

KIC 011671226

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})
011671226-01	OBS	No	2.957133	133.936267	29.6	2.148	17.0	18.0	3.18	8300	2.01	16405.78
011671226-02	OBS	No	1.478955	131.958719	5.9	3.838	12.5	5.6	3.18	8300	0.98	41325.52
011671226-03	OBS	No	2.957012	134.142976	23.4	2.115	12.0	14.0	3.18	8300	1.70	16406.68
011671226-04	OBS	No	2.957124	131.548455	47.6	9.000	10.6	-1.0	3.18	8300	2.22	16405.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011671226-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011671226-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

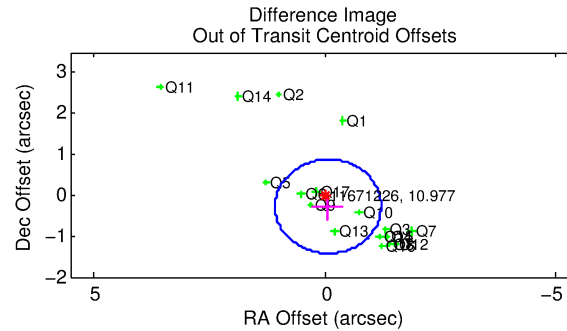
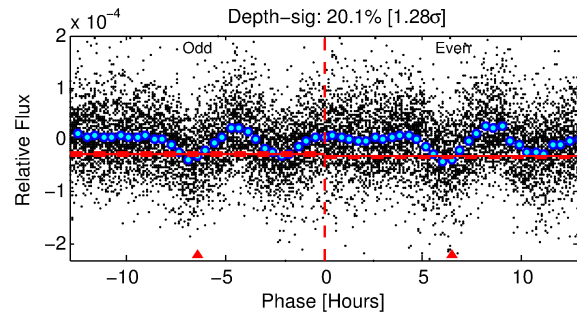
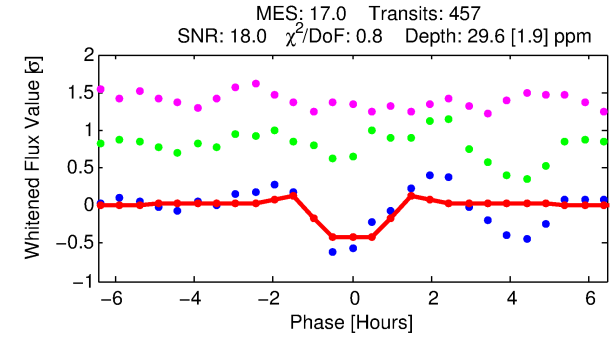
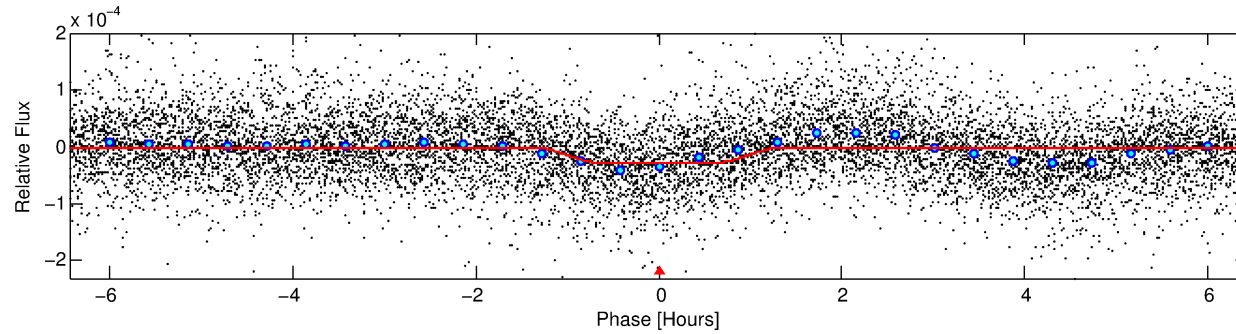
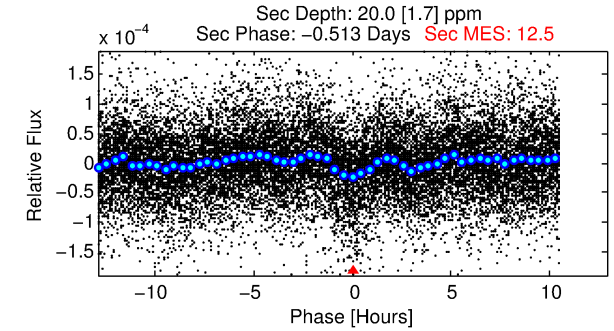
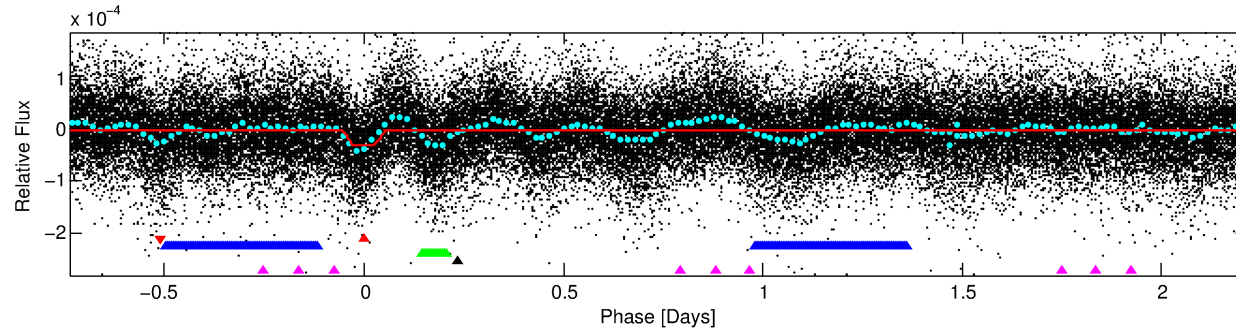
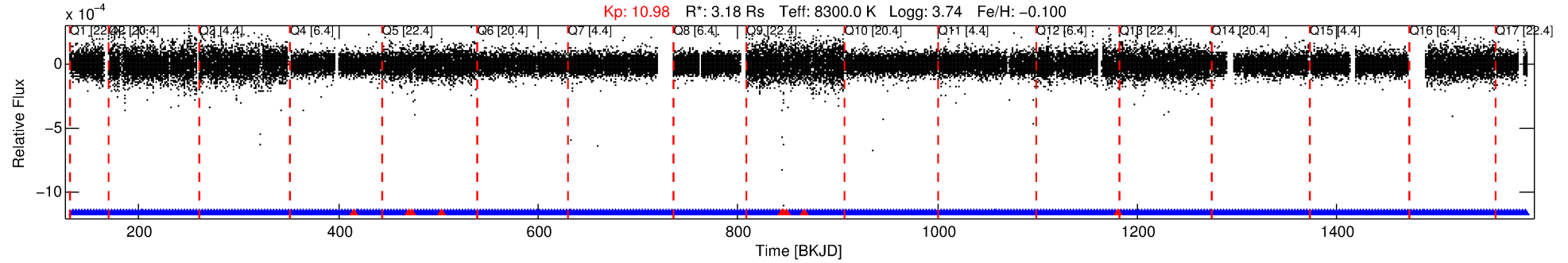
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011671226-01

No Significant Match Found

DV One-Page Summary

KIC: 11671226 Candidate: 1 of 5 Period: 2.957 d



DV Fit Results:

Period = 2.95713 [0.00001] d
Epoch = 133.9363 [0.0014] BKJD
Rp/R* = 0.0058 [0.0008]
a/R* = 4.81 [4.13]
b = 0.90 [0.19]
Seff = 16405.78 [12316.76]
Teq = 2886 [542] K
Rp = 2.01 [0.96] Re
a = 0.0512 [0.0230] AU
Ag = 7.11 [5.60] [1.09σ]
Teffp = 7287 [636] K [5.27σ]

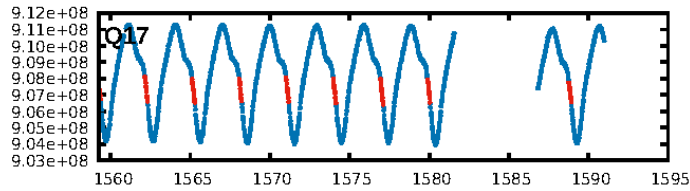
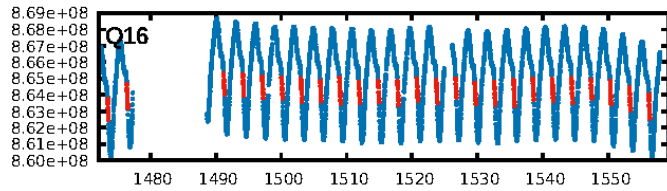
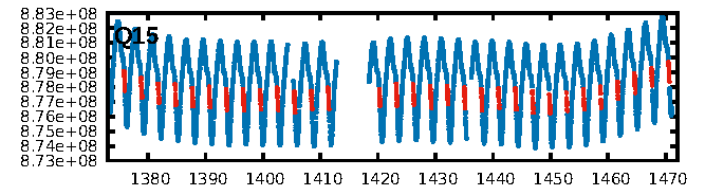
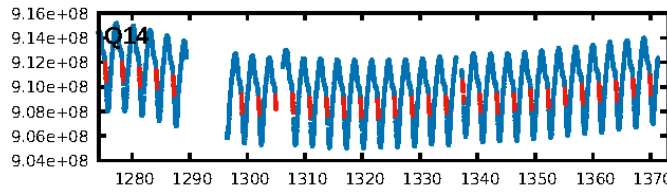
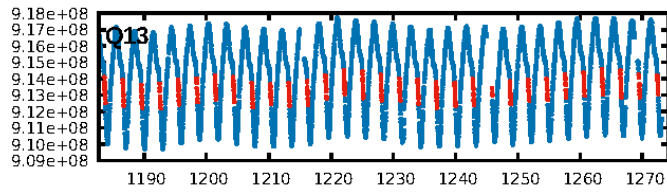
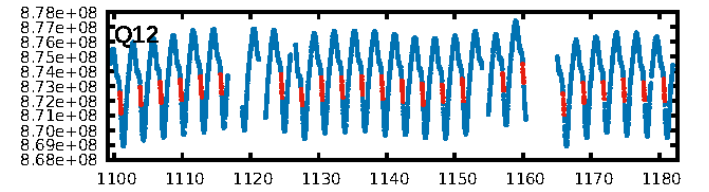
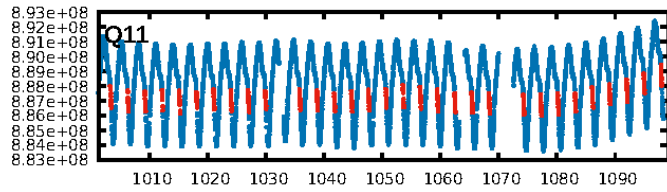
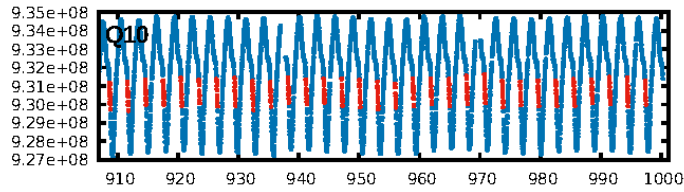
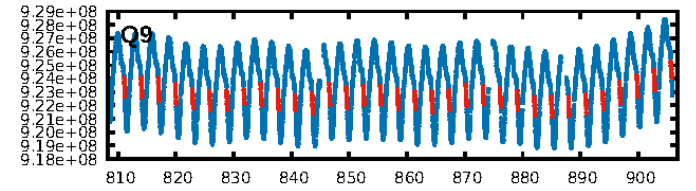
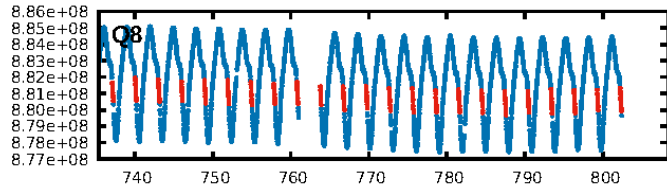
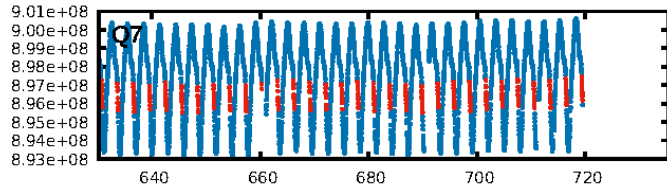
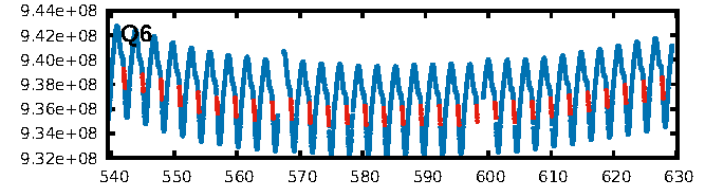
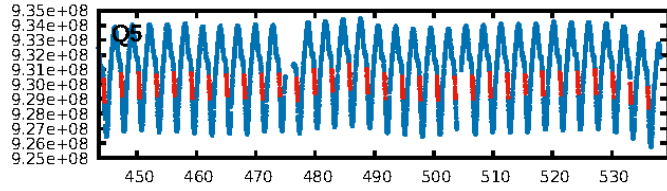
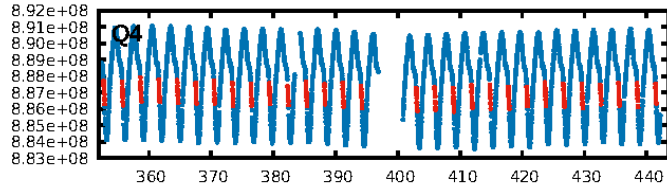
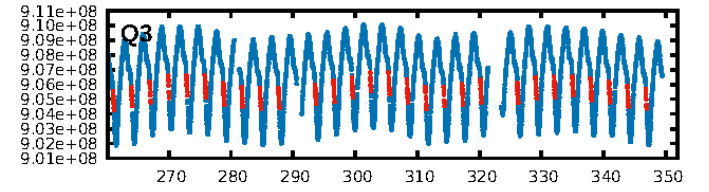
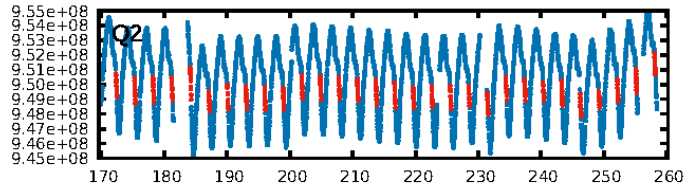
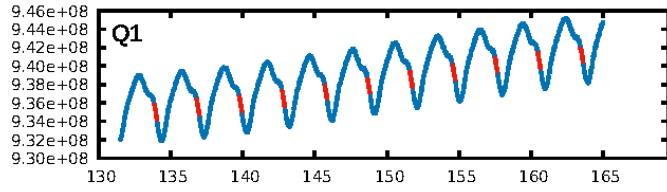
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [144.76σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.18e-44
RollingBand-fgt: 0.98 [428/437]
GhostDiagnostic-chr: -1.861
Centroid-sig: 20.4%
Centroid-so: 0.946 arcsec [1.13σ]
OotOffset-rm: 0.283 arcsec [0.74σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.483 arcsec [1.06σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 0.00 [0/17]

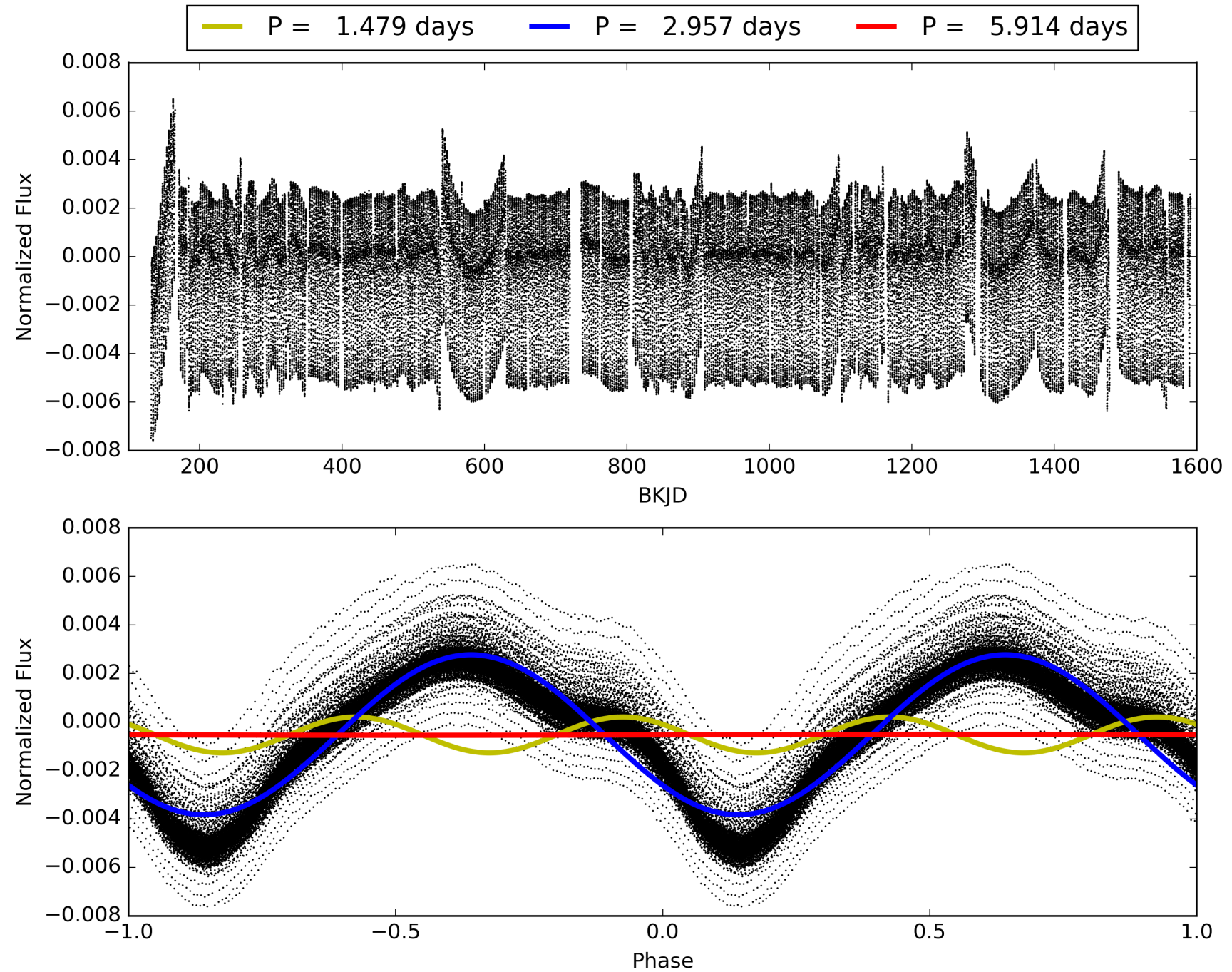
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:15:27 Z

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

TCE 011671226-01, PDC Light Curves

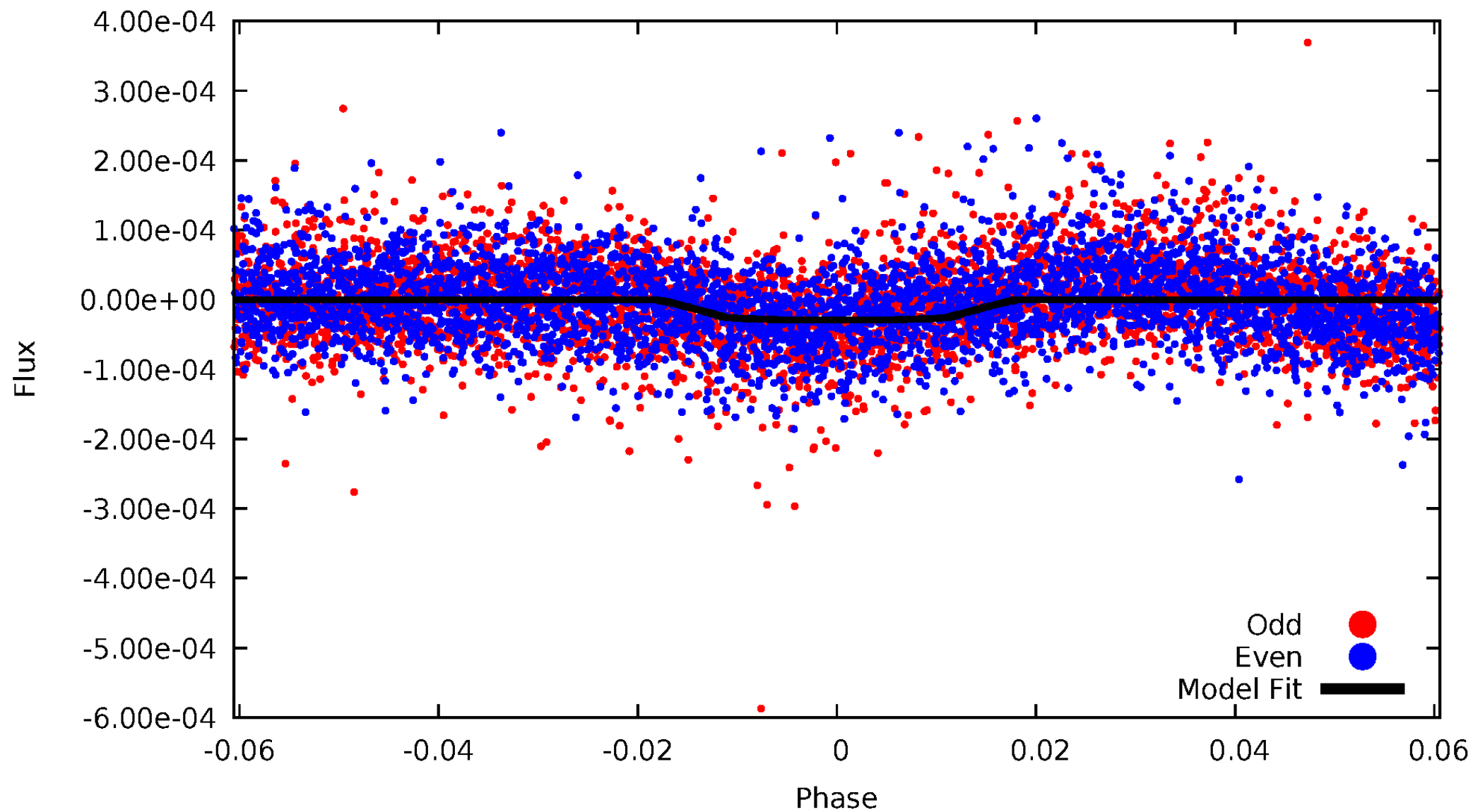


TCE 011671226-01



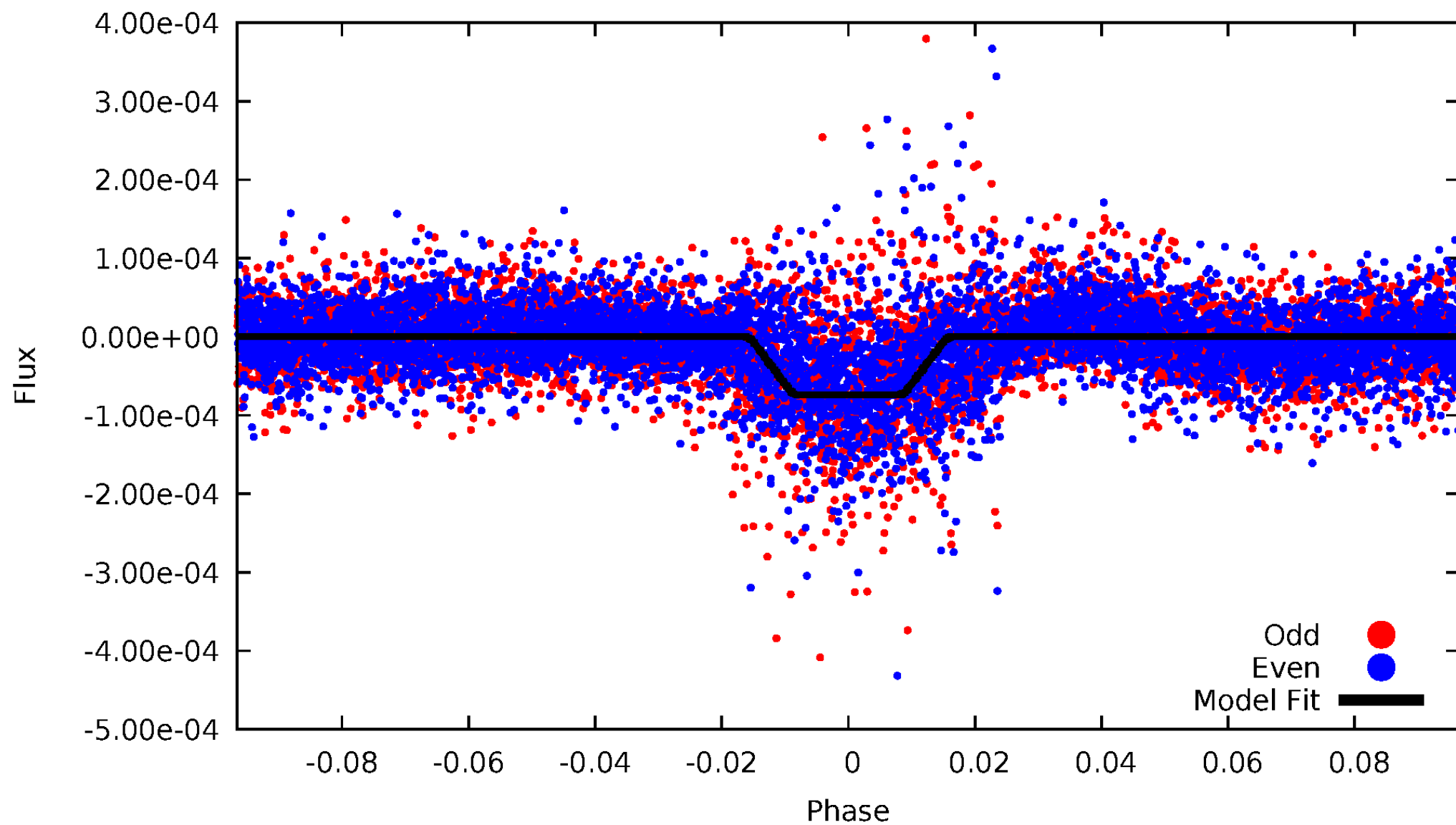
DV Odd/Even

TCE 011671226-01



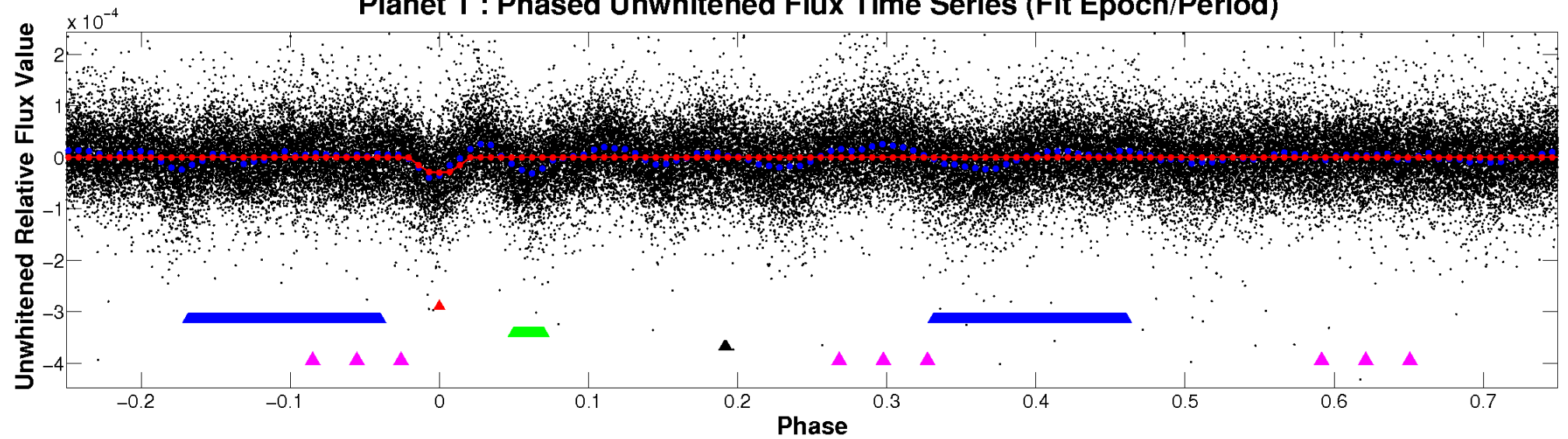
ALT Odd/Even

TCE 011671226-01

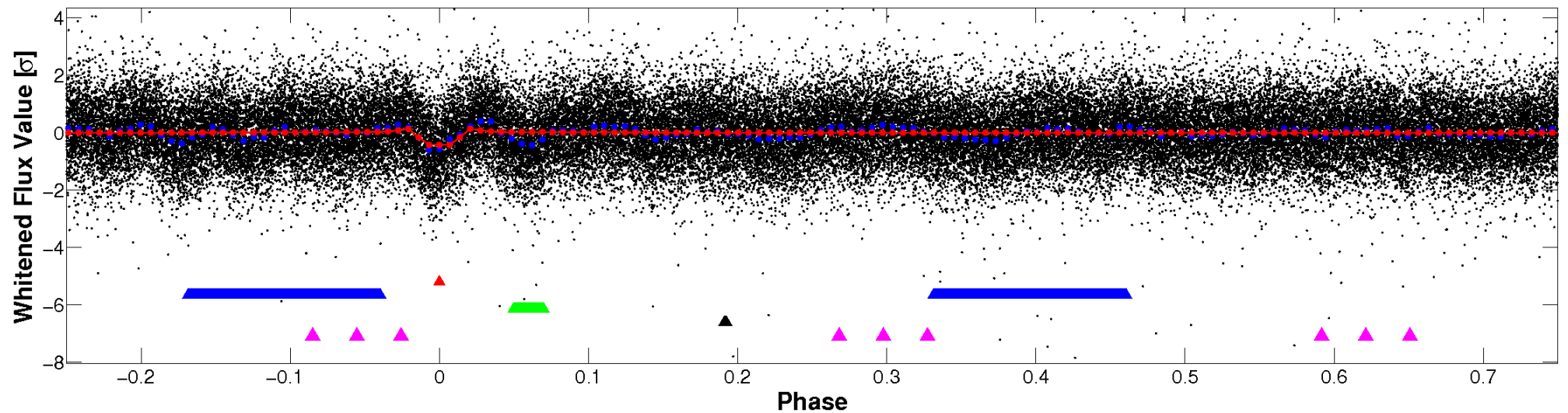


Non-Whitened Vs. Whitened Light Curve

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

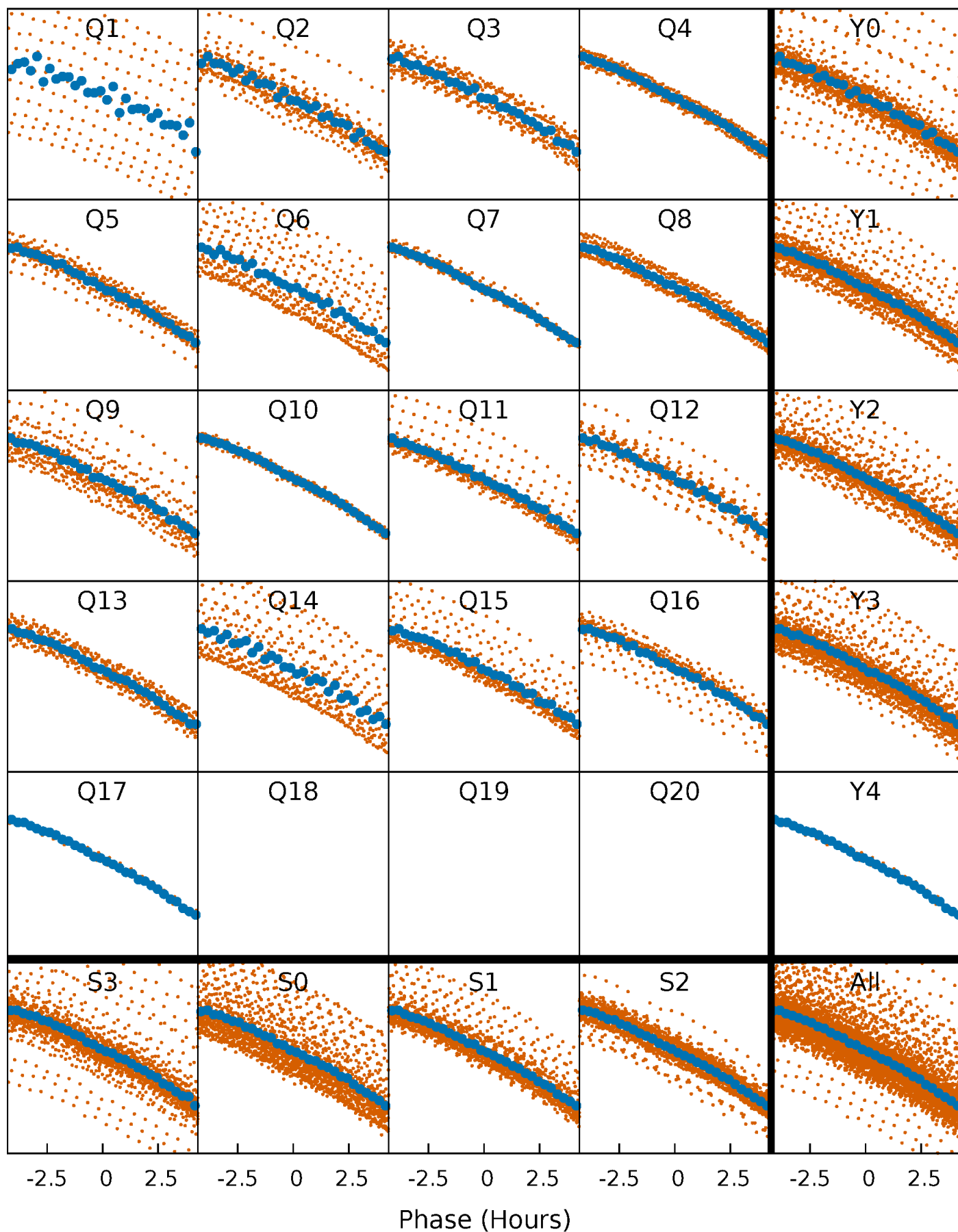


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



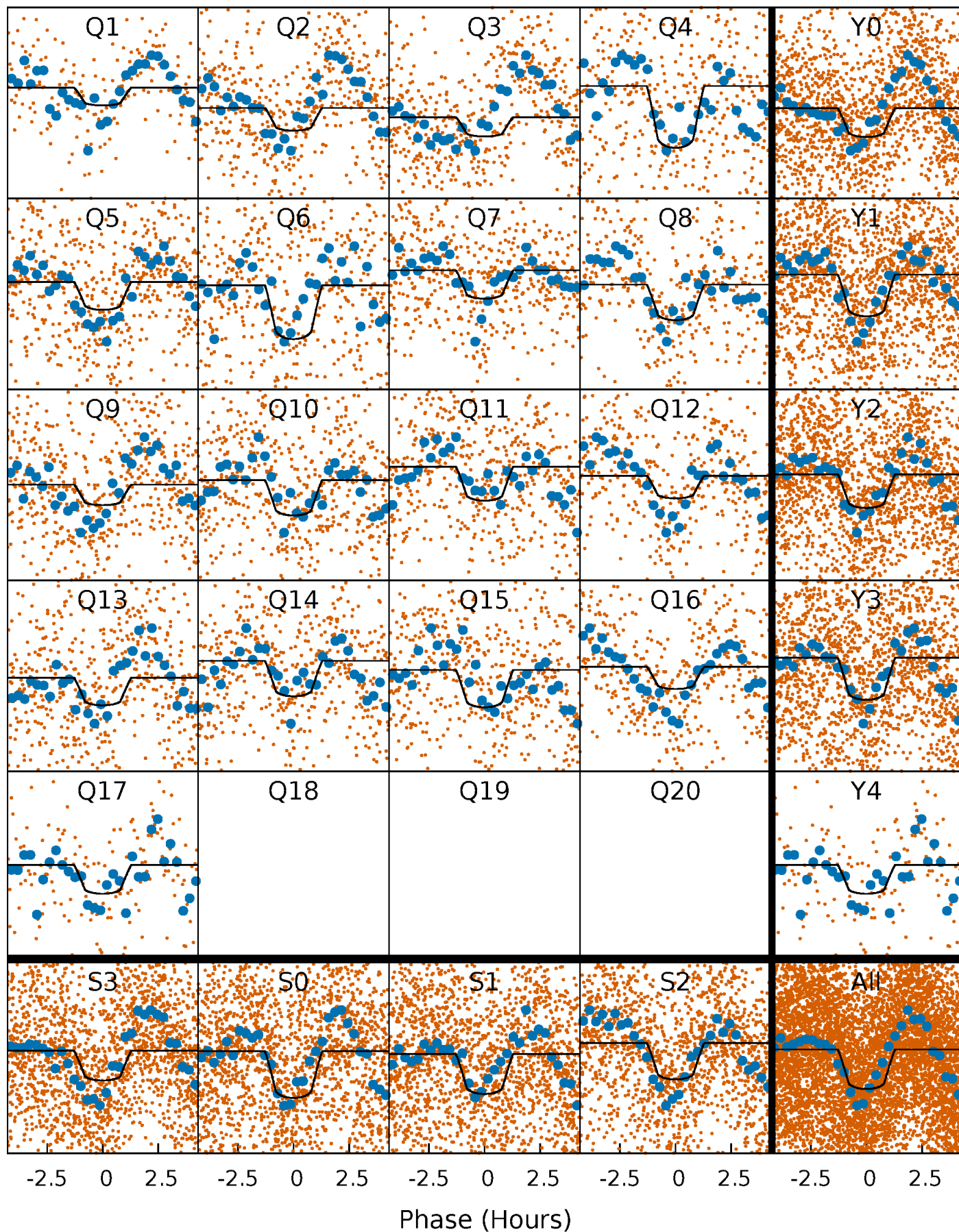
PDC Quarter-Phased Transit Curves

TCE 011671226-01 P= 2.957133 Days $T_0=133.936267$ (BKJD)



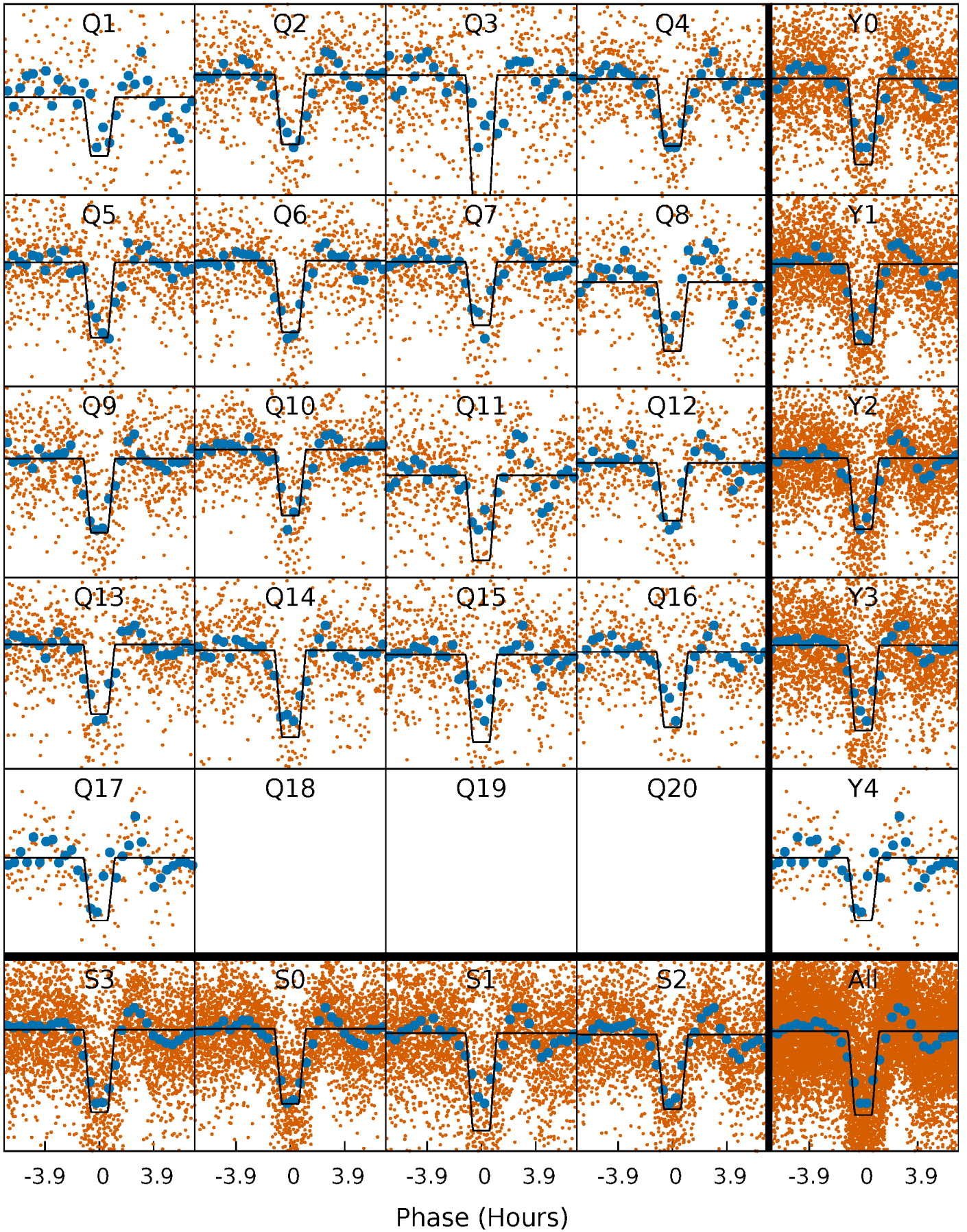
DV Quarter-Phased Transit Curves

TCE 011671226-01 P= 2.957133 Days $T_0=133.936267$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

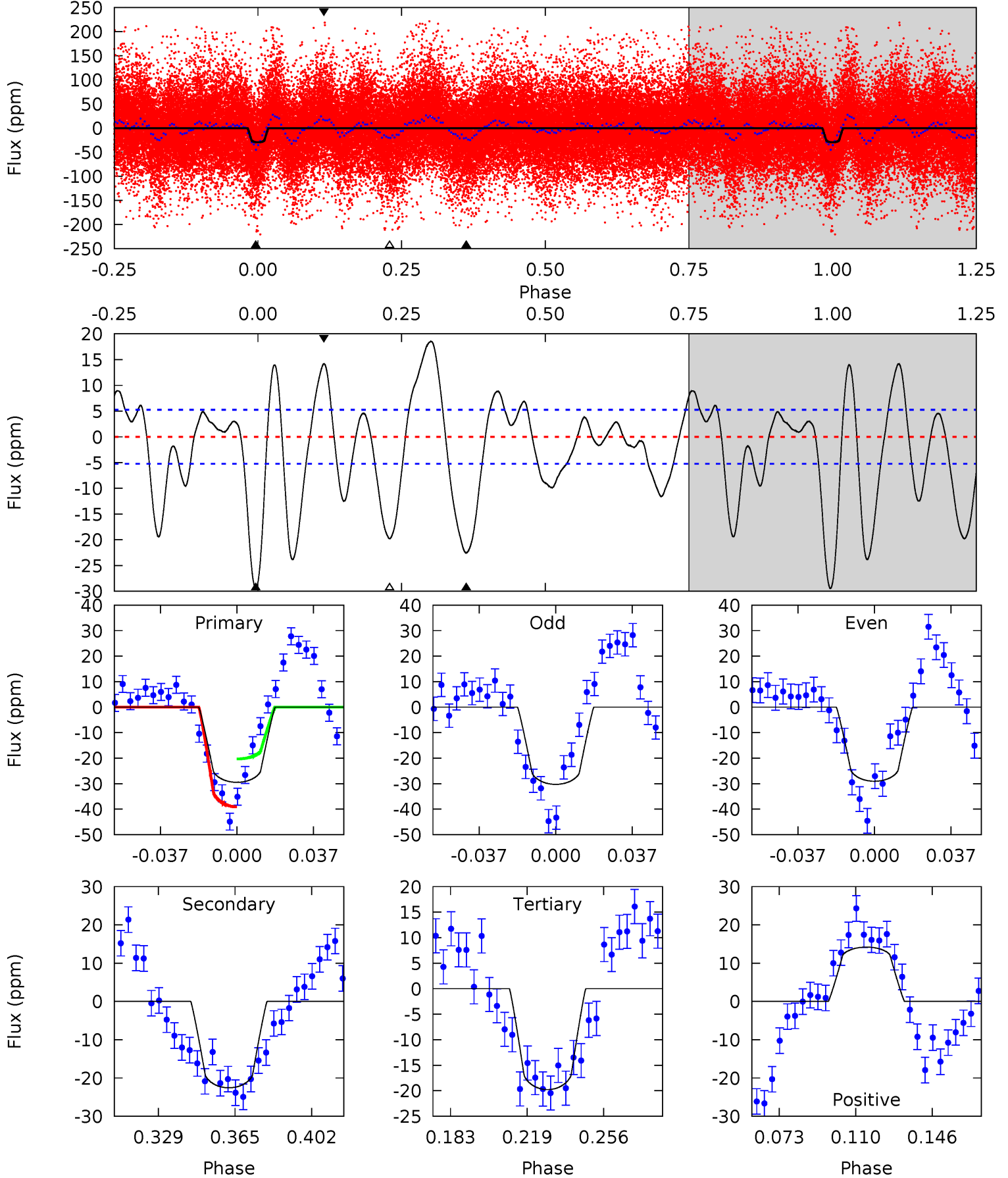
TCE 011671226-01 P= 2.957167 Days $T_0=133.914576$ (BKJD)



DV Model-Shift Uniqueness Test

011671226-01, P = 2.957133 Days, E = 130.979134 Days

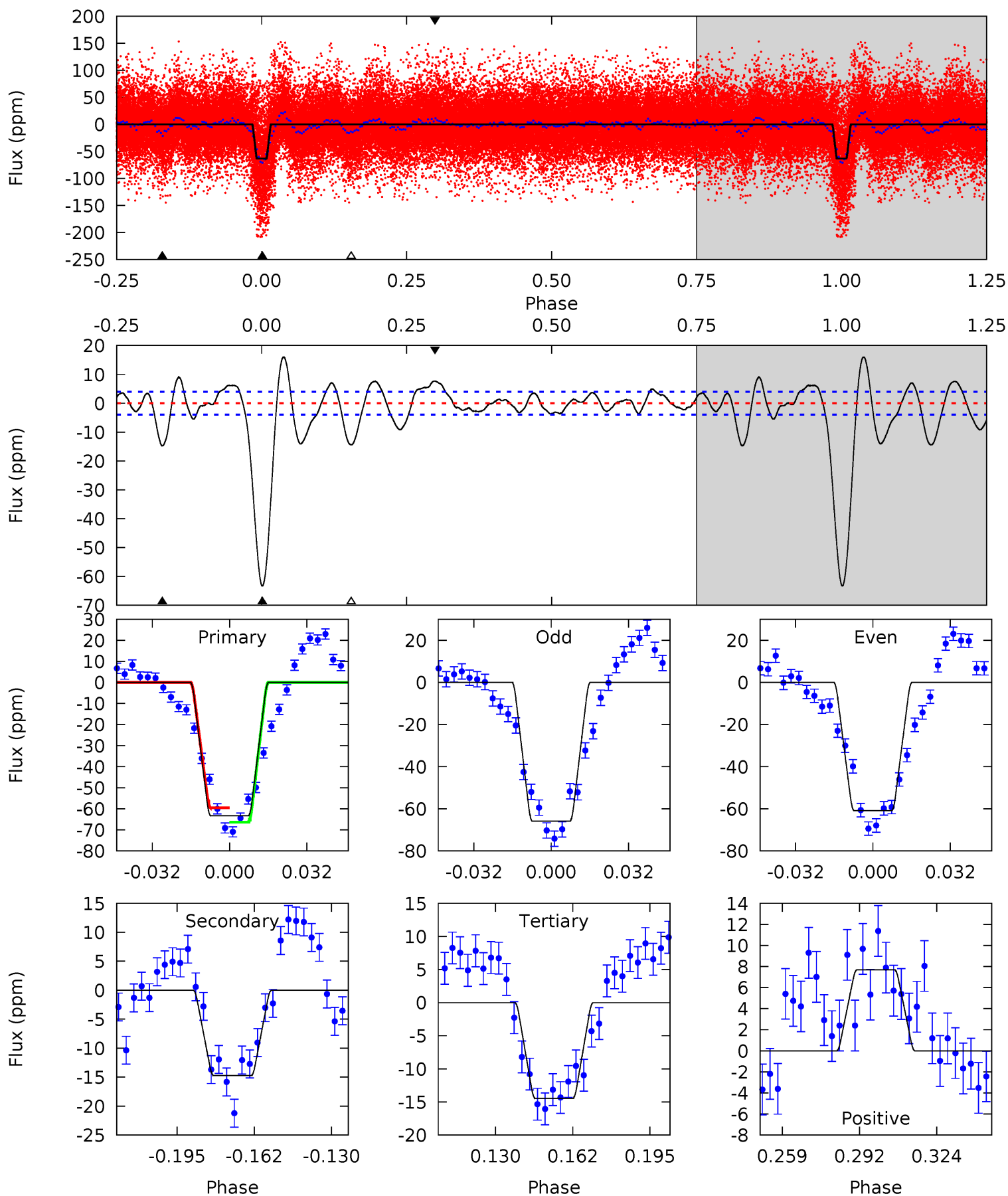
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.8	20.5	18.0	12.9	4.77	2.09	7.82	8.84	13.9	2.54	7.61	0.55	1.09	0.39	8.62



Alt Model-Shift Uniqueness Test

011671226-01, P = 2.957167 Days, E = 130.957409 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
76.7	17.9	17.5	9.32	4.80	2.14	5.87	59.2	67.4	0.33	8.54	3.06	0.99	0.20	4.11



Stellar Parameters For KIC 011671226

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8300^{+201}_{-374}	$3.744^{+0.432}_{-0.135}$	$-0.100^{+0.250}_{-0.400}$	$3.180^{+0.961}_{-1.442}$	$2.046^{+0.371}_{-0.453}$	$0.090^{+0.345}_{-0.036}$
	+2%/-5%	+12%/-4%	+250%/-400%	+30%/-45%	+18%/-22%	+385%/-41%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011671226-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-23 ± 1	$1.87^{+0.50}_{-0.51}$	3894^{+338}_{-484}	7261^{+744}_{-585}	$9.421^{+7.701}_{-3.430}$
Alt.	-15 ± 1	$2.81^{+0.66}_{-0.66}$	3894^{+350}_{-445}	5241^{+315}_{-285}	$2.745^{+1.732}_{-0.904}$

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

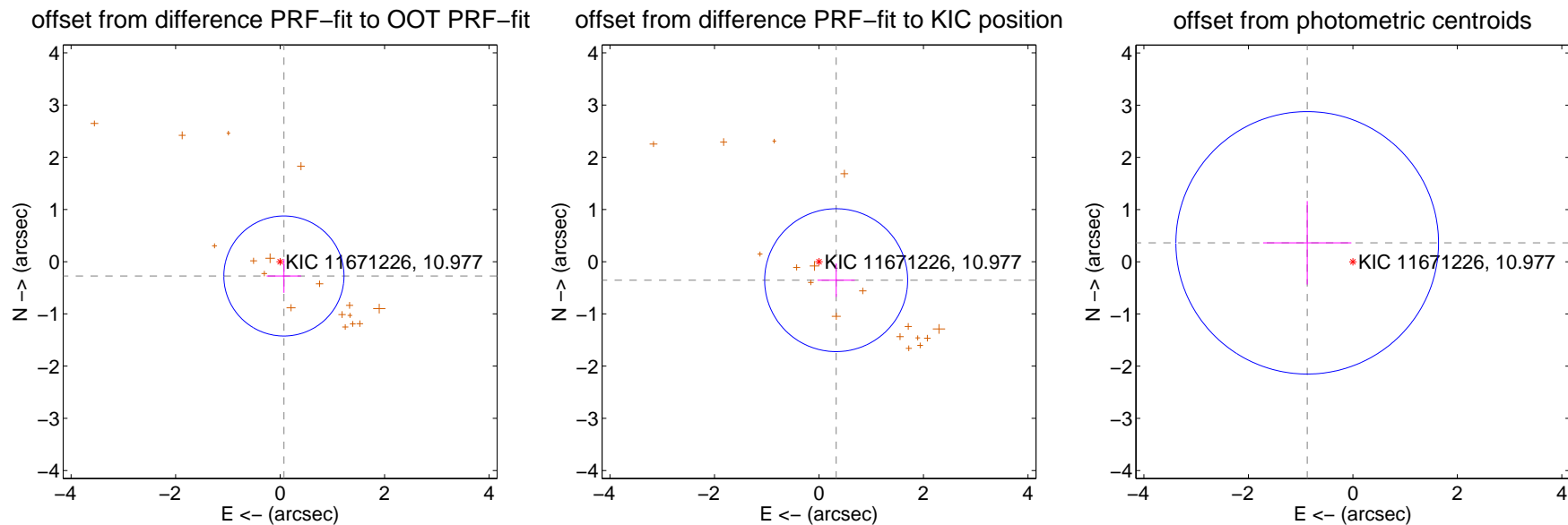
DV Centroid Data

Supplemental centroid analysis for 011671226-01. **Kepler magnitude: 10.98.** Transit SNR 17.95

There are 0 quarters with good PRF difference image offsets

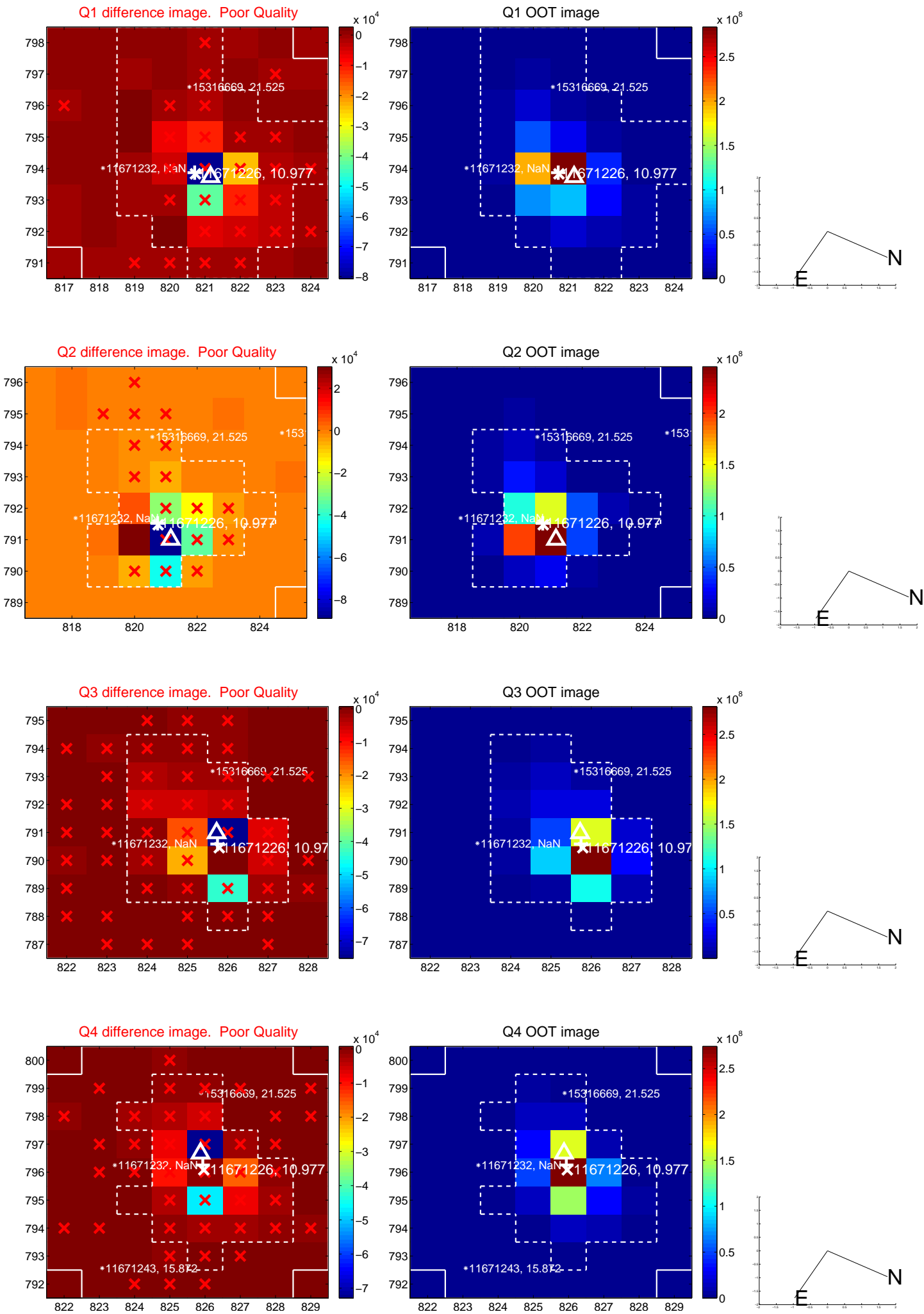
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.283 ± 0.383	0.74	-0.073 ± 0.330	-0.274 ± 0.323
PRF-fit source offset from KIC position	0.483 ± 0.456	1.06	-0.329 ± 0.356	-0.354 ± 0.322
photometric centroid source offset	0.95 ± 0.84	1.13	0.87 ± 0.84	0.36 ± 0.80

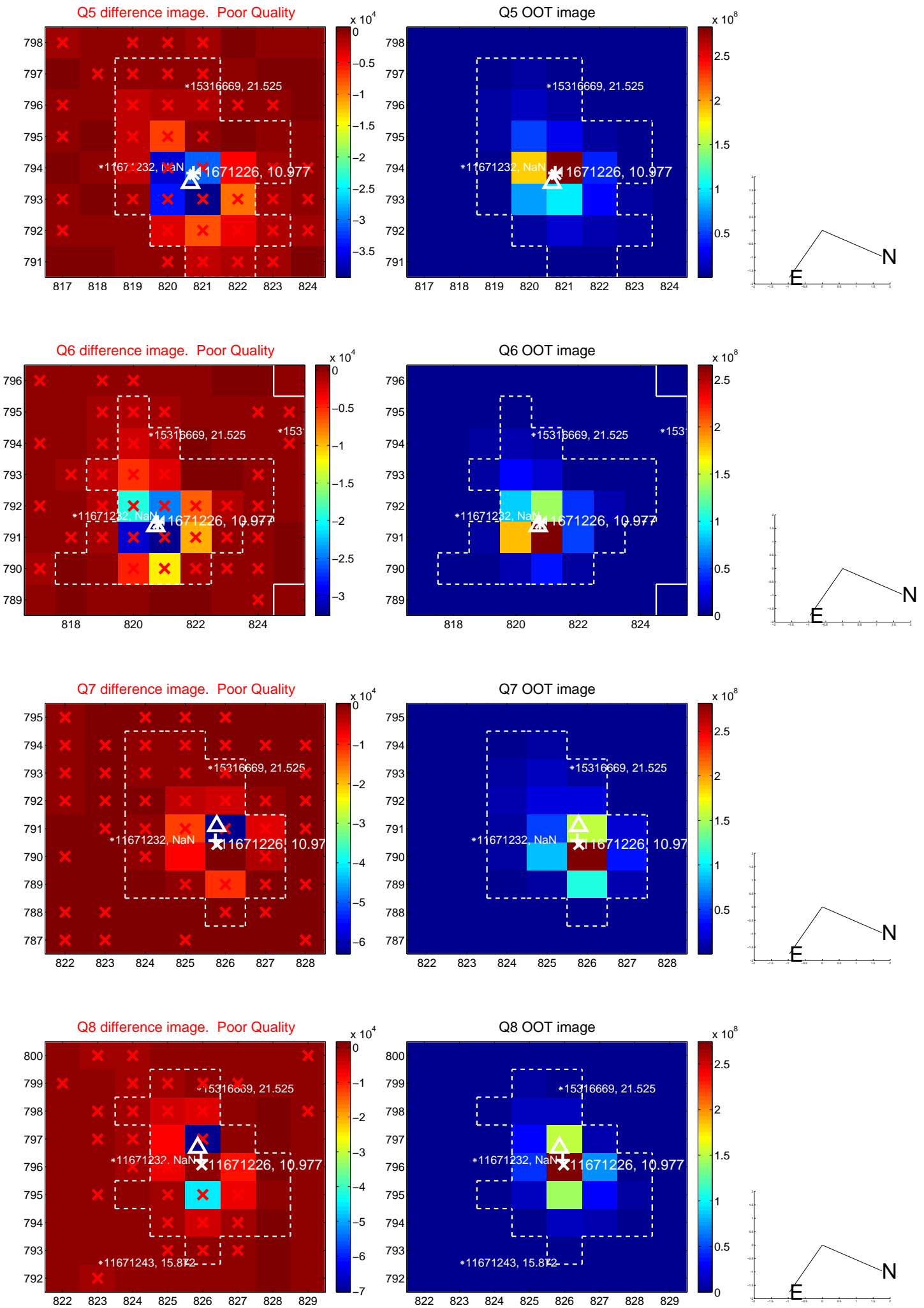


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

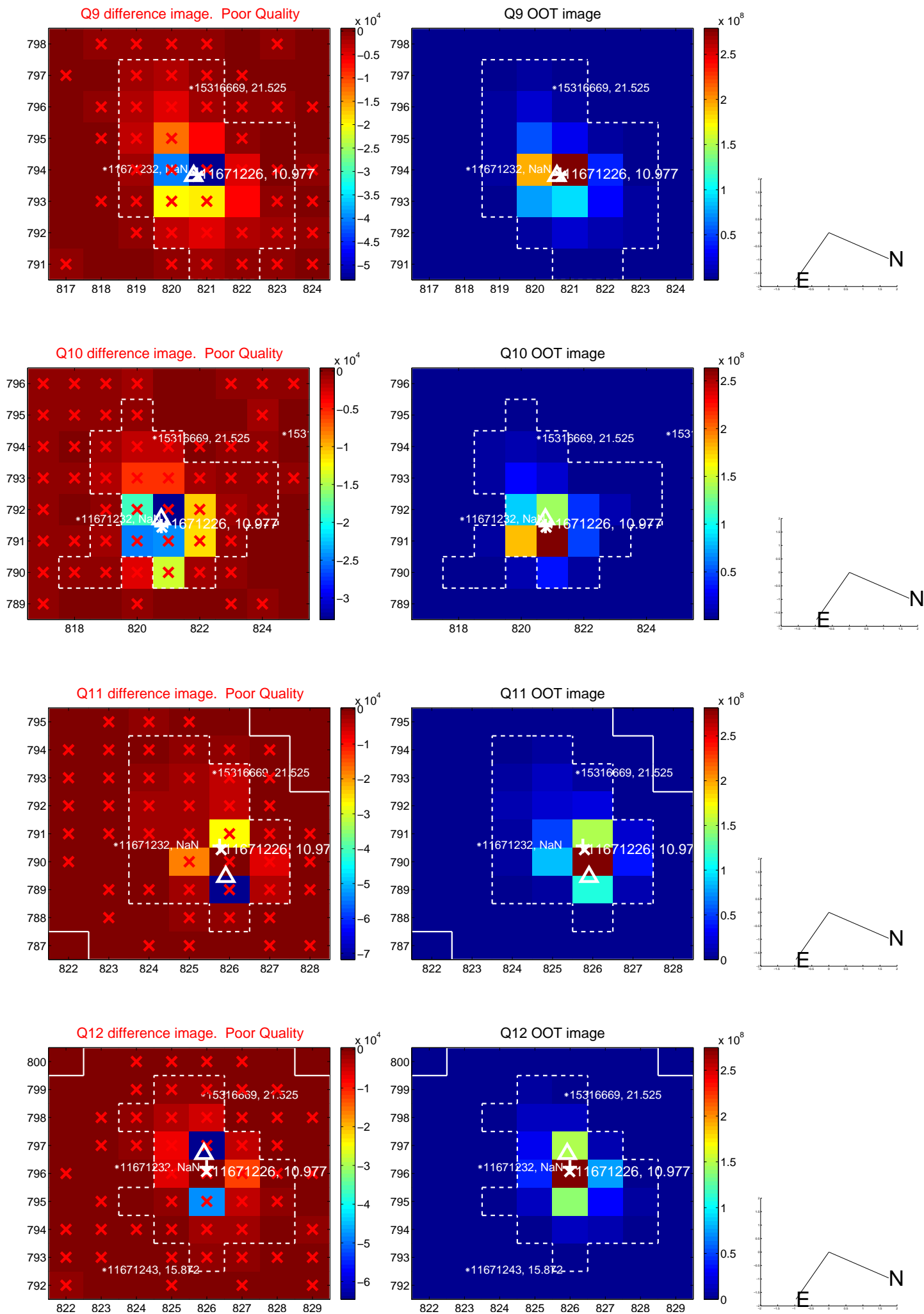
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



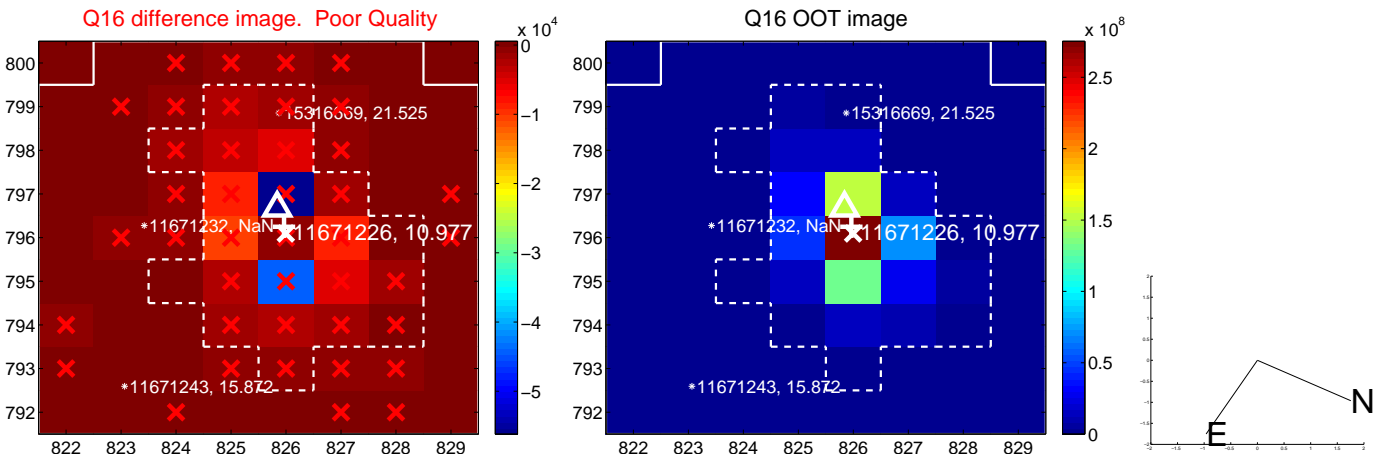
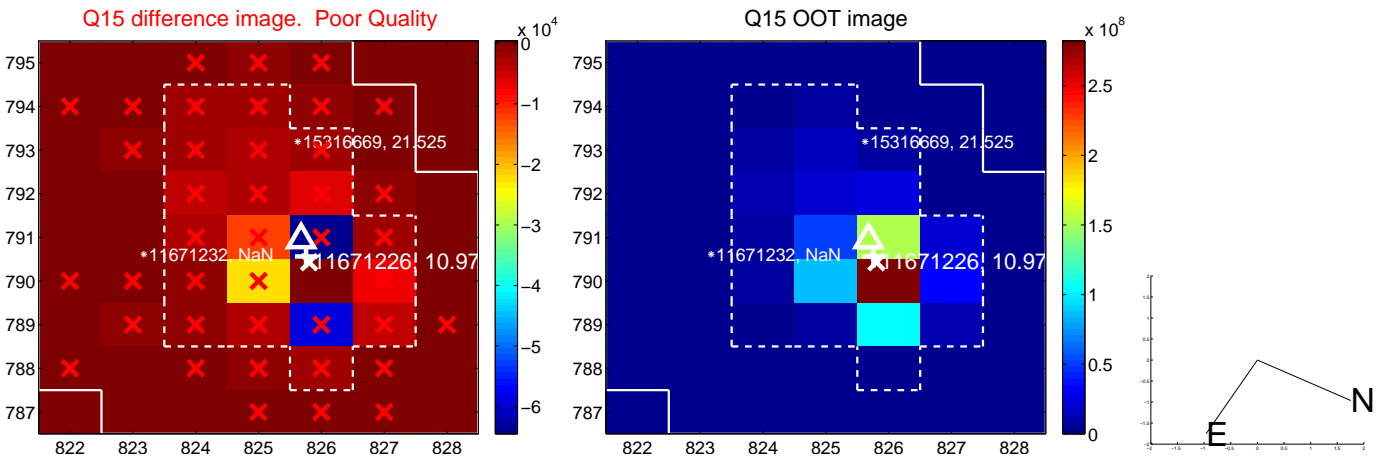
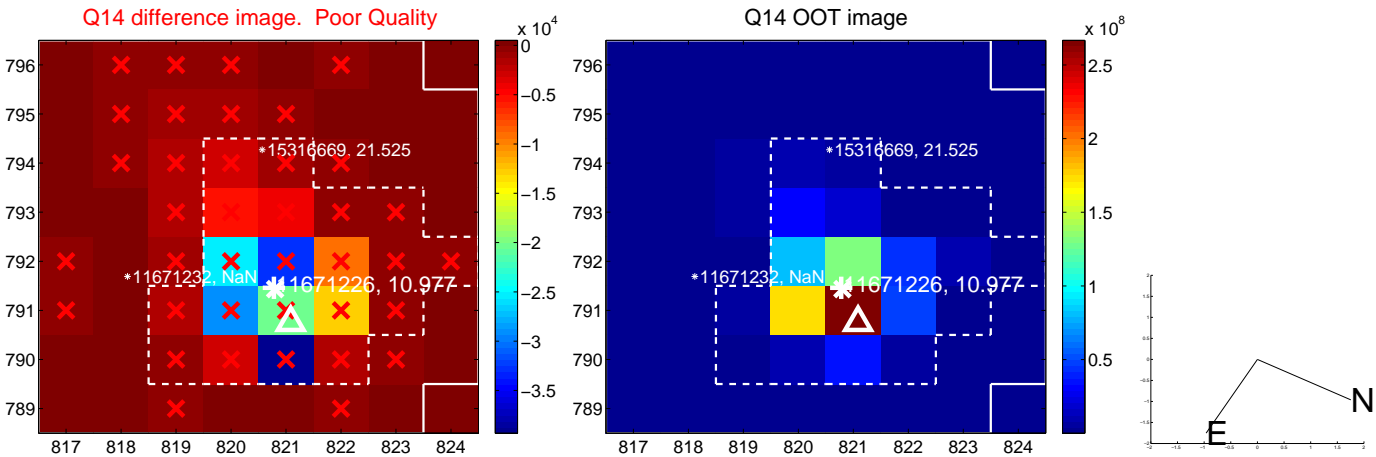
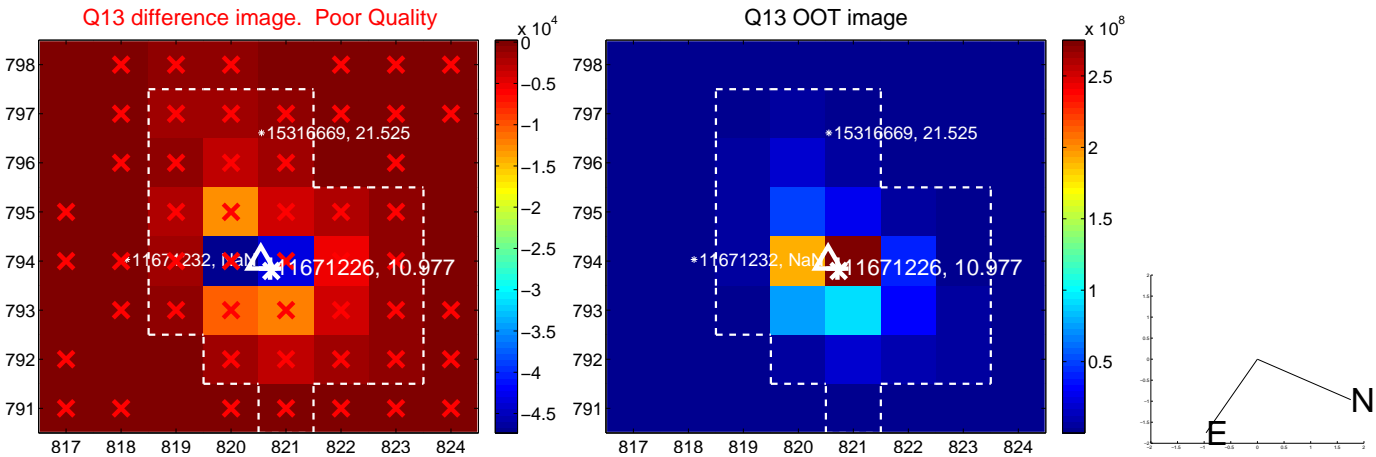
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



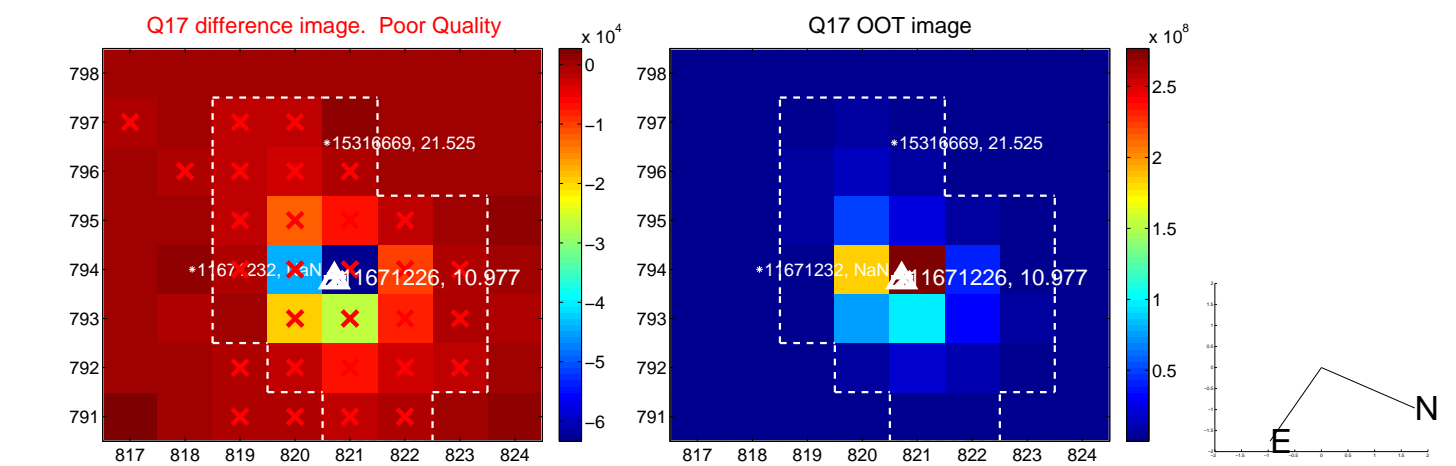
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



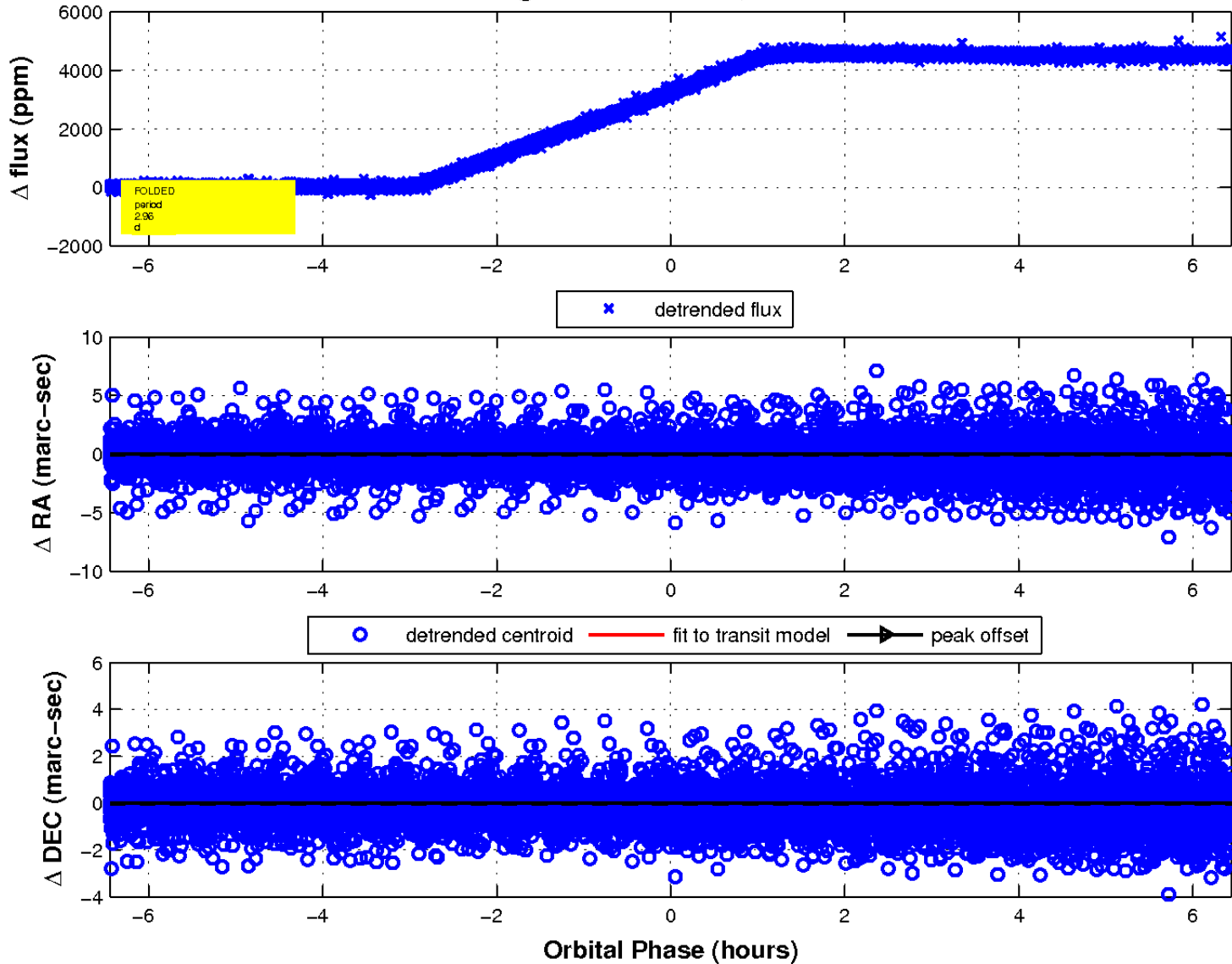
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

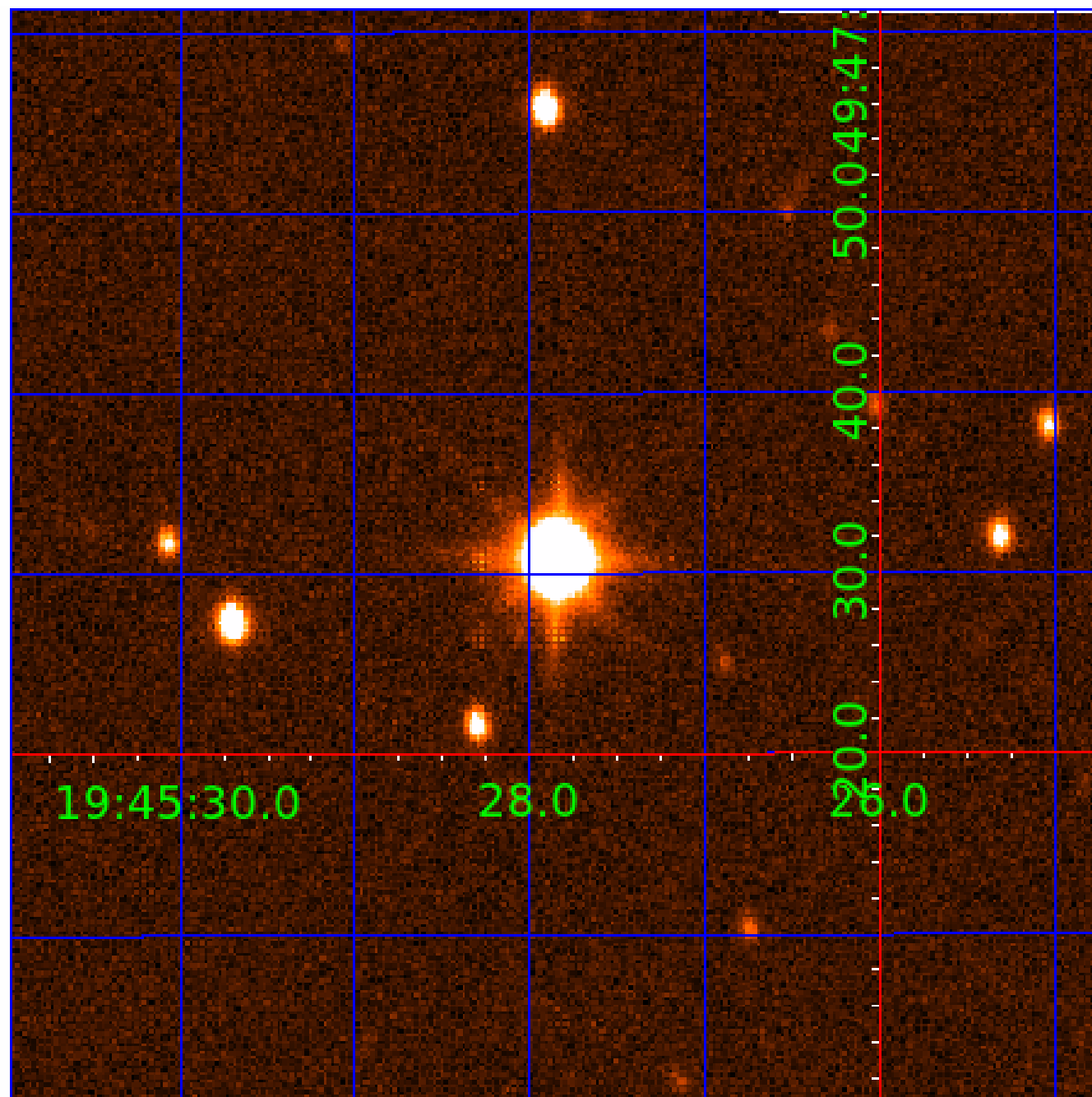


fluxWeightedCentroids, Planet 1 of 5



UKIRT Image

Declination



KIC 011671226

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})
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011671226-02	OBS	No	1.478955	131.958719	5.9	3.838	12.5	5.6	3.18	8300	0.98	41325.52
011671226-03	OBS	No	2.957012	134.142976	23.4	2.115	12.0	14.0	3.18	8300	1.70	16406.68
011671226-04	OBS	No	2.957124	131.548455	47.6	9.000	10.6	-1.0	3.18	8300	2.22	16405.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011671226-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011671226-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

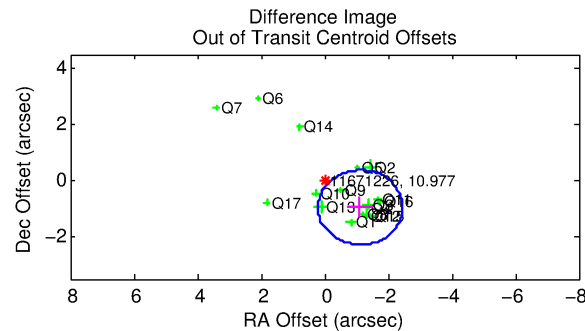
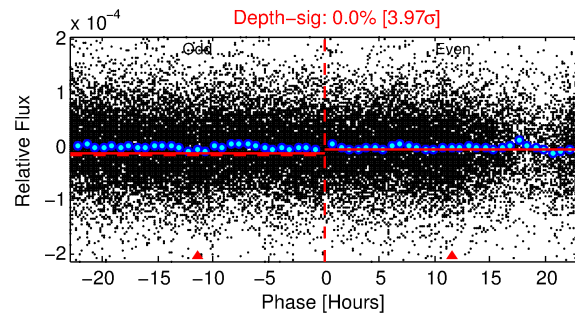
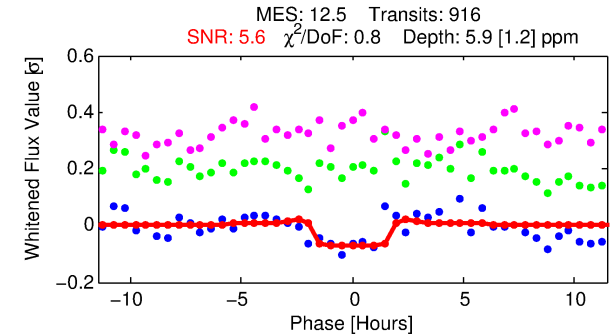
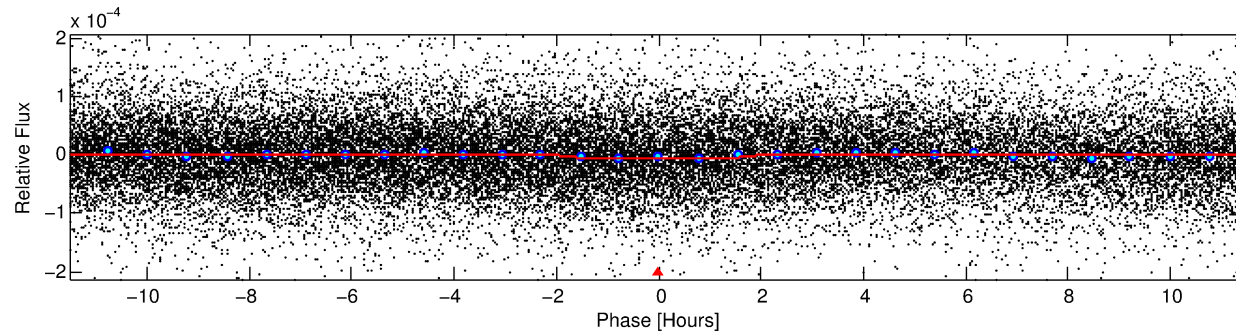
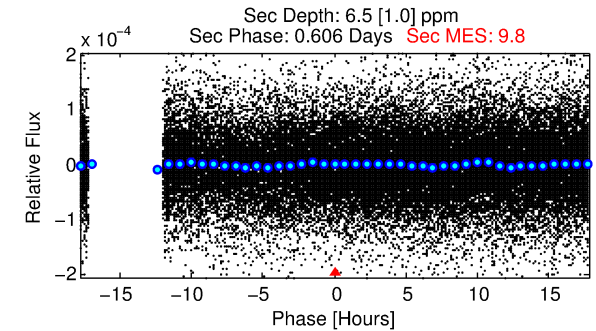
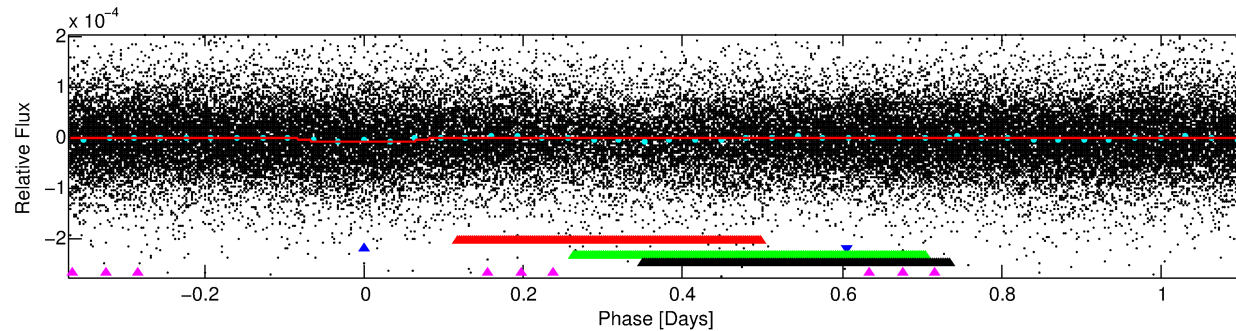
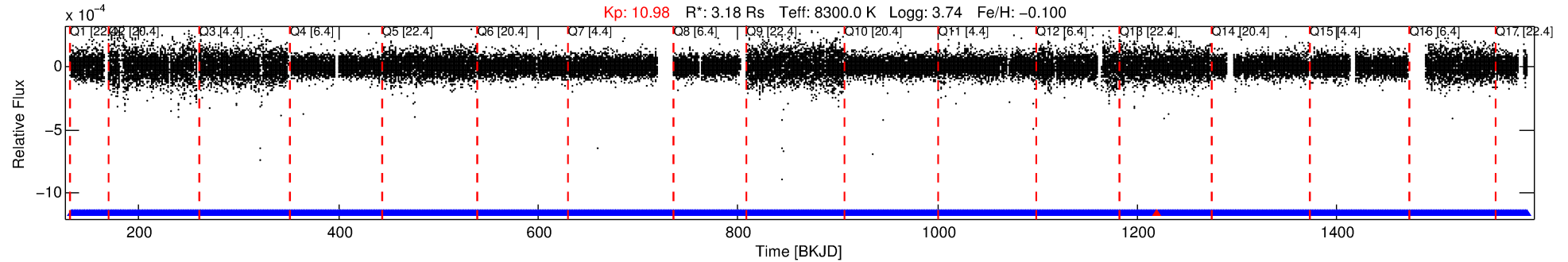
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011671226-02

No Significant Match Found

DV One-Page Summary

KIC: 11671226 Candidate: 2 of 5 Period: 1.479 d



DV Fit Results:

Period = 1.47895 [0.00002] d
Epoch = 131.9587 [0.0055] BKJD
Rp/R* = 0.0028 [0.0007]
a/R* = 1.22 [0.70]
b = 0.97 [0.10]
Seff = 41325.52 [31025.43]
Teq = 3636 [682] K
Rp = 0.98 [0.51] Re
a = 0.0323 [0.0145] AU
Ag = 3.86 [3.51] [0.82σ]
Teffp = 7880 [1125] K [3.23σ]

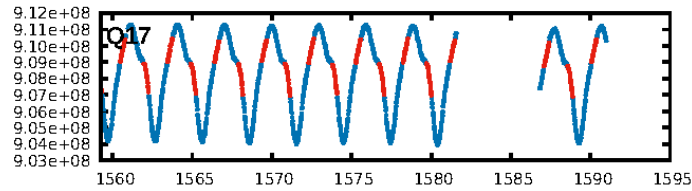
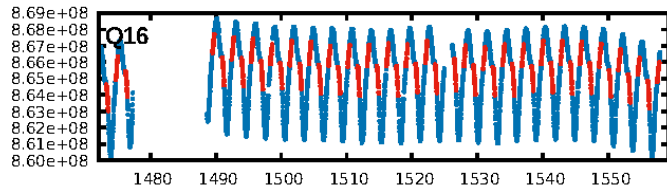
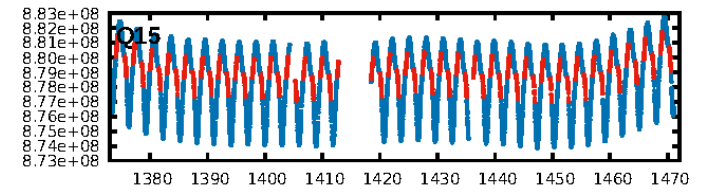
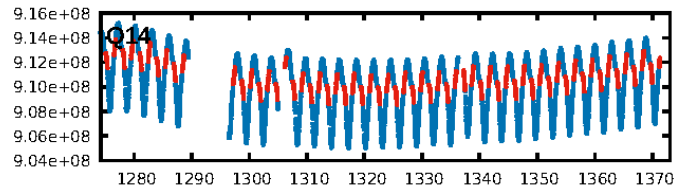
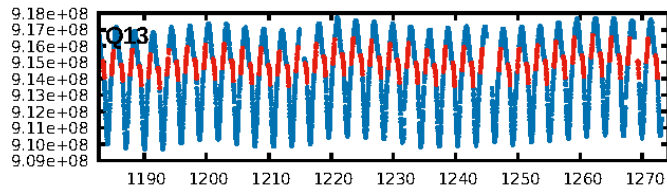
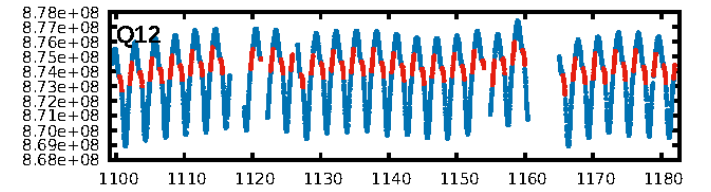
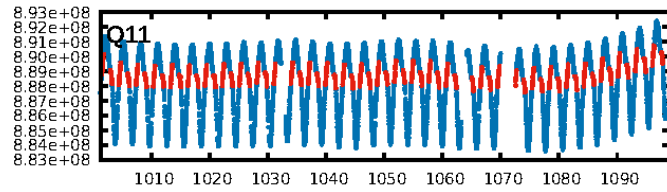
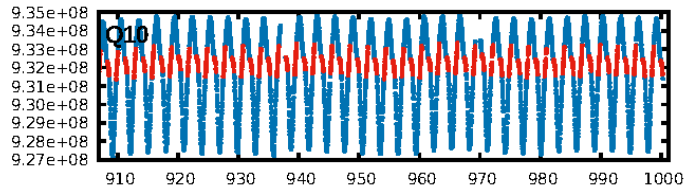
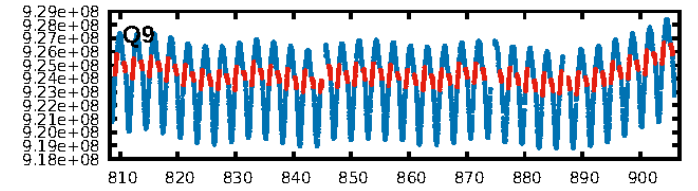
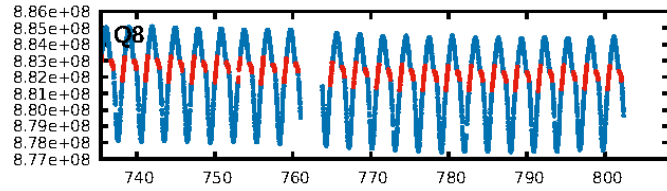
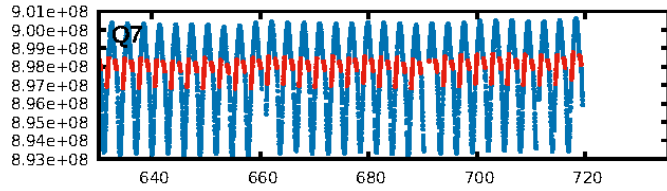
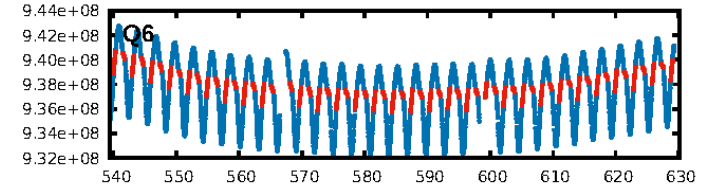
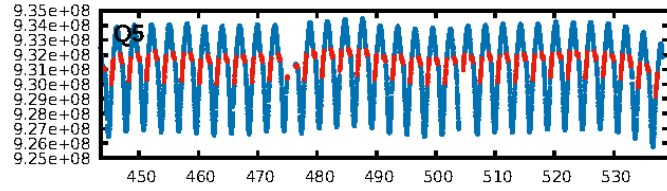
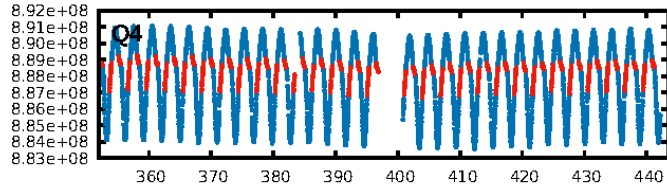
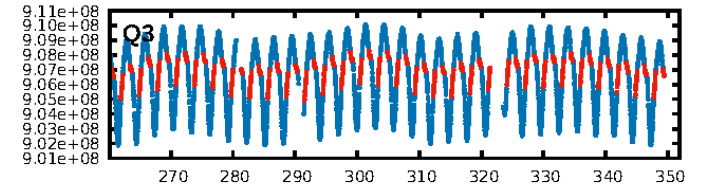
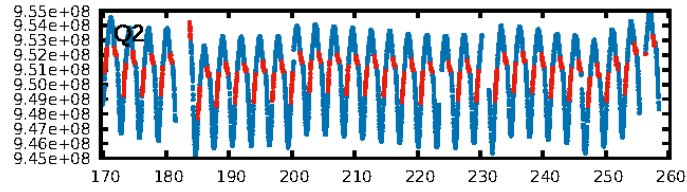
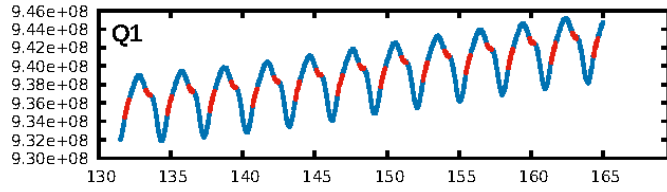
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [8.09σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.42e-23
RollingBand-fgt: 1.00 [874/875]
GhostDiagnostic-chr: 1.103
Centroid-sig: 86.7%
Centroid-so: 0.786 arcsec [0.33σ]
OotOffset-rm: 1.468 arcsec [3.31σ]
KicOffset-rm: 1.893 arcsec [3.94σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.00 [0/17]
DiffImageOverlap-fno: 0.88 [15/17]

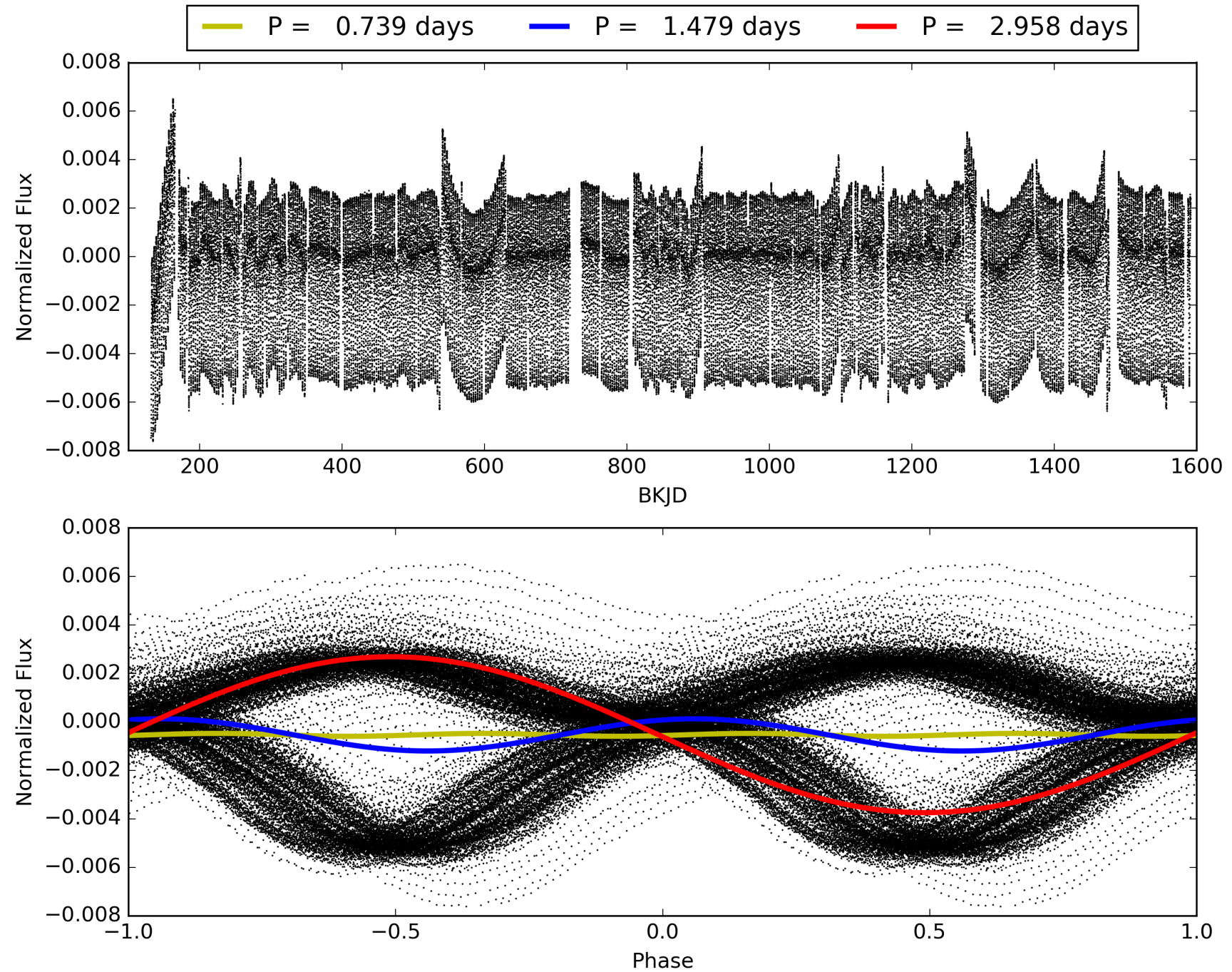
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:15:35 Z

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

TCE 011671226-02, PDC Light Curves

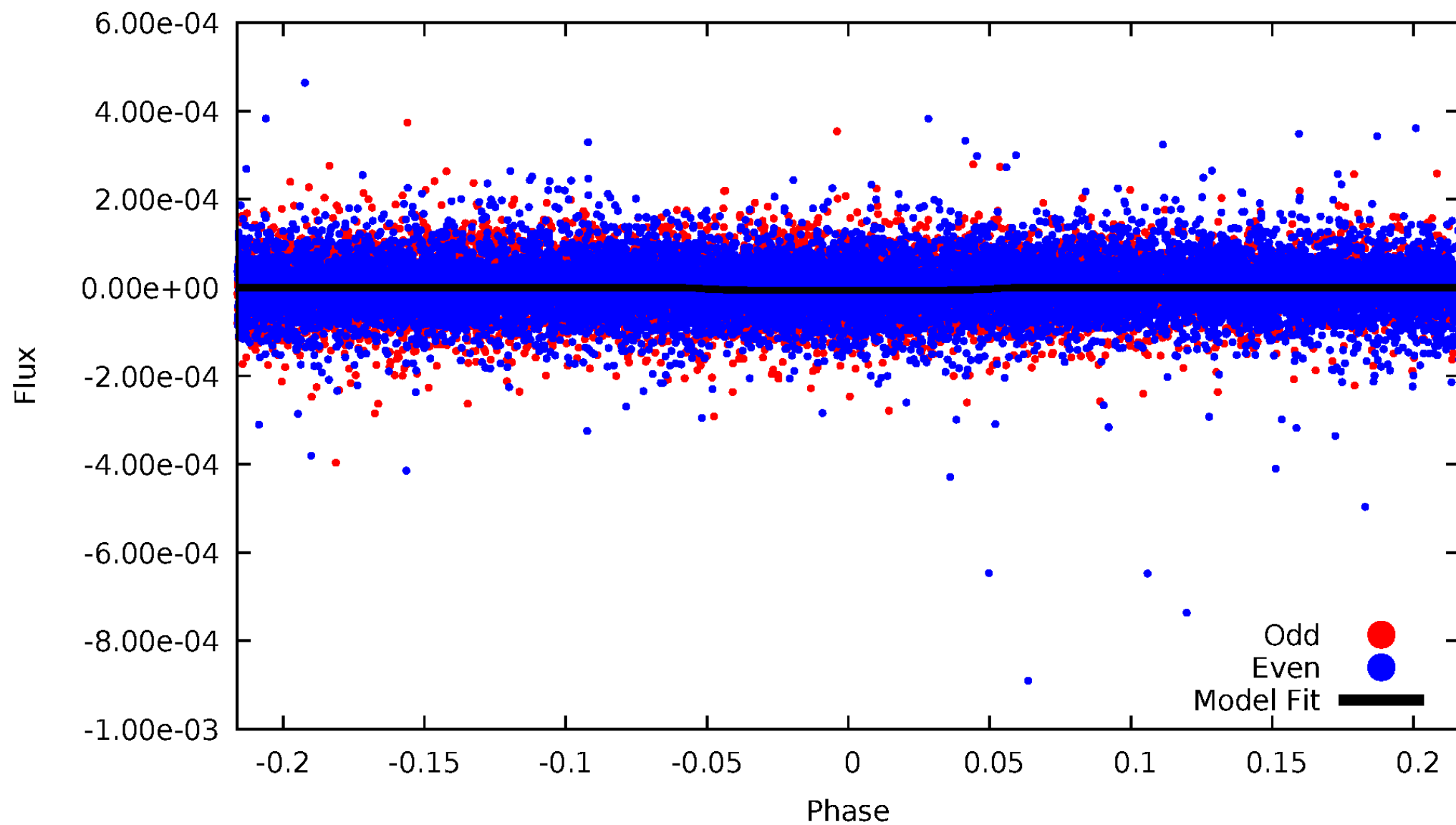


TCE 011671226-02



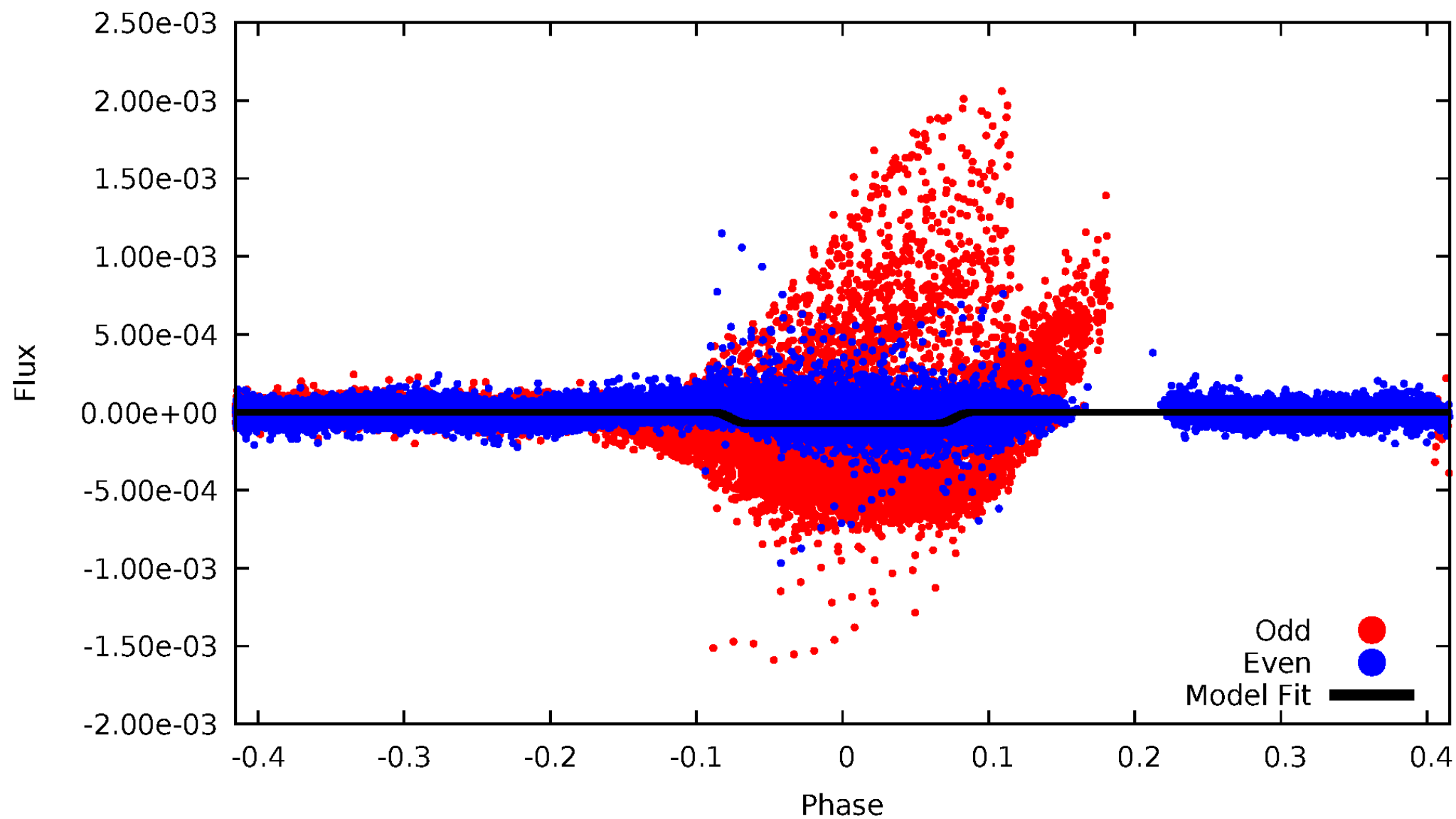
DV Odd/Even

TCE 011671226-02



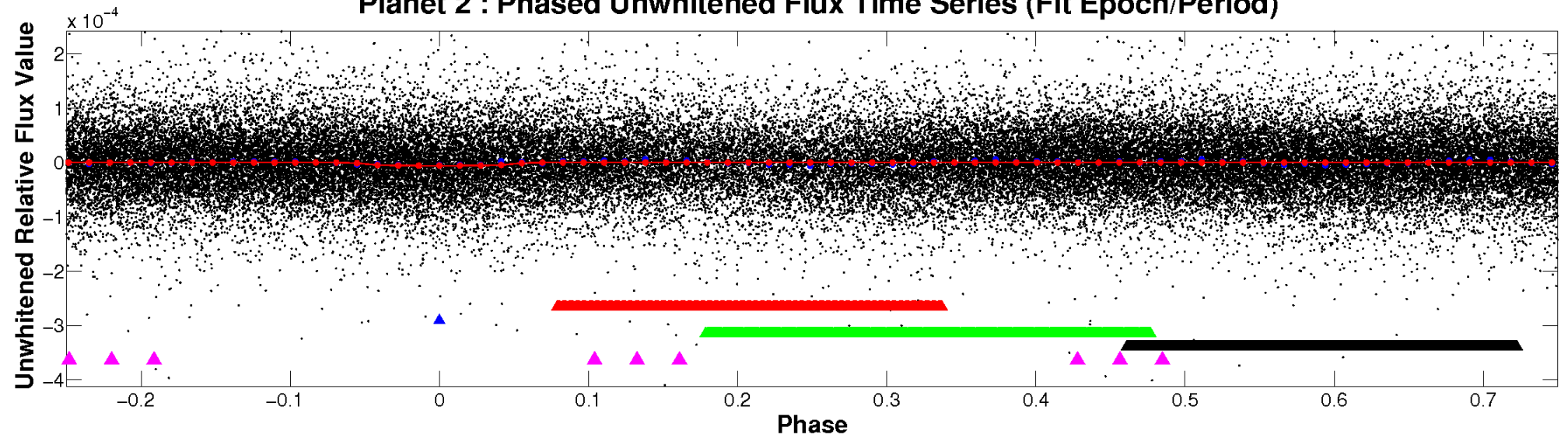
ALT Odd/Even

TCE 011671226-02

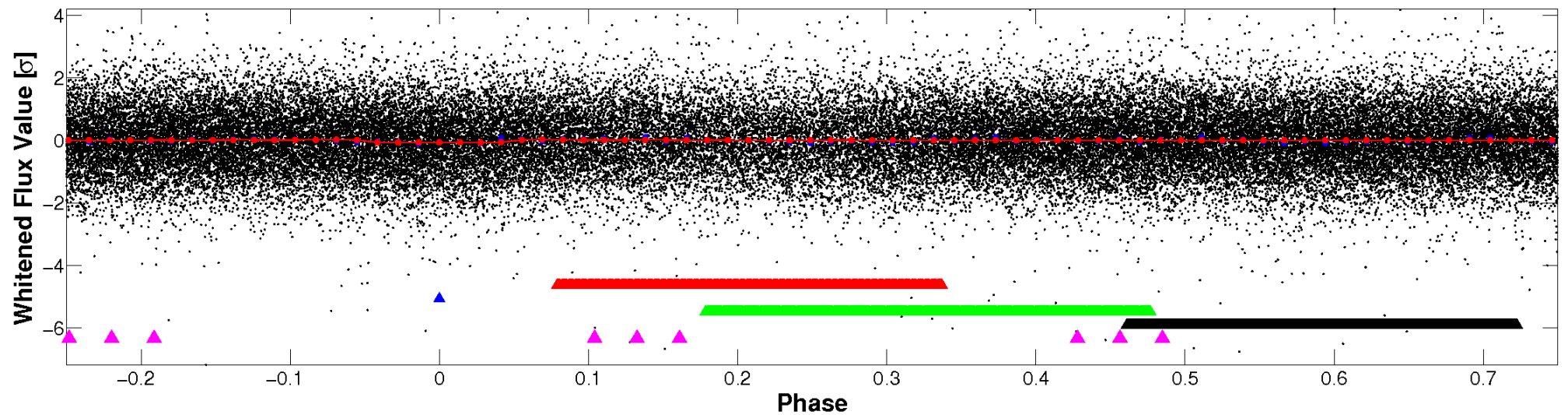


Non-Whitened Vs. Whitened Light Curve

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

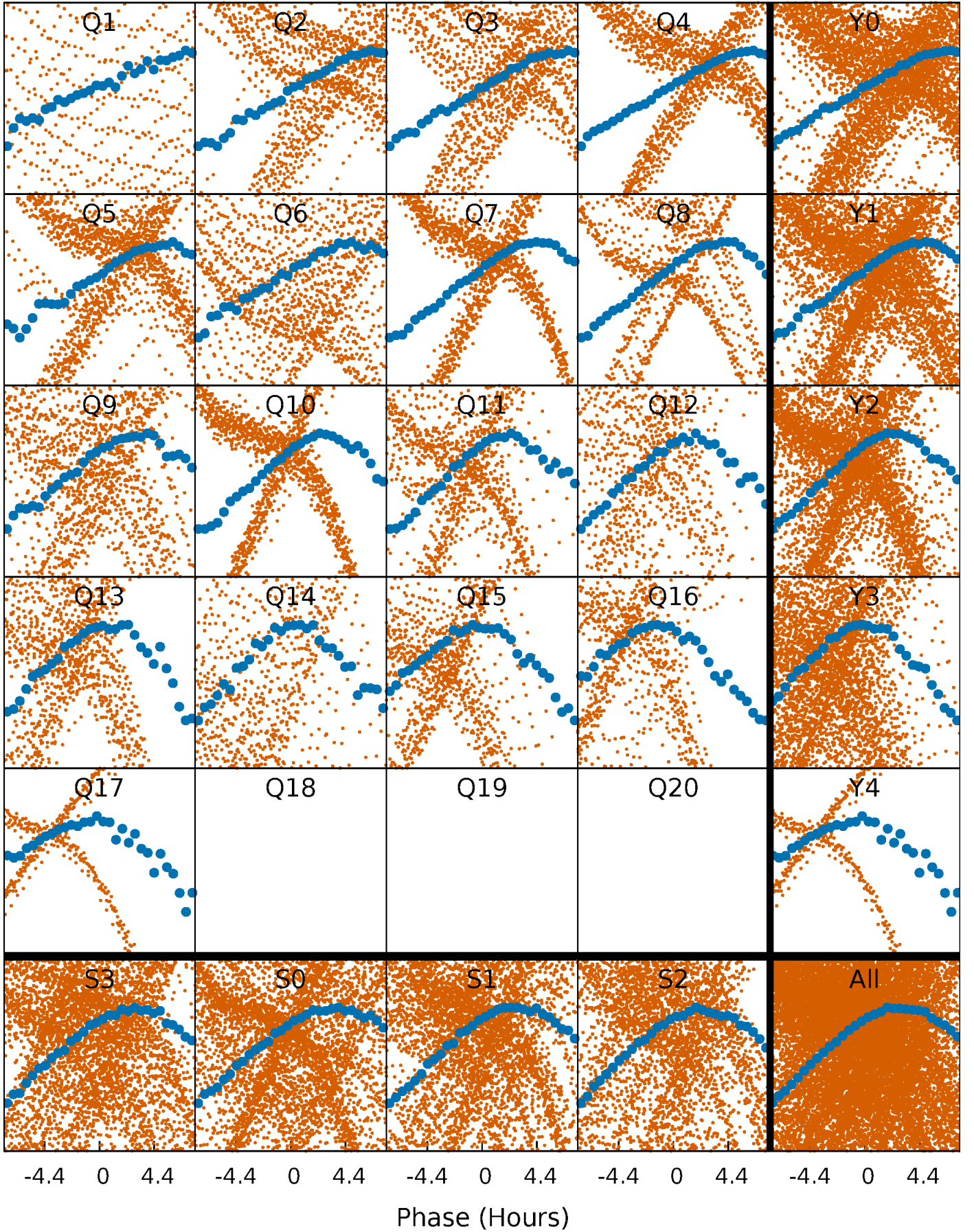


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



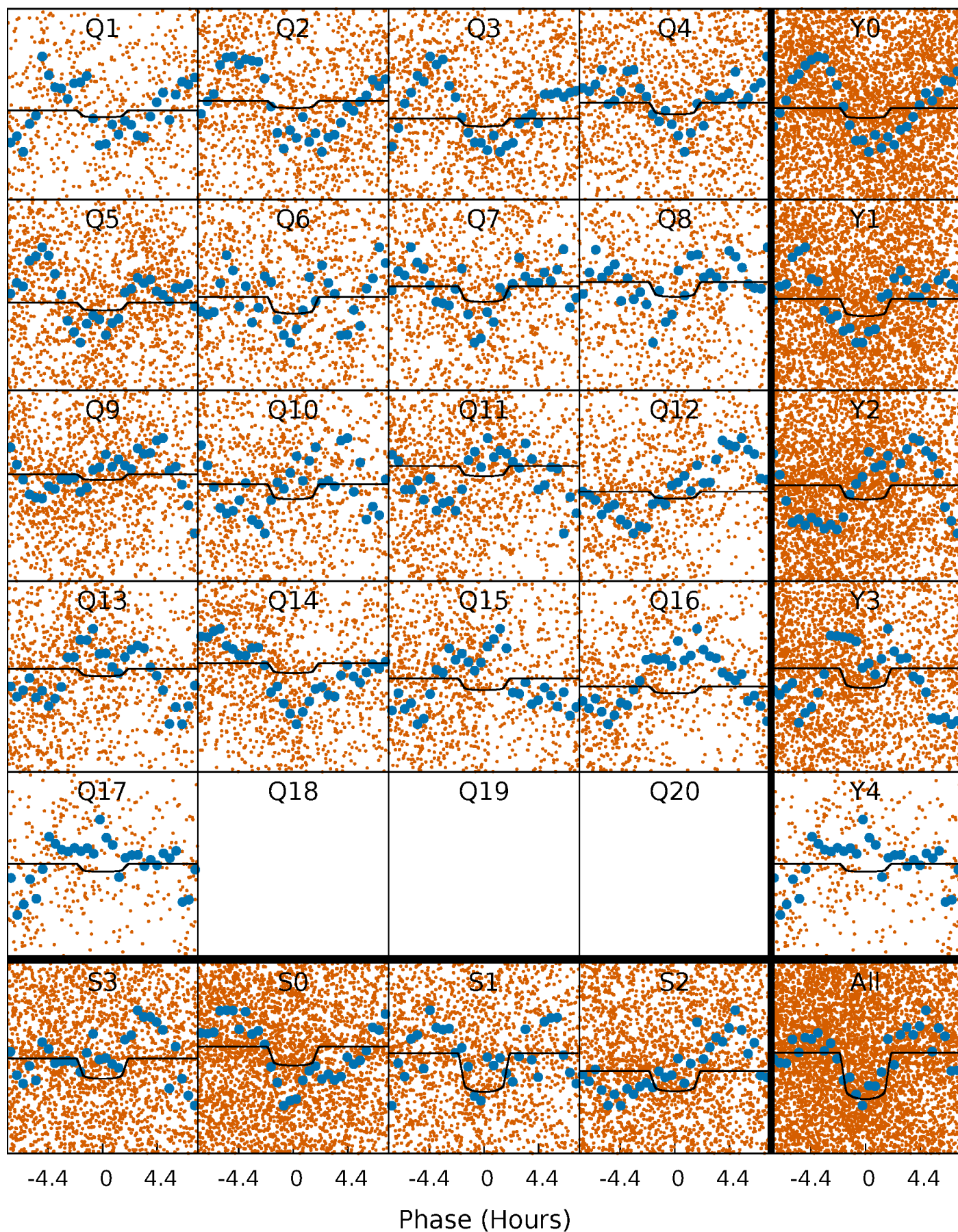
PDC Quarter-Phased Transit Curves

TCE 011671226-02 P= 1.478955 Days $T_0=131.958719$ (BKJD)



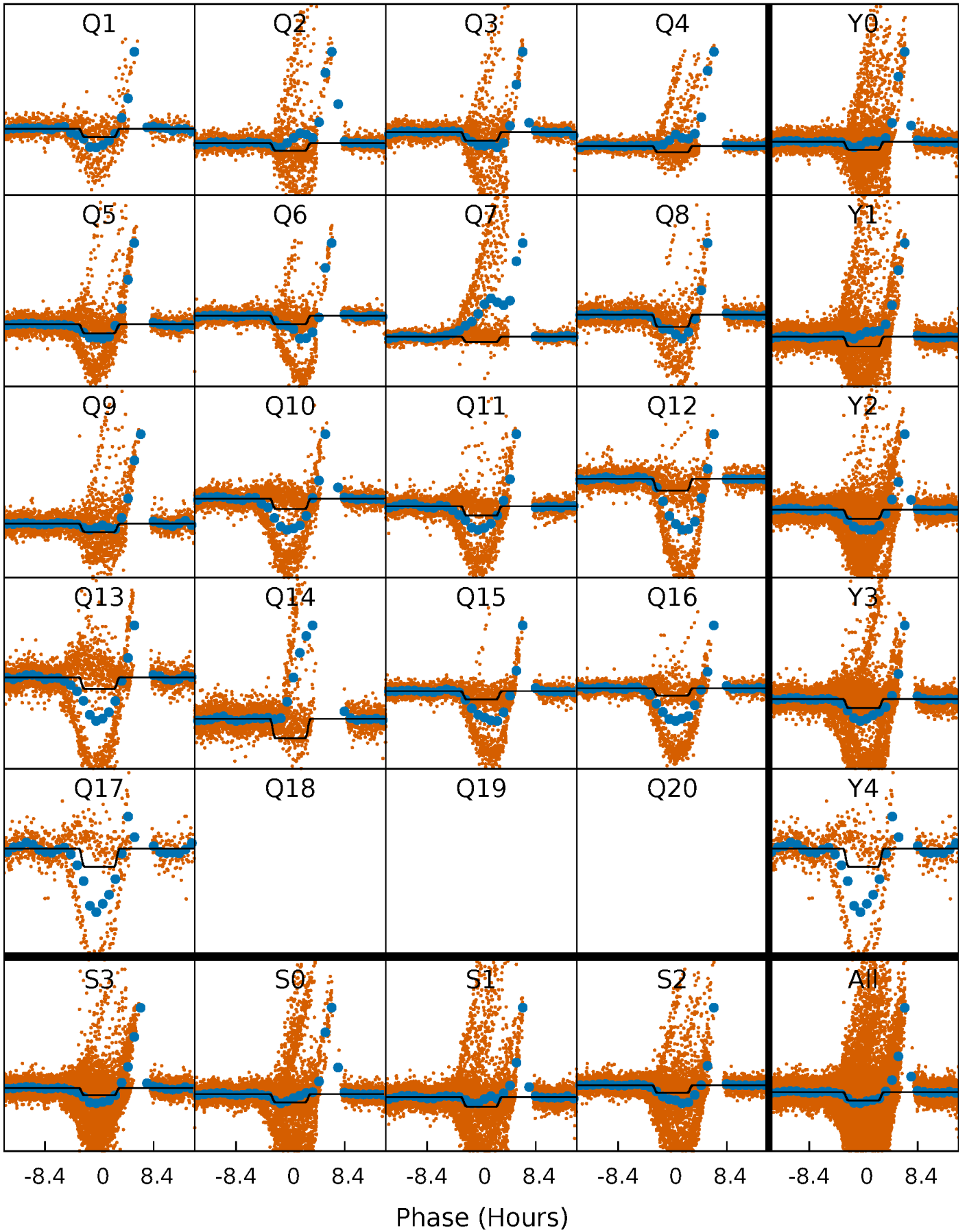
DV Quarter-Phased Transit Curves

TCE 011671226-02 P= 1.478955 Days $T_0=131.958719$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

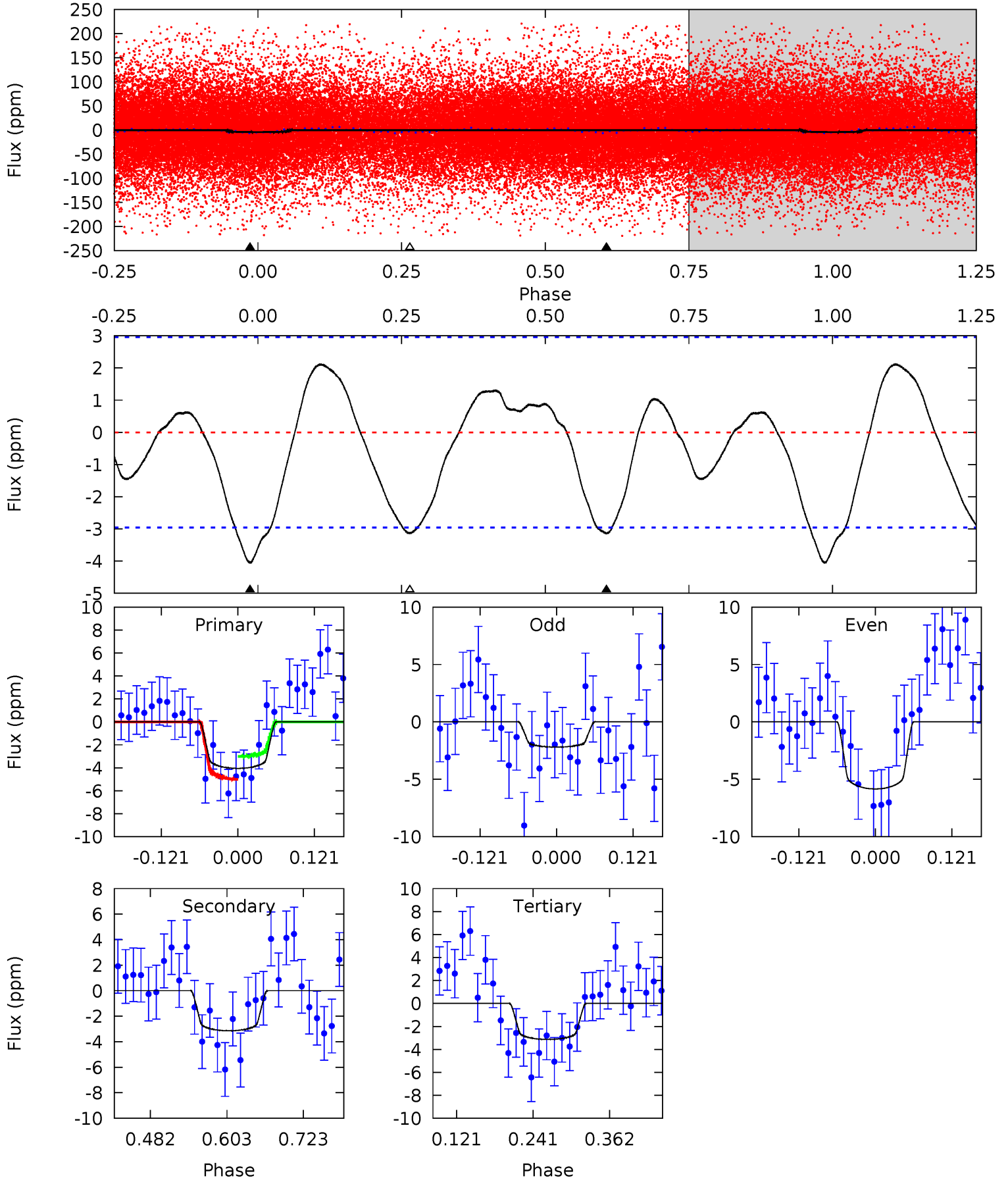
TCE 011671226-02 P= 1.478544 Days $T_0=132.006990$ (BKJD)



DV Model-Shift Uniqueness Test

011671226-02, P = 1.478955 Days, E = 130.479764 Days

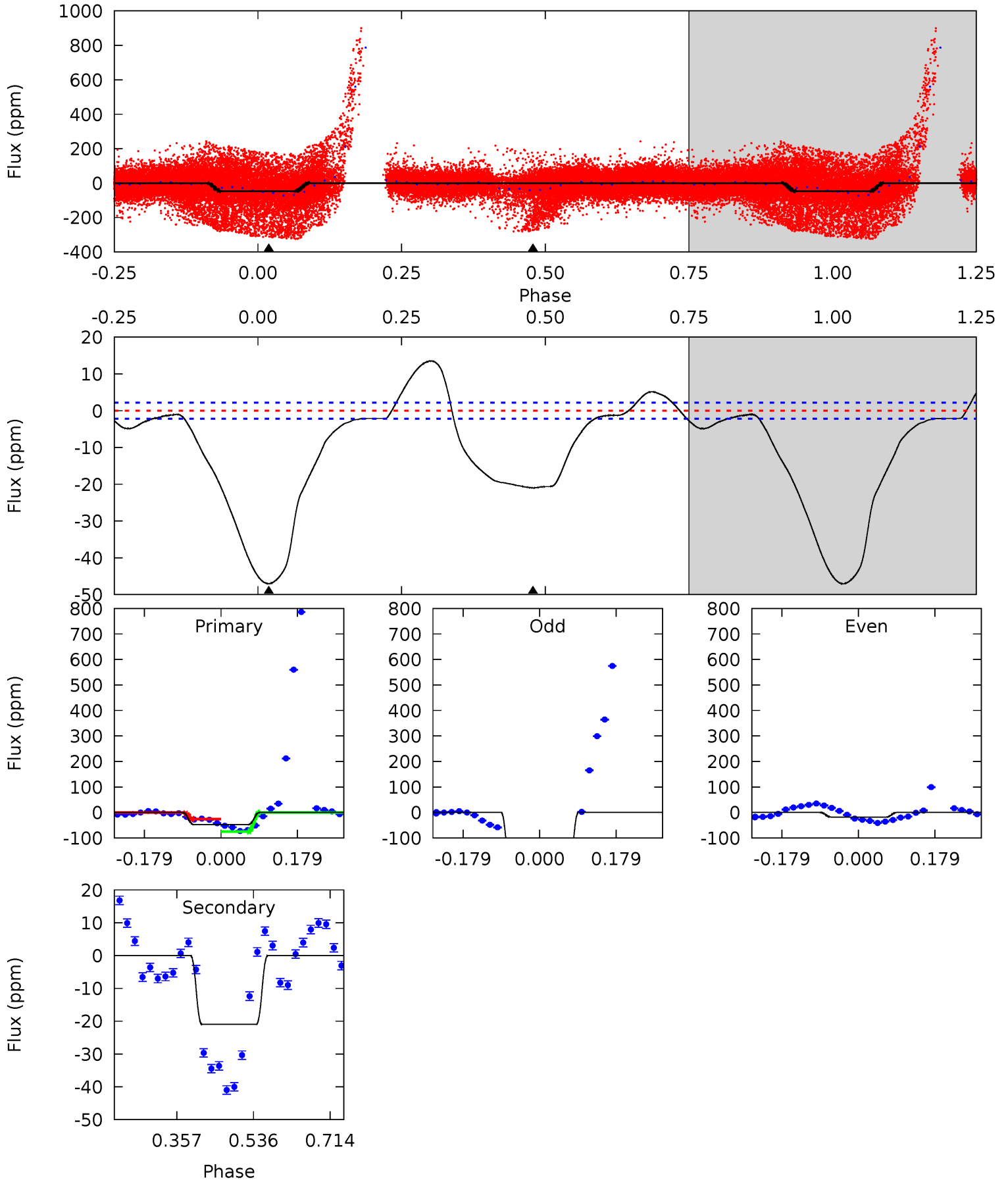
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.19	4.81	4.79	0	4.53	1.55	2.07	1.40	6.19	0.01	4.81	2.77	0.71	0.34	1.53



Alt Model-Shift Uniqueness Test

011671226-02, P = 1.478544 Days, E = 130.528446 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
95.3	42.5	0	0	4.44	1.35	9.57	95.3	95.3	42.5	42.5	319.9	1.66	0.22	0



Stellar Parameters For KIC 011671226

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	8300^{+201}_{-374}	$3.744^{+0.432}_{-0.135}$	$-0.100^{+0.250}_{-0.400}$	$3.180^{+0.961}_{-1.442}$	$2.046^{+0.371}_{-0.453}$	$0.090^{+0.345}_{-0.036}$
	+2%/-5%	+12%/-4%	+250%/-400%	+30%/-45%	+18%/-22%	+385%/-41%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011671226-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 1	$0.88^{+0.35}_{-0.27}$	4902^{+436}_{-552}	6114^{+1232}_{-882}	$2.222^{+2.570}_{-1.066}$
Alt.	-21 ± 0	$2.83^{+0.56}_{-0.64}$	4914^{+446}_{-555}	5557^{+371}_{-344}	$1.522^{+0.970}_{-0.436}$

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

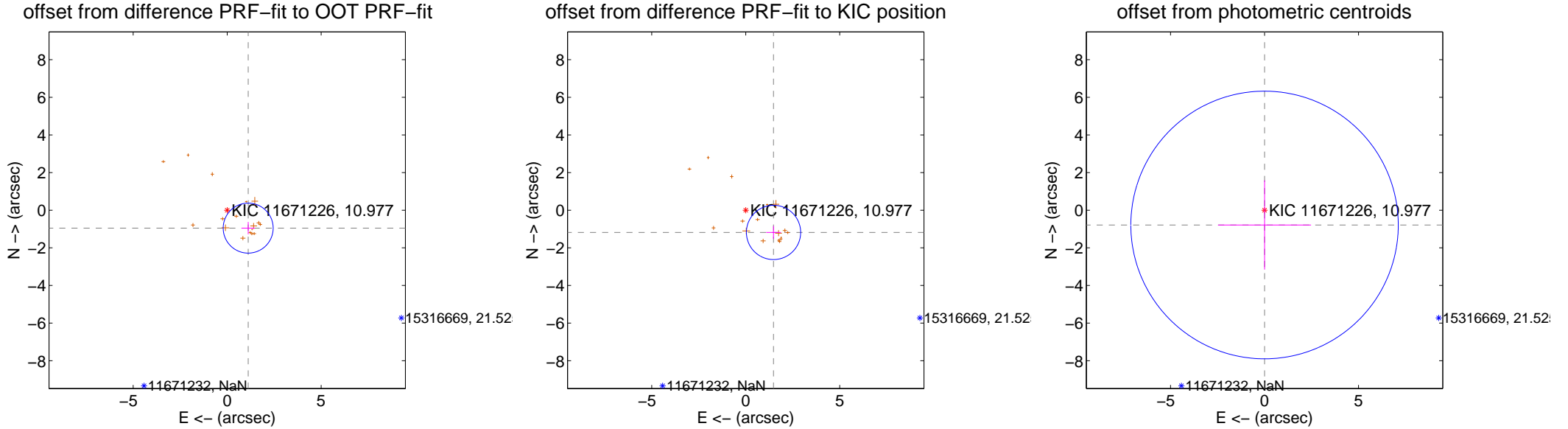
DV Centroid Data

Supplemental centroid analysis for 011671226-02. **Kepler magnitude: 10.98.** Transit SNR 5.64

There are 0 quarters with good PRF difference image offsets

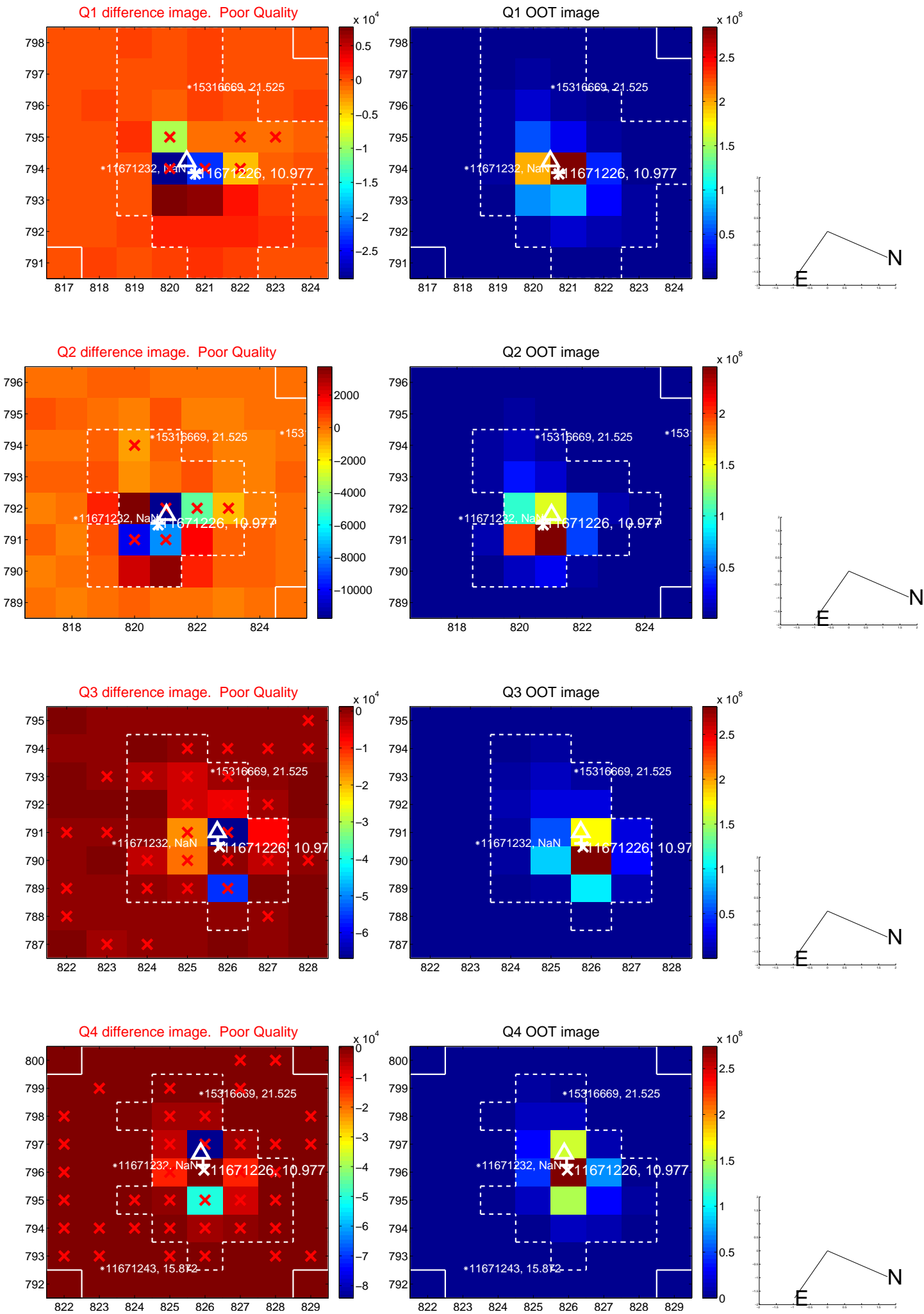
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.468 ± 0.443	3.31	-1.117 ± 0.354	-0.952 ± 0.327
PRF-fit source offset from KIC position	1.893 ± 0.481	3.94	-1.480 ± 0.389	-1.180 ± 0.339
photometric centroid source offset	0.79 ± 2.37	0.33	-0.00 ± 2.47	-0.79 ± 2.37

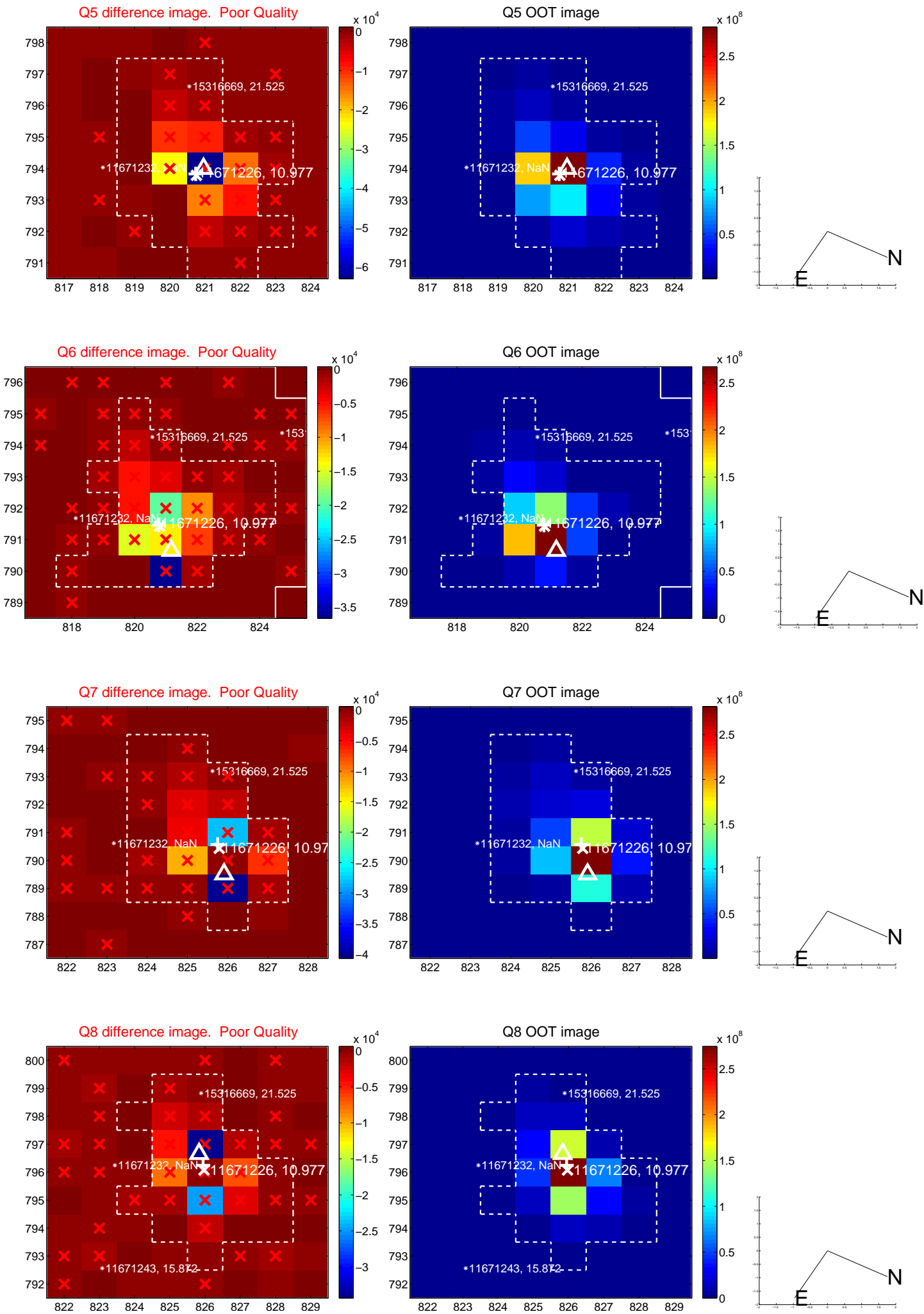


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

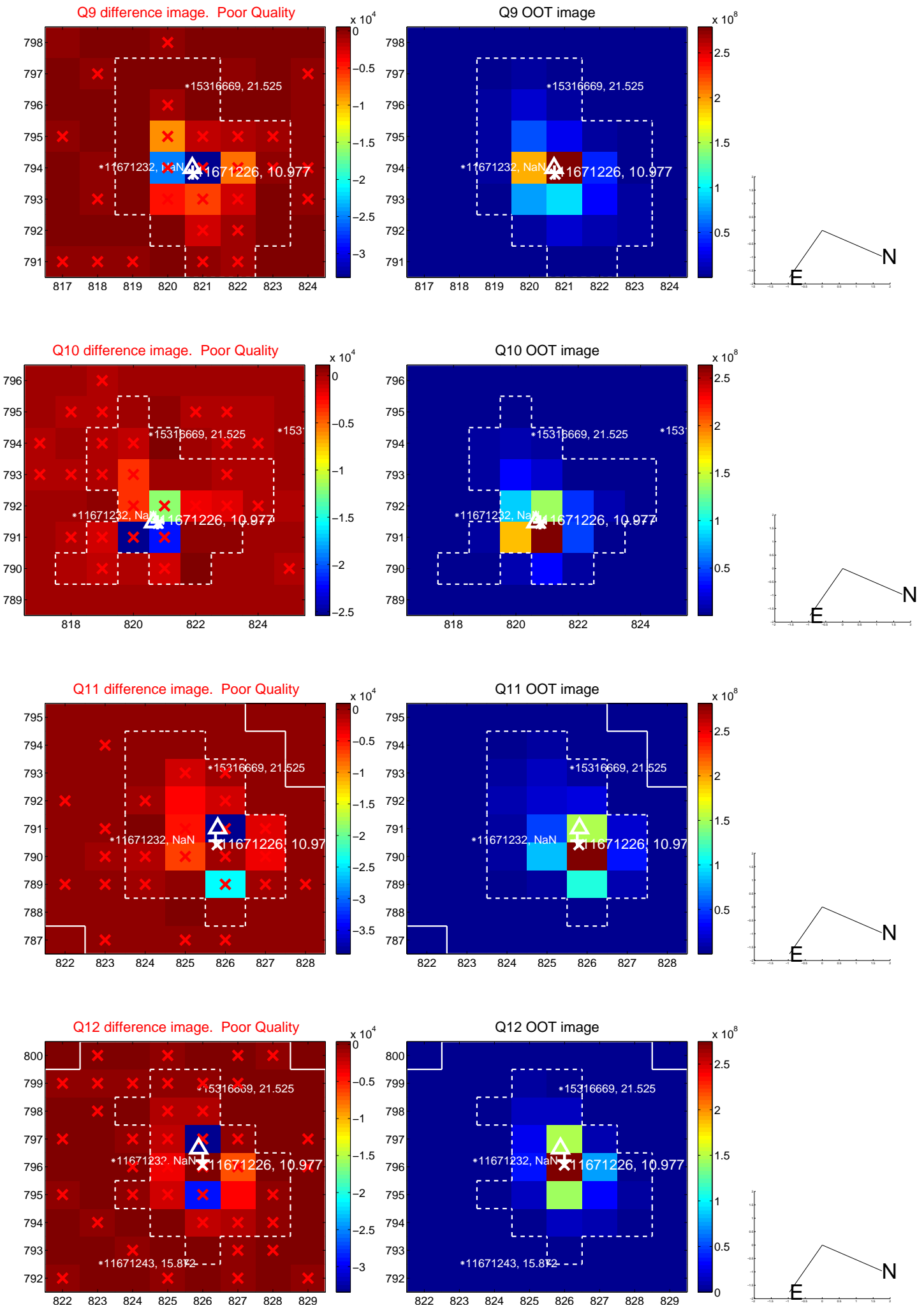
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



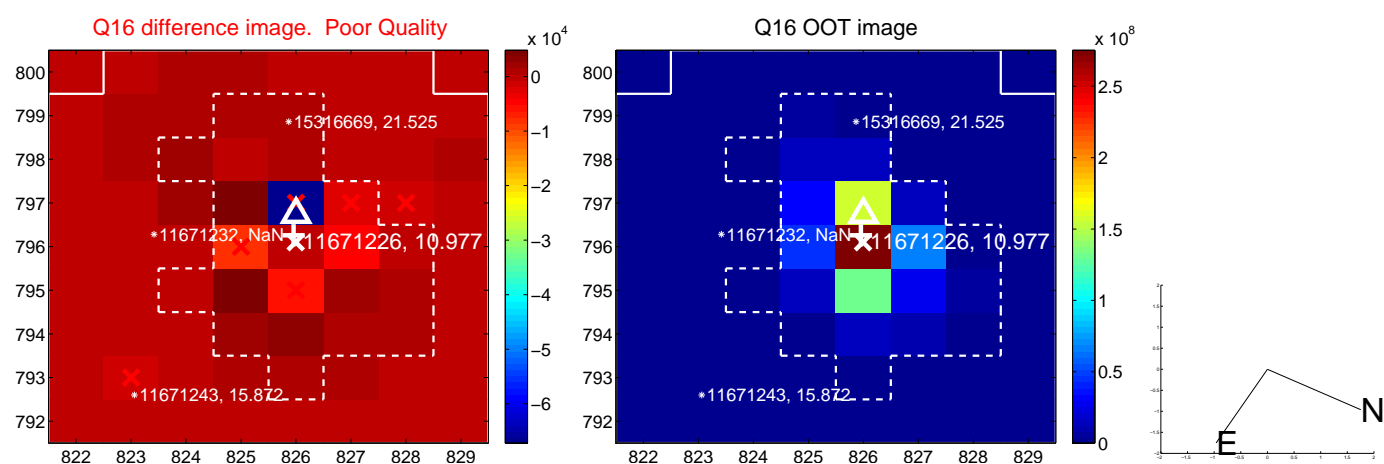
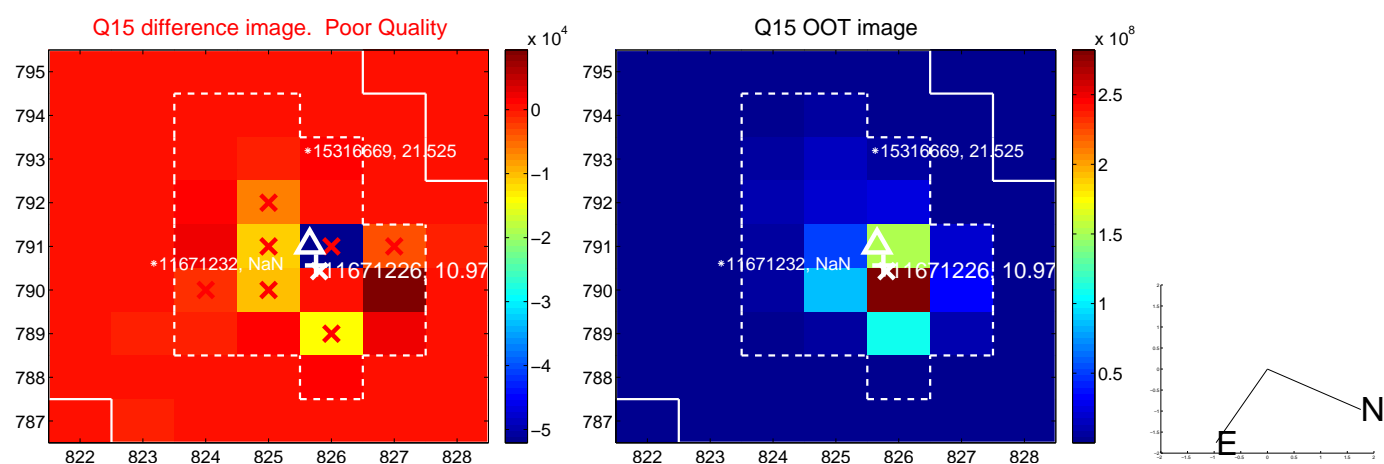
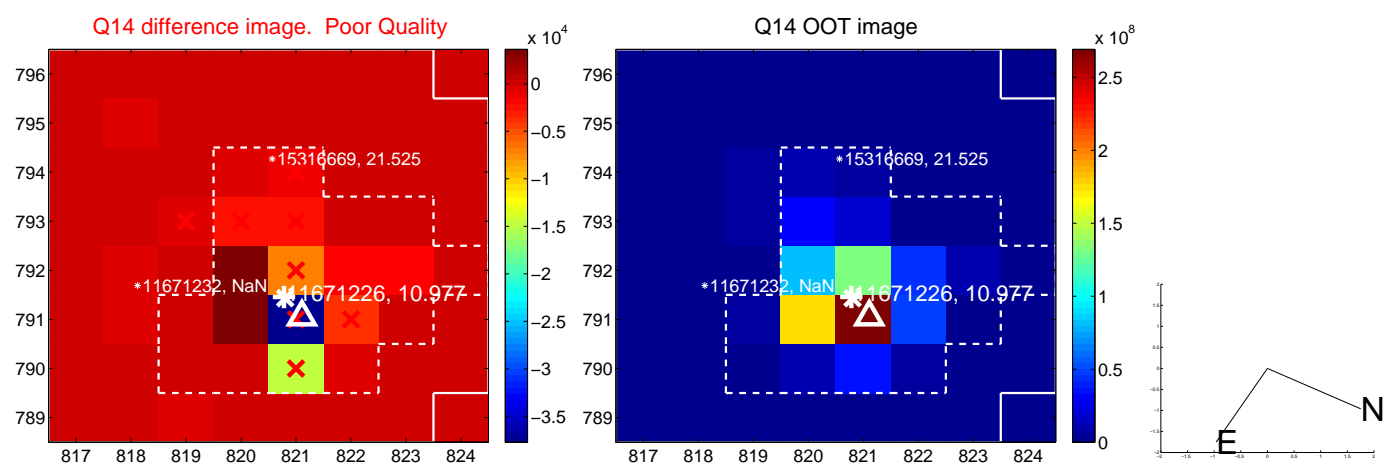
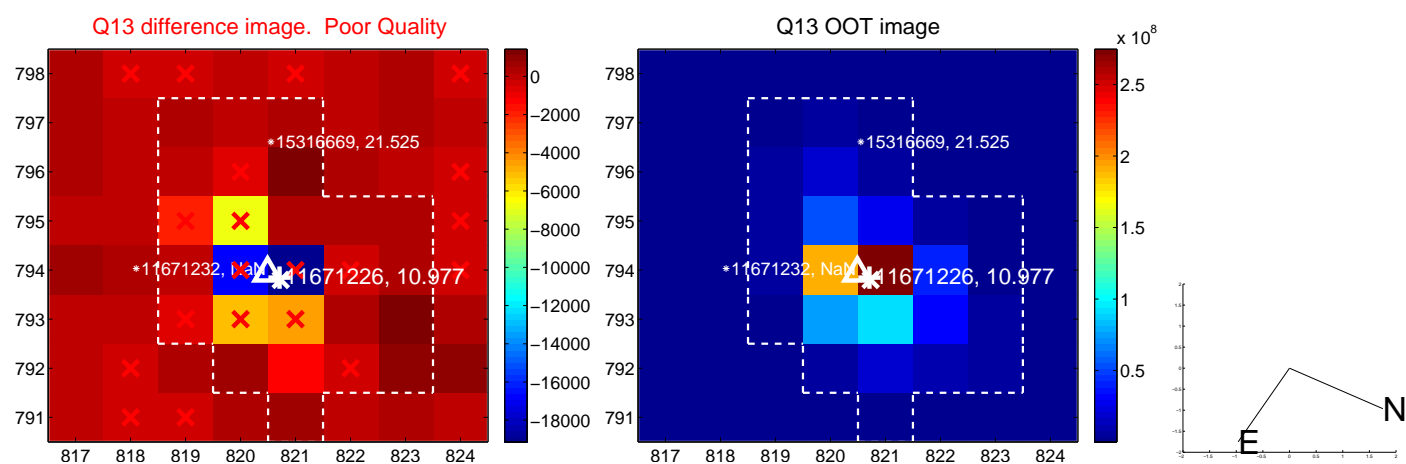
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



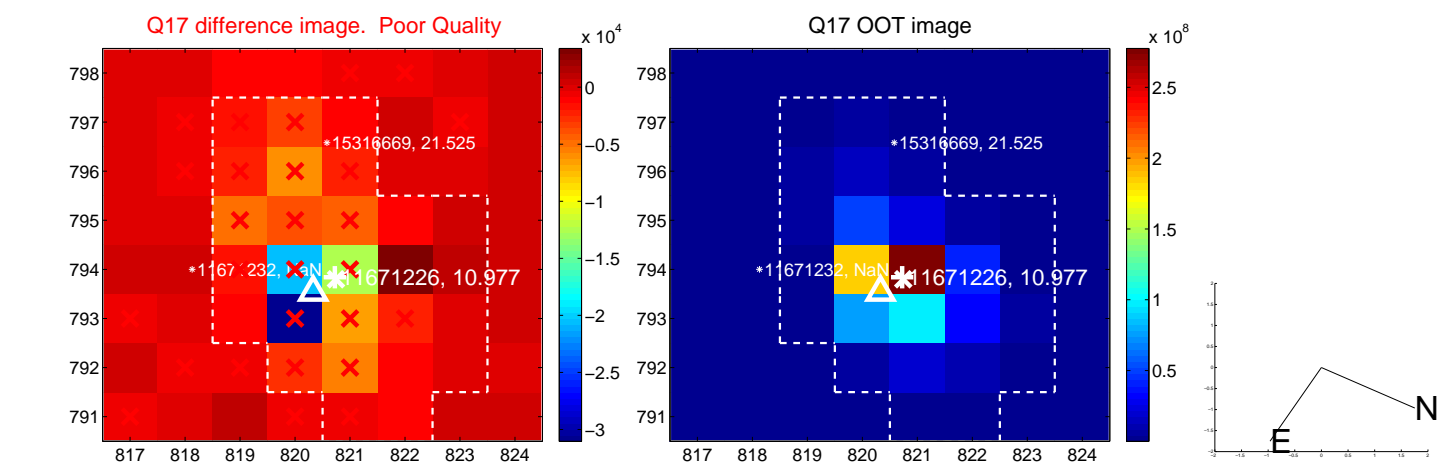
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



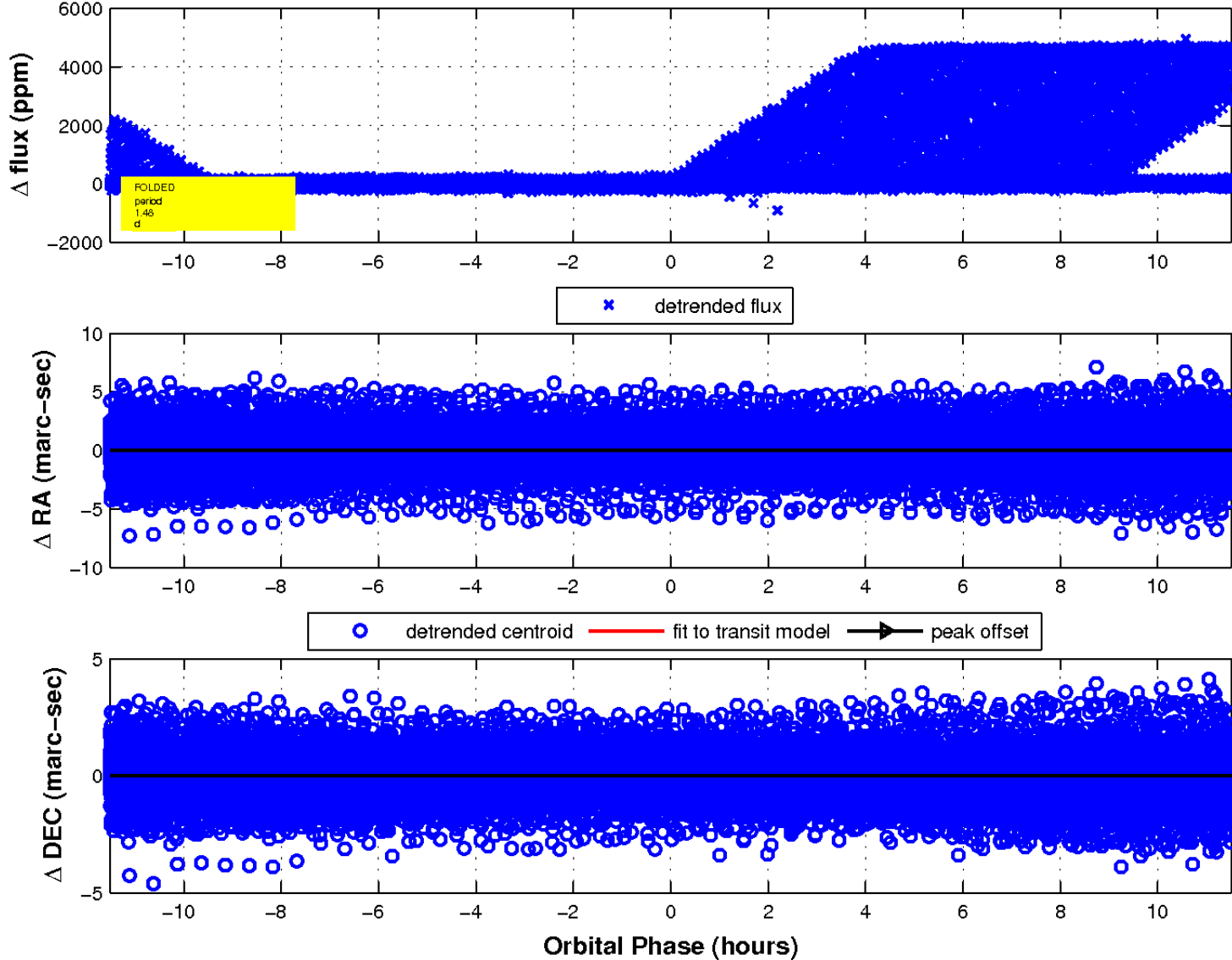
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

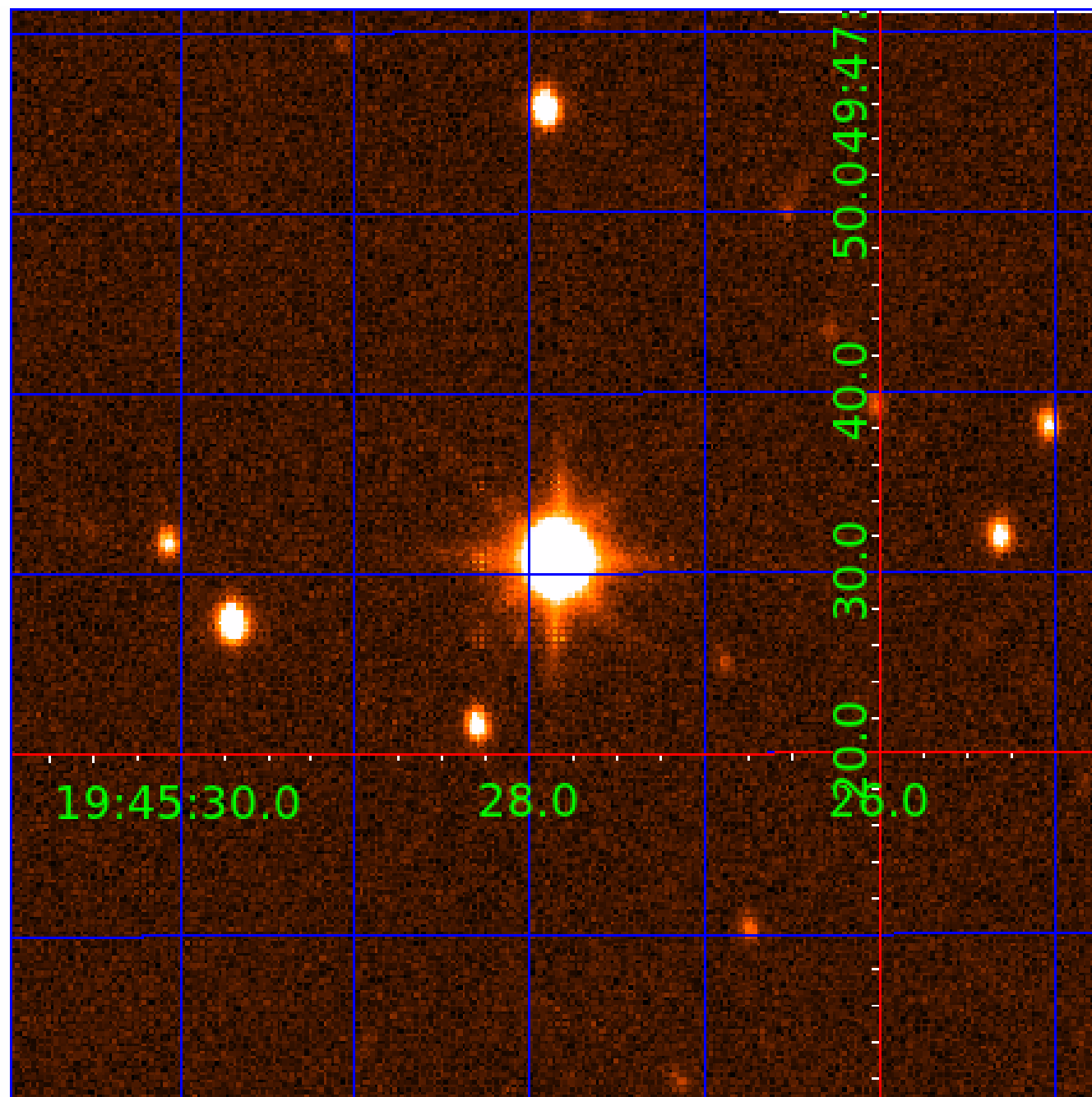


fluxWeightedCentroids, Planet 2 of 5



UKIRT Image

Declination



KIC 011671226

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})
011671226-01	OBS	No	2.957133	133.936267	29.6	2.148	17.0	18.0	3.18	8300	2.01	16405.78
011671226-02	OBS	No	1.478955	131.958719	5.9	3.838	12.5	5.6	3.18	8300	0.98	41325.52
011671226-03	OBS	No	2.957012	134.142976	23.4	2.115	12.0	14.0	3.18	8300	1.70	16406.68
011671226-04	OBS	No	2.957124	131.548455	47.6	9.000	10.6	-1.0	3.18	8300	2.22	16405.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011671226-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011671226-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

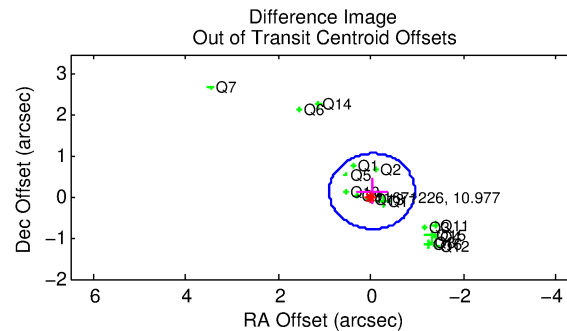
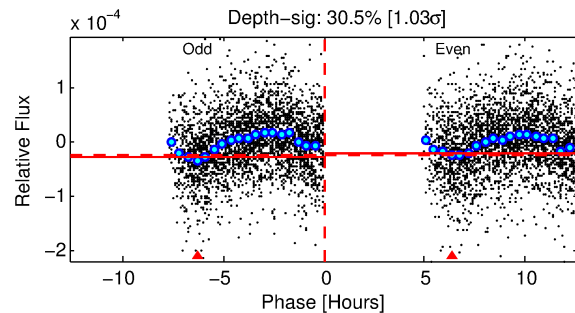
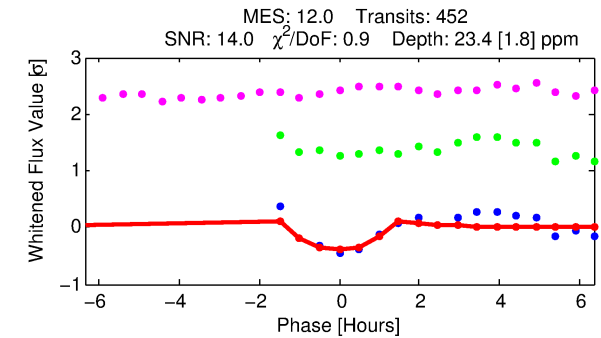
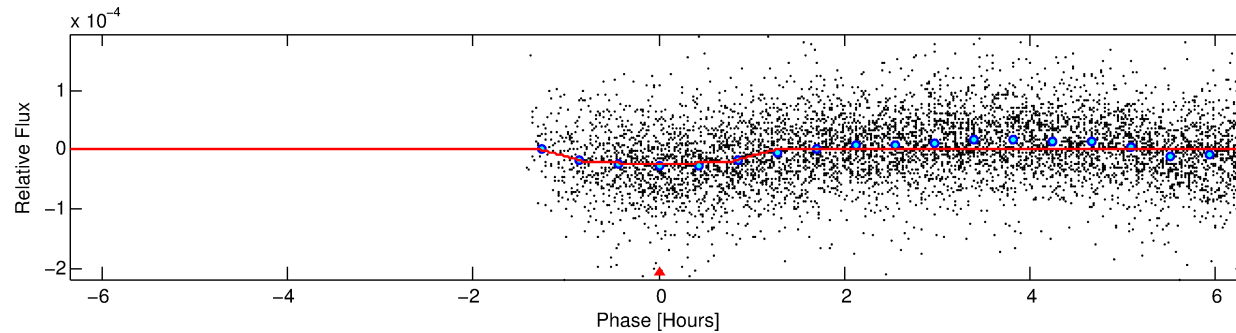
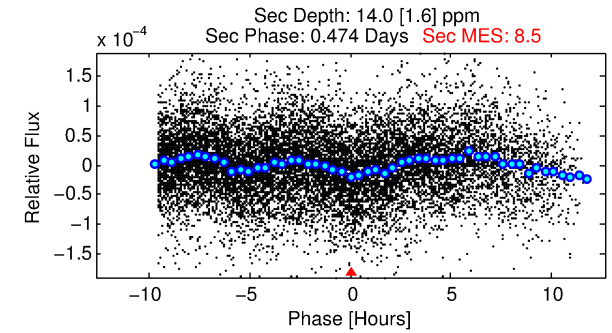
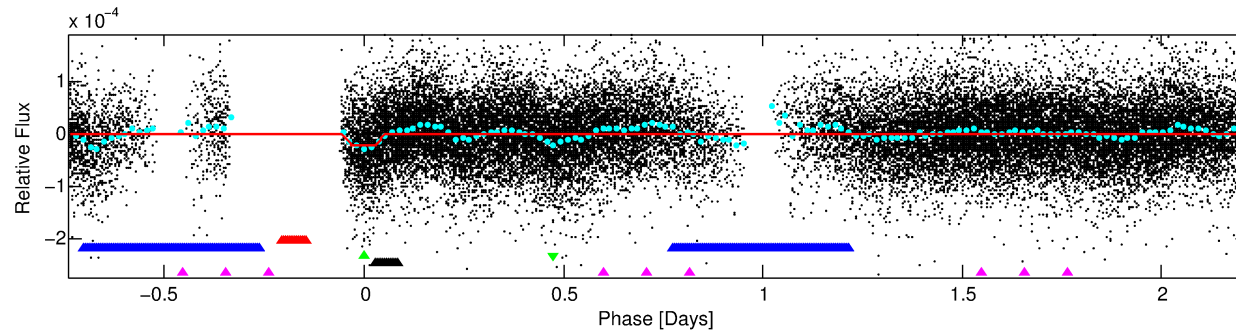
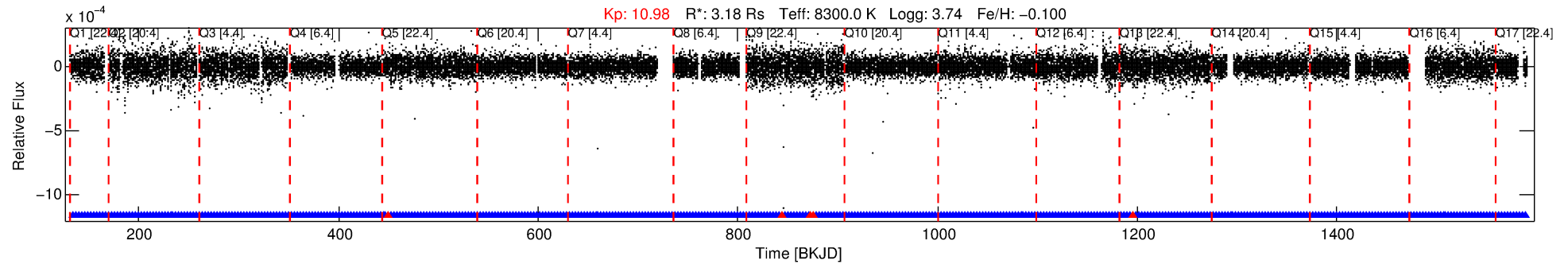
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011671226-03

No Significant Match Found

DV One-Page Summary

KIC: 11671226 Candidate: 3 of 5 Period: 2.957 d



DV Fit Results:

Period = 2.95701 [0.00001] d
Epoch = 134.1430 [0.0025] BKJD
Rp/R* = 0.0049 [0.0005]
a/R* = 6.55 [4.06]
b = 0.80 [0.29]
Seff = 16406.68 [12317.43]
Teq = 2886 [542] K
Rp = 1.70 [0.79] Re
a = 0.0512 [0.0230] AU
Ag = 6.97 [5.38] [1.11σ]
Teffp = 7251 [562] K [5.59σ]

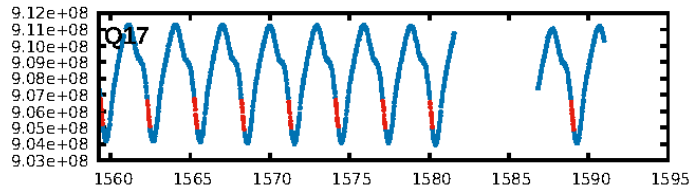
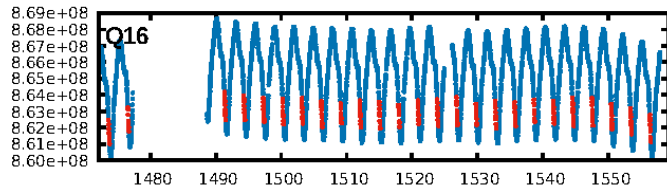
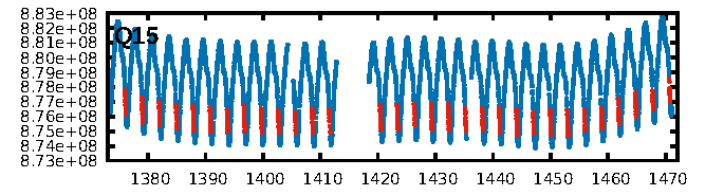
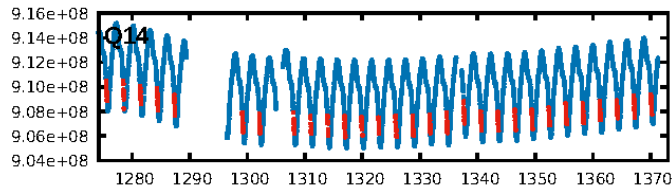
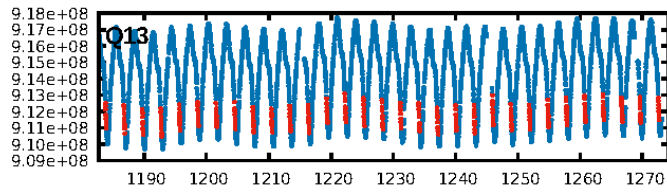
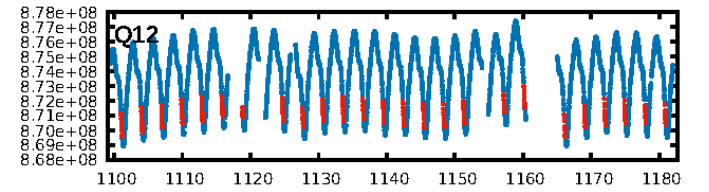
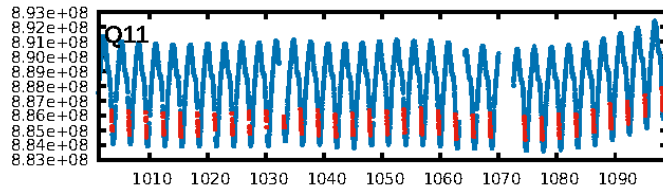
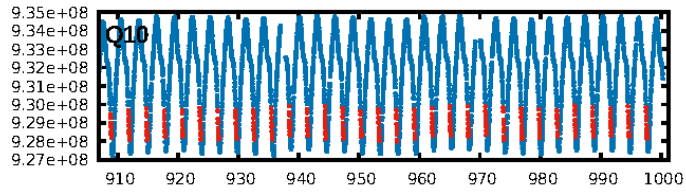
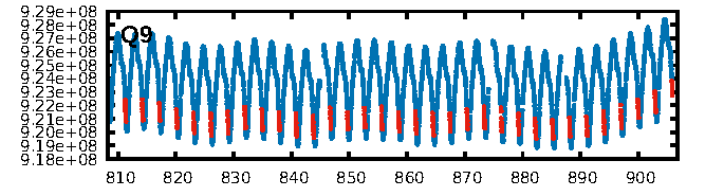
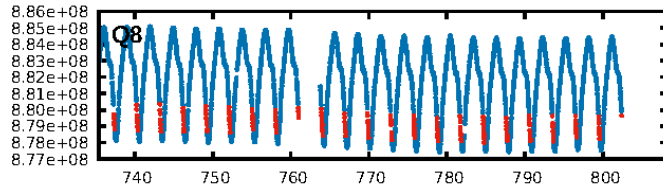
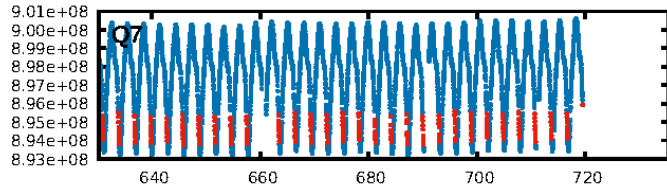
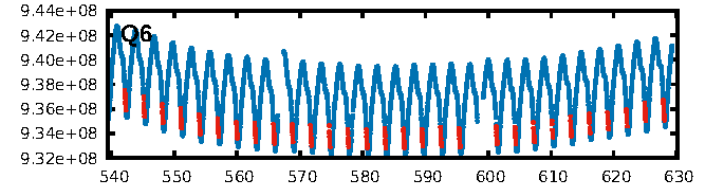
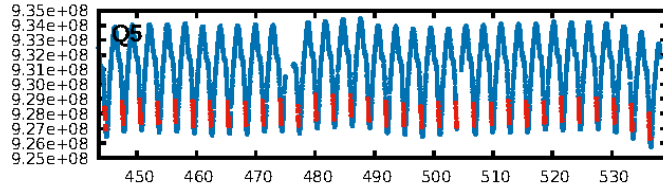
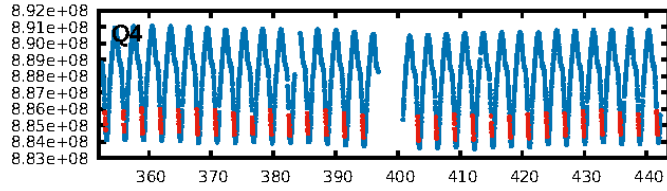
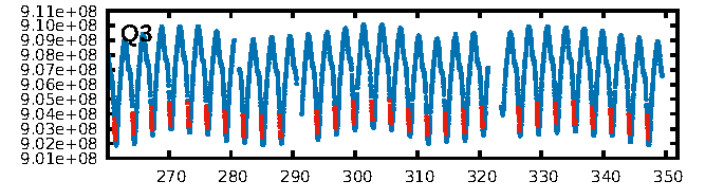
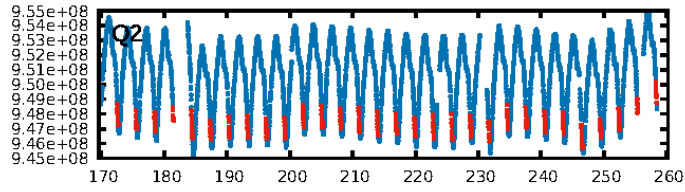
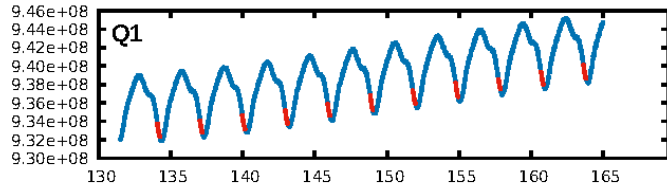
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [8.09σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.34e-23
RollingBand-fgt: 0.99 [427/432]
GhostDiagnostic-chr: 1.804
Centroid-sig: 63.5%
Centroid-so: 0.814 arcsec [0.77σ]
OotOffset-rm: 0.152 arcsec [0.49σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.206 arcsec [0.49σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.82 [14/17]
DiffImageOverlap-fno: 0.00 [0/17]

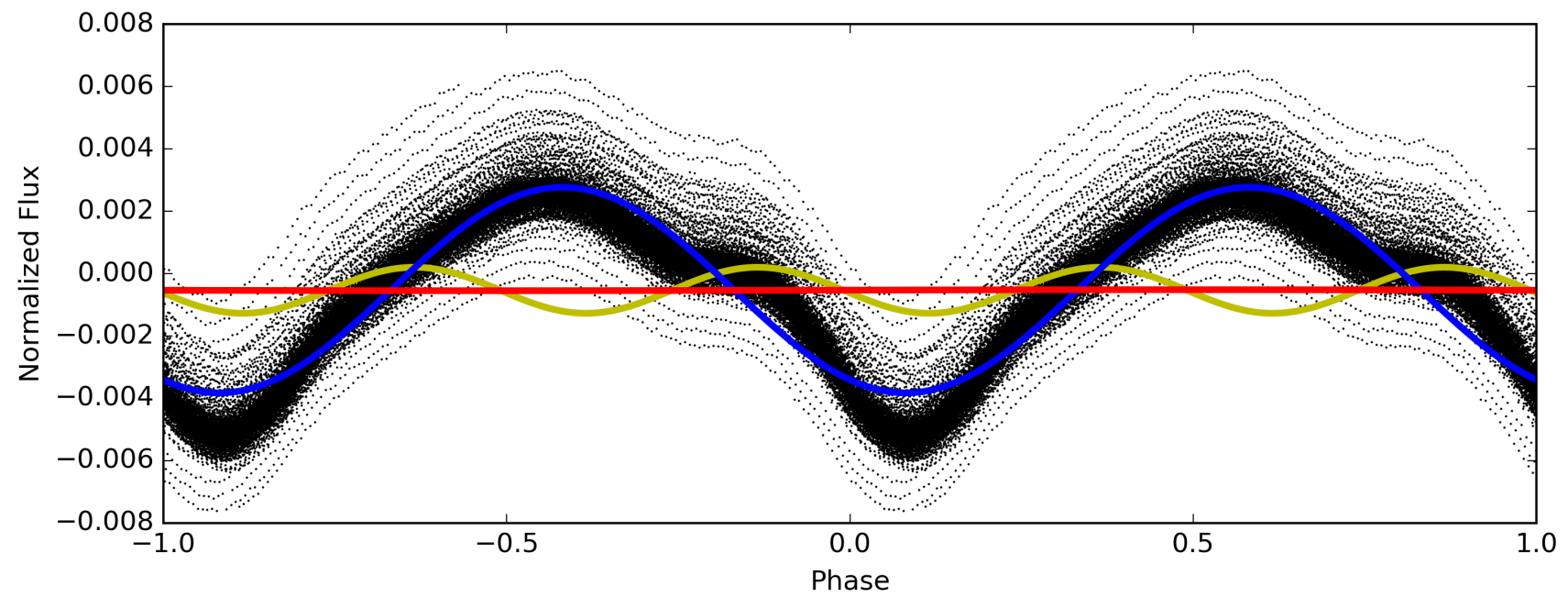
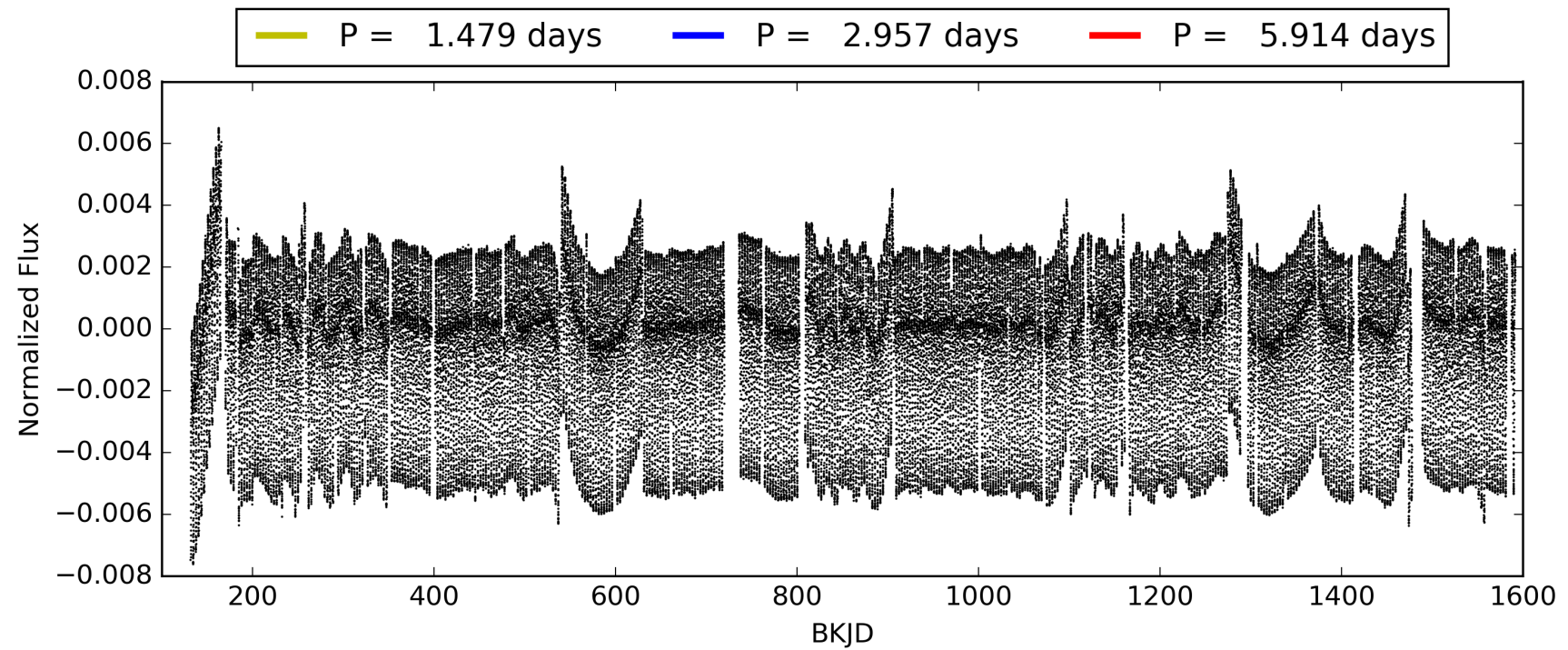
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:15:45 Z

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

TCE 011671226-03, PDC Light Curves

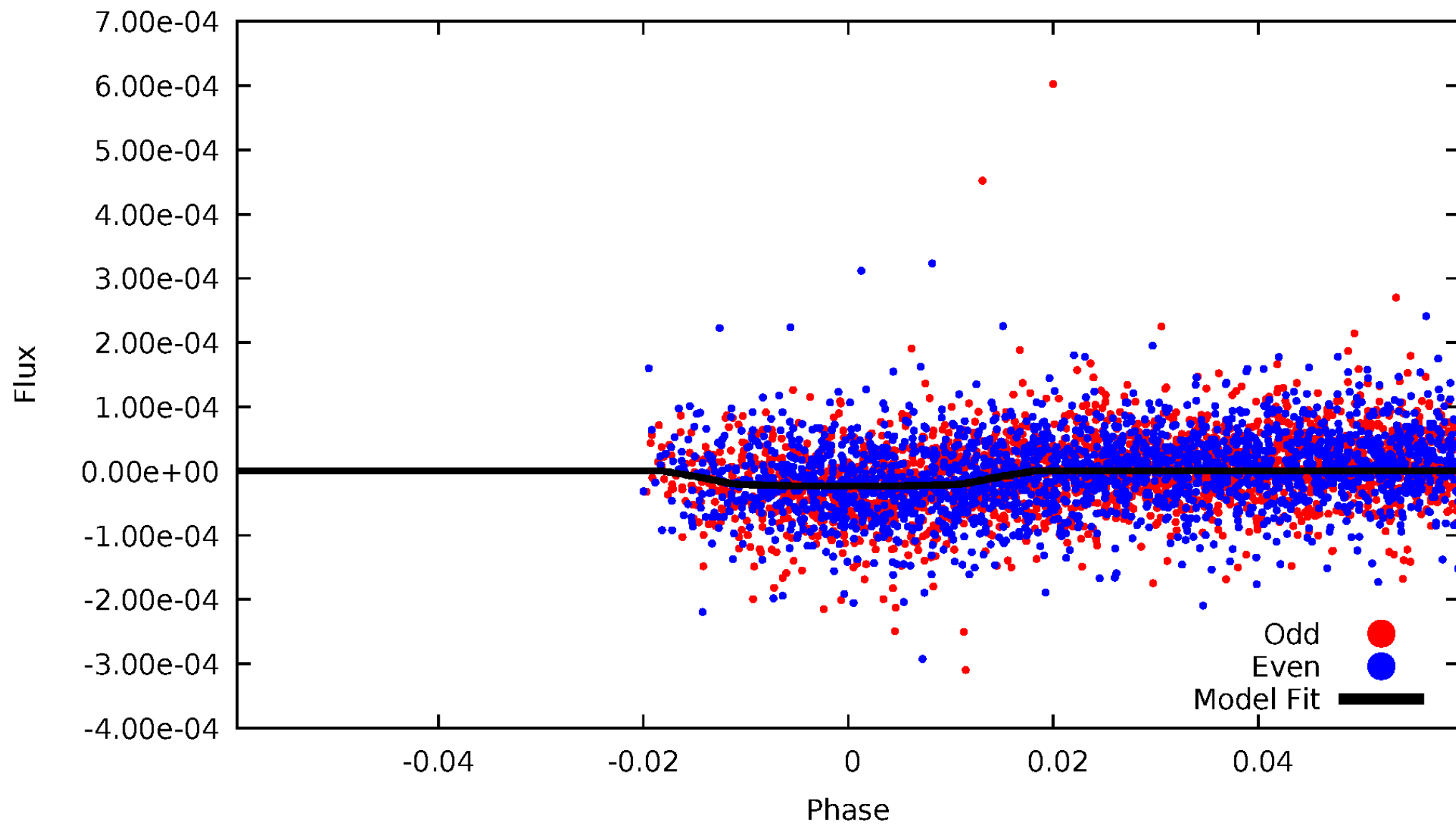


TCE 011671226-03



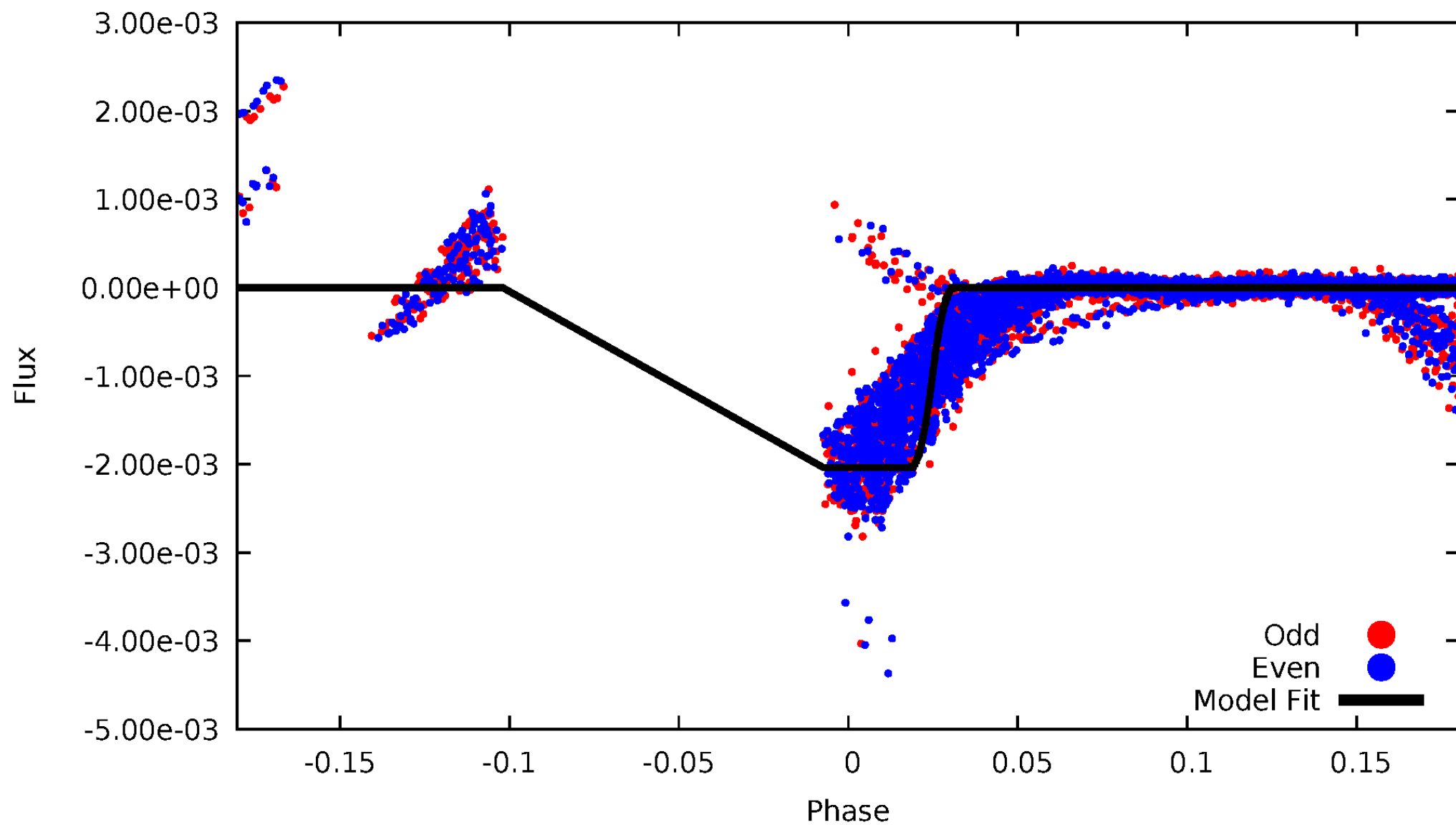
DV Odd/Even

TCE 011671226-03



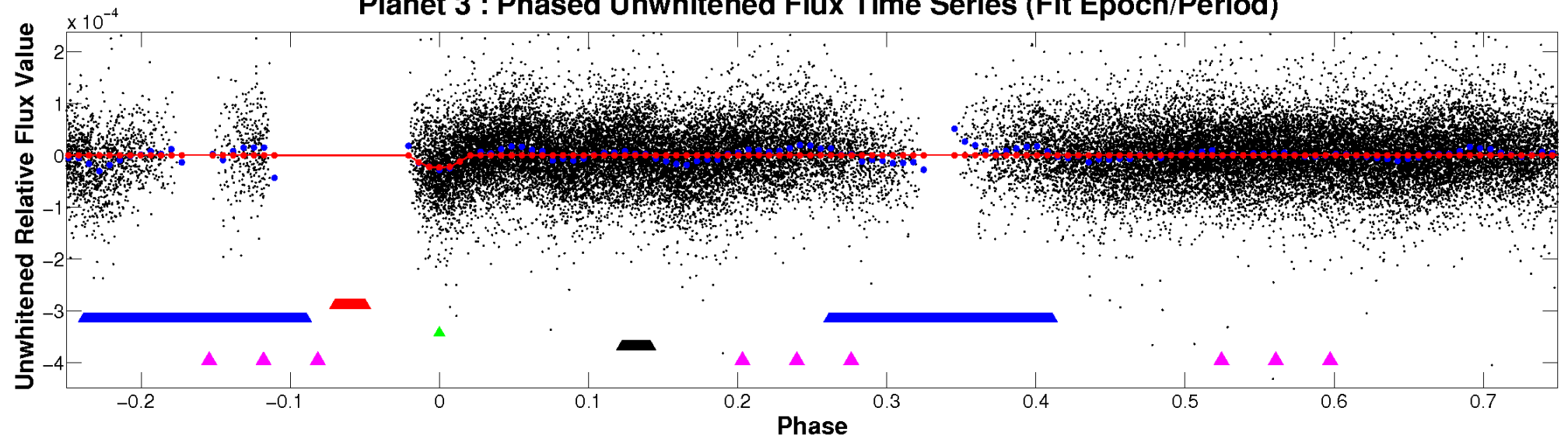
ALT Odd/Even

TCE 011671226-03

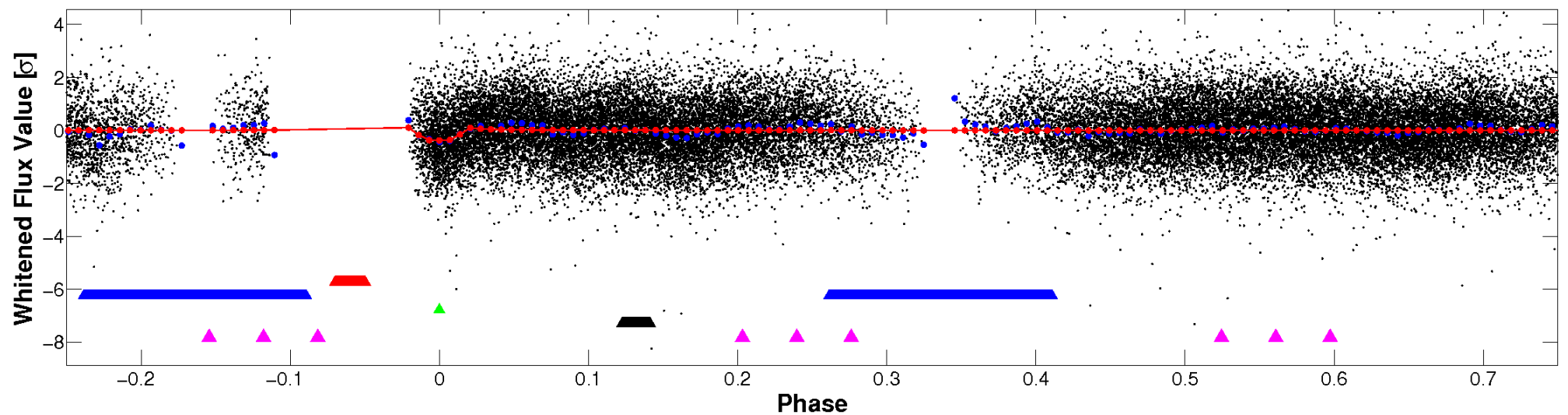


Non-Whitened Vs. Whitened Light Curve

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

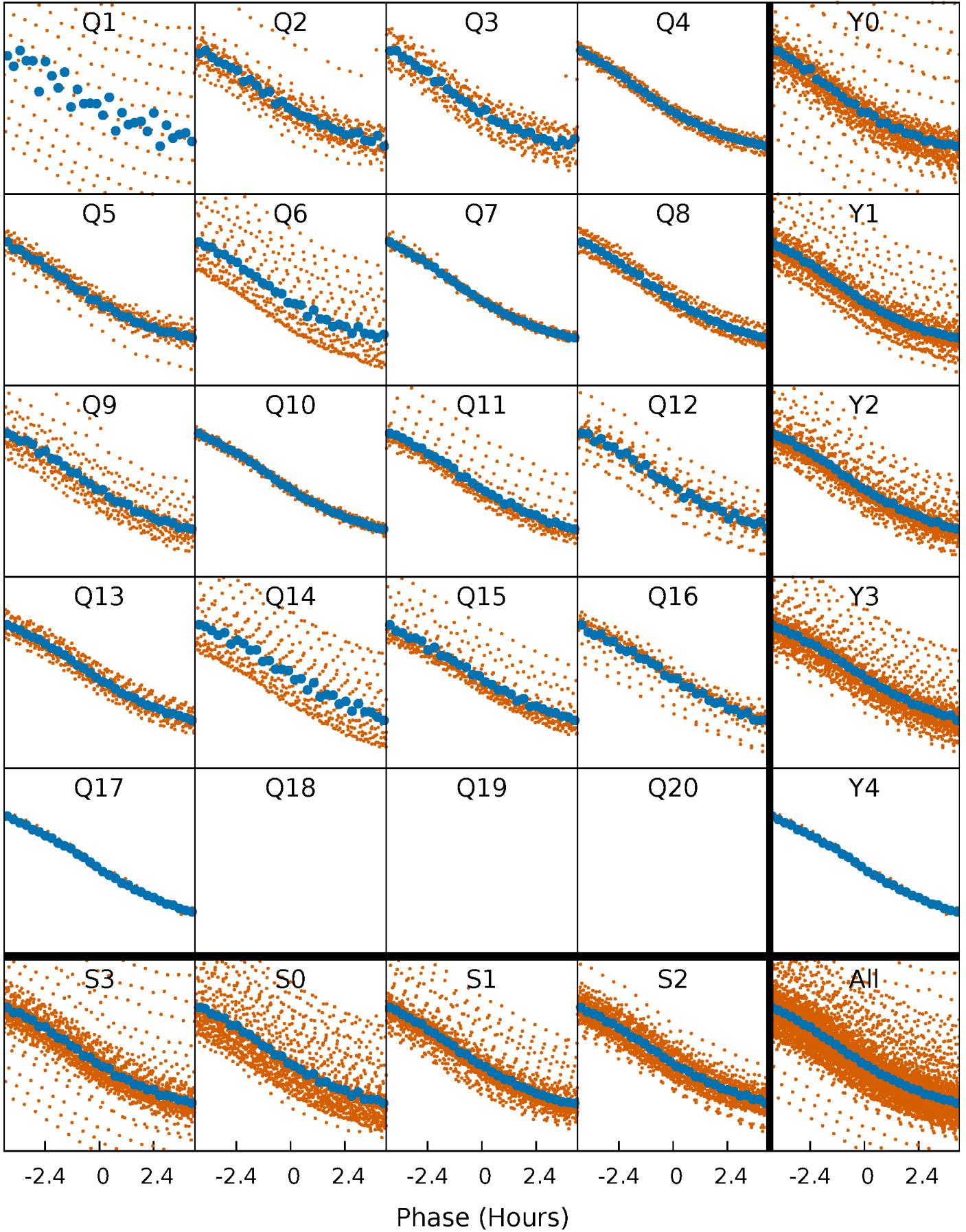


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



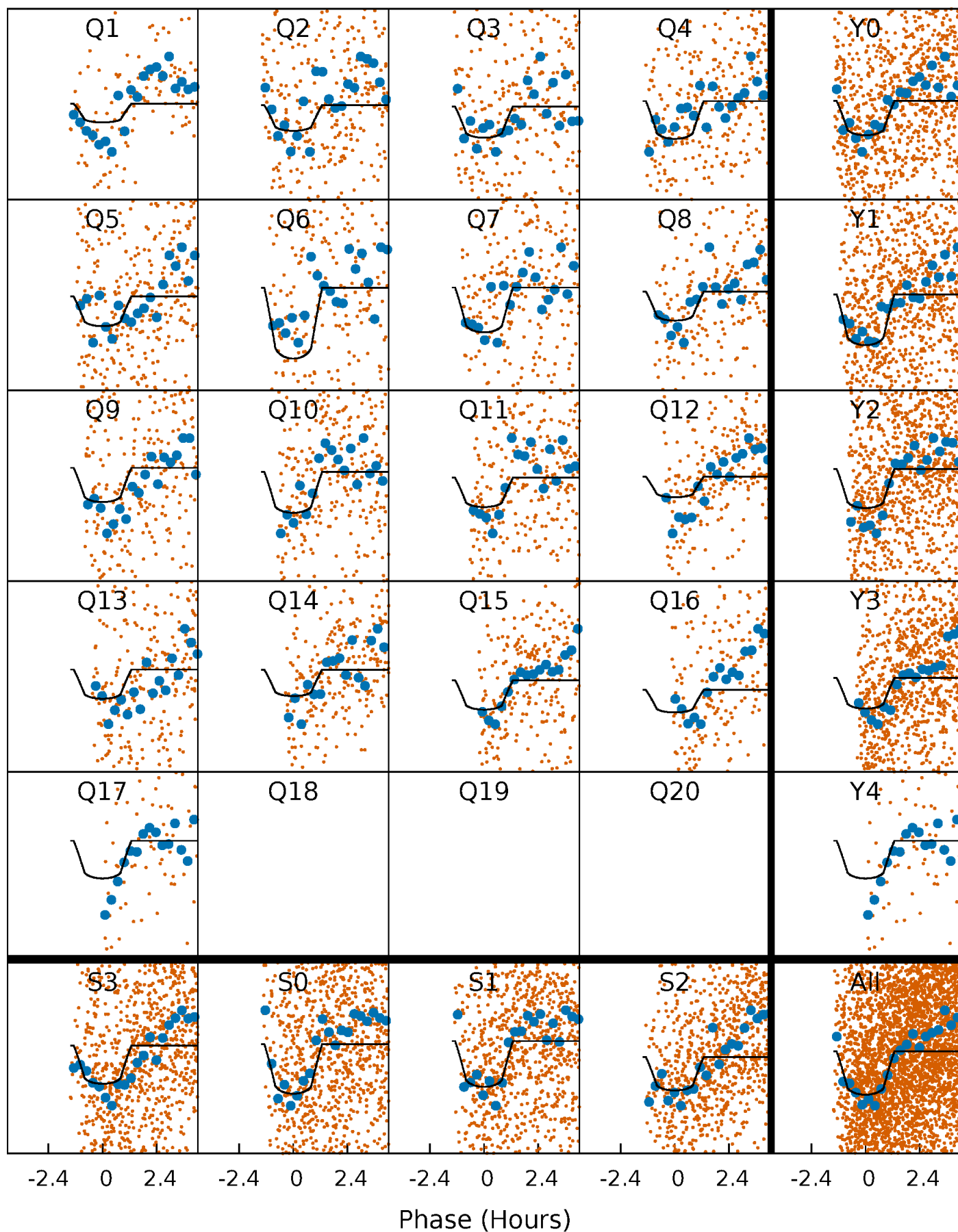
PDC Quarter-Phased Transit Curves

TCE 011671226-03 P= 2.957012 Days $T_0=134.142976$ (BKJD)



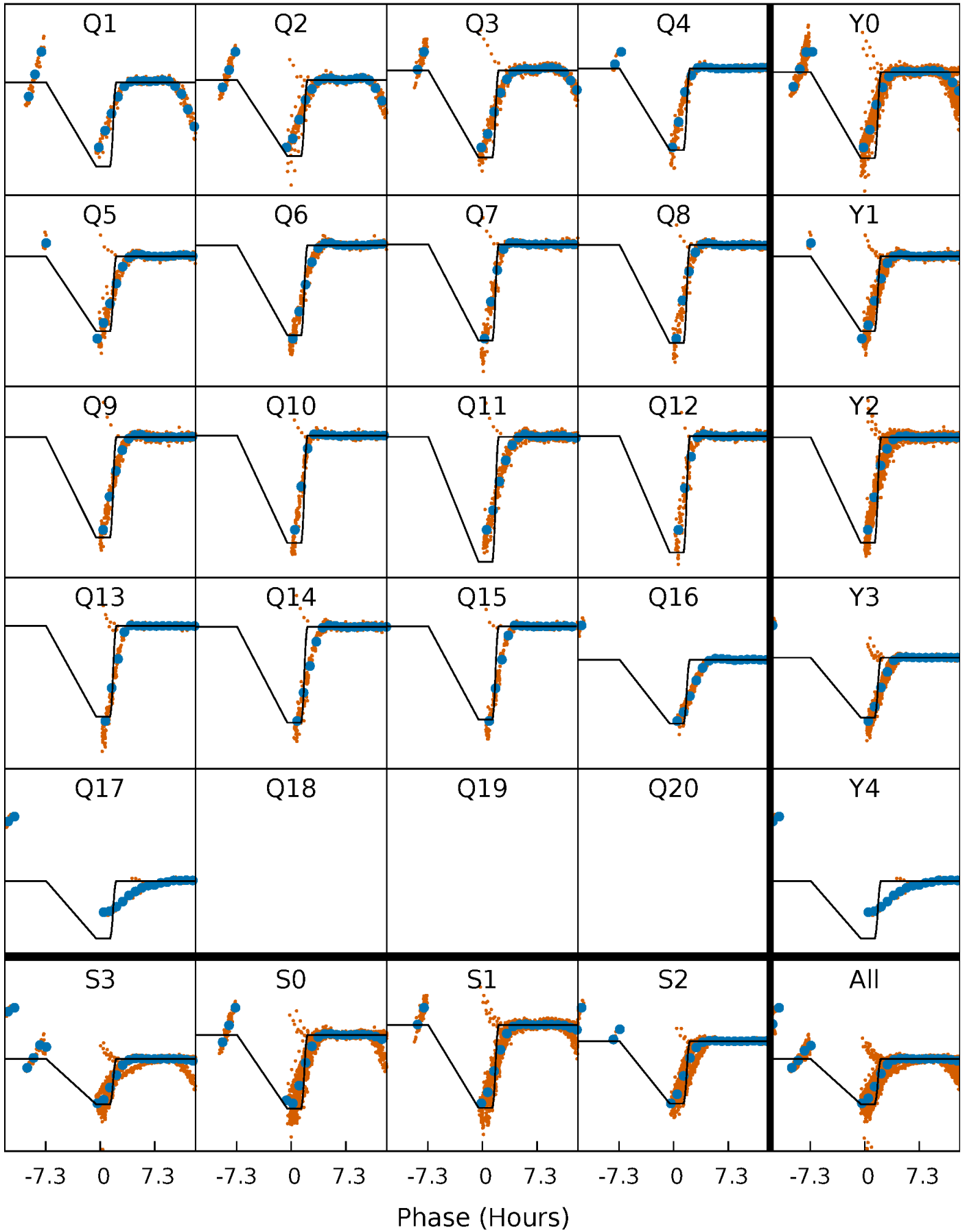
DV Quarter-Phased Transit Curves

TCE 011671226-03 P= 2.957012 Days $T_0=134.142976$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

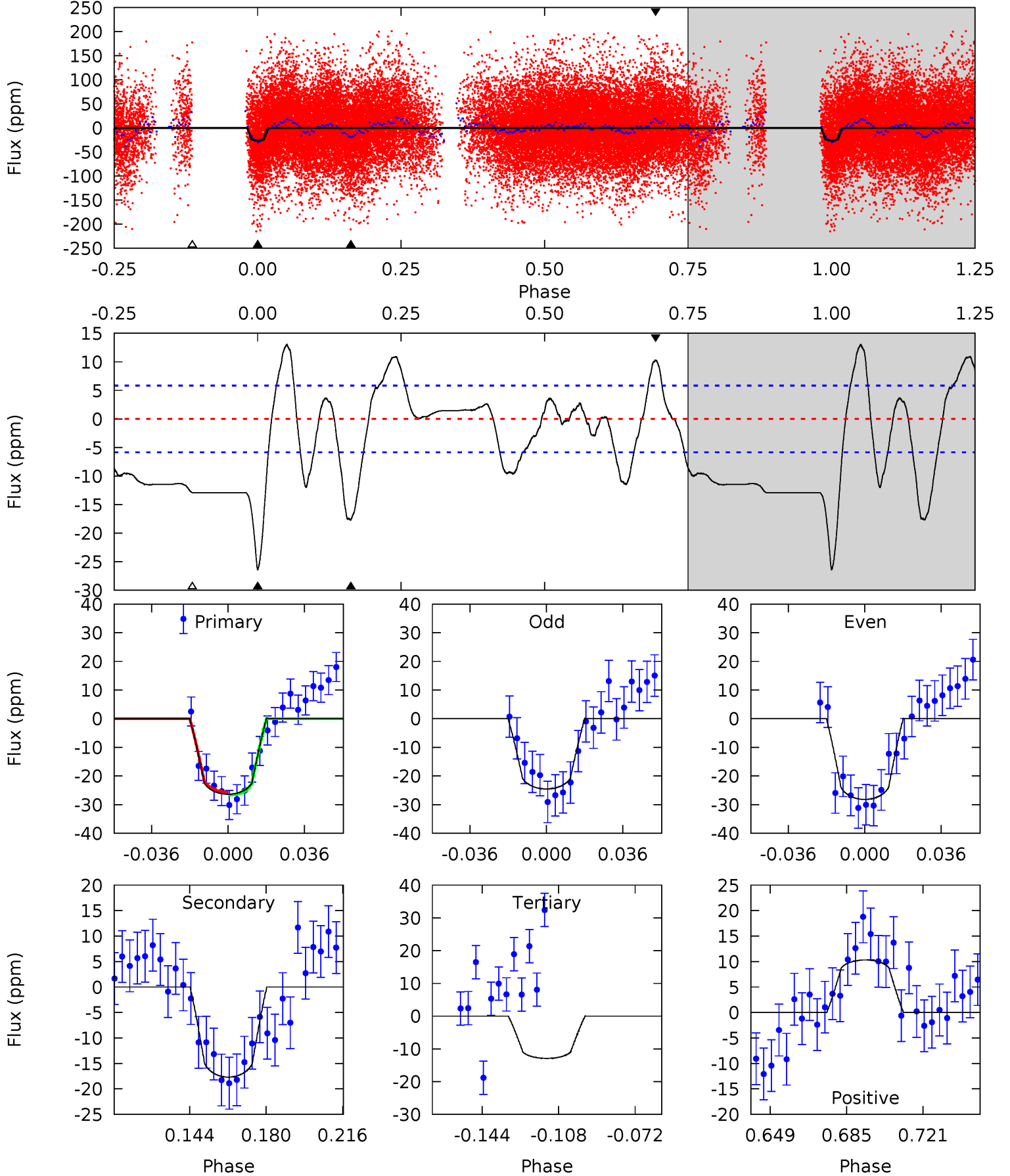
TCE 011671226-03 P= 2.957032 Days $T_0=134.105611$ (BKJD)



DV Model-Shift Uniqueness Test

011671226-03, P = 2.957012 Days, E = 131.185964 Days

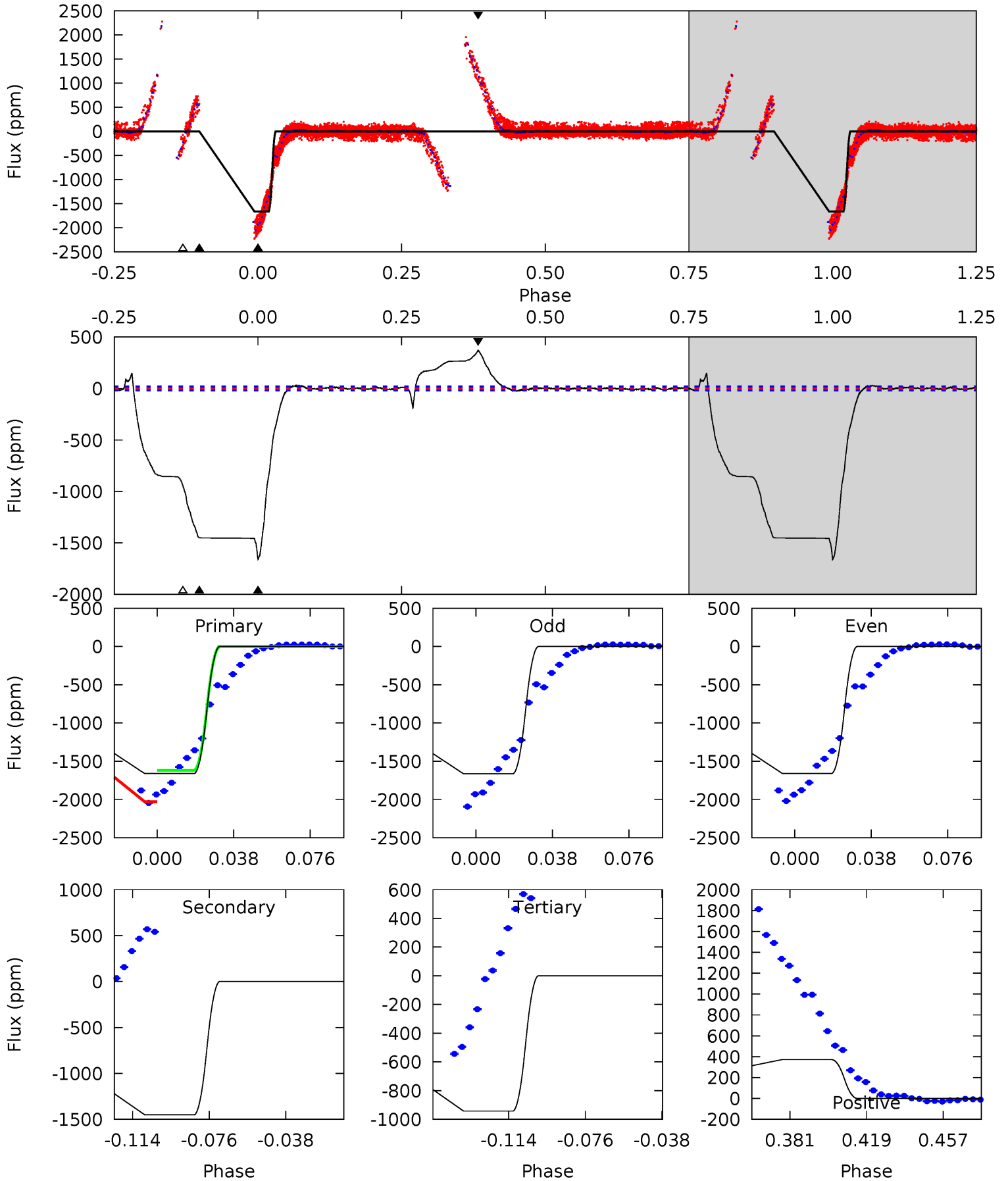
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
21.6	14.5	10.6	8.43	4.77	2.10	5.14	11.0	13.1	3.90	6.03	1.50	1.05	0.33	0.37



Alt Model-Shift Uniqueness Test

011671226-03, P = 2.957032 Days, E = 131.148579 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
408.3	356.7	231.7	91.5	4.76	2.07	20.6	176.6	316.8	125.0	265.2	0.57	0.99	0.18	0



Stellar Parameters For KIC 011671226

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8300^{+201}_{-374}	$3.744^{+0.432}_{-0.135}$	$-0.100^{+0.250}_{-0.400}$	$3.180^{+0.961}_{-1.442}$	$2.046^{+0.371}_{-0.453}$	$0.090^{+0.345}_{-0.036}$
	+2%/-5%	+12%/-4%	+250%/-400%	+30%/-45%	+18%/-22%	+385%/-41%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011671226-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-18 ± 1	$1.59^{+0.40}_{-0.42}$	3873^{+346}_{-462}	7412^{+642}_{-517}	10^{+7}_{-4}
Alt.	-1451 ± 4	$14.85^{+2.66}_{-3.23}$	3914^{+312}_{-459}	7416^{+187}_{-310}	$9.420^{+5.487}_{-2.312}$

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

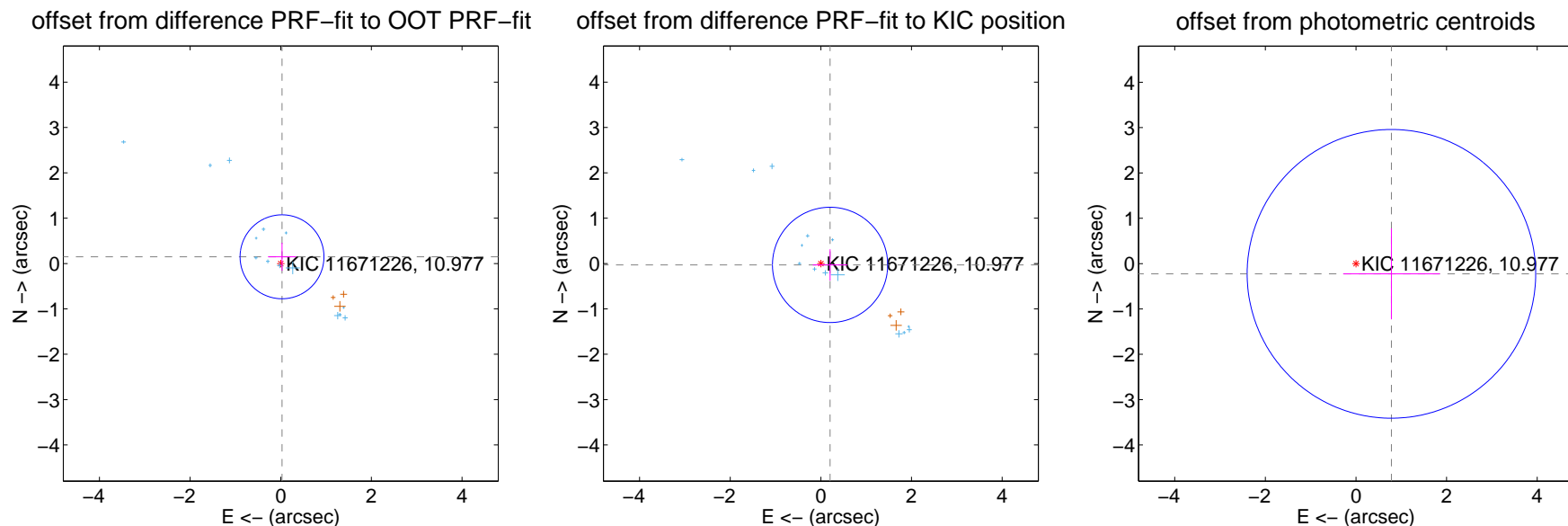
DV Centroid Data

Supplemental centroid analysis for 011671226-03. **Kepler magnitude: 10.98.** Transit SNR 13.99

There are 14 quarters with good PRF difference image offsets

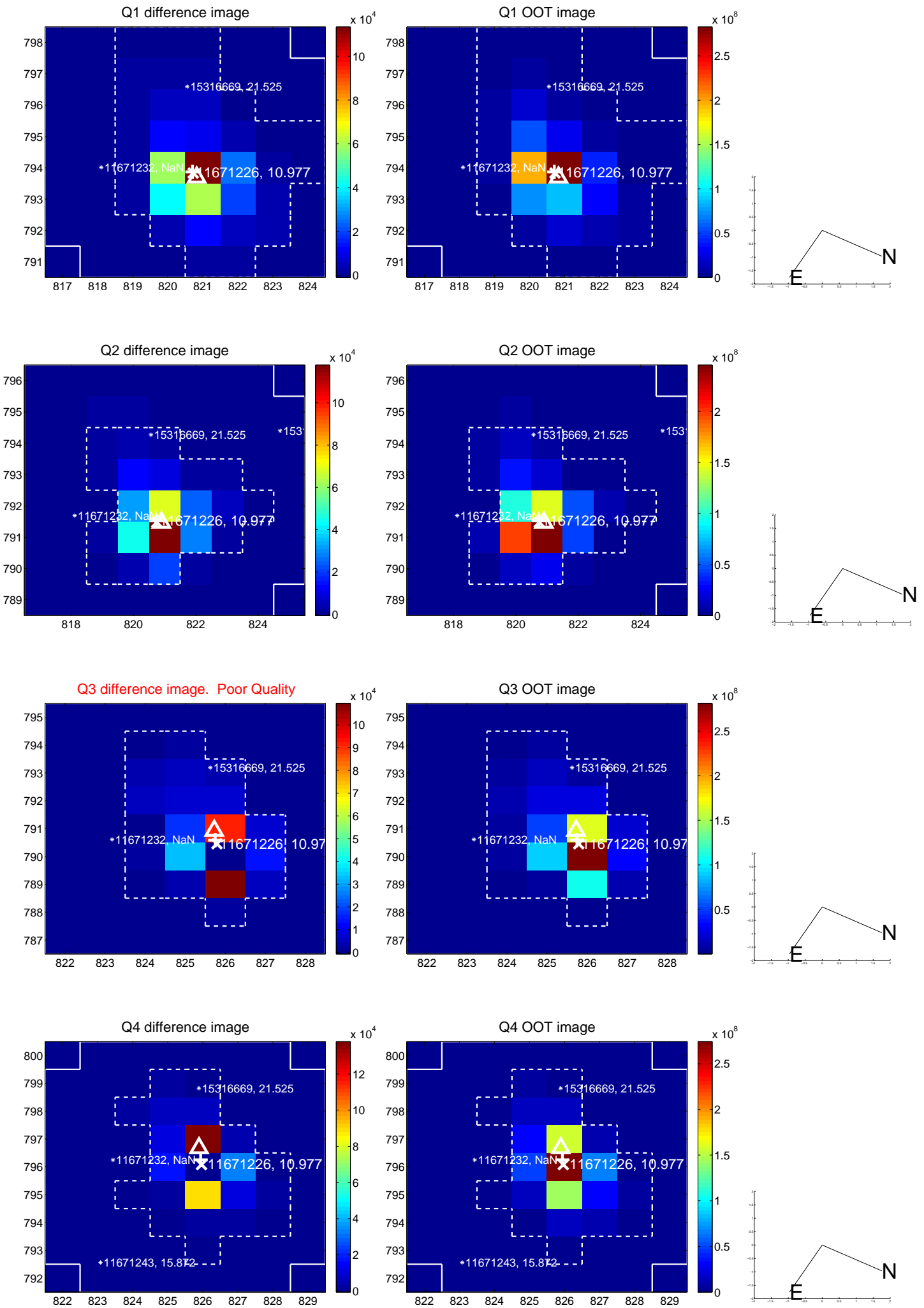
The direct PRF centroid is offset from the target star catalog position by about 0.18 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.152 ± 0.308	0.49	-0.028 ± 0.308	0.149 ± 0.308
PRF-fit source offset from KIC position	0.206 ± 0.424	0.49	-0.203 ± 0.381	-0.030 ± 0.346
photometric centroid source offset	0.81 ± 1.06	0.77	-0.78 ± 1.07	-0.23 ± 1.00

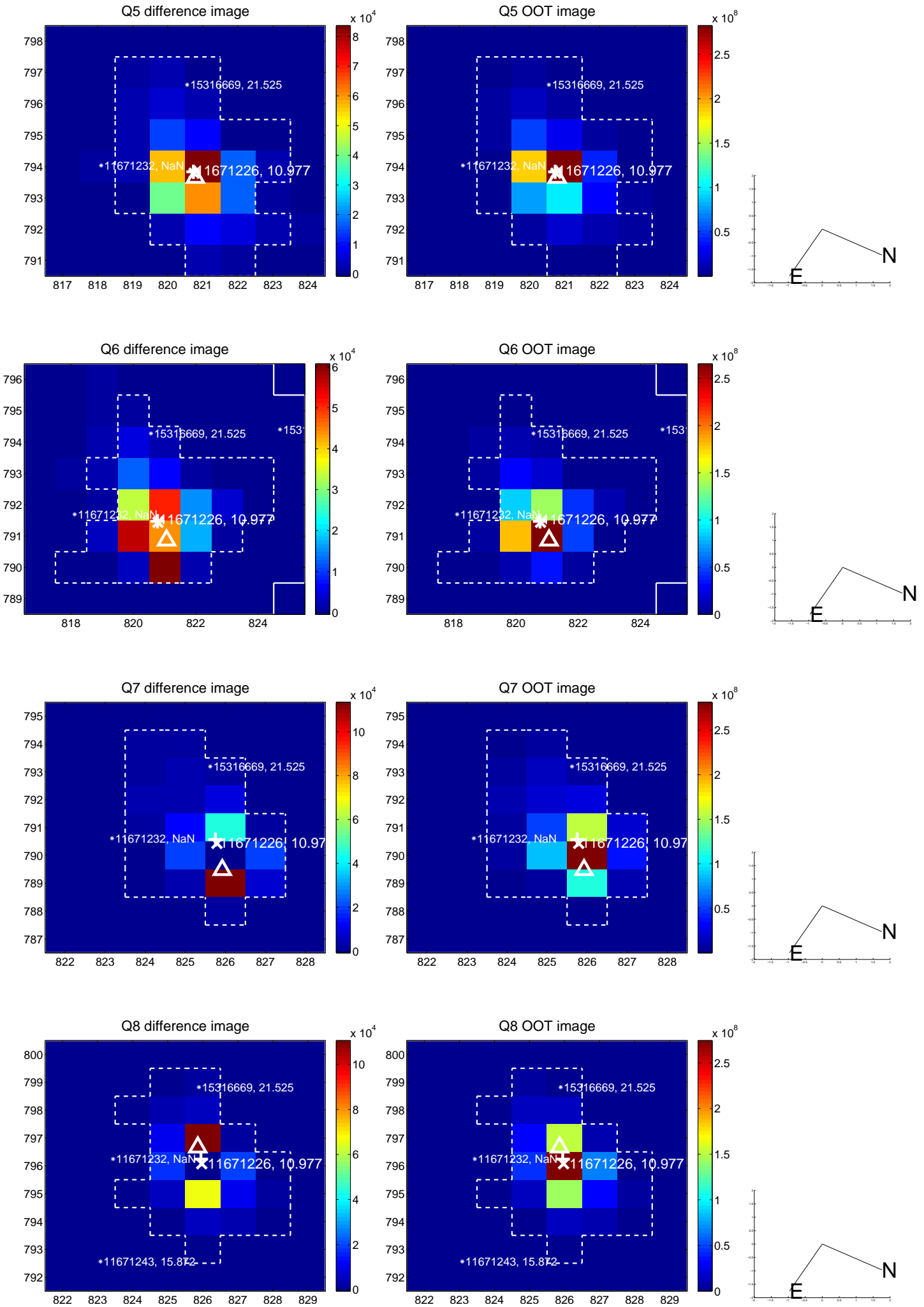


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

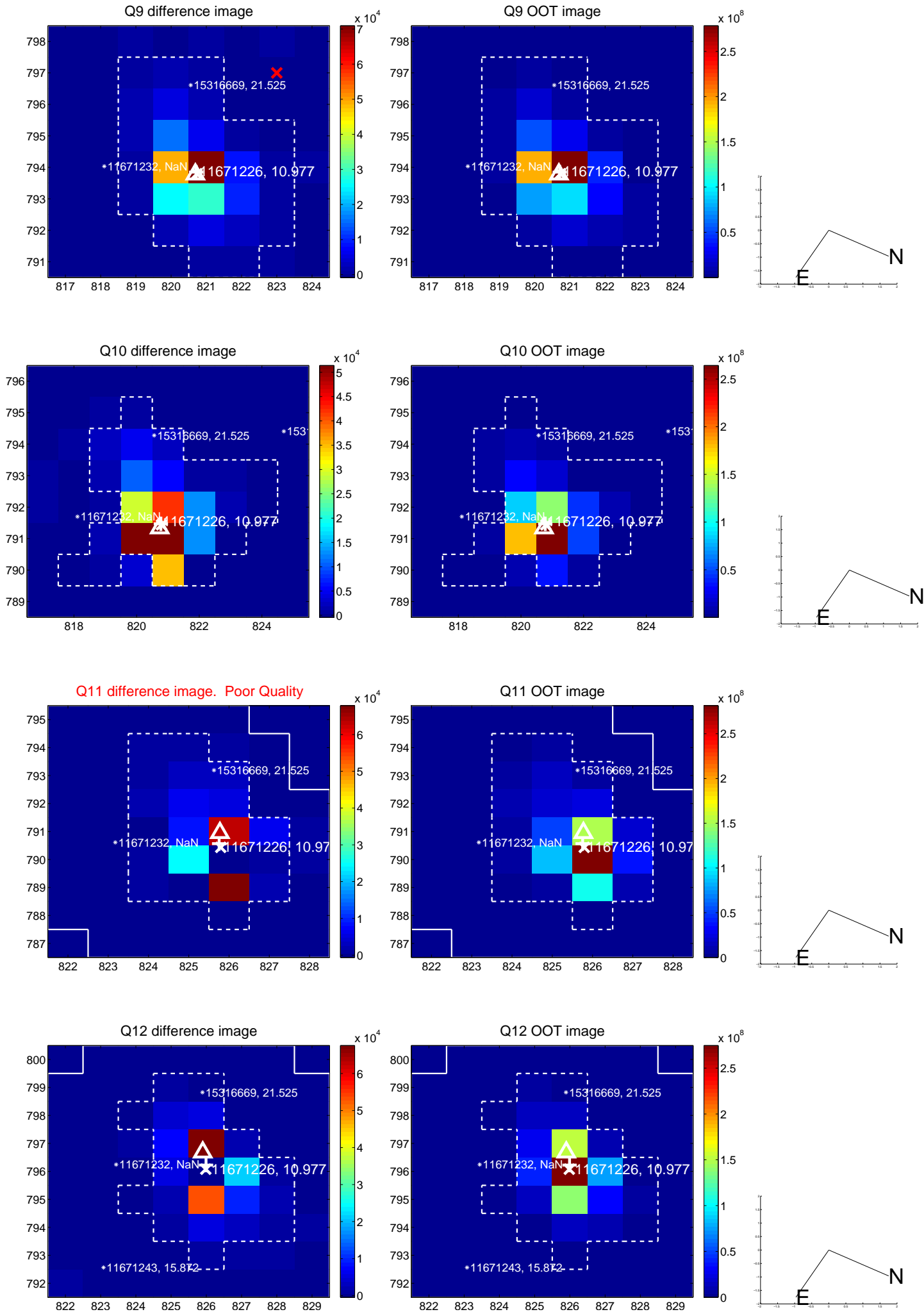
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



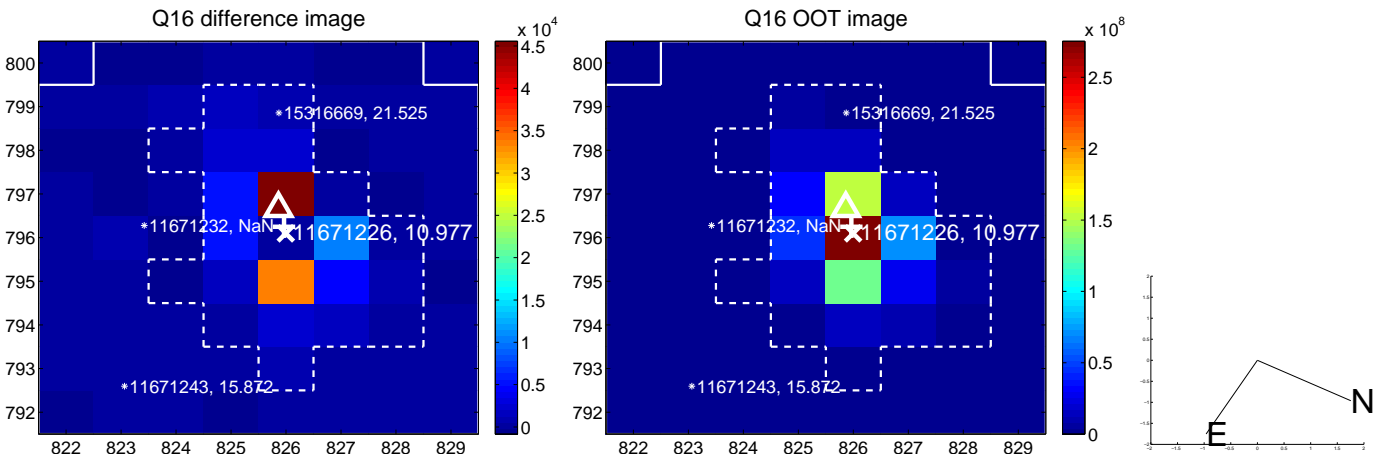
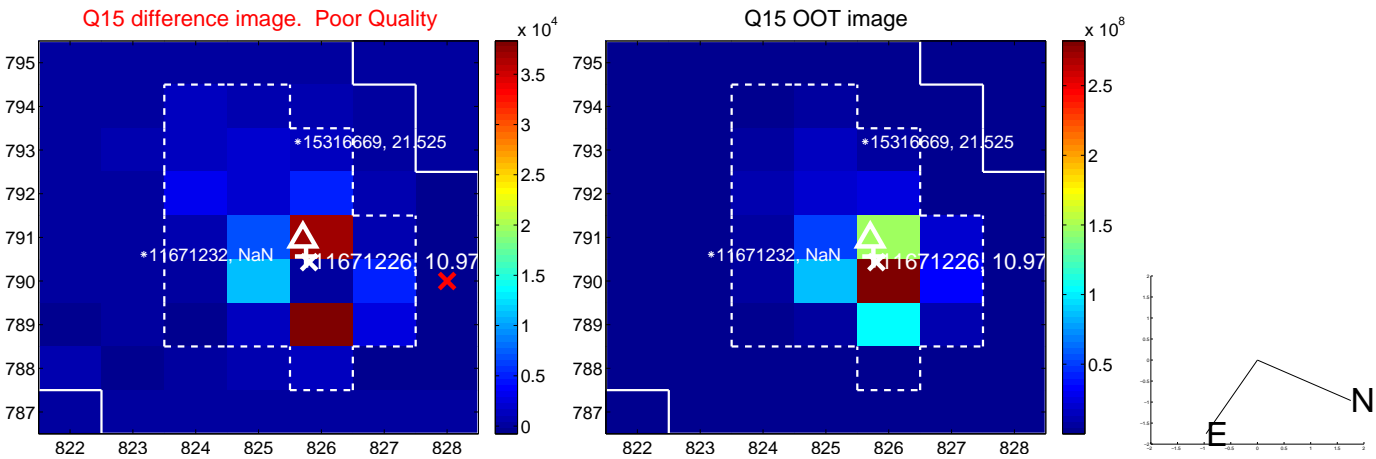
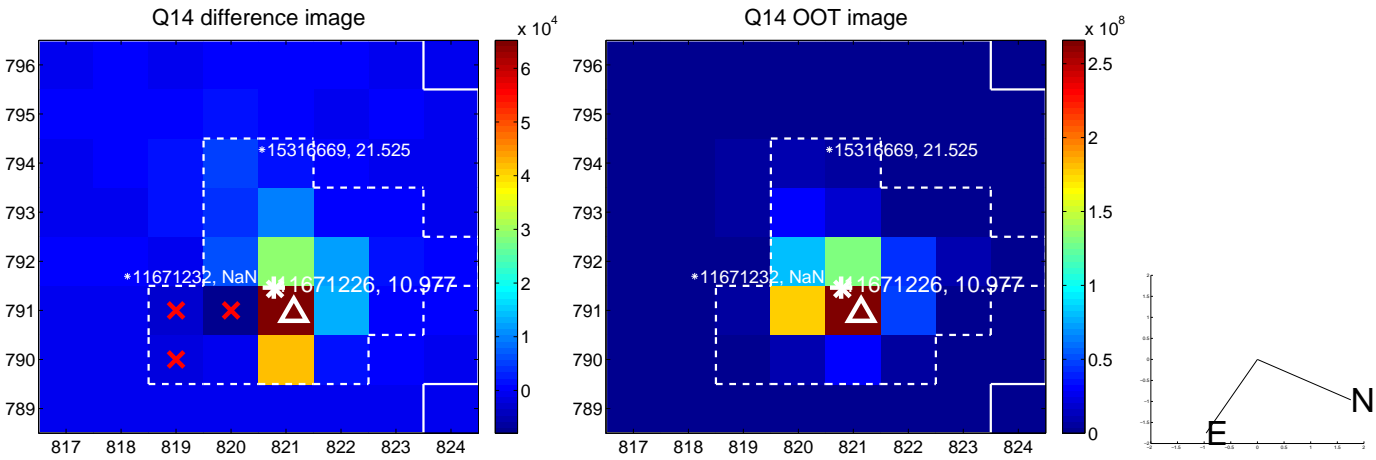
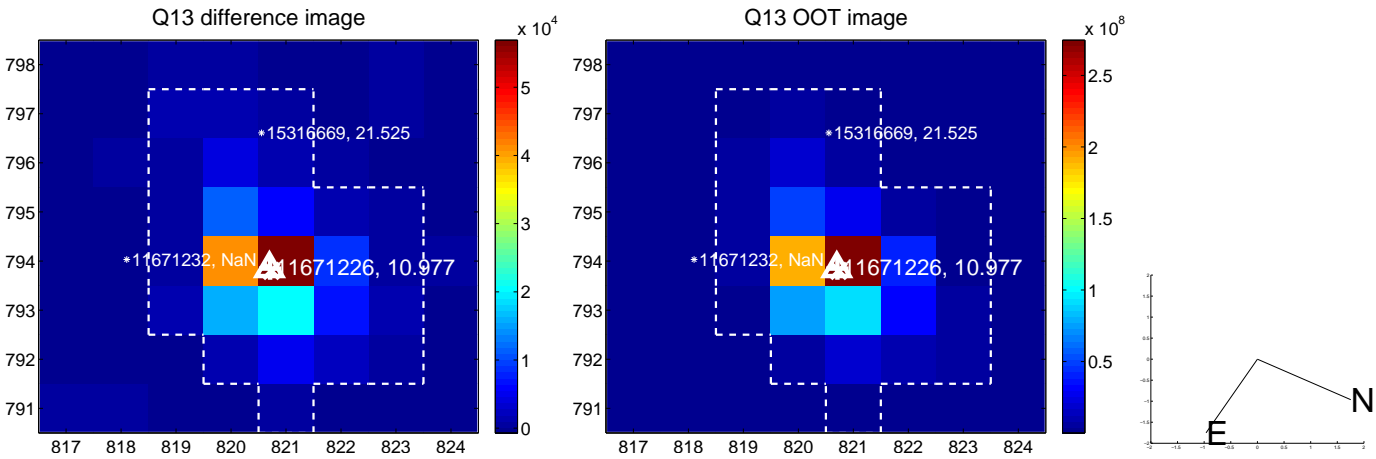
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



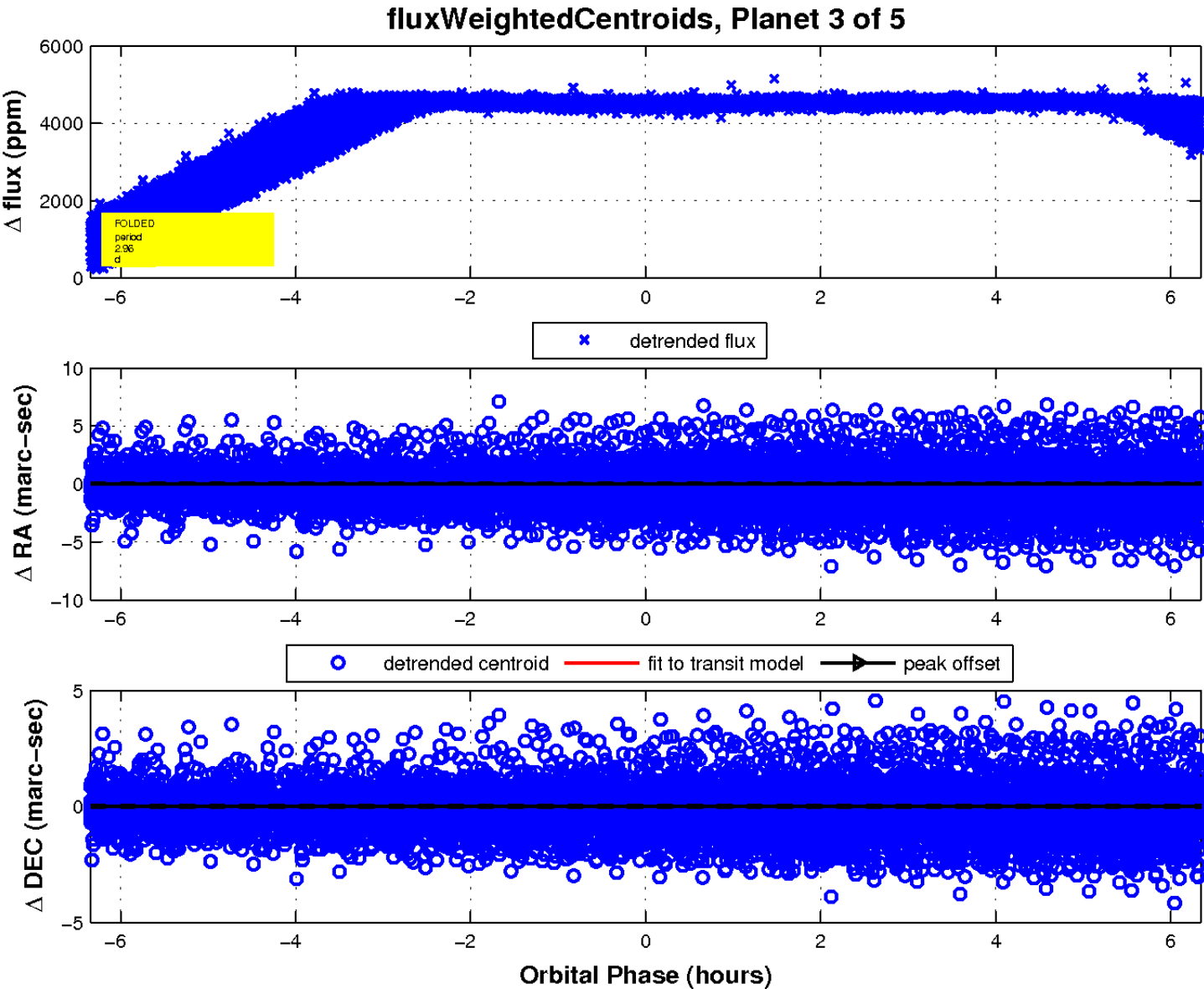
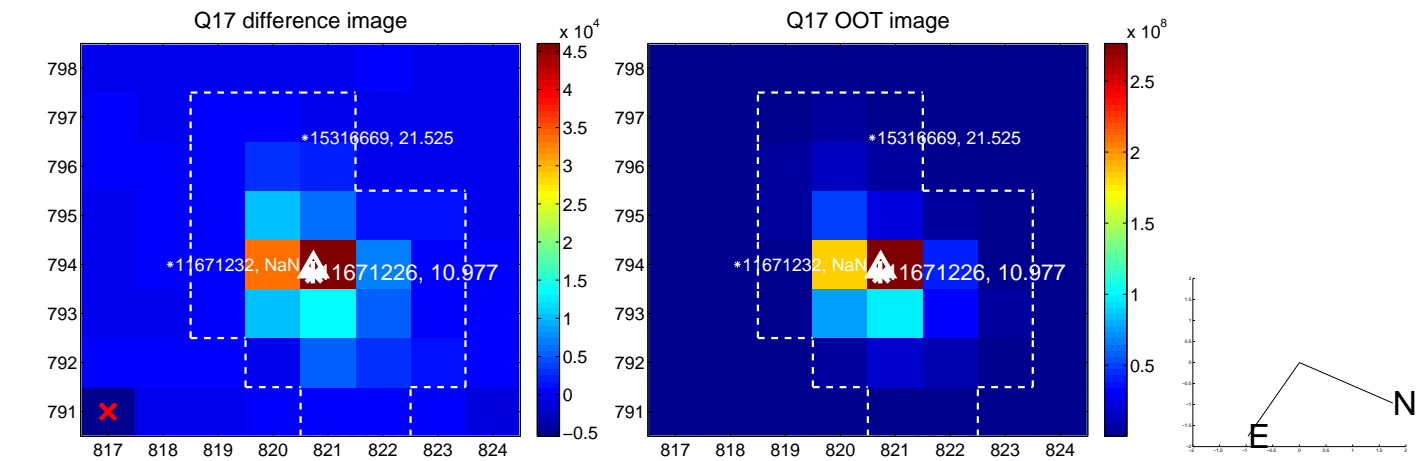
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

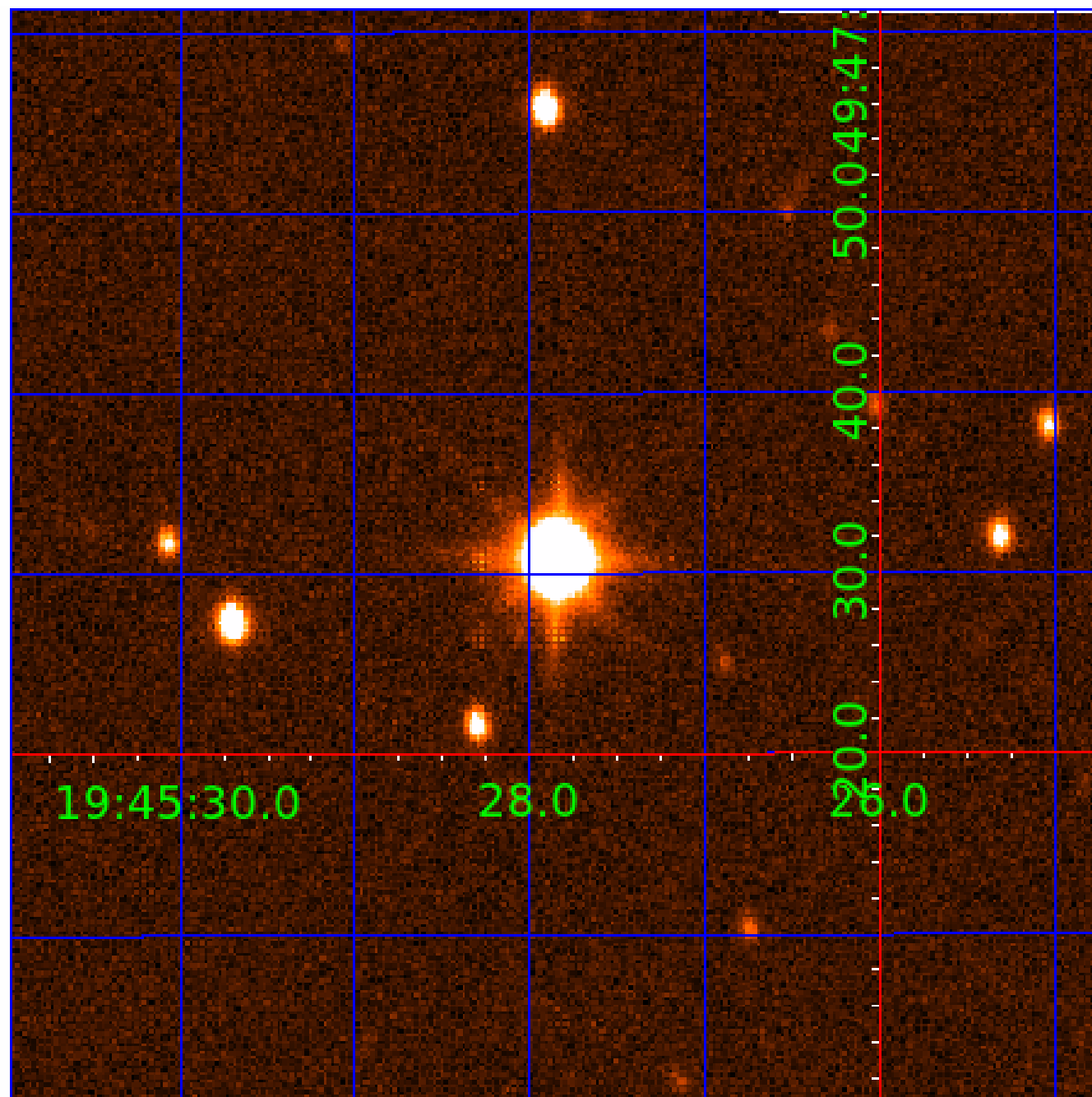


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011671226

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})
011671226-01	OBS	No	2.957133	133.936267	29.6	2.148	17.0	18.0	3.18	8300	2.01	16405.78
011671226-02	OBS	No	1.478955	131.958719	5.9	3.838	12.5	5.6	3.18	8300	0.98	41325.52
011671226-03	OBS	No	2.957012	134.142976	23.4	2.115	12.0	14.0	3.18	8300	1.70	16406.68
011671226-04	OBS	No	2.957124	131.548455	47.6	9.000	10.6	-1.0	3.18	8300	2.22	16405.85

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011671226-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—CENT_SATURATED
011671226-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—SAME_NTL_PERIOD—CENT_SATURATED
011671226-04	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD—CENT_SATURATED

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

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

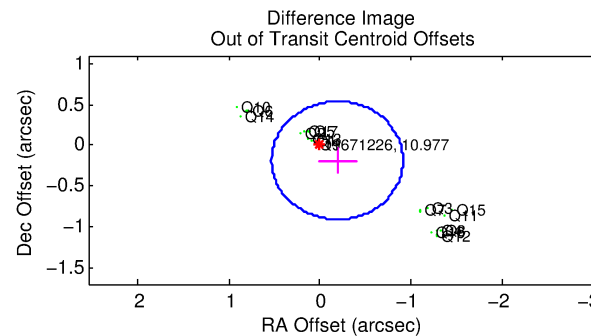
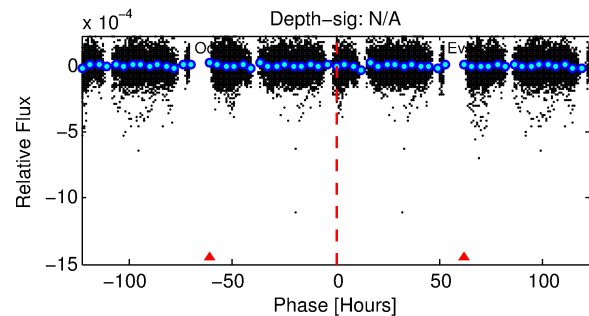
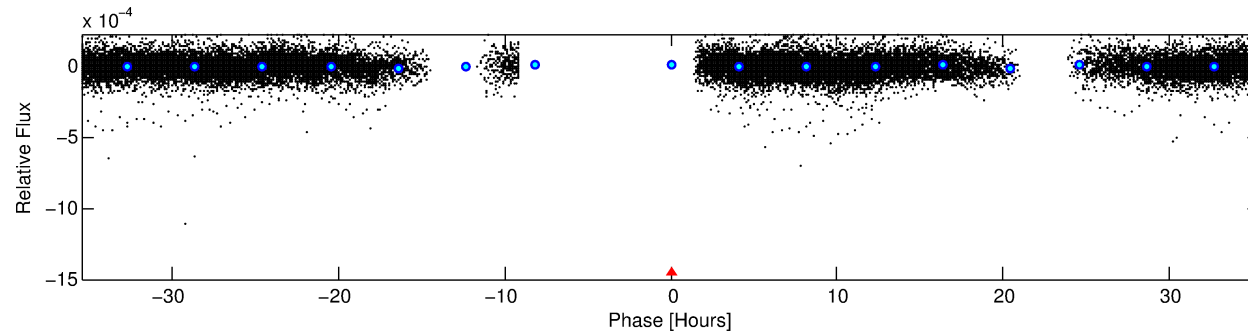
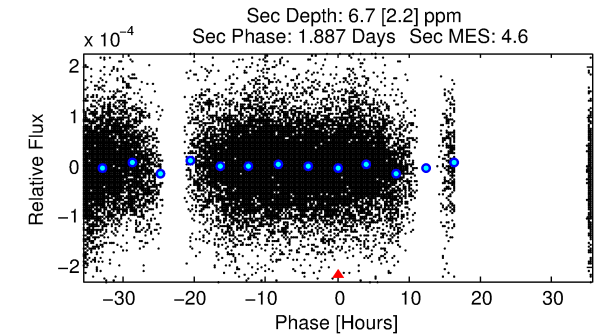
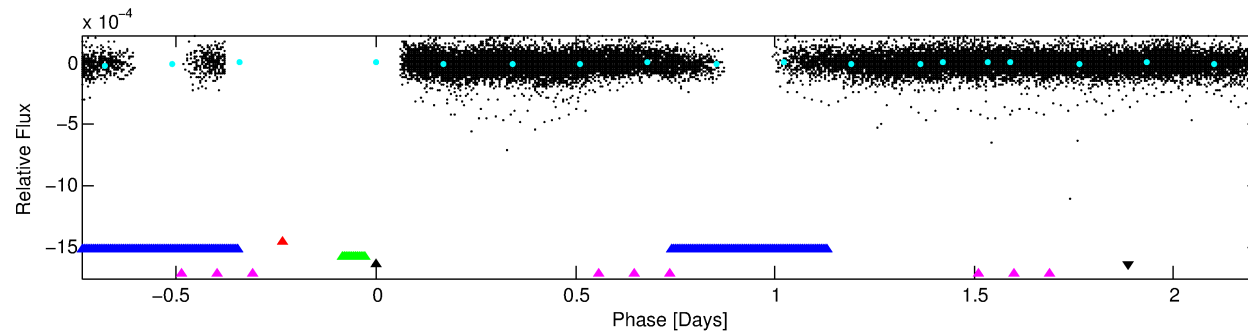
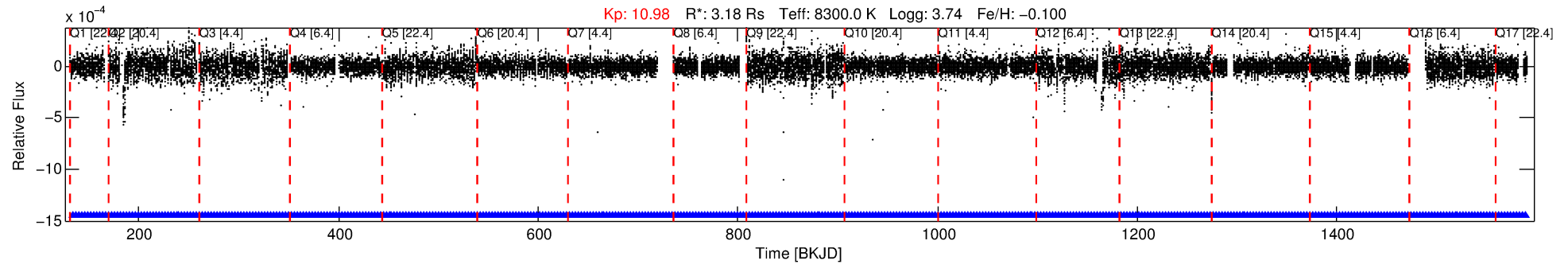
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011671226-04

No Significant Match Found

DV One-Page Summary

KIC: 11671226 Candidate: 4 of 5 Period: 2.957 d



TPS TCE Results:

Period = 2.95712 d
Epoch = 131.5485 BKJD

DV fit results are unavailable

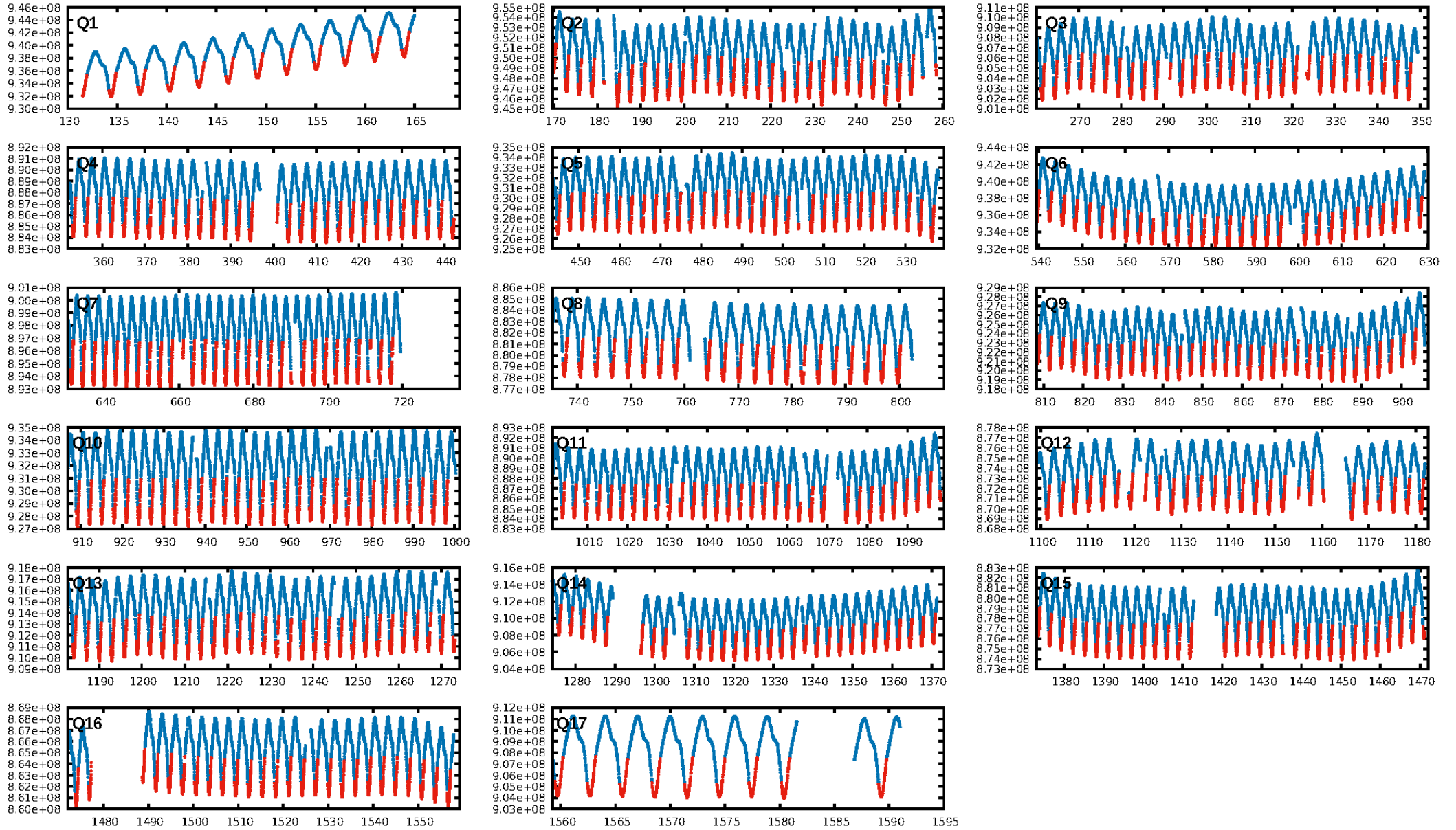
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.47e-19
RollingBand-fgt: 1.00 [440/440]
GhostDiagnostic-chr: 0.9018
Centroid-sig: 0.2%
Centroid-so: 0.109 arcsec [24.34 σ]
OotOffset-rm: 0.266 arcsec [1.10 σ]
KicOffset-rm: 0.613 arcsec [1.93 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.88 [15/17]
DiffImageOverlap-fno: 0.00 [0/17]

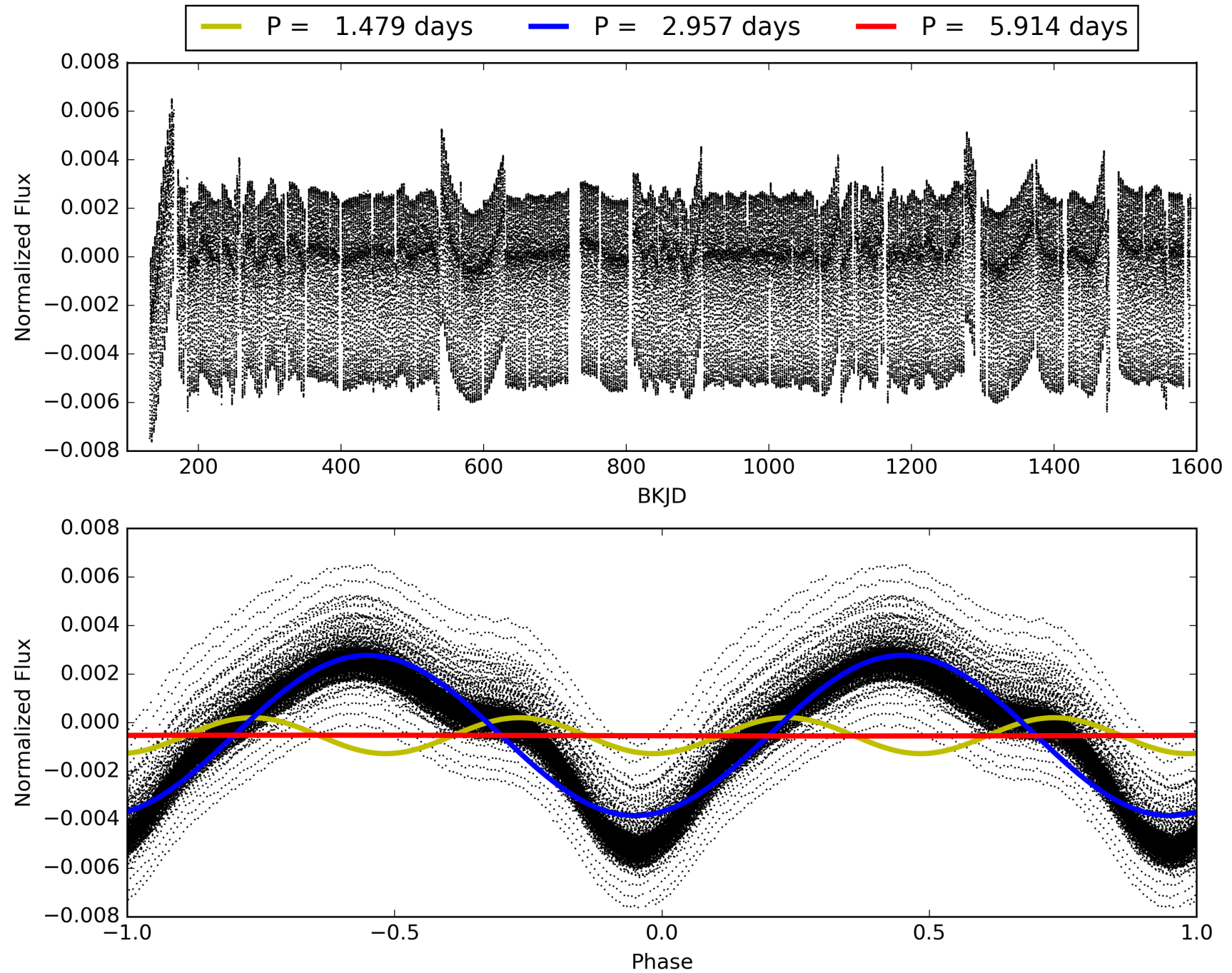
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 04:15:54 Z

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

TCE 011671226-04, PDC Light Curves

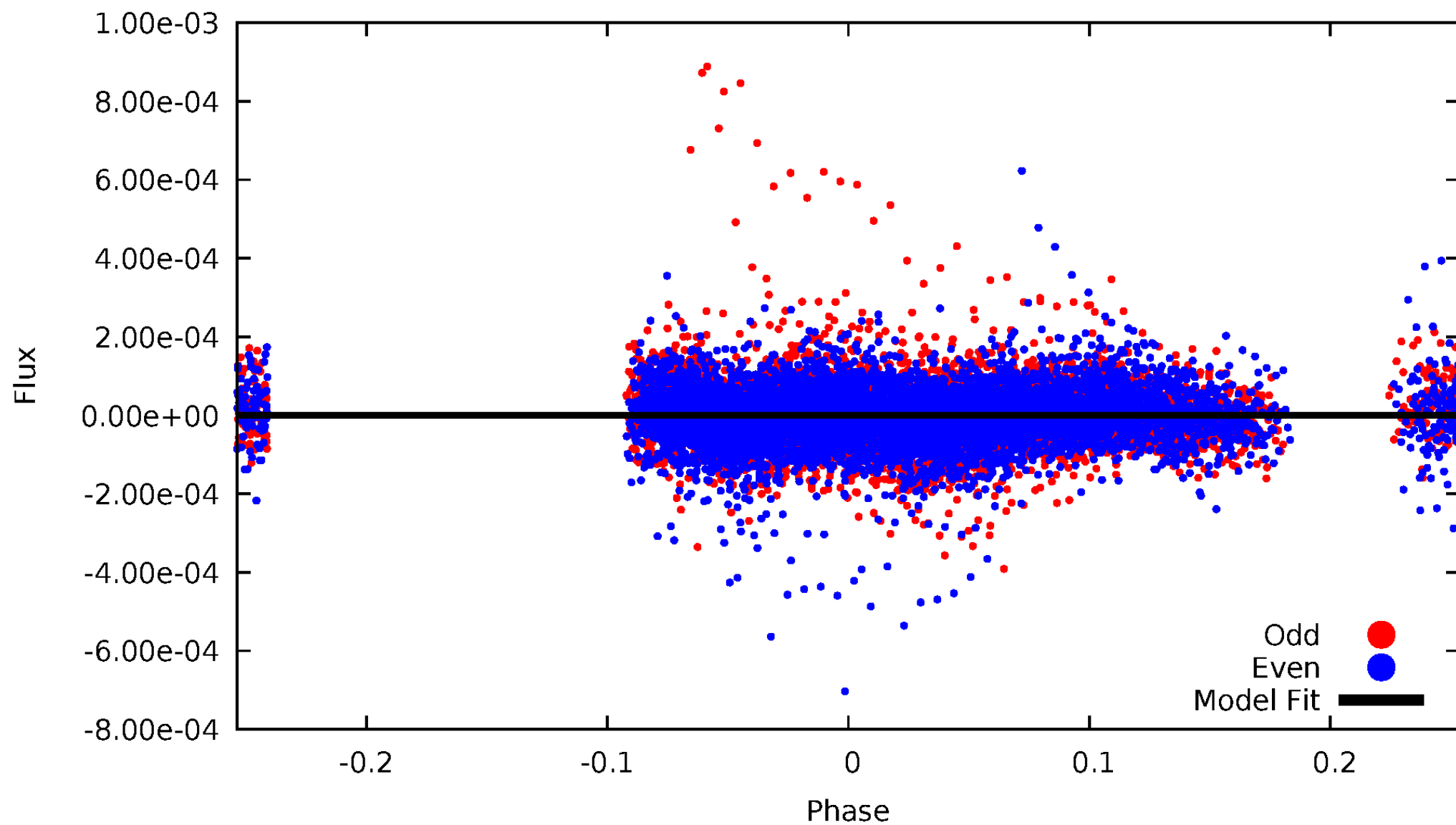


TCE 011671226-04



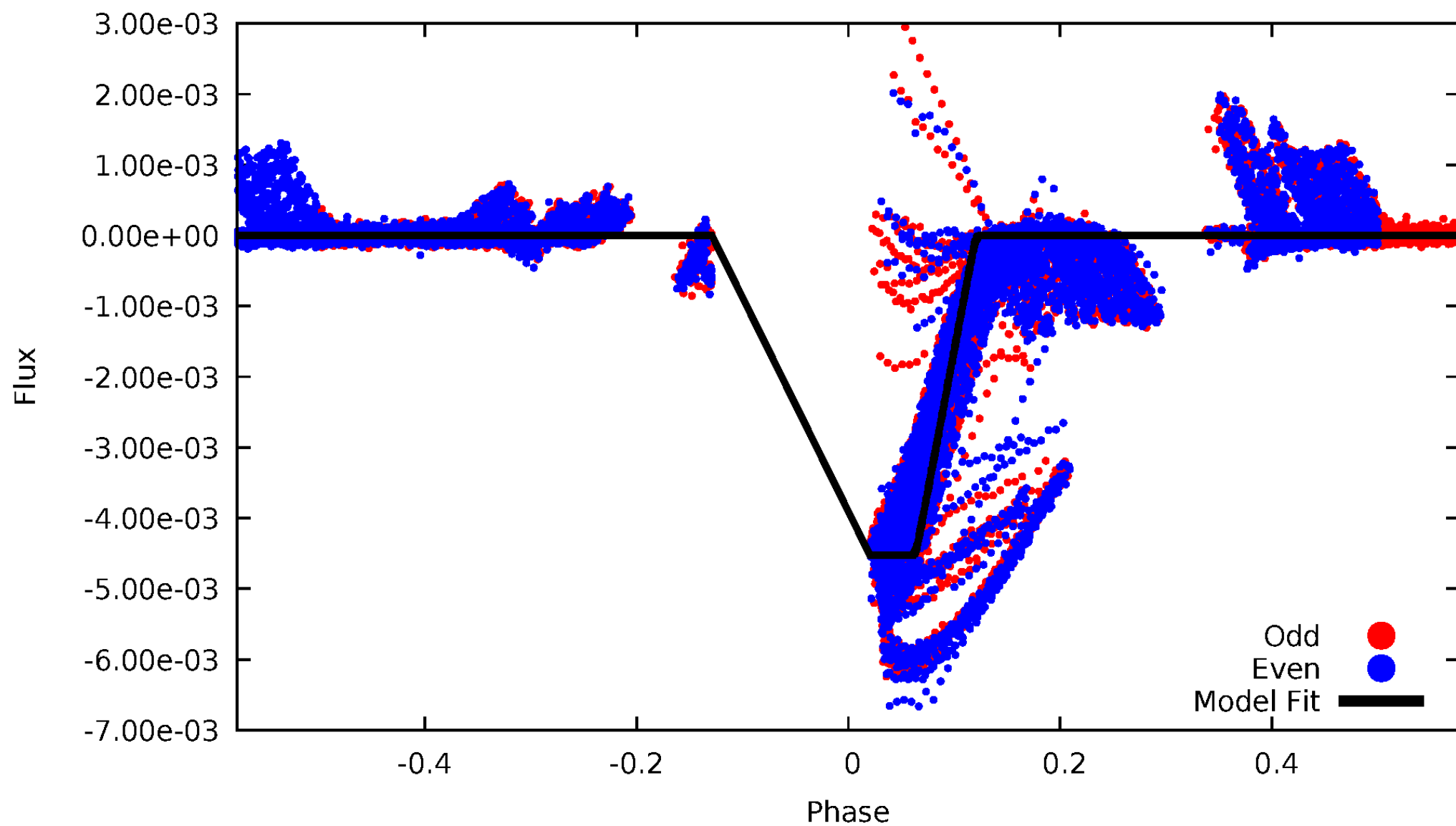
DV Odd/Even

TCE 011671226-04



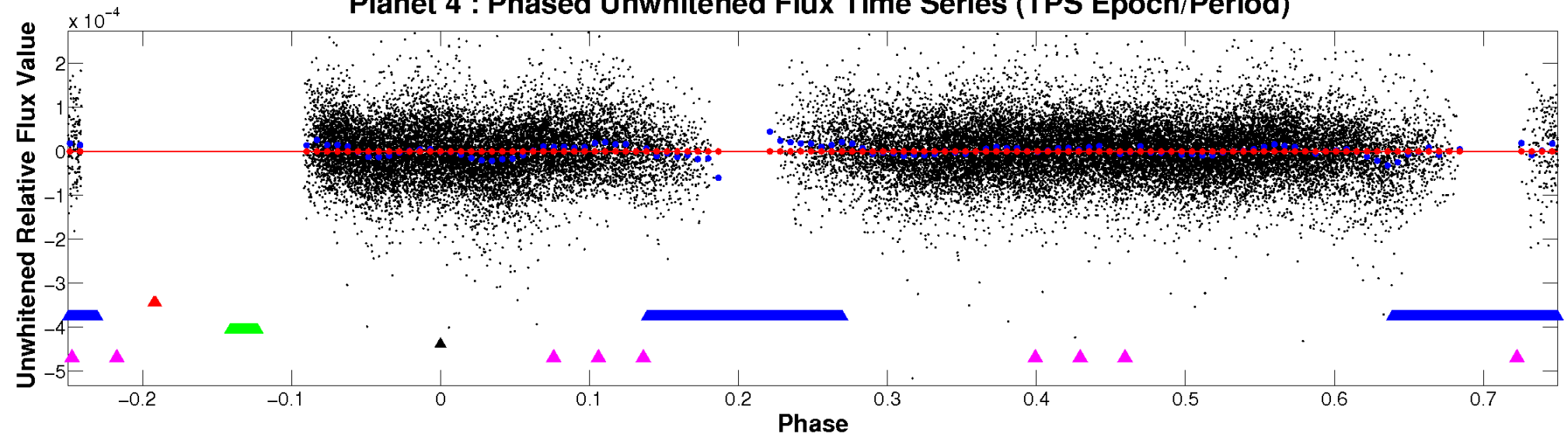
ALT Odd/Even

TCE 011671226-04

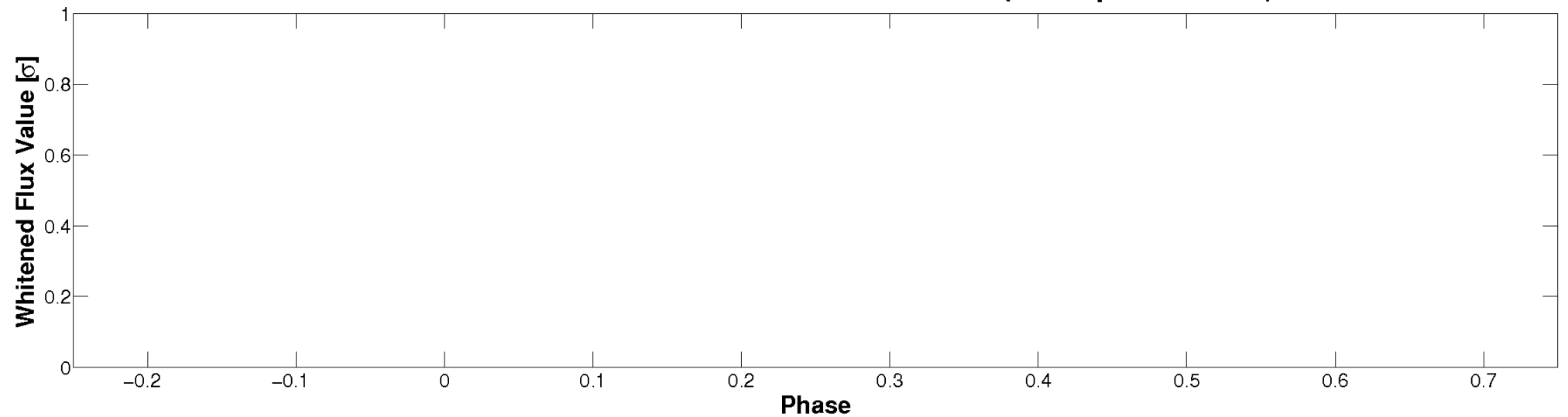


Non-Whitened Vs. Whitened Light Curve

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

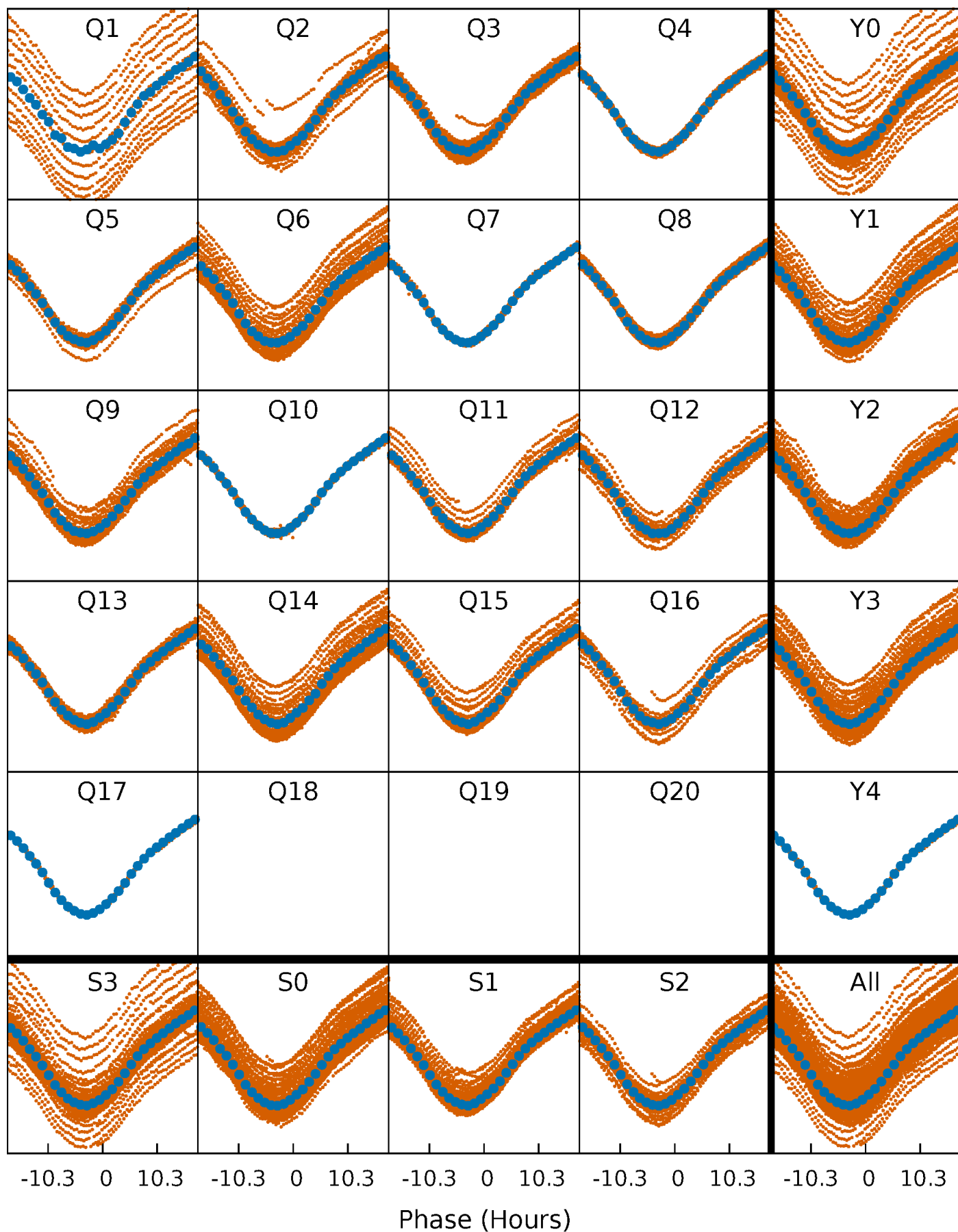


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



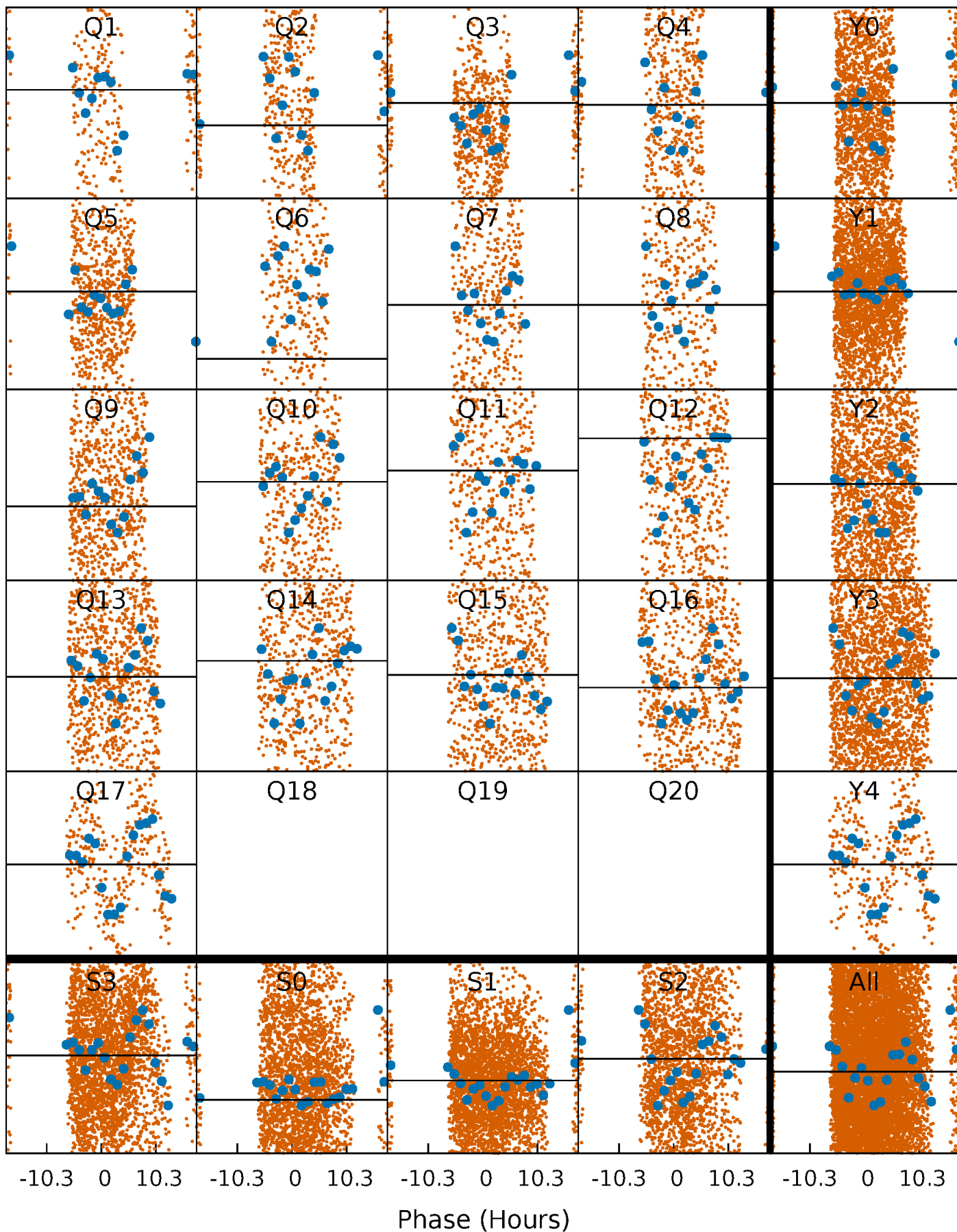
PDC Quarter-Phased Transit Curves

TCE 011671226-04 P= 2.957124 Days $T_0=131.548455$ (BKJD)



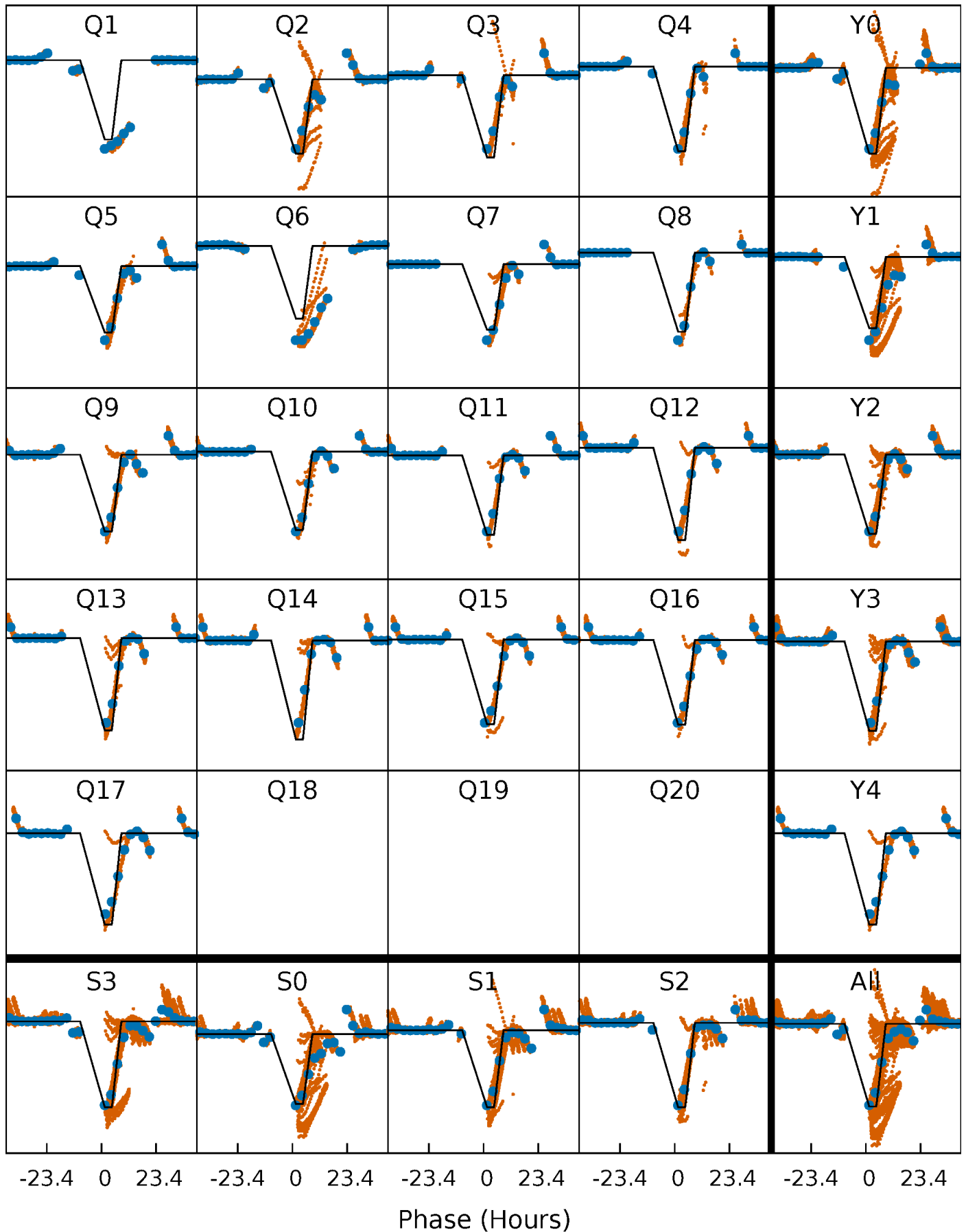
DV Quarter-Phased Transit Curves

TCE 011671226-04 P= 2.957124 Days $T_0=131.548455$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

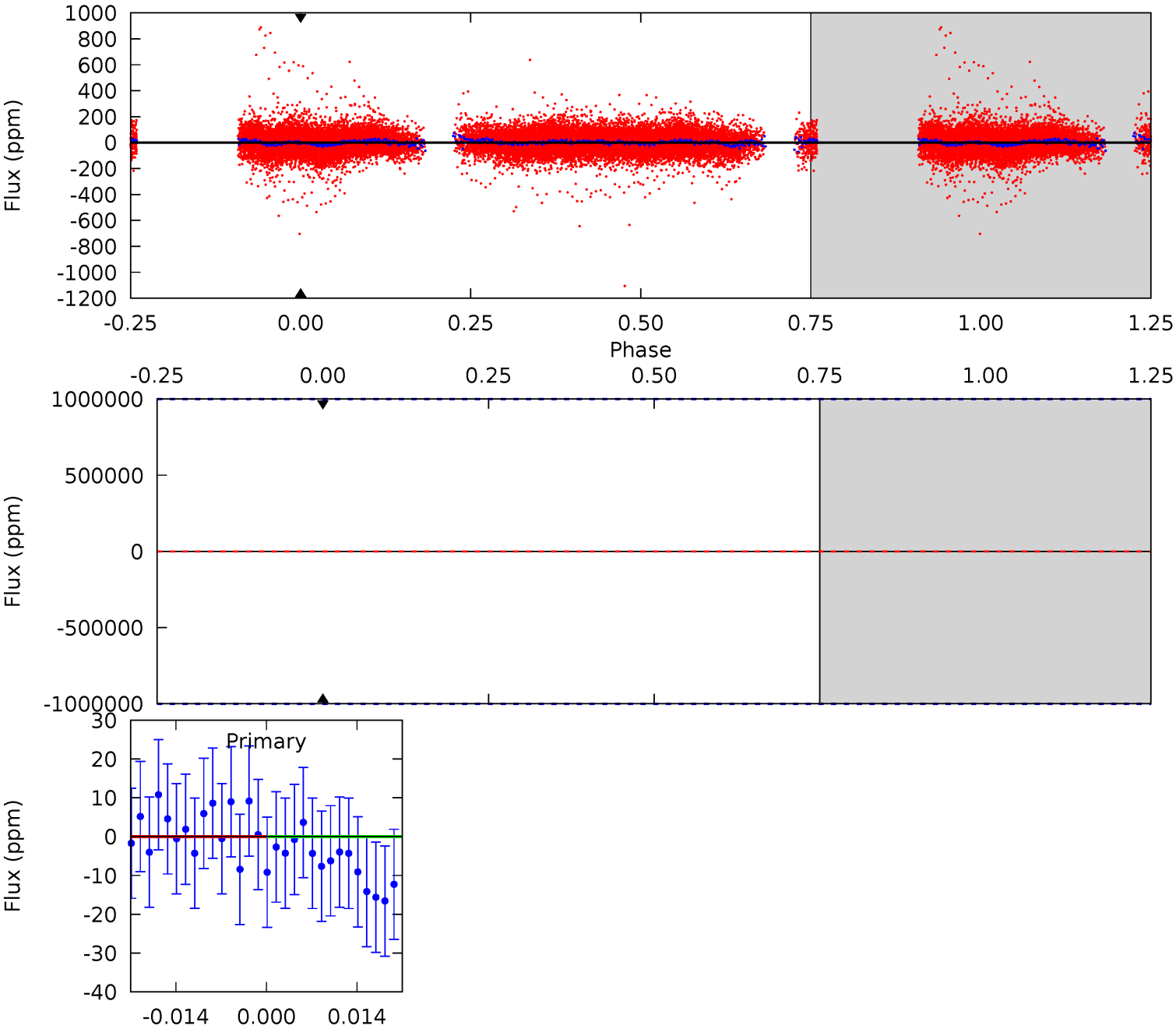
TCE 011671226-04 P= 2.957124 Days $T_0=134.172946$ (BKJD)



DV Model-Shift Uniqueness Test

011671226-04, P = 2.957124 Days, E = 128.591331 Days

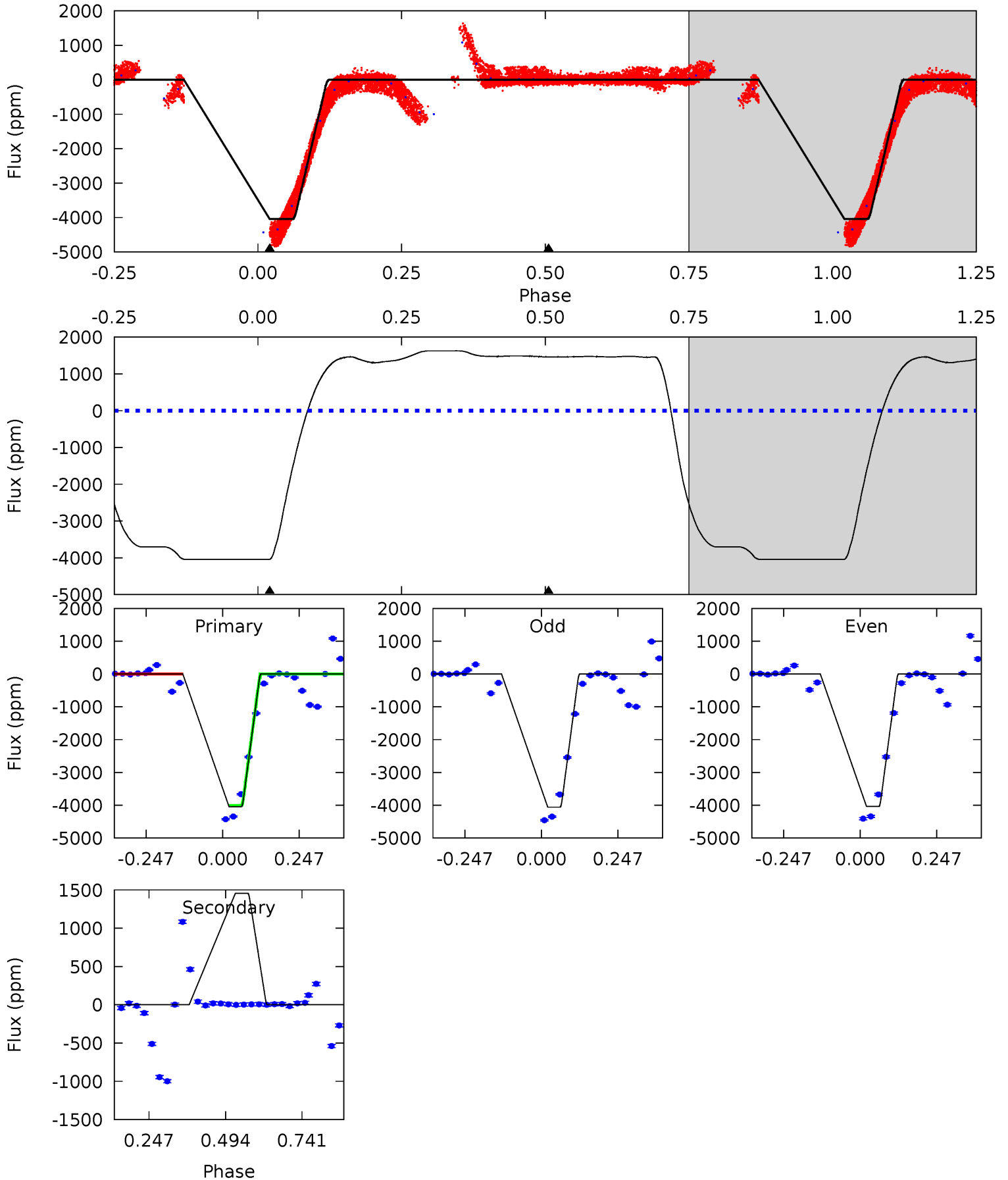
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

011671226-04, P = 2.957124 Days, E = 131.215822 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
674.4	-243.0	0	0	4.37	1.16	288.3	674.4	674.4	-243.0	-243.0	1.72	1.03	0.29	0



Stellar Parameters For KIC 011671226

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8300^{+201}_{-374}	$3.744^{+0.432}_{-0.135}$	$-0.100^{+0.250}_{-0.400}$	$3.180^{+0.961}_{-1.442}$	$2.046^{+0.371}_{-0.453}$	$0.090^{+0.345}_{-0.036}$
	+2%/-5%	+12%/-4%	+250%/-400%	+30%/-45%	+18%/-22%	+385%/-41%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 011671226-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$21.13^{+25.74}_{-14.79}$	3908^{+347}_{-505}	-7361^{+57633}_{-62420}	$-9.350^{+512.139}_{-649.856}$
Alt.	1457 ± 6	$31.59^{+29.04}_{-20.77}$	3896^{+337}_{-441}	-5175^{+896}_{-3397}	$-2.069^{+1.495}_{-15.579}$

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

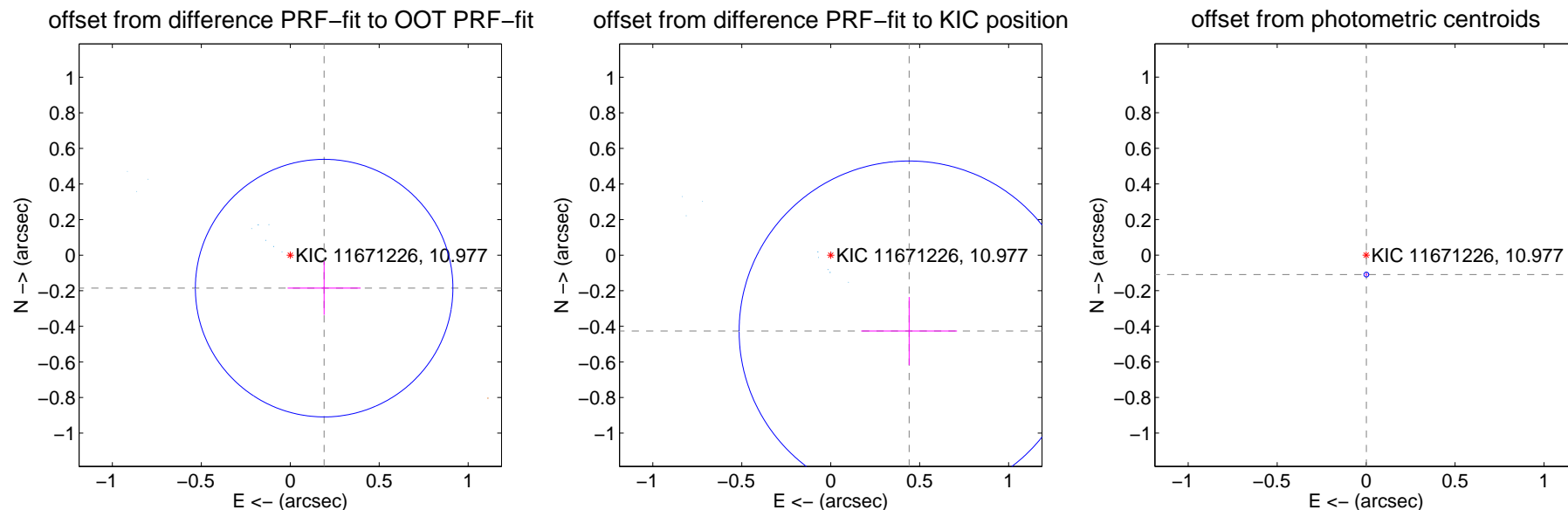
DV Centroid Data

Supplemental centroid analysis for 011671226-04. **Kepler magnitude: 10.98.** Transit SNR -1.00

There are 15 quarters with good PRF difference image offsets

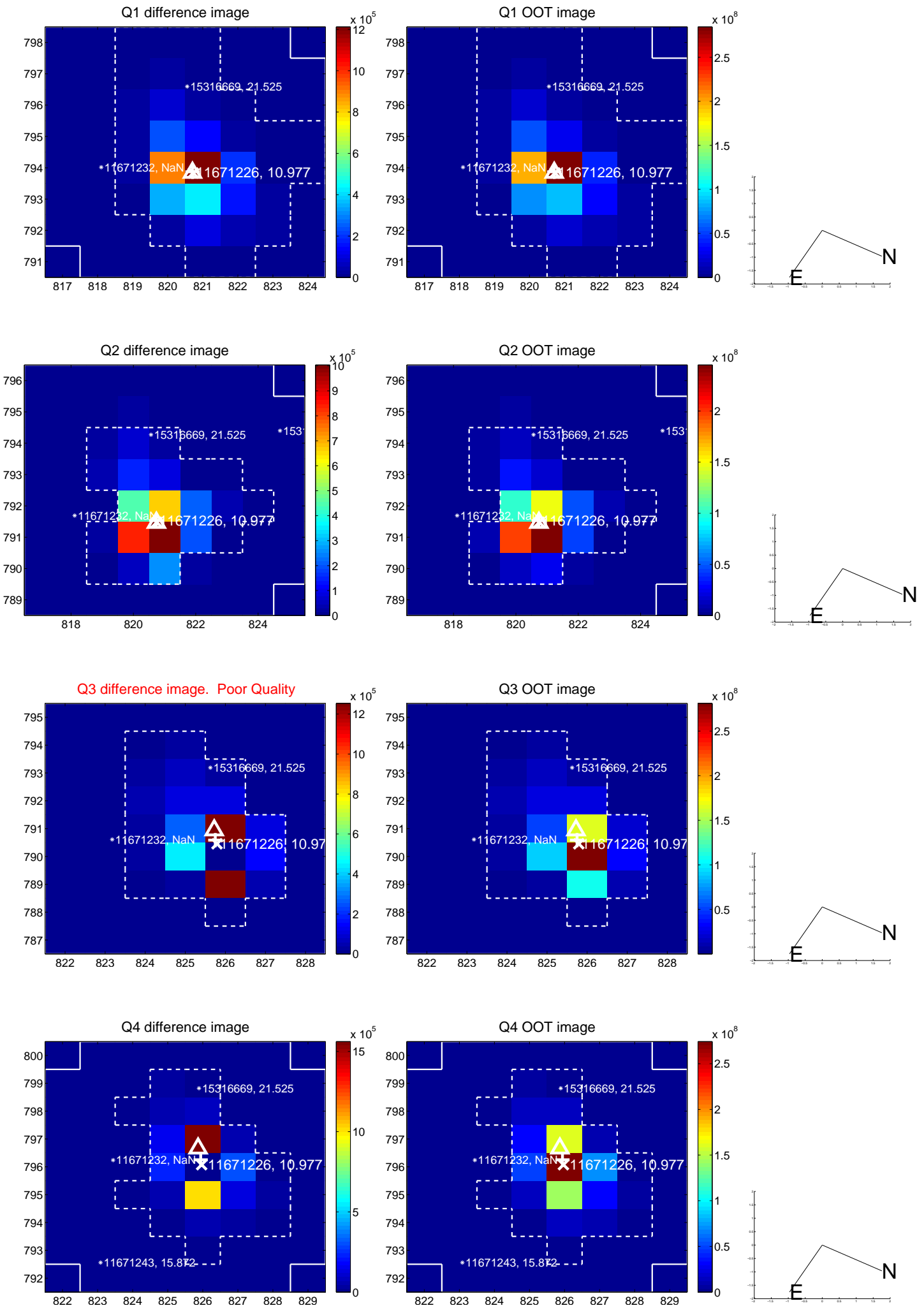
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.266 ± 0.241	1.10	-0.190 ± 0.205	-0.185 ± 0.150
PRF-fit source offset from KIC position	0.613 ± 0.318	1.93	-0.441 ± 0.269	-0.426 ± 0.191
photometric centroid source offset	0.11 ± 0.00	24.34	-0.00 ± 0.00	-0.11 ± 0.00

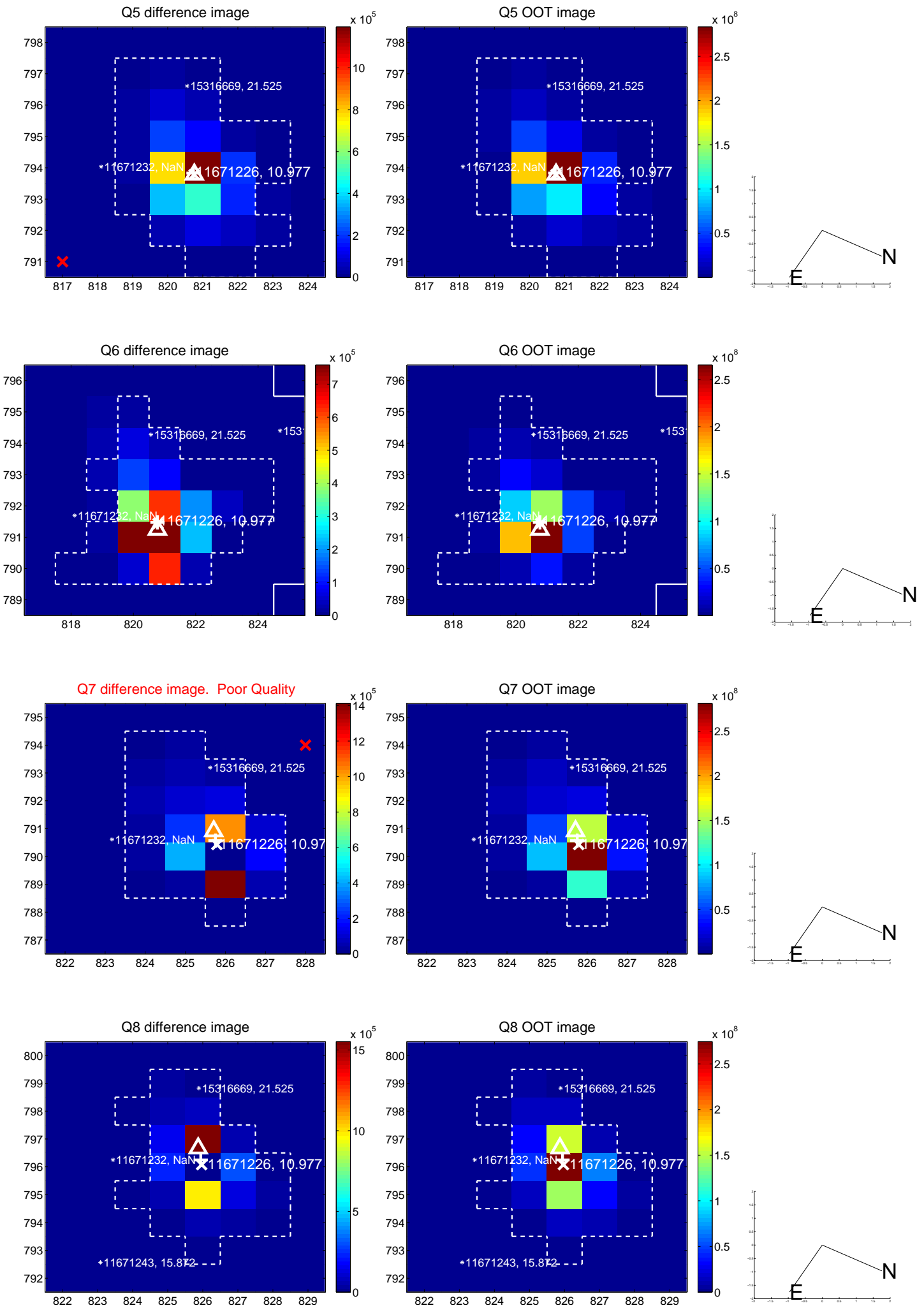


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

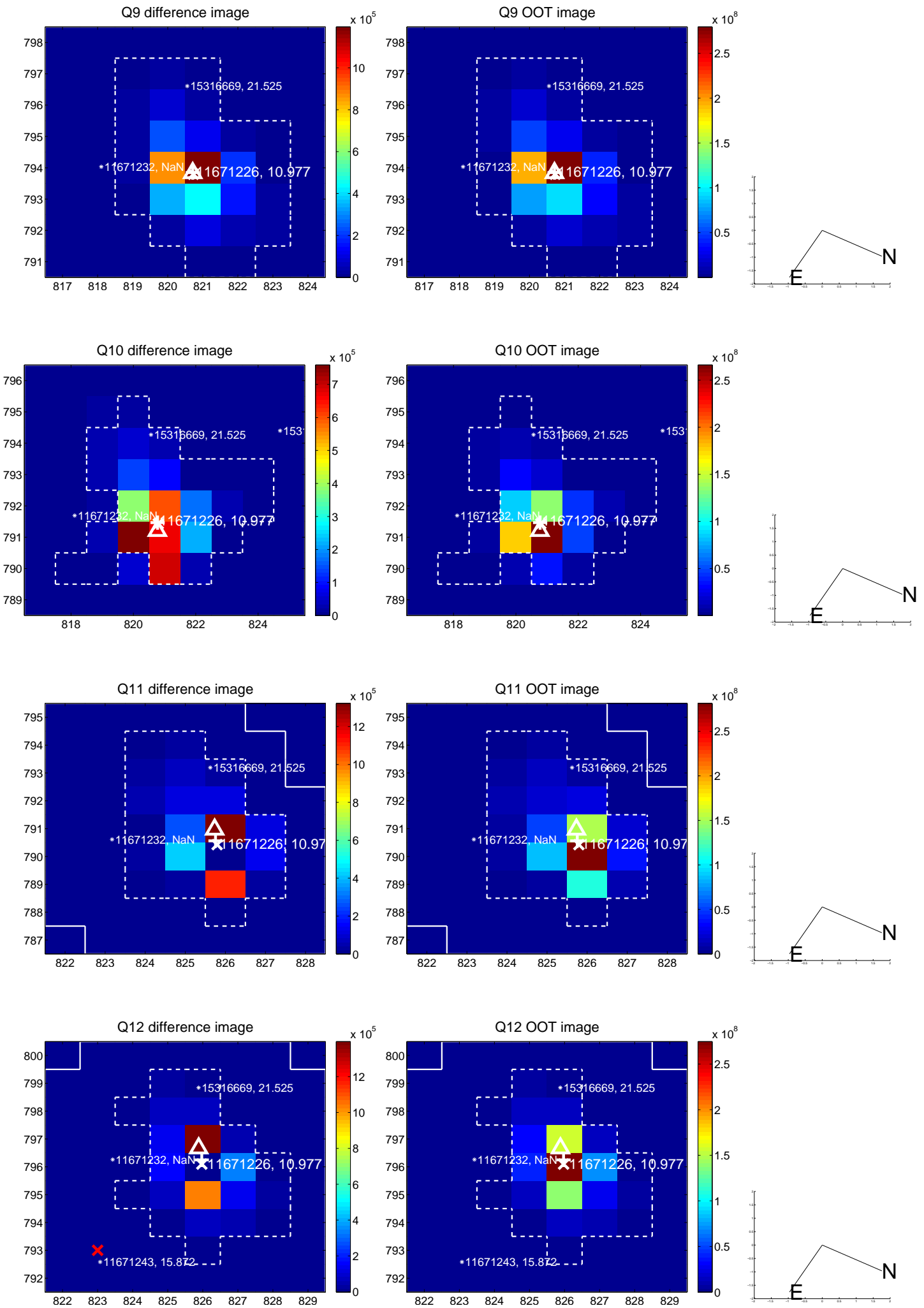
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



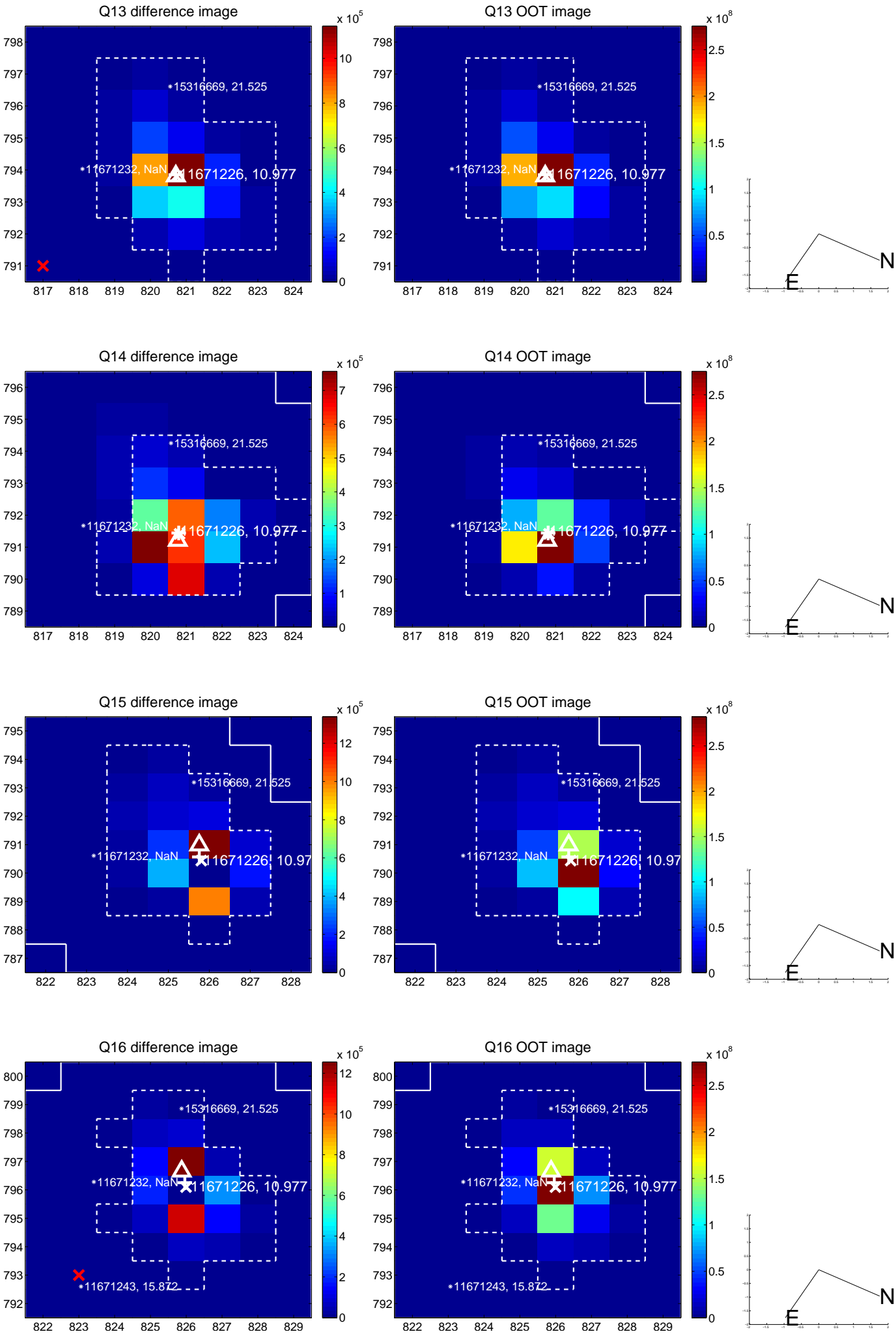
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



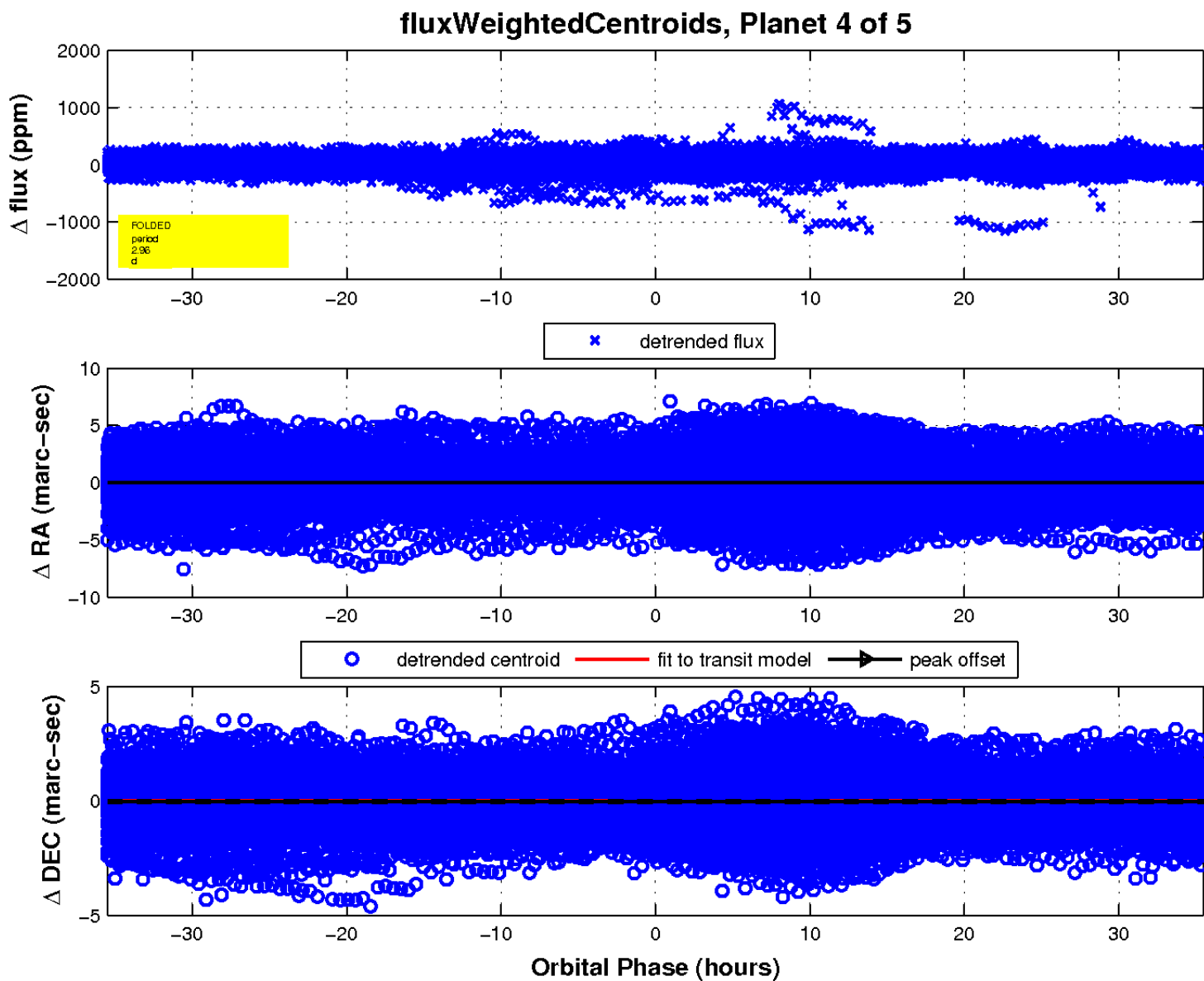
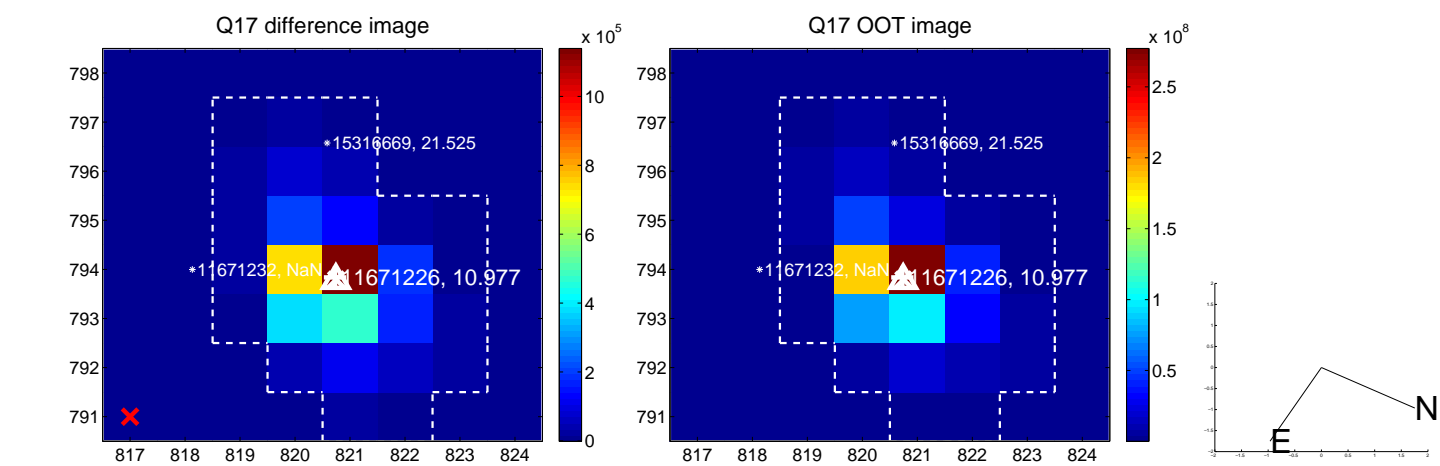
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

