

KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
007264976-02	OBS	No	597.552552	375.827115	585.7	5.011	14.3	9.4	1.85	5038	5.03	1.09
007264976-03	OBS	No	478.058684	296.788410	563.7	3.840	19.7	7.9	1.85	5038	4.73	1.47
007264976-04	OBS	No	513.376449	300.623445	487.7	5.542	15.2	7.3	1.85	5038	4.58	1.34
007264976-05	OBS	No	298.867213	265.577238	583.5	4.368	18.6	9.5	1.85	5038	4.40	2.75
007264976-06	OBS	No	213.790501	274.634459	318.0	4.500	14.3	-1.0	1.85	5038	3.20	4.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

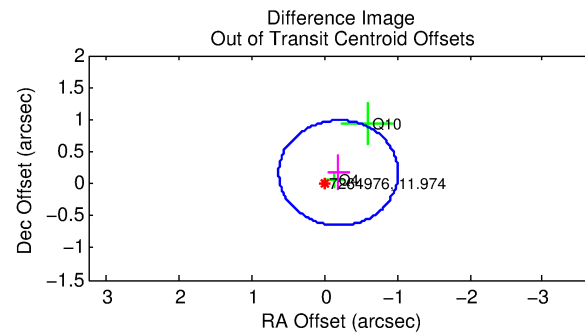
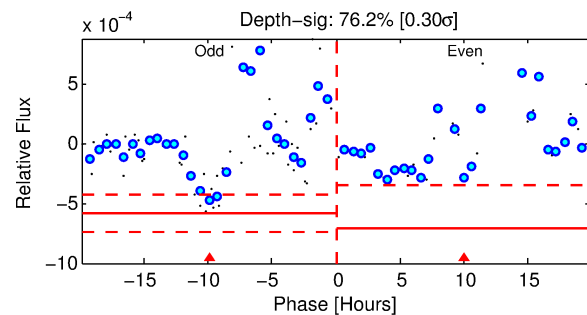
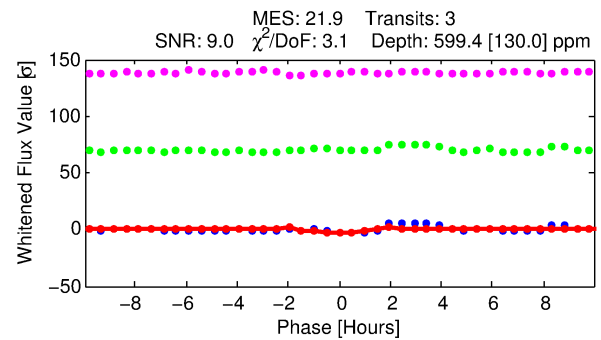
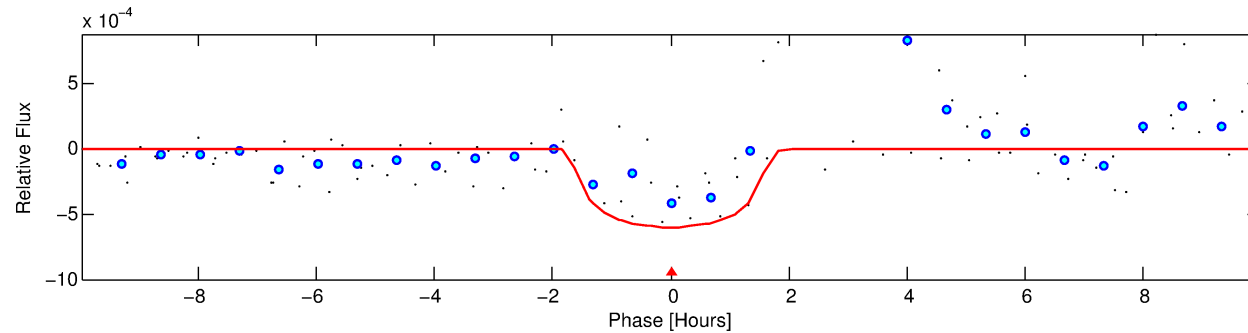
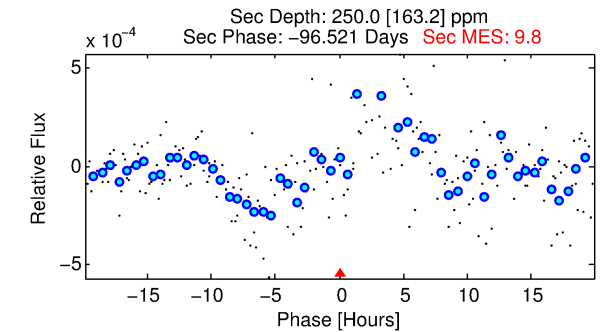
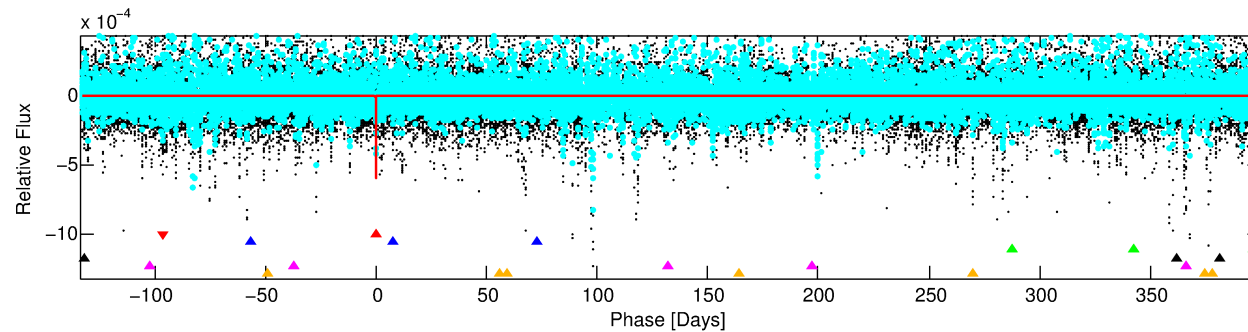
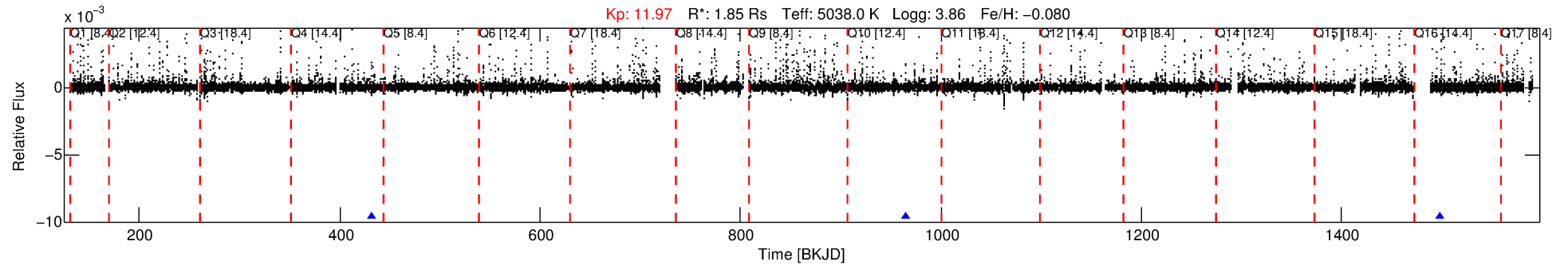
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-01

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 1 of 6 Period: 532.840 d



DV Fit Results:

Period = 532.84045 [0.00864] d
Epoch = 432.5644 [0.0096] BKJD
Rp/R* = 0.0244 [0.0314]
a/R* = 860.59 [3960.59]
b = 0.75 [2.77]
Seff = 1.27 [0.37]
Teq = 271 [20] K
Rp = 4.92 [6.46] Re
a = 1.2433 [0.2569] AU
Ag = 8779.32 [23439.40] [0.37 σ]
Teffp = 4053 [2690] K [1.41 σ]

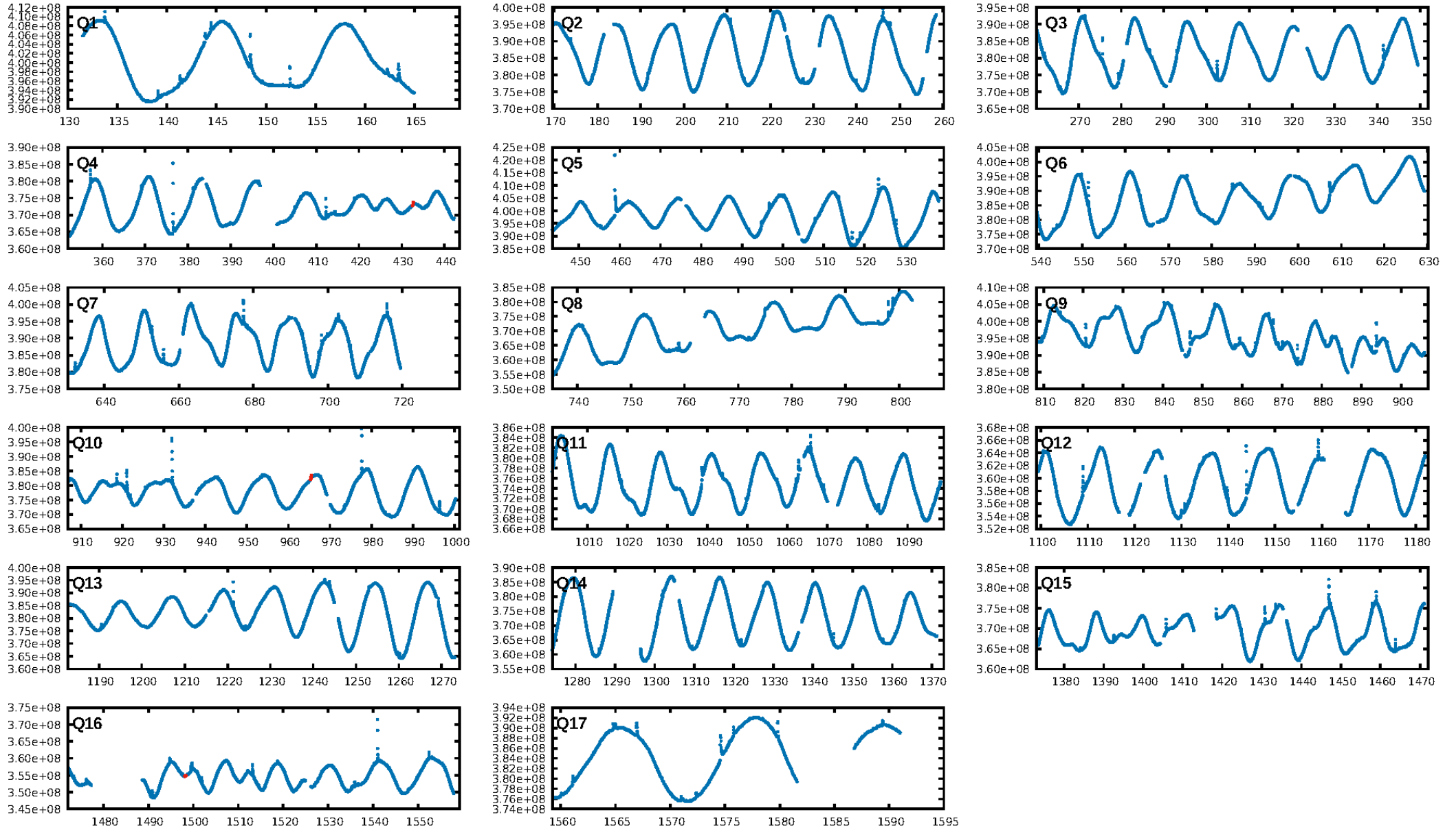
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [72.31 σ]
LongPeriod-sig: 100.0% [258.35 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.6%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.4545
Centroid-sig: 66.3%
Centroid-so: 0.117 arcsec [0.37 σ]
OotOffset-rm: 0.254 arcsec [0.93 σ]
OotOffset-st: 1/0/1/0 [2]
KicOffset-rm: 0.337 arcsec [1.28 σ]
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DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [2/2]

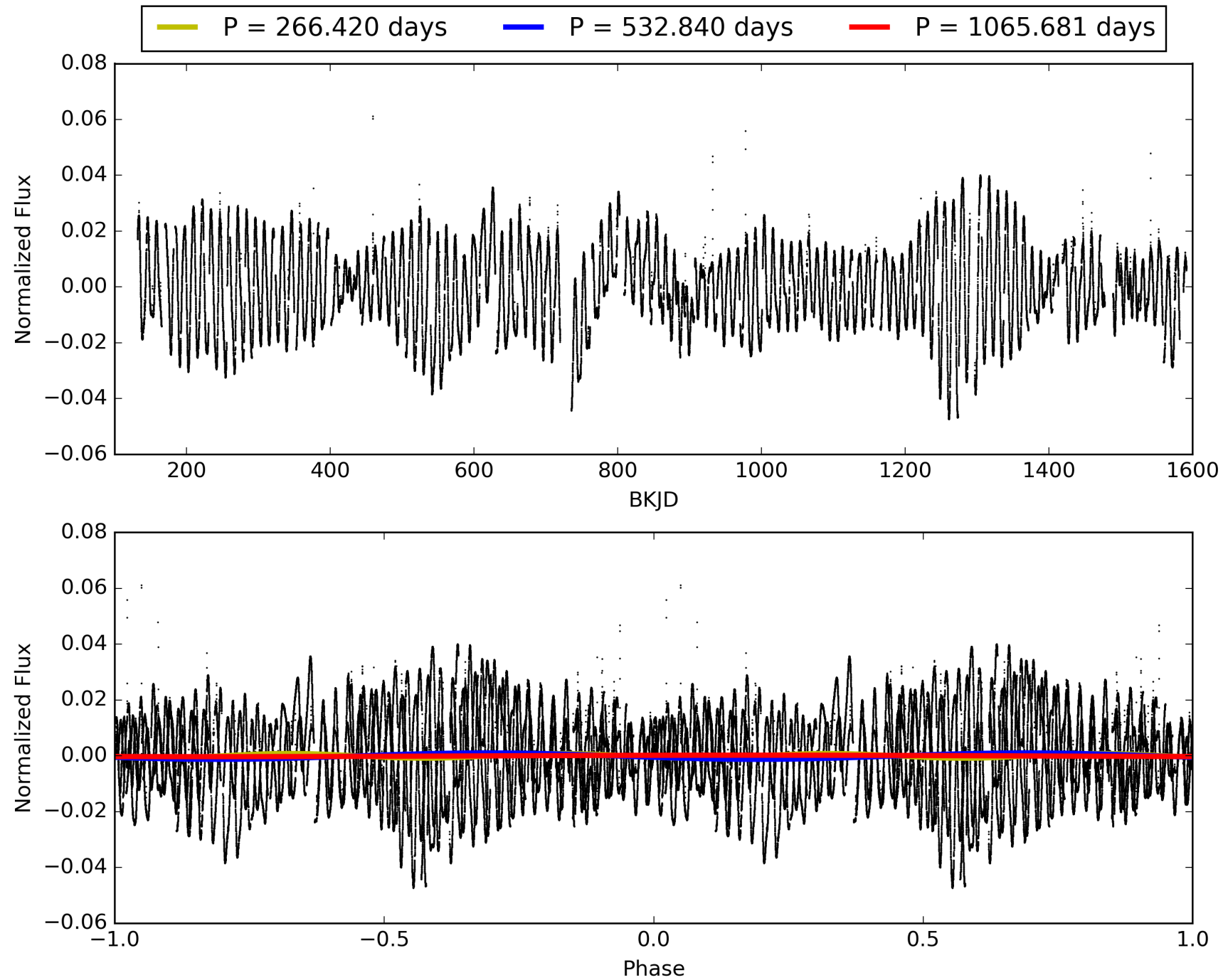
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007264976-01, PDC Light Curves

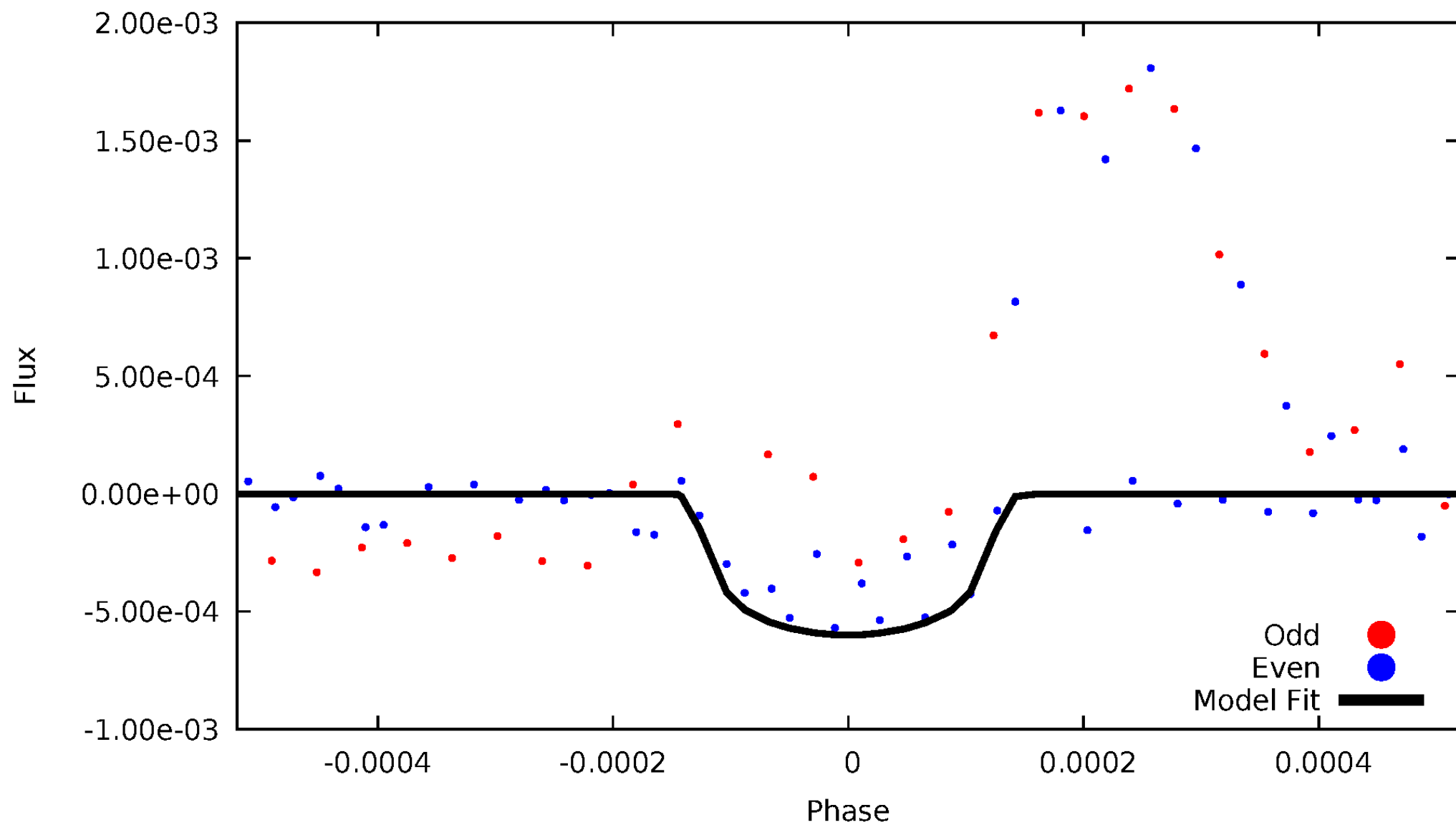


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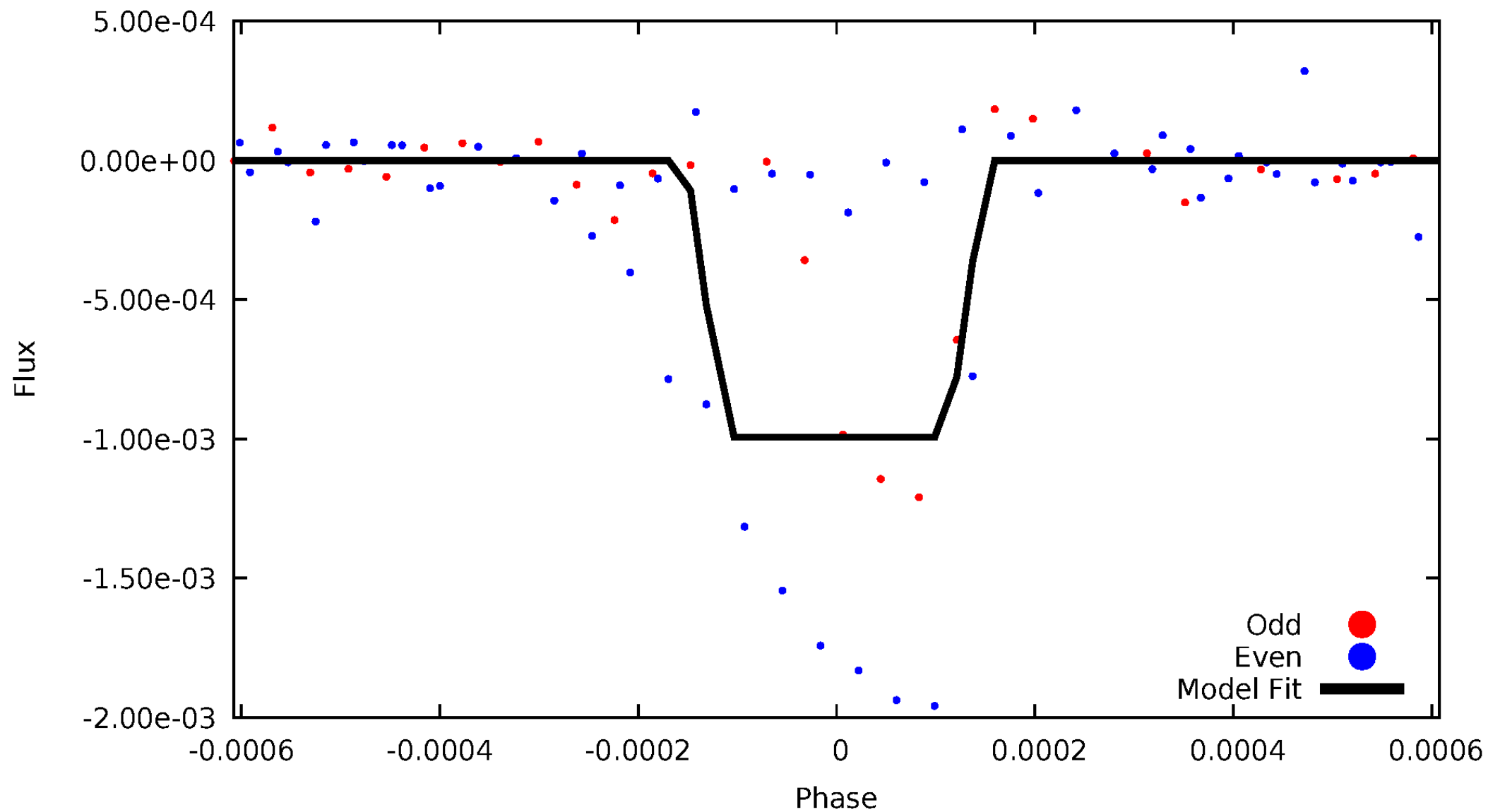
DV Odd/Even

TCE 007264976-01



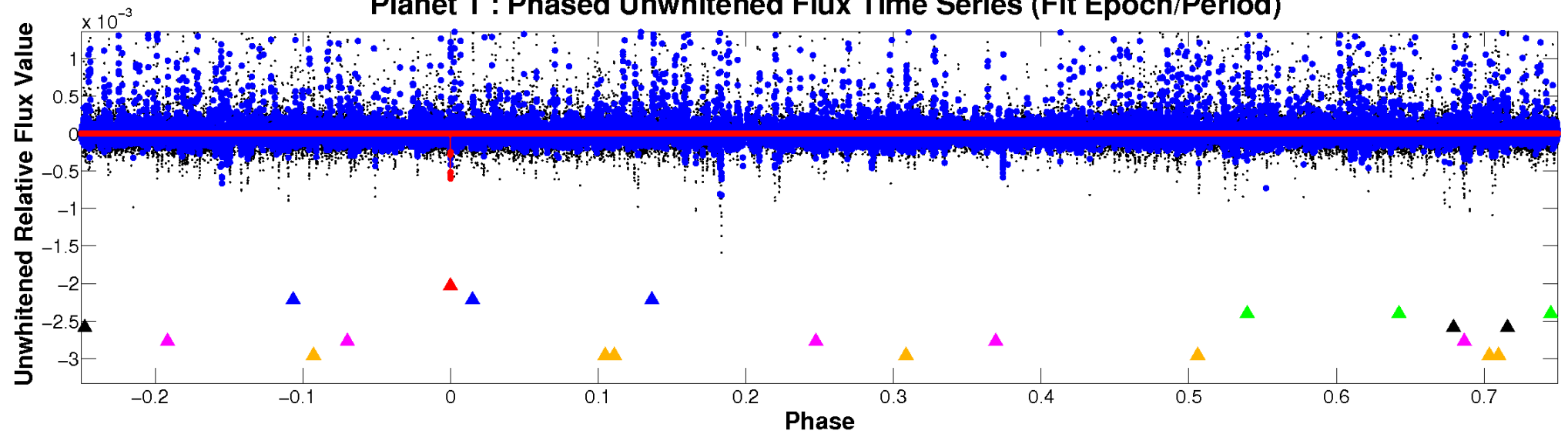
ALT Odd/Even

TCE 007264976-01

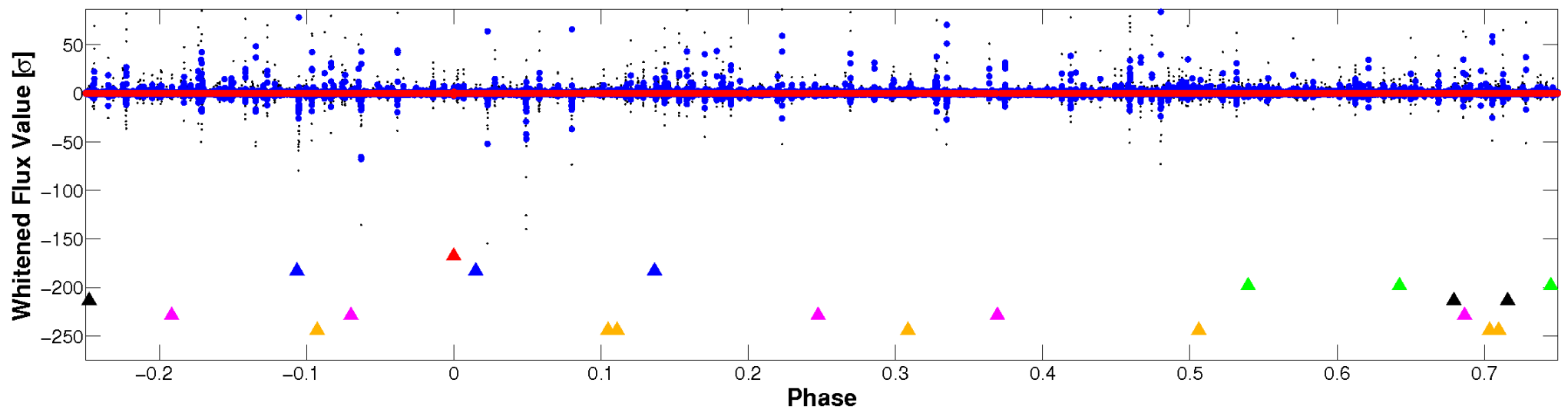


Non-Whitened Vs. Whitened Light Curve

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

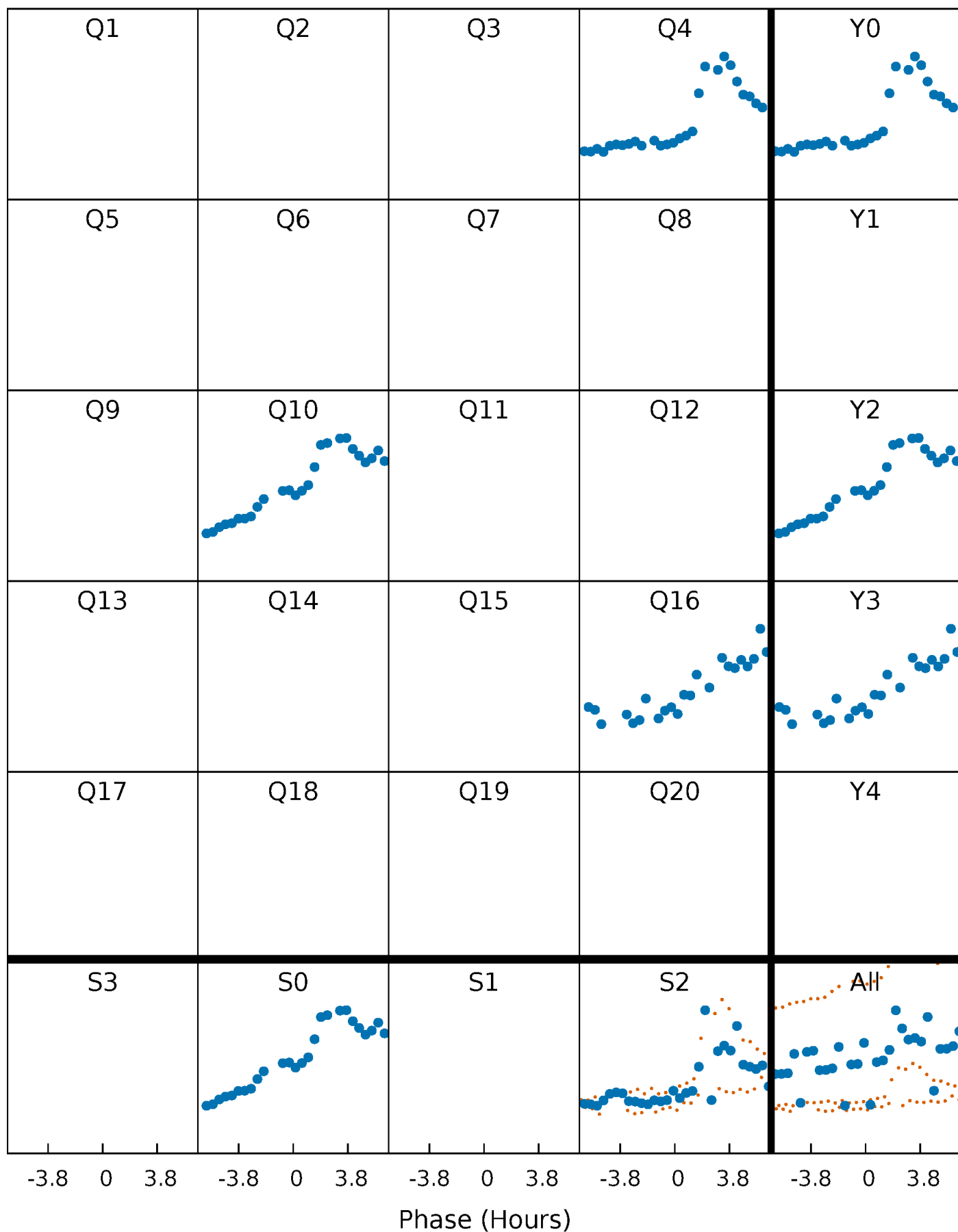


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



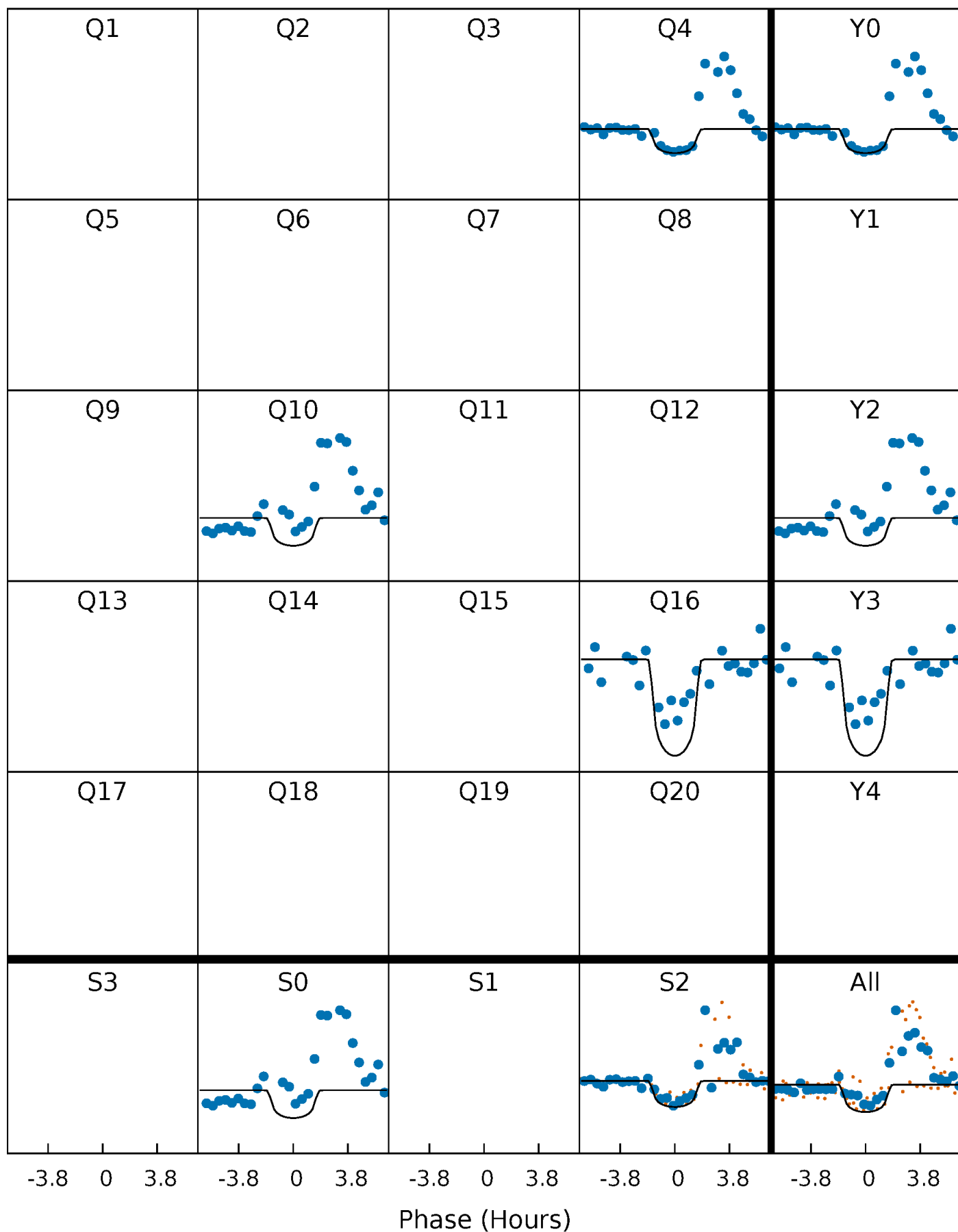
PDC Quarter-Phased Transit Curves

TCE 007264976-01 P=532.840454 Days $T_0=432.564366$ (BKJD)



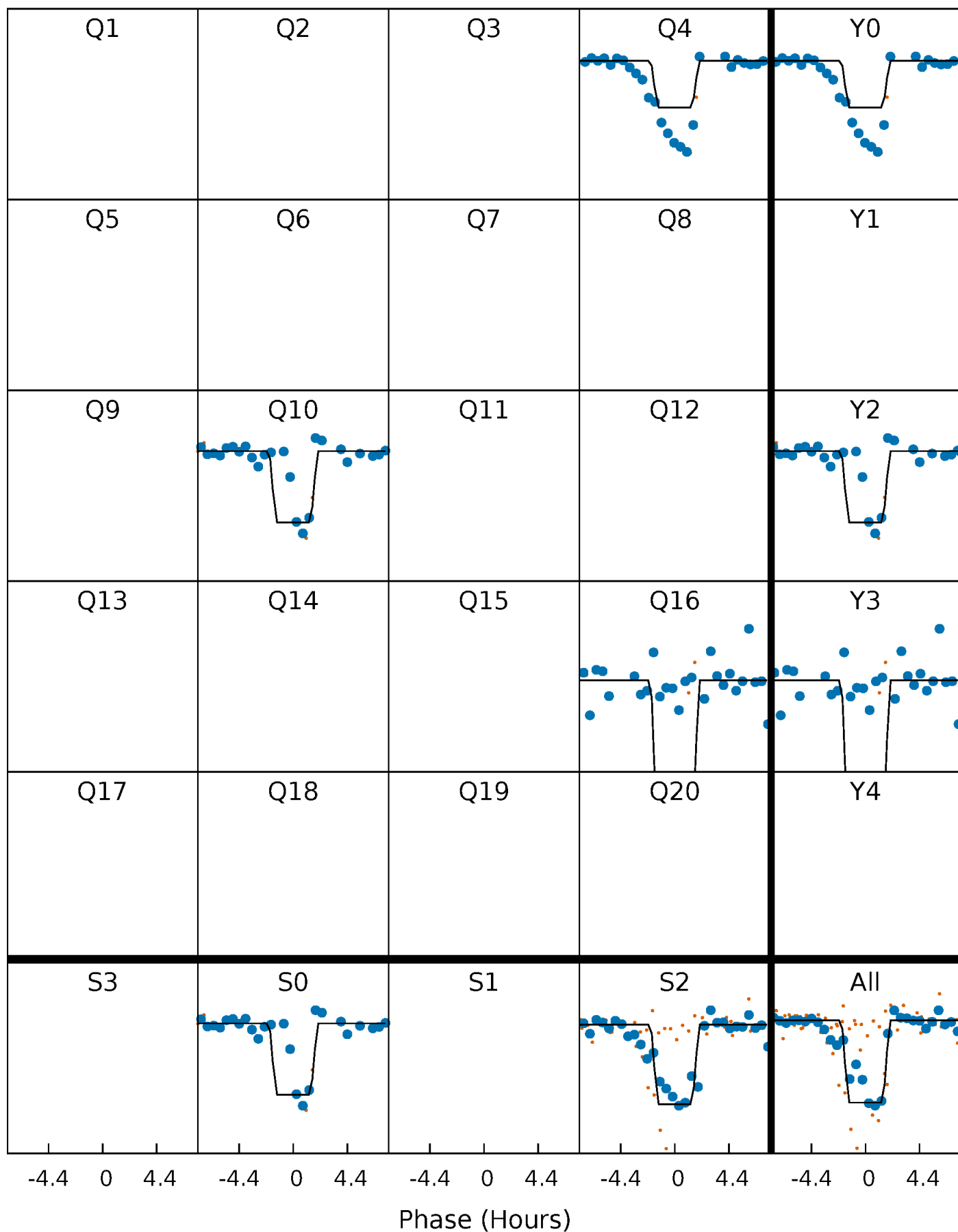
DV Quarter-Phased Transit Curves

TCE 007264976-01 P=532.840454 Days $T_0=432.564366$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

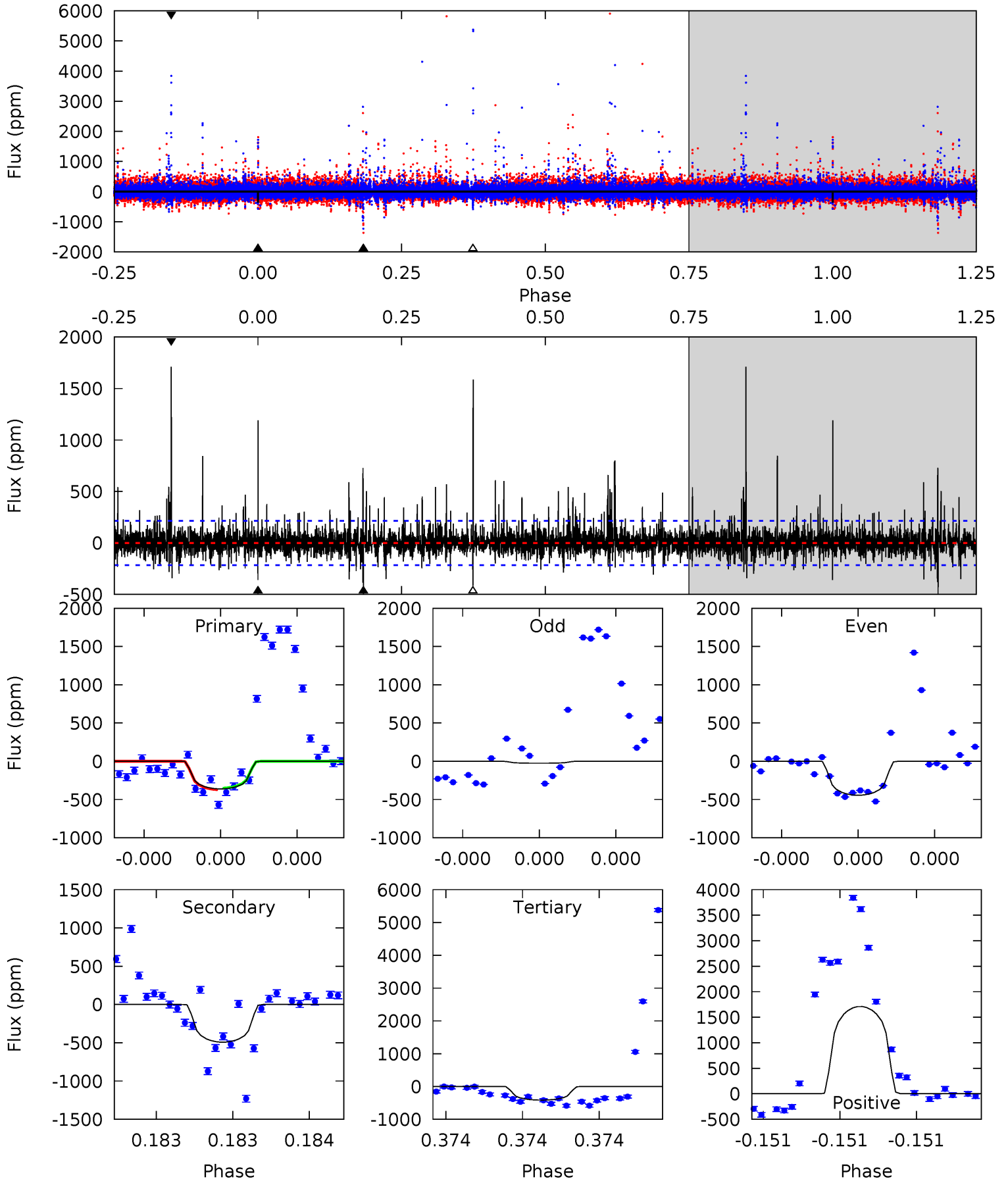
TCE 007264976-01 P=532.839133 Days $T_0=432.566888$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-01, P = 532.840454 Days, E = 432.564366 Days

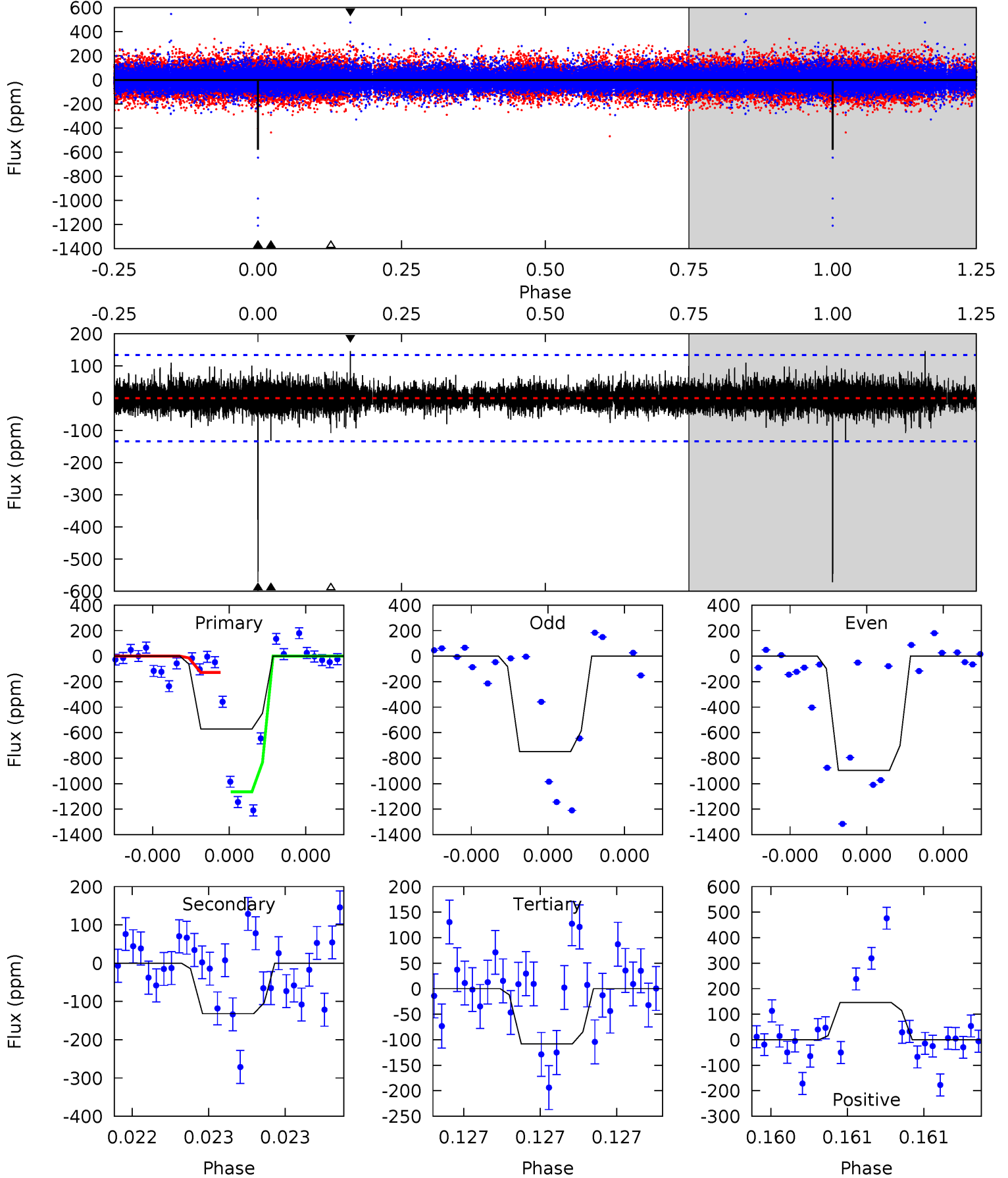
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.46	12.9	10.9	44.9	5.66	3.61	2.23	-1.40	-35.4	2.03	-32.0	1.56	0.91	0.78	0.25



Alt Model-Shift Uniqueness Test

007264976-01, P = 532.839133 Days, E = 432.566888 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.2	5.58	4.57	6.18	5.67	3.63	0.83	19.6	18.0	1.01	-0.60	2.82	1.13	0.20	0



Stellar Parameters For KIC 007264976

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-492 ± 38	$6.76^{+6.07}_{-4.06}$	382^{+22}_{-12}	4322^{+2196}_{-829}	9217^{+47096}_{-6658}
Alt.	-132 ± 24	$8.16^{+5.98}_{-5.57}$	383^{+22}_{-11}	3271^{+1577}_{-468}	1695^{+15475}_{-1129}

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

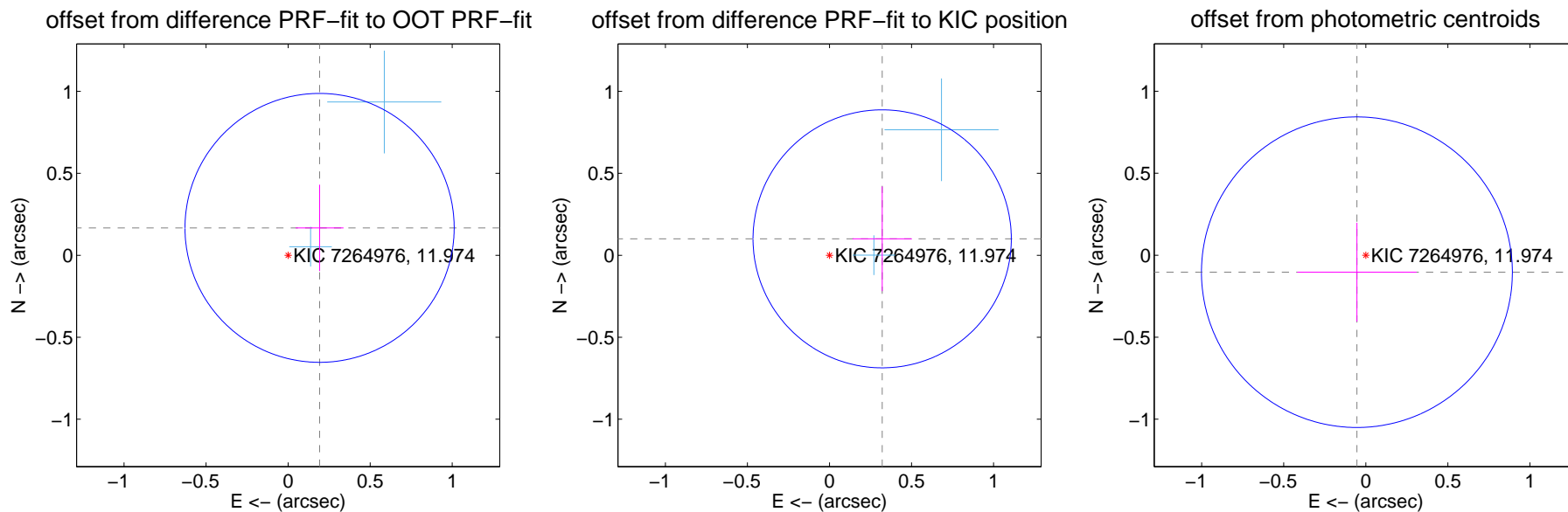
DV Centroid Data

Supplemental centroid analysis for 007264976-01. **Kepler magnitude: 11.97.** Transit SNR 9.04

There are 2 quarters with good PRF difference image offsets

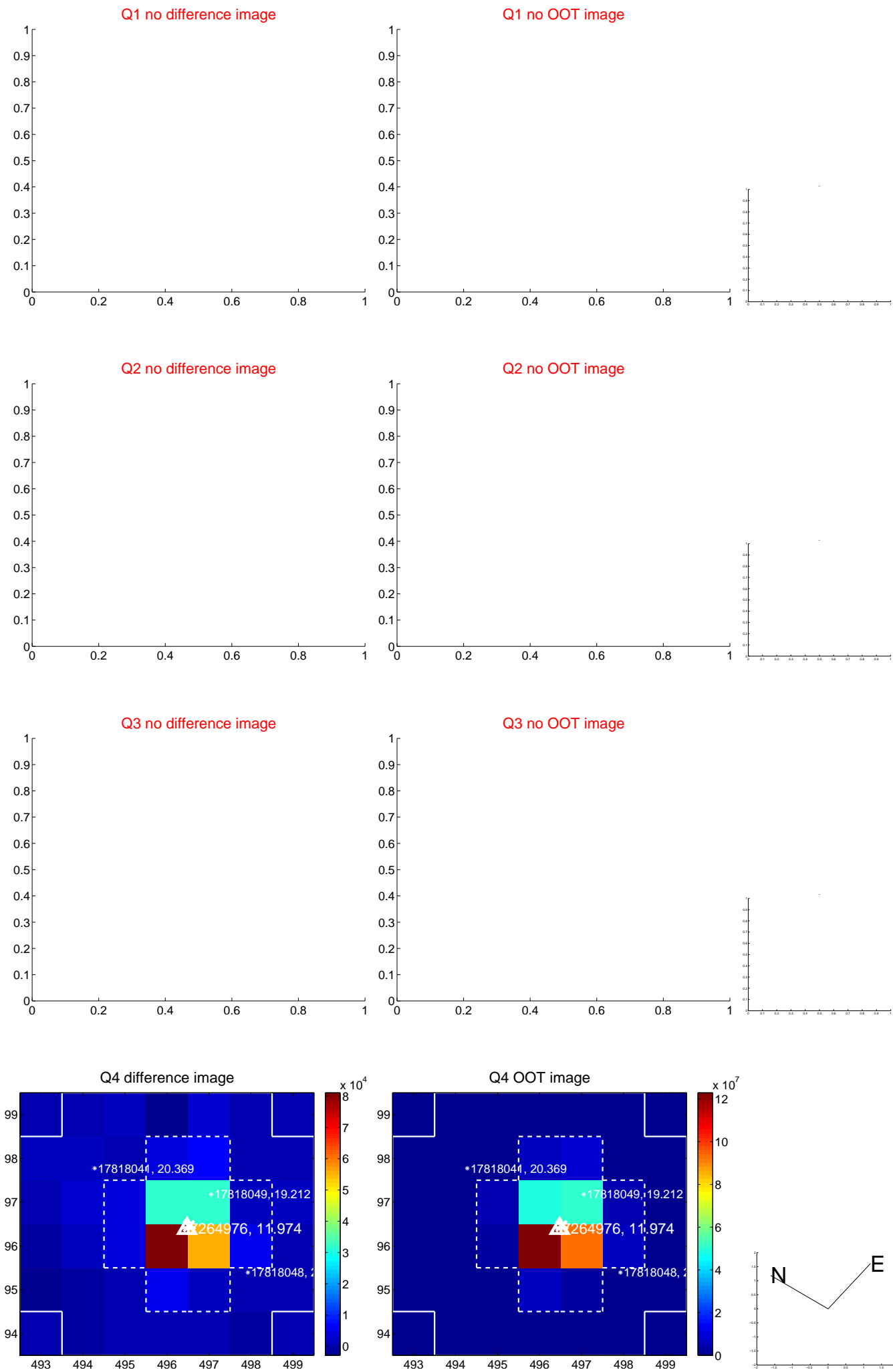
The direct PRF centroid is offset from the target star catalog position by about 0.20 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.254 ± 0.273	0.93	-0.192 ± 0.146	0.167 ± 0.263
PRF-fit source offset from KIC position	0.337 ± 0.262	1.28	-0.321 ± 0.181	0.100 ± 0.319
photometric centroid source offset	0.12 ± 0.32	0.37	0.05 ± 0.36	-0.10 ± 0.30



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.

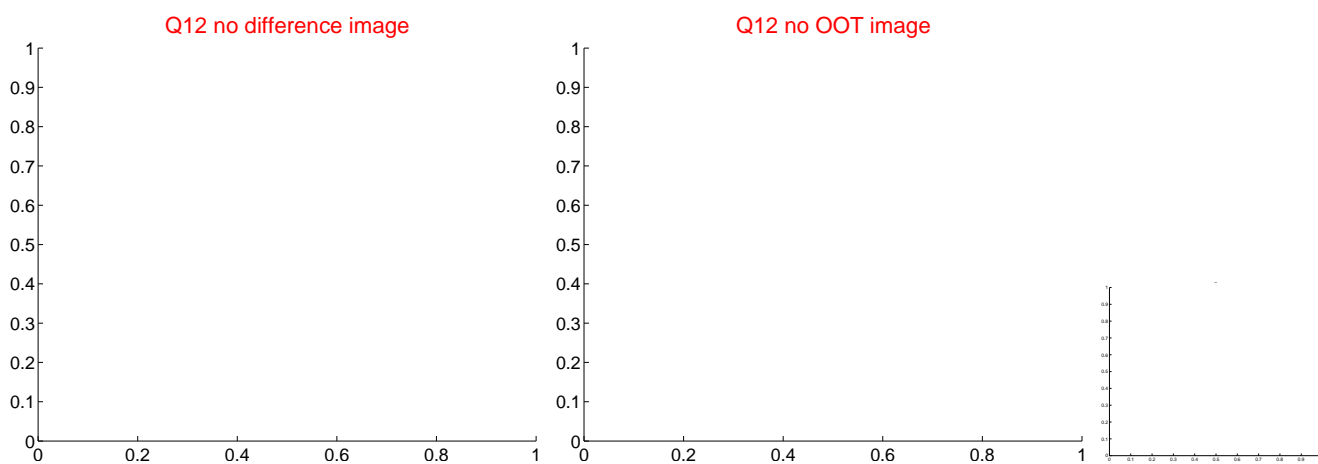
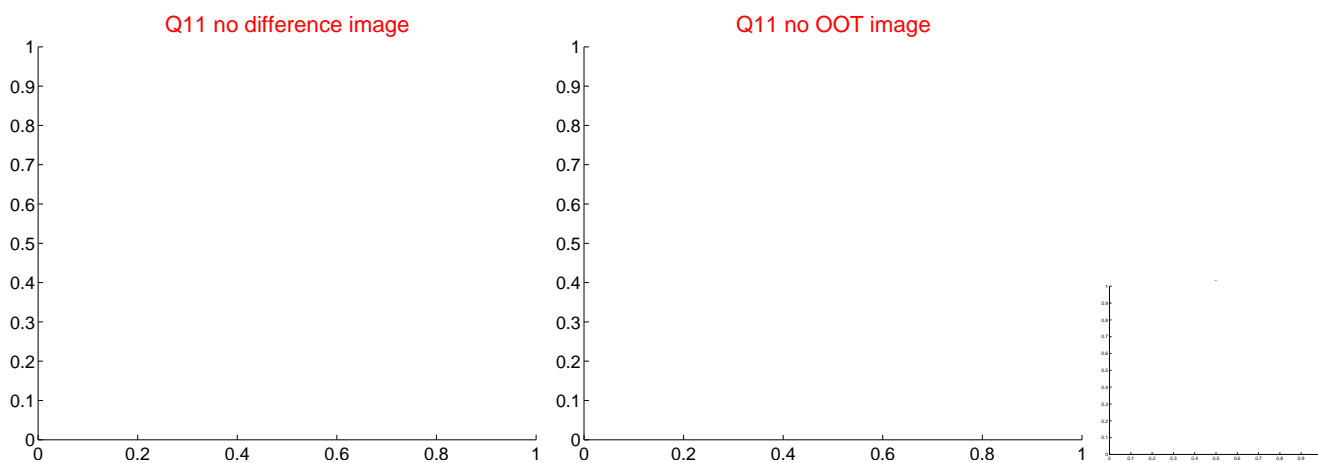
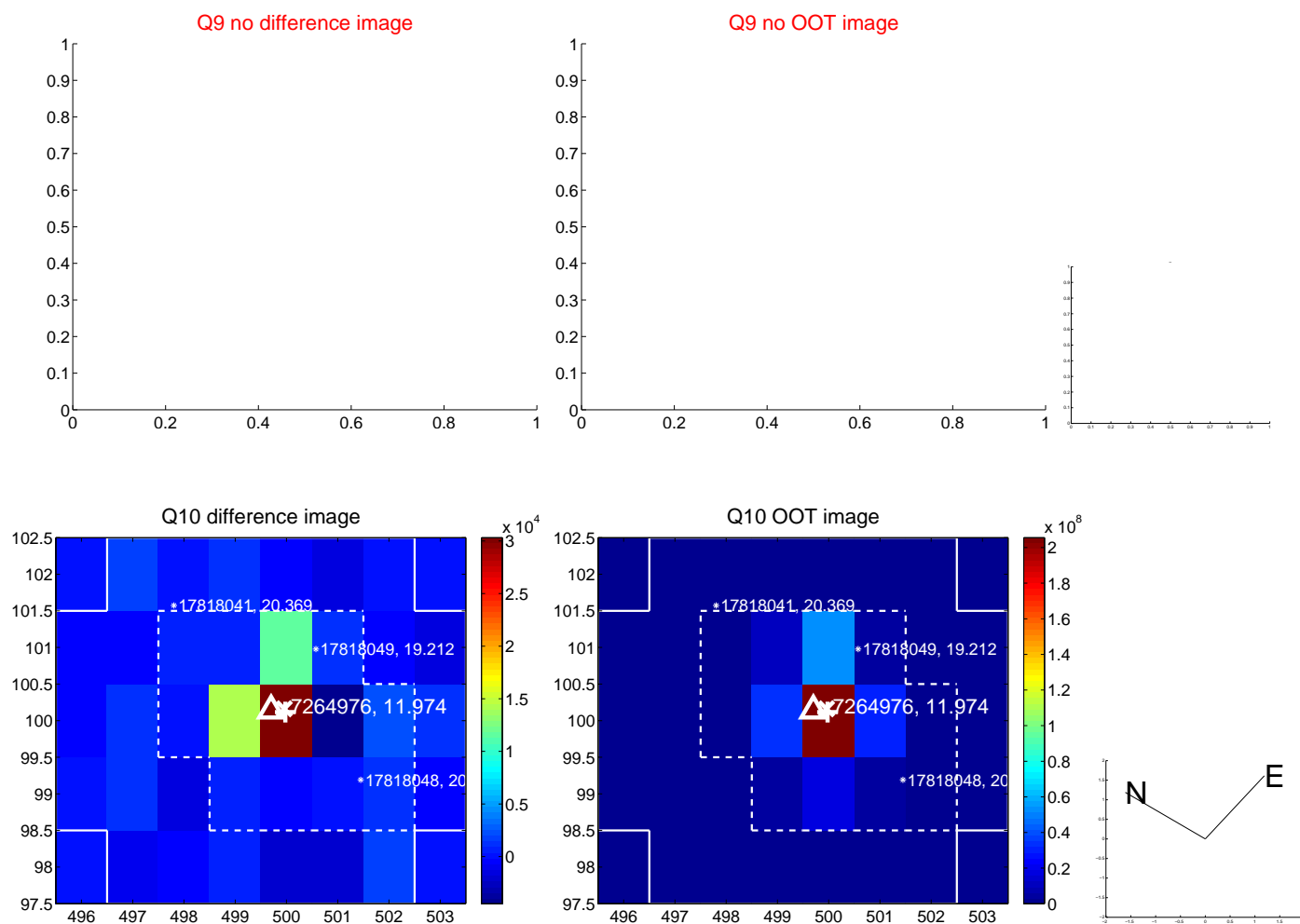
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



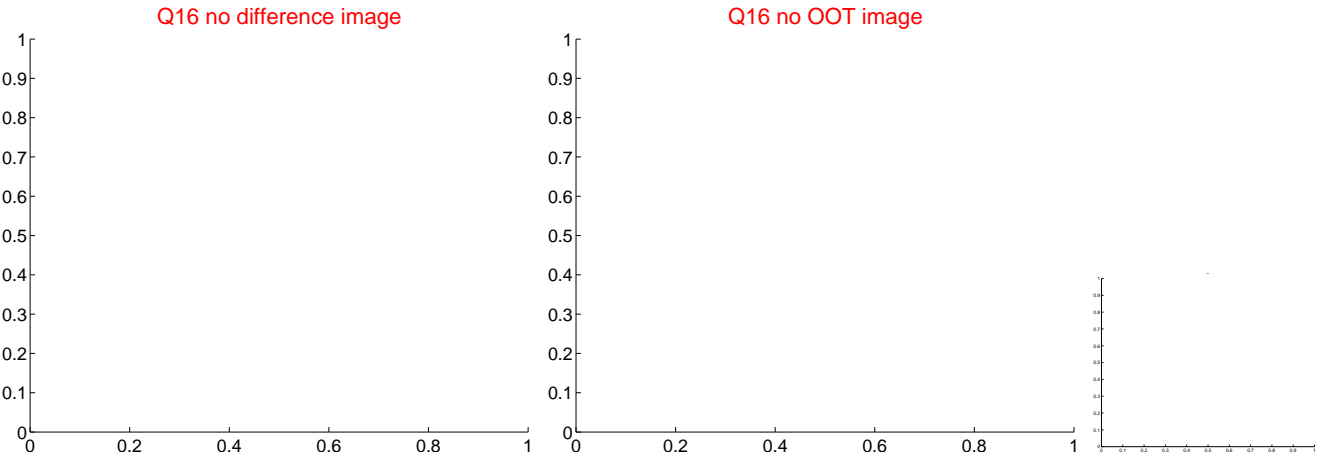
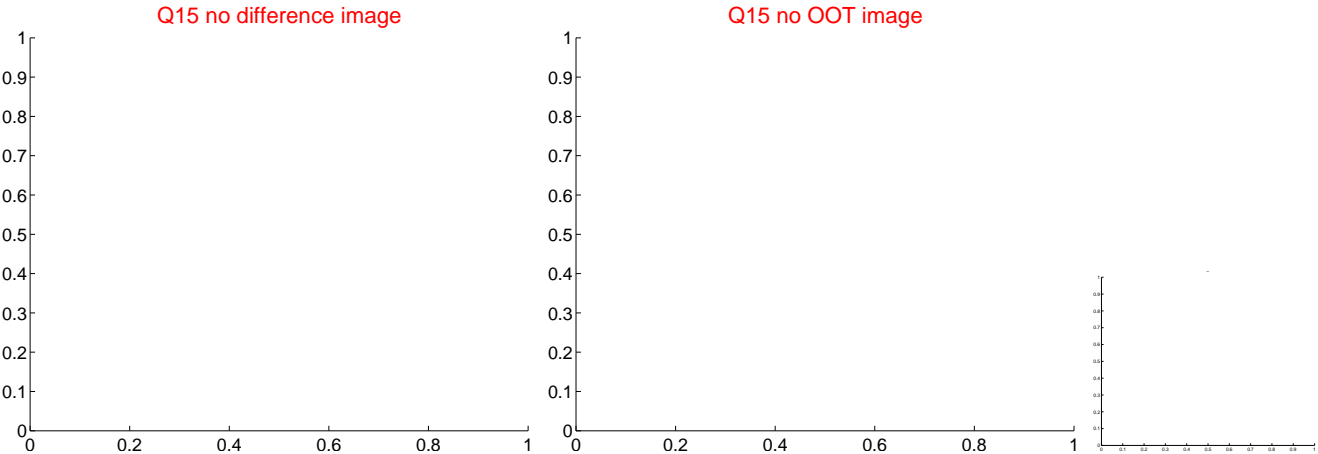
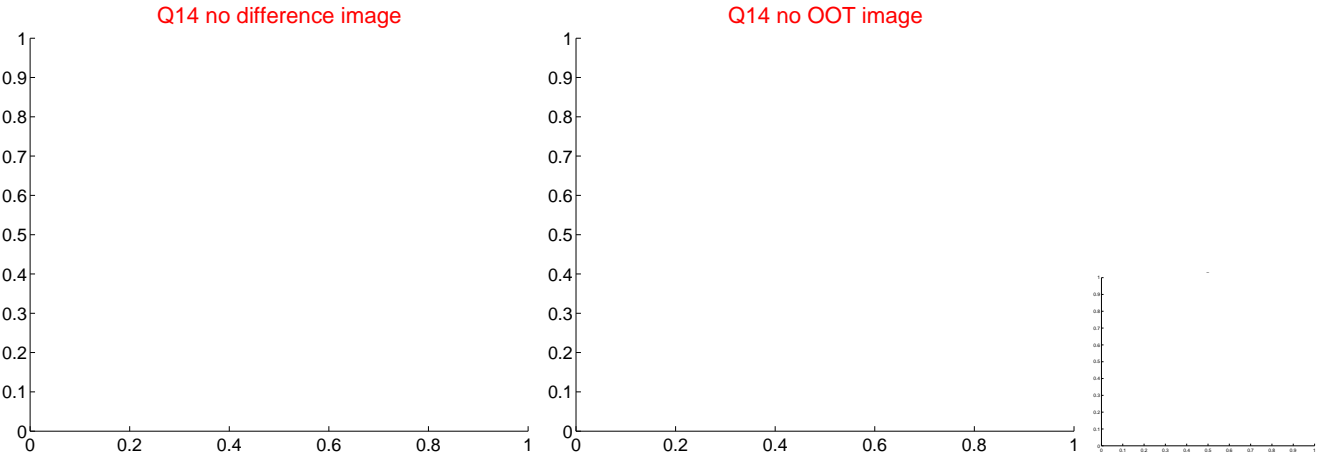
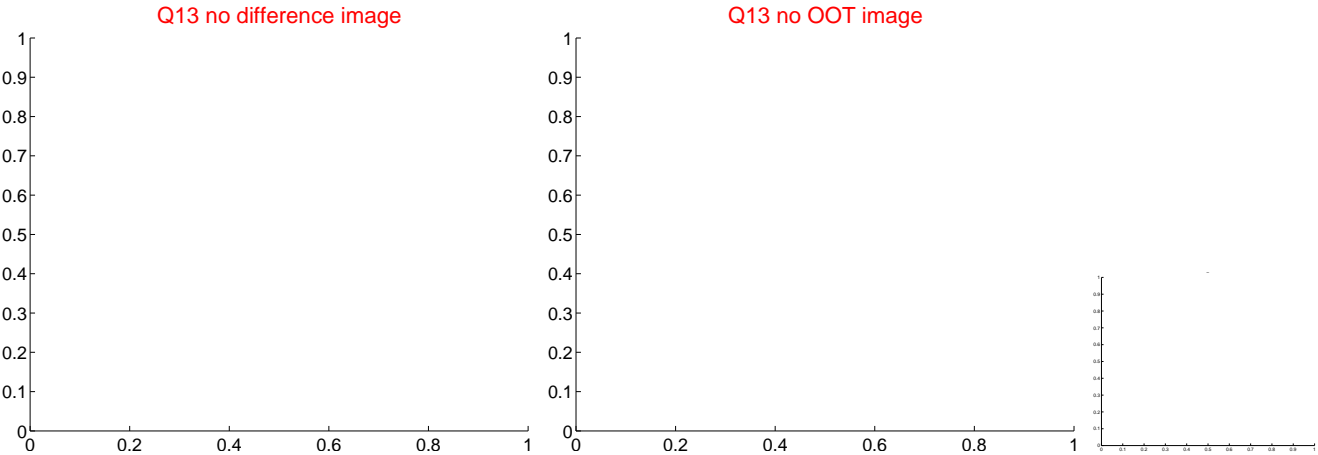
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



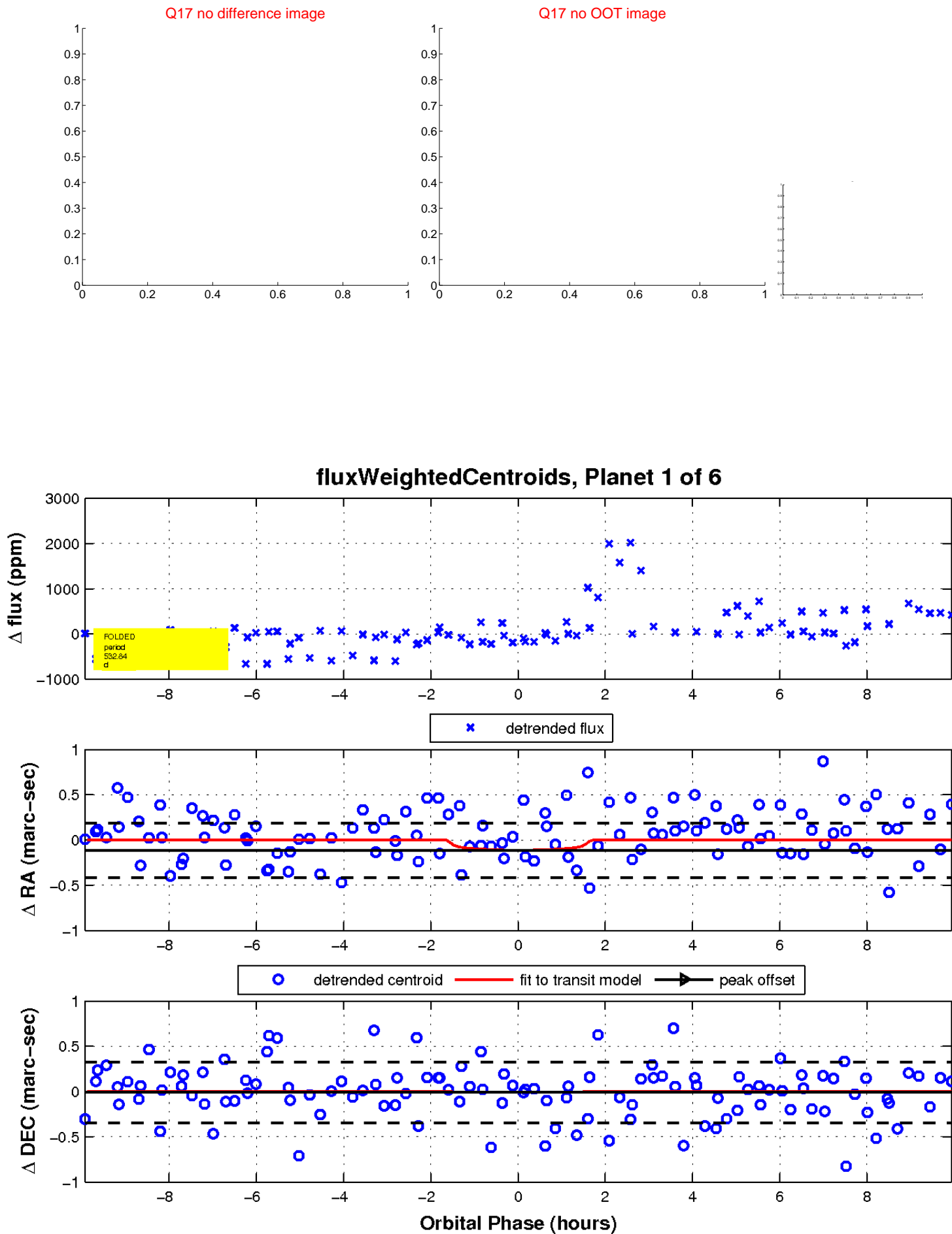
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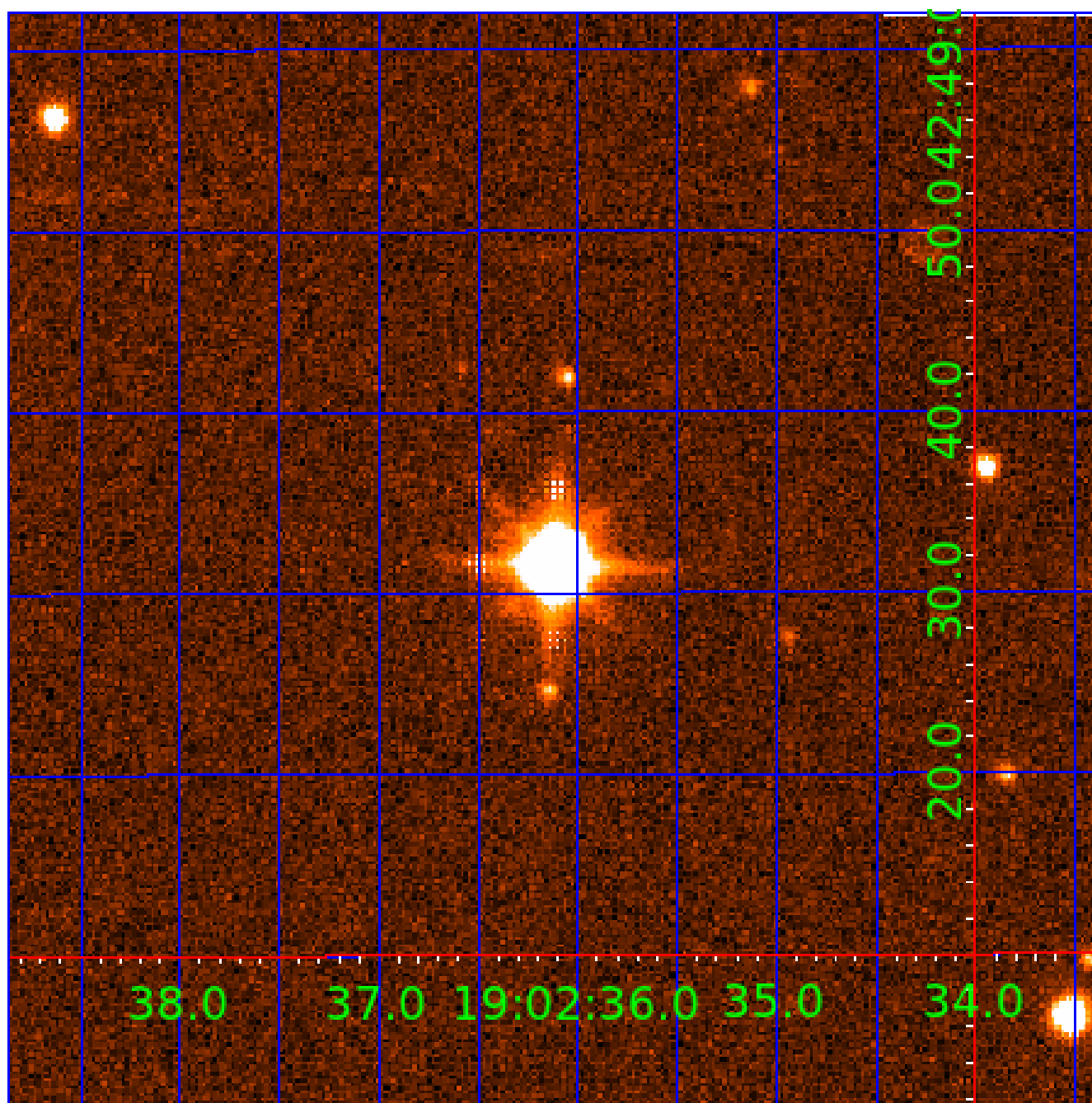


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
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Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

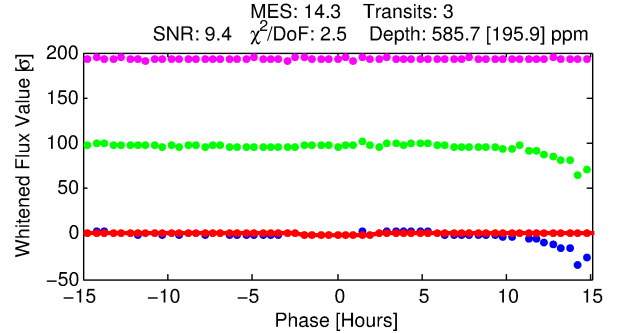
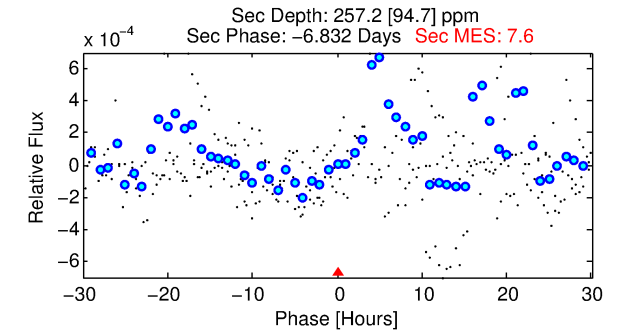
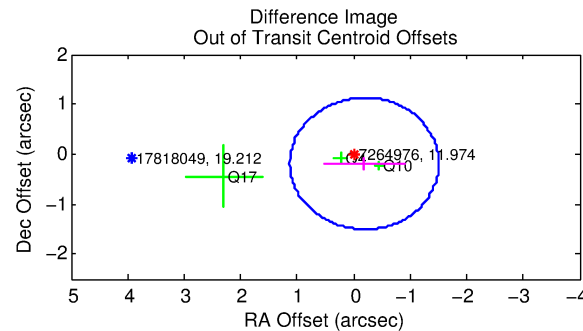
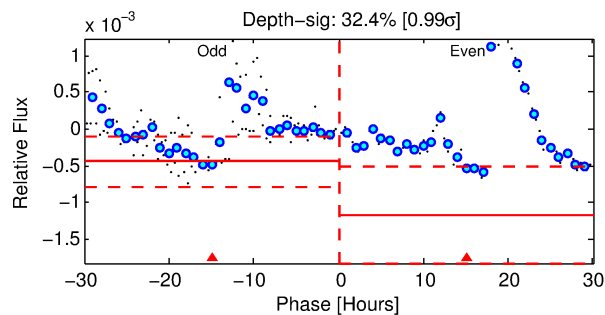
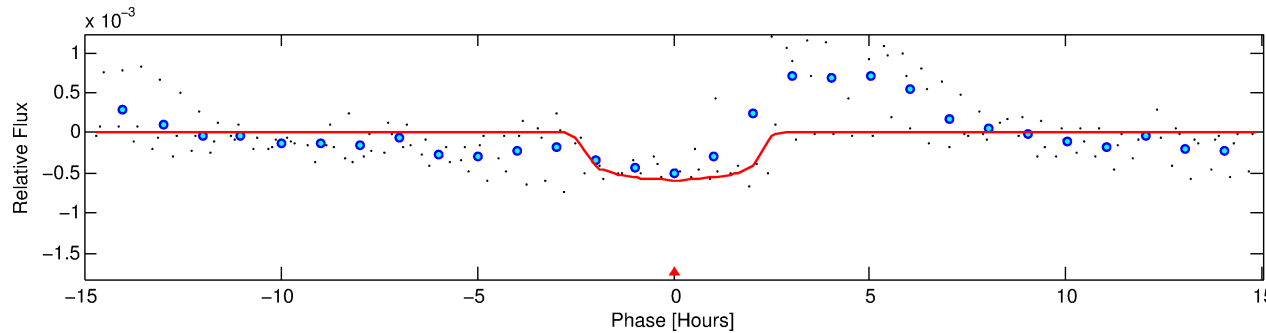
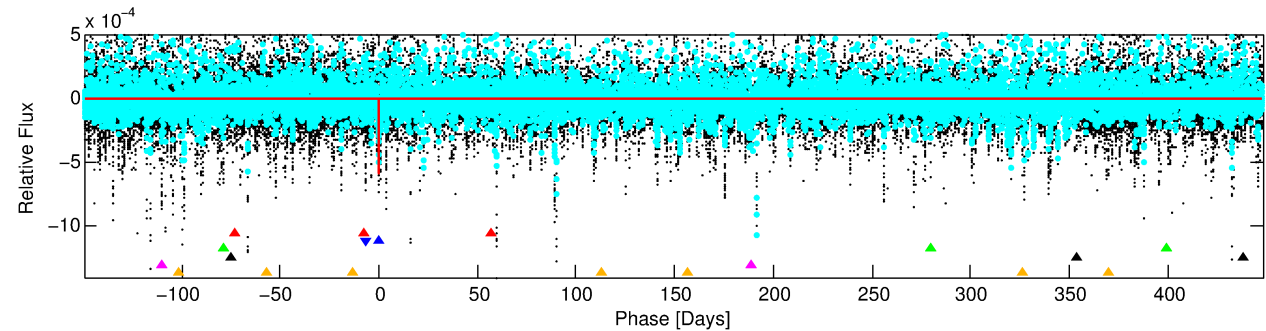
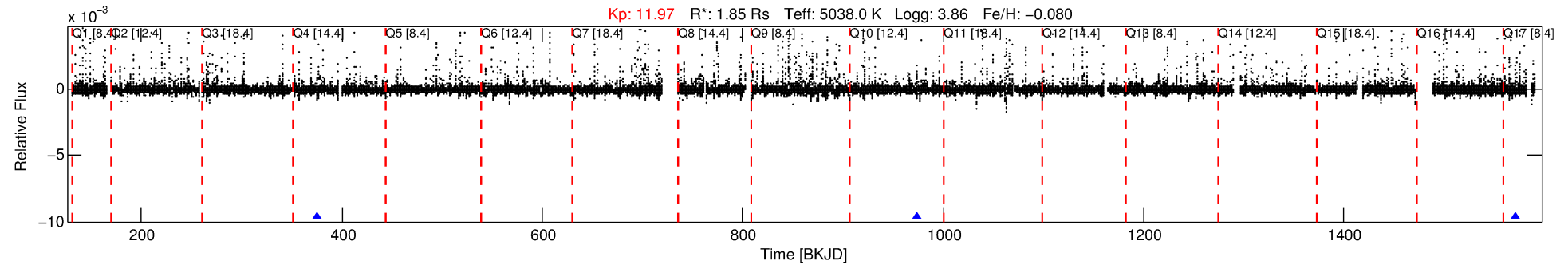
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-02

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 2 of 6 Period: 597.553 d



DV Fit Results:

Period = 597.55255 [0.01000] d
Epoch = 375.8271 [0.0120] BKJD
Rp/R* = 0.0250 [0.0182]
a/R* = 572.02 [1450.86]
b = 0.81 [1.10]
Seff = 1.09 [0.32]
Teq = 261 [19] K
Rp = 5.03 [3.89] Re
a = 1.3421 [0.2773] AU
Ag = 10075.85 [15425.84] [0.65 σ]
Teffp = 4038 [1519] K [2.49 σ]

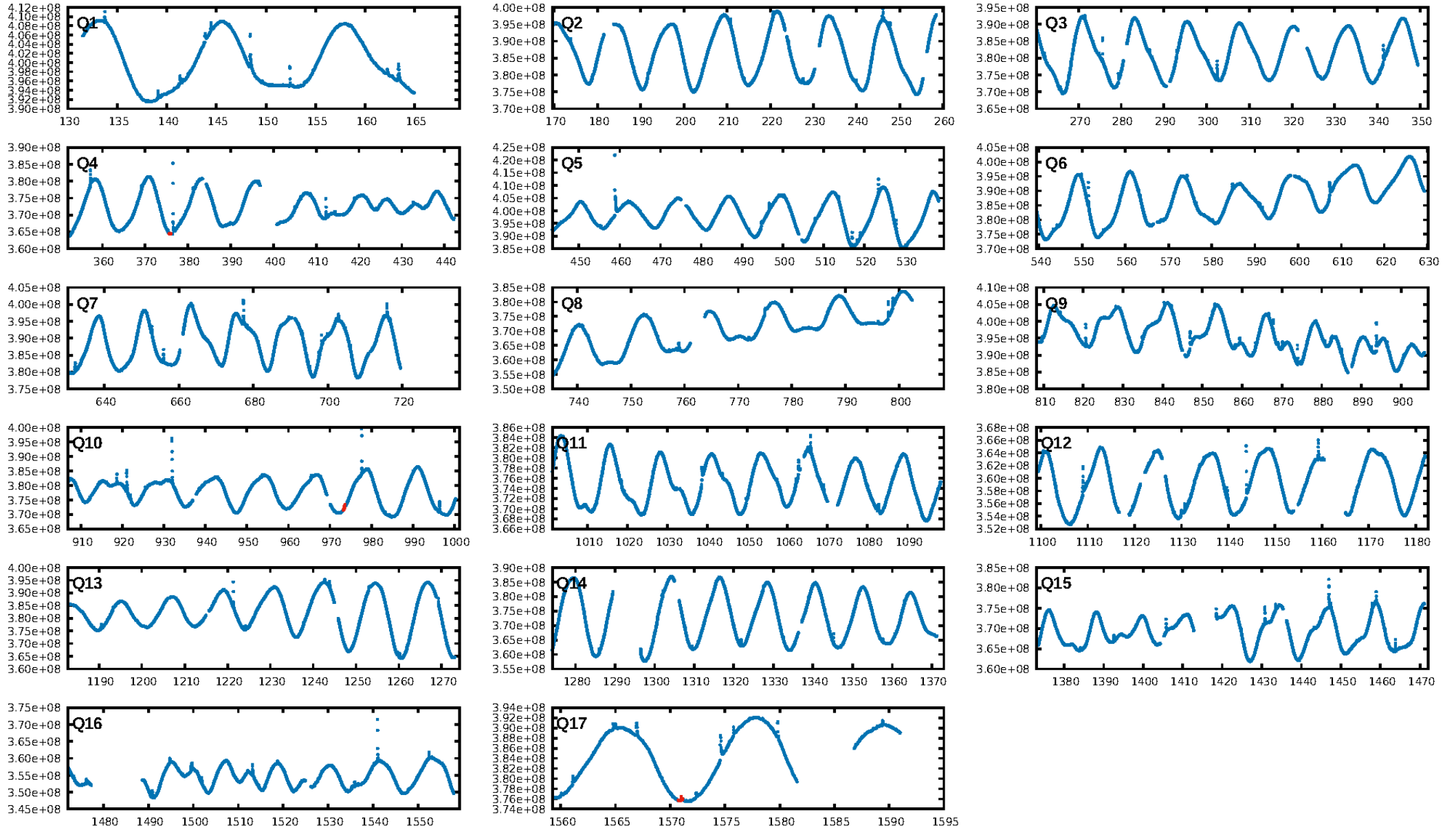
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [258.35 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 15.6%
ModelChiSquareGof-sig: 55.7%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 0.6511
Centroid-sig: 86.1%
Centroid-so: 0.097 arcsec [0.28 σ]
OotOffset-rm: 0.265 arcsec [0.60 σ]
KicOffset-rm: 0.445 arcsec [1.14 σ]
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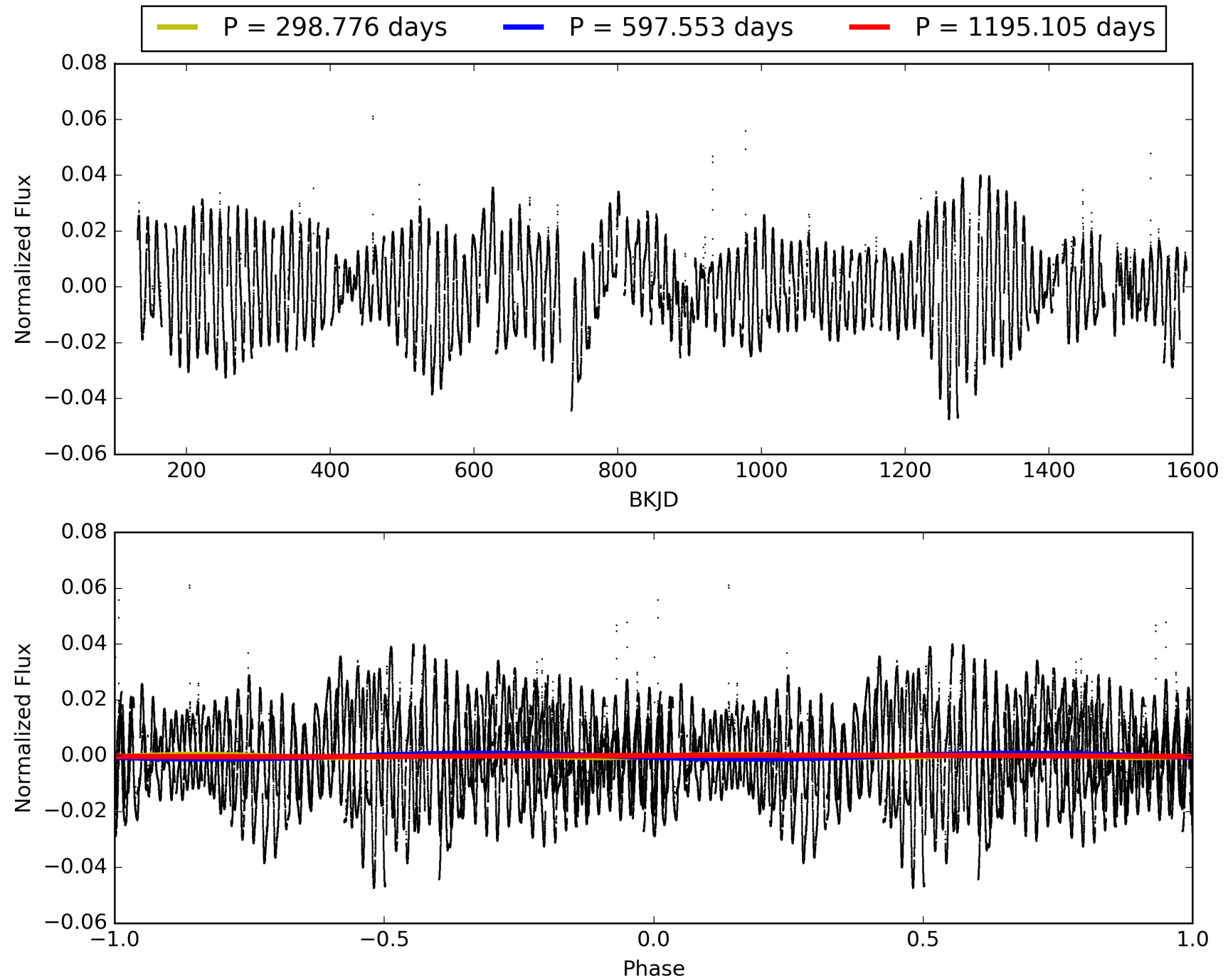
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007264976-02, PDC Light Curves

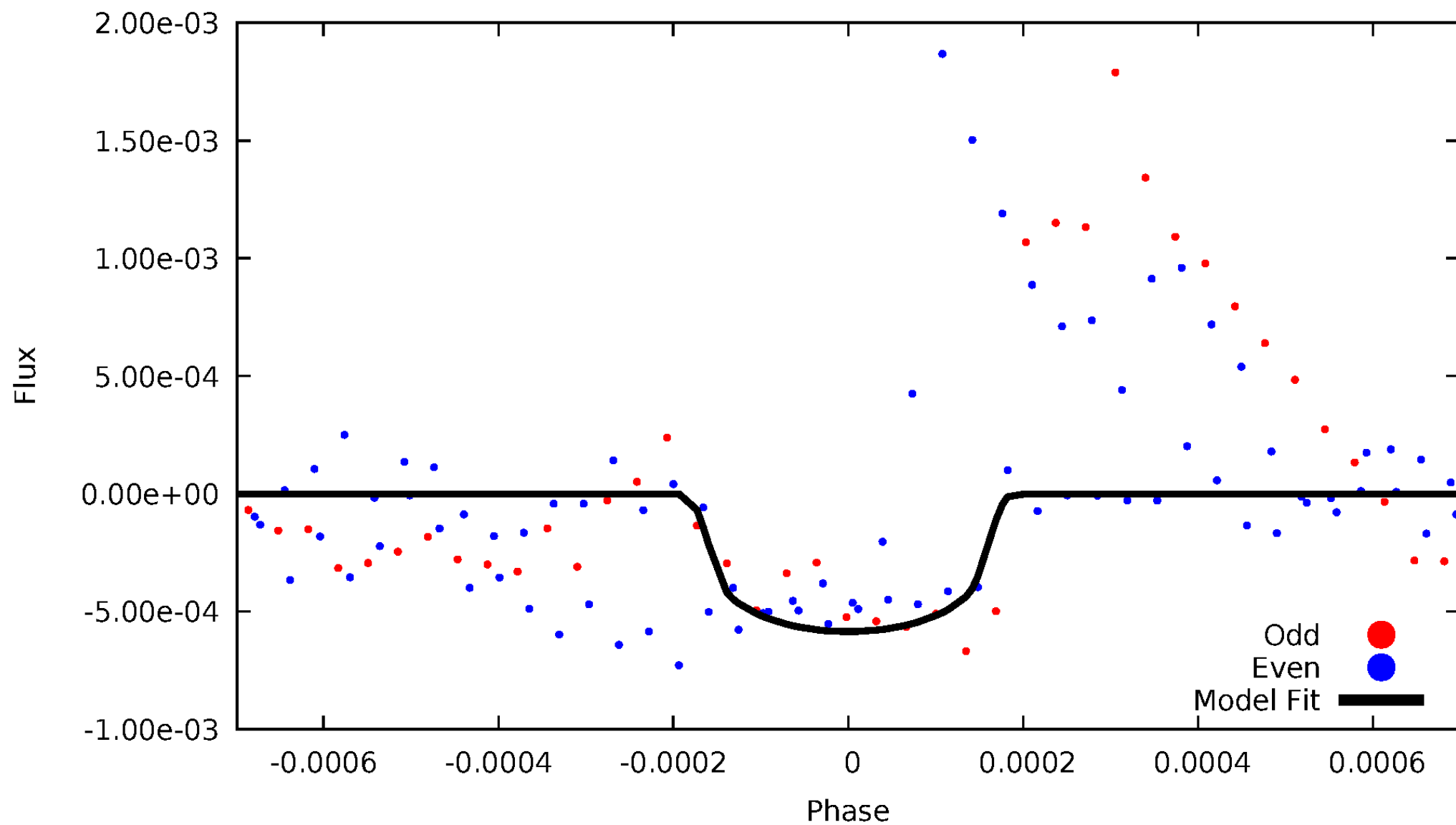


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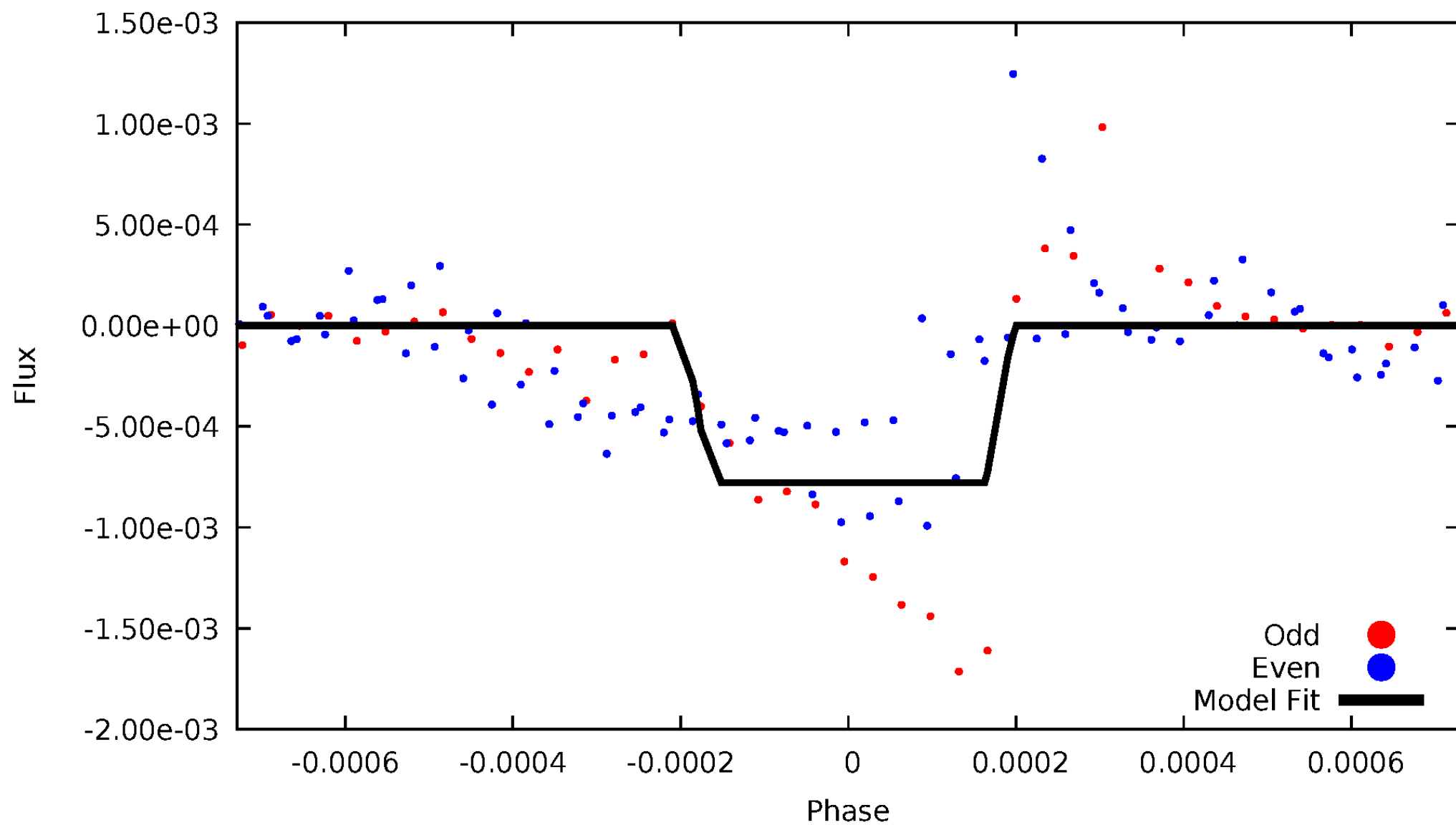
DV Odd/Even

TCE 007264976-02



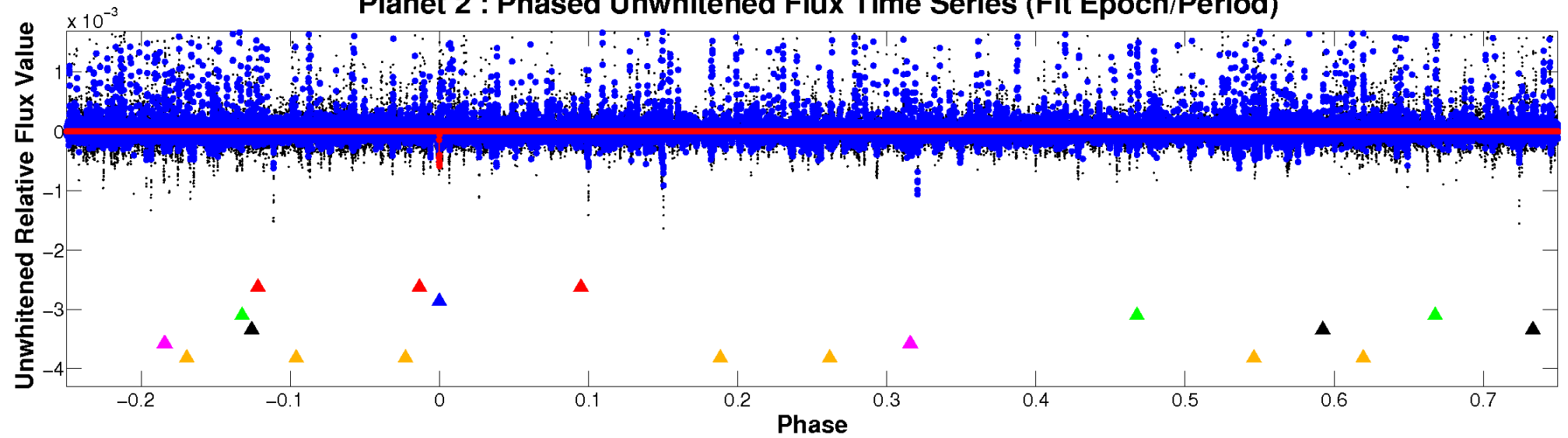
ALT Odd/Even

TCE 007264976-02

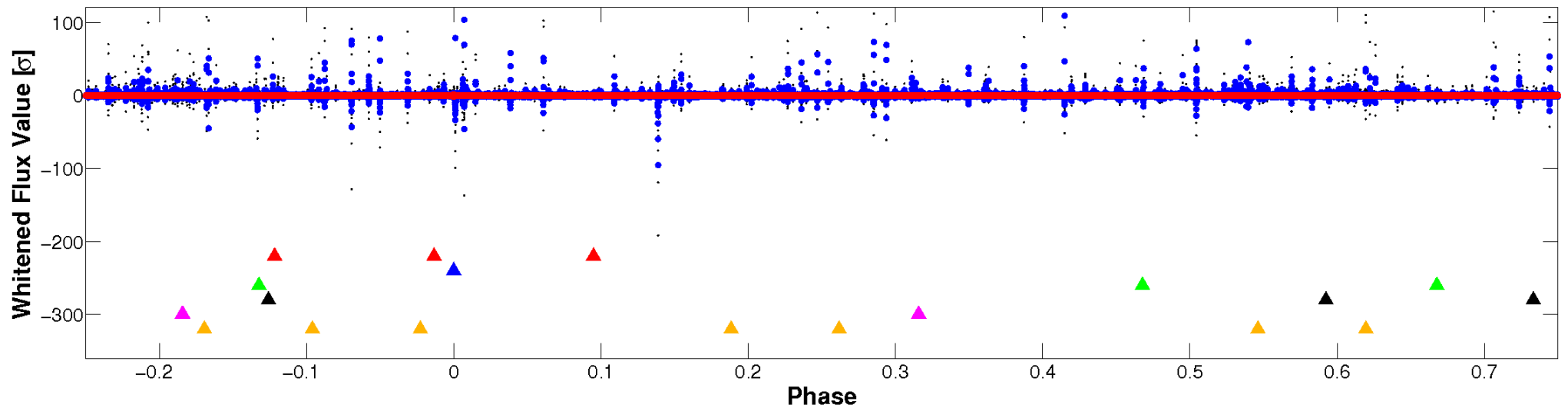


Non-Whitened Vs. Whitened Light Curve

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

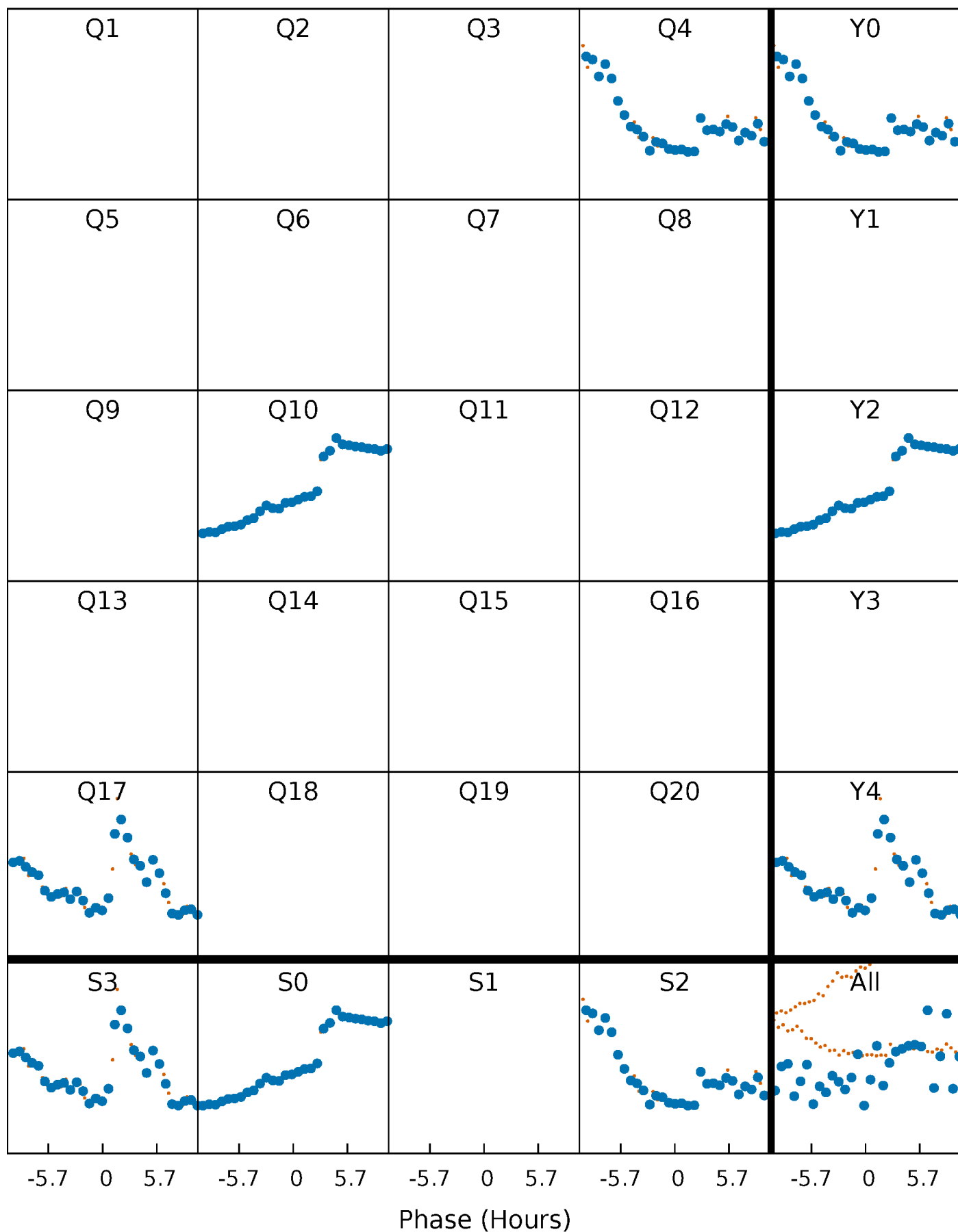


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



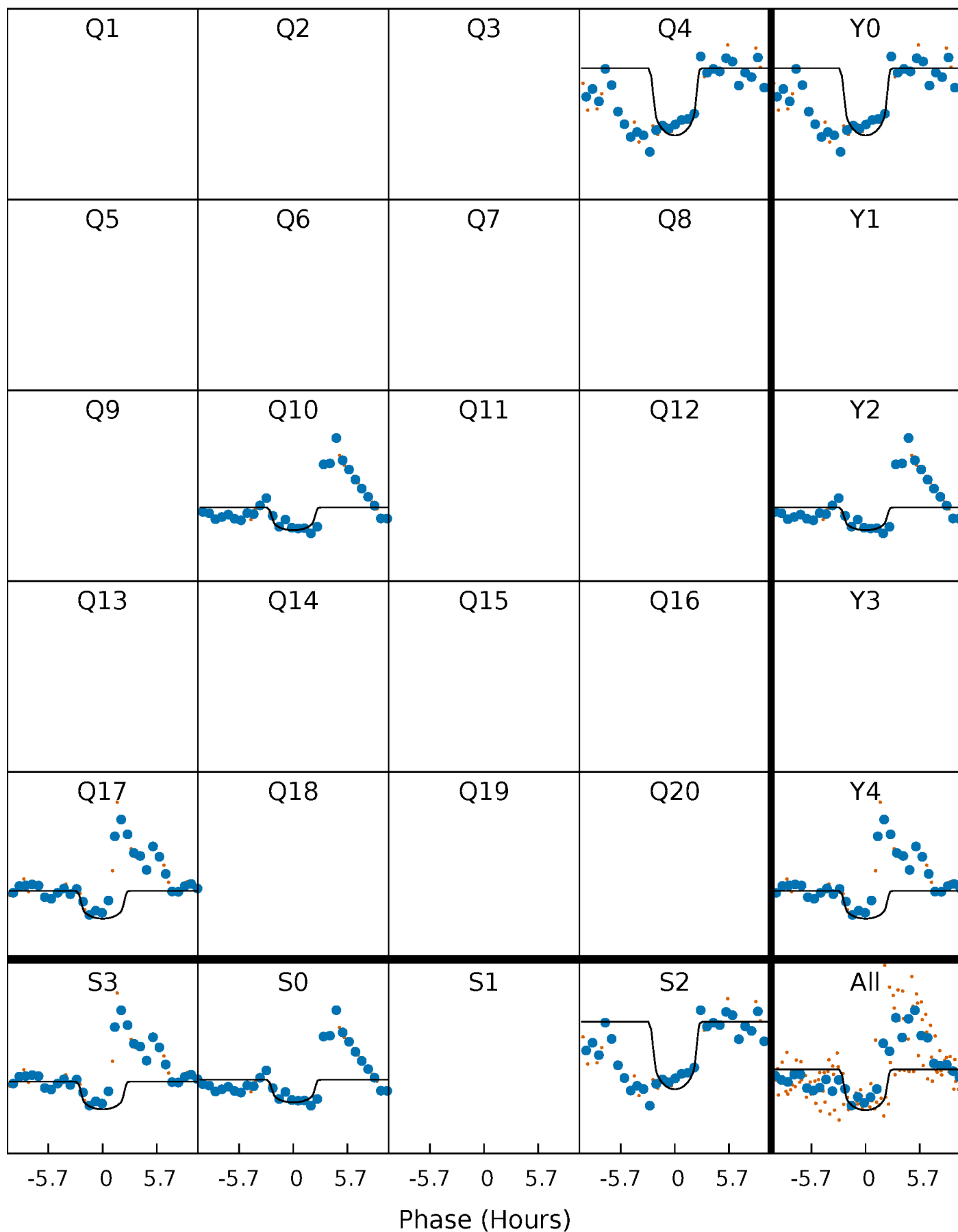
PDC Quarter-Phased Transit Curves

TCE 007264976-02 $P=597.552552$ Days $T_0=375.827115$ (BKJD)



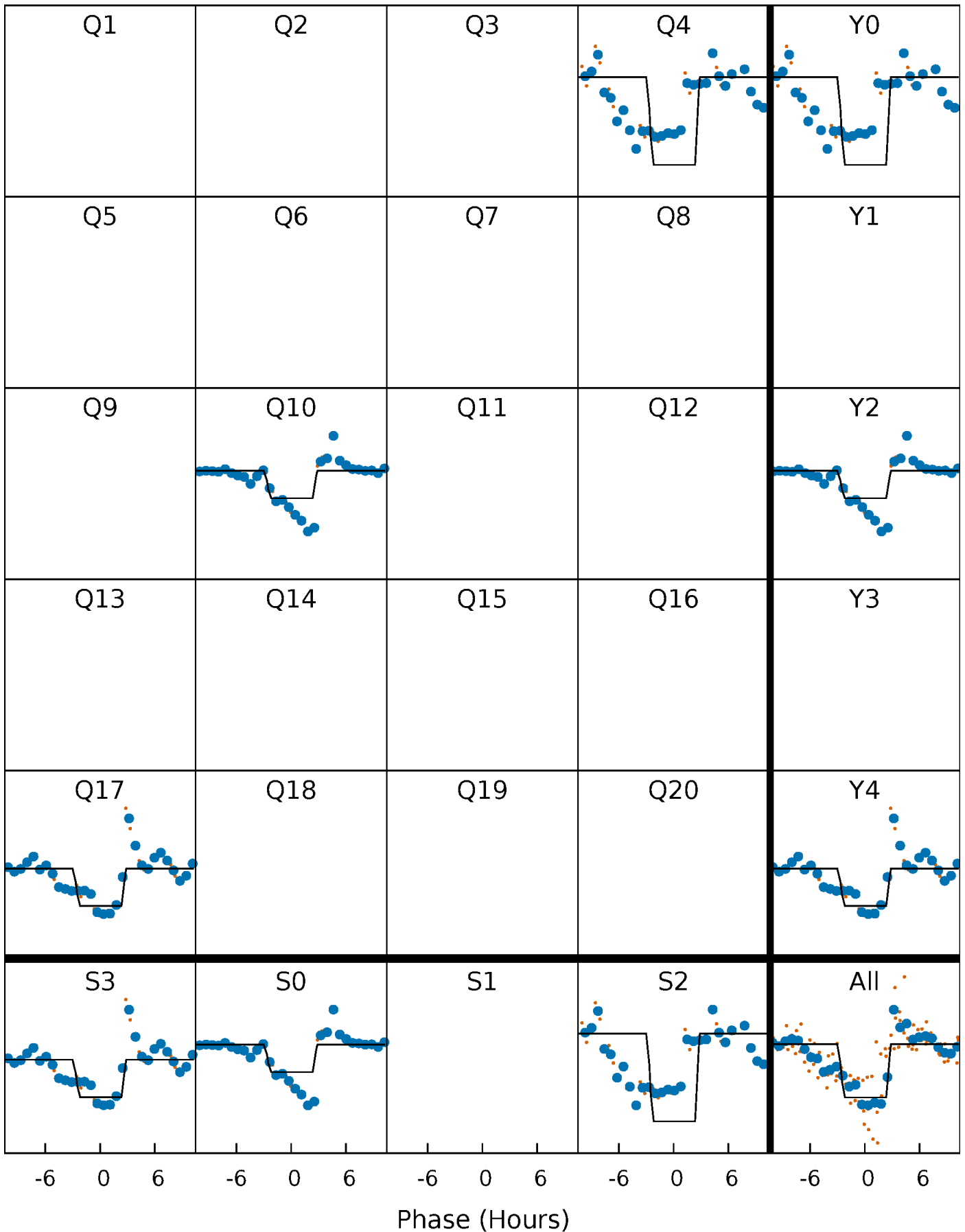
DV Quarter-Phased Transit Curves

TCE 007264976-02 $P=597.552552$ Days $T_0=375.827115$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

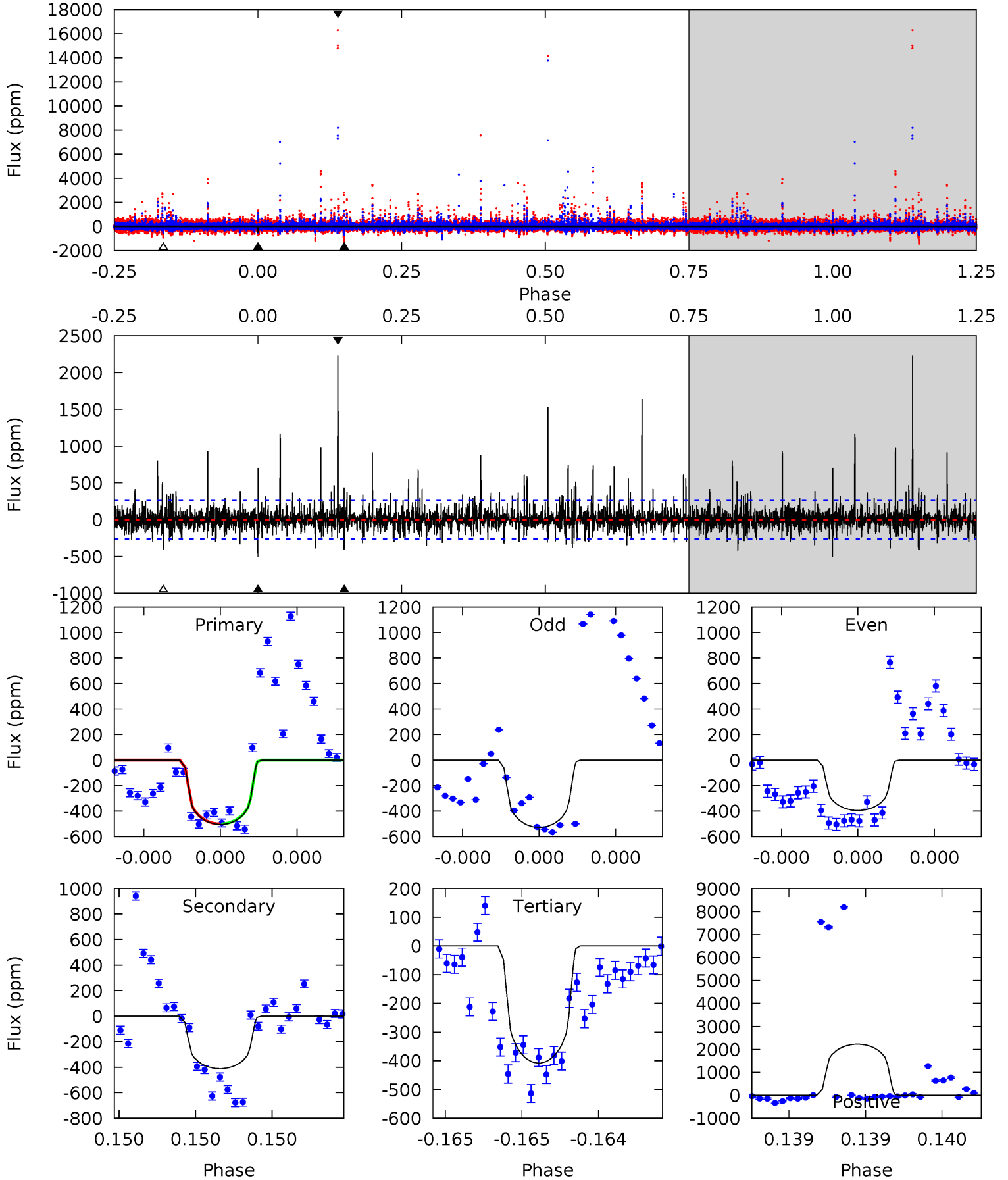
TCE 007264976-02 $P=597.497728$ Days $T_0=375.883514$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-02, P = 597.552552 Days, E = 375.827115 Days

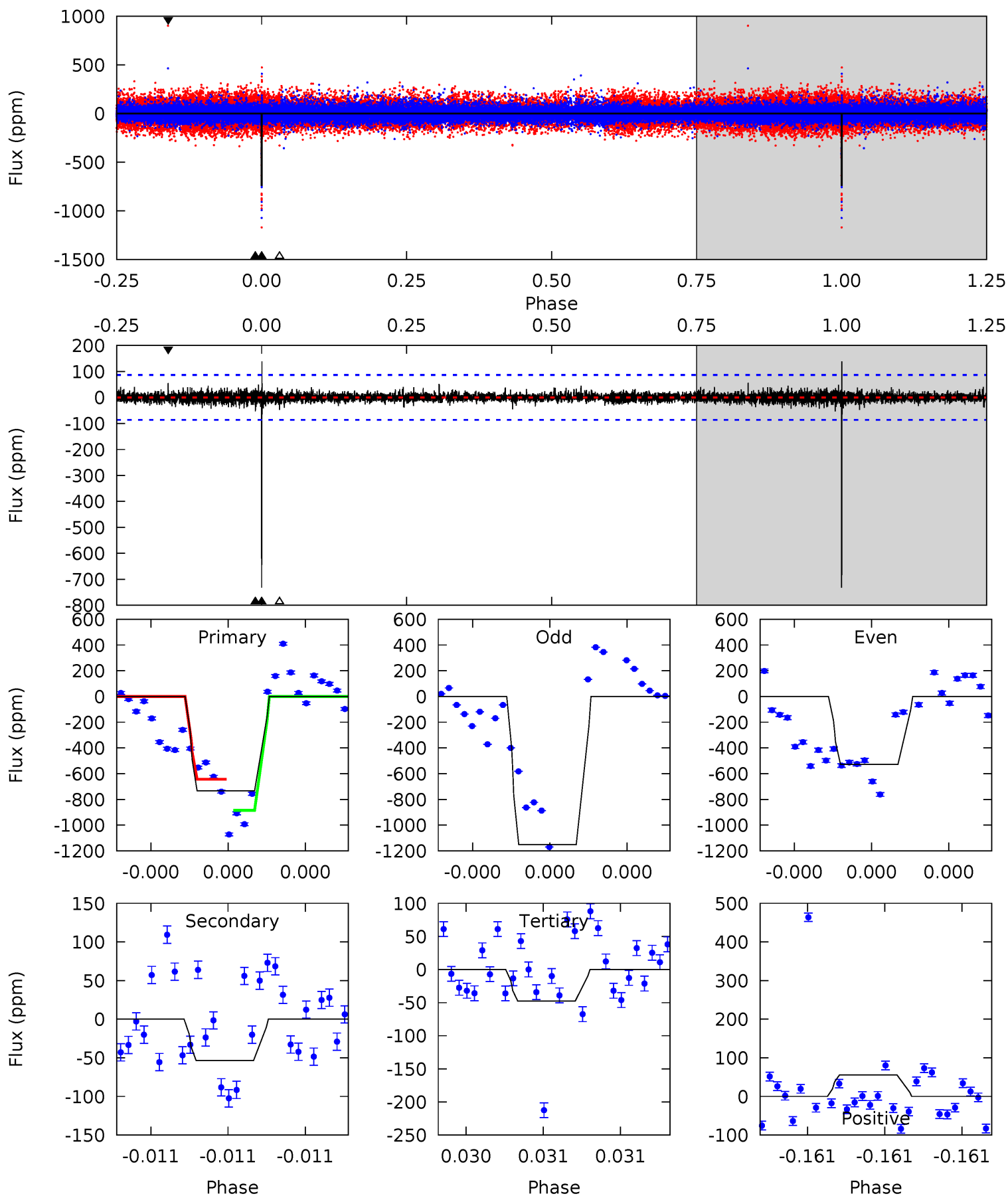
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	8.71	8.65	47.2	5.62	3.56	2.52	2.04	-36.6	0.07	-38.5	0.52	0.61	0.82	0.00



Alt Model-Shift Uniqueness Test

007264976-02, P = 597.497728 Days, E = 375.883514 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
47.6	3.47	3.09	3.62	5.62	3.56	0.60	44.5	44.0	0.38	-0.15	20.2	1.06	0.16	0



Stellar Parameters For KIC 007264976

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-411 ± 47	$5.84^{+3.55}_{-3.38}$	368^{+23}_{-11}	4491^{+2024}_{-736}	12672^{+57424}_{-8044}
Alt.	-53 ± 15	$6.11^{+4.04}_{-3.19}$	367^{+22}_{-11}	3070^{+864}_{-389}	1340^{+5030}_{-867}

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

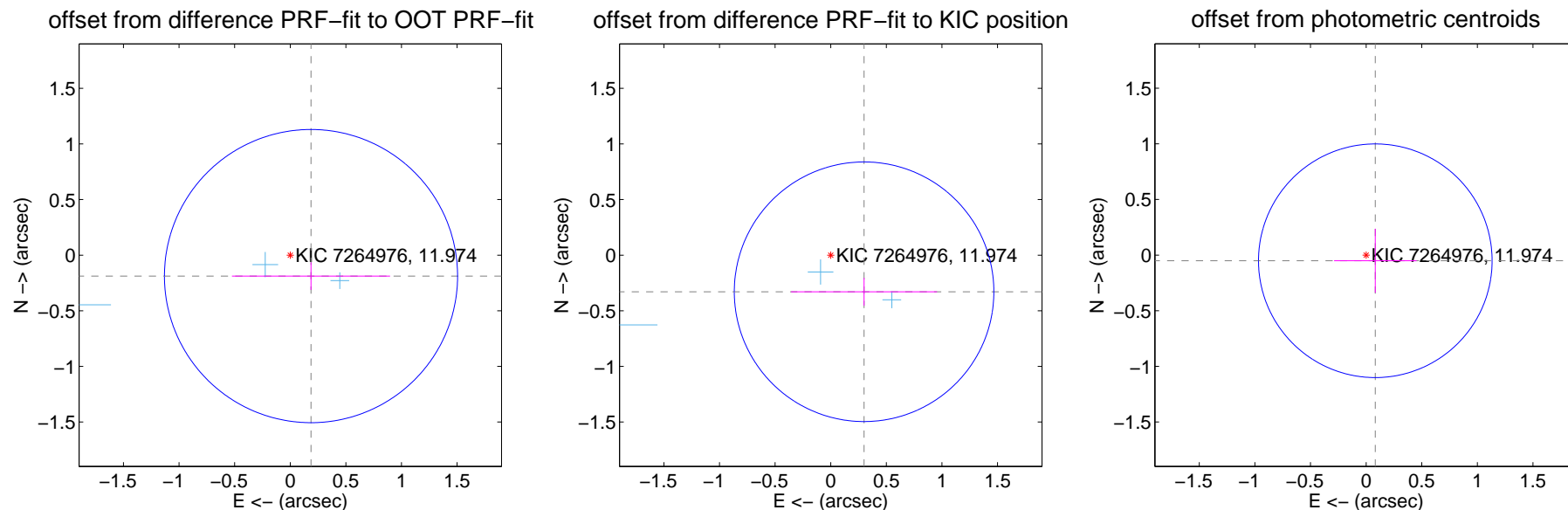
DV Centroid Data

Supplemental centroid analysis for 007264976-02. **Kepler magnitude: 11.97.** Transit SNR 9.36

There are 3 quarters with good PRF difference image offsets

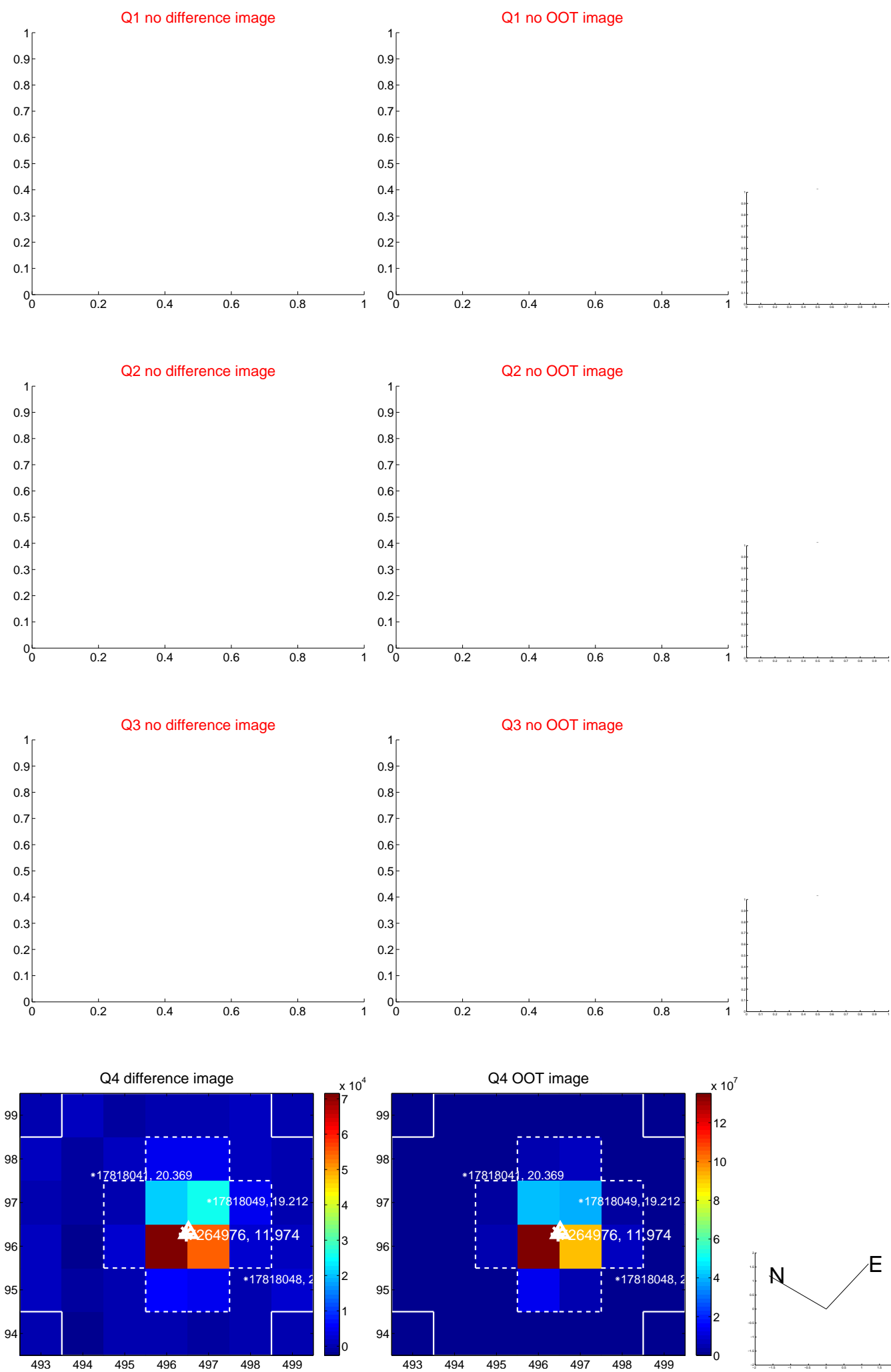
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.265 ± 0.439	0.60	-0.187 ± 0.711	-0.188 ± 0.124
PRF-fit source offset from KIC position	0.445 ± 0.389	1.14	-0.300 ± 0.656	-0.329 ± 0.125
photometric centroid source offset	0.10 ± 0.35	0.28	-0.08 ± 0.37	-0.05 ± 0.29



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

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



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



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

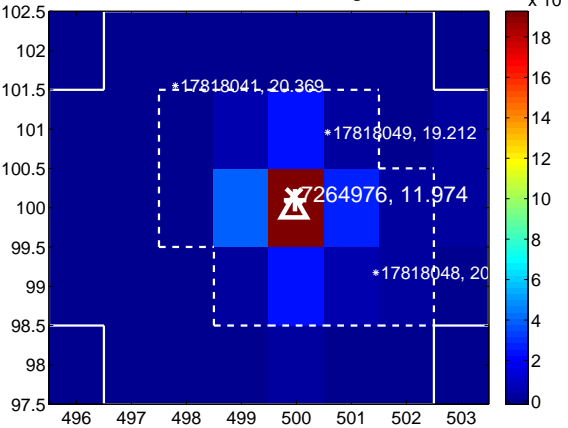
Q9 no difference image



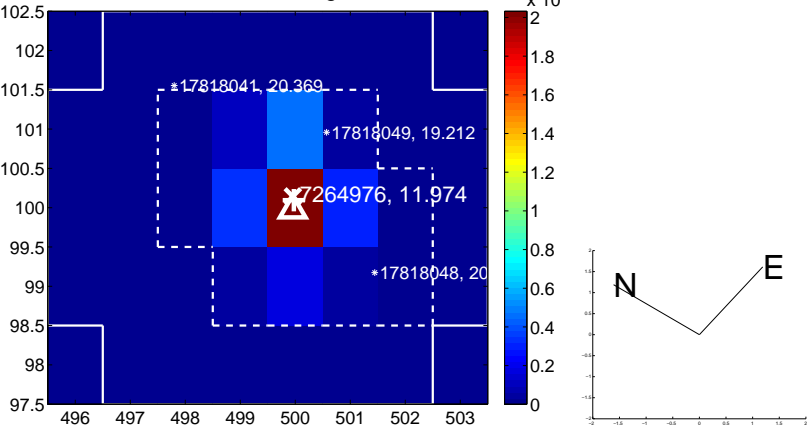
Q9 no OOT image



Q10 difference image



Q10 OOT image



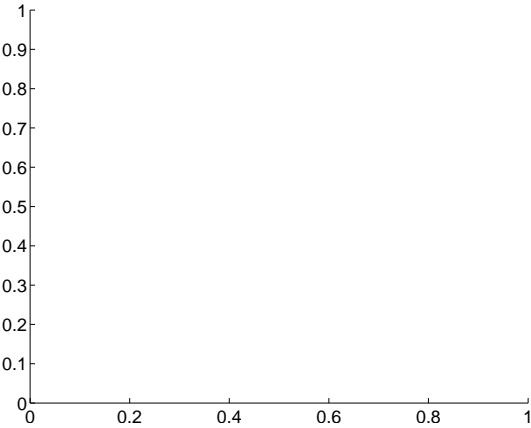
Q11 no difference image



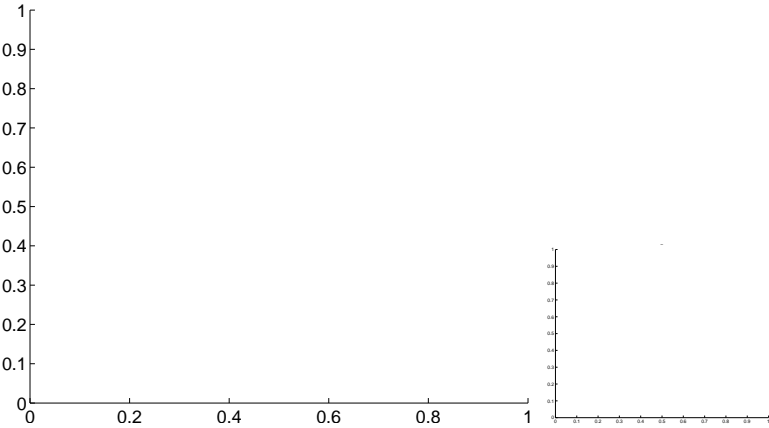
Q11 no OOT image



Q12 no difference image



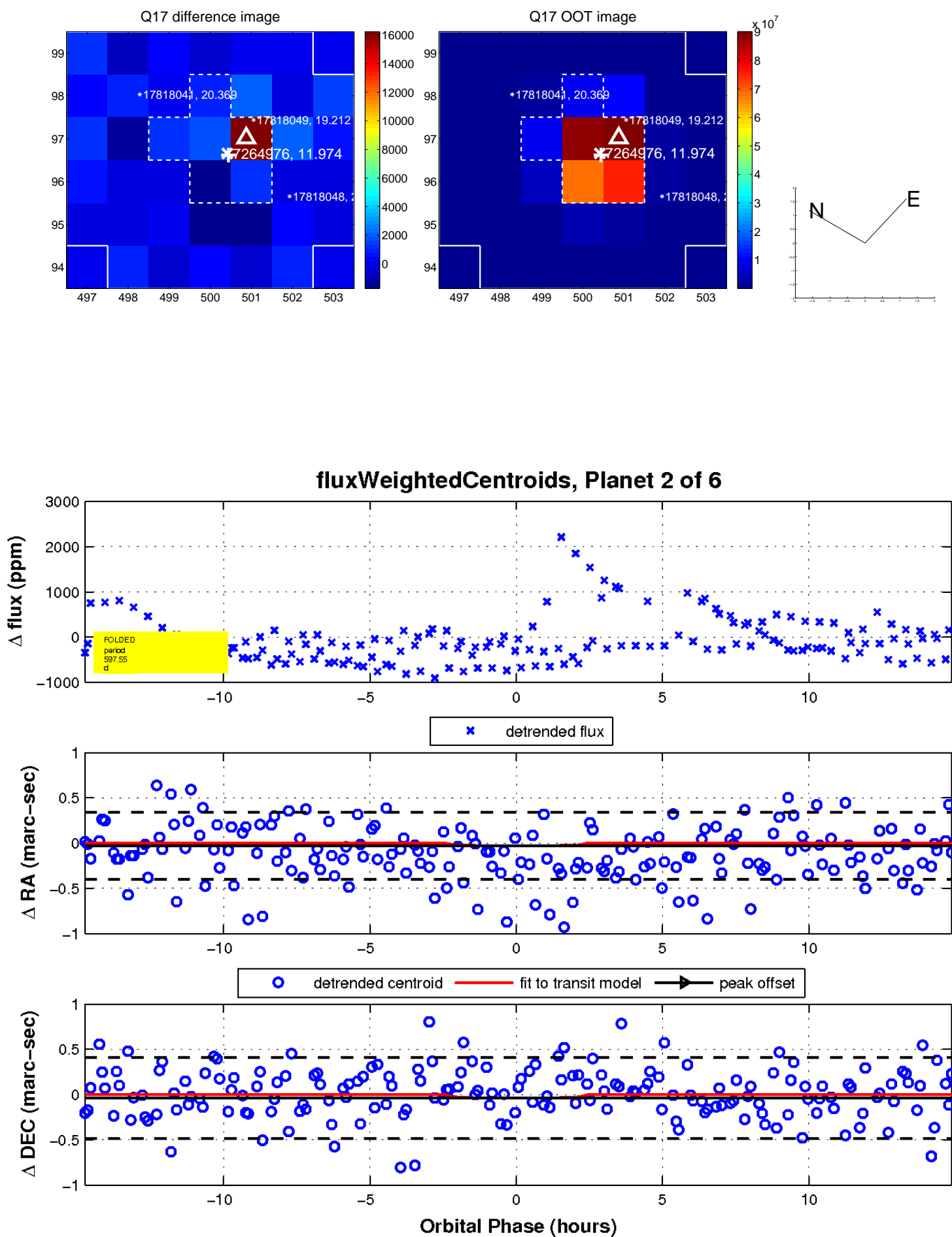
Q12 no OOT image



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

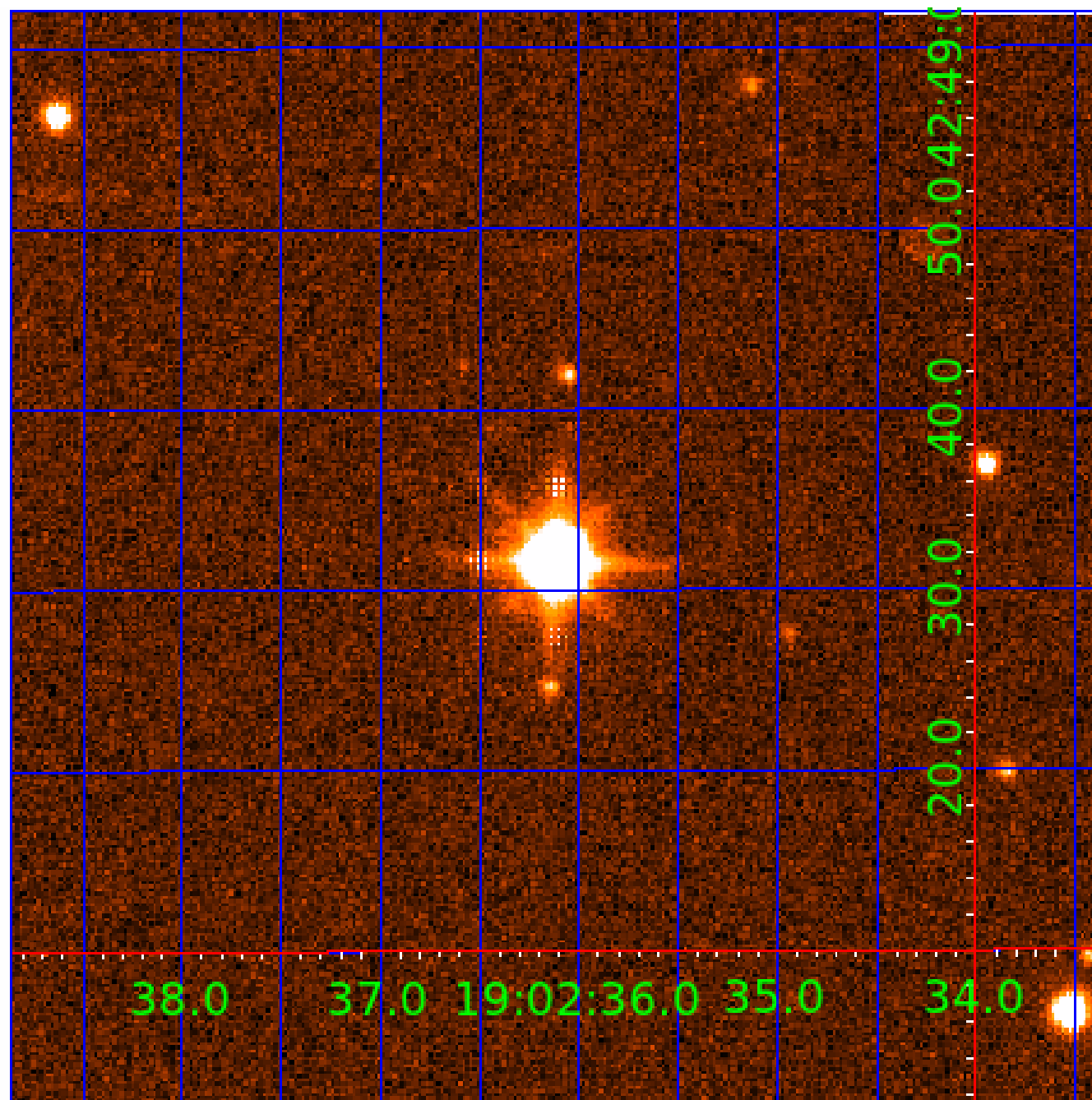


white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
007264976-02	OBS	No	597.552552	375.827115	585.7	5.011	14.3	9.4	1.85	5038	5.03	1.09
007264976-03	OBS	No	478.058684	296.788410	563.7	3.840	19.7	7.9	1.85	5038	4.73	1.47
007264976-04	OBS	No	513.376449	300.623445	487.7	5.542	15.2	7.3	1.85	5038	4.58	1.34
007264976-05	OBS	No	298.867213	265.577238	583.5	4.368	18.6	9.5	1.85	5038	4.40	2.75
007264976-06	OBS	No	213.790501	274.634459	318.0	4.500	14.3	-1.0	1.85	5038	3.20	4.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

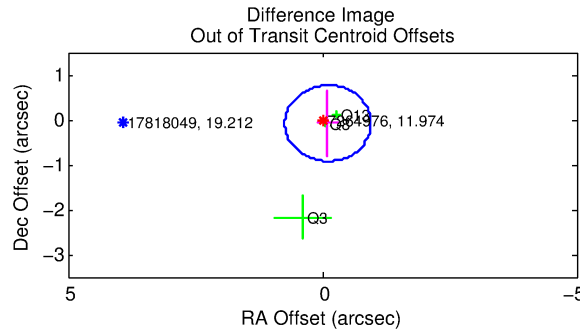
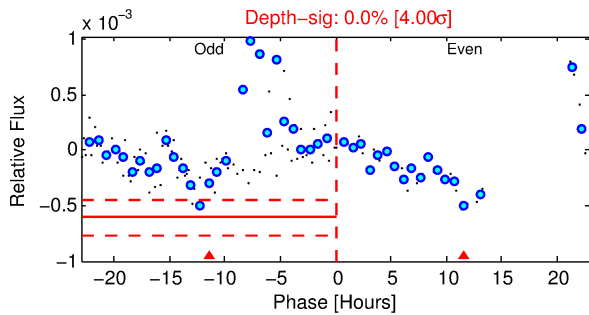
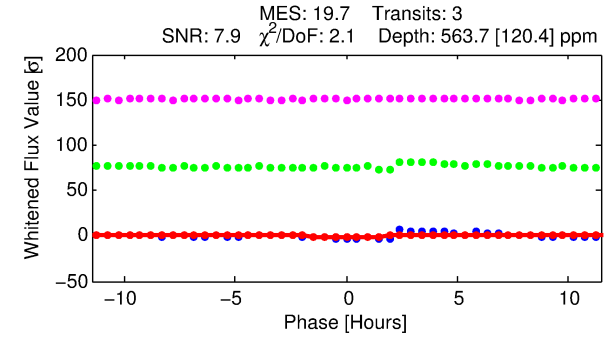
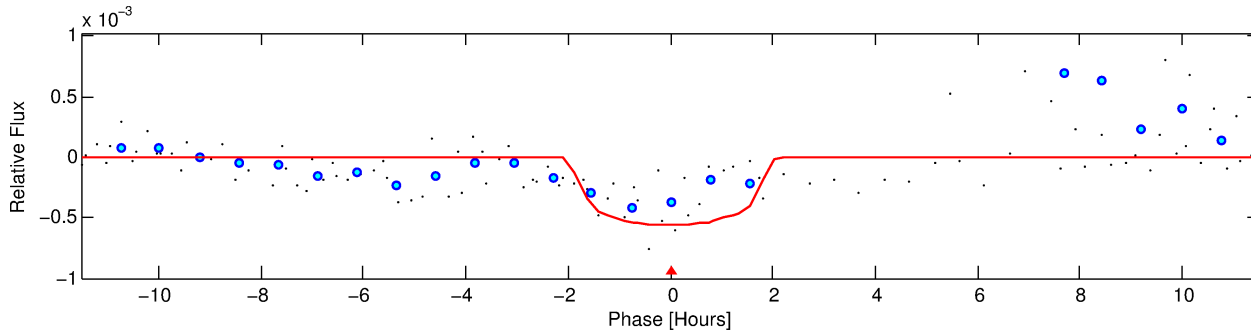
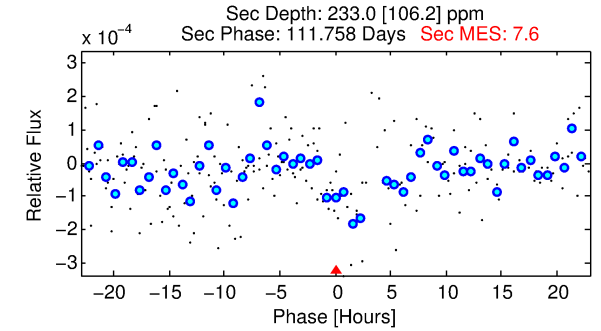
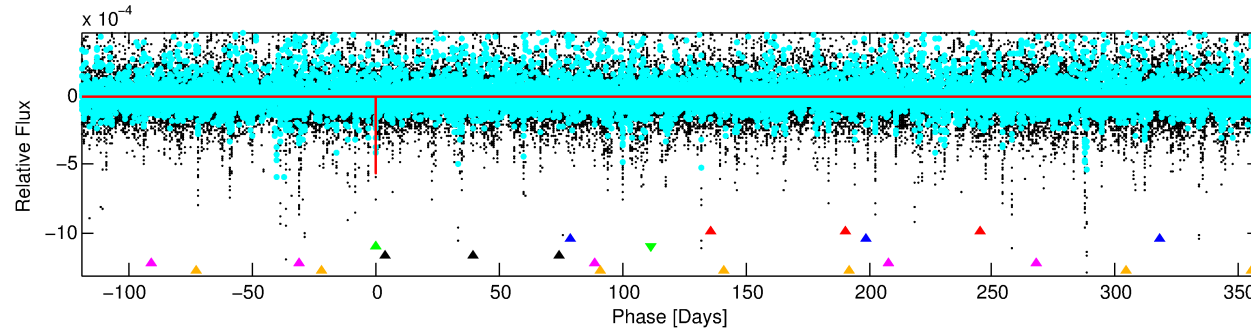
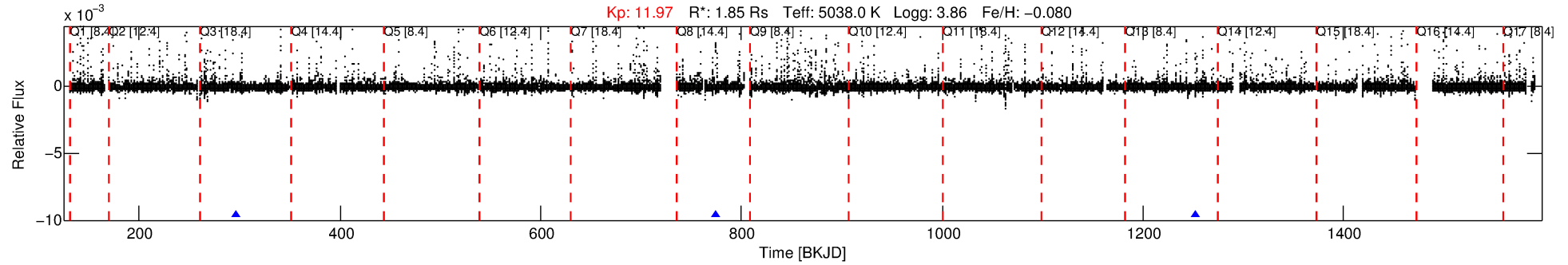
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-03

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 3 of 6 Period: 478.059 d



DV Fit Results:

Period = 478.05868 [0.00588] d
Epoch = 296.7884 [0.0075] BKJD
 $R_p/R^* = 0.0235$ [0.0341]
 $a/R^* = 686.26$ [3574.12]
 $b = 0.73$ [3.47]
 $\text{Seff} = 1.47$ [0.43]
 $T_{\text{eq}} = 281$ [21] K
 $R_p = 4.73$ [6.98] R_e
 $a = 1.1566$ [0.2389] AU
 $A_g = 7676.97$ [22697.98] [0.34 σ]
 $T_{\text{eff}} = 4064$ [2990] K [1.27 σ]

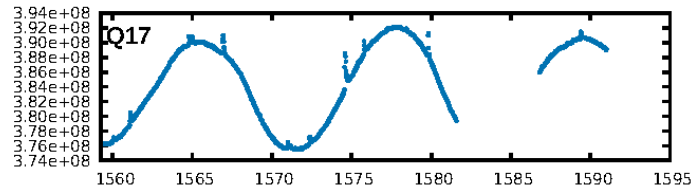
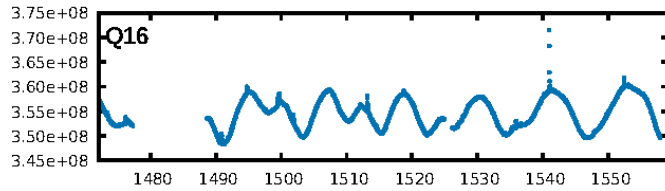
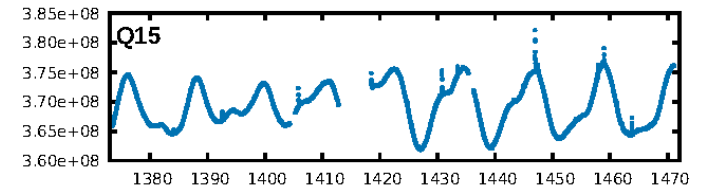
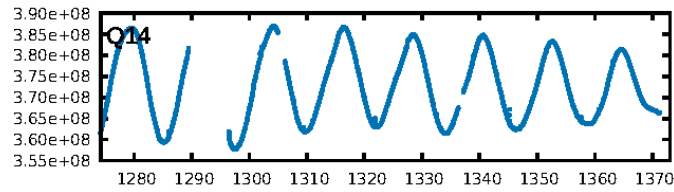
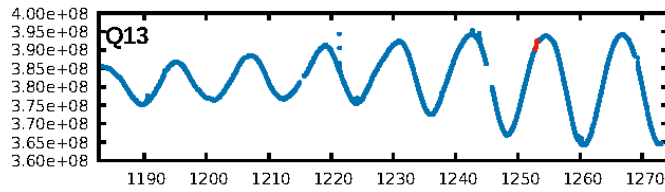
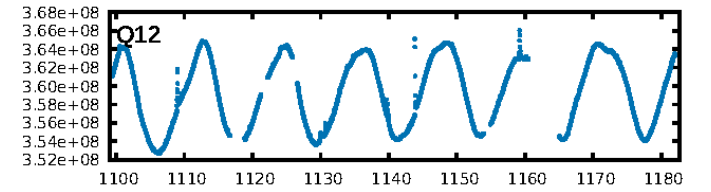
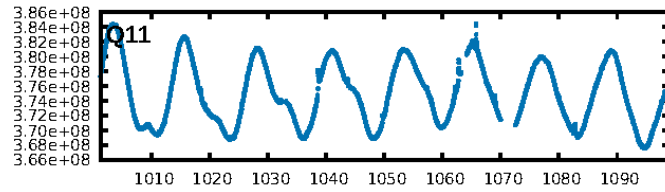
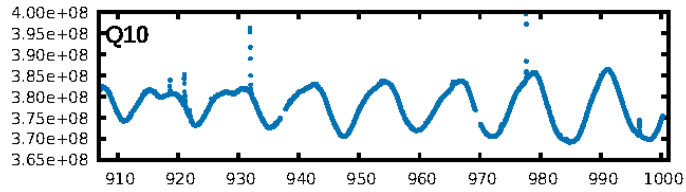
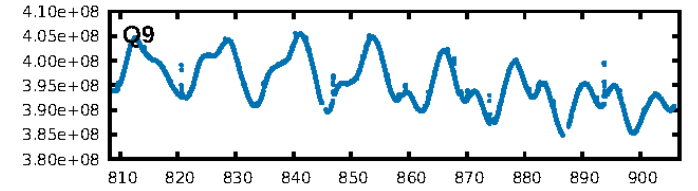
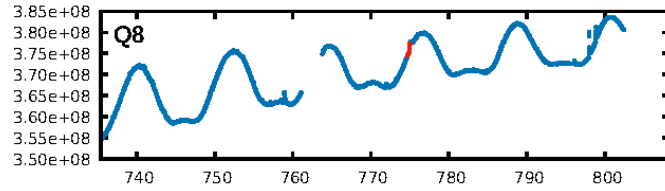
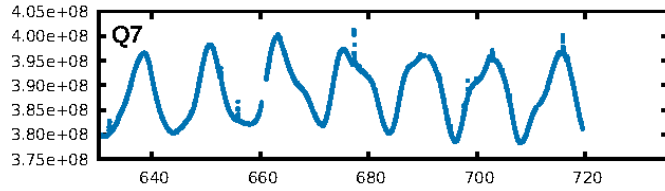
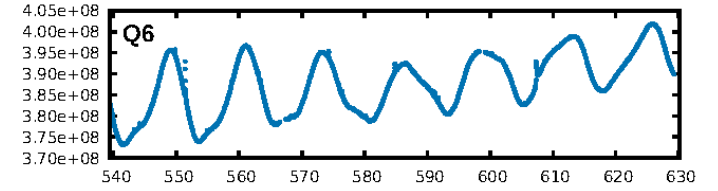
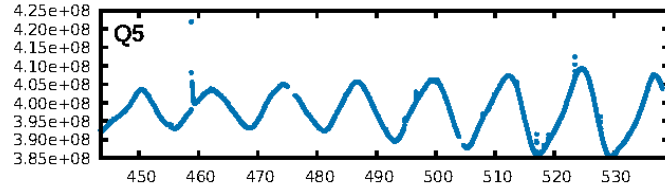
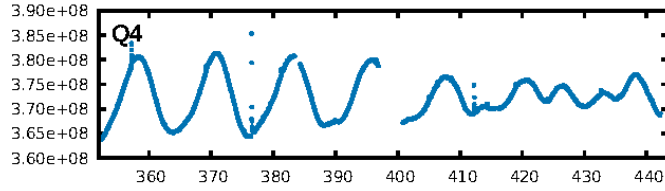
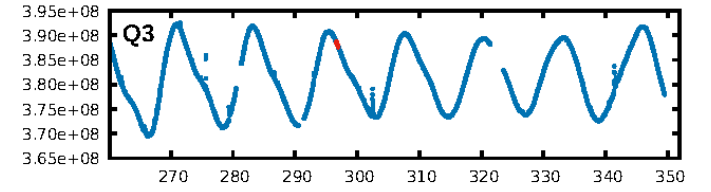
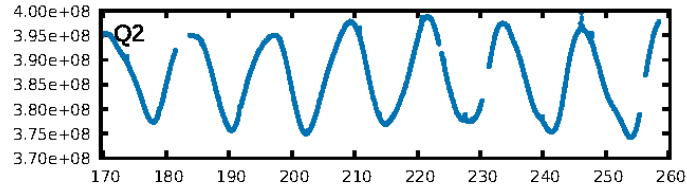
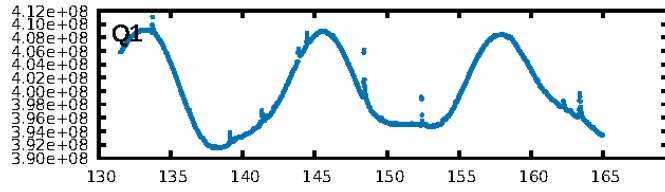
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [739.50 σ]
LongPeriod-sig: 100.0% [125.73 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 4.4%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.703
Centroid-sig: 16.7%
Centroid-so: 0.369 arcsec [0.88 σ]
OotOffset-rm: 0.133 arcsec [0.47 σ]
OotOffset-st: 0/1/1/1 [3]
KicOffset-rm: 0.308 arcsec [1.26 σ]
KicOffset-st: 0/1/1/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

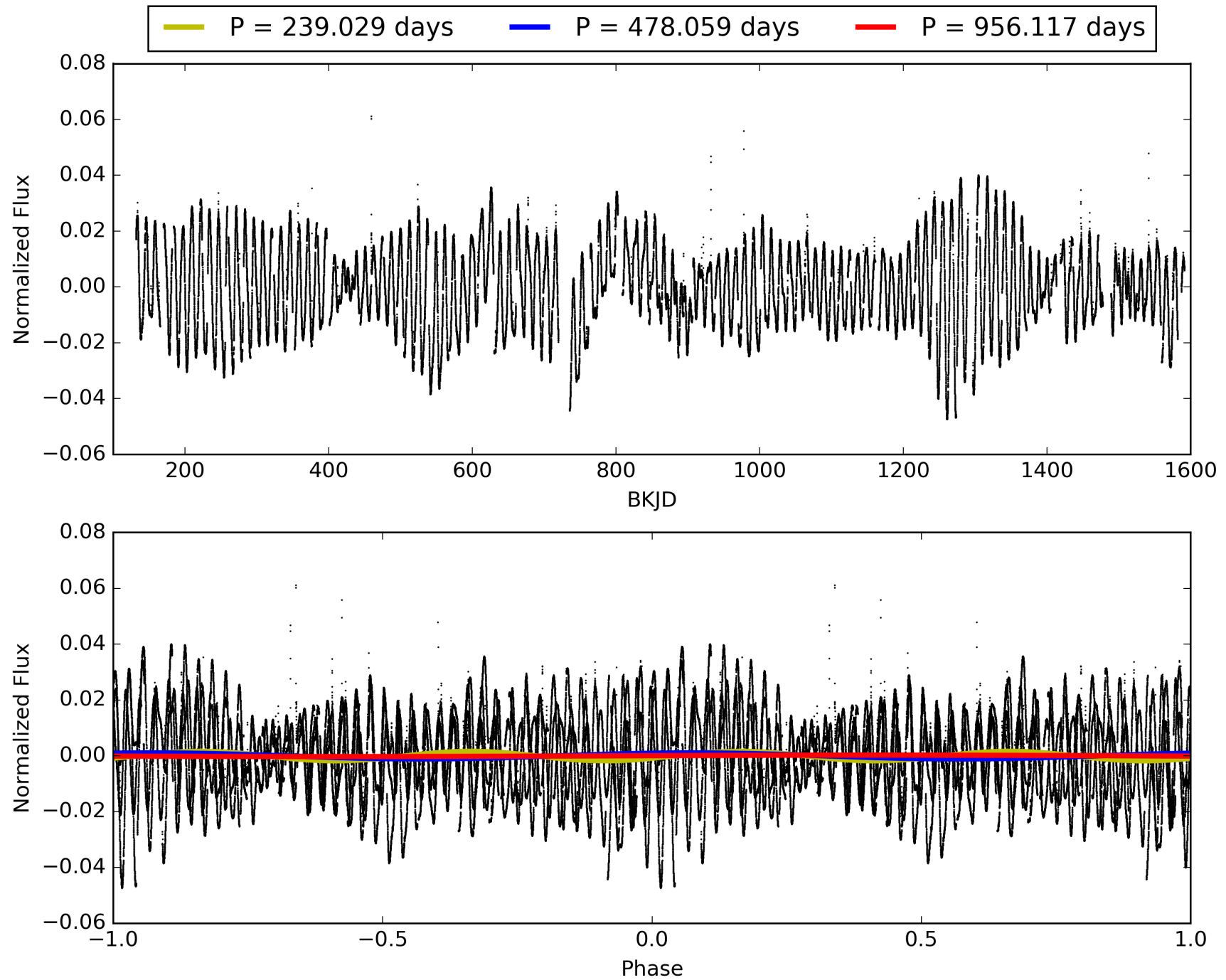
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:49:52 Z

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

TCE 007264976-03, PDC Light Curves

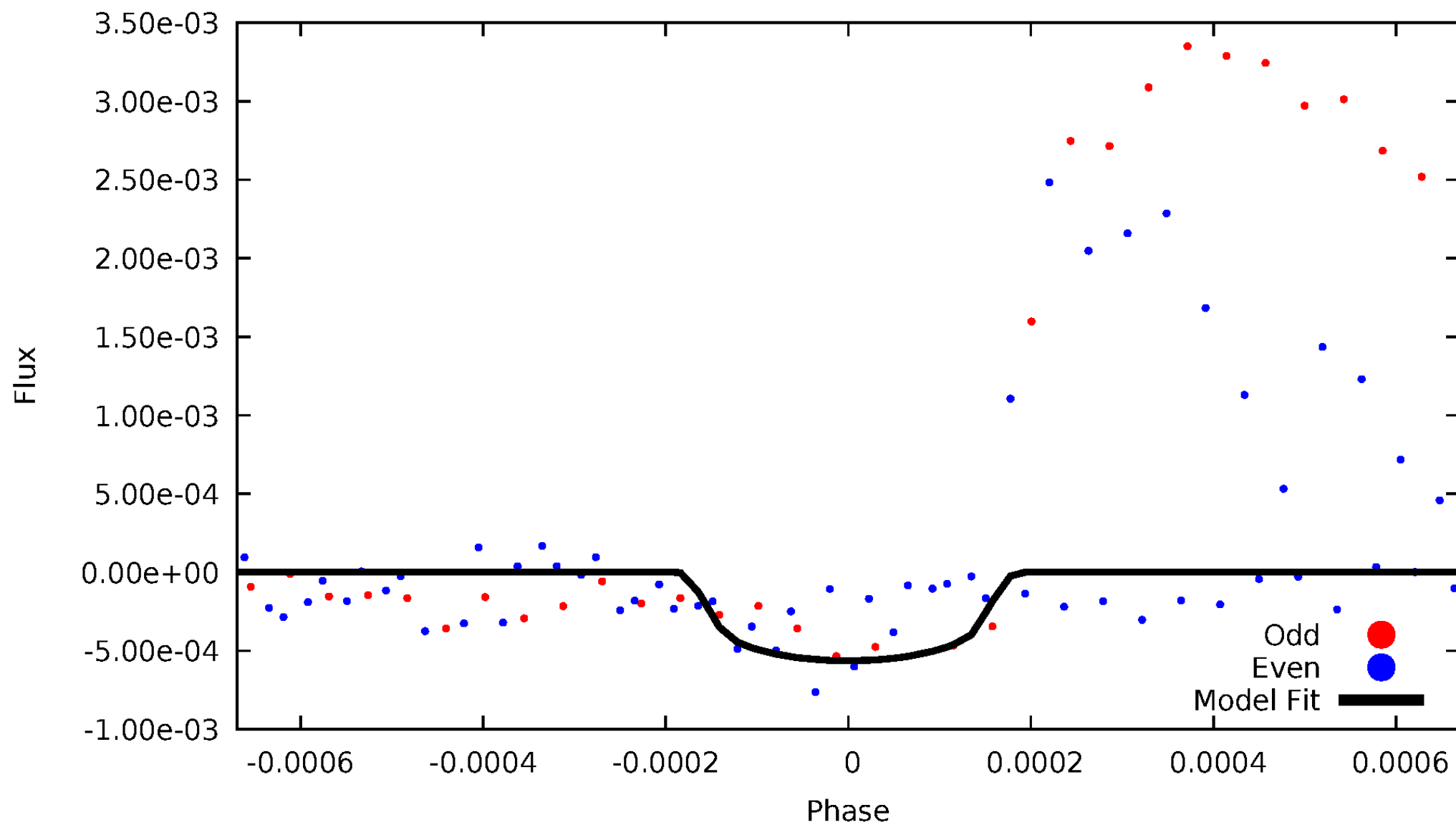


TCE 007264976-03



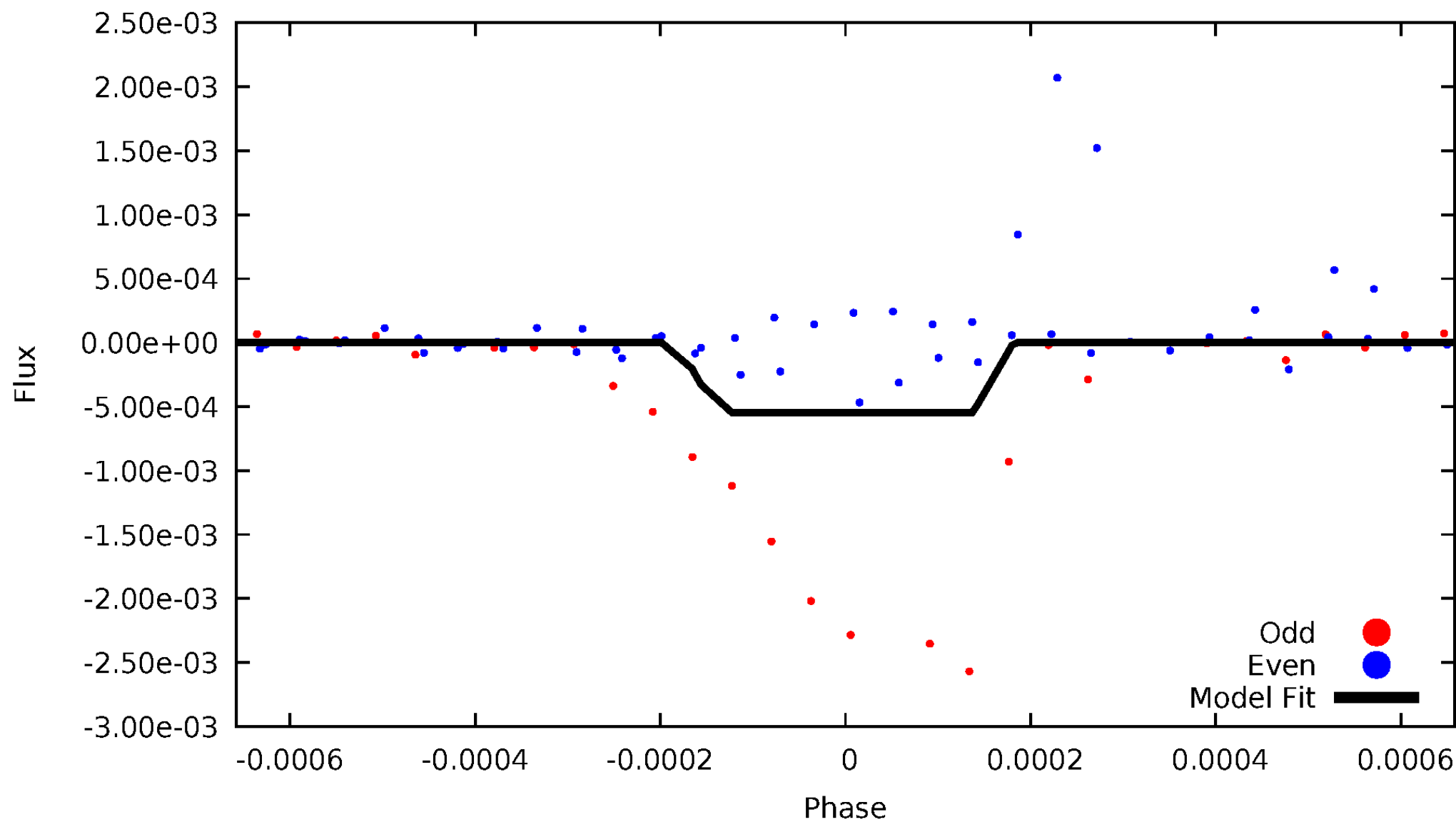
DV Odd/Even

TCE 007264976-03



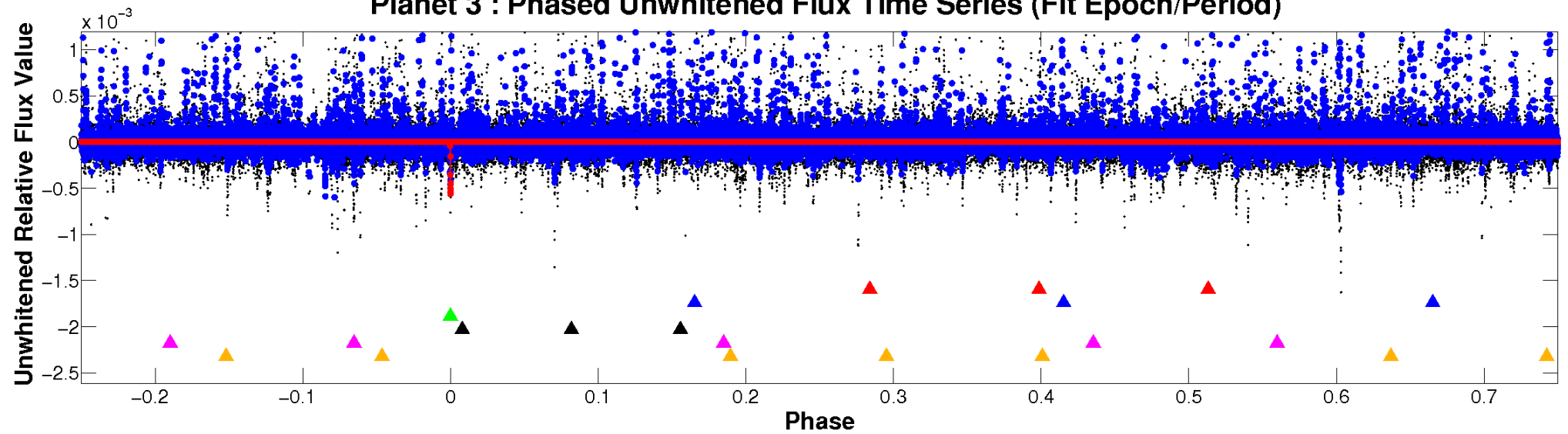
ALT Odd/Even

TCE 007264976-03

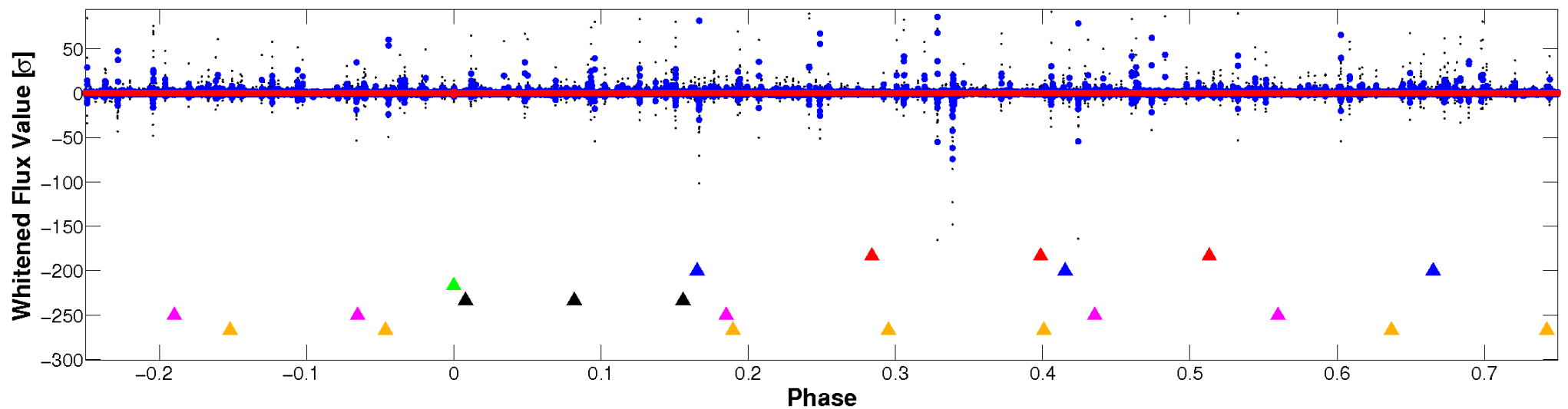


Non-Whitened Vs. Whitened Light Curve

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

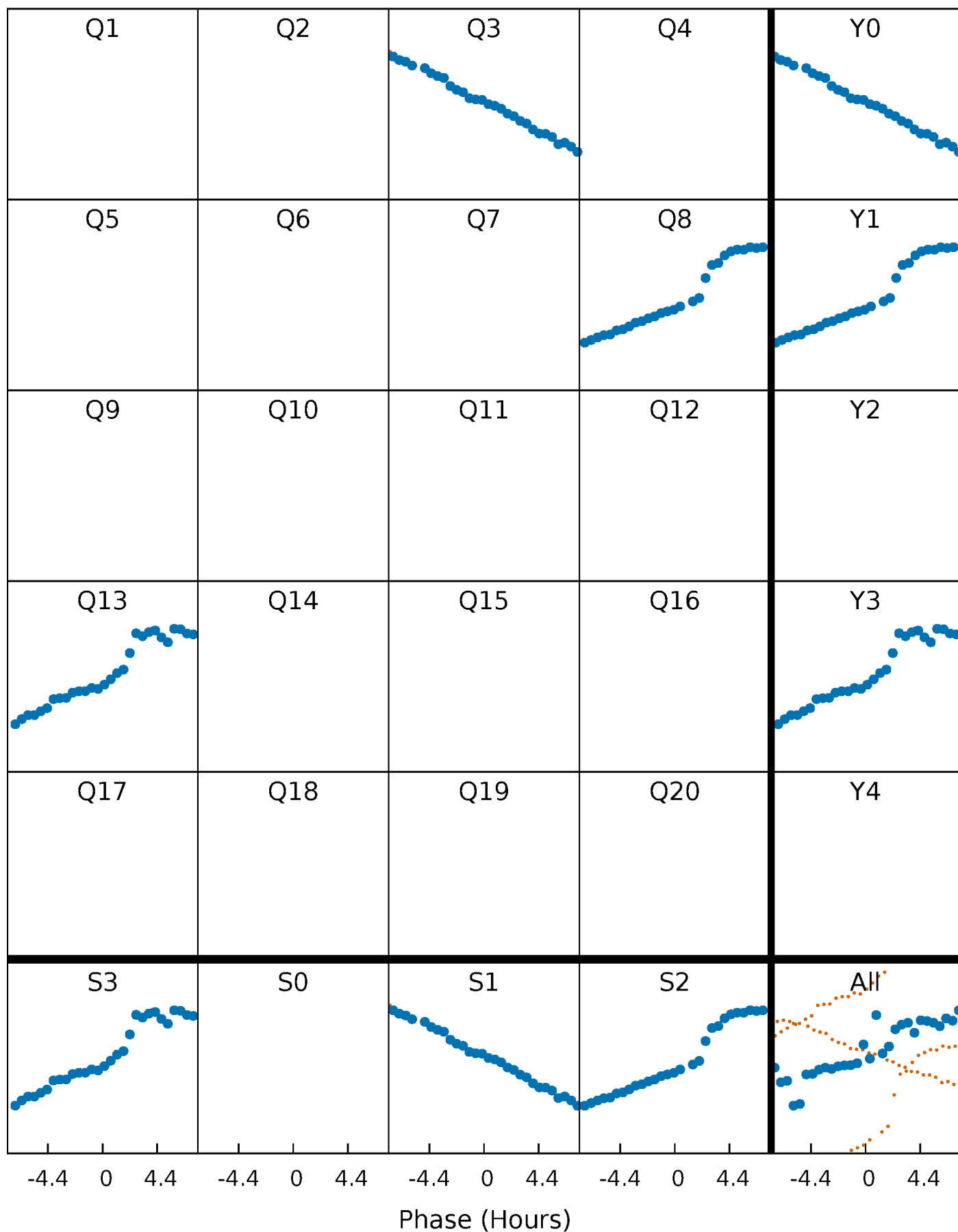


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



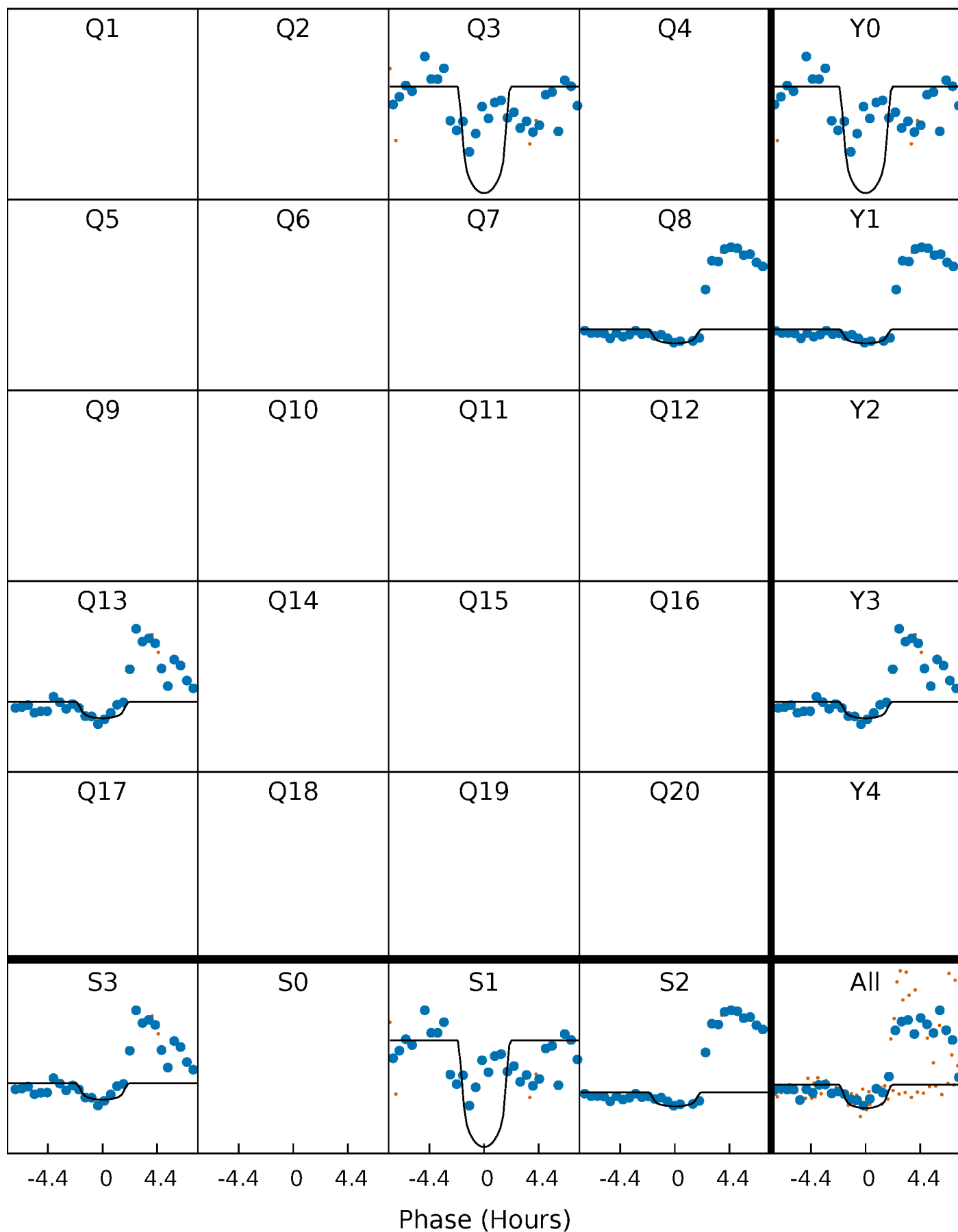
PDC Quarter-Phased Transit Curves

TCE 007264976-03 P=478.058684 Days $T_0=296.788410$ (BKJD)



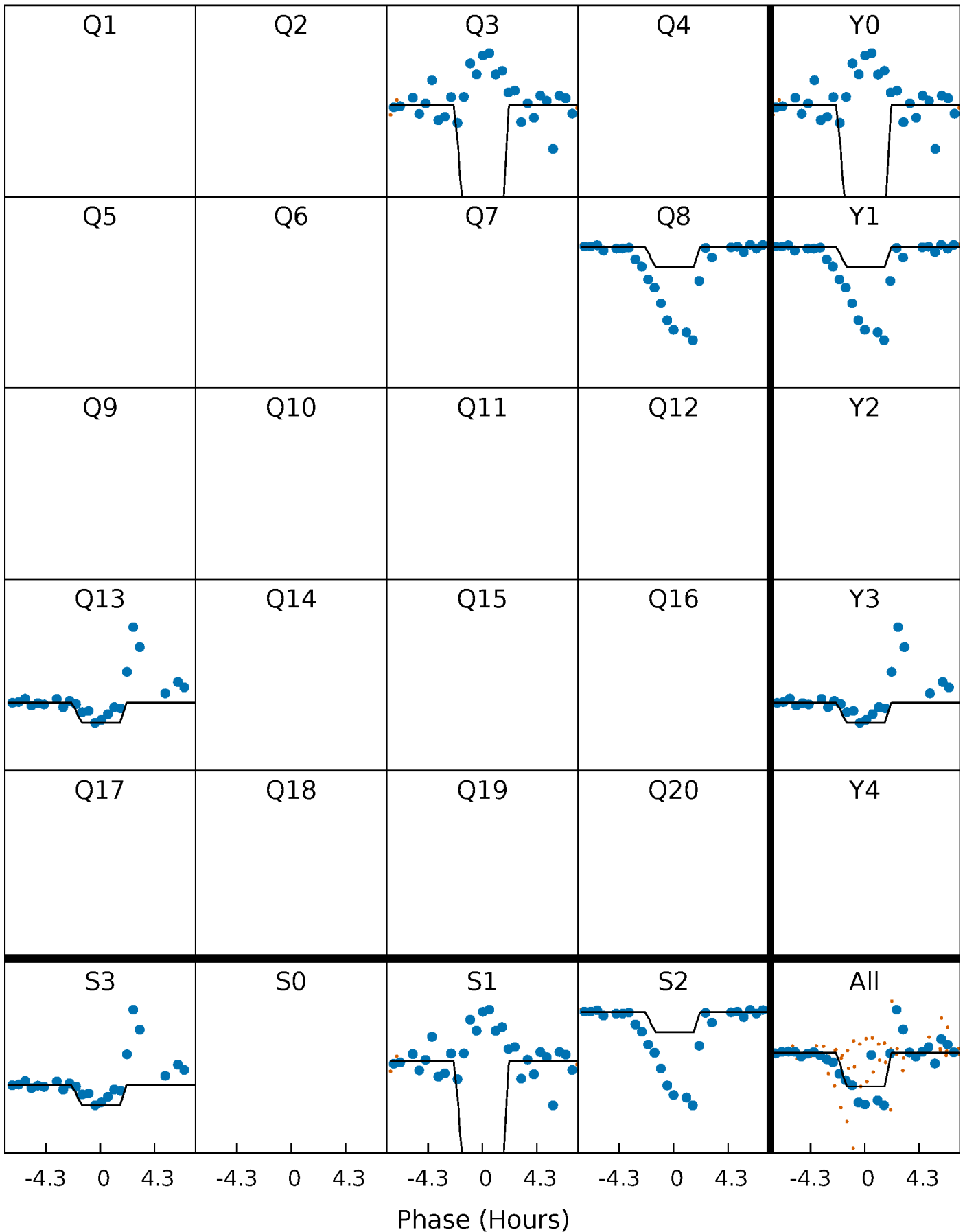
DV Quarter-Phased Transit Curves

TCE 007264976-03 $P=478.058684$ Days $T_0=296.788410$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

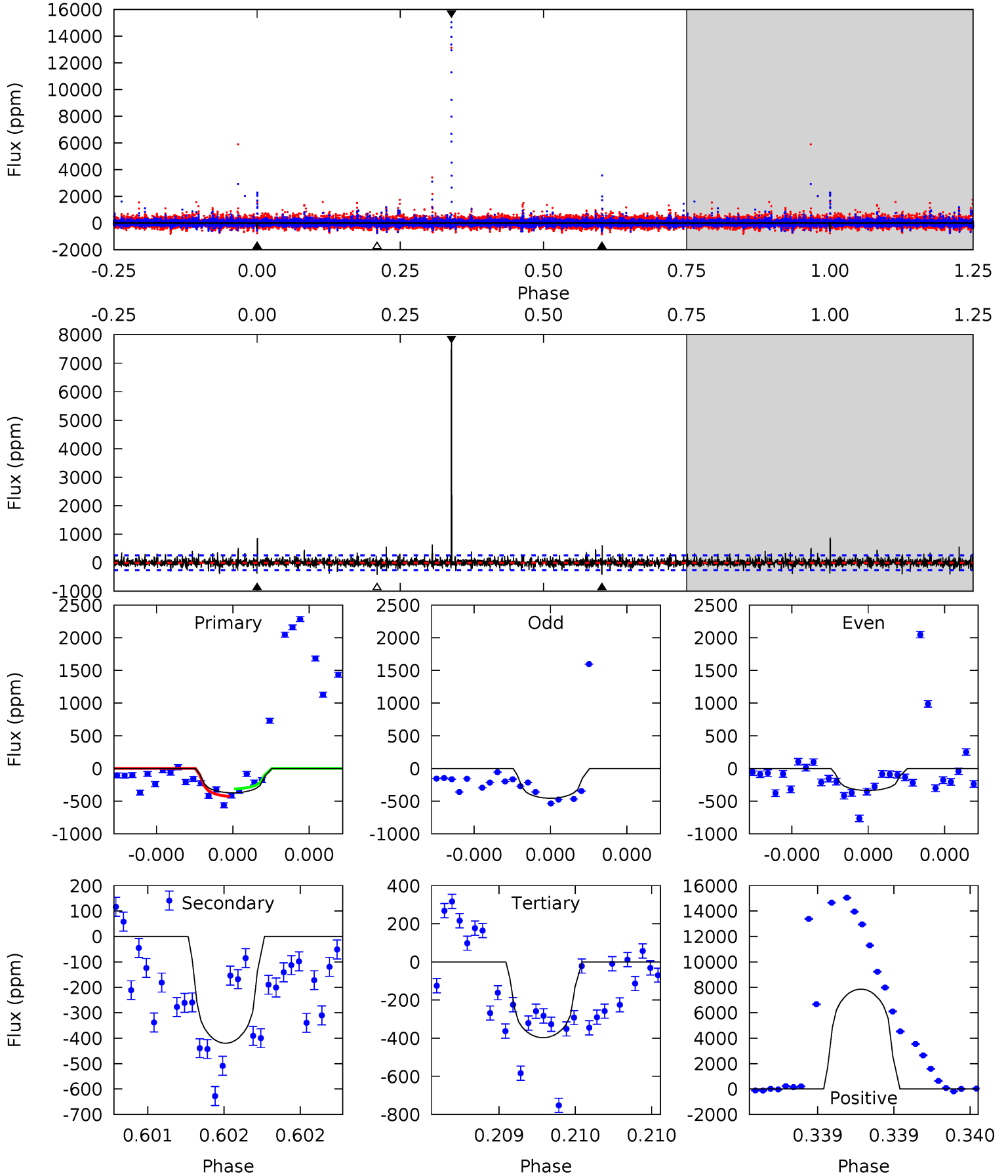
TCE 007264976-03 P=478.043136 Days $T_0=296.815424$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-03, P = 478.058684 Days, E = 296.788410 Days

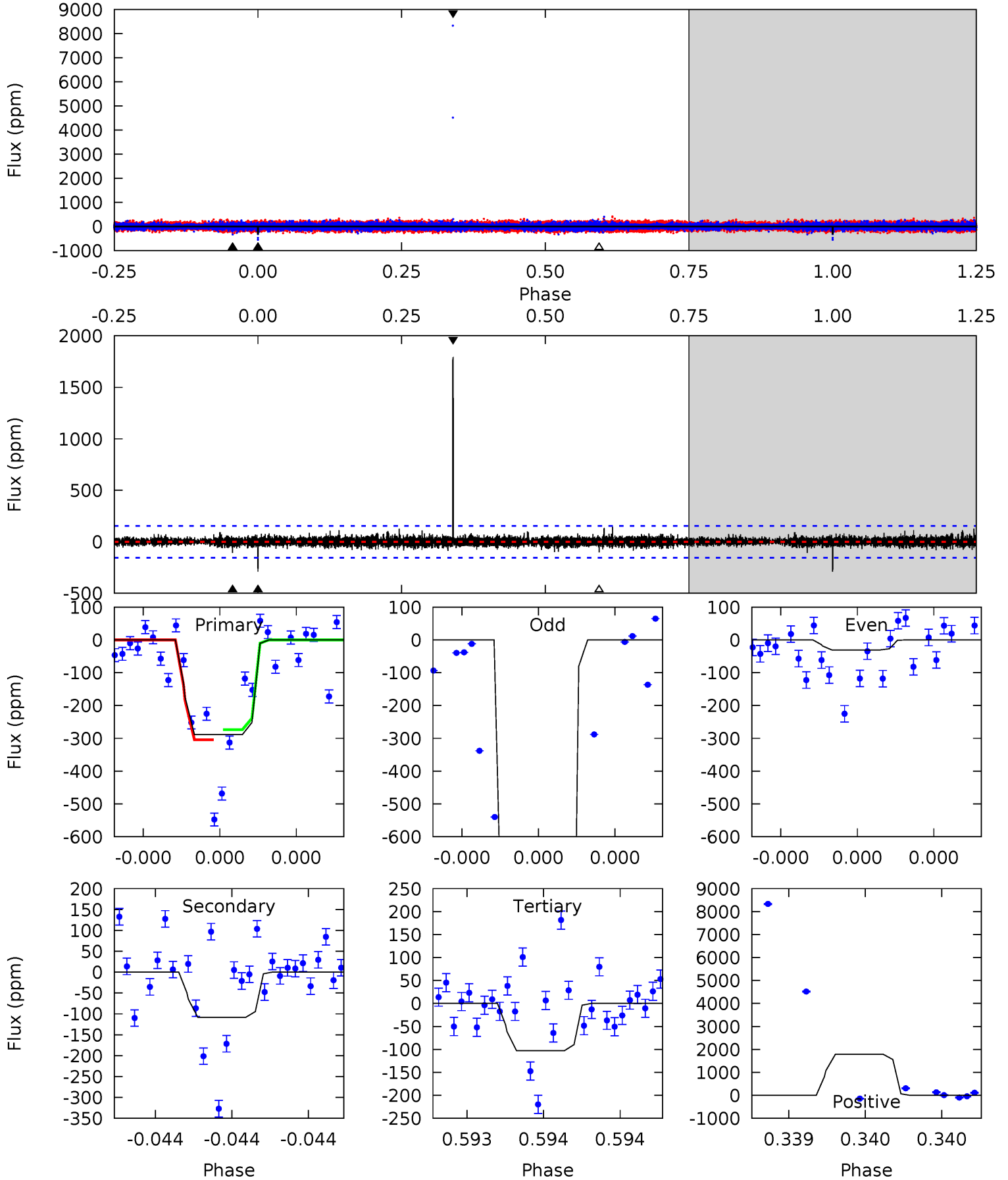
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.03	9.06	8.58	169.6	5.62	3.56	3.08	-0.55	-161.6	0.48	-160.5	0.44	0.82	0.95	1.24



Alt Model-Shift Uniqueness Test

007264976-03, P = 478.043136 Days, E = 296.815424 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	3.95	3.75	65.2	5.64	3.58	1.02	6.79	-54.7	0.20	-61.3	56.9	2.44	0.86	0.56



Stellar Parameters For KIC 007264976

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-420 ± 46	$7.54^{+6.10}_{-4.81}$	397^{+22}_{-13}	4095^{+2125}_{-763}	5645^{+36382}_{-3997}
Alt.	-108 ± 27	$7.30^{+6.57}_{-4.45}$	397^{+19}_{-12}	3260^{+1195}_{-528}	1500^{+8294}_{-1086}

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

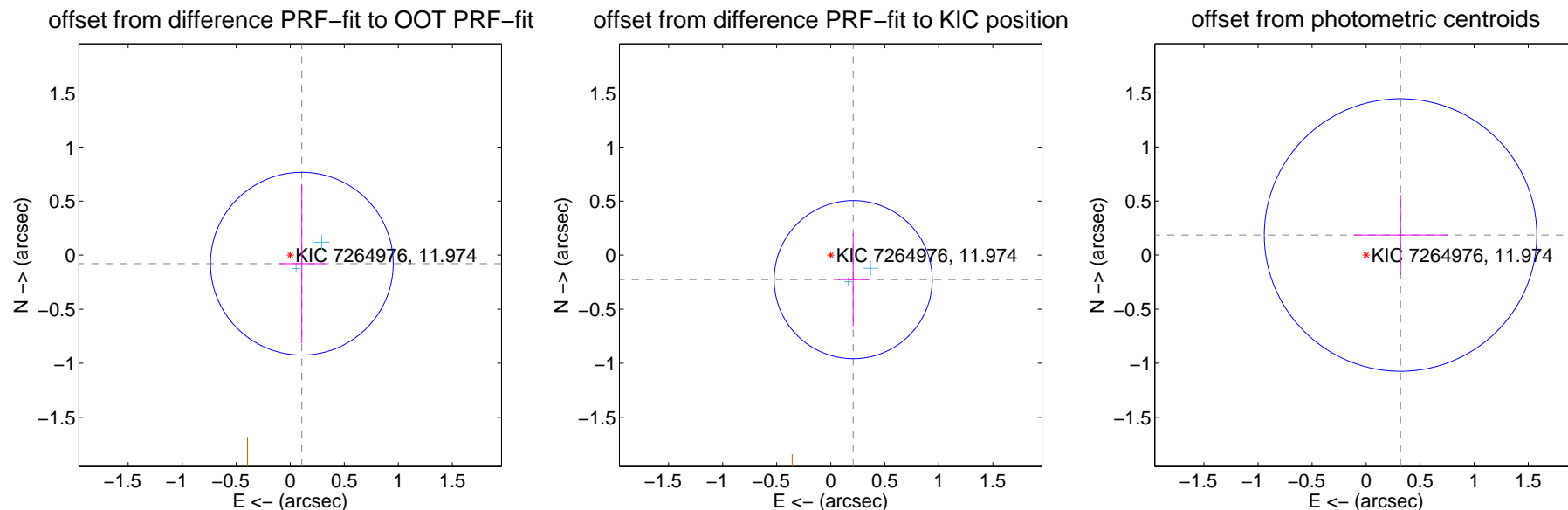
DV Centroid Data

Supplemental centroid analysis for 007264976-03. **Kepler magnitude: 11.97.** Transit SNR 7.93

There are 2 quarters with good PRF difference image offsets

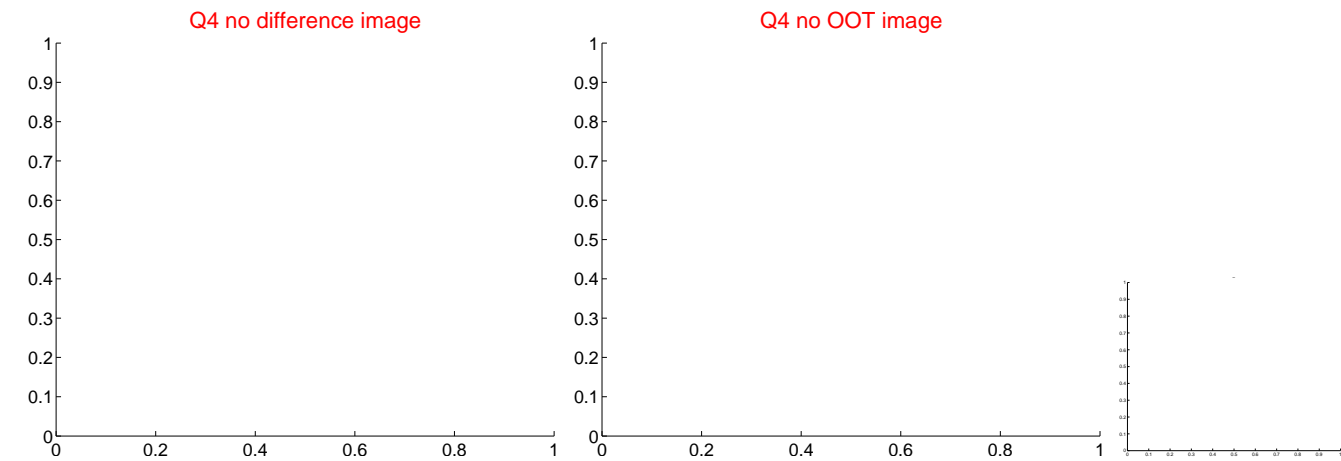
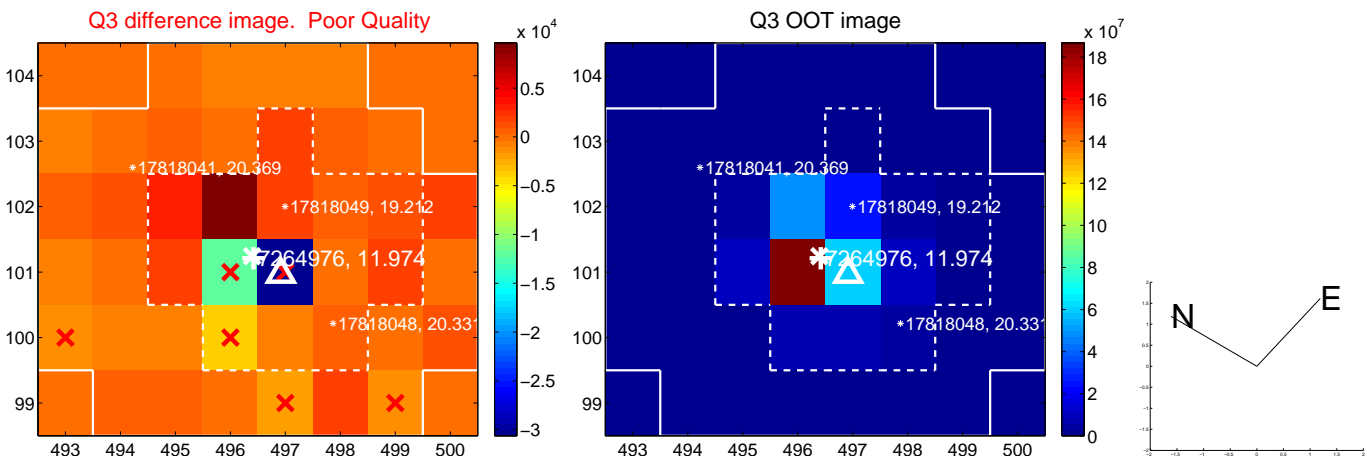
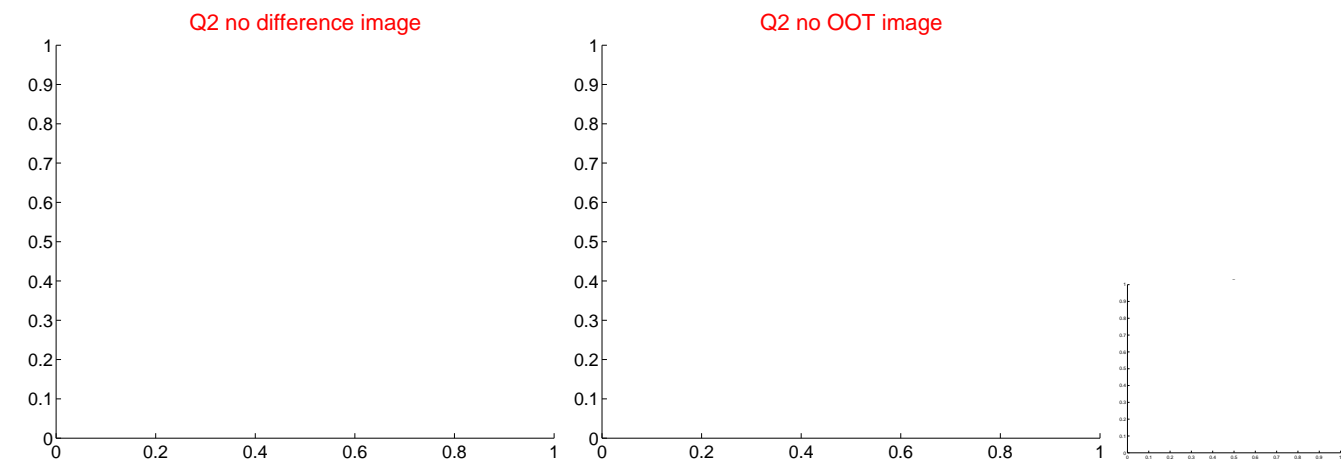
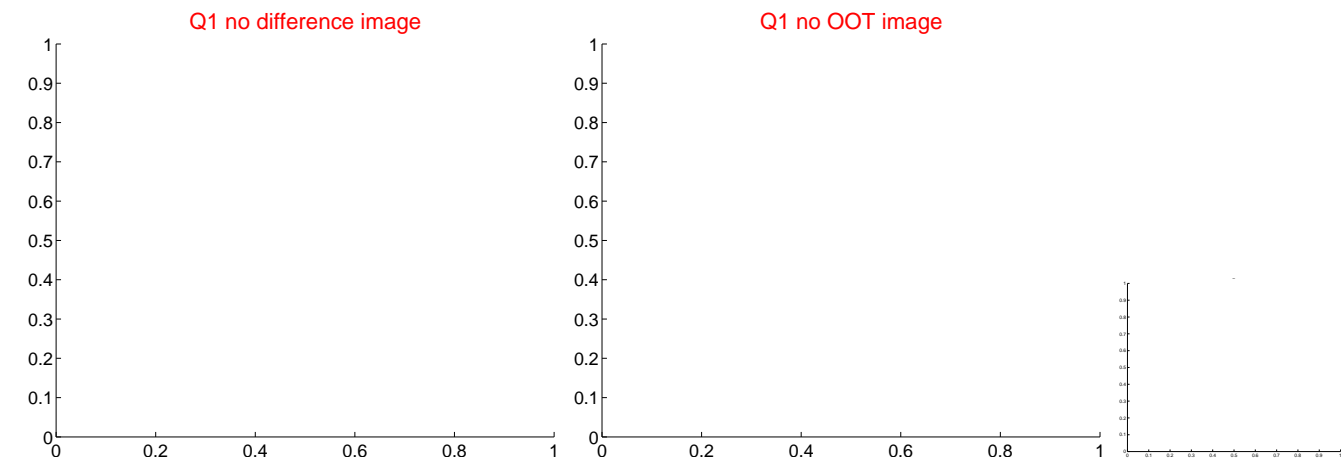
The direct PRF centroid is offset from the target star catalog position by about 0.25 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.133 ± 0.282	0.47	-0.107 ± 0.213	-0.079 ± 0.737
PRF-fit source offset from KIC position	0.308 ± 0.244	1.26	-0.208 ± 0.144	-0.227 ± 0.431
photometric centroid source offset	0.37 ± 0.42	0.88	-0.32 ± 0.44	0.19 ± 0.37

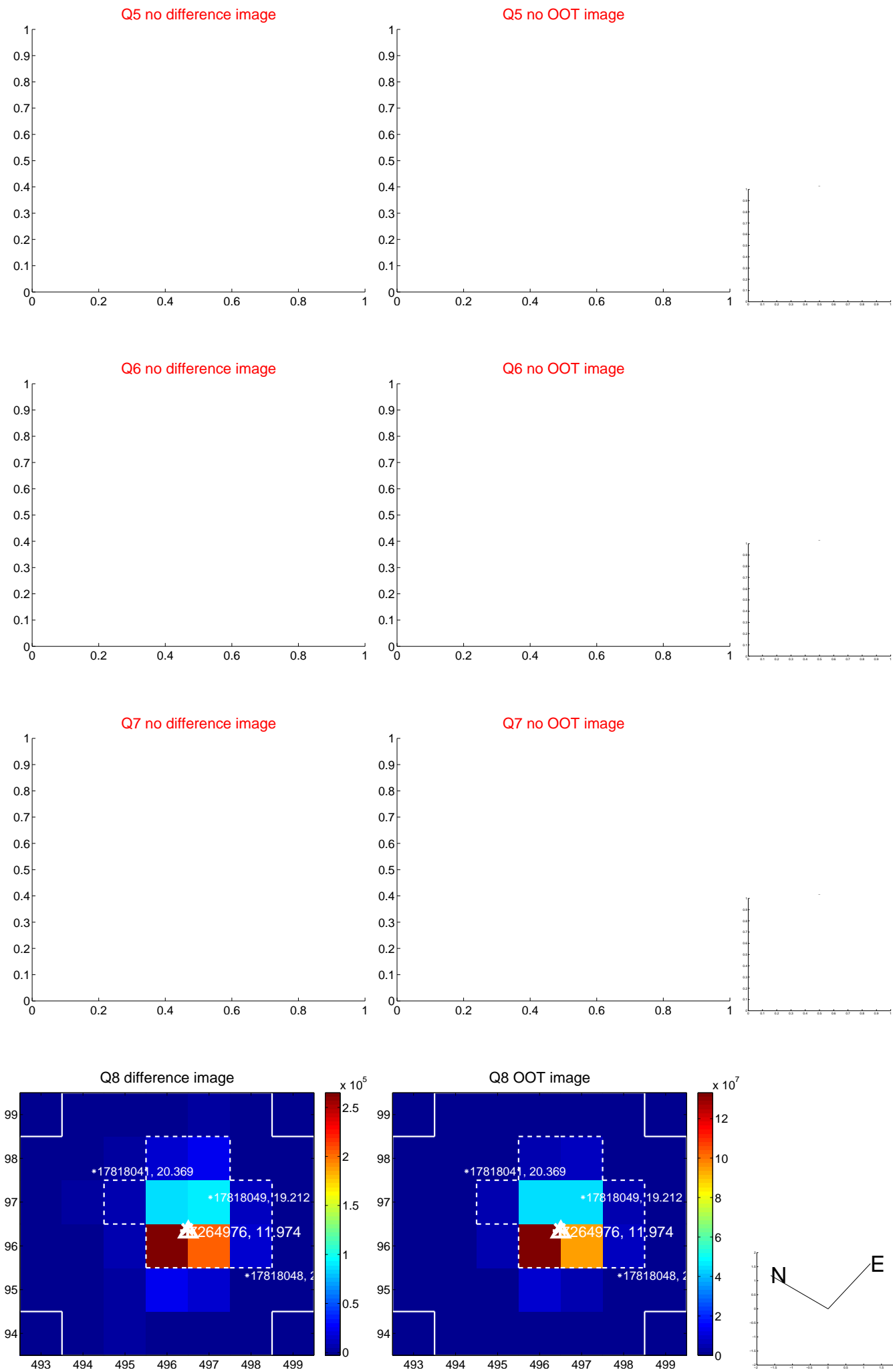


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



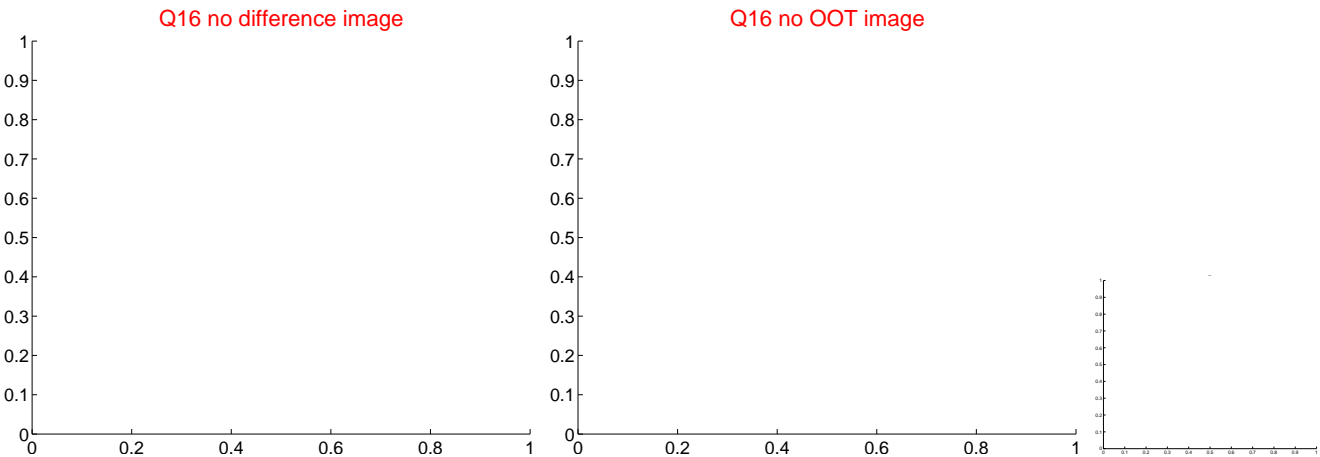
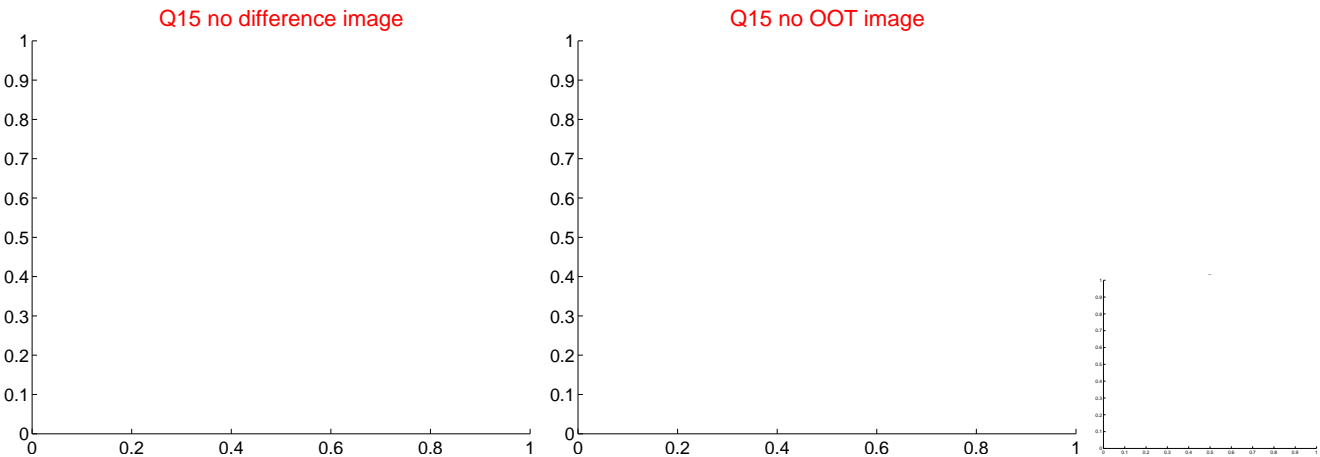
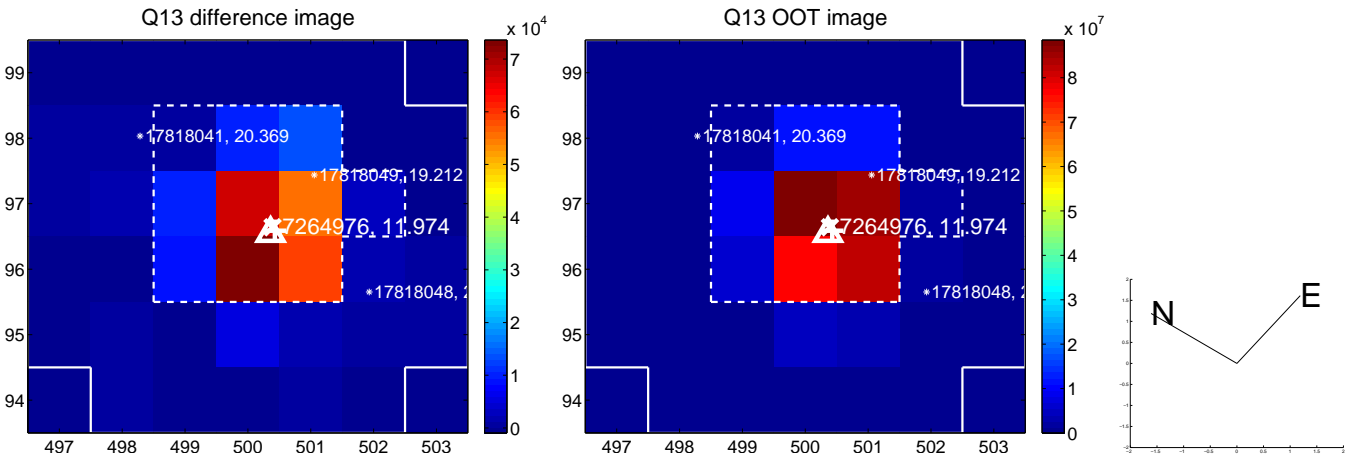
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



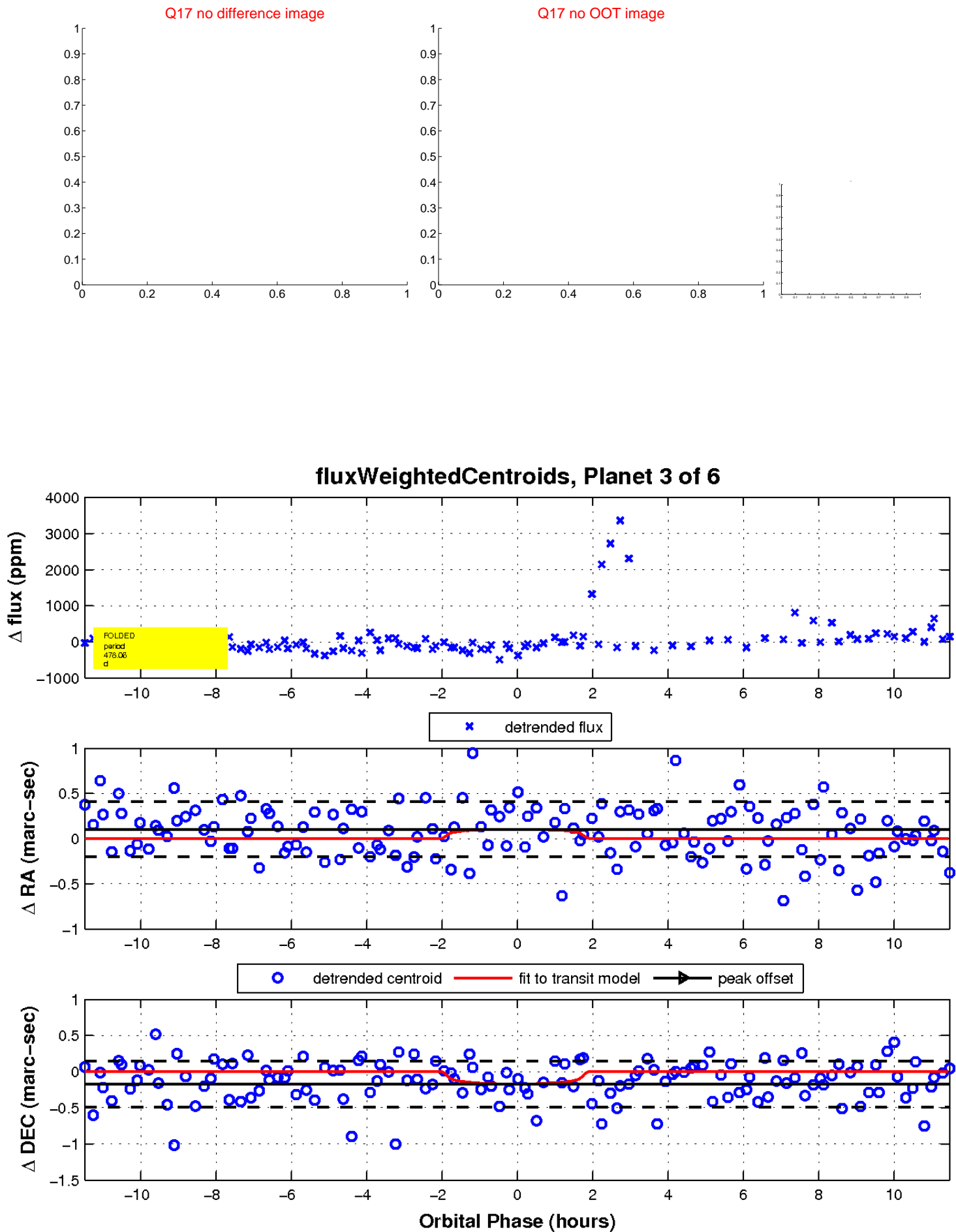
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

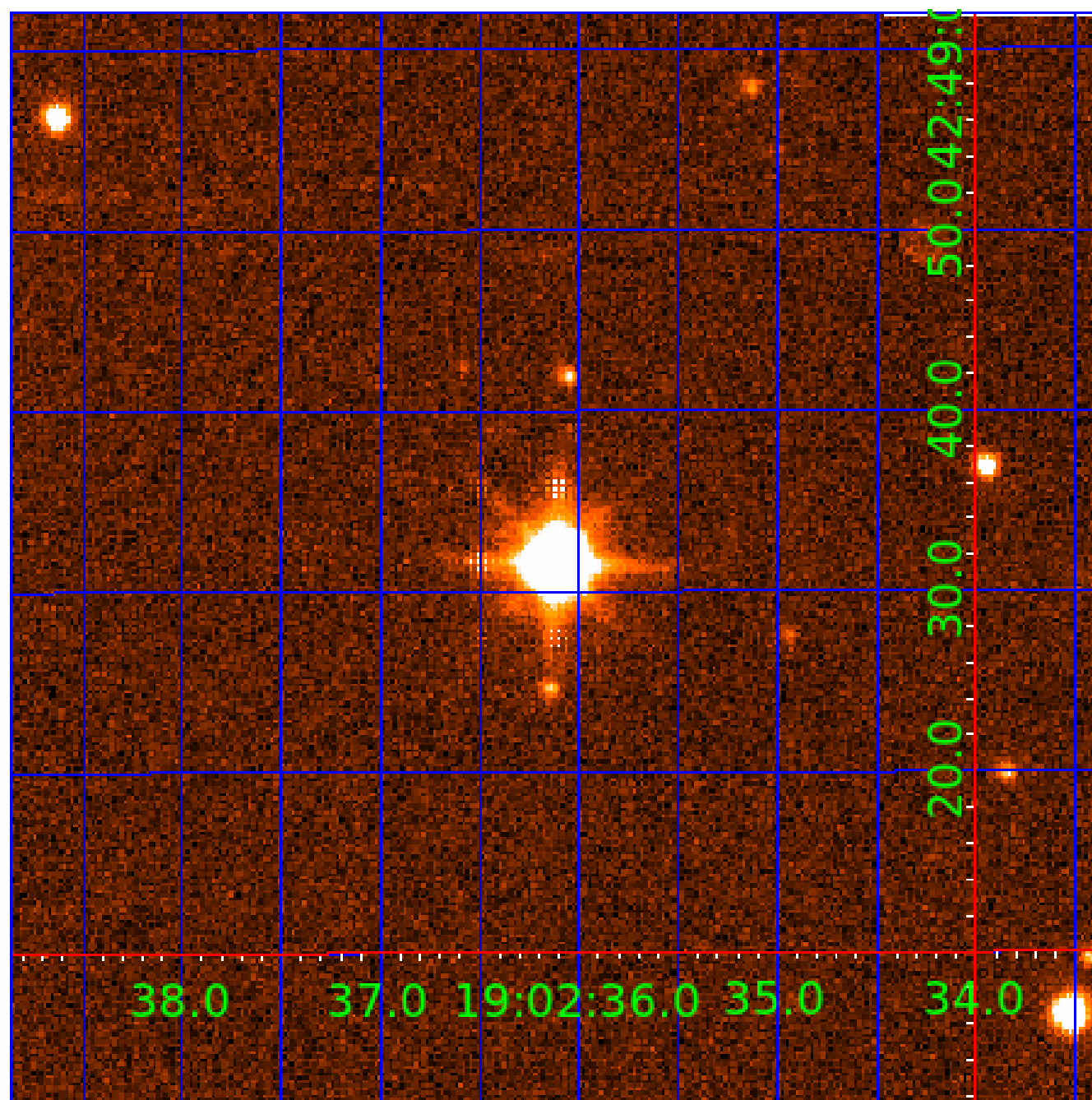


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
007264976-02	OBS	No	597.552552	375.827115	585.7	5.011	14.3	9.4	1.85	5038	5.03	1.09
007264976-03	OBS	No	478.058684	296.788410	563.7	3.840	19.7	7.9	1.85	5038	4.73	1.47
007264976-04	OBS	No	513.376449	300.623445	487.7	5.542	15.2	7.3	1.85	5038	4.58	1.34
007264976-05	OBS	No	298.867213	265.577238	583.5	4.368	18.6	9.5	1.85	5038	4.40	2.75
007264976-06	OBS	No	213.790501	274.634459	318.0	4.500	14.3	-1.0	1.85	5038	3.20	4.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

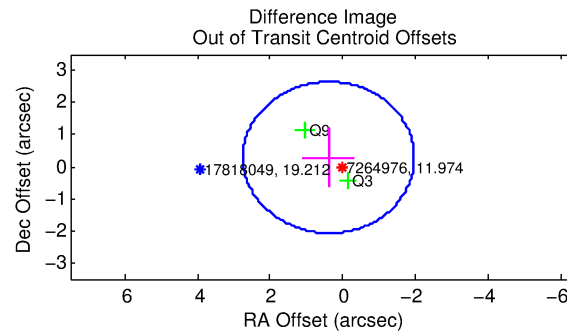
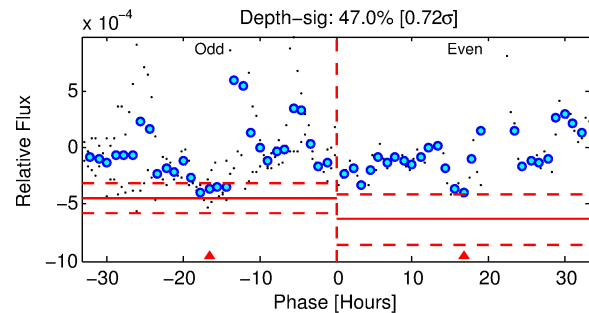
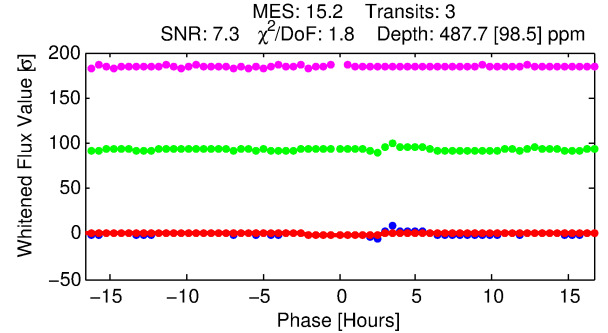
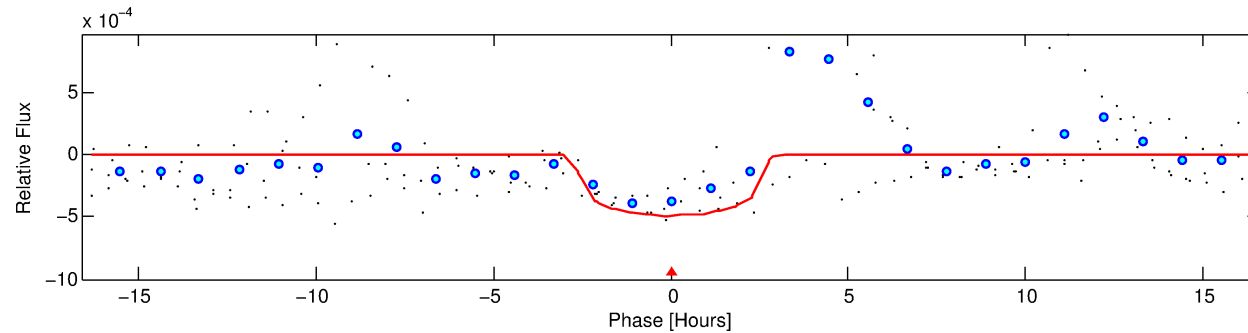
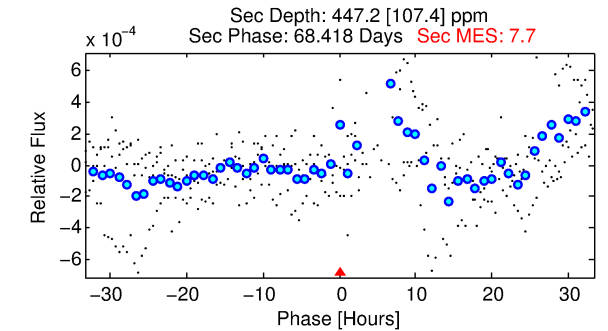
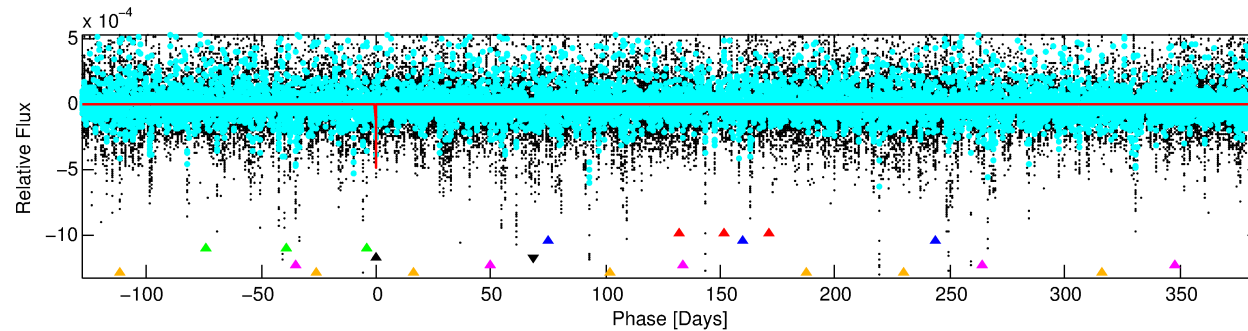
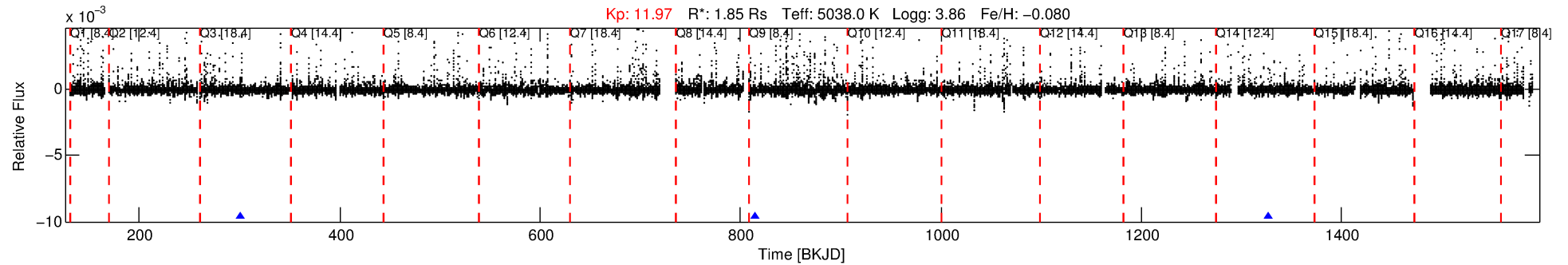
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-04

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 4 of 6 Period: 513.376 d



DV Fit Results:

Period = 513.37645 [0.00585] d
Epoch = 300.6234 [0.0087] BKJD
Rp/R* = 0.0227 [0.0089]
a/R* = 444.94 [598.95]
b = 0.81 [0.60]
Seff = 1.34 [0.39]
Teq = 274 [20] K
Rp = 4.58 [2.15] Re
a = 1.2129 [0.2506] AU
Ag = 17260.25 [14990.26] [1.15 σ]
Teffp = 4859 [999] K [4.59 σ]

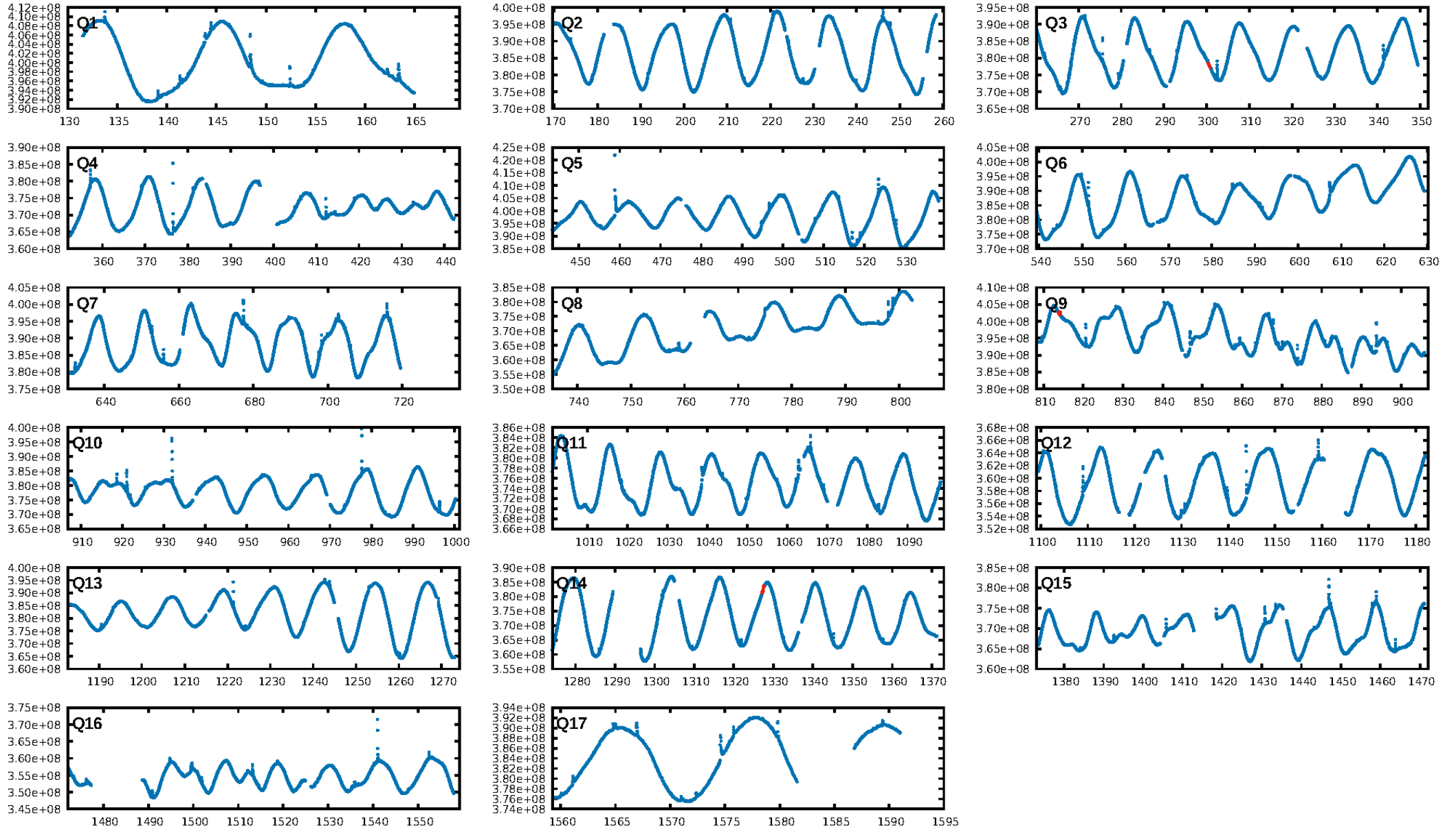
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [125.73 σ]
LongPeriod-sig: 100.0% [72.31 σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 23.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -9.113
Centroid-sig: 59.4%
Centroid-so: 0.307 arcsec [0.81 σ]
OotOffset-rm: 0.483 arcsec [0.61 σ]
OotOffset-st: 0/1/0/1 [2]
KicOffset-rm: 0.371 arcsec [0.50 σ]
KicOffset-st: 0/1/0/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

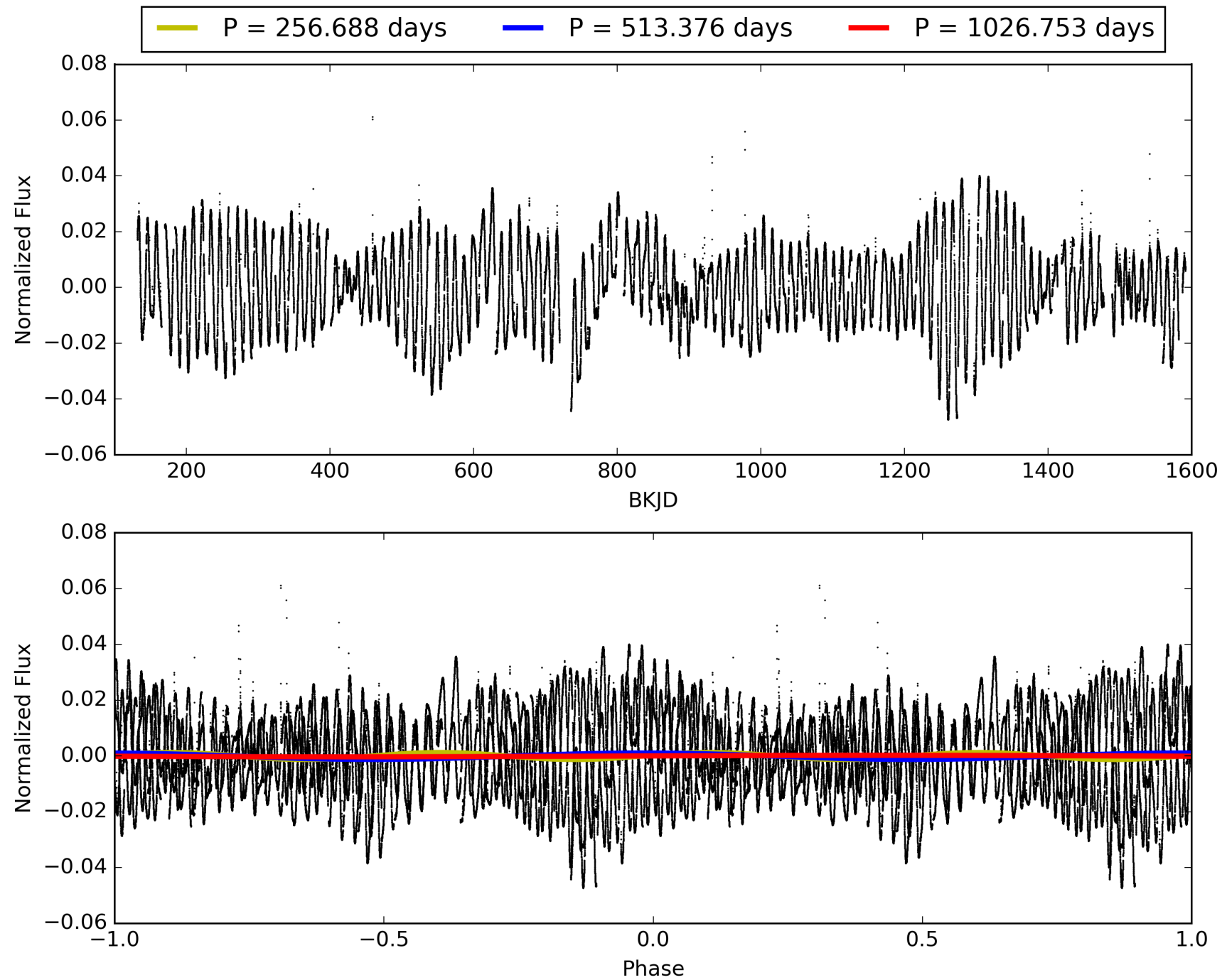
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:50:06 Z

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

TCE 007264976-04, PDC Light Curves

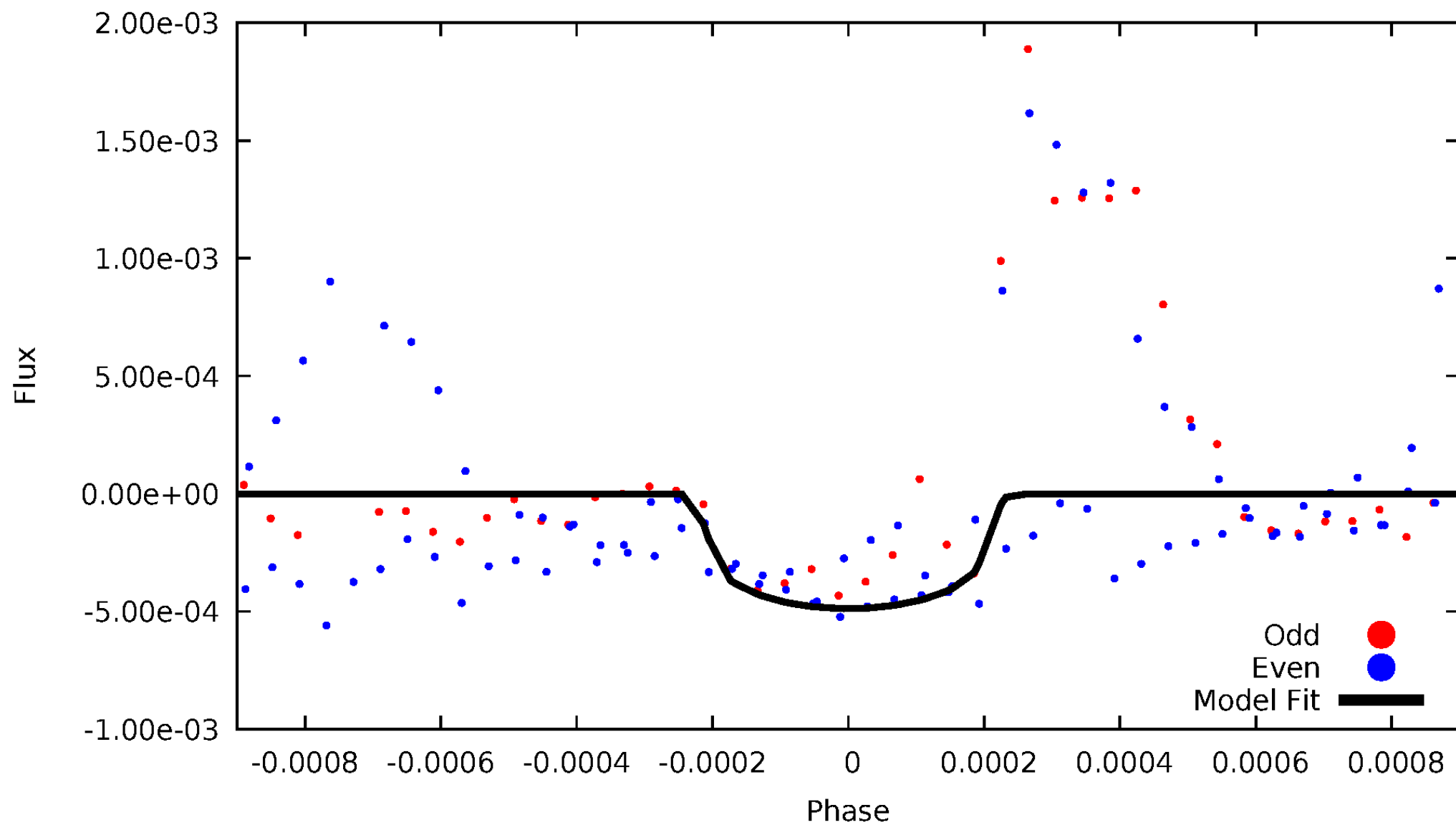


TCE 007264976-04



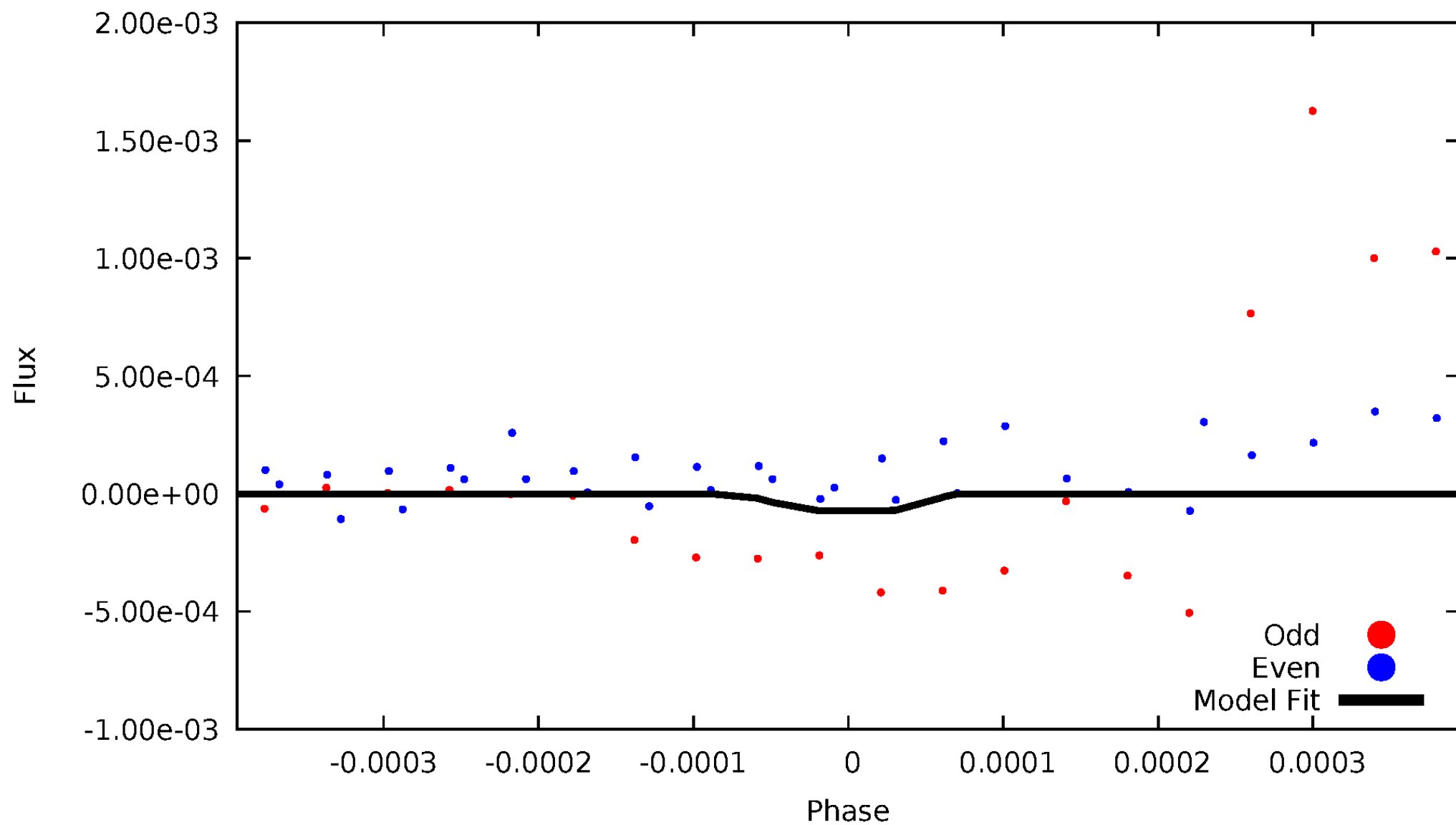
DV Odd/Even

TCE 007264976-04



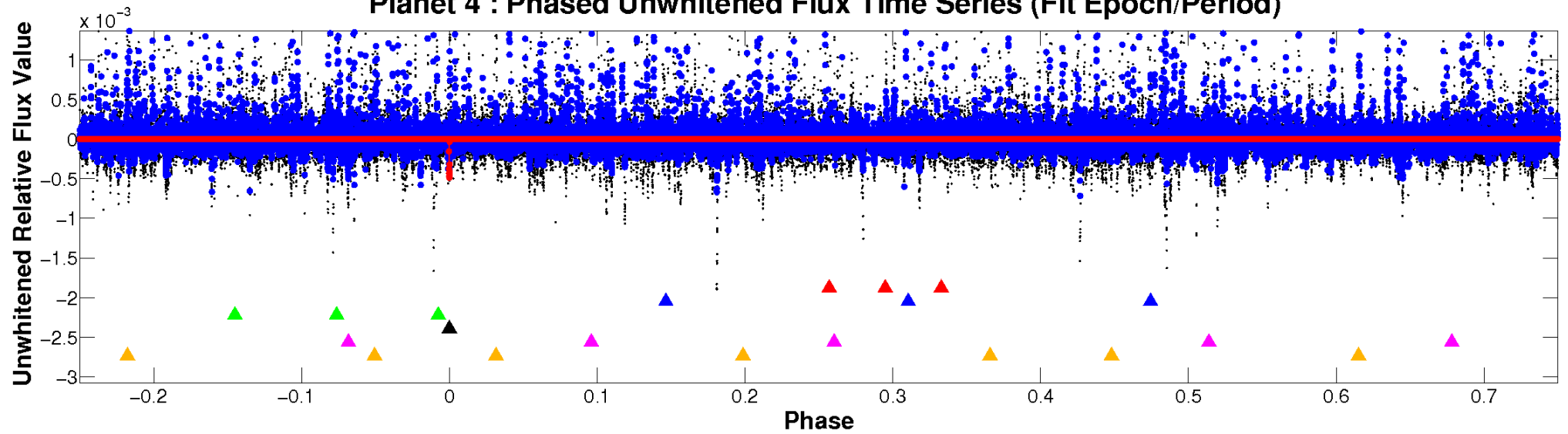
ALT Odd/Even

TCE 007264976-04

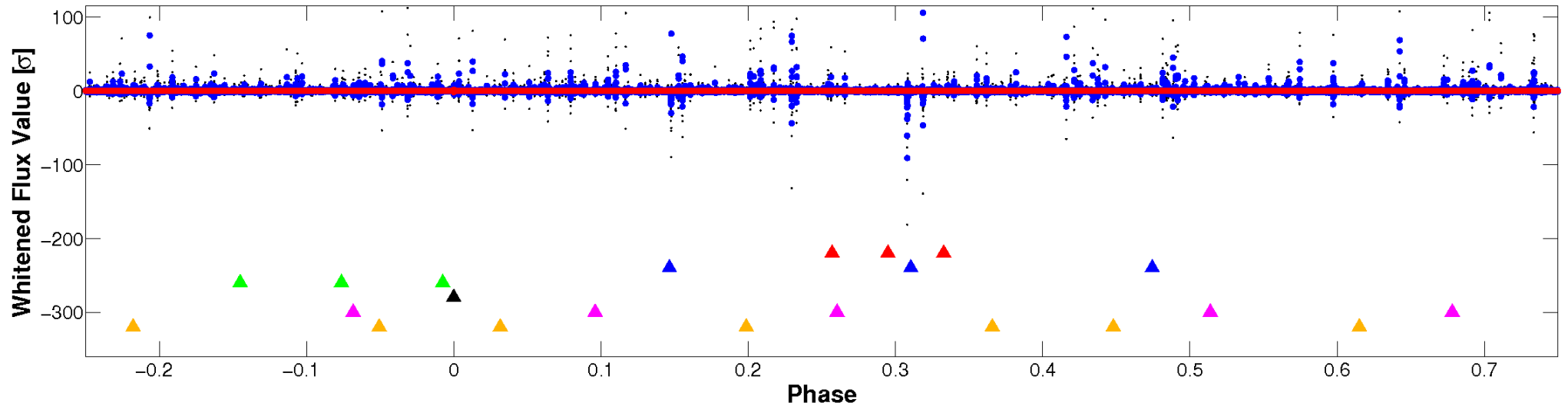


Non-Whitened Vs. Whitened Light Curve

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

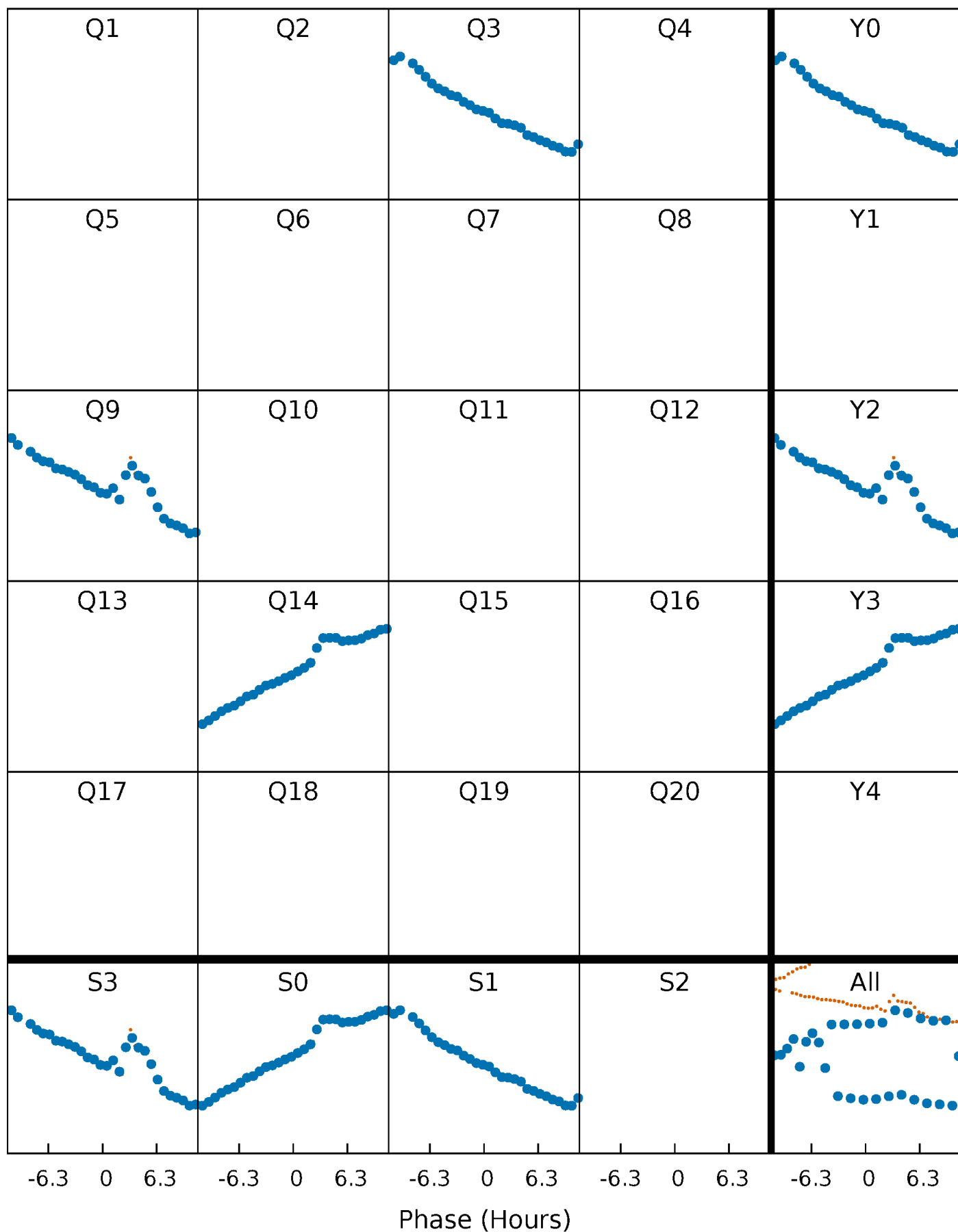


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



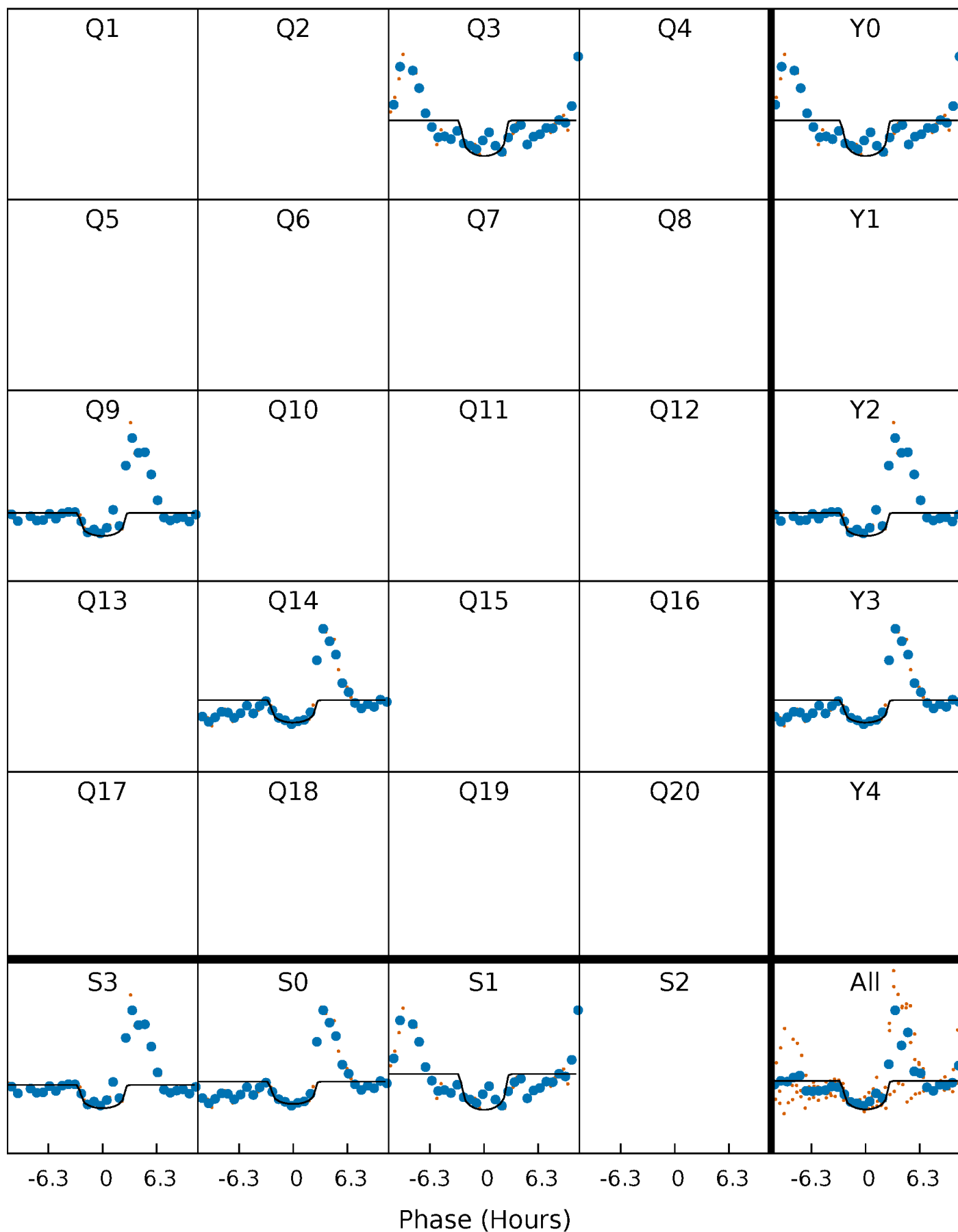
PDC Quarter-Phased Transit Curves

TCE 007264976-04 $P=513.376449$ Days $T_0=300.623445$ (BKJD)



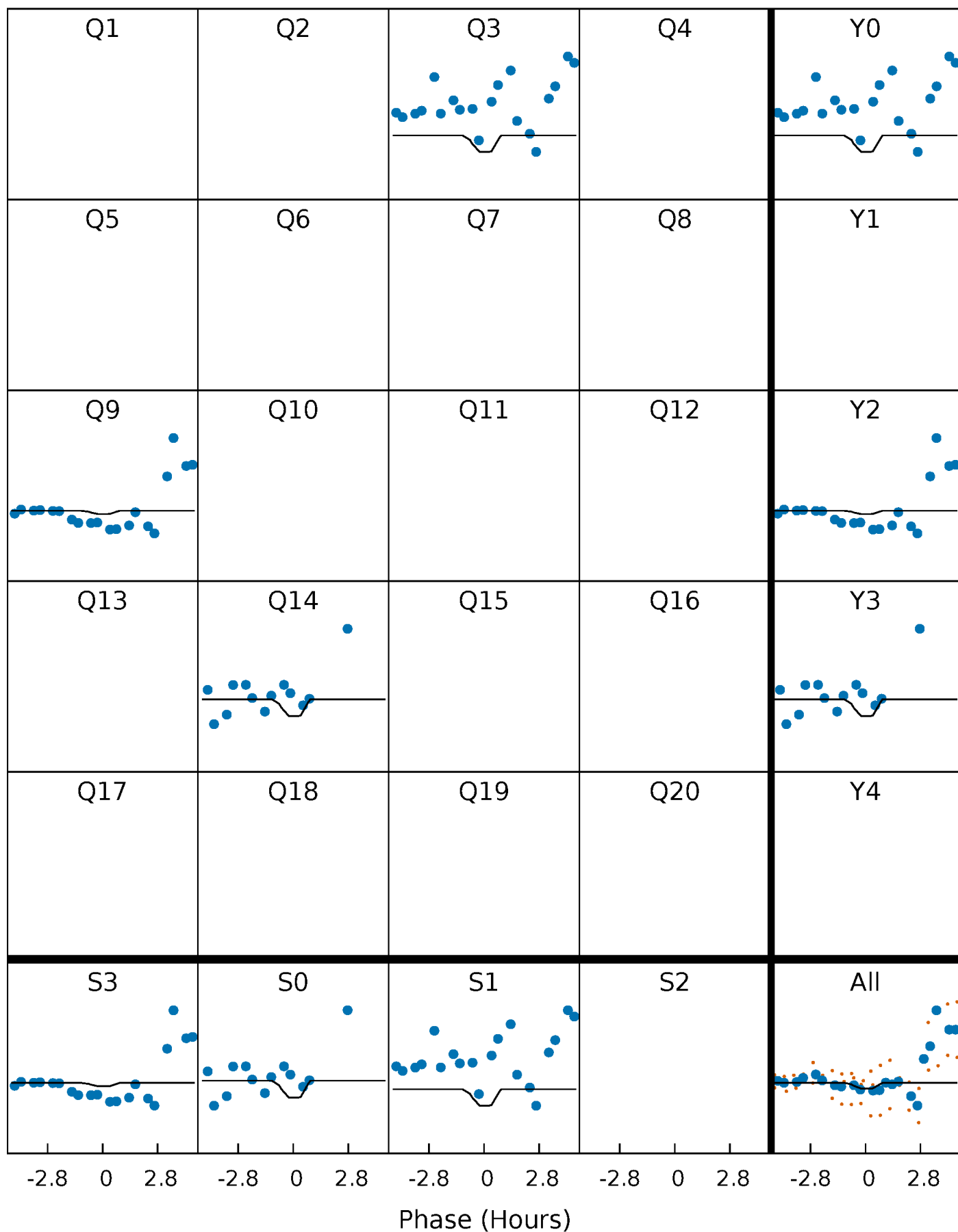
DV Quarter-Phased Transit Curves

TCE 007264976-04 $P=513.376449$ Days $T_0=300.623445$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

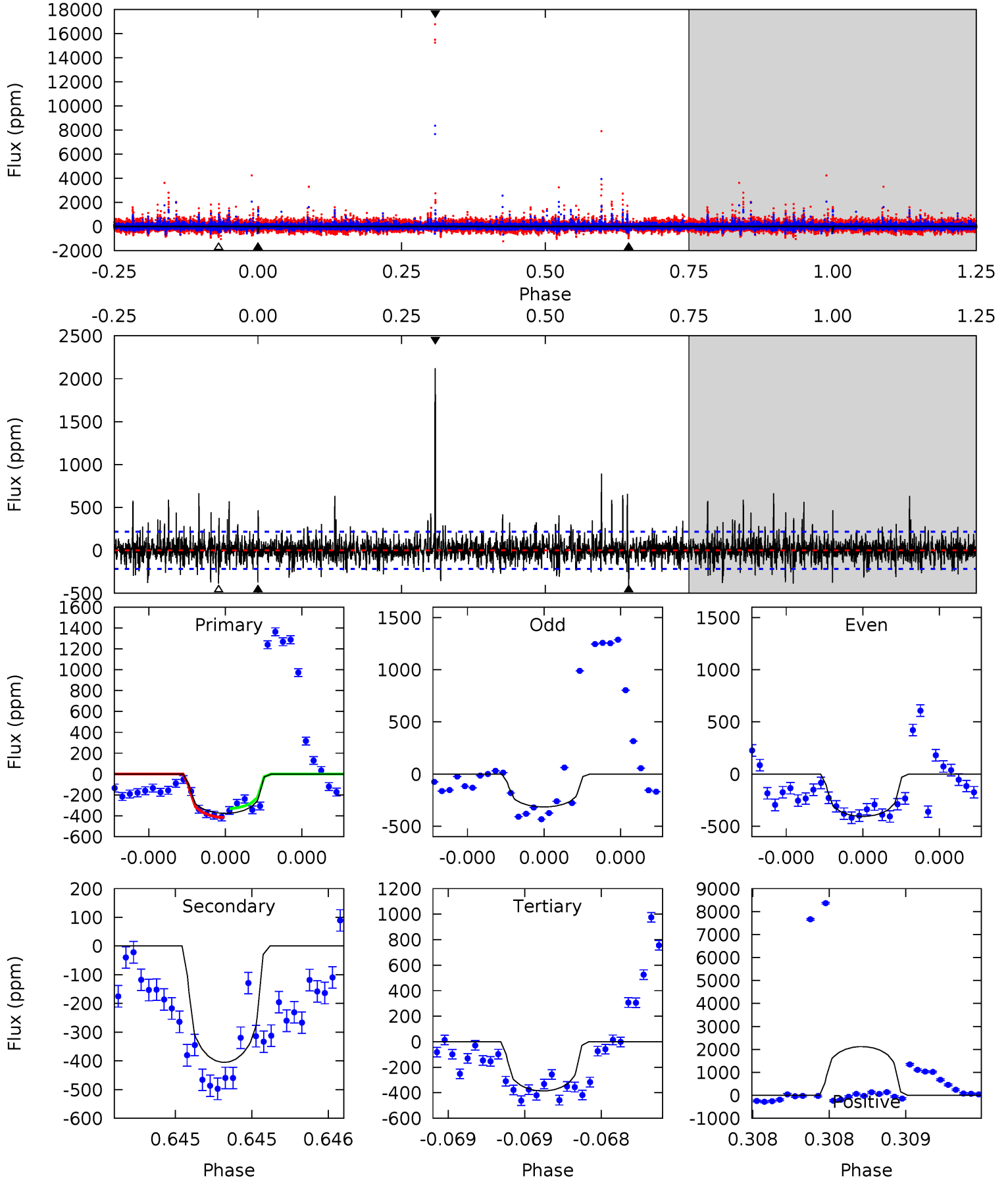
TCE 007264976-04 P=513.372761 Days $T_0=300.608946$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-04, P = 513.376449 Days, E = 300.623445 Days

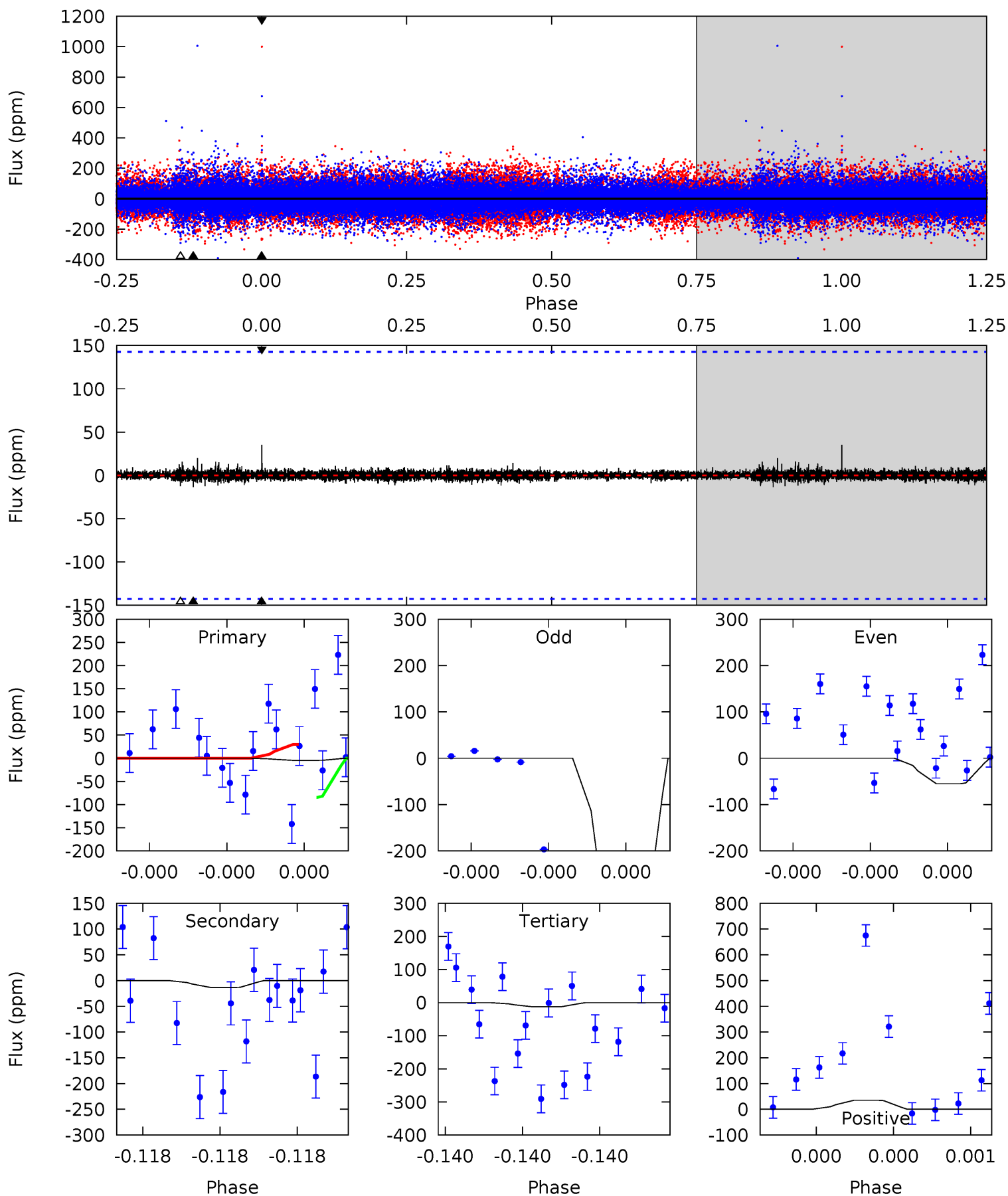
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.70	10.4	9.93	54.6	5.59	3.51	2.67	-0.23	-44.9	0.50	-44.2	0.38	1.03	0.84	1.10



Alt Model-Shift Uniqueness Test

007264976-04, P = 513.372761 Days, E = 300.608946 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.19	0.55	0.51	1.43	5.80	3.83	0.10	-0.32	-1.24	0.04	-0.88	6.10	-6.41	0.72	1.13



Stellar Parameters For KIC 007264976

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-405 ± 39	$4.75^{+1.96}_{-1.86}$	386^{+21}_{-11}	4794^{+1207}_{-587}	14690^{+24846}_{-7250}
Alt.	-14 ± 25	$2.31^{+1.64}_{-1.39}$	387^{+20}_{-12}	3192^{+1511}_{-6501}	1385^{+11927}_{-3173}

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

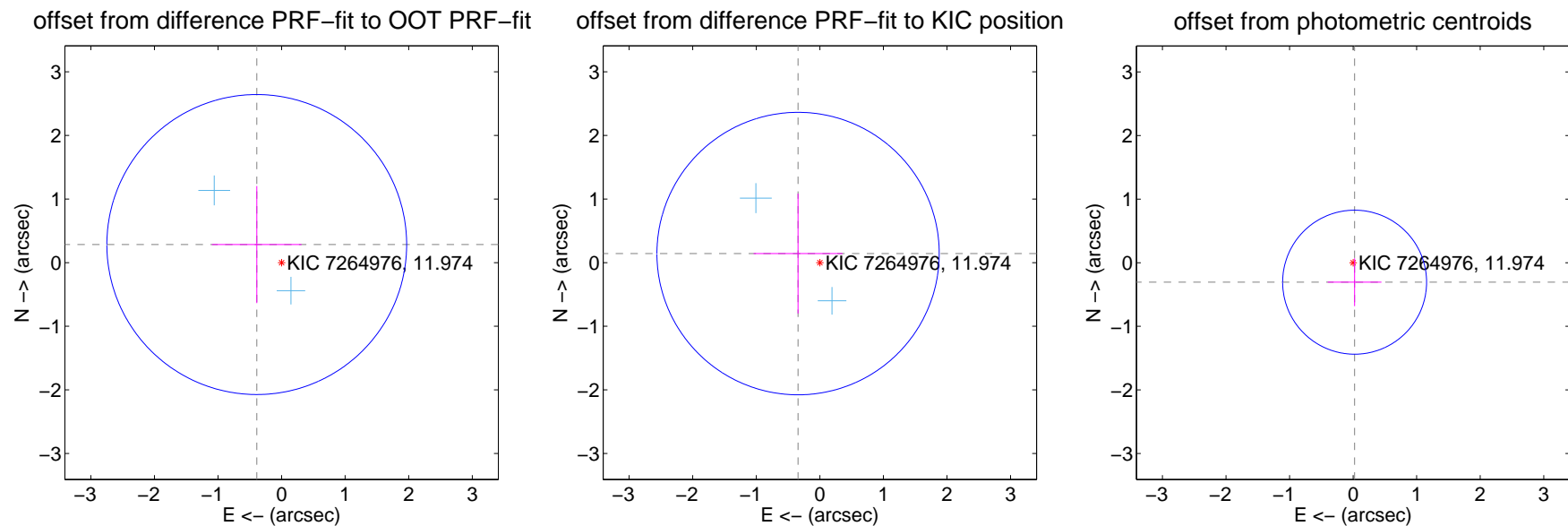
DV Centroid Data

Supplemental centroid analysis for 007264976-04. **Kepler magnitude: 11.97.** Transit SNR 7.34

There are 2 quarters with good PRF difference image offsets

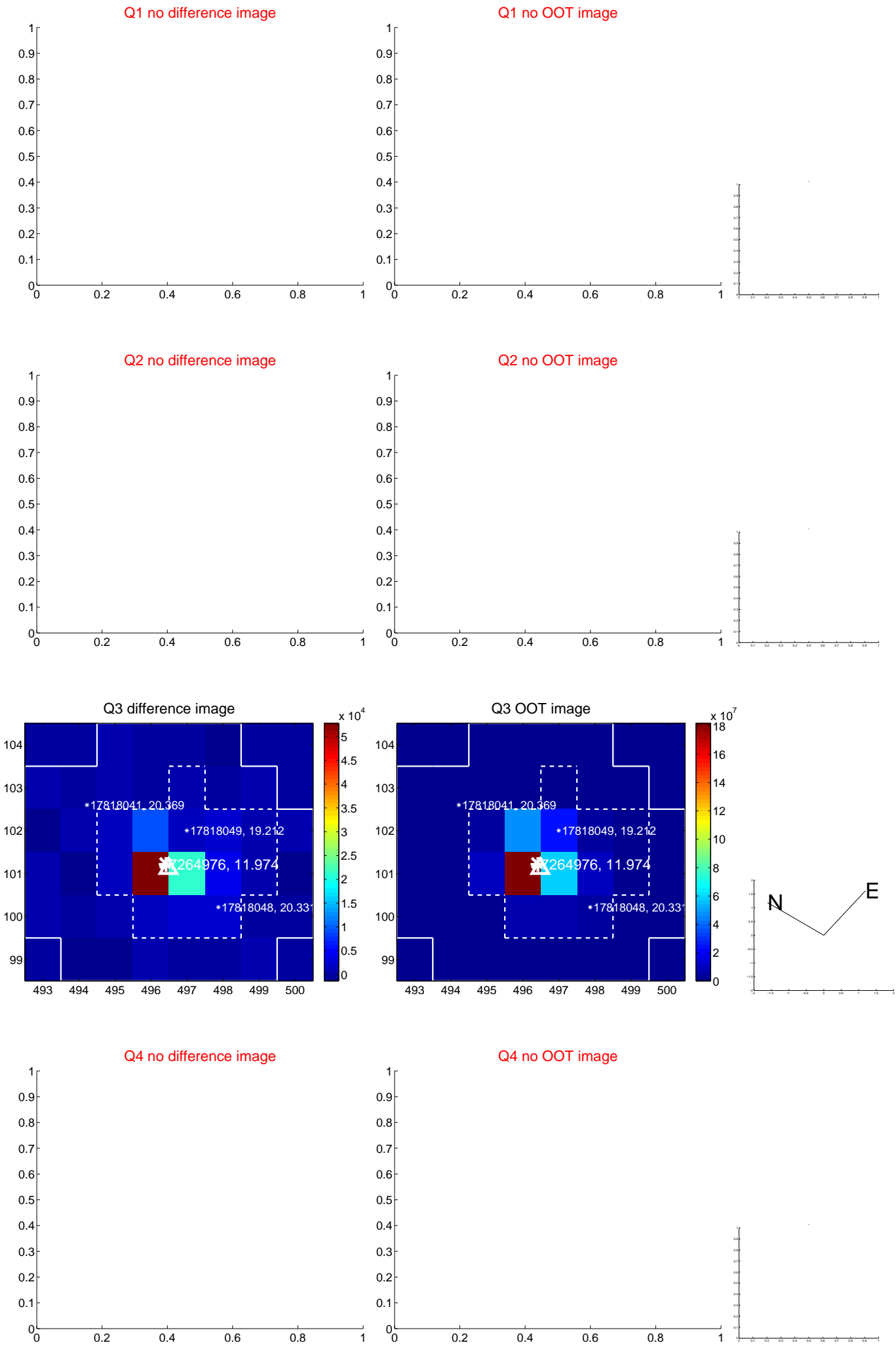
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.483 ± 0.786	0.61	0.390 ± 0.704	0.285 ± 0.920
PRF-fit source offset from KIC position	0.371 ± 0.740	0.50	0.342 ± 0.699	0.143 ± 0.942
photometric centroid source offset	0.31 ± 0.38	0.81	-0.02 ± 0.42	-0.31 ± 0.38



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

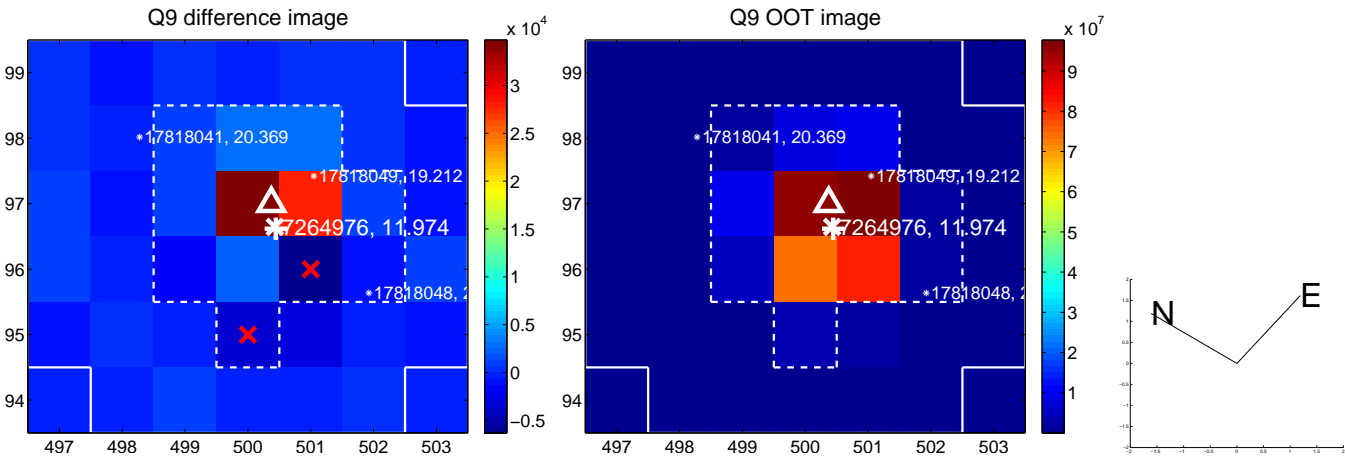
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



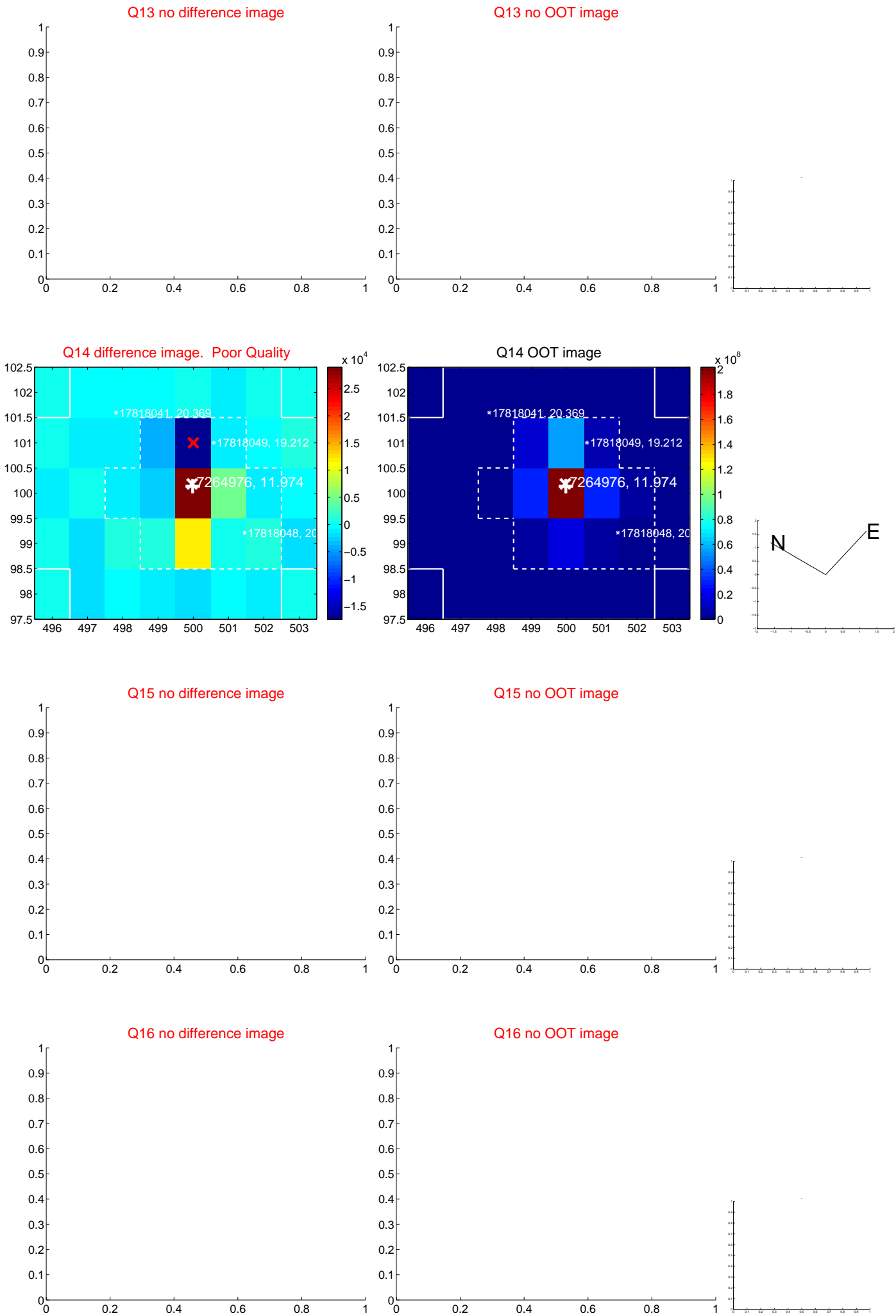
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



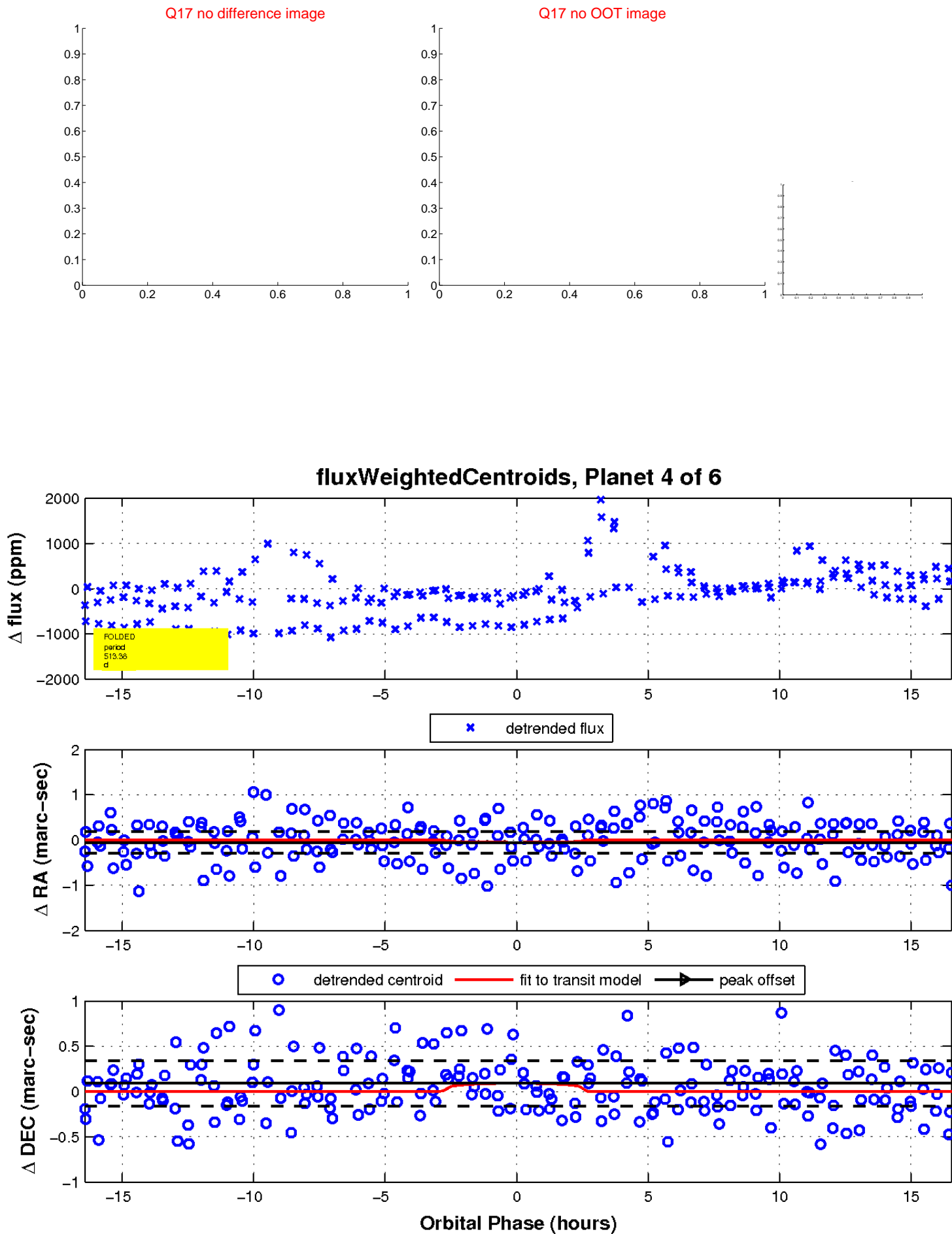
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

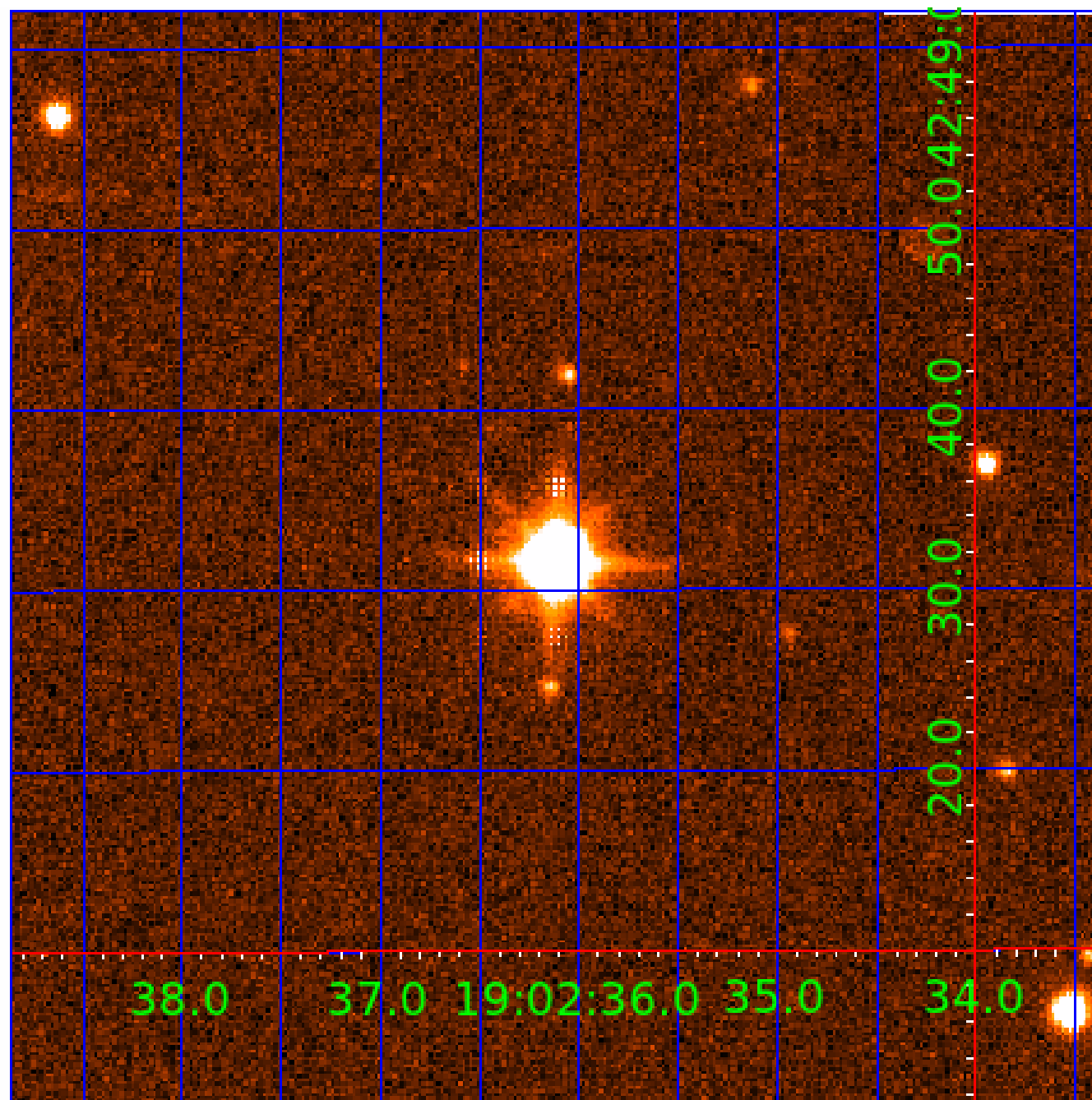


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
007264976-02	OBS	No	597.552552	375.827115	585.7	5.011	14.3	9.4	1.85	5038	5.03	1.09
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007264976-06	OBS	No	213.790501	274.634459	318.0	4.500	14.3	-1.0	1.85	5038	3.20	4.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

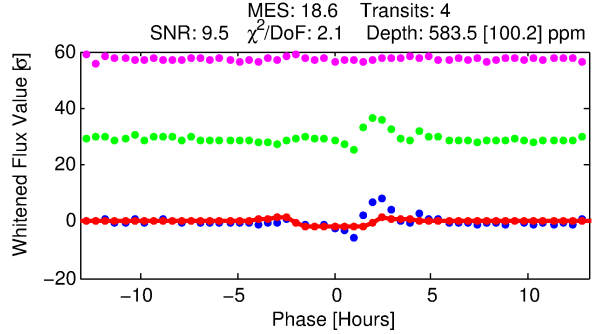
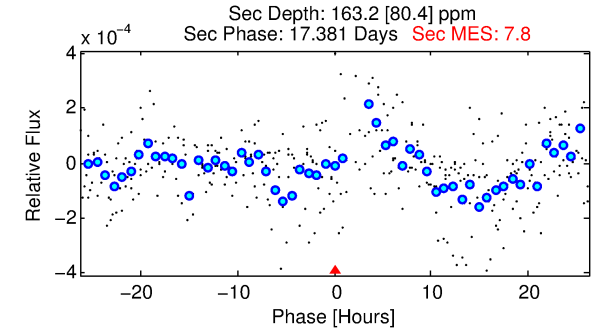
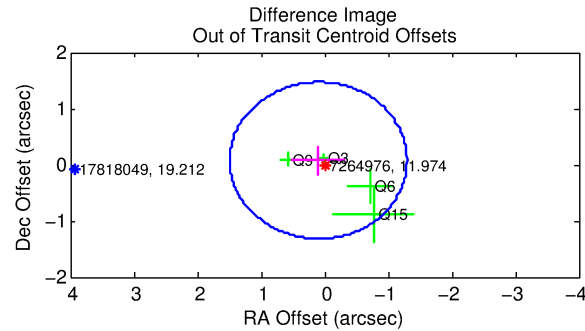
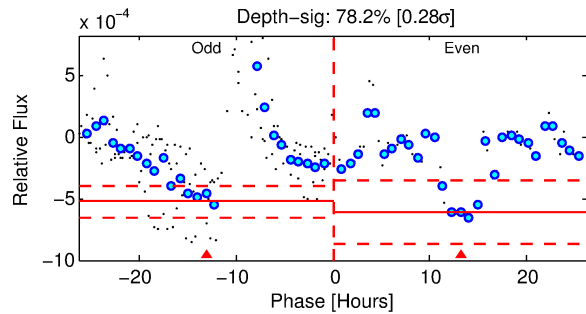
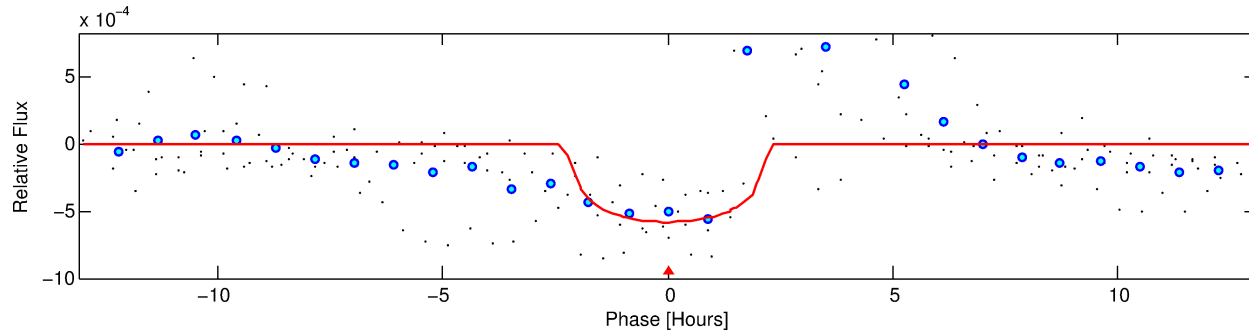
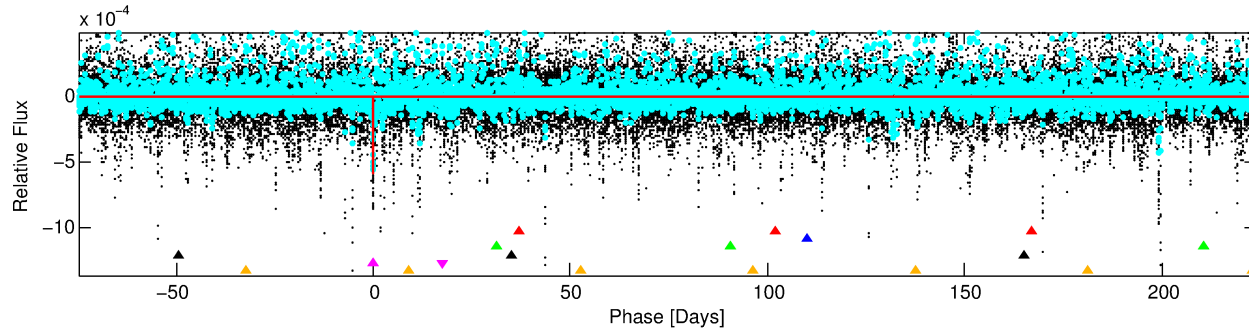
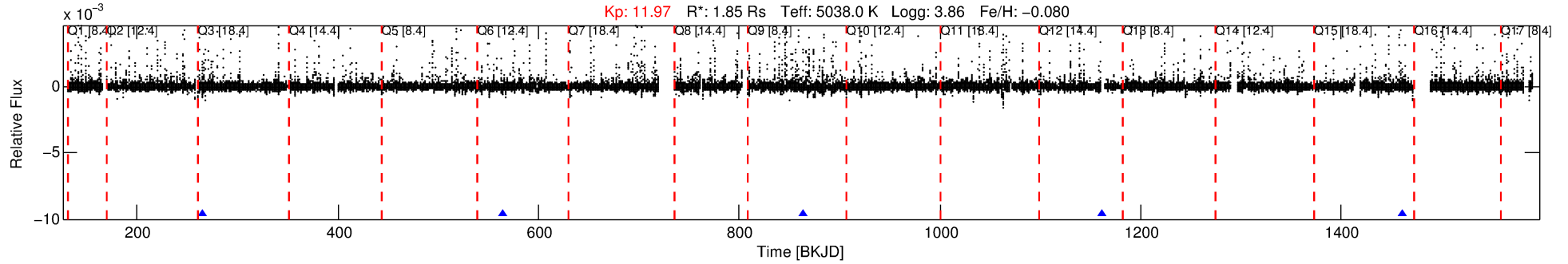
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-05

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 5 of 6 Period: 298.867 d



DV Fit Results:

Period = 298.86721 [0.00230] d
Epoch = 265.5772 [0.0051] BKJD
Rp/R* = 0.0218 [0.0536]
a/R* = 503.22 [4296.74]
b = 0.34 [22.36]
Seff = 2.75 [0.81]
Teq = 328 [24] K
Rp = 4.40 [10.85] Re
a = 0.8456 [0.1747] AU
Ag = 3313.56 [16357.79] [0.20 σ]
Teffp = 3852 [4747] K [0.74 σ]

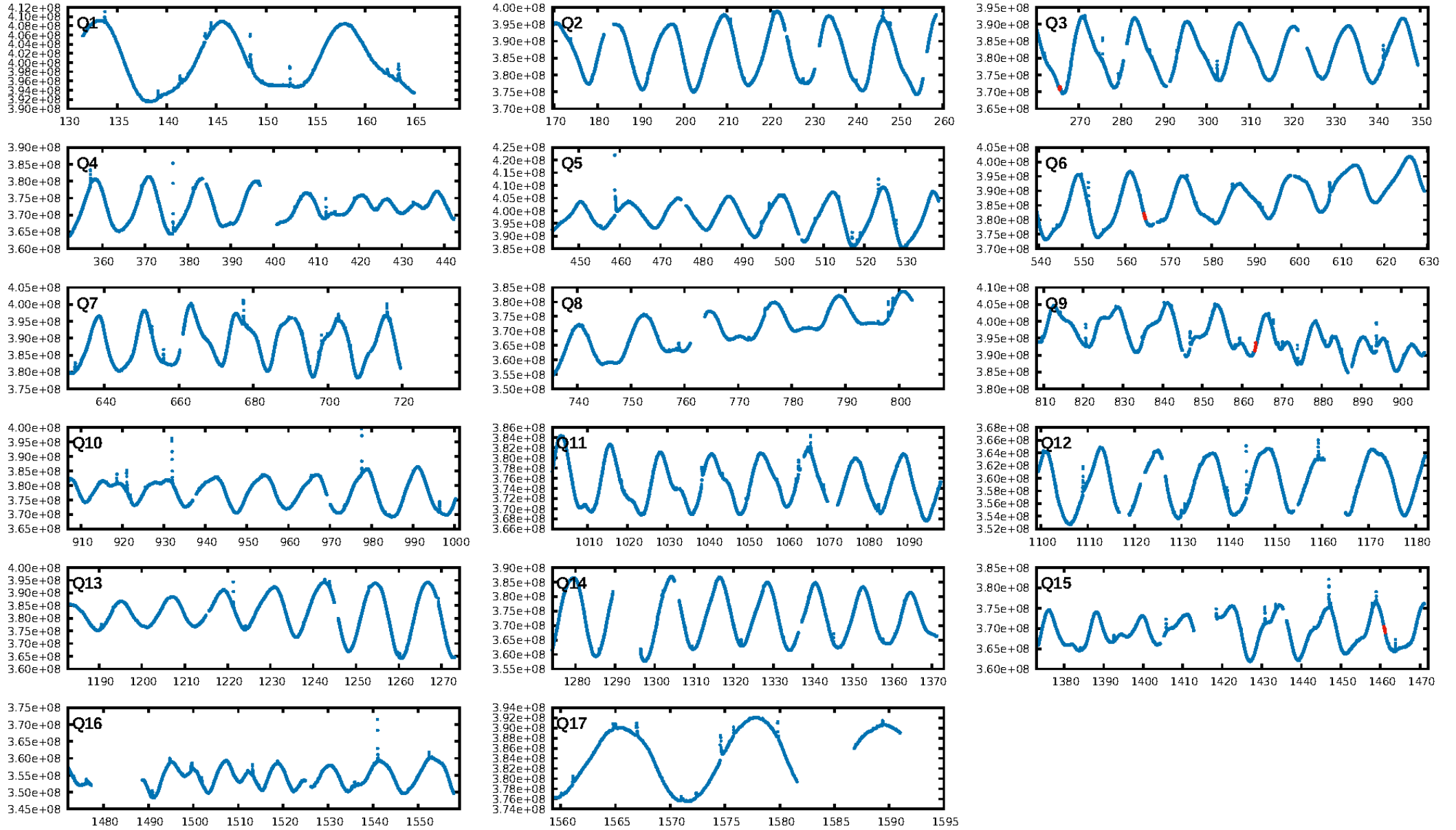
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [325.59 σ]
LongPeriod-sig: 100.0% [739.50 σ]
ModelChiSquare2-sig: 82.3%
ModelChiSquareGof-sig: 75.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: -0.03624
Centroid-sig: 13.7%
Centroid-so: 0.188 arcsec [0.56 σ]
OotOffset-rm: 0.123 arcsec [0.26 σ]
OotOffset-st: 1/2/0/1 [4]
KicOffset-rm: 0.108 arcsec [0.60 σ]
KicOffset-st: 1/2/0/1 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 1.00 [4/4]

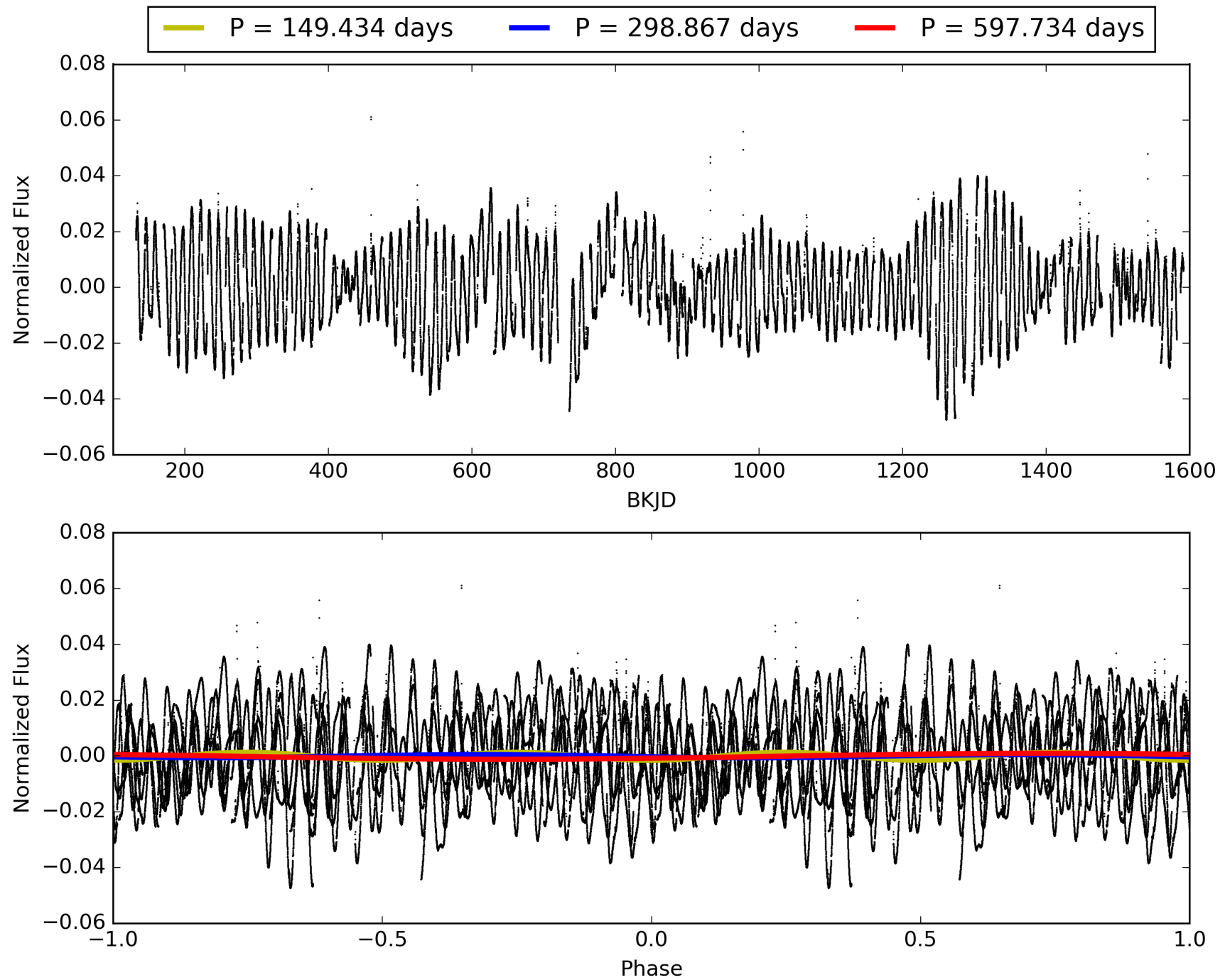
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:50:19 Z

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

TCE 007264976-05, PDC Light Curves

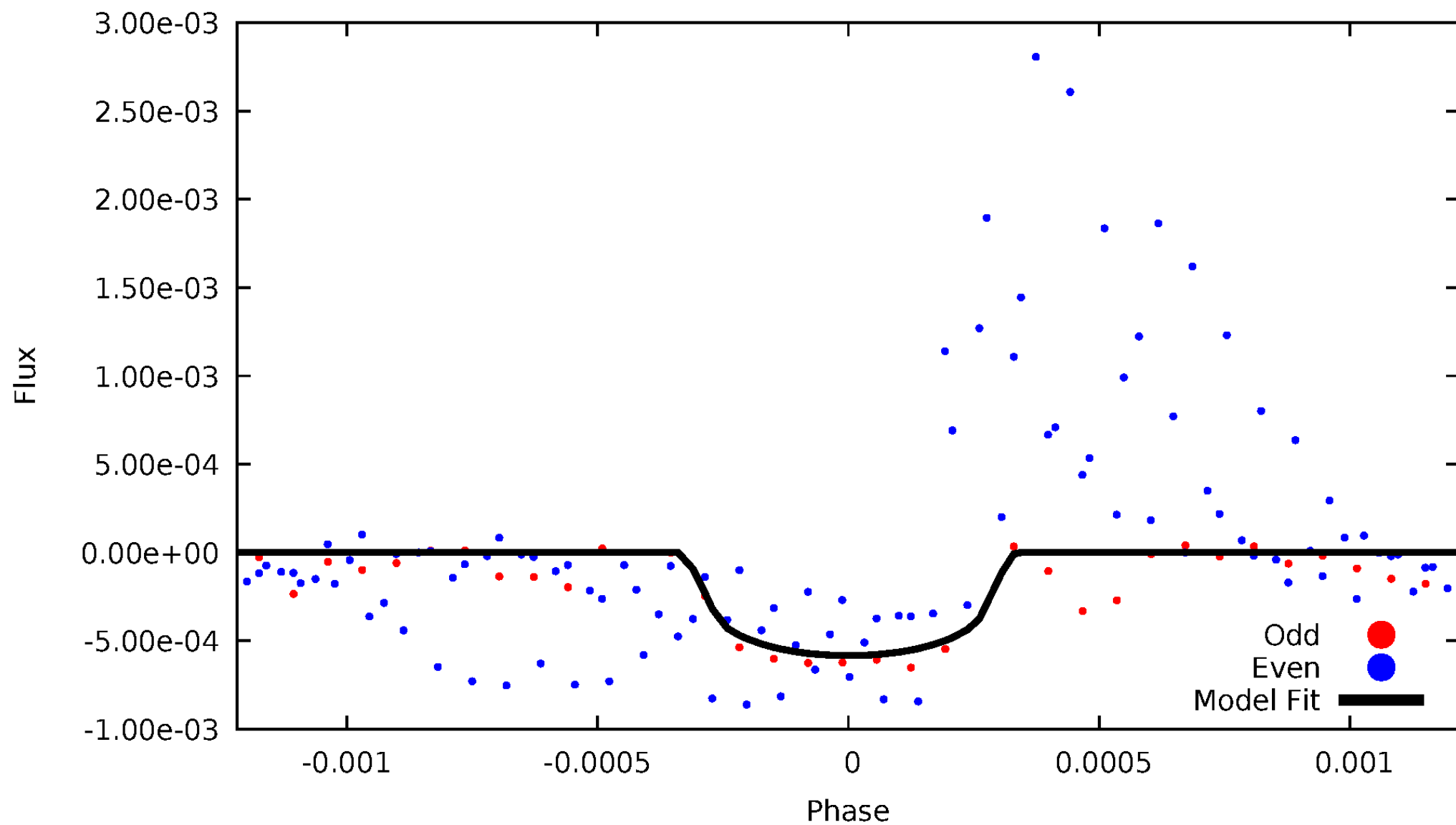


TCE 007264976-05



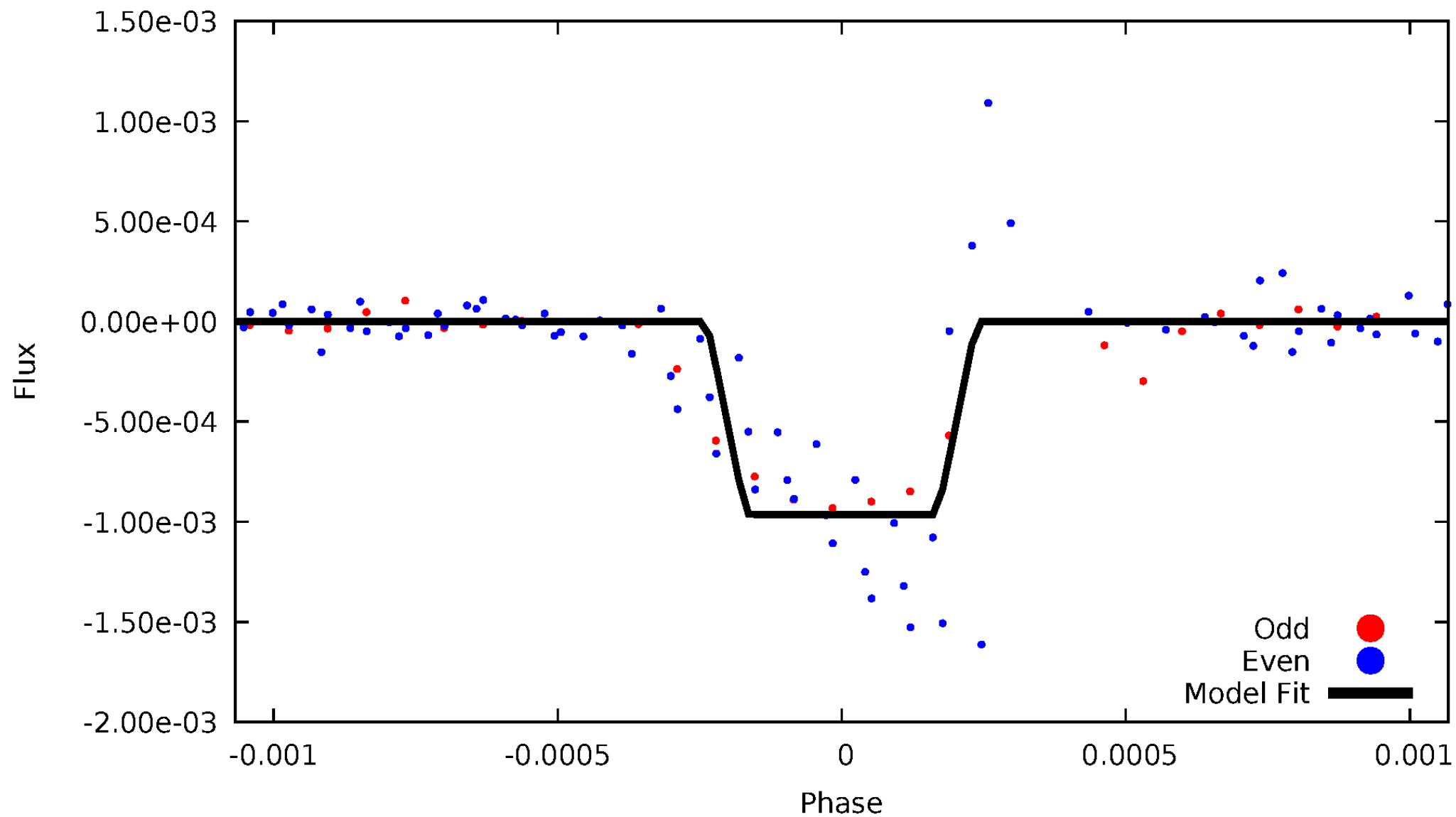
DV Odd/Even

TCE 007264976-05



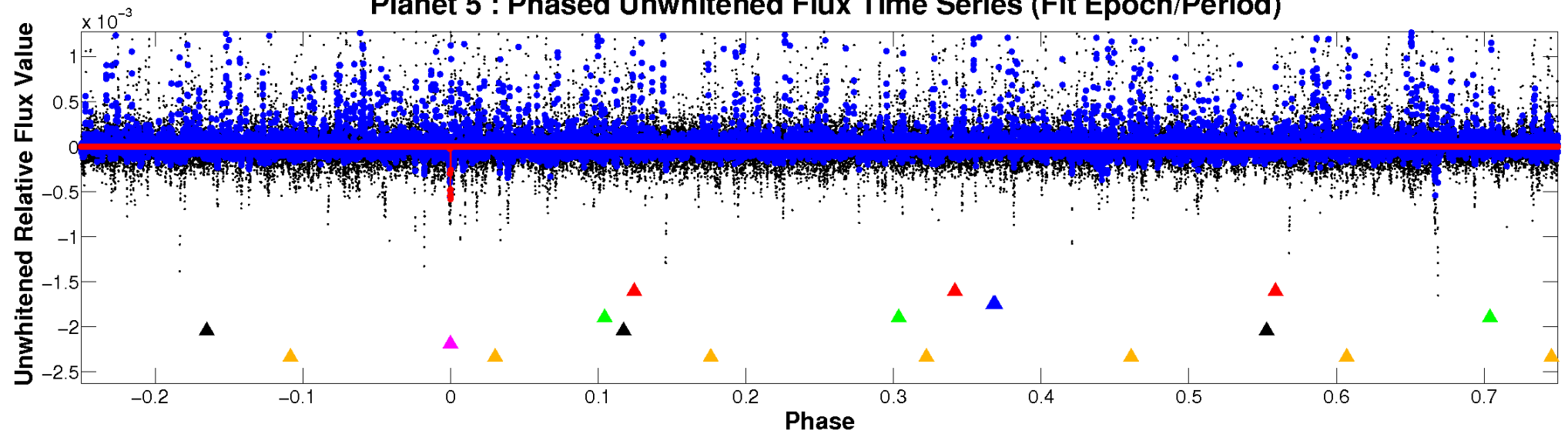
ALT Odd/Even

TCE 007264976-05

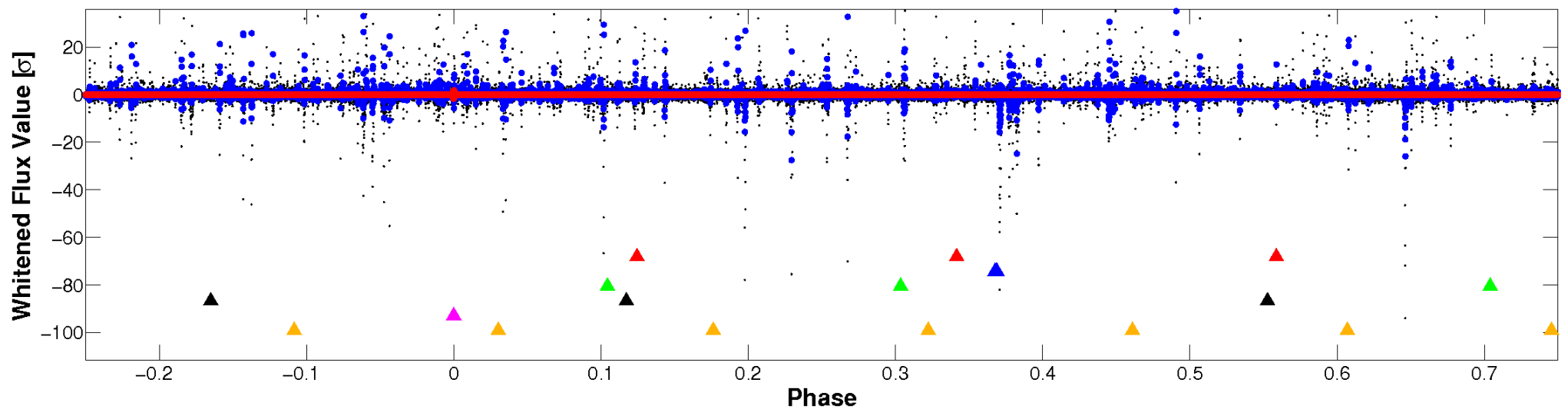


Non-Whitened Vs. Whitened Light Curve

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

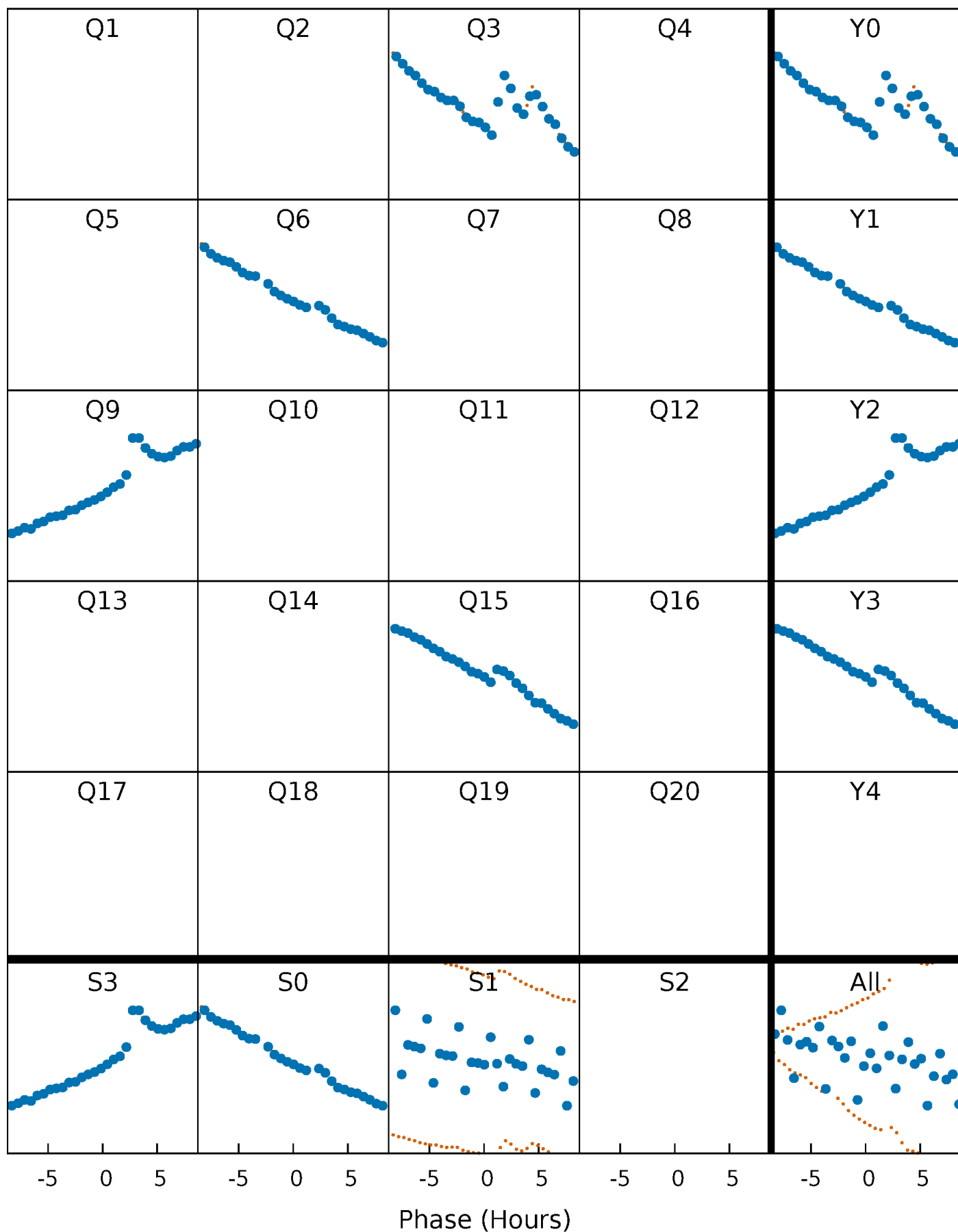


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



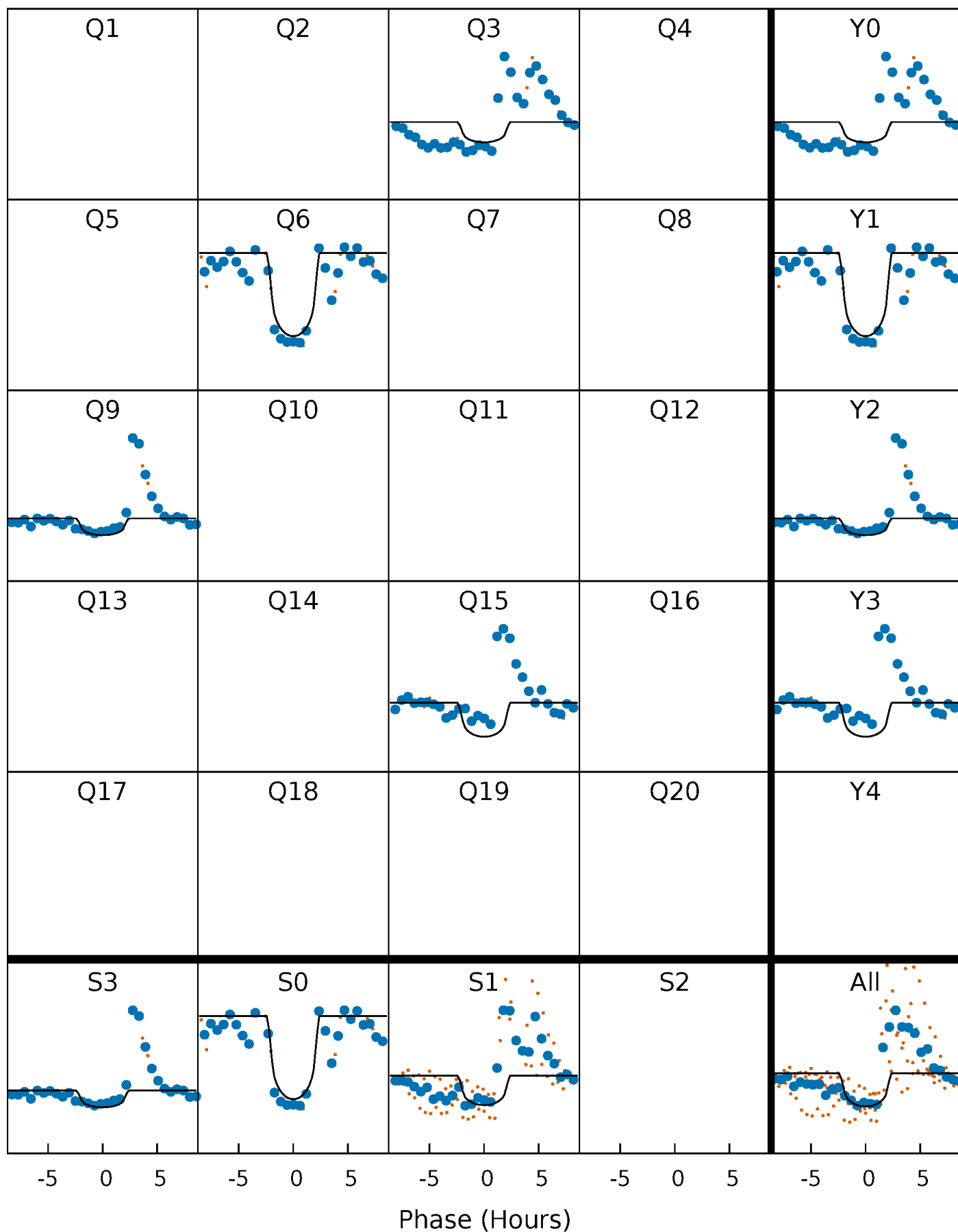
PDC Quarter-Phased Transit Curves

TCE 007264976-05 $P=298.867213$ Days $T_0=265.577238$ (BKJD)



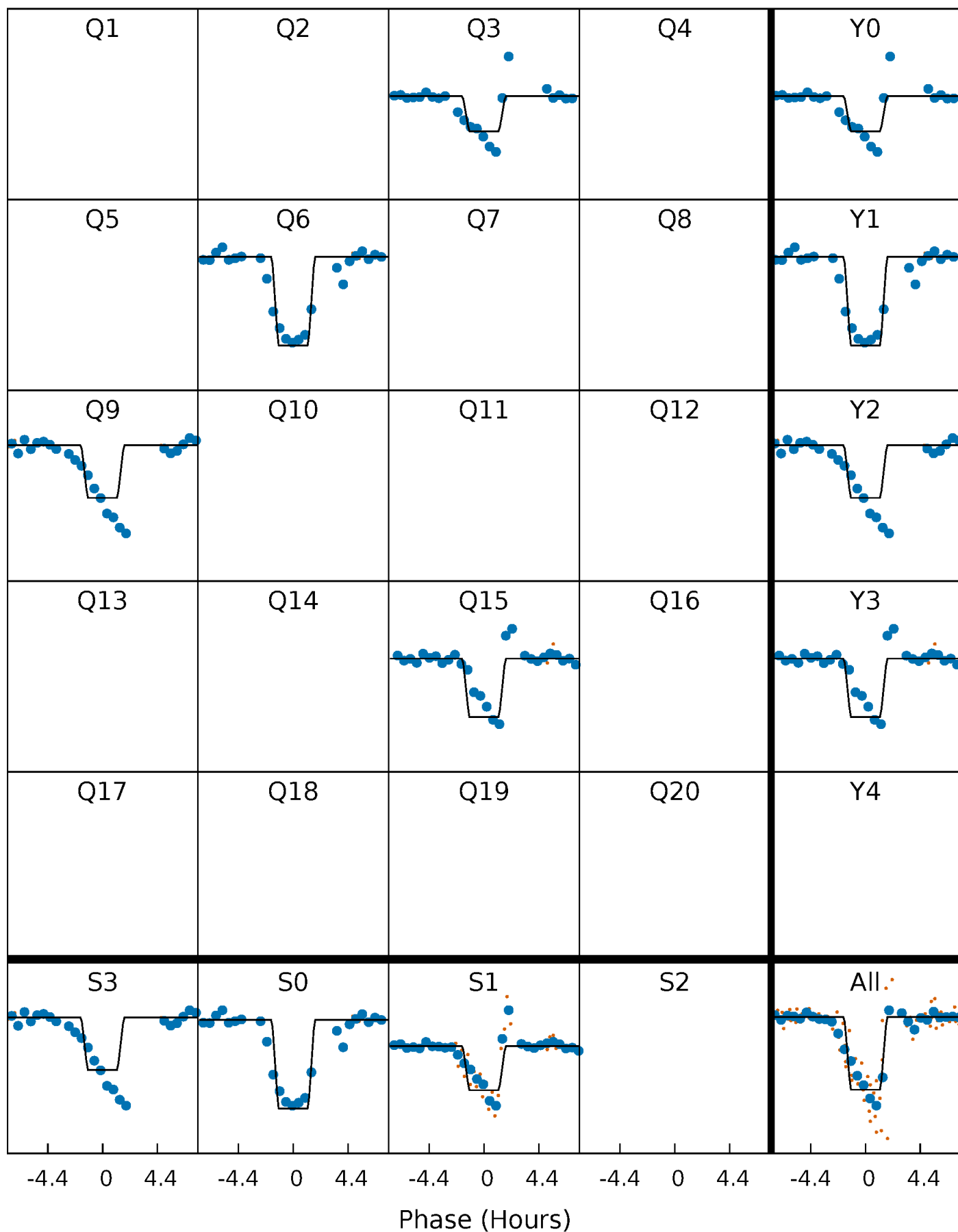
DV Quarter-Phased Transit Curves

TCE 007264976-05 $P=298.867213$ Days $T_0=265.577238$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

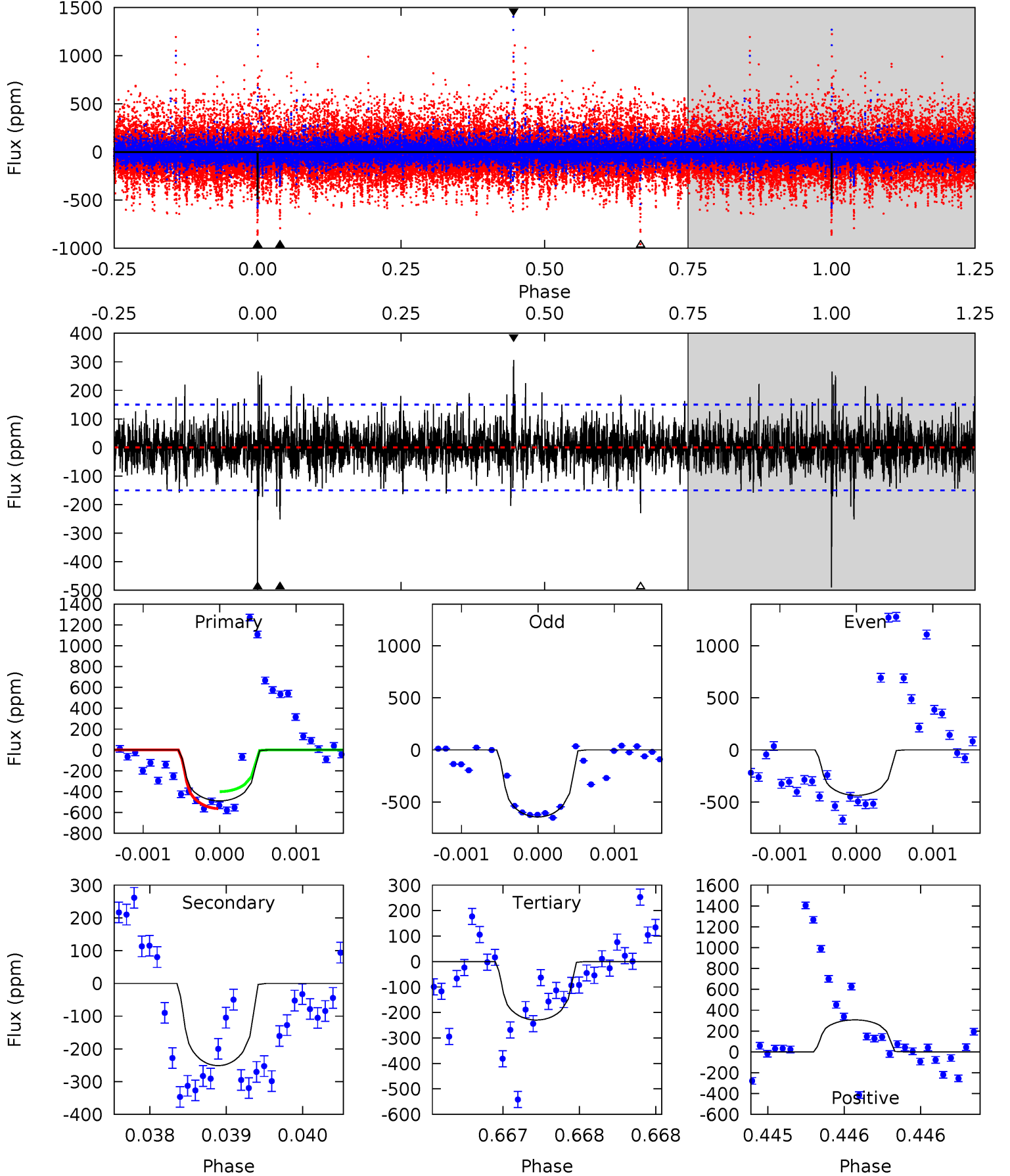
TCE 007264976-05 $P=298.863171$ Days $T_0=265.582615$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-05, P = 298.867213 Days, E = 265.577238 Days

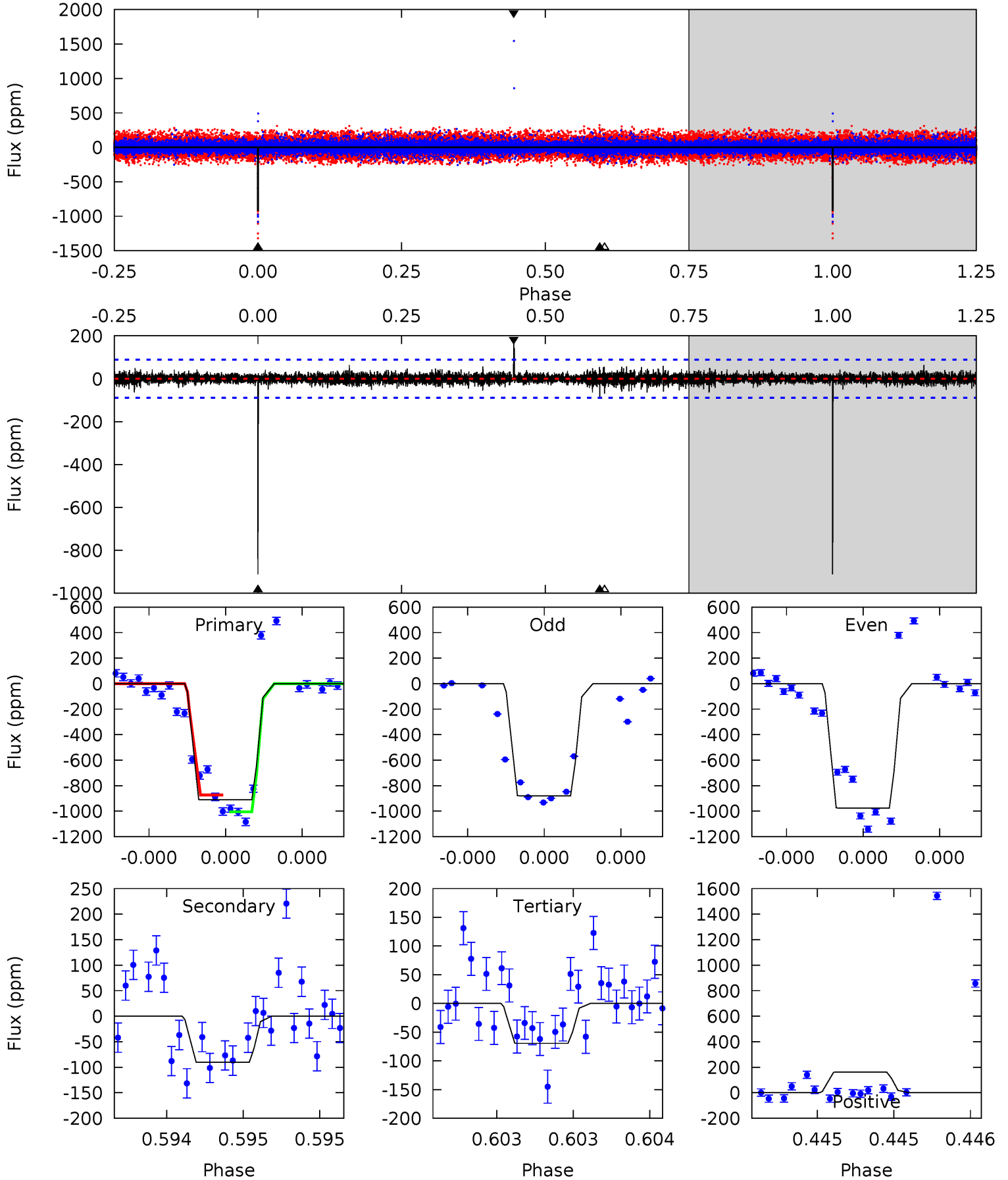
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	9.24	8.45	11.3	5.53	3.42	1.83	9.55	6.71	0.79	-2.05	1.97	0.82	0.39	3.01



Alt Model-Shift Uniqueness Test

007264976-05, P = 298.863171 Days, E = 265.582615 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
57.4	5.68	4.38	10.2	5.58	3.50	0.83	53.0	47.2	1.30	-4.48	3.04	0.96	0.15	4.08



Stellar Parameters For KIC 007264976

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-251 ± 27	$10.02^{+8.74}_{-6.66}$	464^{+27}_{-14}	3407^{+1714}_{-575}	1020^{+8213}_{-739}
Alt.	-90 ± 16	$10.32^{+10.51}_{-7.04}$	463^{+26}_{-14}	2904^{+1254}_{-479}	344^{+2995}_{-263}

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

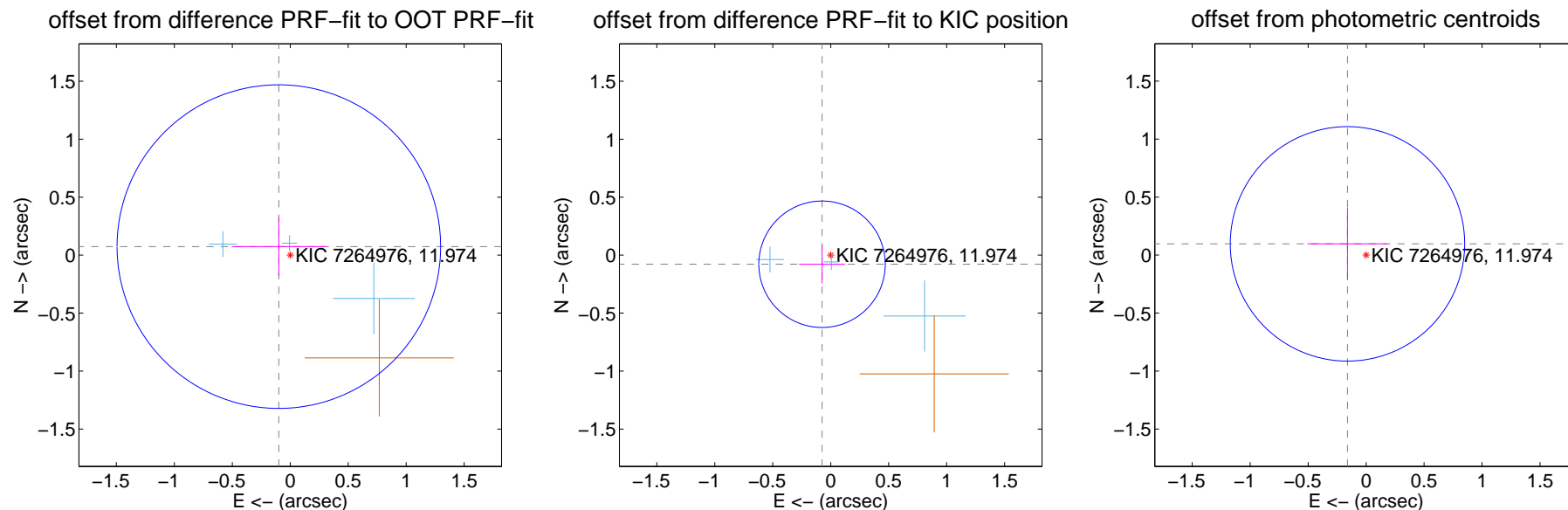
DV Centroid Data

Supplemental centroid analysis for 007264976-05. **Kepler magnitude: 11.97.** Transit SNR 9.47

There are 3 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.123 ± 0.465	0.26	0.098 ± 0.407	0.074 ± 0.254
PRF-fit source offset from KIC position	0.108 ± 0.182	0.60	0.075 ± 0.198	-0.078 ± 0.165
photometric centroid source offset	0.19 ± 0.34	0.56	0.16 ± 0.35	0.10 ± 0.31



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.

Q1 no difference image



Q1 no OOT image



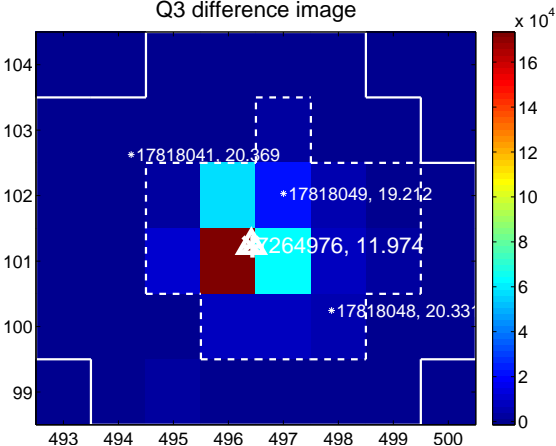
Q2 no difference image



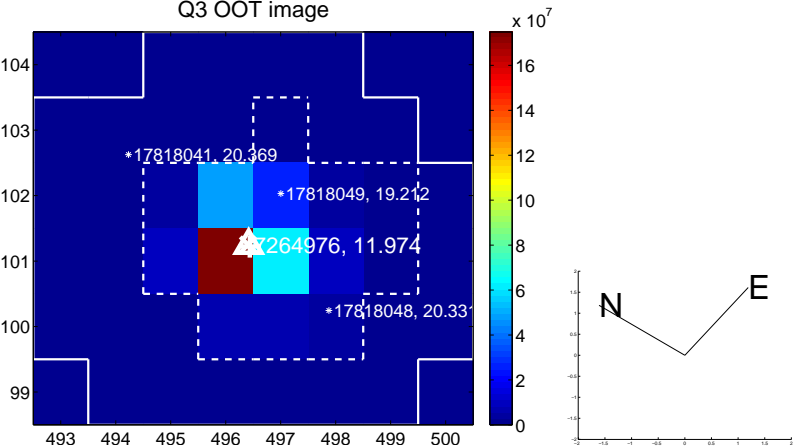
Q2 no OOT image



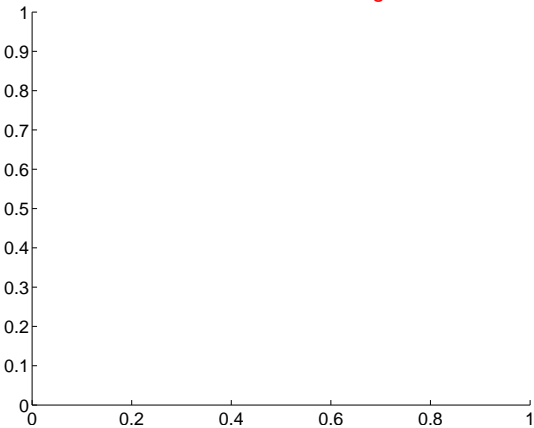
Q3 difference image



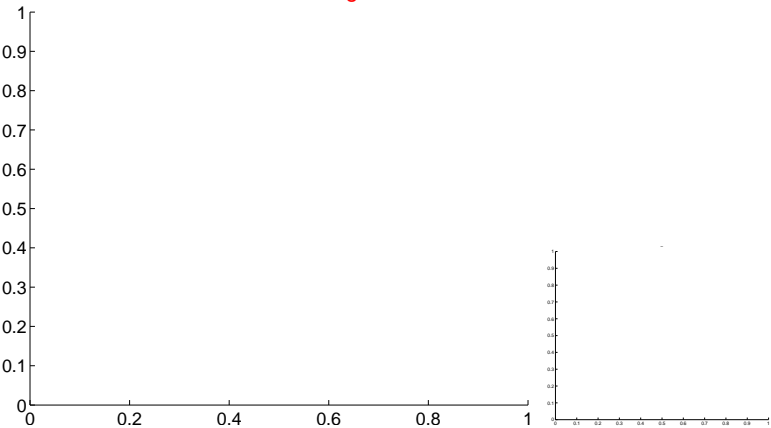
Q3 OOT image



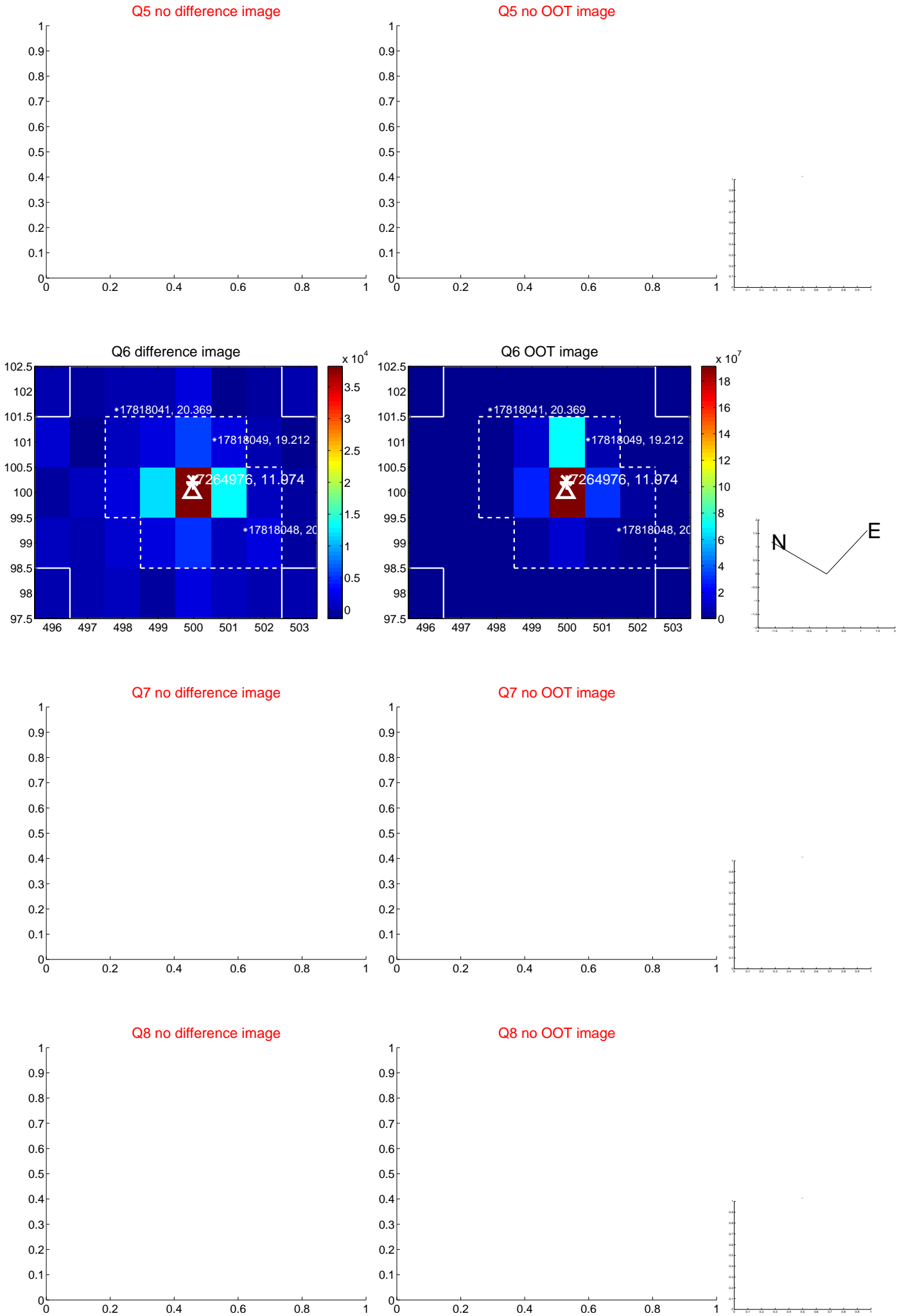
Q4 no difference image



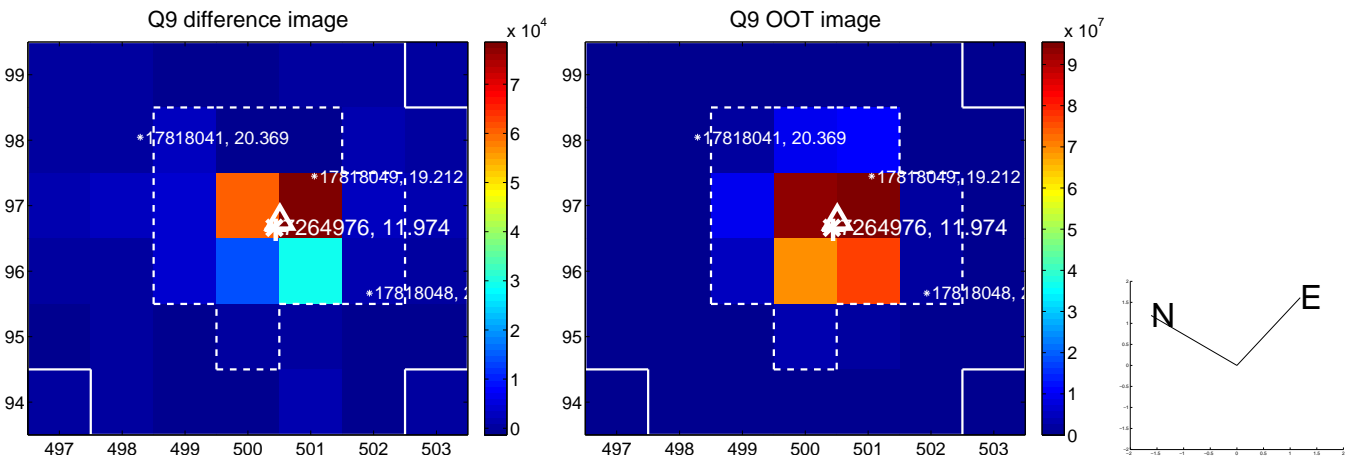
Q4 no OOT image



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.

Q13 no difference image



Q13 no OOT image



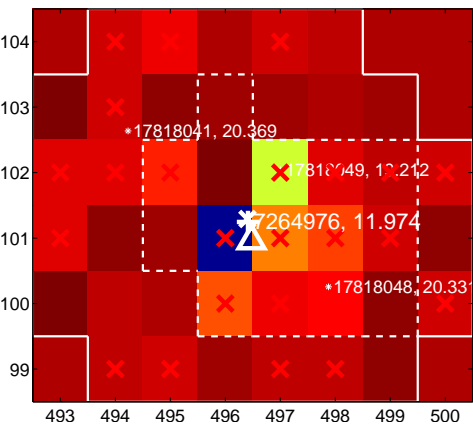
Q14 no difference image



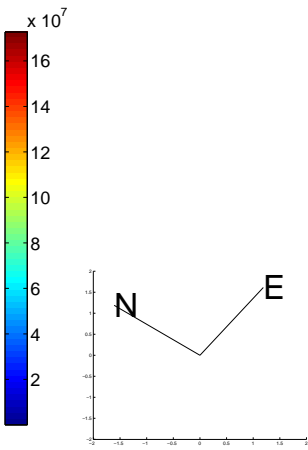
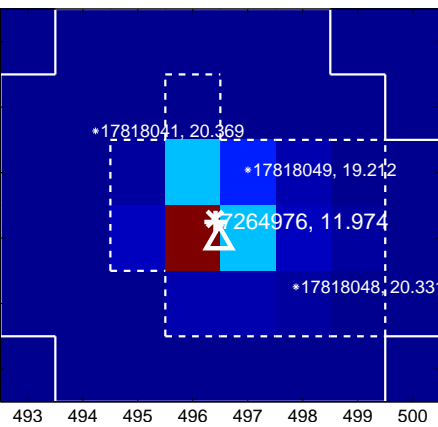
Q14 no OOT image



Q15 difference image. Poor Quality



Q15 OOT image



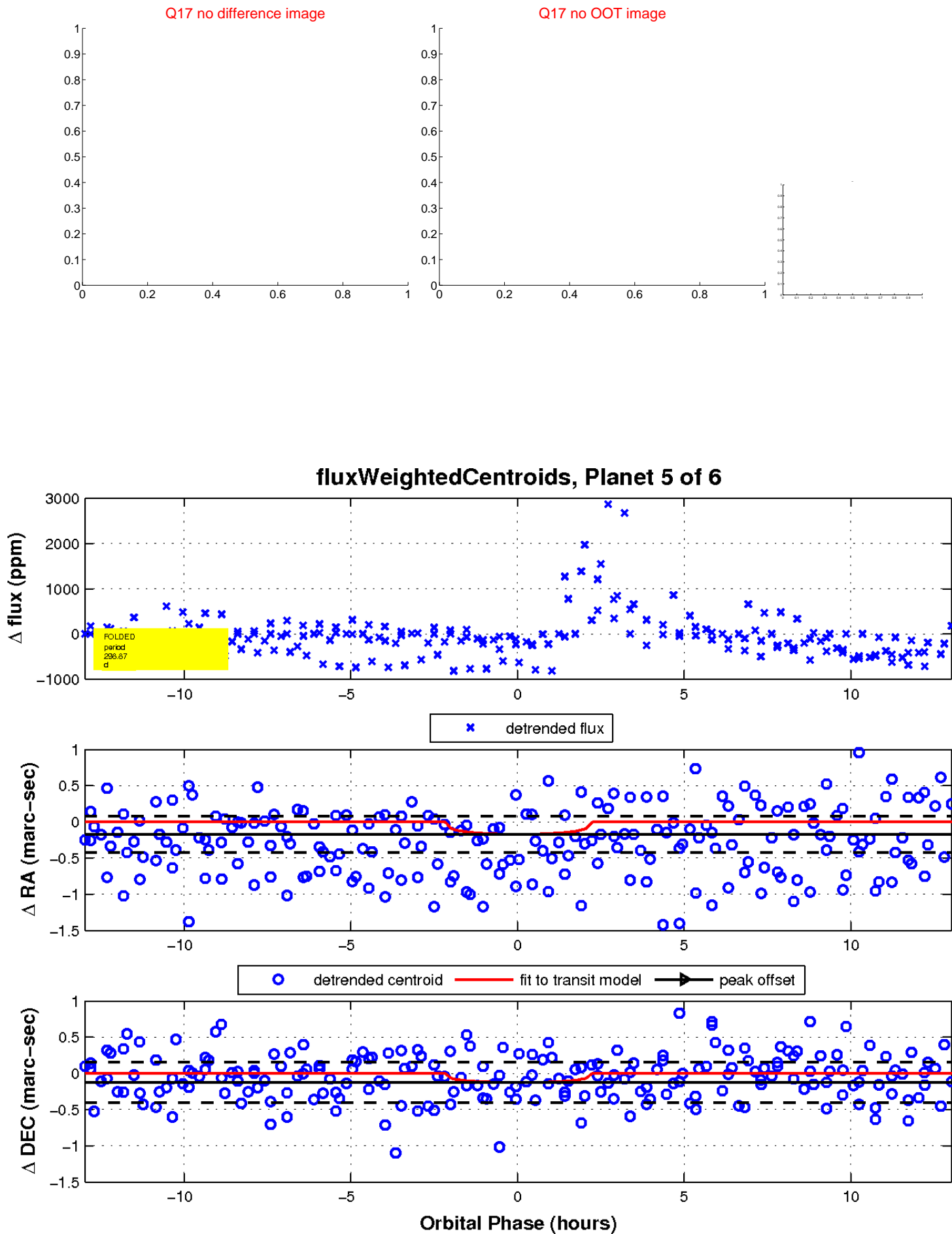
Q16 no difference image



Q16 no OOT image

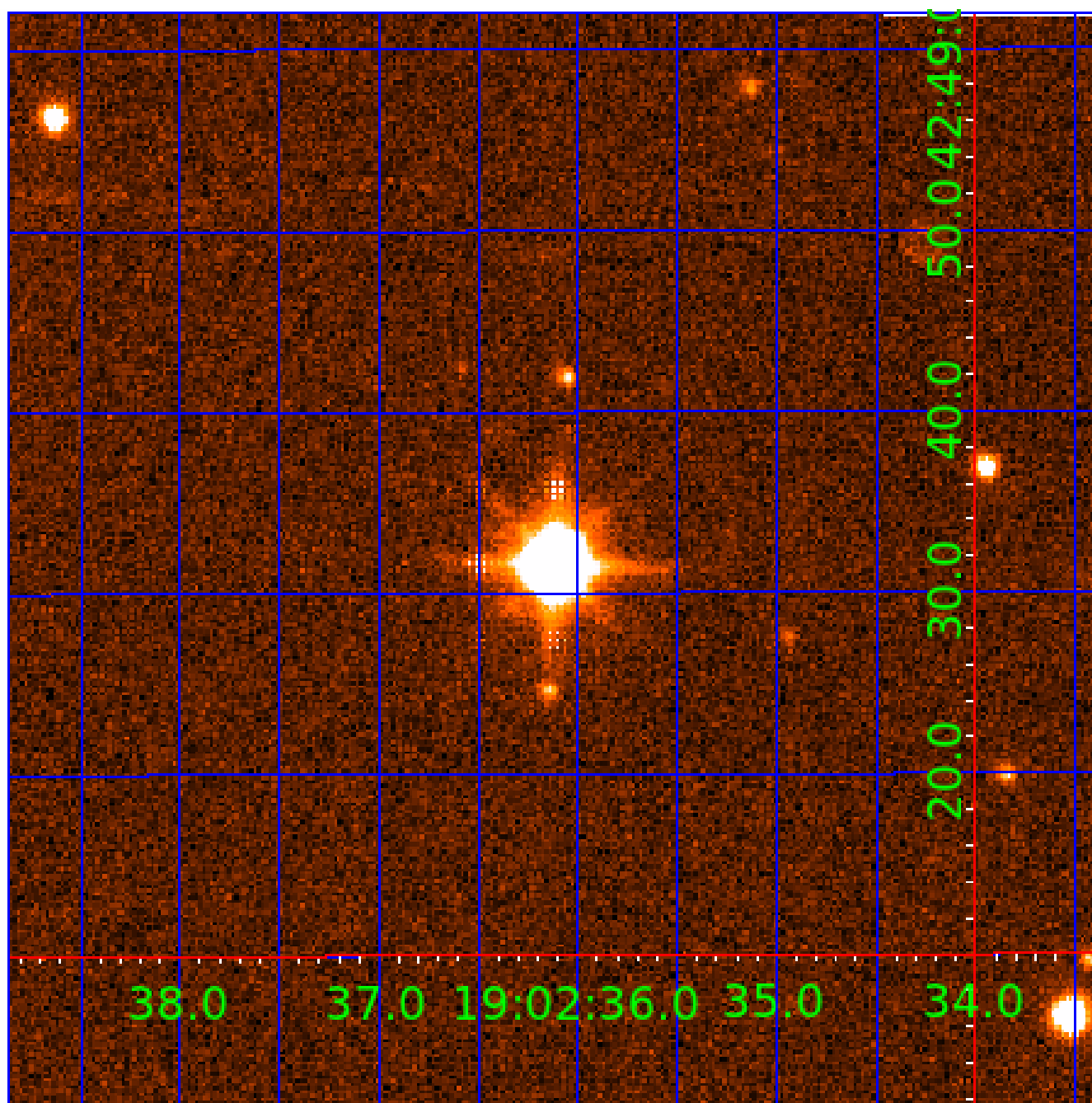


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007264976

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})
007264976-01	OBS	No	532.840454	432.564366	599.4	3.320	21.9	9.0	1.85	5038	4.92	1.27
007264976-02	OBS	No	597.552552	375.827115	585.7	5.011	14.3	9.4	1.85	5038	5.03	1.09
007264976-03	OBS	No	478.058684	296.788410	563.7	3.840	19.7	7.9	1.85	5038	4.73	1.47
007264976-04	OBS	No	513.376449	300.623445	487.7	5.542	15.2	7.3	1.85	5038	4.58	1.34
007264976-05	OBS	No	298.867213	265.577238	583.5	4.368	18.6	9.5	1.85	5038	4.40	2.75
007264976-06	OBS	No	213.790501	274.634459	318.0	4.500	14.3	-1.0	1.85	5038	3.20	4.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007264976-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_TRACKER—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—INCONSISTENT_TRANS
007264976-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007264976-05	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—ALL_TRANS_CHASES—INCONSISTENT_TRANS—CENT_FEW_DIFFS—HALO_GHOST
007264976-06	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—LPP_DV—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.

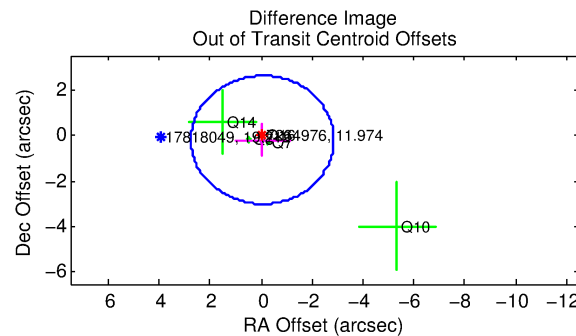
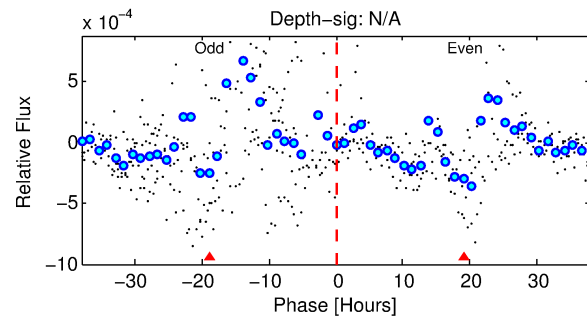
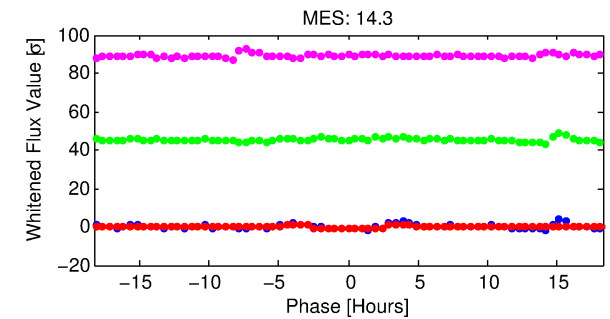
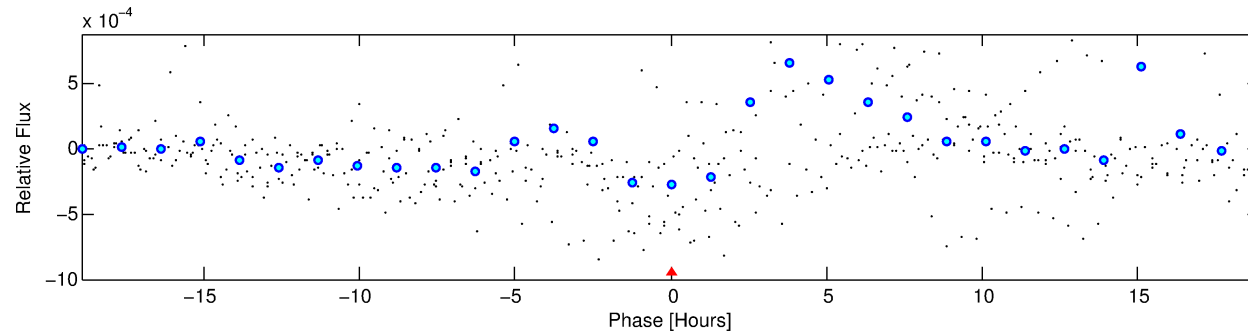
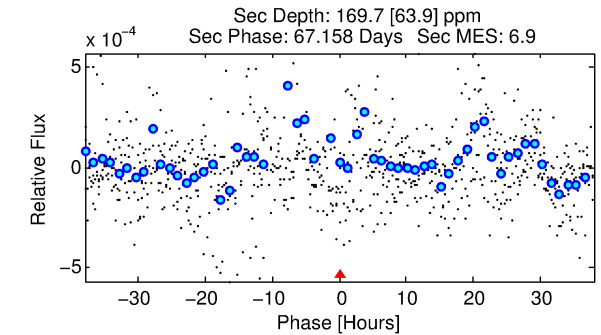
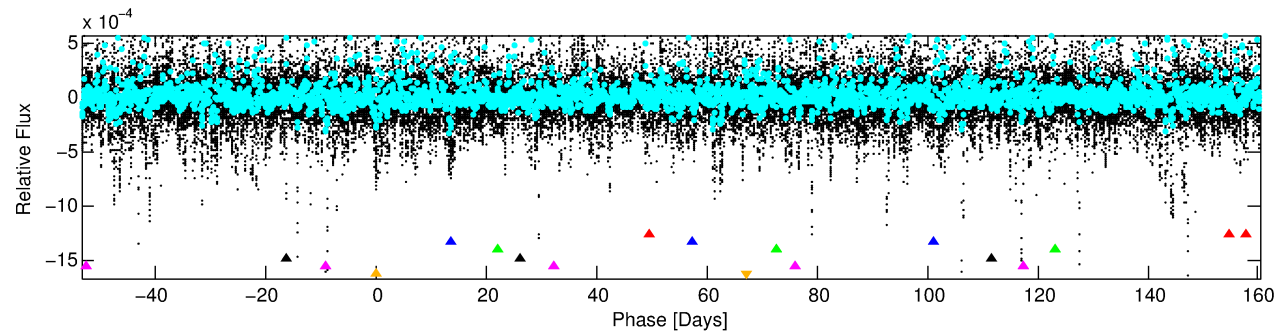
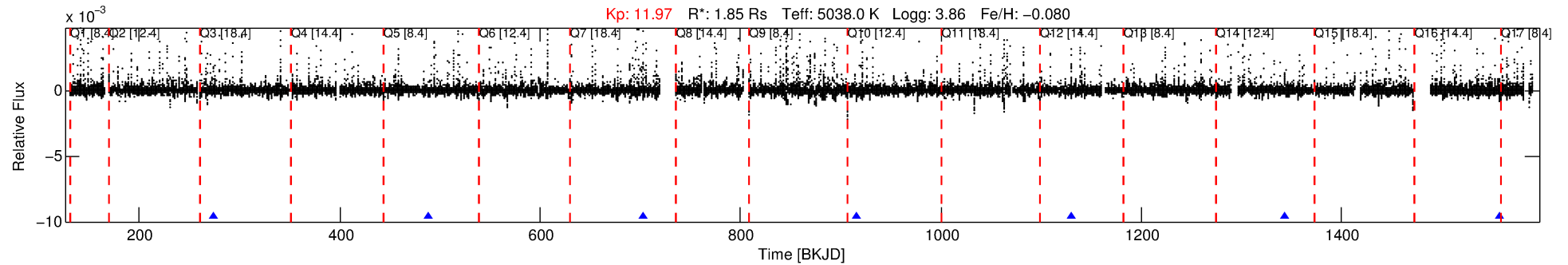
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007264976-06

No Significant Match Found

DV One-Page Summary

KIC: 7264976 Candidate: 6 of 6 Period: 213.791 d



TPS TCE Results:

Period = 213.79050 d
Epoch = 274.6345 BKJD

DV fit results are unavailable

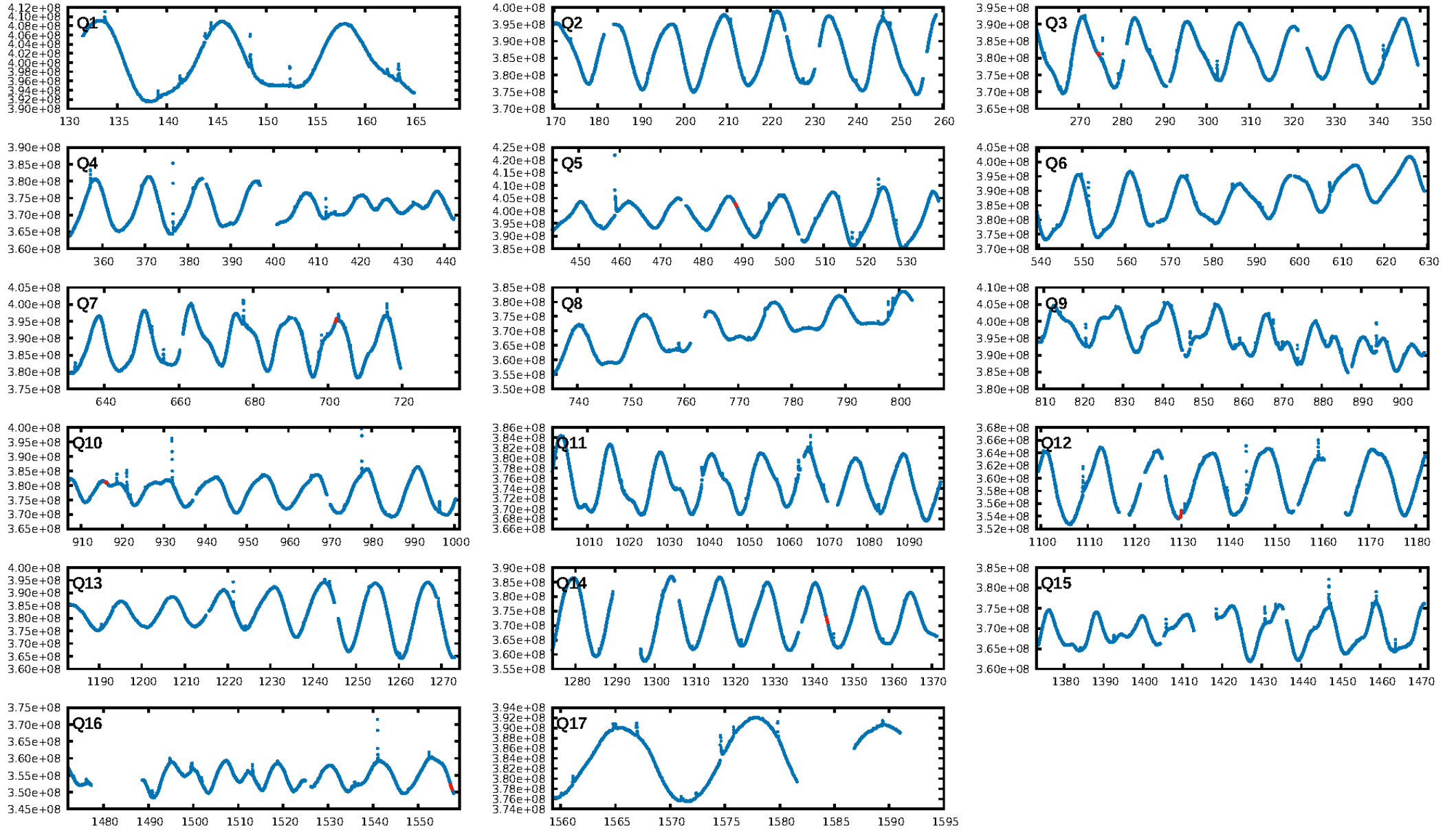
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [325.59σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 69.12
Centroid-sig: 22.1%
Centroid-so: 0.308 arcsec [1.65σ]
OotOffset-rm: 0.197 arcsec [0.21σ]
KicOffset-rm: 0.384 arcsec [0.32σ]
OotOffset-st: 2/2/1/0 [5]
KicOffset-st: 2/2/1/0 [5]
DiffImageQuality-fgm: 0.40 [2/5]
DiffImageOverlap-fno: 1.00 [6/6]

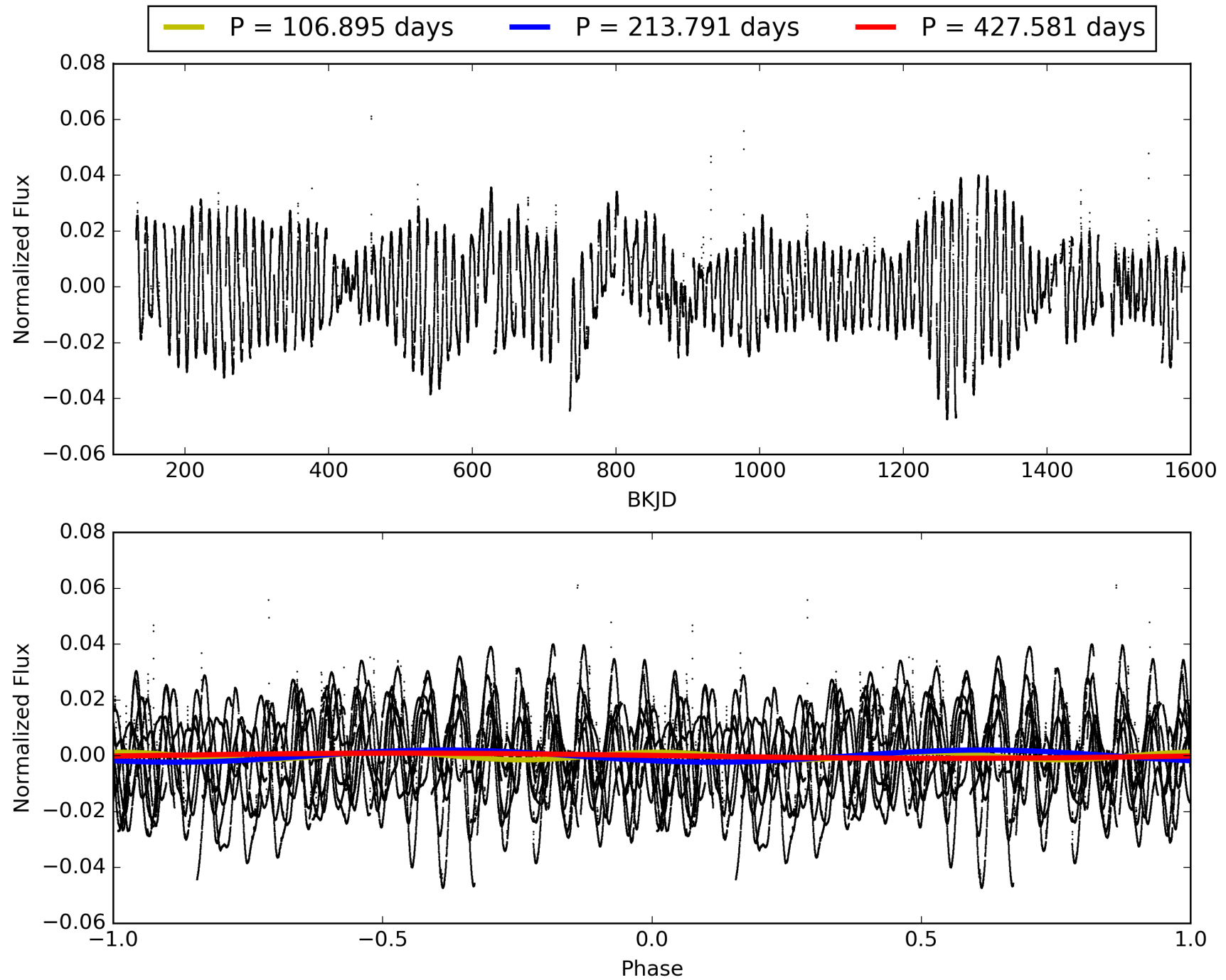
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:50:27 Z

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

TCE 007264976-06, PDC Light Curves

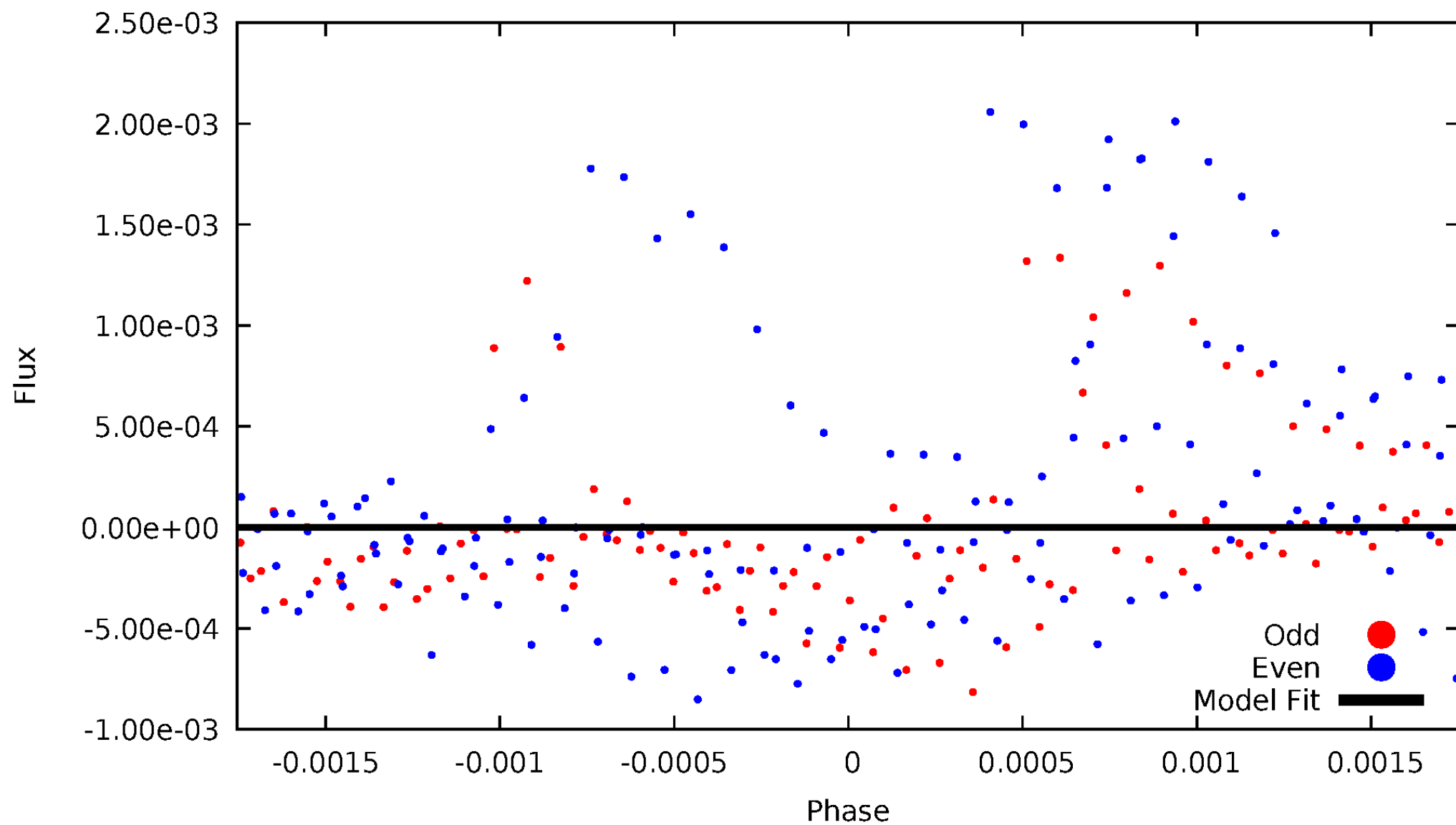


TCE 007264976-06



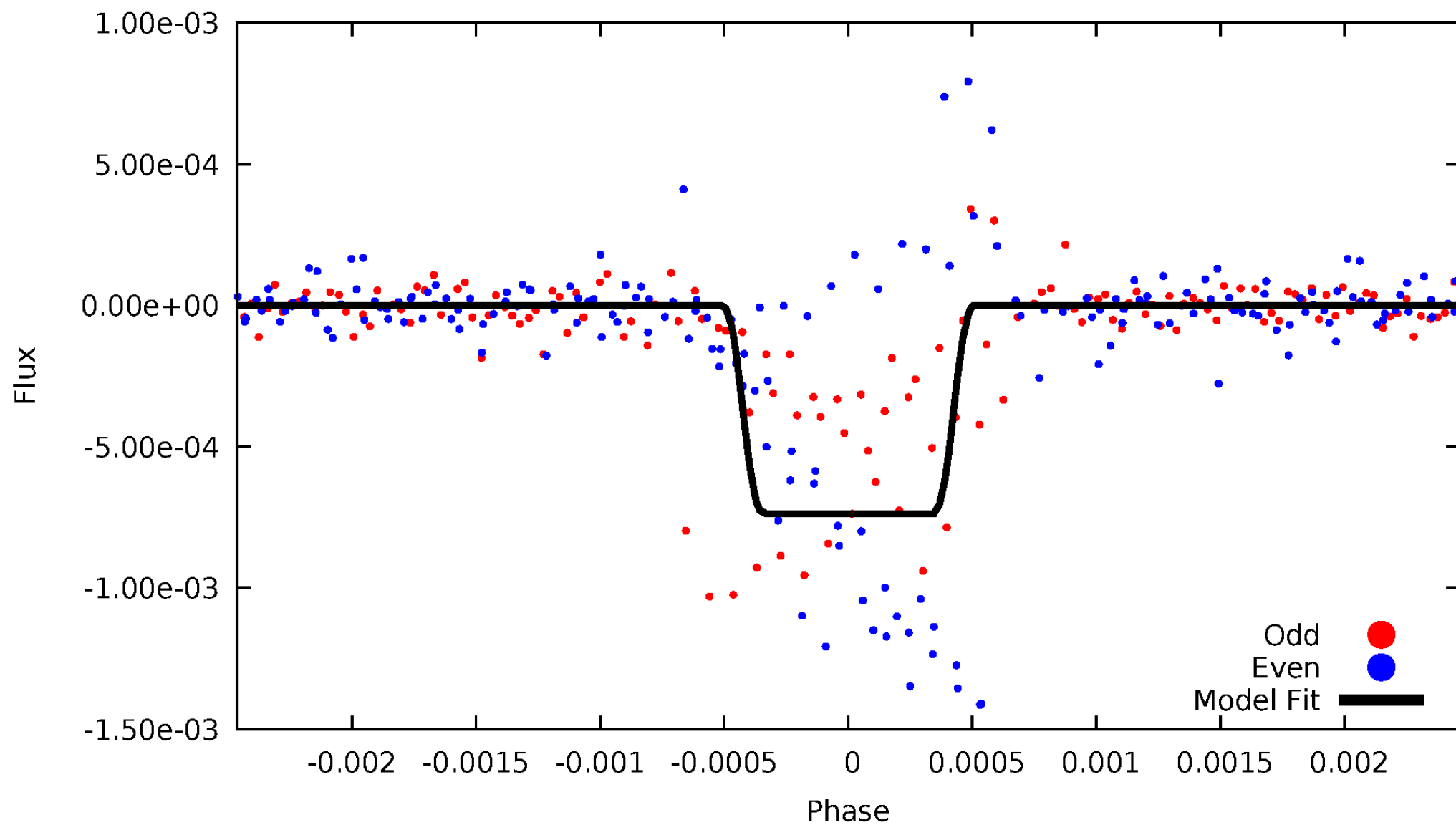
DV Odd/Even

TCE 007264976-06



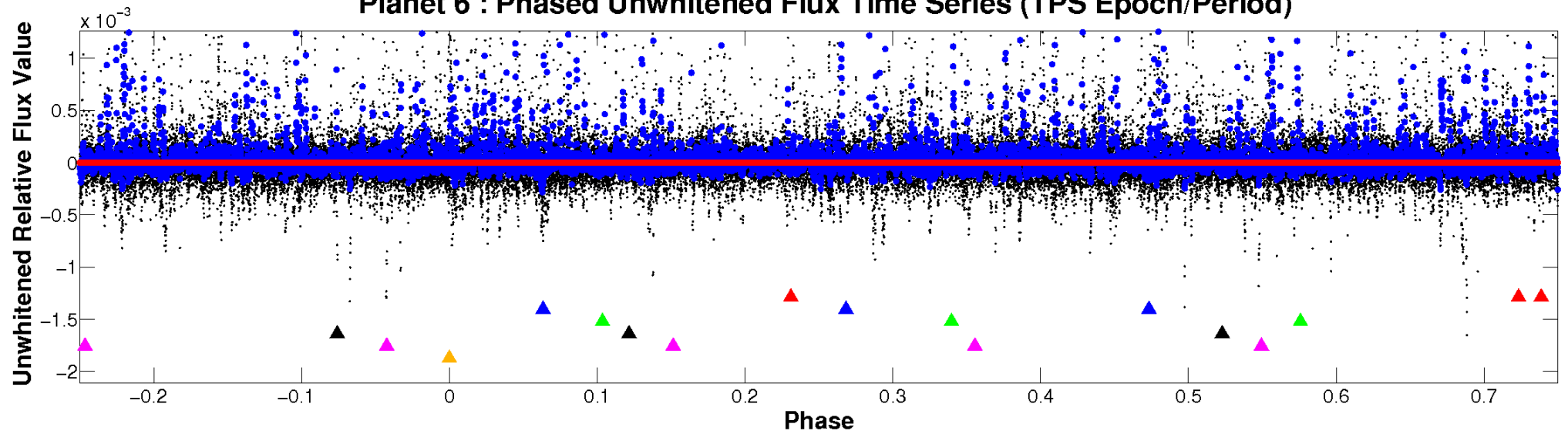
ALT Odd/Even

TCE 007264976-06



Non-Whitened Vs. Whitened Light Curve

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

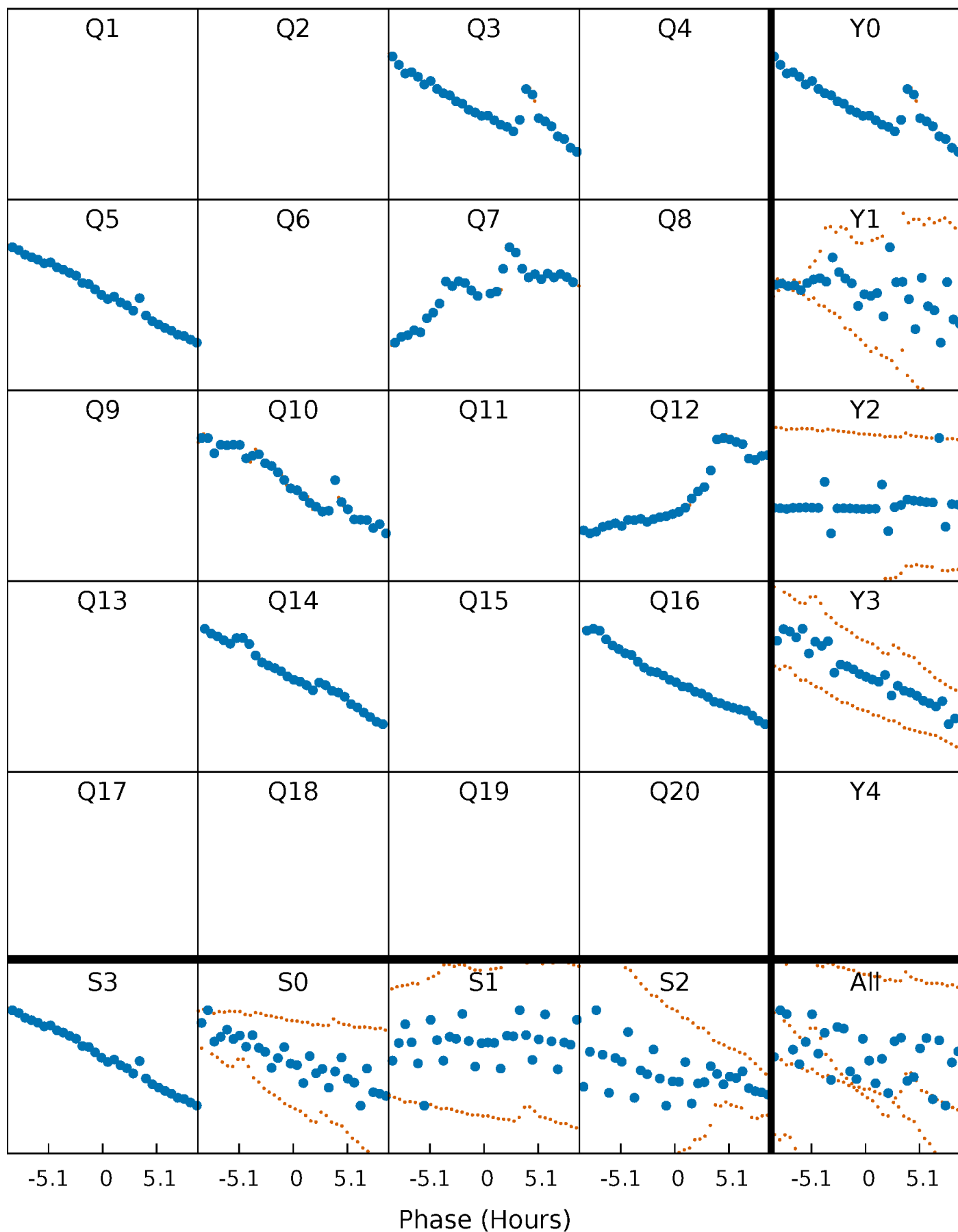


Planet 6 : Phased Whitened Flux Time Series (TPS Epoch/Period)



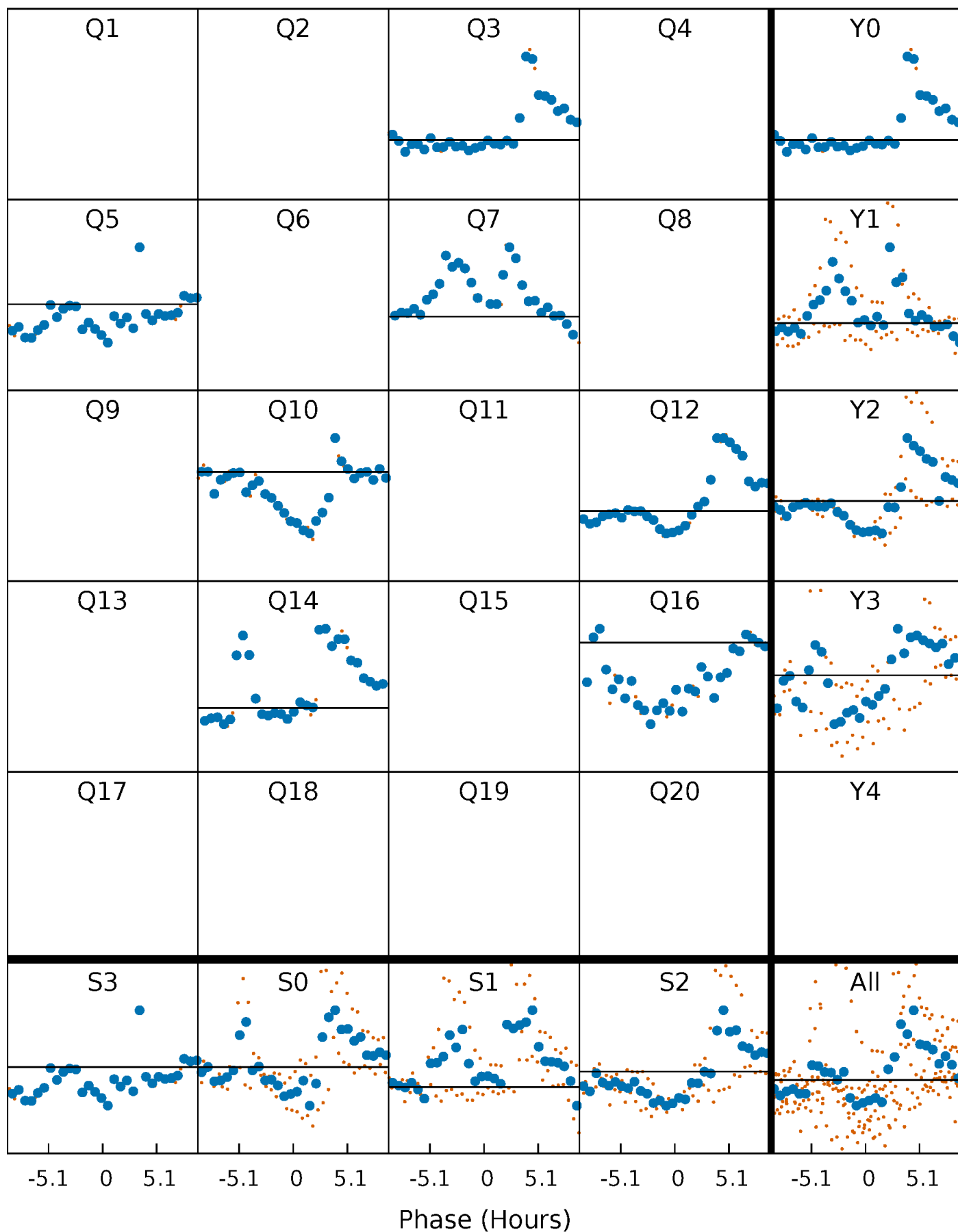
PDC Quarter-Phased Transit Curves

TCE 007264976-06 P=213.790501 Days $T_0=274.634459$ (BKJD)



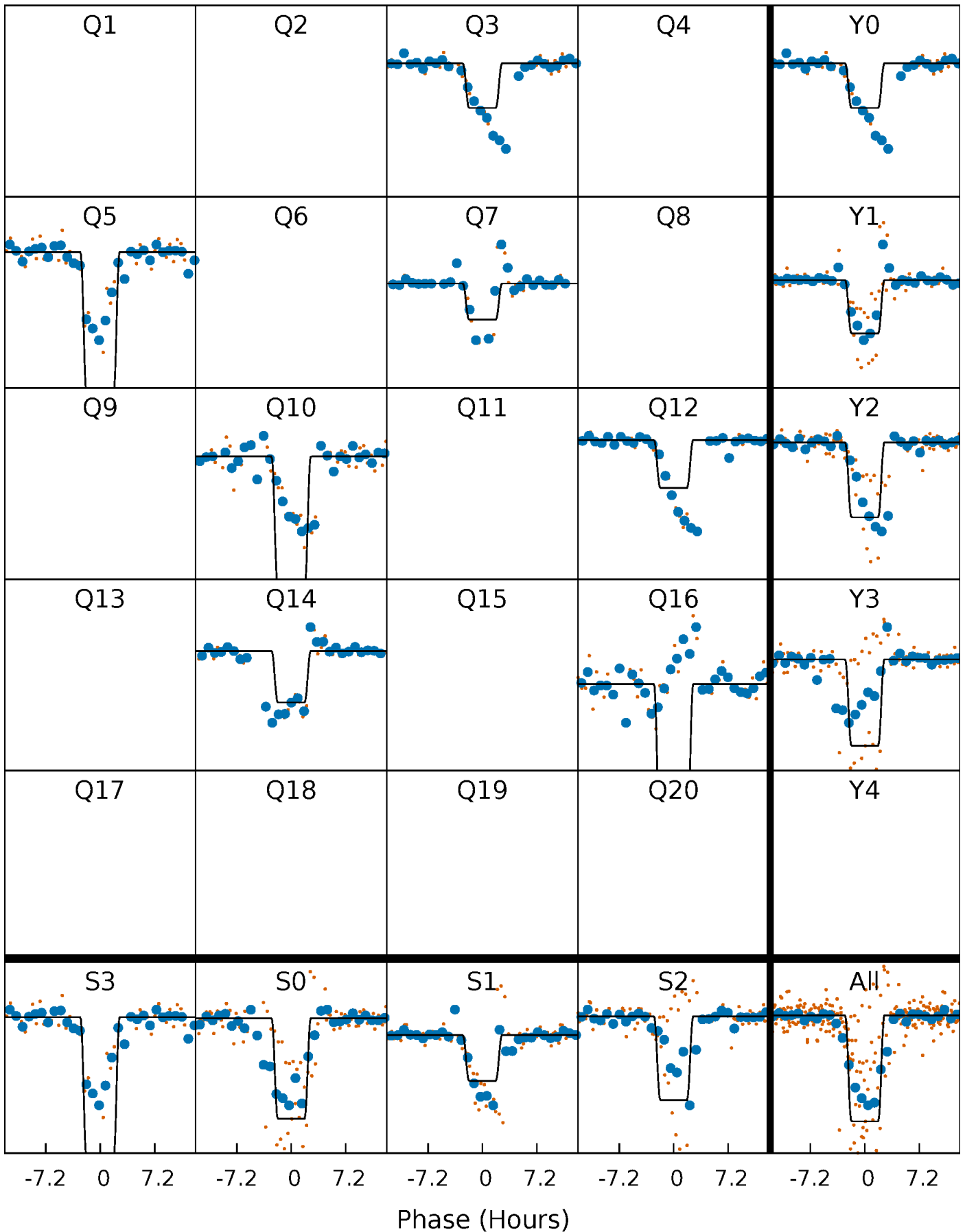
DV Quarter-Phased Transit Curves

TCE 007264976-06 P=213.790501 Days $T_0=274.634459$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

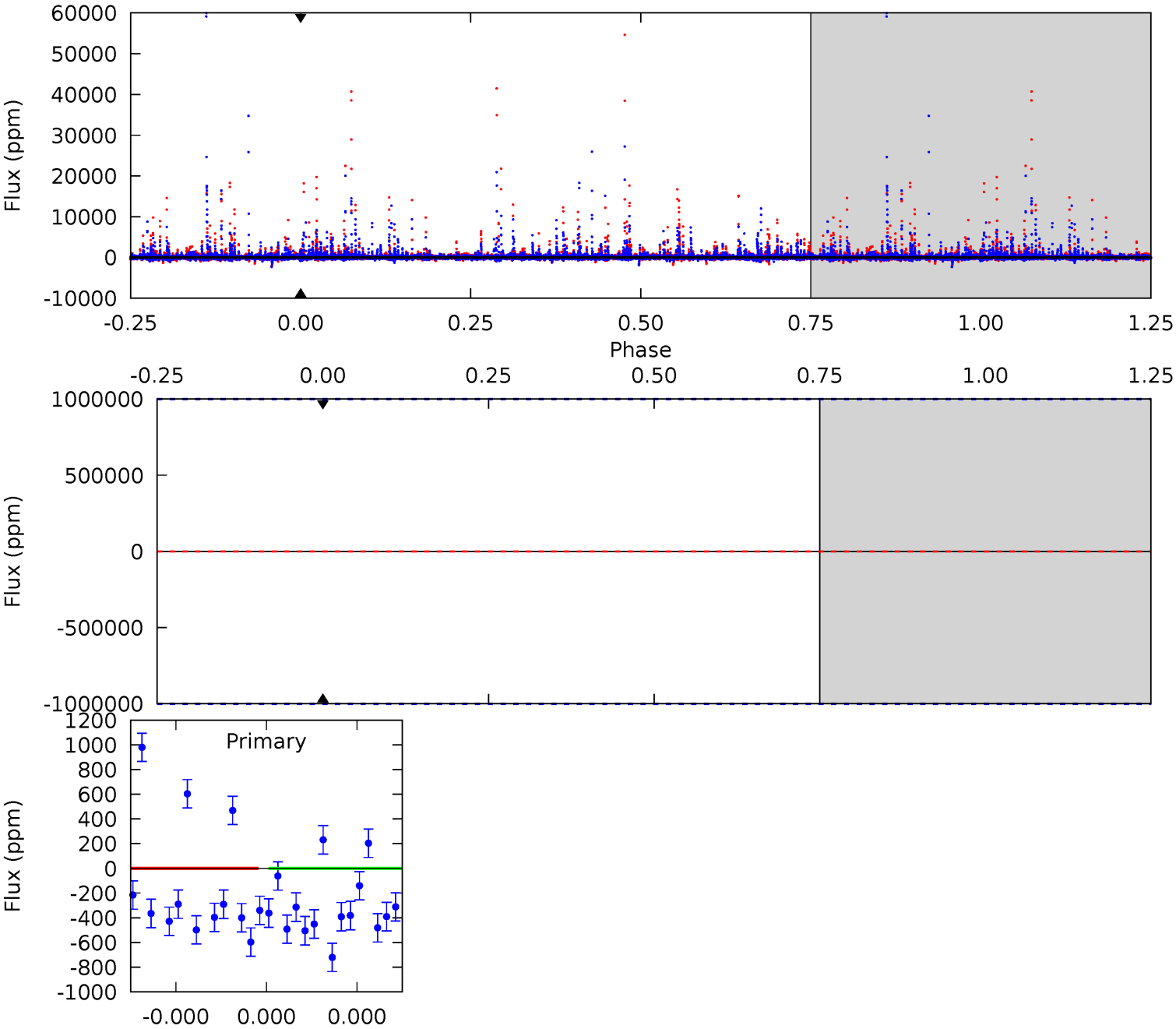
TCE 007264976-06 P=213.790501 Days $T_0=274.638766$ (BKJD)



DV Model-Shift Uniqueness Test

007264976-06, P = 213.790501 Days, E = 60.843958 Days

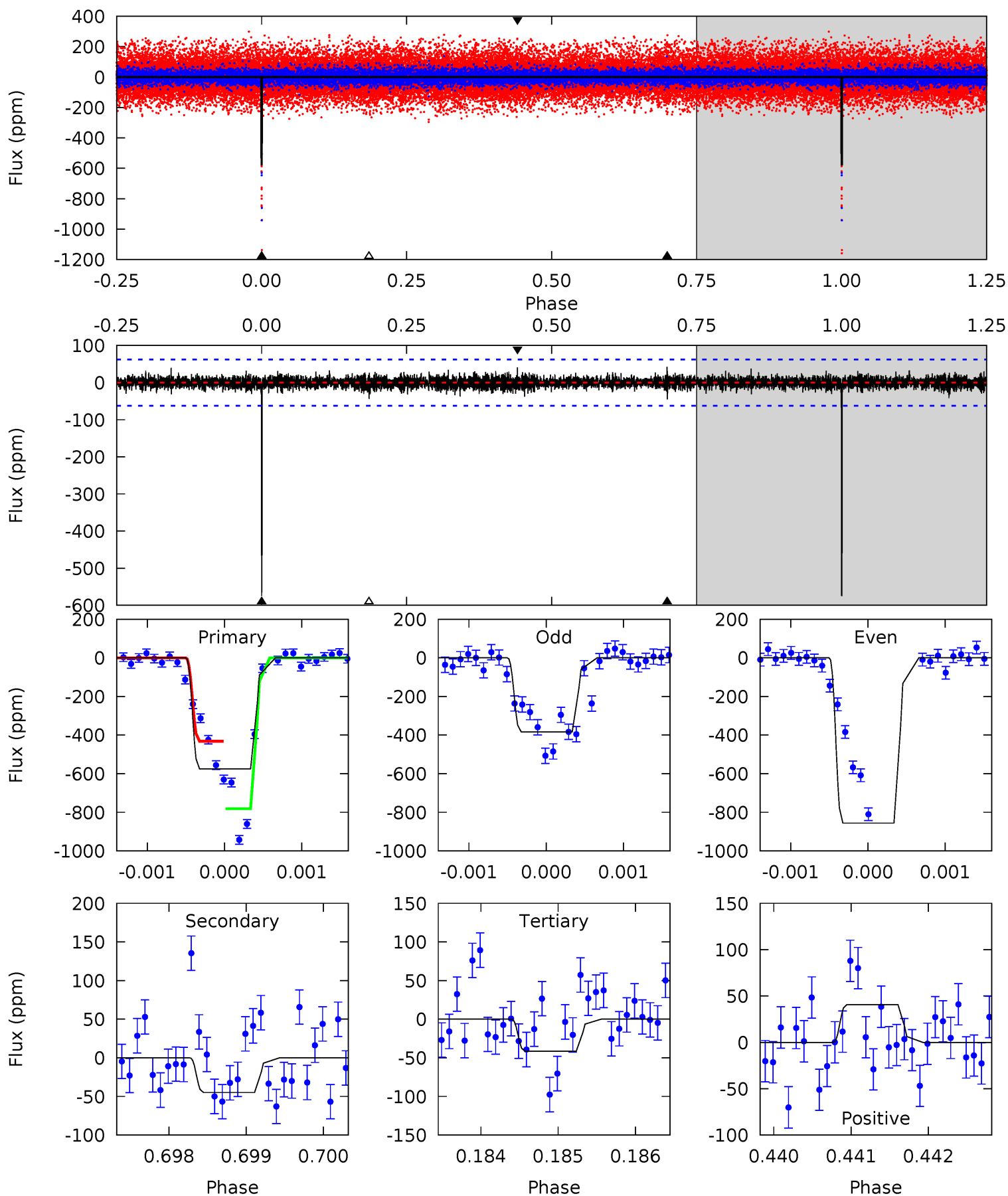
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007264976-06, P = 213.790501 Days, E = 60.848265 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
50.2	3.93	3.62	3.56	5.45	3.28	0.78	46.6	46.7	0.30	0.37	23.6	0.72	0.07	13.7



Stellar Parameters For KIC 007264976

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5038^{+83}_{-68}	$3.861^{+0.050}_{-0.150}$	$-0.080^{+0.150}_{-0.100}$	$1.846^{+0.475}_{-0.119}$	$0.902^{+0.148}_{-0.016}$	$0.202^{+0.043}_{-0.089}$
	+2%/-1%	+1%/-4%	+188%/-125%	+26%/-6%	+16%/-2%	+21%/-44%
Source	SPE74	SPE74	SPE74	DSEP		

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

Secondary Eclipse Parameters for KIC 007264976-06 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$16.44^{+17.15}_{-11.61}$	518^{+29}_{-16}	-3768^{+19060}_{-10566}	$-1154.356^{+188318.894}_{-168160.110}$
Alt.	-45 ± 11	$16.94^{+16.93}_{-10.92}$	518^{+29}_{-15}	2332^{+709}_{-330}	39^{+284}_{-29}

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

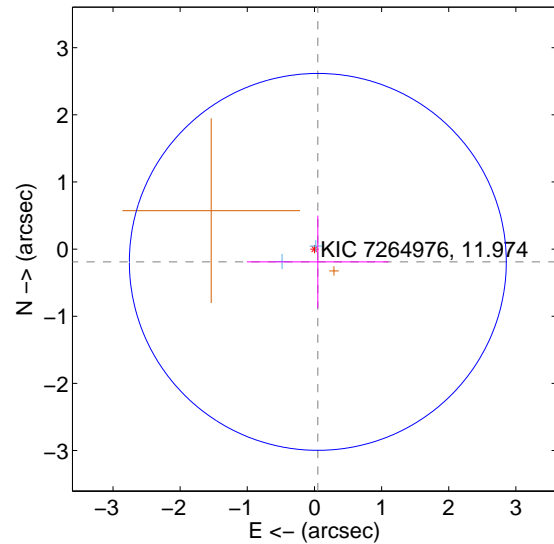
Supplemental centroid analysis for 007264976-06. **Kepler magnitude: 11.97.** Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

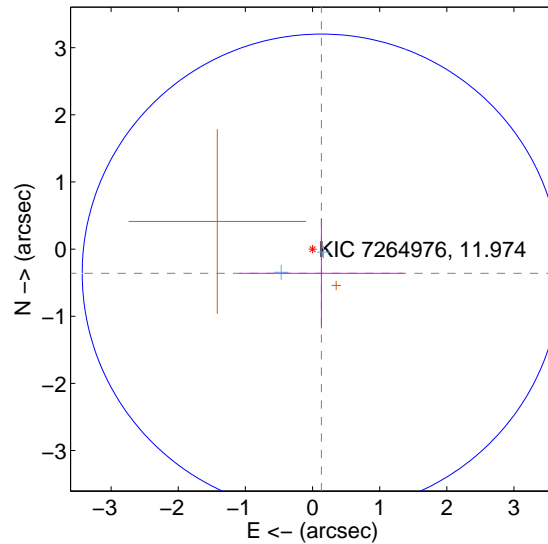
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.197 ± 0.936	0.21	-0.051 ± 1.056	-0.190 ± 0.690
PRF-fit source offset from KIC position	0.384 ± 1.188	0.32	-0.133 ± 1.223	-0.360 ± 0.820
photometric centroid source offset	0.31 ± 0.19	1.65	-0.31 ± 0.19	-0.02 ± 0.16

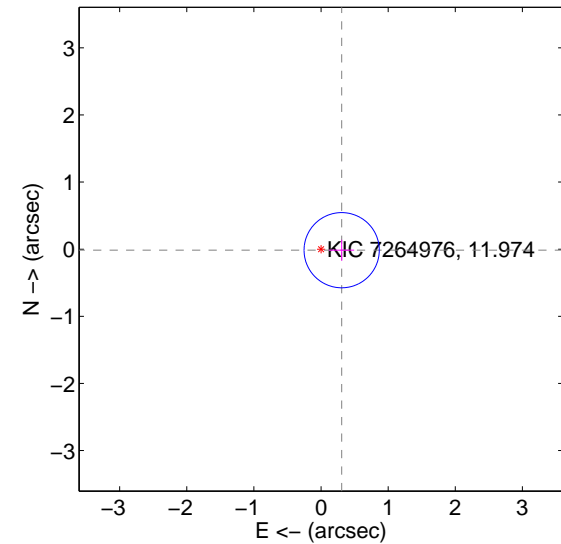
offset from difference PRF-fit to OOT PRF-fit



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.

Q1 no difference image



Q1 no OOT image



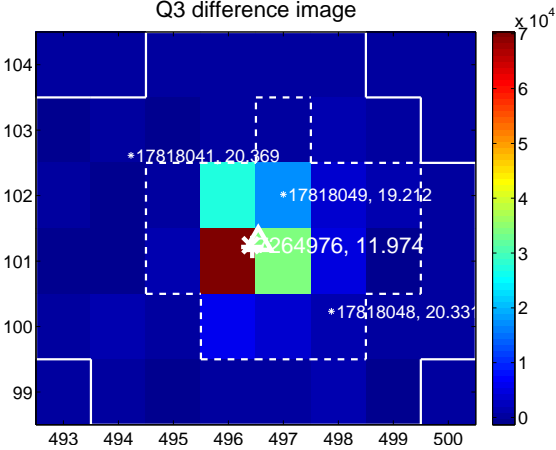
Q2 no difference image



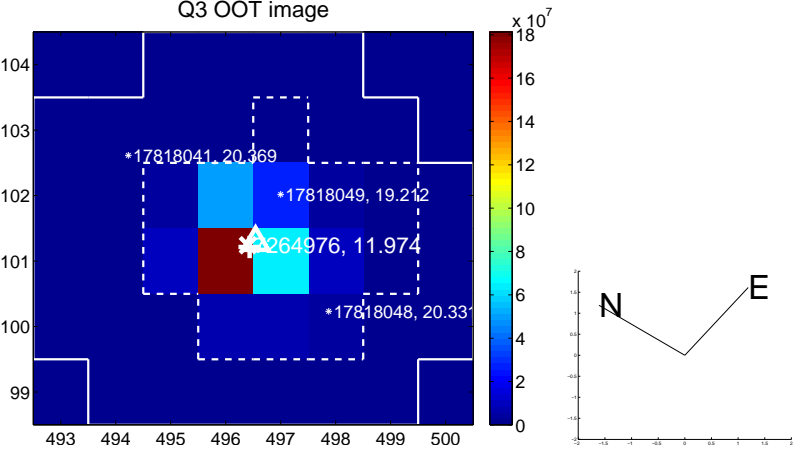
Q2 no OOT image



Q3 difference image



Q3 OOT image



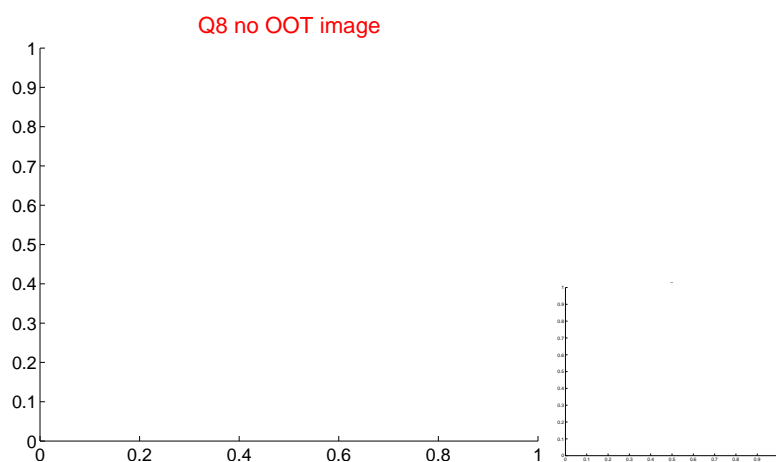
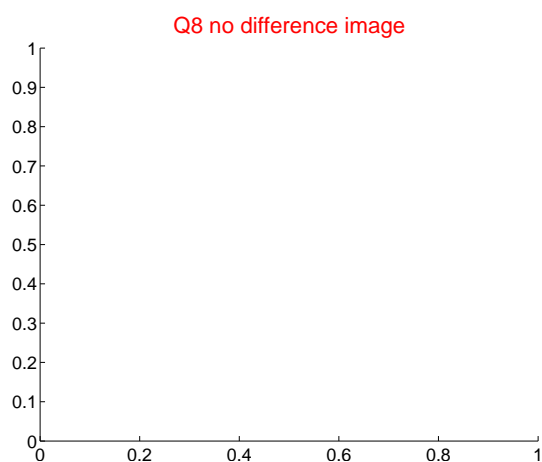
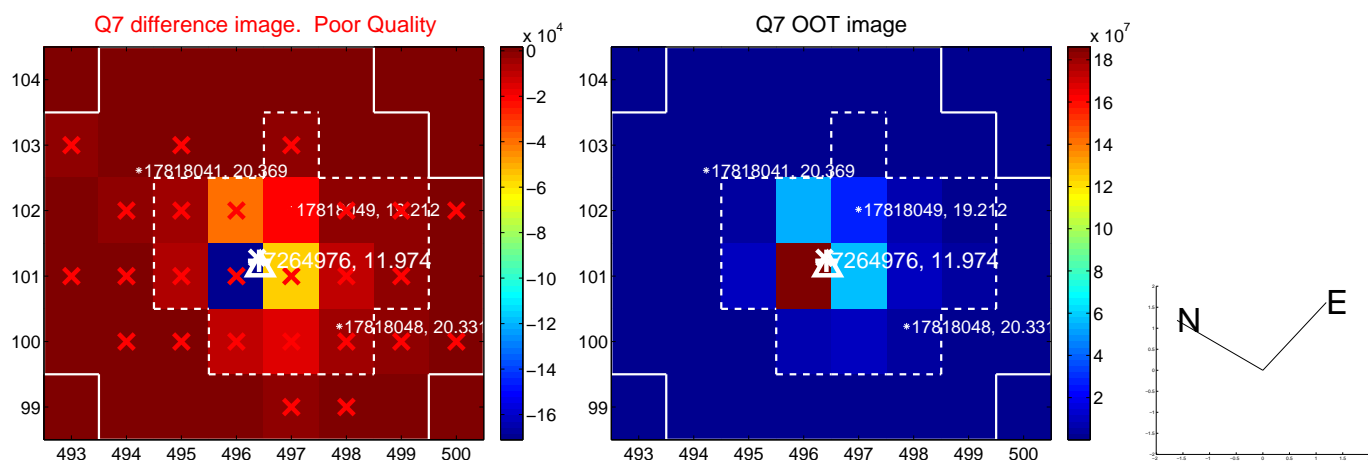
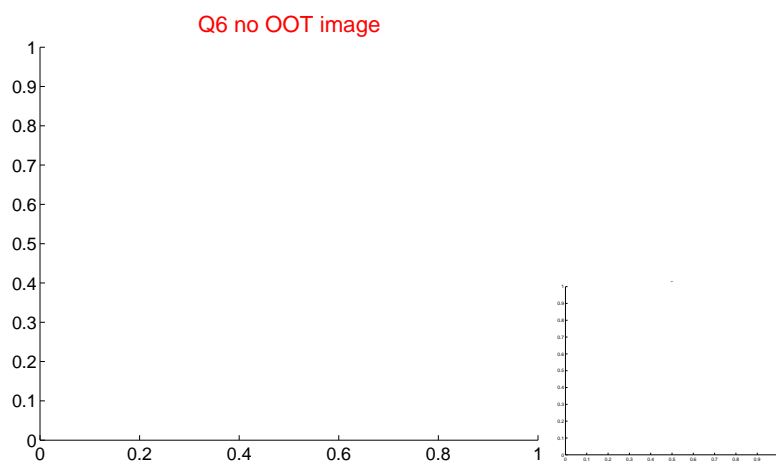
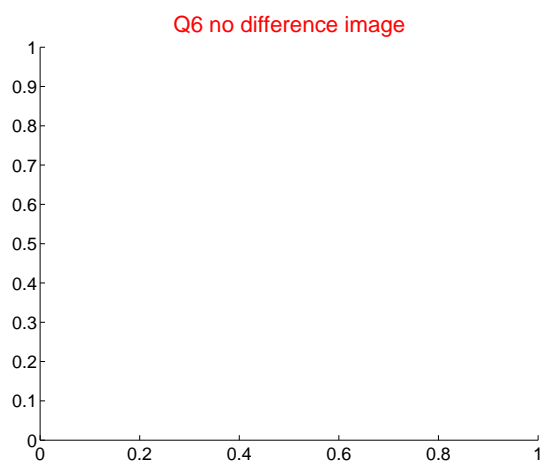
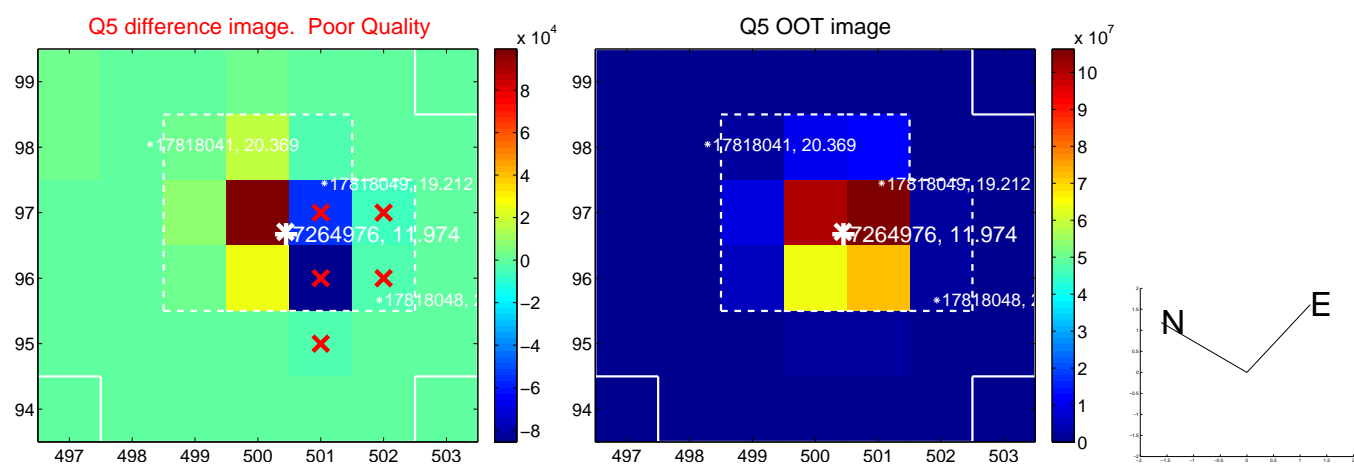
Q4 no difference image



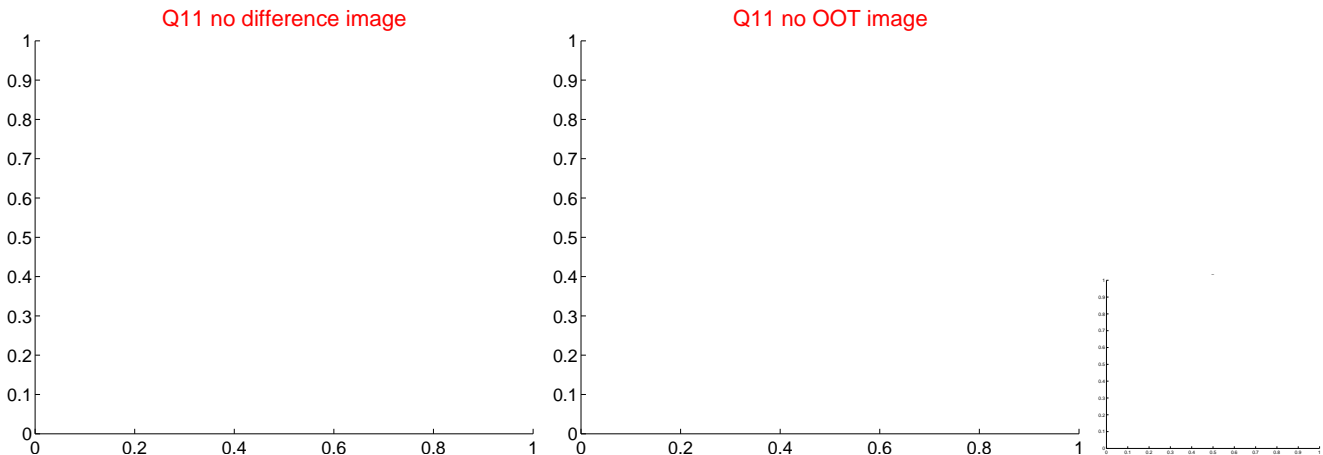
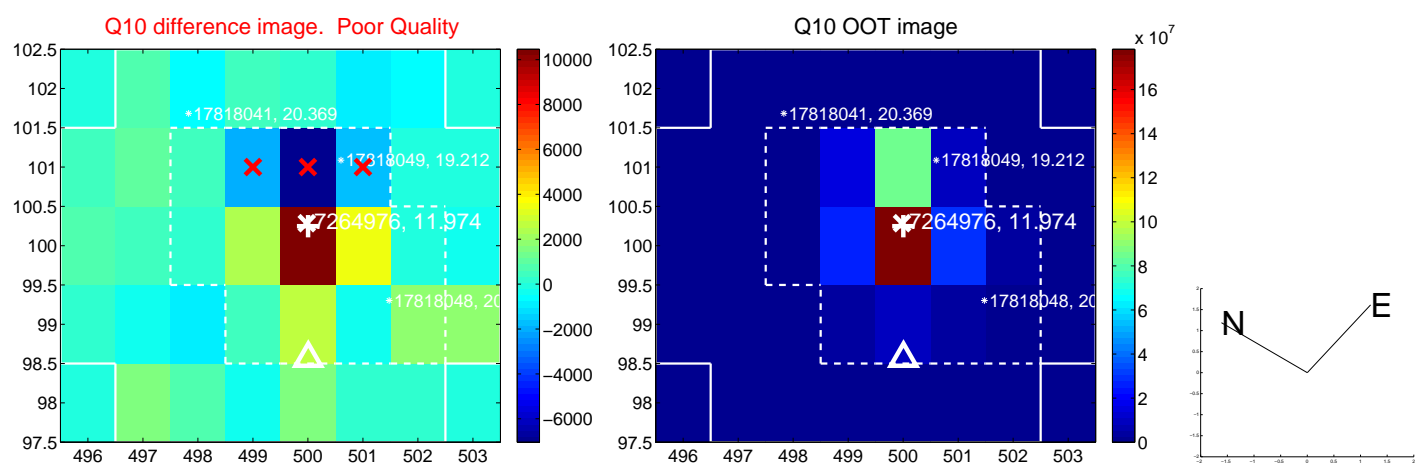
Q4 no OOT image



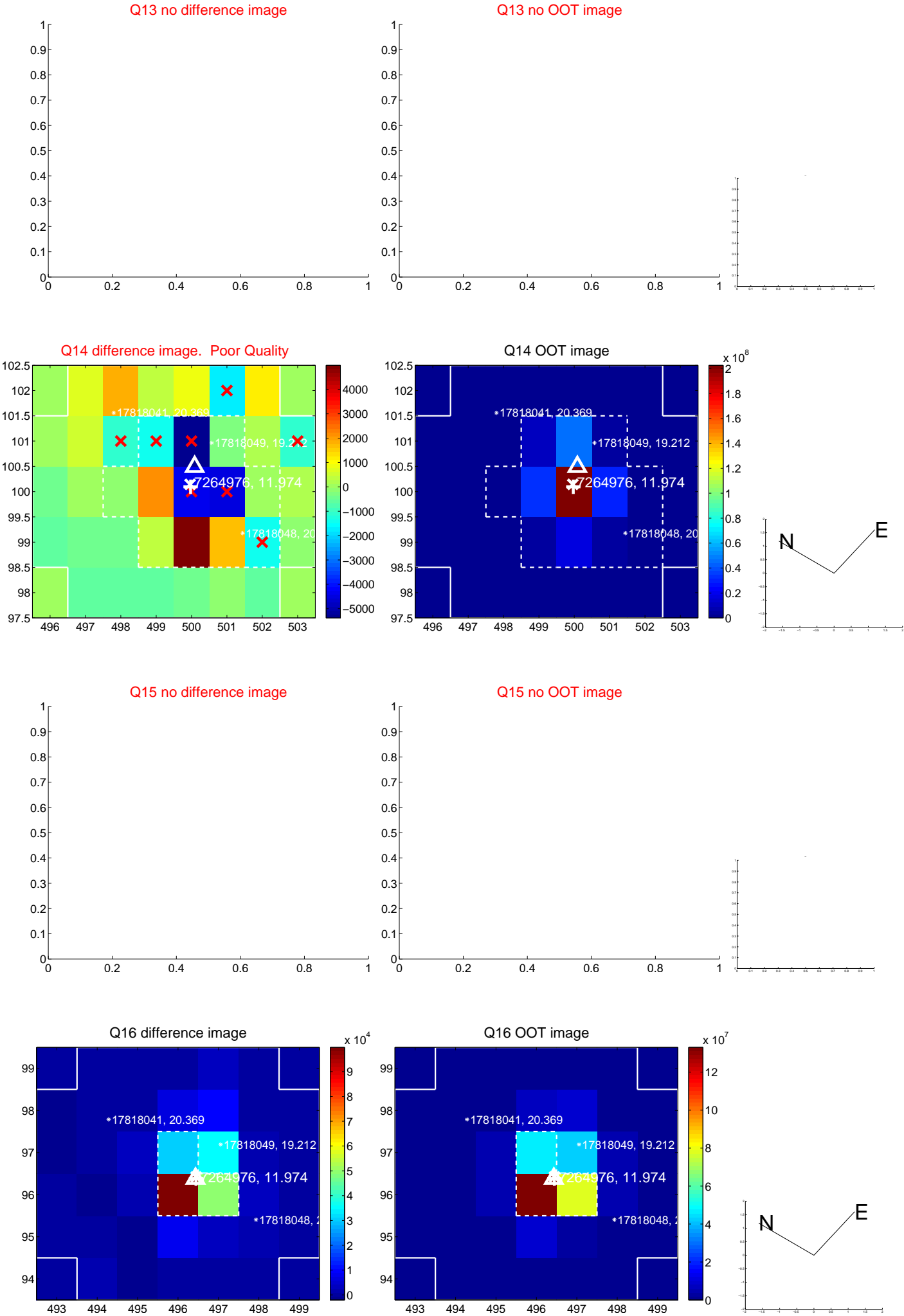
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



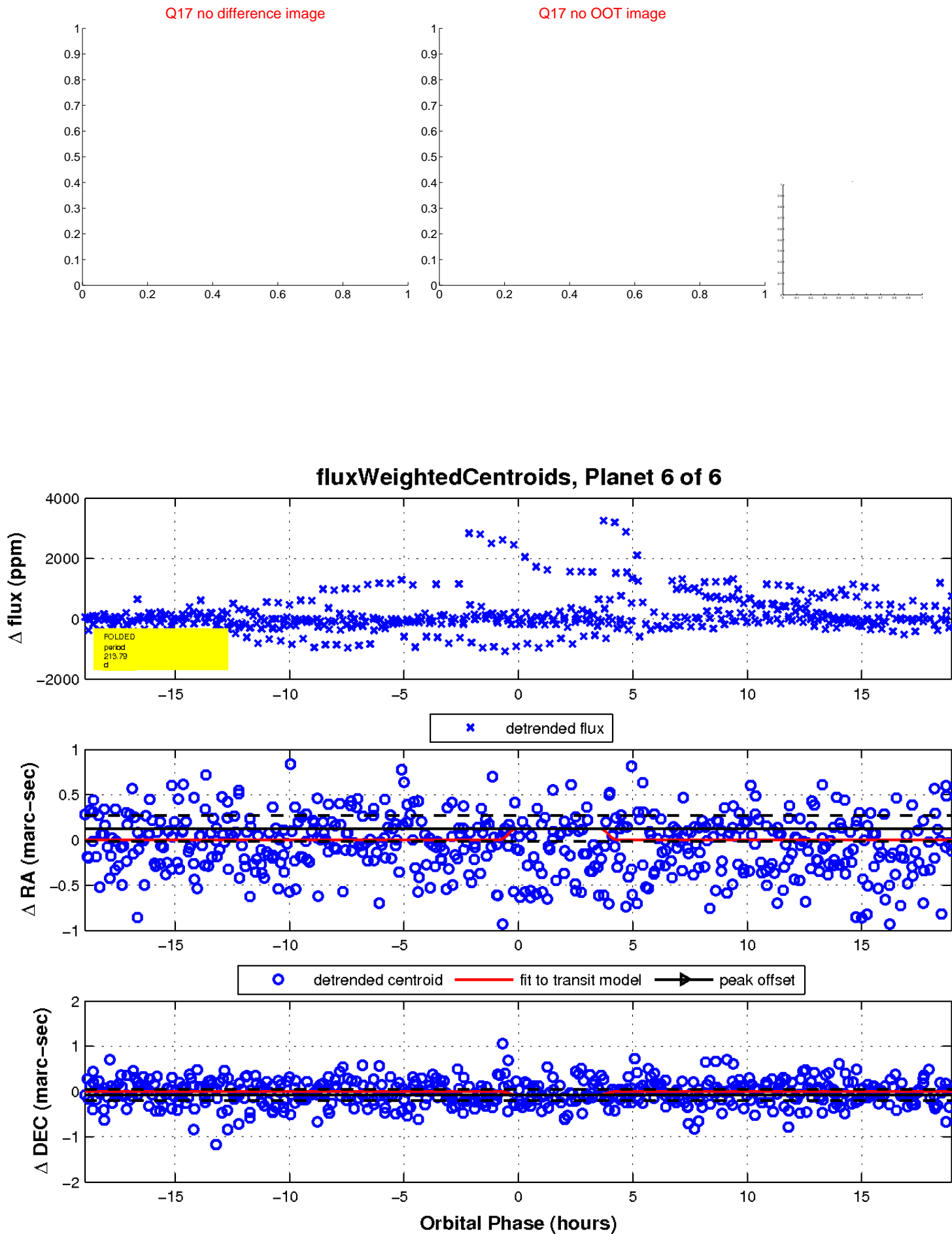
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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



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



UKIRT Image

Declination

