

KIC 006891543

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})
006891543-01	OBS	1354.01	1.752532	132.733362	242.3	3.916	32.6	34.3	1.00	5739	2.14	1206.49
006891543-02	OBS	No	482.805581	535.332488	541.6	15.437	9.7	6.1	1.00	5739	2.53	0.67
006891543-03	OBS	No	1.752770	132.628365	92.6	21.033	7.8	10.7	1.00	5739	1.11	1206.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006891543-01	OBS	FP	0.00	0	0	1	1	CENT_RESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
006891543-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006891543-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—RESIDUAL_TCE—CENT_FEW_DIFFS

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

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

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

Ephemeris Match Information For 006891543-01

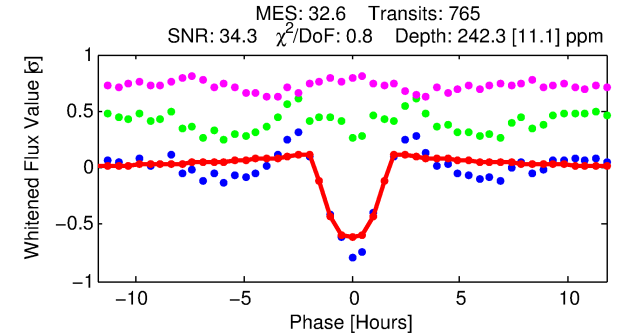
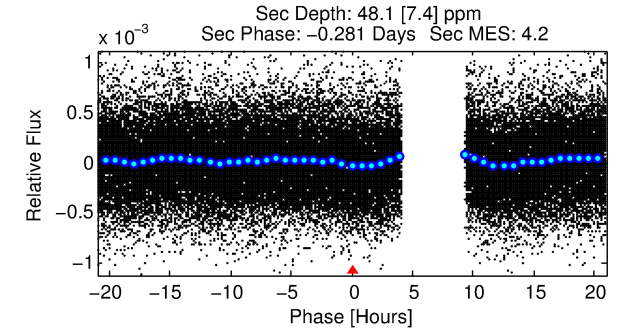
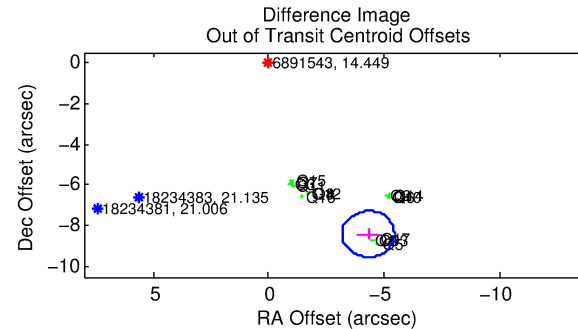
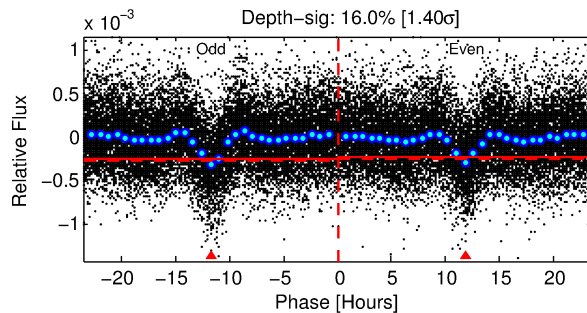
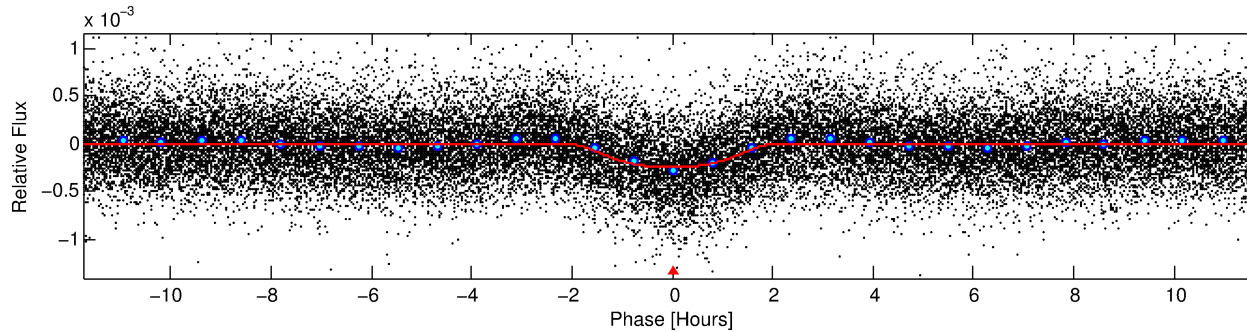
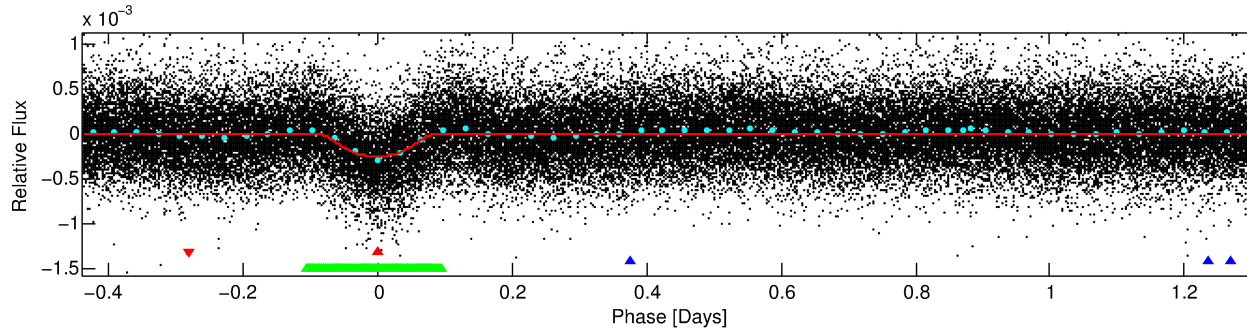
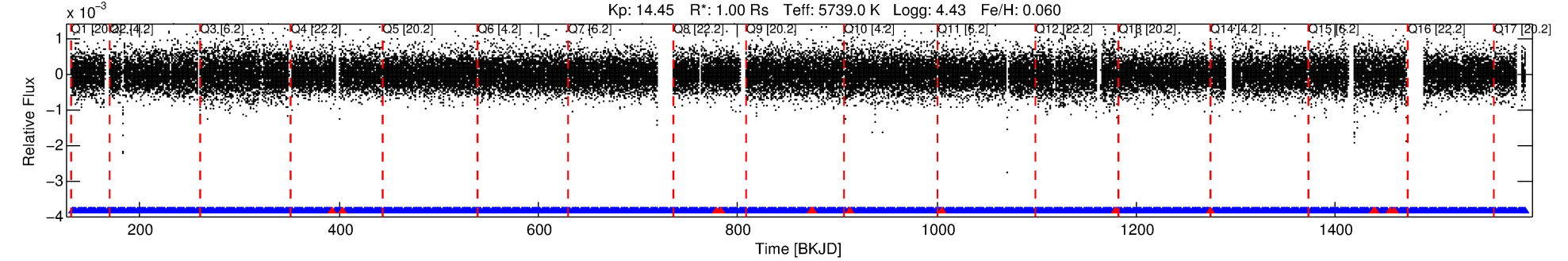
TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist ($''$)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
006891543-01	6891543	5335.01	6891512	1:1	25.0	-2	-6	11.39	14.45	1526.30	Direct-PRF	0	1.34	0.66

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 6891543 Candidate: 1 of 3 Period: 1.753 d
KOI: K01354.01 Corr: 0.842

Kp: 14.45 R*: 1.00 Rs Teff: 5739.0 K Logg: 4.43 Fe/H: 0.060



DV Fit Results:

Period = 1.75253 [0.00000] d
Epoch = 132.7334 [0.0015] BKJD
Rp/R* = 0.0197 [0.0006]
a/R* = 1.39 [0.04]
b = 0.98 [0.00]
Seff = 1206.49 [438.92]
Teq = 1503 [137] K
Rp = 2.14 [0.59] Re
a = 0.0283 [0.0066] AU
Ag = 4.61 [1.76] [2.05σ]
Teffp = 3405 [174] K [8.58σ]

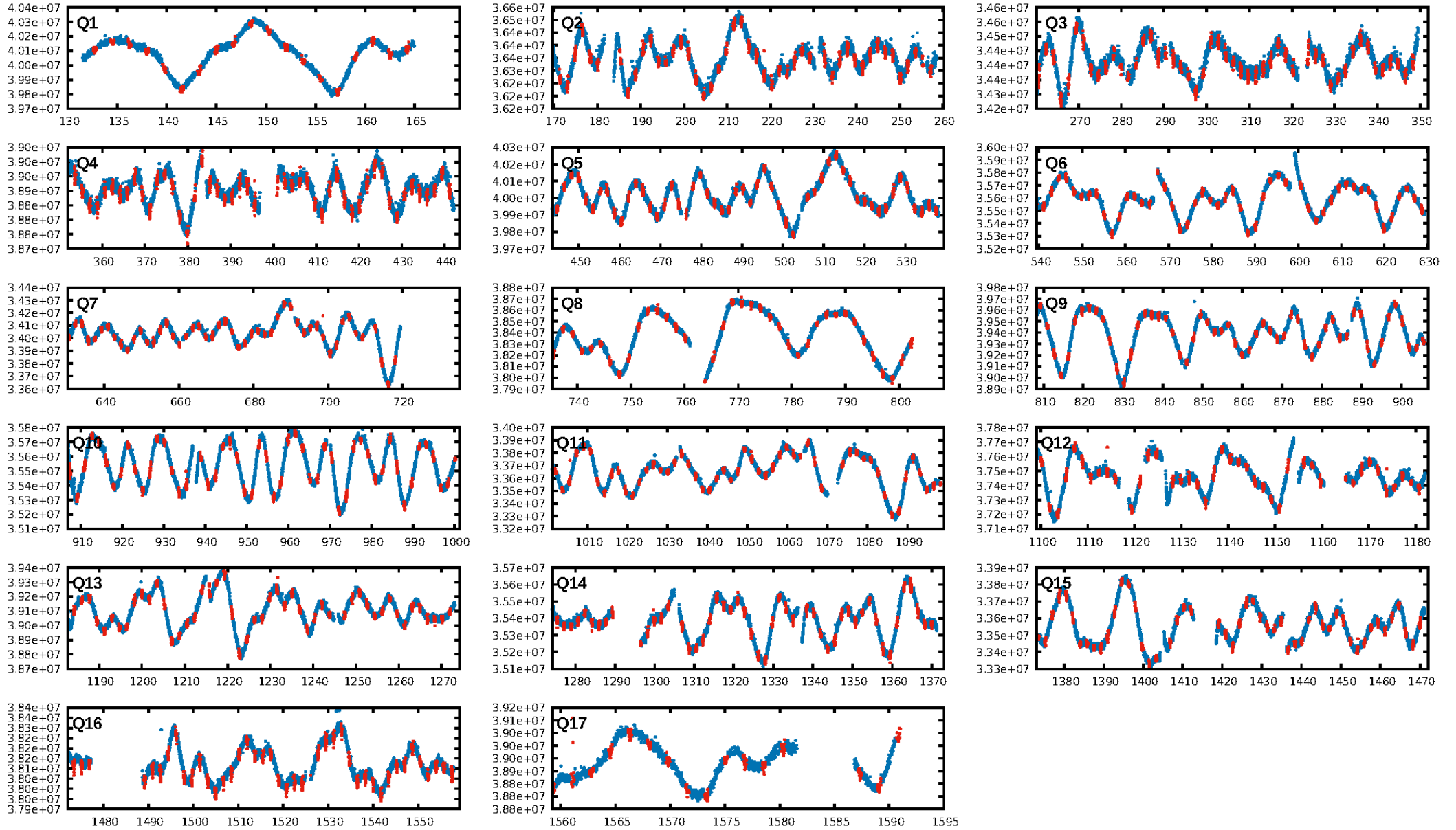
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [716/730]
GhostDiagnostic-chr: -0.1409
Centroid-sig: 0.0%
Centroid-so: 10.726 arcsec [29.35σ]
OotOffset-rm: 9.441 arcsec [25.11σ]
KicOffset-rm: 9.364 arcsec [23.41σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.76 [13/17]
DiffImageOverlap-fno: 0.00 [0/17]

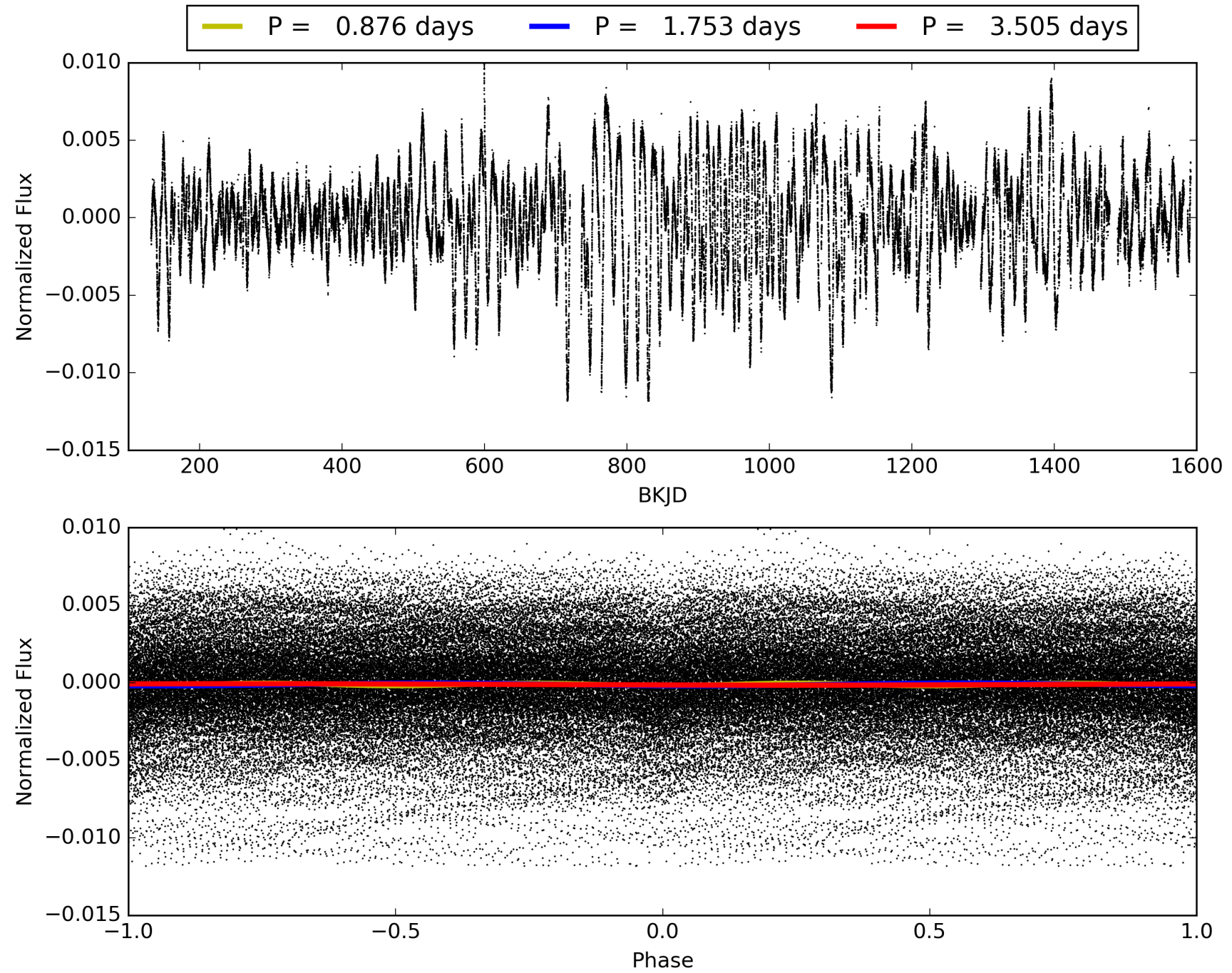
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 16:51:53 Z

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

TCE 006891543-01, PDC Light Curves

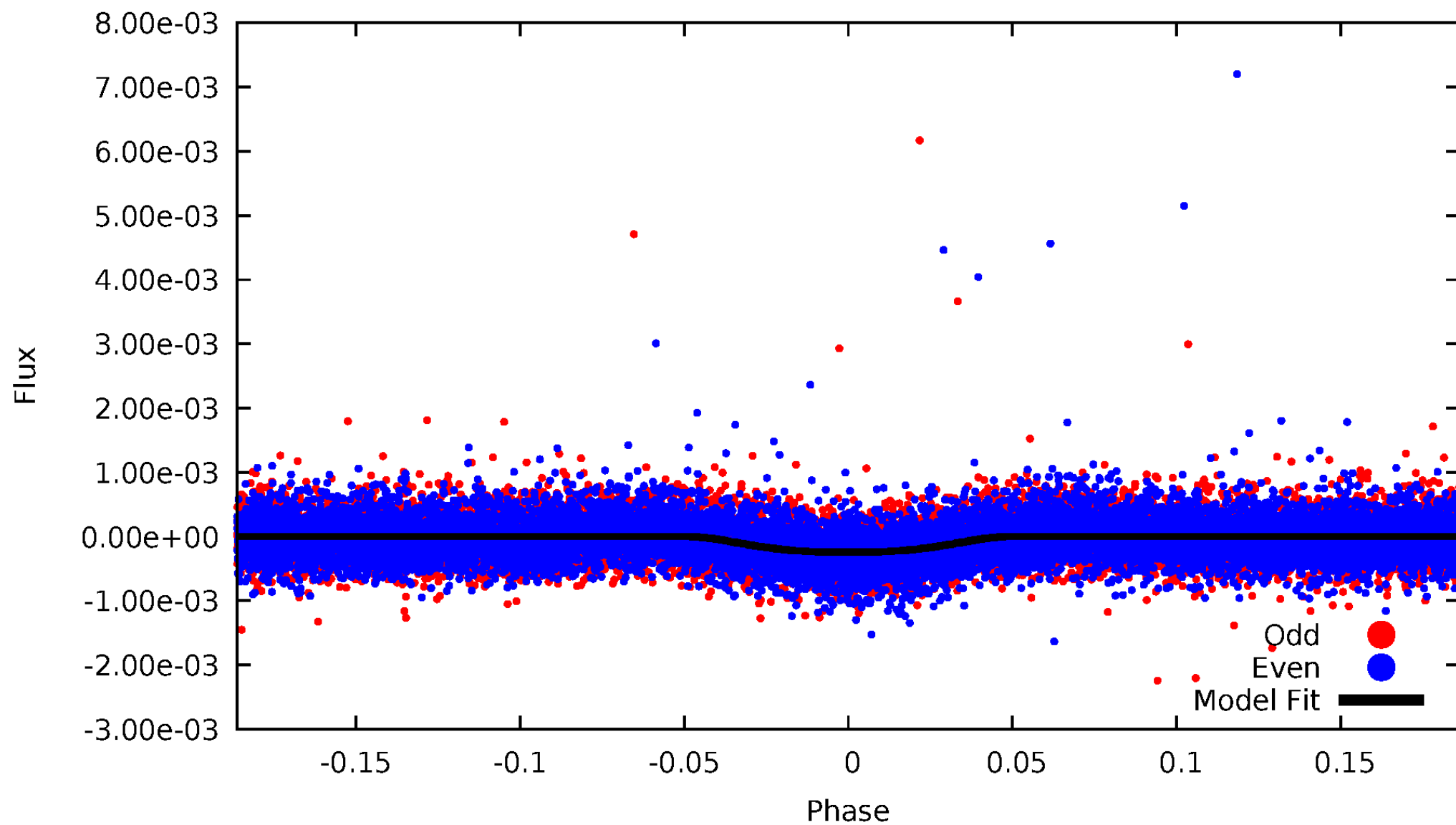


TCE 006891543-01



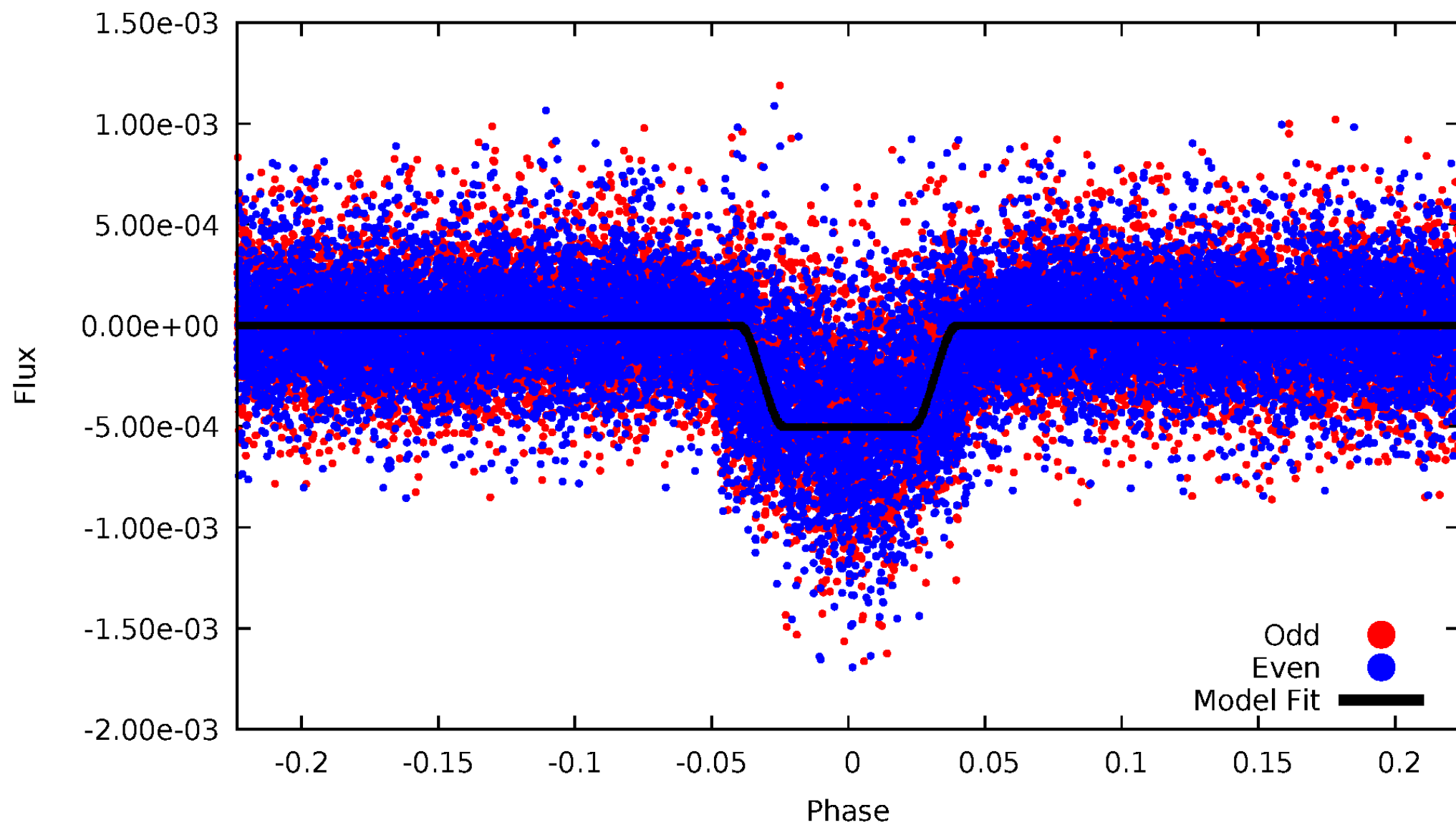
DV Odd/Even

TCE 006891543-01

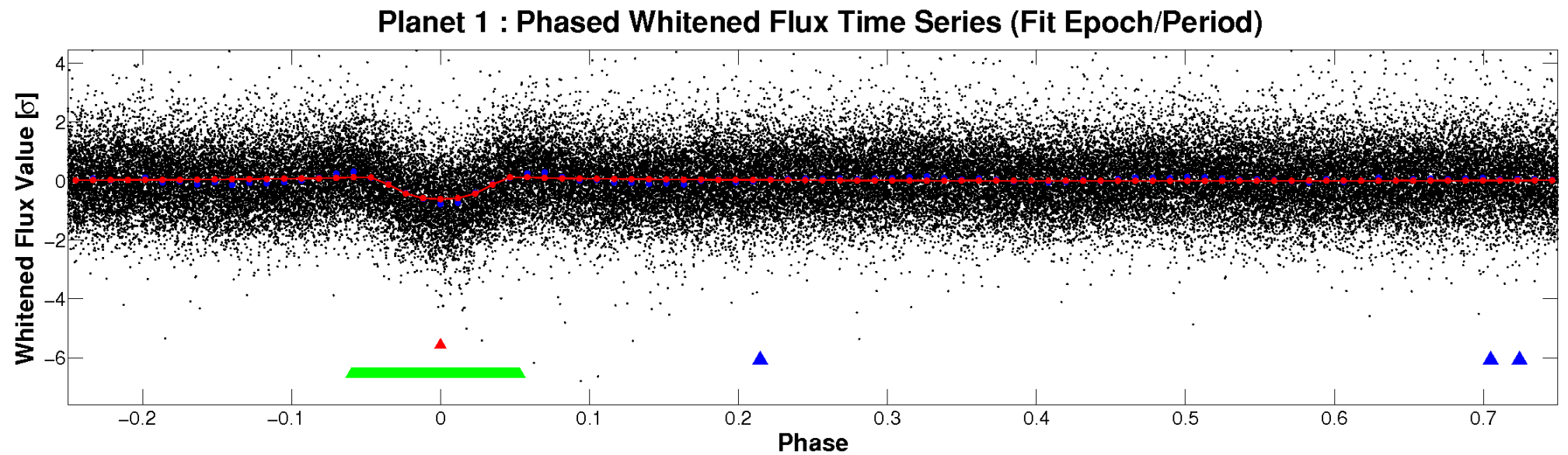
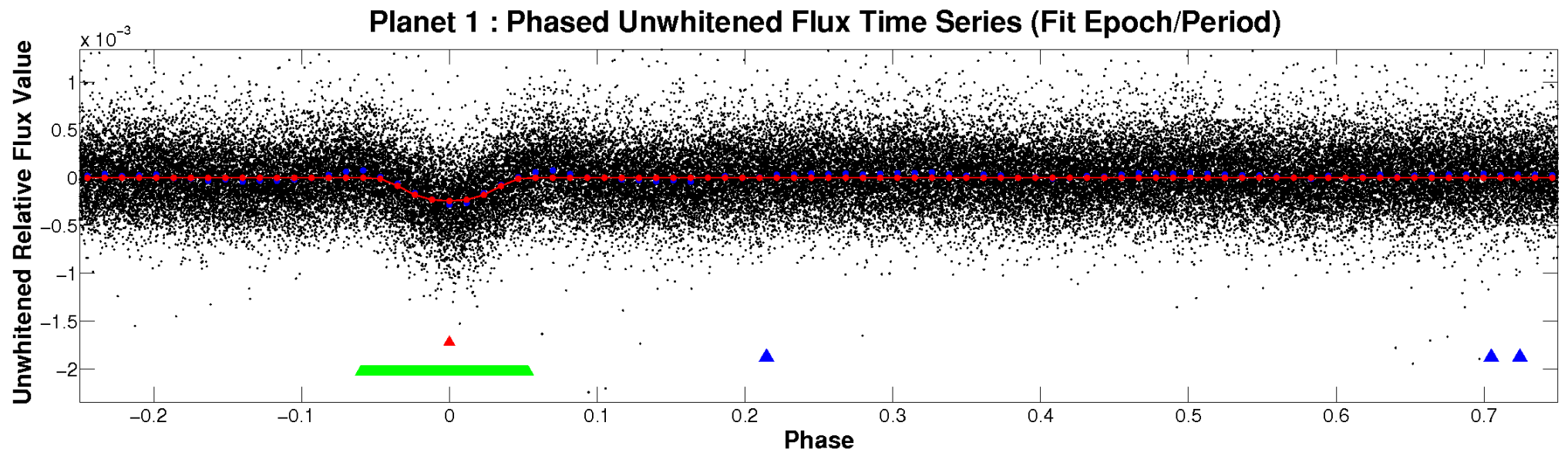


ALT Odd/Even

TCE 006891543-01

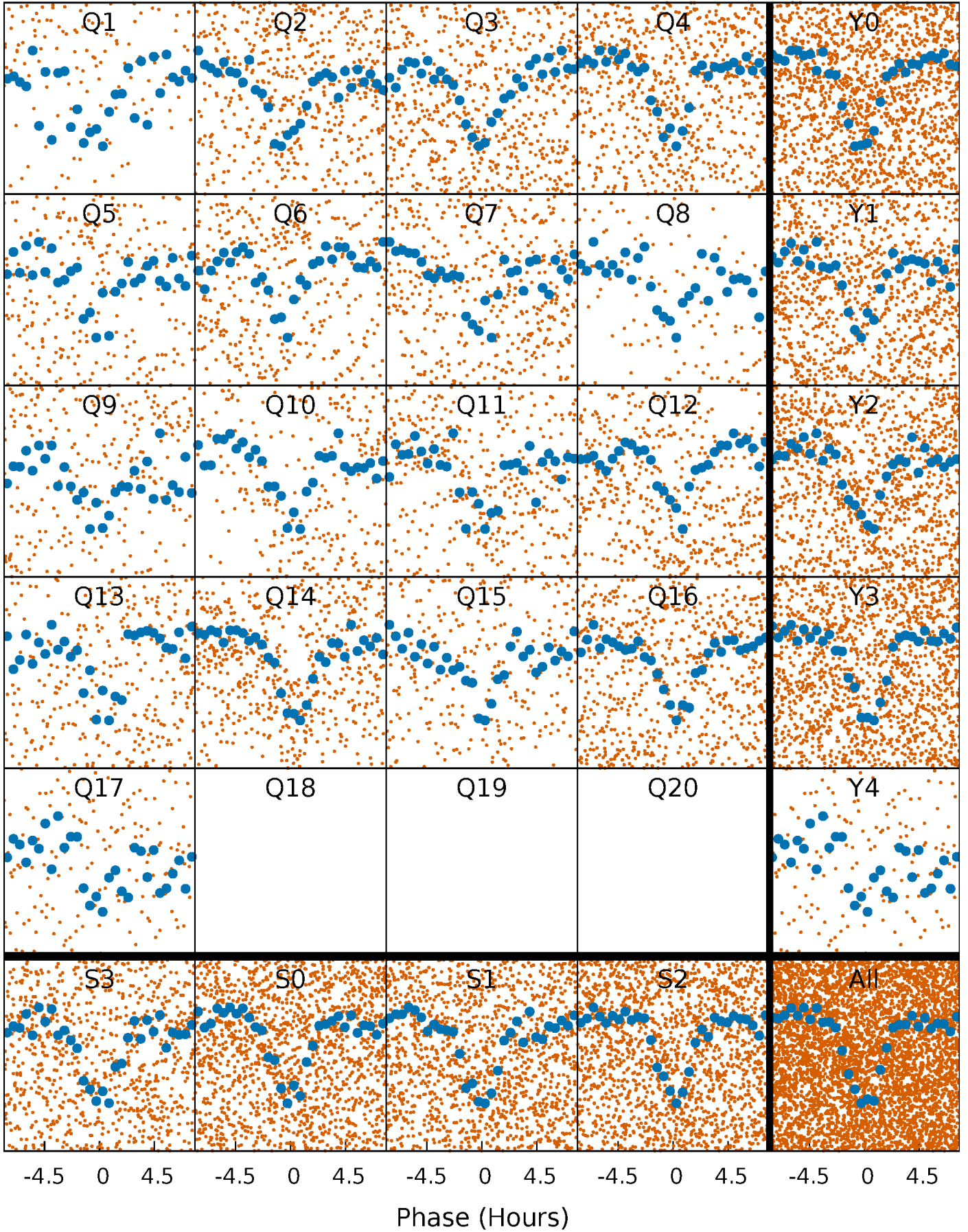


Non-Whitened Vs. Whitened Light Curve



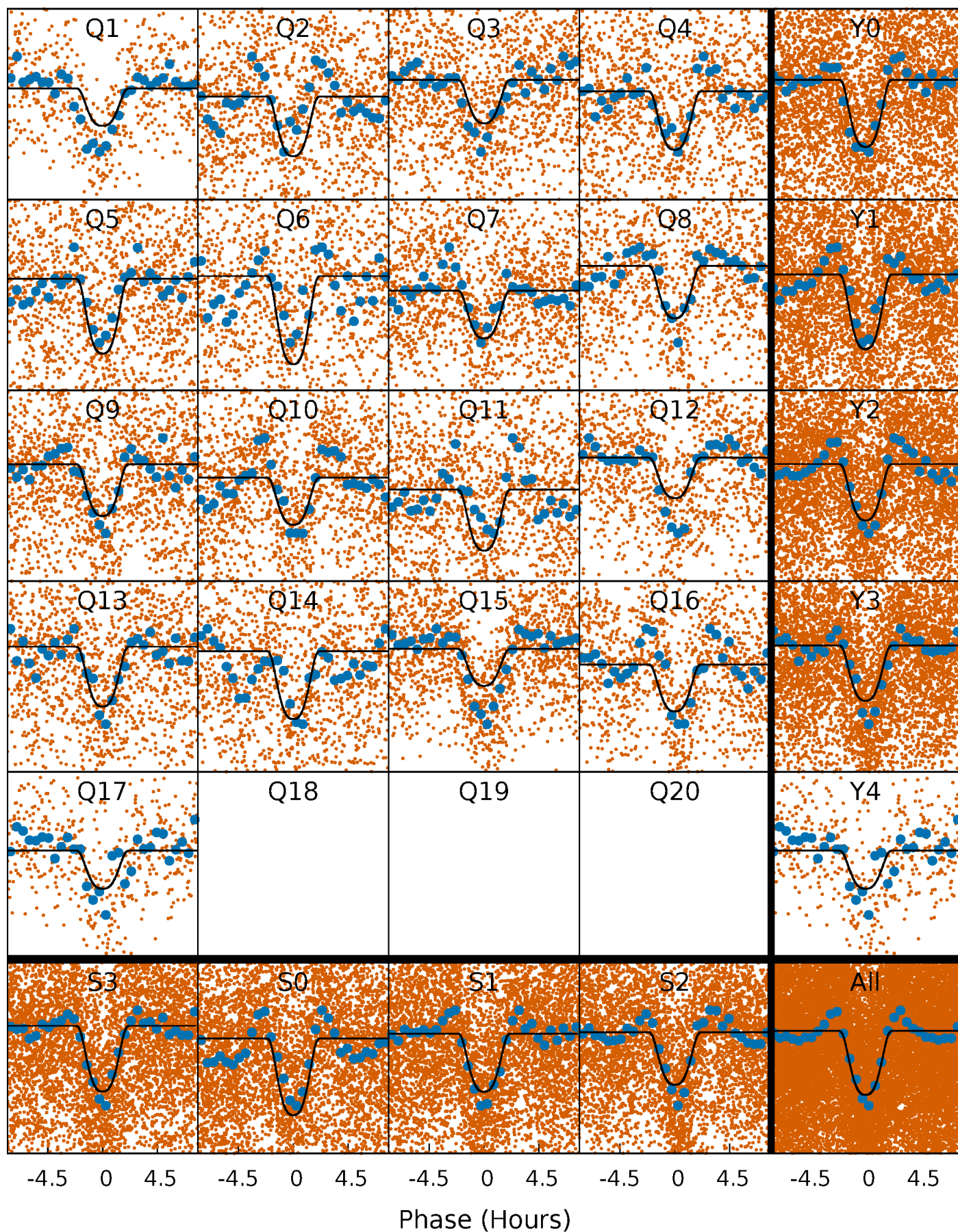
PDC Quarter-Phased Transit Curves

TCE 006891543-01 P= 1.752532 Days $T_0=132.733362$ (BKJD)



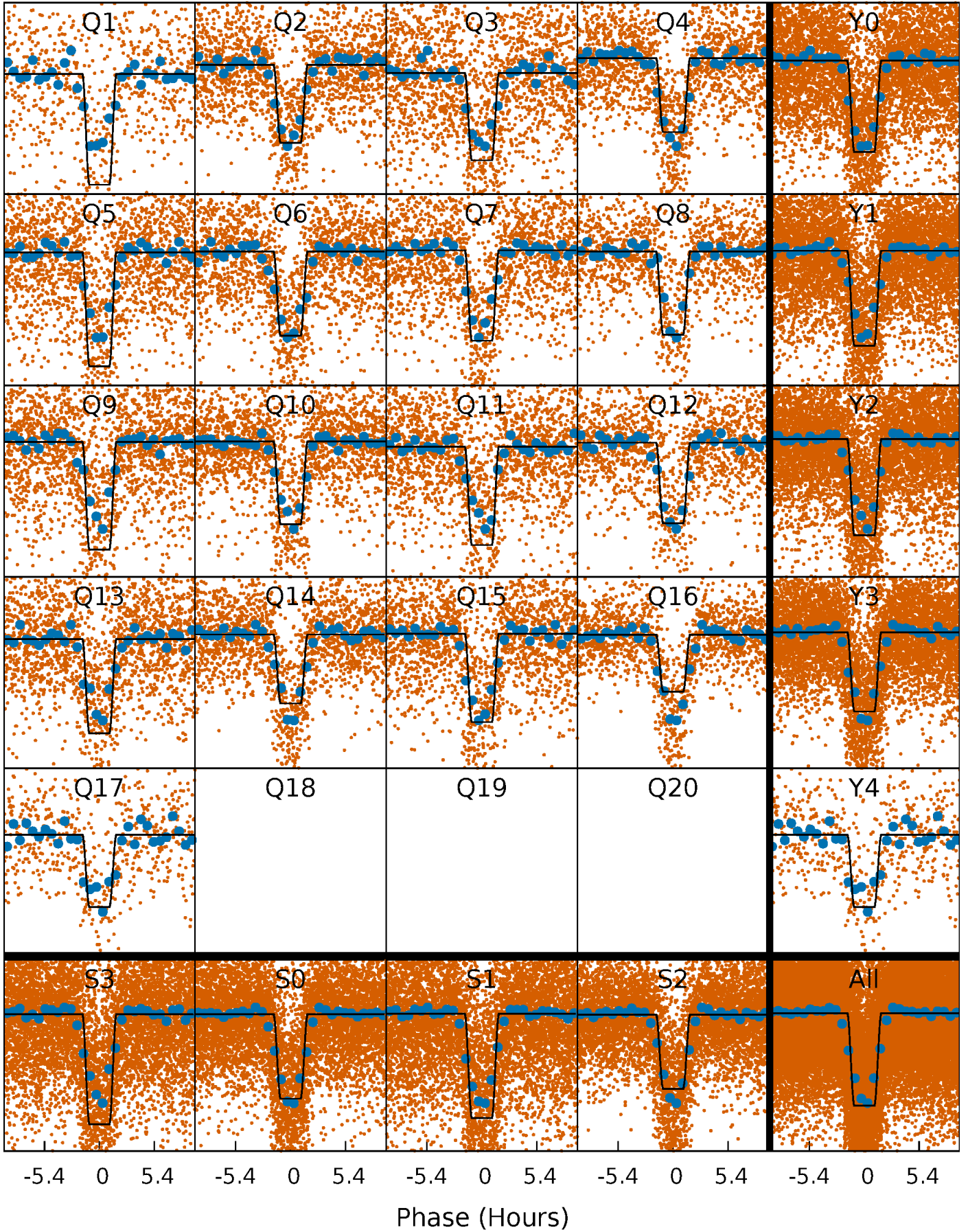
DV Quarter-Phased Transit Curves

TCE 006891543-01 P= 1.752532 Days $T_0=132.733362$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

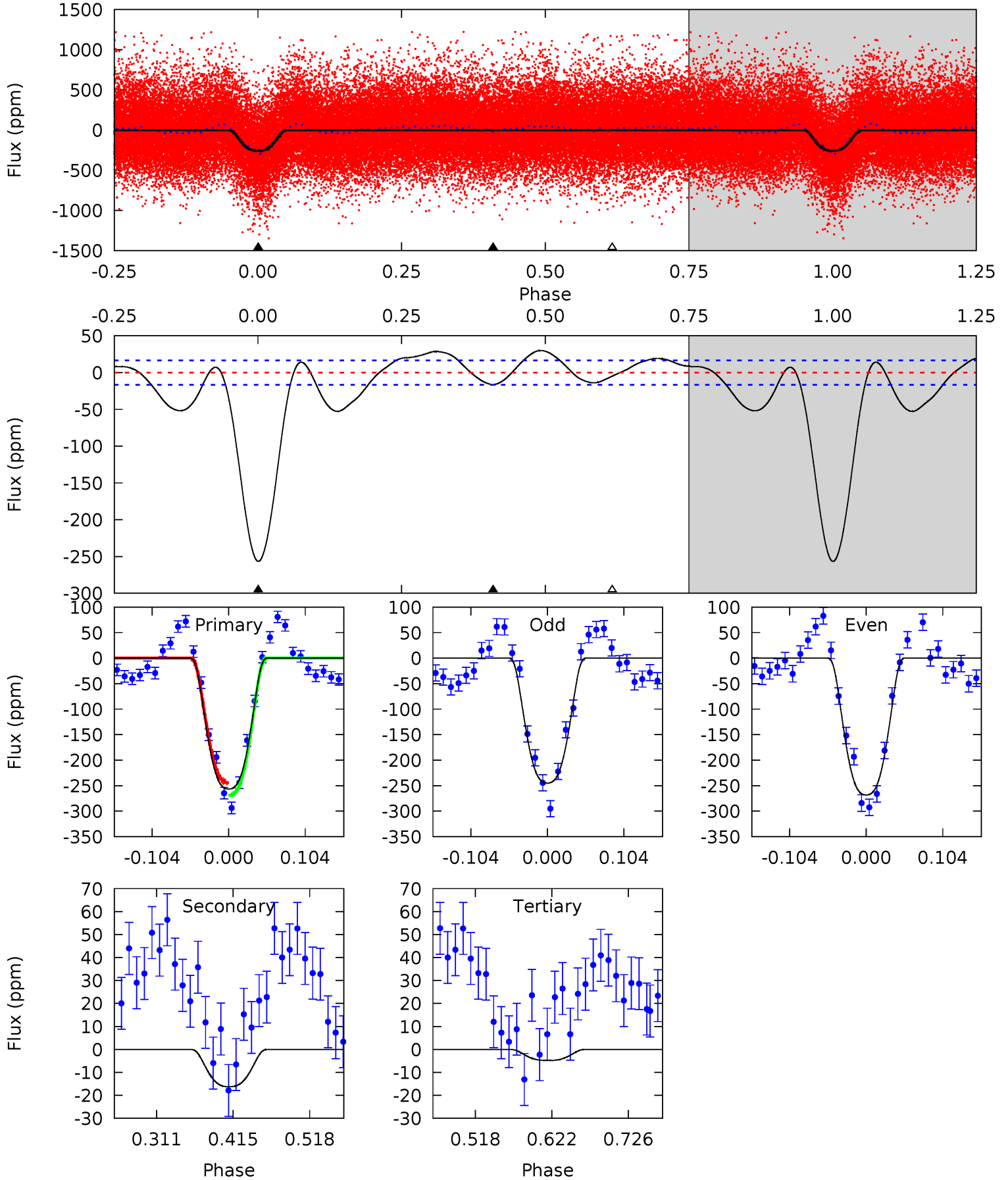
TCE 006891543-01 P= 1.752563 Days $T_0=132.721175$ (BKJD)



DV Model-Shift Uniqueness Test

006891543-01, P = 1.752532 Days, E = 130.980830 Days

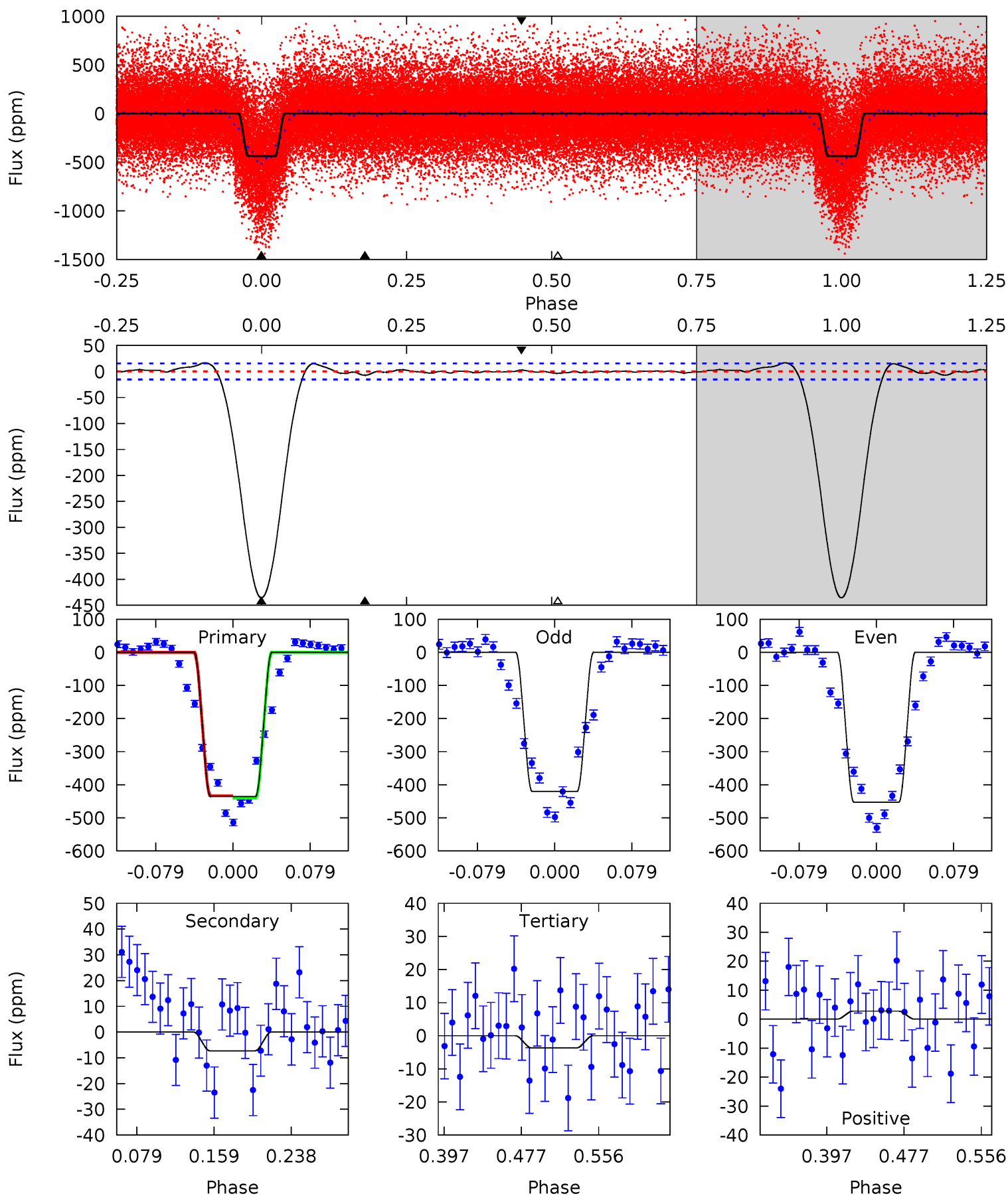
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
70.3	4.45	1.33	0	4.56	1.63	6.65	69.0	70.3	3.13	4.45	3.20	1.03	0.10	3.38



Alt Model-Shift Uniqueness Test

006891543-01, P = 1.752563 Days, E = 130.968612 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
129.1	2.16	1.09	0.83	4.61	1.75	1.27	128.0	128.3	1.07	1.33	4.81	1.02	0.04	1.07



Stellar Parameters For KIC 006891543

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5739^{+156}_{-173}	$4.433^{+0.081}_{-0.189}$	$0.060^{+0.250}_{-0.300}$	$0.996^{+0.274}_{-0.126}$	$0.980^{+0.114}_{-0.102}$	$1.397^{+0.591}_{-0.706}$
	+3%/-3%	+2%/-4%	+417%/-500%	+28%/-13%	+12%/-10%	+42%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006891543-01 / KOI 1354.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-16 ± 4	$2.18^{+0.34}_{-0.18}$	2130^{+144}_{-106}	3076^{+130}_{-160}	$1.432^{+0.448}_{-0.423}$
Alt.	-7 ± 3	$2.49^{+0.38}_{-0.22}$	2131^{+148}_{-102}	2433^{+289}_{-4563}	$0.486^{+0.289}_{-0.240}$

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 $A_{obs} \gg 1.0$

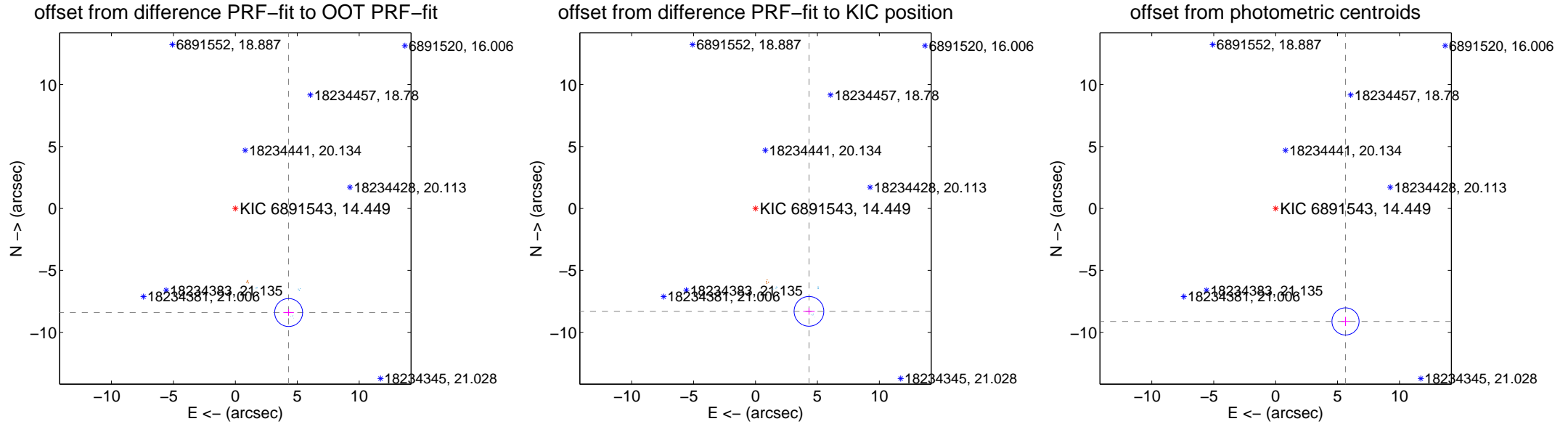
DV Centroid Data

Supplemental centroid analysis for 006891543-01. Kepler magnitude: 14.45. Transit SNR 34.29

There are 13 quarters with good PRF difference image offsets

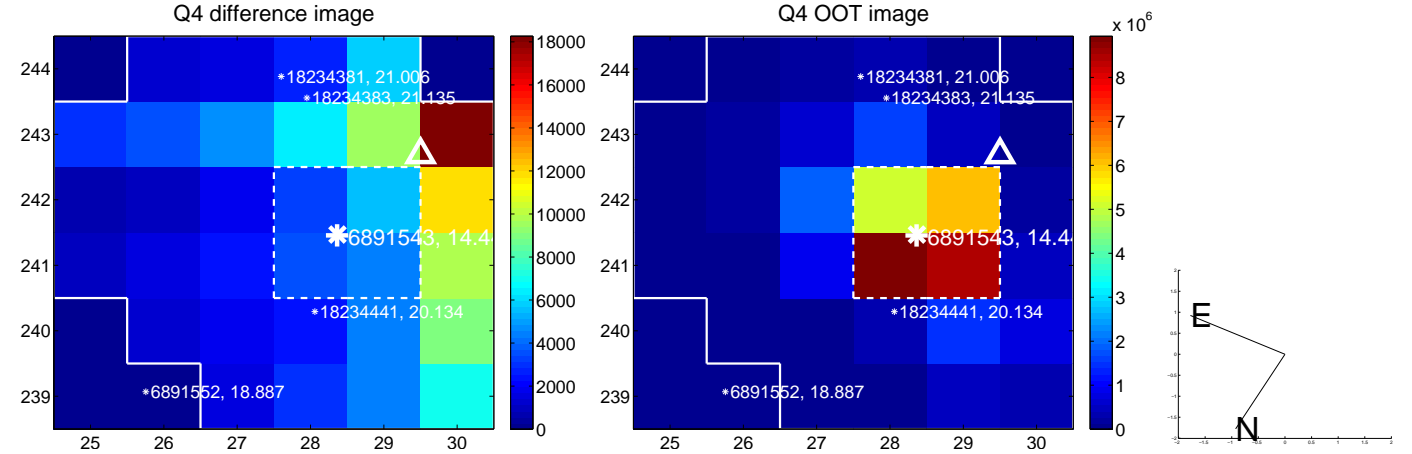
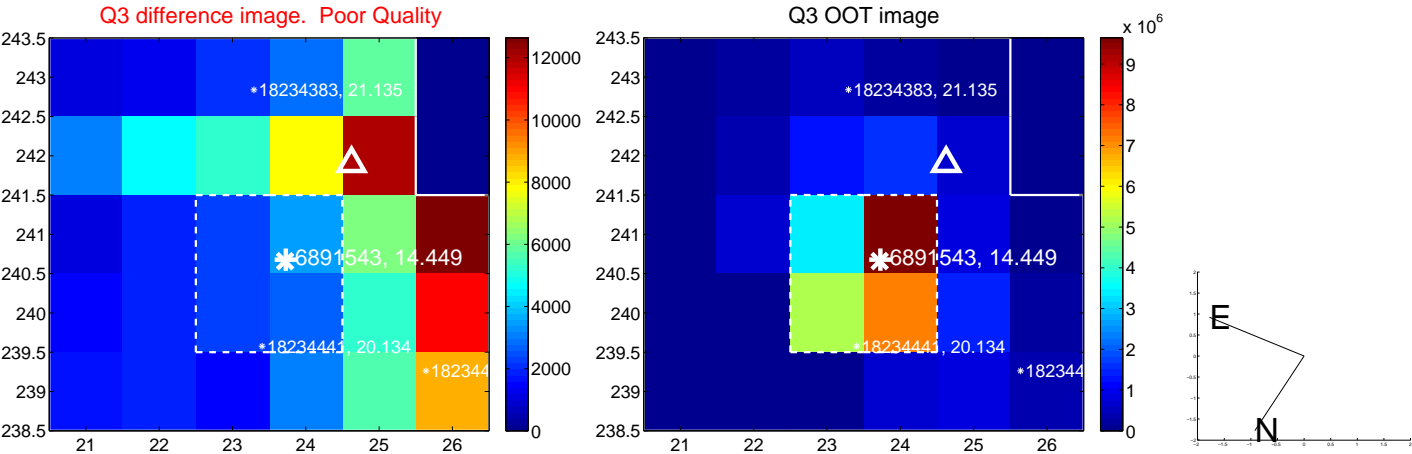
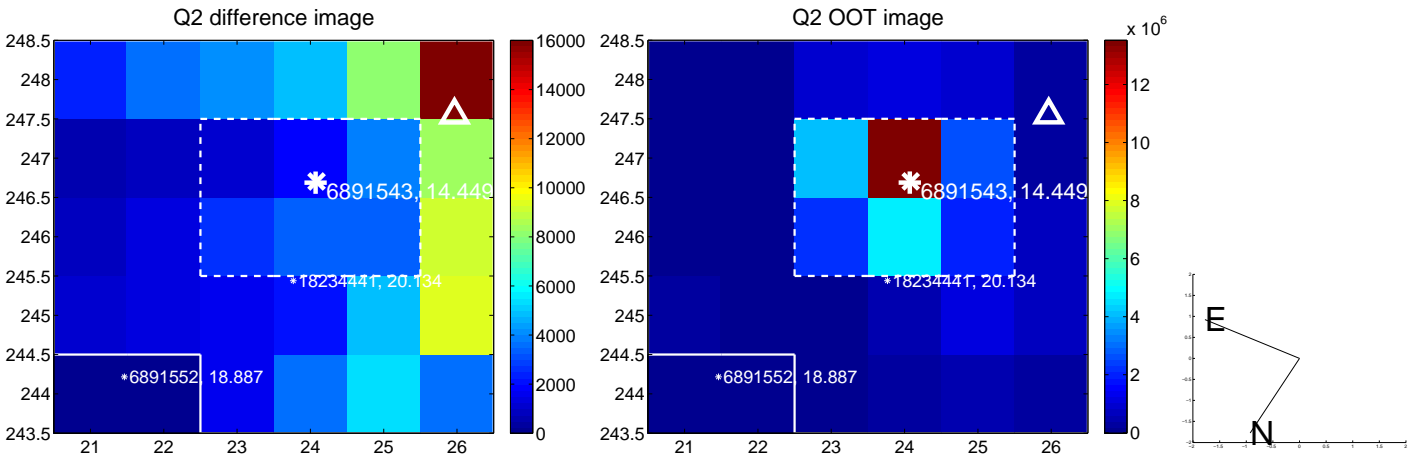
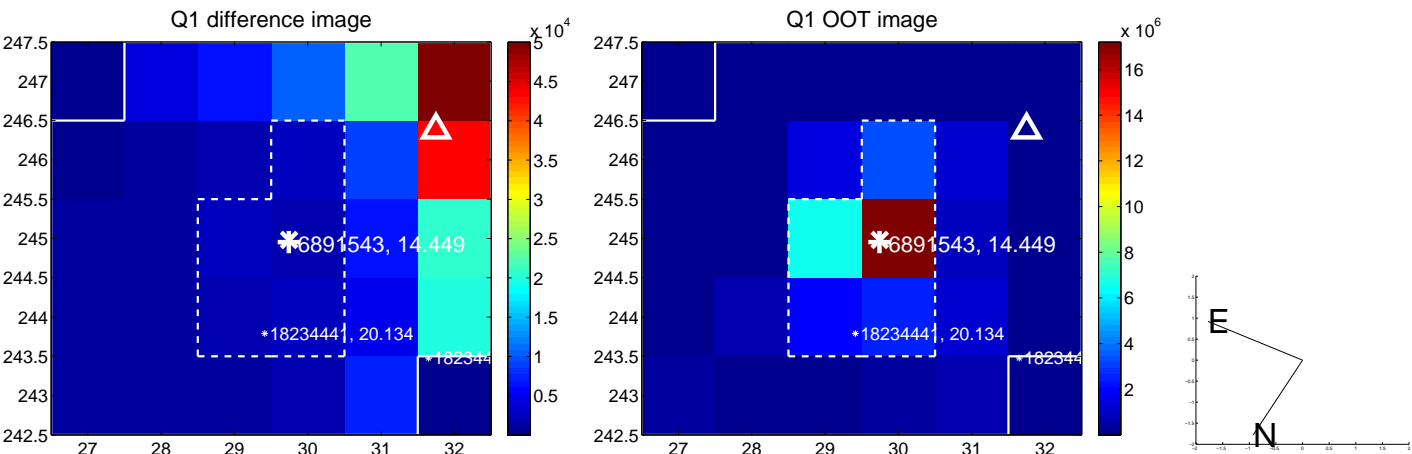
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.441 ± 0.376	25.11	-4.303 ± 0.423	-8.403 ± 0.261
PRF-fit source offset from KIC position	9.364 ± 0.400	23.41	-4.318 ± 0.458	-8.309 ± 0.274
photometric centroid source offset	10.73 ± 0.37	29.35	-5.64 ± 0.35	-9.12 ± 0.37

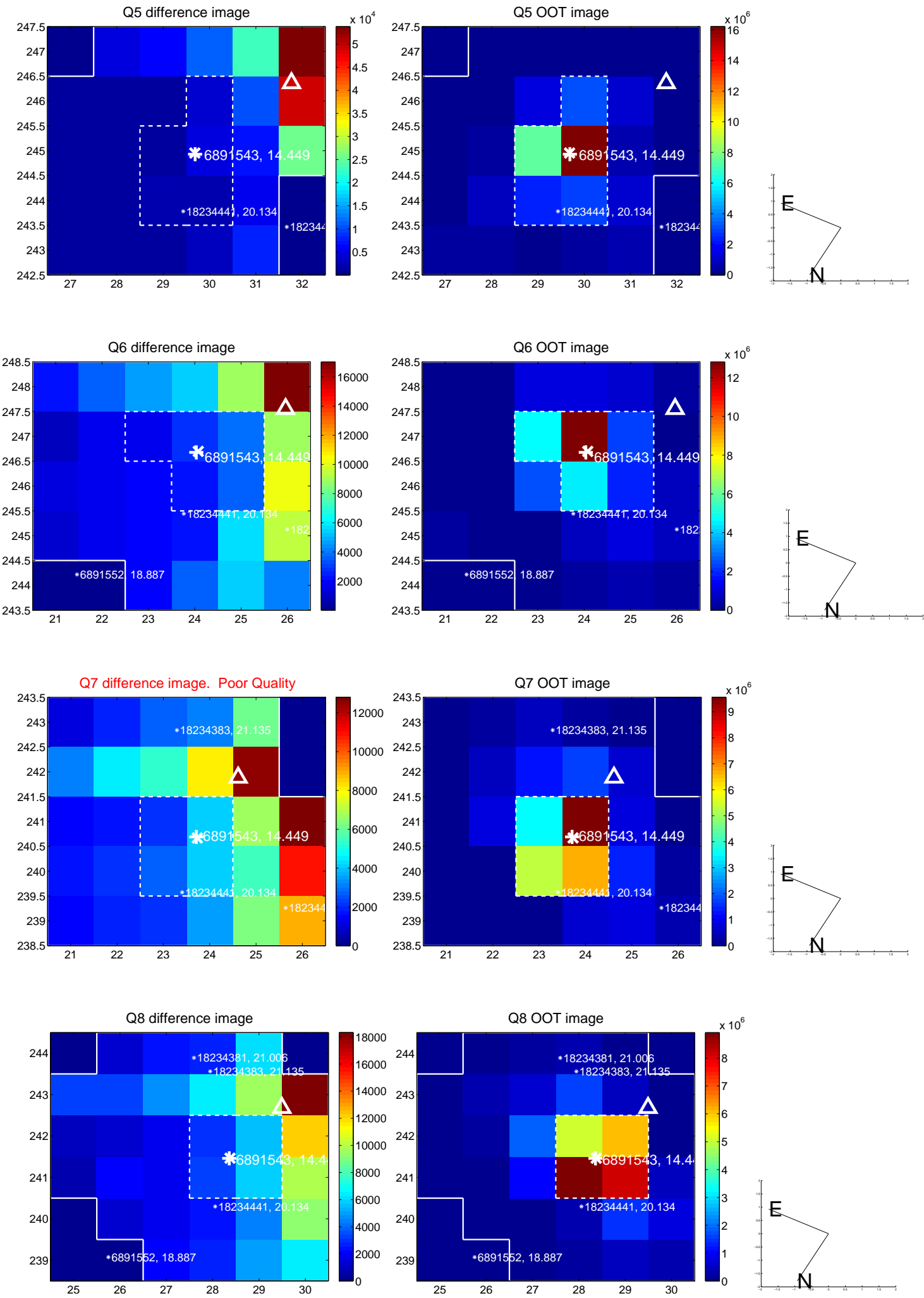


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

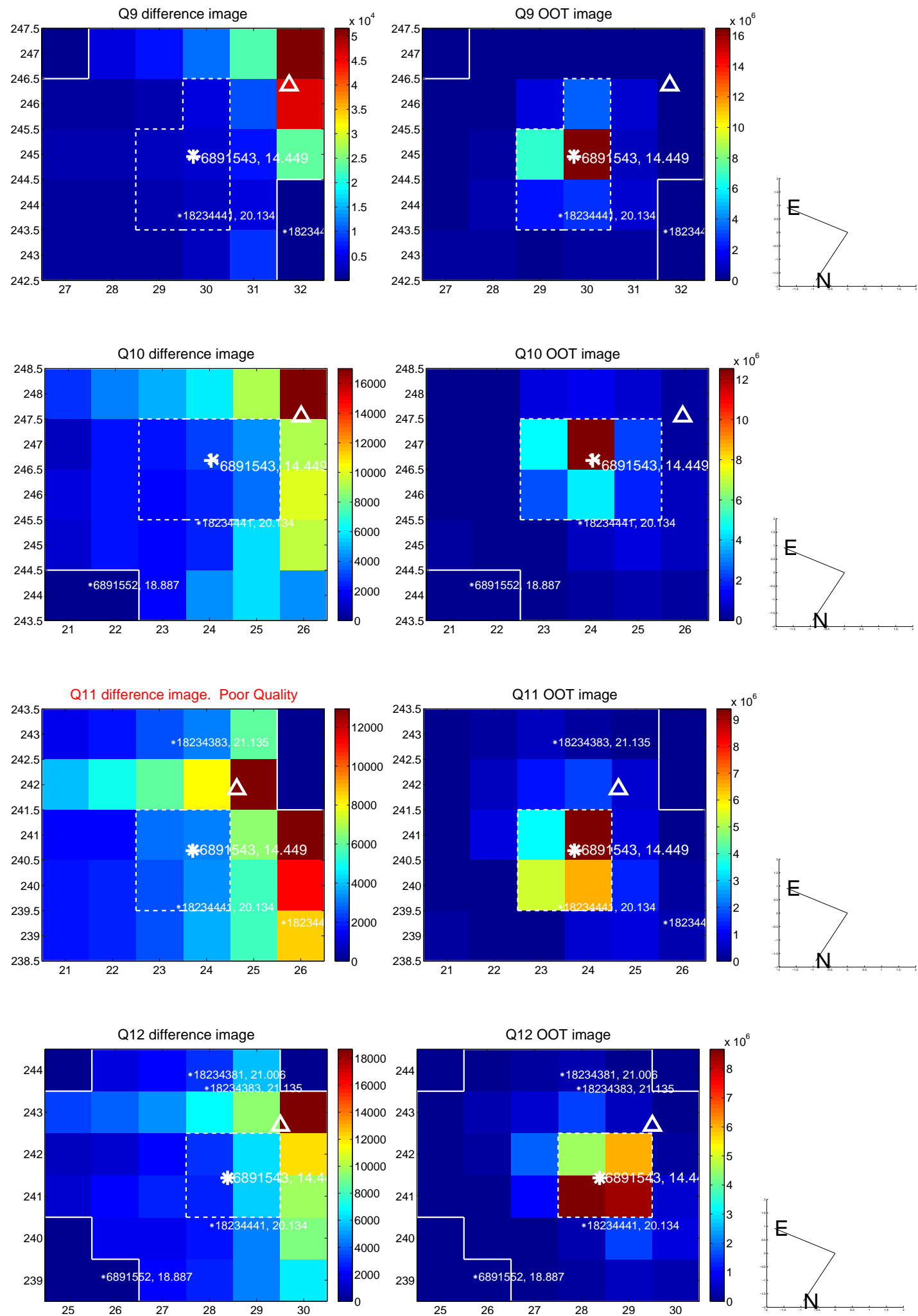
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



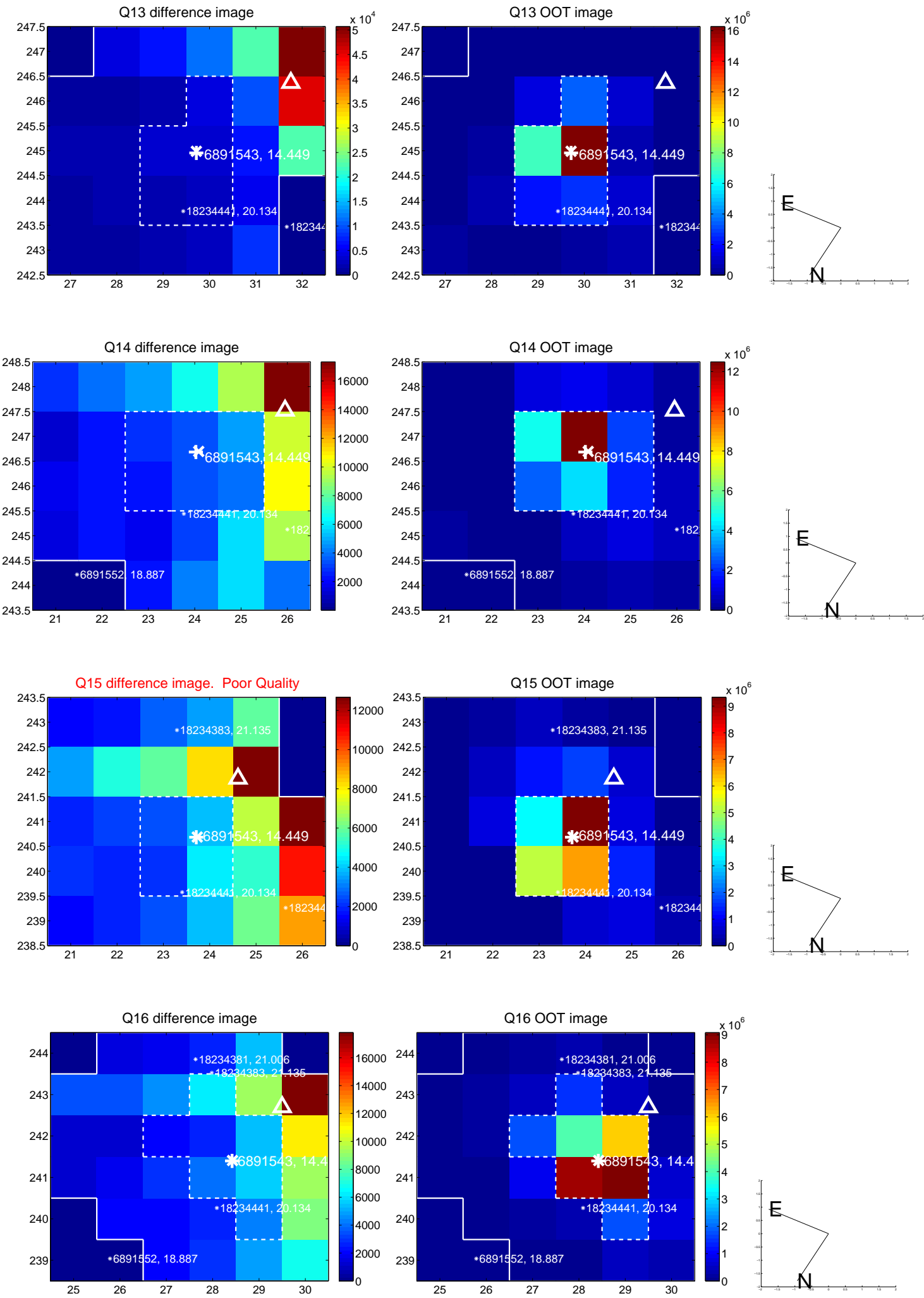
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



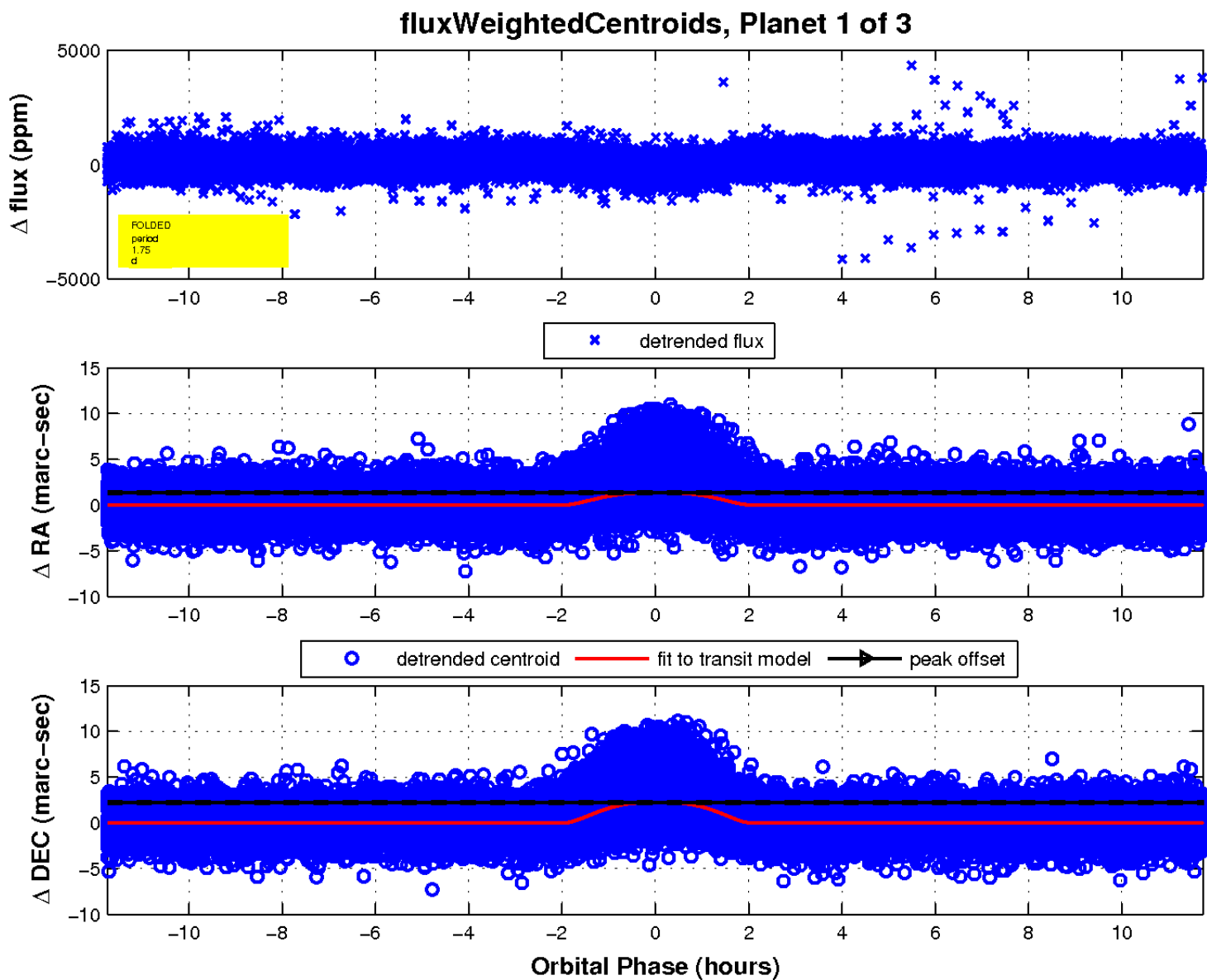
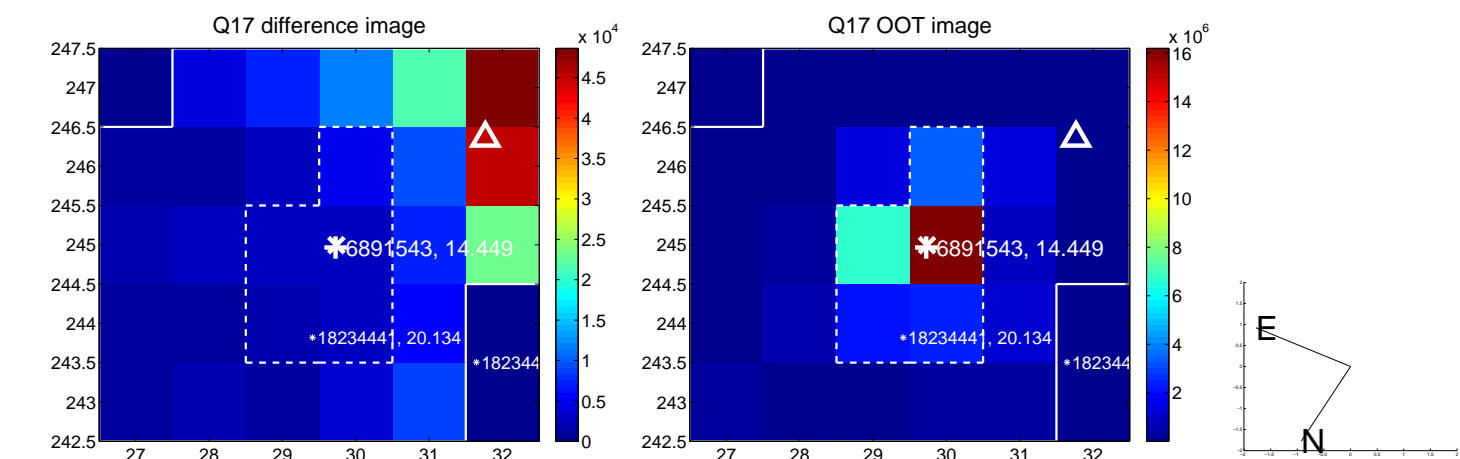
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



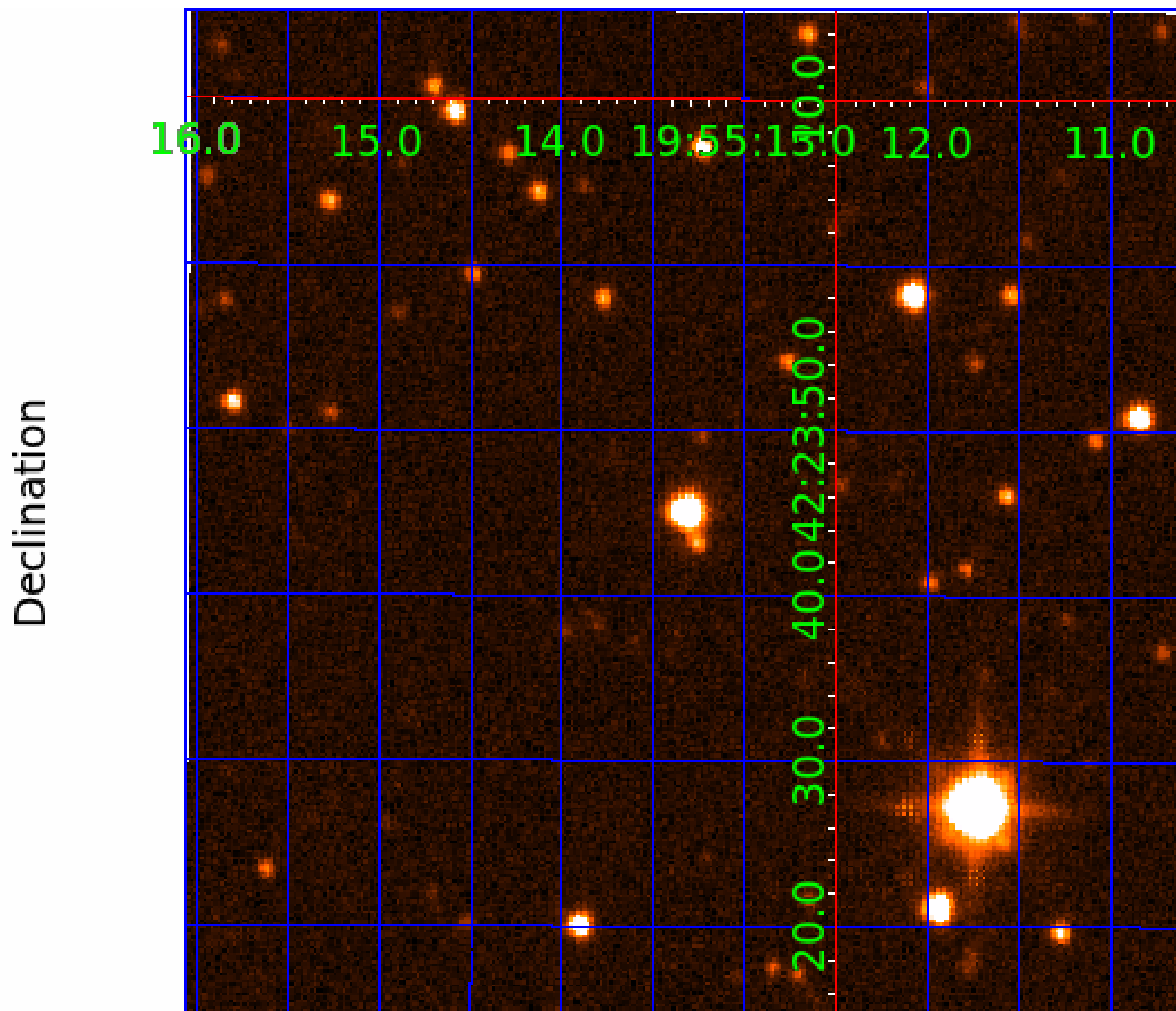
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006891543

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})
006891543-01	OBS	1354.01	1.752532	132.733362	242.3	3.916	32.6	34.3	1.00	5739	2.14	1206.49
006891543-02	OBS	No	482.805581	535.332488	541.6	15.437	9.7	6.1	1.00	5739	2.53	0.67
006891543-03	OBS	No	1.752770	132.628365	92.6	21.033	7.8	10.7	1.00	5739	1.11	1206.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006891543-01	OBS	FP	0.00	0	0	1	1	CENT_RESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
006891543-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006891543-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—RESIDUAL_TCE—CENT_FEW_DIFFS

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

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

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

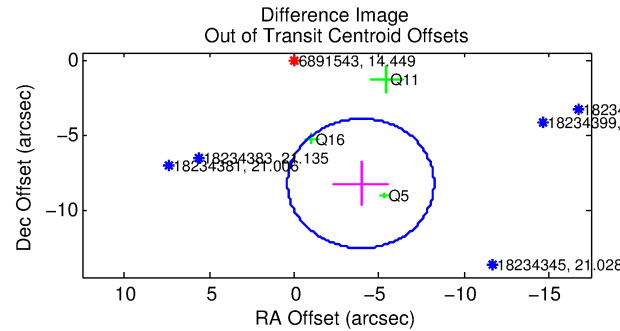
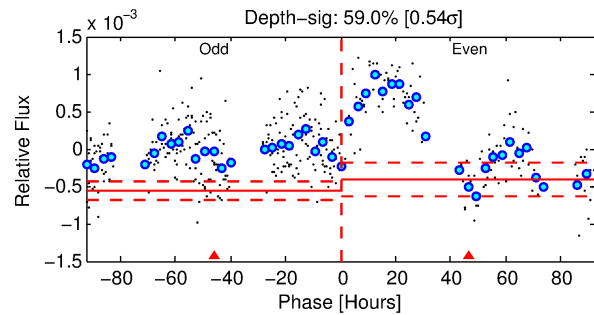
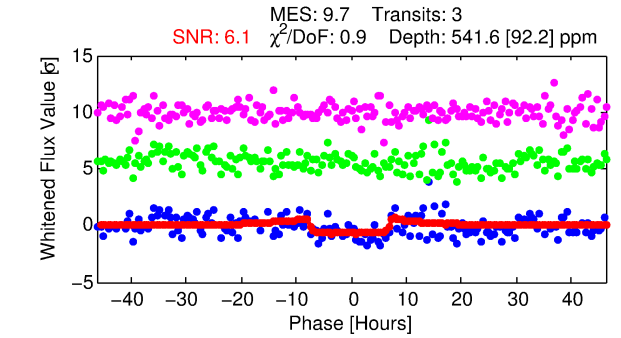
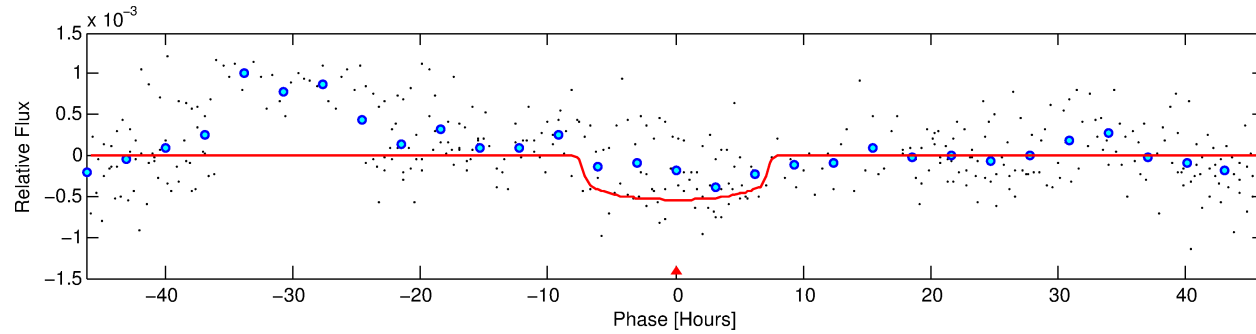
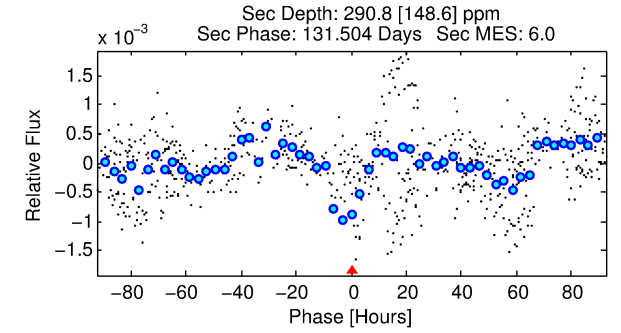
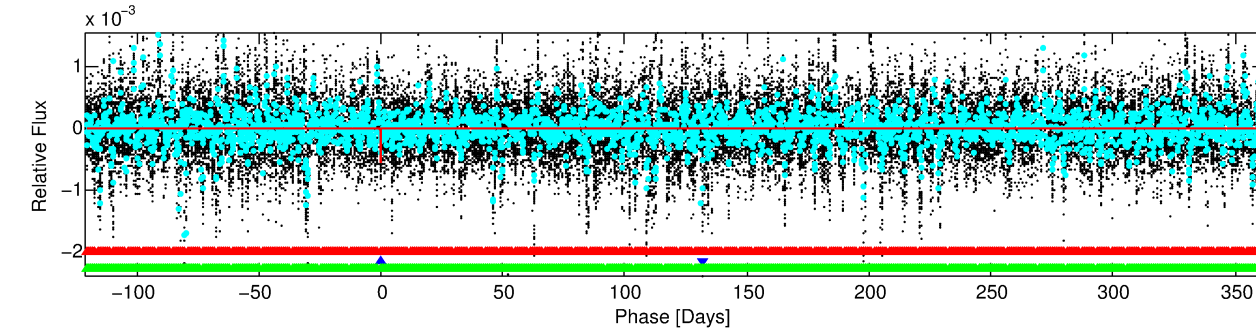
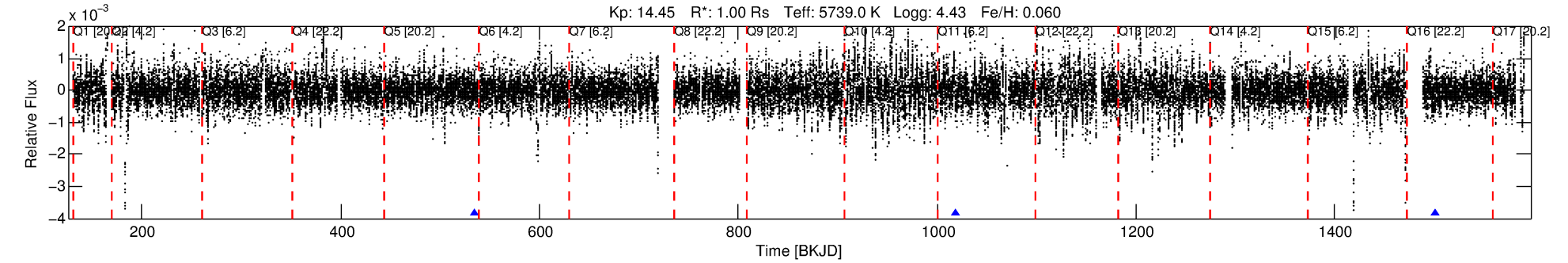
Ephemeris Match Information For 006891543-02

No Significant Match Found

DV One-Page Summary

KIC: 6891543 Candidate: 2 of 3 Period: 482.806 d
KOI: K01354 Corr: No Ephemeris Match

Kp: 14.45 R*: 1.00 Rs Teff: 5739.0 K Logg: 4.43 Fe/H: 0.060



DV Fit Results:

Period = 482.80558 [0.01812] d
Epoch = 535.3325 [0.0243] BKJD
Rp/R* = 0.0233 [0.0064]
a/R* = 163.89 [184.48]
b = 0.76 [0.63]
Seff = 0.67 [0.24]
Teff = 231 [21] K
Rp = 2.53 [0.98] Re
a = 1.1969 [0.2799] AU
Ag = 35888.39 [29652.76] [1.21σ]
Teffp = 4915 [935] K [5.01σ]

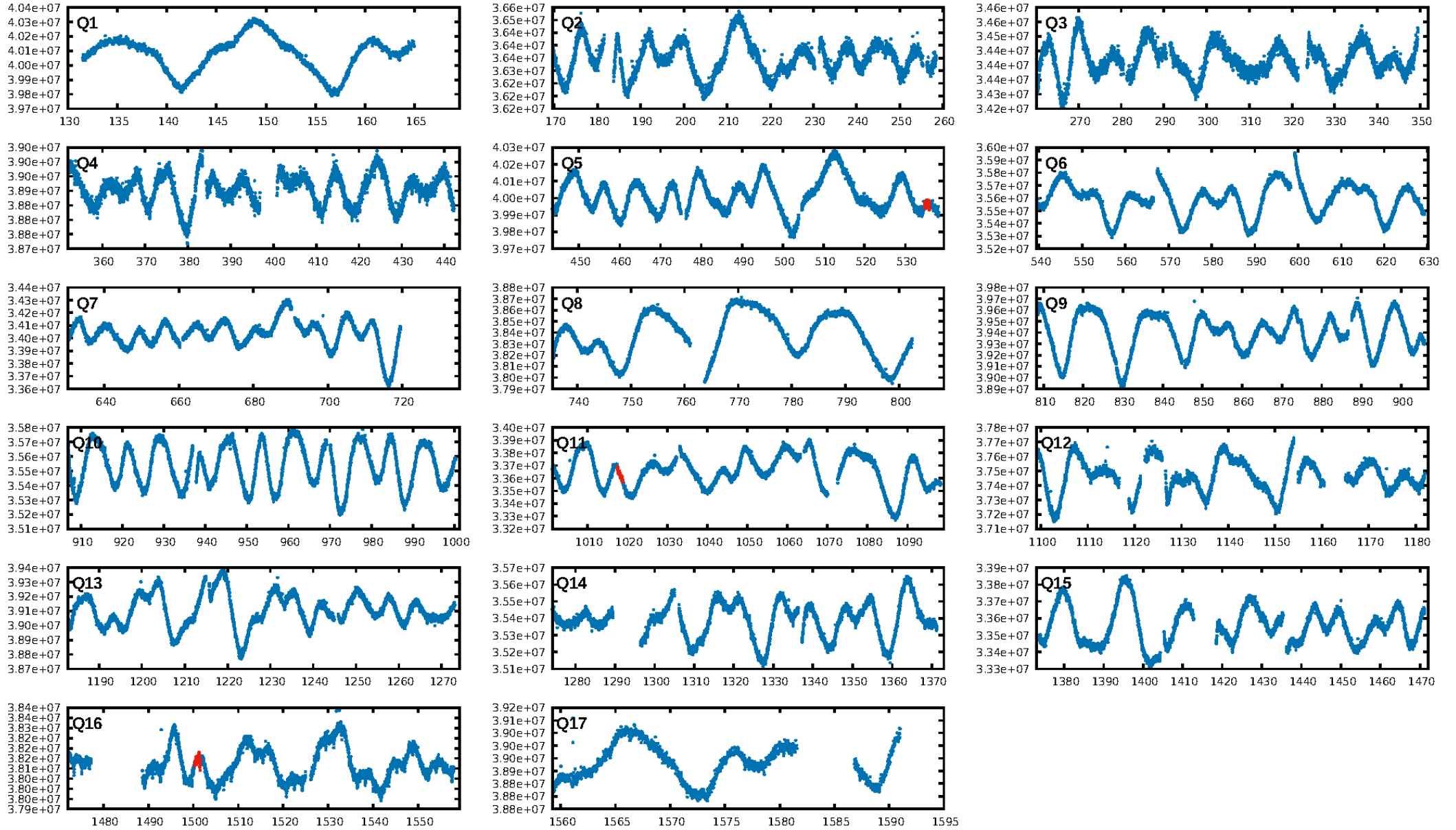
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [442.52σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 2.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -18.08
Centroid-sig: 36.3%
Centroid-so: 0.967 arcsec [0.82σ]
OotOffset-rm: 9.147 arcsec [6.35σ]
KicOffset-rm: 9.049 arcsec [4.76σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.00 [0/3]

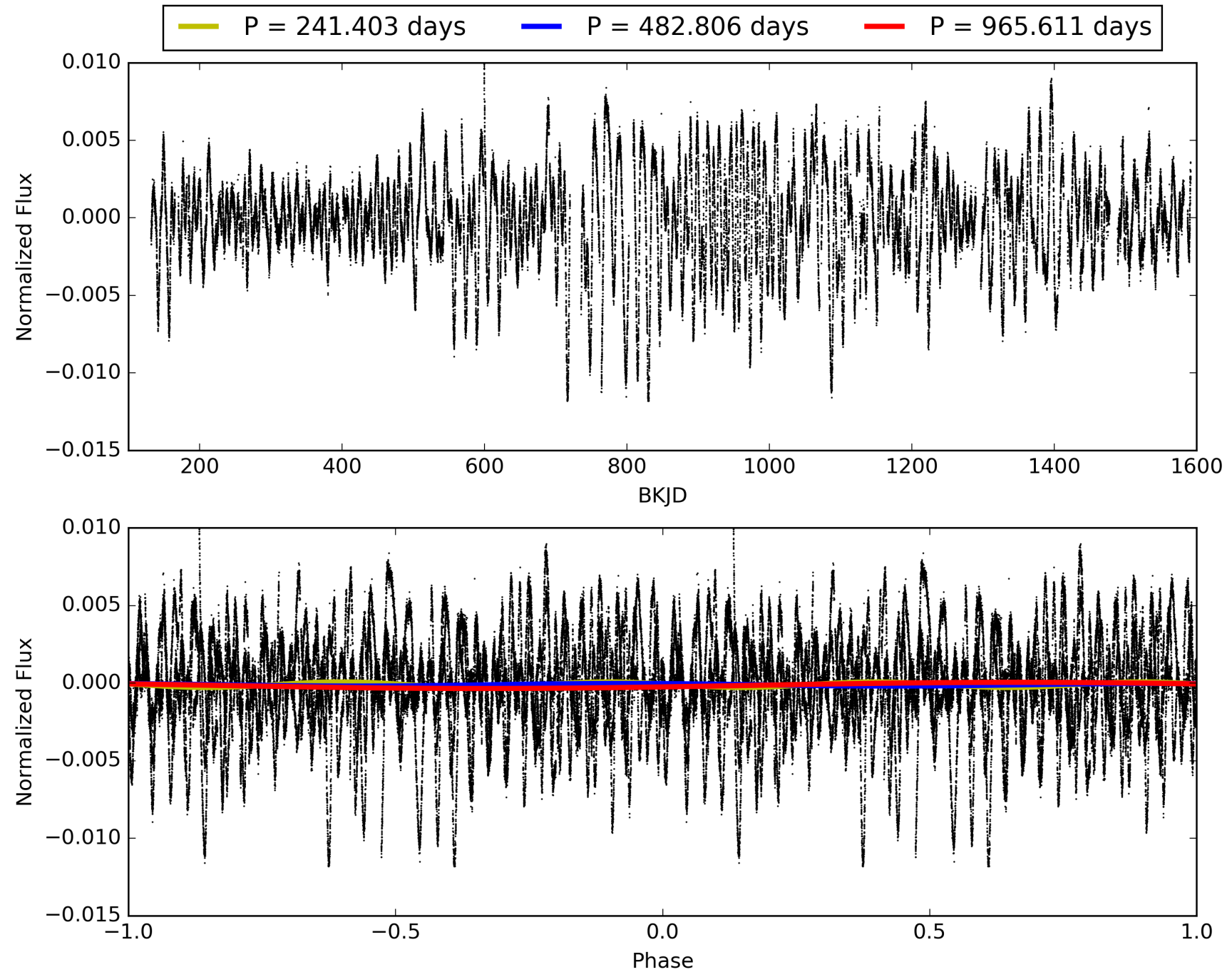
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 006891543-02, PDC Light Curves

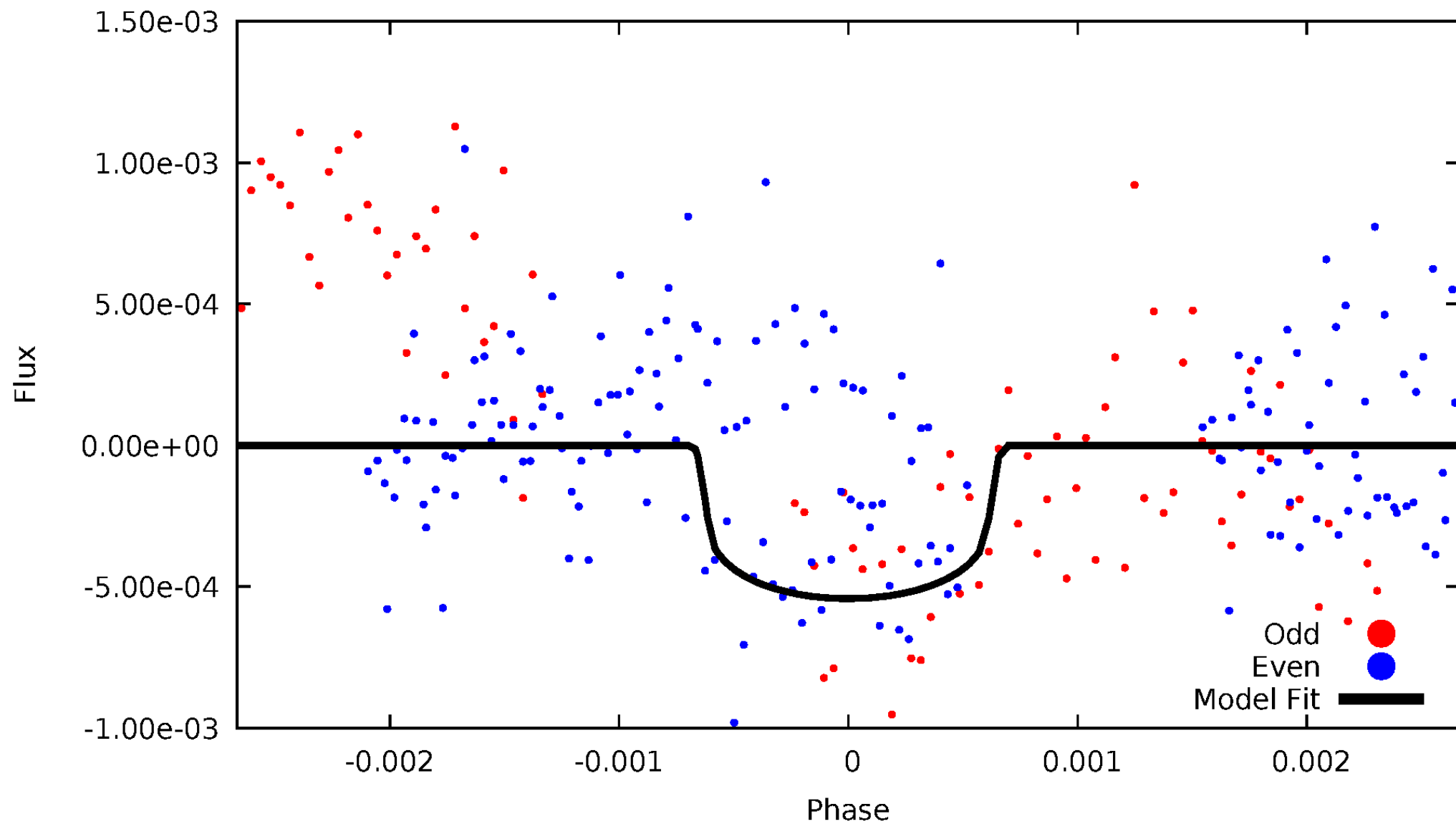


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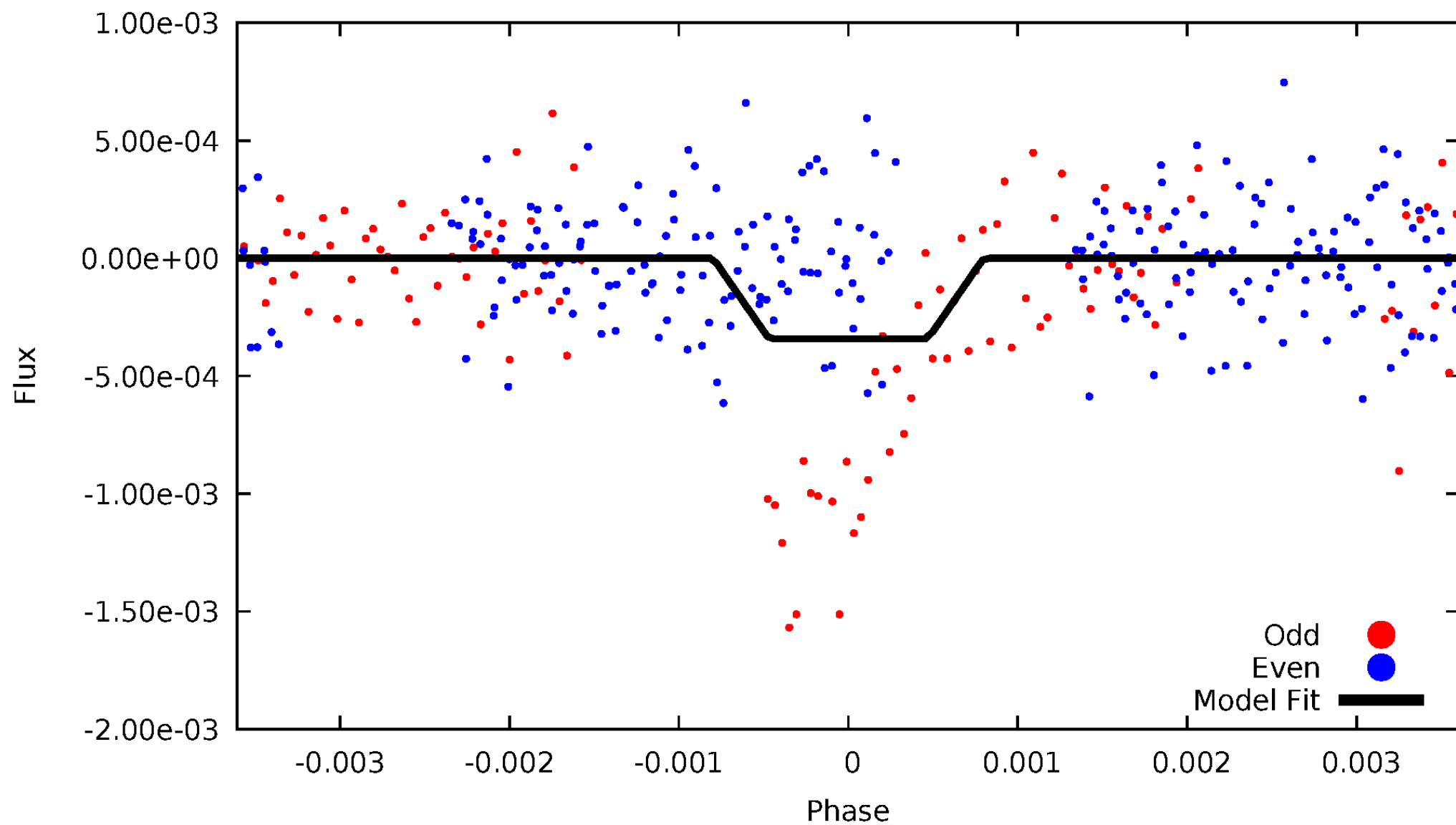
DV Odd/Even

TCE 006891543-02



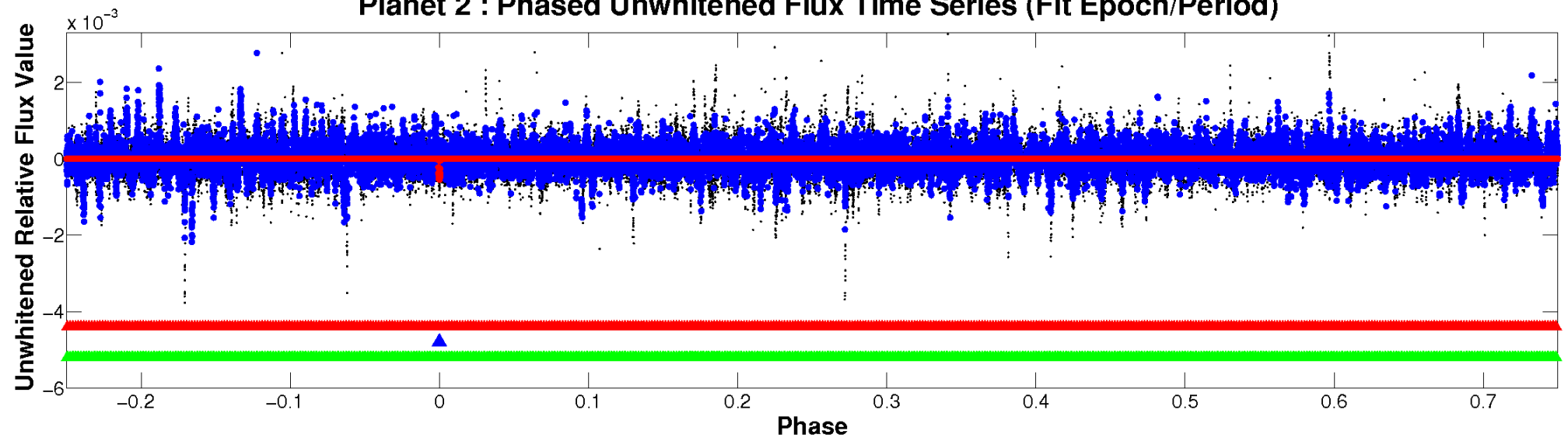
ALT Odd/Even

TCE 006891543-02

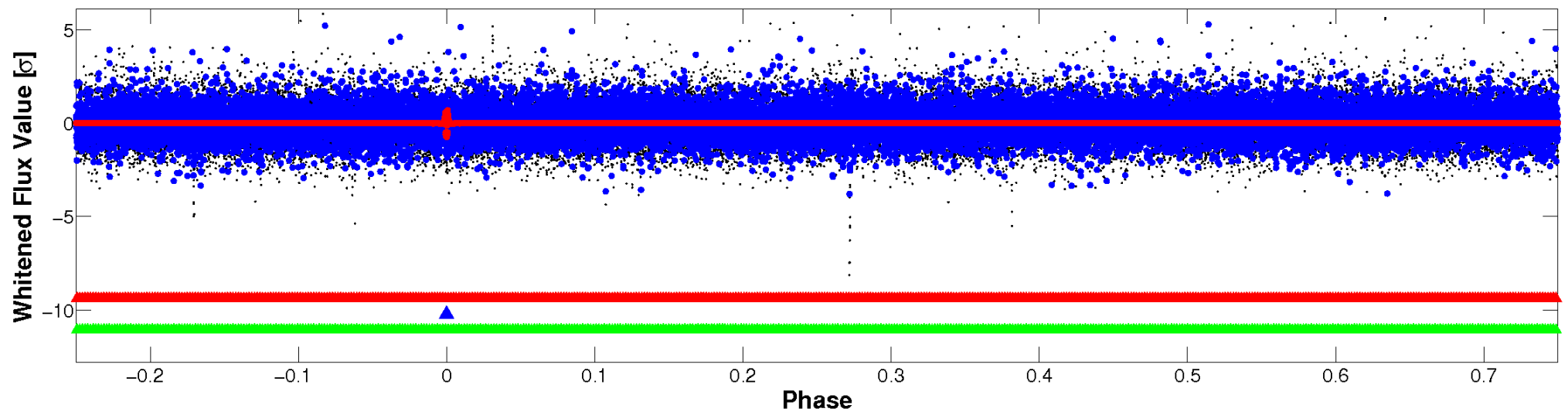


Non-Whitened Vs. Whitened Light Curve

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

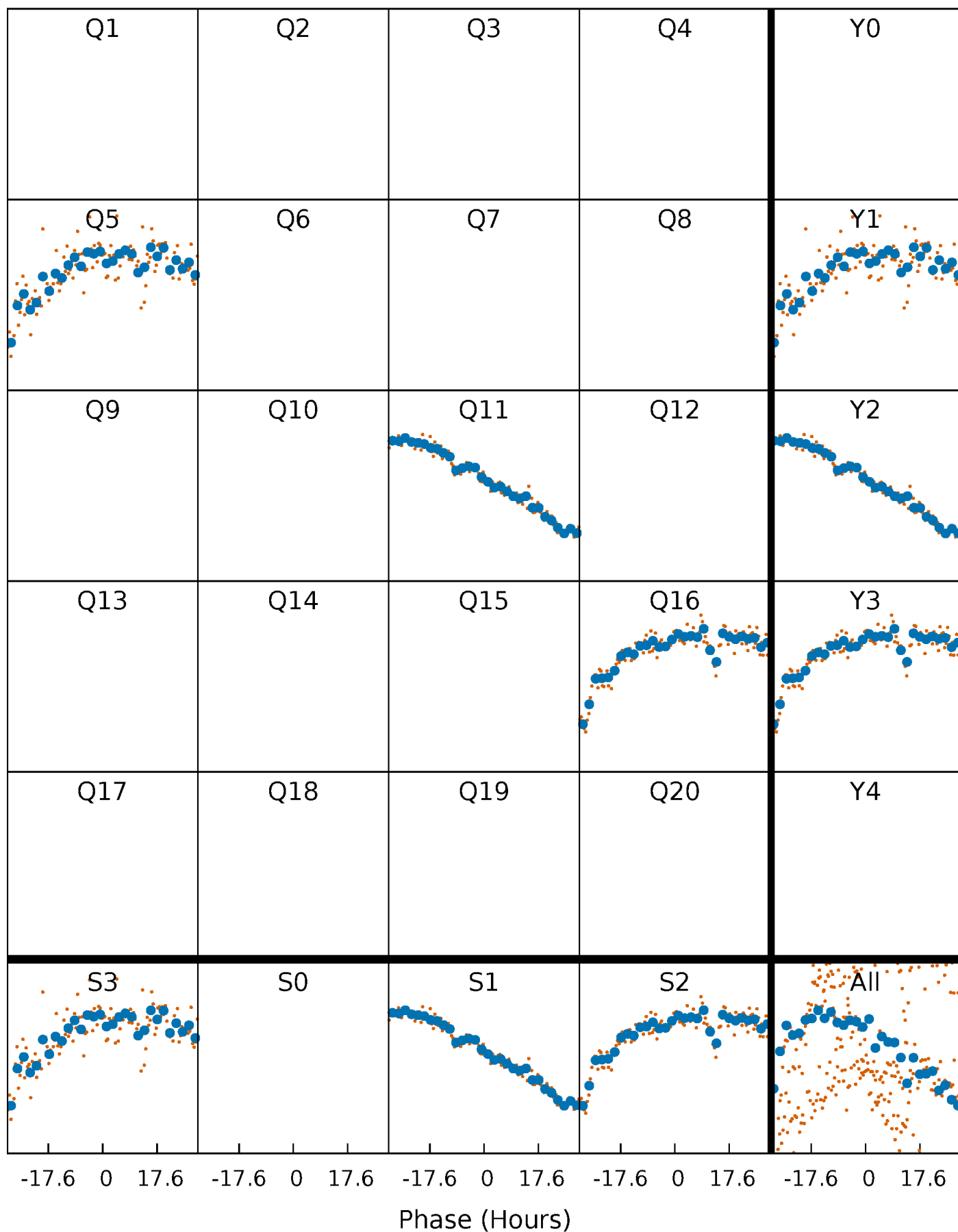


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



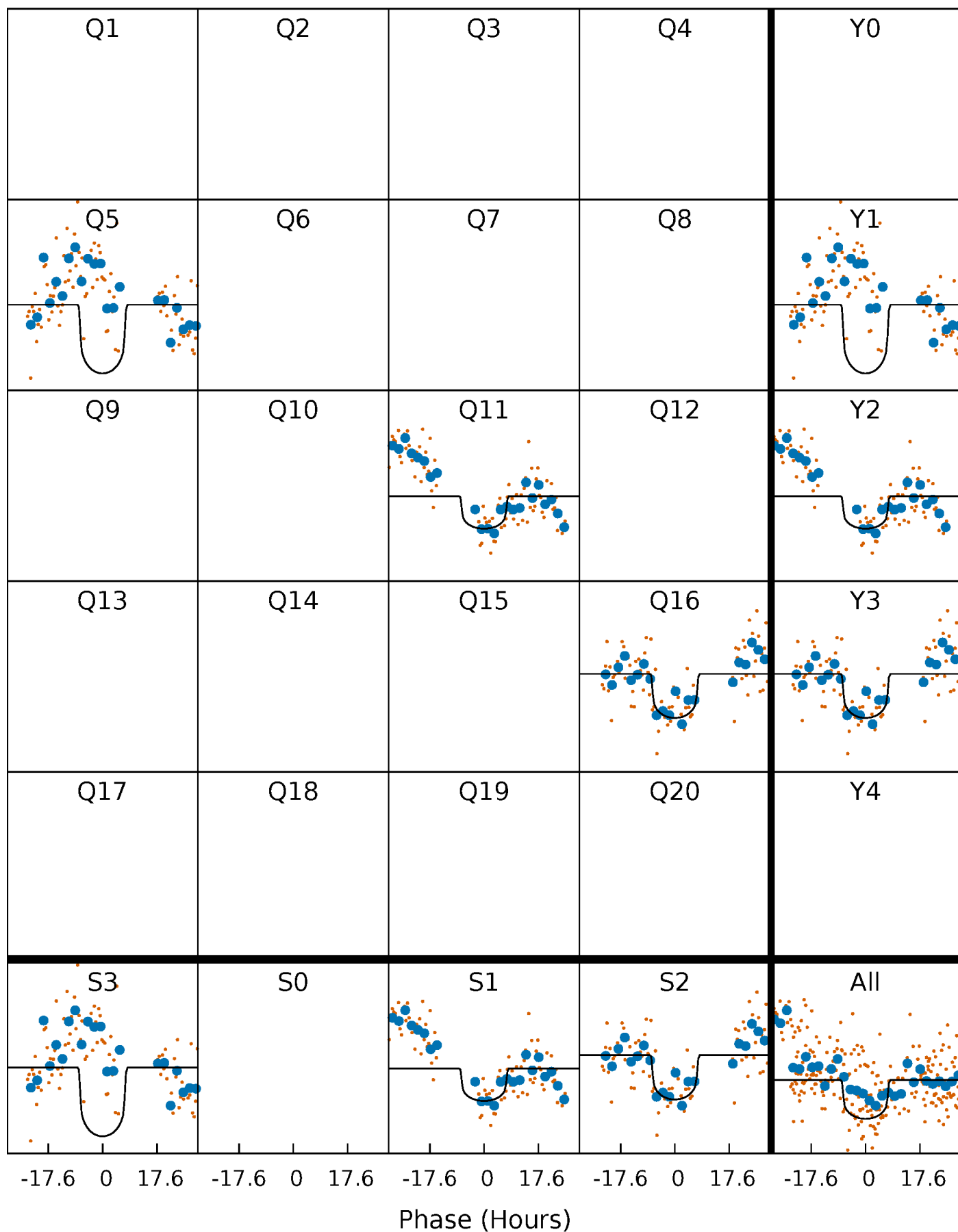
PDC Quarter-Phased Transit Curves

TCE 006891543-02 P=482.805581 Days $T_0=535.332488$ (BKJD)



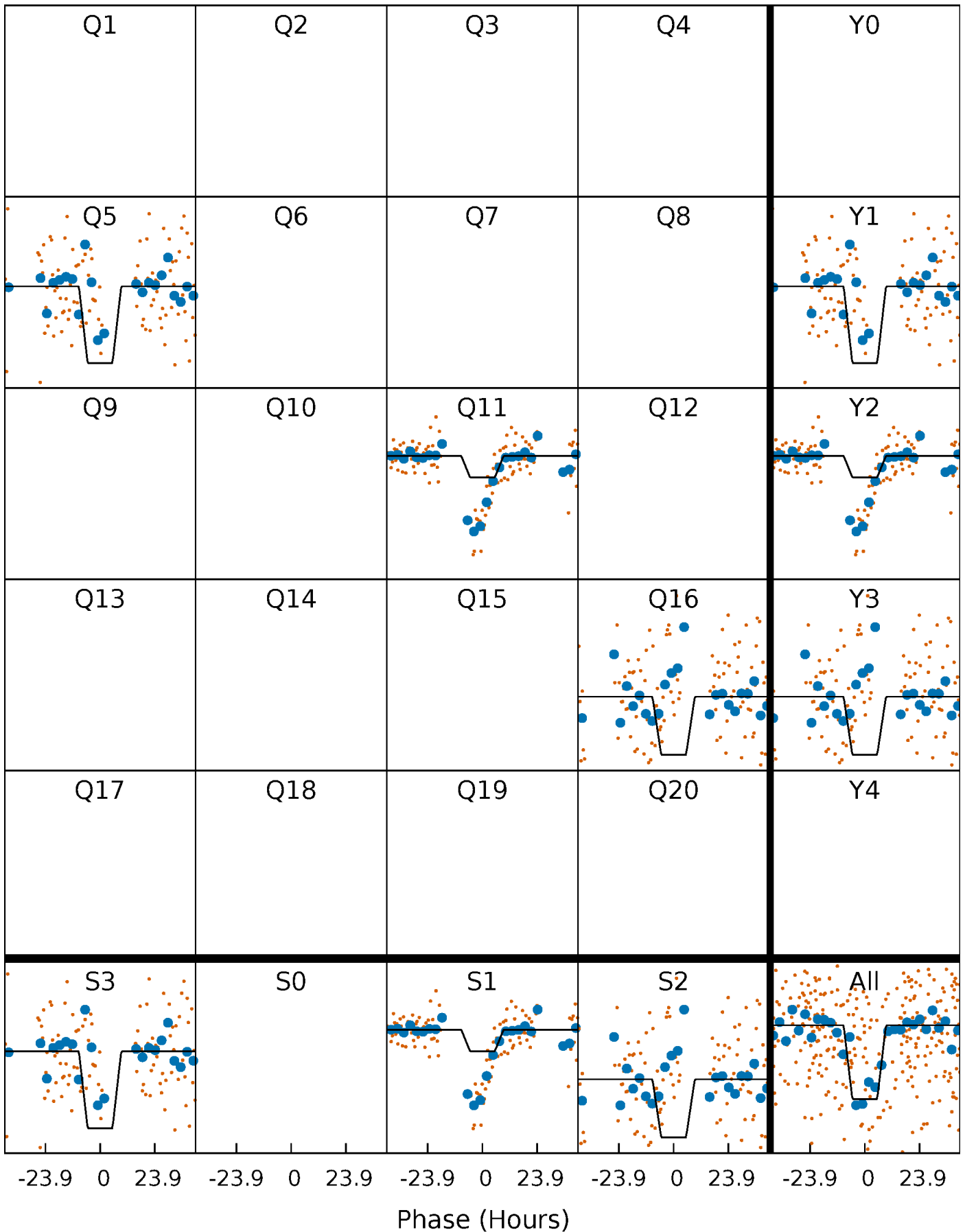
DV Quarter-Phased Transit Curves

TCE 006891543-02 P=482.805581 Days $T_0=535.332488$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

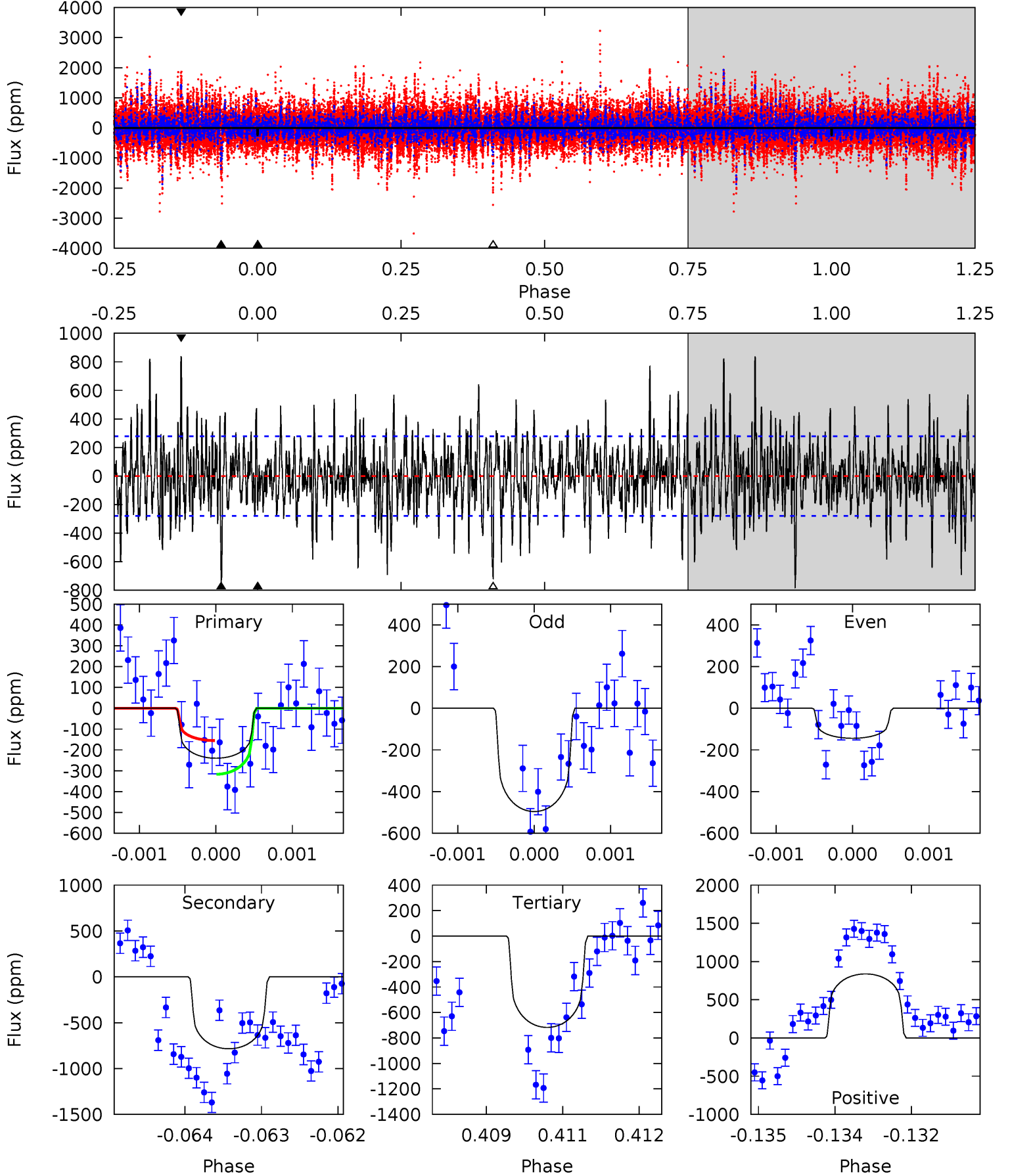
TCE 006891543-02 P=482.804156 Days $T_0=535.450693$ (BKJD)



DV Model-Shift Uniqueness Test

006891543-02, P = 482.805581 Days, E = 52.526907 Days

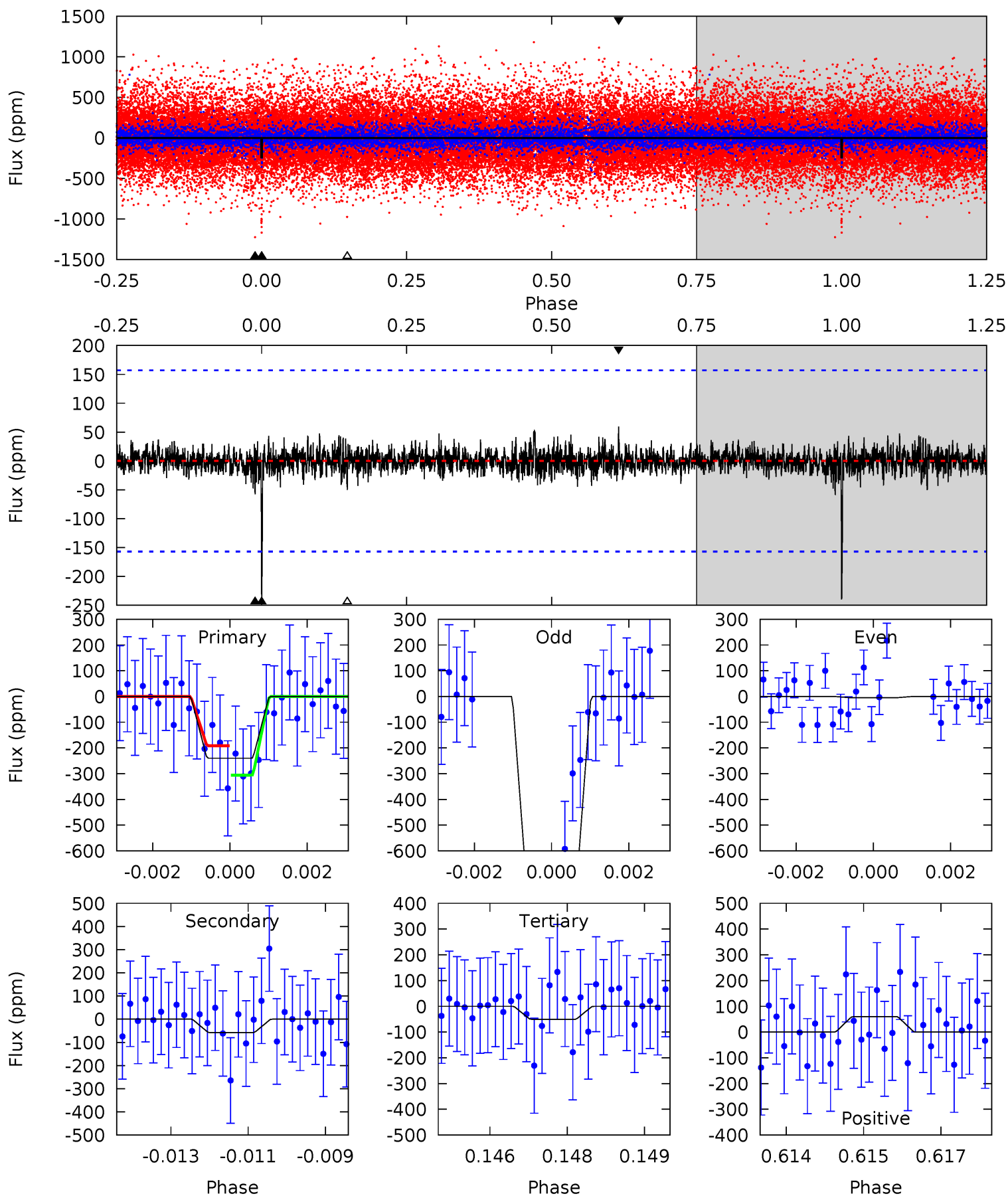
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.65	15.2	13.9	16.3	5.40	3.21	3.79	-9.26	-11.6	1.31	-1.04	2.80	0.54	0.52	1.57



Alt Model-Shift Uniqueness Test

006891543-02, P = 482.804156 Days, E = 52.646537 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.20	1.98	1.72	2.04	5.37	3.16	0.45	6.48	6.16	0.25	-0.06	14.2	3.07	0.20	1.93



Stellar Parameters For KIC 006891543

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5739^{+156}_{-173}	$4.433^{+0.081}_{-0.189}$	$0.060^{+0.250}_{-0.300}$	$0.996^{+0.274}_{-0.126}$	$0.980^{+0.114}_{-0.102}$	$1.397^{+0.591}_{-0.706}$
	+3%/-3%	+2%/-4%	+417%/-500%	+28%/-13%	+12%/-10%	+42%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006891543-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-784 ± 52	$2.58^{+0.86}_{-0.73}$	326^{+24}_{-16}	6248^{+1295}_{-673}	88940^{+88843}_{-35898}
Alt.	-58 ± 29	$2.03^{+0.81}_{-0.71}$	326^{+22}_{-15}	3969^{+762}_{-567}	10030^{+16033}_{-6189}

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 $A_{obs} \gg 1.0$

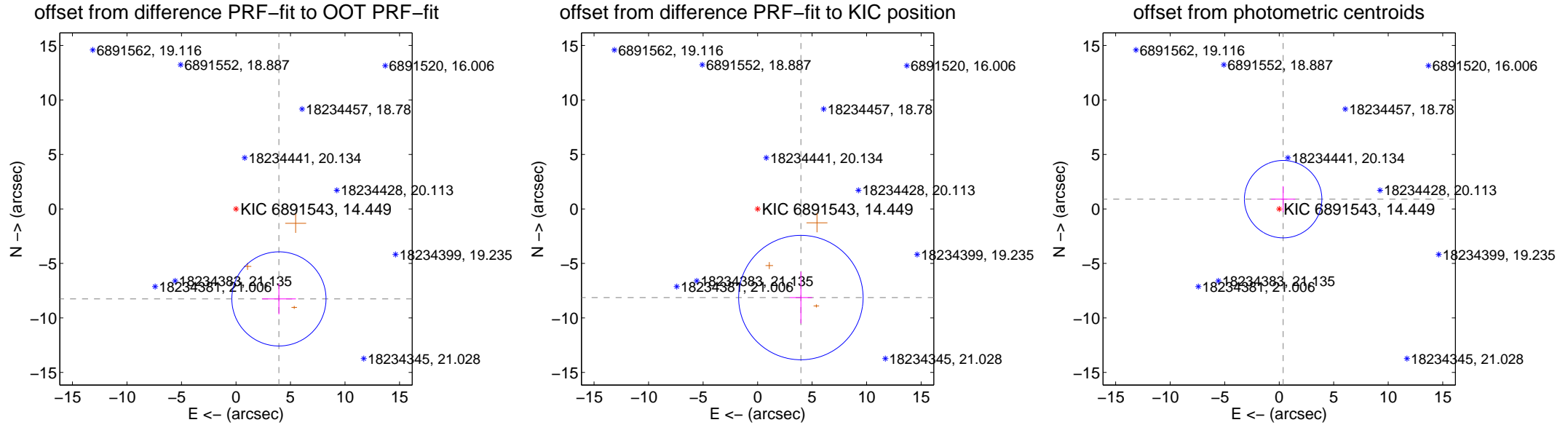
DV Centroid Data

Supplemental centroid analysis for 006891543-02. Kepler magnitude: 14.45. Transit SNR 6.14

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	9.147 \pm 1.440	6.35	-3.939 \pm 1.553	-8.255 \pm 1.413
PRF-fit source offset from KIC position	9.049 \pm 1.903	4.76	-3.970 \pm 1.036	-8.132 \pm 2.376
photometric centroid source offset	0.97 \pm 1.18	0.82	-0.36 \pm 1.12	0.90 \pm 1.19

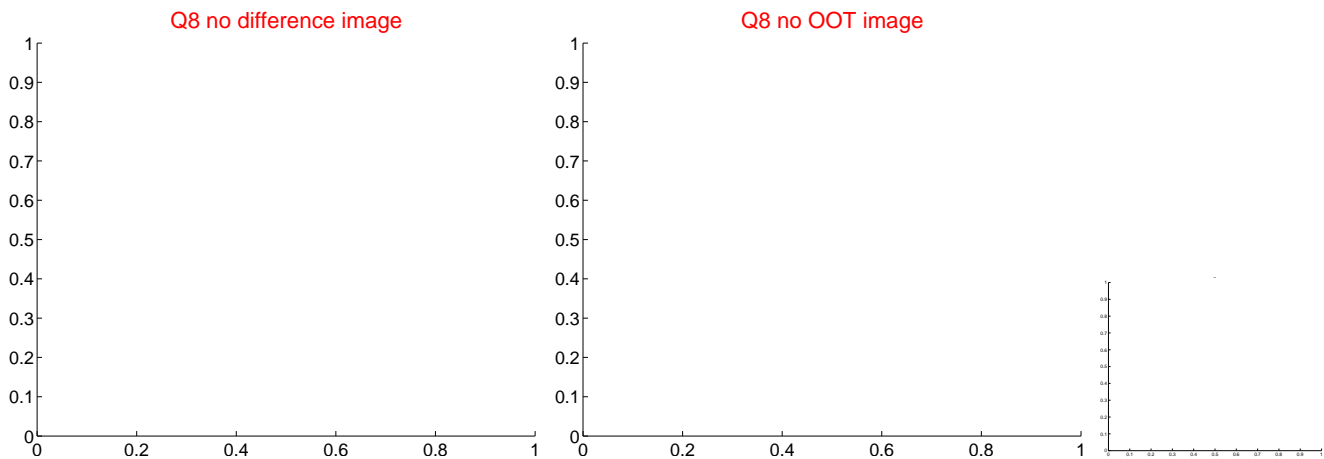
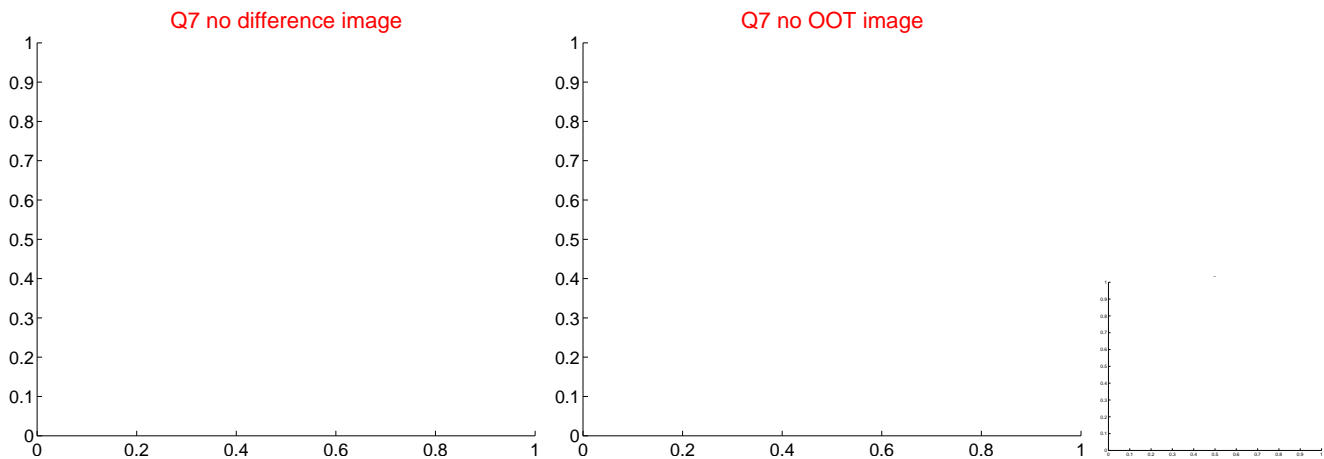
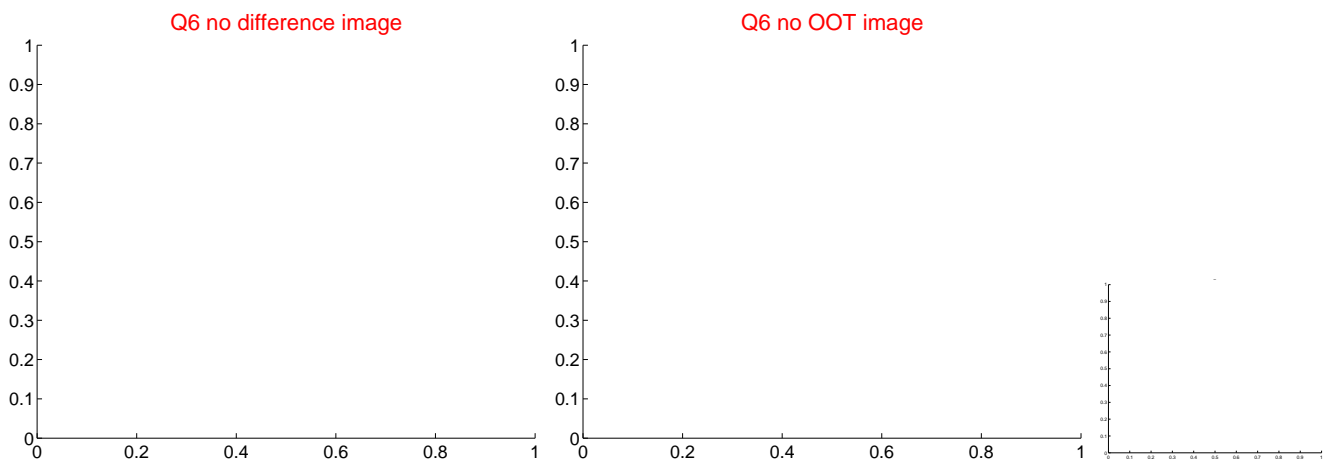
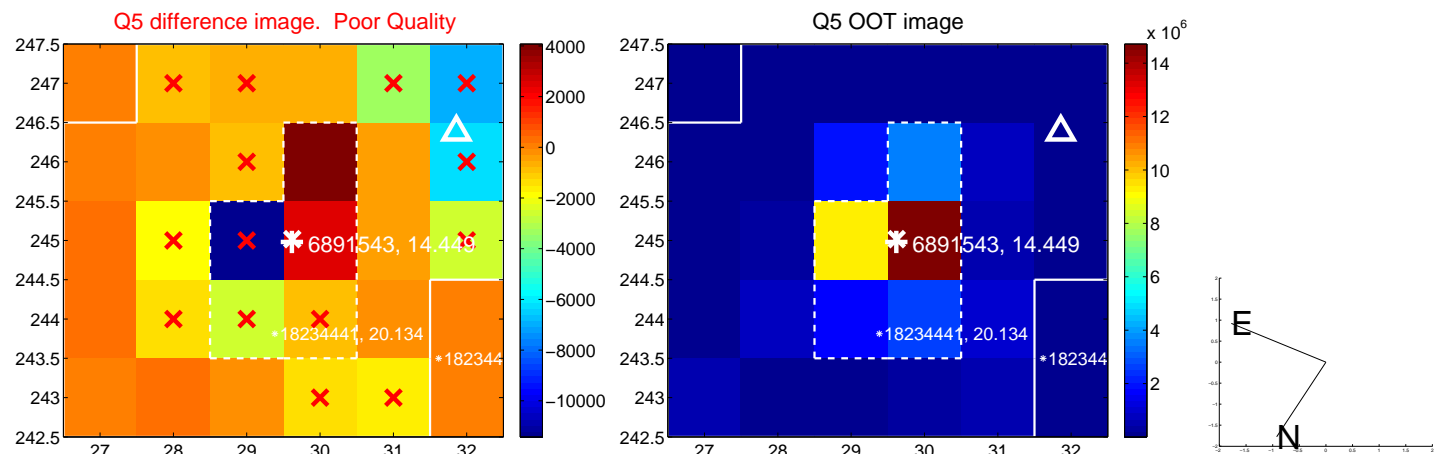


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . 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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

Q9 no difference image



Q9 no OOT image



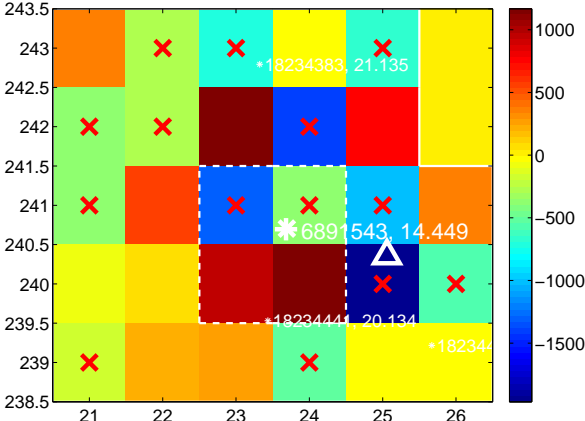
Q10 no difference image



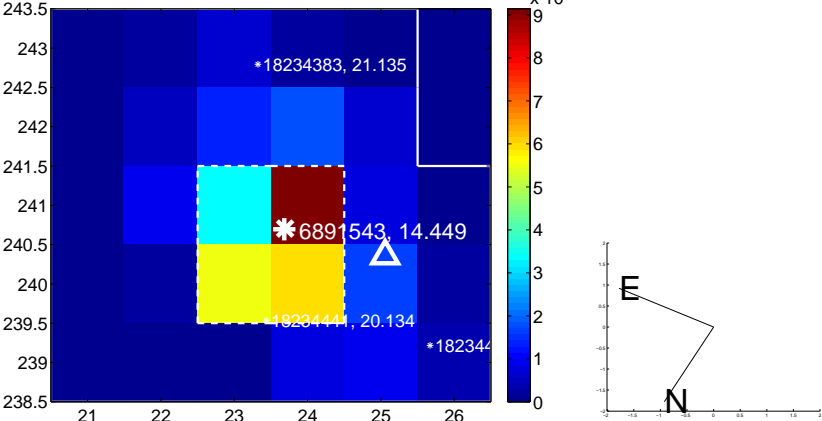
Q10 no OOT image



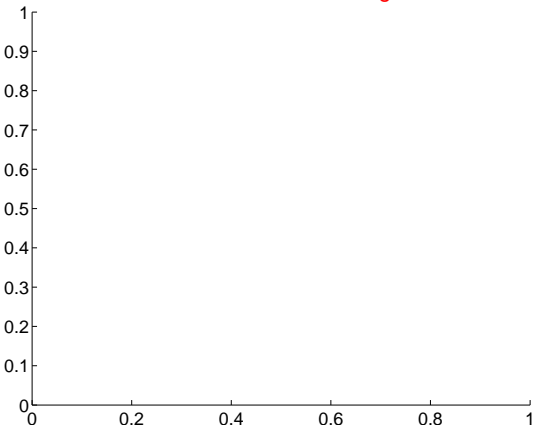
Q11 difference image. Poor Quality



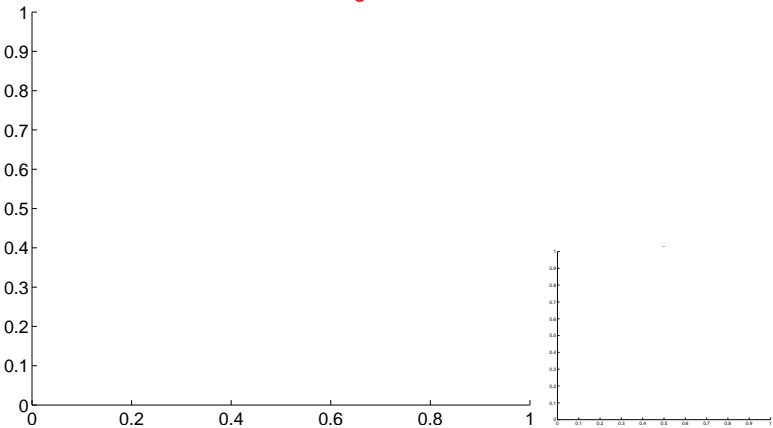
Q11 OOT image



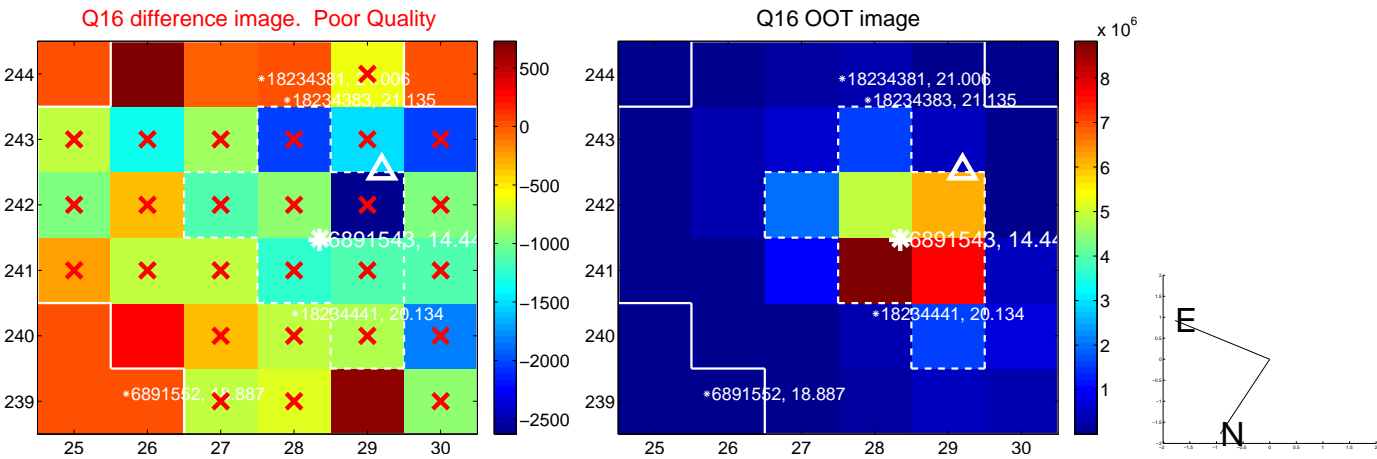
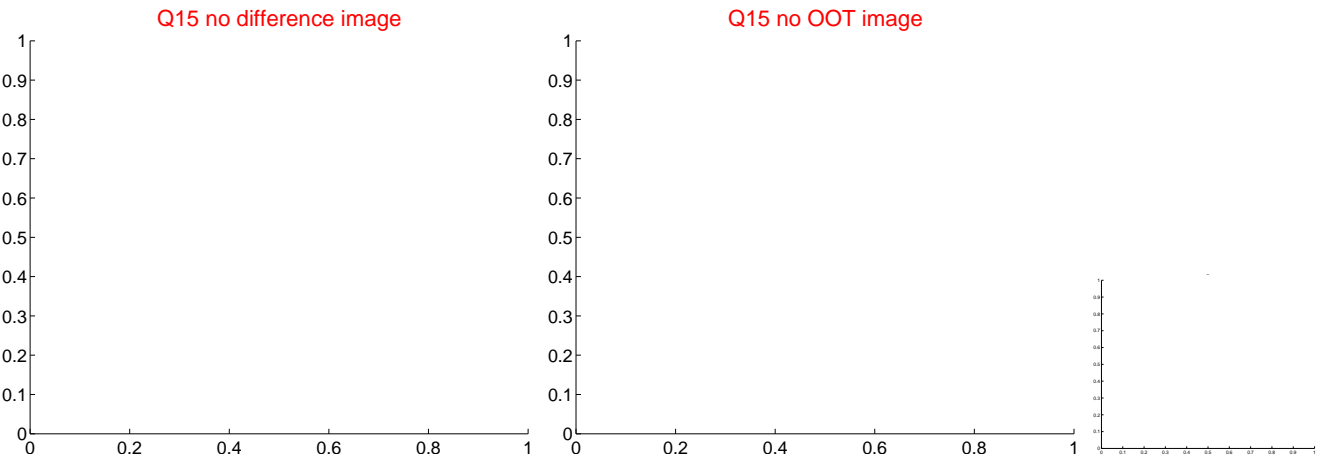
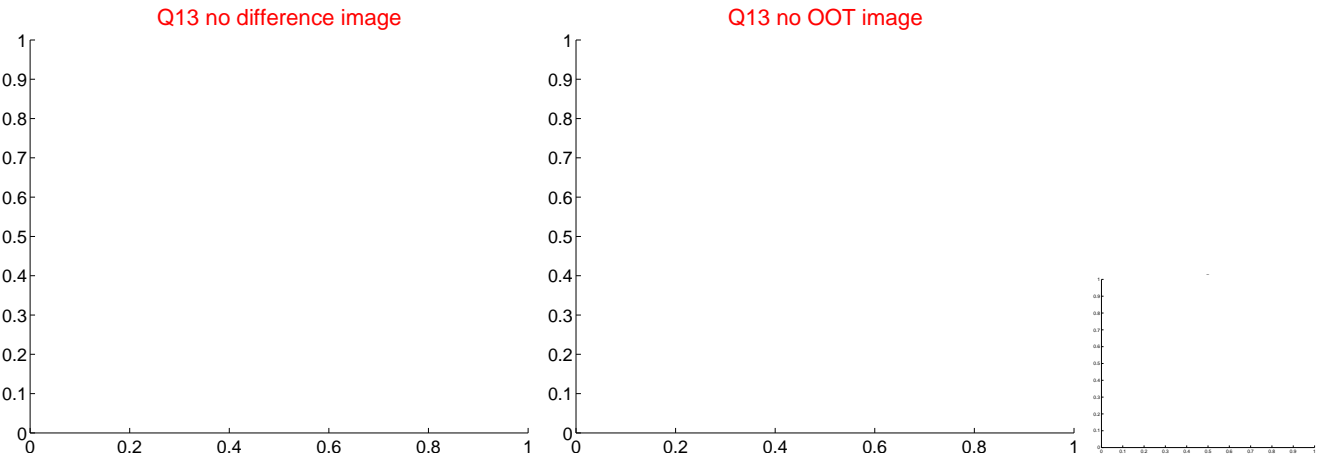
Q12 no difference image



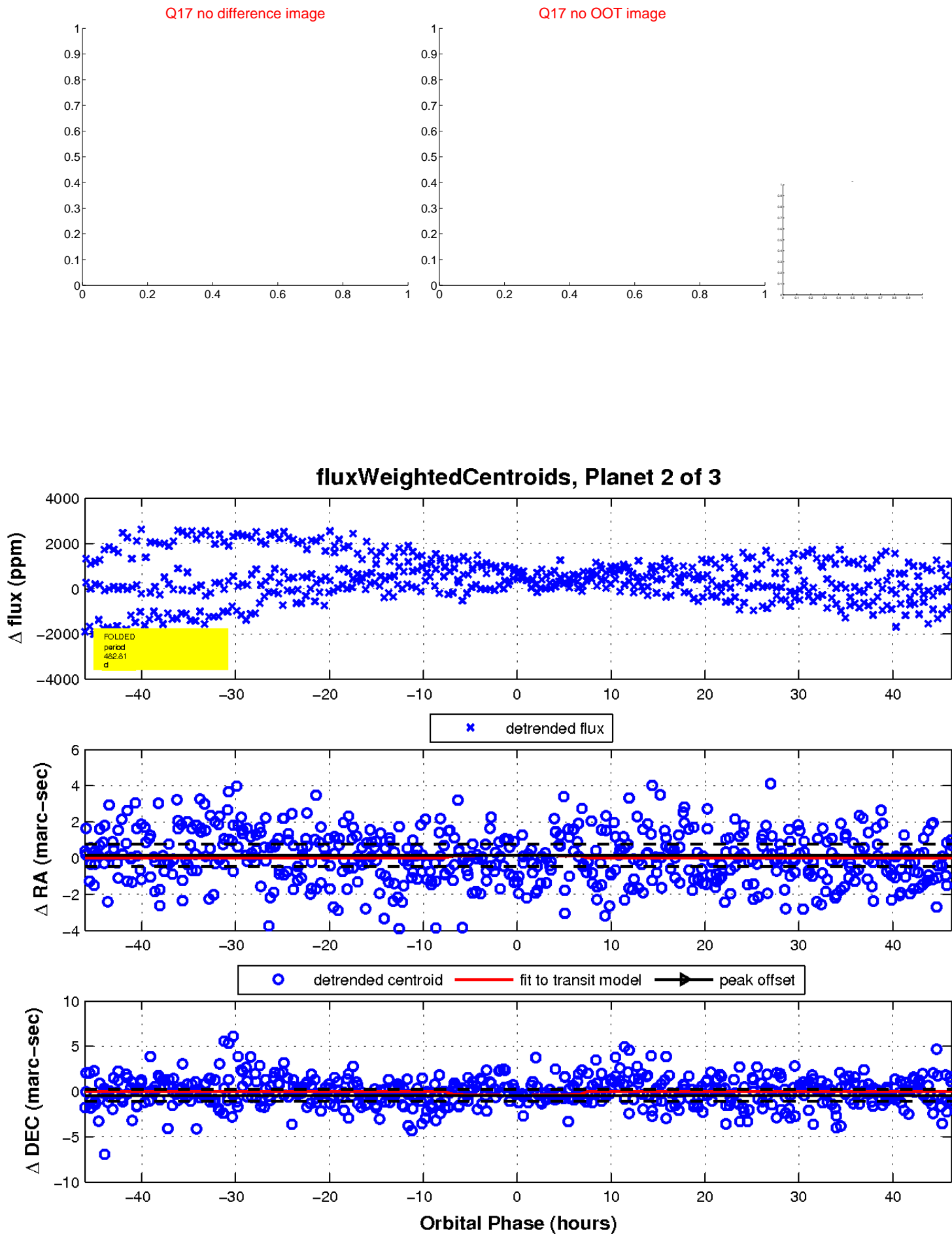
Q12 no OOT image



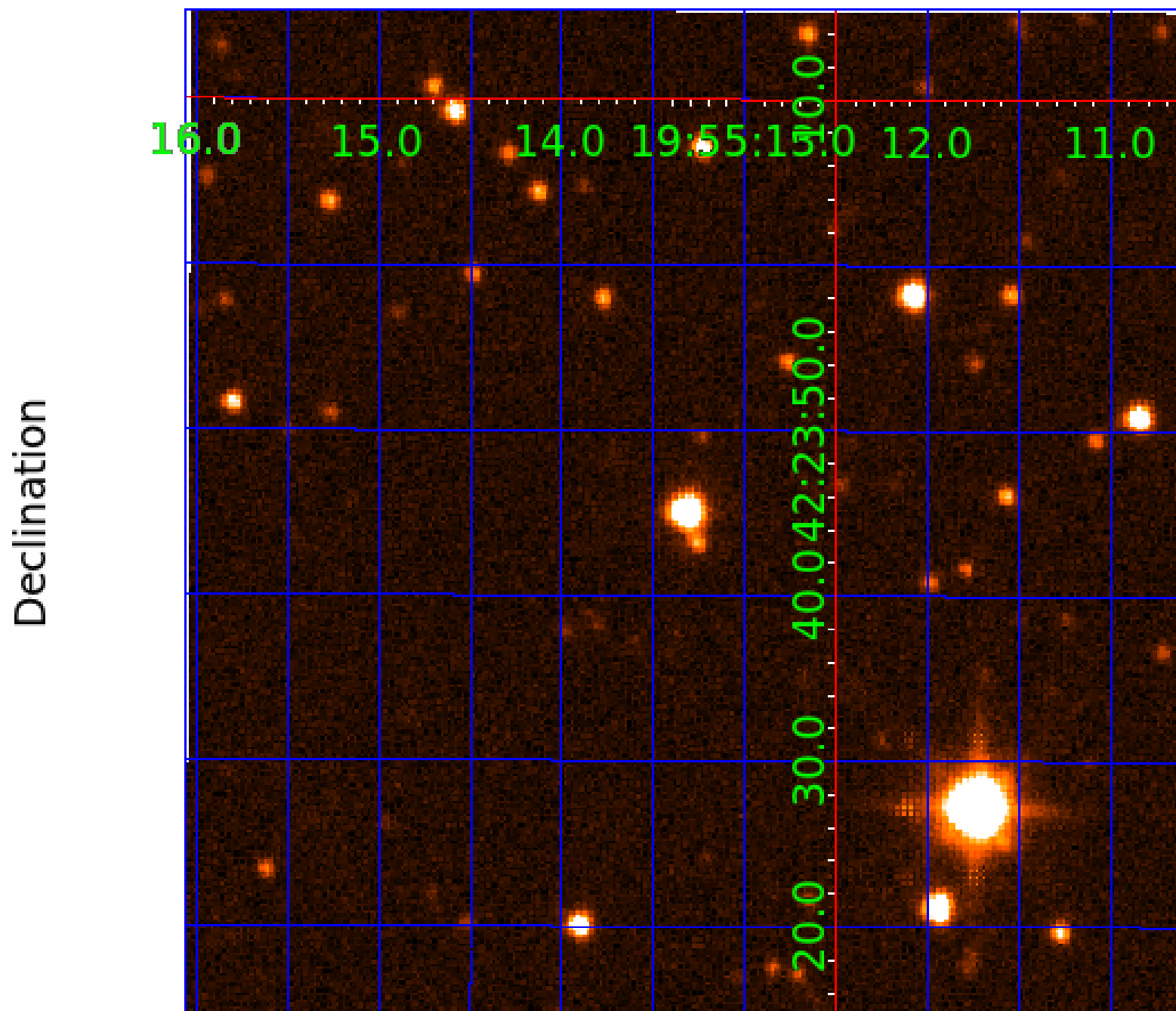
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 006891543

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})
006891543-01	OBS	1354.01	1.752532	132.733362	242.3	3.916	32.6	34.3	1.00	5739	2.14	1206.49
006891543-02	OBS	No	482.805581	535.332488	541.6	15.437	9.7	6.1	1.00	5739	2.53	0.67
006891543-03	OBS	No	1.752770	132.628365	92.6	21.033	7.8	10.7	1.00	5739	1.11	1206.27

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006891543-01	OBS	FP	0.00	0	0	1	1	CENT_RESOLVED_OFFSET—HALO_GHOST—EPHEM_MATCH
006891543-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
006891543-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—RESIDUAL_TCE—CENT_FEW_DIFFS

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

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

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

Ephemeris Match Information For 006891543-03

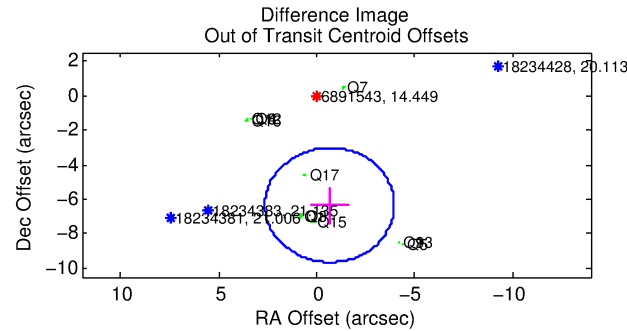
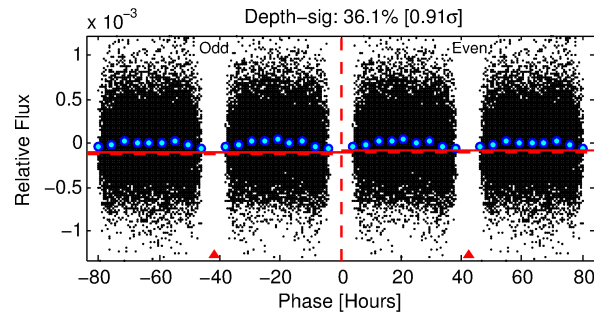
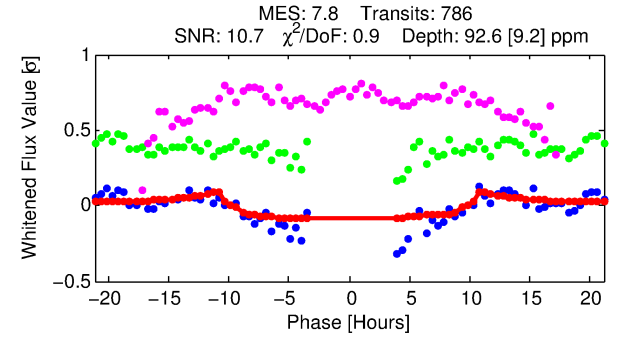
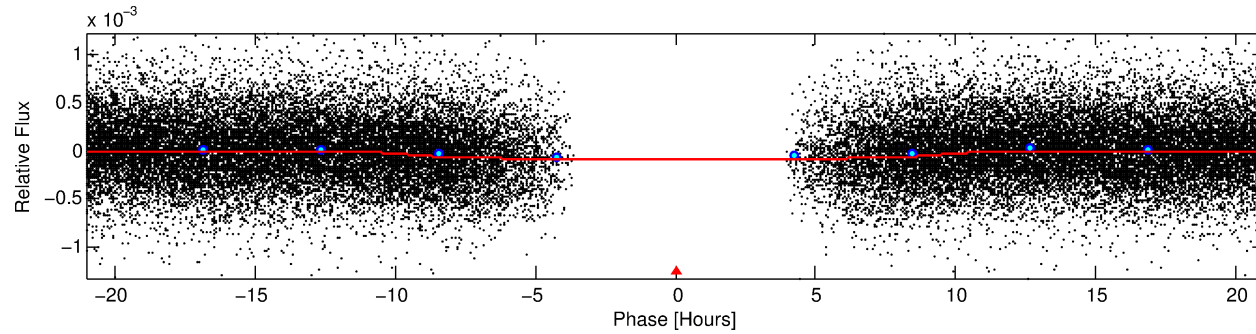
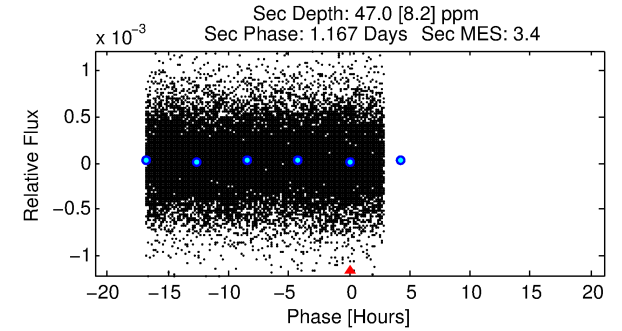
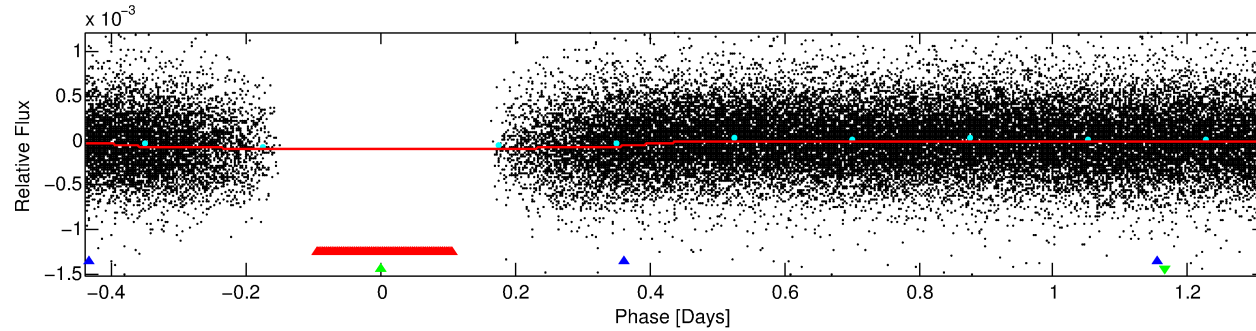
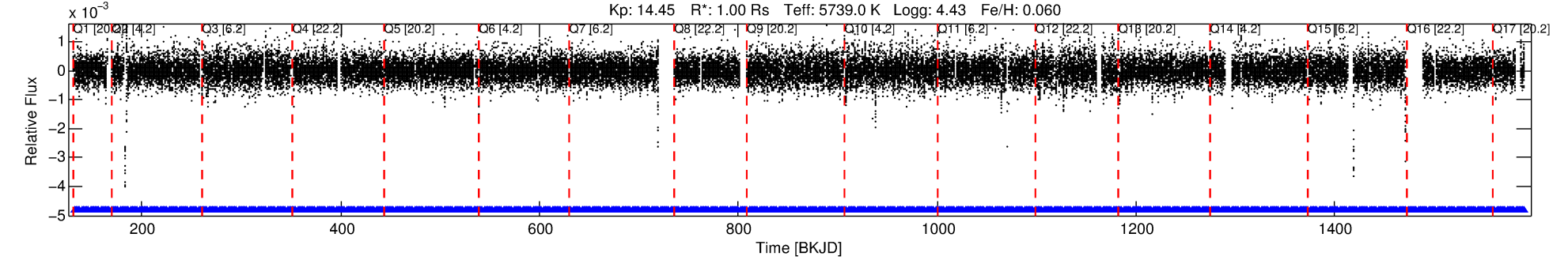
No Significant Match Found

DV One-Page Summary

KIC: 6891543 Candidate: 3 of 3 Period: 1.753 d

KOI: K01354 Corr: No Ephemeris Match

Kp: 14.45 R*: 1.00 Rs Teff: 5739.0 K Logg: 4.43 Fe/H: 0.060



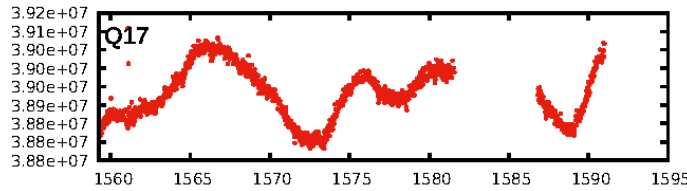
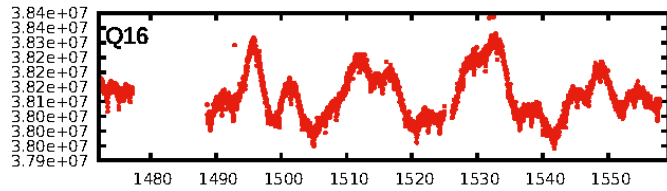
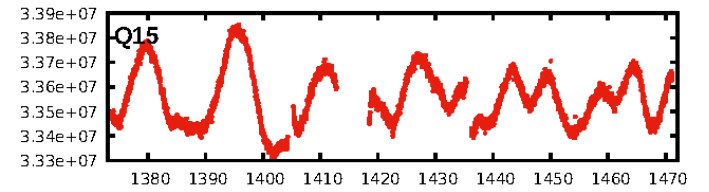
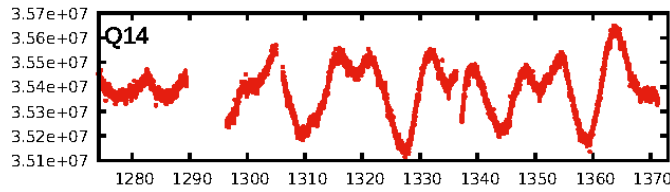
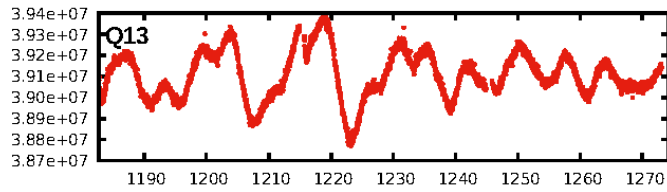
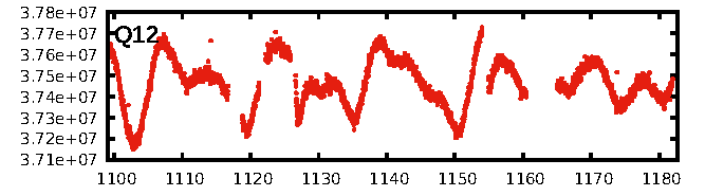
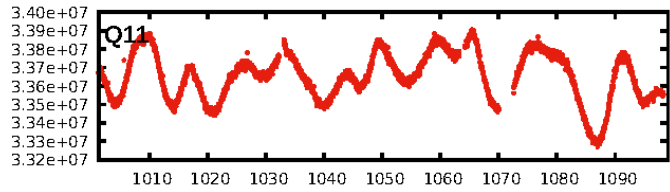
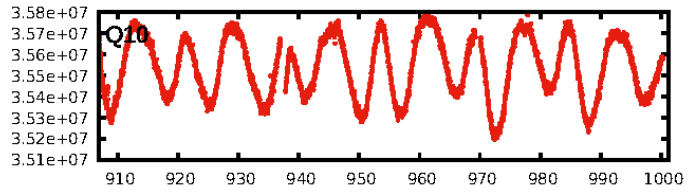
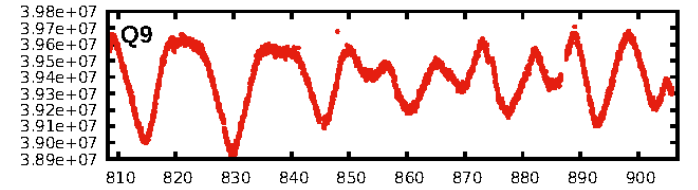
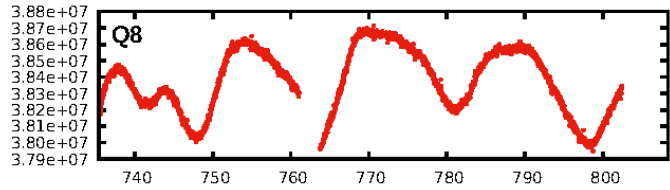
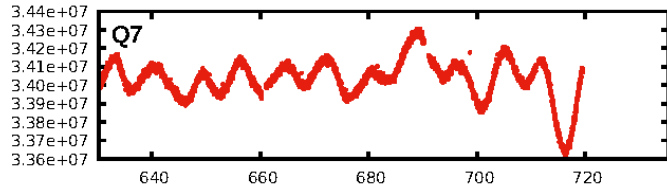
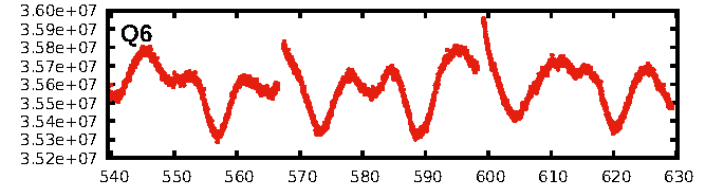
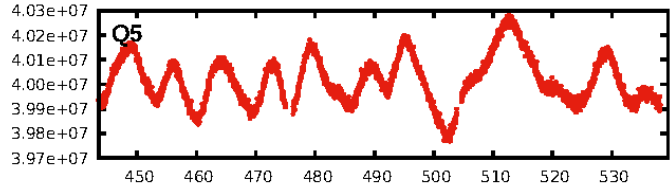
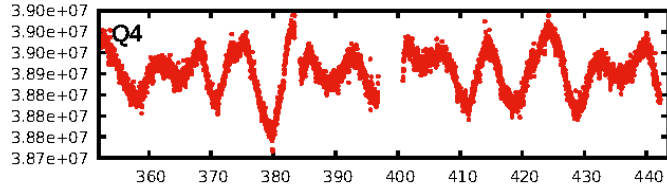
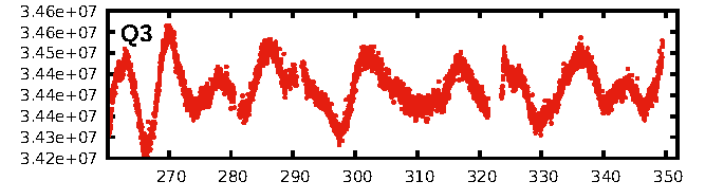
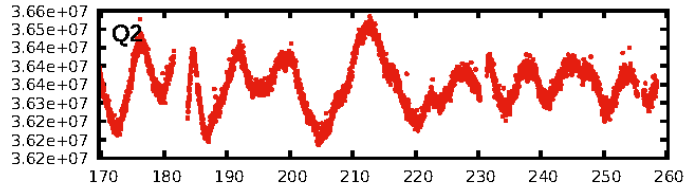
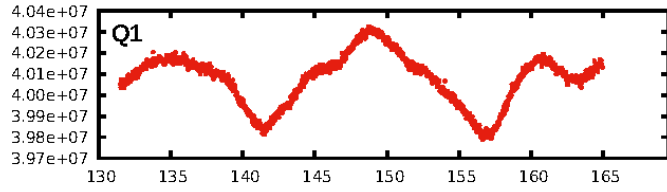
DV Fit Results:

Period = 1.75277 [0.00002] d
Epoch = 132.6284 [0.0065] BKJD
Rp/R* = 0.0102 [0.0007]
a/R* = 1.00 [0.00]
b = 0.87 [0.08]
Seff = 1206.27 [438.84]
Teff = 1503 [137] K
Rp = 1.11 [0.31] Re
a = 0.0283 [0.0066] AU
Ag = 16.84 [6.92] [2.29σ]
Teffp = 4707 [301] K [9.69σ]

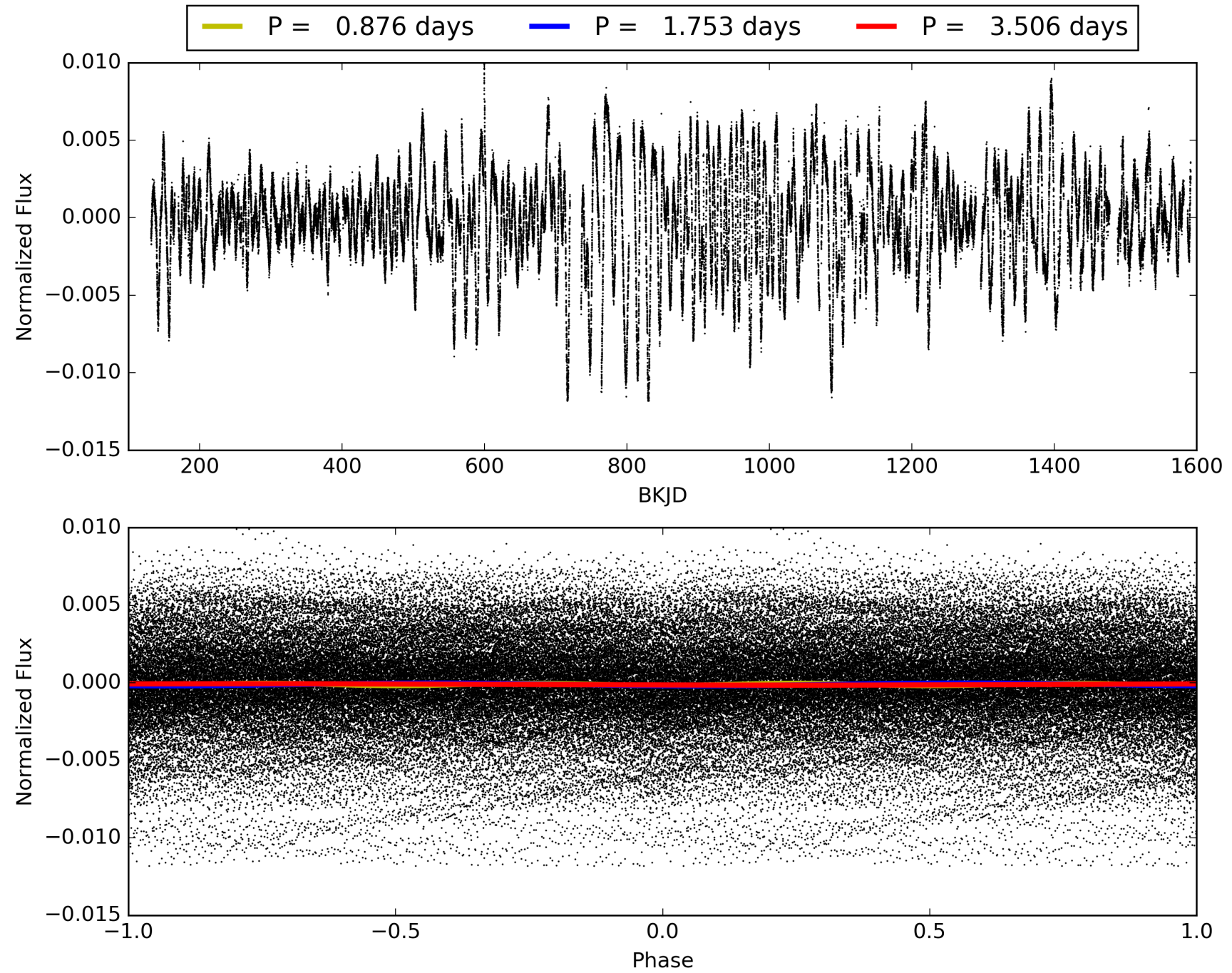
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [442.52σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [751/751]
GhostDiagnostic-chr: 0.3316
Centroid-sig: 0.0%
Centroid-so: 1.171 arcsec [2.91σ]
OotOffset-rm: 6.376 arcsec [5.78σ]
KicOffset-rm: 6.303 arcsec [5.70σ]
OotOffset-st: 0/4/4/4 [12]
KicOffset-st: 0/4/4/4 [12]
DiffImageQuality-fgm: 0.08 [1/12]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 006891543-03, PDC Light Curves

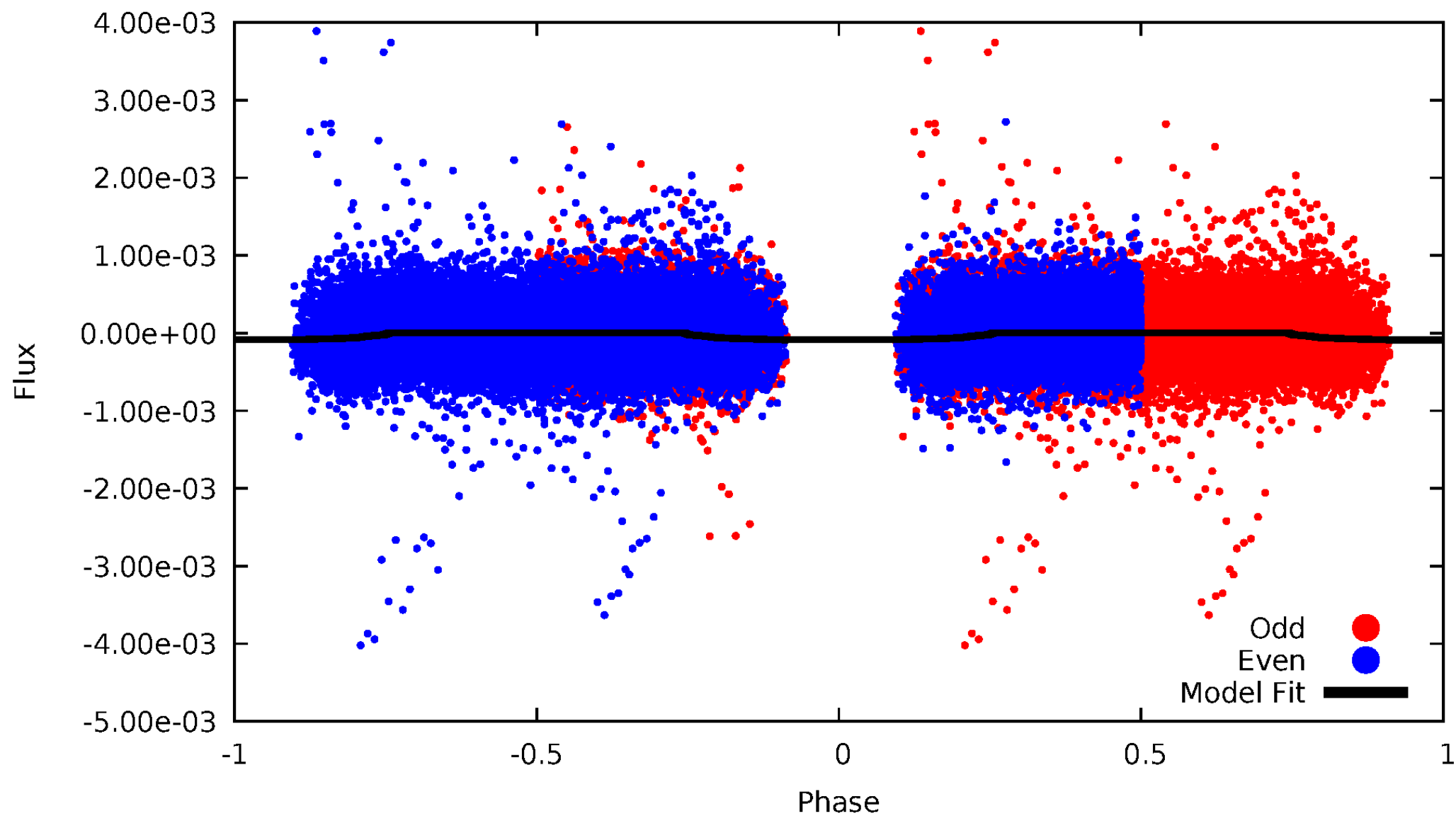


TCE 006891543-03



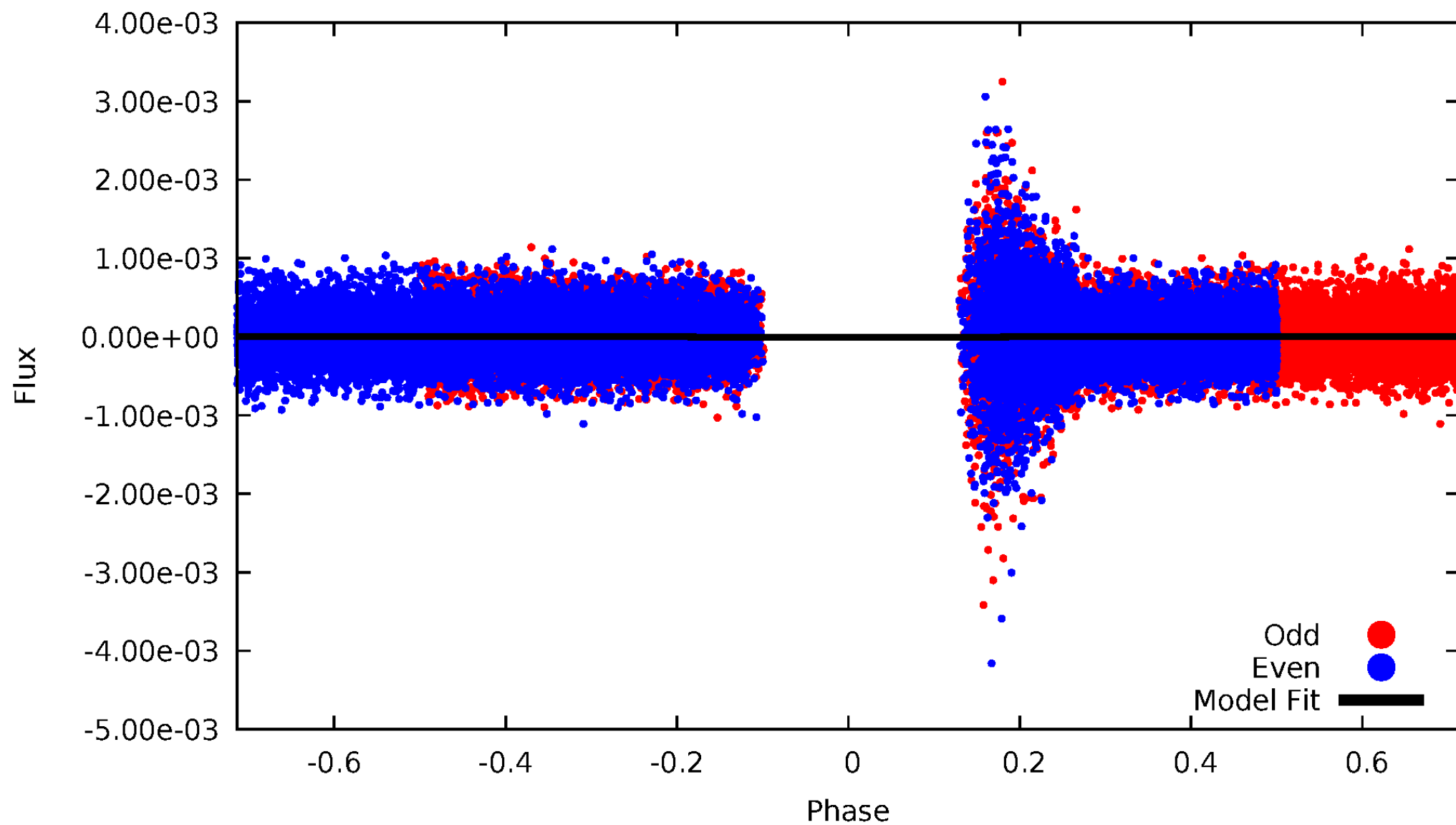
DV Odd/Even

TCE 006891543-03



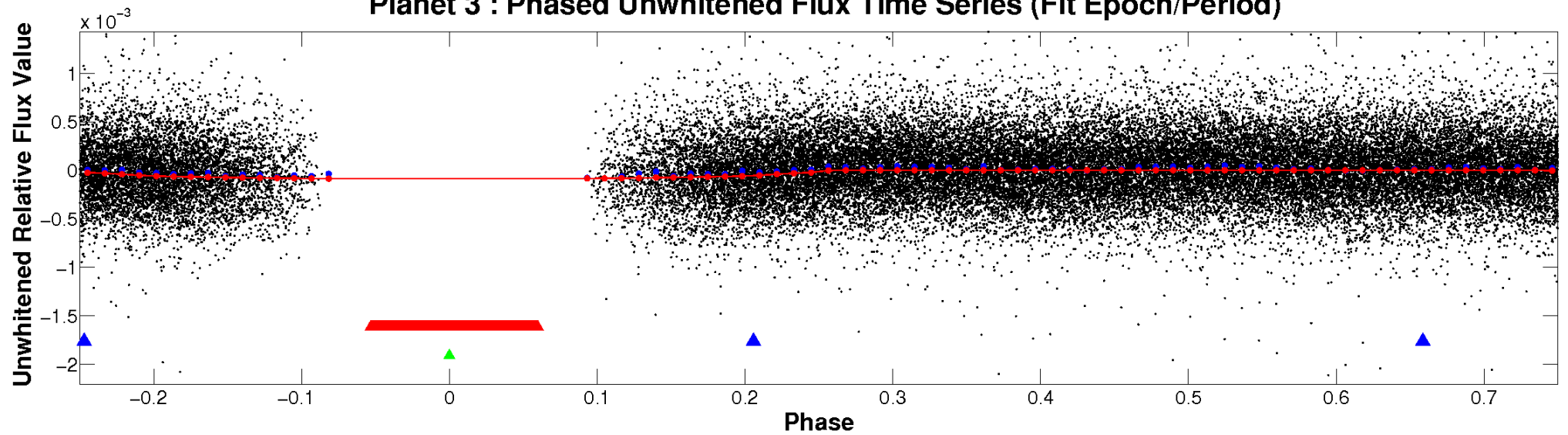
ALT Odd/Even

TCE 006891543-03

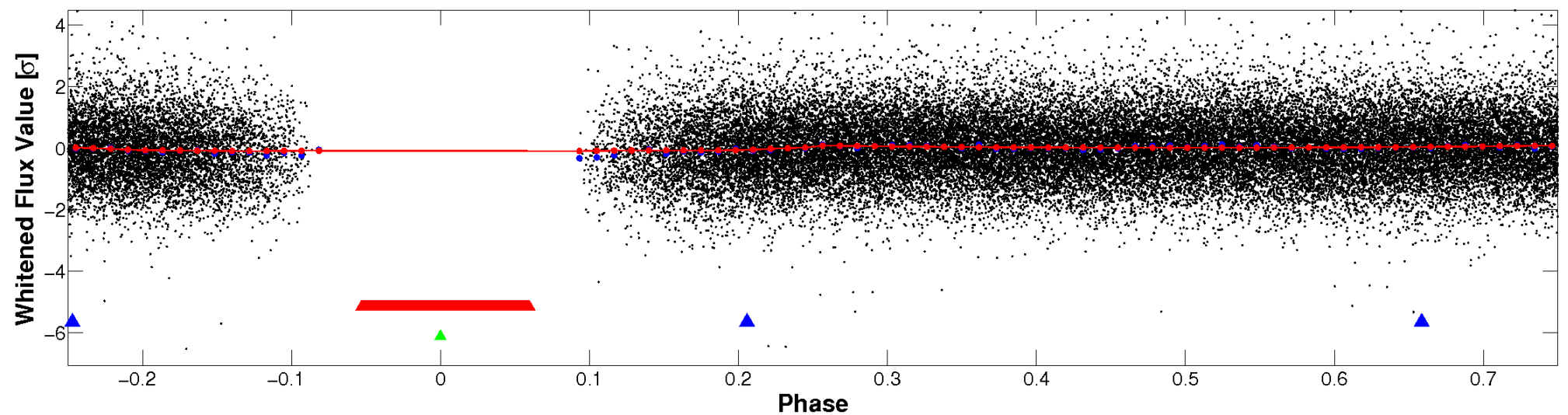


Non-Whitened Vs. Whitened Light Curve

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

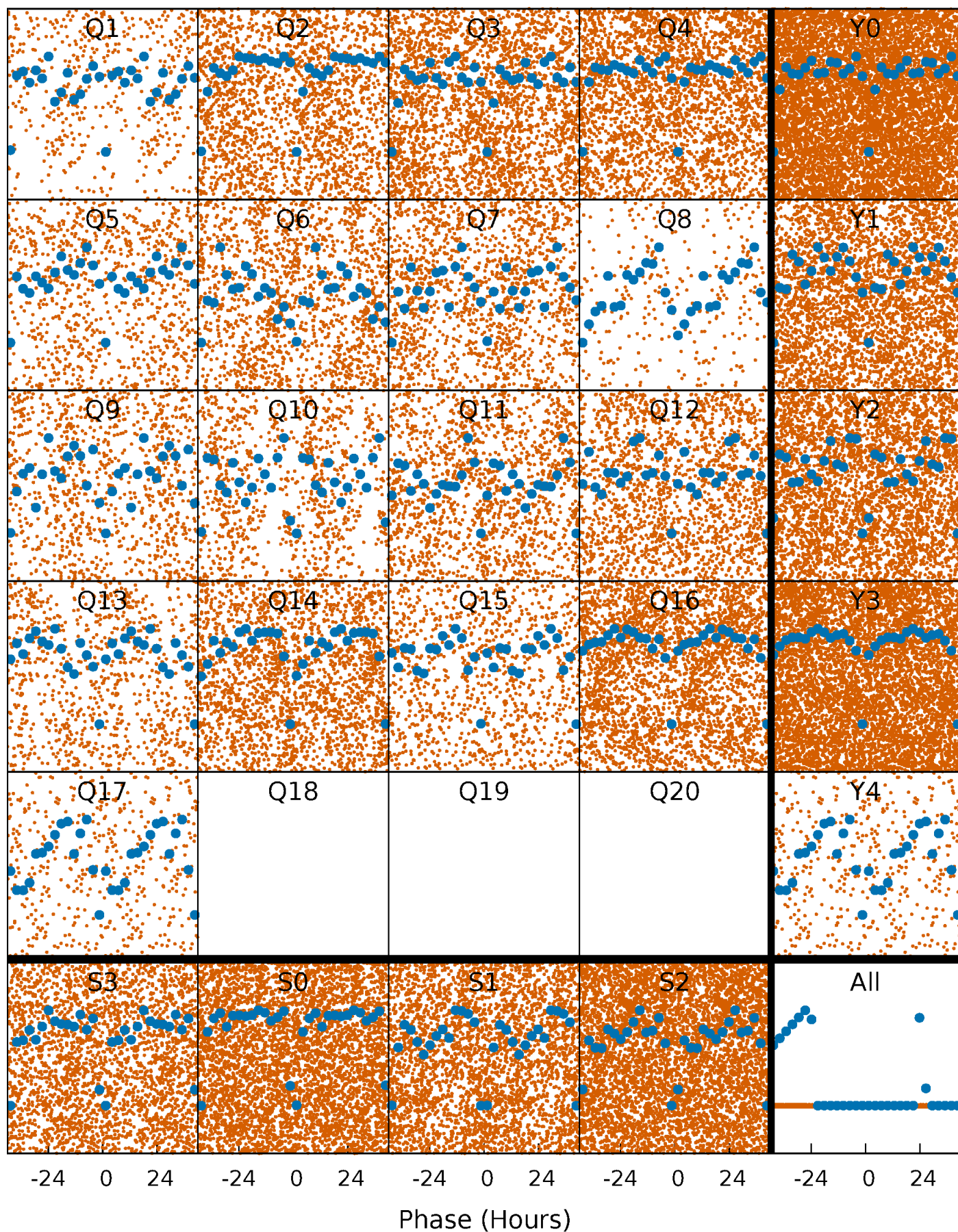


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



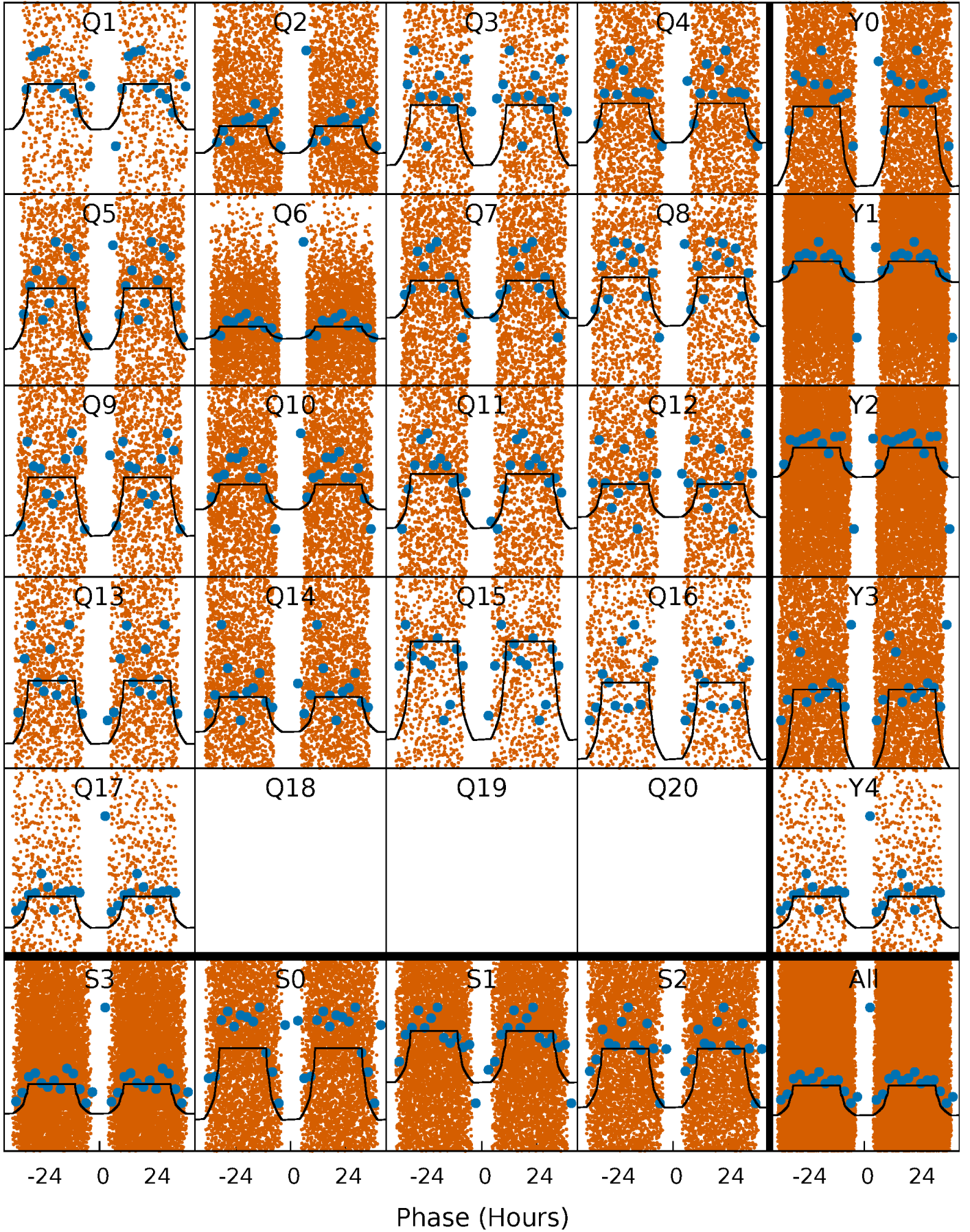
PDC Quarter-Phased Transit Curves

TCE 006891543-03 P= 1.752770 Days $T_0=132.628365$ (BKJD)



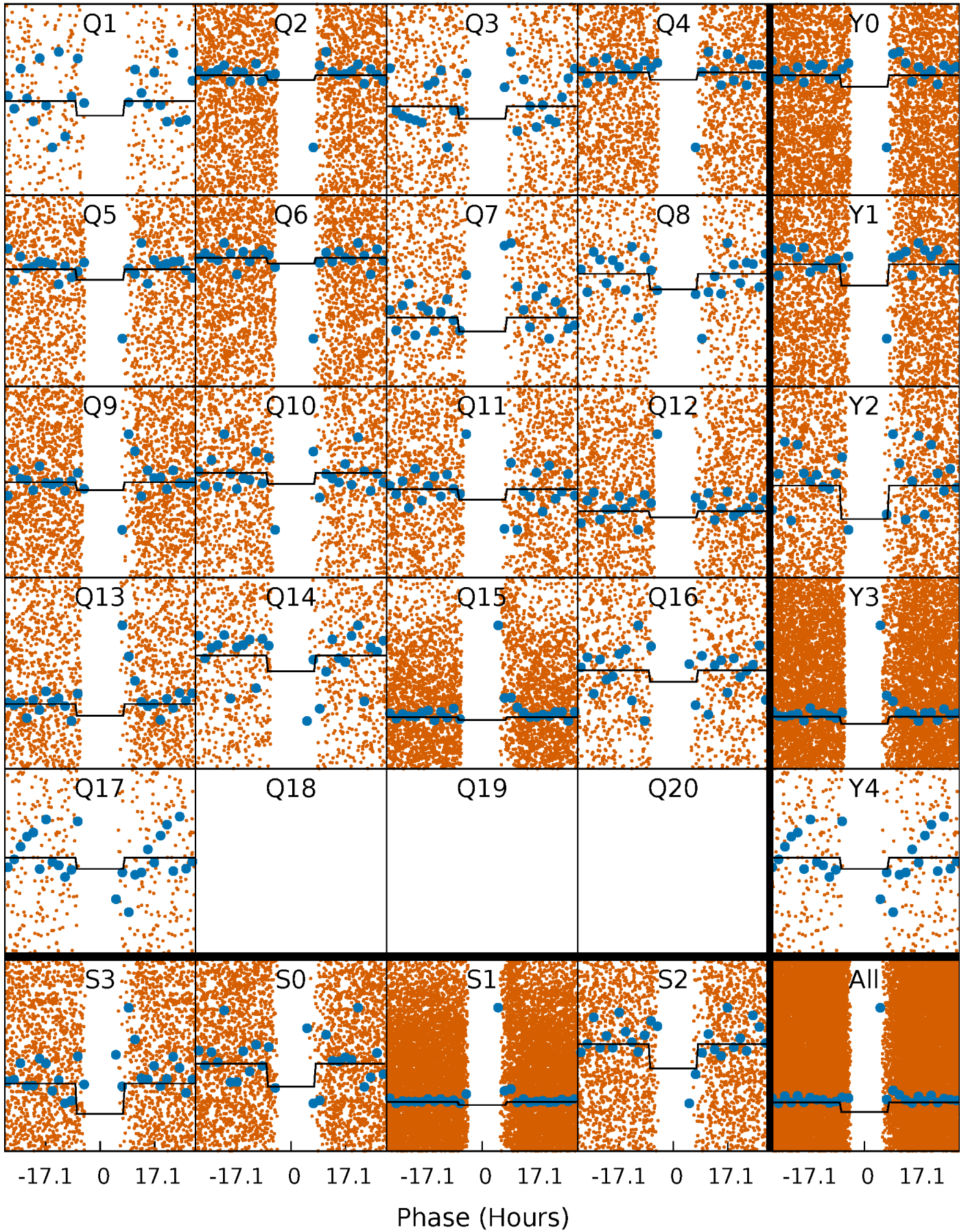
DV Quarter-Phased Transit Curves

TCE 006891543-03 P= 1.752770 Days $T_0=132.628365$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

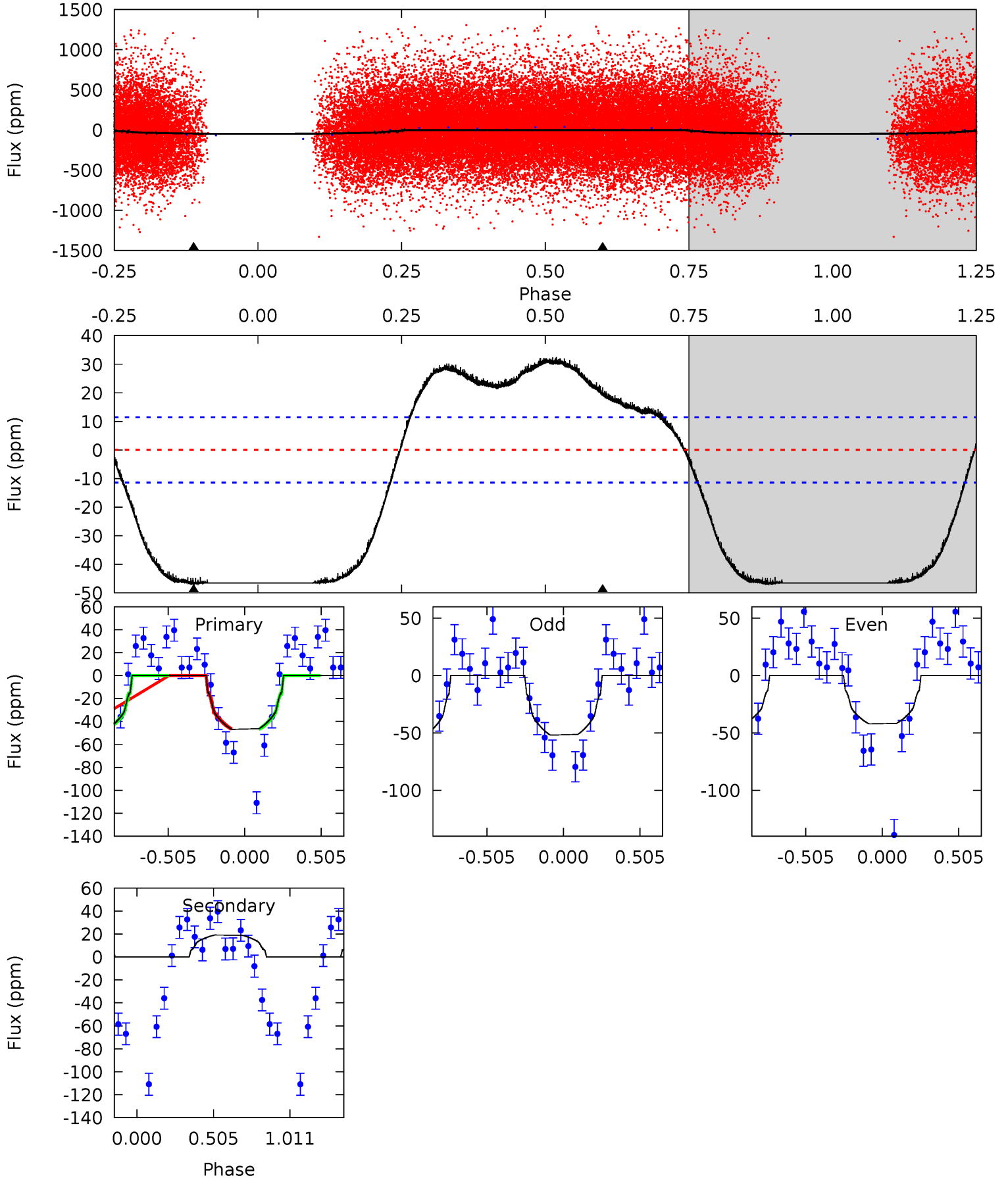
TCE 006891543-03 P= 1.752668 Days $T_0=132.650259$ (BKJD)



DV Model-Shift Uniqueness Test

006891543-03, P = 1.752770 Days, E = 130.875595 Days

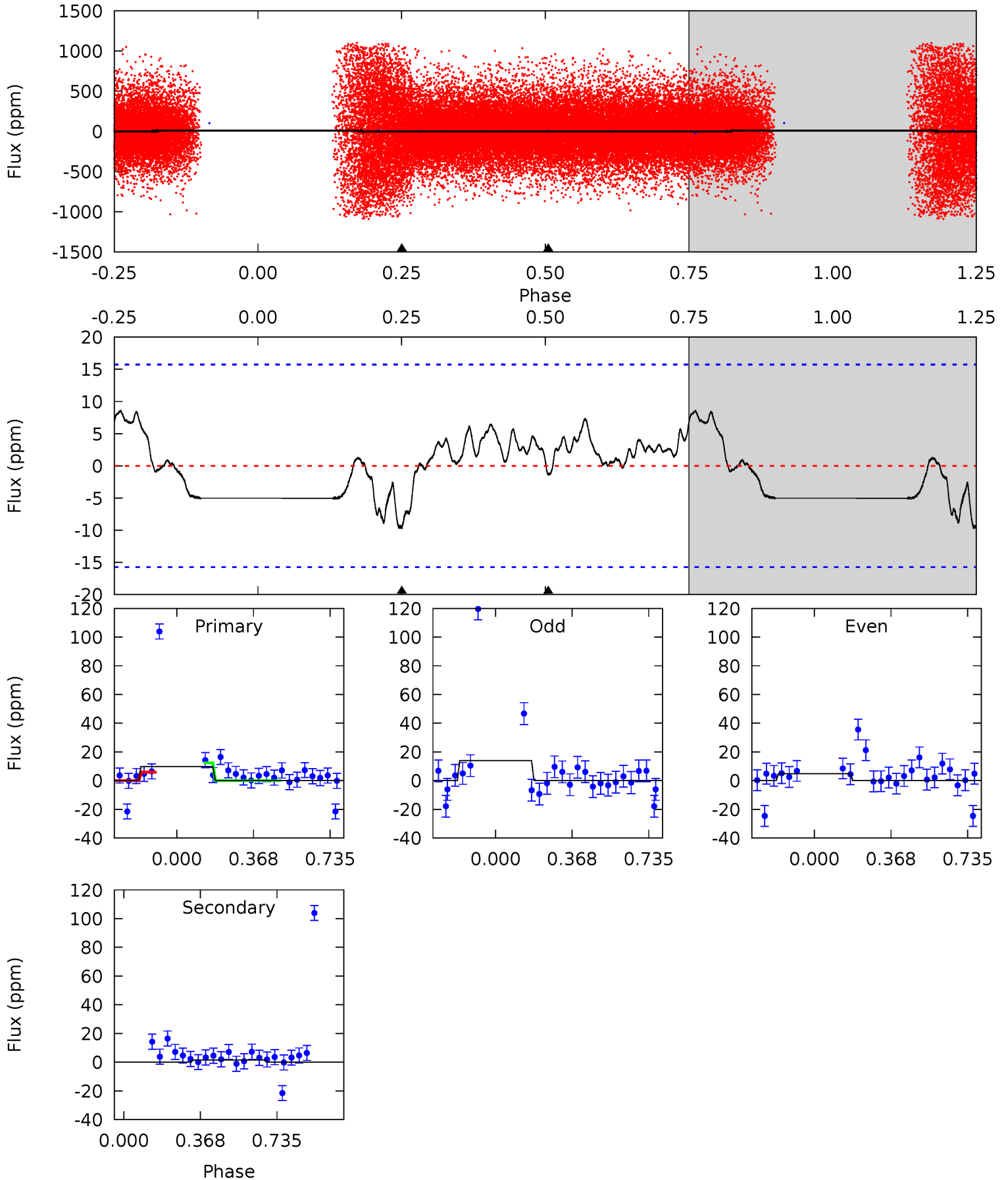
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.3	-7.04	0	0	4.21	0.67	5.03	17.3	17.3	-7.04	-7.04	1.76	0.61	0.41	0.03



Alt Model-Shift Uniqueness Test

006891543-03, P = 1.752668 Days, E = 130.897591 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.66	0.39	0	0	4.28	0.90	0.67	2.66	2.66	0.39	0.39	1.26	0.63	0.47	0.81



Stellar Parameters For KIC 006891543

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5739^{+156}_{-173}	$4.433^{+0.081}_{-0.189}$	$0.060^{+0.250}_{-0.300}$	$0.996^{+0.274}_{-0.126}$	$0.980^{+0.114}_{-0.102}$	$1.397^{+0.591}_{-0.706}$
	+3%/-3%	+2%/-4%	+417%/-500%	+28%/-13%	+12%/-10%	+42%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 006891543-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	19 ± 3	$1.14^{+0.18}_{-0.14}$	2126^{+144}_{-106}	-4081^{+159}_{-184}	$-6.376^{+1.691}_{-2.073}$
Alt.	-1 ± 4	$0.36^{+0.09}_{-0.08}$	2122^{+140}_{-99}	3762^{+1170}_{-7942}	$4.120^{+14.997}_{-11.674}$

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 $A_{obs} \gg 1.0$

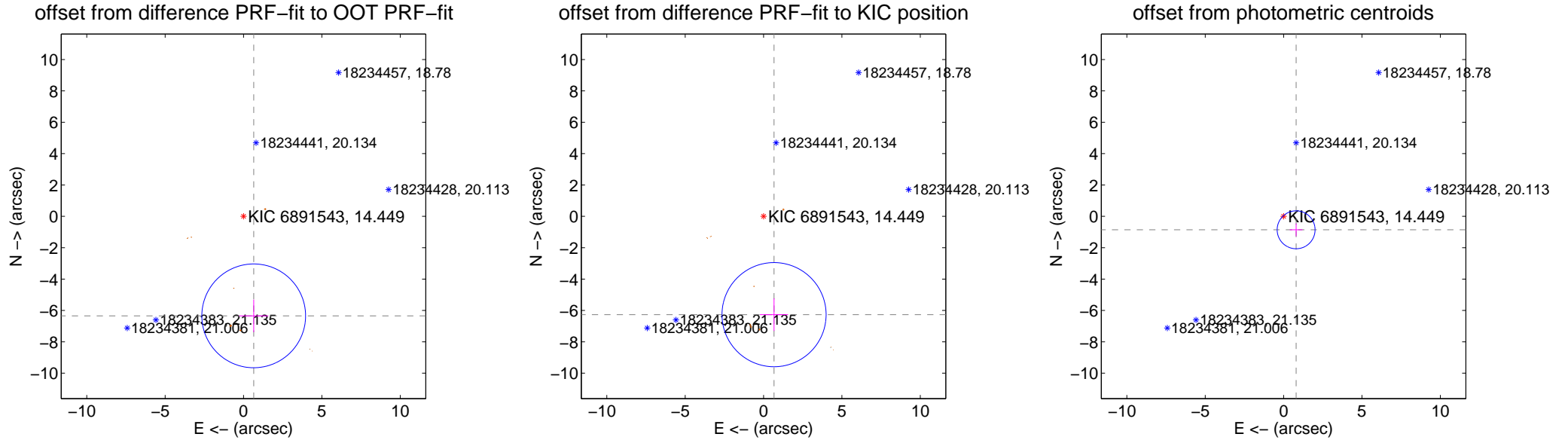
DV Centroid Data

Supplemental centroid analysis for 006891543-03. Kepler magnitude: 14.45. Transit SNR 10.69

There are 1 quarters with good PRF difference image offsets

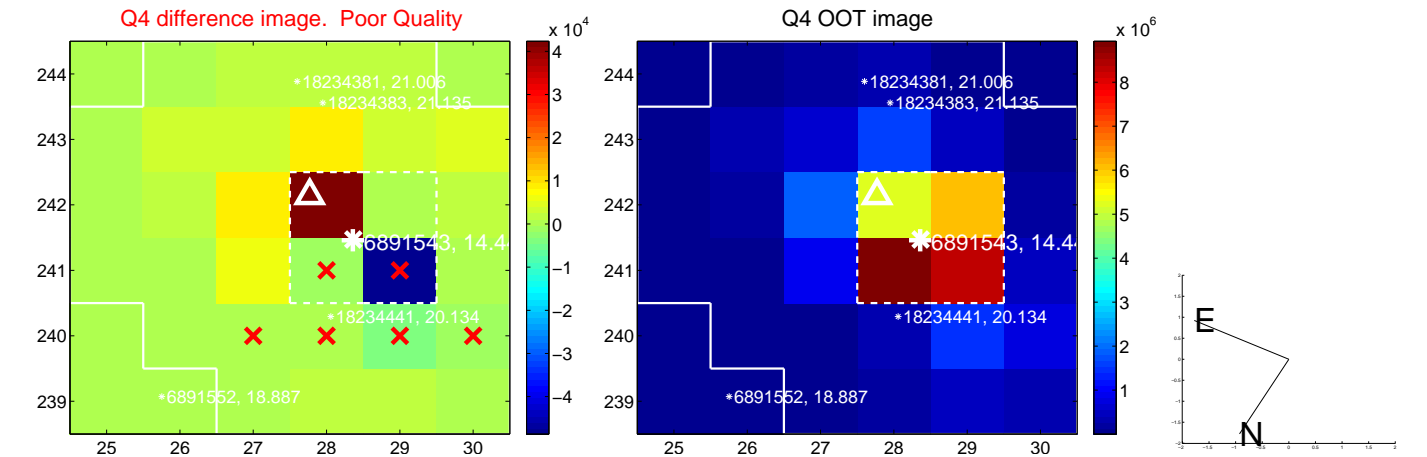
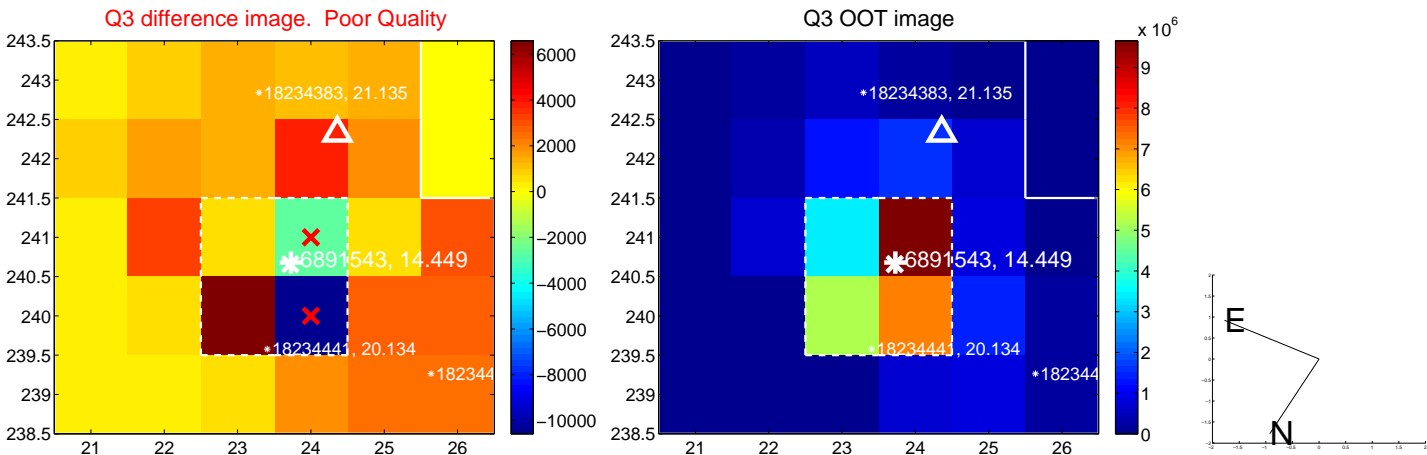
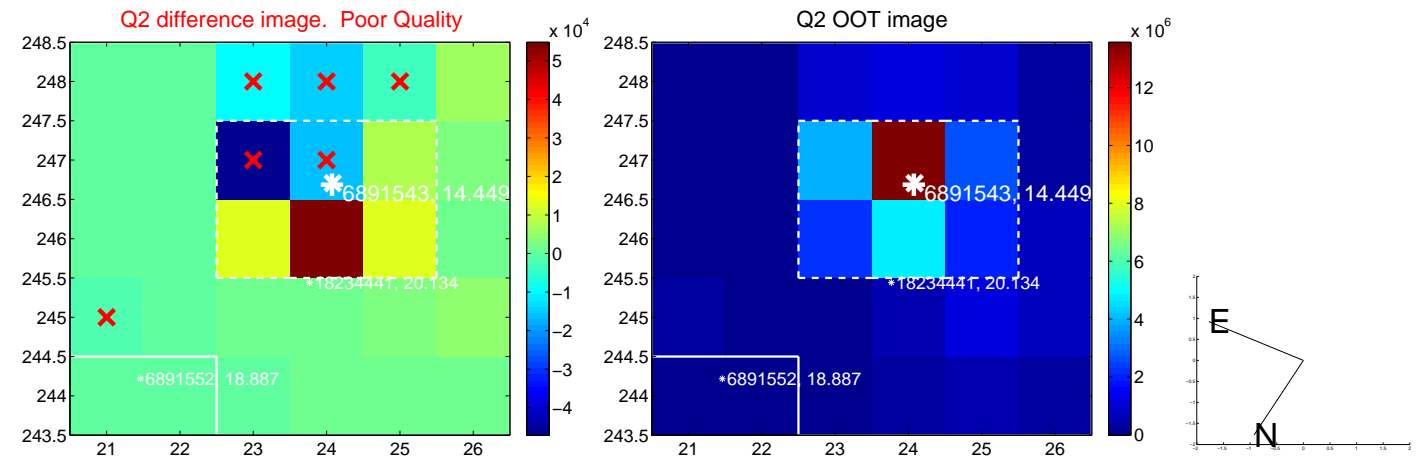
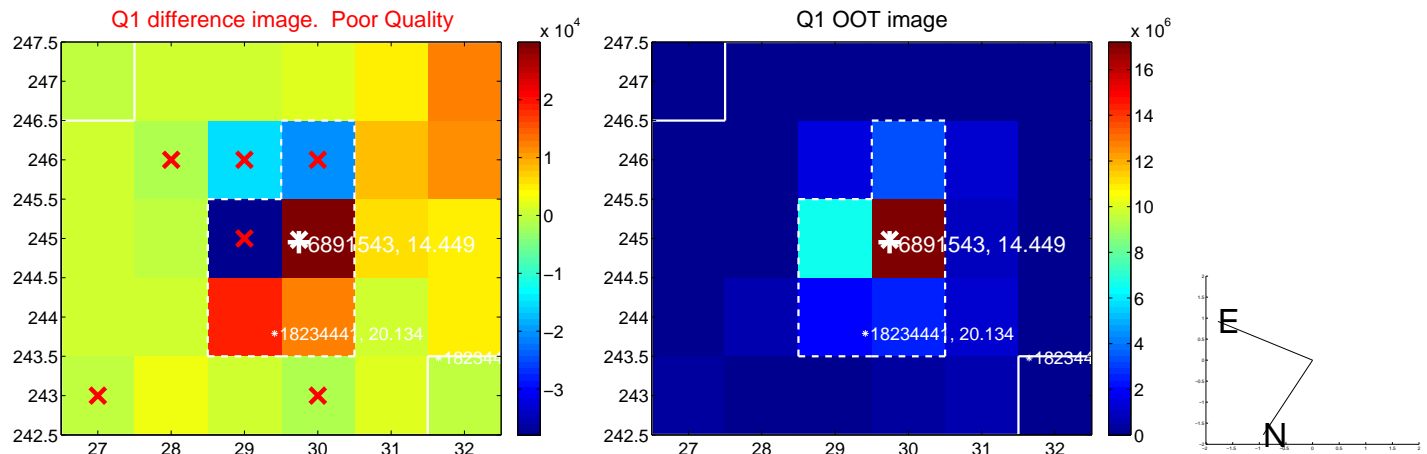
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	6.376 ± 1.103	5.78	-0.650 ± 0.930	-6.343 ± 1.036
PRF-fit source offset from KIC position	6.303 ± 1.107	5.70	-0.670 ± 0.896	-6.268 ± 1.039
photometric centroid source offset	1.17 ± 0.40	2.91	-0.80 ± 0.40	-0.86 ± 0.40

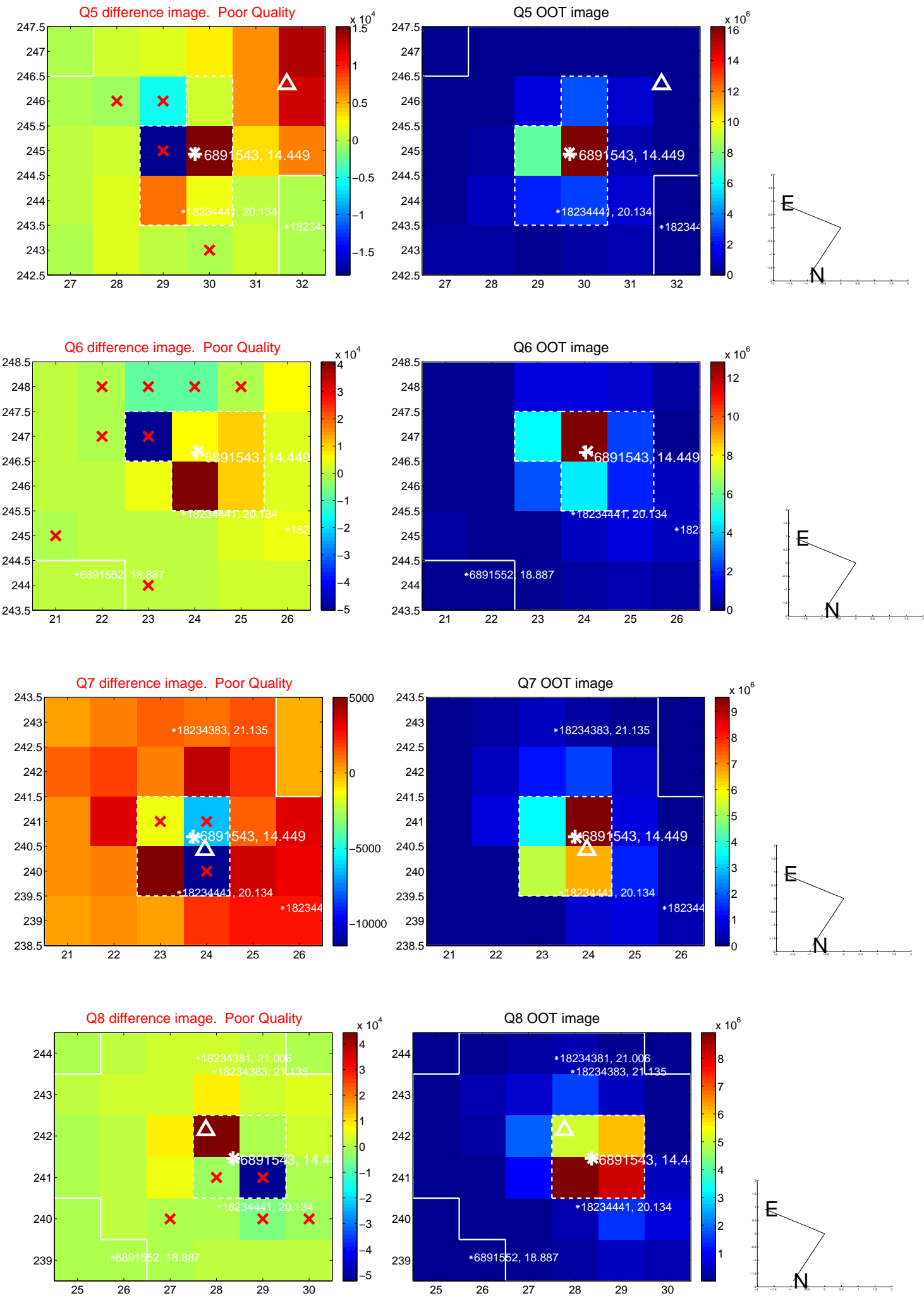


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

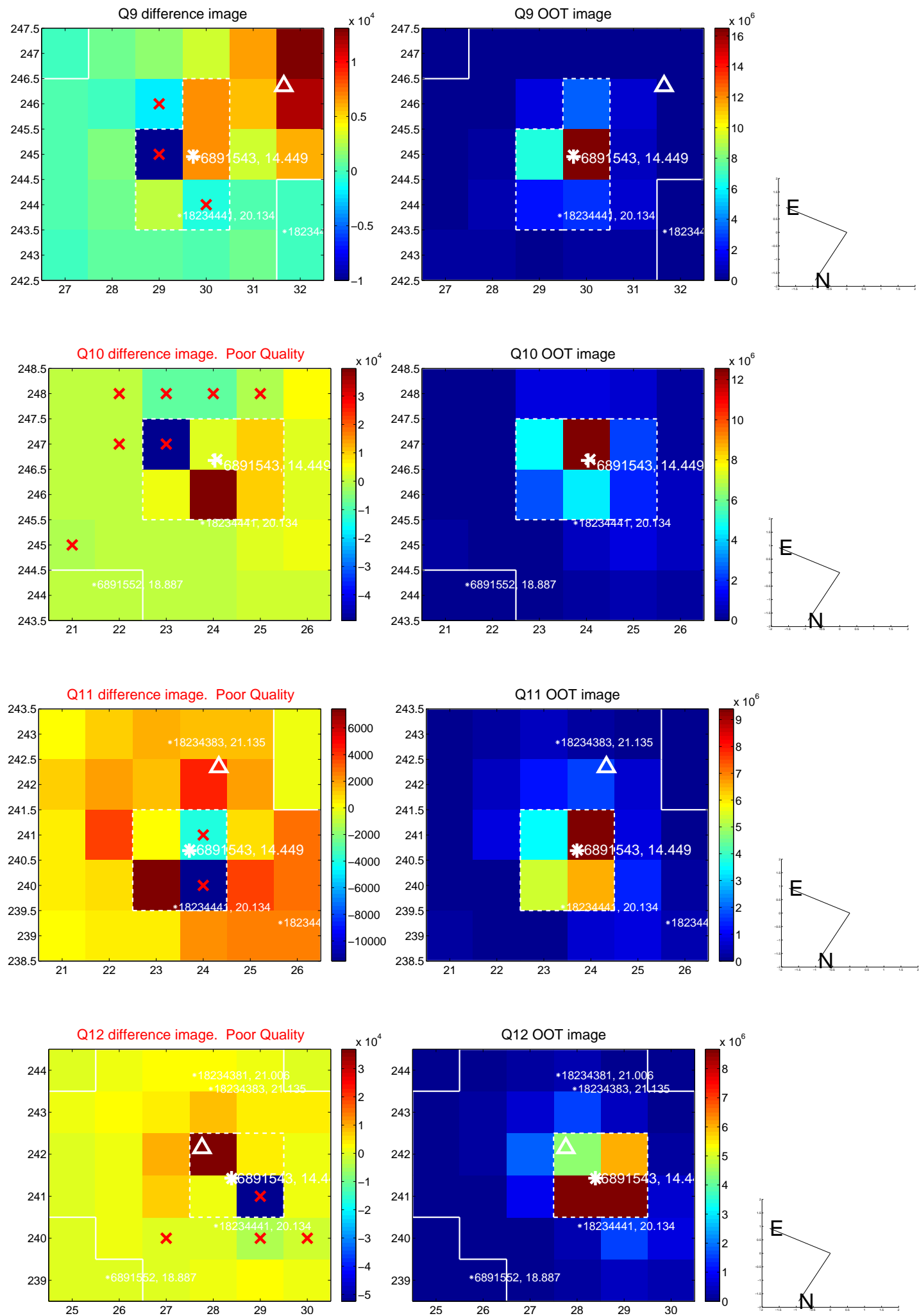
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



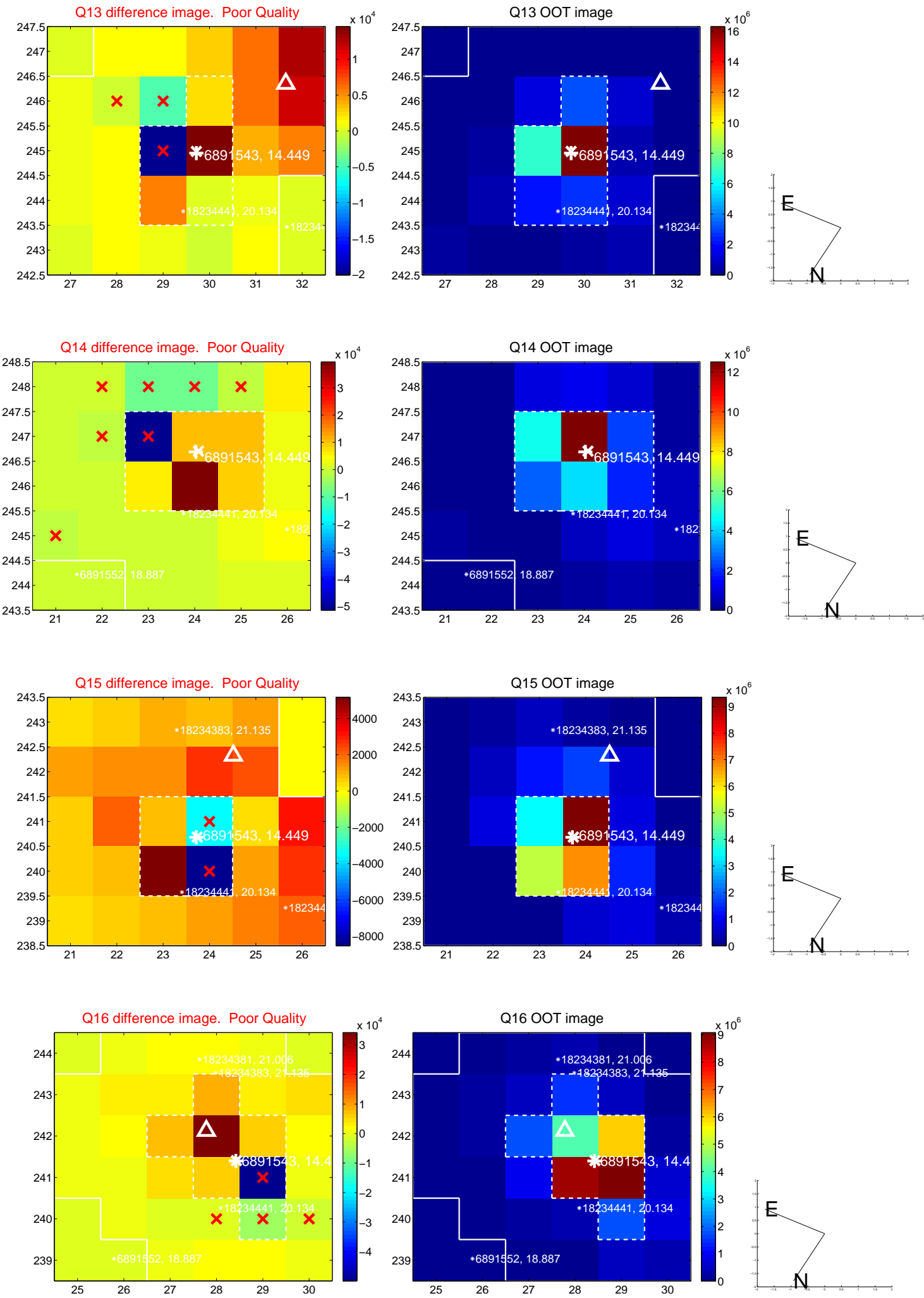
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



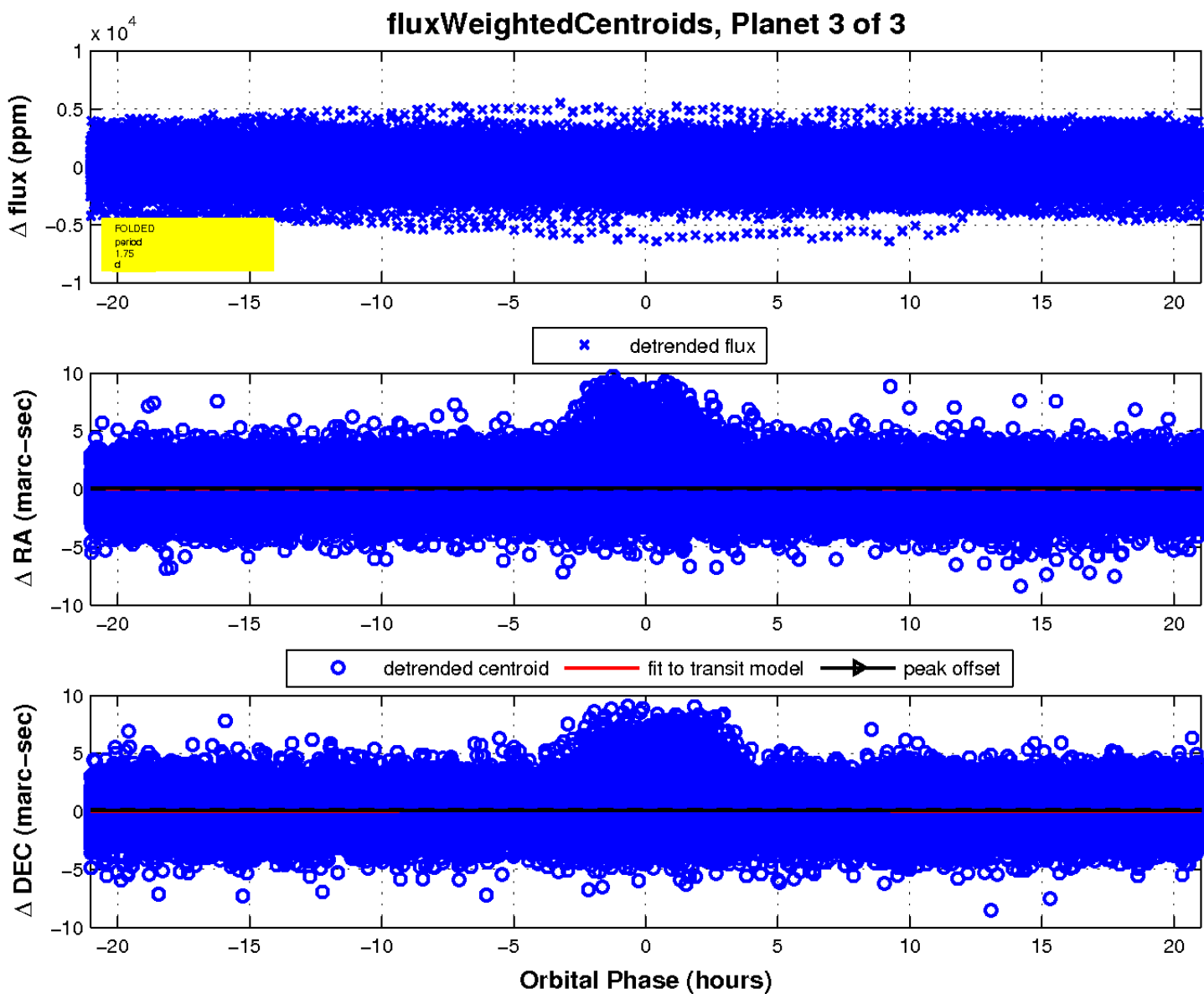
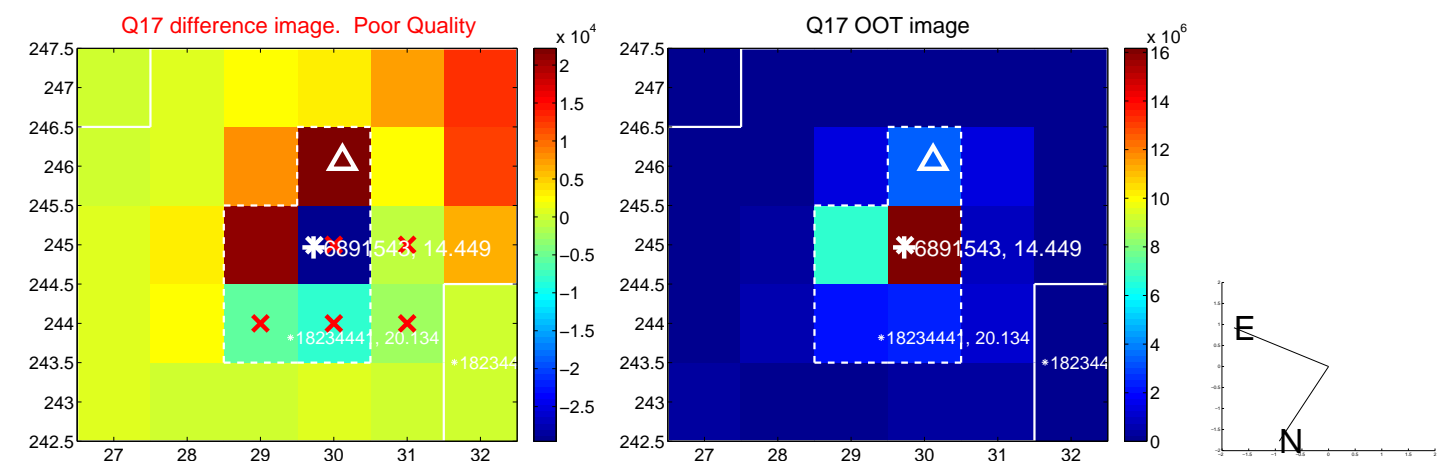
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

