

KIC 010328393

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})
010328393-01	OBS	1905.01	7.626372	136.013975	285.3	2.562	30.7	31.9	0.72	4955	1.51	57.98
010328393-02	OBS	1905.02	15.995584	144.242302	231.4	4.091	19.1	19.2	0.72	4955	1.51	21.59
010328393-03	OBS	1905.03	34.211155	154.584076	253.9	5.200	14.0	15.9	0.72	4955	1.45	7.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010328393-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010328393-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010328393-03	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.

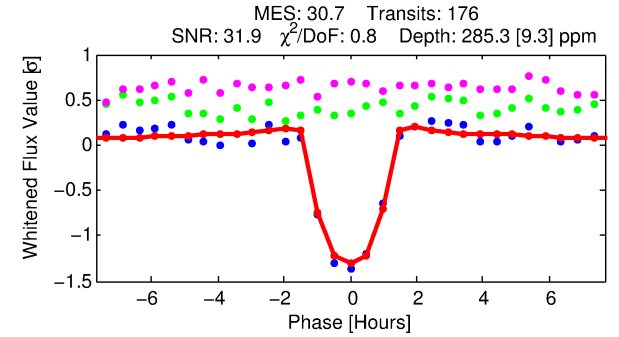
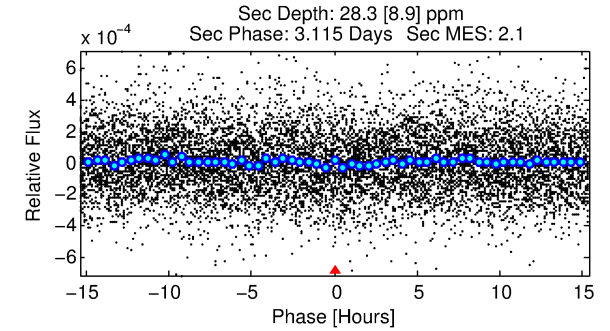
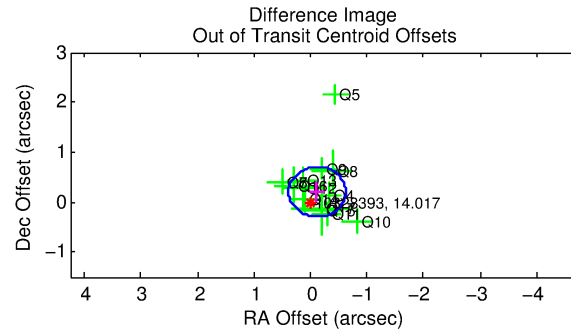
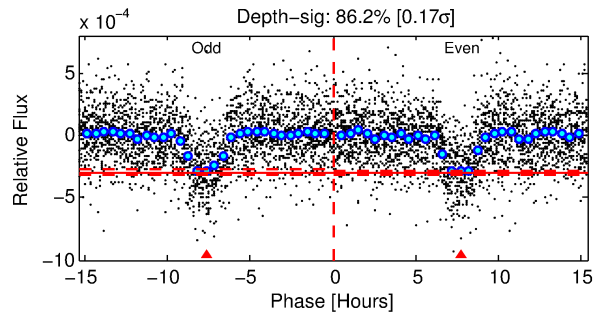
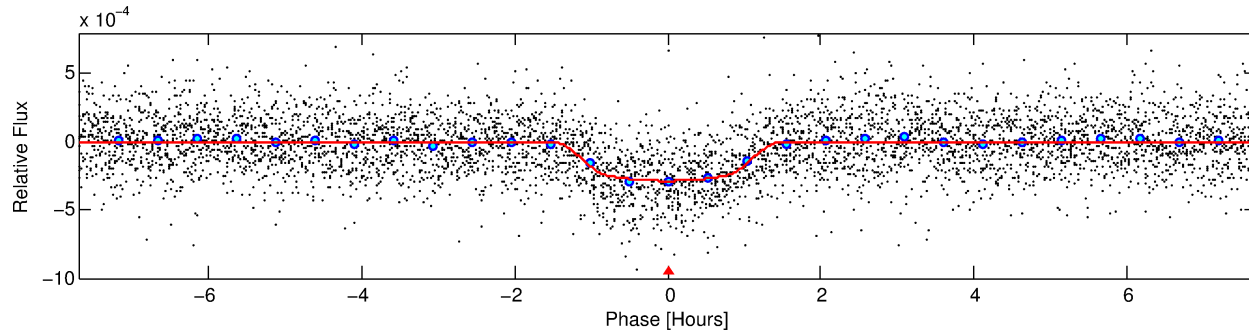
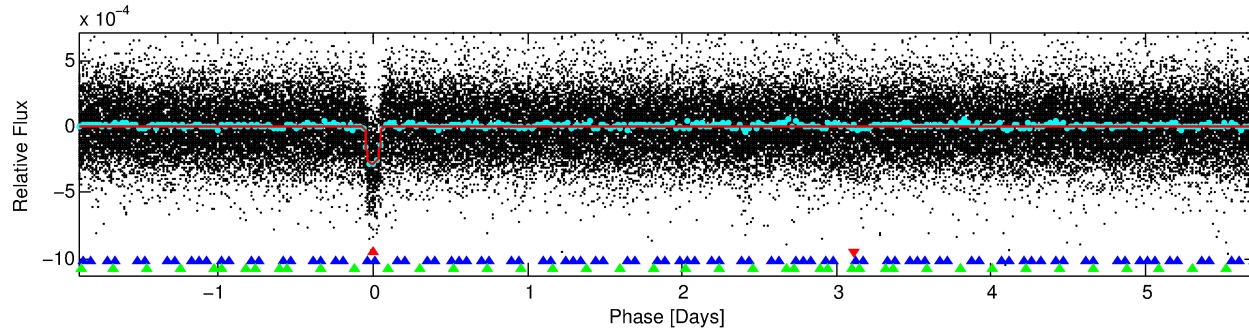
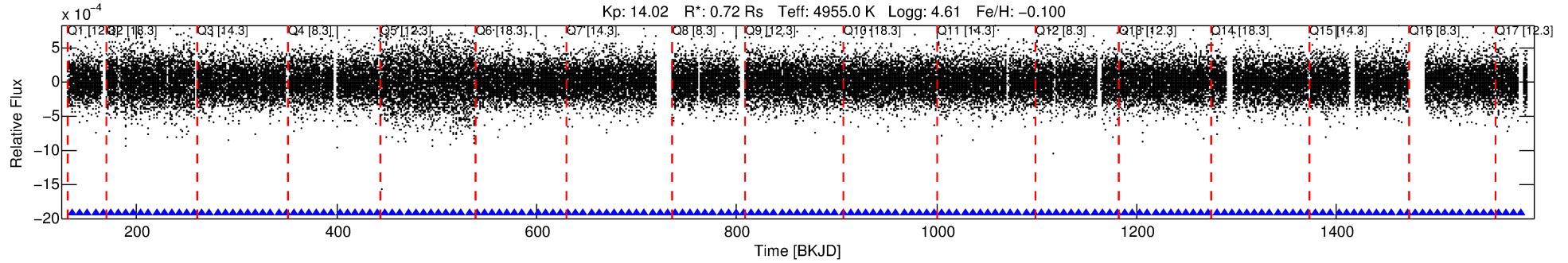
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010328393-01

No Significant Match Found

DV One-Page Summary

KIC: 10328393 Candidate: 1 of 3 Period: 7.626 d
KOI: K01905.01 Name: Kepler-332b Corr: 0.972



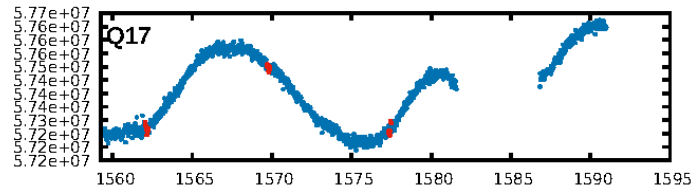
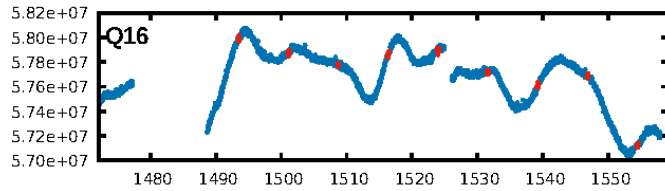
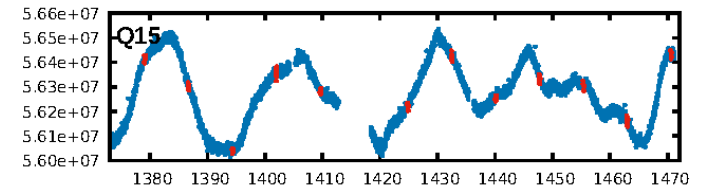
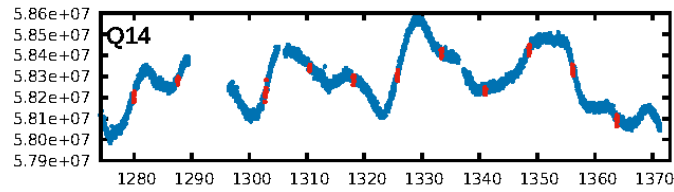
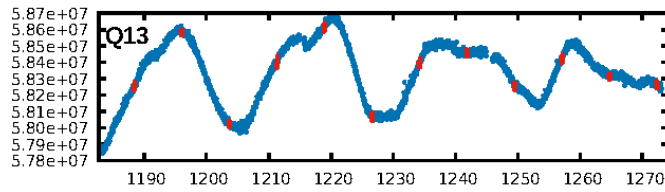
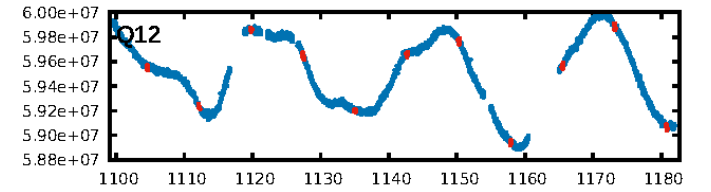
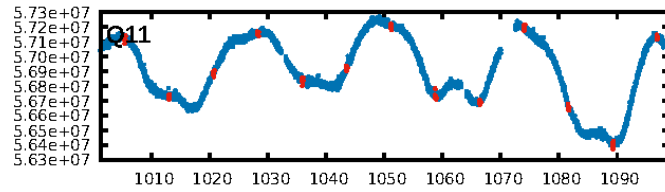
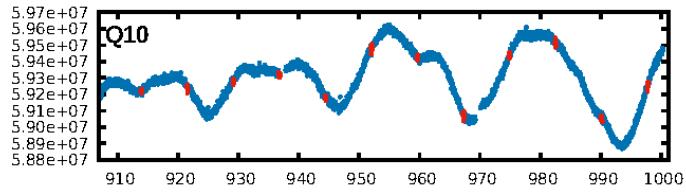
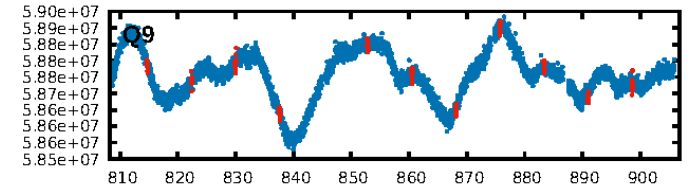
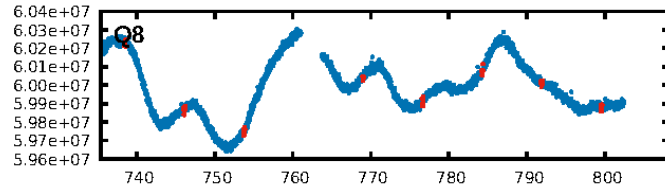
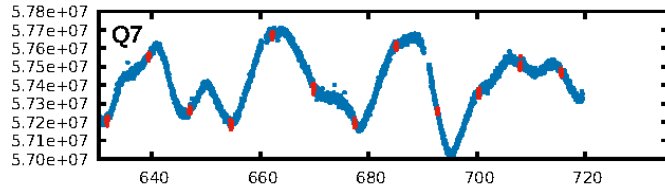
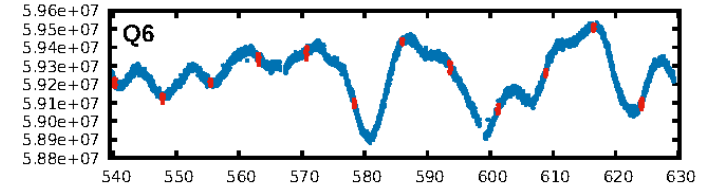
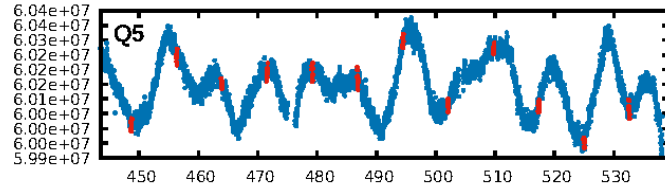
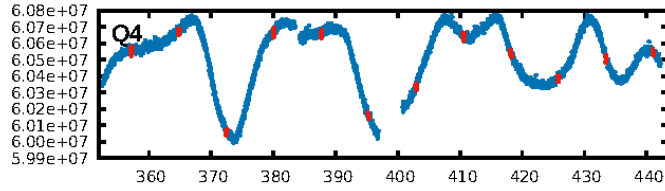
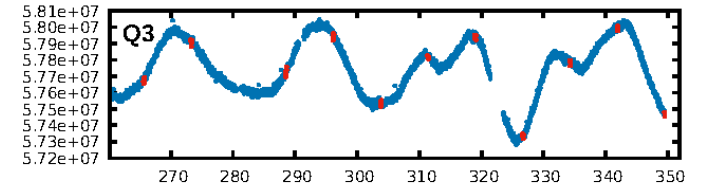
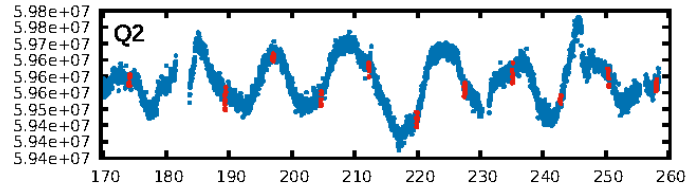
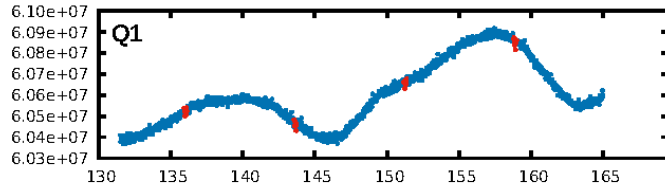
DV Fit Results:

Period = 7.62637 [0.00002] d
Epoch = 136.0140 [0.0016] BKJD
Rp/R* = 0.0191 [0.0032]
a/R* = 10.41 [6.77]
b = 0.91 [0.13]
Seff = 57.98 [6.71]
Teq = 704 [20] K
Rp = 1.51 [0.27] Re
a = 0.0696 [0.0039] AU
Ag = 33.25 [15.41] [2.09σ]
Teffp = 2612 [302] K [6.30σ]

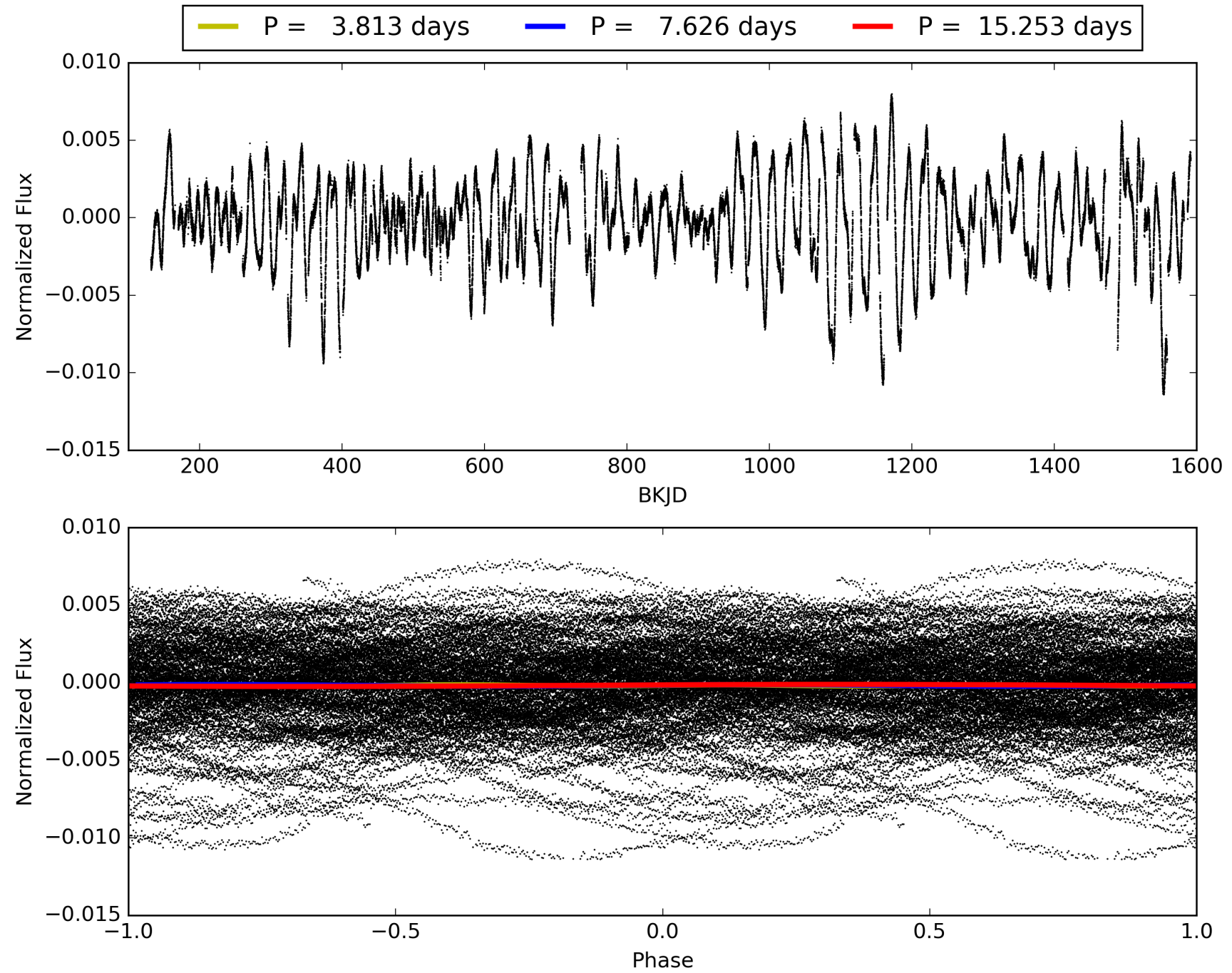
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [41.61σ]
ModelChiSquare2-sig: 99.7%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 6.70e-200
RollingBand-fgt: 1.00 [169/169]
GhostDiagnostic-chr: 11.3
Centroid-sig: 0.0%
Centroid-so: 0.993 arcsec [1.93σ]
OotOffset-rm: 0.234 arcsec [1.40σ]
KicOffset-rm: 0.386 arcsec [2.90σ]
OotOffset-st: 3/3/4/4 [14]
KicOffset-st: 3/3/4/4 [14]
DiffImageQuality-fgm: 0.79 [11/14]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 010328393-01, PDC Light Curves

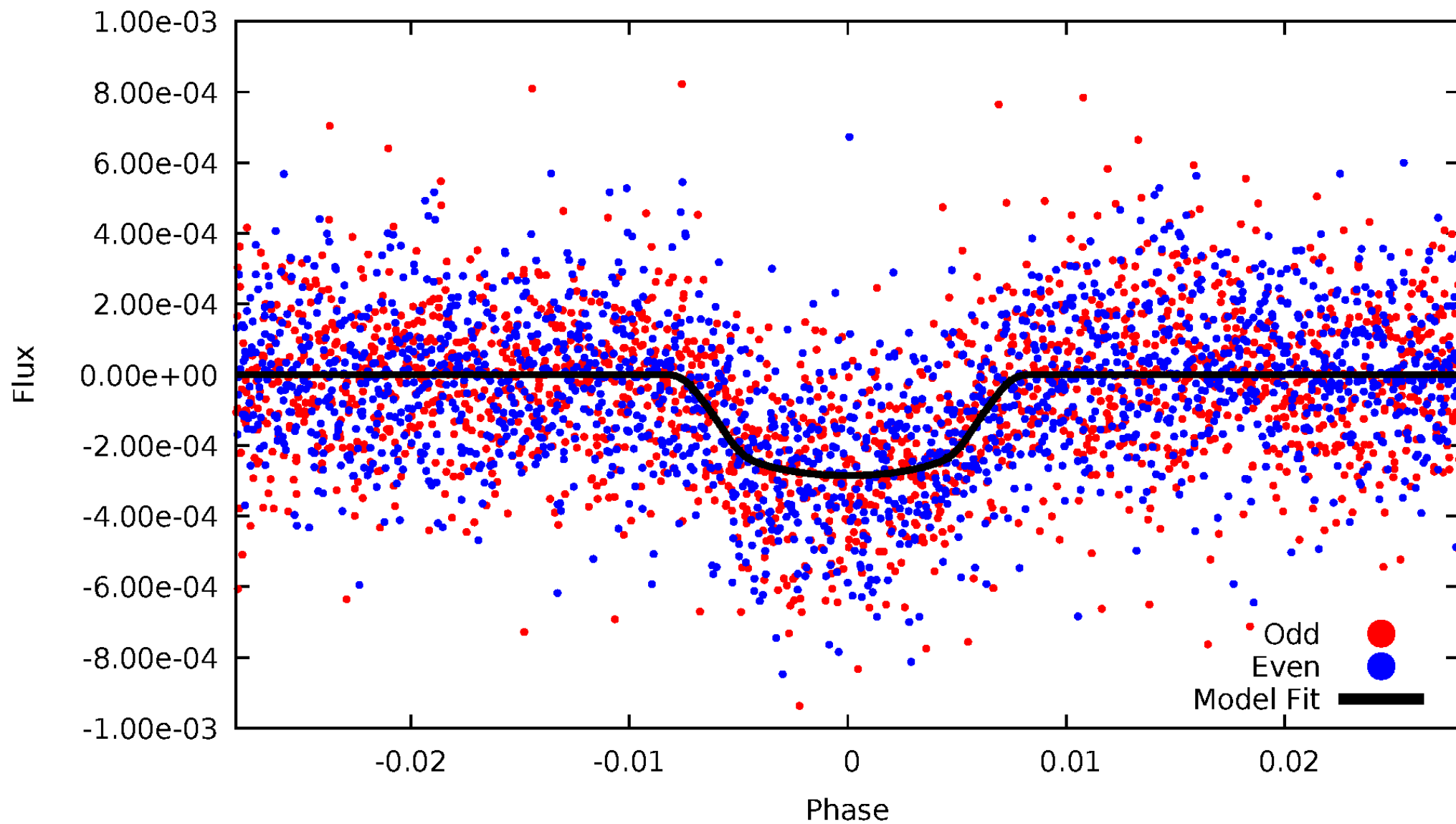


TCE 010328393-01



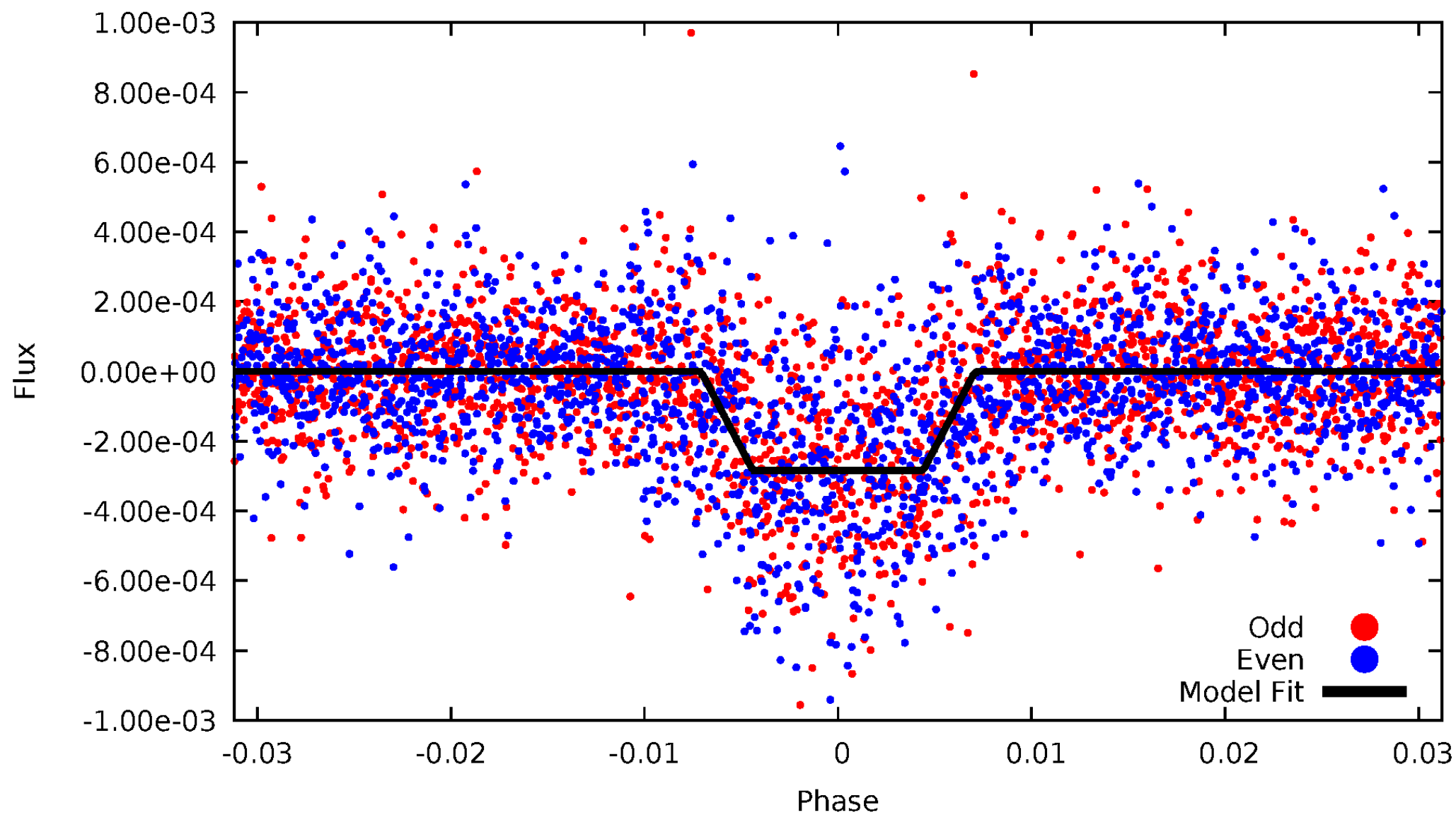
DV Odd/Even

TCE 010328393-01



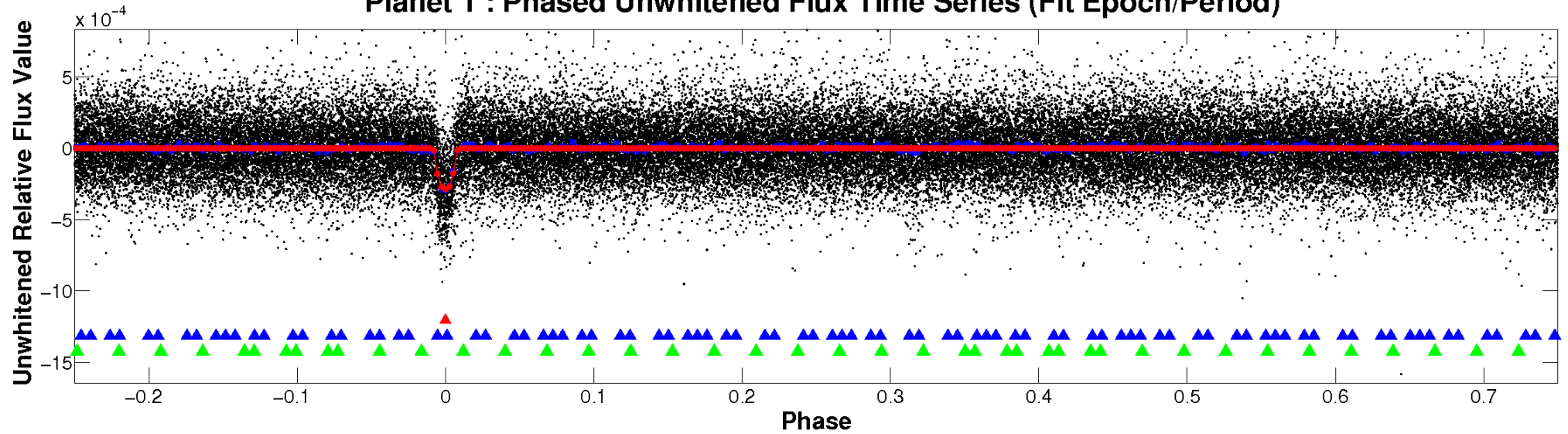
ALT Odd/Even

TCE 010328393-01

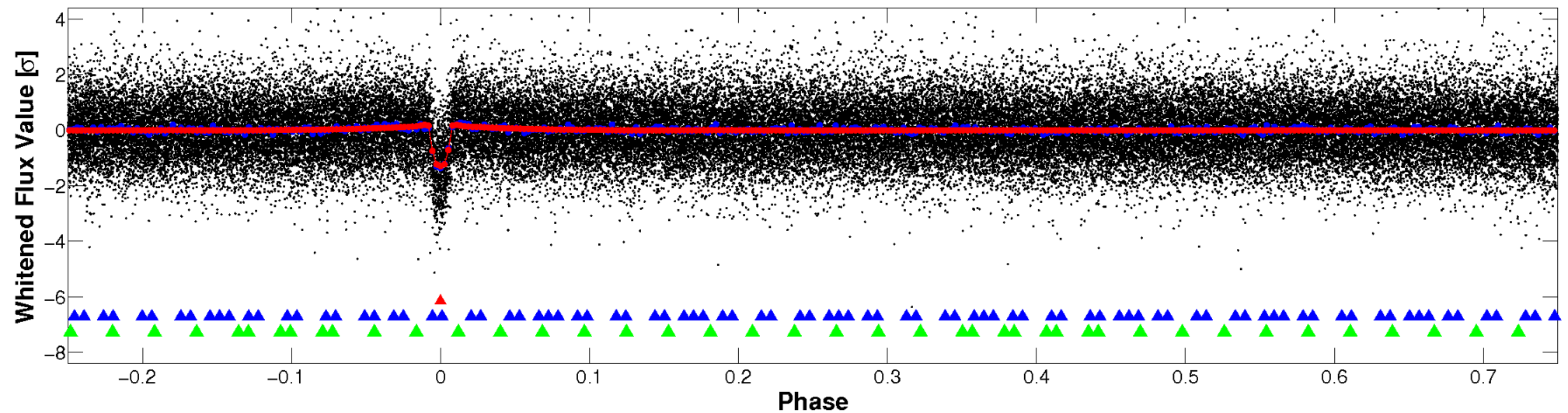


Non-Whitened Vs. Whitened Light Curve

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

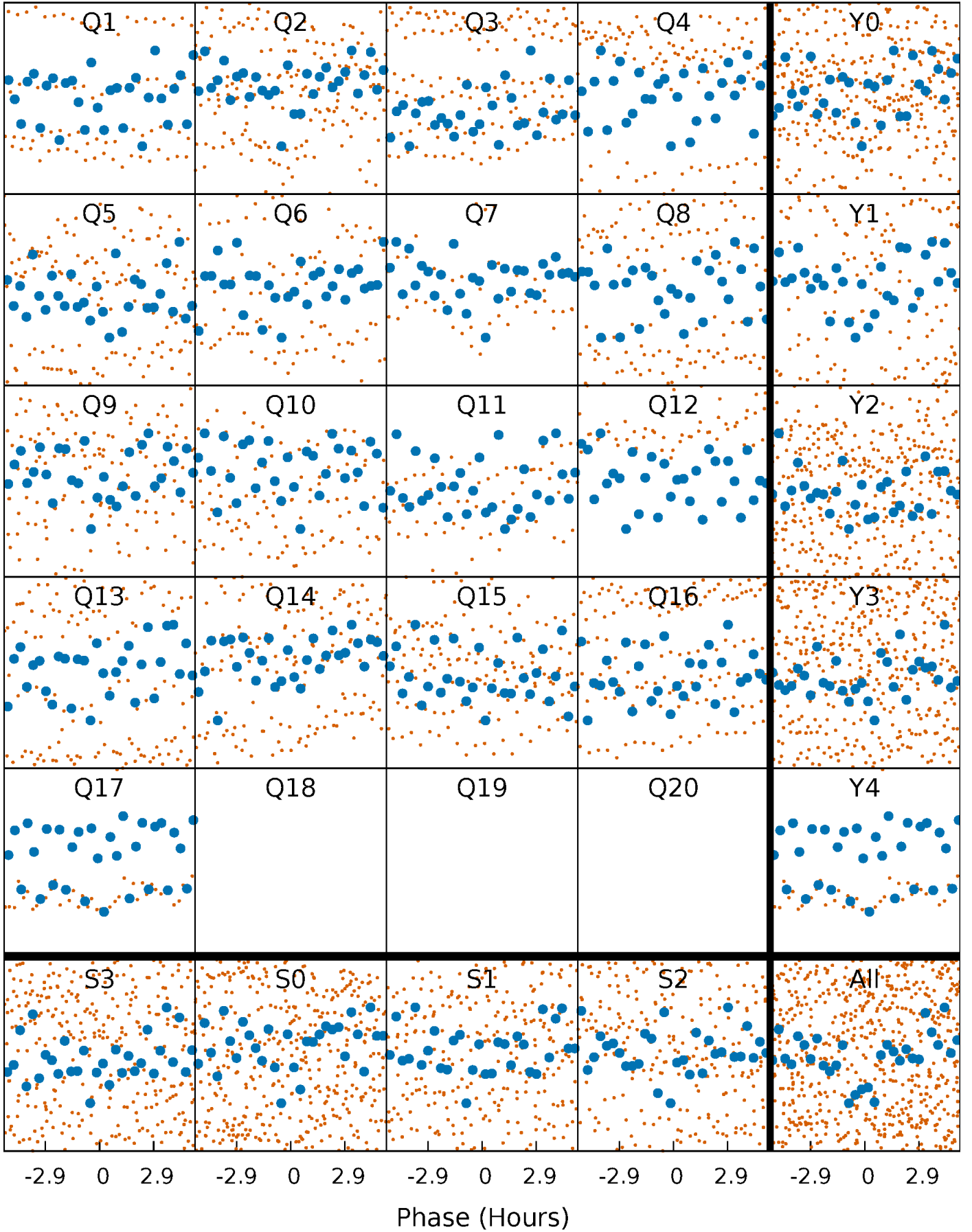


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



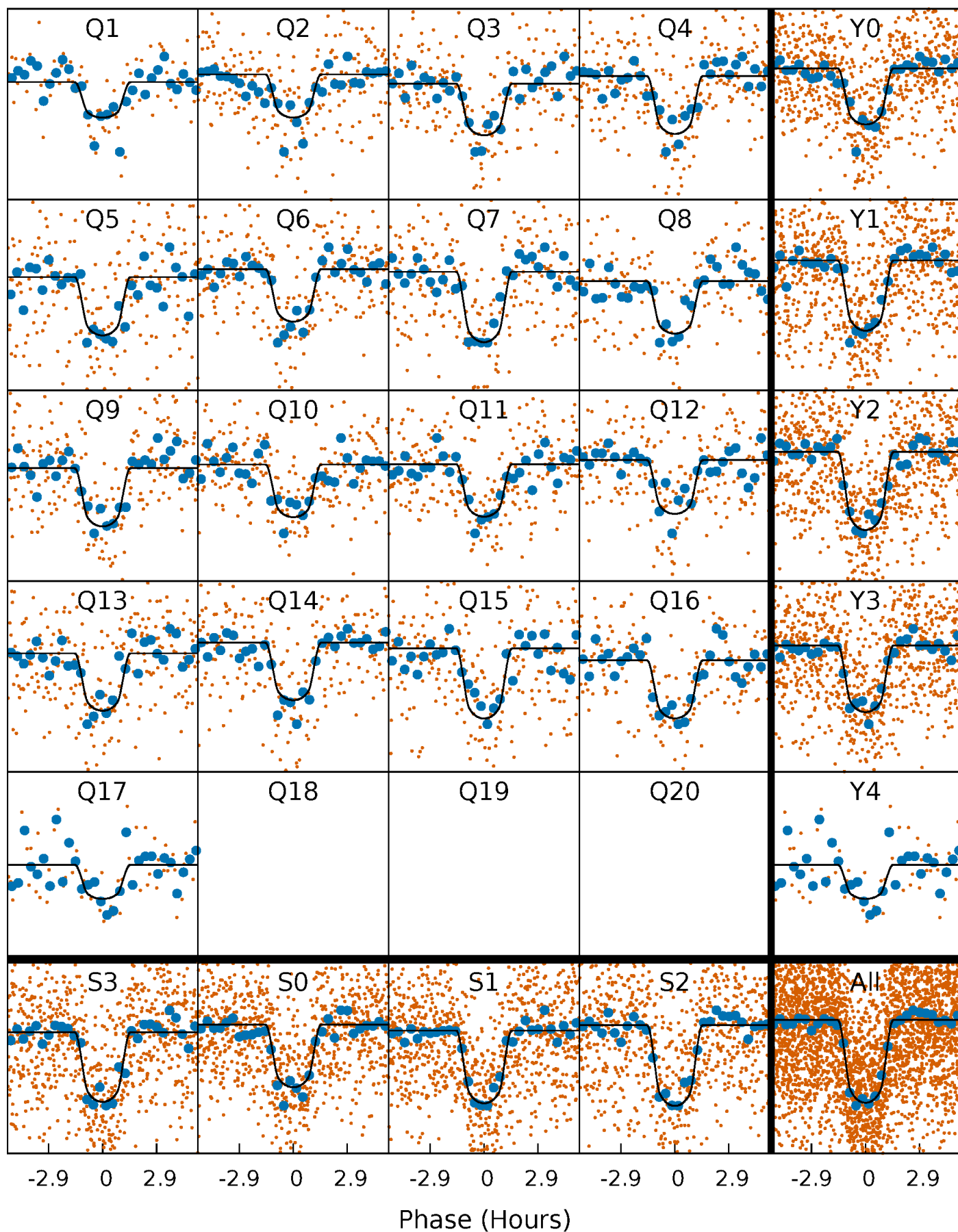
PDC Quarter-Phased Transit Curves

TCE 010328393-01 P= 7.626372 Days $T_0=136.013975$ (BKJD)



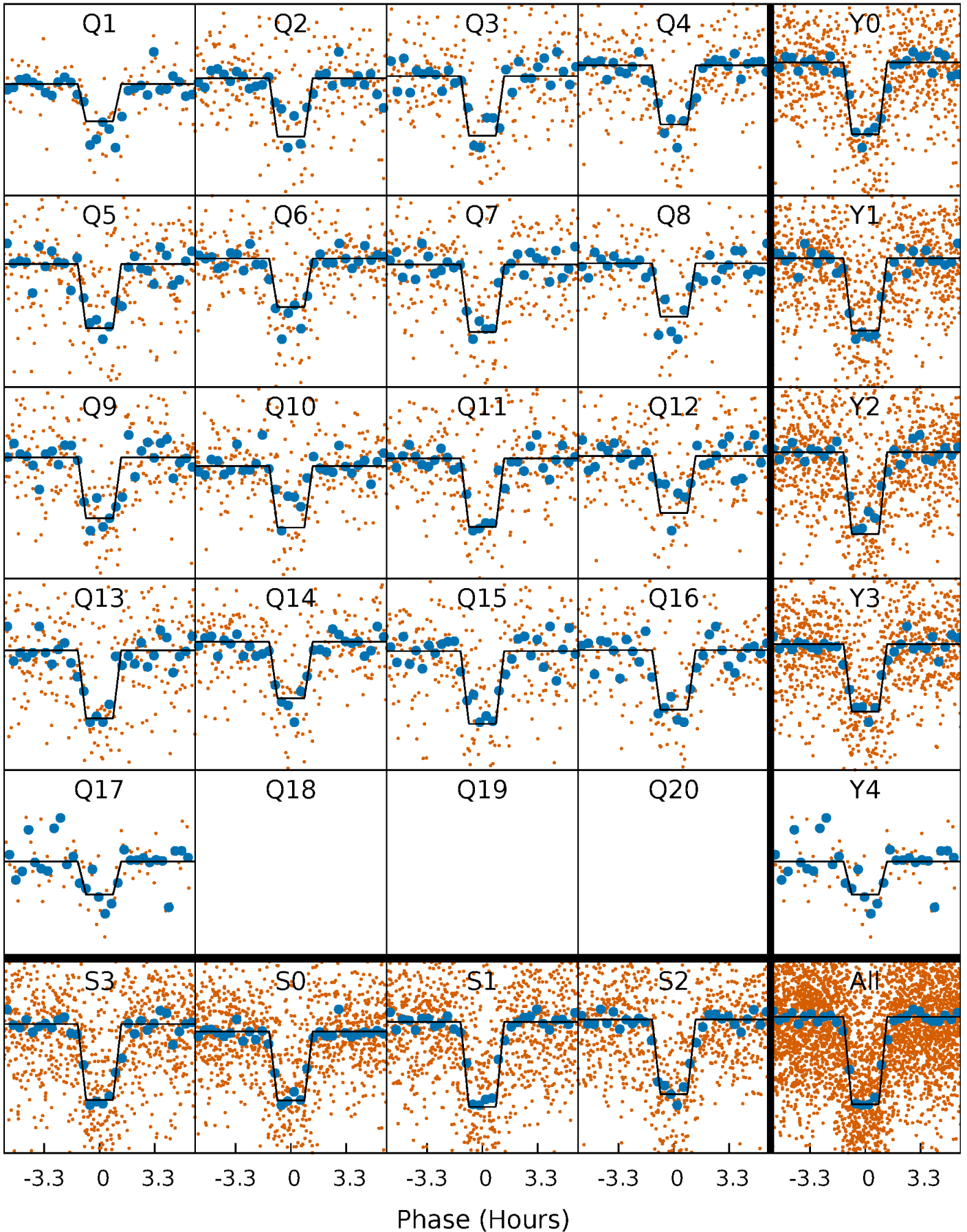
DV Quarter-Phased Transit Curves

TCE 010328393-01 P= 7.626372 Days $T_0=136.013975$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

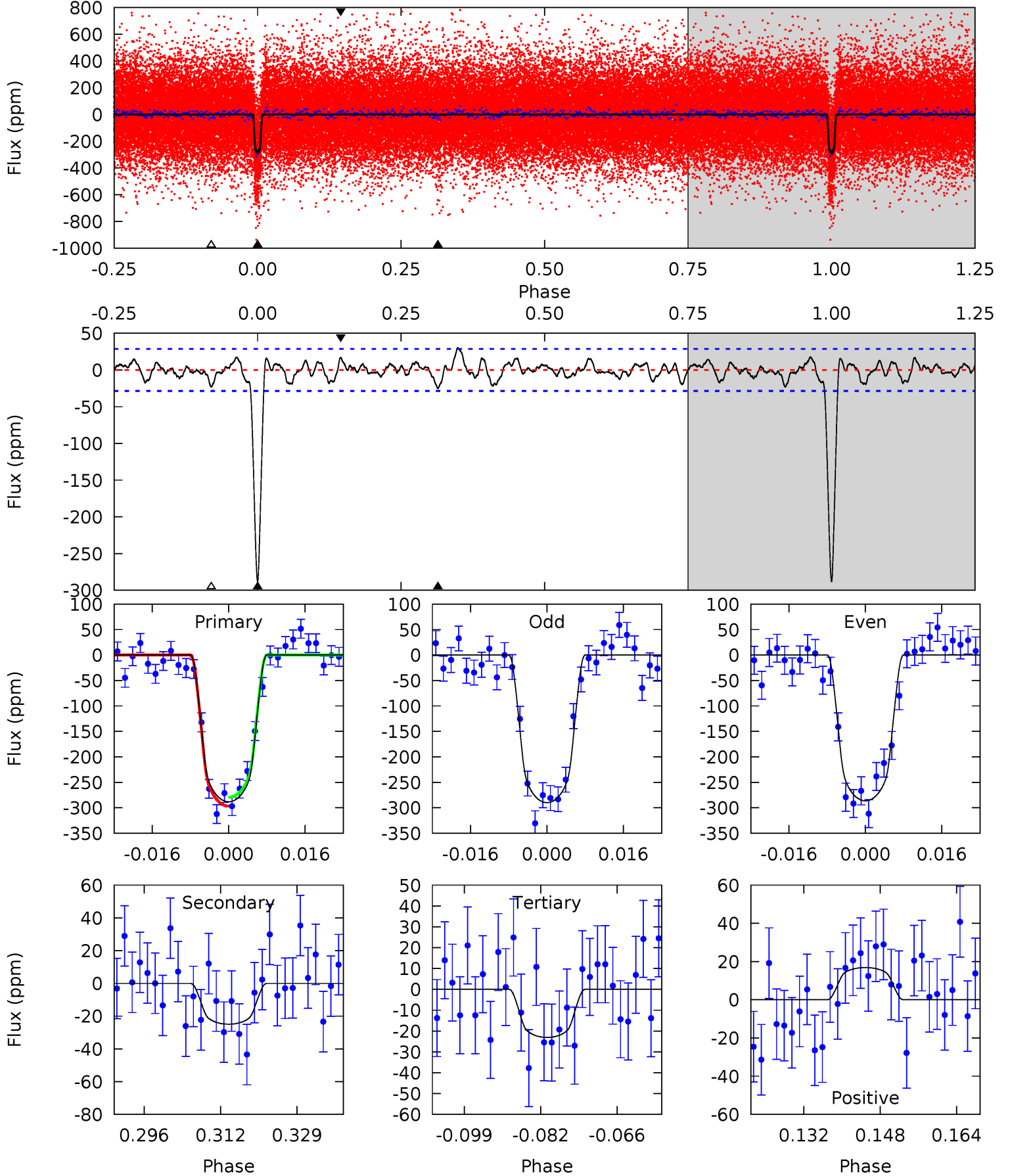
TCE 010328393-01 P= 7.626390 Days $T_0=136.011875$ (BKJD)



DV Model-Shift Uniqueness Test

010328393-01, P = 7.626372 Days, E = 128.387603 Days

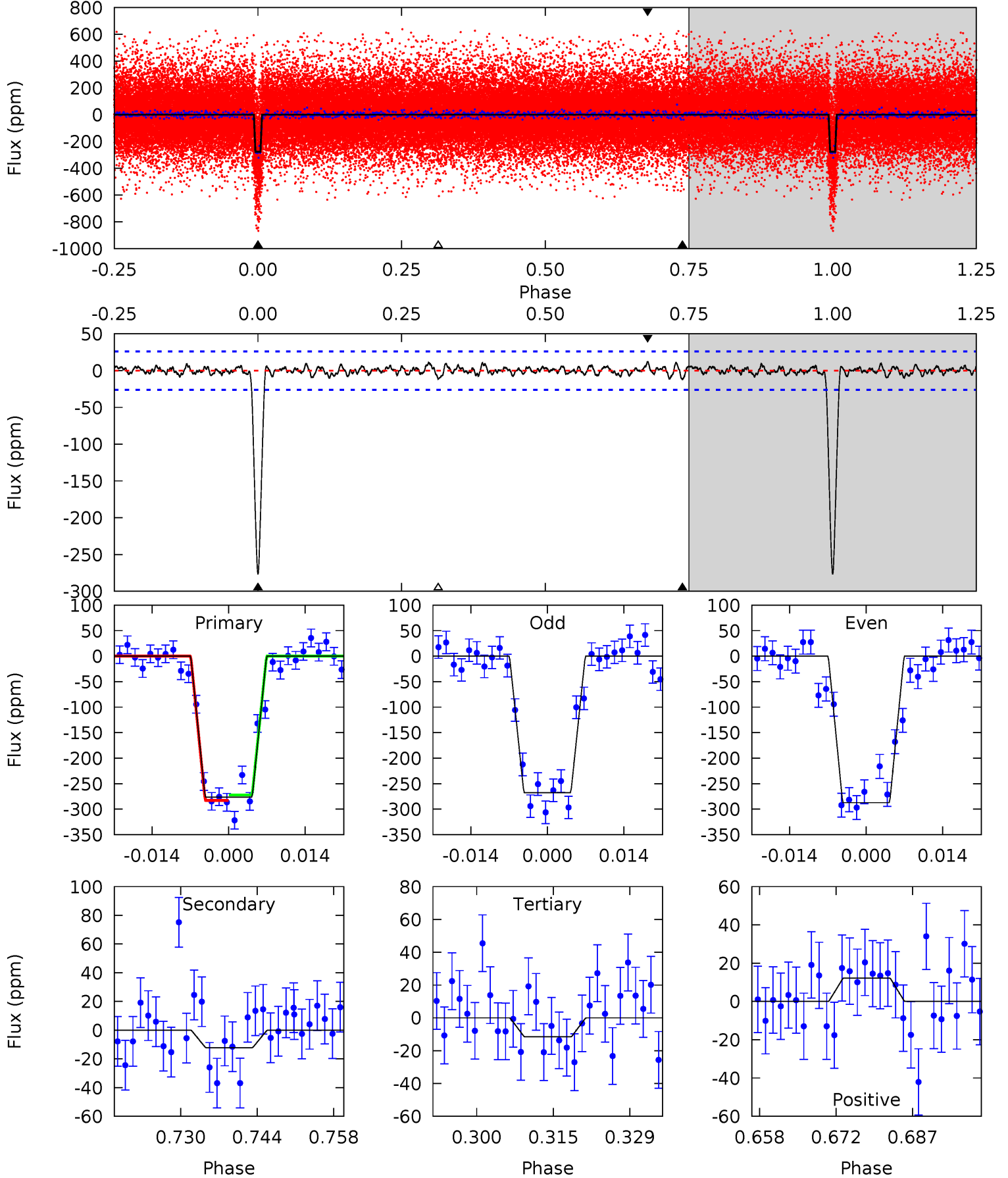
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
49.5	4.28	3.97	2.90	4.93	2.40	1.49	45.5	46.6	0.32	1.39	0.30	1.01	0.10	1.47



Alt Model-Shift Uniqueness Test

010328393-01, P = 7.626390 Days, E = 128.385485 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
52.5	2.32	2.20	2.32	4.96	2.45	0.77	50.3	50.1	0.12	-0.00	1.86	1.01	0.04	1.03



Stellar Parameters For KIC 010328393

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4955^{+100}_{-100}	$4.610^{+0.018}_{-0.046}$	$-0.100^{+0.150}_{-0.150}$	$0.721^{+0.047}_{-0.029}$	$0.774^{+0.036}_{-0.048}$	$2.914^{+0.270}_{-0.442}$
	+2%/-2%	+0%/-1%	+150%/-150%	+7%/-4%	+5%/-6%	+9%/-15%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 010328393-01 / KOI 1905.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-25 ± 6	$1.52^{+0.24}_{-0.28}$	987^{+24}_{-24}	3110^{+203}_{-184}	29^{+15}_{-10}
Alt.	-12 ± 5	$1.34^{+0.26}_{-0.26}$	988^{+24}_{-24}	2895^{+214}_{-241}	18^{+11}_{-8}

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

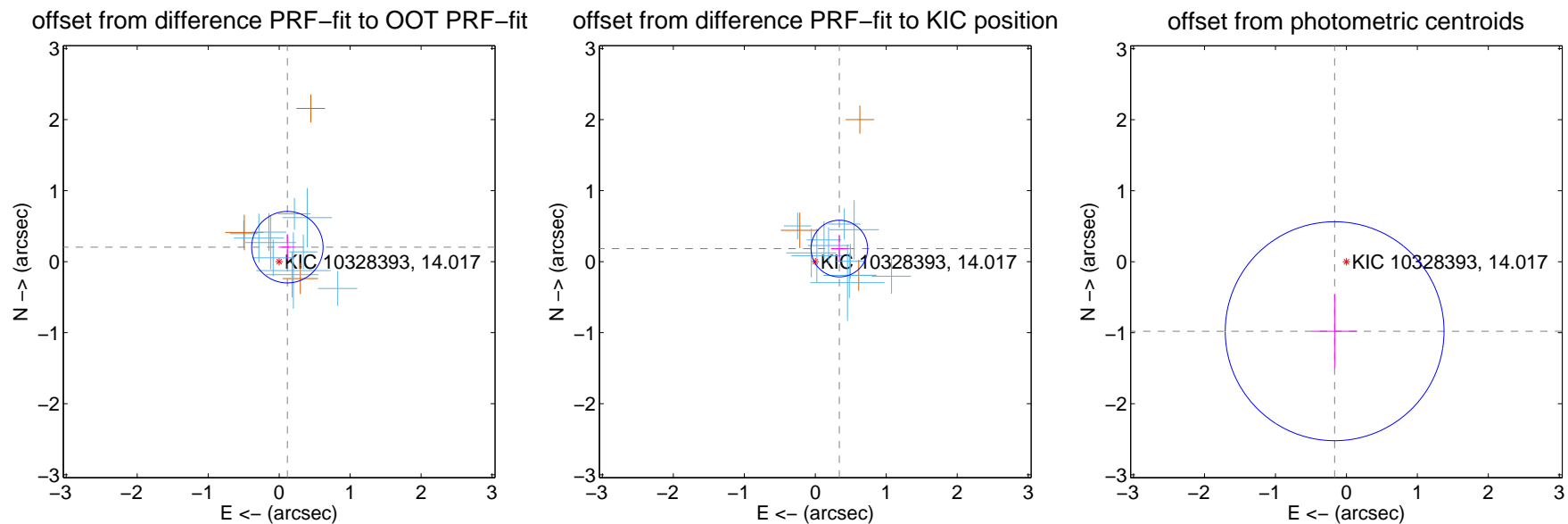
DV Centroid Data

Supplemental centroid analysis for 010328393-01. Kepler magnitude: 14.02. Transit SNR 31.91

There are 11 quarters with good PRF difference image offsets

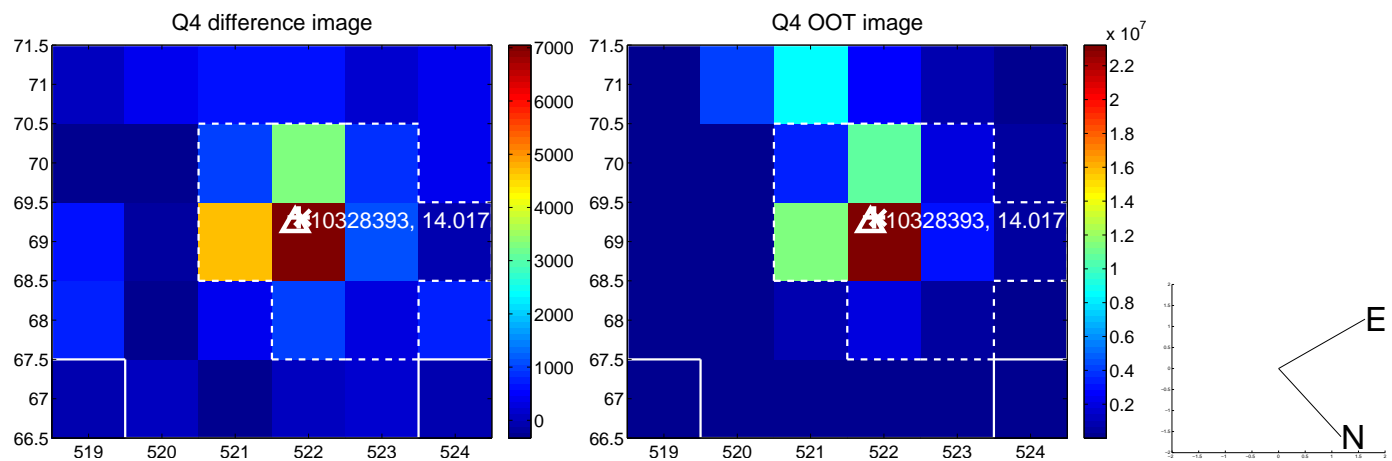
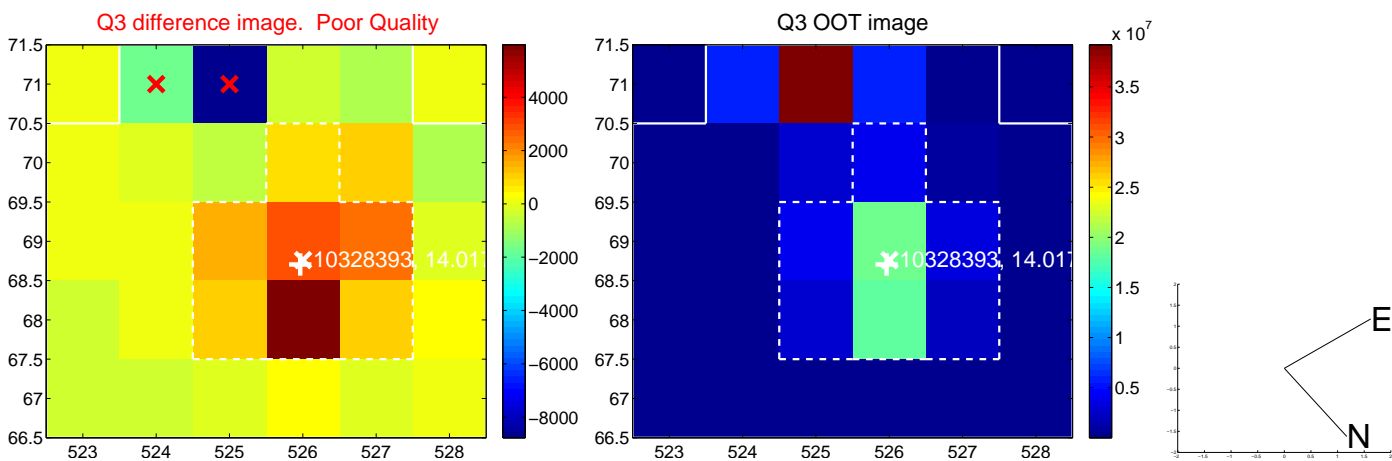
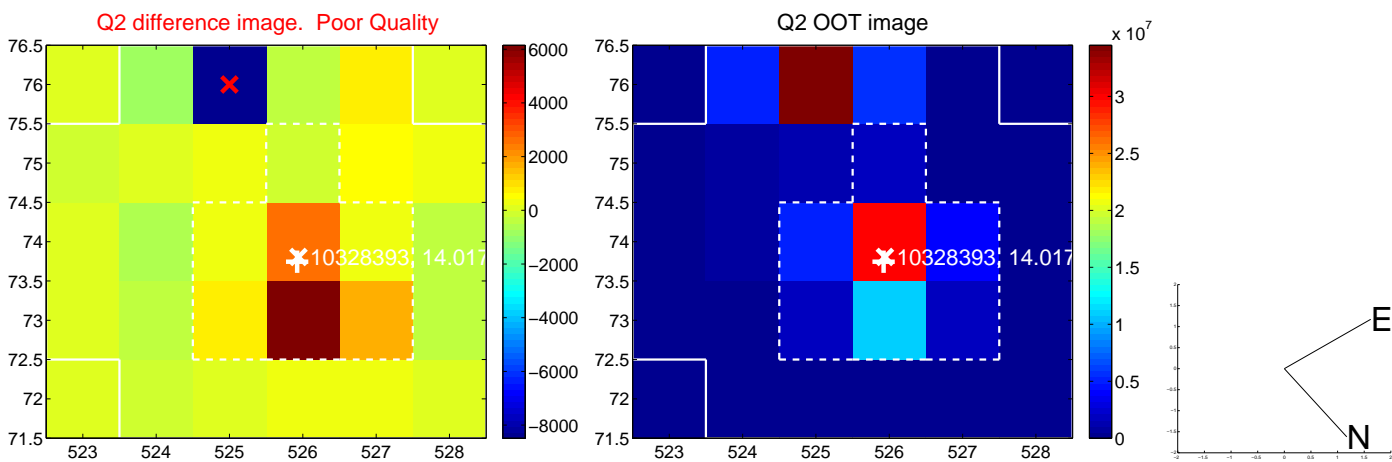
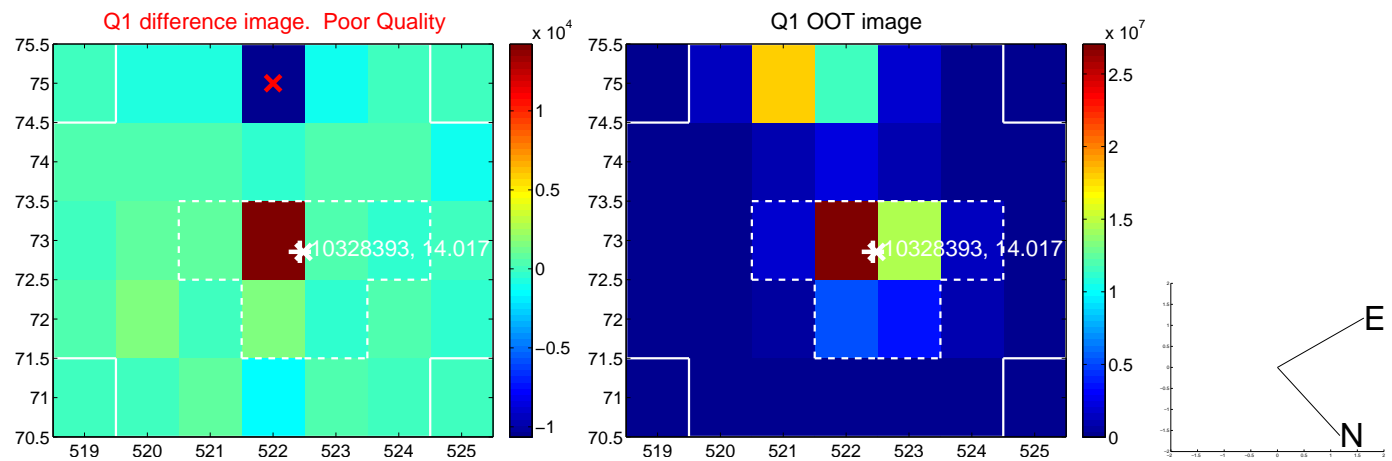
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.234 ± 0.168	1.40	-0.116 ± 0.124	0.204 ± 0.181
PRF-fit source offset from KIC position	0.386 ± 0.133	2.90	-0.339 ± 0.119	0.184 ± 0.181
photometric centroid source offset	0.99 ± 0.51	1.93	0.17 ± 0.32	-0.98 ± 0.52

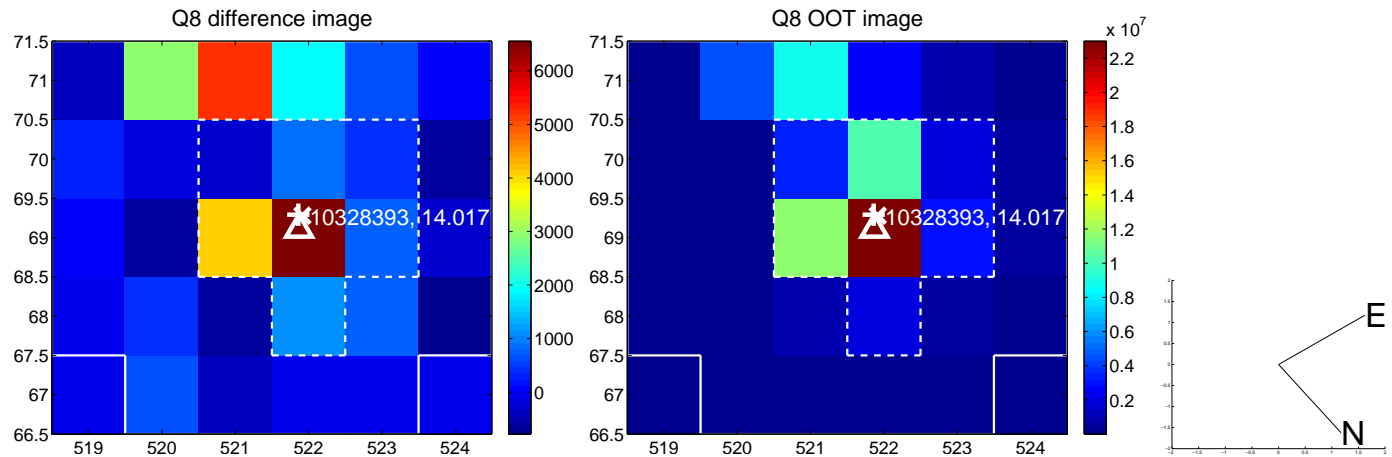
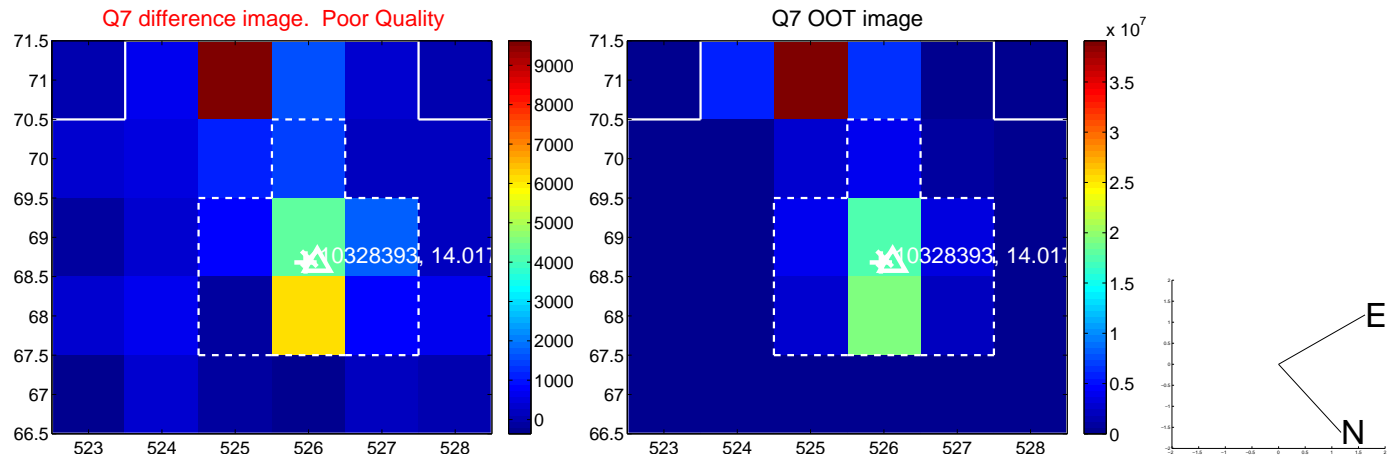
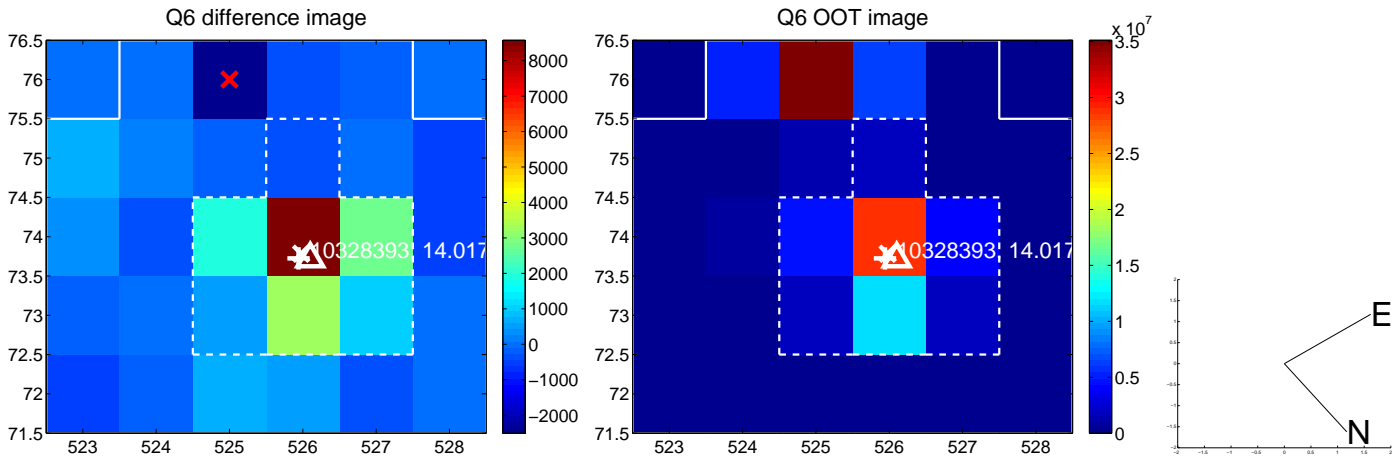
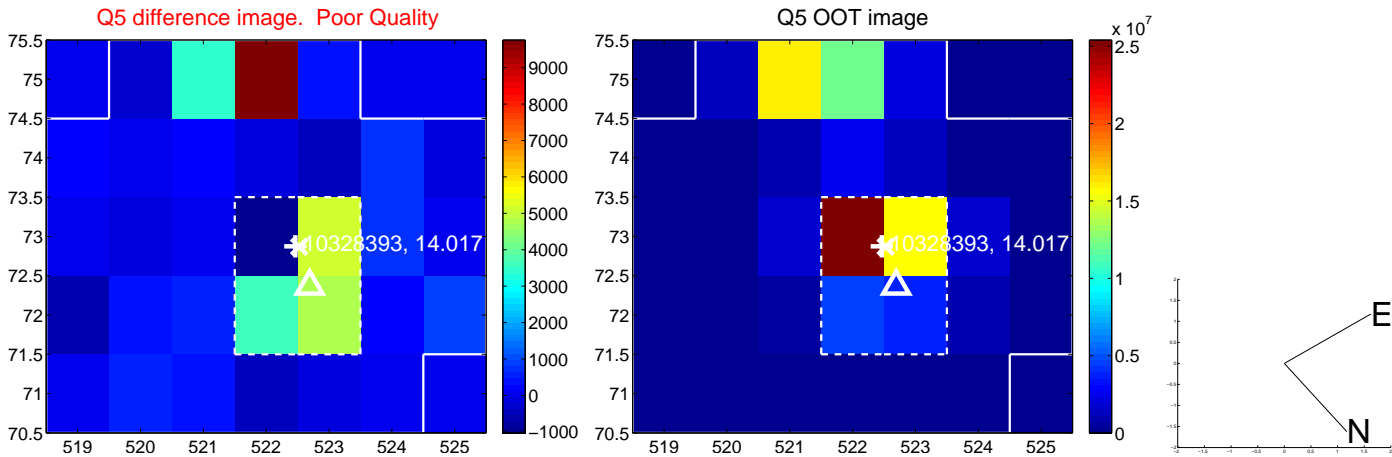


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

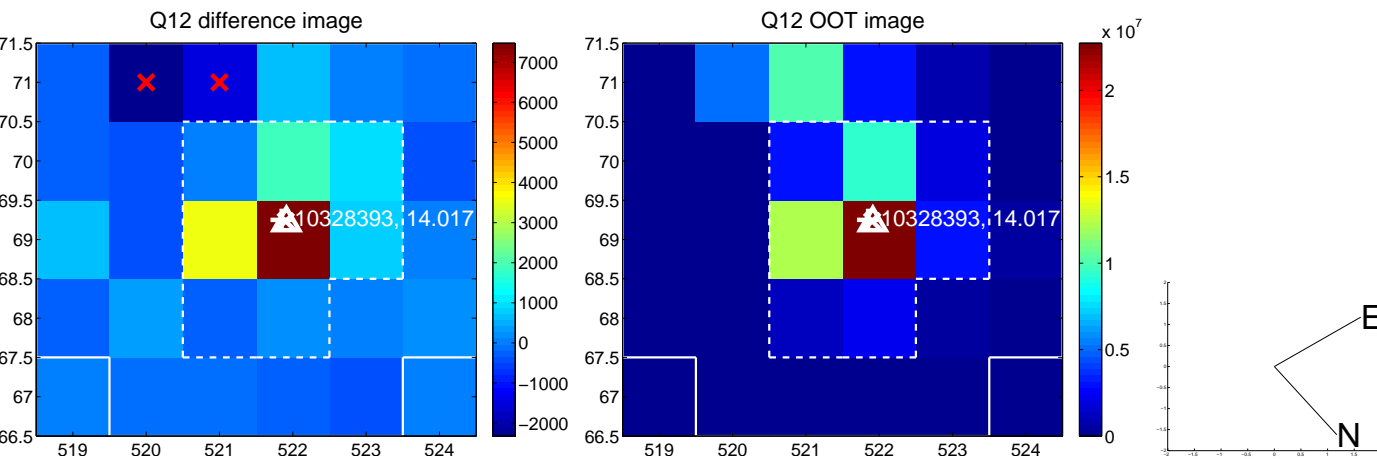
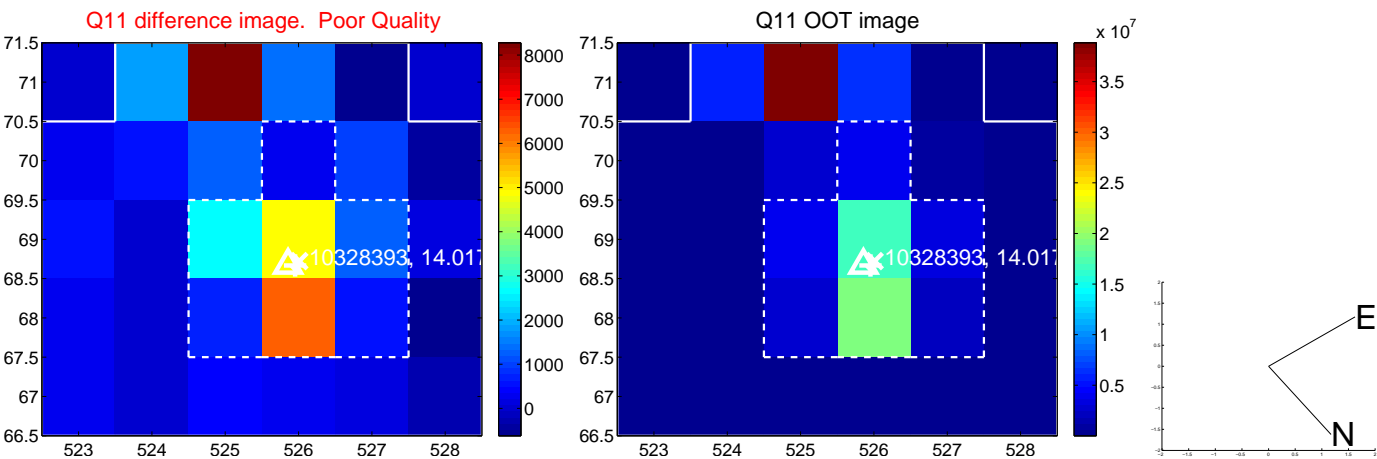
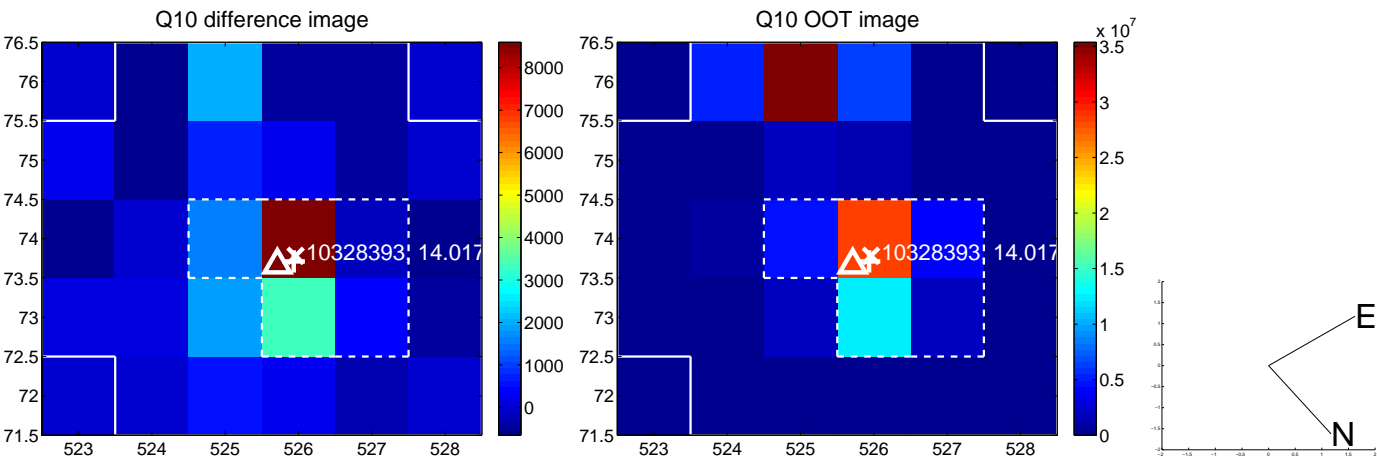
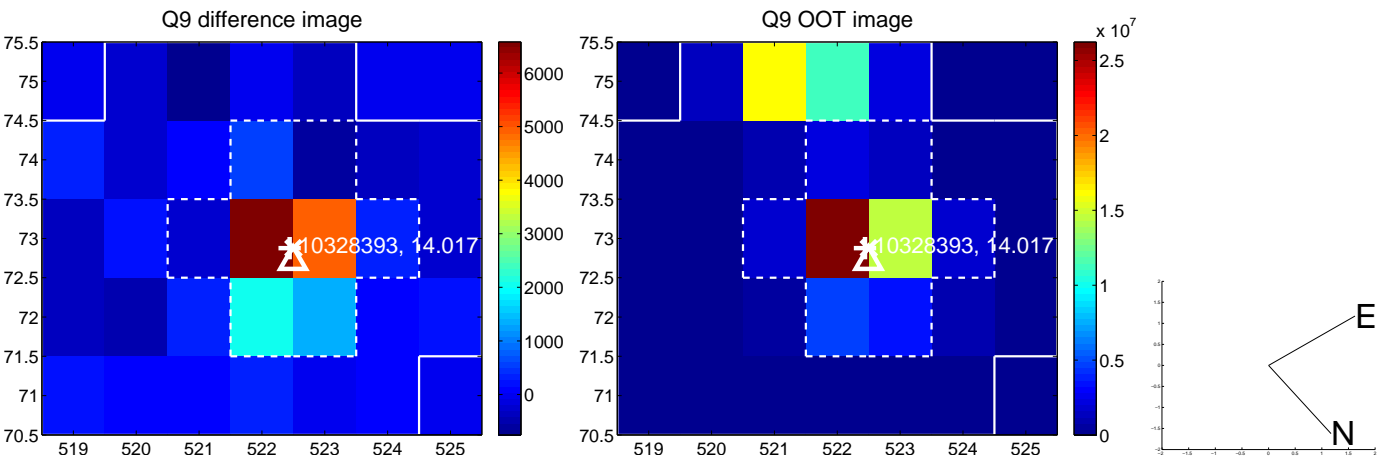
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



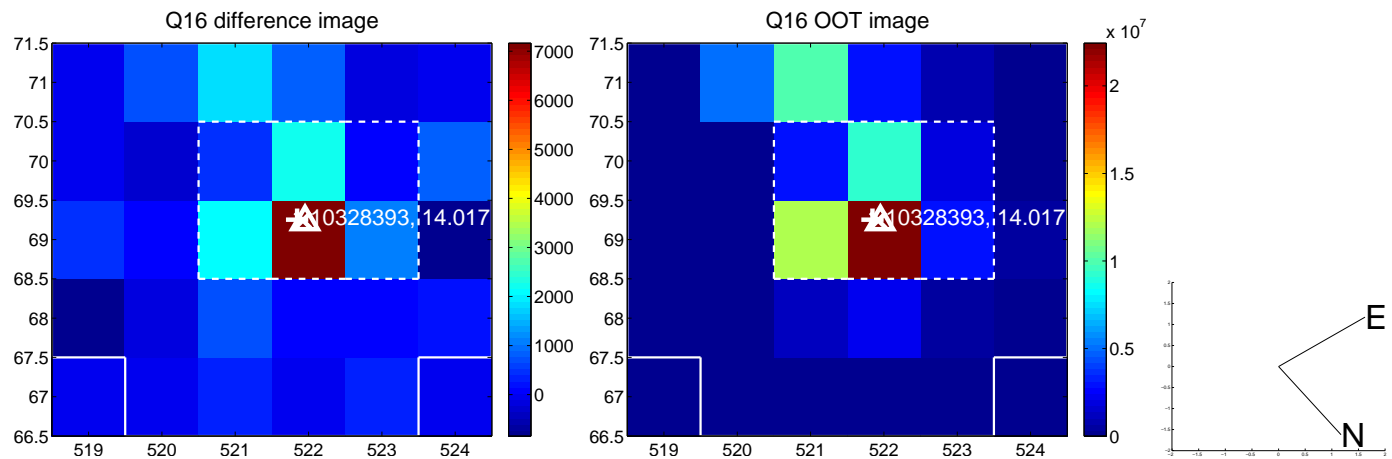
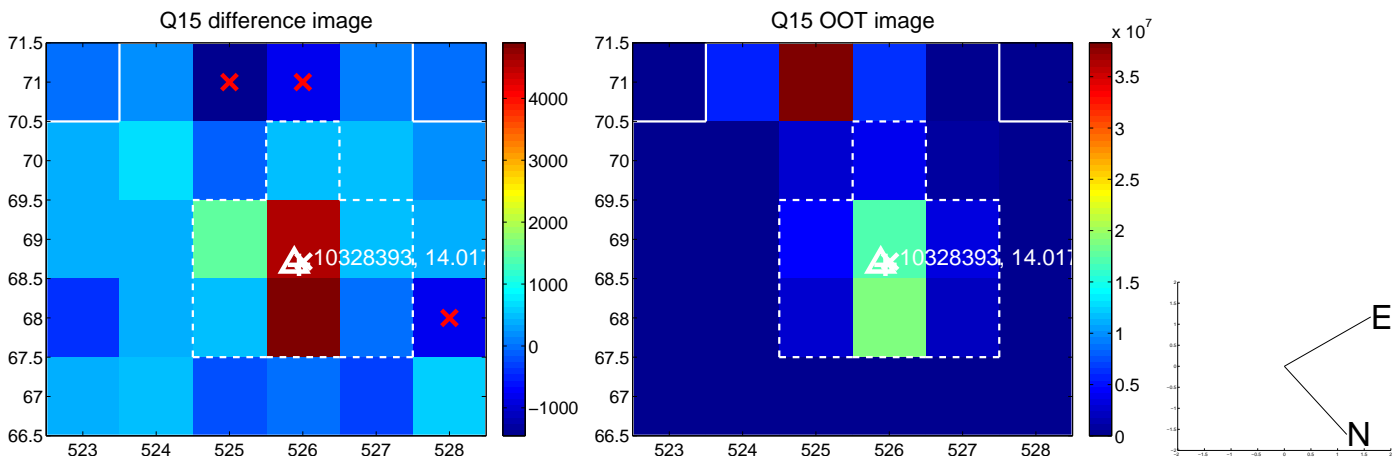
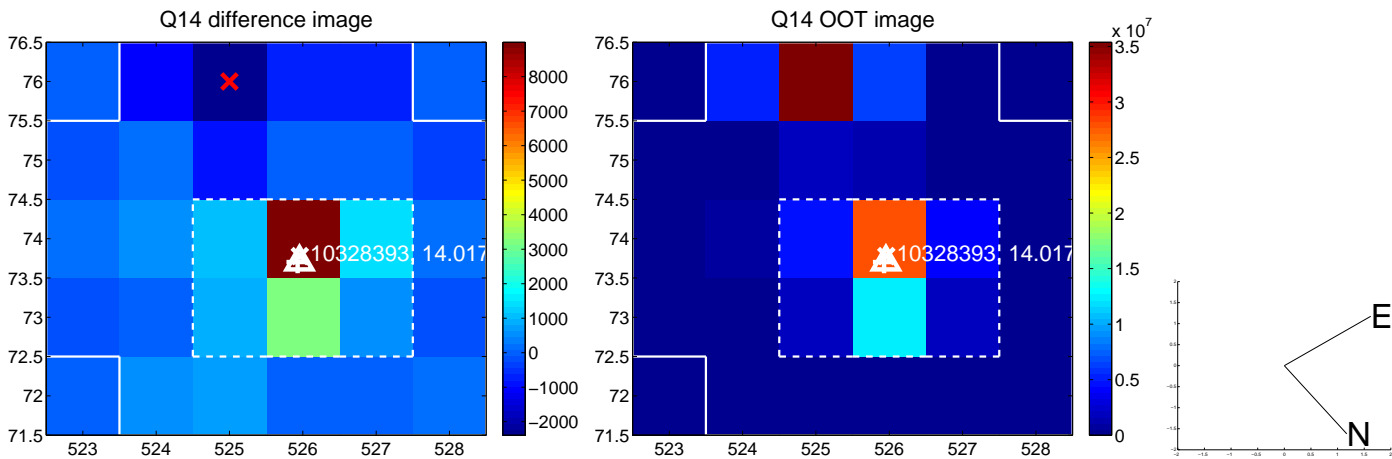
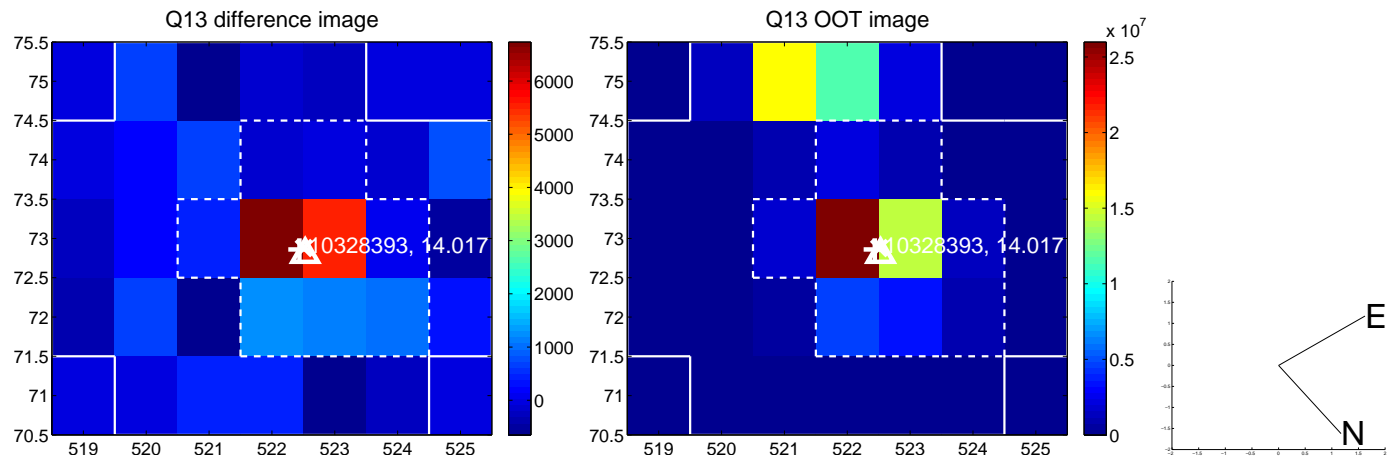
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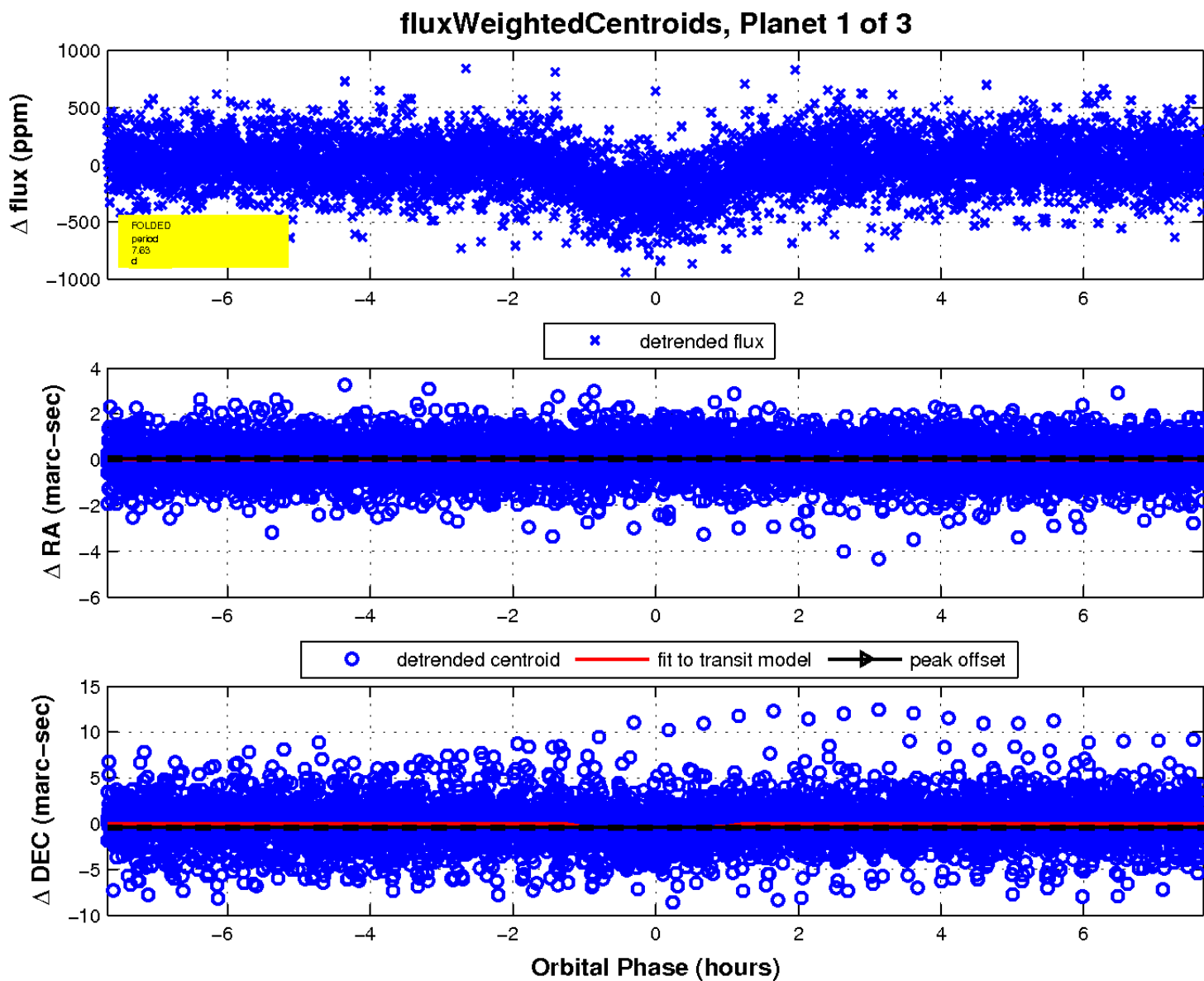
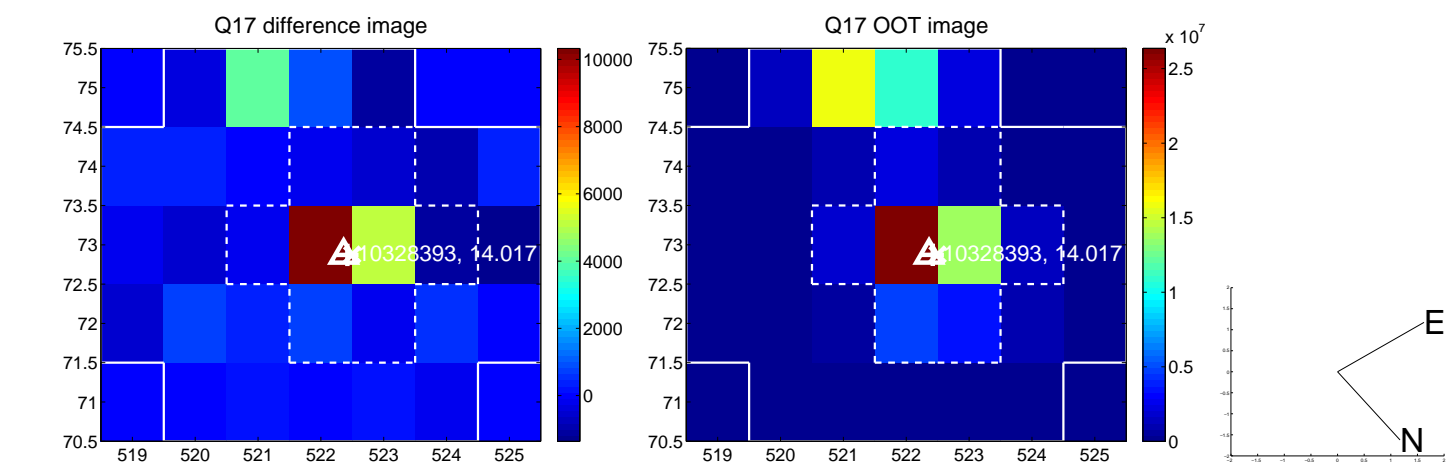
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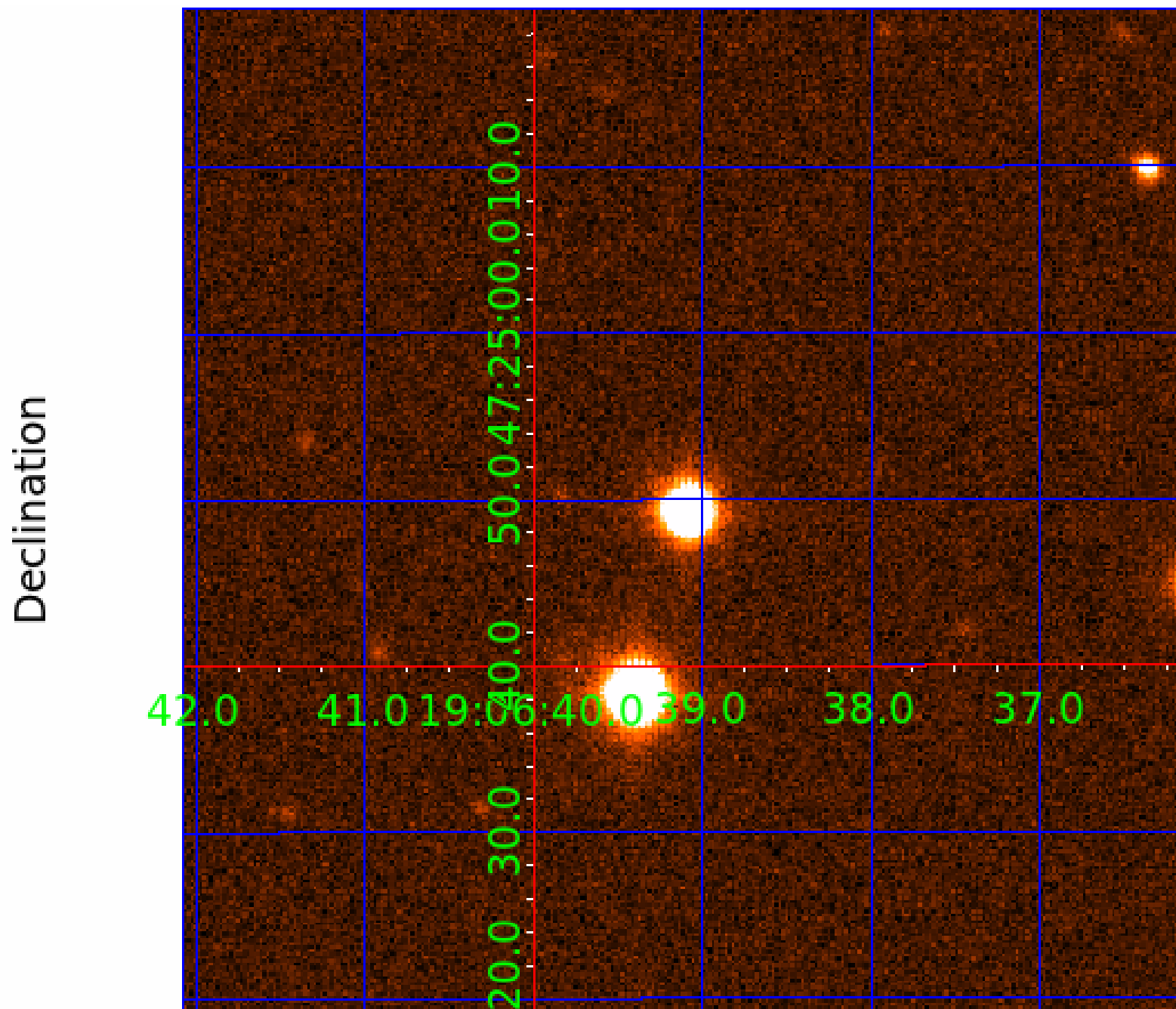
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UKIRT Image



KIC 010328393

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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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010328393-03	OBS	PC	1.00	0	0	0	0	NO_COMMENT

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

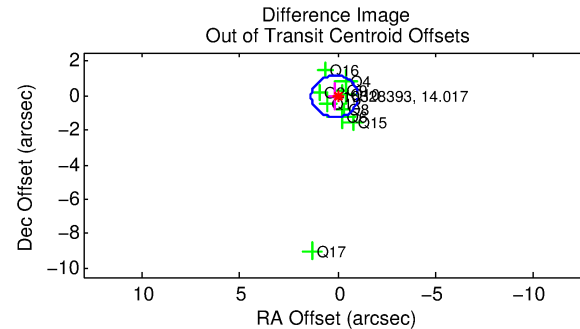
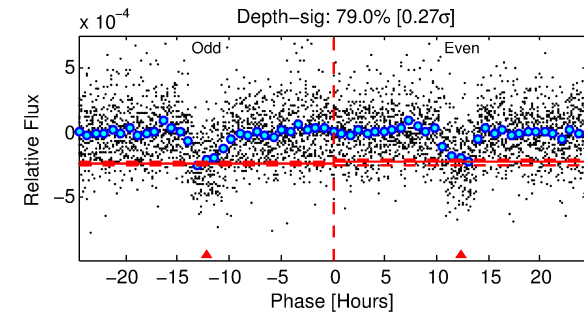
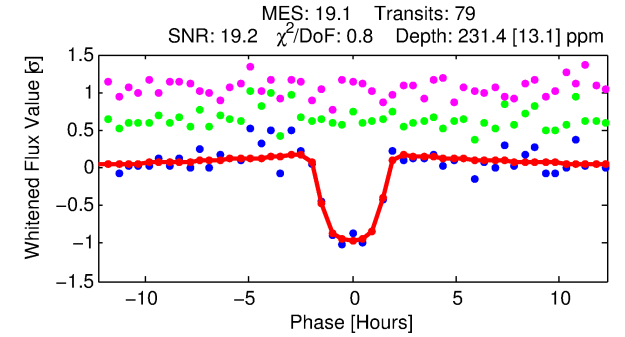
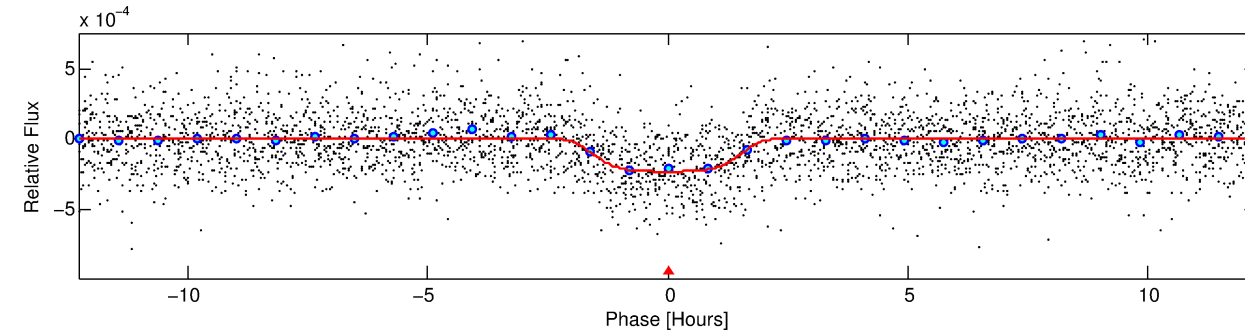
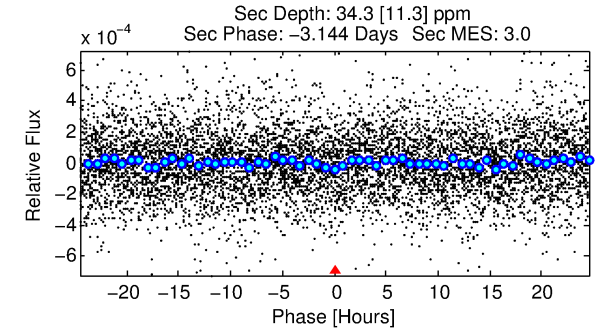
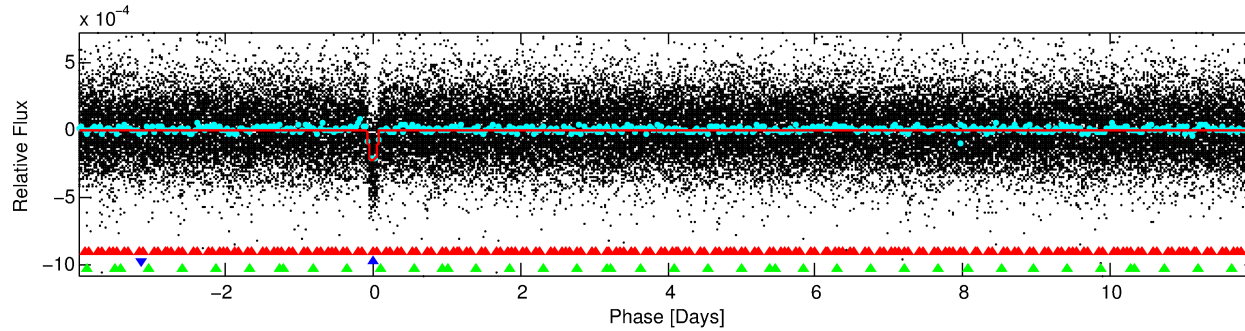
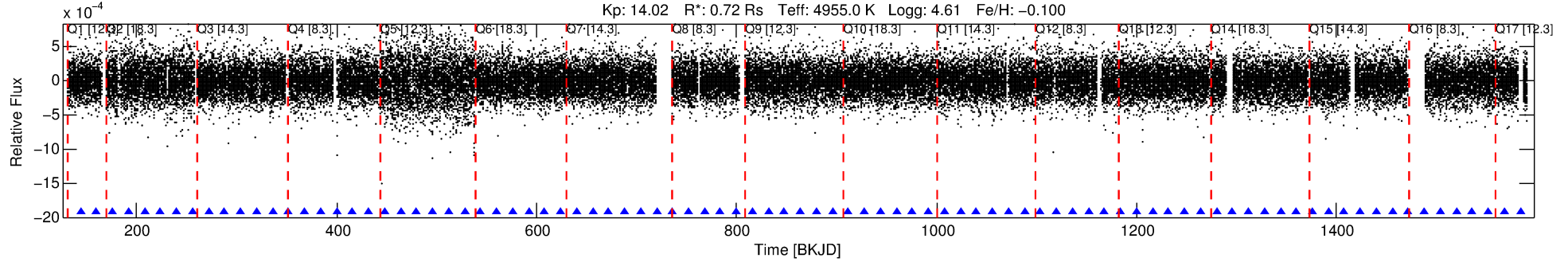
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010328393-02

No Significant Match Found

DV One-Page Summary

KIC: 10328393 Candidate: 2 of 3 Period: 15.996 d
KOI: K01905.02 Name: Kepler-332c Corr: 0.900



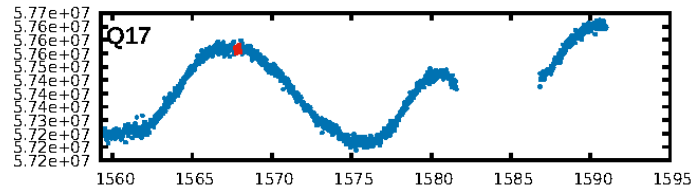
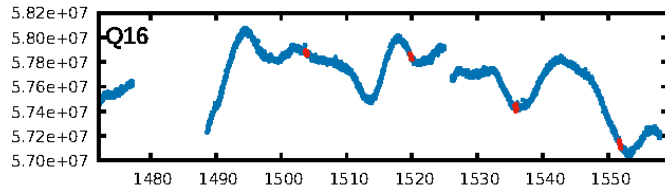
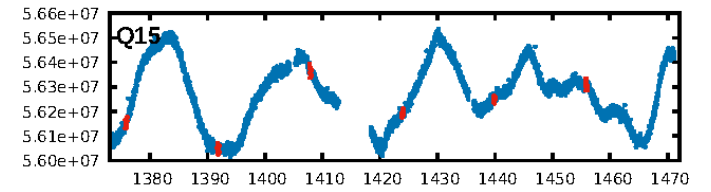
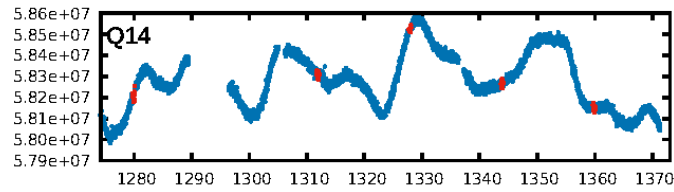
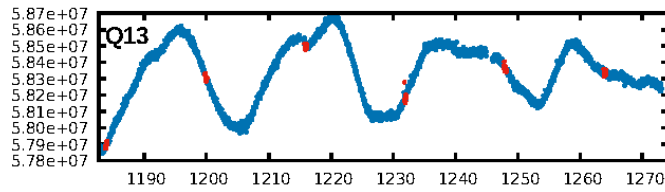
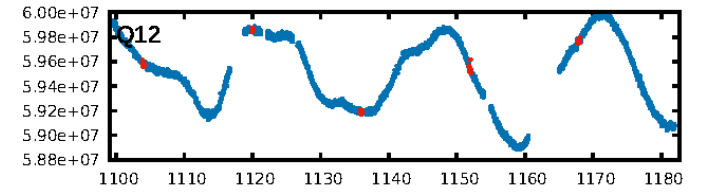
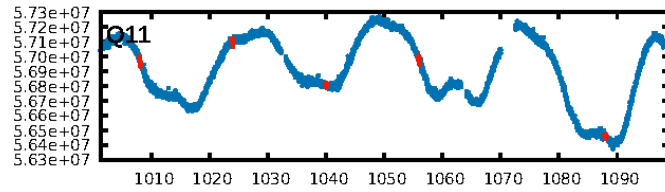
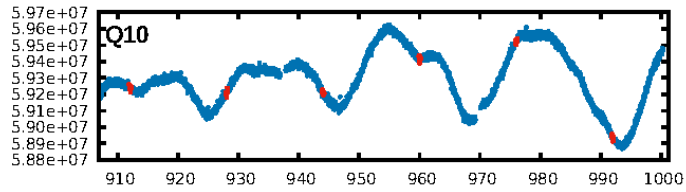
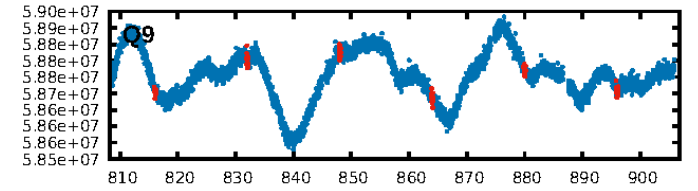
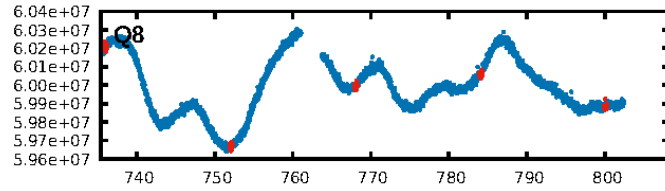
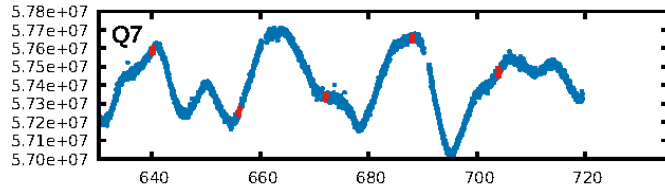
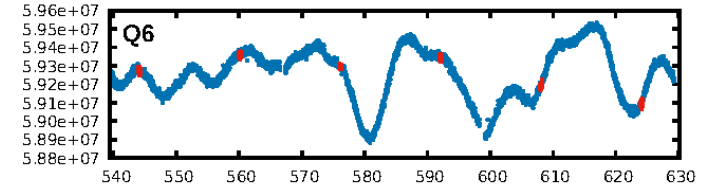
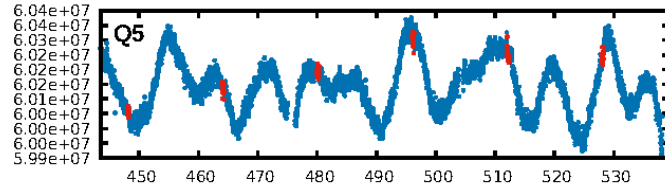
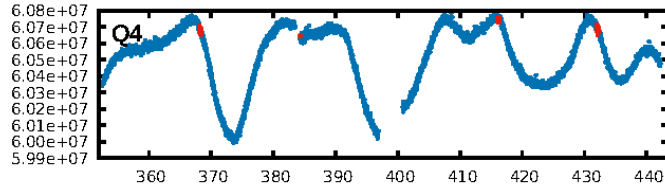
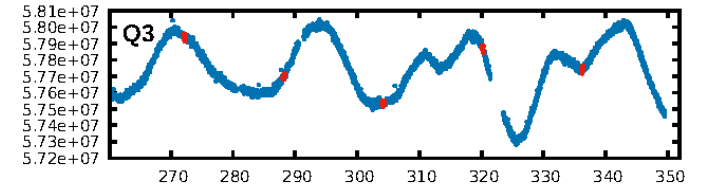
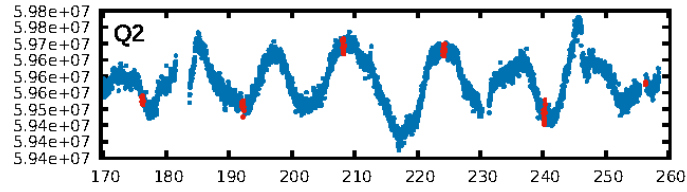
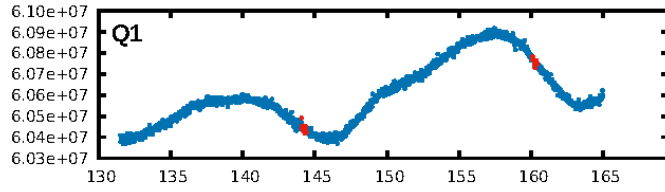
DV Fit Results:

Period = 15.99558 [0.00009] d
Epoch = 144.2423 [0.0045] BKJD
Rp/R* = 0.0192 [0.0009]
a/R* = 9.56 [1.39]
b = 0.97 [0.01]
Seff = 21.60 [2.50]
Teq = 550 [16] K
Rp = 1.51 [0.12] Re
a = 0.1140 [0.0064] AU
Ag = 106.90 [37.85] [2.80σ]
Teffp = 2733 [242] K [9.02σ]

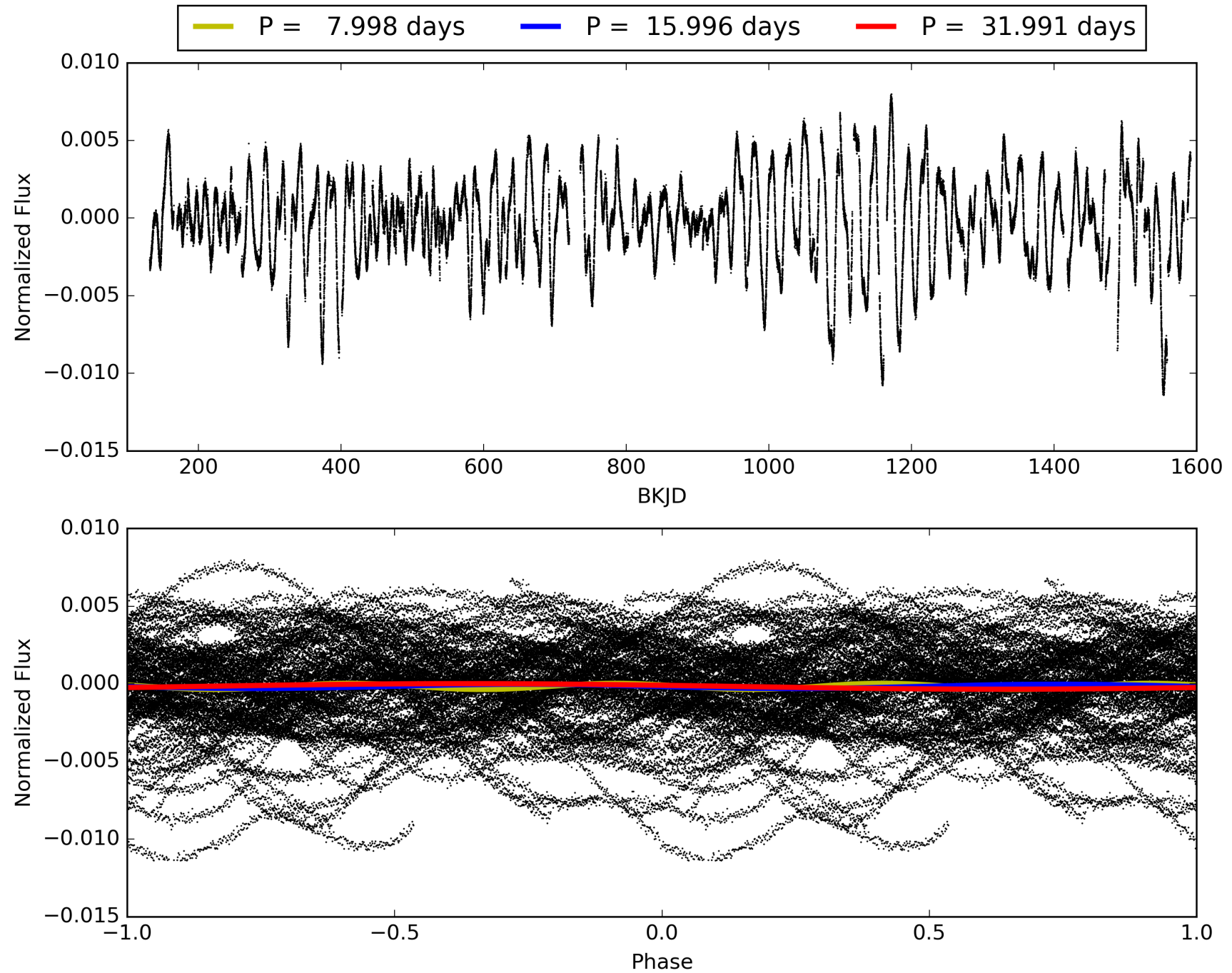
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [41.61σ]
LongPeriod-sig: 100.0% [66.07σ]
ModelChiSquare2-sig: 78.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.69e-77
RollingBand-fgt: 1.00 [76/76]
GhostDiagnostic-chr: -2.675
Centroid-sig: 32.0%
Centroid-so: 1.864 arcsec [2.18σ]
OotOffset-rm: 0.155 arcsec [0.39σ]
KicOffset-rm: 0.118 arcsec [0.15σ]
OotOffset-st: 3/1/4/2 [10]
KicOffset-st: 3/1/4/2 [10]
DiffImageQuality-fgm: 0.90 [9/10]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 010328393-02, PDC Light Curves

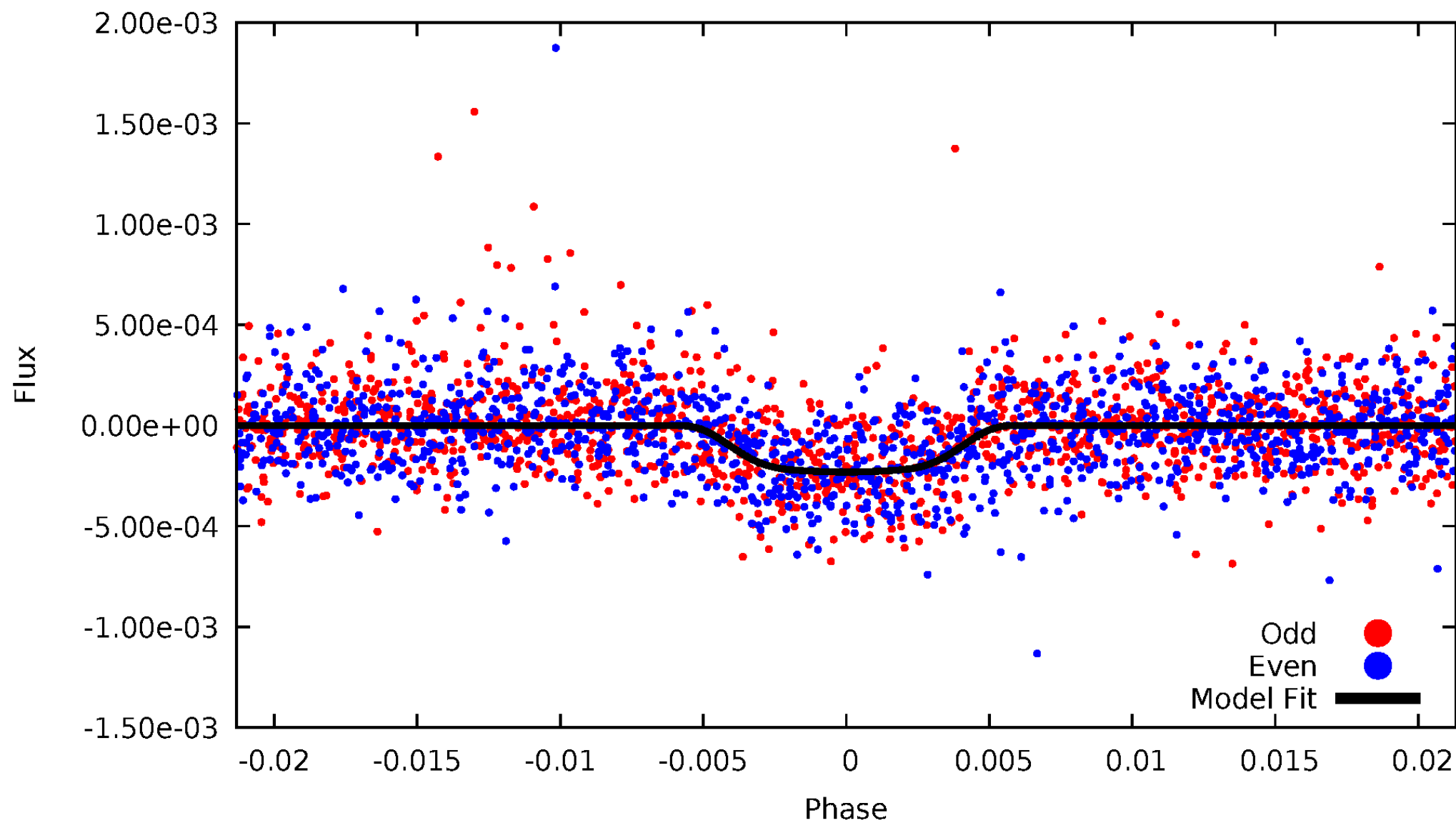


TCE 010328393-02



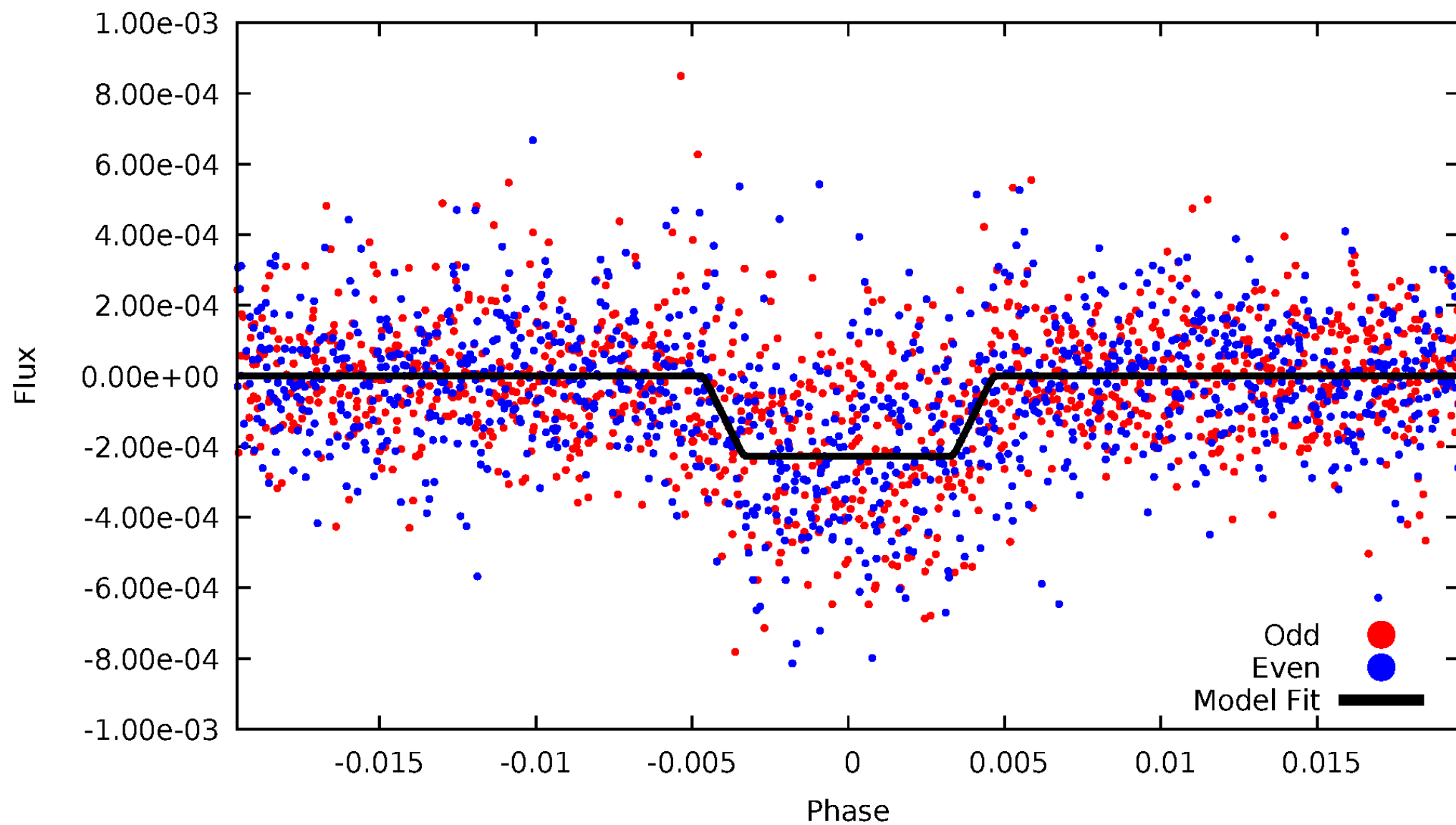
DV Odd/Even

TCE 010328393-02



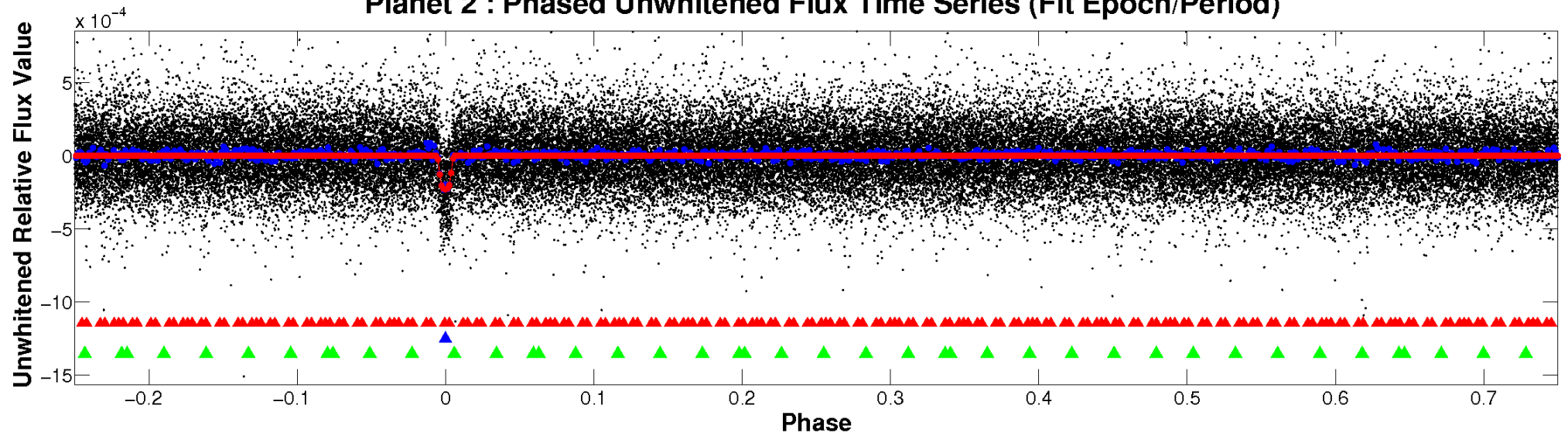
ALT Odd/Even

TCE 010328393-02

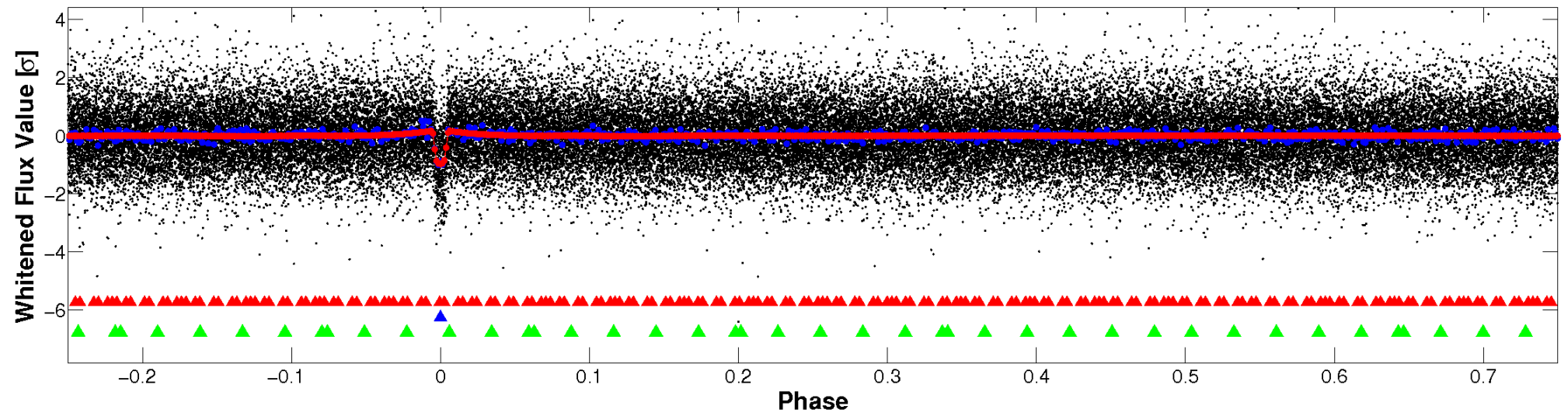


Non-Whitened Vs. Whitened Light Curve

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

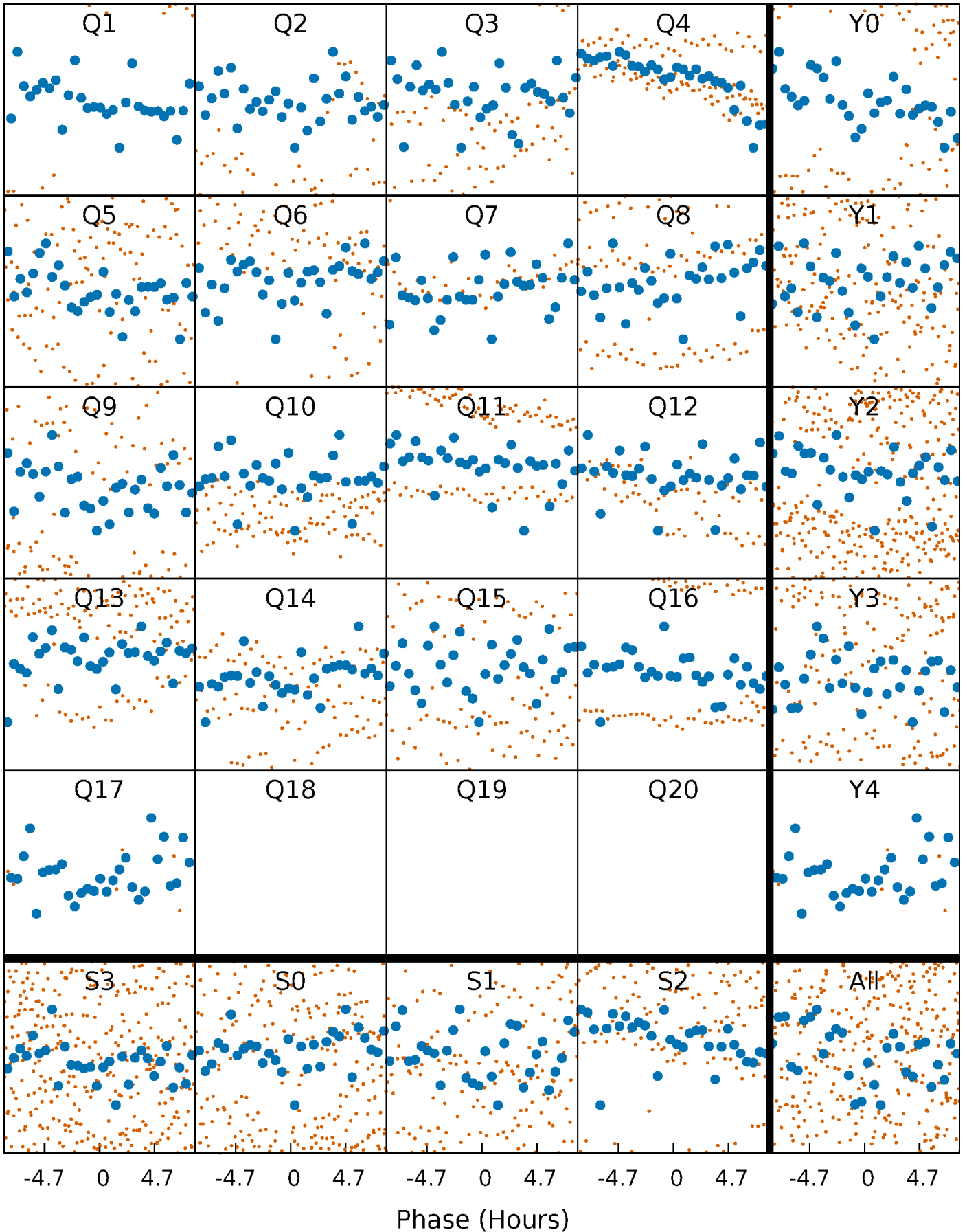


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



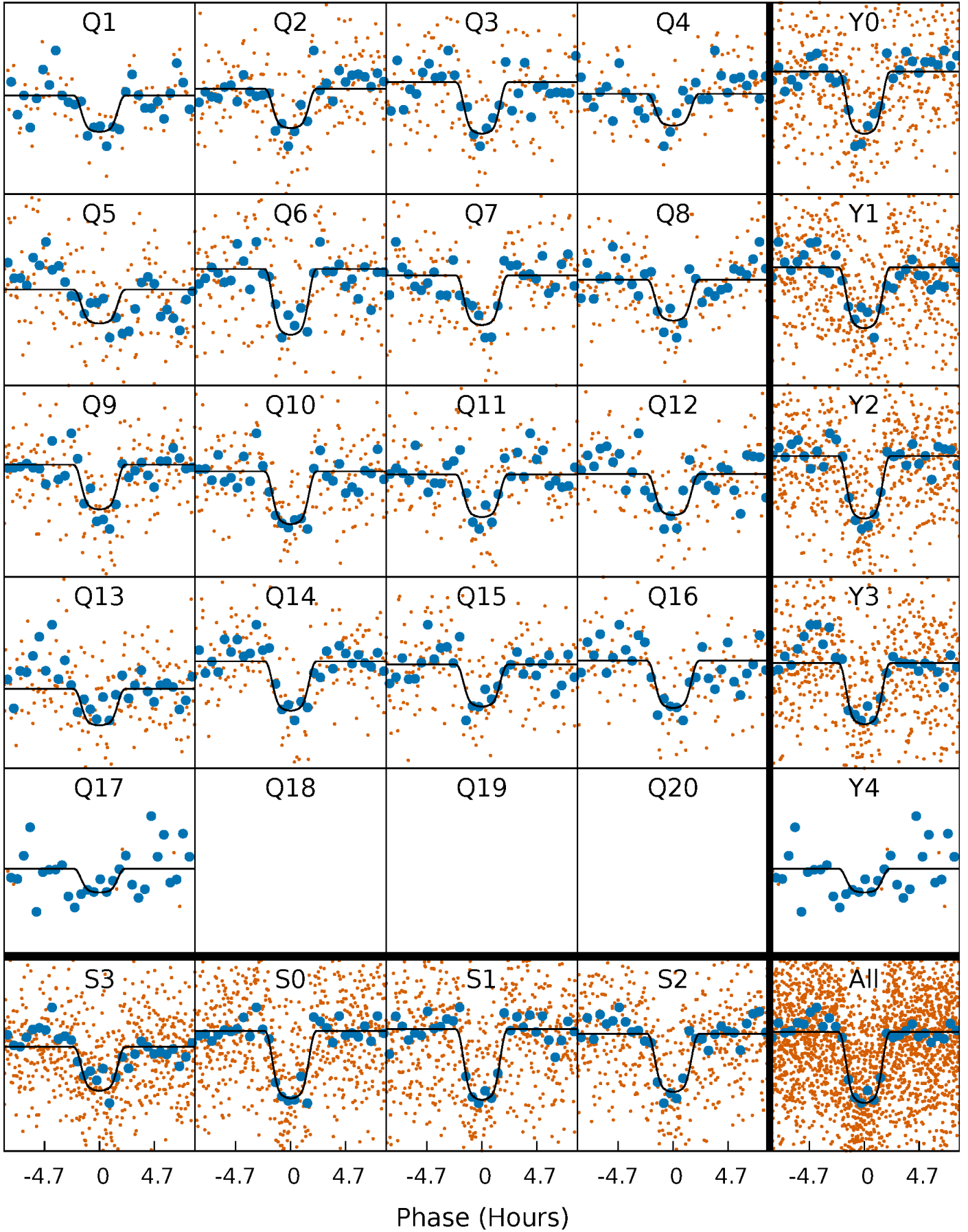
PDC Quarter-Phased Transit Curves

TCE 010328393-02 P= 15.995584 Days $T_0=144.242302$ (BKJD)



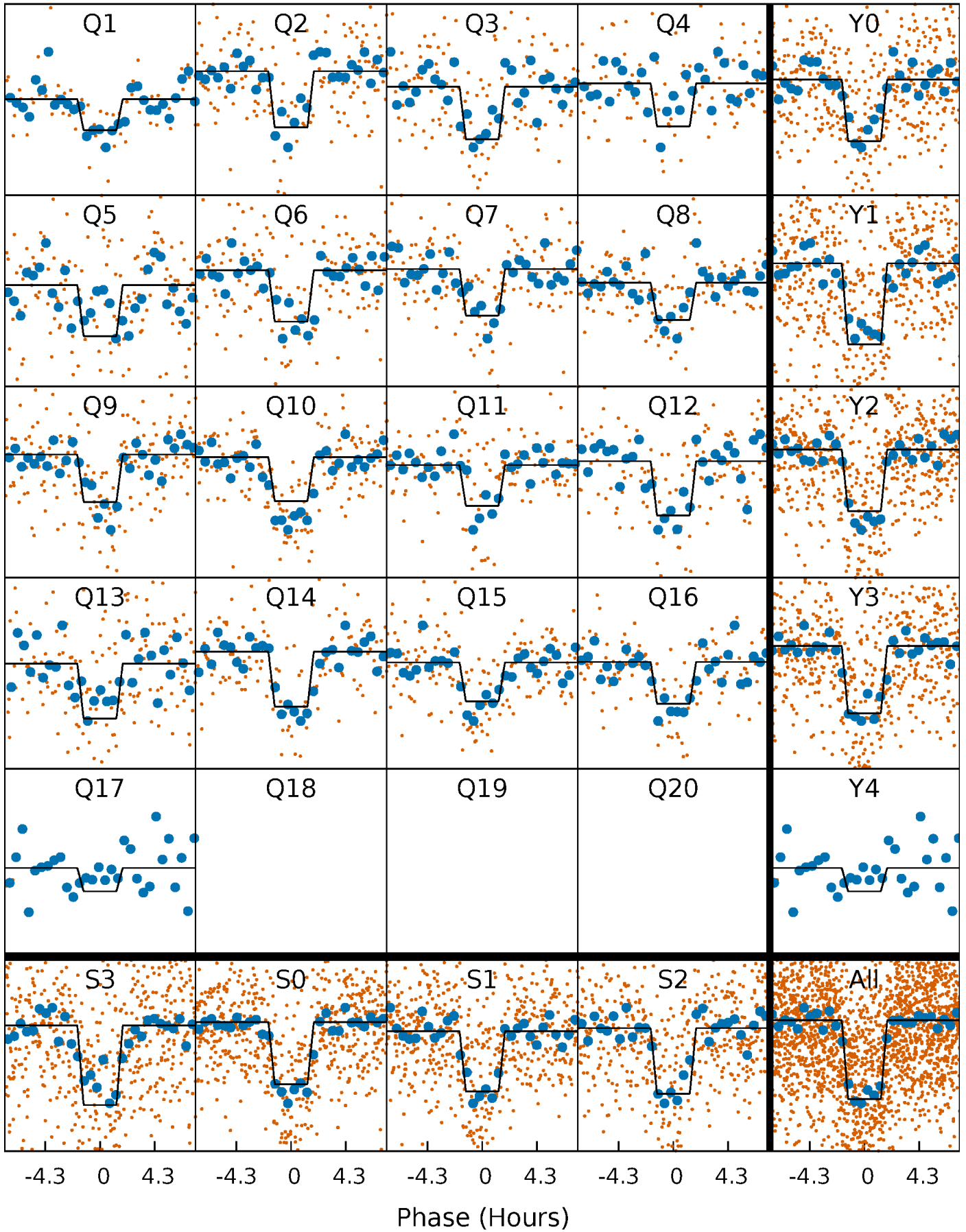
DV Quarter-Phased Transit Curves

TCE 010328393-02 P= 15.995584 Days $T_0=144.242302$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

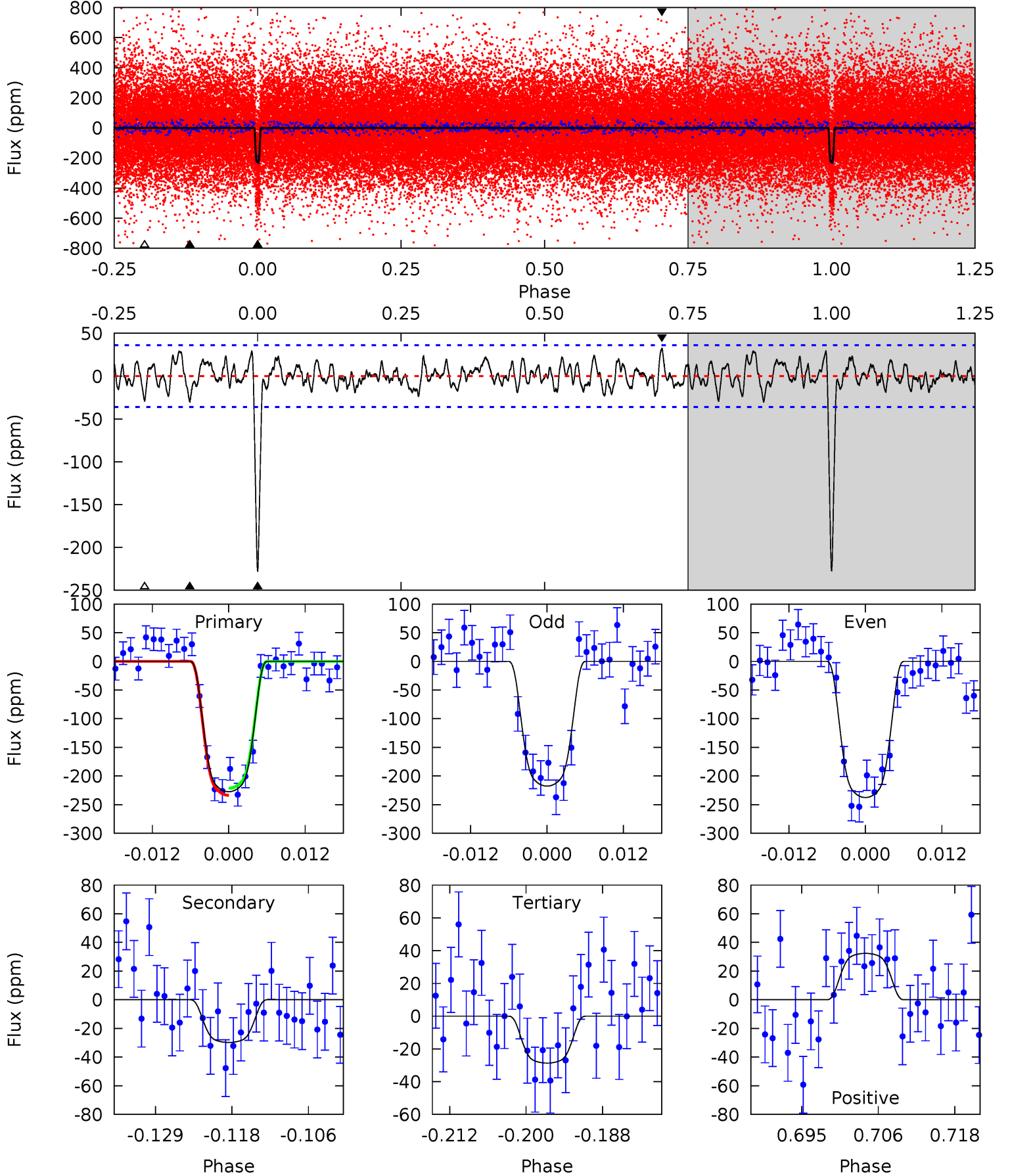
TCE 010328393-02 P= 15.995603 Days $T_0=144.240881$ (BKJD)



DV Model-Shift Uniqueness Test

010328393-02, P = 15.995584 Days, E = 128.246718 Days

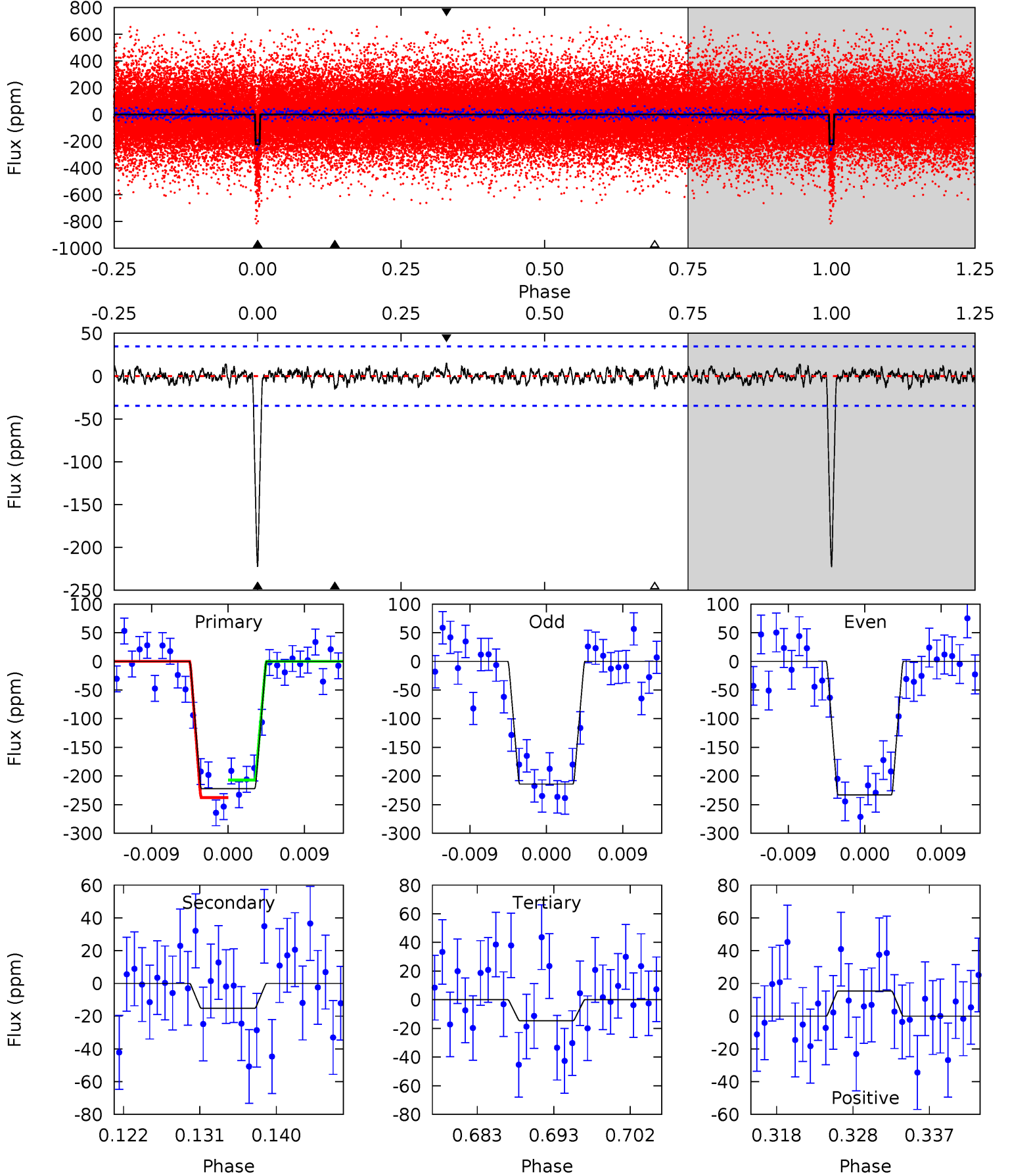
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.5	4.12	3.97	4.48	4.99	2.52	1.50	27.5	27.0	0.15	-0.36	1.38	0.94	0.12	0.85



Alt Model-Shift Uniqueness Test

010328393-02, $P = 15.995603$ Days, $E = 128.245278$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.2	2.21	2.12	2.23	5.04	2.60	0.72	30.1	30.0	0.09	-0.01	1.39	0.95	0.06	2.24



Stellar Parameters For KIC 010328393

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4955^{+100}_{-100}	$4.610^{+0.018}_{-0.046}$	$-0.100^{+0.150}_{-0.150}$	$0.721^{+0.047}_{-0.029}$	$0.774^{+0.036}_{-0.048}$	$2.914^{+0.270}_{-0.442}$
	+2%/-2%	+0%/-1%	+150%/-150%	+7%/-4%	+5%/-6%	+9%/-15%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 010328393-02 / KOI 1905.02

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-30 ± 7	$1.53^{+0.10}_{-0.09}$	772^{+18}_{-18}	3179^{+136}_{-138}	89^{+26}_{-22}
Alt.	-15 ± 7	$1.20^{+0.09}_{-0.08}$	773^{+17}_{-18}	3109^{+185}_{-267}	77^{+34}_{-36}

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 $A_{obs} \gg 1.0$

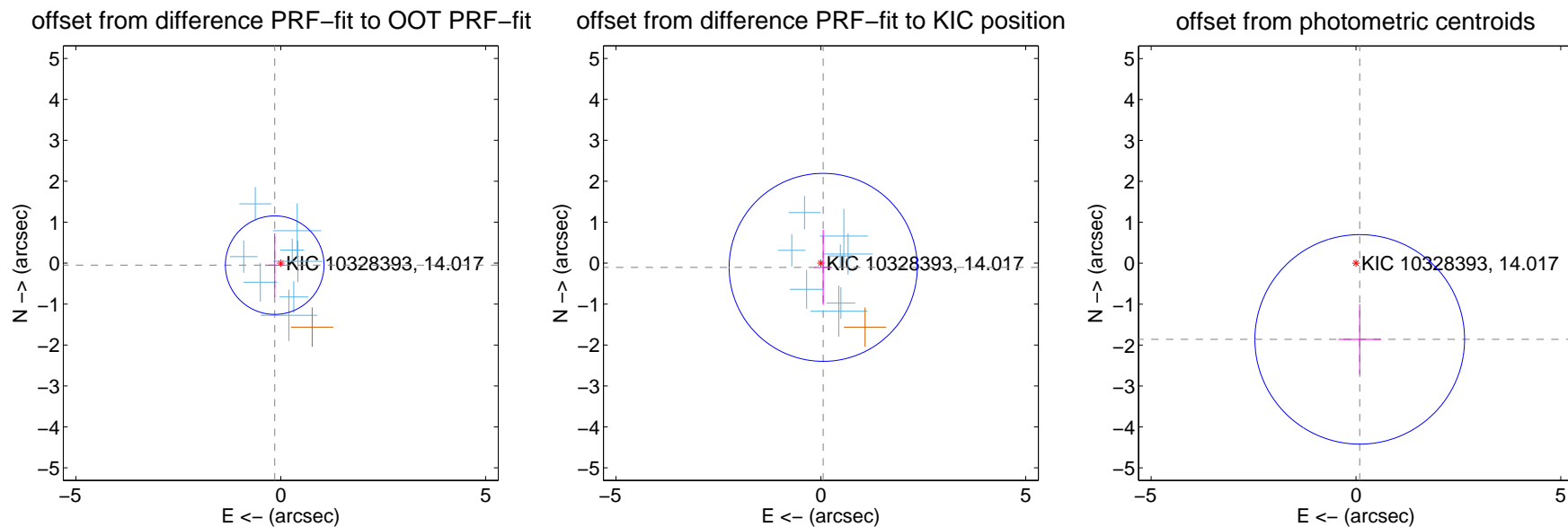
DV Centroid Data

Supplemental centroid analysis for 010328393-02. Kepler magnitude: 14.02. Transit SNR 19.16

There are 9 quarters with good PRF difference image offsets

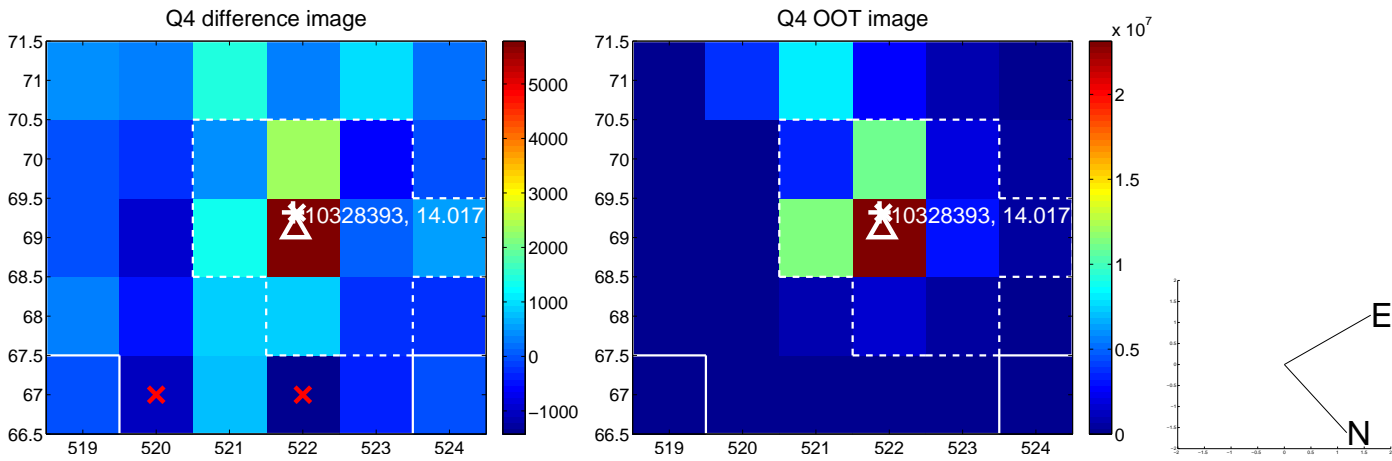
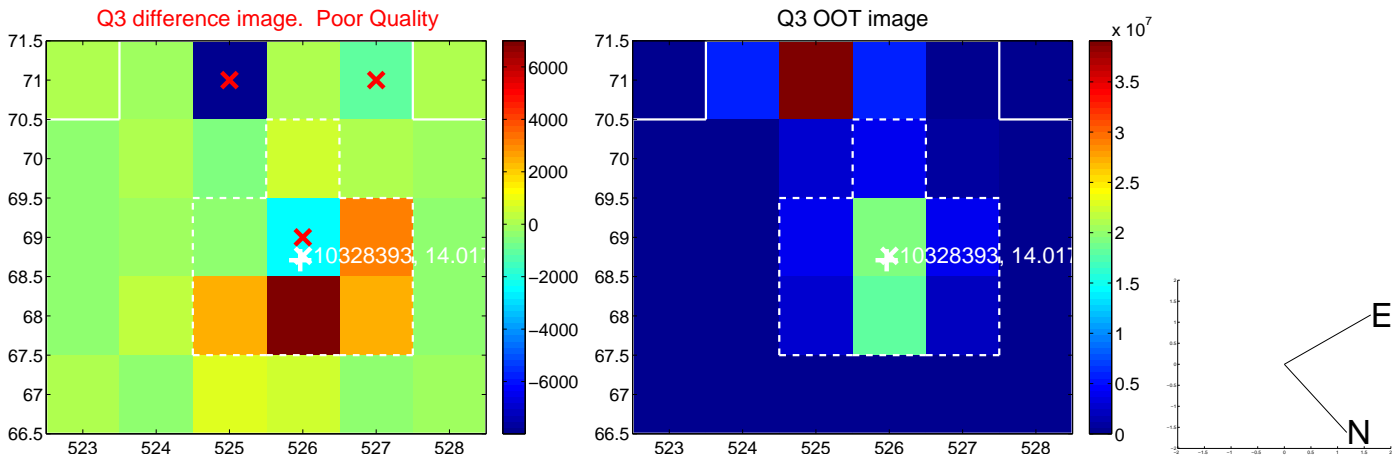
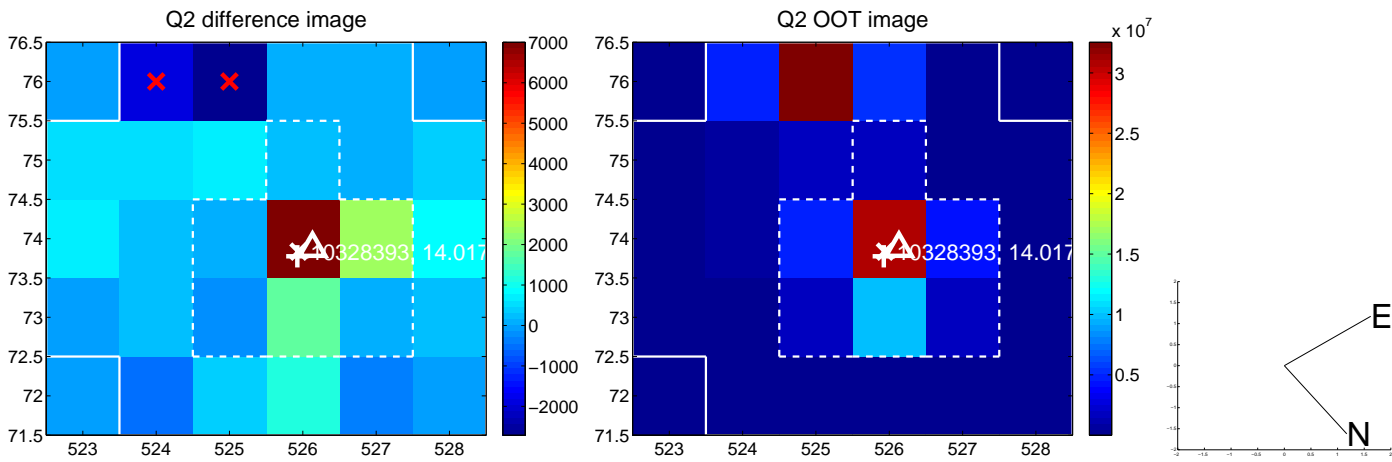
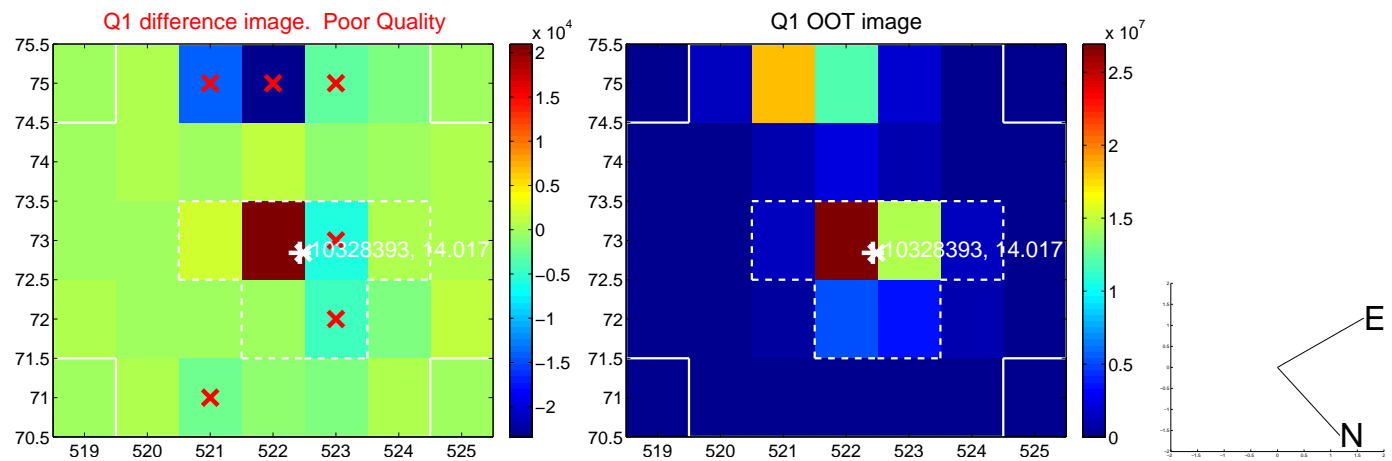
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.155 ± 0.401	0.39	0.148 ± 0.236	-0.049 ± 0.775
PRF-fit source offset from KIC position	0.118 ± 0.765	0.15	-0.057 ± 0.214	-0.103 ± 0.915
photometric centroid source offset	1.86 ± 0.85	2.18	-0.09 ± 0.52	-1.86 ± 0.85

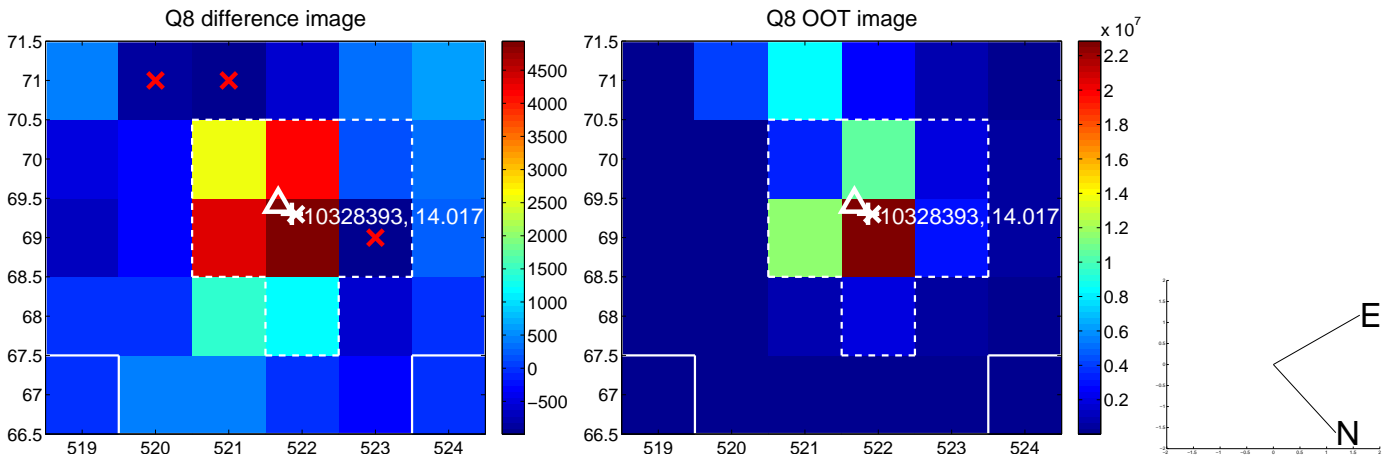
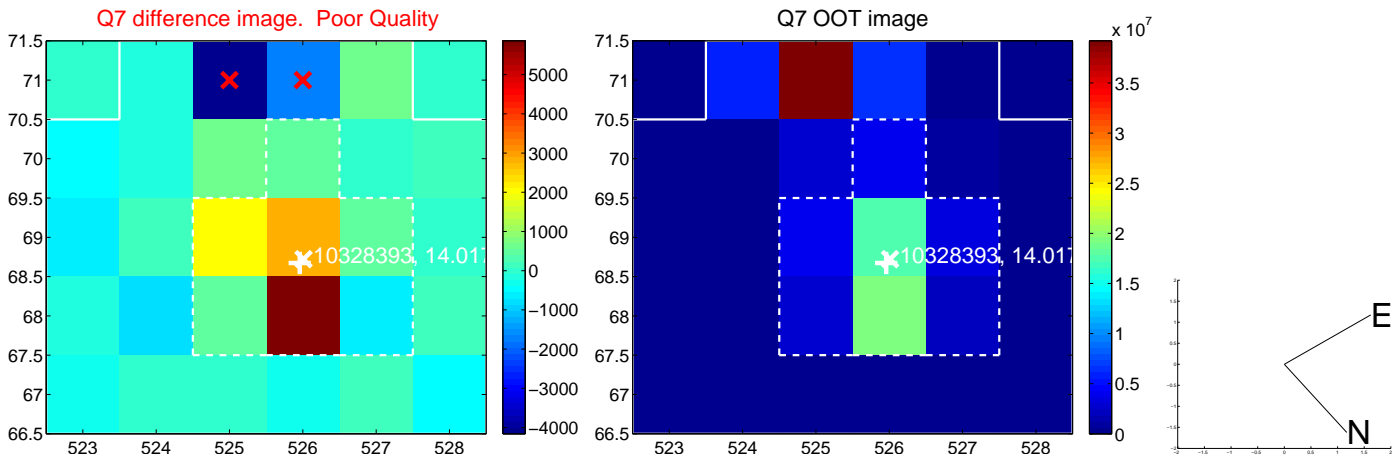
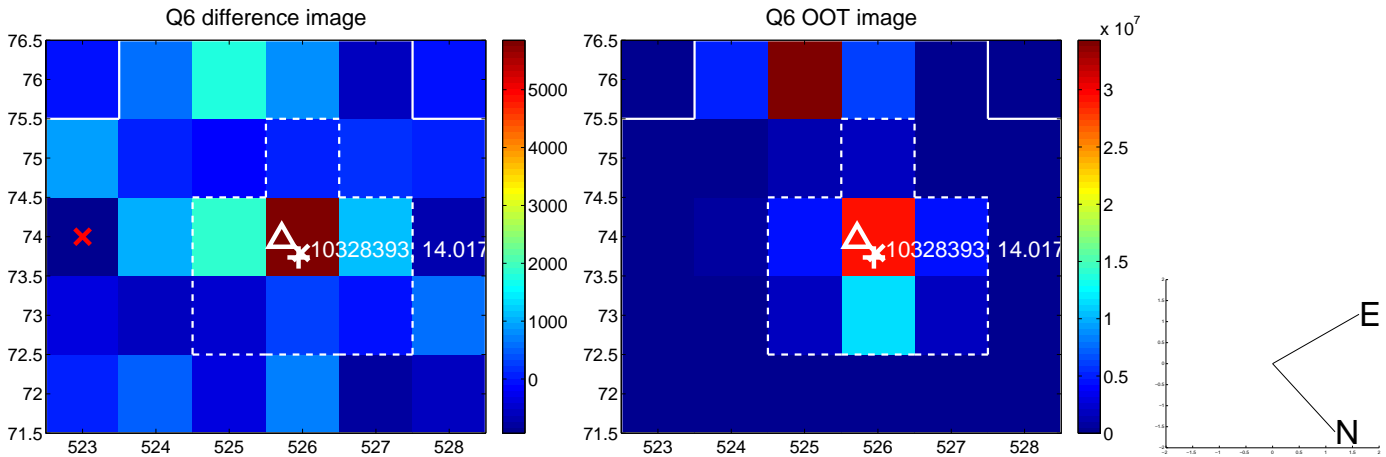
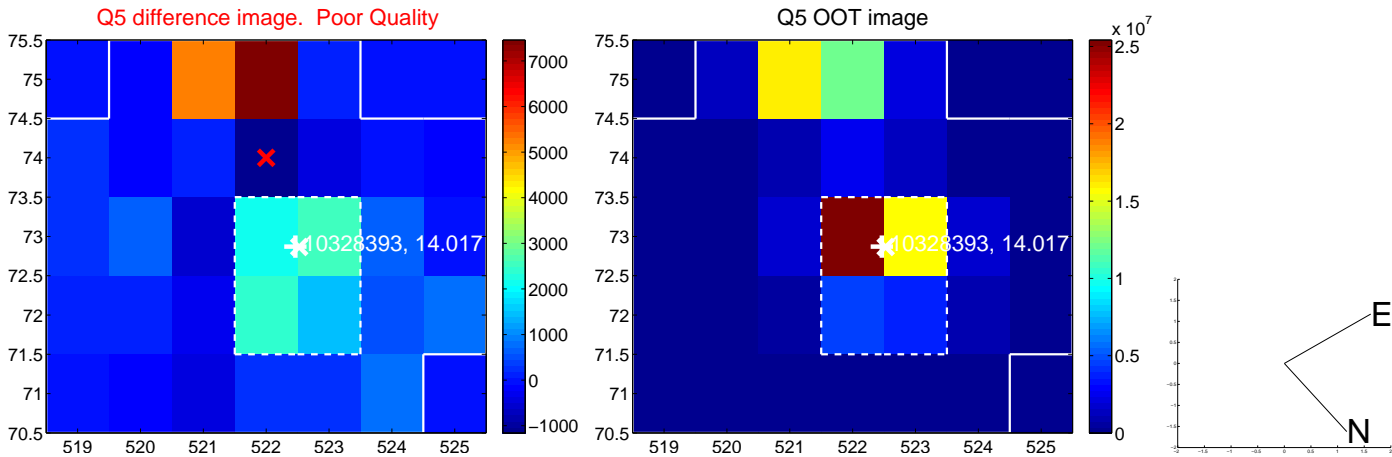


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

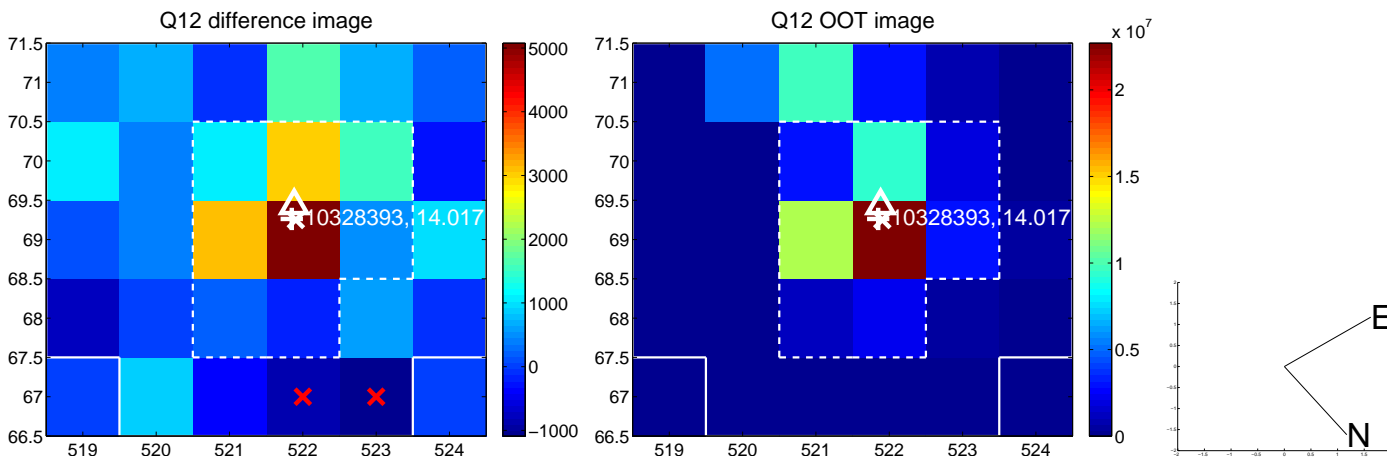
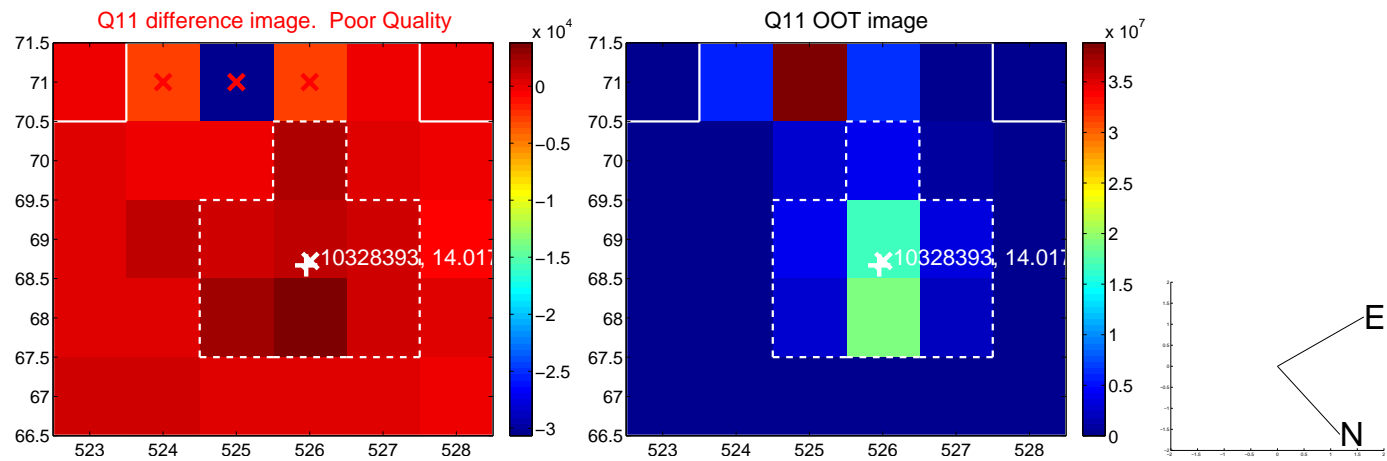
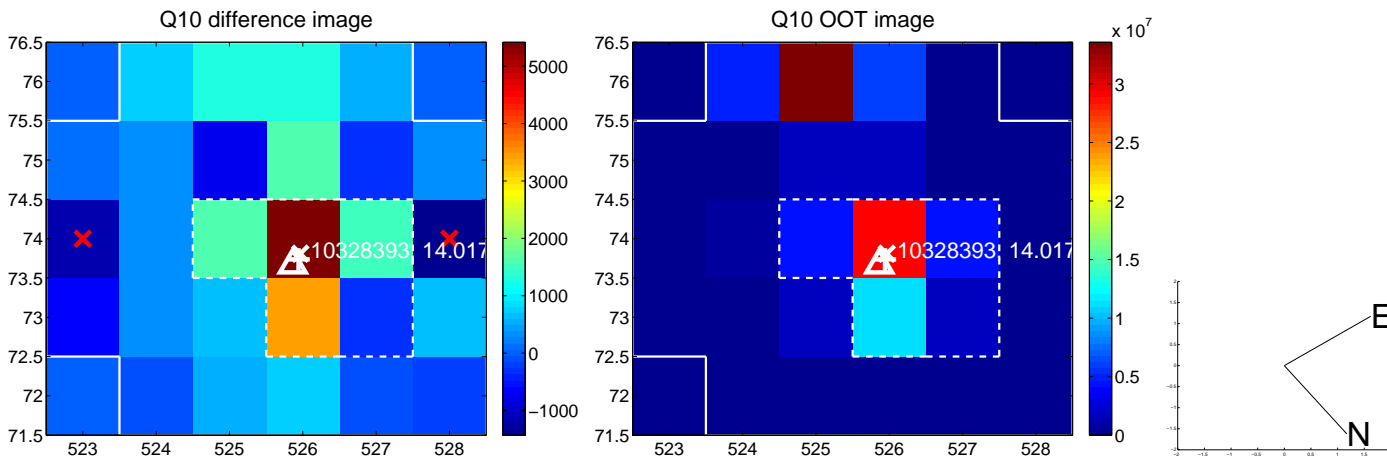
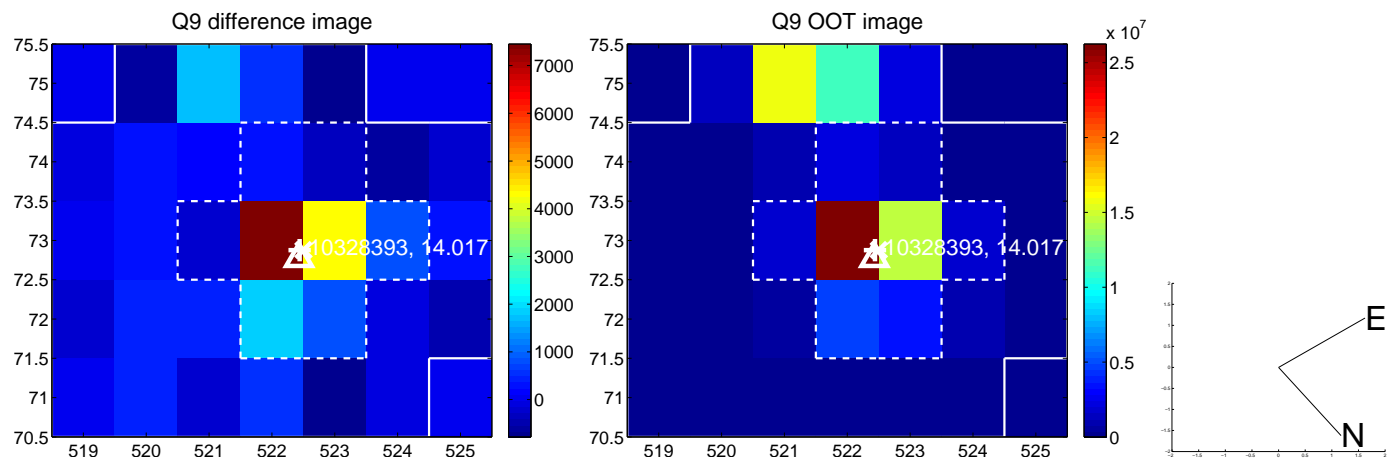
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



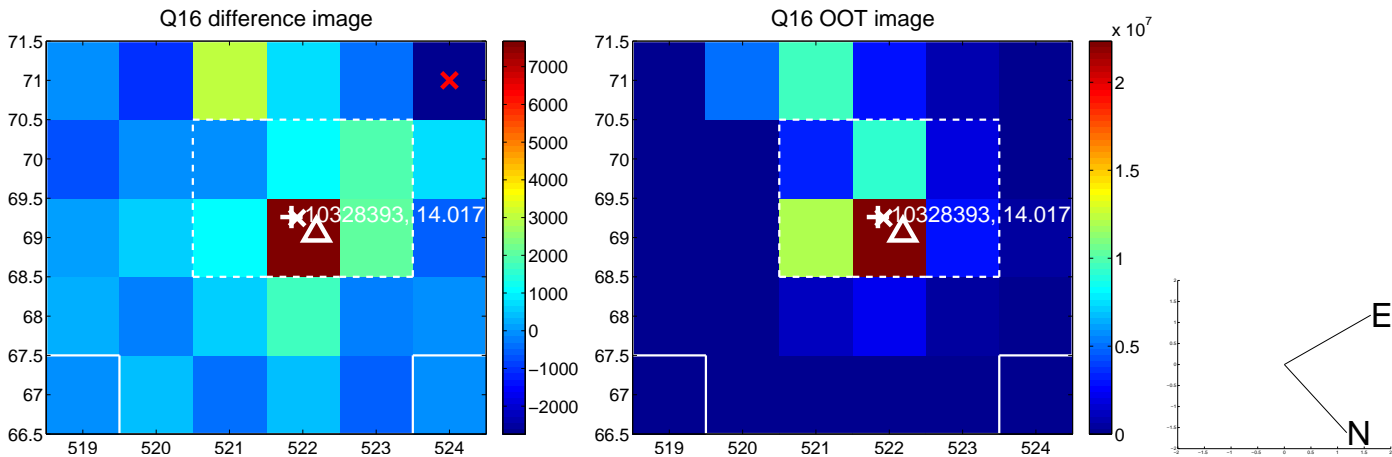
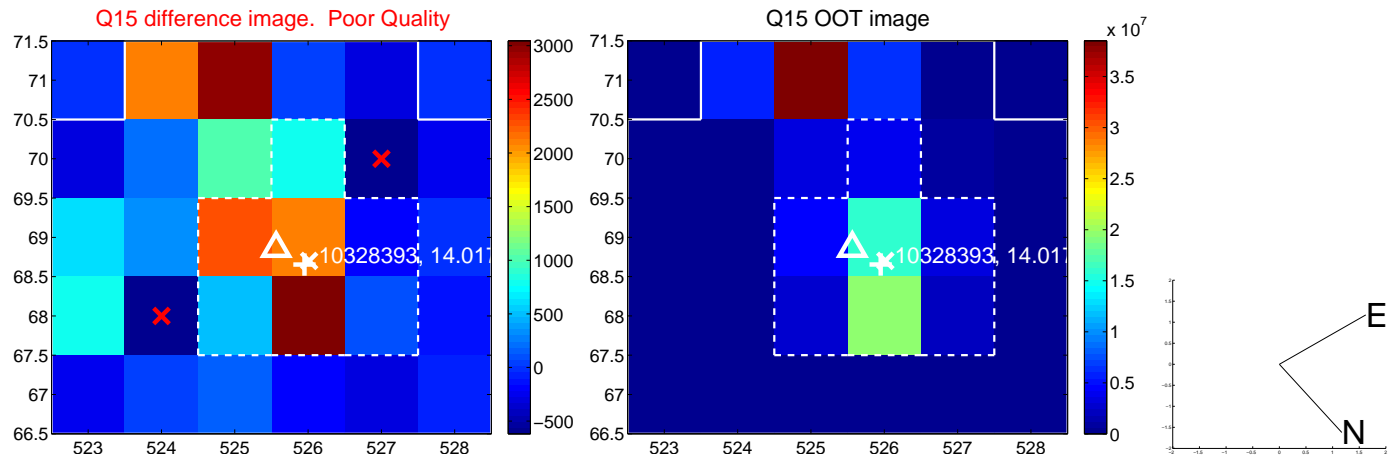
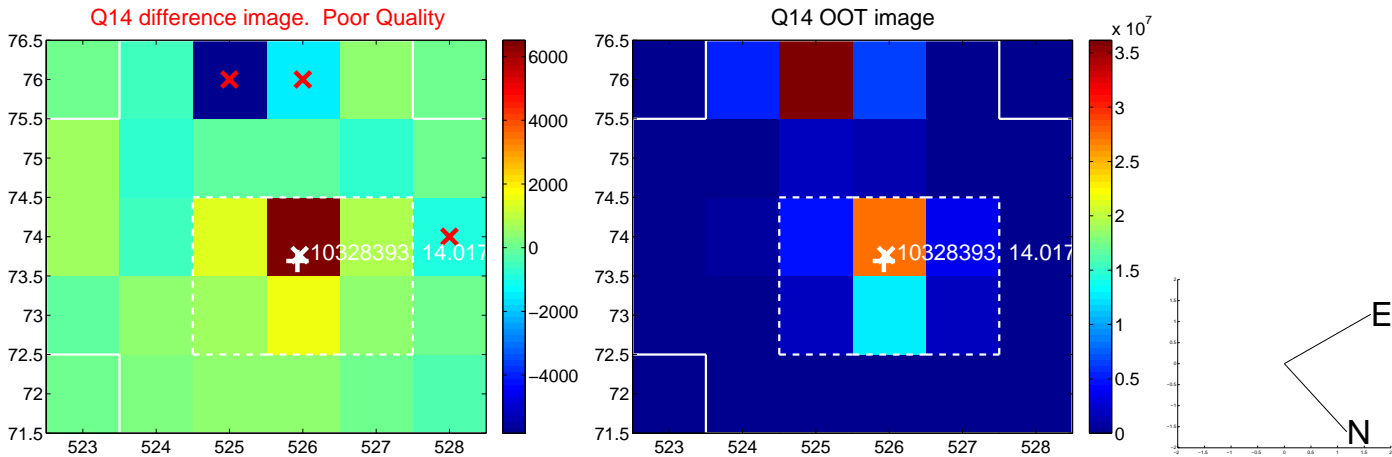
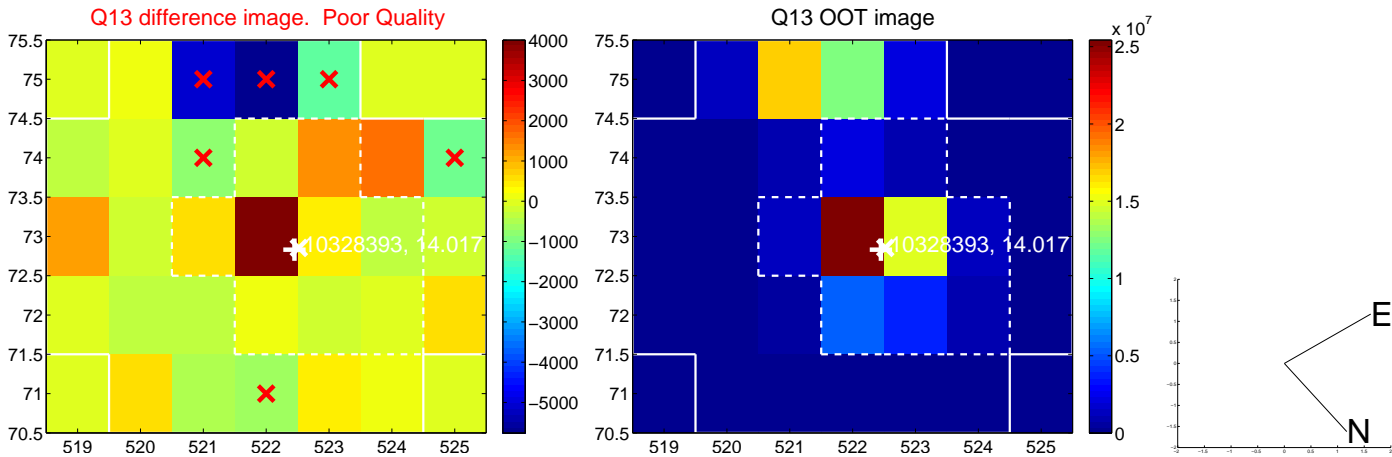
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



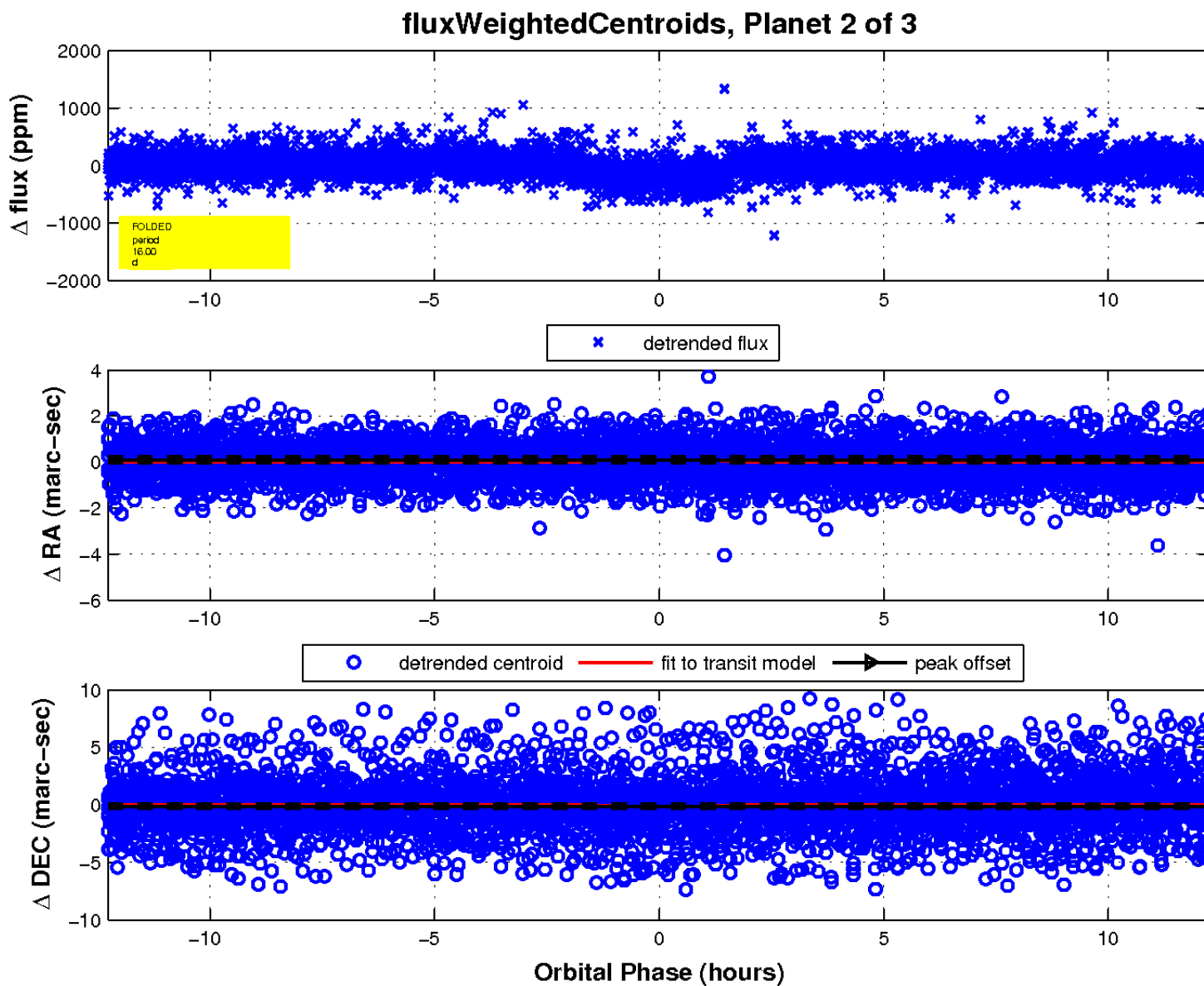
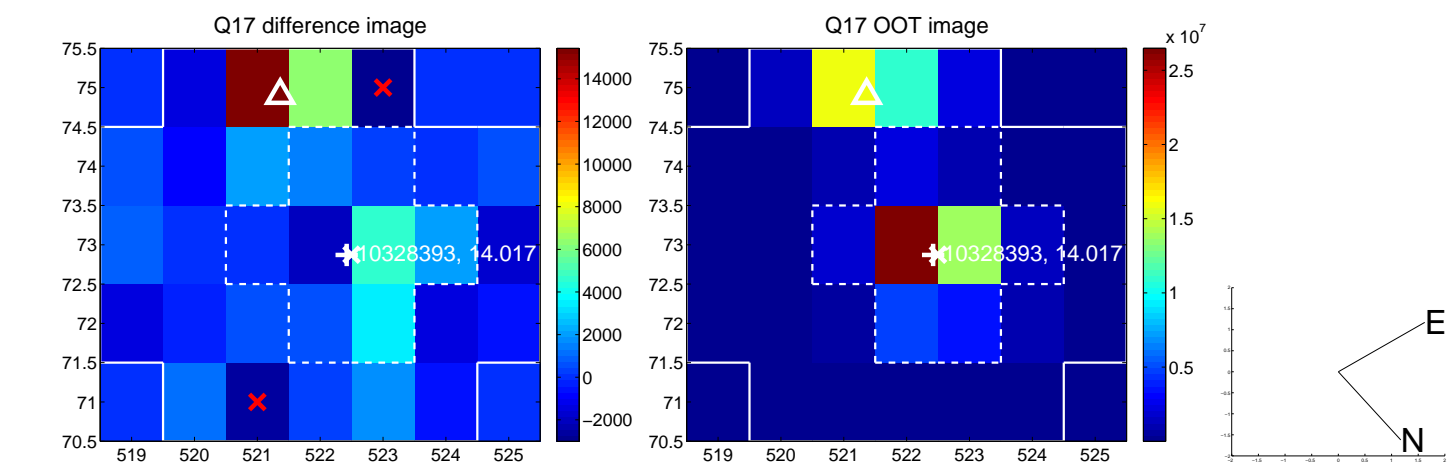
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



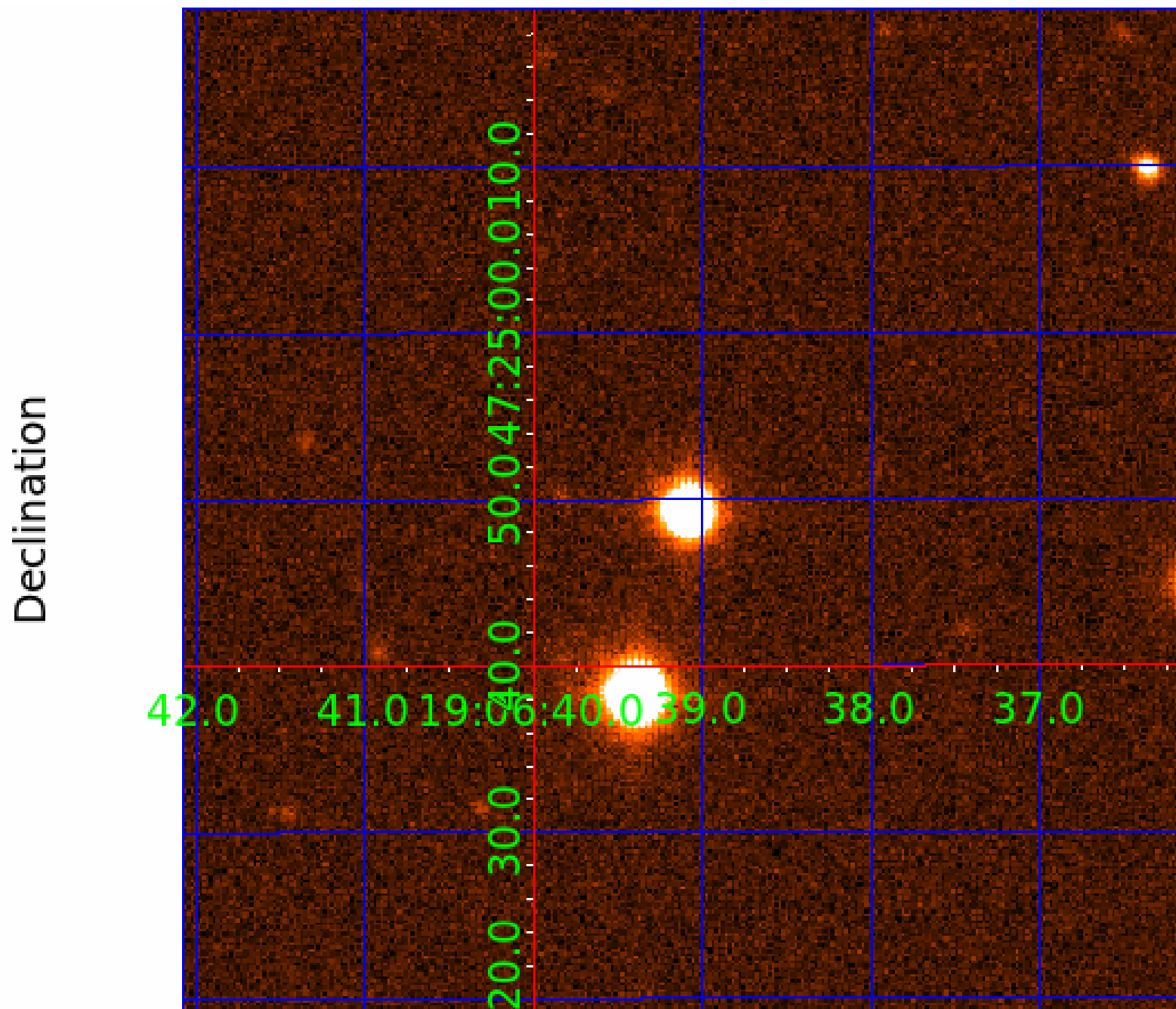
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 010328393

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})
010328393-01	OBS	1905.01	7.626372	136.013975	285.3	2.562	30.7	31.9	0.72	4955	1.51	57.98
010328393-02	OBS	1905.02	15.995584	144.242302	231.4	4.091	19.1	19.2	0.72	4955	1.51	21.59
010328393-03	OBS	1905.03	34.211155	154.584076	253.9	5.200	14.0	15.9	0.72	4955	1.45	7.84

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010328393-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010328393-02	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010328393-03	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.

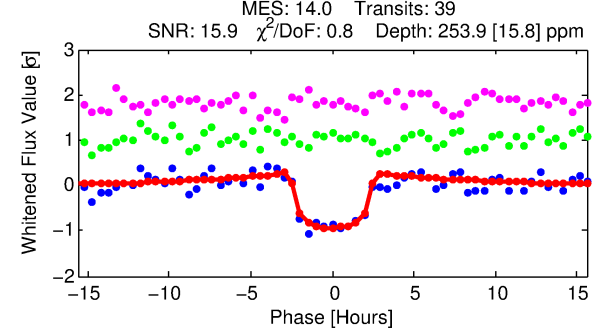
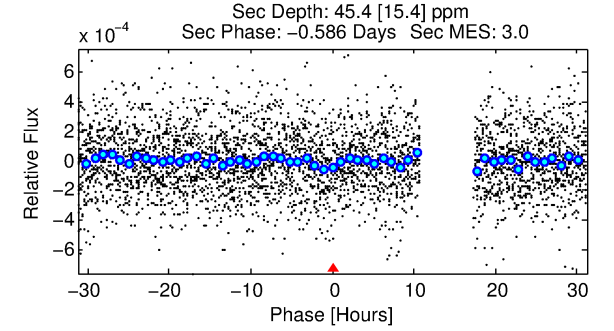
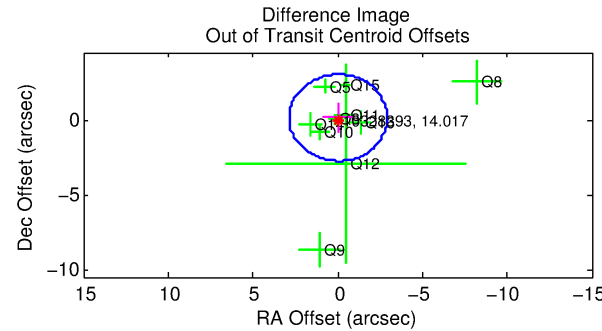
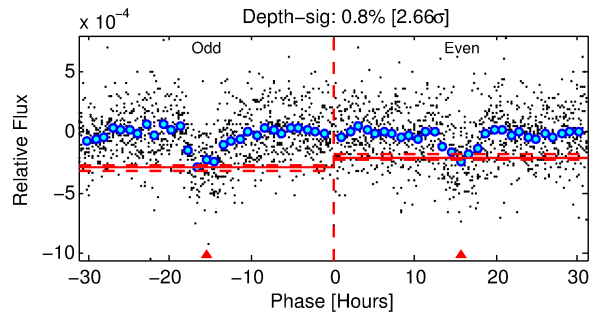
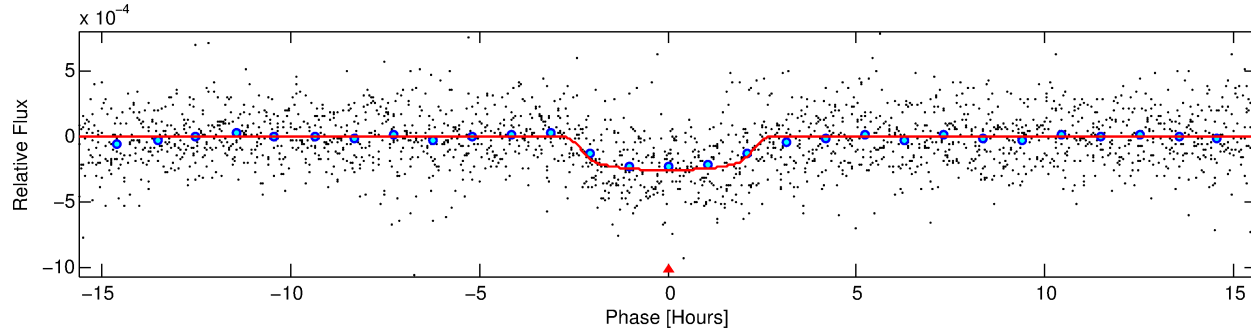
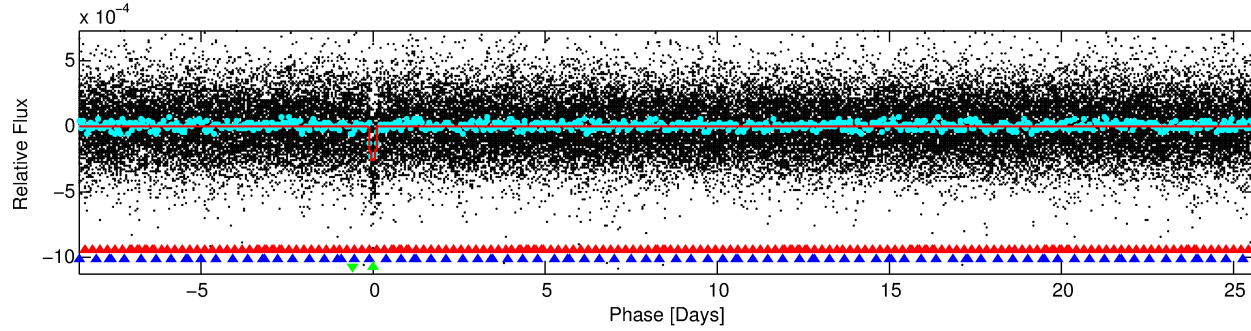
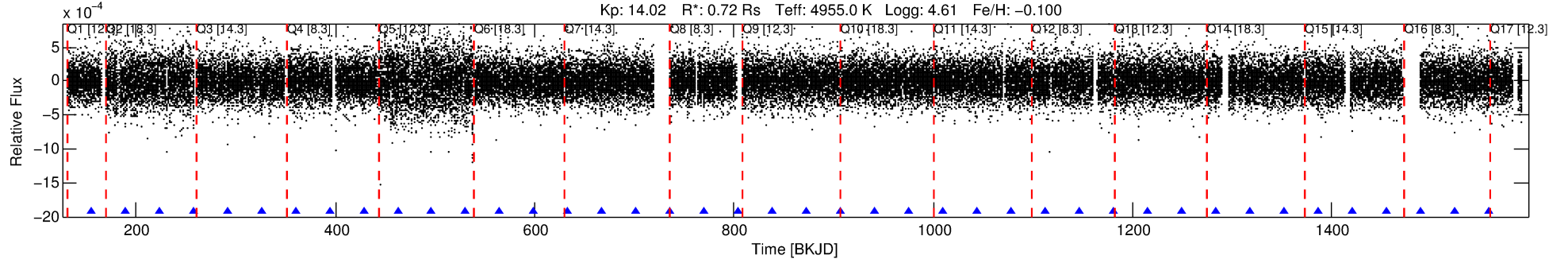
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010328393-03

No Significant Match Found

DV One-Page Summary

KIC: 10328393 Candidate: 3 of 3 Period: 34.211 d
KOI: K01905.03 Name: Kepler-332d Corr: 0.976



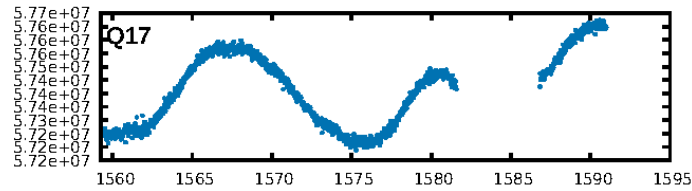
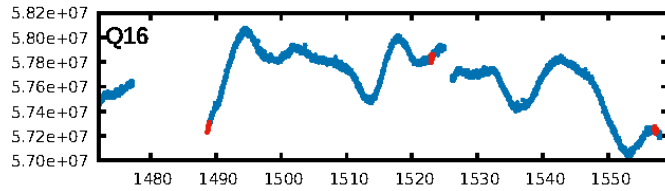
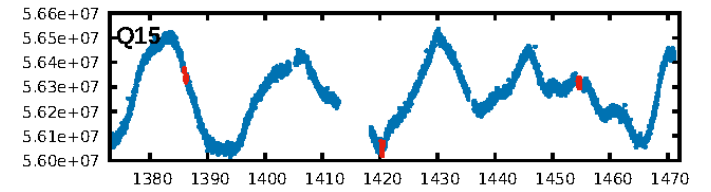
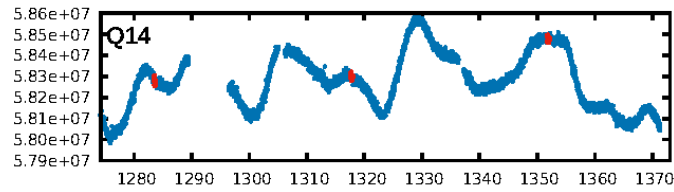
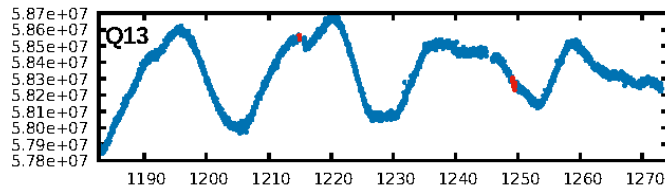
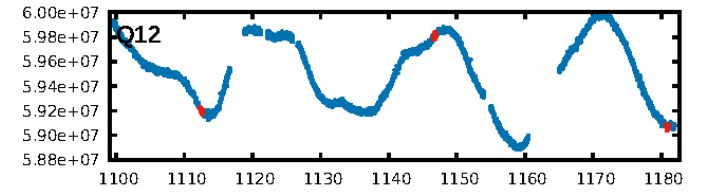
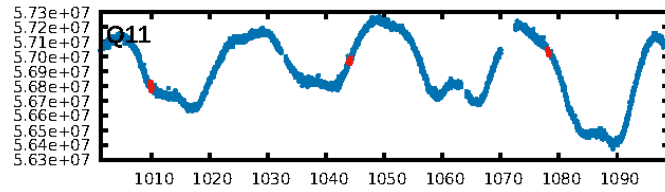
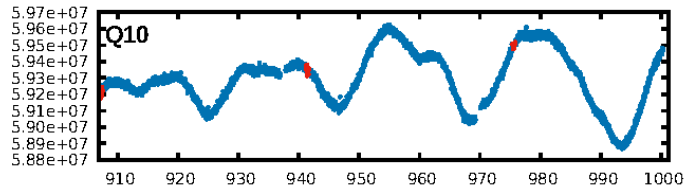
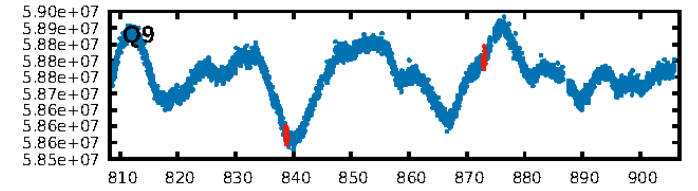
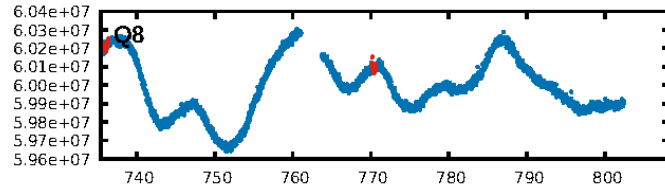
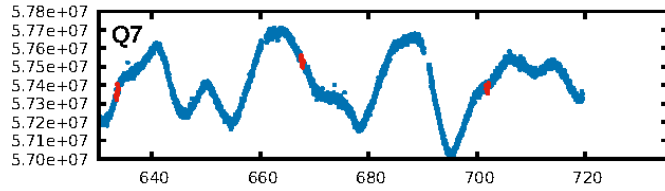
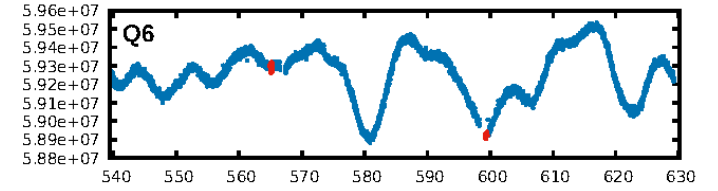
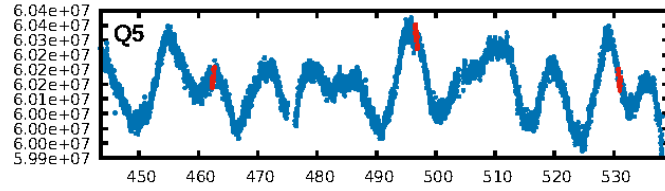
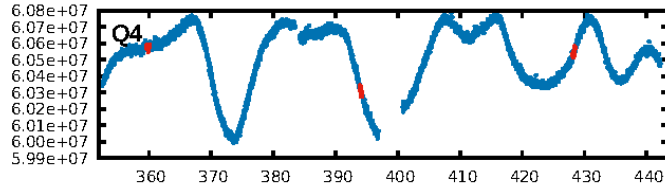
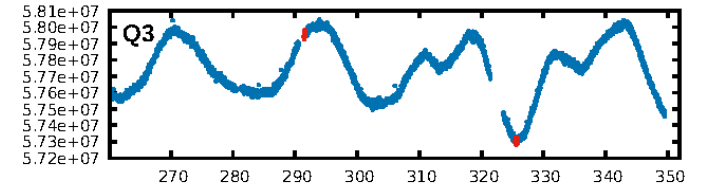
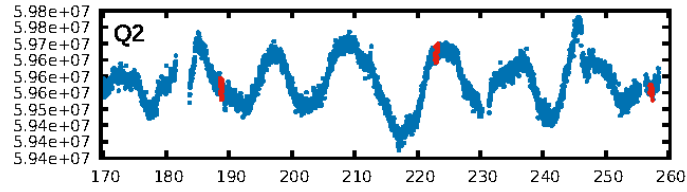
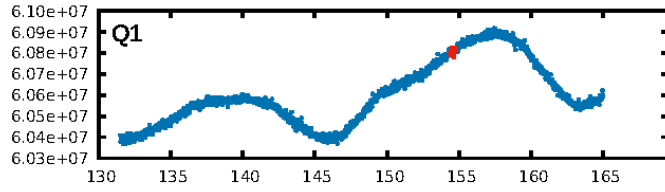
DV Fit Results:

Period = 34.21116 [0.00023] d
Epoch = 154.5841 [0.0057] BKJD
Rp/R* = 0.0184 [0.0020]
a/R* = 21.33 [8.87]
b = 0.93 [0.07]
Seff = 7.84 [0.91]
Teq = 427 [12] K
Rp = 1.45 [0.18] Re
a = 0.1893 [0.0106] AU
Ag = 426.13 [175.38] [2.42σ]
Teffp = 2997 [308] K [8.34σ]

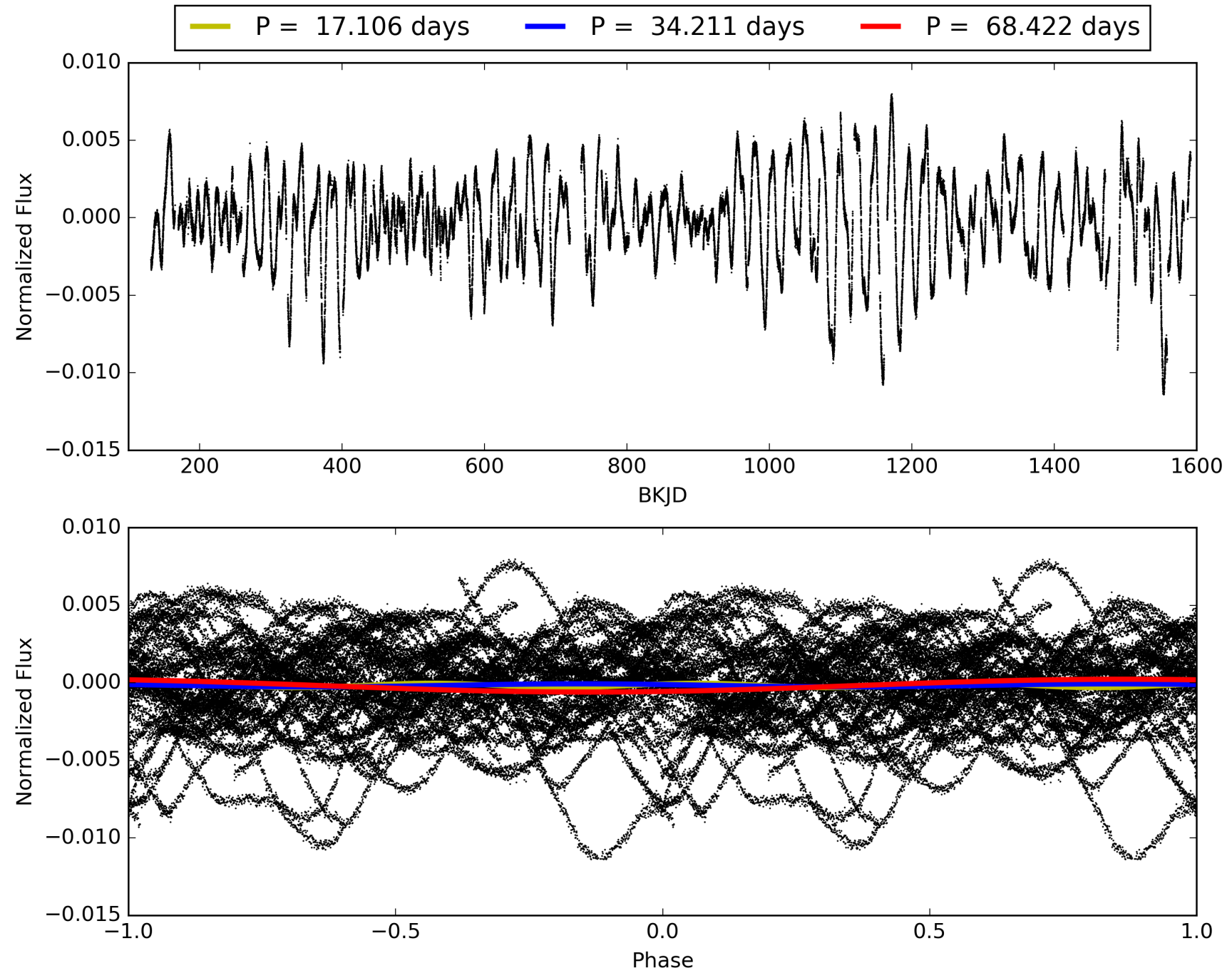
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [66.07σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 34.2%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.01e-39
RollingBand-fgt: 1.00 [38/38]
GhostDiagnostic-chr: 1.133
Centroid-sig: 22.9%
Centroid-so: 2.435 arcsec [2.75σ]
OotOffset-rm: 0.136 arcsec [0.14σ]
KicOffset-rm: 0.403 arcsec [0.37σ]
OotOffset-st: 3/2/3/2 [10]
KicOffset-st: 3/2/3/2 [10]
DiffImageQuality-fgm: 0.50 [5/10]
DiffImageOverlap-fno: 0.94 [15/16]

TCE 010328393-03, PDC Light Curves

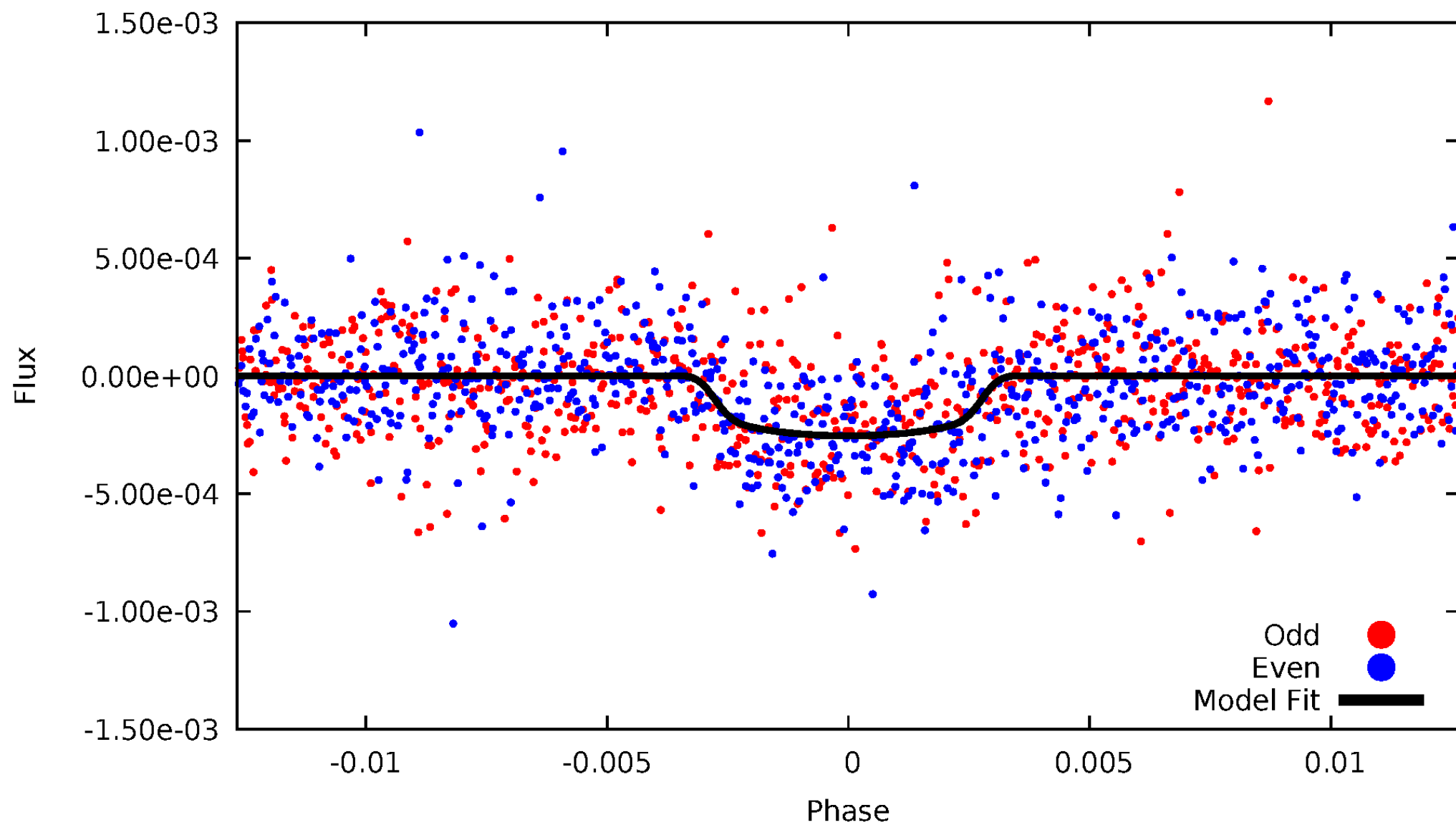


TCE 010328393-03



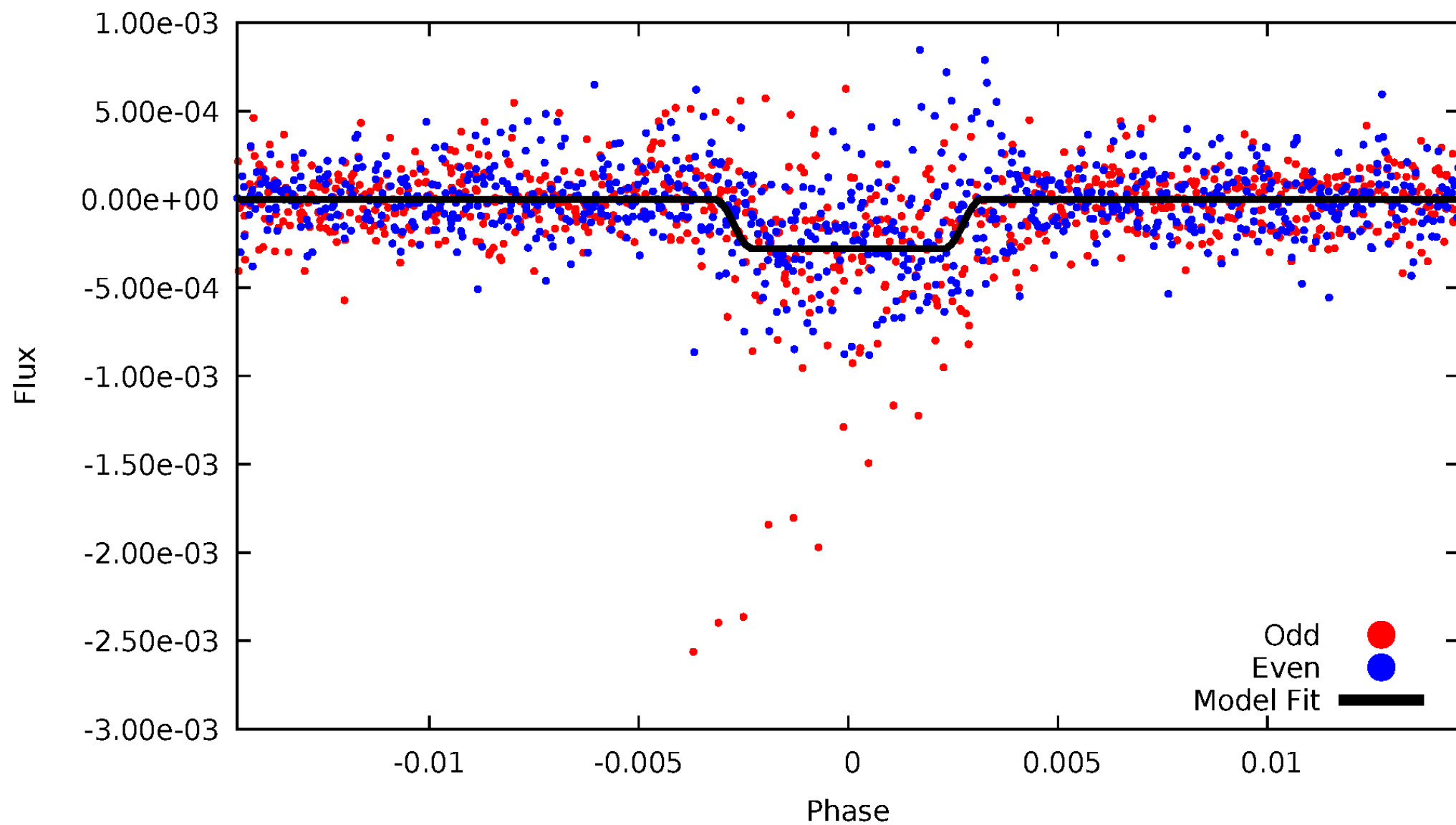
DV Odd/Even

TCE 010328393-03



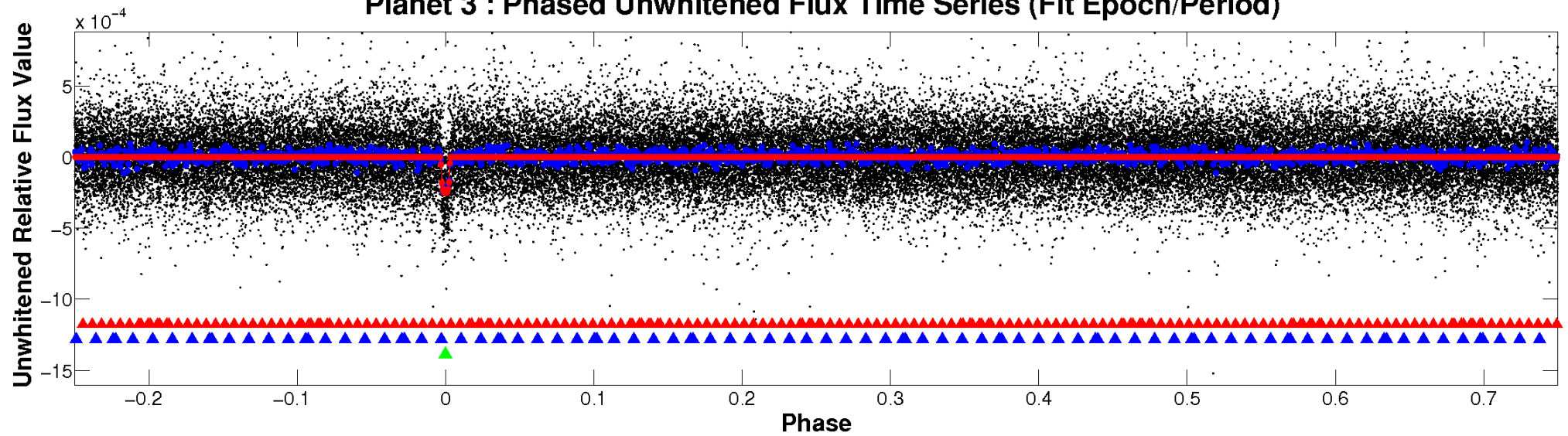
ALT Odd/Even

TCE 010328393-03

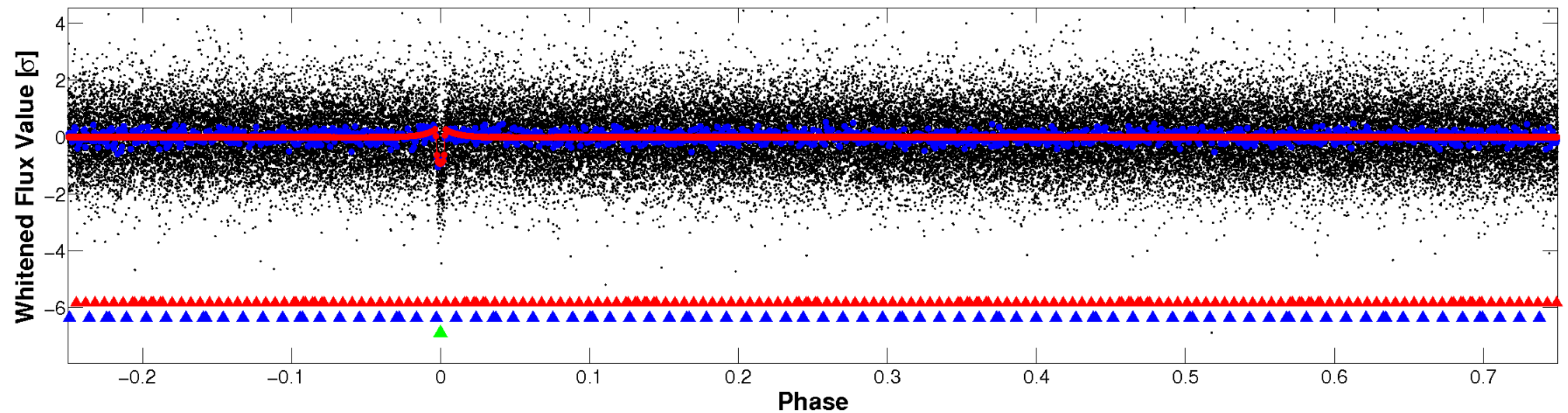


Non-Whitened Vs. Whitened Light Curve

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

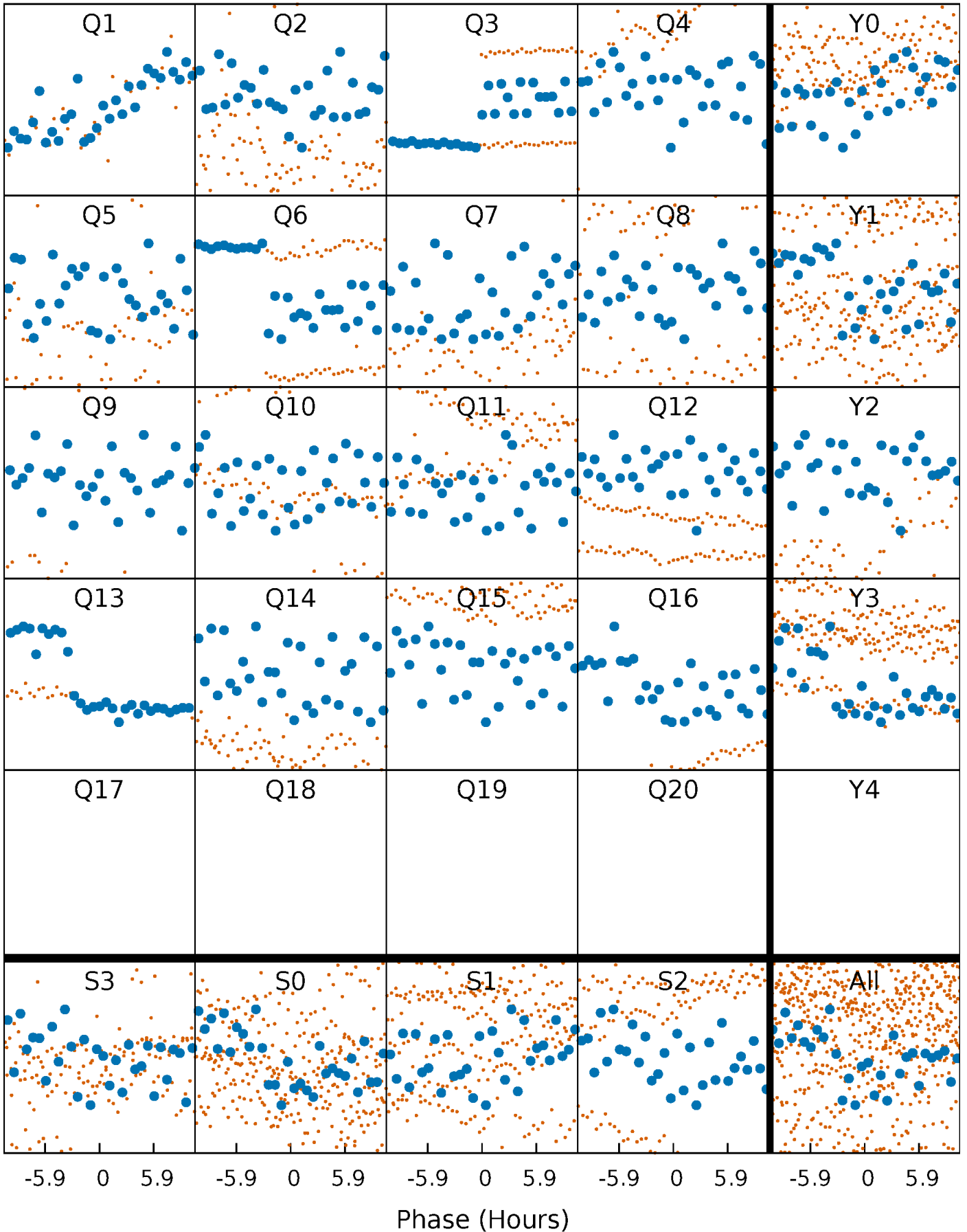


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



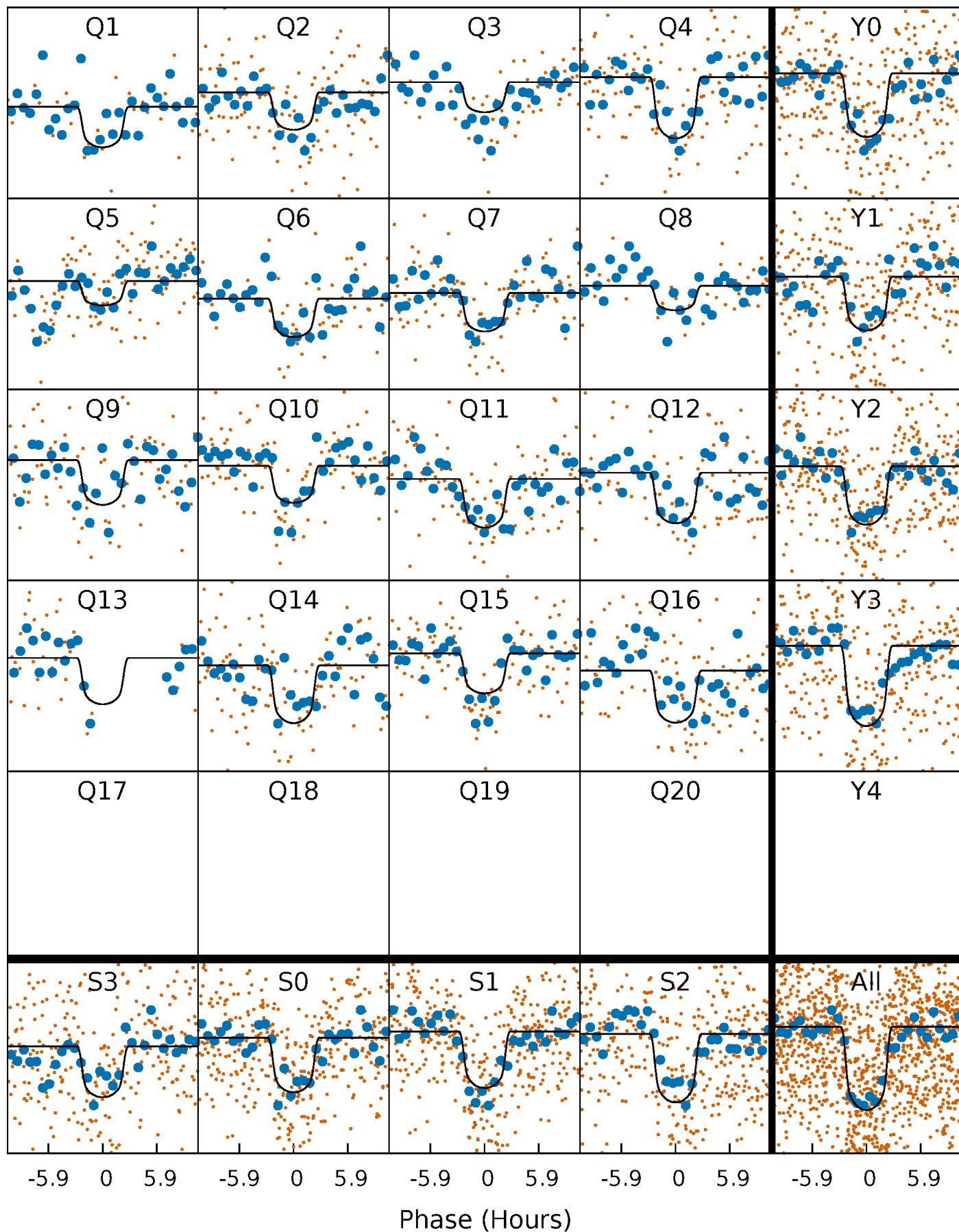
PDC Quarter-Phased Transit Curves

TCE 010328393-03 P= 34.211155 Days $T_0=154.584076$ (BKJD)



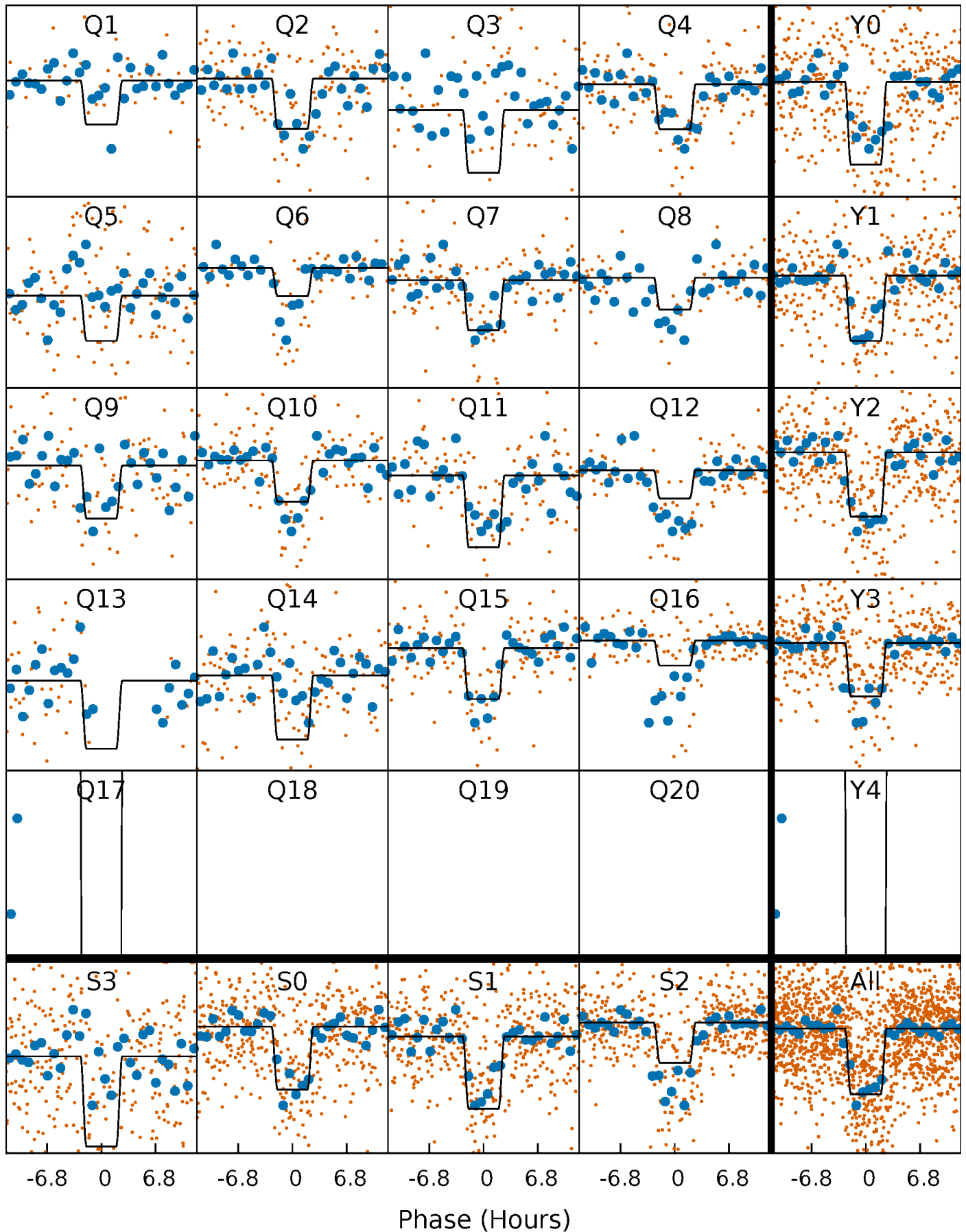
DV Quarter-Phased Transit Curves

TCE 010328393-03 P= 34.211155 Days $T_0=154.584076$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

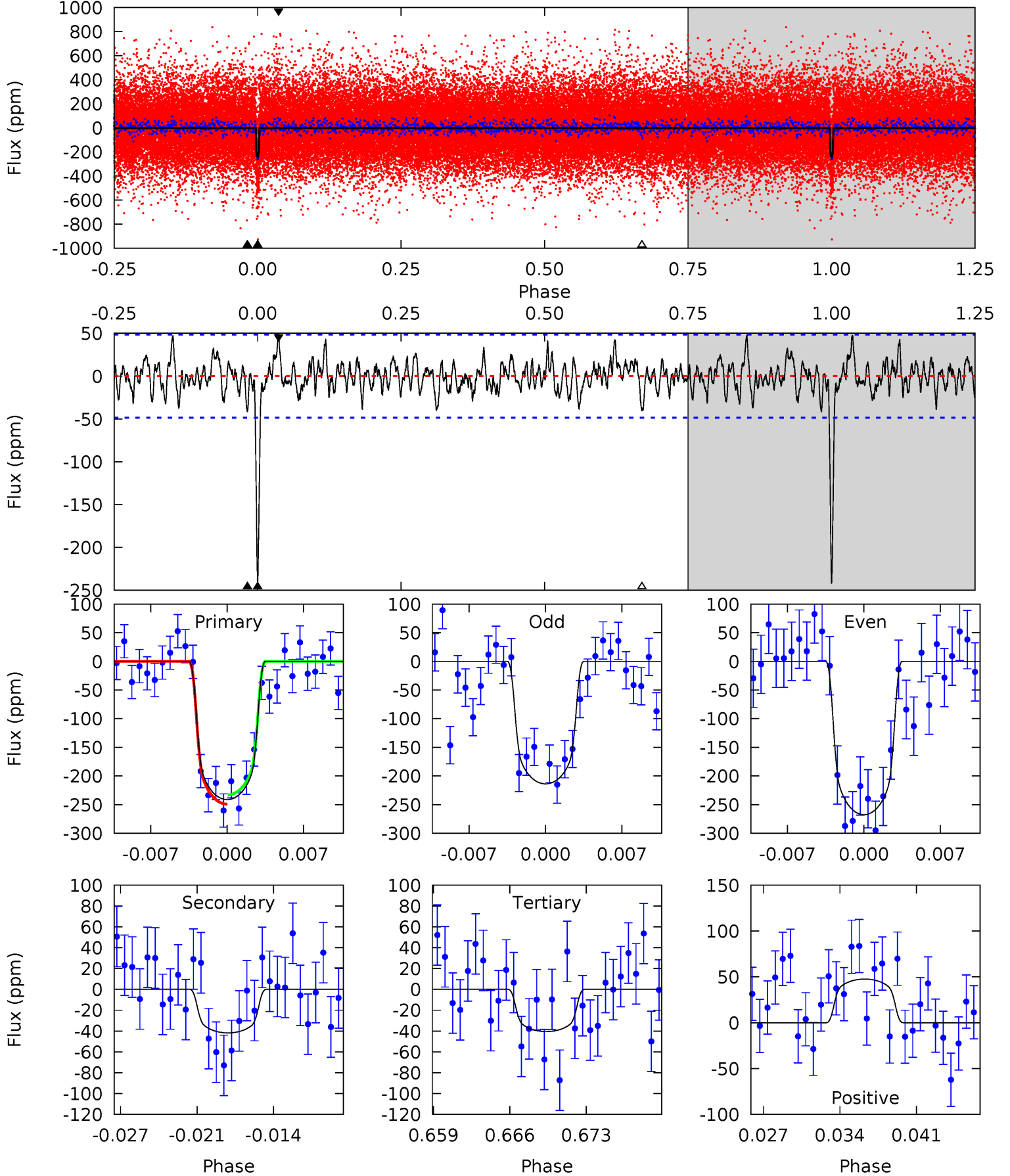
TCE 010328393-03 P= 34.211474 Days $T_0=154.567960$ (BKJD)



DV Model-Shift Uniqueness Test

010328393-03, P = 34.211155 Days, E = 120.372921 Days

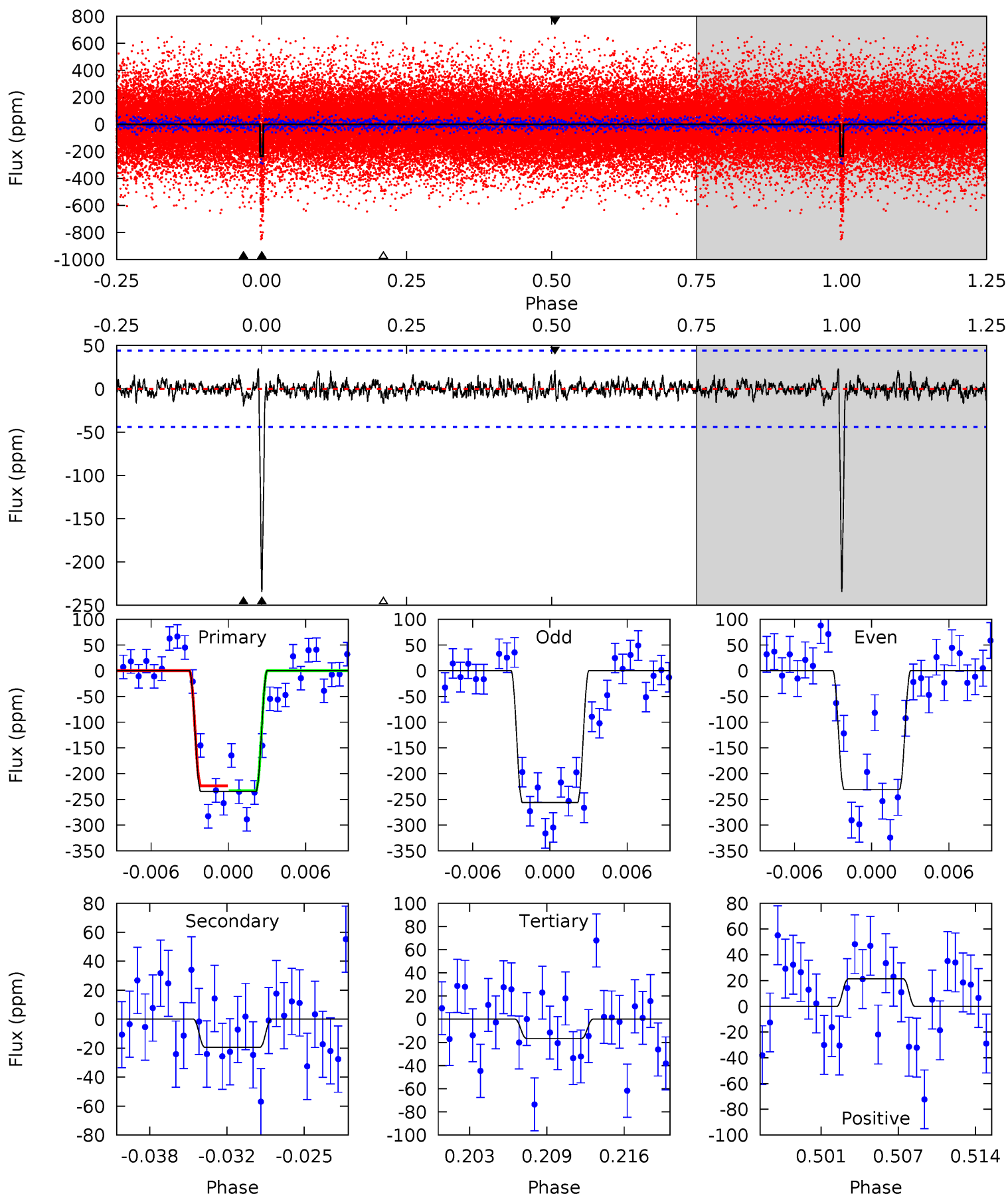
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
25.4	4.39	4.26	5.00	5.10	2.70	1.53	21.1	20.4	0.13	-0.61	2.83	1.00	0.16	0.85



Alt Model-Shift Uniqueness Test

010328393-03, P = 34.211474 Days, E = 120.356486 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
27.2	2.25	1.93	2.47	5.11	2.73	0.67	25.3	24.7	0.32	-0.22	1.46	1.43	0.09	0.53



Stellar Parameters For KIC 010328393

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4955^{+100}_{-100}	$4.610^{+0.018}_{-0.046}$	$-0.100^{+0.150}_{-0.150}$	$0.721^{+0.047}_{-0.029}$	$0.774^{+0.036}_{-0.048}$	$2.914^{+0.270}_{-0.442}$
	+2%/-2%	+0%/-1%	+150%/-150%	+7%/-4%	+5%/-6%	+9%/-15%
Source	SPE58	SPE58	SPE58	DSEP		

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

Secondary Eclipse Parameters for KIC 010328393-03 / KOI 1905.03

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-42 ± 10	$1.46^{+0.18}_{-0.17}$	600^{+14}_{-14}	3397^{+183}_{-175}	381^{+140}_{-108}
Alt.	-19 ± 9	$1.33^{+0.17}_{-0.19}$	601^{+14}_{-15}	3125^{+231}_{-257}	215^{+136}_{-93}

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 $A_{obs} \gg 1.0$

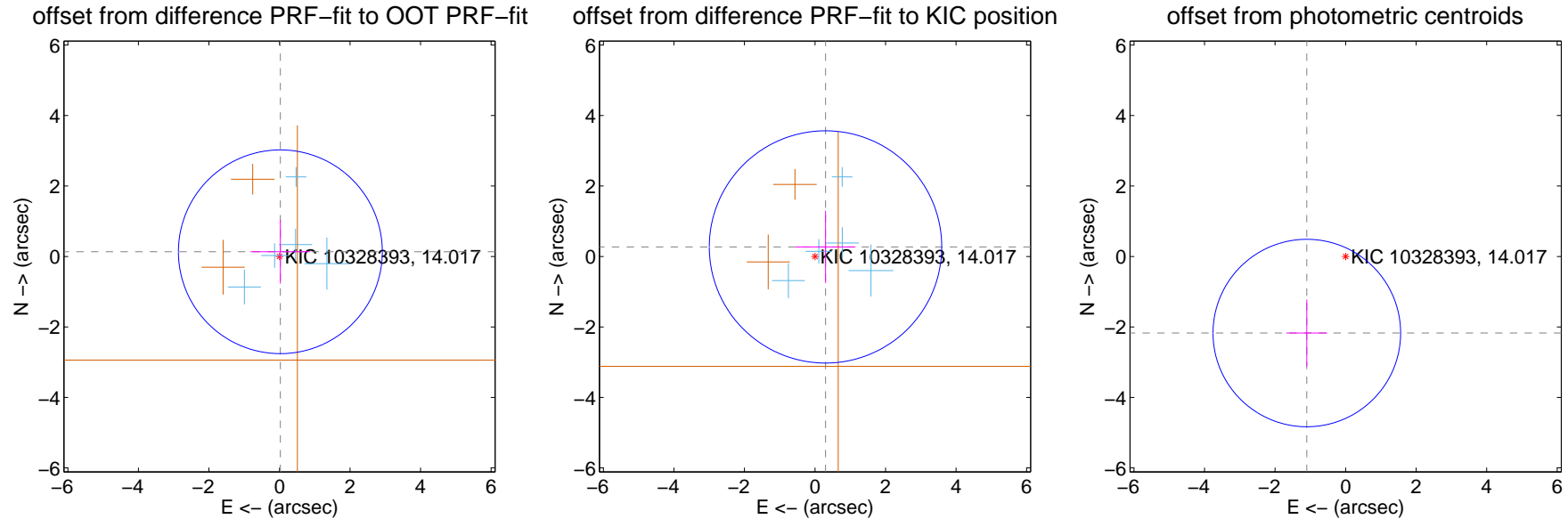
DV Centroid Data

Supplemental centroid analysis for 010328393-03. Kepler magnitude: 14.02. Transit SNR 15.91

There are 5 quarters with good PRF difference image offsets

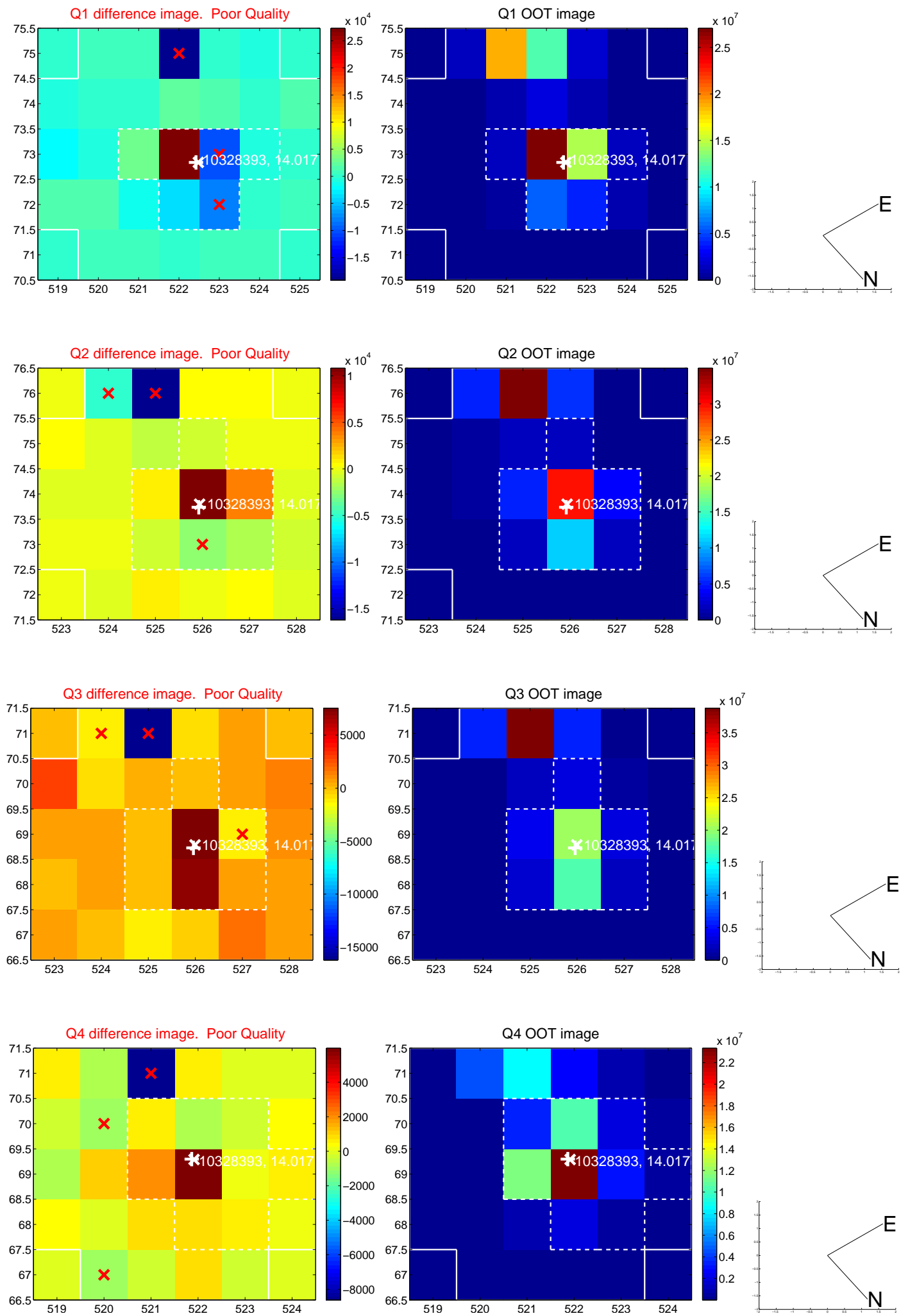
The direct PRF centroid is offset from the target star catalog position by about 0.31 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.136 ± 0.964	0.14	-0.025 ± 0.847	0.133 ± 0.903
PRF-fit source offset from KIC position	0.403 ± 1.099	0.37	-0.298 ± 0.849	0.271 ± 1.025
photometric centroid source offset	2.44 ± 0.89	2.75	1.10 ± 0.58	-2.17 ± 0.95

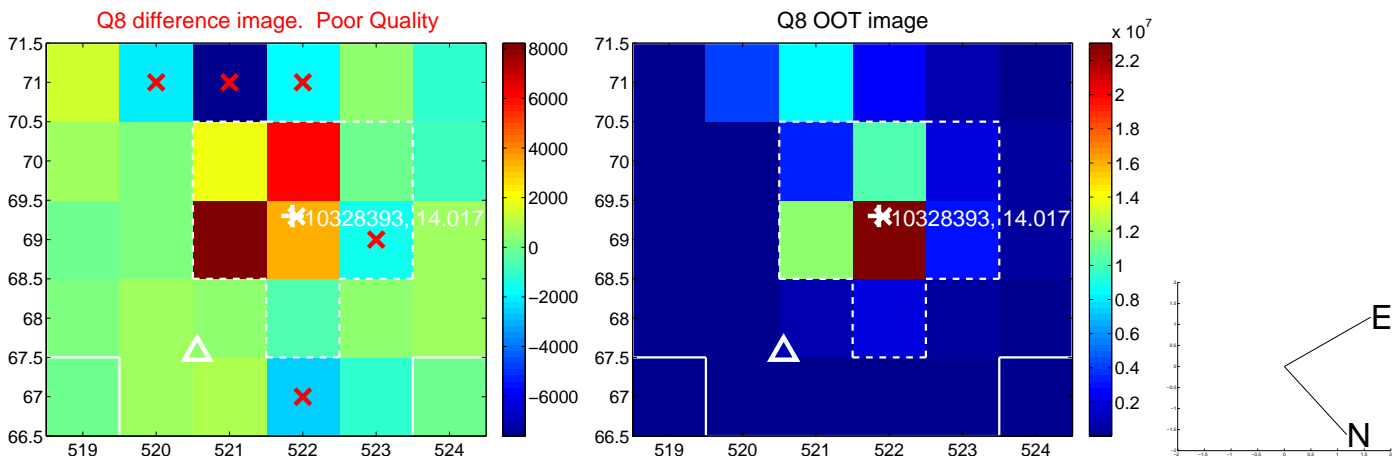
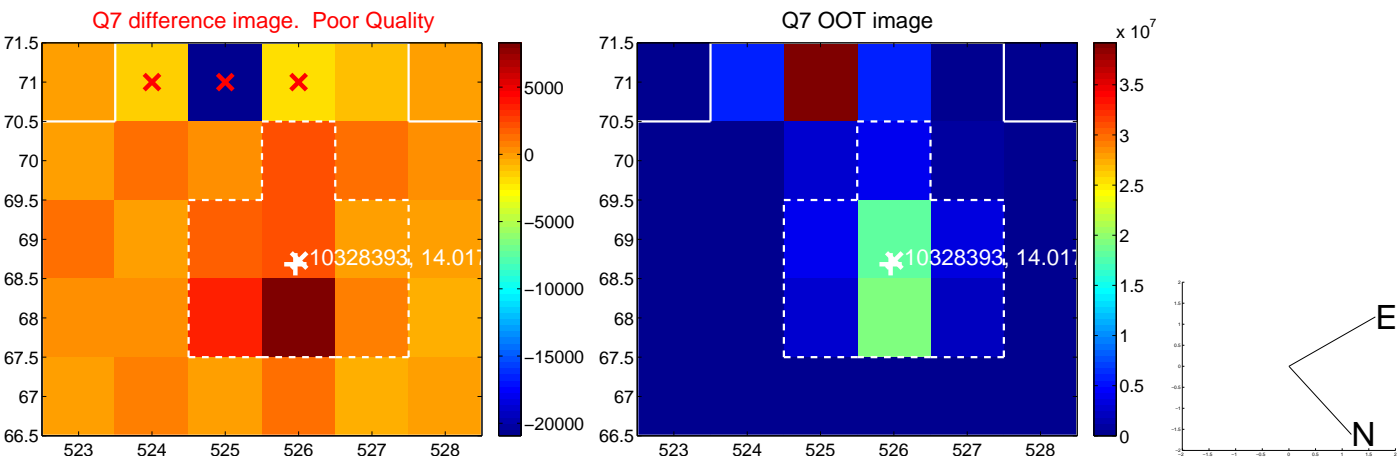
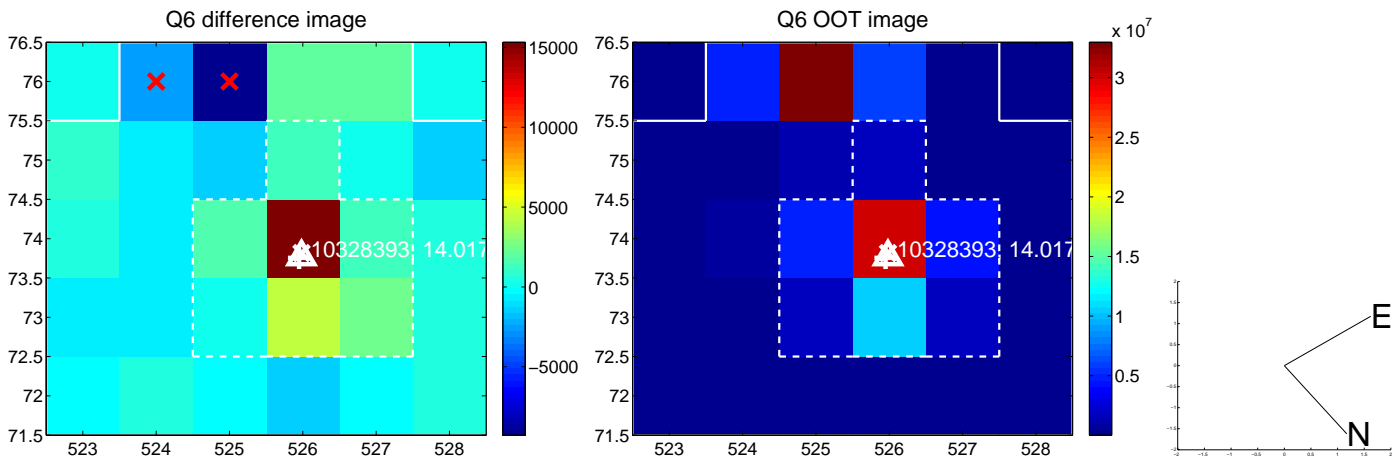
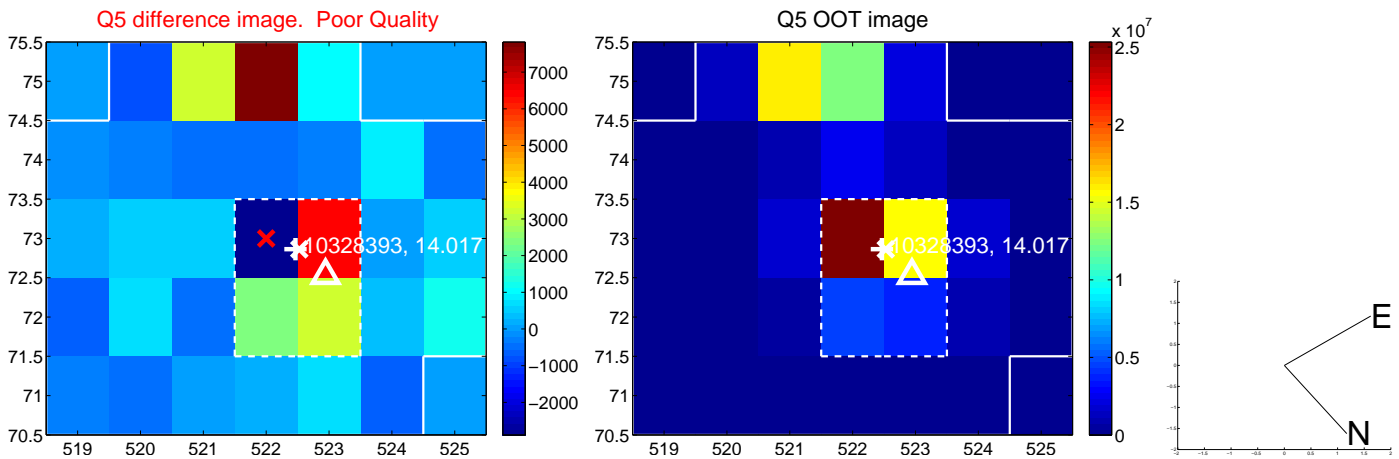


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

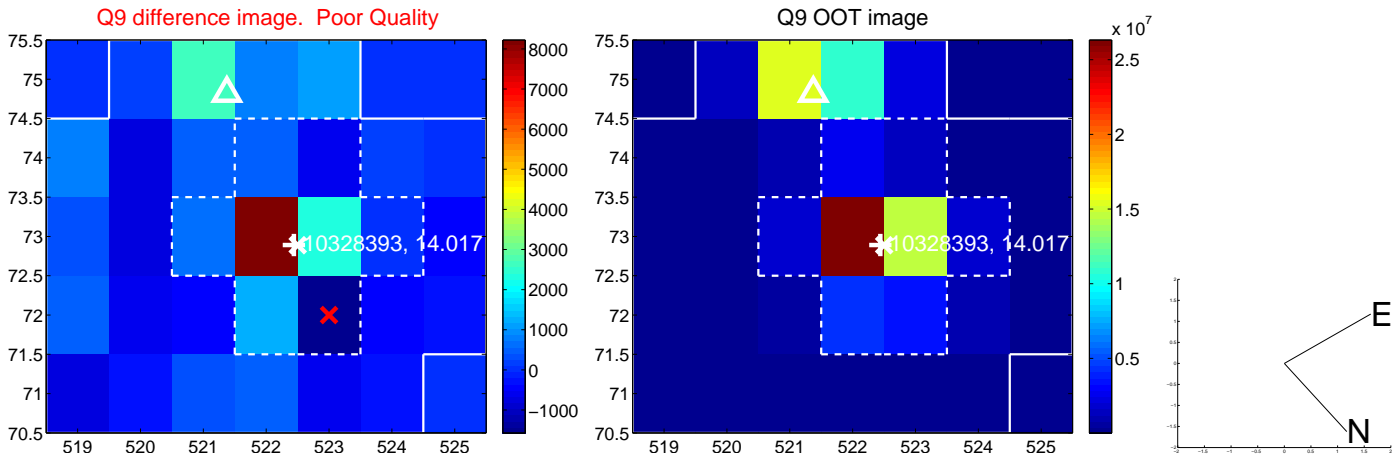
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



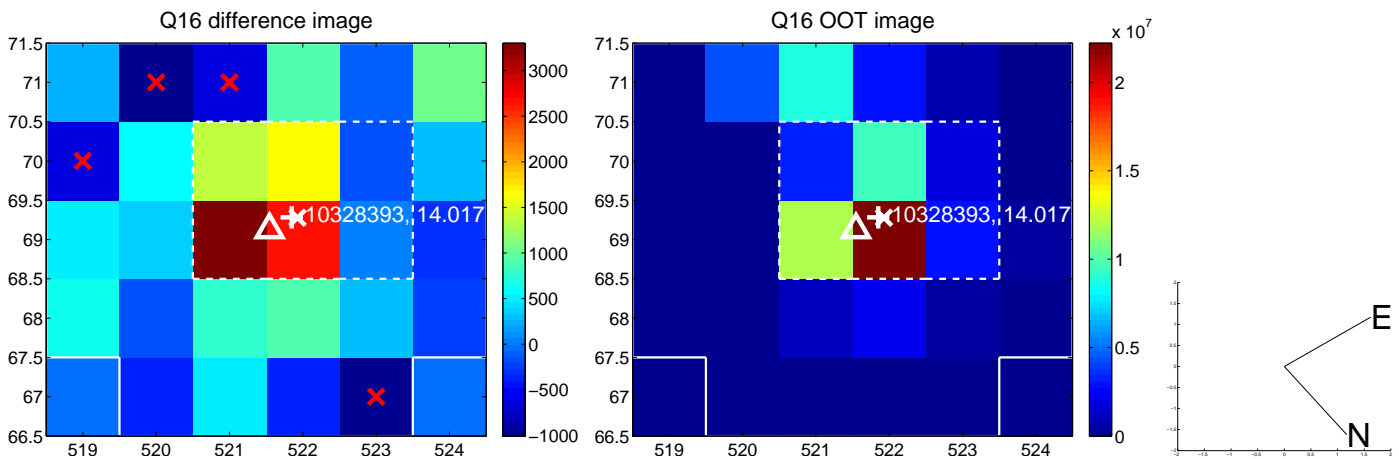
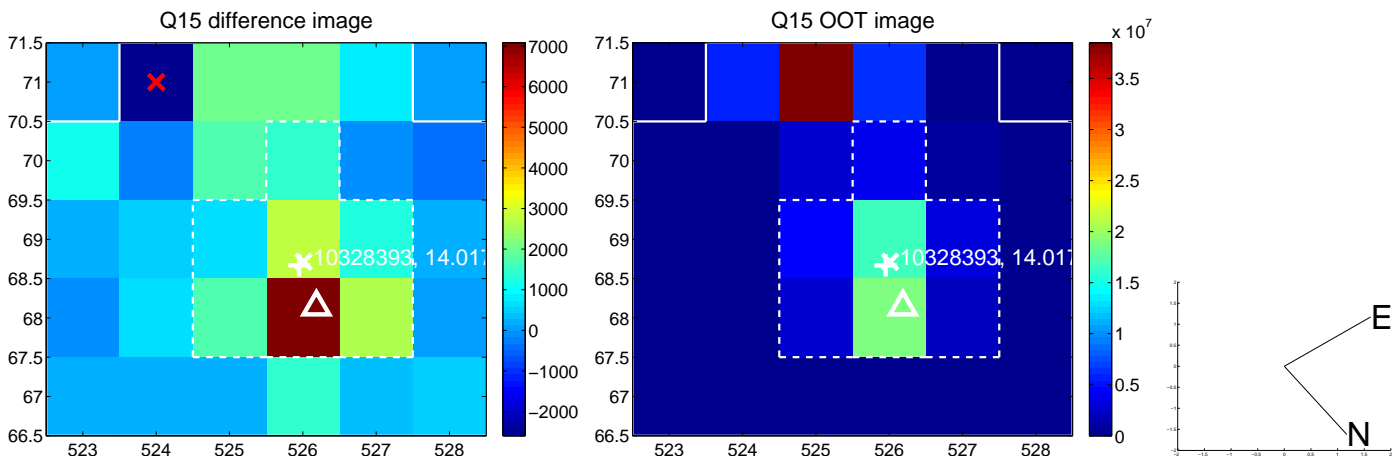
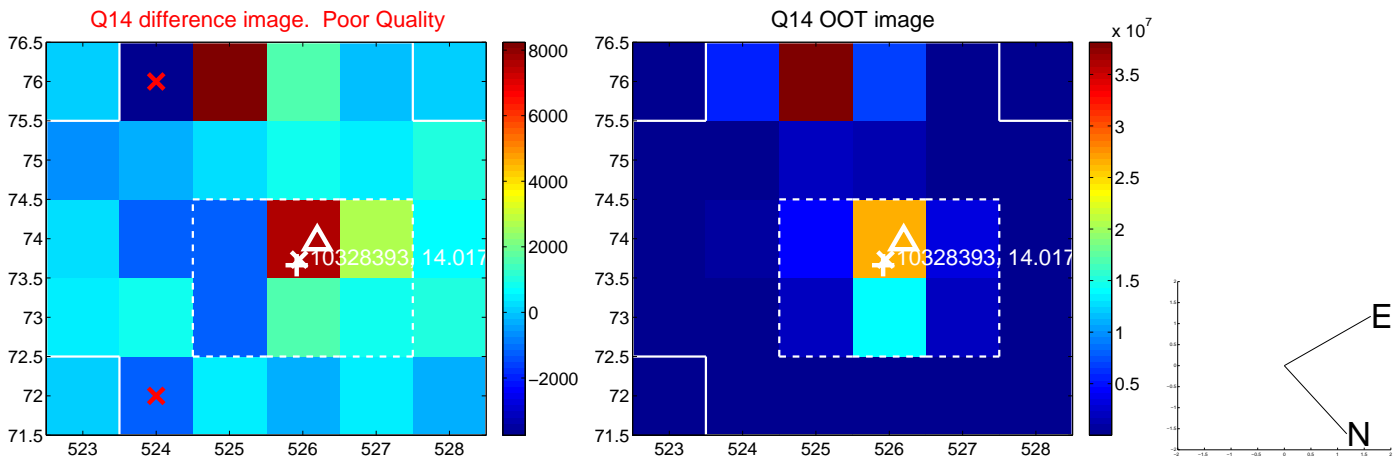
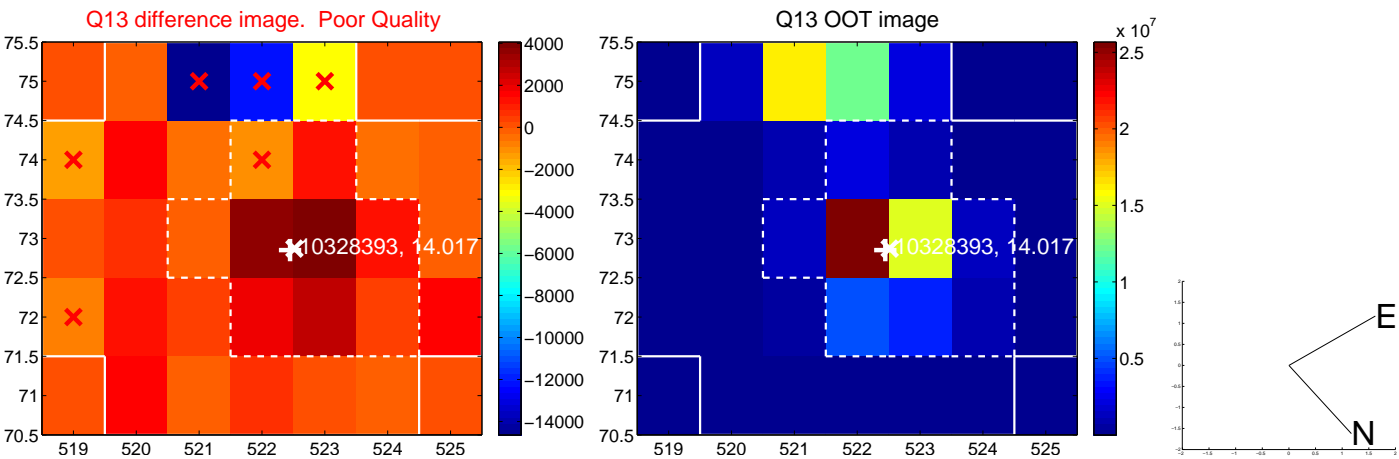
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



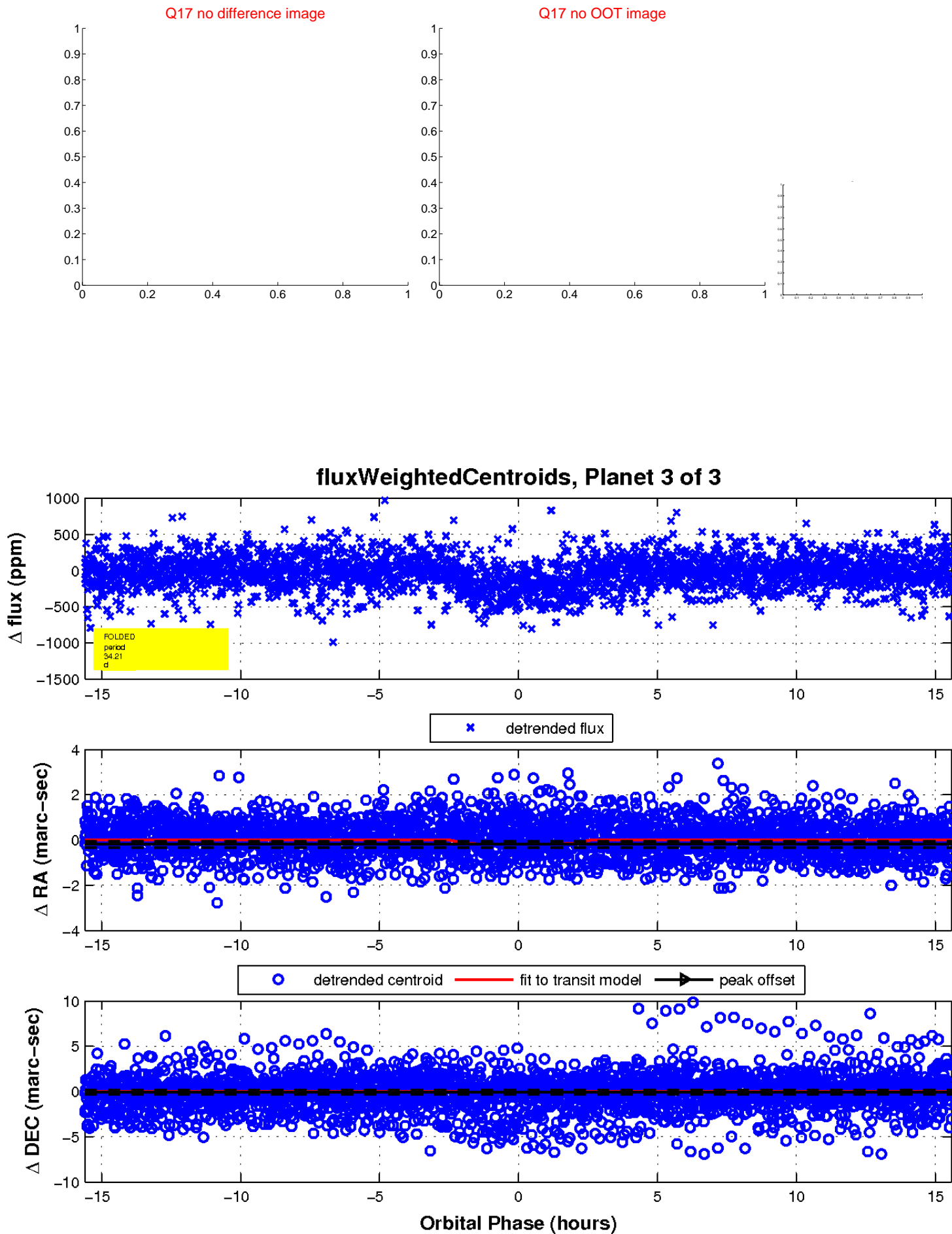
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

