

KIC 007670485

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})
007670485-01	OBS	6900.01	4.233860	135.176012	70878.6	4.327	6199.3	2780.2	0.84	5873	34.89	303.32
007670485-02	OBS	No	547.278006	284.724583	28792.5	25.729	163.8	219.2	0.84	5873	24.84	0.46
007670485-03	OBS	No	586.347815	331.599819	1489.3	5.000	16.1	-1.0	0.84	5873	3.24	0.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007670485-01	OBS	FP	0.00	1	0	0	0	LPP_DV
007670485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007670485-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

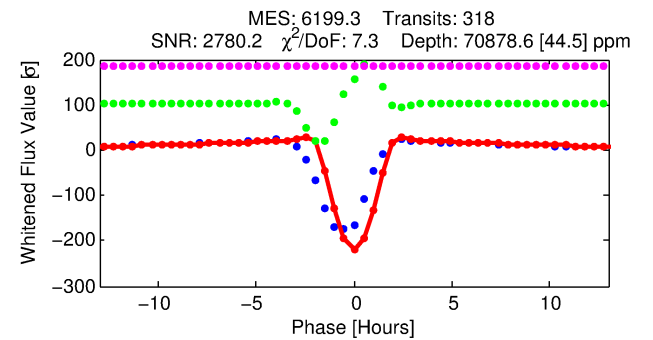
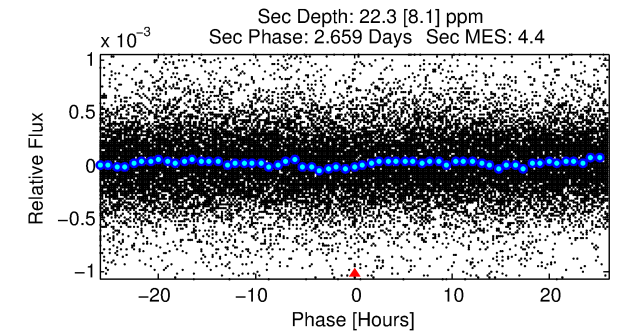
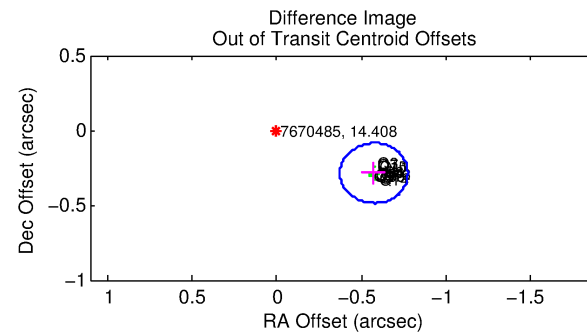
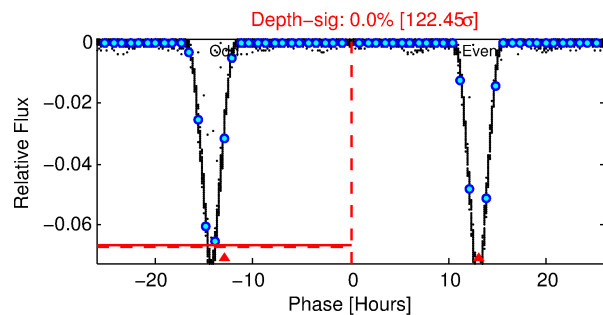
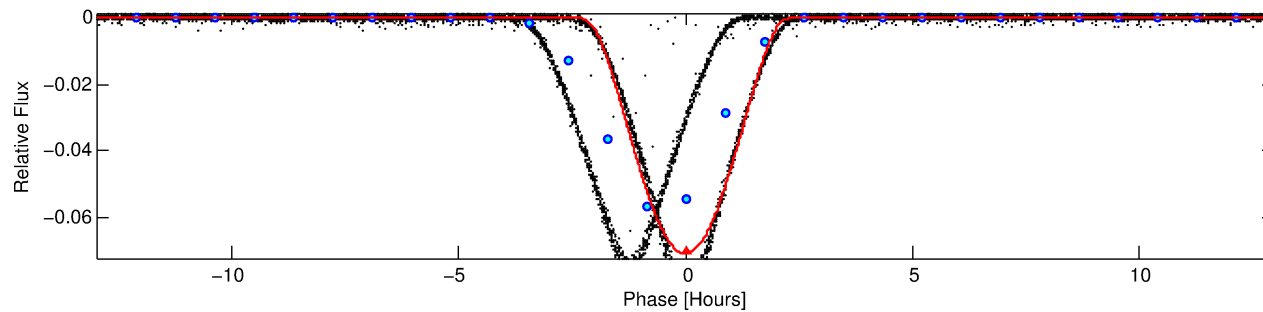
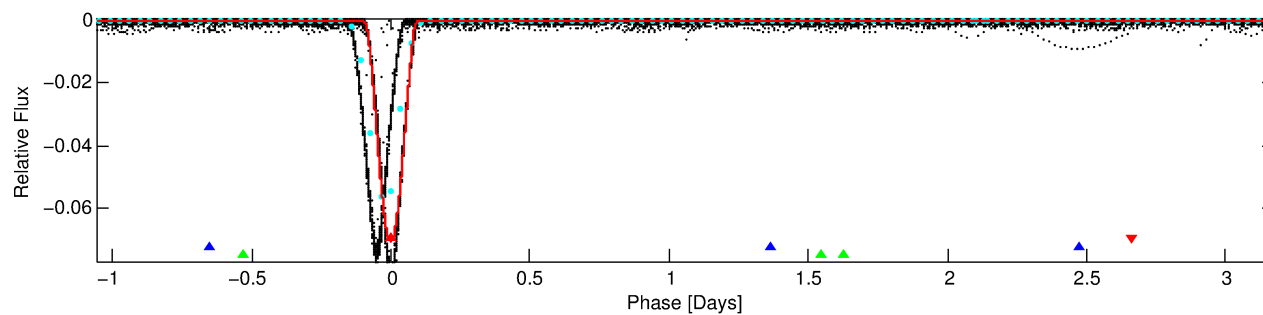
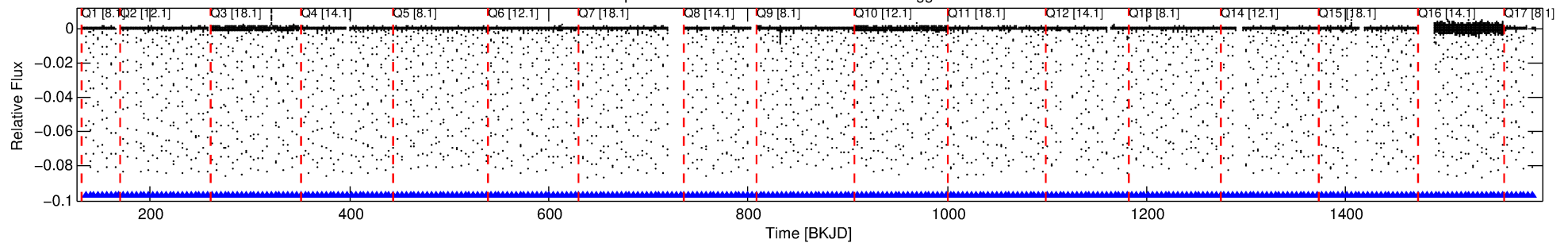
Ephemeris Match Information For 007670485-01

No Significant Match Found

DV One-Page Summary

KIC: 7670485 Candidate: 1 of 3 Period: 4.234 d
KOI: K06900 Corr: No Ephemeris Match

Kp: 14.41 R*: 0.84 Rs Teff: 5873.0 K Logg: 4.55 Fe/H: -0.300



DV Fit Results:

Period = 4.23386 [0.00000] d
Epoch = 135.1760 [0.0000] BKJD
Rp/R* = 0.3793 [0.0142]
a/R* = 7.57 [0.00]
b = 0.95 [0.02]
Seff = 303.32 [116.91]
Teff = 1064 [103] K
Rp = 34.89 [10.35] Re
a = 0.0500 [0.0125] AU
Ag = 0.03 [0.01] [-74.08σ]
Teffp = 656 [63] K [-3.39σ]

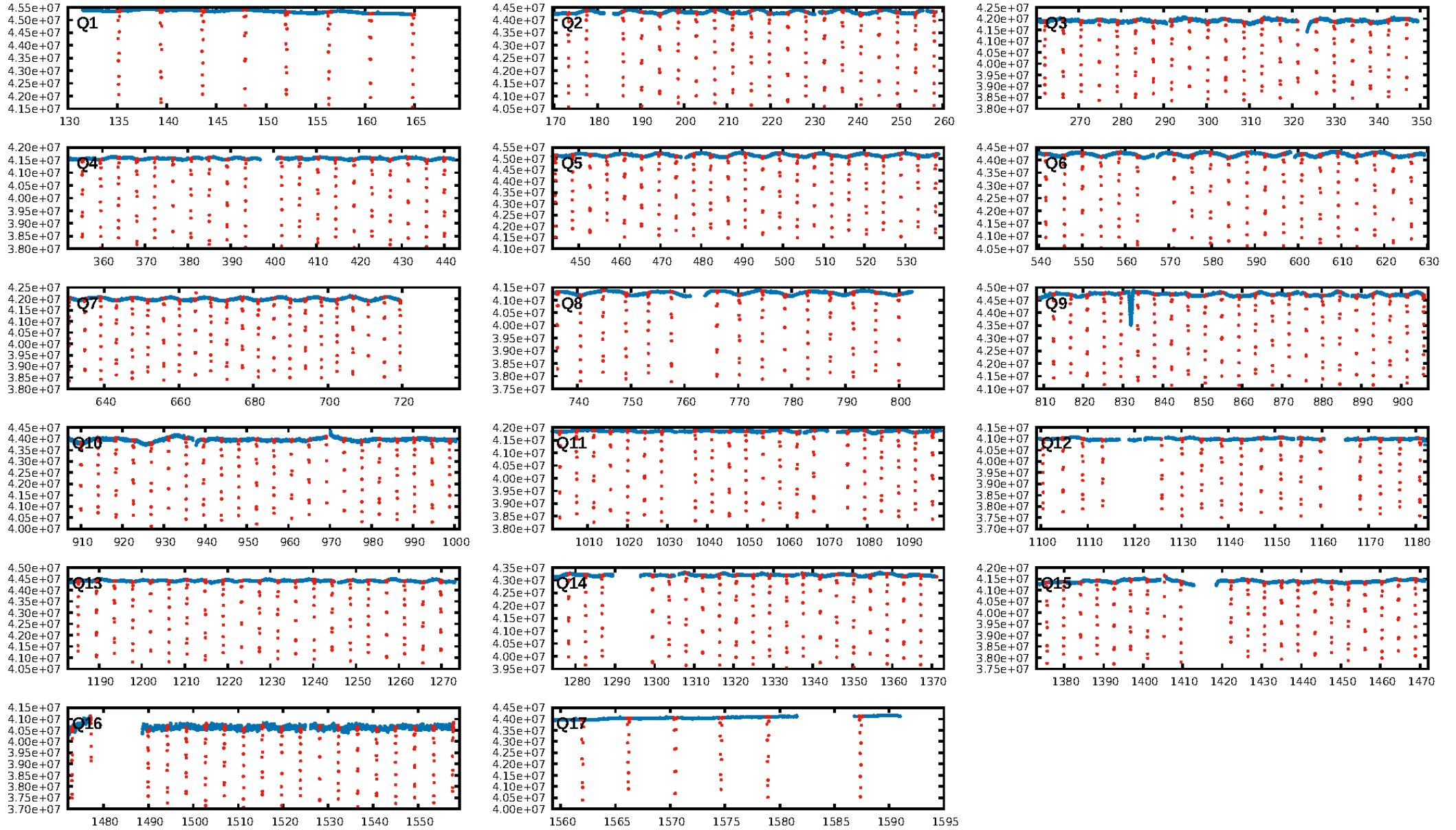
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [499.55σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [304/304]
GhostDiagnostic-chr: 2.052
Centroid-sig: 0.0%
Centroid-so: 0.403 arcsec [308.92σ]
OotOffset-rm: 0.642 arcsec [9.60σ]
KicOffset-rm: 0.469 arcsec [6.97σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

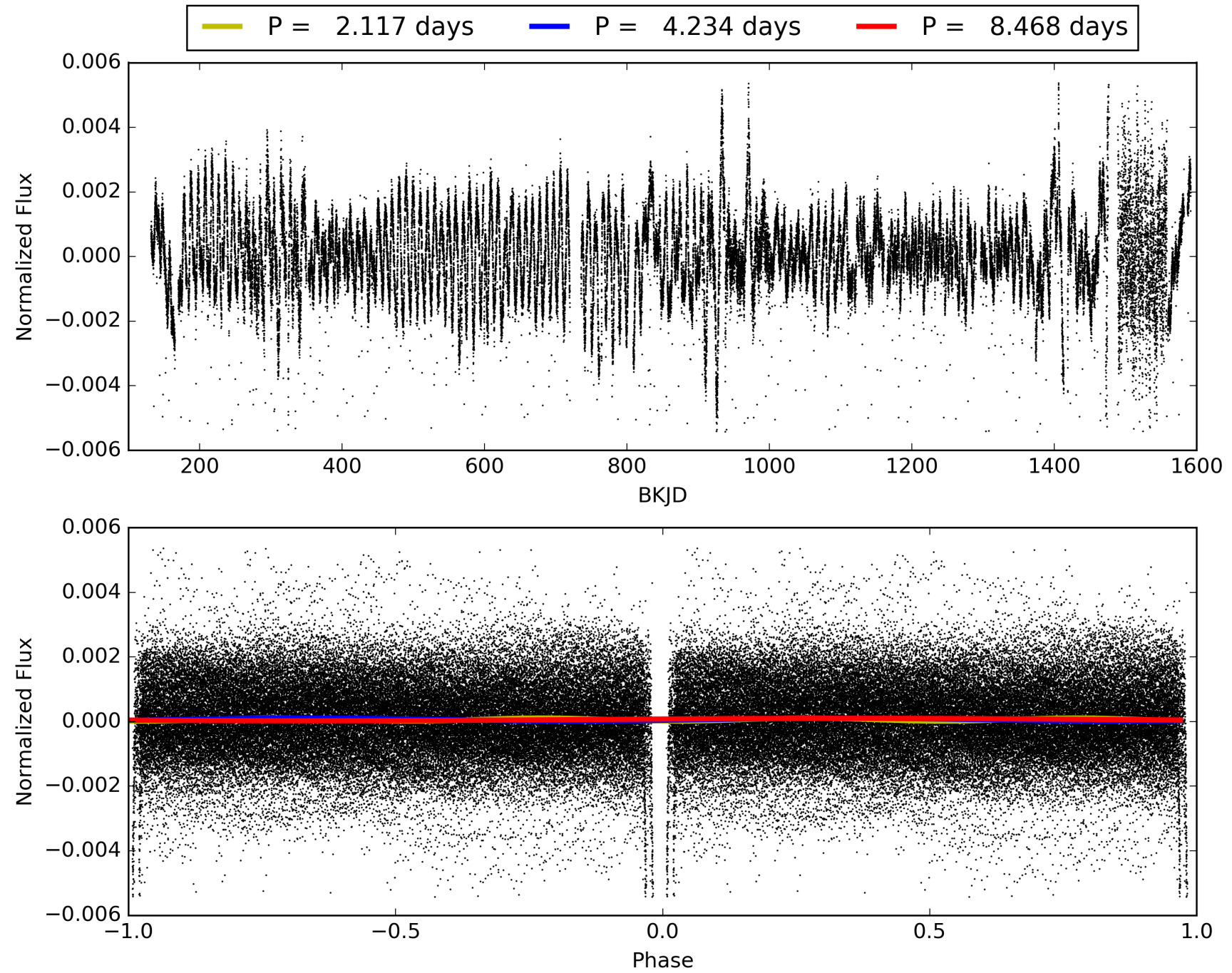
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:48:48 Z

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

TCE 007670485-01, PDC Light Curves

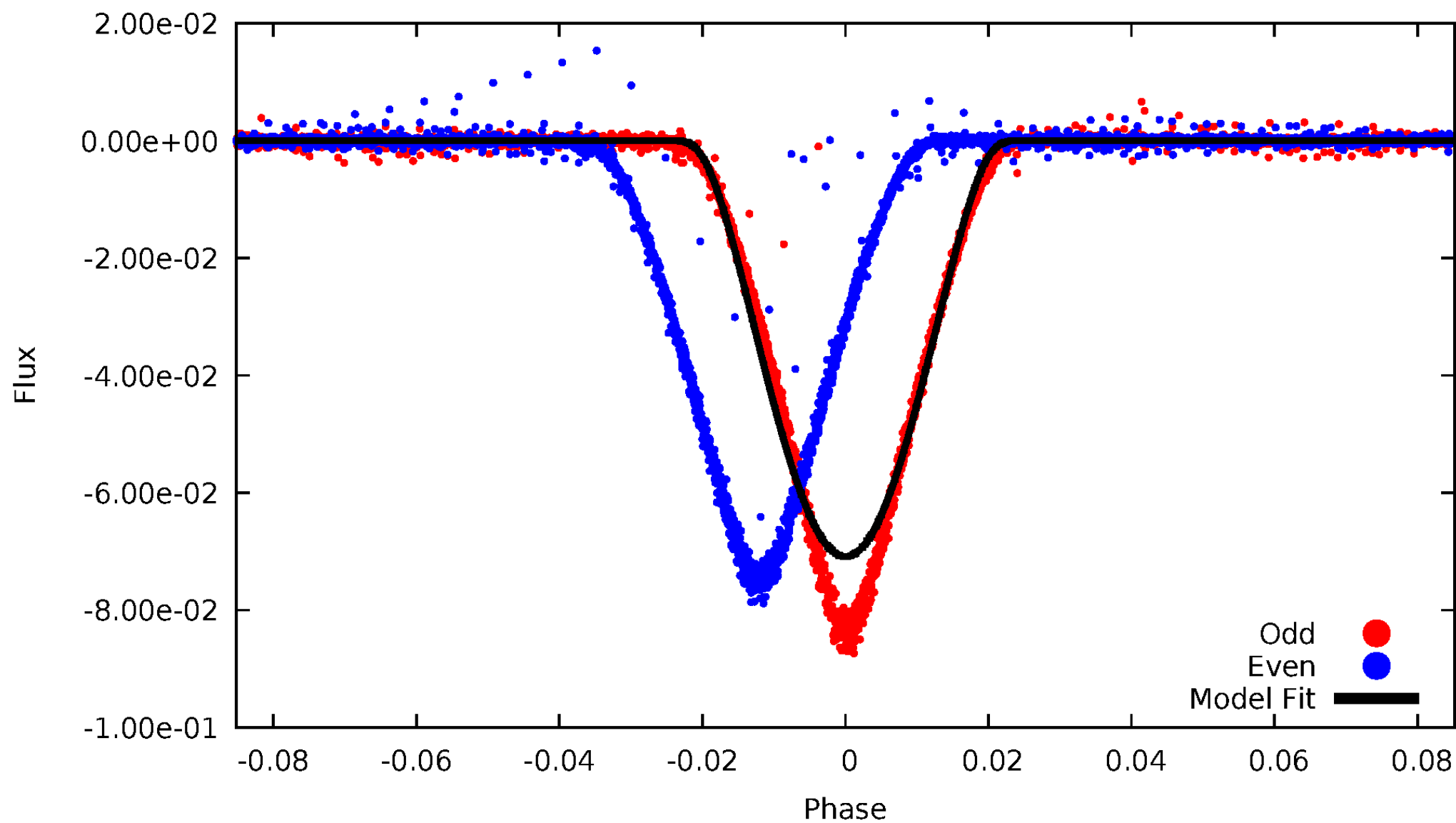


TCE 007670485-01



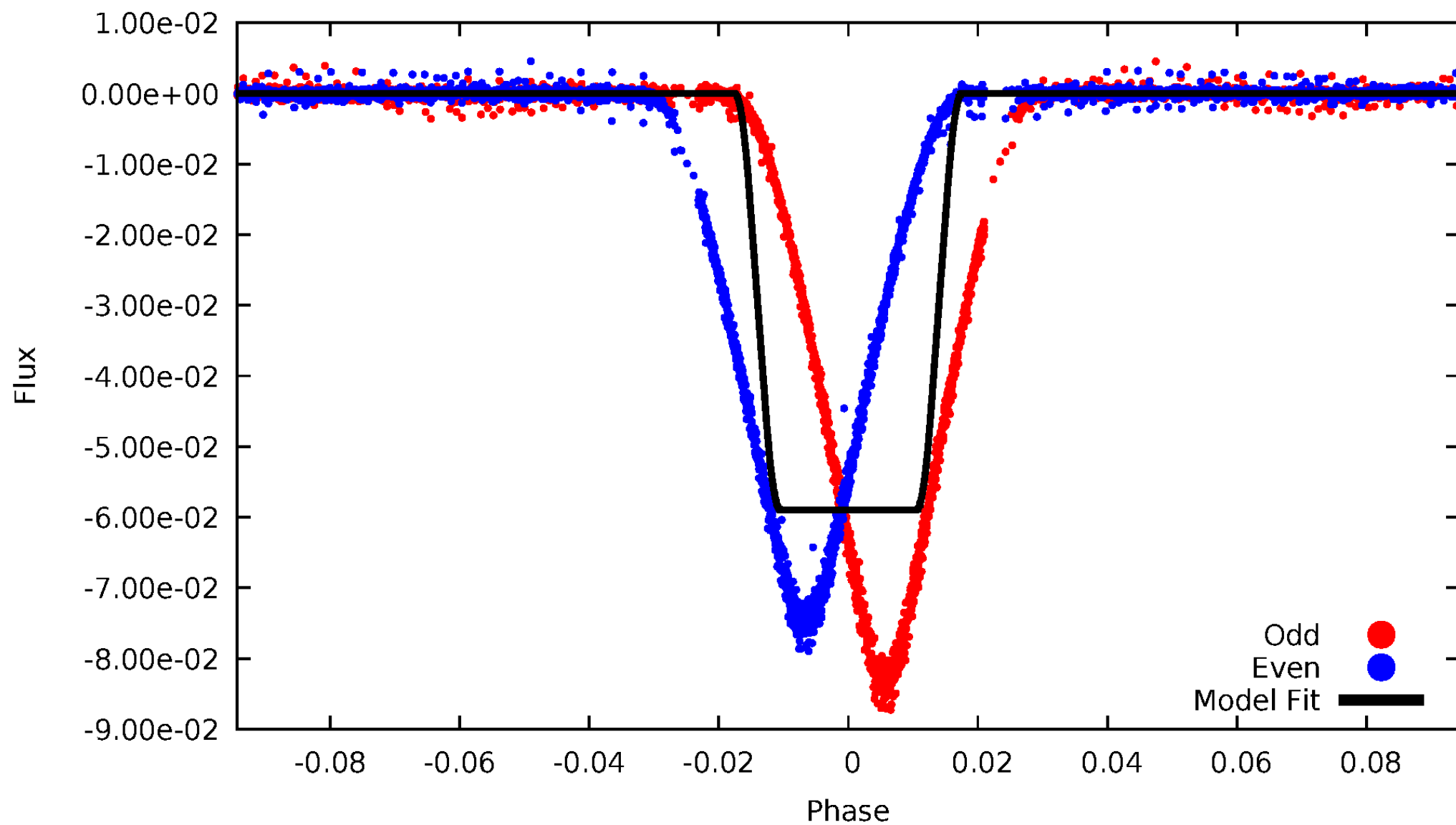
DV Odd/Even

TCE 007670485-01



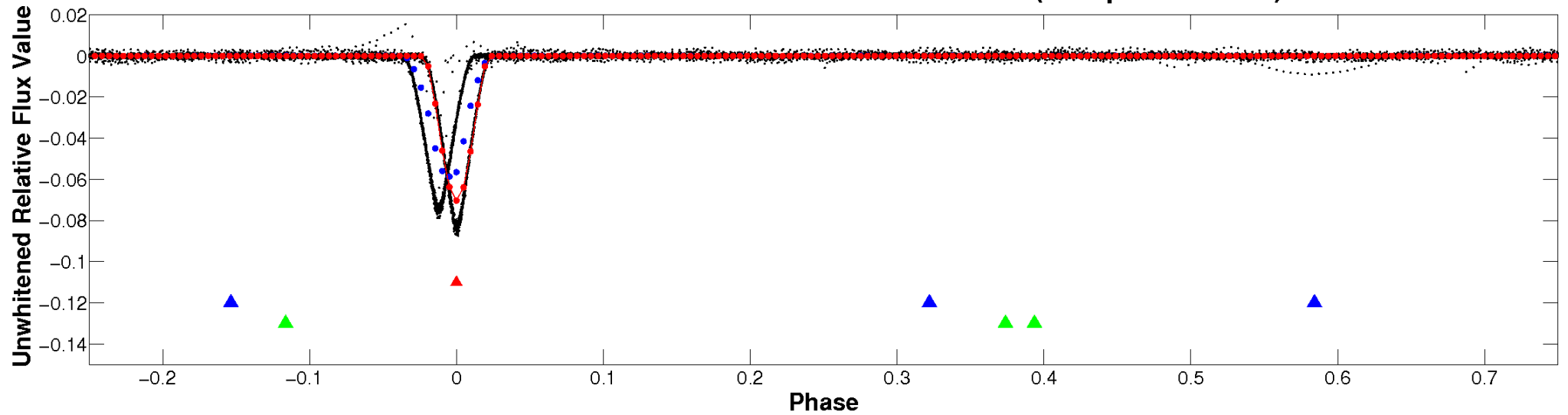
ALT Odd/Even

TCE 007670485-01

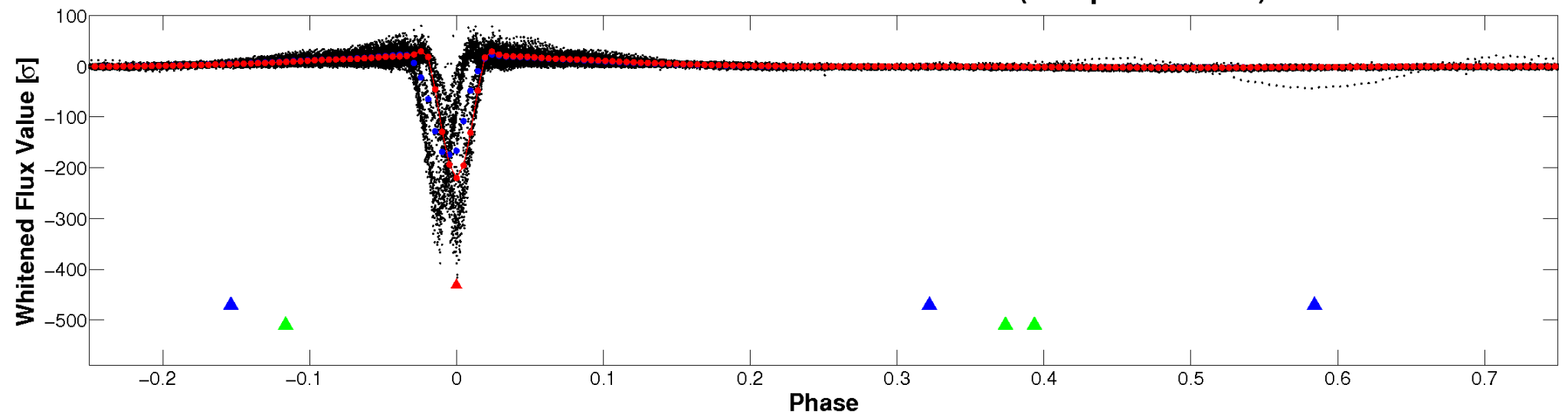


Non-Whitened Vs. Whitened Light Curve

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

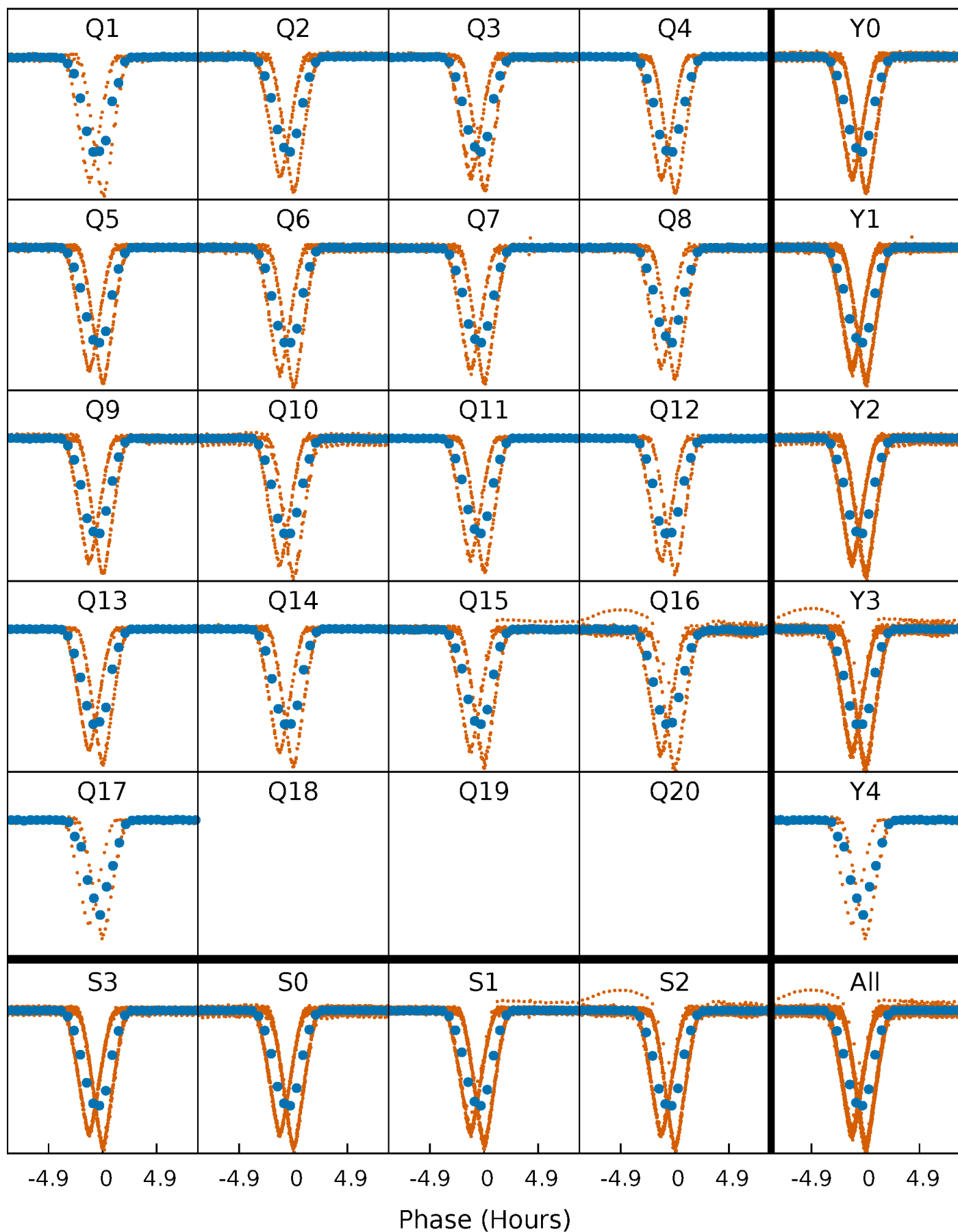


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



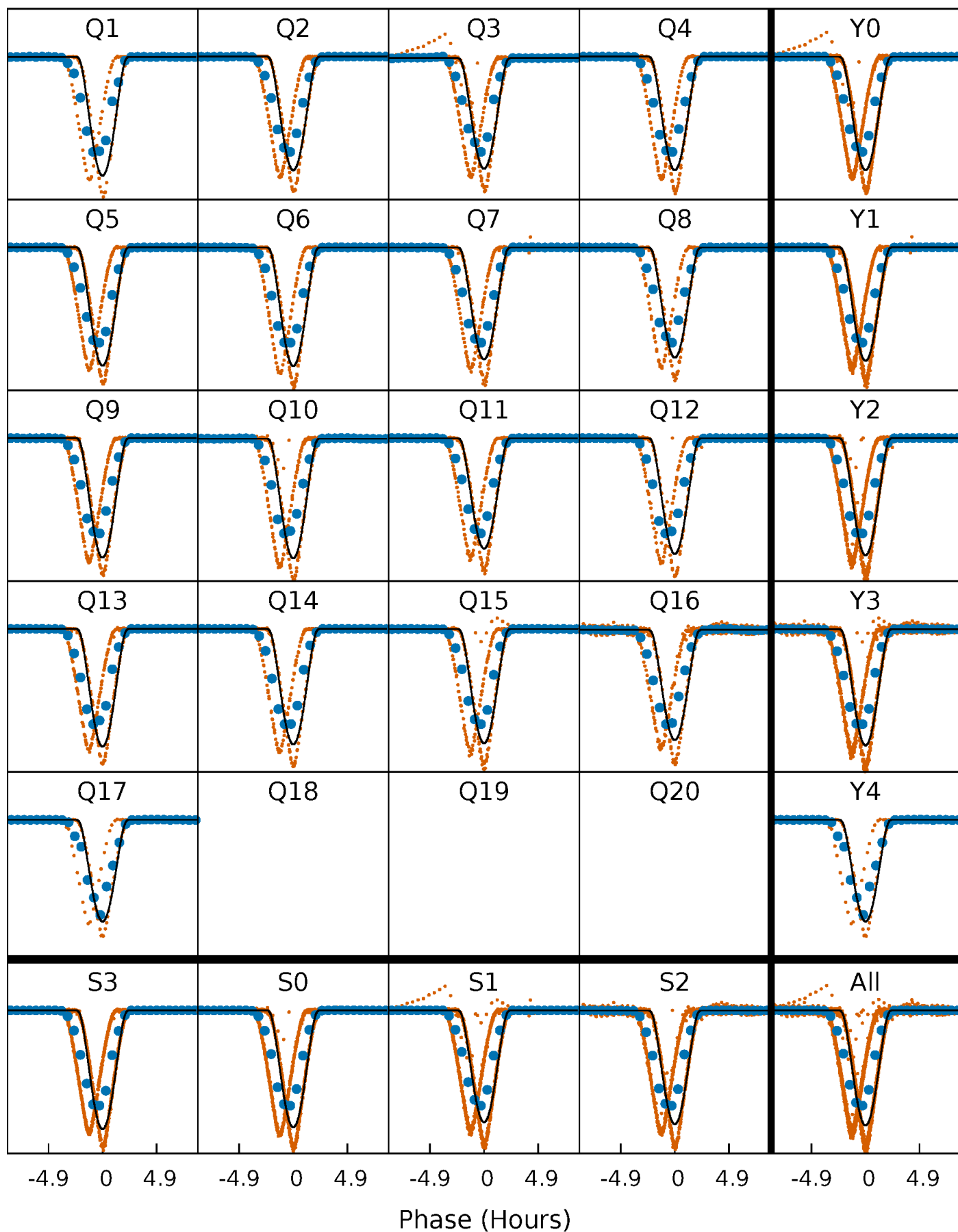
PDC Quarter-Phased Transit Curves

TCE 007670485-01 P= 4.233860 Days $T_0=135.176012$ (BKJD)



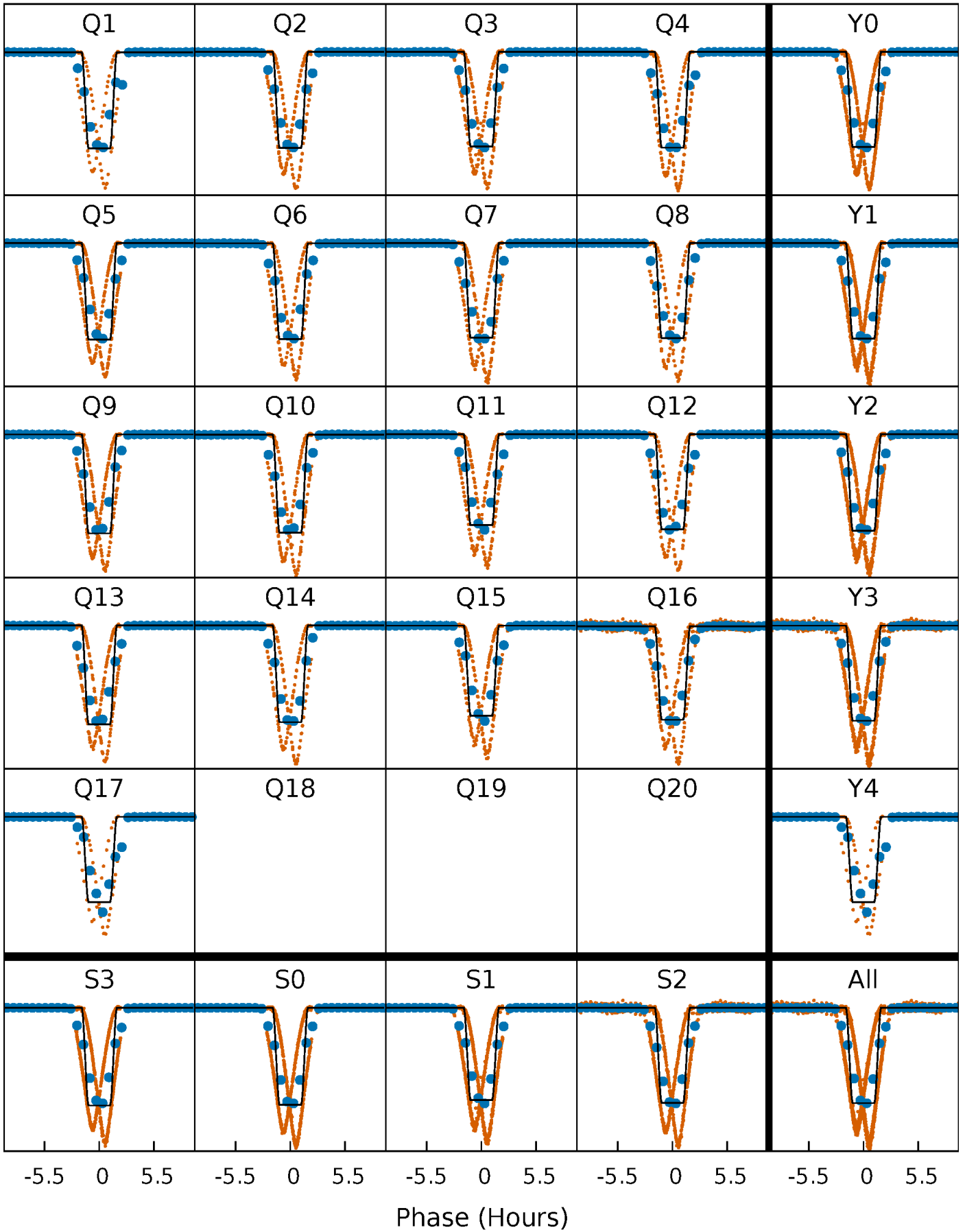
DV Quarter-Phased Transit Curves

TCE 007670485-01 P= 4.233860 Days $T_0=135.176012$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

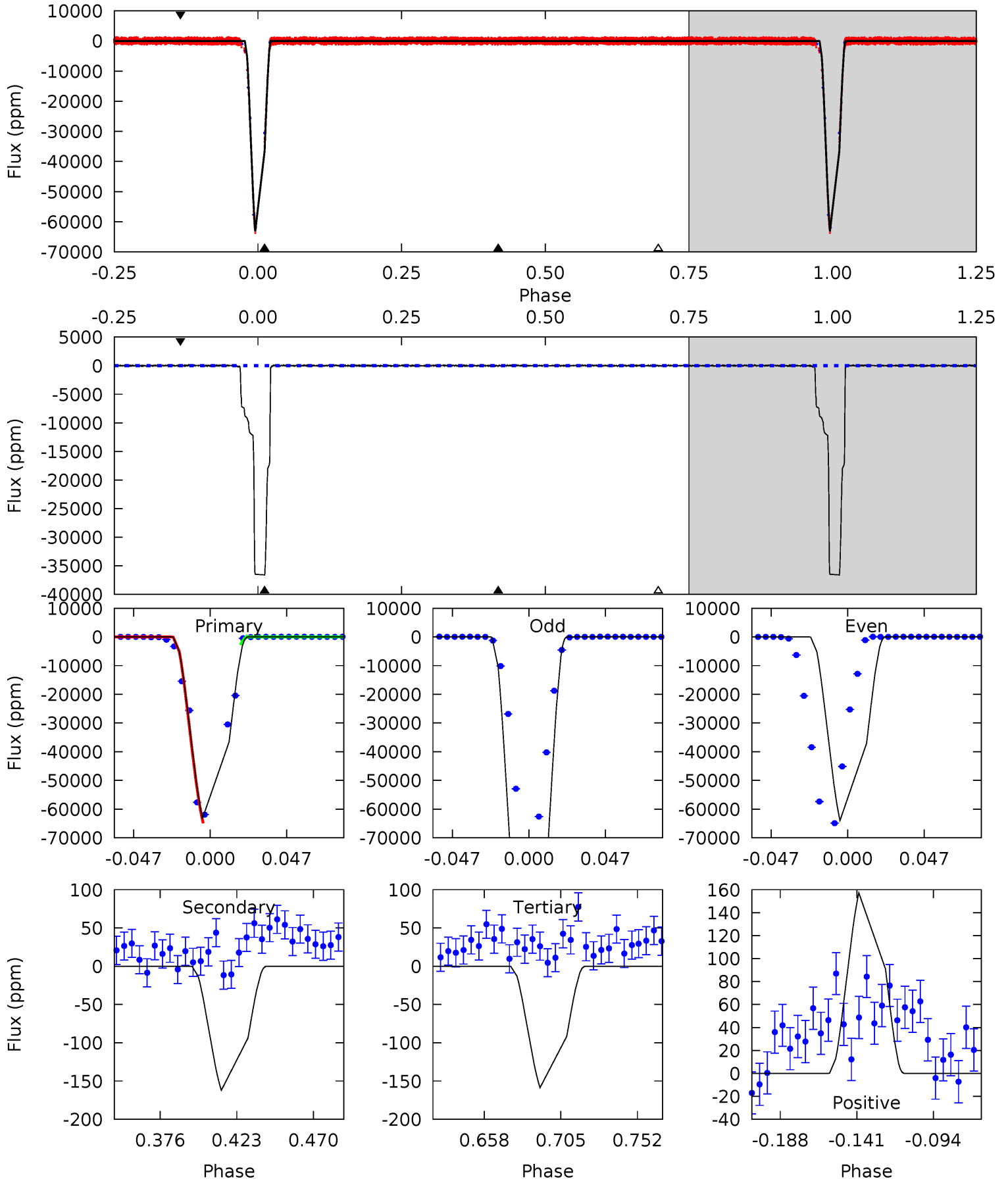
TCE 007670485-01 P= 4.233853 Days $T_0=135.154303$ (BKJD)



DV Model-Shift Uniqueness Test

007670485-01, P = 4.233860 Days, E = 130.942152 Days

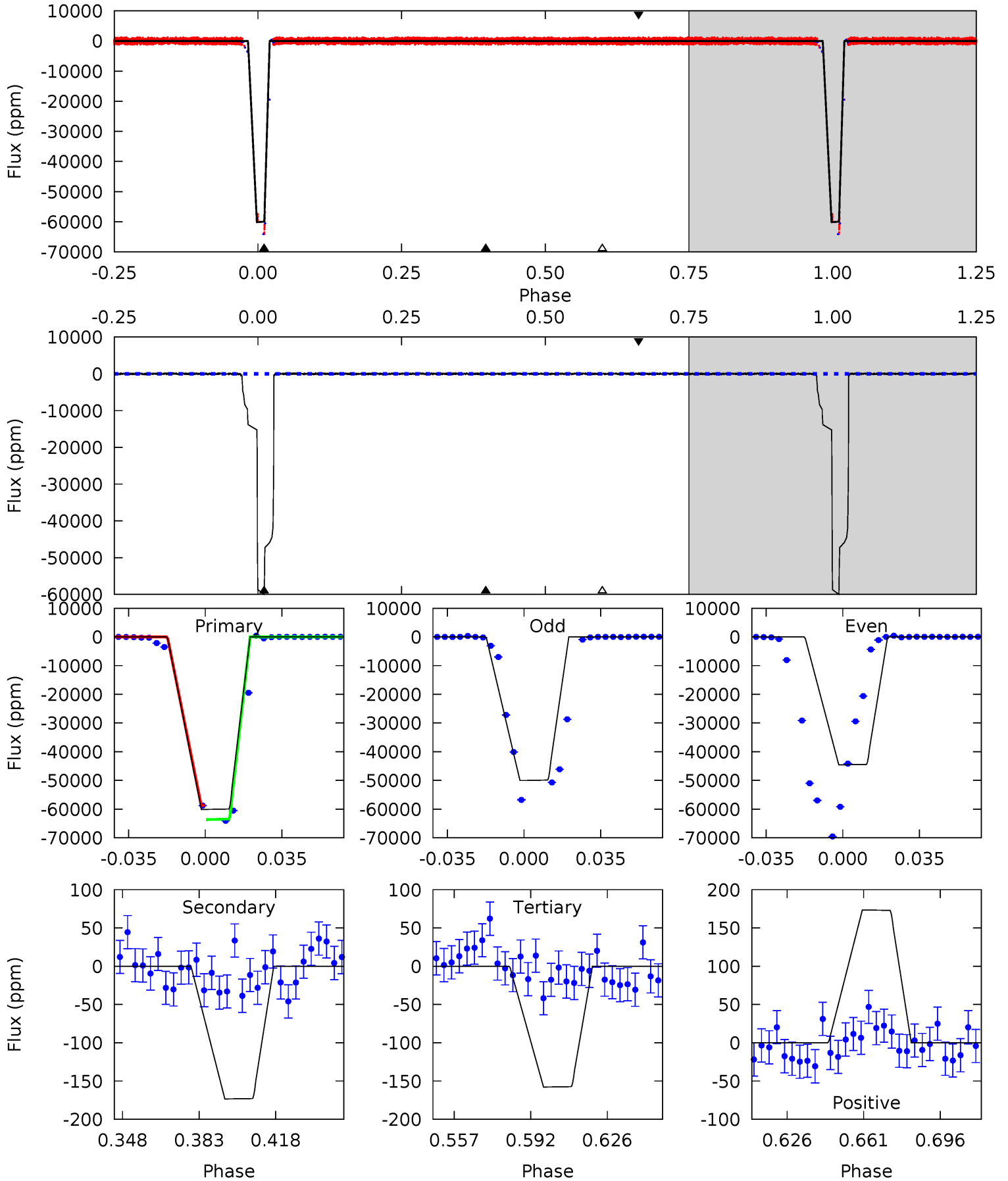
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1804	4.63	4.53	4.49	4.72	1.99	1.30	1800	1800	0.10	0.14	2562	0.92	0.00	0



Alt Model-Shift Uniqueness Test

007670485-01, P = 4.233853 Days, E = 130.920450 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1338	3.86	3.51	3.86	4.78	2.11	1.35	1335	1334	0.35	-0.00	275.3	1.00	0.00	0



Stellar Parameters For KIC 007670485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5873^{+146}_{-161}	$4.554^{+0.036}_{-0.204}$	$-0.300^{+0.300}_{-0.300}$	$0.843^{+0.248}_{-0.083}$	$0.930^{+0.108}_{-0.108}$	$2.183^{+0.426}_{-1.110}$
	+2%/-3%	+1%/-4%	+100%/-100%	+29%/-10%	+12%/-12%	+20%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007670485-01 / KOI 6900.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-94 ± 20	$36.23^{+5.71}_{-3.00}$	1522^{+105}_{-61}	-2113^{+64}_{-80}	$0.091^{+0.033}_{-0.025}$
Alt.	-173 ± 45	$23.52^{+3.94}_{-2.41}$	1528^{+104}_{-69}	1985^{+181}_{-3739}	$0.410^{+0.162}_{-0.135}$

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

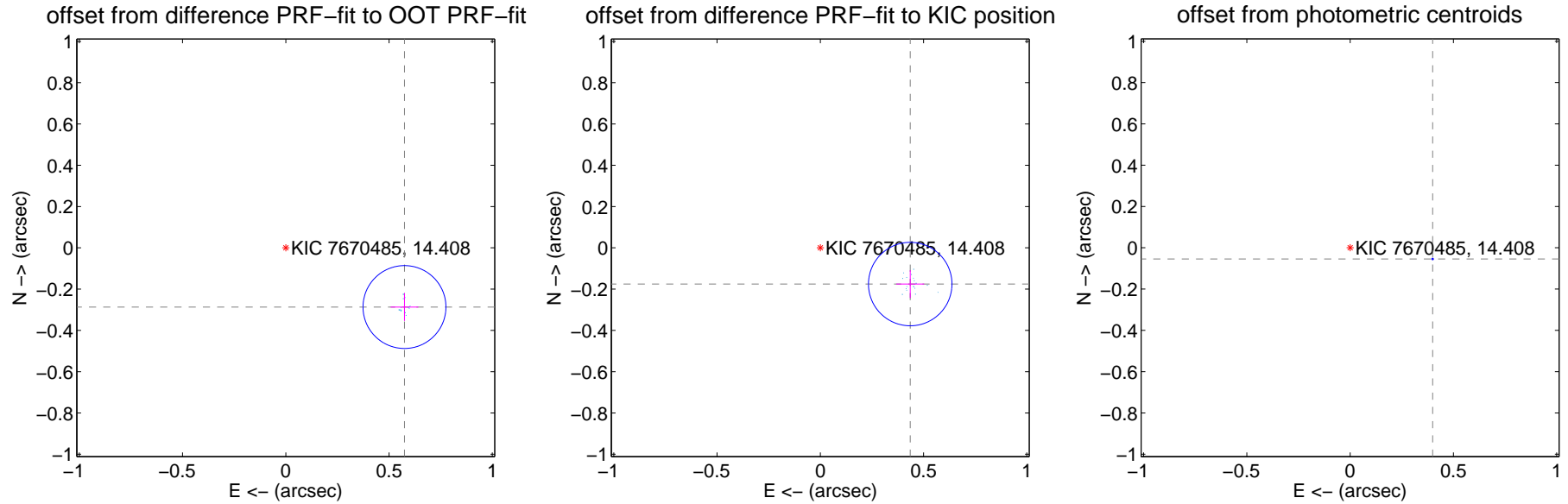
DV Centroid Data

Supplemental centroid analysis for 007670485-01. Kepler magnitude: 14.41. Transit SNR 2780.24

There are 17 quarters with good PRF difference image offsets

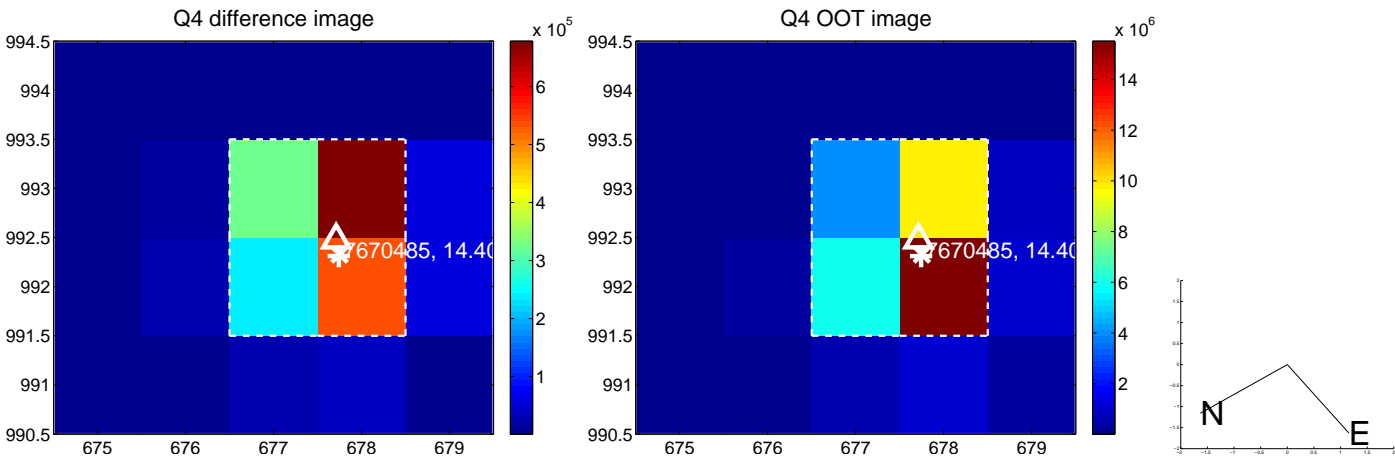
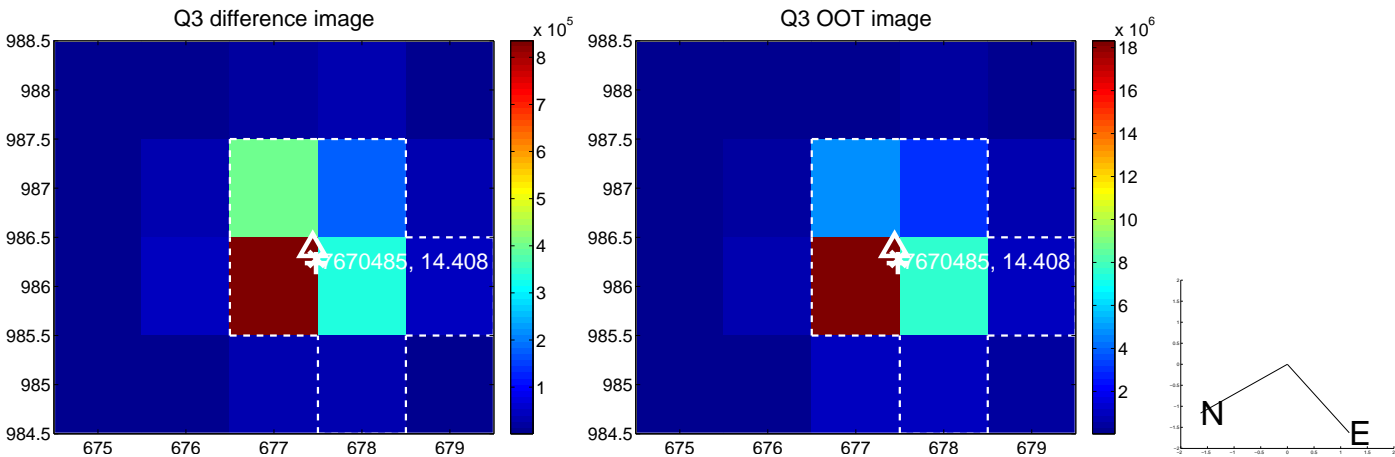
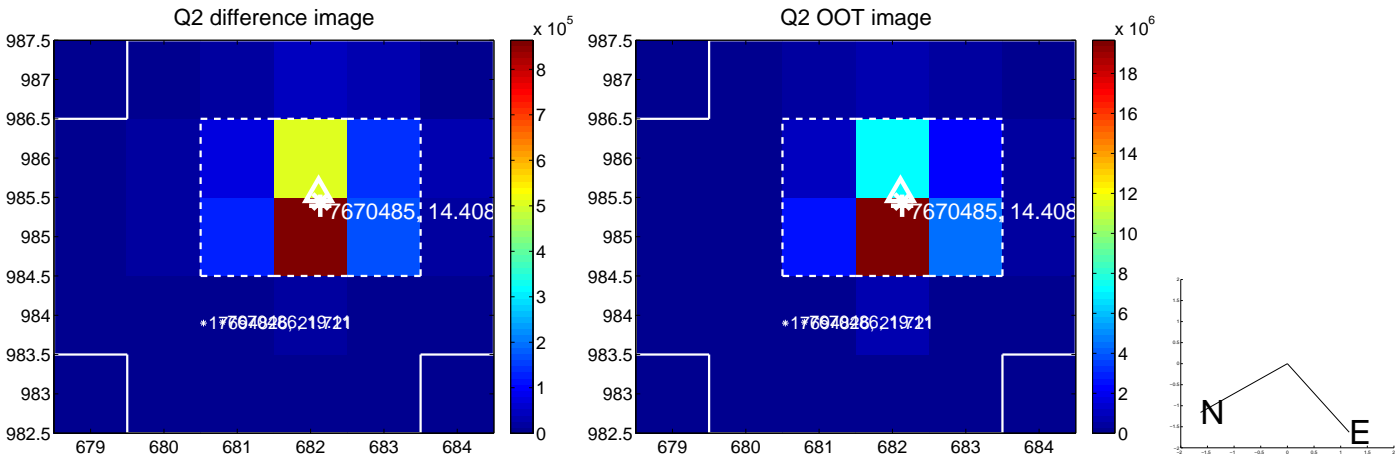
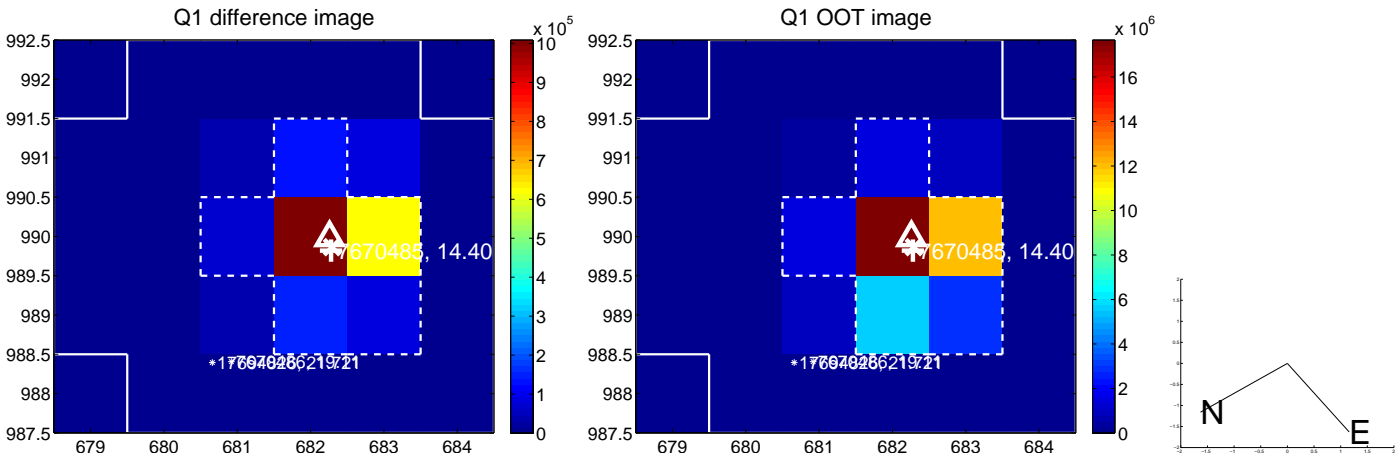
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.642 ± 0.067	9.60	-0.575 ± 0.067	-0.287 ± 0.067
PRF-fit source offset from KIC position	0.469 ± 0.067	6.97	-0.435 ± 0.067	-0.175 ± 0.067
photometric centroid source offset	0.40 ± 0.00	308.92	-0.40 ± 0.00	-0.05 ± 0.00

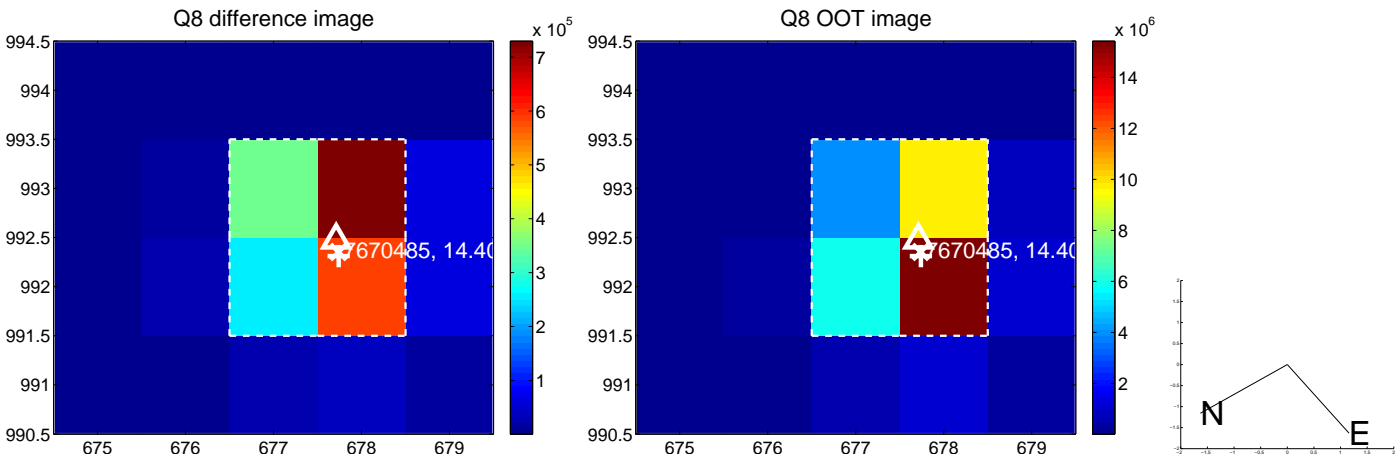
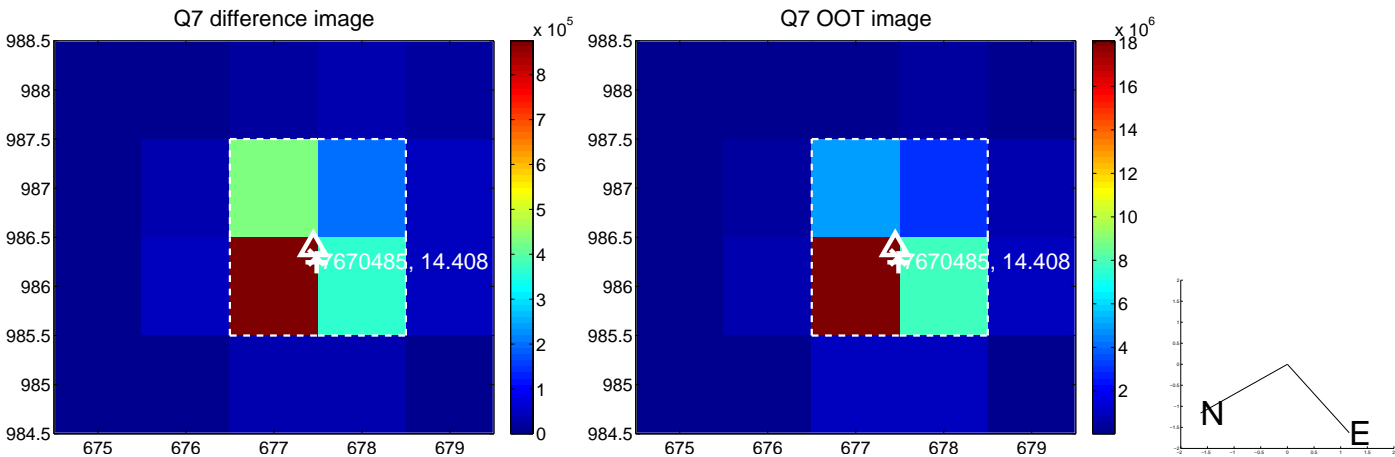
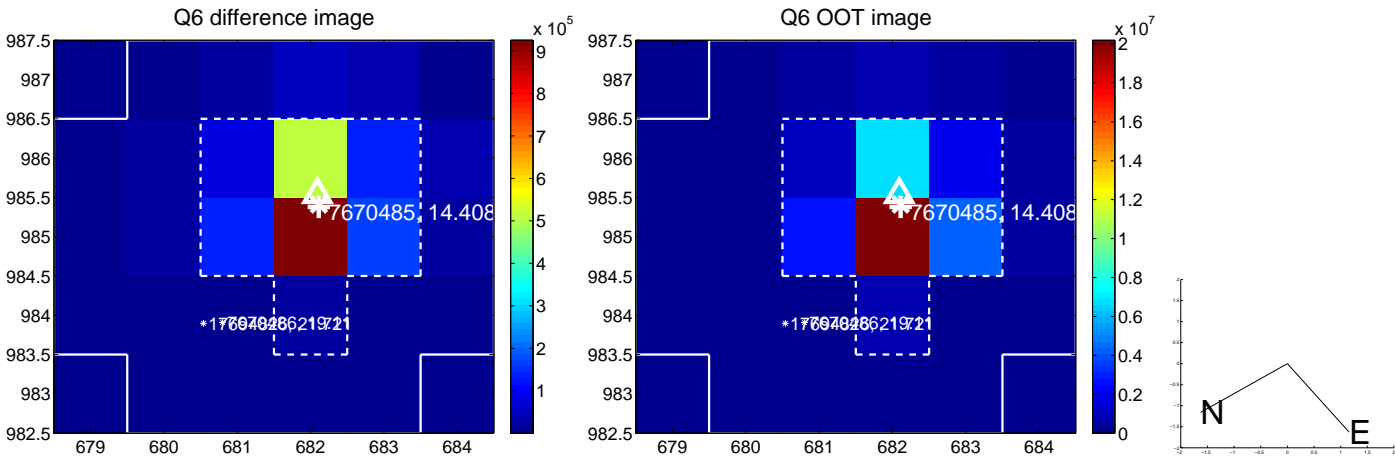
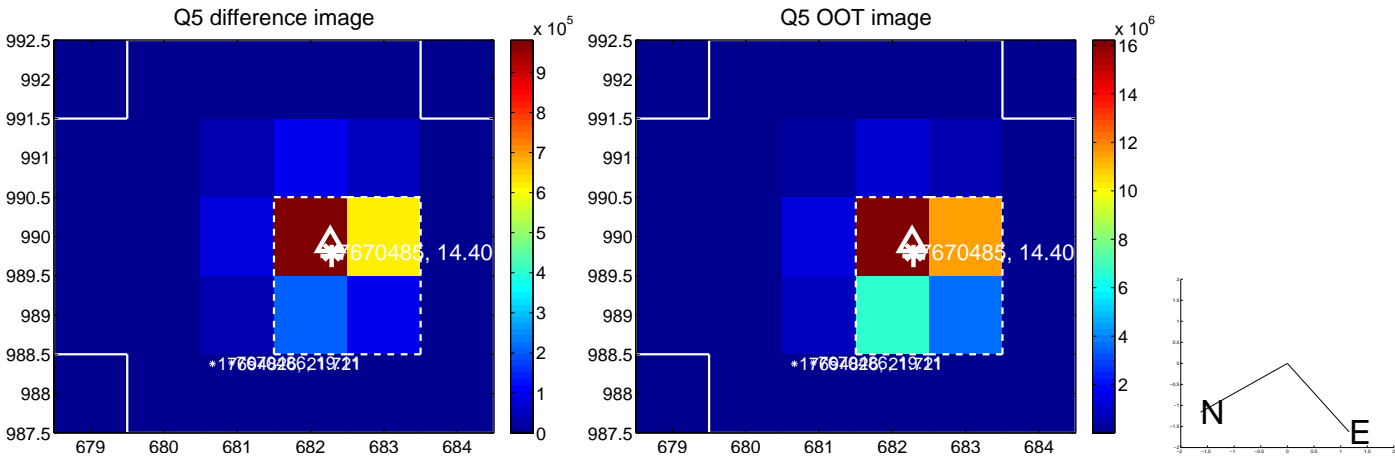


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

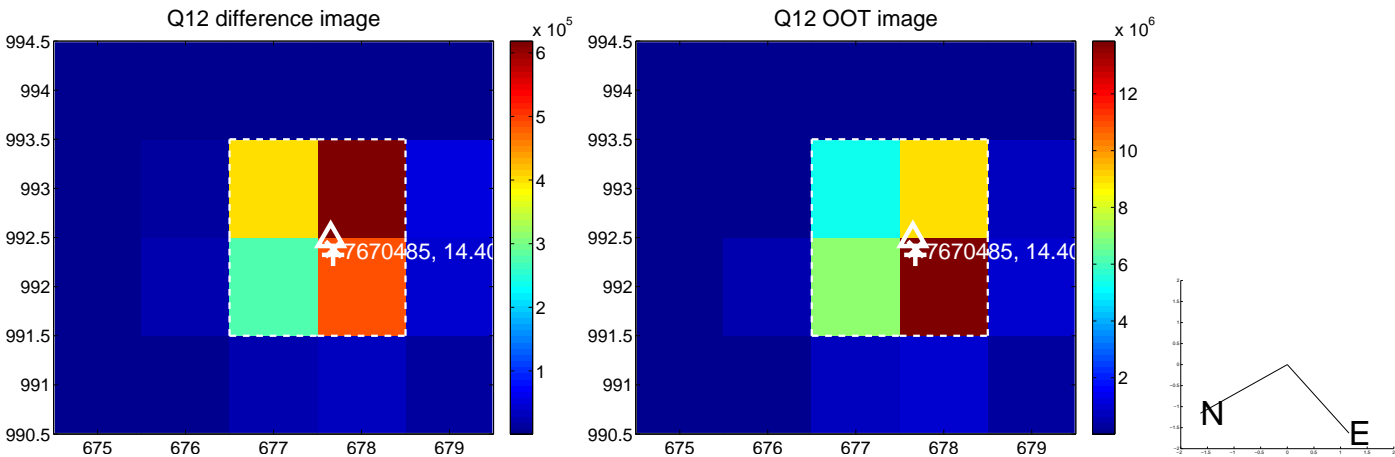
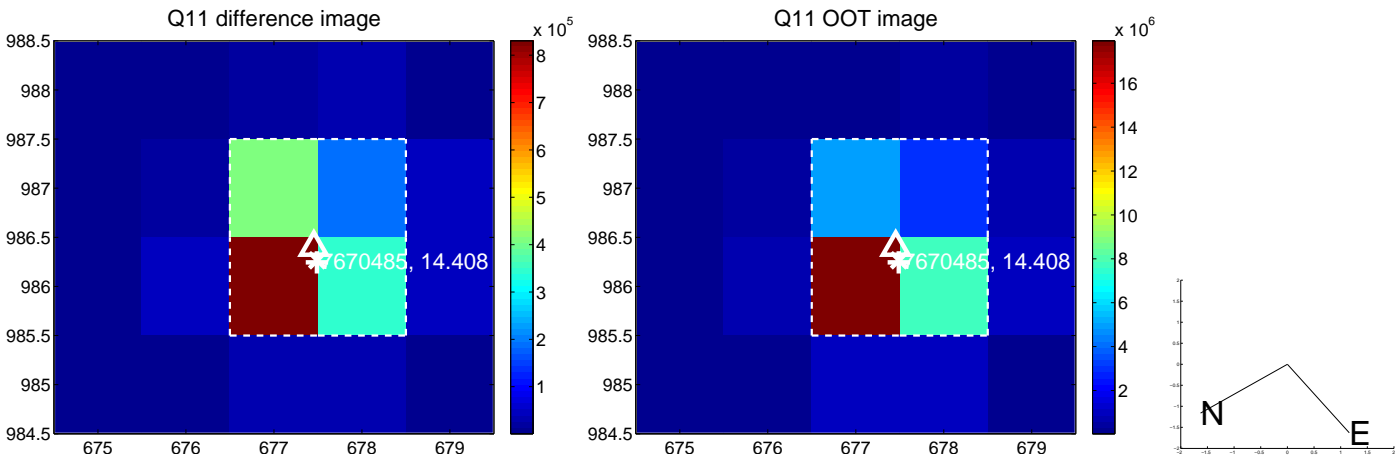
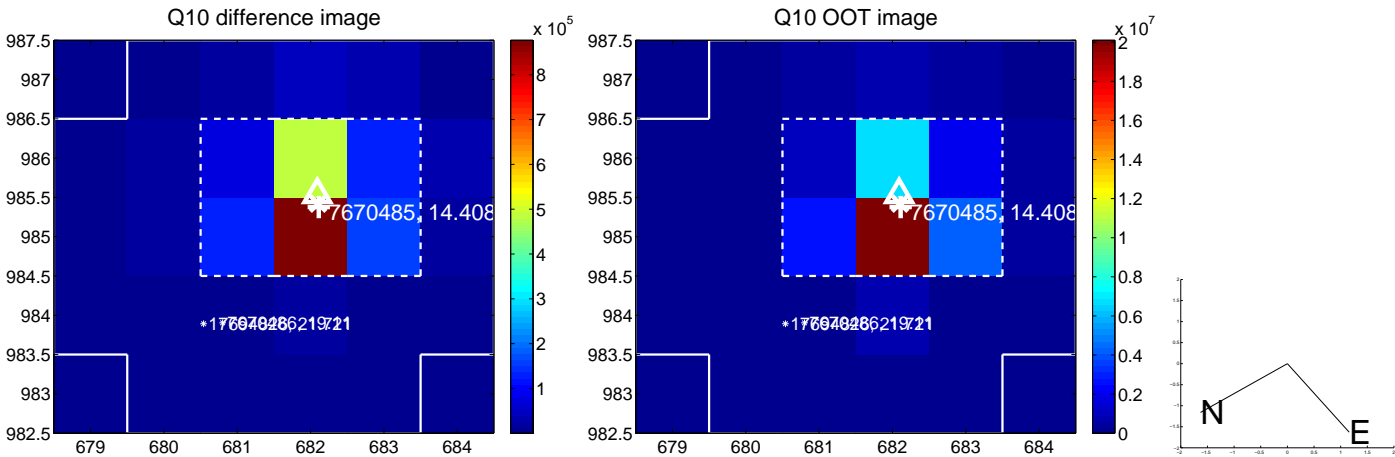
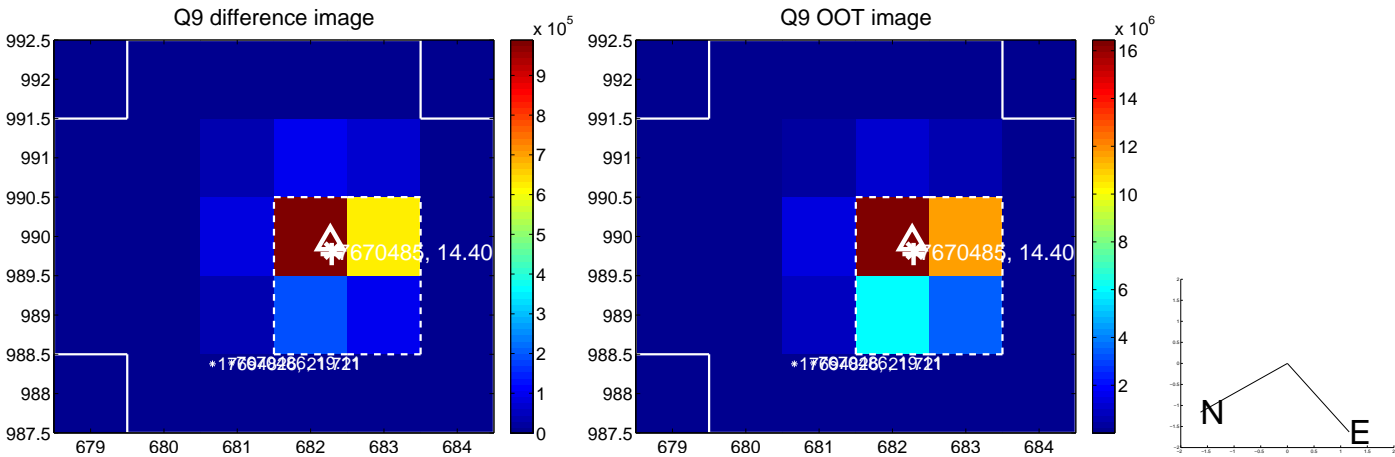
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



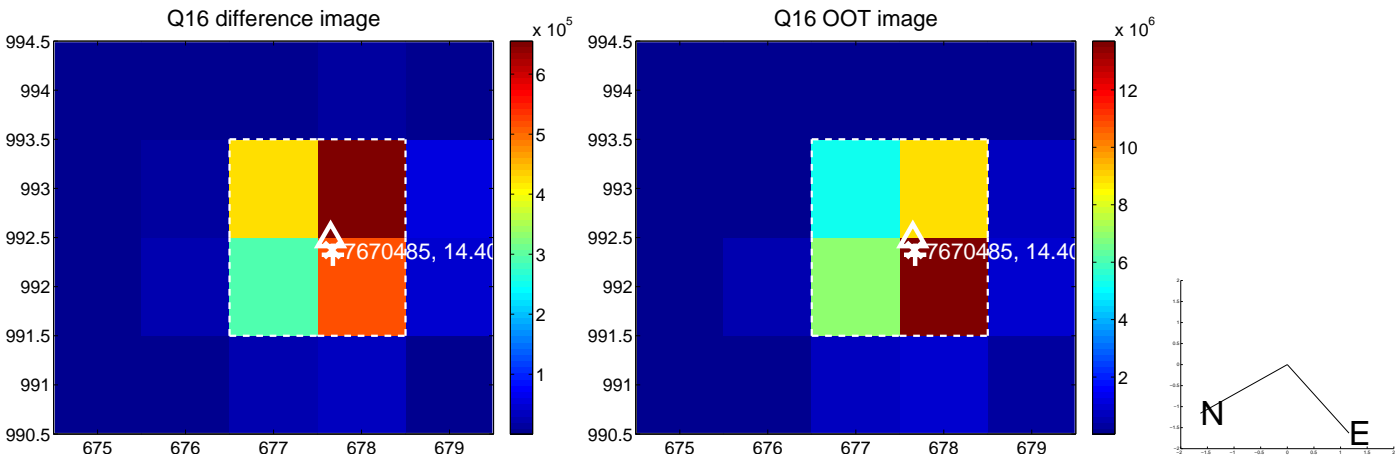
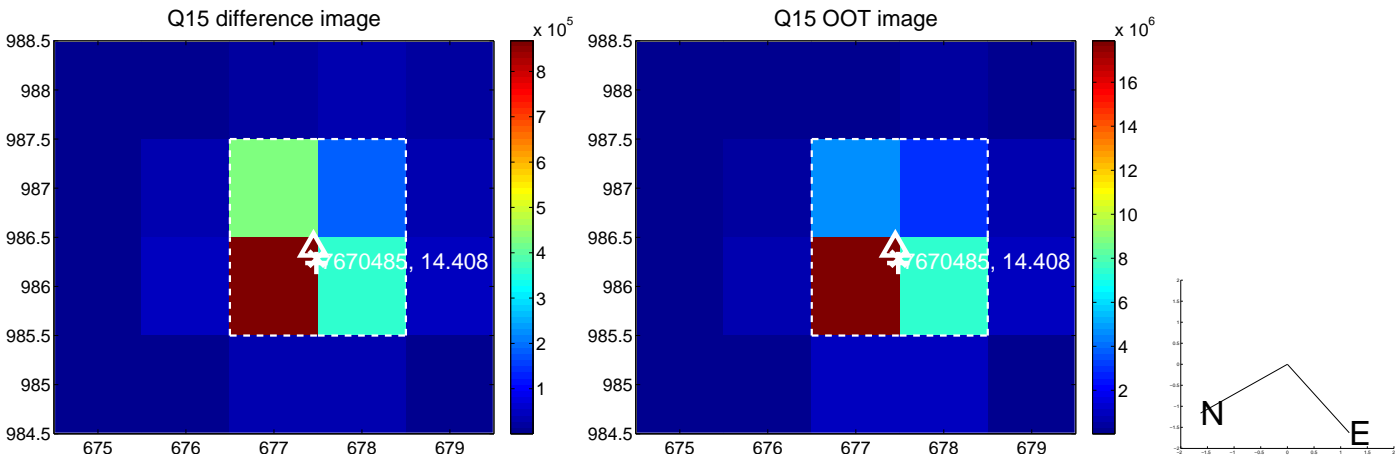
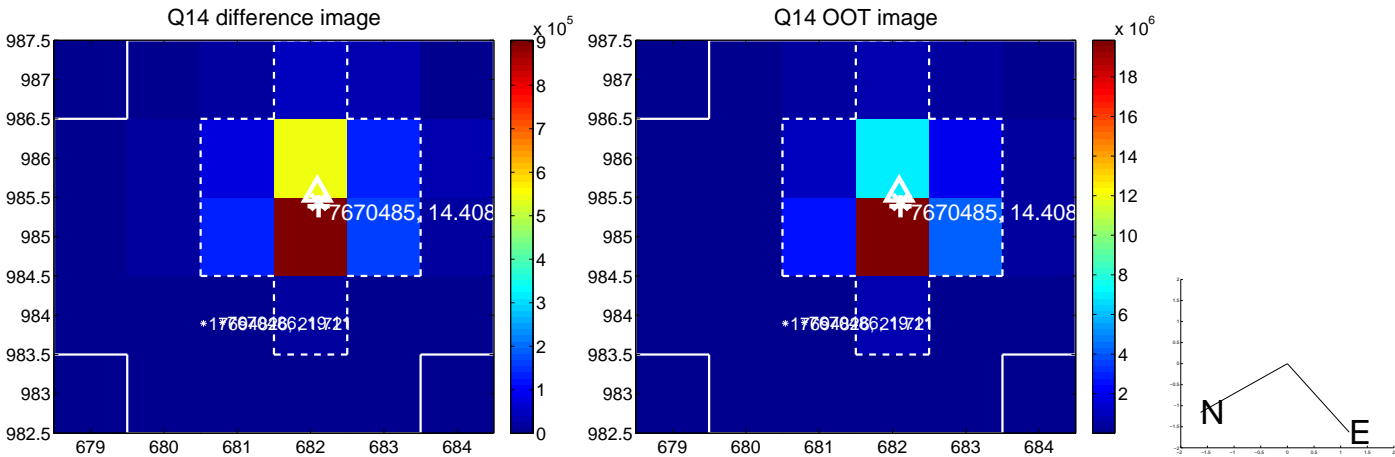
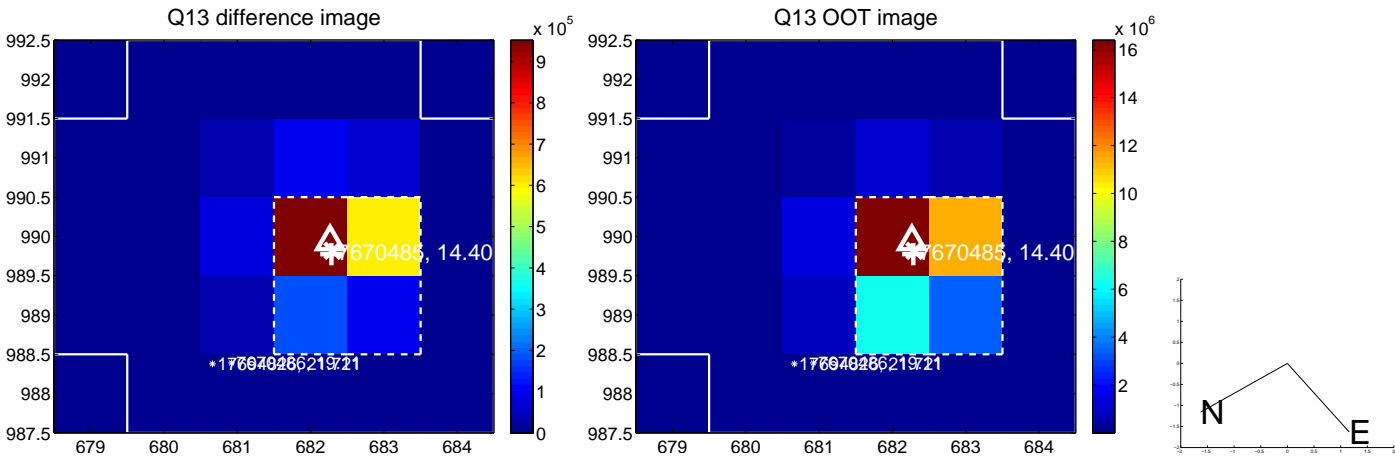
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



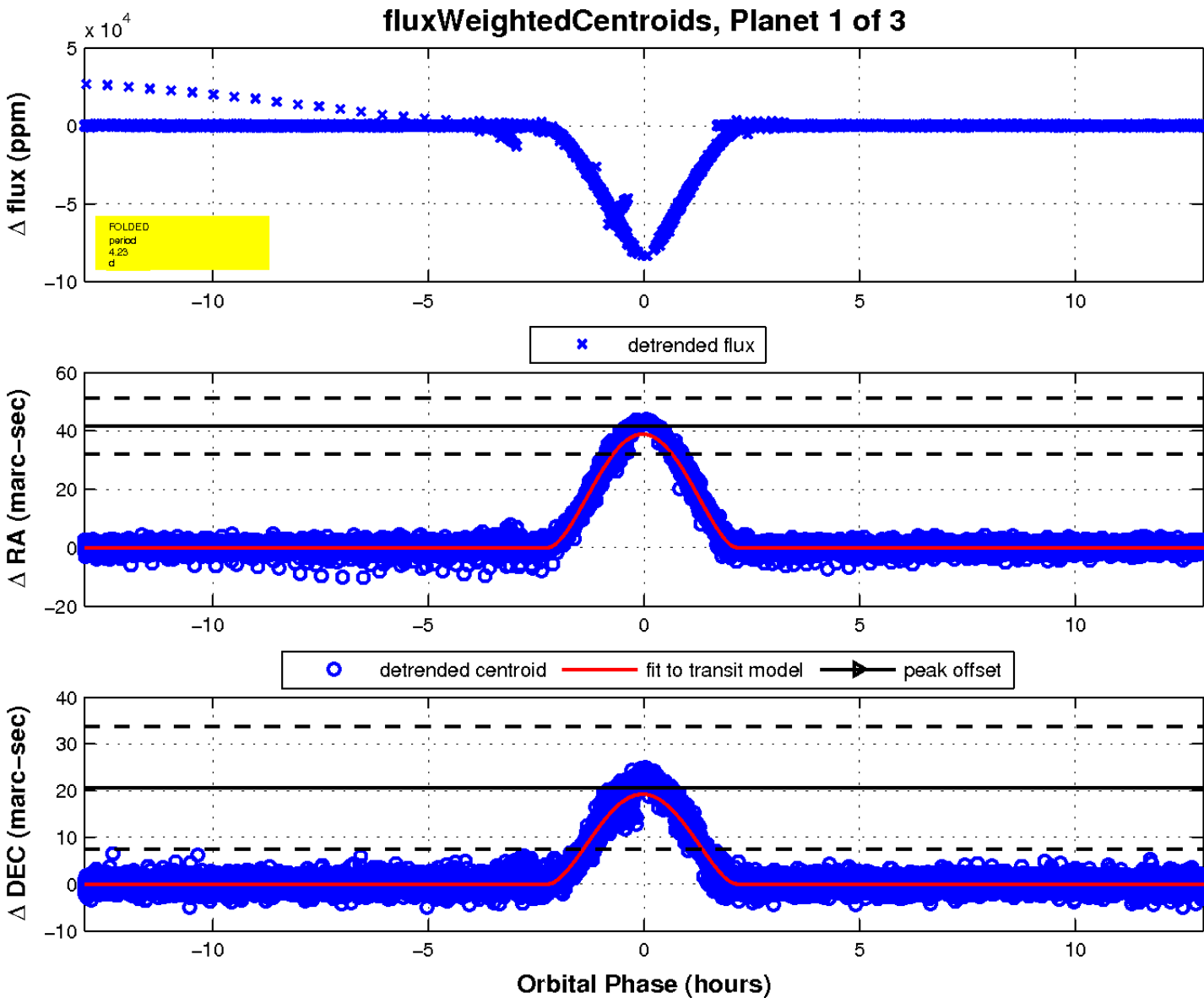
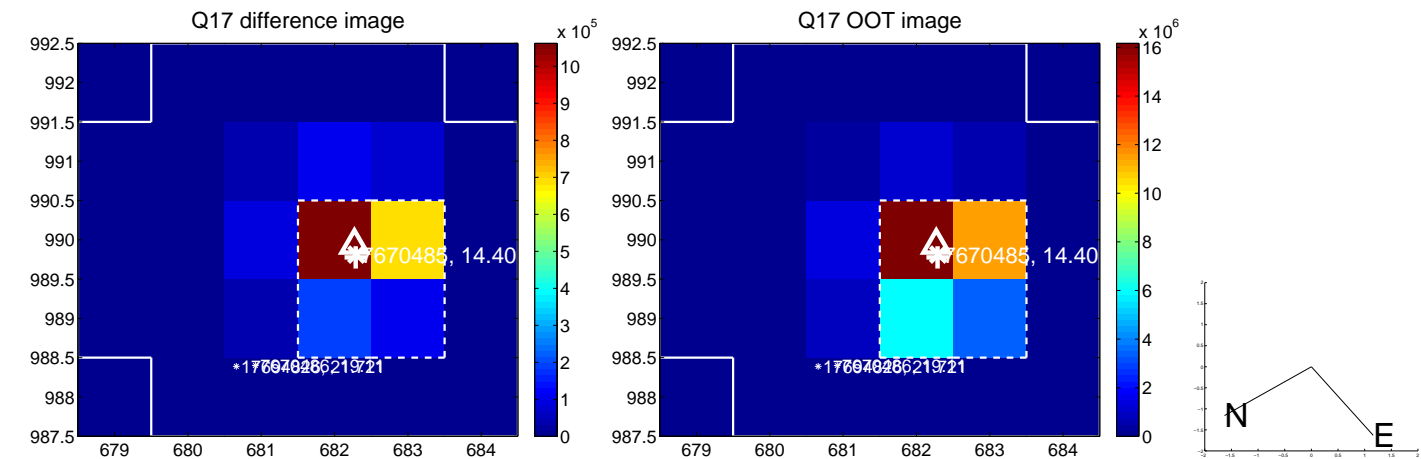
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

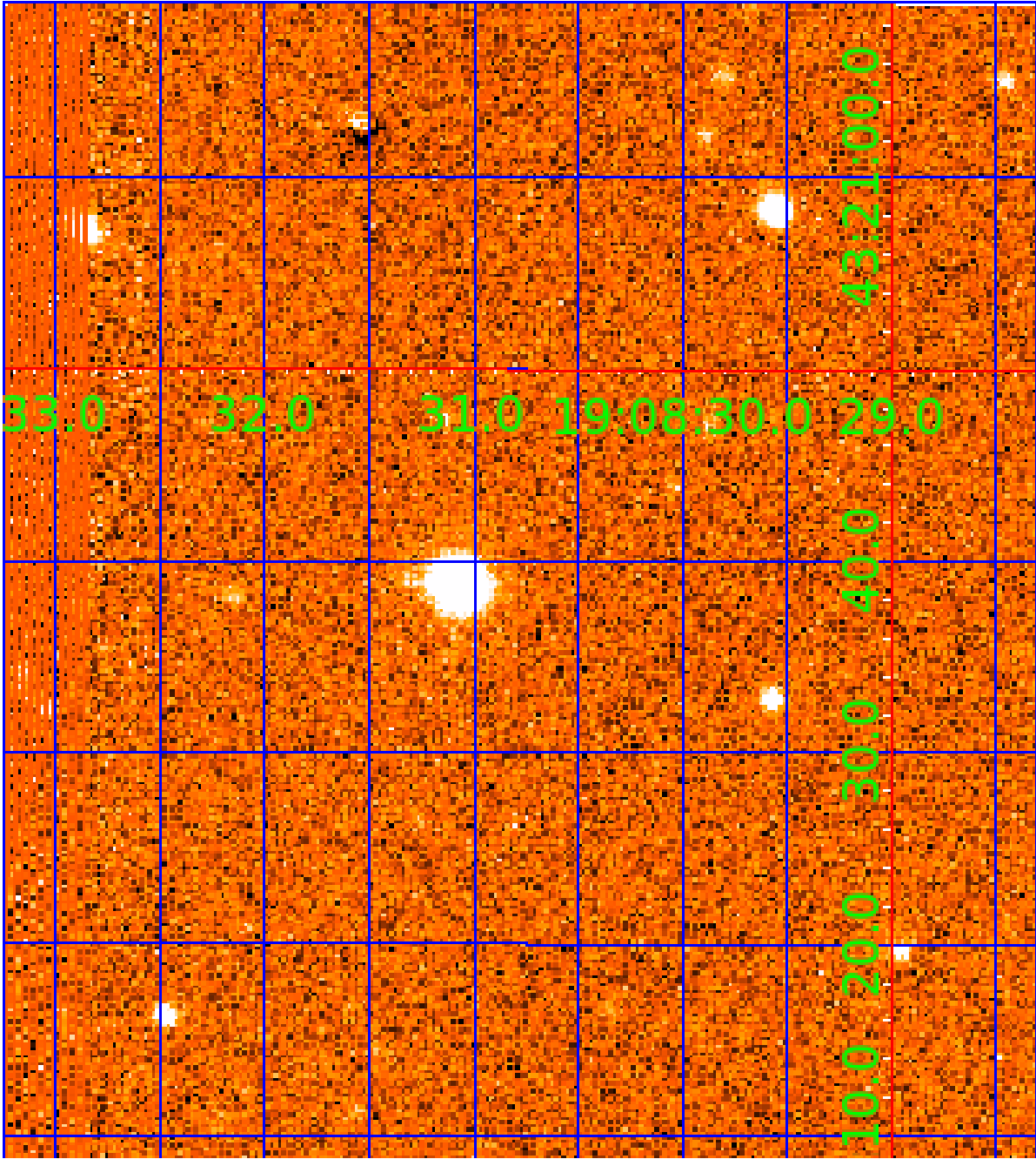


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007670485

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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007670485-03	OBS	No	586.347815	331.599819	1489.3	5.000	16.1	-1.0	0.84	5873	3.24	0.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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007670485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007670485-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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.

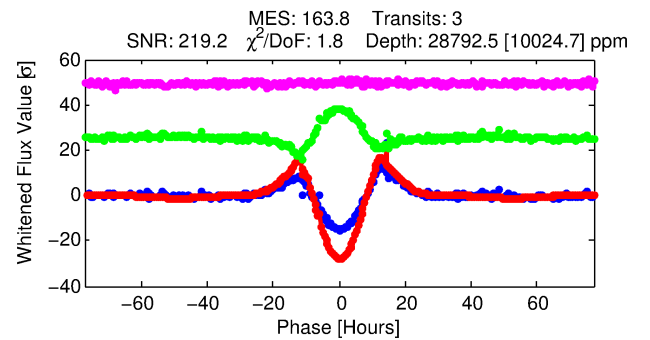
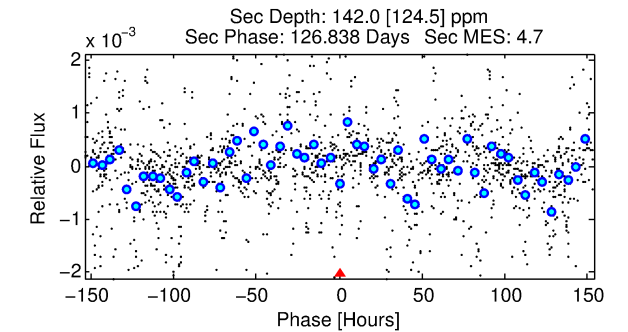
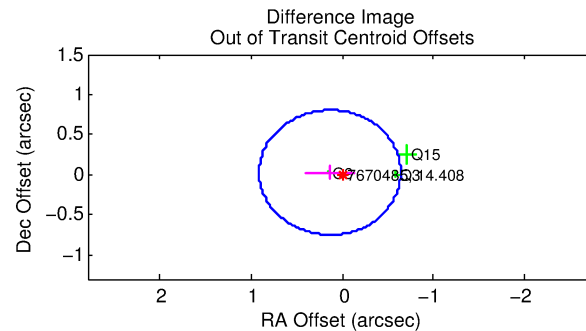
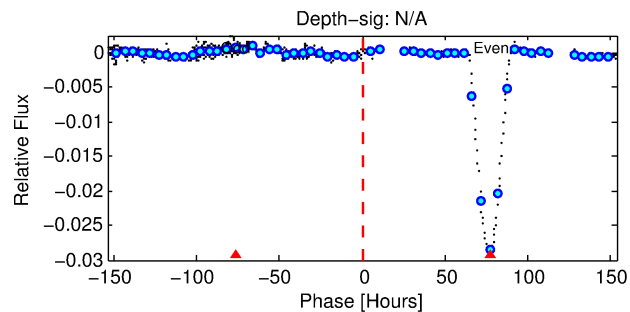
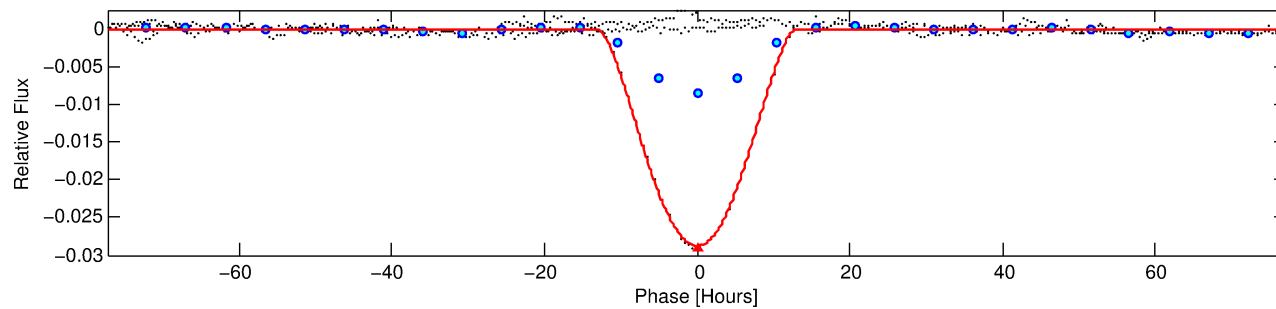
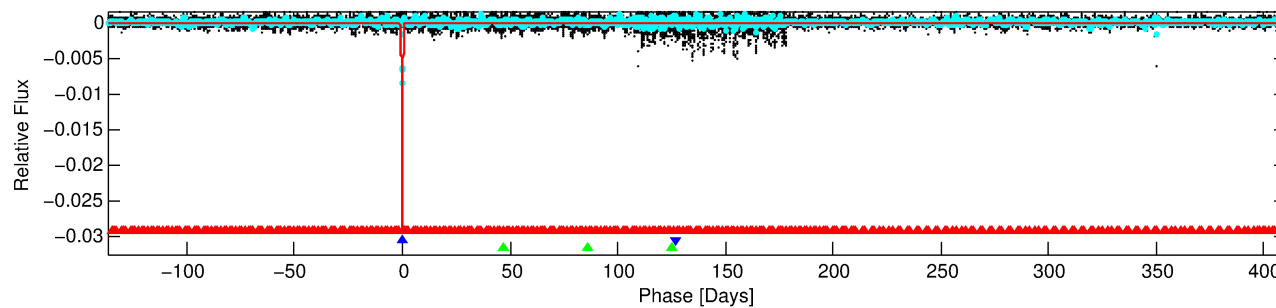
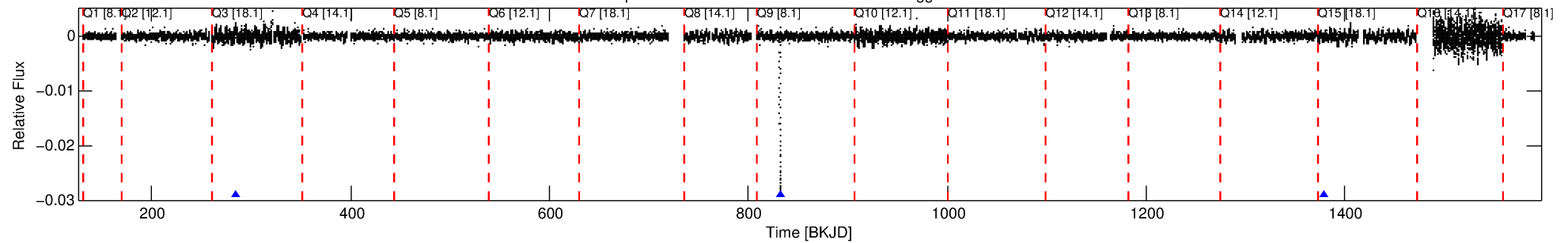
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007670485-02

No Significant Match Found

KOI: K06900 Corr: No Ephemeris Match

Kp: 14.41 R*: 0.84 Rs Teff: 5873.0 K Logg: 4.55 Fe/H: -0.300



DV Fit Results:

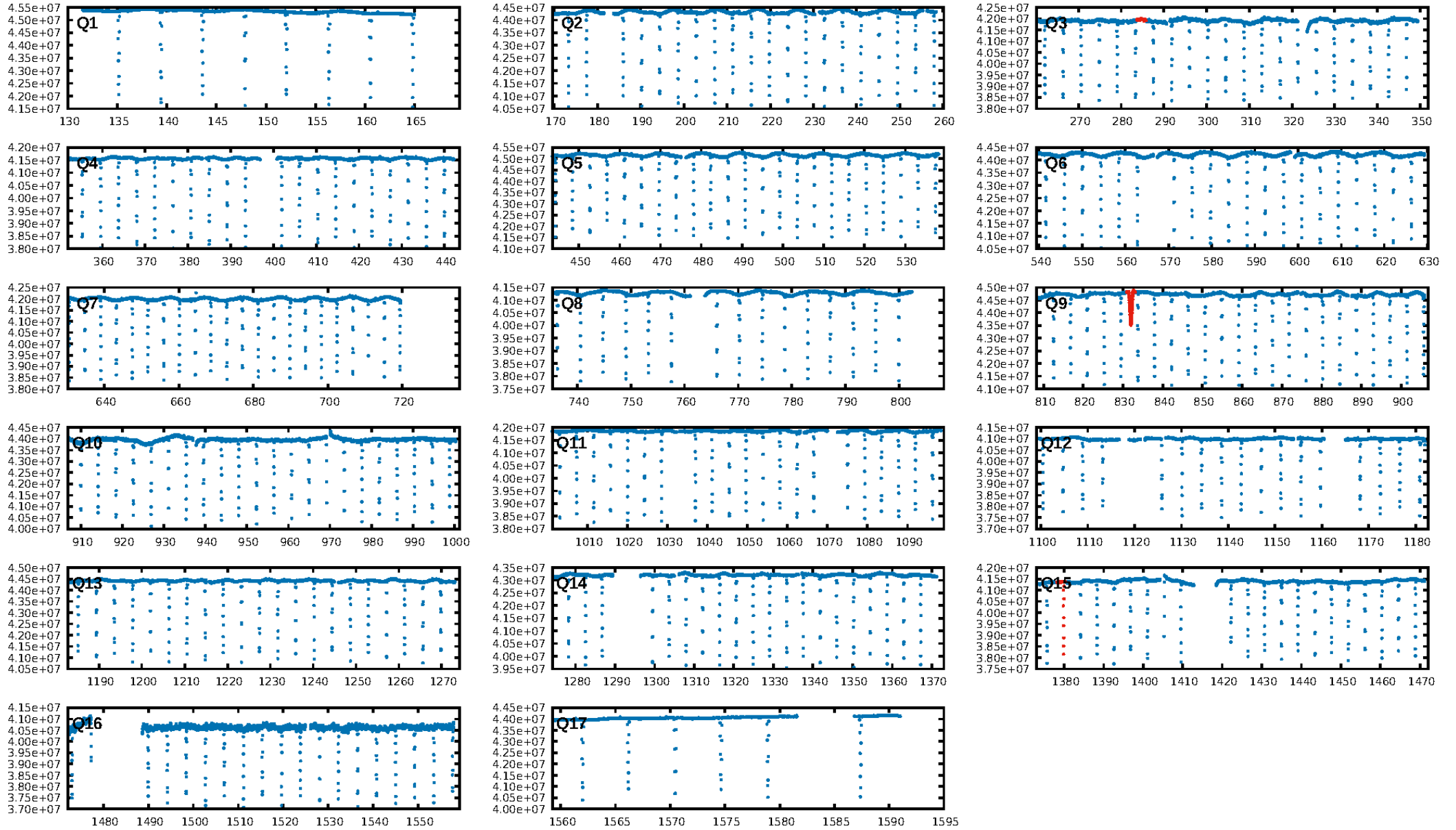
Period = 547.27801 [0.00295] d
 Epoch = 284.7246 [0.0034] BKJD
 Rp/R* = 0.2700 [0.0795]
 a/R* = 127.23 [2.62]
 b = 1.00 [0.17]
 Seff = 0.46 [0.18]
 Teq = 210 [20] K
Rp = 24.84 [10.34] Re
 a = 1.2776 [0.3206] AU
 Ag = 206.75 [231.35] [0.89σ]
 Tefp = 1234 [328] K [3.12σ]

DV Diagnostic Results:

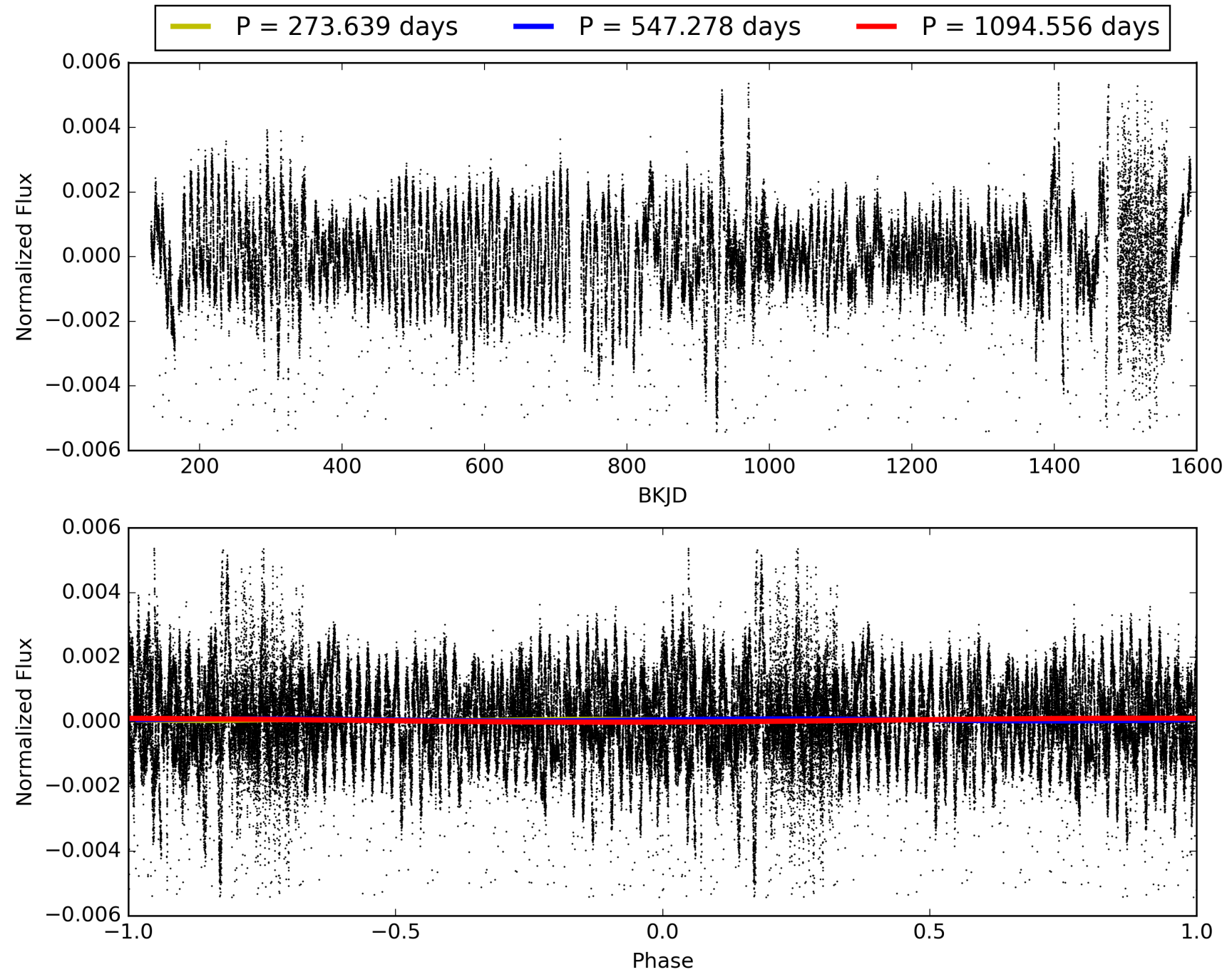
ShortPeriod-sig: 100.0% [499.55σ]
 LongPeriod-sig: 100.0% [35.78σ]
 ModelChiSquare2-sig: 0.0%
 ModelChiSquareGof-sig: 100.0%
 Bootstrap-pfa: N/A
 RollingBand-fgt: 1.00 [3/3]
 GhostDiagnostic-chr: 27.27

Centroid-sig: 0.0%
 Centroid-so: 0.334 arcsec [19.33σ]
 OotOffset-rm: 0.138 arcsec [0.53σ]
 KicOffset-rm: 0.264 arcsec [2.24σ]
 OotOffset-st: 0/2/0/1 [3]
 KicOffset-st: 0/2/0/1 [3]
 DiffImageQuality-fgm: 0.33 [1/3]
 DiffImageOverlap-fno: 0.00 [0/3]

TCE 007670485-02, PDC Light Curves

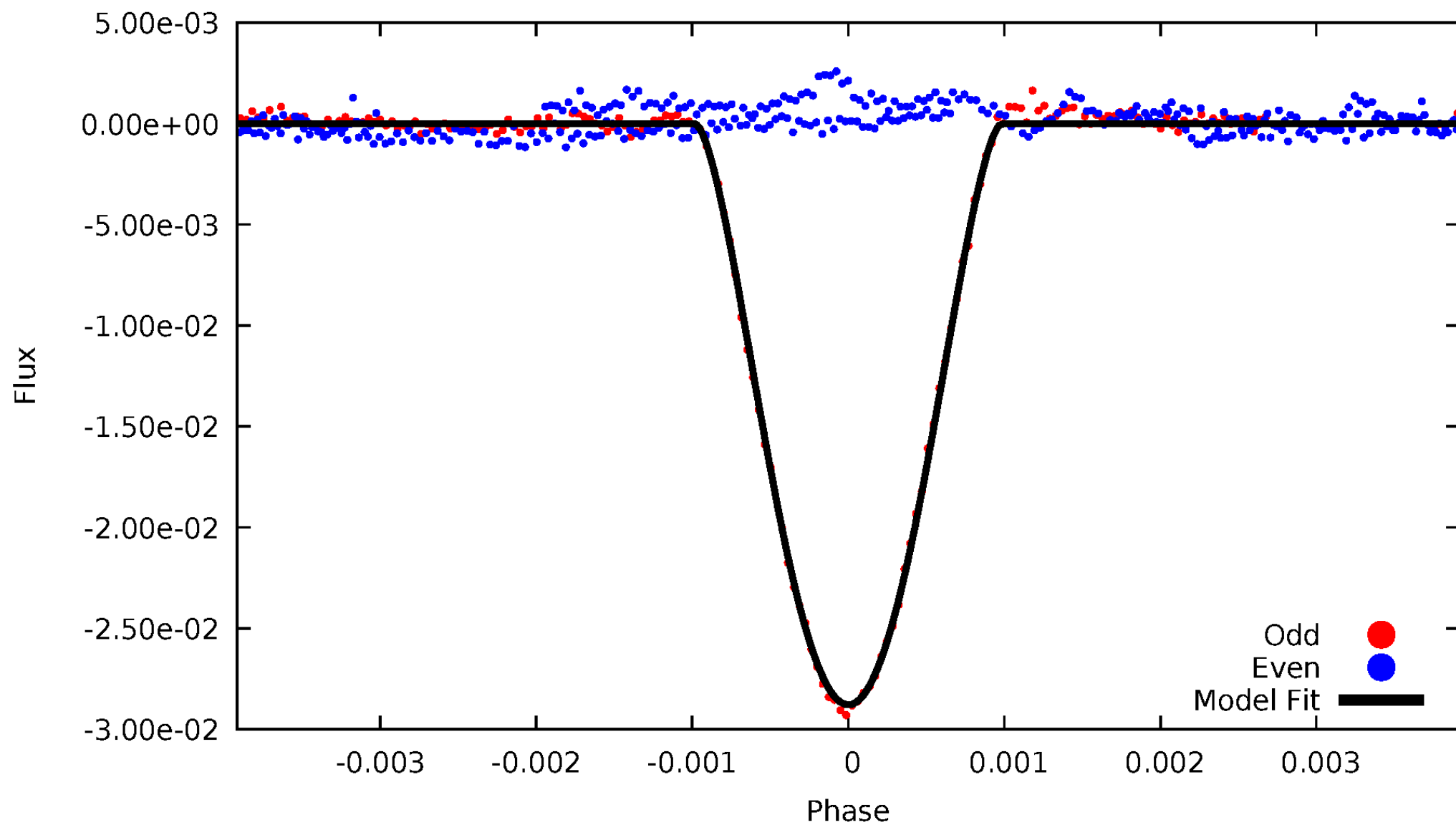


TCE 007670485-02



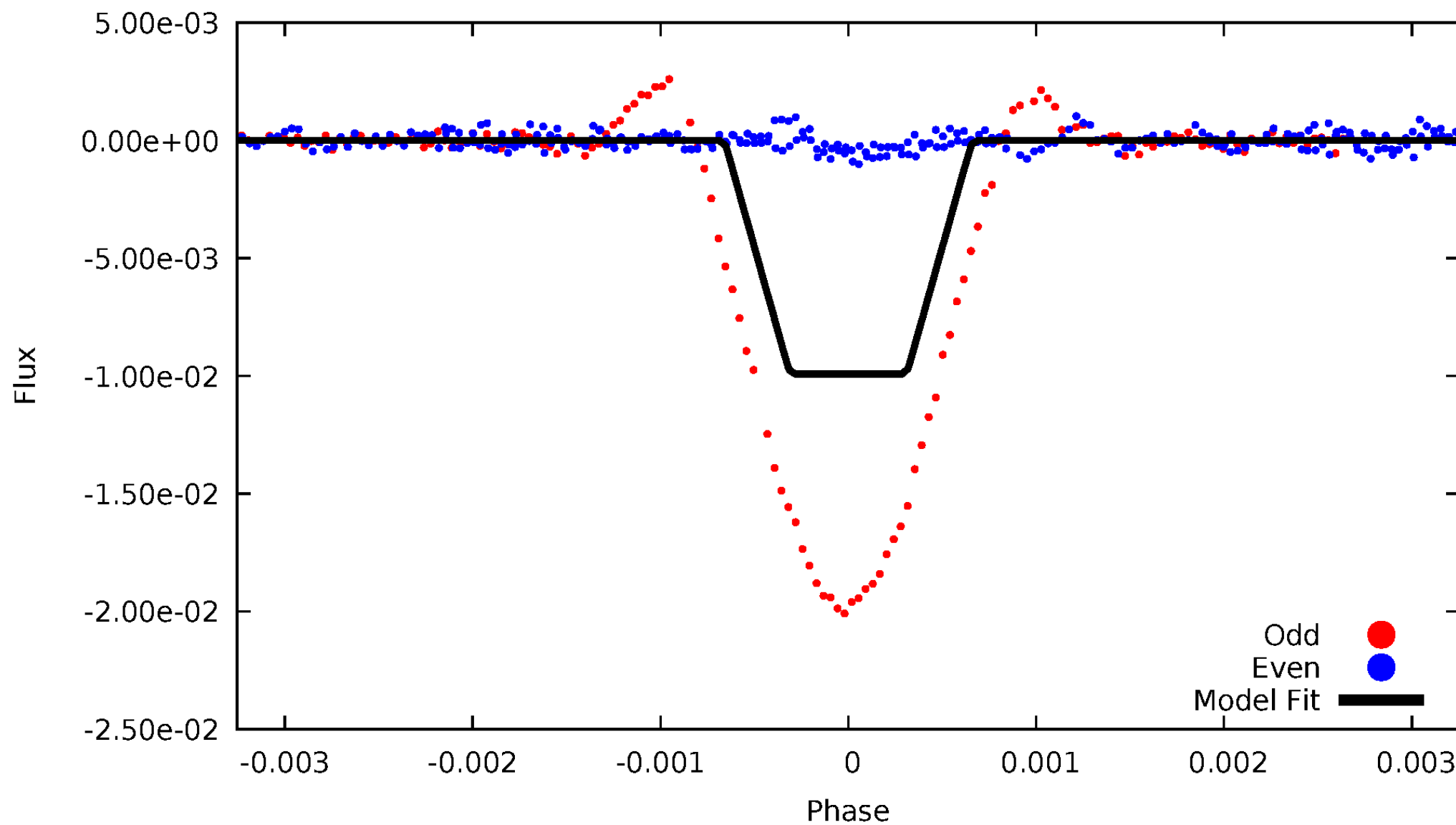
DV Odd/Even

TCE 007670485-02



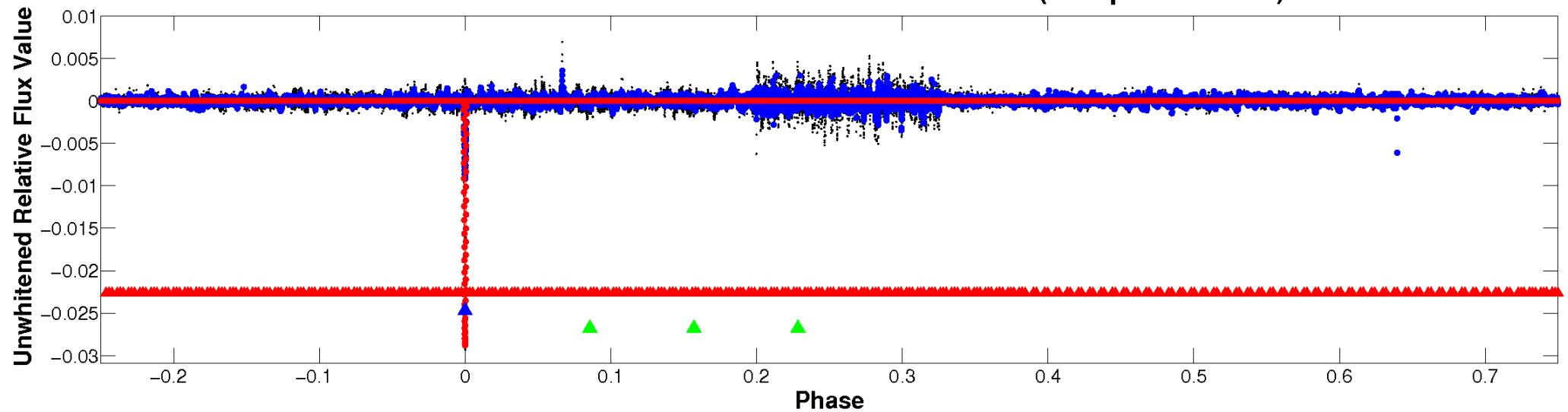
ALT Odd/Even

TCE 007670485-02

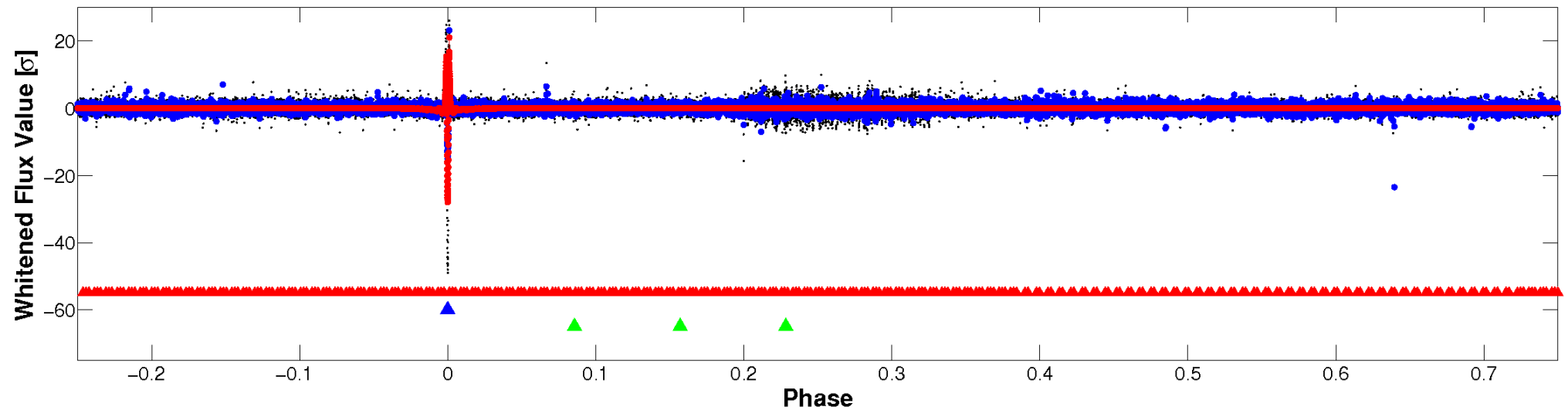


Non-Whitened Vs. Whitened Light Curve

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

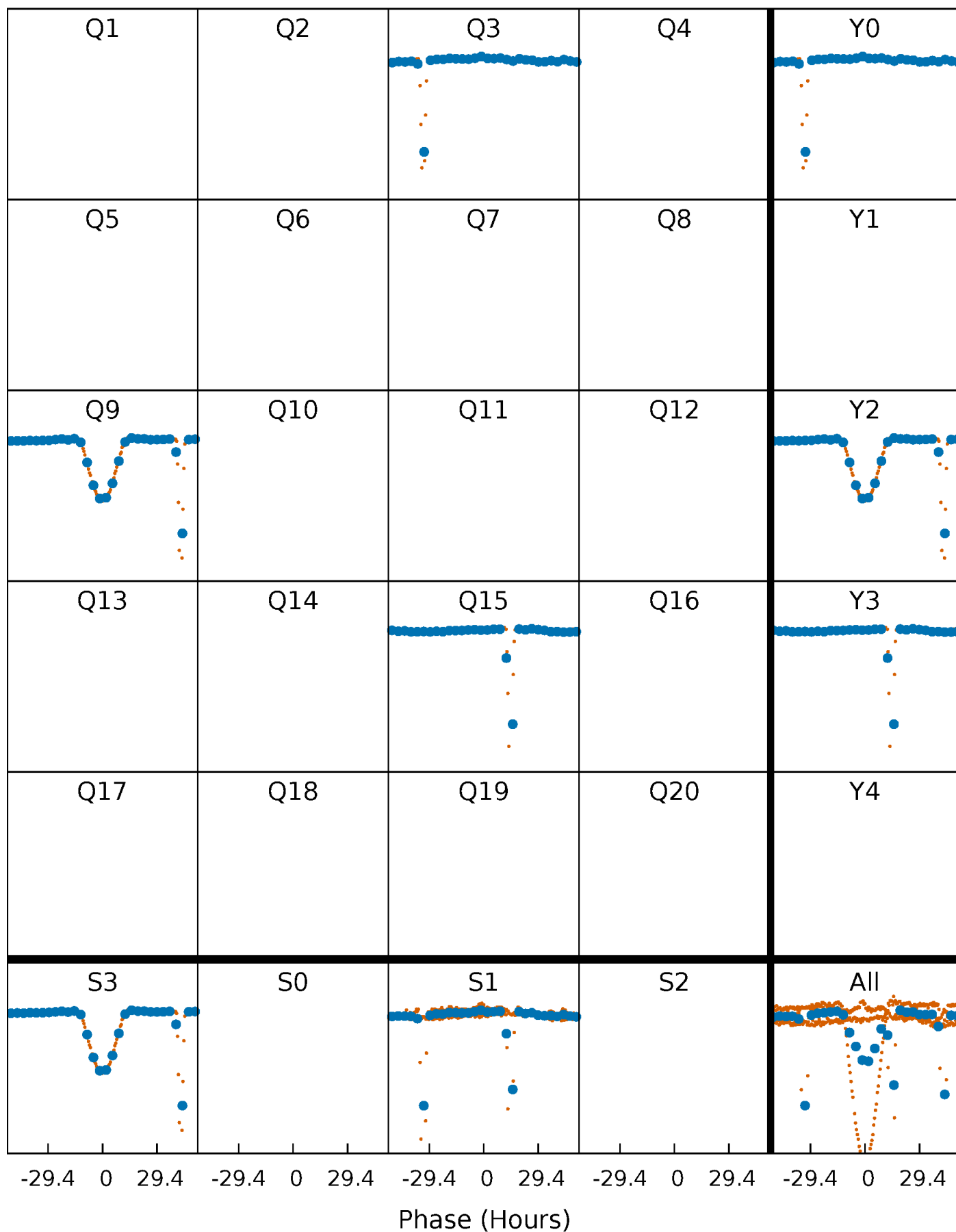


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



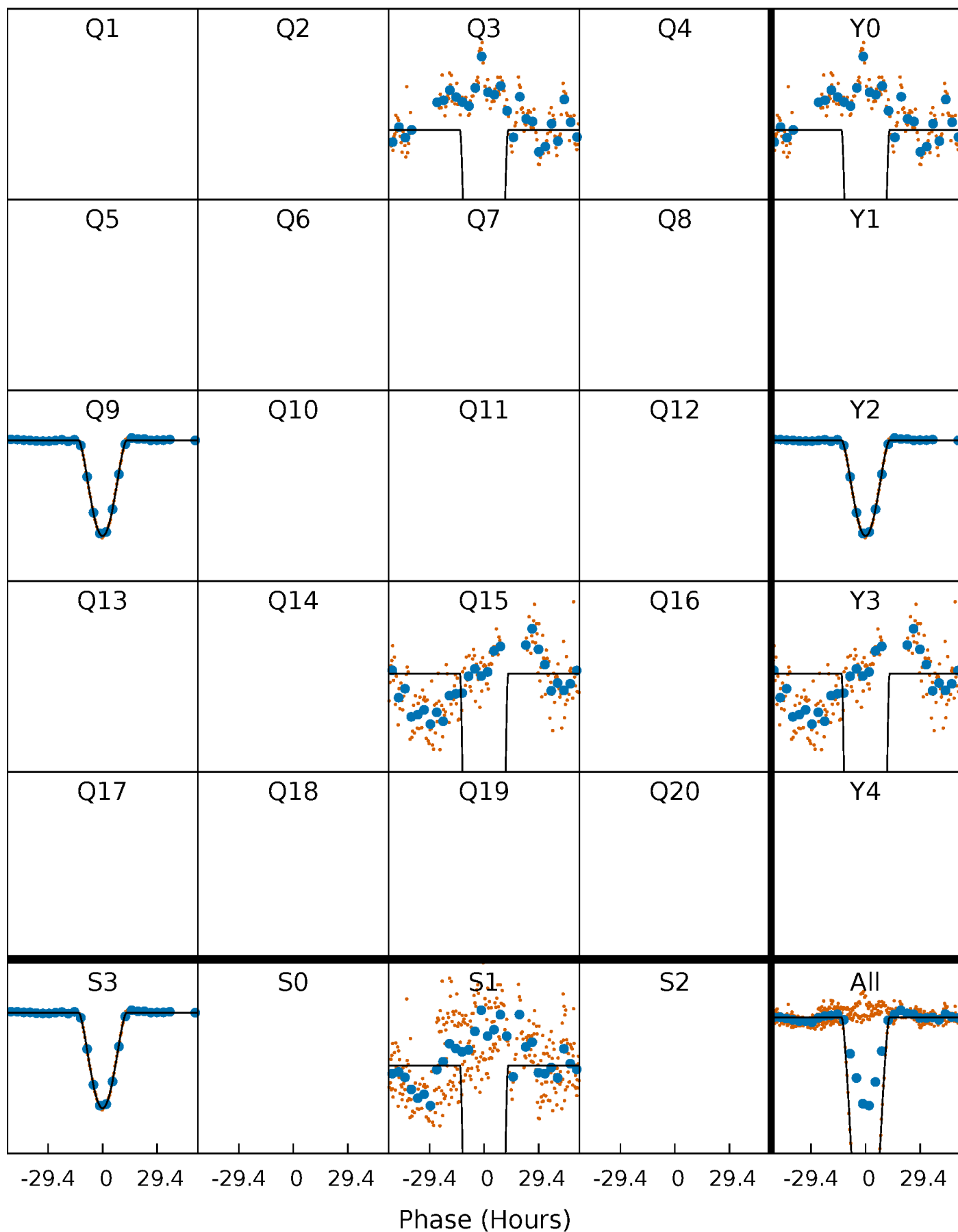
PDC Quarter-Phased Transit Curves

TCE 007670485-02 P=547.278006 Days $T_0=284.724583$ (BKJD)



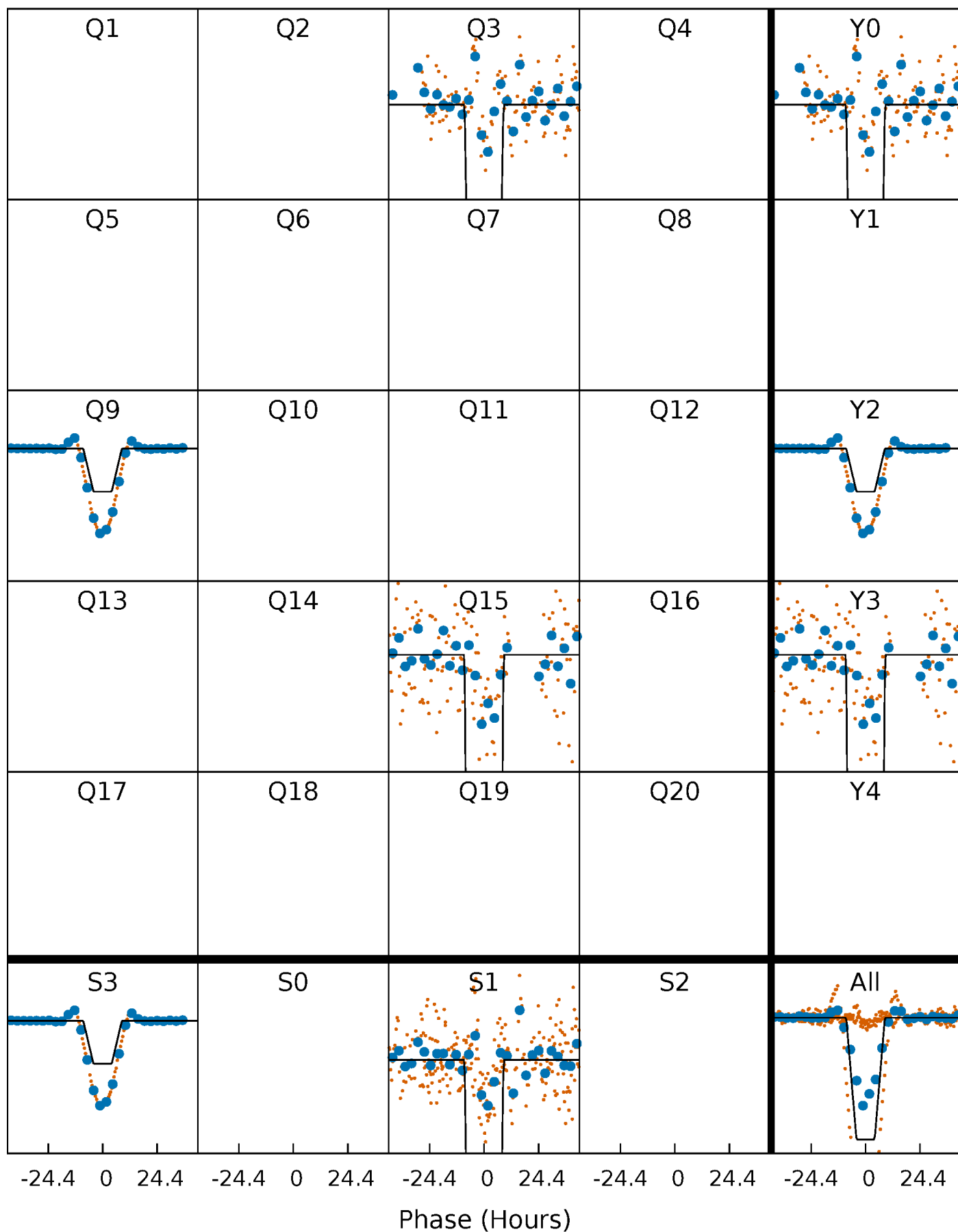
DV Quarter-Phased Transit Curves

TCE 007670485-02 P=547.278006 Days $T_0=284.724583$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

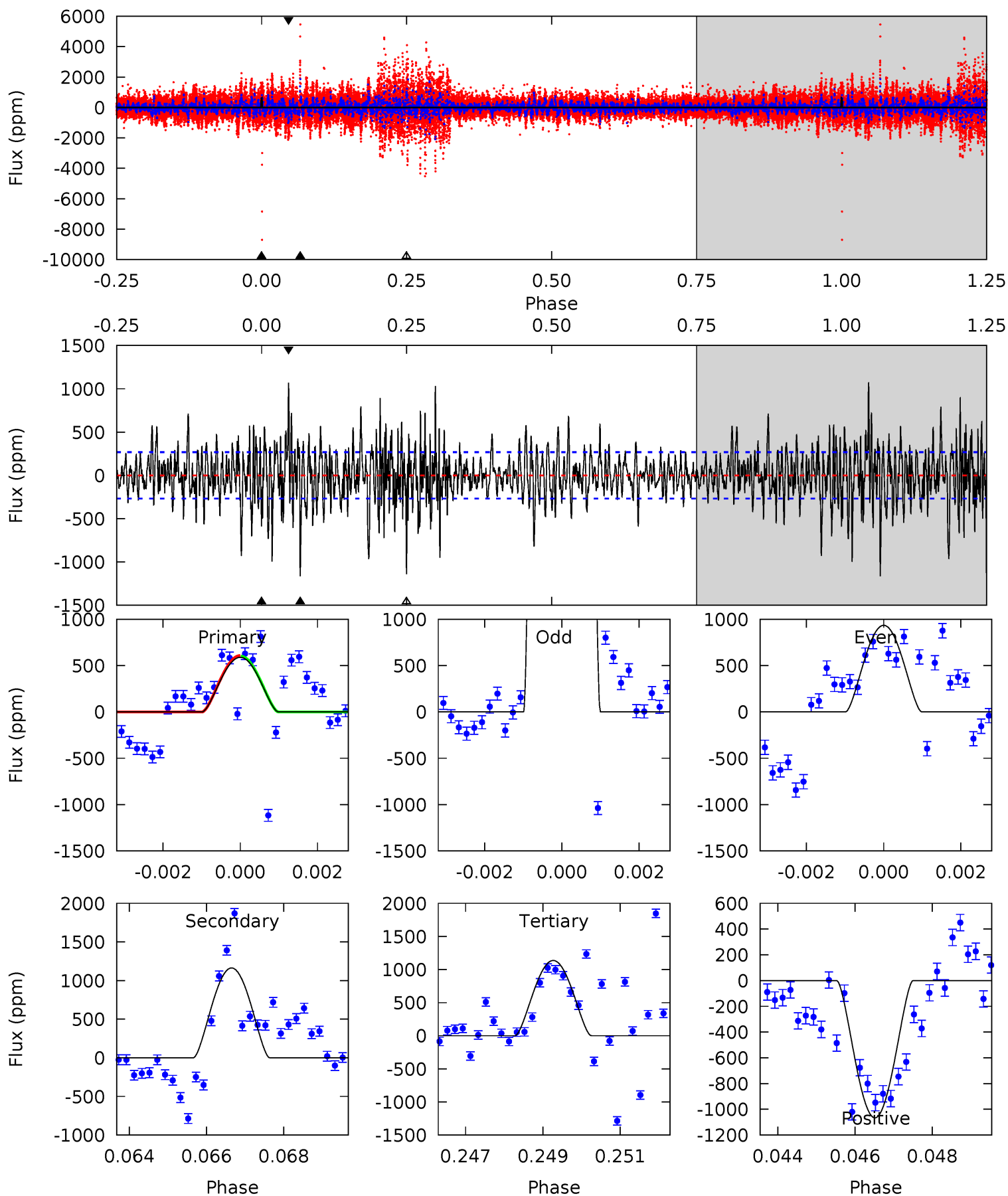
TCE 007670485-02 P=547.169870 Days $T_0=284.836157$ (BKJD)



DV Model-Shift Uniqueness Test

007670485-02, P = 547.278006 Days, E = 284.724583 Days

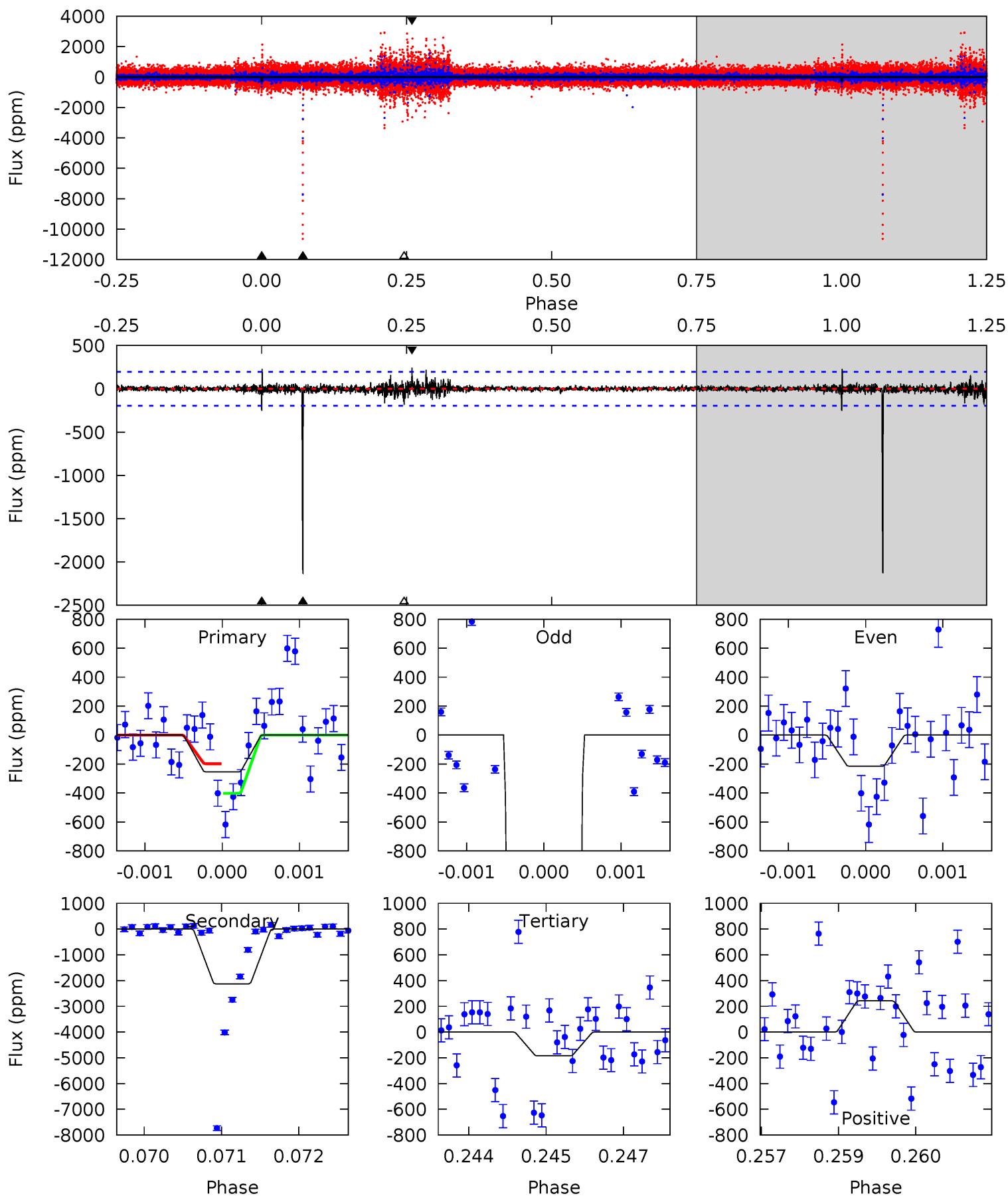
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.7	23.1	22.6	21.2	5.33	3.09	4.86	-10.9	-9.49	0.53	1.93	320.1	-83.2	0.48	0.06



Alt Model-Shift Uniqueness Test

007670485-02, P = 547.169870 Days, E = 284.836157 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.03	58.9	5.10	6.70	5.40	3.21	0.66	1.92	0.33	53.8	52.2	291.9	18.5	0.10	2.80



Stellar Parameters For KIC 007670485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5873^{+146}_{-161}	$4.554^{+0.036}_{-0.204}$	$-0.300^{+0.300}_{-0.300}$	$0.843^{+0.248}_{-0.083}$	$0.930^{+0.108}_{-0.108}$	$2.183^{+0.426}_{-1.110}$
	+2%/-3%	+1%/-4%	+100%/-100%	+29%/-10%	+12%/-12%	+20%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007670485-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-1163 ± 50	$26.57^{+8.33}_{-7.78}$	302^{+22}_{-13}	2823^{+278}_{-188}	1456^{+1492}_{-604}
Alt.	-2130 ± 36	$10.75^{+7.10}_{-6.09}$	302^{+21}_{-13}	4077^{+1643}_{-620}	16027^{+72551}_{-10092}

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

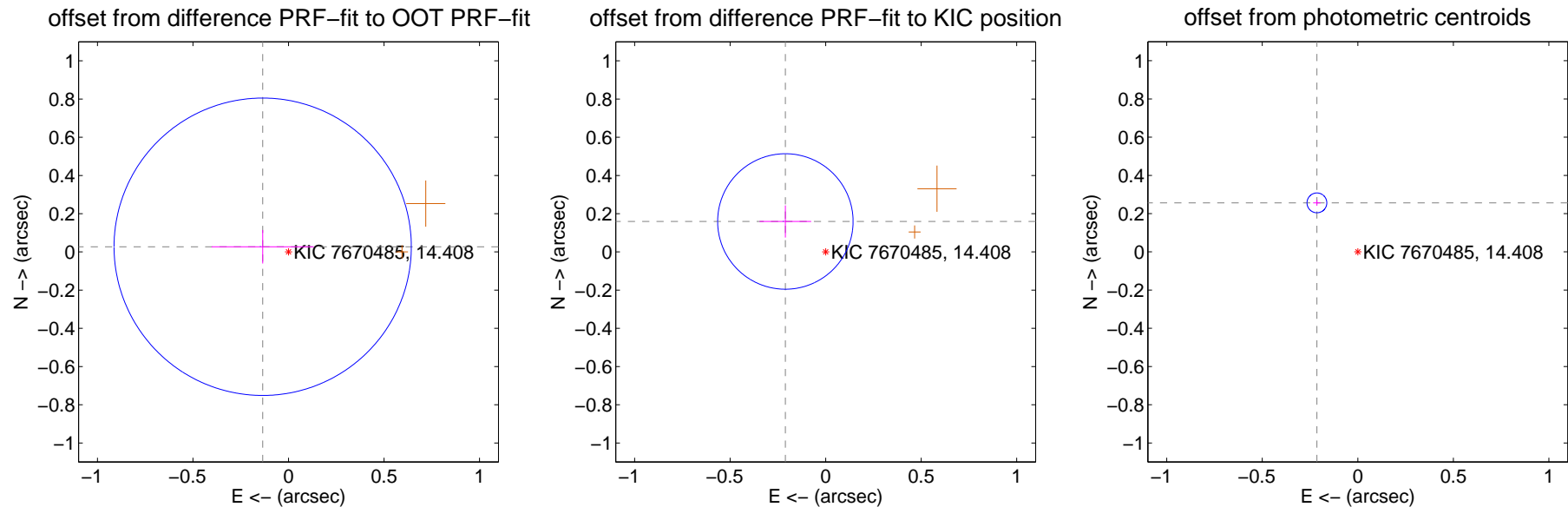
DV Centroid Data

Supplemental centroid analysis for 007670485-02. Kepler magnitude: 14.41. Transit SNR 219.18

There are 1 quarters with good PRF difference image offsets

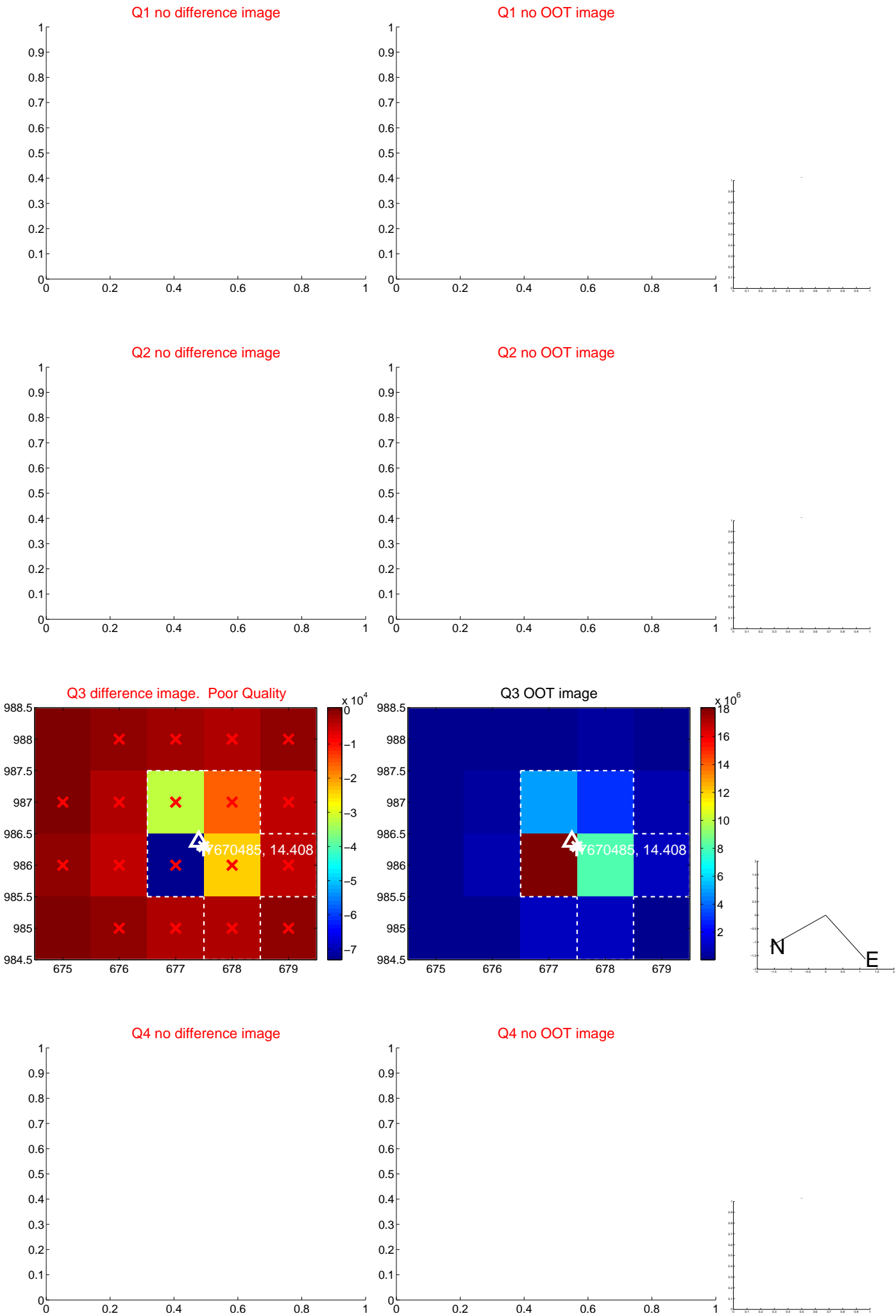
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.138 ± 0.259	0.53	0.135 ± 0.267	0.027 ± 0.088
PRF-fit source offset from KIC position	0.264 ± 0.118	2.24	0.211 ± 0.135	0.159 ± 0.084
photometric centroid source offset	0.33 ± 0.02	19.33	0.21 ± 0.02	0.26 ± 0.02



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.

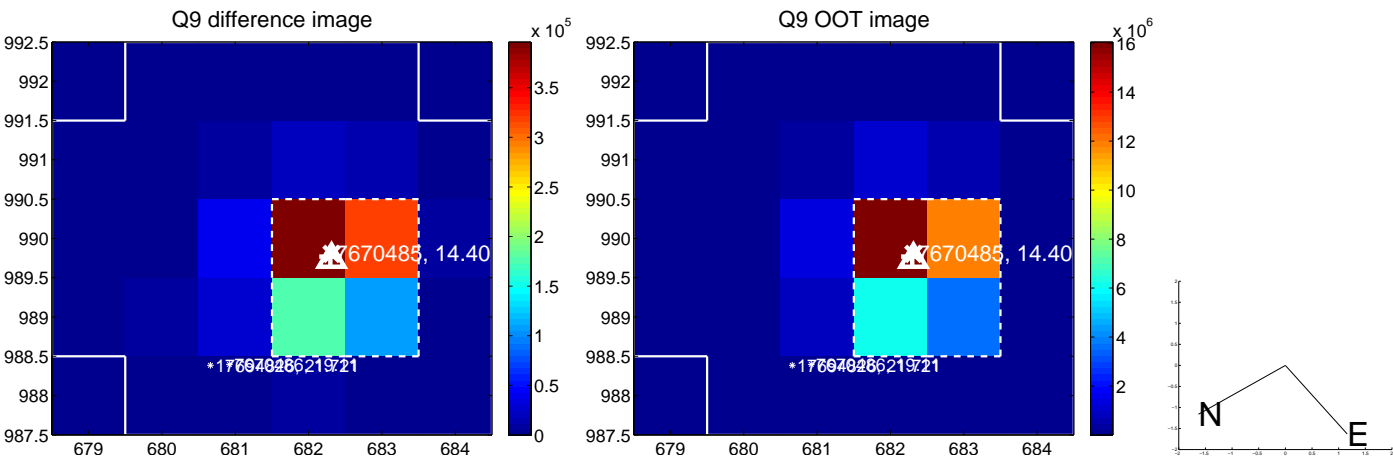
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



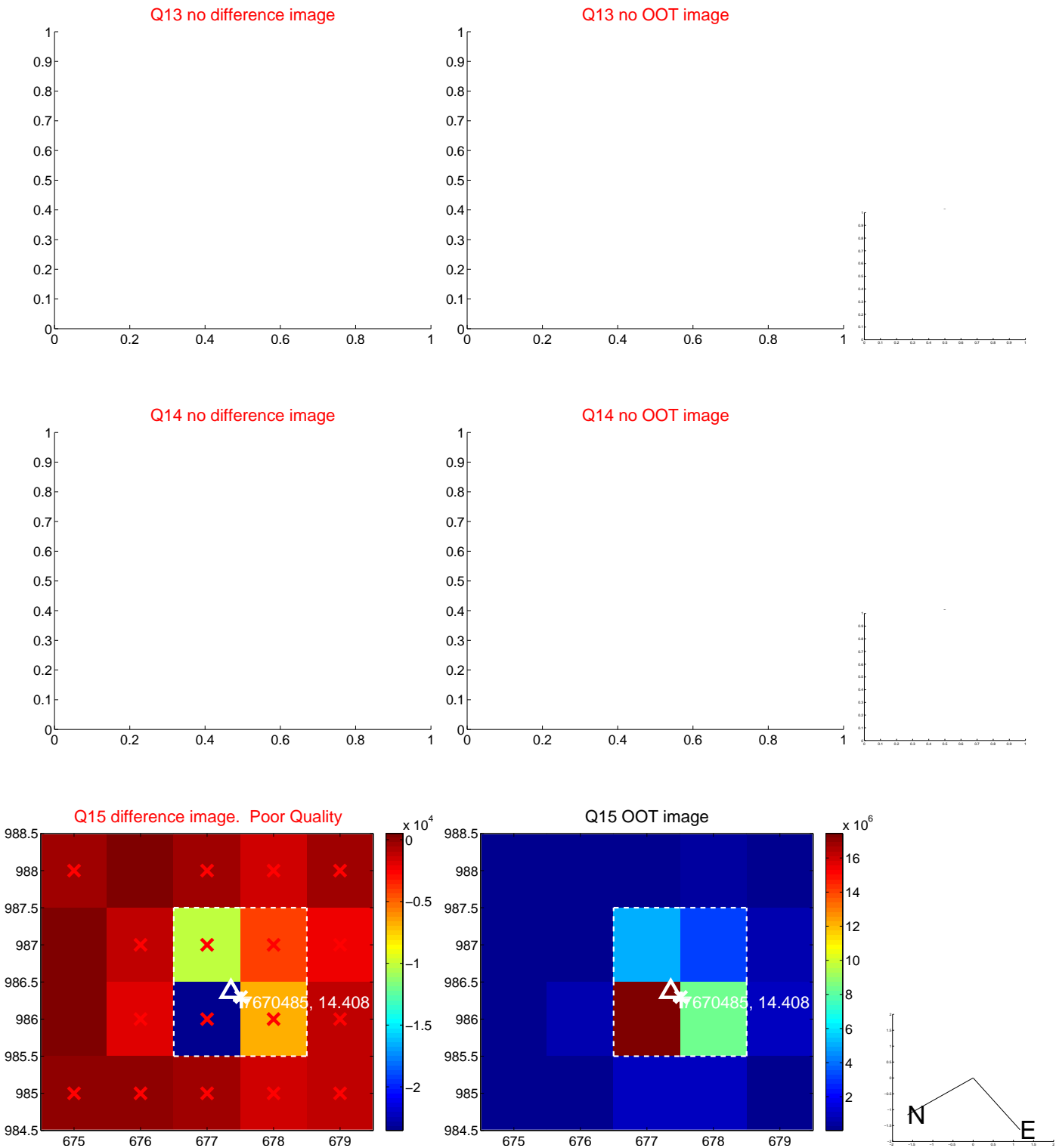
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



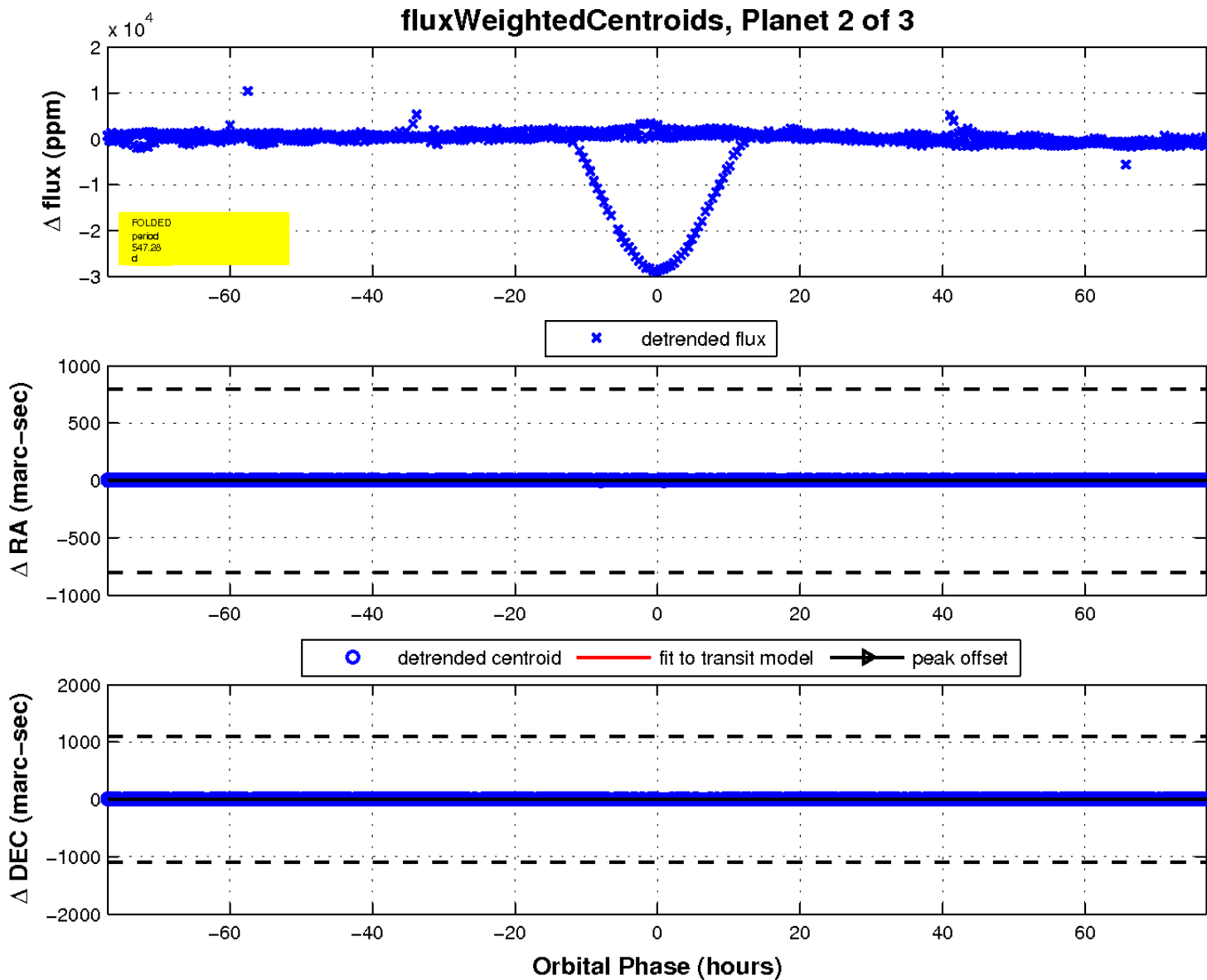
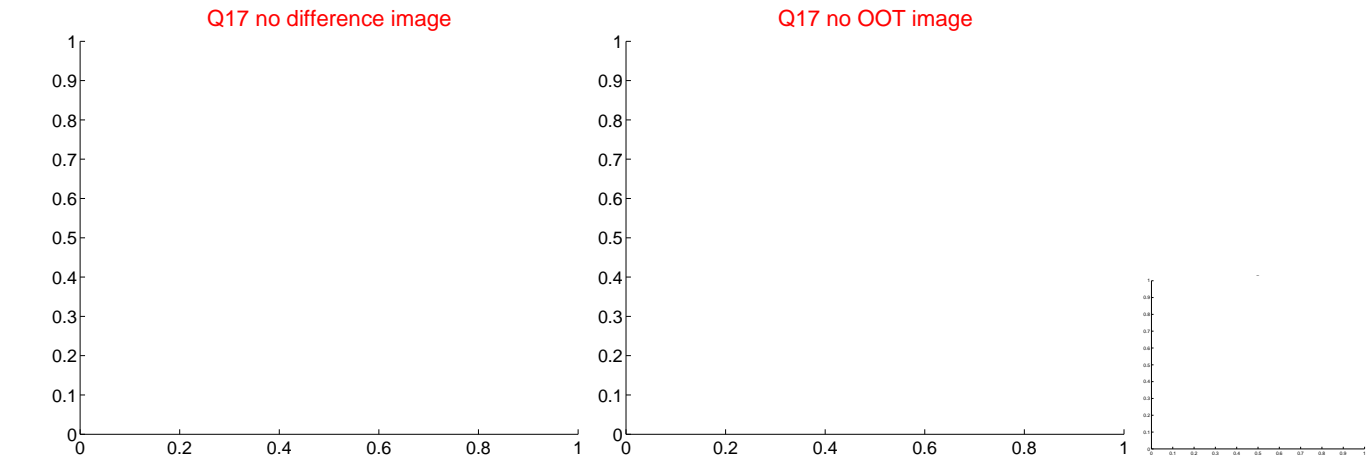
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

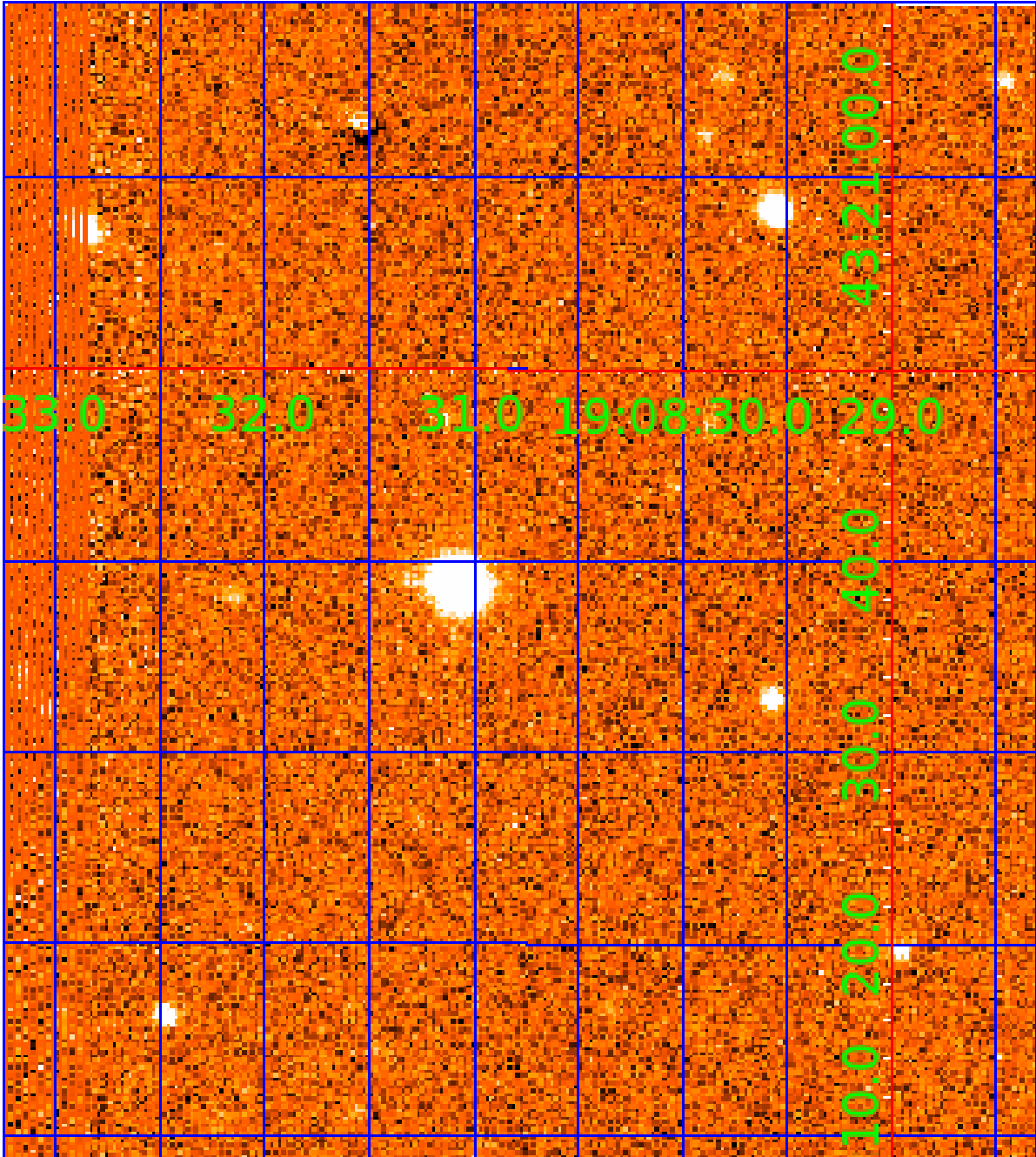


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007670485

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})
007670485-01	OBS	6900.01	4.233860	135.176012	70878.6	4.327	6199.3	2780.2	0.84	5873	34.89	303.32
007670485-02	OBS	No	547.278006	284.724583	28792.5	25.729	163.8	219.2	0.84	5873	24.84	0.46
007670485-03	OBS	No	586.347815	331.599819	1489.3	5.000	16.1	-1.0	0.84	5873	3.24	0.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007670485-01	OBS	FP	0.00	1	0	0	0	LPP_DV
007670485-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_CHASES—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT— MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007670485-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_SKYE—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—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 007670485-03

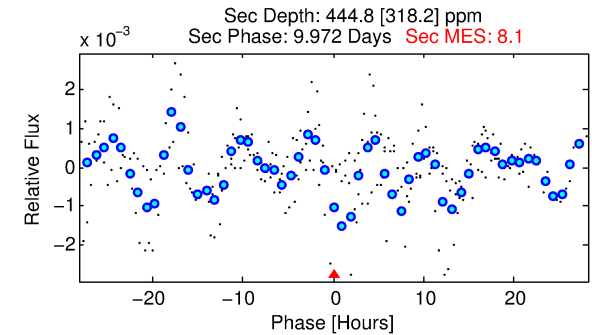
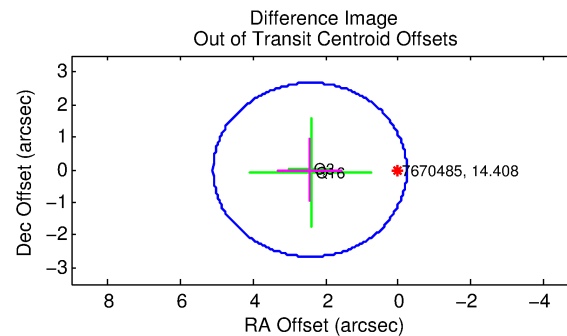
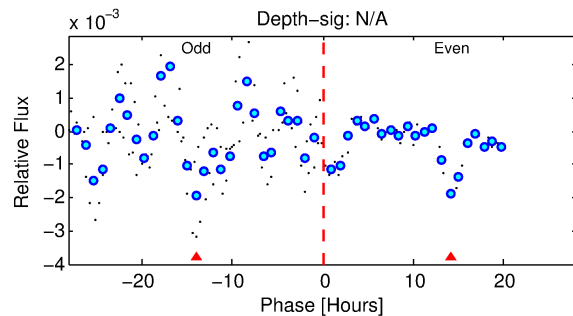
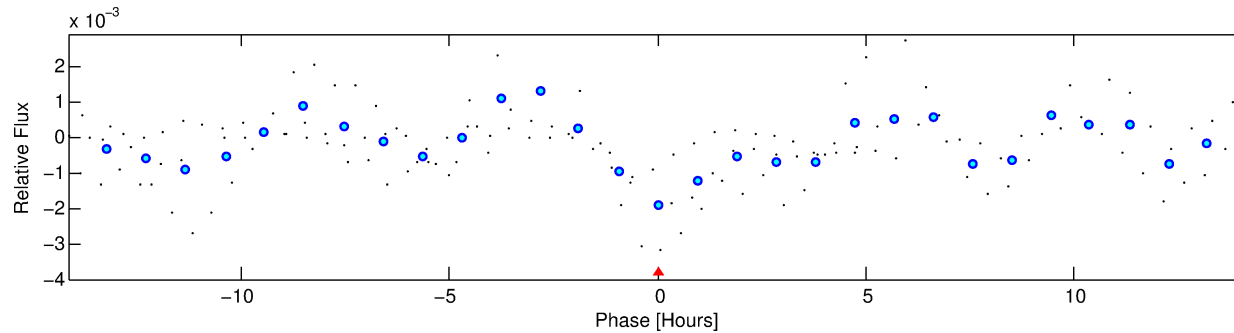
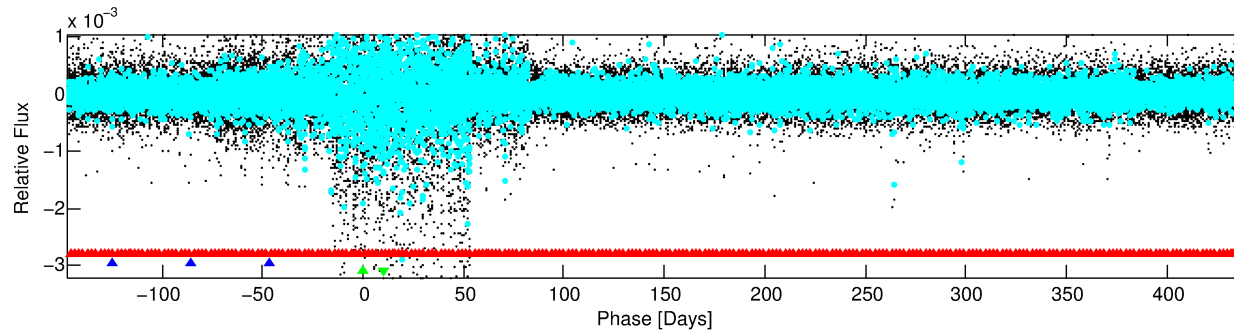
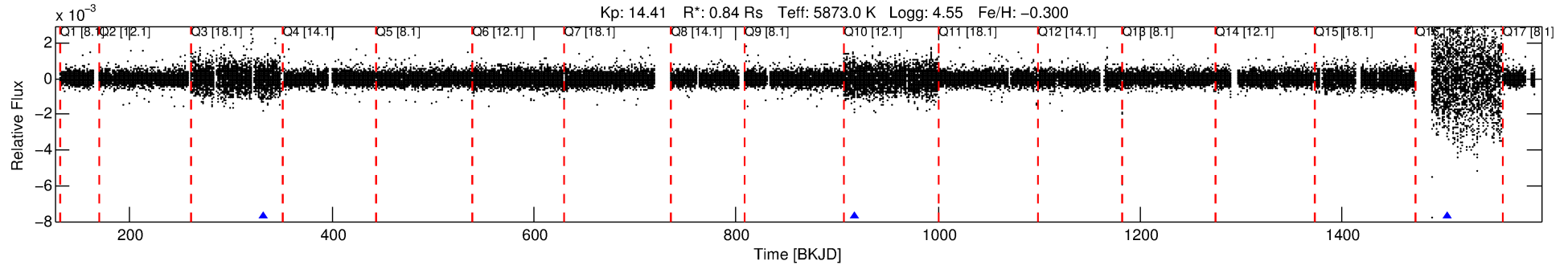
No Significant Match Found

DV One-Page Summary

KIC: 7670485 Candidate: 3 of 3 Period: 586.348 d

KOI: K06900 Corr: No Ephemeris Match

Kp: 14.41 R*: 0.84 Rs Teff: 5873.0 K Logg: 4.55 Fe/H: -0.300



TPS TCE Results:

Period = 586.34782 d
Epoch = 331.5998 BKJD

DV fit results are unavailable

DV Diagnostic Results:

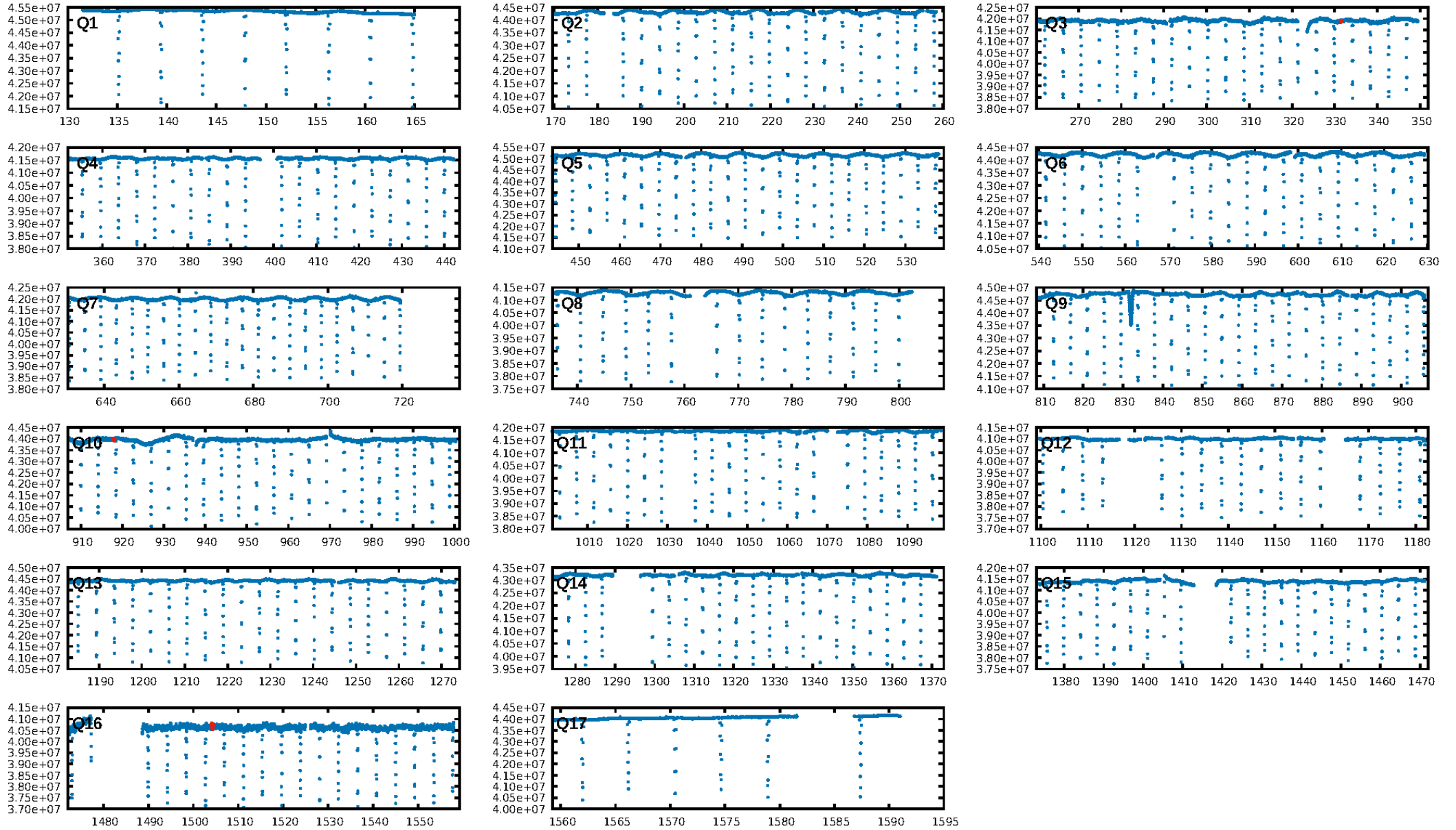
ShortPeriod-sig: 100.0% [35.78 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.9422

Centroid-sig: 80.0%
Centroid-so: 0.094 arcsec [0.21 σ]
OotOffset-rm: 2.428 arcsec [2.73 σ]
KicOffset-rm: 2.539 arcsec [2.86 σ]
OotOffset-st: 0/1/1/0 [2]
KicOffset-st: 0/1/1/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 1.00 [3/3]

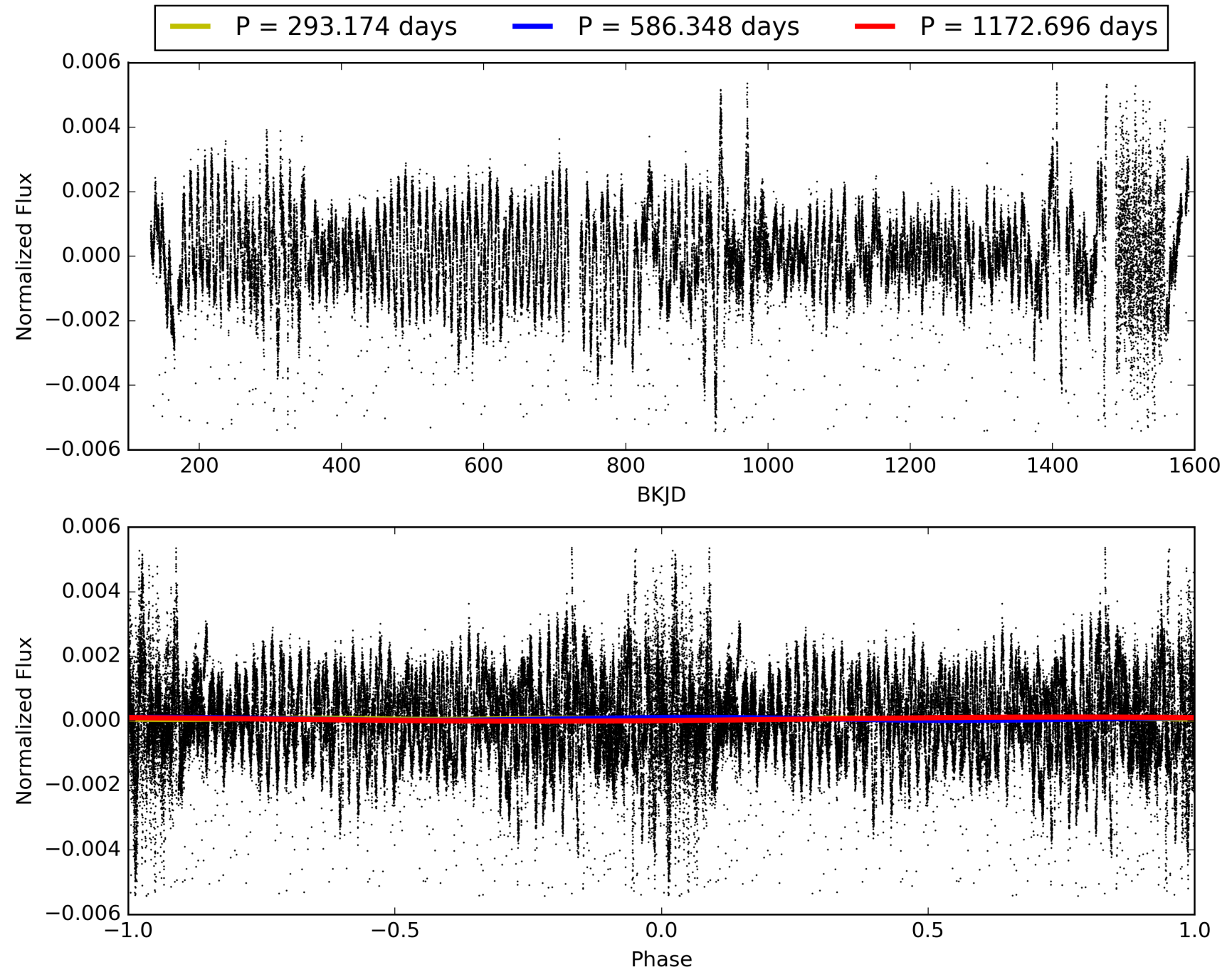
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 07:49:11 Z

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

TCE 007670485-03, PDC Light Curves

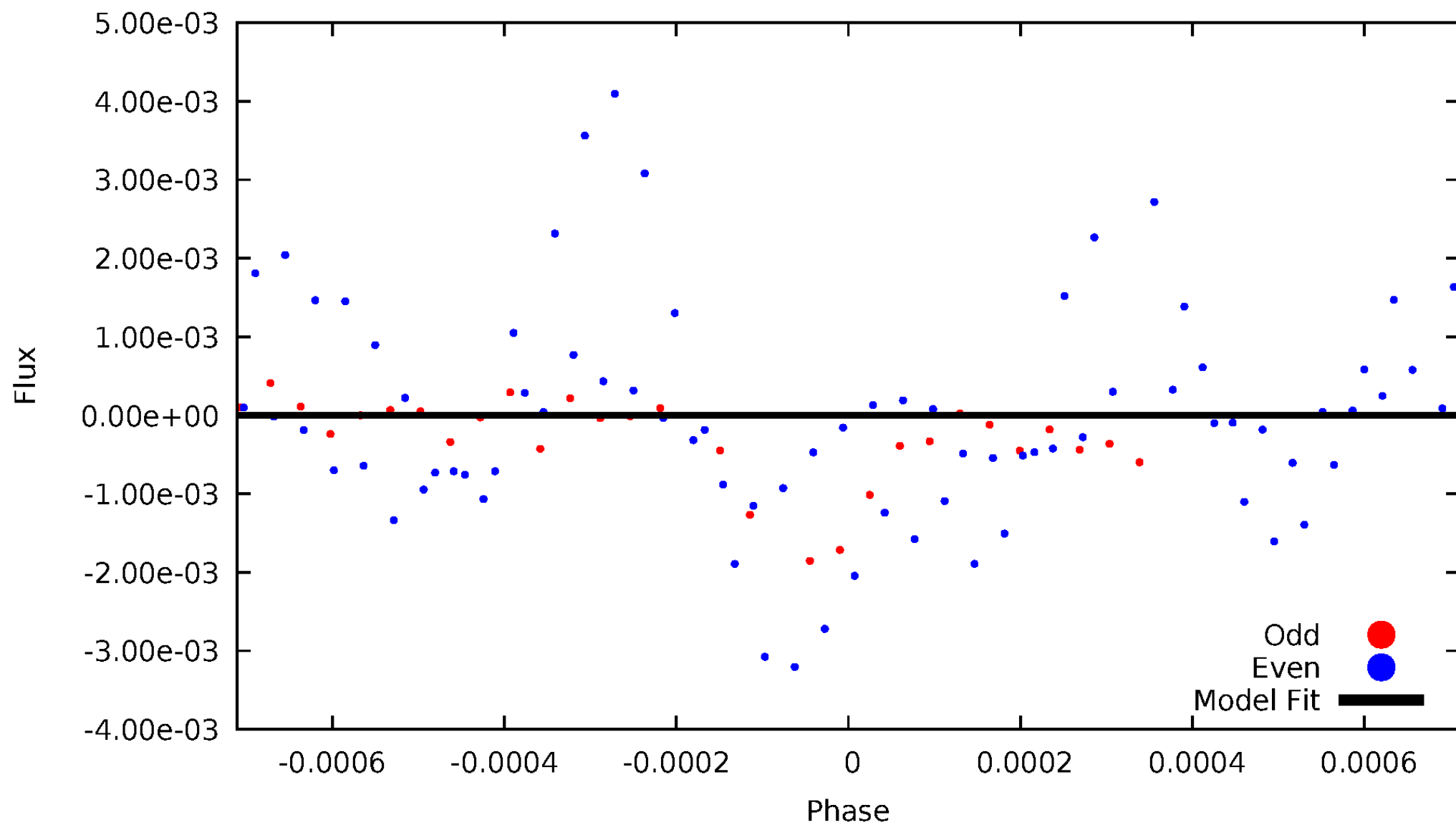


TCE 007670485-03



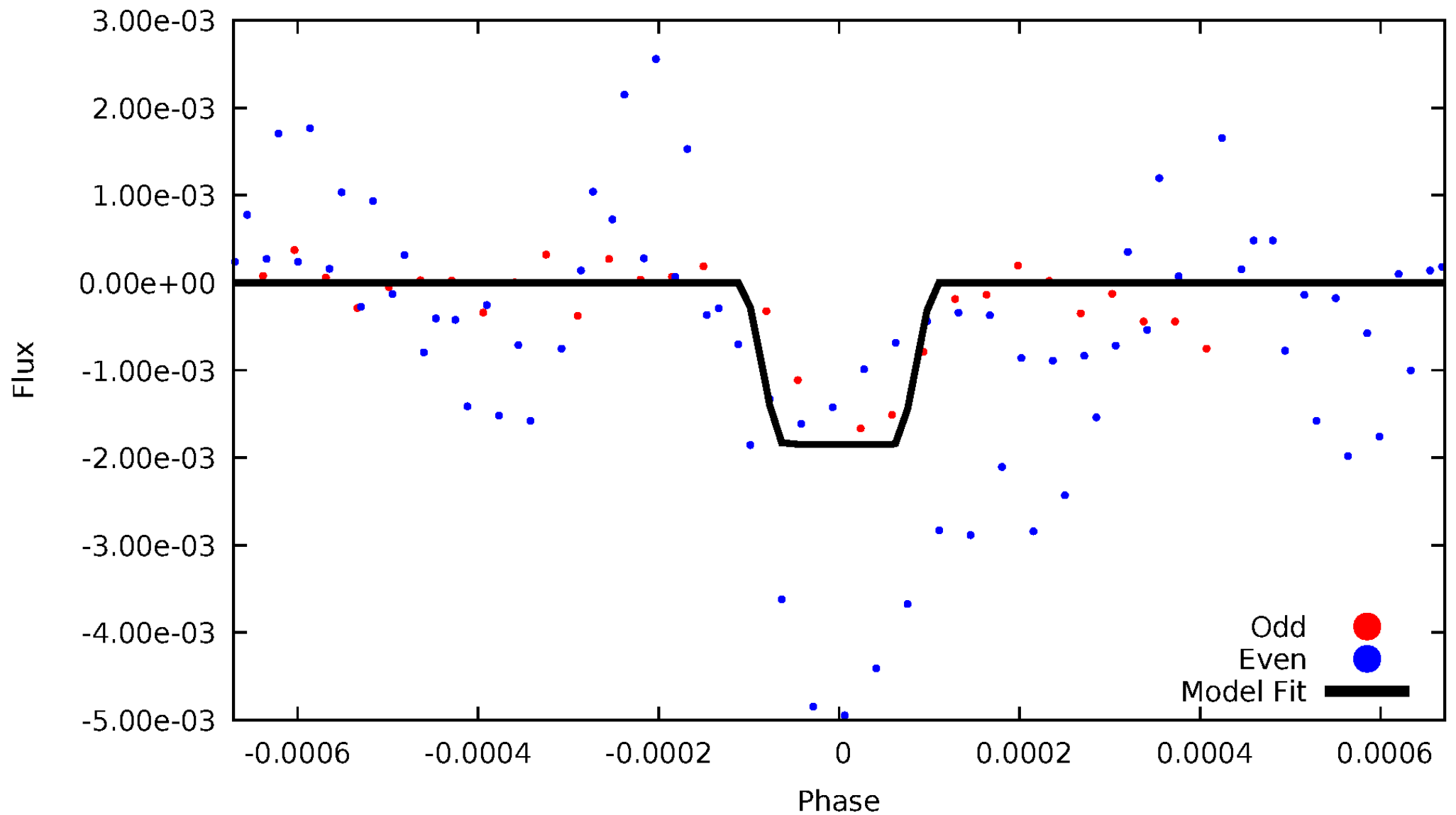
DV Odd/Even

TCE 007670485-03



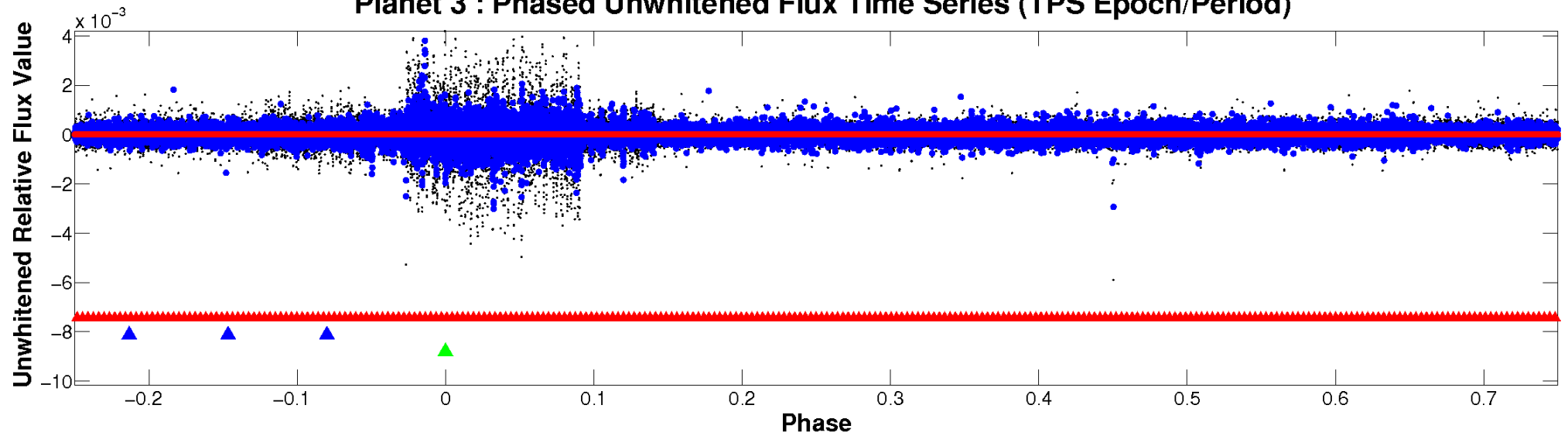
ALT Odd/Even

TCE 007670485-03



Non-Whitened Vs. Whitened Light Curve

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

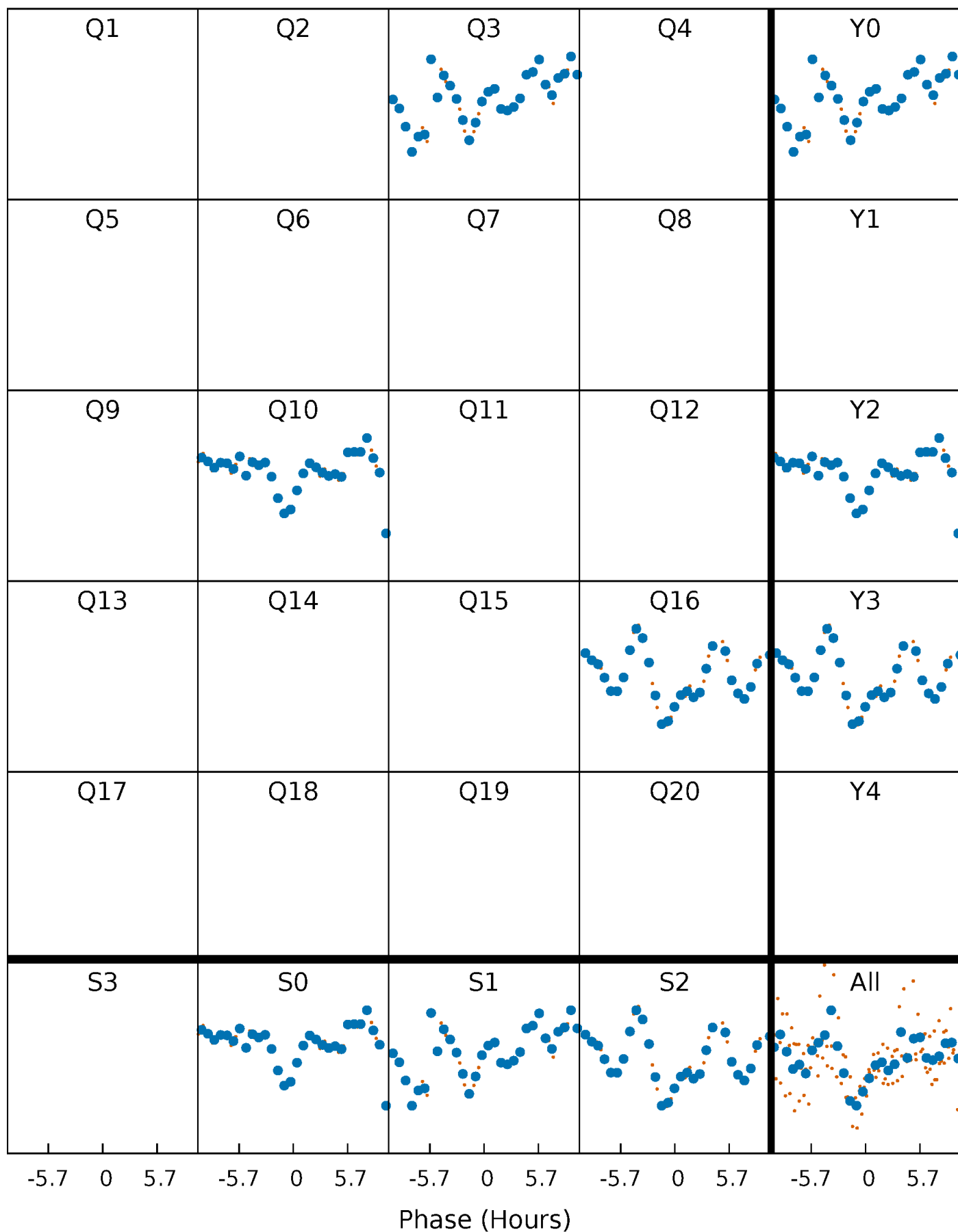


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



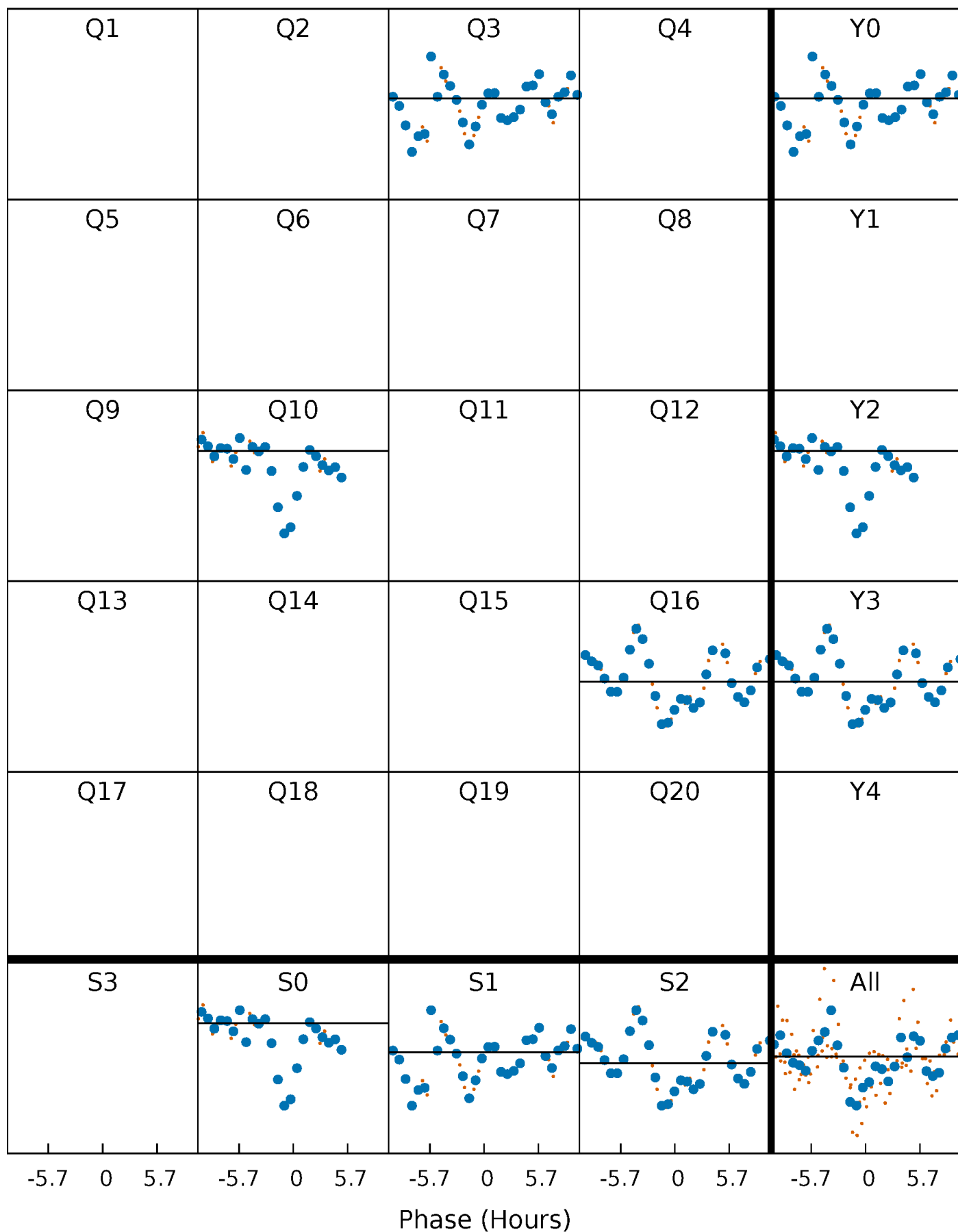
PDC Quarter-Phased Transit Curves

TCE 007670485-03 P=586.347815 Days $T_0=331.599819$ (BKJD)



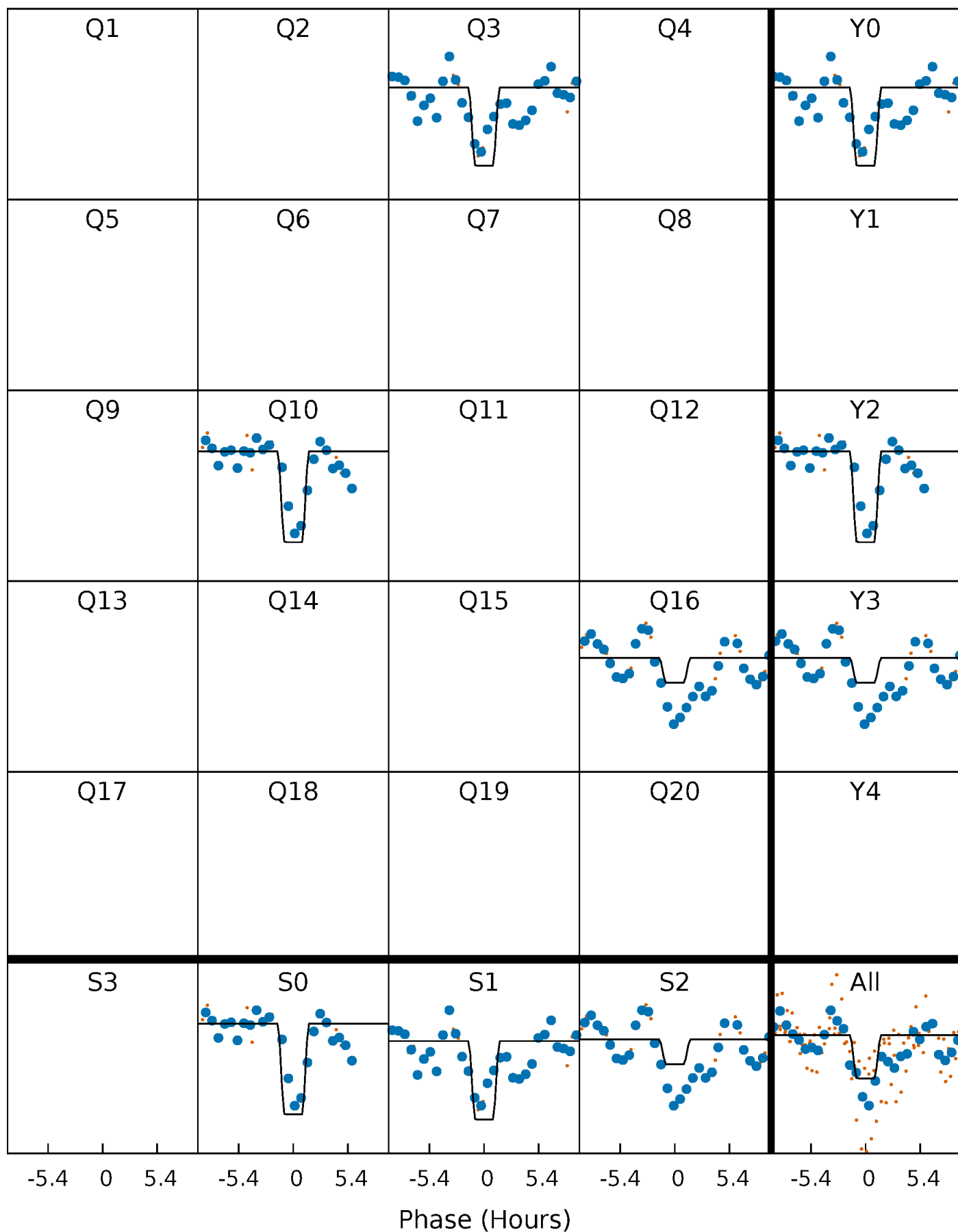
DV Quarter-Phased Transit Curves

TCE 007670485-03 $P=586.347815$ Days $T_0=331.599819$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

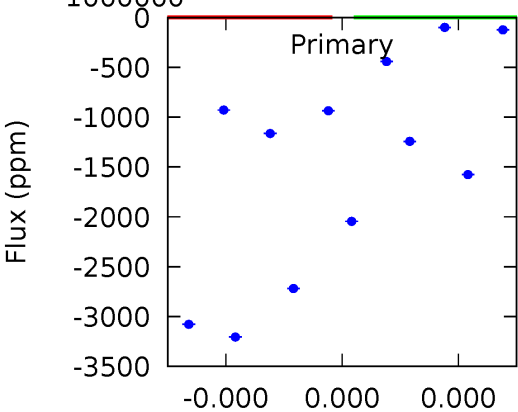
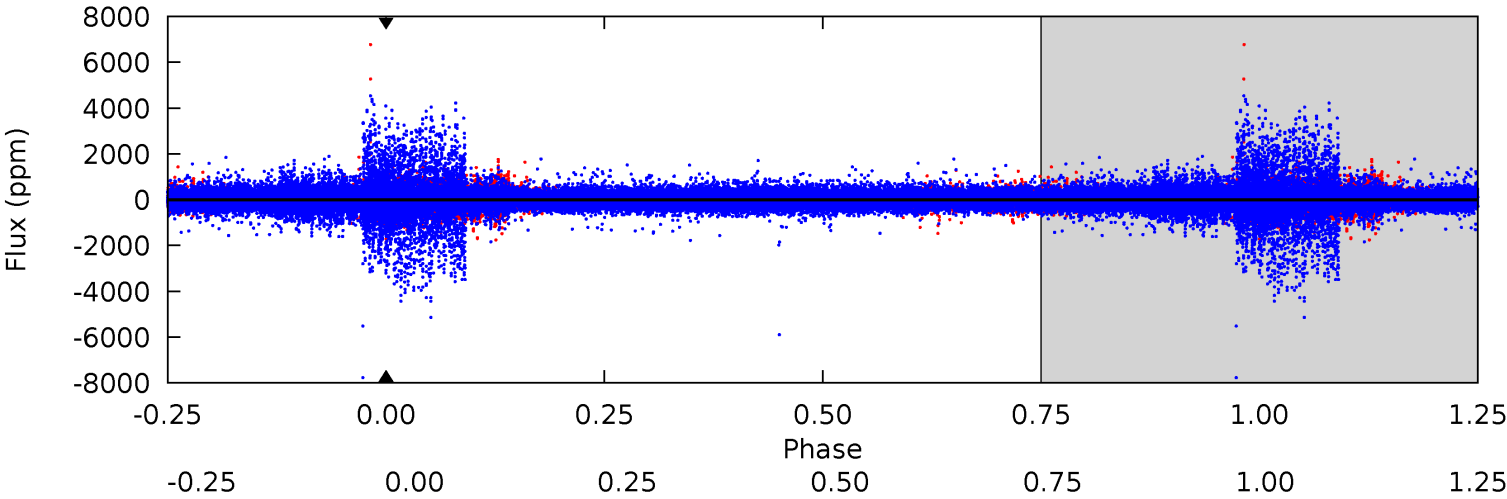
TCE 007670485-03 P=586.347815 Days $T_0=331.559585$ (BKJD)



DV Model-Shift Uniqueness Test

007670485-03, P = 586.347815 Days, E = 331.599819 Days

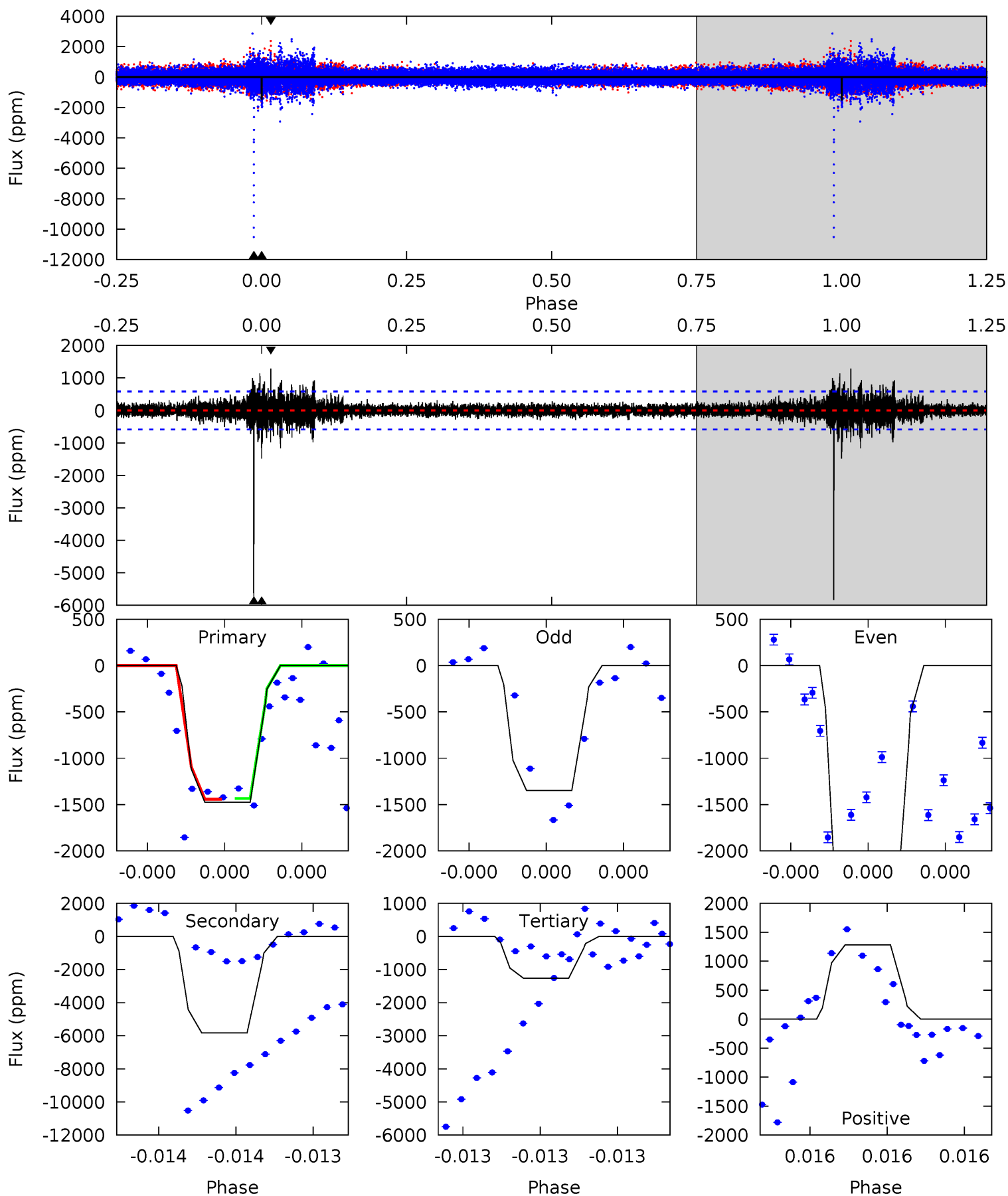
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007670485-03, P = 586.347815 Days, E = 331.559585 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14.5	57.3	12.4	12.6	5.75	3.75	1.33	2.12	1.89	45.0	44.7	9.01	1.77	0.18	0.03



Stellar Parameters For KIC 007670485

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5873^{+146}_{-161}	$4.554^{+0.036}_{-0.204}$	$-0.300^{+0.300}_{-0.300}$	$0.843^{+0.248}_{-0.083}$	$0.930^{+0.108}_{-0.108}$	$2.183^{+0.426}_{-1.110}$
	+2%/-3%	+1%/-4%	+100%/-100%	+29%/-10%	+12%/-12%	+20%/-51%
Source	PHO1	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 007670485-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$7.85^{+8.34}_{-5.25}$	295^{+19}_{-13}	5159^{+16759}_{-23757}	$58843^{+3364168}_{-2550499}$
Alt.	-5834 ± 102	$8.61^{+8.25}_{-5.88}$	295^{+19}_{-13}	5480^{+5228}_{-1274}	$76623^{+681797}_{-56371}$

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

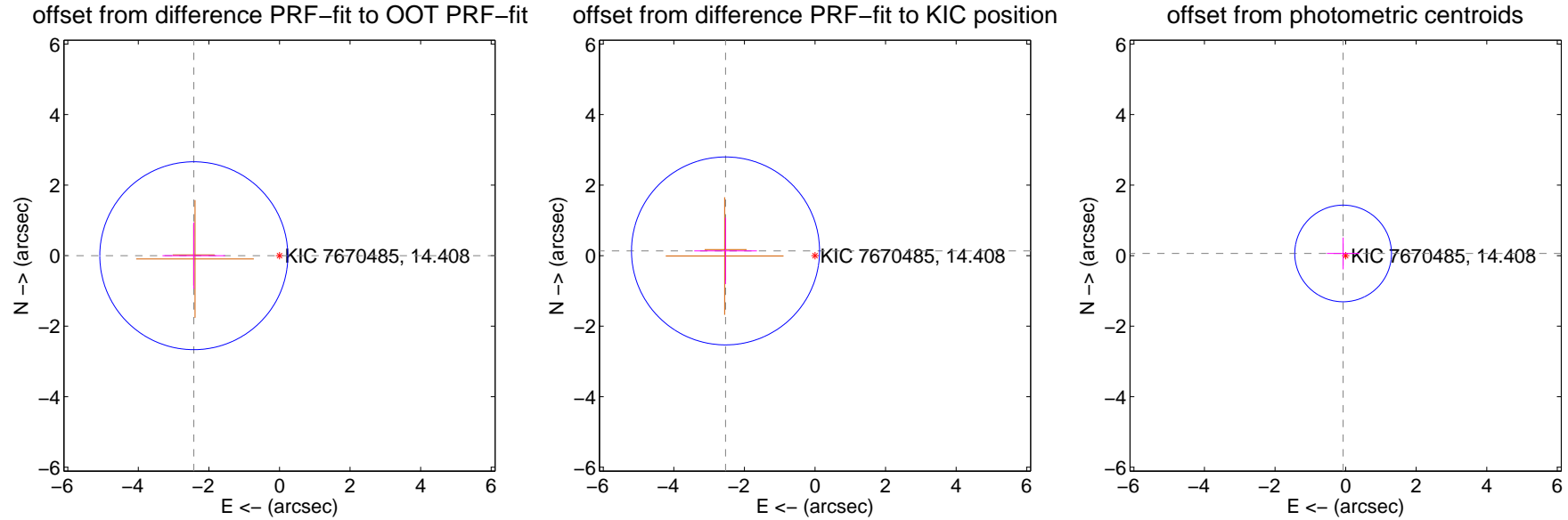
DV Centroid Data

Supplemental centroid analysis for 007670485-03. Kepler magnitude: 14.41. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.428 ± 0.888	2.73	2.428 ± 0.888	-0.002 ± 0.943
PRF-fit source offset from KIC position	2.539 ± 0.888	2.86	2.535 ± 0.888	0.134 ± 0.943
photometric centroid source offset	0.09 ± 0.46	0.21	0.07 ± 0.46	0.06 ± 0.45



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



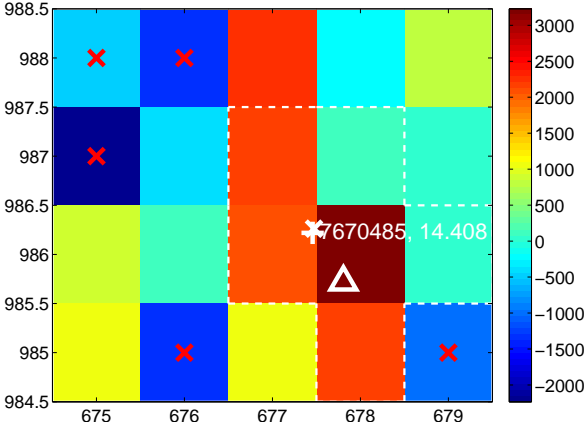
Q2 no difference image



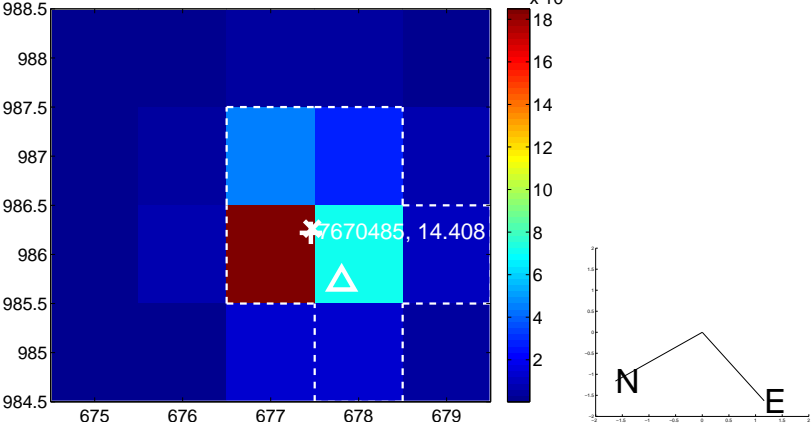
Q2 no OOT image



Q3 difference image. Poor Quality



Q3 OOT image



Q4 no difference image



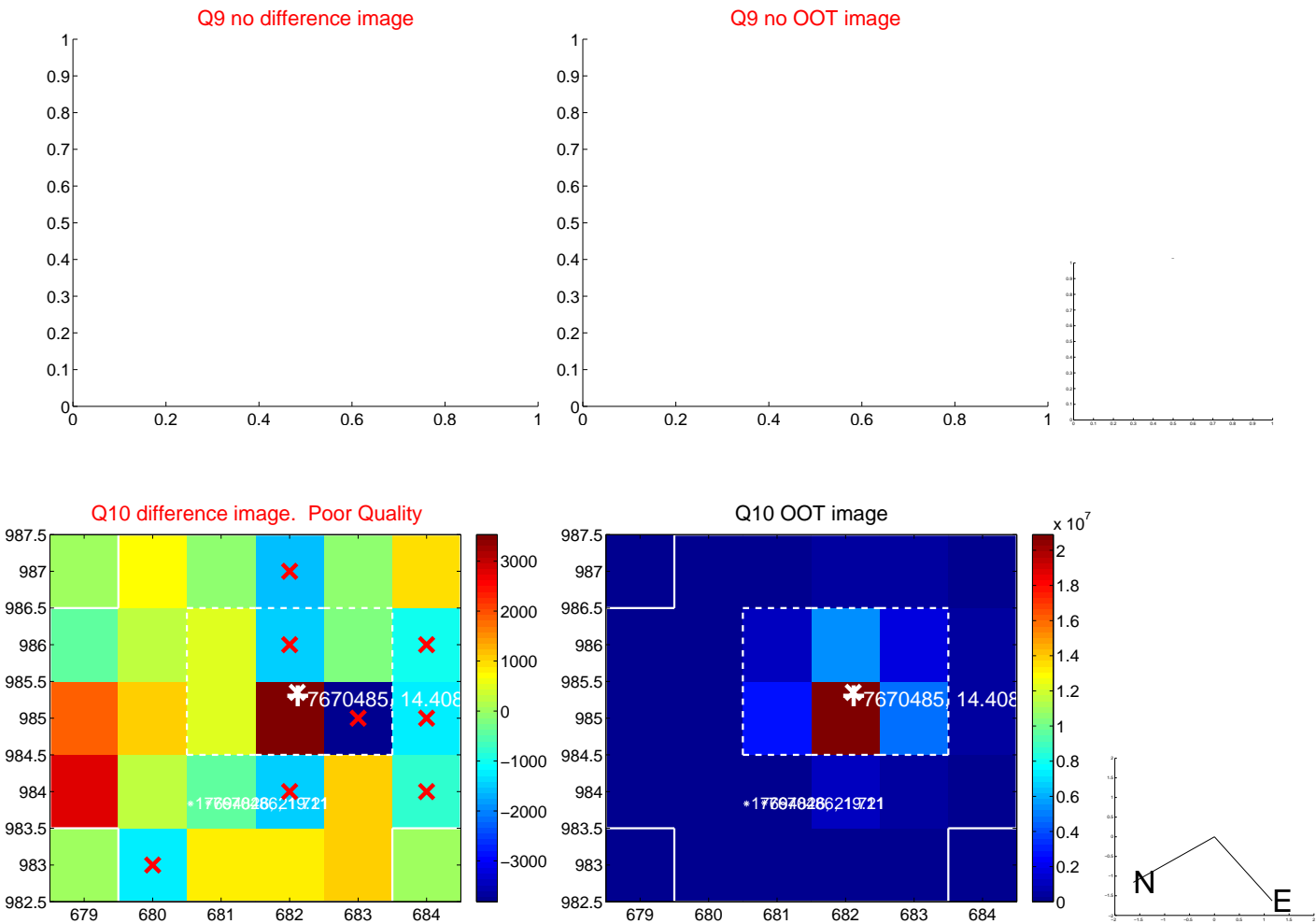
Q4 no OOT image



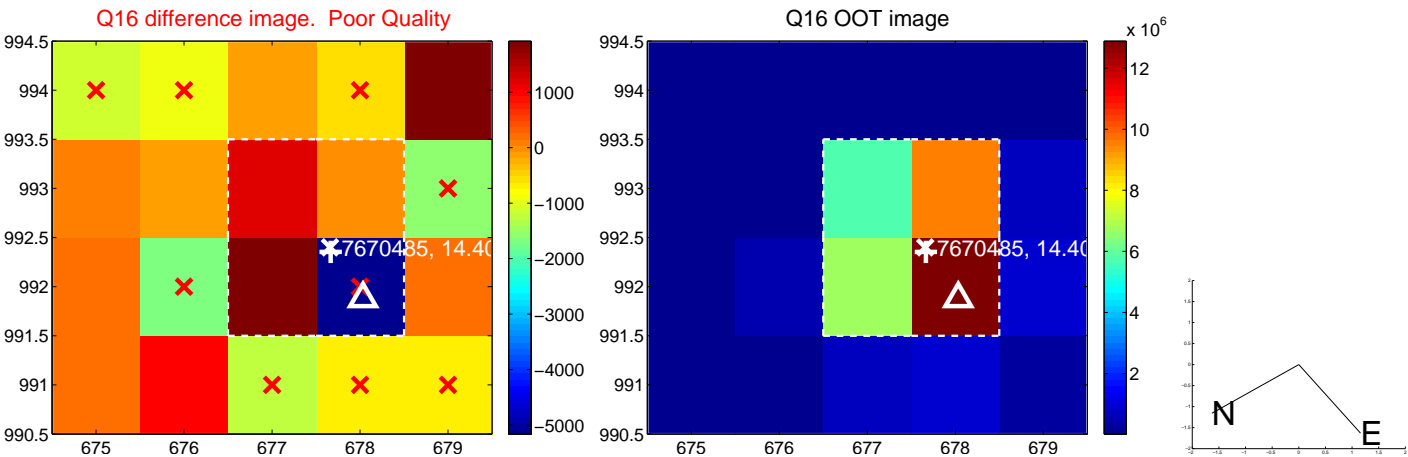
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



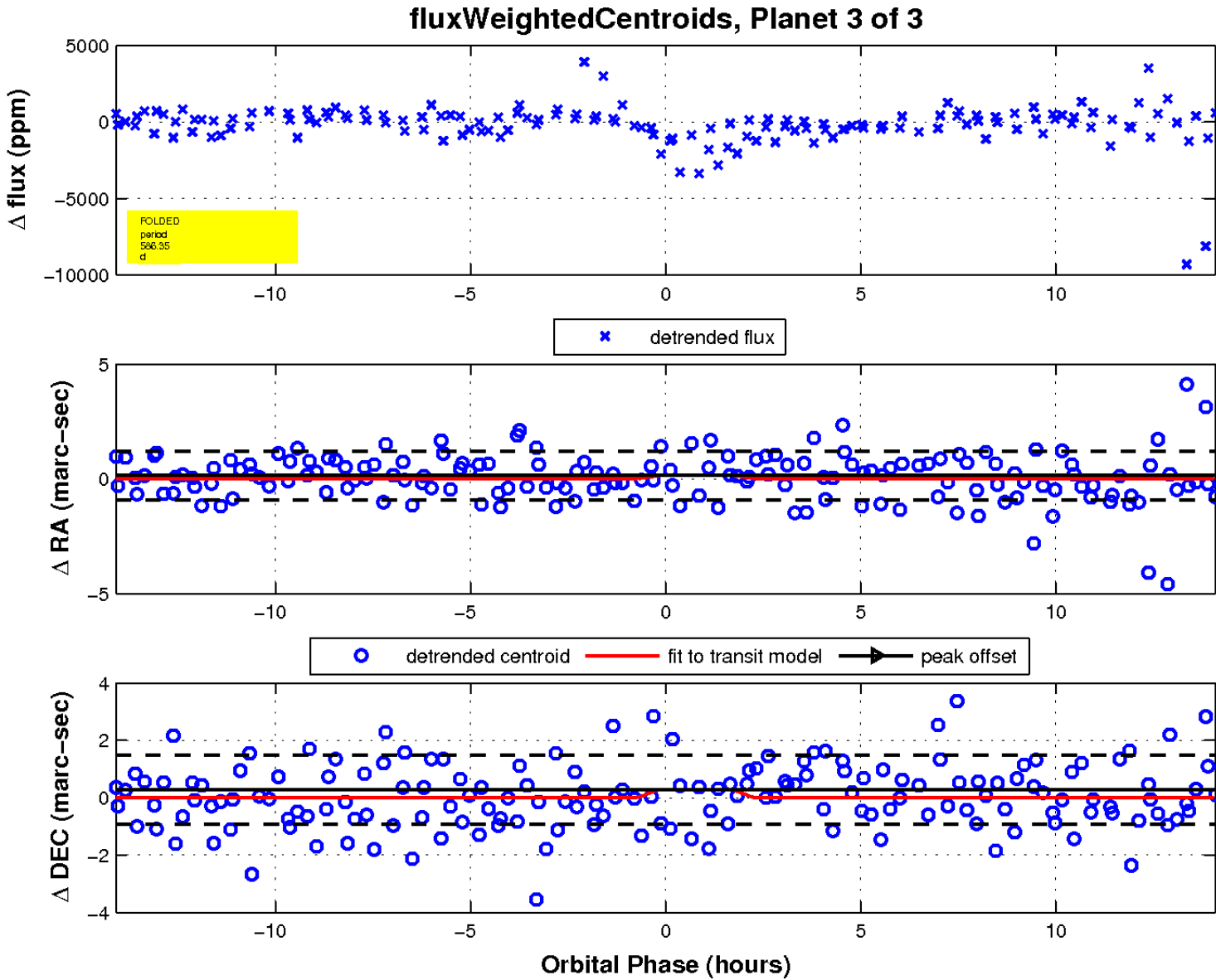
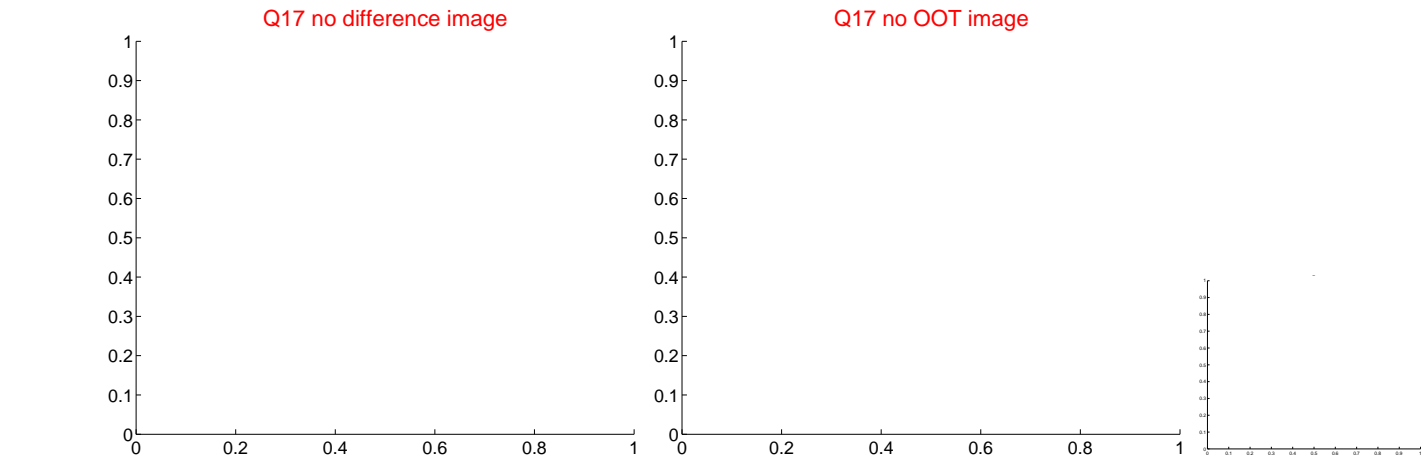
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



white ×: 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

