

KIC 007105691

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})
007105691-01	OBS	No	621.268769	262.571848	3817.4	15.000	71.5	-1.0	1.11	6276	6.85	0.79
007105691-02	OBS	No	617.675956	277.812387	446.1	101.063	60.0	9.9	1.11	6276	4.43	0.80
007105691-03	OBS	No	701.811052	138.506083	3054.9	15.000	53.8	-1.0	1.11	6276	6.12	0.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007105691-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
007105691-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007105691-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_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.

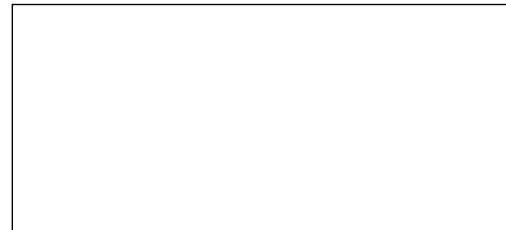
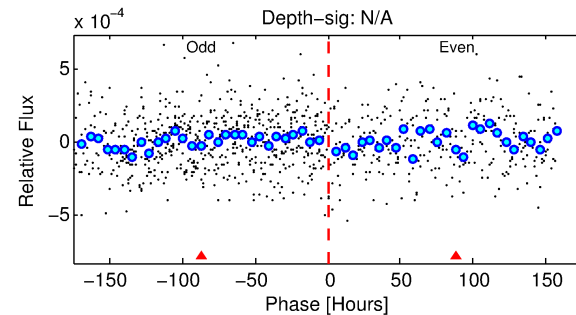
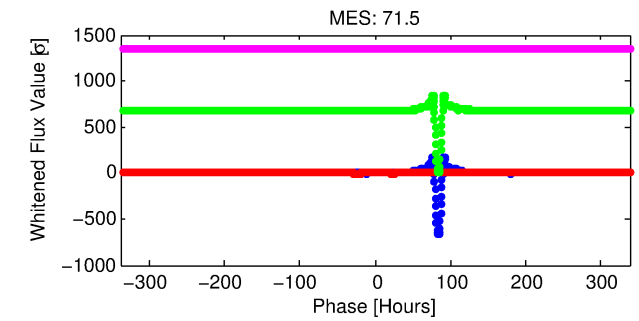
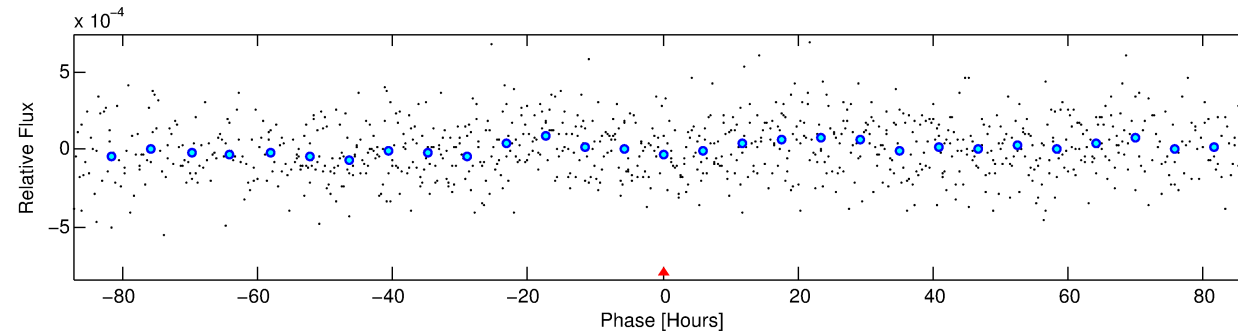
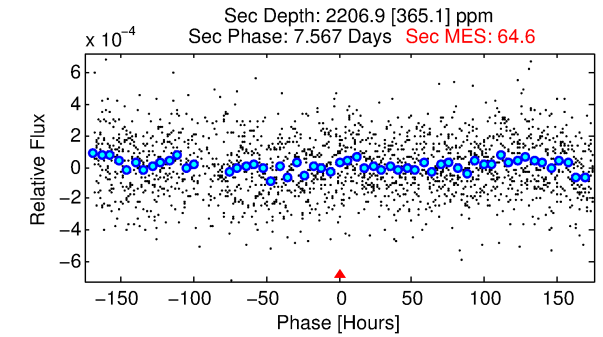
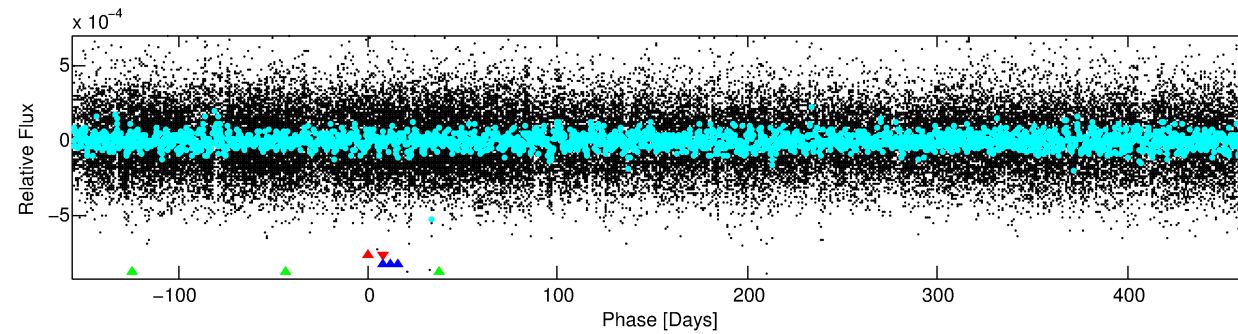
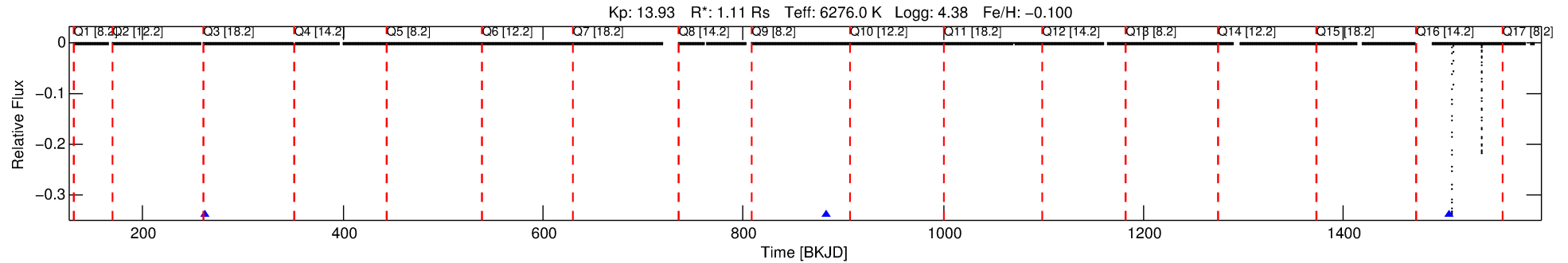
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007105691-01

No Significant Match Found

DV One-Page Summary

KIC: 7105691 Candidate: 1 of 3 Period: 621.269 d



TPS TCE Results:

Period = 621.26877 d
Epoch = 262.5718 BKJD

DV fit results are unavailable

DV Diagnostic Results:

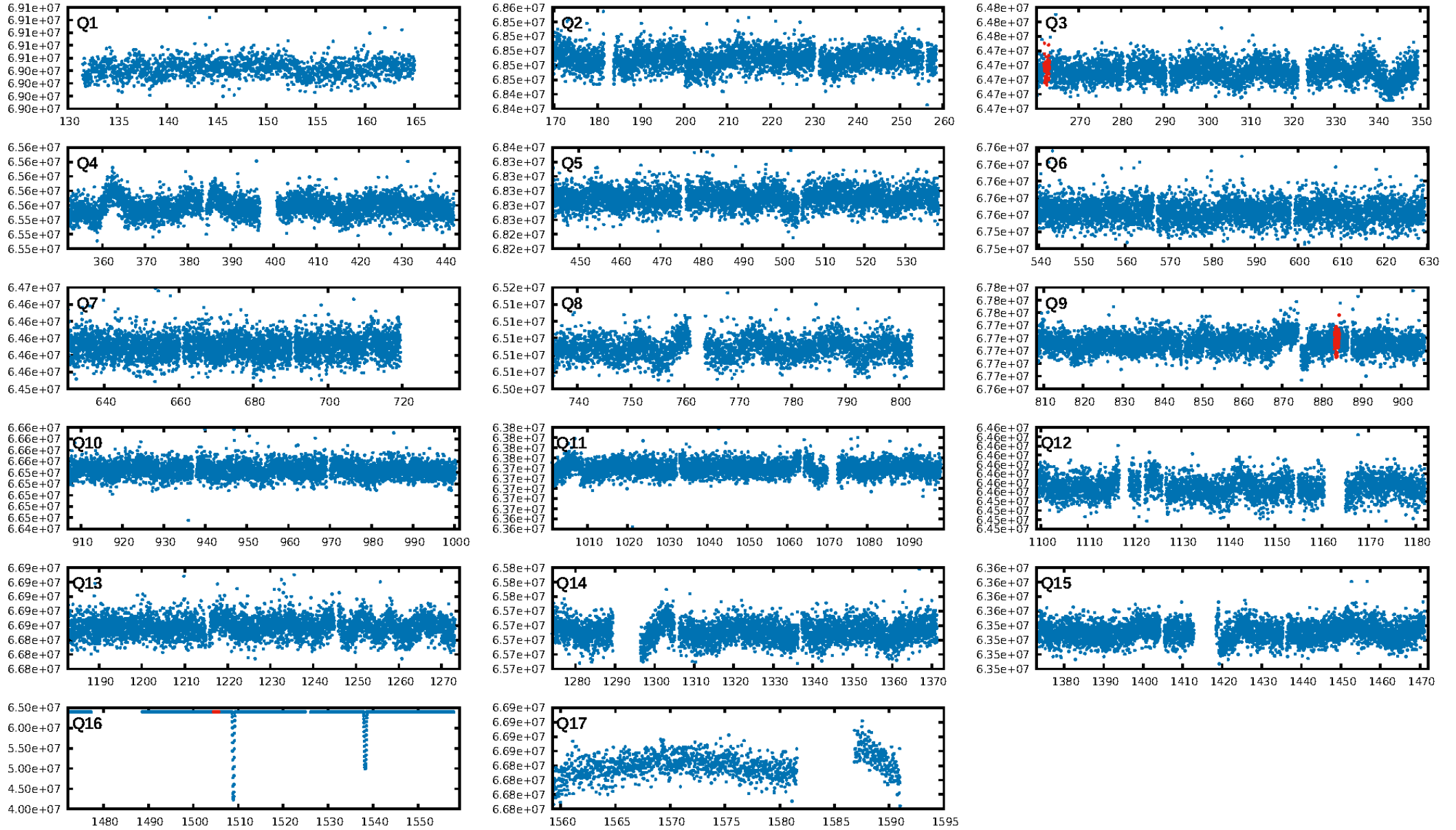
ShortPeriod-sig: 60.1% [0.84σ]
LongPeriod-sig: 100.0% [91.12σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 3.469

Centroid-sig: 37.6%
Centroid-so: 4.039 arcsec [1.01σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

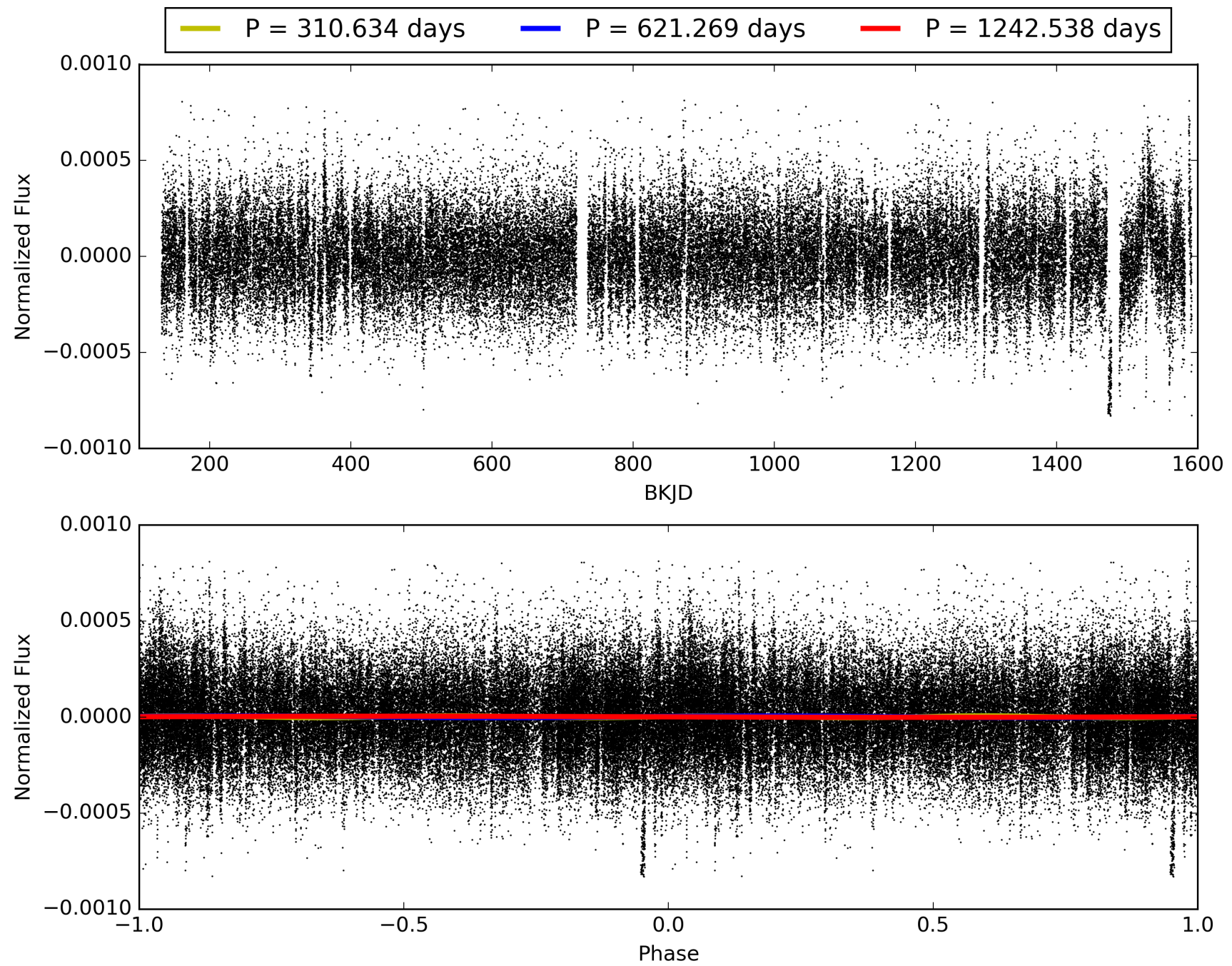
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:26:02 Z

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

TCE 007105691-01, PDC Light Curves

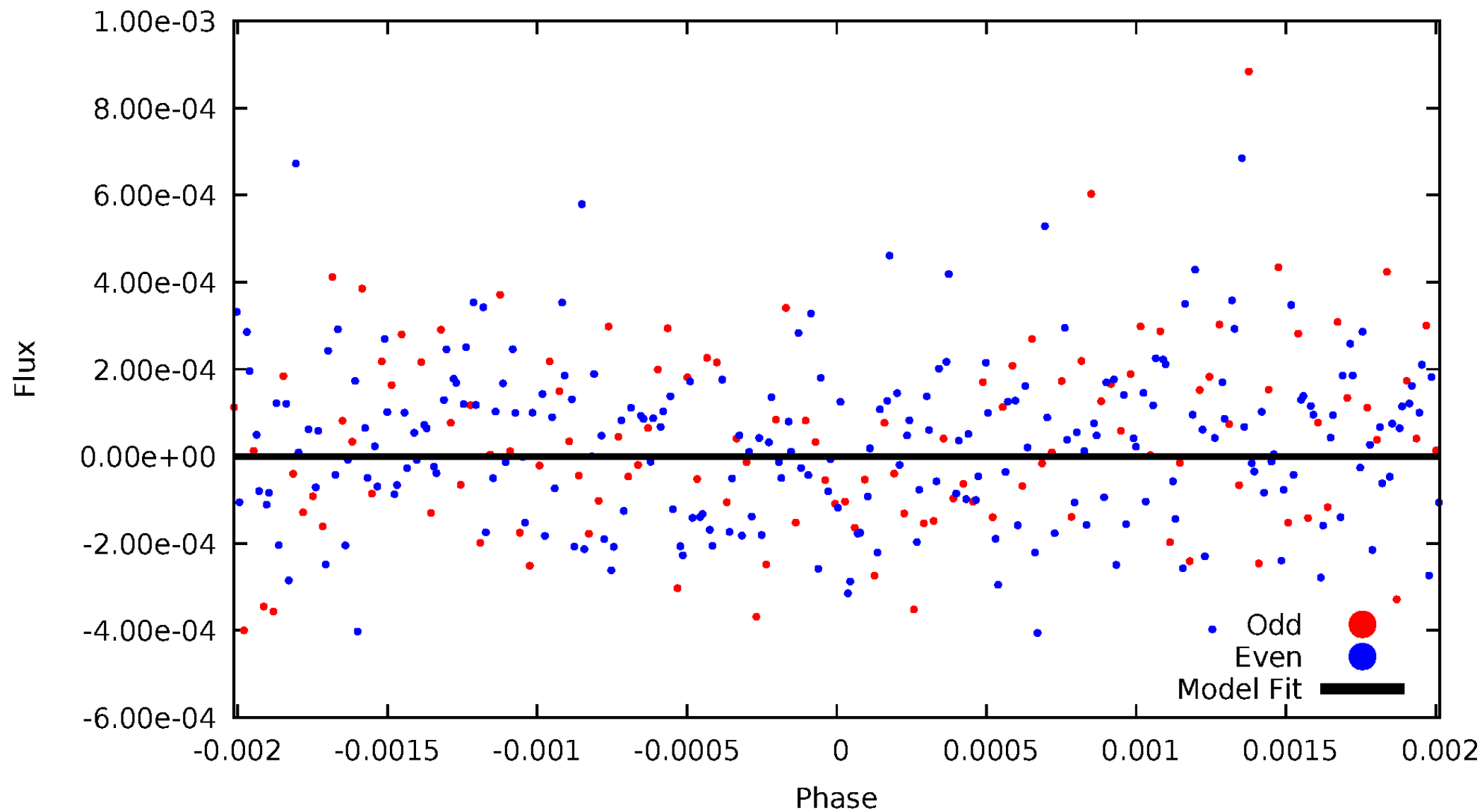


TCE 007105691-01



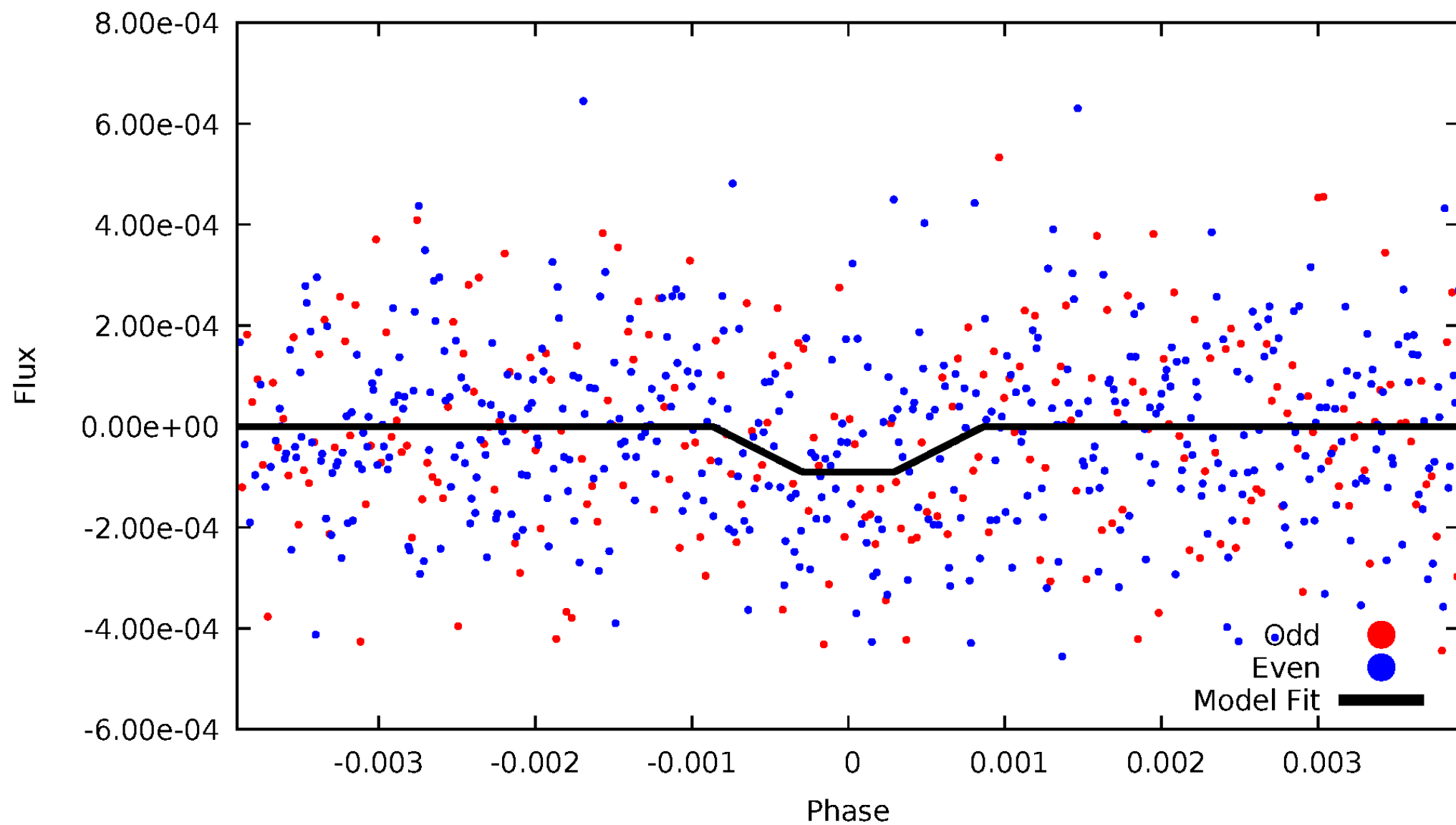
DV Odd/Even

TCE 007105691-01



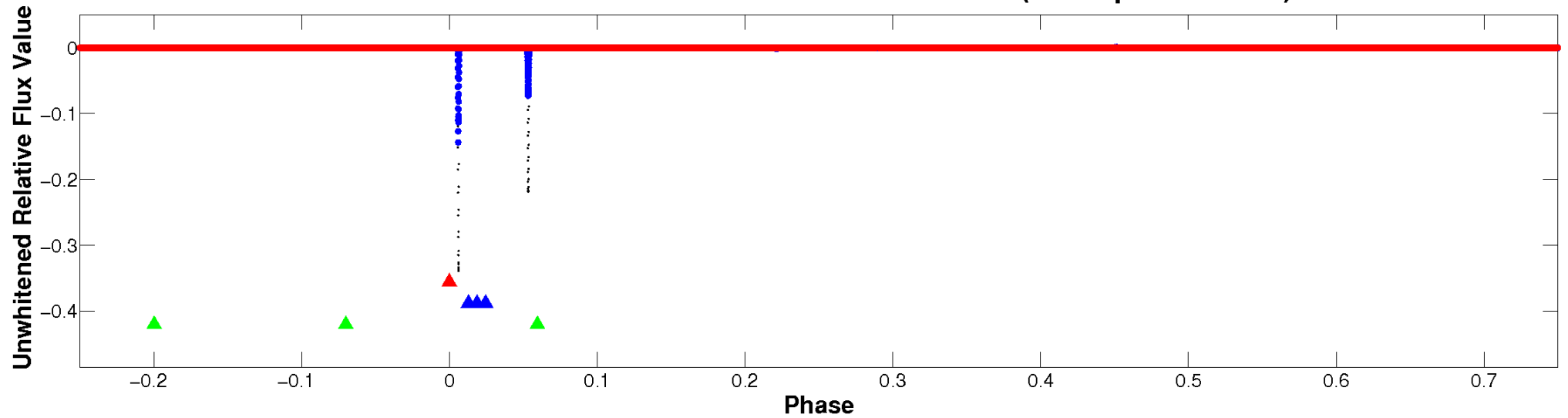
ALT Odd/Even

TCE 007105691-01



Non-Whitened Vs. Whitened Light Curve

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

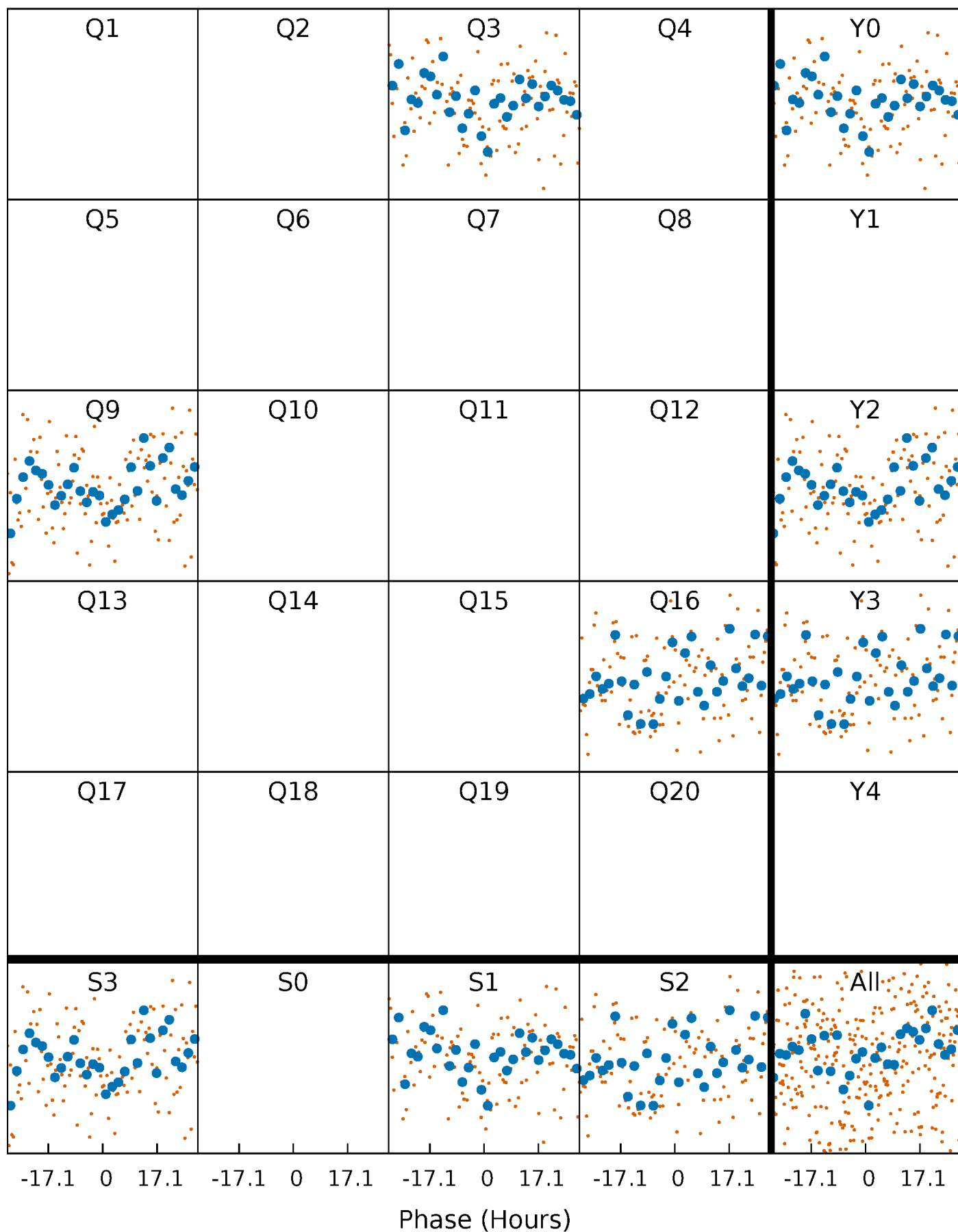


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



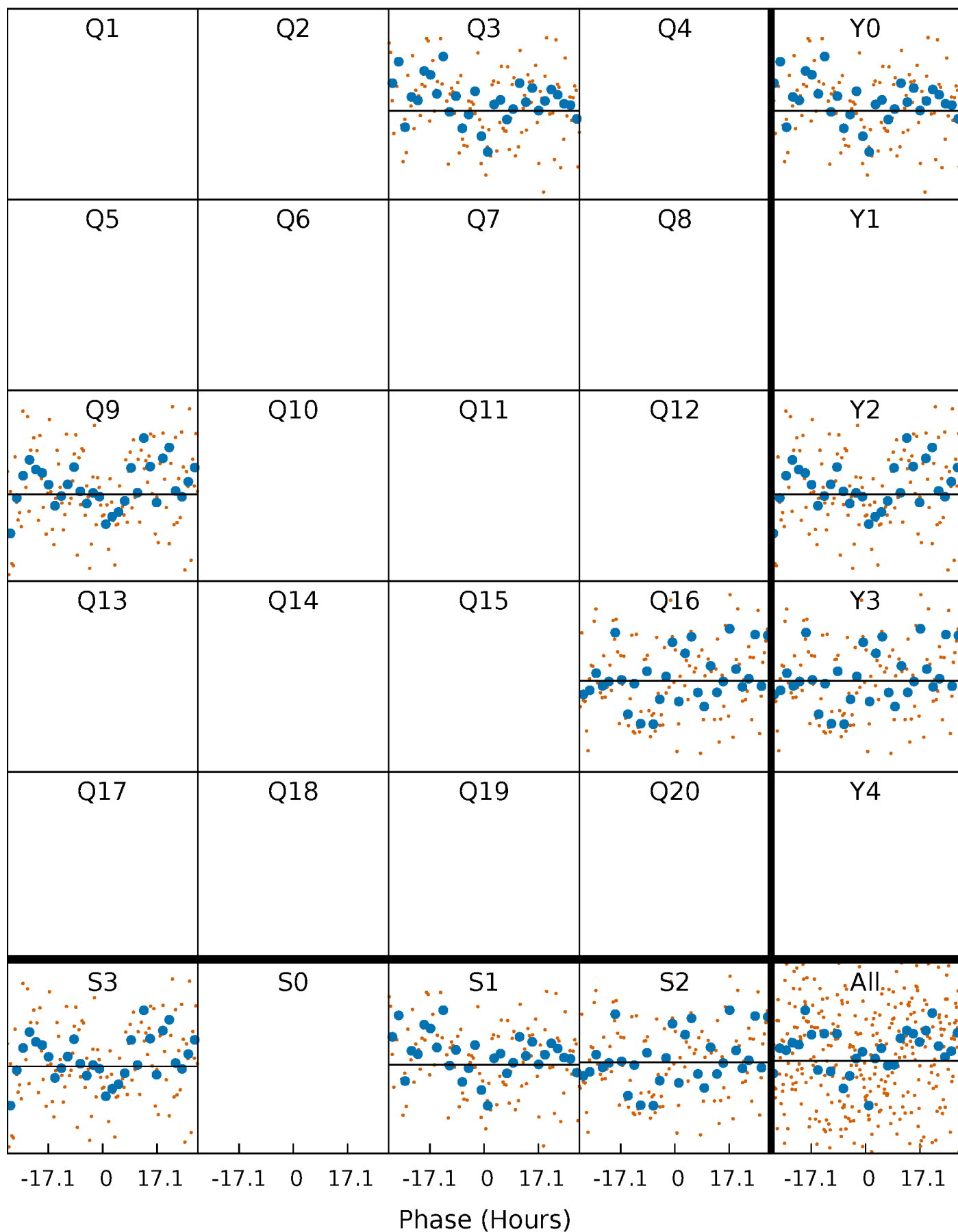
PDC Quarter-Phased Transit Curves

TCE 007105691-01 P=621.268769 Days $T_0=262.571848$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007105691-01 P=621.268769 Days $T_0=262.571848$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

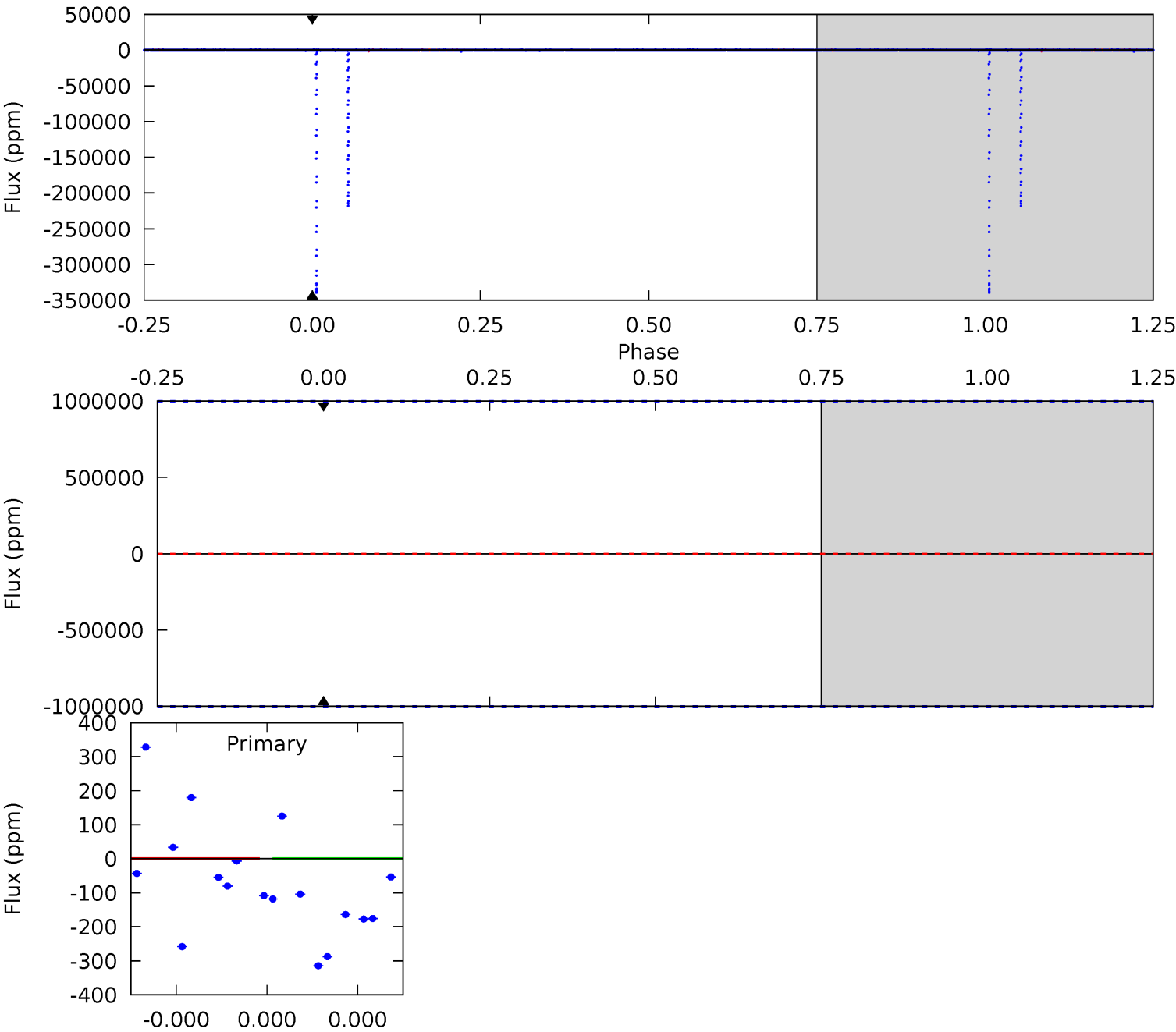
TCE 007105691-01 P=621.268769 Days $T_0=262.501810$ (BKJD)



DV Model-Shift Uniqueness Test

007105691-01, P = 621.268769 Days, E = 262.571848 Days

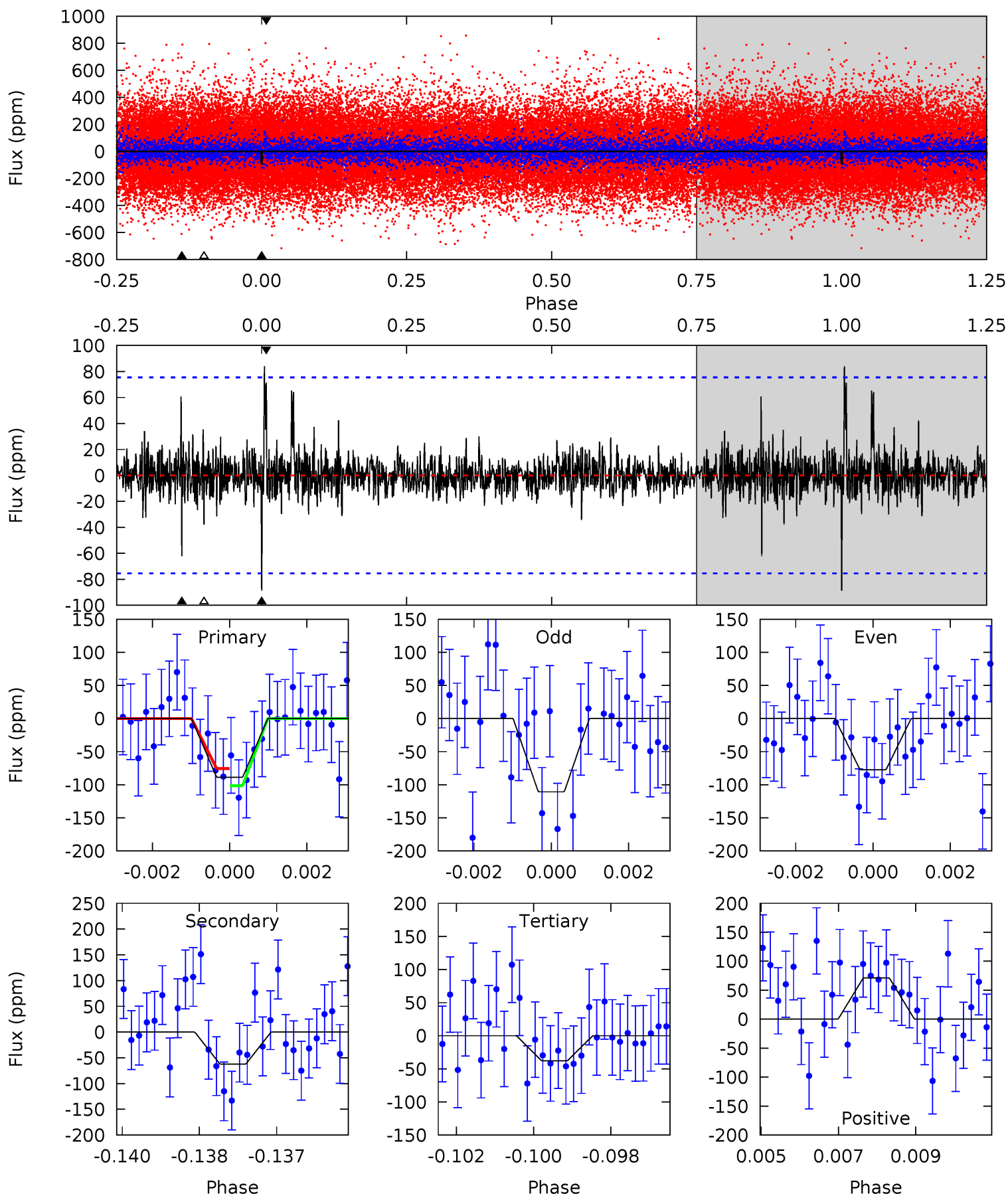
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007105691-01, P = 621.268769 Days, E = 262.501810 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.29	4.40	2.68	5.06	5.35	3.13	0.80	3.61	1.24	1.73	-0.65	1.12	0.80	0.49	0.92



Stellar Parameters For KIC 007105691

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6276^{+174}_{-218}	$4.385^{+0.087}_{-0.203}$	$-0.100^{+0.250}_{-0.300}$	$1.106^{+0.379}_{-0.152}$	$1.078^{+0.171}_{-0.125}$	$1.122^{+0.423}_{-0.586}$
	+3%/-3%	+2%/-5%	+250%/-300%	+34%/-14%	+16%/-12%	+38%/-52%
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 007105691-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$11.76^{+10.33}_{-7.99}$	339^{+27}_{-18}	3148^{+16293}_{-21153}	$1498^{+1543030}_{-1419728}$
Alt.	-62 ± 14	$8.77^{+9.83}_{-6.25}$	340^{+24}_{-19}	2809^{+1394}_{-453}	889^{+10502}_{-679}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

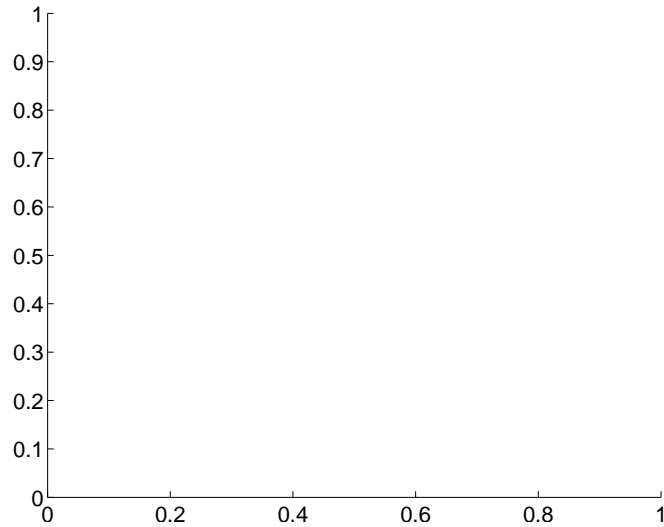
Supplemental centroid analysis for 007105691-01. Kepler magnitude: 13.93. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

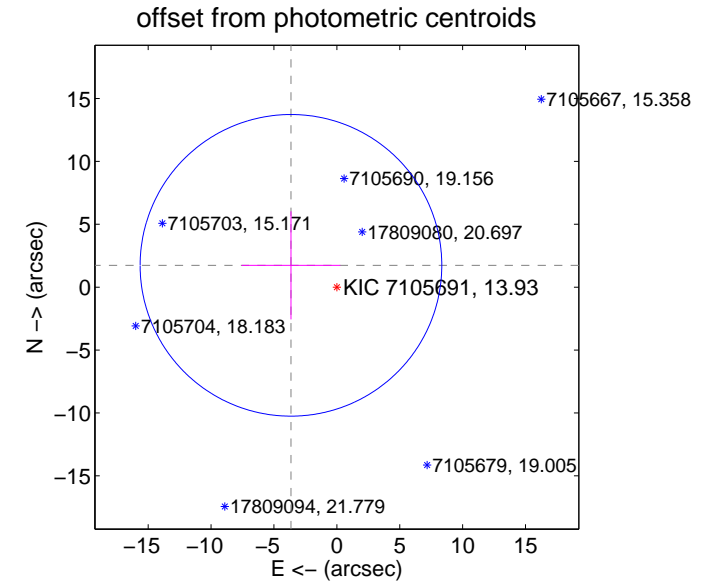
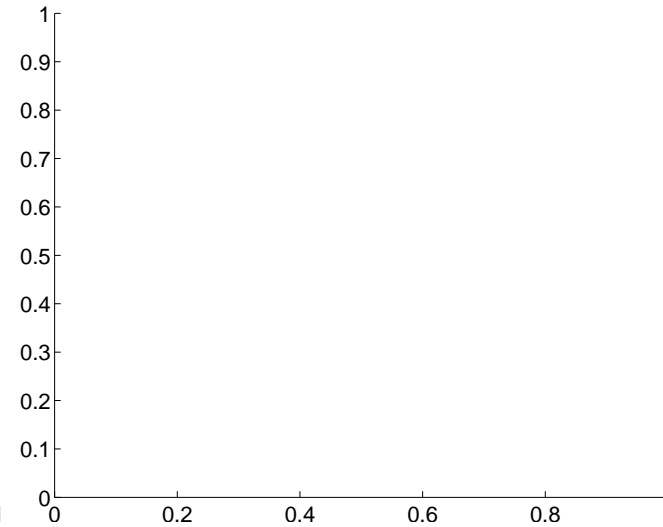
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	4.04 ± 4.00	1.01	3.65 ± 3.93	1.74 ± 4.29

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC



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.

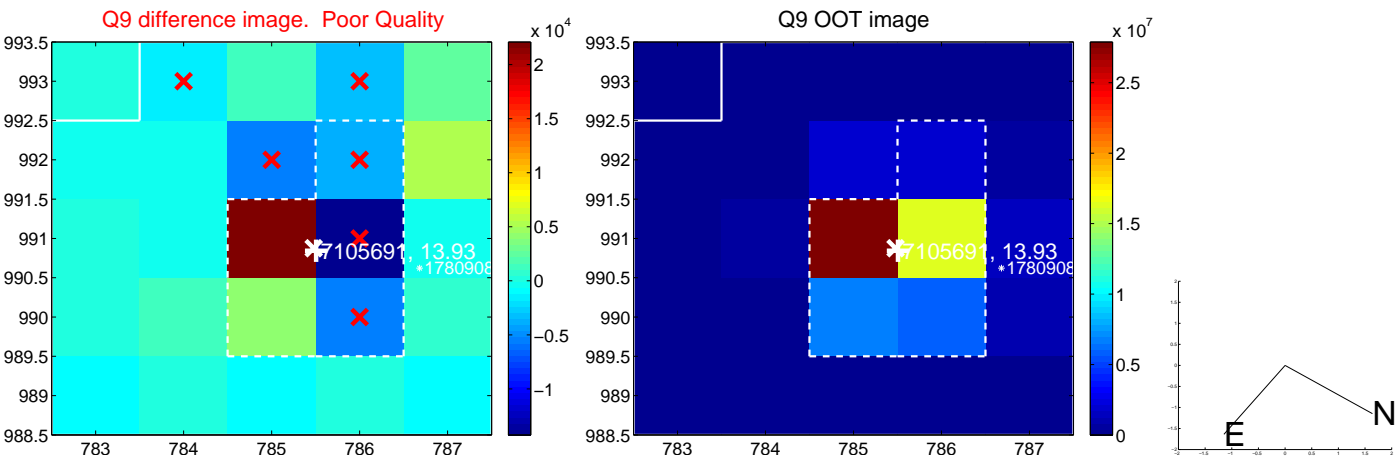
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



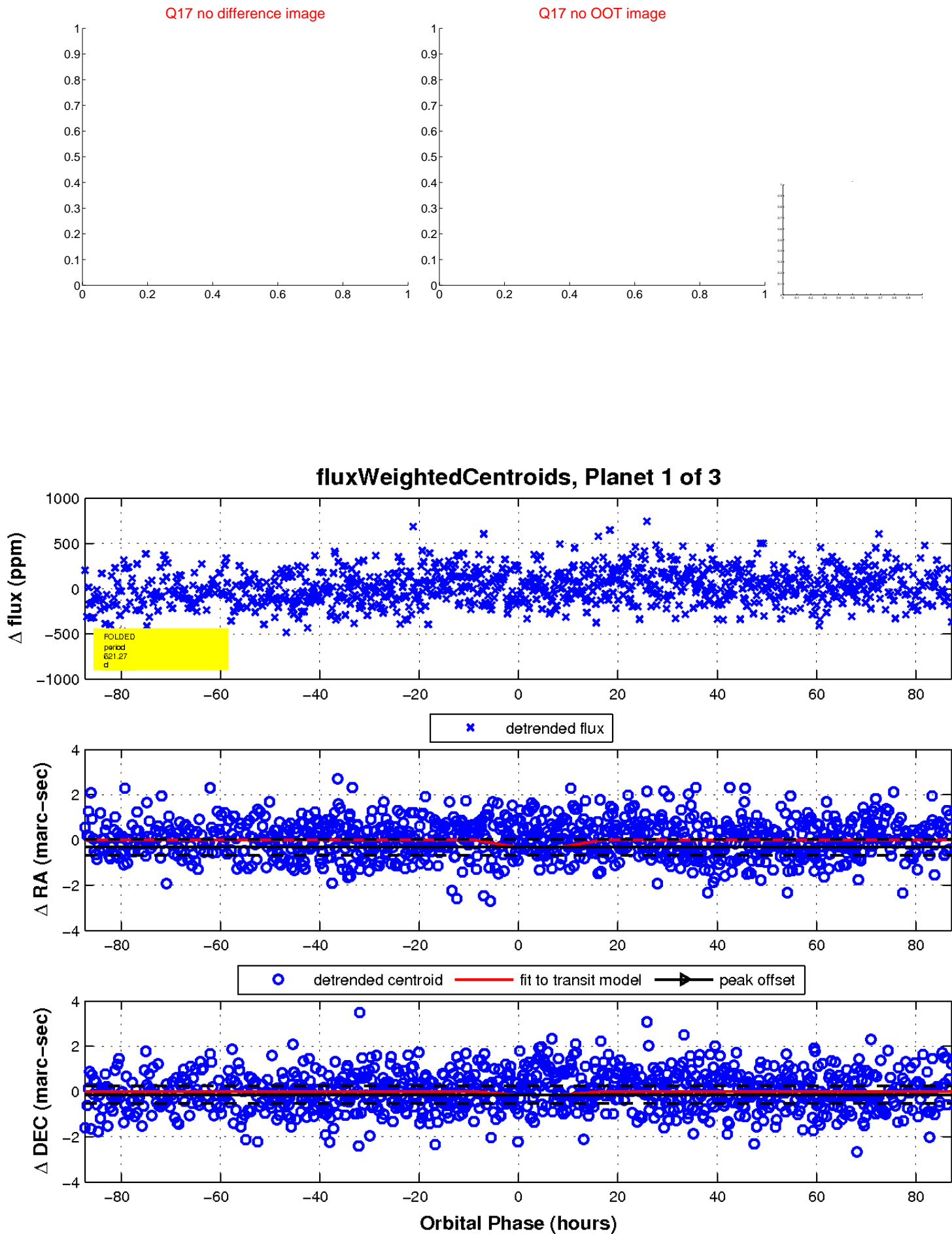
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

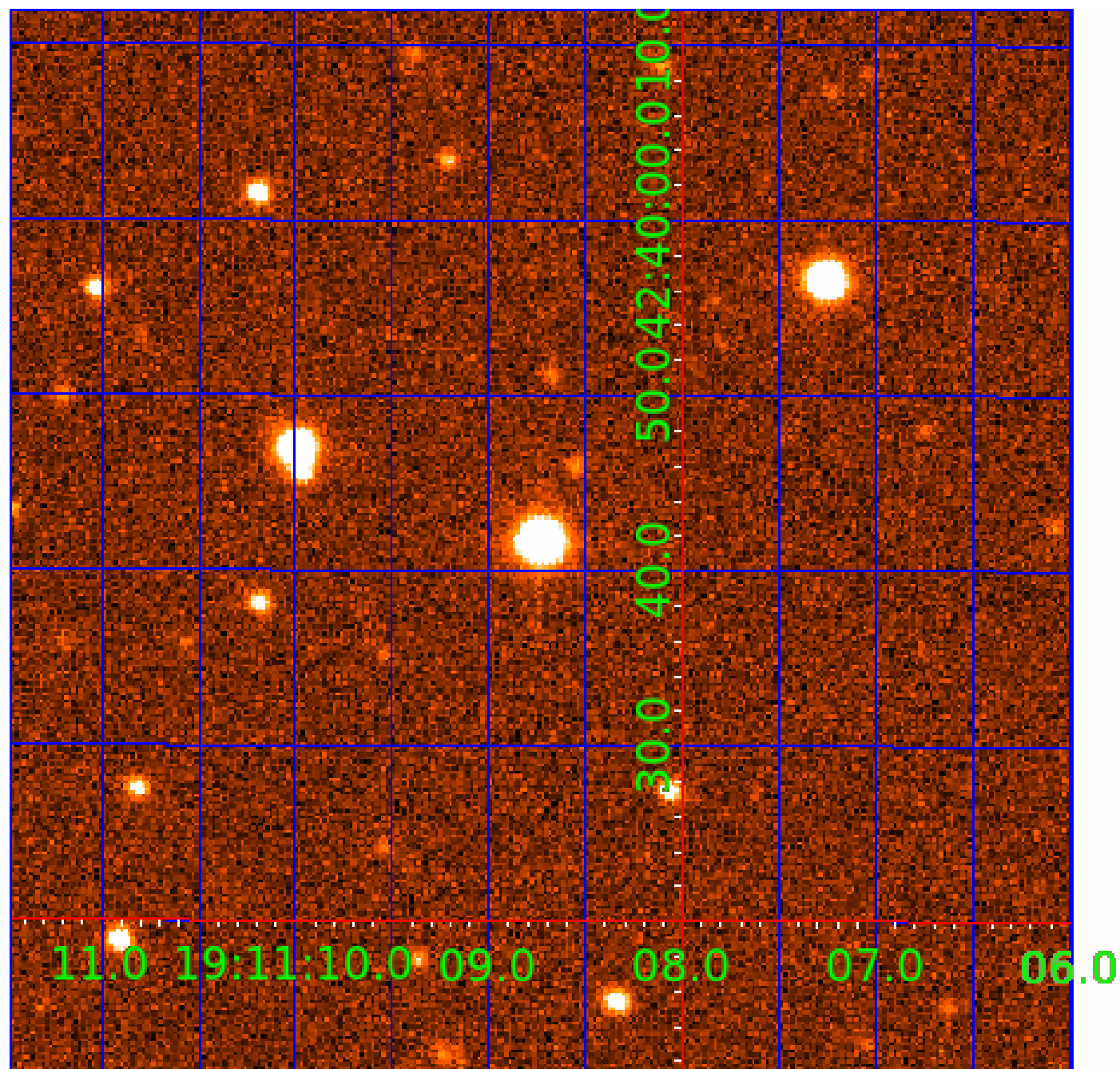


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007105691

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})
007105691-01	OBS	No	621.268769	262.571848	3817.4	15.000	71.5	-1.0	1.11	6276	6.85	0.79
007105691-02	OBS	No	617.675956	277.812387	446.1	101.063	60.0	9.9	1.11	6276	4.43	0.80
007105691-03	OBS	No	701.811052	138.506083	3054.9	15.000	53.8	-1.0	1.11	6276	6.12	0.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007105691-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
007105691-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007105691-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_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.

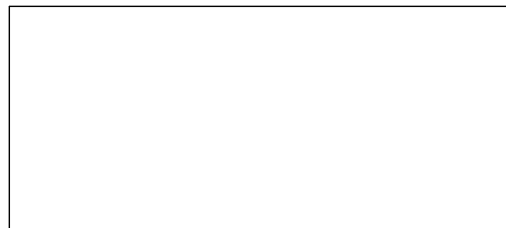
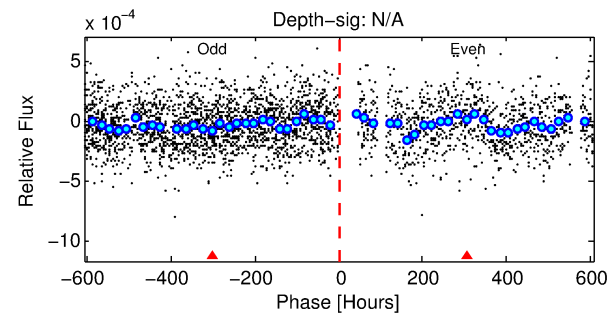
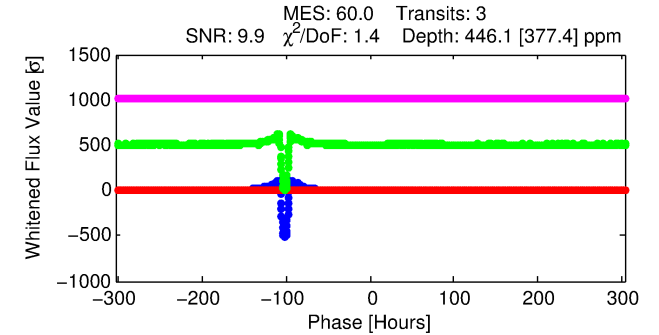
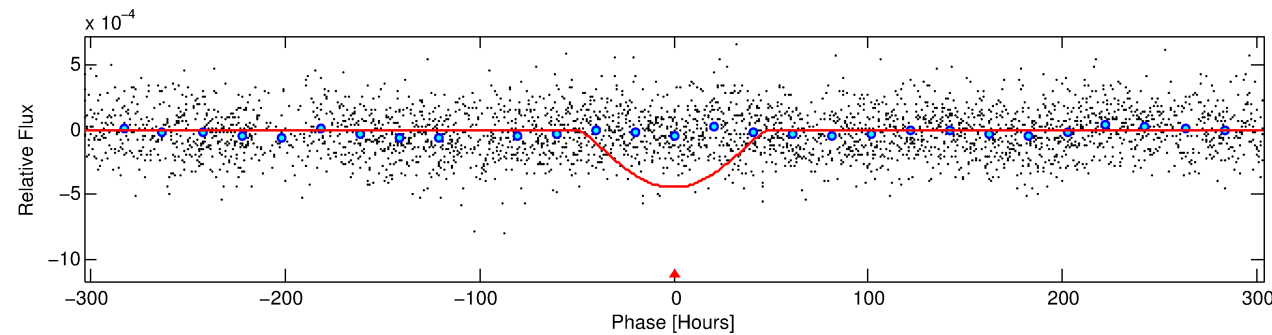
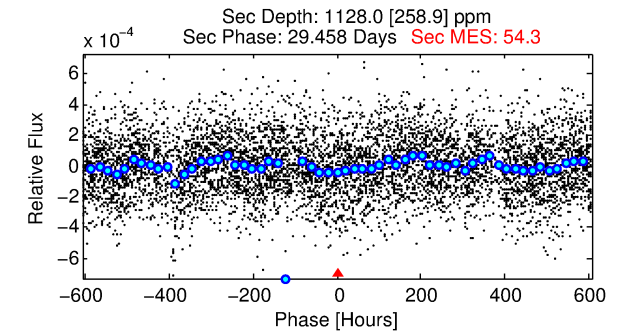
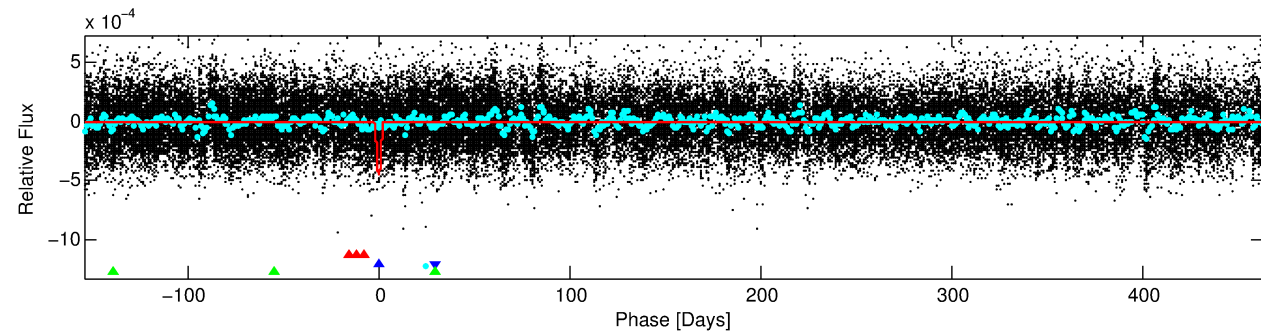
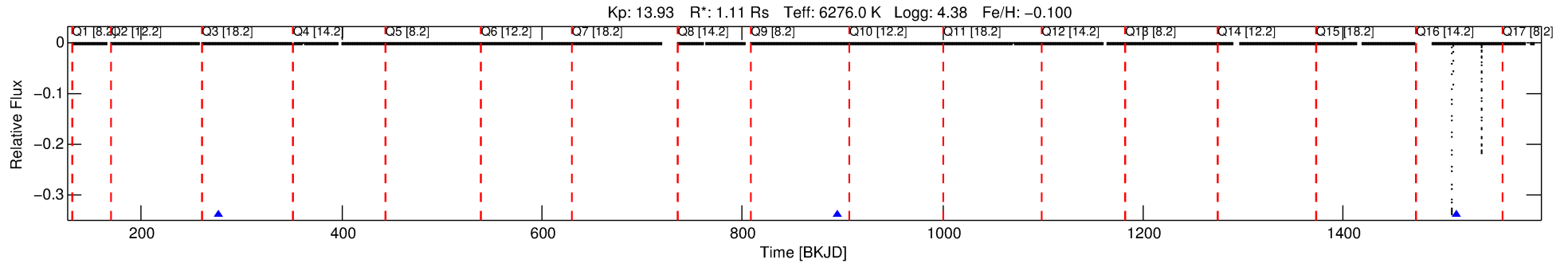
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007105691-02

No Significant Match Found

DV One-Page Summary

KIC: 7105691 Candidate: 2 of 3 Period: 617.676 d



DV Fit Results:

Period = 617.67596 [0.79234] d
Epoch = 277.8124 [1.0087] BKJD
Rp/R* = 0.0367 [0.3859]
a/R* = 13.06 [35.88]
b = 1.00 [0.57]
Seff = 0.80 [0.33]
Teff = 241 [25] K
Rp = 4.44 [46.59] Re
a = 1.4578 [0.4031] AU
Ag = 67042.27 [1408177.99] [0.05σ]
Teffp = 6000 [31501] K [0.18σ]

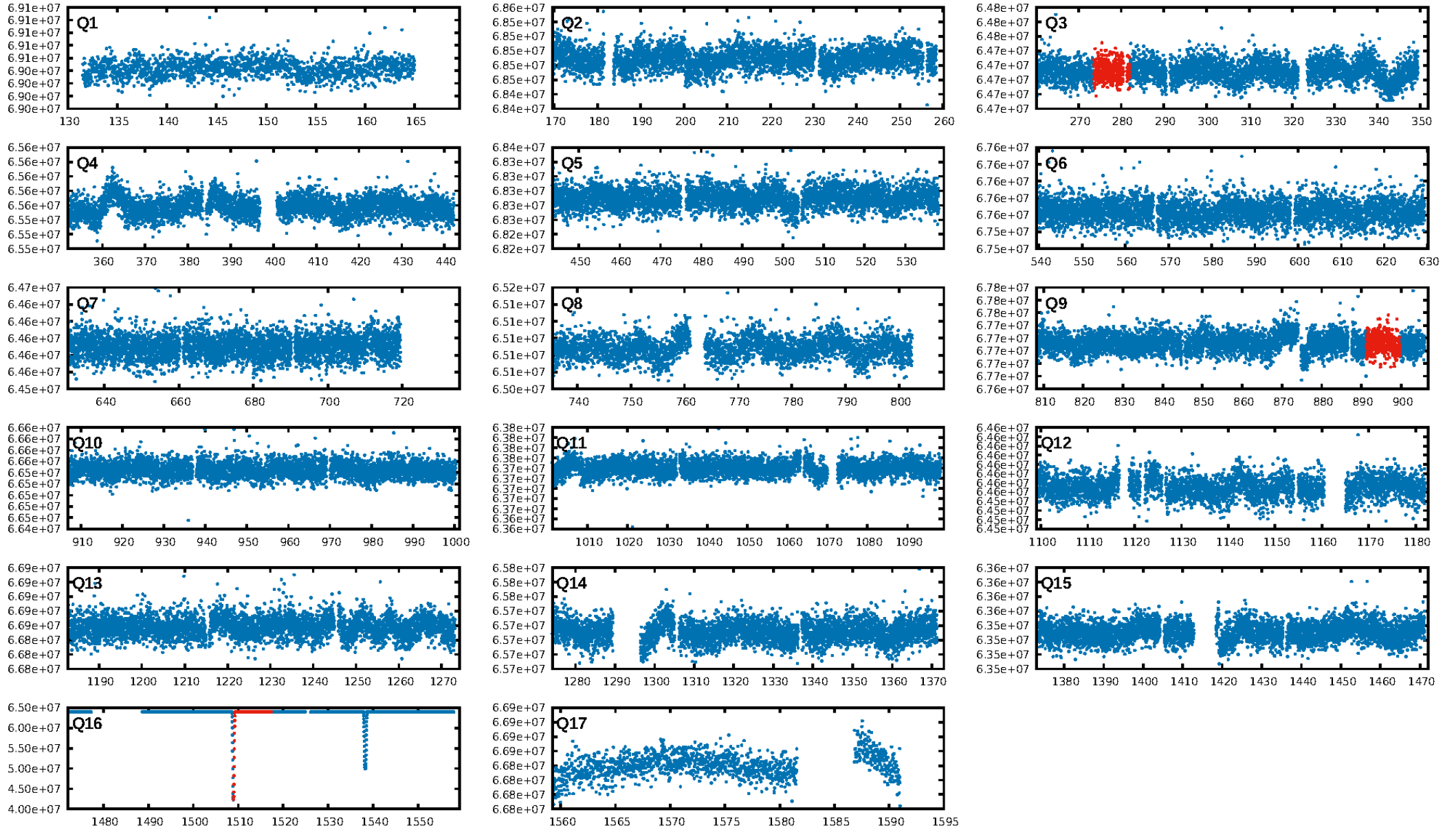
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 60.1% [0.84σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 88.4%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.069
Centroid-sig: 0.0%
Centroid-so: 1.889 arcsec [3.35σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [1/1]

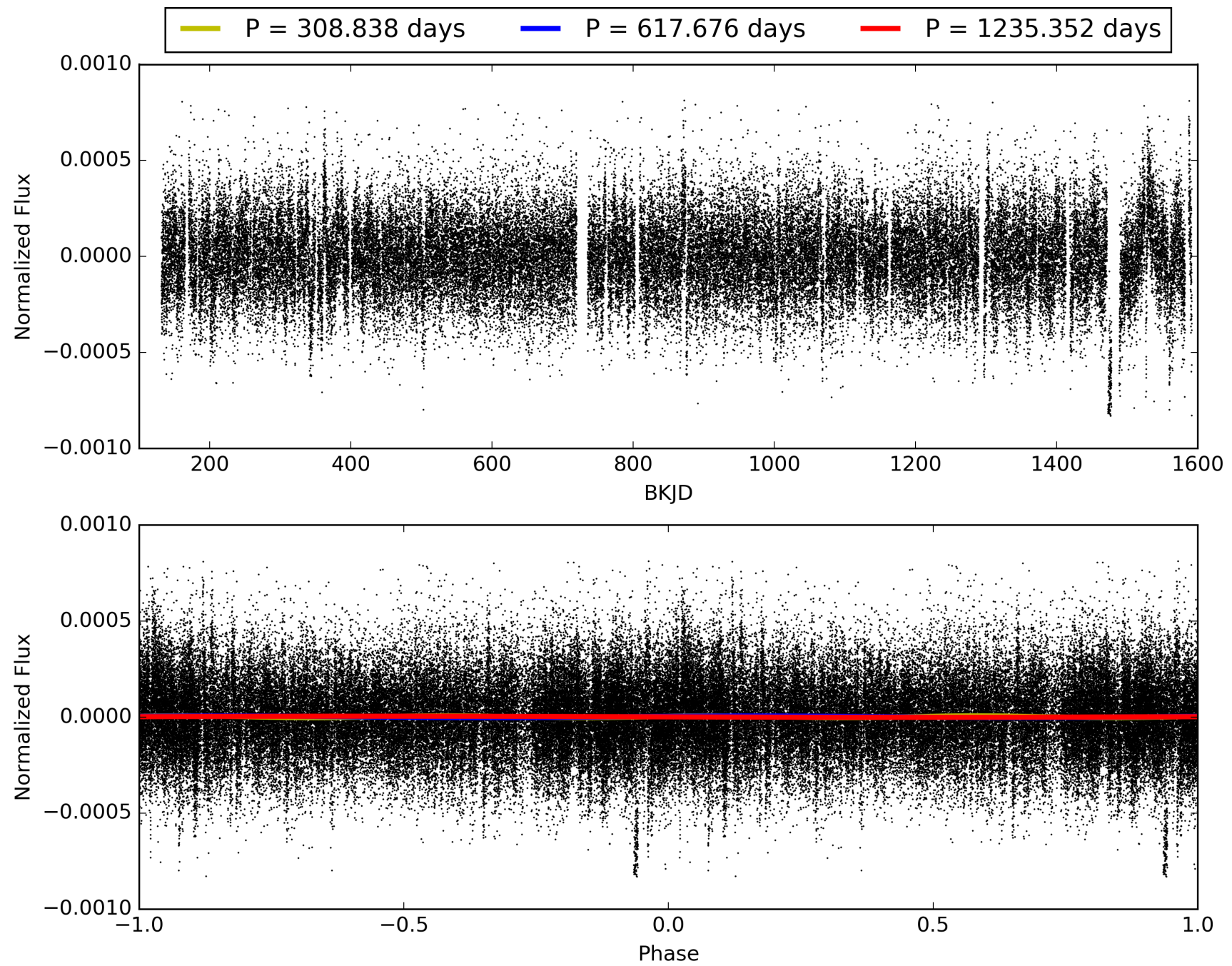
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:26:12 Z

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

TCE 007105691-02, PDC Light Curves

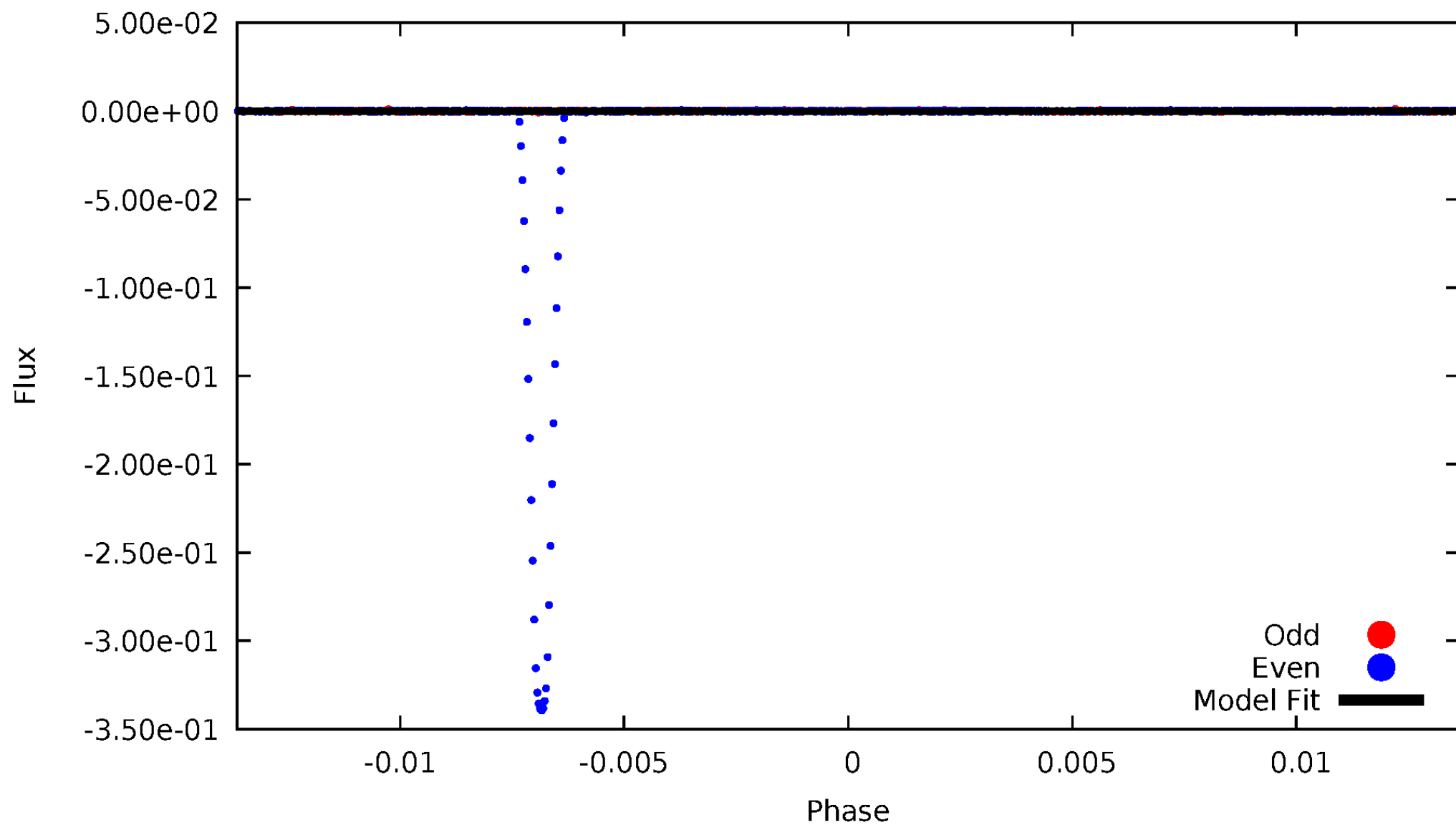


TCE 007105691-02



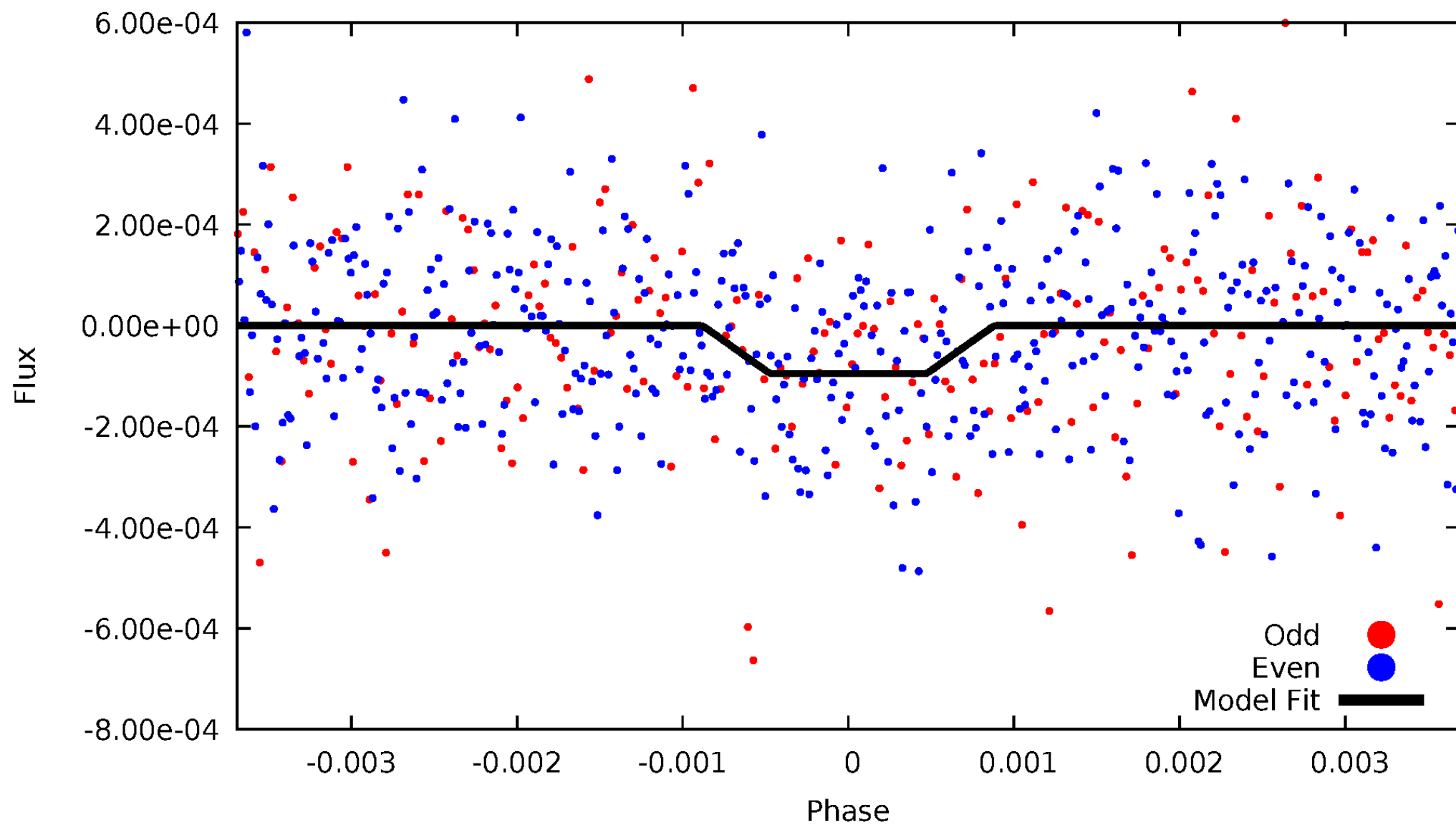
DV Odd/Even

TCE 007105691-02



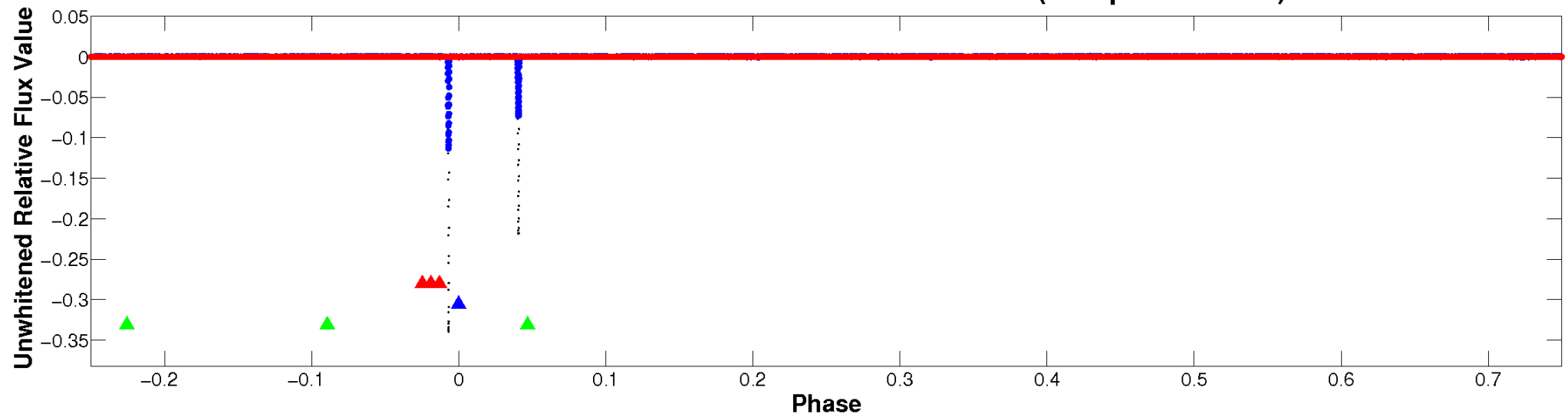
ALT Odd/Even

TCE 007105691-02

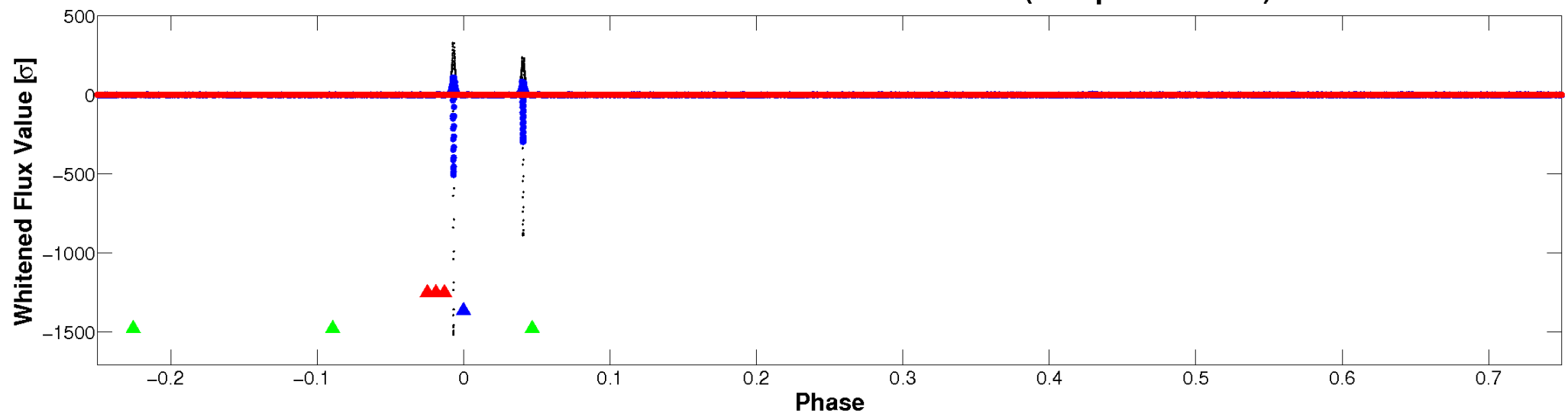


Non-Whitened Vs. Whitened Light Curve

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

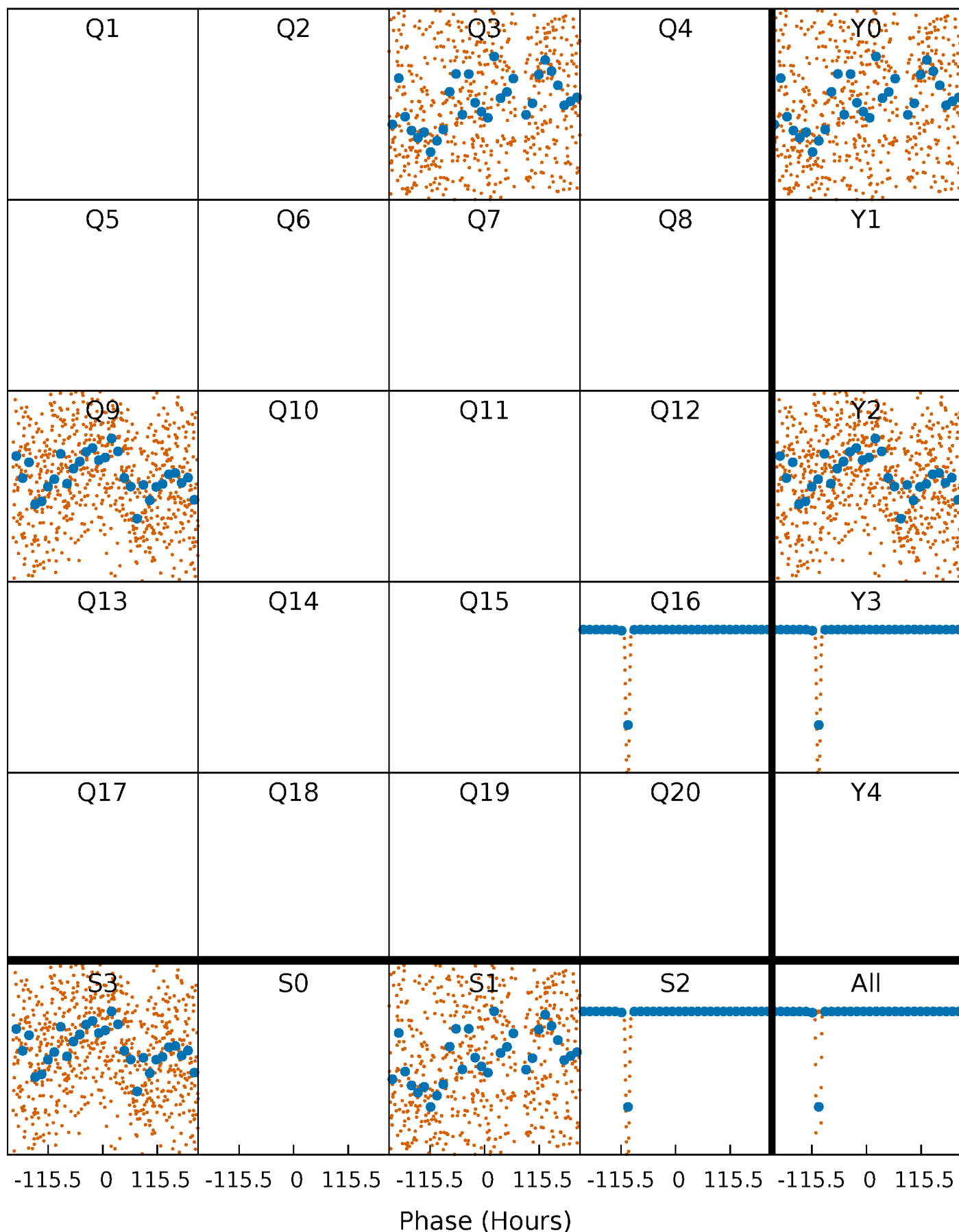


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



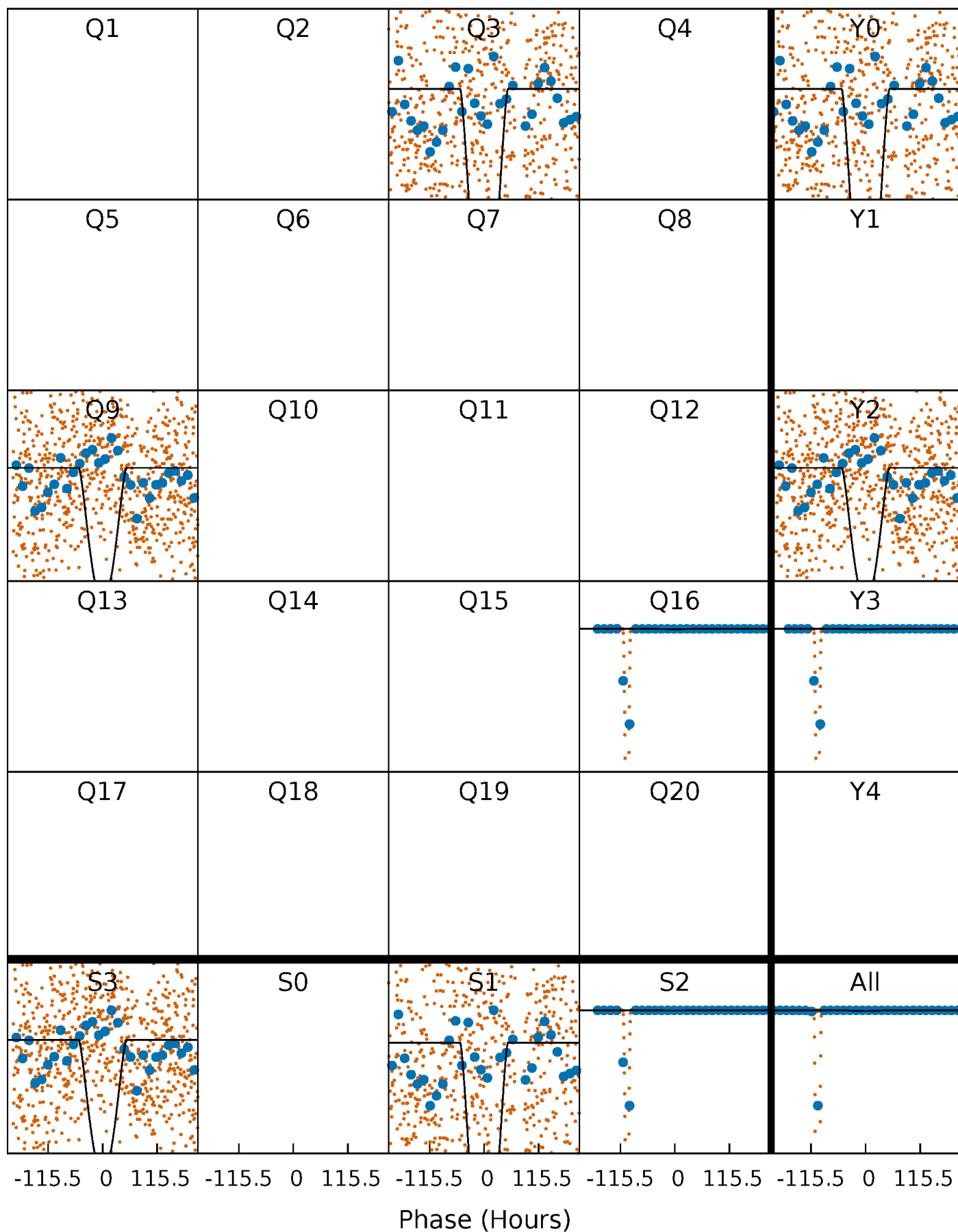
PDC Quarter-Phased Transit Curves

TCE 007105691-02 P=617.675956 Days $T_0=277.812387$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007105691-02 P=617.675956 Days $T_0=277.812387$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

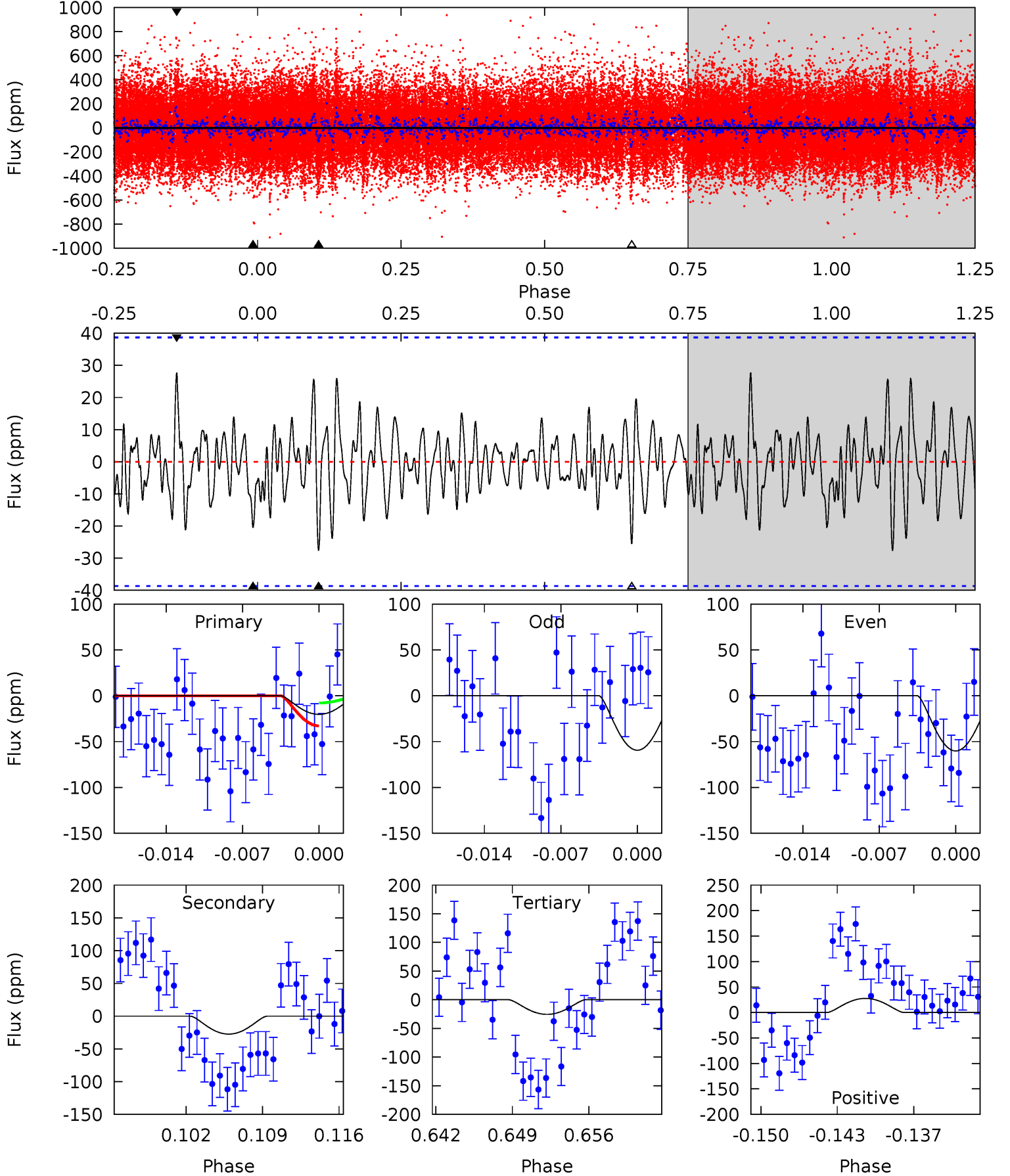
TCE 007105691-02 $P=617.434071$ Days $T_0=277.750858$ (BKJD)



DV Model-Shift Uniqueness Test

007105691-02, P = 617.675956 Days, E = 277.812387 Days

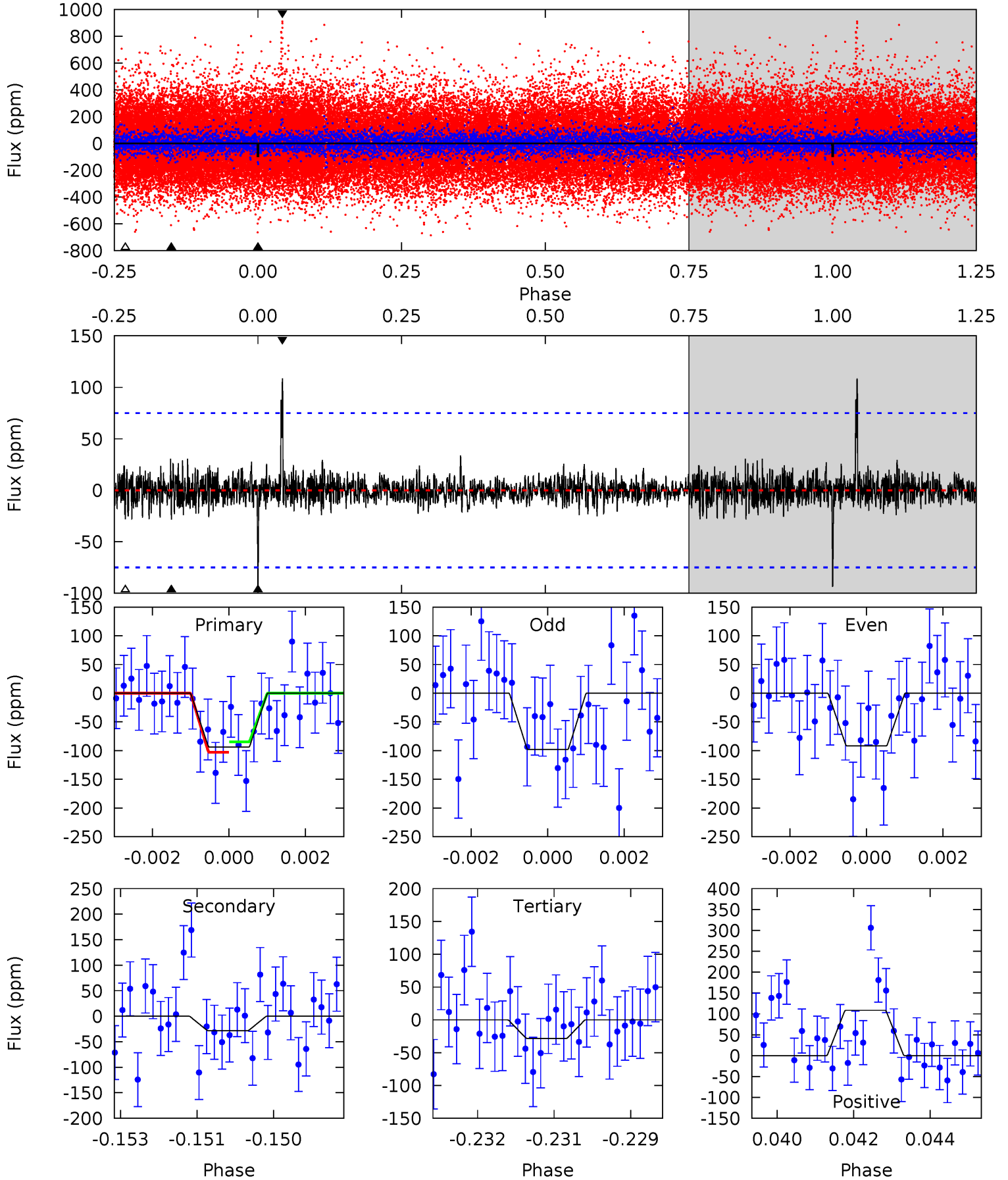
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.67	3.61	3.36	3.64	5.10	2.71	1.10	-0.68	-0.97	0.25	-0.03	0.05	0.80	0.50	1.65



Alt Model-Shift Uniqueness Test

007105691-02, P = 617.434071 Days, E = 277.750858 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.70	2.02	2.01	7.74	5.35	3.13	0.73	4.69	-1.05	0.02	-5.72	0.22	0.96	0.54	0.64



Stellar Parameters For KIC 007105691

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6276^{+174}_{-218}	$4.385^{+0.087}_{-0.203}$	$-0.100^{+0.250}_{-0.300}$	$1.106^{+0.379}_{-0.152}$	$1.078^{+0.171}_{-0.125}$	$1.122^{+0.423}_{-0.586}$
	+3%/-3%	+2%/-5%	+250%/-300%	+34%/-14%	+16%/-12%	+38%/-52%
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 007105691-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-27 ± 8	$36.26^{+37.68}_{-26.07}$	341^{+26}_{-18}	1868^{+523}_{-241}	24^{+232}_{-19}
Alt.	-28 ± 14	$35.75^{+35.38}_{-25.62}$	342^{+25}_{-19}	1854^{+566}_{-238}	23^{+257}_{-18}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

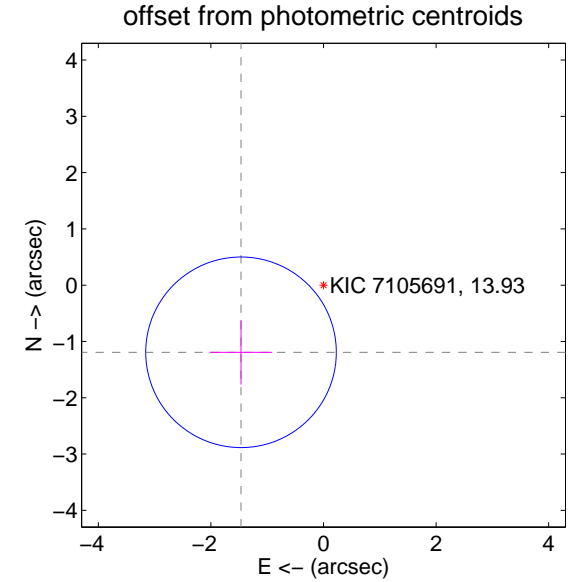
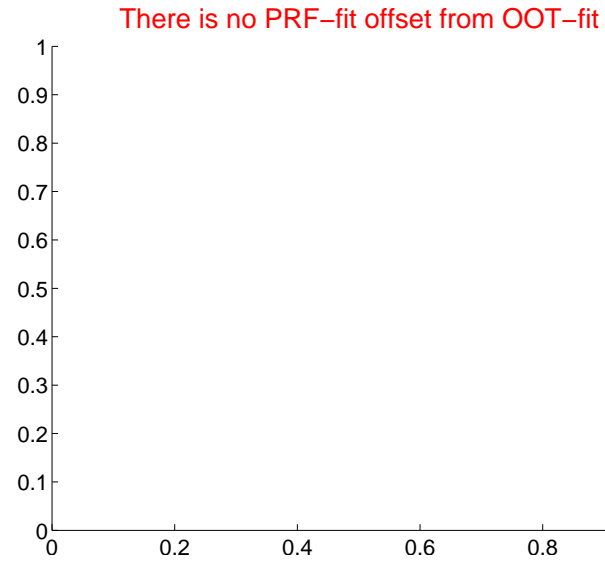
DV Centroid Data

Supplemental centroid analysis for 007105691-02. Kepler magnitude: 13.93. Transit SNR 9.90

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.89 ± 0.56	3.35	1.47 ± 0.56	-1.19 ± 0.58



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.

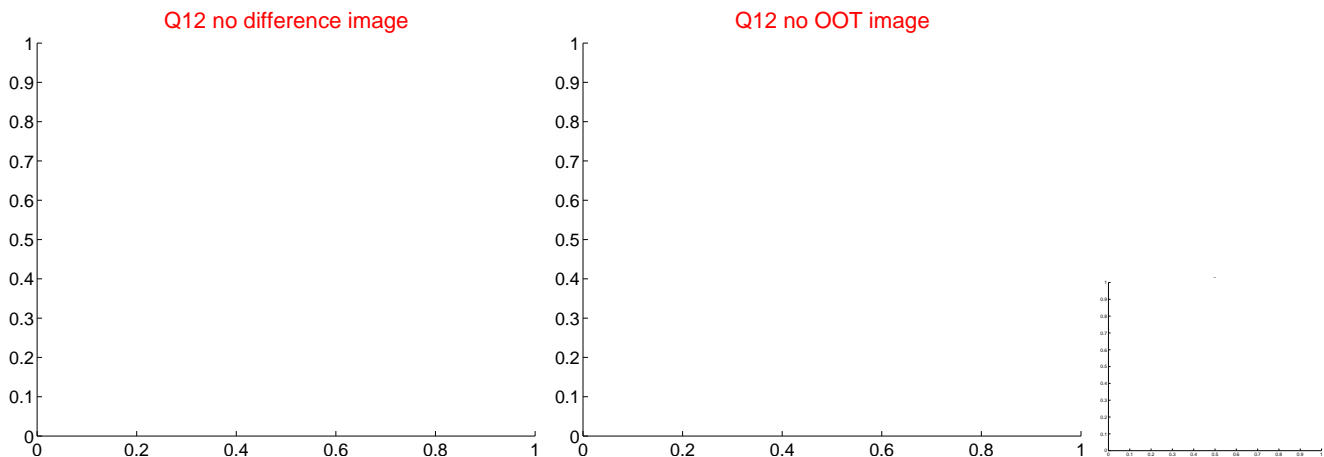
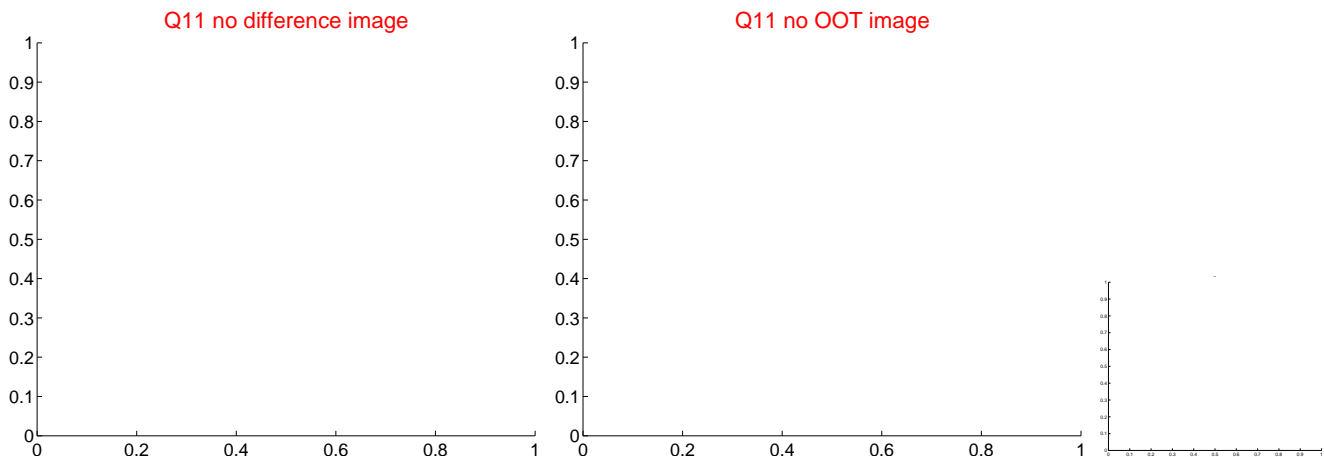
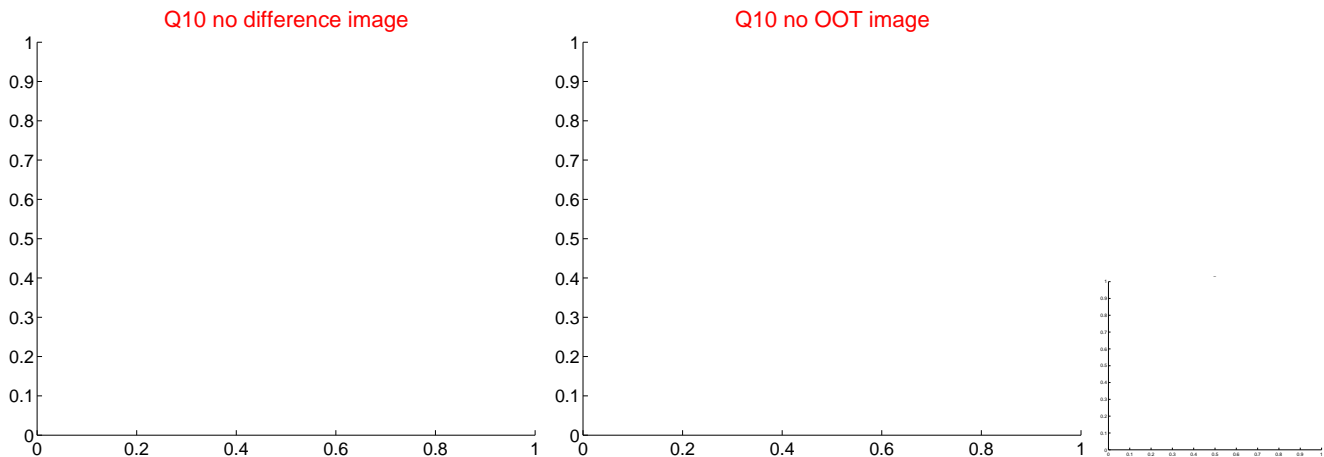
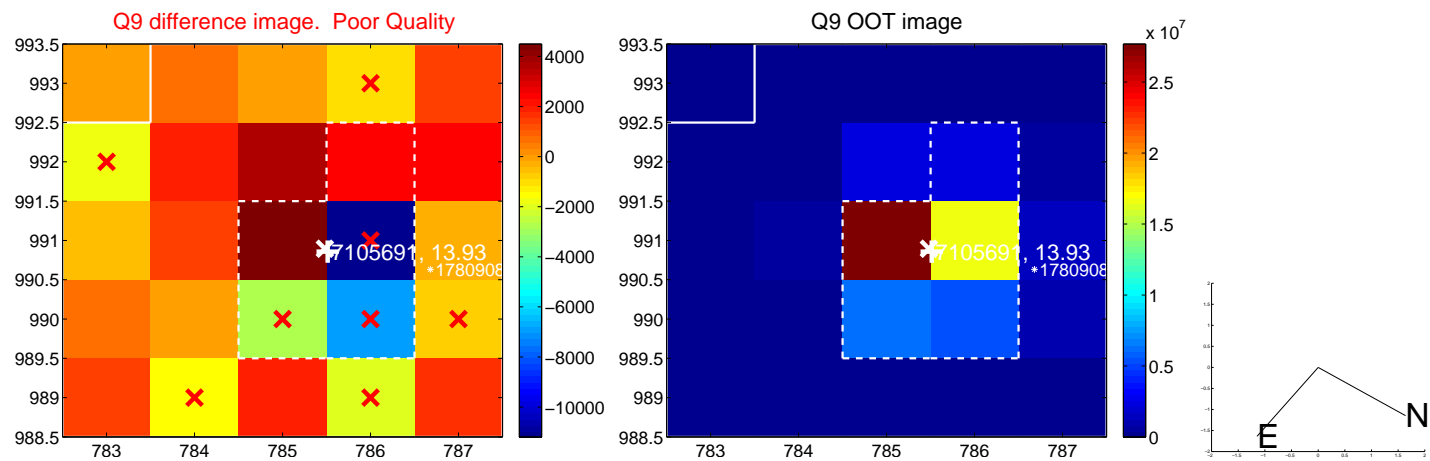
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



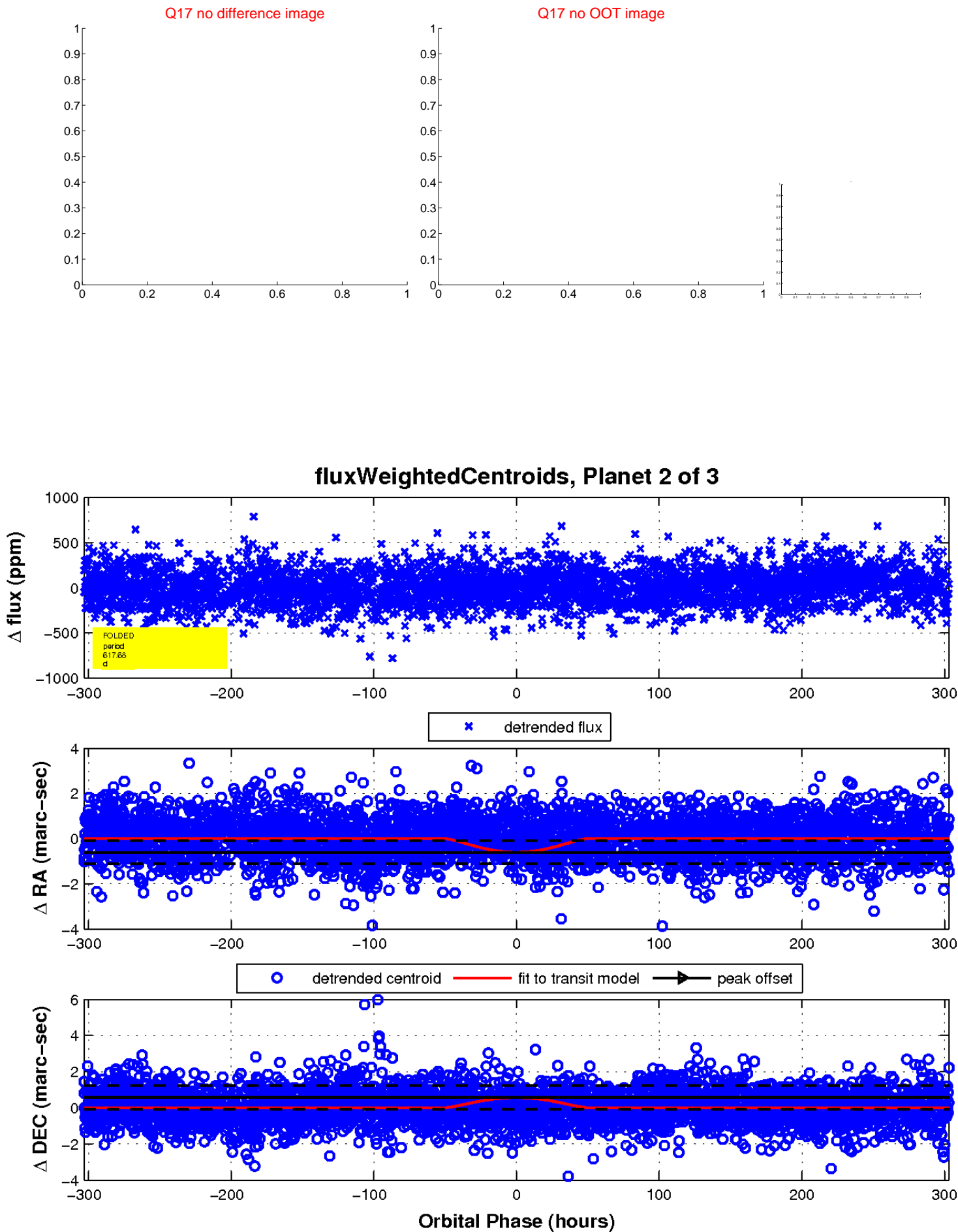
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

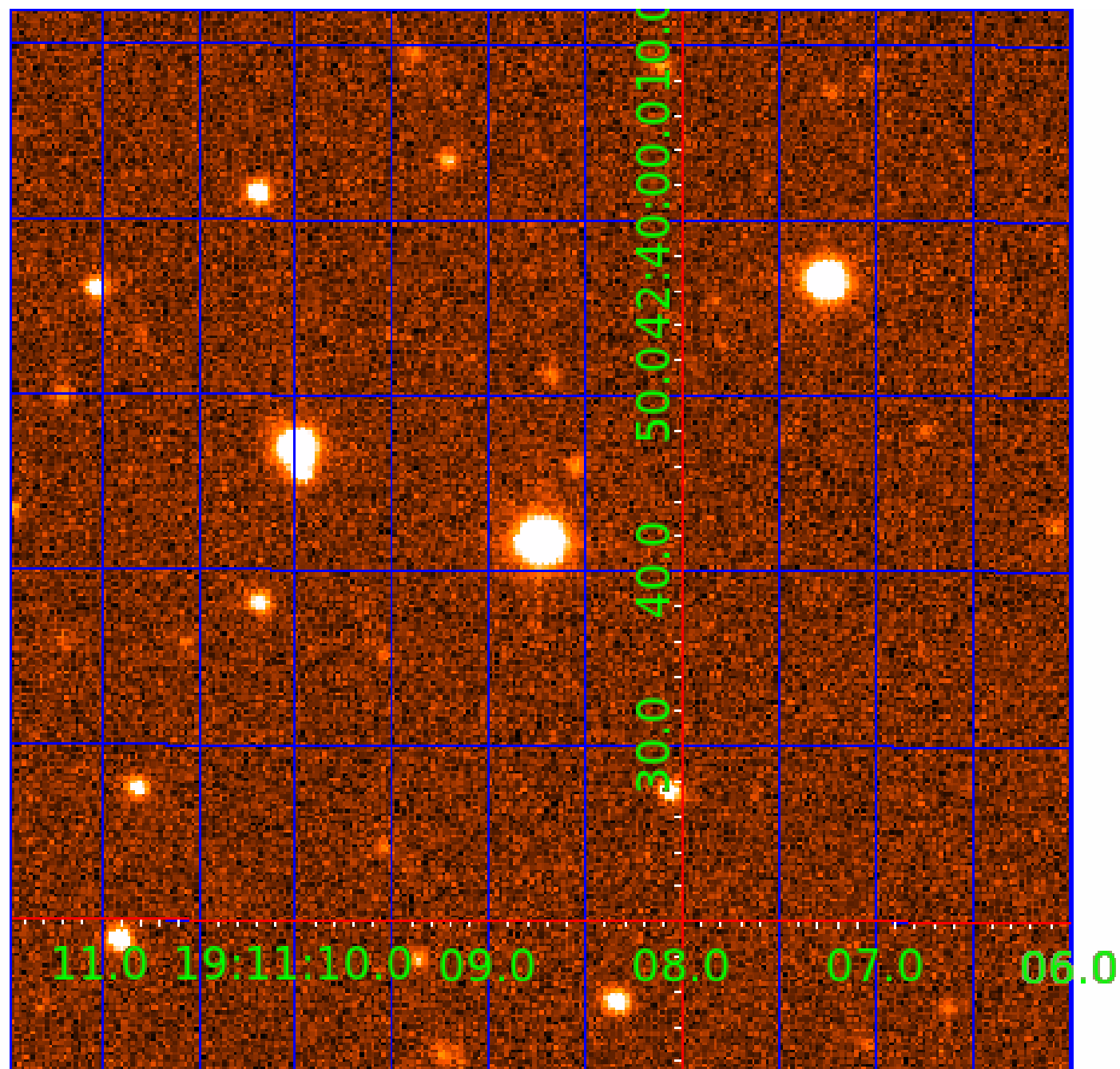


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 007105691

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})
007105691-01	OBS	No	621.268769	262.571848	3817.4	15.000	71.5	-1.0	1.11	6276	6.85	0.79
007105691-02	OBS	No	617.675956	277.812387	446.1	101.063	60.0	9.9	1.11	6276	4.43	0.80
007105691-03	OBS	No	701.811052	138.506083	3054.9	15.000	53.8	-1.0	1.11	6276	6.12	0.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007105691-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
007105691-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
007105691-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_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.

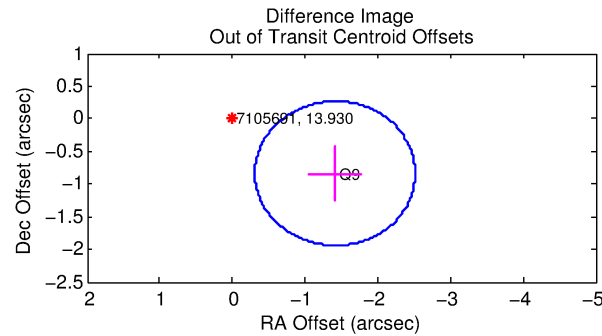
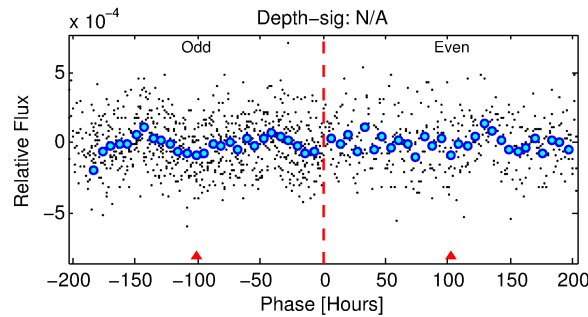
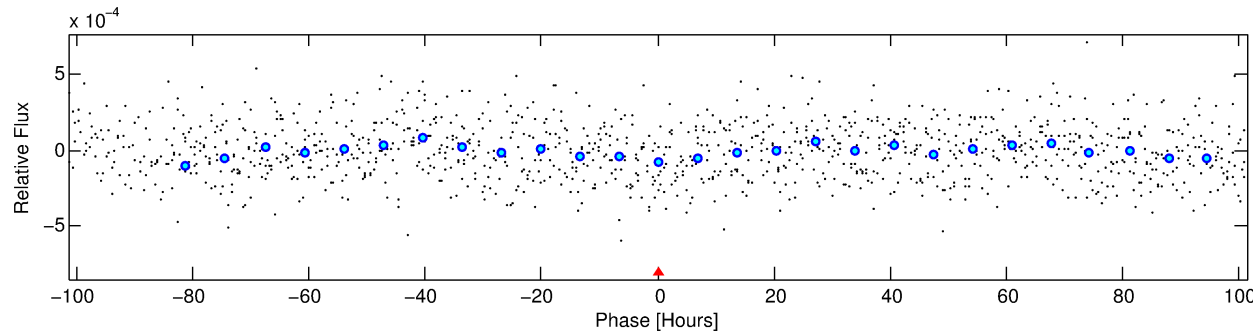
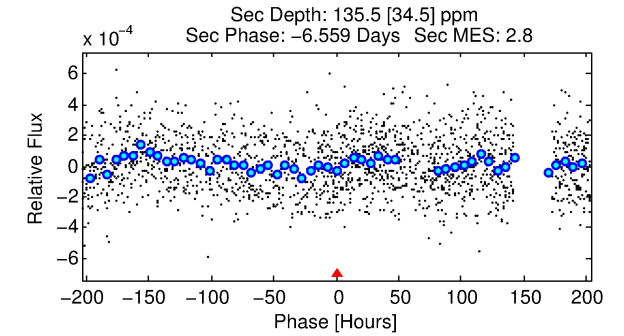
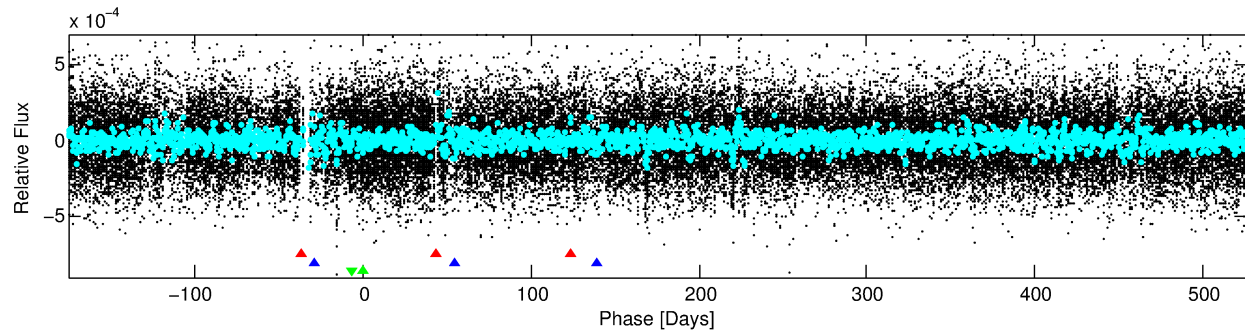
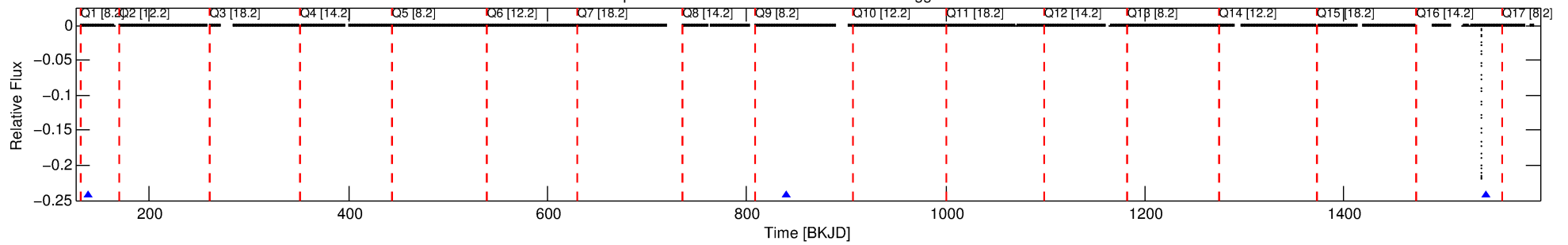
Ephemeris Match Information For 007105691-03

No Significant Match Found

DV One-Page Summary

KIC: 7105691 Candidate: 3 of 3 Period: 701.811 d

Kp: 13.93 R*: 1.11 Rs Teff: 6276.0 K Logg: 4.38 Fe/H: -0.100



TPS TCE Results:

Period = 701.81105 d
Epoch = 138.5061 BKJD

DV fit results are unavailable

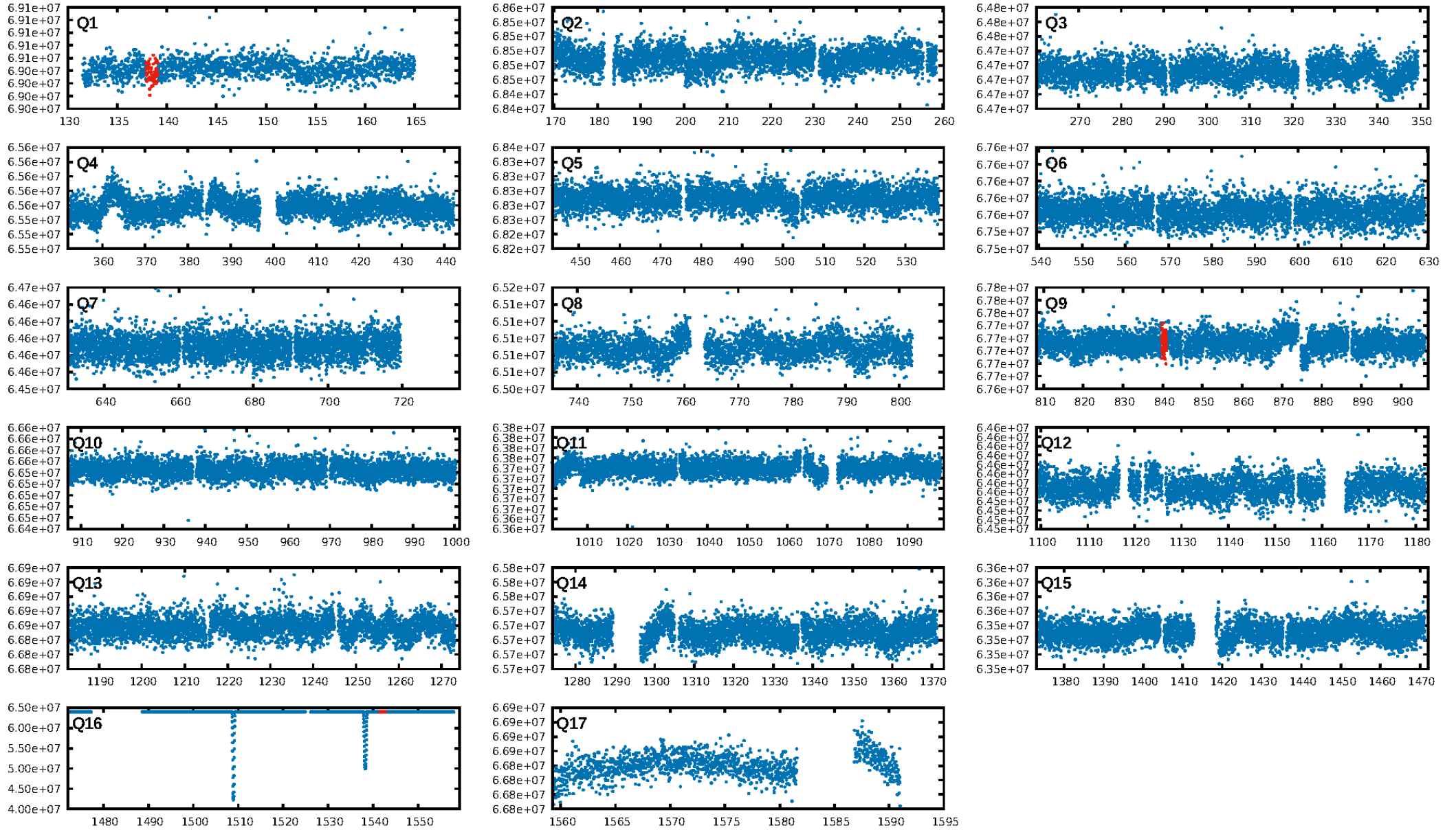
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [91.12σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: 1.065
Centroid-sig: 21.9%
Centroid-so: 3.981 arcsec [0.94σ]
OotOffset-rm: 1.639 arcsec [4.45σ]
KicOffset-rm: 1.573 arcsec [4.29σ]
OotOffset-st: 0/0/0/1 [1]
KicOffset-st: 0/0/0/1 [1]
DiffImageQuality-fgm: 1.00 [1/1]
DiffImageOverlap-fno: 1.00 [3/3]

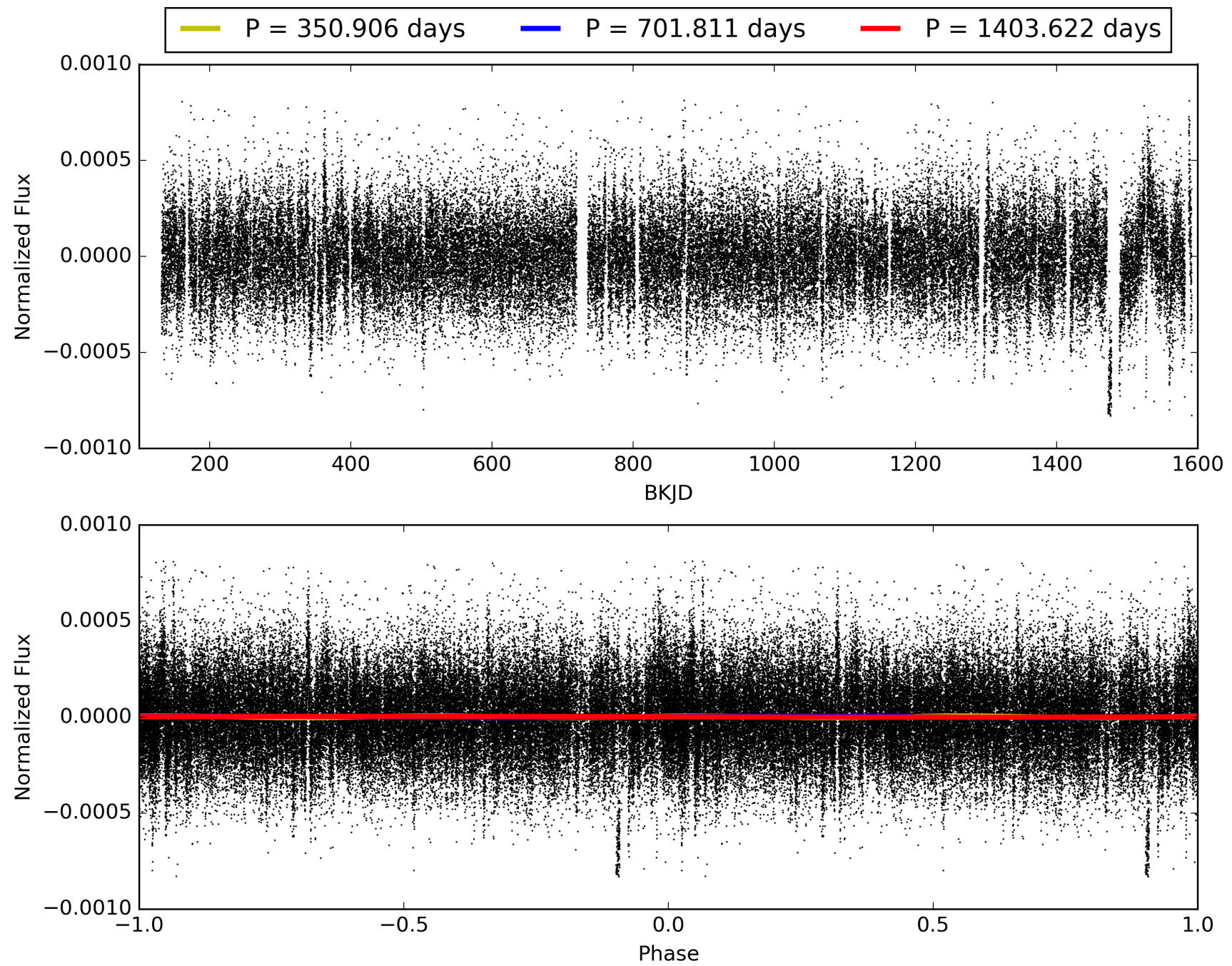
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 14:26:20 Z

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

TCE 007105691-03, PDC Light Curves

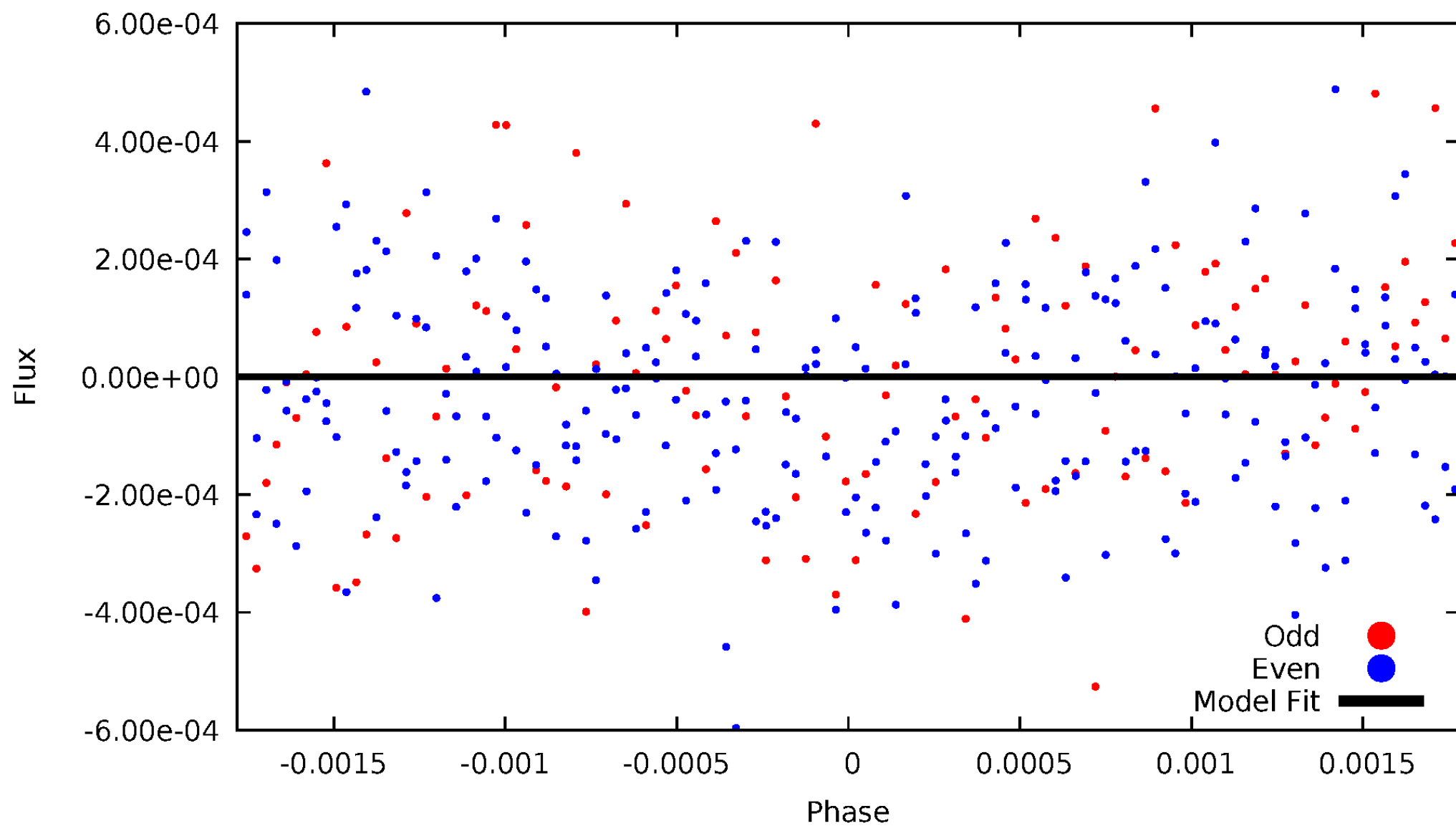


TCE 007105691-03



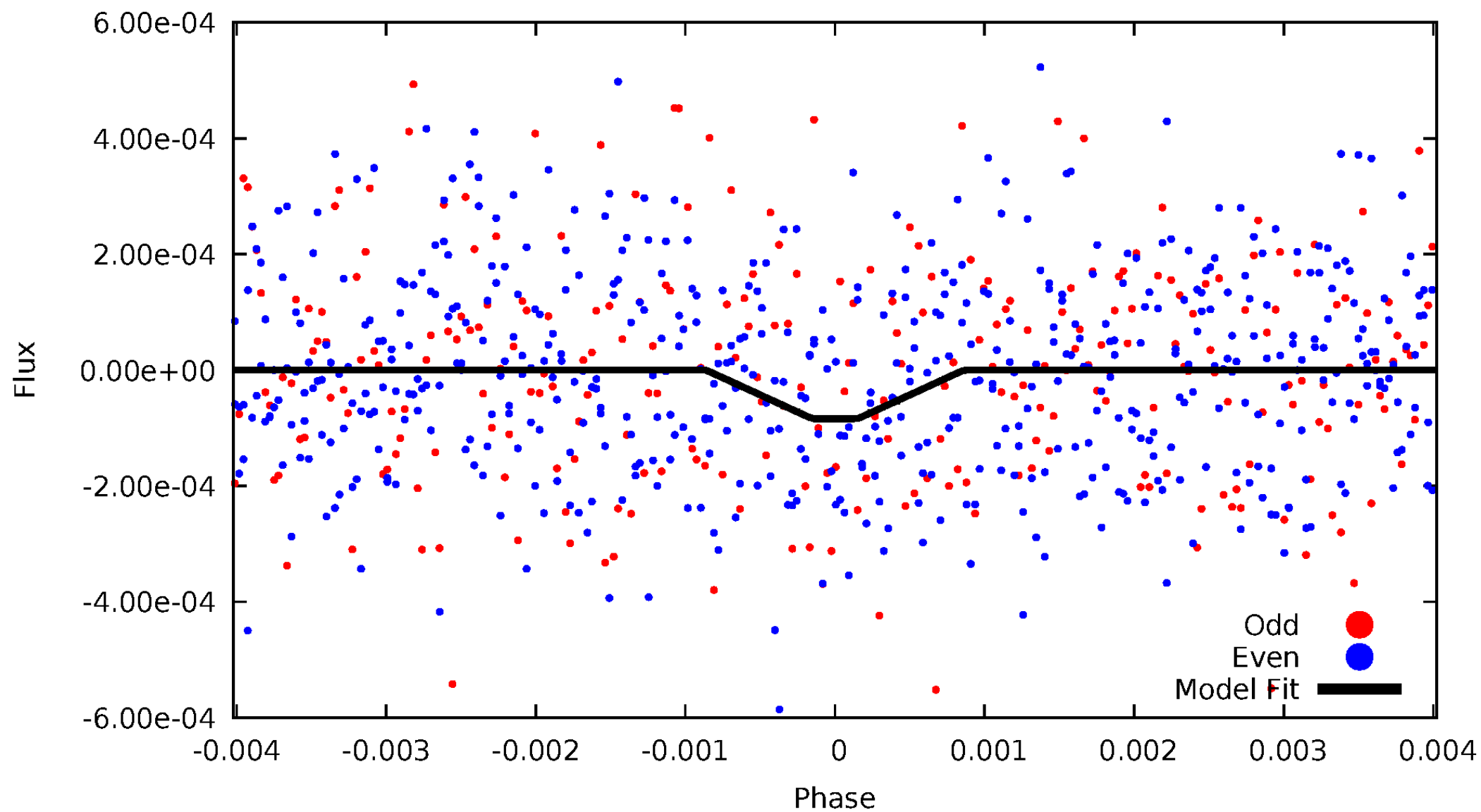
DV Odd/Even

TCE 007105691-03



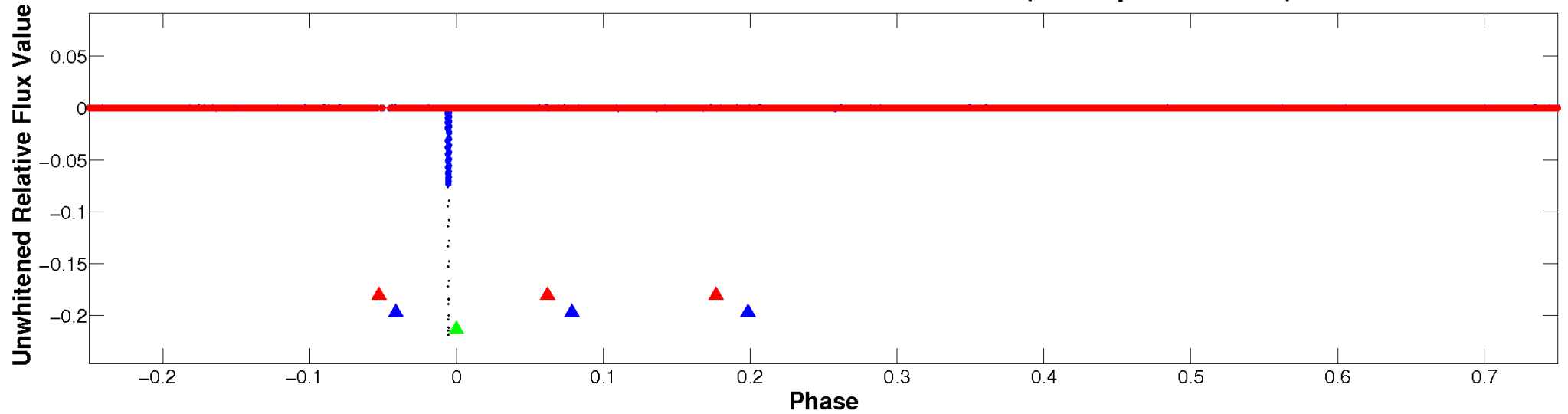
ALT Odd/Even

TCE 007105691-03



Non-Whitened Vs. Whitened Light Curve

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

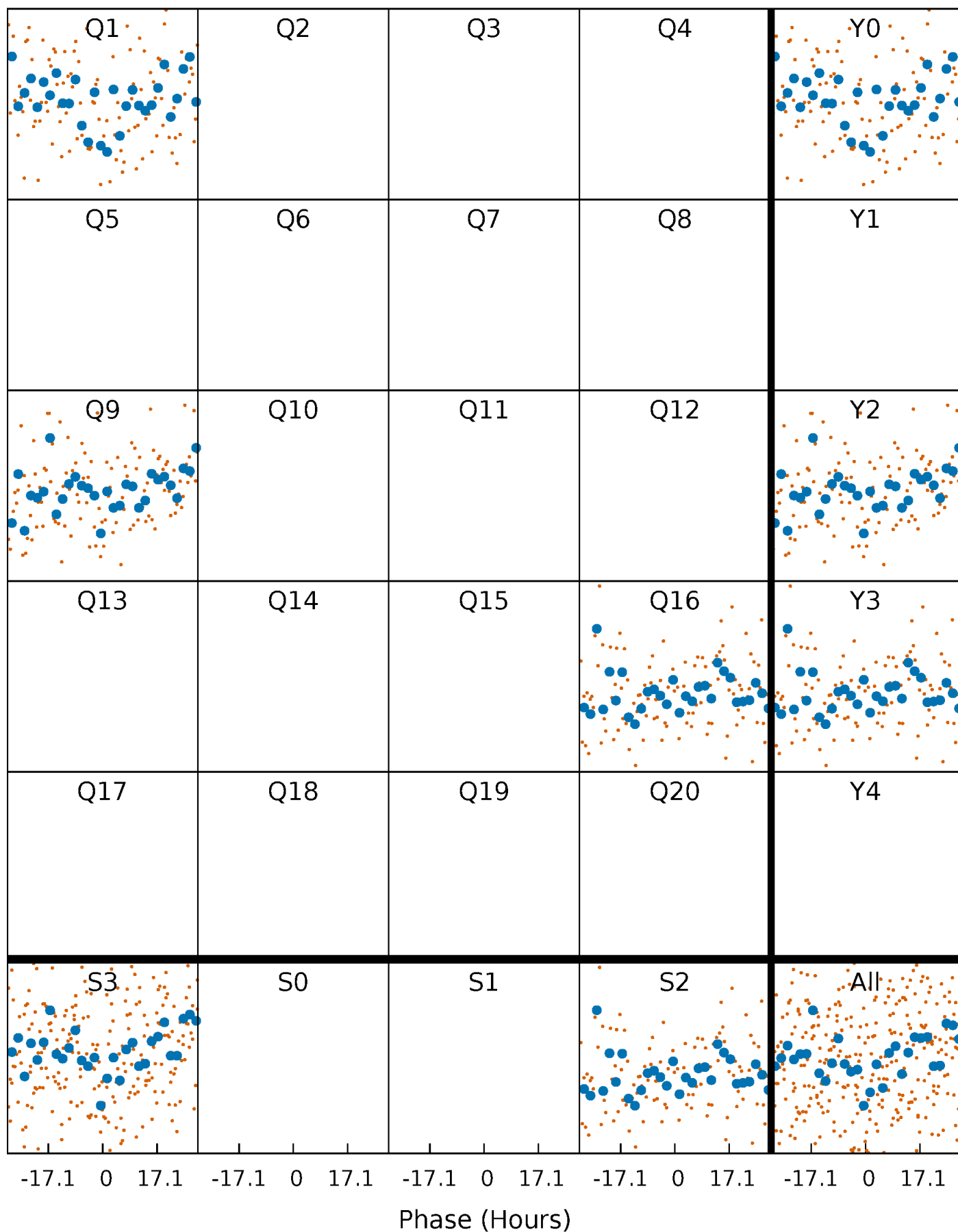


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



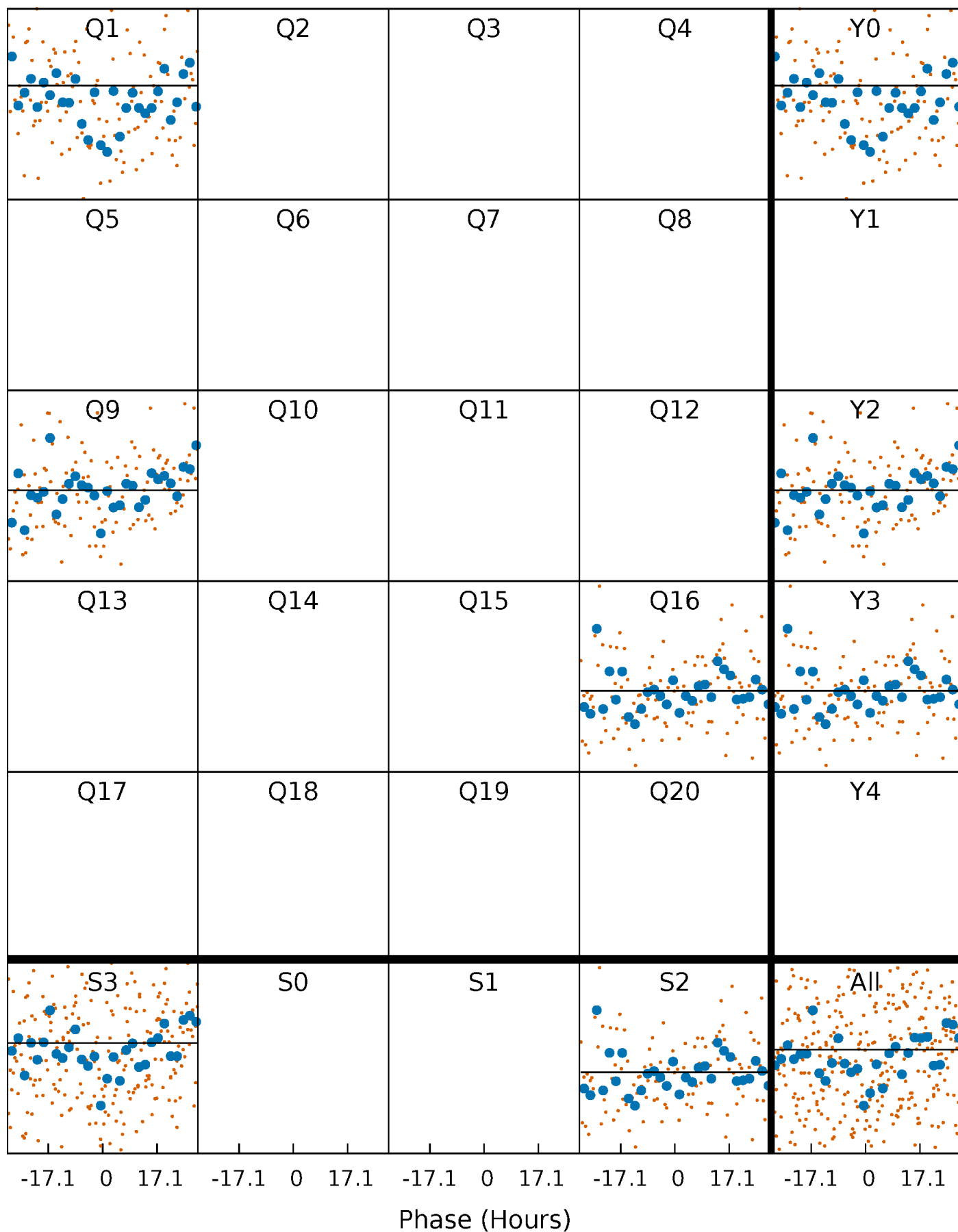
PDC Quarter-Phased Transit Curves

TCE 007105691-03 P=701.811052 Days $T_0=138.506082$ (BKJD)



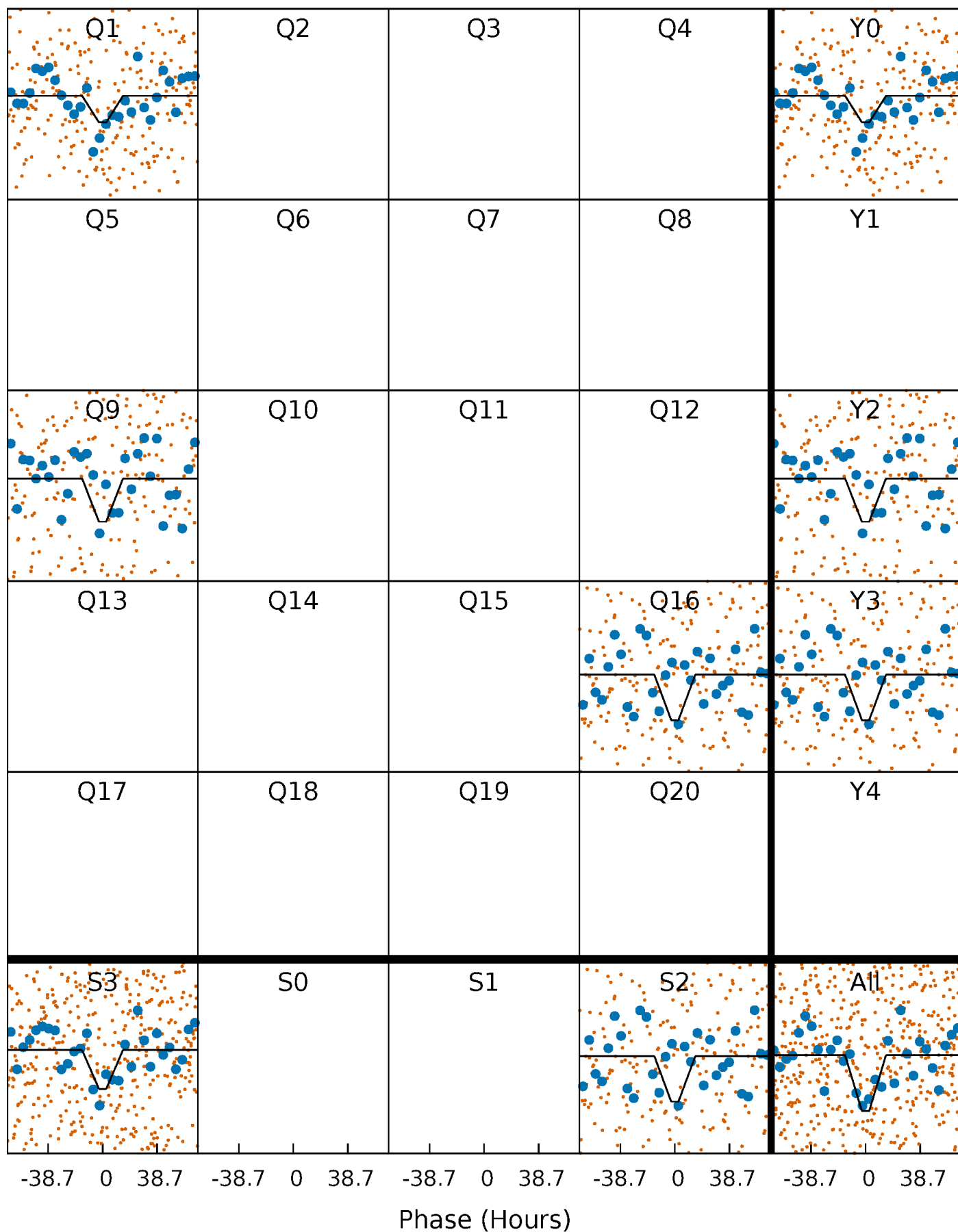
DV Quarter-Phased Transit Curves

TCE 007105691-03 $P=701.811052$ Days $T_0=138.506082$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

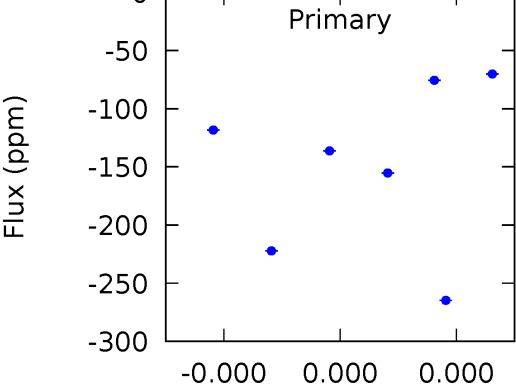
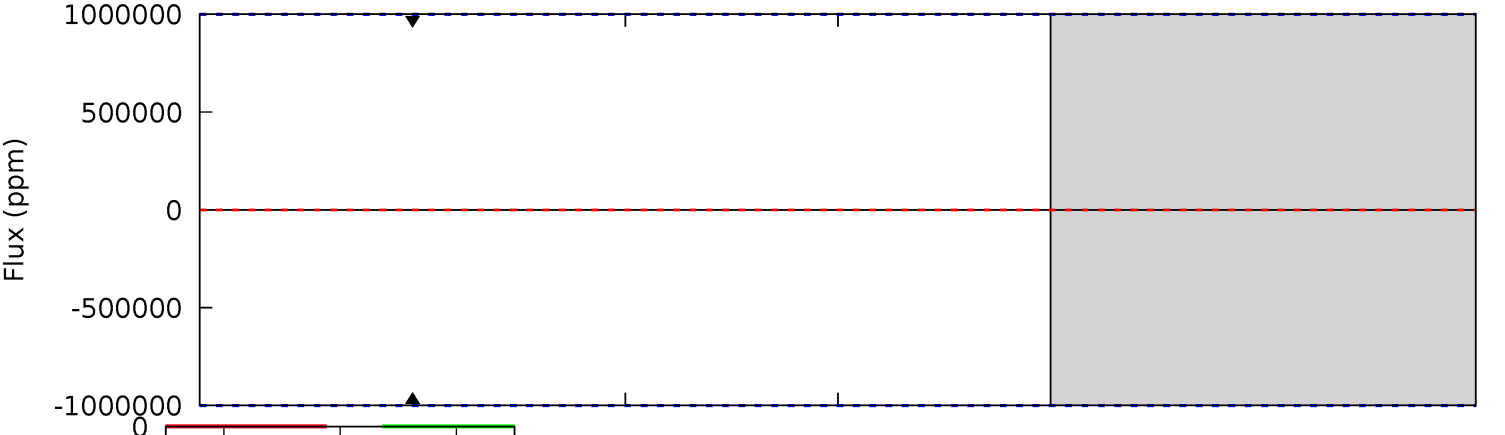
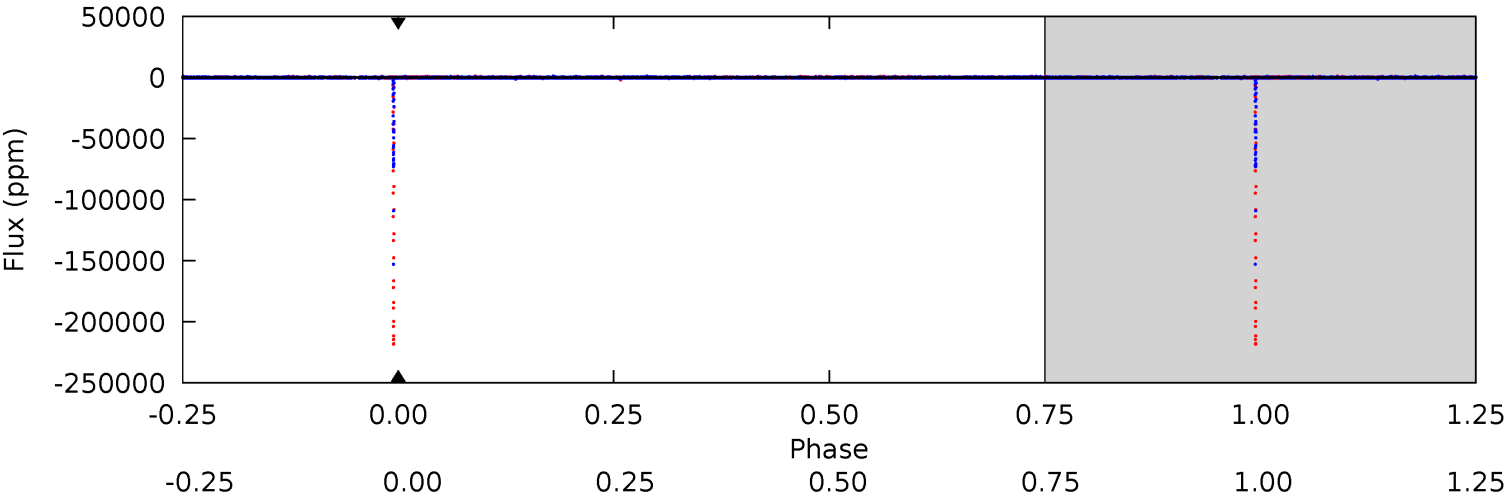
TCE 007105691-03 P=701.811052 Days $T_0=138.537851$ (BKJD)



DV Model-Shift Uniqueness Test

007105691-03, P = 701.811052 Days, E = 138.506082 Days

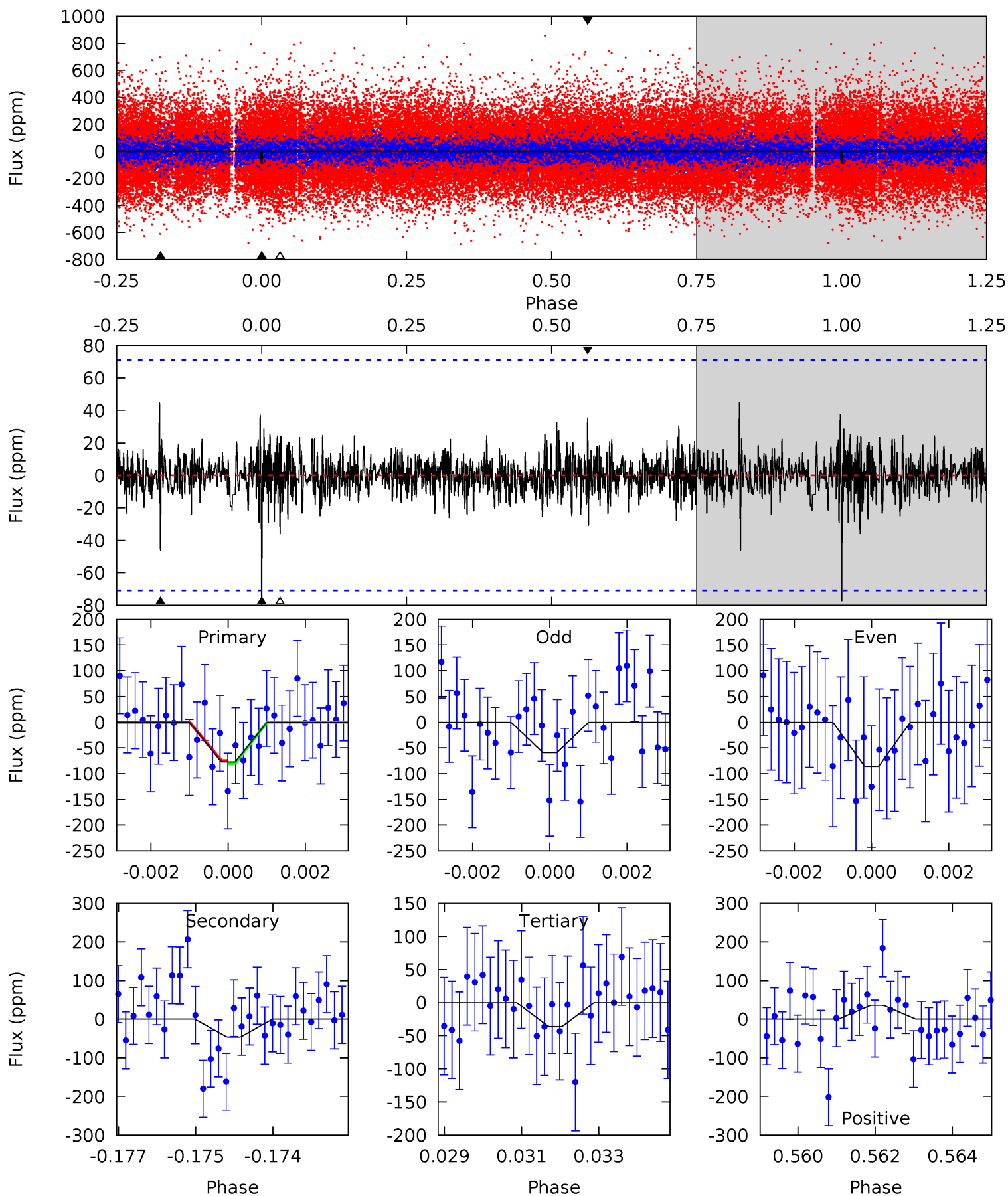
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007105691-03, P = 701.811052 Days, E = 138.537851 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.85	3.48	2.71	2.69	5.35	3.13	0.69	3.13	3.16	0.77	0.79	0.96	1.29	0.37	0.22



Stellar Parameters For KIC 007105691

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6276^{+174}_{-218}	$4.385^{+0.087}_{-0.203}$	$-0.100^{+0.250}_{-0.300}$	$1.106^{+0.379}_{-0.152}$	$1.078^{+0.171}_{-0.125}$	$1.122^{+0.423}_{-0.586}$
	+3%/-3%	+2%/-5%	+250%/-300%	+34%/-14%	+16%/-12%	+38%/-52%
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 007105691-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$11.40^{+9.88}_{-7.55}$	327^{+24}_{-19}	-3475^{+23814}_{-15192}	$-4864.101^{+1713802.426}_{-1745469.357}$
Alt.	-46 ± 13	$8.78^{+9.05}_{-6.17}$	326^{+22}_{-17}	2717^{+1183}_{-454}	827^{+8377}_{-639}

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming A=0.3)

A_{obs} = Observed Albedo (Assuming T=0)

If a secondary eclipse is present, the system is likely an EB if $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

DV Centroid Data

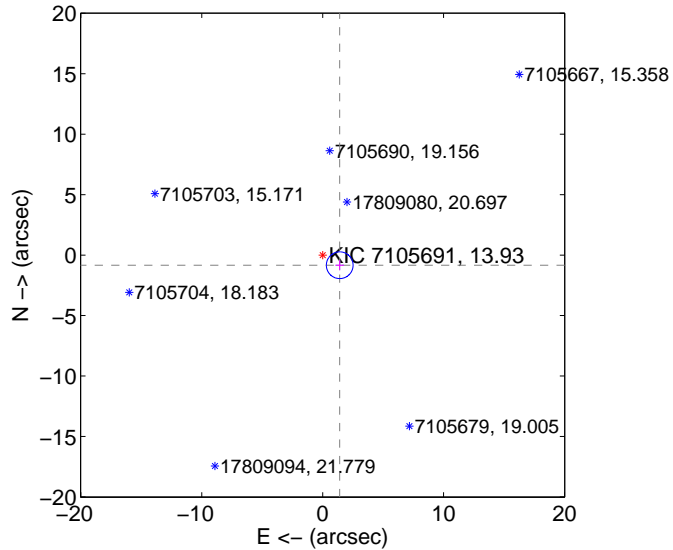
Supplemental centroid analysis for 007105691-03. Kepler magnitude: 13.93. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

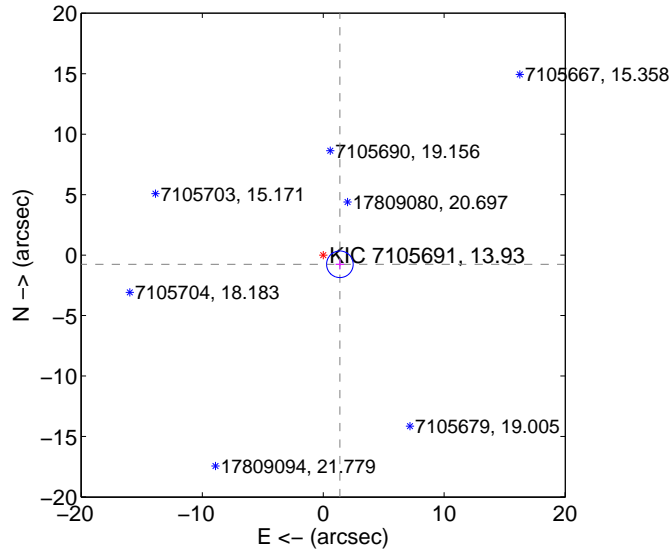
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.639 ± 0.368	4.45	-1.410 ± 0.349	-0.836 ± 0.418
PRF-fit source offset from KIC position	1.573 ± 0.366	4.29	-1.377 ± 0.349	-0.760 ± 0.418
photometric centroid source offset	3.98 ± 4.23	0.94	-1.92 ± 3.76	3.49 ± 4.36

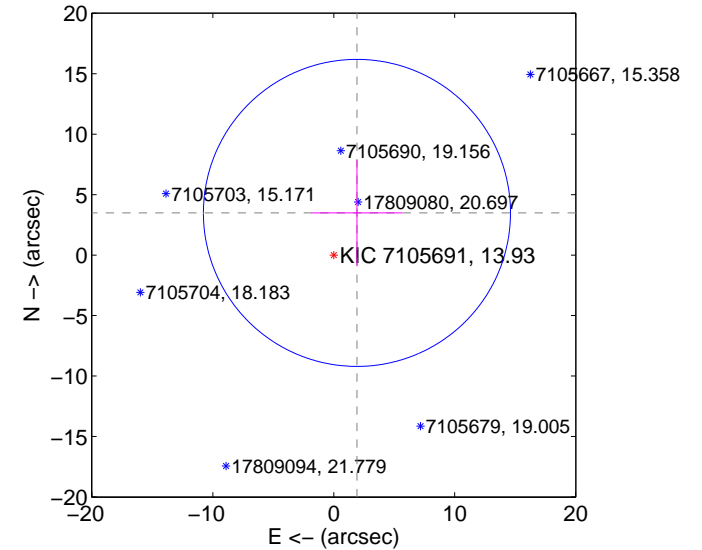
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

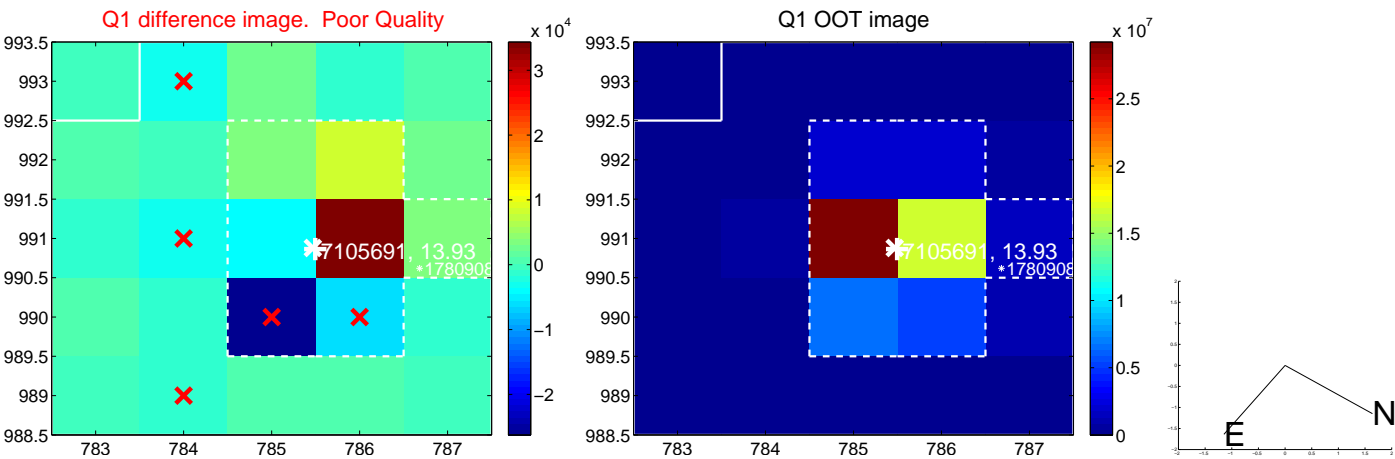


offset from photometric centroids



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.

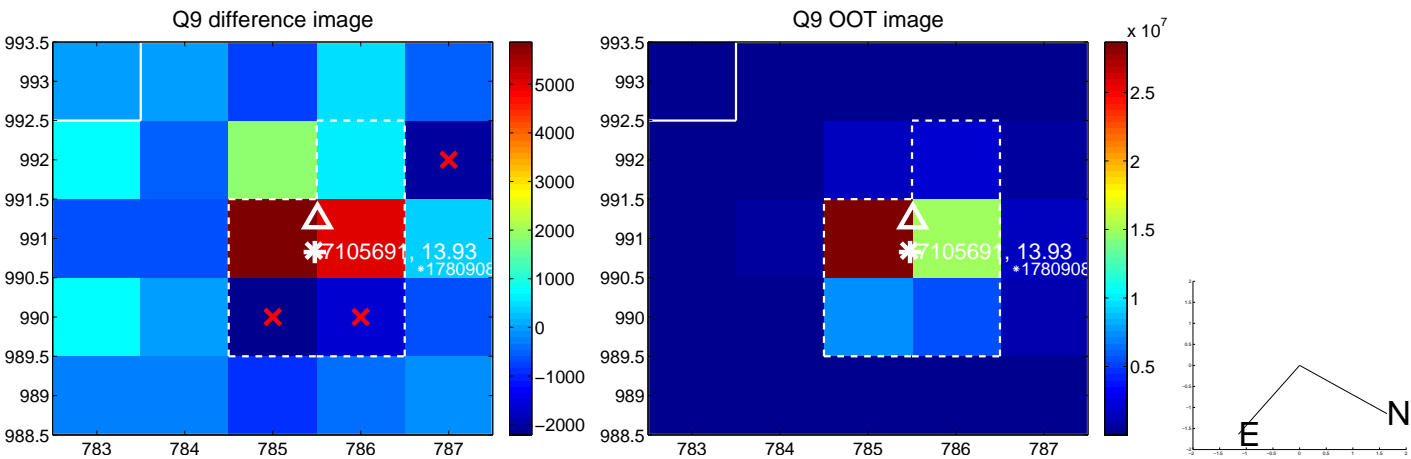
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ✕: large negative pixel value.



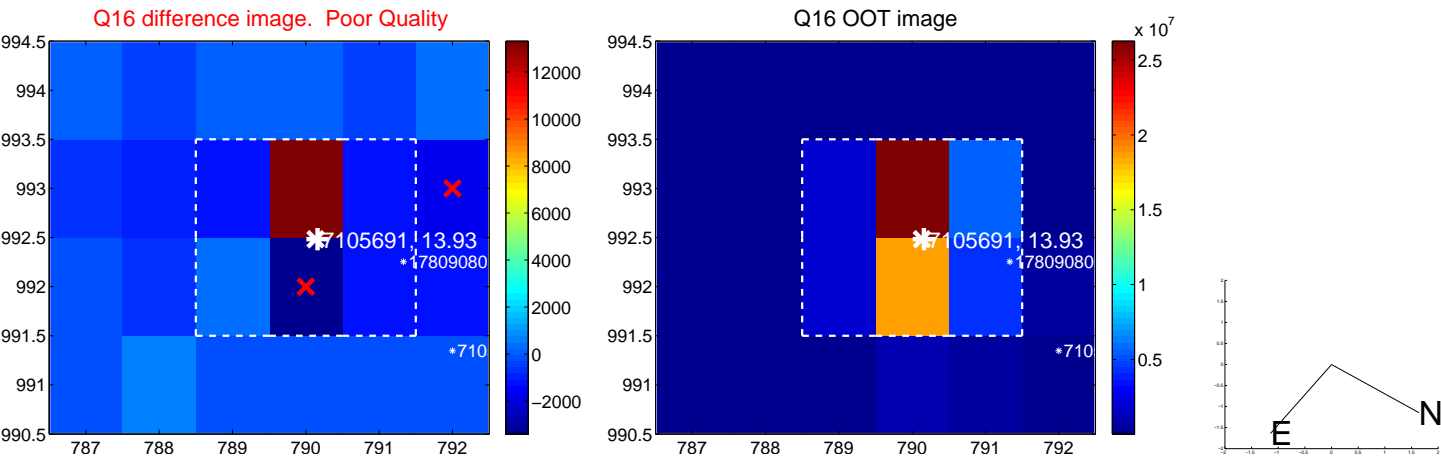
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



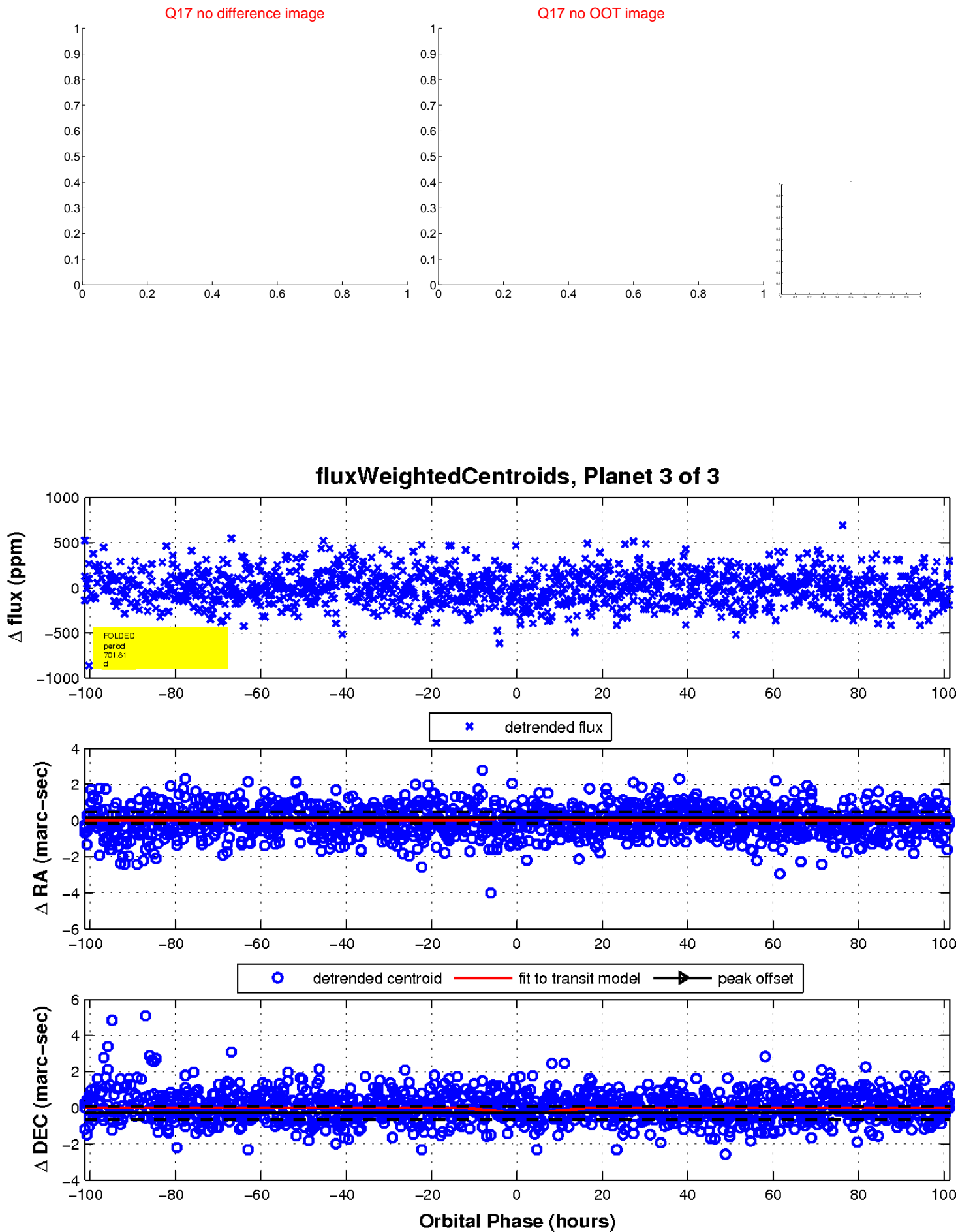
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

