

KIC 006975129

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})
006975129-01	OBS	1628.01	19.747346	147.104304	456.5	3.591	41.2	42.5	1.15	6243	2.86	76.68
006975129-02	OBS	1628.02	1.772461	132.086058	79.4	2.492	21.7	24.4	1.15	6243	1.21	1908.00
006975129-03	OBS	1628.03	37.840596	146.768630	217.0	6.838	11.8	12.7	1.15	6243	1.98	32.22

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006975129-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-03	OBS	FP	0.00	1	0	0	0	MOD_NONUNIQ_DV

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

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

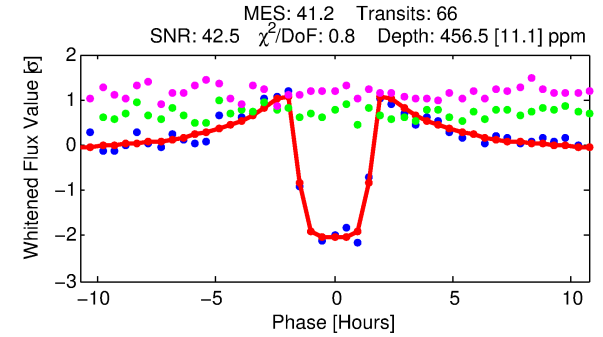
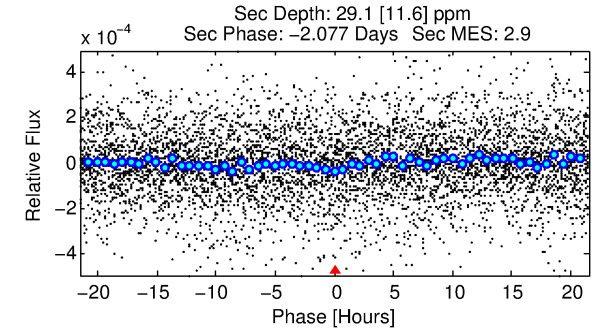
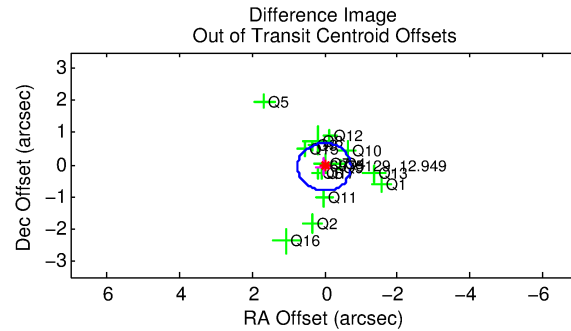
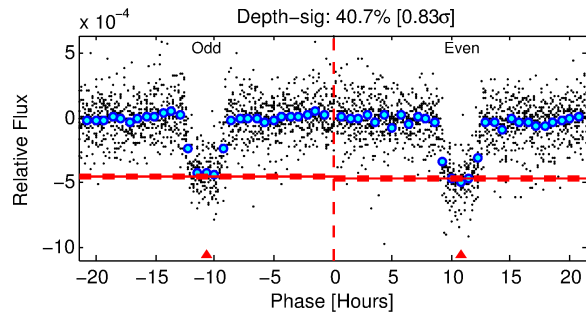
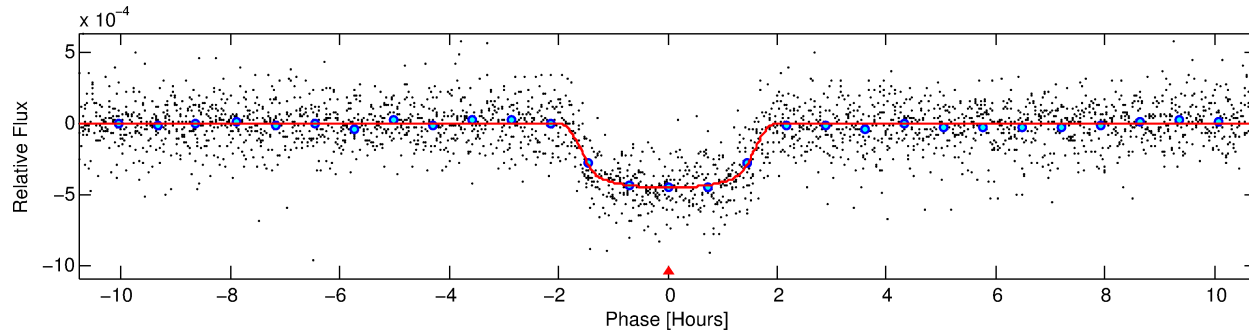
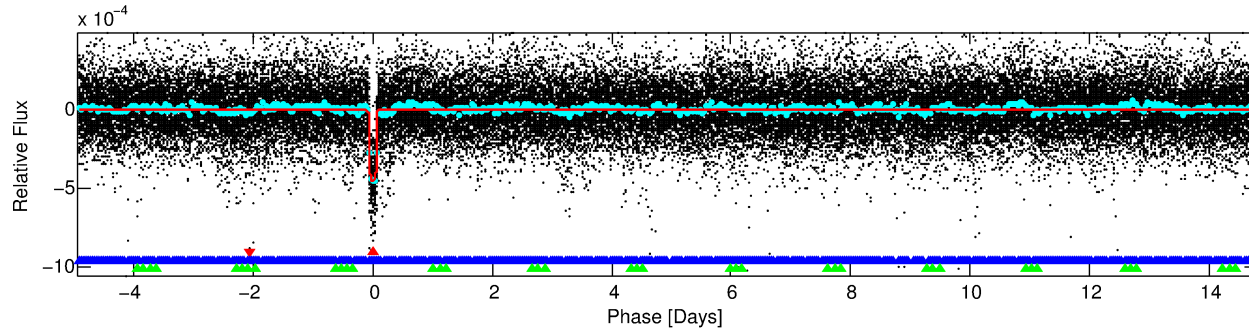
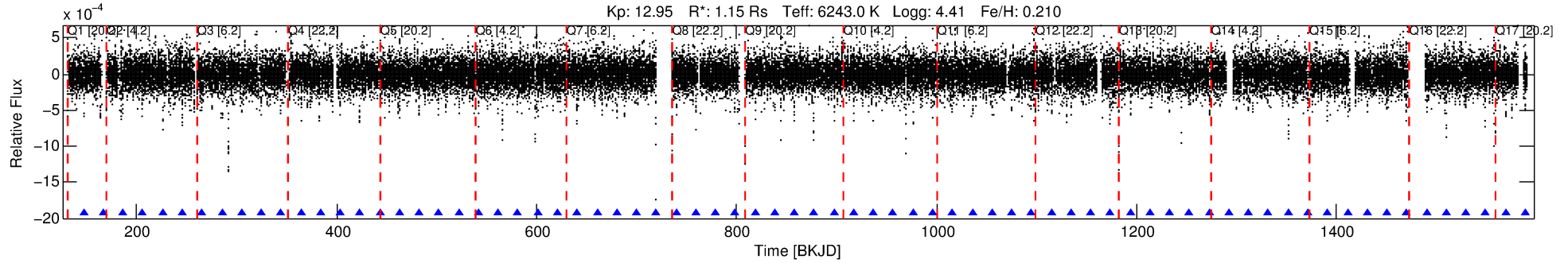
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006975129-01

No Significant Match Found

DV One-Page Summary

KIC: 6975129 Candidate: 1 of 3 Period: 19.747 d
KOI: K01628.01 Name: Kepler-312c Corr: 0.975



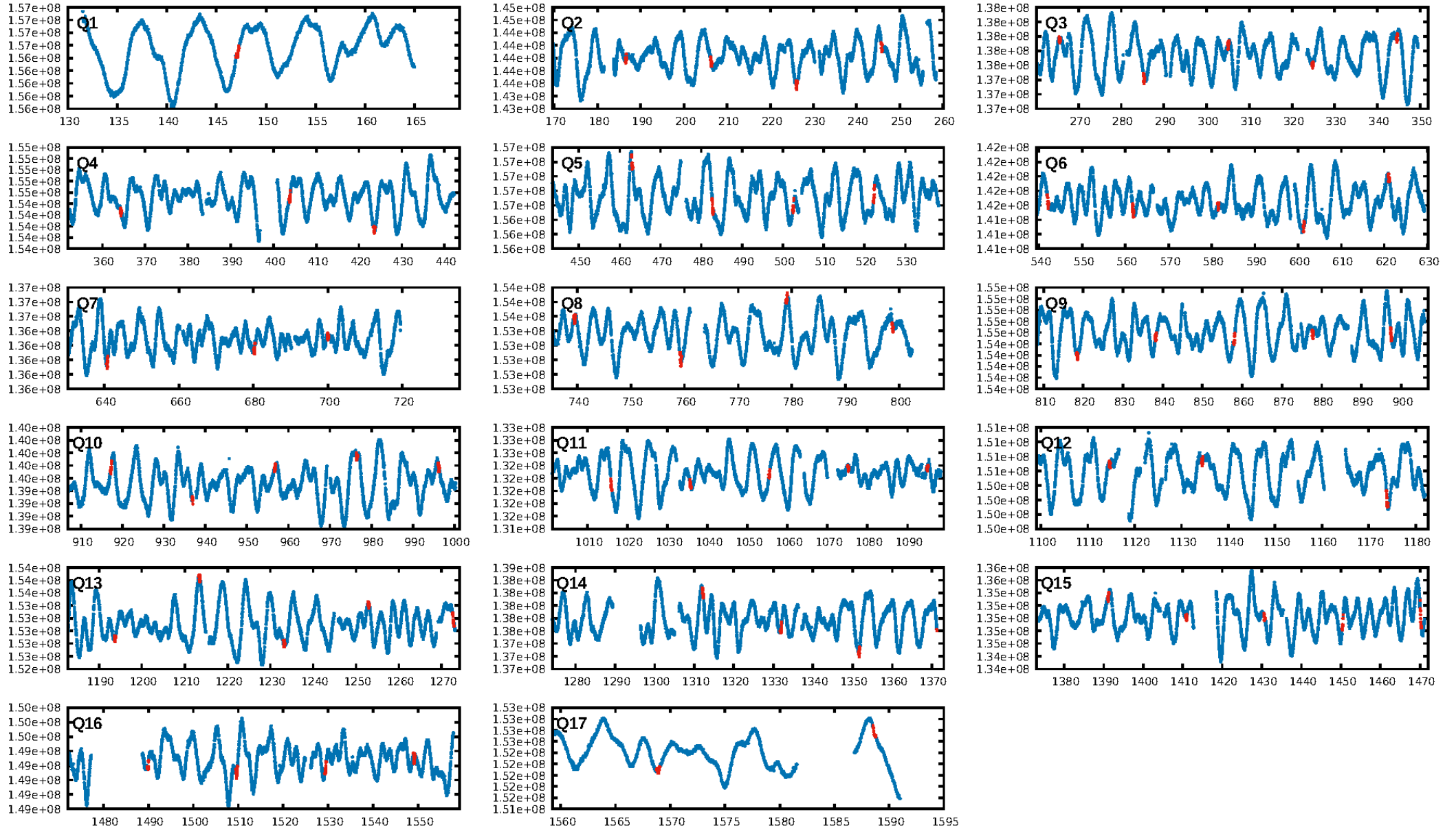
DV Fit Results:

Period = 19.74735 [0.00003] d
Epoch = 147.1043 [0.0014] BKJD
Rp/R* = 0.0228 [0.0012]
a/R* = 21.37 [5.33]
b = 0.89 [0.06]
Seff = 76.68 [19.52]
Teq = 755 [48] K
Rp = 2.86 [0.52] Re
a = 0.1531 [0.0240] AU
Ag = 45.75 [21.83] [2.05 σ]
Teffp = 3034 [320] K [7.04 σ]

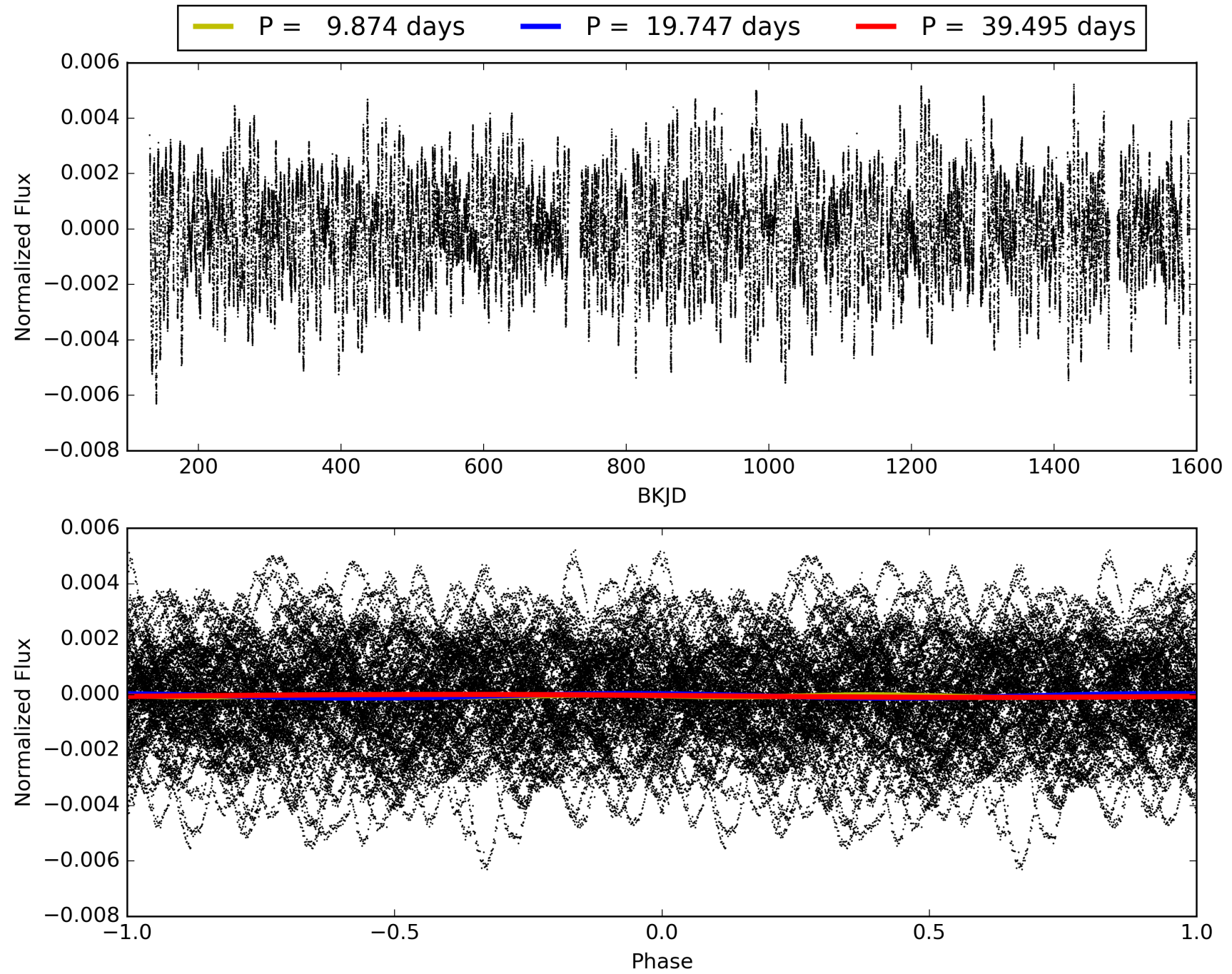
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [98.70 σ]
LongPeriod-sig: 100.0% [56.22 σ]
ModelChiSquare2-sig: 76.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.70e-292
RollingBand-fgt: 1.00 [63/63]
GhostDiagnostic-chr: 4.675
Centroid-sig: 0.1%
Centroid-so: 0.499 arcsec [2.23 σ]
OotOffset-rm: 0.073 arcsec [0.30 σ]
KicOffset-rm: 0.151 arcsec [0.56 σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 0.94 [15/16]

TCE 006975129-01, PDC Light Curves

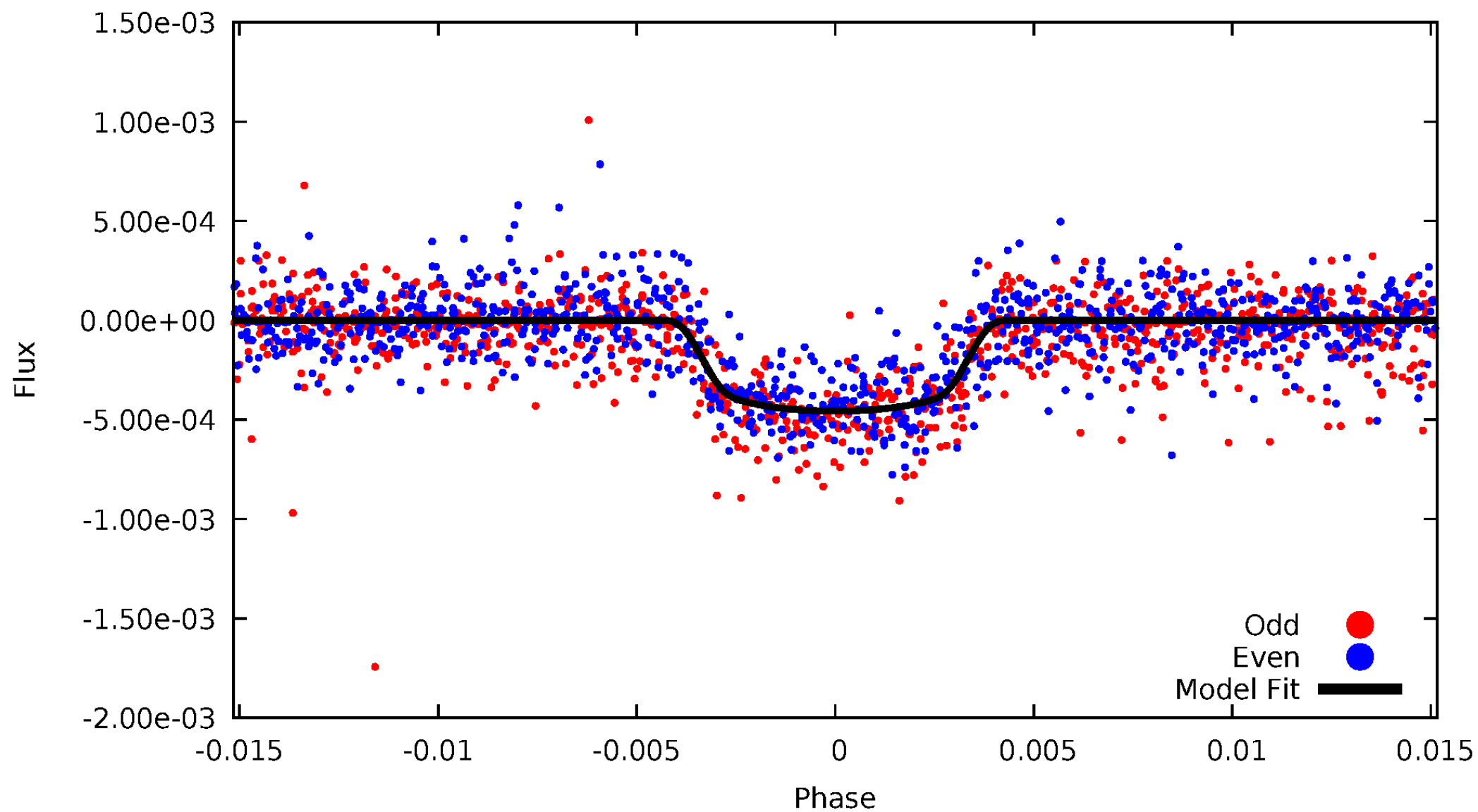


TCE 006975129-01



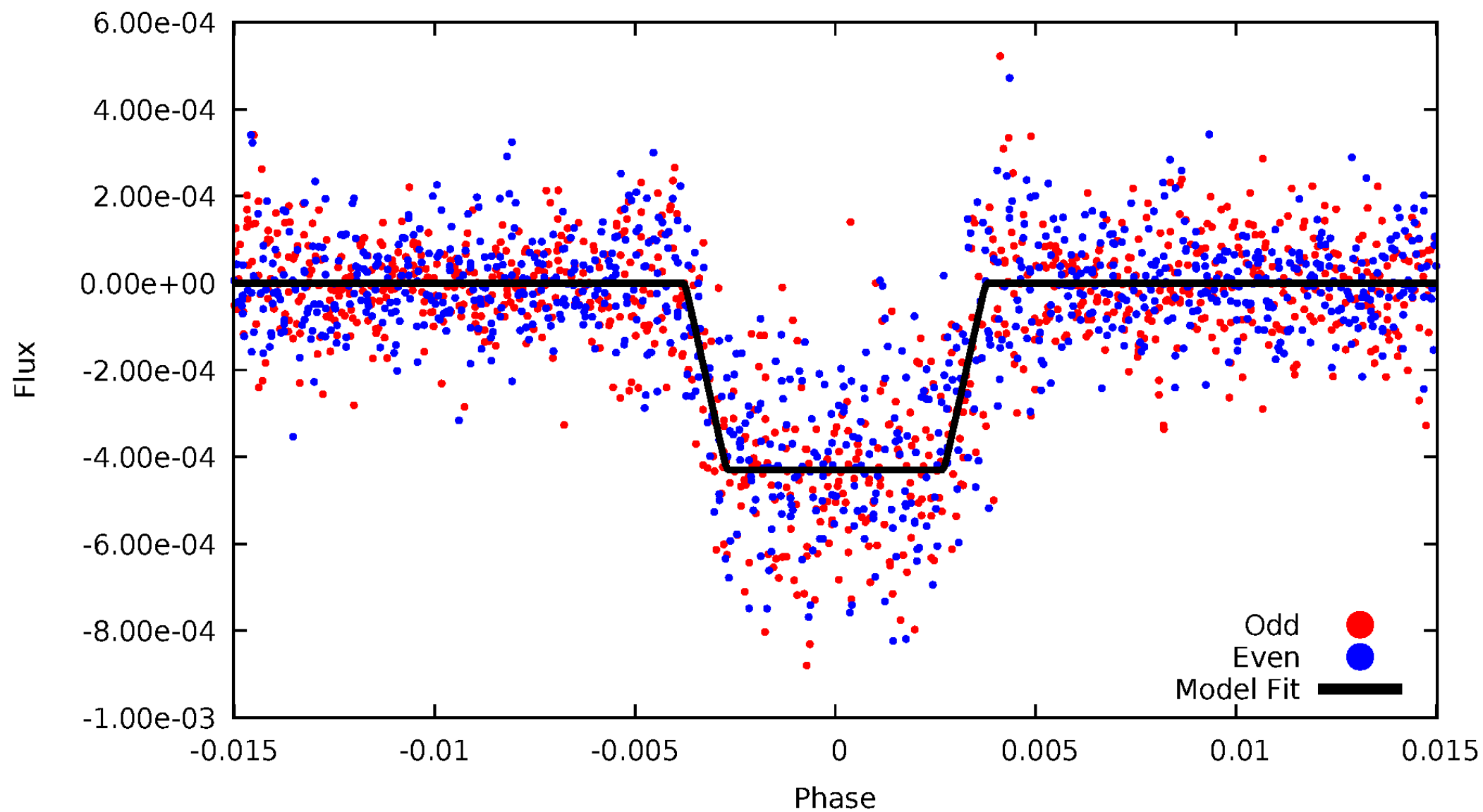
DV Odd/Even

TCE 006975129-01



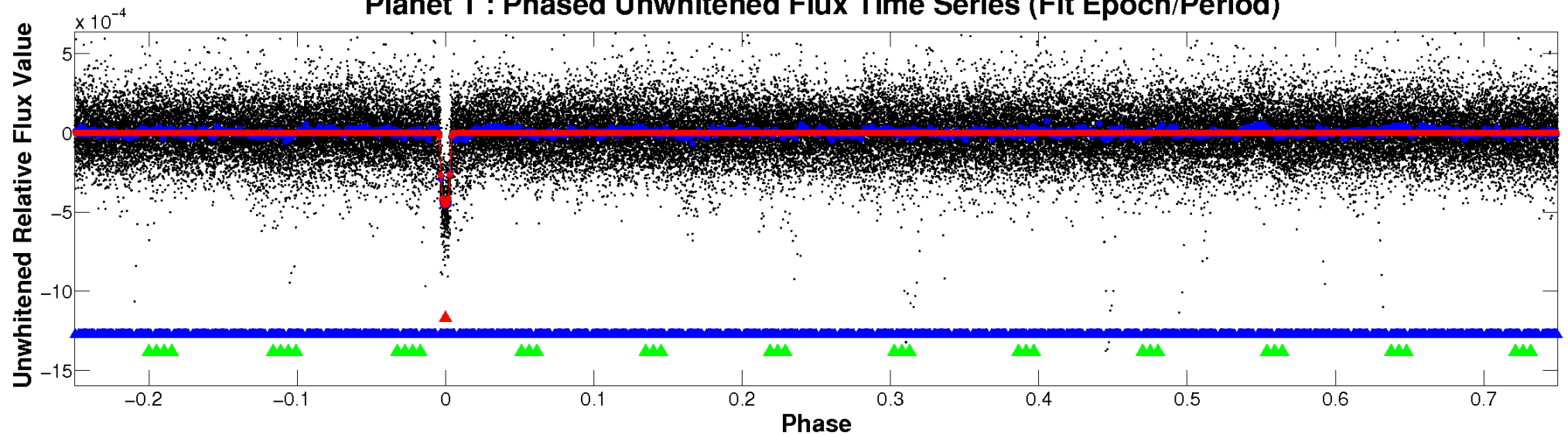
ALT Odd/Even

TCE 006975129-01

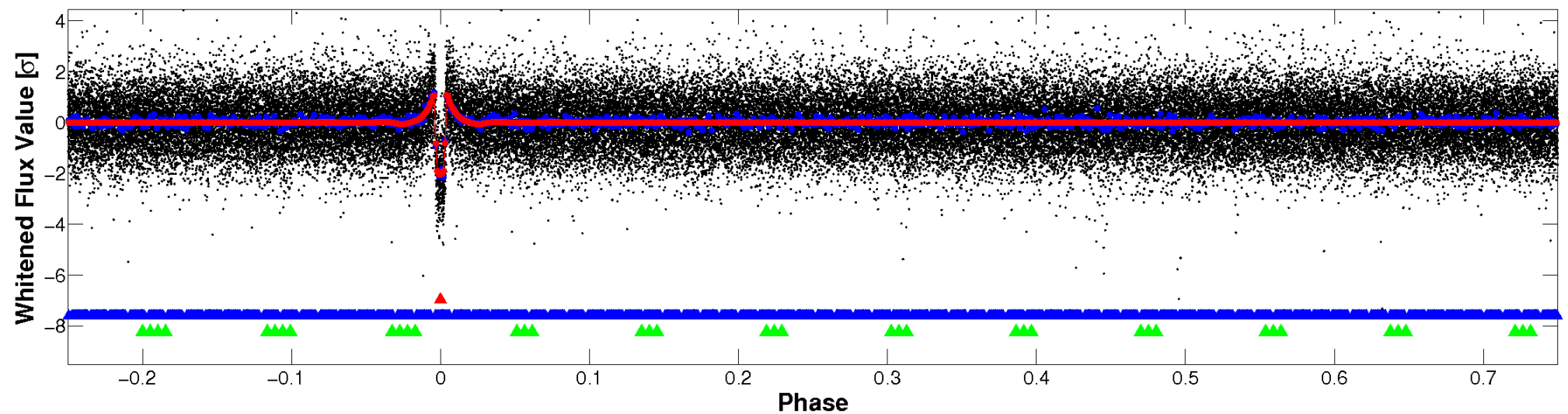


Non-Whitened Vs. Whitened Light Curve

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

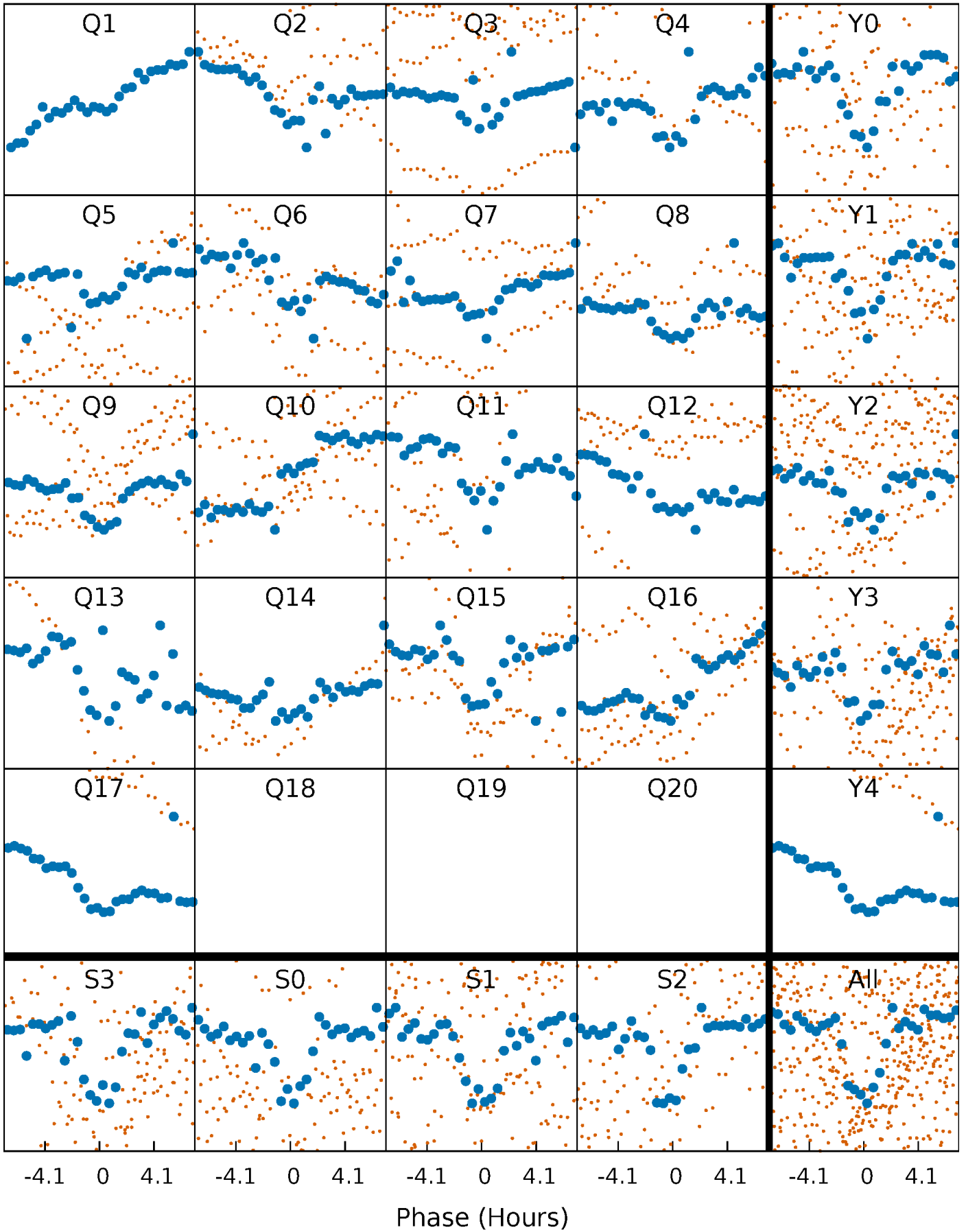


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



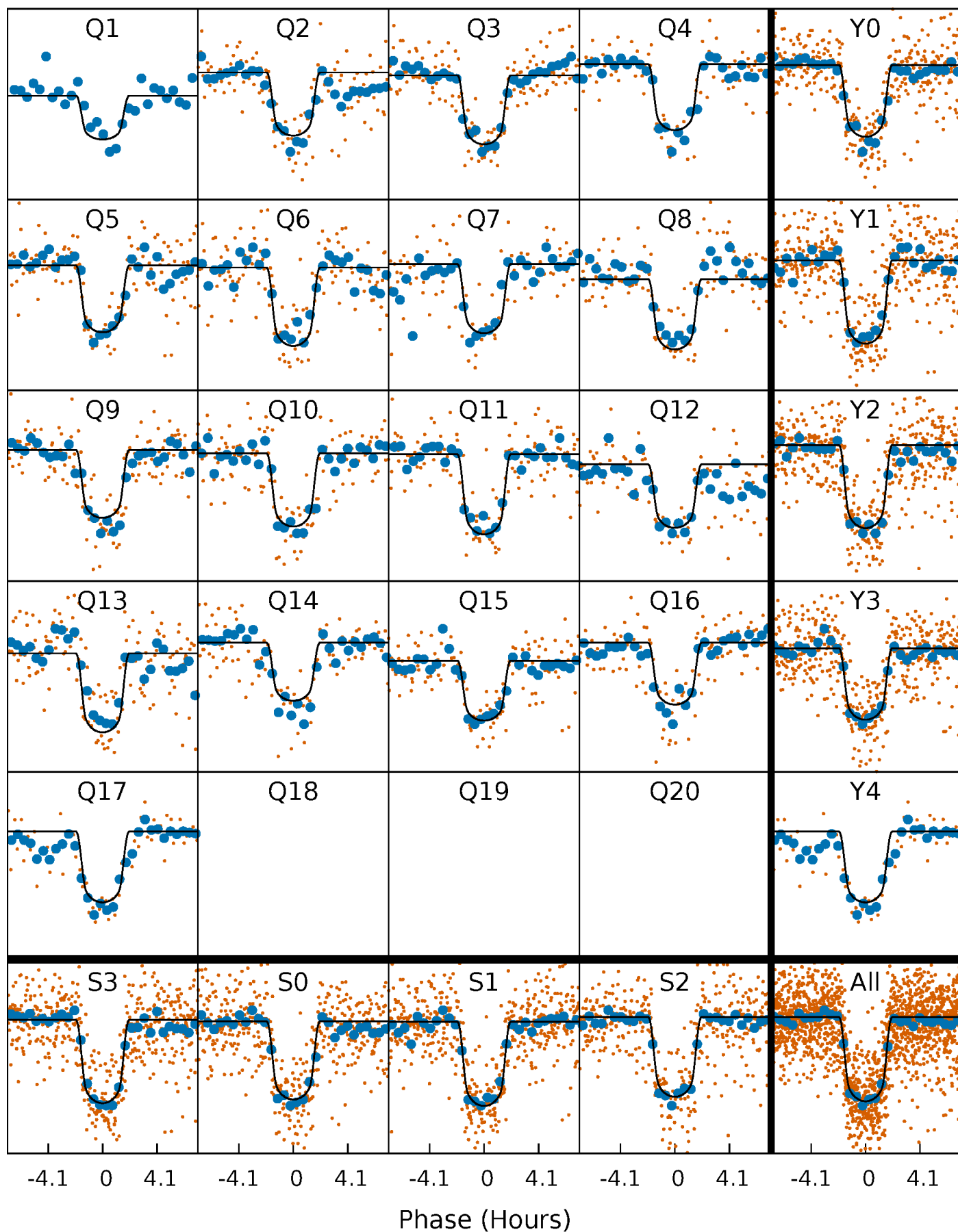
PDC Quarter-Phased Transit Curves

TCE 006975129-01 P= 19.747346 Days $T_0=147.104304$ (BKJD)



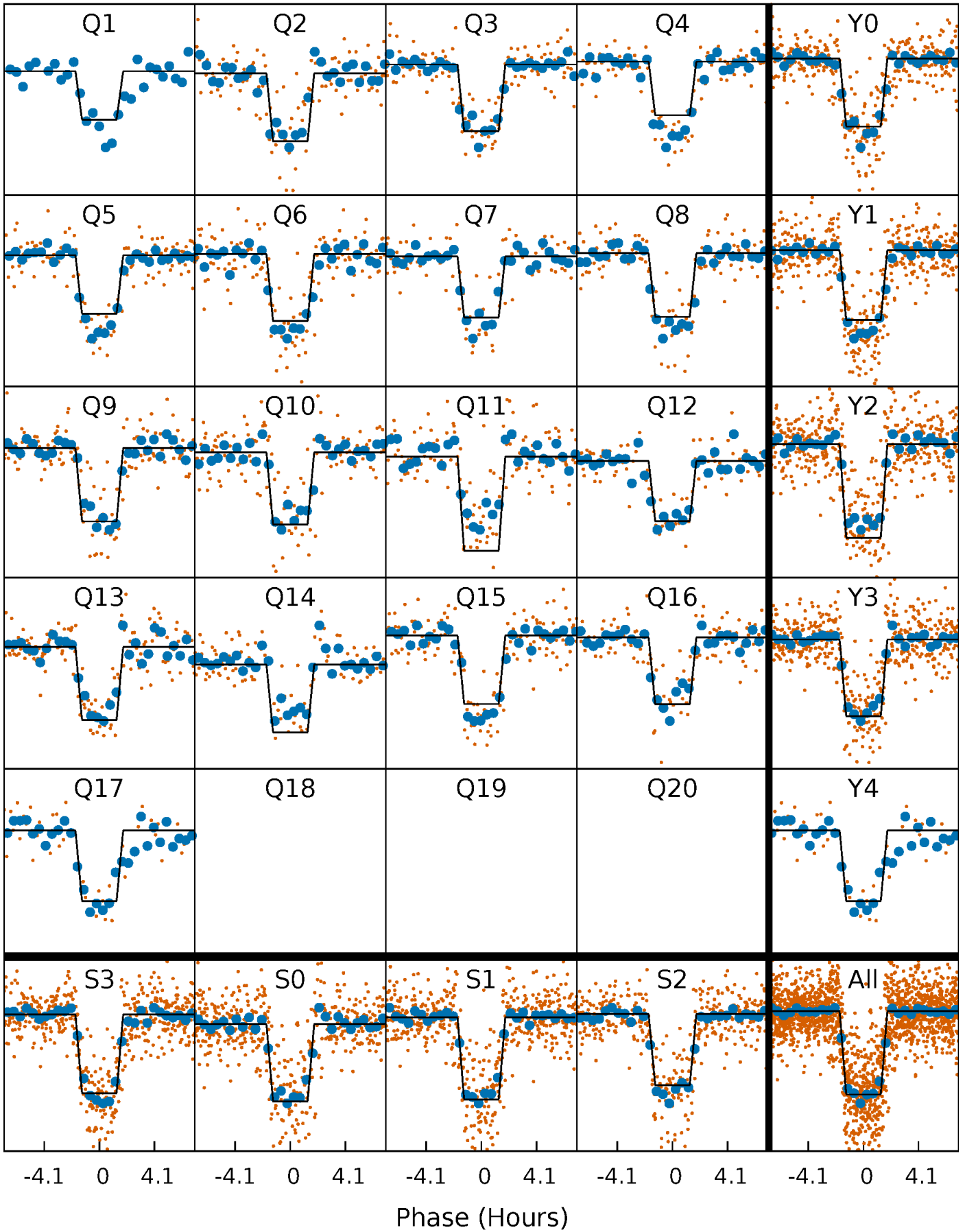
DV Quarter-Phased Transit Curves

TCE 006975129-01 P= 19.747346 Days $T_0=147.104304$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

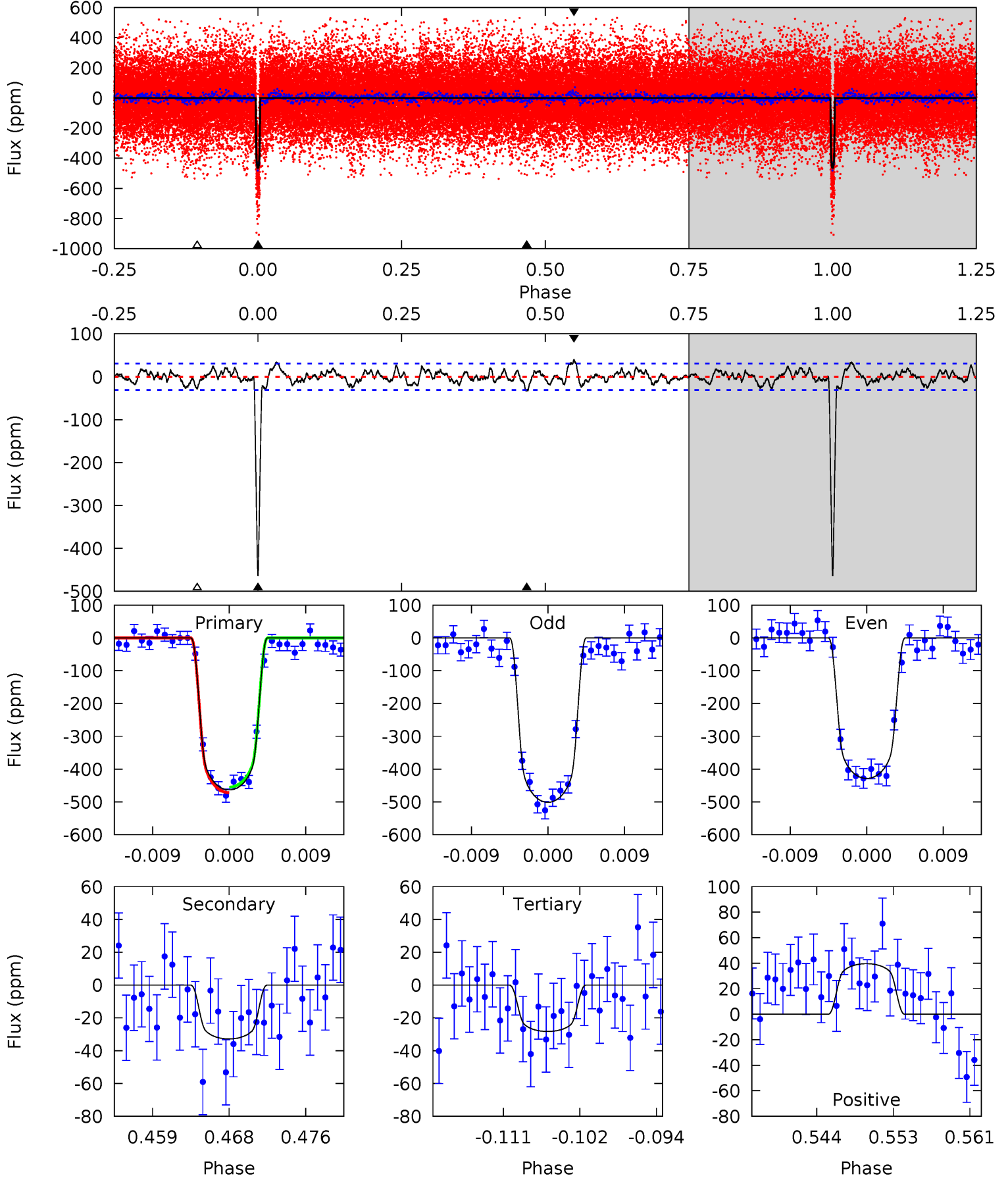
TCE 006975129-01 P= 19.747344 Days $T_0=147.104172$ (BKJD)



DV Model-Shift Uniqueness Test

006975129-01, P = 19.747346 Days, E = 127.356958 Days

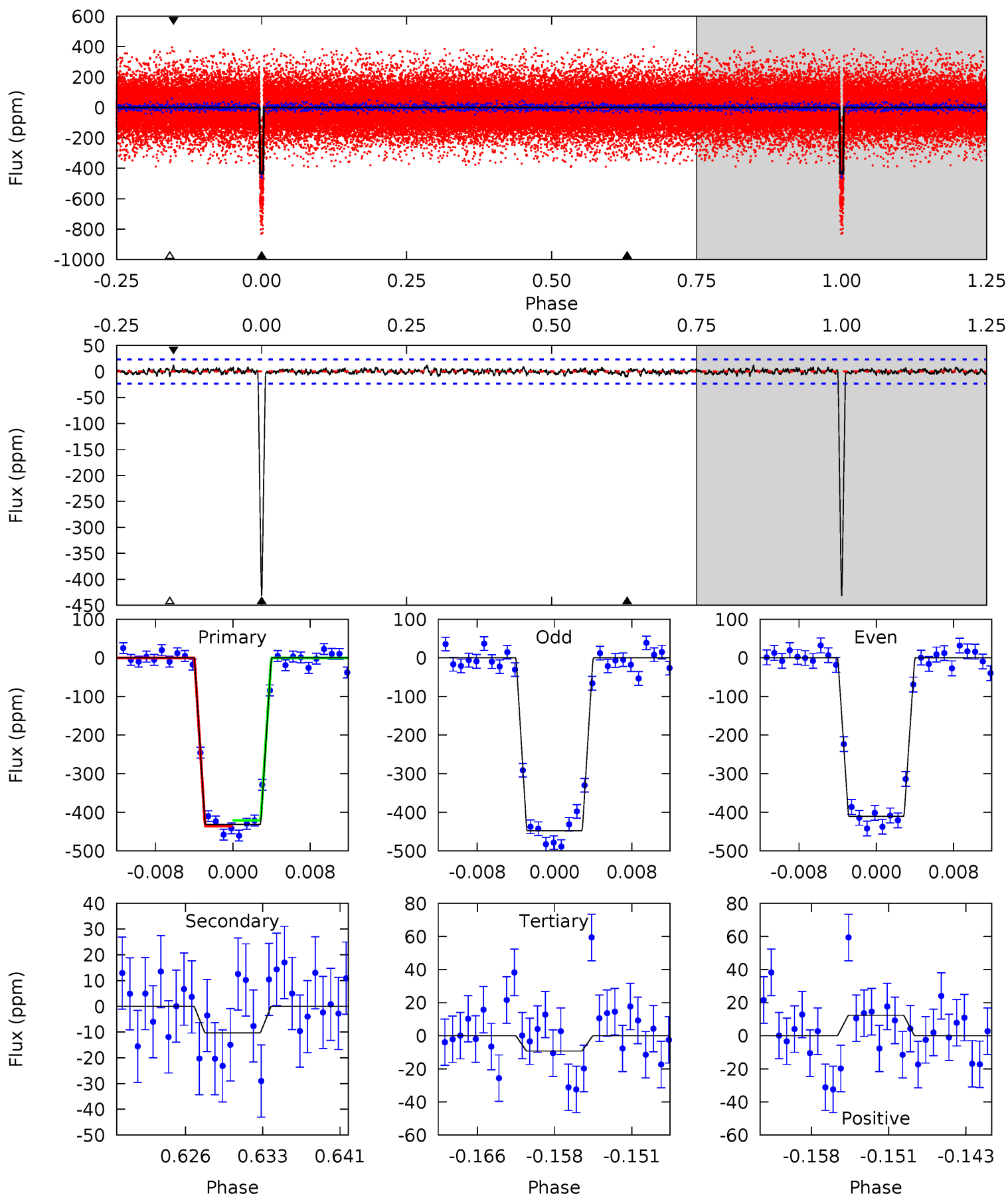
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
76.3	5.40	4.66	6.52	5.06	2.63	1.92	71.6	69.7	0.75	-1.11	6.02	1.03	0.08	1.39



Alt Model-Shift Uniqueness Test

006975129-01, $P = 19.747344$ Days, $E = 127.356828$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
93.7	2.24	2.01	2.67	5.08	2.67	0.67	91.7	91.1	0.22	-0.44	4.01	0.98	0.03	1.58



Stellar Parameters For KIC 006975129

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6243^{+99}_{-136}	$4.406^{+0.026}_{-0.136}$	$0.210^{+0.150}_{-0.200}$	$1.149^{+0.201}_{-0.067}$	$1.226^{+0.076}_{-0.102}$	$1.139^{+0.146}_{-0.438}$
	+2%/-2%	+1%/-3%	+71%/-95%	+17%/-6%	+6%/-8%	+13%/-38%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006975129-01 / KOI 1628.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-33 ± 6	$2.94^{+0.30}_{-0.23}$	1068^{+44}_{-30}	3569^{+133}_{-127}	47^{+13}_{-11}
Alt.	-10 ± 5	$2.67^{+0.27}_{-0.20}$	1068^{+46}_{-31}	3074^{+198}_{-282}	18^{+9}_{-9}

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

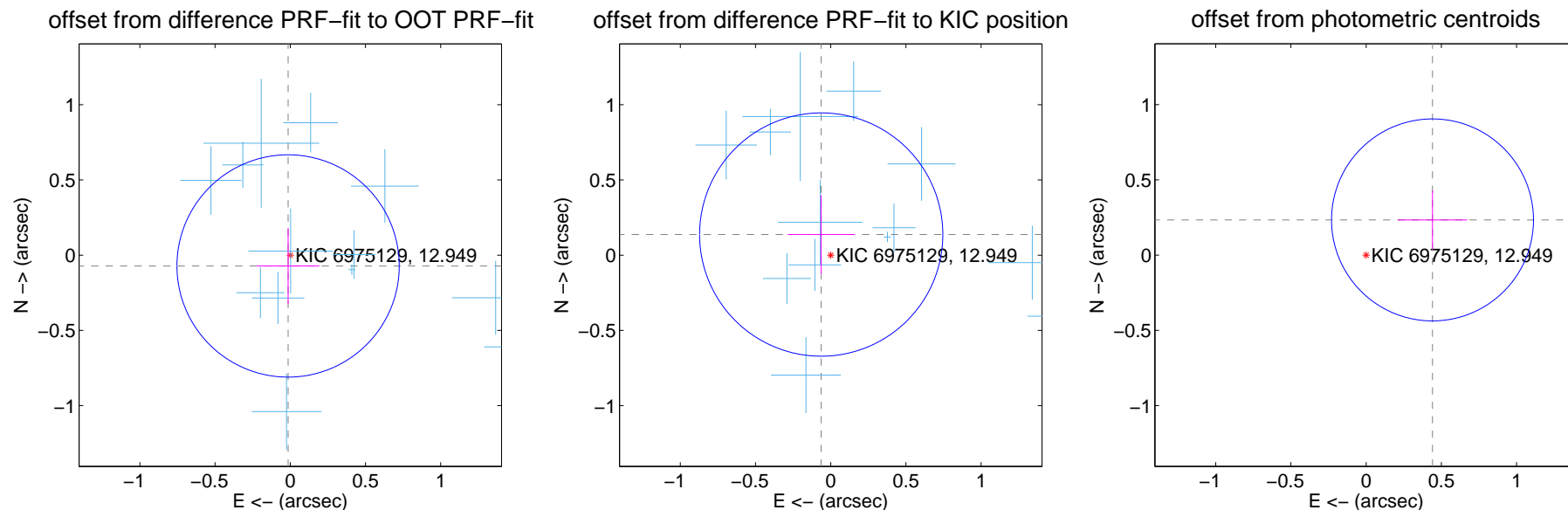
DV Centroid Data

Supplemental centroid analysis for 006975129-01. Kepler magnitude: 12.95. Transit SNR 42.55

There are 15 quarters with good PRF difference image offsets

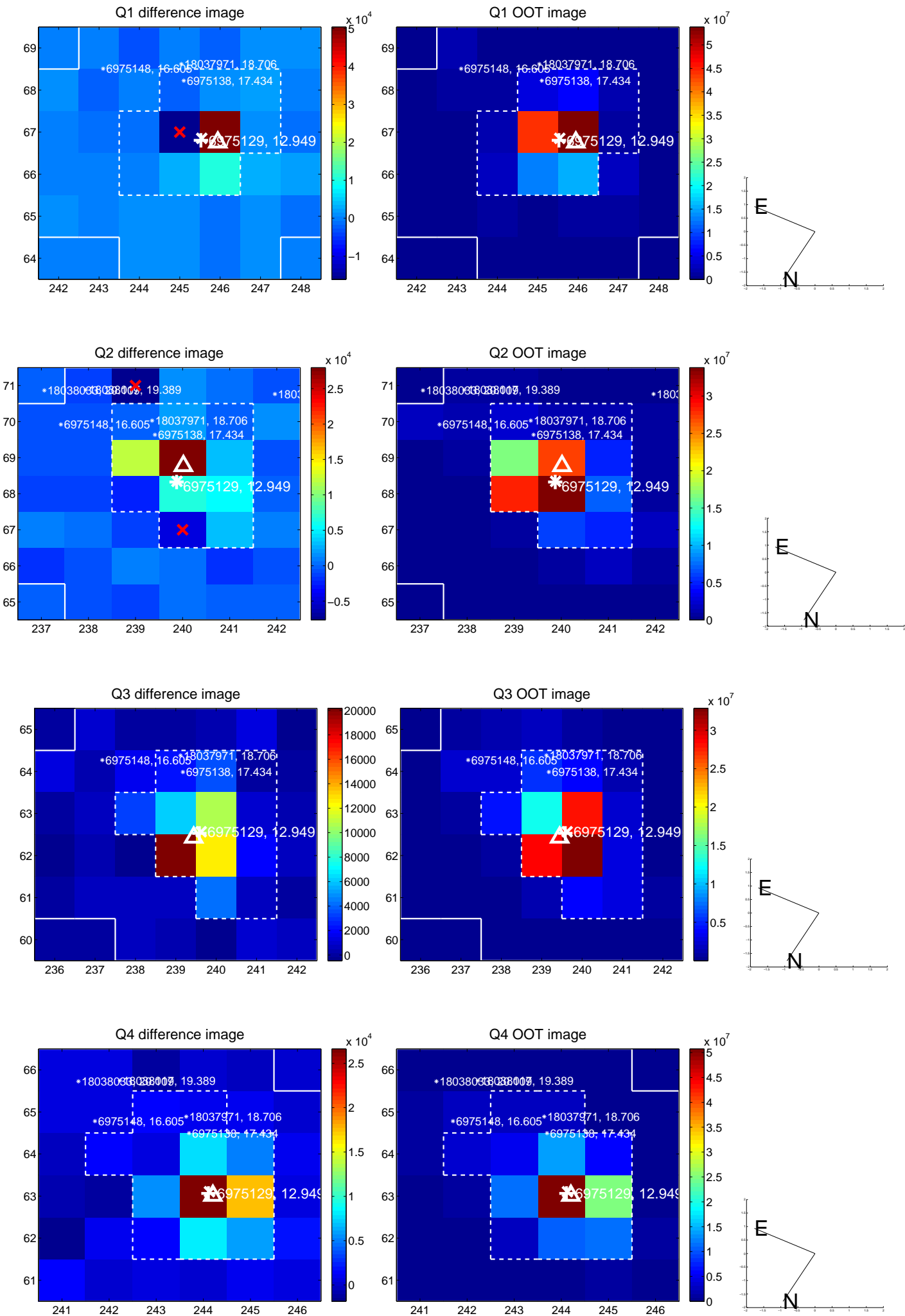
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.073 ± 0.246	0.30	0.014 ± 0.207	-0.072 ± 0.252
PRF-fit source offset from KIC position	0.151 ± 0.269	0.56	0.063 ± 0.224	0.137 ± 0.261
photometric centroid source offset	0.50 ± 0.22	2.23	-0.44 ± 0.23	0.23 ± 0.20

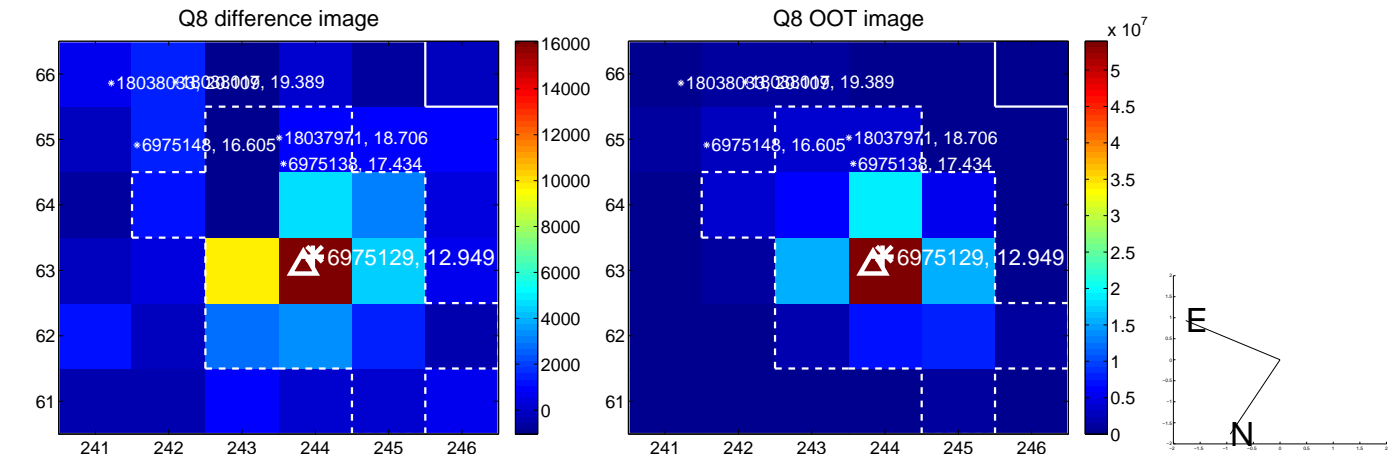
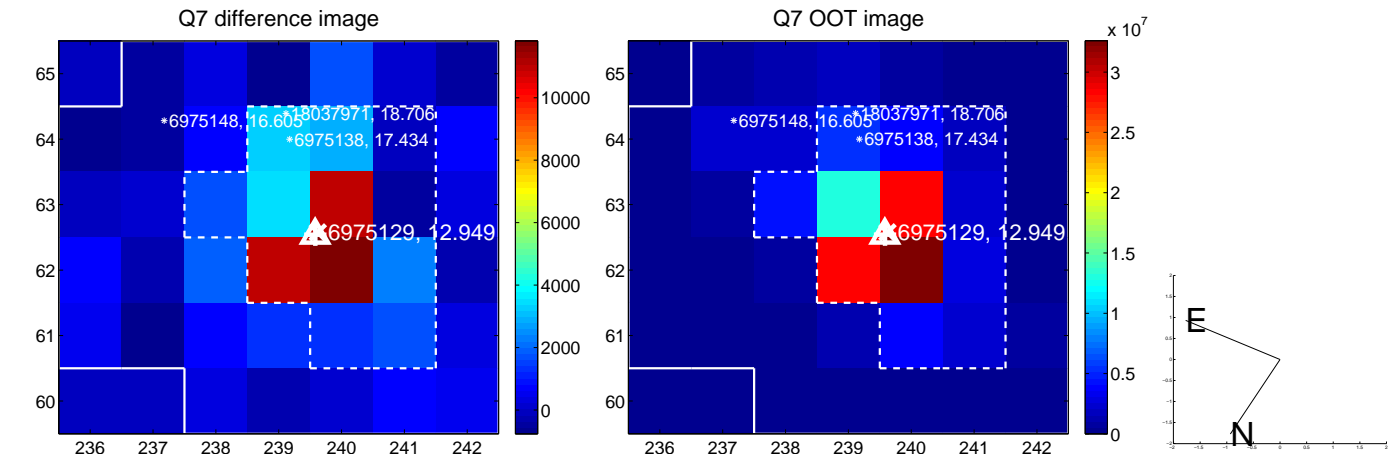
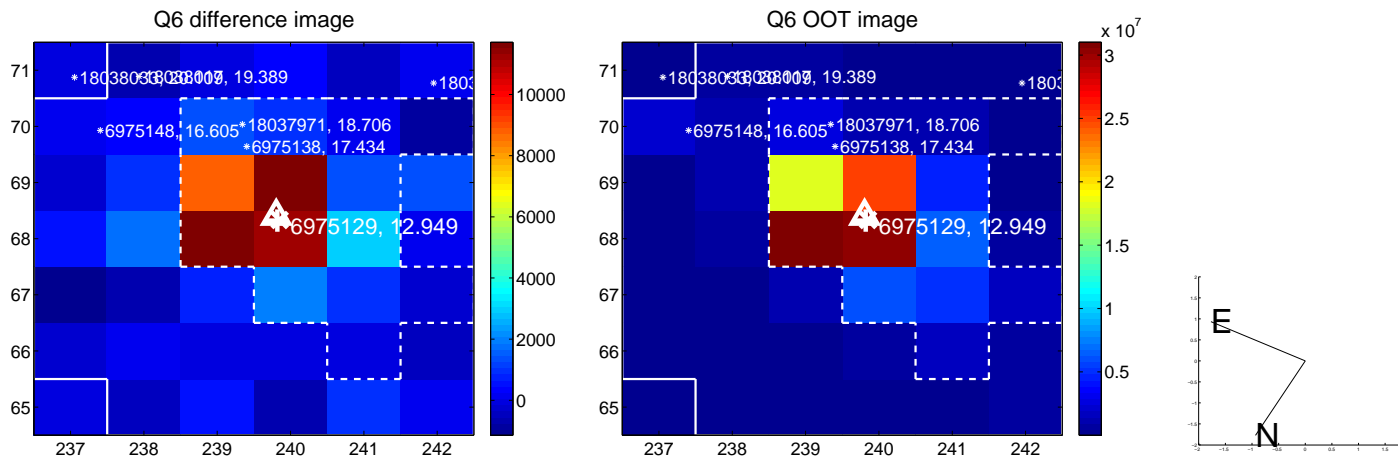
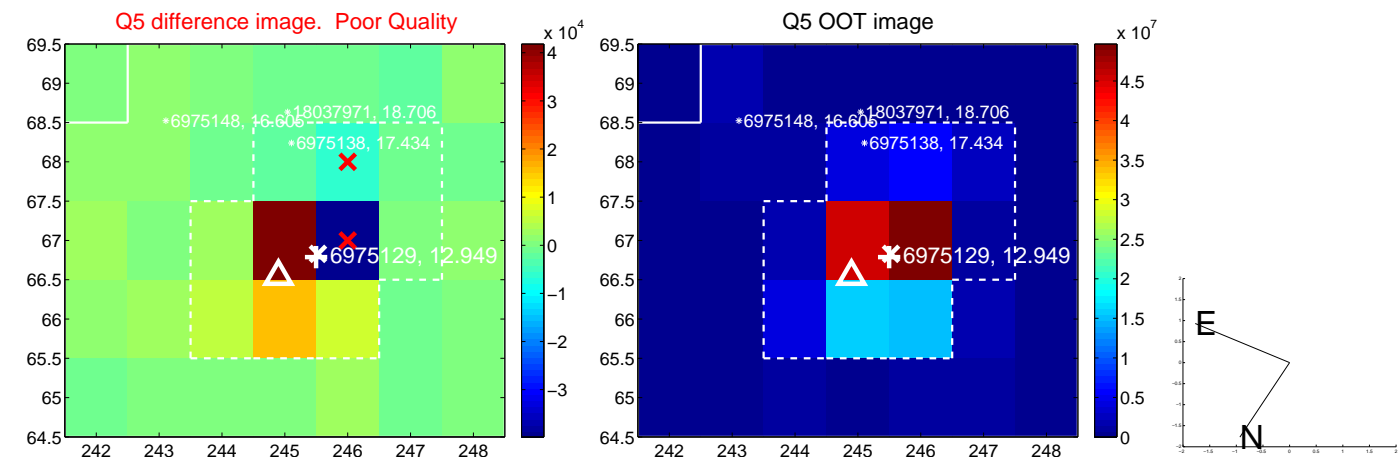


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

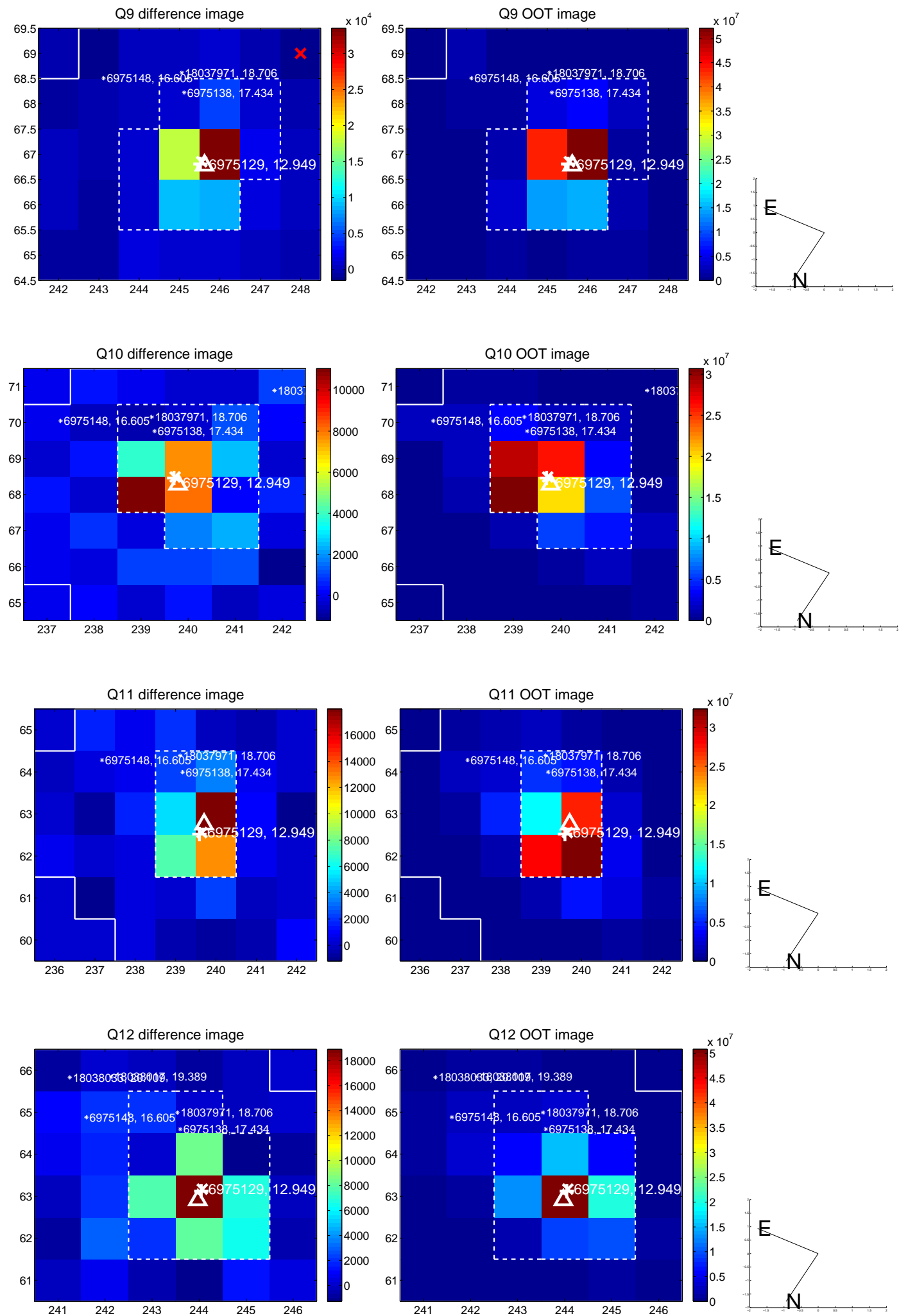
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



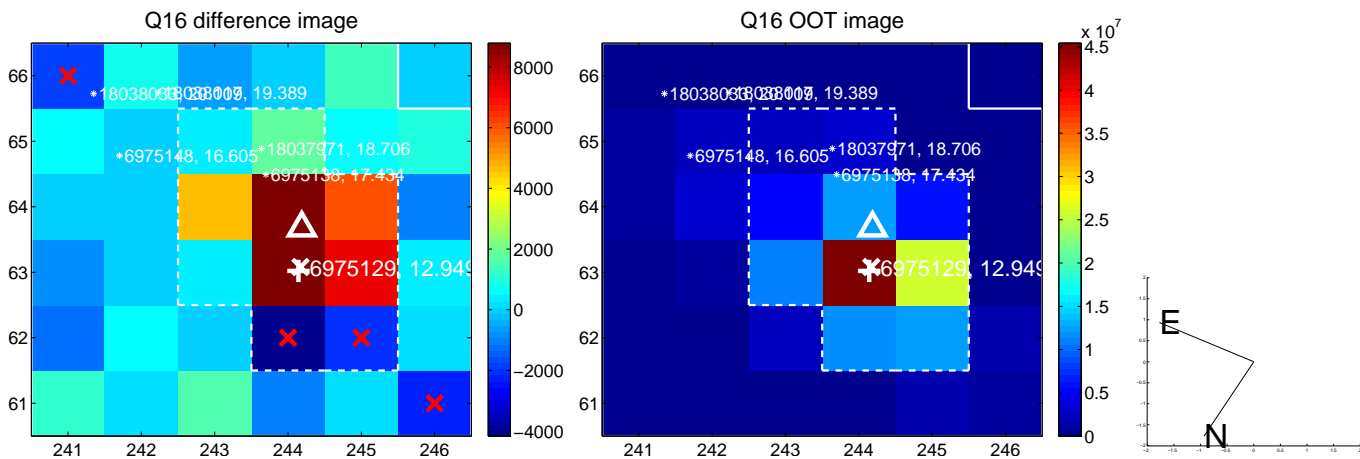
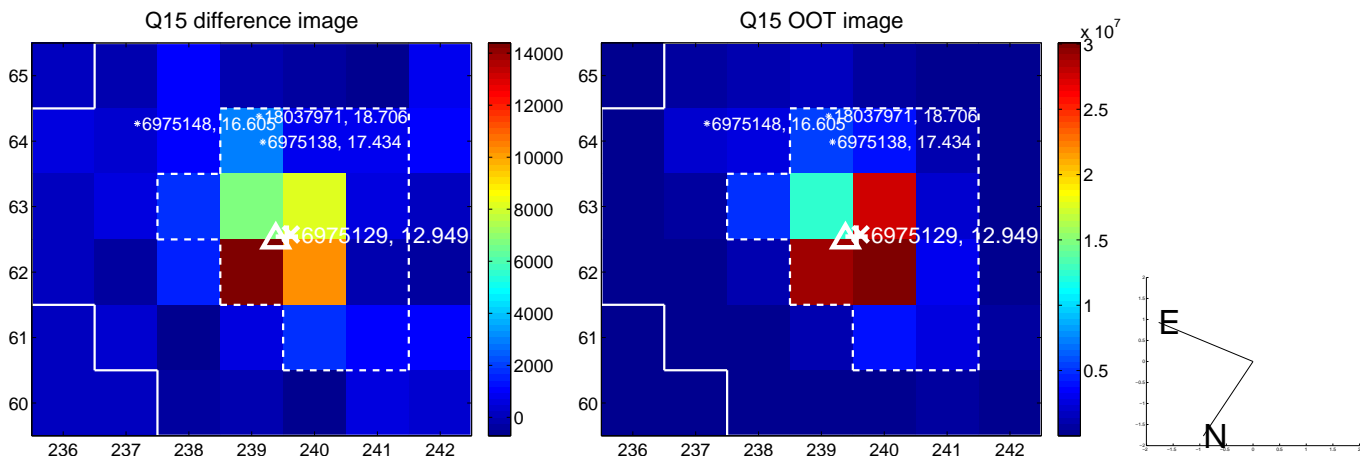
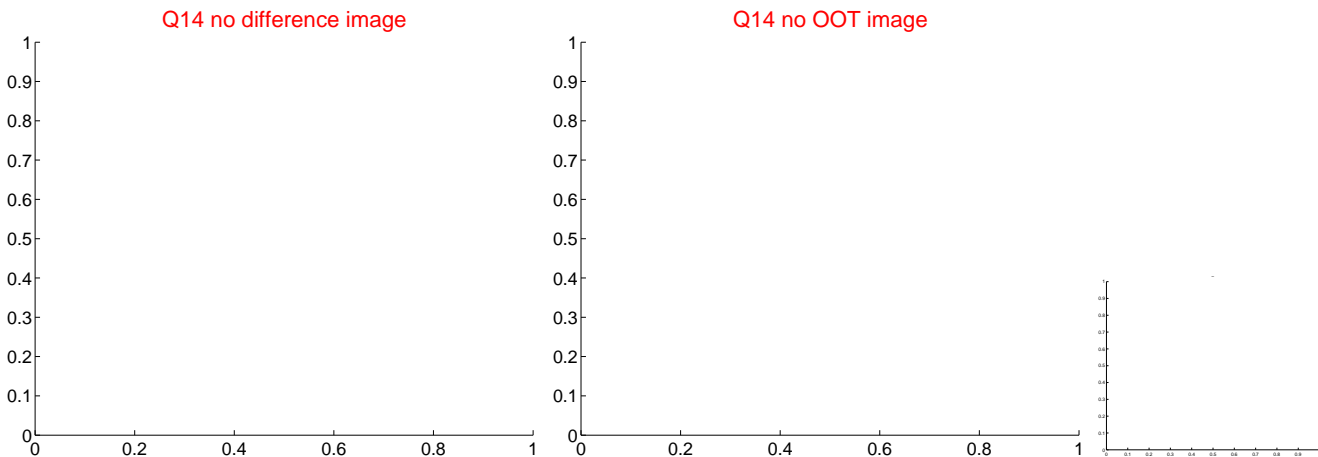
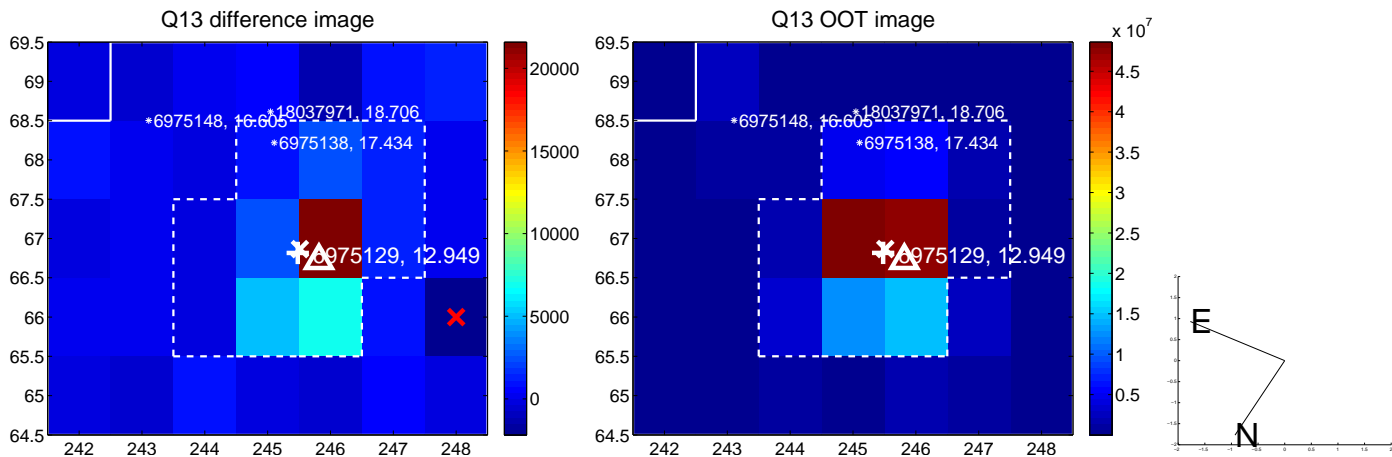
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



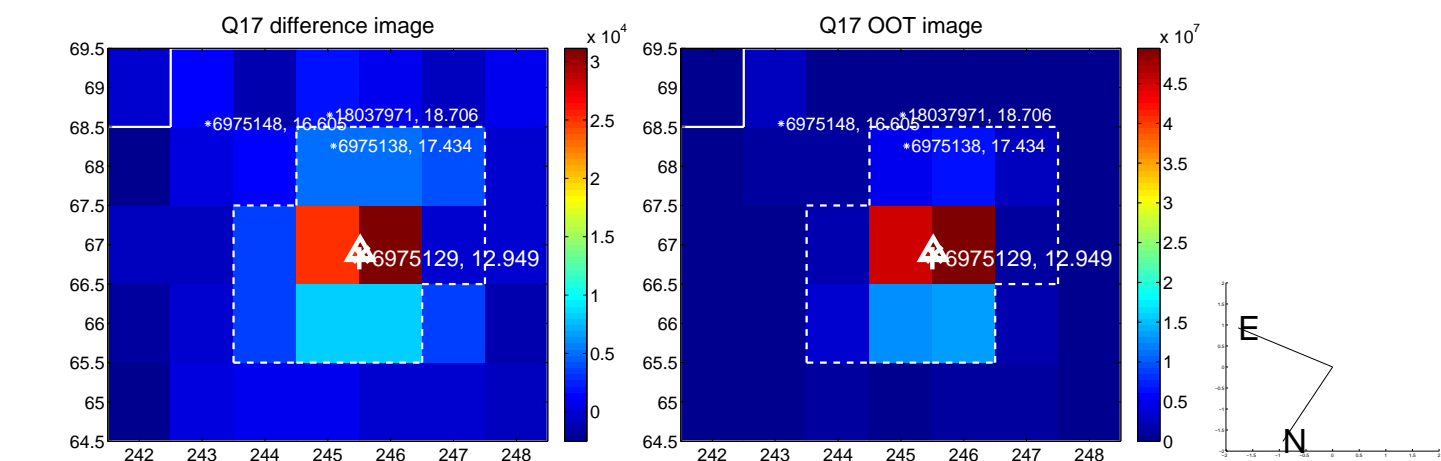
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



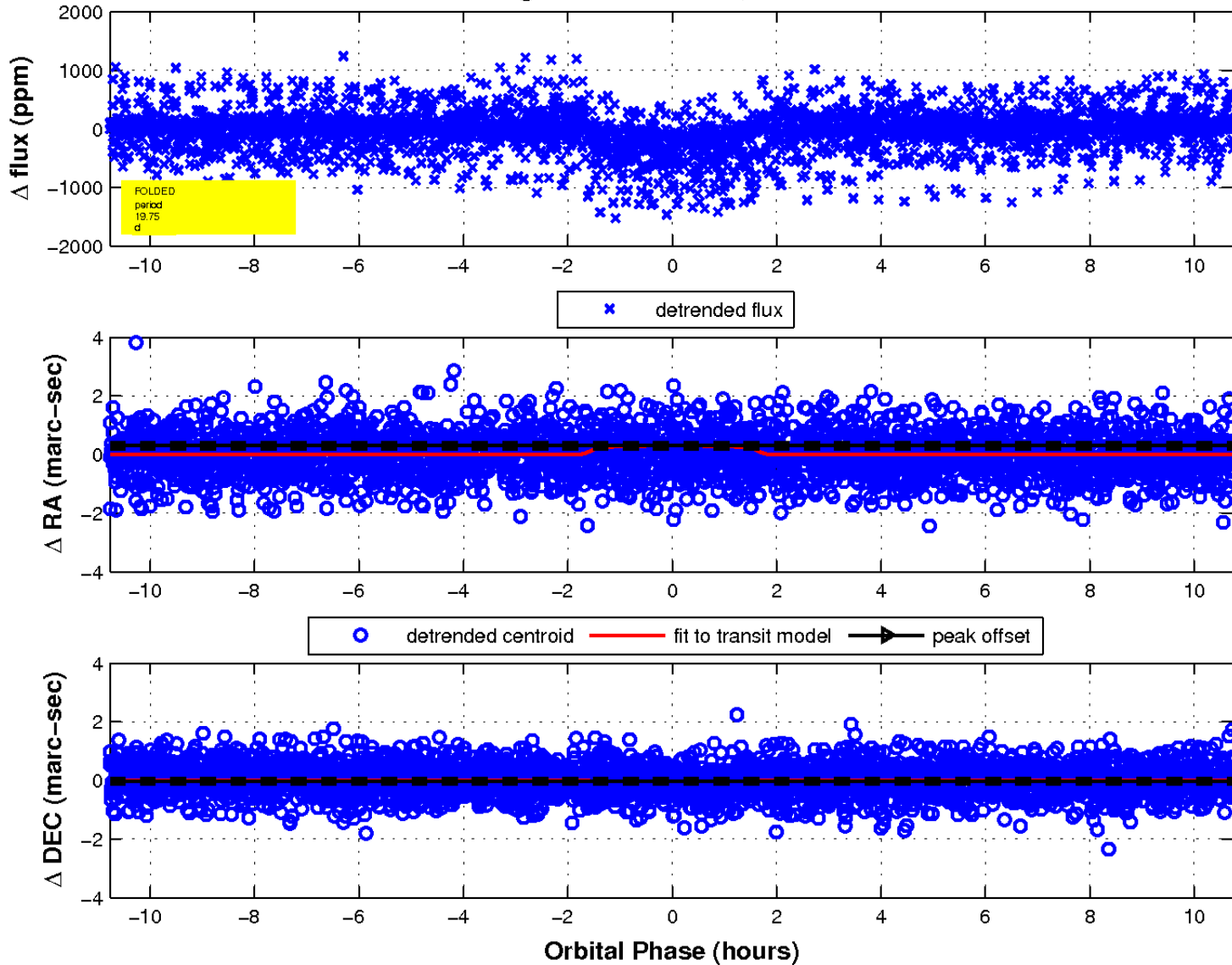
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

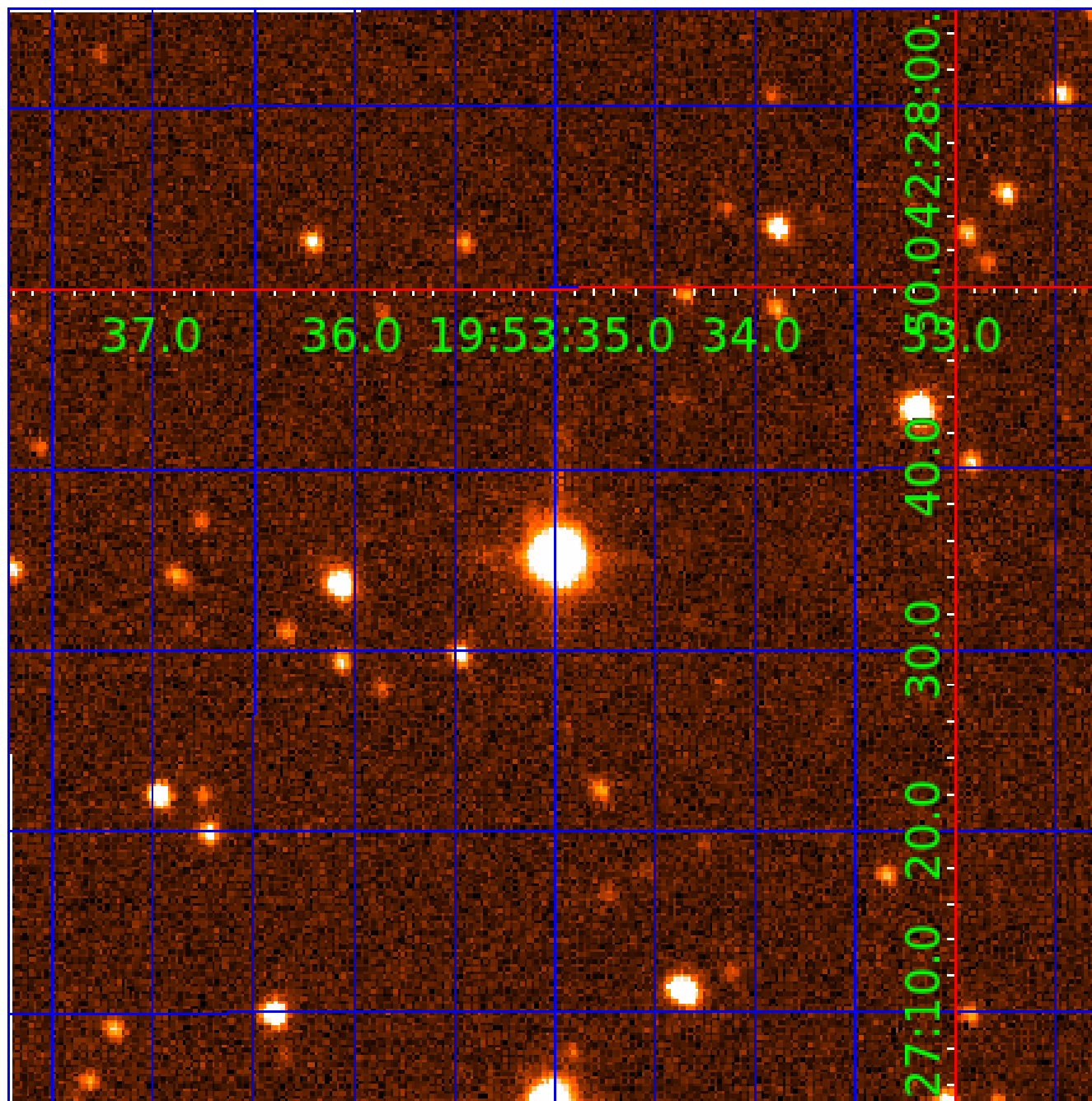


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 006975129

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})
006975129-01	OBS	1628.01	19.747346	147.104304	456.5	3.591	41.2	42.5	1.15	6243	2.86	76.68
006975129-02	OBS	1628.02	1.772461	132.086058	79.4	2.492	21.7	24.4	1.15	6243	1.21	1908.00
006975129-03	OBS	1628.03	37.840596	146.768630	217.0	6.838	11.8	12.7	1.15	6243	1.98	32.22

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006975129-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-03	OBS	FP	0.00	1	0	0	0	MOD_NONUNIQ_DV

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

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

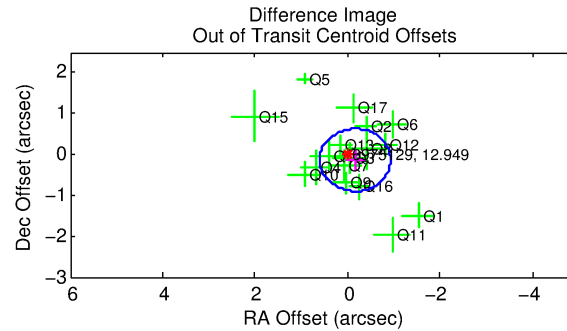
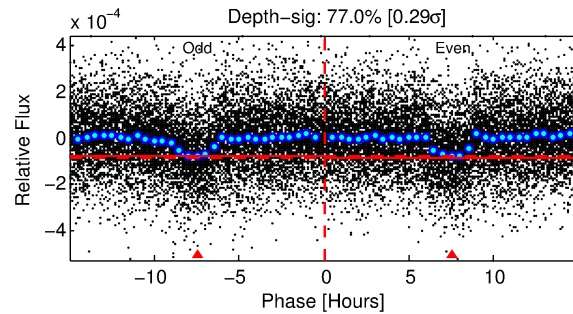
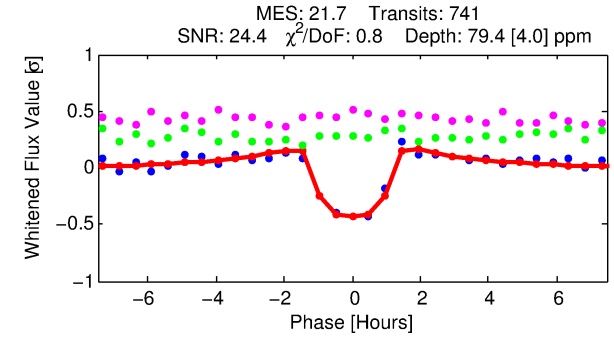
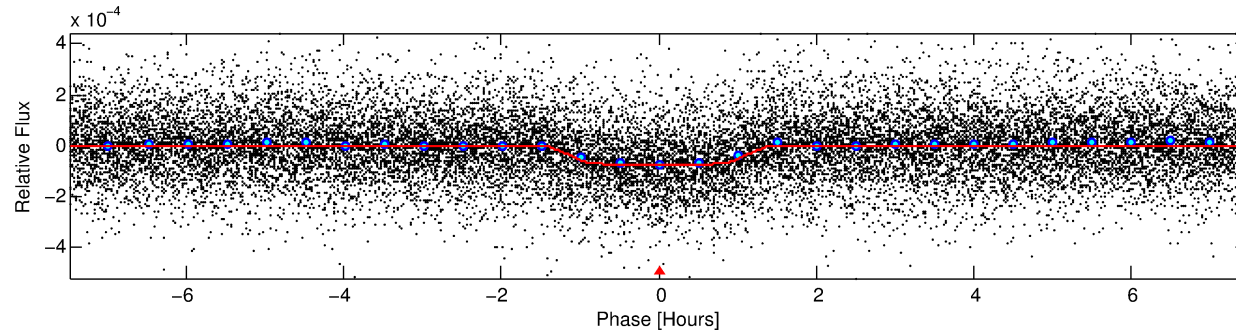
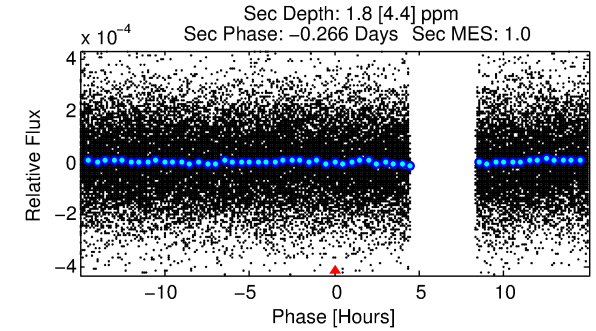
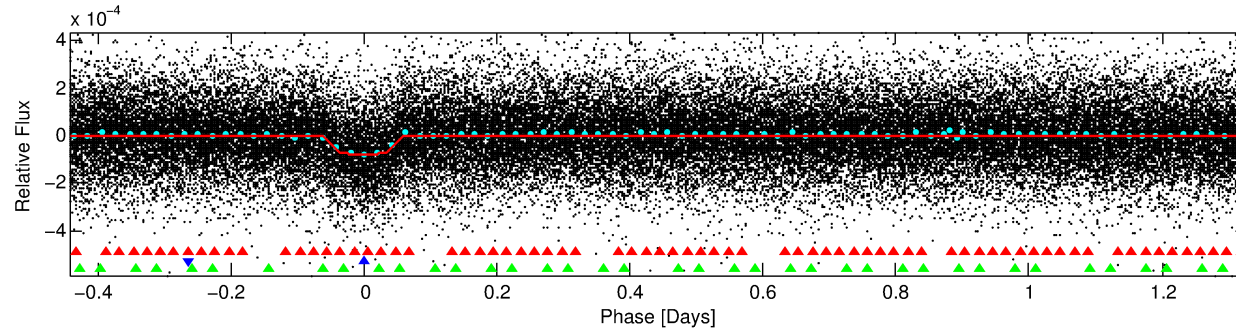
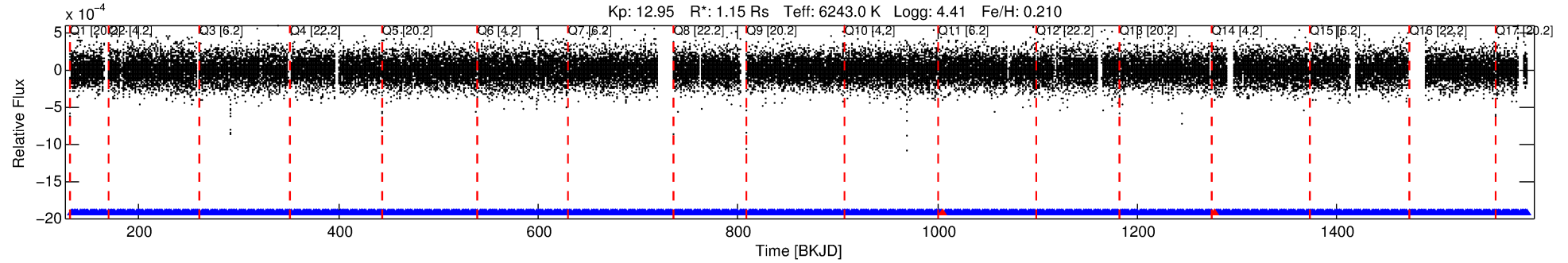
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006975129-02

No Significant Match Found

DV One-Page Summary

KIC: 6975129 Candidate: 2 of 3 Period: 1.772 d
KOI: K01628.02 Name: Kepler-312b Corr: 0.970



DV Fit Results:

Period = 1.77246 [0.00000] d
Epoch = 132.0861 [0.0011] BKJD
Rp/R* = 0.0096 [0.0019]
a/R* = 2.66 [2.34]
b = 0.90 [0.22]
Seff = 1908.00 [485.62]
Teq = 1685 [107] K
Rp = 1.21 [0.32] Re
a = 0.0307 [0.0048] AU
Ag = 0.64 [1.59] [-0.23σ]
Teffp = 2332 [1443] K [0.45σ]

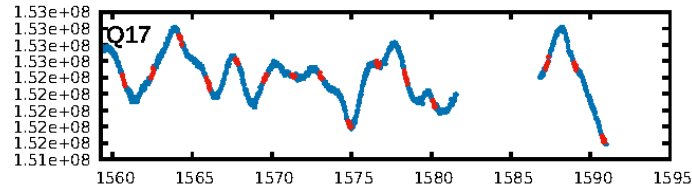
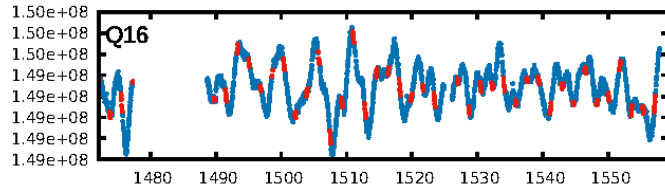
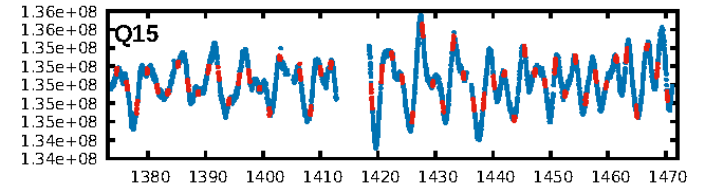
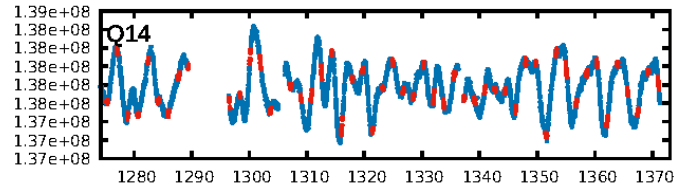
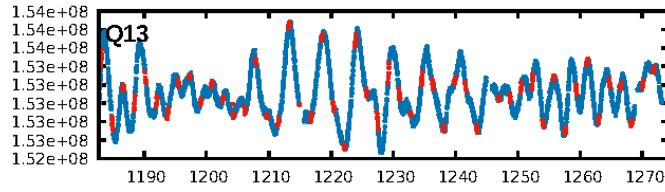
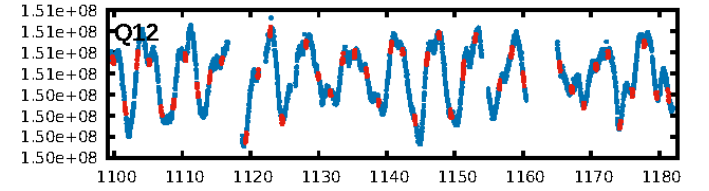
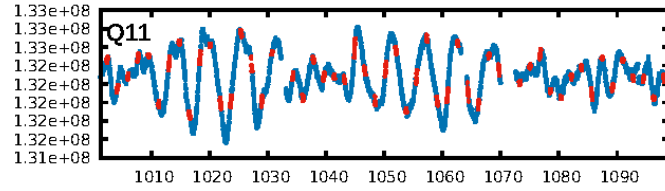
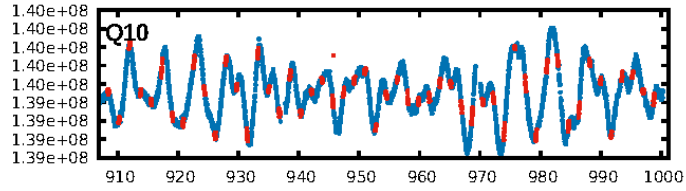
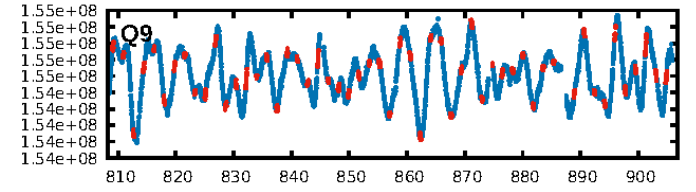
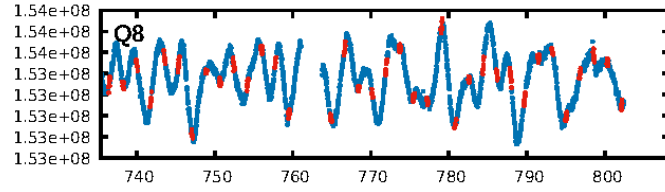
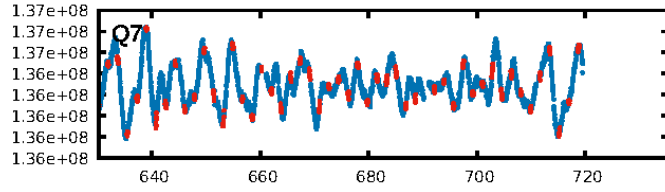
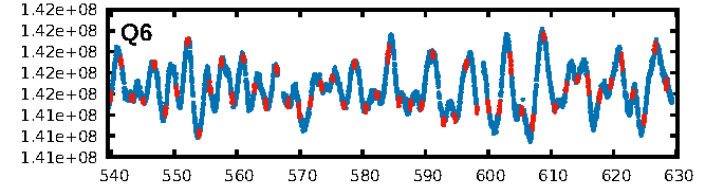
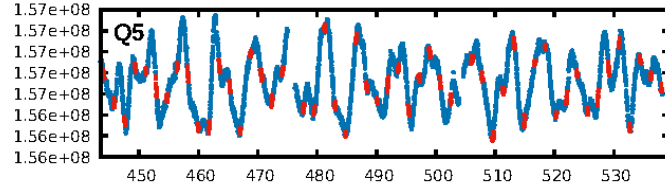
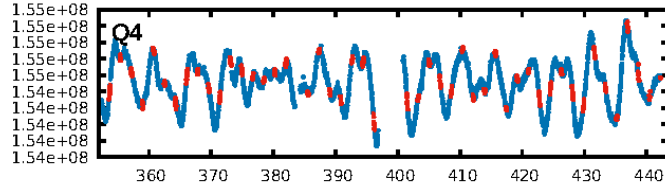
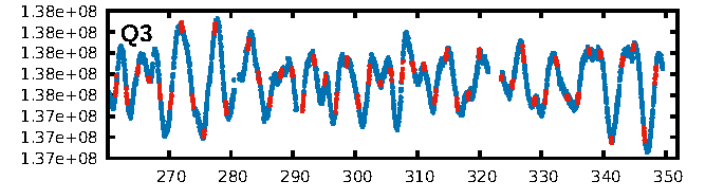
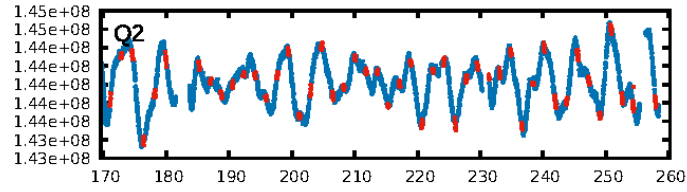
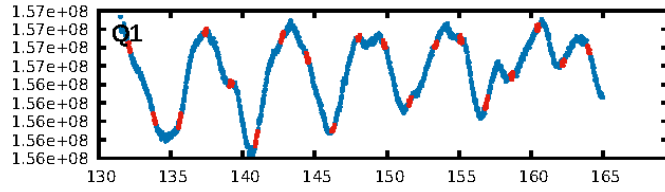
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [98.70σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.92e-96
RollingBand-fgt: 1.00 [705/707]
GhostDiagnostic-chr: 2.076
Centroid-sig: 67.9%
Centroid-so: 0.080 arcsec [0.20σ]
OotOffset-rm: 0.206 arcsec [0.81σ]
KicOffset-rm: 0.056 arcsec [0.27σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

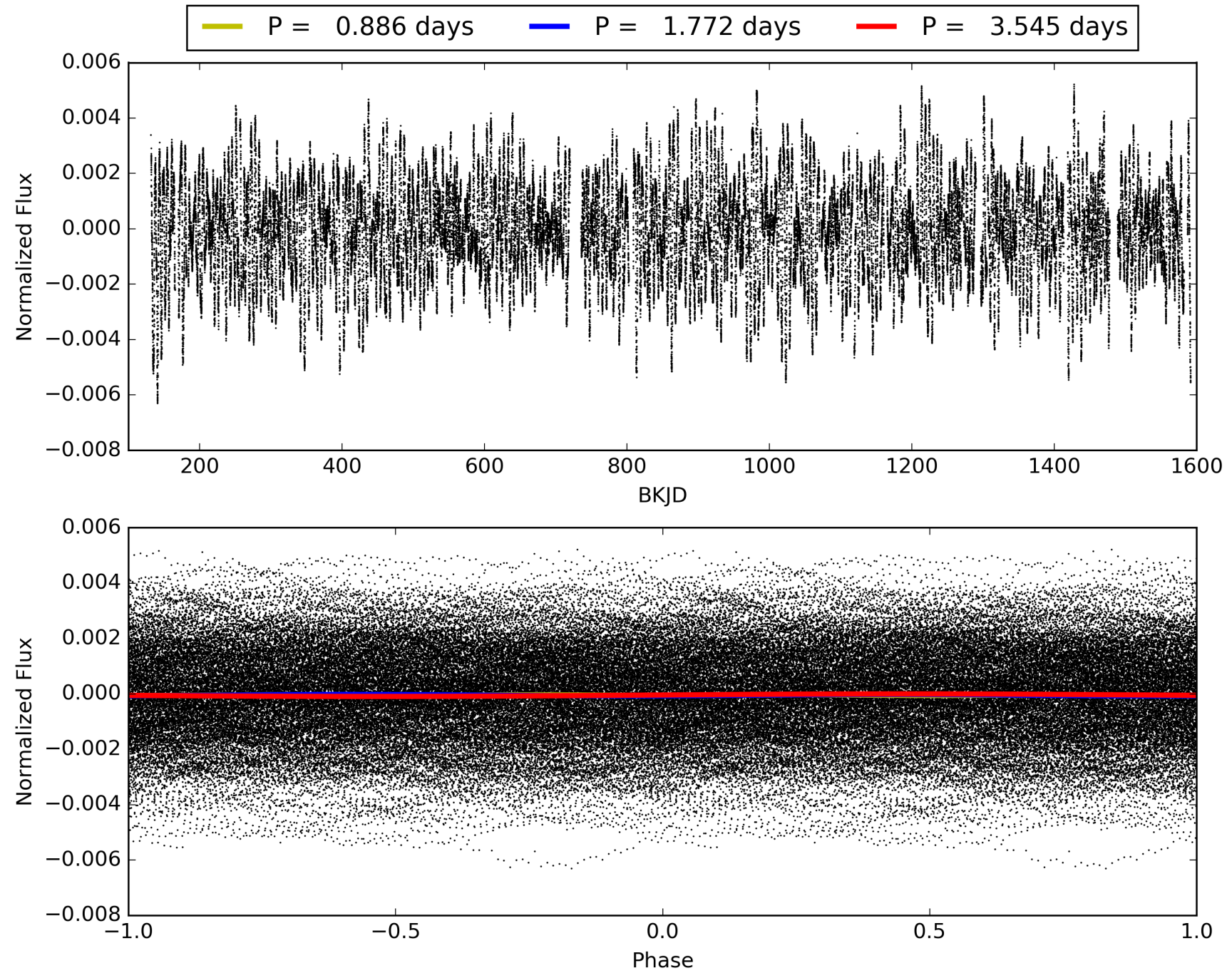
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:29:34 Z

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

TCE 006975129-02, PDC Light Curves

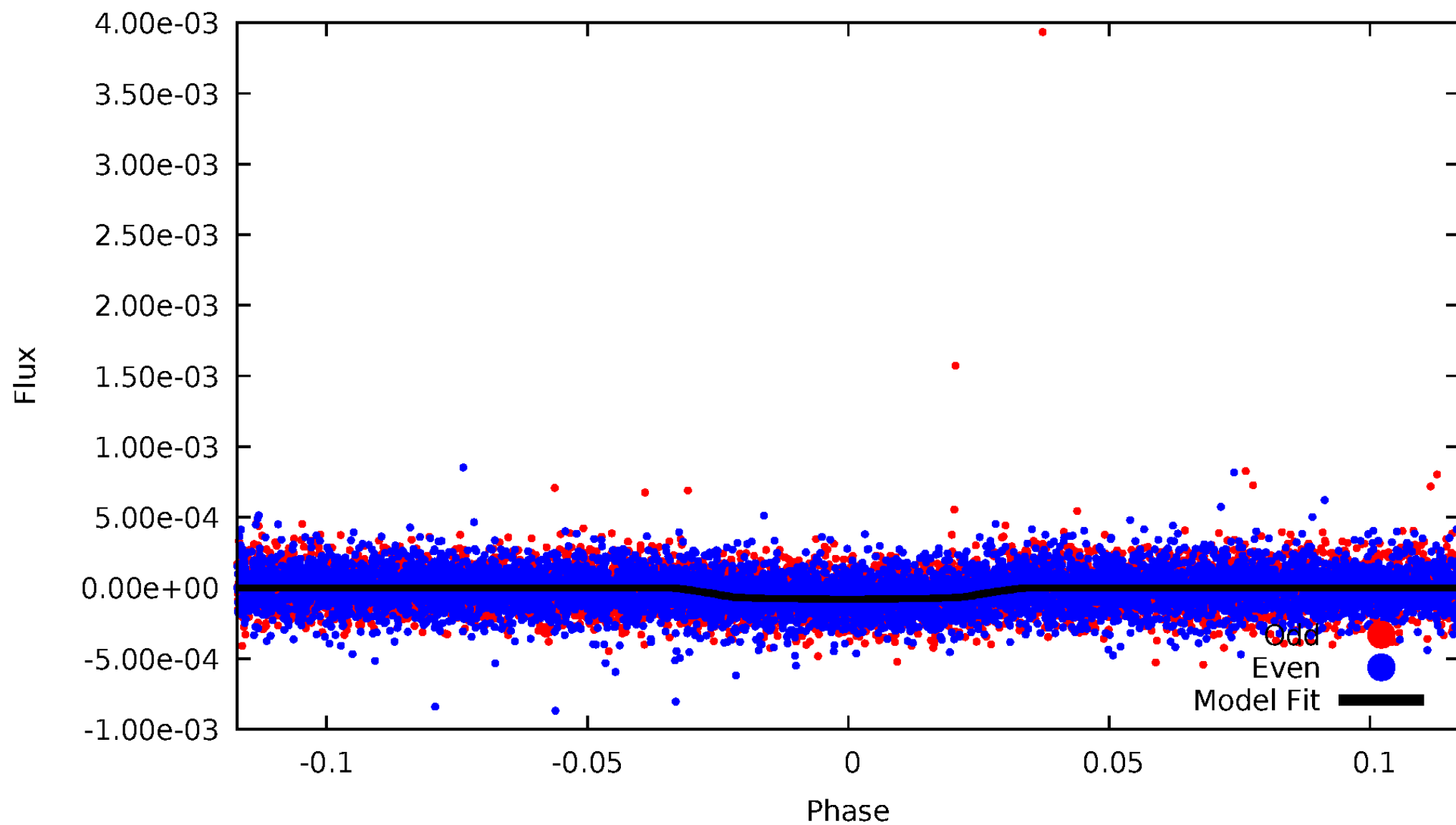


TCE 006975129-02



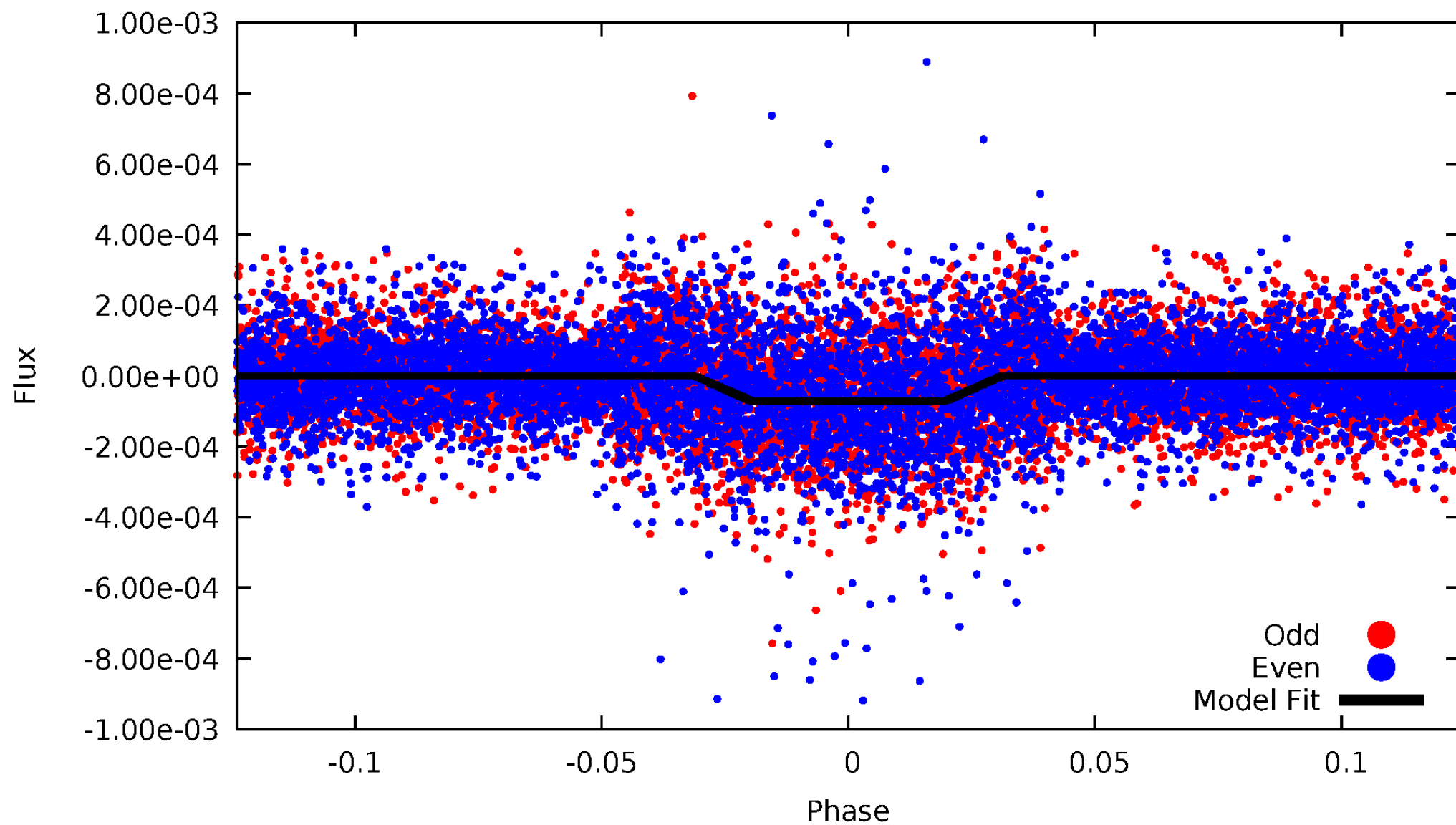
DV Odd/Even

TCE 006975129-02



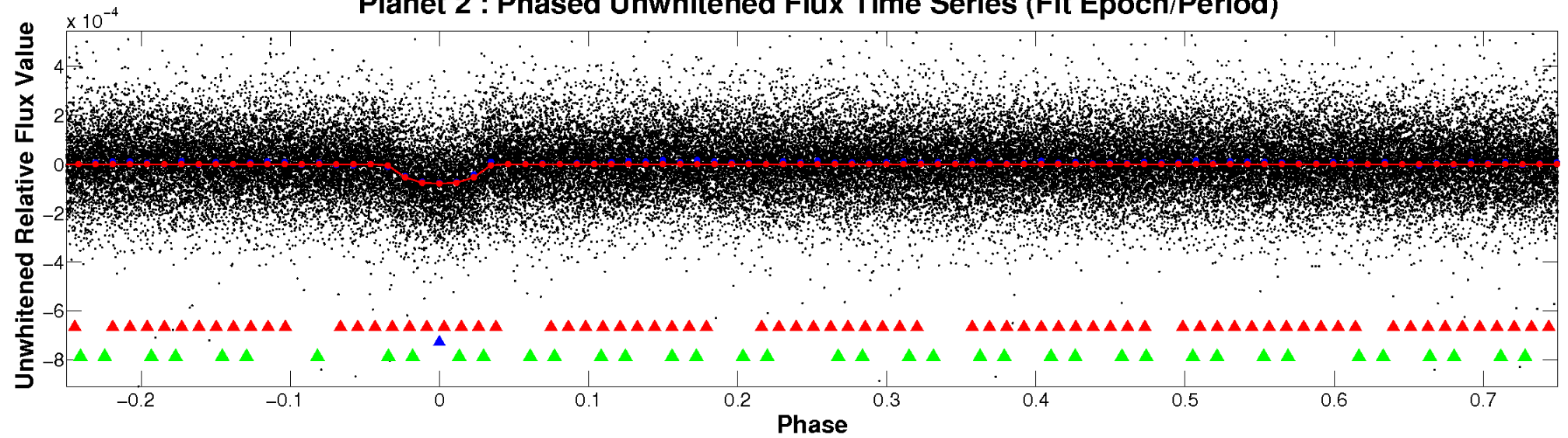
ALT Odd/Even

TCE 006975129-02

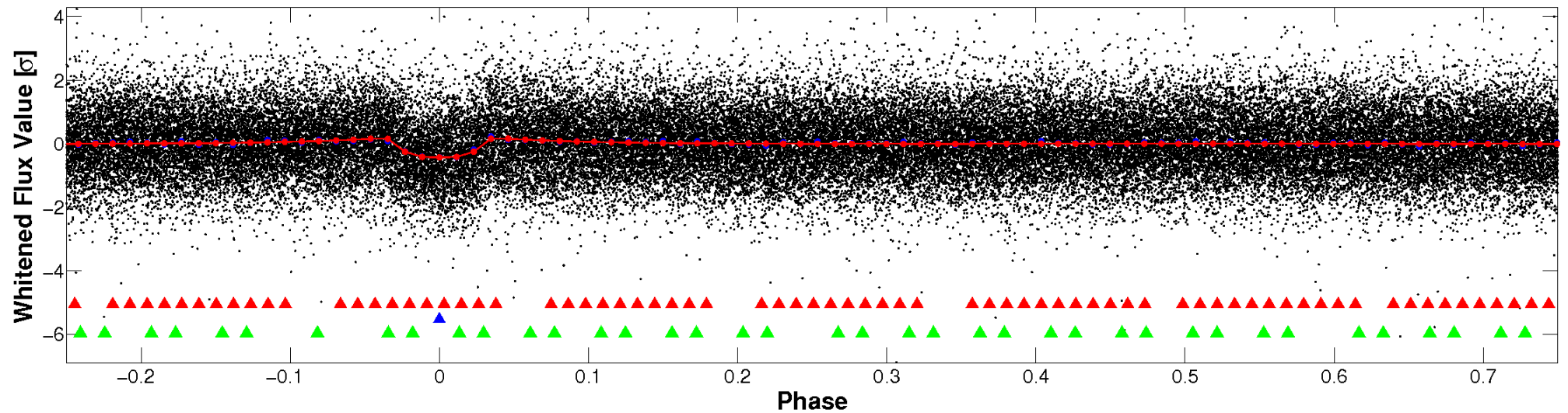


Non-Whitened Vs. Whitened Light Curve

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

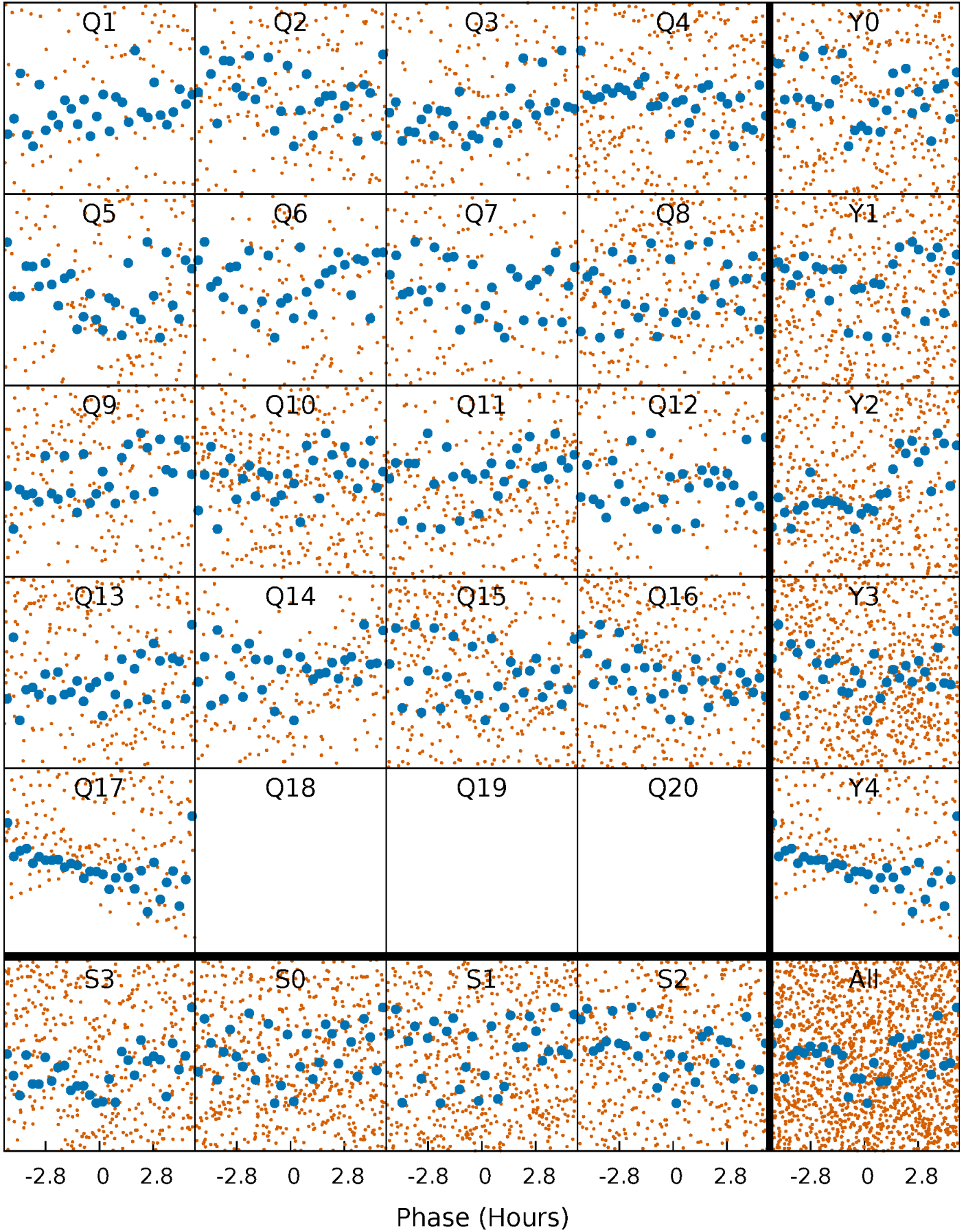


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



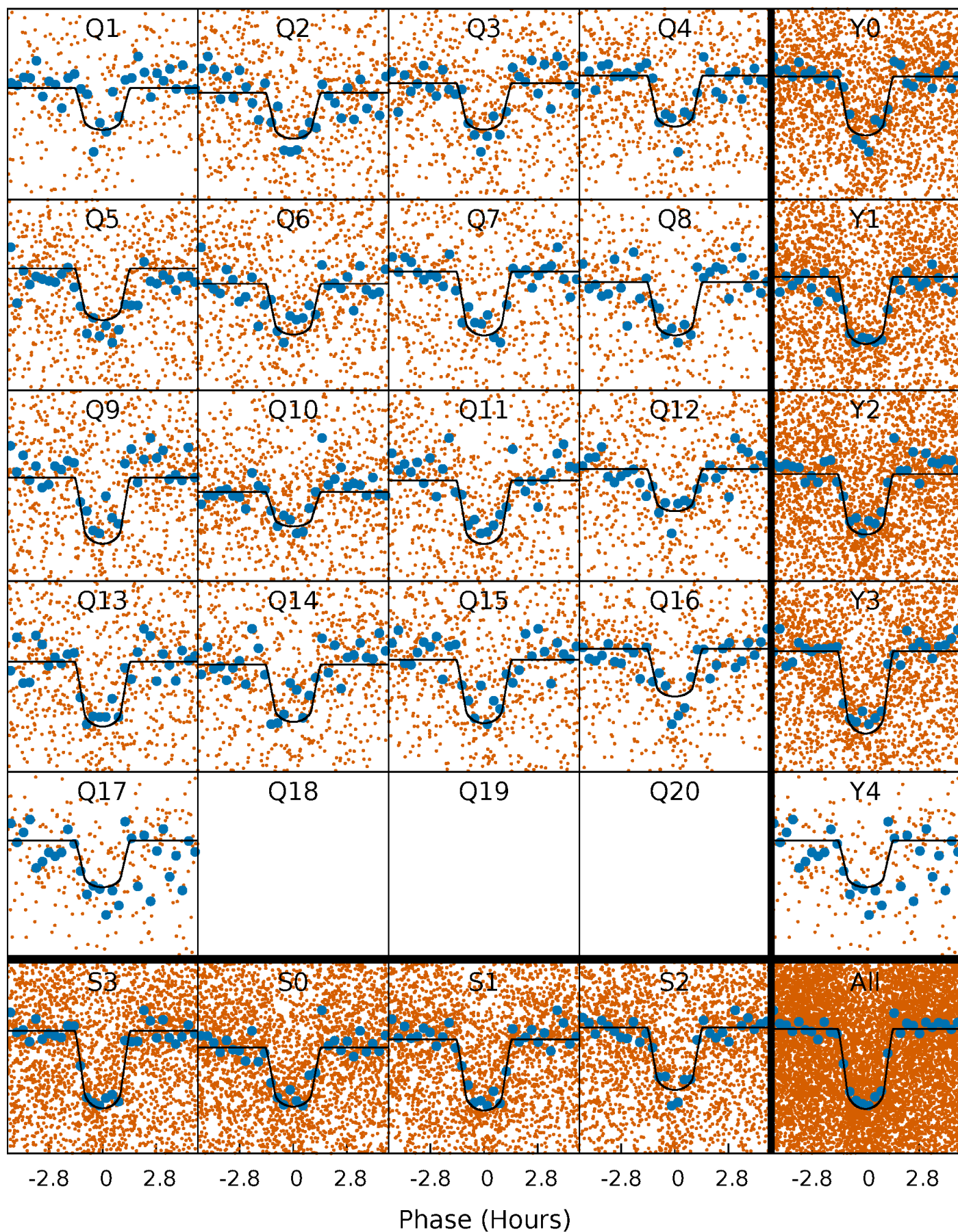
PDC Quarter-Phased Transit Curves

TCE 006975129-02 P= 1.772461 Days $T_0=132.086058$ (BKJD)



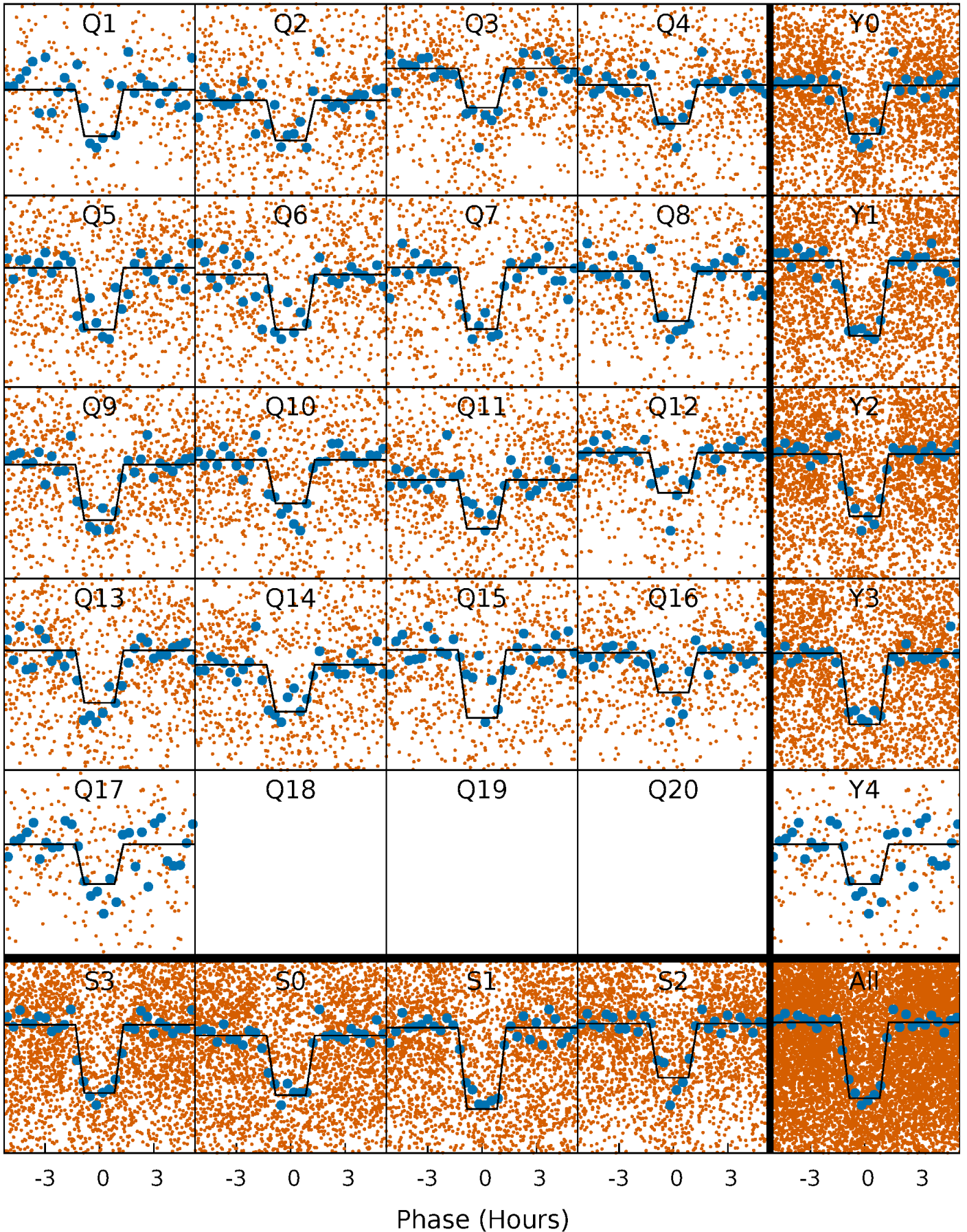
DV Quarter-Phased Transit Curves

TCE 006975129-02 P= 1.772461 Days $T_0=132.086058$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

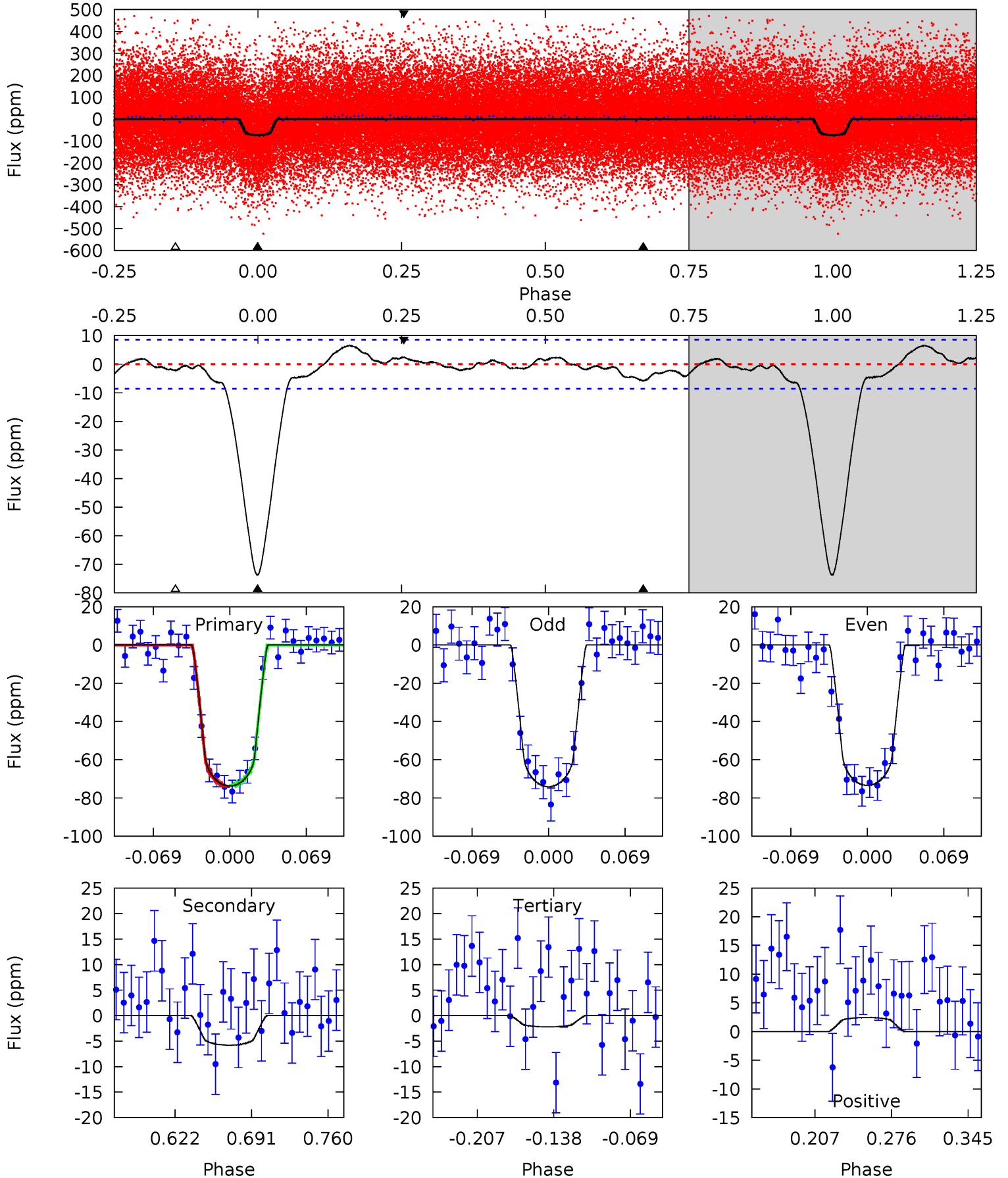
TCE 006975129-02 P= 1.772451 Days $T_0=132.089295$ (BKJD)



DV Model-Shift Uniqueness Test

006975129-02, P = 1.772461 Days, E = 130.313597 Days

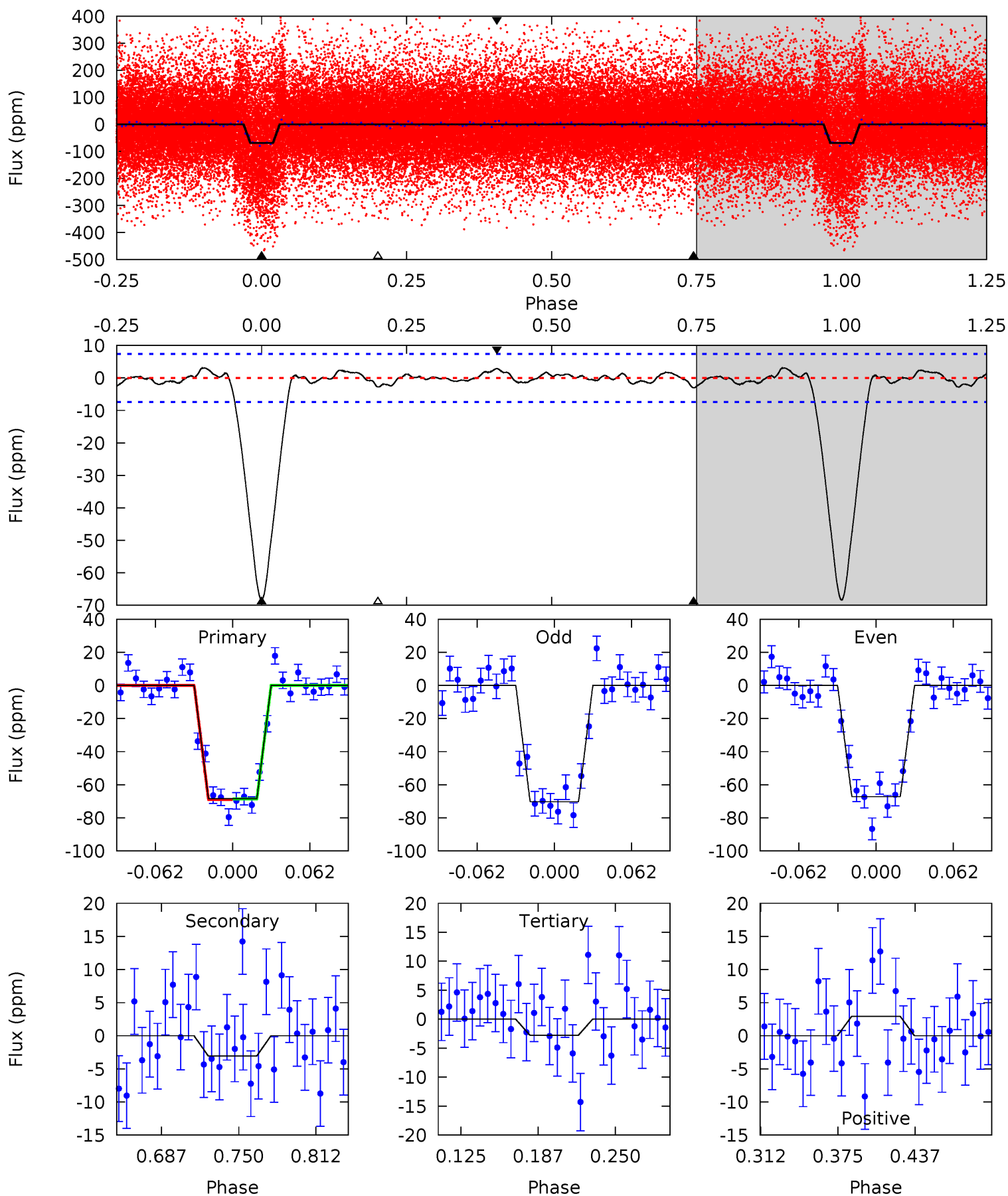
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.9	3.13	1.18	1.32	4.64	1.82	1.28	38.7	38.6	1.95	1.81	0.17	1.02	0.08	0.13



Alt Model-Shift Uniqueness Test

006975129-02, P = 1.772451 Days, E = 130.316844 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
43.1	1.93	1.75	1.85	4.66	1.86	0.78	41.3	41.2	0.18	0.08	0.96	1.09	0.04	0.11



Stellar Parameters For KIC 006975129

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6243^{+99}_{-136}	$4.406^{+0.026}_{-0.136}$	$0.210^{+0.150}_{-0.200}$	$1.149^{+0.201}_{-0.067}$	$1.226^{+0.076}_{-0.102}$	$1.139^{+0.146}_{-0.438}$
	+2%/-2%	+1%/-3%	+71%/-95%	+17%/-6%	+6%/-8%	+13%/-38%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006975129-02 / KOI 1628.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-6 ± 2	$1.24^{+0.29}_{-0.24}$	2390^{+84}_{-71}	3468^{+370}_{-358}	$1.889^{+1.307}_{-0.836}$
Alt.	-3 ± 2	$1.08^{+0.29}_{-0.25}$	2388^{+115}_{-71}	3226^{+421}_{-568}	$1.260^{+1.181}_{-0.721}$

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

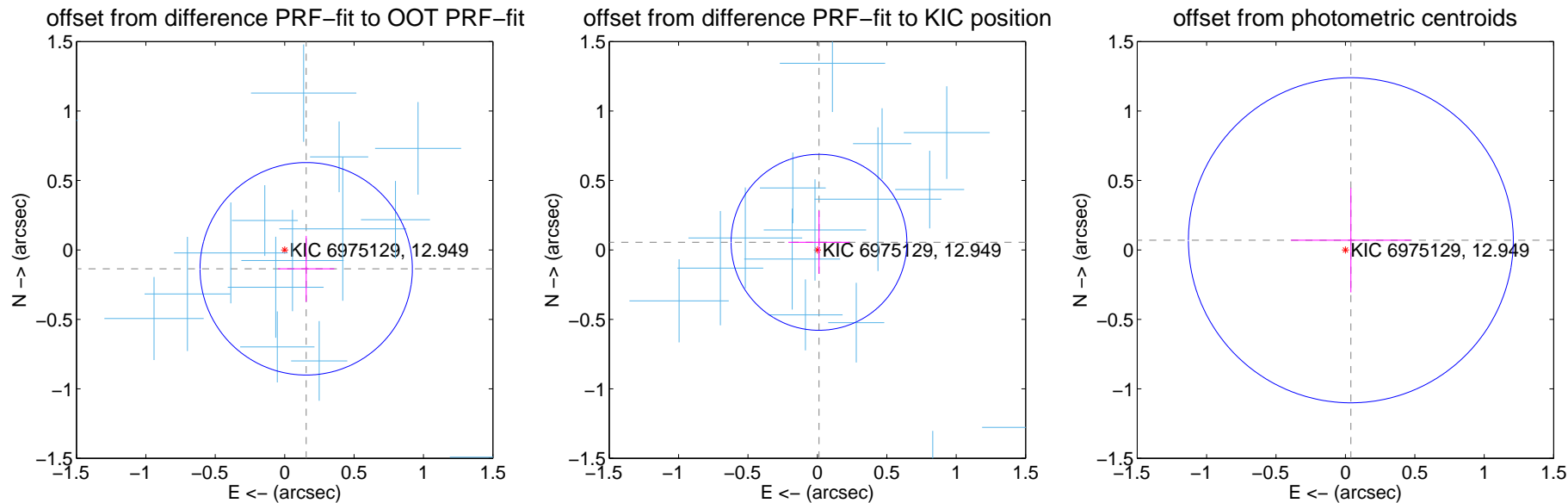
DV Centroid Data

Supplemental centroid analysis for 006975129-02. Kepler magnitude: 12.95. Transit SNR 24.36

There are 17 quarters with good PRF difference image offsets

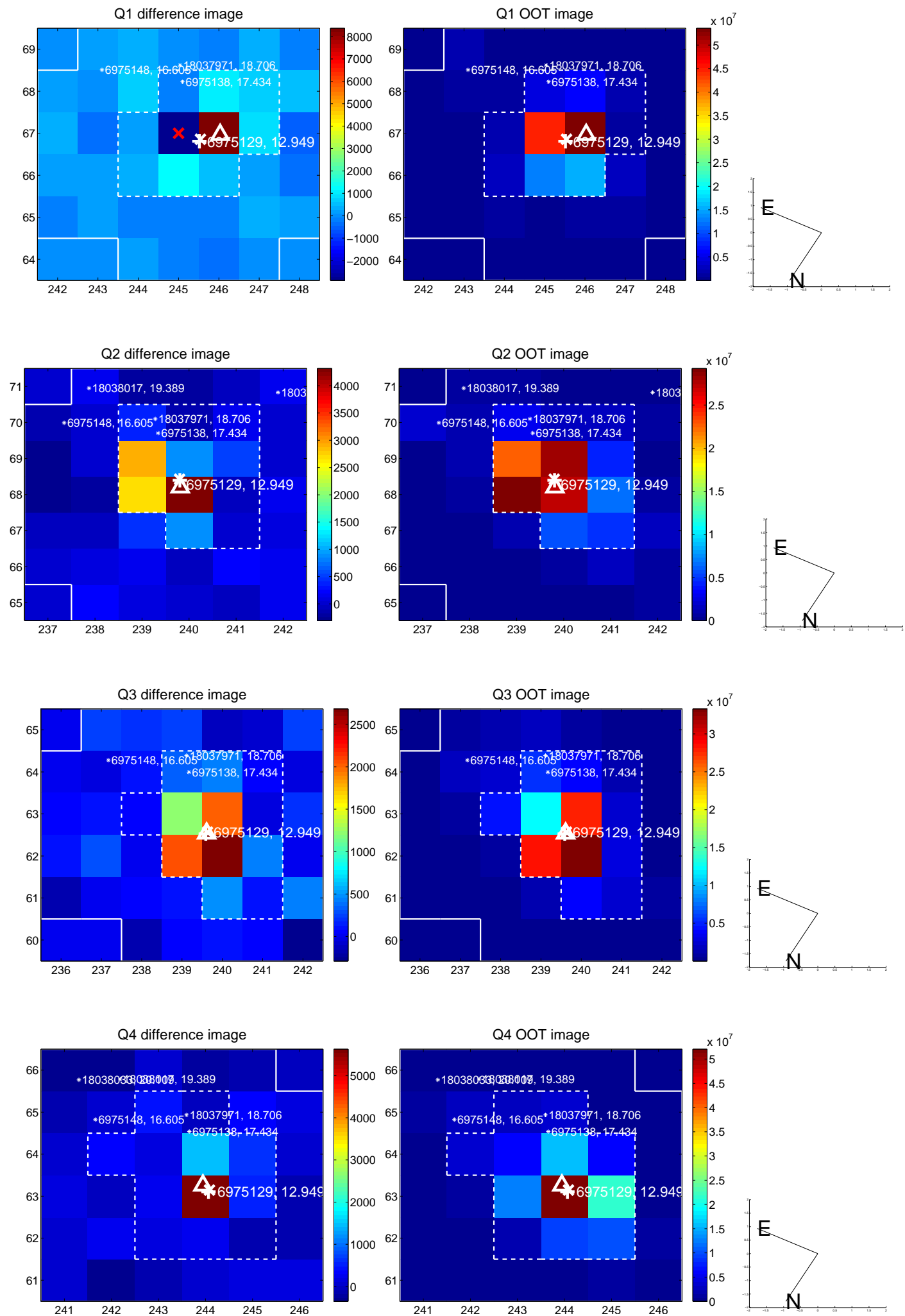
The direct PRF centroid is offset from the target star catalog position by about 0.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.206 ± 0.255	0.81	-0.155 ± 0.202	-0.136 ± 0.237
PRF-fit source offset from KIC position	0.056 ± 0.211	0.27	-0.011 ± 0.221	0.055 ± 0.227
photometric centroid source offset	0.08 ± 0.39	0.20	-0.04 ± 0.43	0.07 ± 0.38

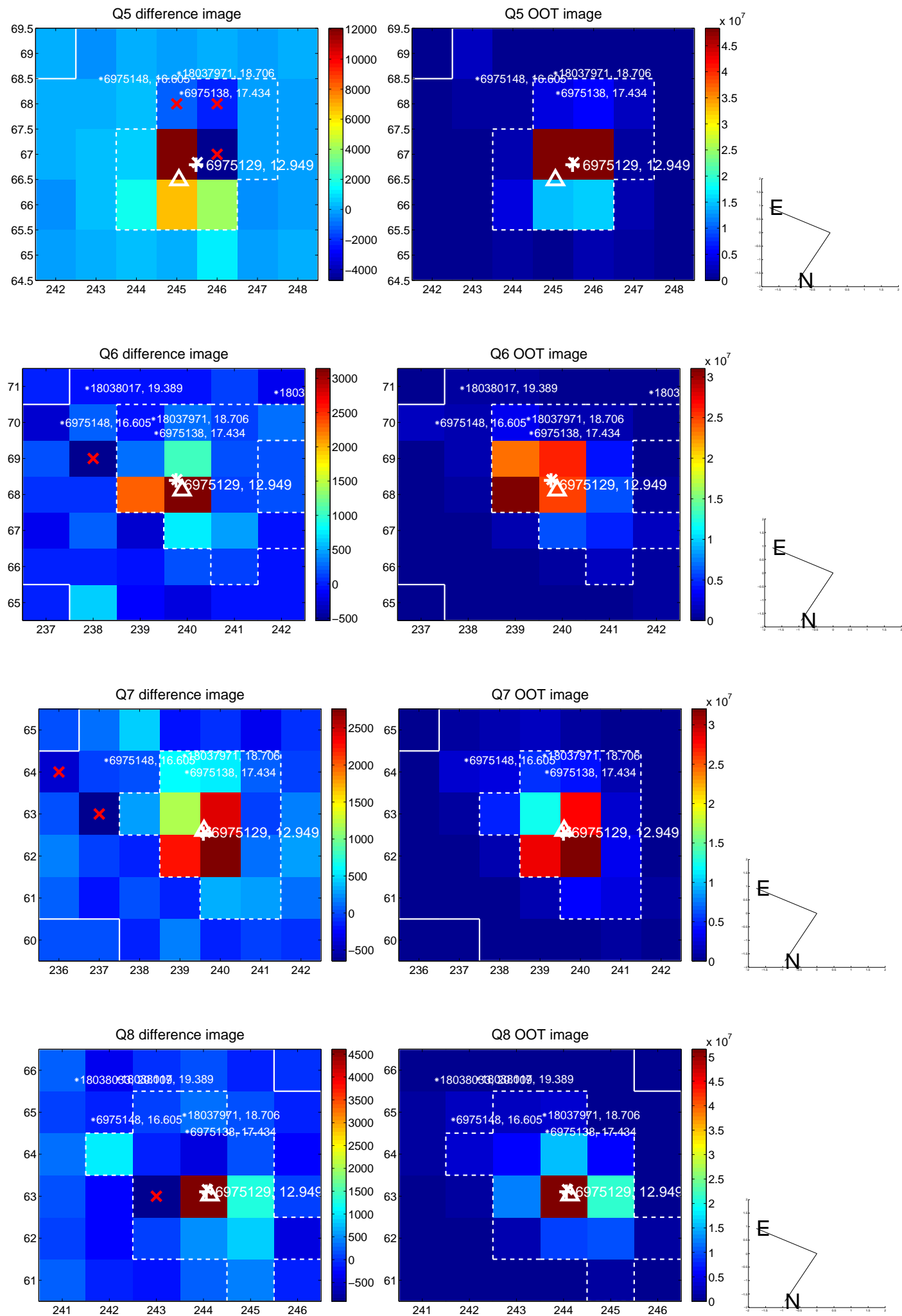


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

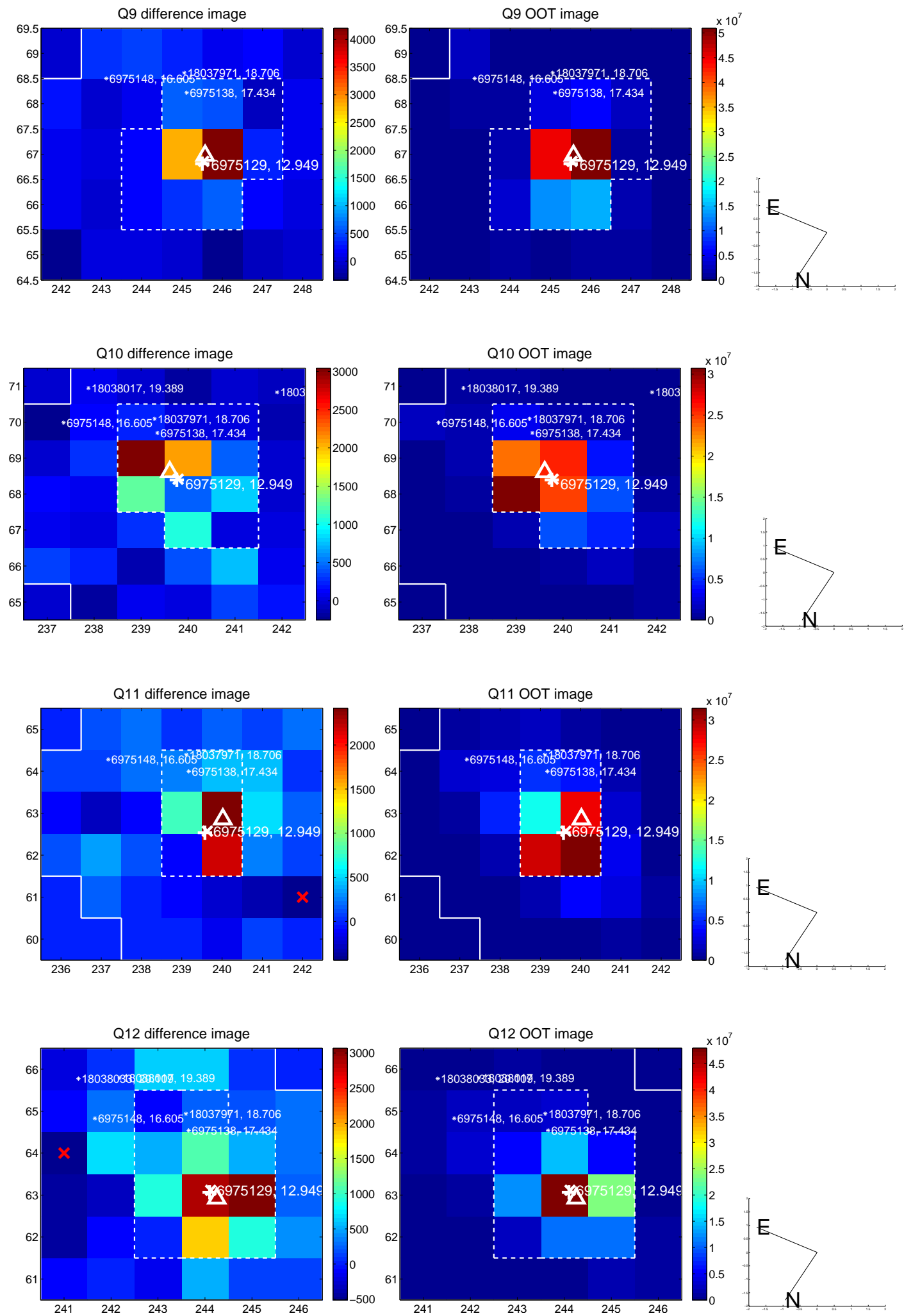
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



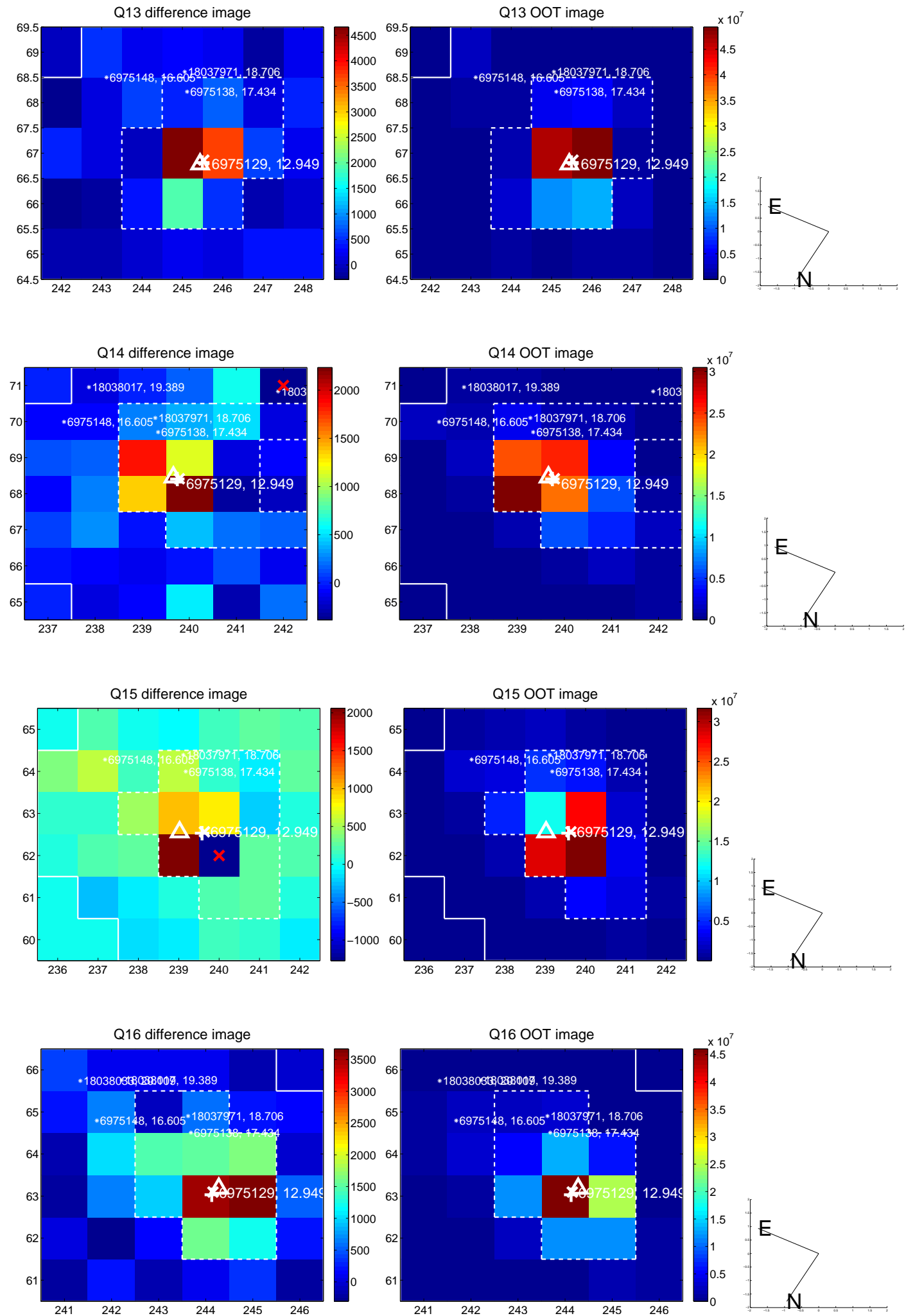
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



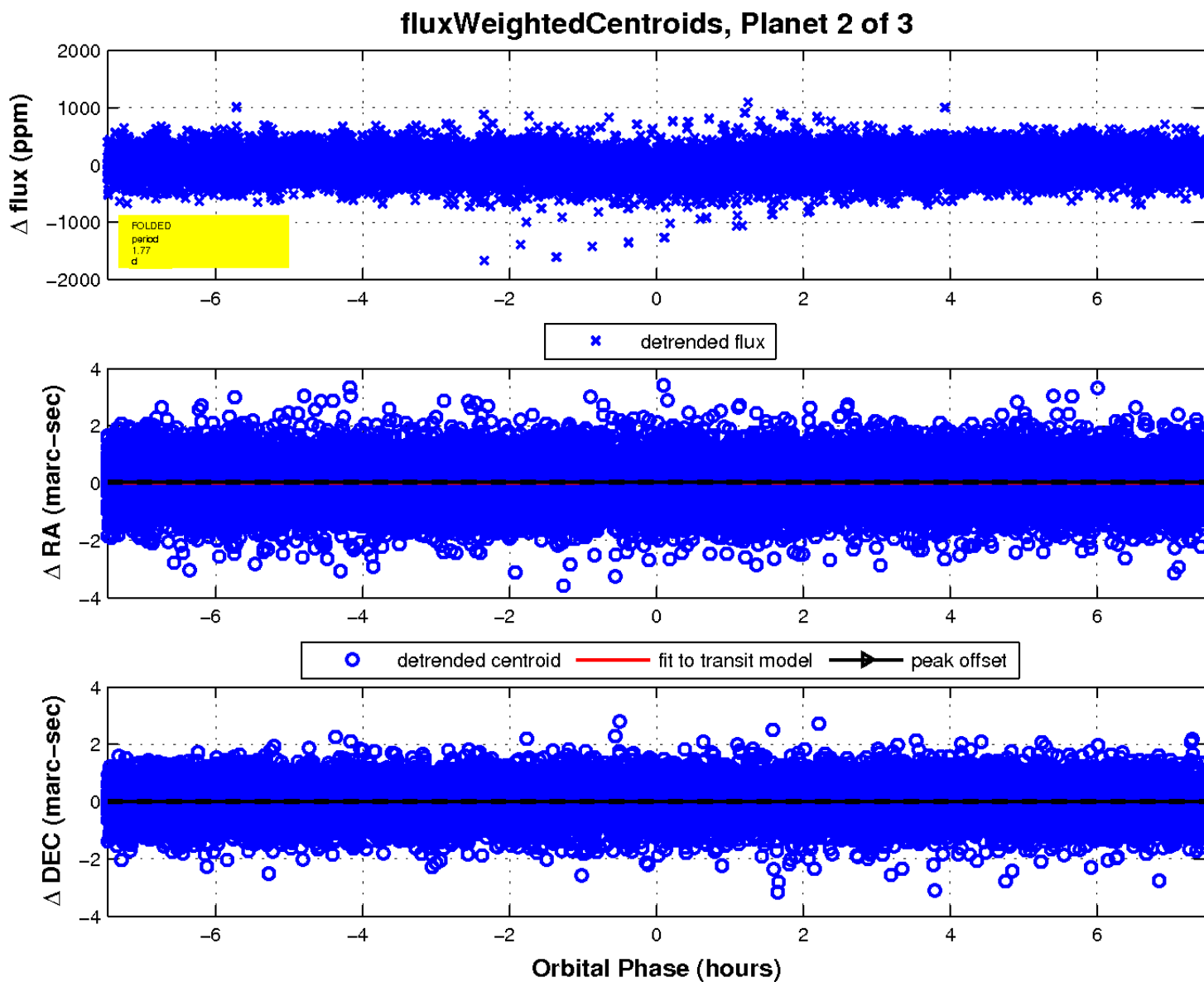
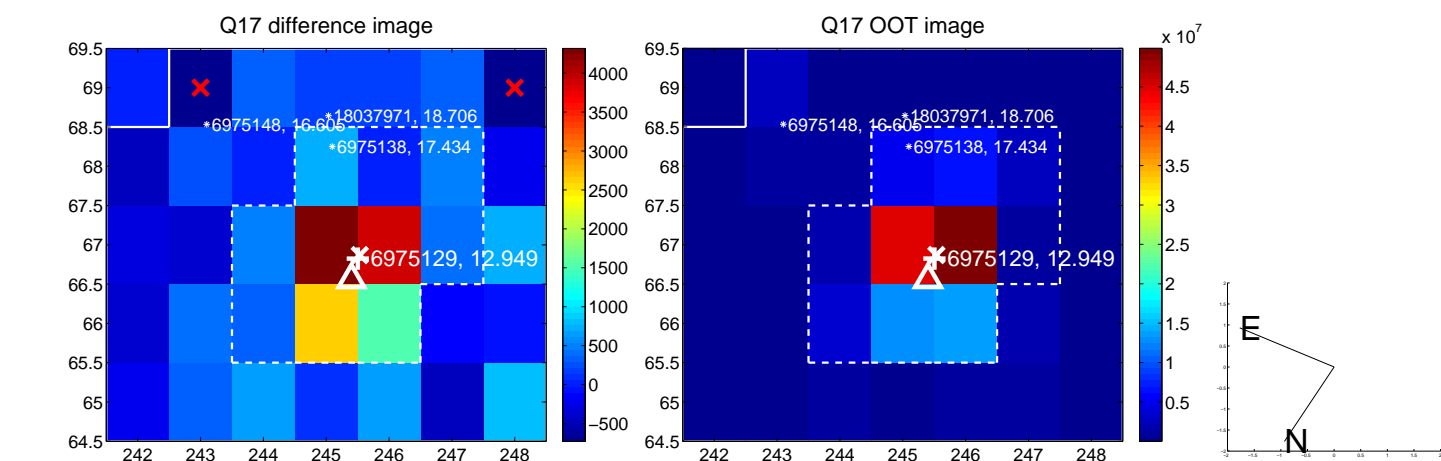
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

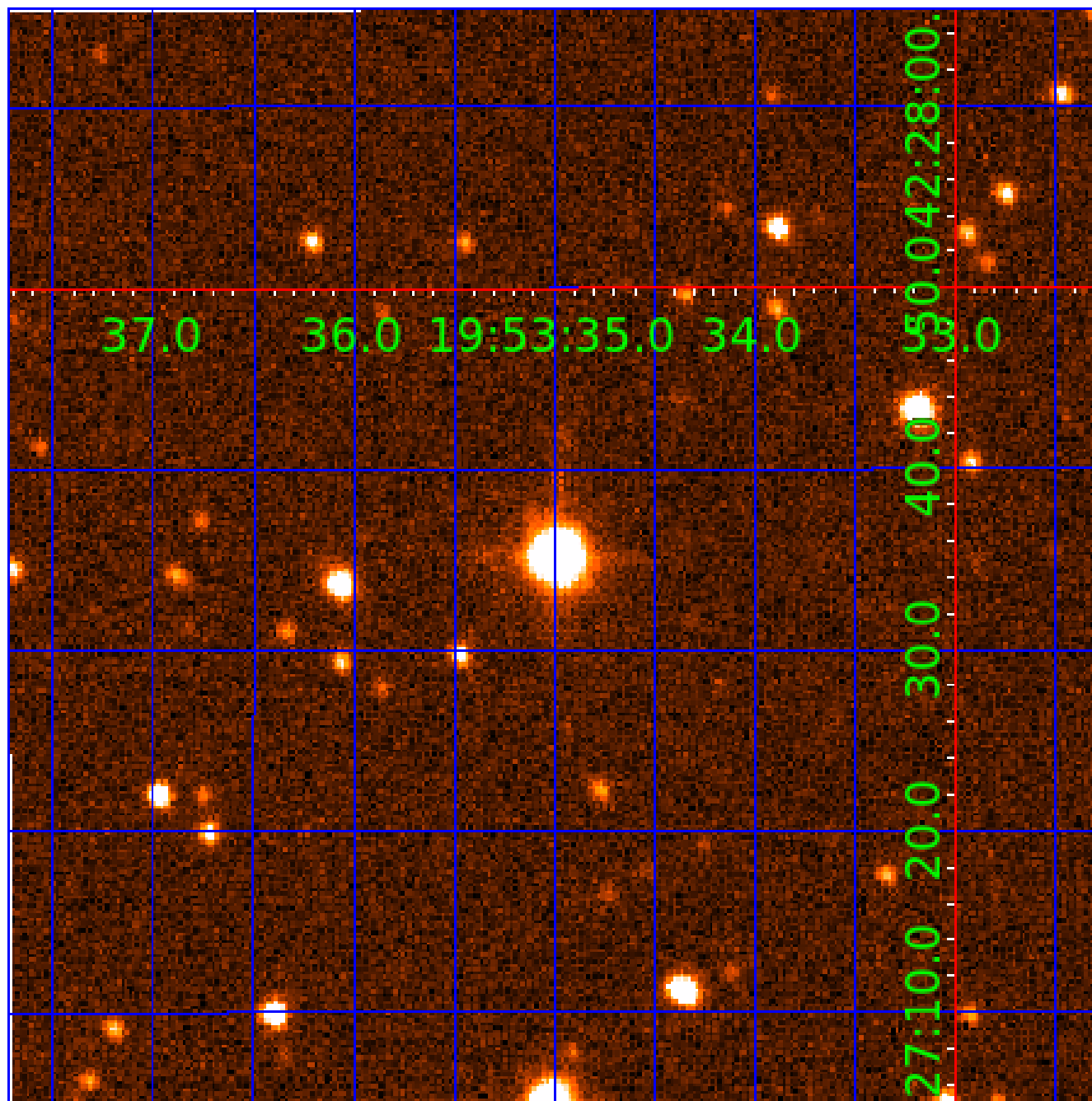


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006975129

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})
006975129-01	OBS	1628.01	19.747346	147.104304	456.5	3.591	41.2	42.5	1.15	6243	2.86	76.68
006975129-02	OBS	1628.02	1.772461	132.086058	79.4	2.492	21.7	24.4	1.15	6243	1.21	1908.00
006975129-03	OBS	1628.03	37.840596	146.768630	217.0	6.838	11.8	12.7	1.15	6243	1.98	32.22

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006975129-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006975129-03	OBS	FP	0.00	1	0	0	0	MOD_NONUNIQ_DV

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

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

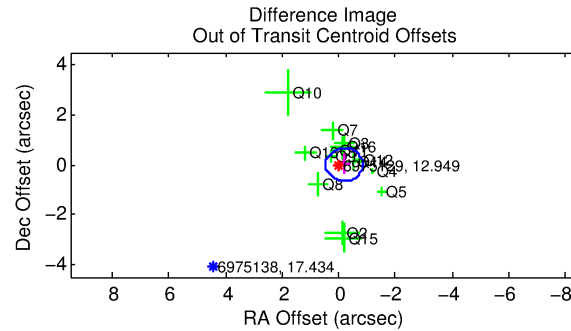
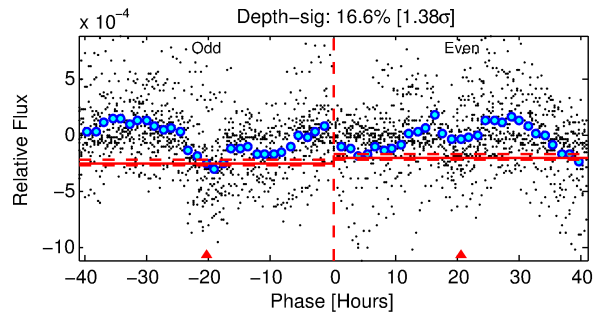
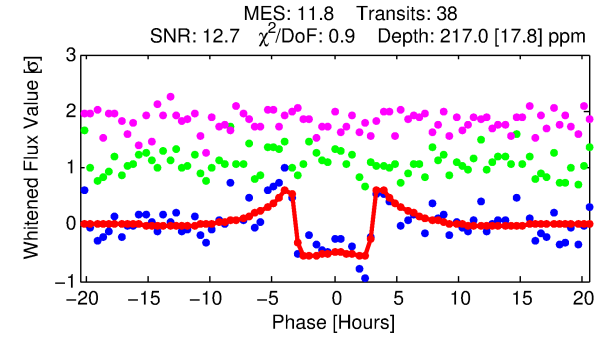
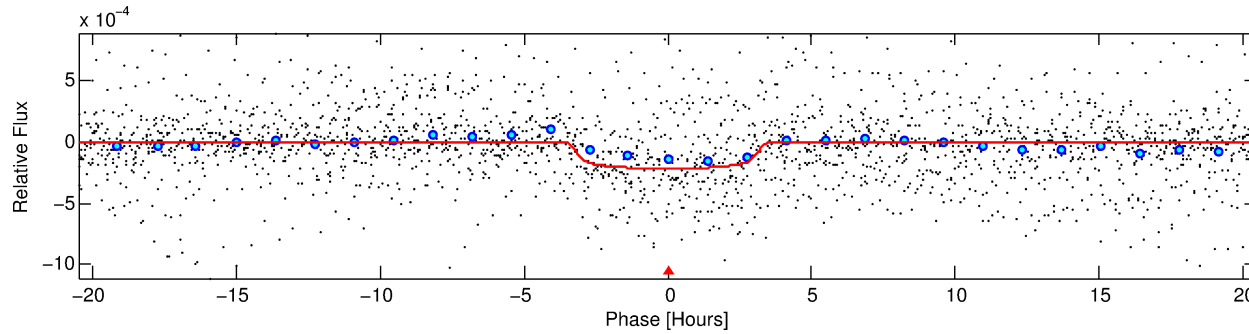
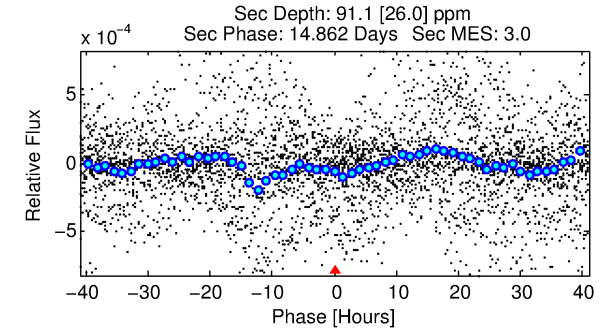
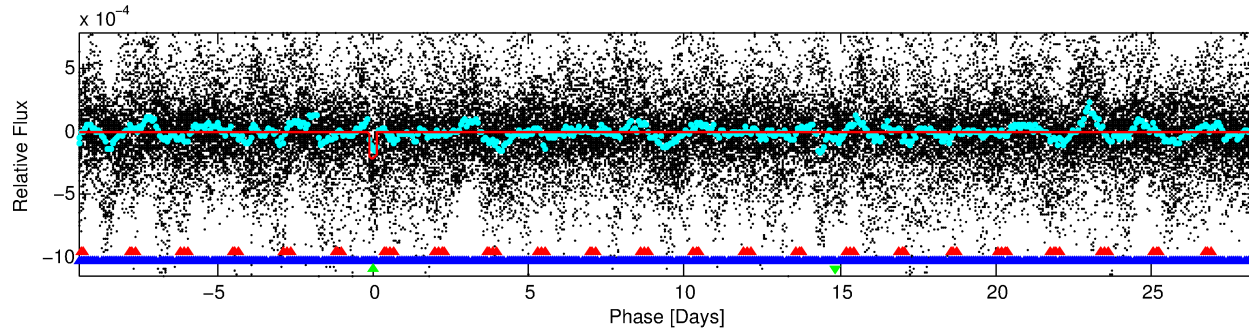
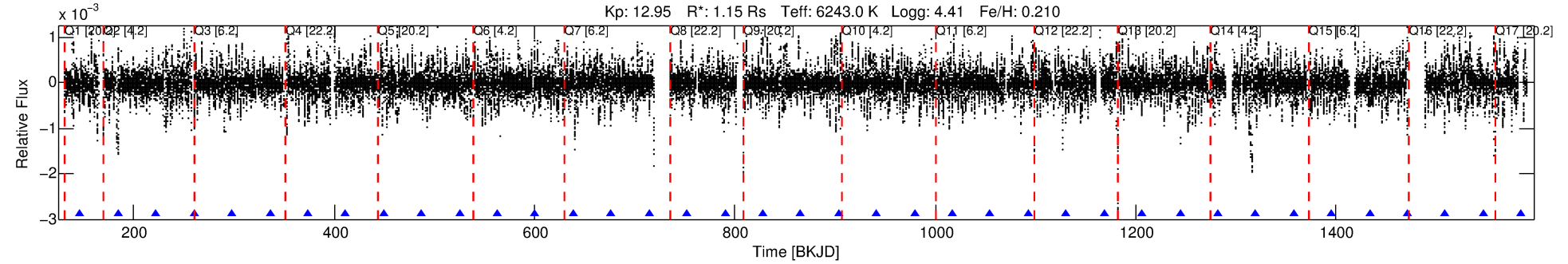
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006975129-03

No Significant Match Found

DV One-Page Summary

KIC: 6975129 Candidate: 3 of 3 Period: 37.841 d
KOI: K01628.03 Corr: 0.963



DV Fit Results:

Period = 37.84060 [0.00025] d
Epoch = 146.7686 [0.0055] BKJD
Rp/R* = 0.0158 [0.0016]
a/R* = 20.43 [8.68]
b = 0.89 [0.10]
Seff = 32.22 [8.20]
Teq = 607 [39] K
Rp = 1.98 [0.40] Re
a = 0.2362 [0.0370] AU
Ag = 711.04 [300.05] [2.37σ]
Teffp = 4850 [435] K [9.72σ]

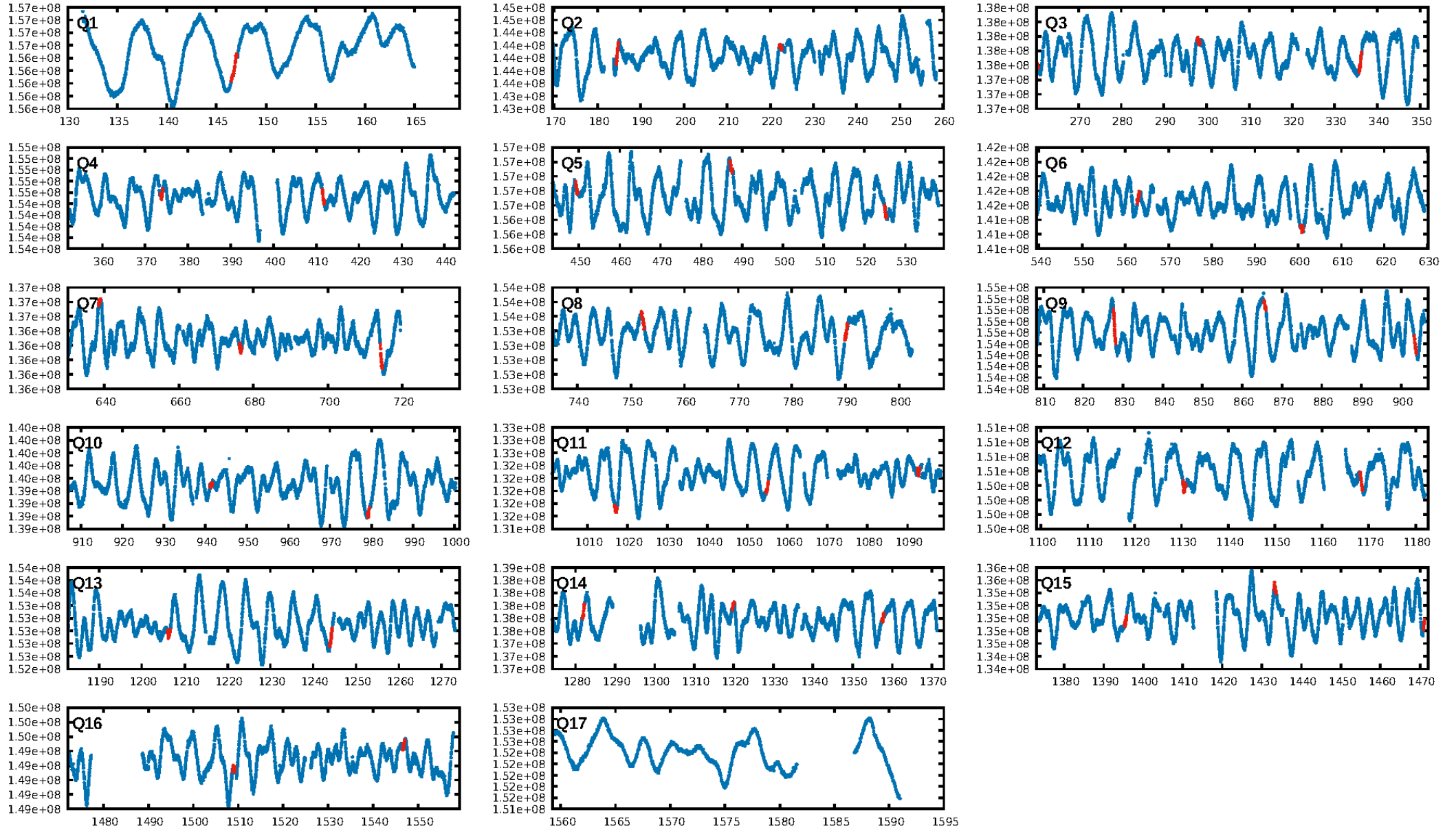
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [56.22σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 6.4%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.38e-19
RollingBand-fgt: 1.00 [37/37]
GhostDiagnostic-chr: 2.657
Centroid-sig: 44.1%
Centroid-so: 0.422 arcsec [1.00σ]
OotOffset-rm: 0.193 arcsec [0.87σ]
KicOffset-rm: 0.221 arcsec [0.75σ]
OotOffset-st: 3/4/4/3 [14]
KicOffset-st: 3/4/4/3 [14]
DiffImageQuality-fgm: 0.71 [10/14]
DiffImageOverlap-fno: 0.44 [7/16]

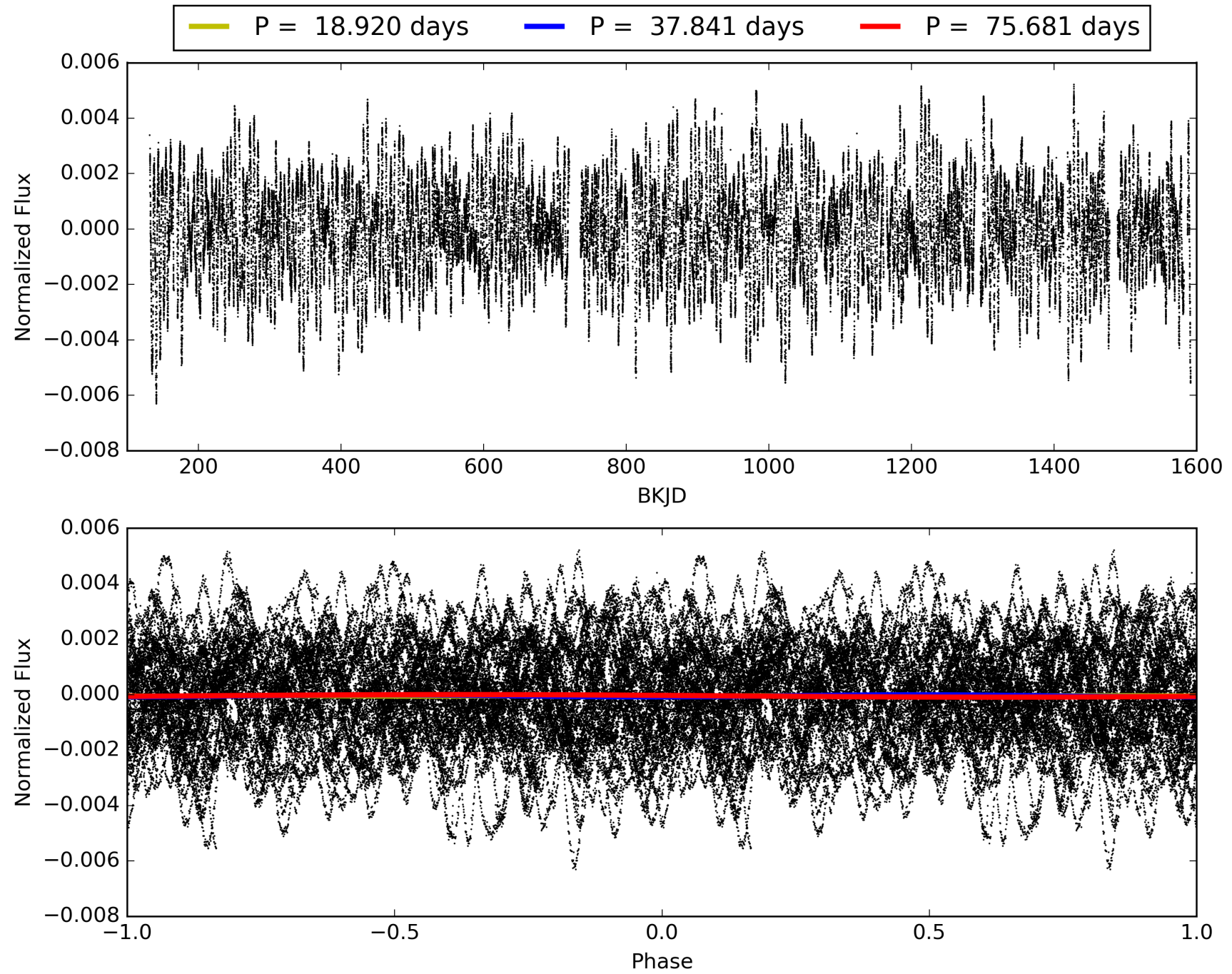
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 12:29:42 Z

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

TCE 006975129-03, PDC Light Curves

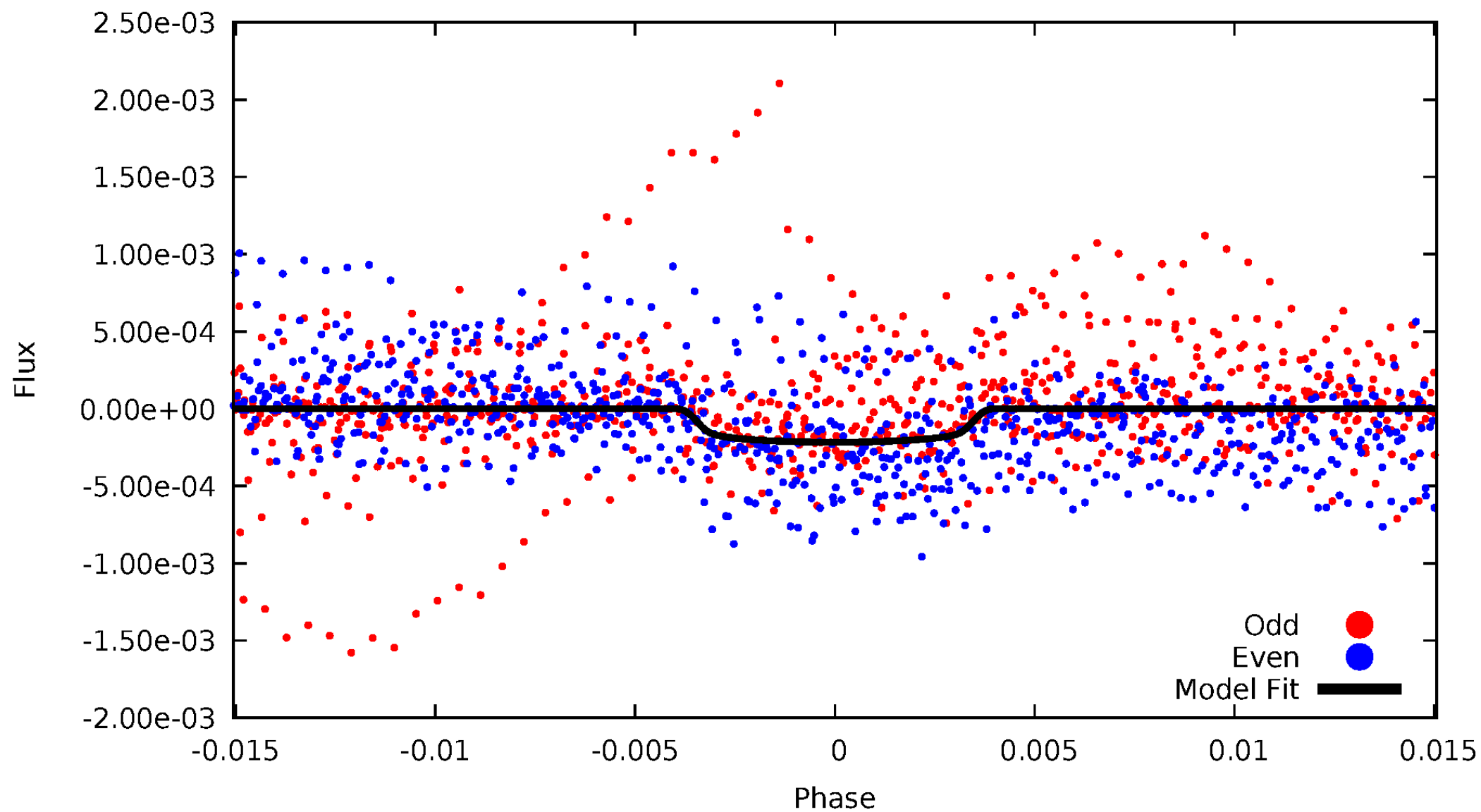


TCE 006975129-03



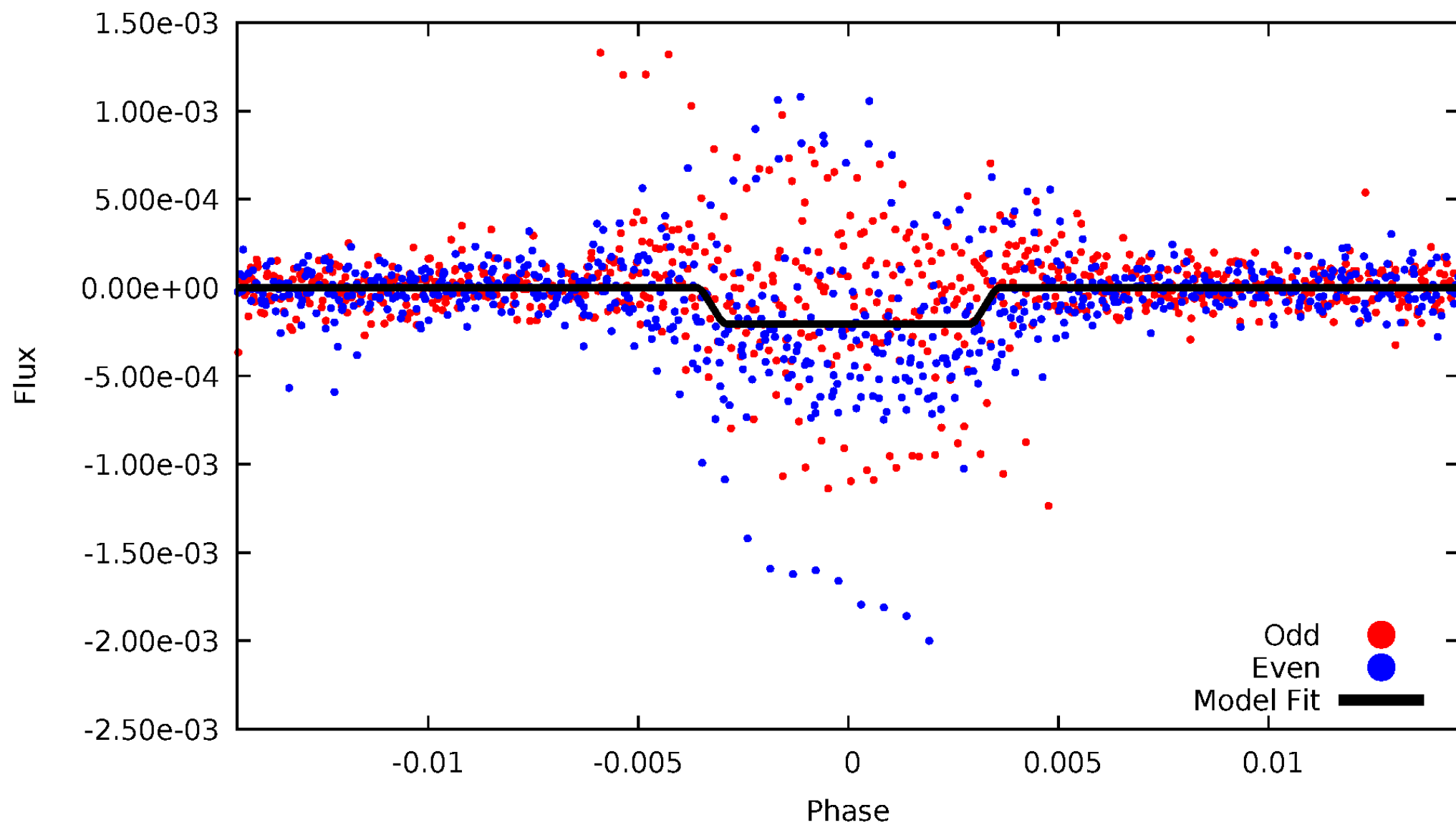
DV Odd/Even

TCE 006975129-03

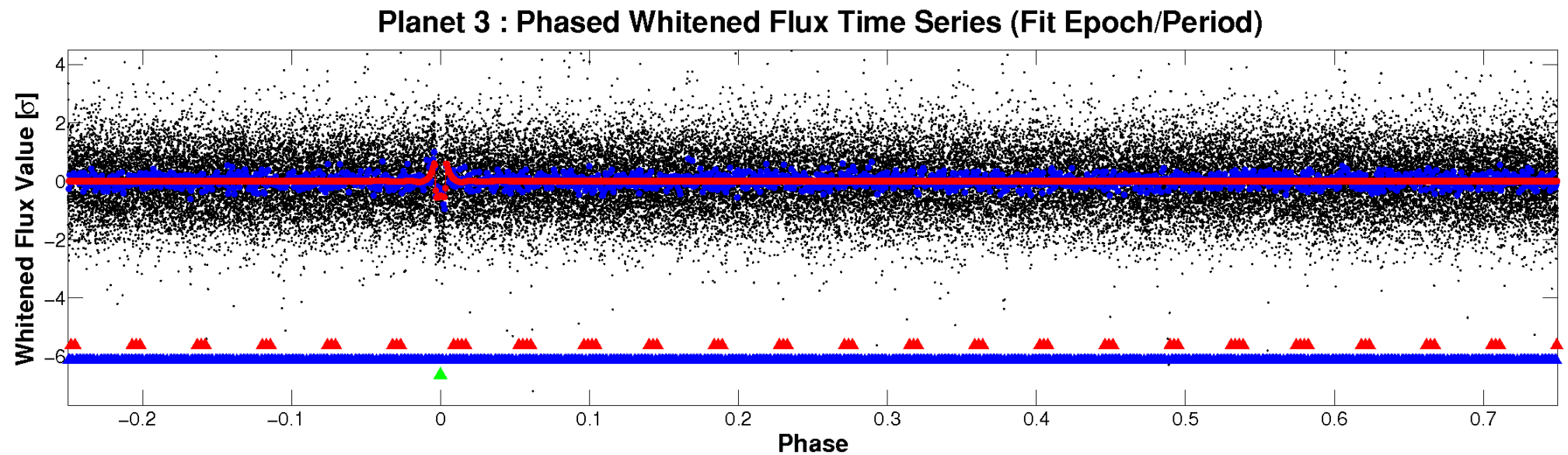
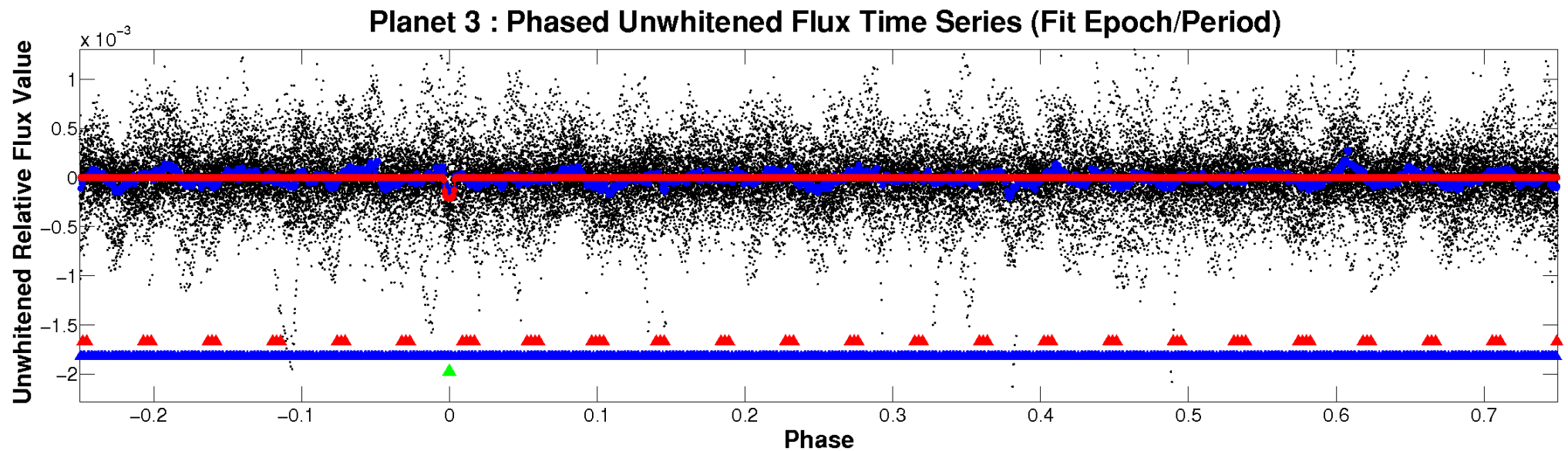


ALT Odd/Even

TCE 006975129-03

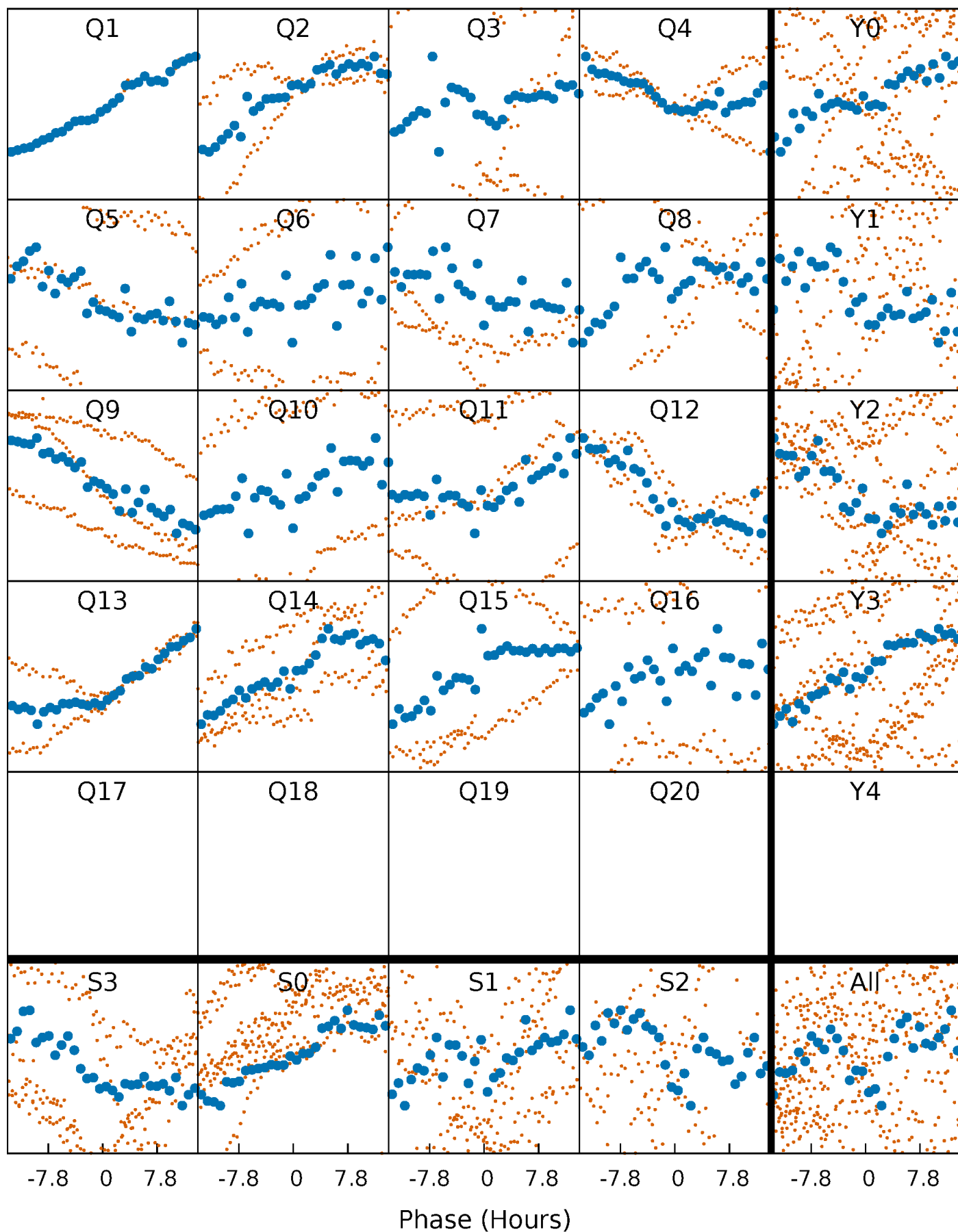


Non-Whitened Vs. Whitened Light Curve



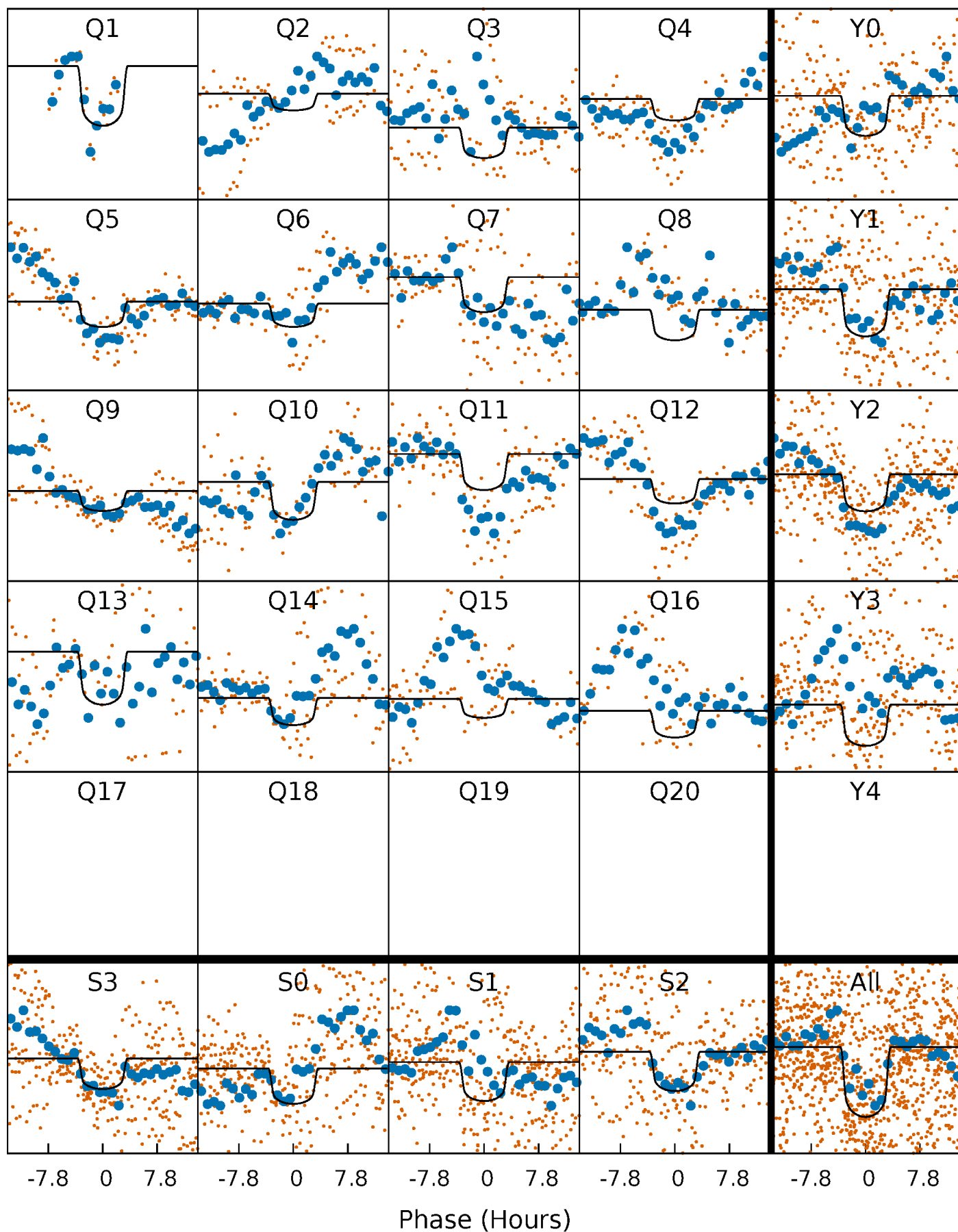
PDC Quarter-Phased Transit Curves

TCE 006975129-03 P= 37.840596 Days $T_0=146.768630$ (BKJD)



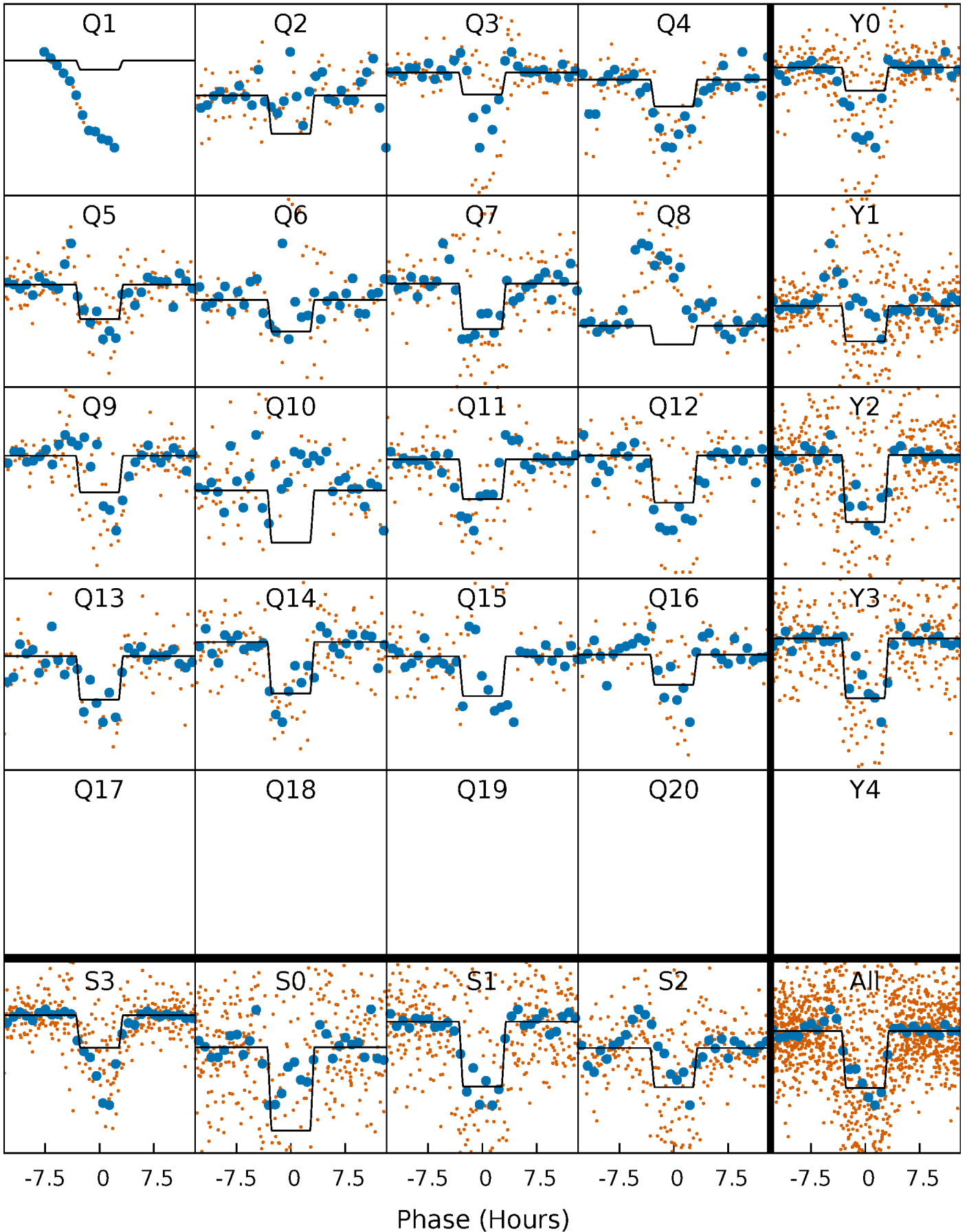
DV Quarter-Phased Transit Curves

TCE 006975129-03 P= 37.840596 Days $T_0=146.768630$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

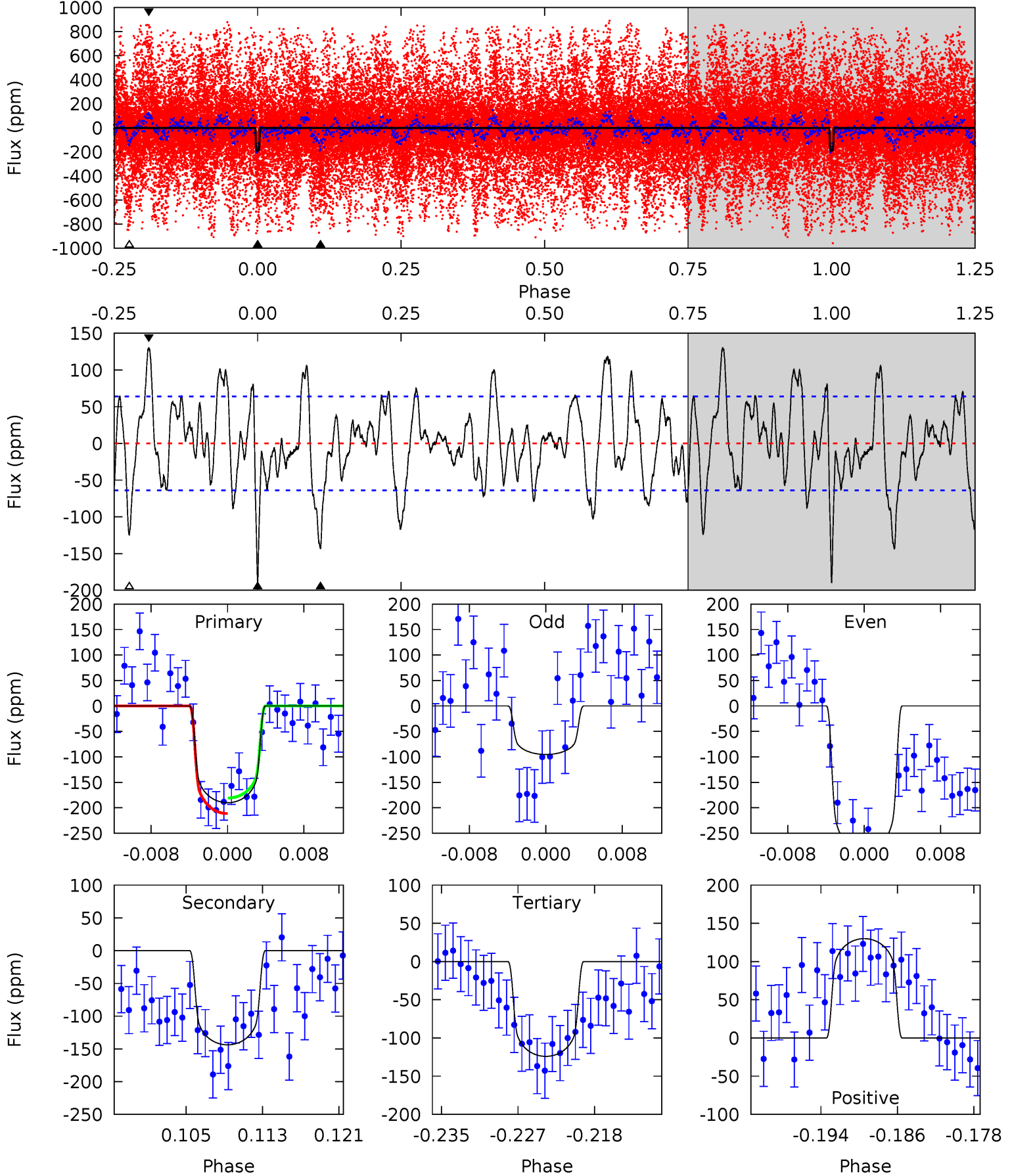
TCE 006975129-03 P= 37.839791 Days $T_0=146.785432$ (BKJD)



DV Model-Shift Uniqueness Test

006975129-03, P = 37.840596 Days, E = 108.928034 Days

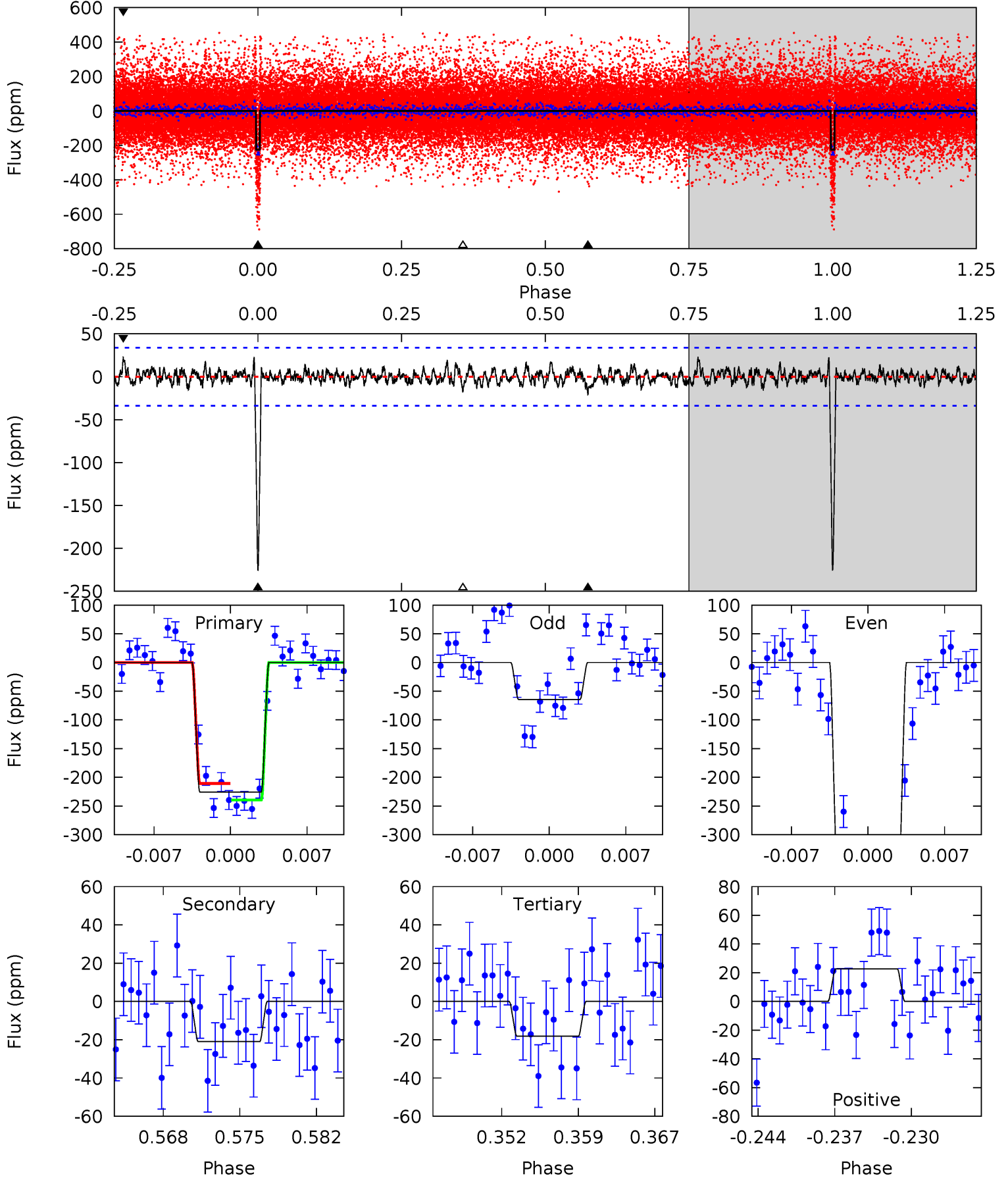
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.1	11.4	9.84	10.3	5.07	2.65	3.77	5.22	4.76	1.56	1.09	7.72	0.47	0.41	1.21



Alt Model-Shift Uniqueness Test

006975129-03, P = 37.839791 Days, E = 108.945641 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
34.0	3.16	2.73	3.43	5.09	2.69	0.91	31.3	30.6	0.42	-0.27	23.2	0.78	0.09	2.15



Stellar Parameters For KIC 006975129

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6243^{+99}_{-136}	$4.406^{+0.026}_{-0.136}$	$0.210^{+0.150}_{-0.200}$	$1.149^{+0.201}_{-0.067}$	$1.226^{+0.076}_{-0.102}$	$1.139^{+0.146}_{-0.438}$
	+2%/-2%	+1%/-3%	+71%/-95%	+17%/-6%	+6%/-8%	+13%/-38%
Source	SPE59	SPE59	SPE59	DSEP		

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

Secondary Eclipse Parameters for KIC 006975129-03 / KOI 1628.03

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-144 ± 13	$2.04^{+0.29}_{-0.23}$	862^{+37}_{-26}	5446^{+339}_{-269}	1031^{+303}_{-235}
Alt.	-21 ± 7	$1.84^{+0.26}_{-0.21}$	860^{+37}_{-27}	3886^{+254}_{-288}	182^{+81}_{-66}

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

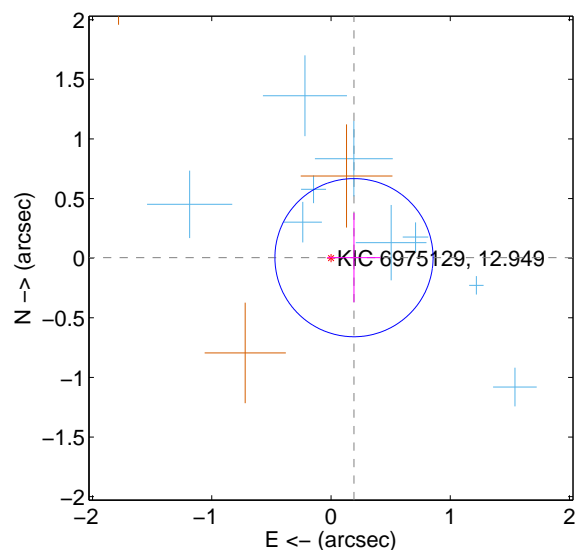
Supplemental centroid analysis for 006975129-03. Kepler magnitude: 12.95. Transit SNR 12.72

There are 10 quarters with good PRF difference image offsets

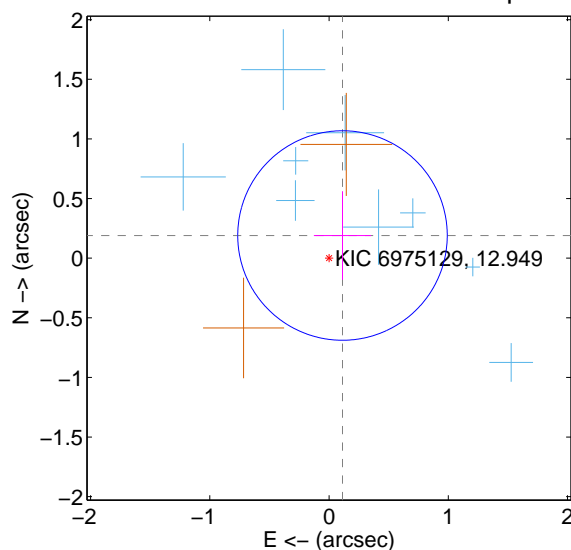
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.193 ± 0.221	0.87	-0.193 ± 0.224	0.004 ± 0.374
PRF-fit source offset from KIC position	0.221 ± 0.293	0.75	-0.113 ± 0.240	0.190 ± 0.371
photometric centroid source offset	0.42 ± 0.42	1.00	0.06 ± 0.52	0.42 ± 0.42

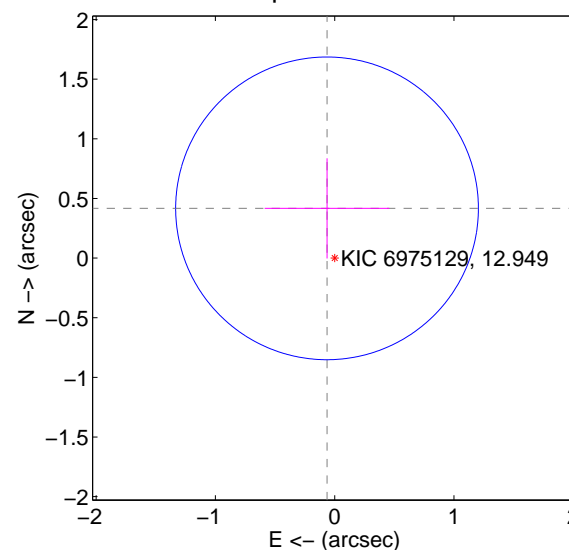
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

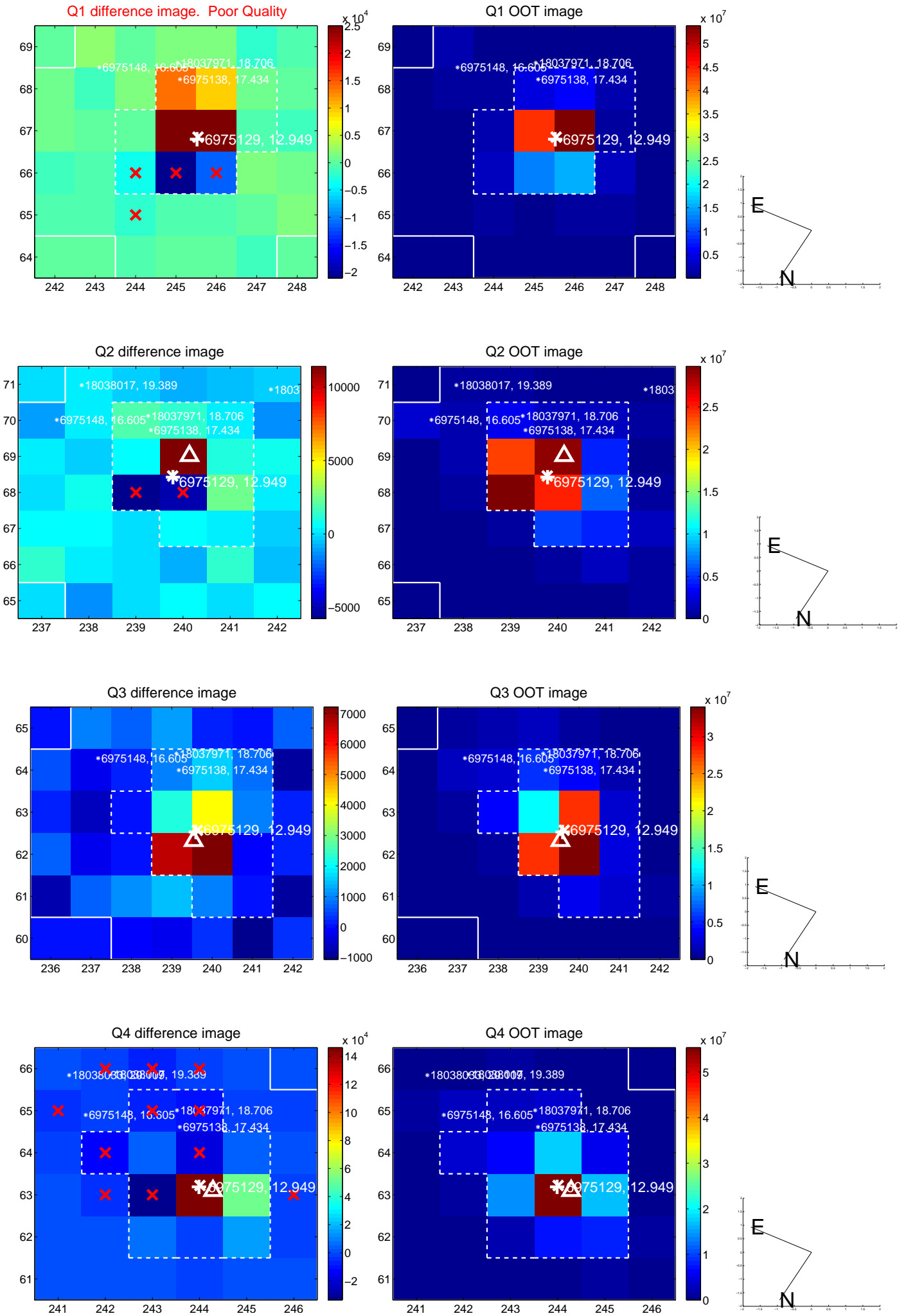


offset from photometric centroids

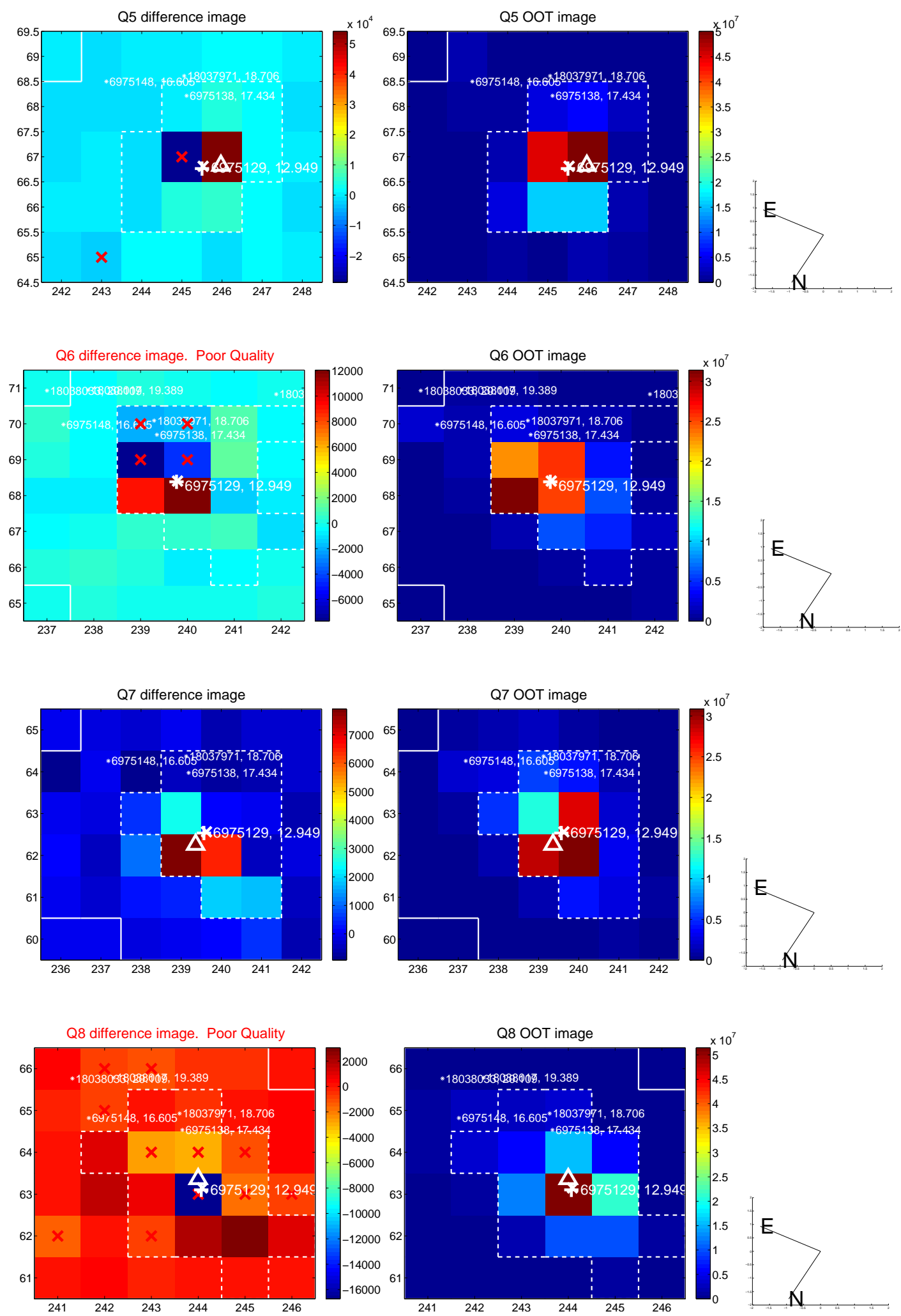


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

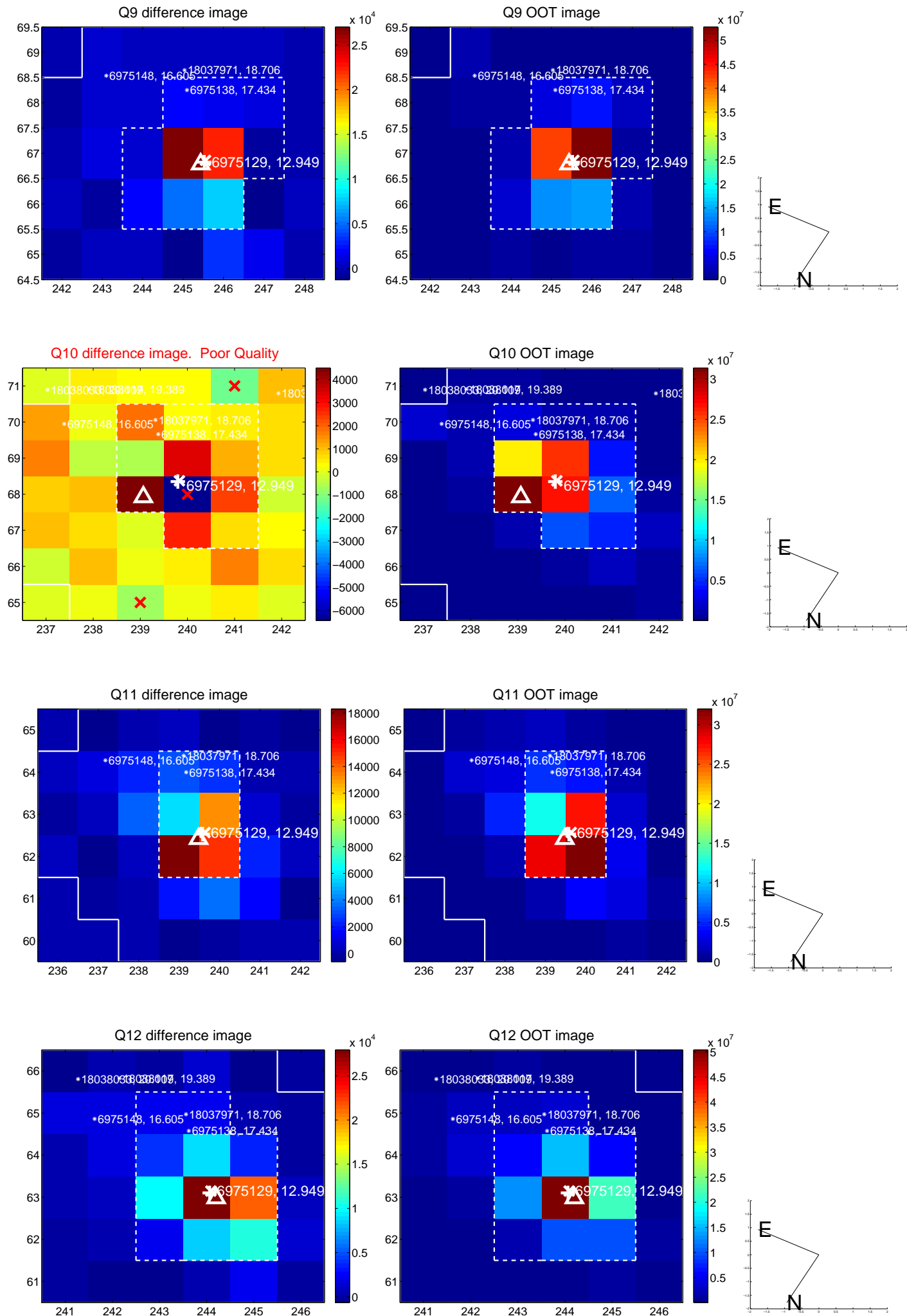
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



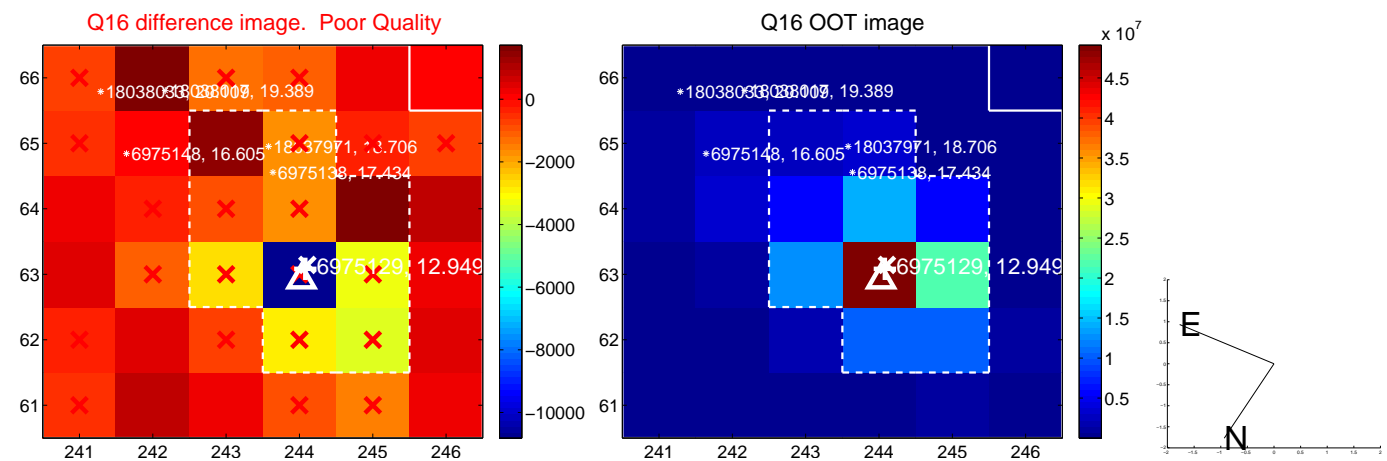
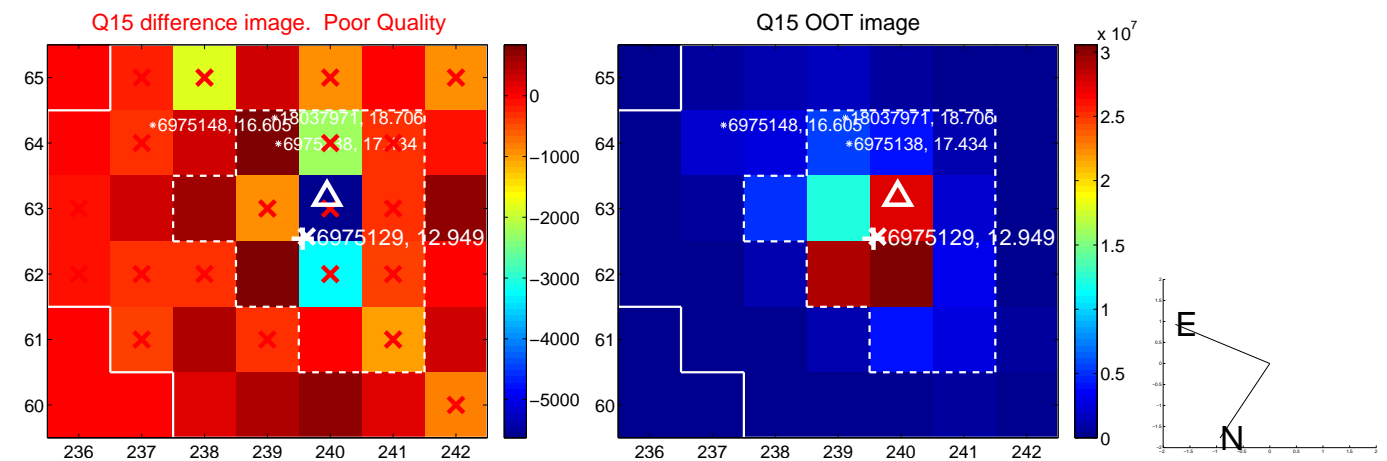
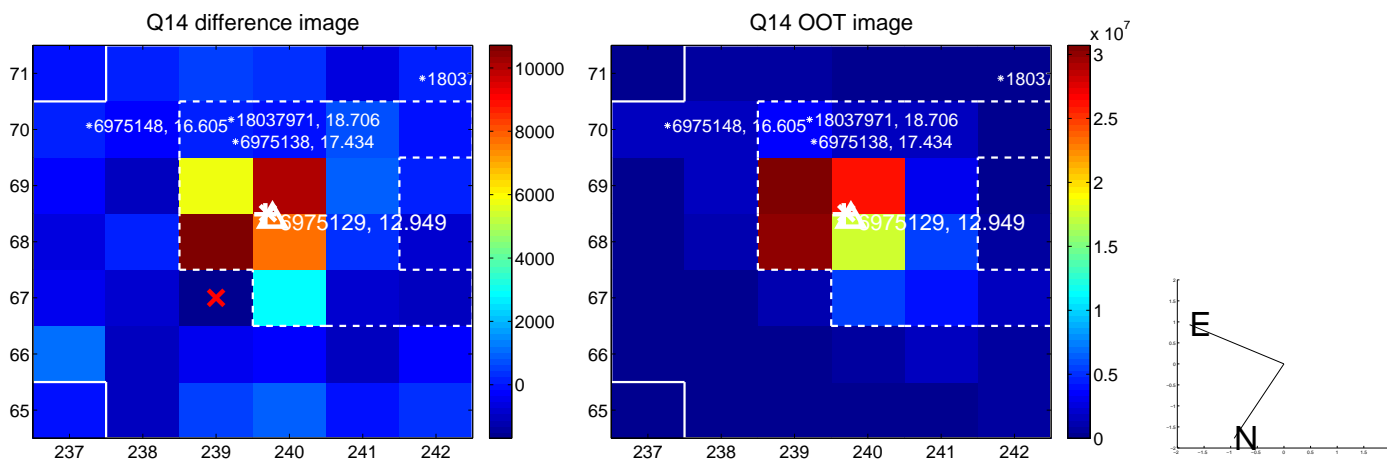
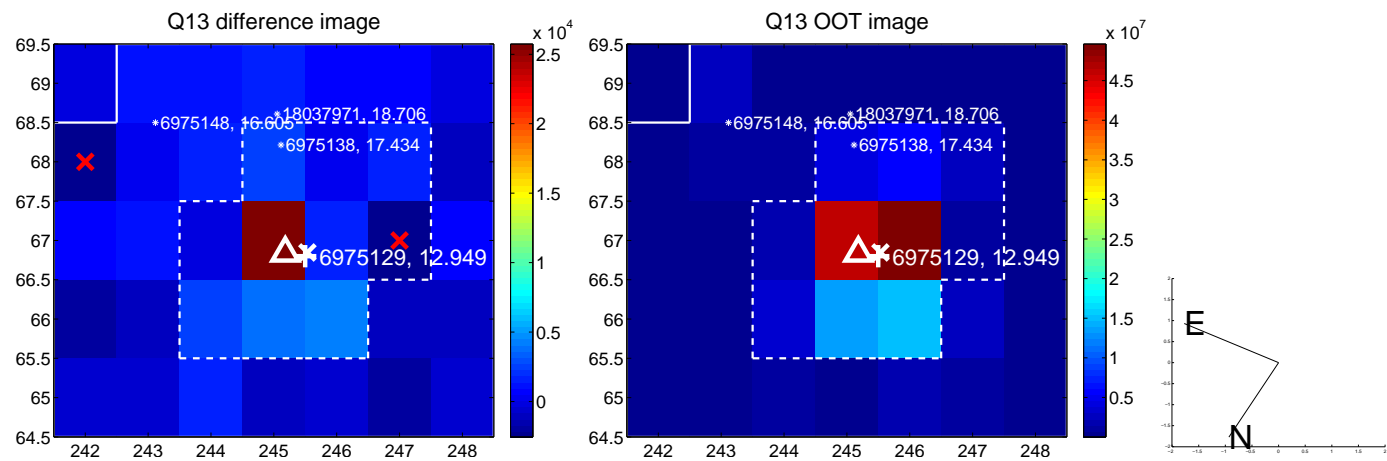
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



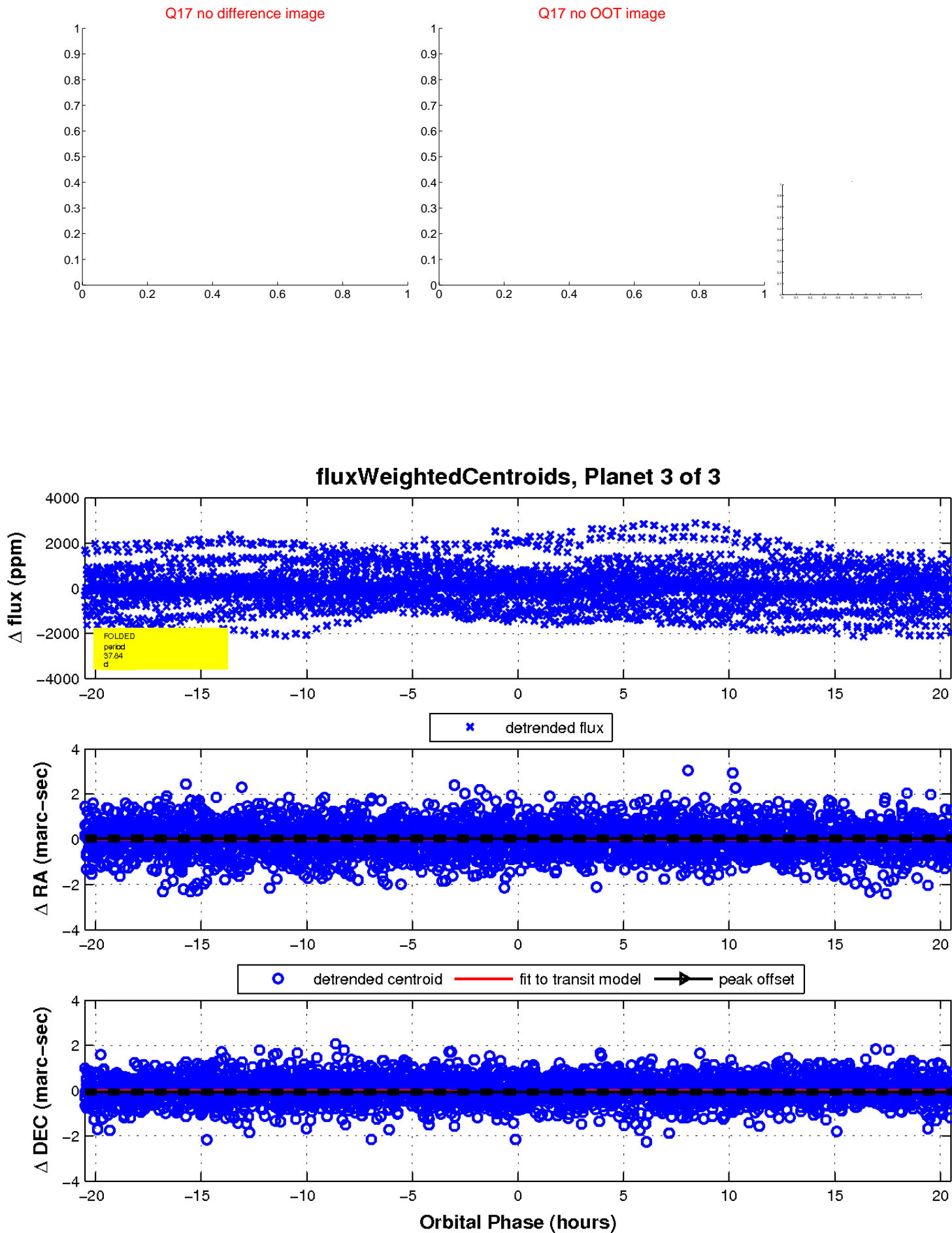
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

