

KIC 004263801

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})
004263801-02	OBS	No	351.837957	137.344031	874.3	4.246	16.4	6.1	3.73	5225	11.09	8.03
004263801-03	OBS	No	497.548859	541.556408	1205.5	3.183	14.6	7.4	3.73	5225	14.01	5.06
004263801-04	OBS	No	606.533978	358.782399	127.6	5.979	12.5	0.7	3.73	5225	5.71	3.88
004263801-05	OBS	No	357.598614	176.927745	1339.4	3.499	15.6	7.9	3.73	5225	13.39	7.85
004263801-06	OBS	No	483.750911	412.629101	857.2	7.500	13.0	-1.0	3.73	5225	10.71	5.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004263801-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
004263801-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
004263801-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004263801-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
004263801-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

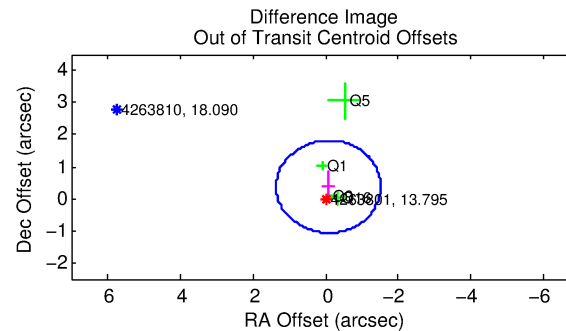
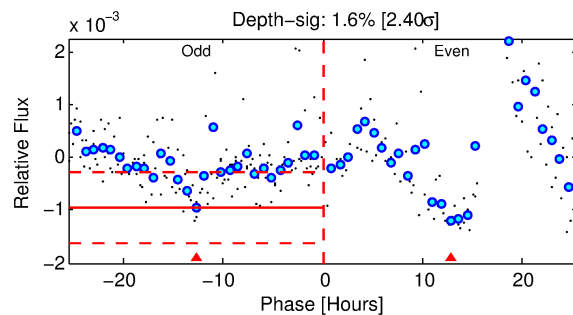
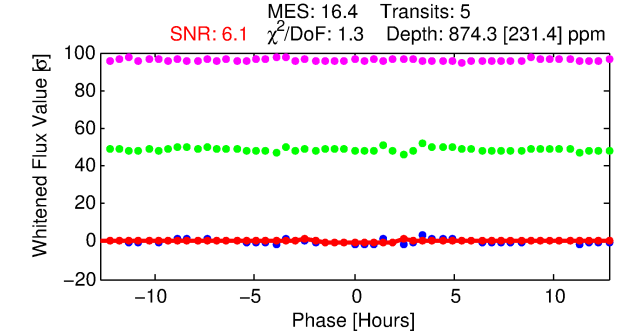
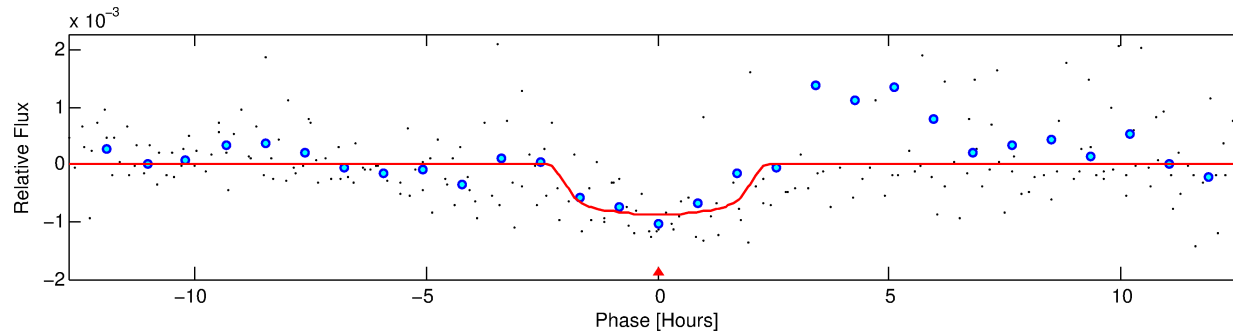
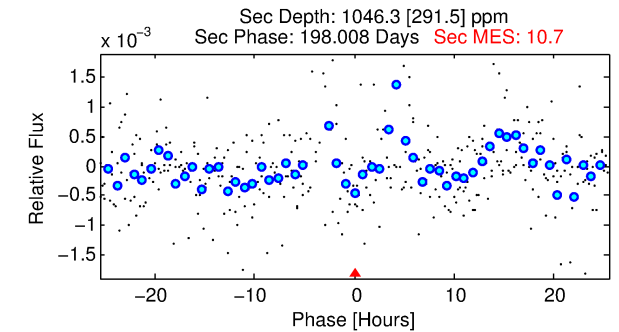
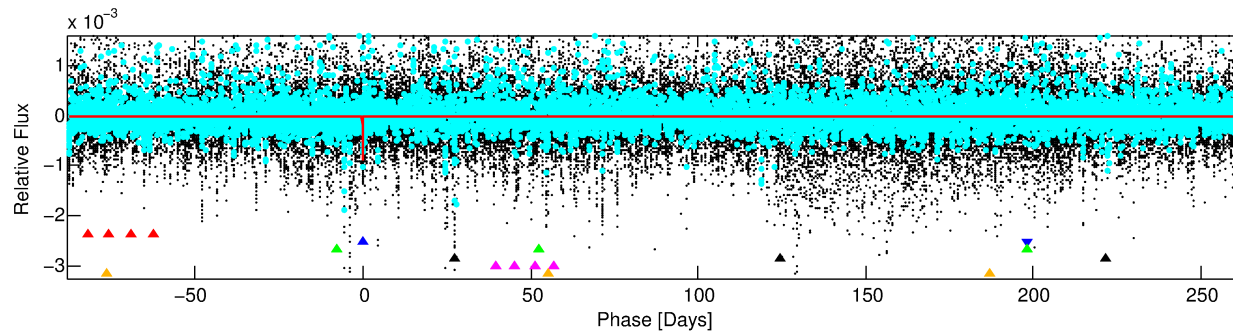
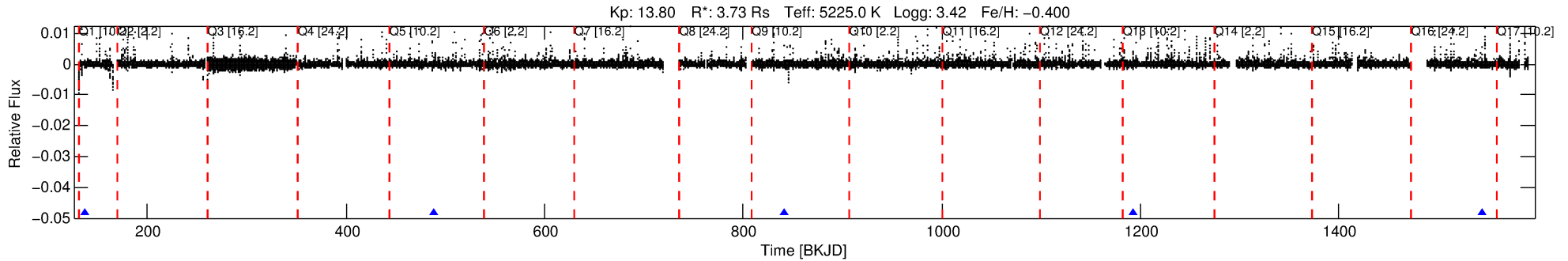
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004263801-02

No Significant Match Found

DV One-Page Summary

KIC: 4263801 Candidate: 2 of 6 Period: 351.838 d



DV Fit Results:

Period = 351.83796 [0.00493] d
Epoch = 137.3440 [0.0128] BKJD
Rp/R* = 0.0272 [0.0564]
a/R* = 591.77 [4761.26]
b = 0.43 [15.62]
Seff = 8.03 [5.28]
Teq = 429 [71] K
Rp = 11.09 [23.40] Re
a = 1.0756 [0.4330] AU
Ag = 5417.99 [22731.86] [0.24σ]
Teffp = 5693 [5904] K [0.89σ]

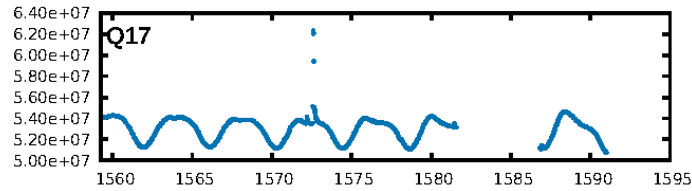
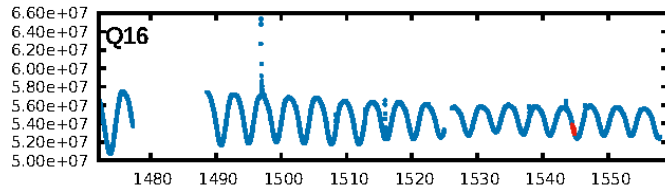
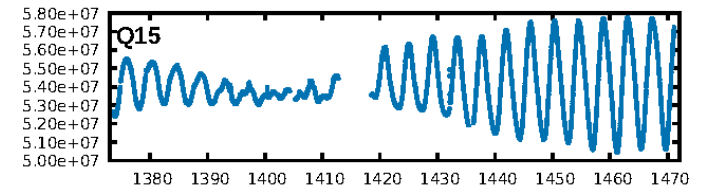
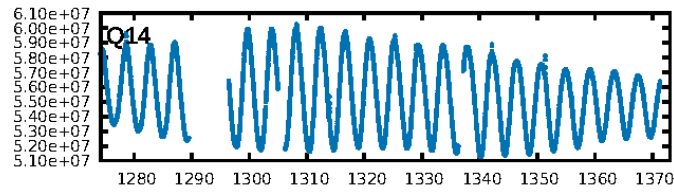
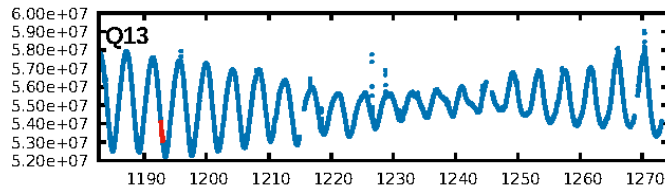
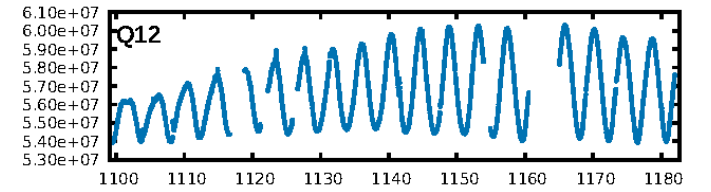
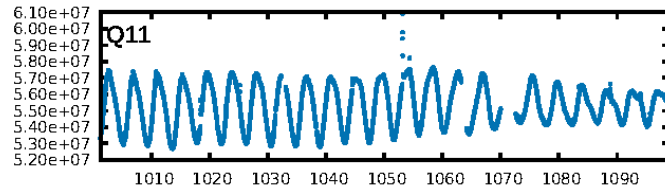
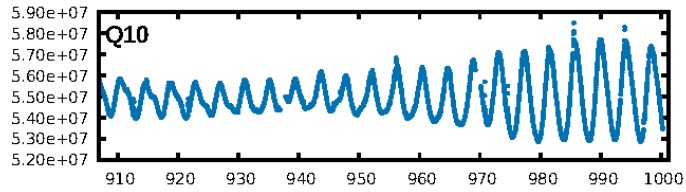
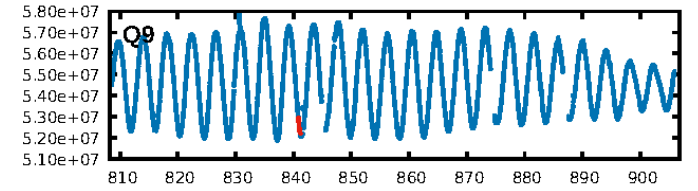
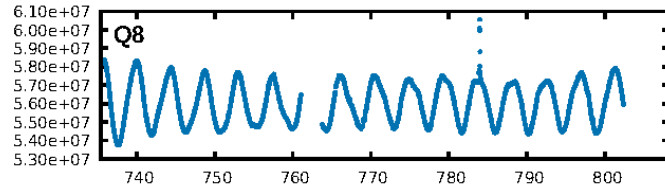
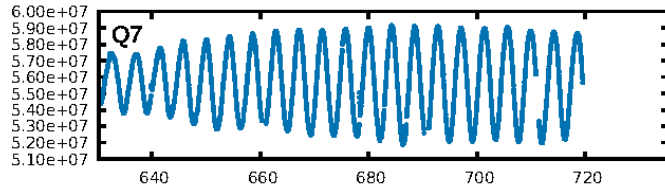
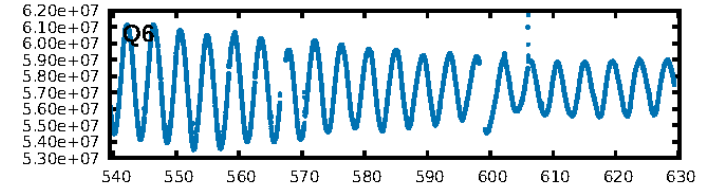
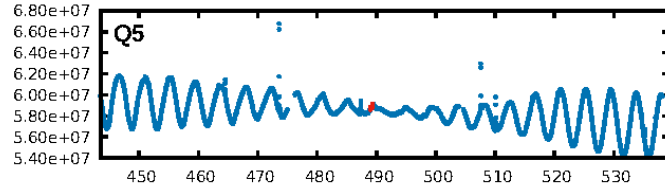
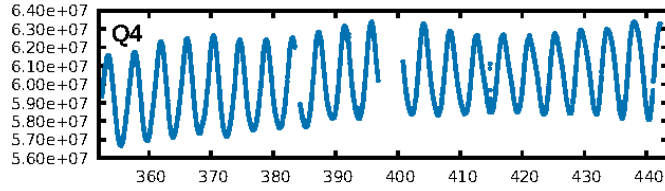
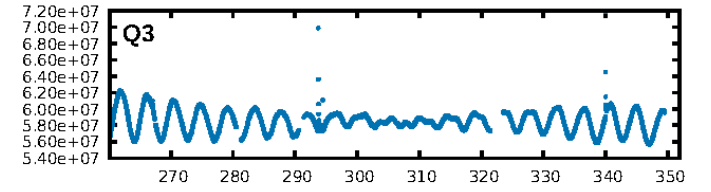
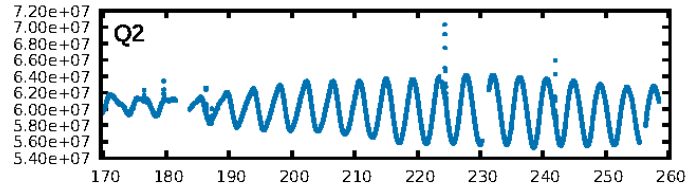
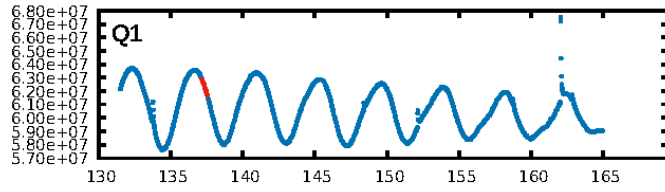
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [25.13σ]
ModelChiSquare2-sig: 4.4%
ModelChiSquareGof-sig: 84.2%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -1.167
Centroid-sig: 41.7%
Centroid-so: 0.400 arcsec [0.53σ]
OotOffset-rm: 0.382 arcsec [0.80σ]
KicOffset-rm: 0.384 arcsec [0.62σ]
OotOffset-st: 0/0/1/3 [4]
KicOffset-st: 0/0/1/3 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

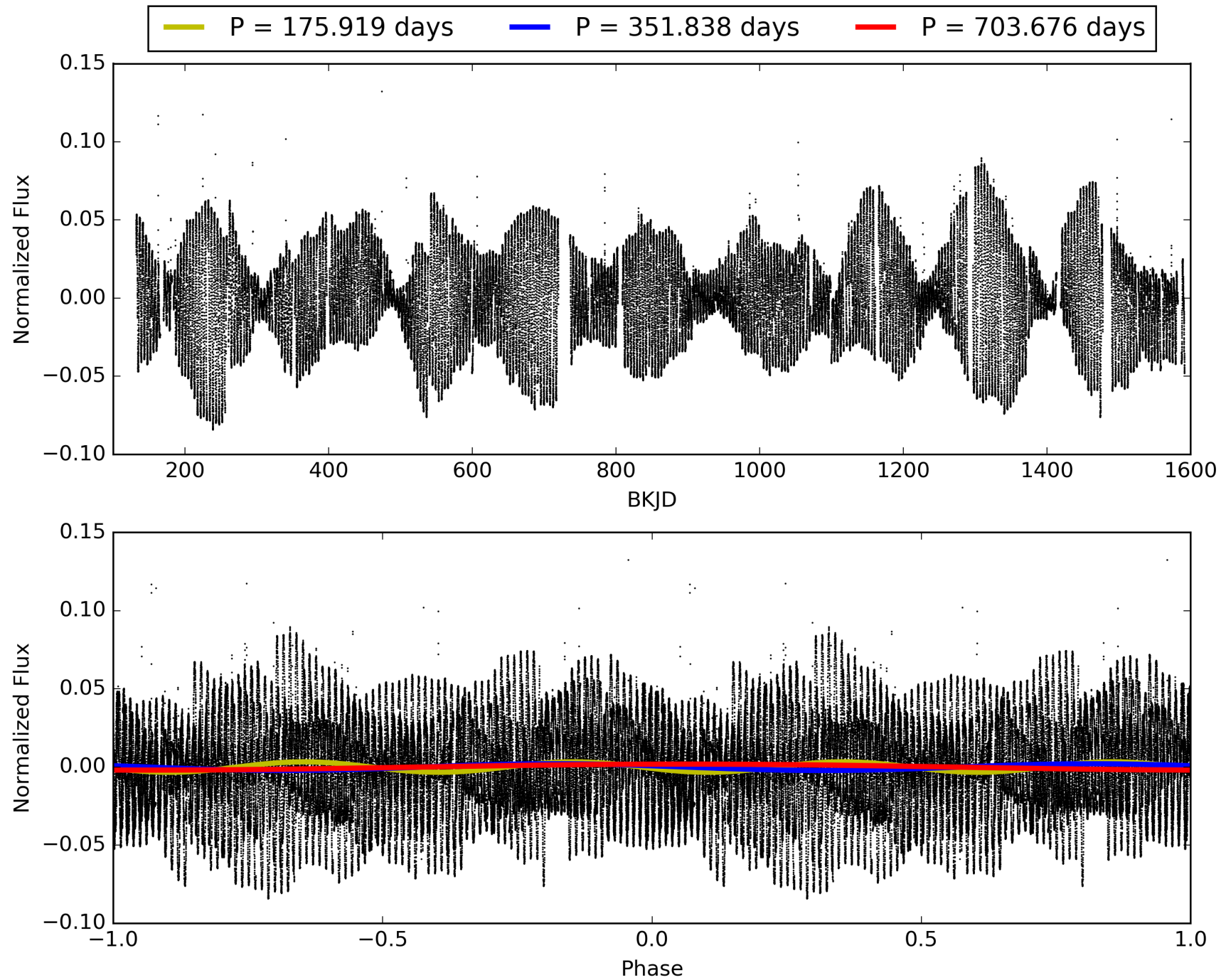
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 05:43:49 Z

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

TCE 004263801-02, PDC Light Curves

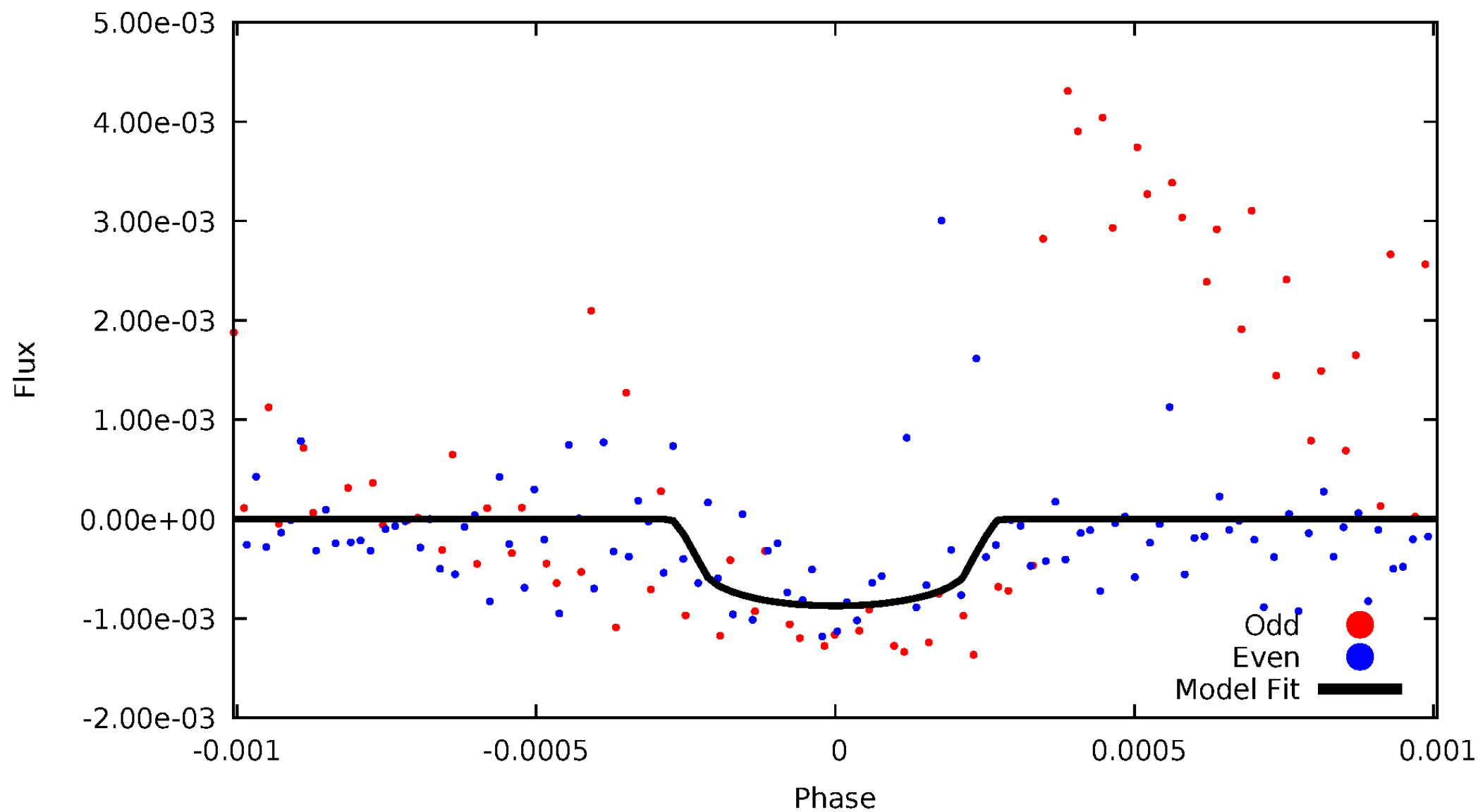


TCE 004263801-02



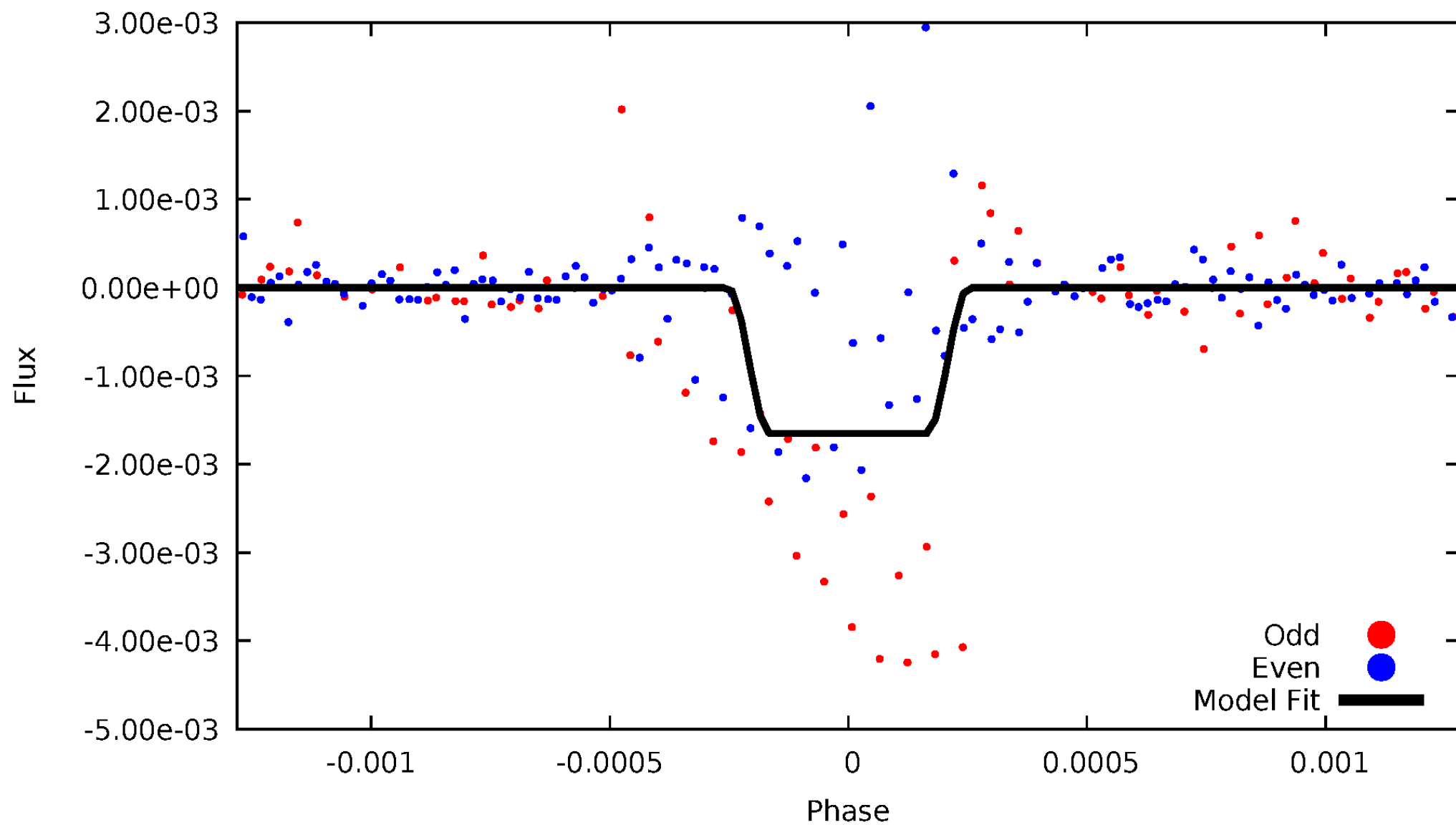
DV Odd/Even

TCE 004263801-02



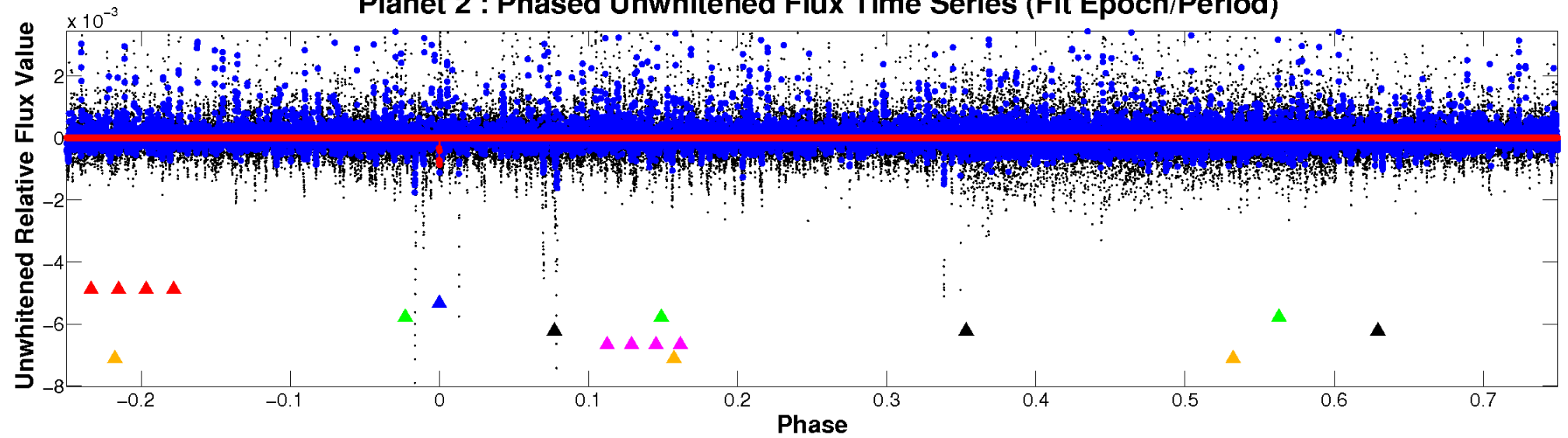
ALT Odd/Even

TCE 004263801-02

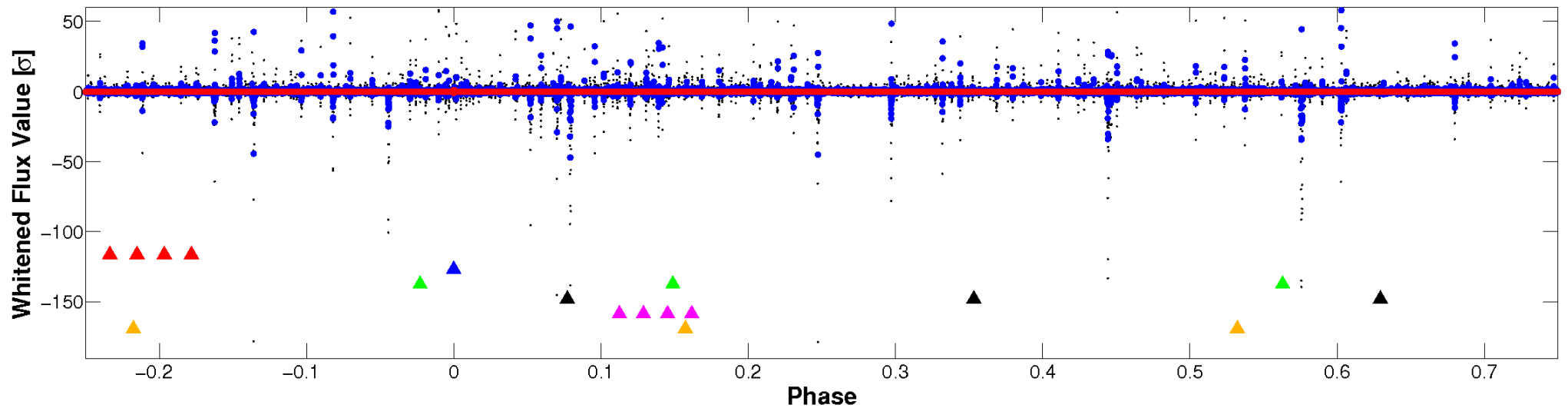


Non-Whitened Vs. Whitened Light Curve

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

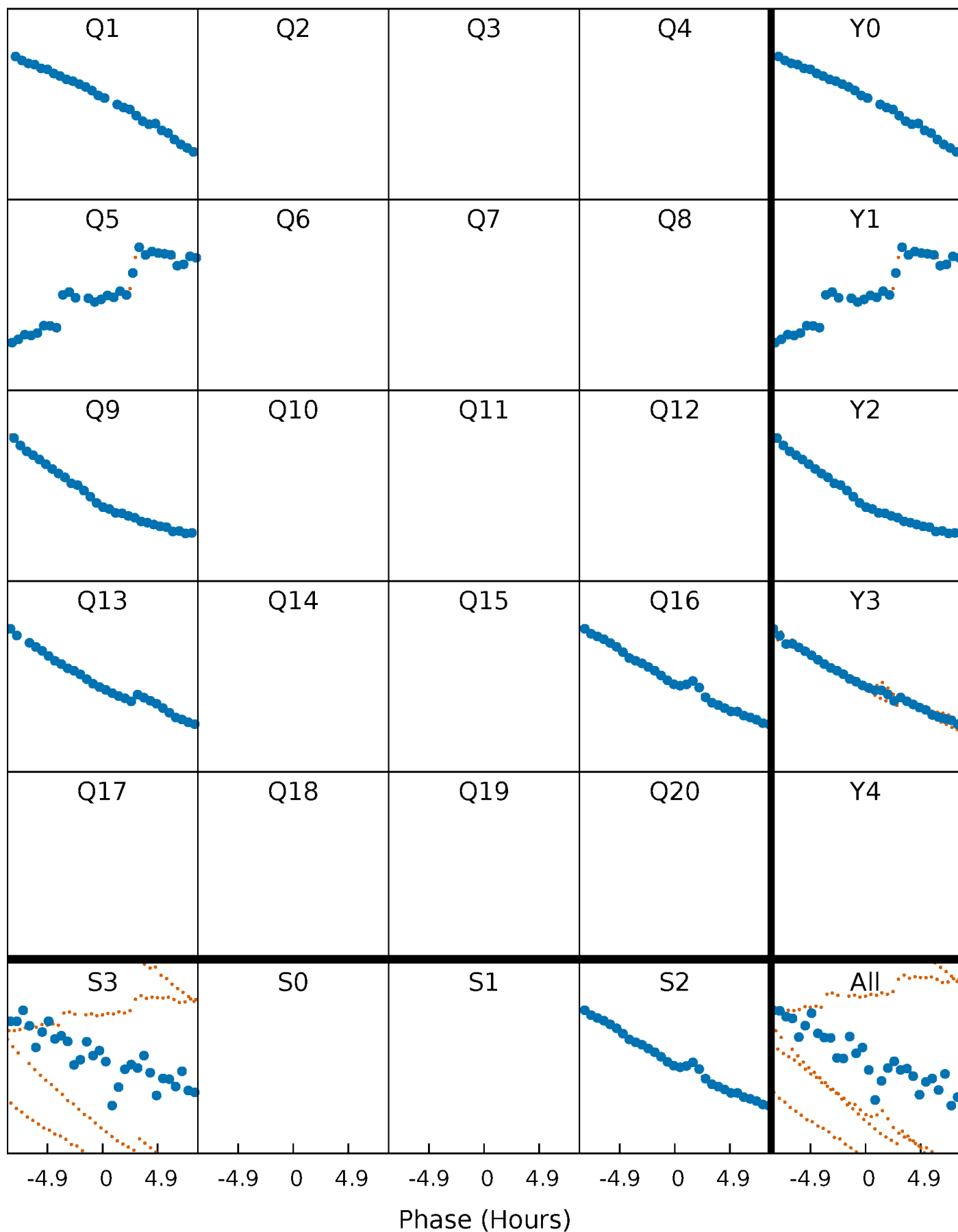


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



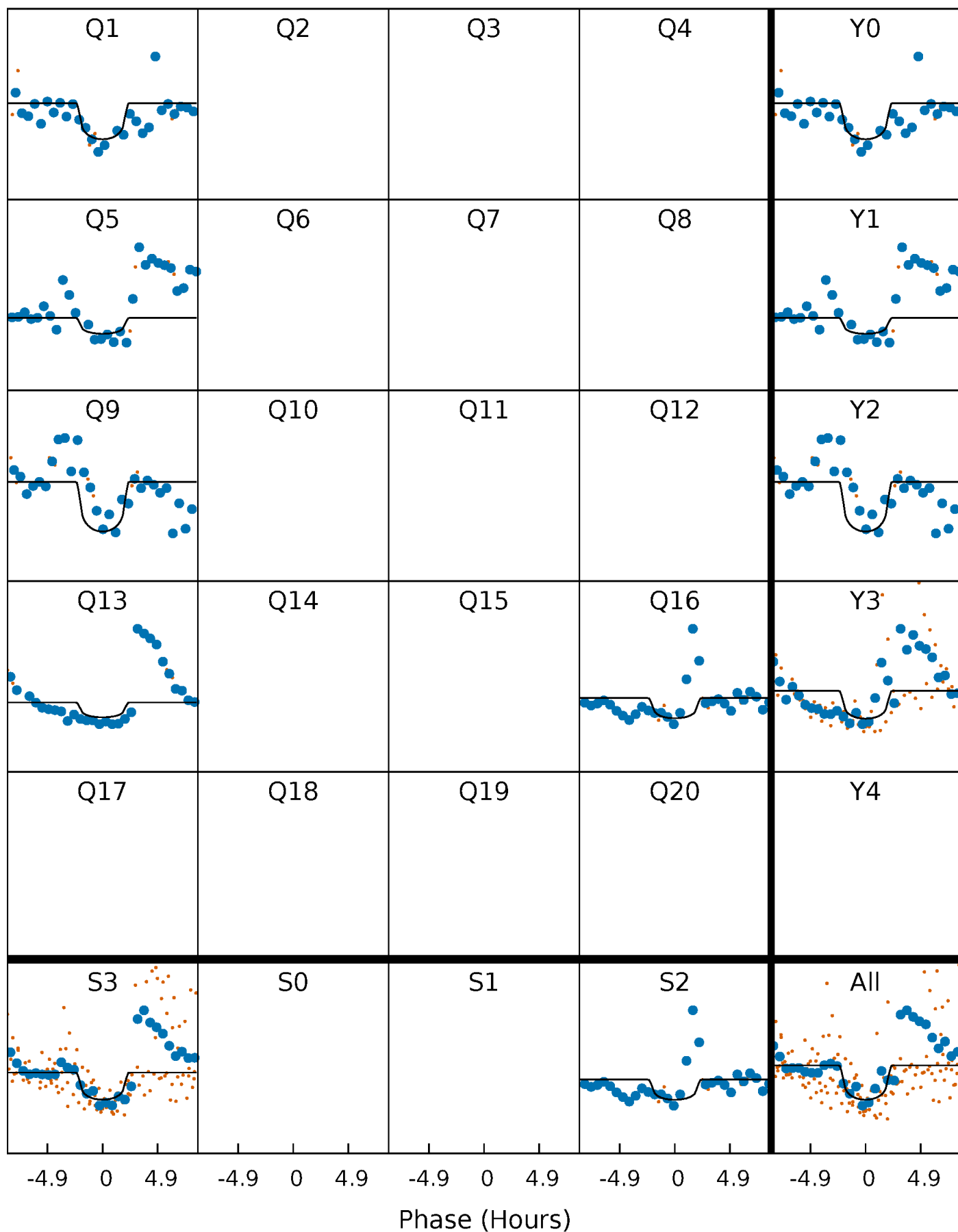
PDC Quarter-Phased Transit Curves

TCE 004263801-02 $P=351.837957$ Days $T_0=137.344031$ (BKJD)



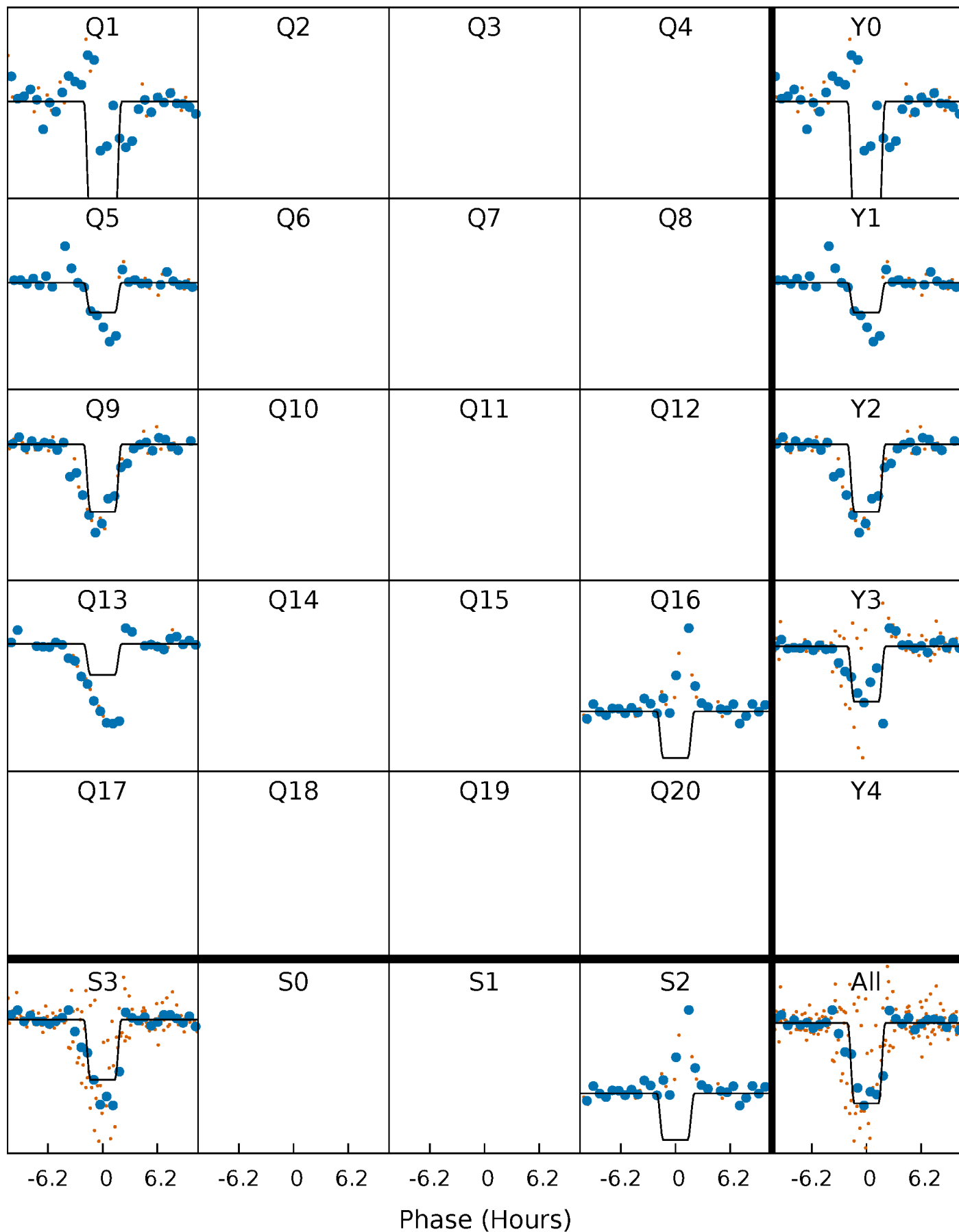
DV Quarter-Phased Transit Curves

TCE 004263801-02 $P=351.837957$ Days $T_0=137.344031$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

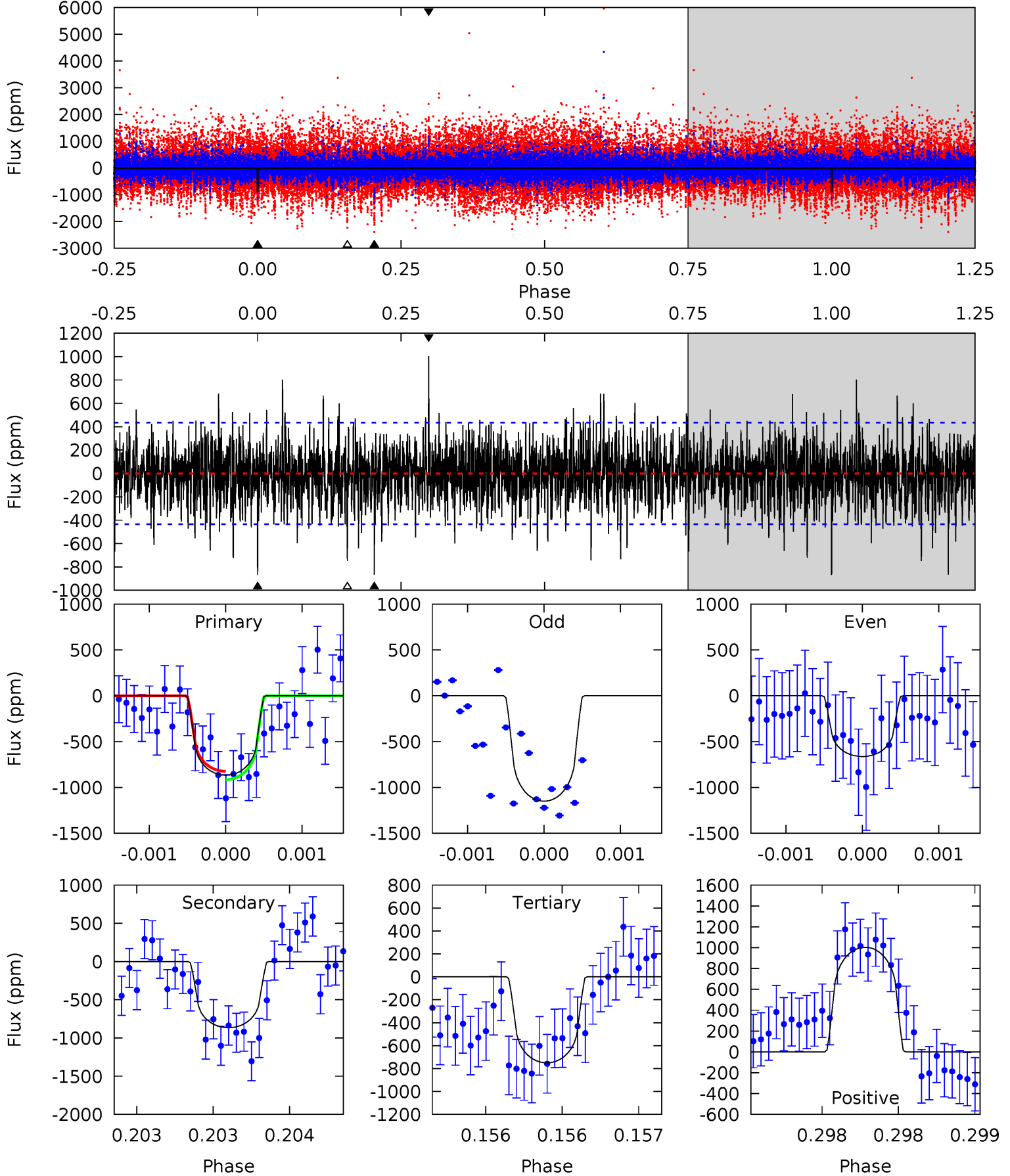
TCE 004263801-02 $P=351.831847$ Days $T_0=137.394279$ (BKJD)



DV Model-Shift Uniqueness Test

004263801-02, P = 351.837957 Days, E = 137.344031 Days

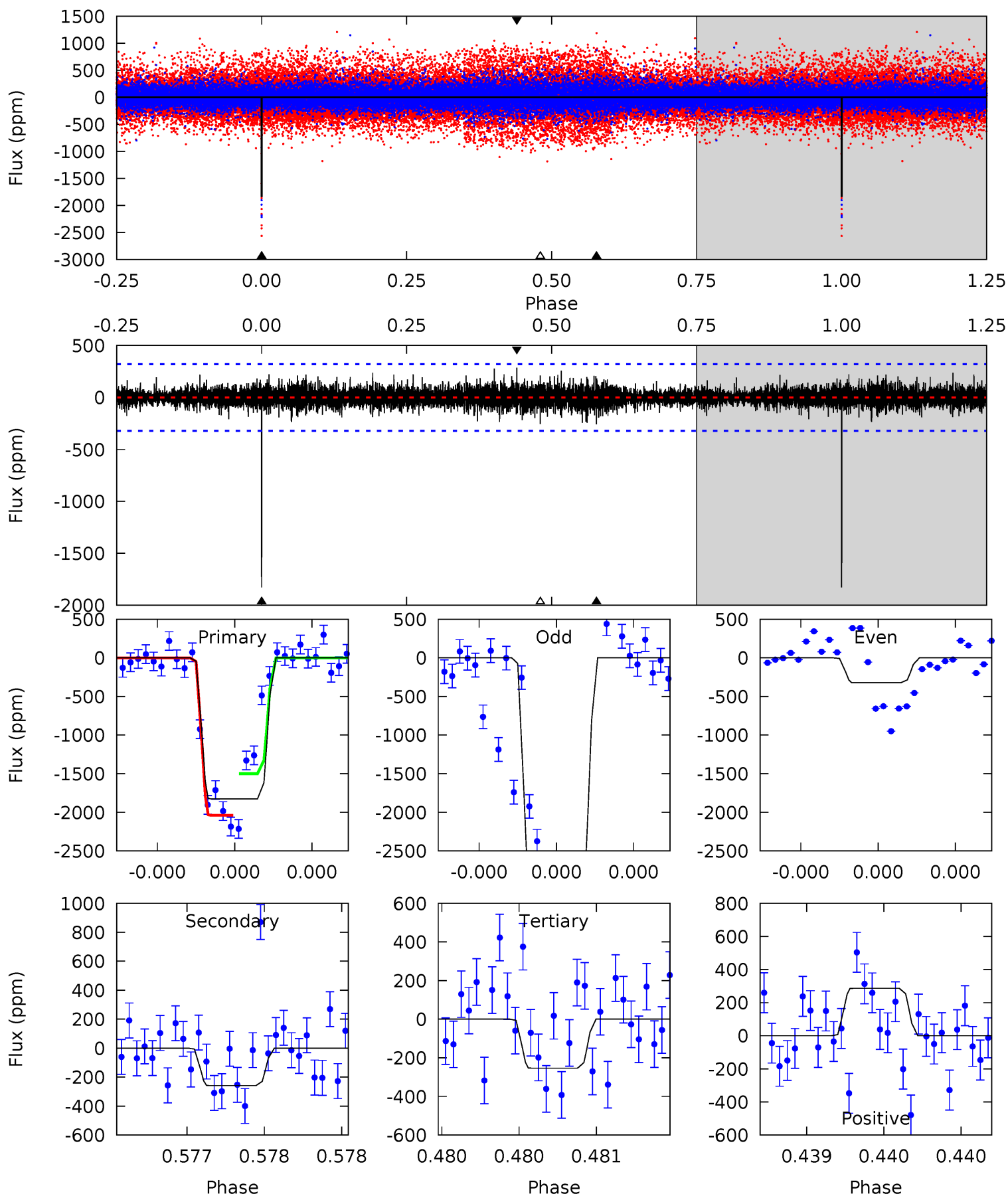
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	11.1	9.59	12.8	5.56	3.46	2.43	1.49	-1.74	1.47	-1.77	2.11	0.77	0.54	0.59



Alt Model-Shift Uniqueness Test

004263801-02, P = 351.831847 Days, E = 137.394279 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.8	4.49	4.41	4.98	5.58	3.49	0.94	27.3	26.8	0.08	-0.49	30.7	0.76	0.14	4.63



Stellar Parameters For KIC 004263801

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5225^{+157}_{-173}	$3.422^{+0.378}_{-0.252}$	$-0.400^{+0.300}_{-0.250}$	$3.729^{+1.277}_{-1.561}$	$1.341^{+0.177}_{-0.443}$	$0.036^{+0.104}_{-0.021}$
	+3%/-3%	+11%/-7%	+75%/-62%	+34%/-42%	+13%/-33%	+285%/-59%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 004263801-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-865 ± 78	$19.35^{+19.62}_{-13.75}$	596^{+66}_{-66}	4194^{+3256}_{-849}	1443^{+15298}_{-1090}
Alt.	-259 ± 58	$22.08^{+19.59}_{-14.47}$	598^{+65}_{-67}	3270^{+1674}_{-495}	325^{+2516}_{-239}

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

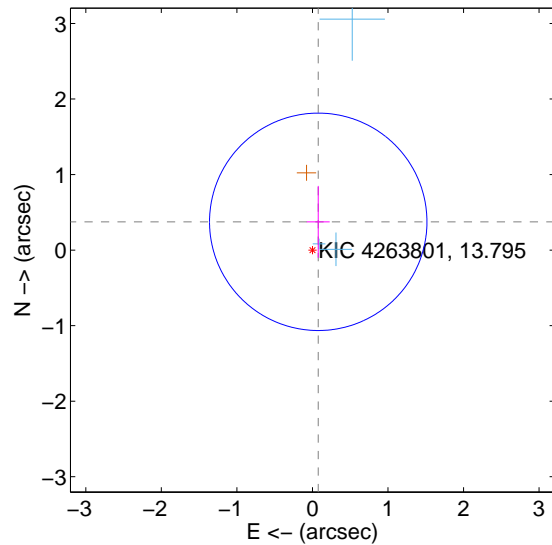
Supplemental centroid analysis for 004263801-02. Kepler magnitude: 13.79. Transit SNR 6.07

There are 3 quarters with good PRF difference image offsets

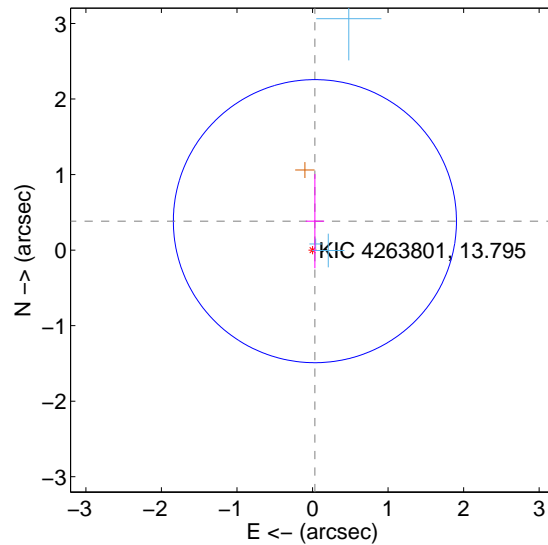
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.382 ± 0.480	0.80	-0.077 ± 0.151	0.374 ± 0.475
PRF-fit source offset from KIC position	0.384 ± 0.624	0.62	-0.032 ± 0.122	0.383 ± 0.623
photometric centroid source offset	0.40 ± 0.76	0.53	-0.11 ± 0.89	0.39 ± 0.75

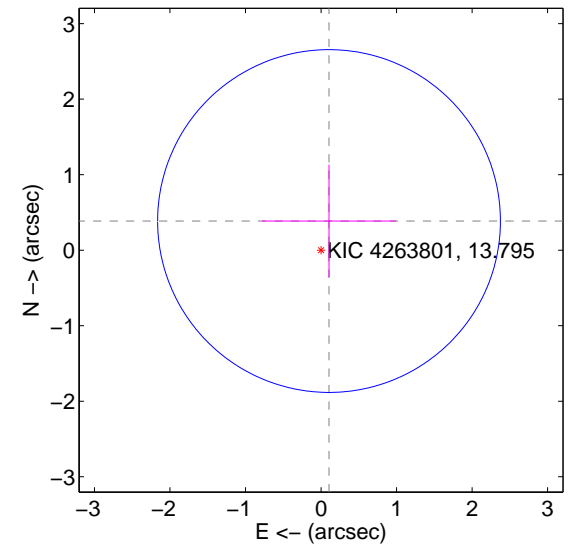
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

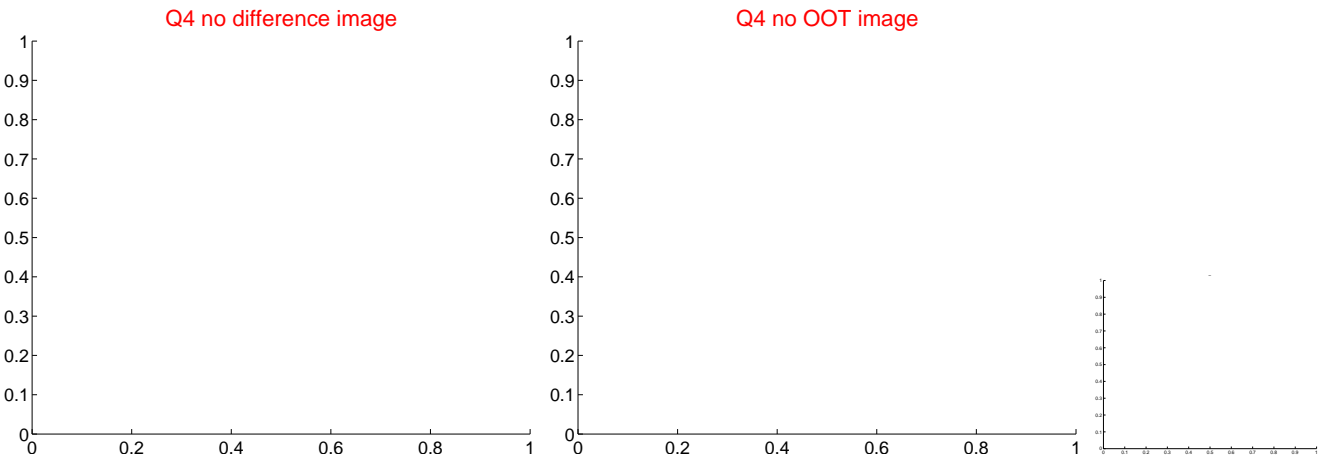
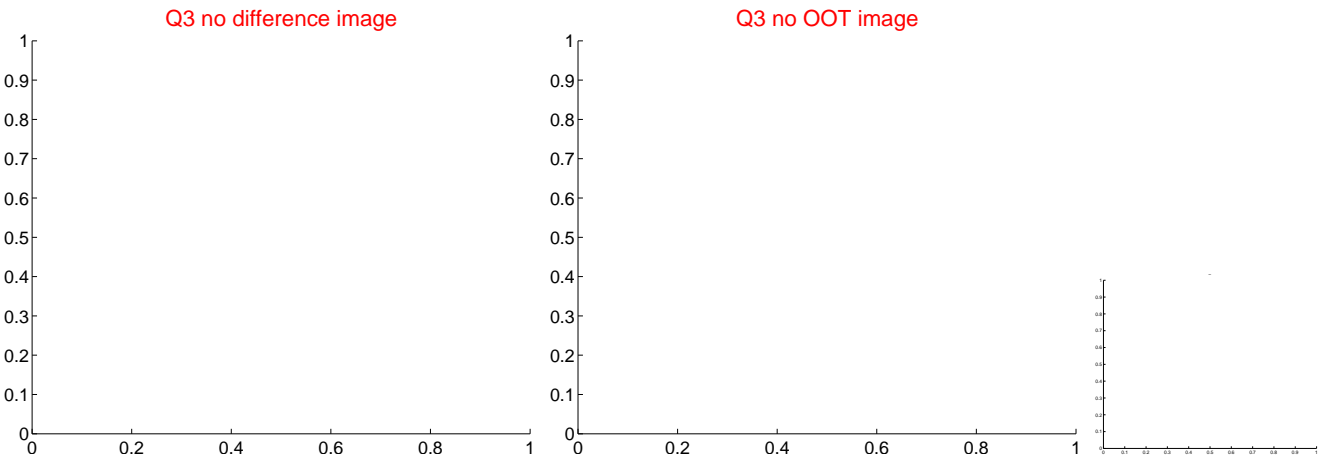
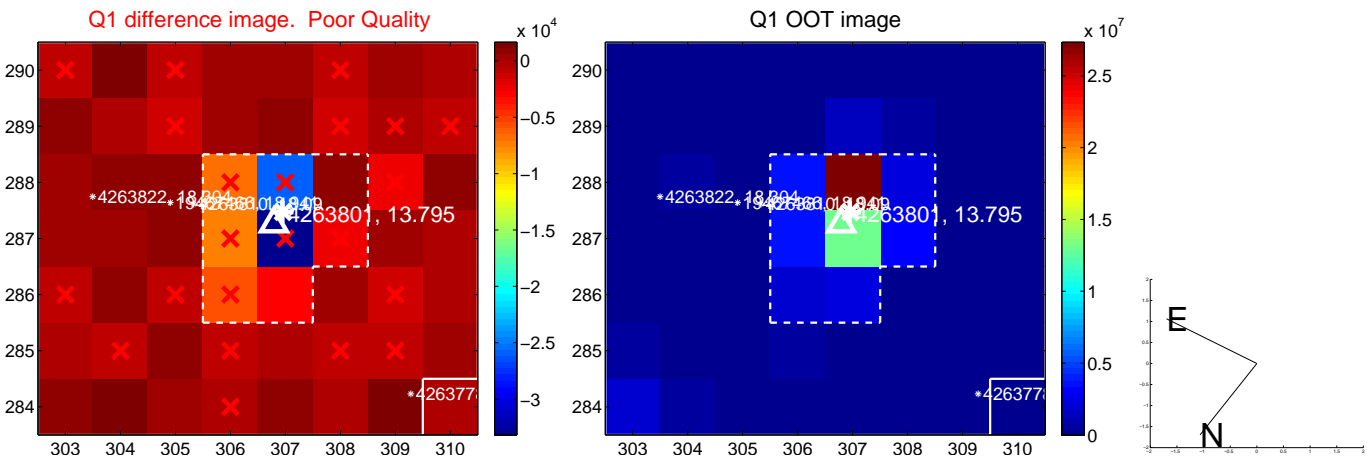


offset from photometric centroids

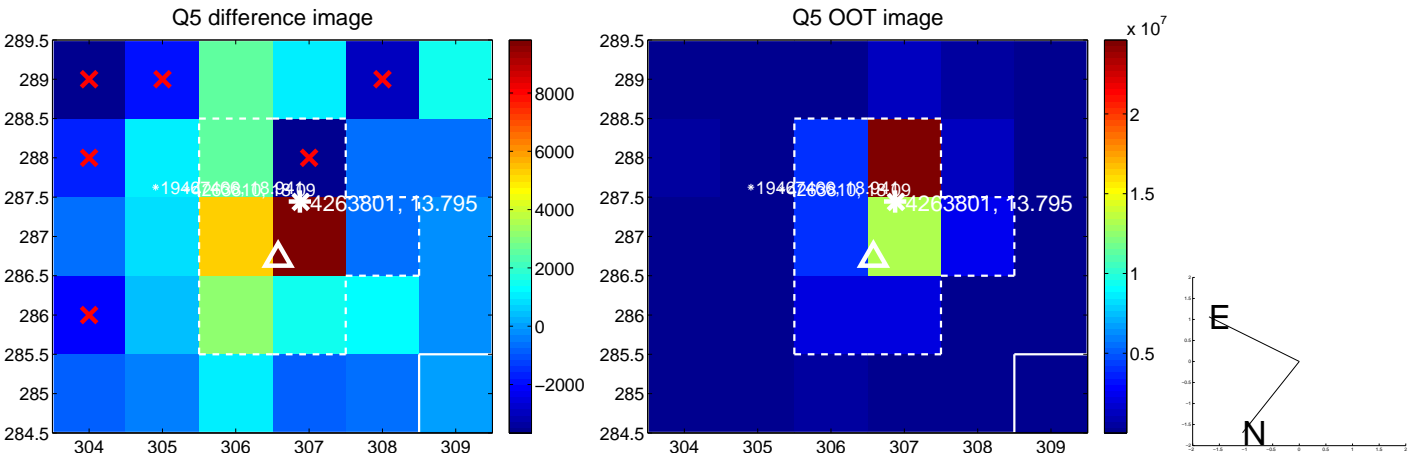


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

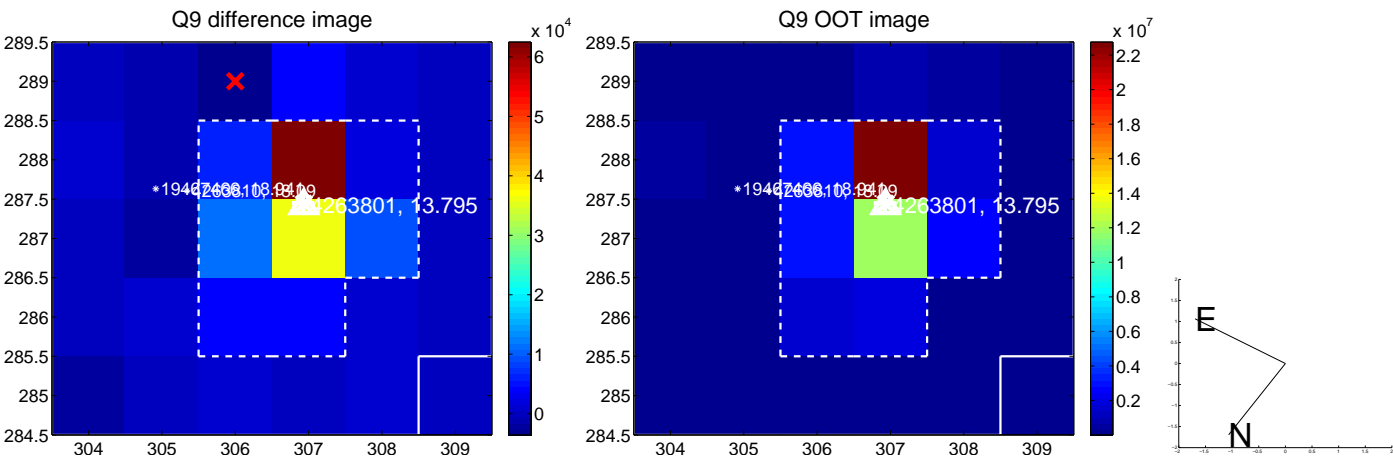
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



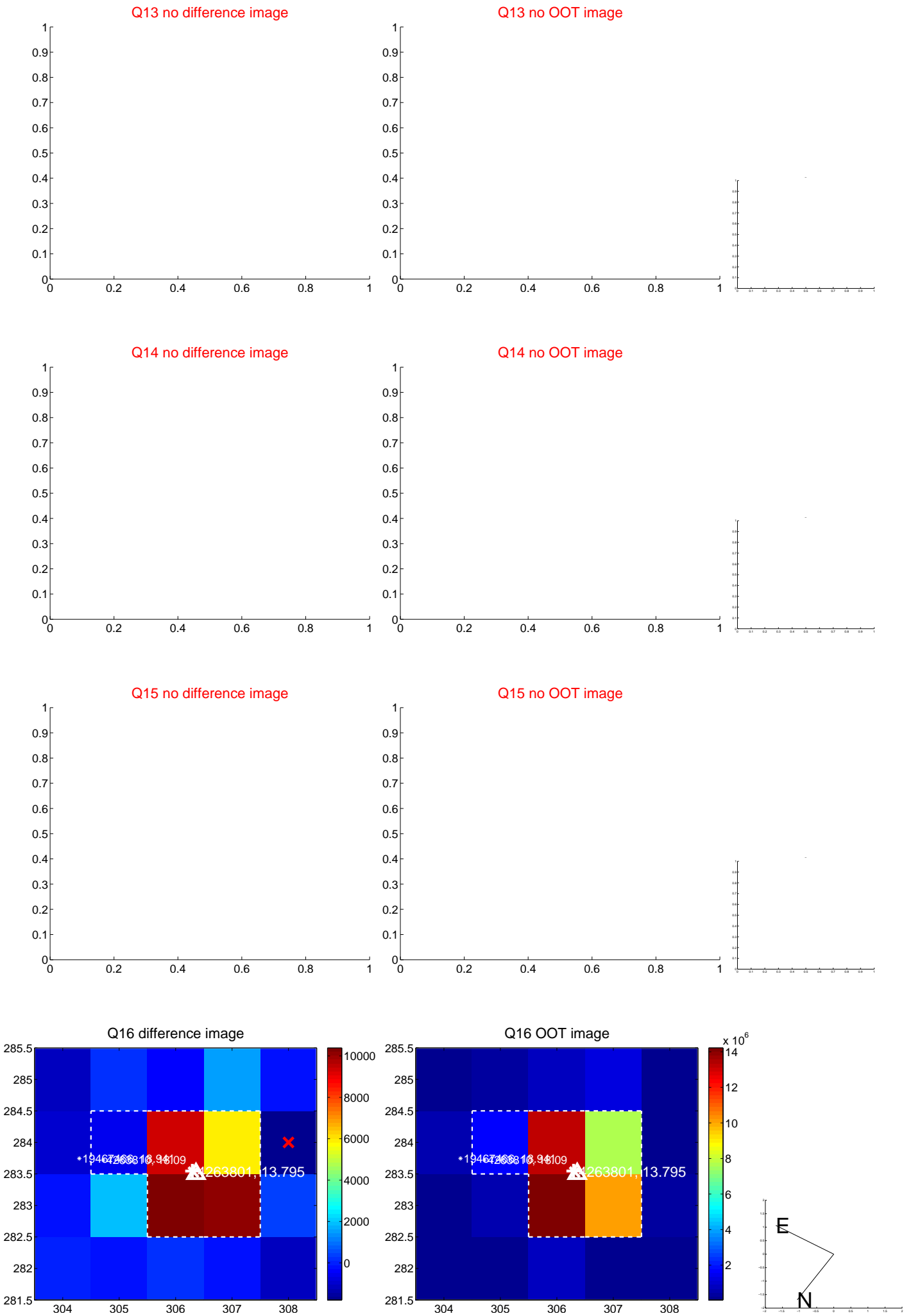
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



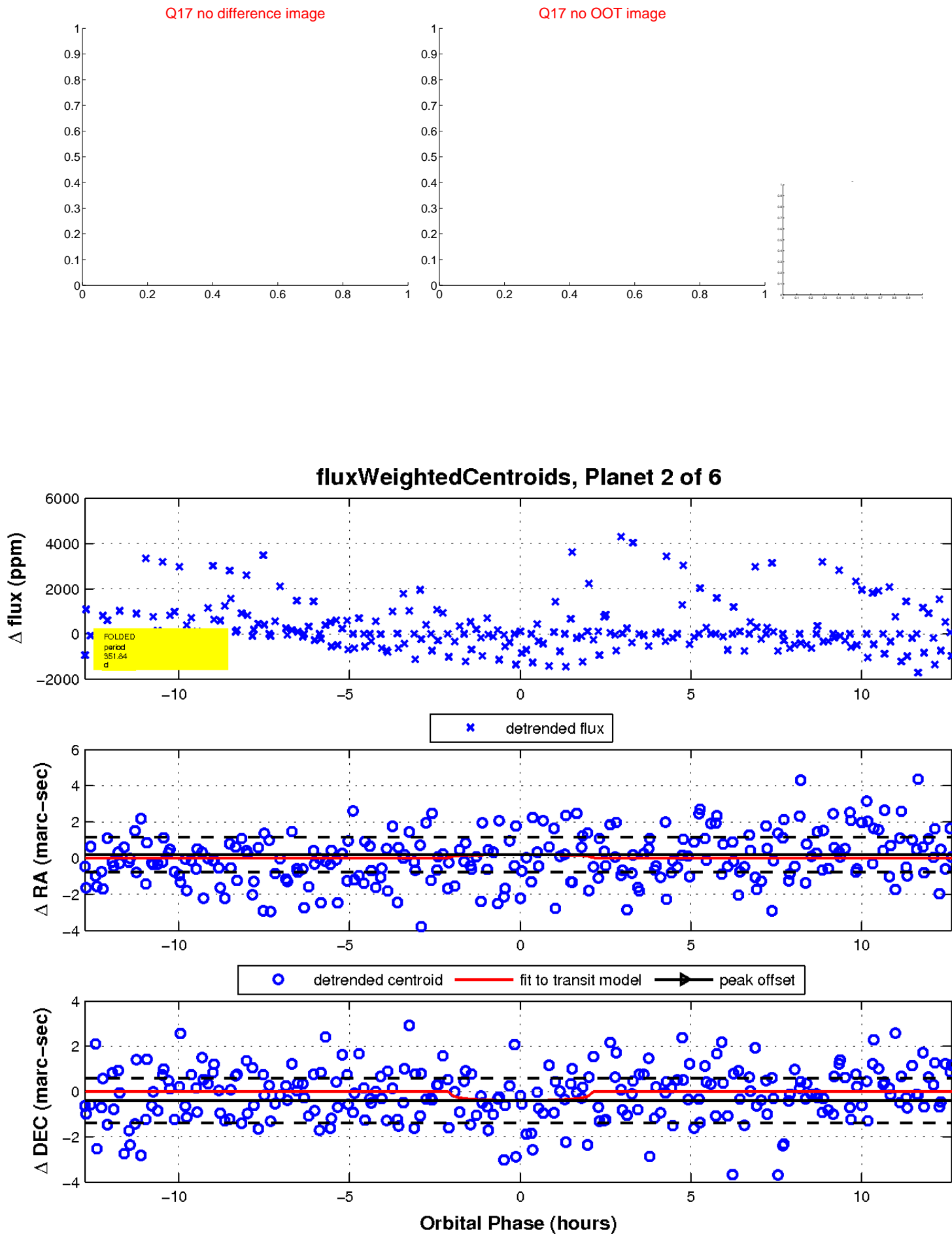
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

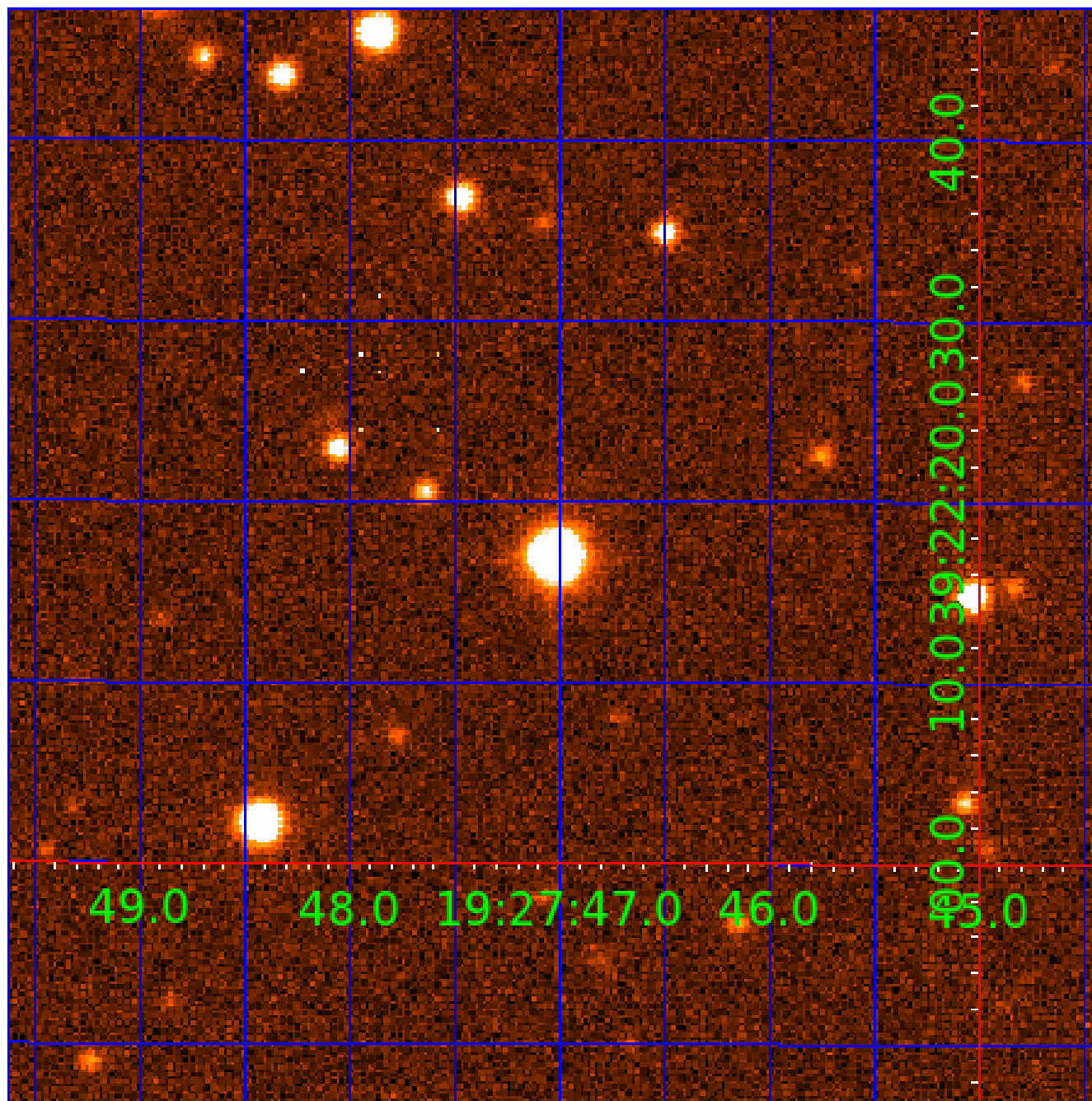


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 004263801

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})
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Robovetter Results

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004263801-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004263801-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
004263801-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

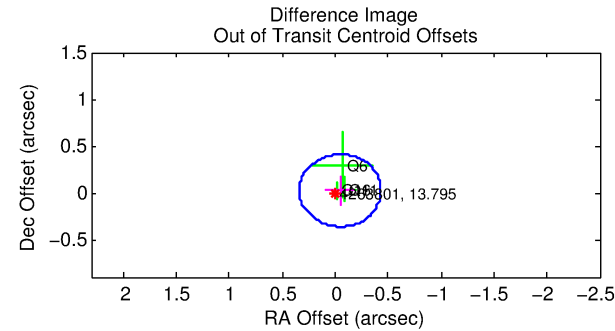
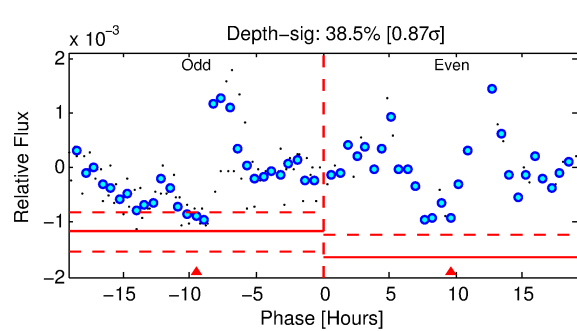
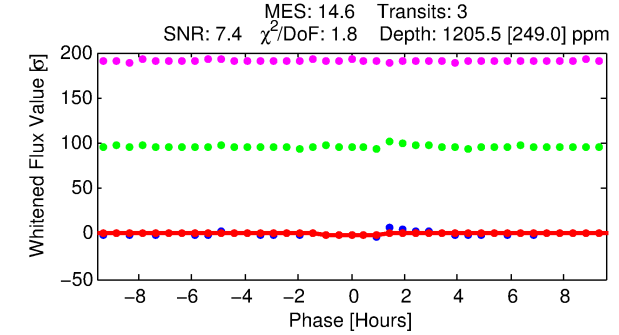
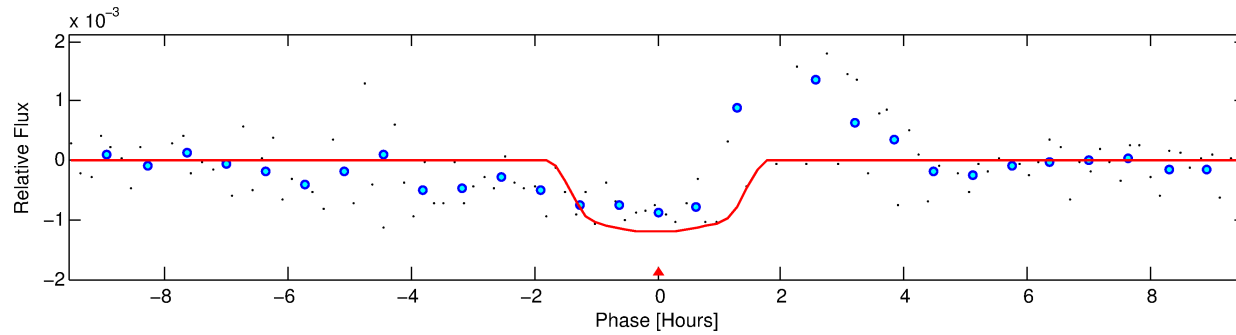
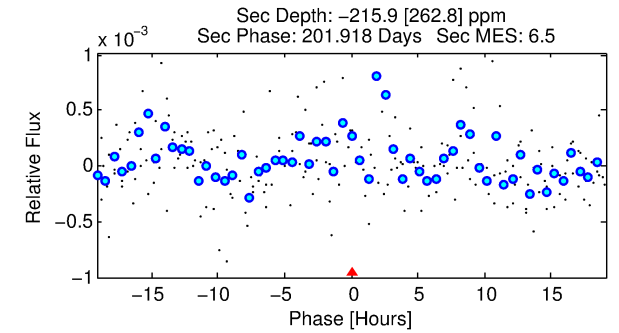
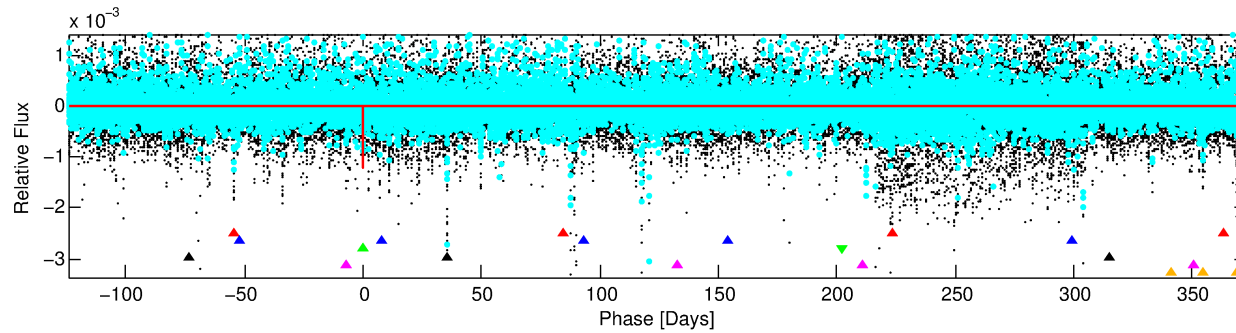
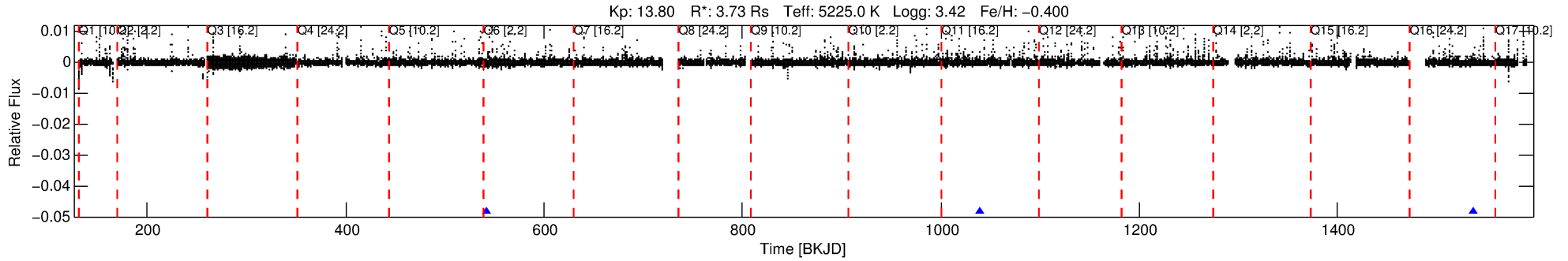
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004263801-03

No Significant Match Found

DV One-Page Summary

KIC: 4263801 Candidate: 3 of 6 Period: 497.549 d



DV Fit Results:

Period = 497.54886 [0.00597] d
 Epoch = 541.5564 [0.0069] BKJD
 Rp/R* = 0.0344 [0.0399]
 a/R* = 868.20 [3914.02]
 b = 0.74 [2.86]
 Seff = 5.06 [3.32]
 Teq = 382 [63] K
 Rp = 14.01 [17.25] Re
 a = 1.3551 [0.5455] AU
 Ag = N/A
 Tefp = N/A

DV Diagnostic Results:

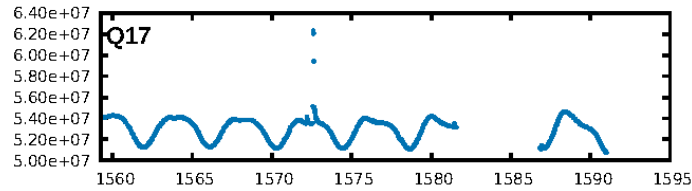
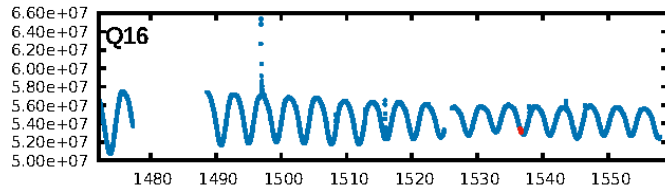
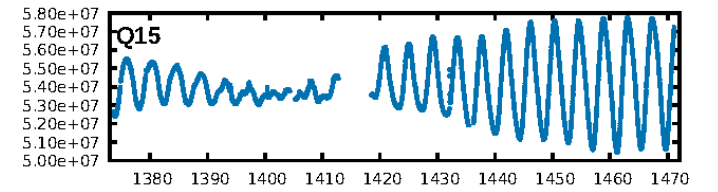
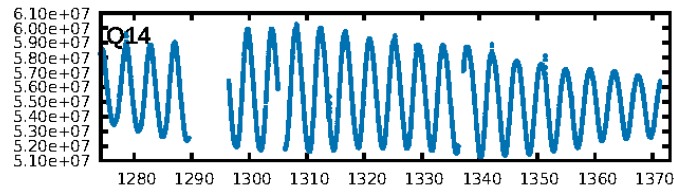
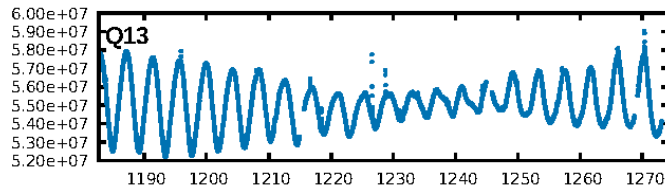
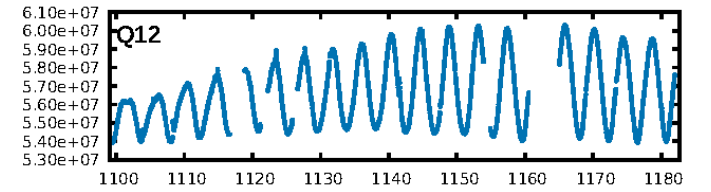
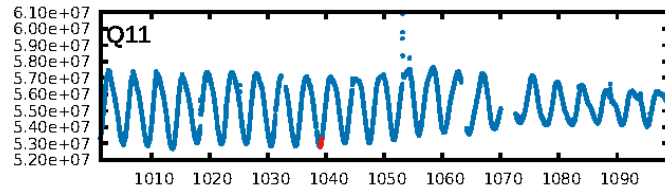
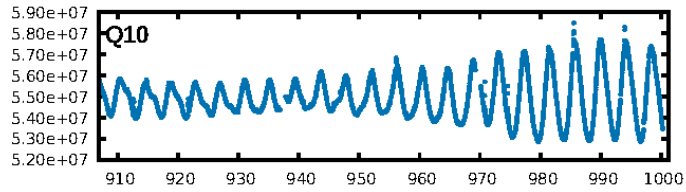
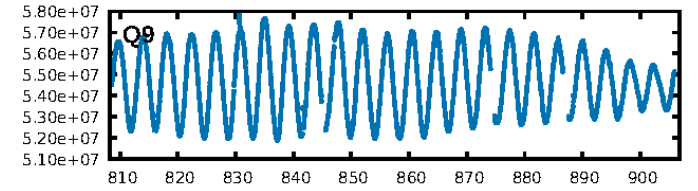
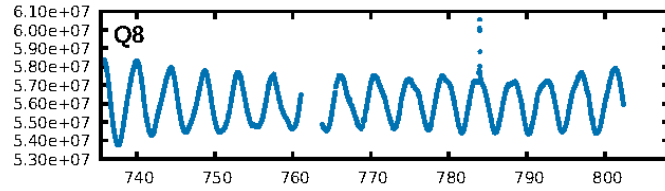
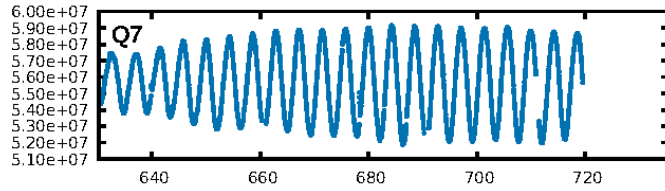
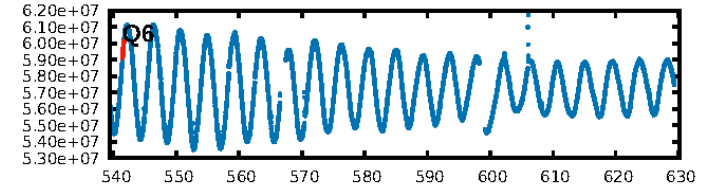
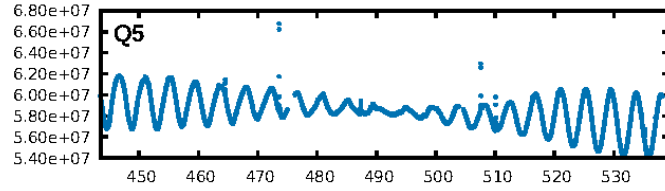
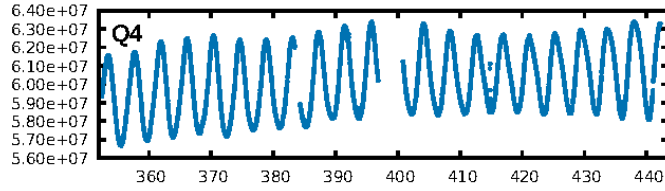
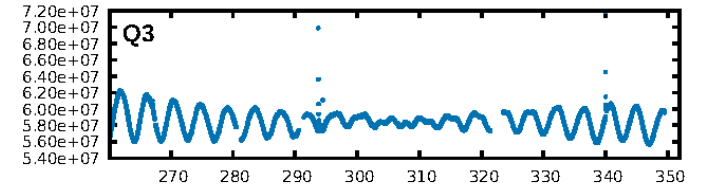
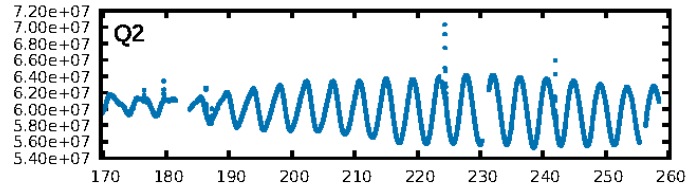
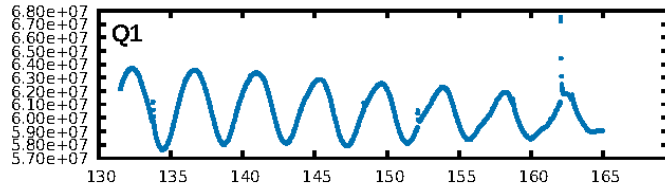
ShortPeriod-sig: 100.0% [40.64σ]
LongPeriod-sig: 100.0% [386.13σ]
ModelChiSquare2-sig: 28.6%
ModelChiSquareGof-sig: 53.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -3.16

Centroid-sig: 32.6%
Centroid-so: 0.632 arcsec [0.66σ]
OotOffset-rm: 0.054 arcsec [0.42σ]
KicOffset-rm: 0.041 arcsec [0.32σ]
OotOffset-st: 1/1/1/0 [3]
KicOffset-st: 1/1/1/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

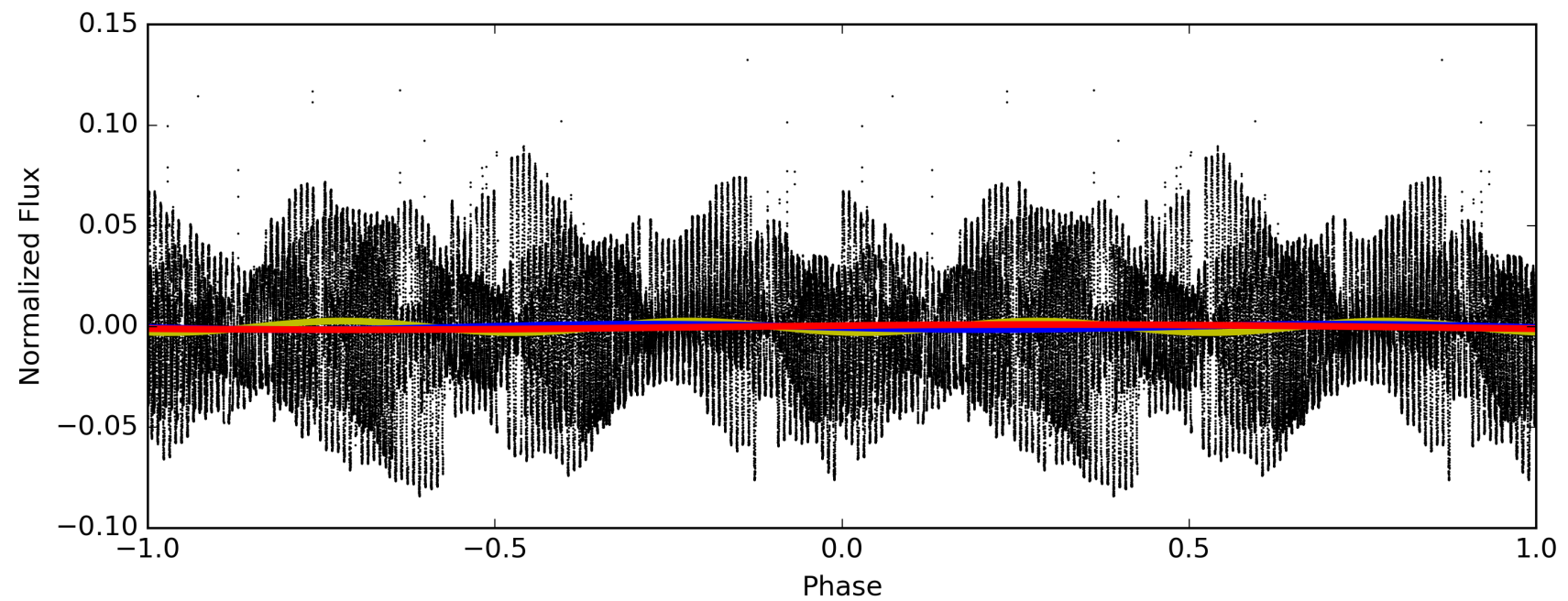
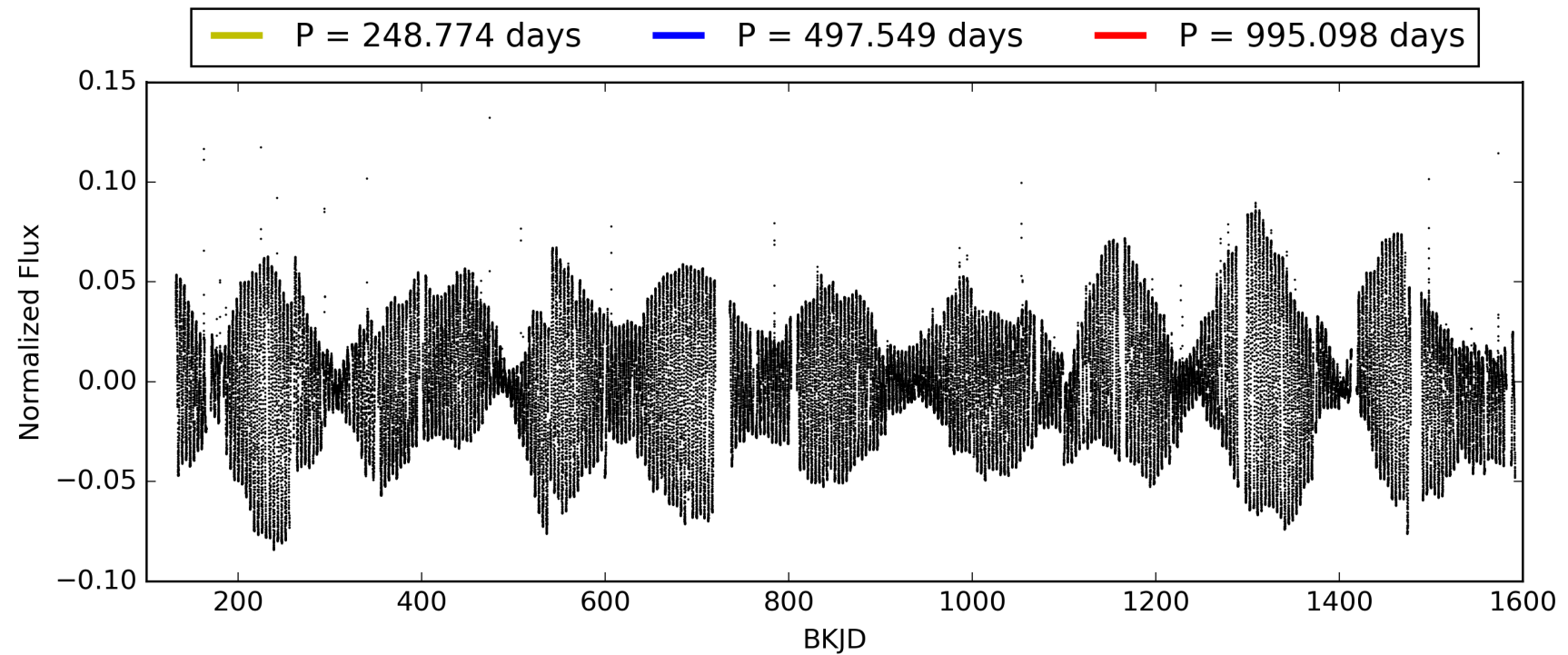
Software Revision: <svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958> -- Date Generated: 01-Feb-2016 05:44:09 Z

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

TCE 004263801-03, PDC Light Curves

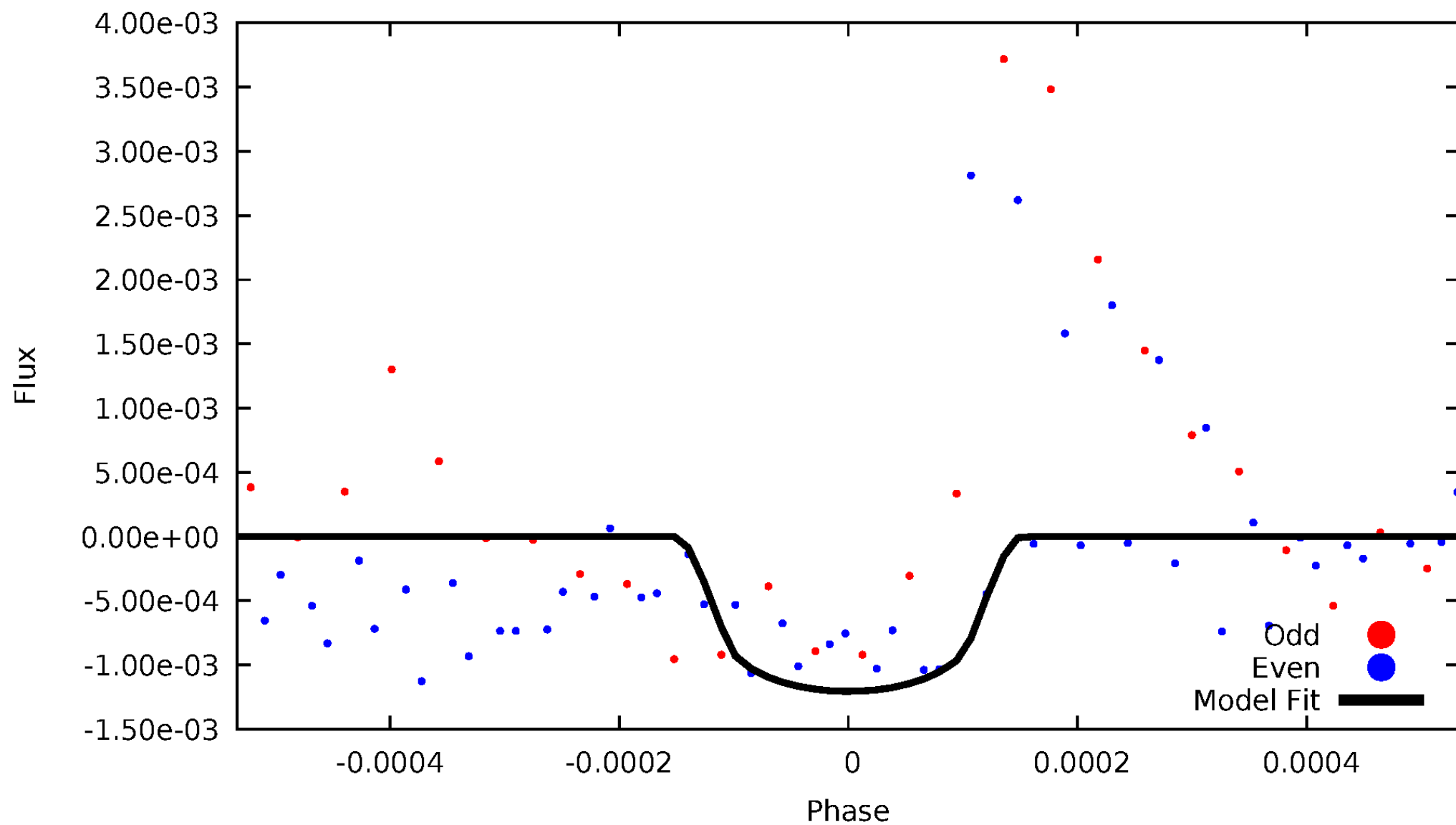


TCE 004263801-03



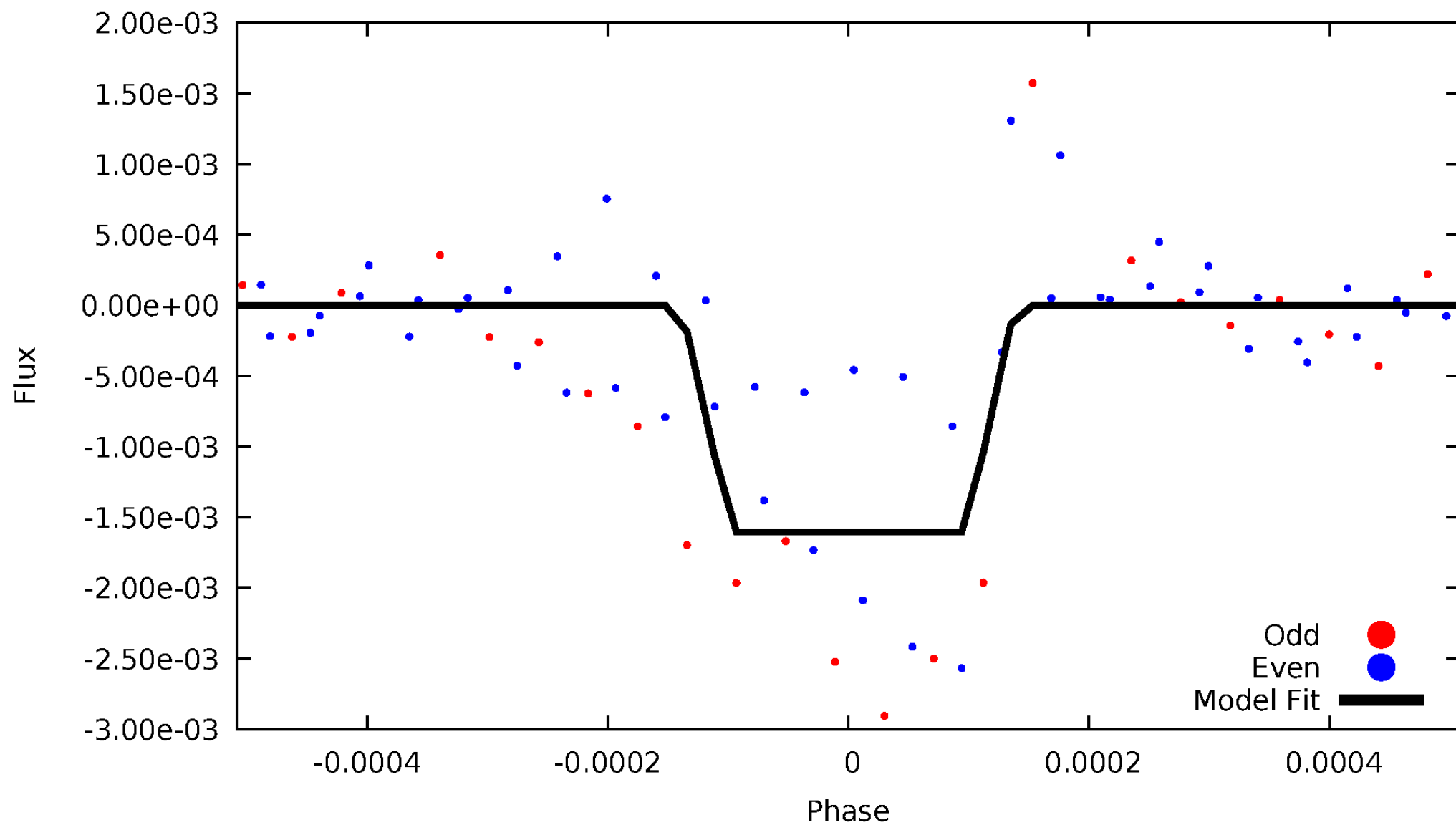
DV Odd/Even

TCE 004263801-03



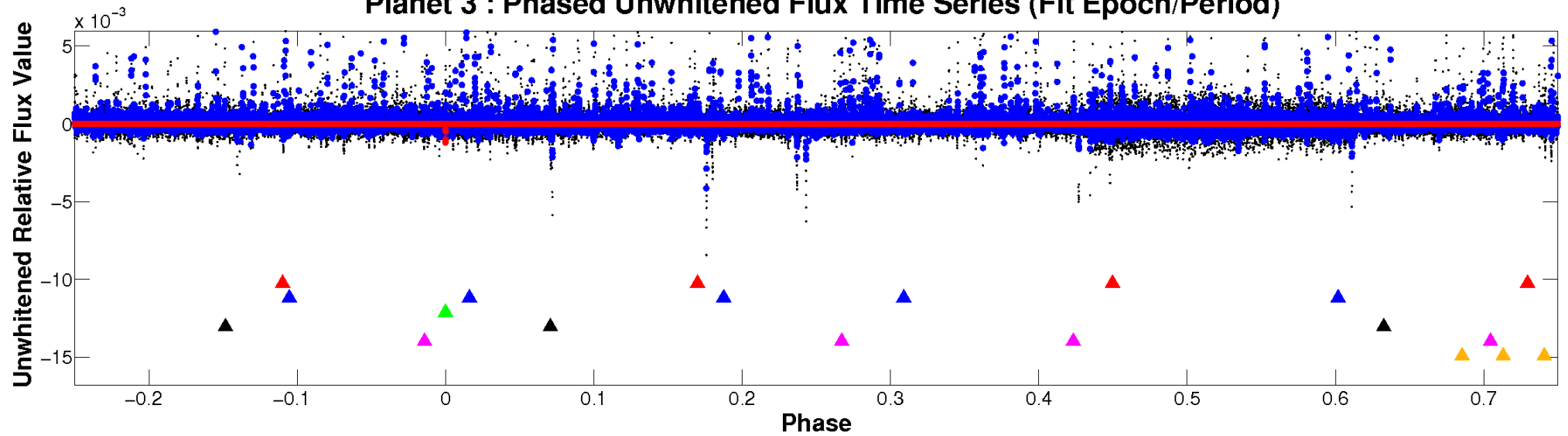
ALT Odd/Even

TCE 004263801-03

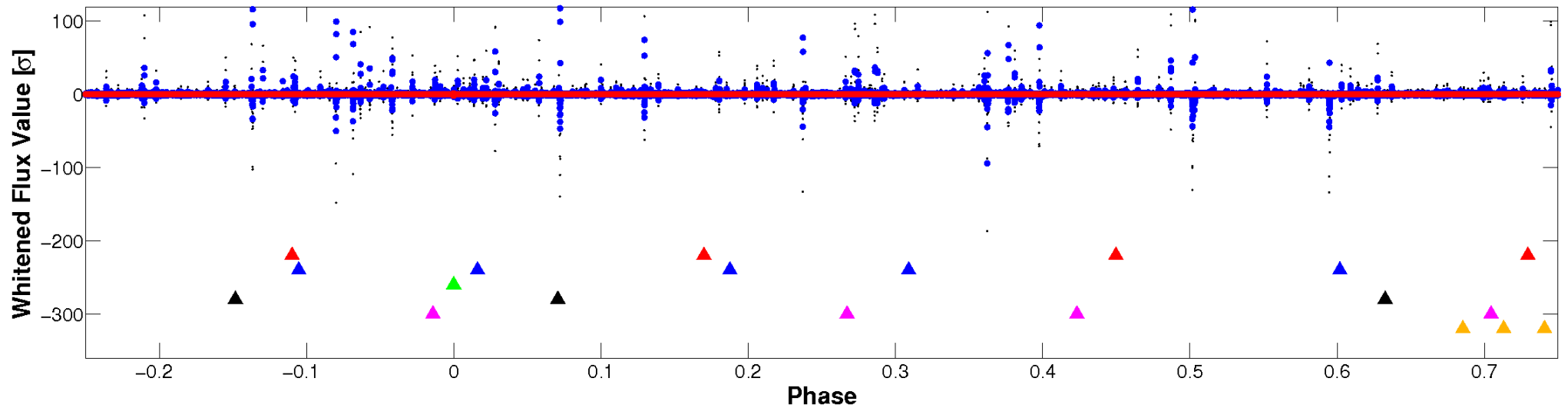


Non-Whitened Vs. Whitened Light Curve

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

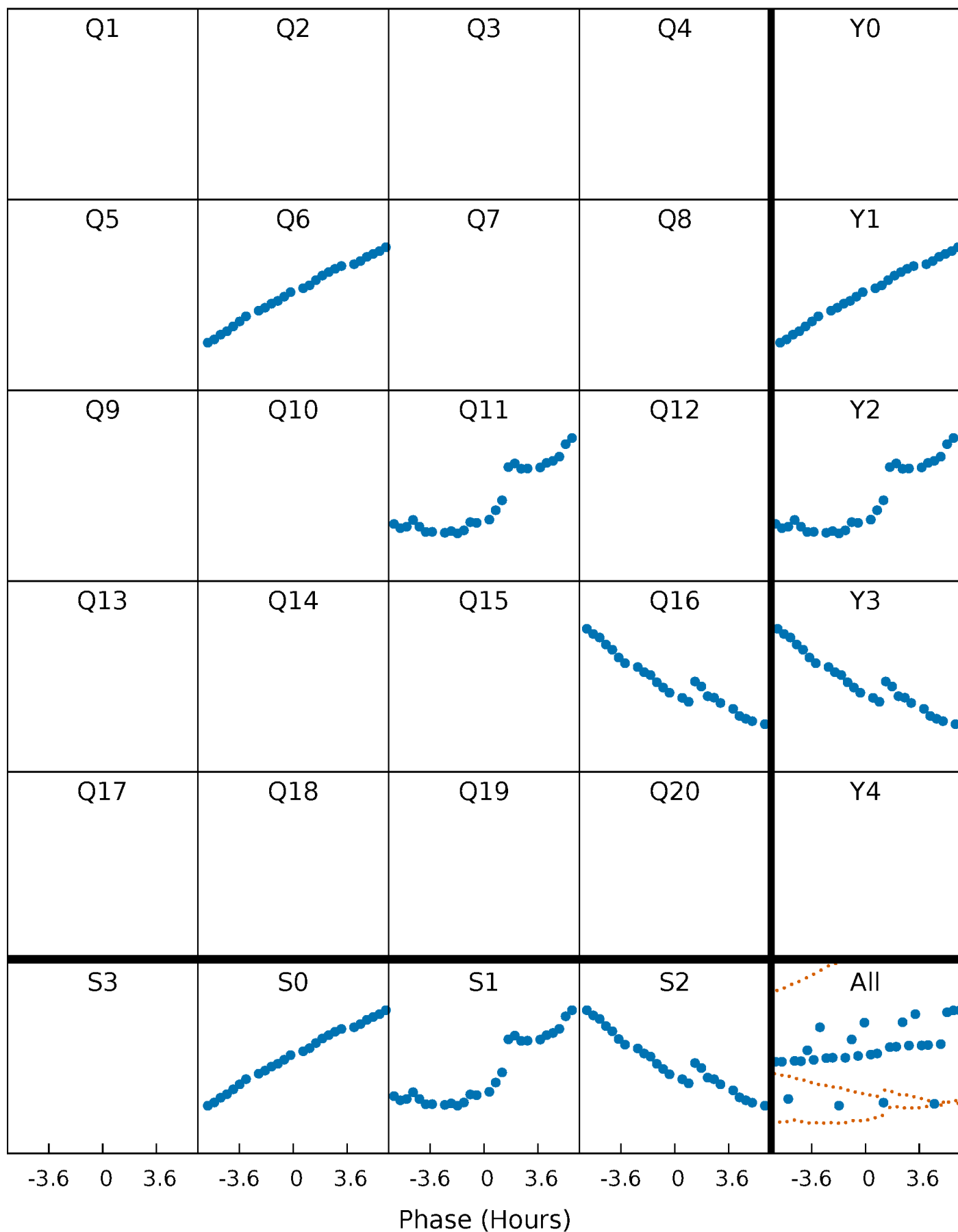


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



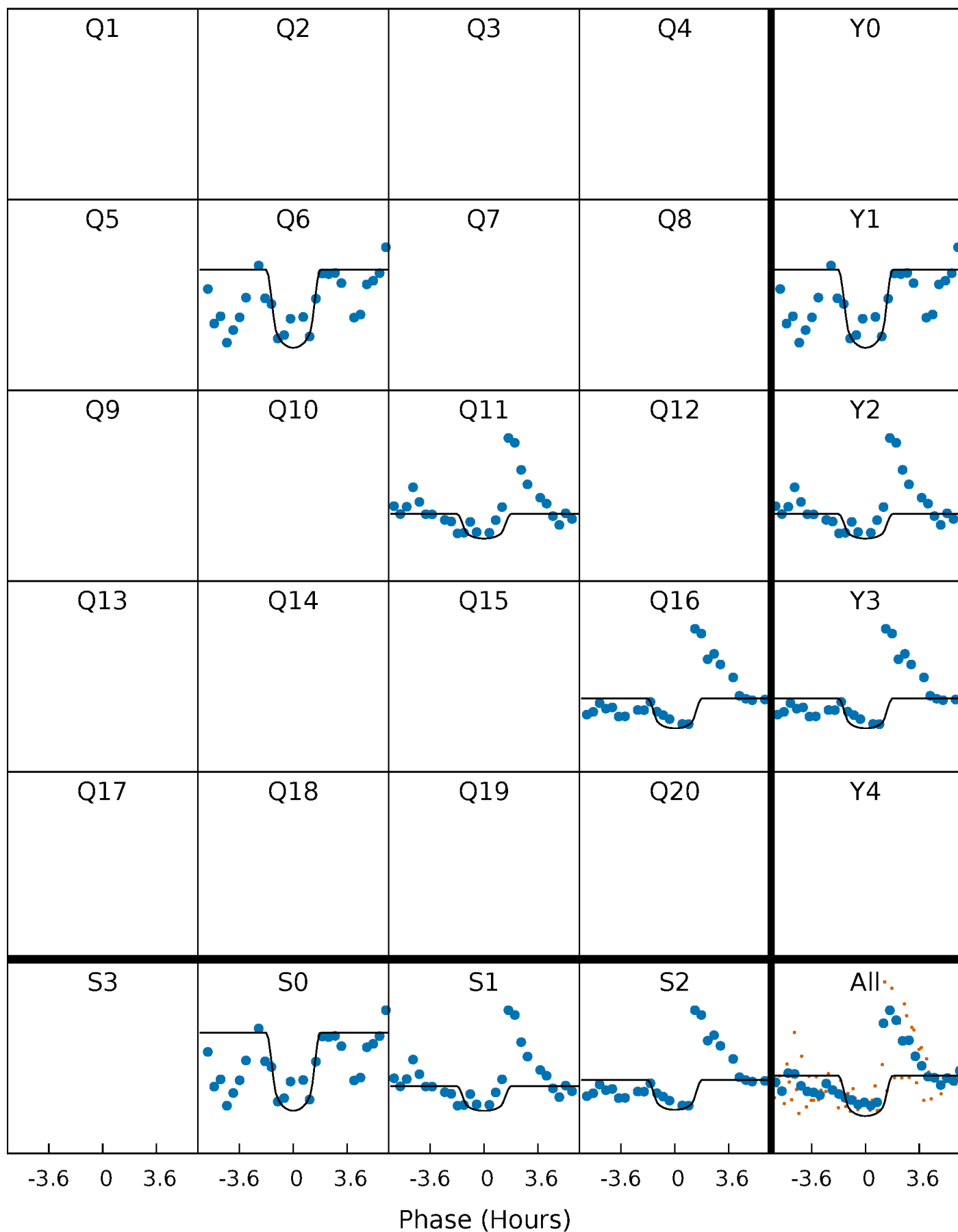
PDC Quarter-Phased Transit Curves

TCE 004263801-03 $P=497.548859$ Days $T_0=541.556408$ (BKJD)



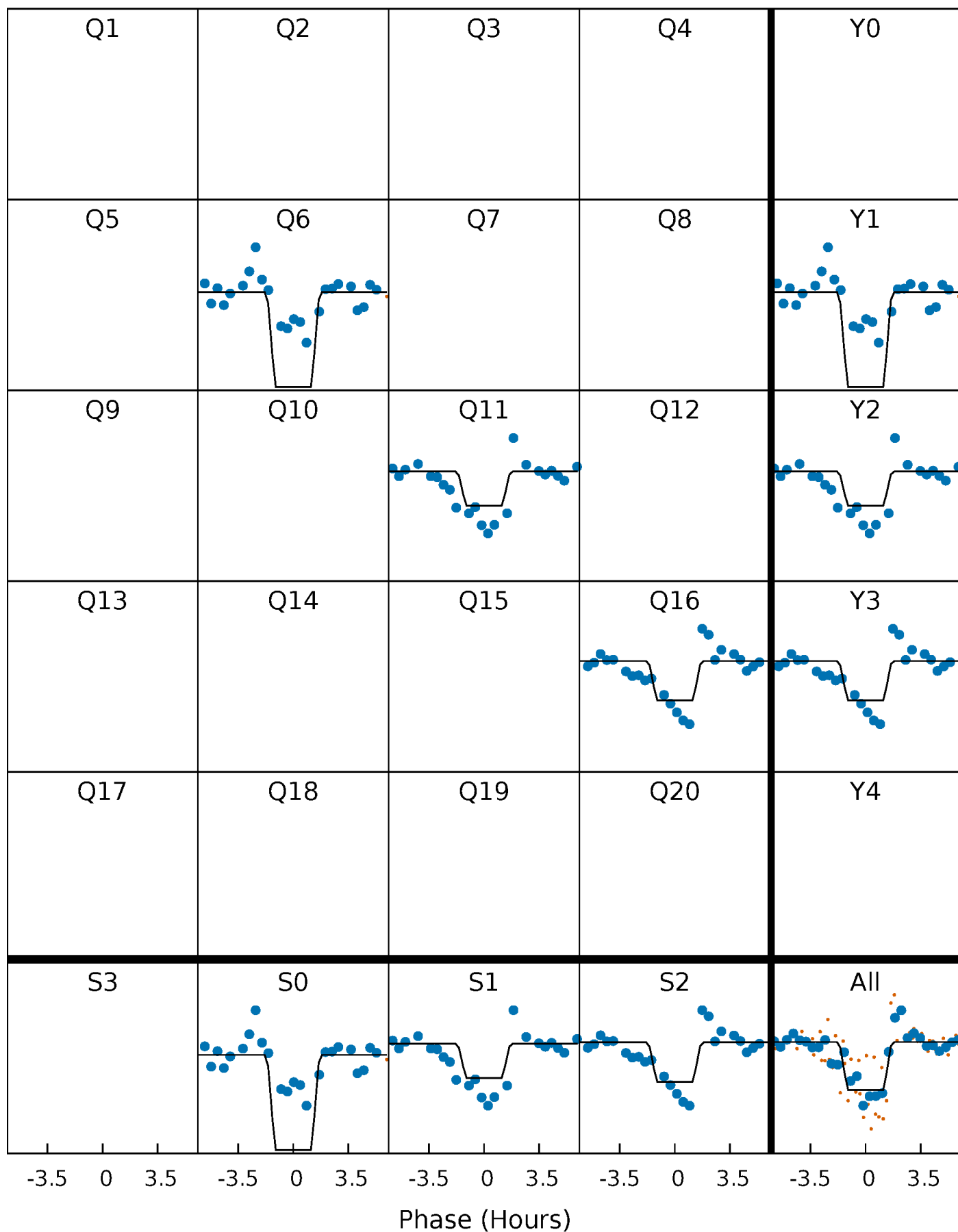
DV Quarter-Phased Transit Curves

TCE 004263801-03 $P=497.548859$ Days $T_0=541.556408$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

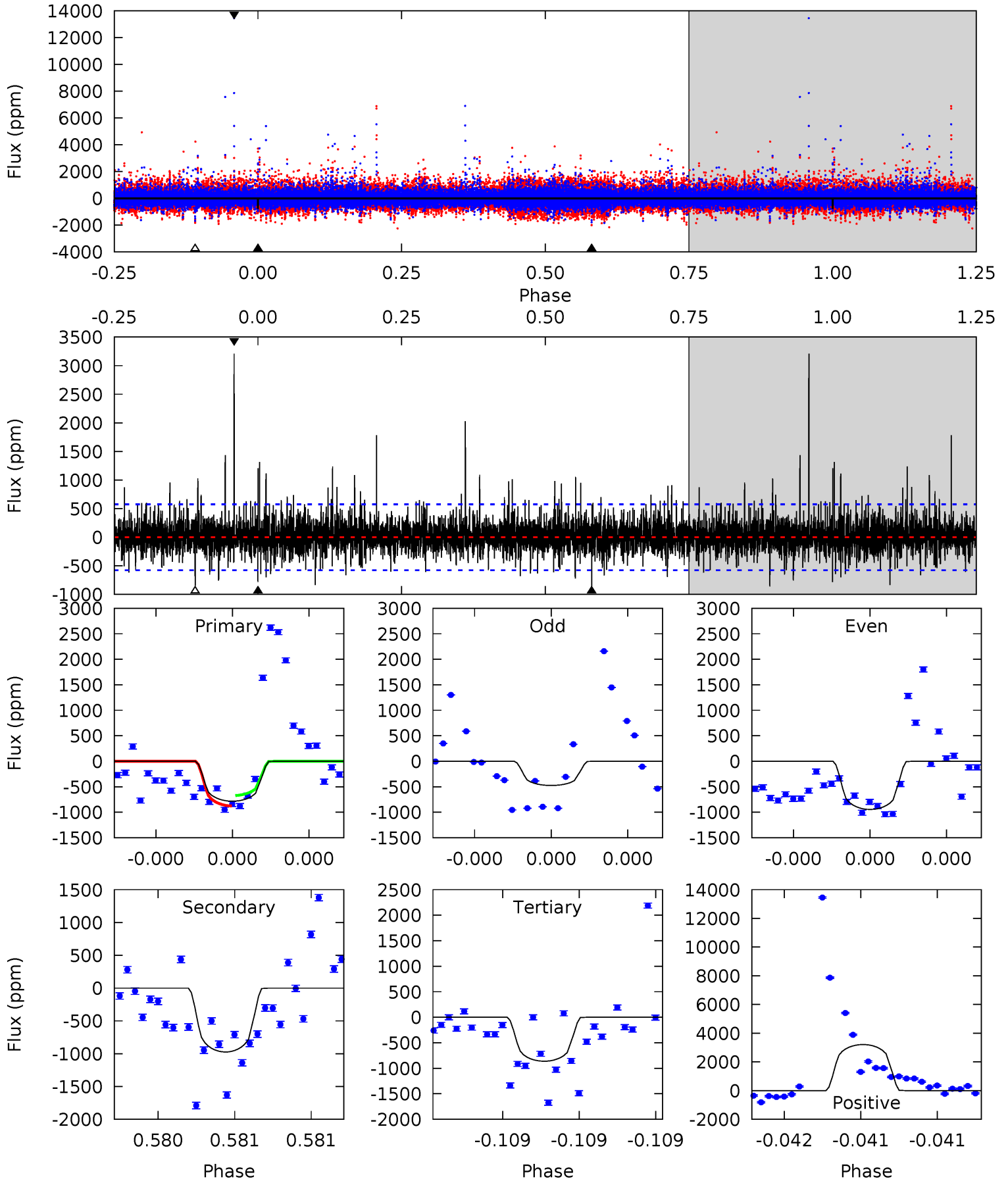
TCE 004263801-03 $P=497.543564$ Days $T_0=541.552890$ (BKJD)



DV Model-Shift Uniqueness Test

004263801-03, P = 497.548859 Days, E = 44.007549 Days

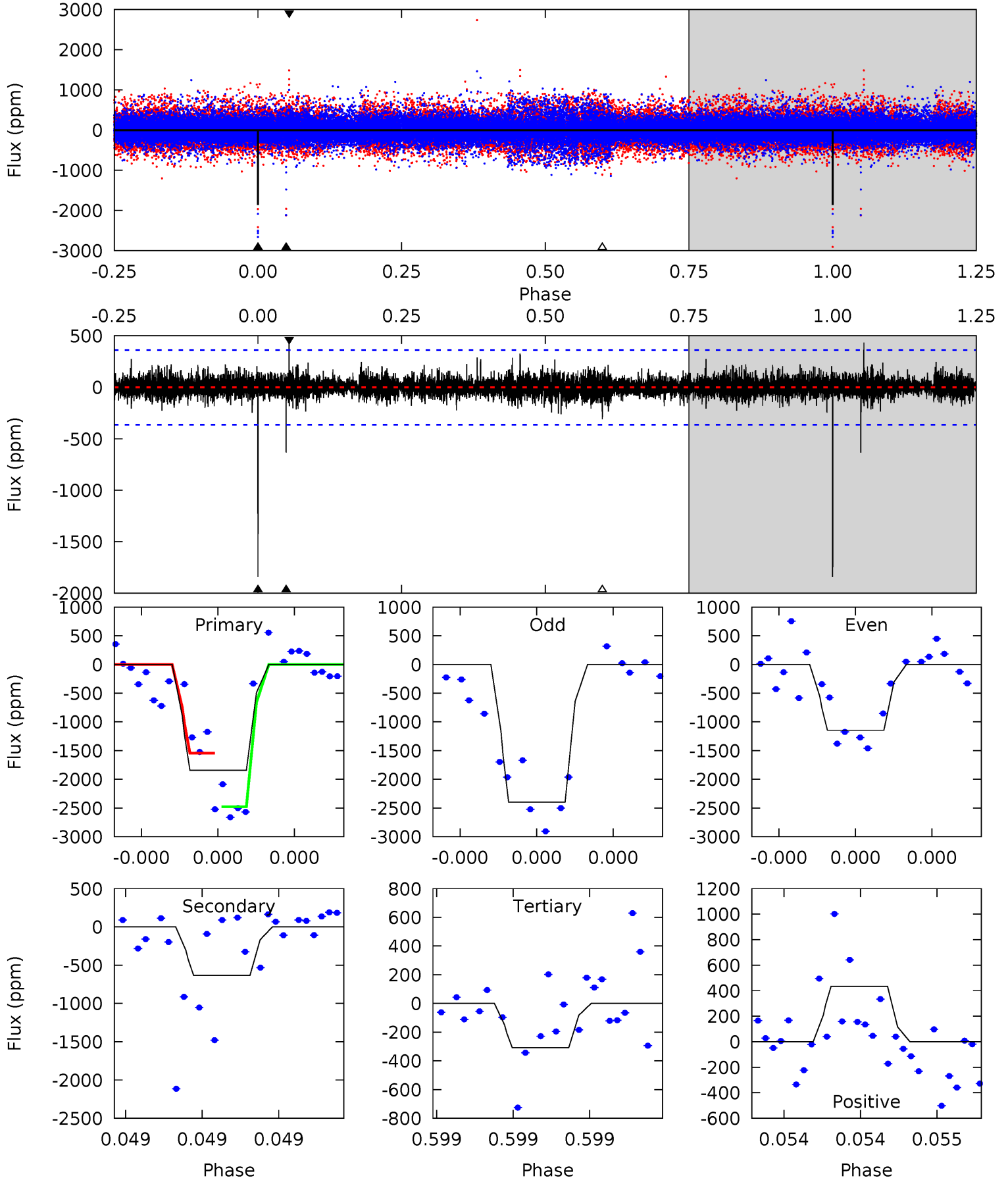
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.69	9.56	8.46	31.5	5.65	3.60	2.03	-0.77	-23.8	1.10	-21.9	1.14	1.32	0.77	1.01



Alt Model-Shift Uniqueness Test

004263801-03, P = 497.543564 Days, E = 44.009326 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
28.9	9.92	4.85	6.81	5.69	3.66	0.83	24.1	22.1	5.07	3.11	9.84	0.85	0.19	7.13



Stellar Parameters For KIC 004263801

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5225^{+157}_{-173}	$3.422^{+0.378}_{-0.252}$	$-0.400^{+0.300}_{-0.250}$	$3.729^{+1.277}_{-1.561}$	$1.341^{+0.177}_{-0.443}$	$0.036^{+0.104}_{-0.021}$
	+3%/-3%	+11%/-7%	+75%/-62%	+34%/-42%	+13%/-33%	+285%/-59%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 004263801-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-974 ± 102	$16.41^{+14.81}_{-10.98}$	533^{+54}_{-58}	4584^{+3048}_{-910}	3556^{+26131}_{-2597}
Alt.	-632 ± 64	$19.21^{+16.42}_{-12.17}$	529^{+58}_{-62}	3958^{+1944}_{-627}	1654^{+9784}_{-1175}

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

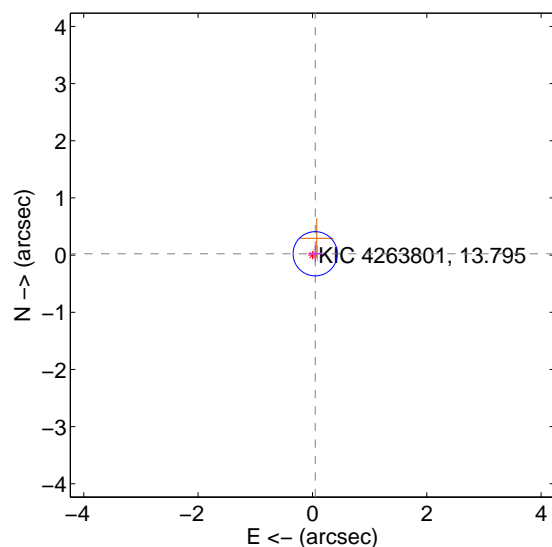
Supplemental centroid analysis for 004263801-03. Kepler magnitude: 13.79. Transit SNR 7.41

There are 2 quarters with good PRF difference image offsets

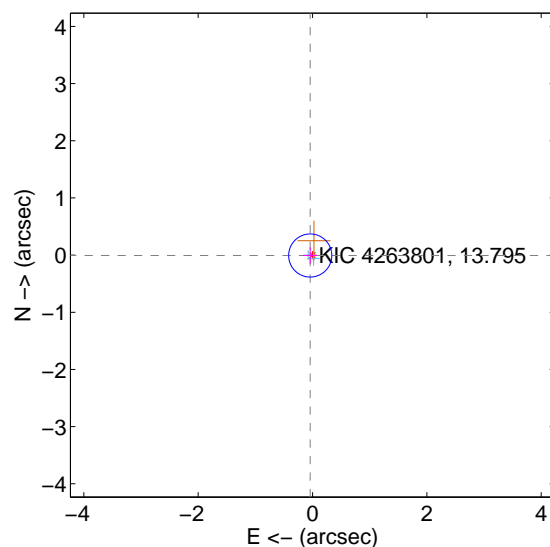
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.054 ± 0.129	0.42	-0.048 ± 0.125	0.023 ± 0.144
PRF-fit source offset from KIC position	0.041 ± 0.126	0.32	0.040 ± 0.125	-0.007 ± 0.144
photometric centroid source offset	0.63 ± 0.97	0.66	-0.53 ± 1.01	0.35 ± 0.85

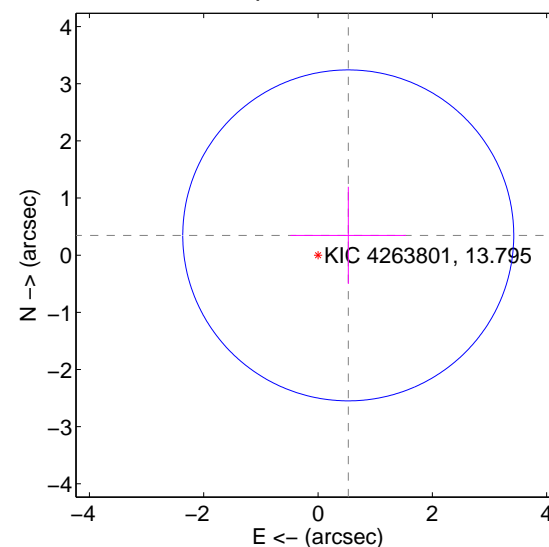
offset from difference PRF-fit to OOT PRF-fit



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 ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.

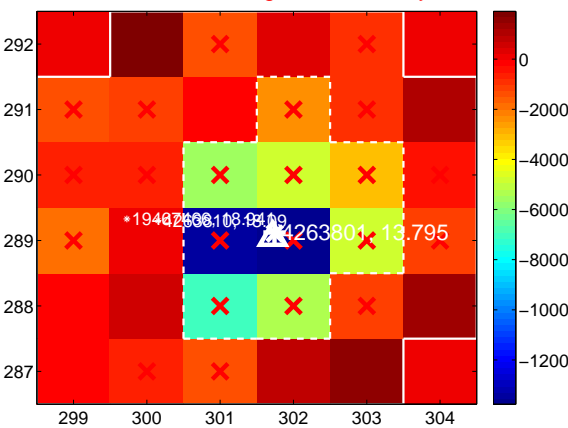
Q5 no difference image



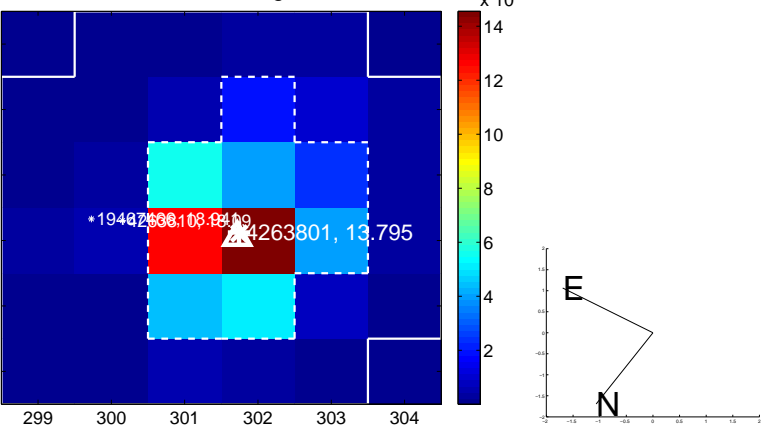
Q5 no OOT image



Q6 difference image. Poor Quality



Q6 OOT image



Q7 no difference image



Q7 no OOT image



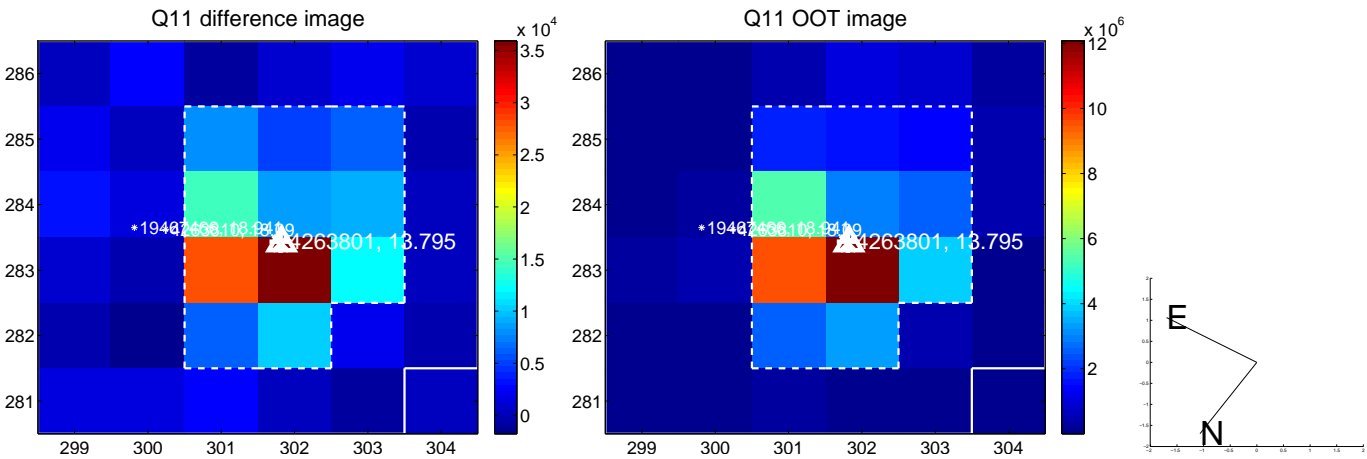
Q8 no difference image



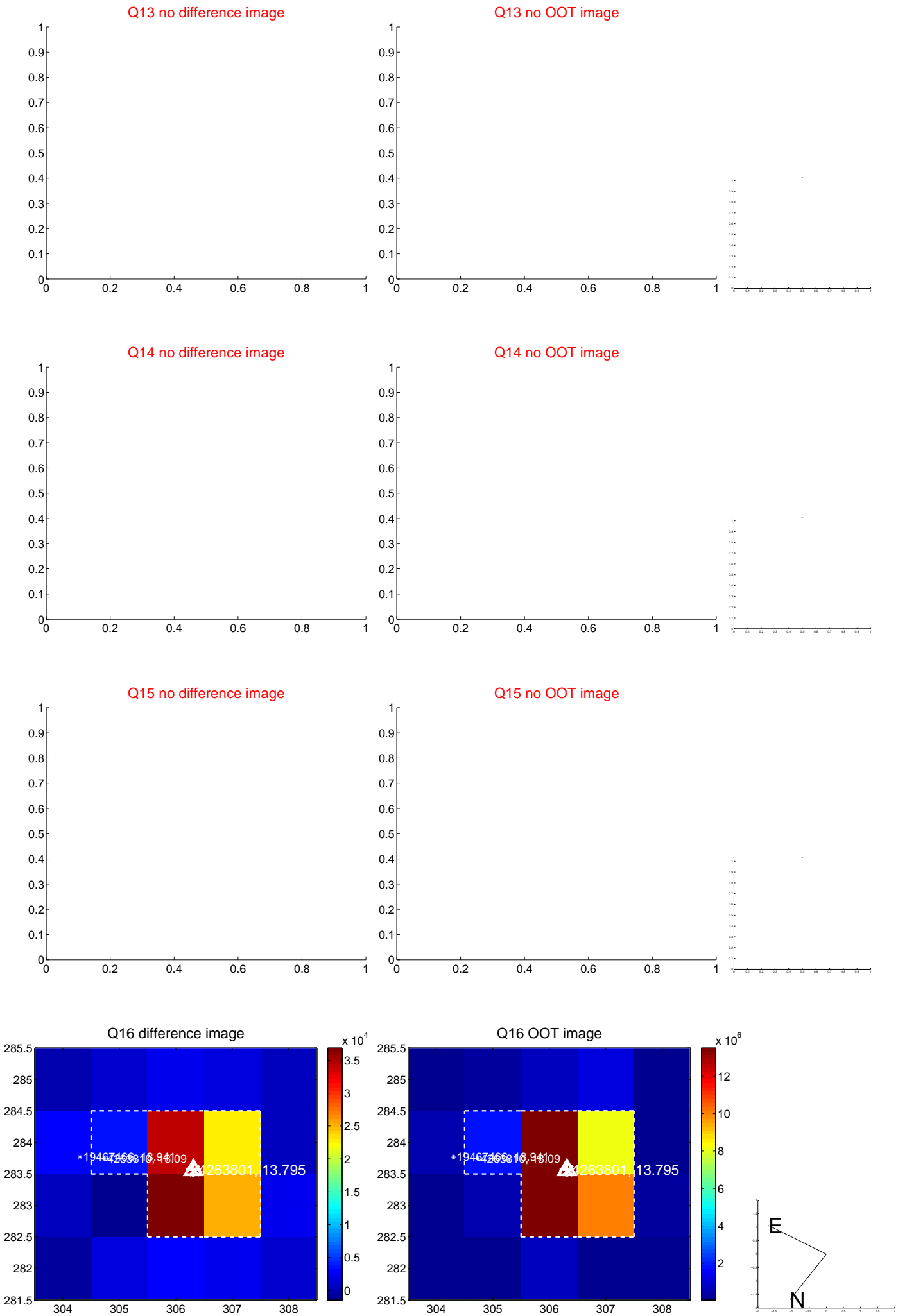
Q8 no OOT image



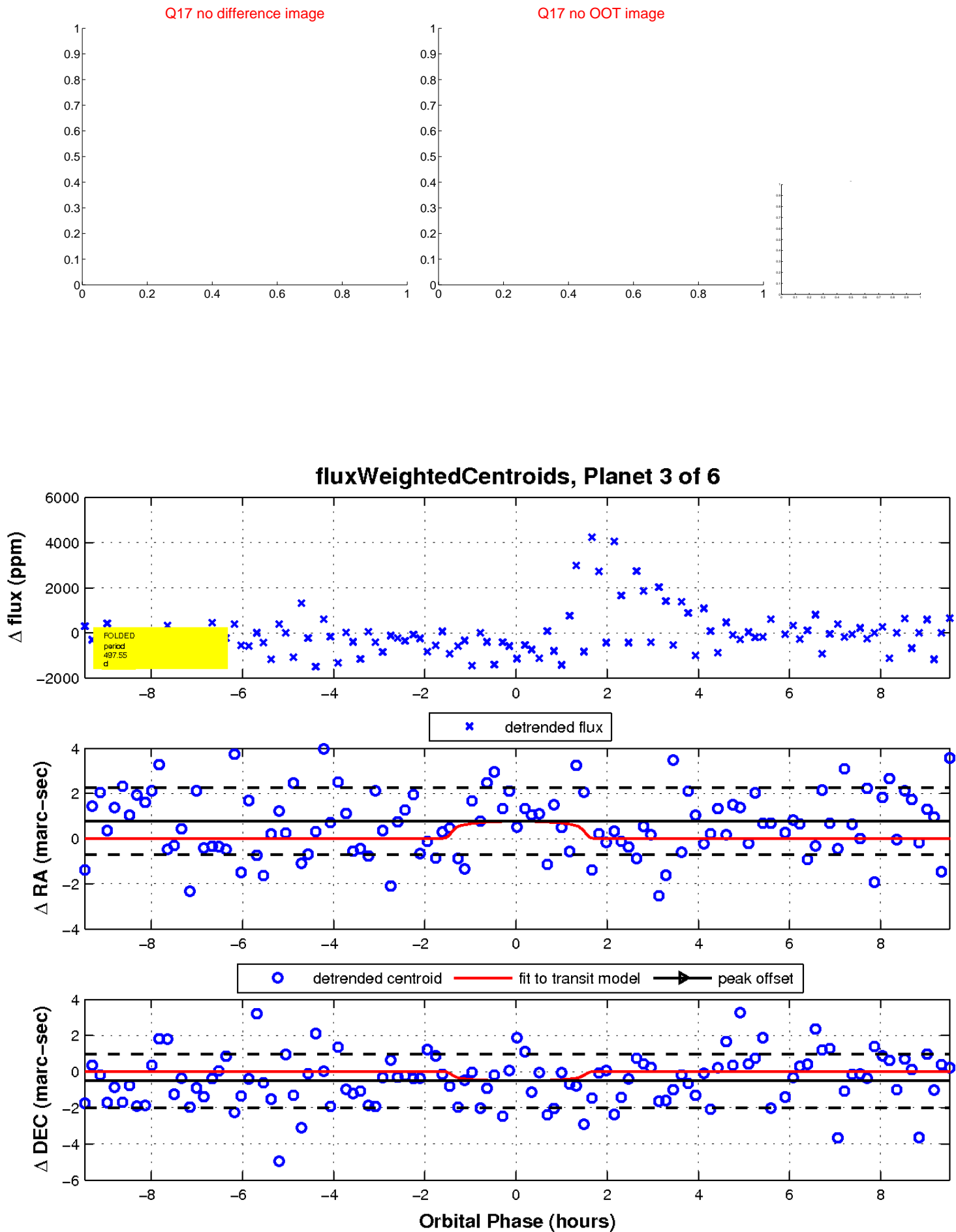
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

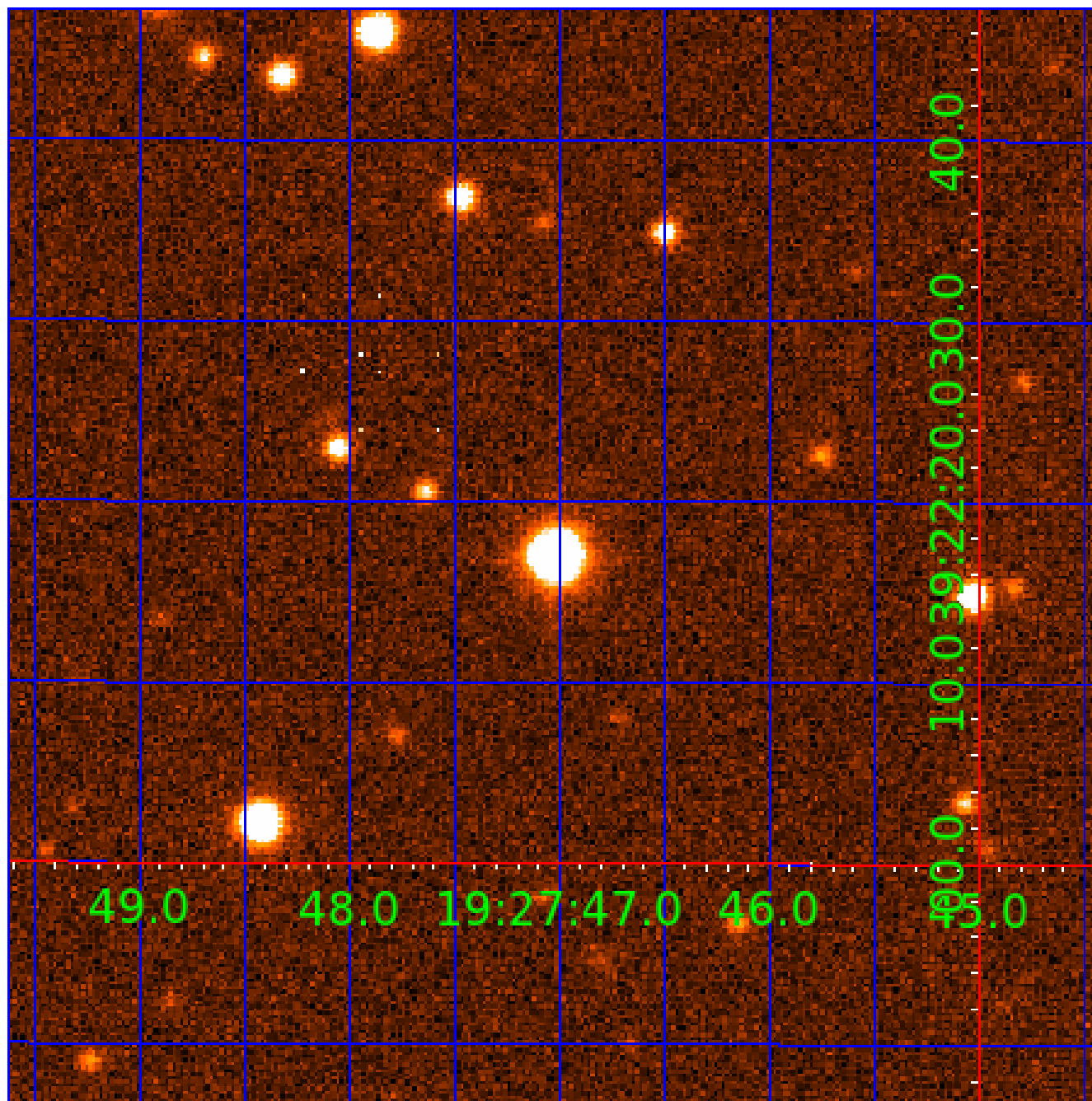


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 004263801

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})
004263801-02	OBS	No	351.837957	137.344031	874.3	4.246	16.4	6.1	3.73	5225	11.09	8.03
004263801-03	OBS	No	497.548859	541.556408	1205.5	3.183	14.6	7.4	3.73	5225	14.01	5.06
004263801-04	OBS	No	606.533978	358.782399	127.6	5.979	12.5	0.7	3.73	5225	5.71	3.88
004263801-05	OBS	No	357.598614	176.927745	1339.4	3.499	15.6	7.9	3.73	5225	13.39	7.85
004263801-06	OBS	No	483.750911	412.629101	857.2	7.500	13.0	-1.0	3.73	5225	10.71	5.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004263801-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
004263801-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
004263801-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004263801-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
004263801-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

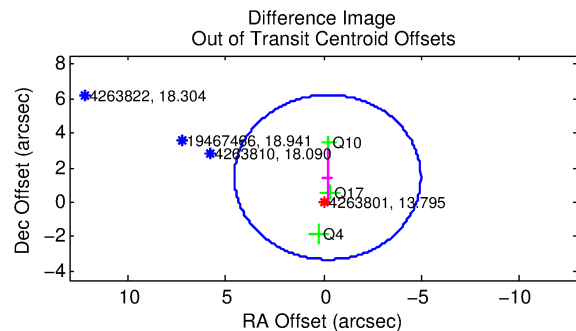
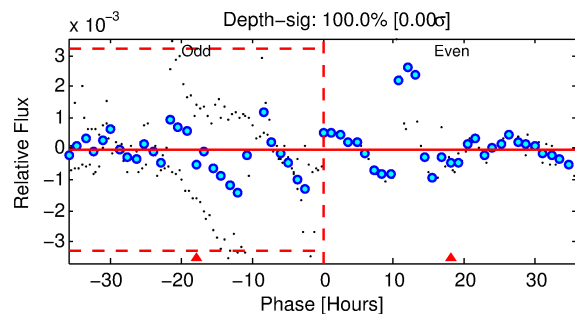
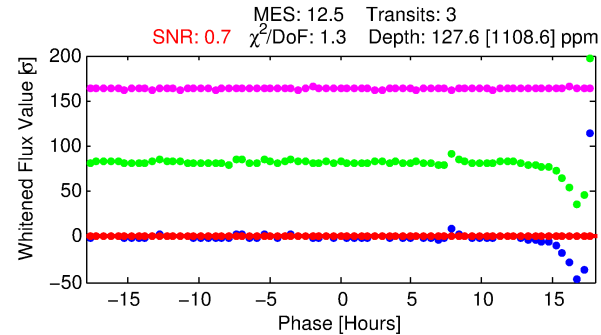
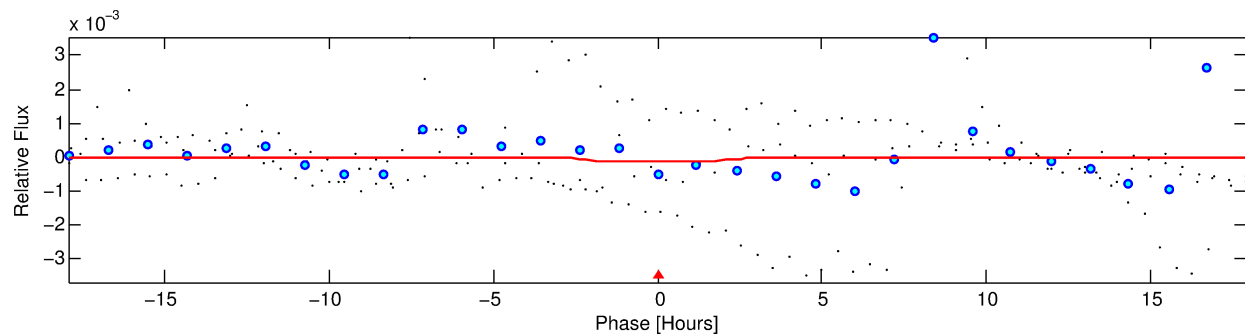
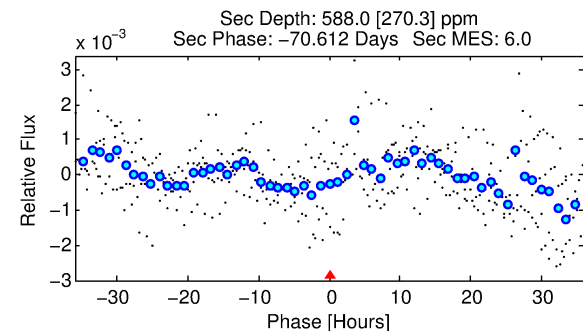
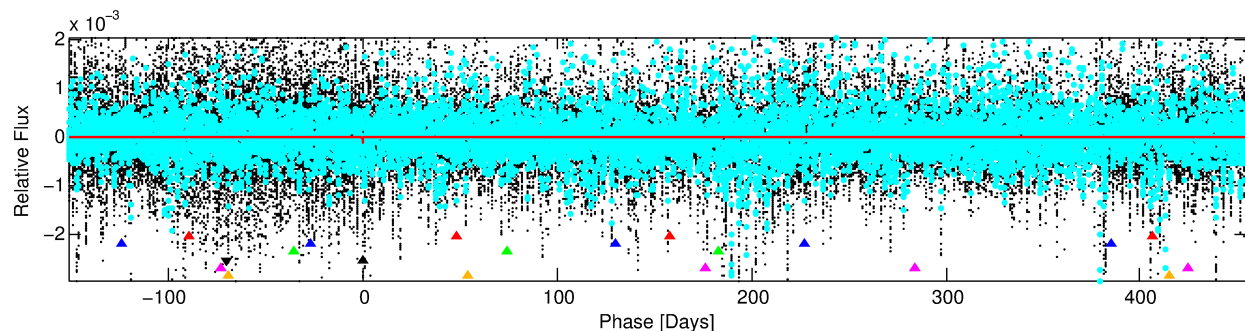
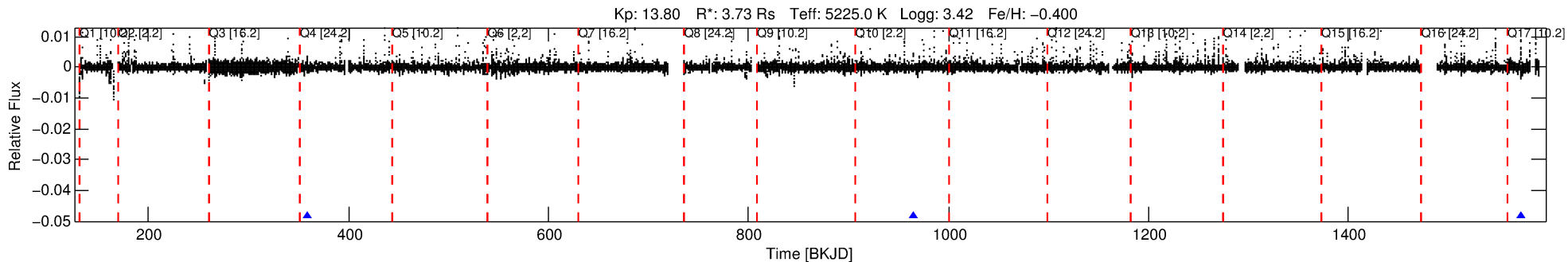
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004263801-04

No Significant Match Found

DV One-Page Summary

KIC: 4263801 Candidate: 4 of 6 Period: 606.534 d



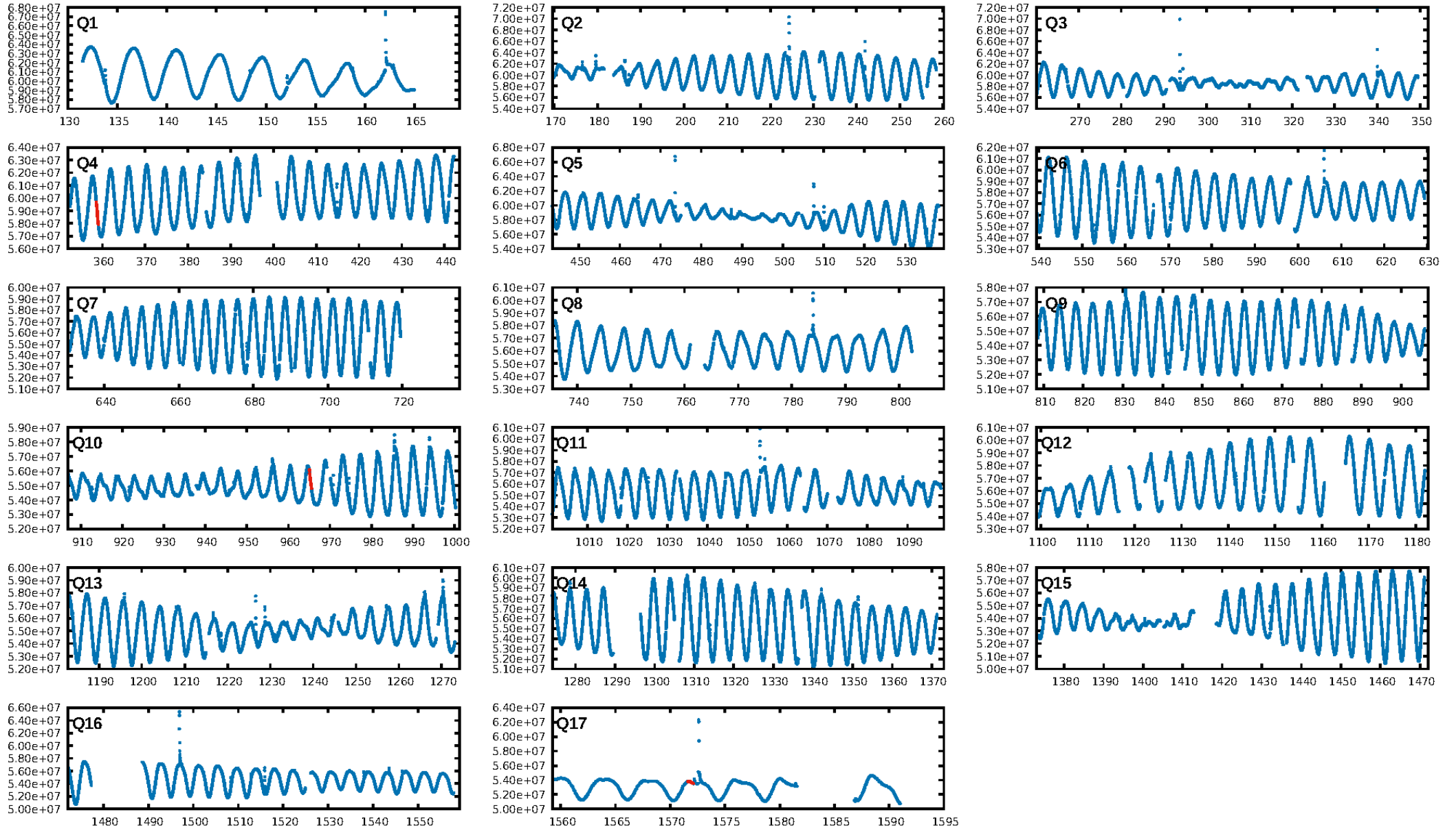
DV Fit Results:

Period = 606.53398 [0.28308] d
Epoch = 358.7824 [0.3447] BKJD
Rp/R* = 0.0140 [0.0706]
a/R* = 227.86 [2081.95]
b = 0.97 [0.58]
Seff = 3.88 [2.55]
Teq = 358 [59] K
Rp = 5.71 [28.82] Re
a = 1.5464 [0.6225] AU
Ag = 23749.68 [239767.84] [0.10σ]
Teffp = 6870 [17306] K [0.38σ]

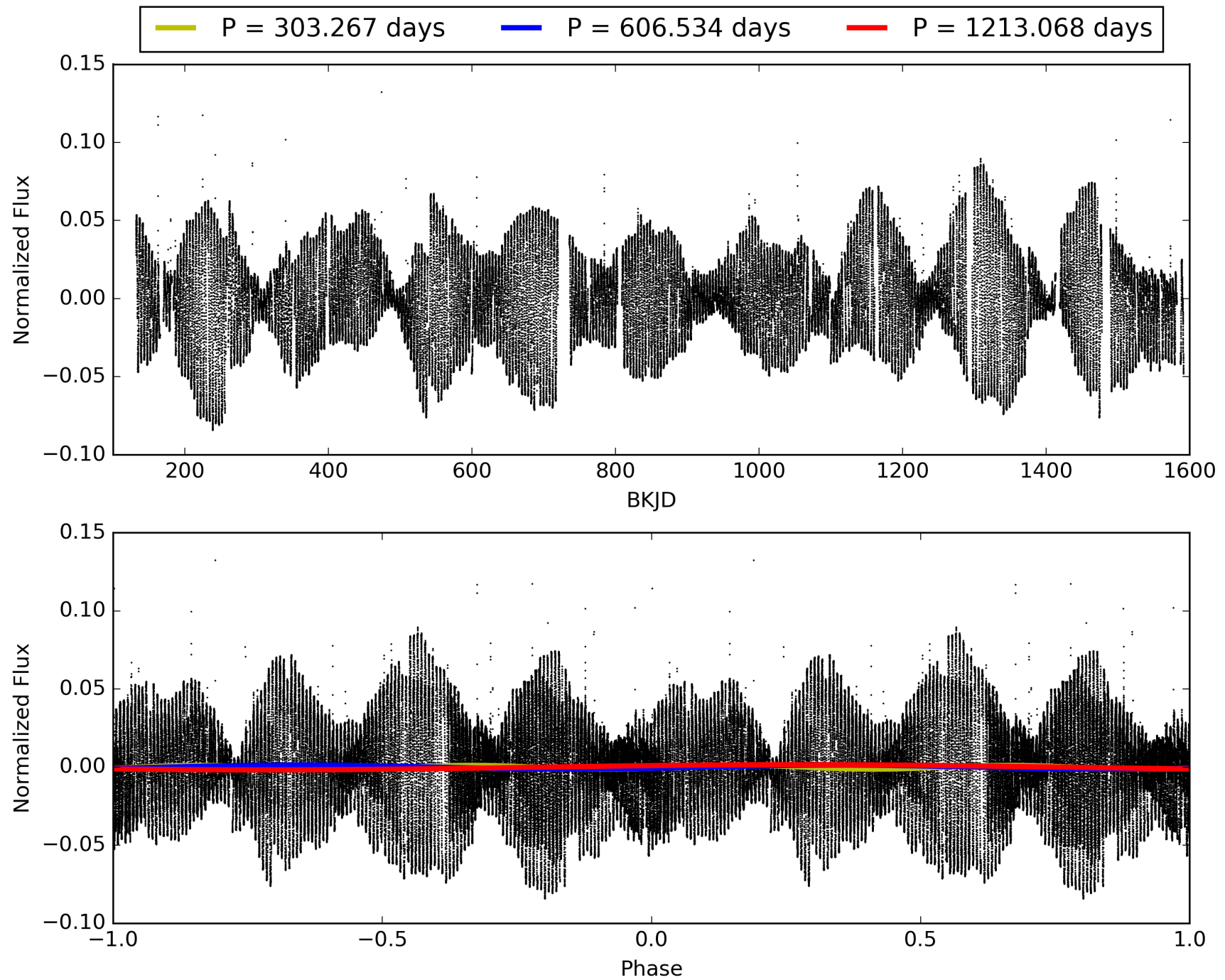
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [386.13σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 96.0%
ModelChiSquareGof-sig: 72.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 0.5543
Centroid-sig: 9.3%
Centroid-so: 6.394 arcsec [1.01σ]
OotOffset-rm: 1.457 arcsec [0.92σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-rm: 1.403 arcsec [0.89σ]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 004263801-04, PDC Light Curves

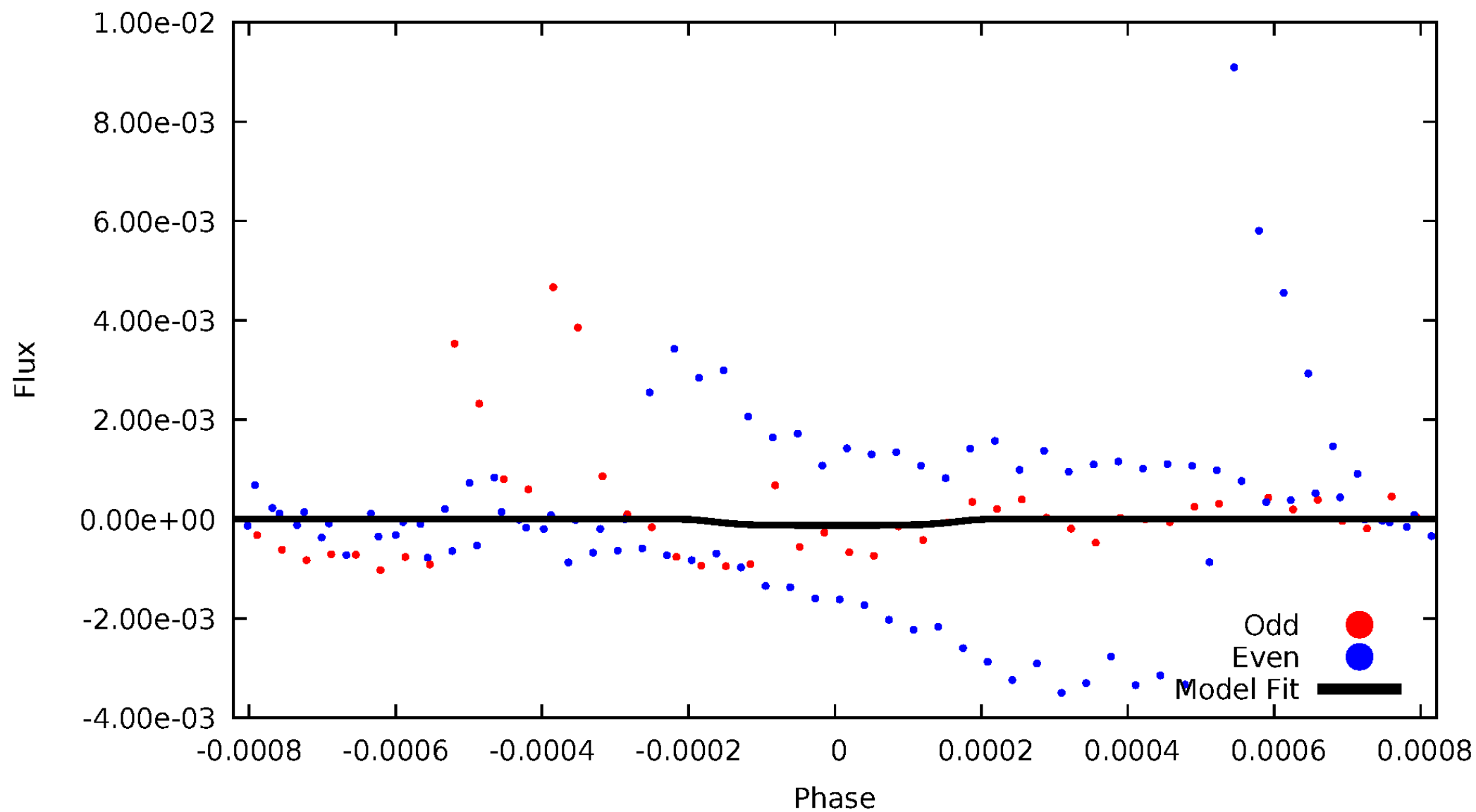


TCE 004263801-04



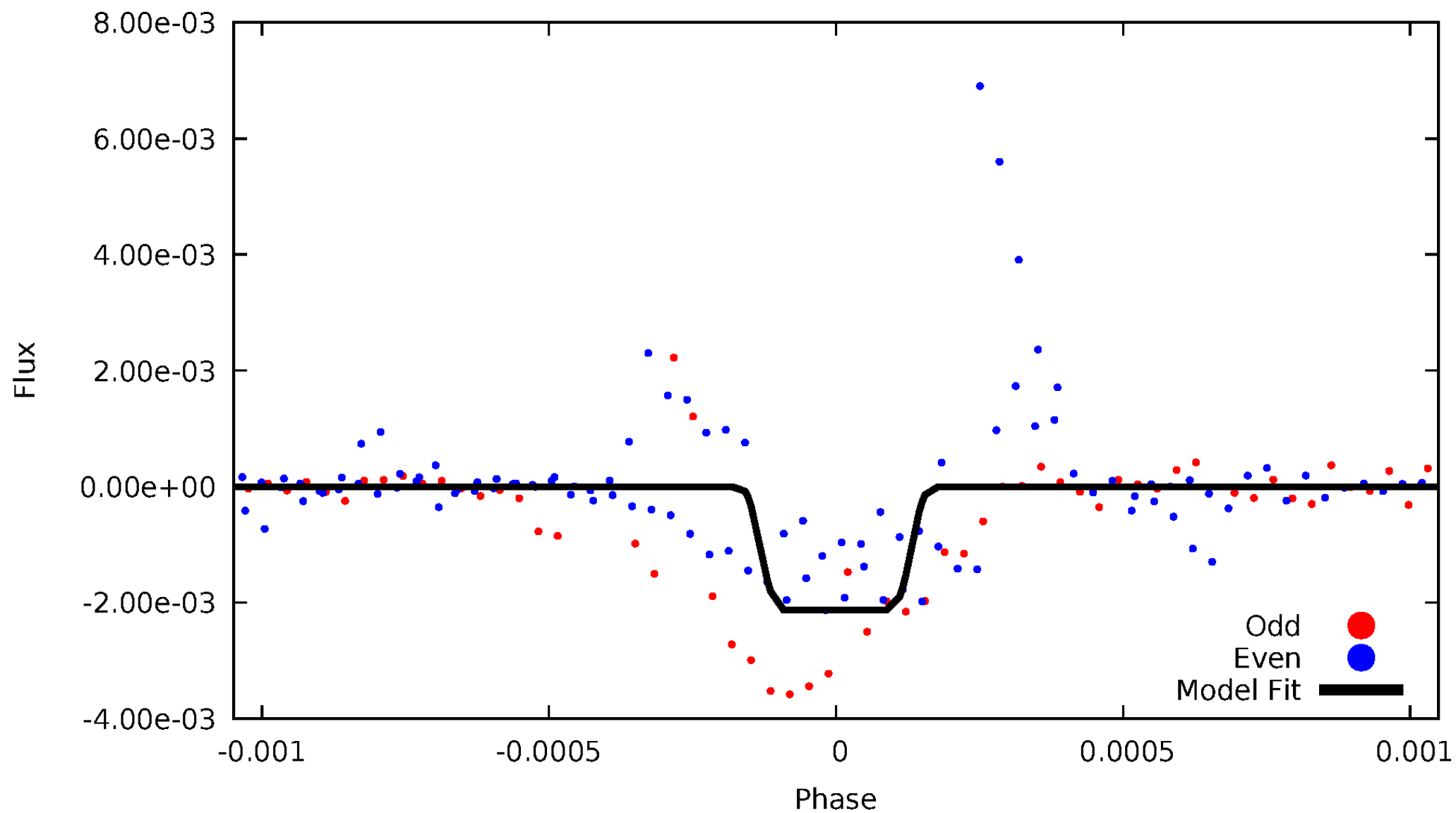
DV Odd/Even

TCE 004263801-04



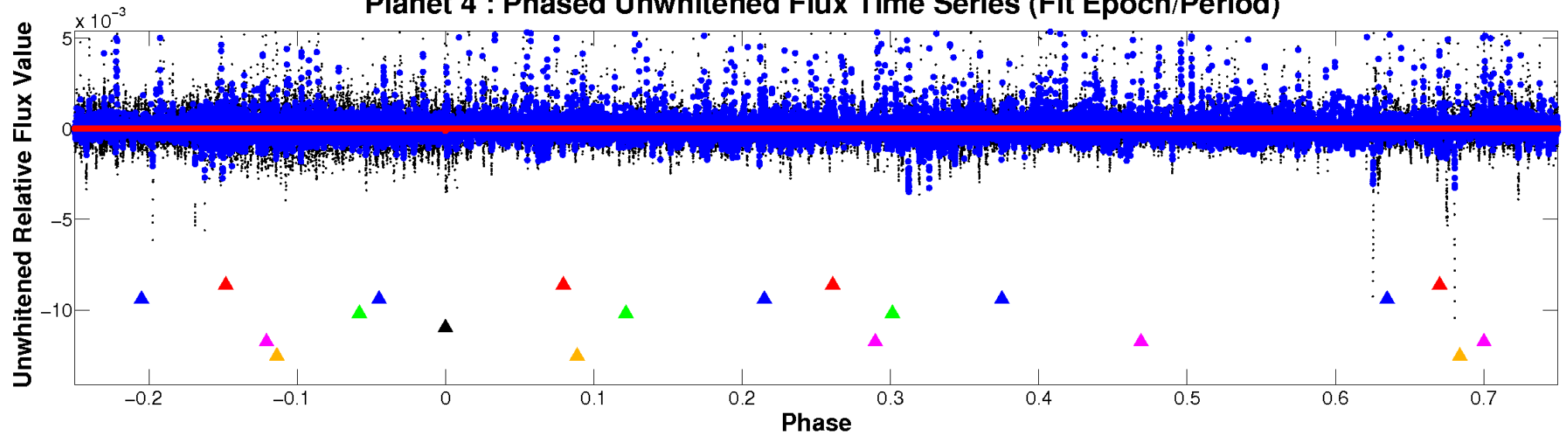
ALT Odd/Even

TCE 004263801-04

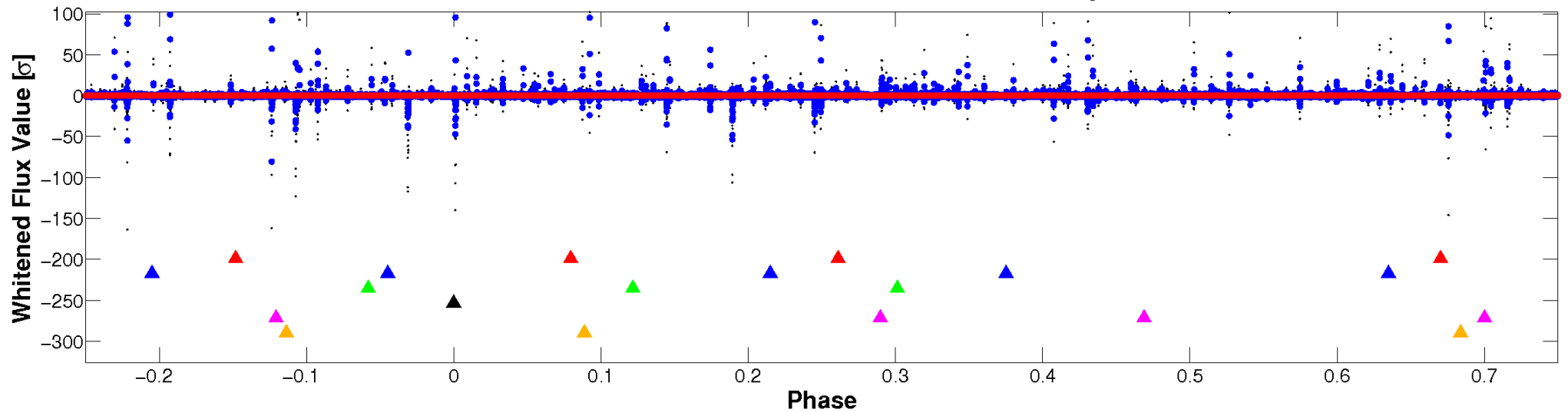


Non-Whitened Vs. Whitened Light Curve

Planet 4 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

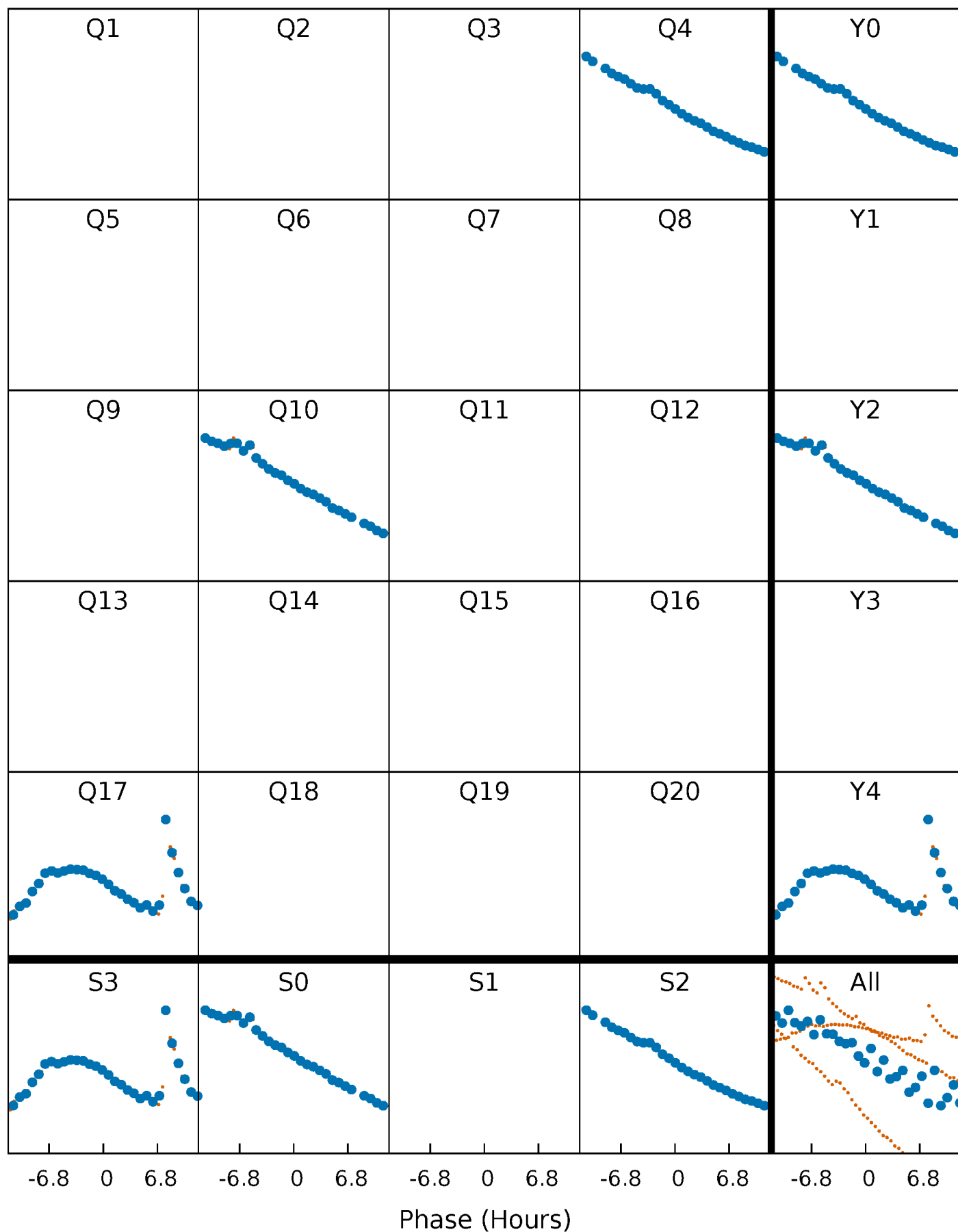


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



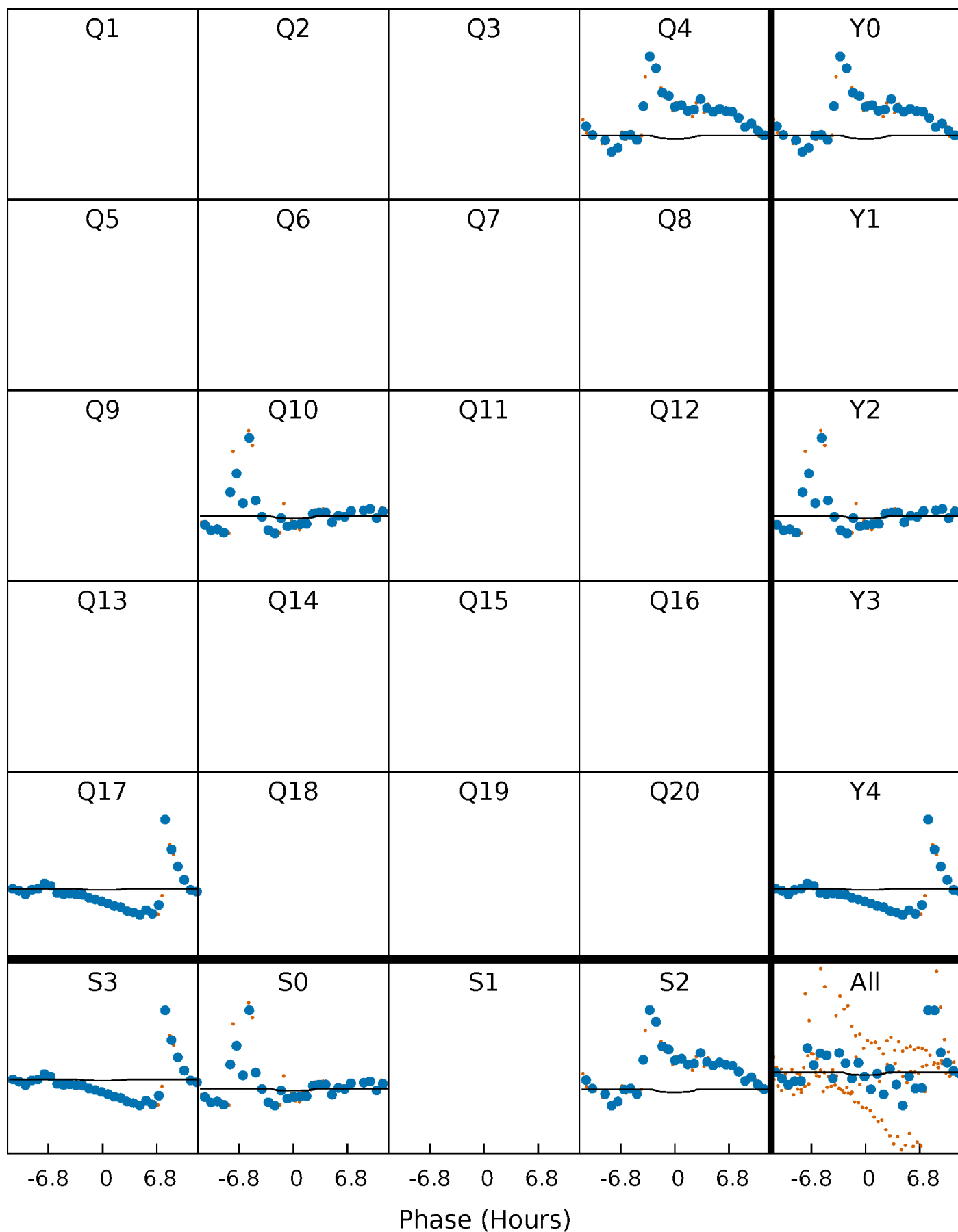
PDC Quarter-Phased Transit Curves

TCE 004263801-04 P=606.533978 Days $T_0=358.782399$ (BKJD)



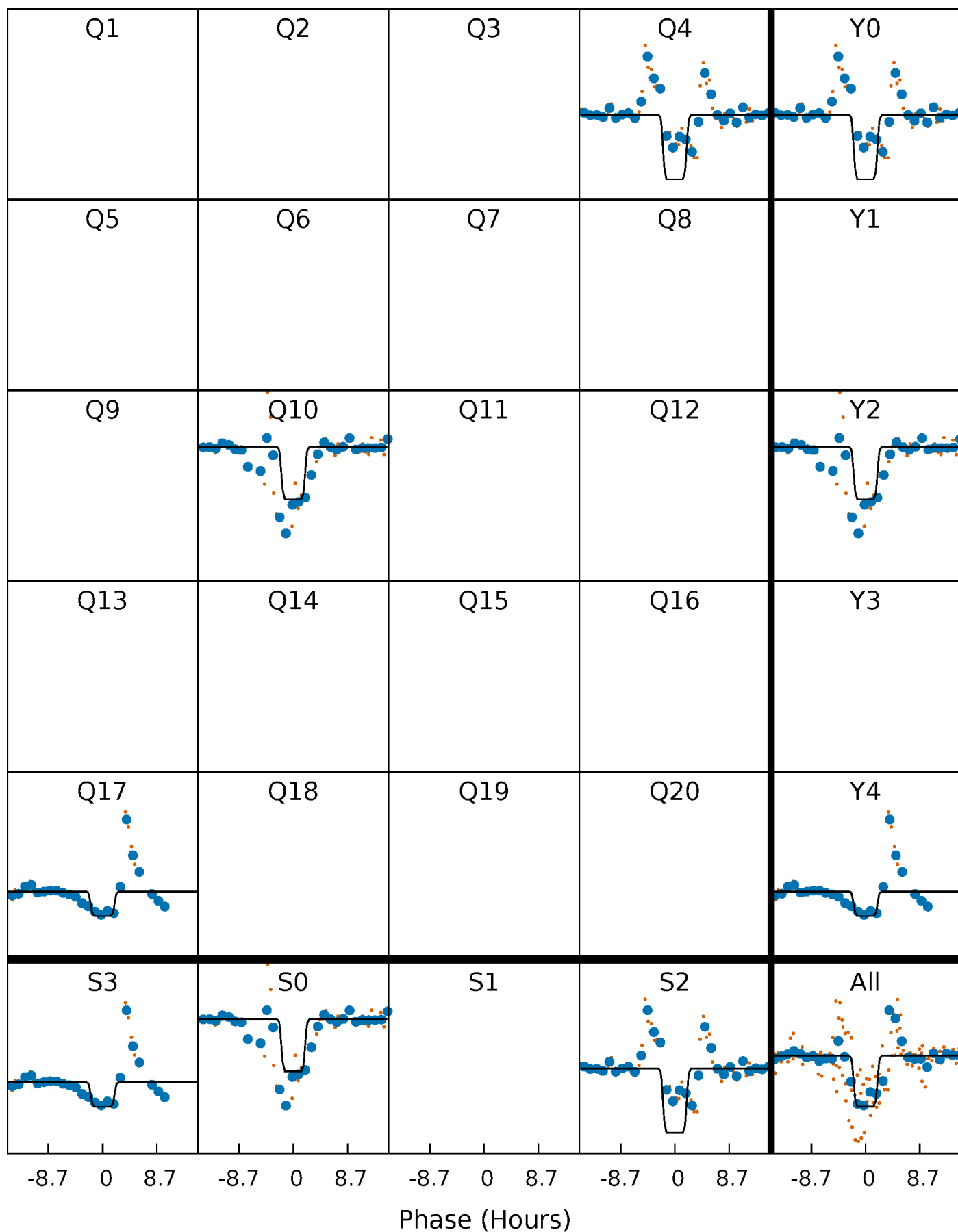
DV Quarter-Phased Transit Curves

TCE 004263801-04 $P=606.533978$ Days $T_0=358.782399$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

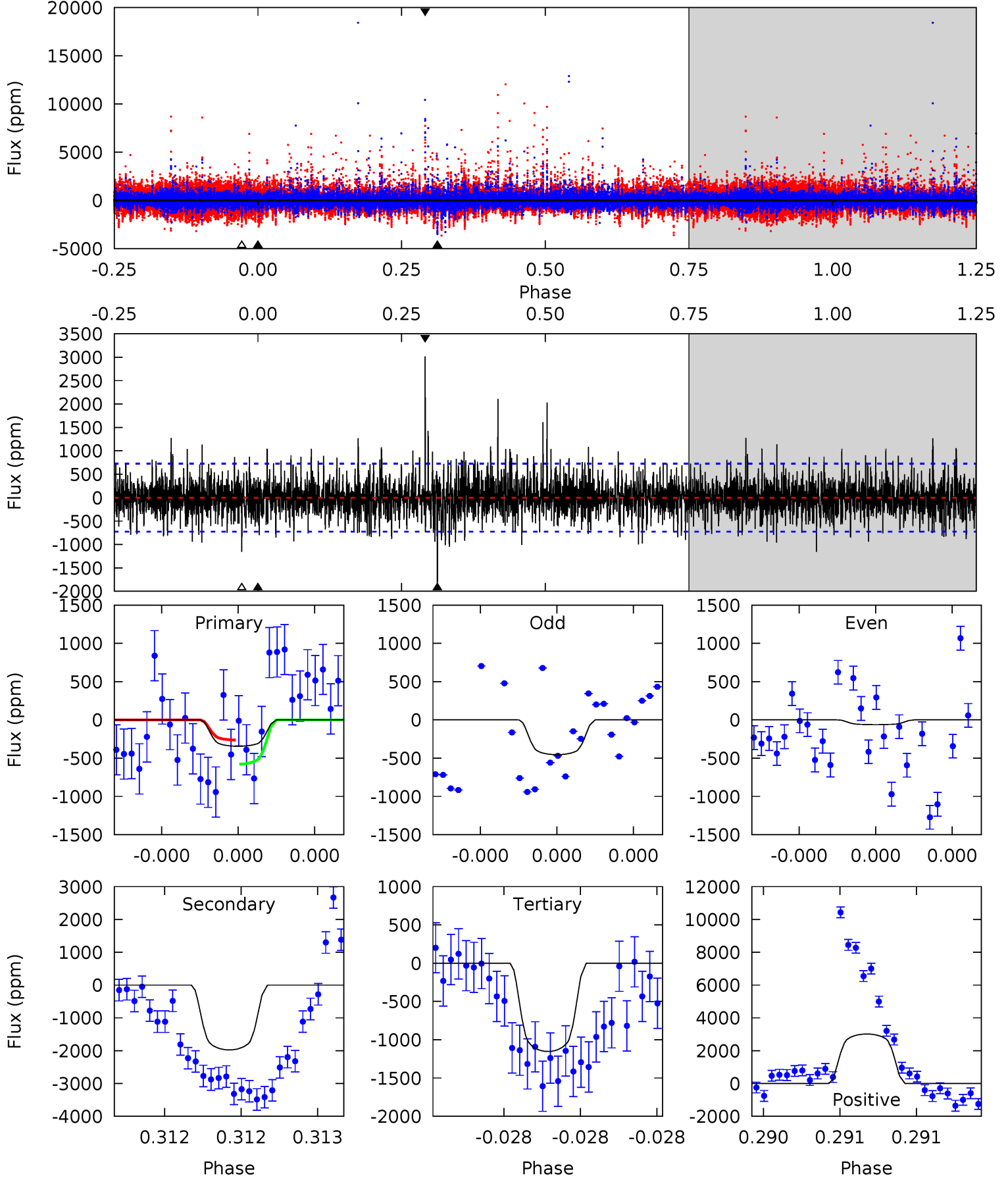
TCE 004263801-04 P=606.794998 Days $T_0=358.459360$ (BKJD)



DV Model-Shift Uniqueness Test

004263801-04, P = 606.533978 Days, E = 358.782399 Days

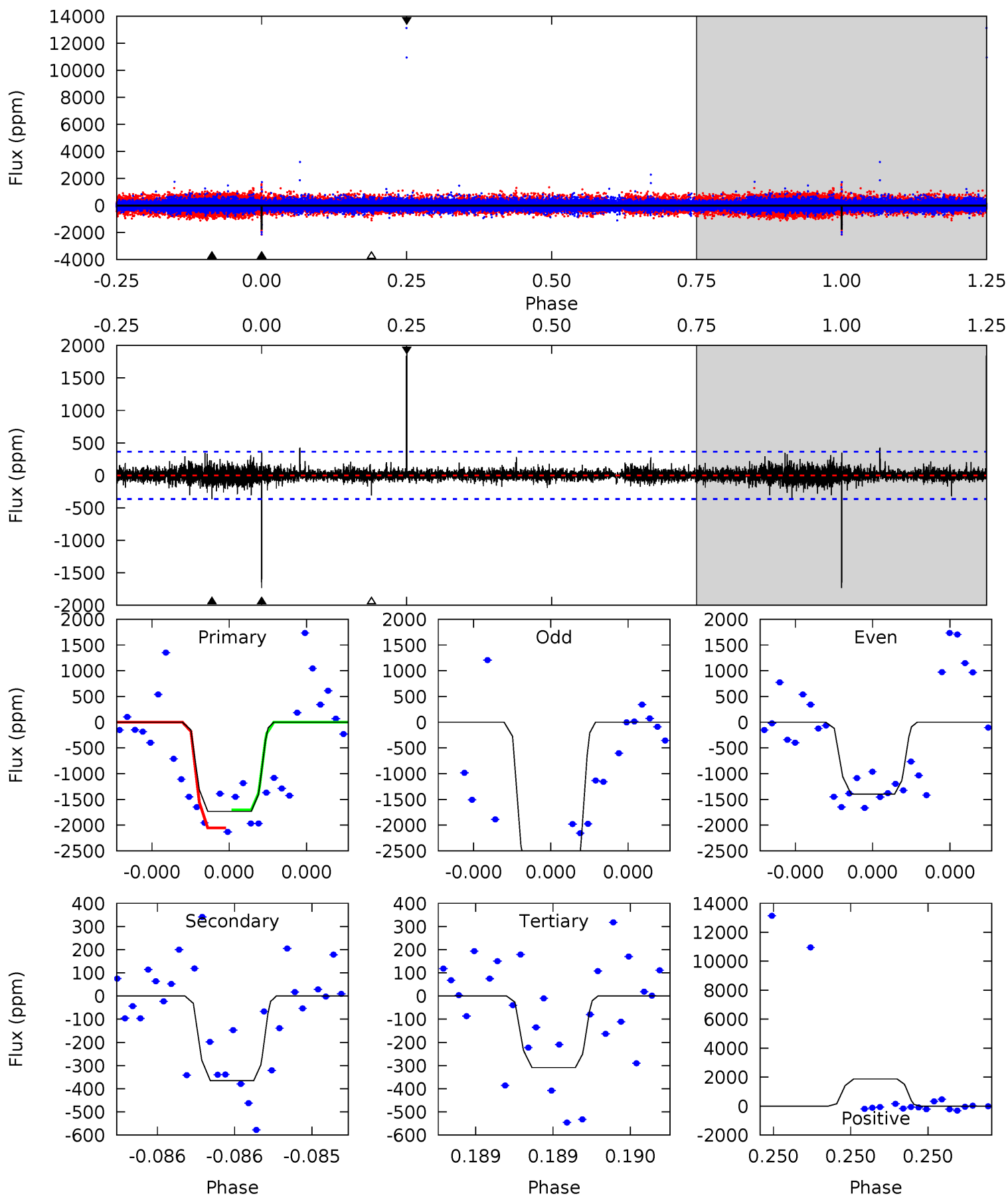
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.66	15.3	8.91	23.3	5.60	3.52	2.36	-6.25	-20.6	6.35	-8.02	0.88	0.42	0.60	1.21



Alt Model-Shift Uniqueness Test

004263801-04, P = 606.794998 Days, E = 358.459360 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.9	5.67	4.80	29.0	5.66	3.61	0.88	22.1	-2.12	0.88	-23.4	13.5	0.99	0.52	2.74



Stellar Parameters For KIC 004263801

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5225^{+157}_{-173}	$3.422^{+0.378}_{-0.252}$	$-0.400^{+0.300}_{-0.250}$	$3.729^{+1.277}_{-1.561}$	$1.341^{+0.177}_{-0.443}$	$0.036^{+0.104}_{-0.021}$
	+3%/-3%	+11%/-7%	+75%/-62%	+34%/-42%	+13%/-33%	+285%/-59%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 004263801-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1976 ± 129	$20.77^{+23.17}_{-14.42}$	500^{+49}_{-56}	4837^{+3970}_{-1139}	5934^{+55300}_{-4602}
Alt.	-365 ± 64	$26.29^{+26.97}_{-18.08}$	499^{+56}_{-60}	3313^{+1556}_{-579}	683^{+5694}_{-528}

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 $A_{obs} \gg 1.0$

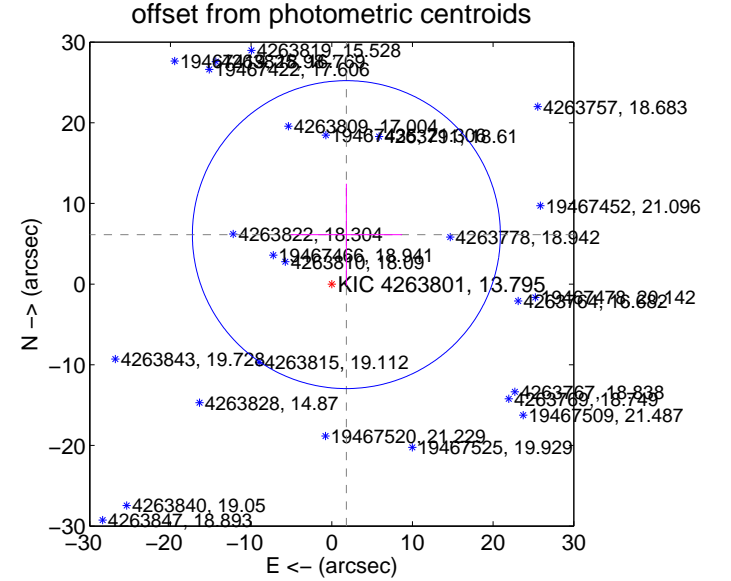
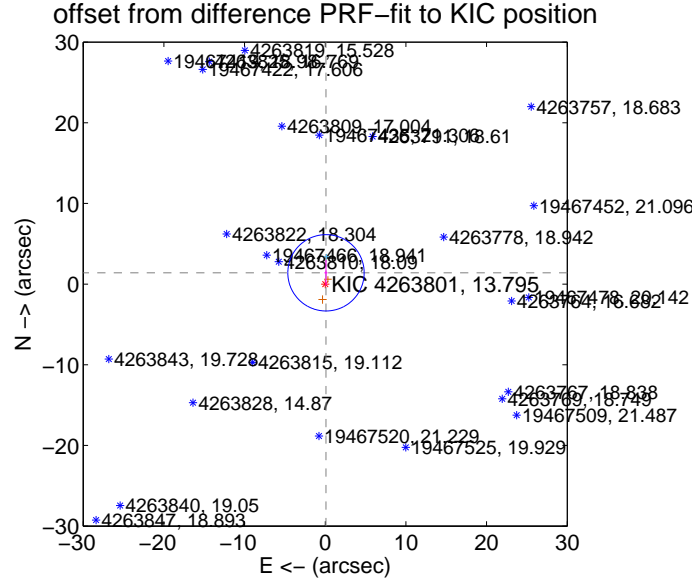
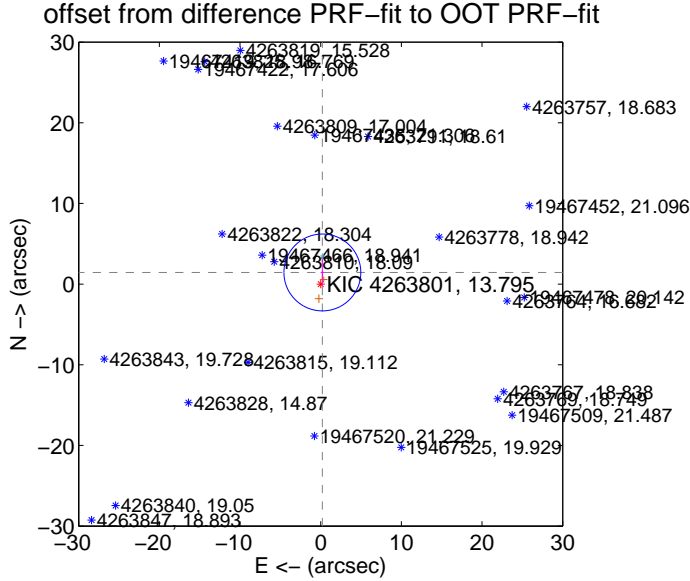
DV Centroid Data

Supplemental centroid analysis for 004263801-04. Kepler magnitude: 13.79. Transit SNR 0.67

There are 1 quarters with good PRF difference image offsets

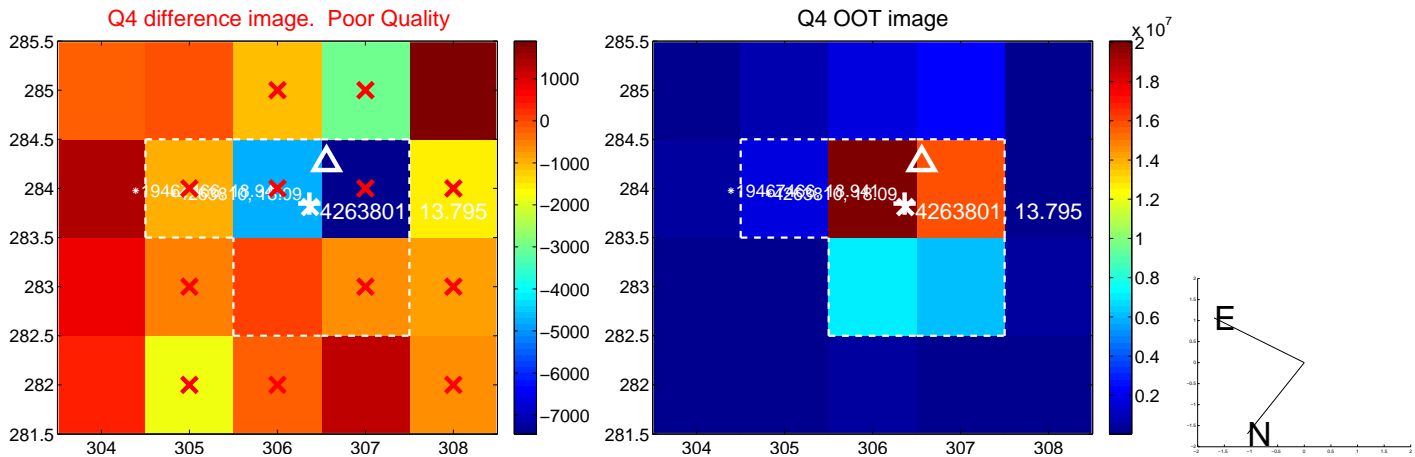
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.457 ± 1.588	0.92	-0.208 ± 0.208	1.442 ± 1.604
PRF-fit source offset from KIC position	1.403 ± 1.577	0.89	-0.095 ± 0.198	1.399 ± 1.581
photometric centroid source offset	6.39 ± 6.36	1.01	-1.81 ± 6.90	6.13 ± 6.31



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.

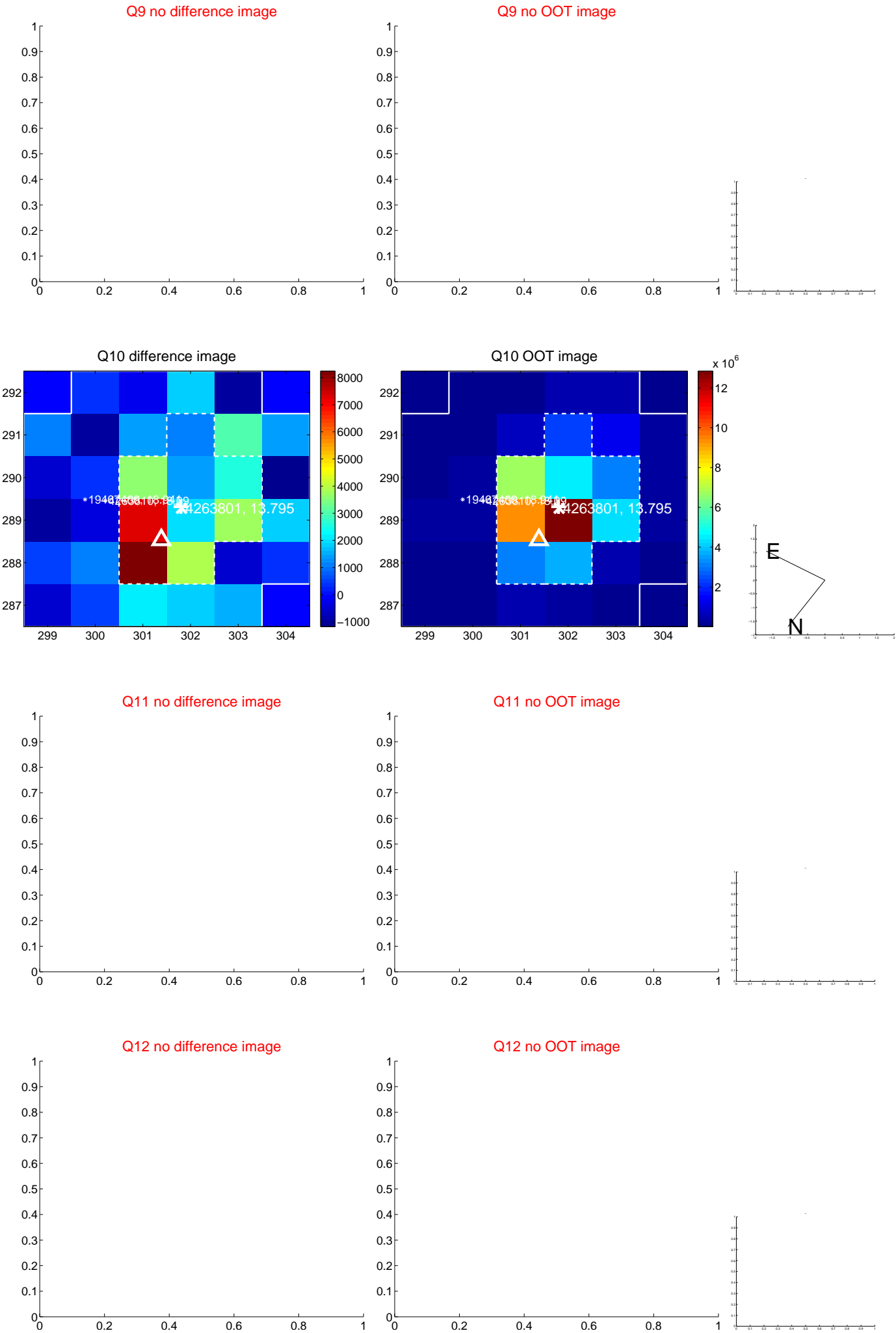
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



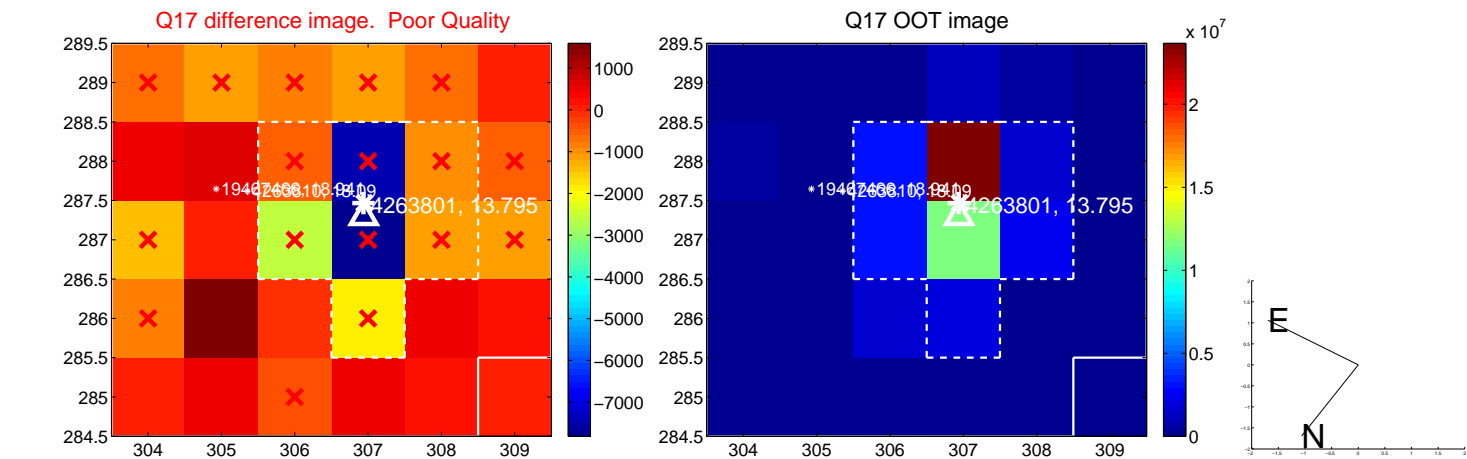
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



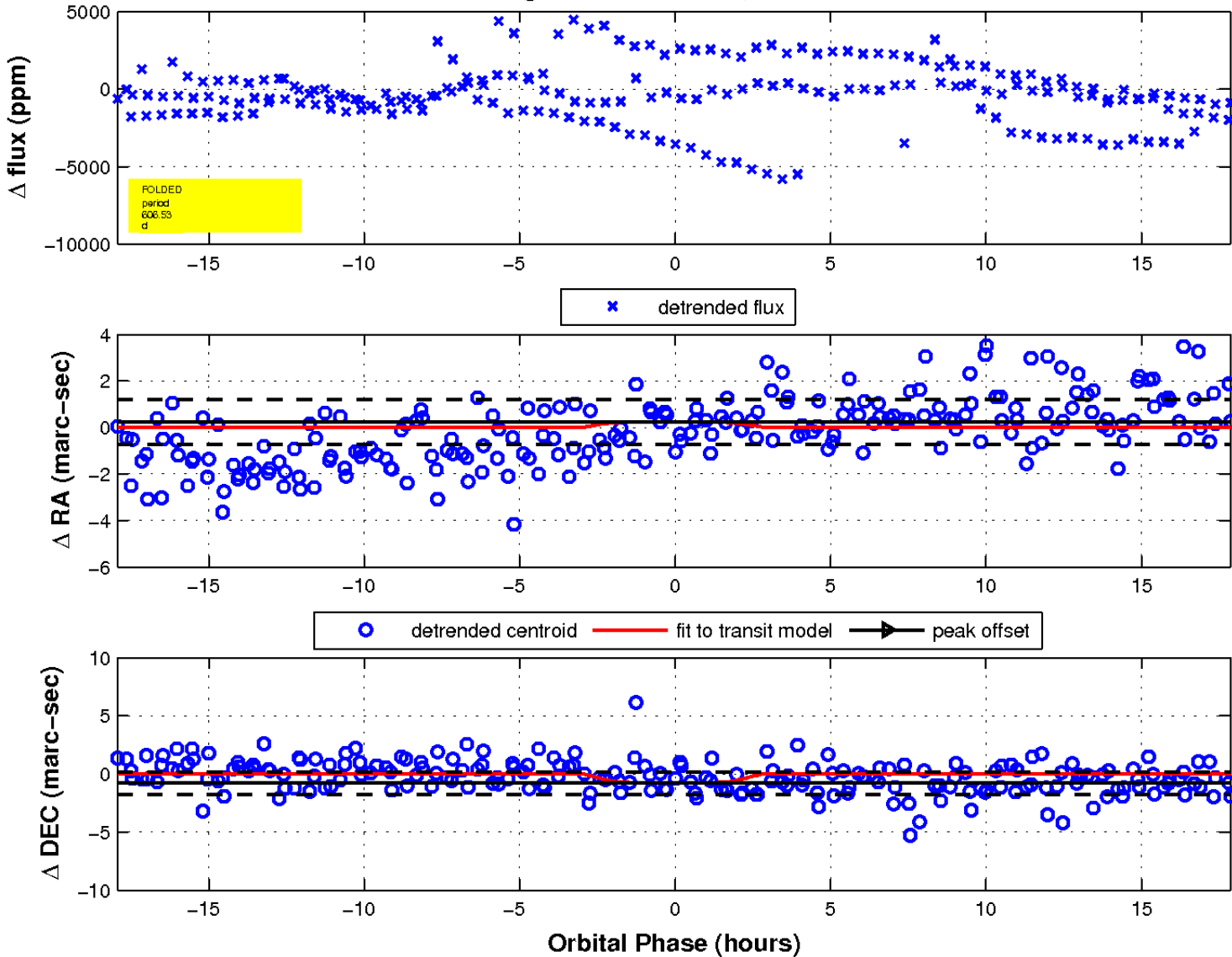
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

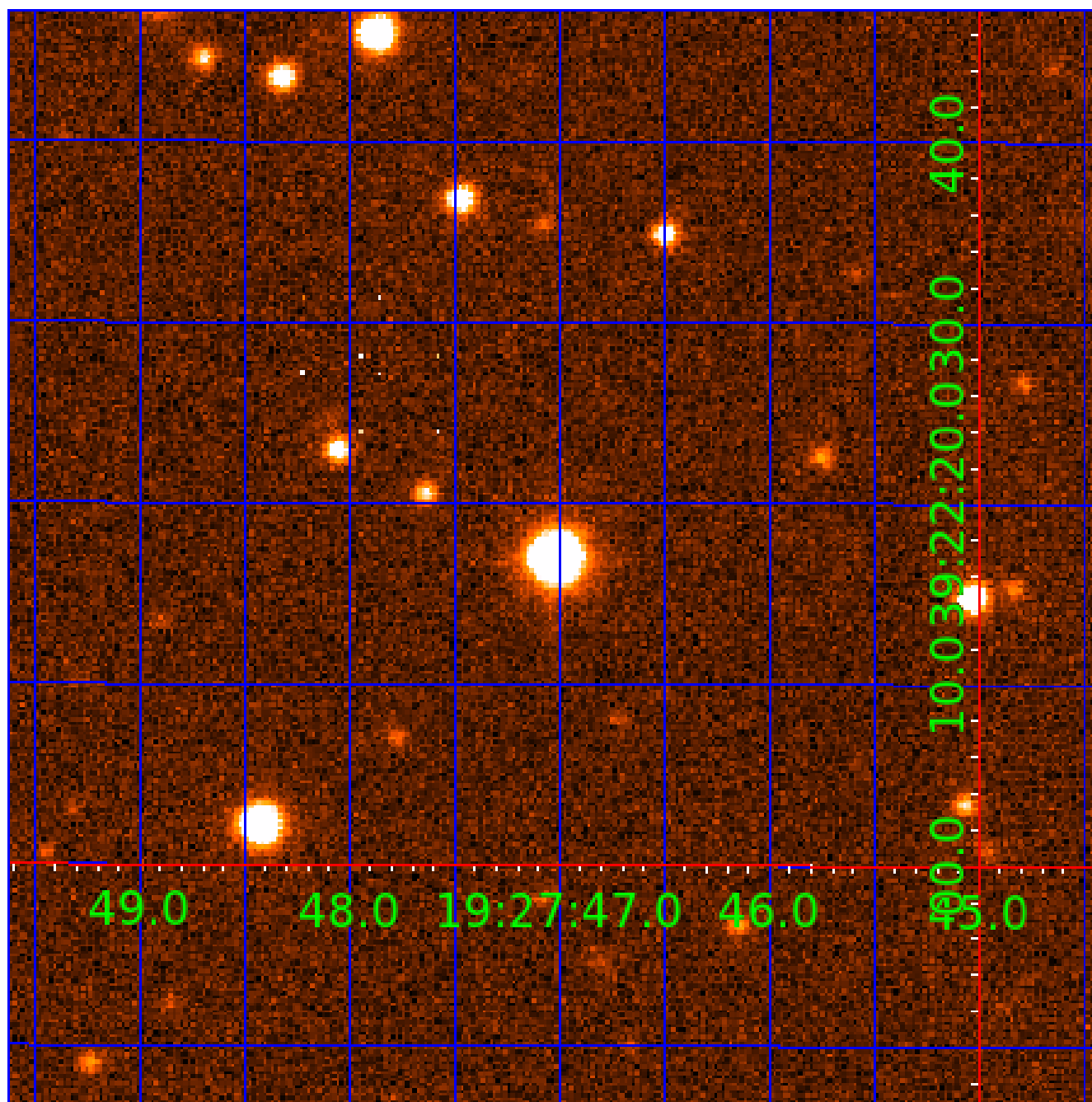


fluxWeightedCentroids, Planet 4 of 6



UKIRT Image

Declination



KIC 004263801

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})
004263801-02	OBS	No	351.837957	137.344031	874.3	4.246	16.4	6.1	3.73	5225	11.09	8.03
004263801-03	OBS	No	497.548859	541.556408	1205.5	3.183	14.6	7.4	3.73	5225	14.01	5.06
004263801-04	OBS	No	606.533978	358.782399	127.6	5.979	12.5	0.7	3.73	5225	5.71	3.88
004263801-05	OBS	No	357.598614	176.927745	1339.4	3.499	15.6	7.9	3.73	5225	13.39	7.85
004263801-06	OBS	No	483.750911	412.629101	857.2	7.500	13.0	-1.0	3.73	5225	10.71	5.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004263801-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
004263801-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
004263801-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004263801-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
004263801-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

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

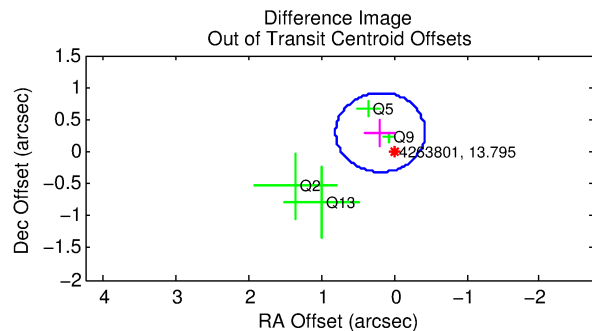
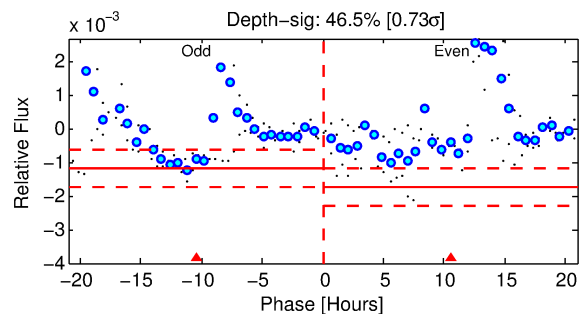
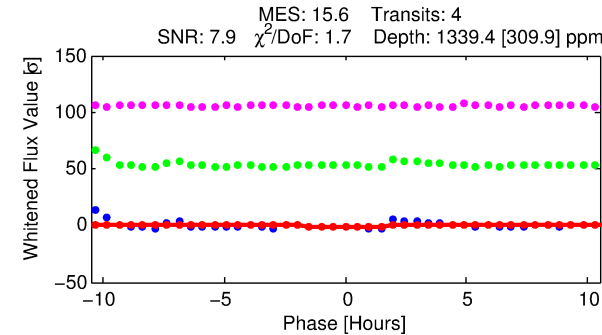
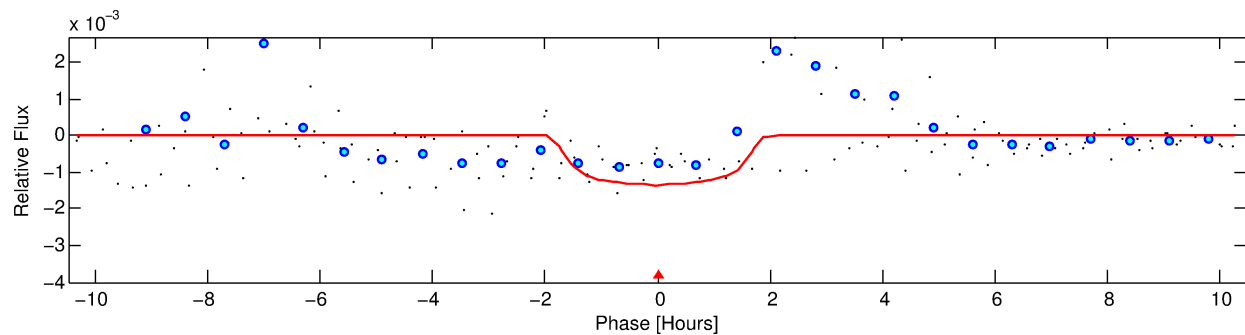
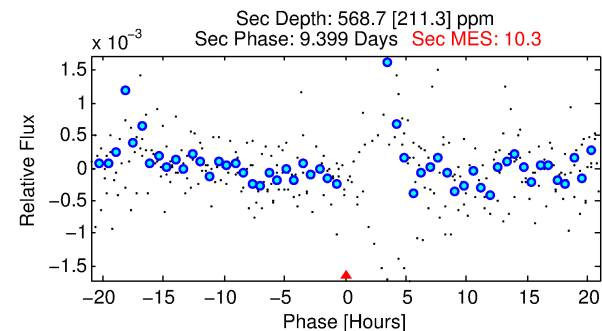
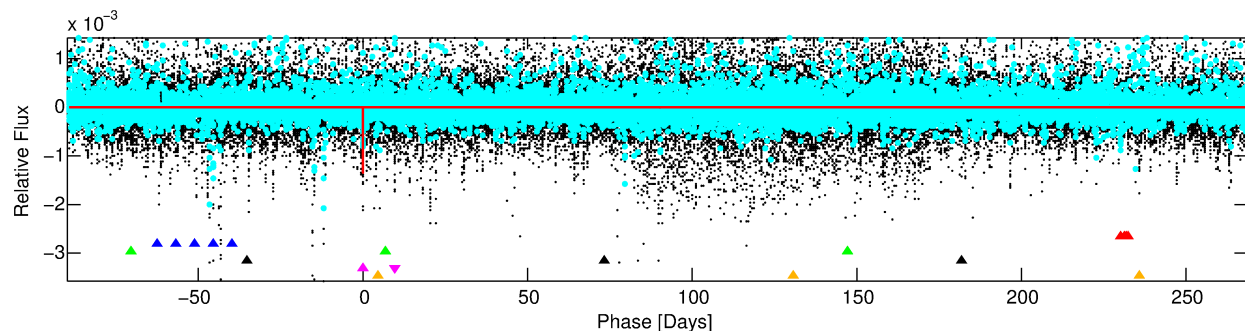
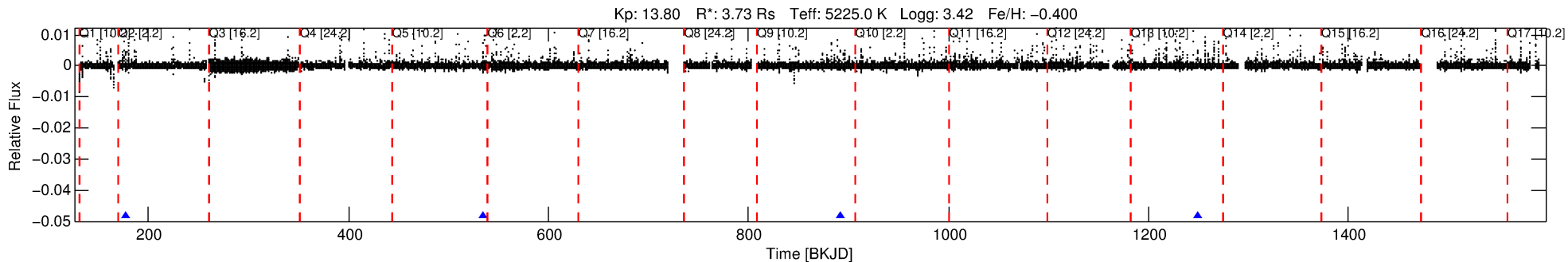
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 004263801-05

No Significant Match Found

DV One-Page Summary

KIC: 4263801 Candidate: 5 of 6 Period: 357.599 d



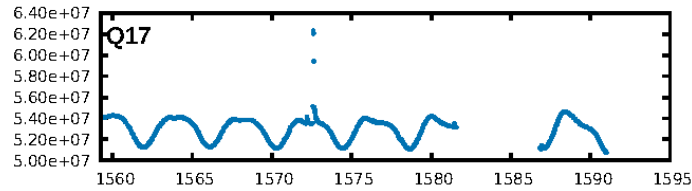
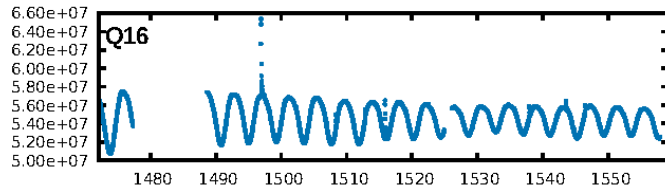
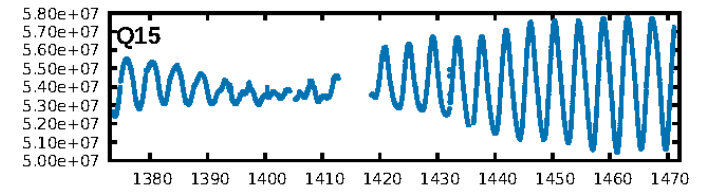
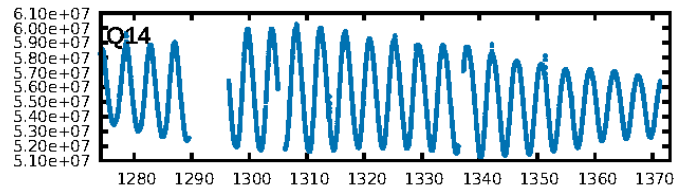
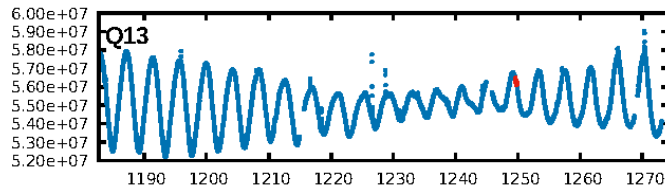
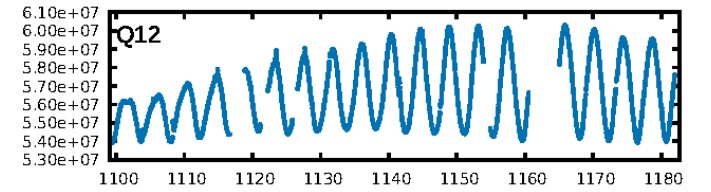
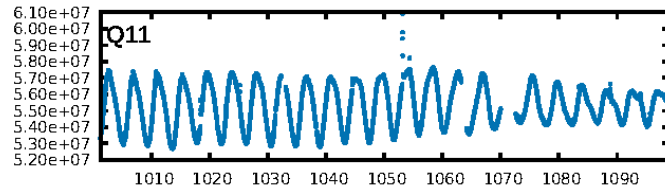
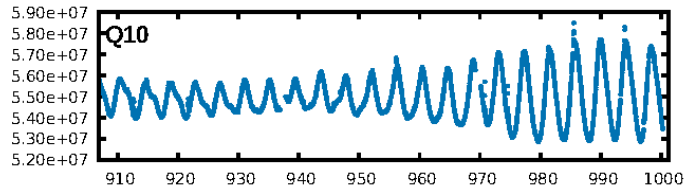
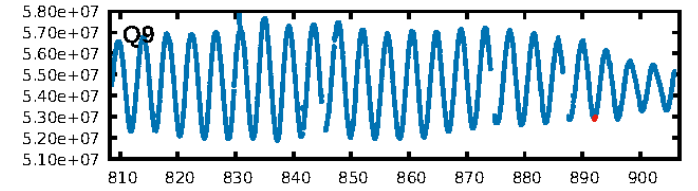
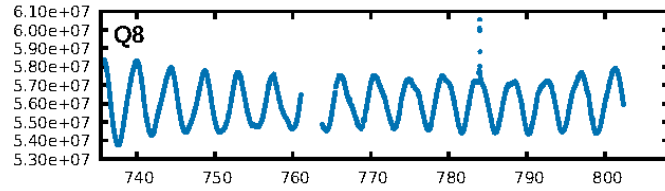
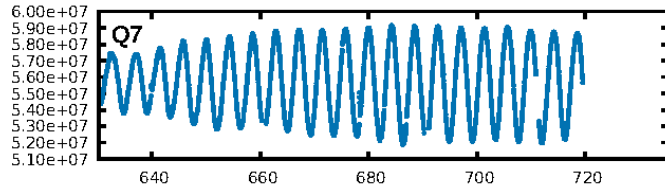
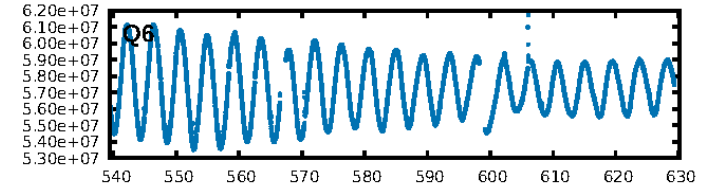
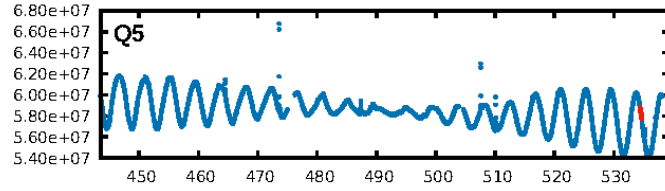
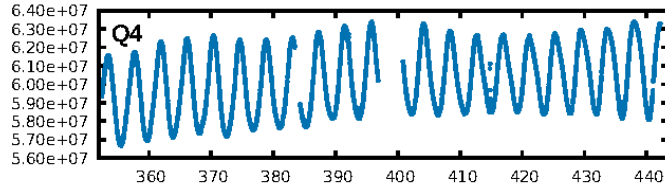
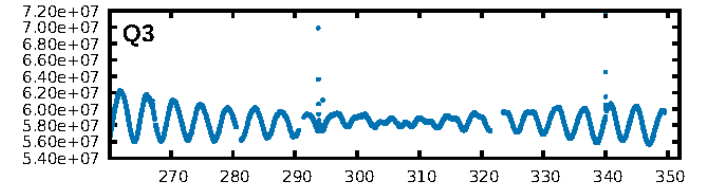
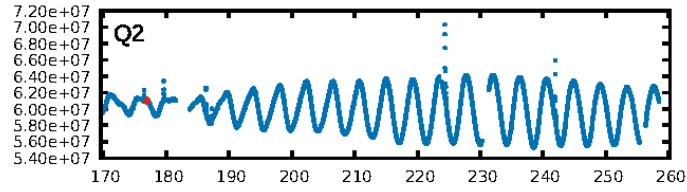
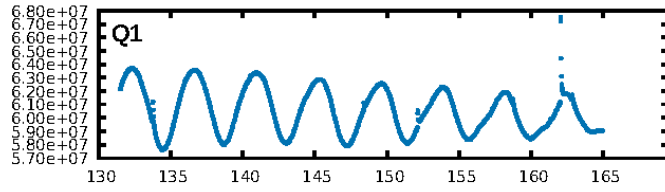
DV Fit Results:

Period = 357.59861 [0.00427] d
Epoch = 176.9277 [0.0094] BKJD
Rp/R* = 0.0329 [0.1406]
a/R* = 806.50 [13541.71]
b = 0.01 [1757.42]
Seff = 7.85 [5.16]
Teff = 427 [70] K
Rp = 13.39 [57.51] Re
a = 1.0873 [0.4377] AU
Ag = 2063.87 [17713.68] [0.12σ]
Teffp = 4449 [9519] K [0.42σ]

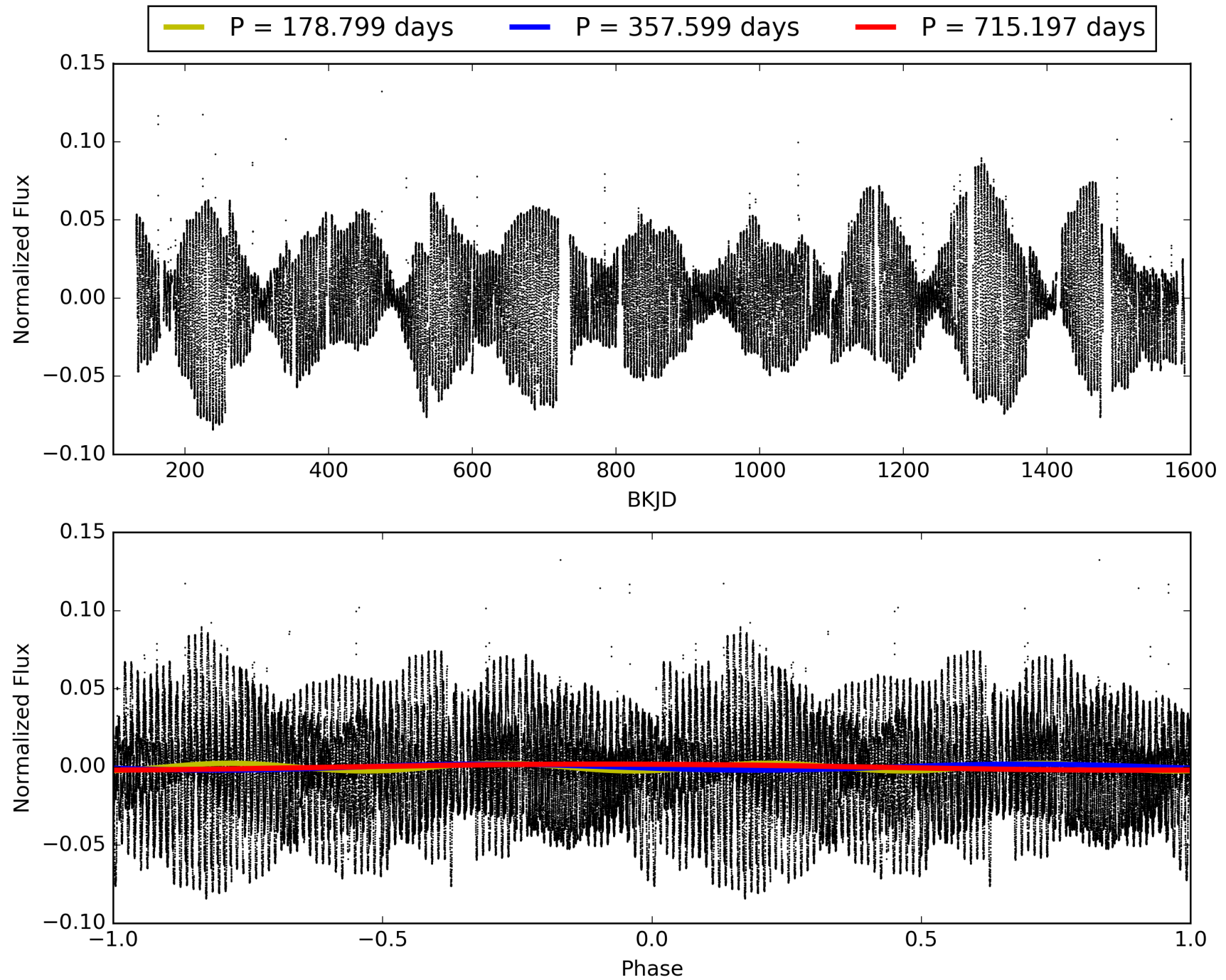
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [25.13σ]
LongPeriod-sig: 99.4% [2.75σ]
ModelChiSquare2-sig: 3.0%
ModelChiSquareGof-sig: 72.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.2551
Centroid-sig: 62.3%
Centroid-so: 0.295 arcsec [0.40σ]
OotOffset-rm: 0.354 arcsec [1.72σ]
OotOffset-st: 1/0/0/3 [4]
KicOffset-rm: 0.434 arcsec [2.11σ]
KicOffset-st: 1/0/0/3 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

TCE 004263801-05, PDC Light Curves

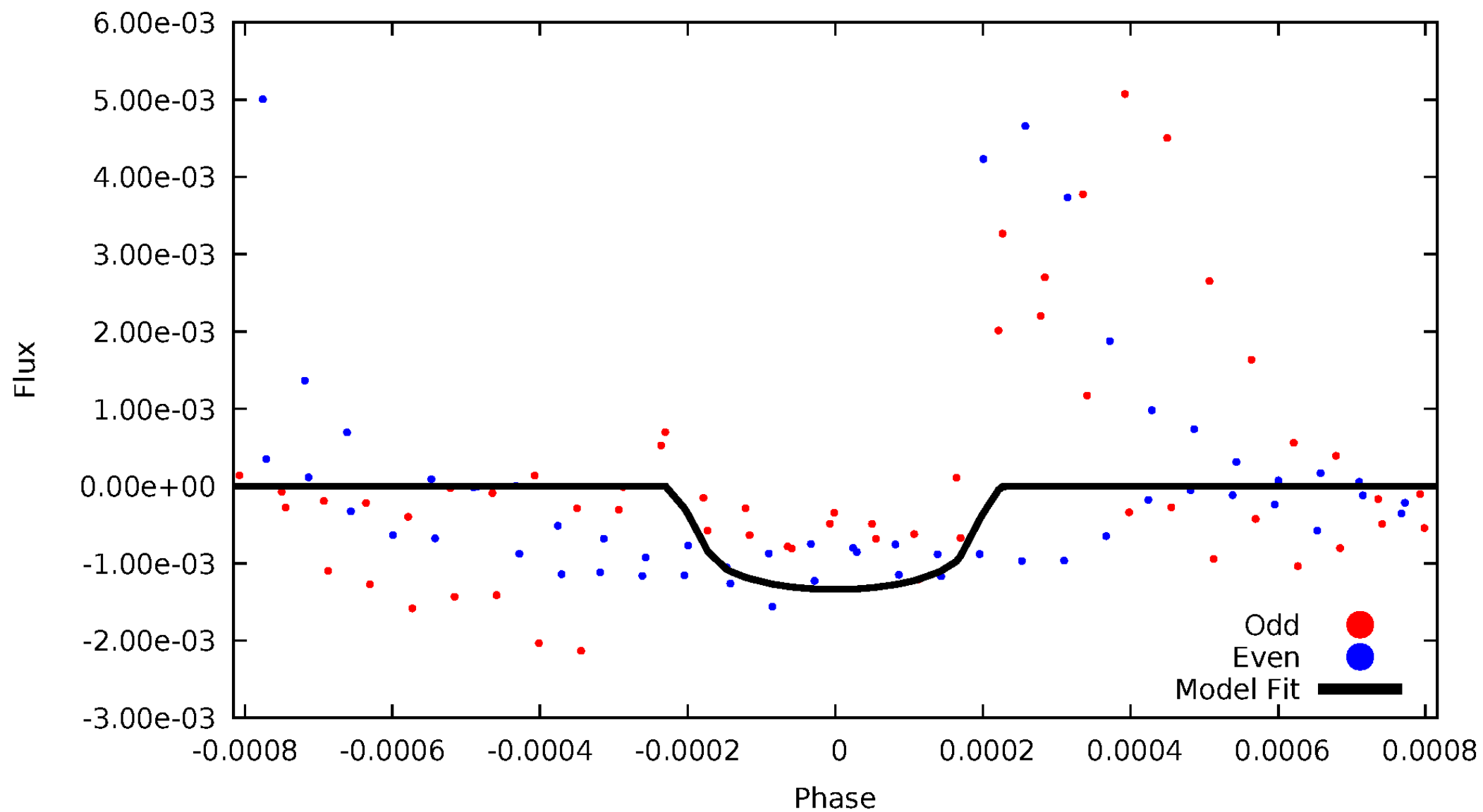


TCE 004263801-05



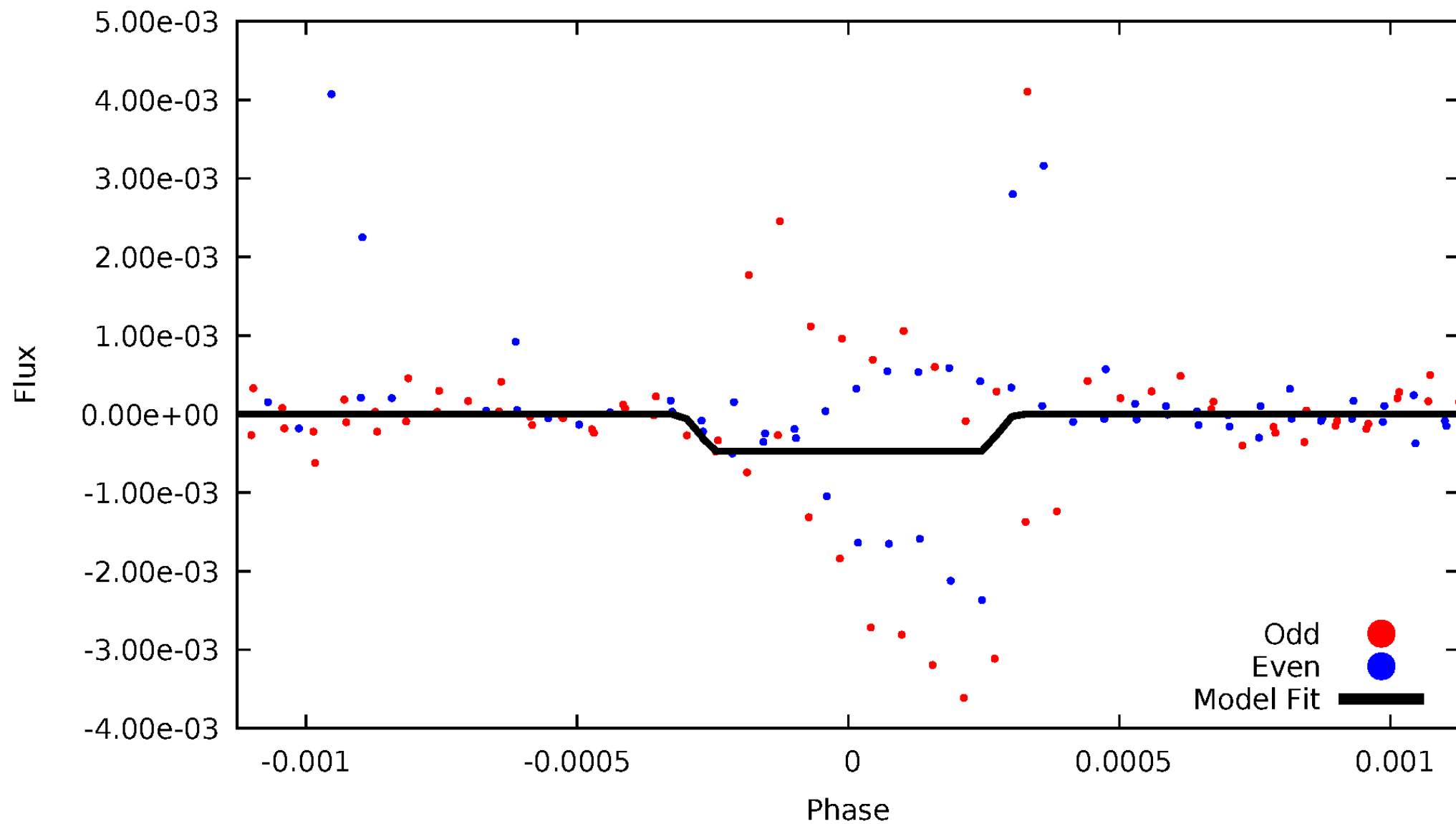
DV Odd/Even

TCE 004263801-05



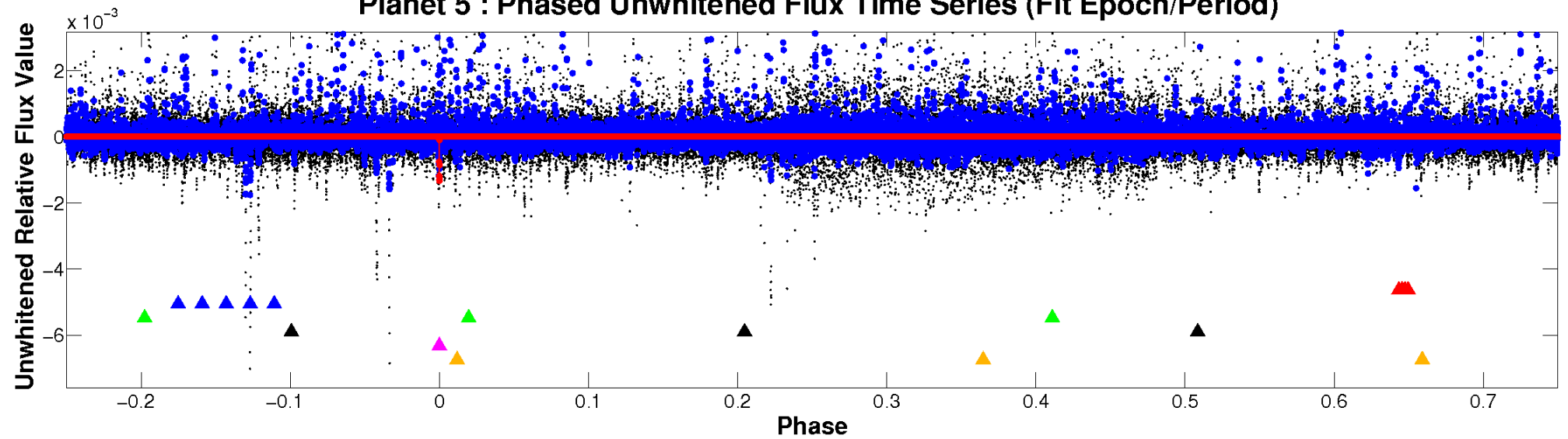
ALT Odd/Even

TCE 004263801-05

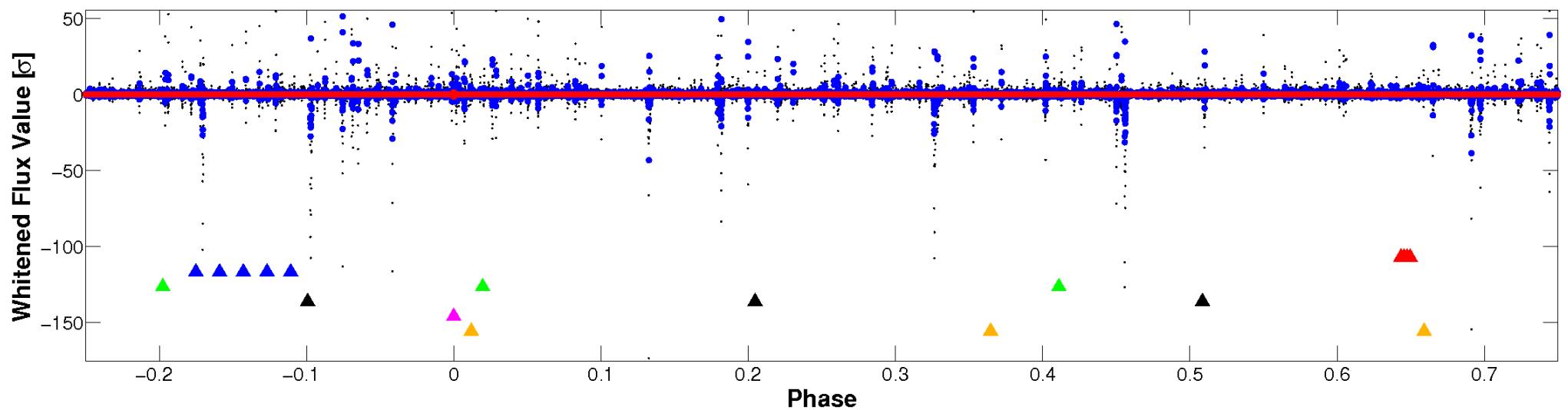


Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

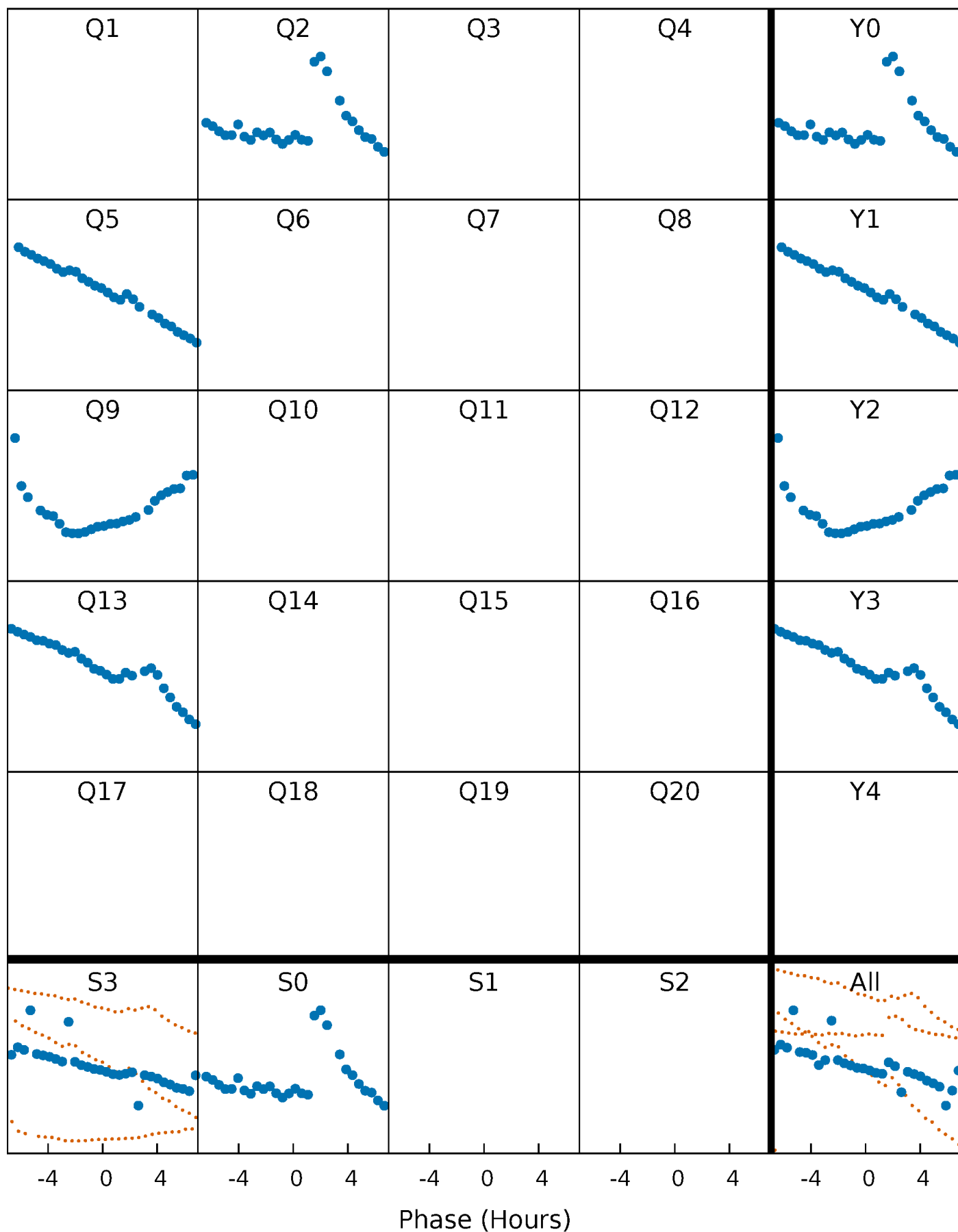


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



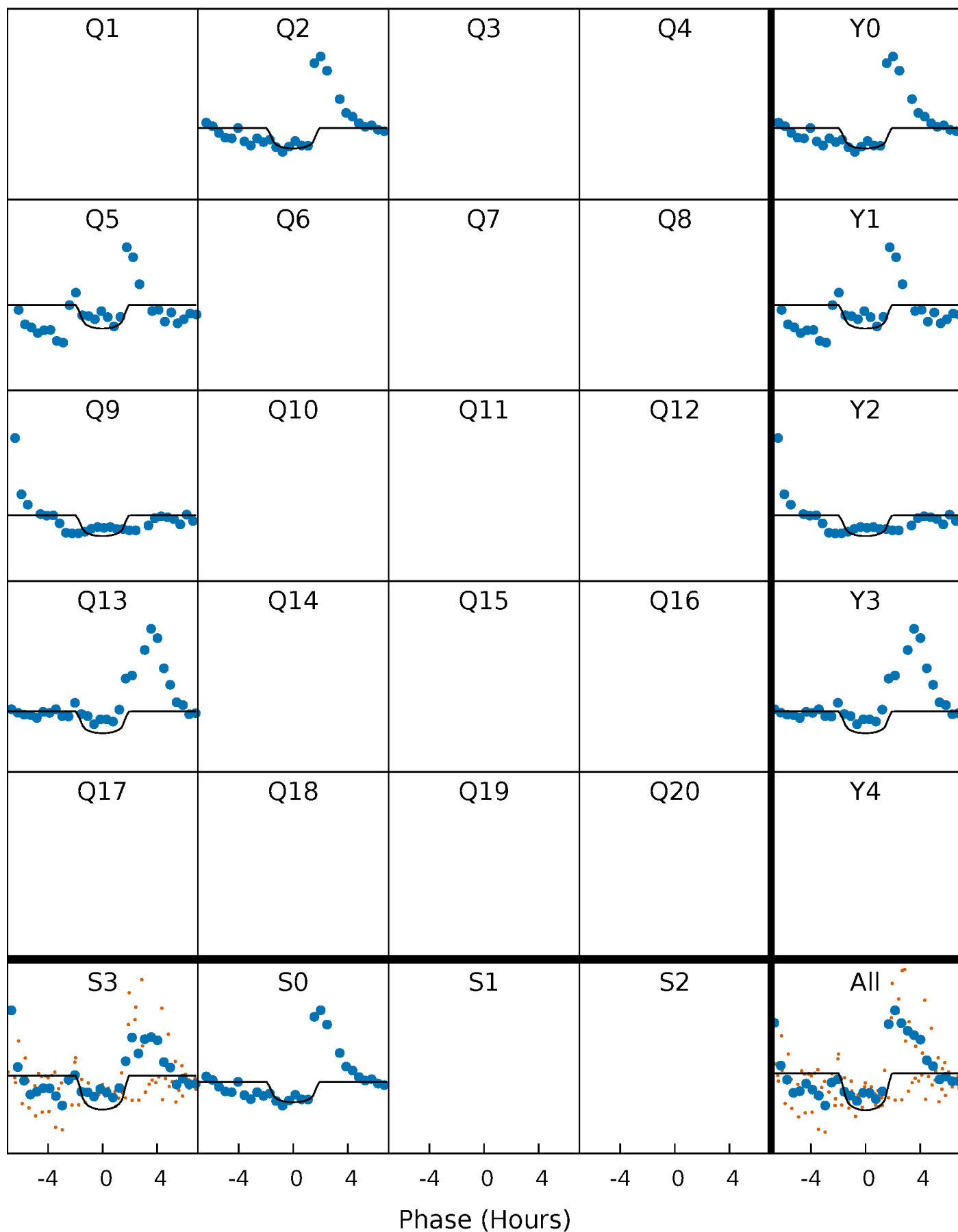
PDC Quarter-Phased Transit Curves

TCE 004263801-05 $P=357.598614$ Days $T_0=176.927745$ (BKJD)



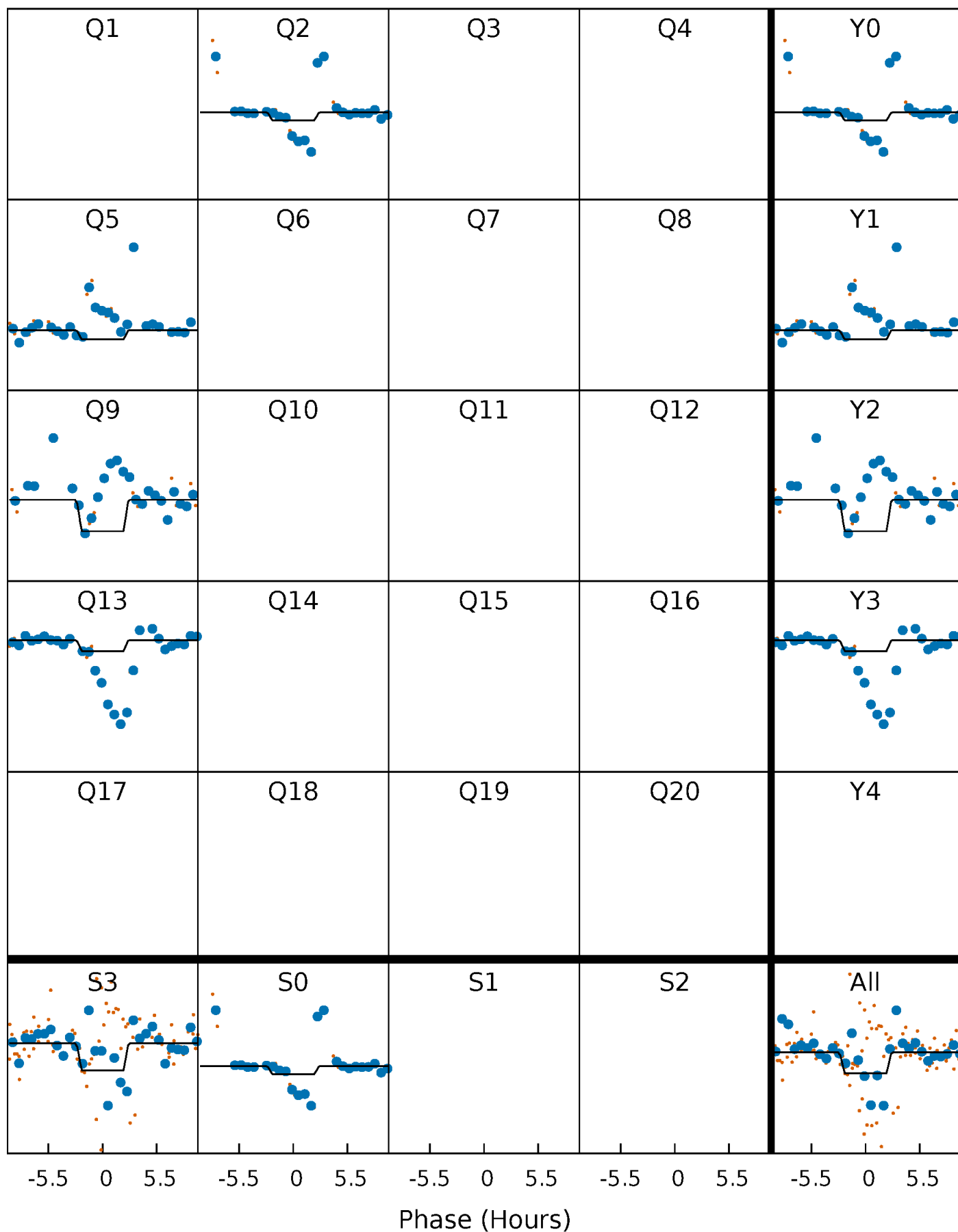
DV Quarter-Phased Transit Curves

TCE 004263801-05 $P=357.598614$ Days $T_0=176.927745$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

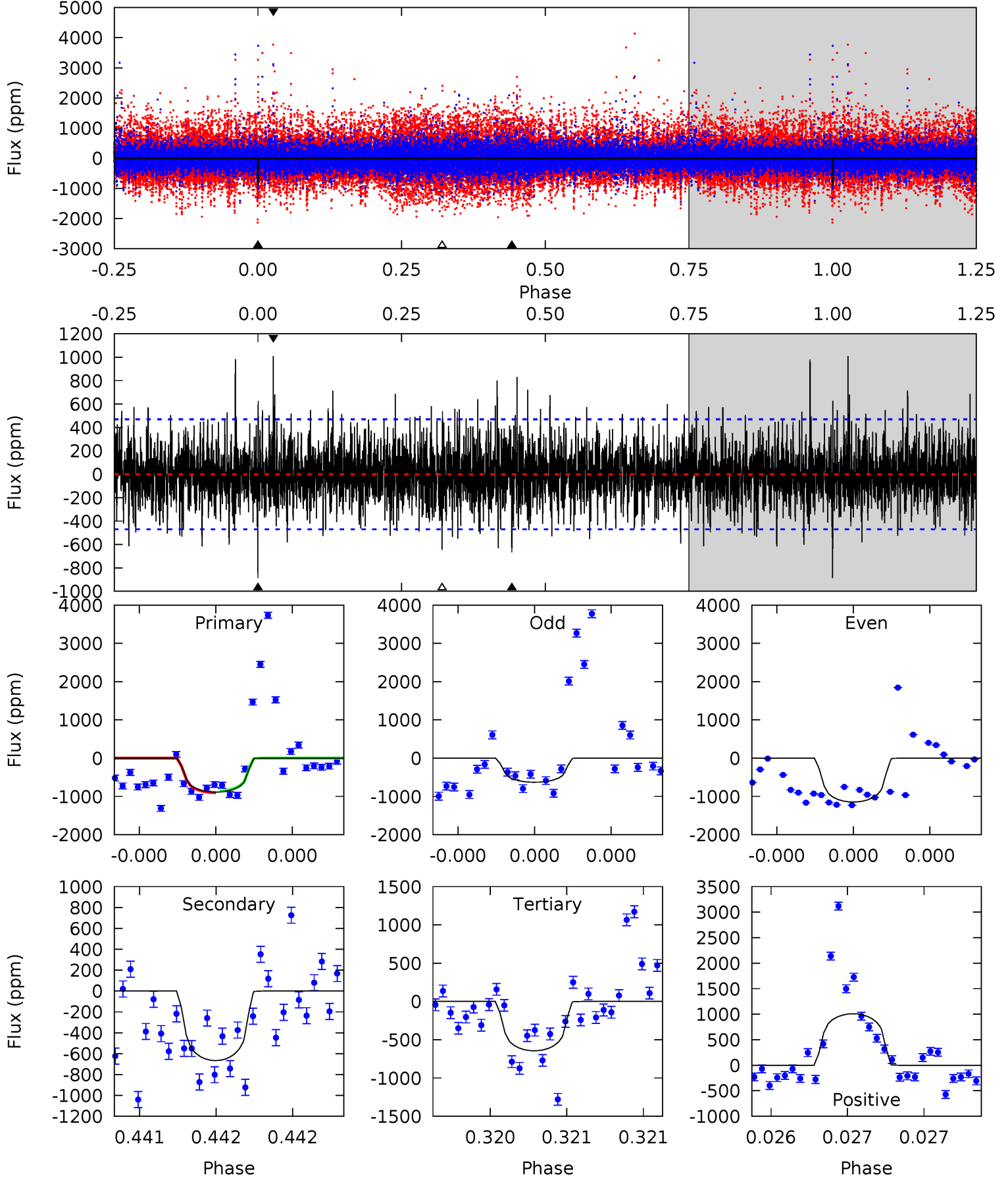
TCE 004263801-05 $P=357.598245$ Days $T_0=176.890953$ (BKJD)



DV Model-Shift Uniqueness Test

004263801-05, $P = 357.598614$ Days, $E = 176.927745$ Days

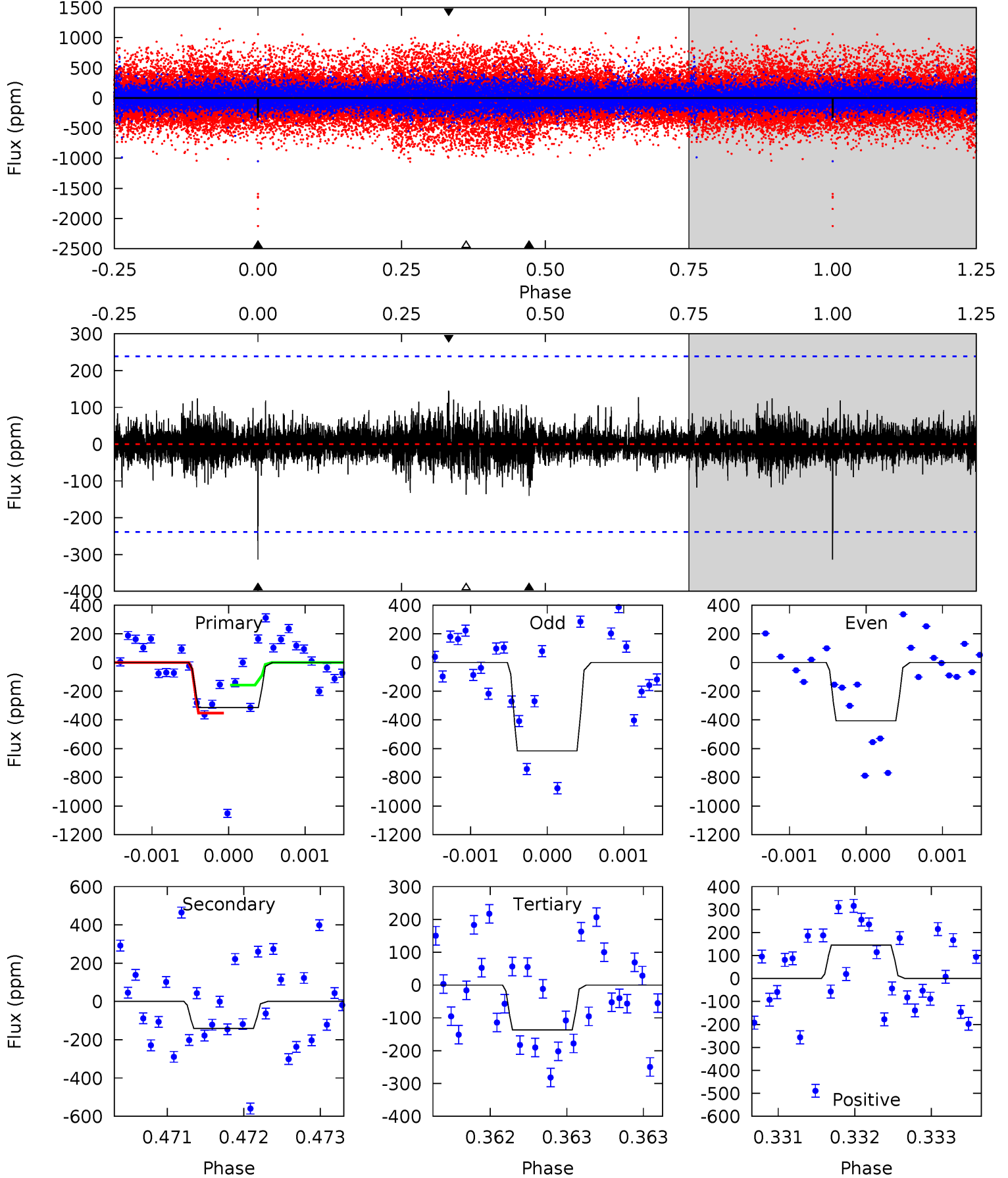
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	7.92	7.66	12.0	5.59	3.51	2.16	2.88	-1.45	0.26	-4.07	2.48	0.94	0.53	0.22



Alt Model-Shift Uniqueness Test

004263801-05, P = 357.598245 Days, E = 176.890953 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.28	3.25	3.18	3.37	5.53	3.42	0.65	4.11	3.92	0.08	-0.12	2.58	1.06	0.32	0



Stellar Parameters For KIC 004263801

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5225^{+157}_{-173}	$3.422^{+0.378}_{-0.252}$	$-0.400^{+0.300}_{-0.250}$	$3.729^{+1.277}_{-1.561}$	$1.341^{+0.177}_{-0.443}$	$0.036^{+0.104}_{-0.021}$
	+3%/-3%	+11%/-7%	+75%/-62%	+34%/-42%	+13%/-33%	+285%/-59%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 004263801-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-666 ± 84	$41.60^{+48.24}_{-29.22}$	594^{+60}_{-65}	3152^{+1589}_{-587}	246^{+2394}_{-197}
Alt.	-140 ± 43	$39.53^{+44.99}_{-28.37}$	593^{+60}_{-66}	2568^{+1036}_{-414}	56^{+592}_{-45}

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

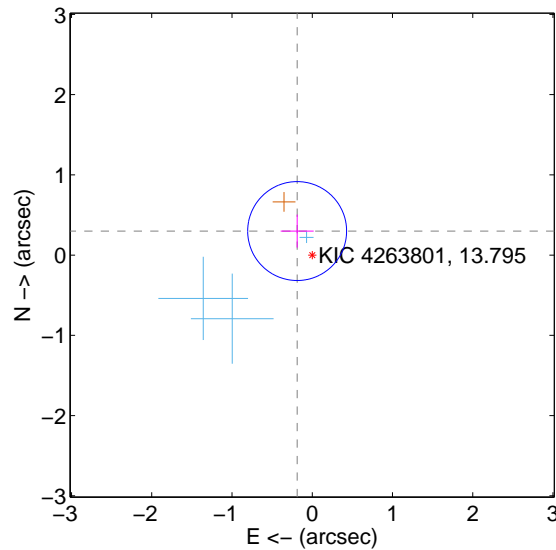
Supplemental centroid analysis for 004263801-05. Kepler magnitude: 13.79. Transit SNR 7.88

There are 3 quarters with good PRF difference image offsets

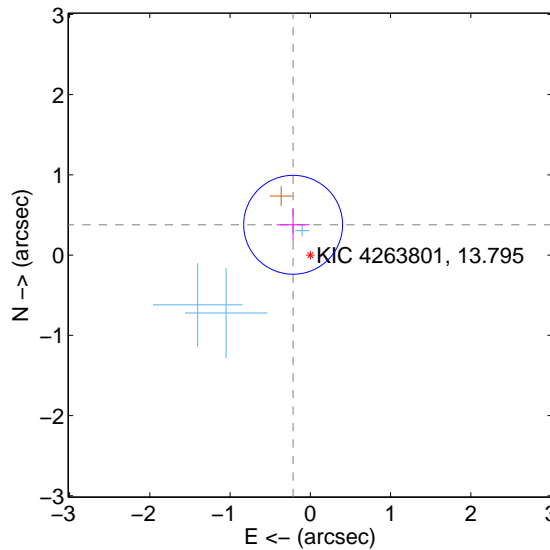
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.354 ± 0.205	1.72	0.188 ± 0.206	0.300 ± 0.205
PRF-fit source offset from KIC position	0.434 ± 0.205	2.11	0.214 ± 0.206	0.378 ± 0.205
photometric centroid source offset	0.30 ± 0.74	0.40	-0.27 ± 0.75	0.12 ± 0.68

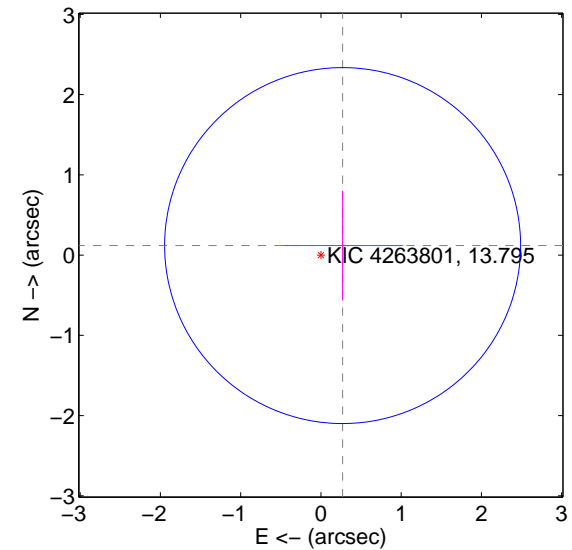
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

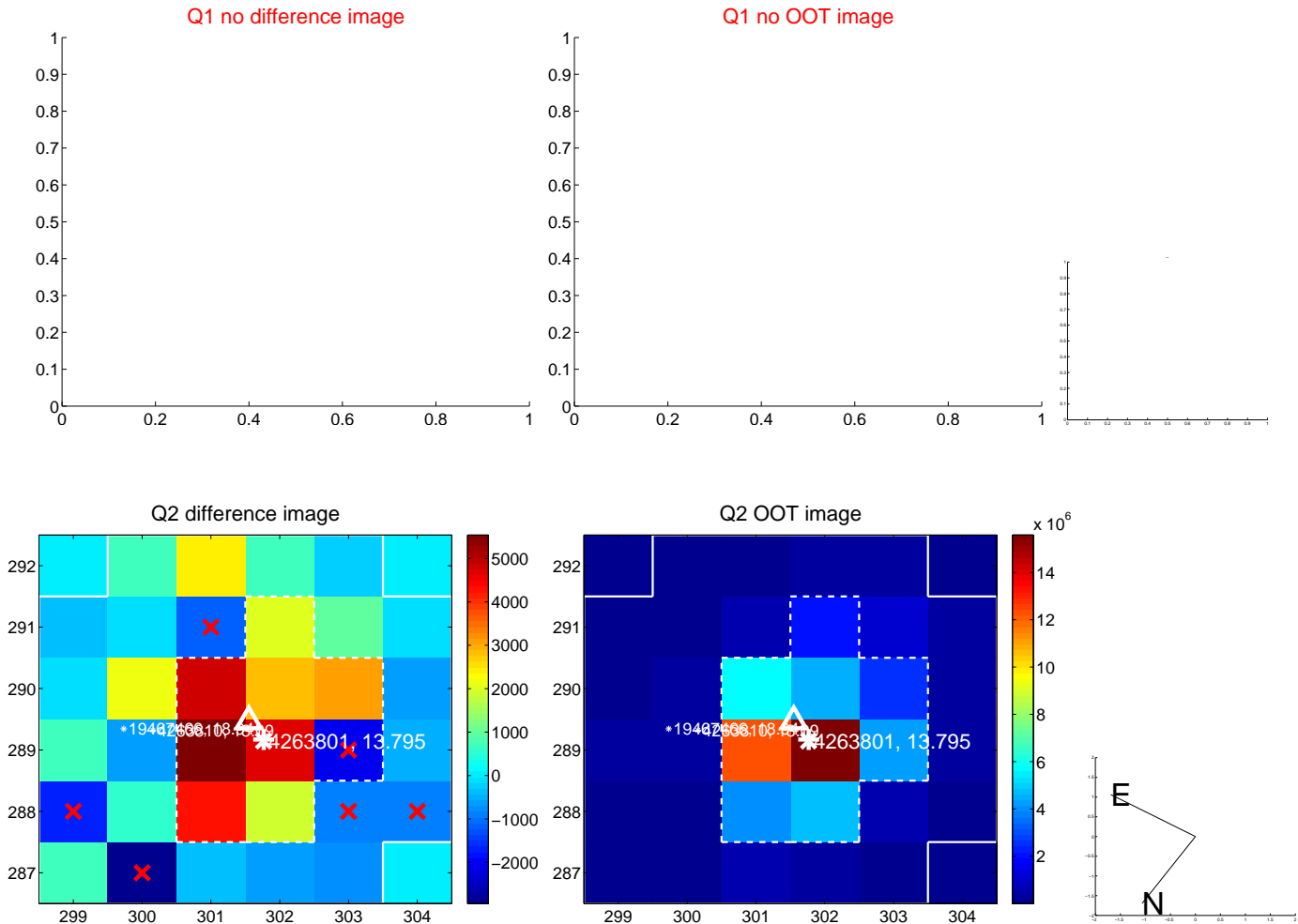


offset from photometric centroids

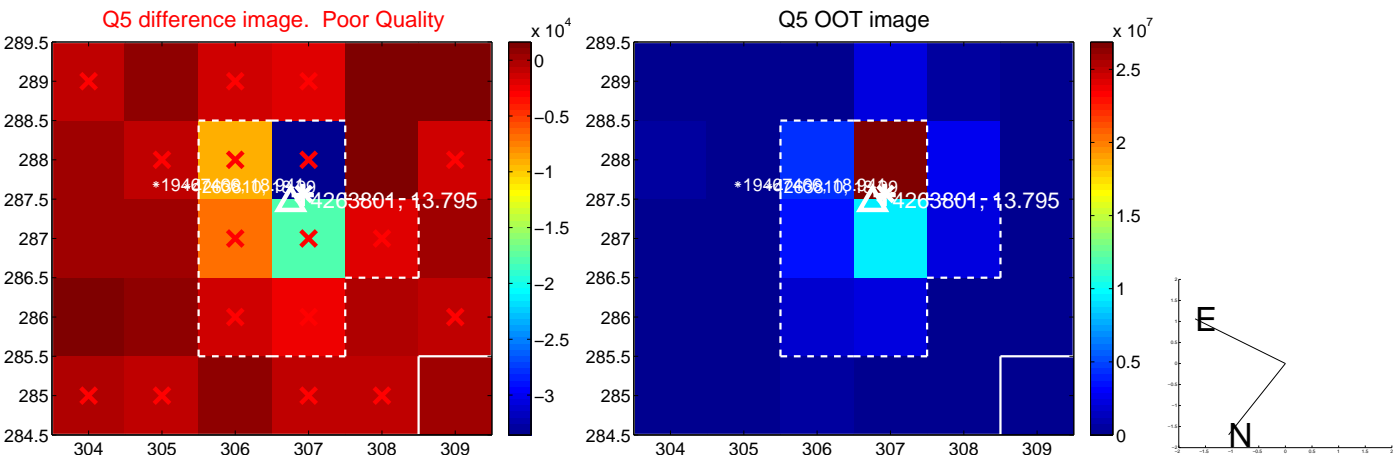


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ . Red *: target star. Blue *: Other stars. Text next to a star gives its KIC ID and kepmag. KIC IDs > 15,000,000 are from the UKIRT catalog.

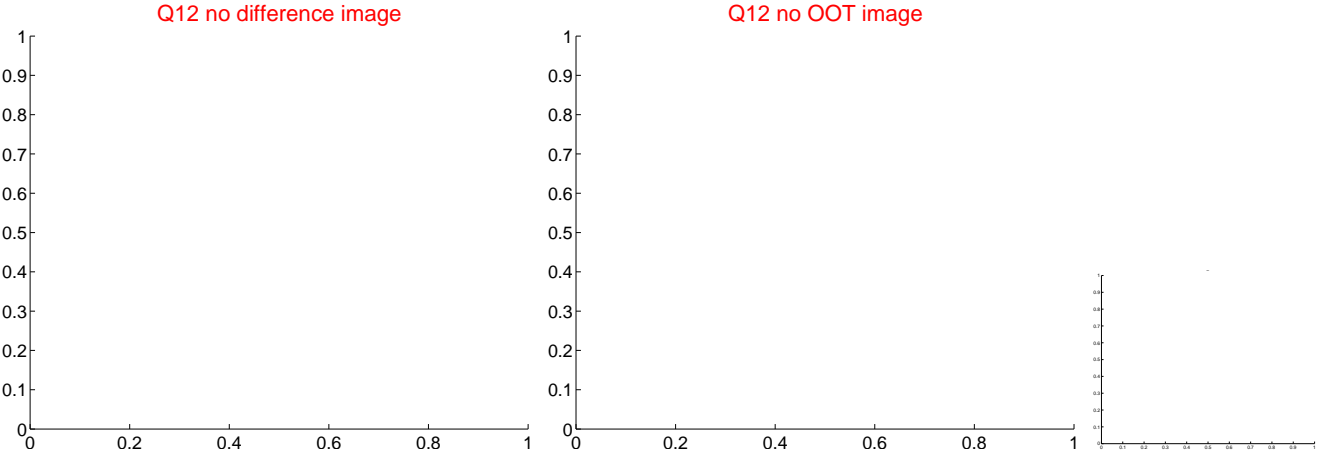
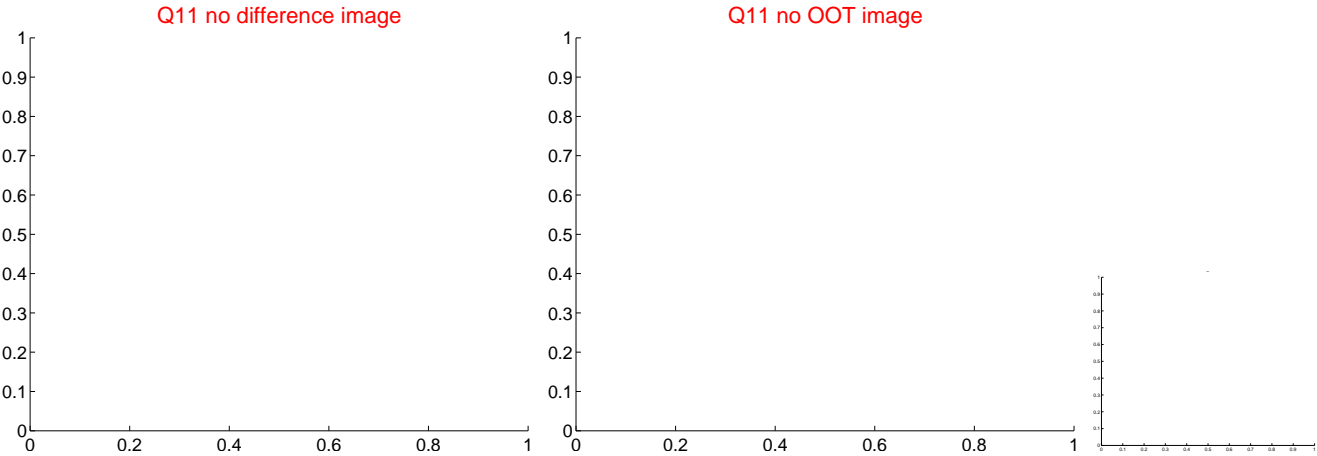
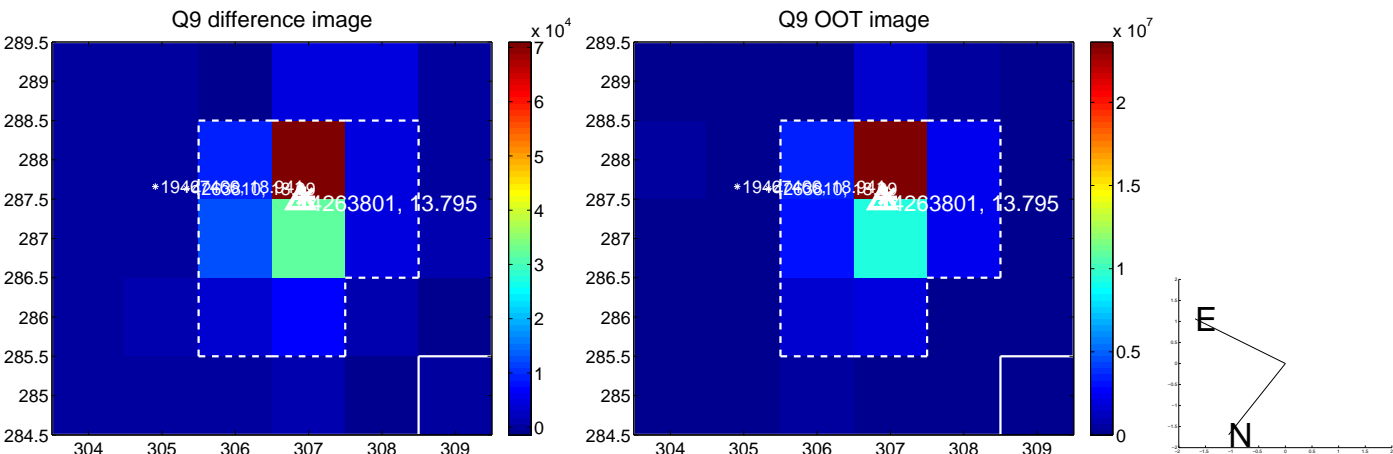
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



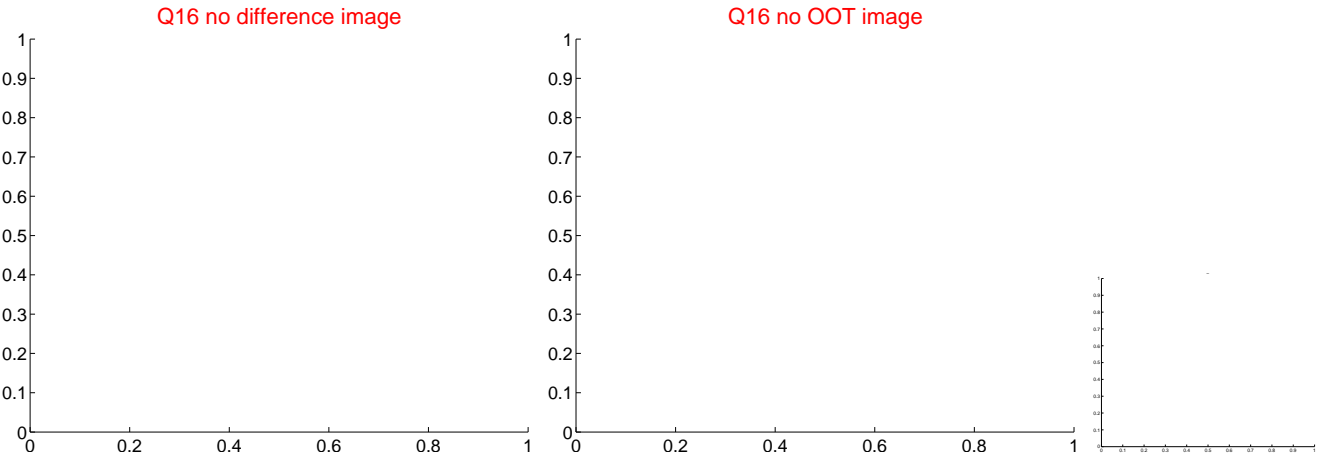
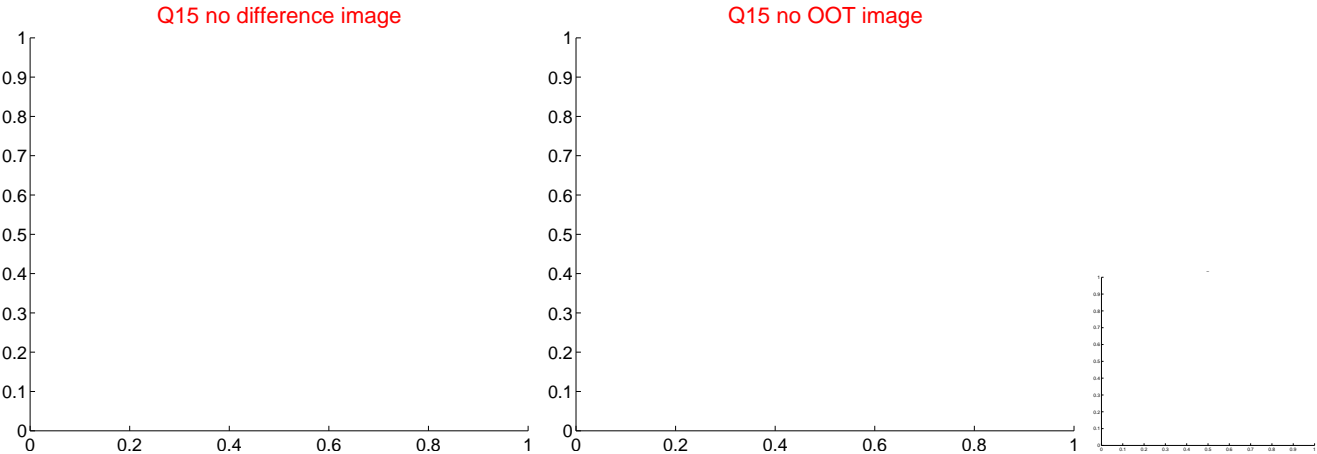
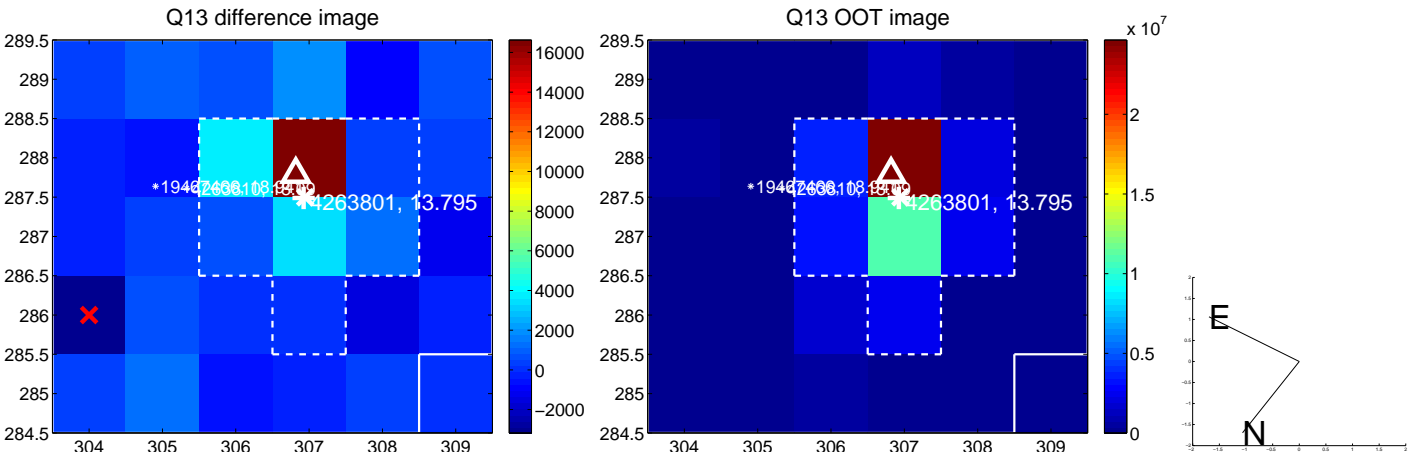
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



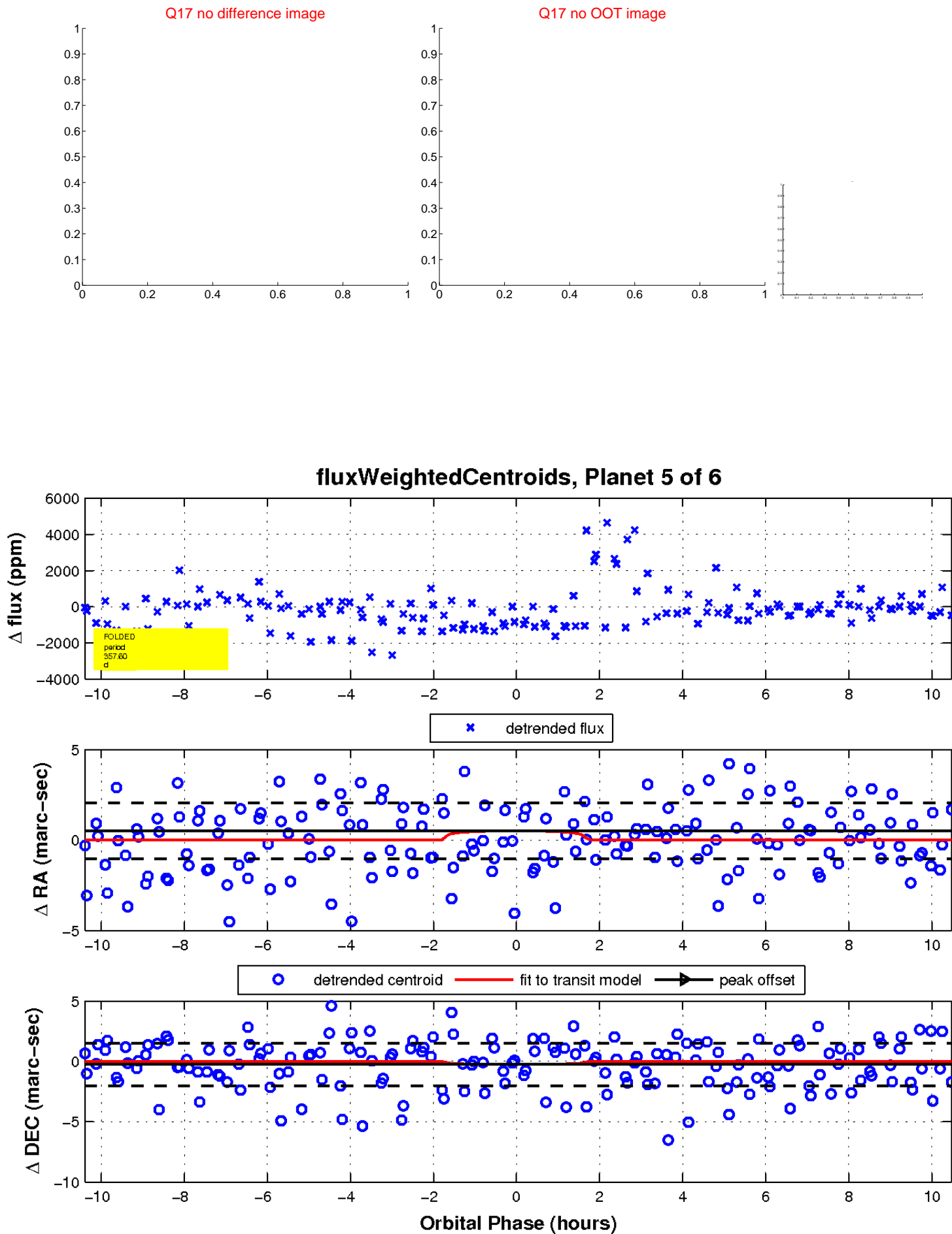
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

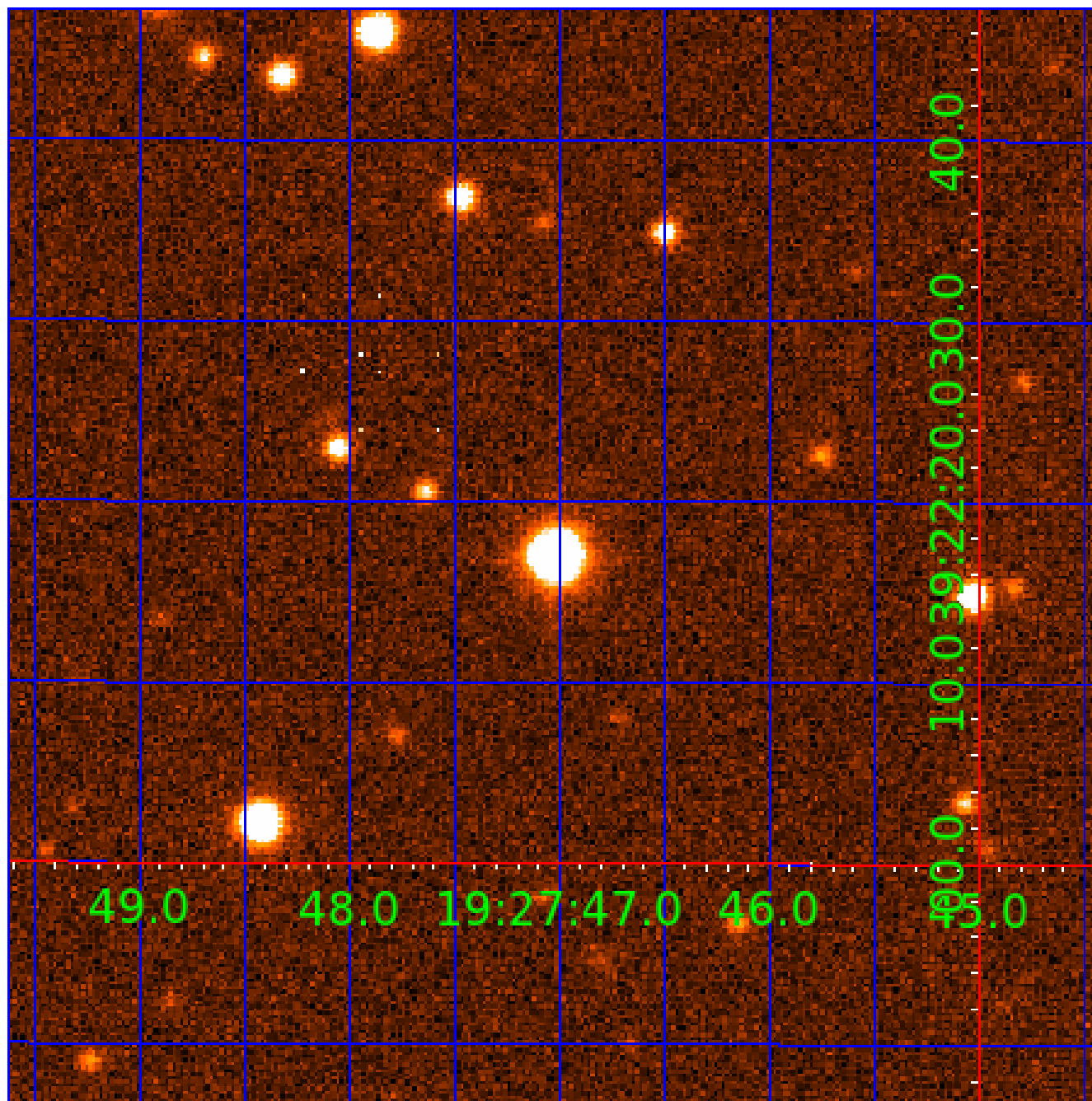


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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Declination



KIC 004263801

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})
004263801-02	OBS	No	351.837957	137.344031	874.3	4.246	16.4	6.1	3.73	5225	11.09	8.03
004263801-03	OBS	No	497.548859	541.556408	1205.5	3.183	14.6	7.4	3.73	5225	14.01	5.06
004263801-04	OBS	No	606.533978	358.782399	127.6	5.979	12.5	0.7	3.73	5225	5.71	3.88
004263801-05	OBS	No	357.598614	176.927745	1339.4	3.499	15.6	7.9	3.73	5225	13.39	7.85
004263801-06	OBS	No	483.750911	412.629101	857.2	7.500	13.0	-1.0	3.73	5225	10.71	5.25

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004263801-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
004263801-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
004263801-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
004263801-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_POS_DV
004263801-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_NOFITS

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

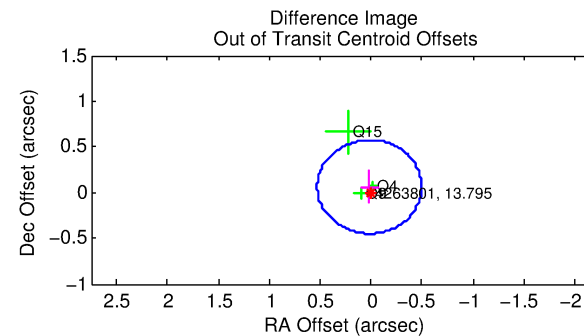
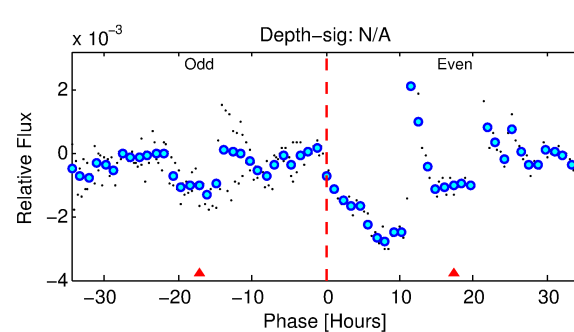
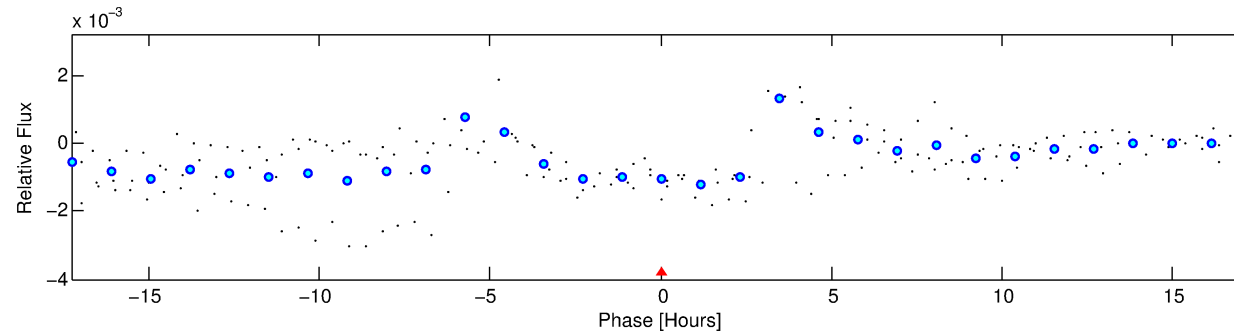
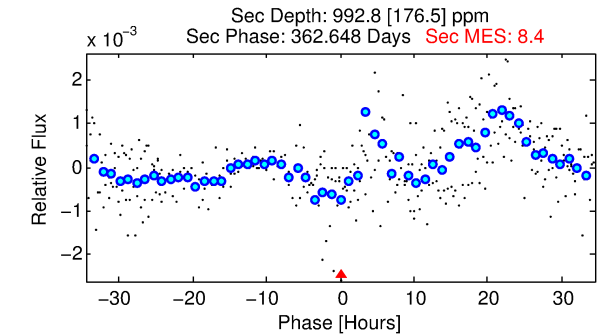
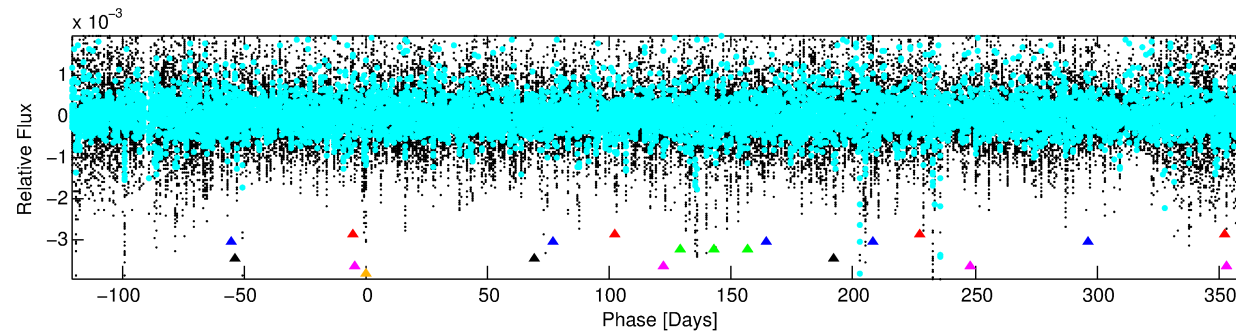
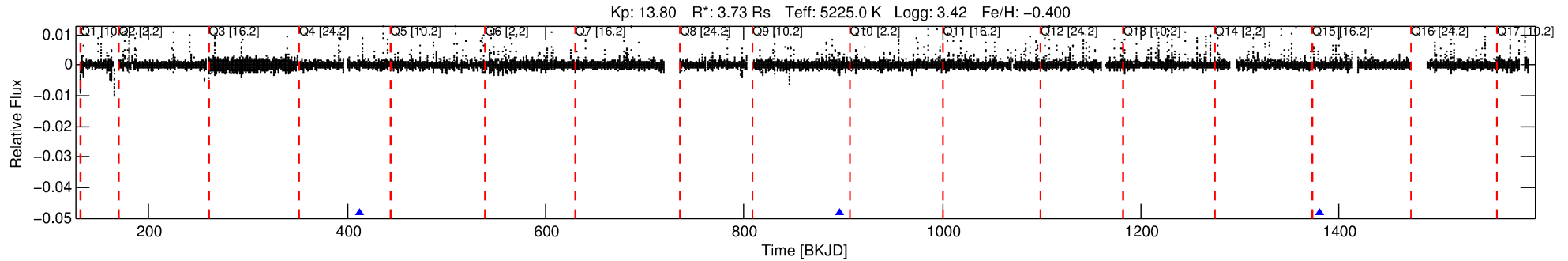
N = Not Transit-Like. S = Stellar Eclipse. C = Centroid Offset. E = Ephemeris Match.

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

Ephemeris Match Information For 004263801-06

No Significant Match Found

KIC: 4263801 Candidate: 6 of 6 Period: 483.751 d



TPS TCE Results:

Period = 483.75091 d
Epoch = 412.6291 BKJD

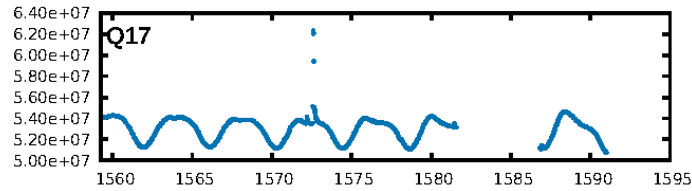
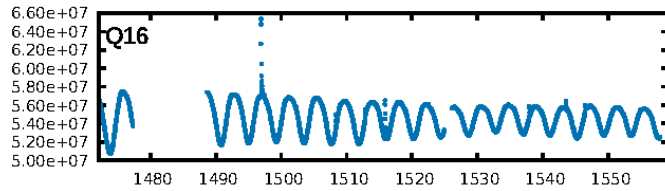
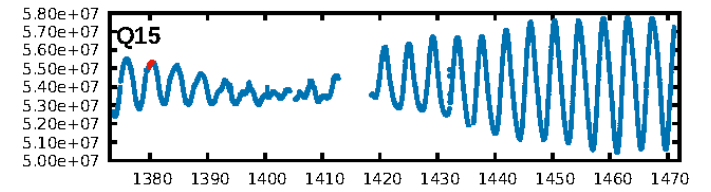
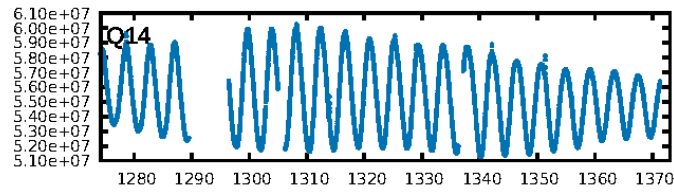
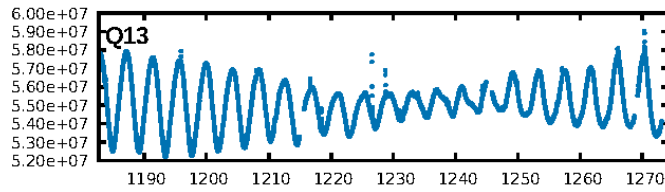
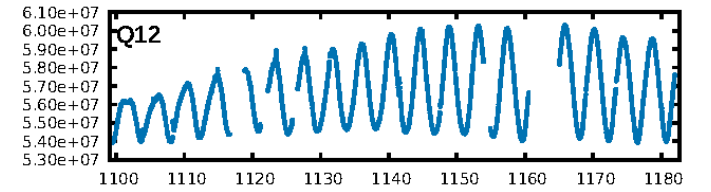
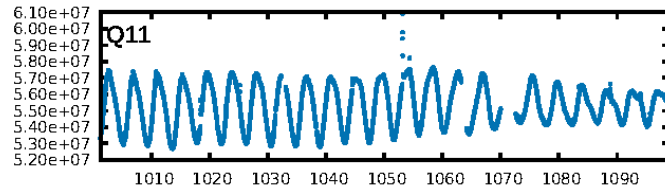
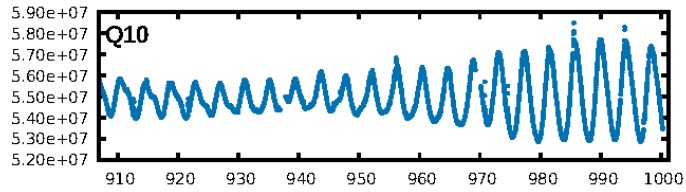
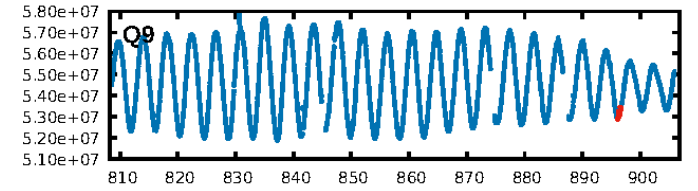
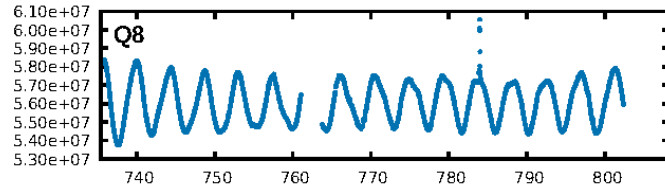
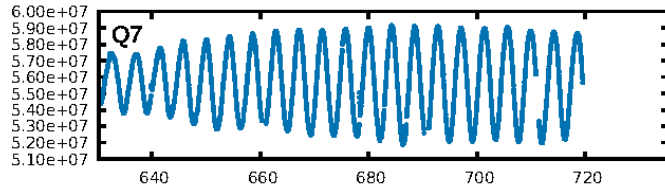
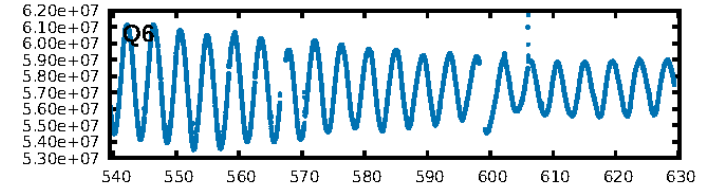
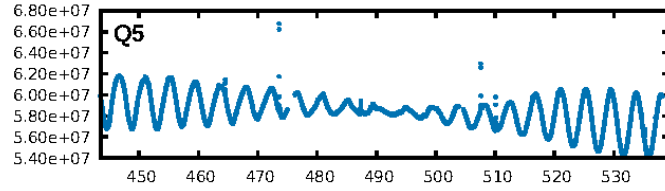
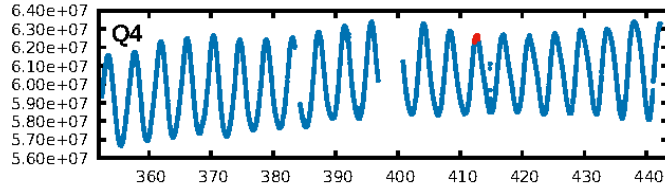
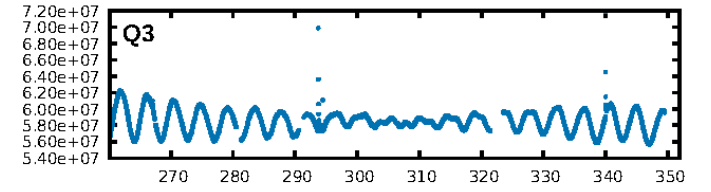
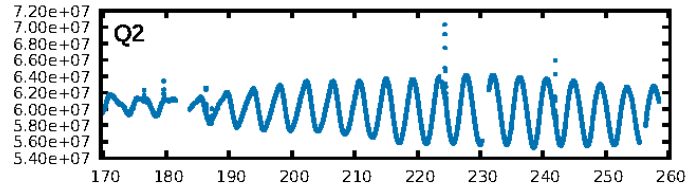
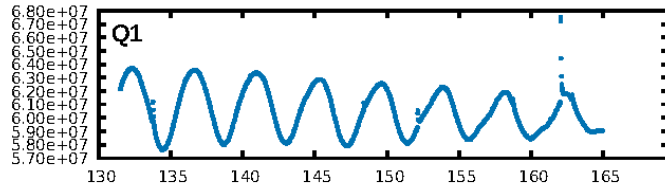
DV fit results are unavailable

DV Diagnostic Results:

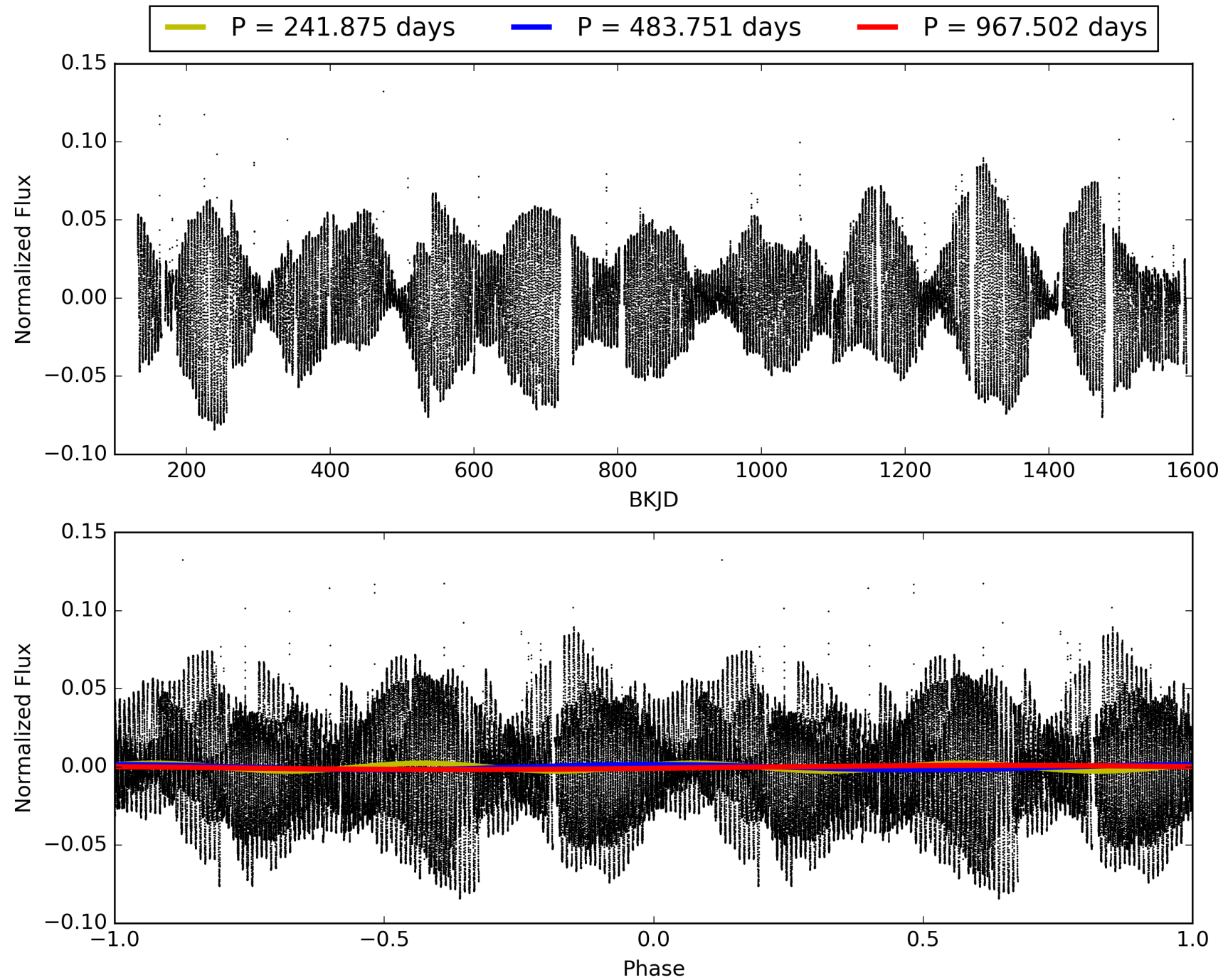
ShortPeriod-sig: 100.0% [325.45σ]
LongPeriod-sig: 100.0% [40.64σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-ftgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.214

Centroid-sig: 3.5%
Centroid-so: 1.100 arcsec [1.39σ]
OotOffset-rm: 0.065 arcsec [0.38σ]
KicOffset-rm: 0.103 arcsec [0.81σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 004263801-06, PDC Light Curves

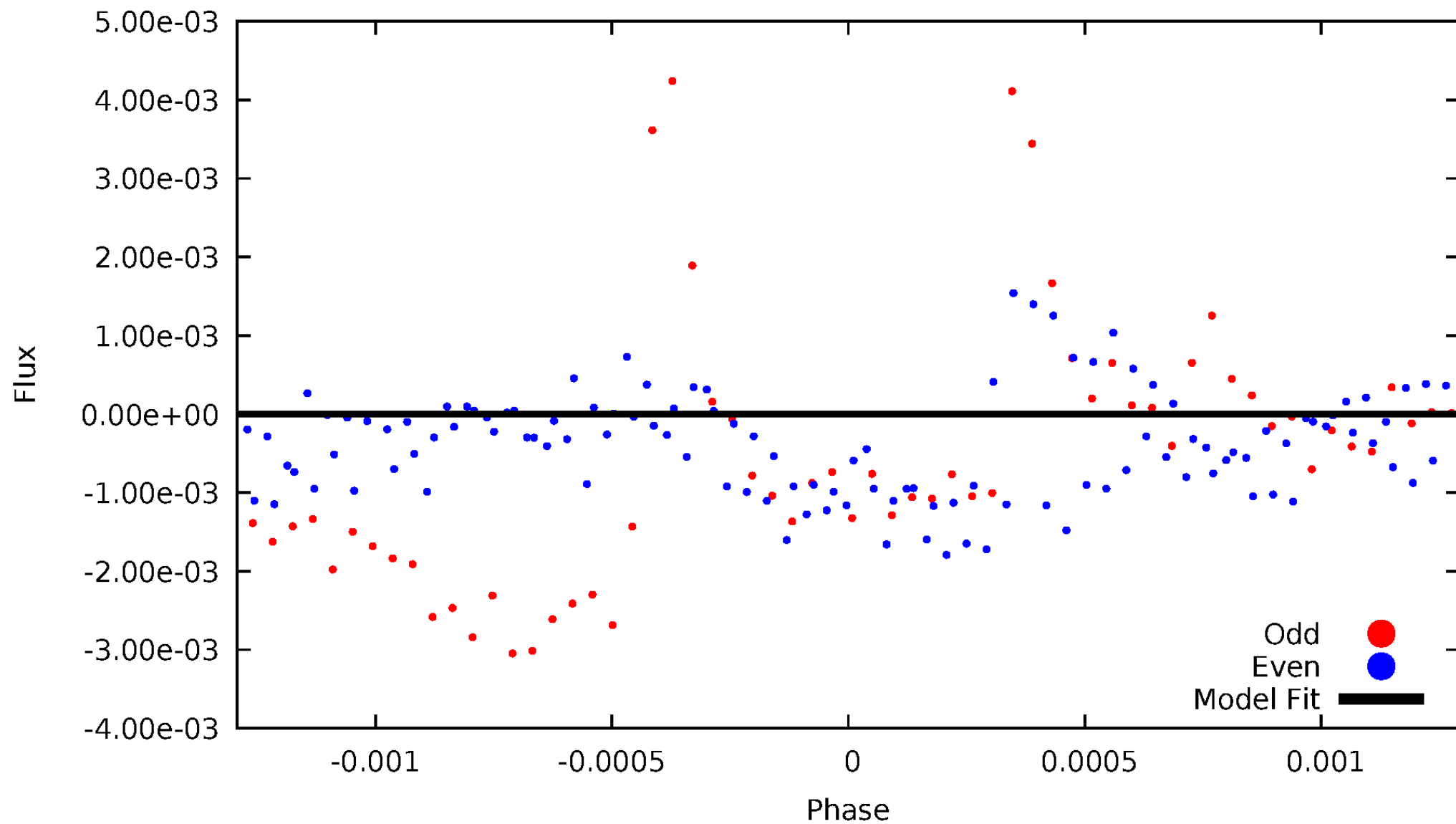


TCE 004263801-06



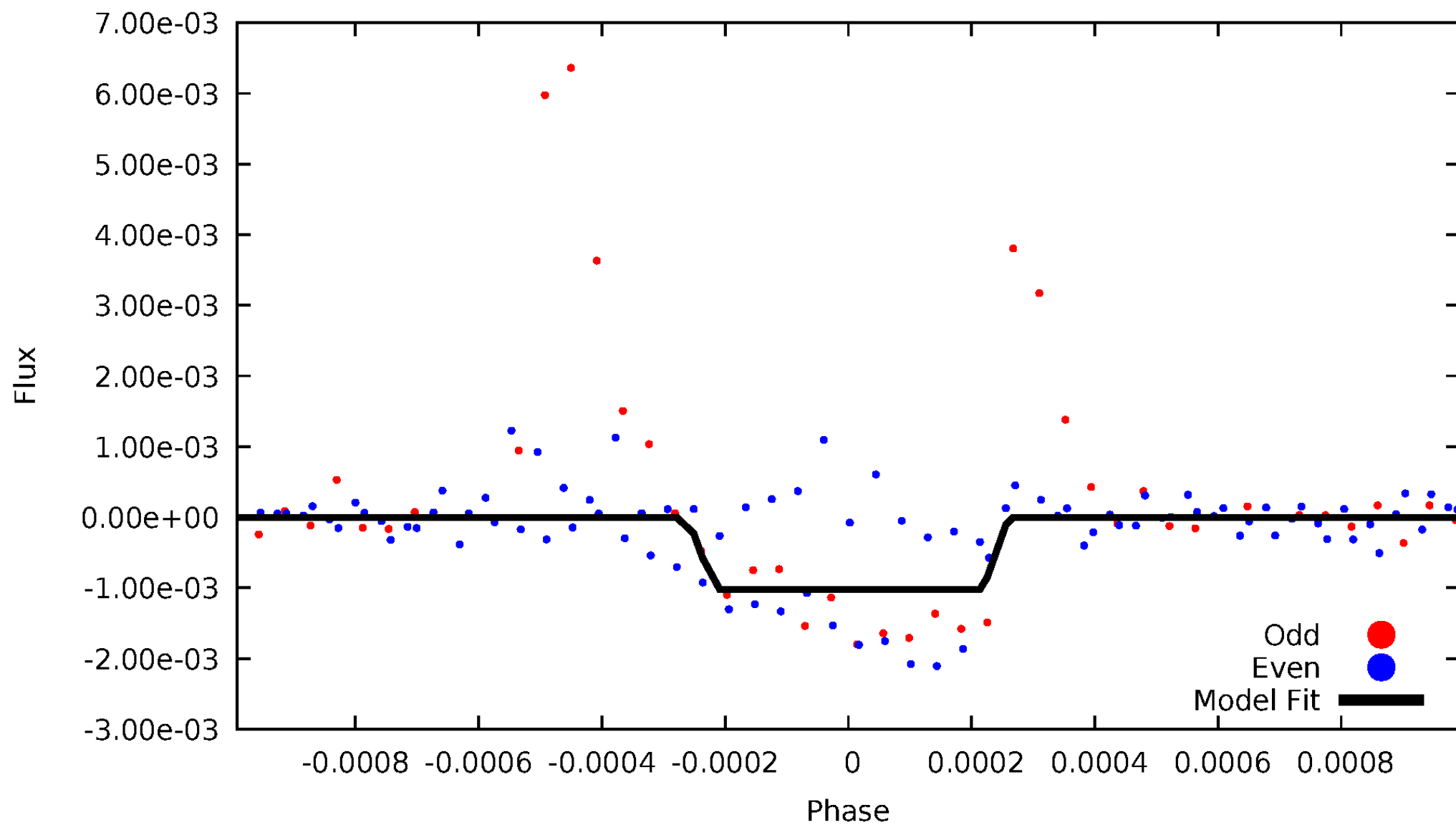
DV Odd/Even

TCE 004263801-06



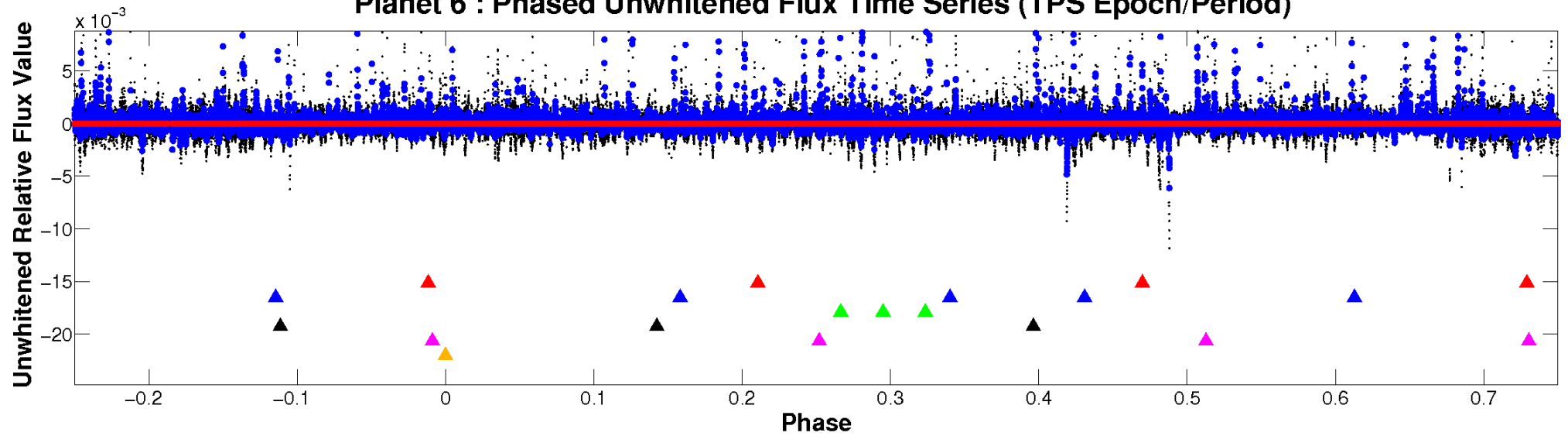
ALT Odd/Even

TCE 004263801-06

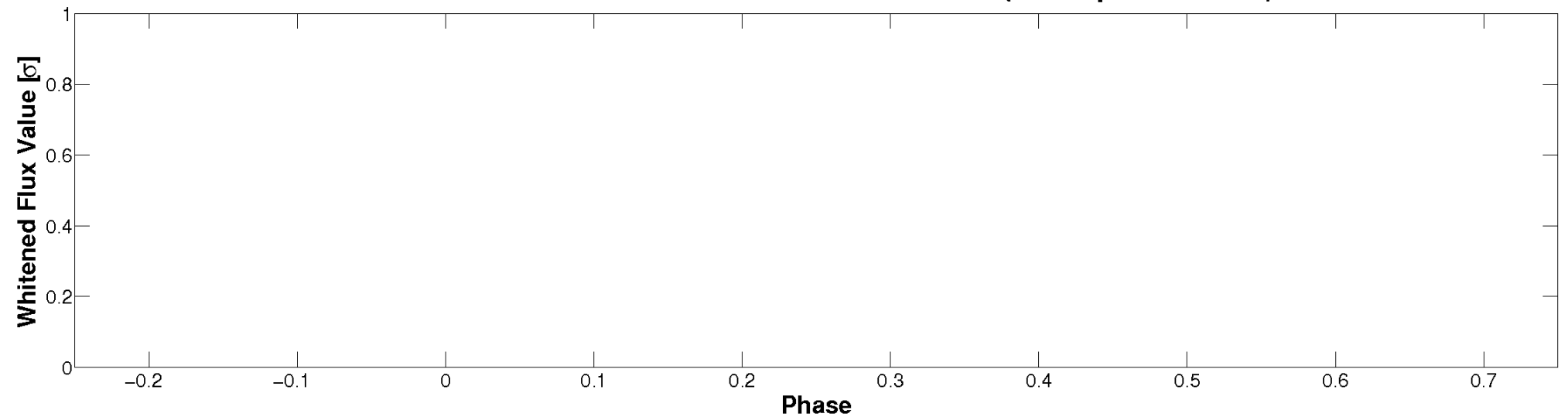


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

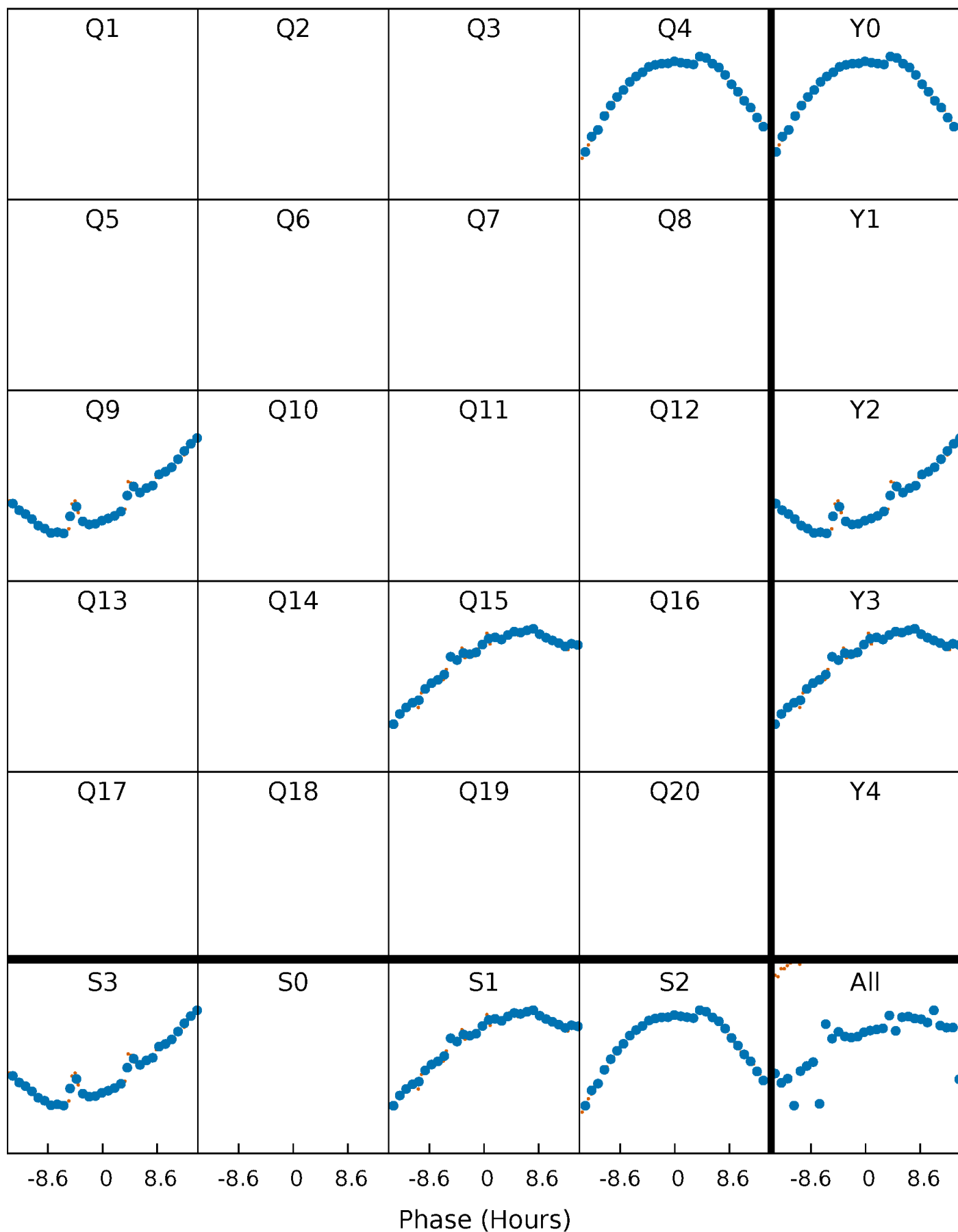


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



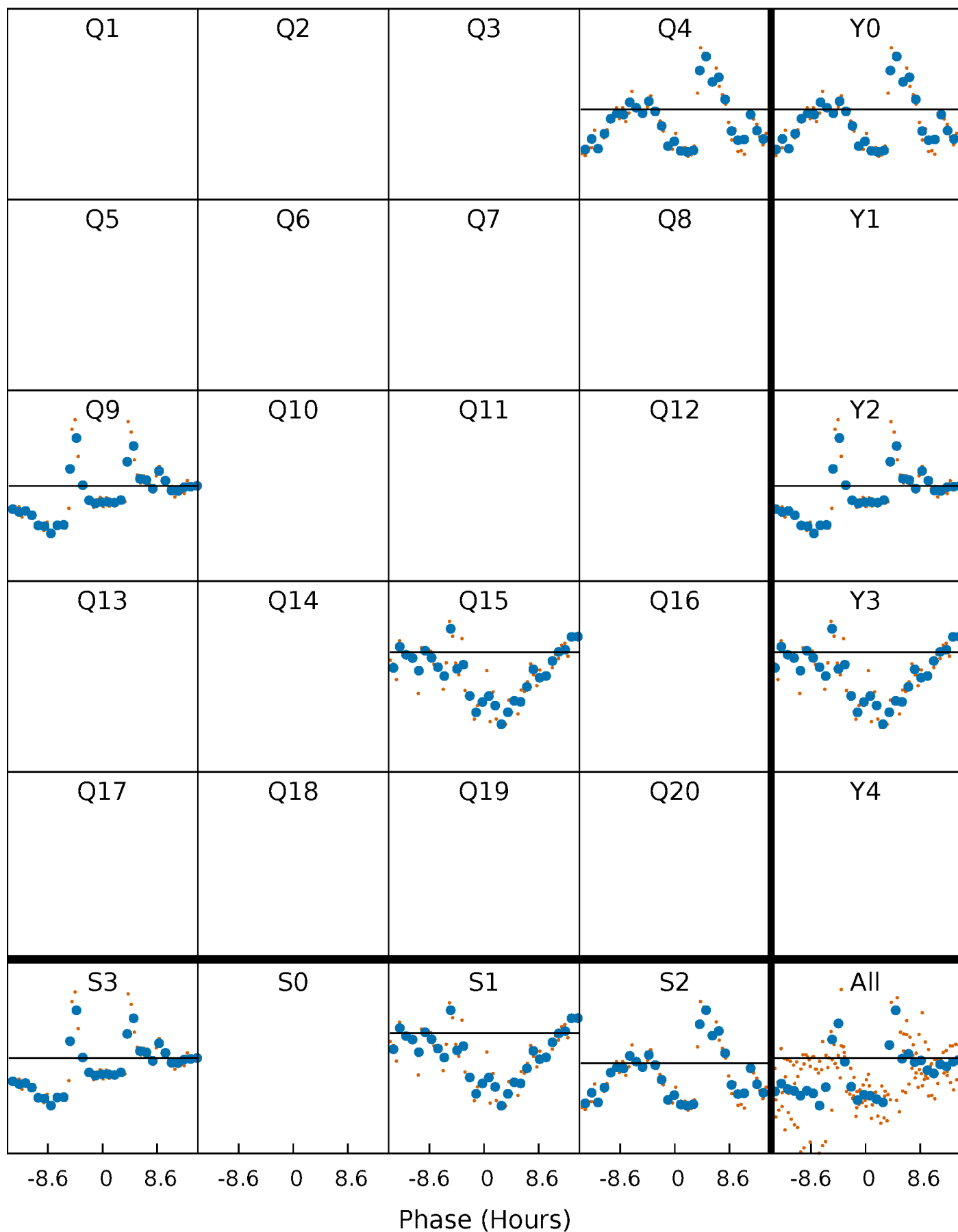
PDC Quarter-Phased Transit Curves

TCE 004263801-06 P=483.750911 Days $T_0=412.629101$ (BKJD)



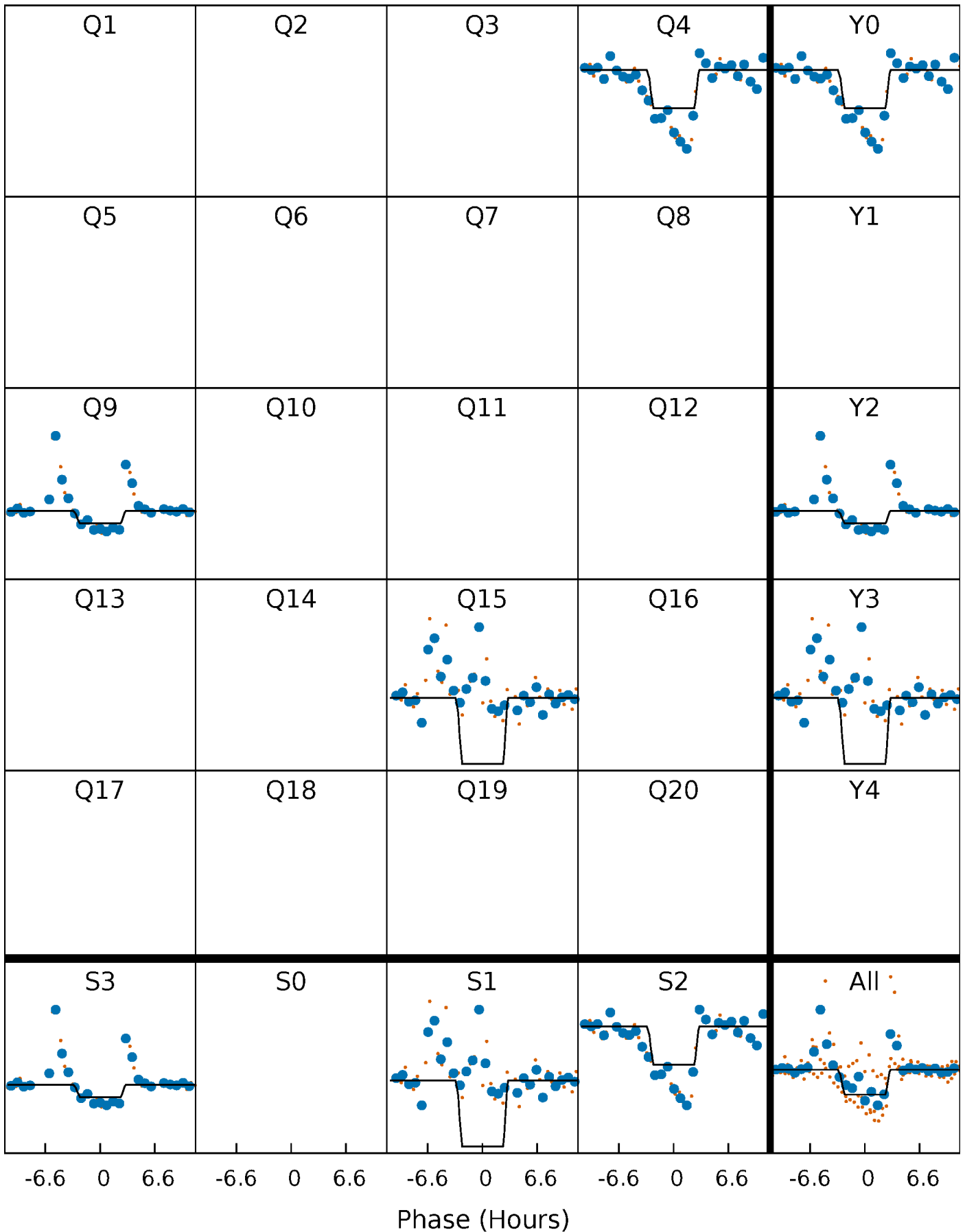
DV Quarter-Phased Transit Curves

TCE 004263801-06 P=483.750911 Days $T_0=412.629101$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

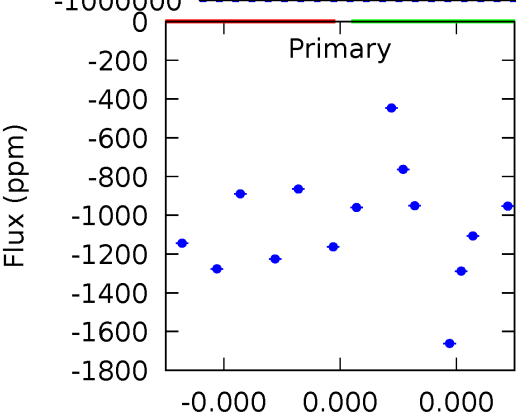
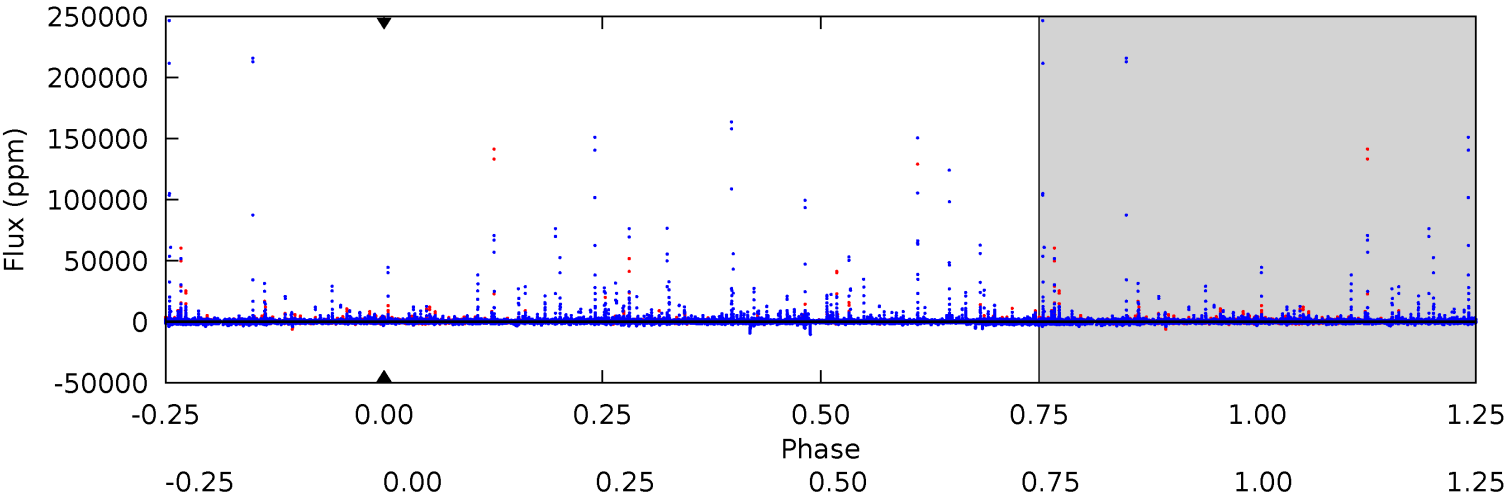
TCE 004263801-06 $P=483.750911$ Days $T_0=412.667033$ (BKJD)



DV Model-Shift Uniqueness Test

004263801-06, P = 483.750911 Days, E = 412.629101 Days

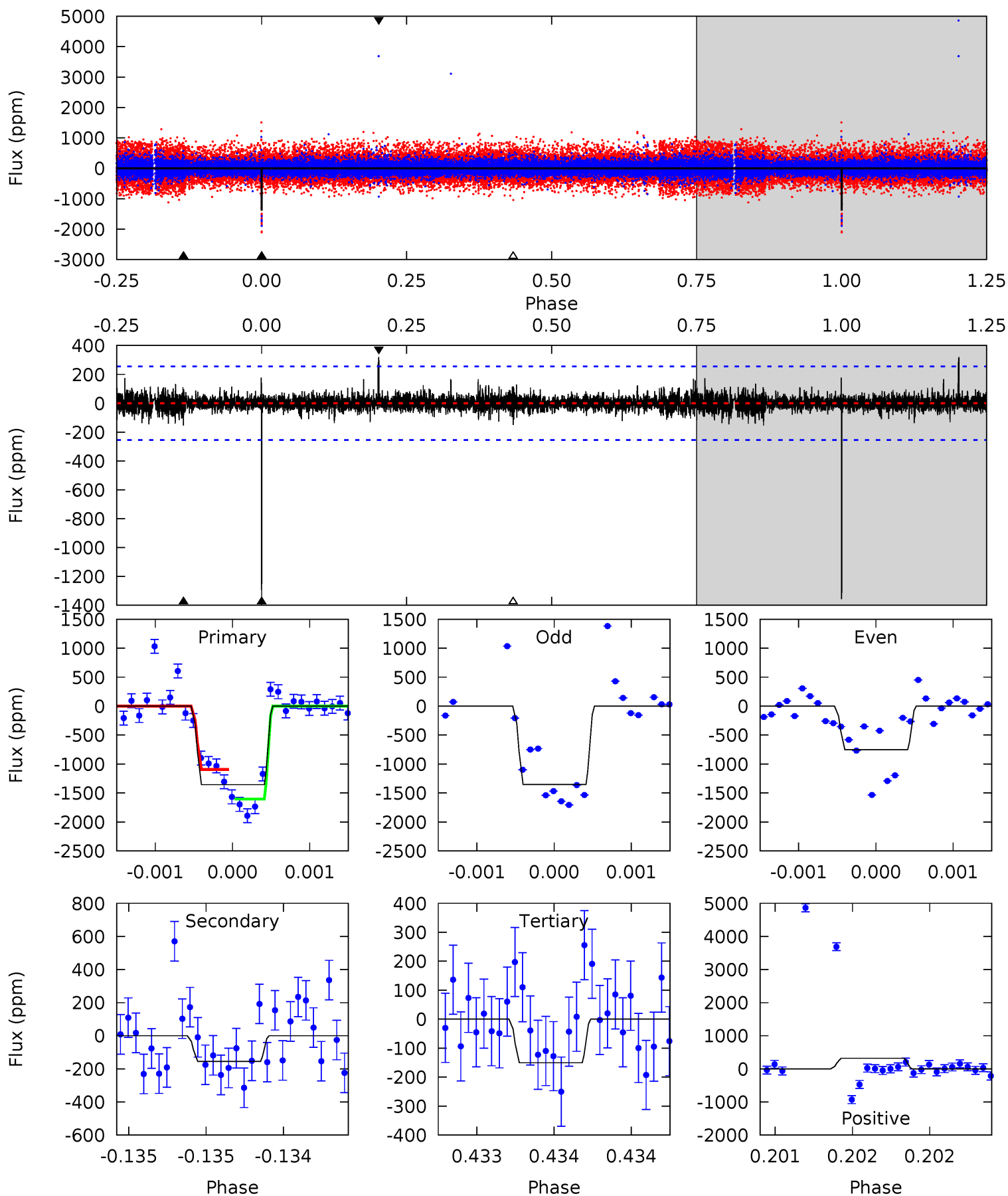
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

004263801-06, P = 483.750911 Days, E = 412.667033 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
29.6	3.38	3.28	7.02	5.57	3.47	0.68	26.4	22.6	0.10	-3.64	6.60	0.69	0.19	5.62



Stellar Parameters For KIC 004263801

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5225^{+157}_{-173}	$3.422^{+0.378}_{-0.252}$	$-0.400^{+0.300}_{-0.250}$	$3.729^{+1.277}_{-1.561}$	$1.341^{+0.177}_{-0.443}$	$0.036^{+0.104}_{-0.021}$
	+3%/-3%	+11%/-7%	+75%/-62%	+34%/-42%	+13%/-33%	+285%/-59%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 004263801-06 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$31.32^{+34.40}_{-21.80}$	539^{+58}_{-62}	-3604^{+19023}_{-11812}	$-670.721^{+166508.513}_{-169283.902}$
Alt.	-155 ± 46	$31.49^{+32.41}_{-20.85}$	537^{+56}_{-64}	2738^{+1059}_{-404}	134^{+1082}_{-101}

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

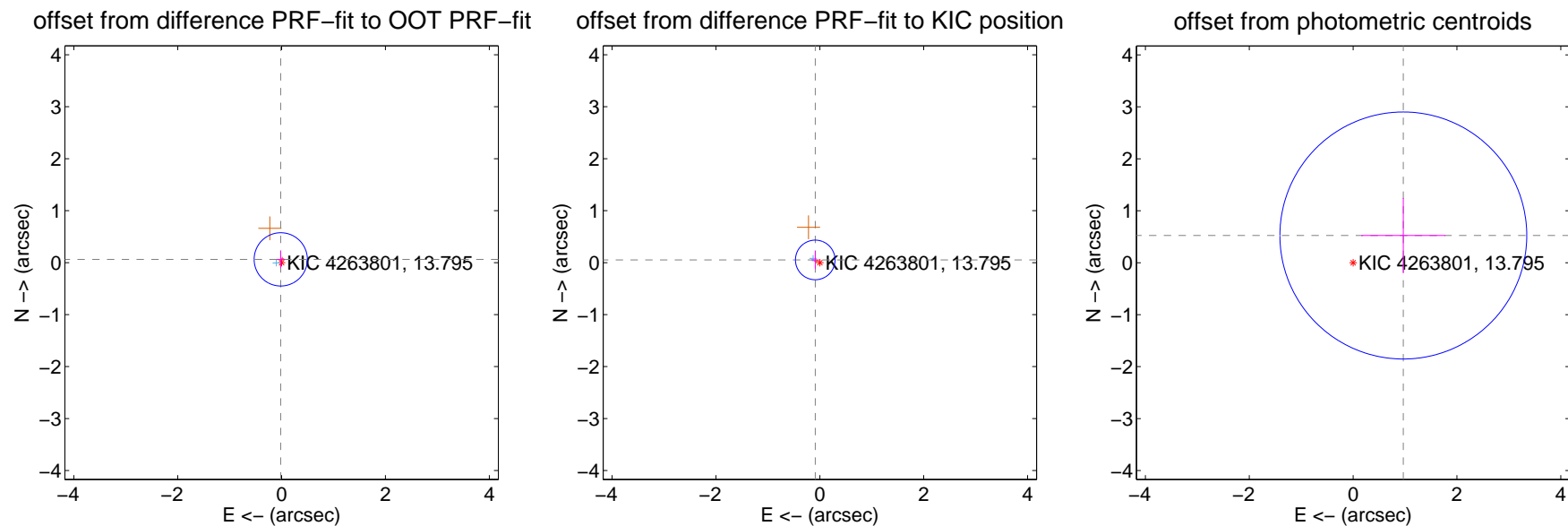
DV Centroid Data

Supplemental centroid analysis for 004263801-06. Kepler magnitude: 13.79. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

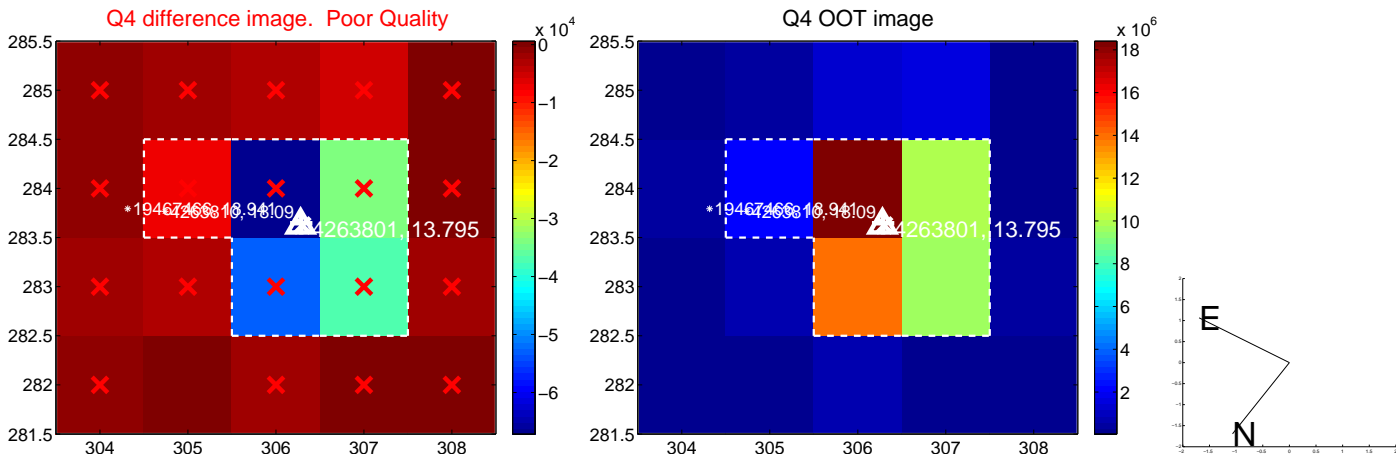
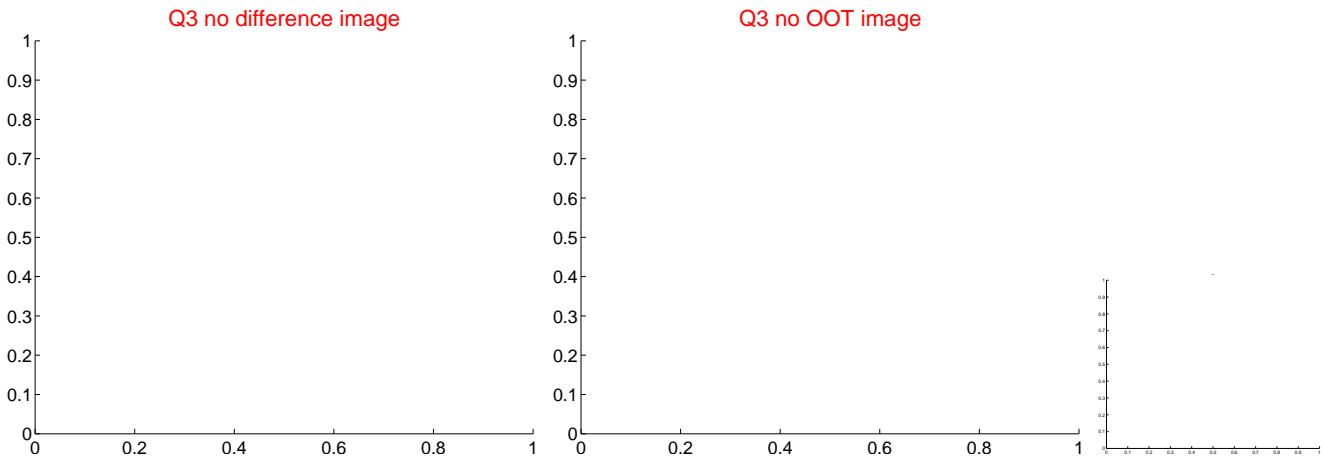
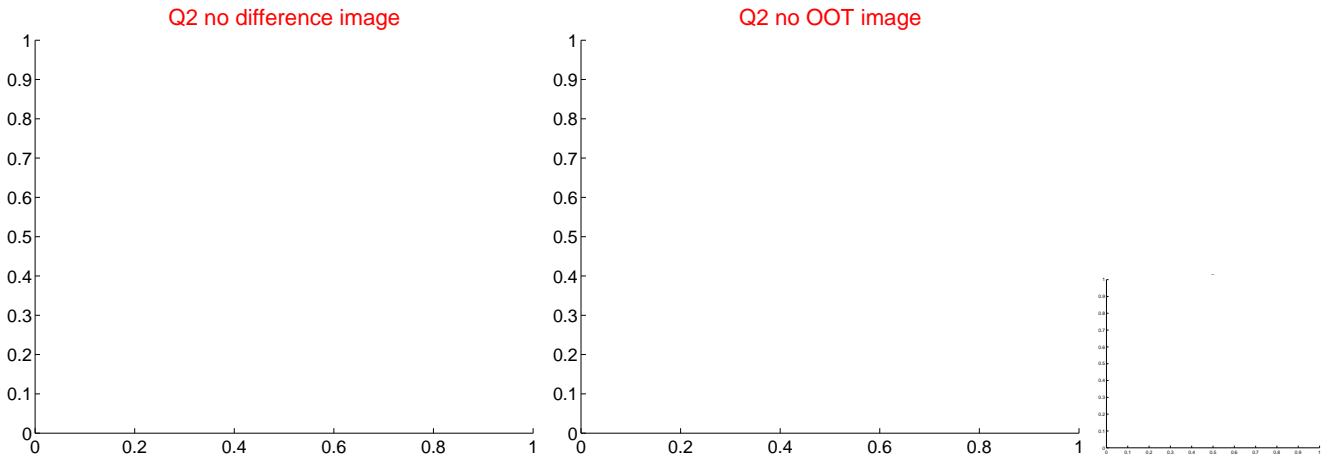
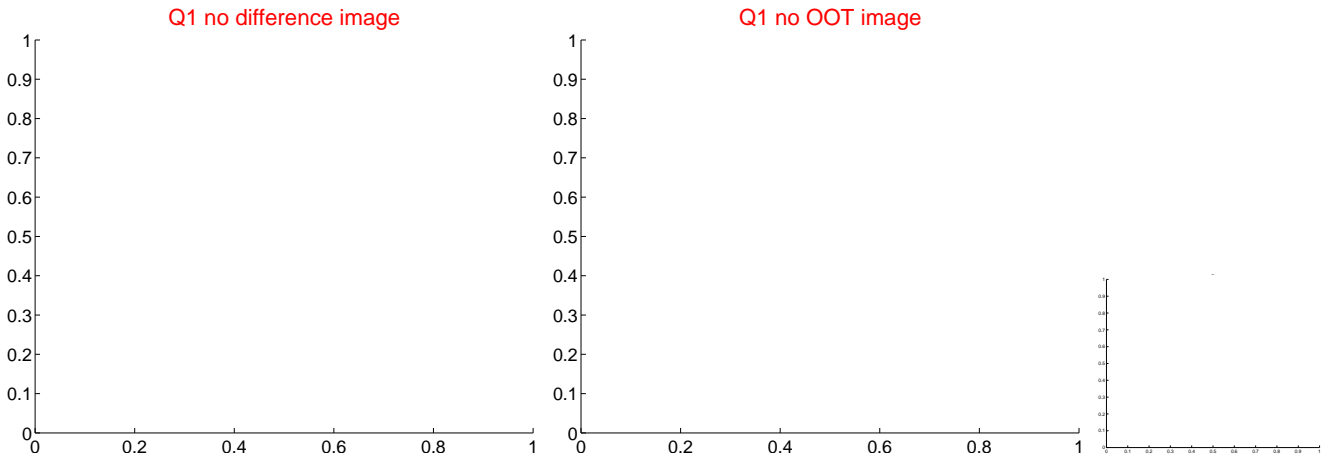
The direct PRF centroid is offset from the target star catalog position by about 0.02 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.065 ± 0.171	0.38	0.016 ± 0.080	0.063 ± 0.168
PRF-fit source offset from KIC position	0.103 ± 0.127	0.81	0.088 ± 0.074	0.052 ± 0.175
photometric centroid source offset	1.10 ± 0.79	1.39	-0.97 ± 0.81	0.52 ± 0.72



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.

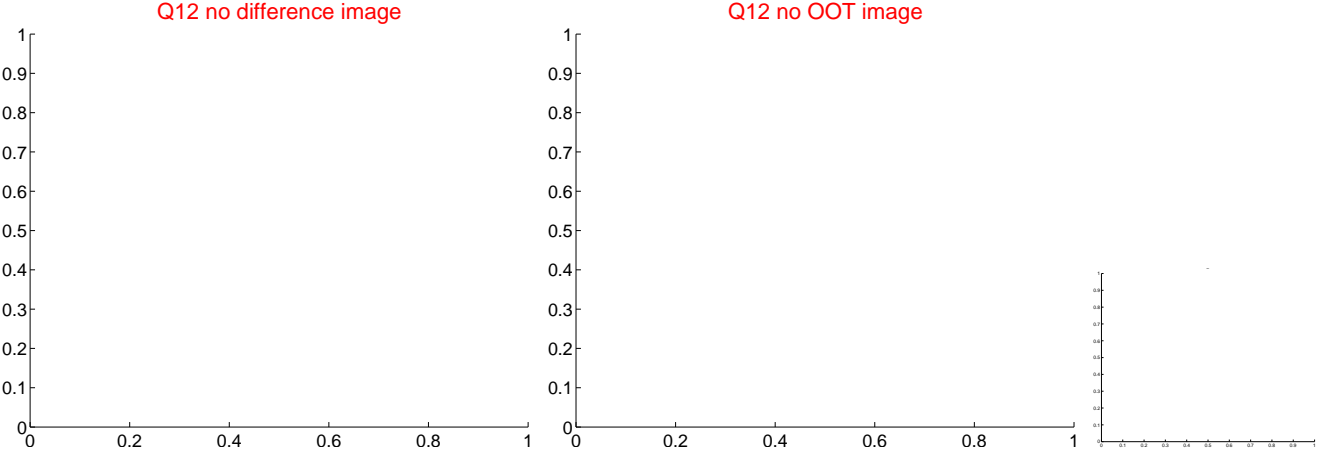
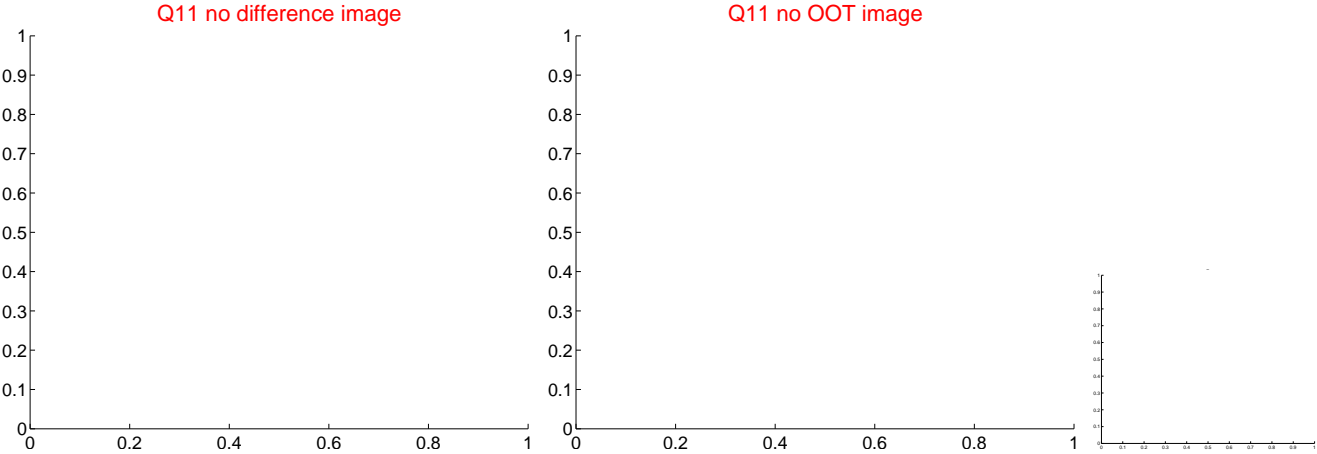
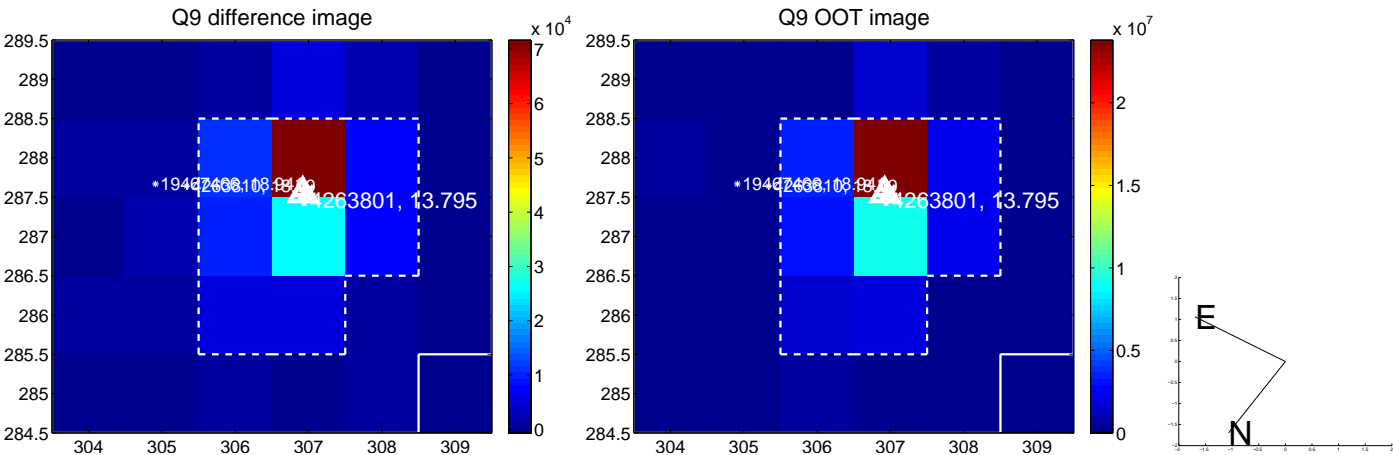
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



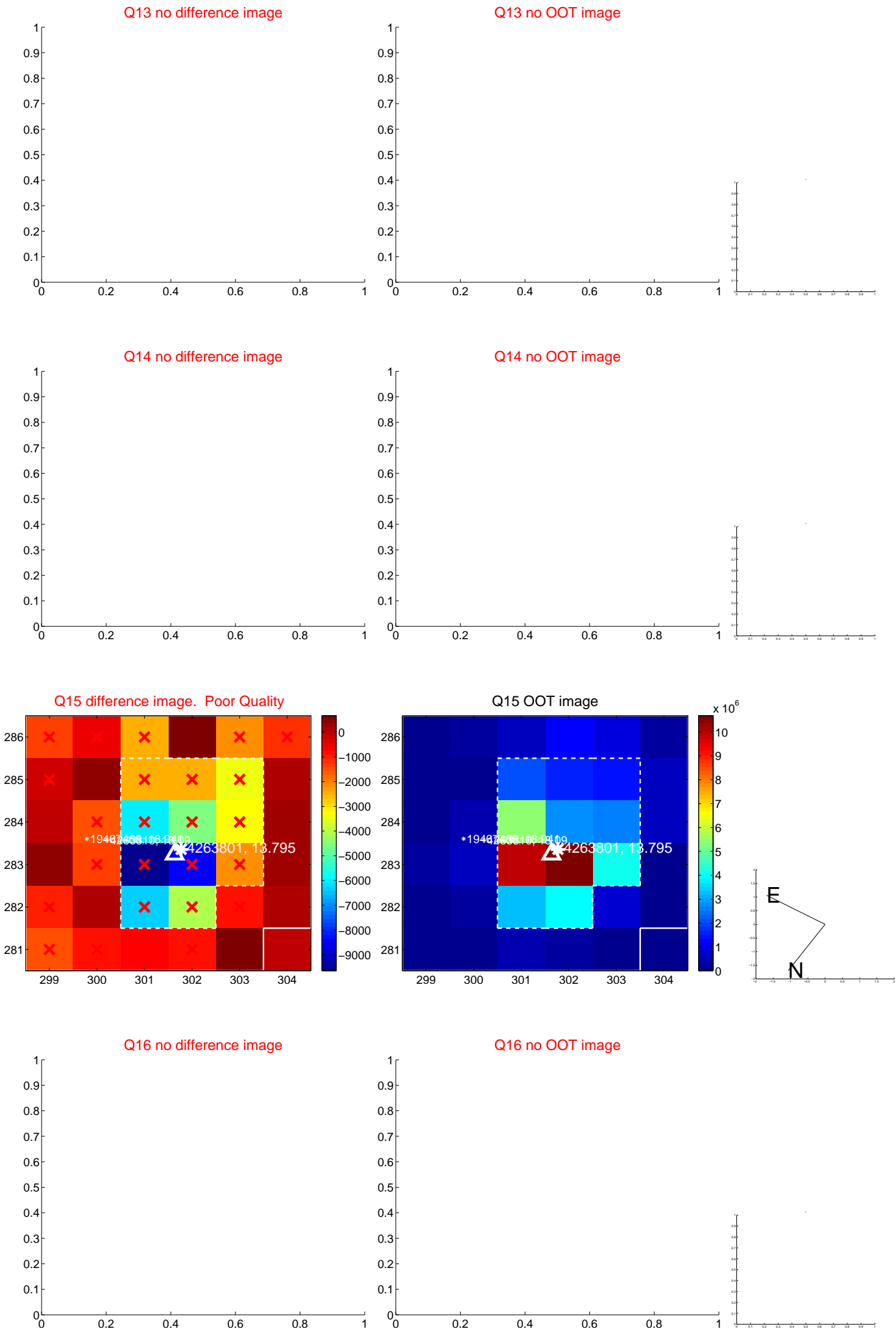
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



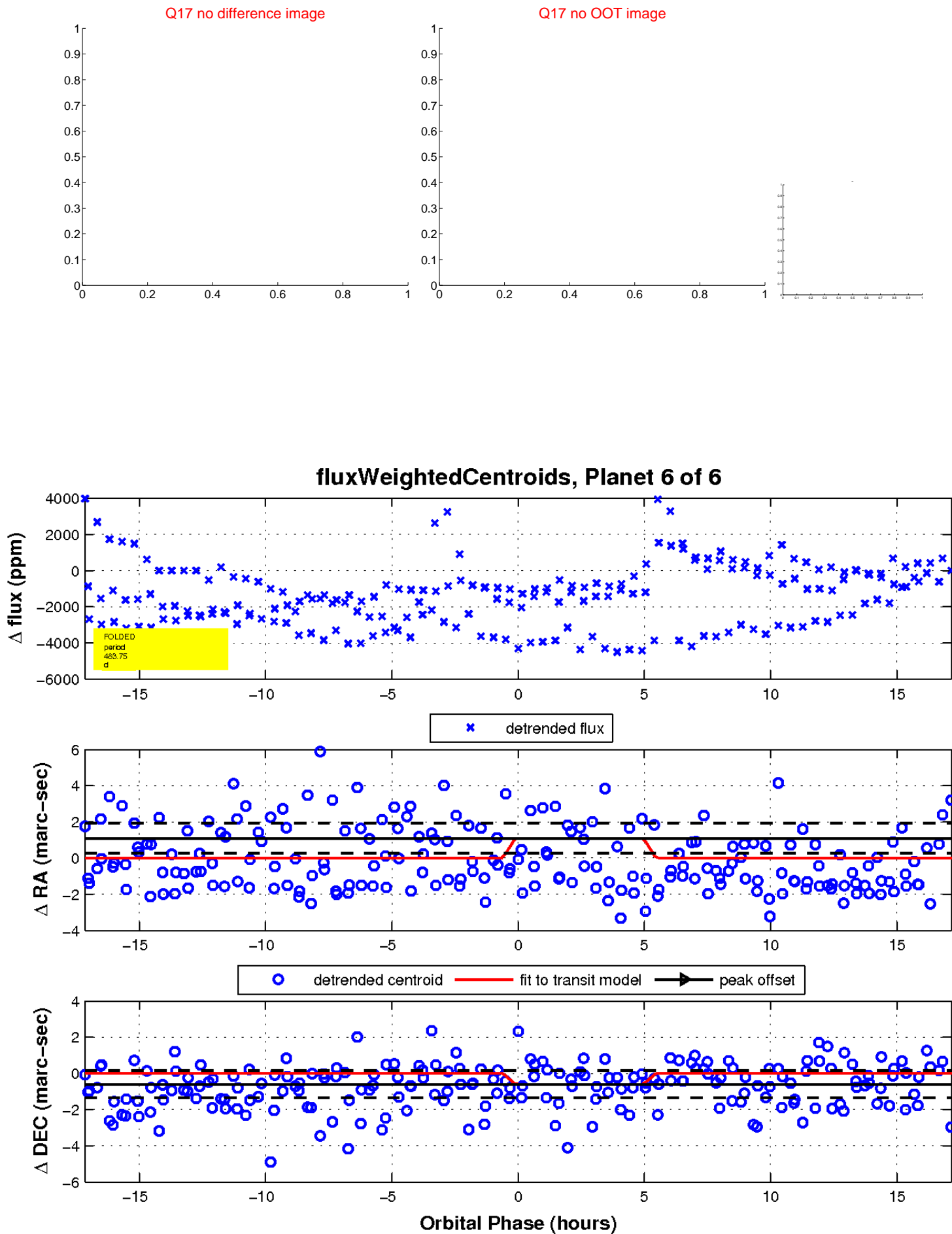
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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.



UKIRT Image

Declination

