

KIC 010604335

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})
010604335-01	OBS	1298.01	11.008170	132.218136	1431.6	2.391	35.2	38.5	0.58	4141	2.78	13.42
010604335-02	OBS	1298.02	92.749377	173.284991	1077.3	7.745	10.7	11.3	0.58	4141	3.79	0.78
010604335-03	OBS	No	1.428671	132.671710	79.1	11.141	9.3	10.2	0.58	4141	0.50	204.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010604335-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010604335-02	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED
010604335-03	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

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

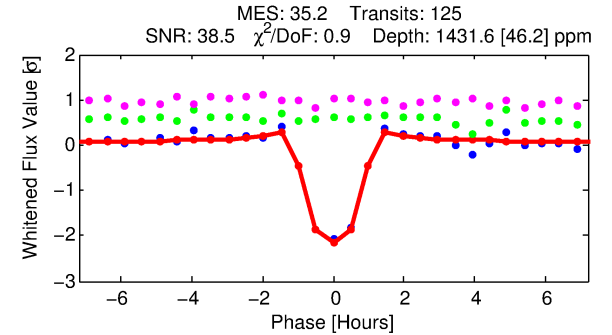
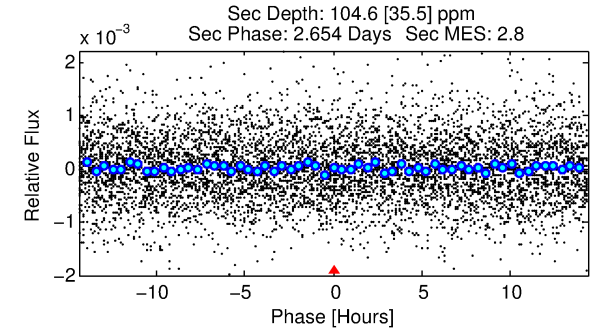
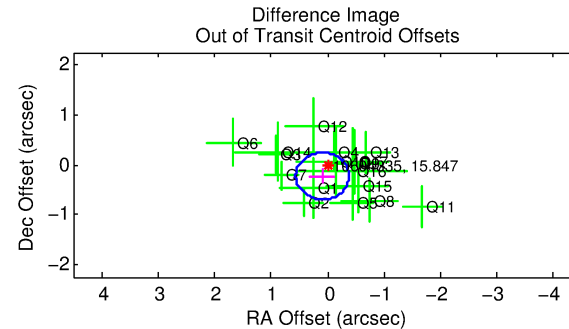
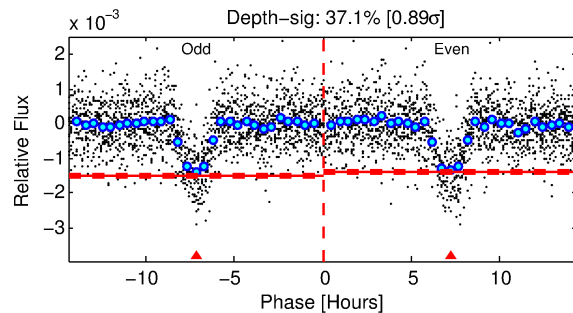
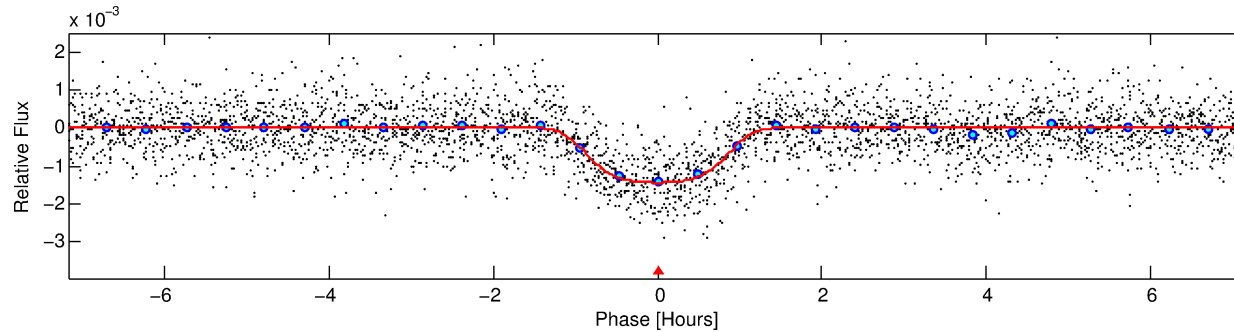
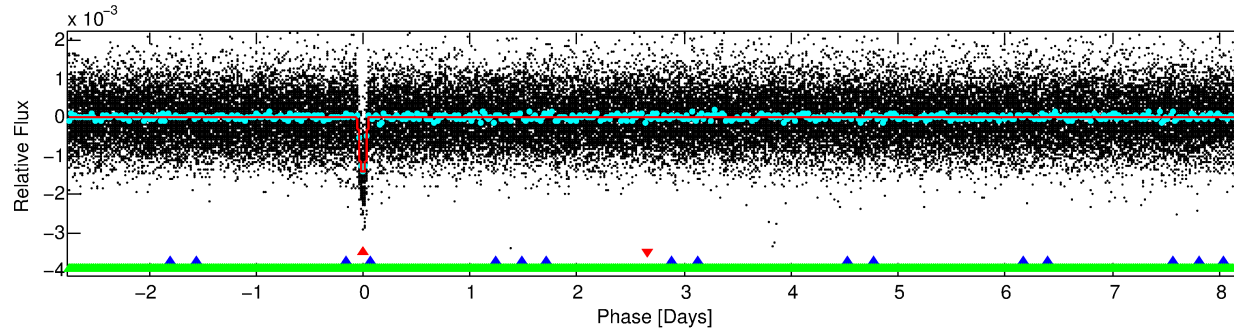
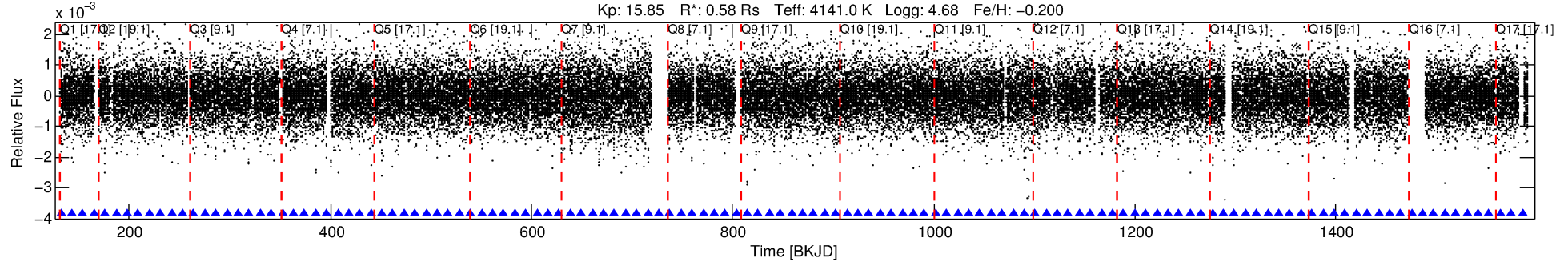
Ephemeris Match Information For 010604335-01

No Significant Match Found

DV One-Page Summary

KIC: 10604335 Candidate: 1 of 3 Period: 11.008 d
KOI: K01298.01 Name: Kepler-283b Corr: 0.955

Kp: 15.85 R*: 0.58 Rs Teff: 4141.0 K Logg: 4.68 Fe/H: -0.200



DV Fit Results:

Period = 11.00817 [0.00002] d
Epoch = 132.2181 [0.0014] BKJD
Rp/R* = 0.0438 [0.0016]
a/R* = 16.61 [1.80]
b = 0.93 [0.02]
Seff = 13.42 [1.37]
Teq = 488 [12] K
Rp = 2.78 [0.18] Re
a = 0.0816 [0.0032] AU
Ag = 49.35 [17.34] [2.79σ]
Teffp = 2000 [179] K [8.41σ]

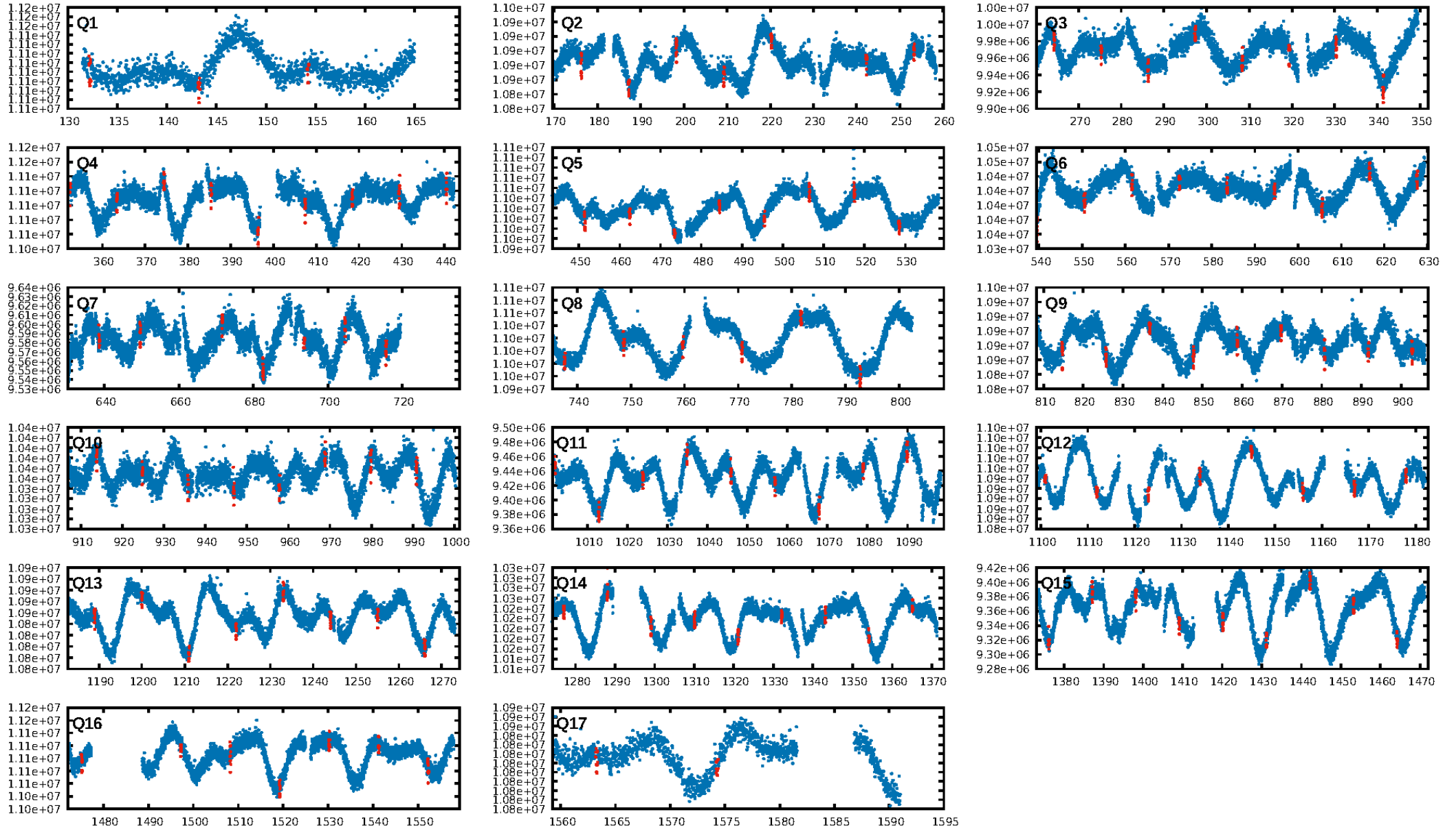
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [20.18σ]
LongPeriod-sig: 100.0% [242.02σ]
ModelChiSquare2-sig: 98.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.26e-194
RollingBand-fgt: 1.00 [120/120]
GhostDiagnostic-chr: 2.527
Centroid-sig: 16.8%
Centroid-so: 0.312 arcsec [1.07σ]
OotOffset-rm: 0.247 arcsec [1.58σ]
KicOffset-rm: 0.334 arcsec [1.90σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.88 [15/17]

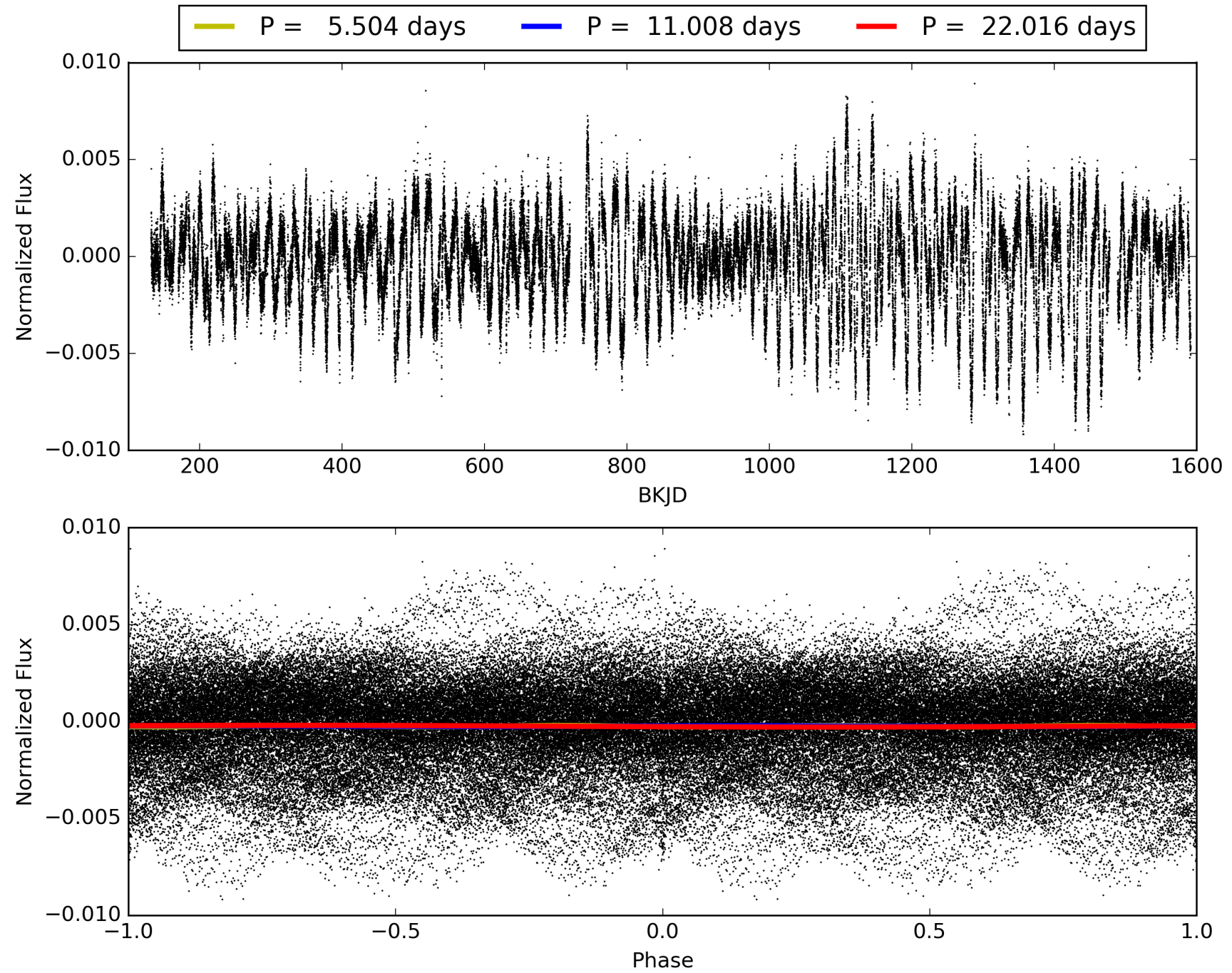
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010604335-01, PDC Light Curves

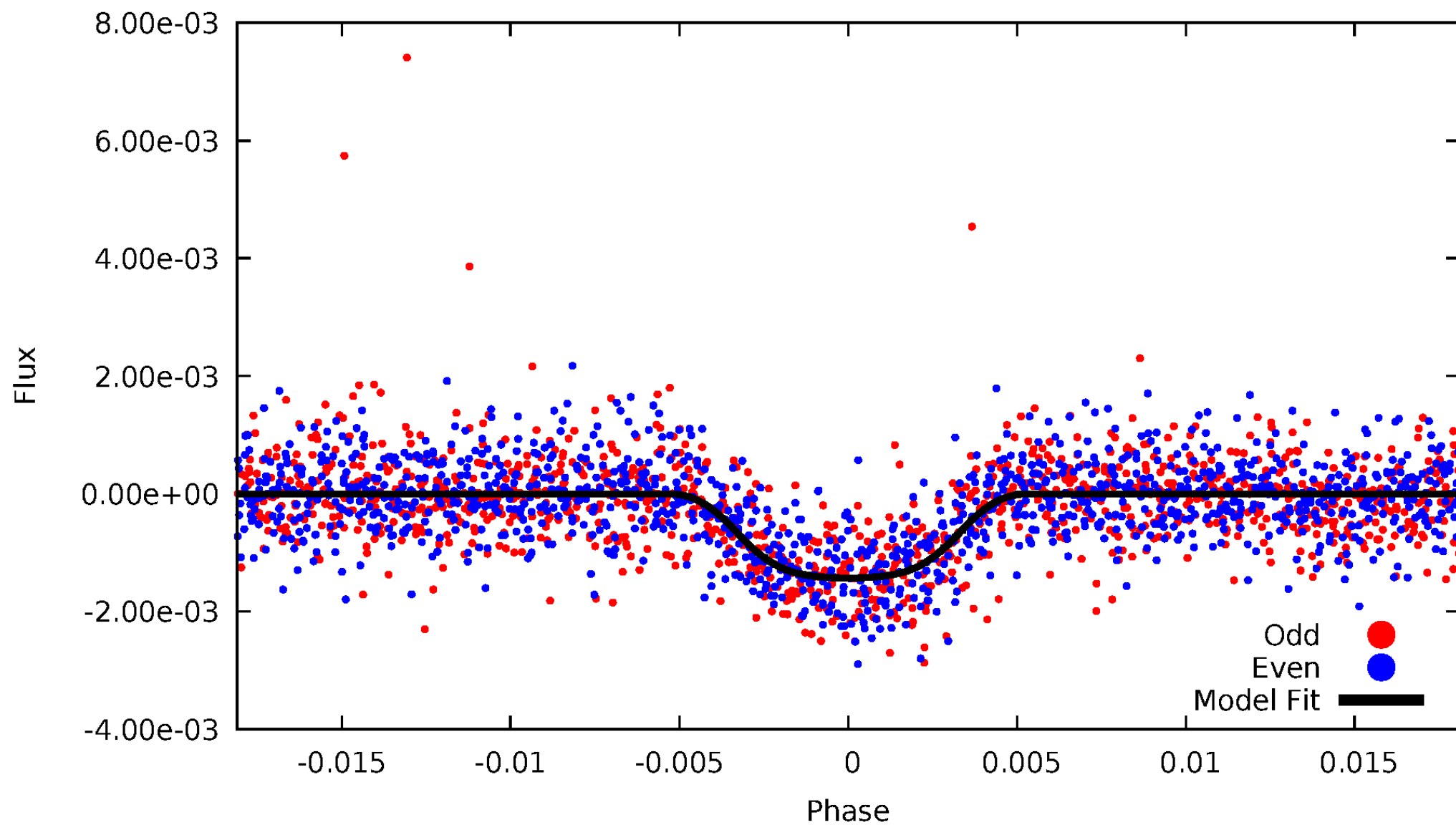


TCE 010604335-01



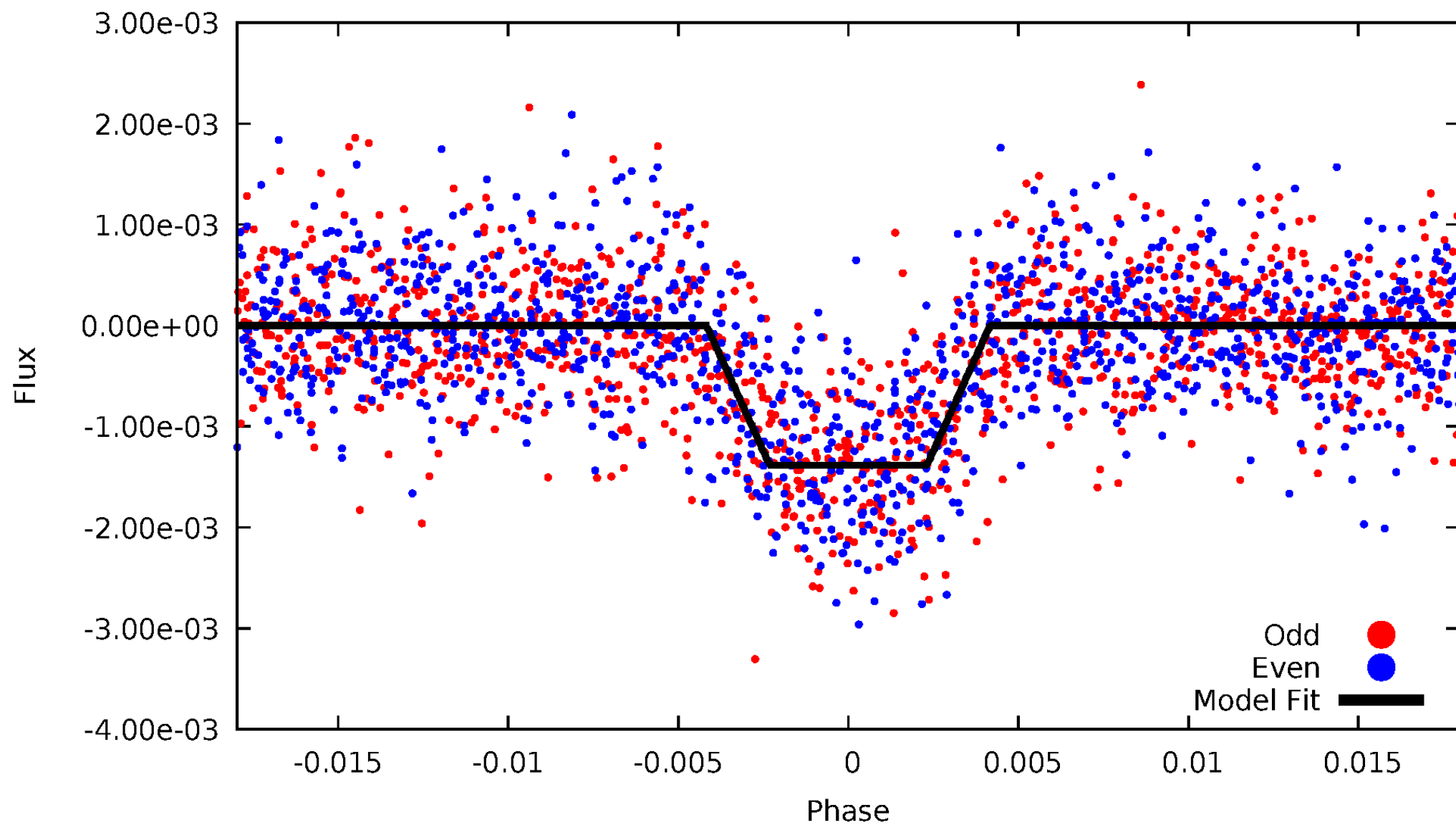
DV Odd/Even

TCE 010604335-01

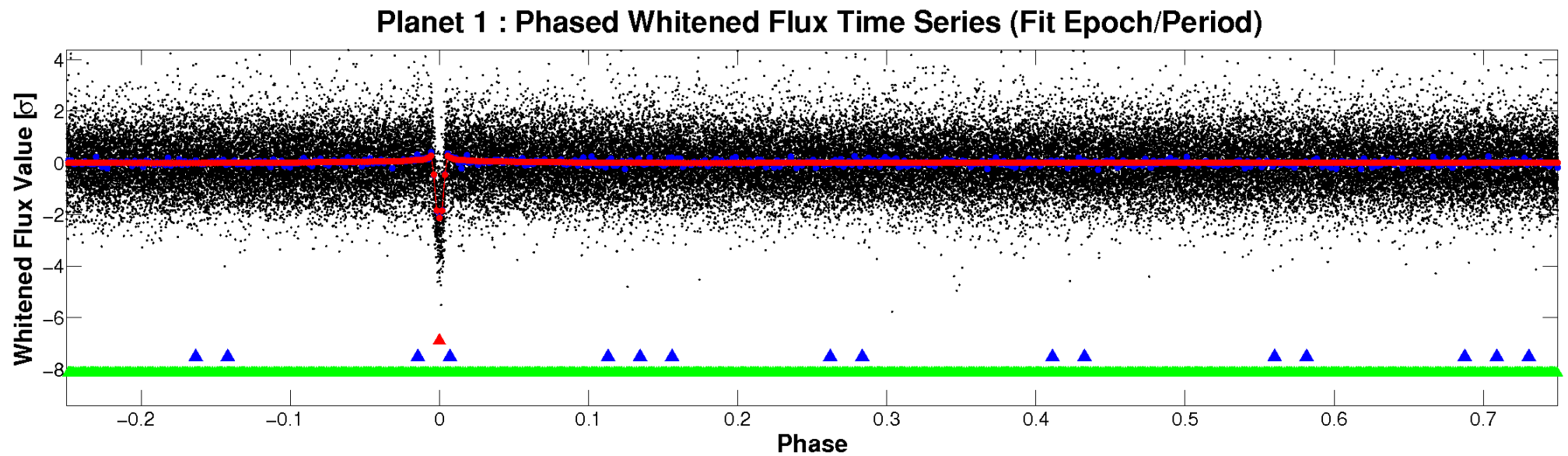
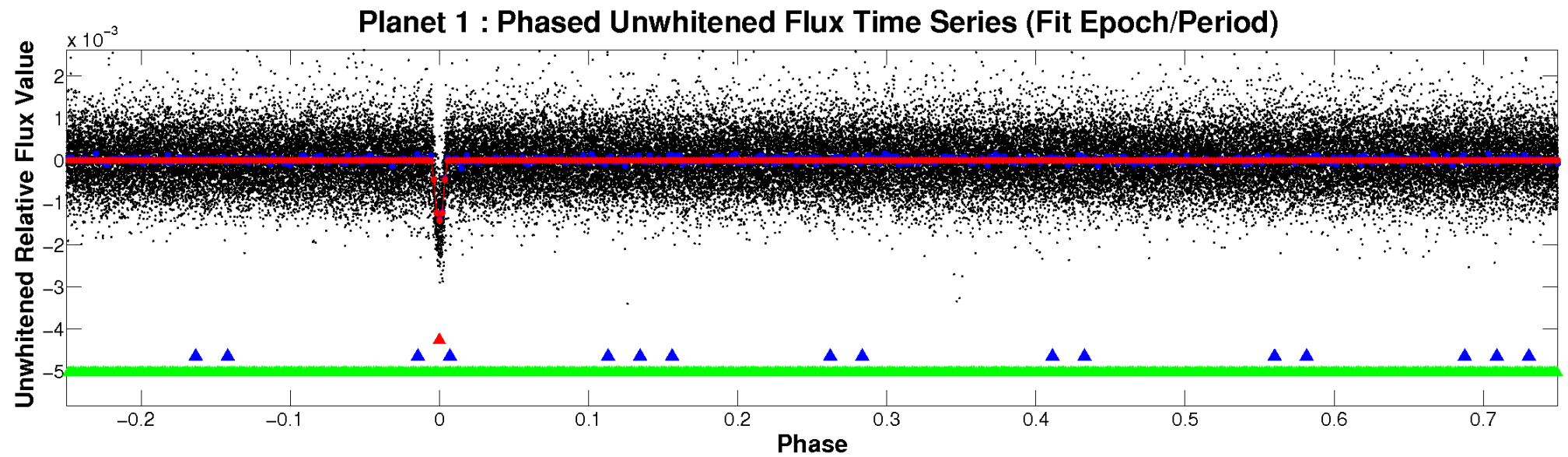


ALT Odd/Even

TCE 010604335-01

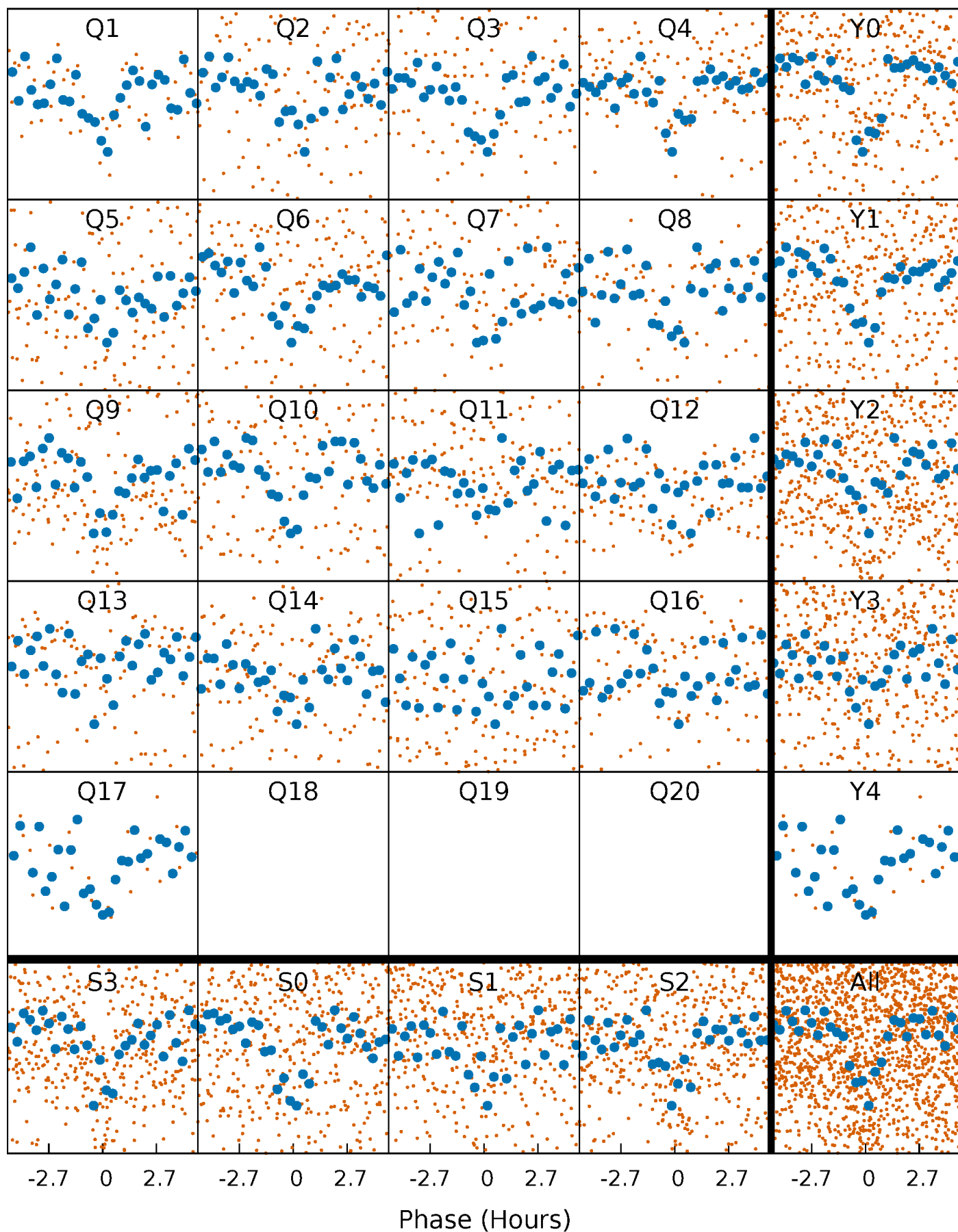


Non-Whitened Vs. Whitened Light Curve



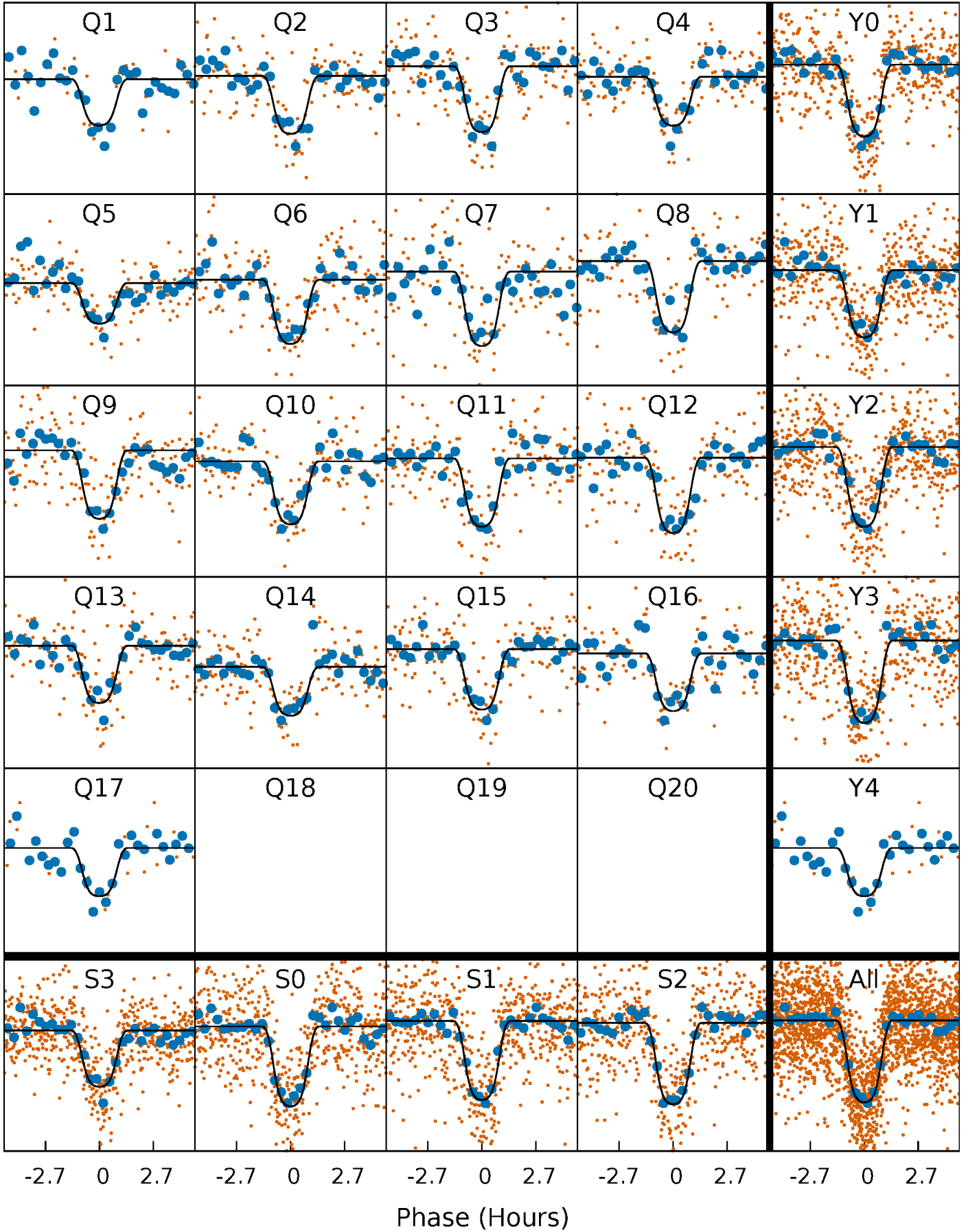
PDC Quarter-Phased Transit Curves

TCE 010604335-01 P= 11.008170 Days $T_0=132.218136$ (BKJD)



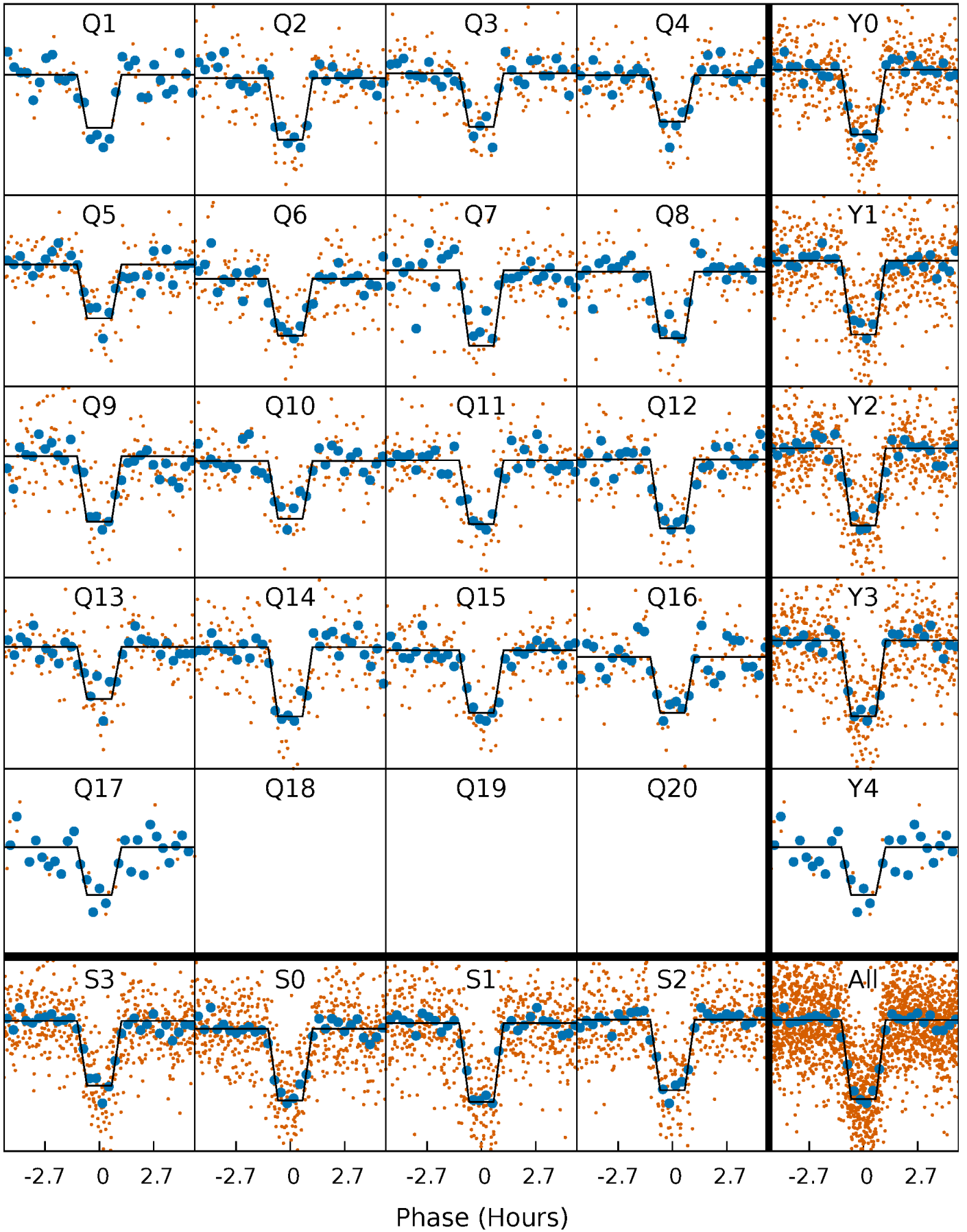
DV Quarter-Phased Transit Curves

TCE 010604335-01 P= 11.008170 Days $T_0=132.218136$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

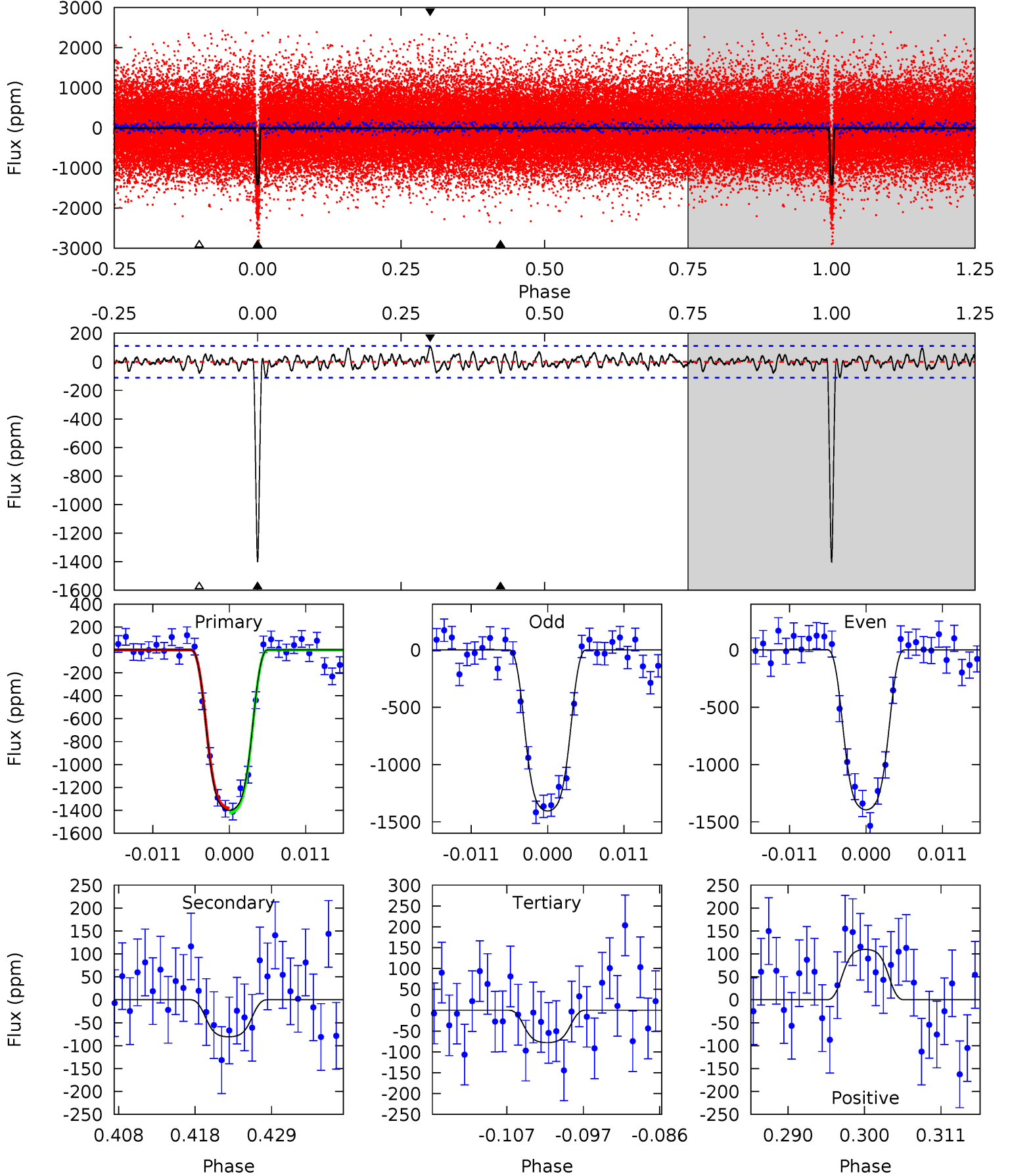
TCE 010604335-01 P= 11.008153 Days $T_0=132.218929$ (BKJD)



DV Model-Shift Uniqueness Test

010604335-01, $P = 11.008170$ Days, $E = 121.209966$ Days

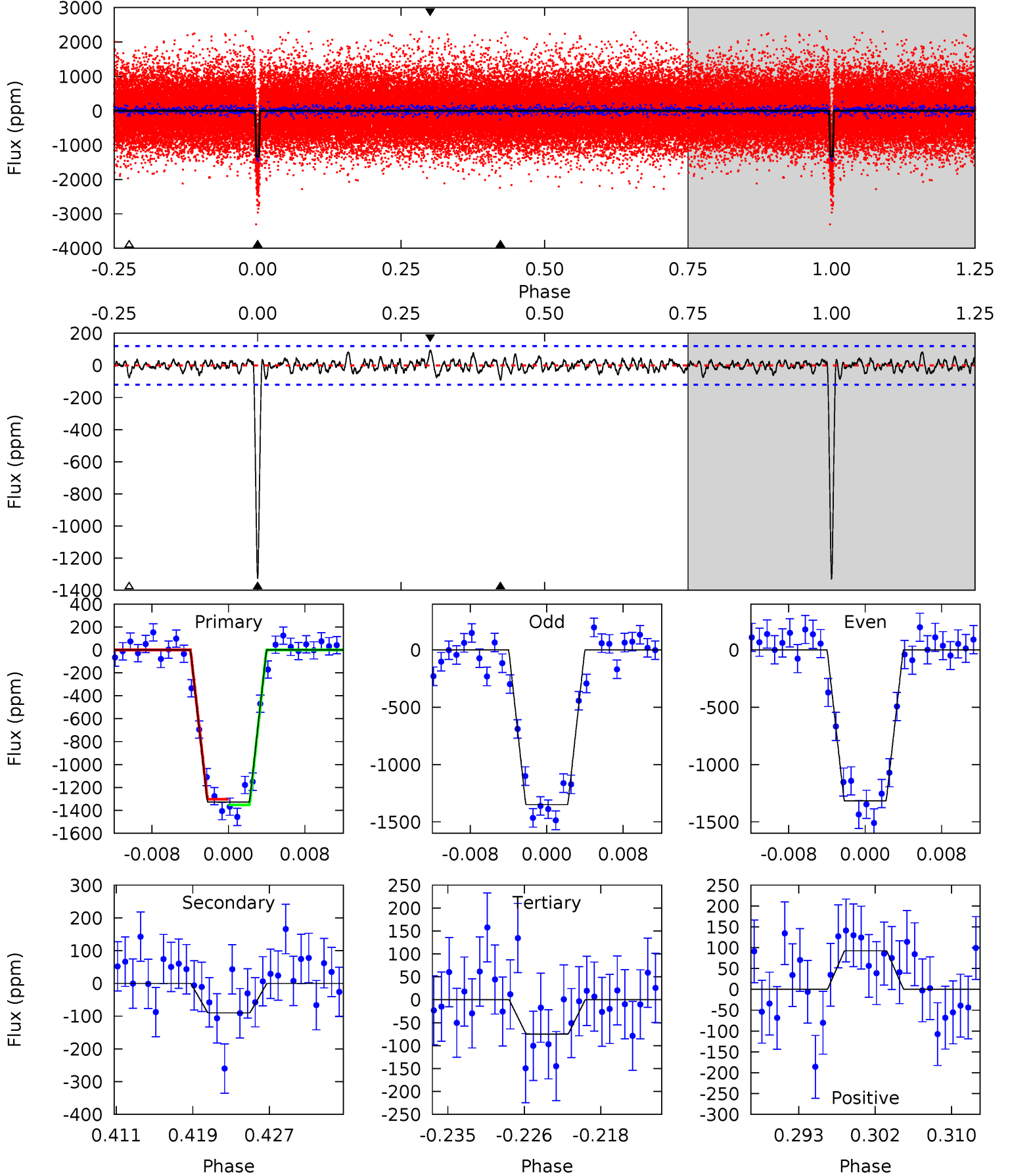
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
63.3	3.66	3.52	4.96	5.01	2.55	1.40	59.8	58.4	0.14	-1.31	0.24	0.97	0.07	0.93



Alt Model-Shift Uniqueness Test

010604335-01, $P = 11.008153$ Days, $E = 121.210776$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
55.8	3.79	3.14	3.89	5.06	2.64	1.11	52.6	51.9	0.64	-0.11	0.69	1.04	0.07	1.04



Stellar Parameters For KIC 010604335

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (g \cdot \text{cm}^{-3})$
	4141^{+83}_{-91}	$4.684^{+0.022}_{-0.025}$	$-0.200^{+0.150}_{-0.150}$	$0.582^{+0.027}_{-0.030}$	$0.596^{+0.028}_{-0.036}$	$4.267^{+0.466}_{-0.420}$
	+2%/-2%	+0%/-1%	+75%/-75%	+5%/-5%	+5%/-6%	+11%/-10%
Source	SPE60	SPE60	SPE60	DSEP		

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

Secondary Eclipse Parameters for KIC 010604335-01 / KOI 1298.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-81 ± 22	$2.79^{+0.13}_{-0.12}$	683^{+16}_{-17}	2574^{+94}_{-110}	38^{+10}_{-11}
Alt.	-90 ± 24	$2.36^{+0.12}_{-0.13}$	682^{+15}_{-16}	2718^{+104}_{-123}	59^{+16}_{-17}

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

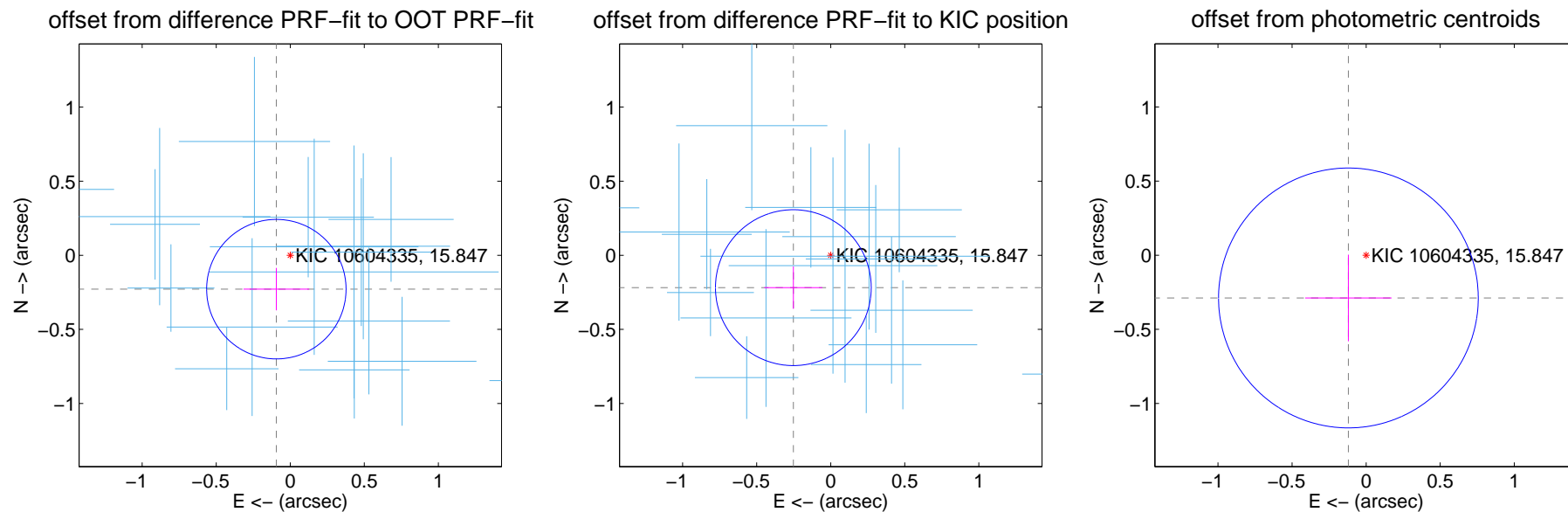
DV Centroid Data

Supplemental centroid analysis for 010604335-01. Kepler magnitude: 15.85. Transit SNR 38.46

There are 17 quarters with good PRF difference image offsets

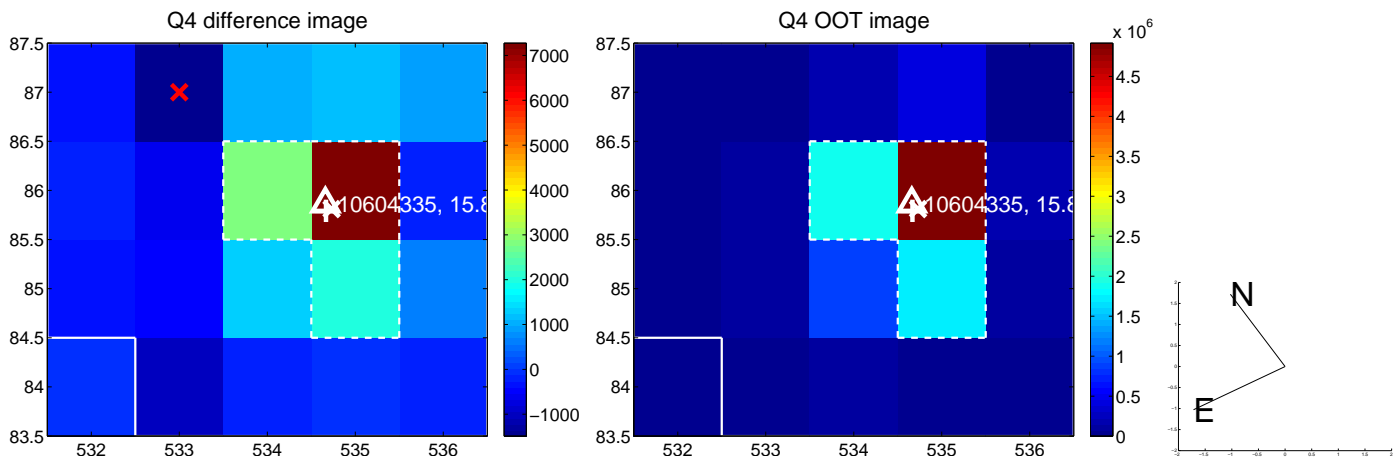
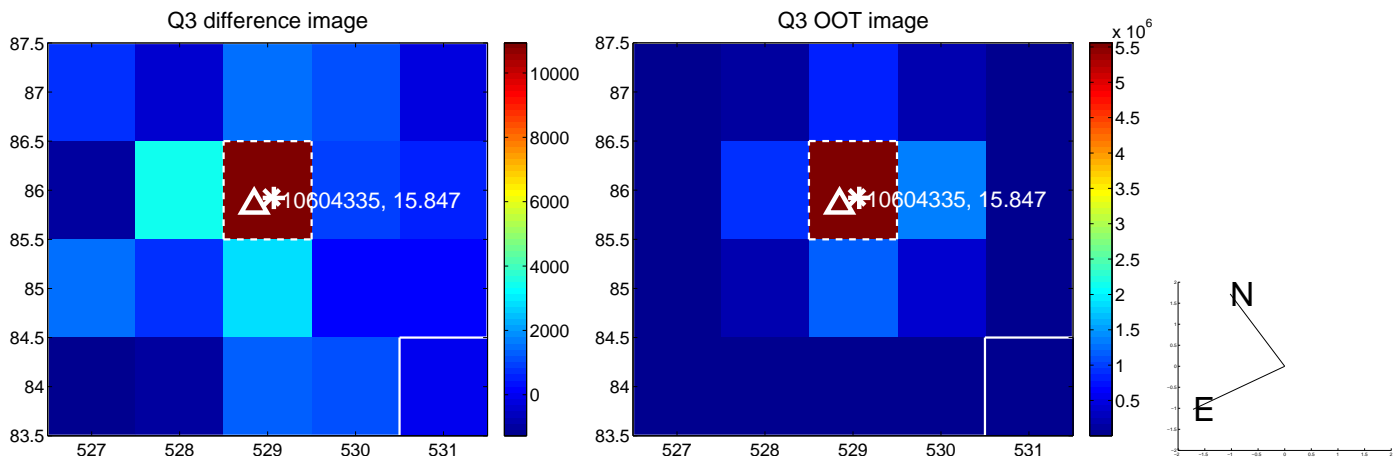
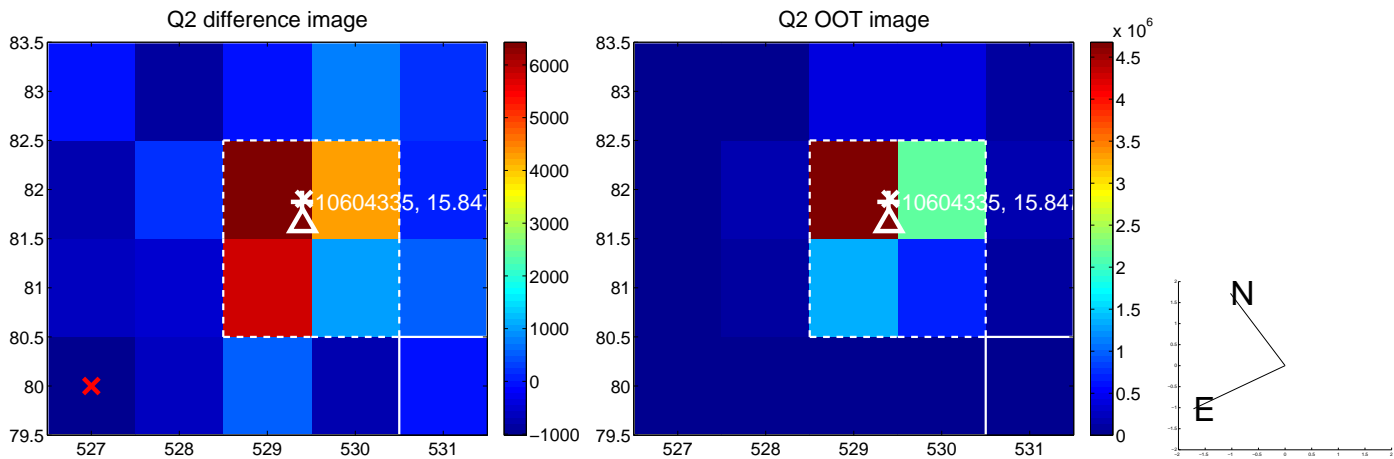
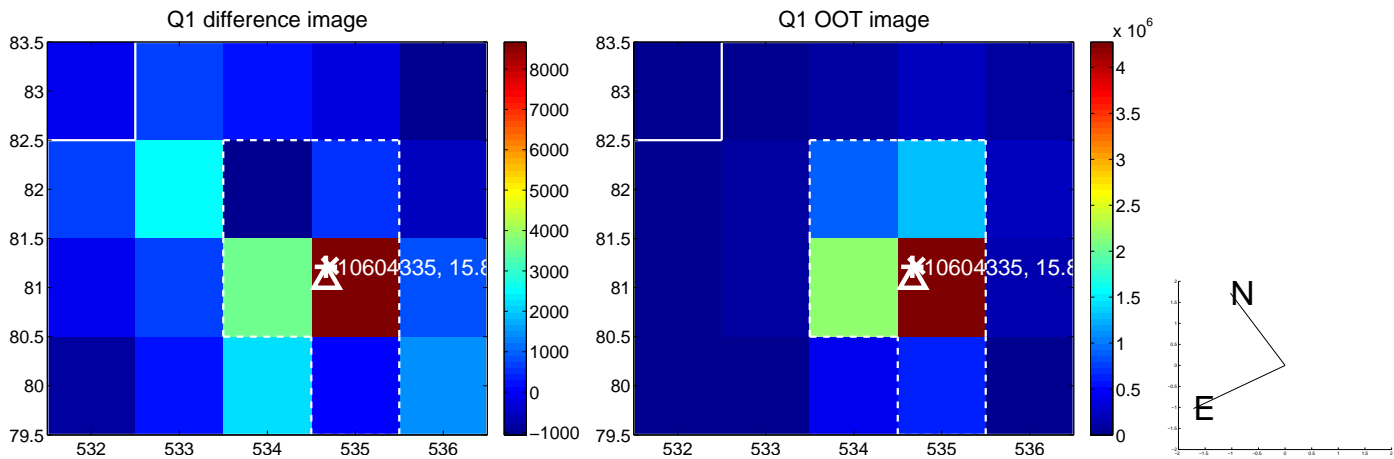
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.247 ± 0.157	1.58	0.094 ± 0.221	-0.229 ± 0.143
PRF-fit source offset from KIC position	0.334 ± 0.175	1.90	0.252 ± 0.196	-0.218 ± 0.143
photometric centroid source offset	0.31 ± 0.29	1.07	0.12 ± 0.29	-0.29 ± 0.29

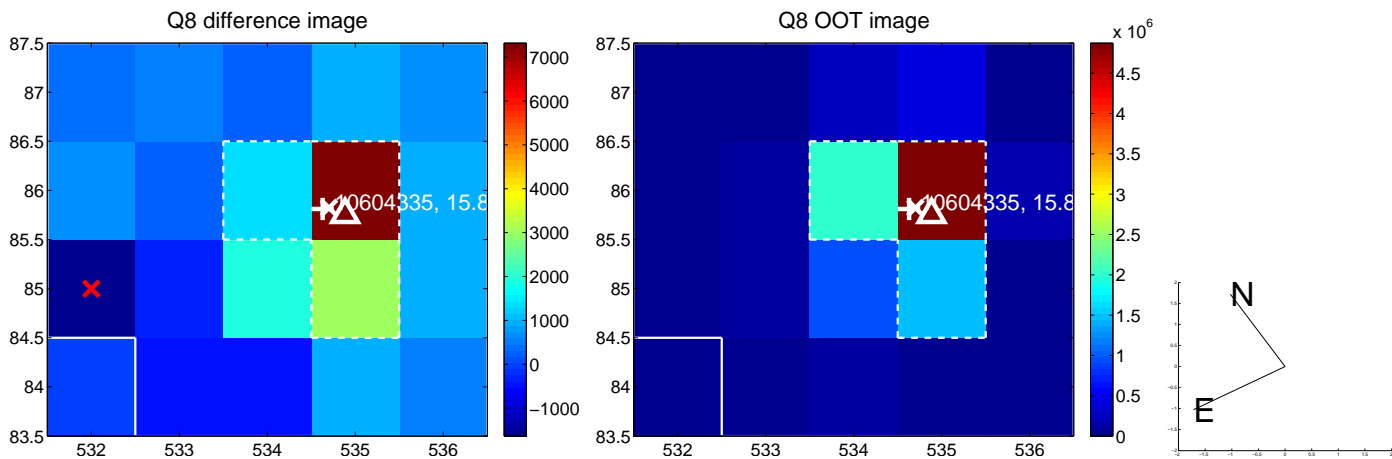
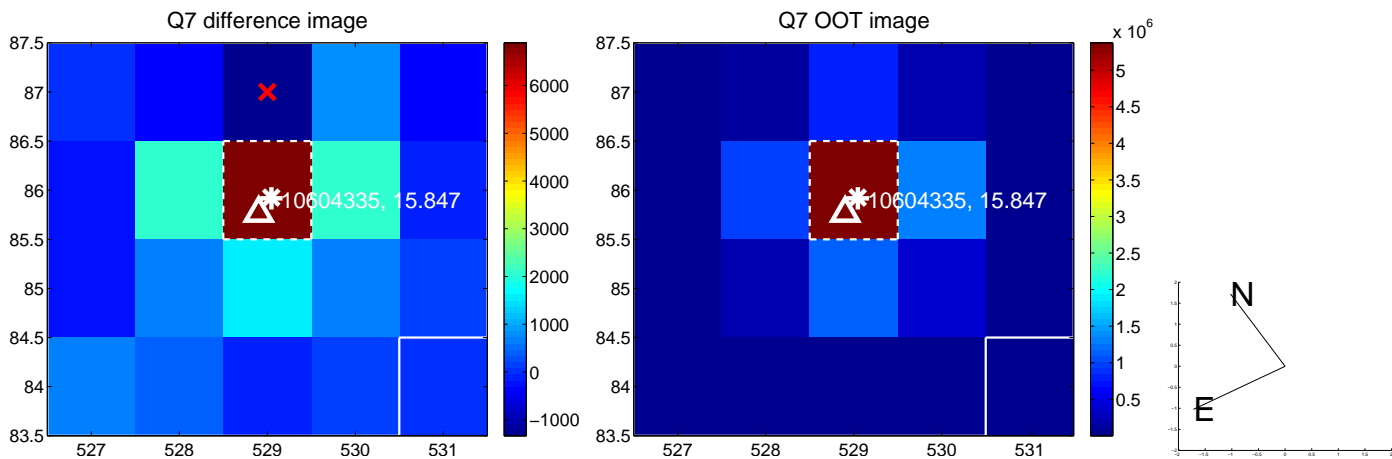
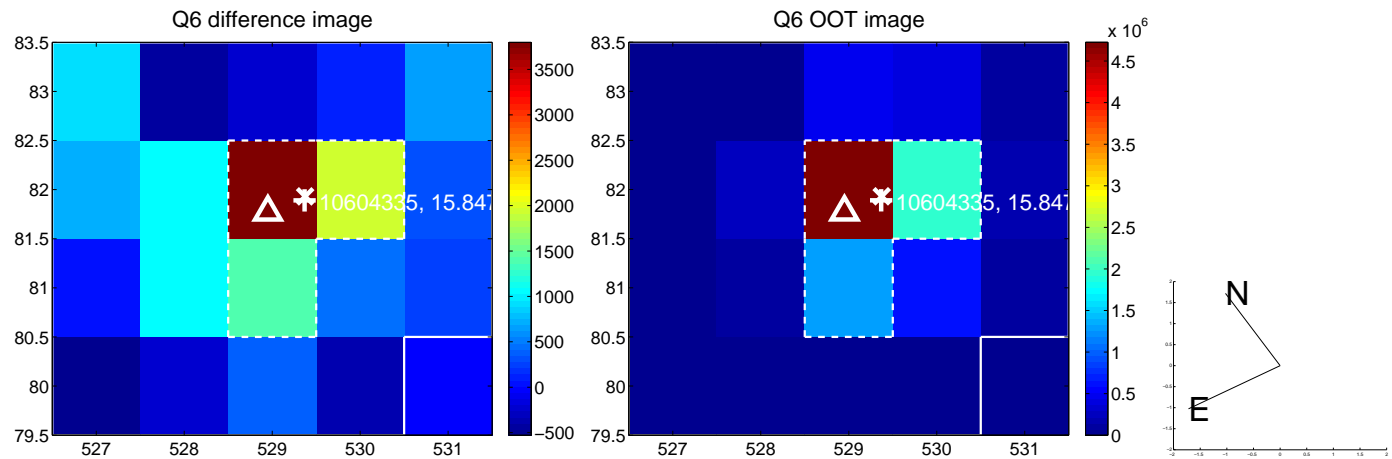
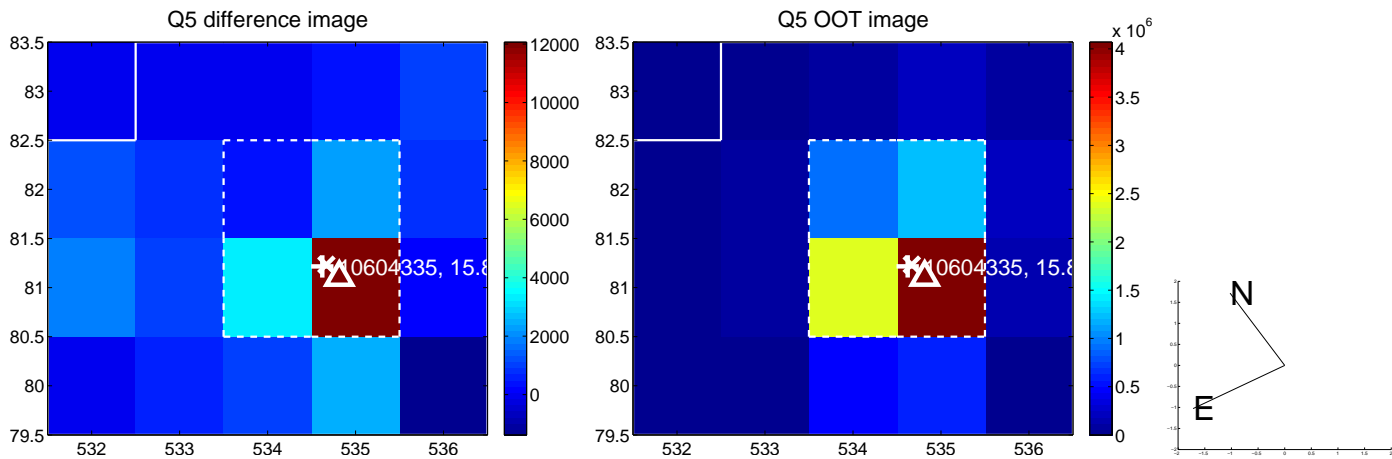


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

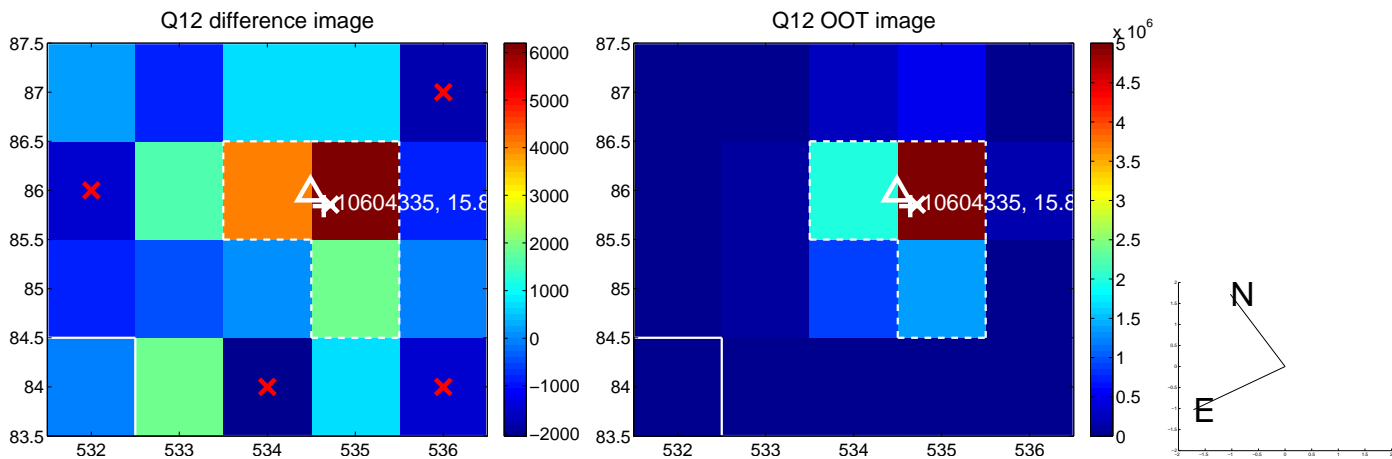
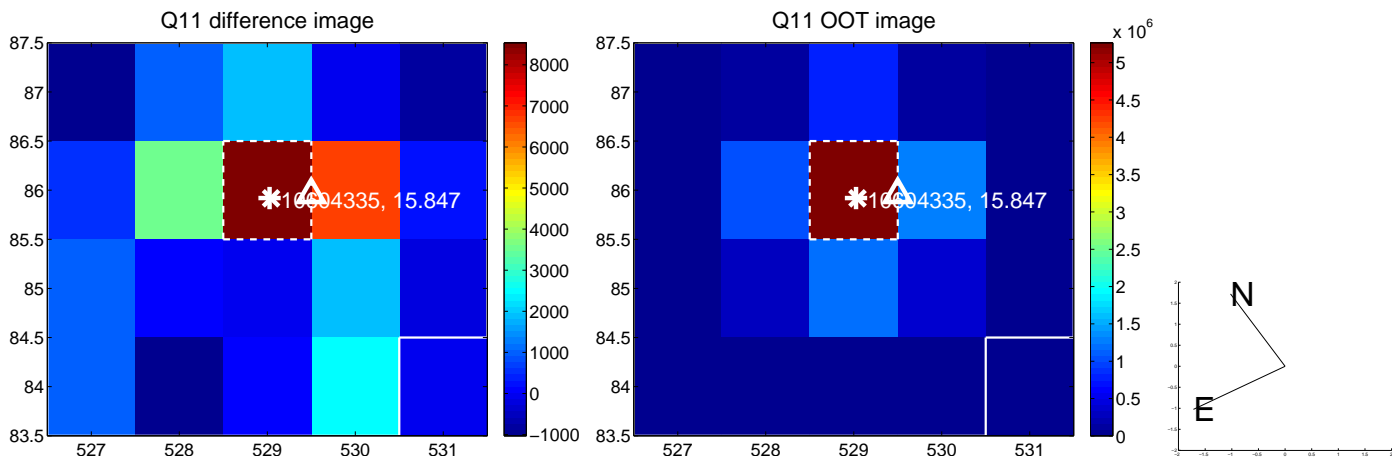
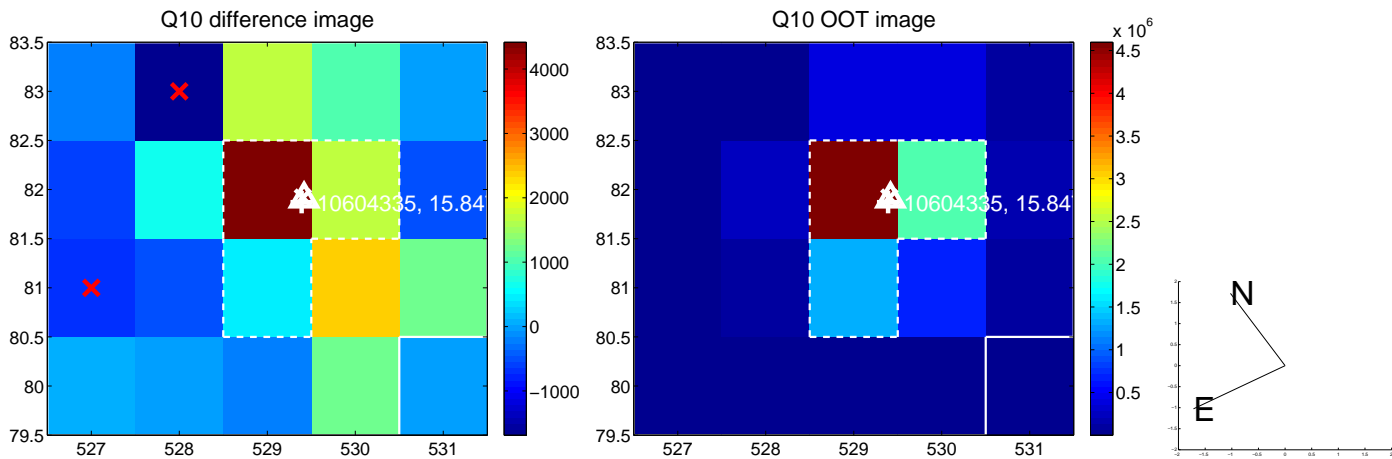
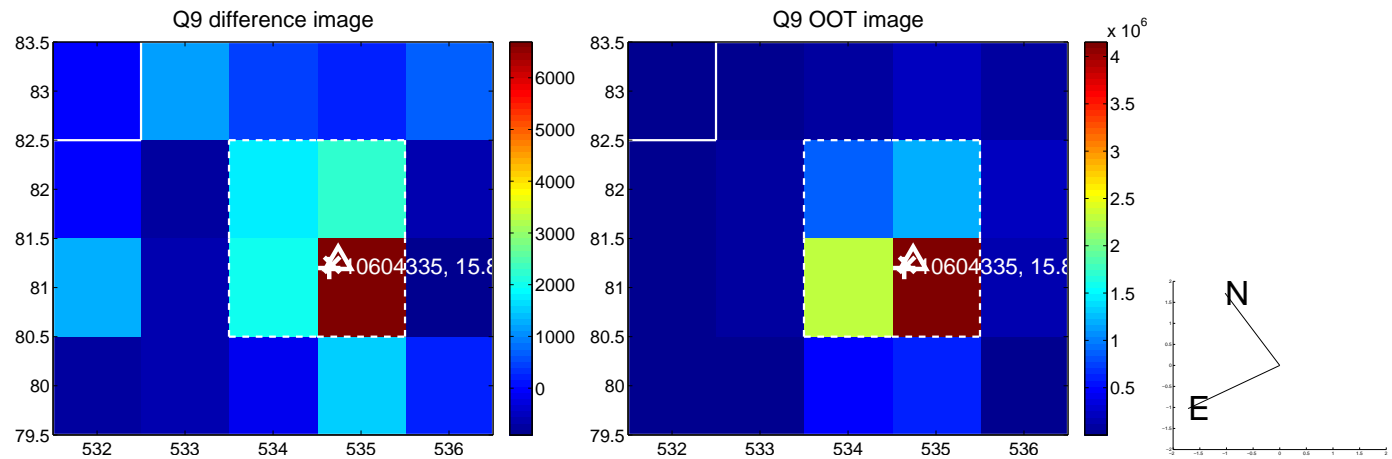
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



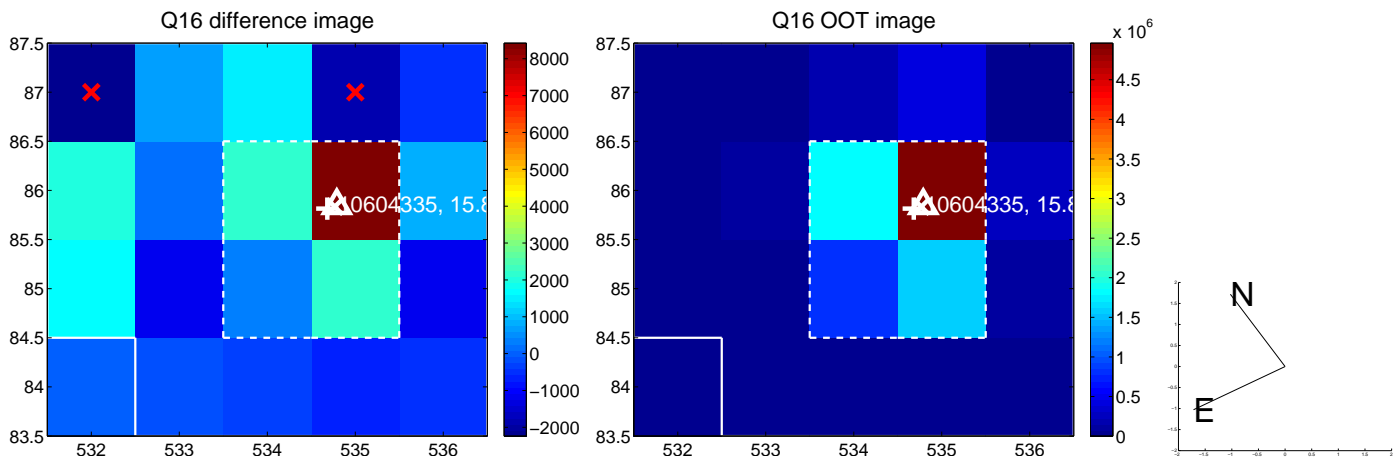
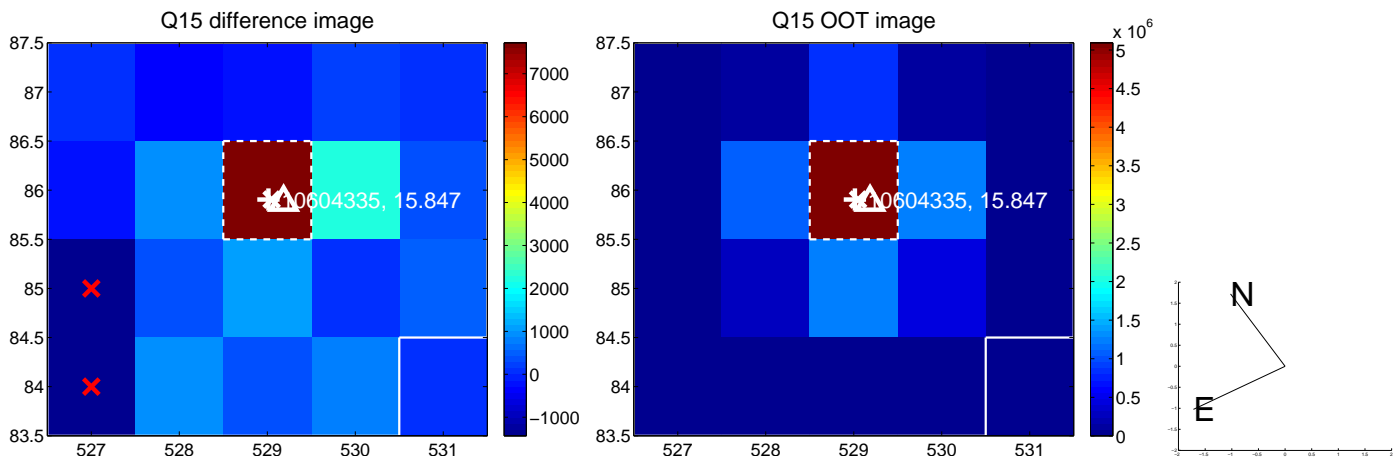
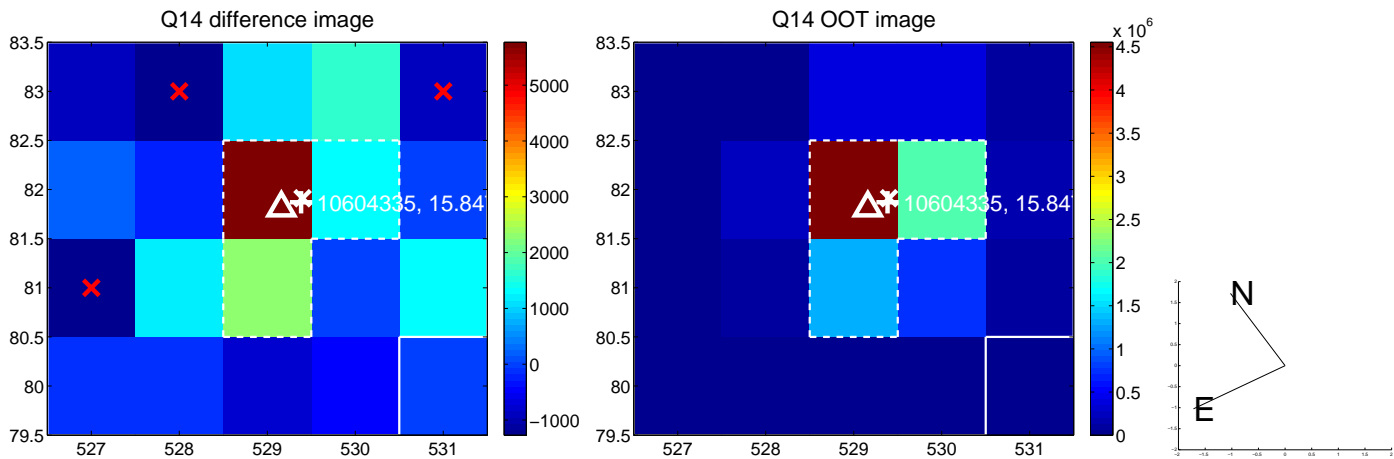
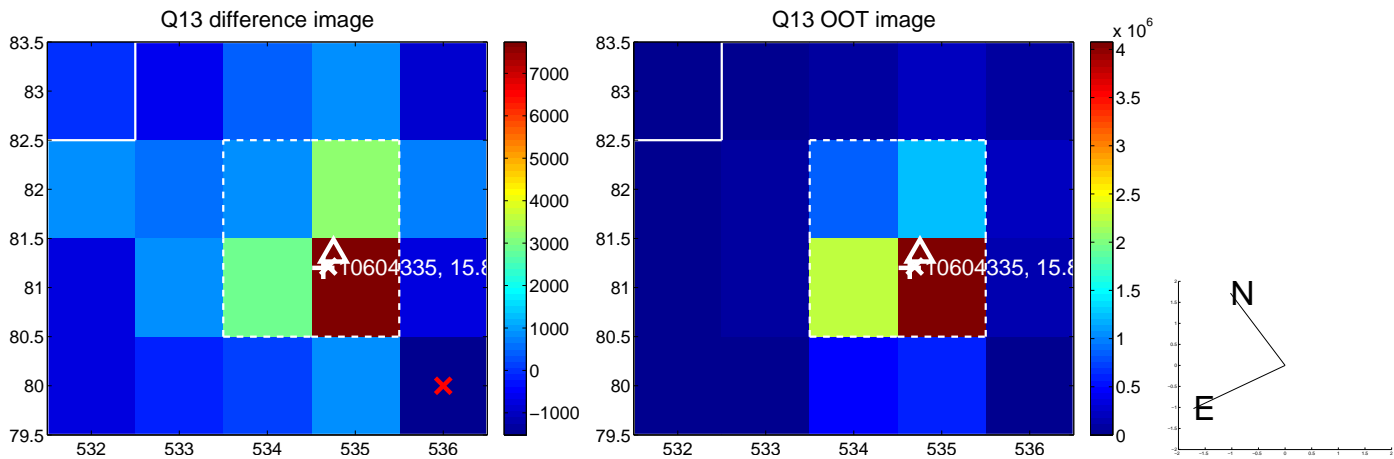
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



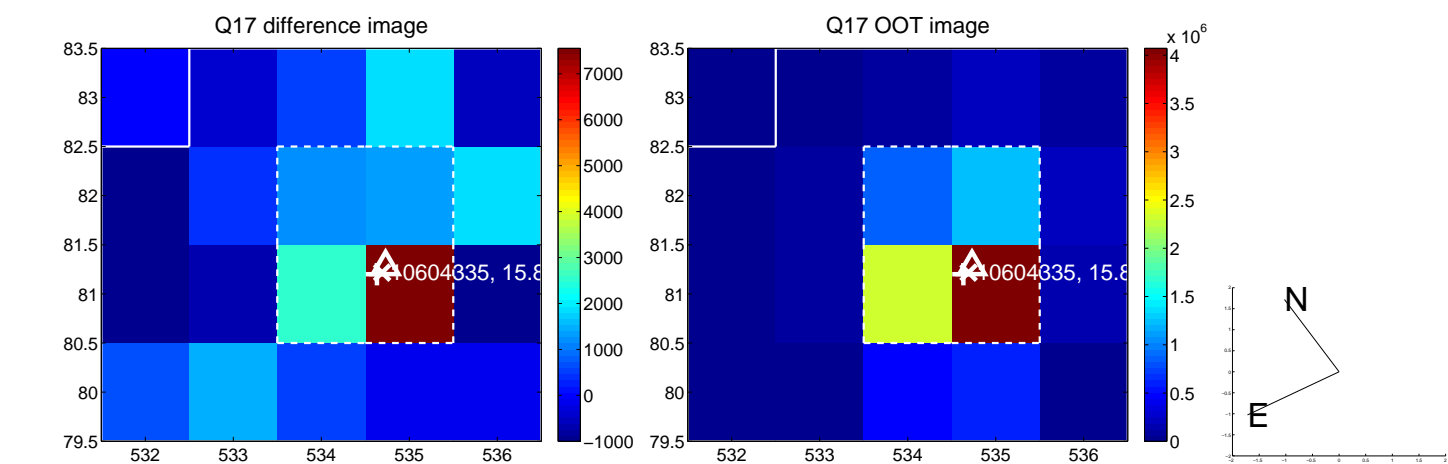
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



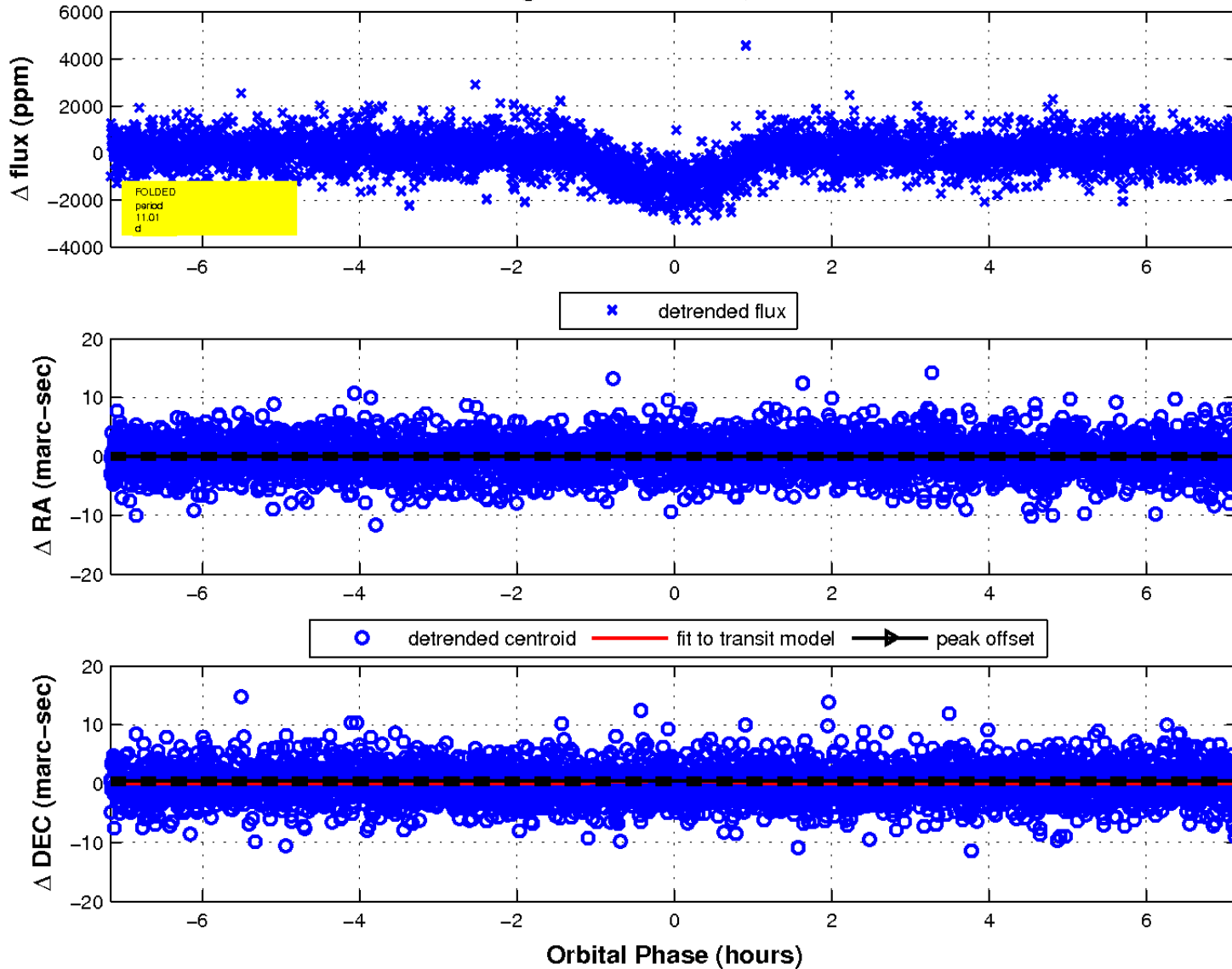
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



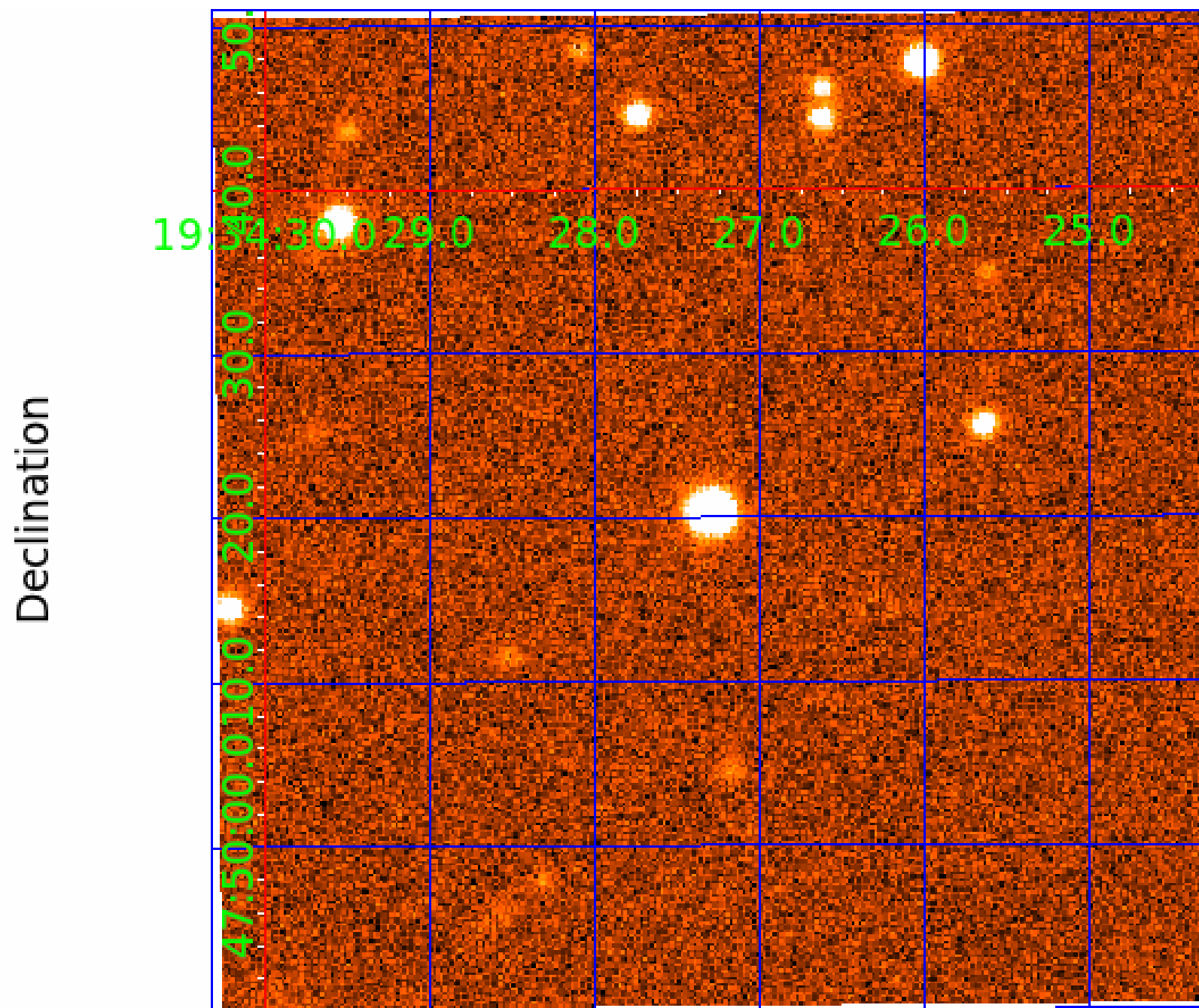
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 1 of 3



UKIRT Image



KIC 010604335

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})
010604335-01	OBS	1298.01	11.008170	132.218136	1431.6	2.391	35.2	38.5	0.58	4141	2.78	13.42
010604335-02	OBS	1298.02	92.749377	173.284991	1077.3	7.745	10.7	11.3	0.58	4141	3.79	0.78
010604335-03	OBS	No	1.428671	132.671710	79.1	11.141	9.3	10.2	0.58	4141	0.50	204.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010604335-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010604335-02	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED
010604335-03	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

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

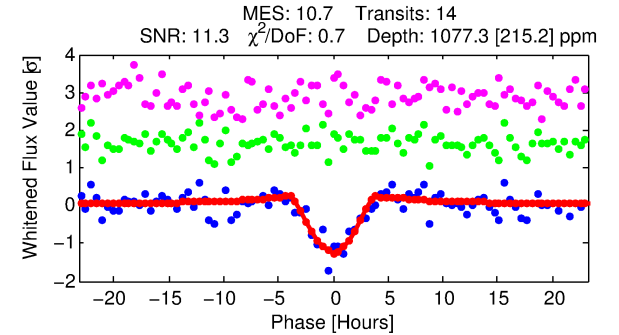
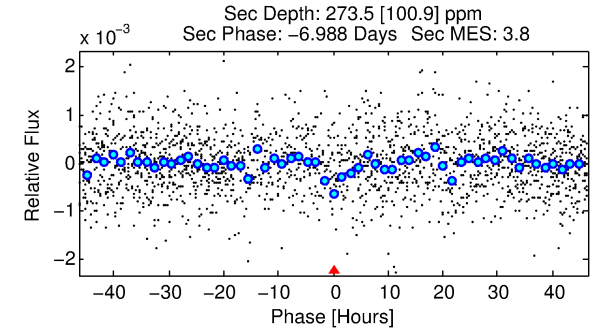
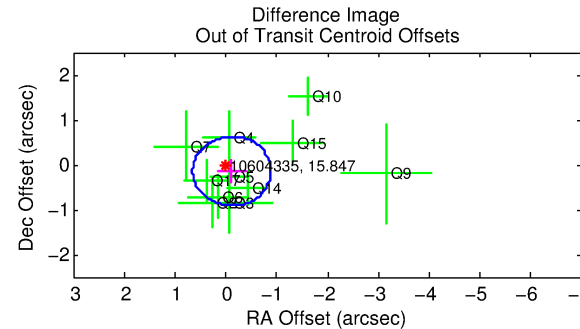
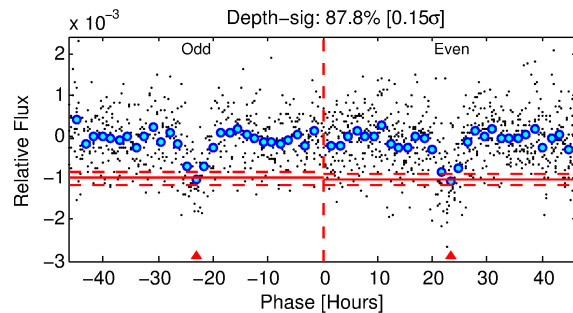
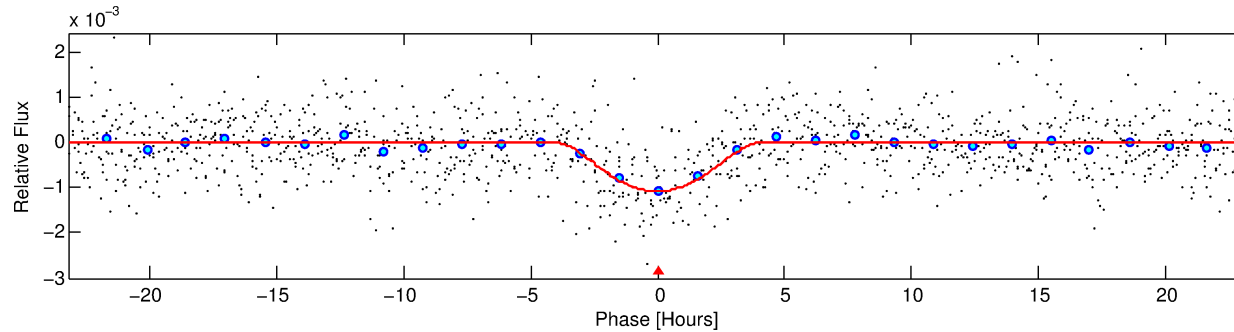
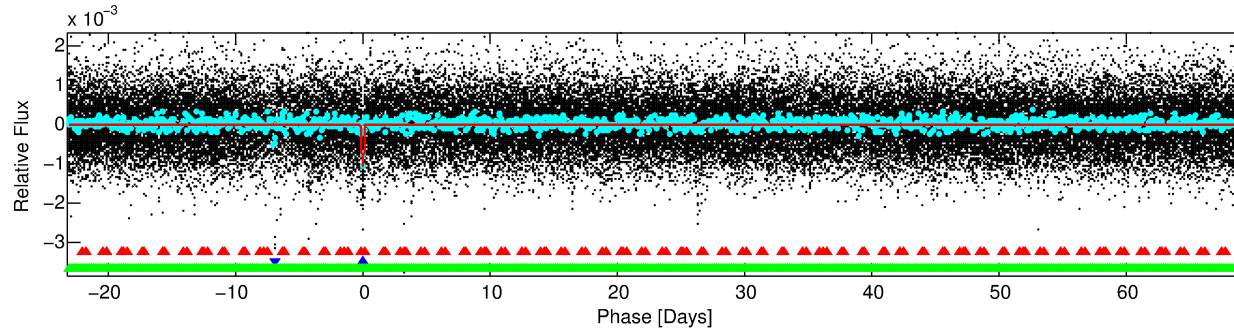
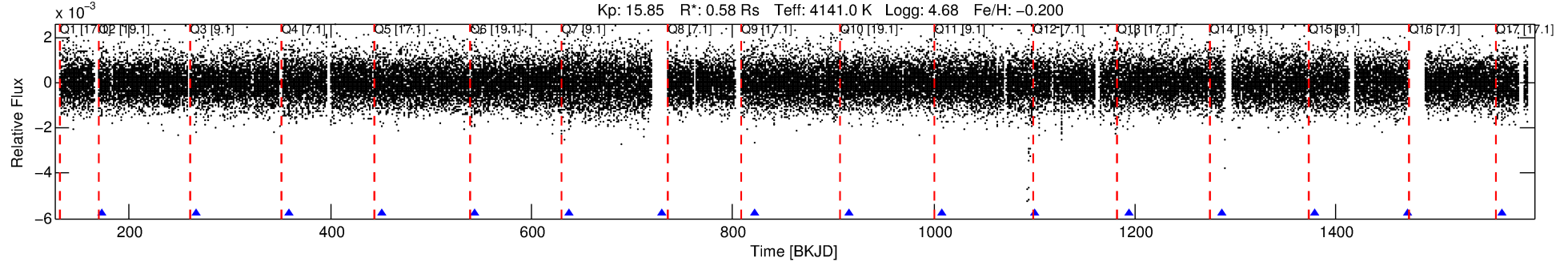
Ephemeris Match Information For 010604335-02

No Significant Match Found

DV One-Page Summary

KIC: 10604335 Candidate: 2 of 3 Period: 92.749 d
KOI: K01298.02 Name: Kepler-283c Corr: 0.994

Kp: 15.85 R*: 0.58 Rs Teff: 4141.0 K Logg: 4.68 Fe/H: -0.200



DV Fit Results:

Period = 92.74938 [0.00140] d
Epoch = 173.2850 [0.0124] BKJD
Rp/R* = 0.0597 [0.1559]
a/R* = 32.39 [19.32]
b = 1.00 [0.23]
Seff = 0.78 [0.08]
Teq = 240 [6] K
Rp = 3.79 [9.90] Re
a = 0.3377 [0.0133] AU
Ag = 1193.54 [6247.24] [0.19σ]
Teffp = 2179 [2852] K [0.68σ]

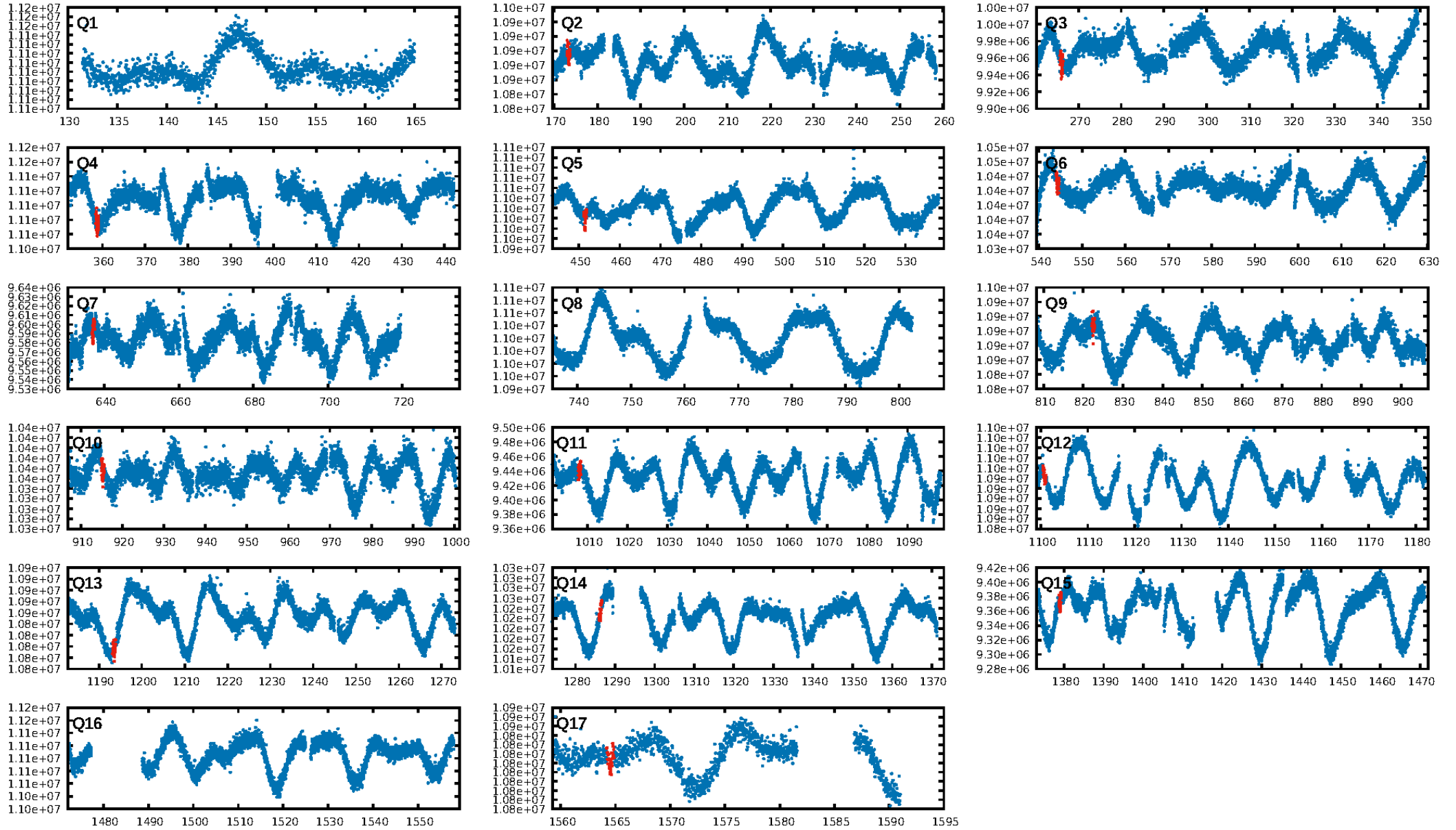
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [242.02σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 91.8%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 3.46e-18
RollingBand-fgt: 1.00 [13/13]
GhostDiagnostic-chr: 1.979
Centroid-sig: 15.4%
Centroid-so: 0.761 arcsec [1.07σ]
OotOffset-rm: 0.188 arcsec [0.73σ]
KicOffset-rm: 0.116 arcsec [0.44σ]
OotOffset-st: 4/3/1/3 [11]
KicOffset-st: 4/3/1/3 [11]
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DiffImageOverlap-fno: 0.00 [0/11]

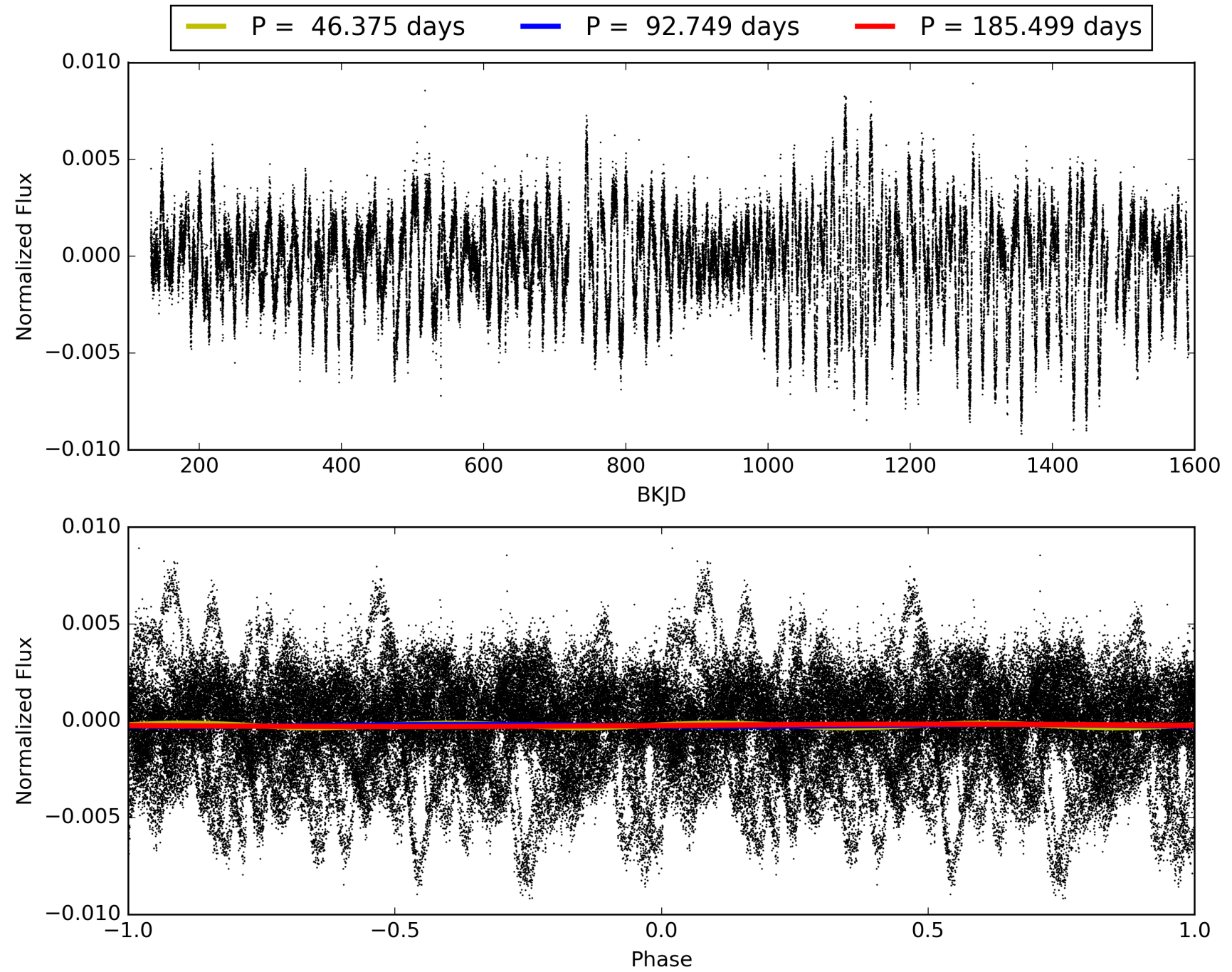
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:15:58 Z

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

TCE 010604335-02, PDC Light Curves

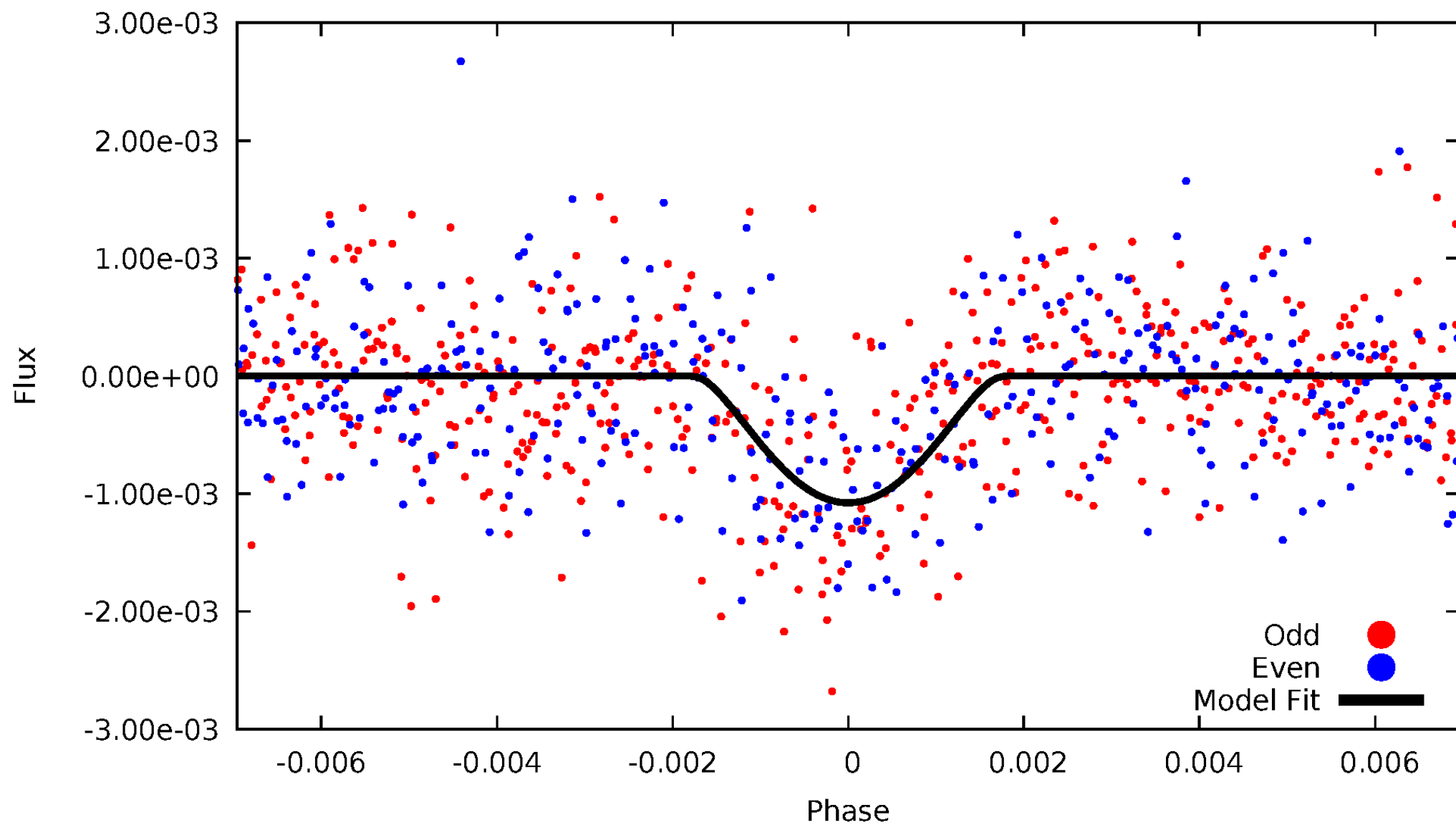


TCE 010604335-02



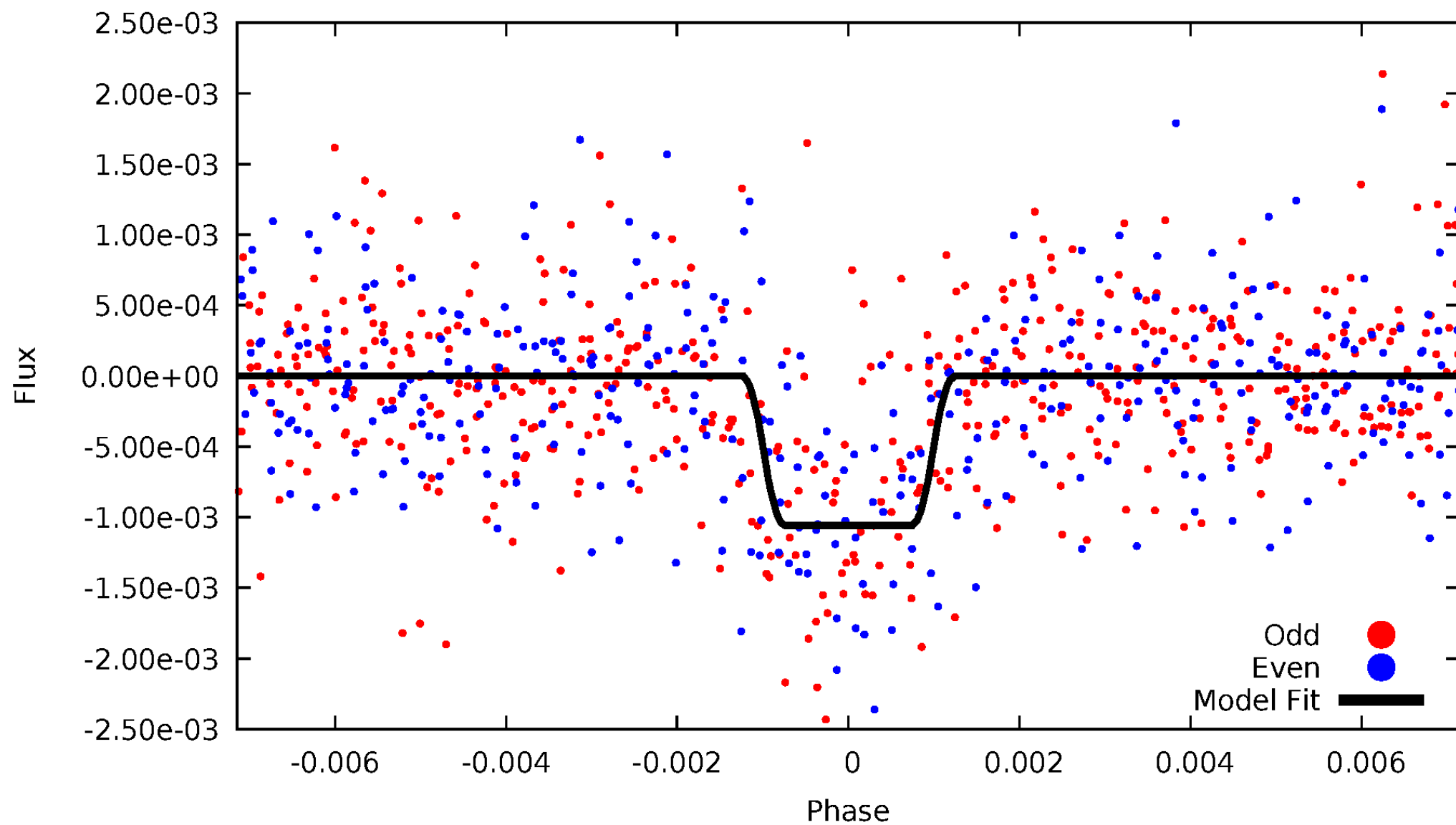
DV Odd/Even

TCE 010604335-02



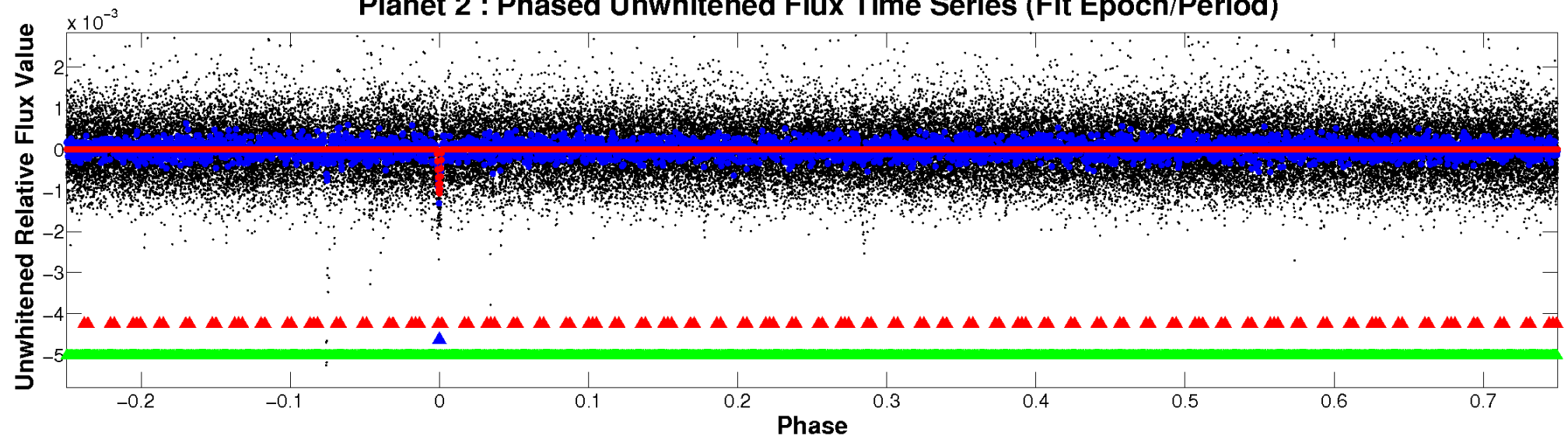
ALT Odd/Even

TCE 010604335-02

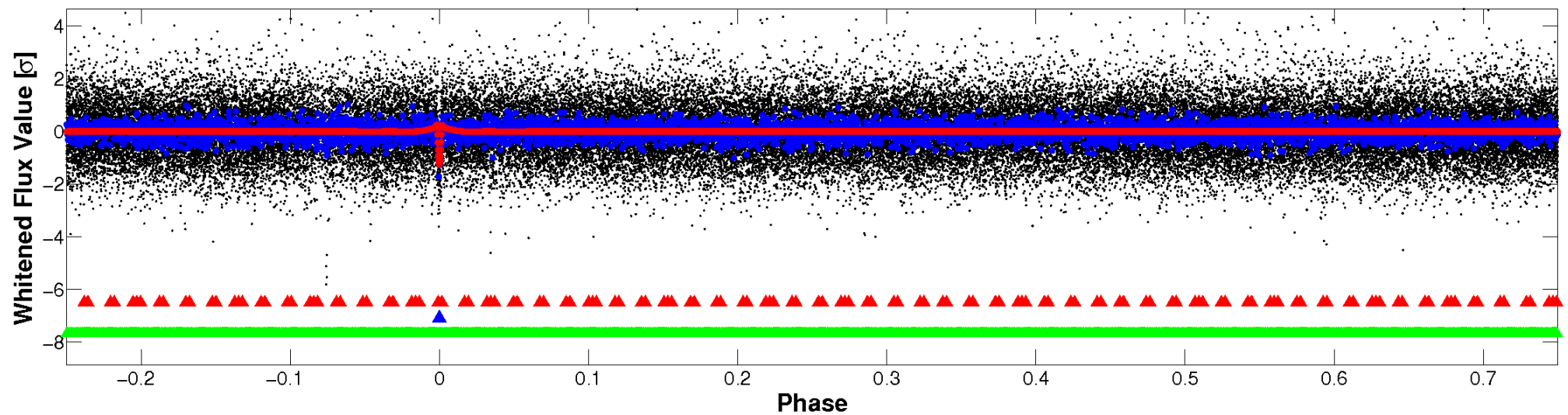


Non-Whitened Vs. Whitened Light Curve

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

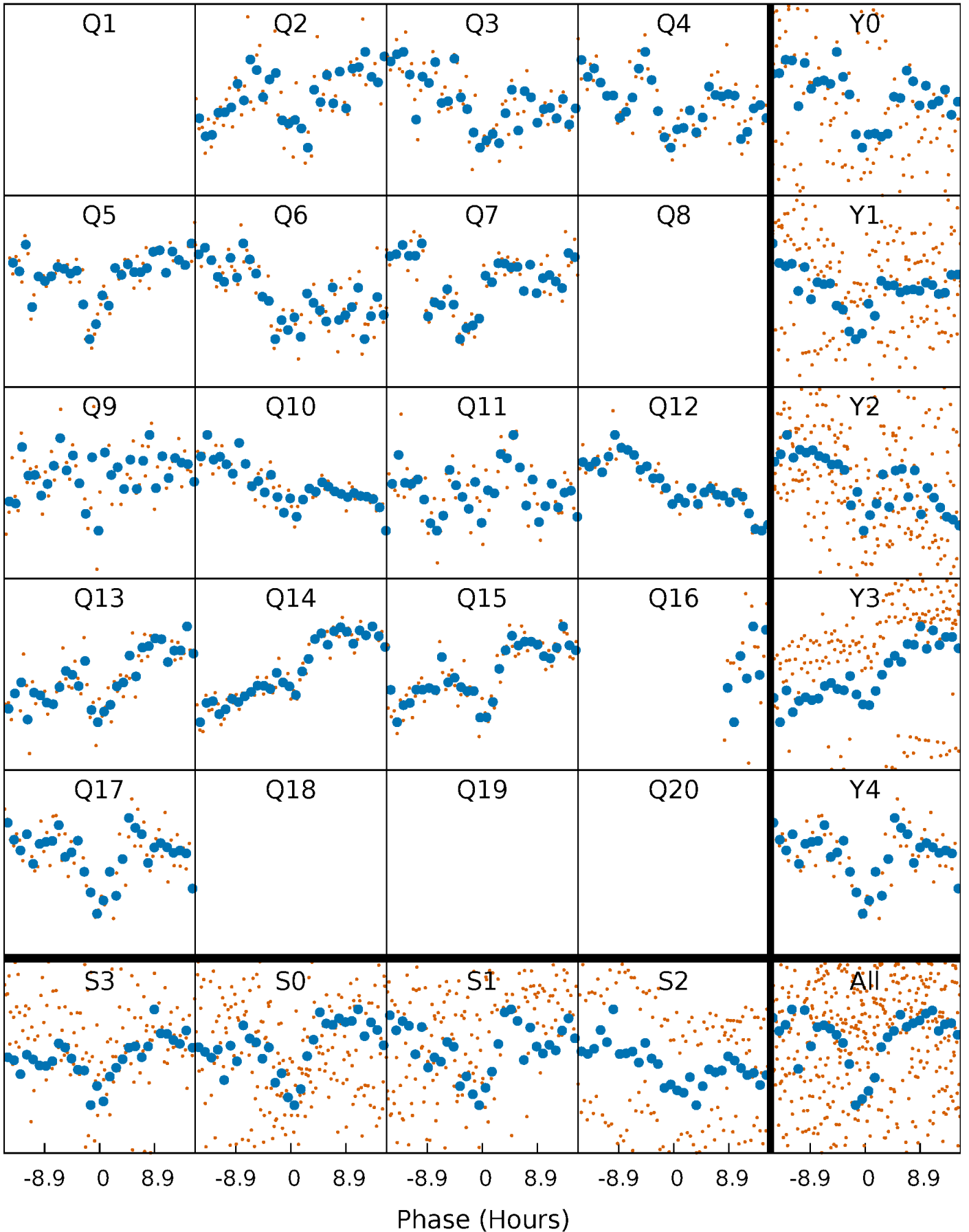


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



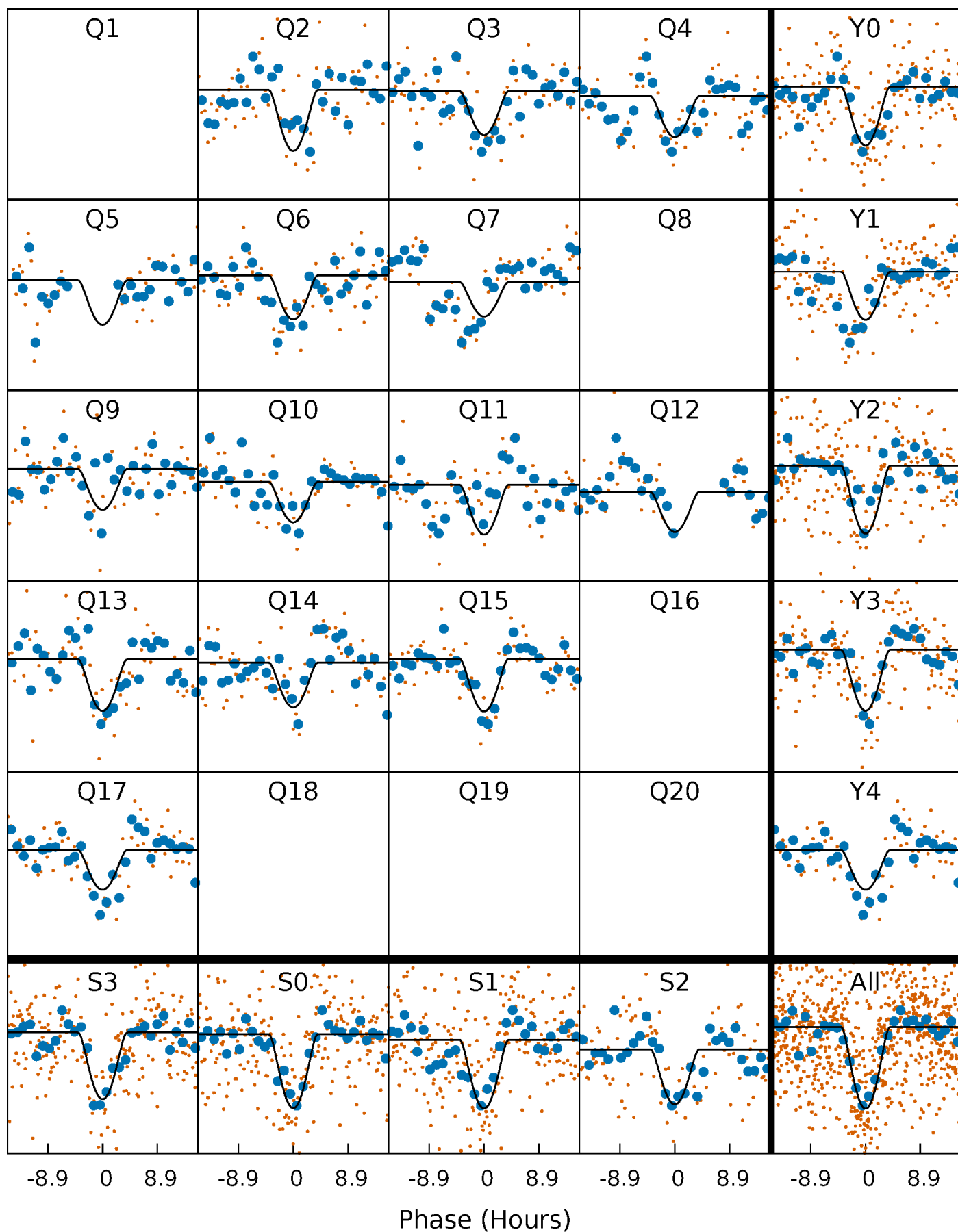
PDC Quarter-Phased Transit Curves

TCE 010604335-02 P= 92.749377 Days $T_0=173.284991$ (BKJD)



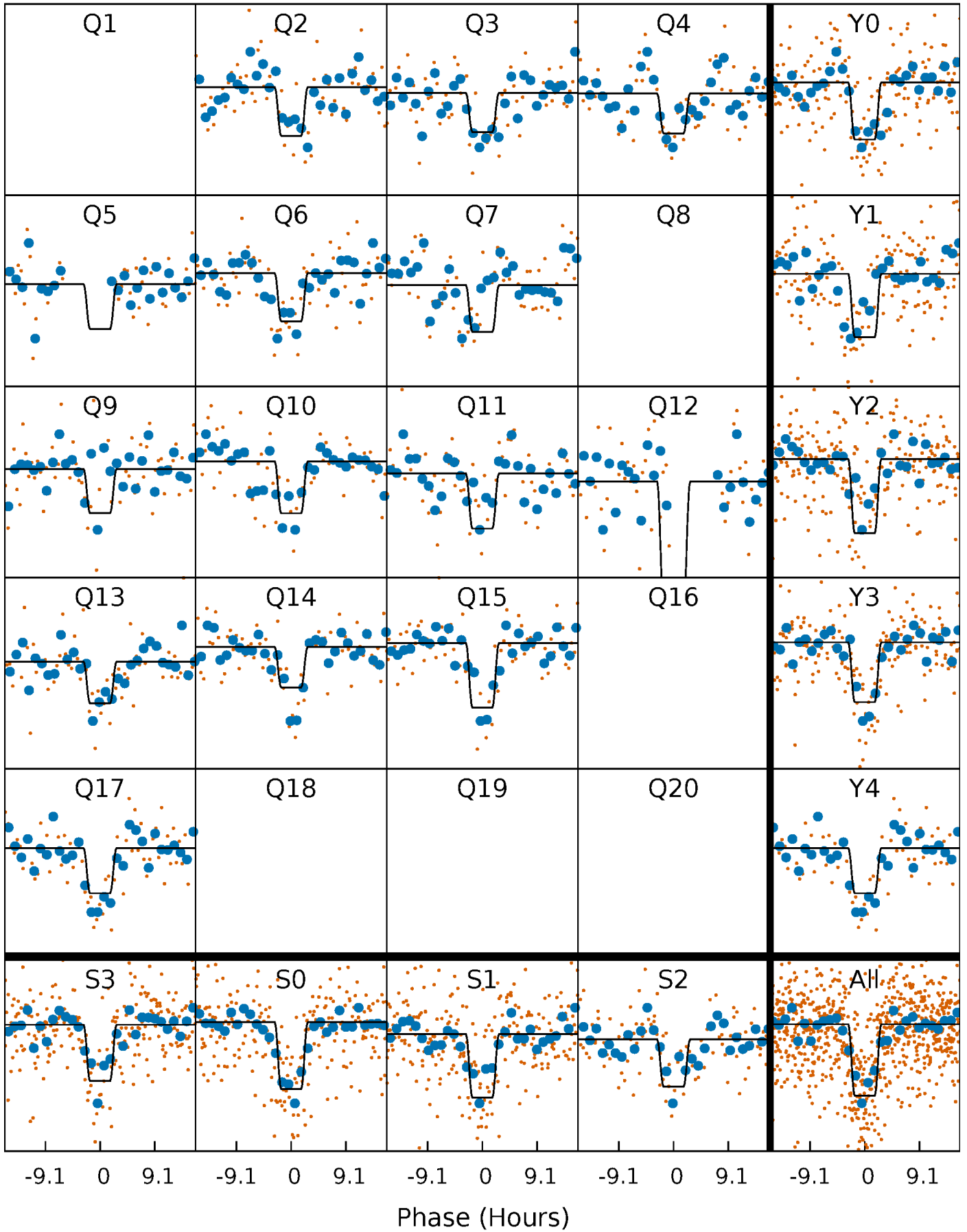
DV Quarter-Phased Transit Curves

TCE 010604335-02 P= 92.749377 Days $T_0=173.284991$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

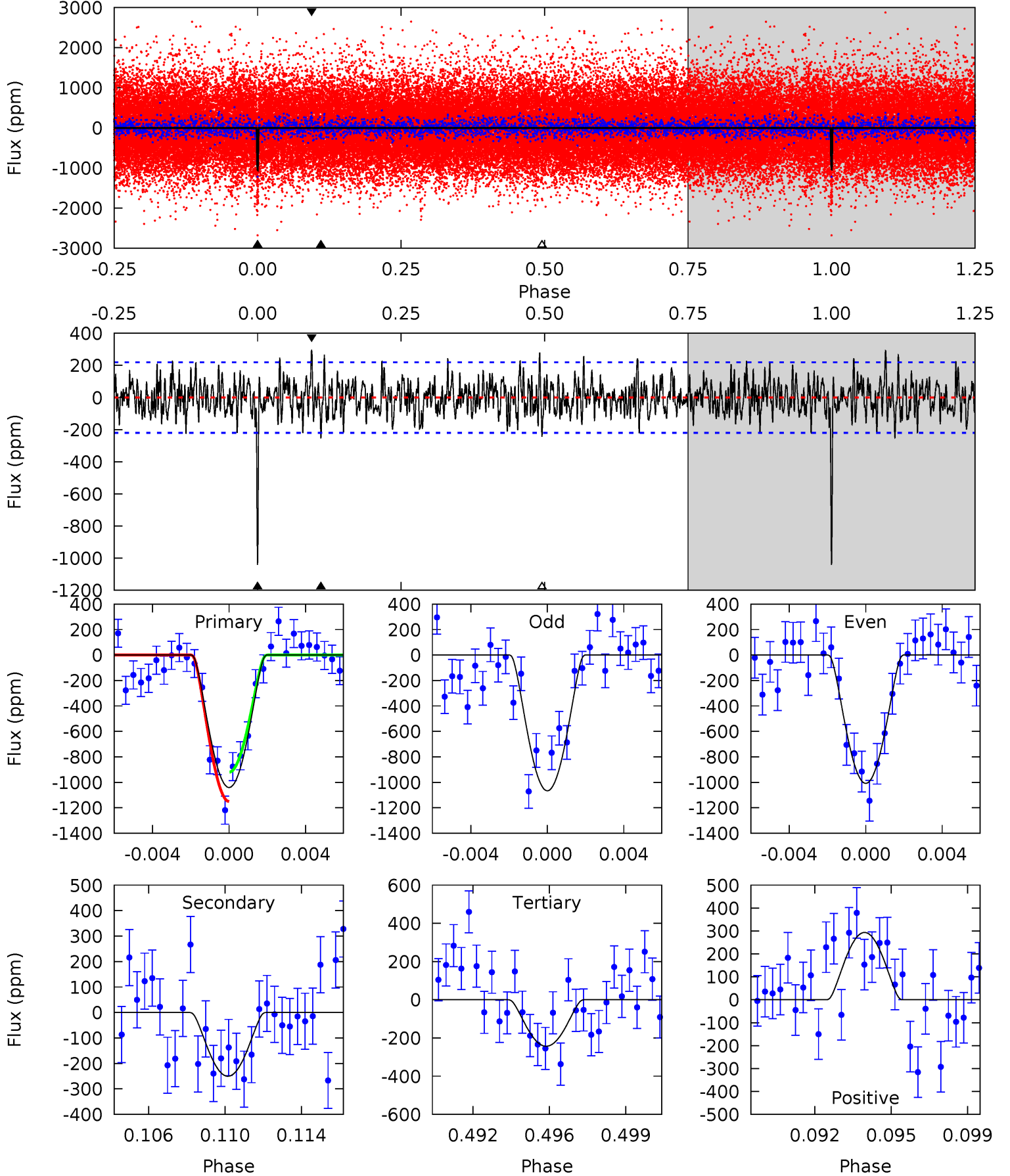
TCE 010604335-02 $P = 92.750444$ Days $T_0 = 173.284401$ (BKJD)



DV Model-Shift Uniqueness Test

010604335-02, P = 92.749377 Days, E = 80.535614 Days

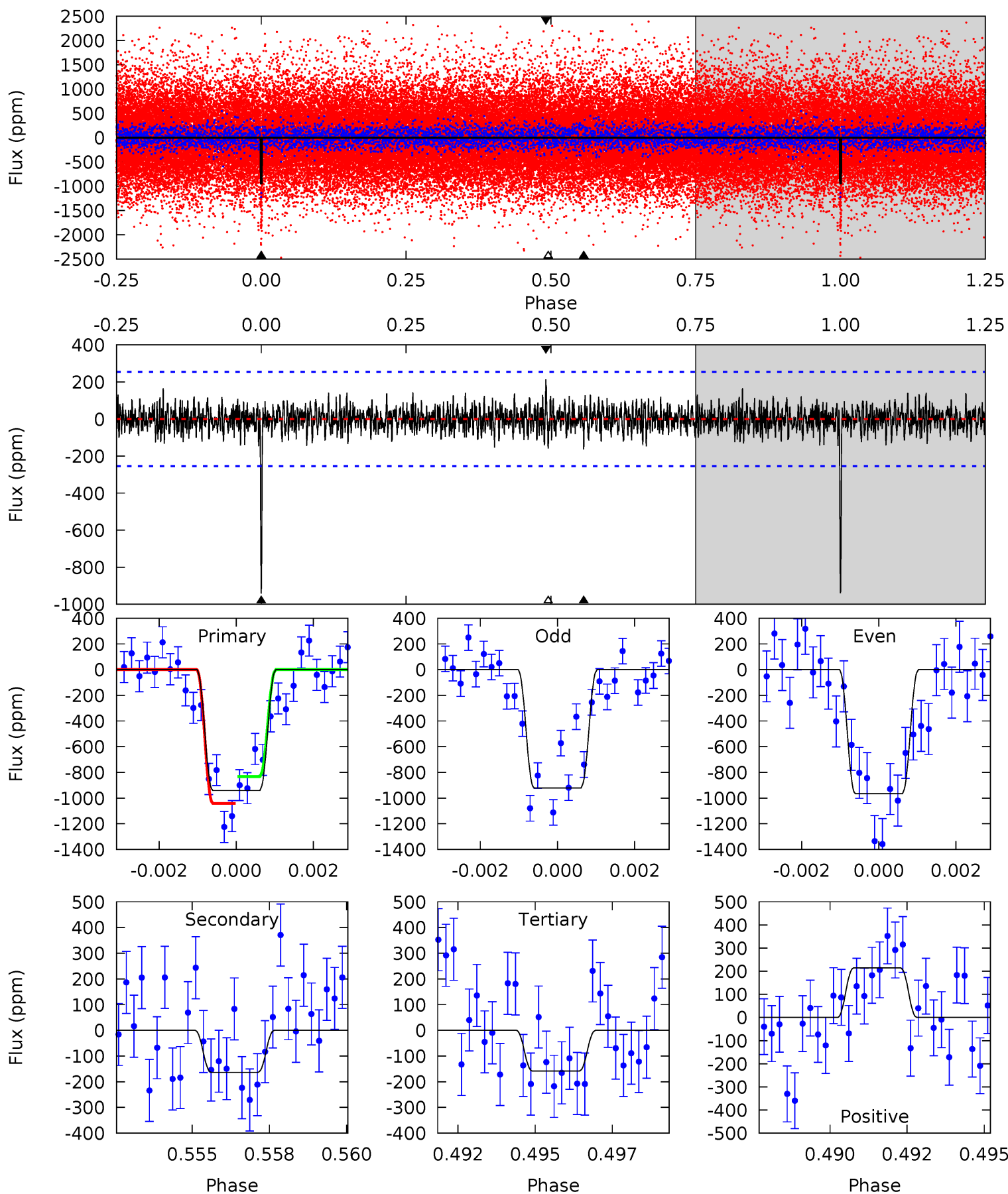
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.7	5.94	5.77	6.96	5.22	2.91	1.99	18.9	17.7	0.17	-1.02	0.69	0.98	0.22	2.74



Alt Model-Shift Uniqueness Test

010604335-02, $P = 92.750444$ Days, $E = 80.533957$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.6	3.40	3.30	4.47	5.29	3.03	1.05	16.3	15.1	0.10	-1.07	0.47	0.81	0.19	2.17



Stellar Parameters For KIC 010604335

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	4141^{+83}_{-91}	$4.684^{+0.022}_{-0.025}$	$-0.200^{+0.150}_{-0.150}$	$0.582^{+0.027}_{-0.030}$	$0.596^{+0.028}_{-0.036}$	$4.267^{+0.466}_{-0.420}$
	+2%/-2%	+0%/-1%	+75%/-75%	+5%/-5%	+5%/-6%	+11%/-10%
Source	SPE60	SPE60	SPE60	DSEP		

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

Secondary Eclipse Parameters for KIC 010604335-02 / KOI 1298.02

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-250 ± 42	$8.12^{+7.87}_{-5.70}$	336^{+7}_{-8}	2278^{+846}_{-323}	240^{+2638}_{-185}
Alt.	-163 ± 48	$6.99^{+7.68}_{-4.82}$	335^{+8}_{-7}	2251^{+800}_{-337}	210^{+1959}_{-164}

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

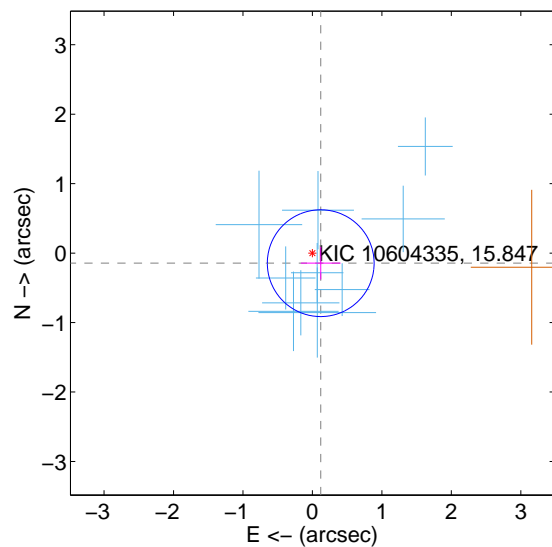
Supplemental centroid analysis for 010604335-02. Kepler magnitude: 15.85. Transit SNR 11.33

There are 10 quarters with good PRF difference image offsets

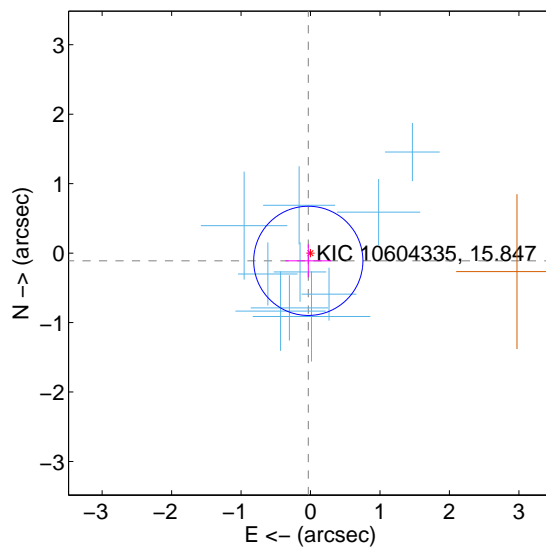
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.188 ± 0.256	0.73	-0.119 ± 0.286	-0.145 ± 0.234
PRF-fit source offset from KIC position	0.116 ± 0.262	0.44	0.032 ± 0.329	-0.112 ± 0.238
photometric centroid source offset	0.76 ± 0.71	1.07	0.26 ± 0.72	-0.71 ± 0.71

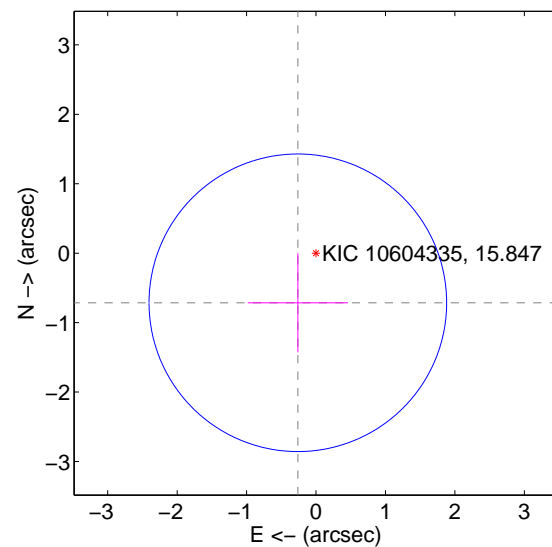
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

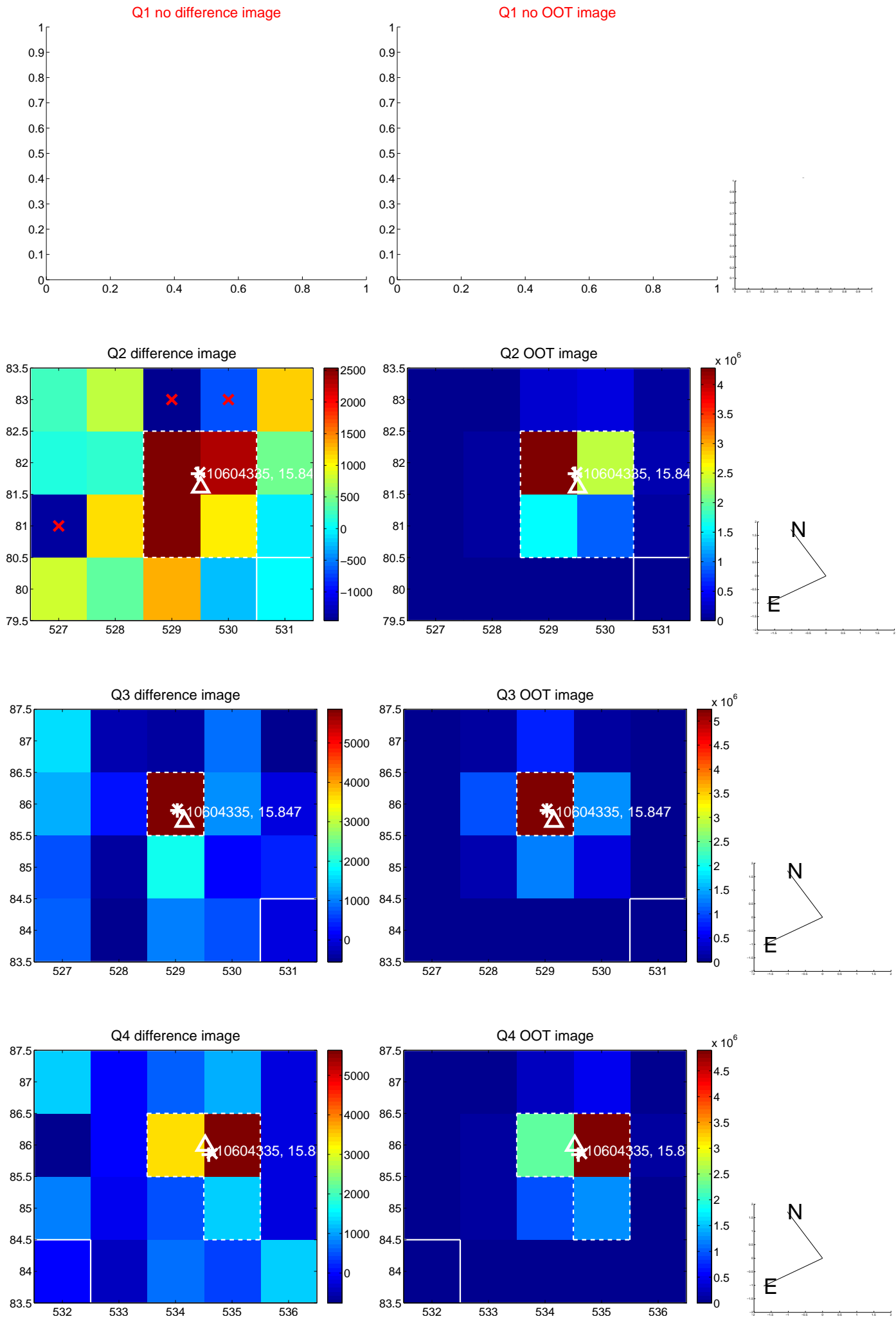


offset from photometric centroids

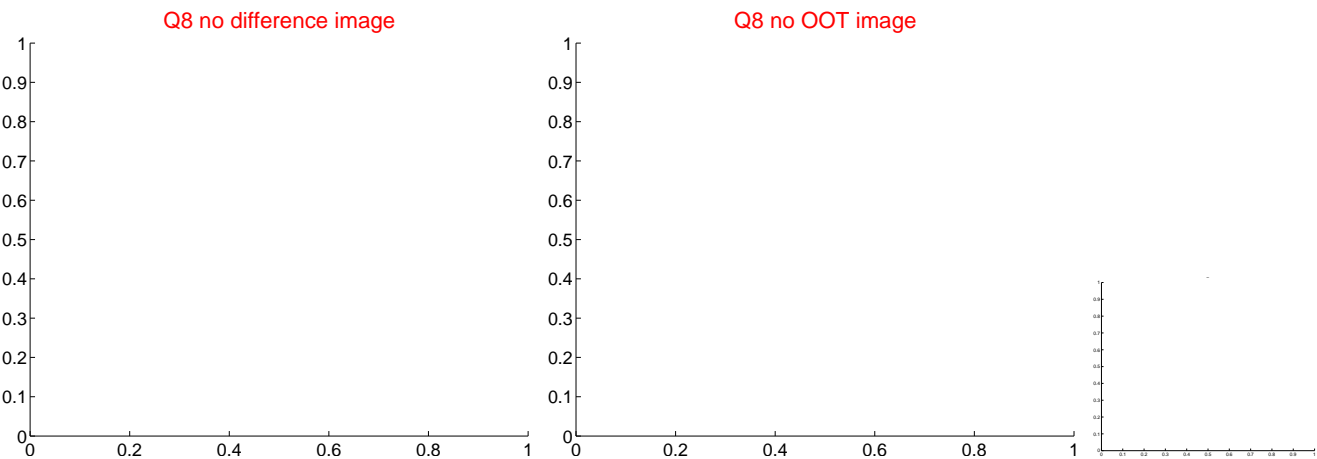
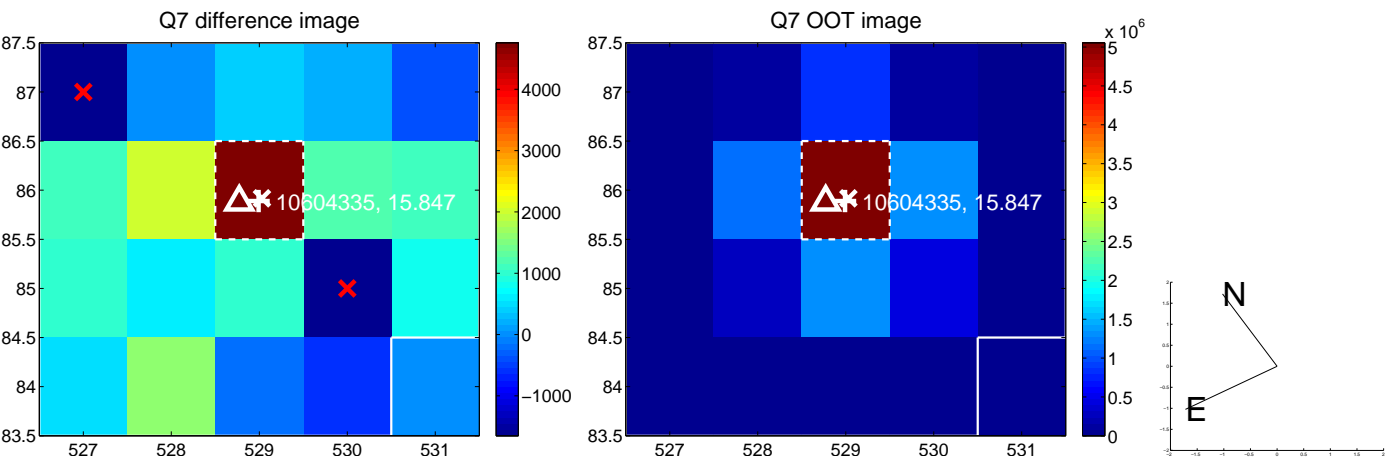
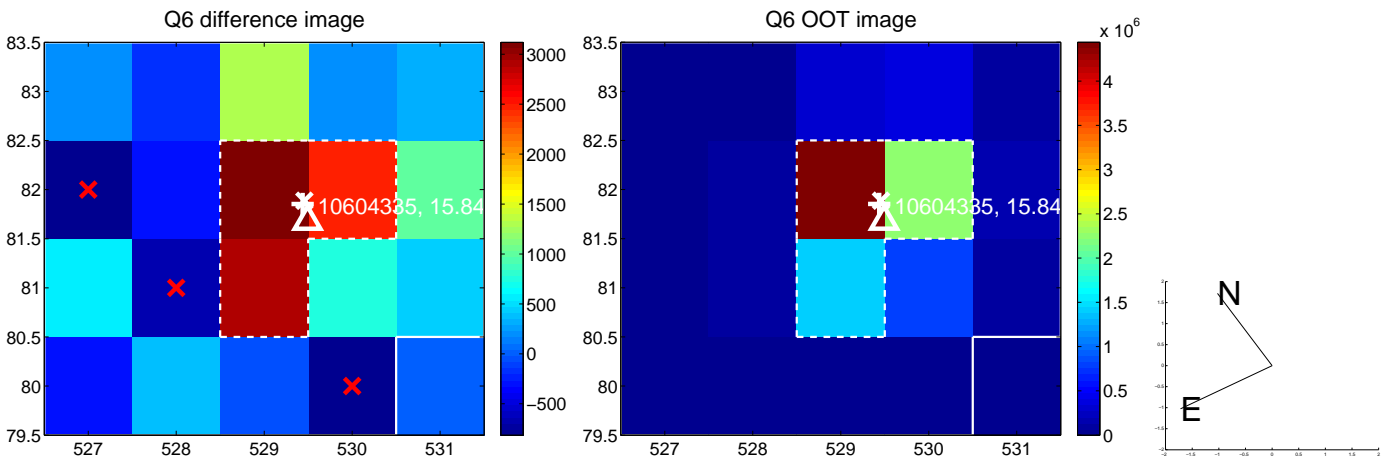
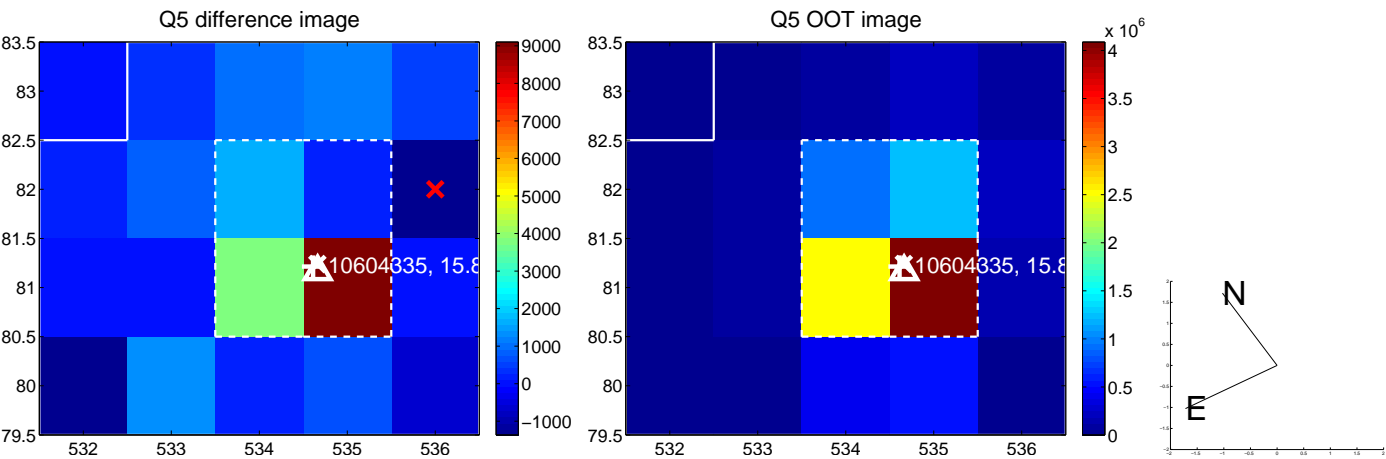


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

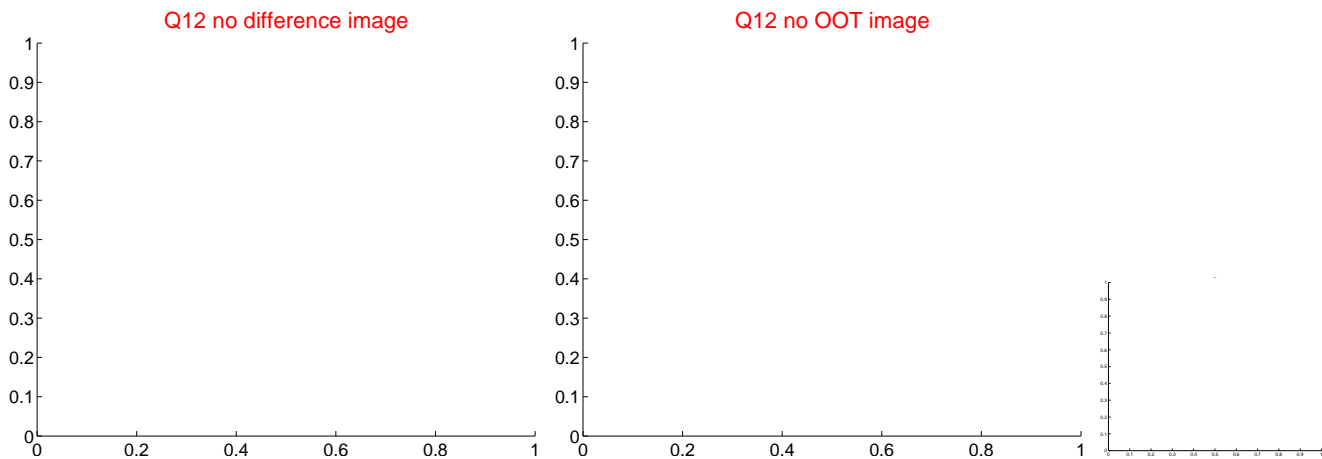
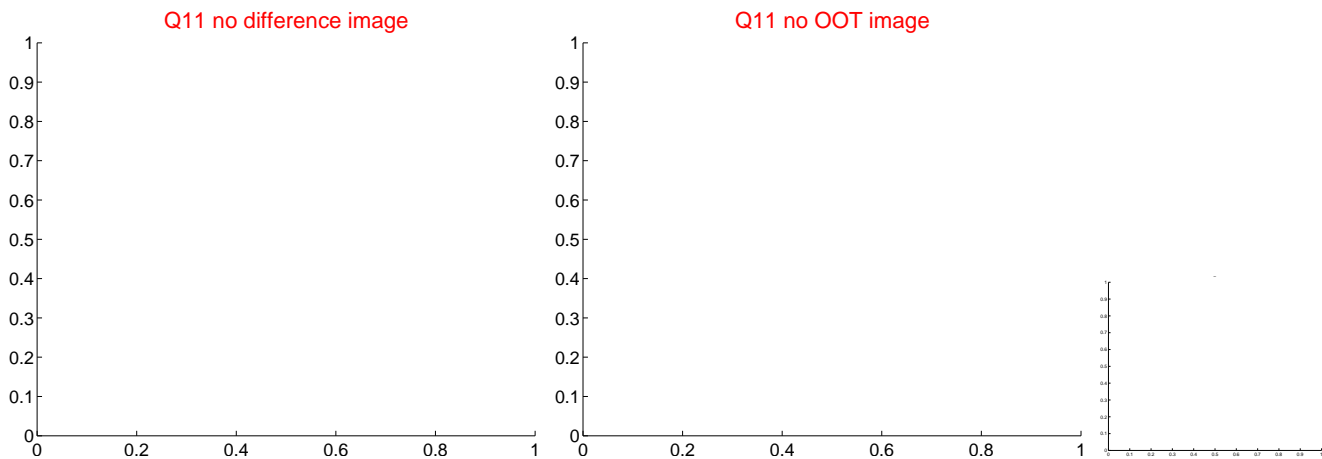
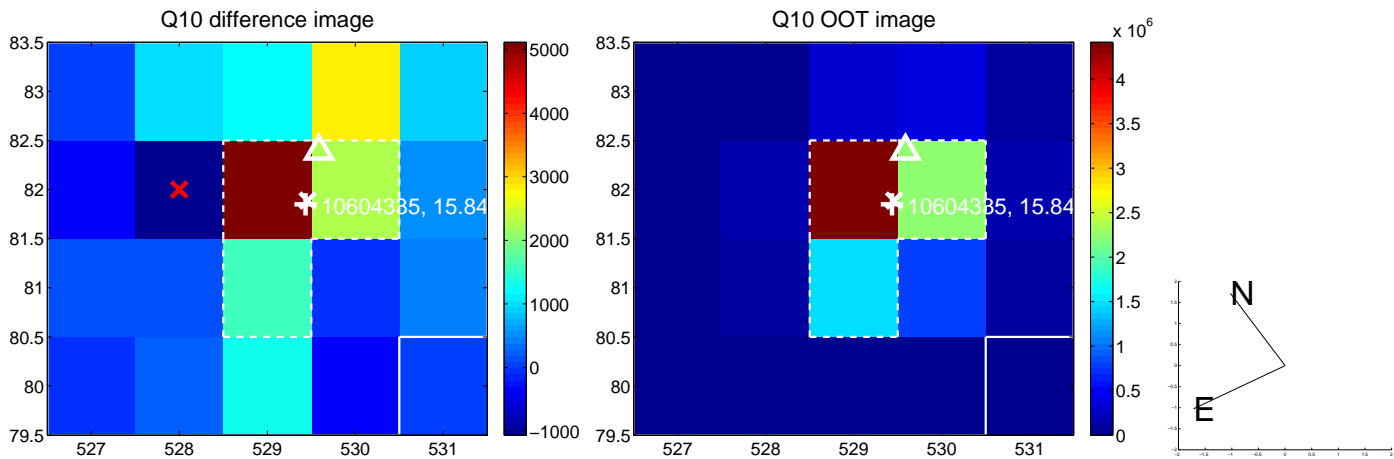
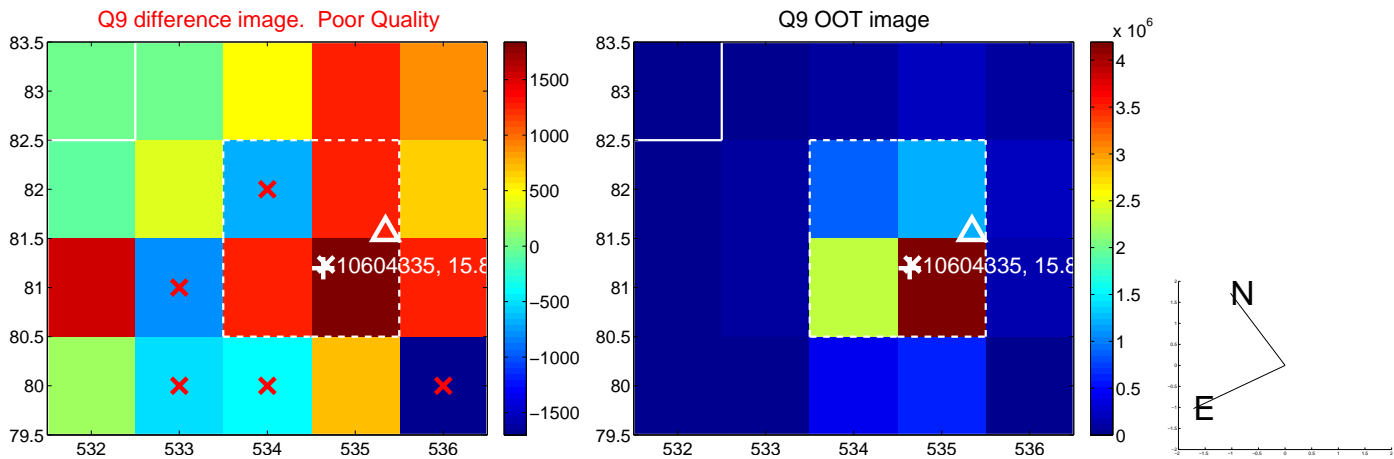
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.

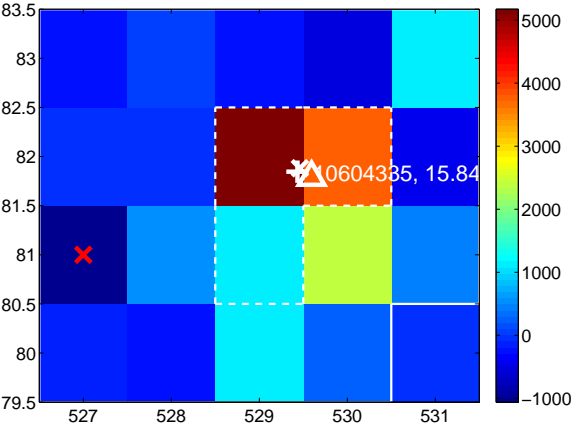
Q13 no difference image



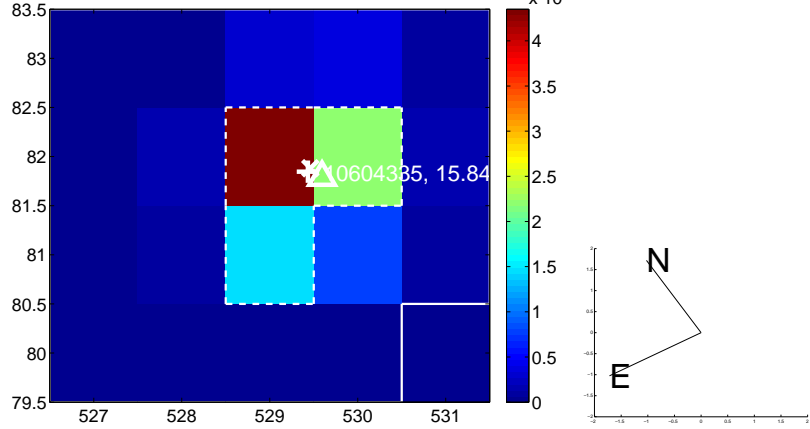
Q13 no OOT image



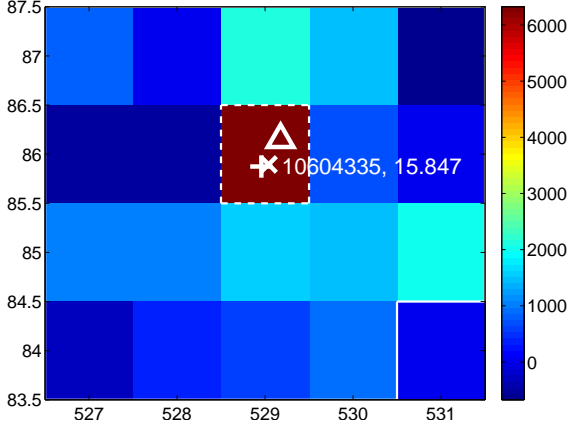
Q14 difference image



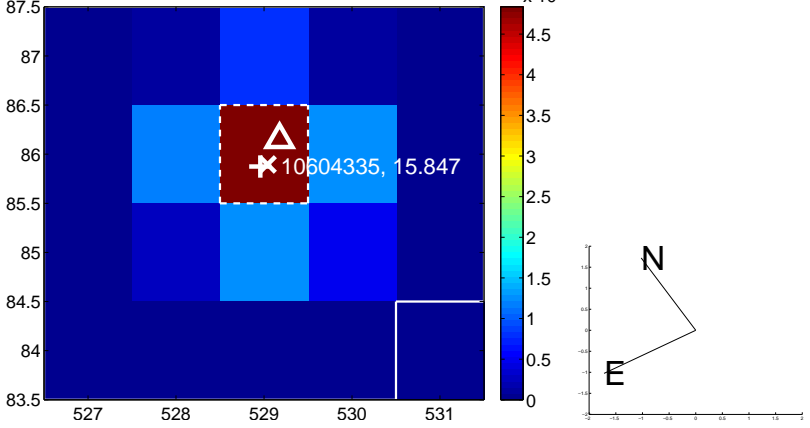
Q14 OOT image



Q15 difference image



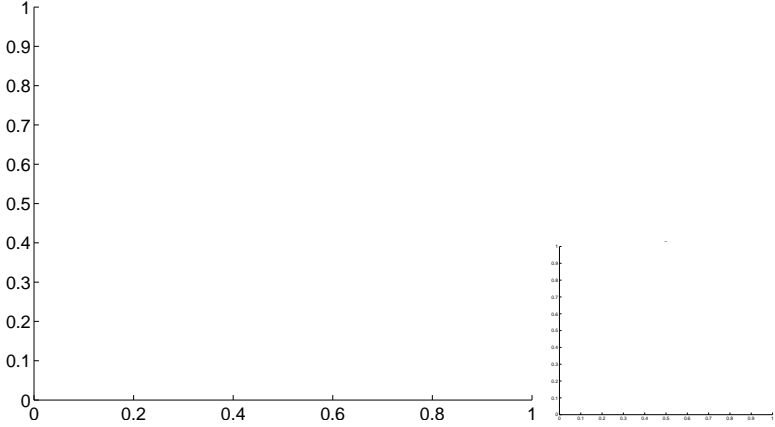
Q15 OOT image



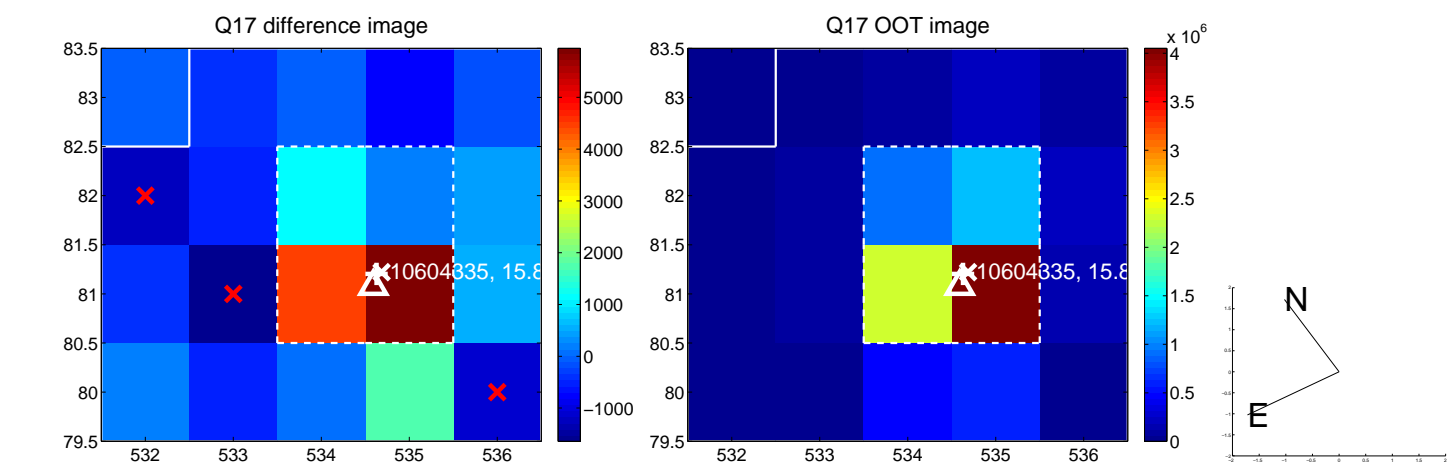
Q16 no difference image



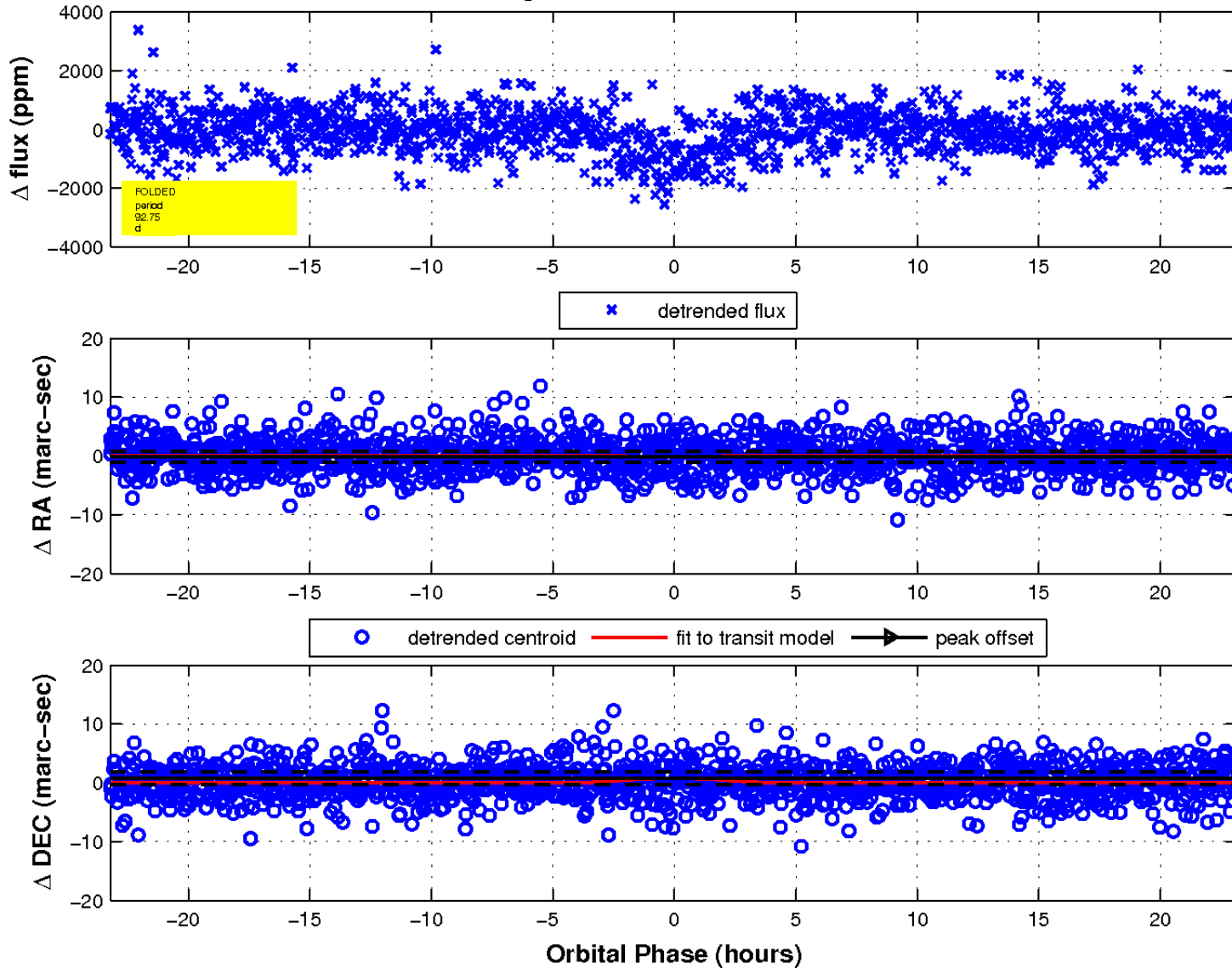
Q16 no OOT image



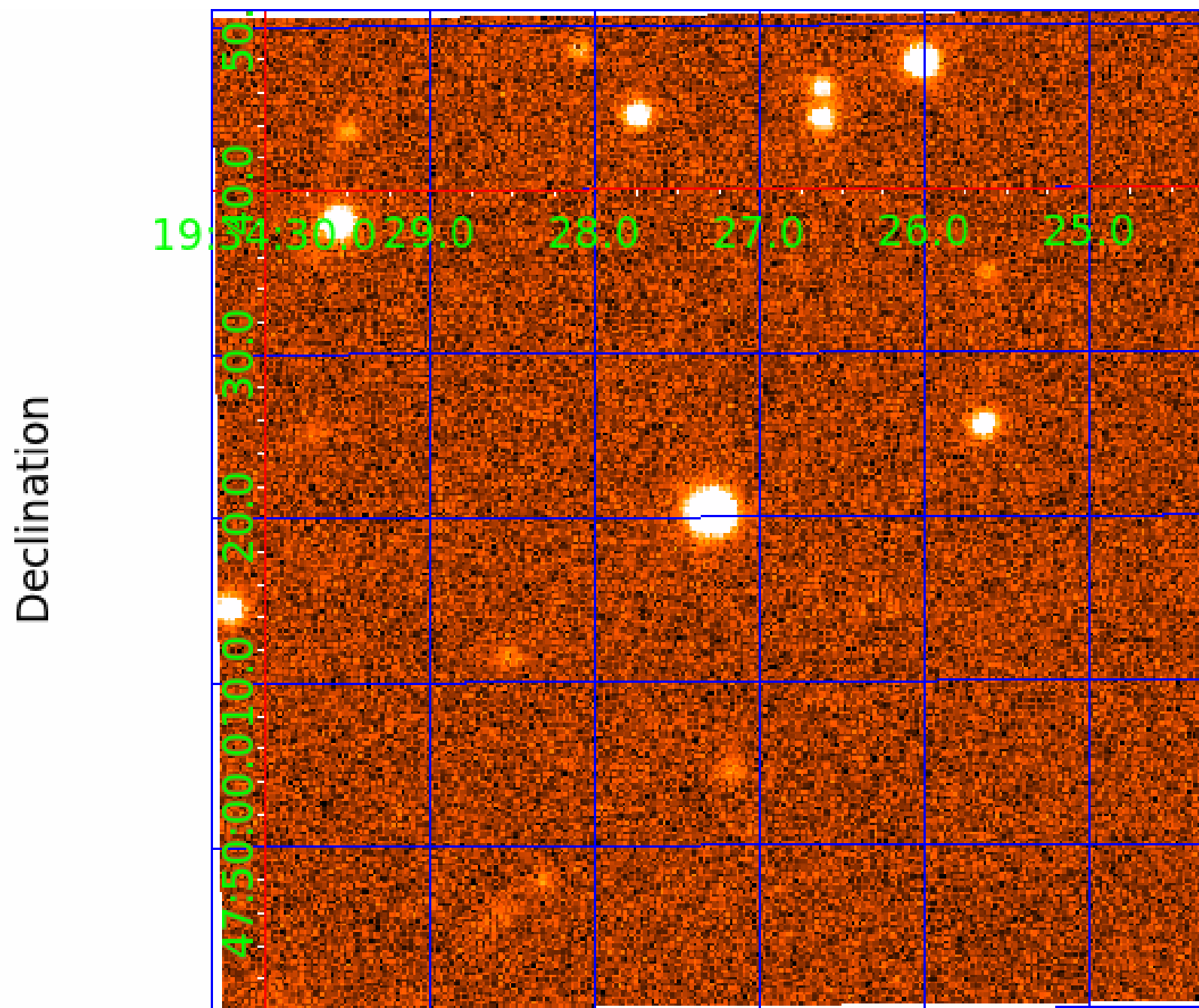
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



fluxWeightedCentroids, Planet 2 of 3



UKIRT Image



KIC 010604335

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})
010604335-01	OBS	1298.01	11.008170	132.218136	1431.6	2.391	35.2	38.5	0.58	4141	2.78	13.42
010604335-02	OBS	1298.02	92.749377	173.284991	1077.3	7.745	10.7	11.3	0.58	4141	3.79	0.78
010604335-03	OBS	No	1.428671	132.671710	79.1	11.141	9.3	10.2	0.58	4141	0.50	204.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010604335-01	OBS	PC	1.00	0	0	0	0	NO_COMMENT
010604335-02	OBS	FP	0.00	0	1	0	0	DEEP_V_SHAPED
010604335-03	OBS	FP	0.00	1	0	0	0	LPP_DV

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

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

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

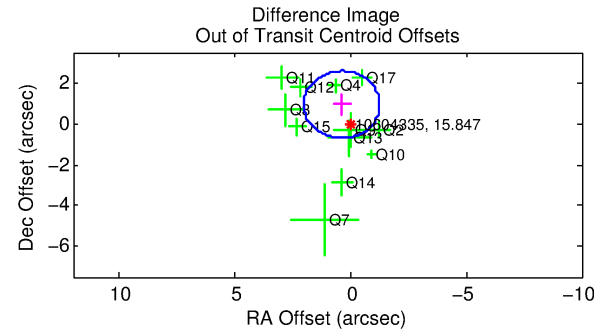
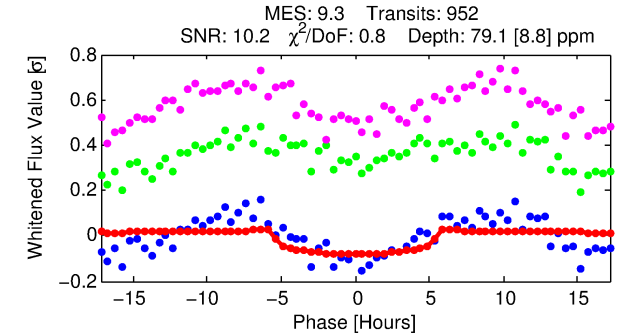
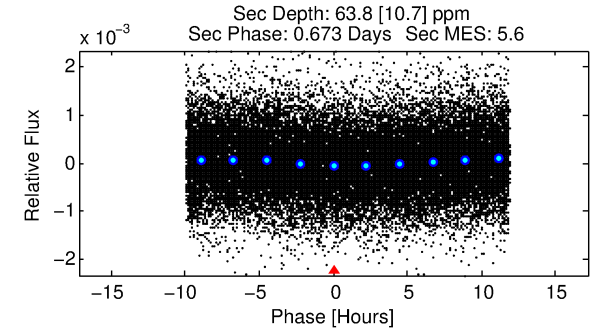
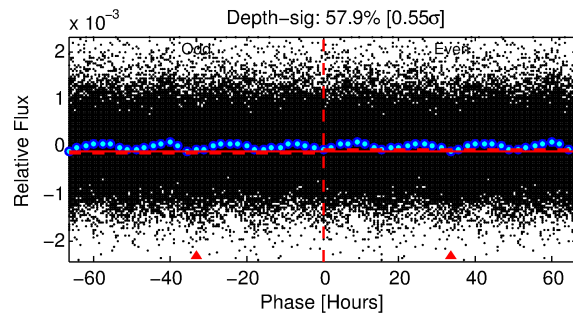
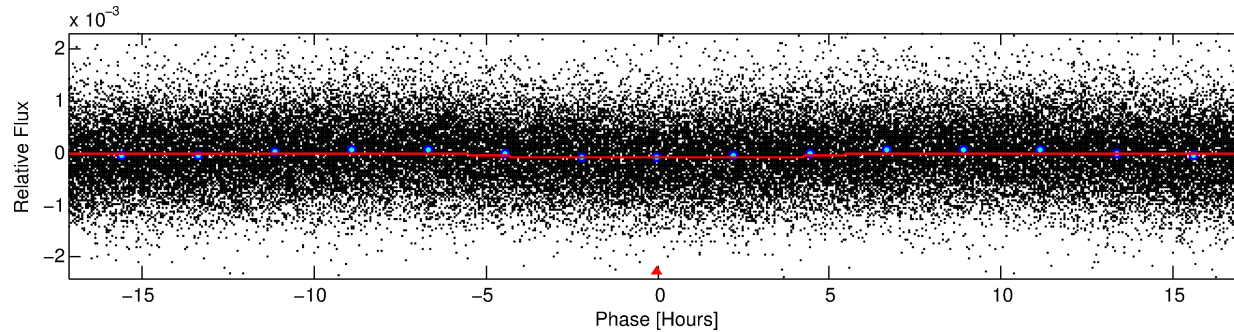
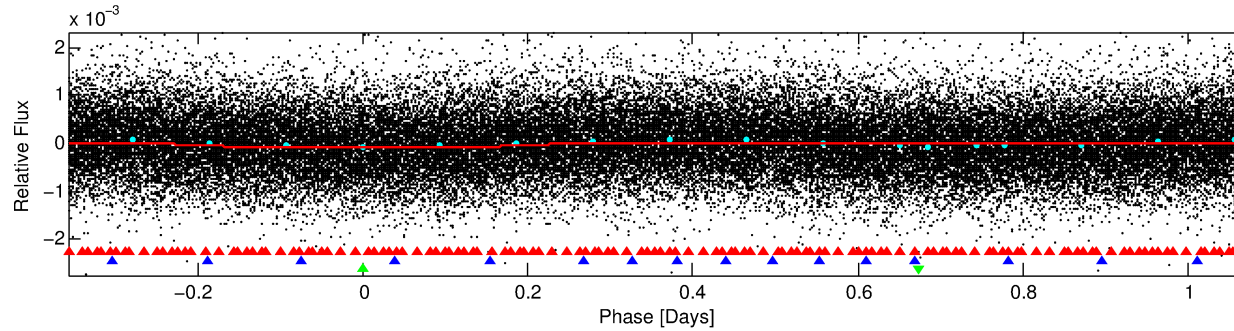
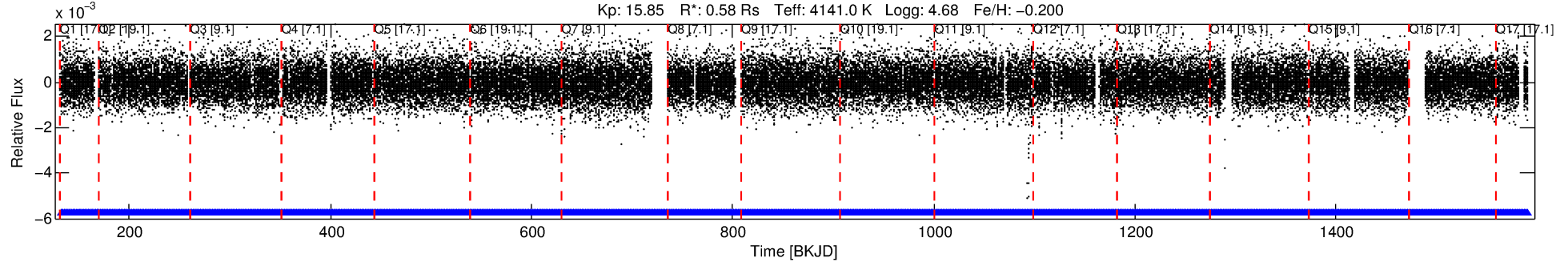
Ephemeris Match Information For 010604335-03

No Significant Match Found

DV One-Page Summary

KIC: 10604335 Candidate: 3 of 3 Period: 1.429 d
KOI: K01298 Name: Kepler-283 Corr: No Ephemeris Match

Kp: 15.85 R*: 0.58 Rs Teff: 4141.0 K Logg: 4.68 Fe/H: -0.200



DV Fit Results:

Period = 1.42867 [0.00002] d
Epoch = 132.6717 [0.0082] BKJD
Rp/R* = 0.0079 [0.0047]
a/R* = 1.18 [0.70]
b = 0.03 [71.65]
Seff = 204.18 [20.80]
Teq = 964 [25] K
Rp = 0.50 [0.30] Re
a = 0.0209 [0.0008] AU
Ag = 60.60 [73.25] [0.81σ]
Teff = 4158 [1259] K [2.54σ]

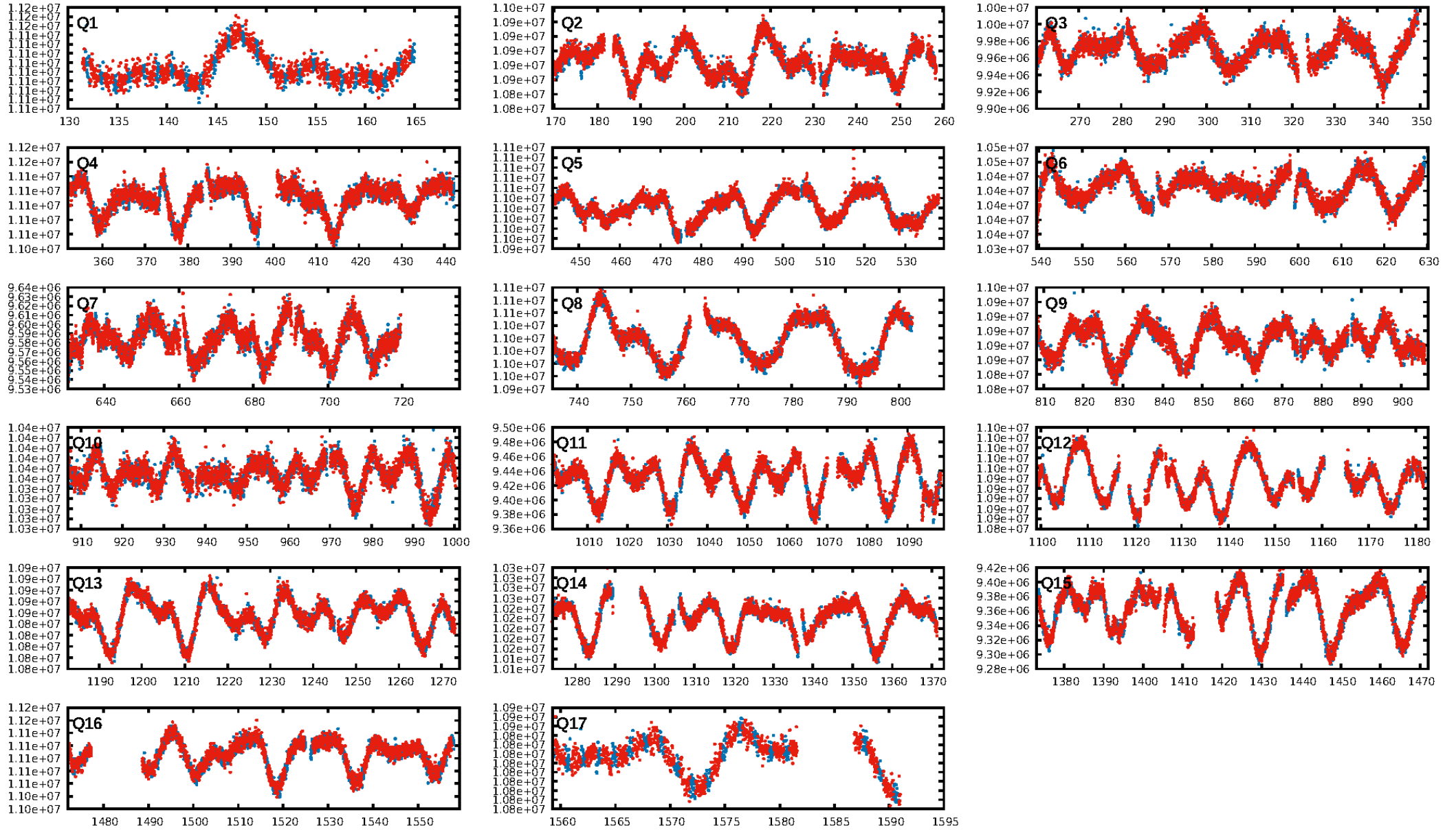
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [20.18σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.05e-01
RollingBand-fgt: 1.00 [910/910]
GhostDiagnostic-chr: 1.159
Centroid-sig: 85.9%
Centroid-so: 0.184 arcsec [0.23σ]
OotOffset-rm: 1.017 arcsec [1.85σ]
KicOffset-rm: 1.154 arcsec [1.93σ]
OotOffset-st: 3/4/2/3 [12]
KicOffset-st: 3/4/2/3 [12]
DiffImageQuality-fgm: 0.58 [7/12]
DiffImageOverlap-fno: 1.00 [17/17]

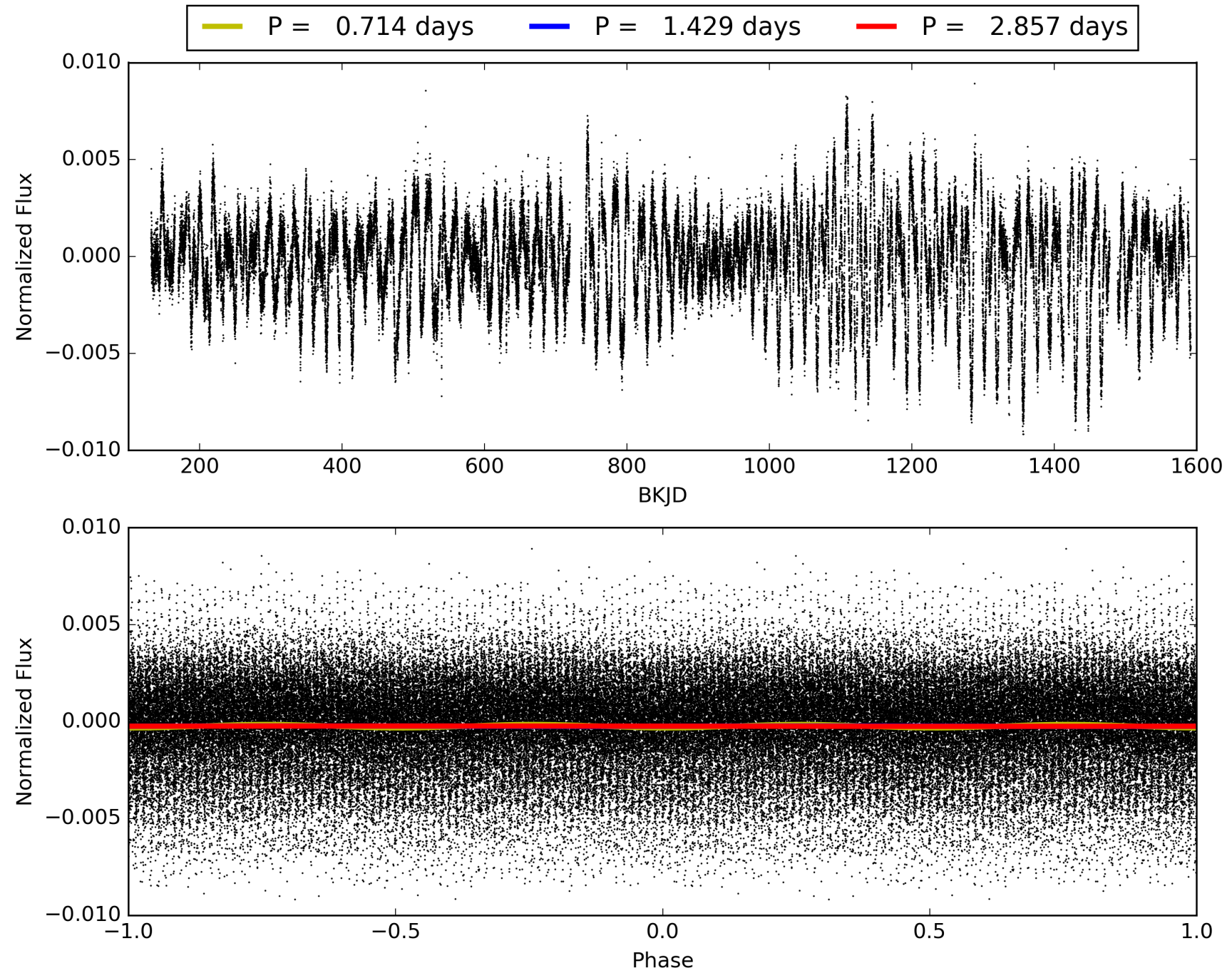
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 14:16:08 Z

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

TCE 010604335-03, PDC Light Curves

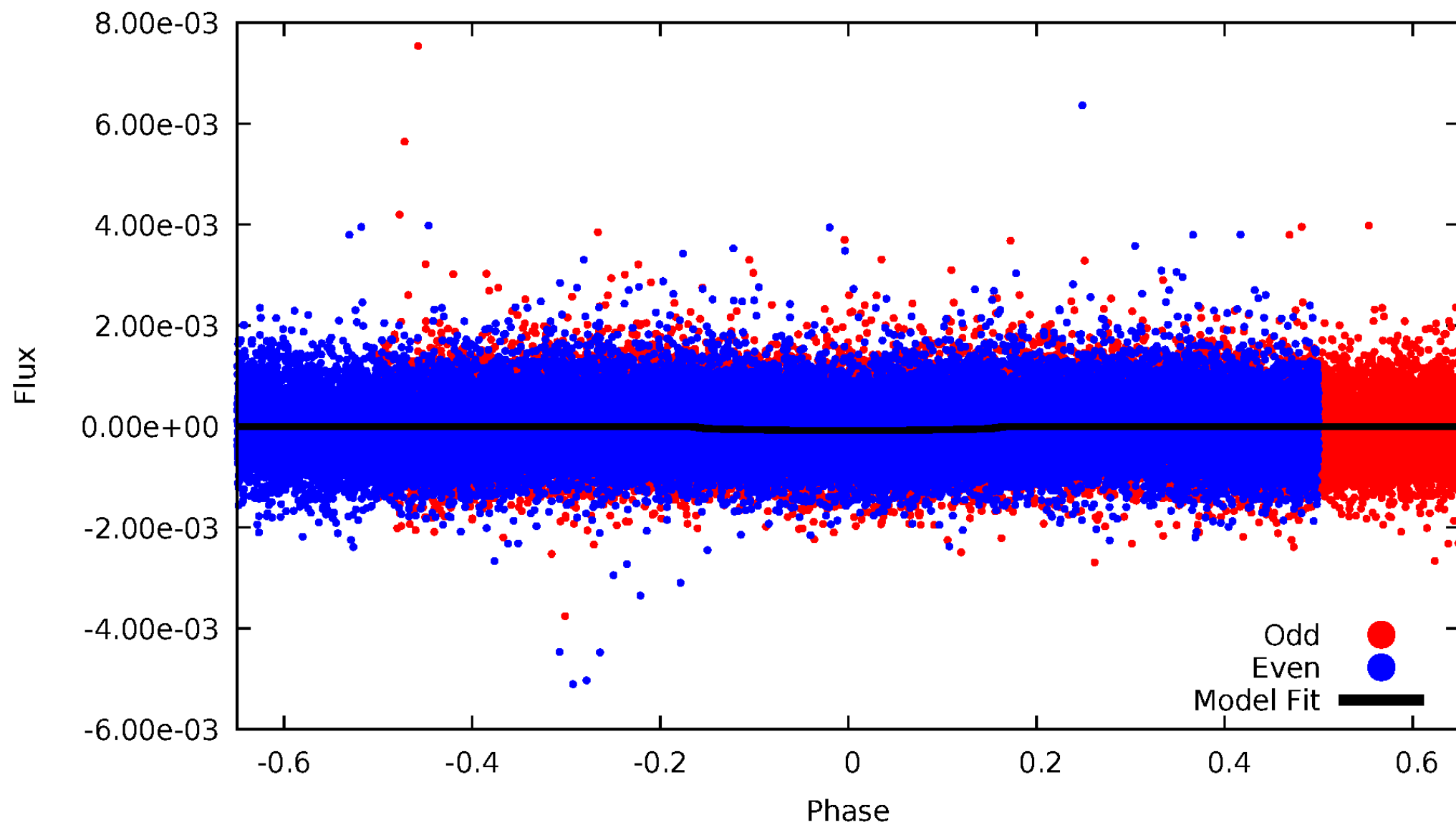


TCE 010604335-03



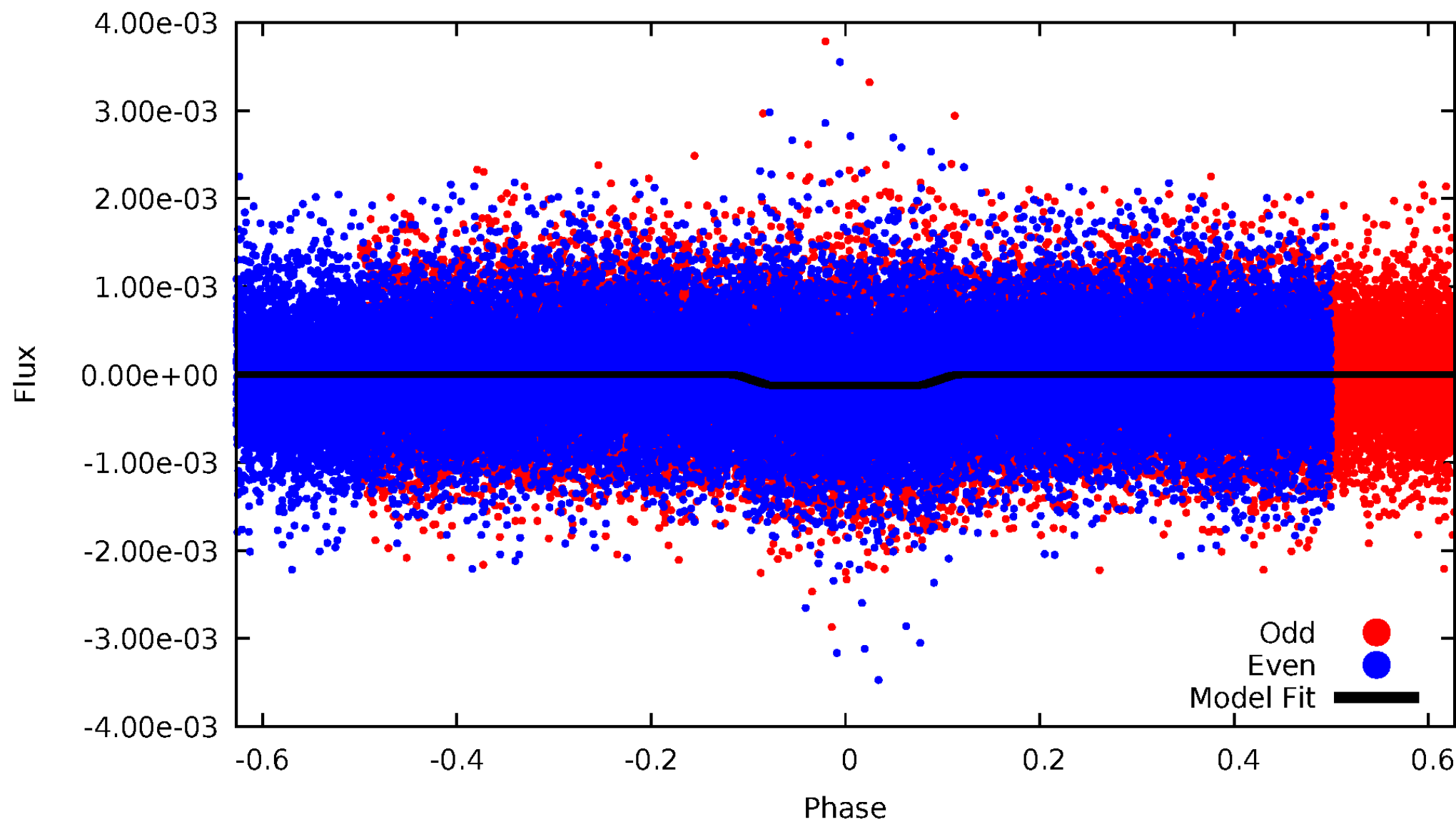
DV Odd/Even

TCE 010604335-03

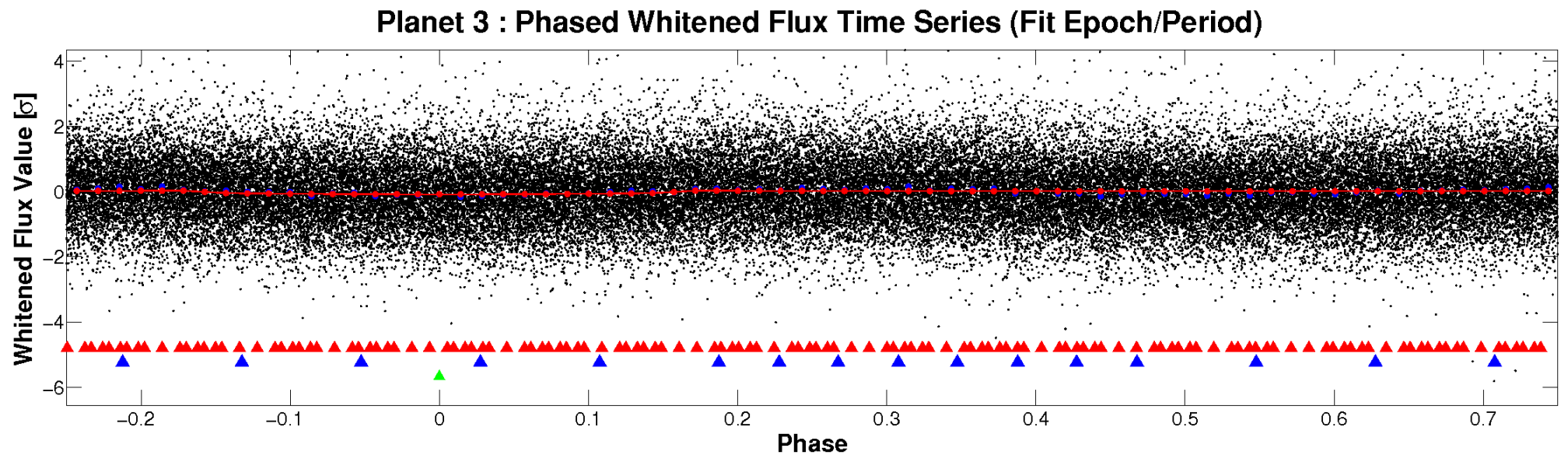
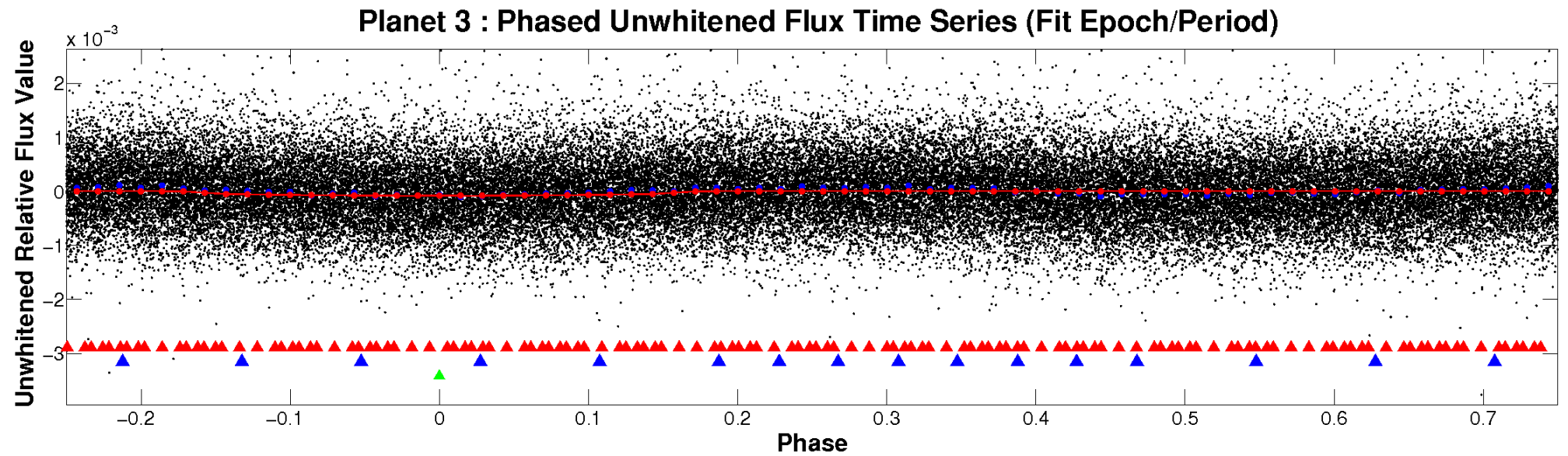


ALT Odd/Even

TCE 010604335-03

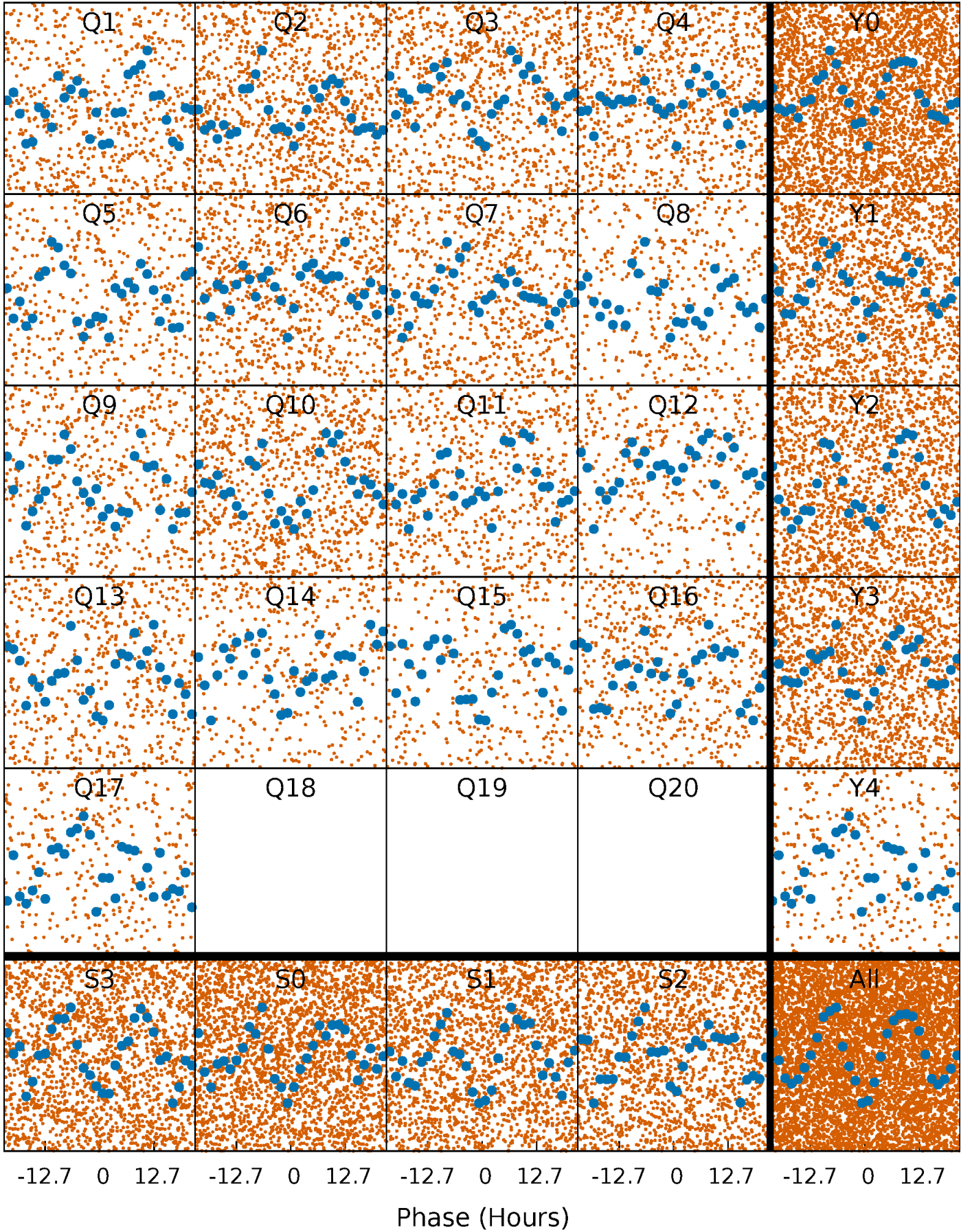


Non-Whitened Vs. Whitened Light Curve



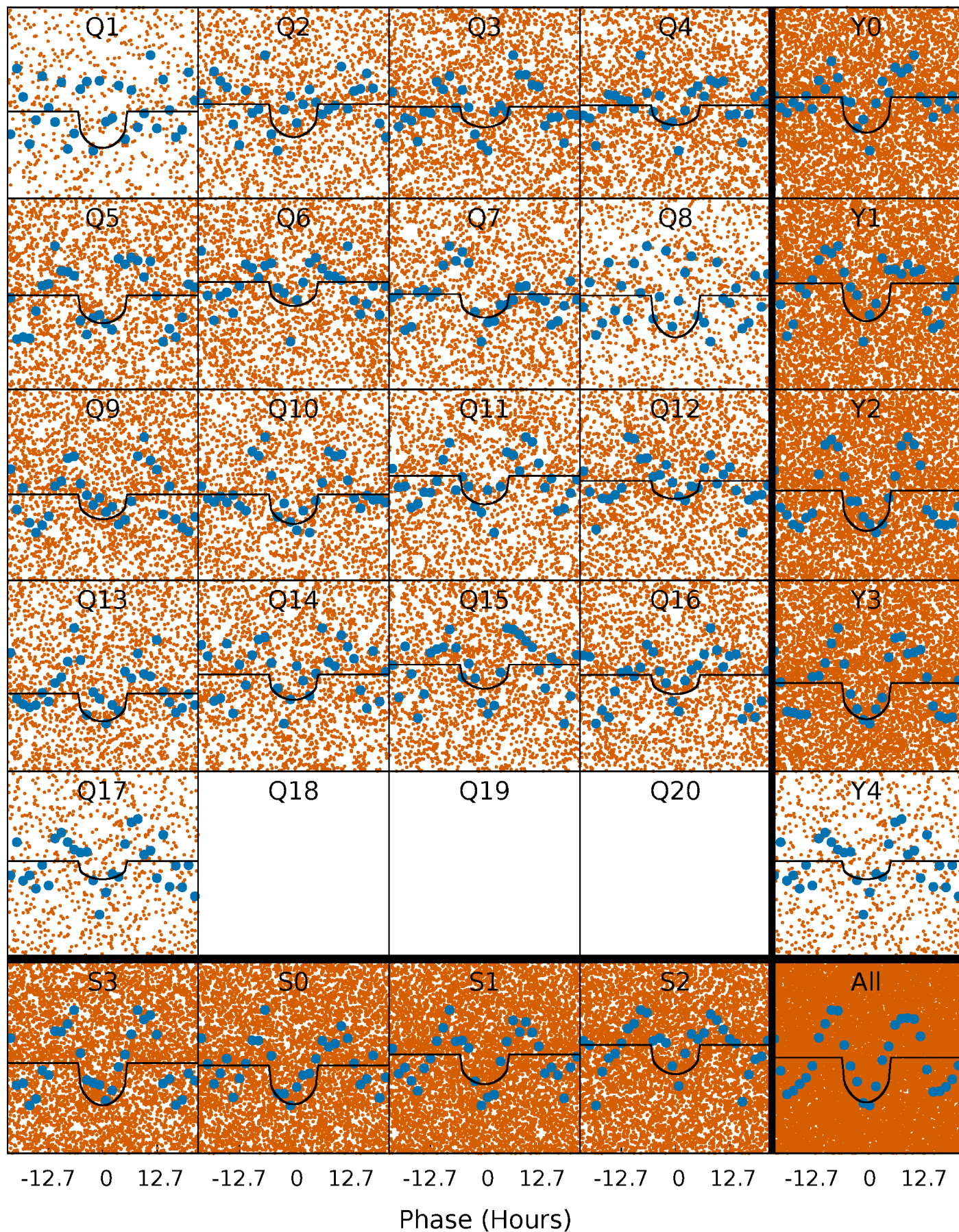
PDC Quarter-Phased Transit Curves

TCE 010604335-03 P= 1.428671 Days $T_0=132.671709$ (BKJD)



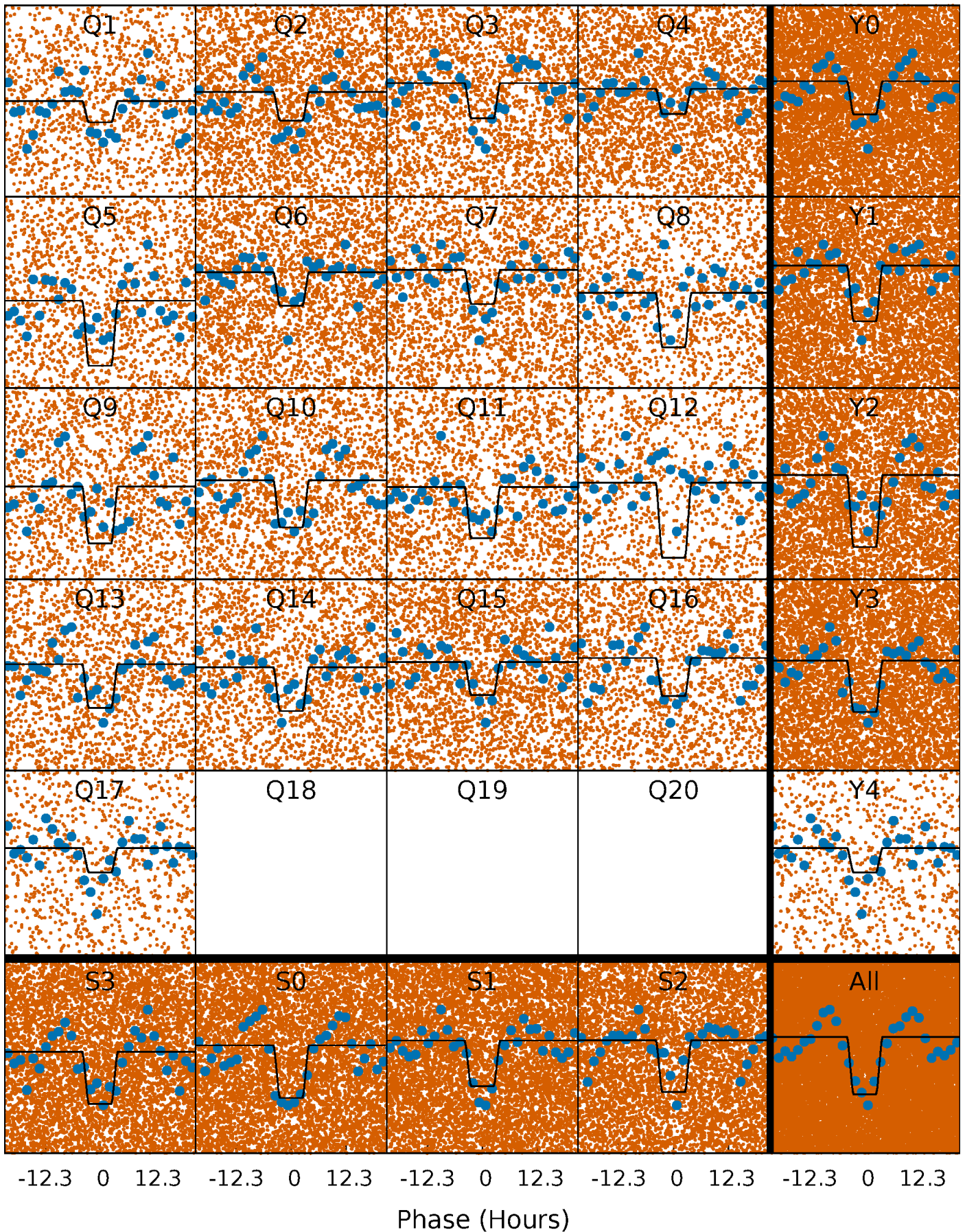
DV Quarter-Phased Transit Curves

TCE 010604335-03 P= 1.428671 Days $T_0=132.671709$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

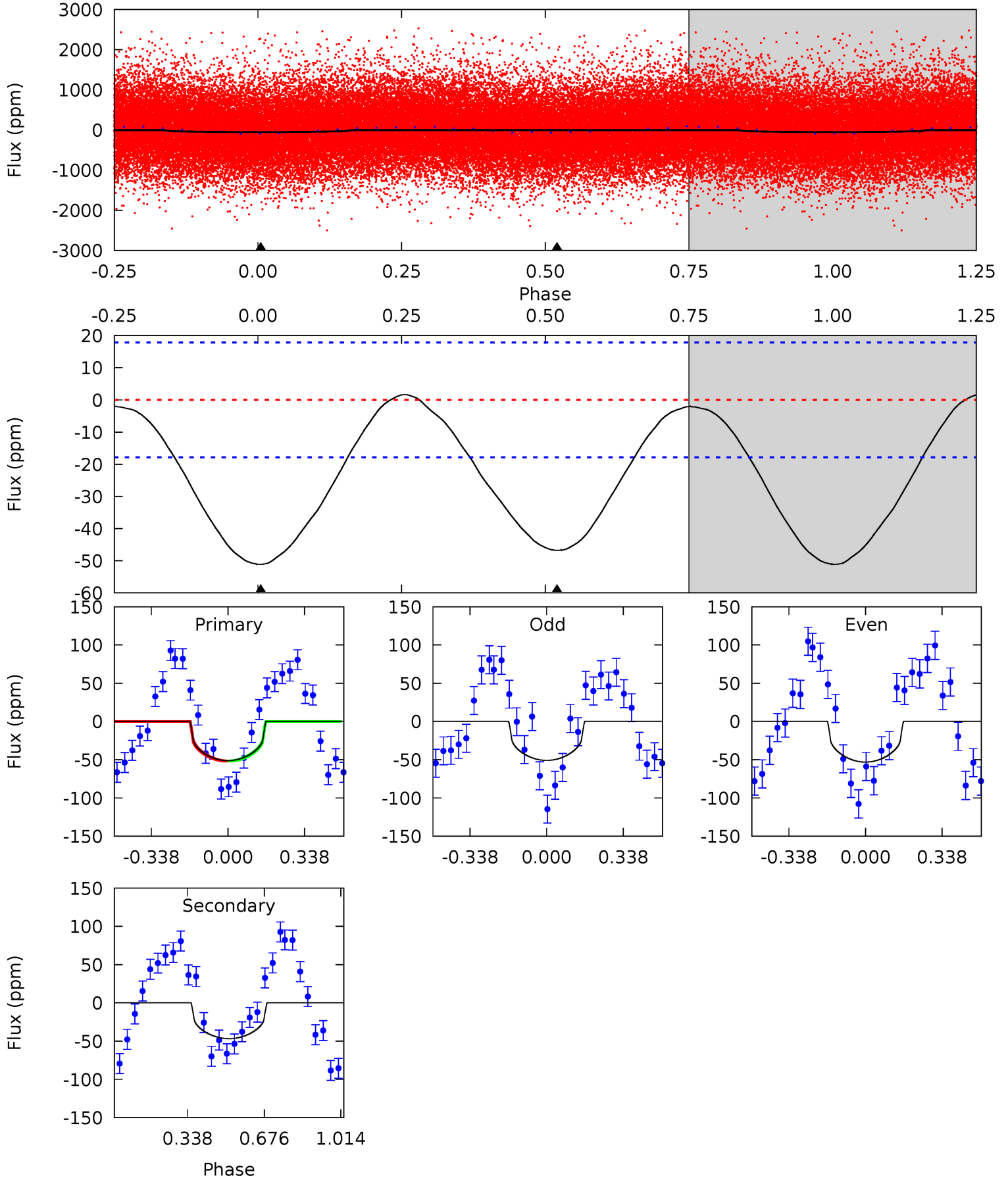
TCE 010604335-03 P= 1.428734 Days $T_0=132.647297$ (BKJD)



DV Model-Shift Uniqueness Test

010604335-03, P = 1.428671 Days, E = 131.243038 Days

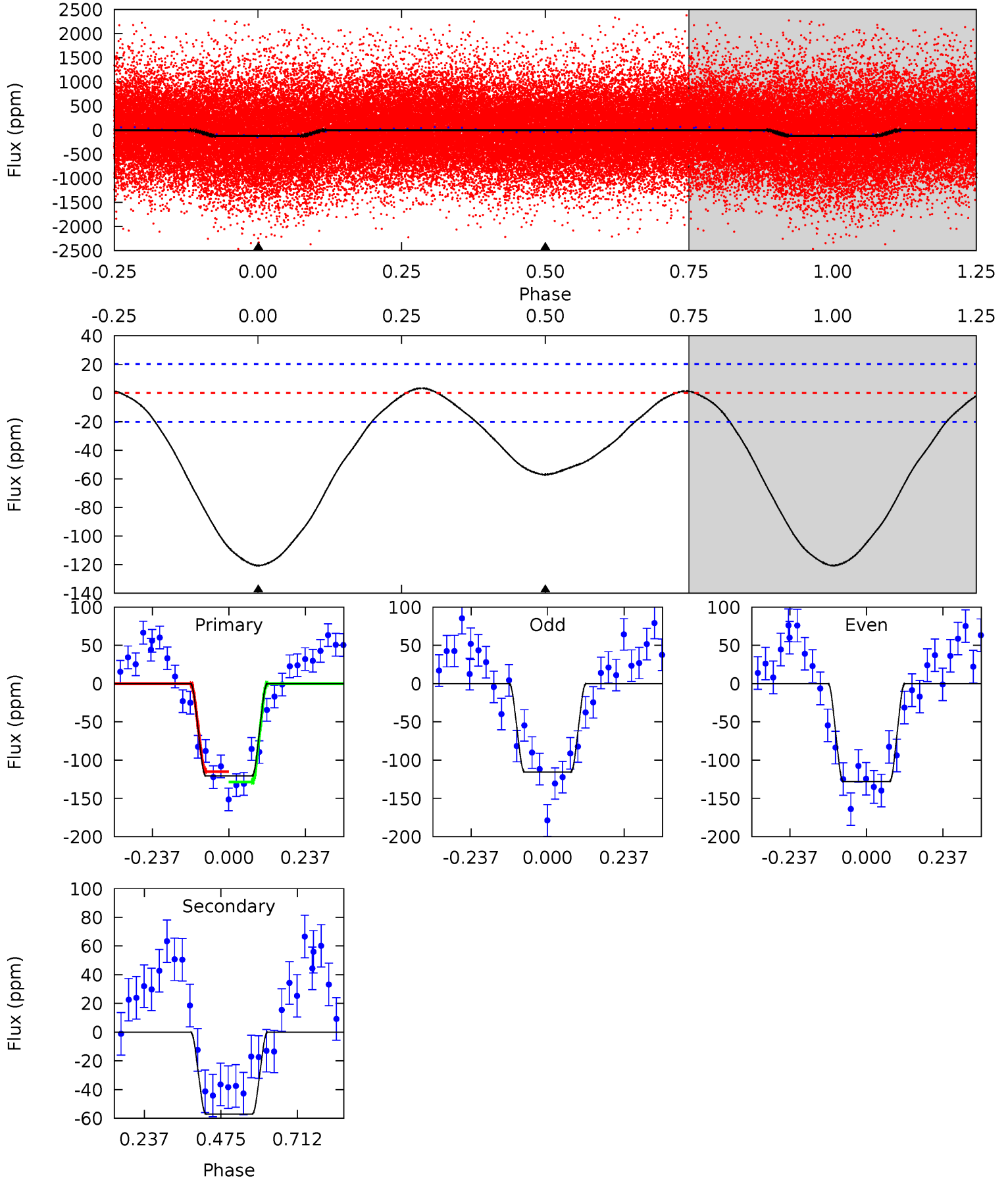
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	11.3	0	0	4.30	0.96	0.40	12.3	12.3	11.3	11.3	0.27	1.02	0.03	0.00



Alt Model-Shift Uniqueness Test

010604335-03, P = 1.428734 Days, E = 131.218563 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.1	12.3	0	0	4.38	1.18	0.67	26.1	26.1	12.3	12.3	1.35	1.01	0.03	1.48



Stellar Parameters For KIC 010604335

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4141^{+83}_{-91}	$4.684^{+0.022}_{-0.025}$	$-0.200^{+0.150}_{-0.150}$	$0.582^{+0.027}_{-0.030}$	$0.596^{+0.028}_{-0.036}$	$4.267^{+0.466}_{-0.420}$
	+2%/-2%	+0%/-1%	+75%/-75%	+5%/-5%	+5%/-6%	+11%/-10%
Source	SPE60	SPE60	SPE60	DSEP		

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

Secondary Eclipse Parameters for KIC 010604335-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-47 ± 4	$0.52^{+0.28}_{-0.26}$	1349^{+28}_{-36}	3864^{+1171}_{-510}	41^{+119}_{-24}
Alt.	-57 ± 5	$0.69^{+0.34}_{-0.27}$	1347^{+30}_{-31}	3629^{+694}_{-420}	28^{+46}_{-16}

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

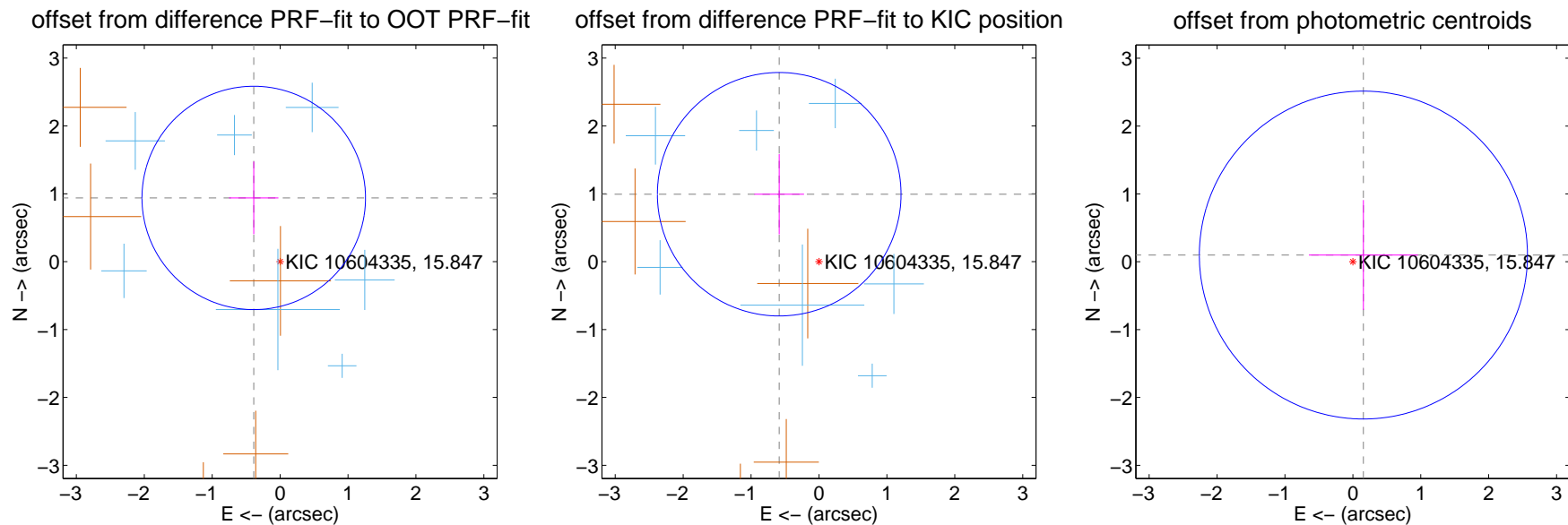
DV Centroid Data

Supplemental centroid analysis for 010604335-03. Kepler magnitude: 15.85. Transit SNR 10.18

There are 7 quarters with good PRF difference image offsets

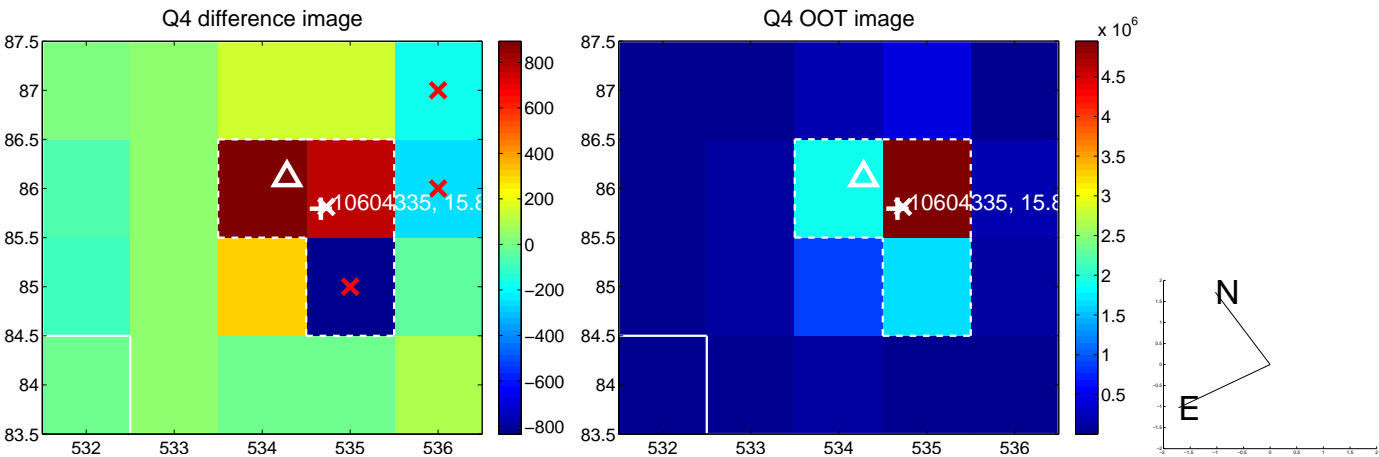
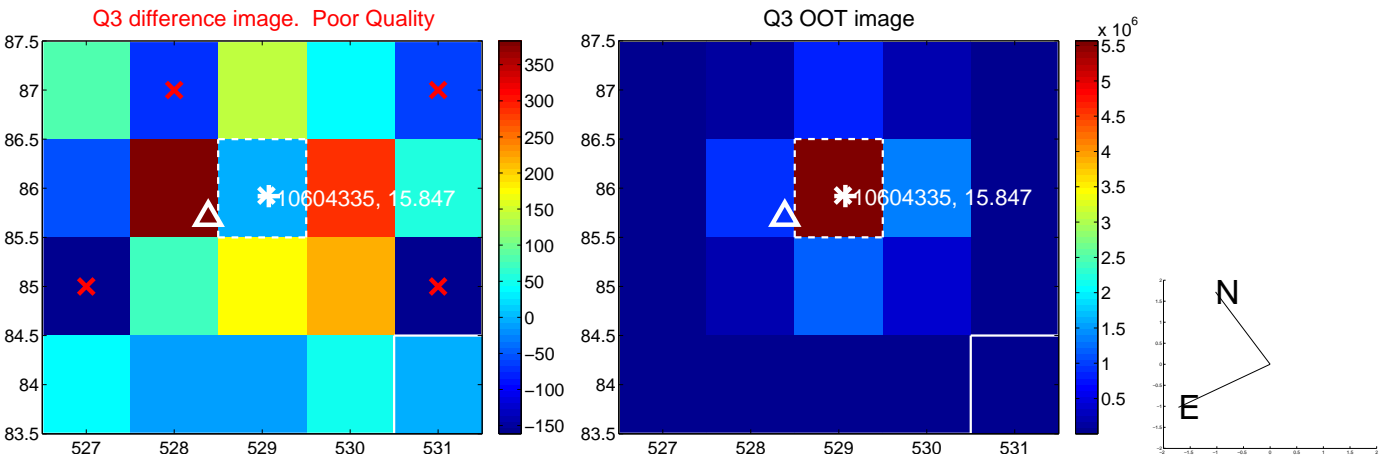
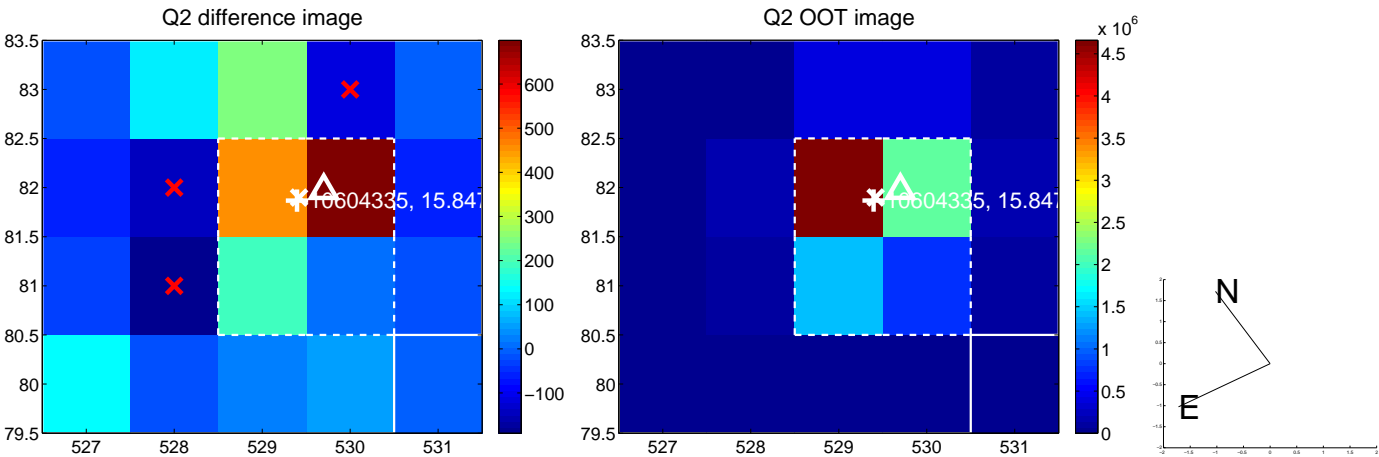
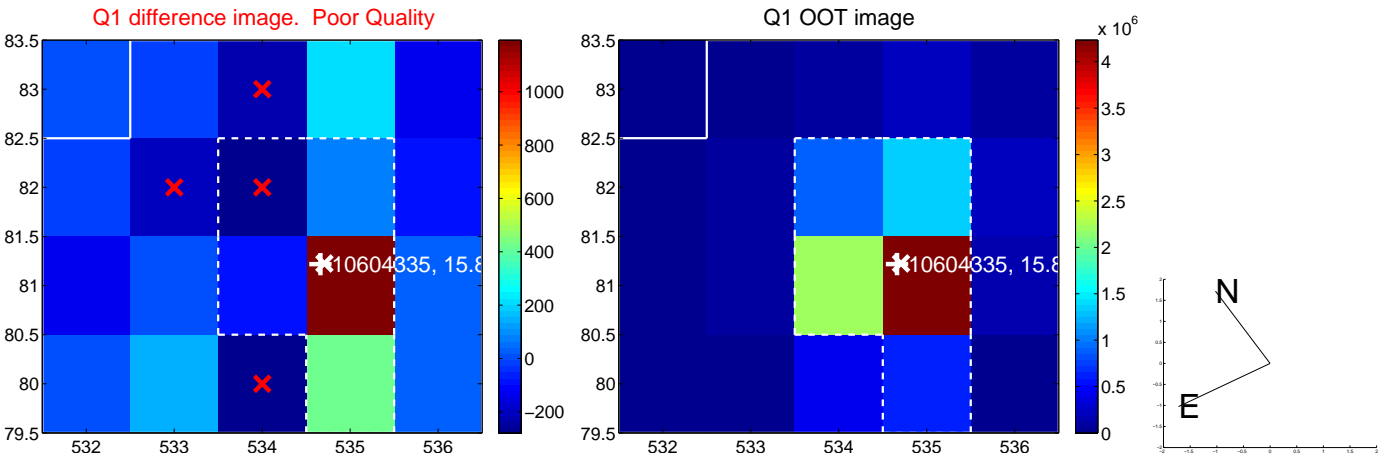
The direct PRF centroid is offset from the target star catalog position by about 0.24 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.017 ± 0.549	1.85	0.388 ± 0.363	0.940 ± 0.535
PRF-fit source offset from KIC position	1.154 ± 0.598	1.93	0.586 ± 0.365	0.994 ± 0.591
photometric centroid source offset	0.18 ± 0.81	0.23	-0.16 ± 0.80	0.10 ± 0.81

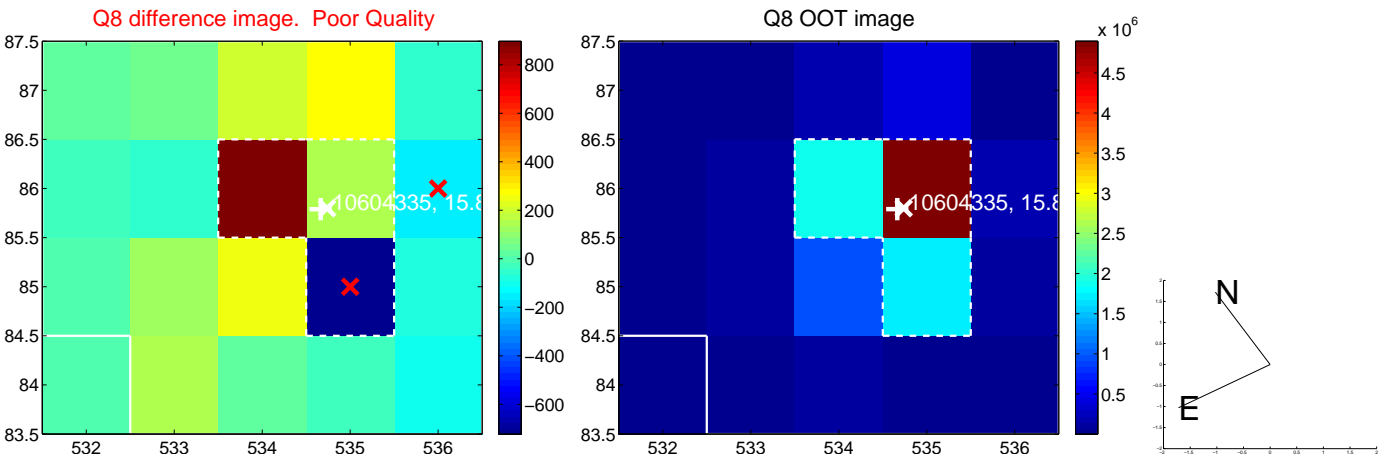
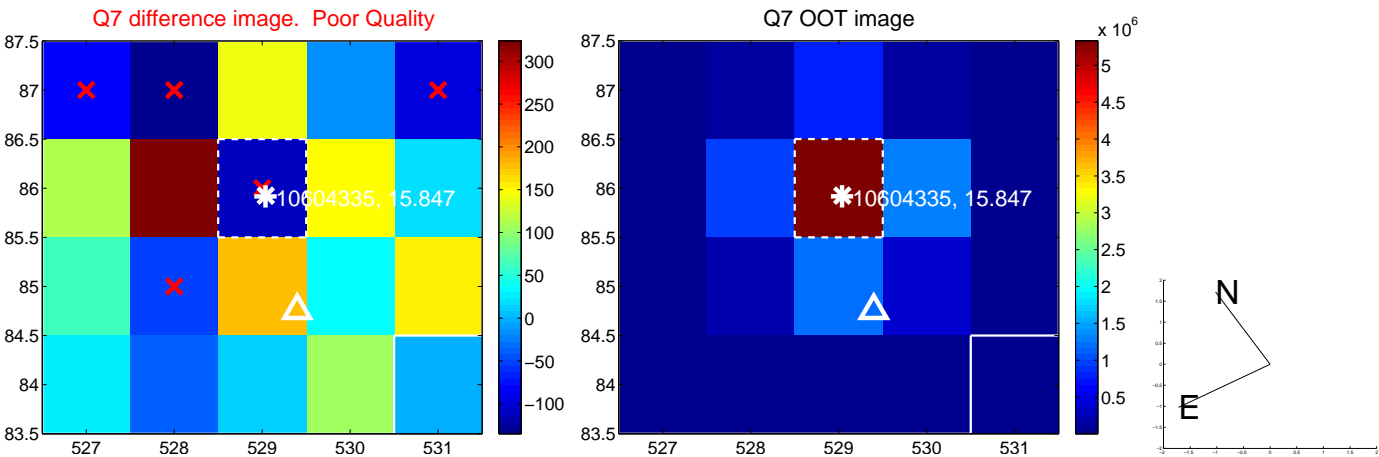
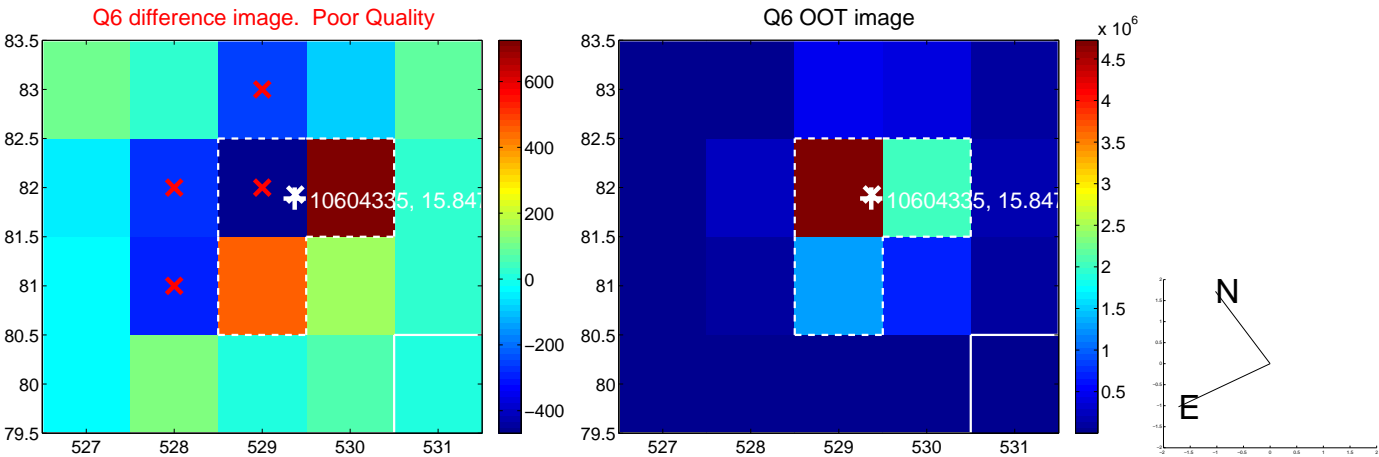
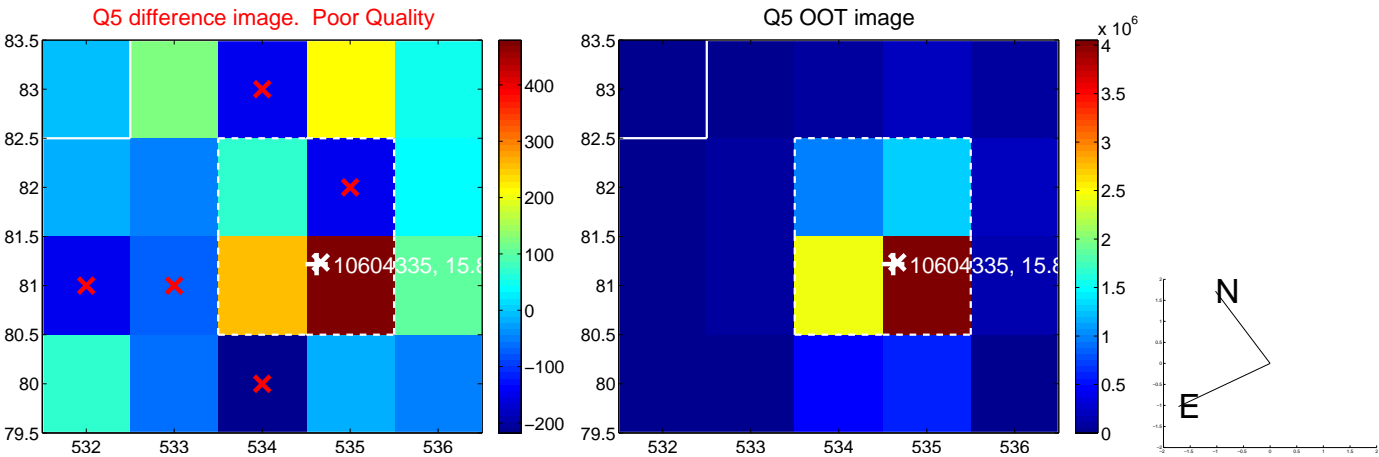


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

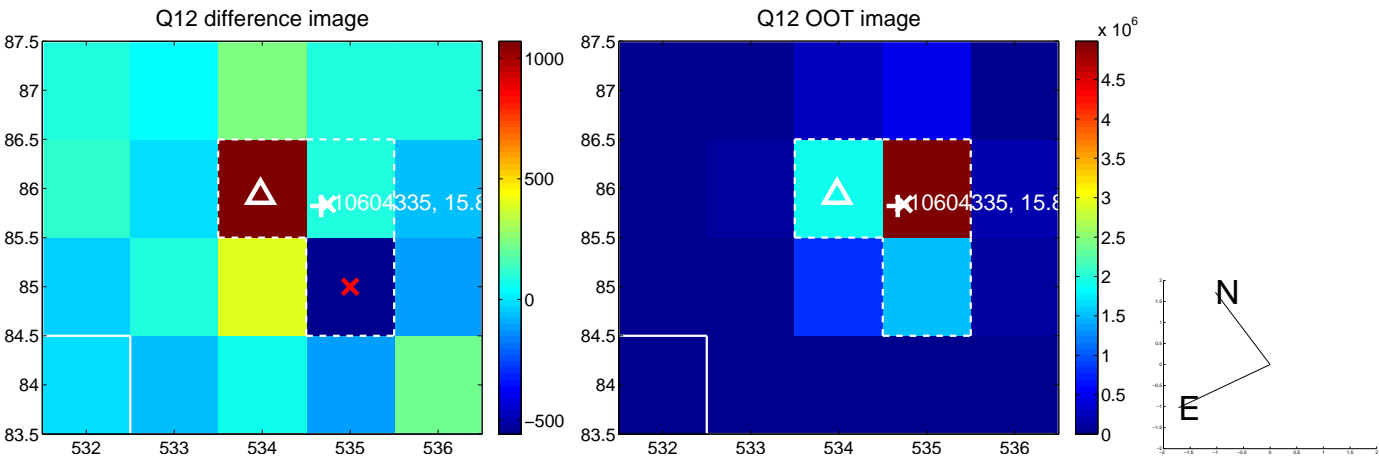
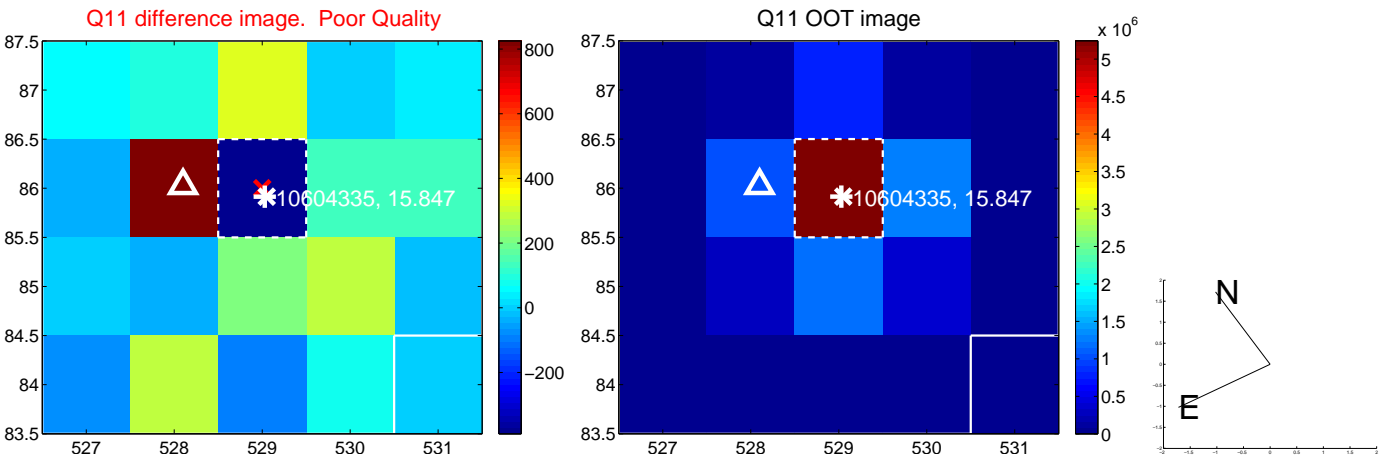
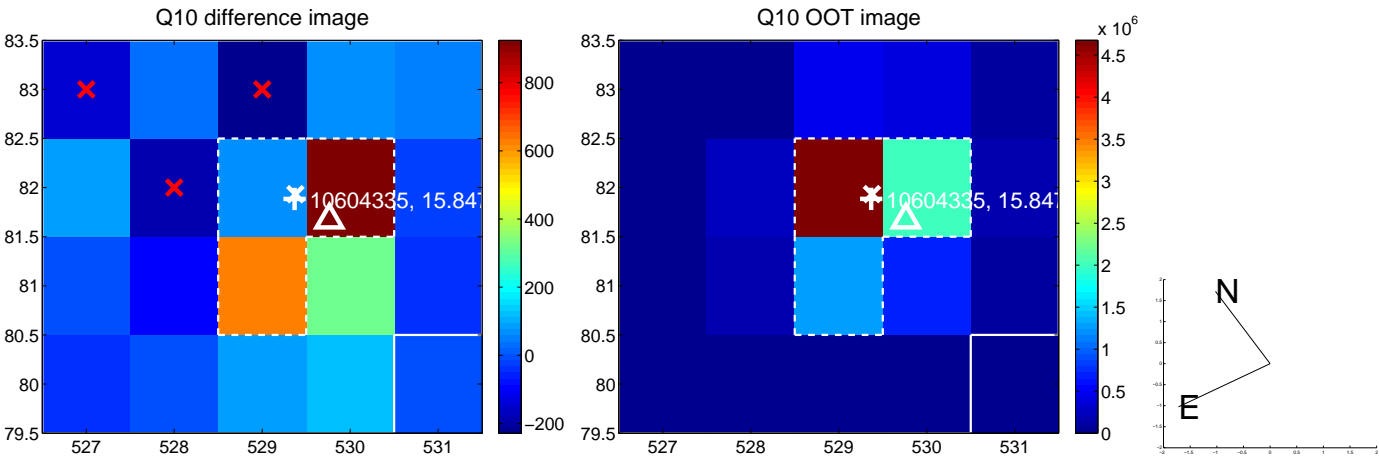
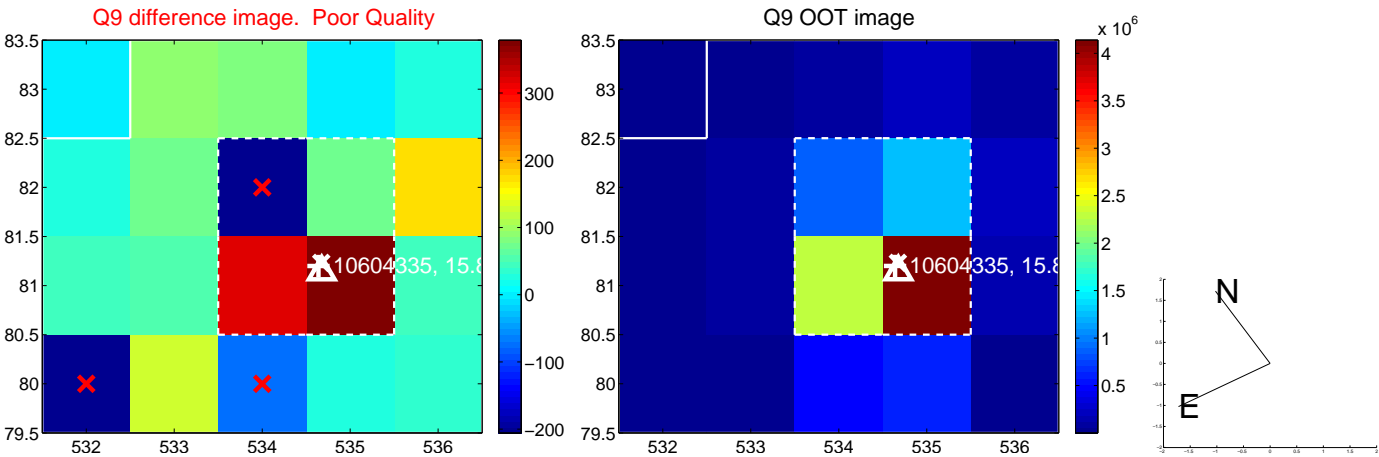
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



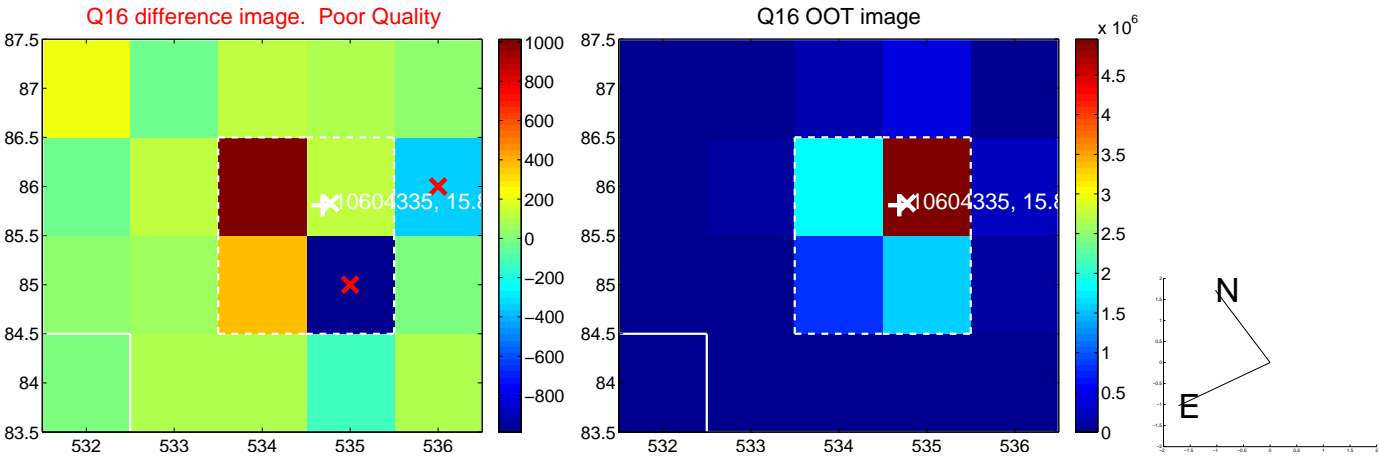
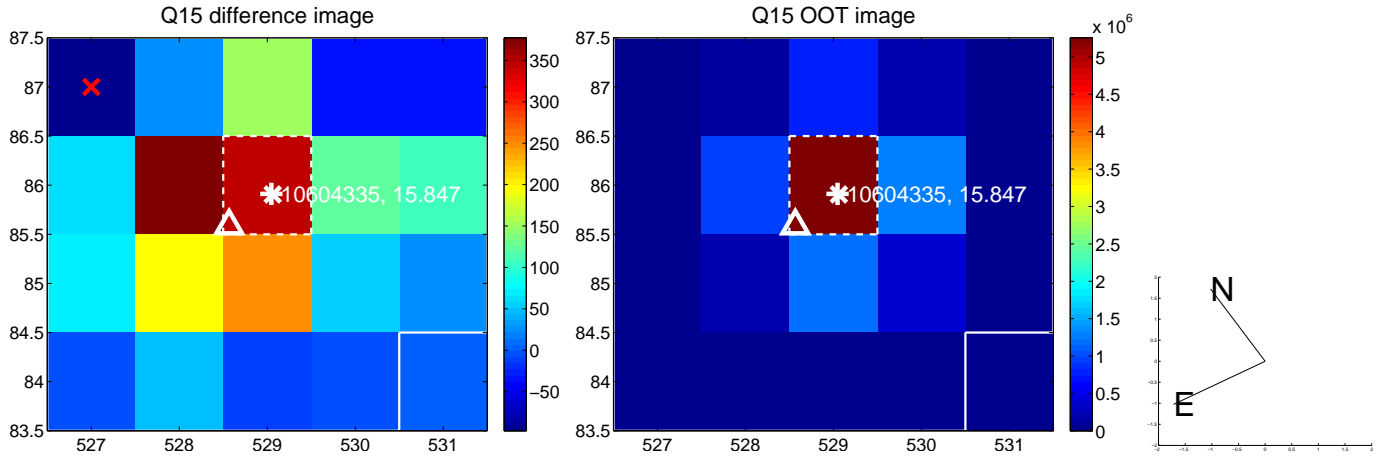
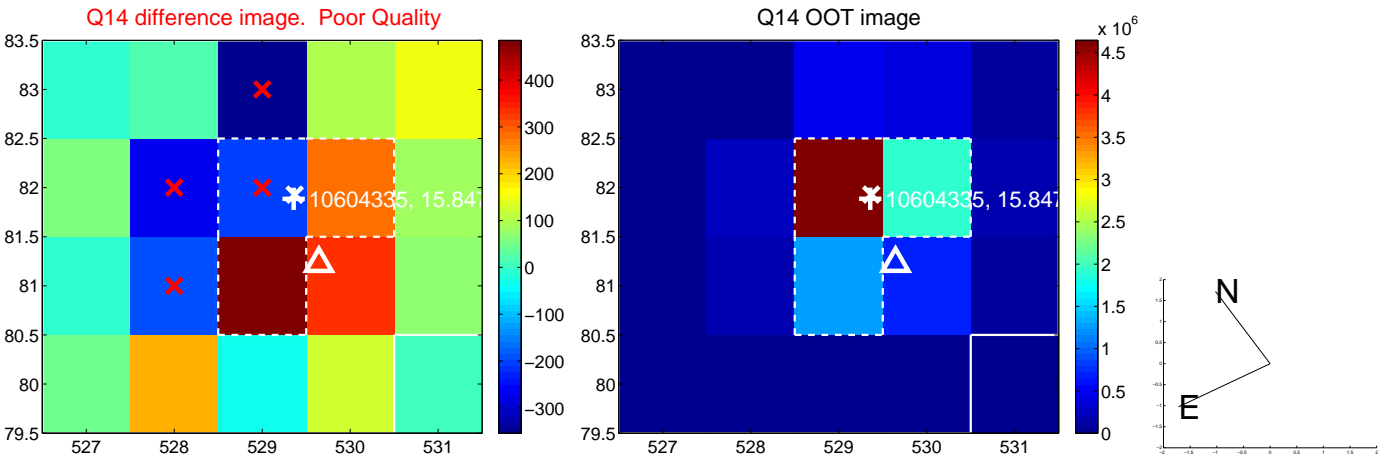
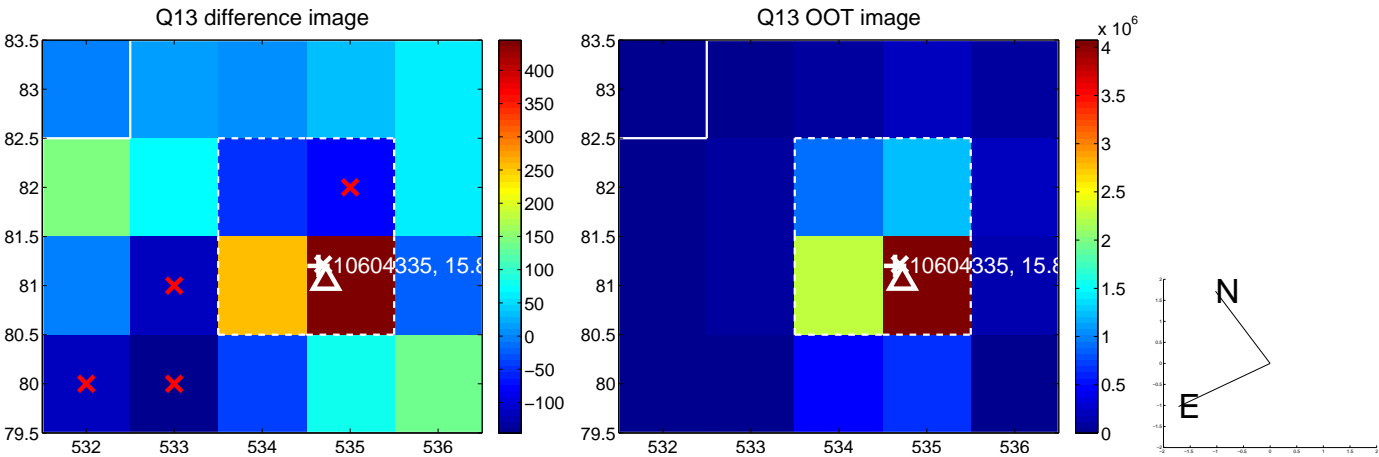
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



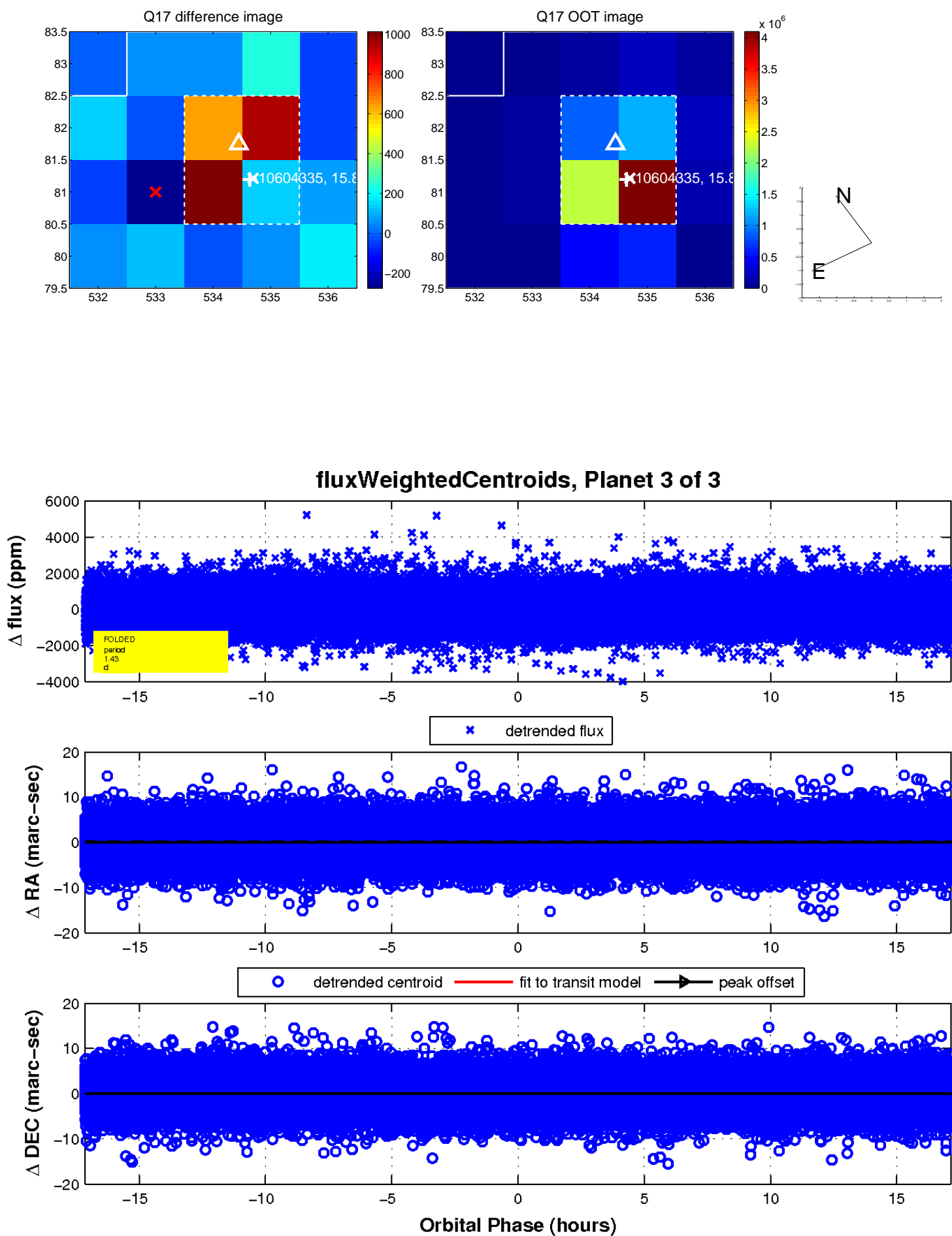
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

