

KIC 006100702

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})
006100702-01	OBS	No	289.093698	194.707965	2436.1	12.864	27.2	7.0	1.78	7000	8.87	7.39
006100702-02	OBS	No	212.155425	141.639831	3745.9	2.645	21.2	4.5	1.78	7000	11.20	11.17
006100702-03	OBS	No	340.286301	154.896740	9847.6	2.681	20.8	9.3	1.78	7000	17.87	5.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006100702-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006100702-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006100702-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

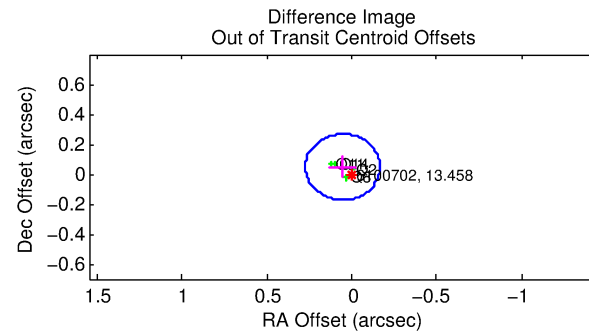
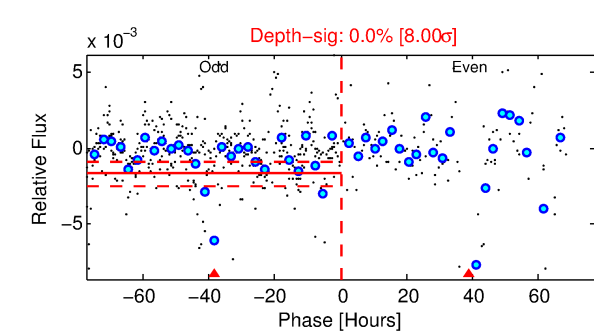
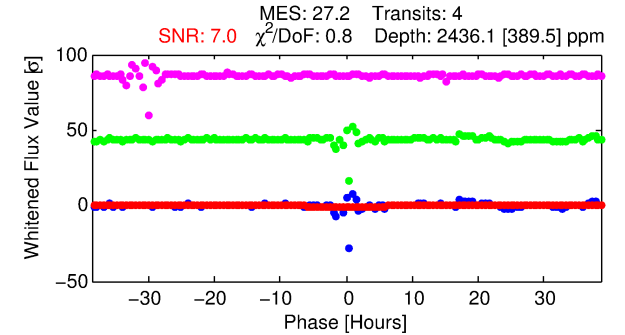
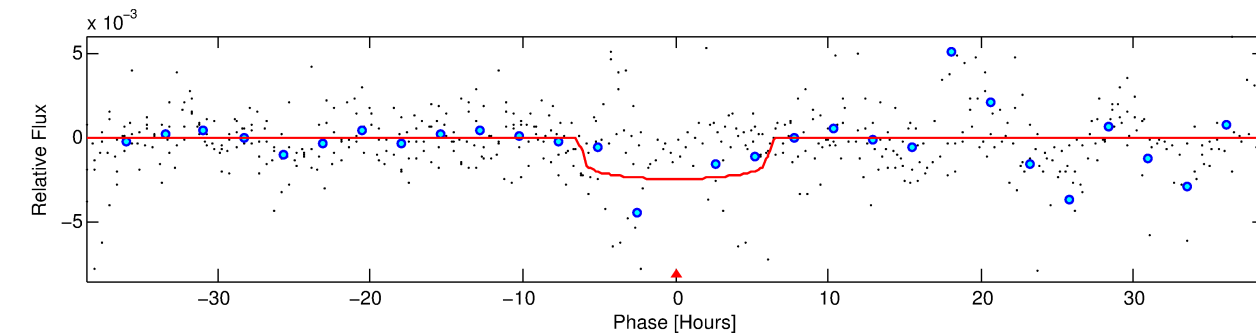
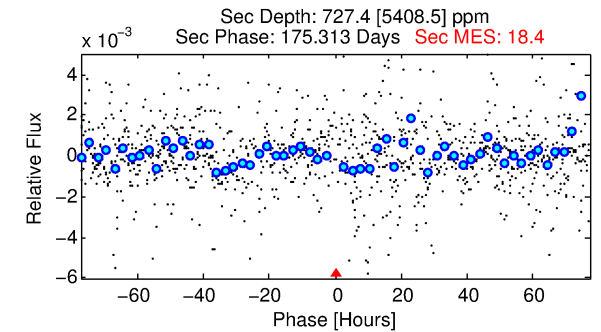
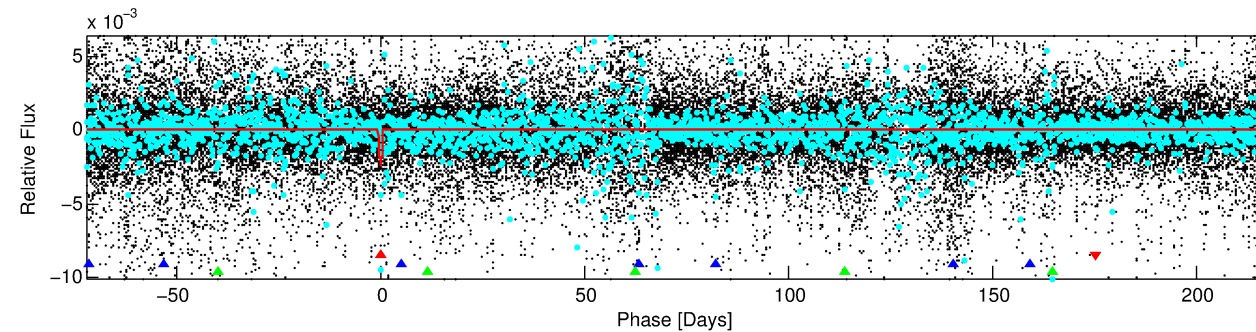
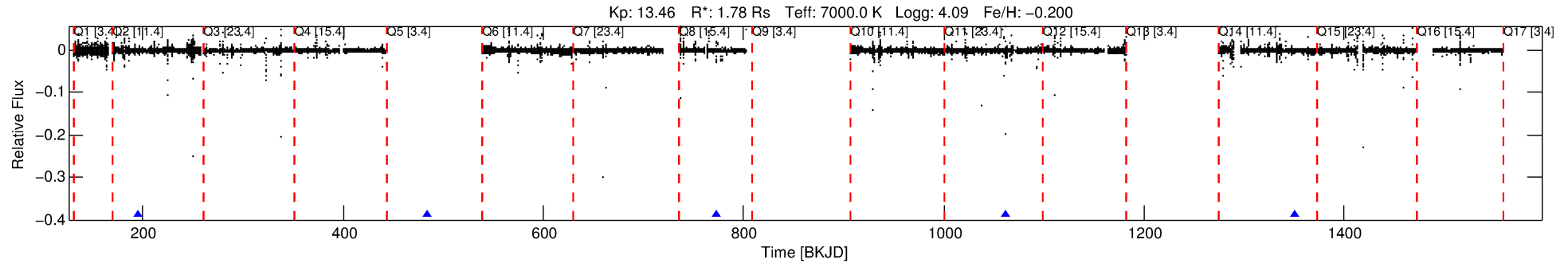
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006100702-01

No Significant Match Found

DV One-Page Summary

KIC: 6100702 Candidate: 1 of 3 Period: 289.094 d



DV Fit Results:

Period = 289.09370 [0.00550] d
Epoch = 194.7080 [0.0156] BKJD
Rp/R* = 0.0457 [0.0144]
a/R* = 179.52 [297.92]
b = 0.01 [316.26]
Seff = 7.39 [2.86]
Teq = 420 [41] K
Rp = 8.87 [3.76] Re
a = 0.9601 [0.2299] AU
Ag = 4684.34 [34992.27] [0.13 σ]
Teffp = 5378 [10036] K [0.49 σ]

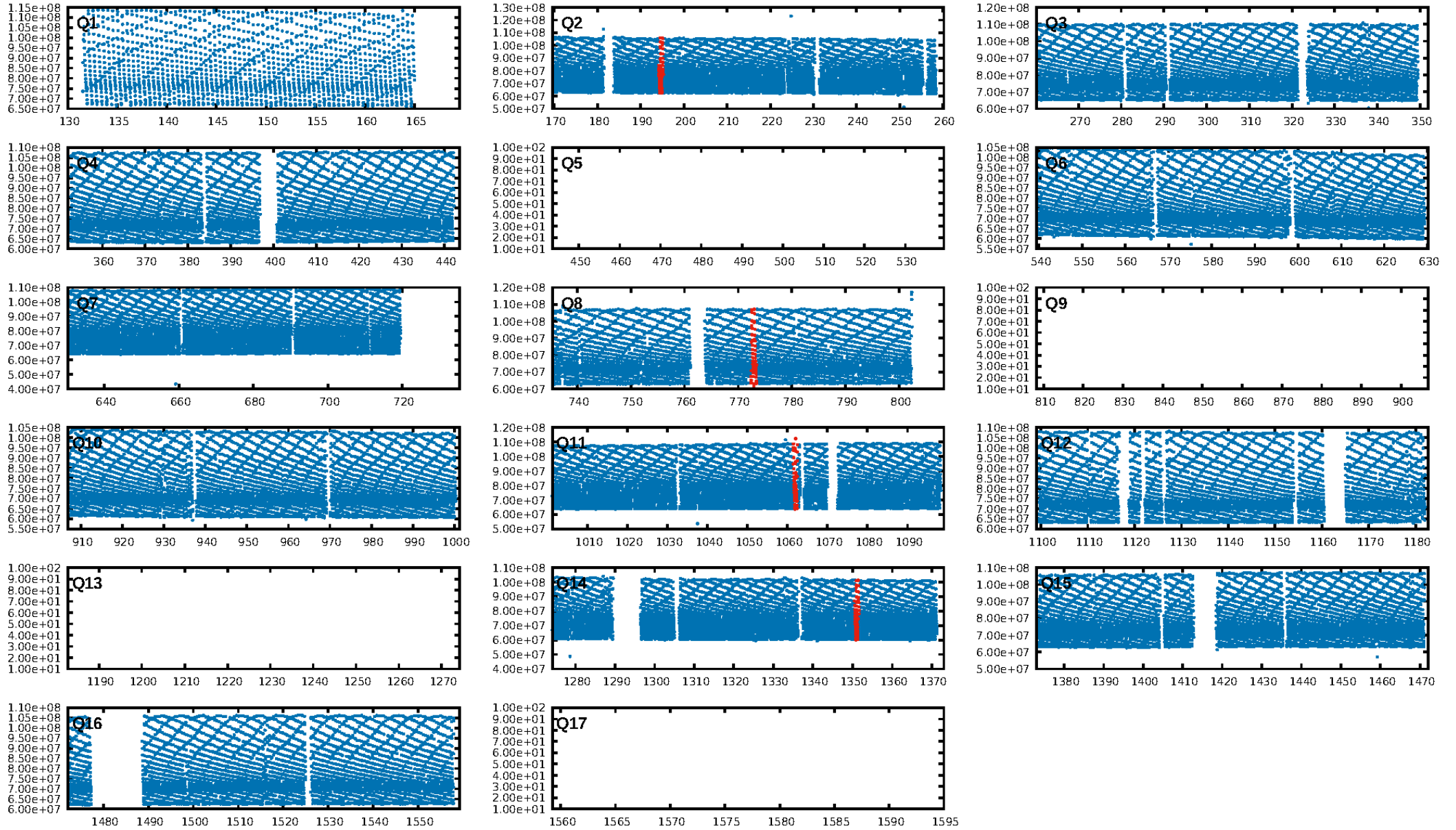
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [140.60 σ]
LongPeriod-sig: 100.0% [93.50 σ]
ModelChiSquare2-sig: 16.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.07566
Centroid-sig: 0.1%
Centroid-so: 1.408 arcsec [3.17 σ]
OotOffset-rm: 0.072 arcsec [0.99 σ]
KicOffset-rm: 0.078 arcsec [0.95 σ]
OotOffset-st: 2/1/1/0 [4]
KicOffset-st: 2/1/1/0 [4]
DiffImageQuality-fgm: 0.25 [1/4]
DiffImageOverlap-fno: 1.00 [4/4]

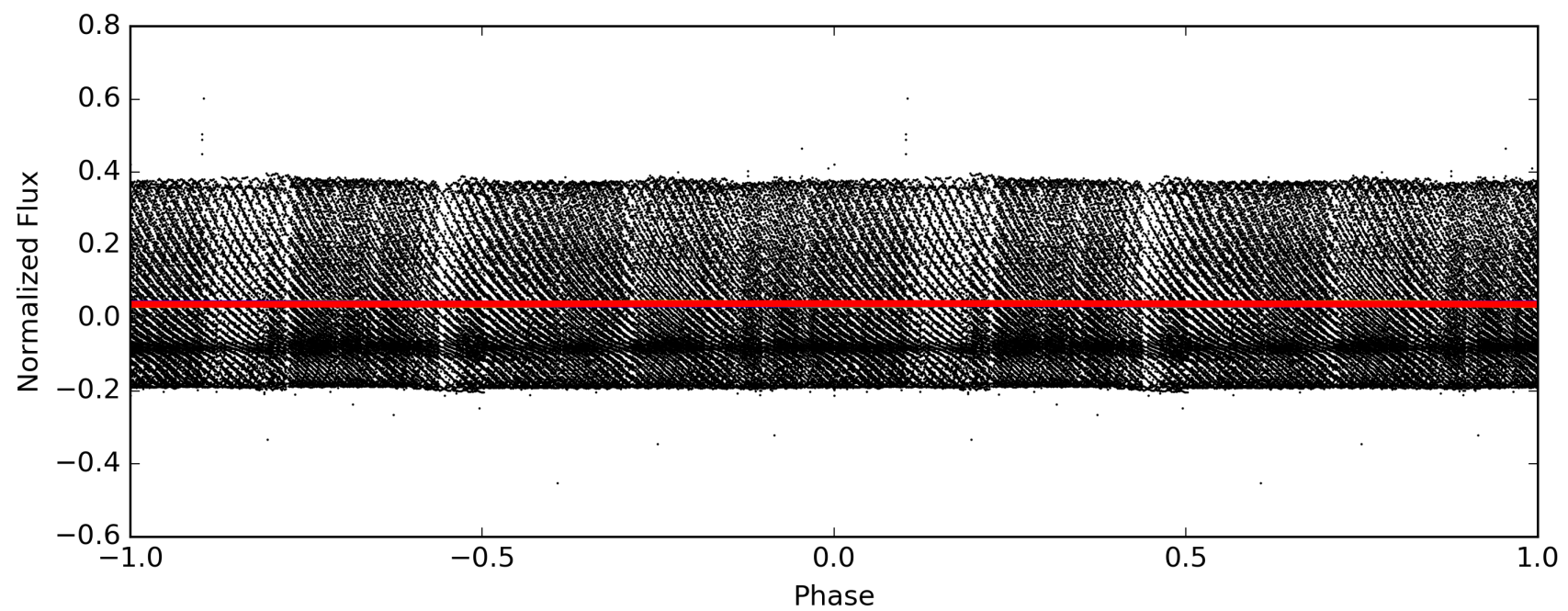
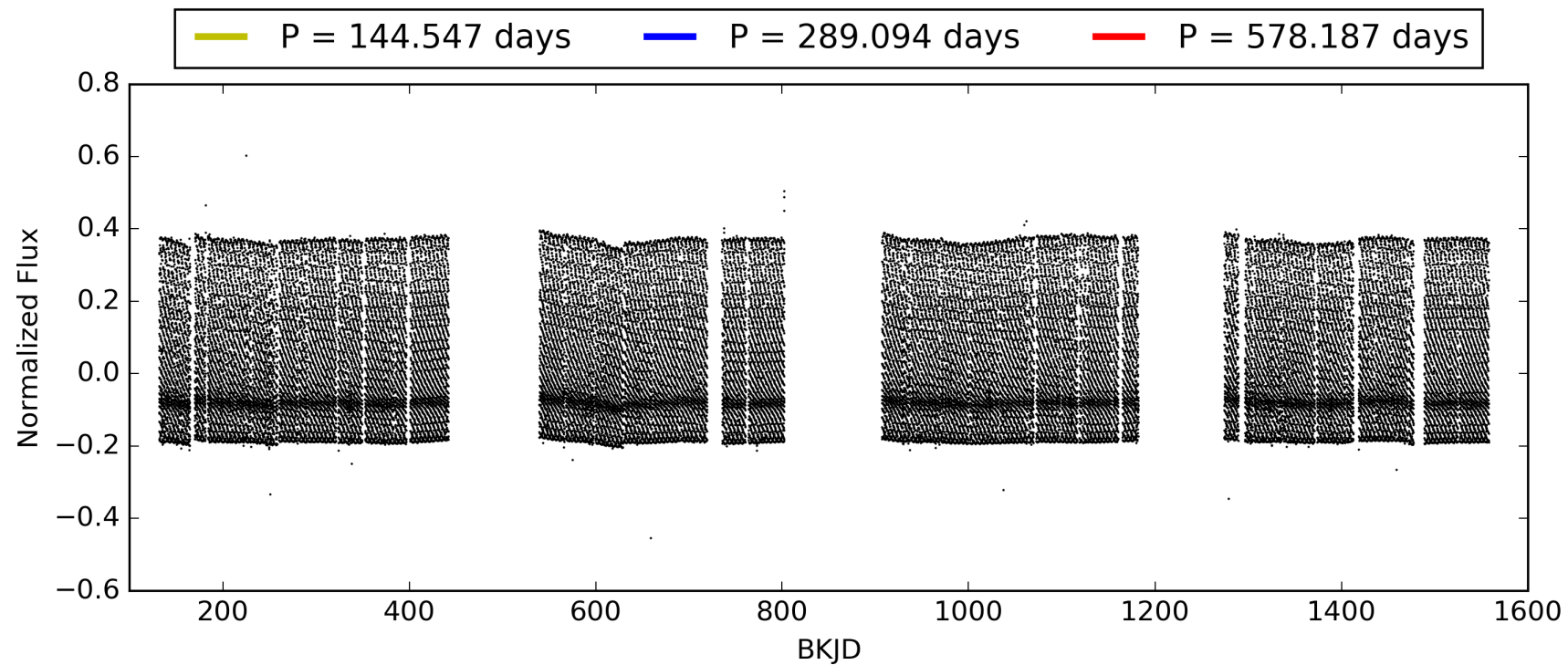
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 09:08:22 Z

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

TCE 006100702-01, PDC Light Curves

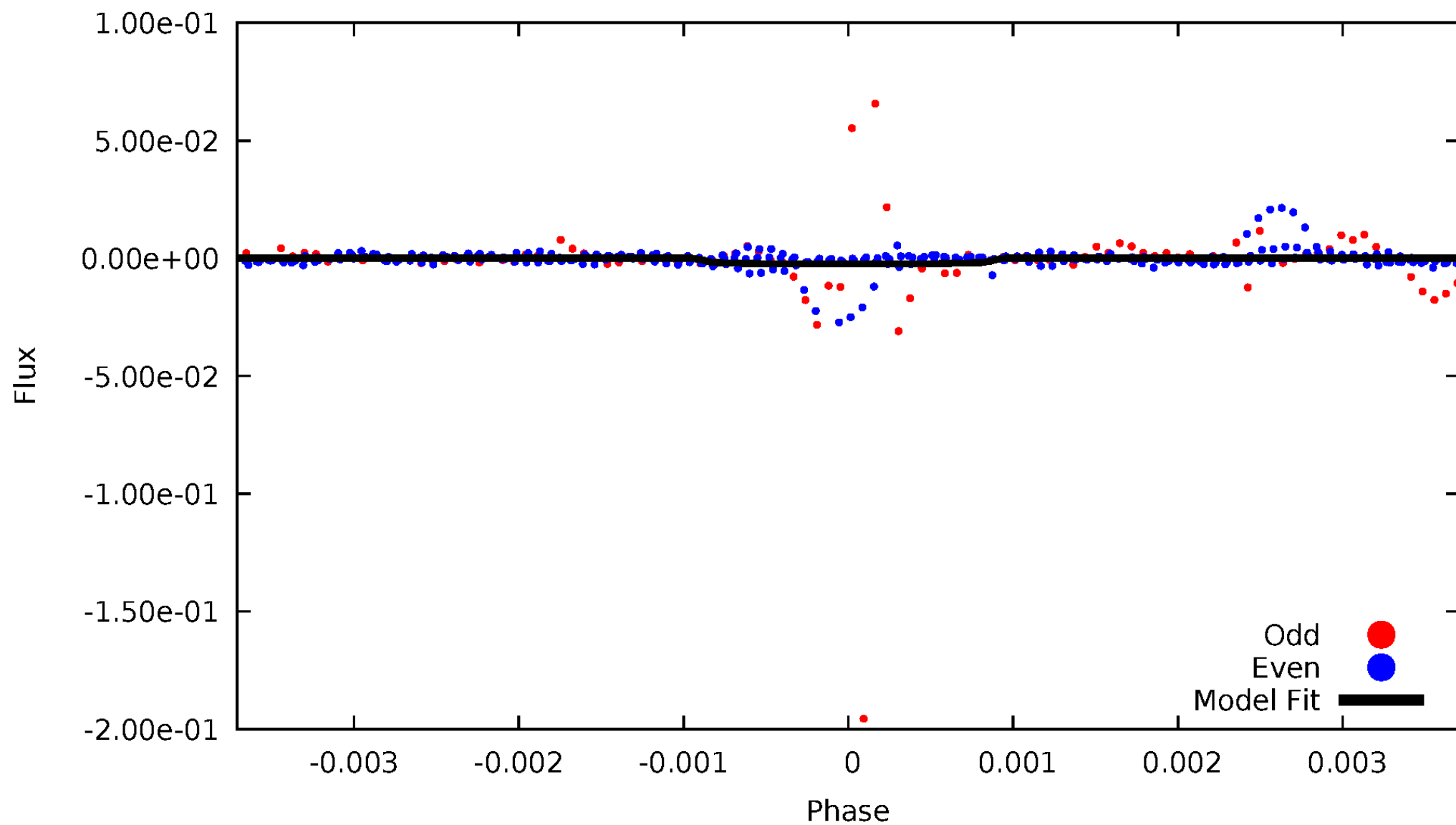


TCE 006100702-01



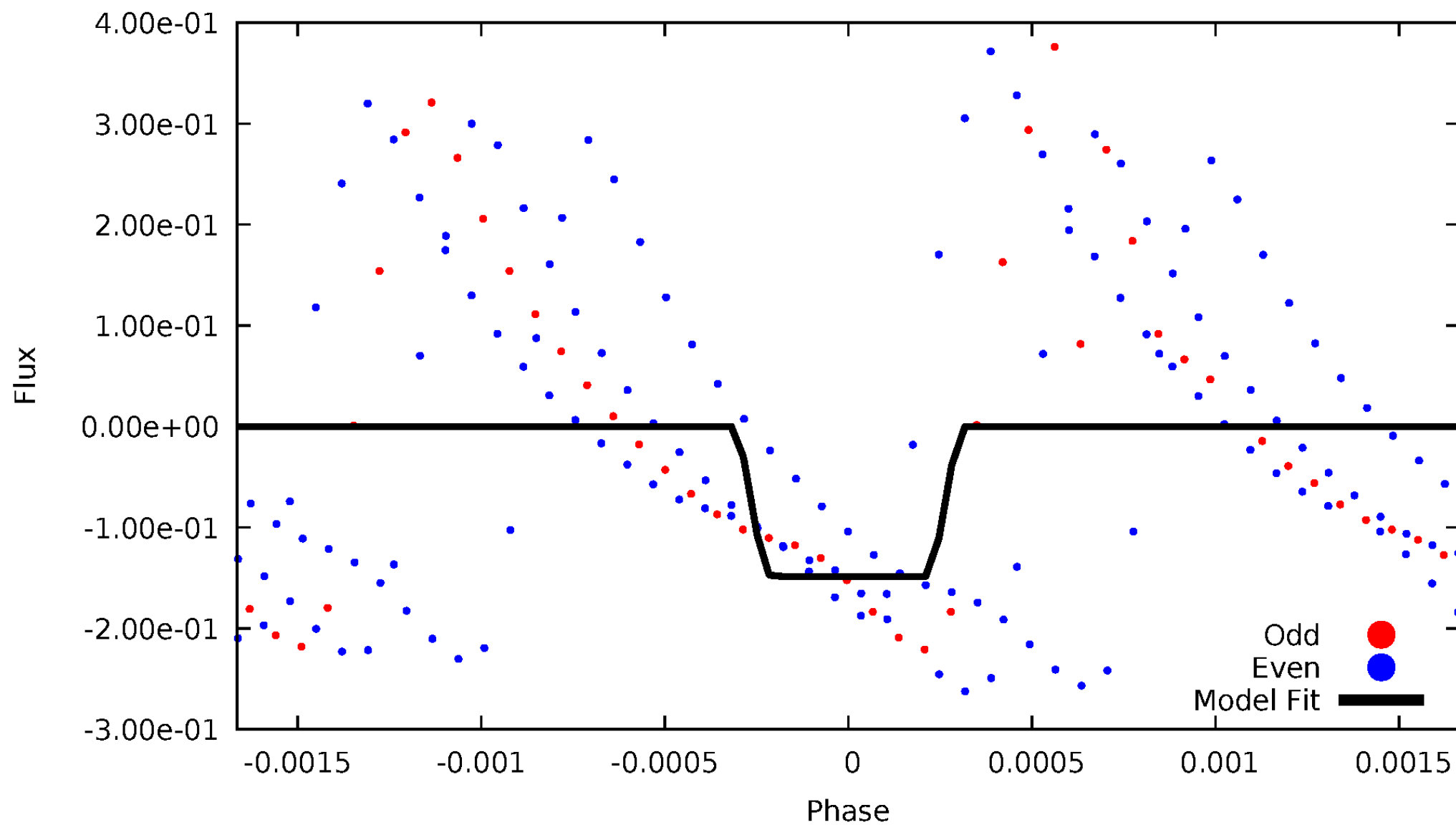
DV Odd/Even

TCE 006100702-01



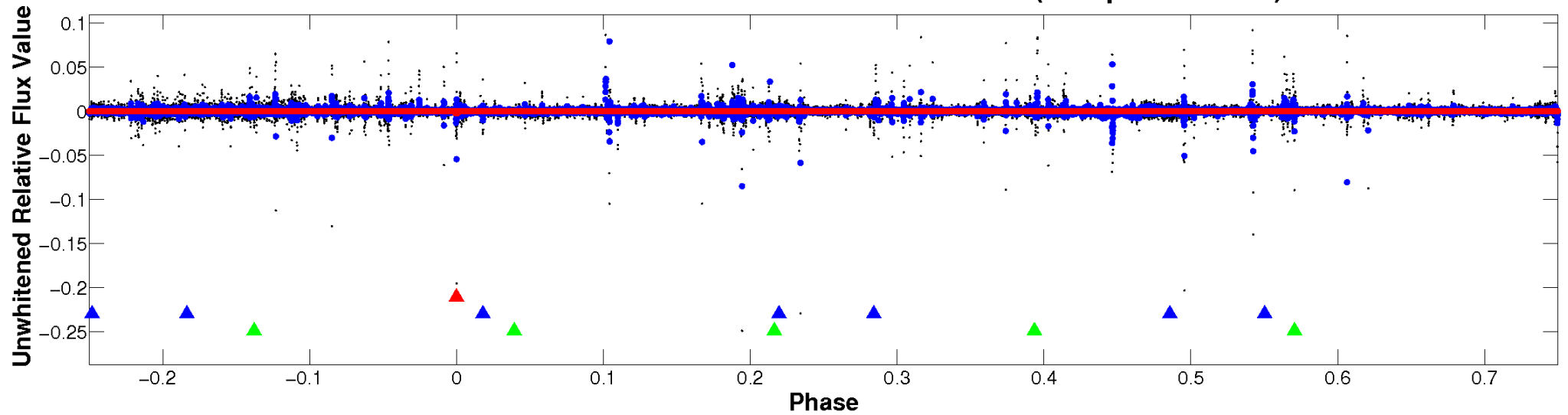
ALT Odd/Even

TCE 006100702-01

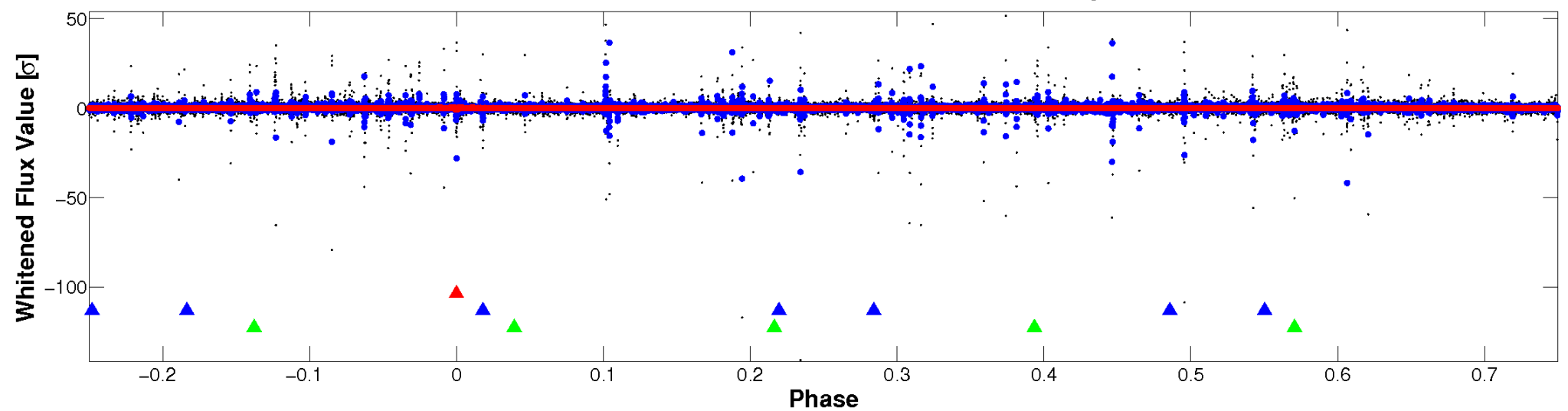


Non-Whitened Vs. Whitened Light Curve

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

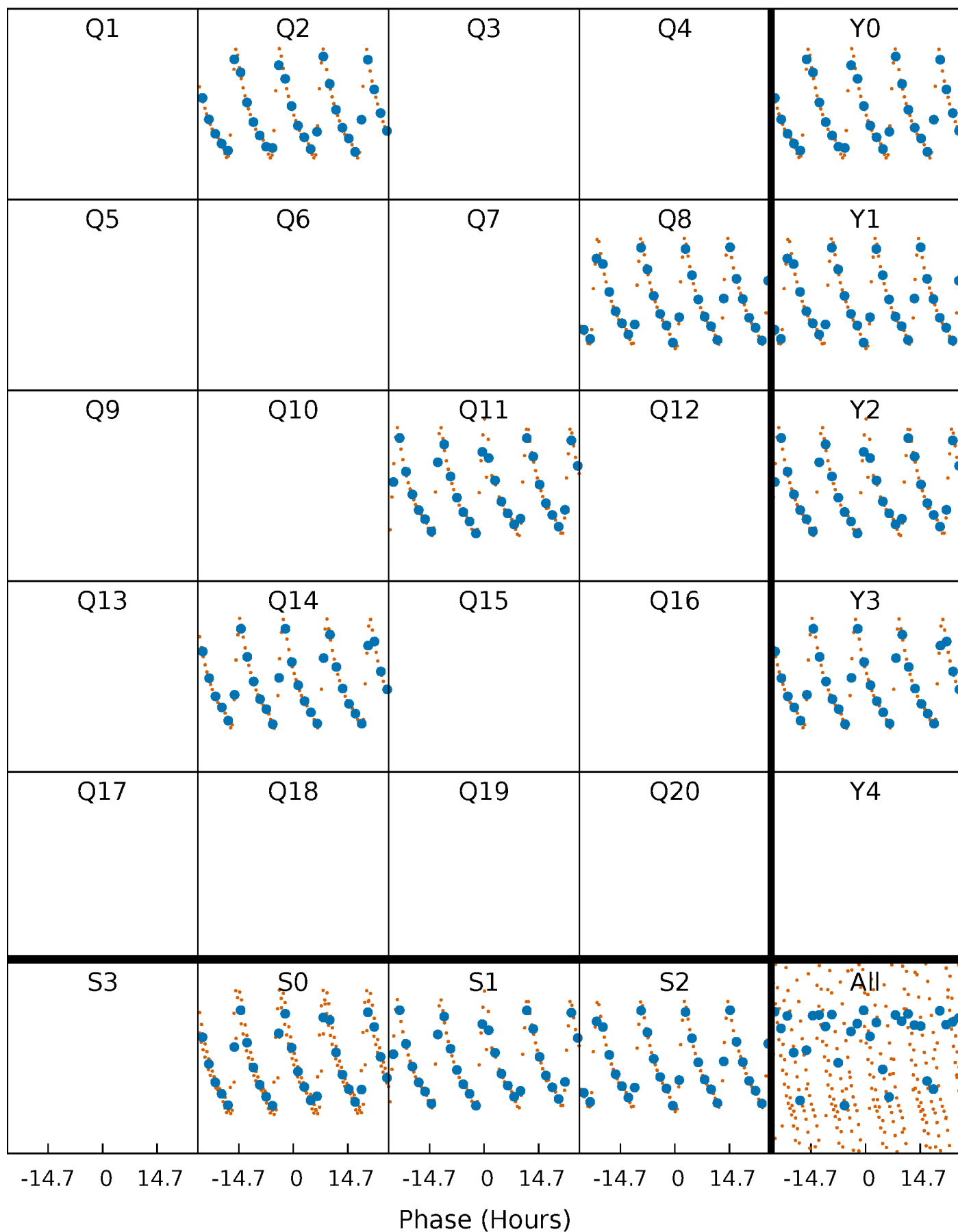


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



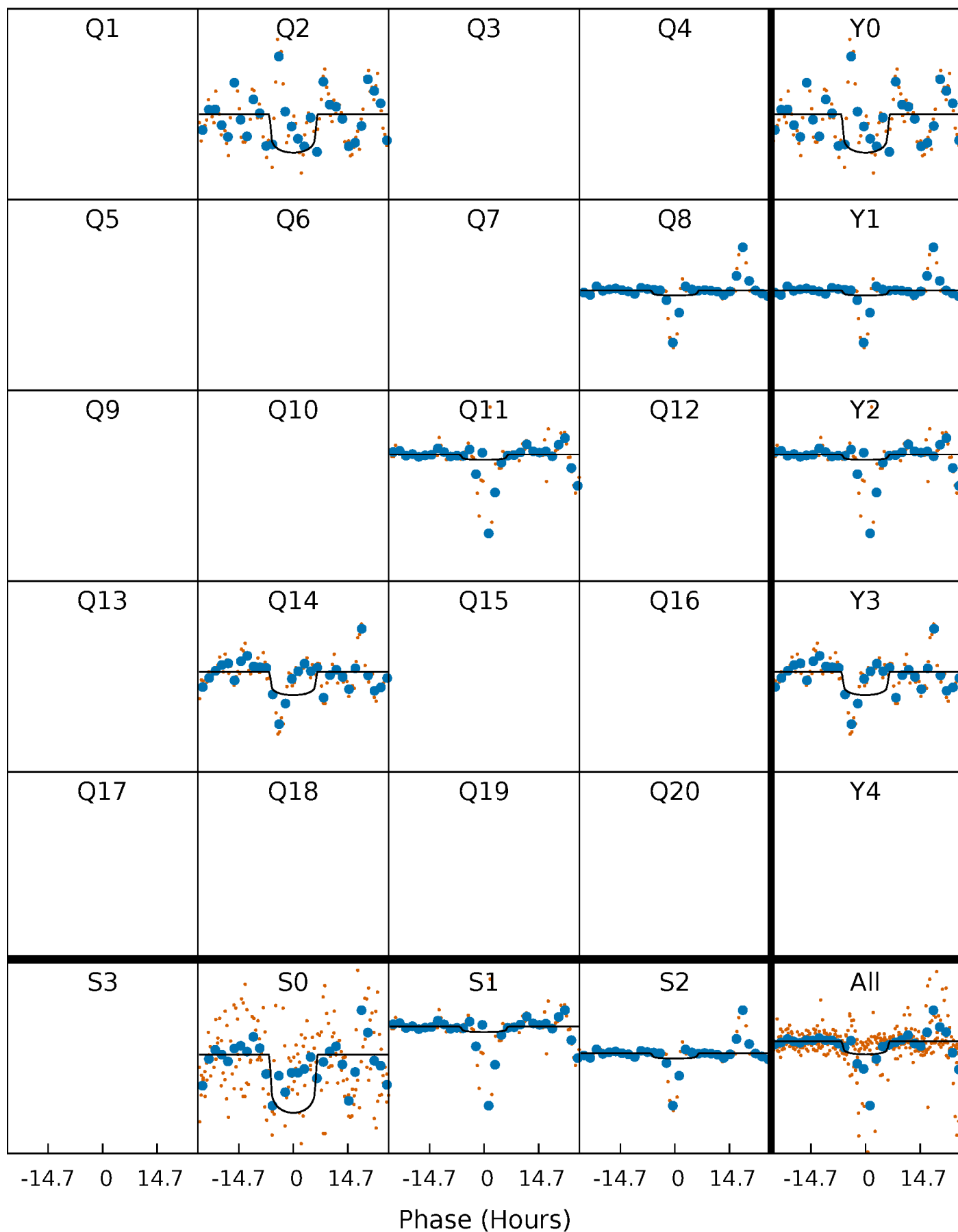
PDC Quarter-Phased Transit Curves

TCE 006100702-01 P=289.093698 Days $T_0=194.707965$ (BKJD)



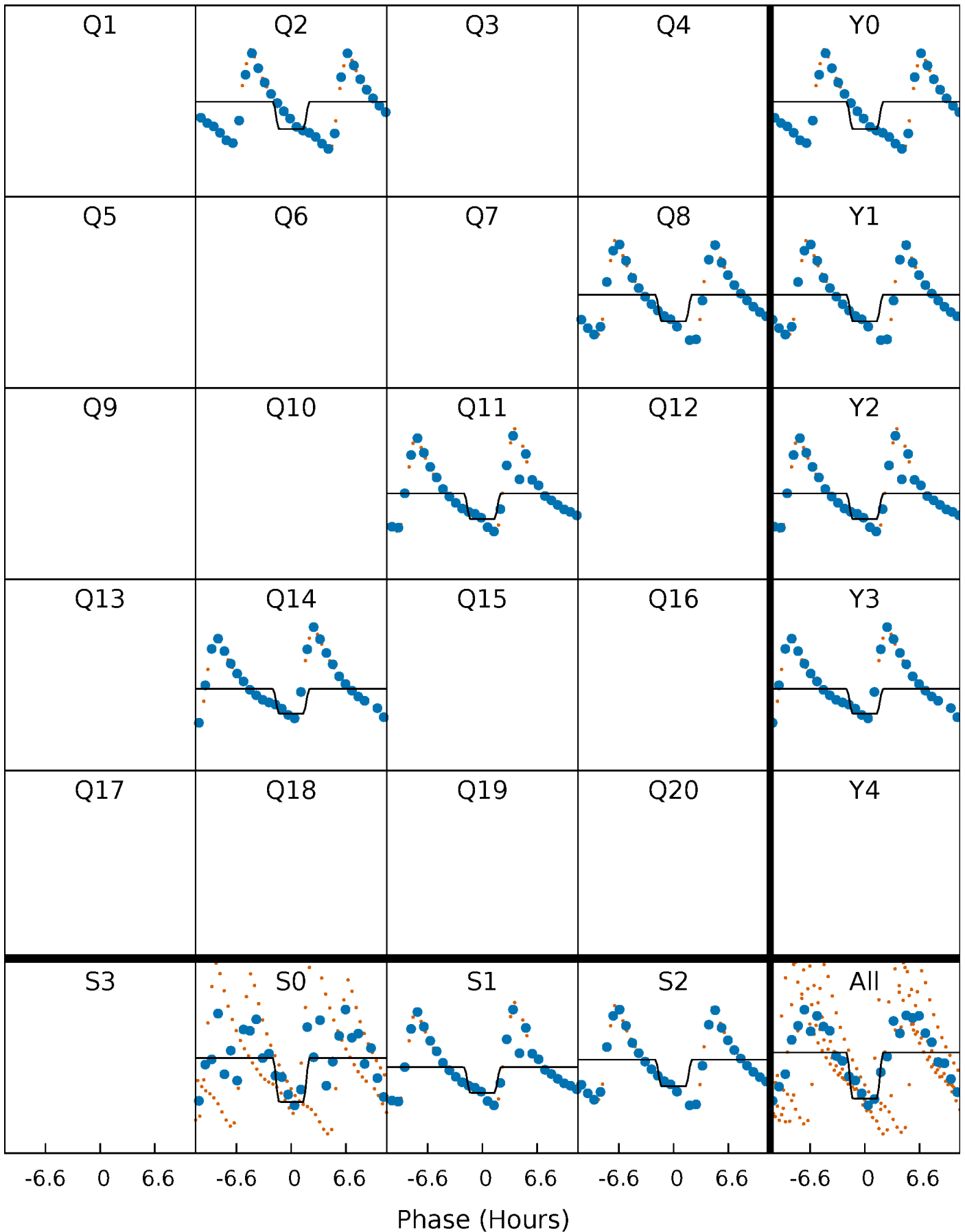
DV Quarter-Phased Transit Curves

TCE 006100702-01 P=289.093698 Days $T_0=194.707965$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

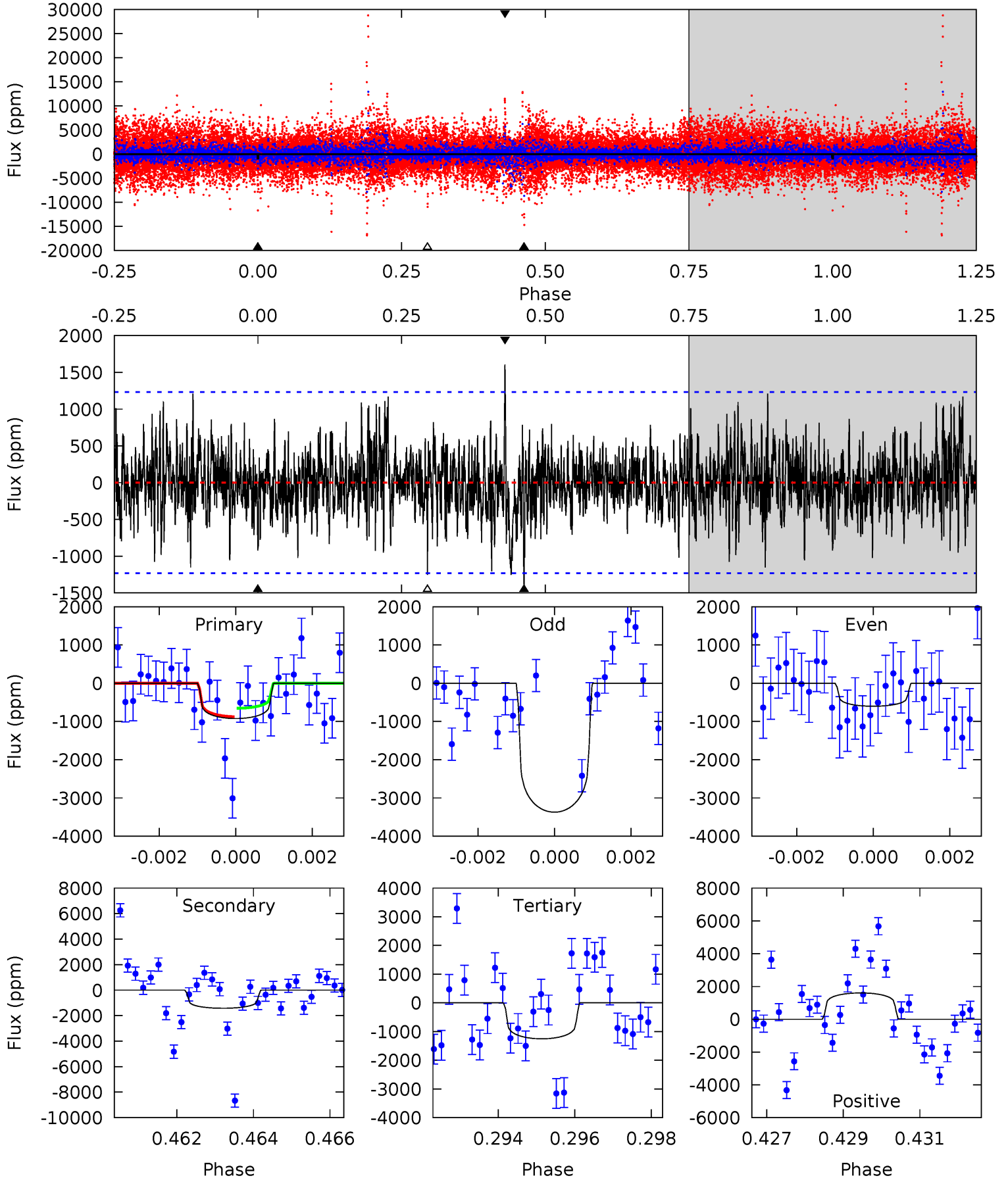
TCE 006100702-01 P=289.025451 Days $T_0=194.756782$ (BKJD)



DV Model-Shift Uniqueness Test

006100702-01, P = 289.093698 Days, E = 194.707965 Days

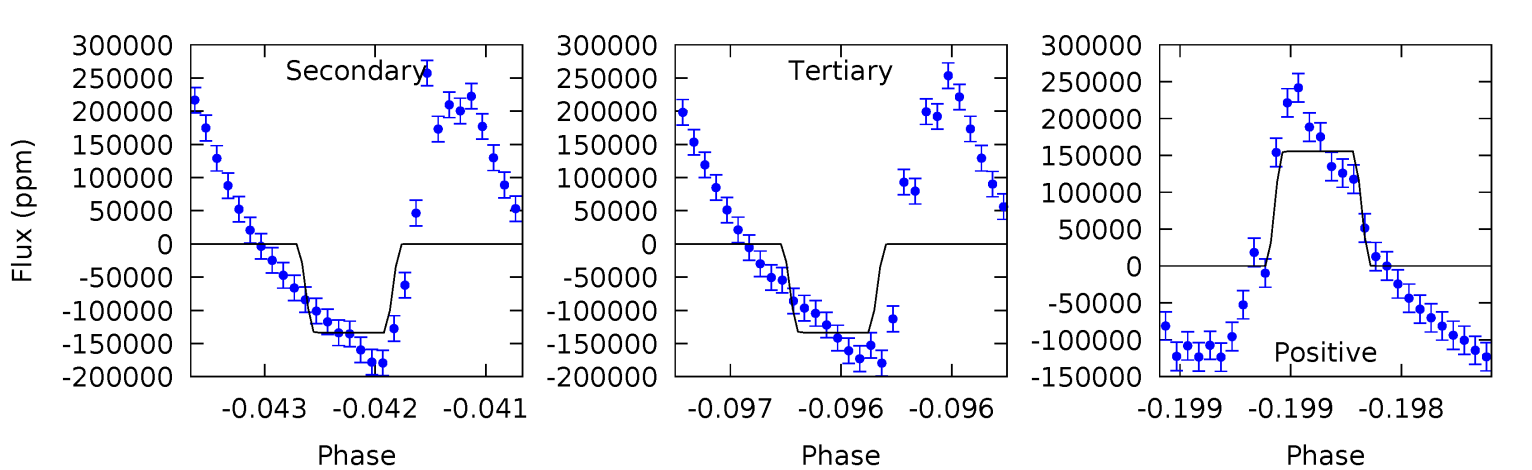
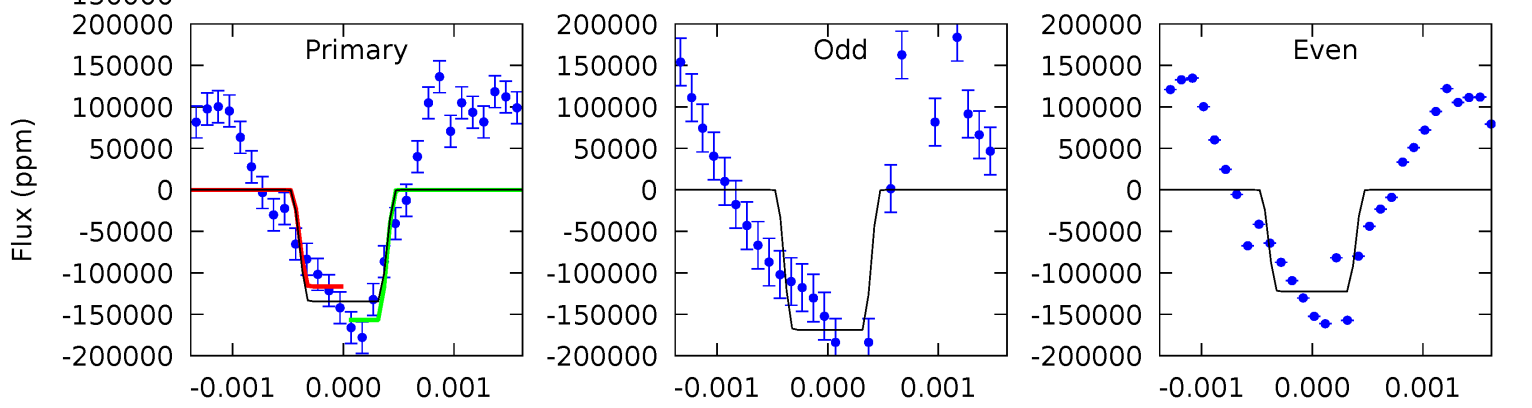
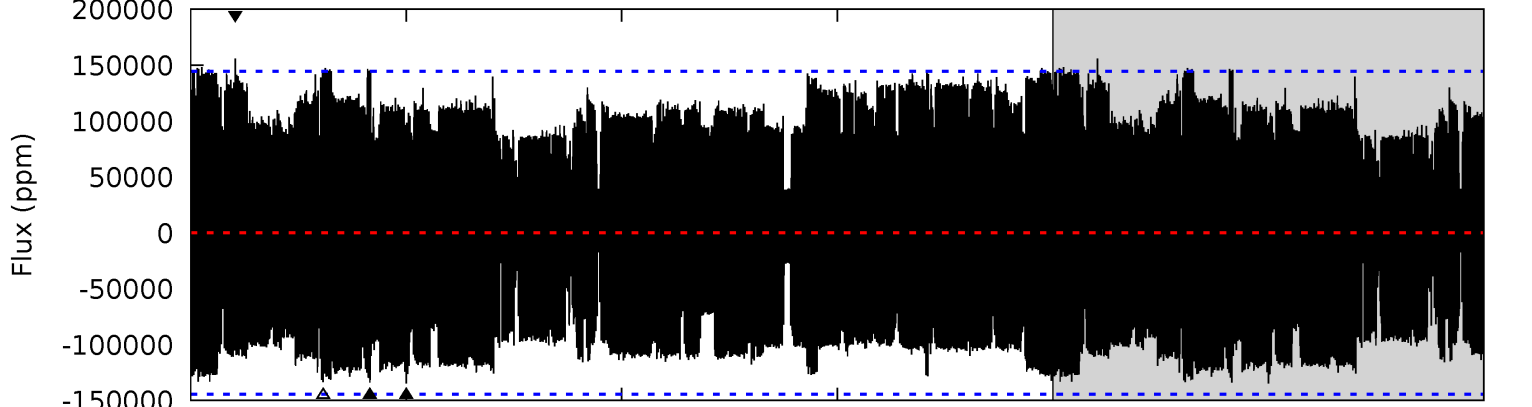
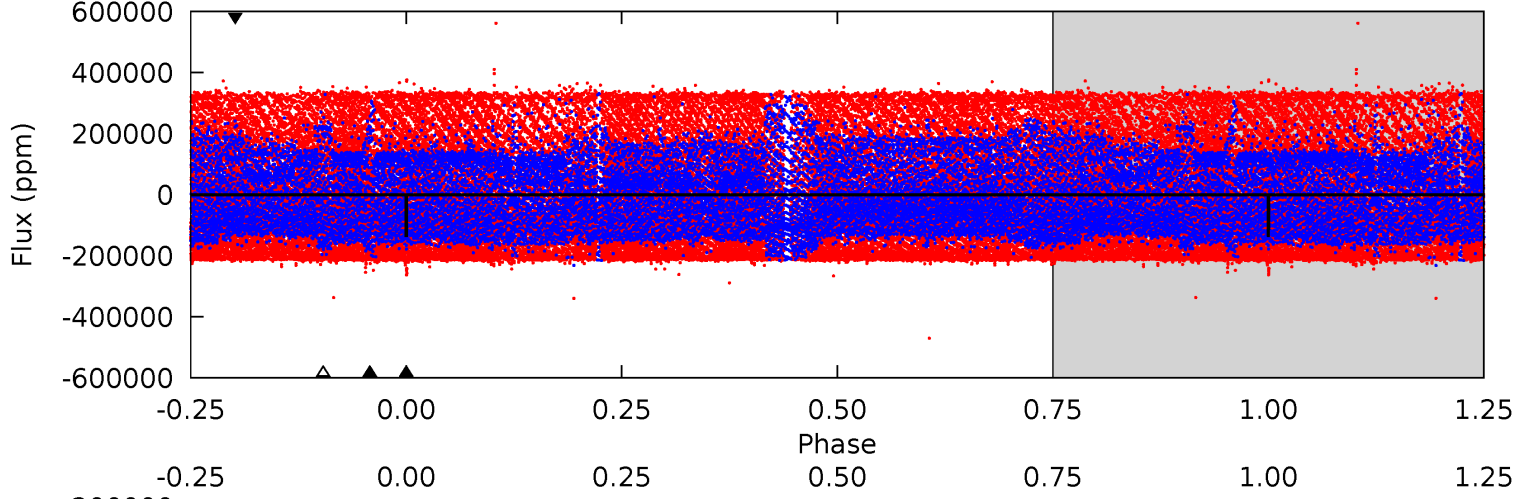
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.00	6.16	5.42	6.96	5.34	3.10	1.42	-1.42	-2.96	0.73	-0.80	4.41	1.17	0.53	0.48



Alt Model-Shift Uniqueness Test

006100702-01, P = 289.025451 Days, E = 194.756782 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.14	5.11	5.11	5.95	5.52	3.40	2.94	0.04	-0.81	0.01	-0.84	0.76	1.00	0.54	0.77



Stellar Parameters For KIC 006100702

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7000^{+197}_{-296}	$4.087^{+0.190}_{-0.171}$	$-0.200^{+0.250}_{-0.350}$	$1.780^{+0.507}_{-0.456}$	$1.415^{+0.208}_{-0.255}$	$0.353^{+0.423}_{-0.168}$
	+3%/-4%	+5%/-4%	+125%/-175%	+28%/-26%	+15%/-18%	+120%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006100702-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-1421 ± 231	$8.79^{+3.30}_{-2.96}$	585^{+44}_{-44}	6288^{+1451}_{-825}	9385^{+11581}_{-4539}
Alt.	-133780 ± 26163	$74.71^{+12.03}_{-10.86}$	584^{+47}_{-42}	7016^{+541}_{-564}	13894^{+5371}_{-4274}

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 $A_{obs} \gg 1.0$

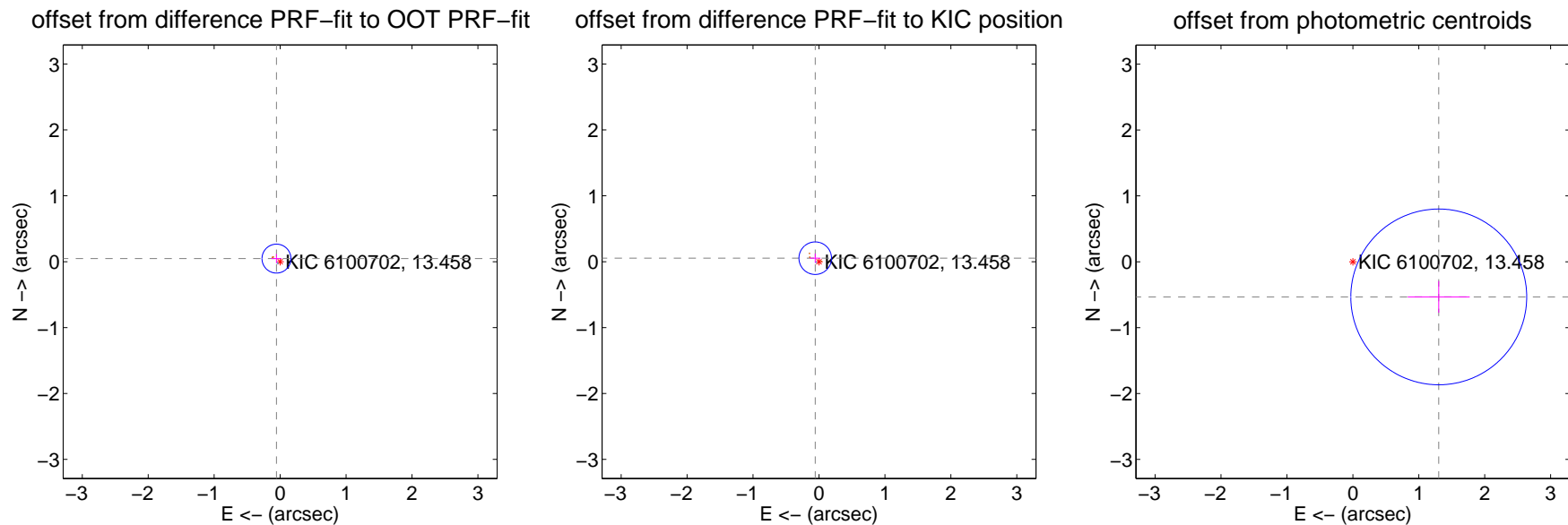
DV Centroid Data

Supplemental centroid analysis for 006100702-01. Kepler magnitude: 13.46. Transit SNR 7.03

There are 1 quarters with good PRF difference image offsets

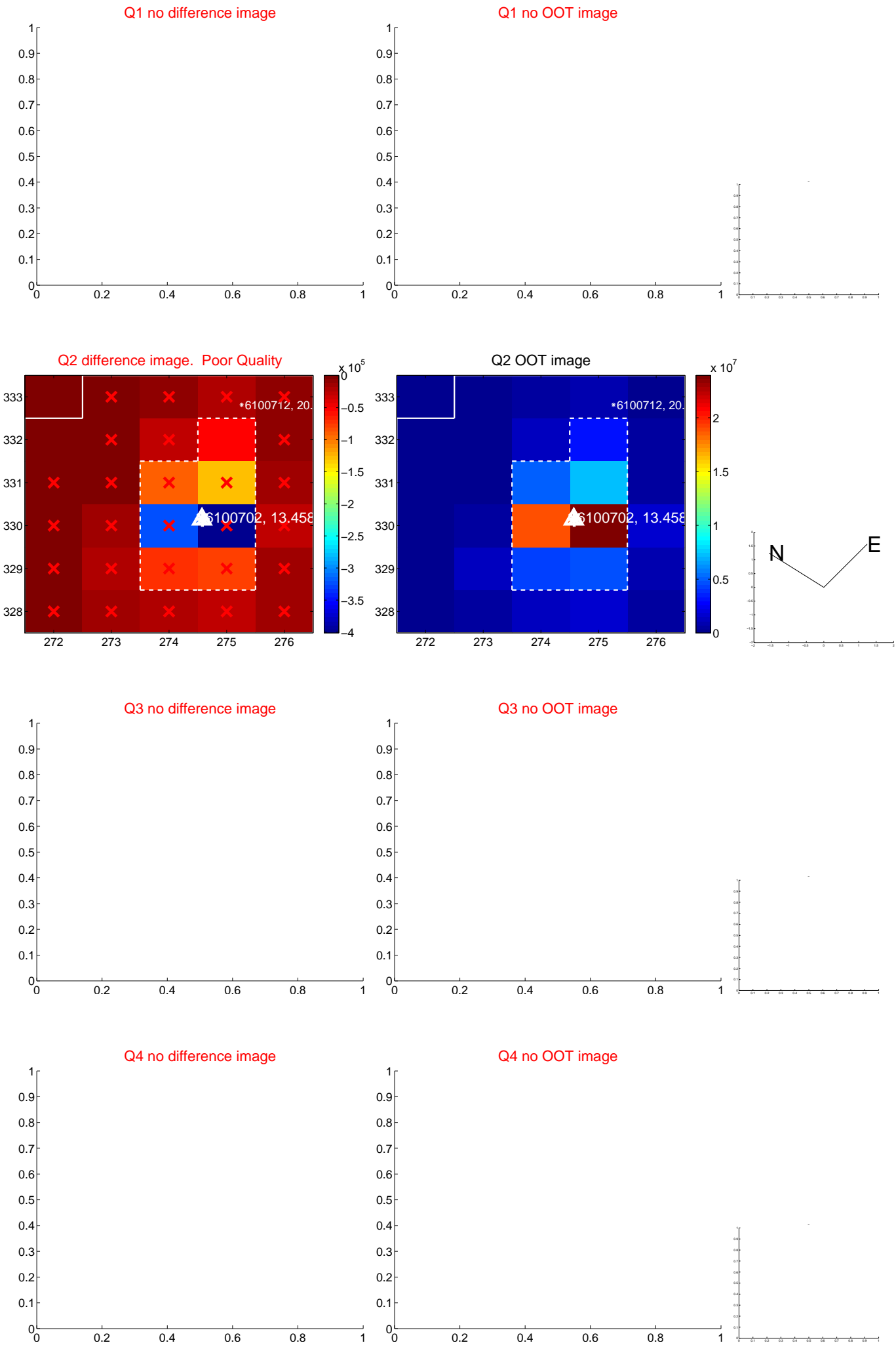
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.072 ± 0.073	0.99	0.055 ± 0.076	0.047 ± 0.069
PRF-fit source offset from KIC position	0.078 ± 0.082	0.95	0.057 ± 0.080	0.053 ± 0.071
photometric centroid source offset	1.41 ± 0.44	3.17	-1.30 ± 0.47	-0.53 ± 0.24

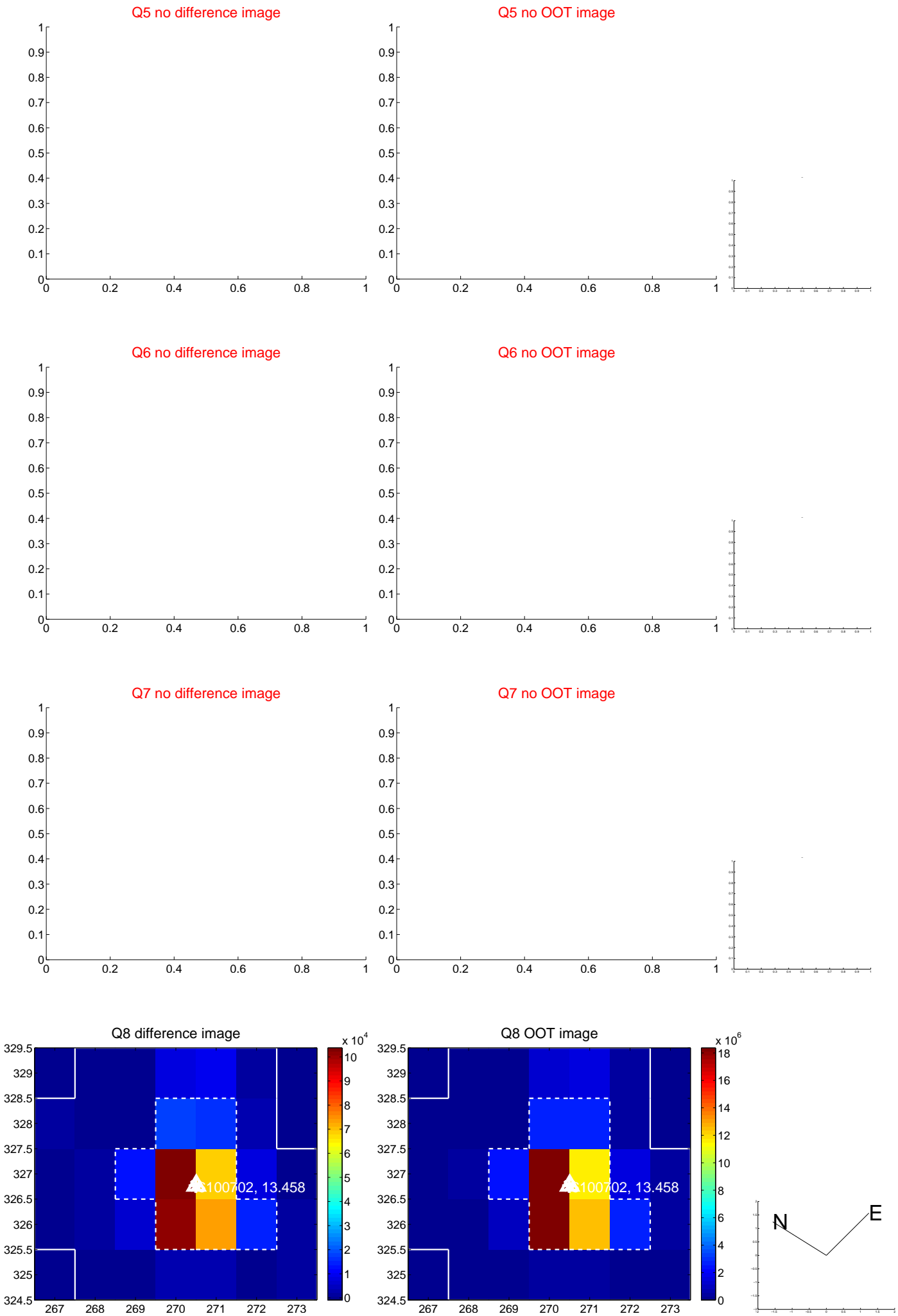


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

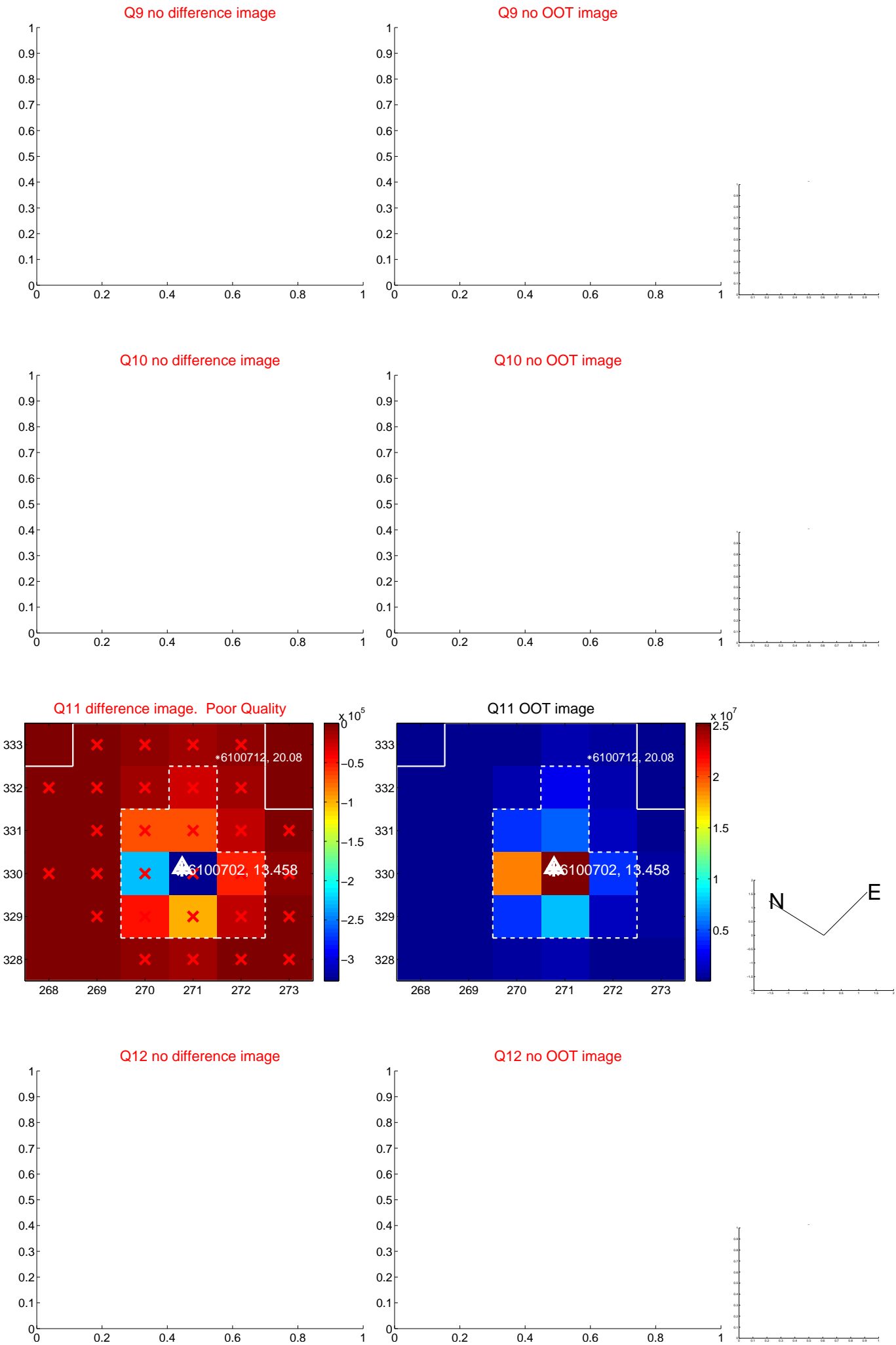
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



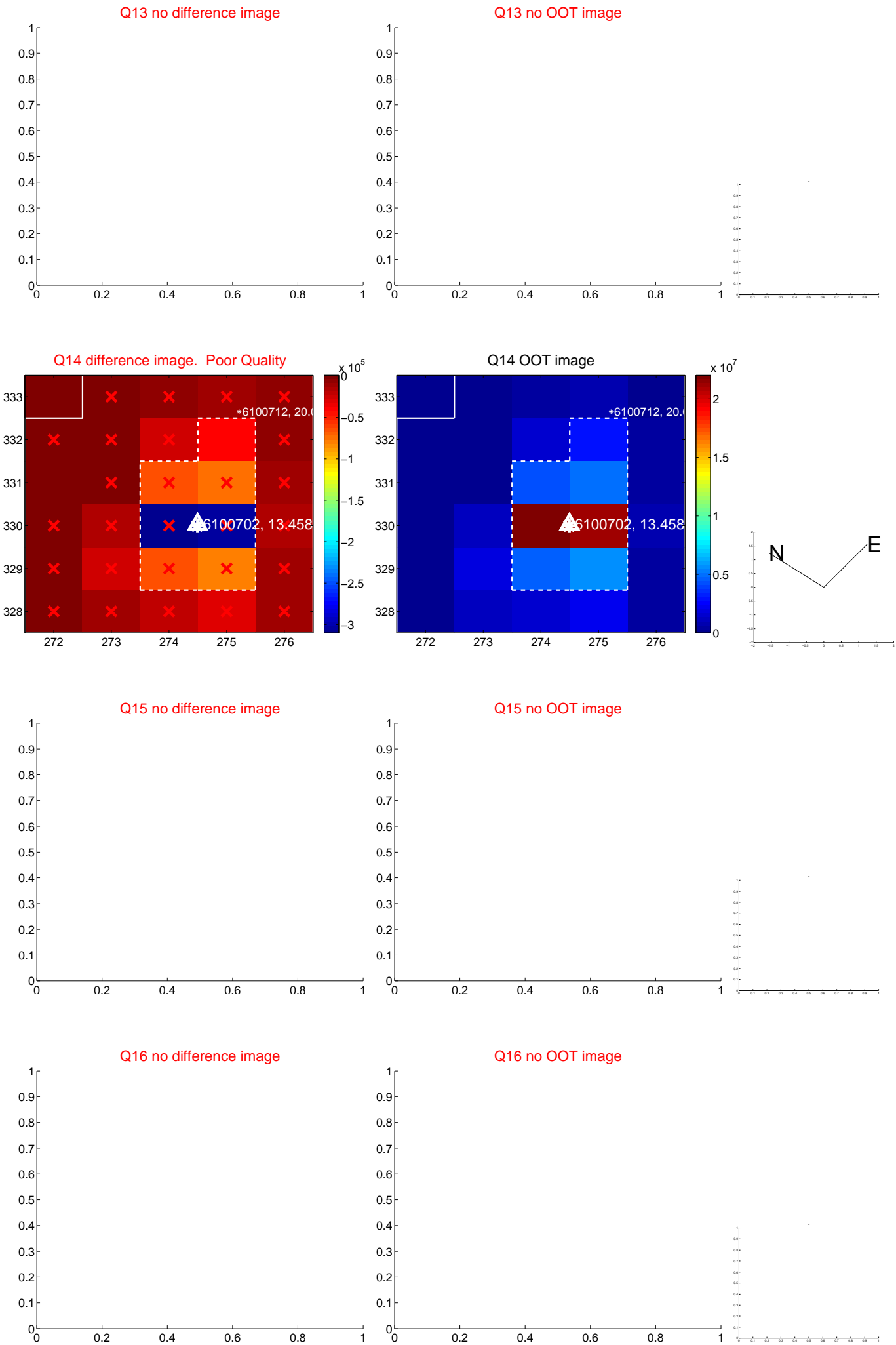
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



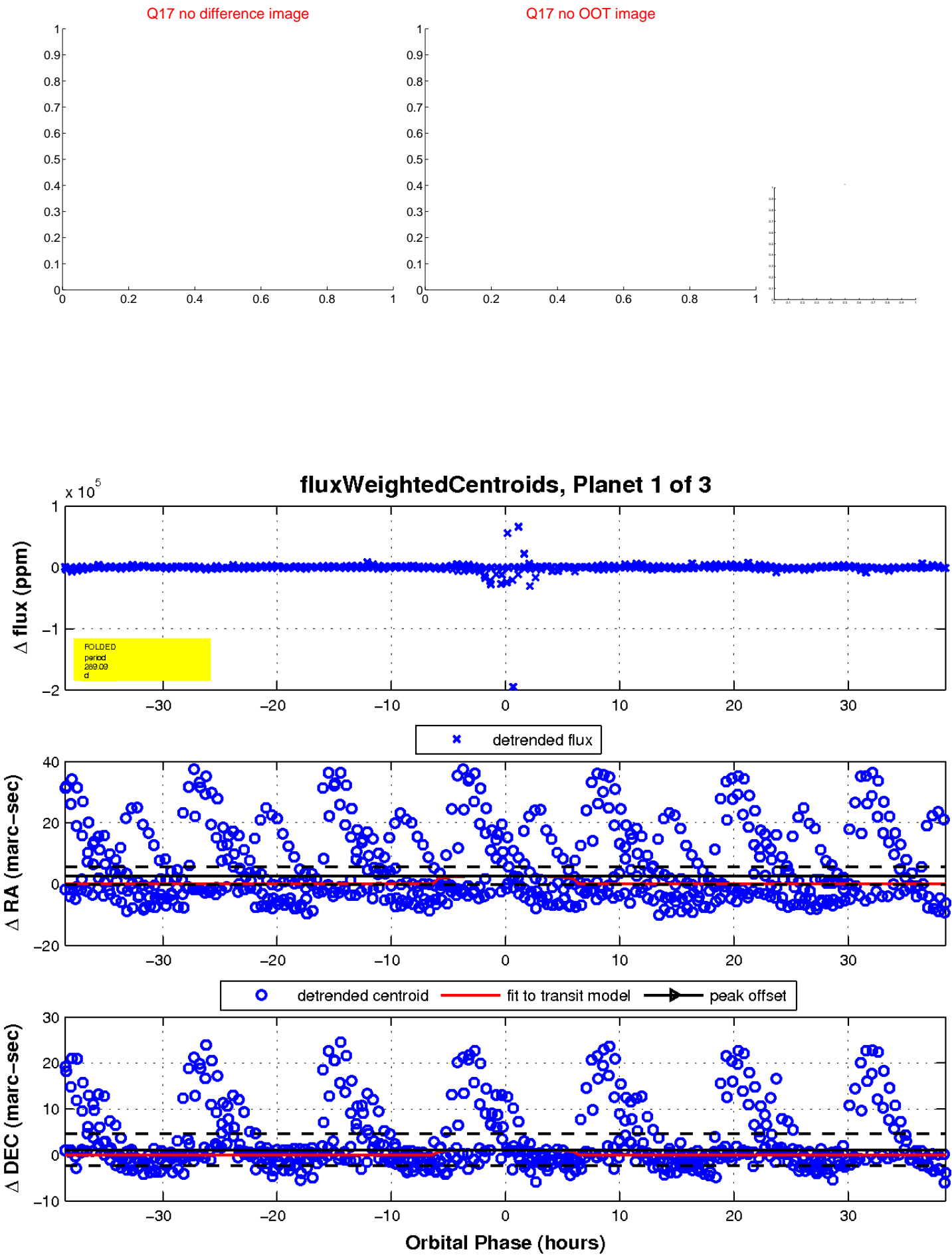
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

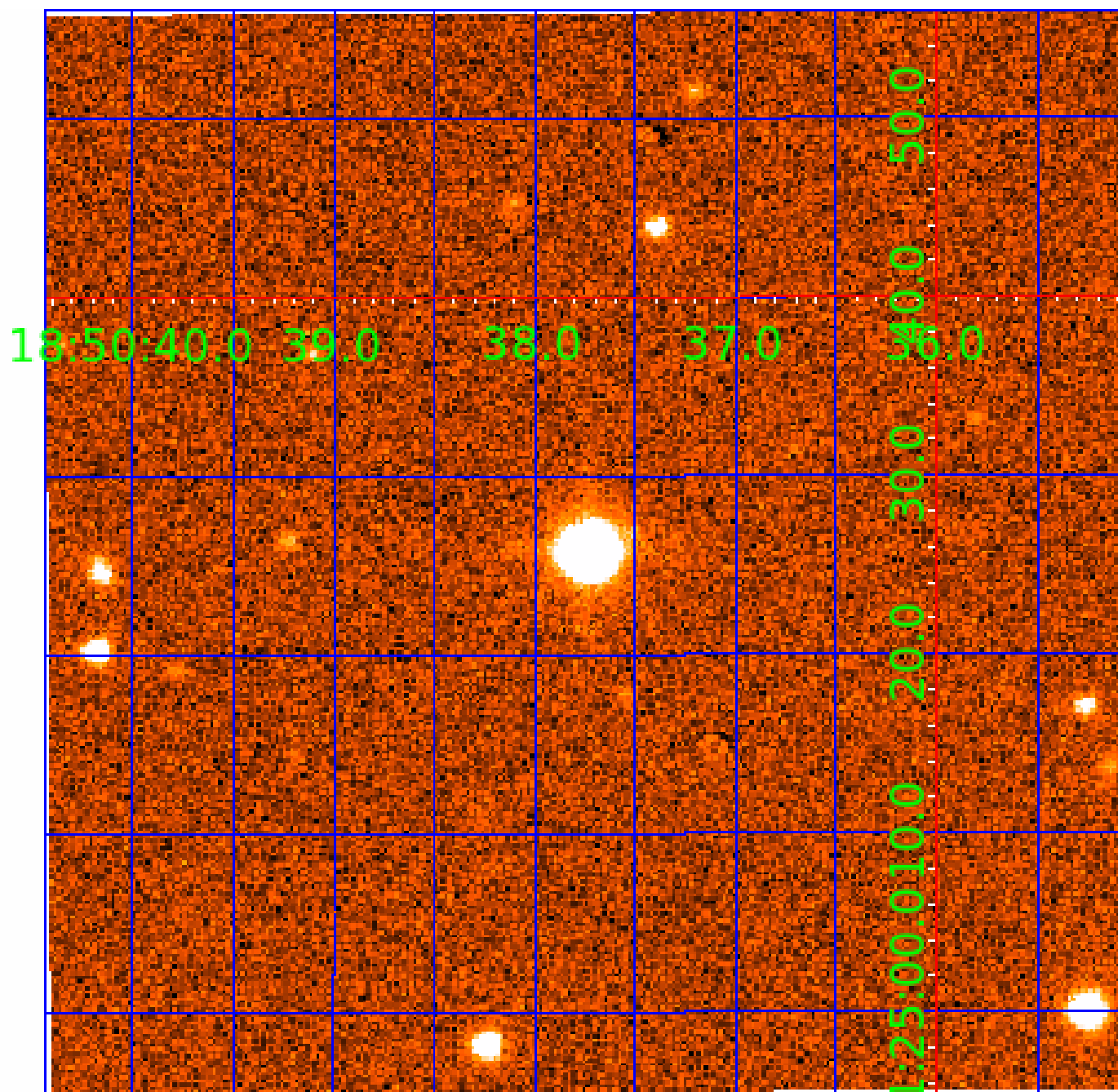


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006100702

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})
006100702-01	OBS	No	289.093698	194.707965	2436.1	12.864	27.2	7.0	1.78	7000	8.87	7.39
006100702-02	OBS	No	212.155425	141.639831	3745.9	2.645	21.2	4.5	1.78	7000	11.20	11.17
006100702-03	OBS	No	340.286301	154.896740	9847.6	2.681	20.8	9.3	1.78	7000	17.87	5.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006100702-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006100702-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006100702-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

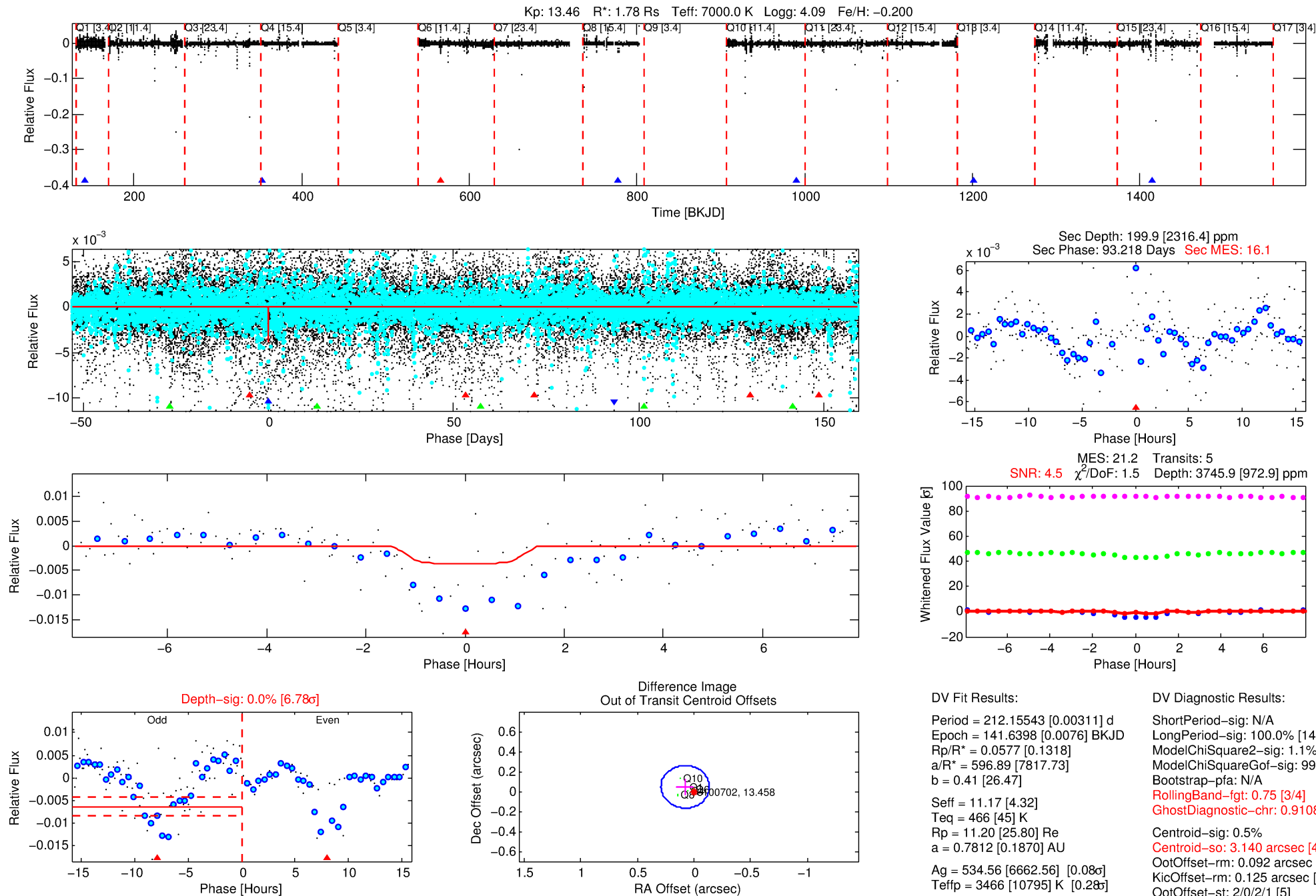
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006100702-02

No Significant Match Found

DV One-Page Summary

KIC: 6100702 Candidate: 2 of 3 Period: 212.155 d



DV Fit Results:

Period = 212.15543 [0.00311] d
Epoch = 141.6398 [0.0076] BKJD
Rp/R* = 0.0577 [0.1318]
a/R* = 596.89 [7817.73]
b = 0.41 [26.47]
Seff = 11.17 [4.32]
Teq = 466 [45] K
Rp = 11.20 [25.80] Re
a = 0.7812 [0.1870] AU
Ag = 534.56 [6662.56] [0.08σ]
Teff = 3466 [10795] K [0.28σ]

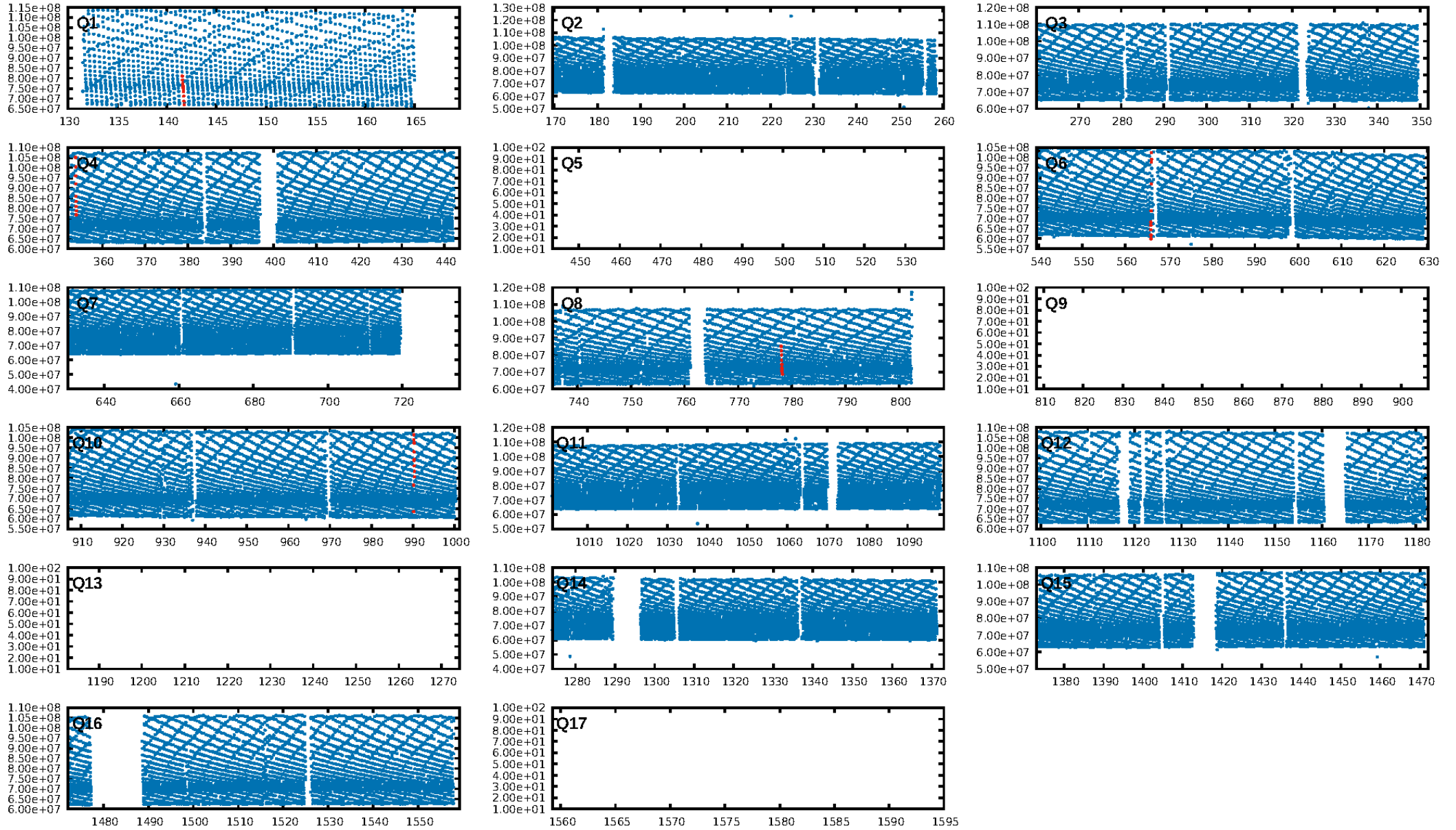
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [140.60σ]
ModelChiSquare2-sig: 1.1%
ModelChiSquareGof-sig: 99.3%
Bootstrap-pfa: N/A
RollingBand-ftg: 0.75 [3/4]
GhostDiagnostic-chr: 0.9108
Centroid-sig: 0.5%
Centroid-so: 3.140 arcsec [4.74σ]
OotOffset-rm: 0.092 arcsec [1.30σ]
KicOffset-rm: 0.125 arcsec [1.76σ]
OotOffset-st: 2/0/2/1 [5]
KicOffset-st: 2/0/2/1 [5]
DiffImageQuality-fgm: 0.60 [3/5]
DiffImageOverlap-fno: 1.00 [5/5]

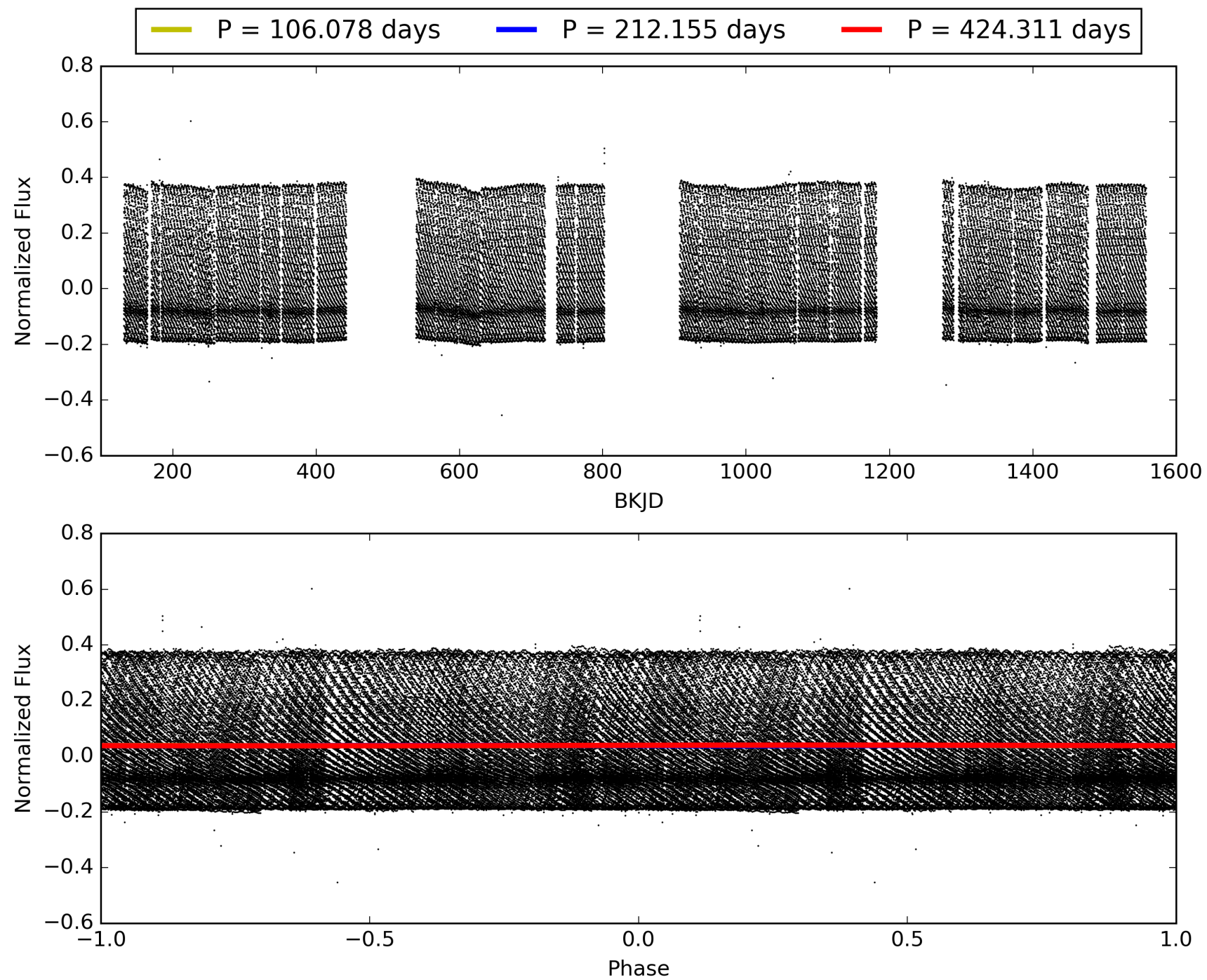
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 09:08:33 Z

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

TCE 006100702-02, PDC Light Curves

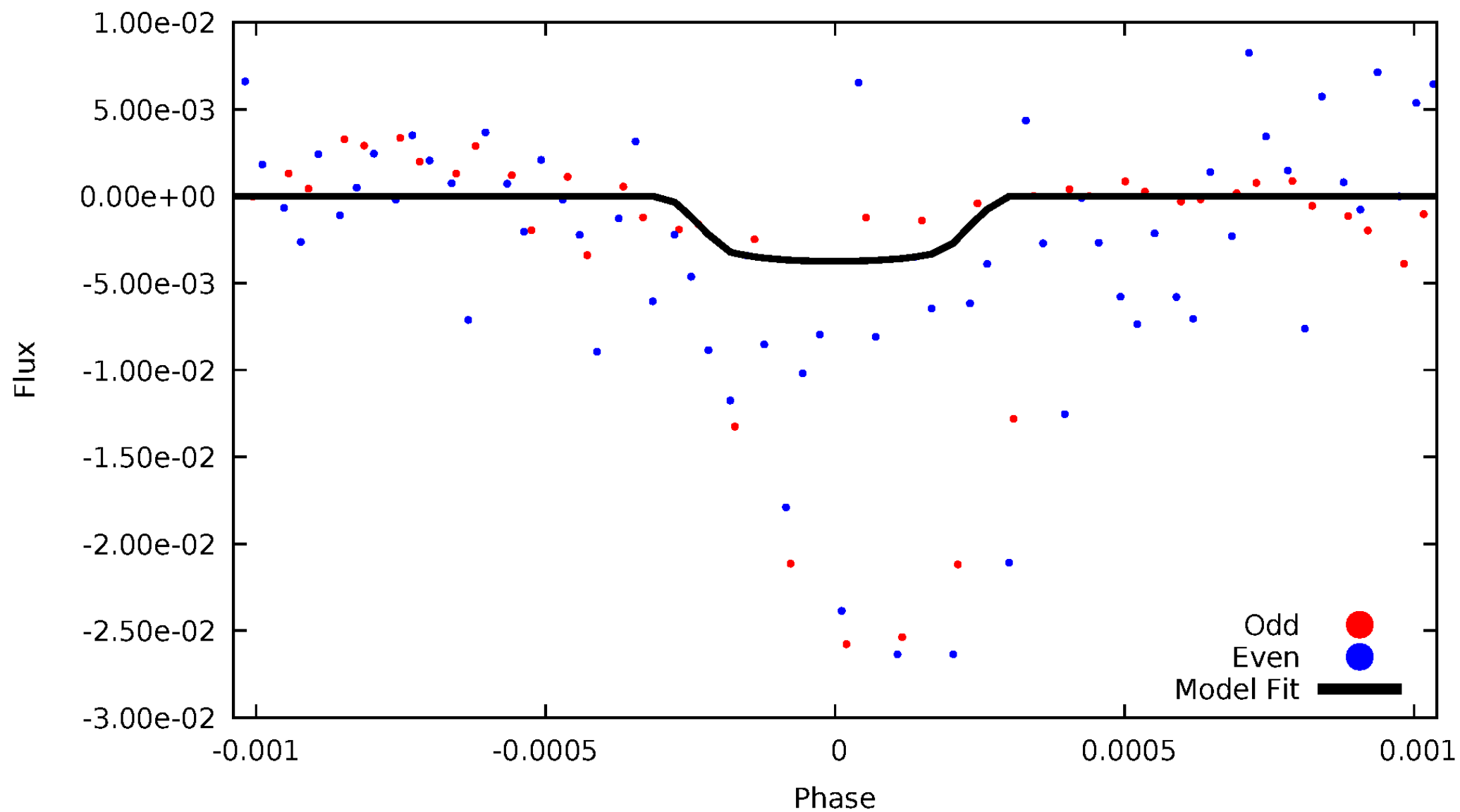


TCE 006100702-02



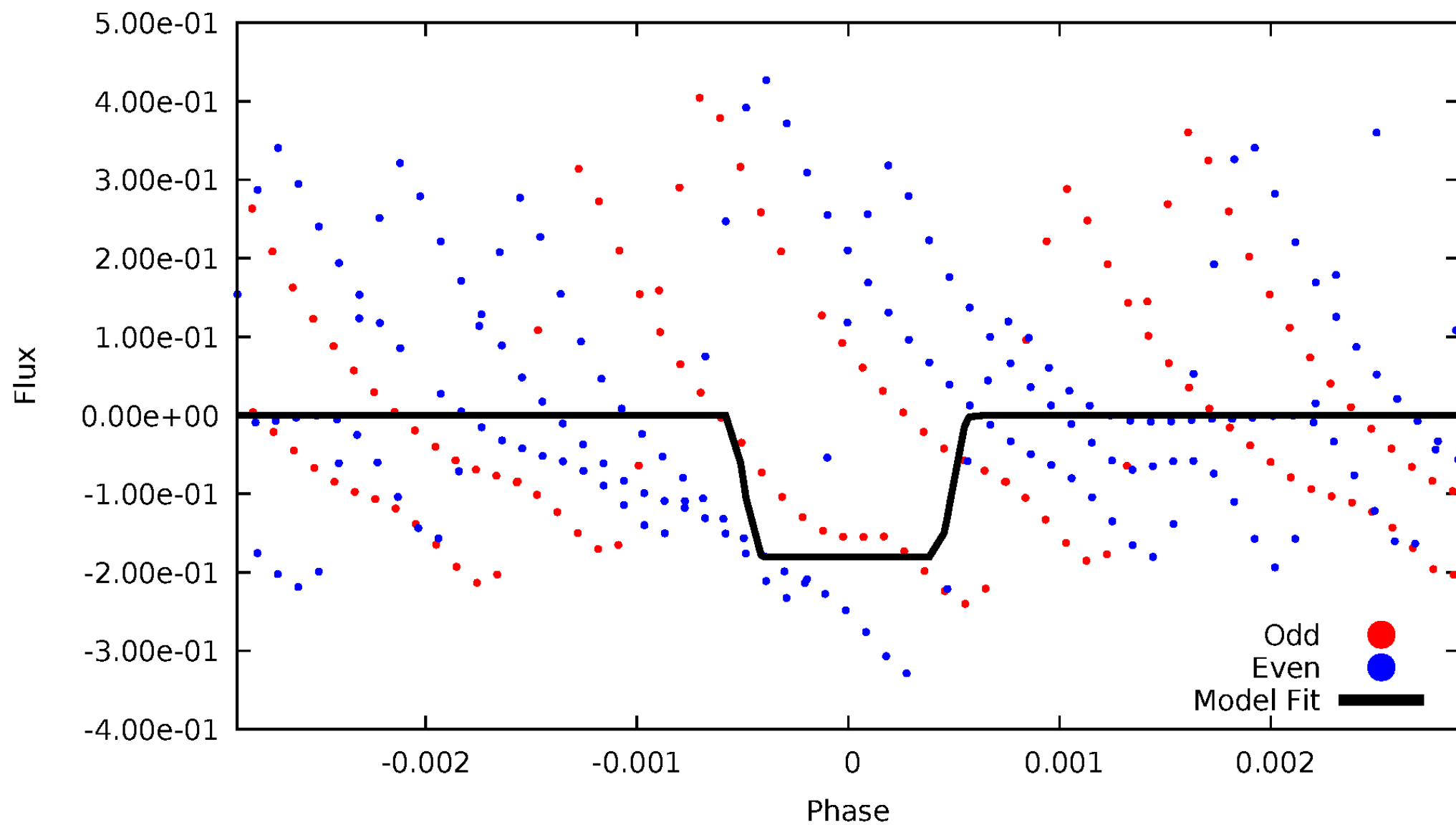
DV Odd/Even

TCE 006100702-02



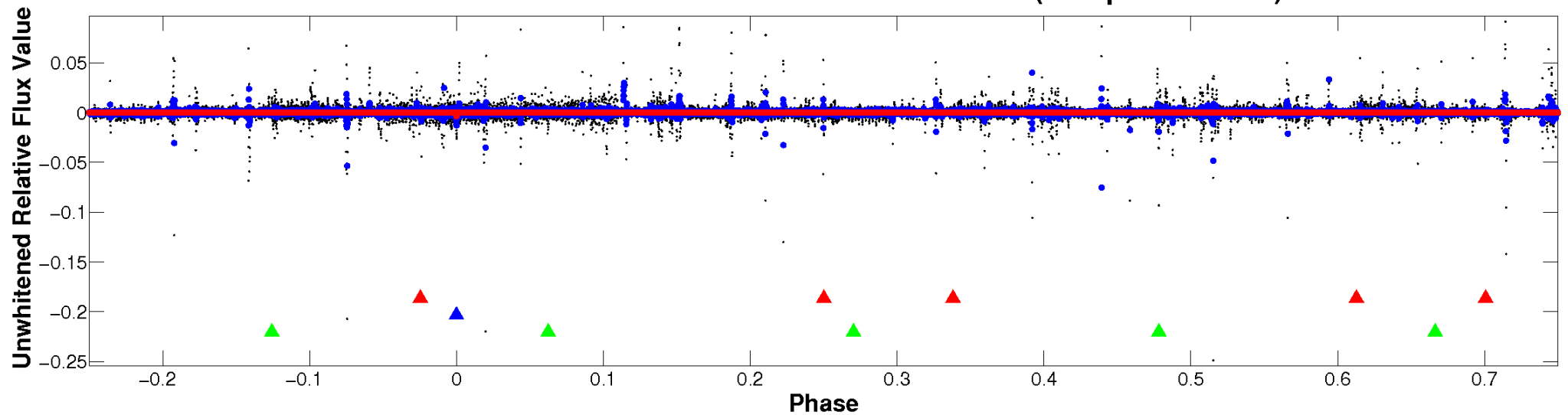
ALT Odd/Even

TCE 006100702-02

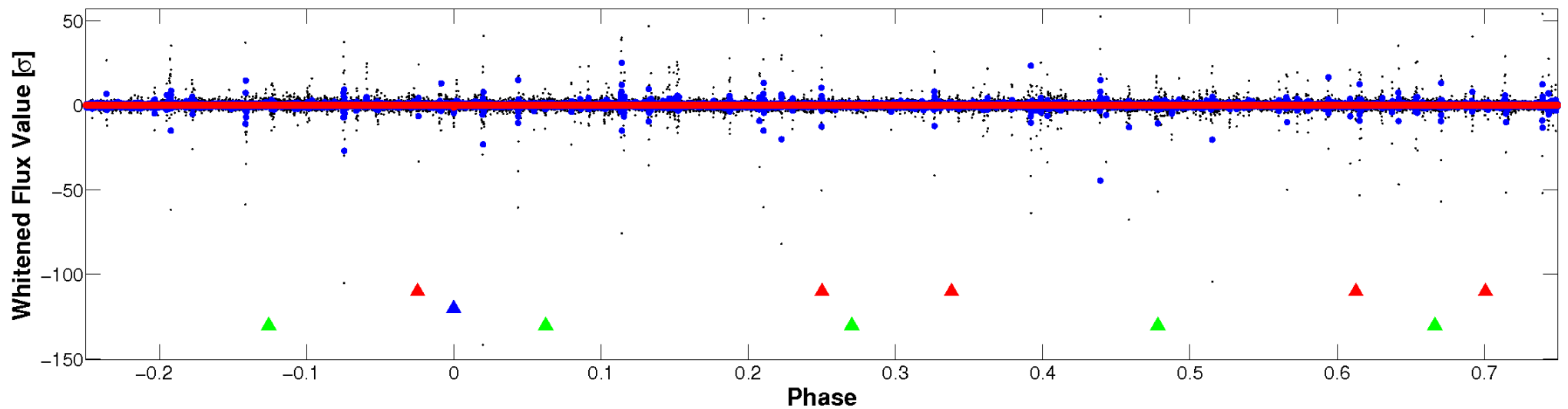


Non-Whitened Vs. Whitened Light Curve

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

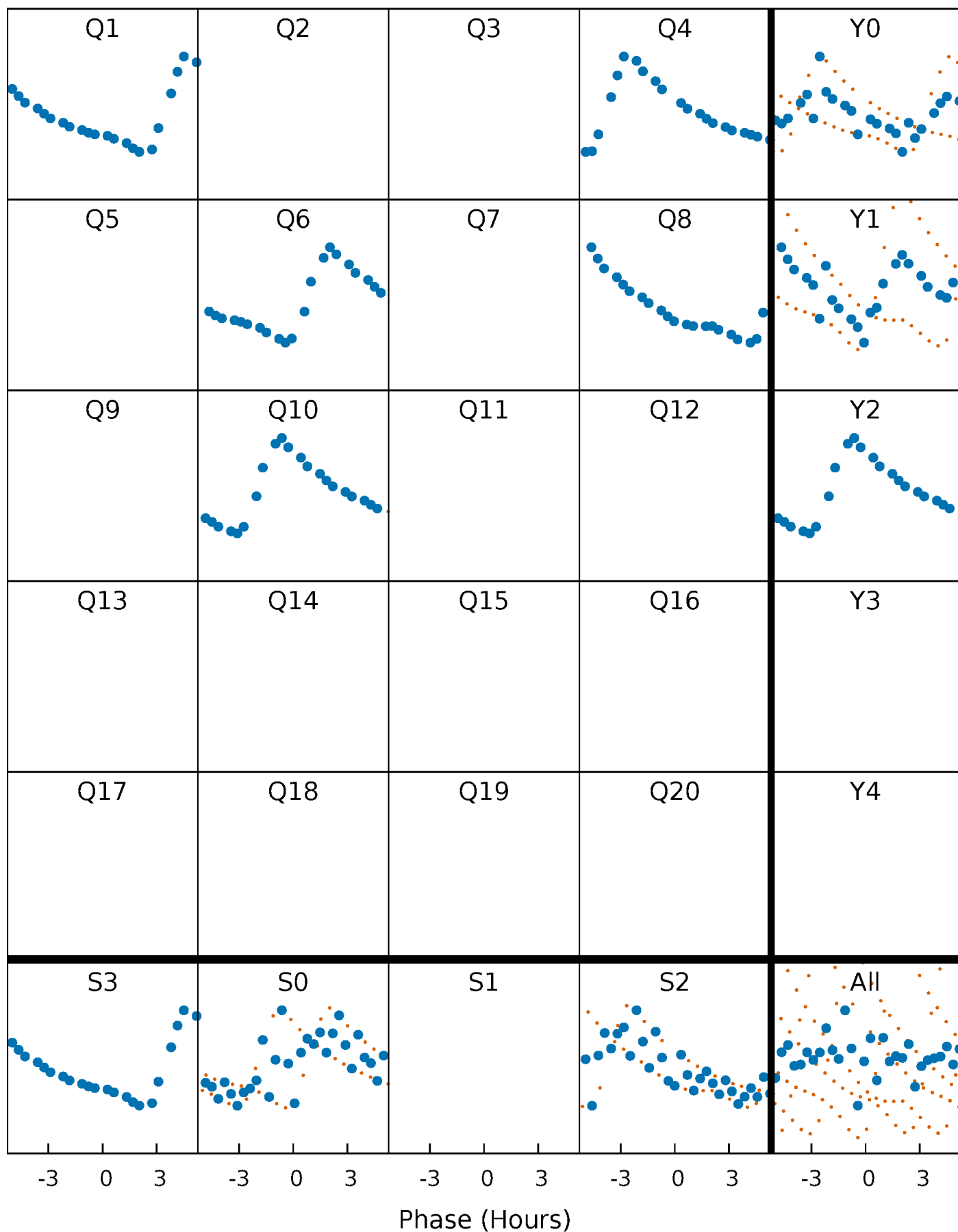


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



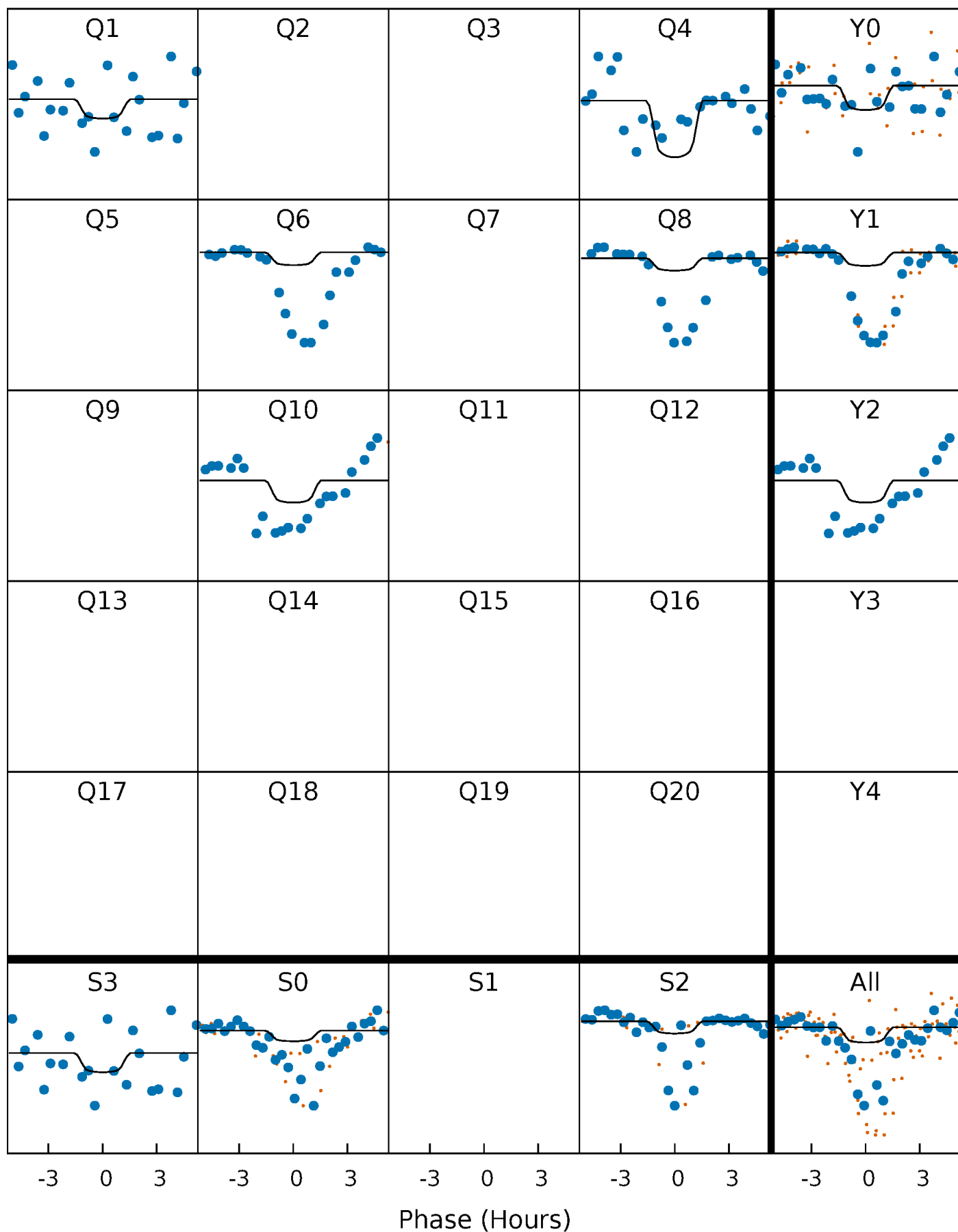
PDC Quarter-Phased Transit Curves

TCE 006100702-02 P=212.155425 Days $T_0=141.639831$ (BKJD)



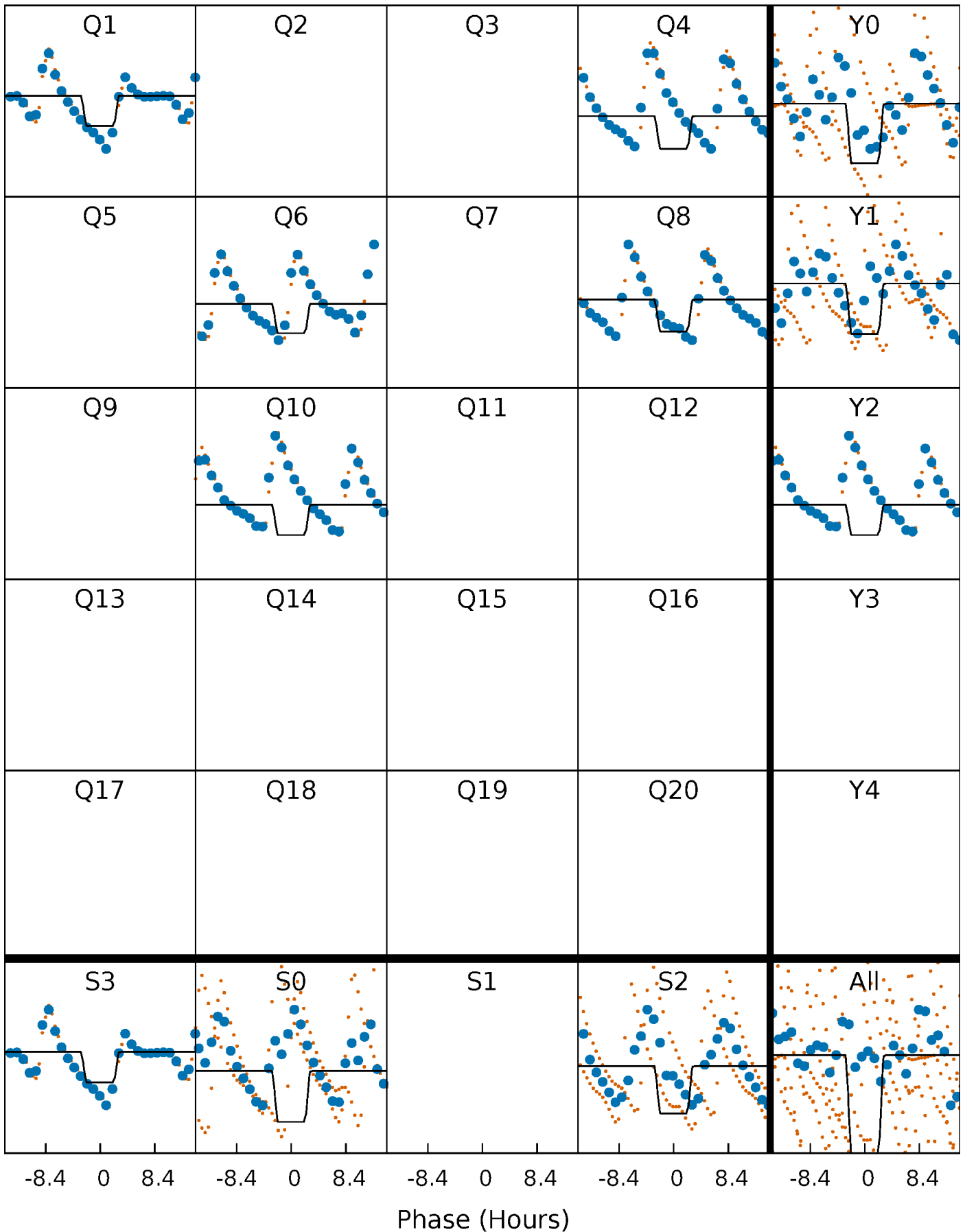
DV Quarter-Phased Transit Curves

TCE 006100702-02 $P=212.155425$ Days $T_0=141.639831$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

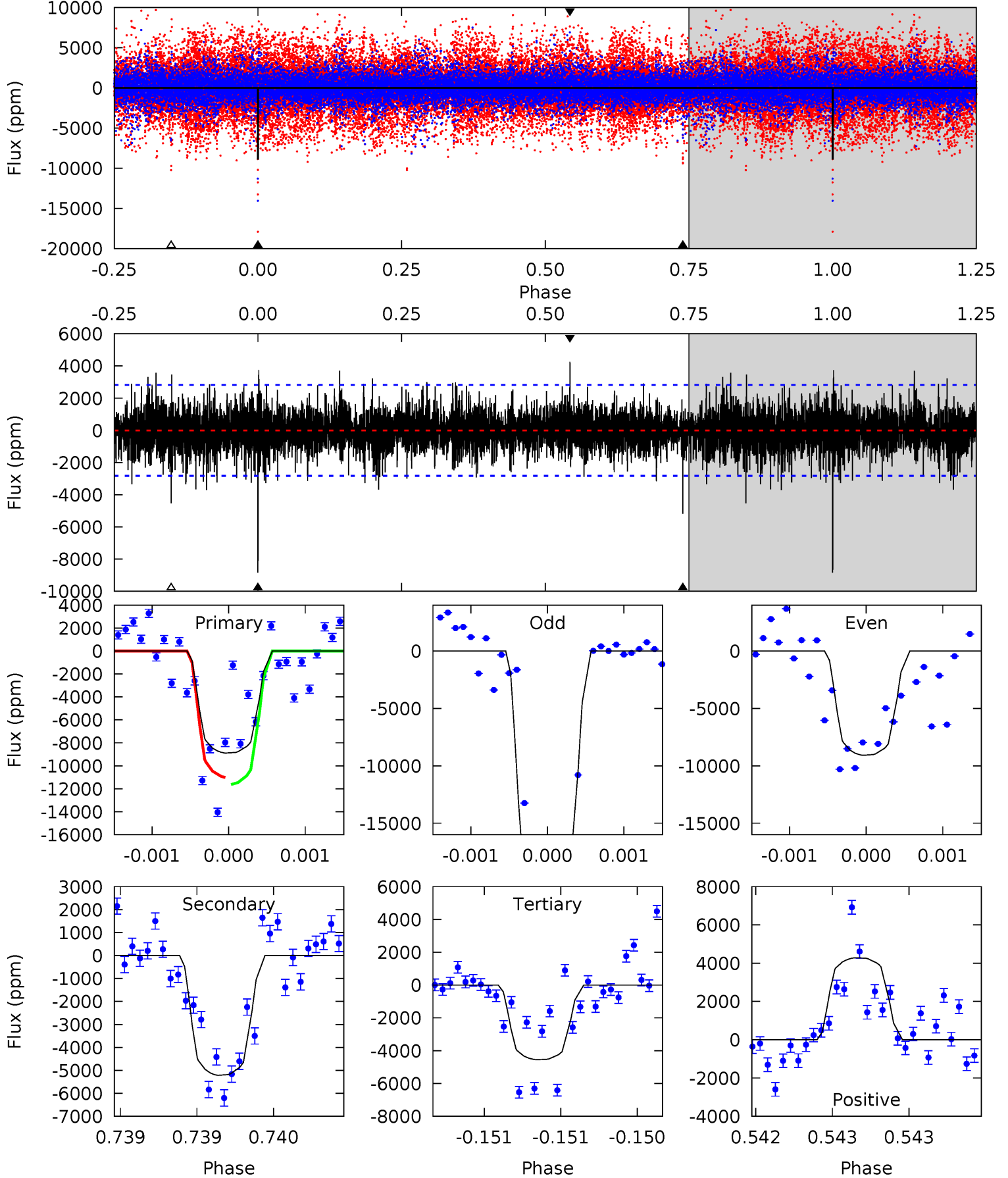
TCE 006100702-02 P=212.161544 Days $T_0=141.671664$ (BKJD)



DV Model-Shift Uniqueness Test

006100702-02, P = 212.155425 Days, E = 141.639831 Days

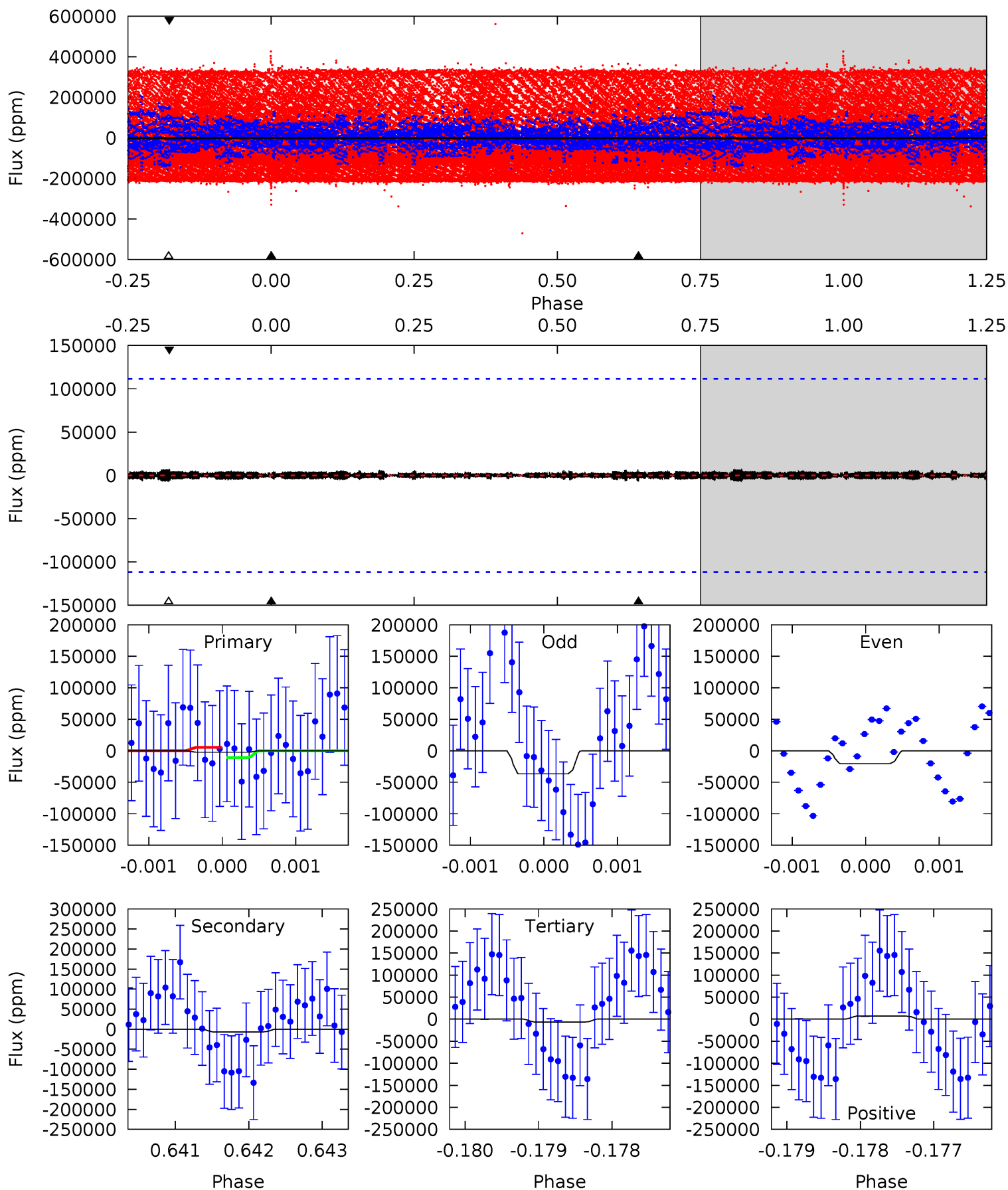
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.3	10.2	8.88	8.36	5.55	3.44	1.85	8.47	8.99	1.30	1.82	12.0	1.38	0.33	0.57



Alt Model-Shift Uniqueness Test

006100702-02, P = 212.161544 Days, E = 141.671664 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.11	0.33	0.32	0.33	5.43	3.25	0.11	-0.21	-0.22	0.01	0.00	0.39	-0.10	0.50	0.14



Stellar Parameters For KIC 006100702

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7000^{+197}_{-296}	$4.087^{+0.190}_{-0.171}$	$-0.200^{+0.250}_{-0.350}$	$1.780^{+0.507}_{-0.456}$	$1.415^{+0.208}_{-0.255}$	$0.353^{+0.423}_{-0.168}$
	+3%/-4%	+5%/-4%	+125%/-175%	+28%/-26%	+15%/-18%	+120%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006100702-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-5182 ± 509	$22.60^{+18.74}_{-15.78}$	647^{+50}_{-48}	5493^{+4885}_{-1198}	3455^{+32139}_{-2472}
Alt.	-6800 ± 20574	$81.31^{+28.64}_{-28.10}$	643^{+50}_{-47}	3485^{+1196}_{-7489}	294^{+1401}_{-1023}

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

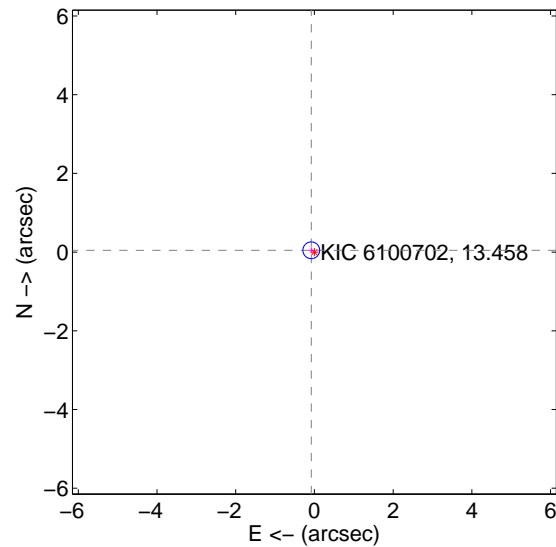
Supplemental centroid analysis for 006100702-02. Kepler magnitude: 13.46. Transit SNR 4.49

There are 3 quarters with good PRF difference image offsets

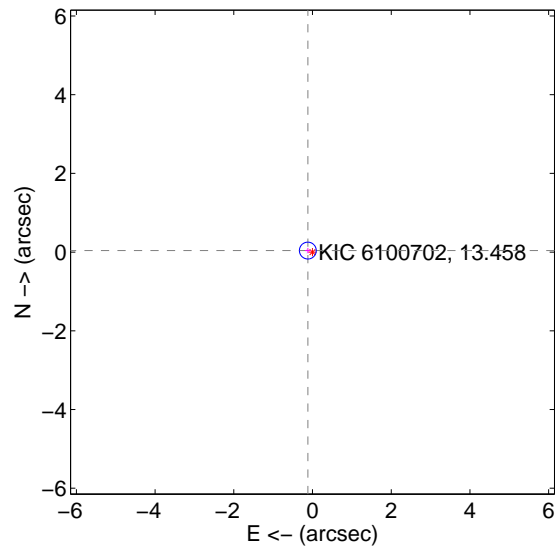
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.092 ± 0.071	1.30	0.080 ± 0.070	0.046 ± 0.074
PRF-fit source offset from KIC position	0.125 ± 0.071	1.76	0.119 ± 0.072	0.039 ± 0.068
photometric centroid source offset	3.14 ± 0.66	4.74	-3.13 ± 0.66	-0.22 ± 0.26

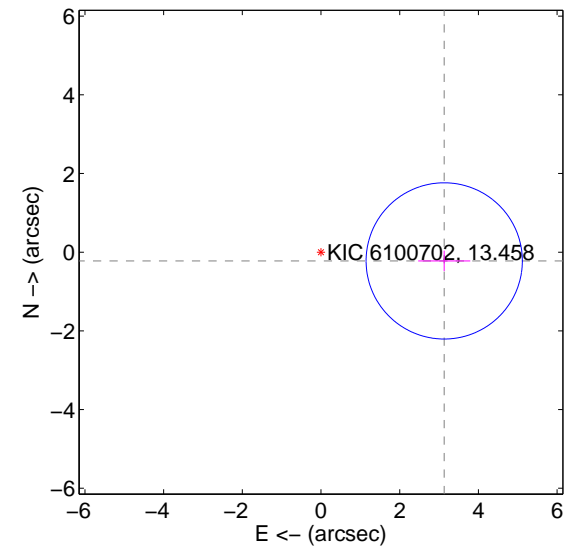
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

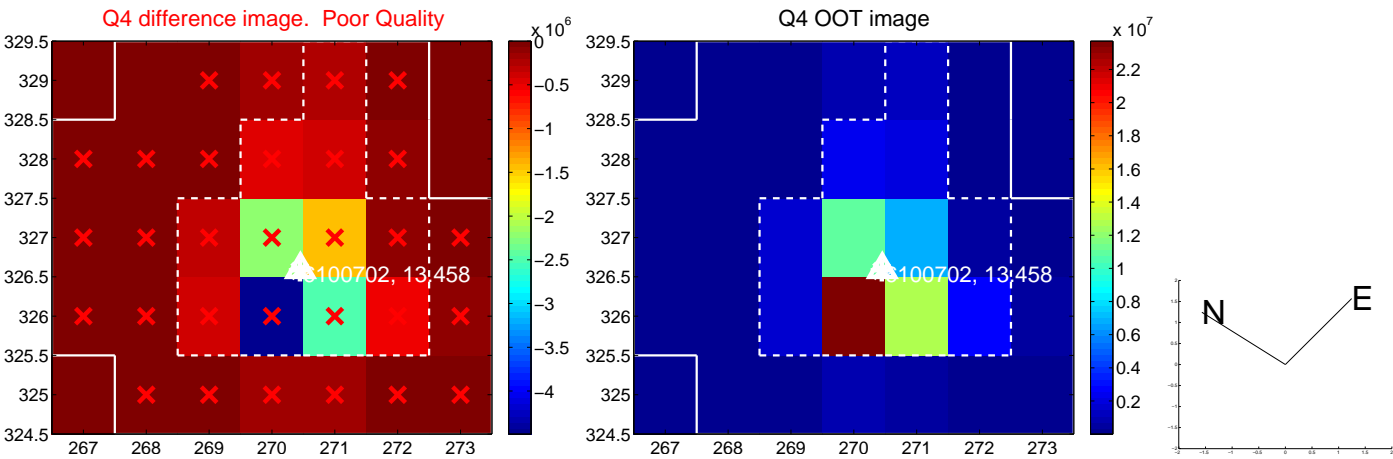
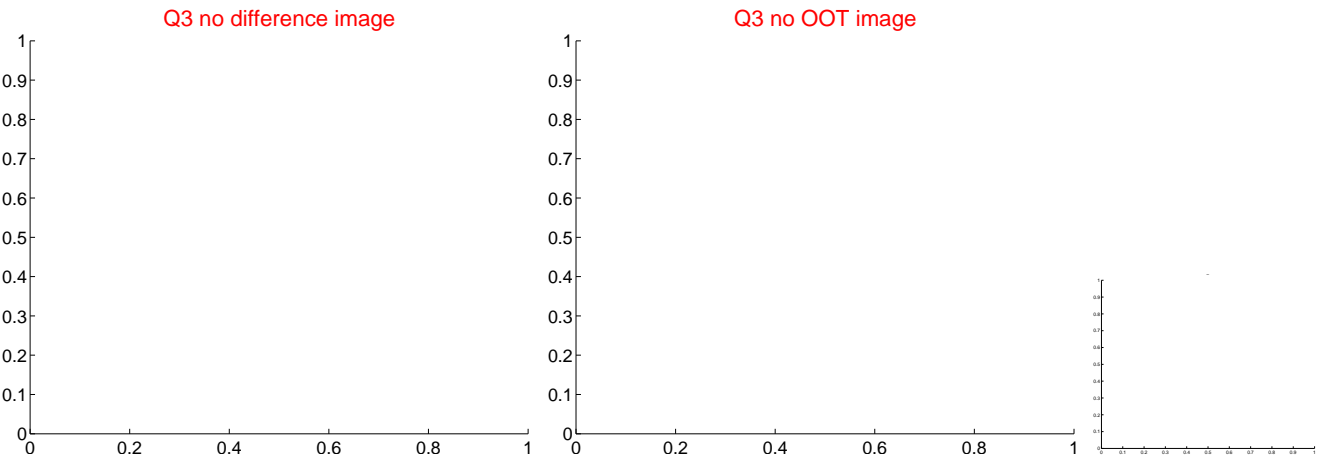
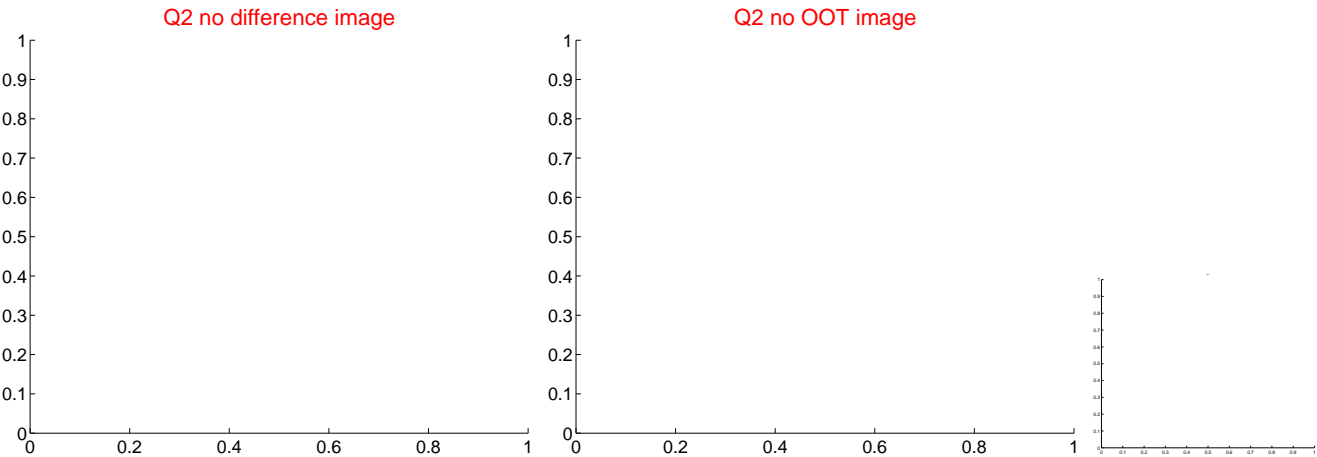
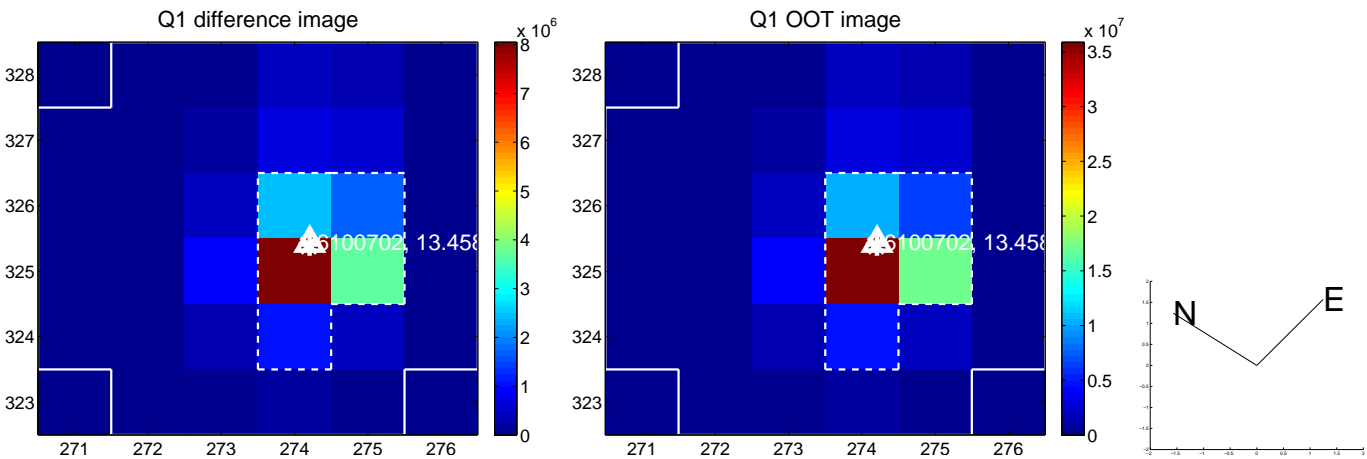


offset from photometric centroids

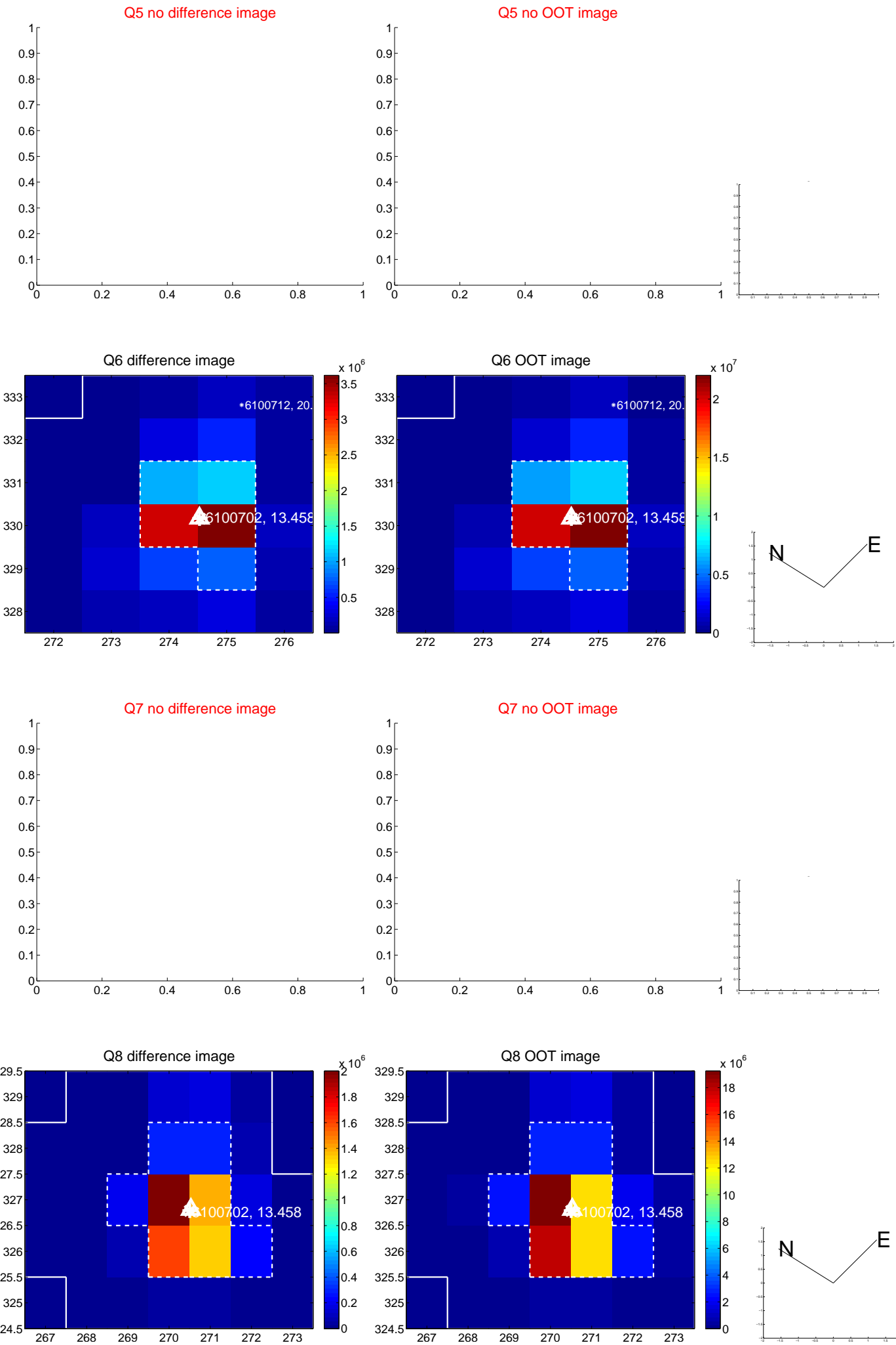


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

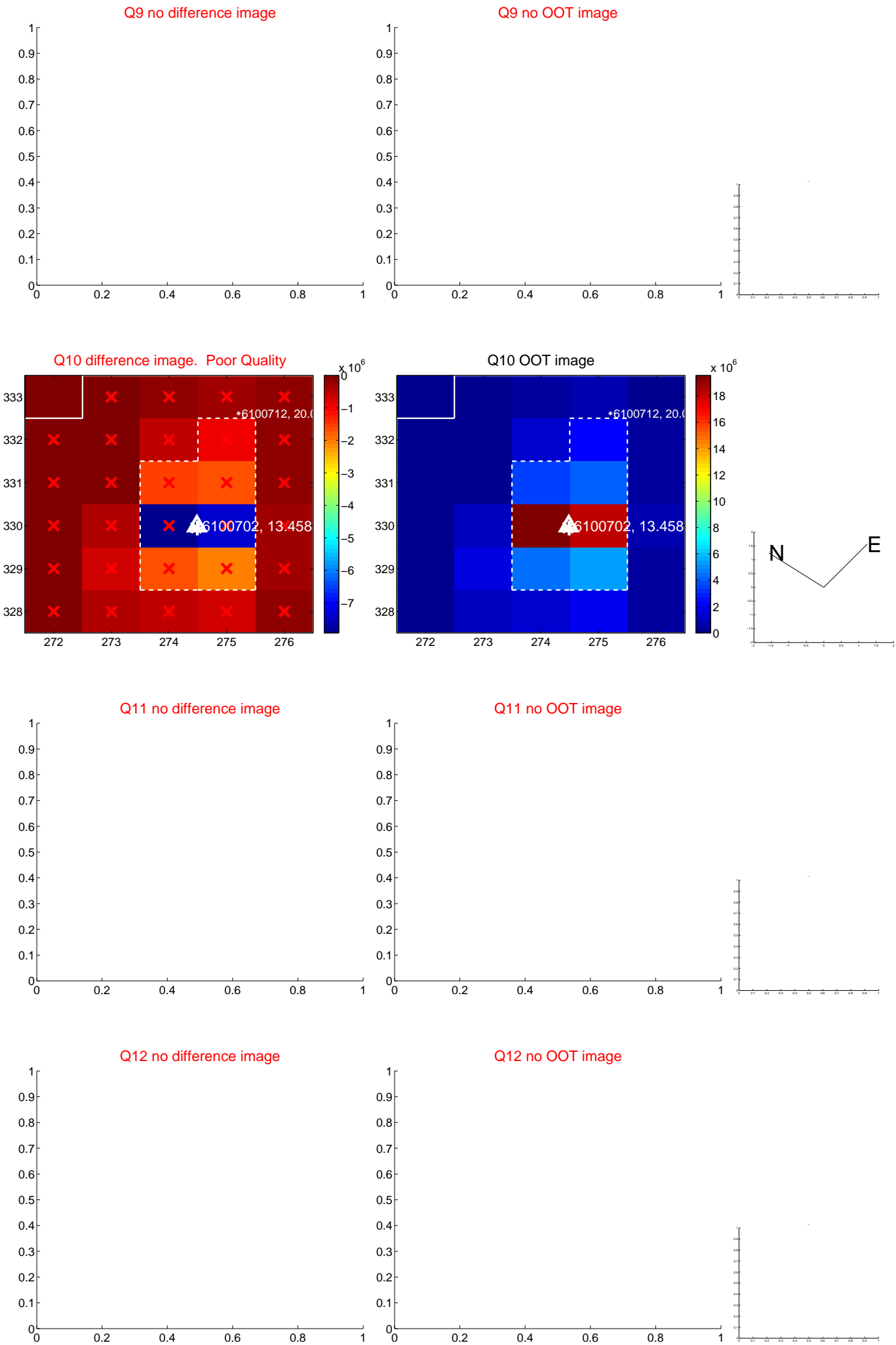
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



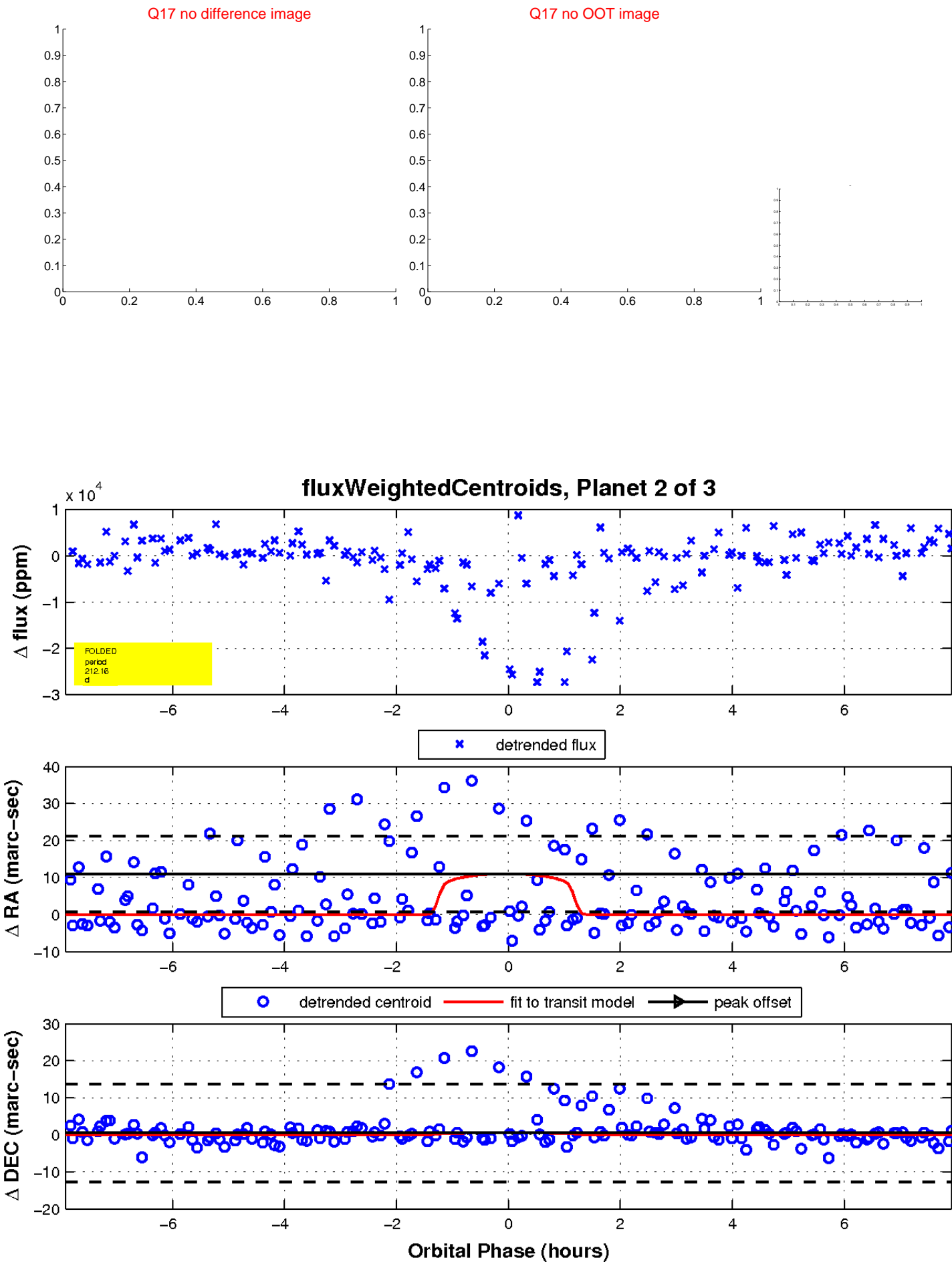
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

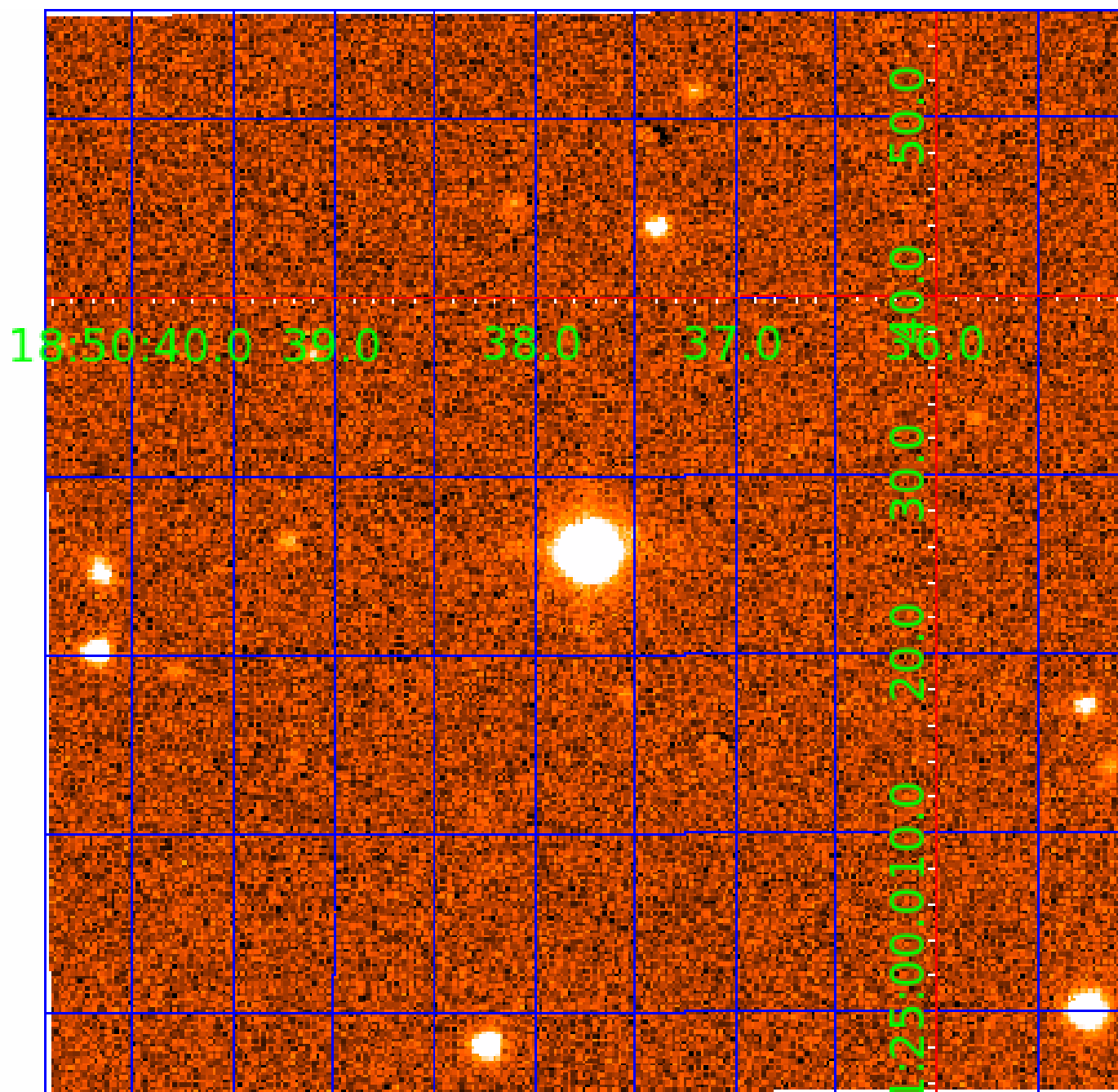


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006100702

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})
006100702-01	OBS	No	289.093698	194.707965	2436.1	12.864	27.2	7.0	1.78	7000	8.87	7.39
006100702-02	OBS	No	212.155425	141.639831	3745.9	2.645	21.2	4.5	1.78	7000	11.20	11.17
006100702-03	OBS	No	340.286301	154.896740	9847.6	2.681	20.8	9.3	1.78	7000	17.87	5.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006100702-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
006100702-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS
006100702-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

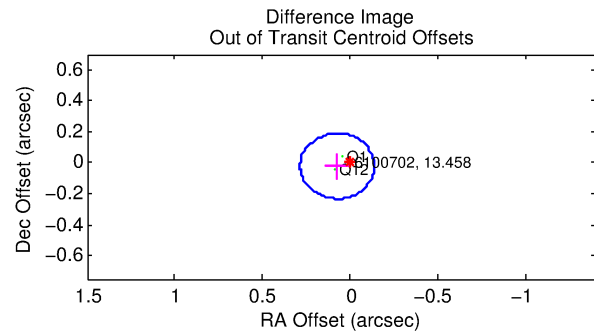
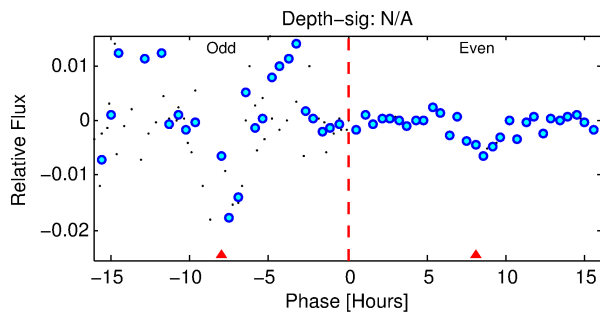
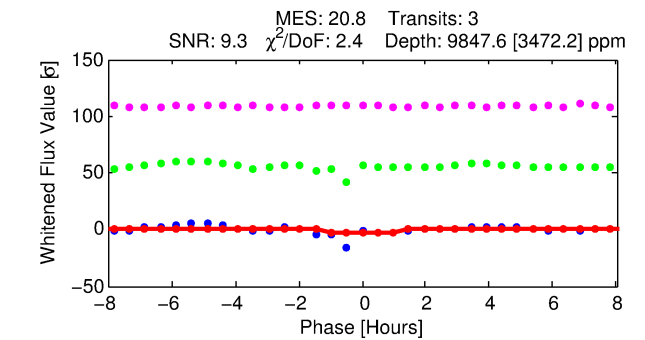
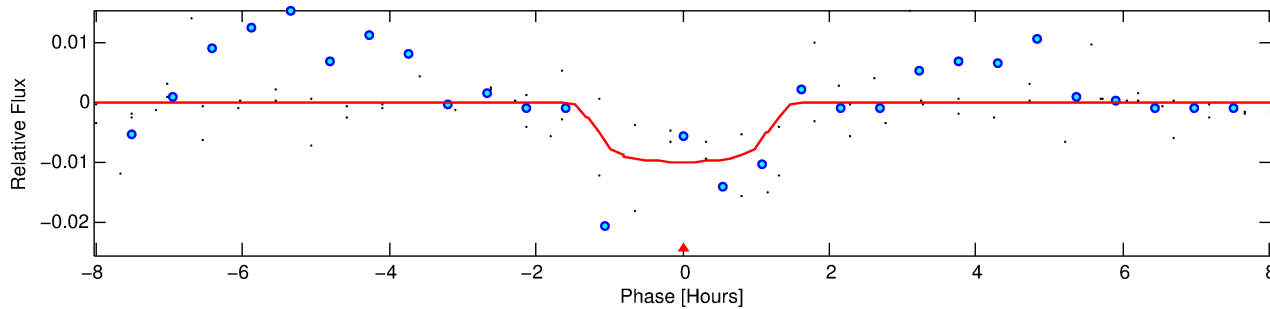
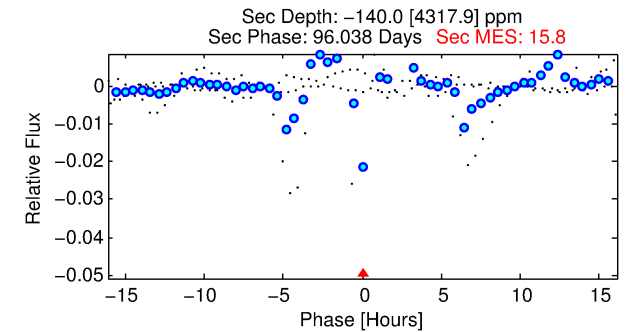
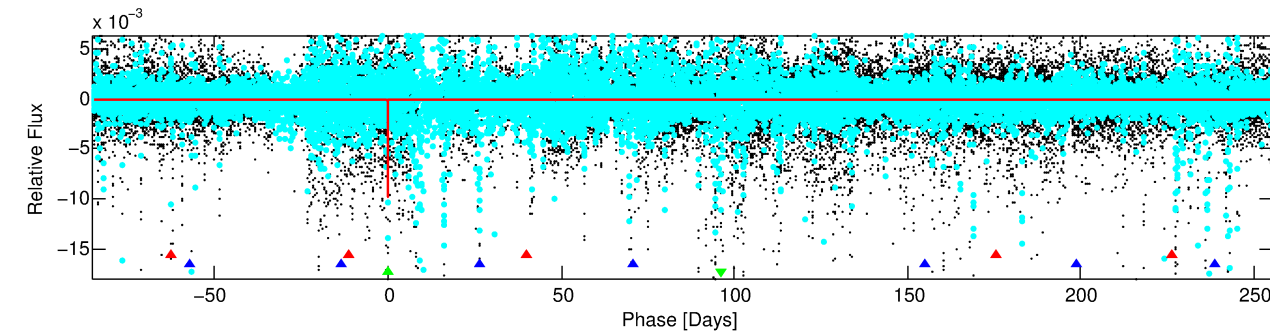
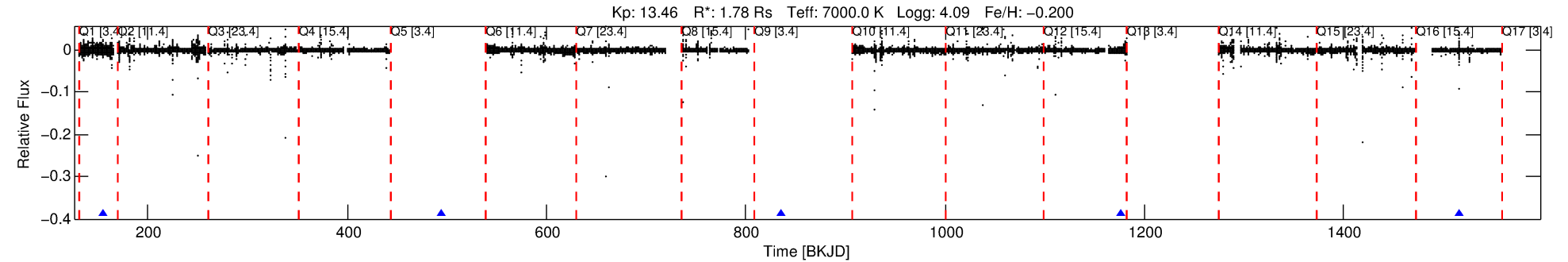
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006100702-03

No Significant Match Found

DV One-Page Summary

KIC: 6100702 Candidate: 3 of 3 Period: 340.286 d



DV Fit Results:

Period = 340.28630 [0.00595] d
Epoch = 154.8967 [0.0192] BKJD
Rp/R* = 0.0920 [0.4460]
a/R* = 1058.91 [28460.55]
b = 0.00 [7437.31]
Seff = 5.95 [2.30]
Teq = 398 [39] K
Rp = 17.87 [86.78] Re
a = 1.0704 [0.2563] AU
Ag = N/A
Teffp = N/A

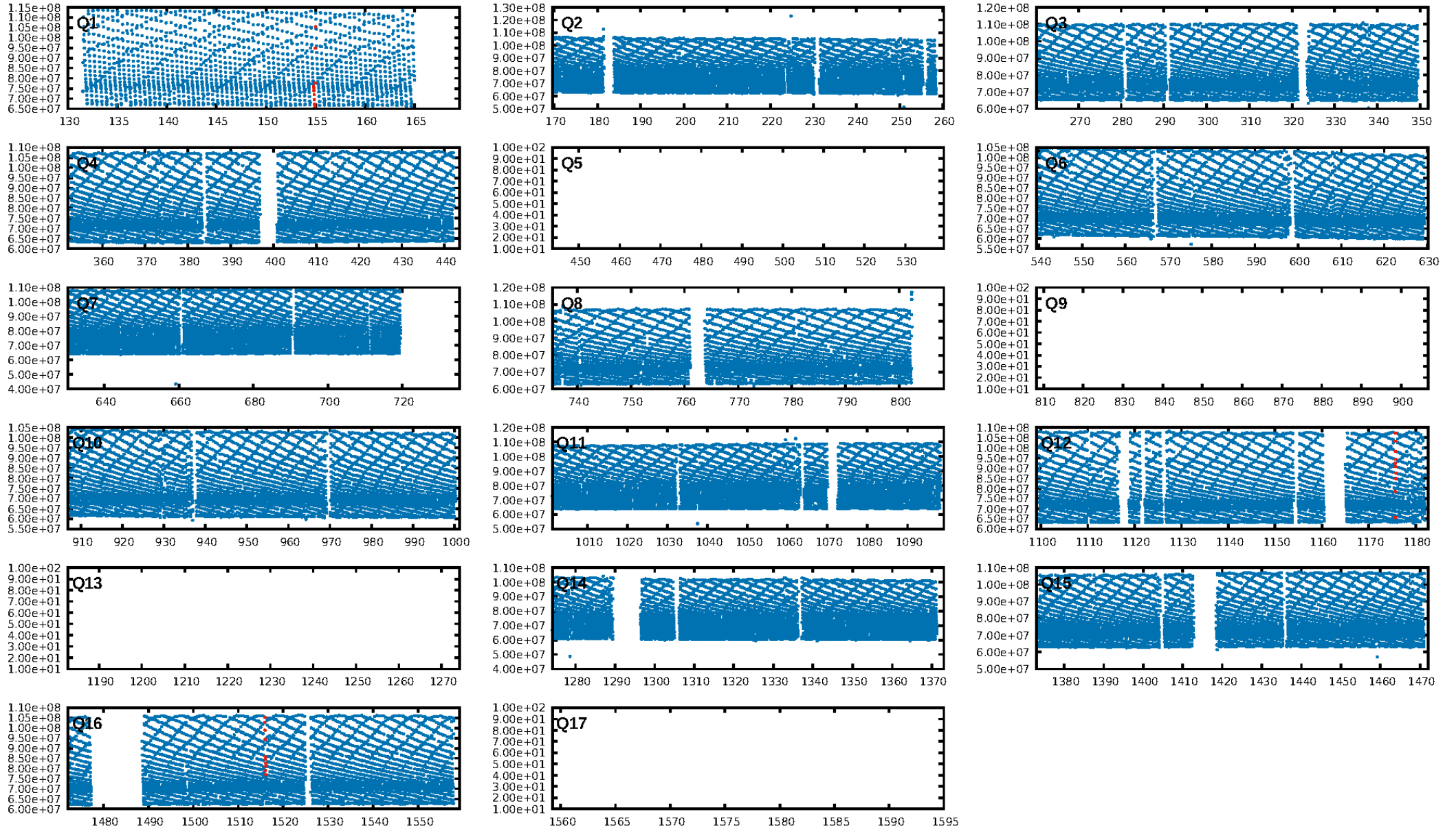
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [93.50σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 2.7%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 0.6922
Centroid-sig: 81.4%
Centroid-so: 0.327 arcsec [1.15σ]
OotOffset-rm: 0.078 arcsec [1.11σ]
KicOffset-rm: 0.088 arcsec [1.32σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

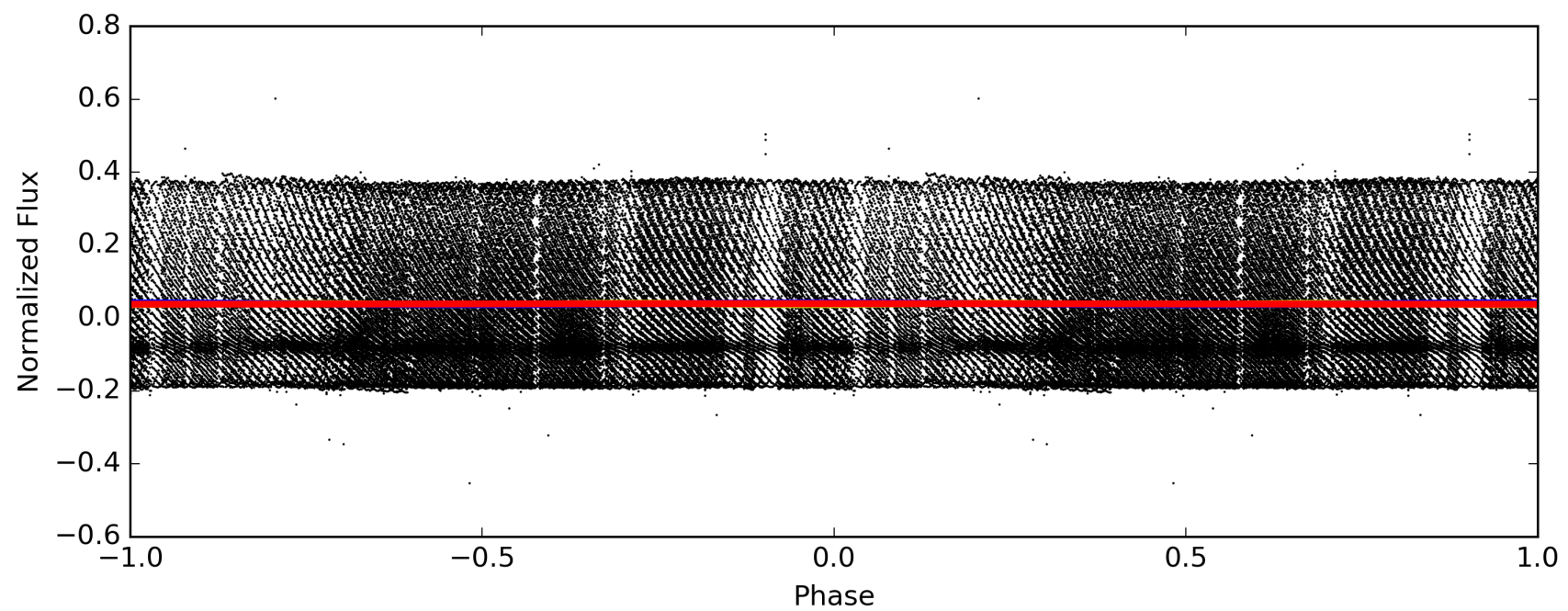
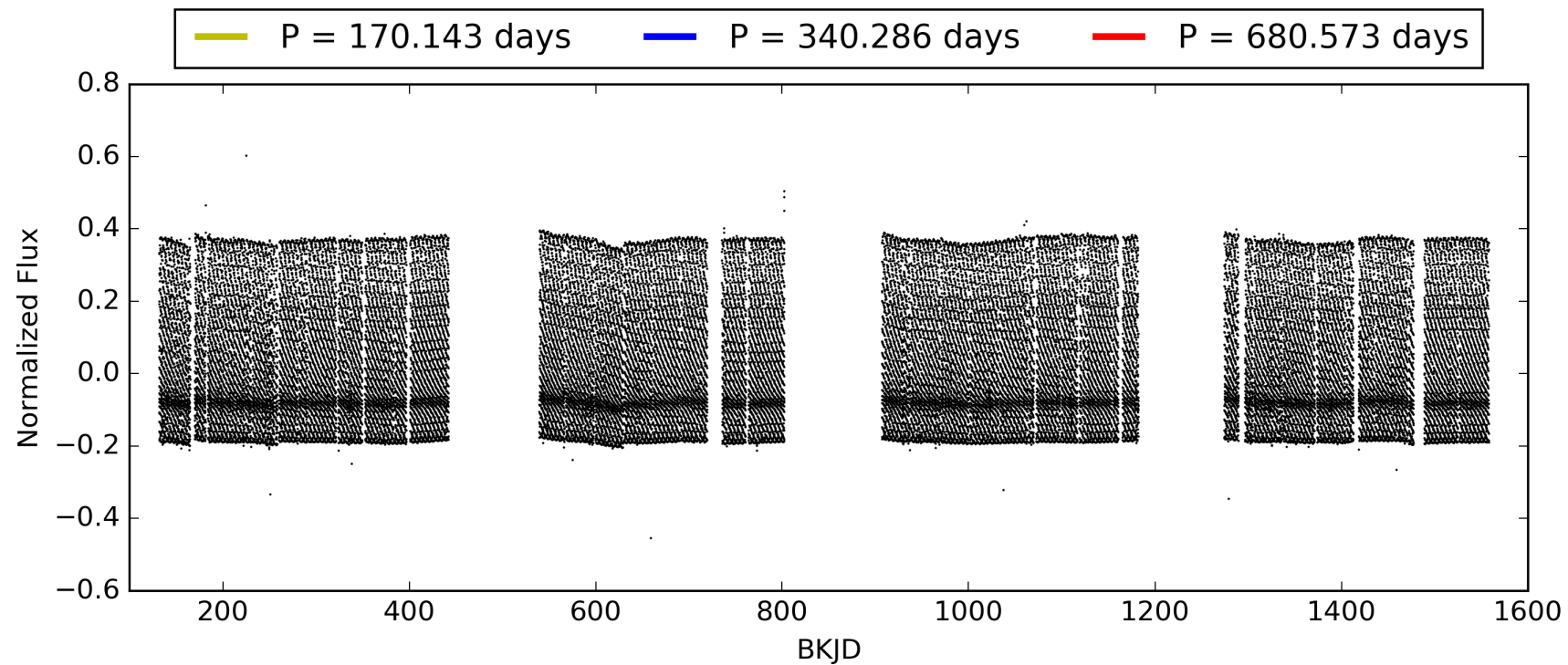
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 09:08:47 Z

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

TCE 006100702-03, PDC Light Curves

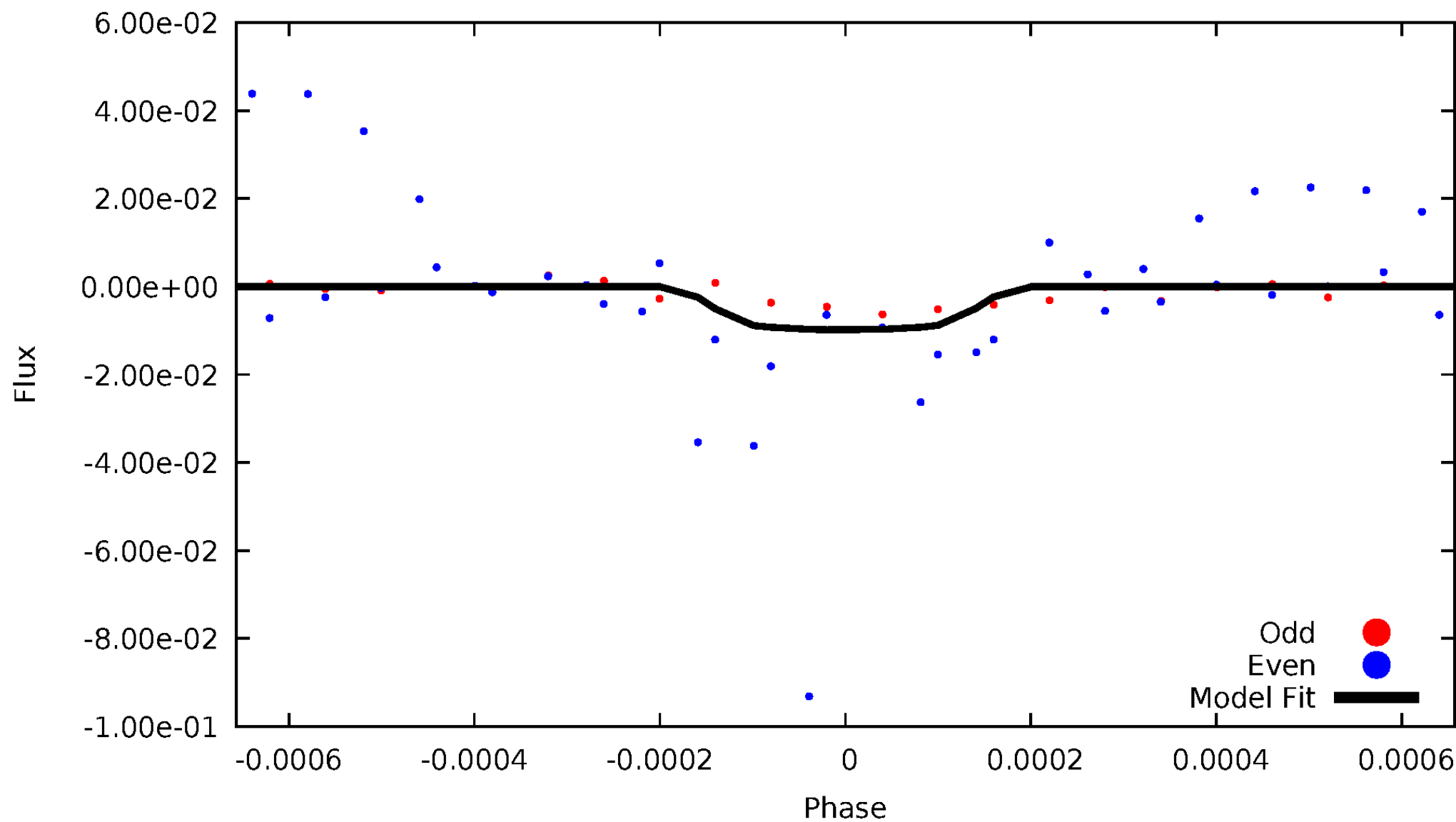


TCE 006100702-03



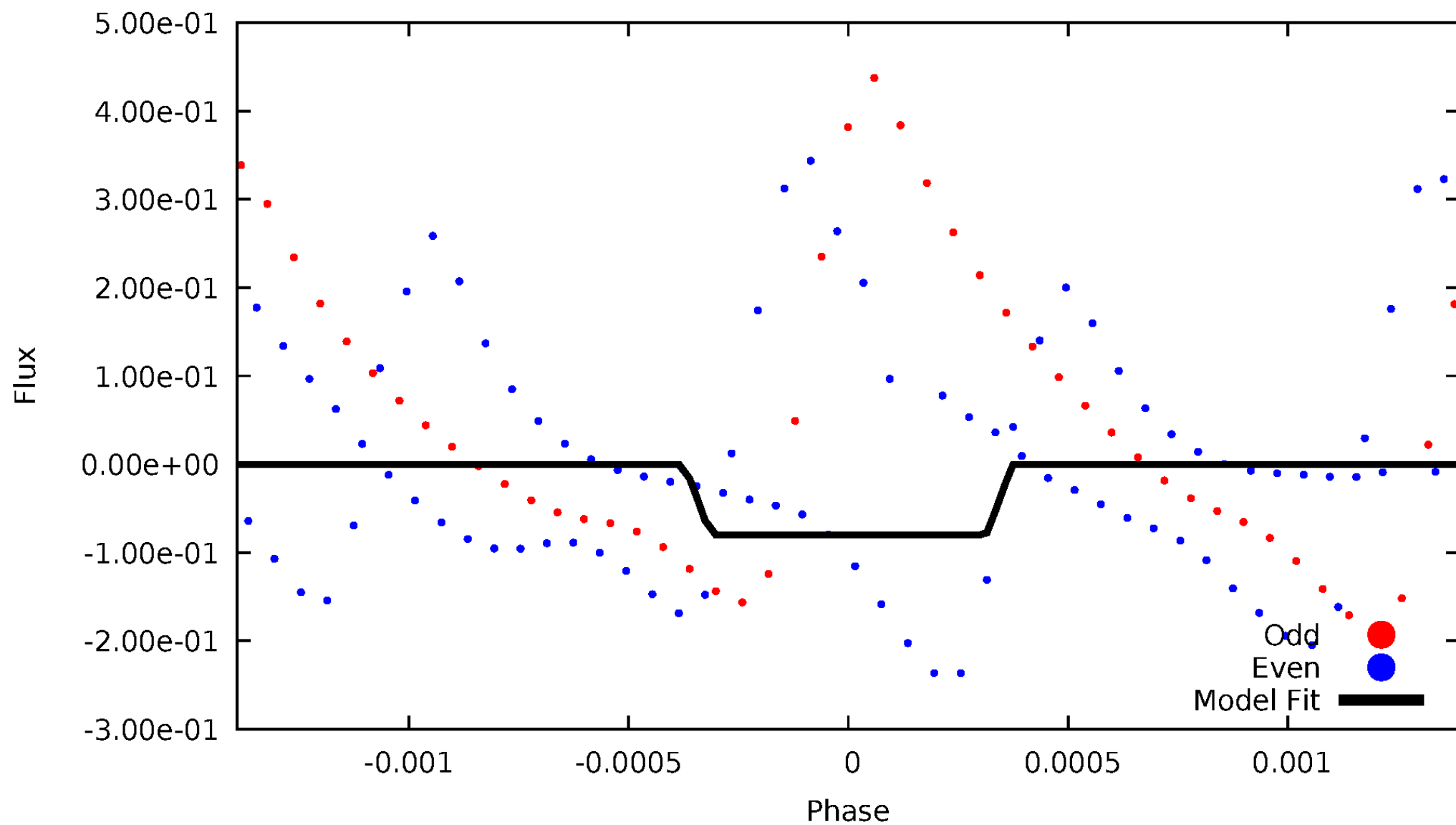
DV Odd/Even

TCE 006100702-03



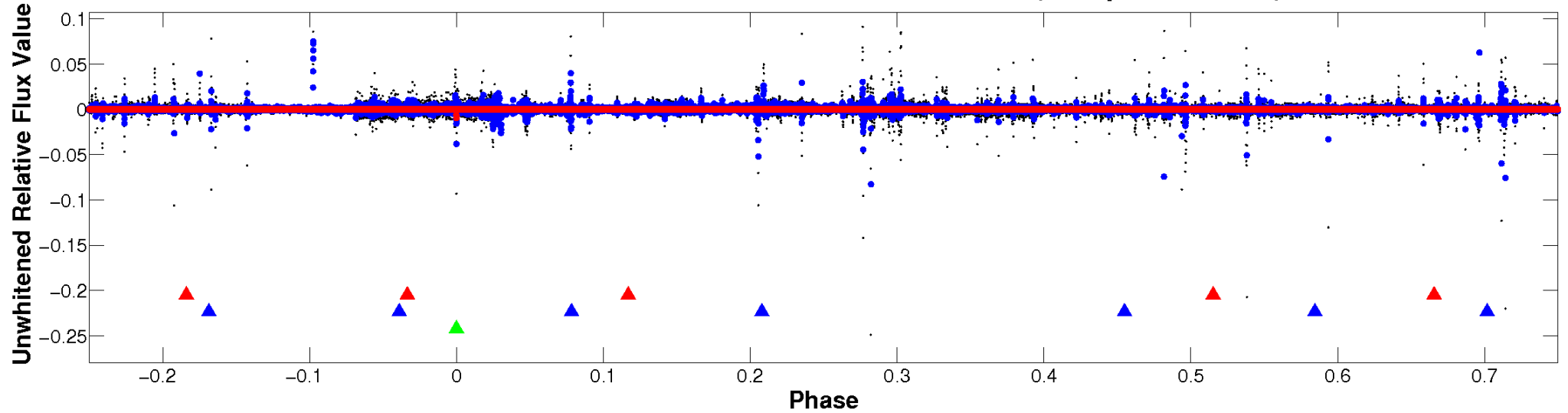
ALT Odd/Even

TCE 006100702-03

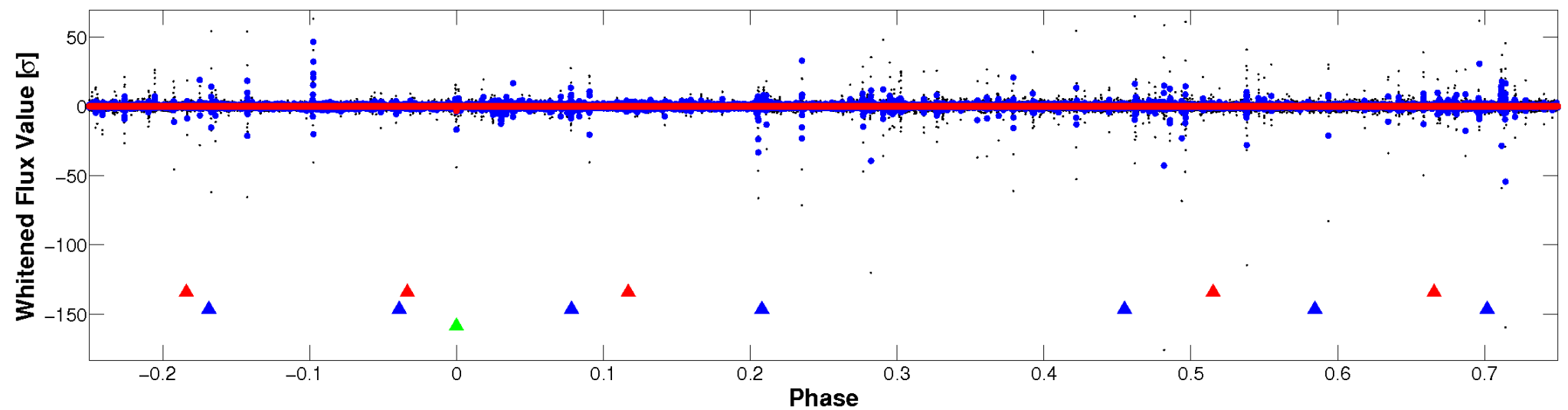


Non-Whitened Vs. Whitened Light Curve

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

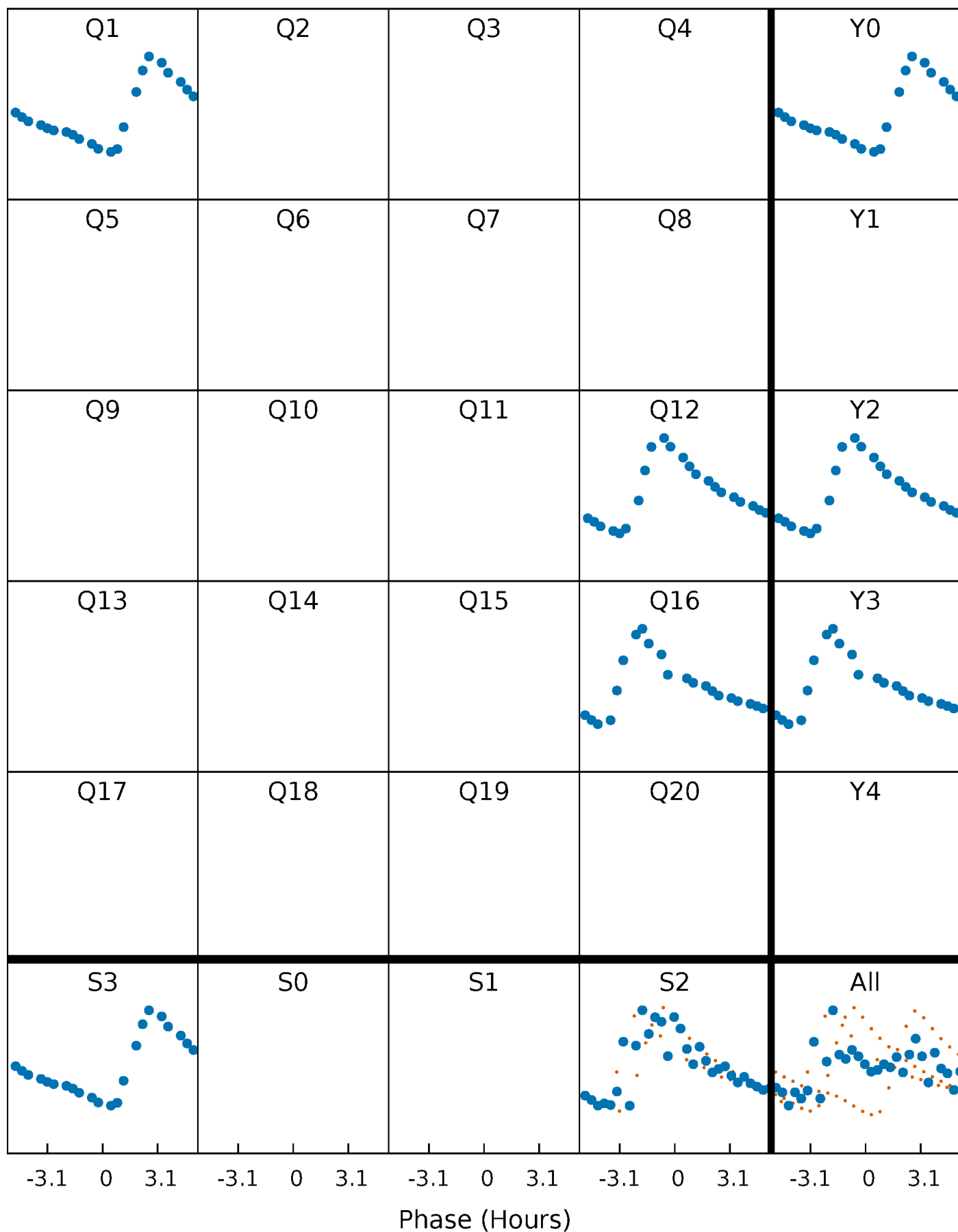


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



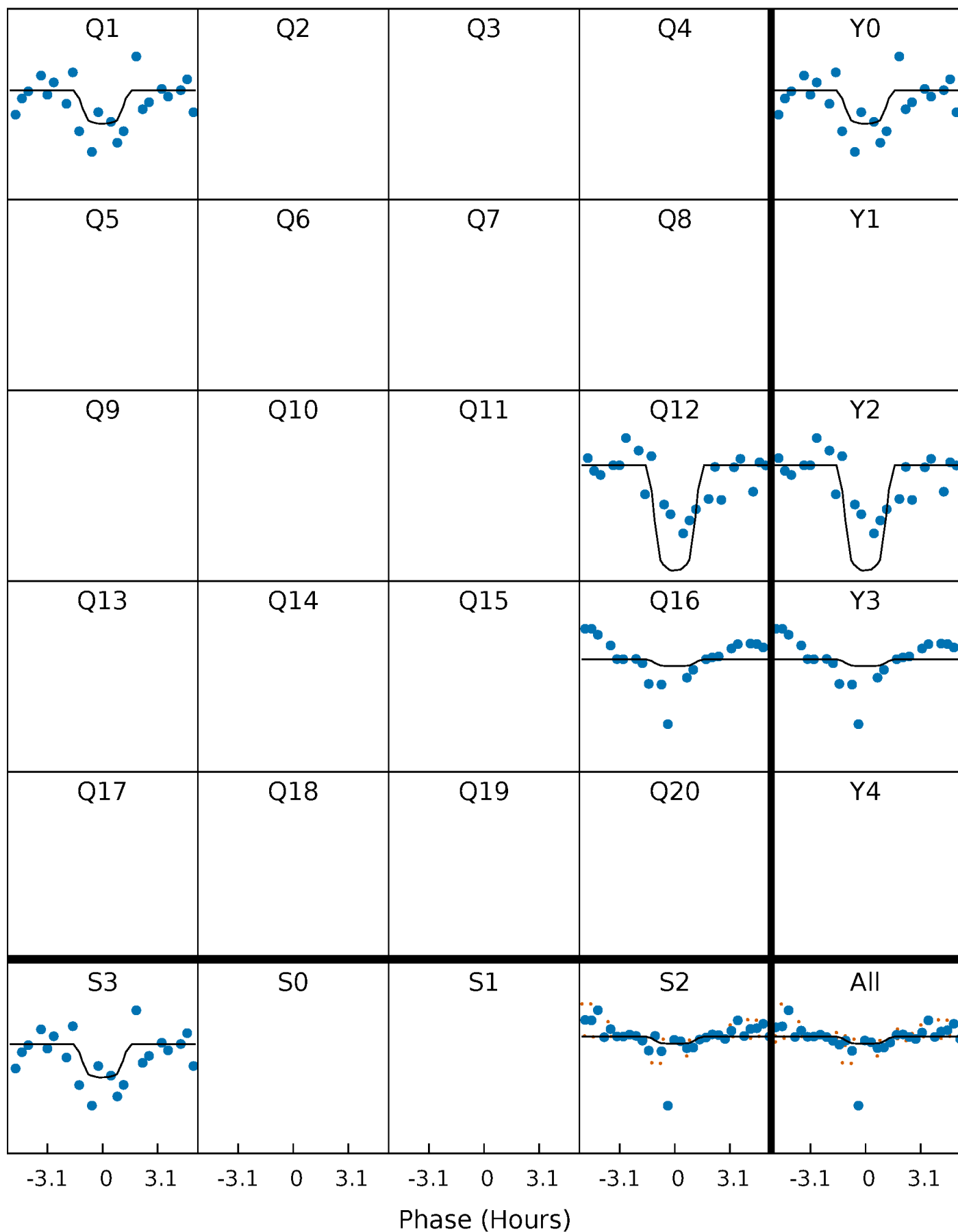
PDC Quarter-Phased Transit Curves

TCE 006100702-03 P=340.286301 Days $T_0=154.896740$ (BKJD)



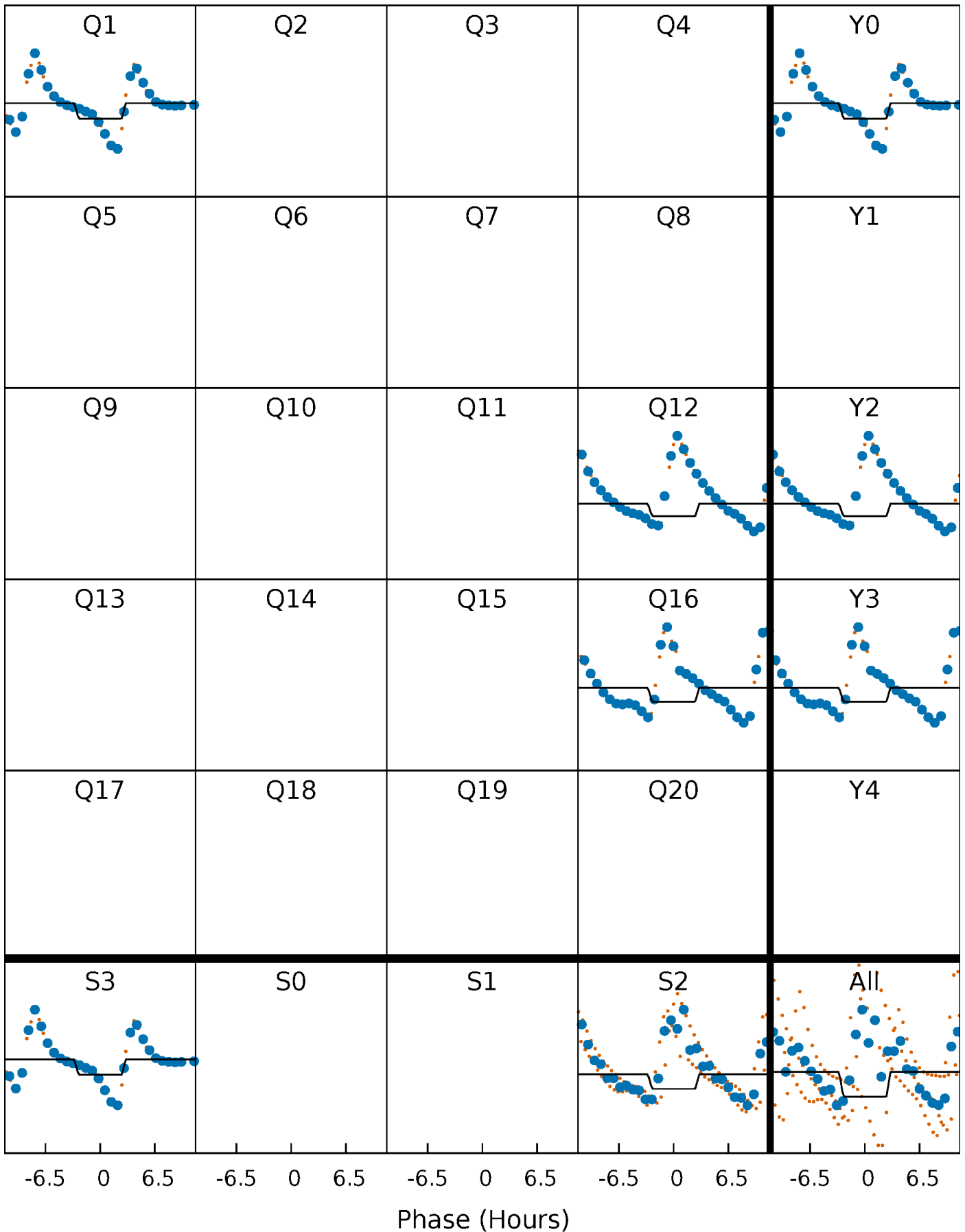
DV Quarter-Phased Transit Curves

TCE 006100702-03 $P=340.286301$ Days $T_0=154.896740$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

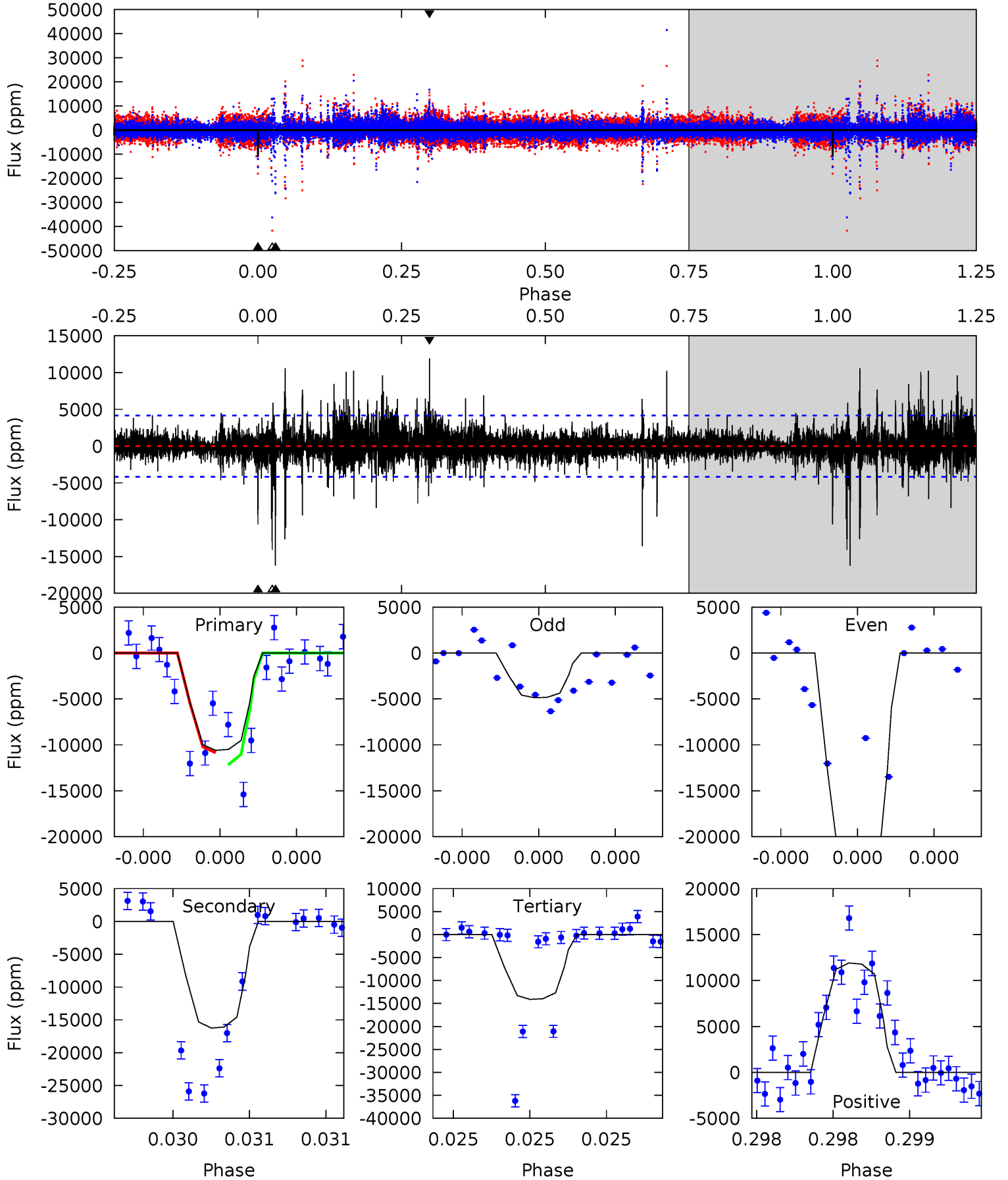
TCE 006100702-03 P=340.288181 Days $T_0=154.843784$ (BKJD)



DV Model-Shift Uniqueness Test

006100702-03, P = 340.286301 Days, E = 154.896740 Days

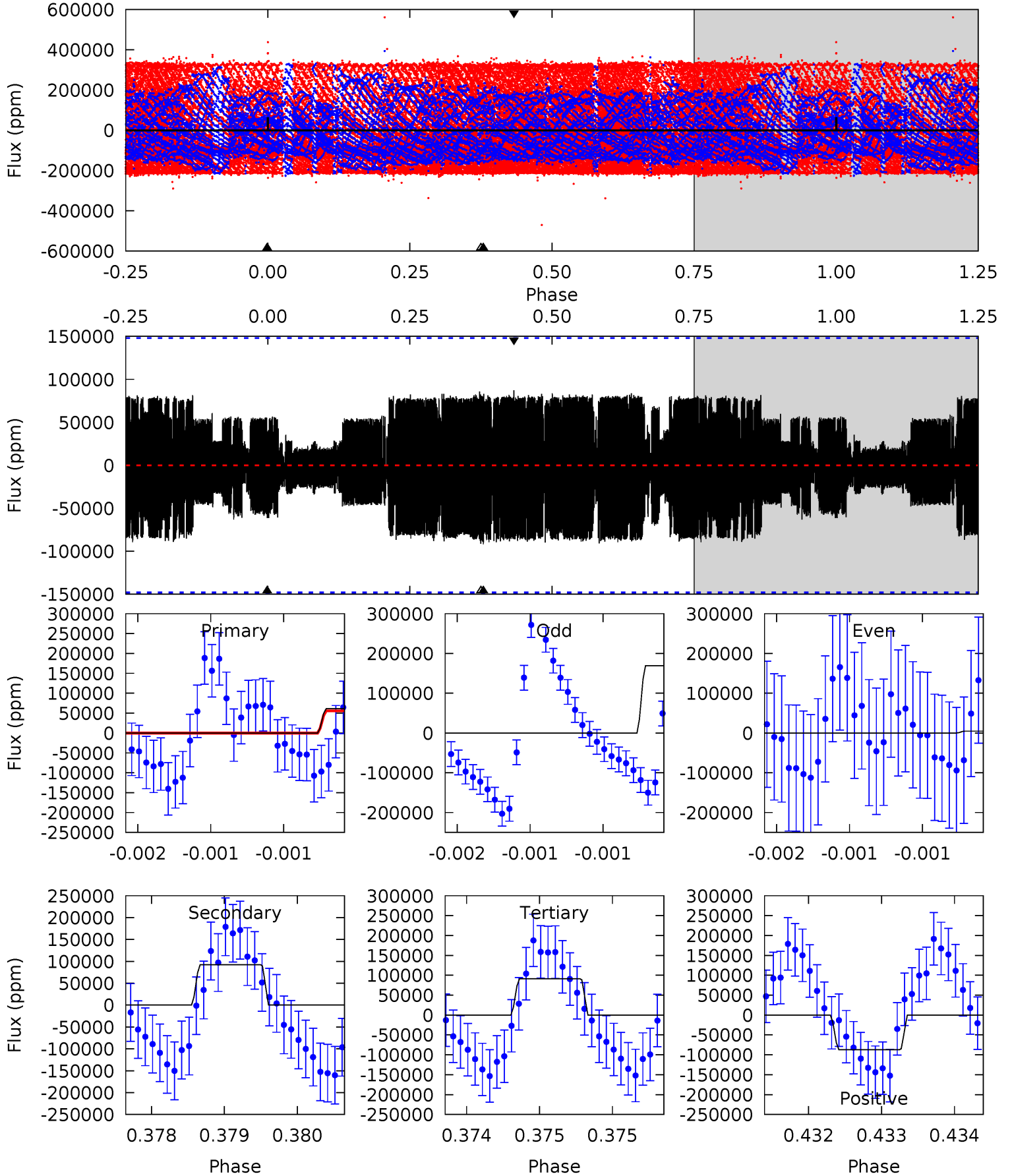
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.3	22.0	19.1	16.1	5.63	3.57	1.89	-4.75	-1.77	2.90	5.88	11.7	1.78	0.42	0.84



Alt Model-Shift Uniqueness Test

006100702-03, P = 340.288181 Days, E = 154.843784 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.28	3.42	3.39	3.24	5.51	3.38	1.85	-1.11	-0.96	0.03	0.18	2.91	0.45	0.49	0.22



Stellar Parameters For KIC 006100702

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7000^{+197}_{-296}	$4.087^{+0.190}_{-0.171}$	$-0.200^{+0.250}_{-0.350}$	$1.780^{+0.507}_{-0.456}$	$1.415^{+0.208}_{-0.255}$	$0.353^{+0.423}_{-0.168}$
	+3%/-4%	+5%/-4%	+125%/-175%	+28%/-26%	+15%/-18%	+120%/-48%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006100702-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-16250 ± 739	$62.79^{+73.75}_{-43.96}$	556^{+39}_{-42}	4533^{+3624}_{-1052}	2686^{+25911}_{-2113}
Alt.	-91954 ± 26881	$76.08^{+91.64}_{-50.24}$	555^{+39}_{-46}	6079^{+6007}_{-1705}	10117^{+74447}_{-8066}

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

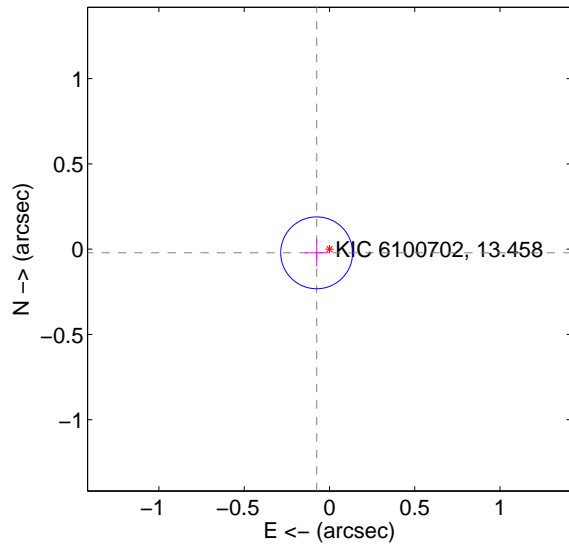
Supplemental centroid analysis for 006100702-03. Kepler magnitude: 13.46. Transit SNR 9.25

There are 1 quarters with good PRF difference image offsets

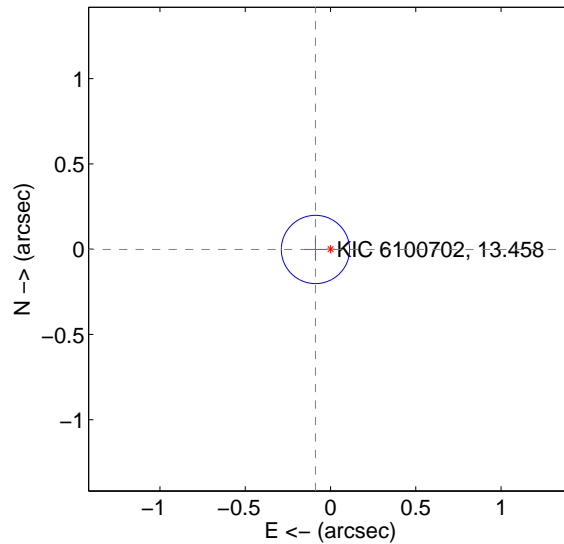
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.078 ± 0.070	1.11	0.075 ± 0.069	-0.021 ± 0.080
PRF-fit source offset from KIC position	0.088 ± 0.067	1.32	0.088 ± 0.067	-0.002 ± 0.067
photometric centroid source offset	0.33 ± 0.29	1.15	-0.32 ± 0.29	-0.07 ± 0.08

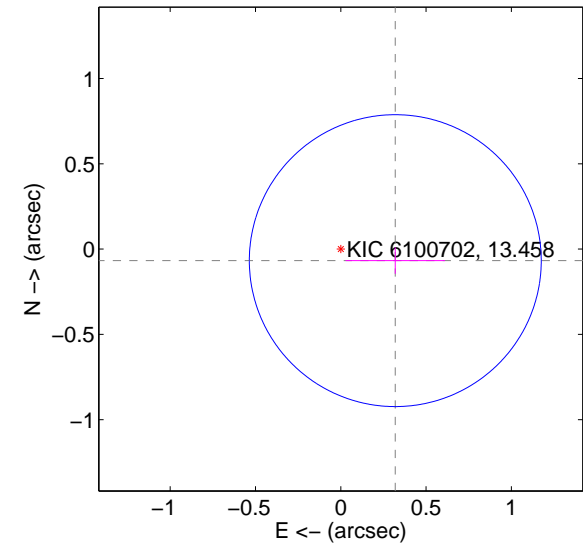
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

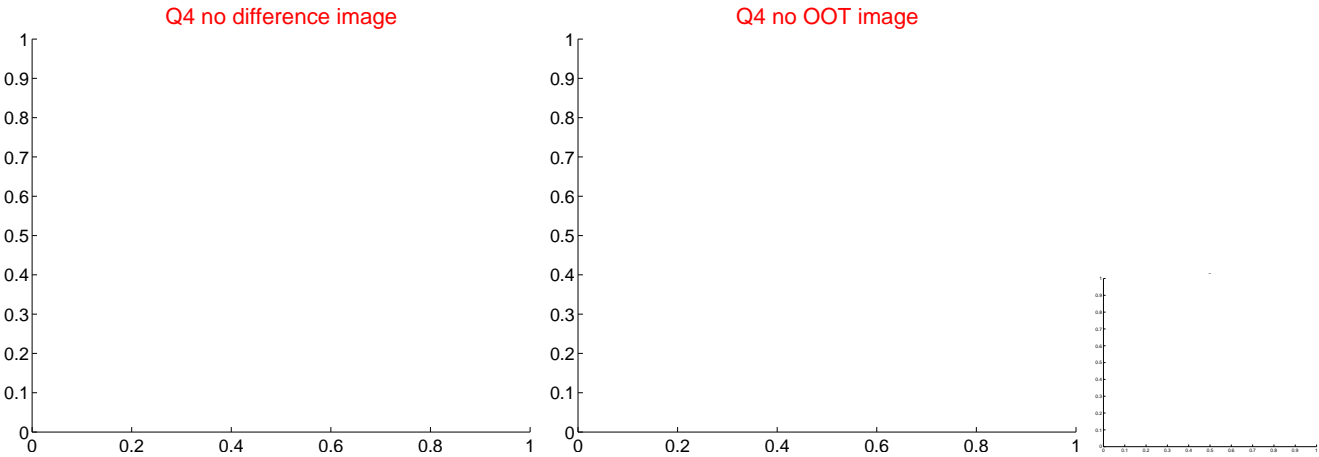
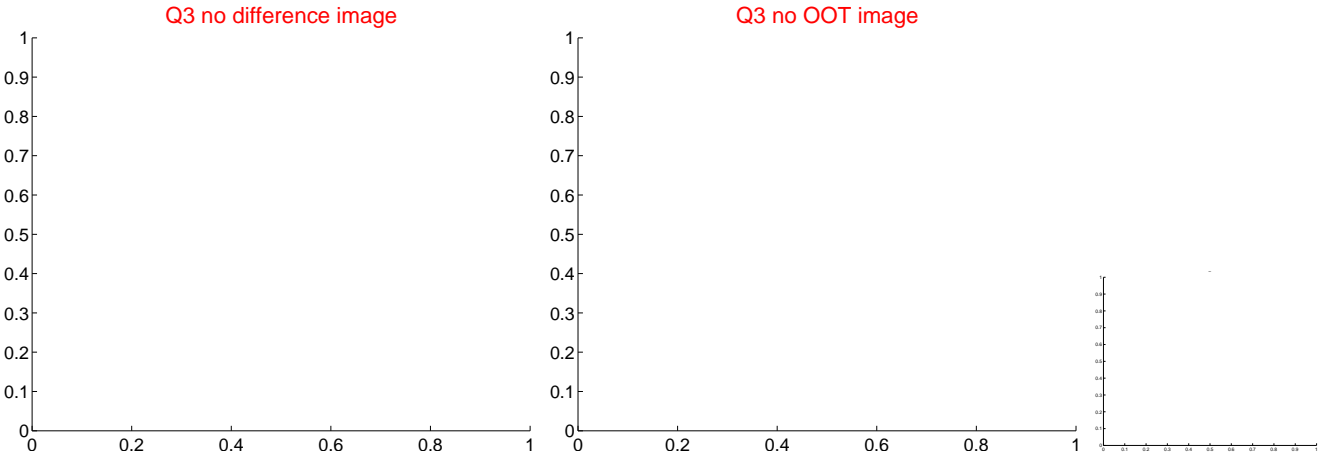
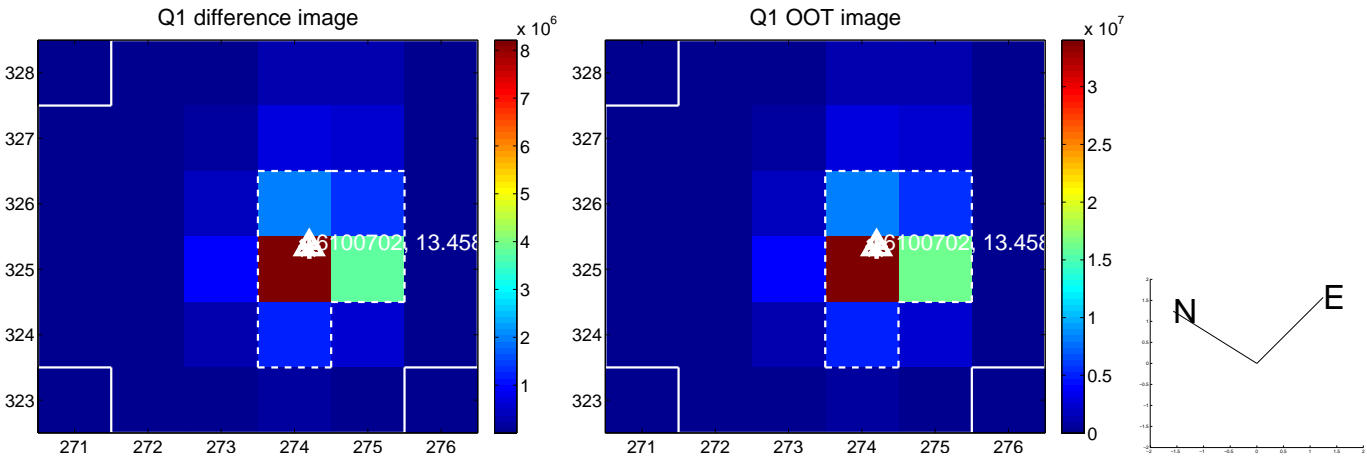


offset from photometric centroids



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.

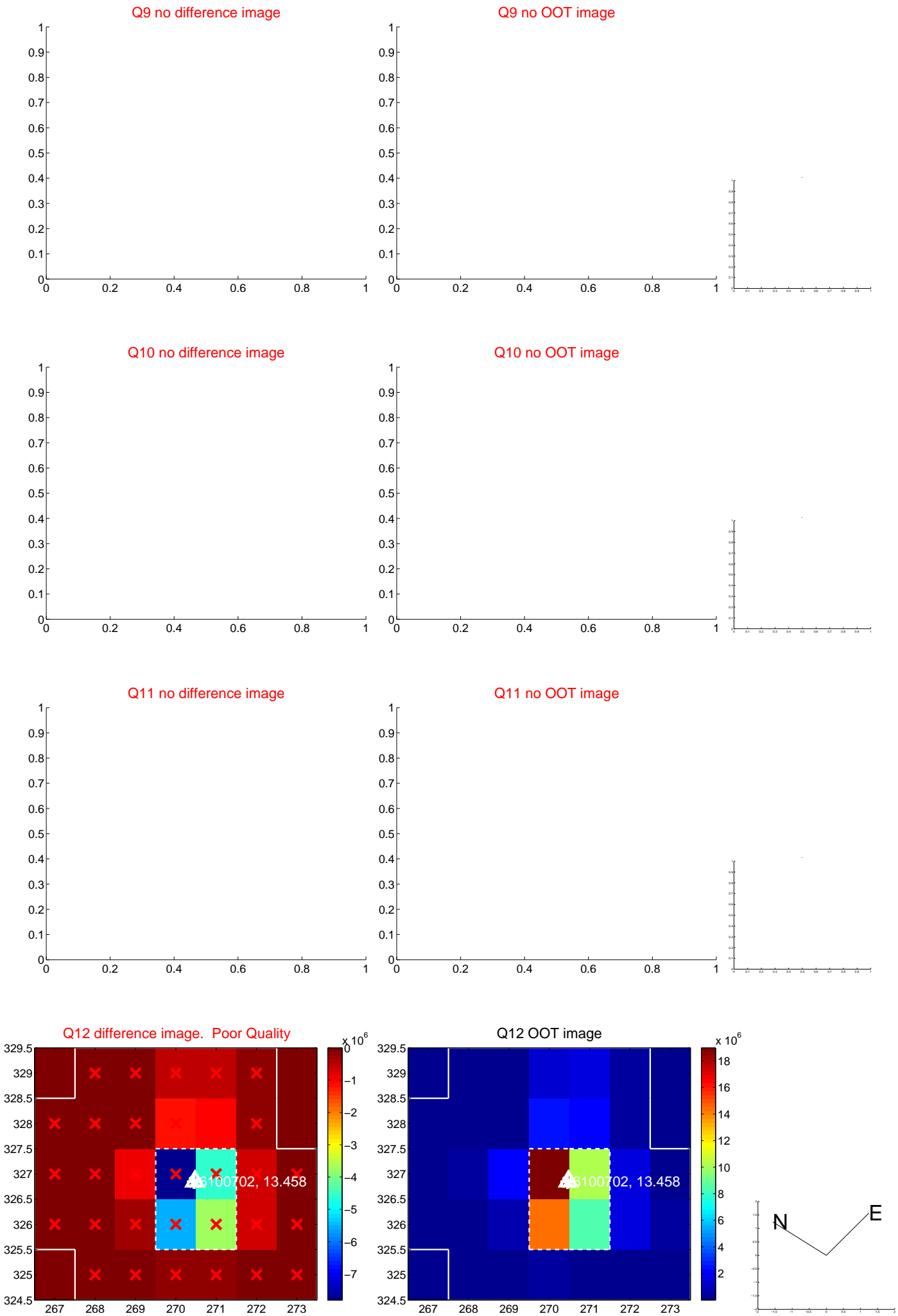
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



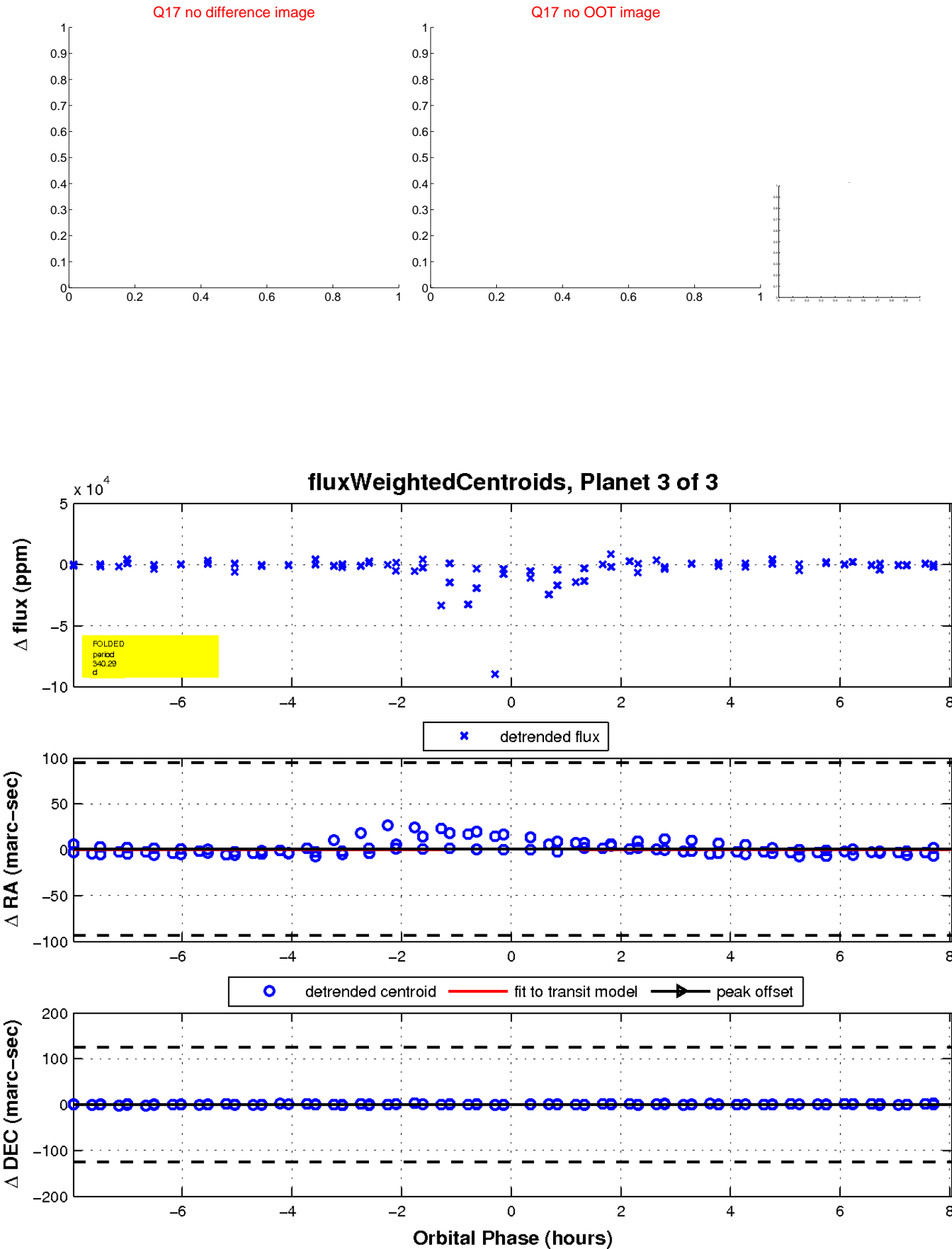
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

