

KIC 006786037

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})
006786037-01	OBS	0564.02	127.904048	246.461881	3932.4	14.008	136.7	135.6	1.25	5751	7.80	6.10
006786037-02	OBS	0564.01	21.060164	150.785656	522.5	10.950	30.0	33.0	1.25	5751	5.08	67.58
006786037-03	OBS	0564.03	6.217134	131.720790	177.8	3.950	17.1	19.3	1.25	5751	1.97	343.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006786037-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 006786037-01

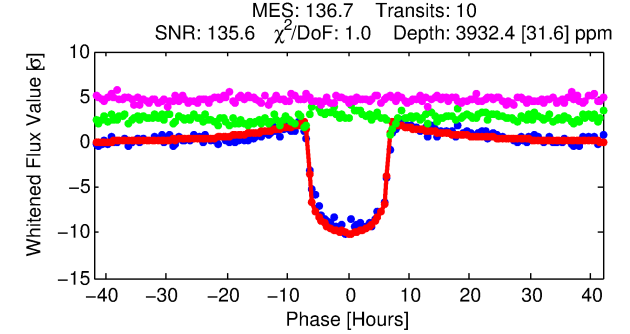
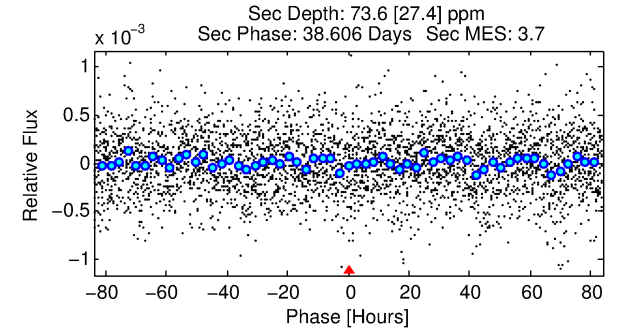
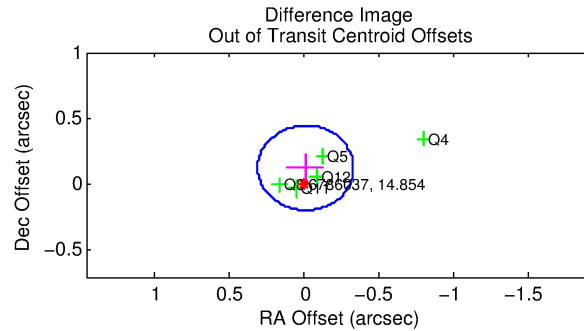
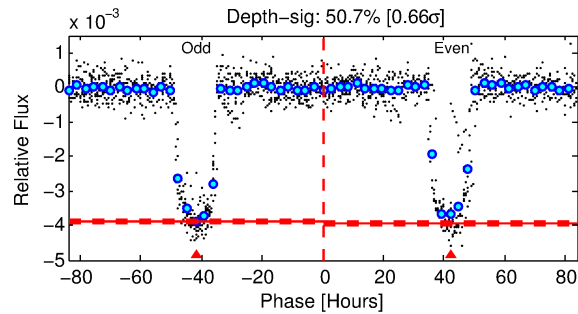
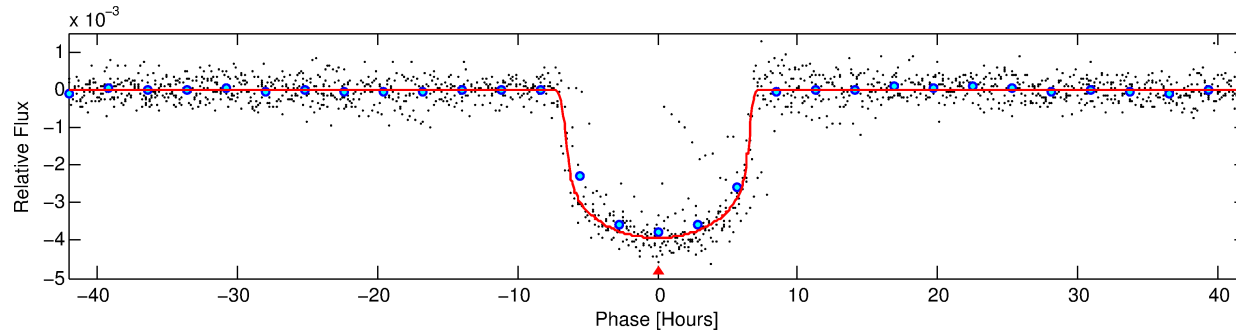
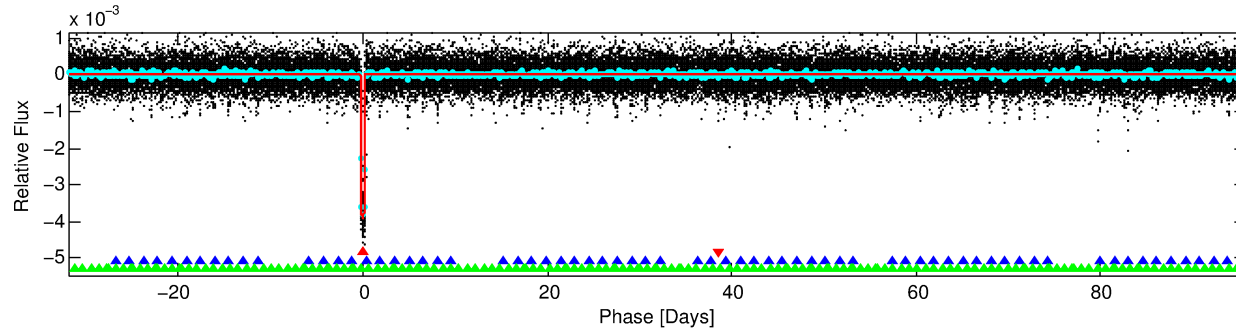
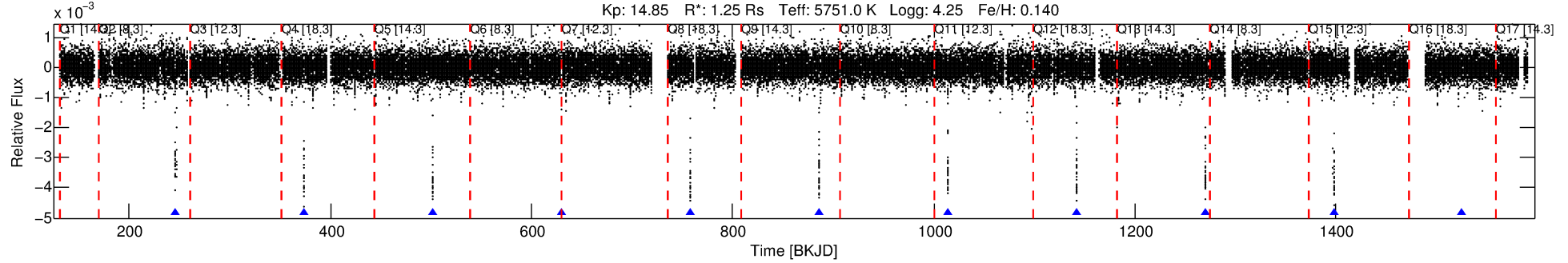
No Significant Match Found

DV One-Page Summary

KIC: 6786037 Candidate: 1 of 3 Period: 127.904 d

KOI: K00564.02 Corr: 0.977

Kp: 14.85 R*: 1.25 Rs Teff: 5751.0 K Logg: 4.25 Fe/H: 0.140



DV Fit Results:

Period = 127.90405 [0.00031] d
Epoch = 246.4619 [0.0018] BKJD
Rp/R* = 0.0573 [0.0012]
a/R* = 70.88 [6.26]
b = 0.29 [0.28]
Seff = 6.10 [1.53]
Teq = 401 [25] K
Rp = 7.80 [1.26] Re
a = 0.4999 [0.0766] AU
Ag = 166.40 [74.33] [2.23σ]
Teffp = 2225 [210] K [8.62σ]

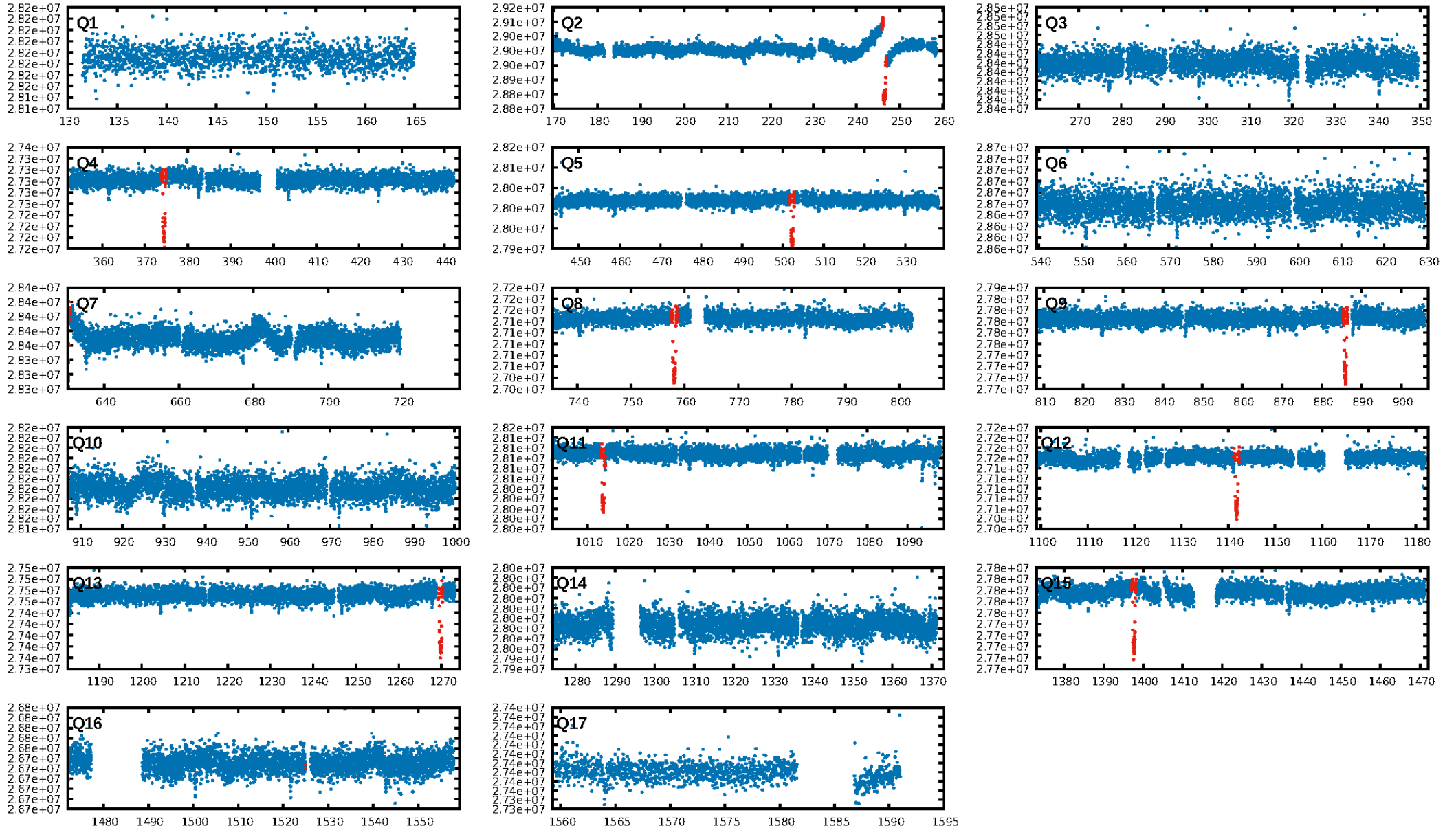
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [144.22σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 6.975
Centroid-sig: 45.1%
Centroid-so: 0.036 arcsec [0.49σ]
OotOffset-rm: 0.127 arcsec [1.19σ]
KicOffset-rm: 0.106 arcsec [0.99σ]
OotOffset-st: 0/1/3/1 [5]
KicOffset-st: 0/1/3/1 [5]
DiffImageQuality-fgm: 1.00 [5/5]
DiffImageOverlap-fno: 0.40 [2/5]

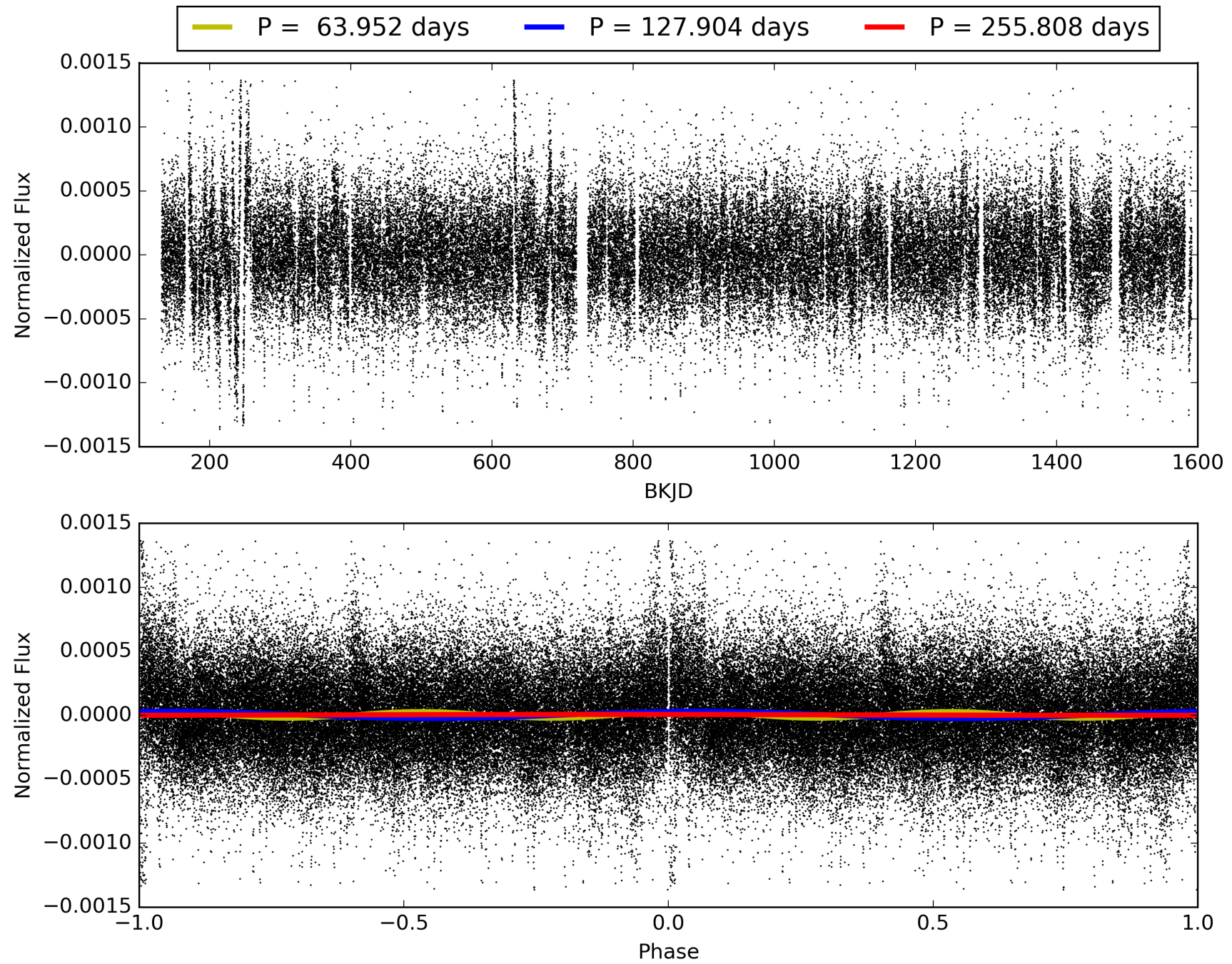
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:21:50 Z

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

TCE 006786037-01, PDC Light Curves

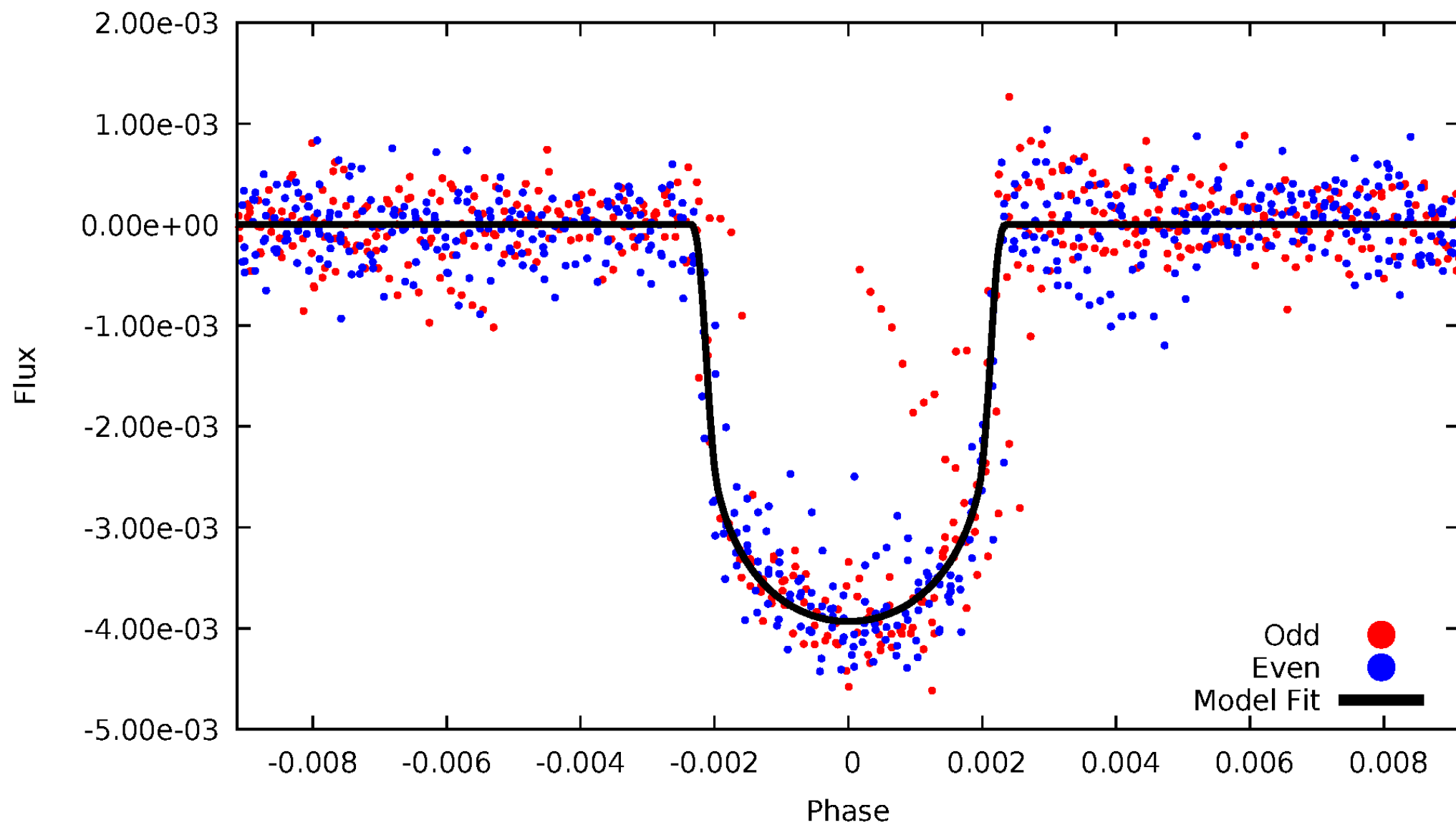


TCE 006786037-01



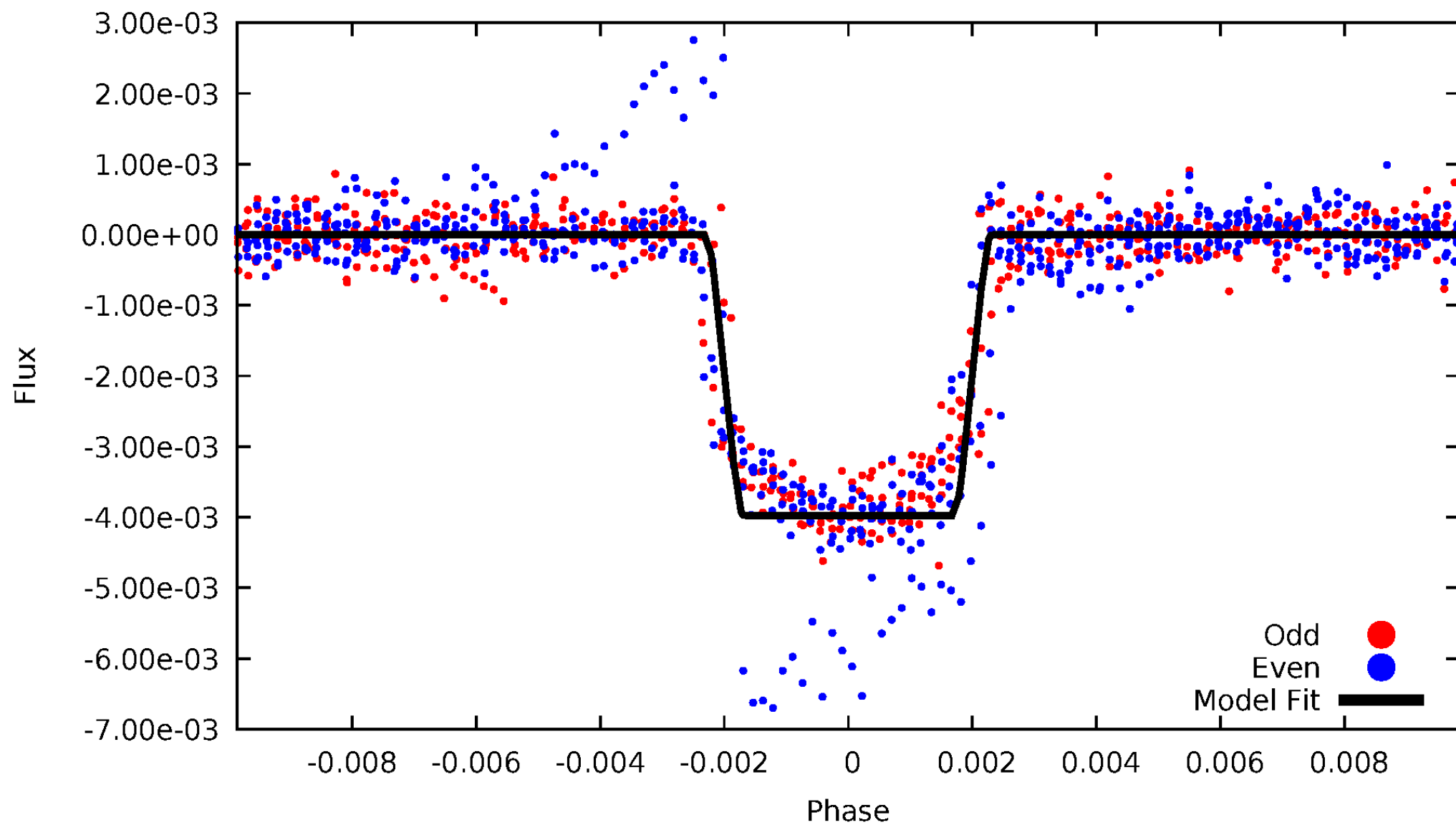
DV Odd/Even

TCE 006786037-01



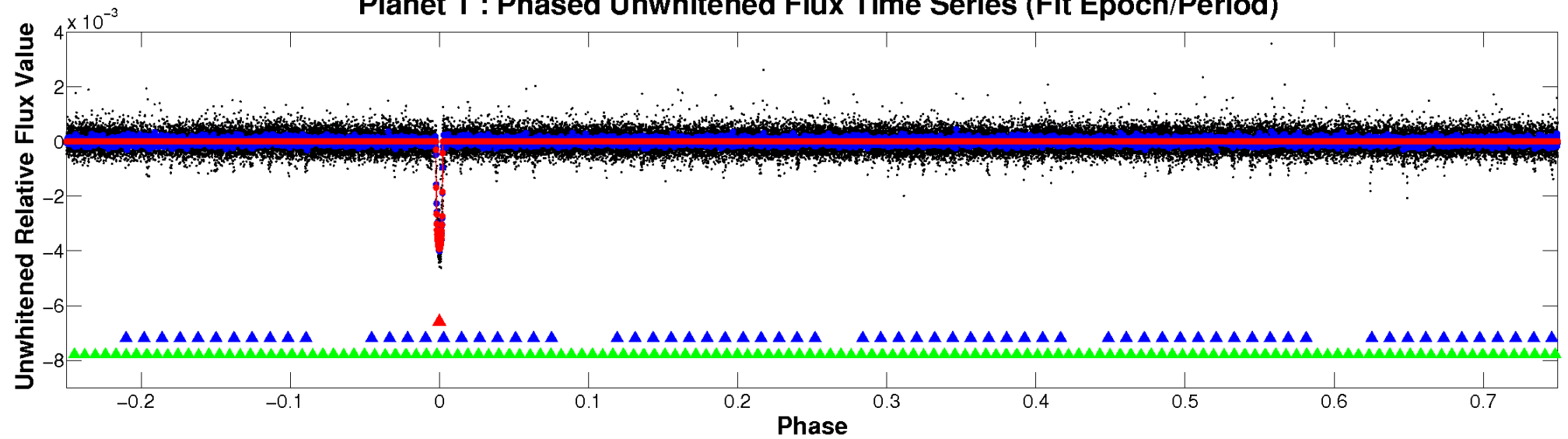
ALT Odd/Even

TCE 006786037-01

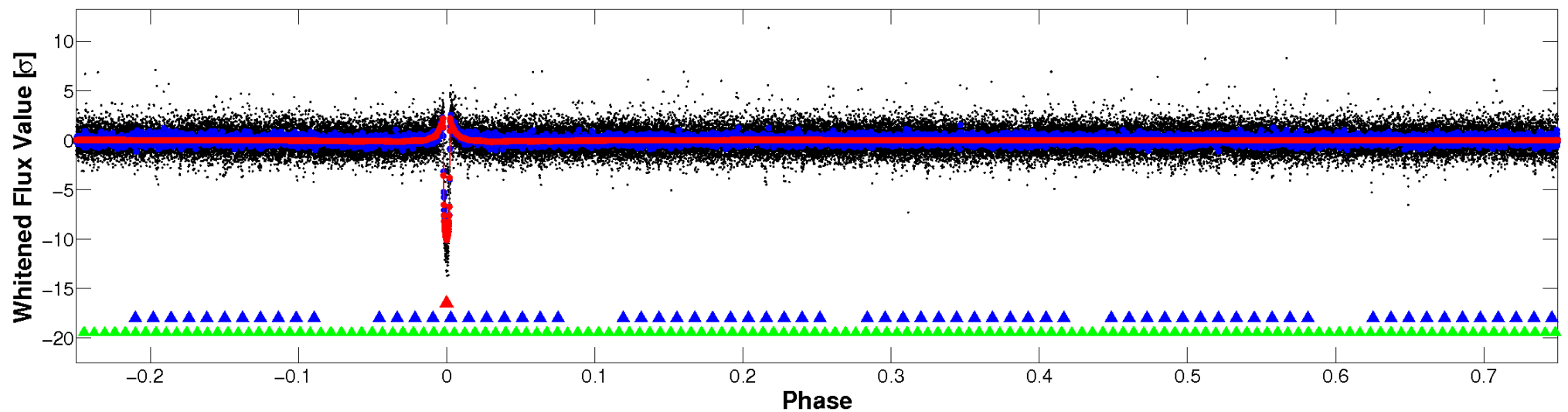


Non-Whitened Vs. Whitened Light Curve

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

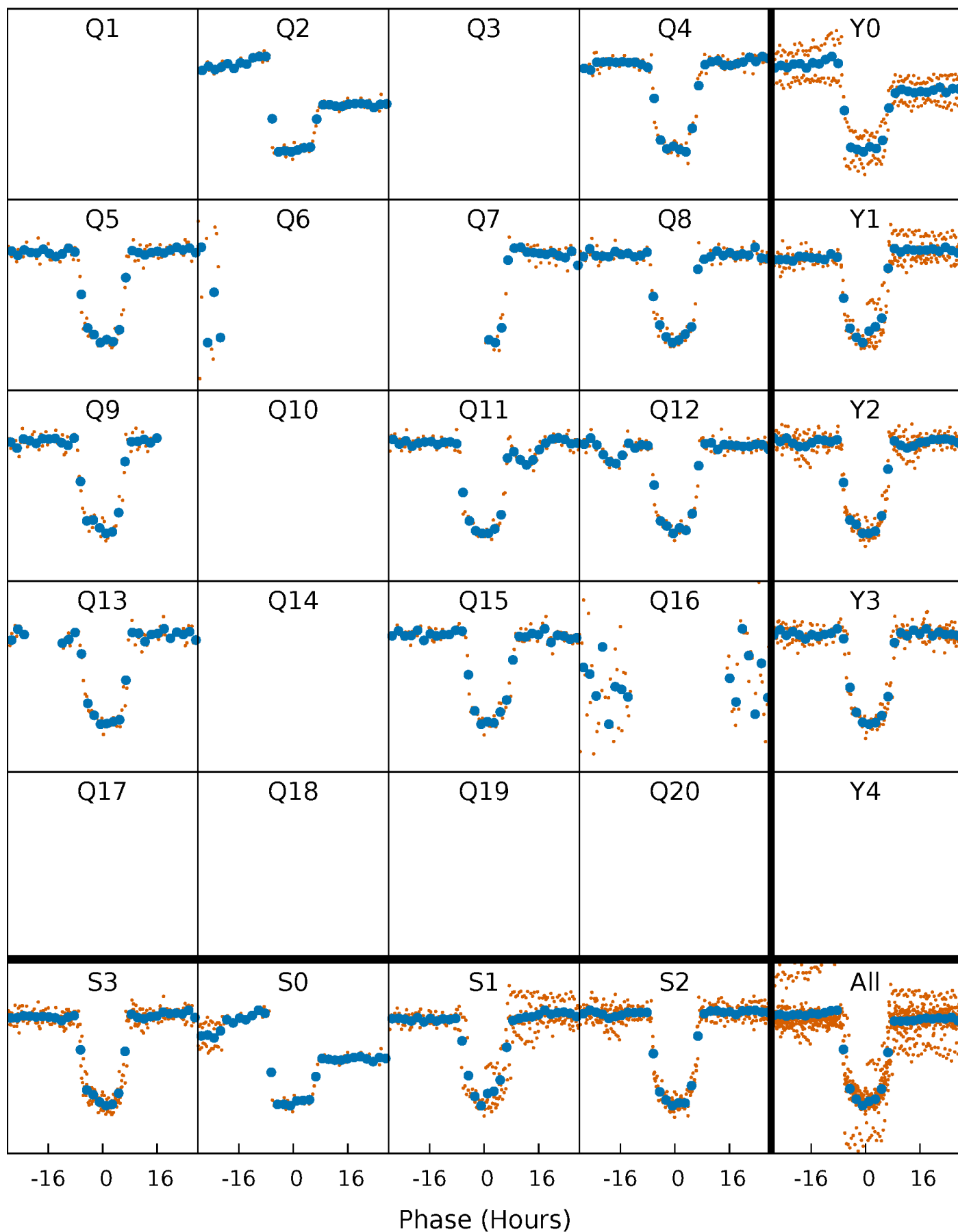


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



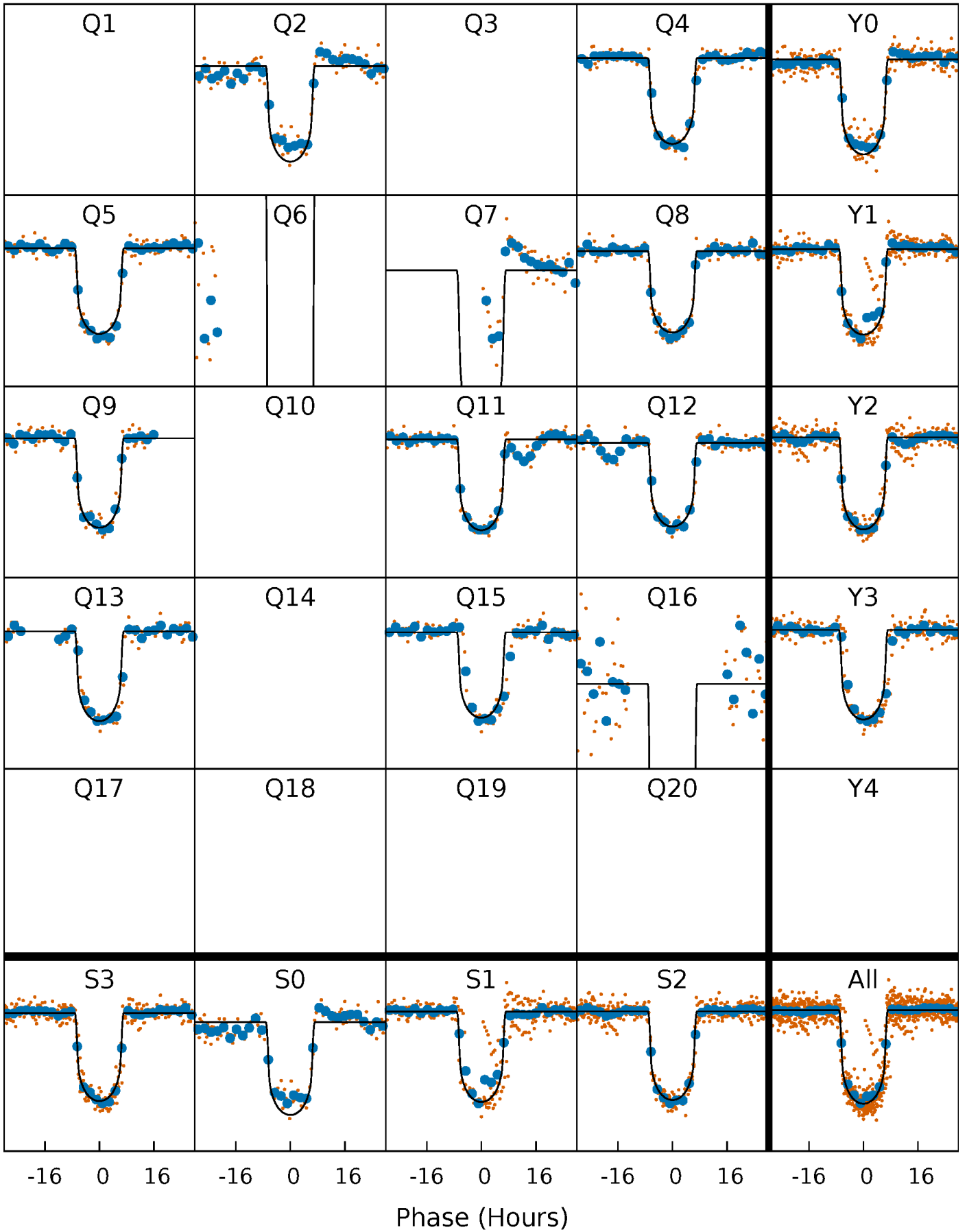
PDC Quarter-Phased Transit Curves

TCE 006786037-01 P=127.904048 Days $T_0=246.461881$ (BKJD)



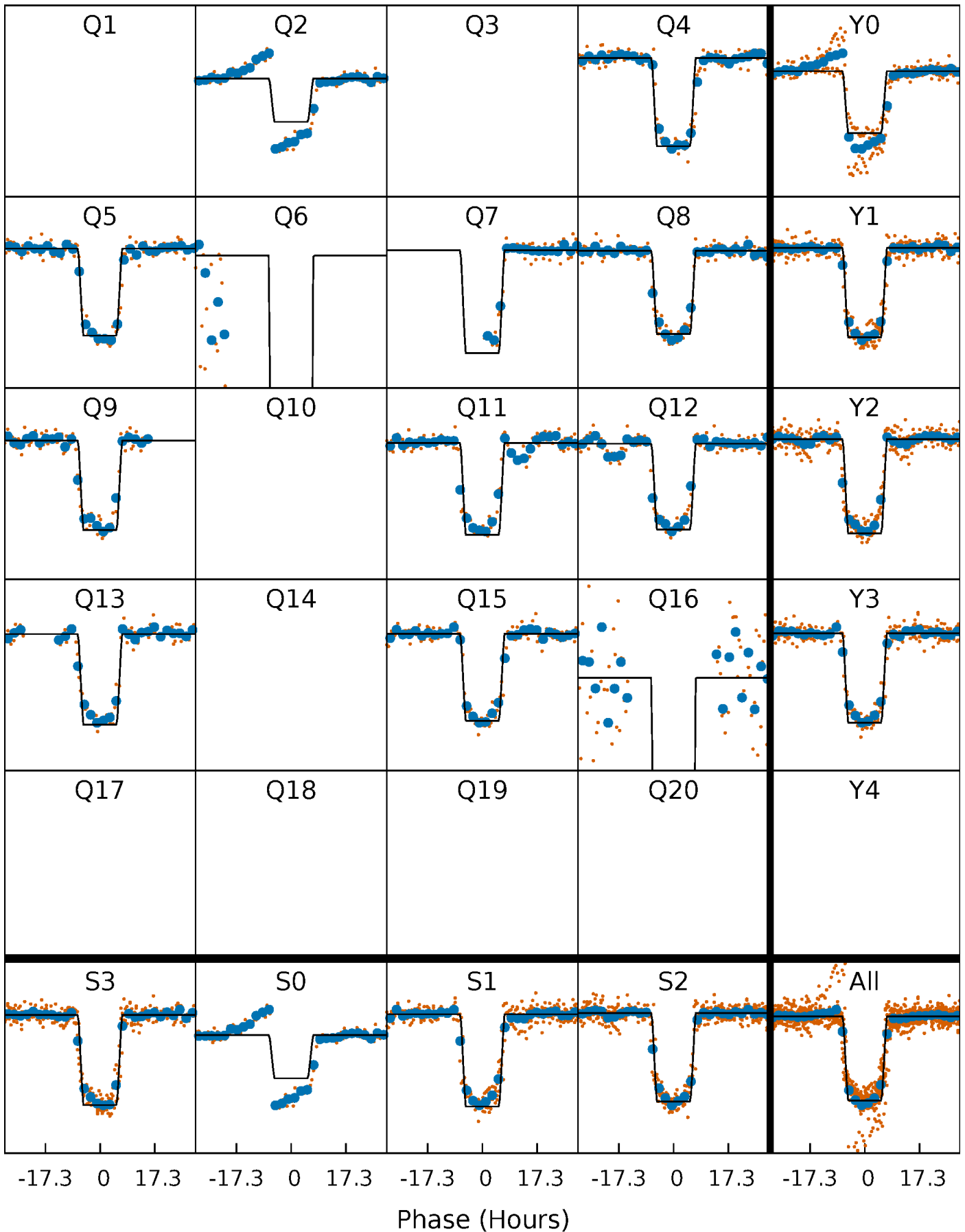
DV Quarter-Phased Transit Curves

TCE 006786037-01 P=127.904048 Days $T_0=246.461881$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

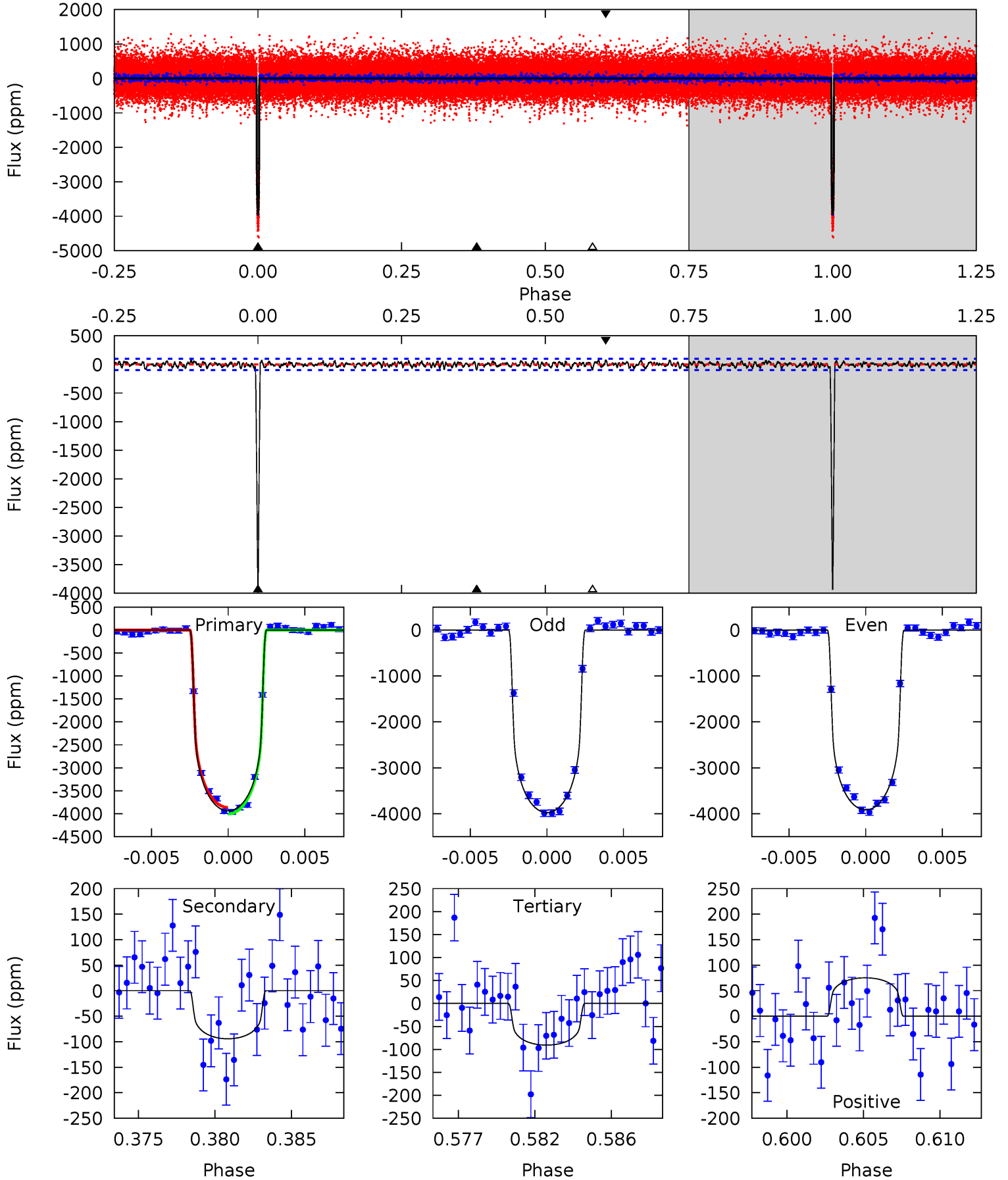
TCE 006786037-01 P=127.914086 Days $T_0=246.424944$ (BKJD)



DV Model-Shift Uniqueness Test

006786037-01, P = 127.904048 Days, E = 118.557833 Days

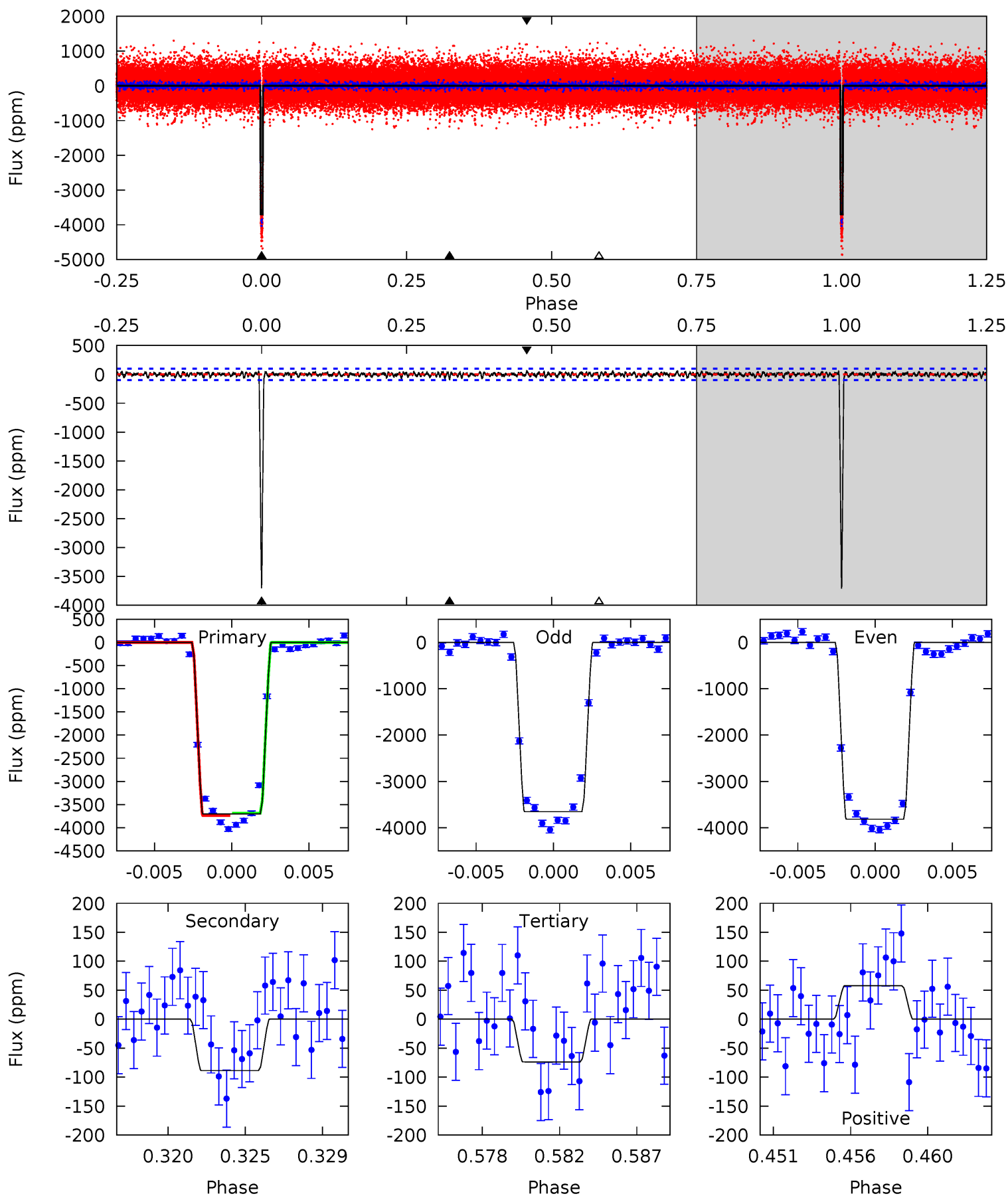
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
207.9	4.98	4.79	3.97	5.17	2.83	1.48	203.1	203.9	0.19	1.00	1.59	0.93	0.02	3.74



Alt Model-Shift Uniqueness Test

006786037-01, P = 127.914086 Days, E = 118.510858 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
191.6	4.59	3.81	2.99	5.18	2.84	1.13	187.8	188.6	0.78	1.60	4.17	1.05	0.02	1.36



Stellar Parameters For KIC 006786037

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5751^{+78}_{-78}	$4.254^{+0.143}_{-0.104}$	$0.140^{+0.150}_{-0.150}$	$1.247^{+0.200}_{-0.200}$	$1.018^{+0.081}_{-0.065}$	$0.739^{+0.496}_{-0.255}$
	+1%/-1%	+3%/-2%	+107%/-107%	+16%/-16%	+8%/-6%	+67%/-35%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006786037-01 / KOI 0564.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-94 ± 19	$7.77^{+0.68}_{-0.69}$	559^{+23}_{-28}	3024^{+87}_{-91}	216^{+61}_{-51}
Alt.	-89 ± 19	$8.49^{+0.82}_{-0.78}$	557^{+24}_{-25}	2916^{+89}_{-100}	168^{+57}_{-46}

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

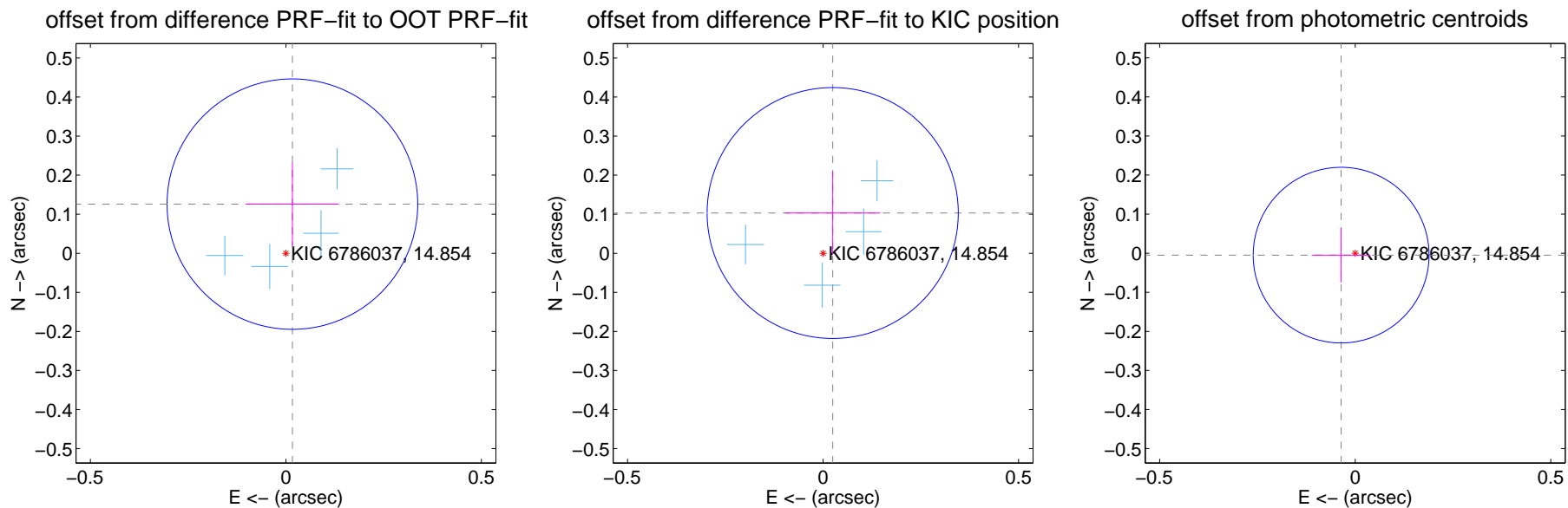
DV Centroid Data

Supplemental centroid analysis for 006786037-01. Kepler magnitude: 14.85. Transit SNR 135.60

There are 5 quarters with good PRF difference image offsets

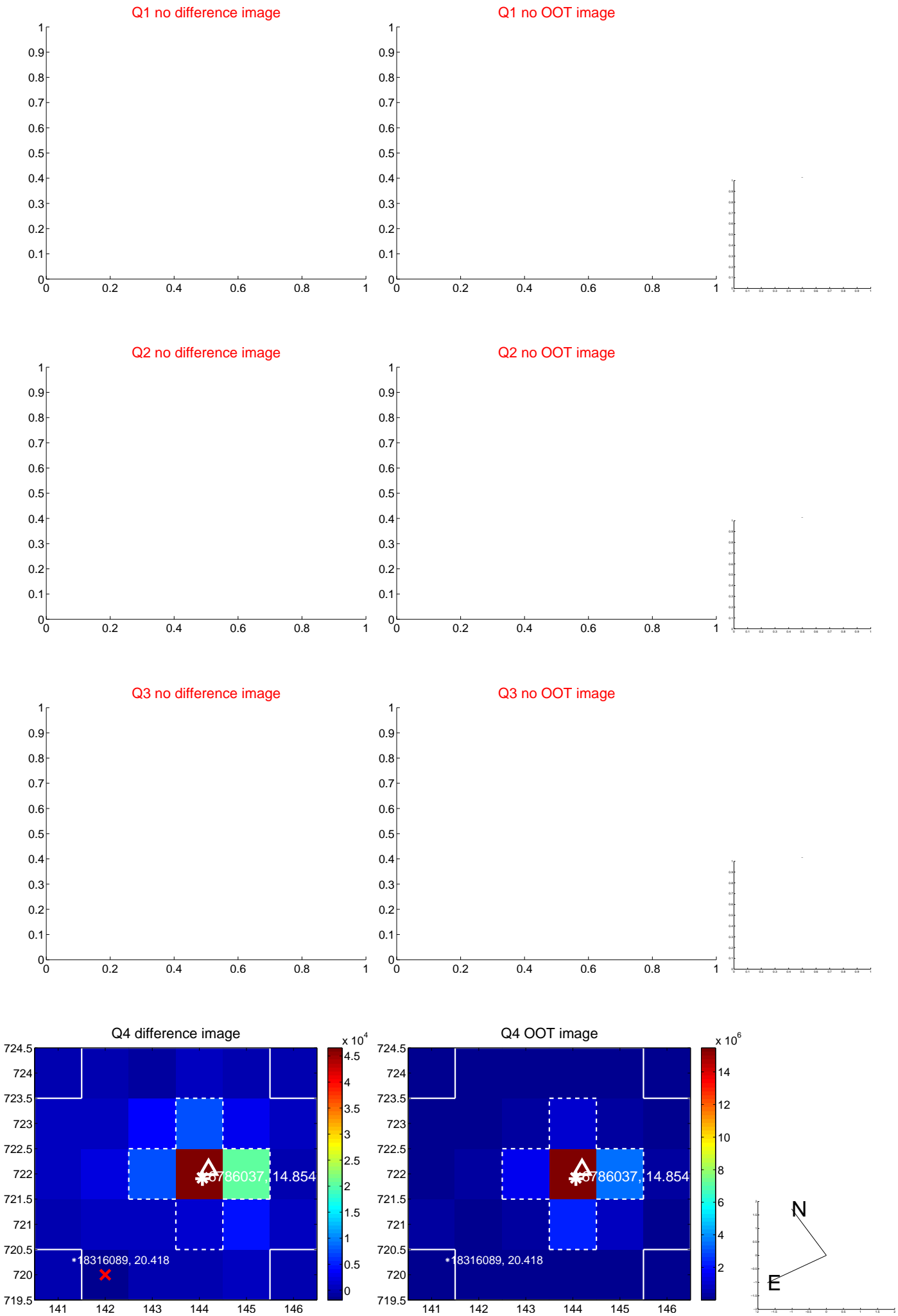
The direct PRF centroid is offset from the target star catalog position by about 0.01 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.127 ± 0.107	1.19	-0.017 ± 0.118	0.126 ± 0.107
PRF-fit source offset from KIC position	0.106 ± 0.107	0.99	-0.025 ± 0.122	0.103 ± 0.106
photometric centroid source offset	0.04 ± 0.07	0.49	0.04 ± 0.08	-0.00 ± 0.07

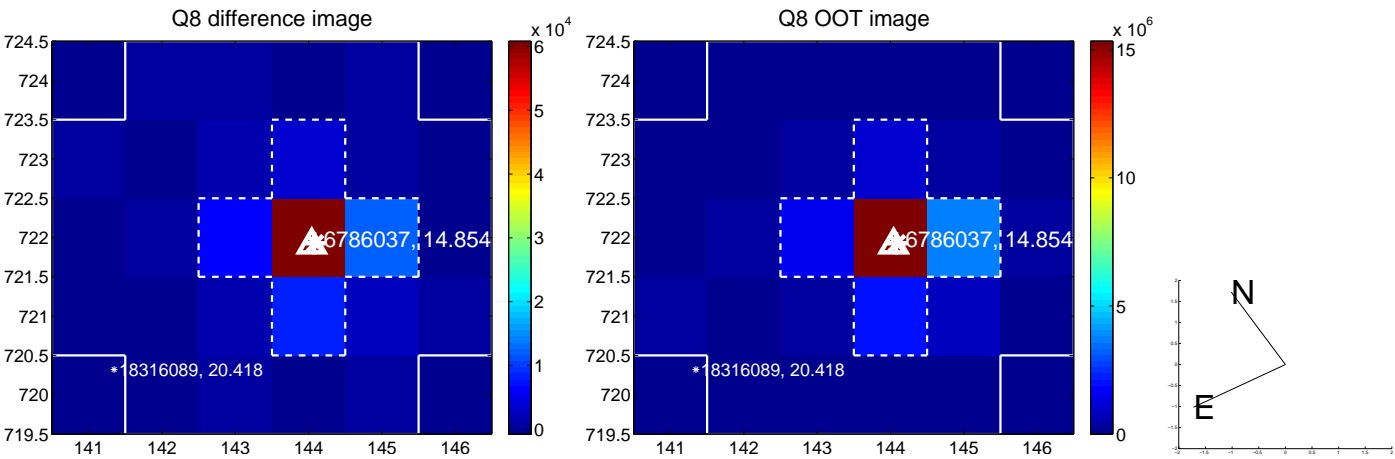
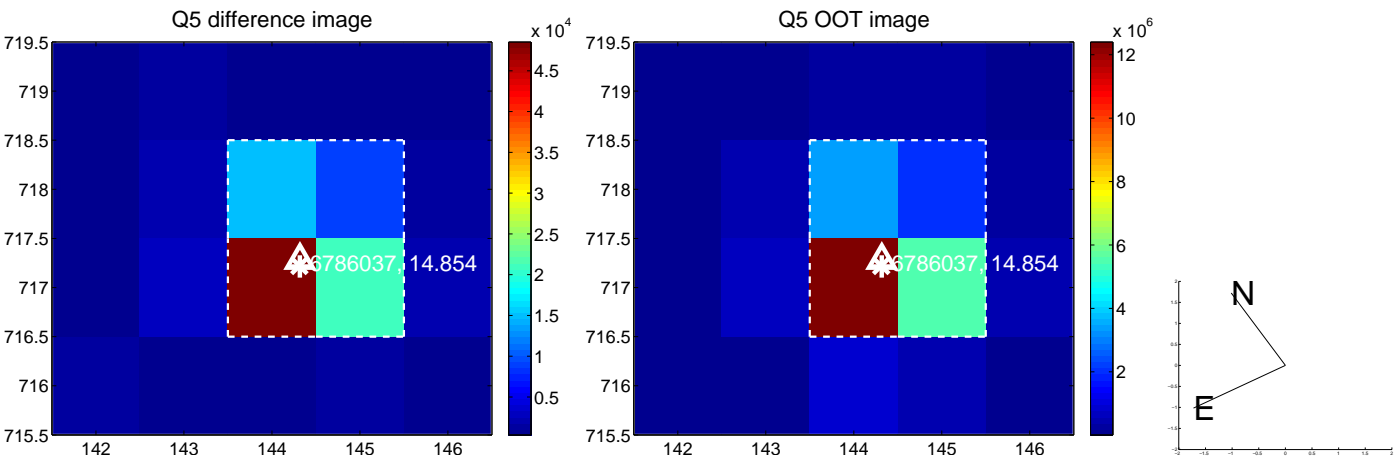


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

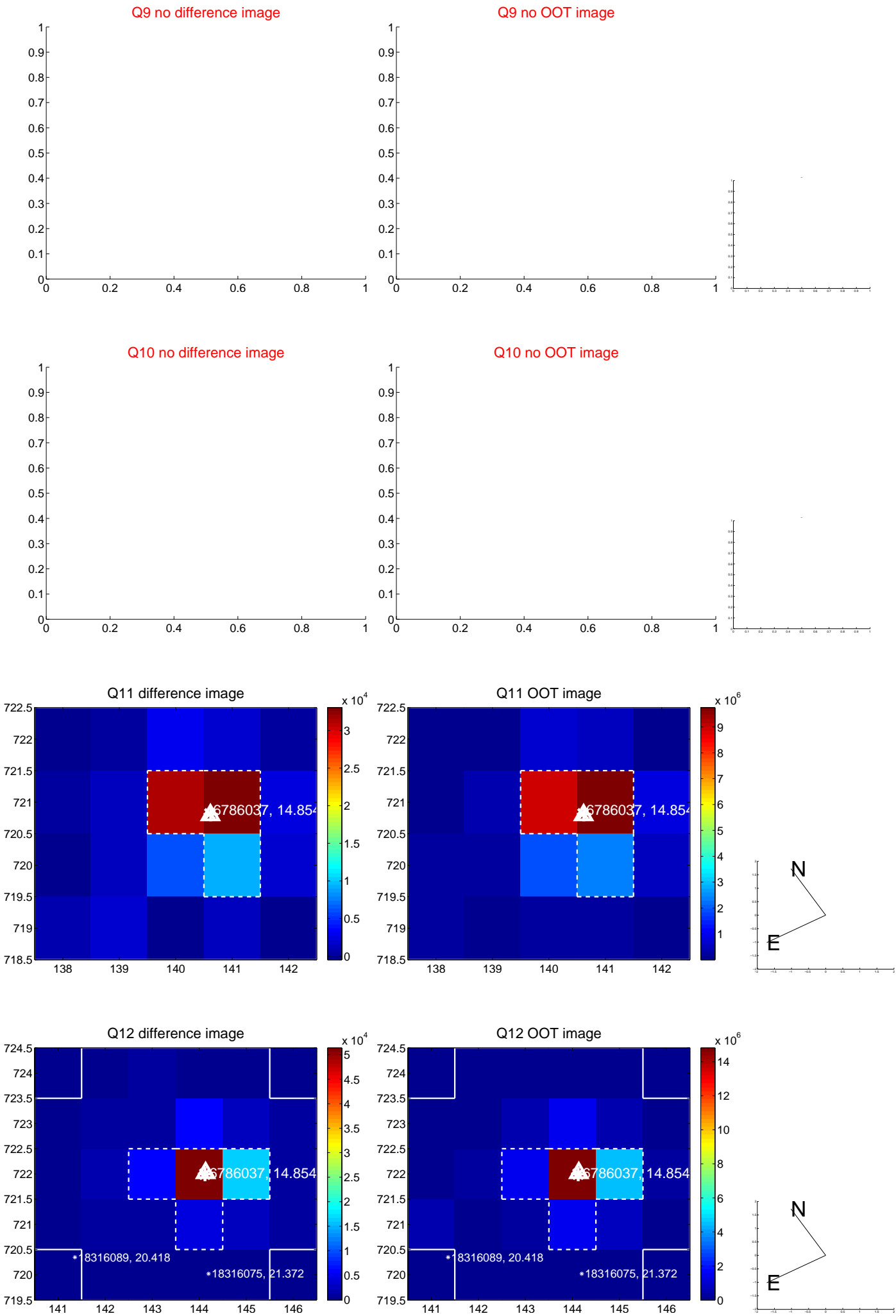
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



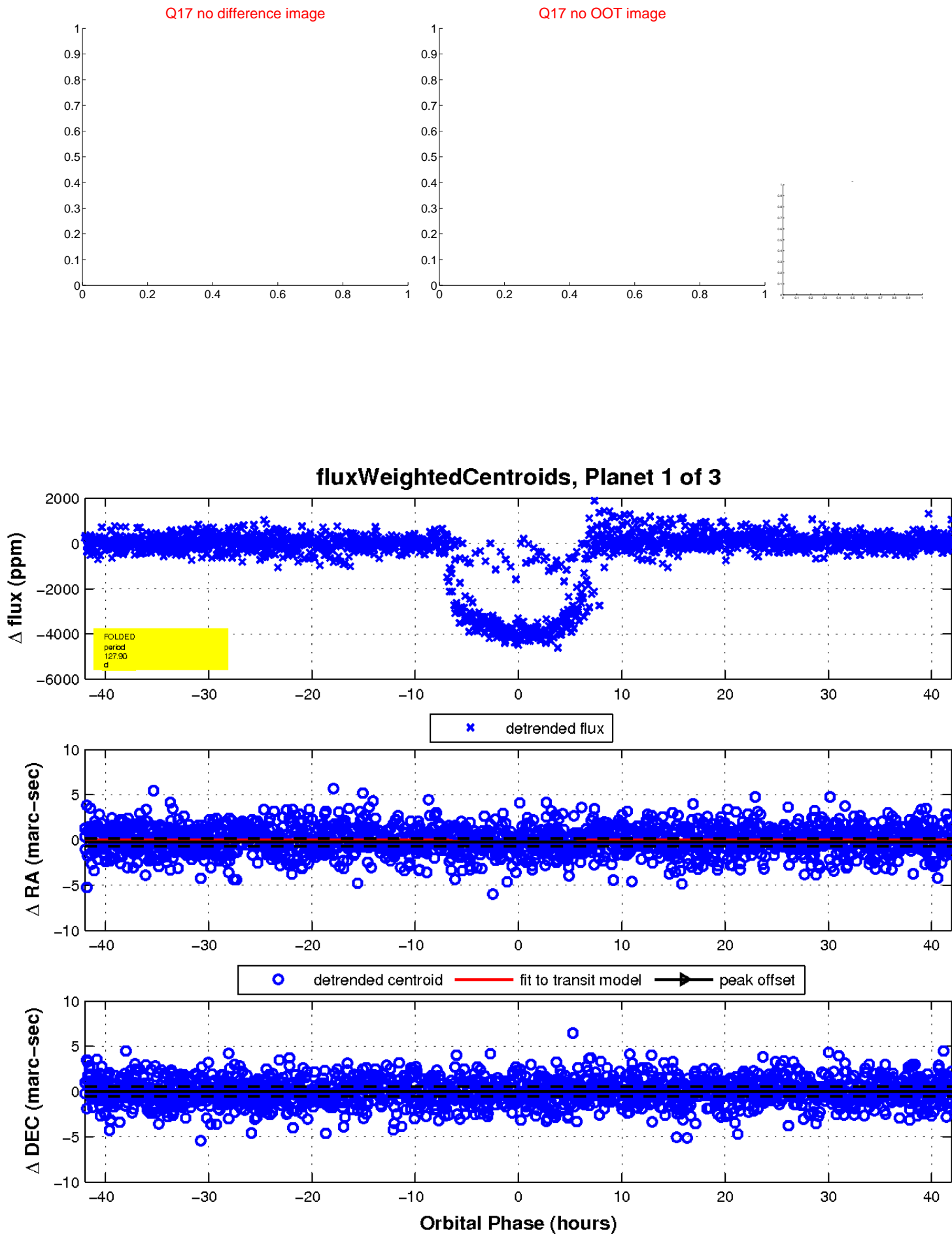
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

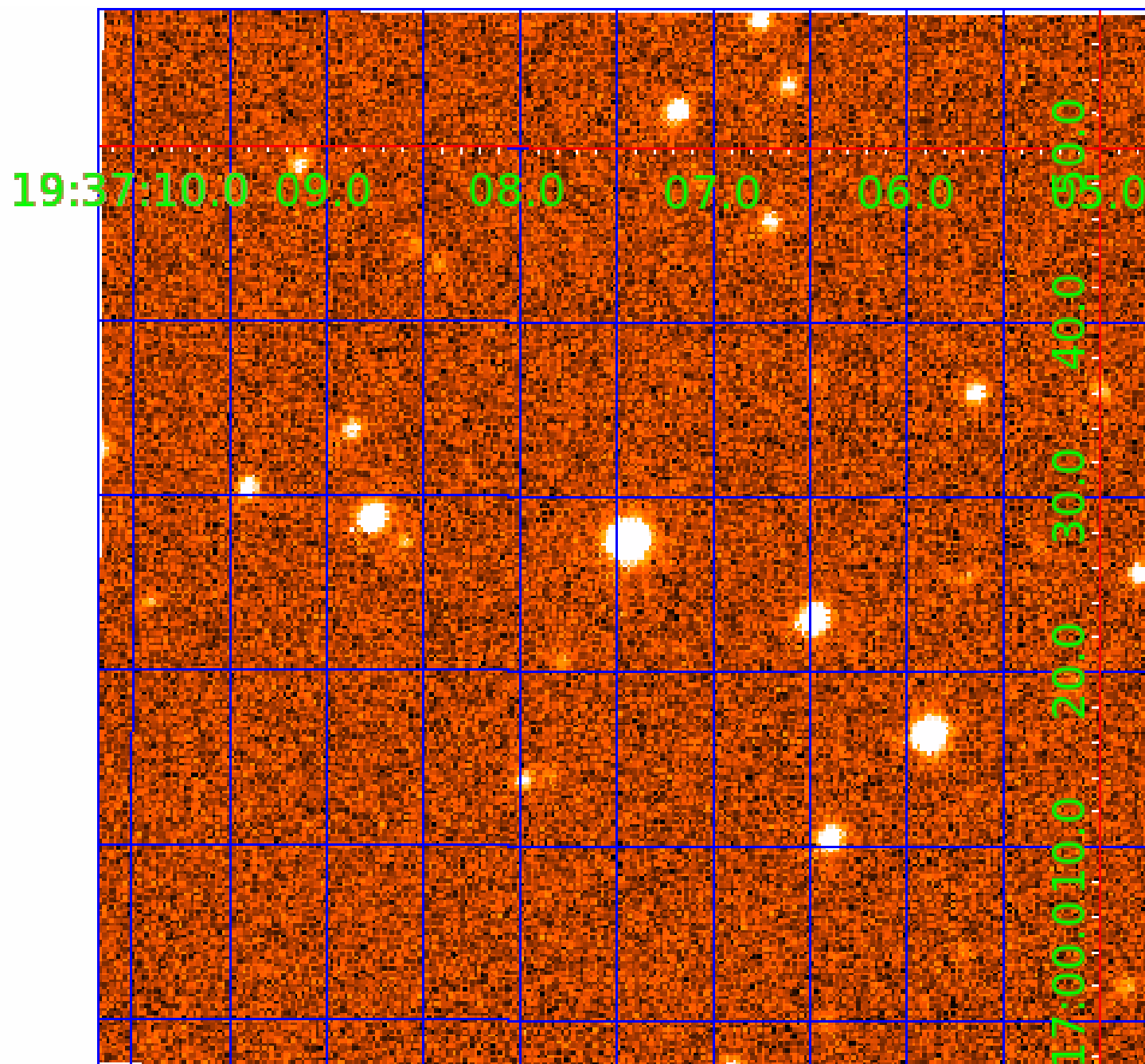


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006786037

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})
006786037-01	OBS	0564.02	127.904048	246.461881	3932.4	14.008	136.7	135.6	1.25	5751	7.80	6.10
006786037-02	OBS	0564.01	21.060164	150.785656	522.5	10.950	30.0	33.0	1.25	5751	5.08	67.58
006786037-03	OBS	0564.03	6.217134	131.720790	177.8	3.950	17.1	19.3	1.25	5751	1.97	343.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006786037-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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 006786037-02

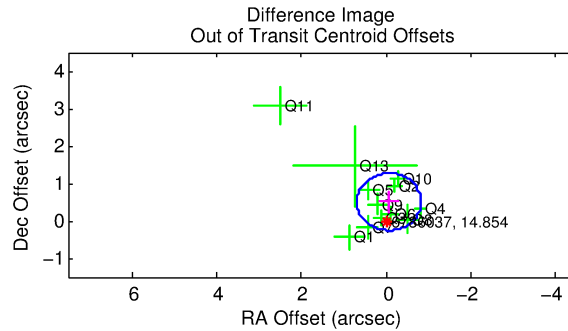
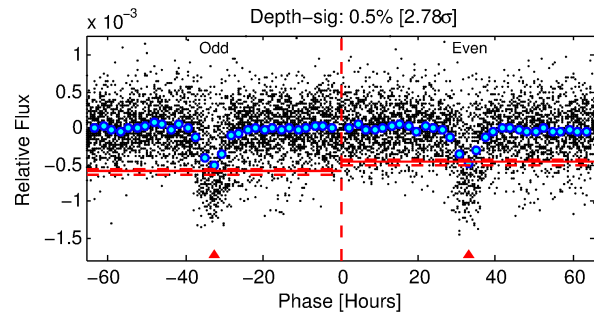
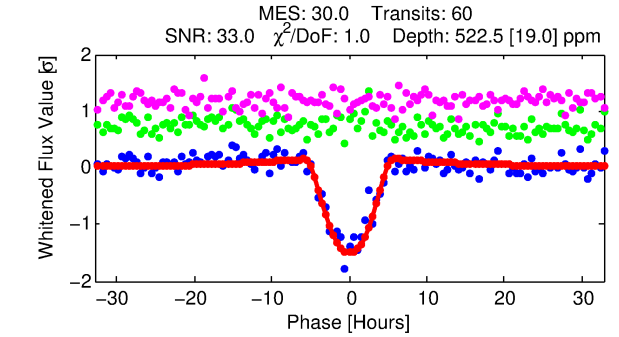
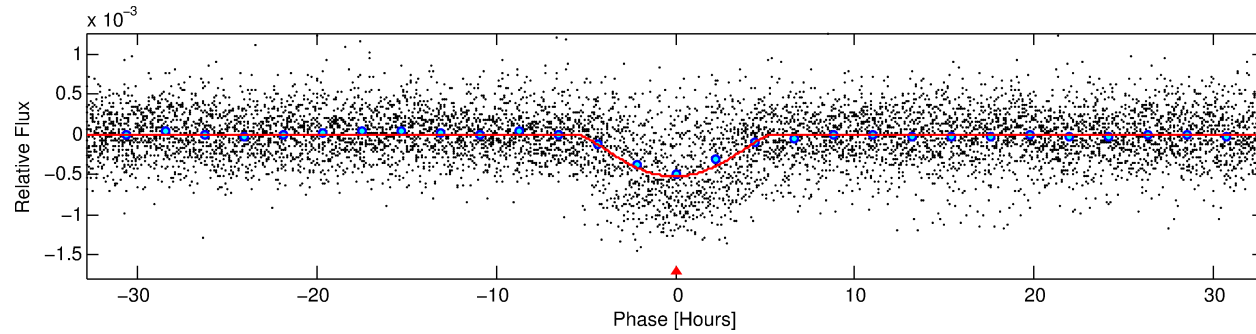
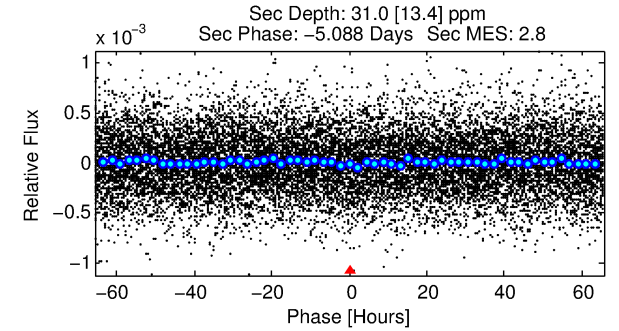
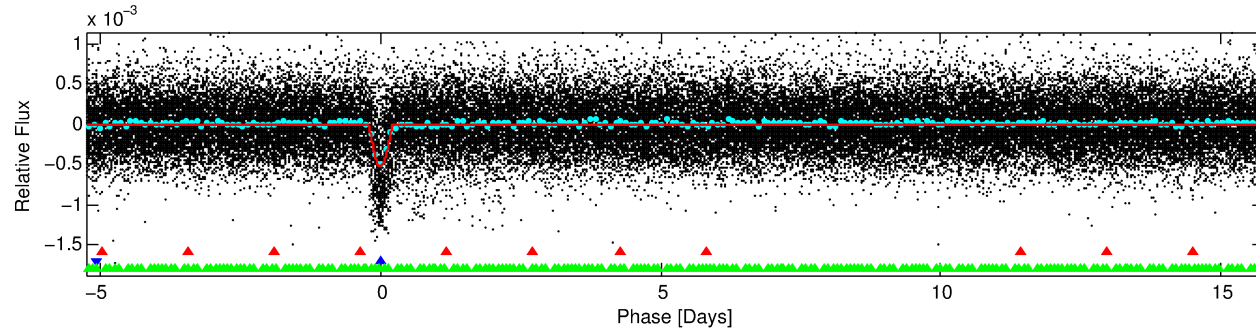
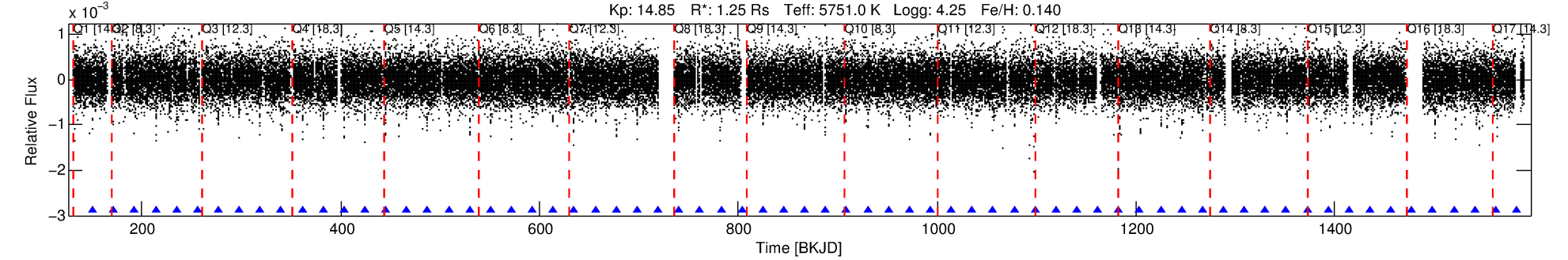
No Significant Match Found

DV One-Page Summary

KIC: 6786037 Candidate: 2 of 3 Period: 21.060 d

KOI: K00564 Corr: No Ephemeris Match

Kp: 14.85 R*: 1.25 Rs Teff: 5751.0 K Logg: 4.25 Fe/H: 0.140



DV Fit Results:

Period = 21.06016 [0.00020] d
Epoch = 150.7857 [0.0076] BKJD
Rp/R* = 0.0373 [0.0268]
a/R* = 4.53 [0.92]
b = 0.99 [0.04]
Seff = 67.58 [16.90]
Teq = 731 [46] K
Rp = 5.08 [3.74] Re
a = 0.1502 [0.0230] AU
Ag = 14.90 [22.65] [0.61σ]
Teff = 2221 [834] K [1.78σ]

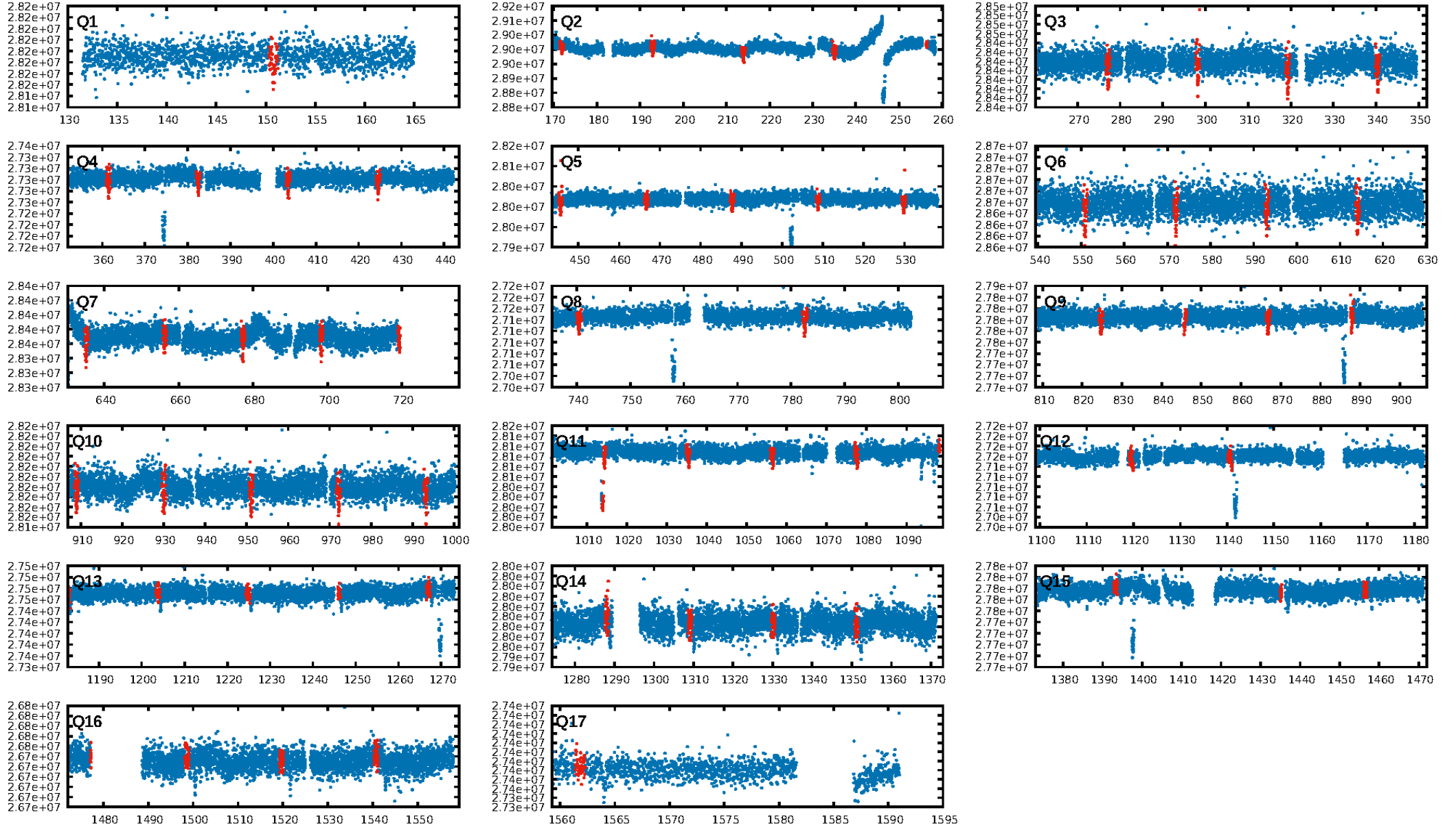
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [30.60σ]
LongPeriod-sig: 100.0% [144.22σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.75e-144
RollingBand-fgt: 1.00 [58/58]
GhostDiagnostic-chr: 4.88
Centroid-sig: 23.2%
Centroid-so: 0.470 arcsec [1.34σ]
OotOffset-rm: 0.510 arcsec [2.01σ]
KicOffset-rm: 0.481 arcsec [2.26σ]
OotOffset-st: 3/3/2/4 [12]
KicOffset-st: 3/3/2/4 [12]
DiffImageQuality-fgm: 0.83 [10/12]
DiffImageOverlap-fno: 0.82 [14/17]

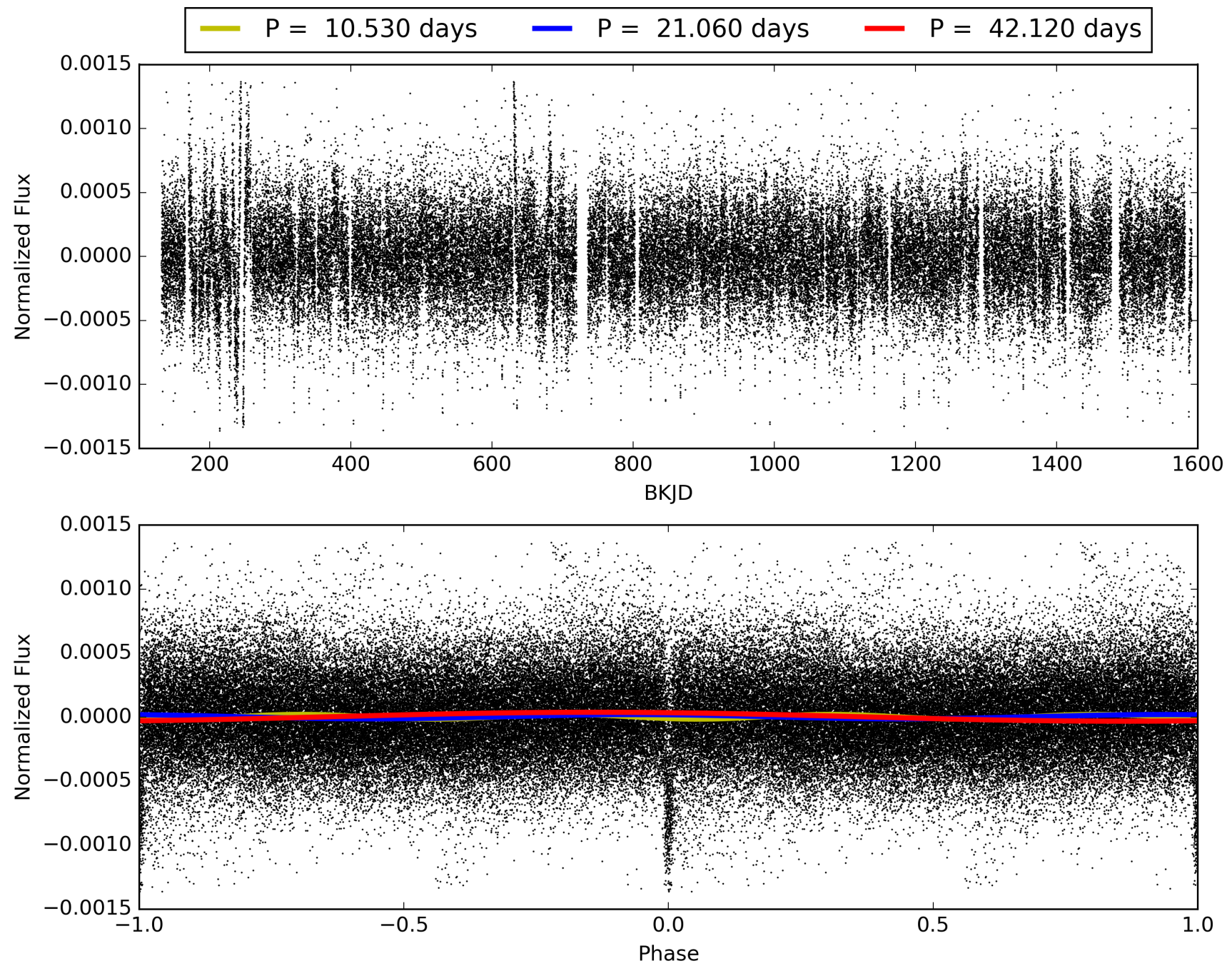
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 06:22:01 Z

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

TCE 006786037-02, PDC Light Curves

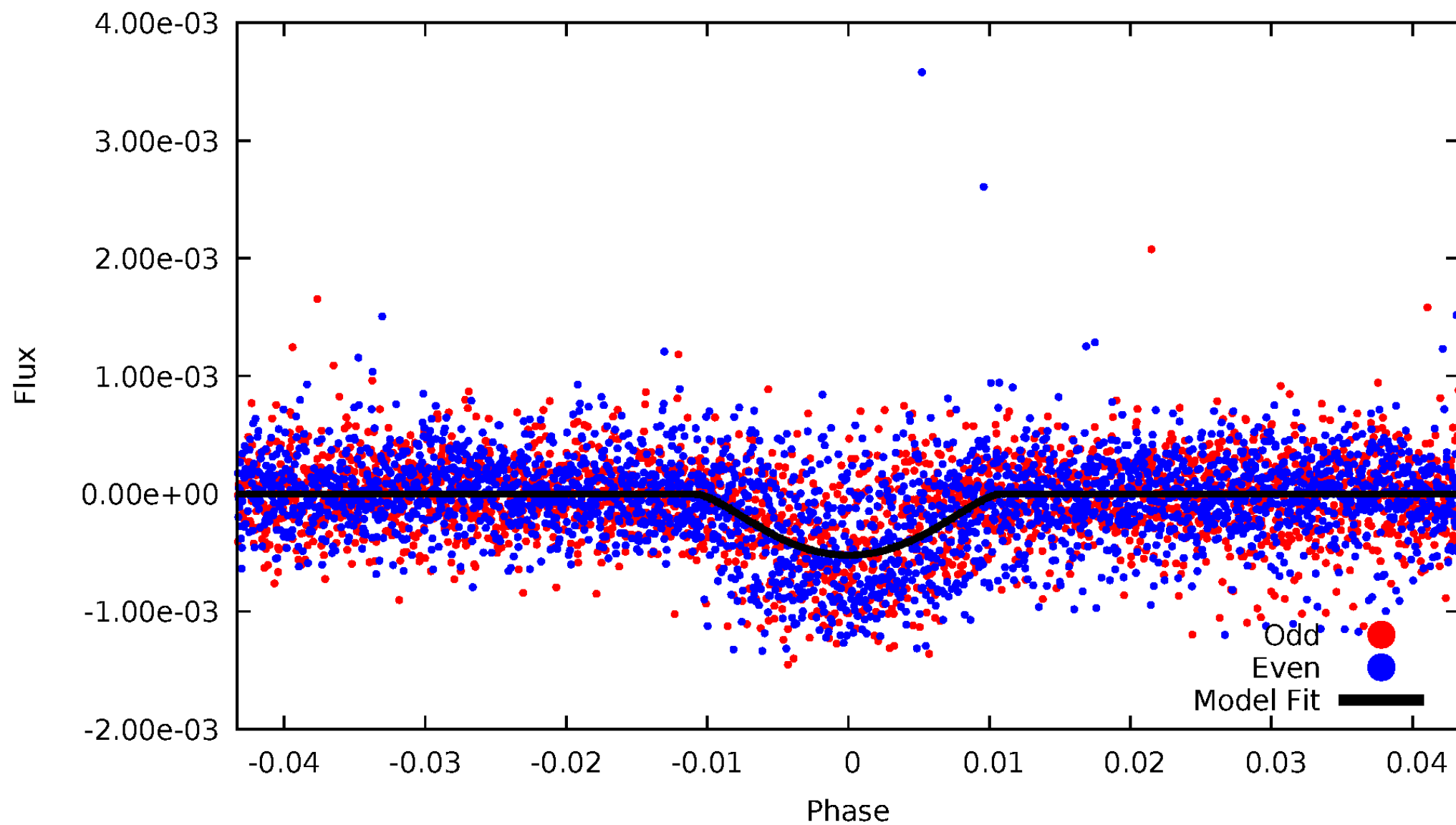


TCE 006786037-02



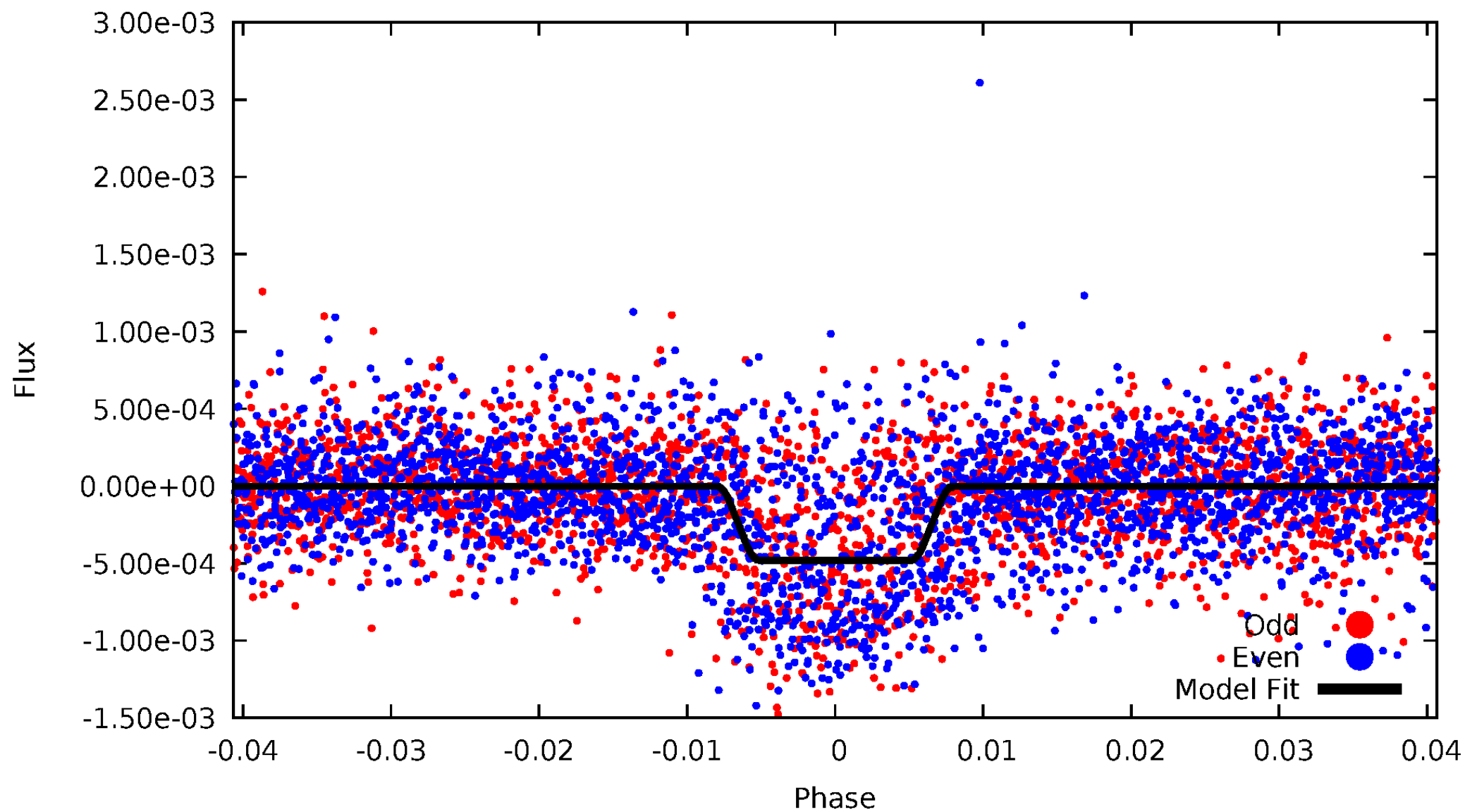
DV Odd/Even

TCE 006786037-02



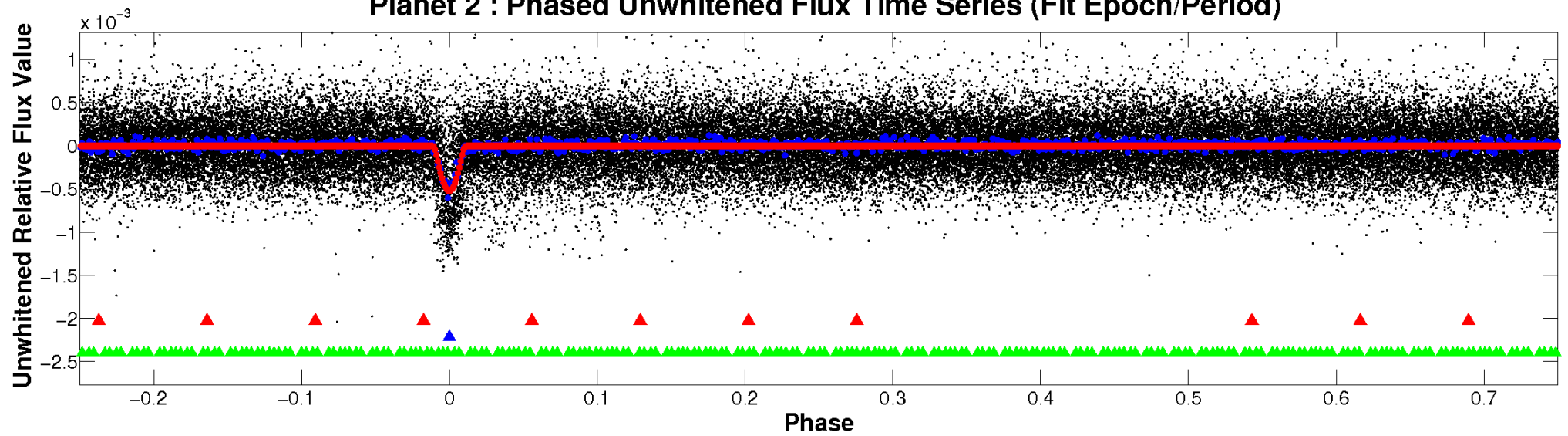
ALT Odd/Even

TCE 006786037-02

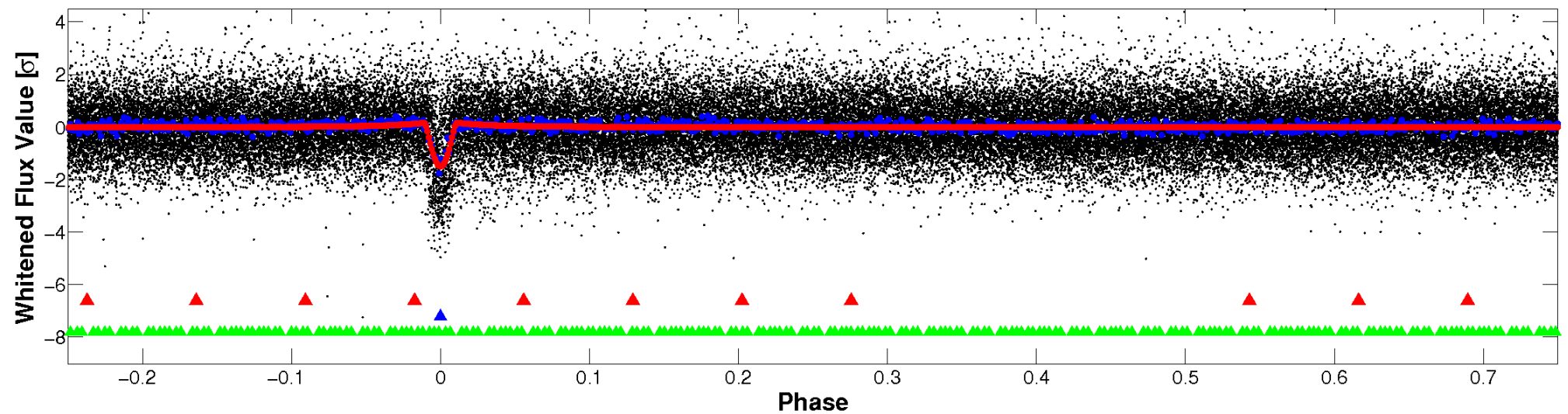


Non-Whitened Vs. Whitened Light Curve

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

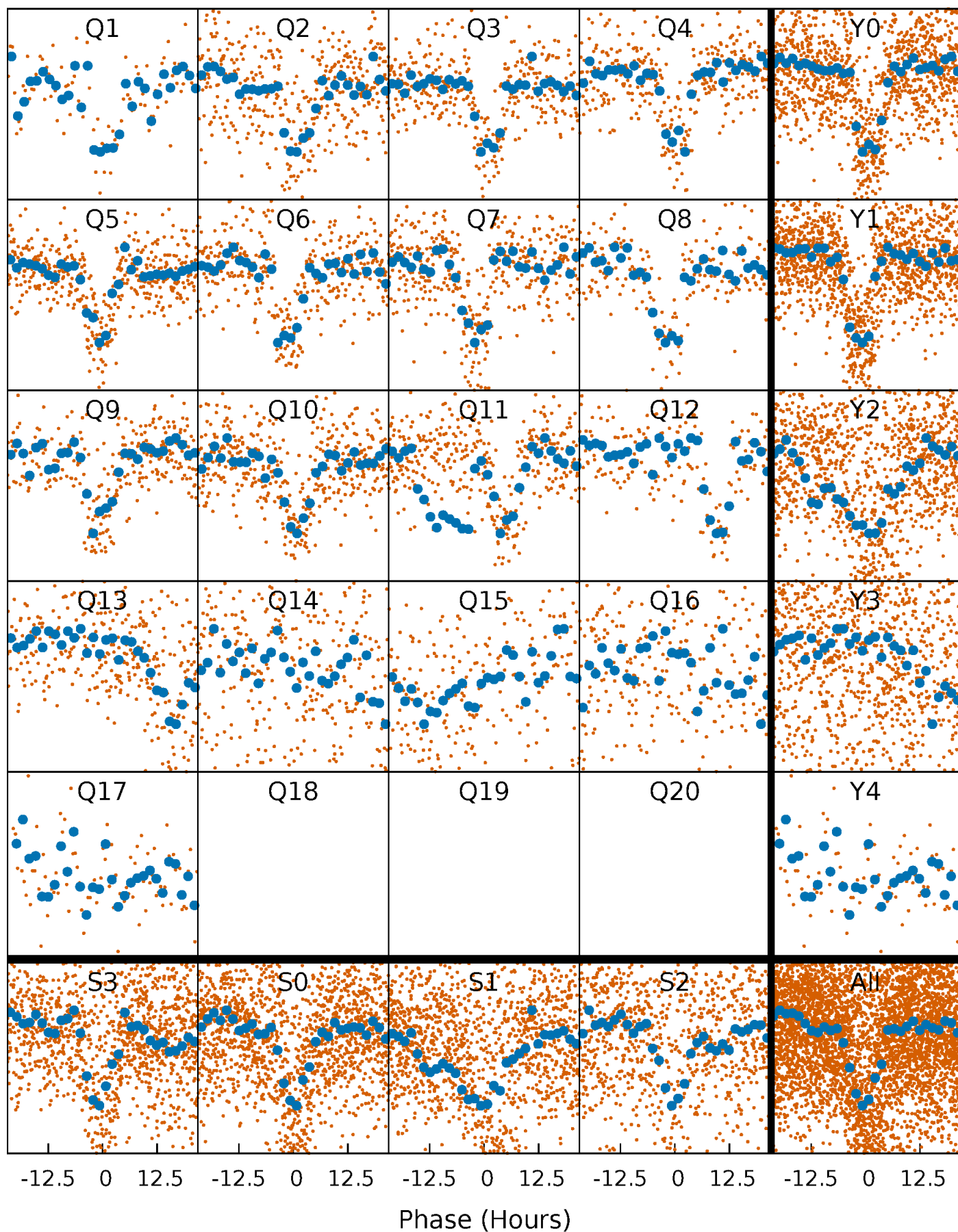


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



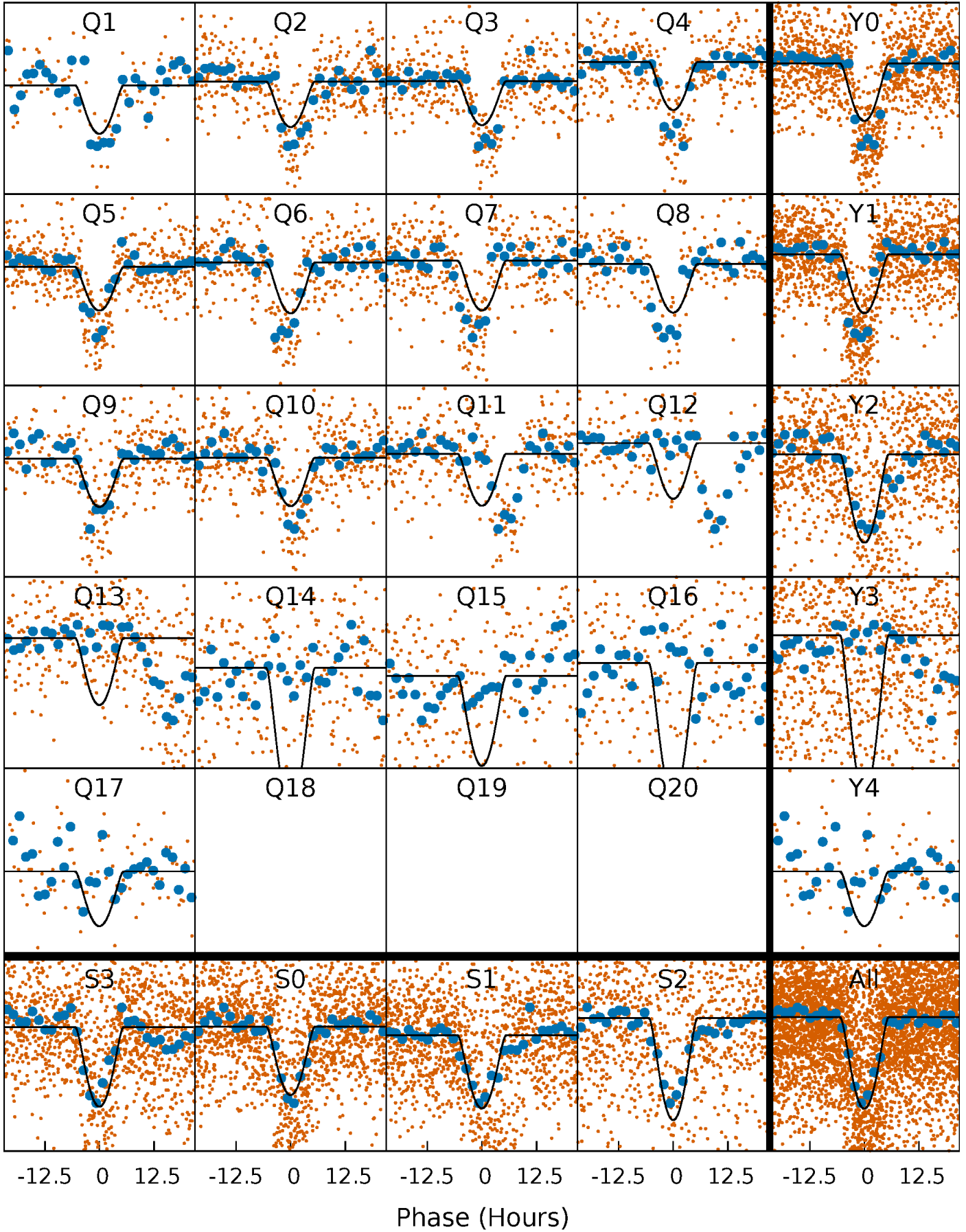
PDC Quarter-Phased Transit Curves

TCE 006786037-02 P= 21.060164 Days $T_0=150.785656$ (BKJD)



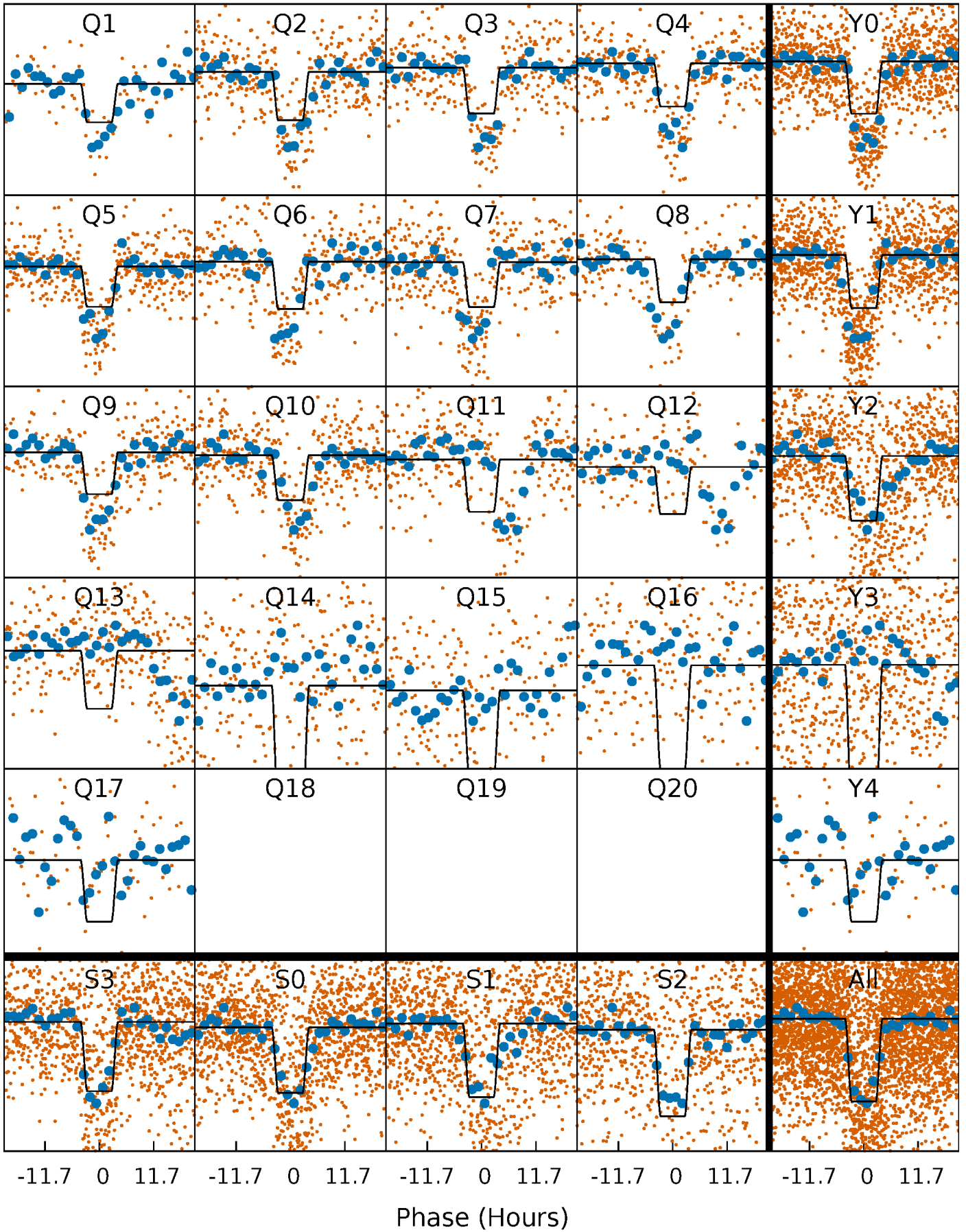
DV Quarter-Phased Transit Curves

TCE 006786037-02 P= 21.060164 Days $T_0=150.785656$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

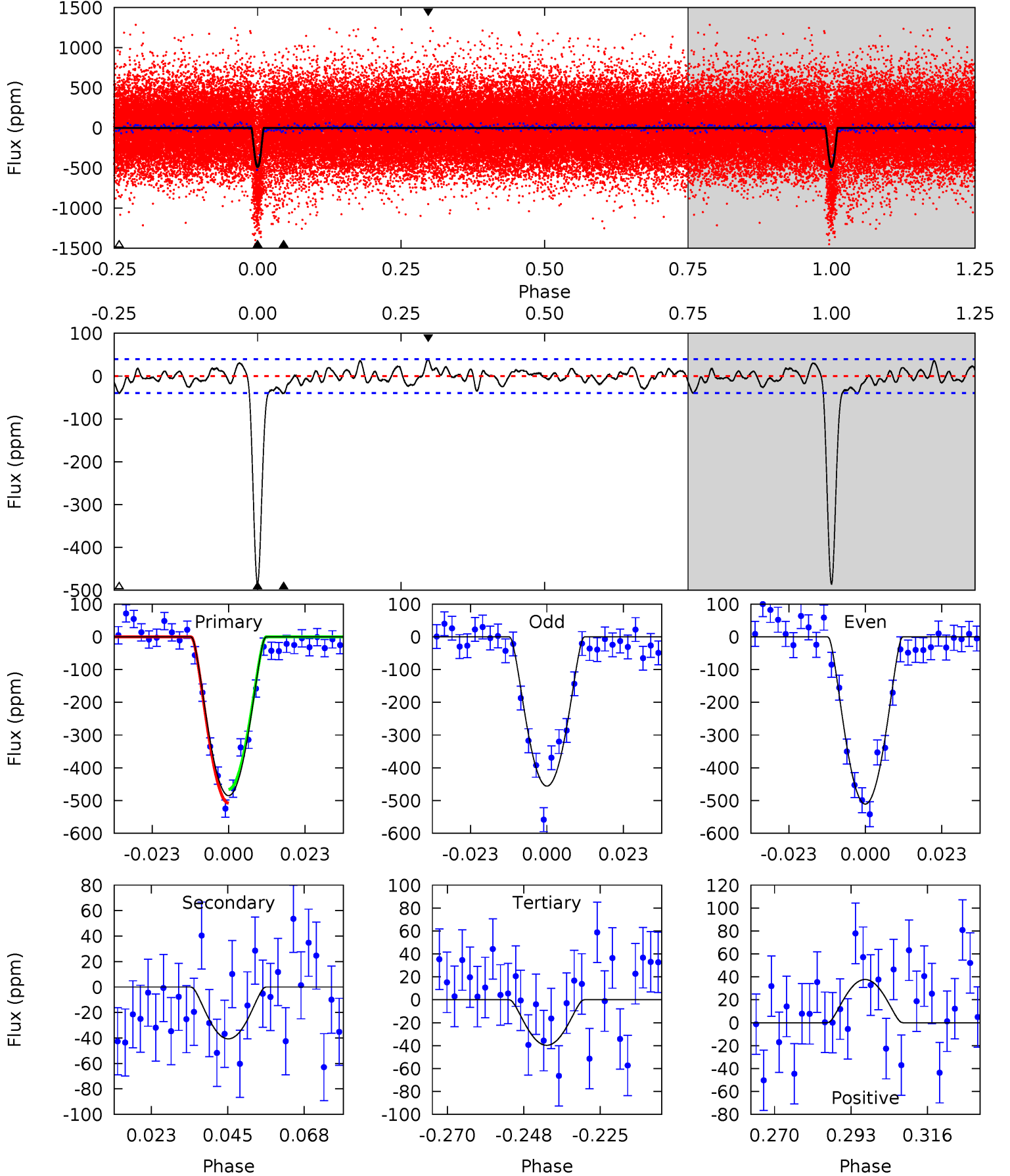
TCE 006786037-02 P= 21.059145 Days $T_0=150.800184$ (BKJD)



DV Model-Shift Uniqueness Test

006786037-02, P = 21.060164 Days, E = 129.725492 Days

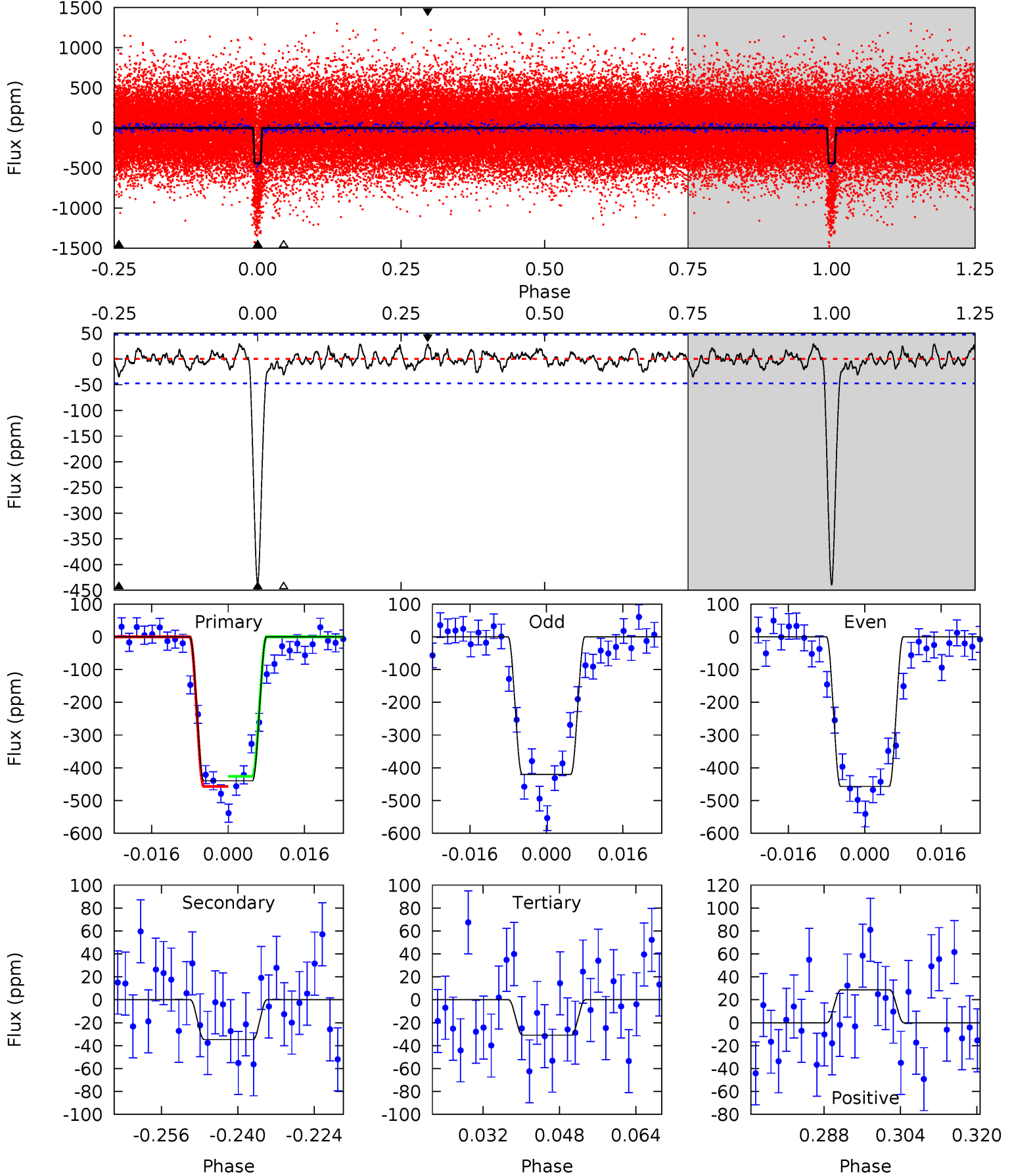
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
59.7	5.01	4.89	4.64	4.87	2.28	1.63	54.8	55.1	0.12	0.37	3.36	0.75	0.07	2.55



Alt Model-Shift Uniqueness Test

006786037-02, P = 21.059145 Days, E = 129.741039 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
45.8	3.62	3.22	2.99	4.94	2.41	1.13	42.6	42.8	0.40	0.63	1.93	0.72	0.06	1.61



Stellar Parameters For KIC 006786037

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5751^{+78}_{-78}	$4.254^{+0.143}_{-0.104}$	$0.140^{+0.150}_{-0.150}$	$1.247^{+0.200}_{-0.200}$	$1.018^{+0.081}_{-0.065}$	$0.739^{+0.496}_{-0.255}$
	+1%/-1%	+3%/-2%	+107%/-107%	+16%/-16%	+8%/-6%	+67%/-35%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006786037-02 / KOI 0564.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-41 ± 8	$5.57^{+3.17}_{-3.27}$	1013^{+47}_{-46}	2949^{+925}_{-355}	17^{+80}_{-10}
Alt.	-35 ± 10	$4.03^{+2.92}_{-2.51}$	1022^{+41}_{-48}	3174^{+1184}_{-498}	27^{+157}_{-19}

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

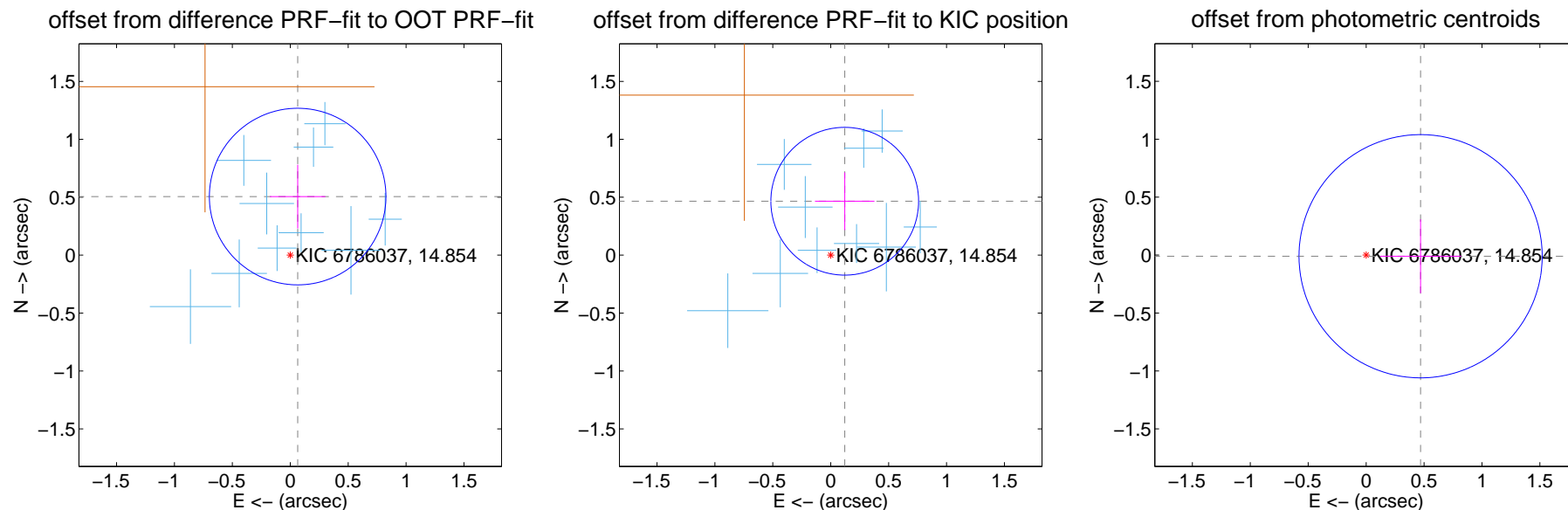
DV Centroid Data

Supplemental centroid analysis for 006786037-02. Kepler magnitude: 14.85. Transit SNR 33.01

There are 10 quarters with good PRF difference image offsets

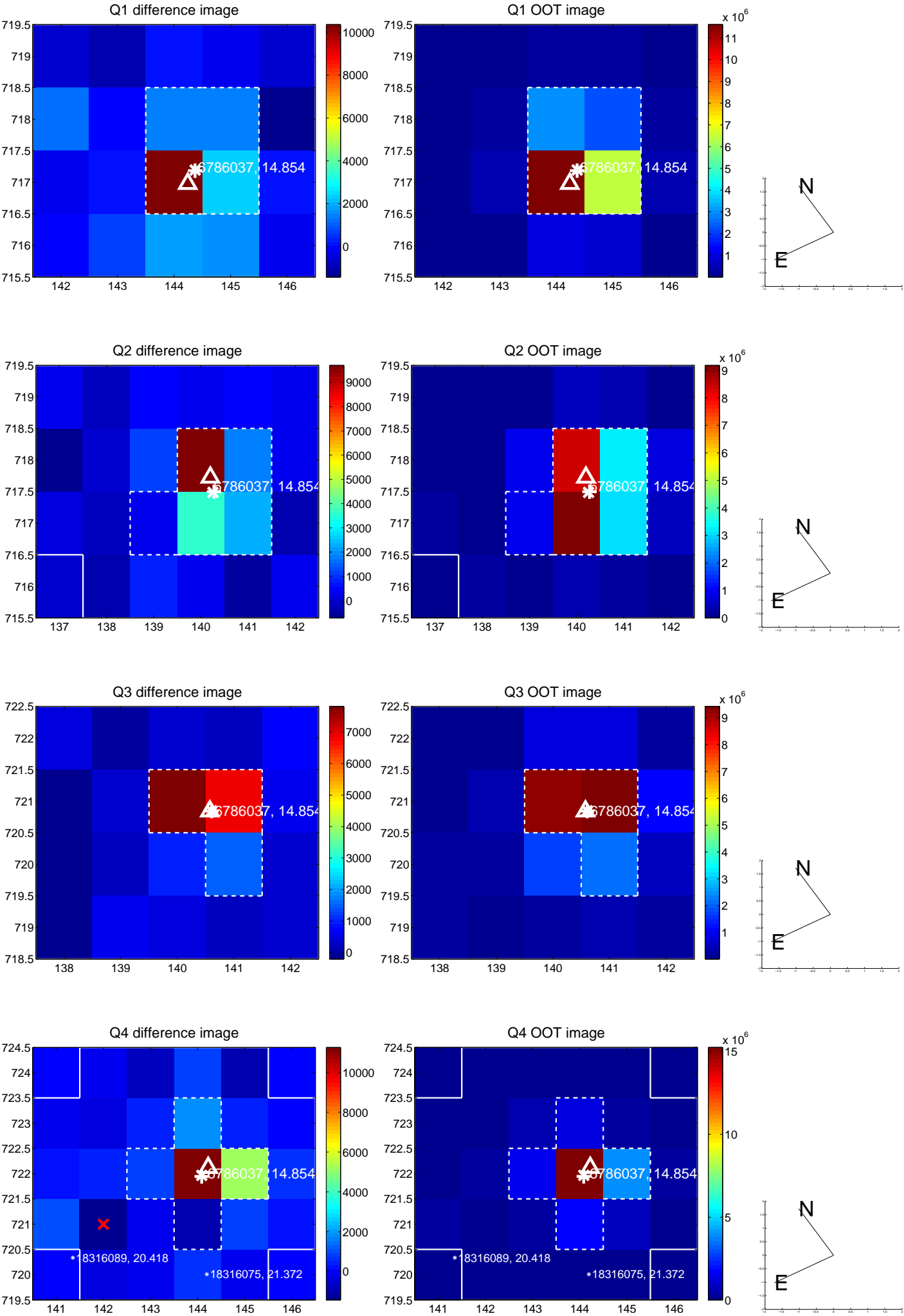
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.510 ± 0.254	2.01	-0.064 ± 0.239	0.506 ± 0.275
PRF-fit source offset from KIC position	0.481 ± 0.213	2.26	-0.121 ± 0.257	0.466 ± 0.248
photometric centroid source offset	0.47 ± 0.35	1.34	-0.47 ± 0.35	-0.01 ± 0.32

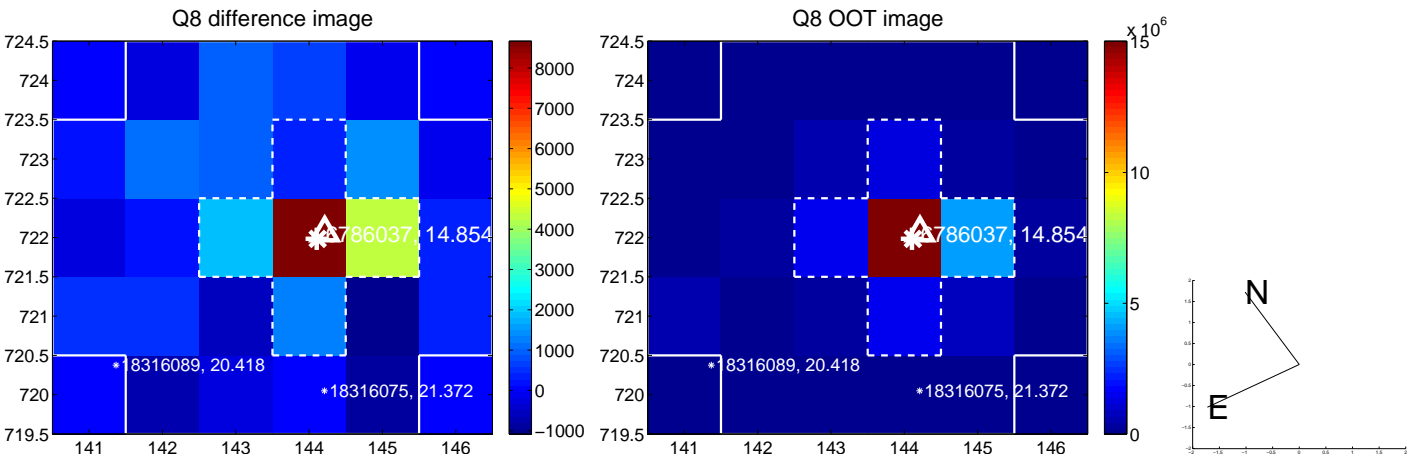
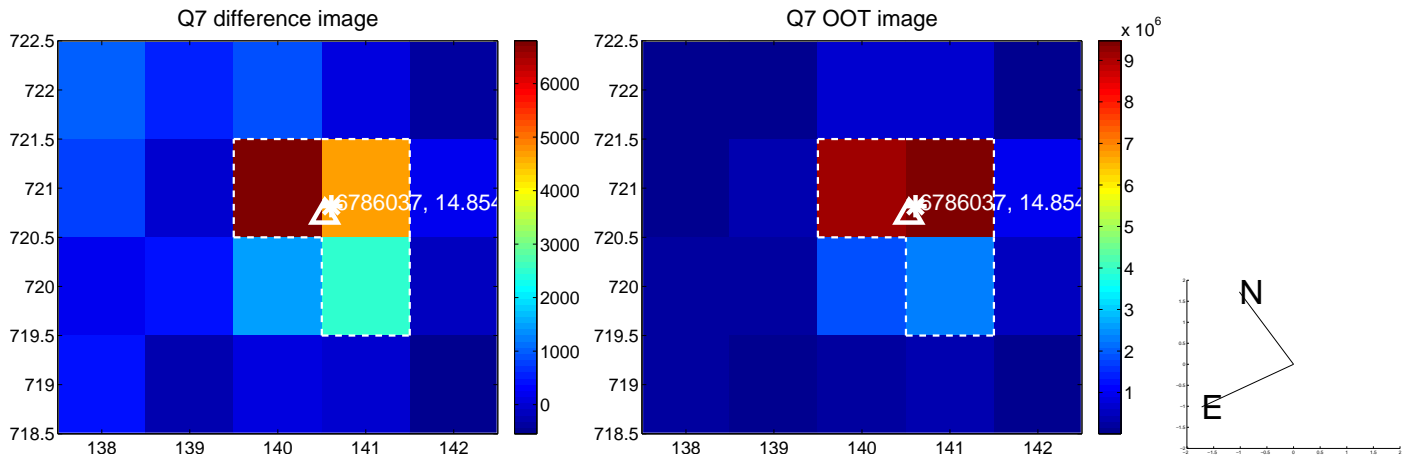
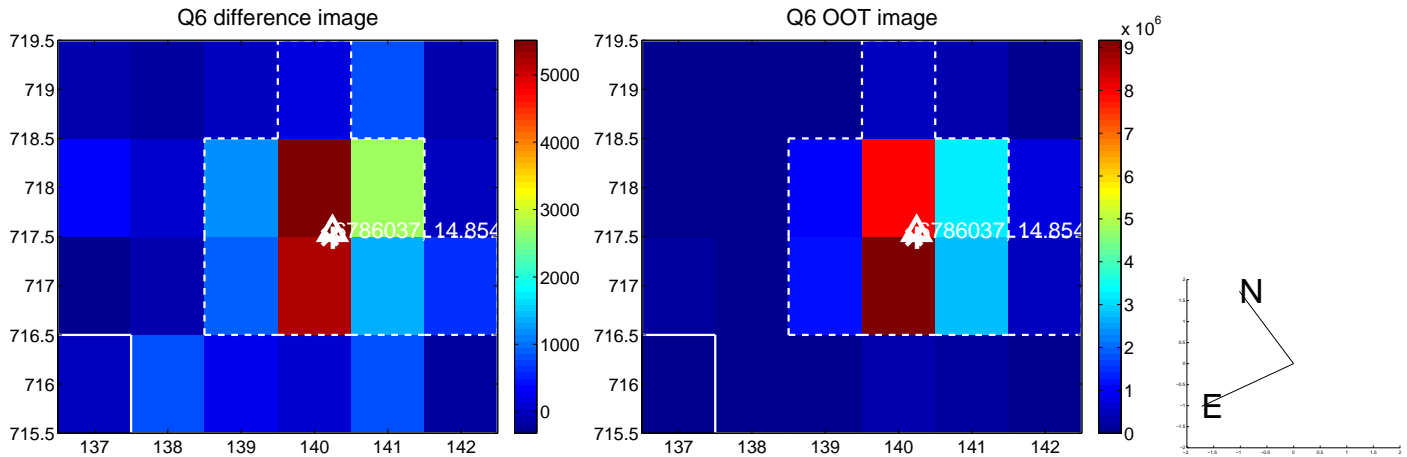
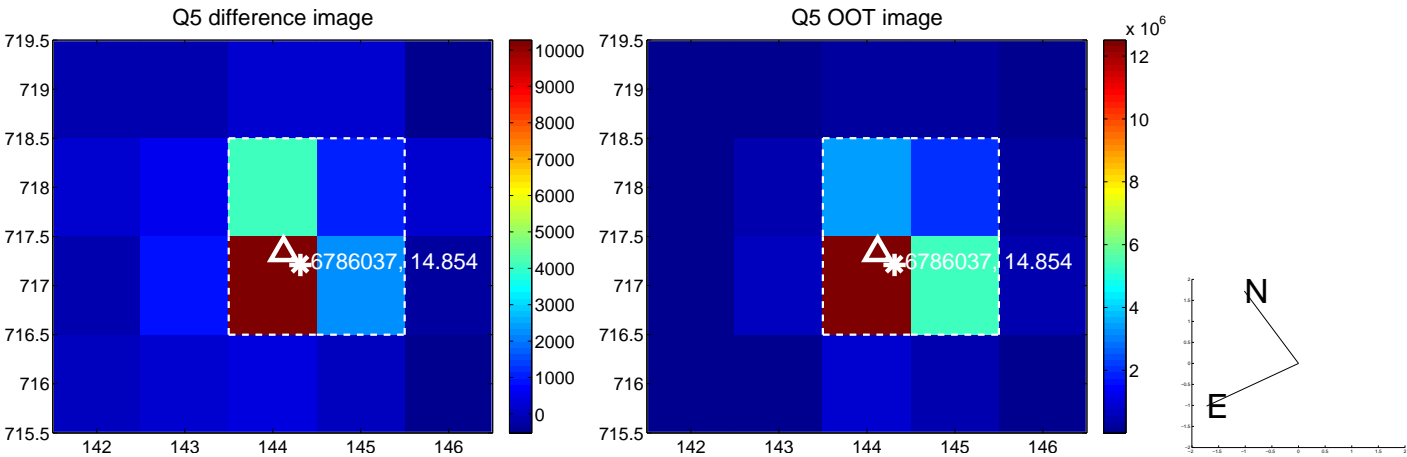


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

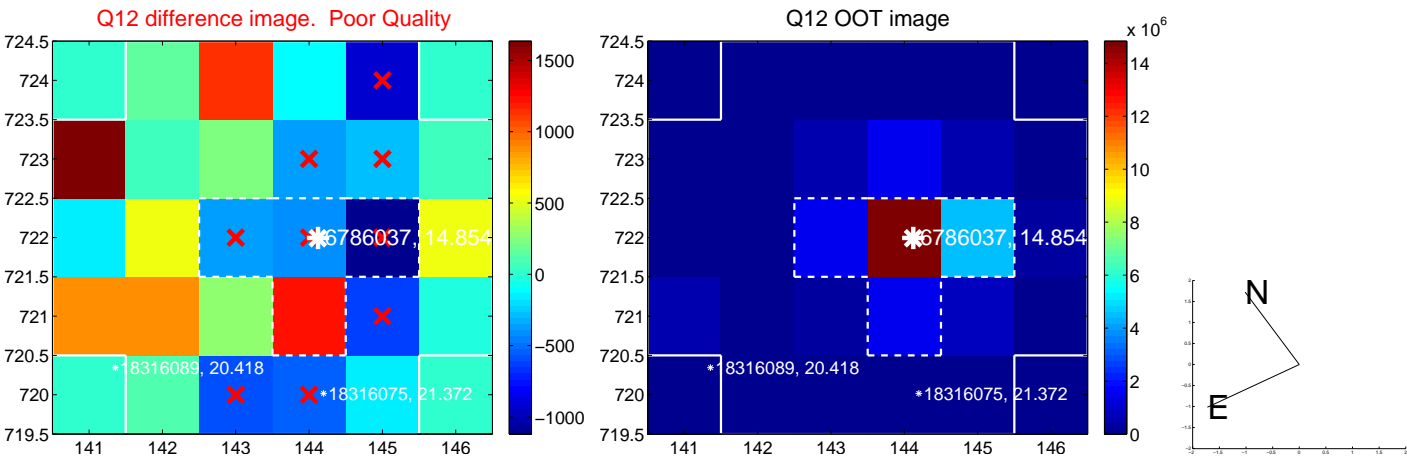
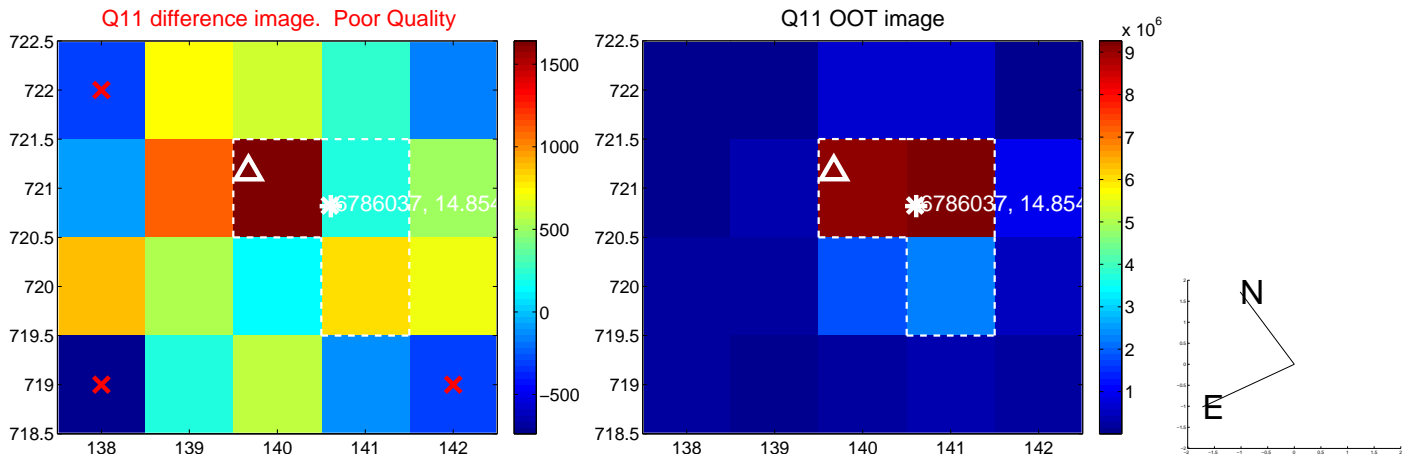
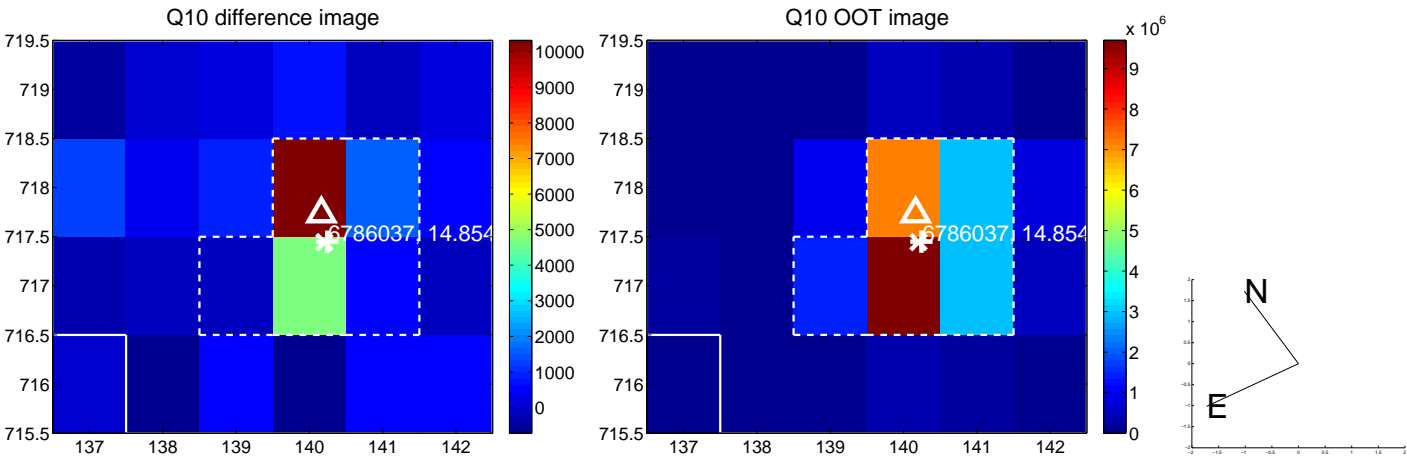
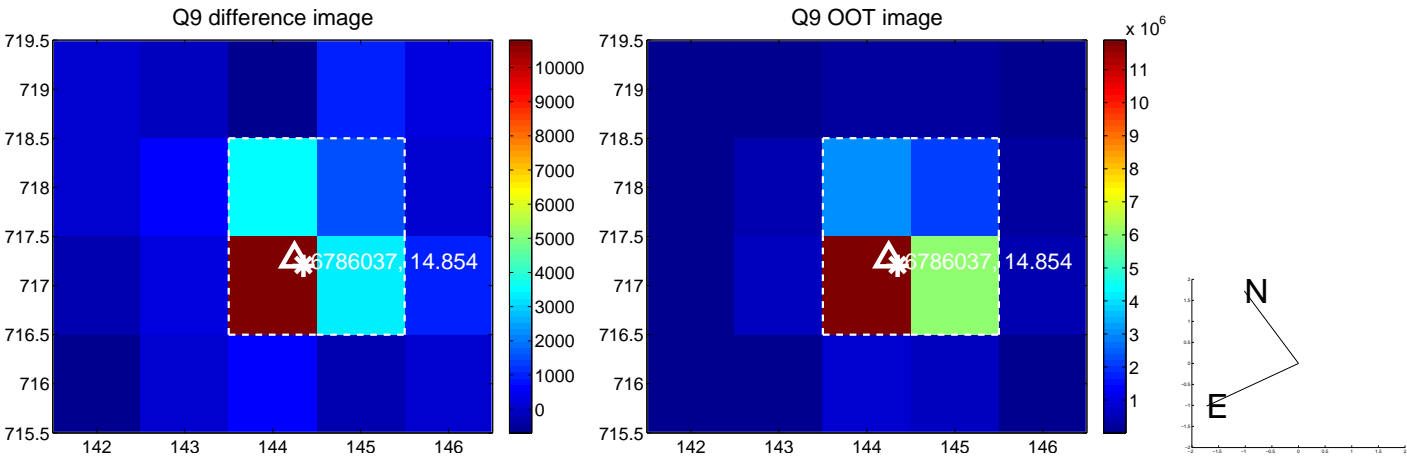
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



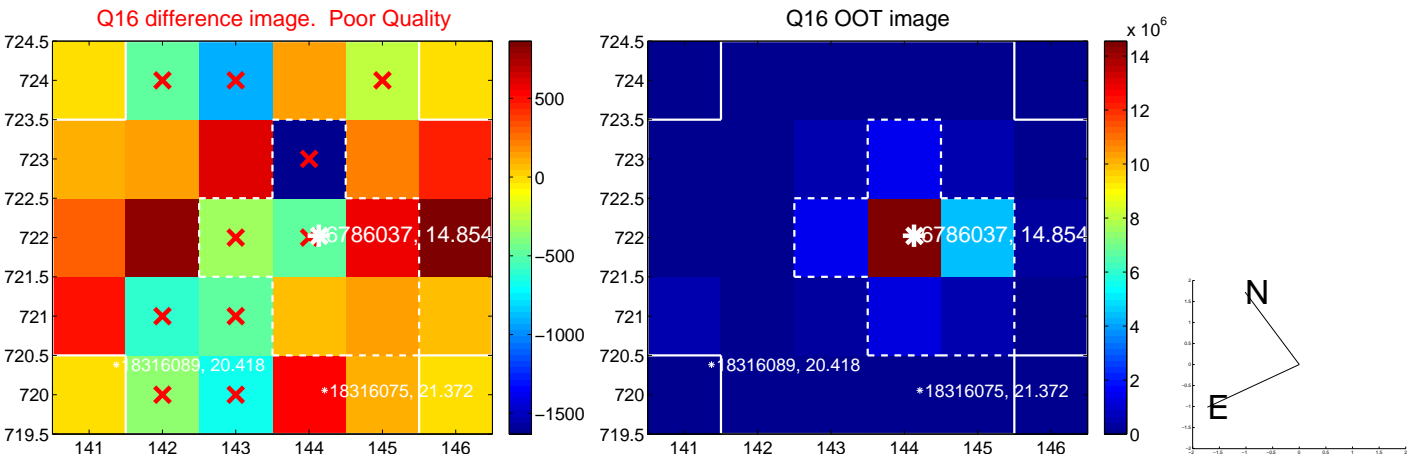
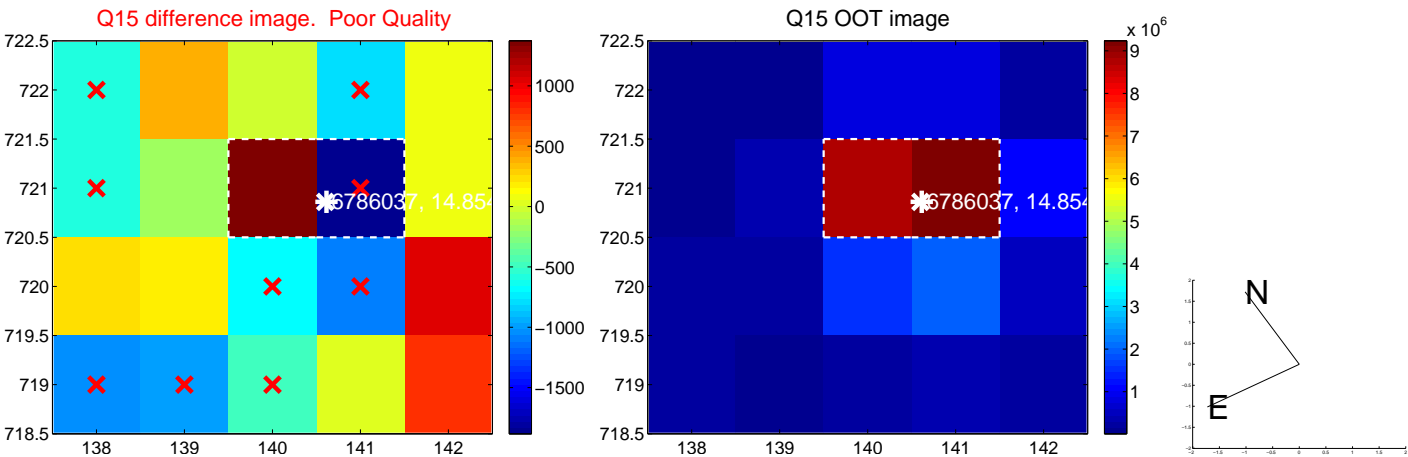
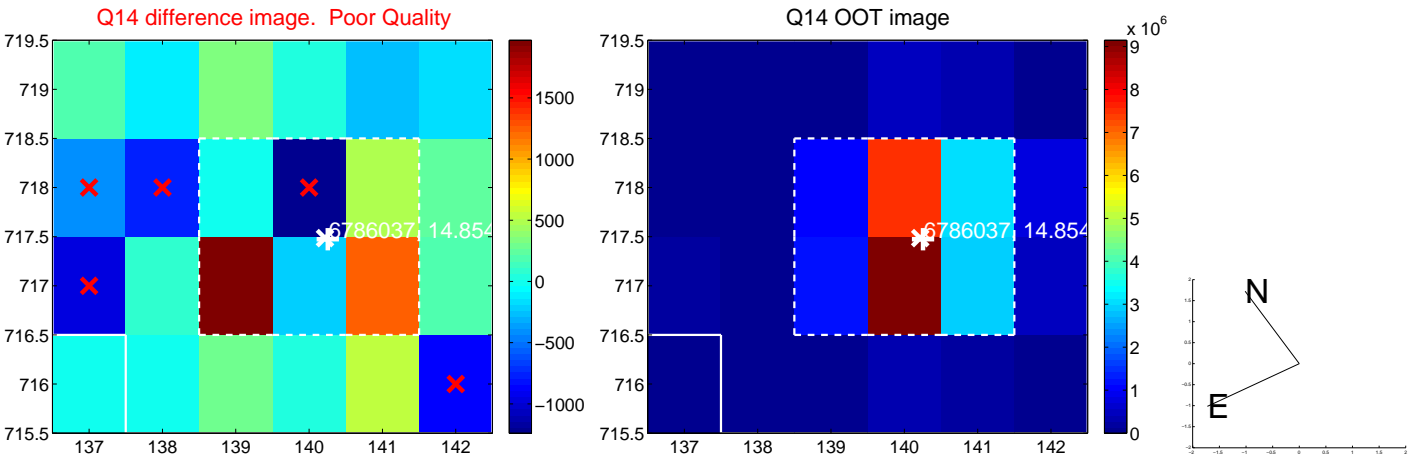
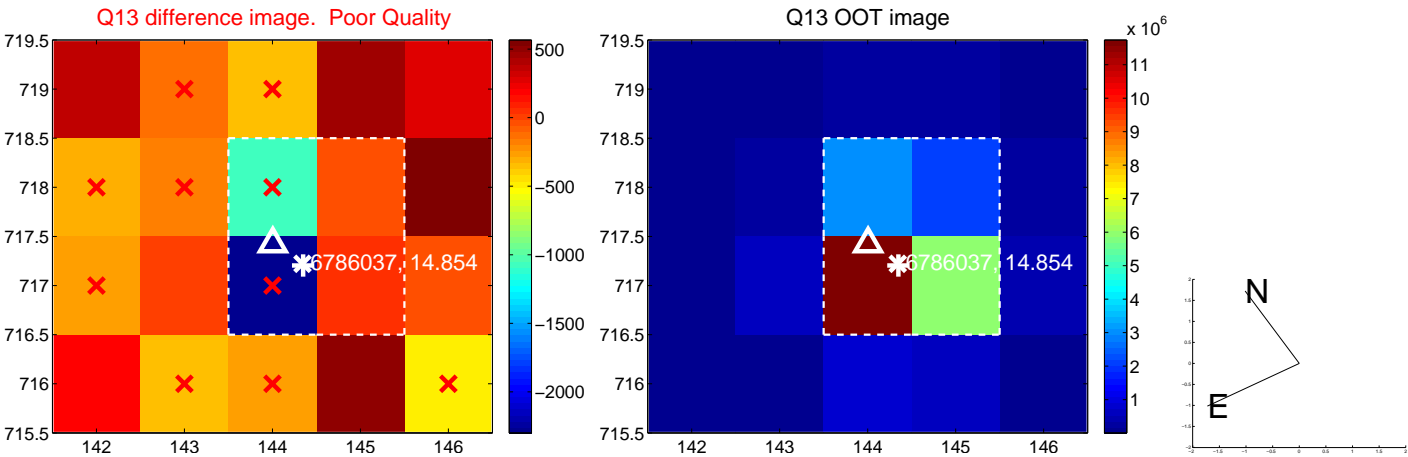
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



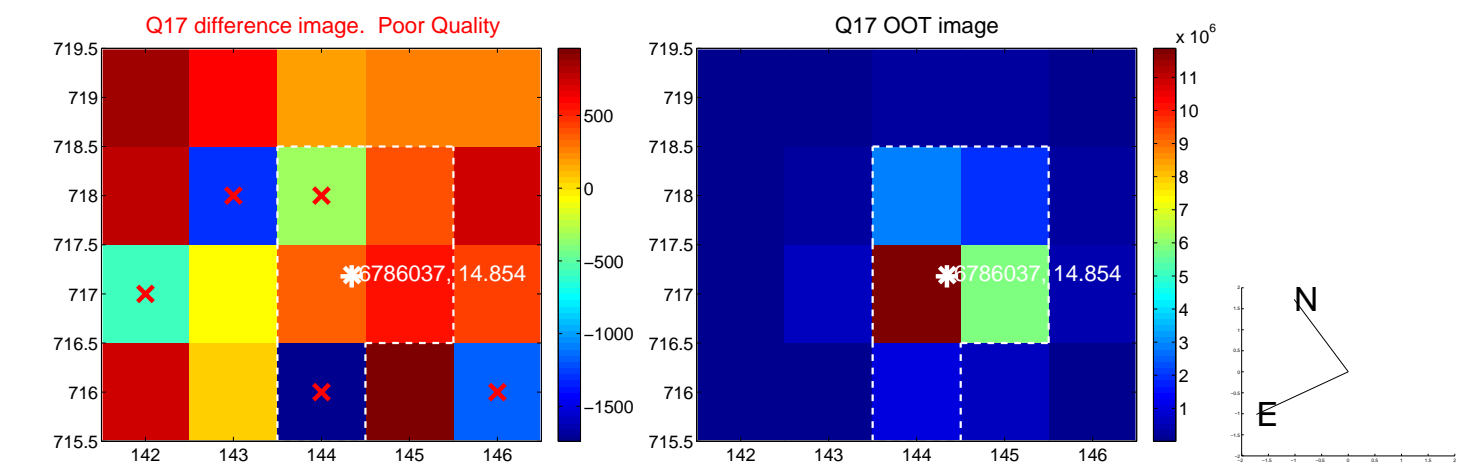
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



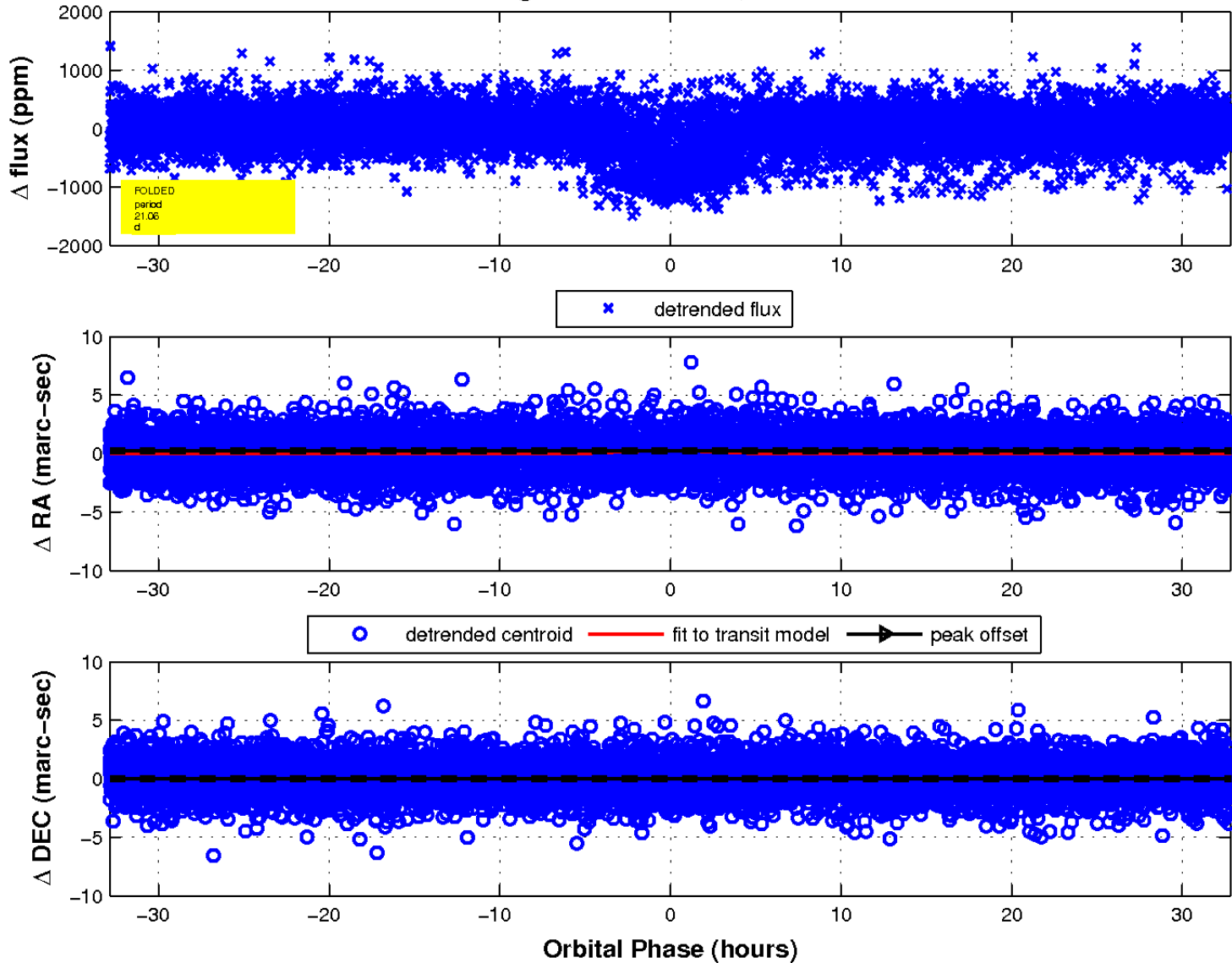
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

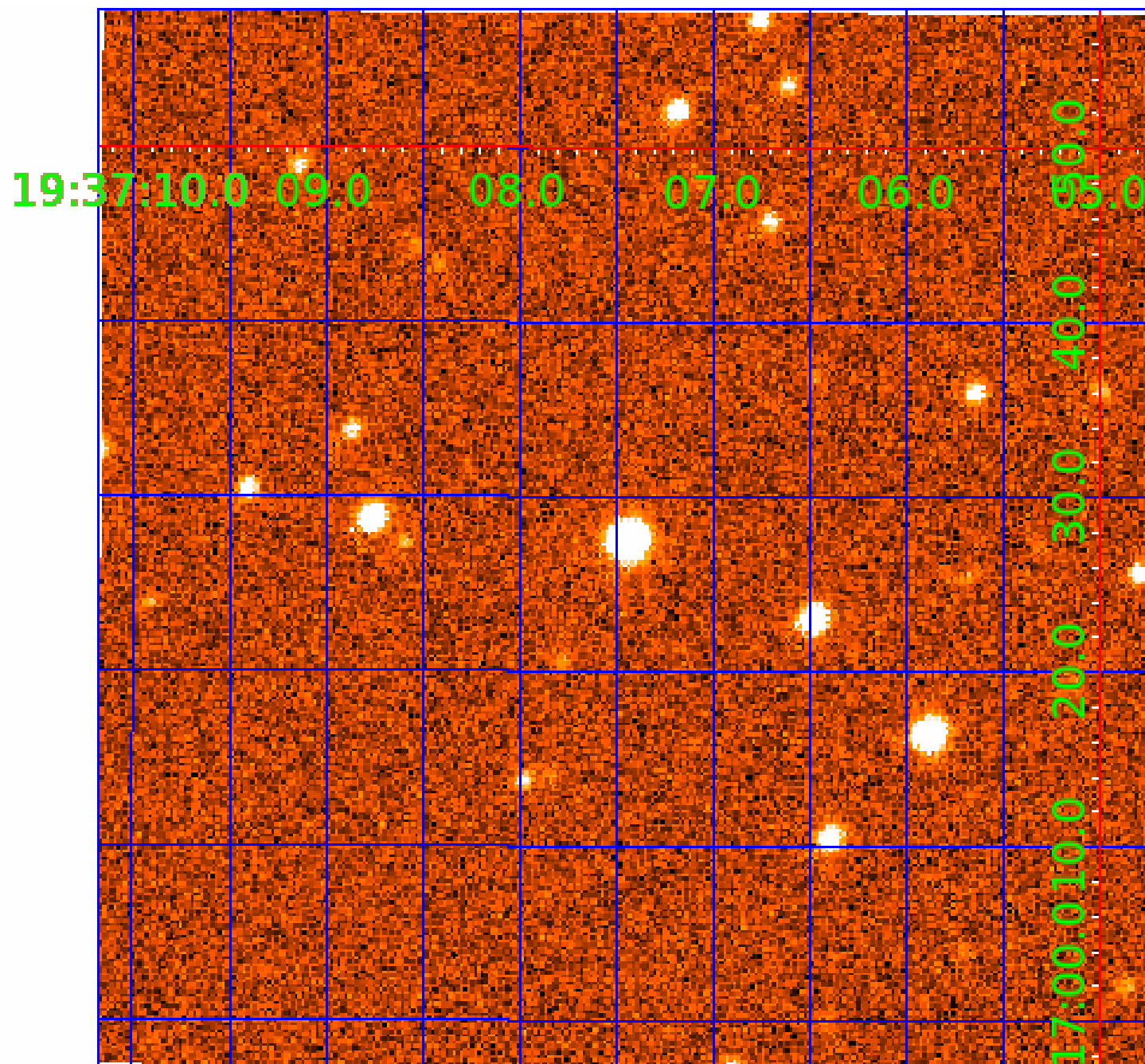


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006786037

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})
006786037-01	OBS	0564.02	127.904048	246.461881	3932.4	14.008	136.7	135.6	1.25	5751	7.80	6.10
006786037-02	OBS	0564.01	21.060164	150.785656	522.5	10.950	30.0	33.0	1.25	5751	5.08	67.58
006786037-03	OBS	0564.03	6.217134	131.720790	177.8	3.950	17.1	19.3	1.25	5751	1.97	343.81

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006786037-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
006786037-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

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

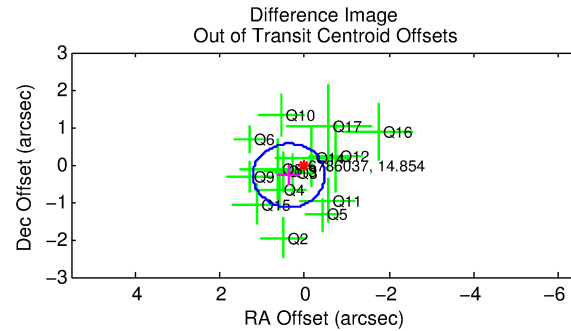
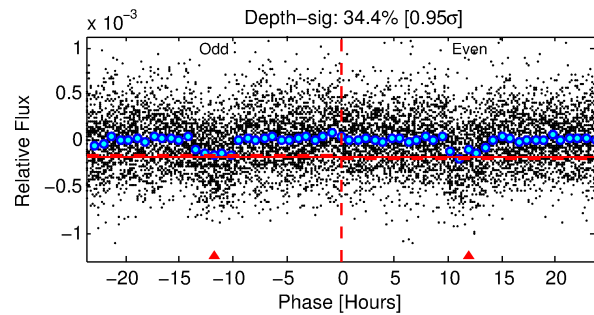
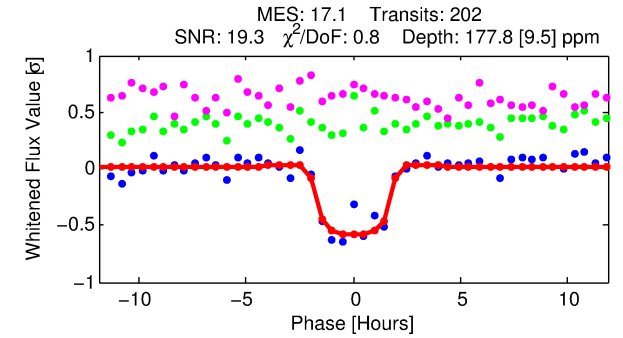
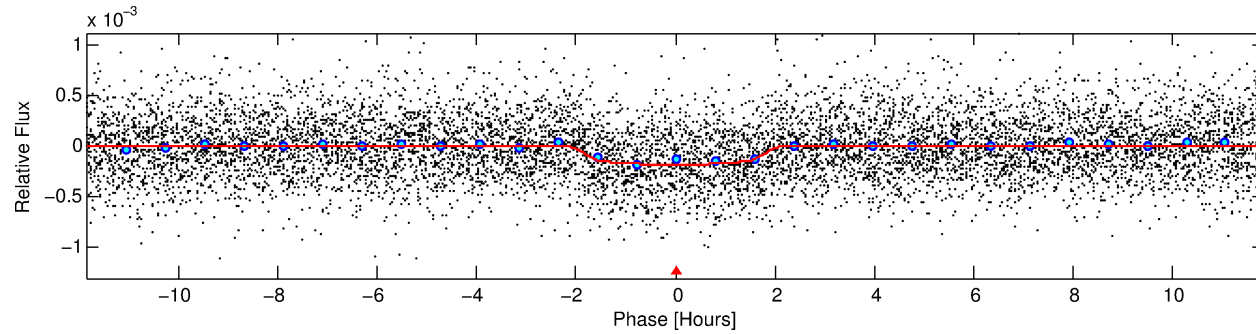
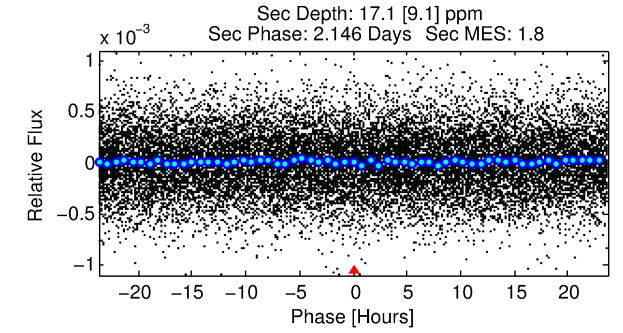
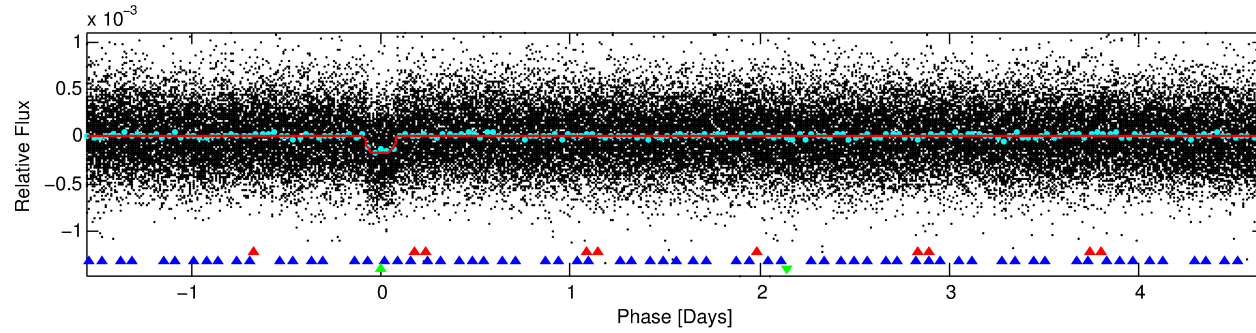
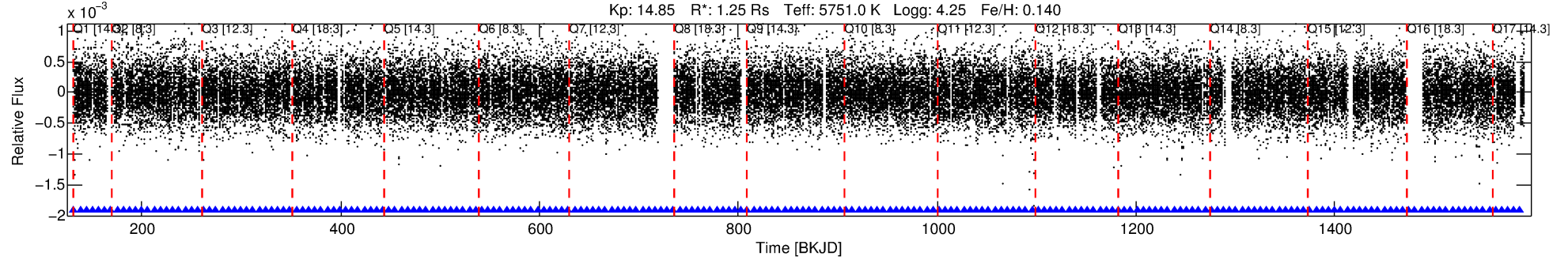
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006786037-03

No Significant Match Found

DV One-Page Summary

KIC: 6786037 Candidate: 3 of 3 Period: 6.217 d
KOI: K00564.03 Corr: 0.968



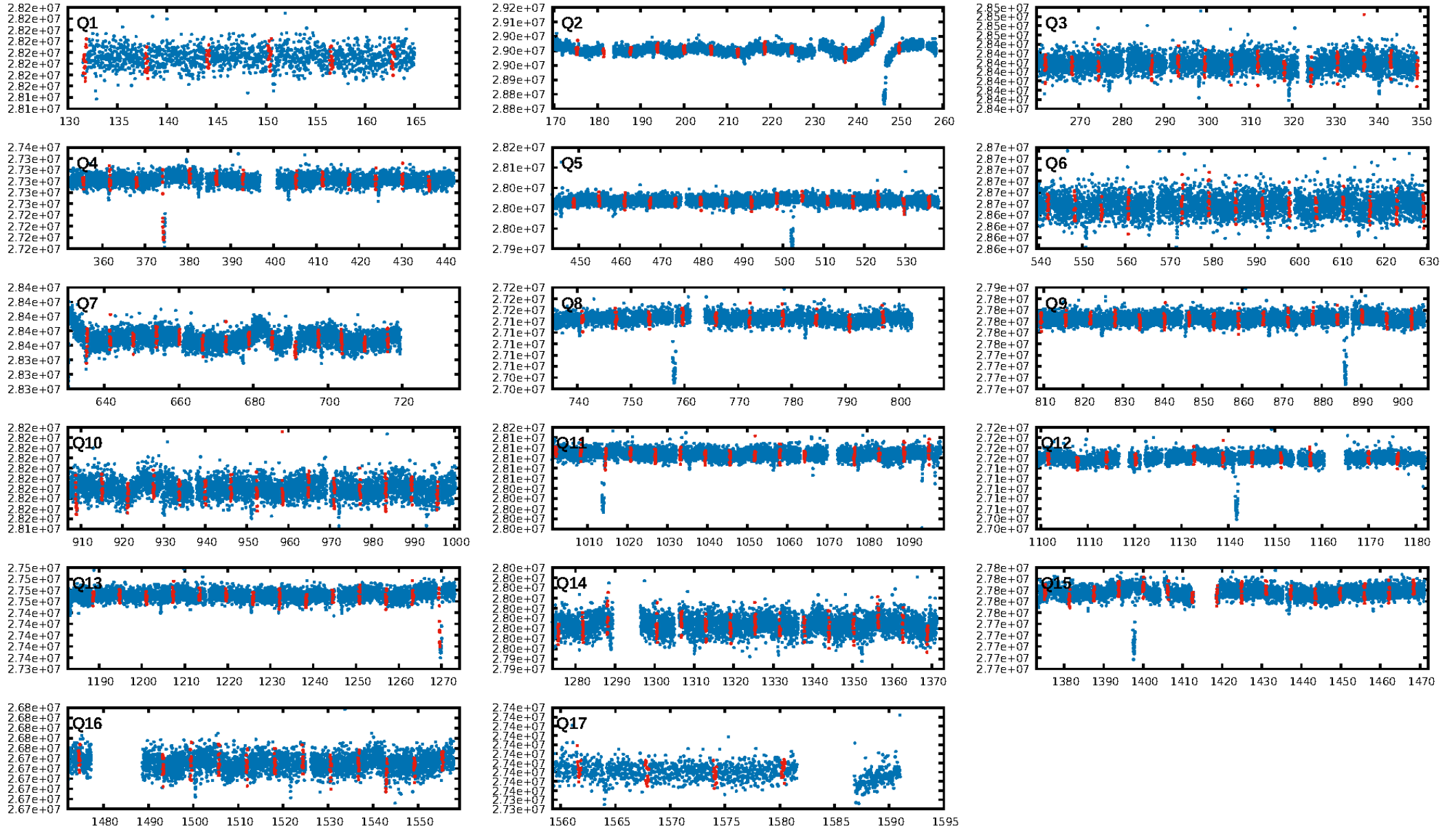
DV Fit Results:

Period = 6.21713 [0.00003] d
Epoch = 131.7208 [0.0037] BKJD
Rp/R* = 0.0145 [0.0038]
a/R* = 5.85 [6.97]
b = 0.89 [0.28]
Seff = 343.82 [86.00]
Teff = 1098 [69] K
Rp = 1.97 [0.60] Re
a = 0.0666 [0.0102] AU
Ag = 10.76 [8.46] [1.15σ]
Teffp = 3075 [576] K [3.41σ]

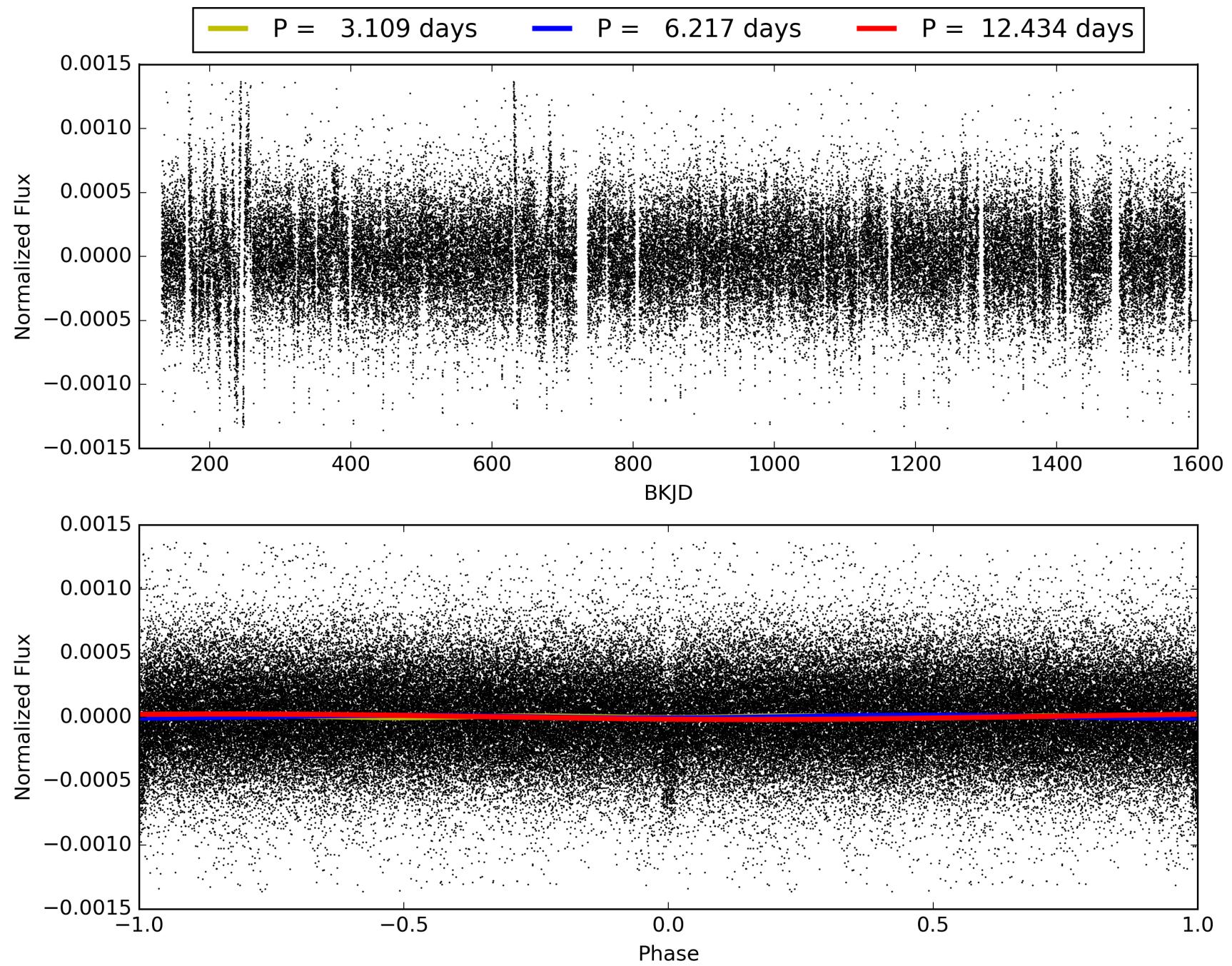
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [30.60σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.34e-60
RollingBand-fgt: 1.00 [194/194]
GhostDiagnostic-chr: 2.337
Centroid-sig: 60.5%
Centroid-so: 0.332 arcsec [0.54σ]
OotOffset-rm: 0.465 arcsec [1.65σ]
KicOffset-rm: 0.470 arcsec [1.91σ]
OotOffset-st: 4/3/4/4 [15]
KicOffset-st: 4/3/4/4 [15]
DiffImageQuality-fgm: 0.73 [11/15]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 006786037-03, PDC Light Curves

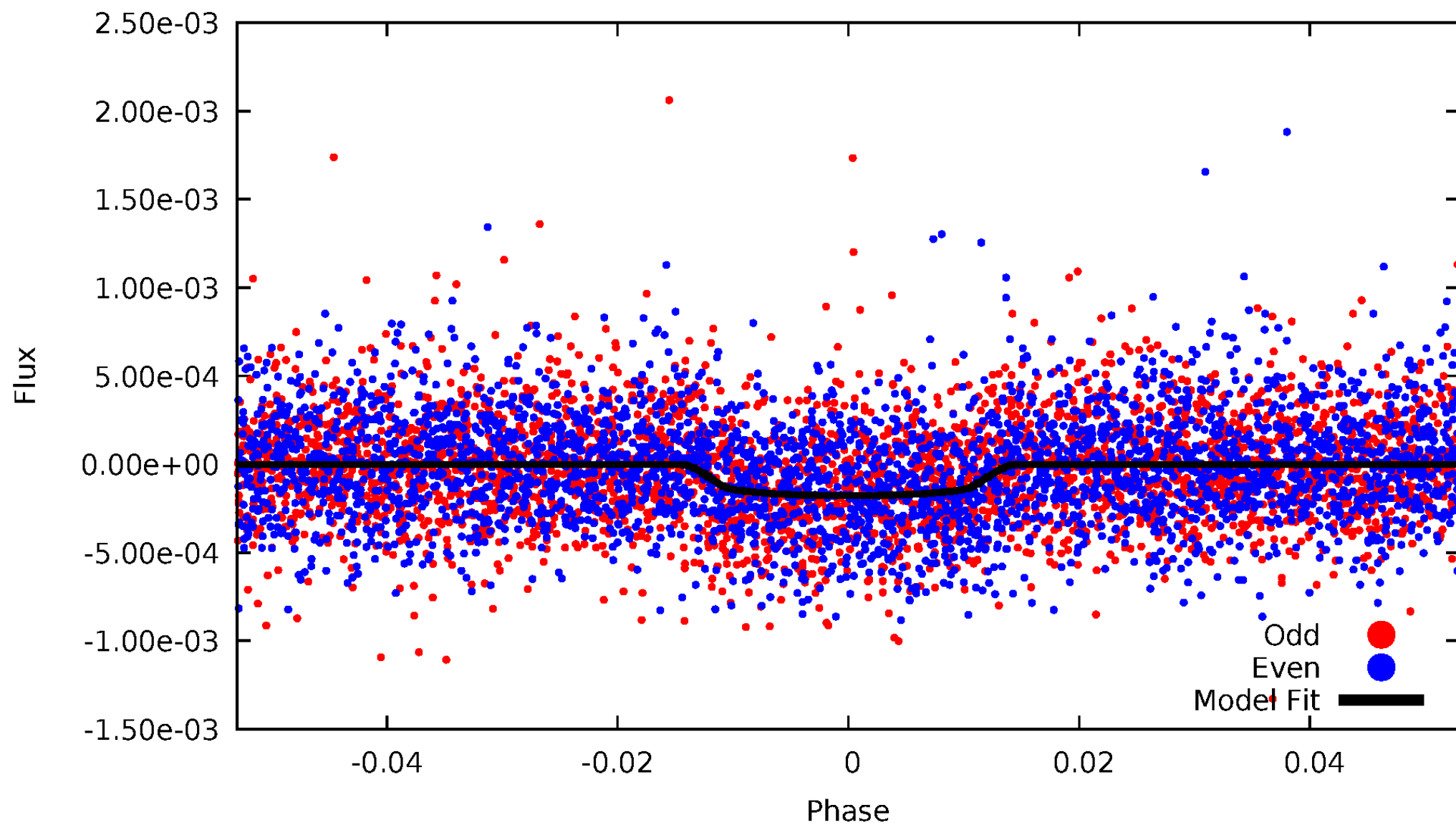


TCE 006786037-03



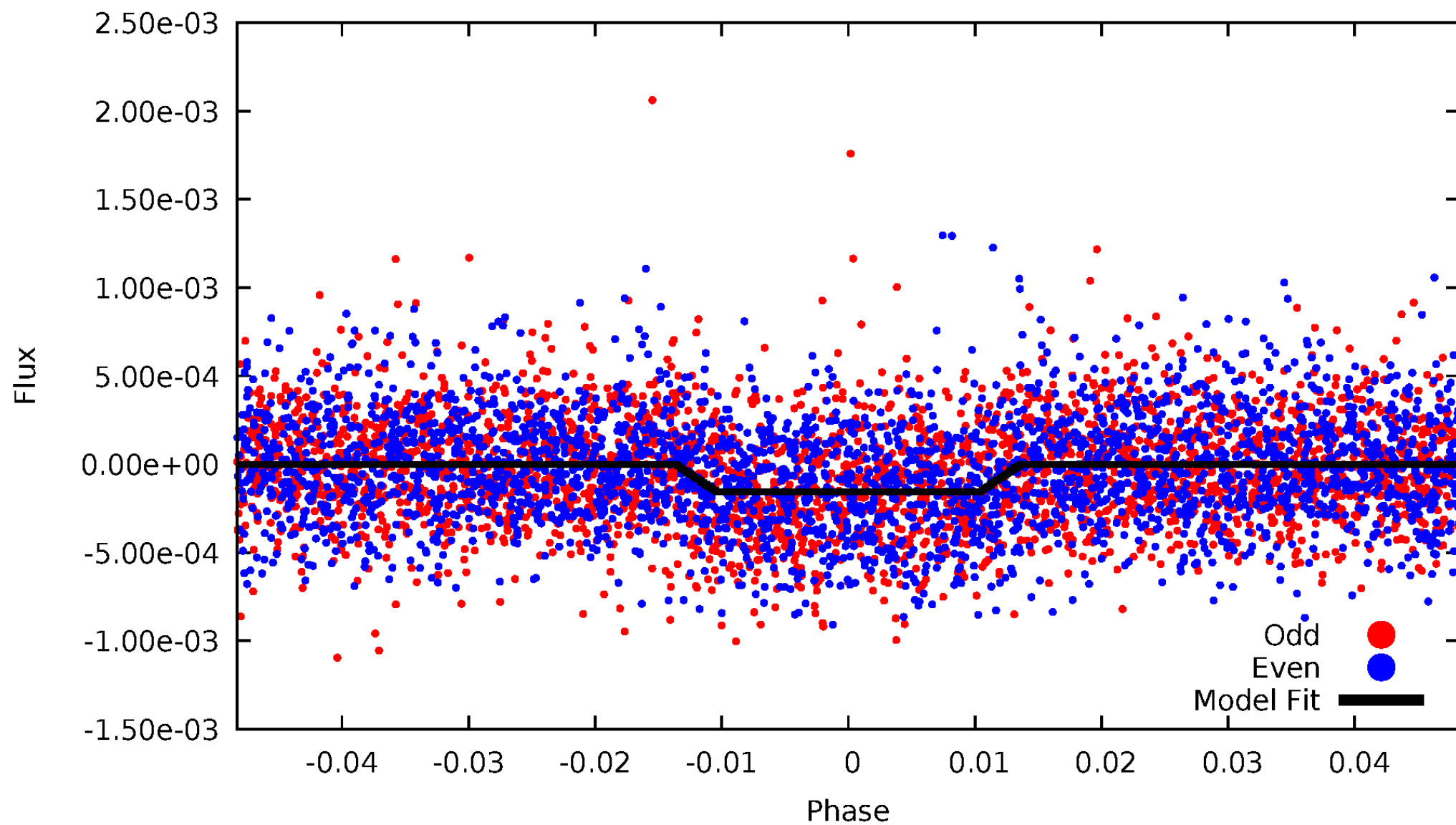
DV Odd/Even

TCE 006786037-03

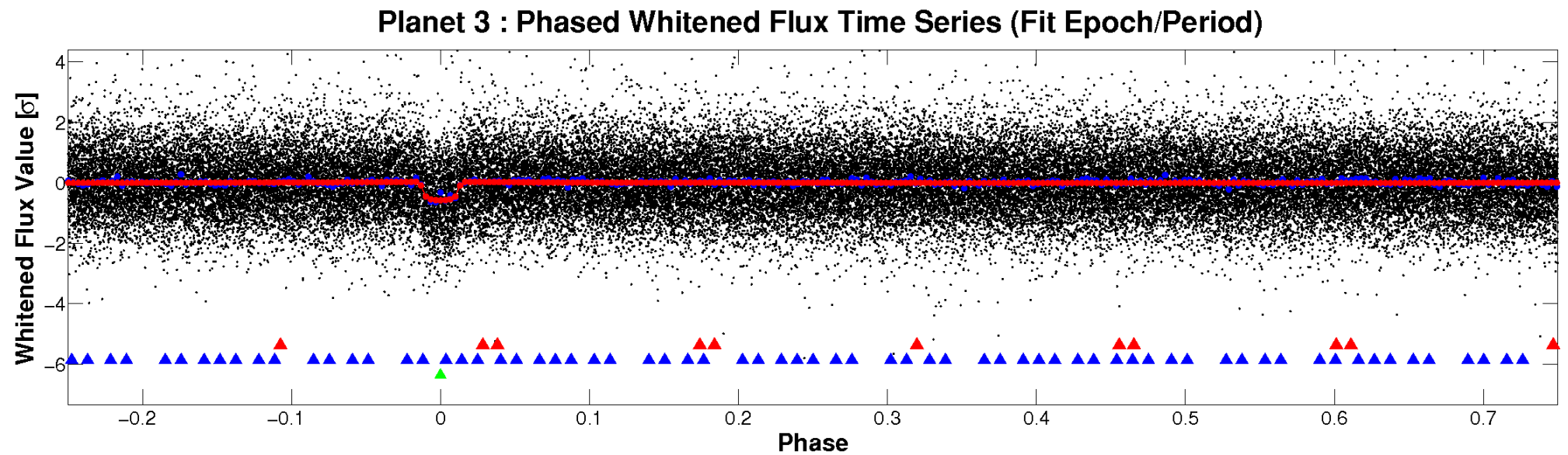
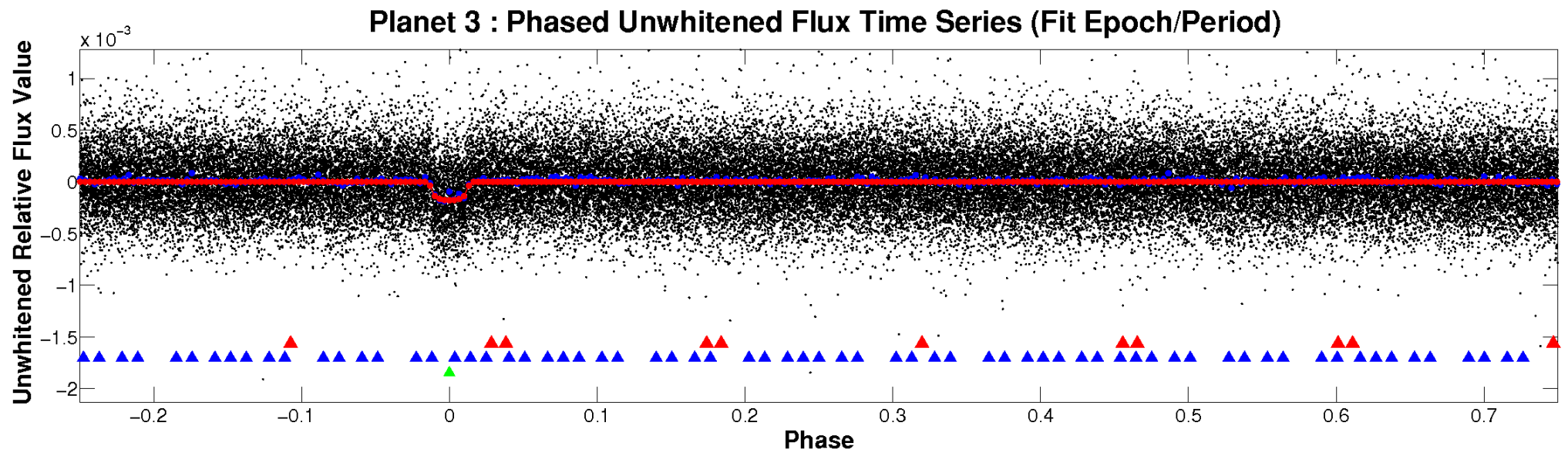


ALT Odd/Even

TCE 006786037-03

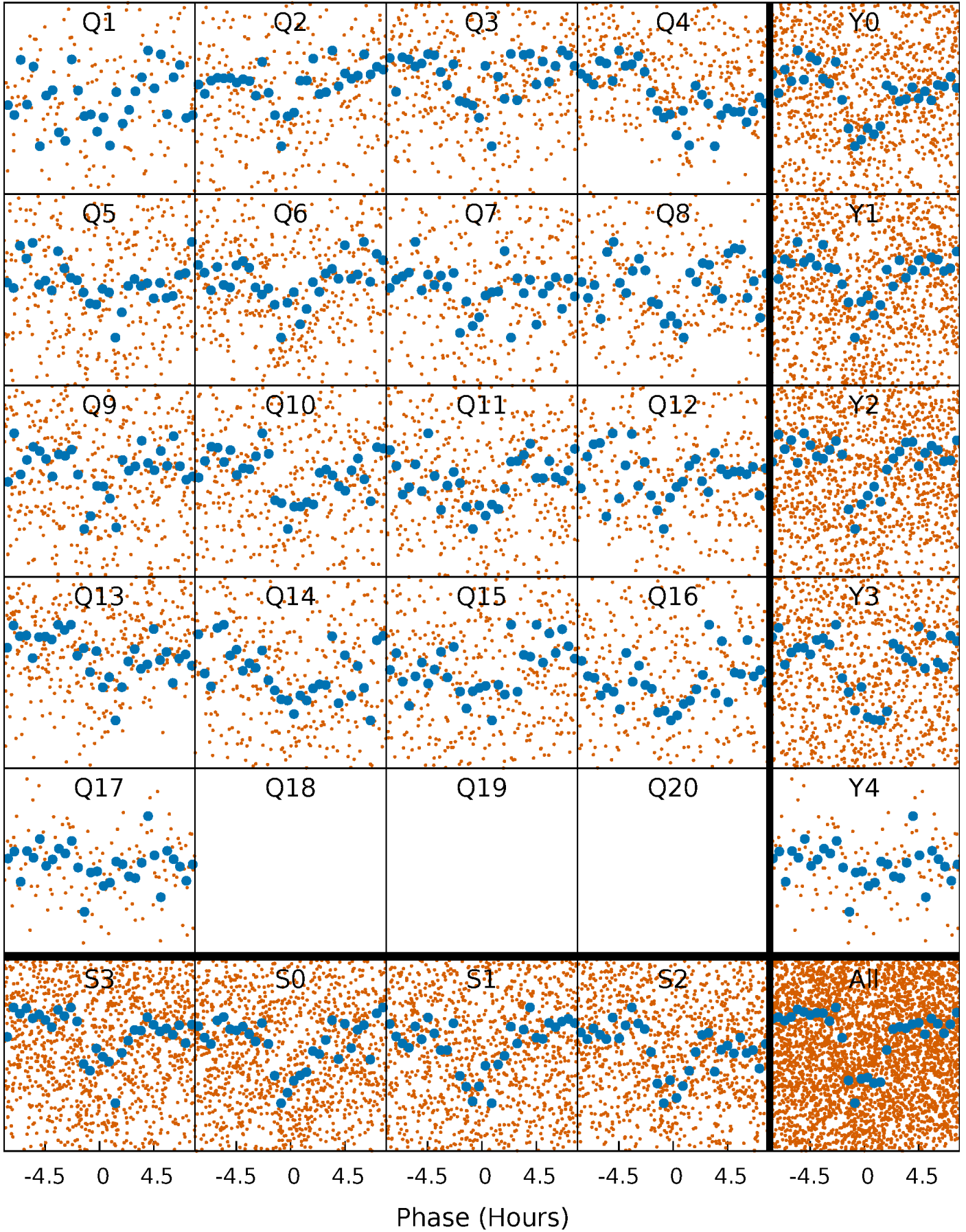


Non-Whitened Vs. Whitened Light Curve



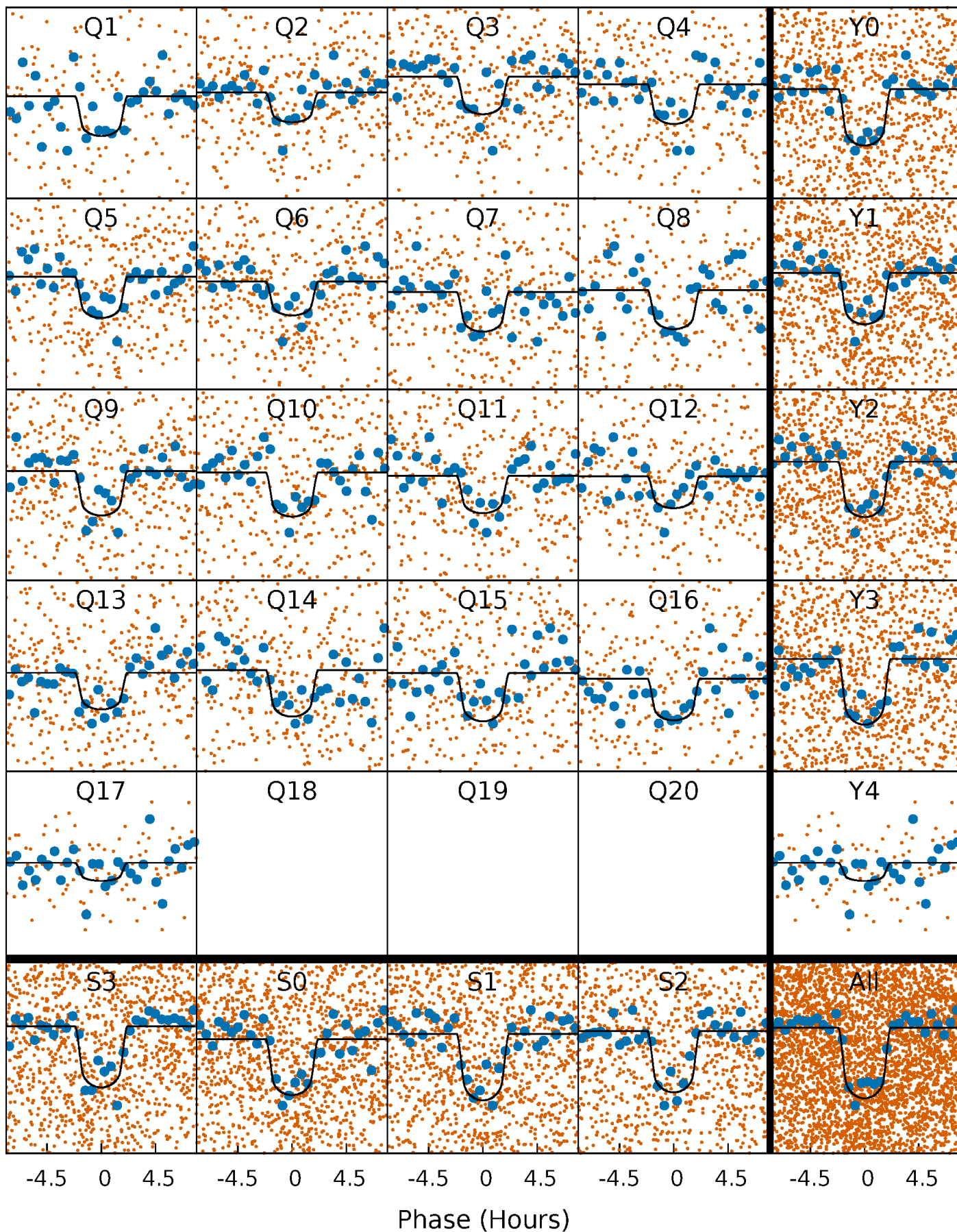
PDC Quarter-Phased Transit Curves

TCE 006786037-03 P= 6.217134 Days $T_0=131.720790$ (BKJD)



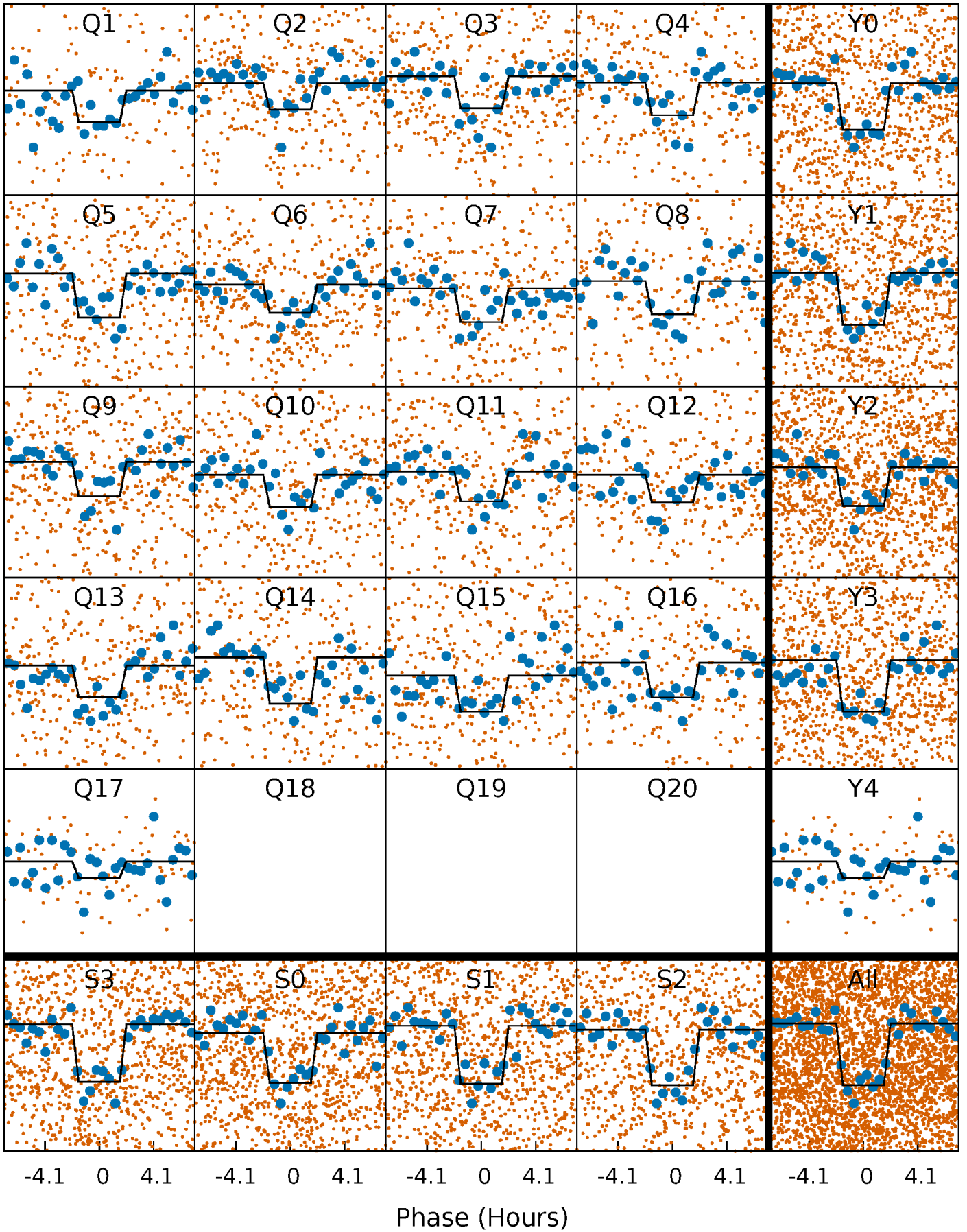
DV Quarter-Phased Transit Curves

TCE 006786037-03 P= 6.217134 Days $T_0=131.720790$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

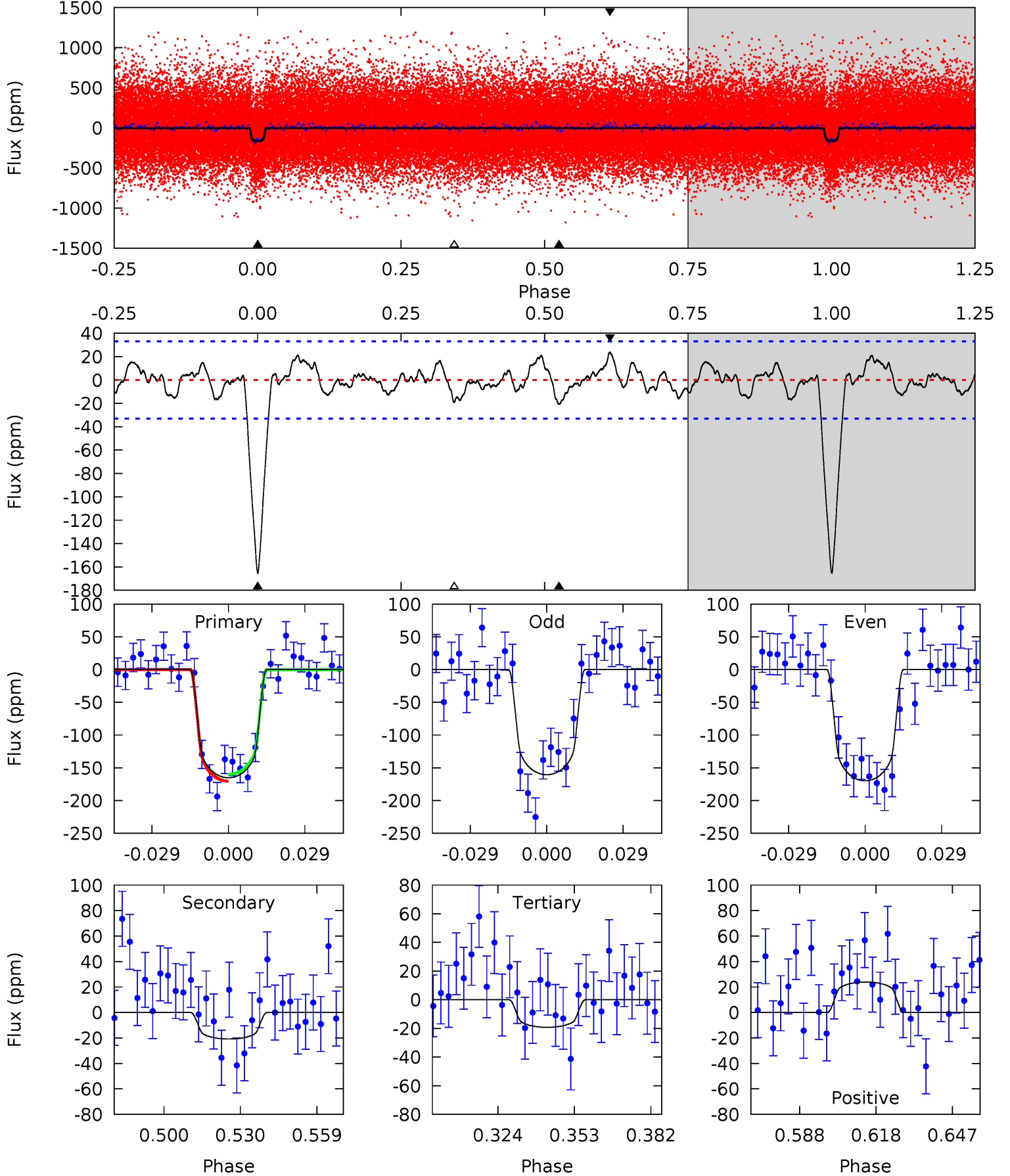
TCE 006786037-03 P= 6.217119 Days $T_0=131.722537$ (BKJD)



DV Model-Shift Uniqueness Test

006786037-03, P = 6.217134 Days, E = 125.503656 Days

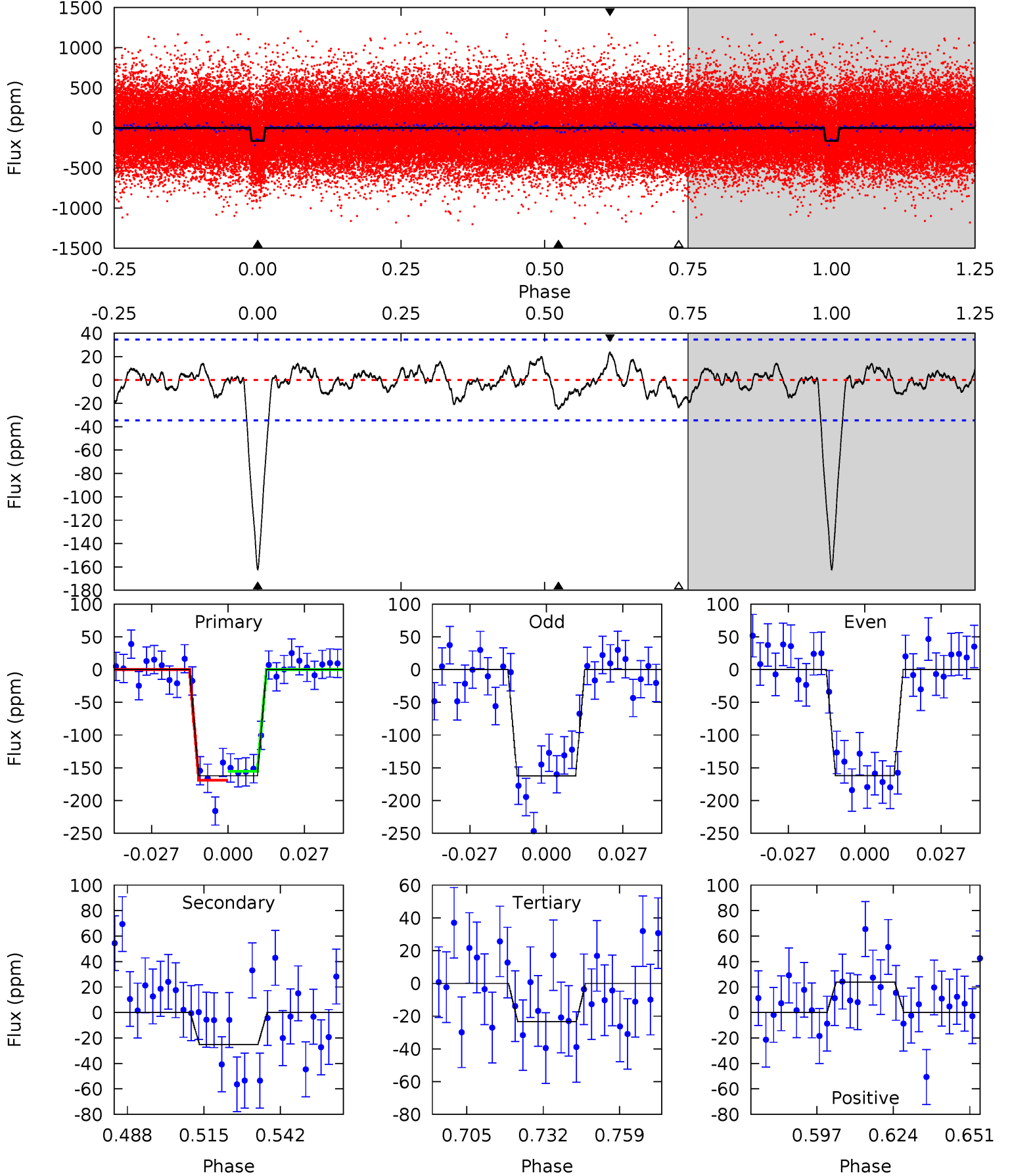
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.1	3.03	2.80	3.49	4.82	2.18	1.27	21.3	20.6	0.23	-0.45	0.68	0.96	0.13	0.76



Alt Model-Shift Uniqueness Test

006786037-03, P = 6.217119 Days, E = 125.505418 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.7	3.50	3.27	3.34	4.83	2.21	1.19	19.4	19.3	0.23	0.16	0.05	0.99	0.13	0.94



Stellar Parameters For KIC 006786037

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5751^{+78}_{-78}	$4.254^{+0.143}_{-0.104}$	$0.140^{+0.150}_{-0.150}$	$1.247^{+0.200}_{-0.200}$	$1.018^{+0.081}_{-0.065}$	$0.739^{+0.496}_{-0.255}$
	+1%/-1%	+3%/-2%	+107%/-107%	+16%/-16%	+8%/-6%	+67%/-35%
Source	SPE90	SPE90	SPE90	DSEP		

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

Secondary Eclipse Parameters for KIC 006786037-03 / KOI 0564.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-21 ± 7	$1.92^{+0.57}_{-0.52}$	1531^{+65}_{-75}	3632^{+437}_{-342}	13^{+13}_{-6}
Alt.	-25 ± 7	$1.68^{+0.60}_{-0.52}$	1530^{+65}_{-72}	3942^{+609}_{-425}	21^{+24}_{-11}

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 $A_{obs} \gg 1.0$

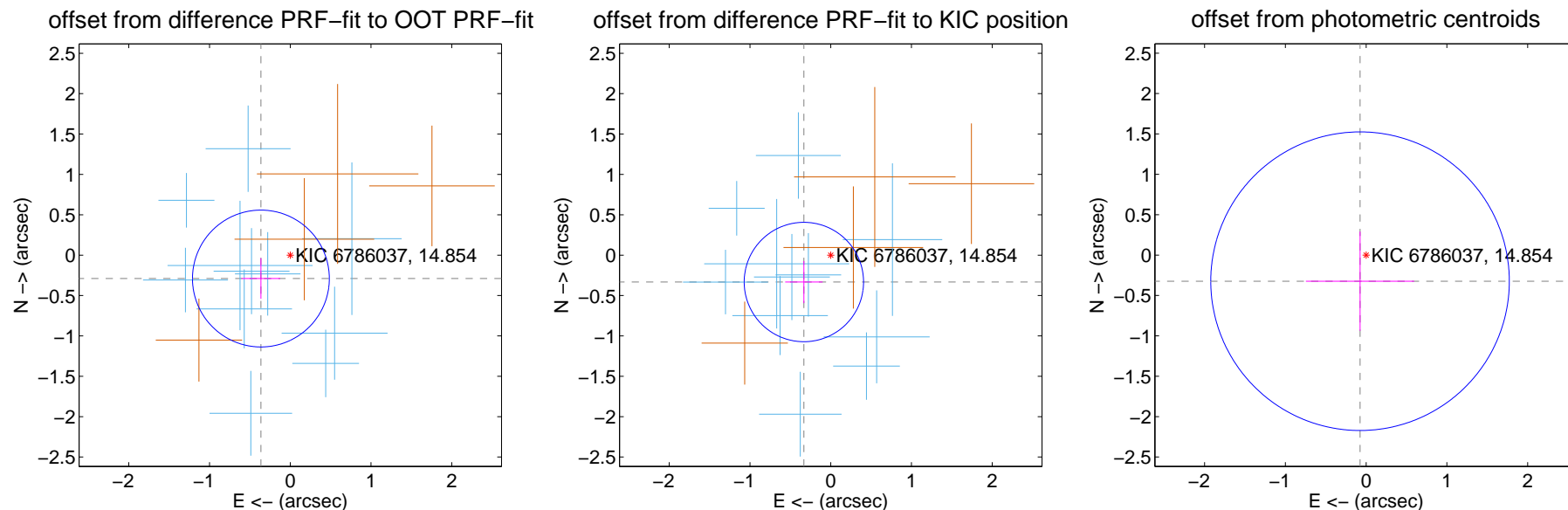
DV Centroid Data

Supplemental centroid analysis for 006786037-03. Kepler magnitude: 14.85. Transit SNR 19.34

There are 11 quarters with good PRF difference image offsets

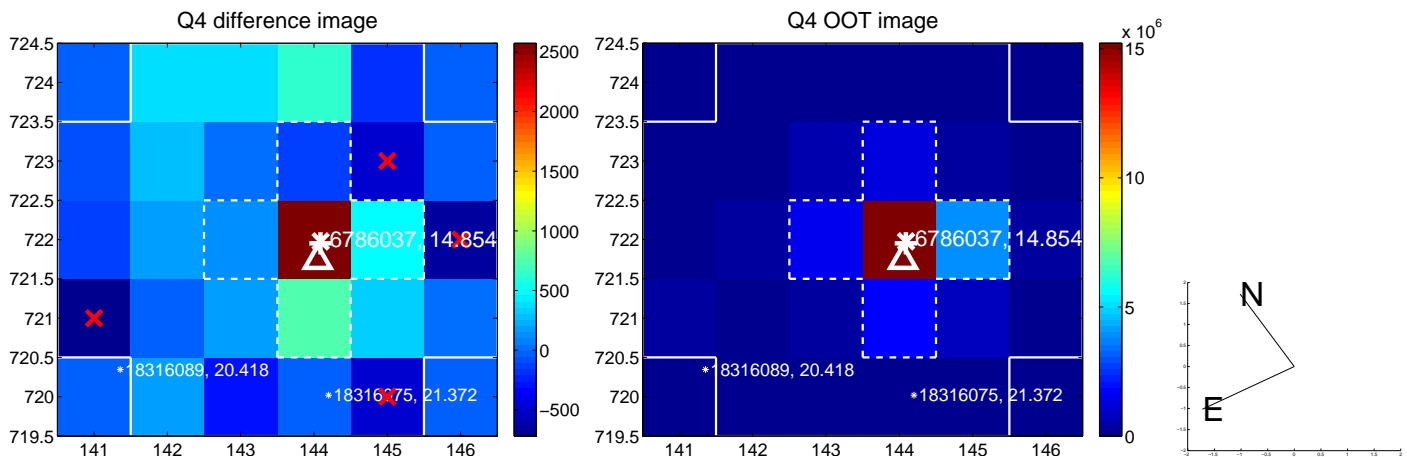
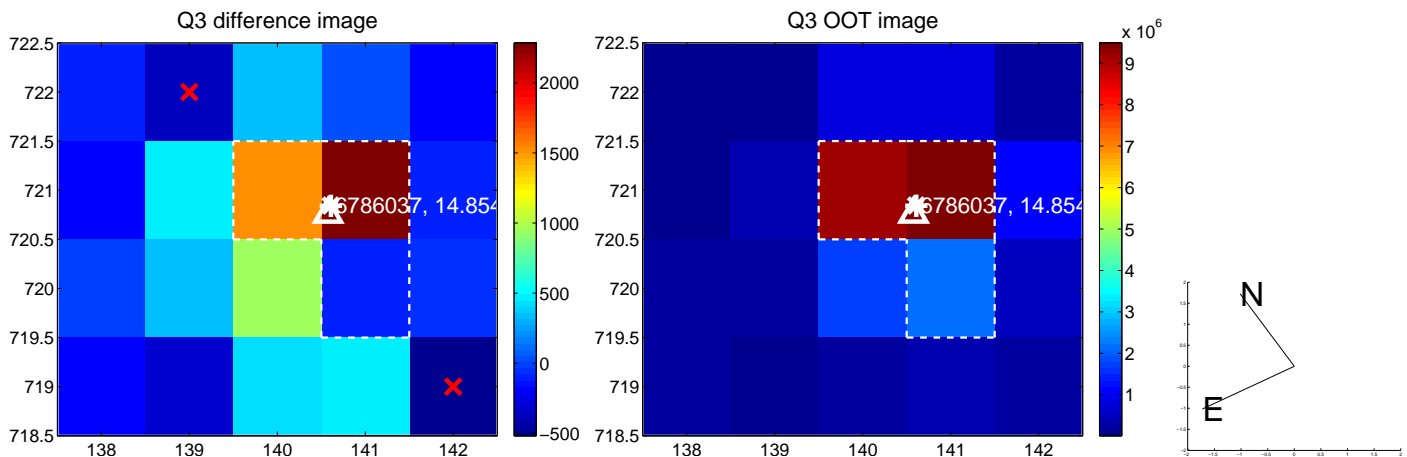
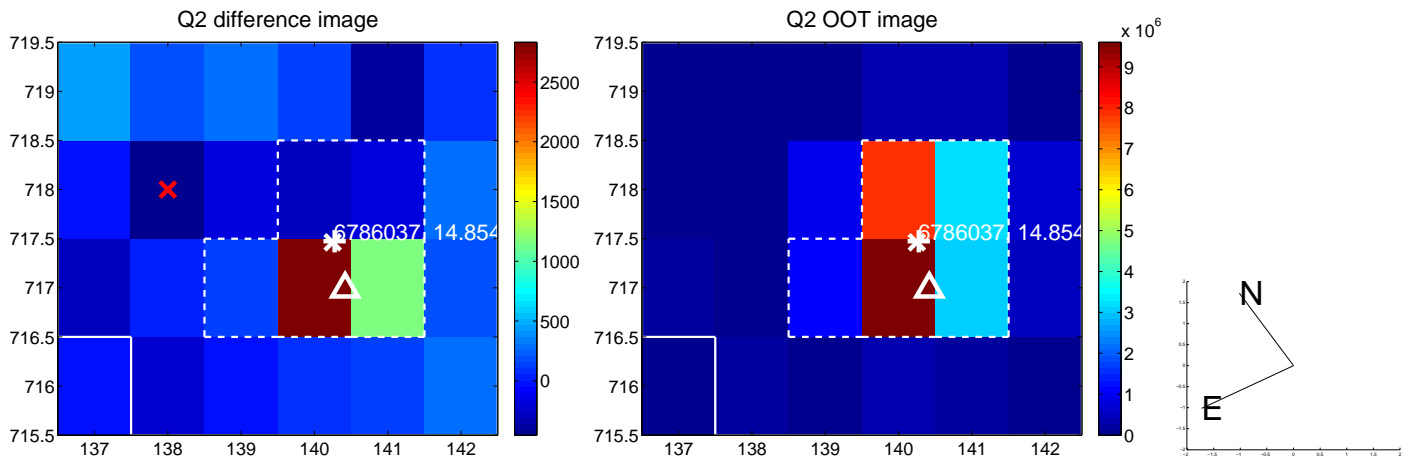
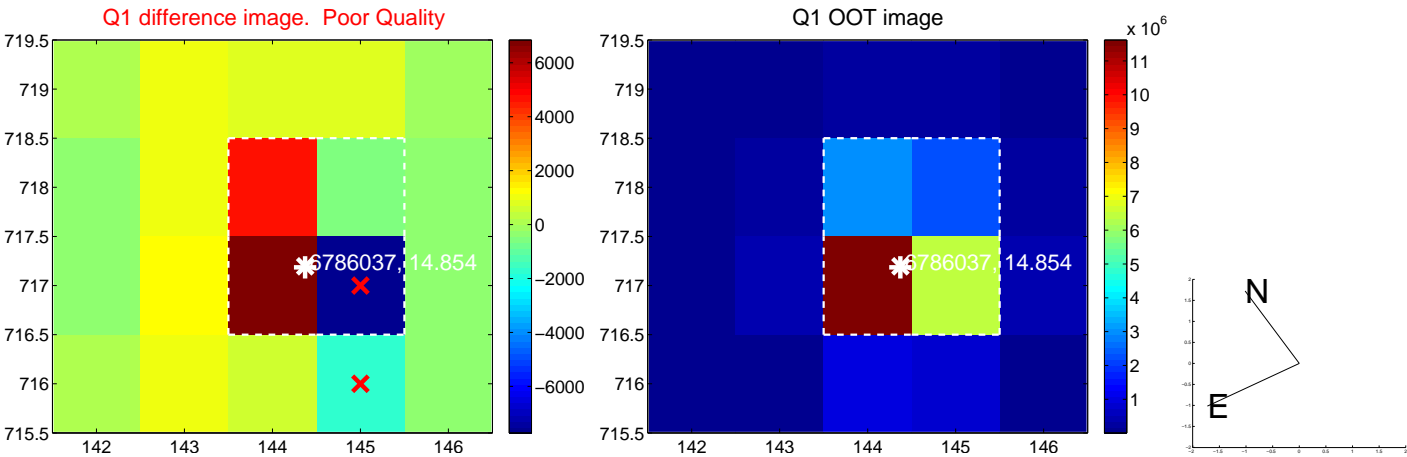
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.465 ± 0.282	1.65	0.364 ± 0.240	-0.290 ± 0.251
PRF-fit source offset from KIC position	0.470 ± 0.246	1.91	0.333 ± 0.231	-0.333 ± 0.261
photometric centroid source offset	0.33 ± 0.62	0.54	0.08 ± 0.67	-0.32 ± 0.61

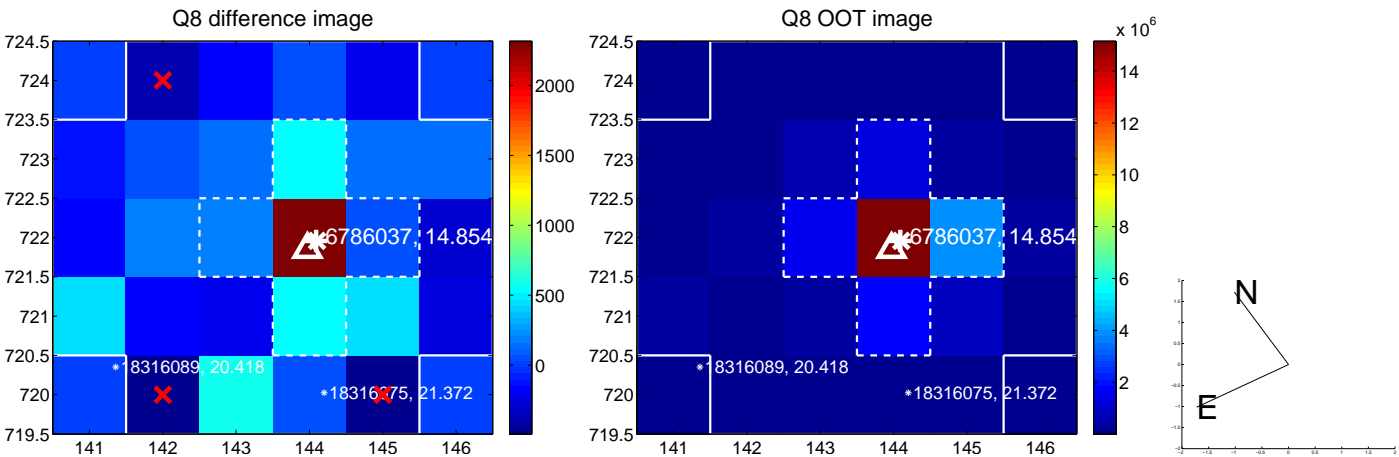
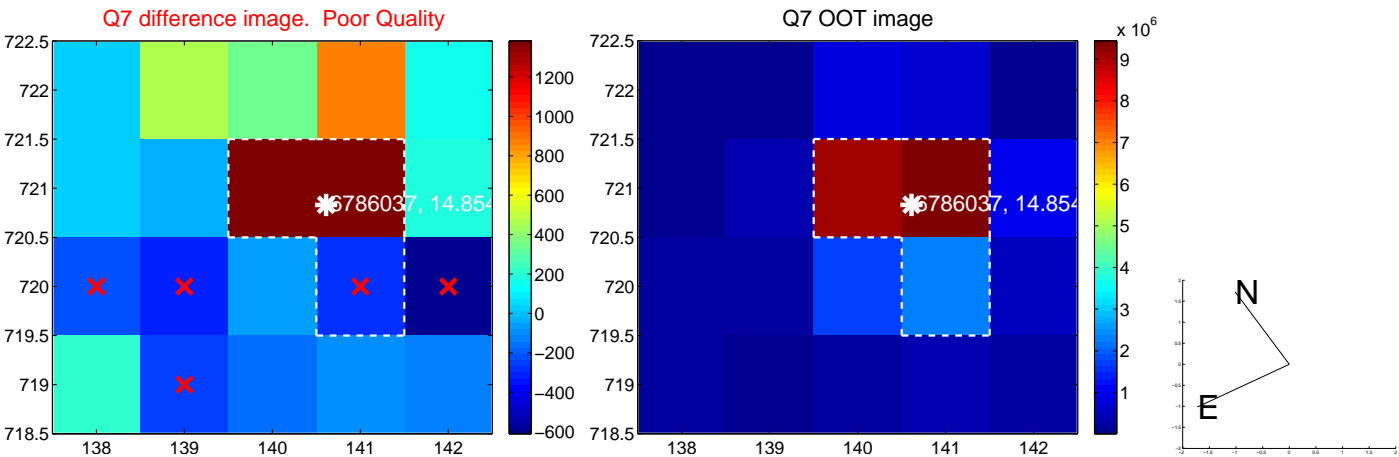
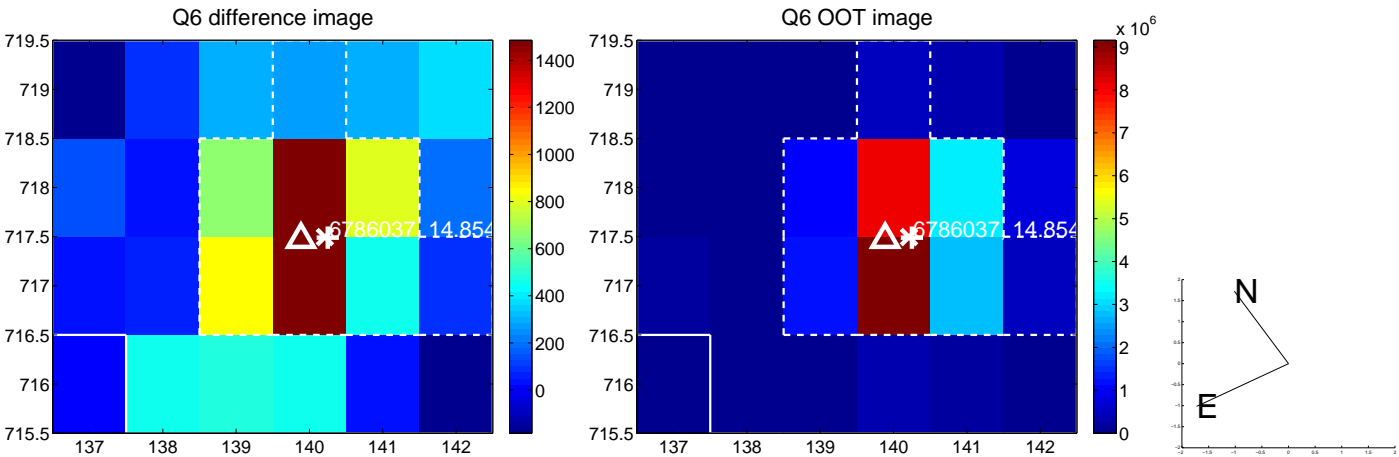
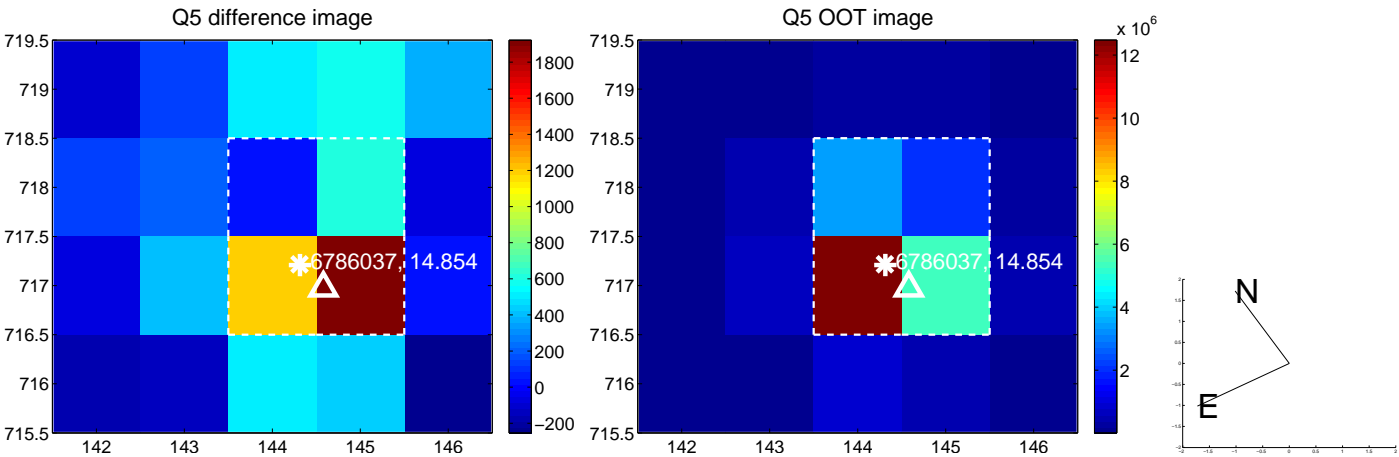


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

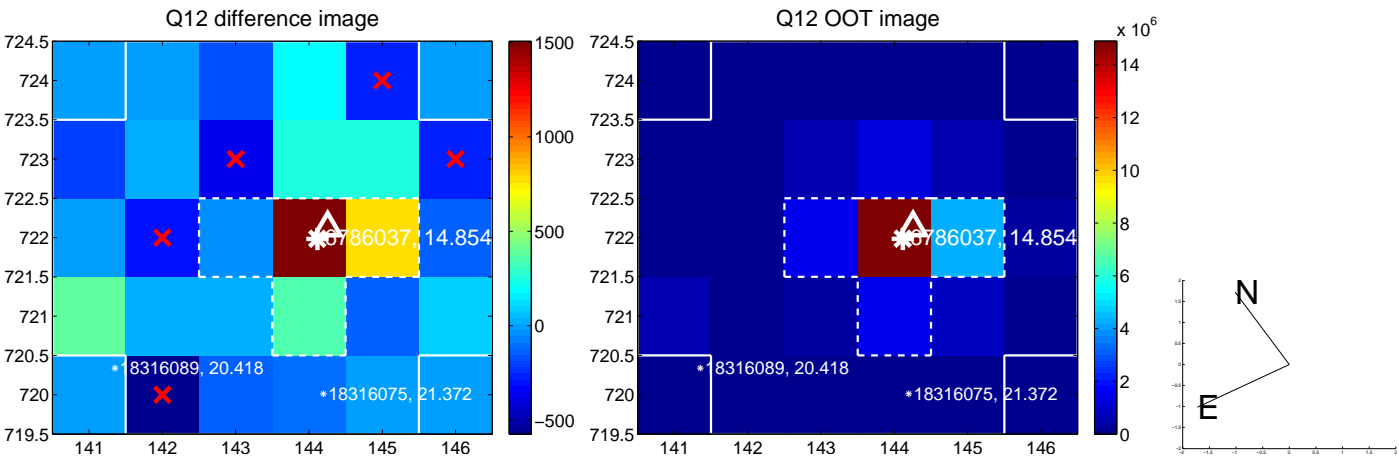
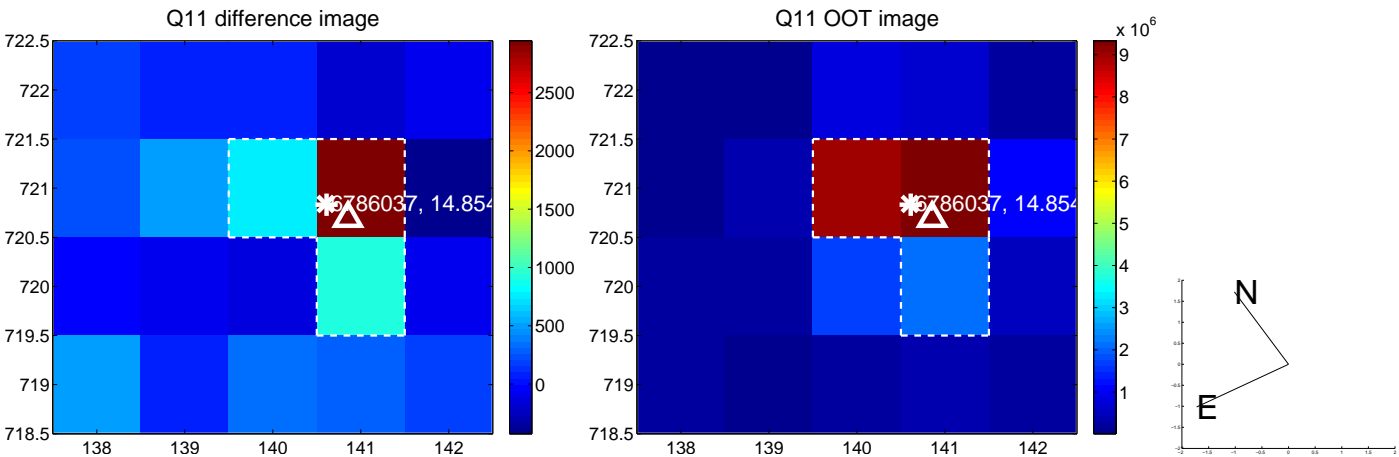
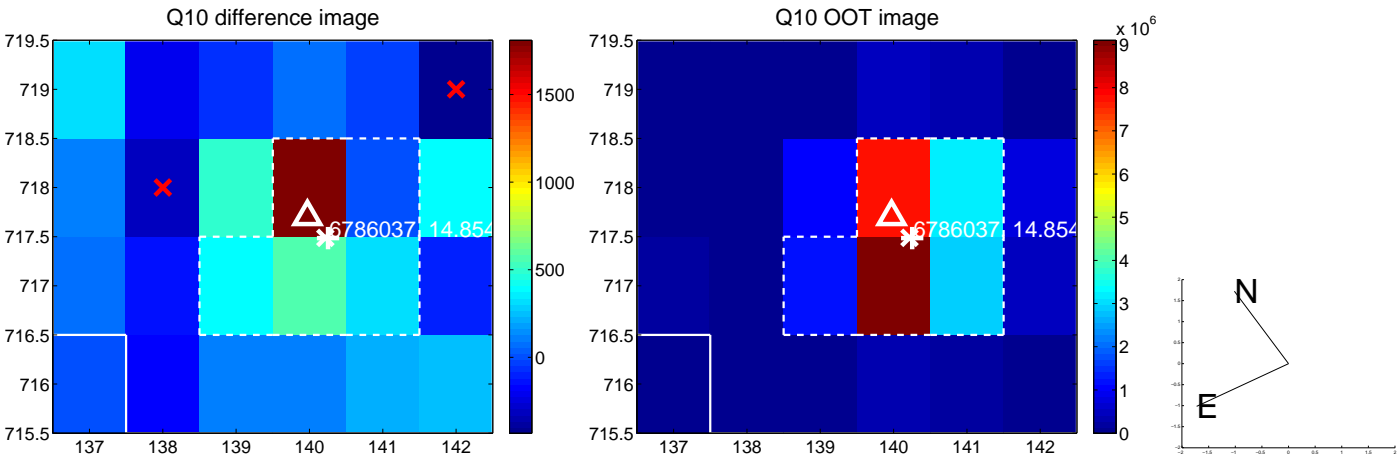
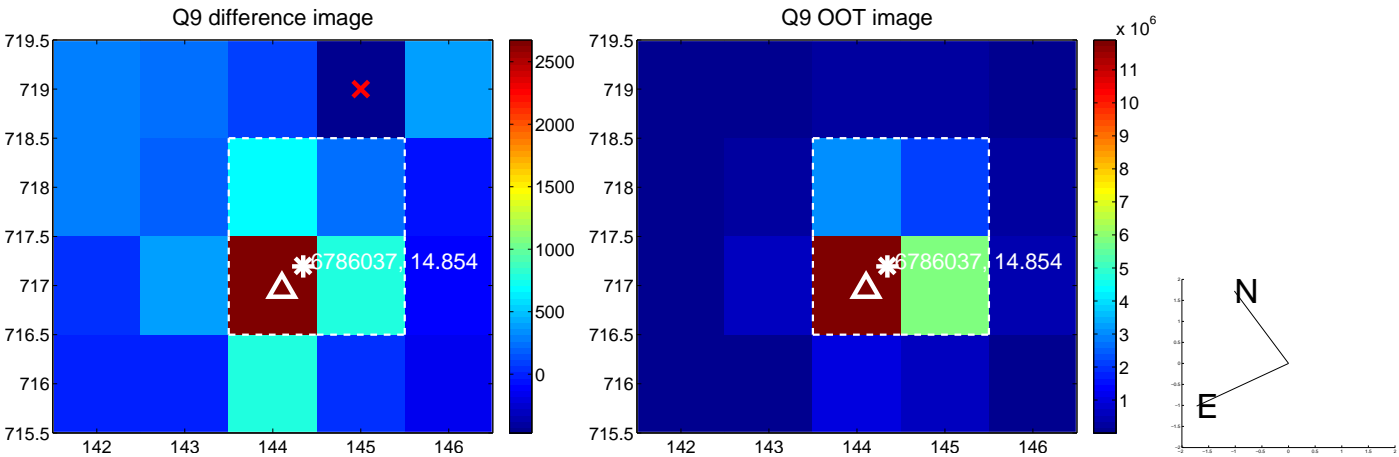
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



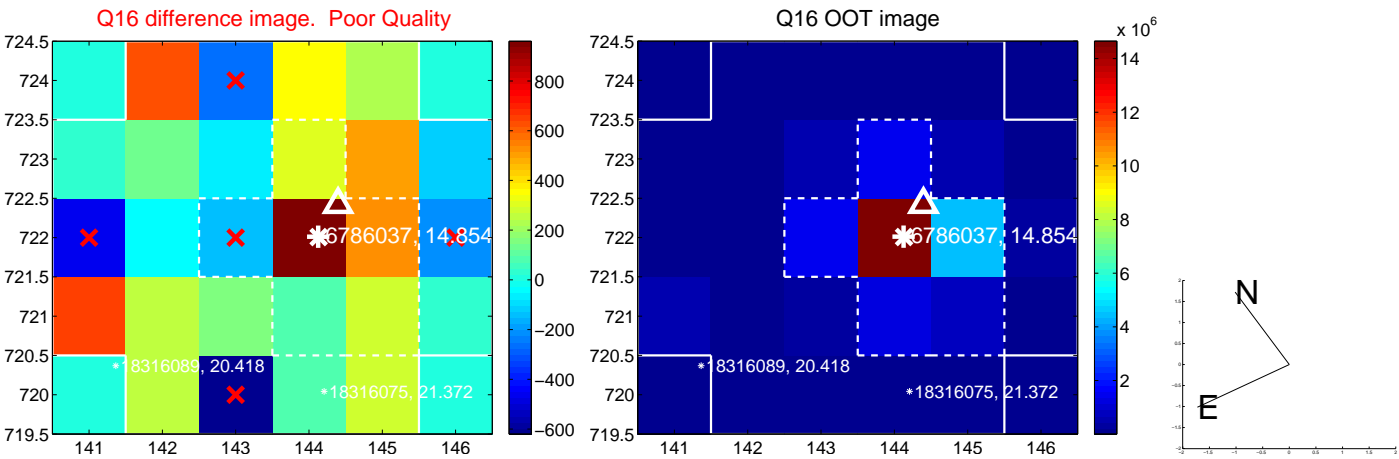
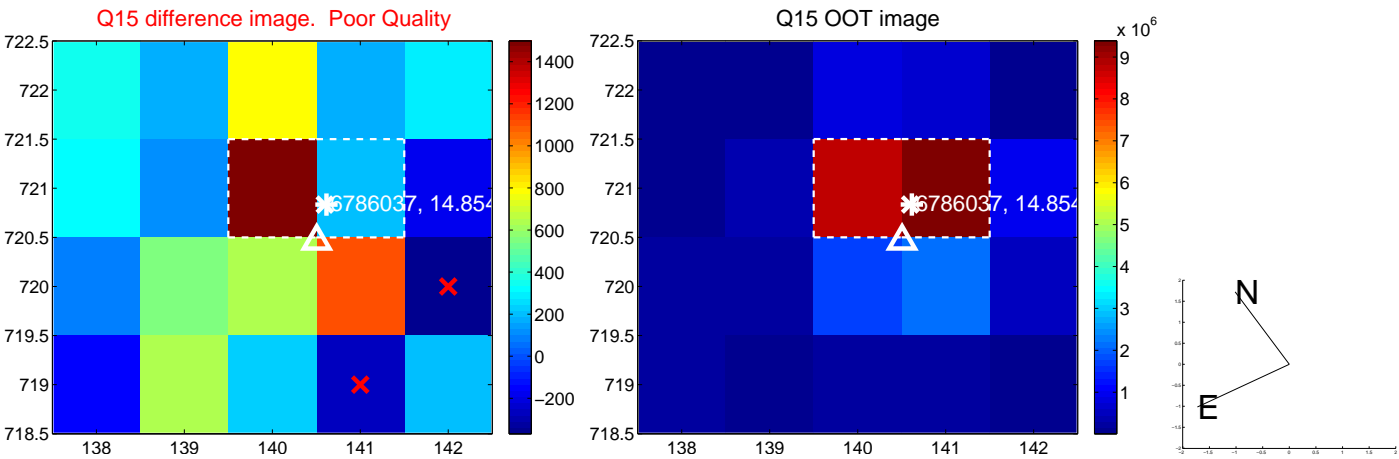
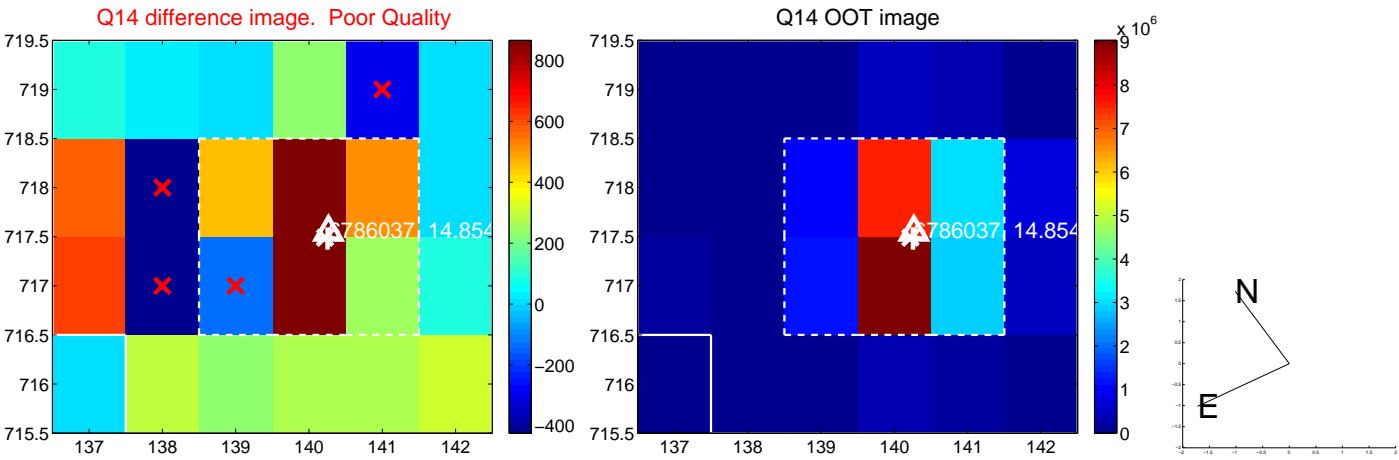
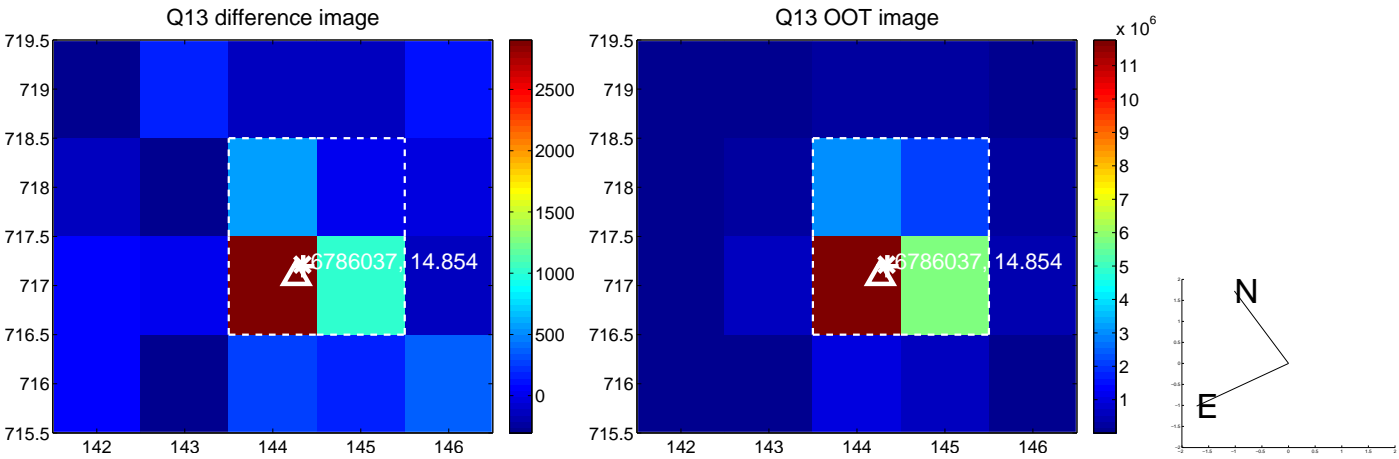
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



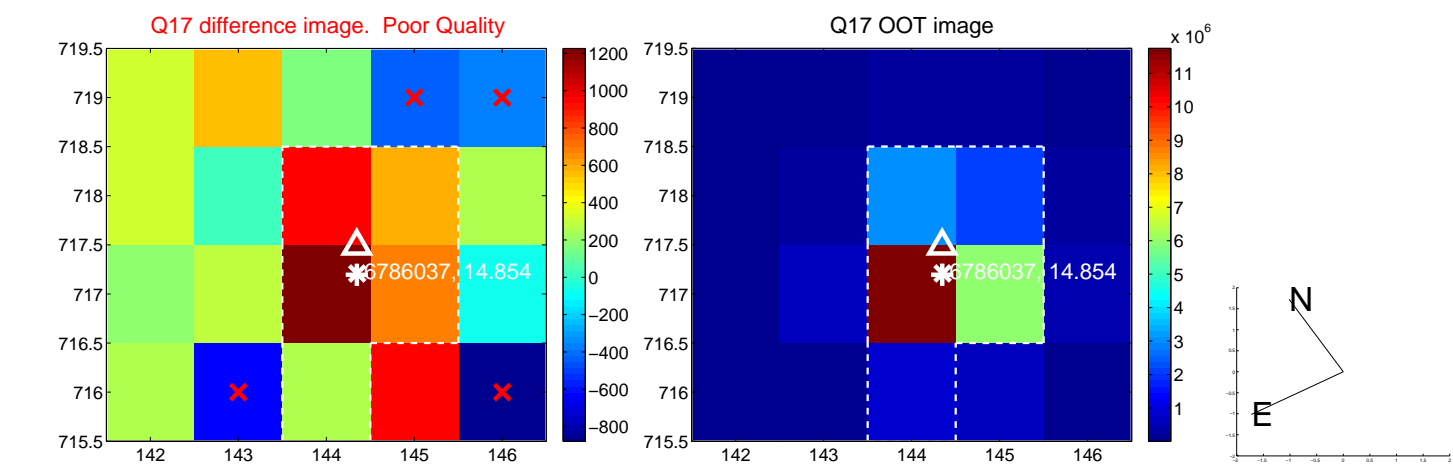
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



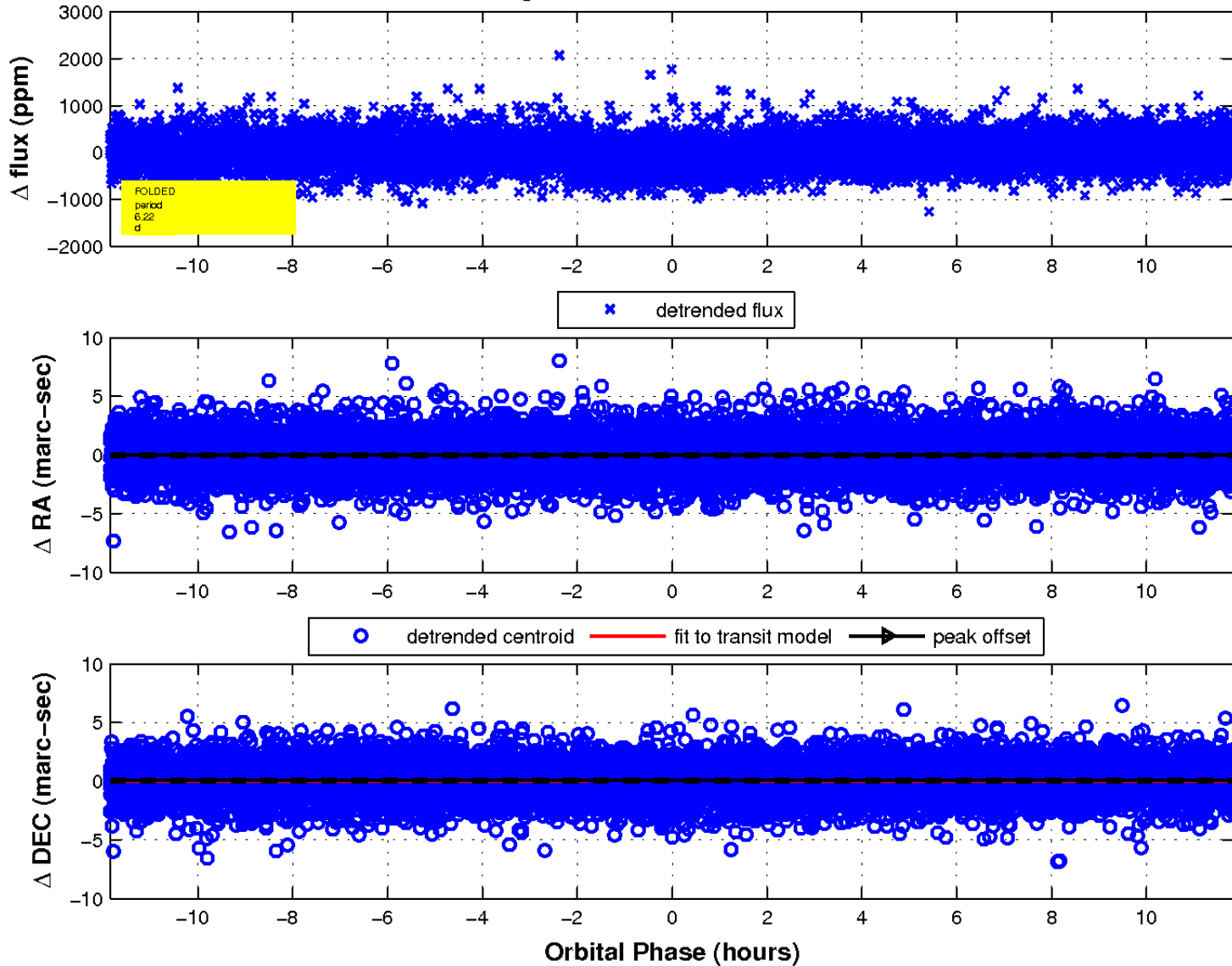
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

