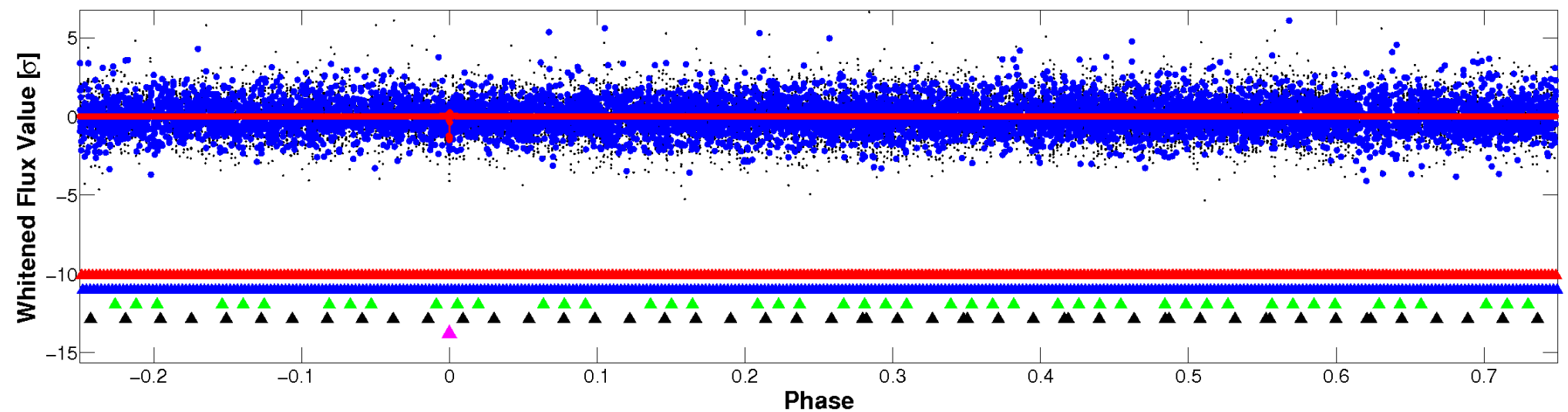


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

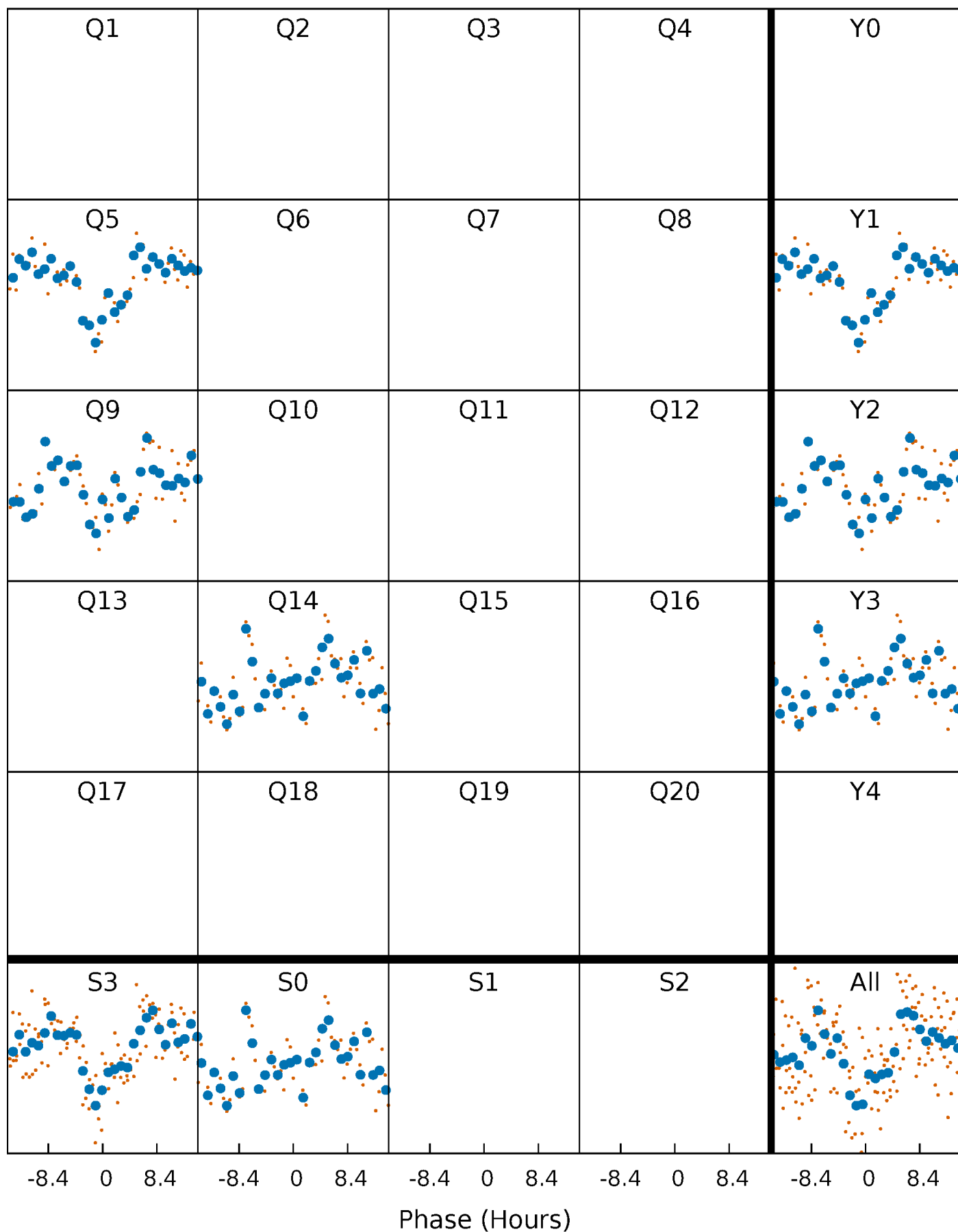


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



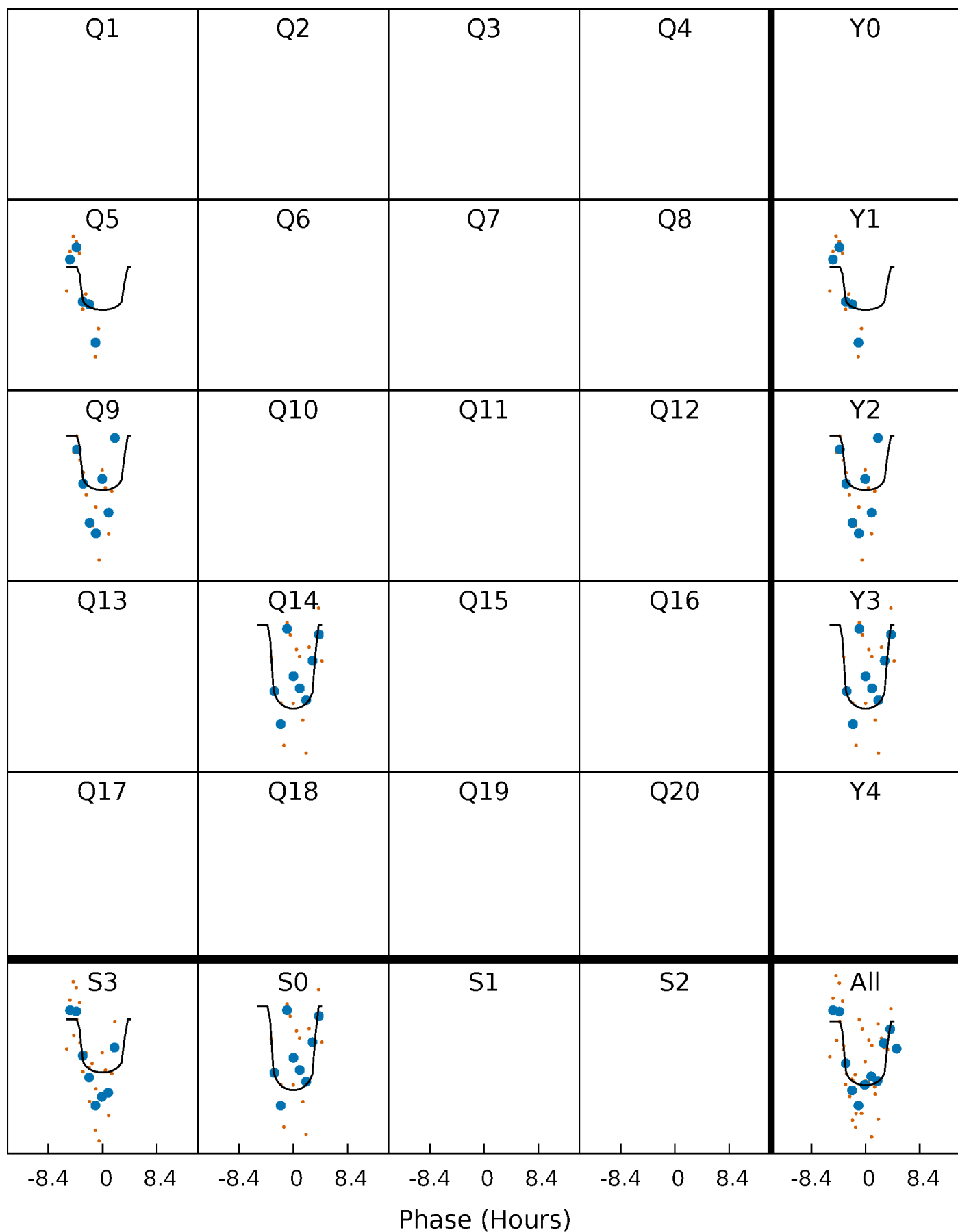
PDC Quarter-Phased Transit Curves

TCE 011723926-05 $P=428.736511$ Days $T_0=460.885023$ (BKJD)



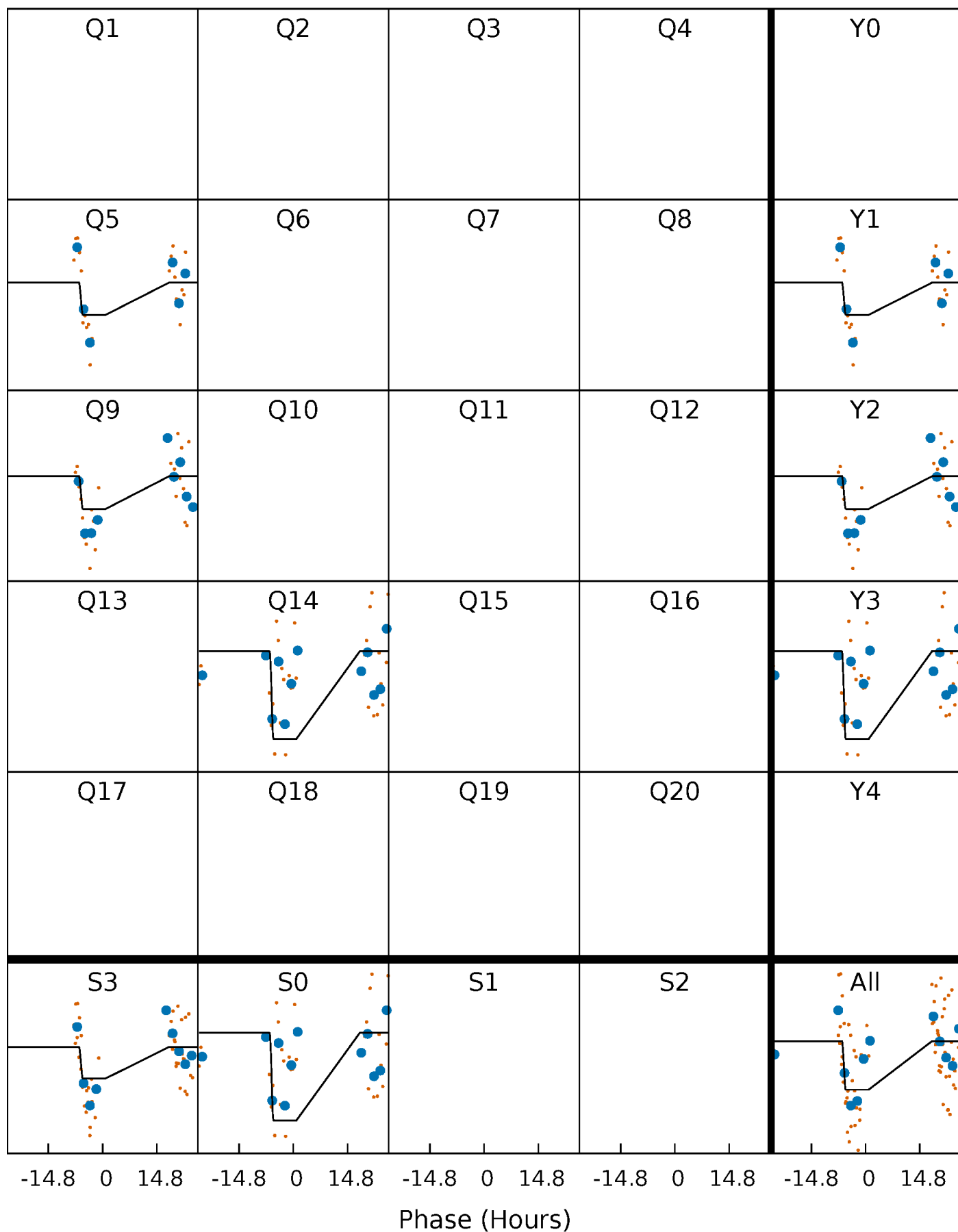
DV Quarter-Phased Transit Curves

TCE 011723926-05 $P=428.736511$ Days $T_0=460.885023$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

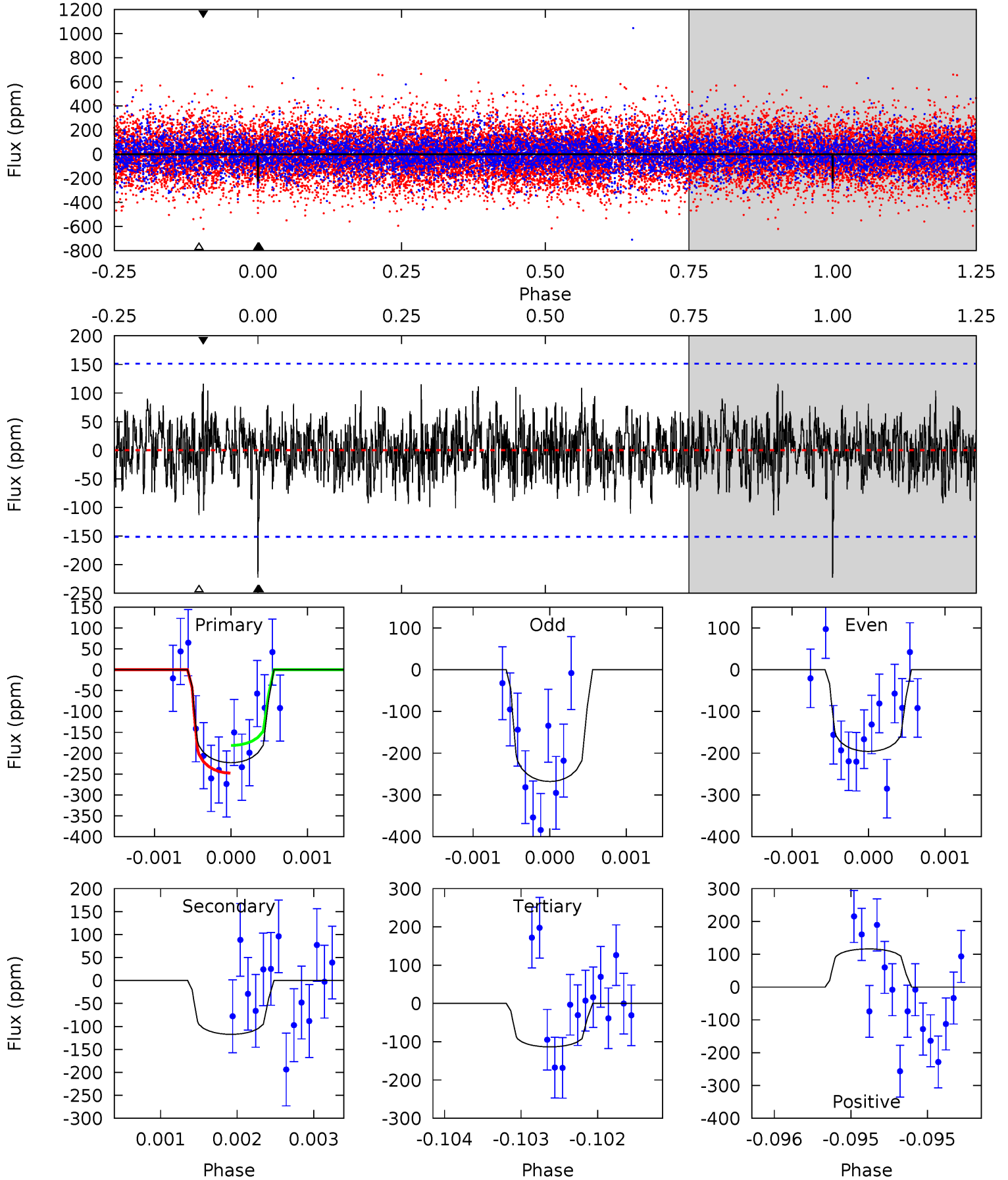
TCE 011723926-05 $P=428.764445$ Days $T_0=460.978696$ (BKJD)



DV Model-Shift Uniqueness Test

011723926-05, P = 428.736511 Days, E = 32.148512 Days

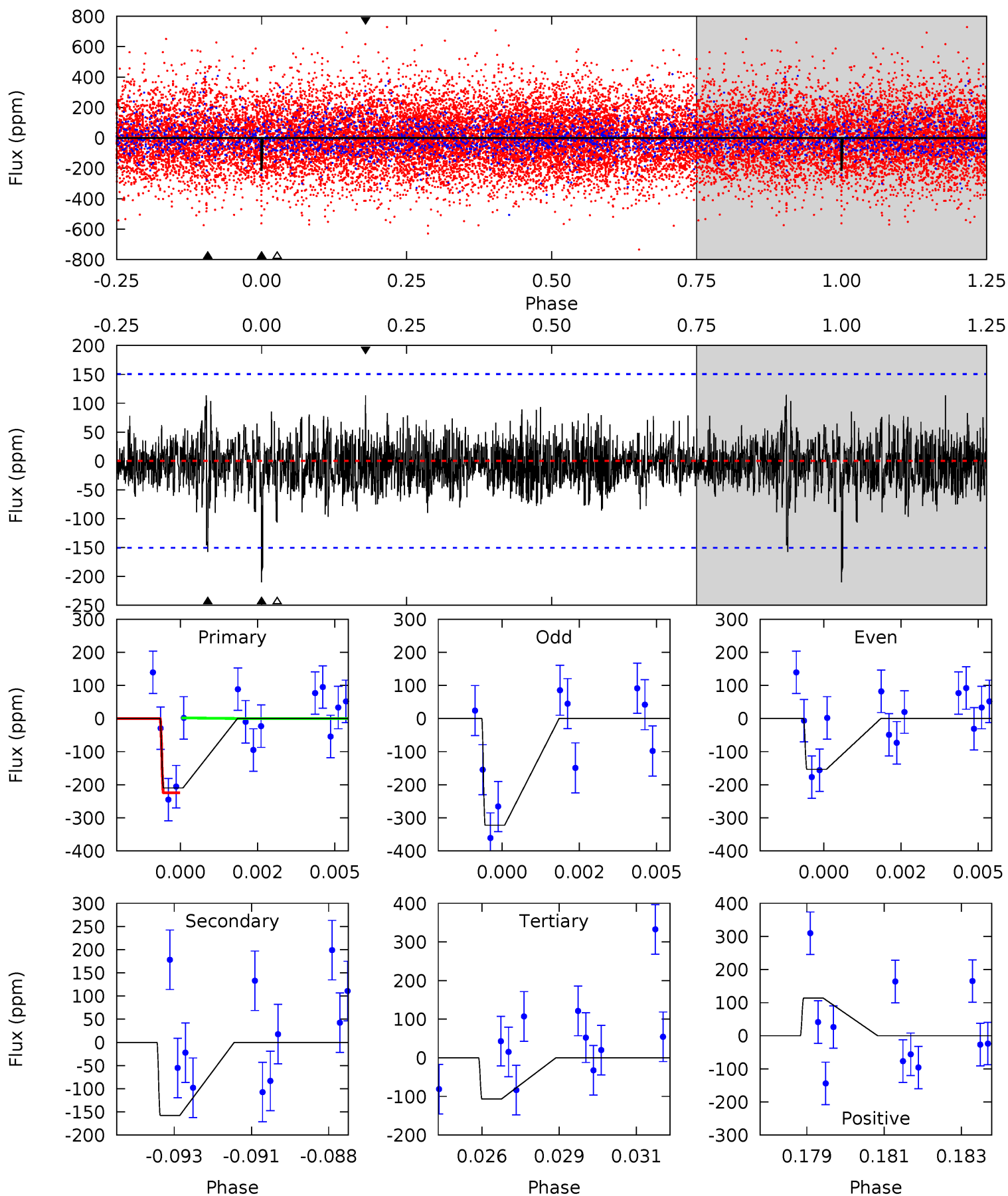
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.13	4.28	4.14	4.24	5.52	3.40	1.27	3.99	3.88	0.14	0.04	1.30	0.88	0.34	1.15



Alt Model-Shift Uniqueness Test

011723926-05, P = 428.764445 Days, E = 32.214251 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.39	5.55	3.76	4.00	5.29	3.04	1.06	3.63	3.38	1.79	1.54	2.85	0.84	0.35	1.83



Stellar Parameters For KIC 011723926

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7272^{+226}_{-327}	$3.948^{+0.240}_{-0.160}$	$0.060^{+0.200}_{-0.350}$	$2.328^{+0.585}_{-0.715}$	$1.752^{+0.186}_{-0.345}$	$0.196^{+0.313}_{-0.078}$
	+3%/-4%	+6%/-4%	+333%/-583%	+25%/-31%	+11%/-20%	+160%/-40%
Source	PHO1	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 011723926-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-117 ± 27	$3.85^{+1.39}_{-1.42}$	584^{+44}_{-49}	5961^{+1534}_{-826}	7556^{+11925}_{-3654}
Alt.	-158 ± 28	$3.39^{+1.47}_{-1.29}$	587^{+45}_{-50}	6871^{+2246}_{-1144}	13336^{+20456}_{-7123}

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 $A_{obs} \gg 1.0$

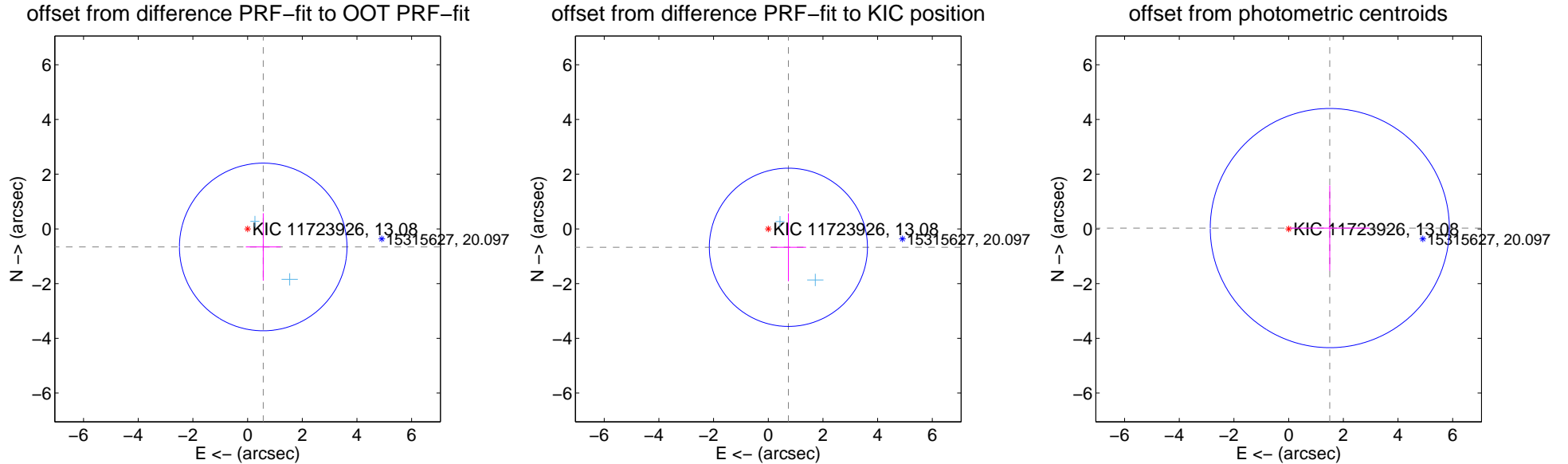
DV Centroid Data

Supplemental centroid analysis for 011723926-05. Kepler magnitude: 13.08. Transit SNR 7.51

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.873 ± 1.022	0.85	-0.571 ± 0.638	-0.660 ± 1.233
PRF-fit source offset from KIC position	0.998 ± 0.964	1.04	-0.737 ± 0.647	-0.673 ± 1.242
photometric centroid source offset	1.51 ± 1.46	1.03	-1.51 ± 1.46	0.03 ± 1.56

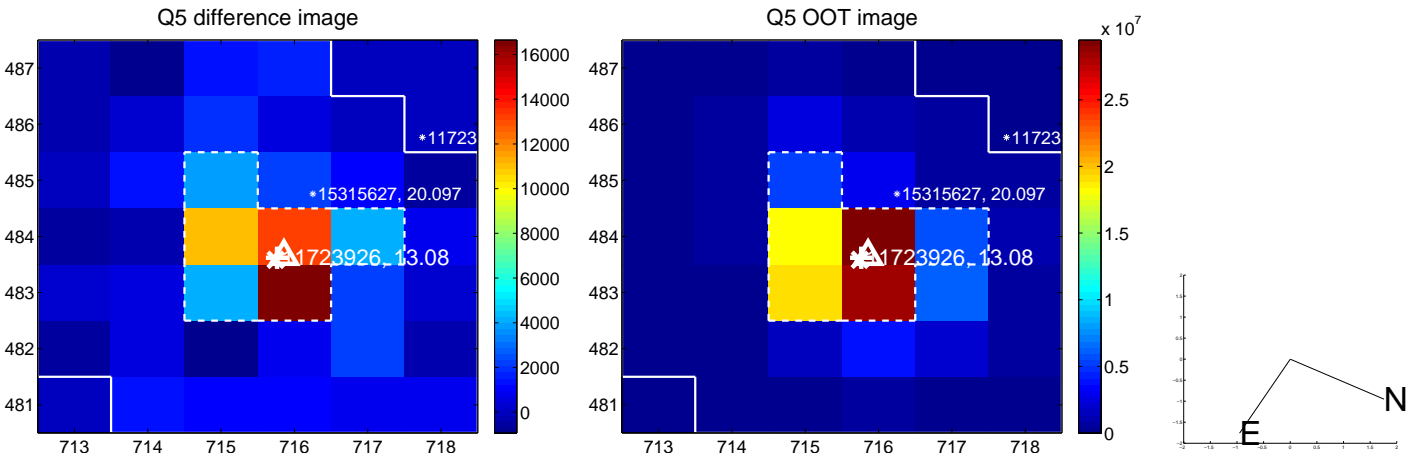


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

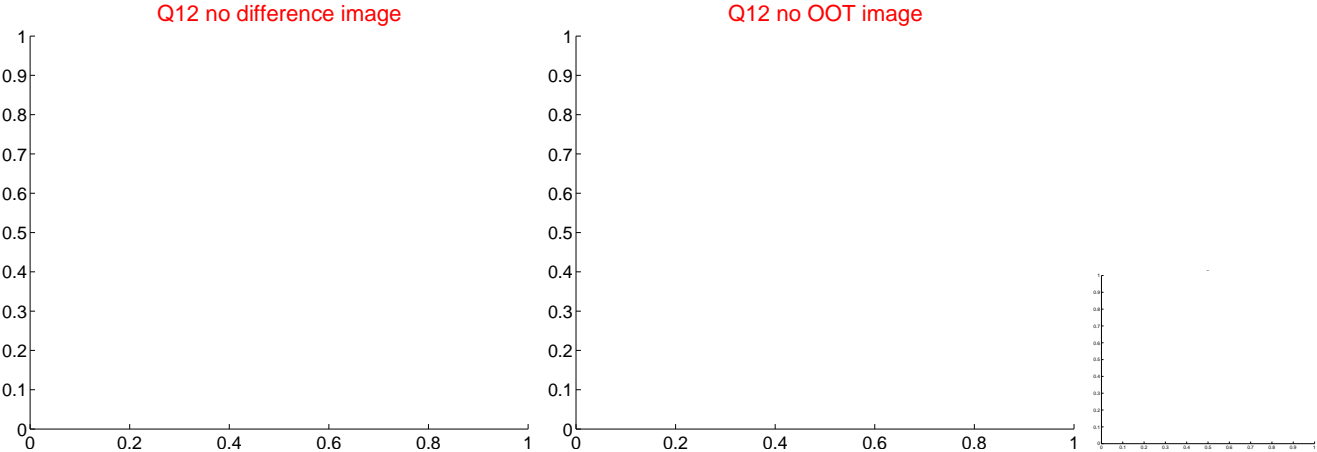
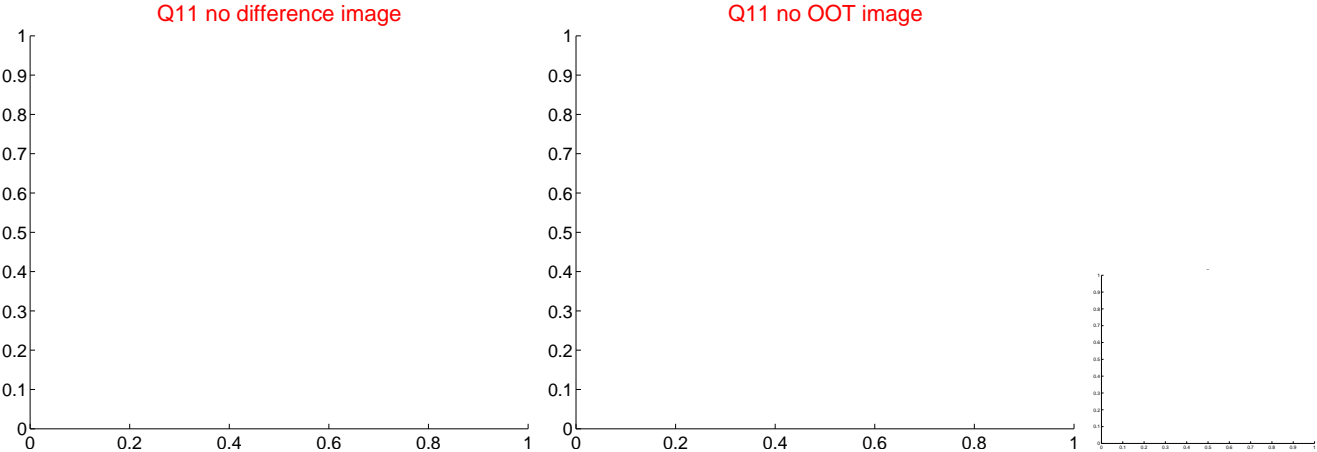
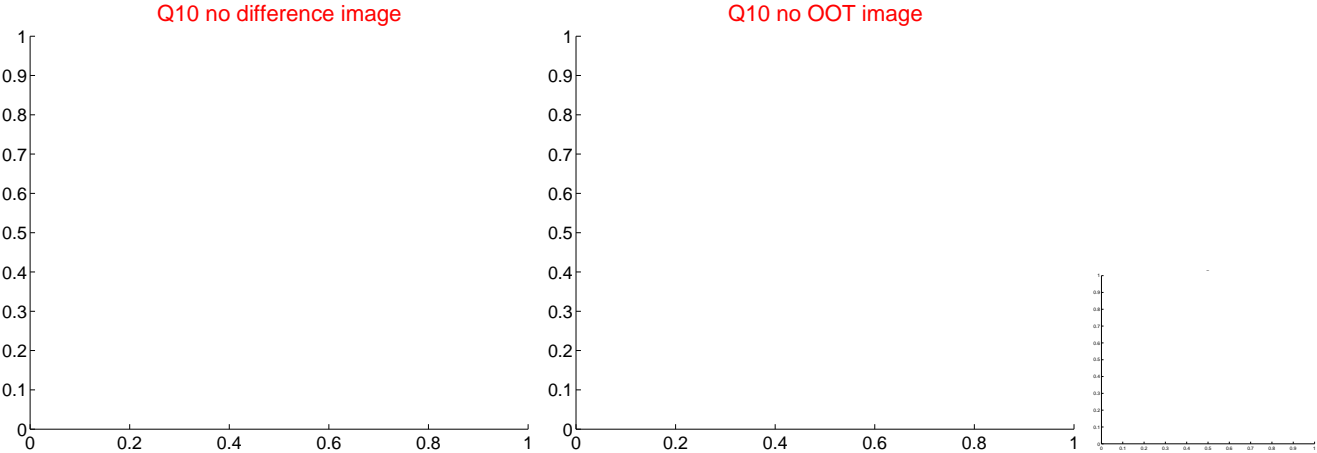
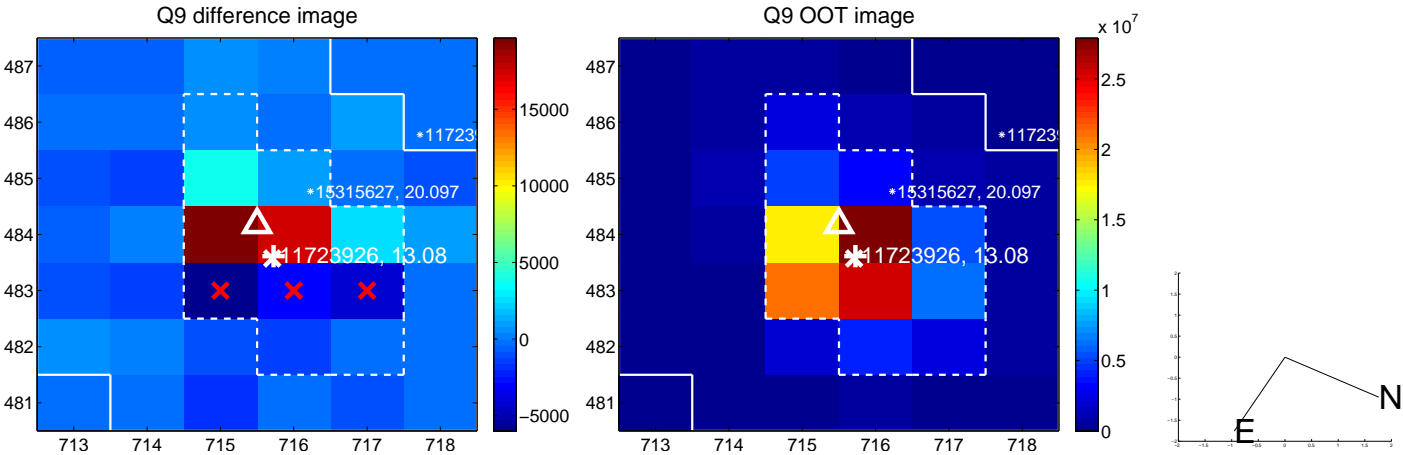
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

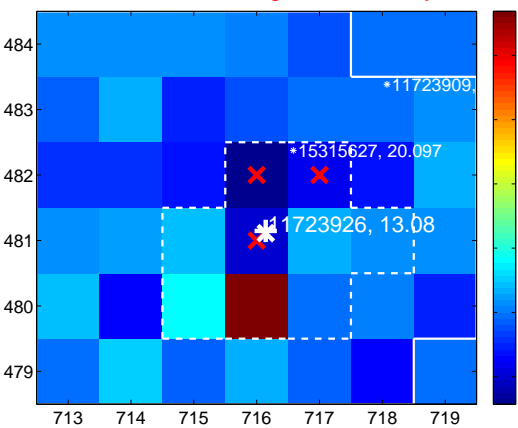
Q13 no difference image



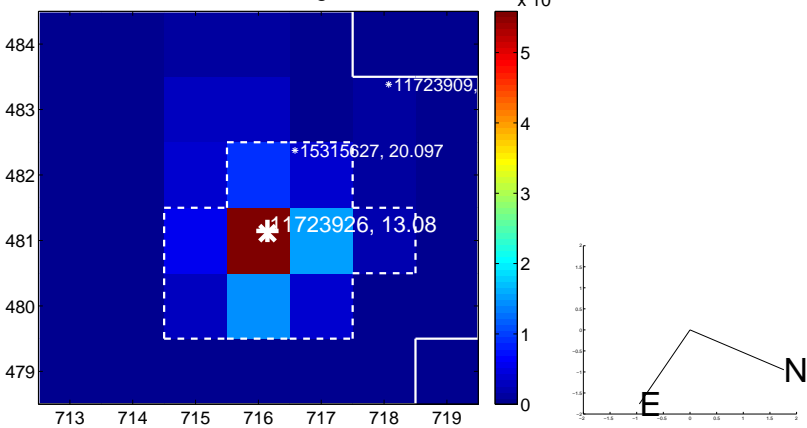
Q13 no OOT image



Q14 difference image. Poor Quality



Q14 OOT image



Q15 no difference image



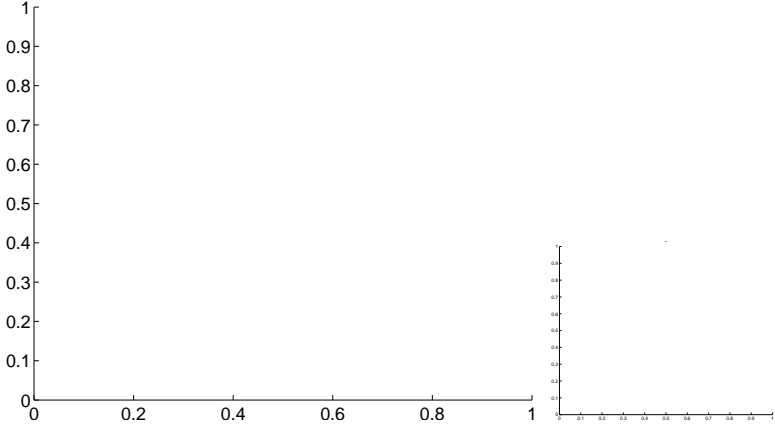
Q15 no OOT image



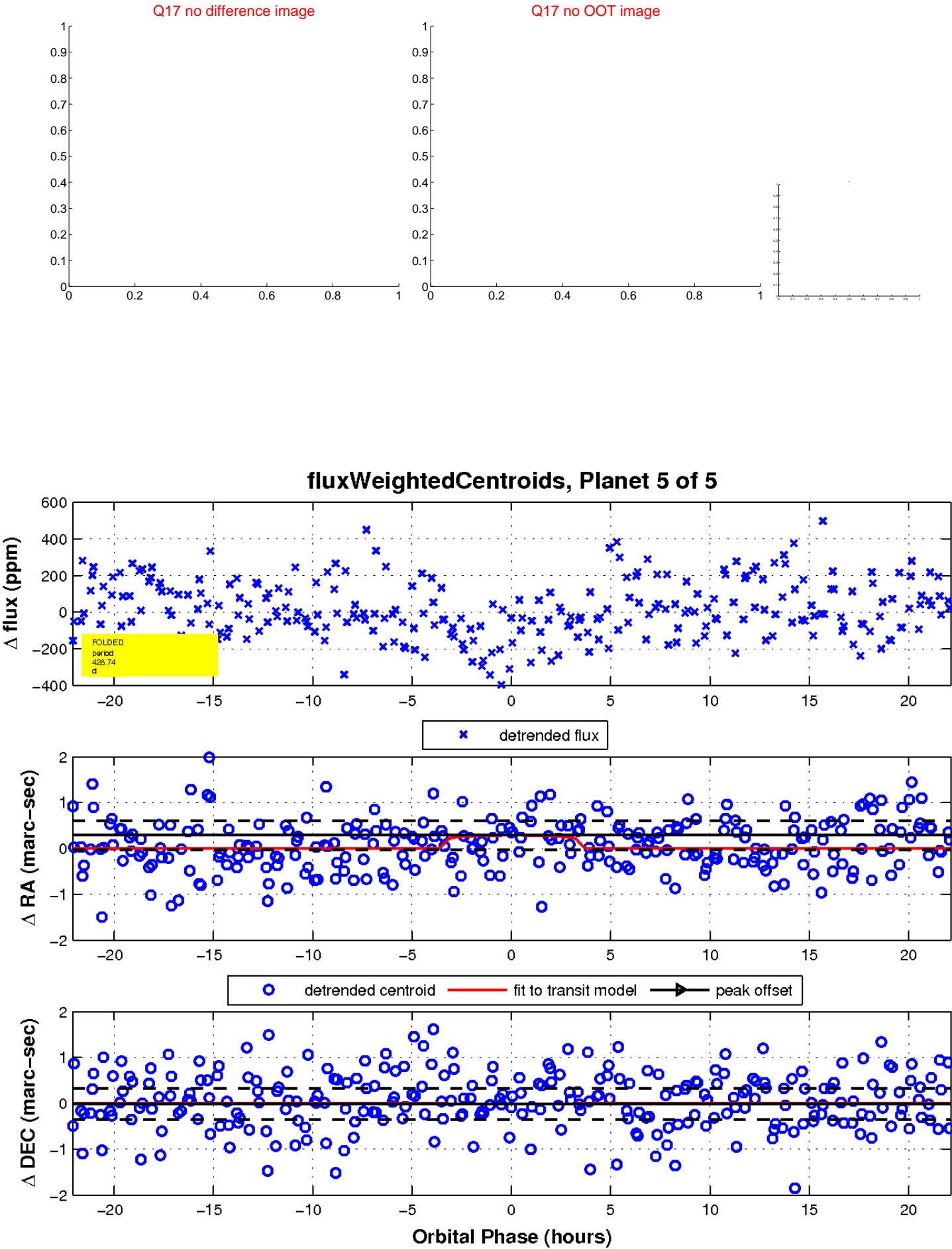
Q16 no difference image



Q16 no OOT image



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



UKIRT Image

