

KIC 005537188

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})
005537188-01	OBS	No	488.784378	364.228809	3876.5	3.500	96.2	-1.0	1.61	7247	10.14	3.34
005537188-02	OBS	No	369.544105	436.263345	19260.9	6.490	45.0	23.1	1.61	7247	38.45	4.85
005537188-03	OBS	No	341.361648	347.036622	5842.6	46.696	42.2	2.3	1.61	7247	13.76	5.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005537188-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
005537188-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005537188-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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.

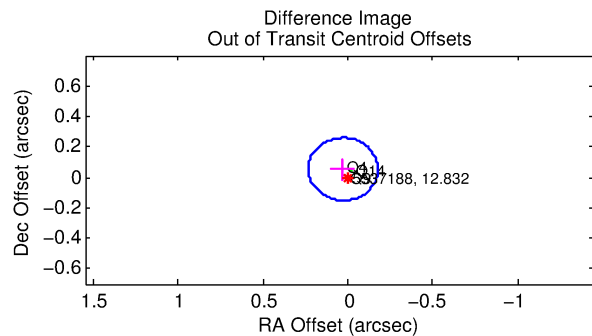
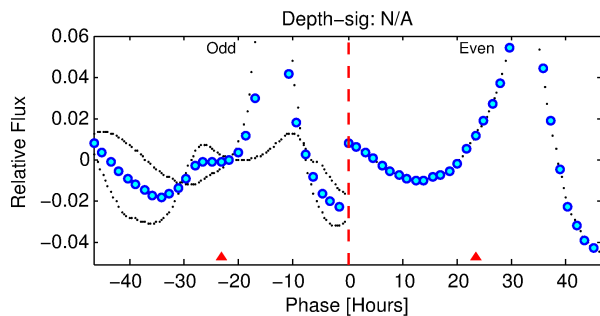
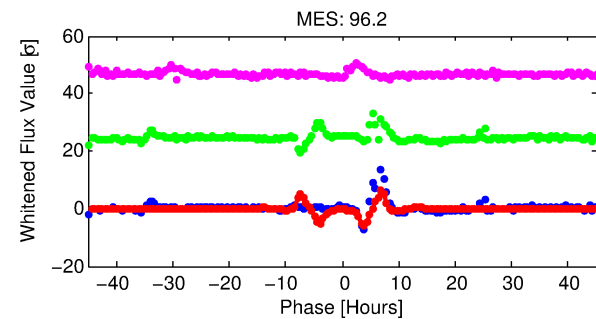
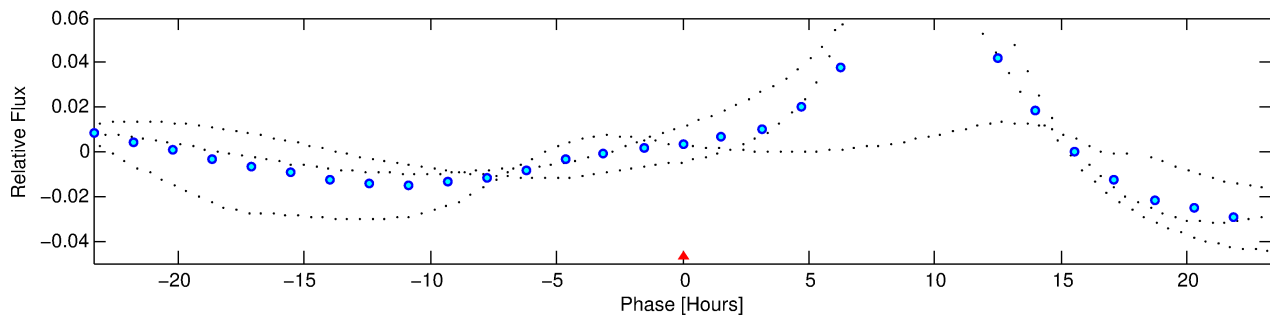
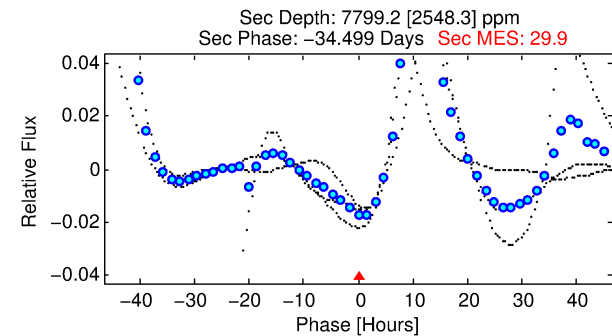
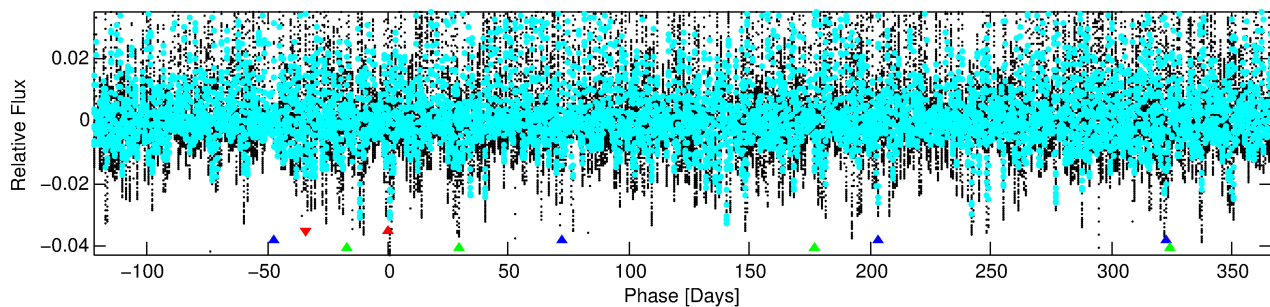
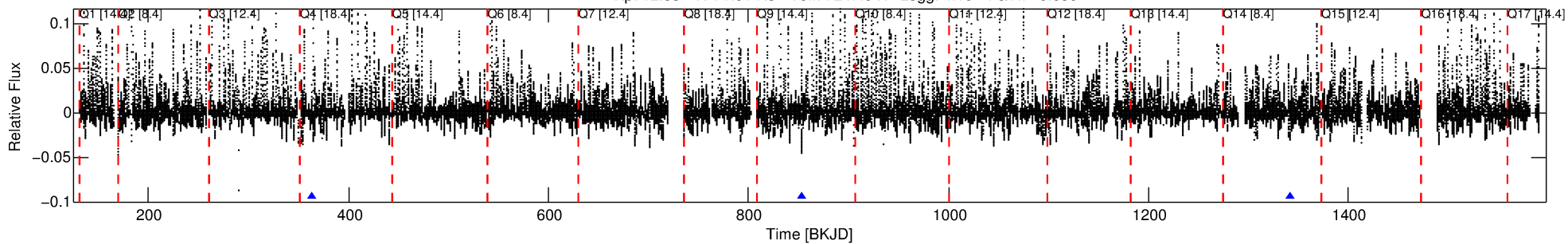
Ephemeris Match Information For 005537188-01

No Significant Match Found

DV One-Page Summary

KIC: 5537188 Candidate: 1 of 3 Period: 488.784 d

Kp: 12.83 R*: 1.61 Rs Teff: 7247.0 K Logg: 4.19 Fe/H: -0.080



TPS TCE Results:

Period = 488.78438 d
Epoch = 364.2288 BKJD

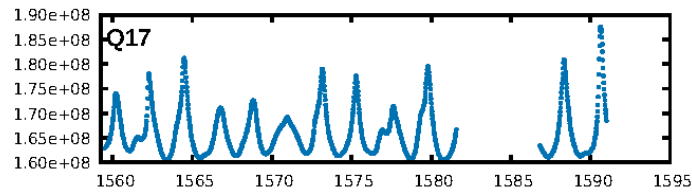
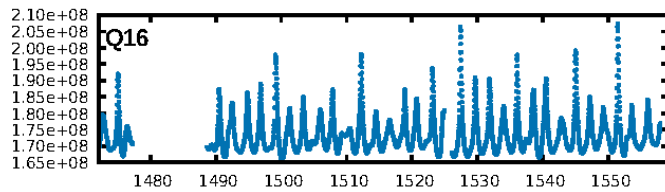
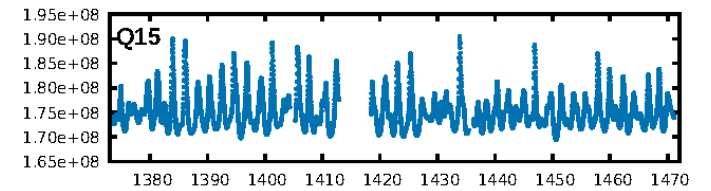
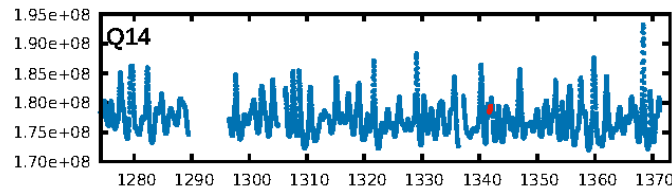
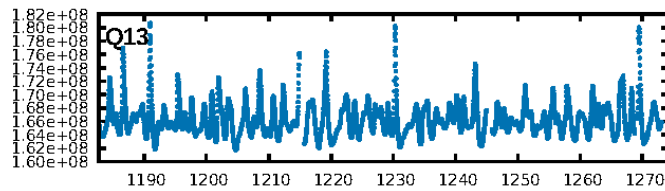
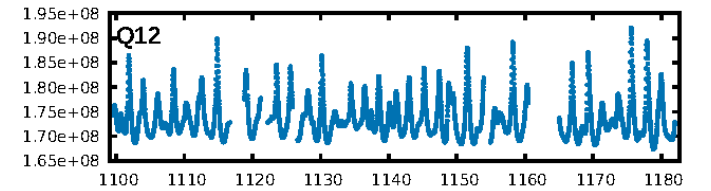
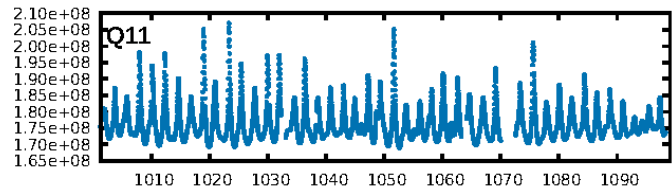
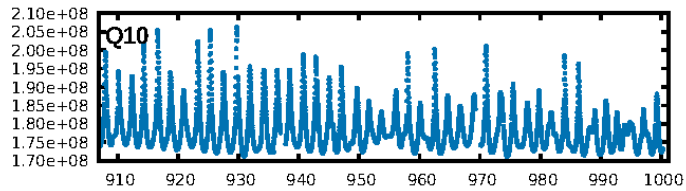
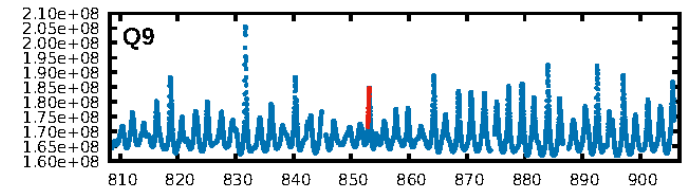
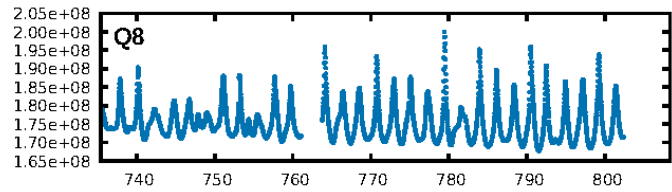
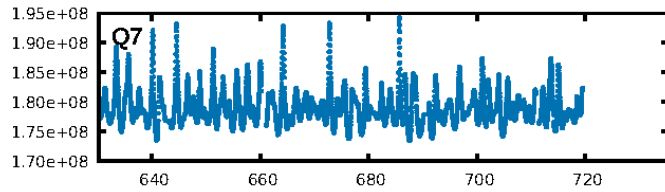
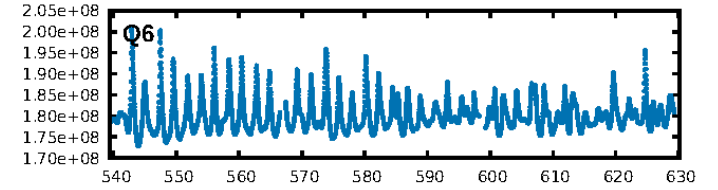
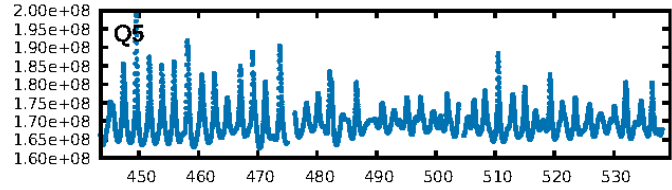
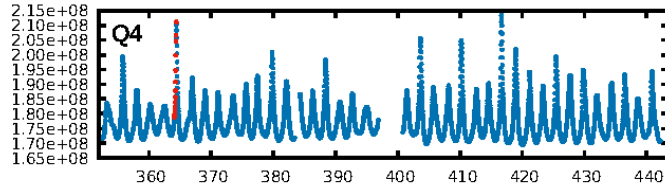
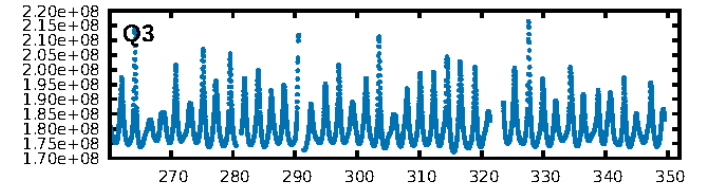
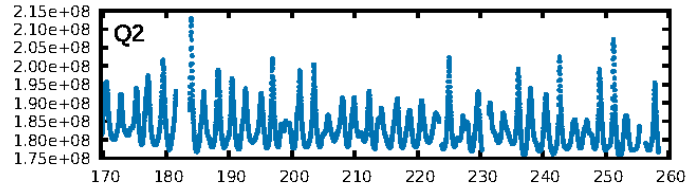
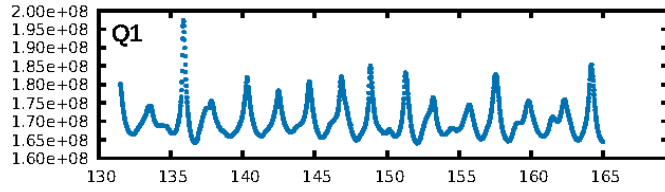
DV fit results are unavailable

DV Diagnostic Results:

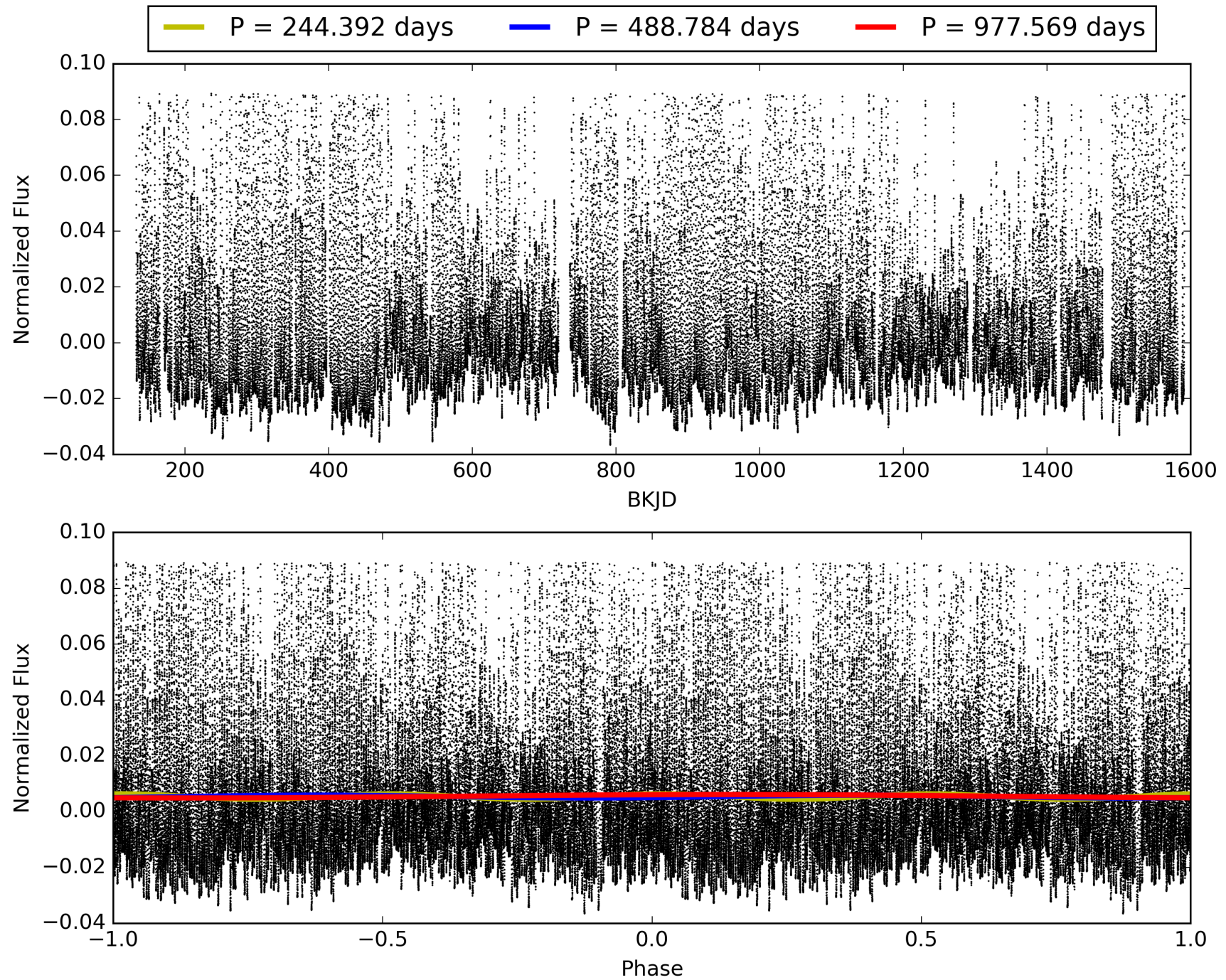
ShortPeriod-sig: 100.0% [388.11σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 0.4229

Centroid-sig: 50.5%
Centroid-so: 0.099 arcsec [0.53σ]
OotOffset-rm: 0.062 arcsec [0.91σ]
KicOffset-rm: 0.071 arcsec [1.03σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 005537188-01, PDC Light Curves

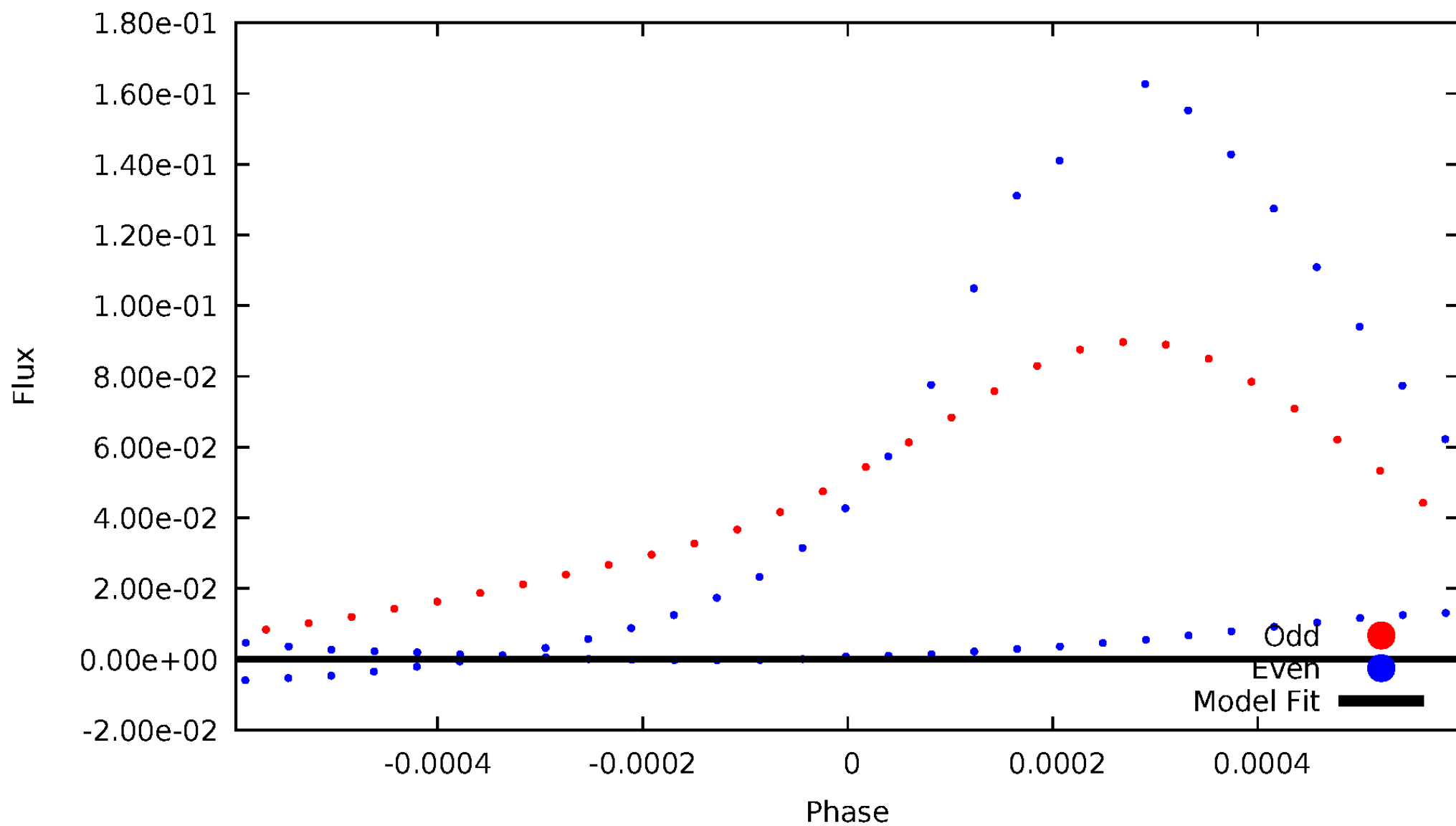


TCE 005537188-01



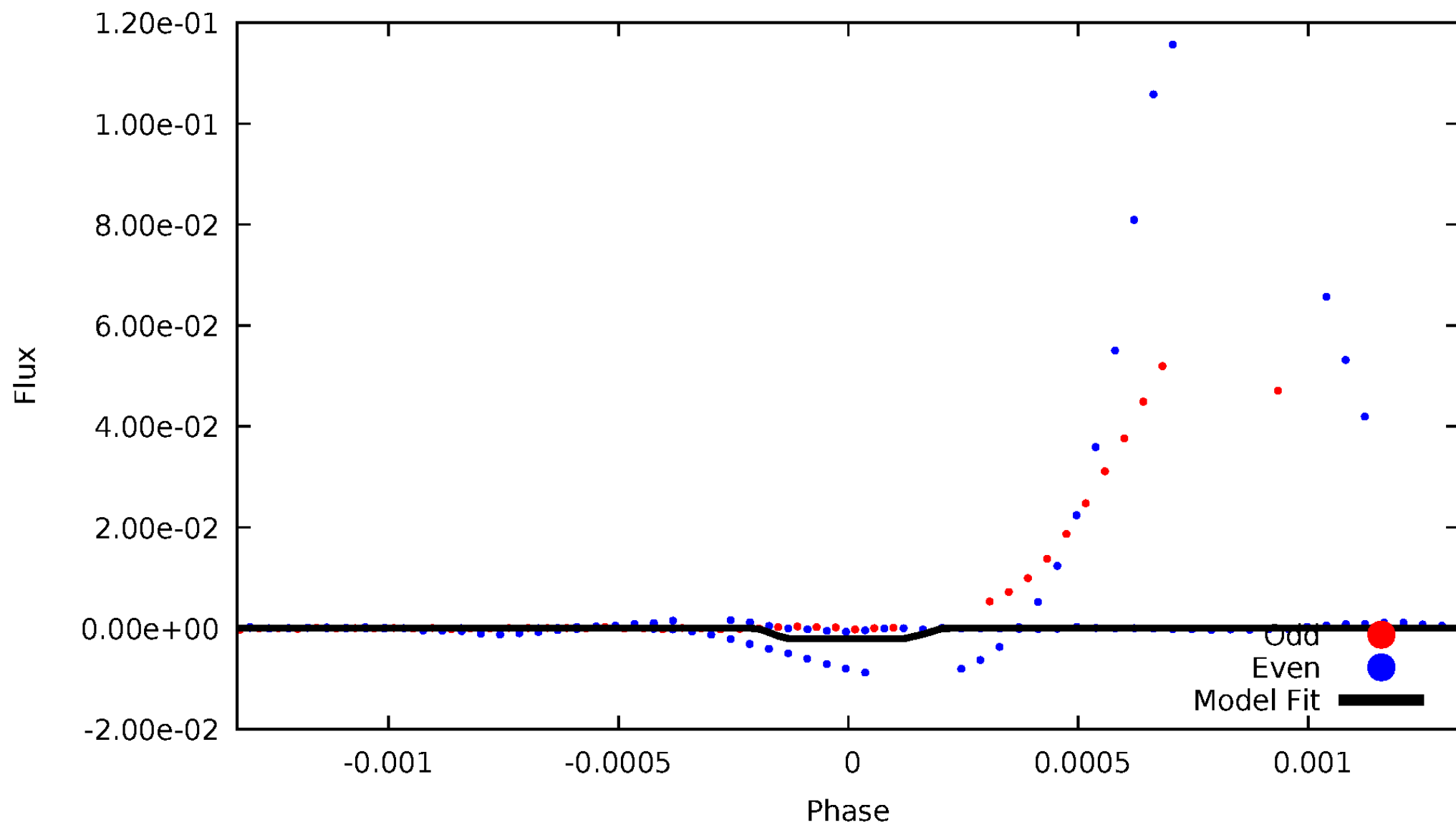
DV Odd/Even

TCE 005537188-01



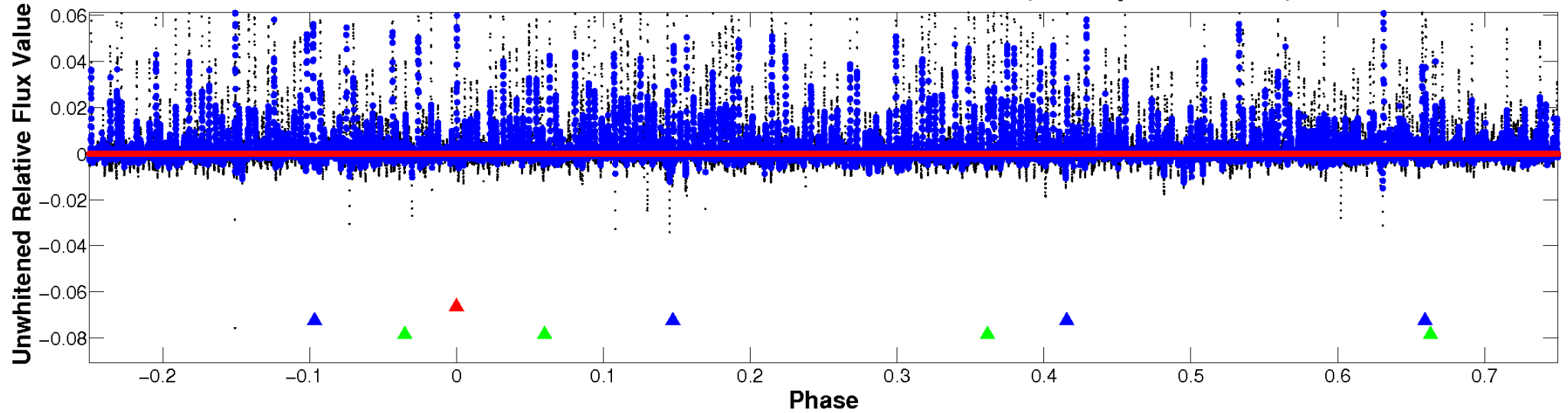
ALT Odd/Even

TCE 005537188-01

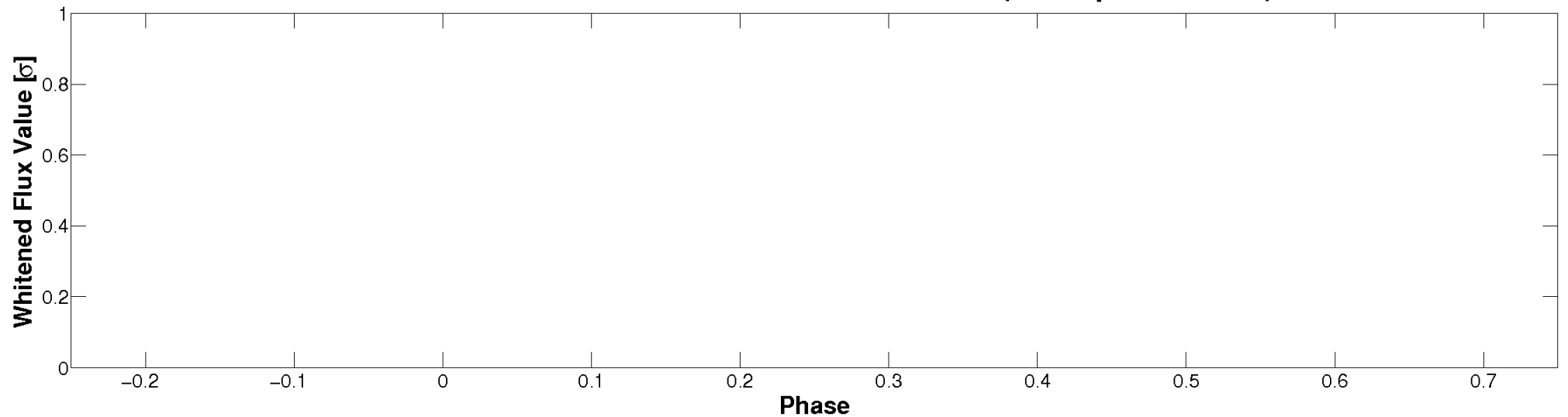


Non-Whitened Vs. Whitened Light Curve

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

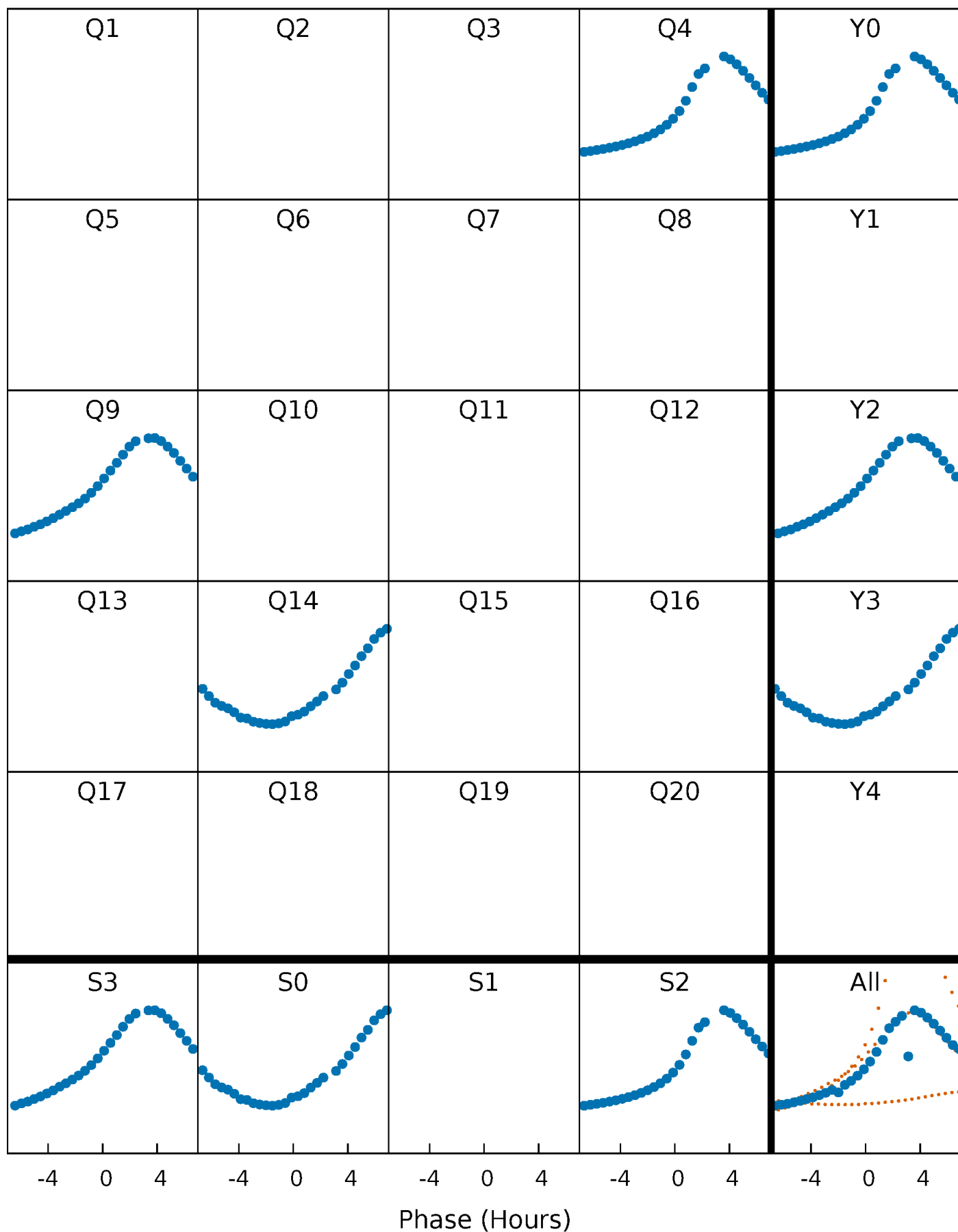


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



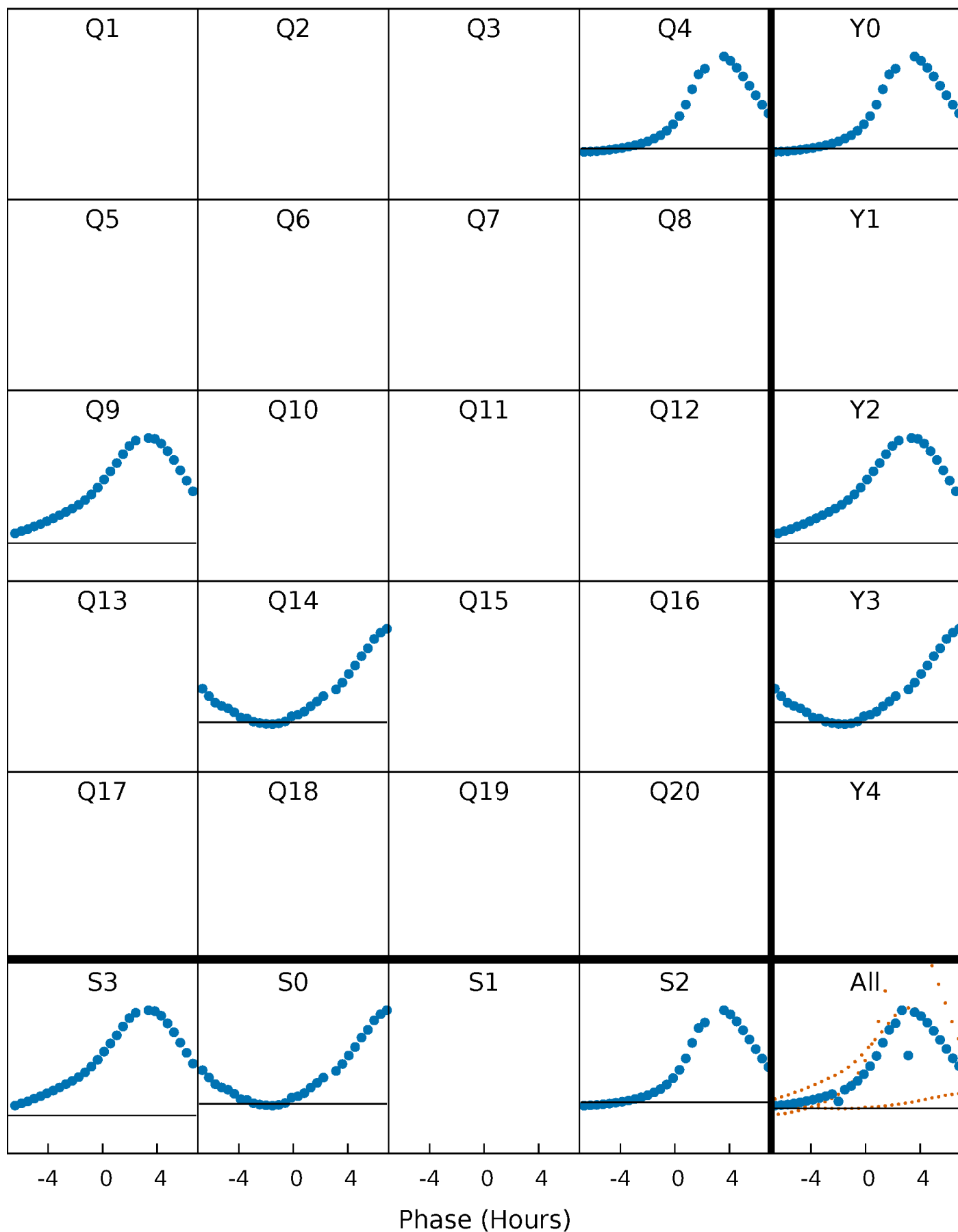
PDC Quarter-Phased Transit Curves

TCE 005537188-01 P=488.784378 Days $T_0=364.228809$ (BKJD)



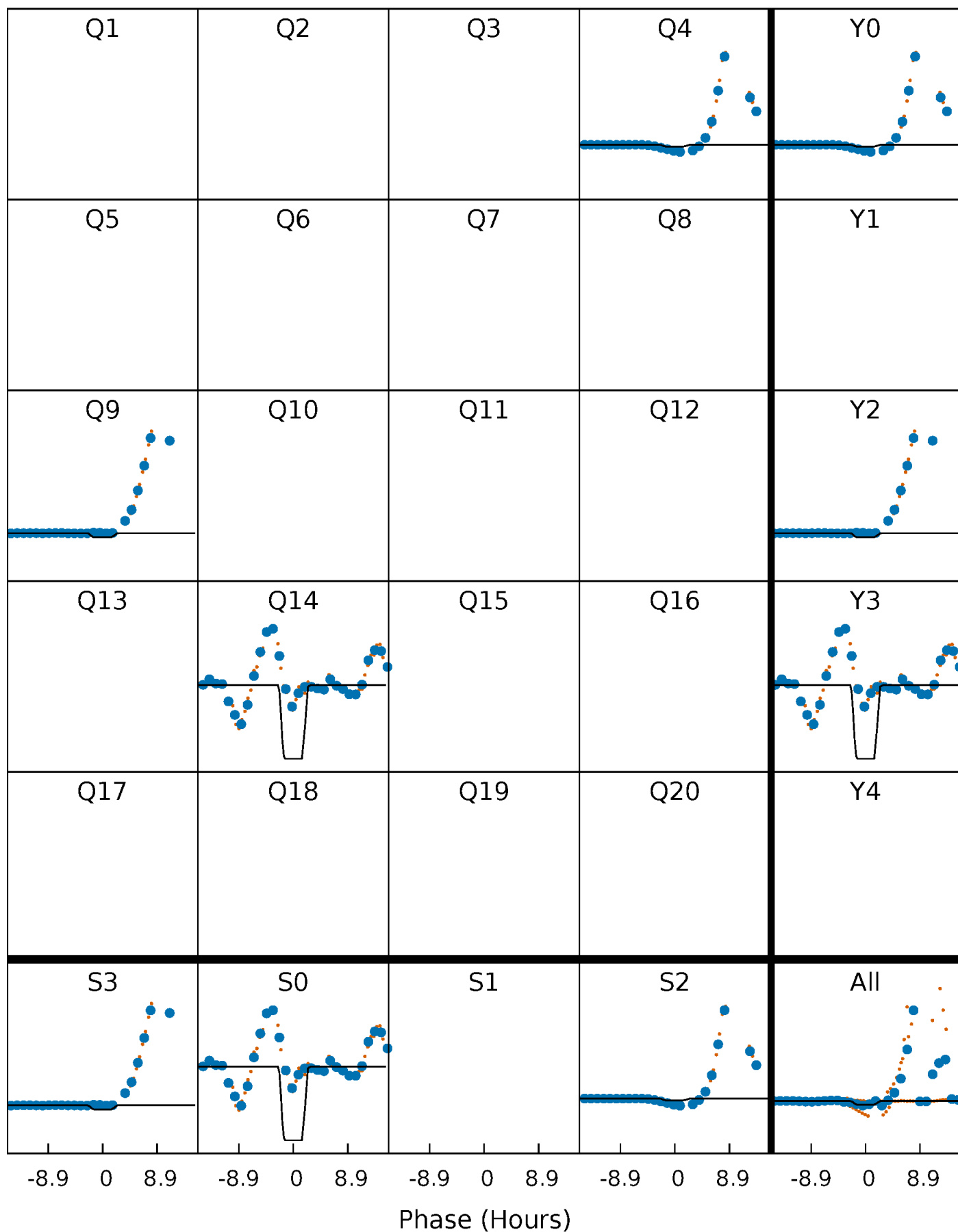
DV Quarter-Phased Transit Curves

TCE 005537188-01 P=488.784378 Days $T_0=364.228809$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

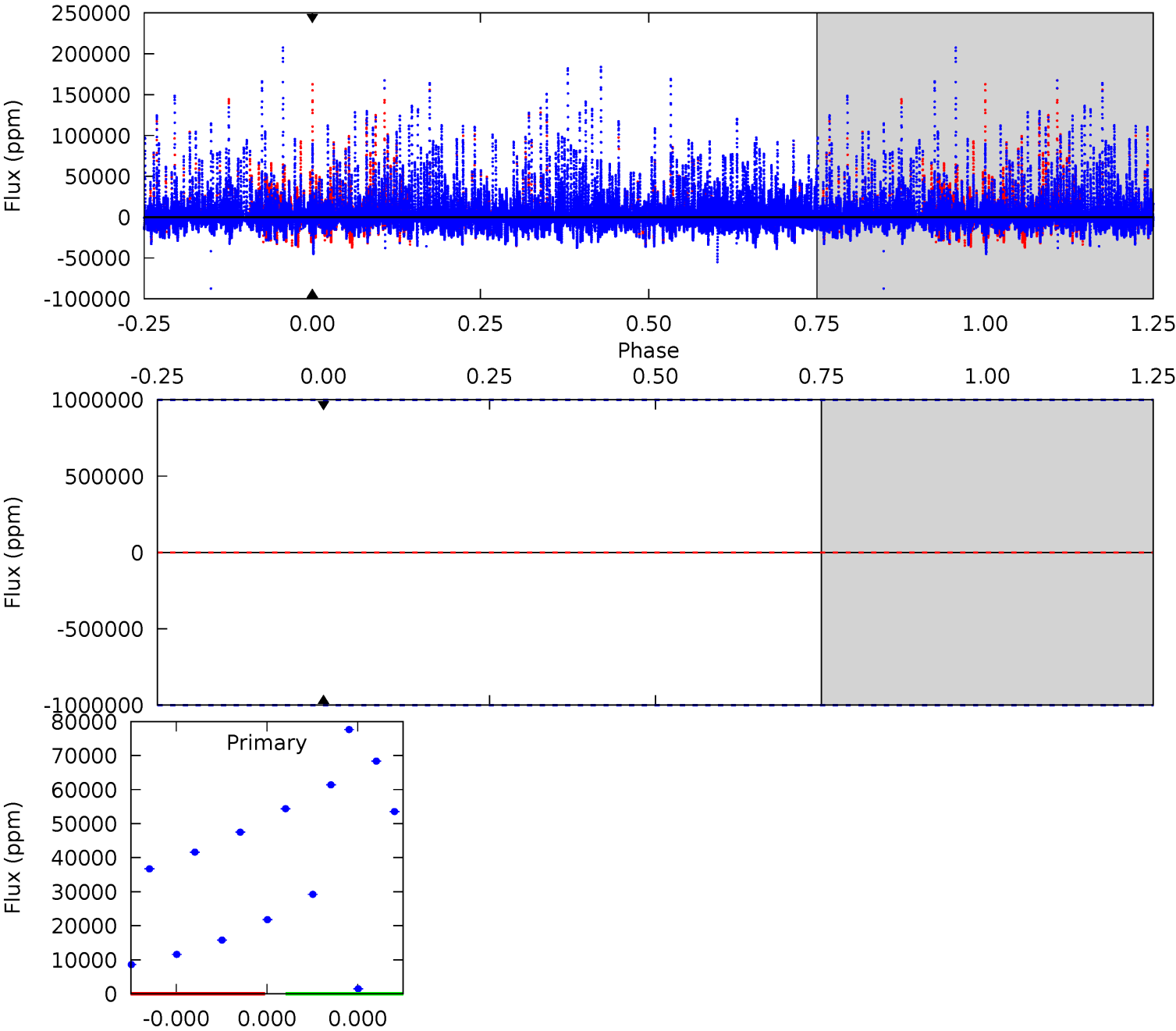
TCE 005537188-01 P=488.784378 Days $T_0=363.985123$ (BKJD)



DV Model-Shift Uniqueness Test

005537188-01, P = 488.784378 Days, E = 364.228809 Days

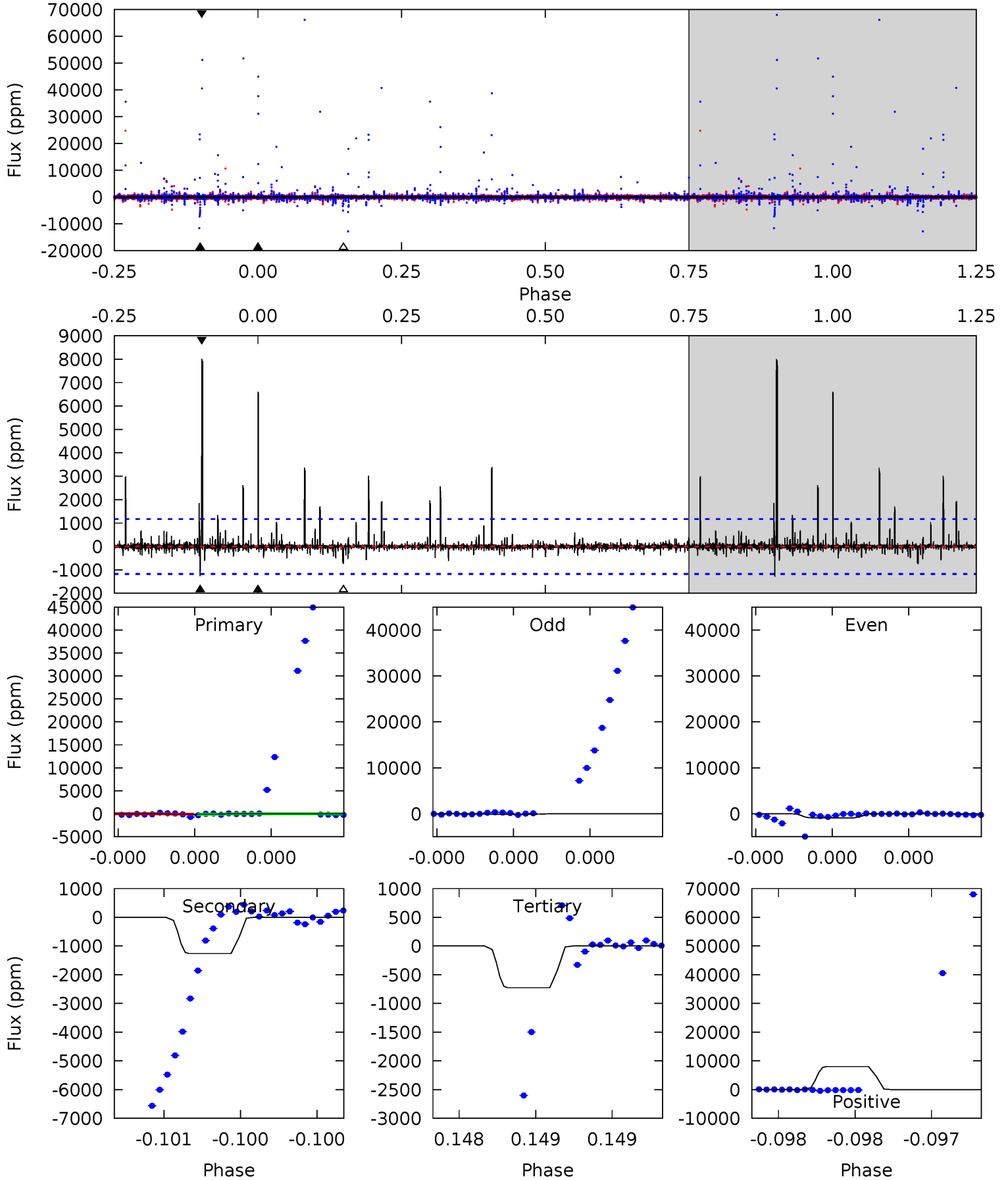
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005537188-01, P = 488.784378 Days, E = 363.985123 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.46	6.03	3.47	38.3	5.60	3.53	0.96	-3.01	-37.8	2.55	-32.3	1.03	9.73	0.86	0.08



Stellar Parameters For KIC 005537188

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7247^{+201}_{-302}	$4.194^{+0.105}_{-0.195}$	$-0.080^{+0.200}_{-0.350}$	$1.606^{+0.540}_{-0.291}$	$1.472^{+0.221}_{-0.221}$	$0.501^{+0.250}_{-0.262}$
	+3%/-4%	+3%/-5%	+250%/-438%	+34%/-18%	+15%/-15%	+50%/-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 005537188-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$17.19^{+15.22}_{-11.29}$	487^{+39}_{-33}	2460^{+22653}_{-23982}	$87^{+625792}_{-525416}$
Alt.	-1260 ± 209	$16.50^{+14.91}_{-11.26}$	487^{+37}_{-30}	4591^{+3440}_{-918}	4710^{+45145}_{-3371}

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

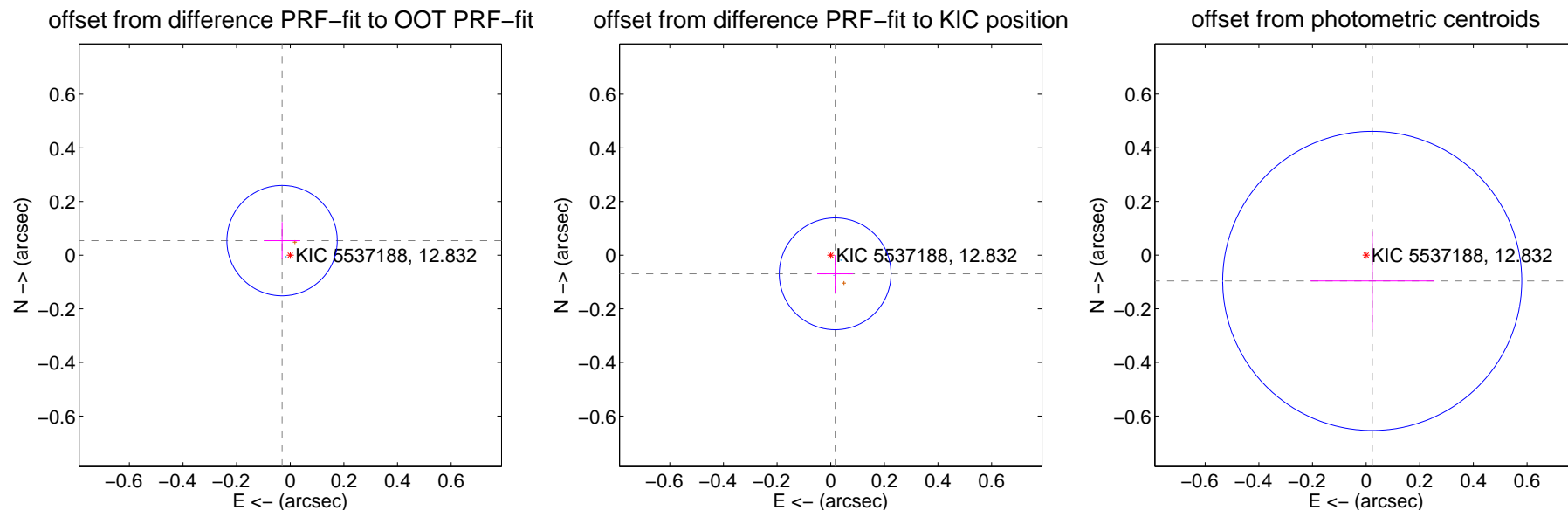
DV Centroid Data

Supplemental centroid analysis for 005537188-01. Kepler magnitude: 12.83. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

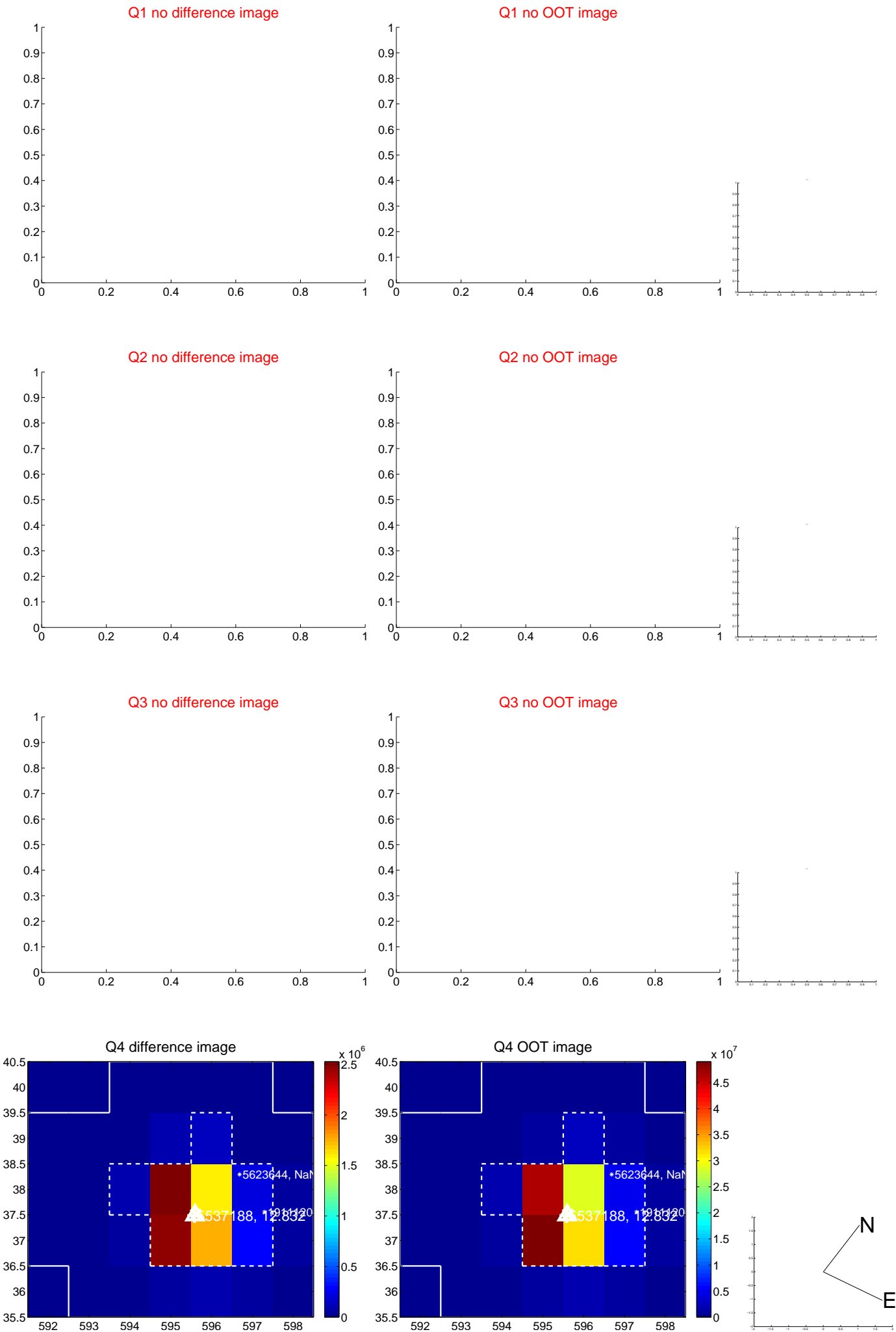
The direct PRF centroid is offset from the target star catalog position by about 0.16 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.062 ± 0.069	0.91	0.031 ± 0.067	0.054 ± 0.069
PRF-fit source offset from KIC position	0.071 ± 0.069	1.03	-0.017 ± 0.067	-0.069 ± 0.070
photometric centroid source offset	0.10 ± 0.19	0.53	-0.02 ± 0.23	-0.10 ± 0.18



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.

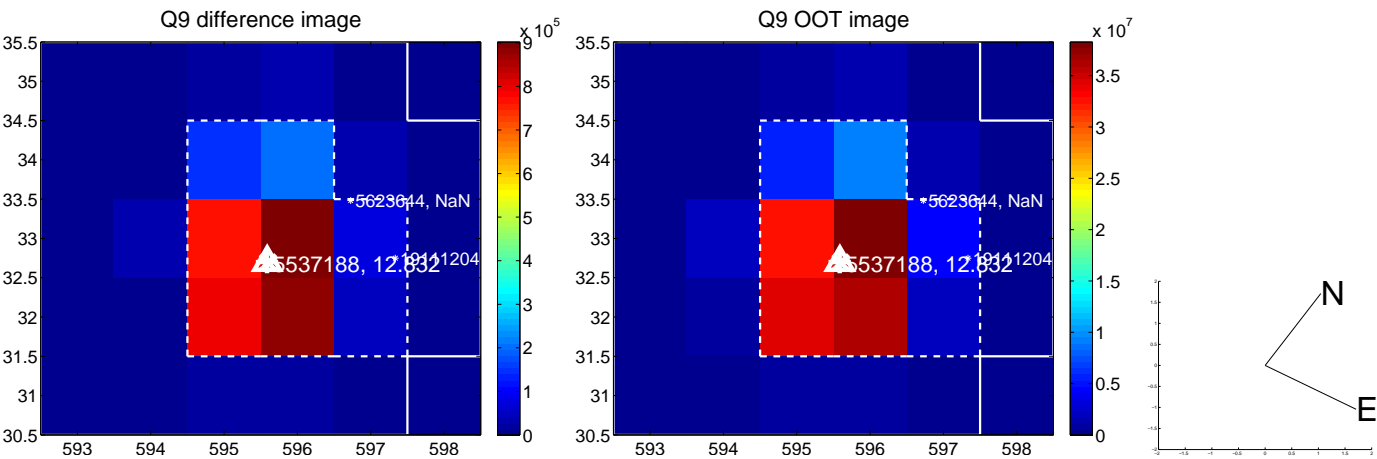
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



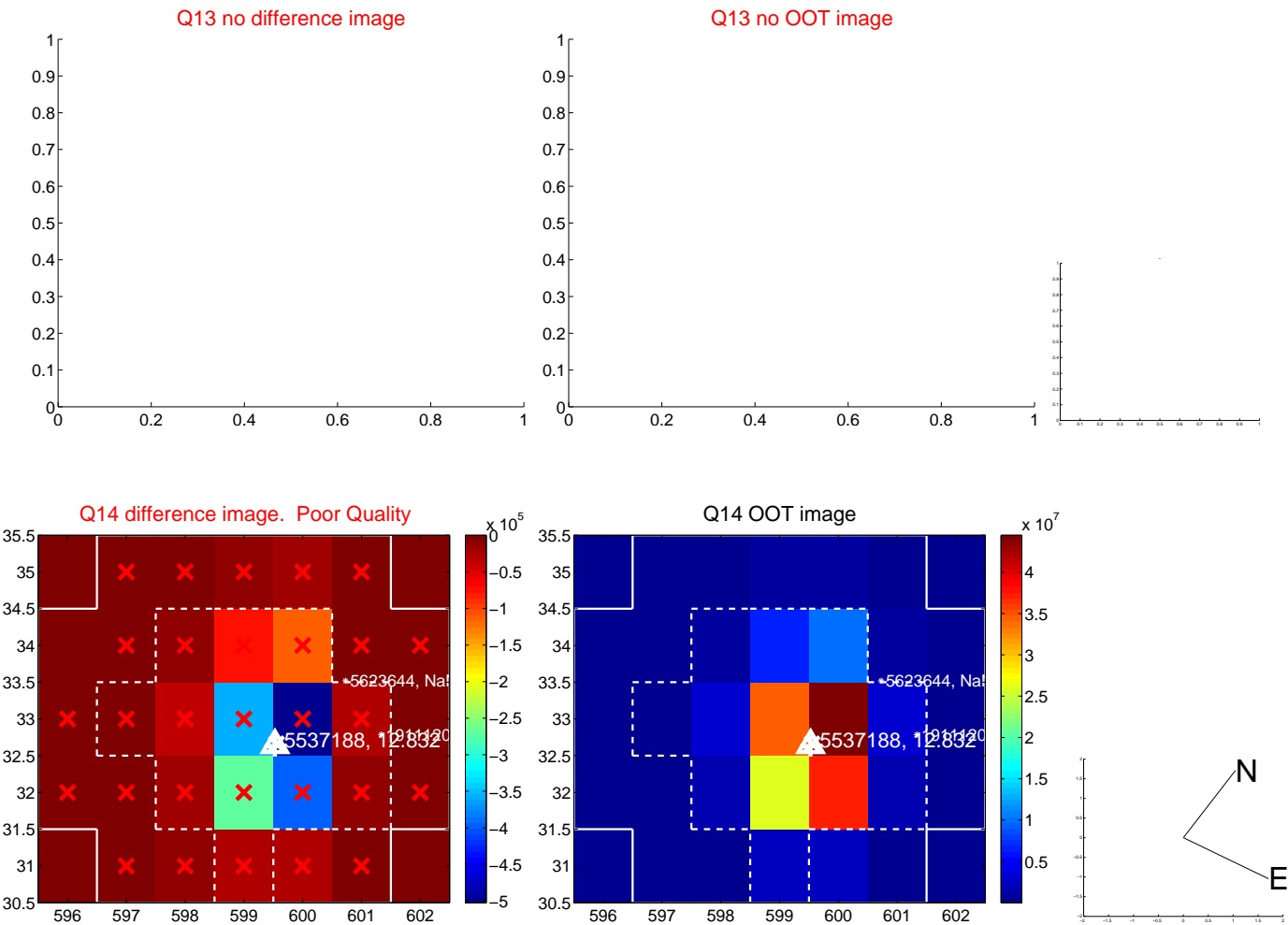
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



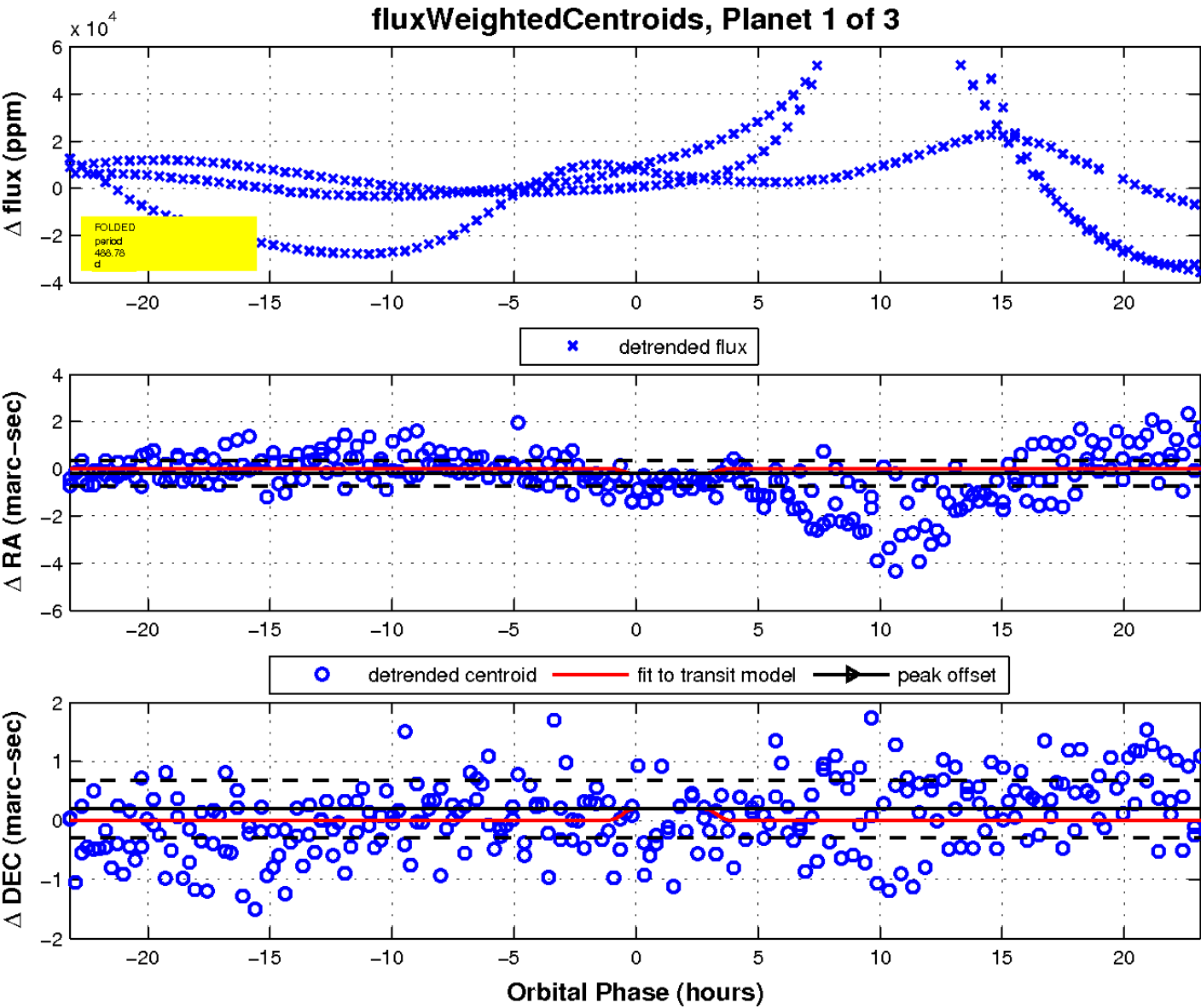
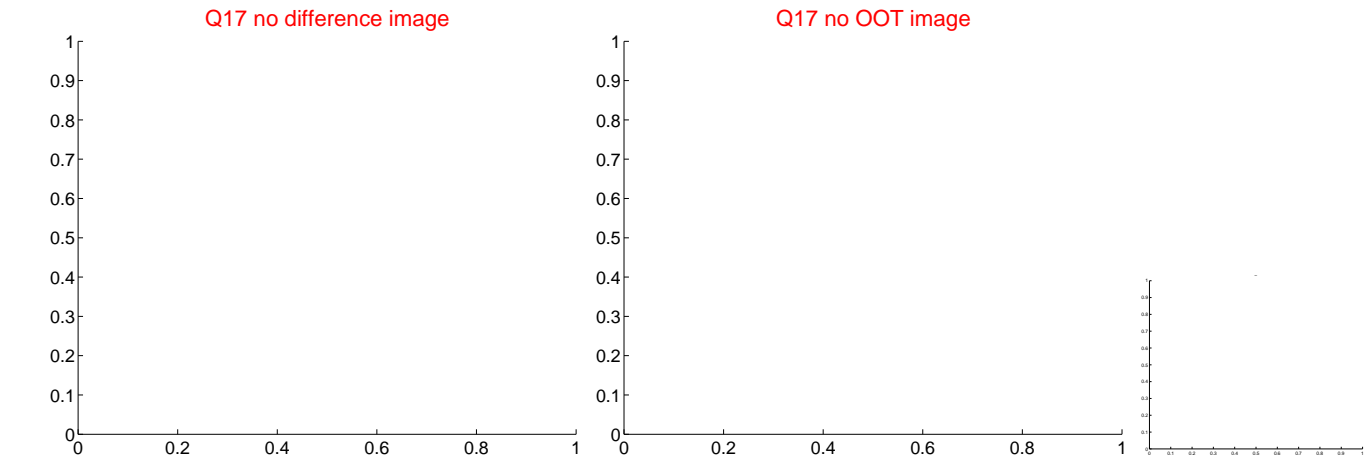
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

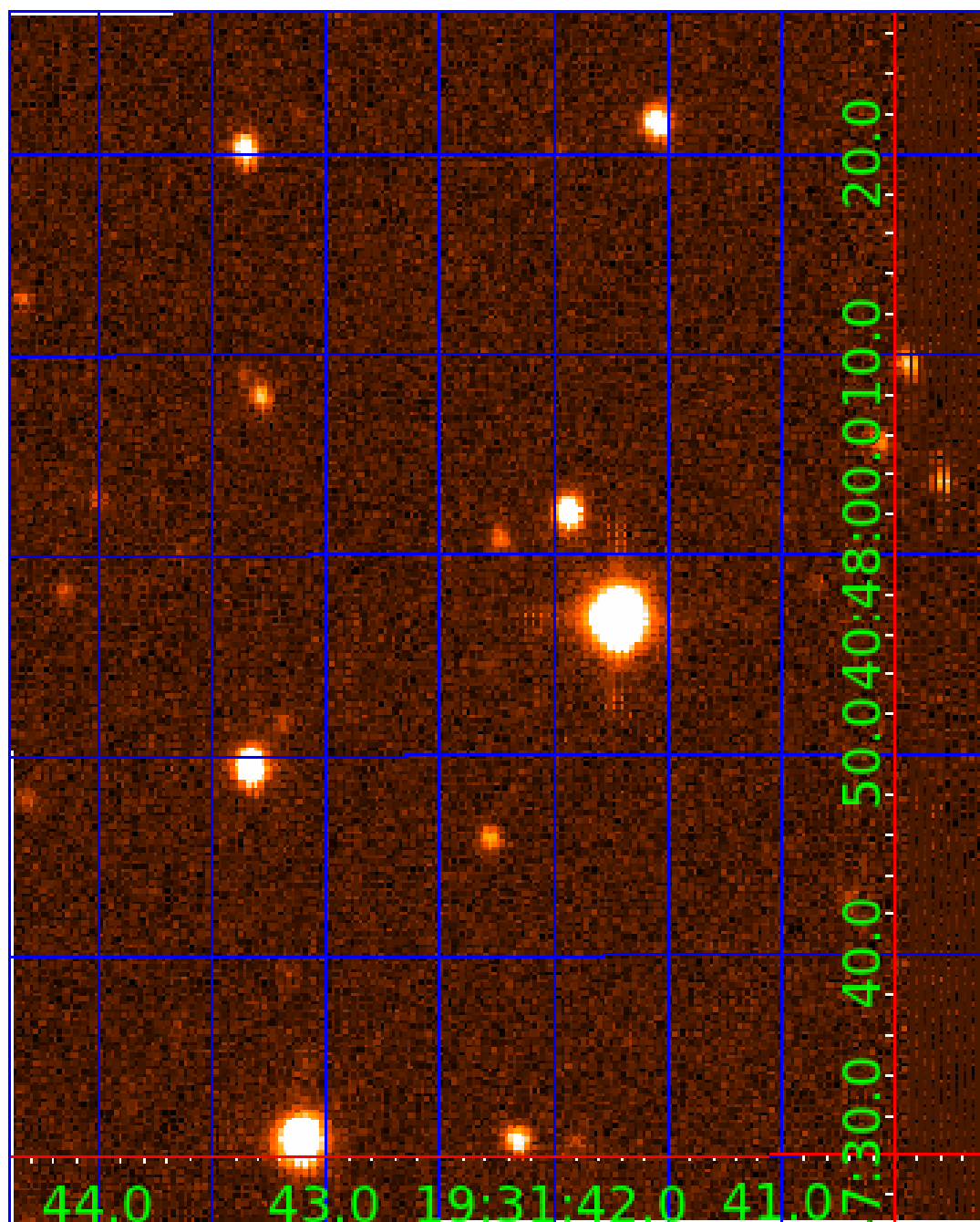


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005537188

Q1-17 DR25 TCE Parameters

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

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

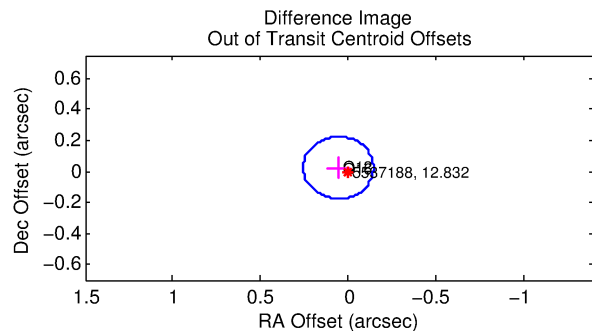
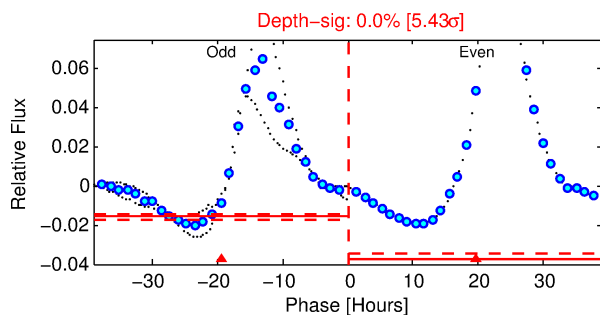
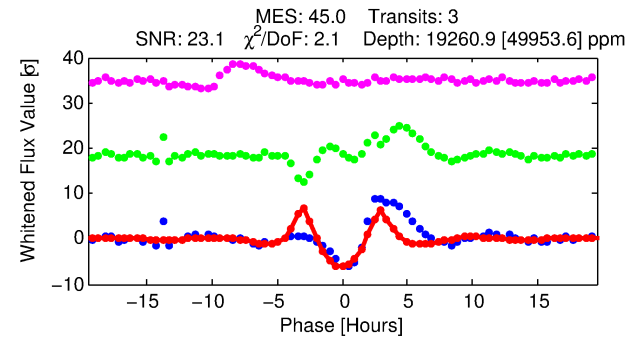
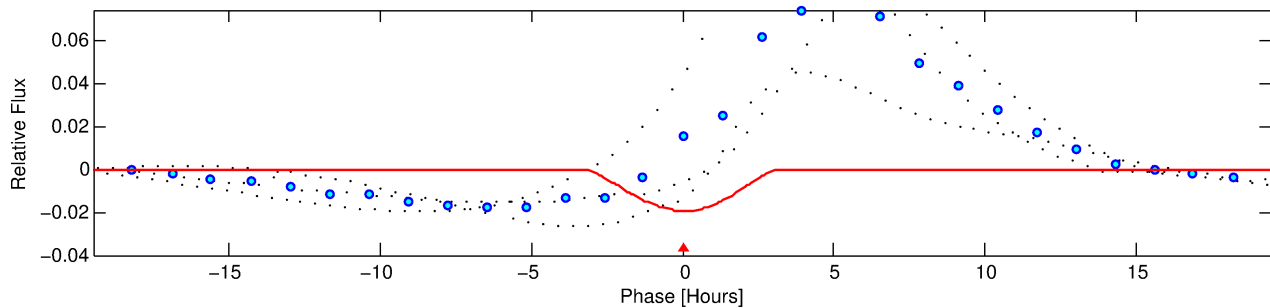
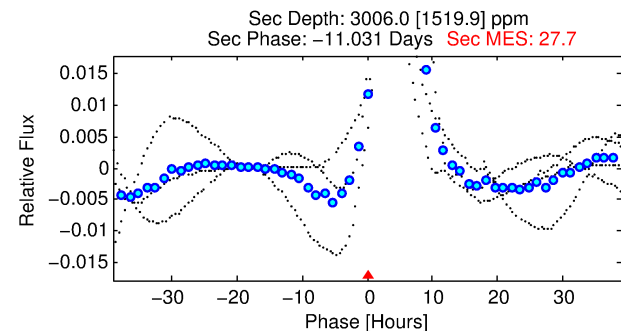
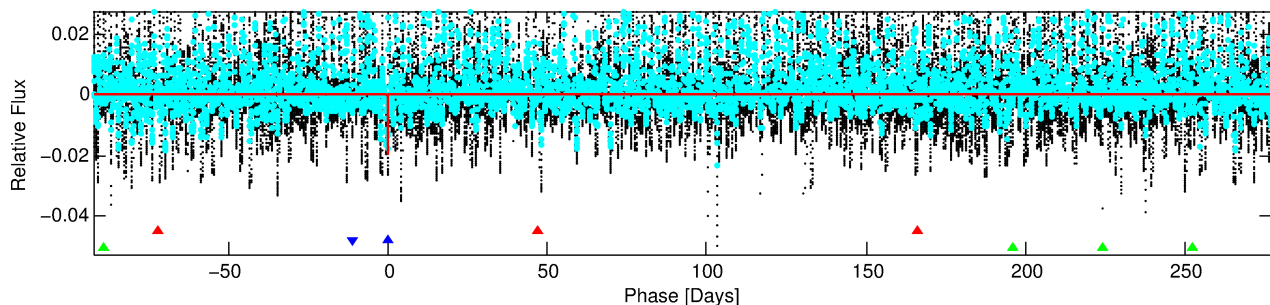
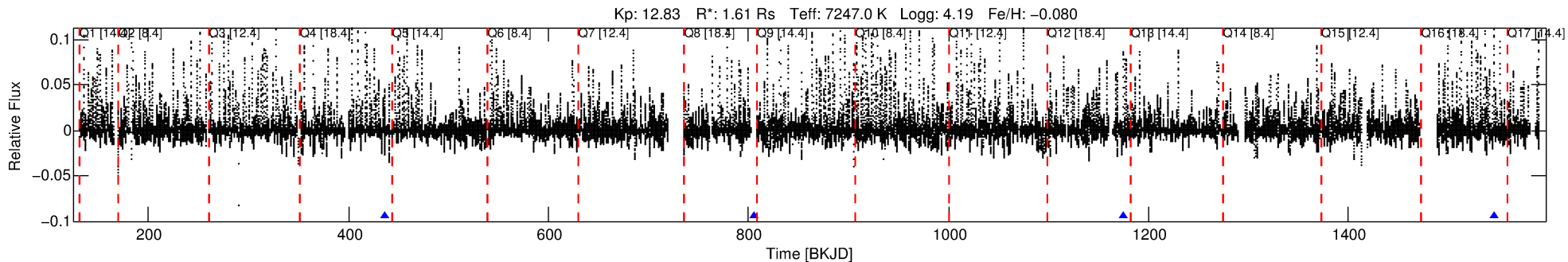
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005537188-02

No Significant Match Found

DV One-Page Summary

KIC: 5537188 Candidate: 2 of 3 Period: 369.544 d



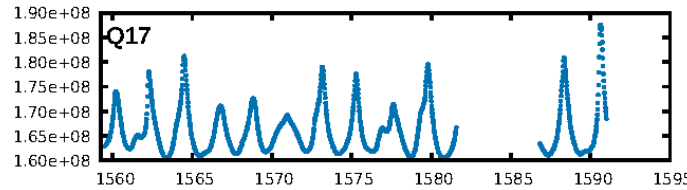
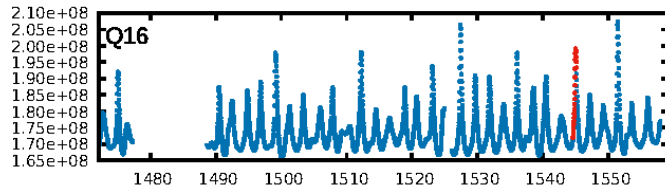
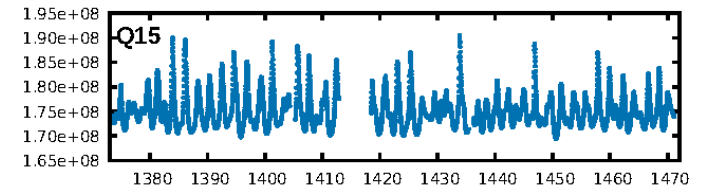
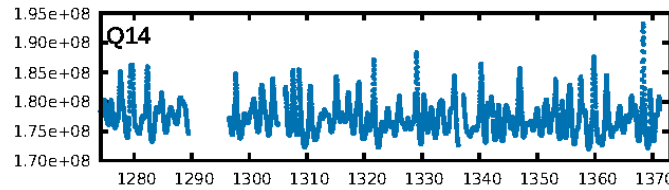
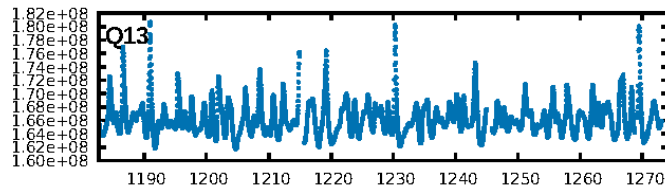
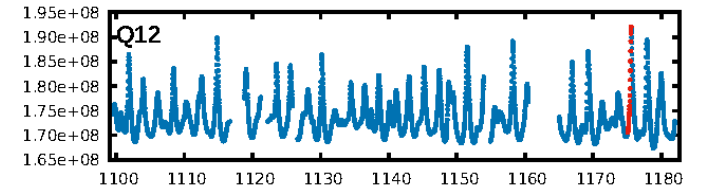
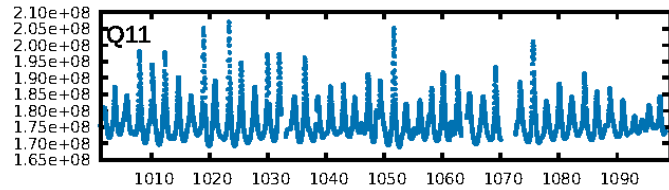
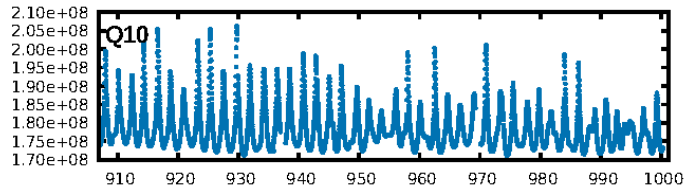
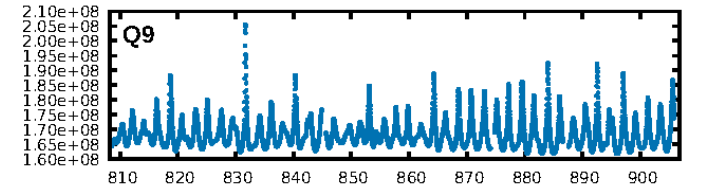
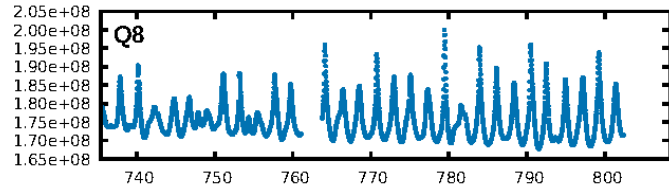
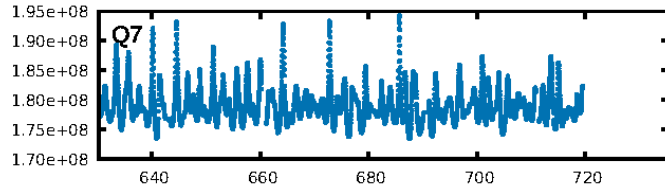
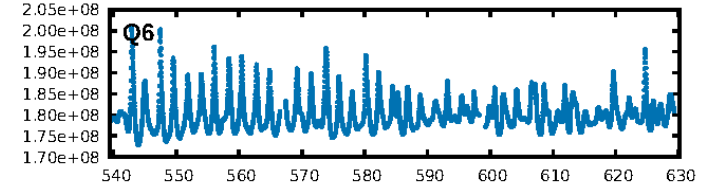
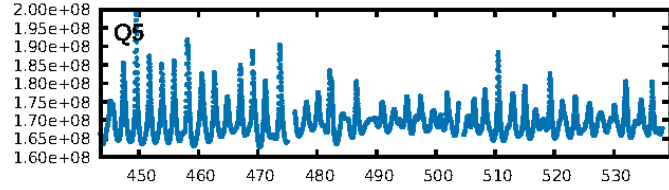
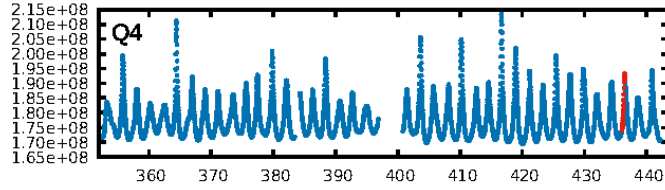
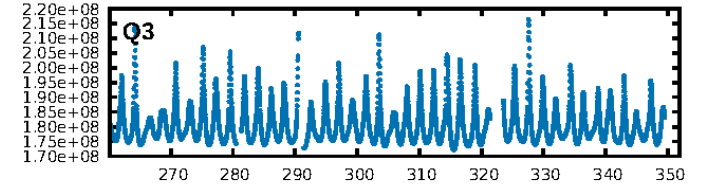
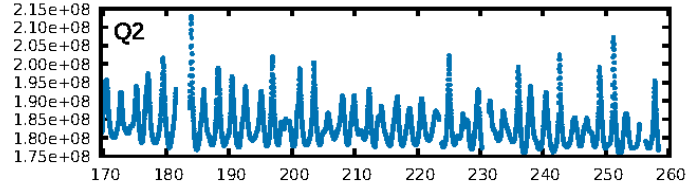
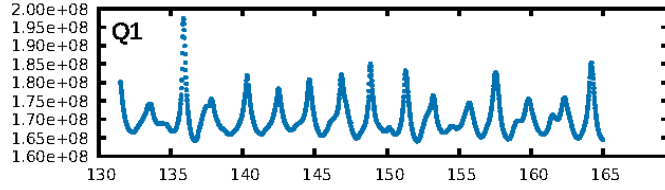
DV Fit Results:

Period = 369.54410 [0.00162] d
Epoch = 436.2633 [0.0035] BKJD
Rp/R* = 0.2194 [0.1628]
a/R* = 303.54 [25.16]
b = 1.00 [0.15]
Seff = 4.85 [1.99]
Teq = 378 [39] K
Rp = 38.45 [31.32] Re
a = 1.1463 [0.3090] AU
Ag = 1469.97 [2369.22] [0.62σ]
Teffp = 3623 [1428] K [2.27σ]

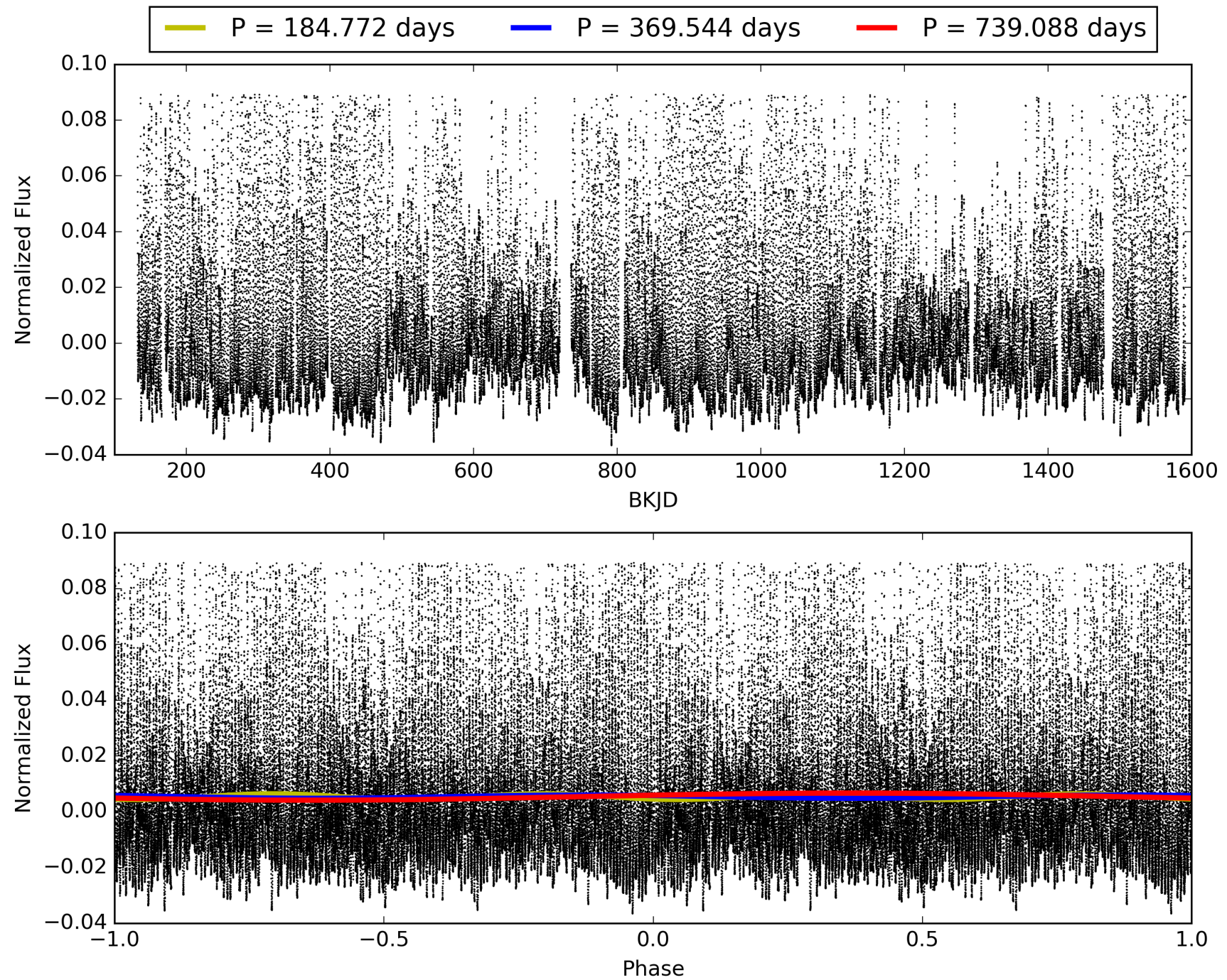
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [14.35σ]
LongPeriod-sig: 100.0% [388.11σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 4.1%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 2.235
Centroid-sig: 2.9%
Centroid-so: 0.160 arcsec [5.69σ]
OotOffset-rm: 0.062 arcsec [0.92σ]
KicOffset-rm: 0.071 arcsec [1.02σ]
OotOffset-st: 0/0/2/0 [2]
KicOffset-st: 0/0/2/0 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [2/2]

TCE 005537188-02, PDC Light Curves

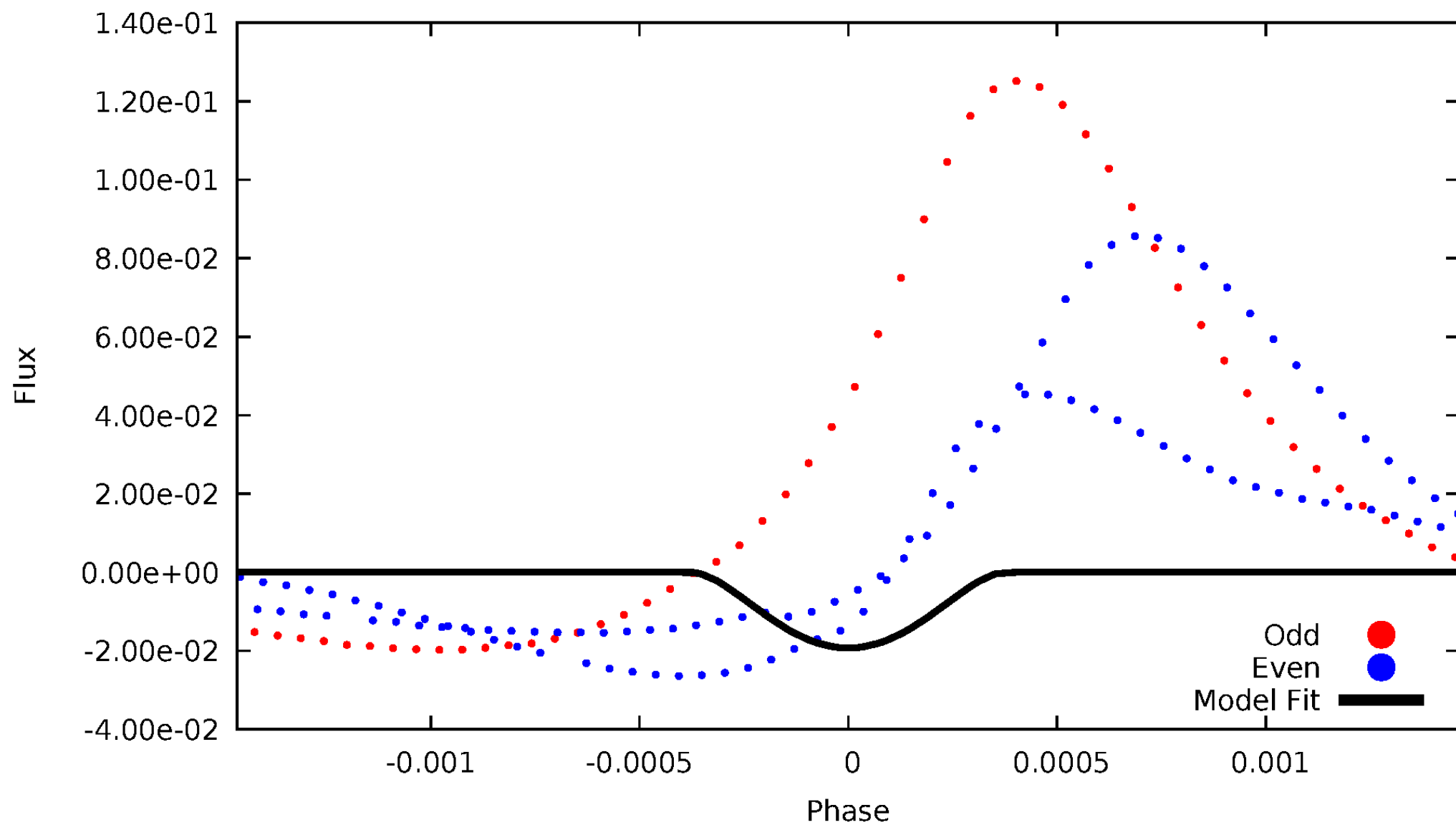


TCE 005537188-02



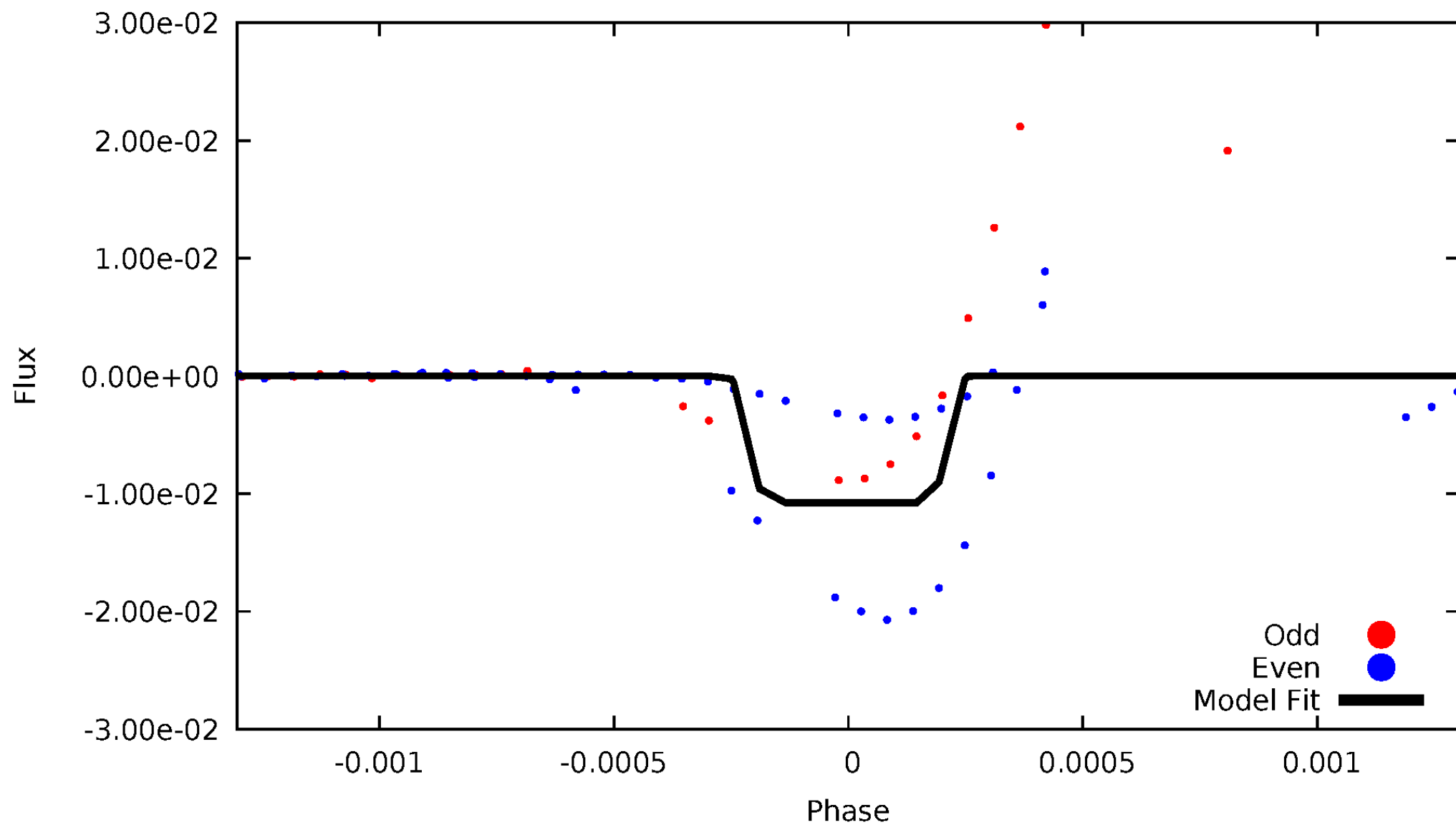
DV Odd/Even

TCE 005537188-02



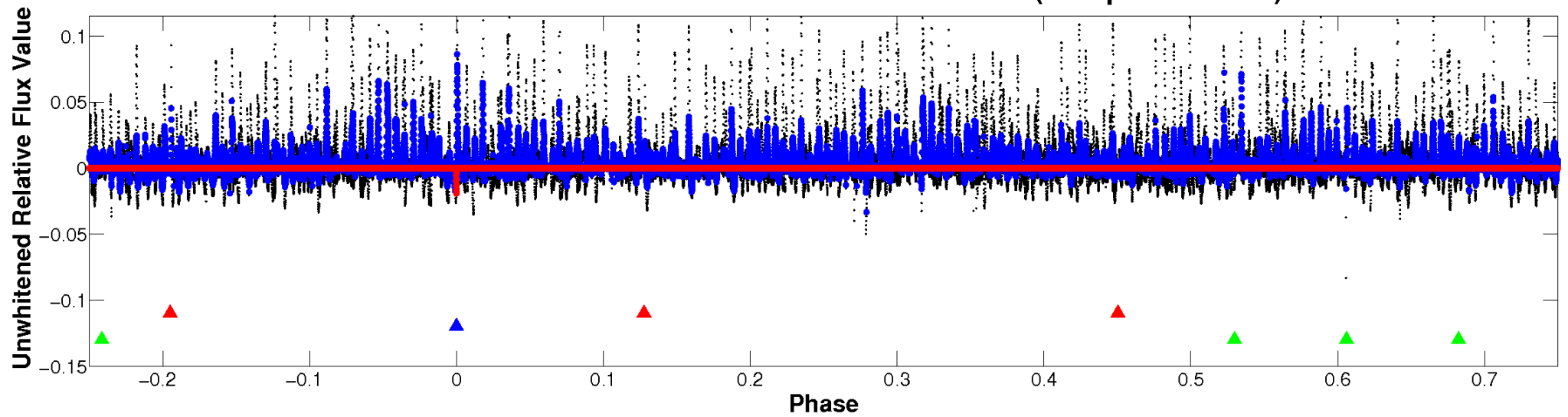
ALT Odd/Even

TCE 005537188-02

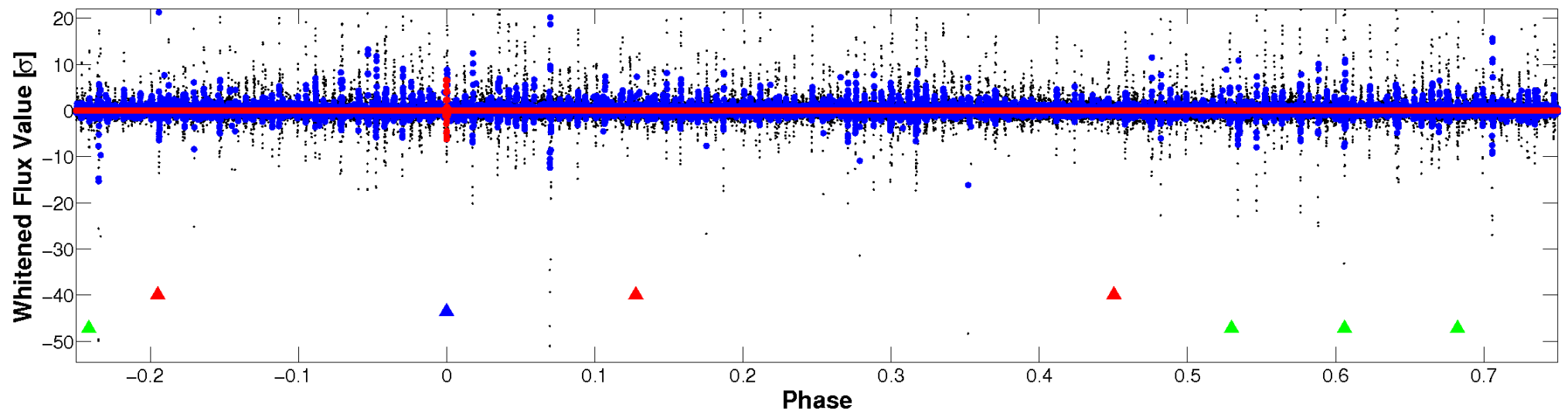


Non-Whitened Vs. Whitened Light Curve

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

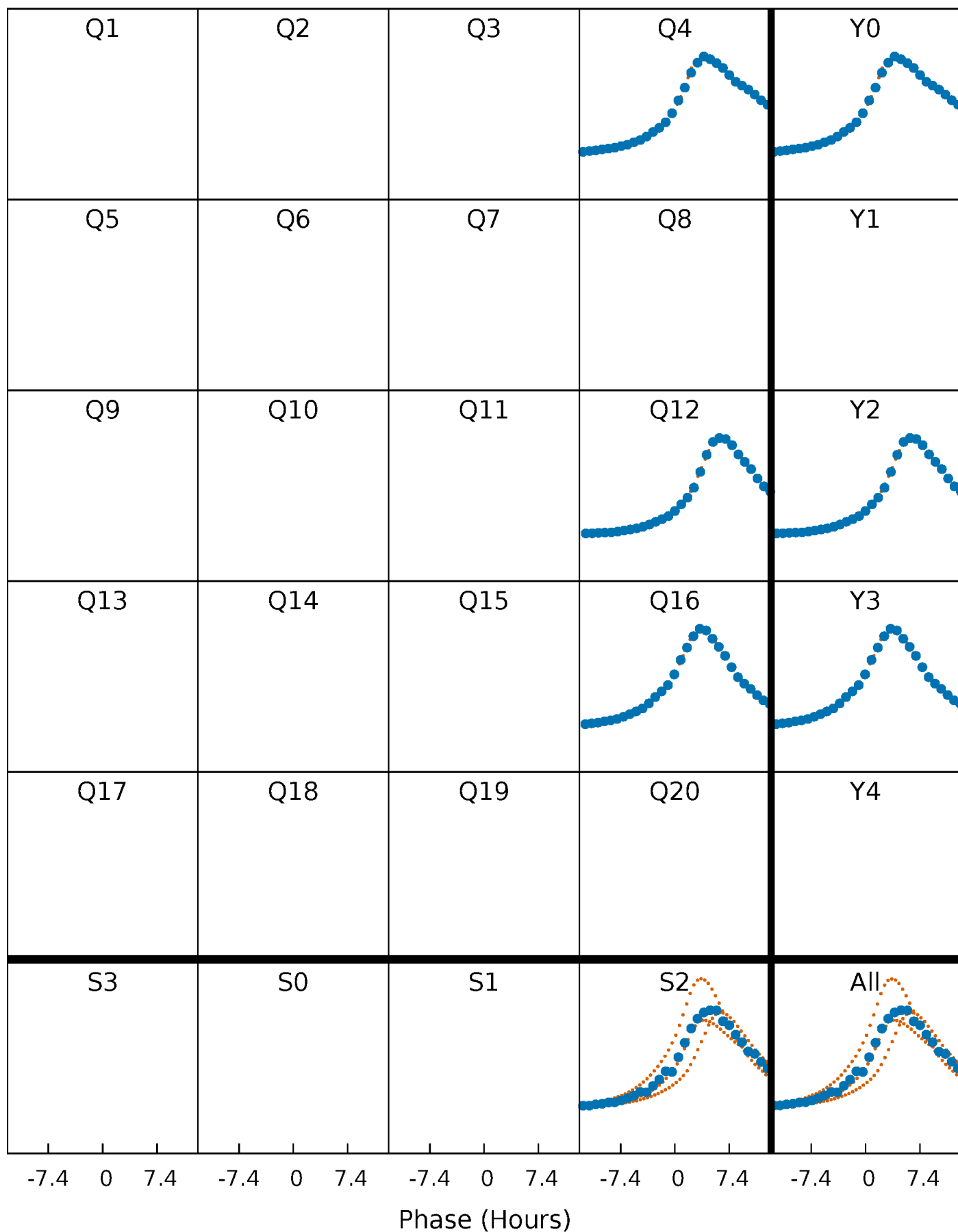


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



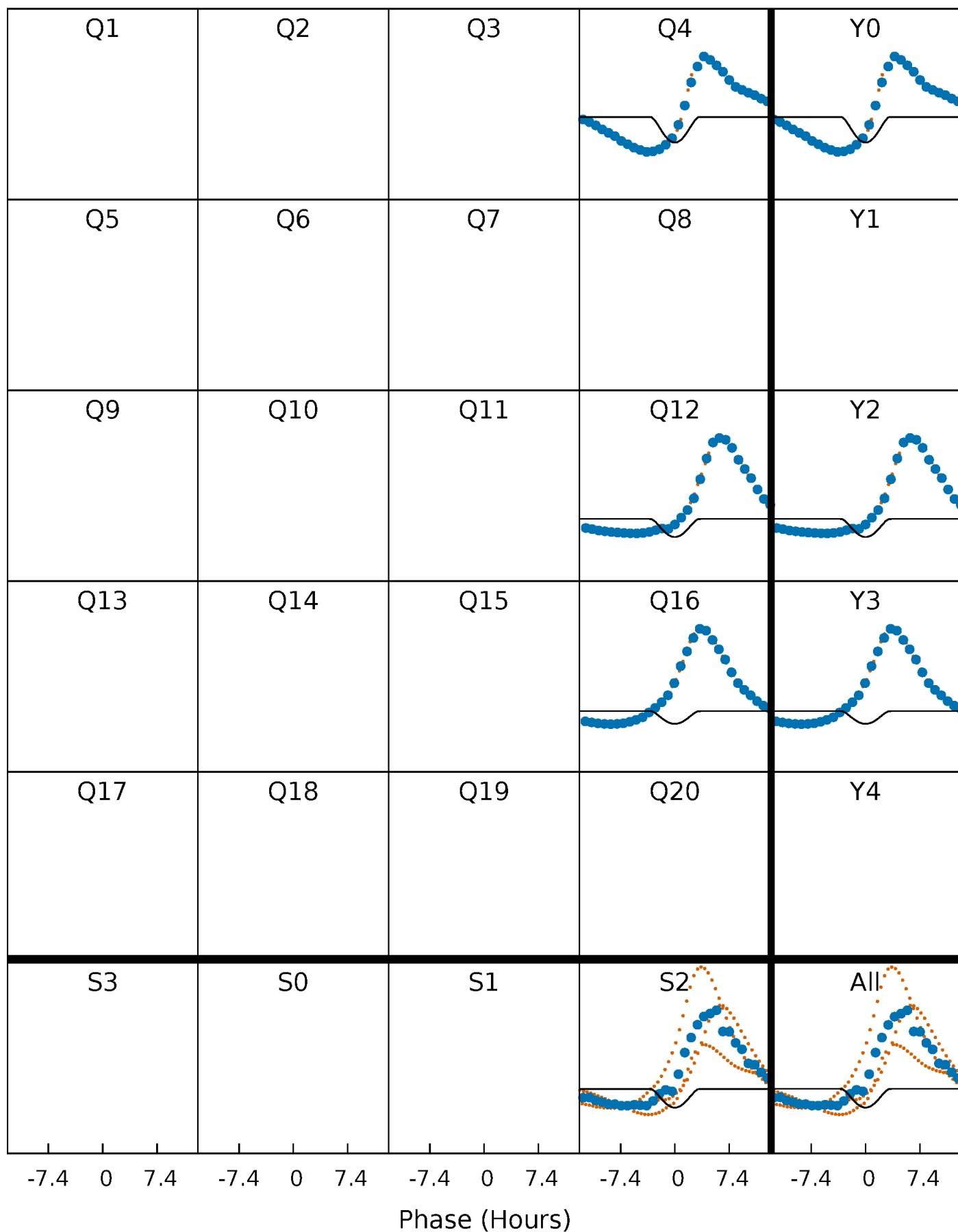
PDC Quarter-Phased Transit Curves

TCE 005537188-02 P=369.544105 Days $T_0=436.263345$ (BKJD)



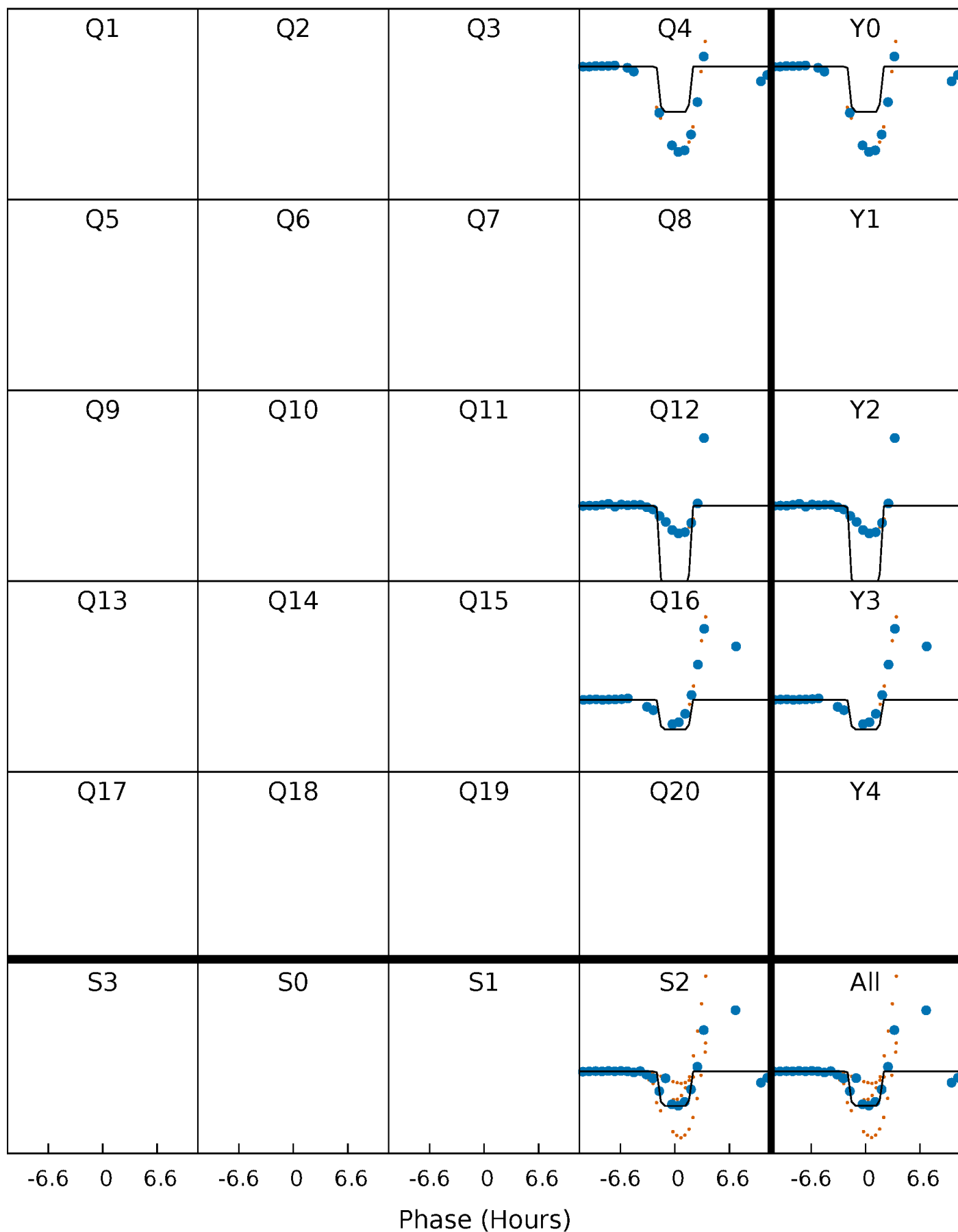
DV Quarter-Phased Transit Curves

TCE 005537188-02 P=369.544105 Days $T_0=436.263345$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

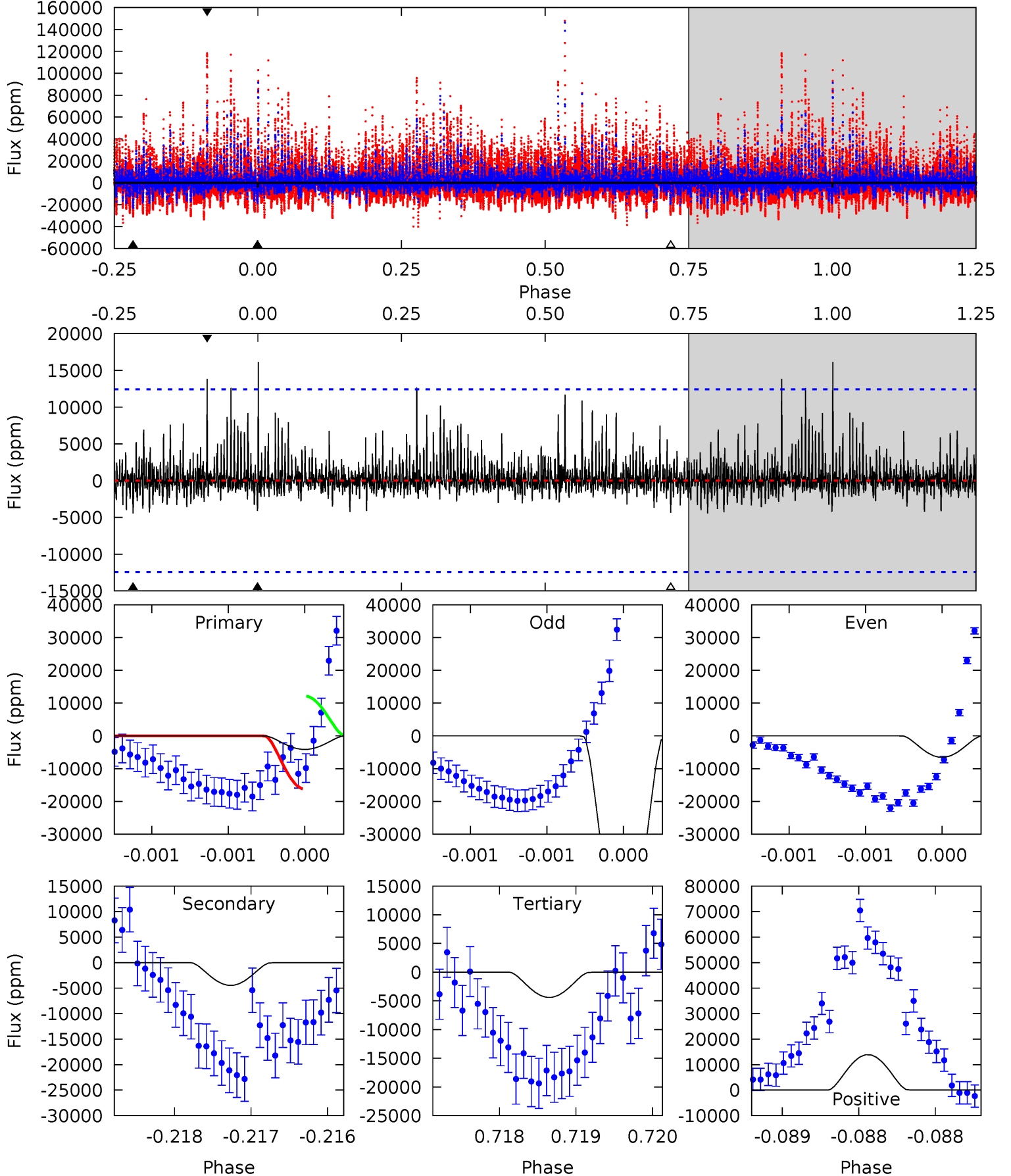
TCE 005537188-02 P=369.540688 Days $T_0=436.205302$ (BKJD)



DV Model-Shift Uniqueness Test

005537188-02, P = 369.544105 Days, E = 66.719240 Days

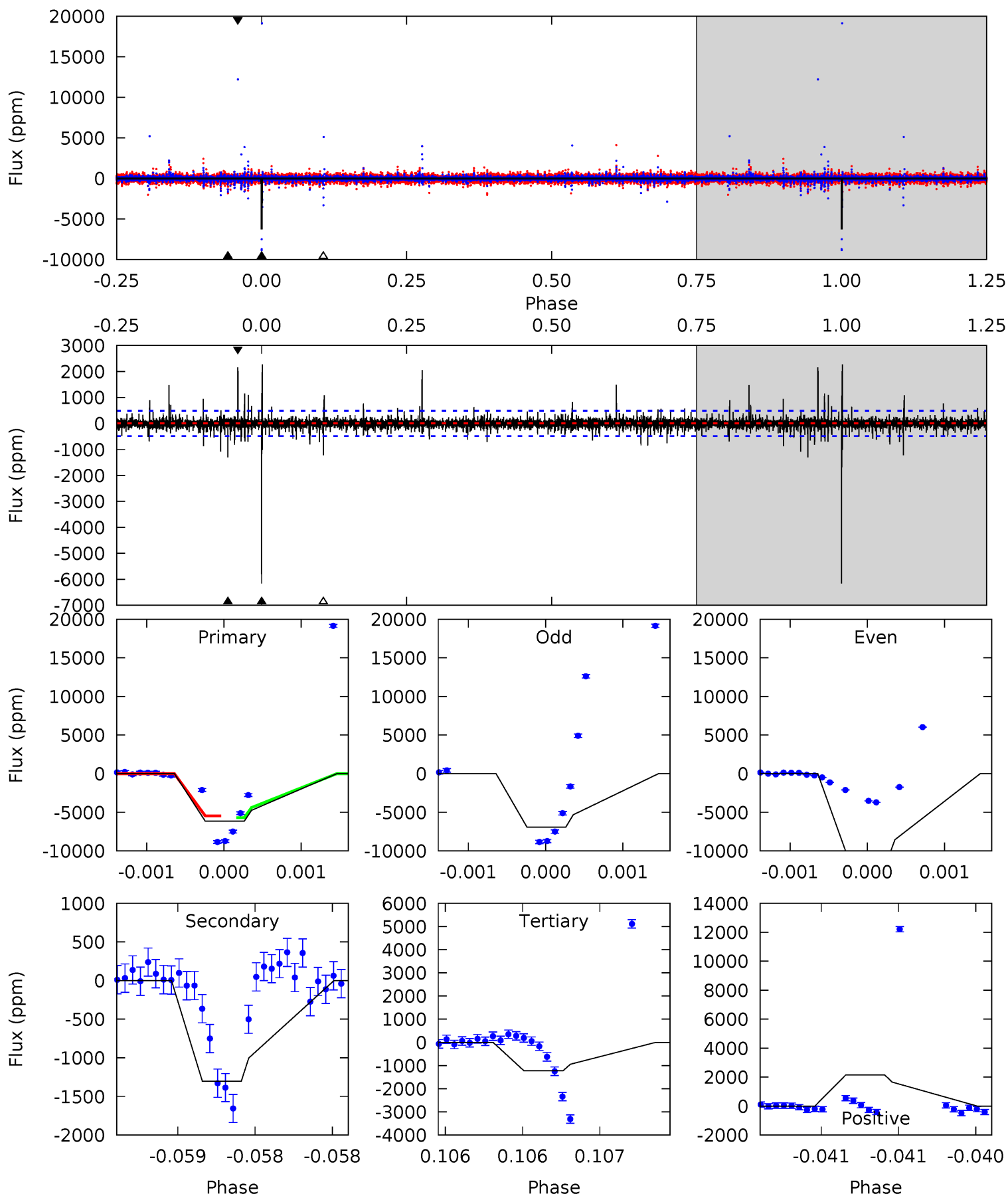
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.83	1.97	1.94	6.14	5.51	3.38	0.78	-0.11	-4.31	0.03	-4.17	9.42	-4.55	0.78	0.91



Alt Model-Shift Uniqueness Test

005537188-02, P = 369.540688 Days, E = 66.664614 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
69.9	14.8	13.9	24.4	5.56	3.45	1.17	56.0	45.5	0.86	-9.64	9.49	1.42	0.27	1.08



Stellar Parameters For KIC 005537188

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7247^{+201}_{-302}	$4.194^{+0.105}_{-0.195}$	$-0.080^{+0.200}_{-0.350}$	$1.606^{+0.540}_{-0.291}$	$1.472^{+0.221}_{-0.221}$	$0.501^{+0.250}_{-0.262}$
	+3%/-4%	+3%/-5%	+250%/-438%	+34%/-18%	+15%/-15%	+50%/-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 005537188-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-4445 ± 2255	$39.73^{+31.59}_{-22.13}$	535^{+40}_{-31}	4123^{+1923}_{-846}	1846^{+8237}_{-1410}
Alt.	-1303 ± 88	$29.01^{+24.22}_{-19.74}$	536^{+40}_{-37}	3782^{+2309}_{-654}	1121^{+10437}_{-794}

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 $A_{obs} \gg 1.0$

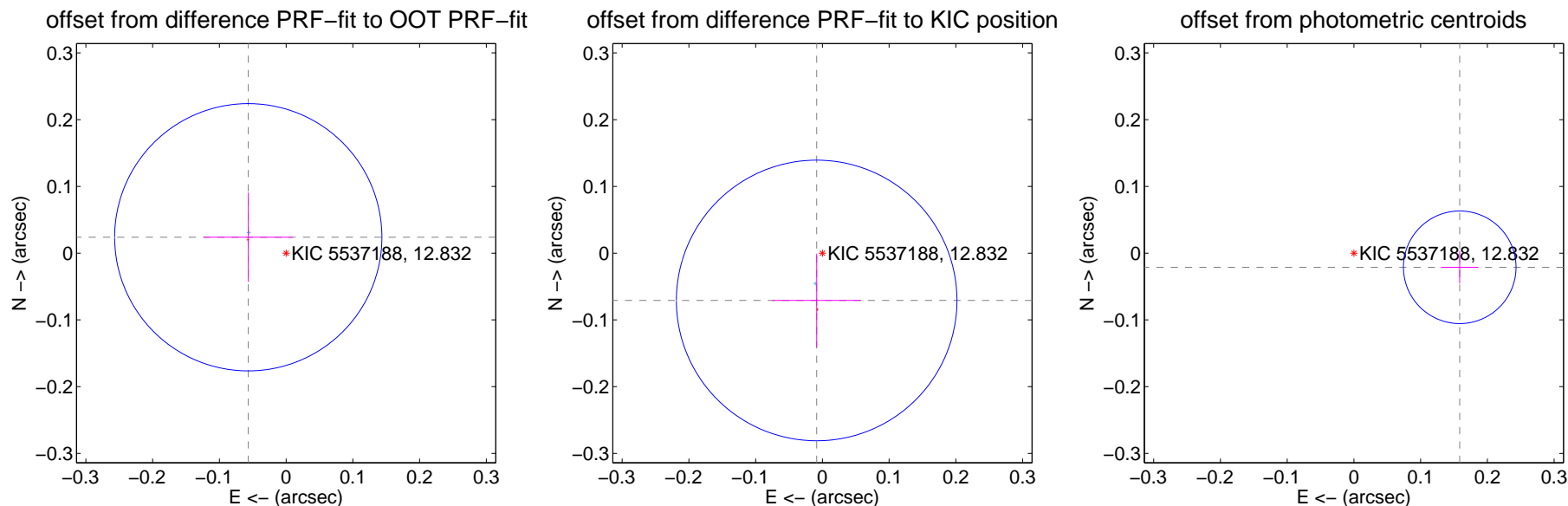
DV Centroid Data

Supplemental centroid analysis for 005537188-02. Kepler magnitude: 12.83. Transit SNR 23.07

There are 1 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.062 ± 0.067	0.92	0.057 ± 0.067	0.024 ± 0.067
PRF-fit source offset from KIC position	0.071 ± 0.070	1.02	0.009 ± 0.067	-0.071 ± 0.070
photometric centroid source offset	0.16 ± 0.03	5.69	-0.16 ± 0.03	-0.02 ± 0.02

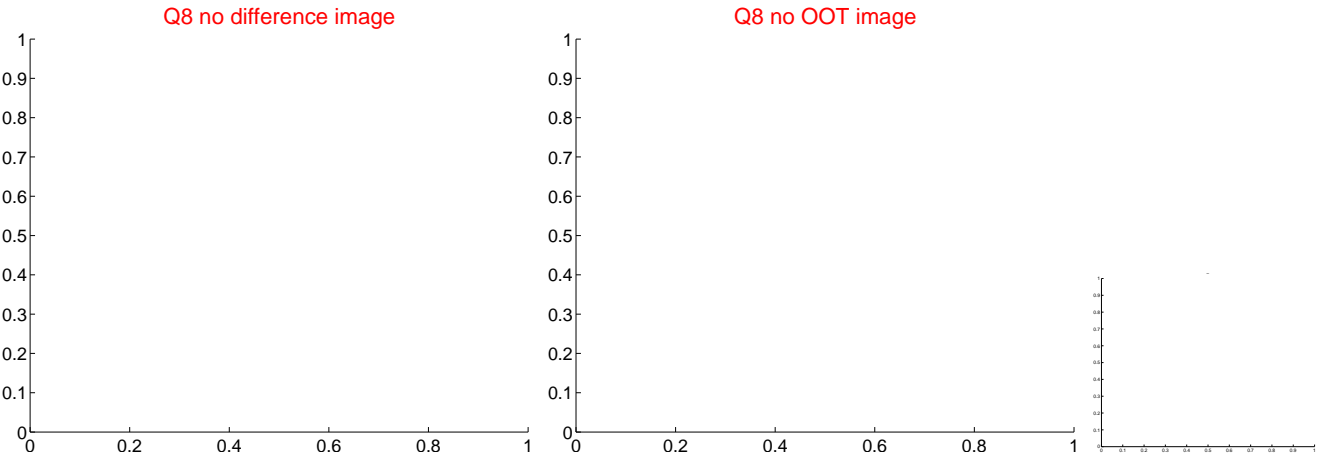
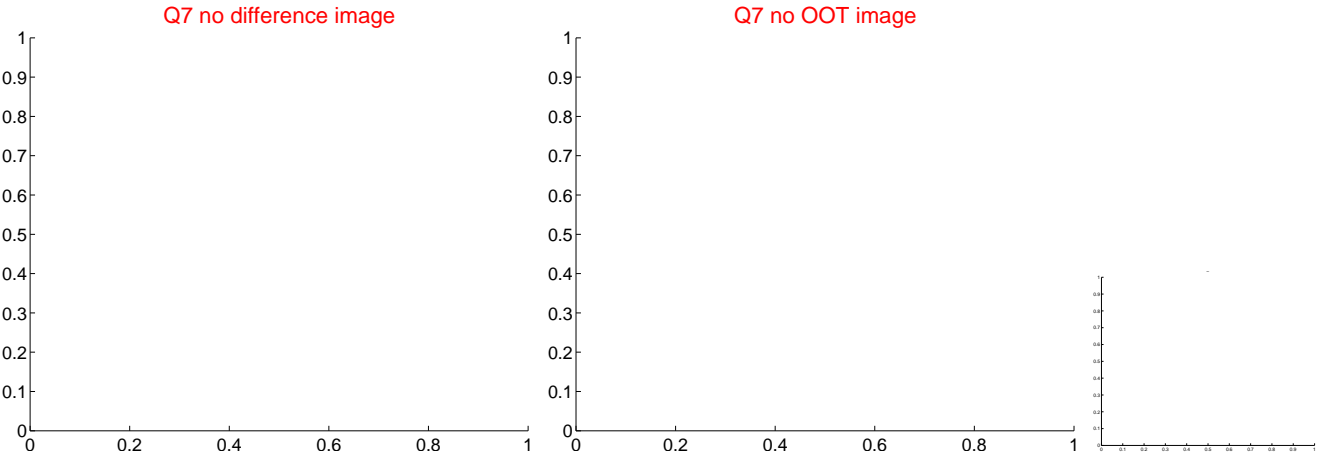
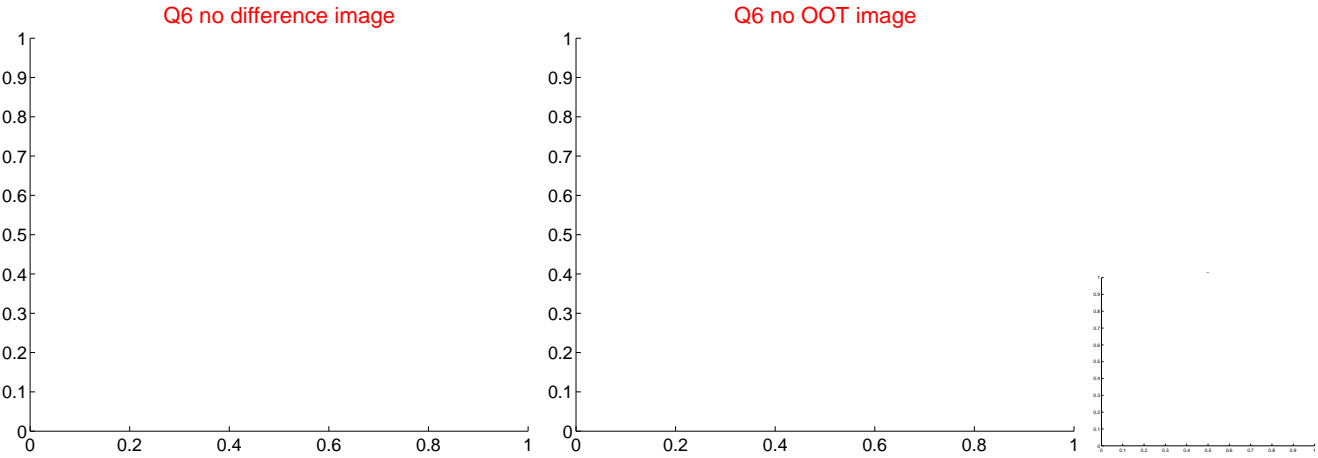
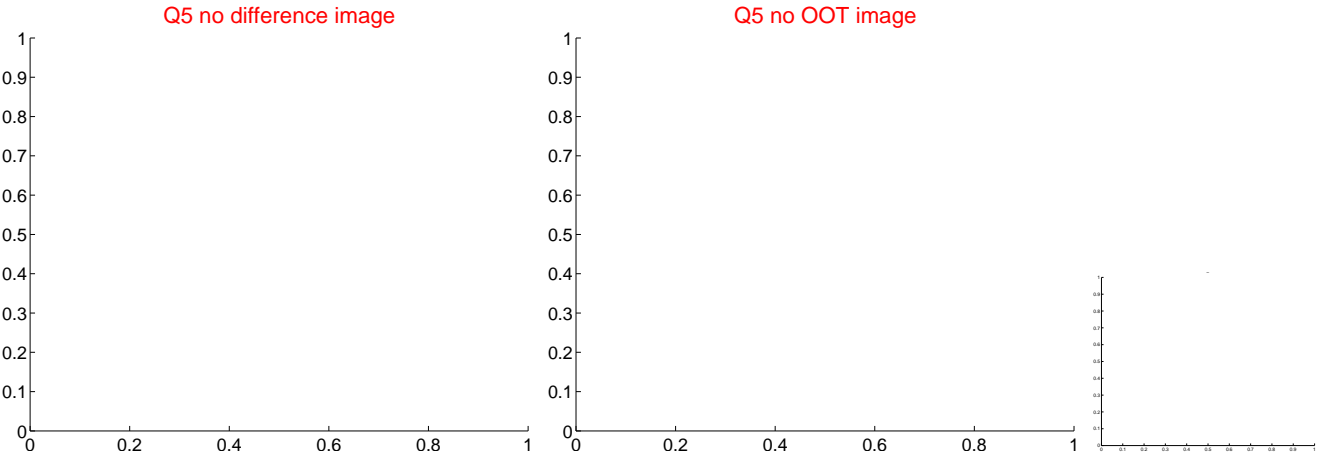


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

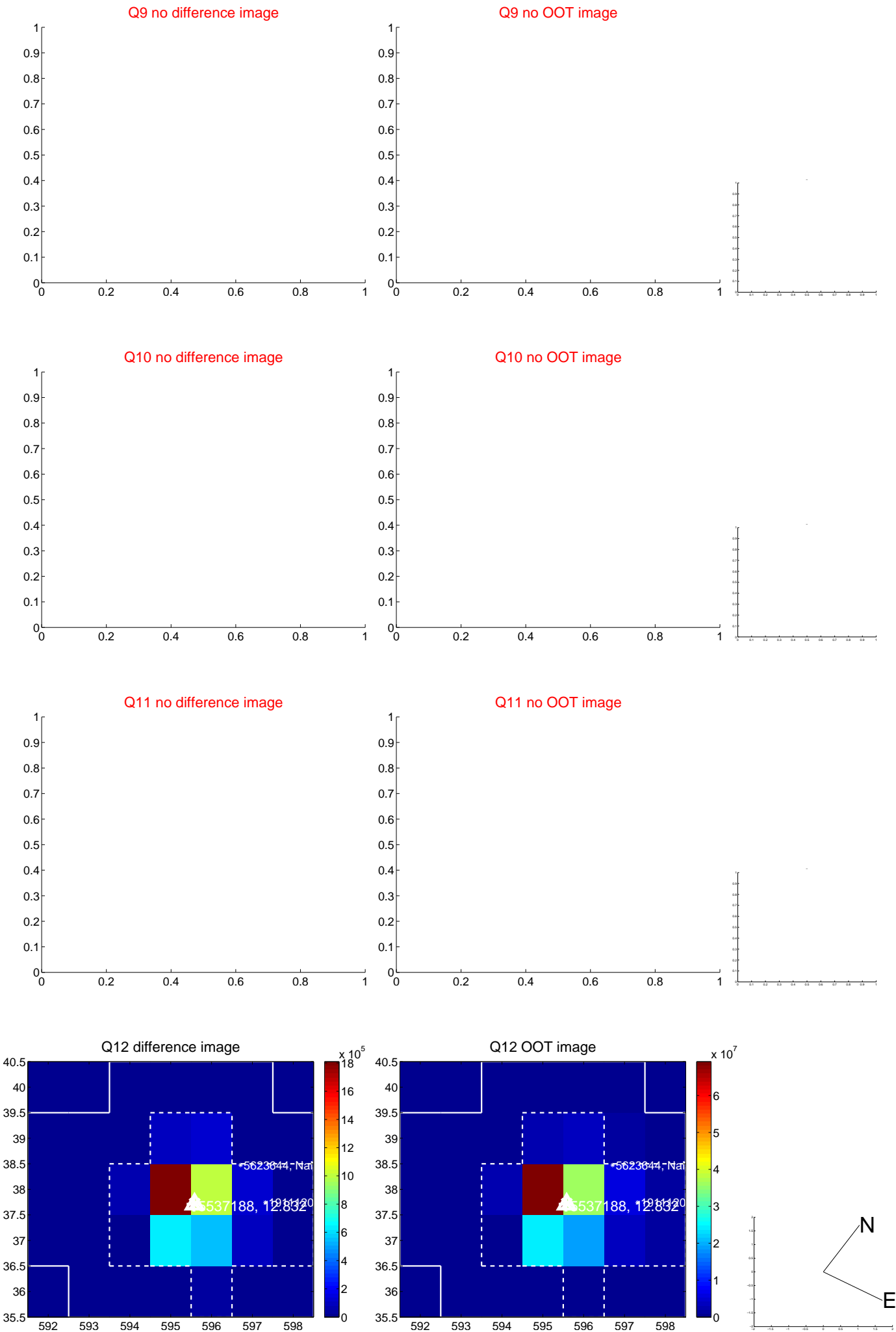
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



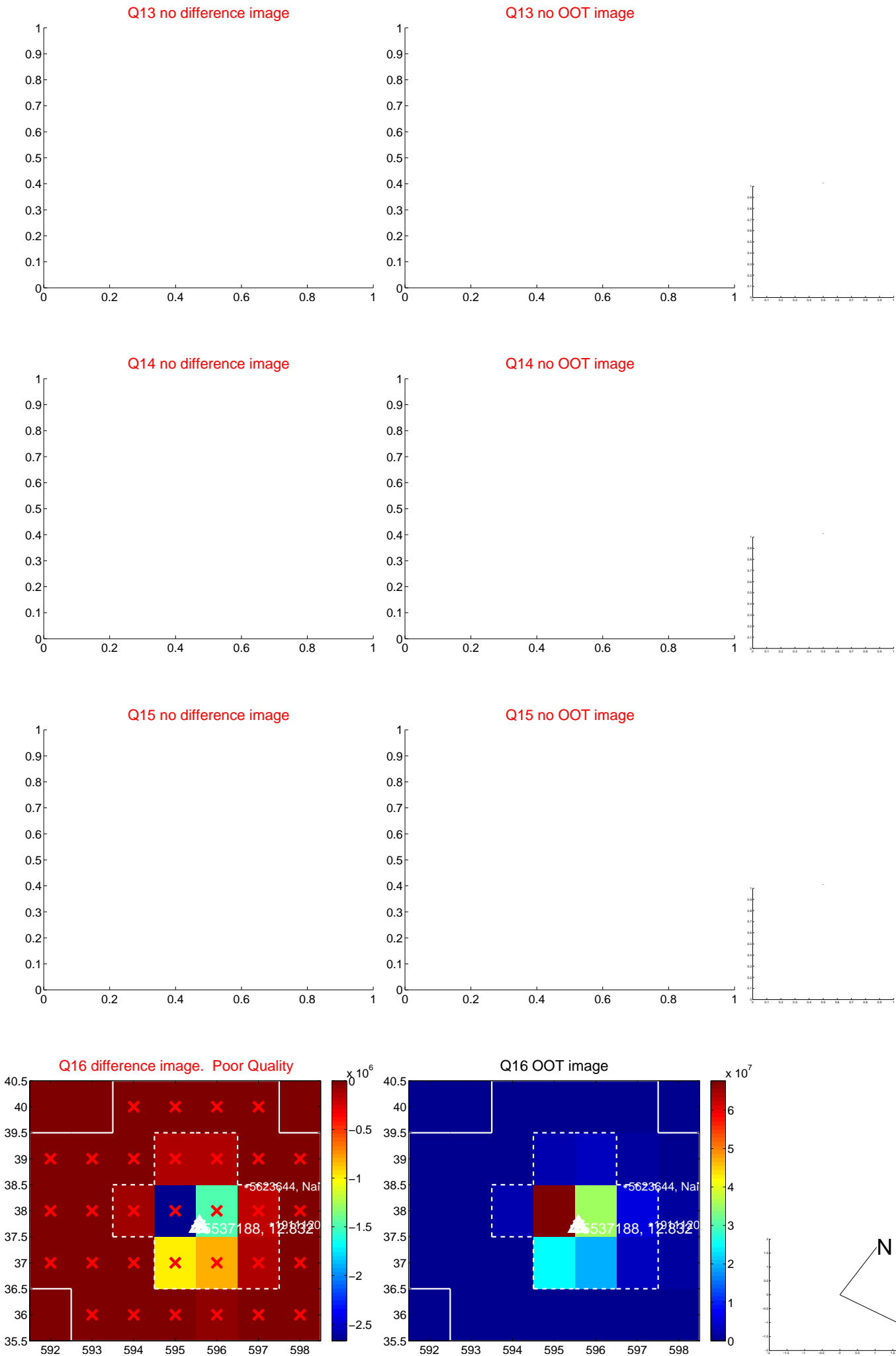
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



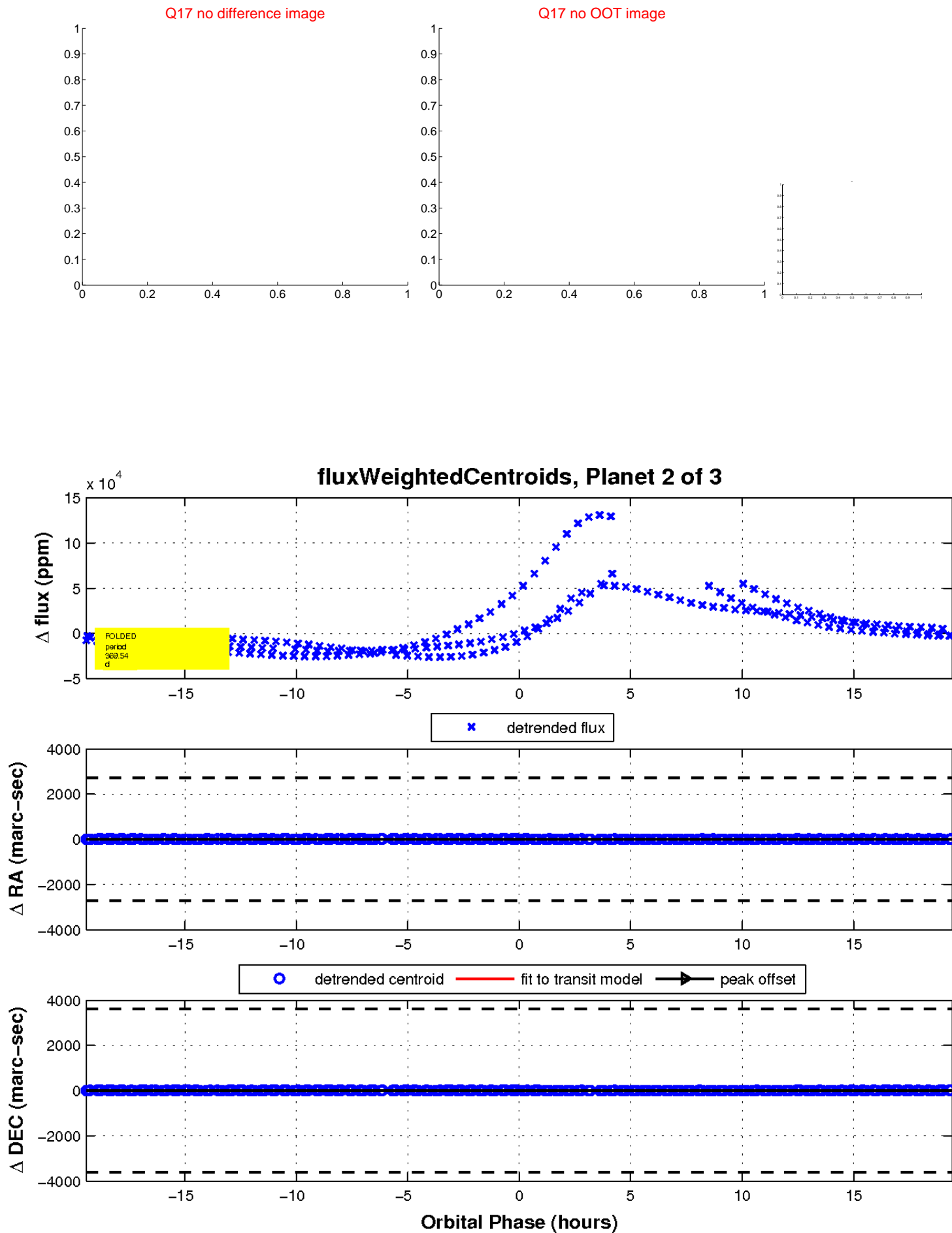
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

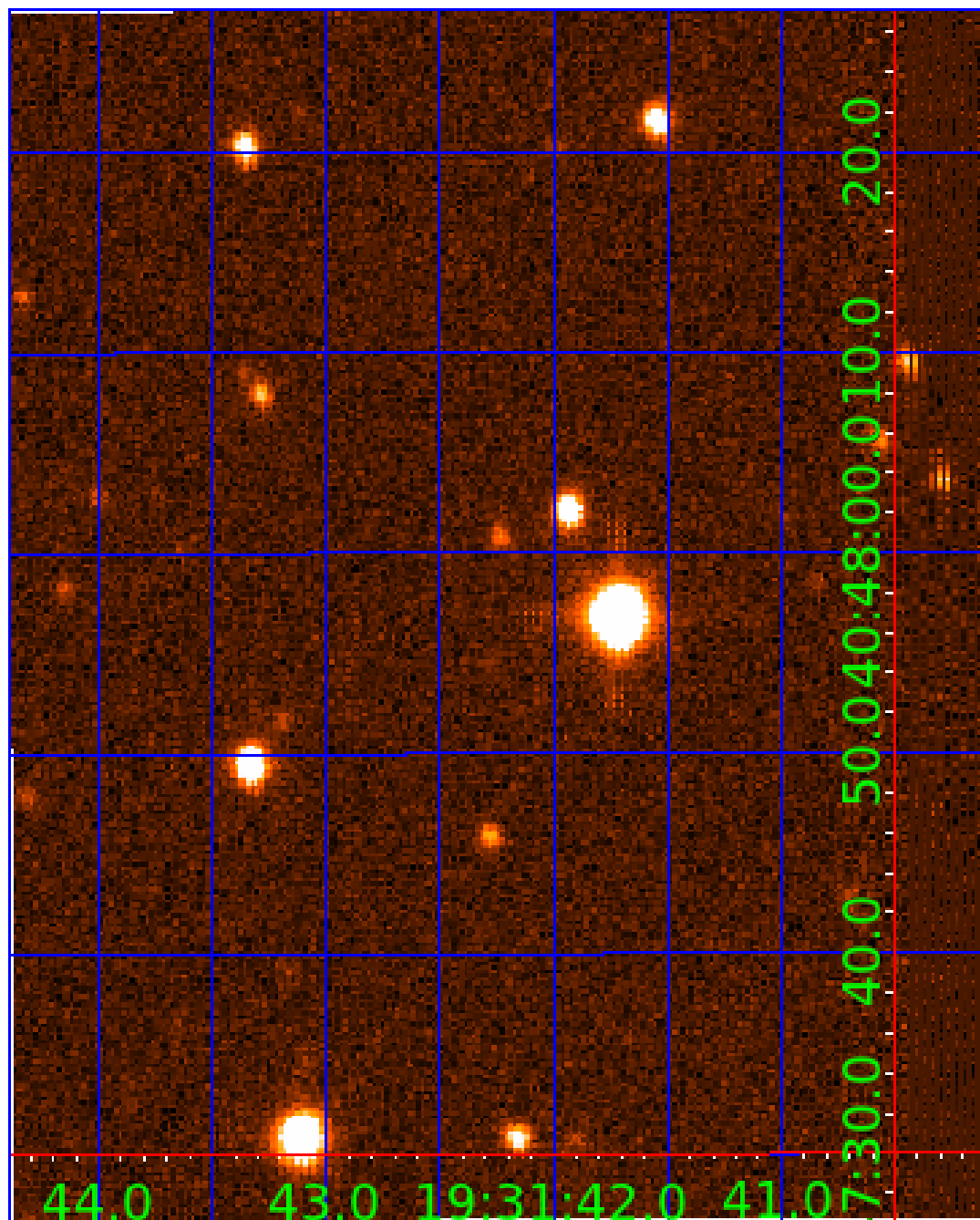


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005537188

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})
005537188-01	OBS	No	488.784378	364.228809	3876.5	3.500	96.2	-1.0	1.61	7247	10.14	3.34
005537188-02	OBS	No	369.544105	436.263345	19260.9	6.490	45.0	23.1	1.61	7247	38.45	4.85
005537188-03	OBS	No	341.361648	347.036622	5842.6	46.696	42.2	2.3	1.61	7247	13.76	5.39

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005537188-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
005537188-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005537188-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

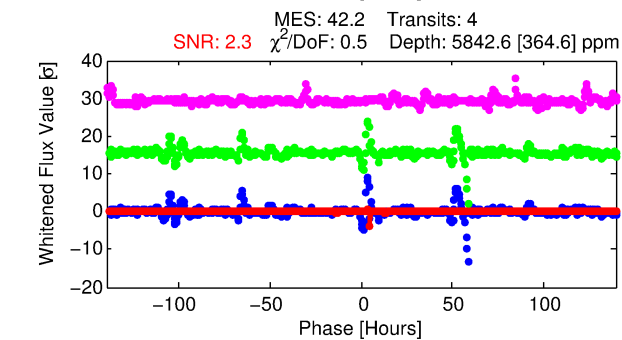
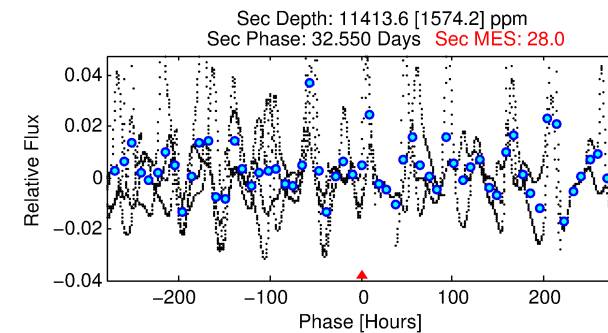
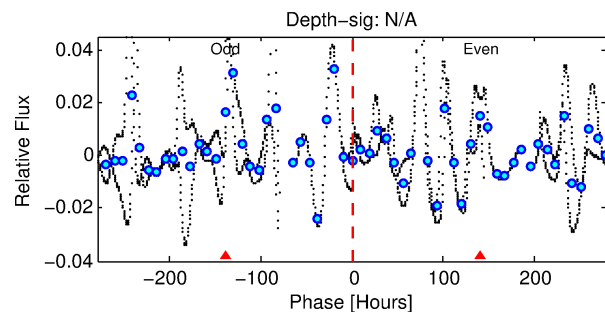
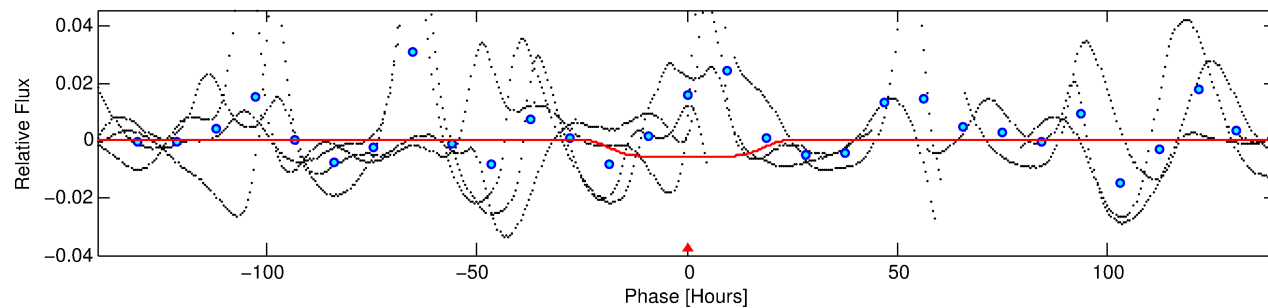
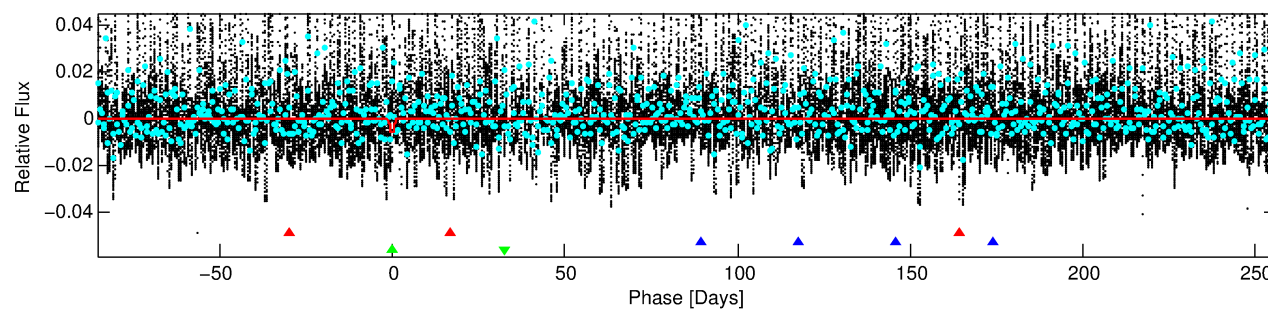
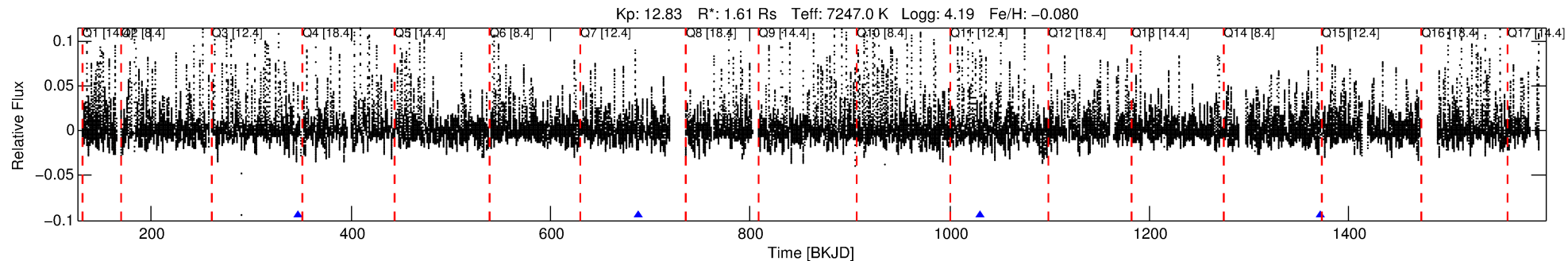
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005537188-03

No Significant Match Found

DV One-Page Summary

KIC: 5537188 Candidate: 3 of 3 Period: 341.362 d



DV Fit Results:

Period = 341.36165 [0.03070] d
Epoch = 347.0366 [0.0477] BKJD
Rp/R* = 0.0785 [0.0026]
a/R* = 37.97 [2.64]
b = 0.84 [0.03]
Seff = 5.39 [2.21]
Teq = 389 [40] K
Rp = 13.76 [4.65] Re
a = 1.0873 [0.2931] AU
Ag = 39201.33 [15836.87] [2.48σ]
Teff = 8453 [478] K [16.82σ]

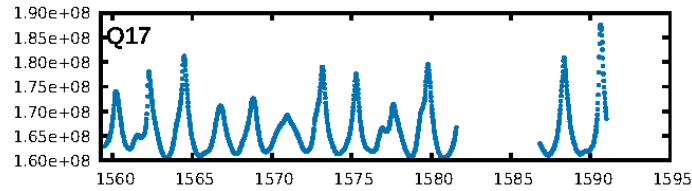
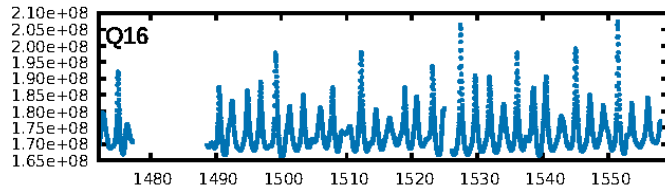
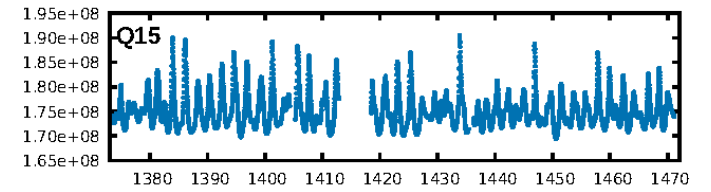
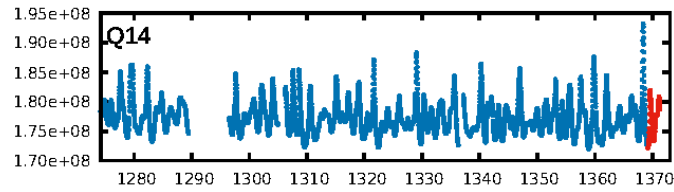
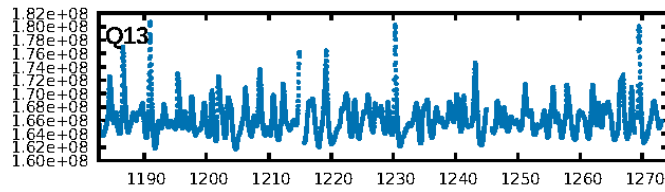
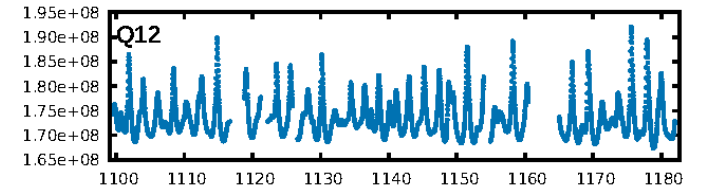
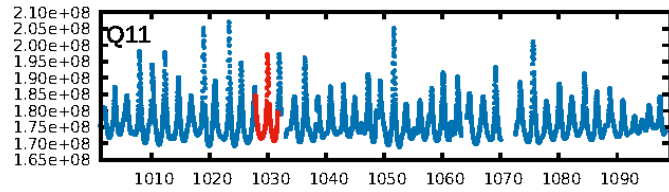
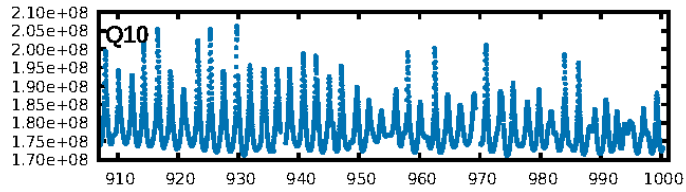
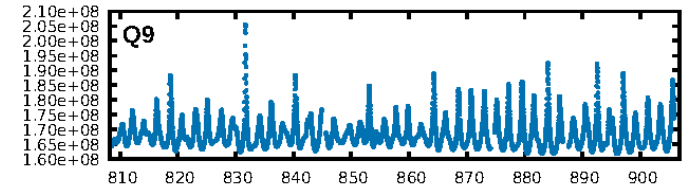
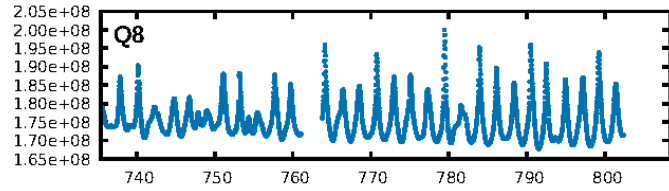
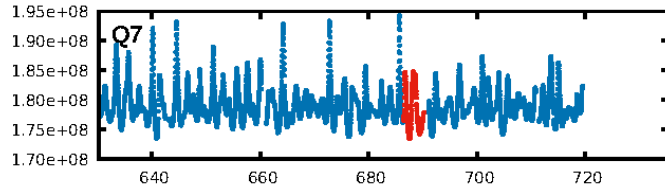
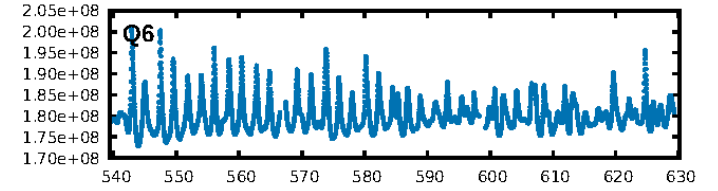
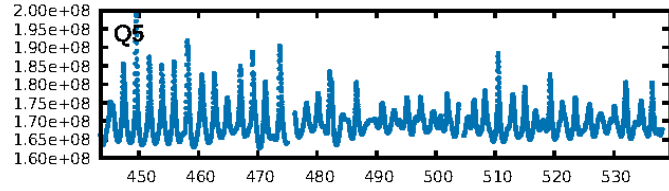
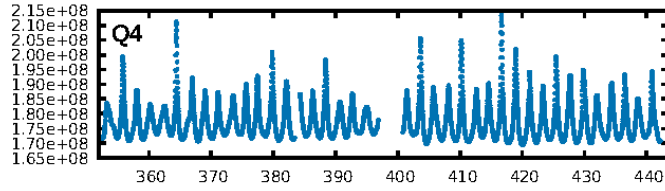
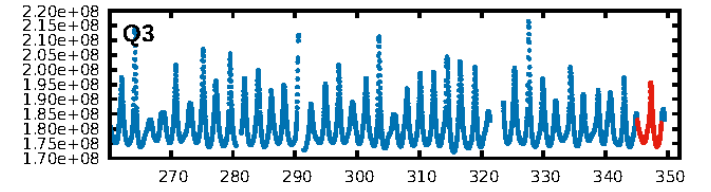
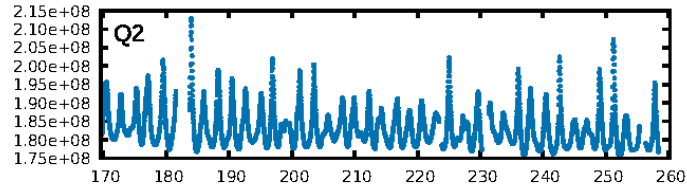
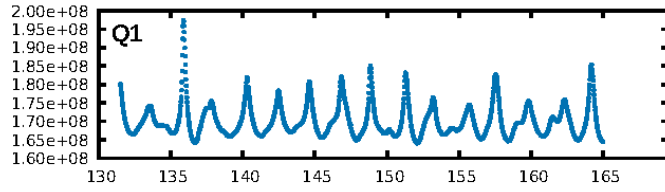
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [14.35σ]
ModelChiSquare2-sig: 75.5%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [4/4]
GhostDiagnostic-chr: 0.8056
Centroid-sig: 4.7%
Centroid-so: 0.119 arcsec [2.35σ]
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

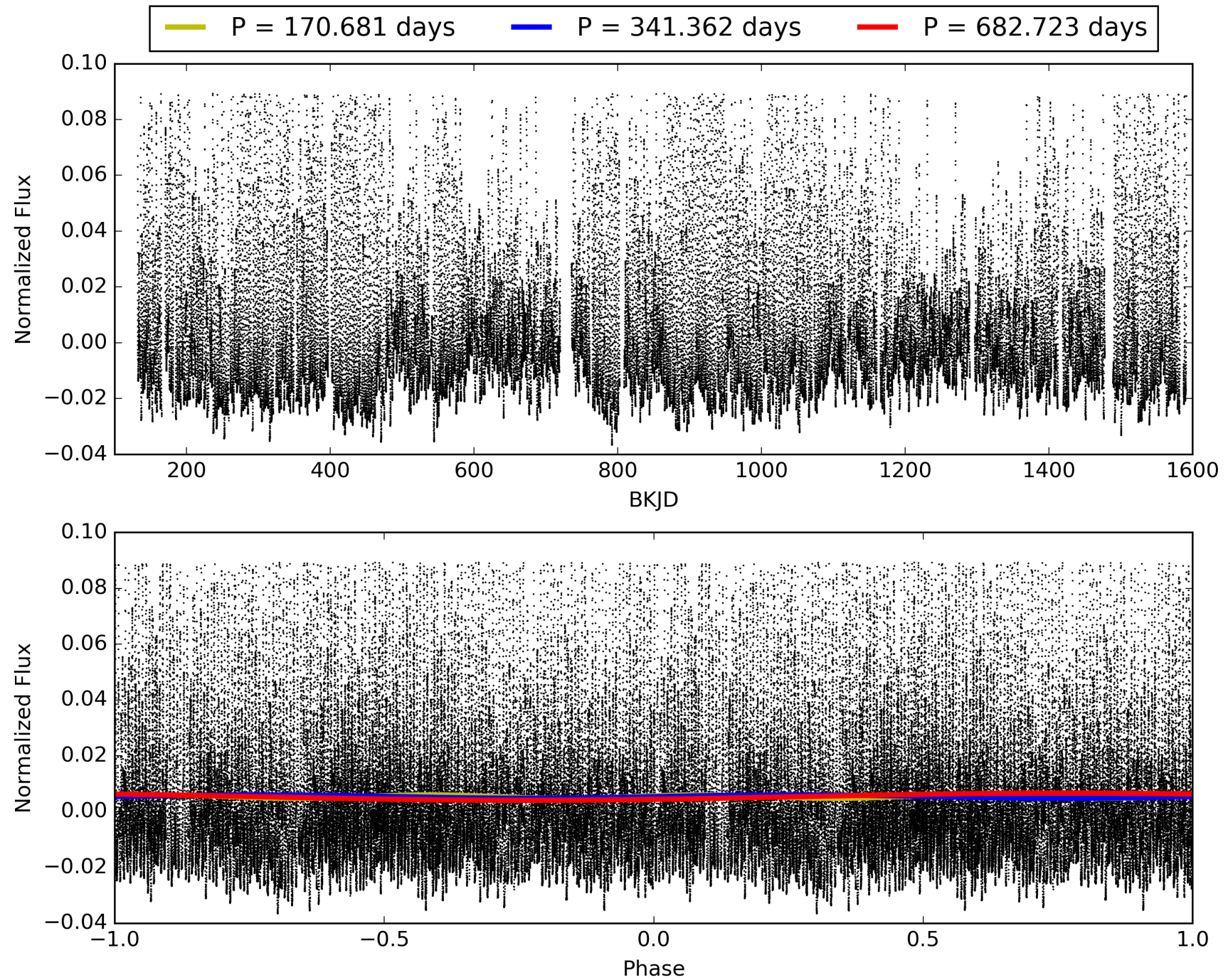
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 08:36:17 Z

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

TCE 005537188-03, PDC Light Curves

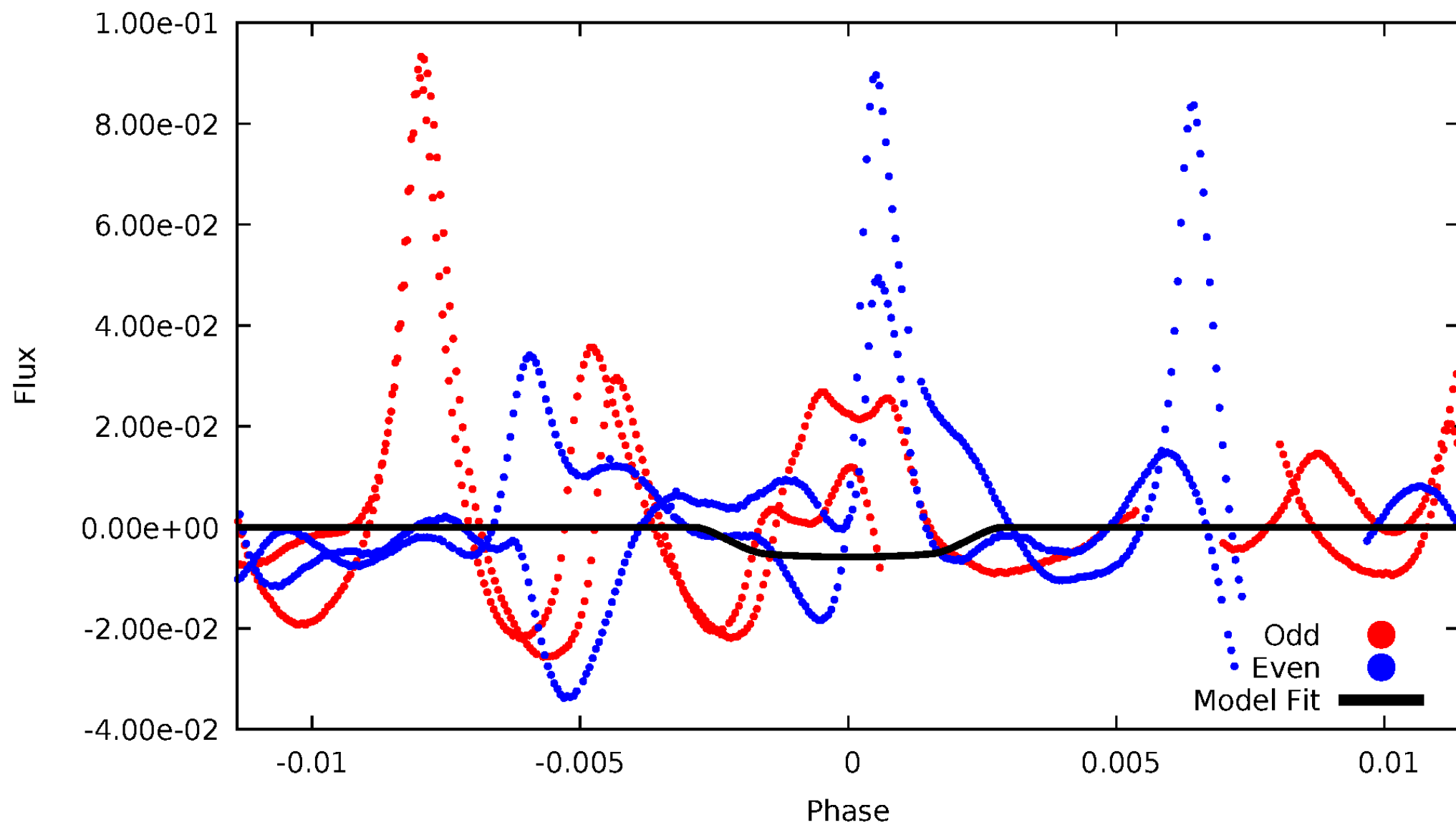


TCE 005537188-03



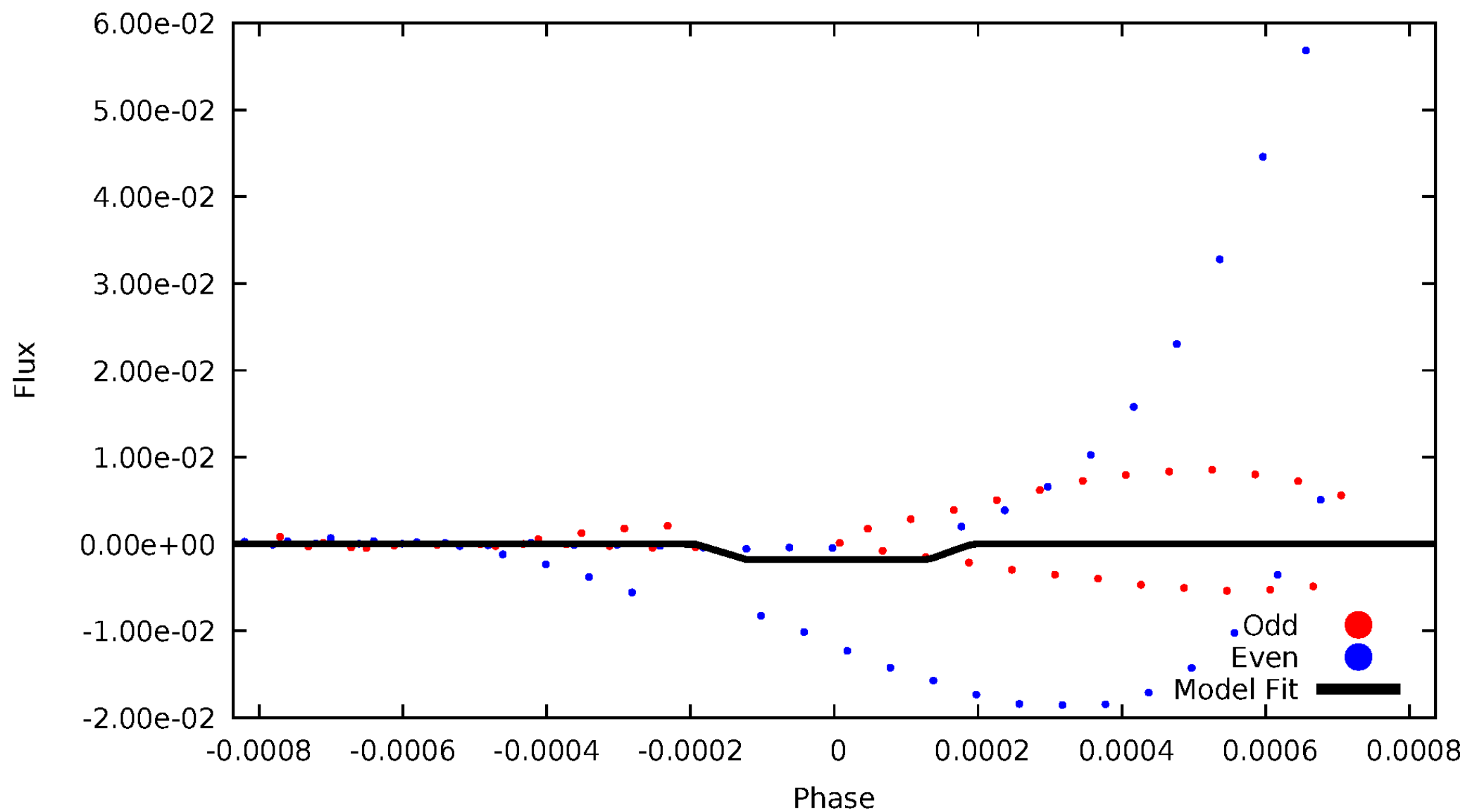
DV Odd/Even

TCE 005537188-03



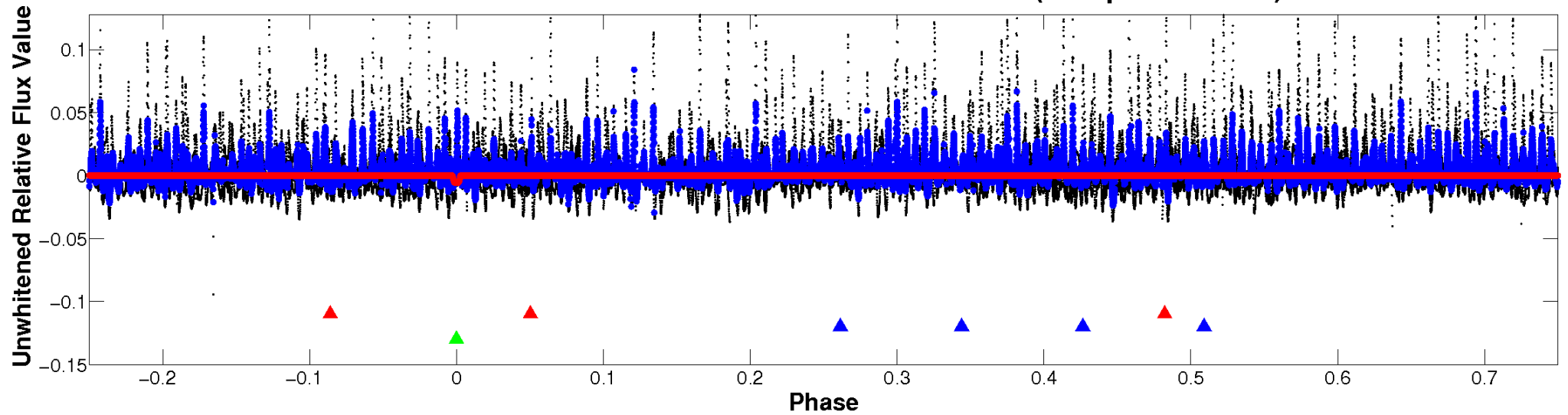
ALT Odd/Even

TCE 005537188-03

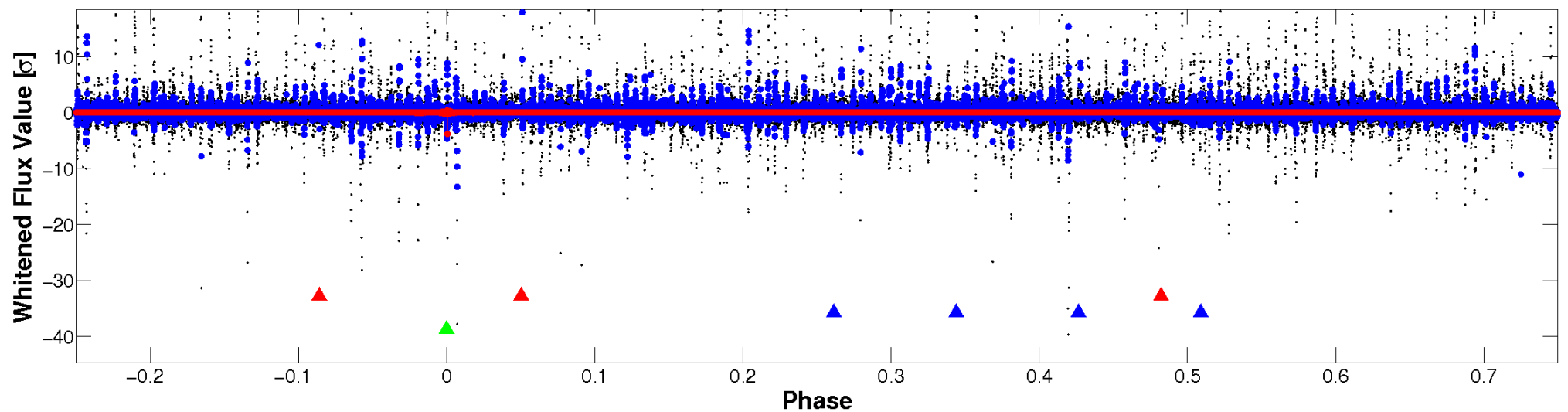


Non-Whitened Vs. Whitened Light Curve

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

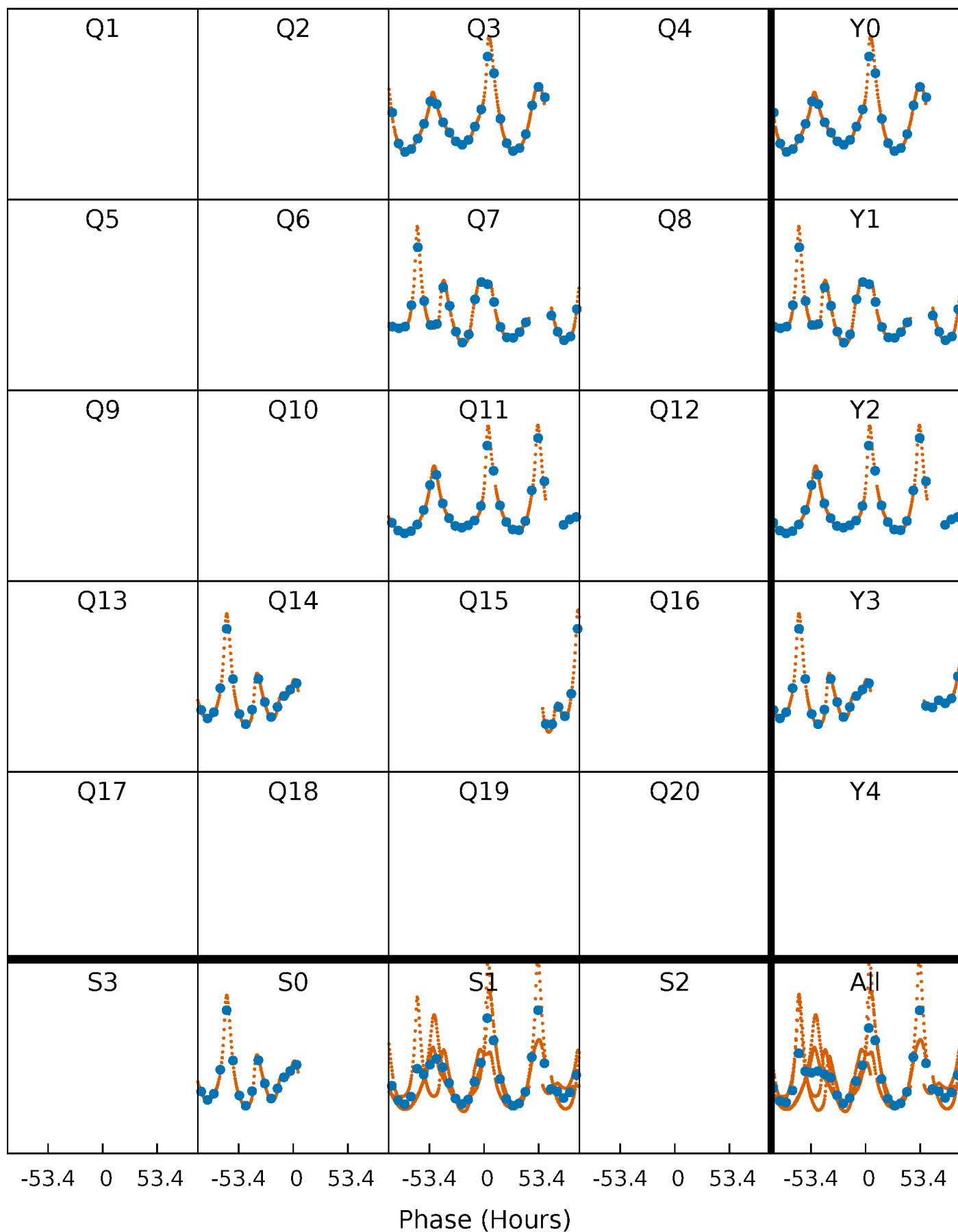


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



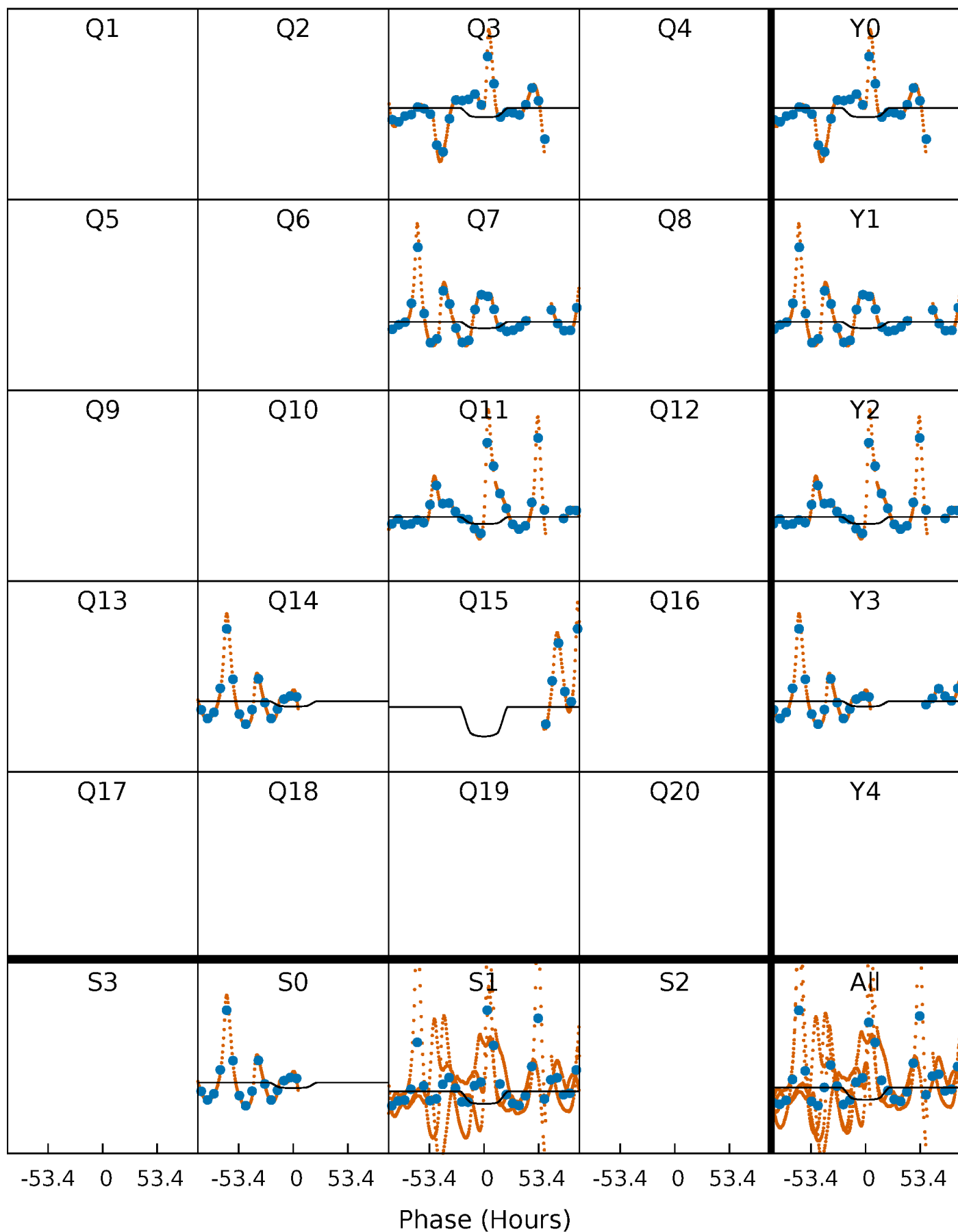
PDC Quarter-Phased Transit Curves

TCE 005537188-03 $P=341.361648$ Days $T_0=347.036622$ (BKJD)



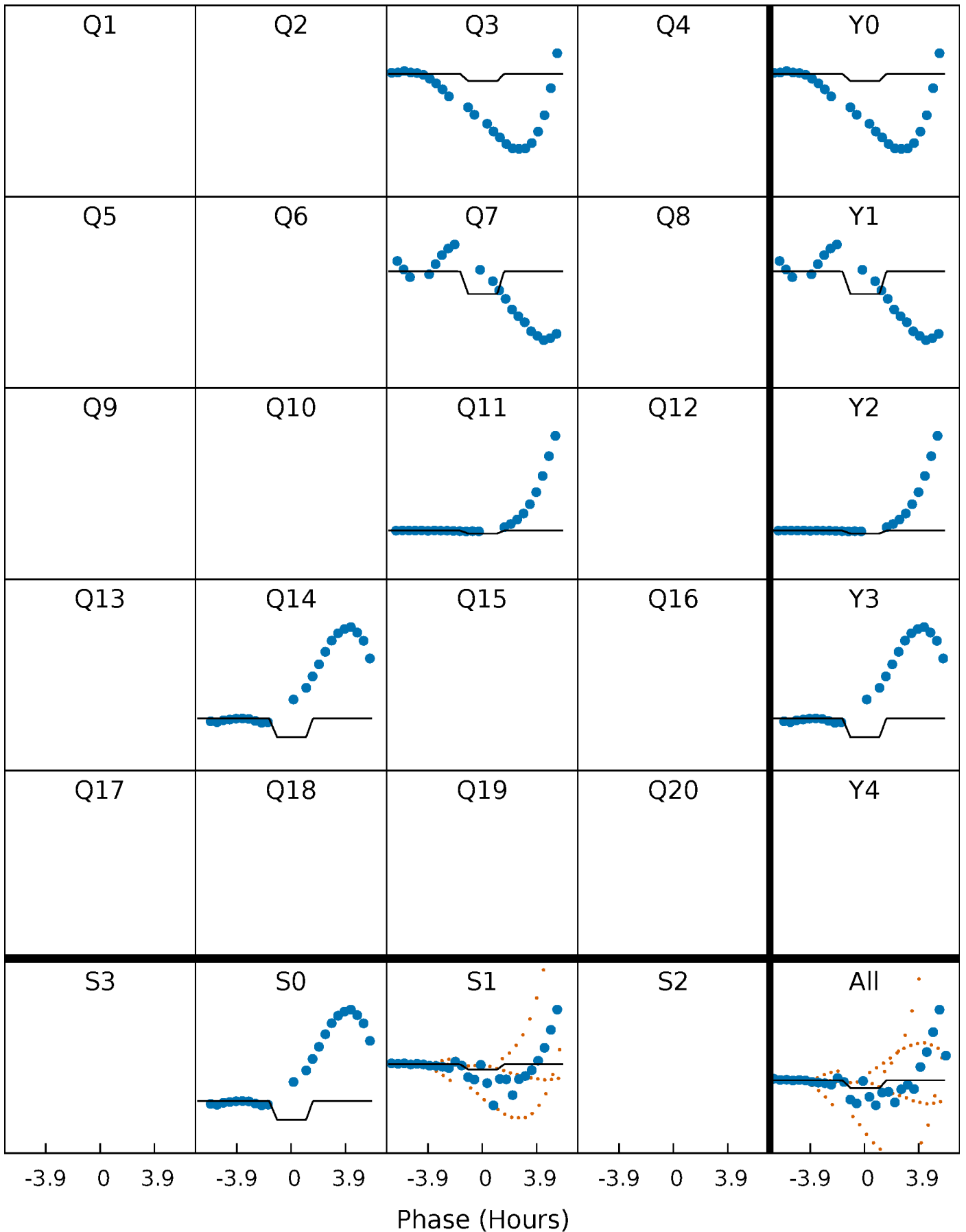
DV Quarter-Phased Transit Curves

TCE 005537188-03 P=341.361648 Days $T_0=347.036622$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

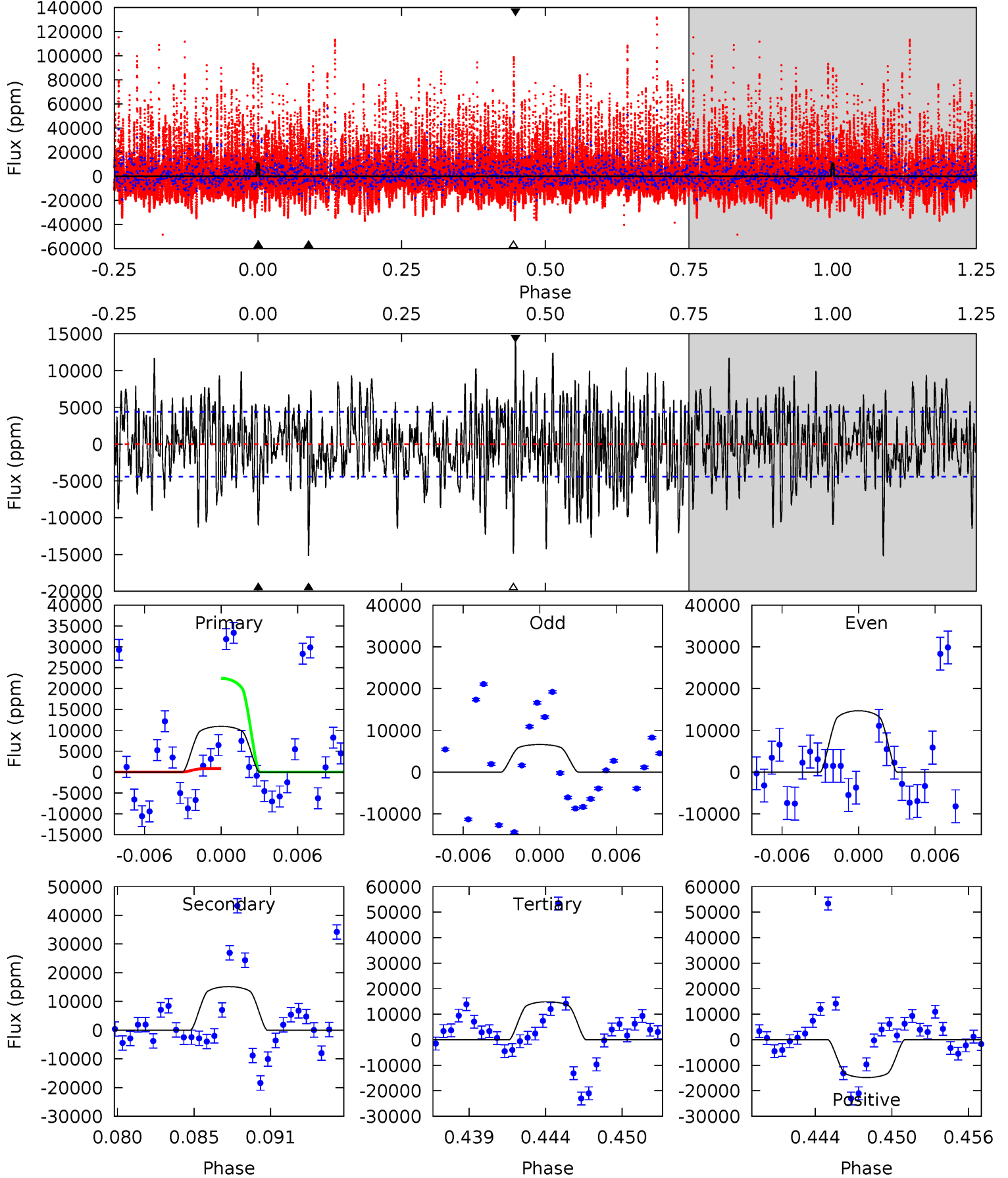
TCE 005537188-03 $P=341.348181$ Days $T_0=346.935245$ (BKJD)



DV Model-Shift Uniqueness Test

005537188-03, P = 341.361648 Days, E = 5.674974 Days

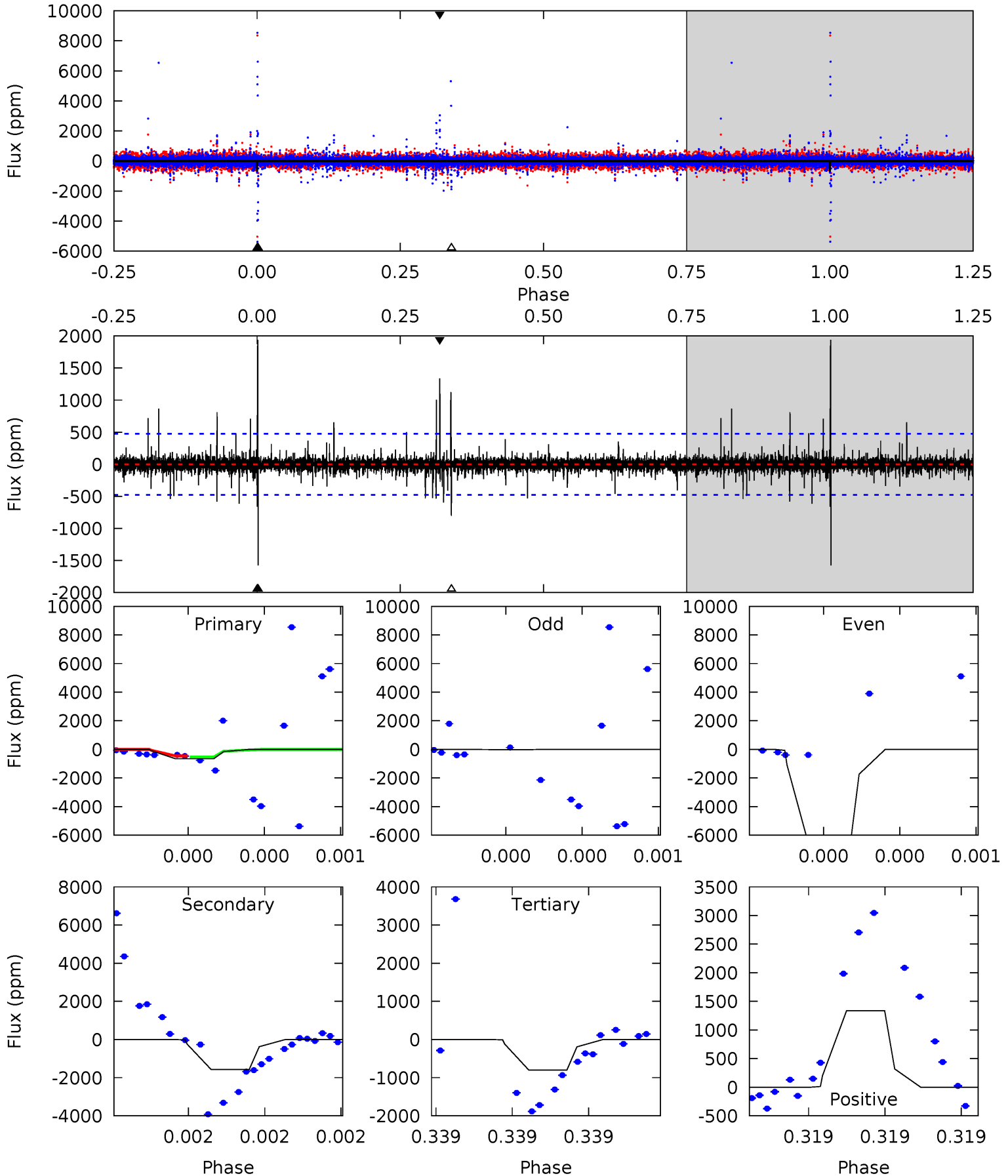
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.7	17.6	17.3	17.2	5.13	2.76	5.16	-4.58	-4.50	0.33	0.41	4.01	0.92	0.49	12.7



Alt Model-Shift Uniqueness Test

005537188-03, P = 341.348181 Days, E = 5.587064 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.80	18.6	9.46	15.8	5.62	3.55	0.72	-1.67	-7.99	9.12	2.79	8.68	4.89	0.55	0.48



Stellar Parameters For KIC 005537188

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7247^{+201}_{-302}	$4.194^{+0.105}_{-0.195}$	$-0.080^{+0.200}_{-0.350}$	$1.606^{+0.540}_{-0.291}$	$1.472^{+0.221}_{-0.221}$	$0.501^{+0.250}_{-0.262}$
	+3%/-4%	+3%/-5%	+250%/-438%	+34%/-18%	+15%/-15%	+50%/-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 005537188-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-15172 ± 860	$13.97^{+2.19}_{-1.52}$	545^{+43}_{-33}	9634^{+543}_{-511}	51098^{+11279}_{-12701}
Alt.	-1575 ± 85	$7.60^{+1.21}_{-1.01}$	549^{+45}_{-32}	7002^{+360}_{-344}	17771^{+4988}_{-4364}

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 $A_{obs} \gg 1.0$

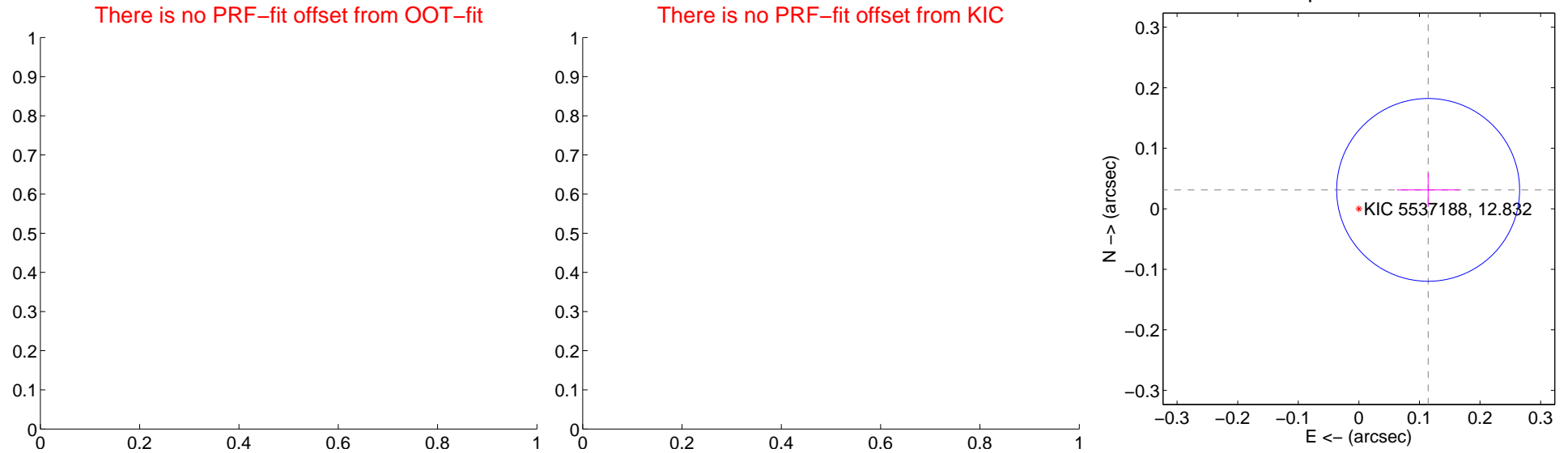
DV Centroid Data

Supplemental centroid analysis for 005537188-03. Kepler magnitude: 12.83. Transit SNR 2.26

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	0.12 ± 0.05	2.35	-0.11 ± 0.05	0.03 ± 0.03



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.



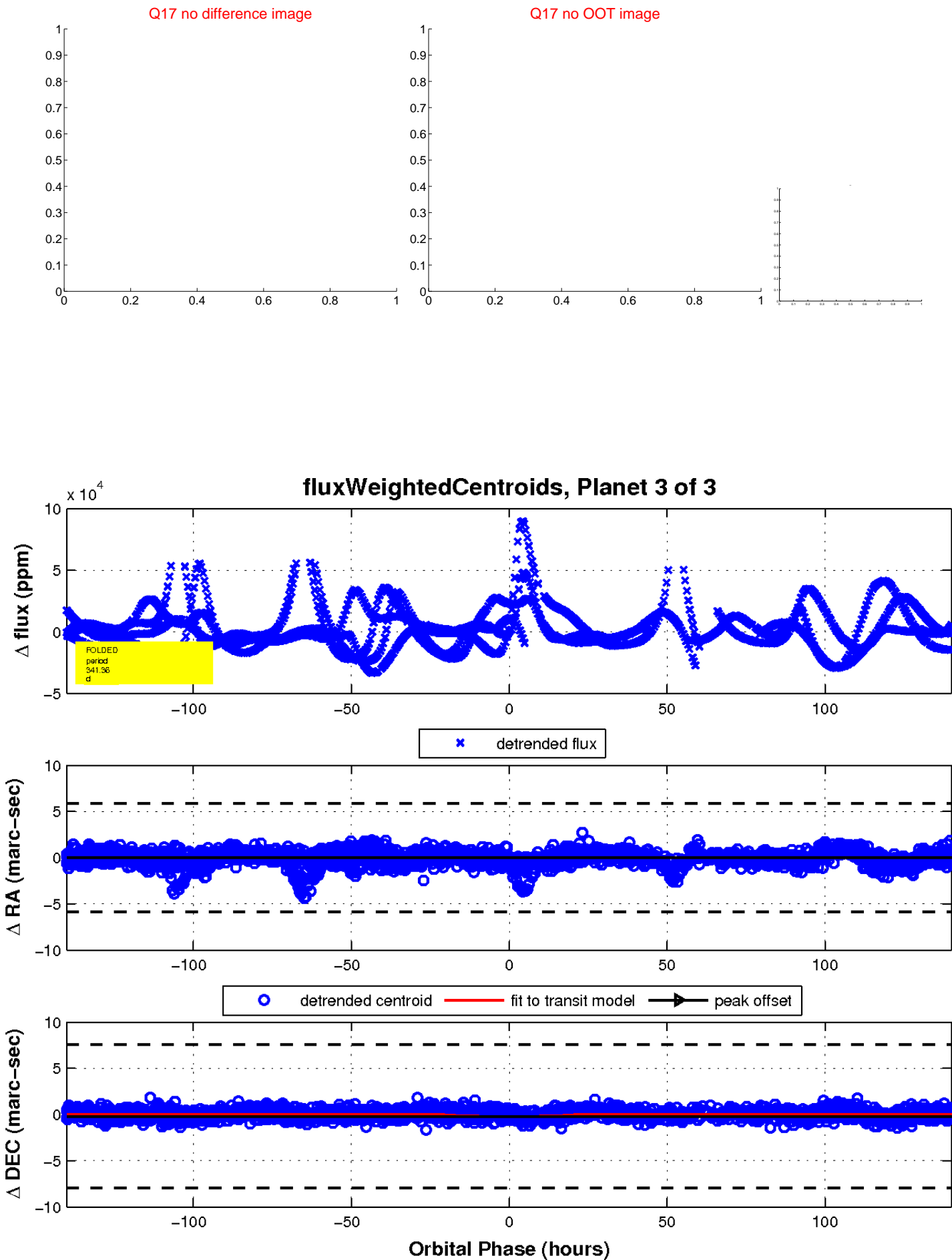
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

