

KIC 010793114

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})
010793114-01	OBS	No	0.826622	131.616760	21.8	3.615	8.2	9.5	1.66	6826	0.81	16295.34
010793114-02	OBS	No	113.023464	132.321953	183.6	7.213	7.5	5.1	1.66	6826	2.50	23.13
010793114-03	OBS	No	154.376636	179.154810	350.9	2.232	7.4	6.8	1.66	6826	4.01	15.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010793114-01	OBS	FP	0.00	1	0	0	0	LPP_DV
010793114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010793114-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT

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

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

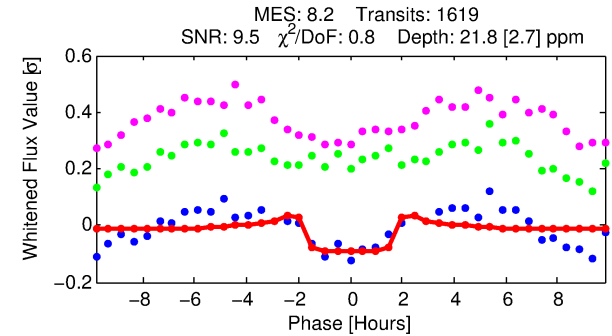
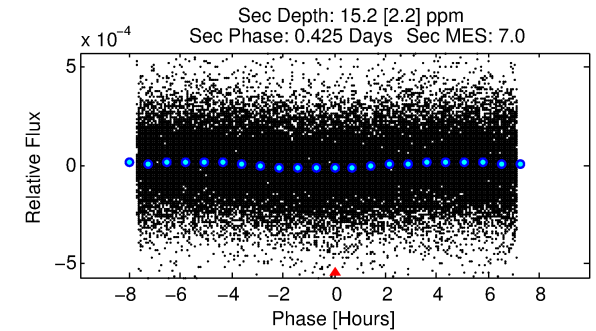
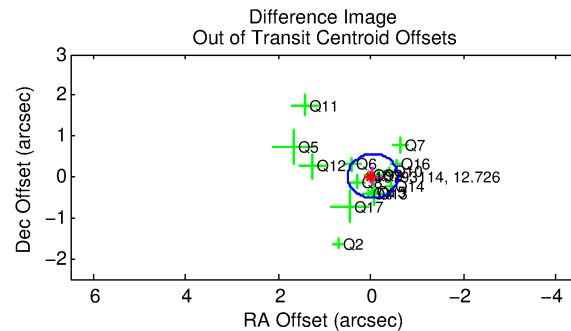
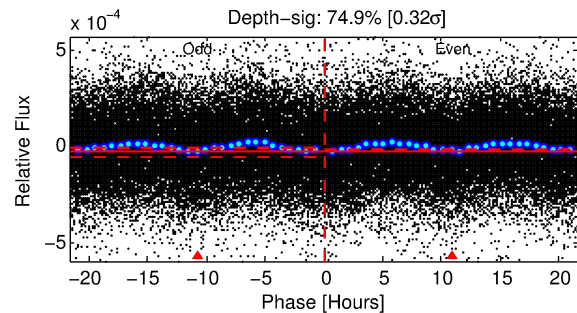
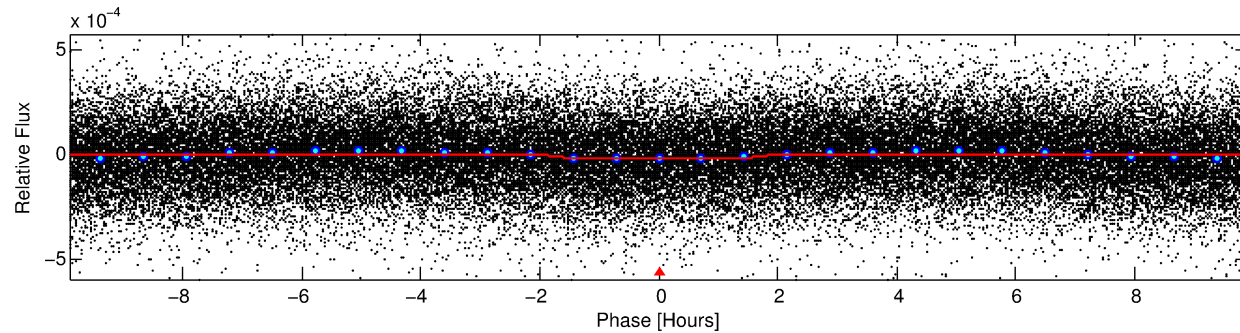
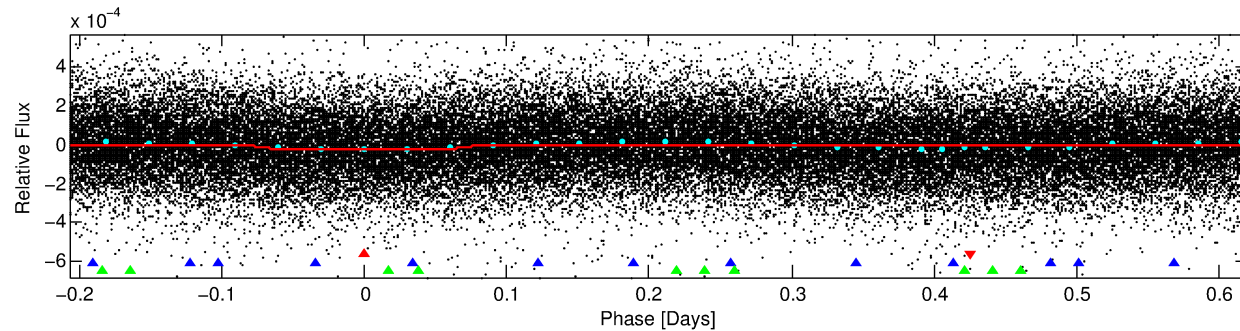
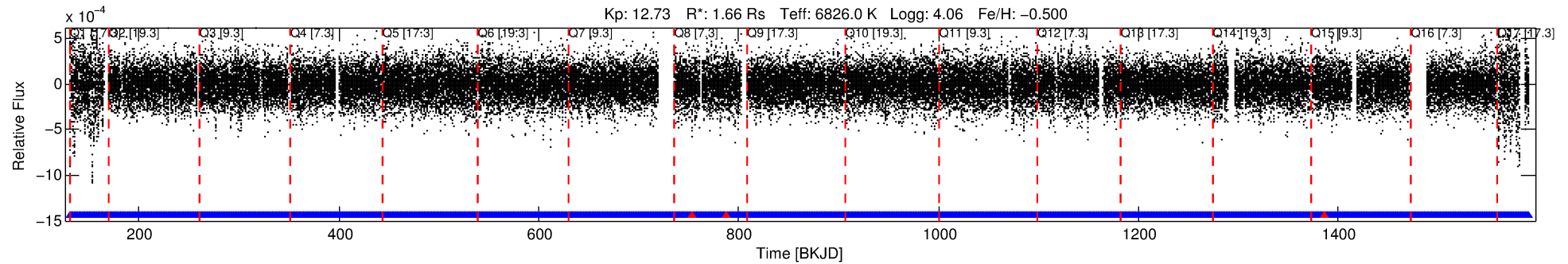
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010793114-01

No Significant Match Found

DV One-Page Summary

KIC: 10793114 Candidate: 1 of 3 Period: 0.827 d



DV Fit Results:

Period = 0.82662 [0.00001] d
Epoch = 131.6168 [0.0027] BKJD
Rp/R* = 0.0045 [0.0009]
a/R* = 1.63 [1.16]
b = 0.57 [1.37]
Seff = 16295.34 [8405.27]
Teq = 2881 [372] K
Rp = 0.81 [0.31] Re
a = 0.0181 [0.0056] AU
Ag = 4.18 [2.75] [1.16 σ]
Teffp = 6370 [749] K [4.17 σ]

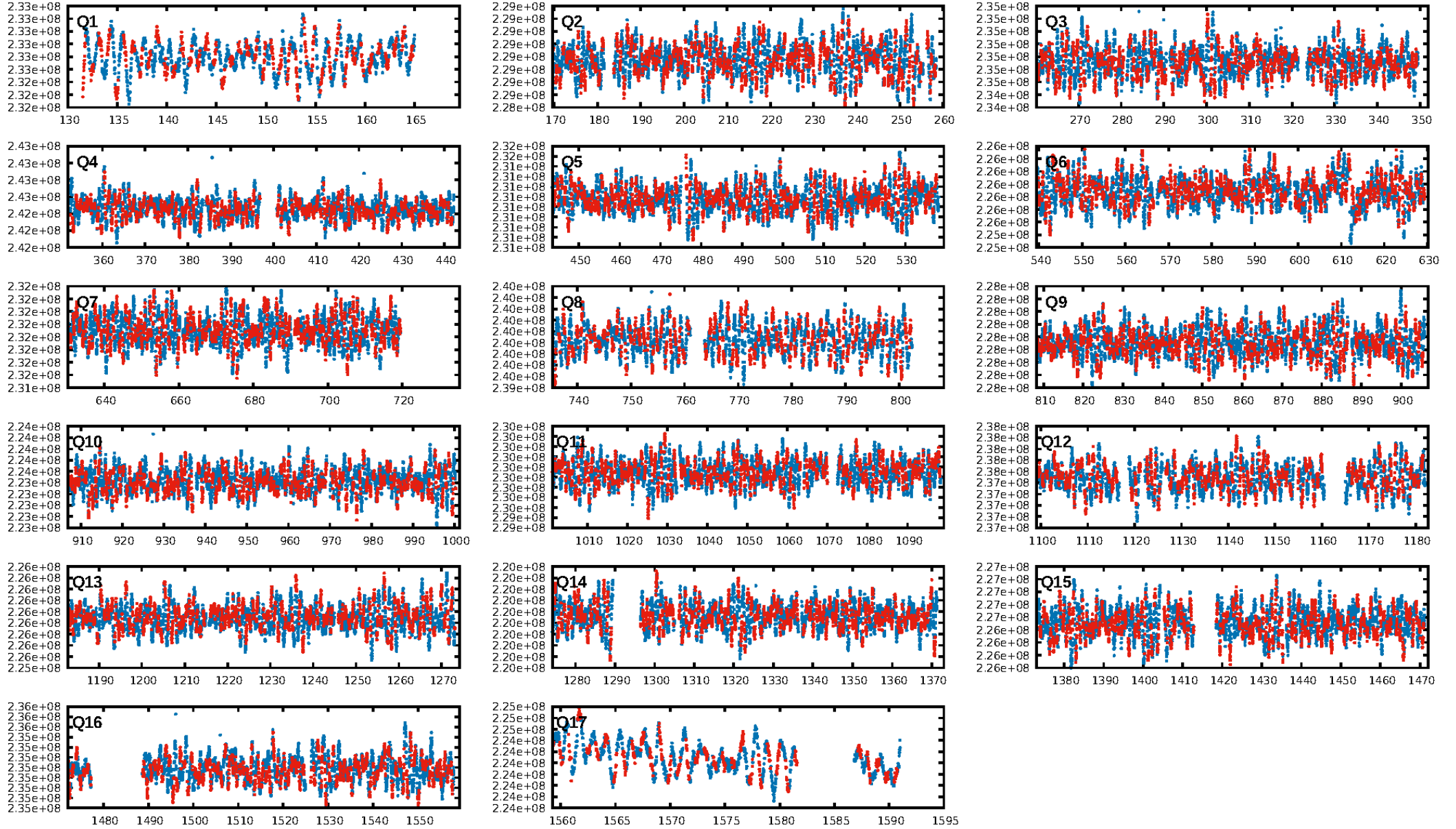
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [333.75 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.13e-11
RollingBand-fgt: 1.00 [1542/1545]
GhostDiagnostic-chr: 3.324
Centroid-sig: 11.9%
Centroid-so: 0.729 arcsec [1.48 σ]
OotOffset-rm: 0.043 arcsec [0.24 σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 0.171 arcsec [0.78 σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.75 [12/16]
DiffImageOverlap-fno: 1.00 [17/17]

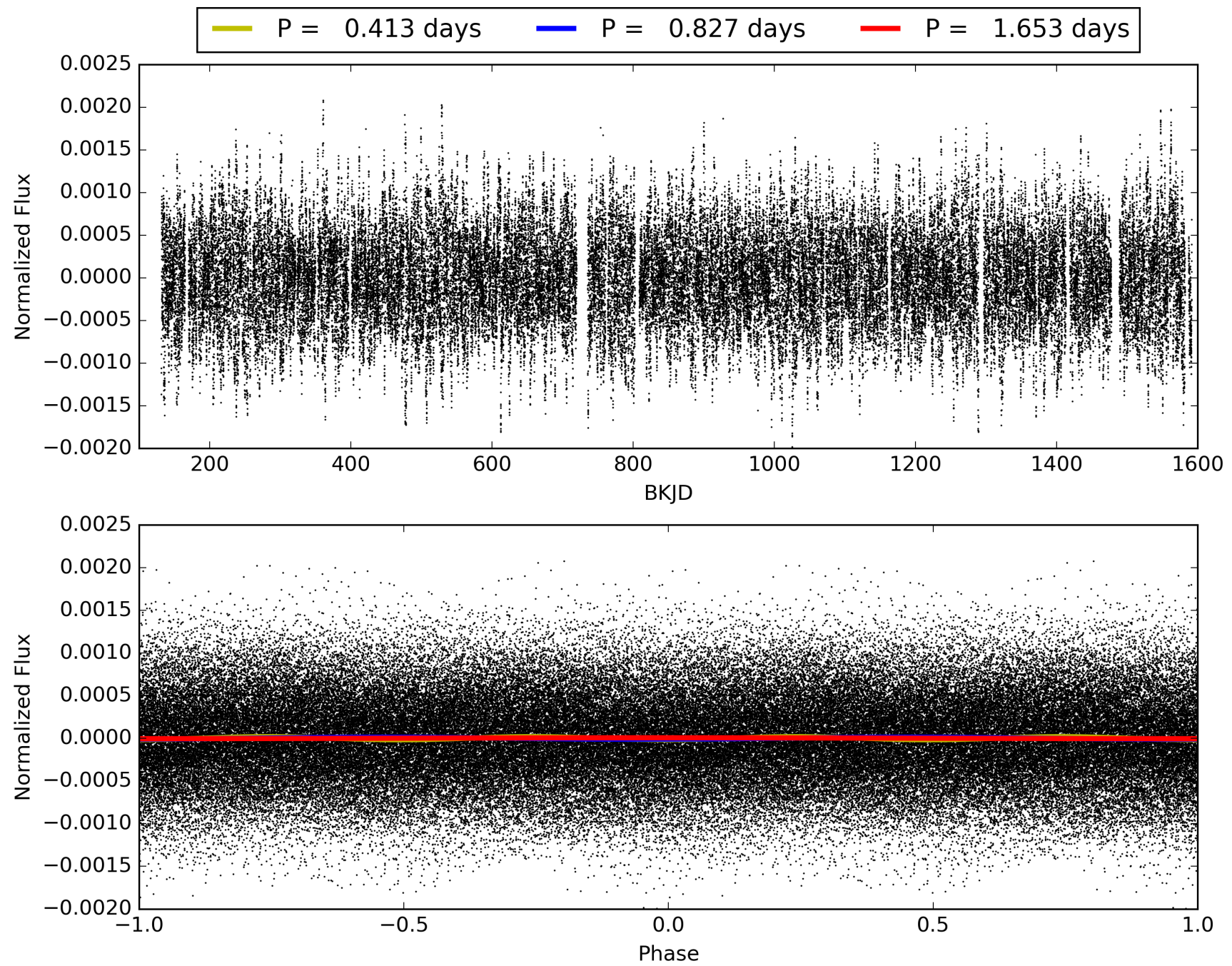
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010793114-01, PDC Light Curves

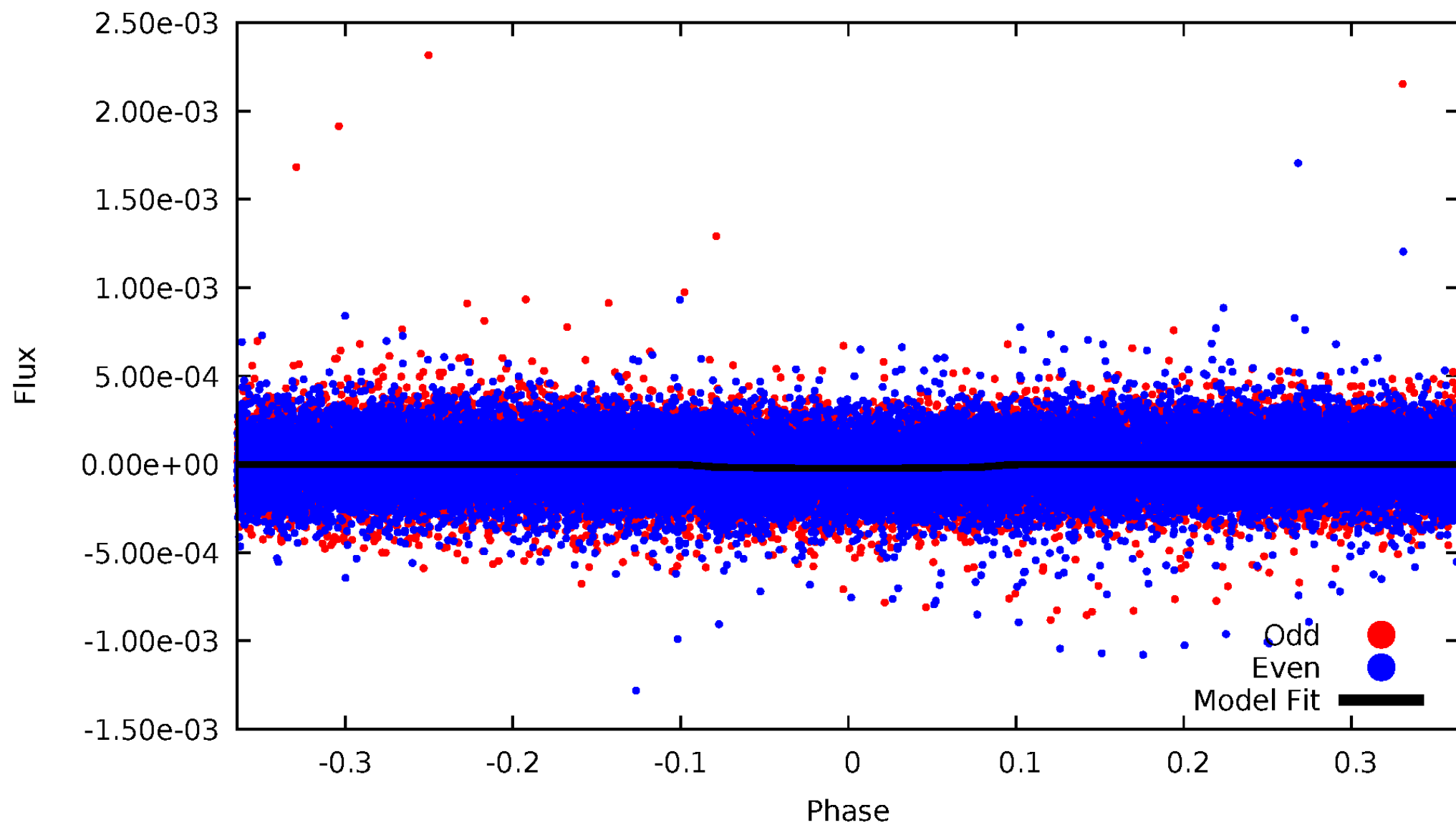


TCE 010793114-01



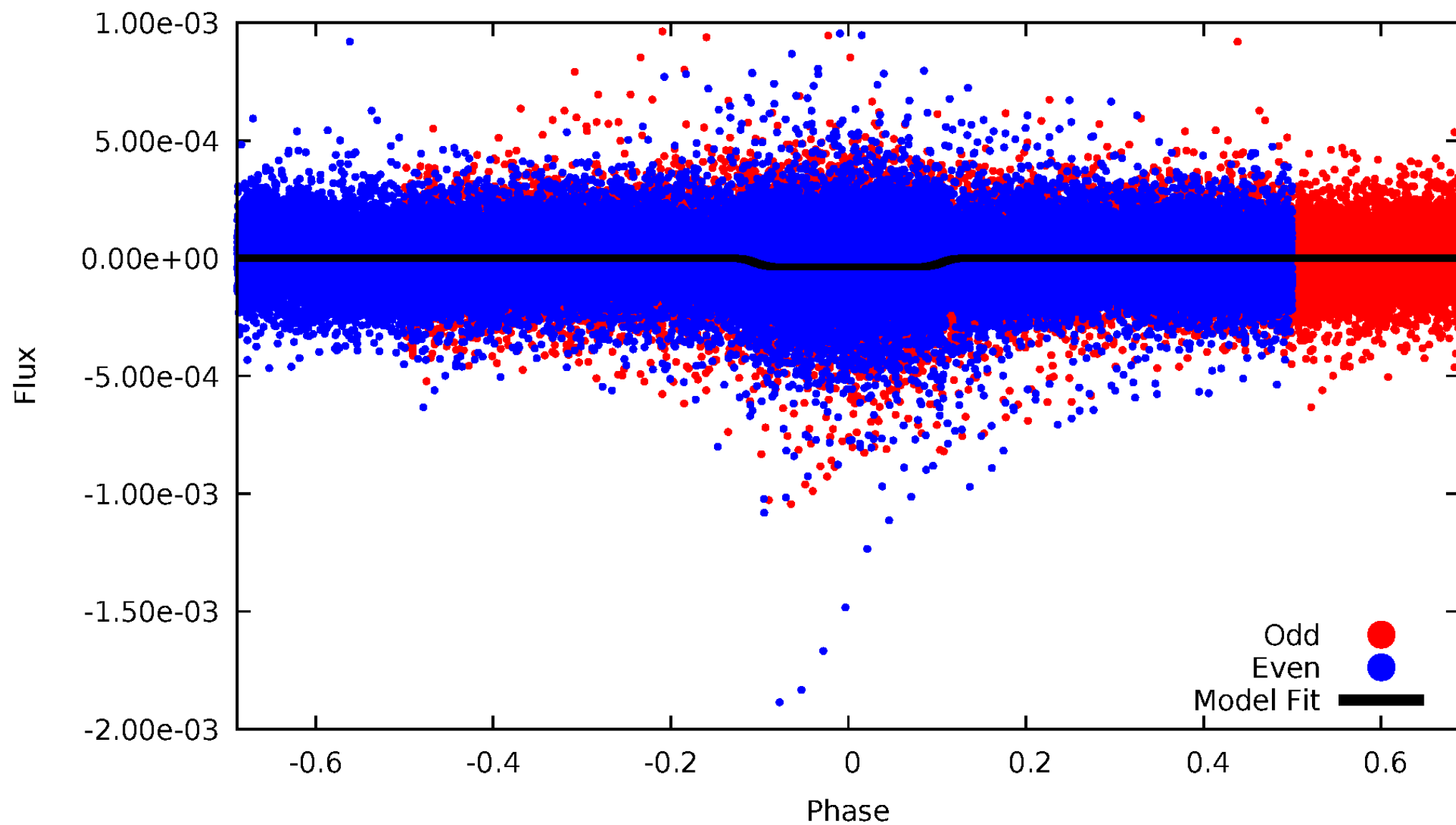
DV Odd/Even

TCE 010793114-01



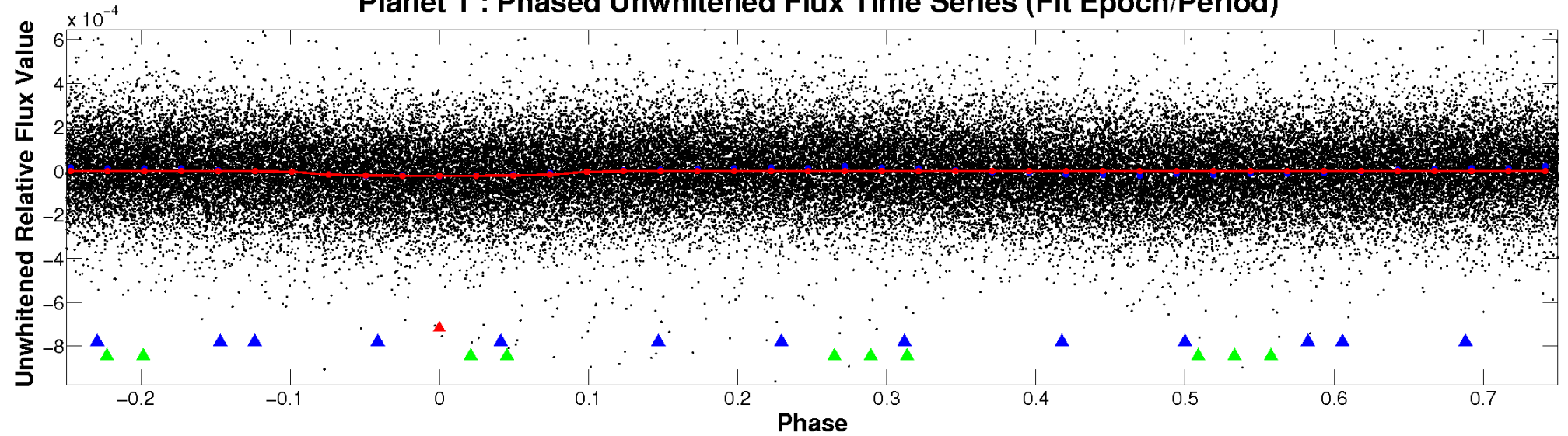
ALT Odd/Even

TCE 010793114-01

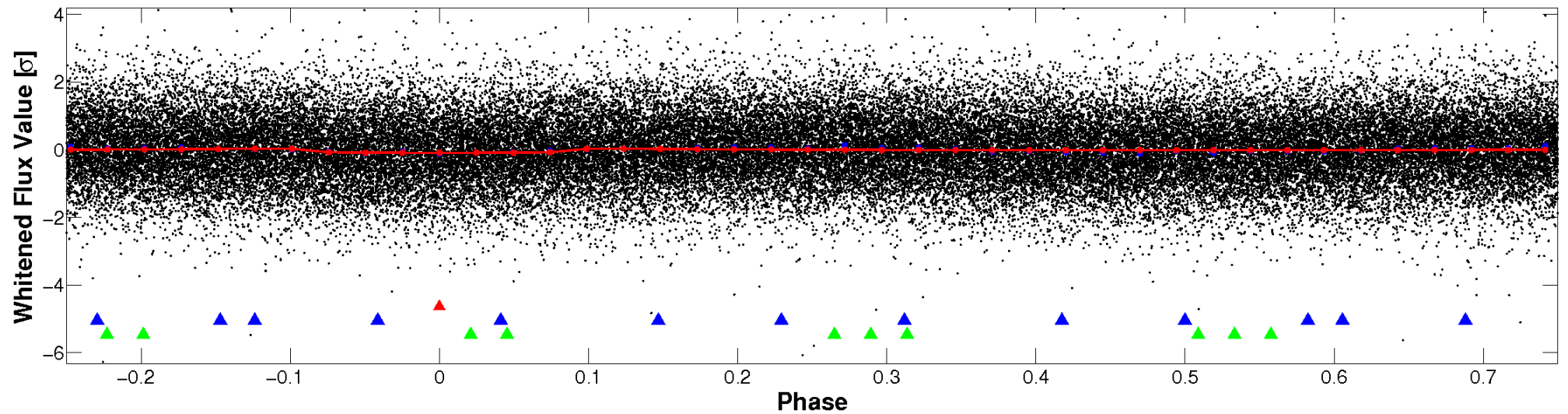


Non-Whitened Vs. Whitened Light Curve

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

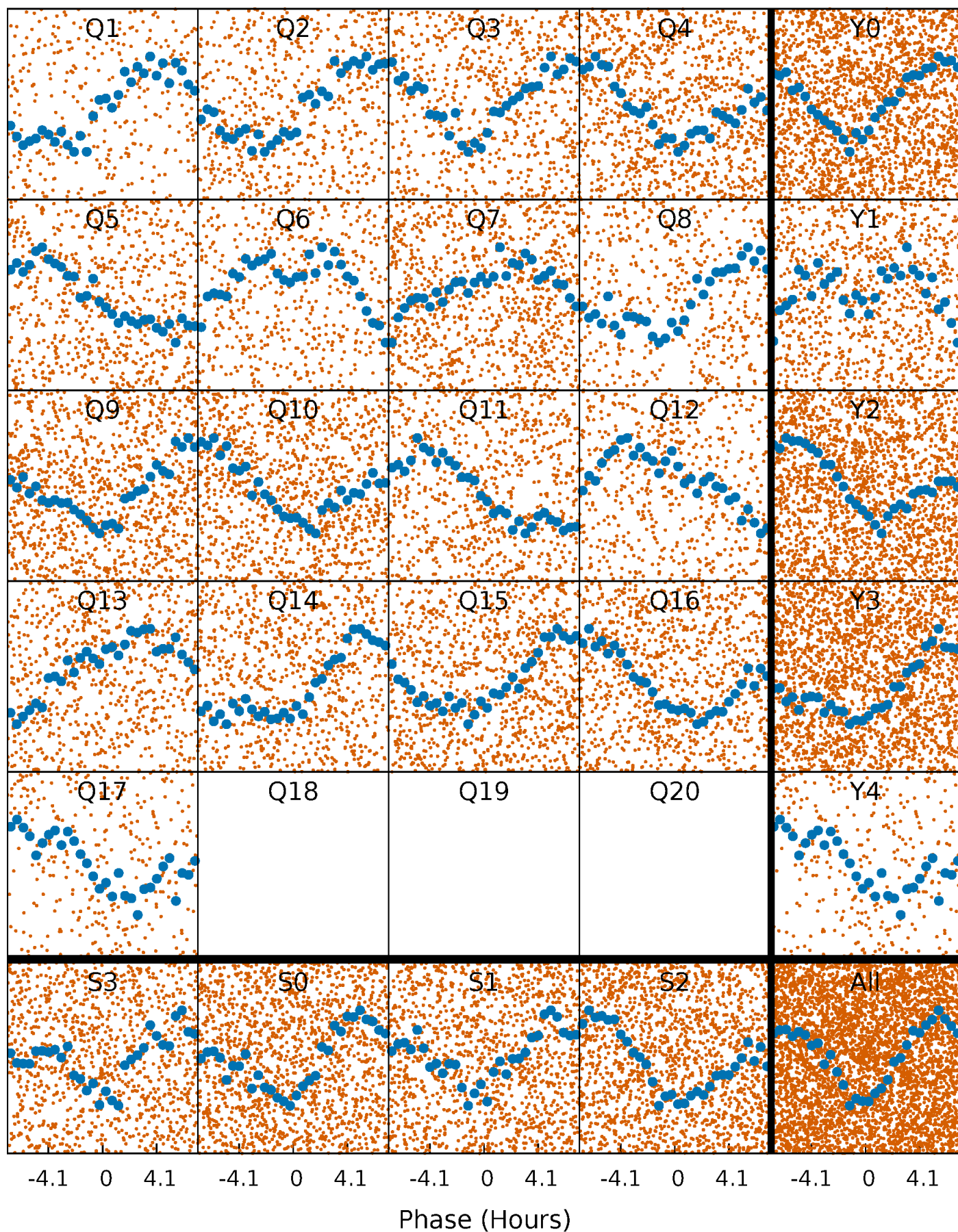


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



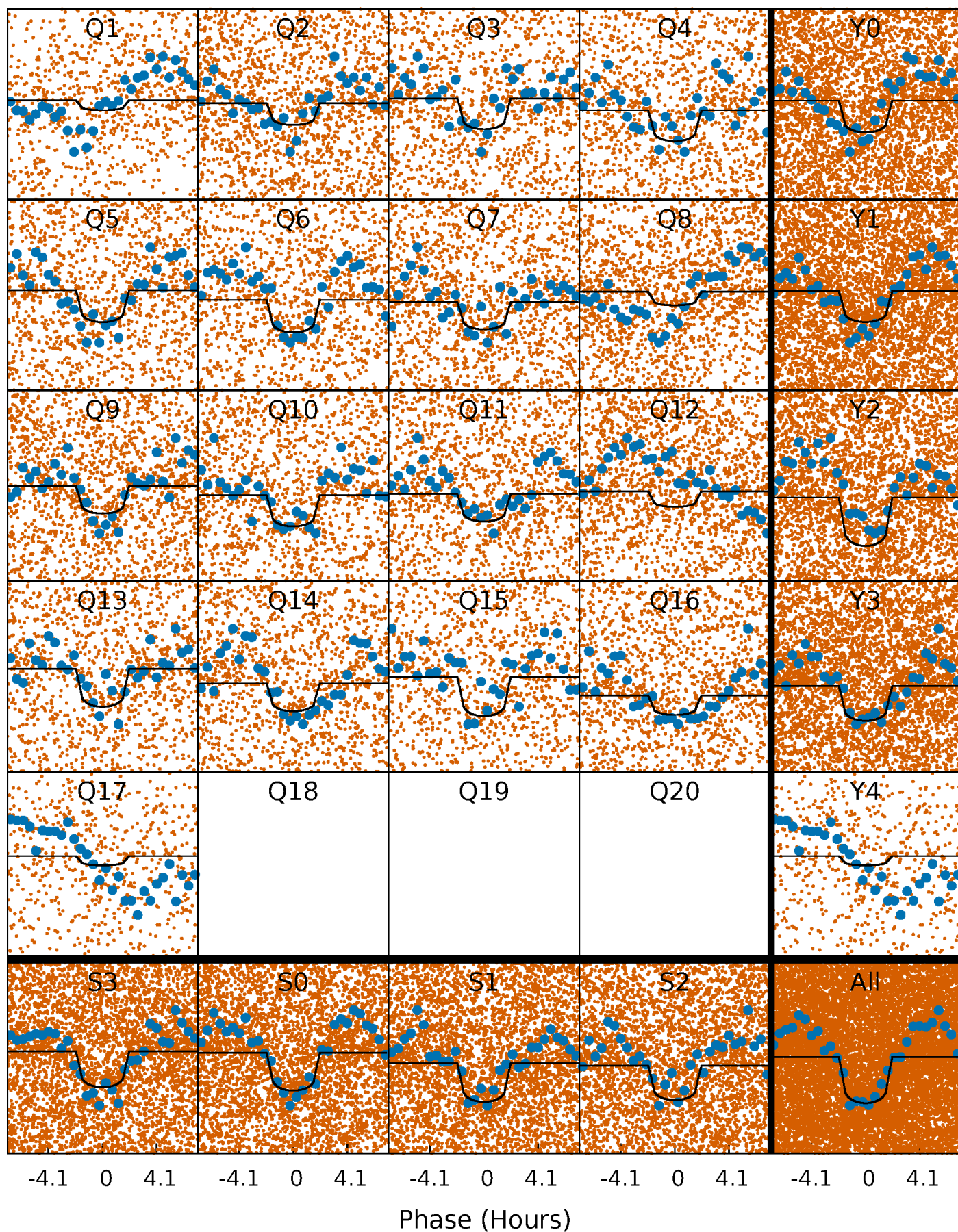
PDC Quarter-Phased Transit Curves

TCE 010793114-01 P= 0.826622 Days $T_0=131.616760$ (BKJD)



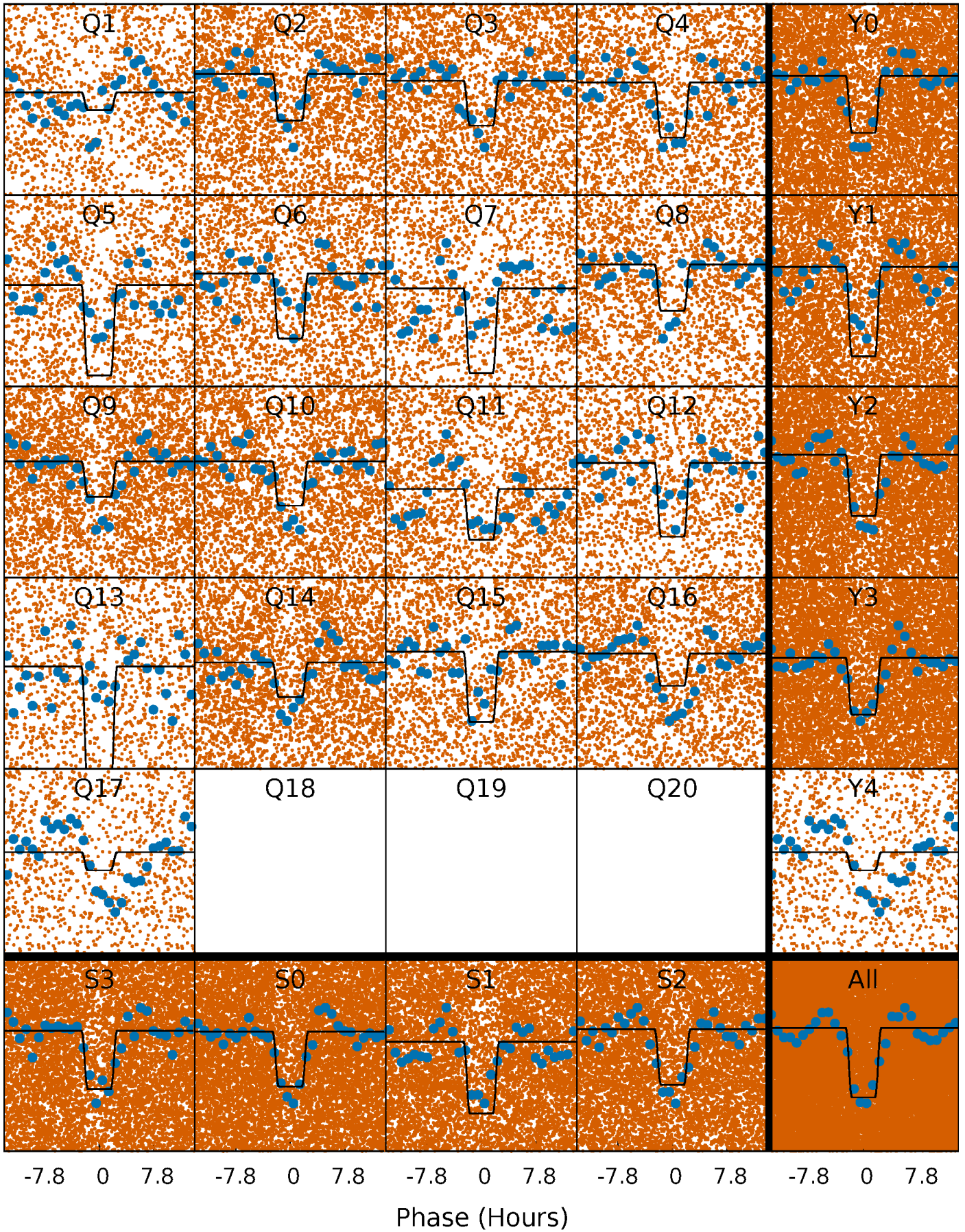
DV Quarter-Phased Transit Curves

TCE 010793114-01 P= 0.826622 Days $T_0=131.616760$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

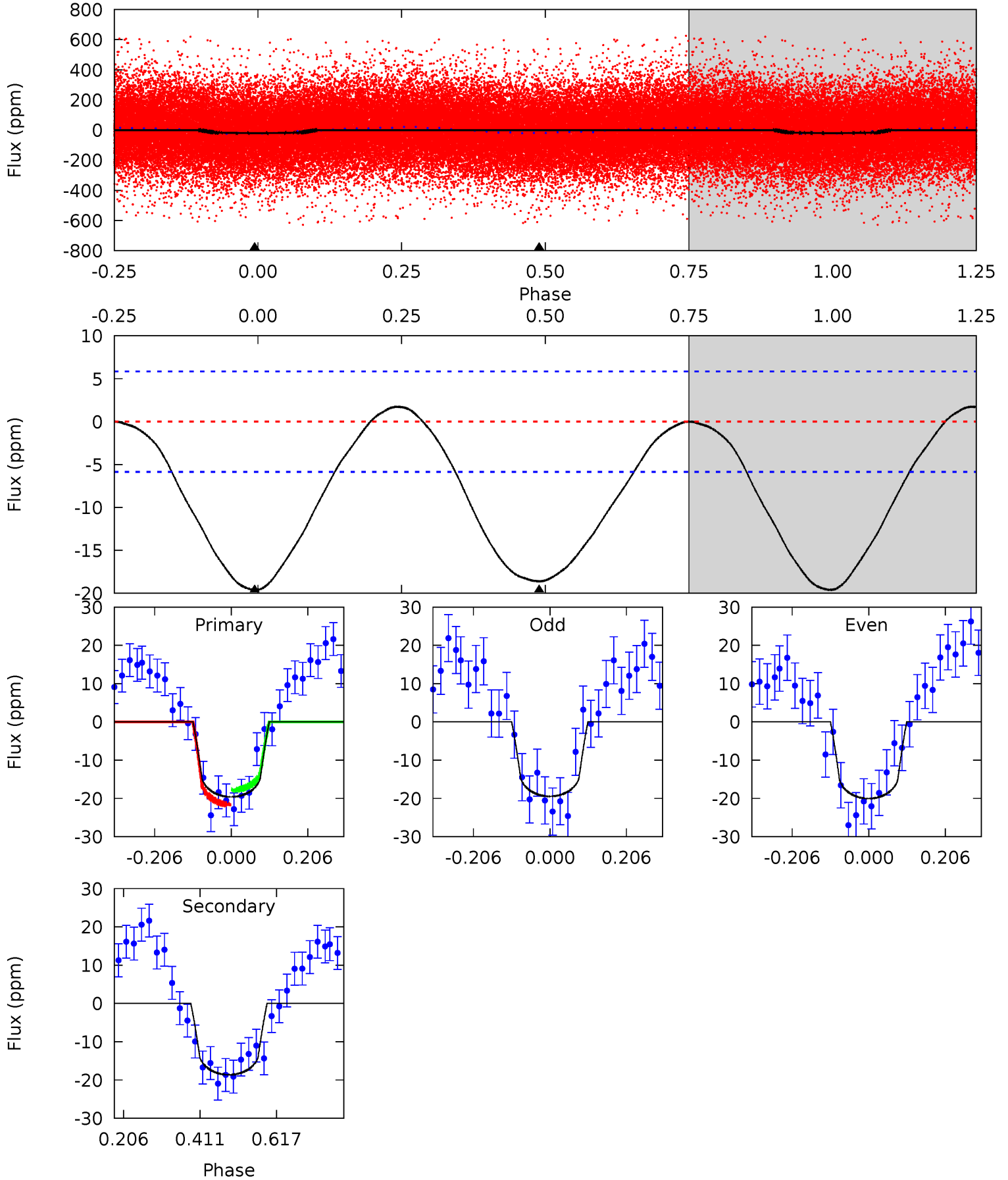
TCE 010793114-01 P= 0.826641 Days $T_0=131.596717$ (BKJD)



DV Model-Shift Uniqueness Test

010793114-01, P = 0.826622 Days, E = 130.790138 Days

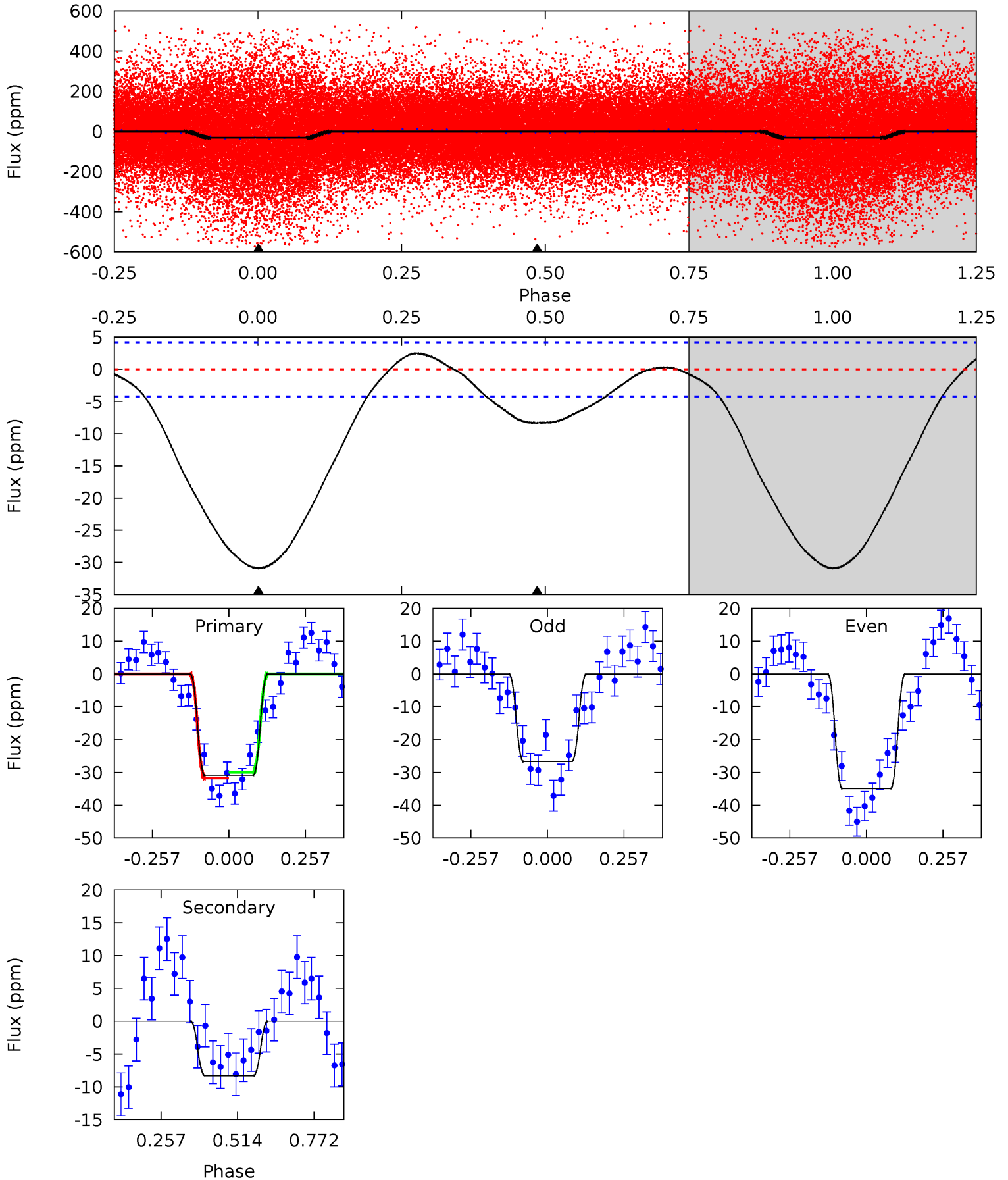
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.8	14.0	0	0	4.41	1.27	0.76	14.8	14.8	14.0	14.0	0.22	1.25	0.08	1.45



Alt Model-Shift Uniqueness Test

010793114-01, P = 0.826641 Days, E = 130.770076 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.0	8.63	0	0	4.36	1.13	1.13	32.0	32.0	8.63	8.63	4.34	1.13	0.07	0.72



Stellar Parameters For KIC 010793114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6826^{+214}_{-285}	$4.064^{+0.286}_{-0.154}$	$-0.500^{+0.250}_{-0.300}$	$1.661^{+0.435}_{-0.531}$	$1.167^{+0.193}_{-0.176}$	$0.358^{+0.595}_{-0.173}$
	+3%/-4%	+7%/-4%	+50%/-60%	+26%/-32%	+17%/-15%	+166%/-48%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 010793114-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-19 ± 1	$0.80^{+0.23}_{-0.19}$	3983^{+306}_{-347}	6578^{+928}_{-748}	$5.367^{+4.021}_{-2.159}$
Alt.	-8 ± 1	$1.05^{+0.26}_{-0.23}$	3974^{+301}_{-365}	4592^{+434}_{-416}	$1.340^{+0.908}_{-0.462}$

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 $A_{obs} \gg 1.0$

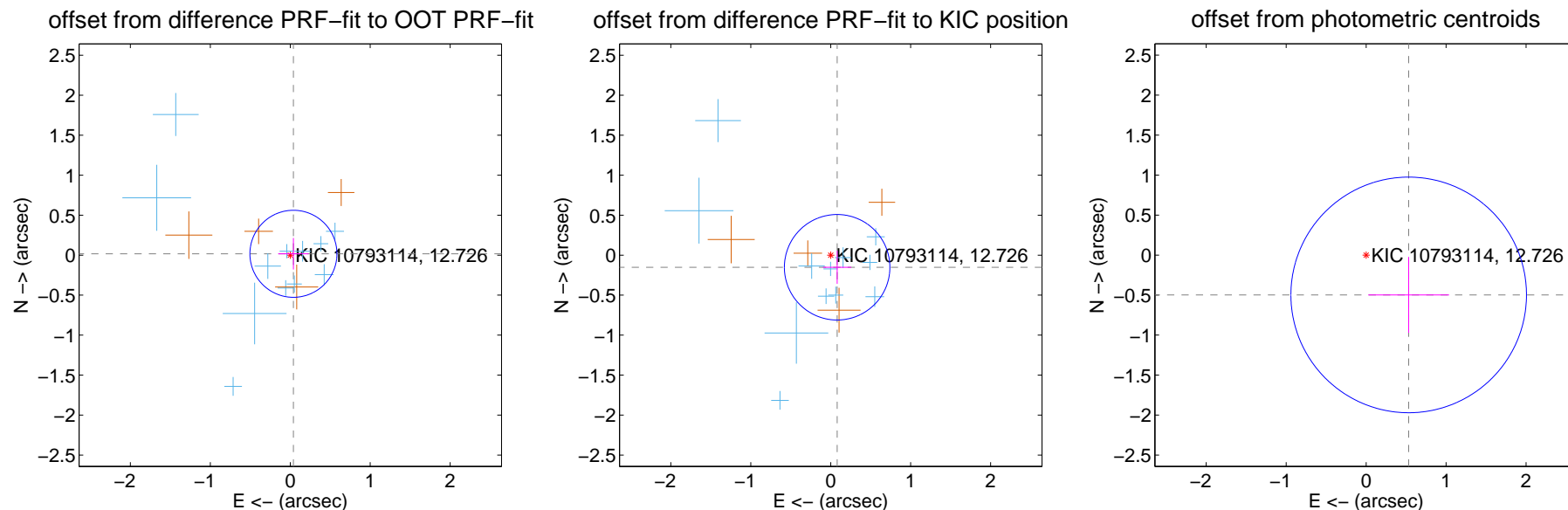
DV Centroid Data

Supplemental centroid analysis for 010793114-01. Kepler magnitude: 12.73. Transit SNR 9.53

There are 12 quarters with good PRF difference image offsets

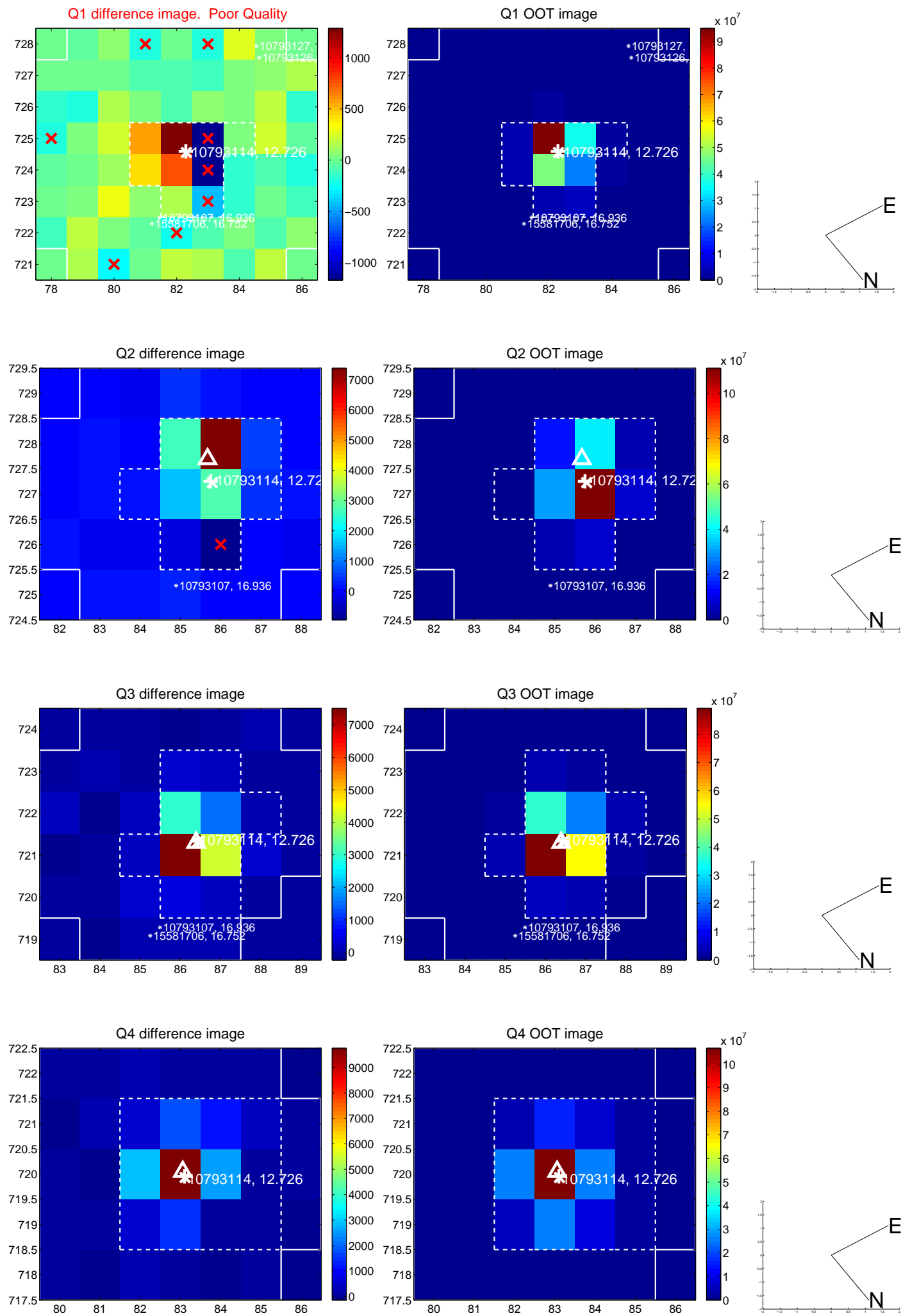
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.043 ± 0.181	0.24	-0.039 ± 0.190	0.017 ± 0.197
PRF-fit source offset from KIC position	0.171 ± 0.220	0.78	-0.080 ± 0.177	-0.151 ± 0.207
photometric centroid source offset	0.73 ± 0.49	1.48	-0.53 ± 0.51	-0.50 ± 0.47

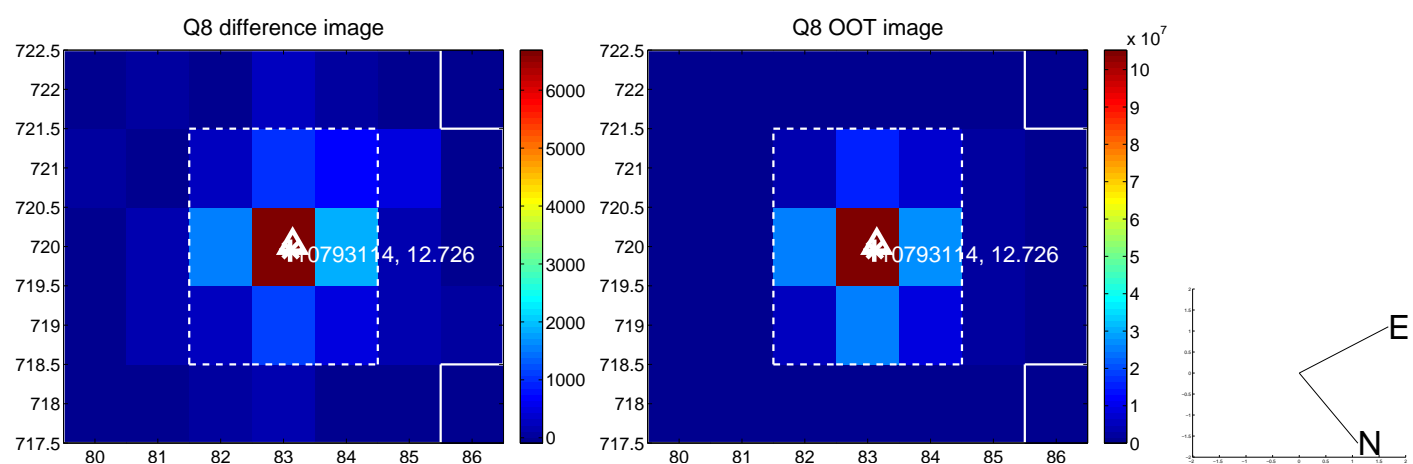
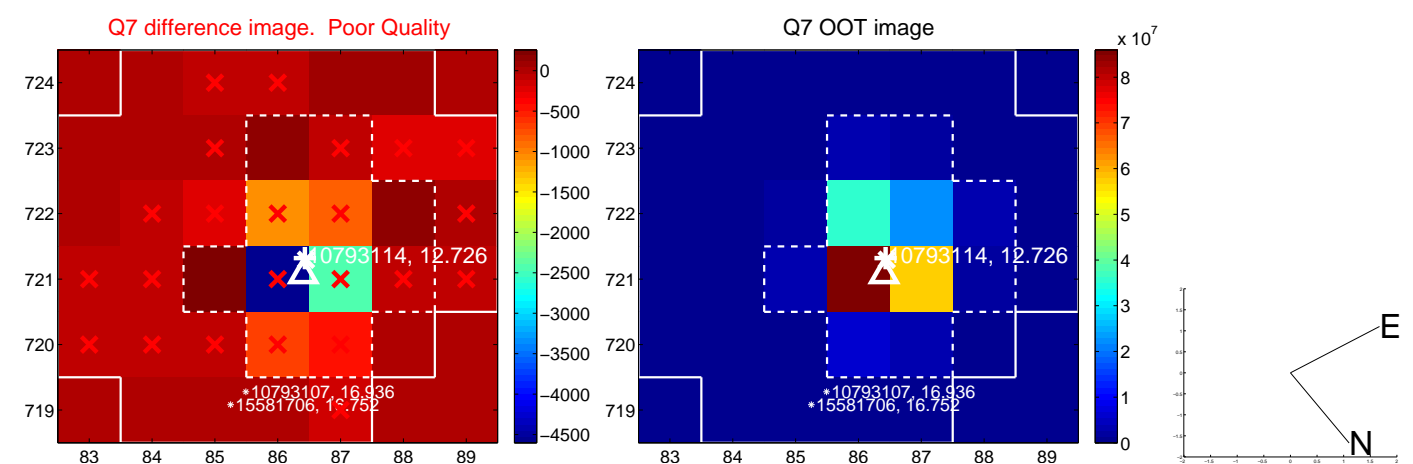
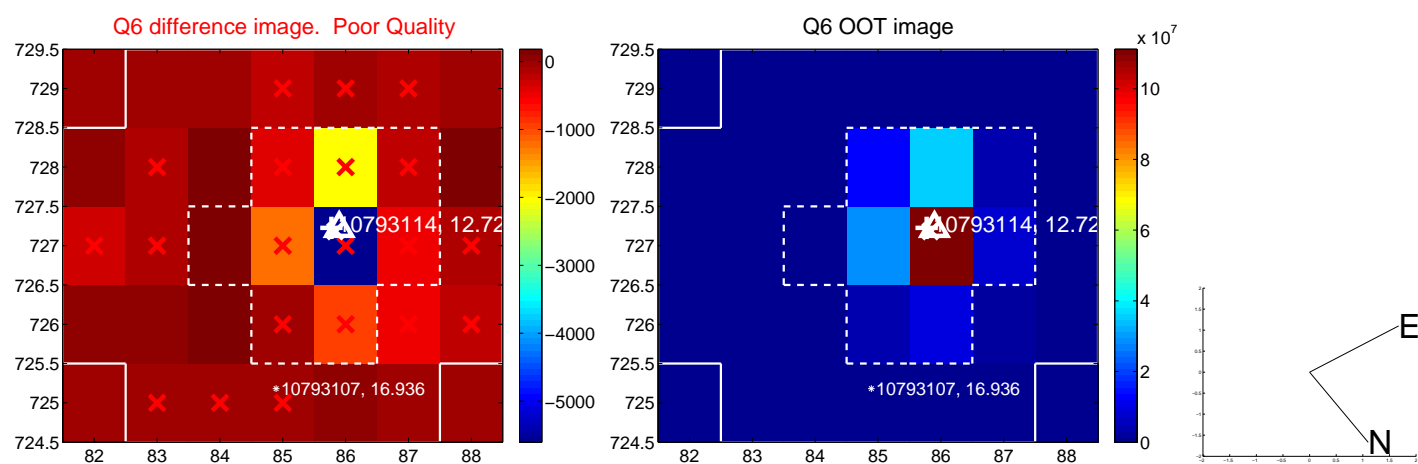
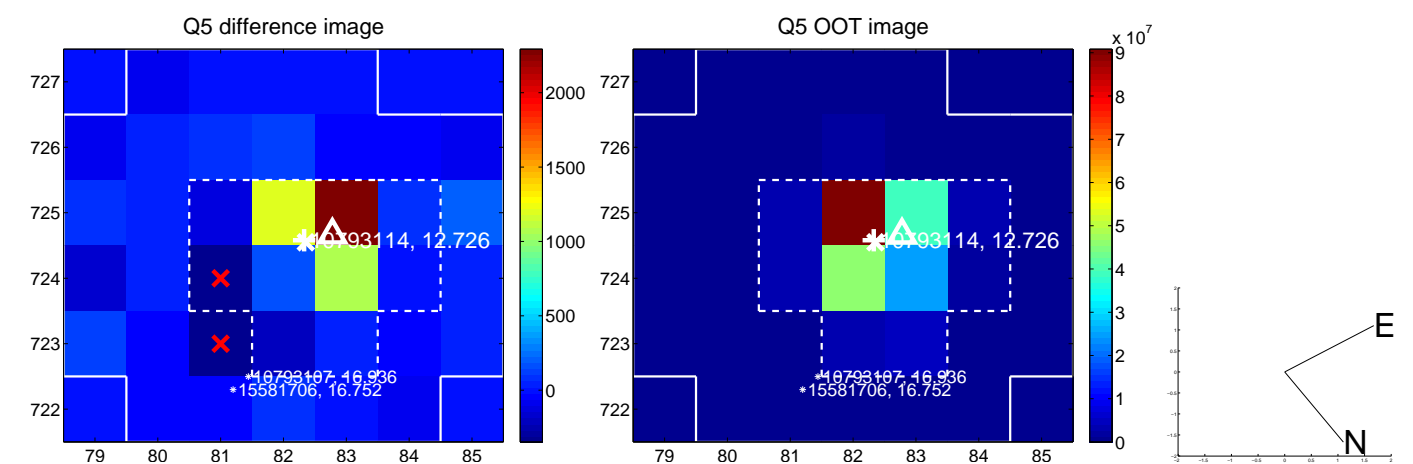


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

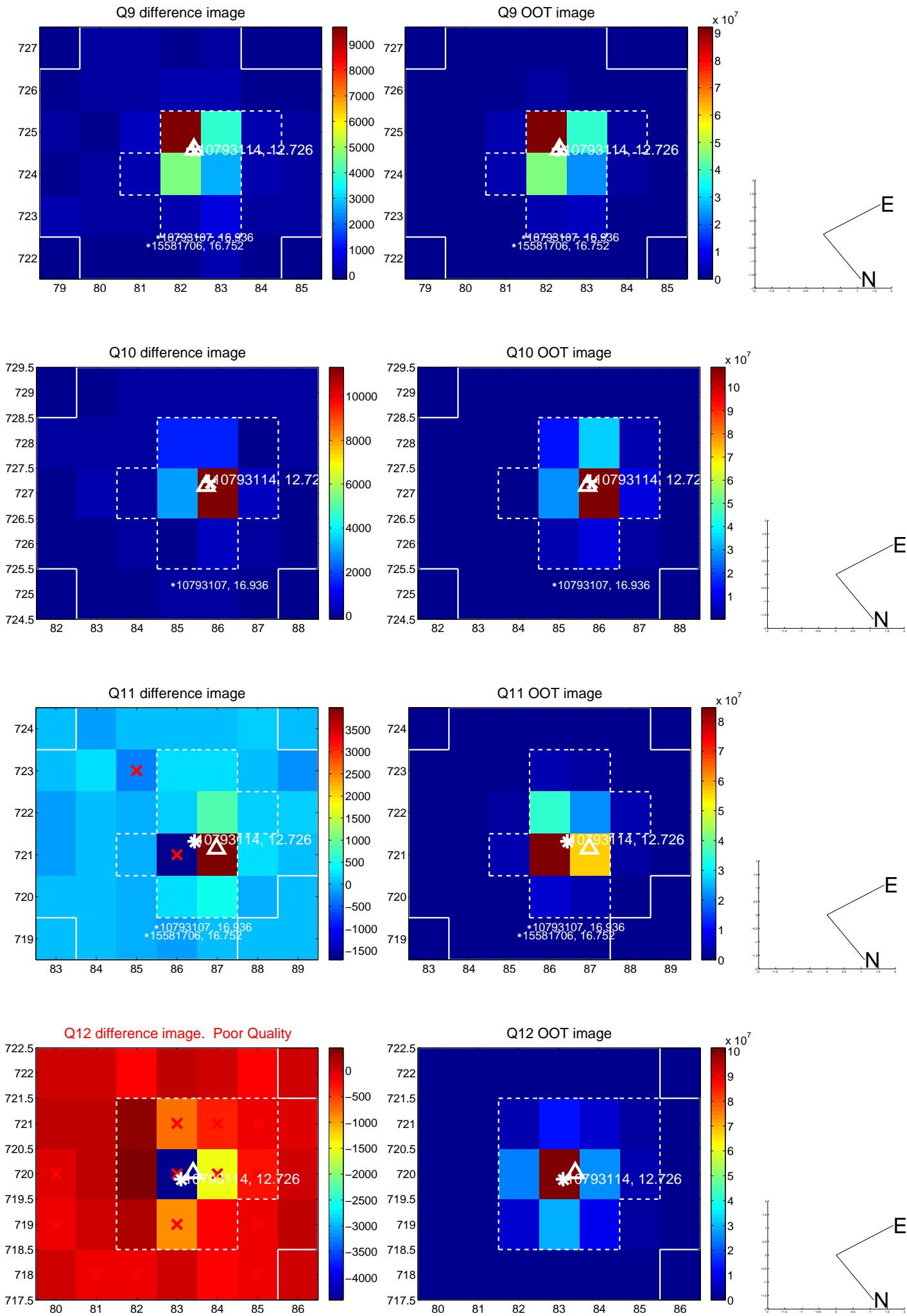
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



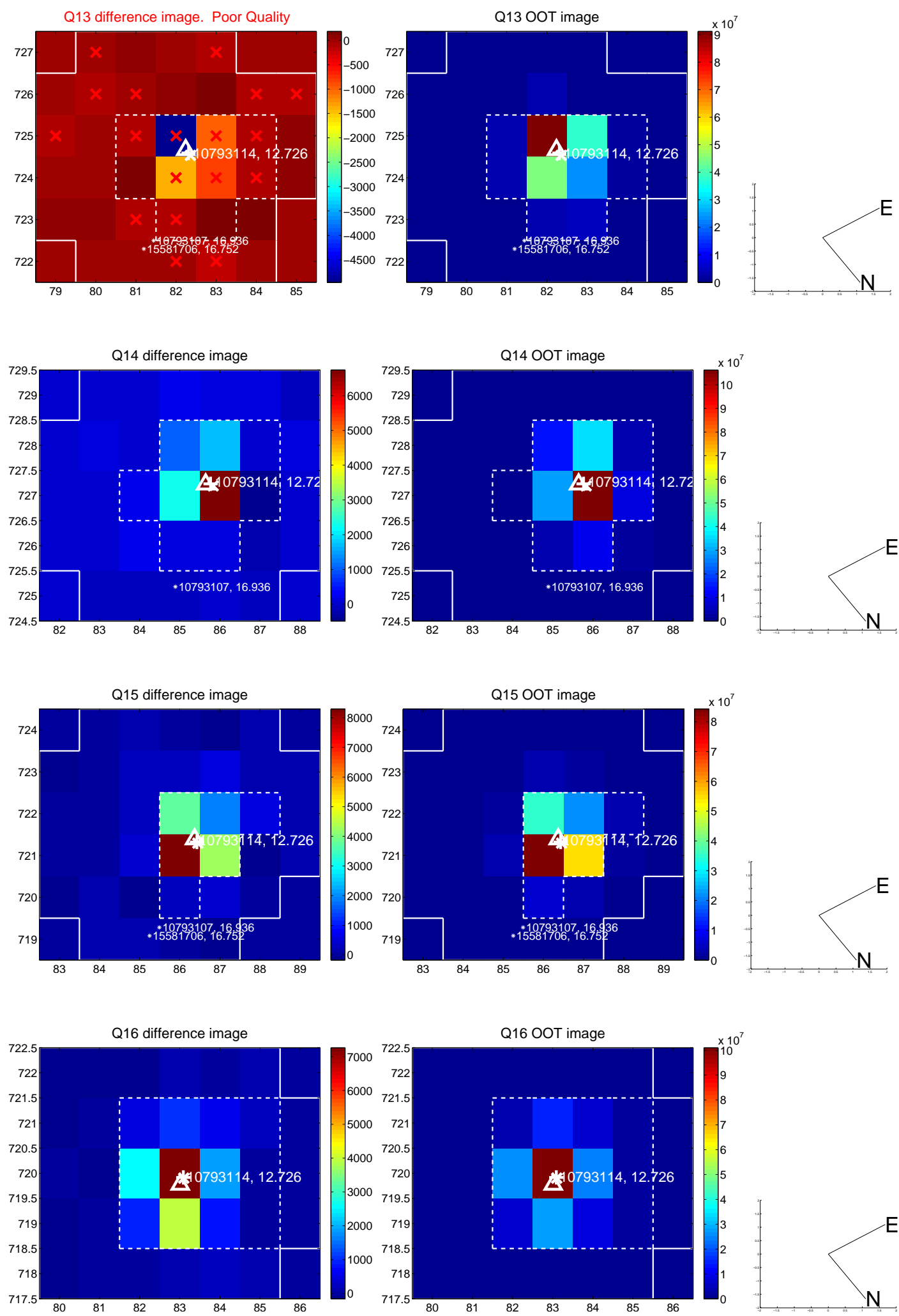
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



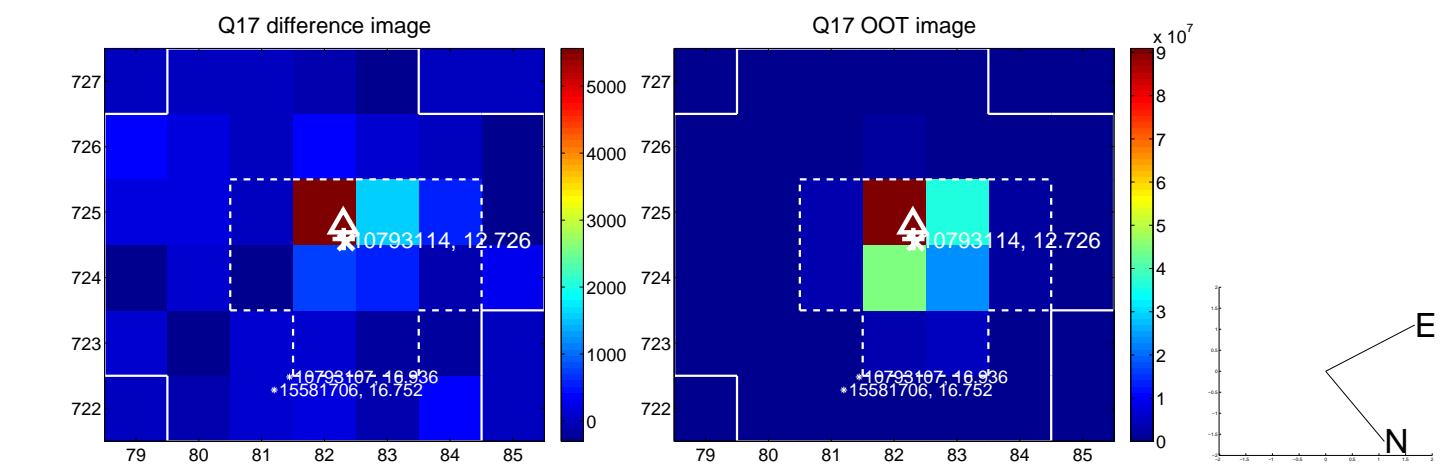
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



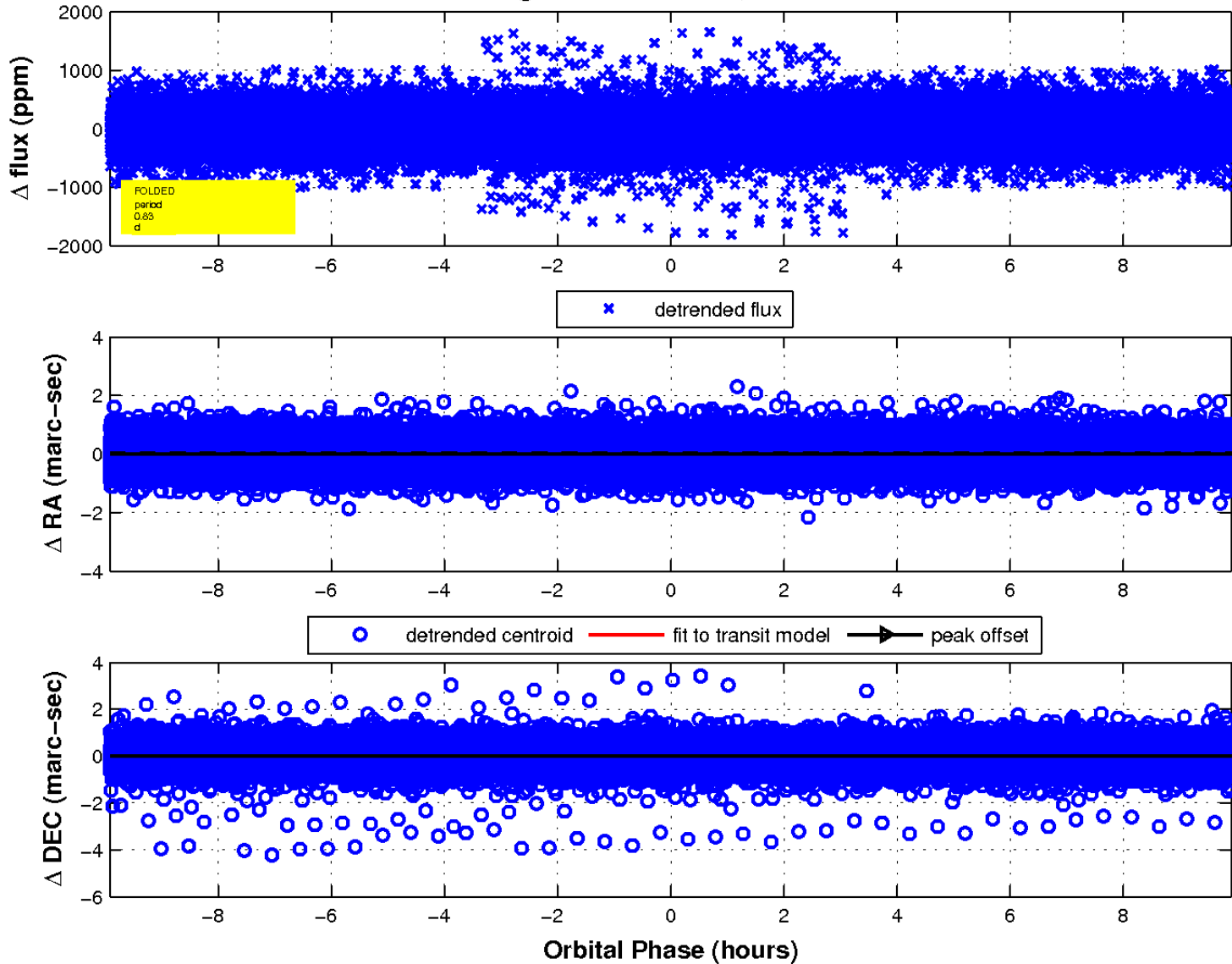
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

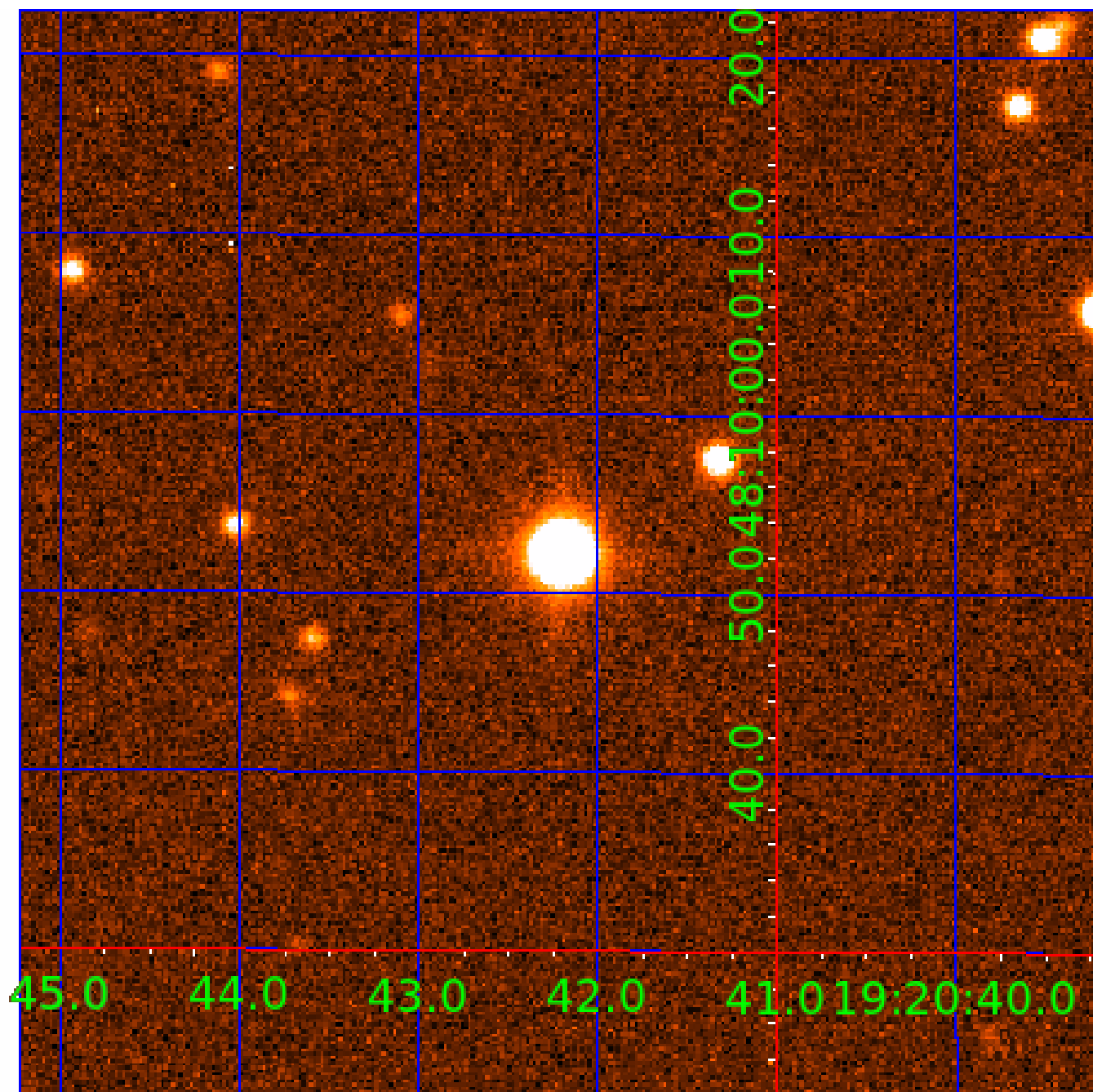


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 010793114

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})
010793114-01	OBS	No	0.826622	131.616760	21.8	3.615	8.2	9.5	1.66	6826	0.81	16295.34
010793114-02	OBS	No	113.023464	132.321953	183.6	7.213	7.5	5.1	1.66	6826	2.50	23.13
010793114-03	OBS	No	154.376636	179.154810	350.9	2.232	7.4	6.8	1.66	6826	4.01	15.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010793114-01	OBS	FP	0.00	1	0	0	0	LPP_DV
010793114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010793114-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT

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

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

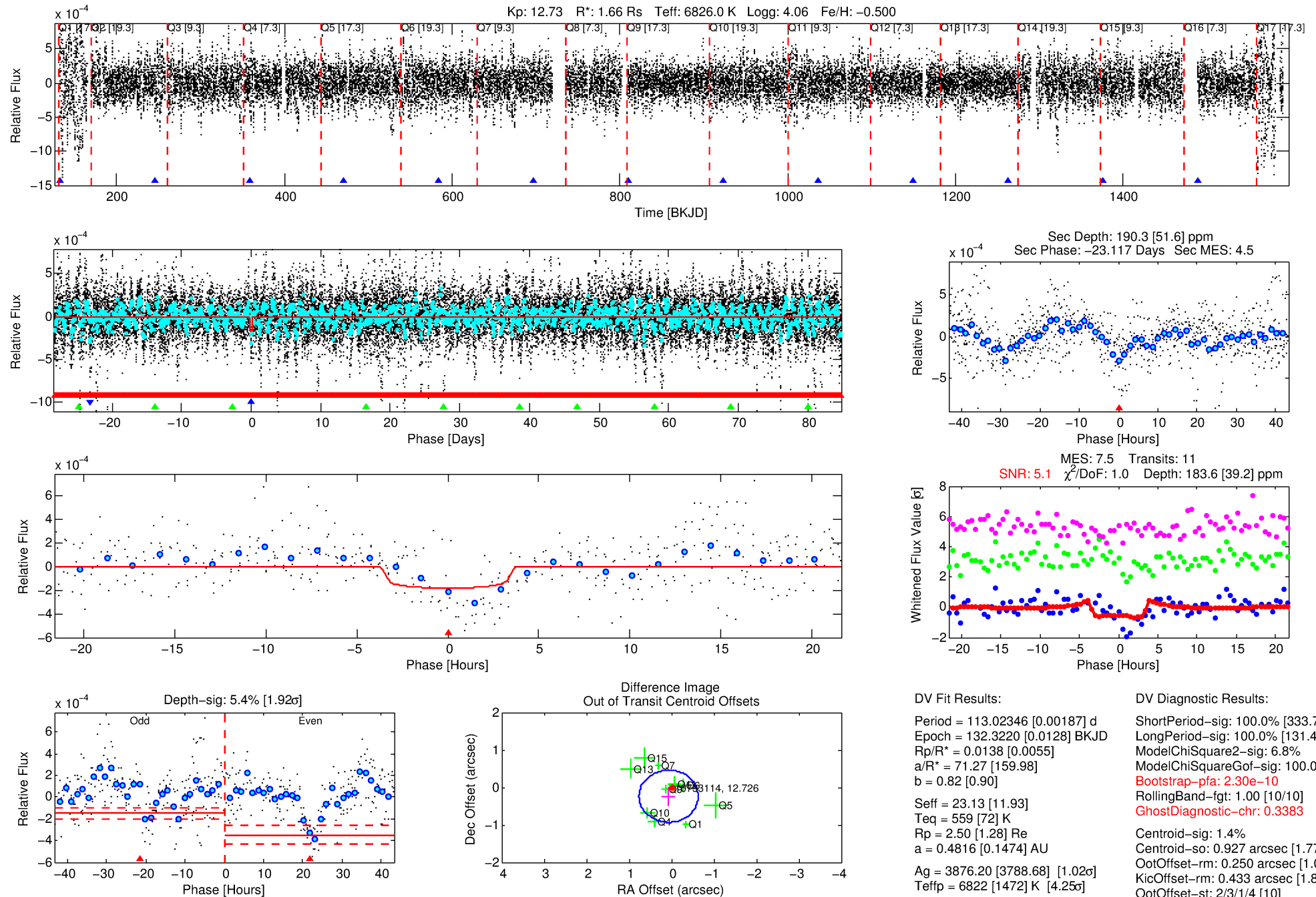
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010793114-02

No Significant Match Found

DV One-Page Summary

KIC: 10793114 Candidate: 2 of 3 Period: 113.023 d



DV Fit Results:

Period = 113.02346 [0.00187] d
Epoch = 132.3220 [0.0128] BKJD
Rp/R* = 0.0138 [0.0055]
a/R* = 71.27 [159.98]
b = 0.82 [0.90]
Seff = 23.13 [11.93]
Teq = 559 [72] K
Rp = 2.50 [1.28] Re
a = 0.4816 [0.1474] AU
Ag = 3876.20 [3788.68] [1.02σ]
Teffp = 6822 [1472] K [4.25σ]

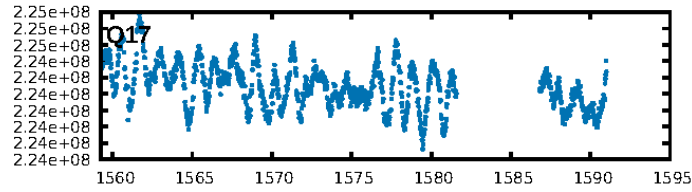
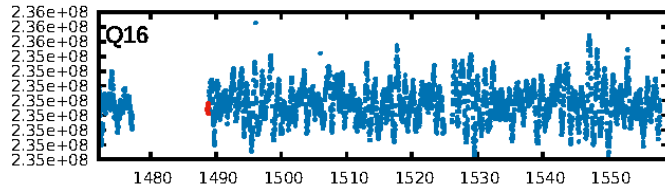
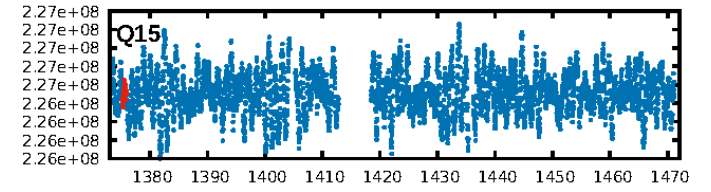
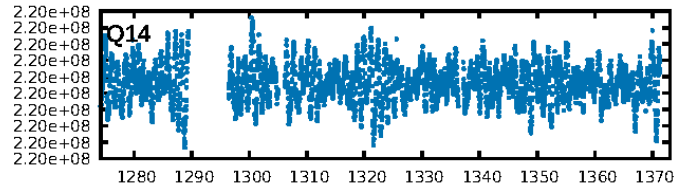
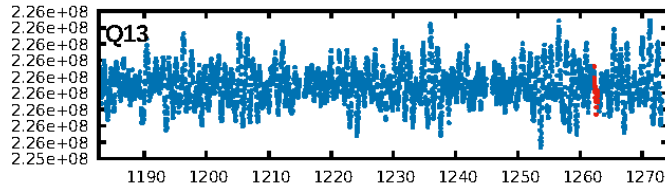
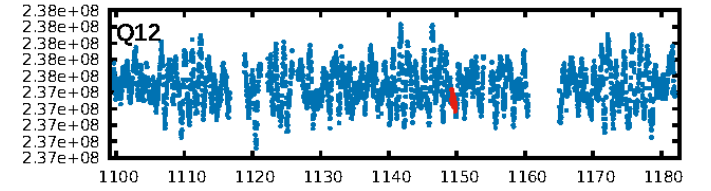
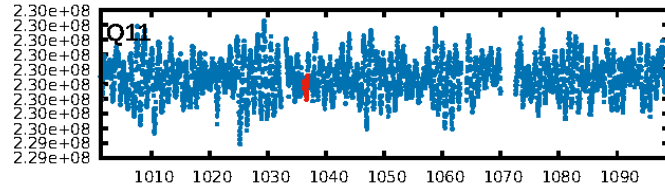
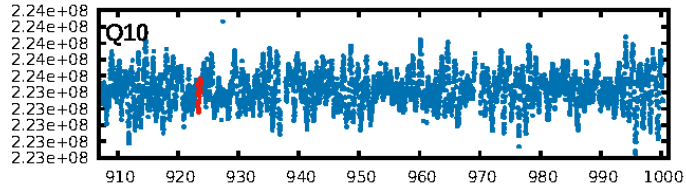
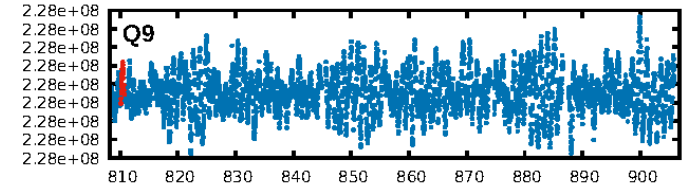
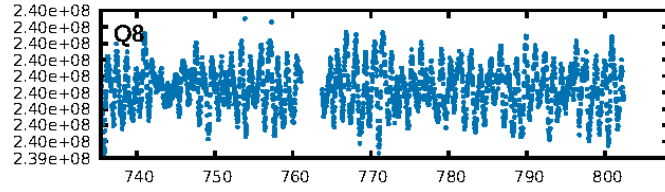
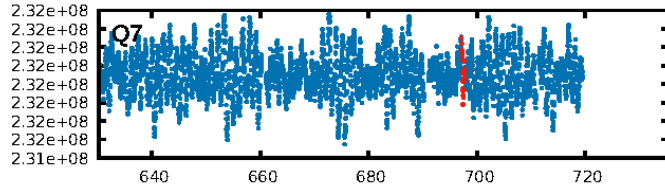
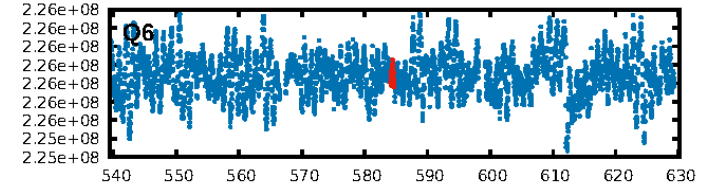
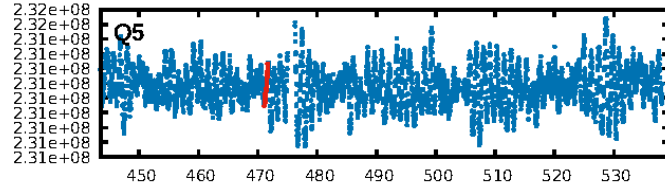
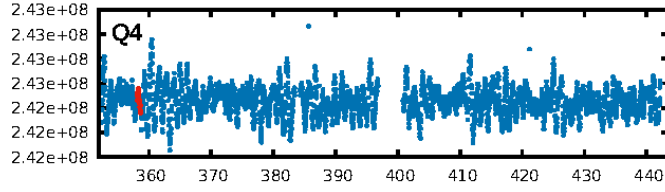
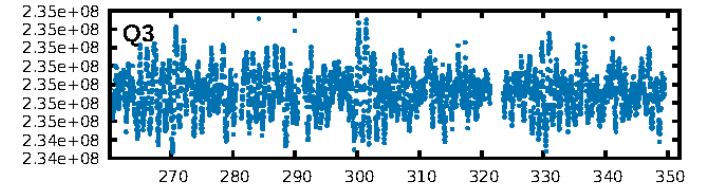
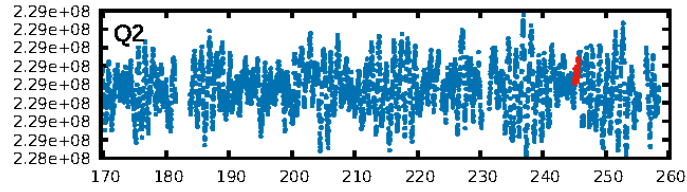
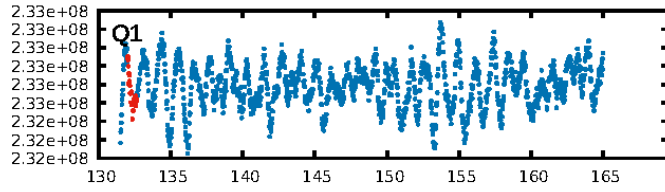
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [333.75σ]
LongPeriod-sig: 100.0% [131.44σ]
ModelChiSquare2-sig: 6.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.30e-10
RollingBand-fgt: 1.00 [10/10]
GhostDiagnostic-chr: 0.3383
Centroid-sig: 1.4%
Centroid-so: 0.927 arcsec [1.77σ]
OotOffset-rm: 0.250 arcsec [1.08σ]
KicOffset-rm: 0.433 arcsec [1.85σ]
OotOffset-st: 2/3/1/4 [10]
KicOffset-st: 2/3/1/4 [10]
DiffImageQuality-fgm: 0.60 [6/10]
DiffImageOverlap-fno: 0.00 [0/12]

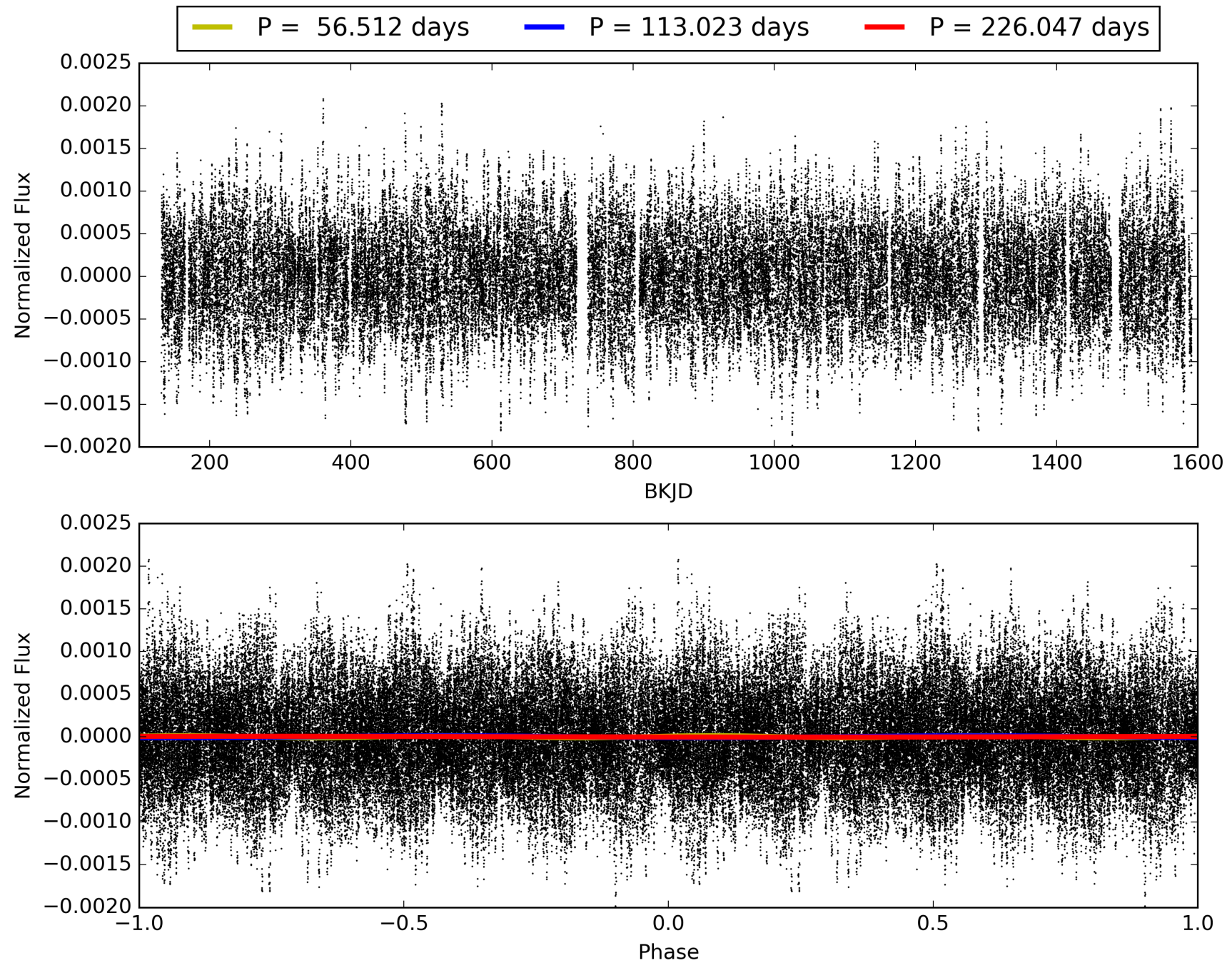
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:50:46 Z

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

TCE 010793114-02, PDC Light Curves

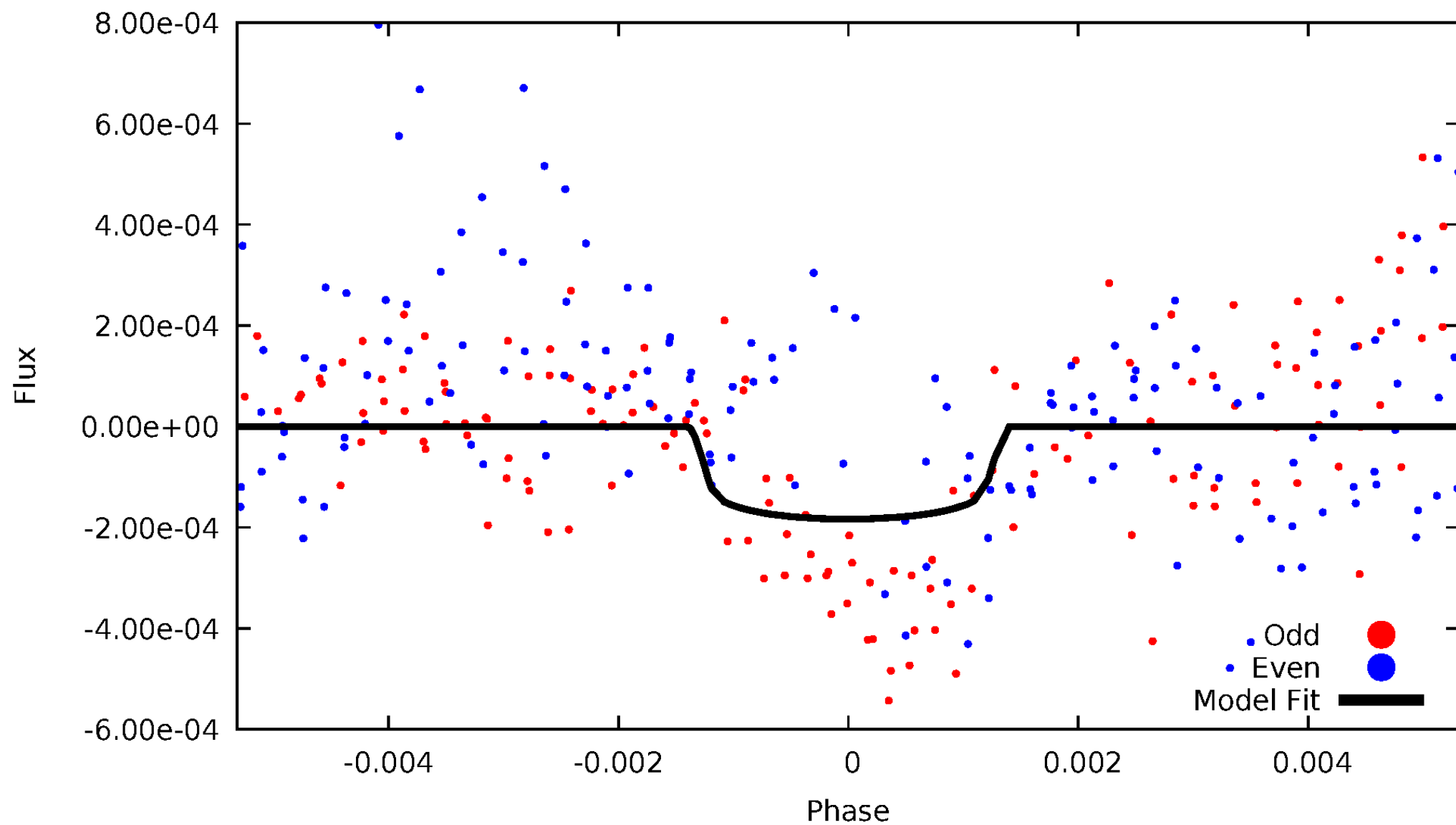


TCE 010793114-02



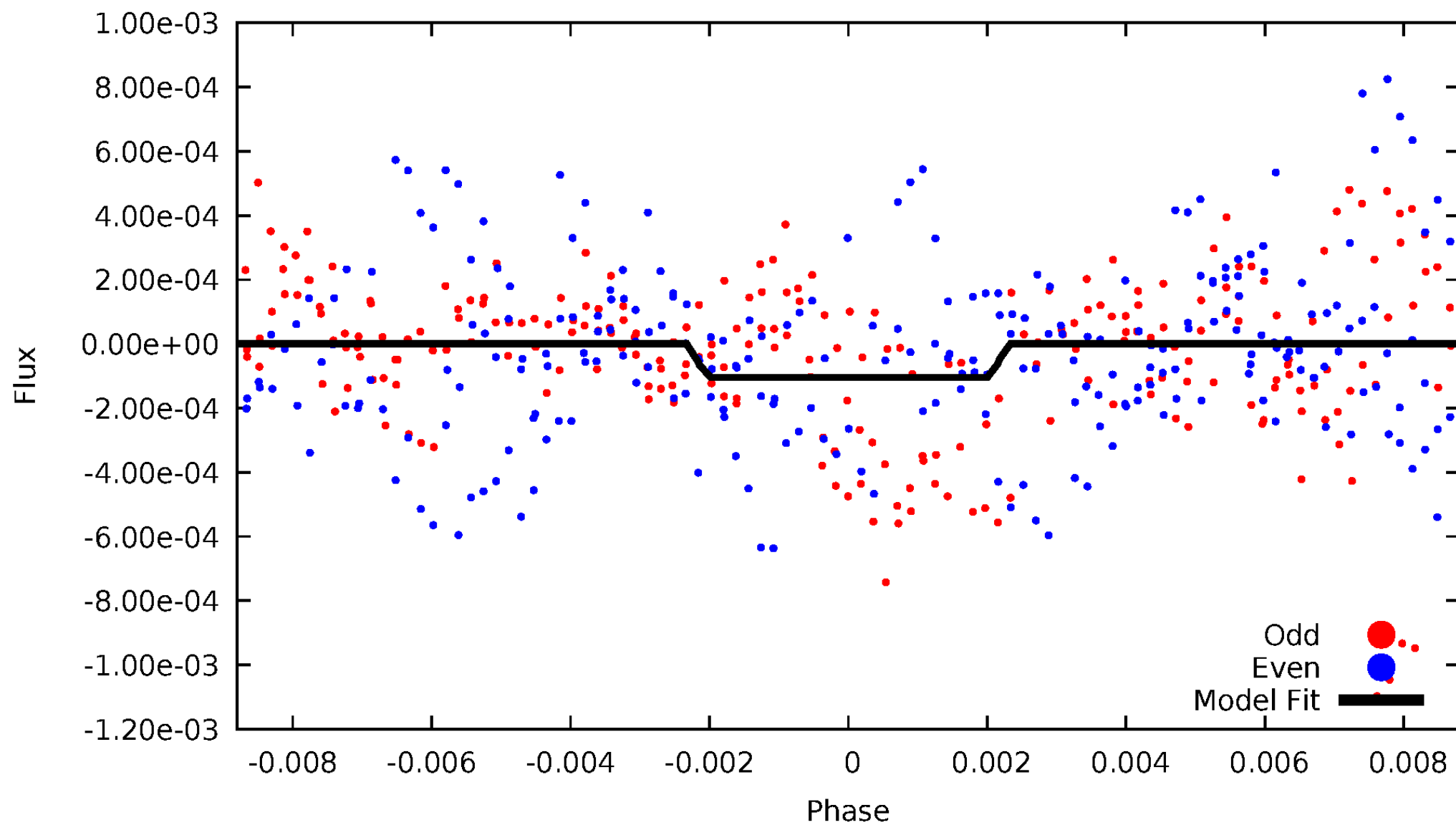
DV Odd/Even

TCE 010793114-02



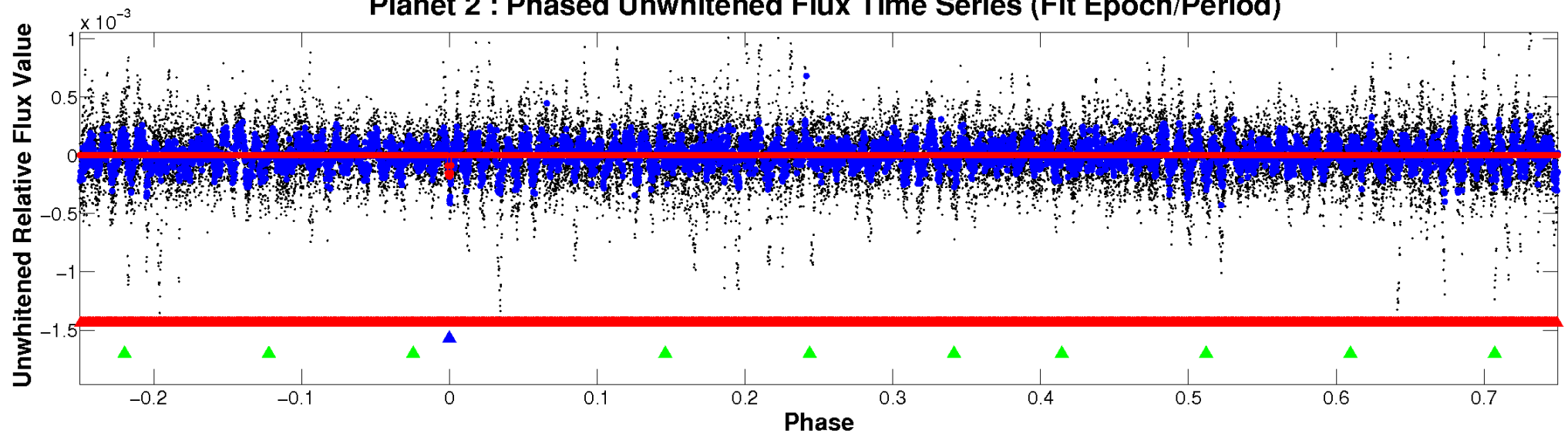
ALT Odd/Even

TCE 010793114-02

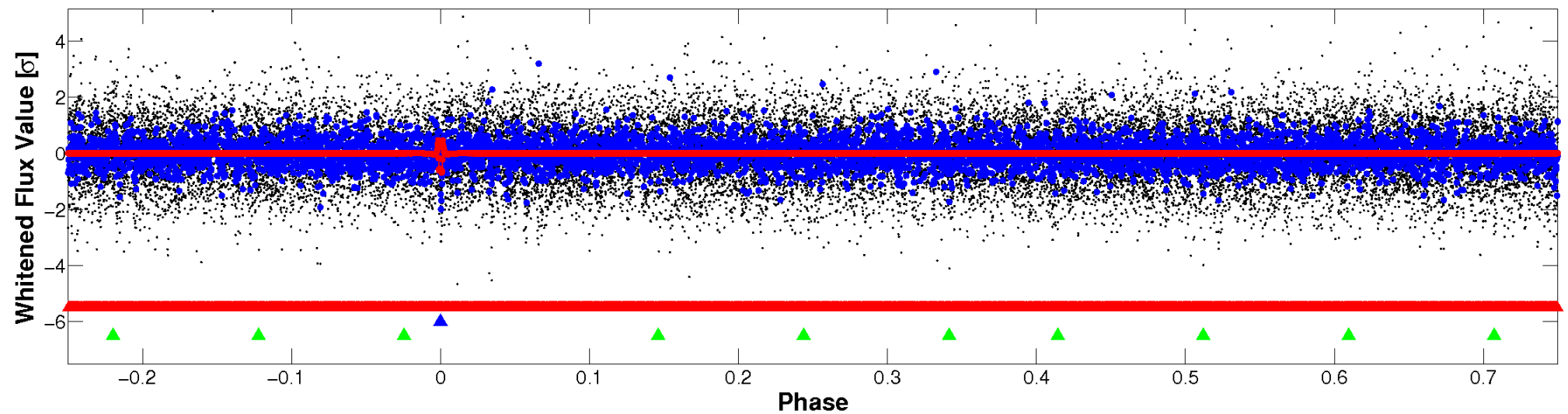


Non-Whitened Vs. Whitened Light Curve

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

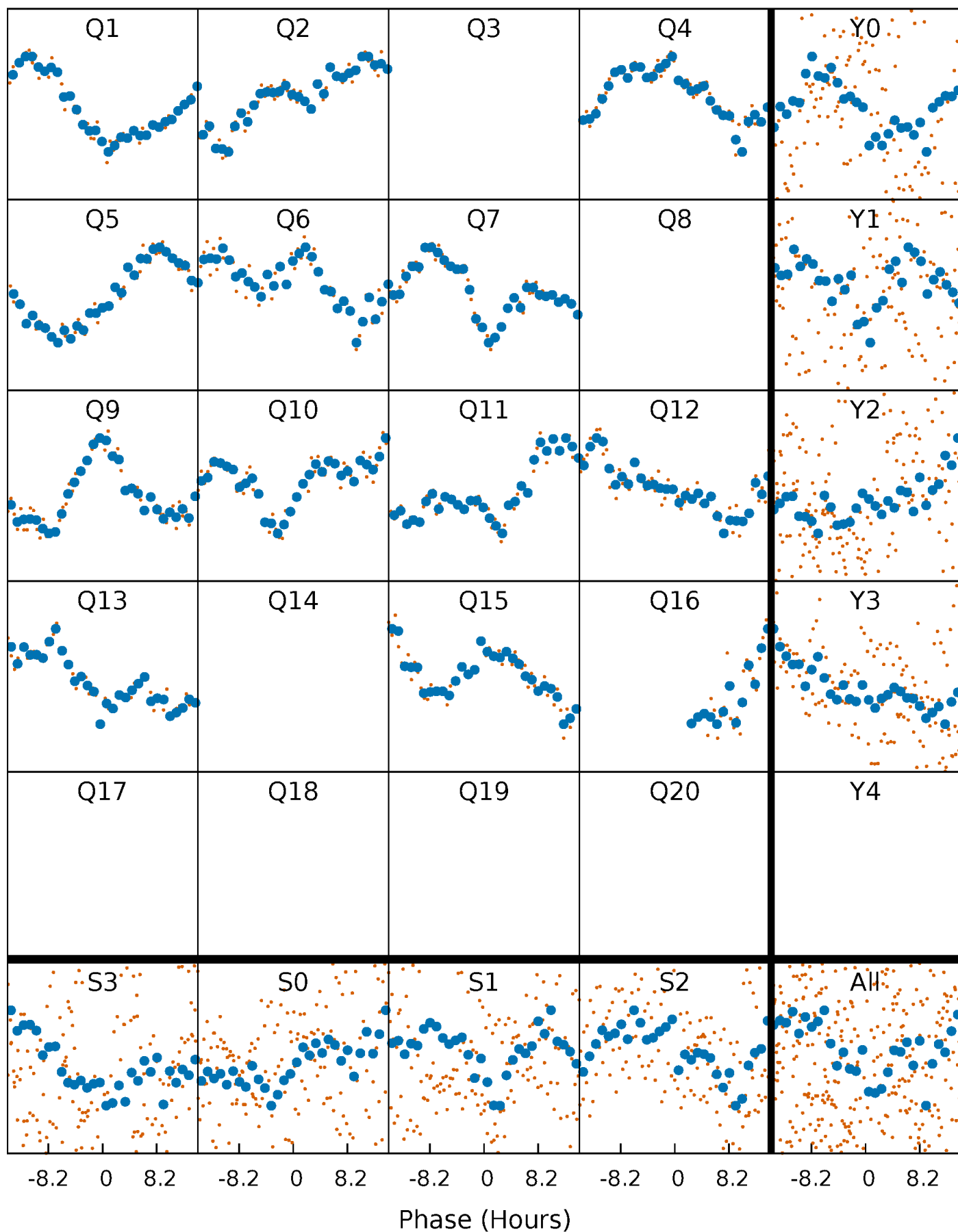


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



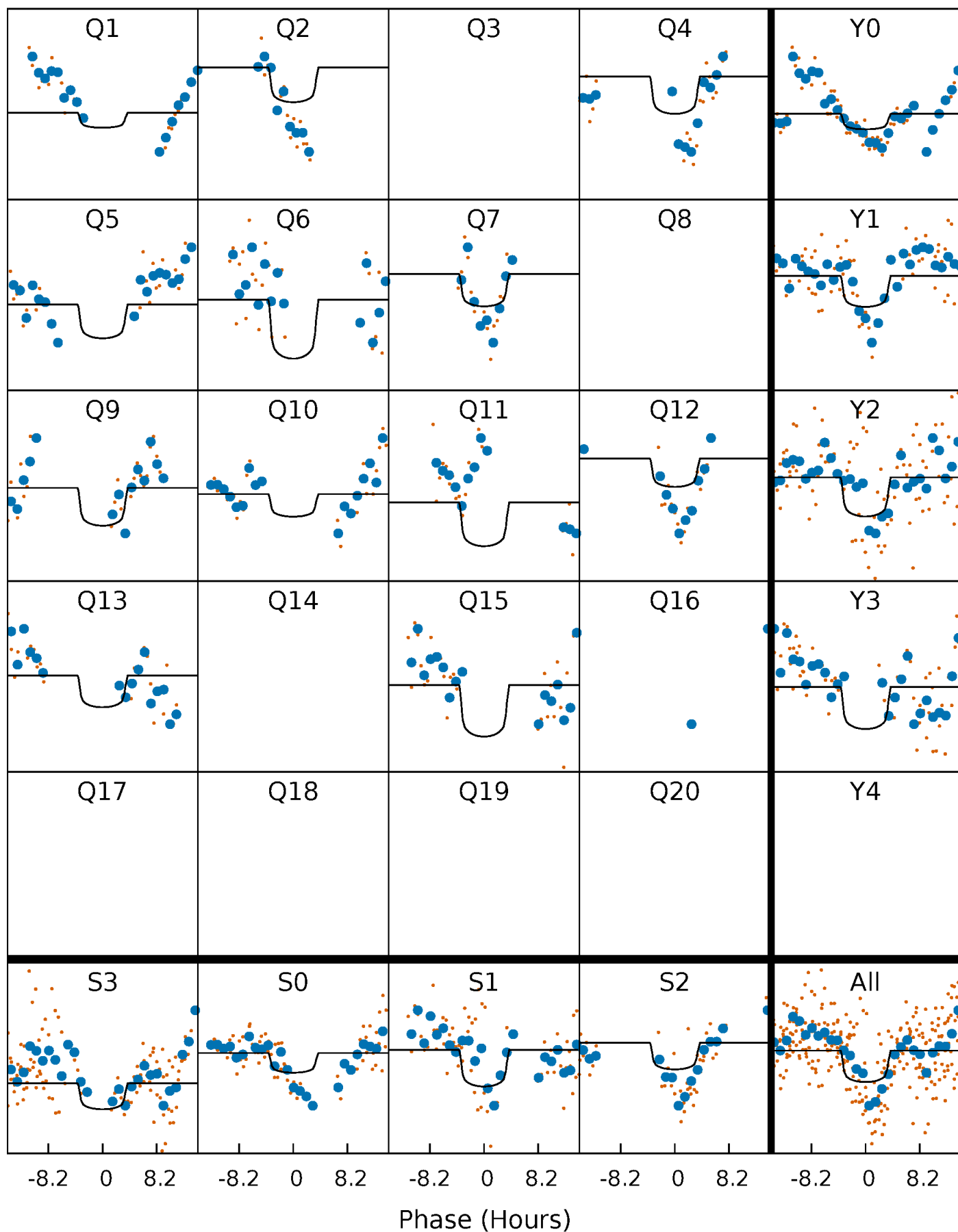
PDC Quarter-Phased Transit Curves

TCE 010793114-02 P=113.023464 Days $T_0=132.321953$ (BKJD)



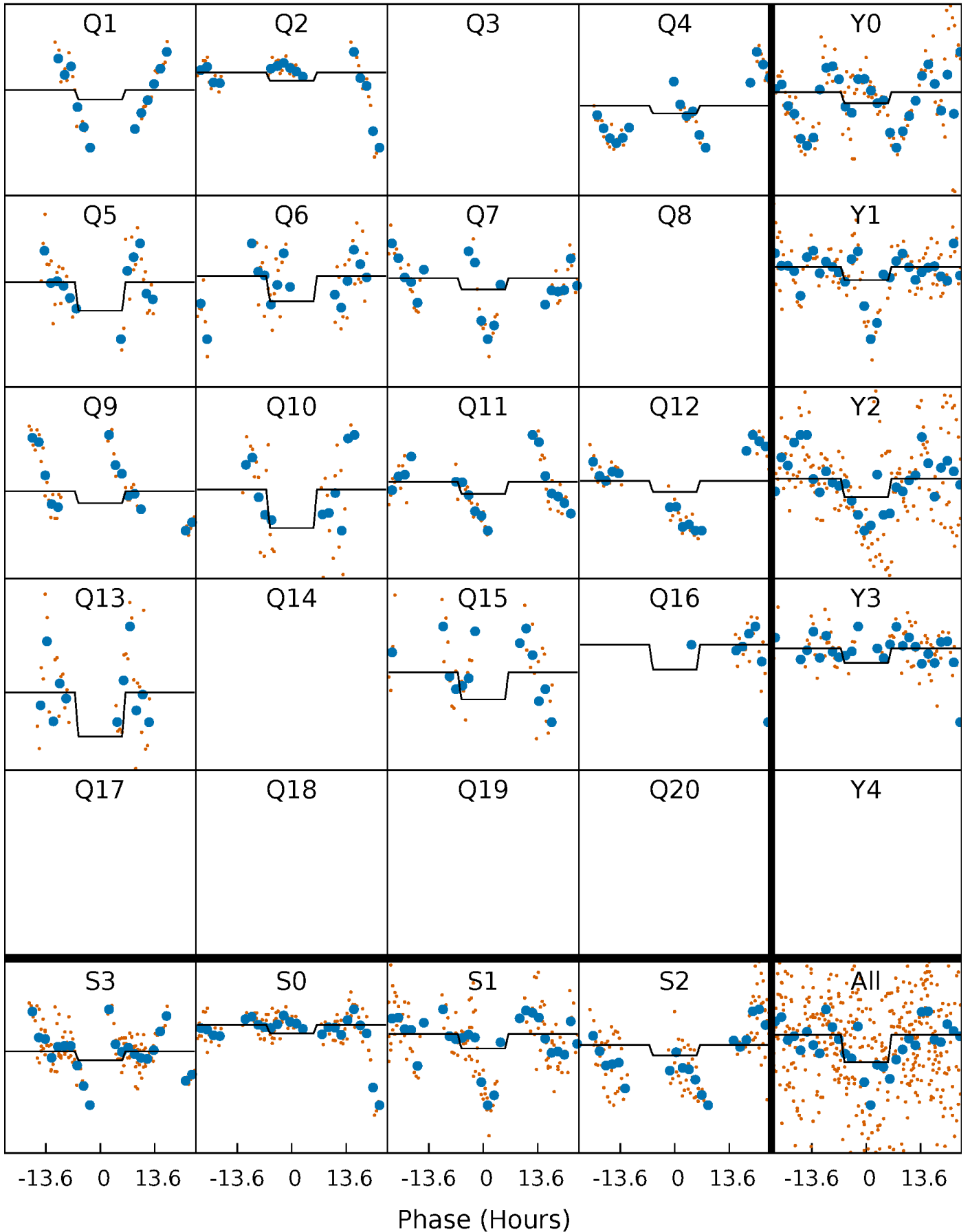
DV Quarter-Phased Transit Curves

TCE 010793114-02 P=113.023464 Days $T_0=132.321953$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

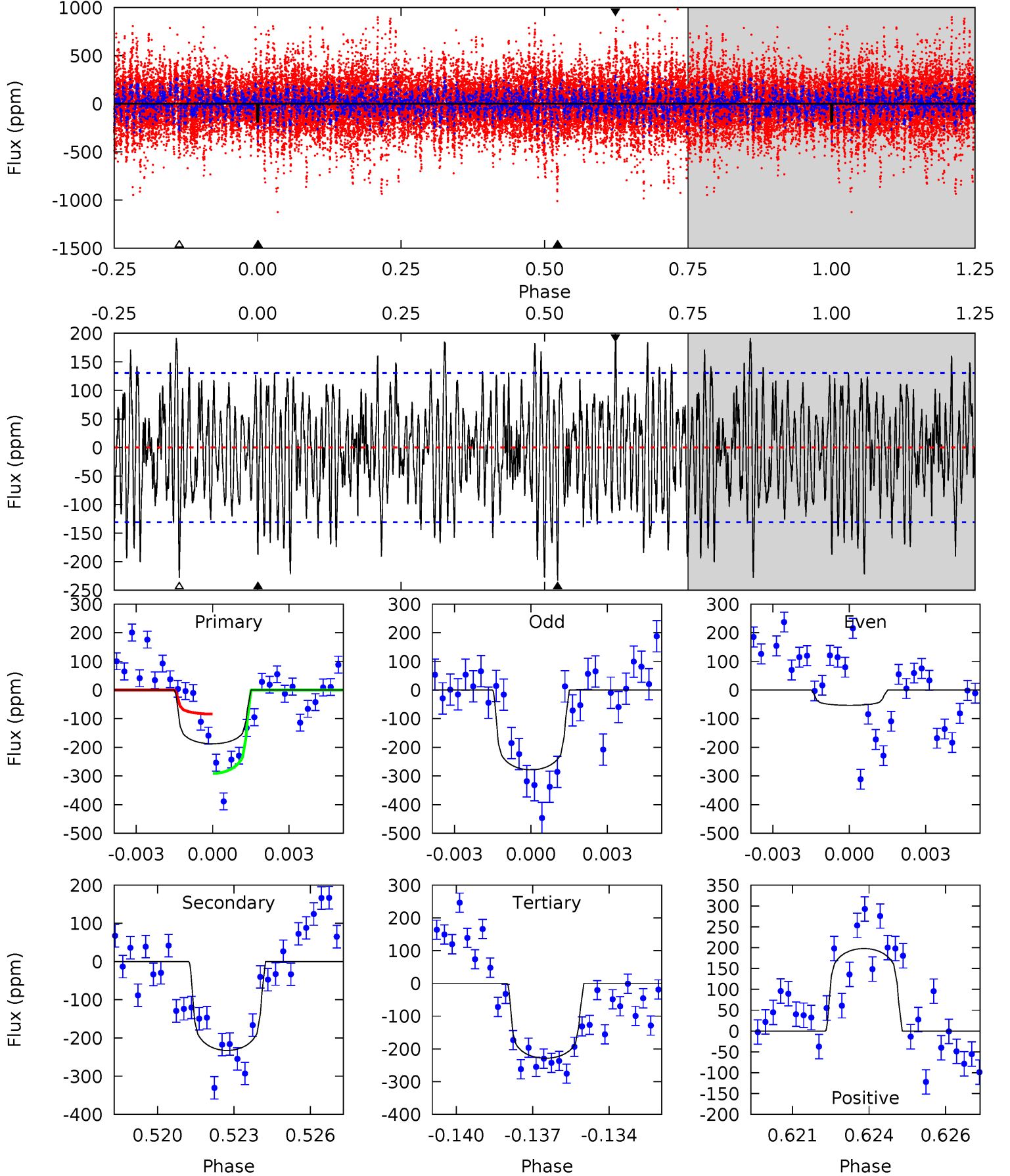
TCE 010793114-02 P=113.018265 Days $T_0=132.328606$ (BKJD)



DV Model-Shift Uniqueness Test

010793114-02, P = 113.023464 Days, E = 19.298489 Days

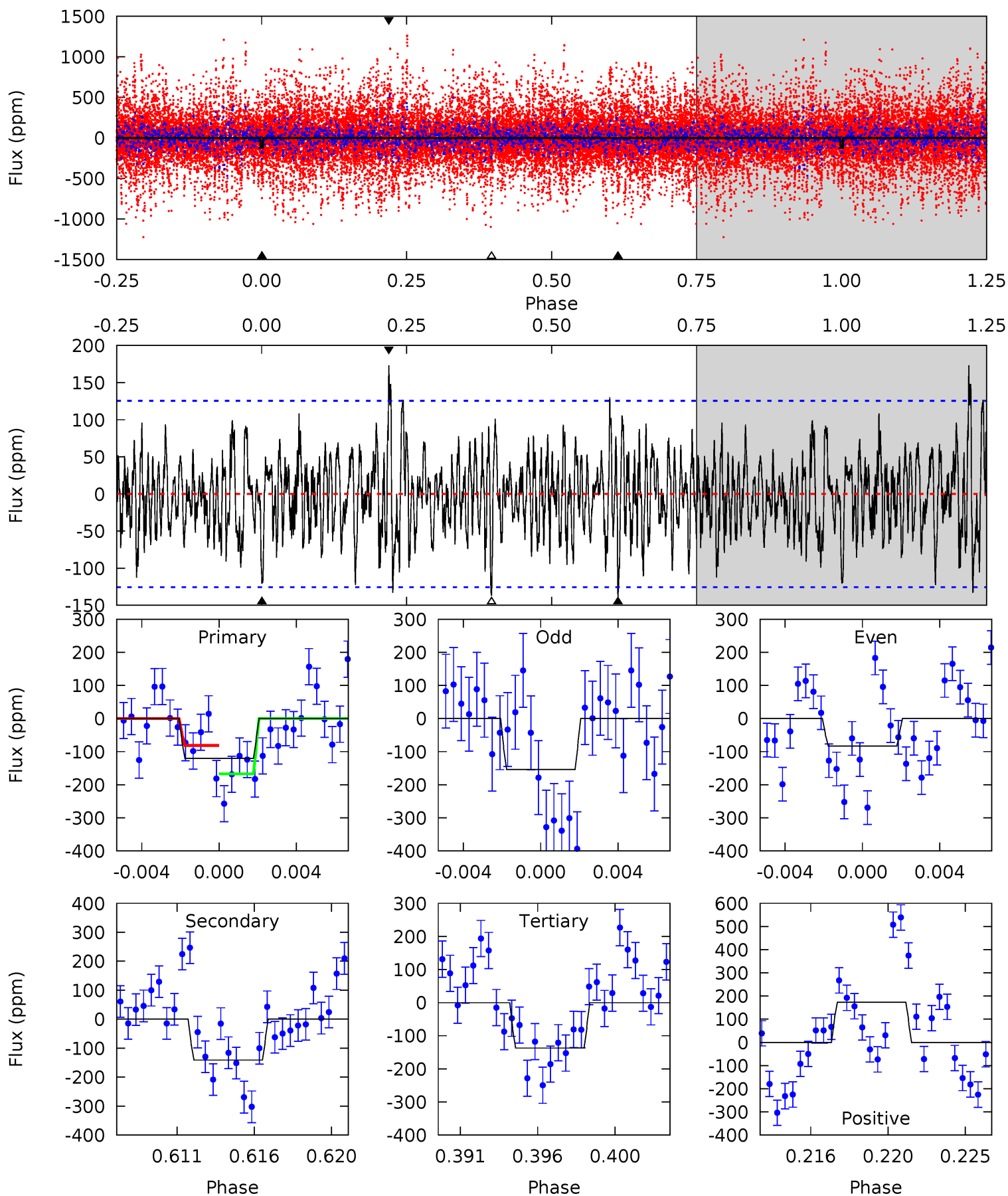
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.57	9.38	9.21	7.98	5.27	2.99	3.07	-1.65	-0.41	0.17	1.40	4.41	1.22	0.46	4.21



Alt Model-Shift Uniqueness Test

010793114-02, P = 113.018265 Days, E = 19.310341 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.97	5.81	5.65	7.14	5.18	2.84	1.83	-0.68	-2.17	0.16	-1.33	1.42	1.31	0.55	1.77



Stellar Parameters For KIC 010793114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6826^{+214}_{-285}	$4.064^{+0.286}_{-0.154}$	$-0.500^{+0.250}_{-0.300}$	$1.661^{+0.435}_{-0.531}$	$1.167^{+0.193}_{-0.176}$	$0.358^{+0.595}_{-0.173}$
	+3%/-4%	+7%/-4%	+50%/-60%	+26%/-32%	+17%/-15%	+166%/-48%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 010793114-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-233 ± 25	$2.38^{+1.10}_{-0.97}$	770^{+60}_{-73}	7293^{+2732}_{-1316}	5337^{+9451}_{-2822}
Alt.	-141 ± 24	$1.81^{+1.03}_{-0.93}$	770^{+64}_{-72}	7225^{+4918}_{-1390}	5398^{+16981}_{-3174}

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 $A_{obs} \gg 1.0$

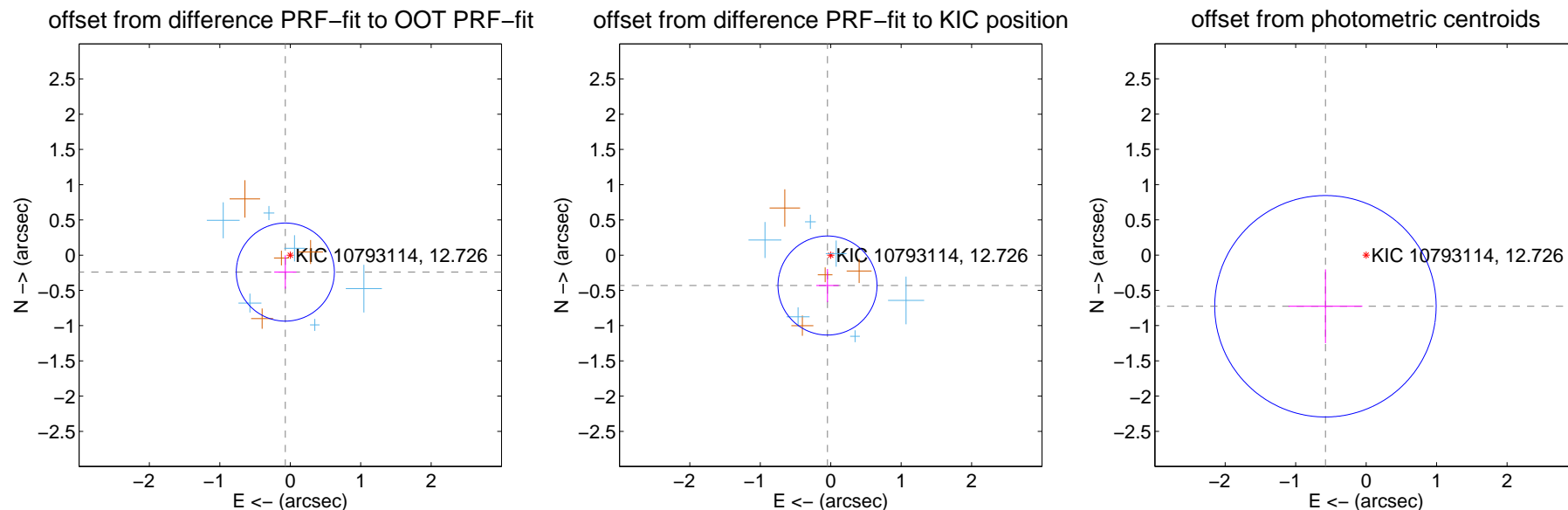
DV Centroid Data

Supplemental centroid analysis for 010793114-02. Kepler magnitude: 12.73. Transit SNR 5.07

There are 6 quarters with good PRF difference image offsets

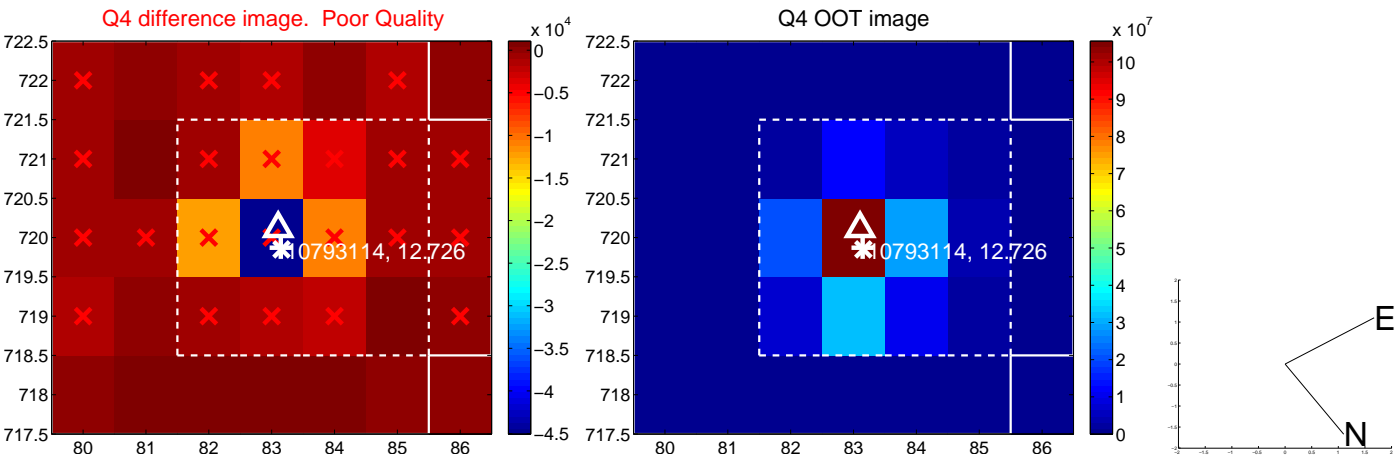
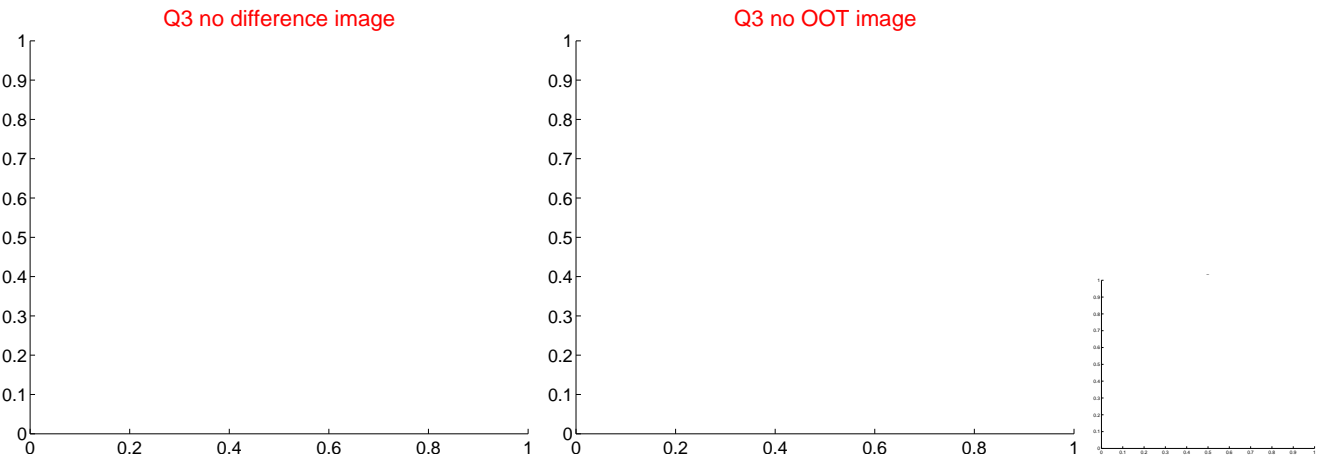
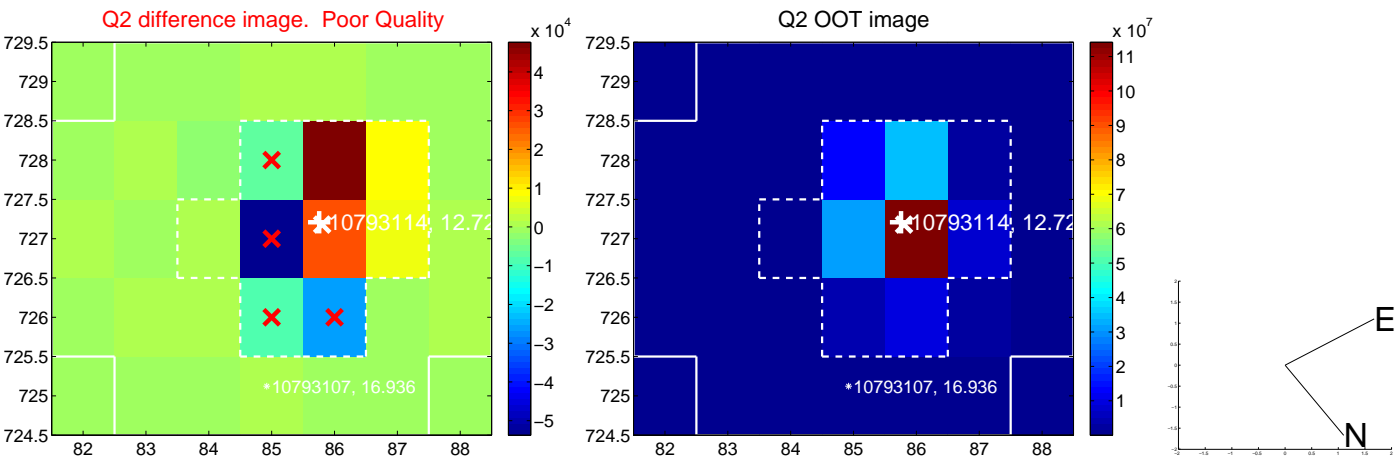
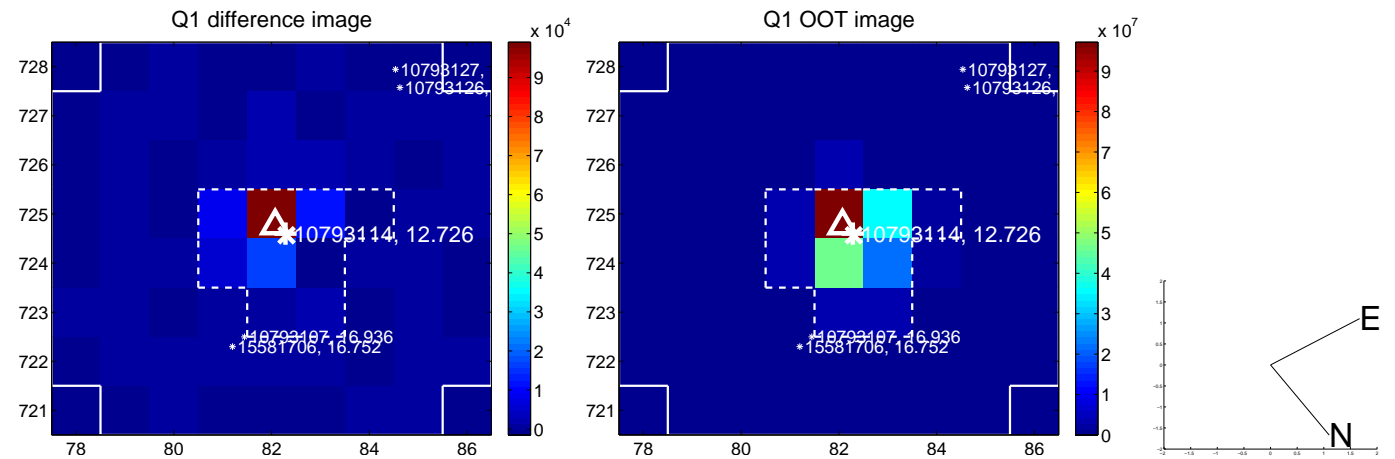
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.250 ± 0.232	1.08	0.070 ± 0.157	-0.240 ± 0.237
PRF-fit source offset from KIC position	0.433 ± 0.234	1.85	0.046 ± 0.159	-0.431 ± 0.235
photometric centroid source offset	0.93 ± 0.52	1.77	0.58 ± 0.52	-0.73 ± 0.52

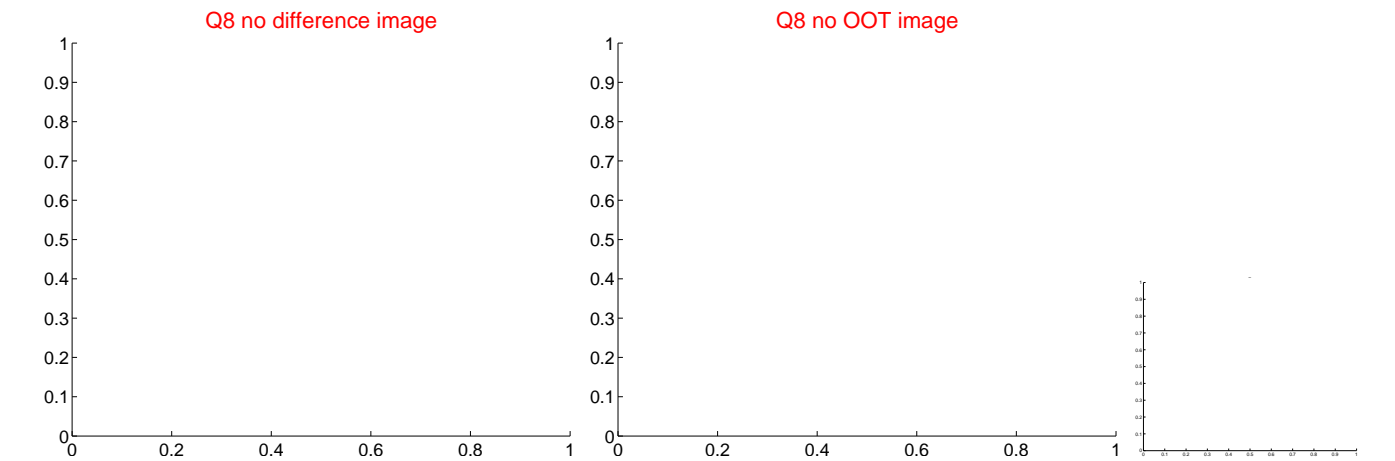
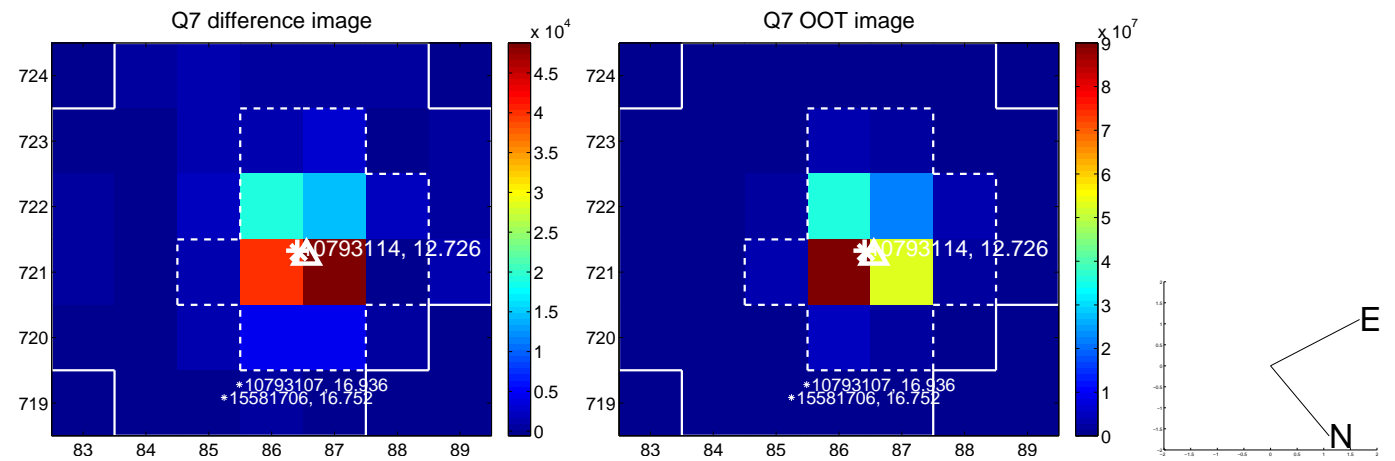
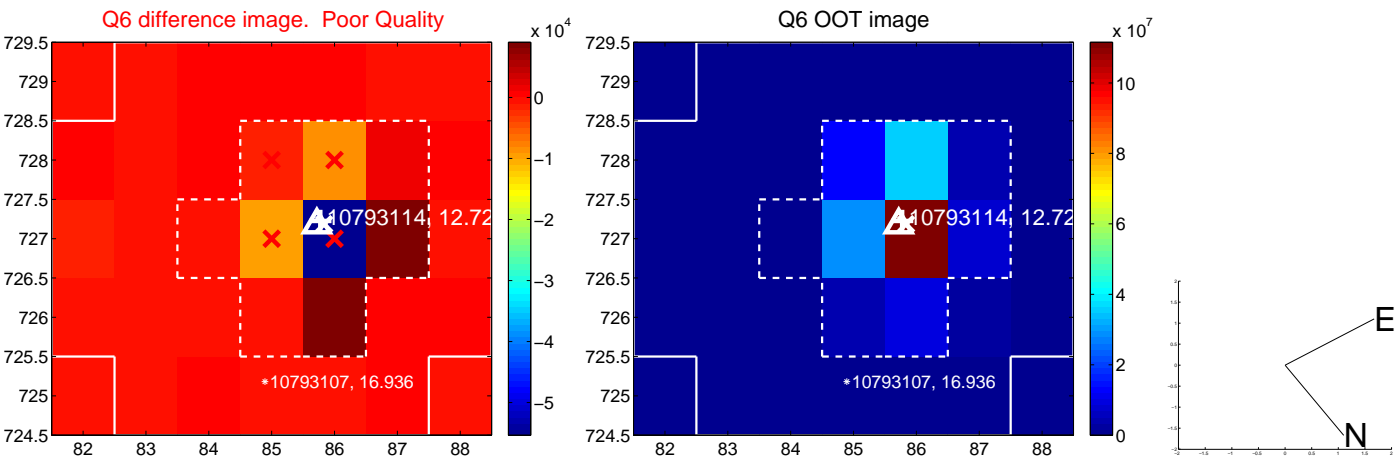
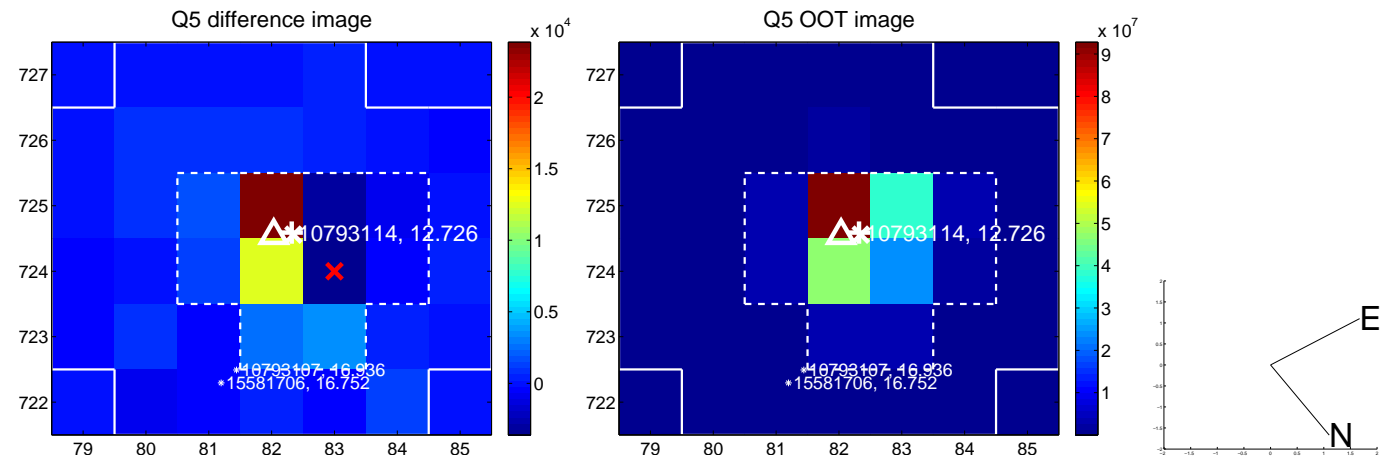


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

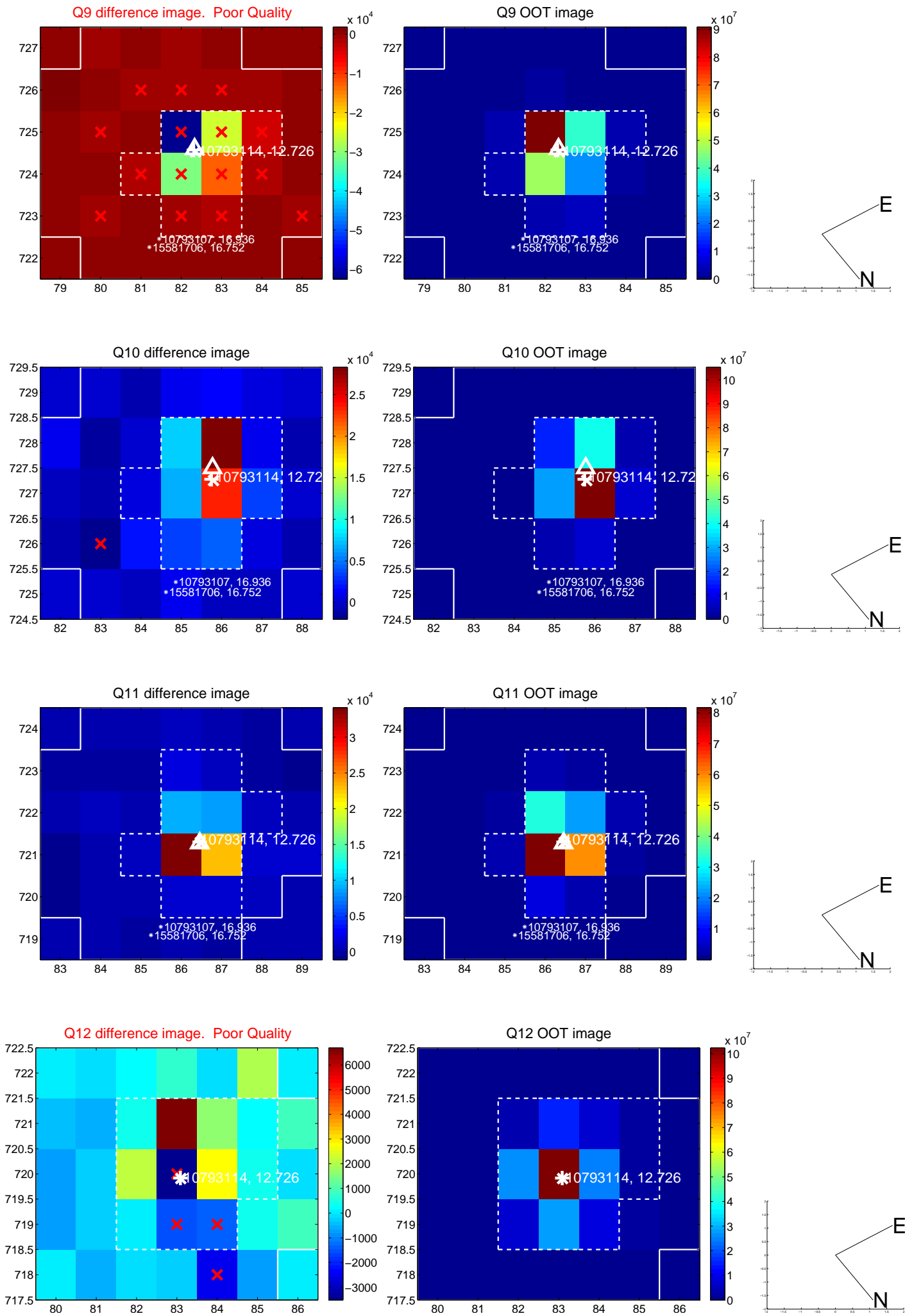
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



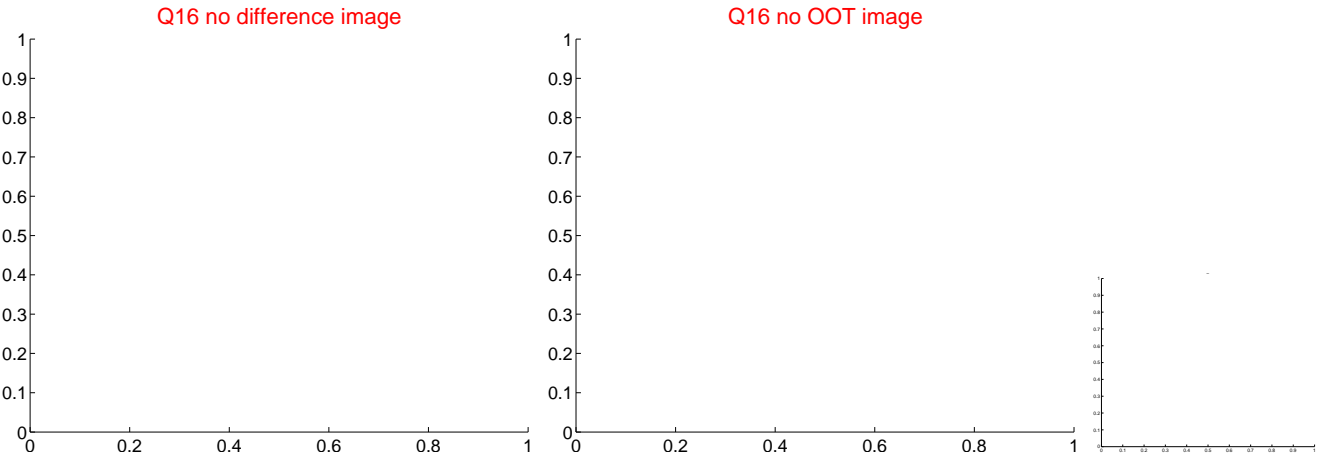
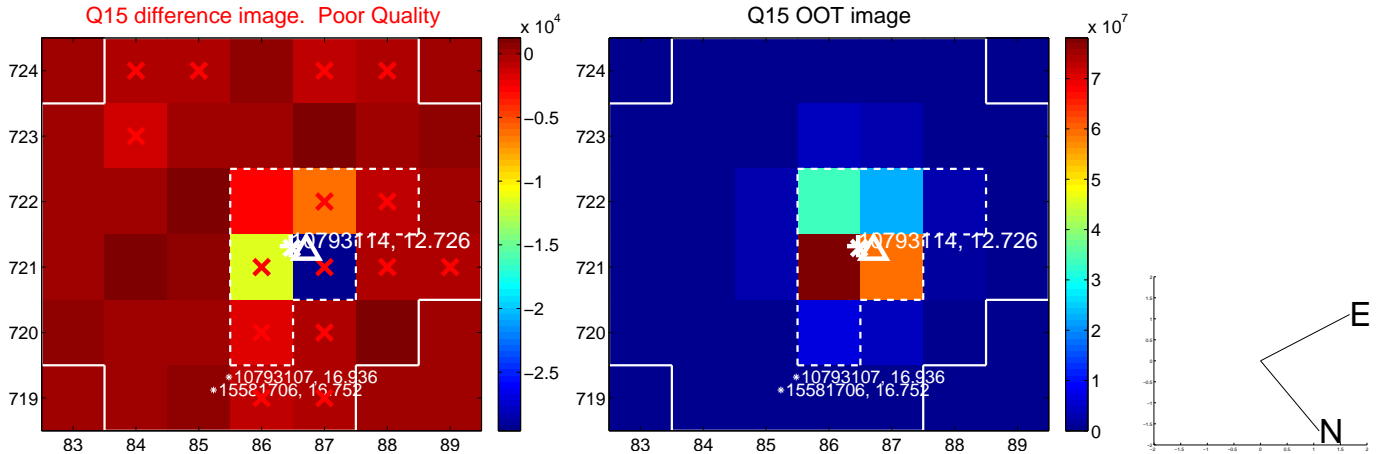
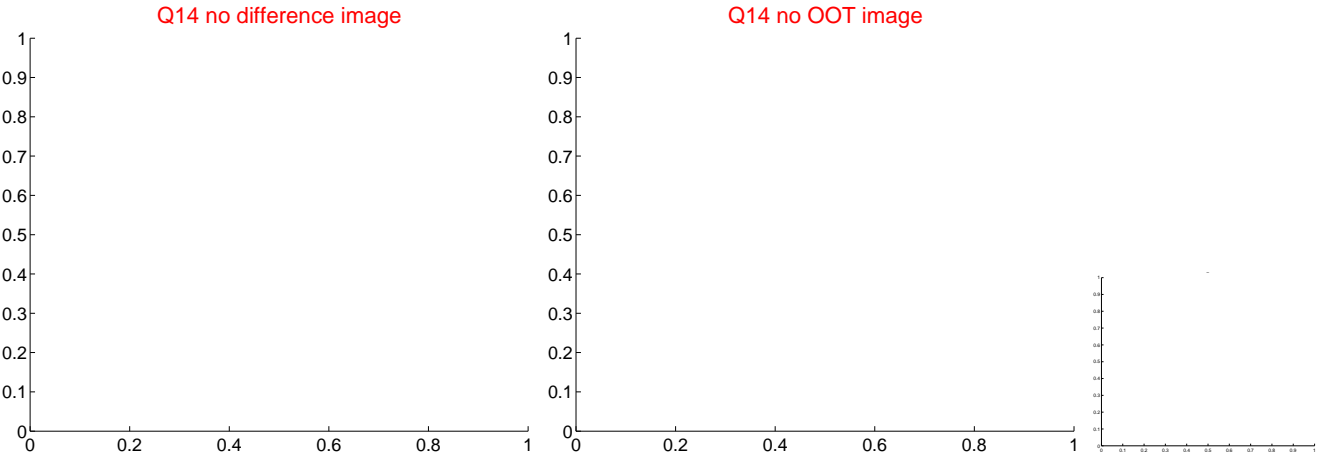
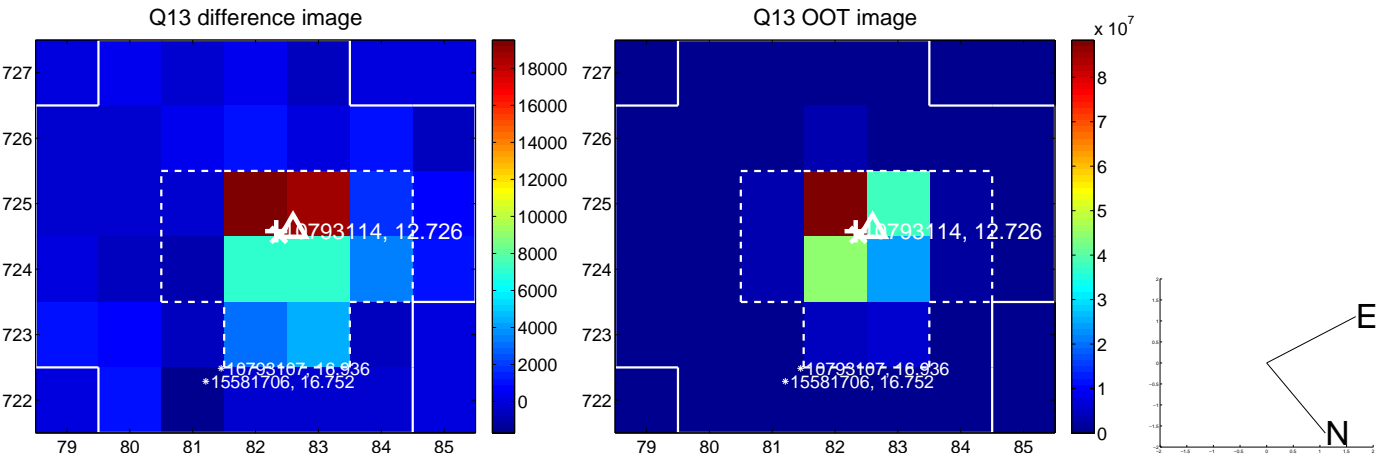
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



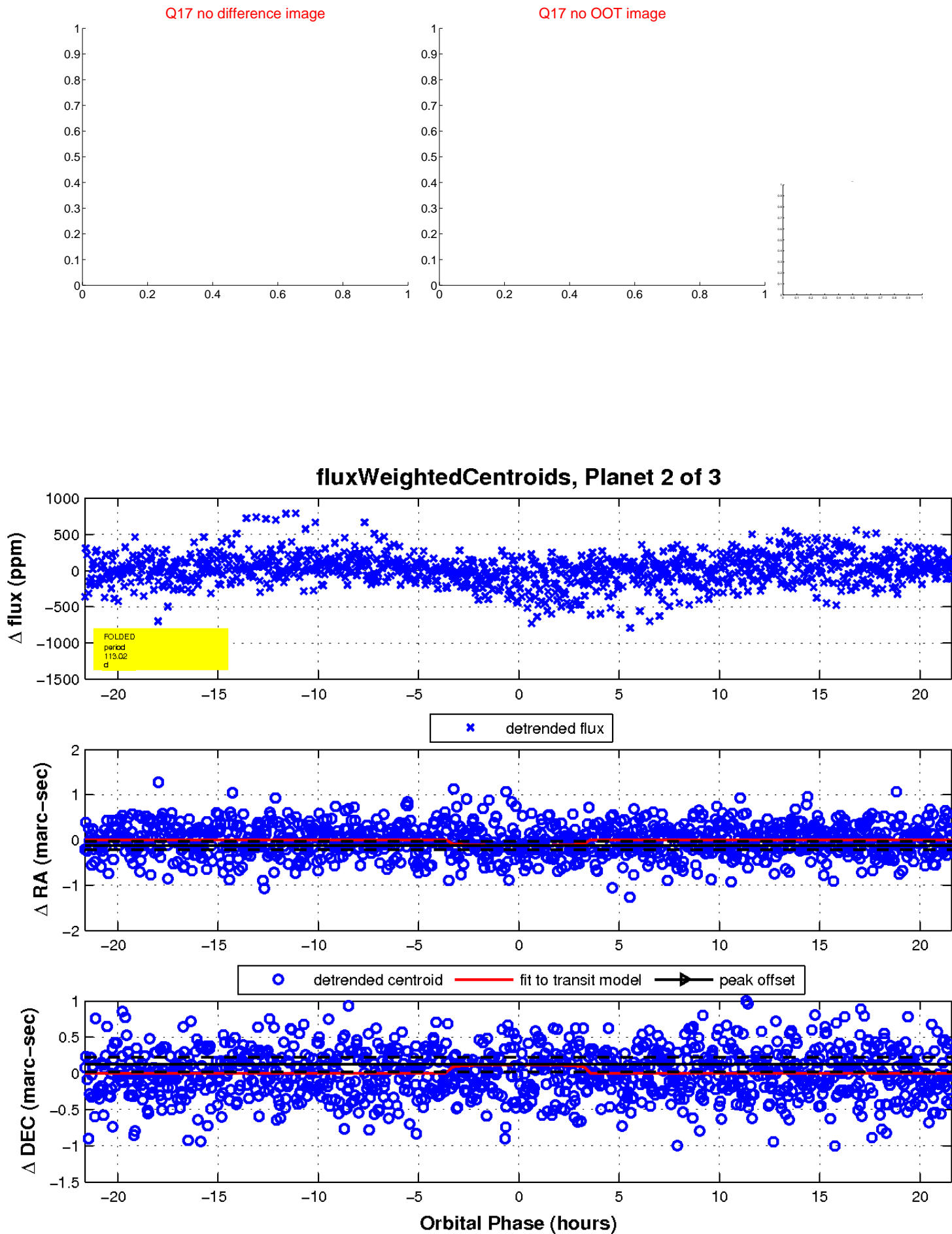
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

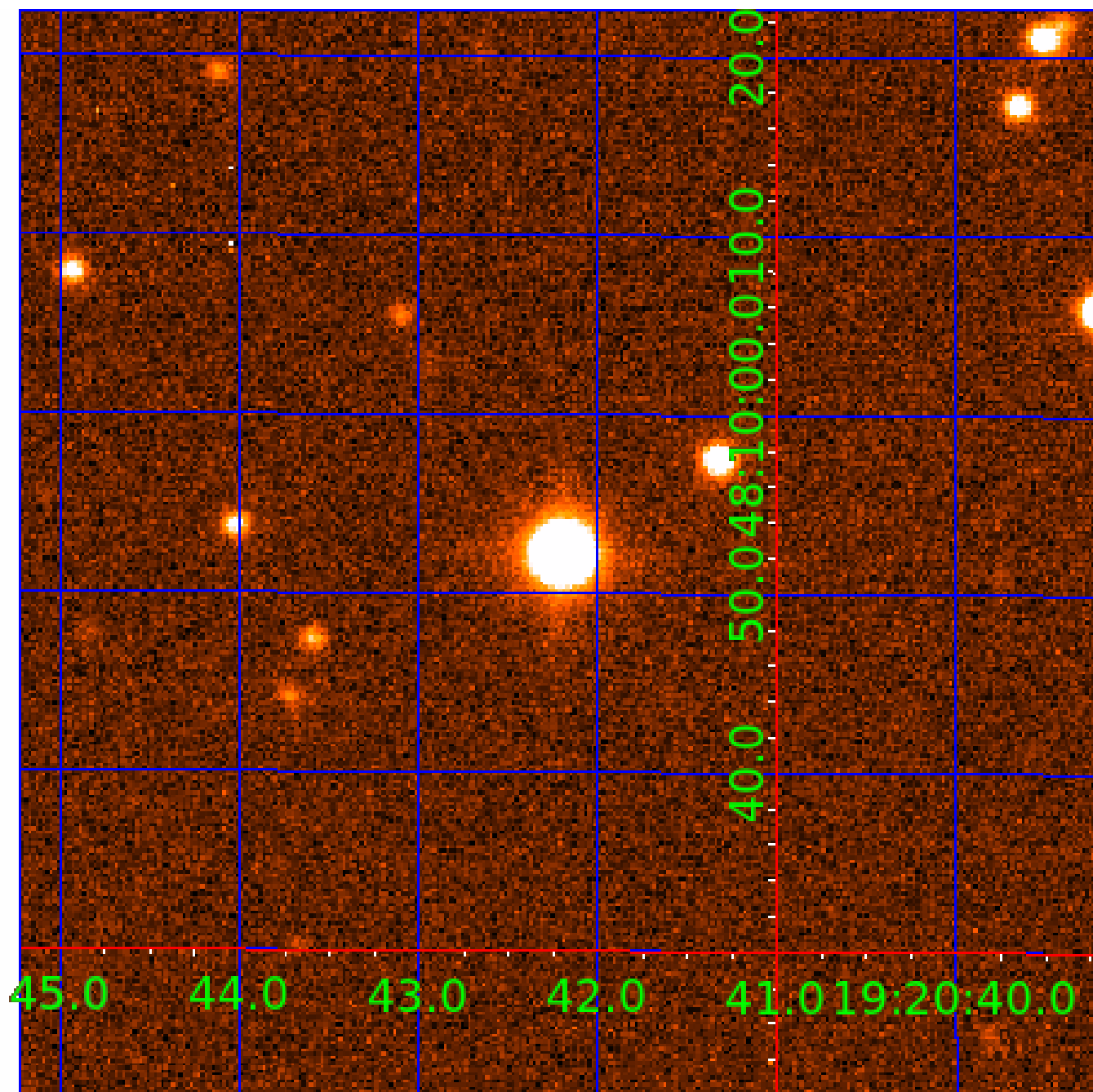


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 010793114

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})
010793114-01	OBS	No	0.826622	131.616760	21.8	3.615	8.2	9.5	1.66	6826	0.81	16295.34
010793114-02	OBS	No	113.023464	132.321953	183.6	7.213	7.5	5.1	1.66	6826	2.50	23.13
010793114-03	OBS	No	154.376636	179.154810	350.9	2.232	7.4	6.8	1.66	6826	4.01	15.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010793114-01	OBS	FP	0.00	1	0	0	0	LPP_DV
010793114-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT
010793114-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES_MARSHALL—TRANS_GAPPED—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT

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

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

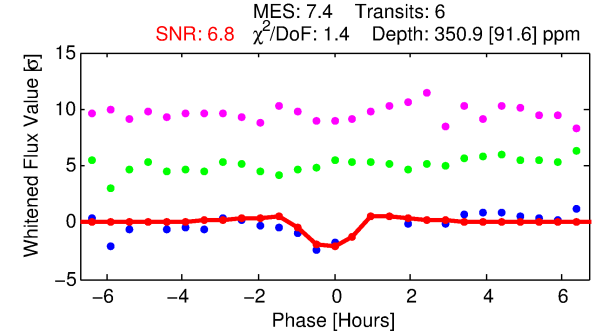
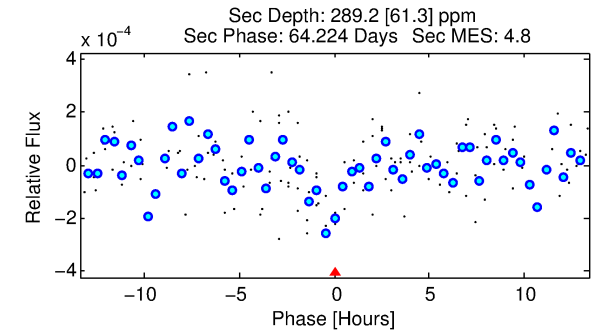
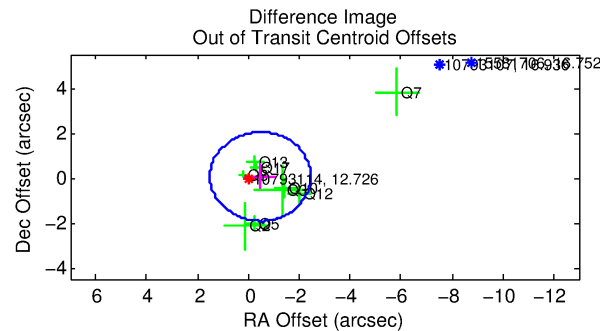
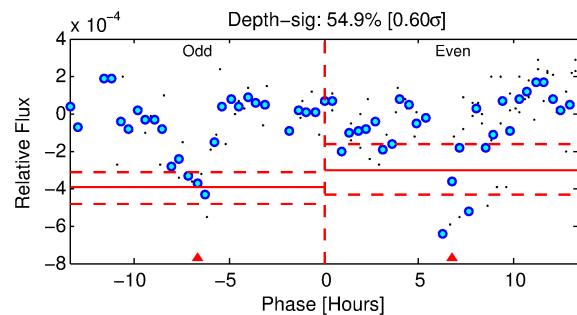
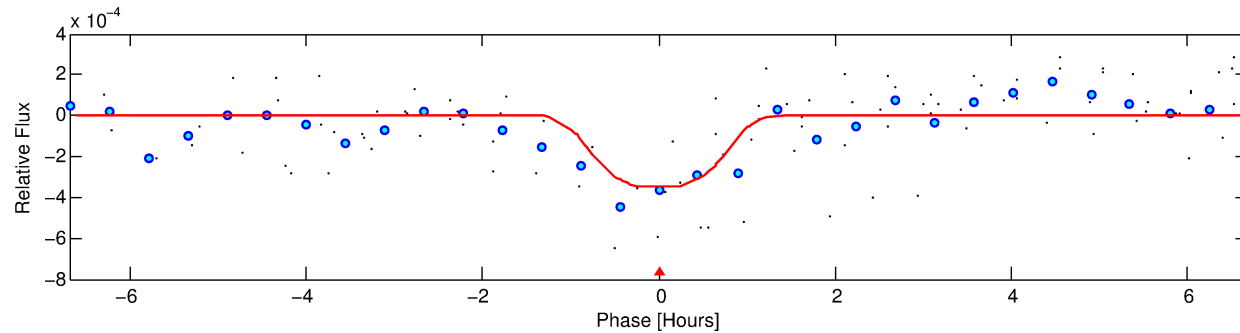
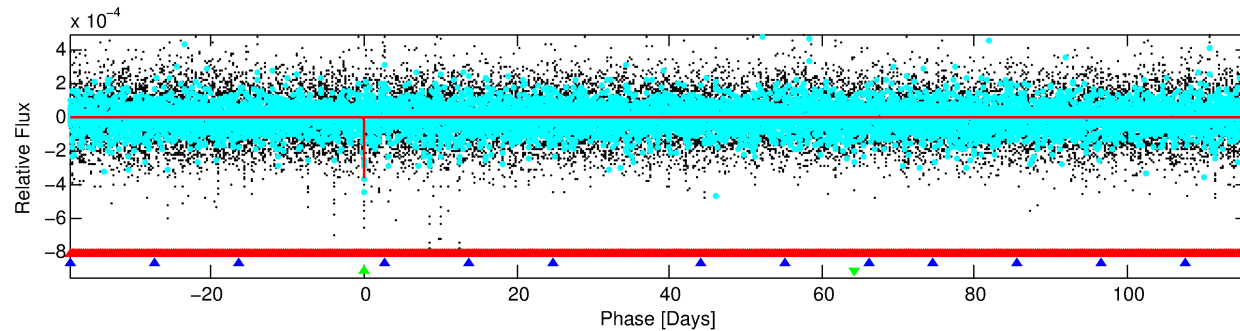
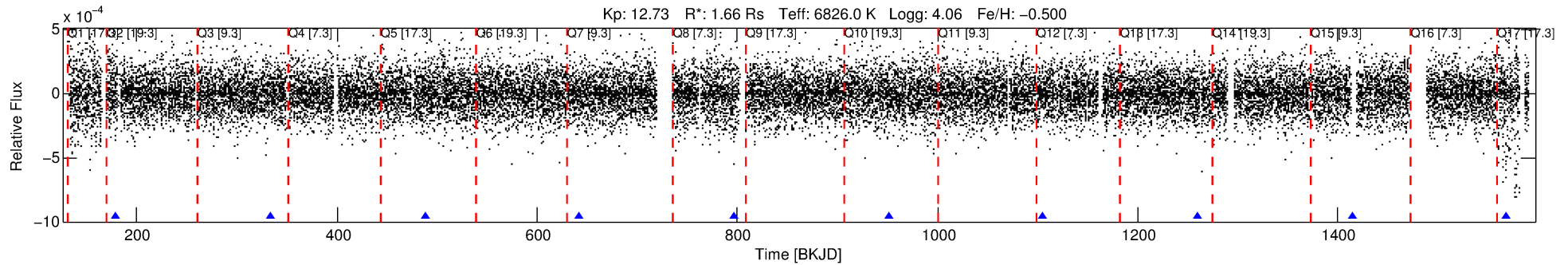
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010793114-03

No Significant Match Found

DV One-Page Summary

KIC: 10793114 Candidate: 3 of 3 Period: 154.377 d



DV Fit Results:

Period = 154.37664 [0.00137] d
Epoch = 179.1548 [0.0052] BKJD
Rp/R* = 0.0221 [0.0044]
a/R* = 166.23 [95.83]
b = 0.97 [0.03]
Seff = 15.27 [7.87]
Teq = 504 [65] K
Rp = 4.01 [1.51] Re
a = 0.5929 [0.1814] AU
Ag = 3476.55 [2305.24] [1.51 σ]
Teffp = 5984 [717] K [7.62 σ]

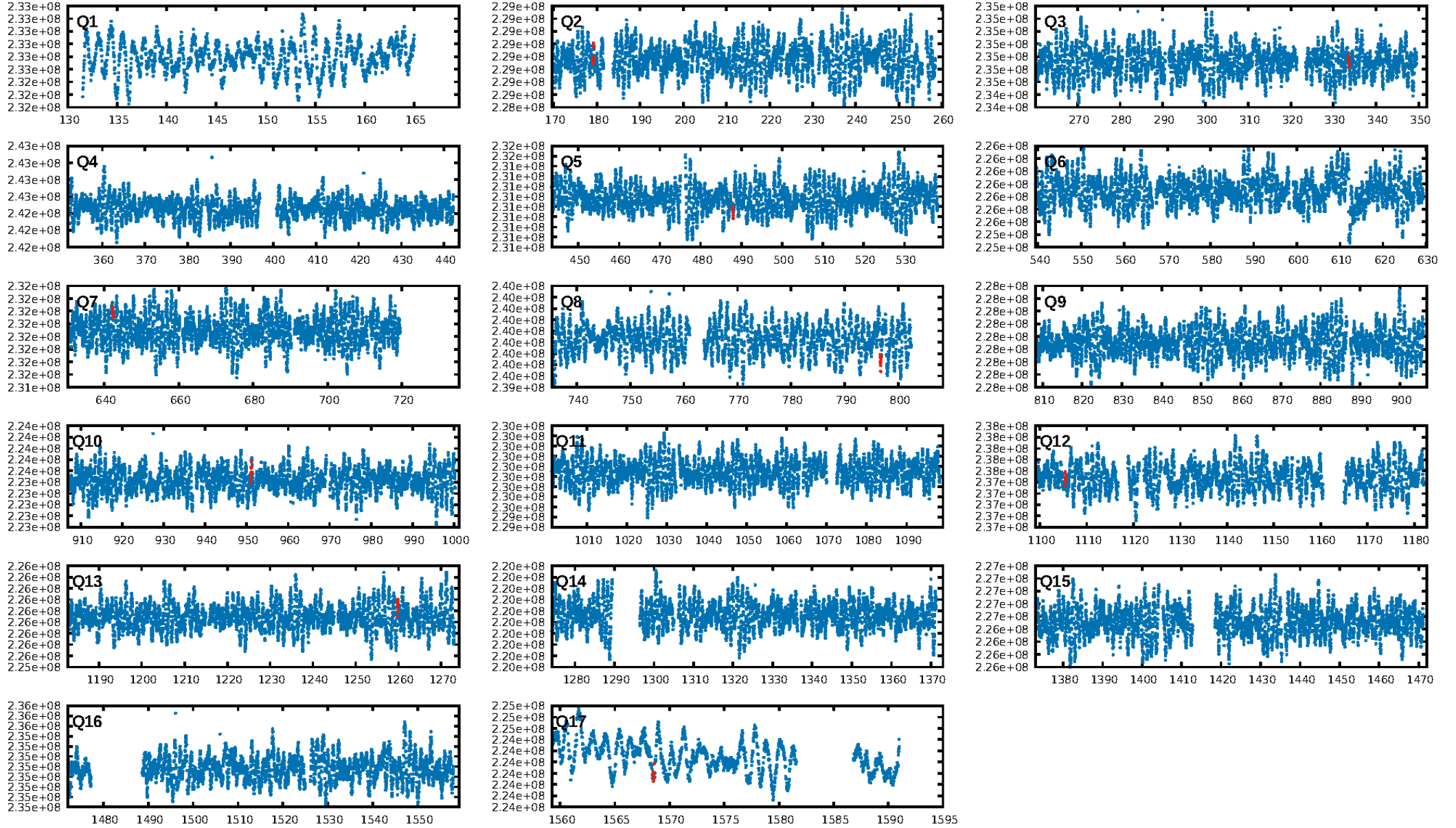
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [131.44 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 20.6%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 1.91e-10
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -15.68
Centroid-sig: 71.4%
Centroid-so: 0.211 arcsec [0.35 σ]
OotOffset-rm: 0.474 arcsec [0.72 σ]
KicOffset-rm: 0.488 arcsec [0.84 σ]
OotOffset-st: 2/2/2/3 [9]
KicOffset-st: 2/2/2/3 [9]
DiffImageQuality-fgm: 0.44 [4/9]
DiffImageOverlap-fno: 0.22 [2/9]

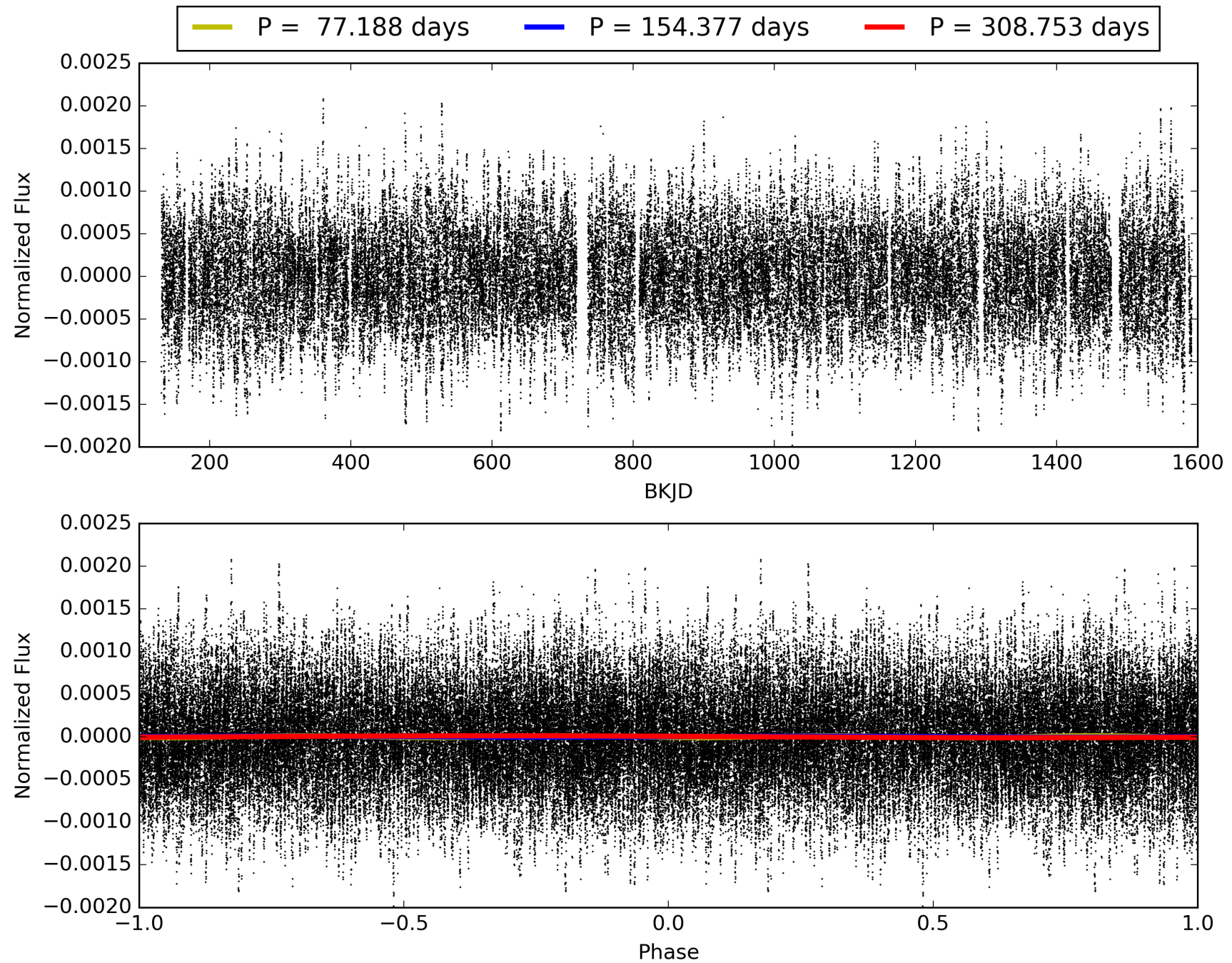
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:50:54 Z

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

TCE 010793114-03, PDC Light Curves

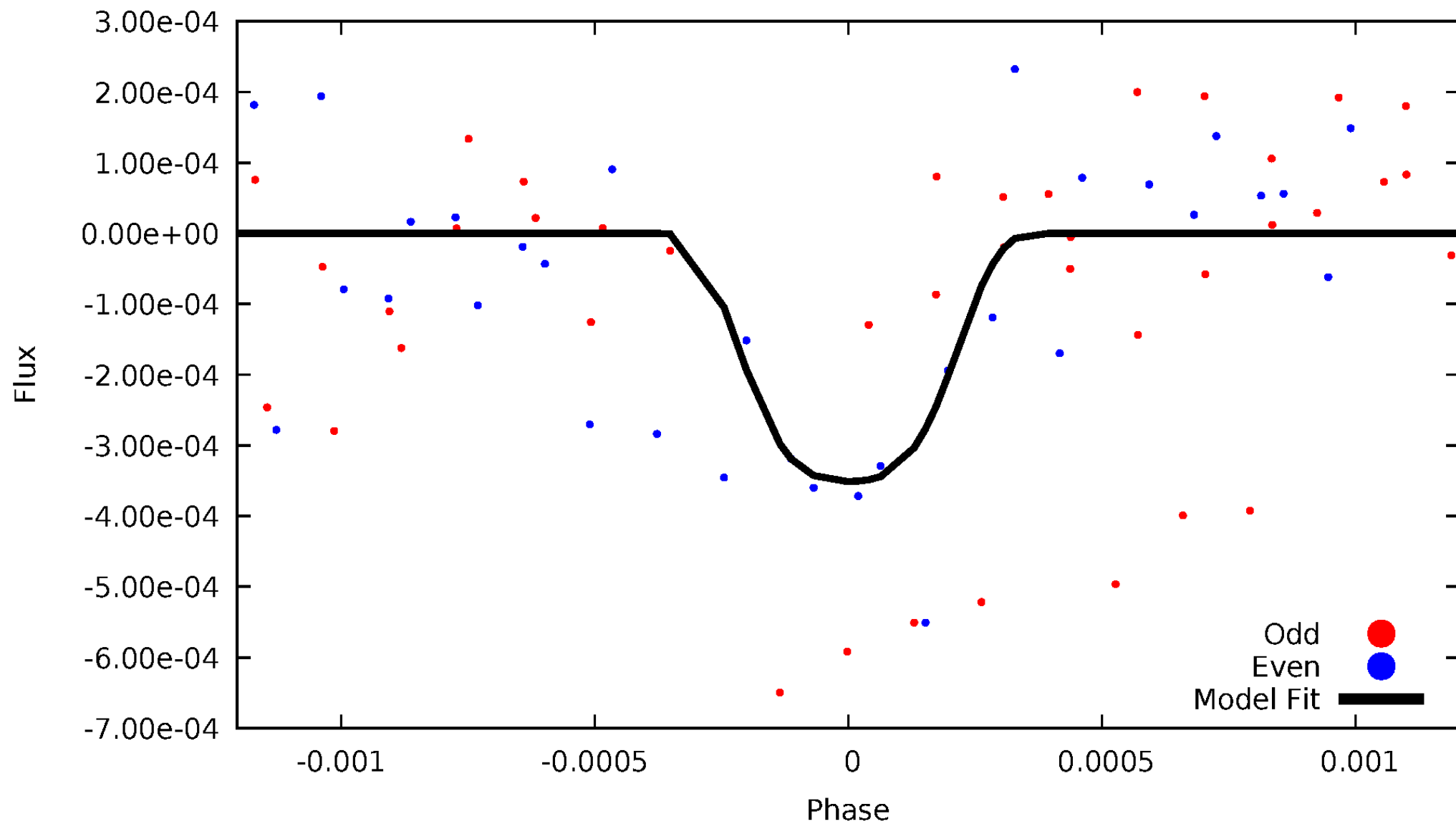


TCE 010793114-03



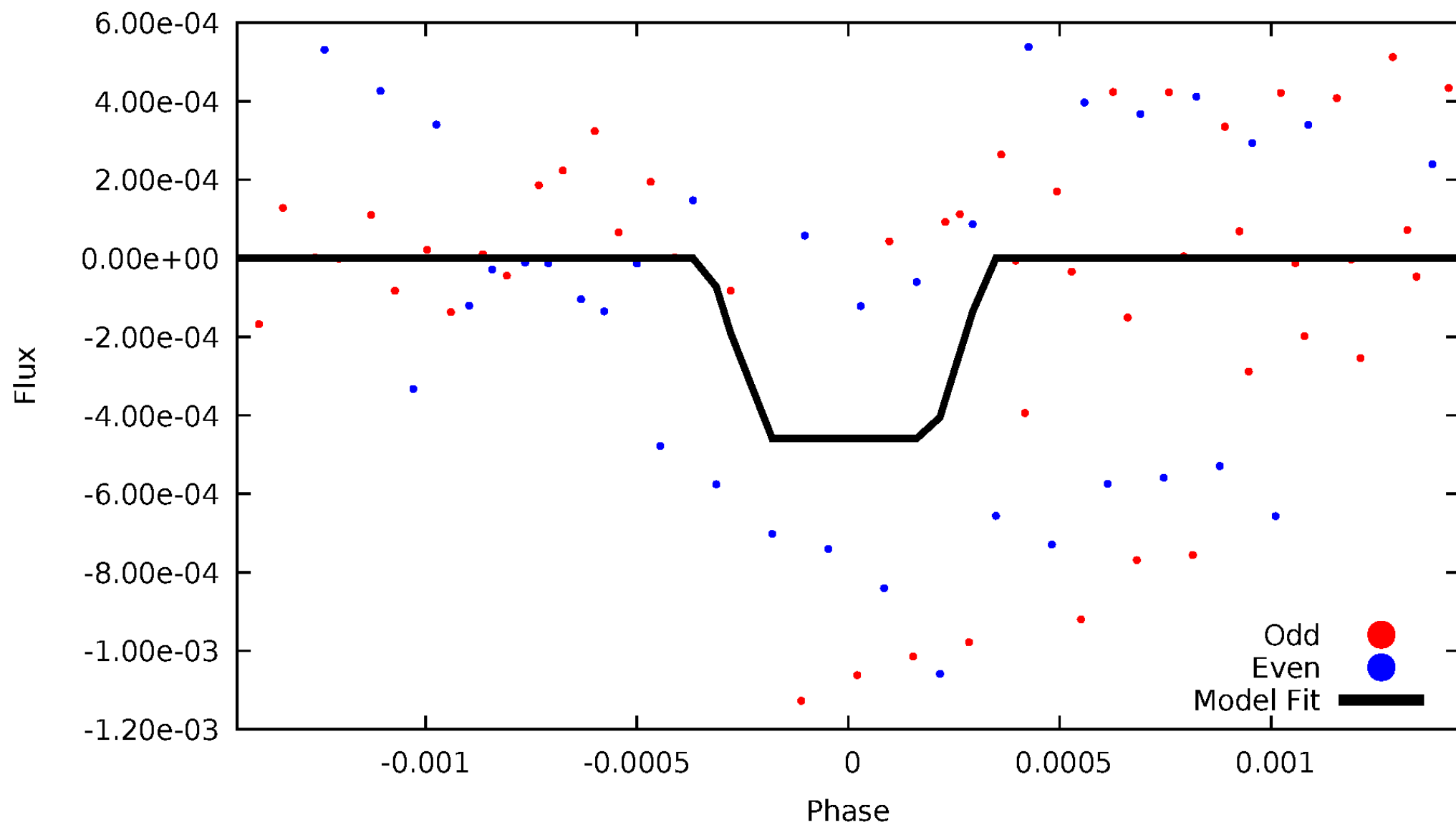
DV Odd/Even

TCE 010793114-03



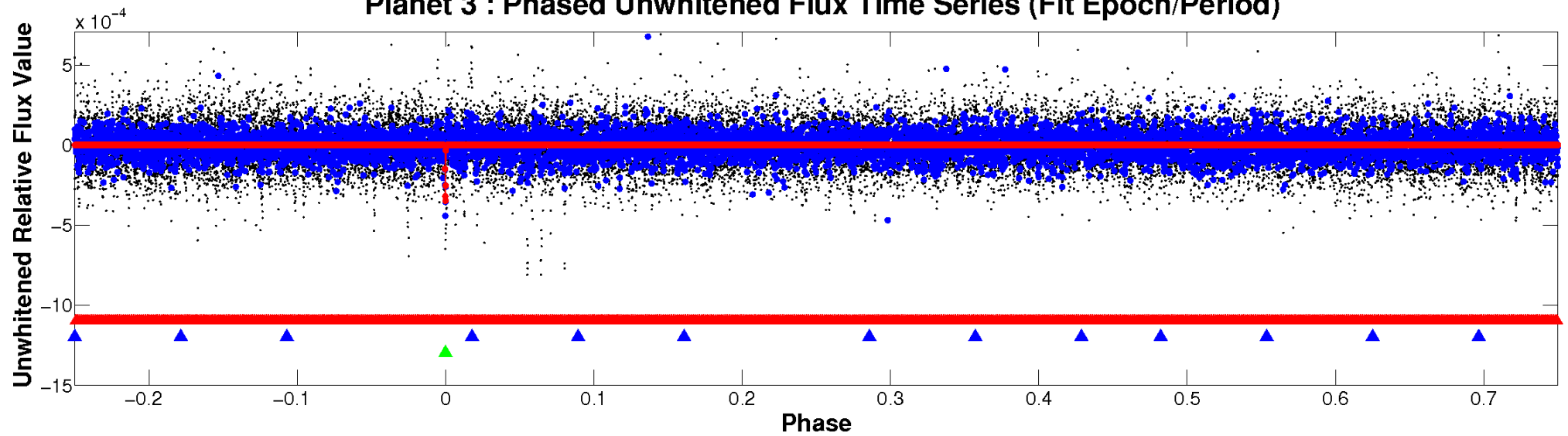
ALT Odd/Even

TCE 010793114-03

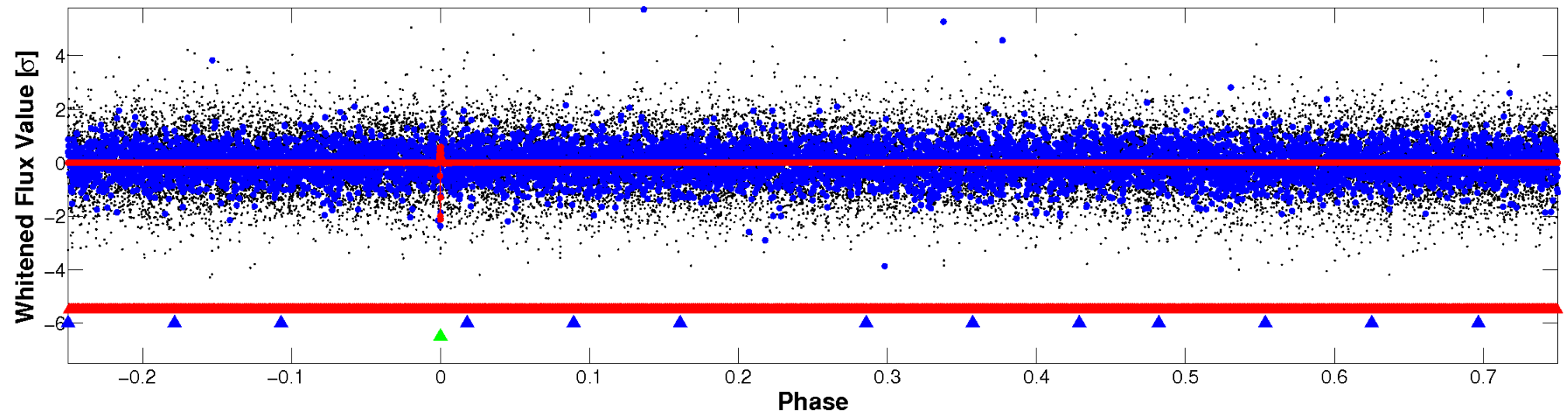


Non-Whitened Vs. Whitened Light Curve

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

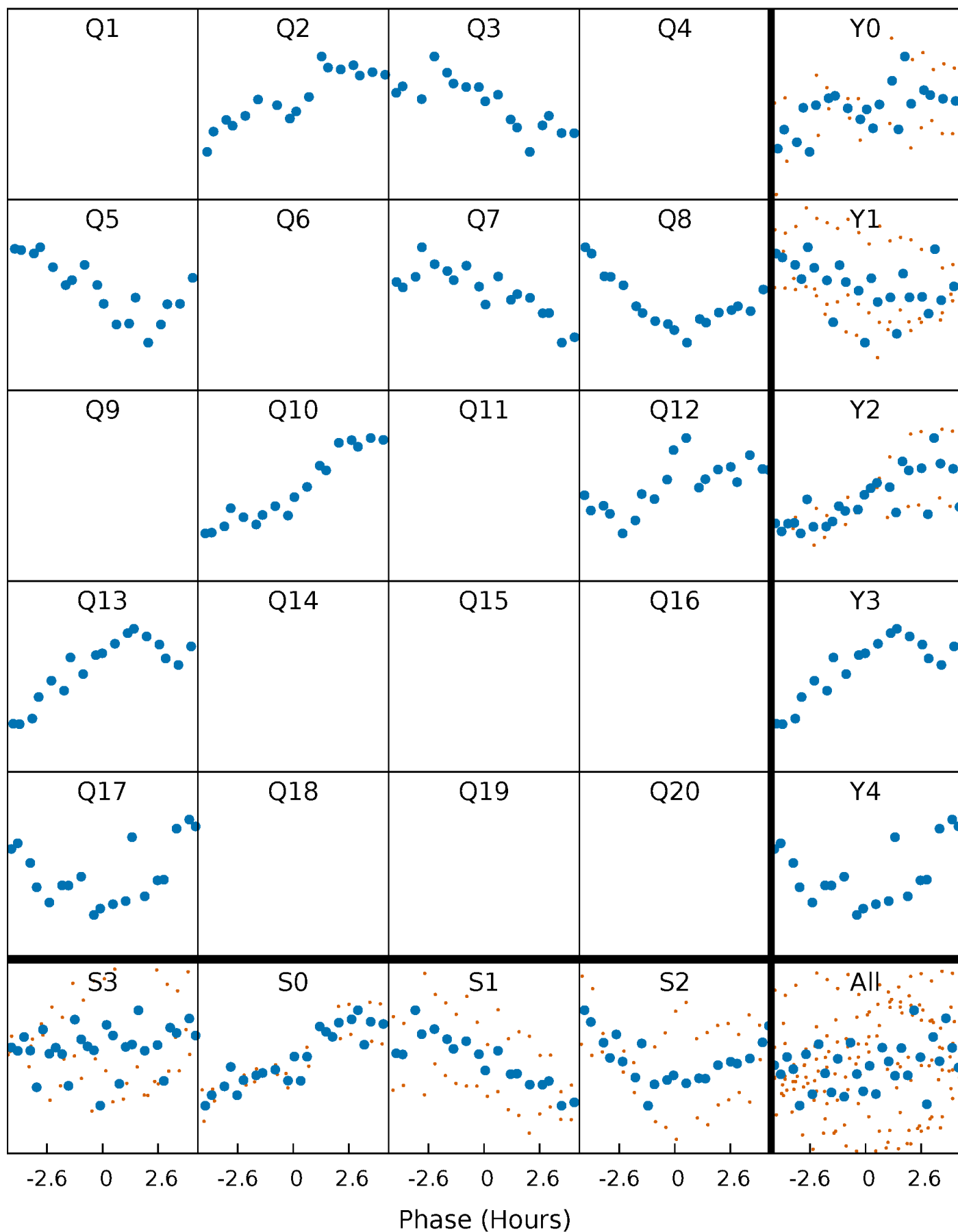


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



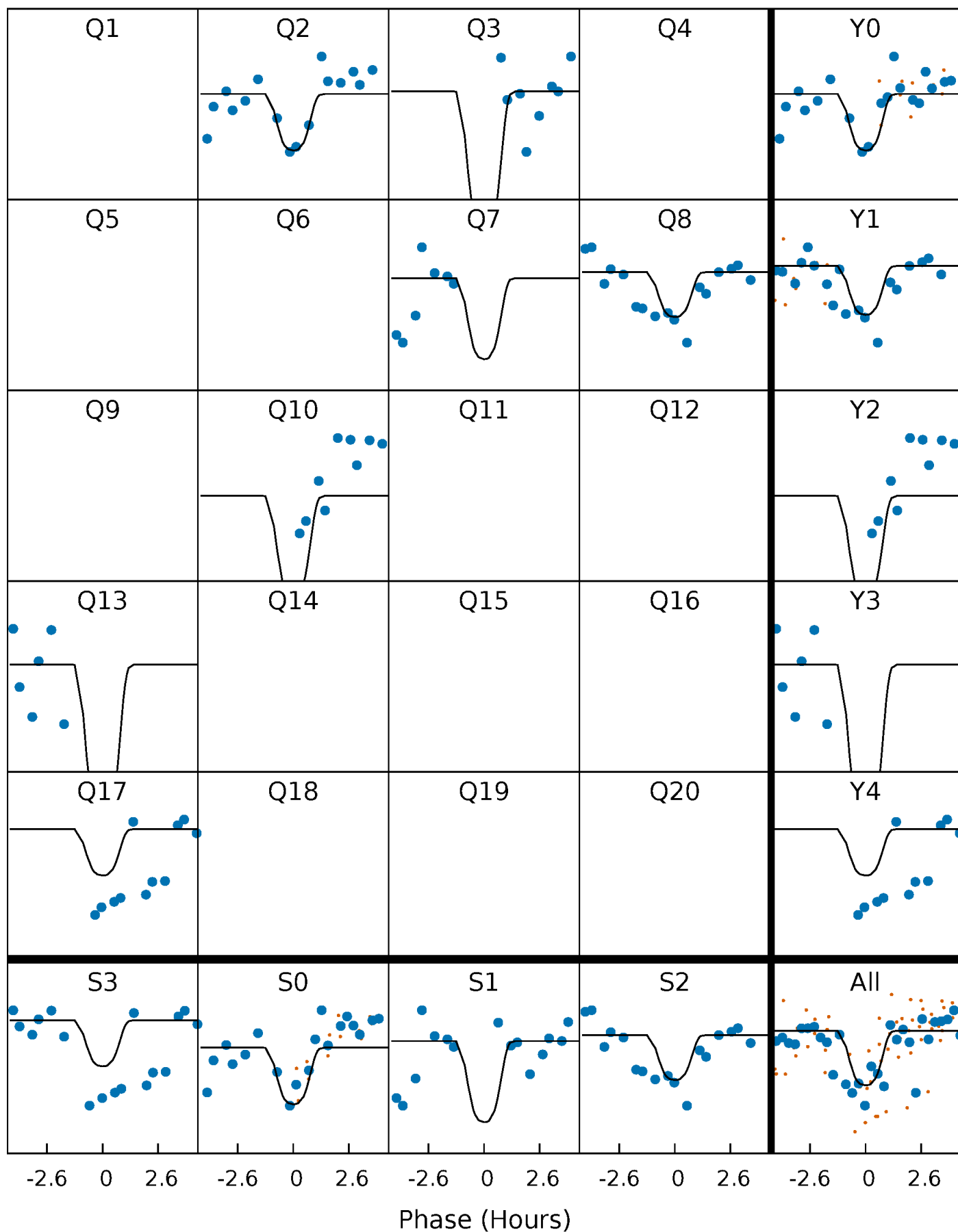
PDC Quarter-Phased Transit Curves

TCE 010793114-03 P=154.376636 Days $T_0=179.154810$ (BKJD)



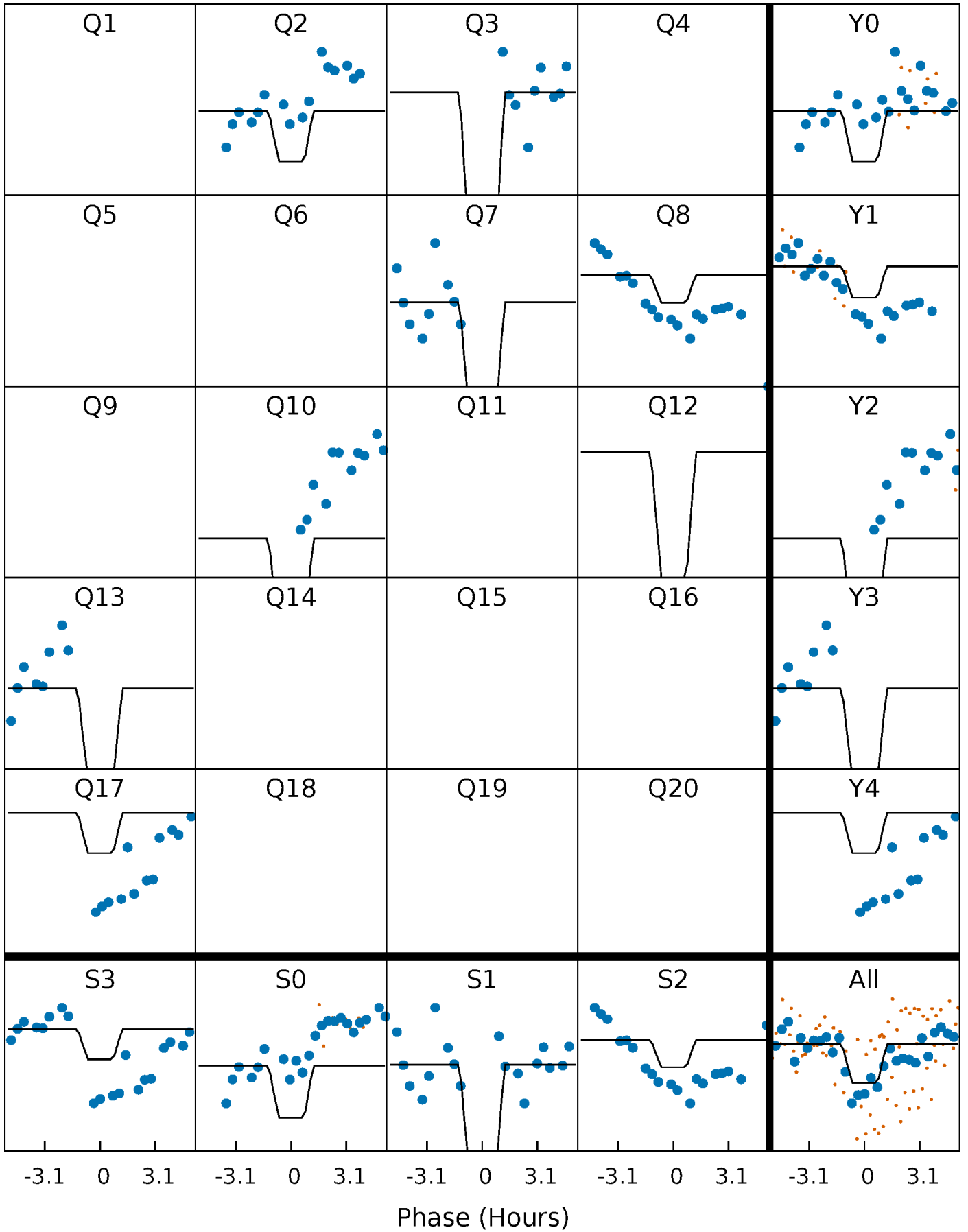
DV Quarter-Phased Transit Curves

TCE 010793114-03 P=154.376636 Days $T_0=179.154810$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

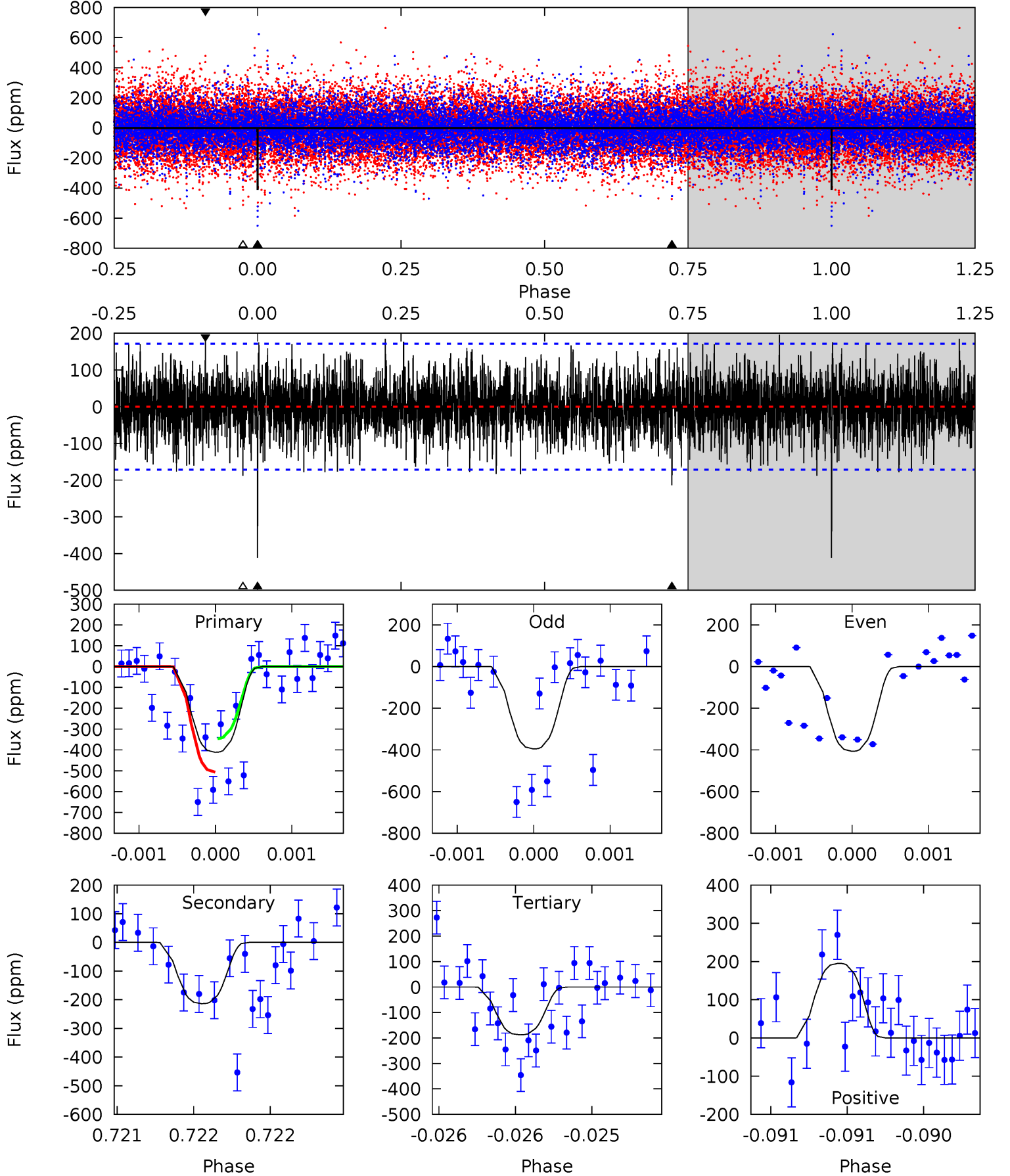
TCE 010793114-03 P=154.377918 Days $T_0=179.139685$ (BKJD)



DV Model-Shift Uniqueness Test

010793114-03, $P = 154.376636$ Days, $E = 24.778174$ Days

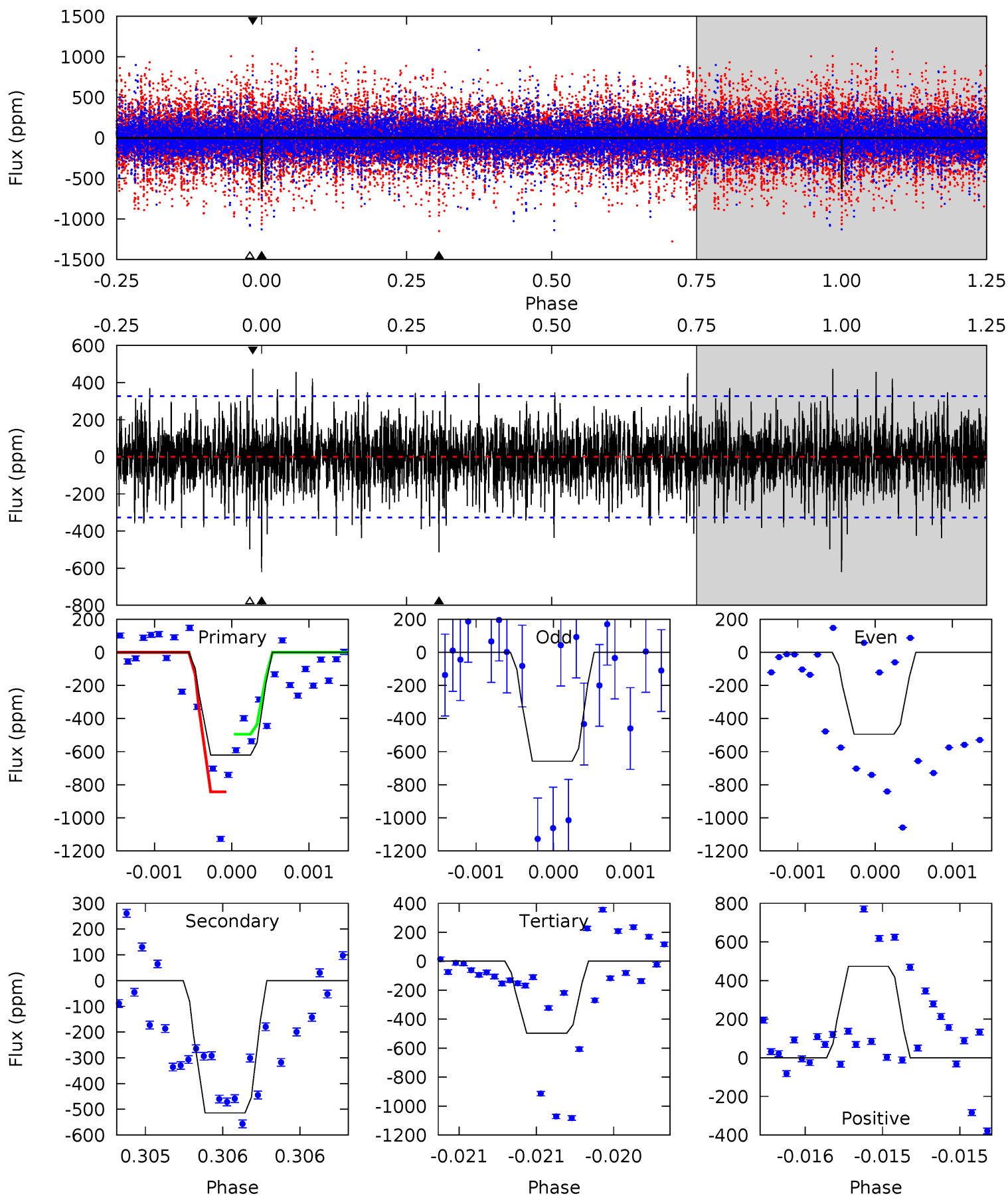
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.3	6.90	6.06	6.31	5.53	3.41	1.83	7.22	6.97	0.84	0.59	0.18	0.89	0.32	2.32



Alt Model-Shift Uniqueness Test

010793114-03, P = 154.377918 Days, E = 24.761767 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	8.68	8.40	7.99	5.52	3.40	2.00	2.08	2.49	0.28	0.69	1.36	1.09	0.43	2.59



Stellar Parameters For KIC 010793114

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	ρ_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6826^{+214}_{-285}	$4.064^{+0.286}_{-0.154}$	$-0.500^{+0.250}_{-0.300}$	$1.661^{+0.435}_{-0.531}$	$1.167^{+0.193}_{-0.176}$	$0.358^{+0.595}_{-0.173}$
	+3%/-4%	+7%/-4%	+50%/-60%	+26%/-32%	+17%/-15%	+166%/-48%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 010793114-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-214 ± 31	$3.86^{+1.05}_{-0.91}$	691^{+55}_{-58}	5503^{+625}_{-462}	2793^{+1973}_{-1092}
Alt.	-514 ± 59	$3.73^{+1.10}_{-0.89}$	692^{+56}_{-55}	7033^{+1169}_{-760}	7205^{+5326}_{-2893}

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

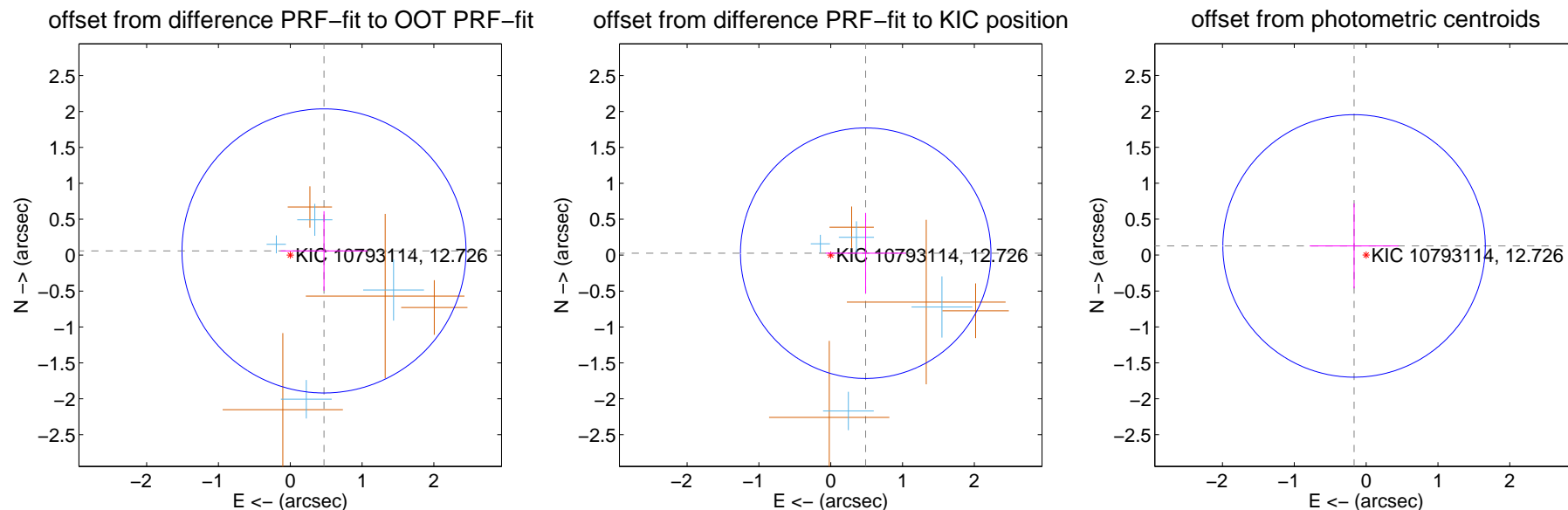
DV Centroid Data

Supplemental centroid analysis for 010793114-03. Kepler magnitude: 12.73. Transit SNR 6.76

There are 4 quarters with good PRF difference image offsets

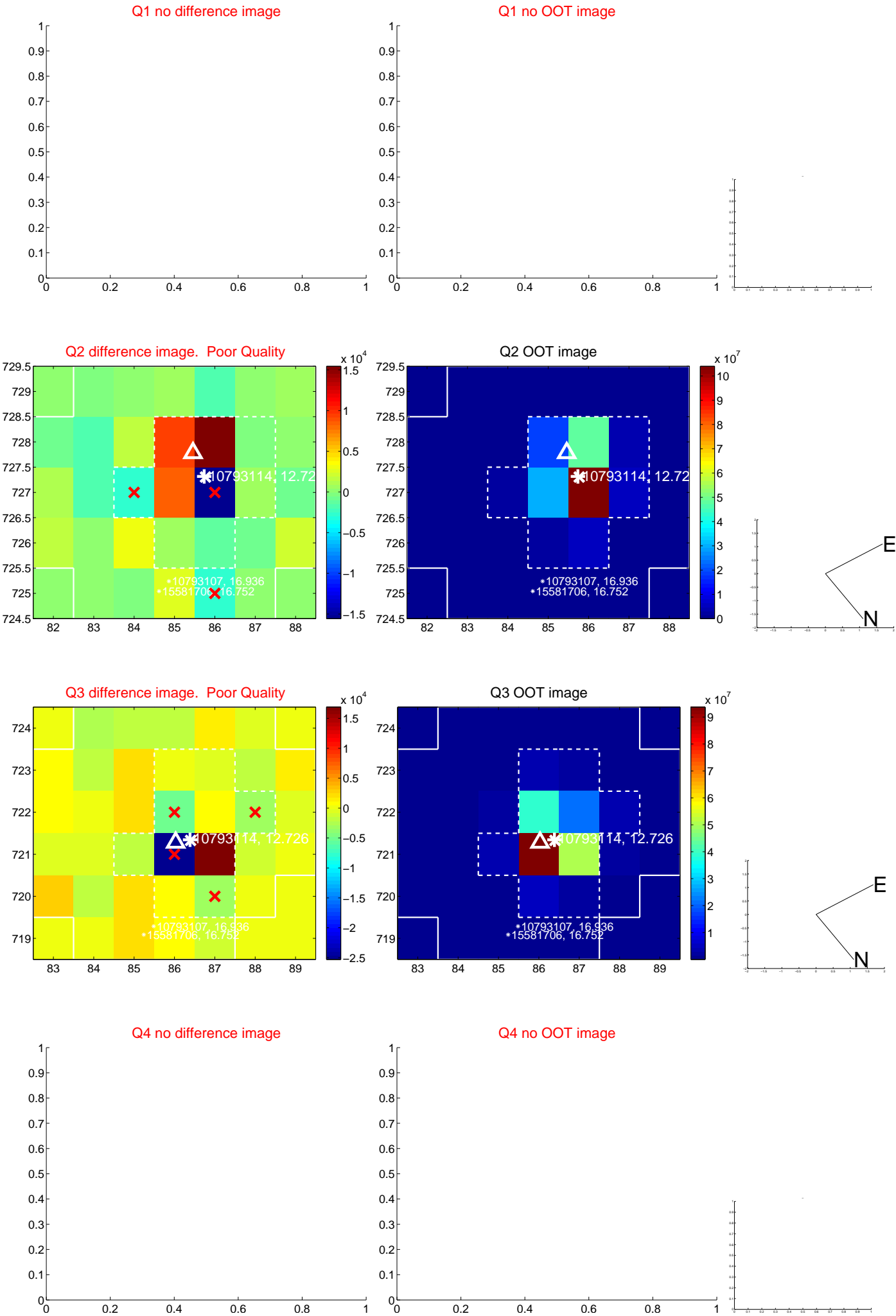
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.474 ± 0.660	0.72	-0.470 ± 0.605	0.059 ± 0.553
PRF-fit source offset from KIC position	0.488 ± 0.582	0.84	-0.487 ± 0.559	0.027 ± 0.562
photometric centroid source offset	0.21 ± 0.61	0.35	0.17 ± 0.62	0.13 ± 0.59

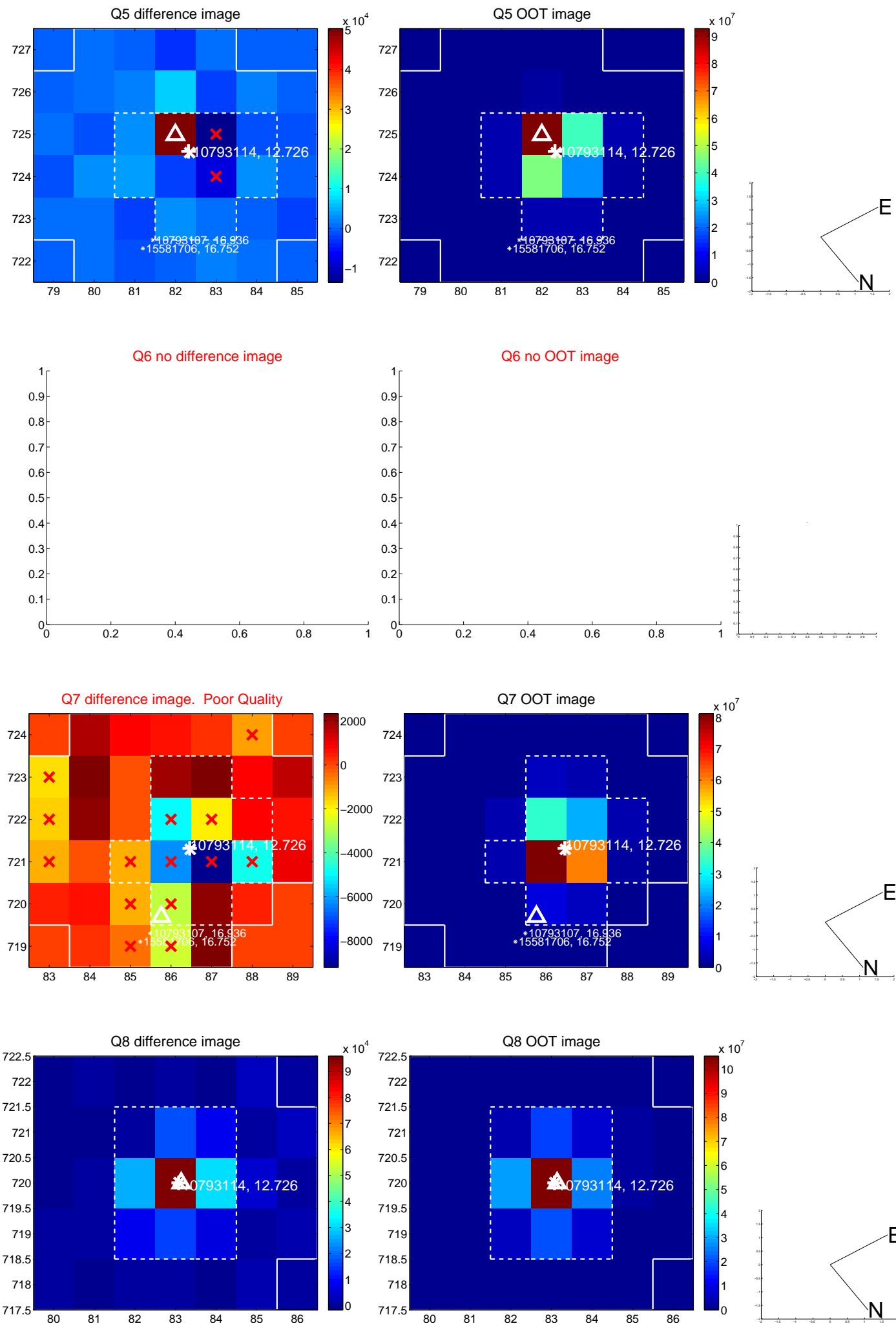


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

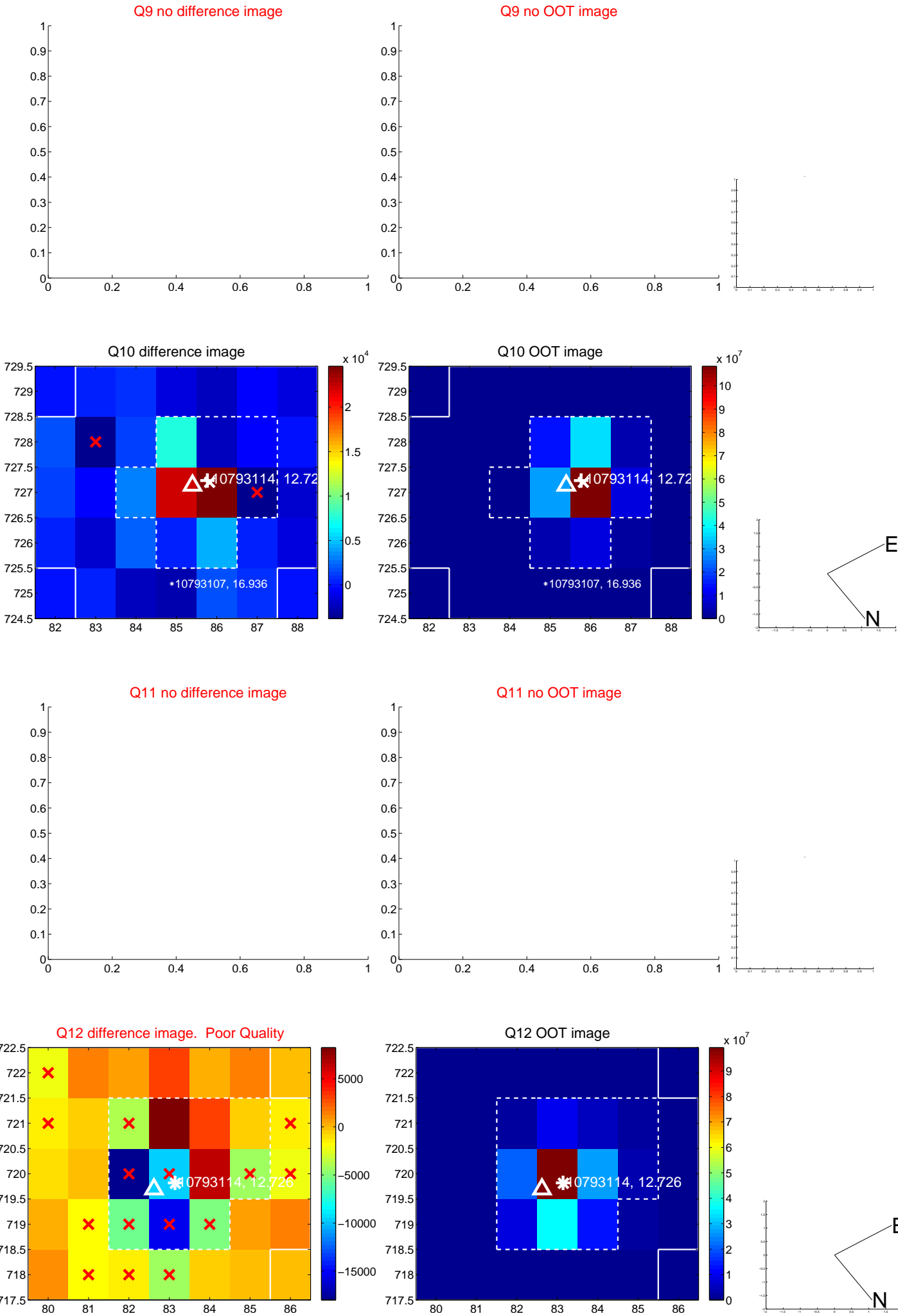
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



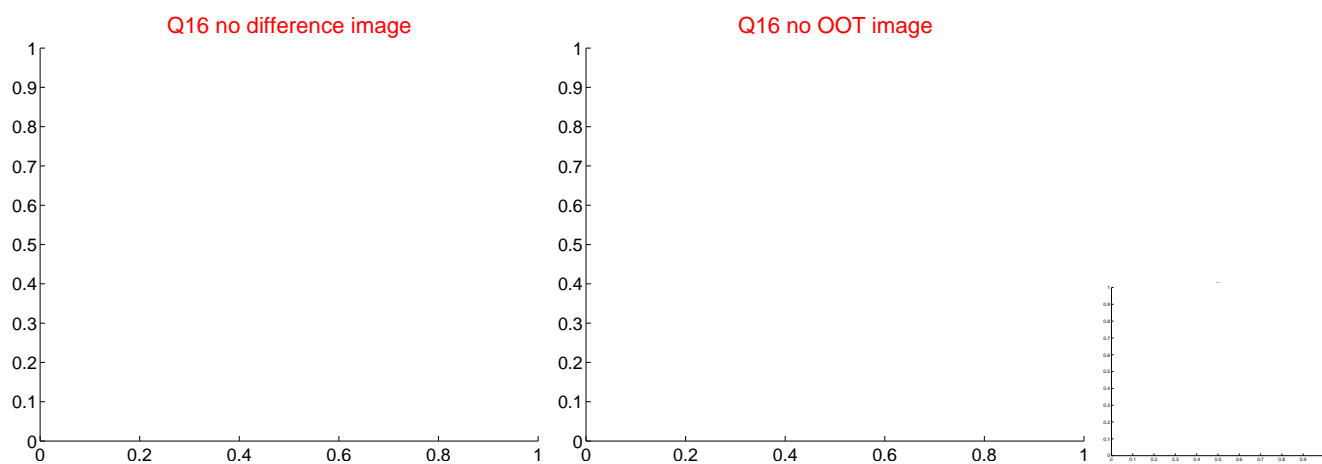
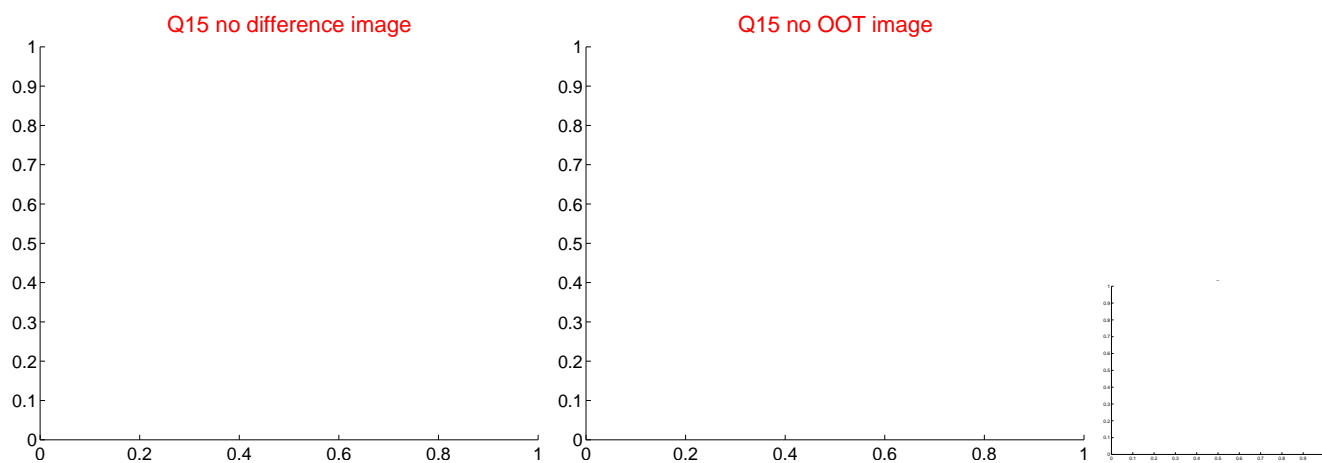
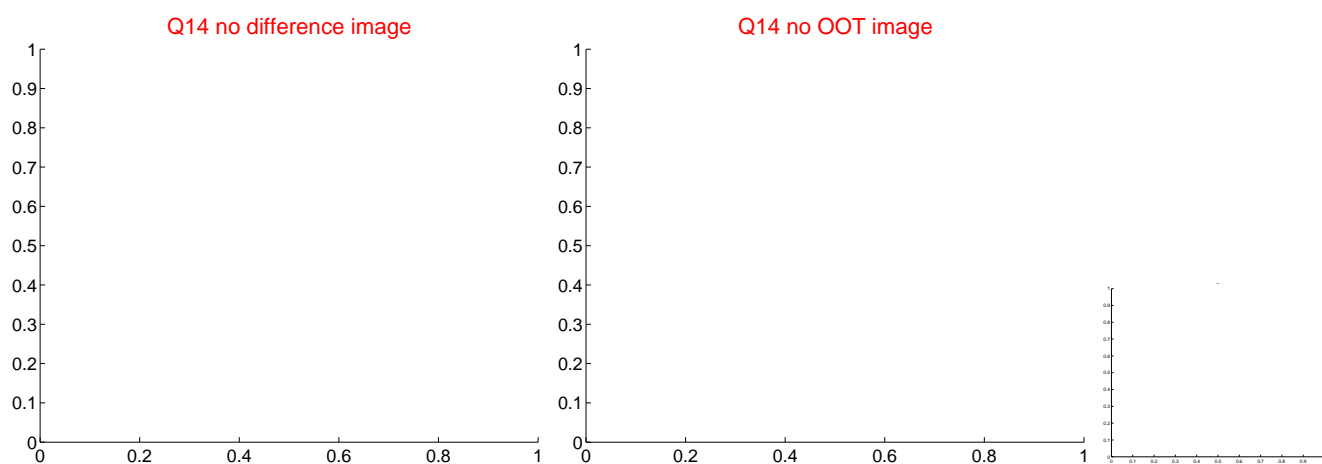
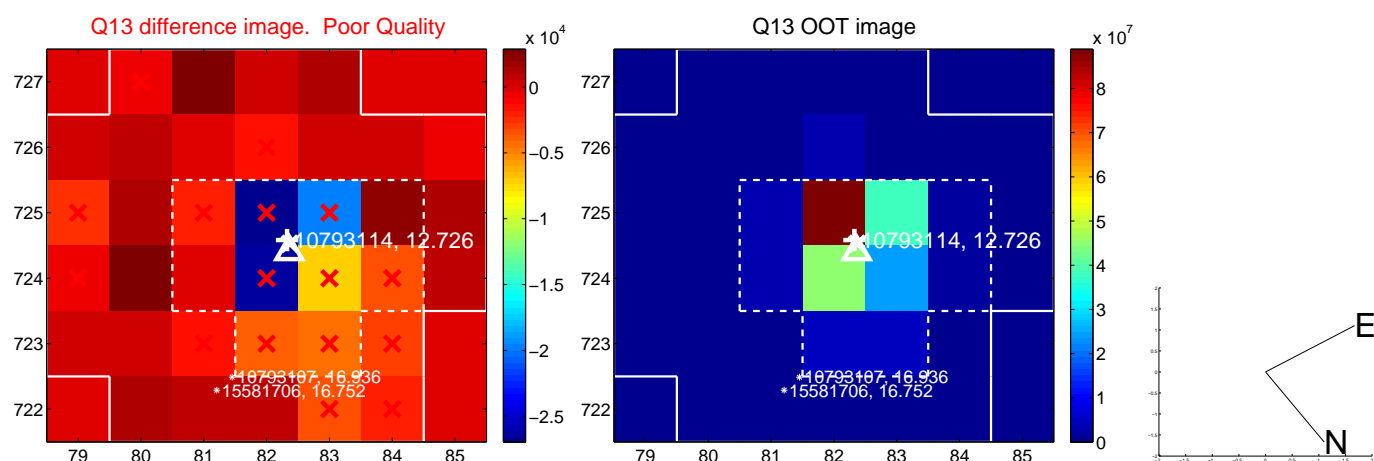
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



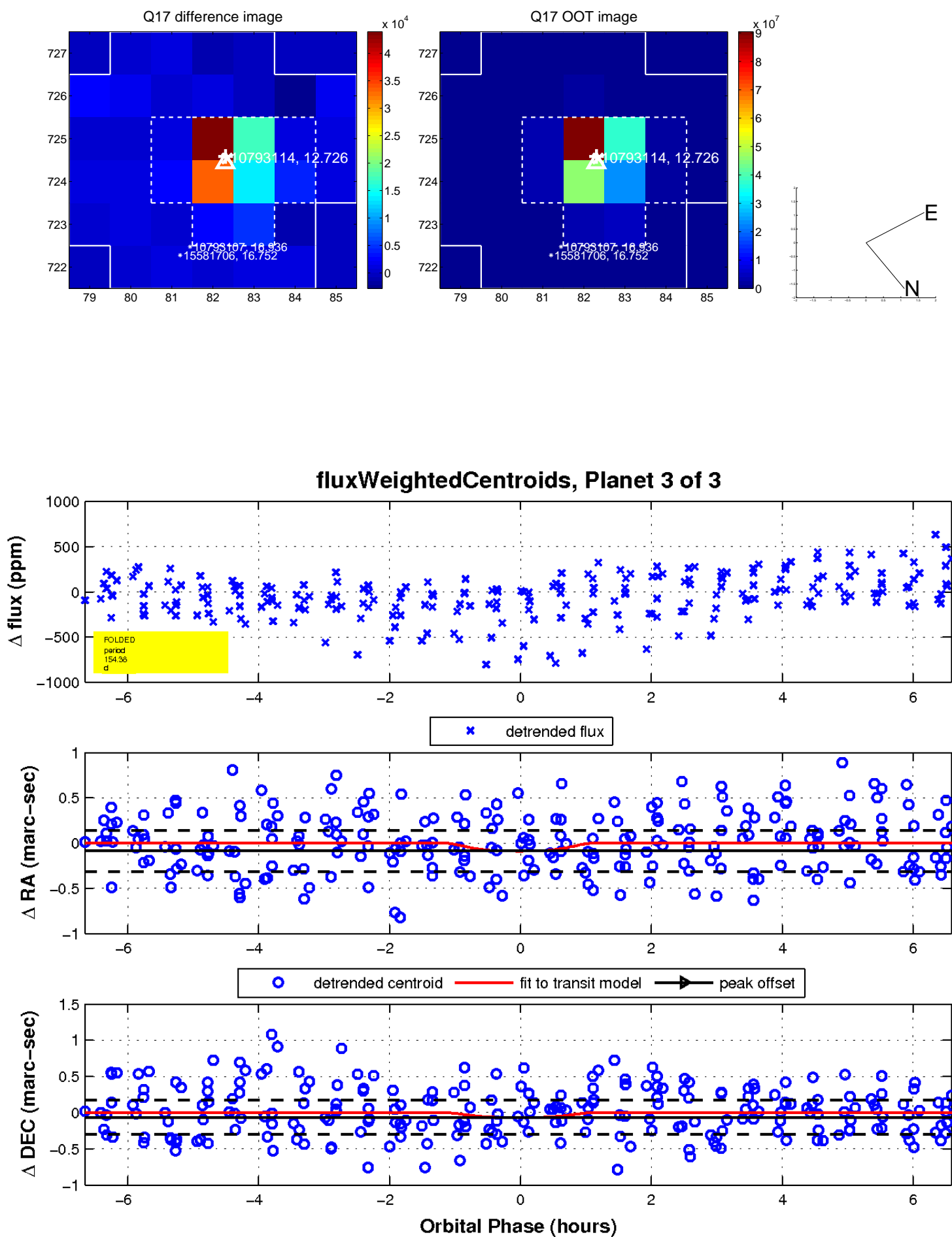
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

