

KIC 007198959

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})
007198959-01	OBS	No	0.568254	131.985266	10467.4	1.994	28.3	15.2	1.08	5982	13.85	7414.93
007198959-02	OBS	No	0.569688	131.775777	29.9	2.000	19.9	-1.0	1.08	5982	0.59	7390.05
007198959-03	OBS	No	0.570326	131.550777	24.6	2.000	9.4	-1.0	1.08	5982	0.54	7379.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007198959-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
007198959-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_SATURATED
007198959-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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

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

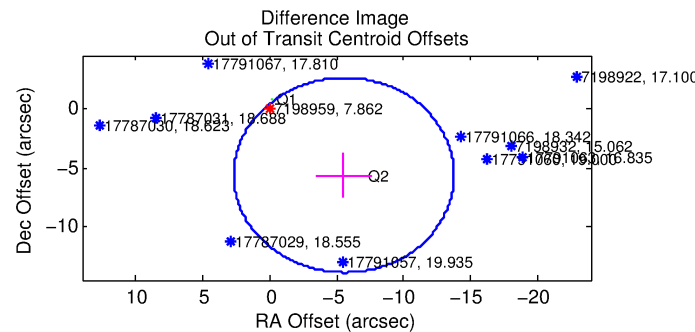
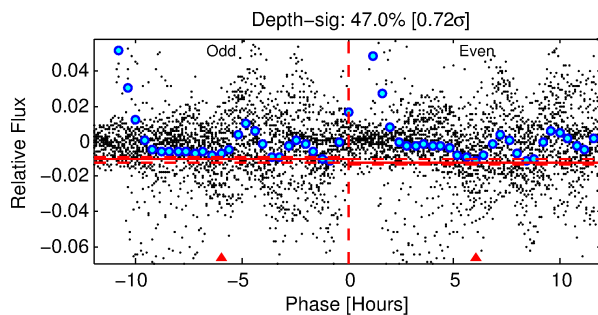
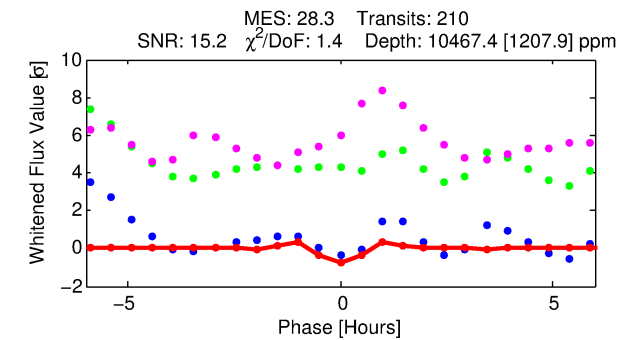
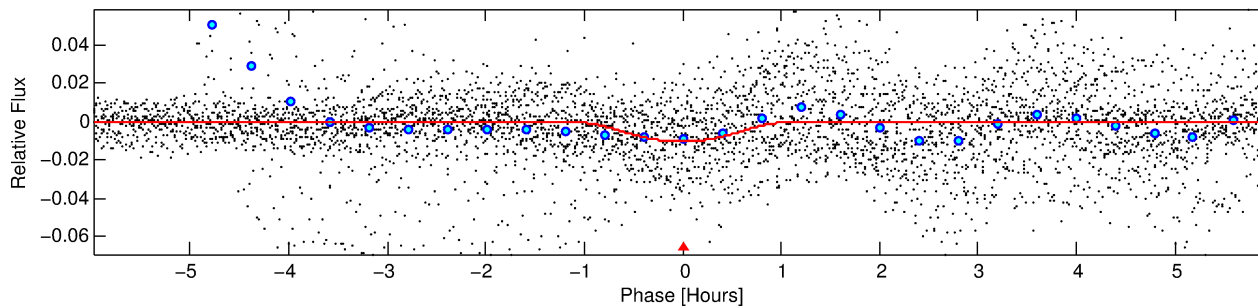
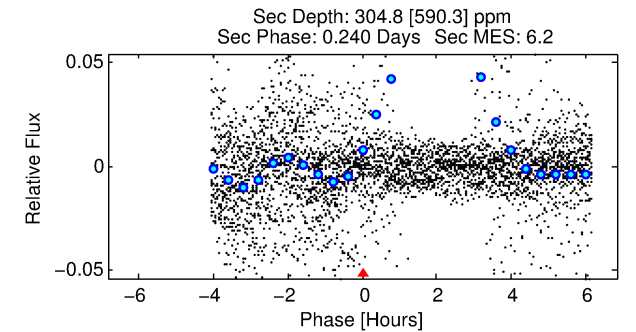
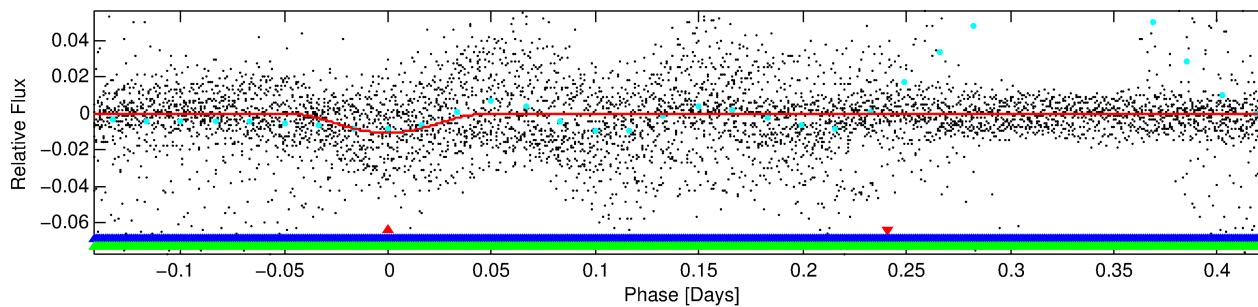
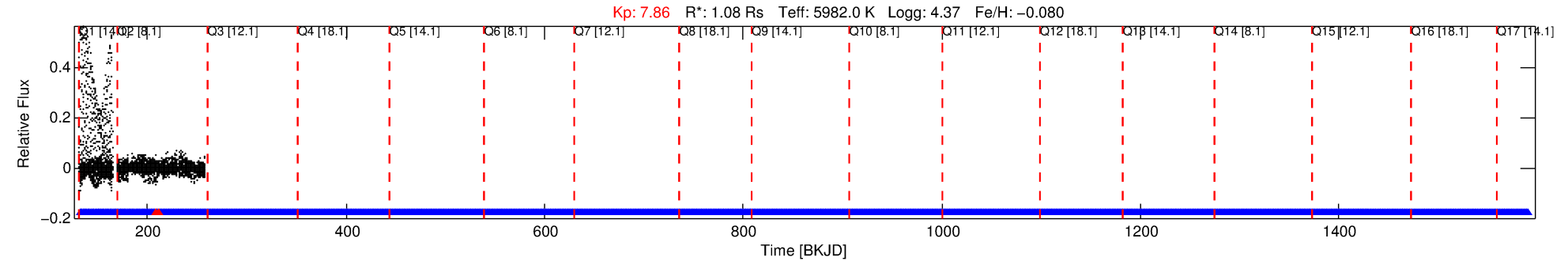
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007198959-01

No Significant Match Found

DV One-Page Summary

KIC: 7198959 Candidate: 1 of 3 Period: 0.568 d



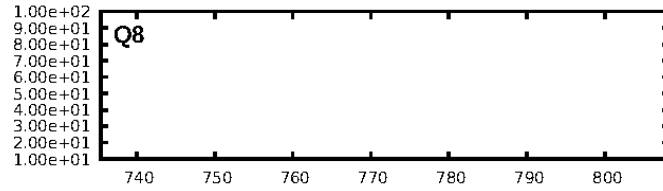
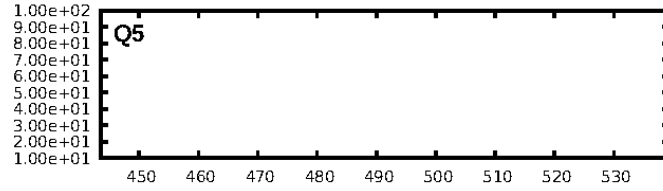
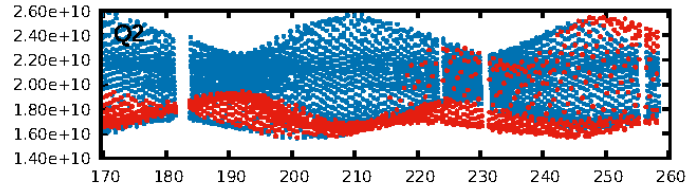
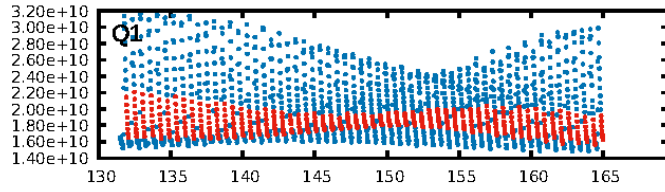
DV Fit Results:

Period = 0.56825 [0.00002] d
Epoch = 131.9853 [0.0025] BKJD
Rp/R* = 0.1174 [0.0353]
a/R* = 1.73 [0.18]
b = 0.91 [0.09]
Seff = 7414.93 [2882.35]
Teq = 2366 [230] K
Rp = 13.85 [5.89] Re
a = 0.0134 [0.0033] AU
Ag = 0.16 [0.33] [-2.59σ]
Teffp = 2307 [1173] K [-0.05σ]

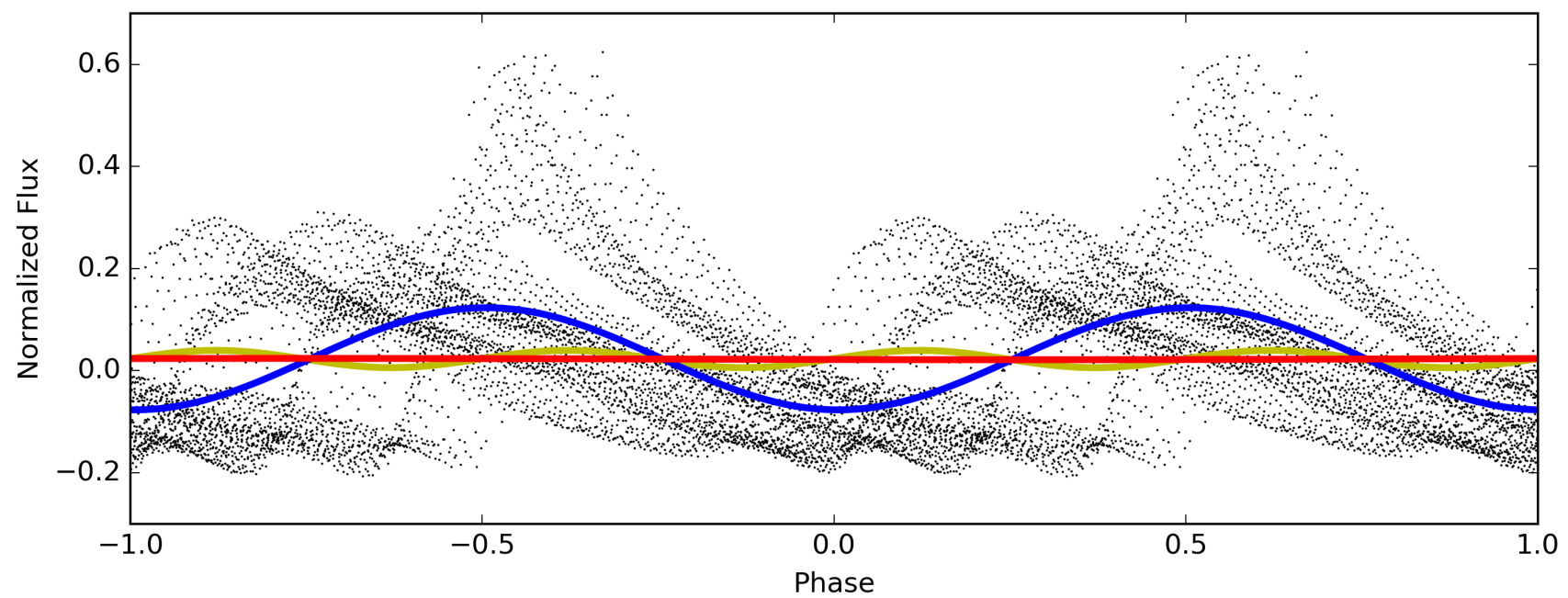
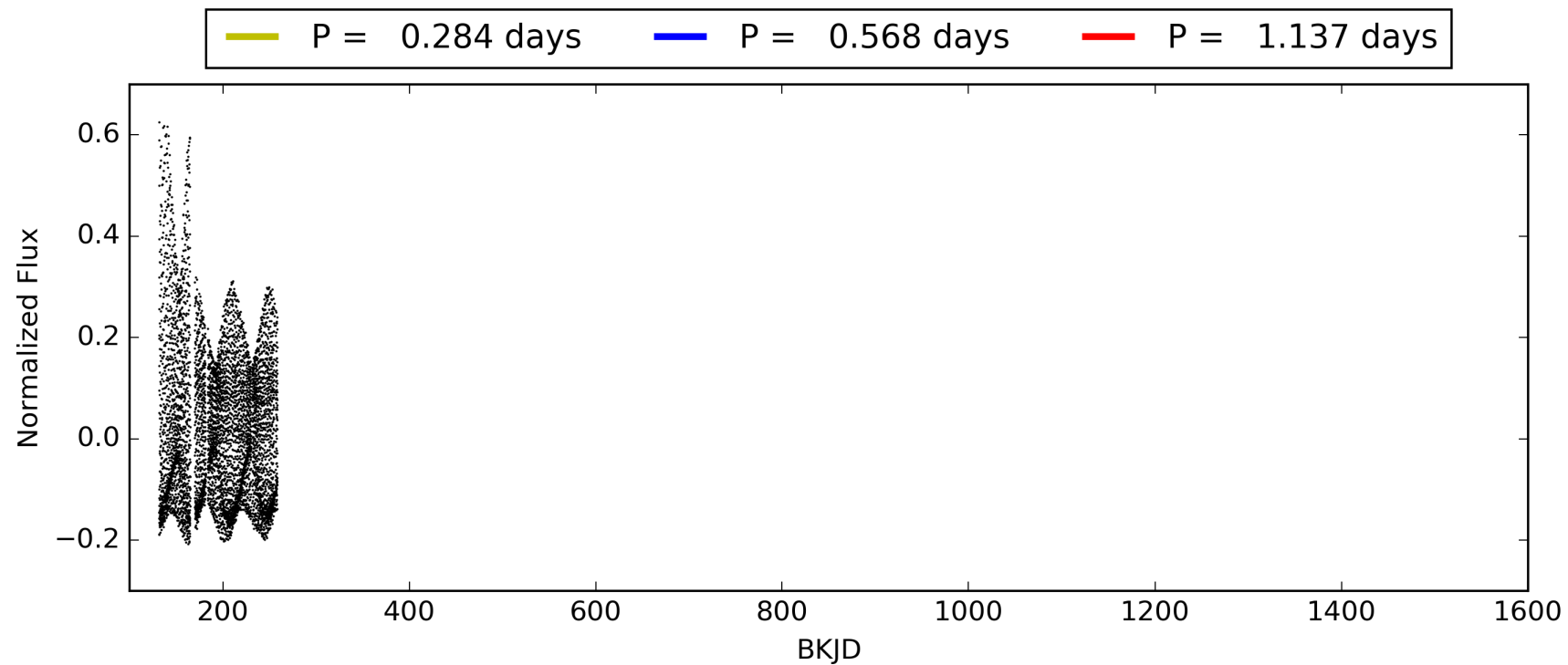
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 1.0% [0.01σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.99 [149/151]
GhostDiagnostic-chr: N/A
Centroid-sig: 6.4%
Centroid-so: 0.661 arcsec [0.58σ]
OotOffset-rm: 7.915 arcsec [2.88σ]
KicOffset-rm: 9.296 arcsec [2.88σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/2]

TCE 007198959-01, PDC Light Curves

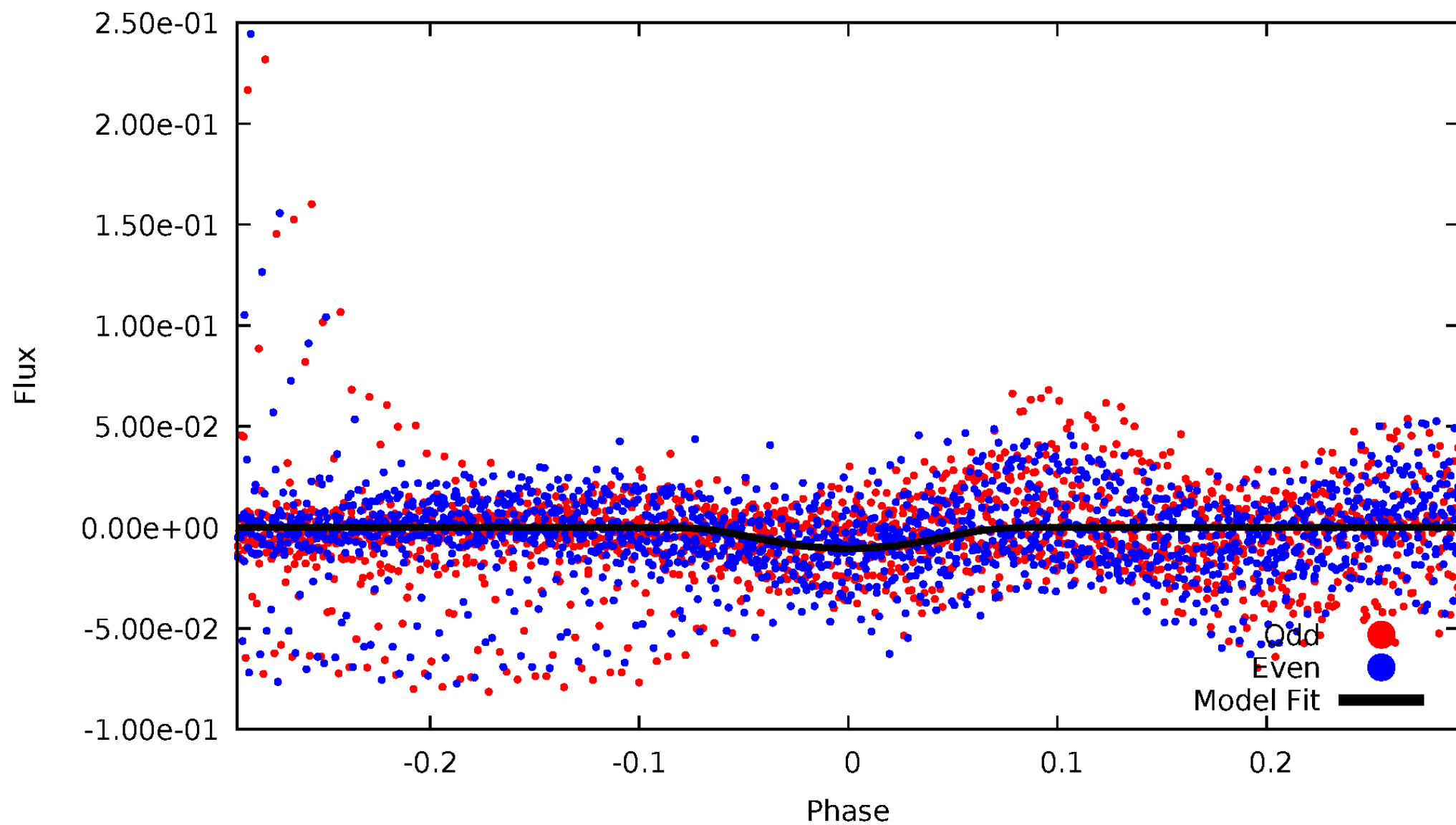


TCE 007198959-01



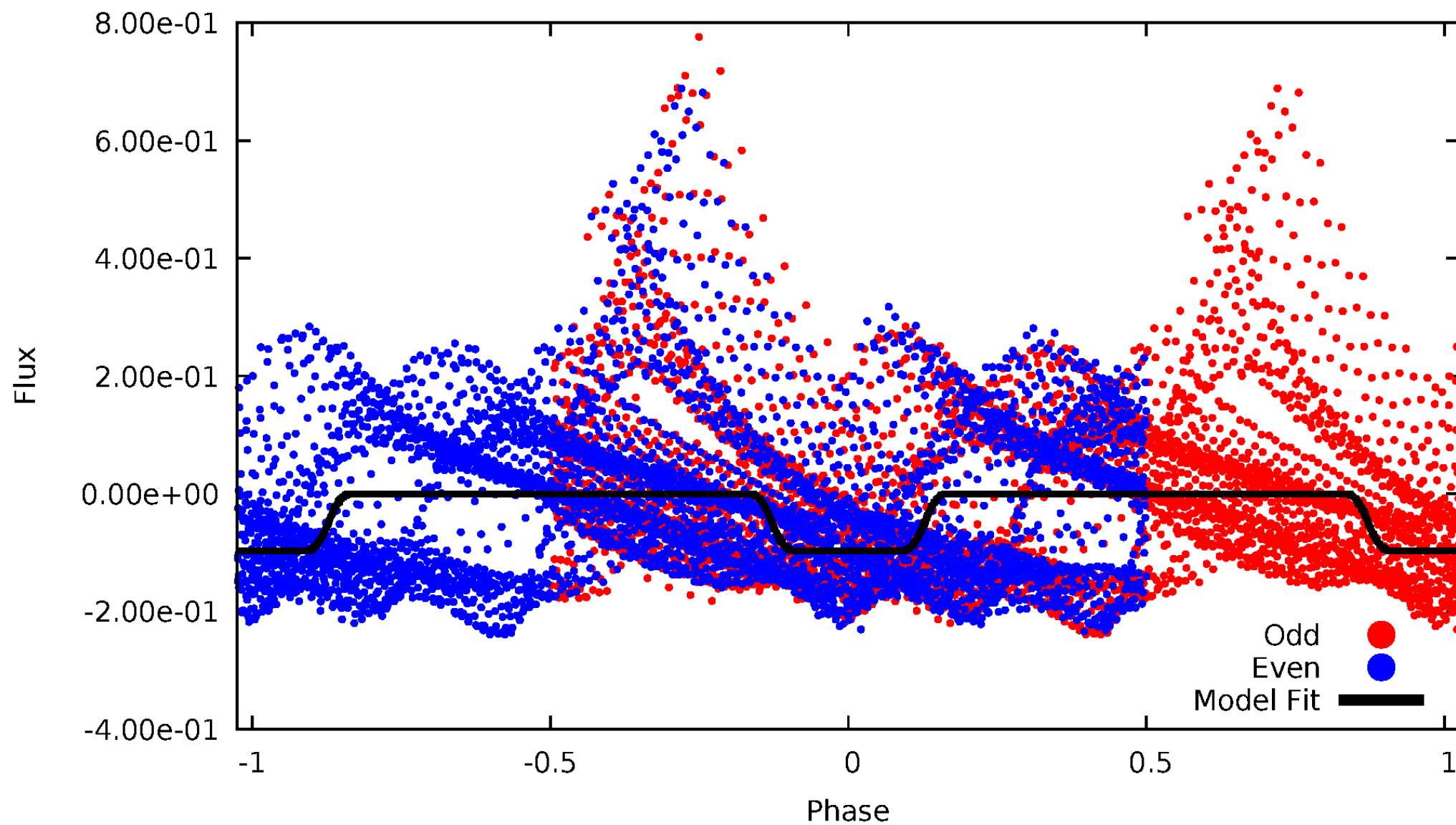
DV Odd/Even

TCE 007198959-01



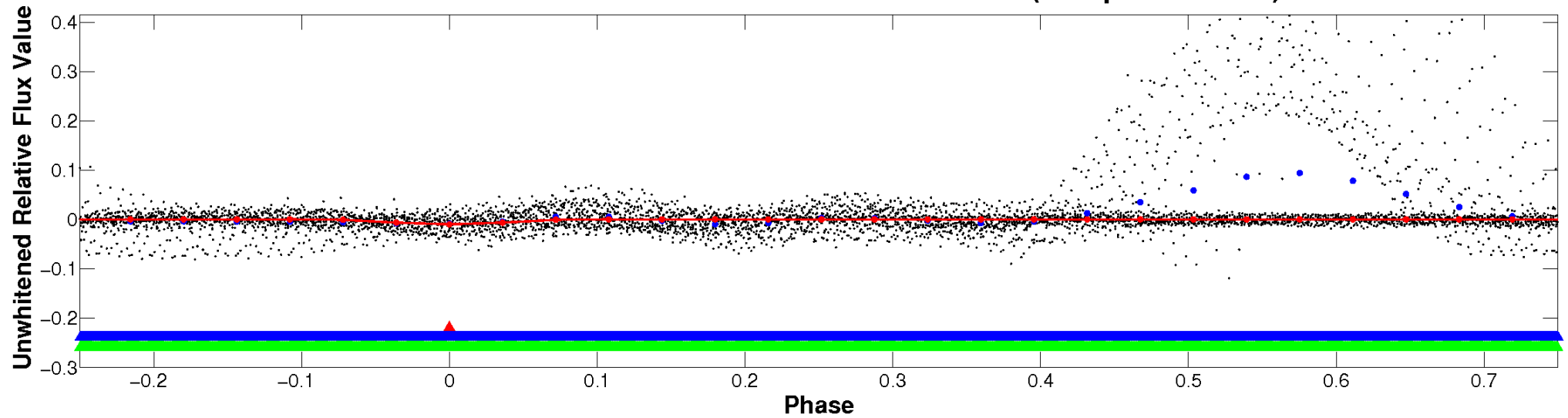
ALT Odd/Even

TCE 007198959-01

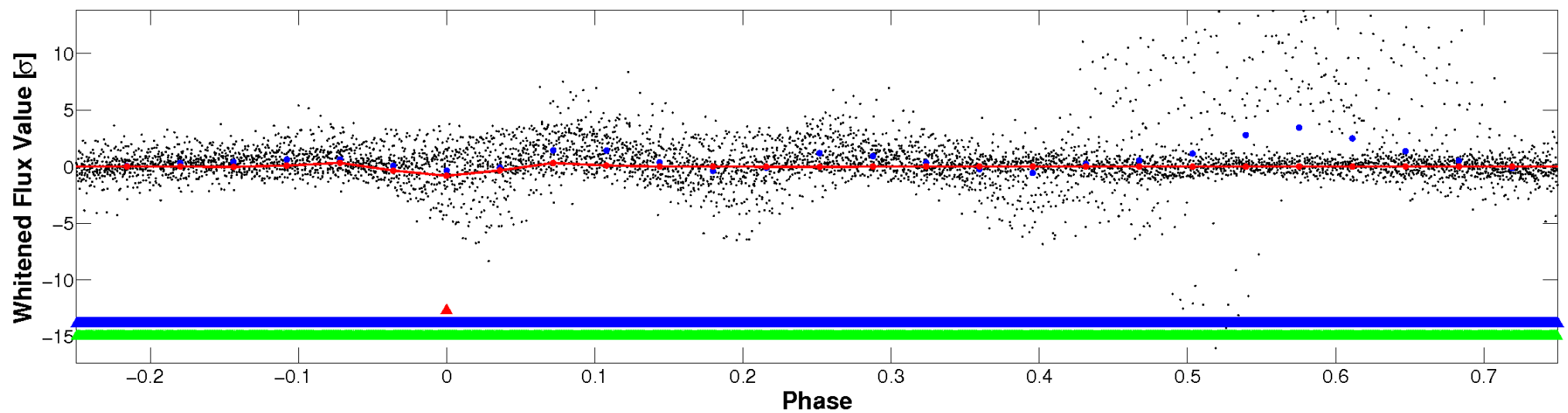


Non-Whitened Vs. Whitened Light Curve

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

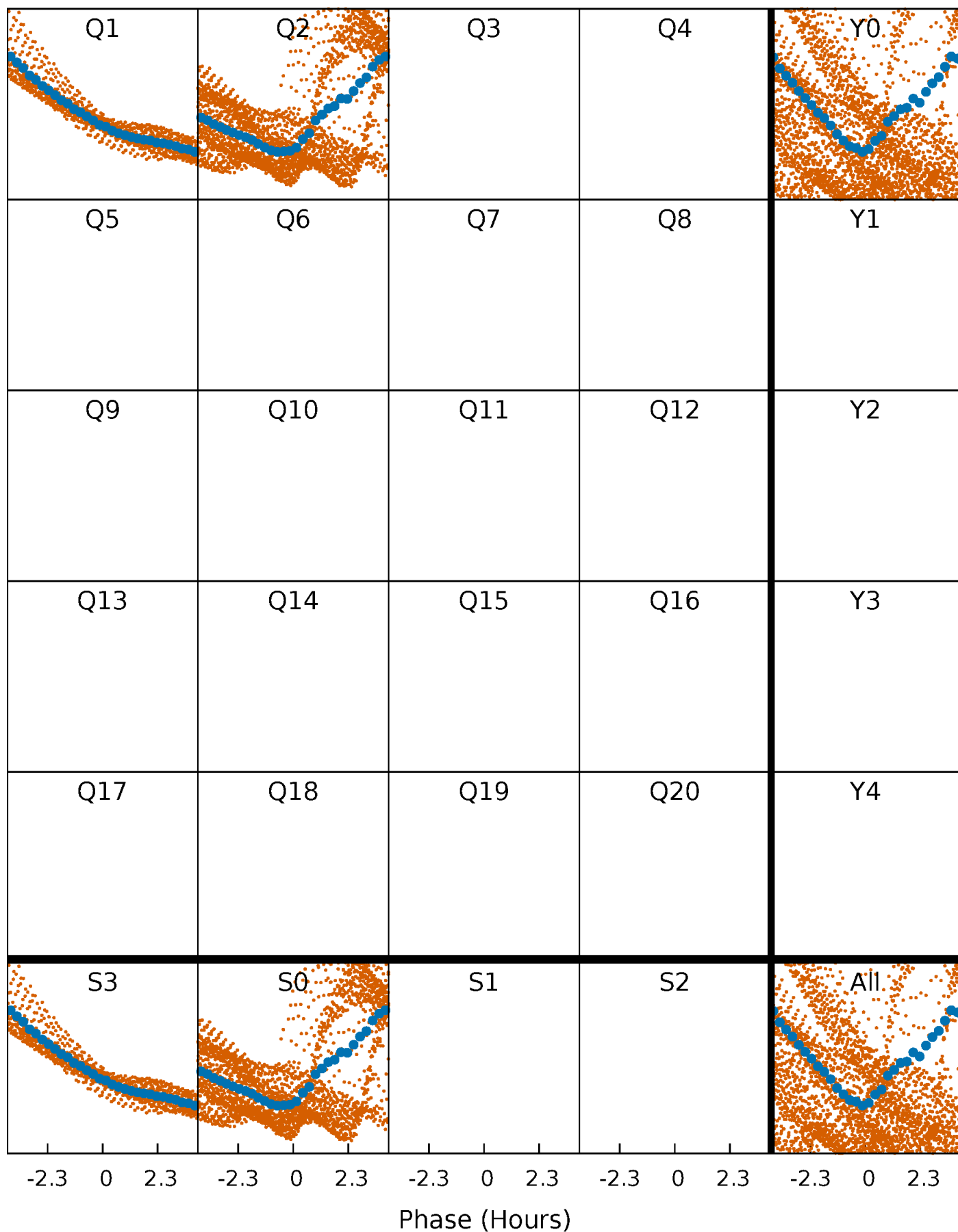


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 007198959-01 P= 0.568254 Days $T_0=131.985266$ (BKJD)



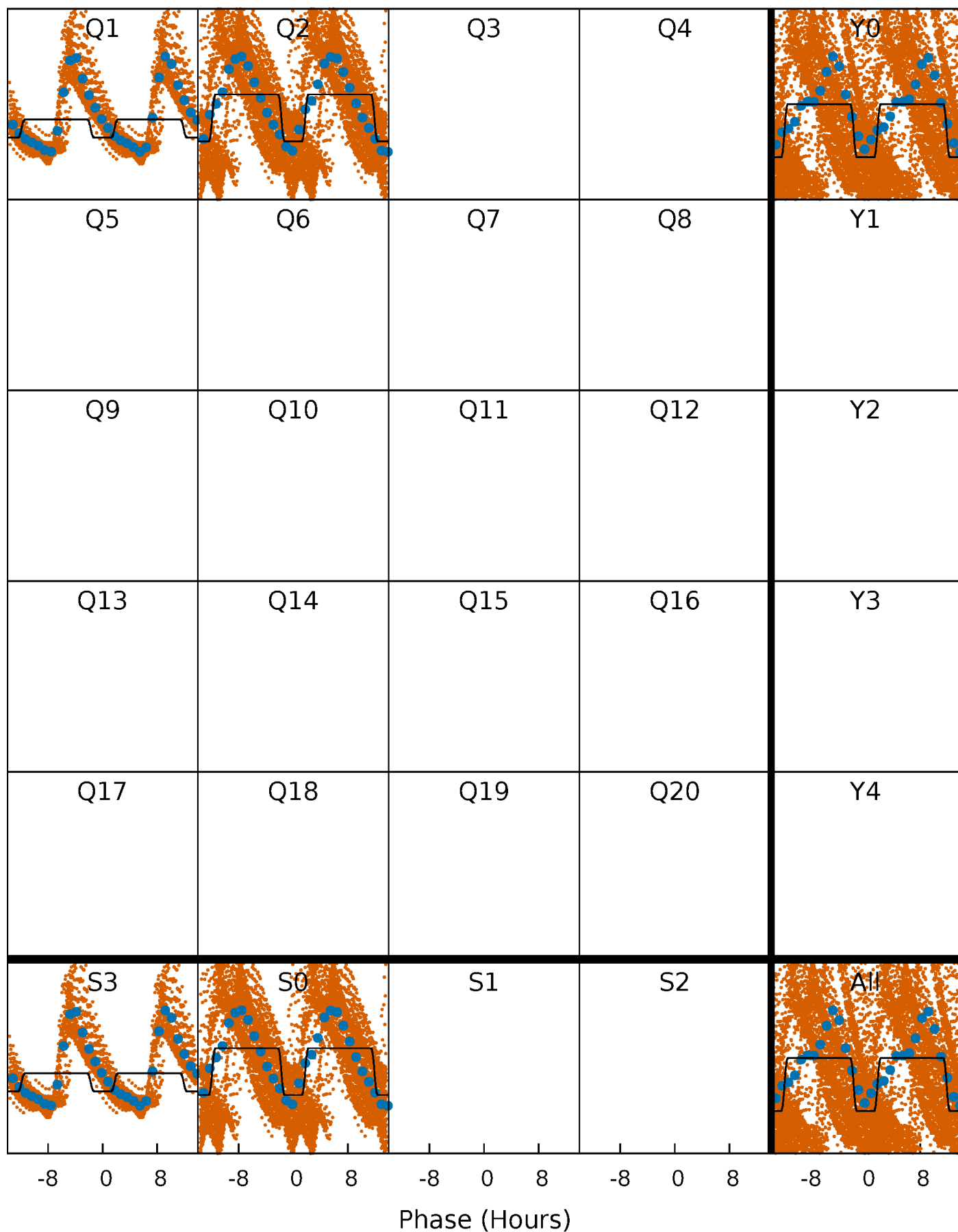
DV Quarter-Phased Transit Curves

TCE 007198959-01 P= 0.568254 Days $T_0=131.985266$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

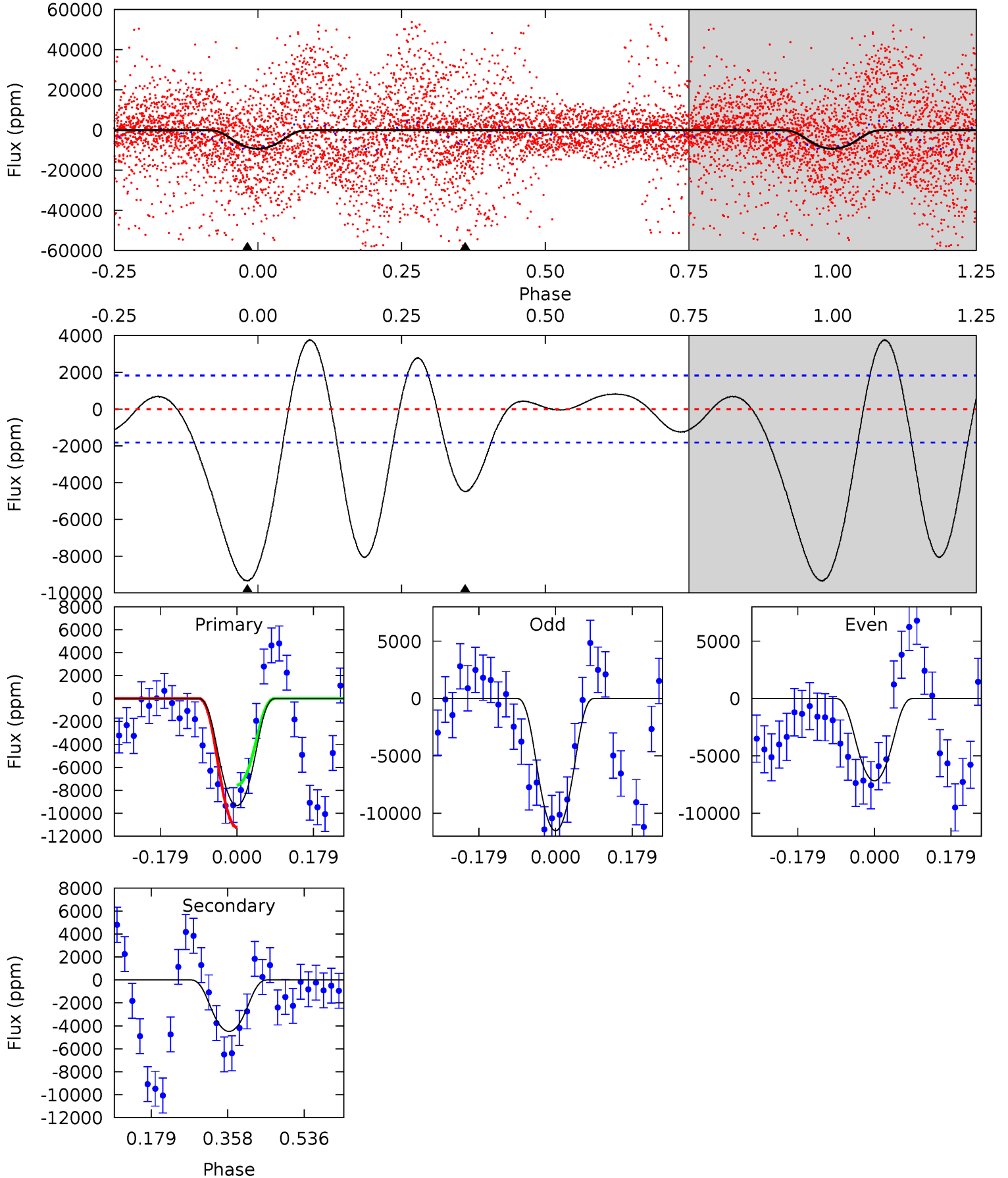
TCE 007198959-01 P= 0.568582 Days $T_0=131.920514$ (BKJD)



DV Model-Shift Uniqueness Test

007198959-01, P = 0.568254 Days, E = 131.417012 Days

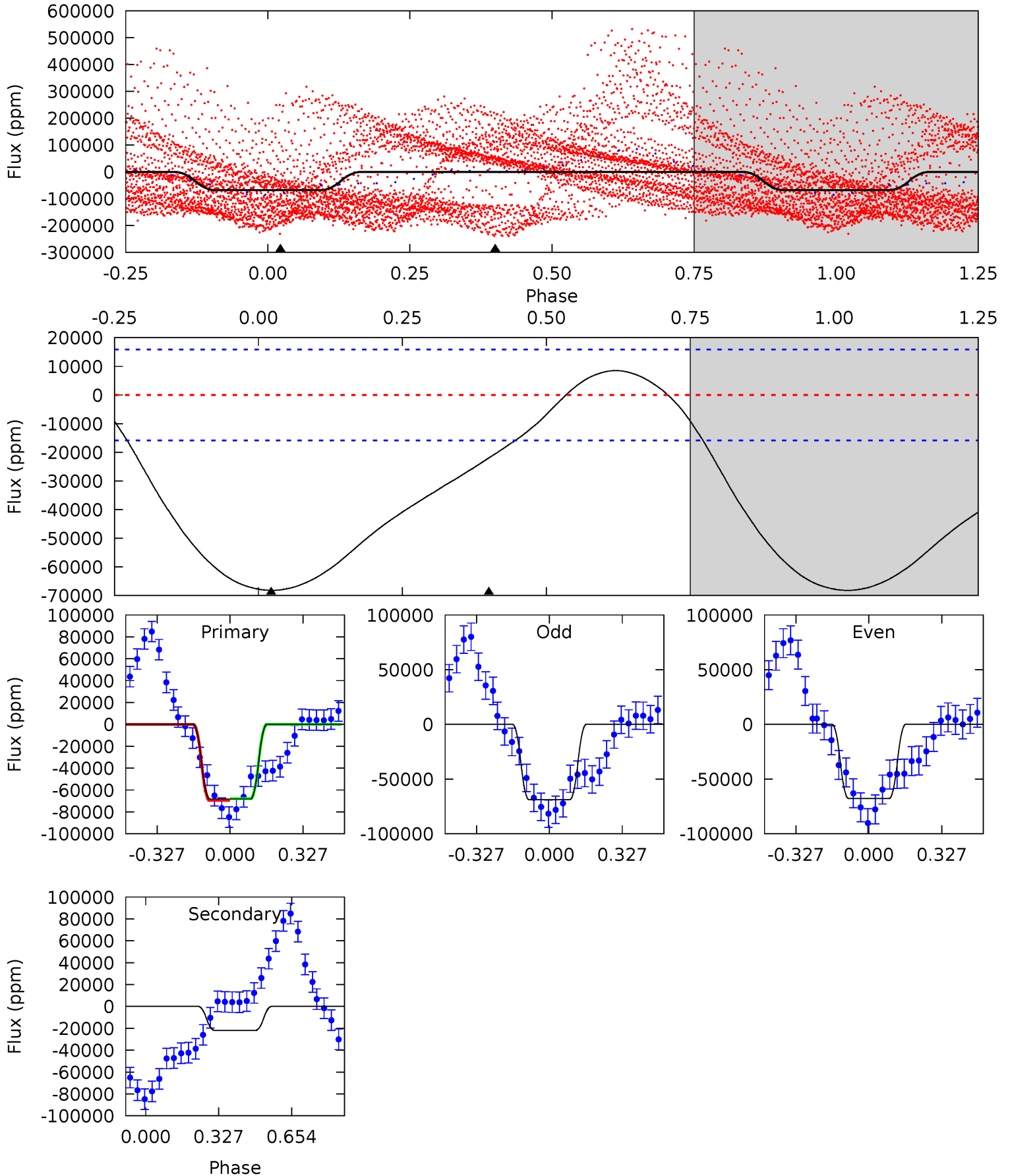
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.8	10.9	0	0	4.44	1.34	5.25	22.8	22.8	10.9	10.9	4.84	0.91	0.29	3.79



Alt Model-Shift Uniqueness Test

007198959-01, P = 0.568582 Days, E = 131.351932 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.5	5.96	0	0	4.31	0.98	1.61	18.5	18.5	5.96	5.96	0.17	0.83	0.11	0.28



Stellar Parameters For KIC 007198959

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5982^{+189}_{-232}	$4.372^{+0.112}_{-0.192}$	$-0.080^{+0.250}_{-0.300}$	$1.081^{+0.325}_{-0.175}$	$1.003^{+0.153}_{-0.112}$	$1.118^{+0.569}_{-0.572}$
	+3%/-4%	+3%/-4%	+312%/-375%	+30%/-16%	+15%/-11%	+51%/-51%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007198959-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4487 ± 410	$14.26^{+4.96}_{-4.45}$	3328^{+267}_{-212}	4480^{+845}_{-509}	$2.223^{+2.395}_{-1.041}$
Alt.	-21947 ± 3680	$38.01^{+6.88}_{-6.00}$	3330^{+265}_{-185}	4163^{+307}_{-272}	$1.511^{+0.707}_{-0.441}$

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 $A_{obs} \gg 1.0$

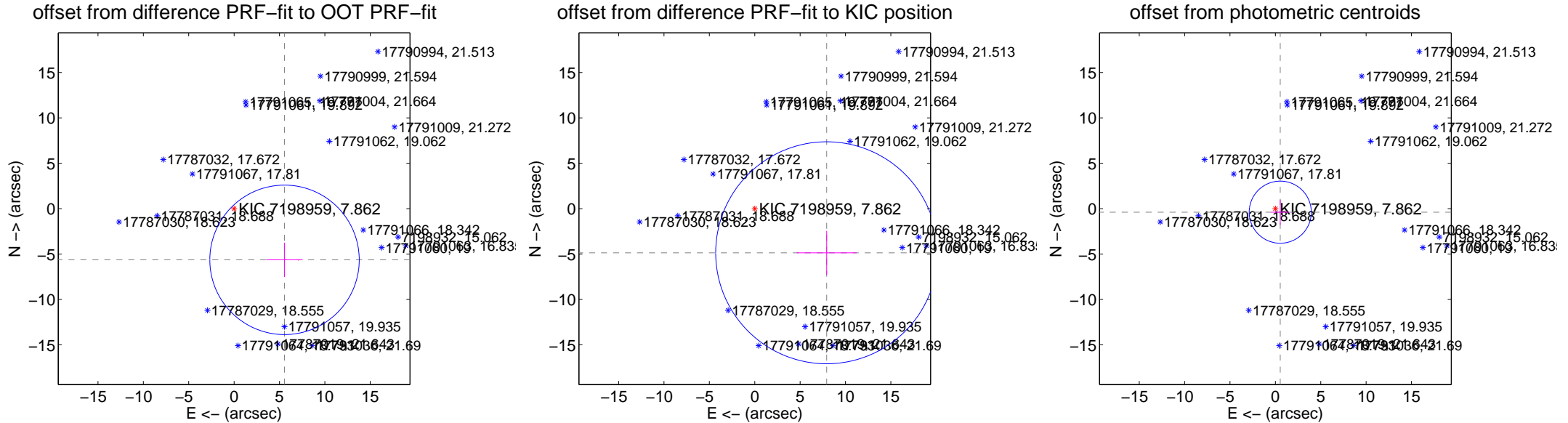
DV Centroid Data

Supplemental centroid analysis for 007198959-01. **Kepler magnitude: 7.86.** Transit SNR 15.25

There are 0 quarters with good PRF difference image offsets

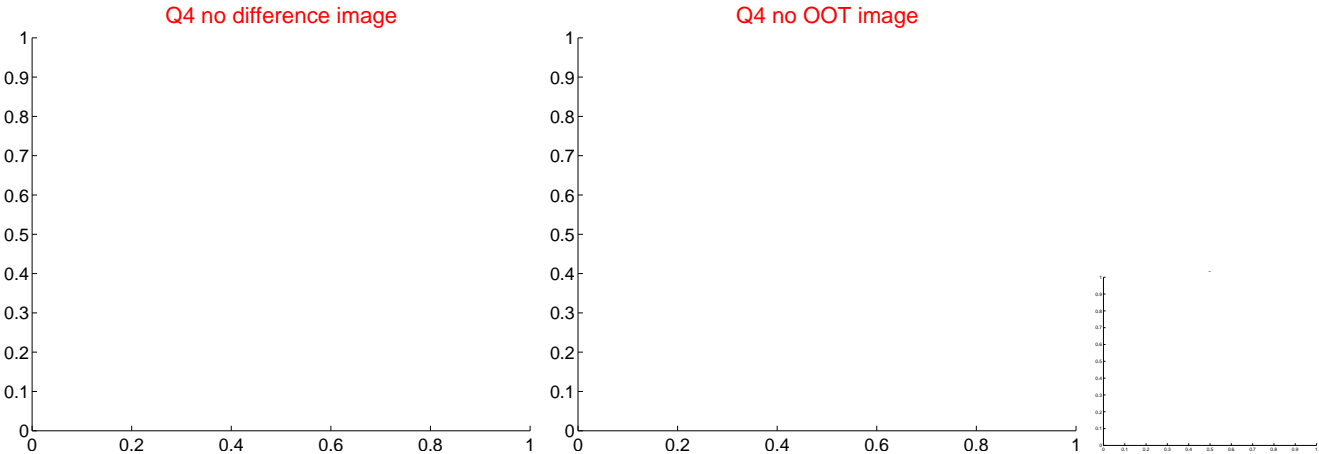
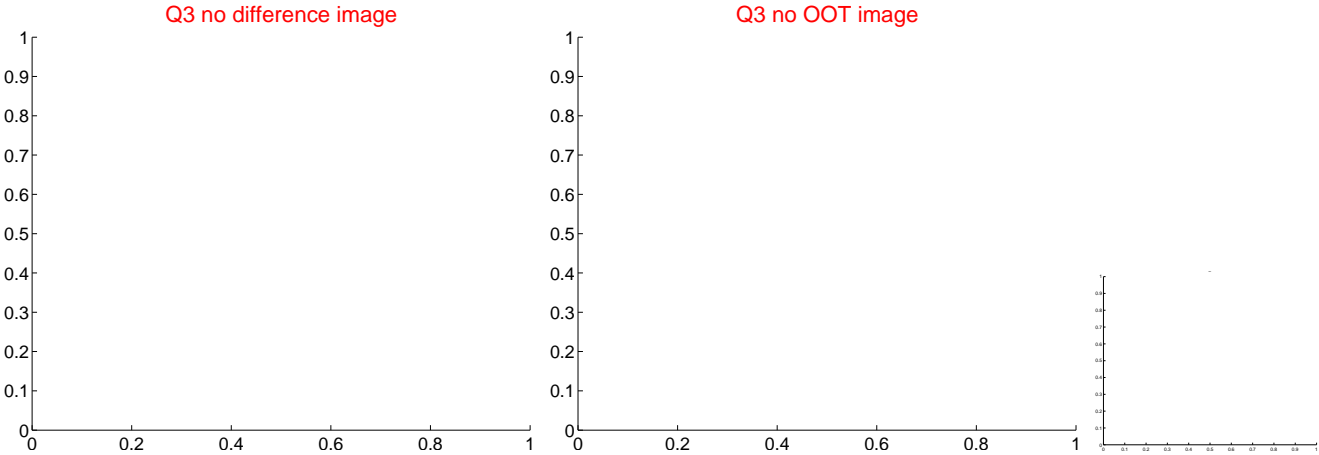
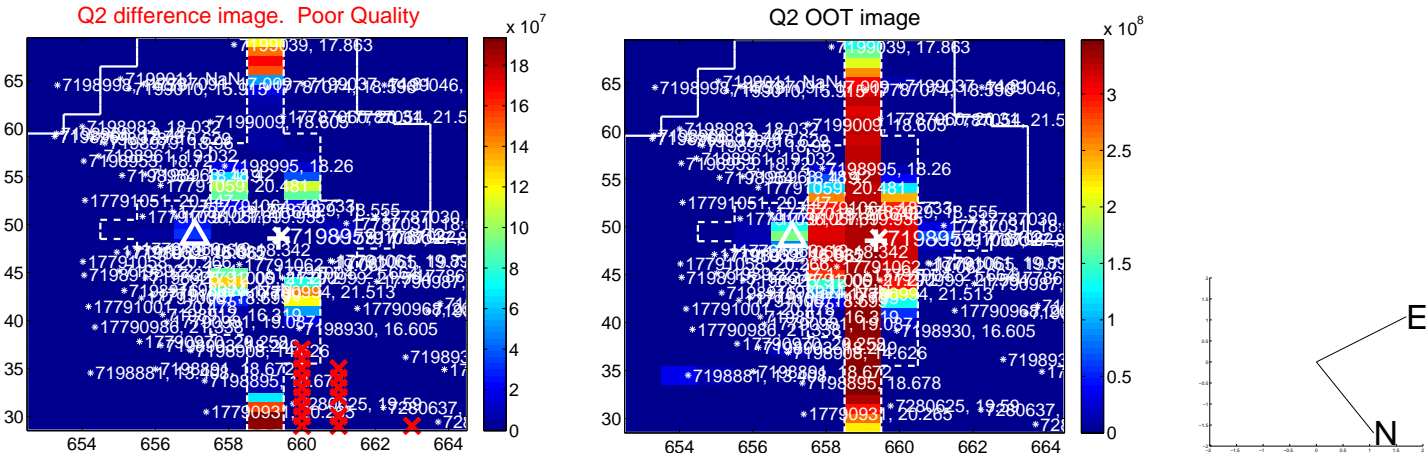
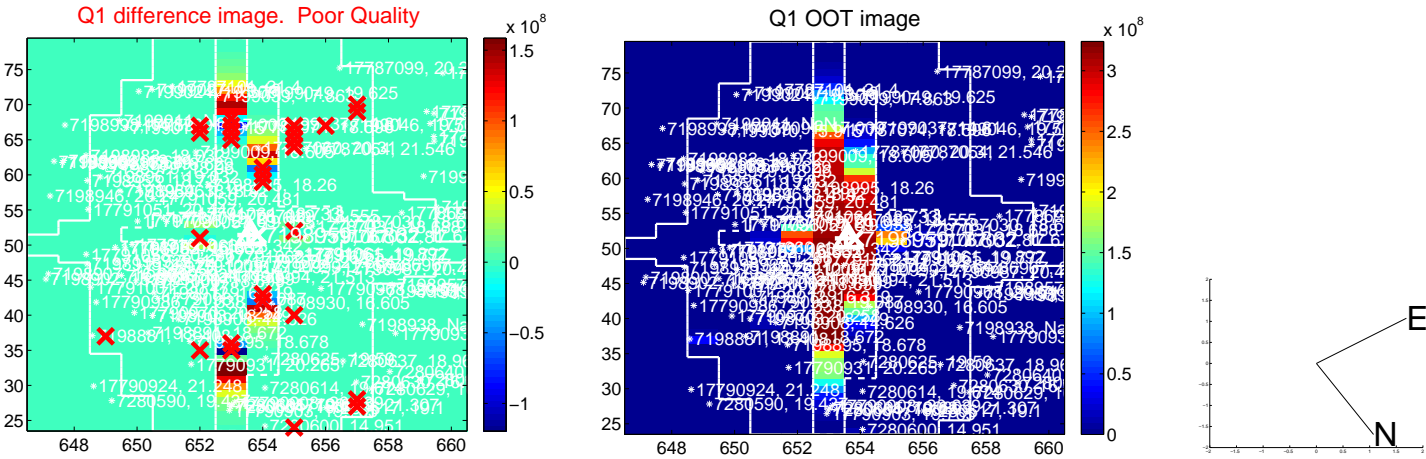
The direct PRF centroid is offset from the target star catalog position by about 1.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	7.915 ± 2.744	2.88	-5.555 ± 1.992	-5.638 ± 1.890
PRF-fit source offset from KIC position	9.296 ± 4.076	2.28	-7.925 ± 3.297	-4.860 ± 2.421
photometric centroid source offset	0.66 ± 1.14	0.58	-0.54 ± 1.00	-0.39 ± 1.38



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.



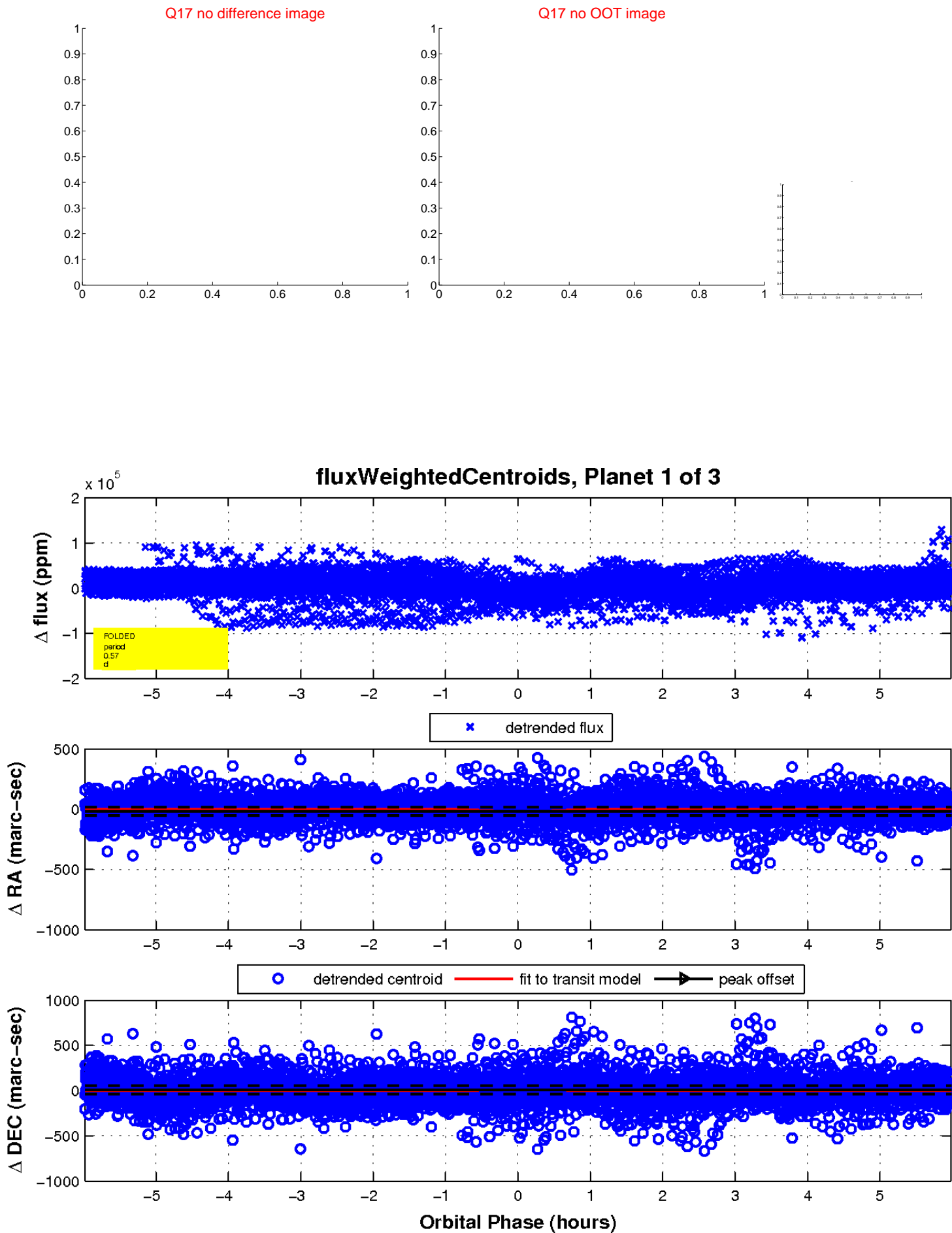
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



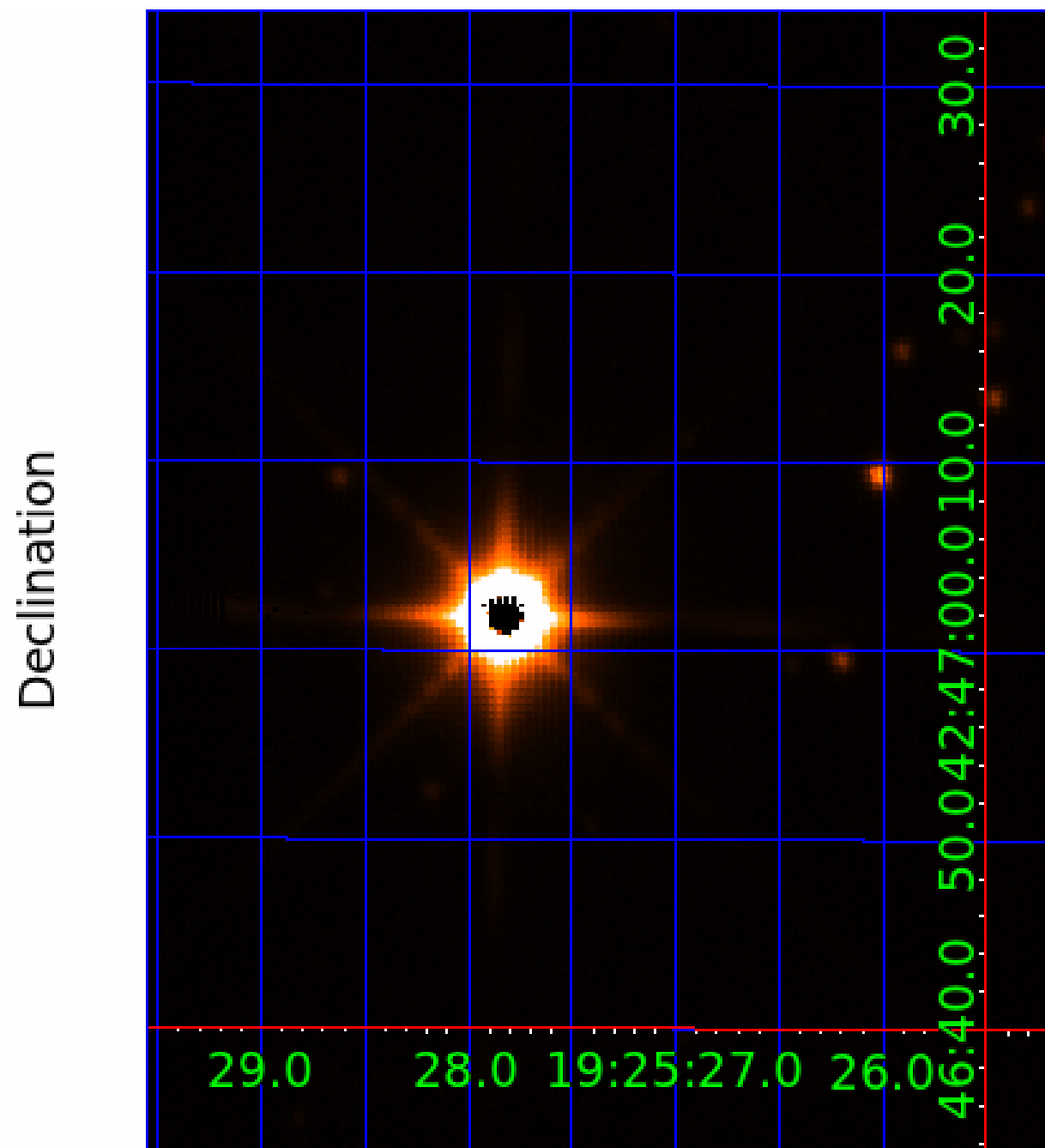
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 007198959

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})
007198959-01	OBS	No	0.568254	131.985266	10467.4	1.994	28.3	15.2	1.08	5982	13.85	7414.93
007198959-02	OBS	No	0.569688	131.775777	29.9	2.000	19.9	-1.0	1.08	5982	0.59	7390.05
007198959-03	OBS	No	0.570326	131.550777	24.6	2.000	9.4	-1.0	1.08	5982	0.54	7379.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007198959-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
007198959-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_SATURATED
007198959-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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.

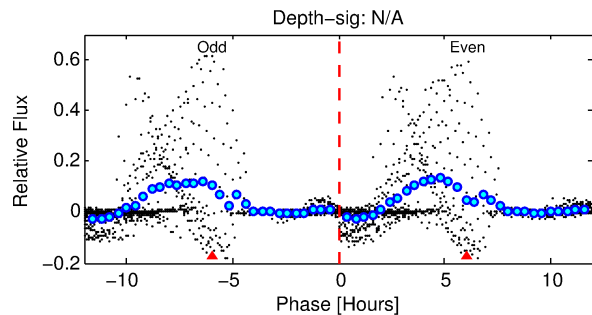
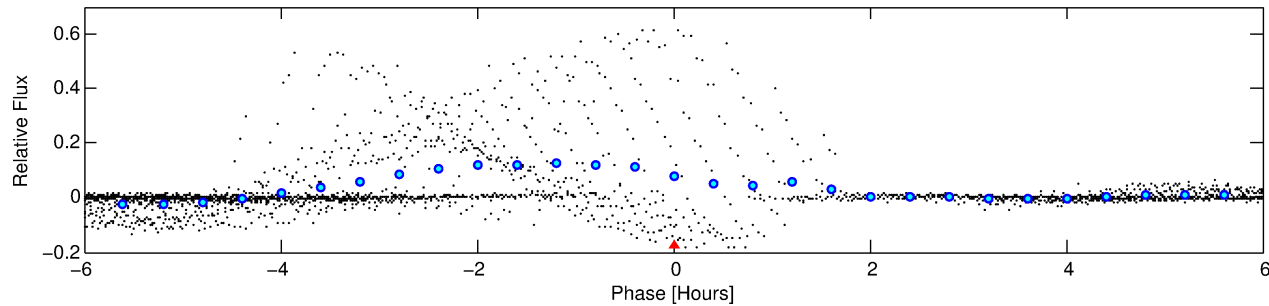
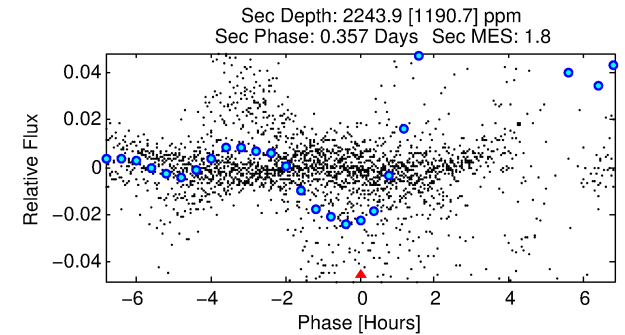
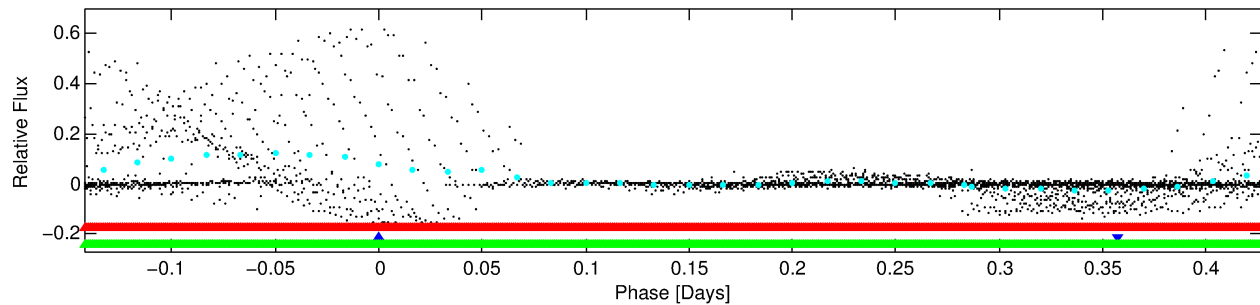
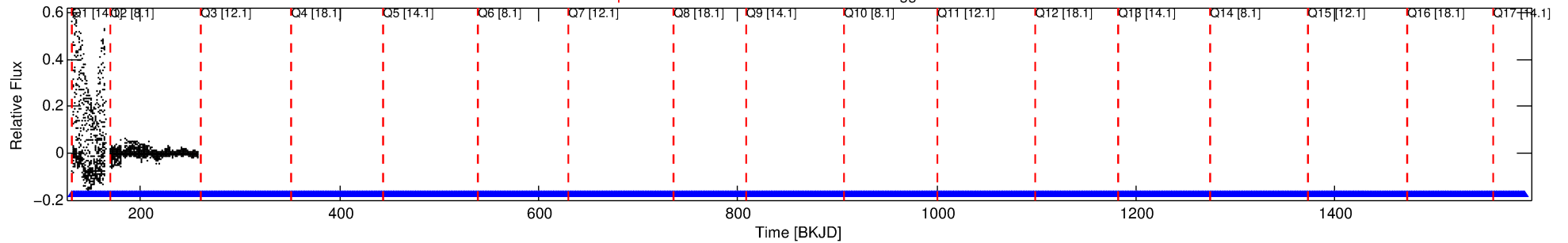
Ephemeris Match Information For 007198959-02

No Significant Match Found

DV One-Page Summary

KIC: 7198959 Candidate: 2 of 3 Period: 0.570 d

Kp: 7.86 R*: 1.08 Rs Teff: 5982.0 K Logg: 4.37 Fe/H: -0.080



TPS TCE Results:

Period = 0.56969 d
Epoch = 131.7758 BKJD

DV fit results are unavailable

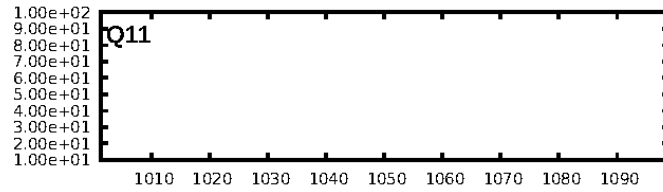
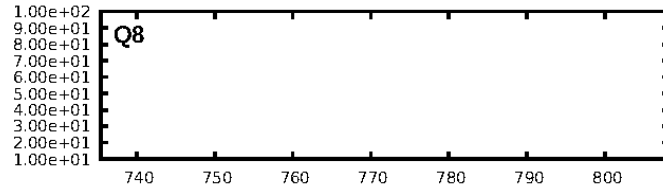
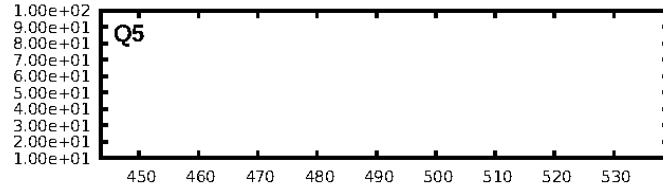
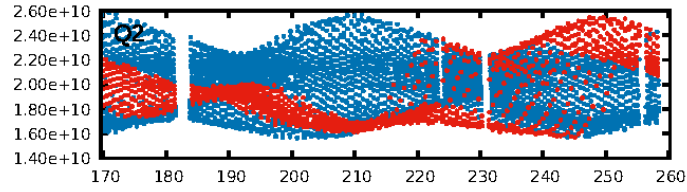
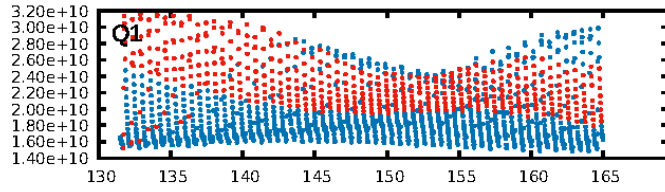
DV Diagnostic Results:

ShortPeriod-sig: 1.0% [0.01 σ]
LongPeriod-sig: 0.4% [0.01 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
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: N/A

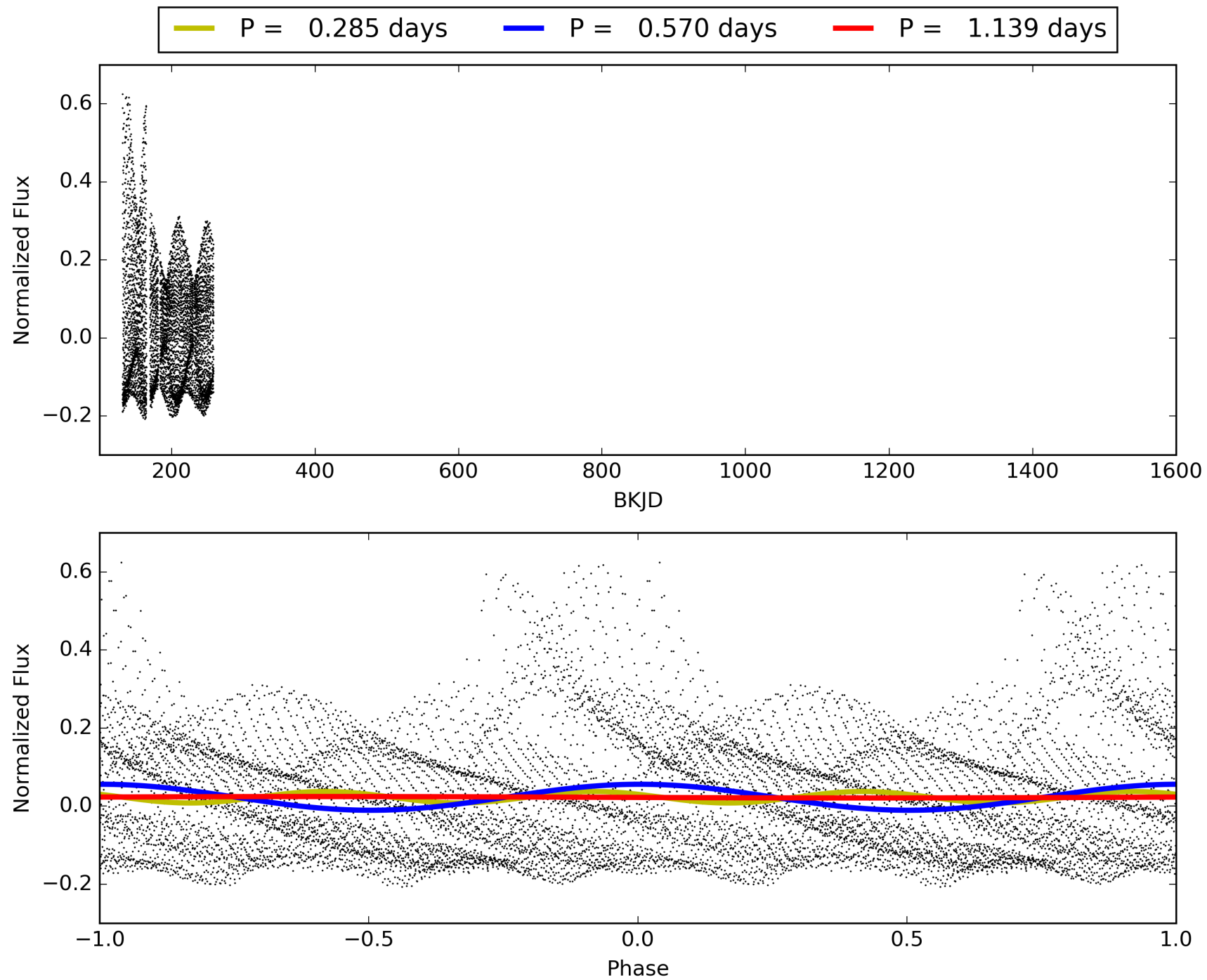
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:37:45 Z

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

TCE 007198959-02, PDC Light Curves

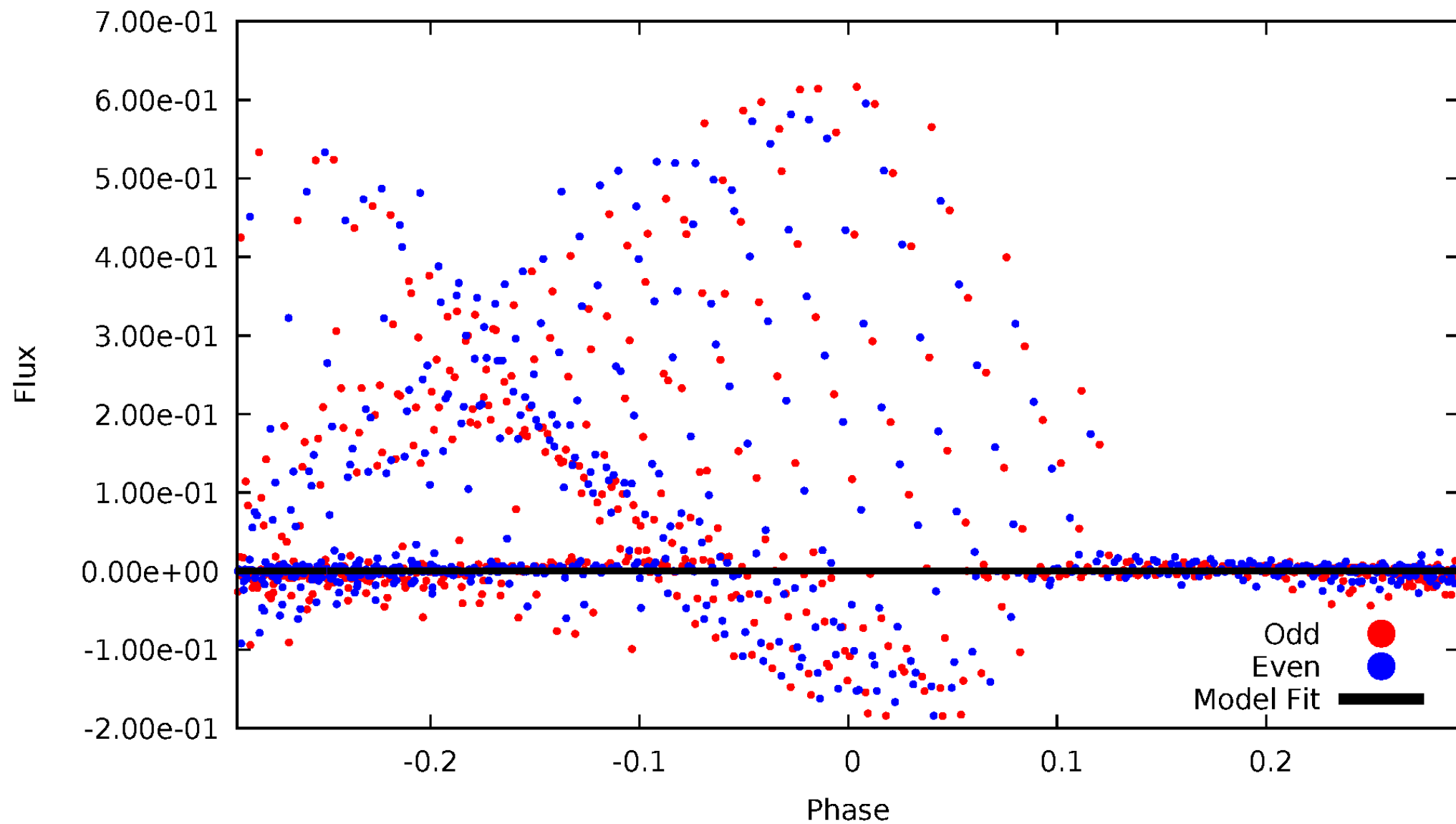


TCE 007198959-02



DV Odd/Even

TCE 007198959-02

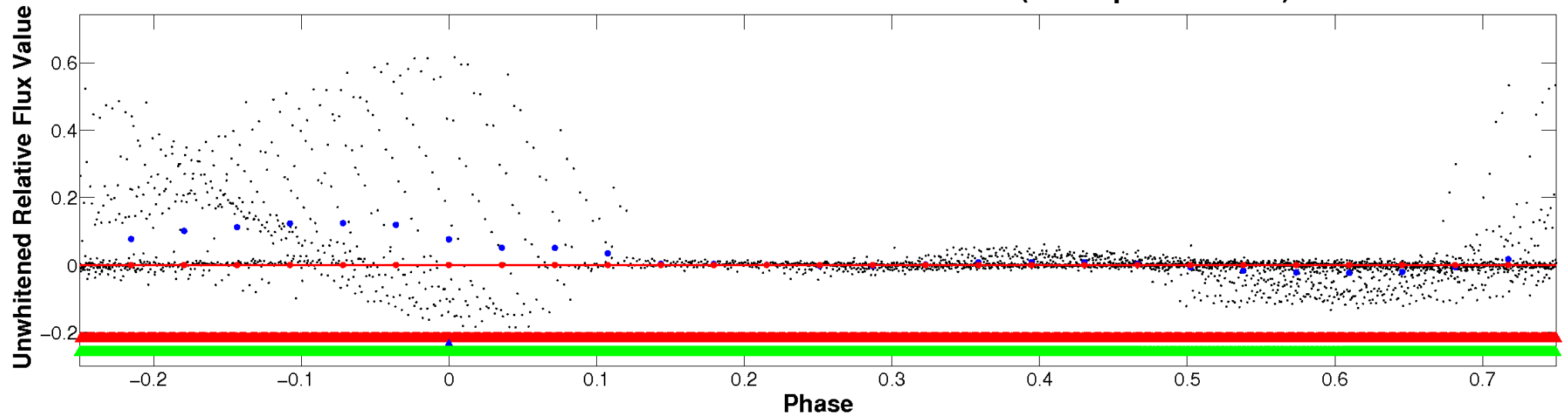


ALT Odd/Even

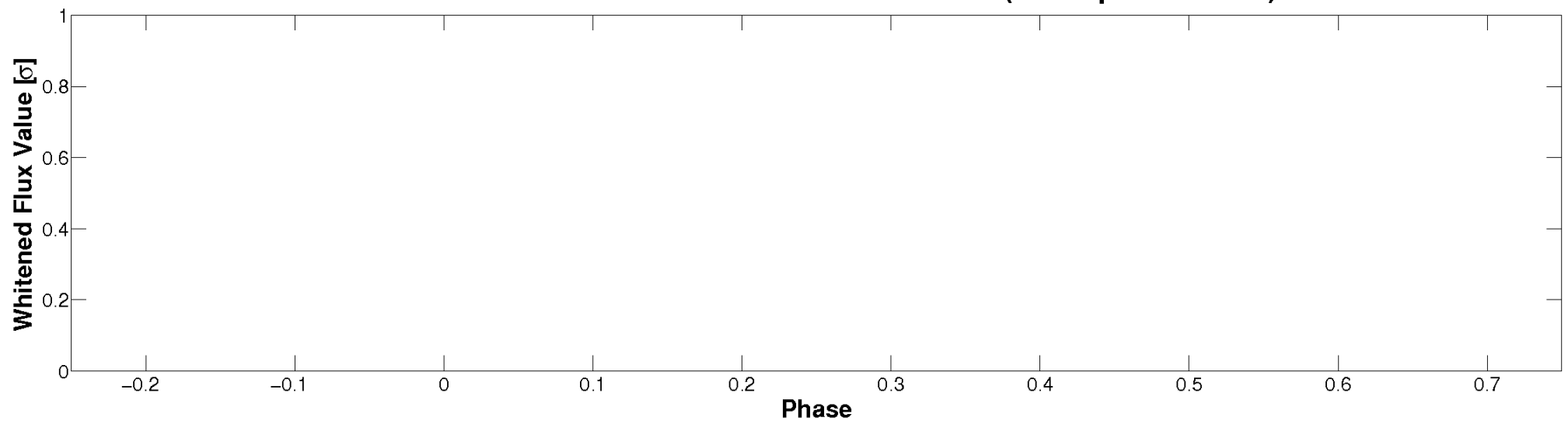
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

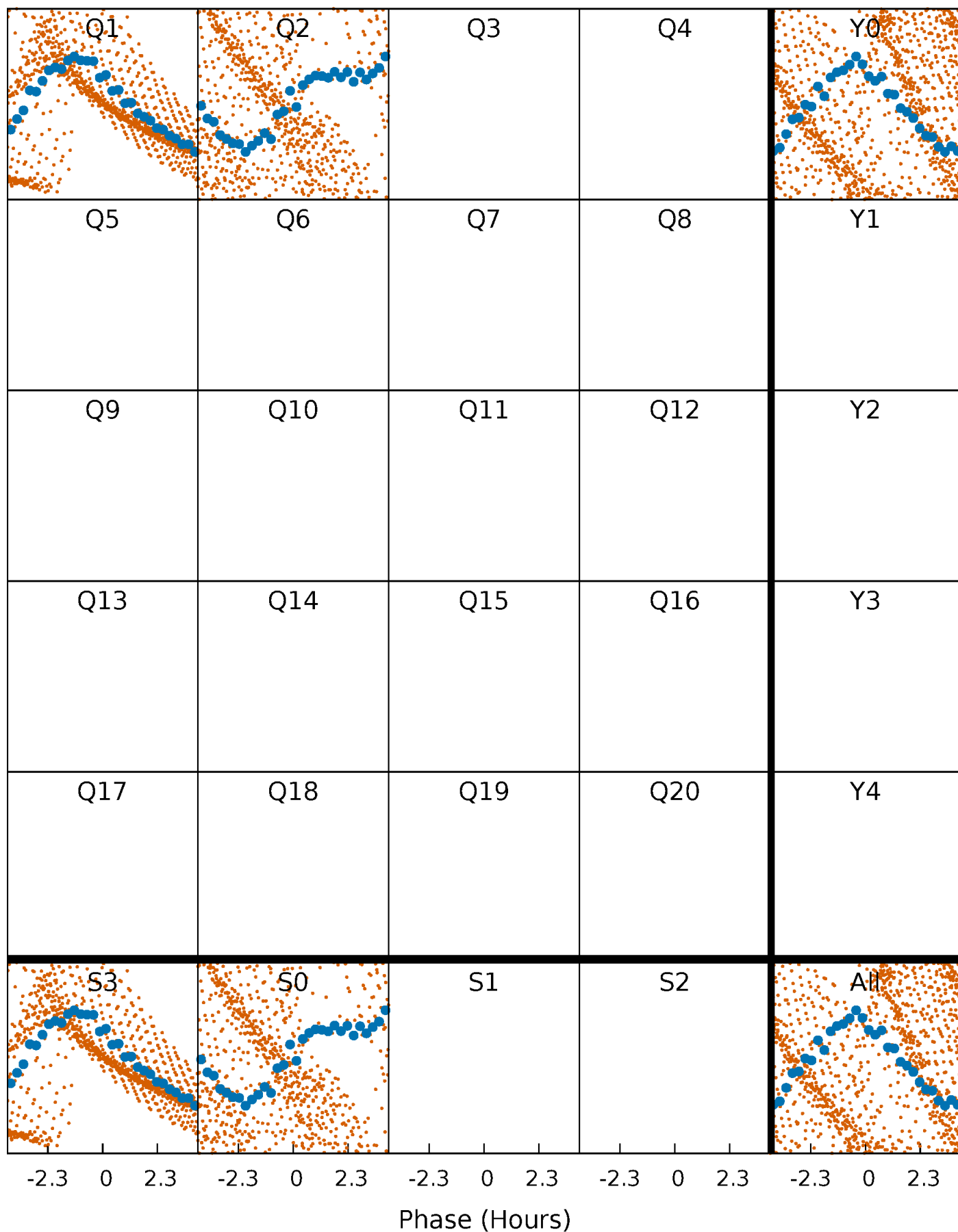


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



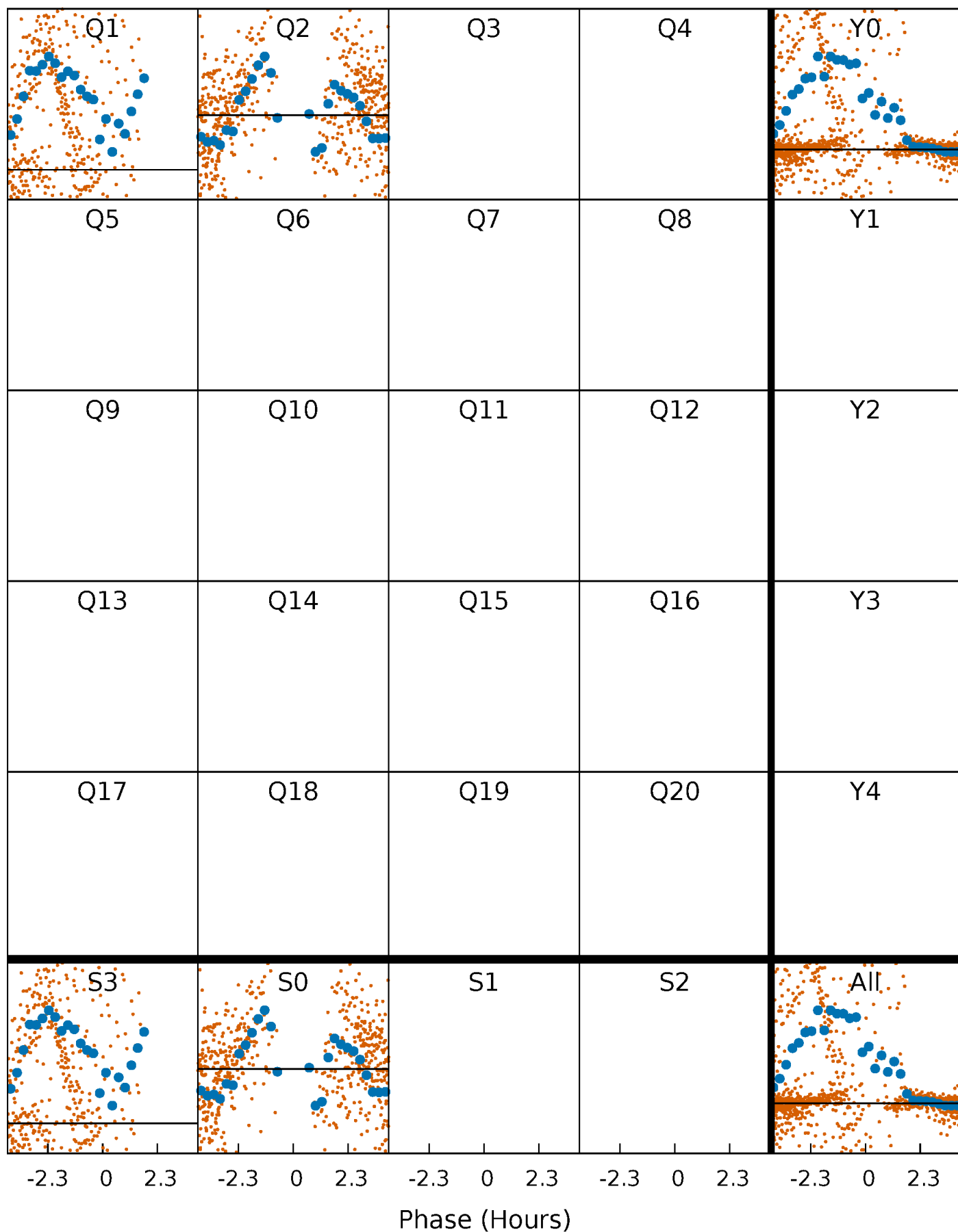
PDC Quarter-Phased Transit Curves

TCE 007198959-02 P= 0.569688 Days $T_0=131.775777$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 007198959-02 P= 0.569688 Days $T_0=131.775777$ (BKJD)

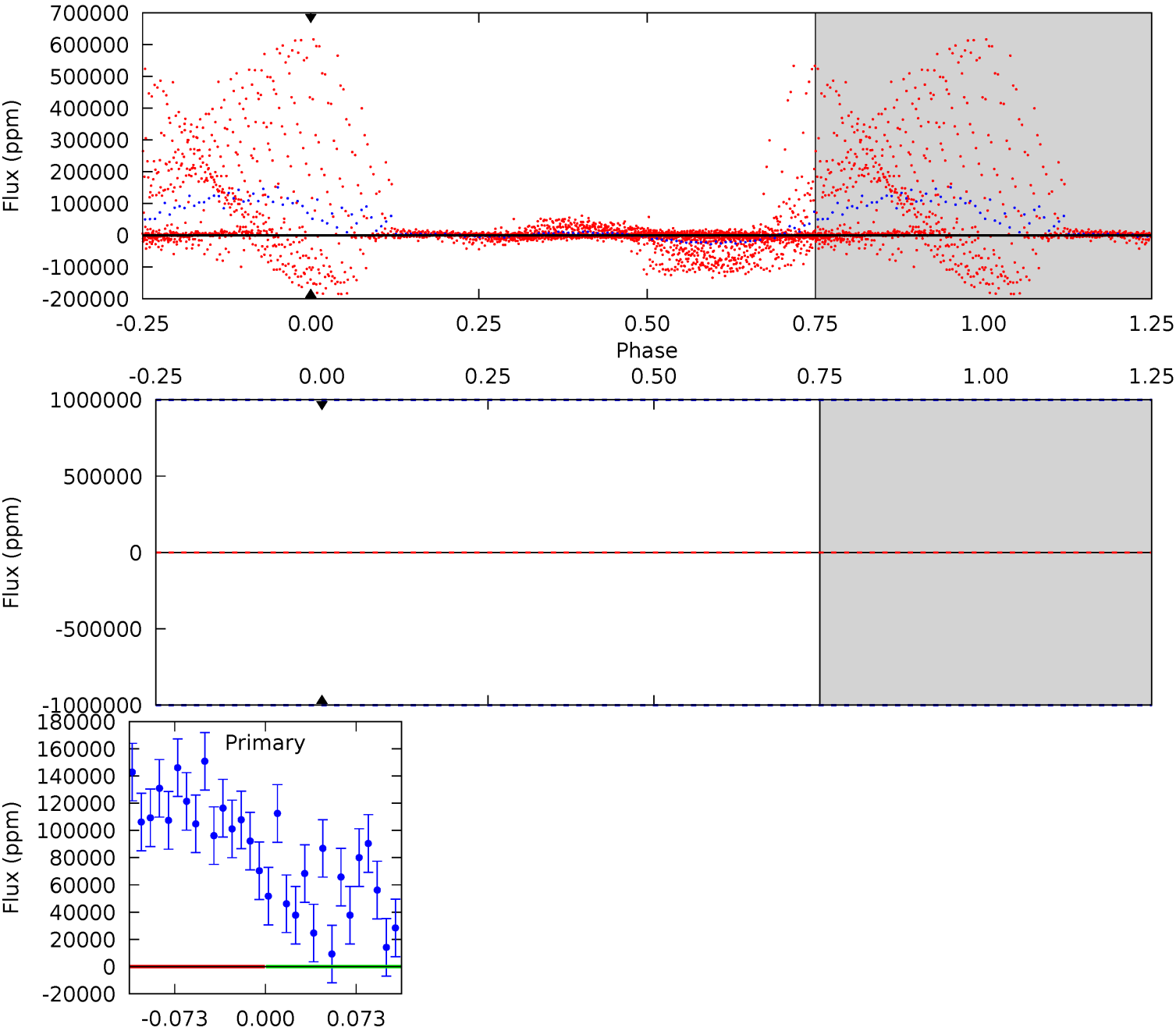


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

007198959-02, P = 0.569688 Days, E = 131.206089 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

This plot does not exist for this TCE.

Stellar Parameters For KIC 007198959

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5982^{+189}_{-232}	$4.372^{+0.112}_{-0.192}$	$-0.080^{+0.250}_{-0.300}$	$1.081^{+0.325}_{-0.175}$	$1.003^{+0.153}_{-0.112}$	$1.118^{+0.569}_{-0.572}$
	+3%/-4%	+3%/-4%	+312%/-375%	+30%/-16%	+15%/-11%	+51%/-51%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007198959-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$8.55^{+9.79}_{-6.05}$	3323^{+246}_{-202}	3915^{+21989}_{-24952}	$1.166^{+267.980}_{-222.380}$
Alt.	N/A	N/A	N/A	N/A	N/A

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

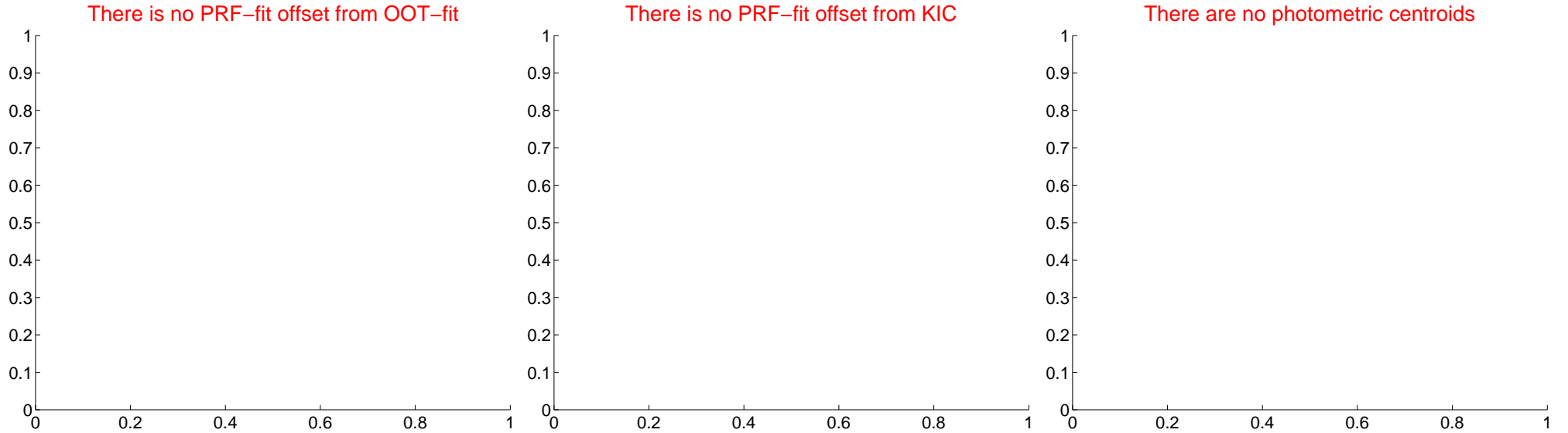
DV Centroid Data

Supplemental centroid analysis for 007198959-02. **Kepler magnitude: 7.86.** 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	—	—	—	—



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.



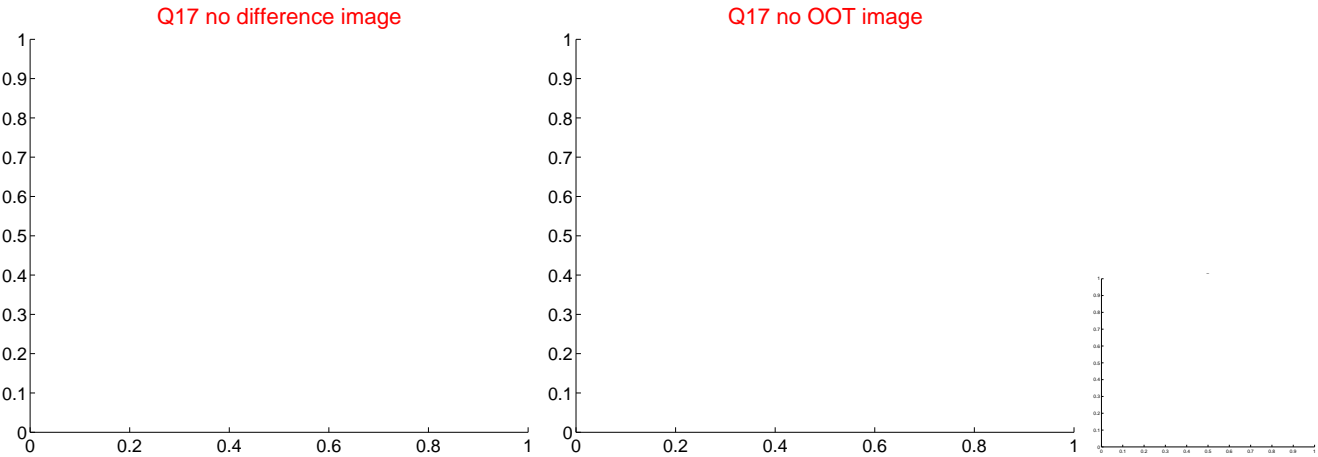
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

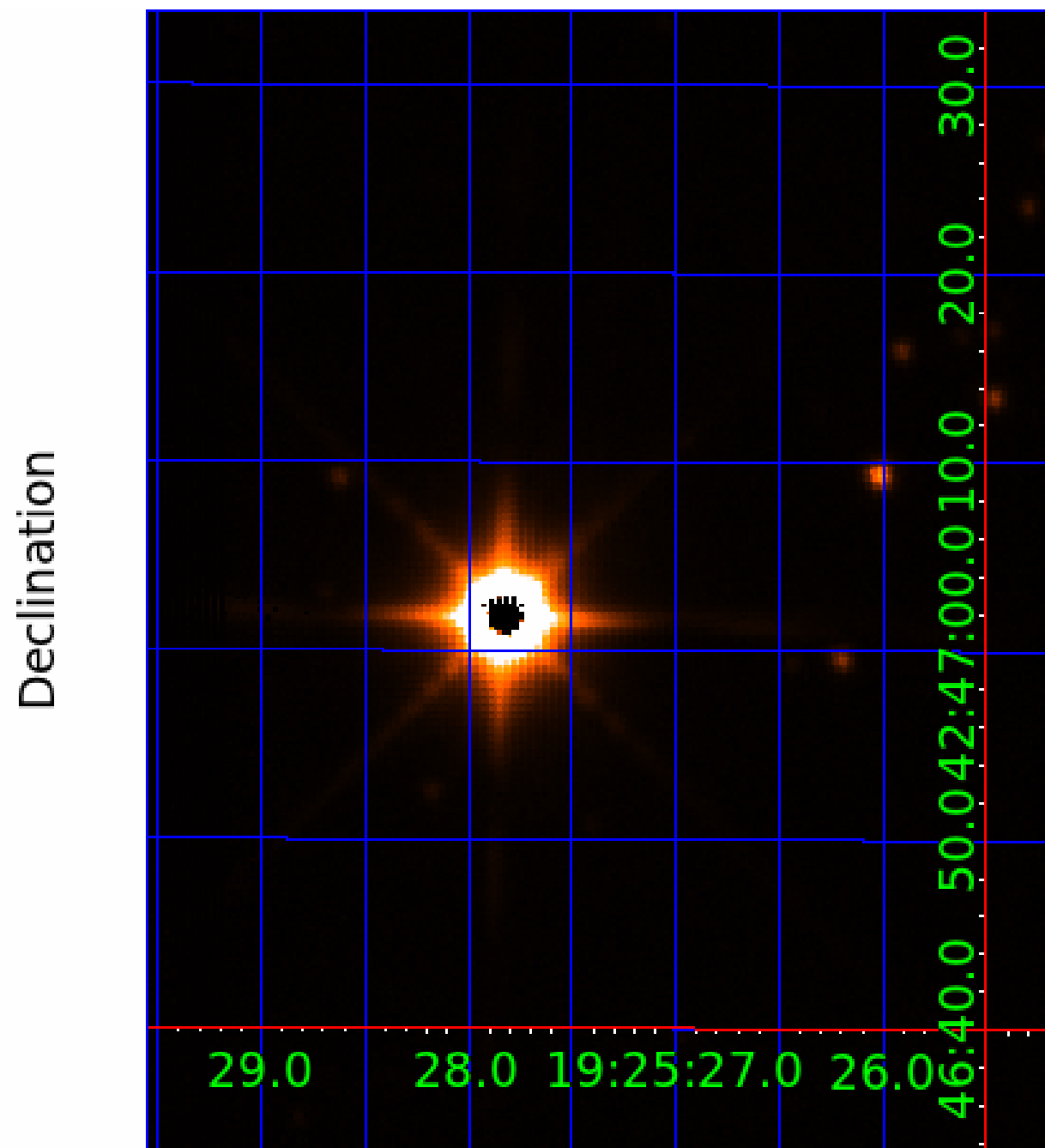


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 007198959

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})
007198959-01	OBS	No	0.568254	131.985266	10467.4	1.994	28.3	15.2	1.08	5982	13.85	7414.93
007198959-02	OBS	No	0.569688	131.775777	29.9	2.000	19.9	-1.0	1.08	5982	0.59	7390.05
007198959-03	OBS	No	0.570326	131.550777	24.6	2.000	9.4	-1.0	1.08	5982	0.54	7379.03

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007198959-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED
007198959-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—NO_FITS—CENT_SATURATED
007198959-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—CENT_SATURATED

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.

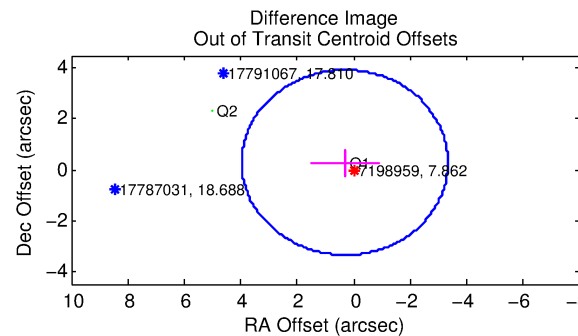
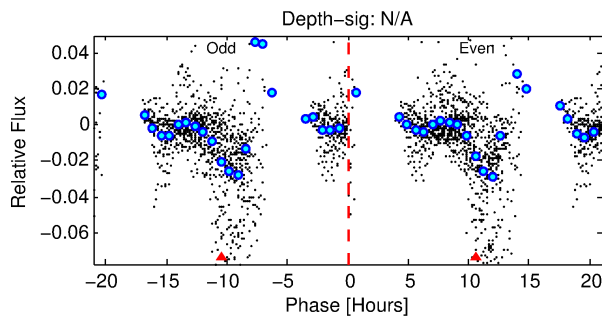
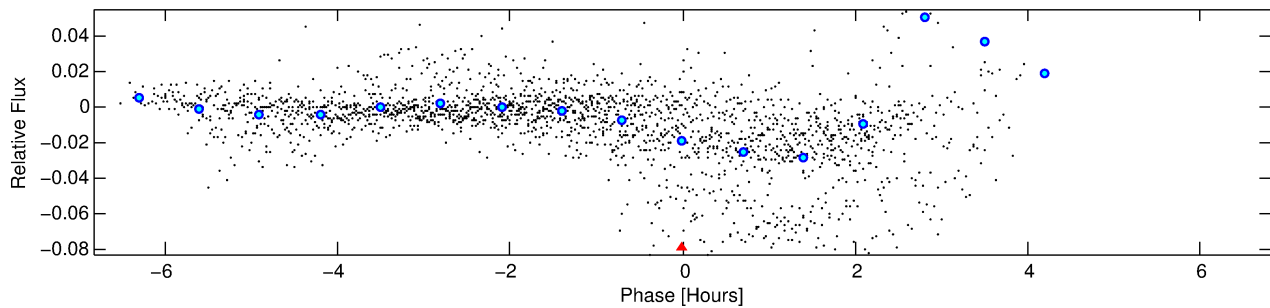
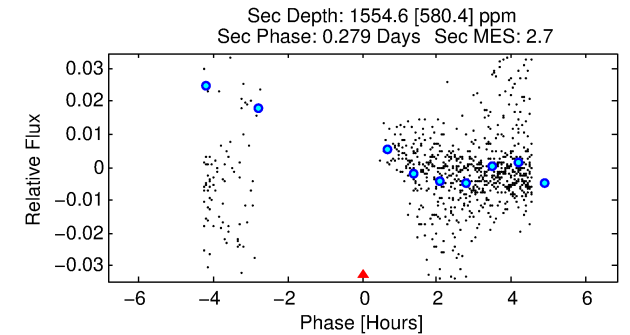
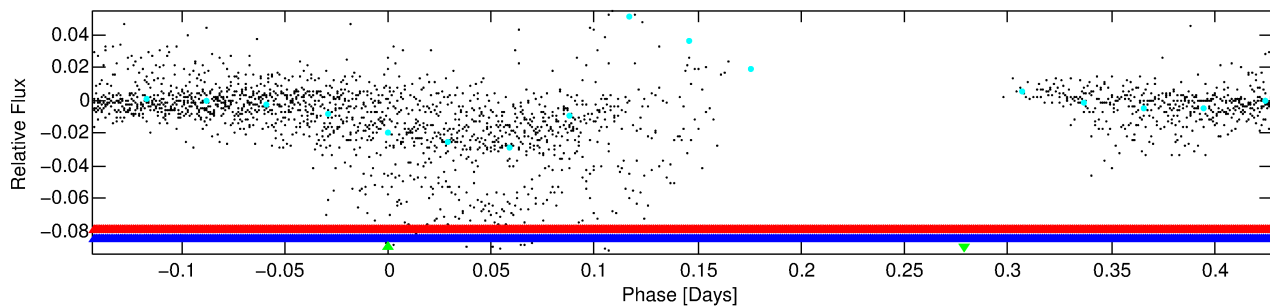
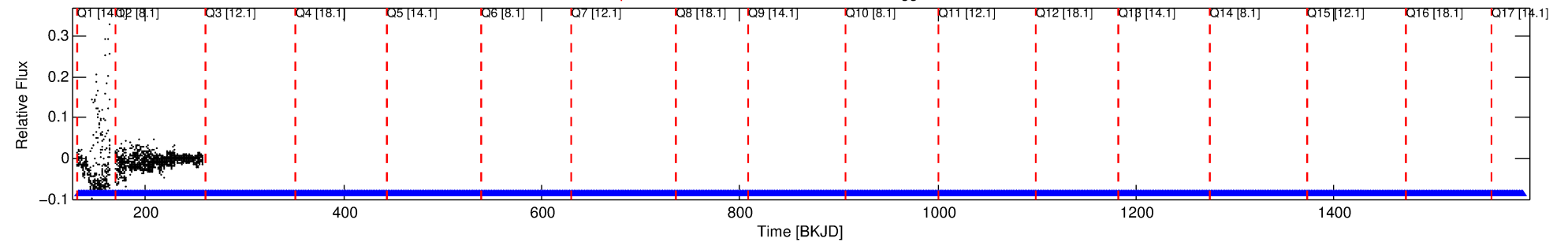
Ephemeris Match Information For 007198959-03

No Significant Match Found

DV One-Page Summary

KIC: 7198959 Candidate: 3 of 3 Period: 0.570 d

Kp: 7.86 R*: 1.08 Rs Teff: 5982.0 K Logg: 4.37 Fe/H: -0.080



TPS TCE Results:

Period = 0.57033 d
Epoch = 131.5508 BKJD

DV fit results are unavailable

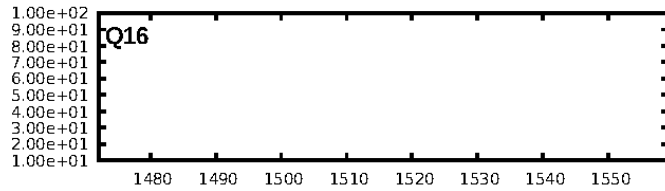
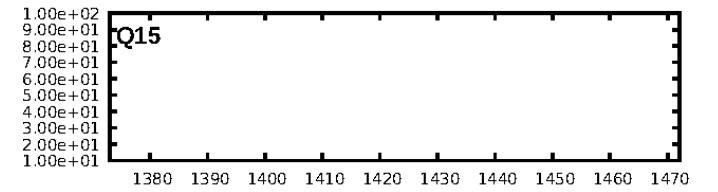
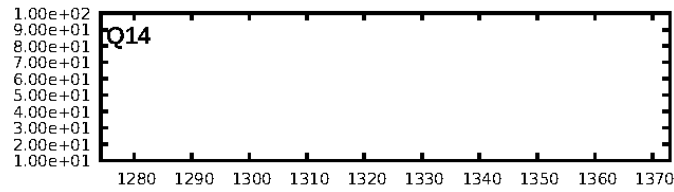
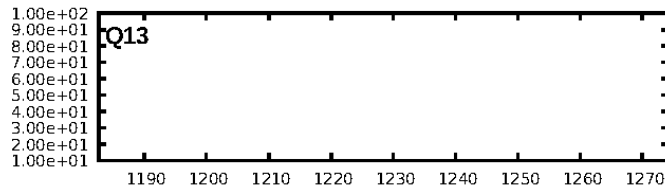
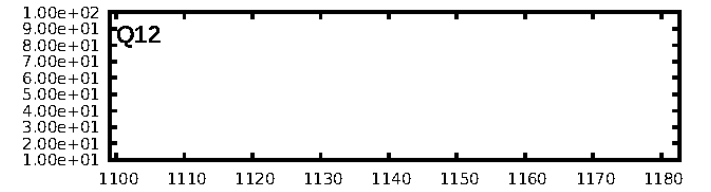
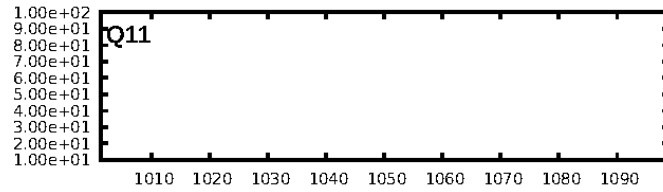
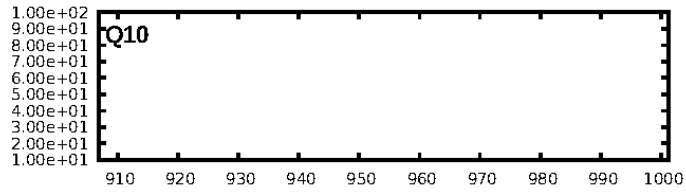
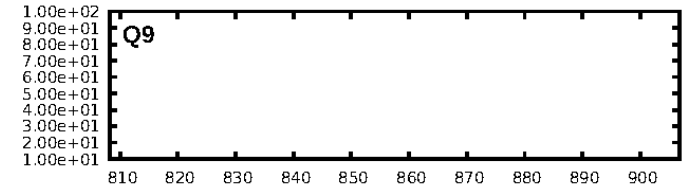
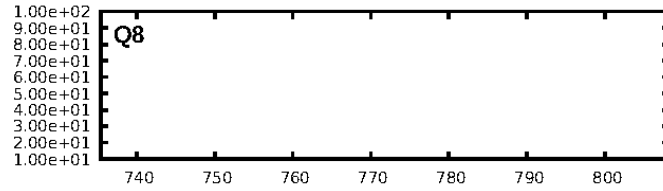
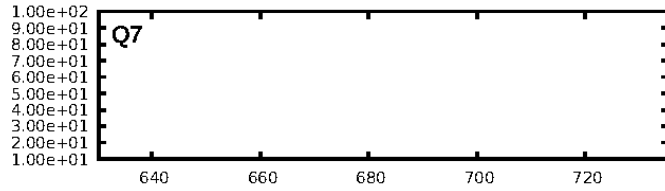
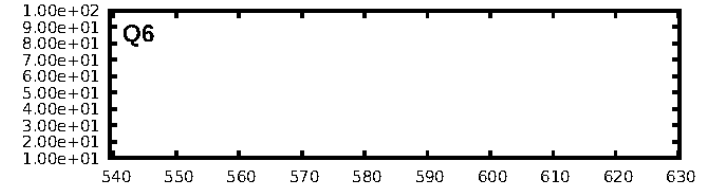
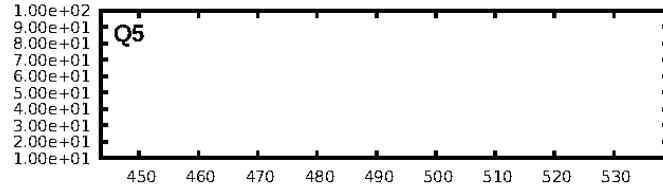
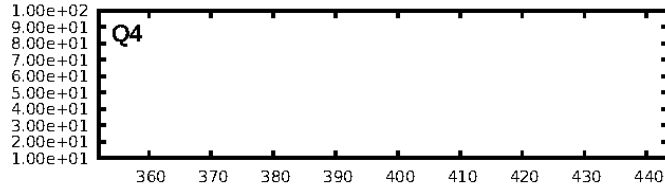
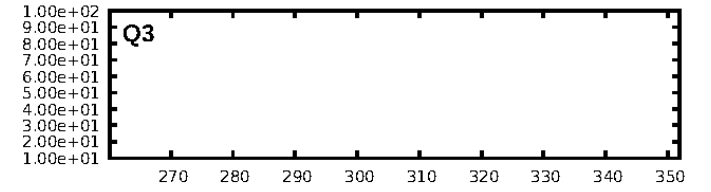
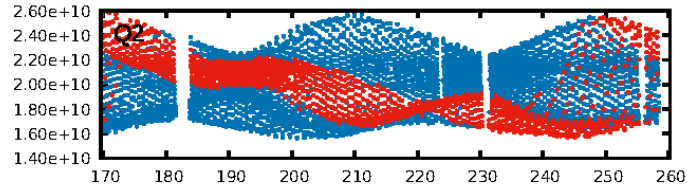
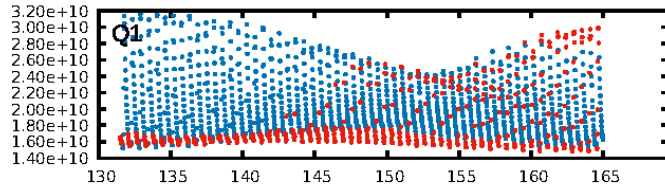
DV Diagnostic Results:

ShortPeriod-sig: 0.4% [0.01 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [144/144]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.0%
Centroid-so: 2.011 arcsec [8.07 σ]
OotOffset-rm: 0.430 arcsec [0.35 σ]
KicOffset-rm: 0.712 arcsec [0.49 σ]
OotOffset-st: 1/0/0/1 [2]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/2]

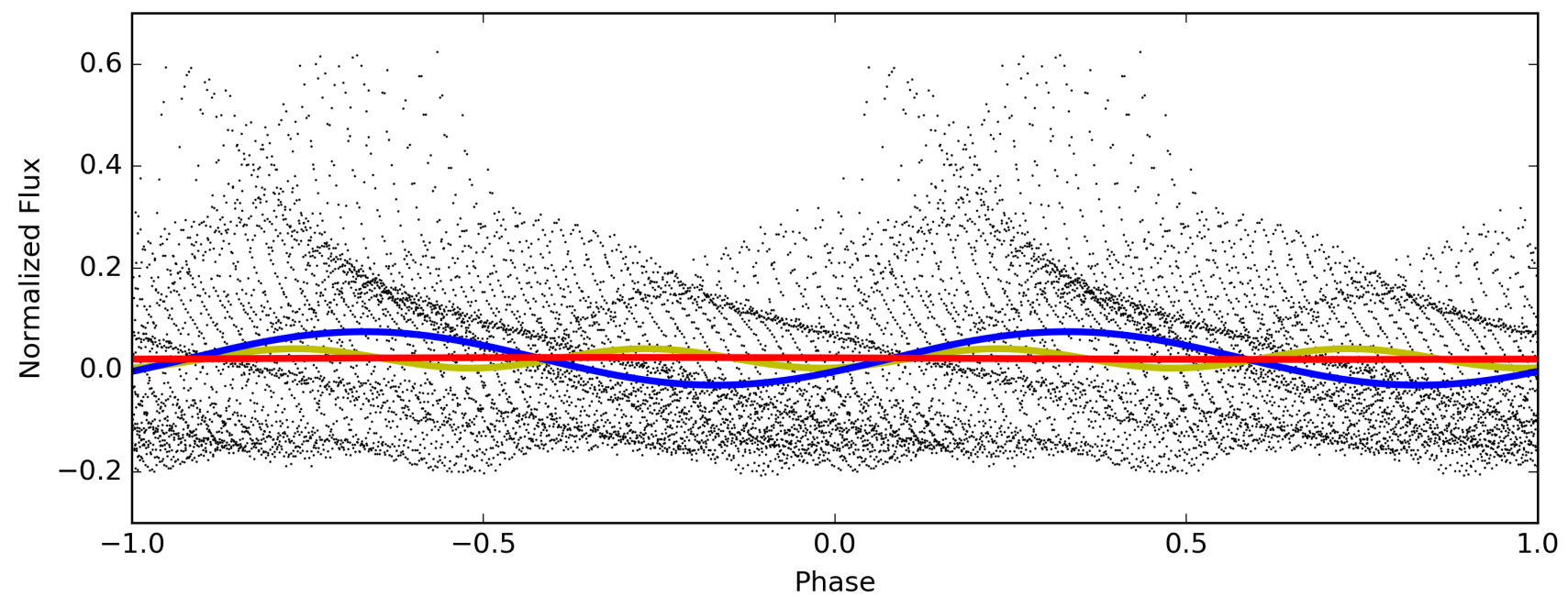
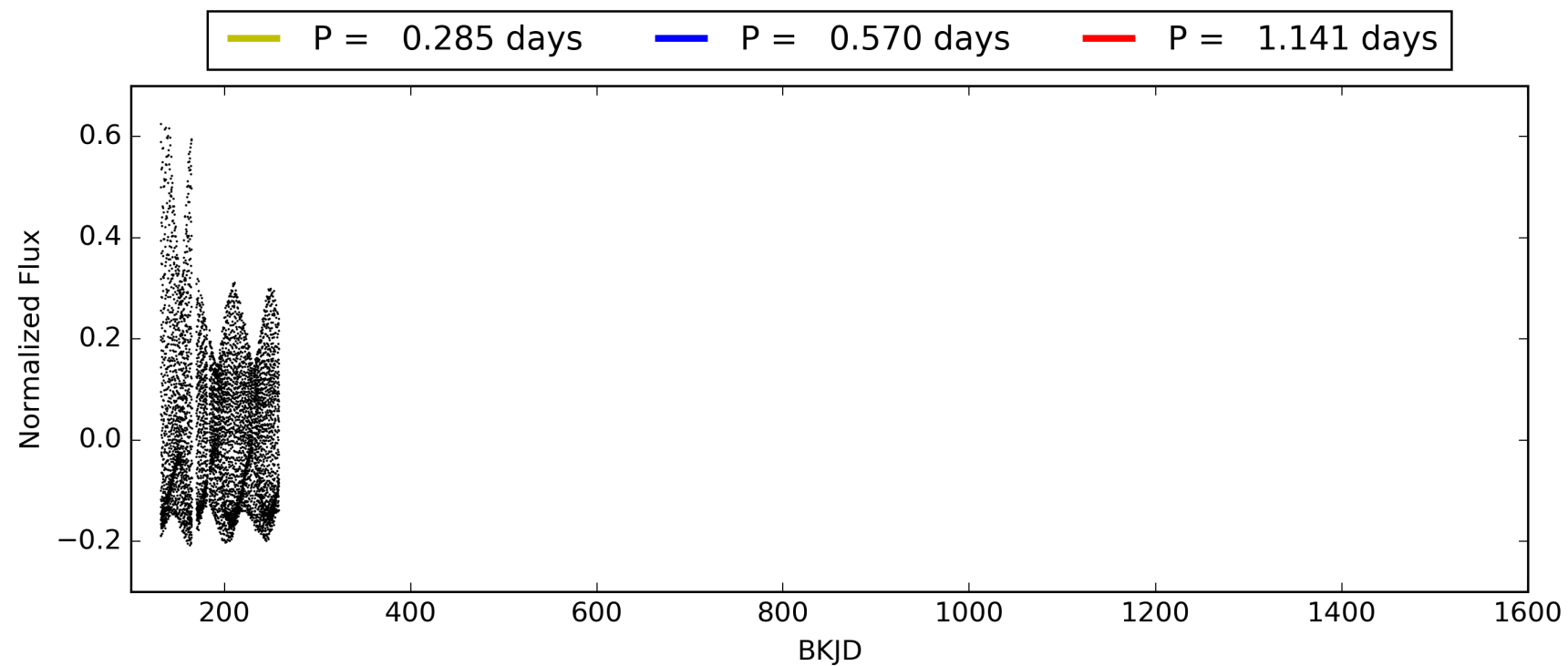
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 13:37:51 Z

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

TCE 007198959-03, PDC Light Curves

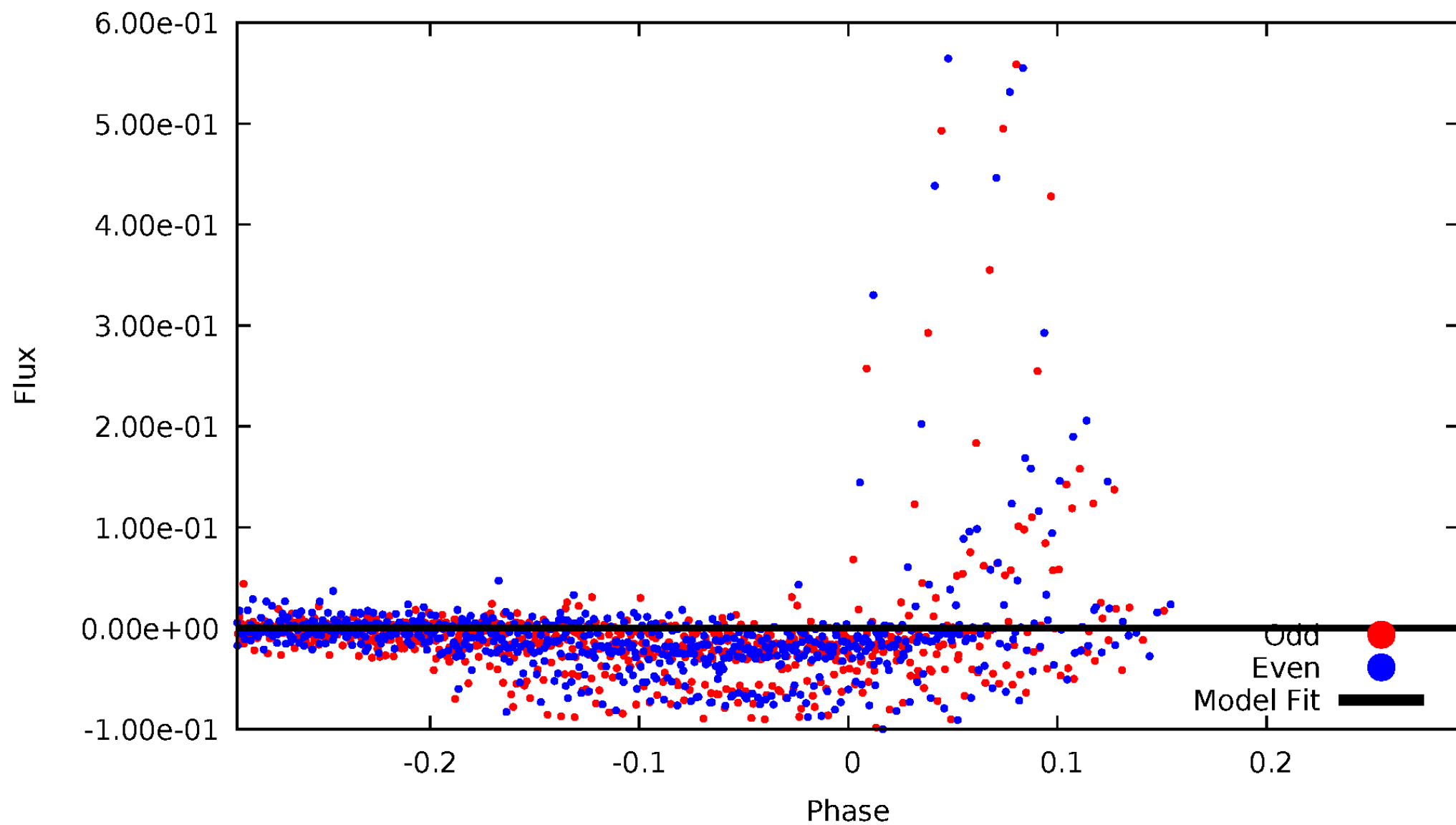


TCE 007198959-03



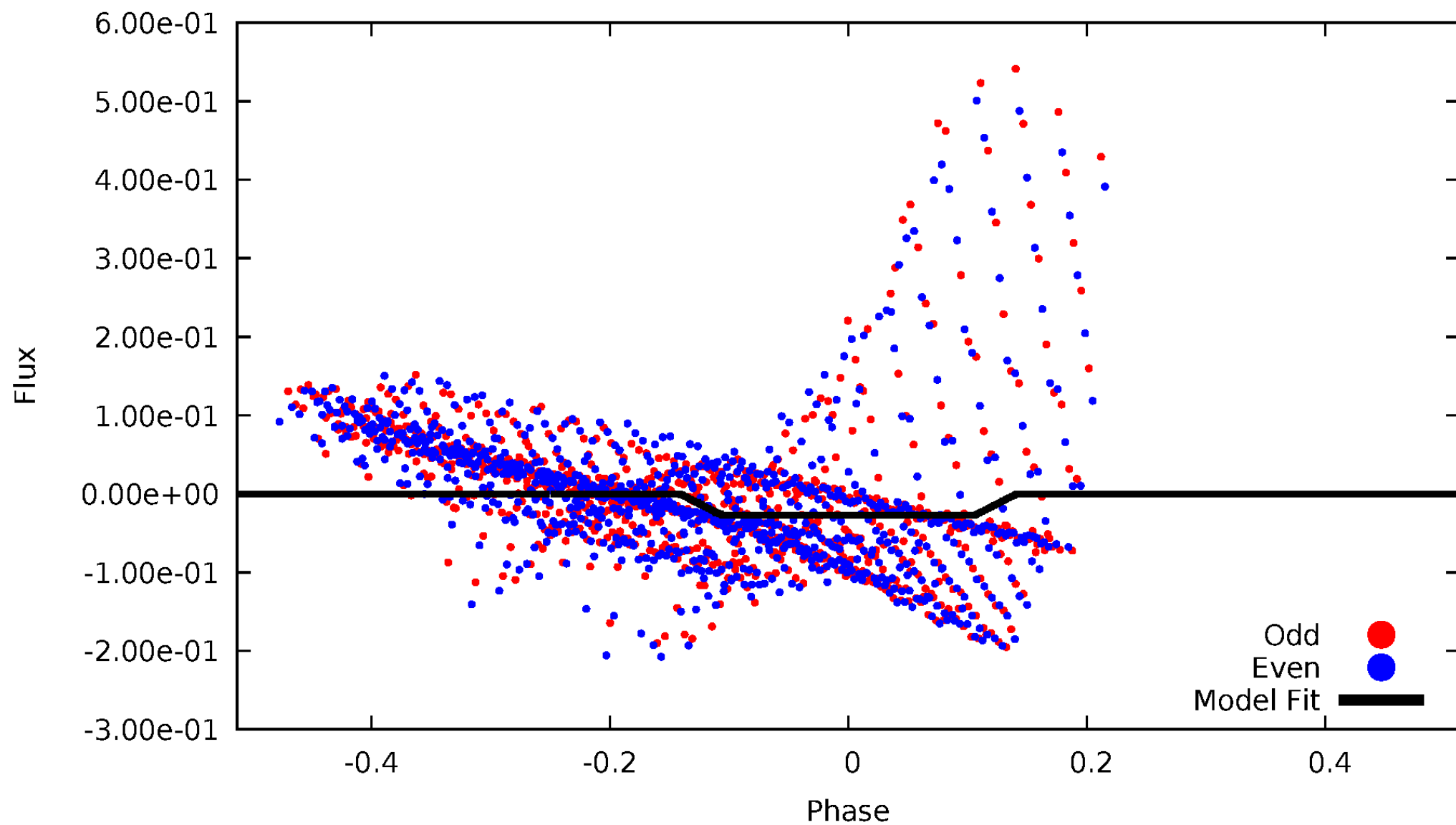
DV Odd/Even

TCE 007198959-03



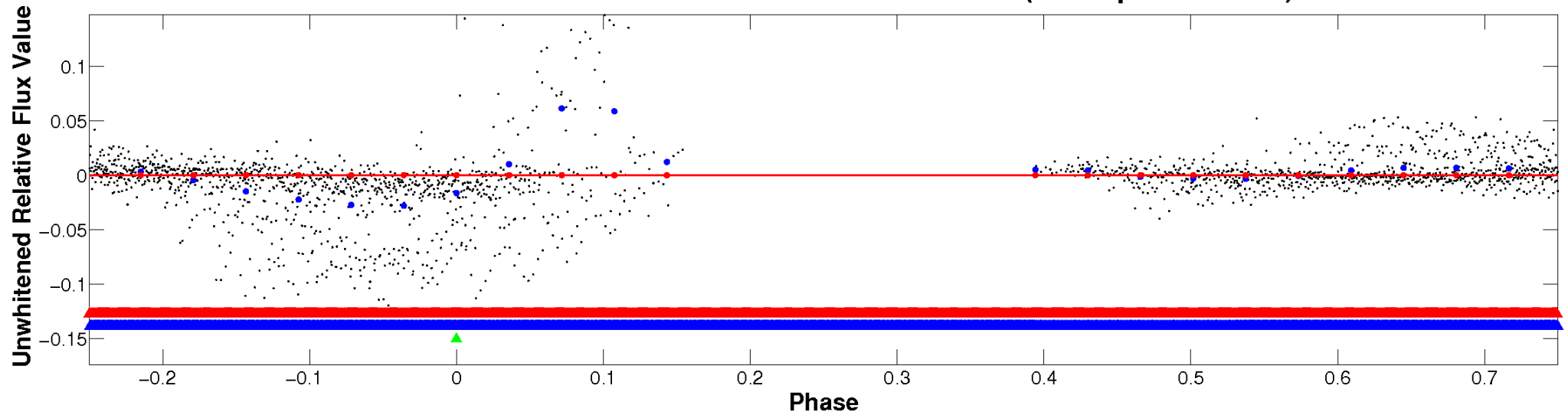
ALT Odd/Even

TCE 007198959-03

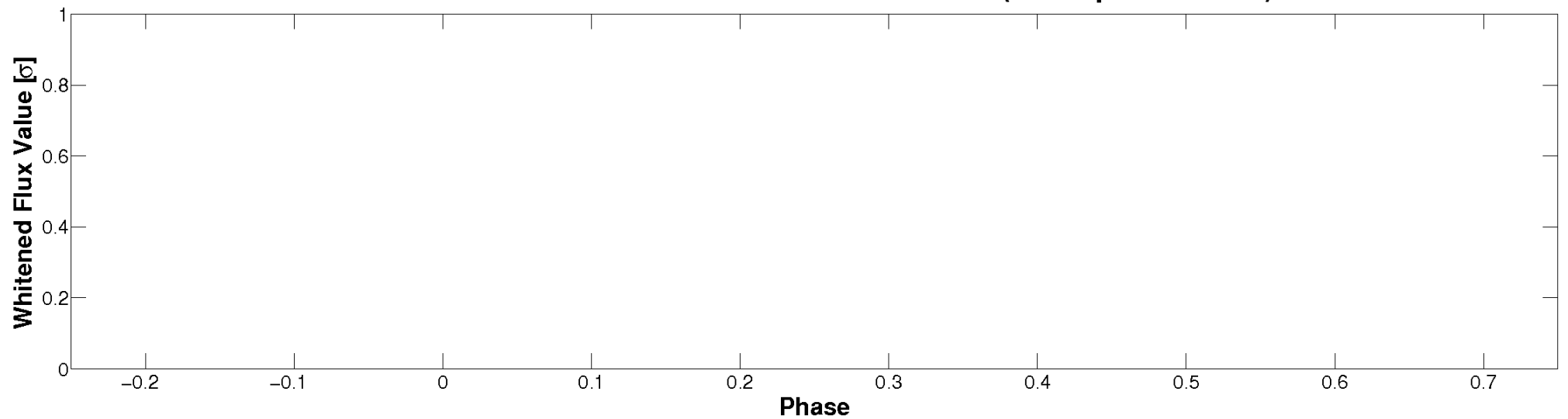


Non-Whitened Vs. Whitened Light Curve

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

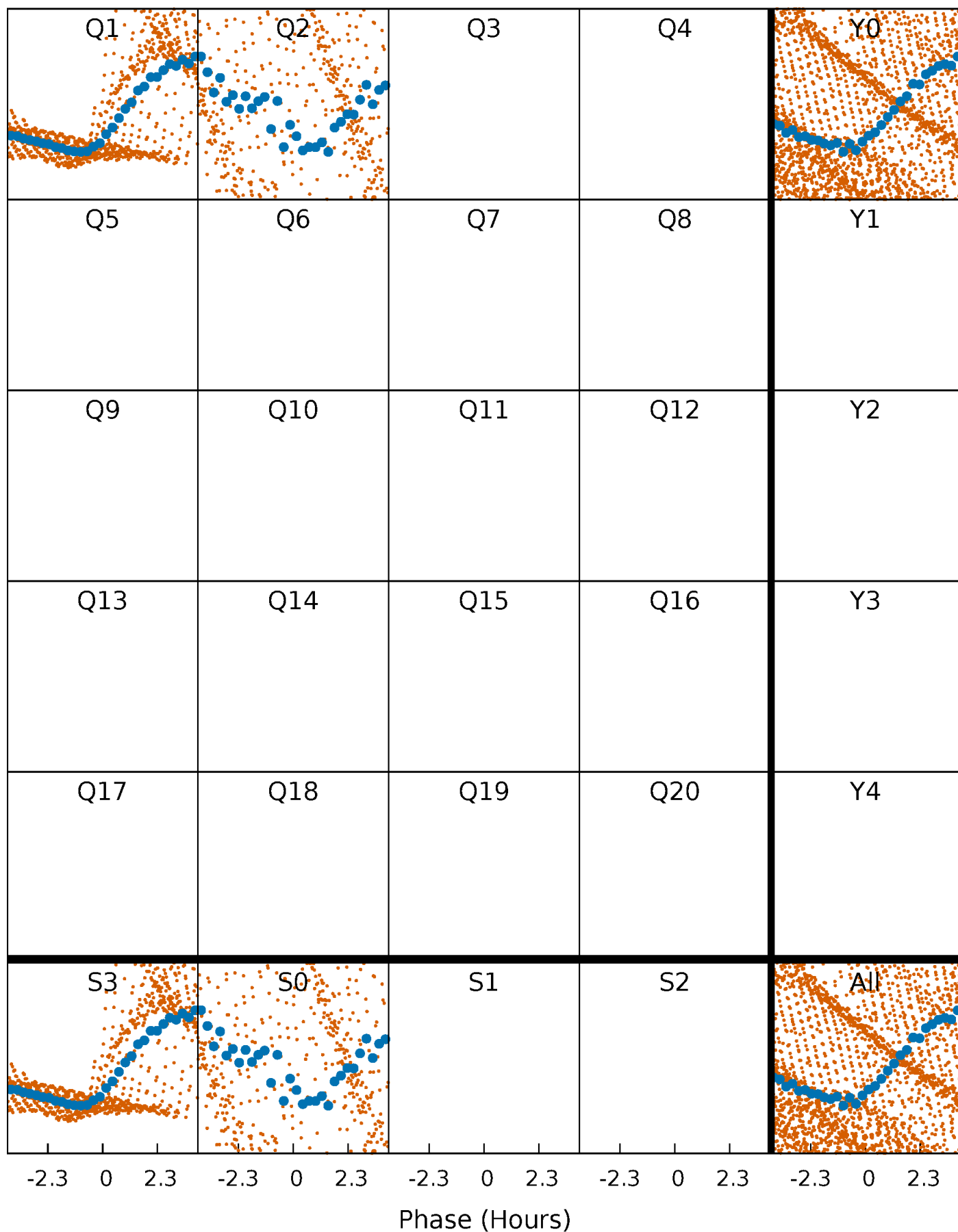


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



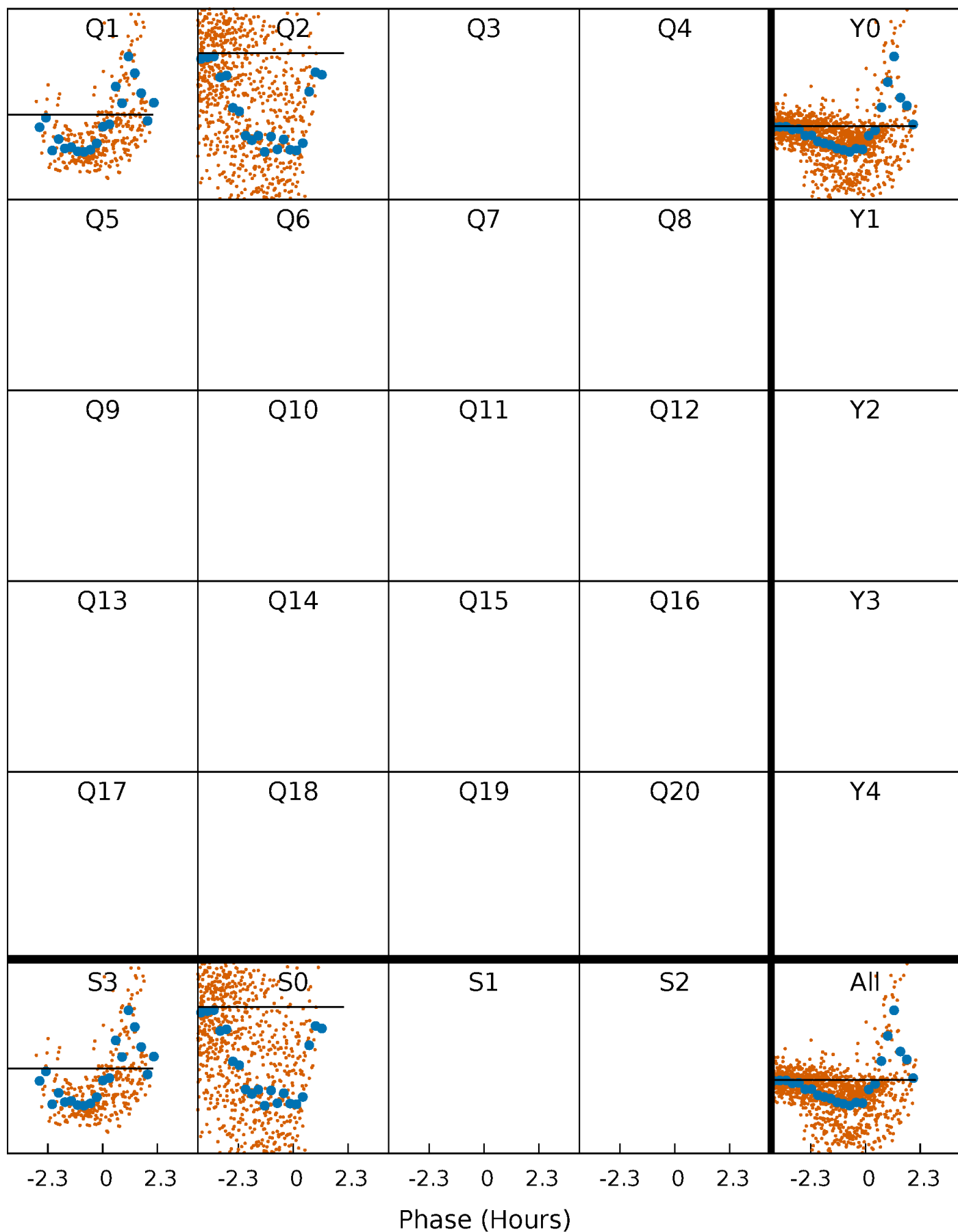
PDC Quarter-Phased Transit Curves

TCE 007198959-03 $P = 0.570326$ Days $T_0 = 131.550777$ (BKJD)



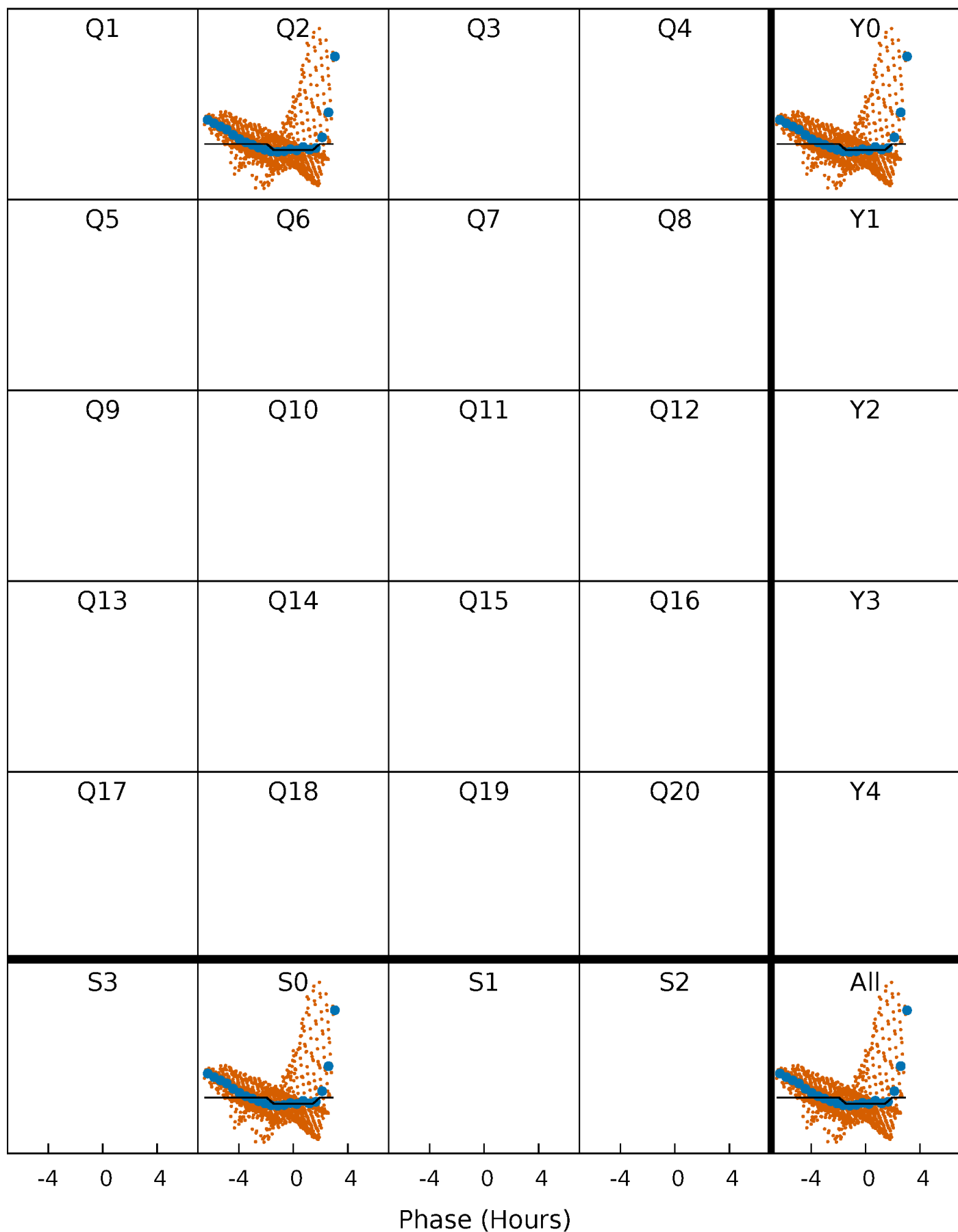
DV Quarter-Phased Transit Curves

TCE 007198959-03 P= 0.570326 Days $T_0=131.550777$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

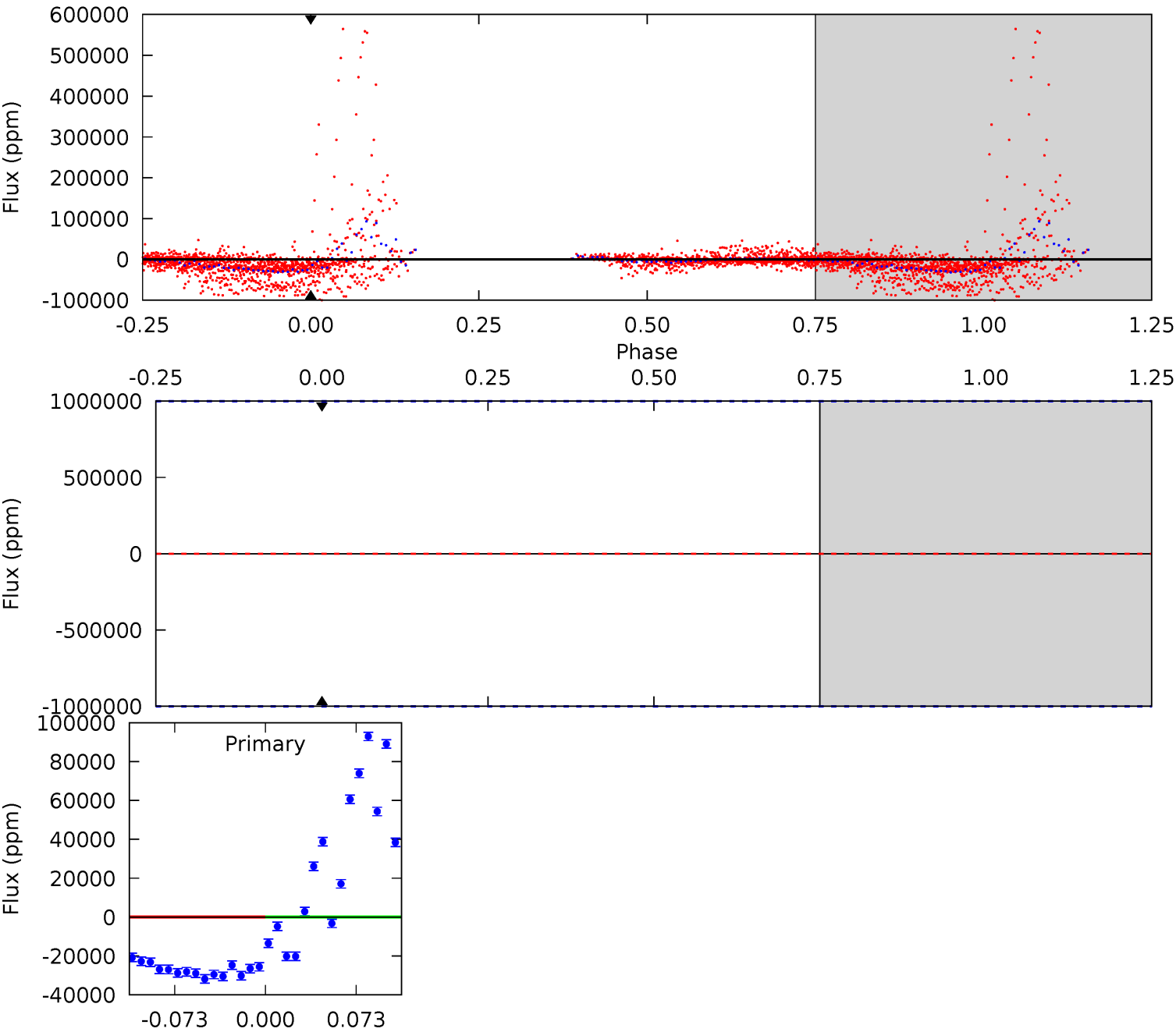
TCE 007198959-03 $P = 0.570326$ Days $T_0 = 132.043915$ (BKJD)



DV Model-Shift Uniqueness Test

007198959-03, P = 0.570326 Days, E = 131.550777 Days

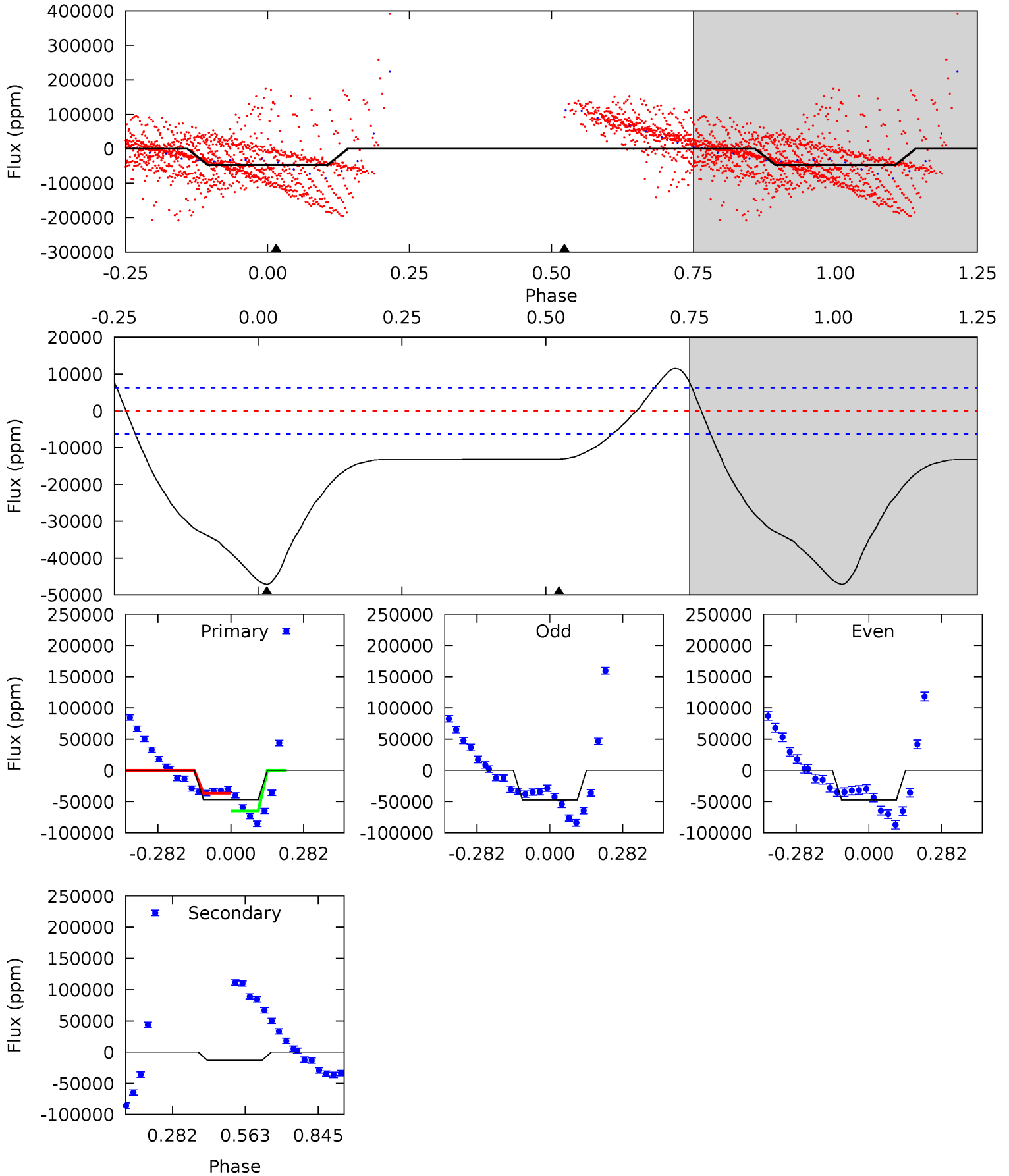
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

007198959-03, P = 0.570326 Days, E = 132.043915 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.9	9.16	0	0	4.34	1.08	4.07	32.9	32.9	9.16	9.16	0.03	0.70	0.20	0



Stellar Parameters For KIC 007198959

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5982^{+189}_{-232}	$4.372^{+0.112}_{-0.192}$	$-0.080^{+0.250}_{-0.300}$	$1.081^{+0.325}_{-0.175}$	$1.003^{+0.153}_{-0.112}$	$1.118^{+0.569}_{-0.572}$
	+3%/-4%	+3%/-4%	+312%/-375%	+30%/-16%	+15%/-11%	+51%/-51%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 007198959-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$8.47^{+9.47}_{-5.80}$	3340^{+251}_{-213}	-4163^{+29894}_{-18262}	$-1.055^{+287.700}_{-212.362}$
Alt.	-13129 ± 1433	$21.09^{+11.86}_{-10.79}$	3328^{+247}_{-224}	4831^{+2125}_{-861}	$2.954^{+9.056}_{-1.722}$

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

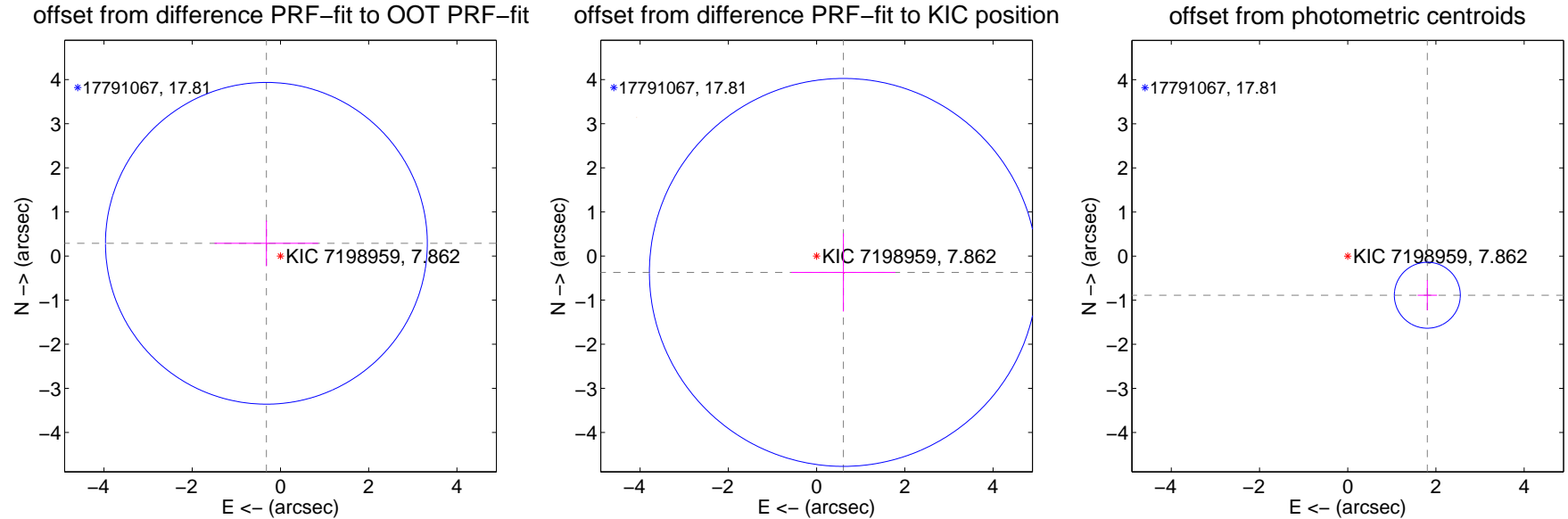
DV Centroid Data

Supplemental centroid analysis for 007198959-03. **Kepler magnitude: 7.86.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

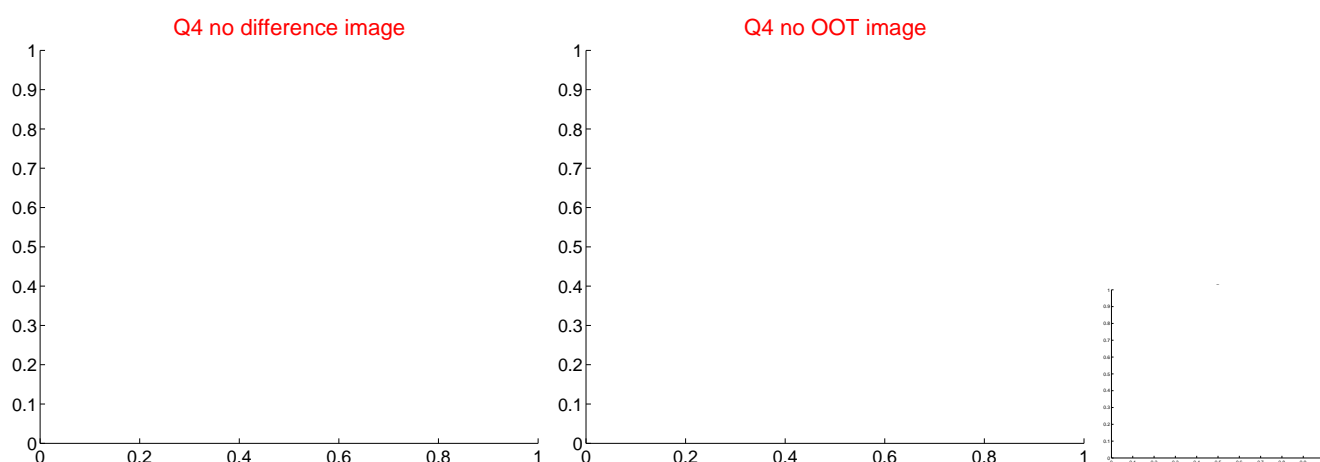
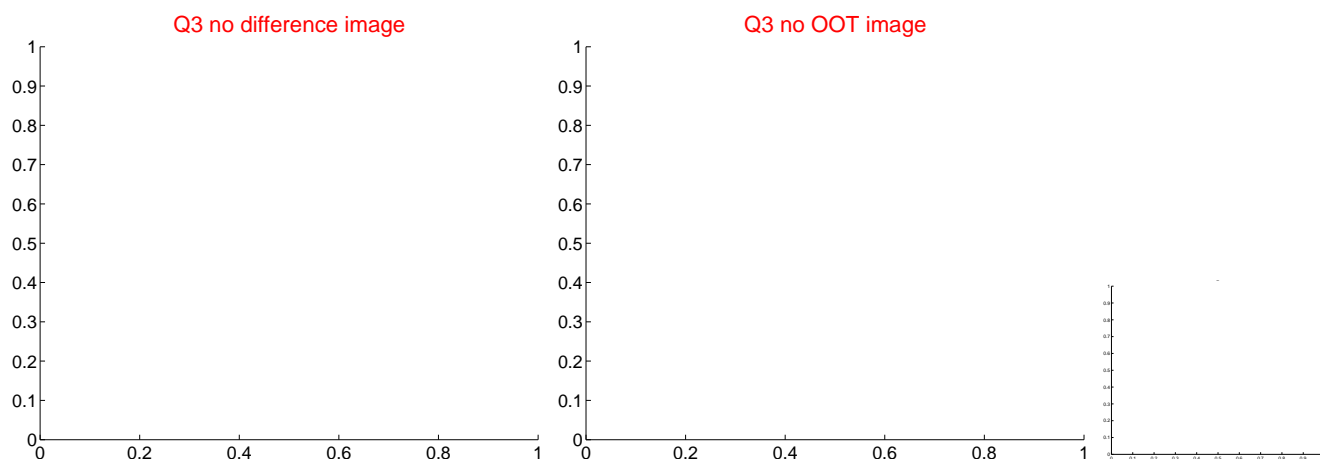
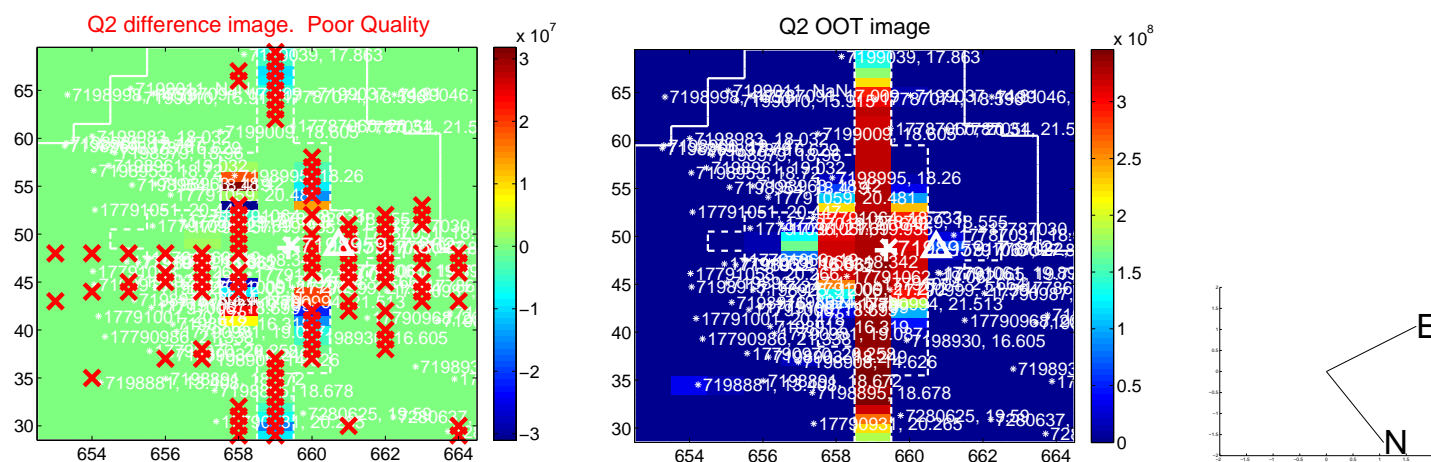
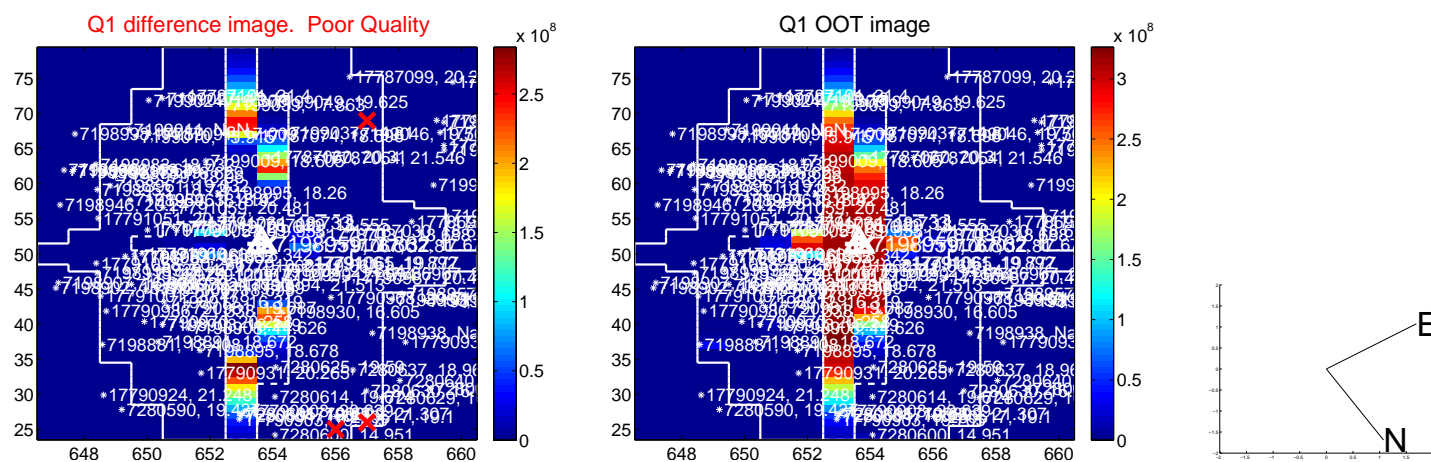
The direct PRF centroid is offset from the target star catalog position by about 1.23 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.430 ± 1.216	0.35	0.319 ± 1.175	0.288 ± 0.517
PRF-fit source offset from KIC position	0.712 ± 1.465	0.49	-0.608 ± 1.177	-0.372 ± 0.887
photometric centroid source offset	2.01 ± 0.25	8.07	-1.80 ± 0.22	-0.89 ± 0.34



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.



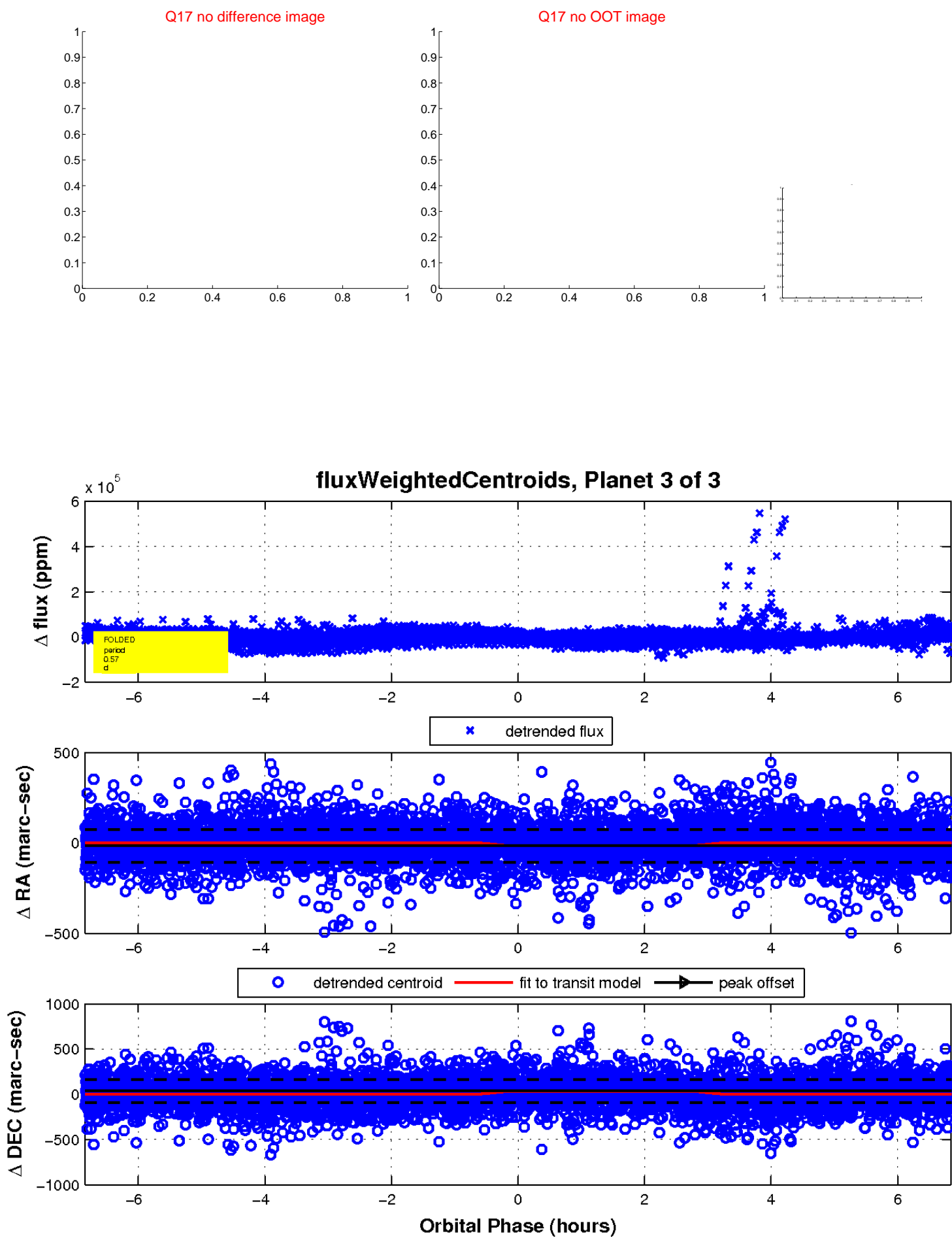
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

