

KIC 005785906

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})
005785906-01	OBS	No	596.025820	265.565191	1011.7	4.497	18.2	7.0	2.62	5004	8.80	2.23
005785906-02	OBS	No	588.989964	222.165847	1880.8	9.376	21.0	8.0	2.62	5004	22.40	2.26
005785906-03	OBS	No	484.306596	380.605585	757.1	5.980	16.5	5.3	2.62	5004	7.37	2.94
005785906-04	OBS	No	383.395503	345.942061	1160.5	4.470	16.8	8.3	2.62	5004	9.11	4.01
005785906-05	OBS	No	122.748339	183.064866	479.0	4.500	15.6	-1.0	2.62	5004	5.59	18.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005785906-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV
005785906-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
005785906-05	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

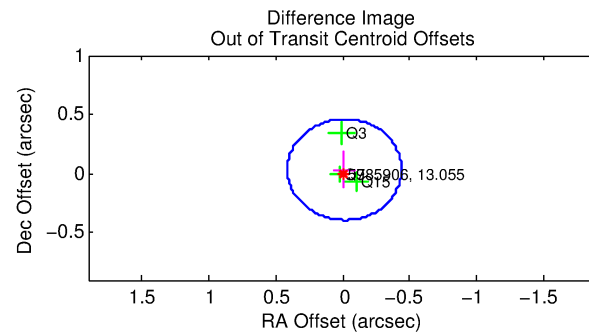
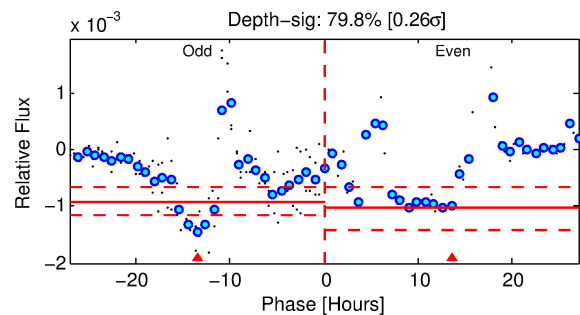
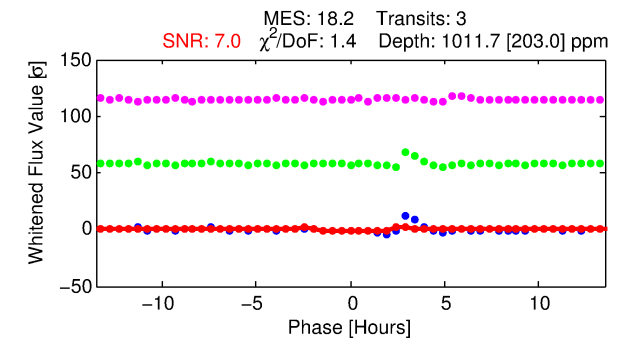
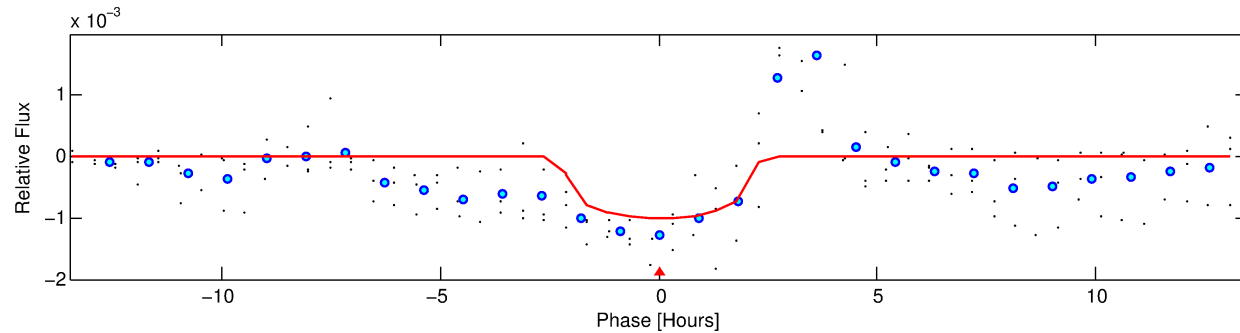
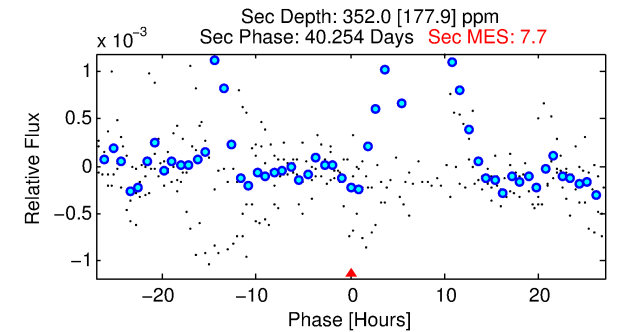
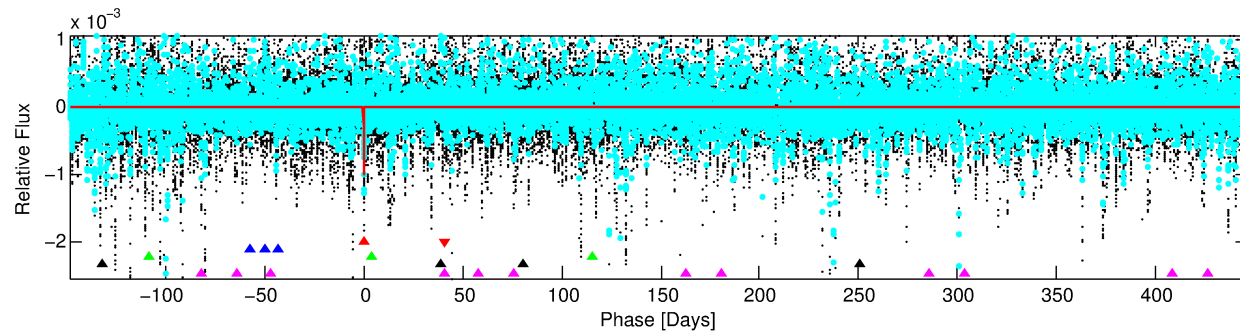
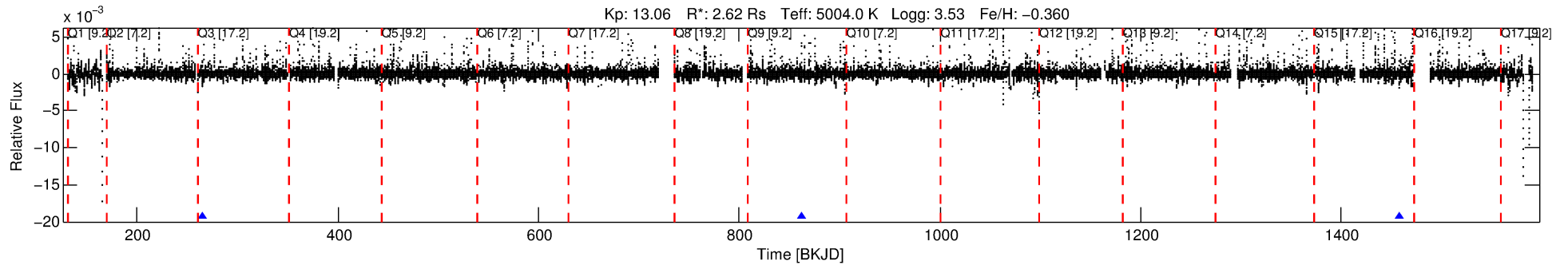
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005785906-01

No Significant Match Found

DV One-Page Summary

KIC: 5785906 Candidate: 1 of 5 Period: 596.026 d



DV Fit Results:

Period = 596.02582 [0.00482] d
Epoch = 265.5652 [0.0063] BKJD
Rp/R* = 0.0308 [0.0488]
a/R* = 795.66 [4612.71]
b = 0.67 [4.94]
Seff = 2.23 [3.83]
Teq = 311 [134] K
Rp = 8.80 [15.58] Re
a = 1.3171 [1.2782] AU
Ag = 4338.40 [15803.81] [0.27 σ]
Teffp = 3908 [3141] K [1.14 σ]

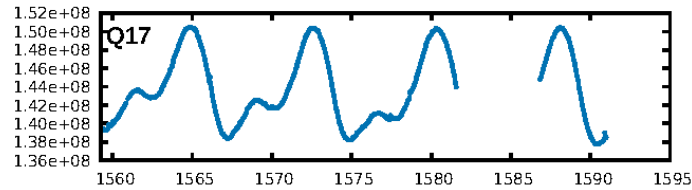
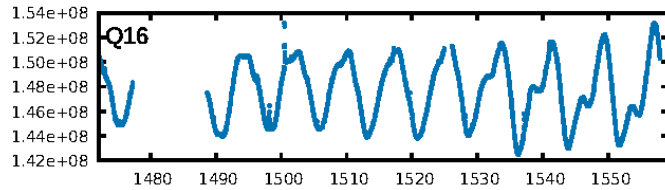
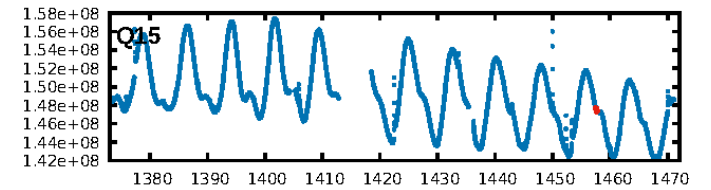
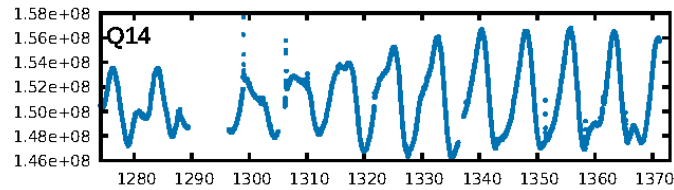
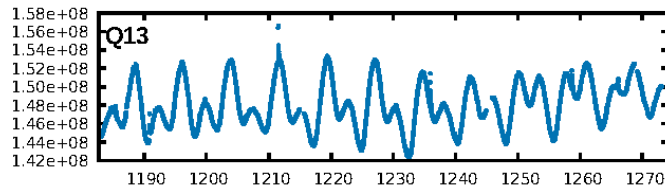
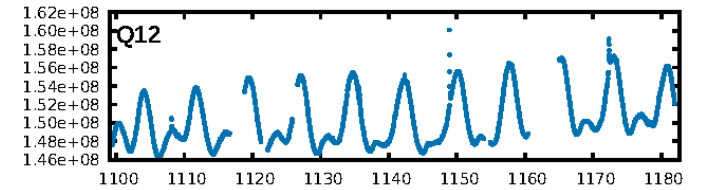
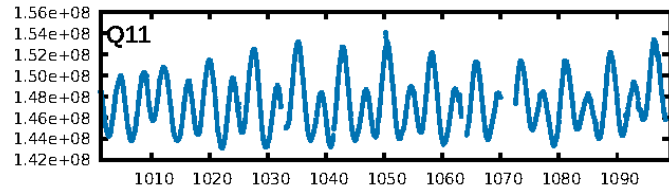
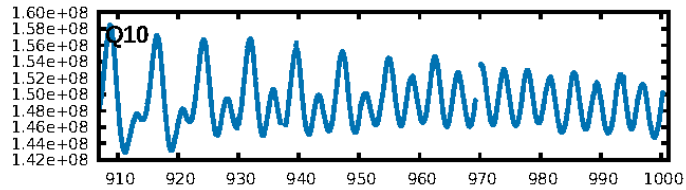
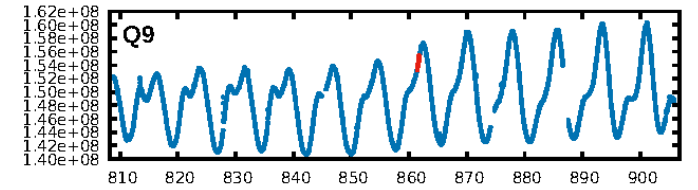
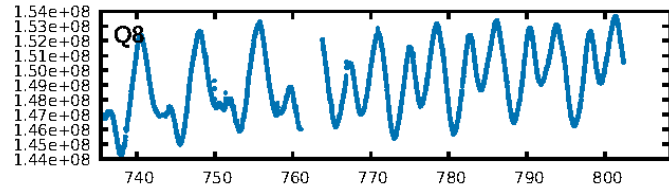
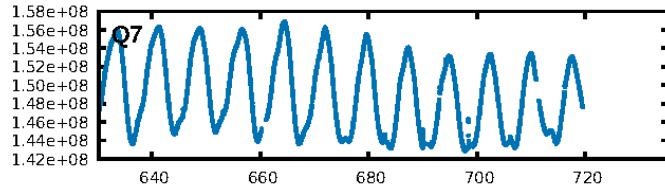
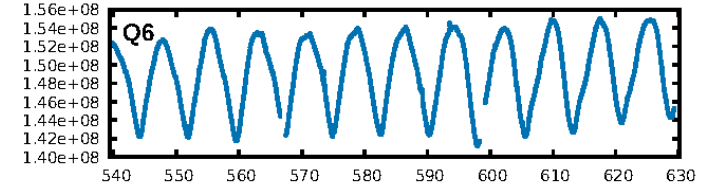
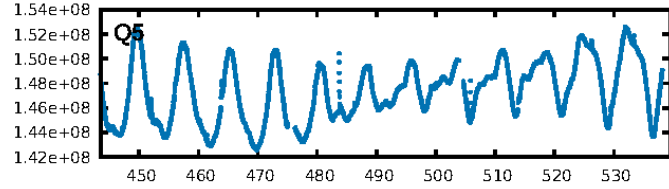
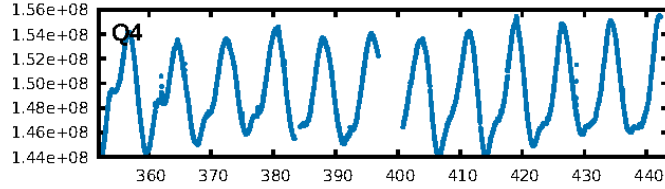
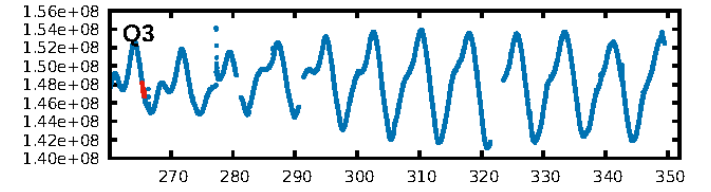
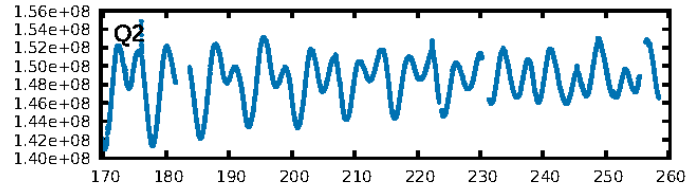
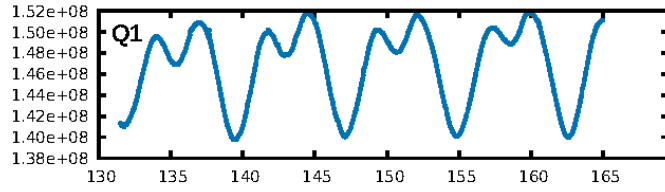
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [16.24 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 58.5%
ModelChiSquareGof-sig: 92.2%
Bootstrap-pfa: 6.27e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 13.55
Centroid-sig: 22.2%
Centroid-so: 0.489 arcsec [1.05 σ]
OotOffset-rm: 0.036 arcsec [0.25 σ]
KicOffset-rm: 0.078 arcsec [0.65 σ]
OotOffset-st: 0/2/0/1 [3]
KicOffset-st: 0/2/0/1 [3]
DiffImageQuality-fgm: 1.00 [3/3]
DiffImageOverlap-fno: 1.00 [3/3]

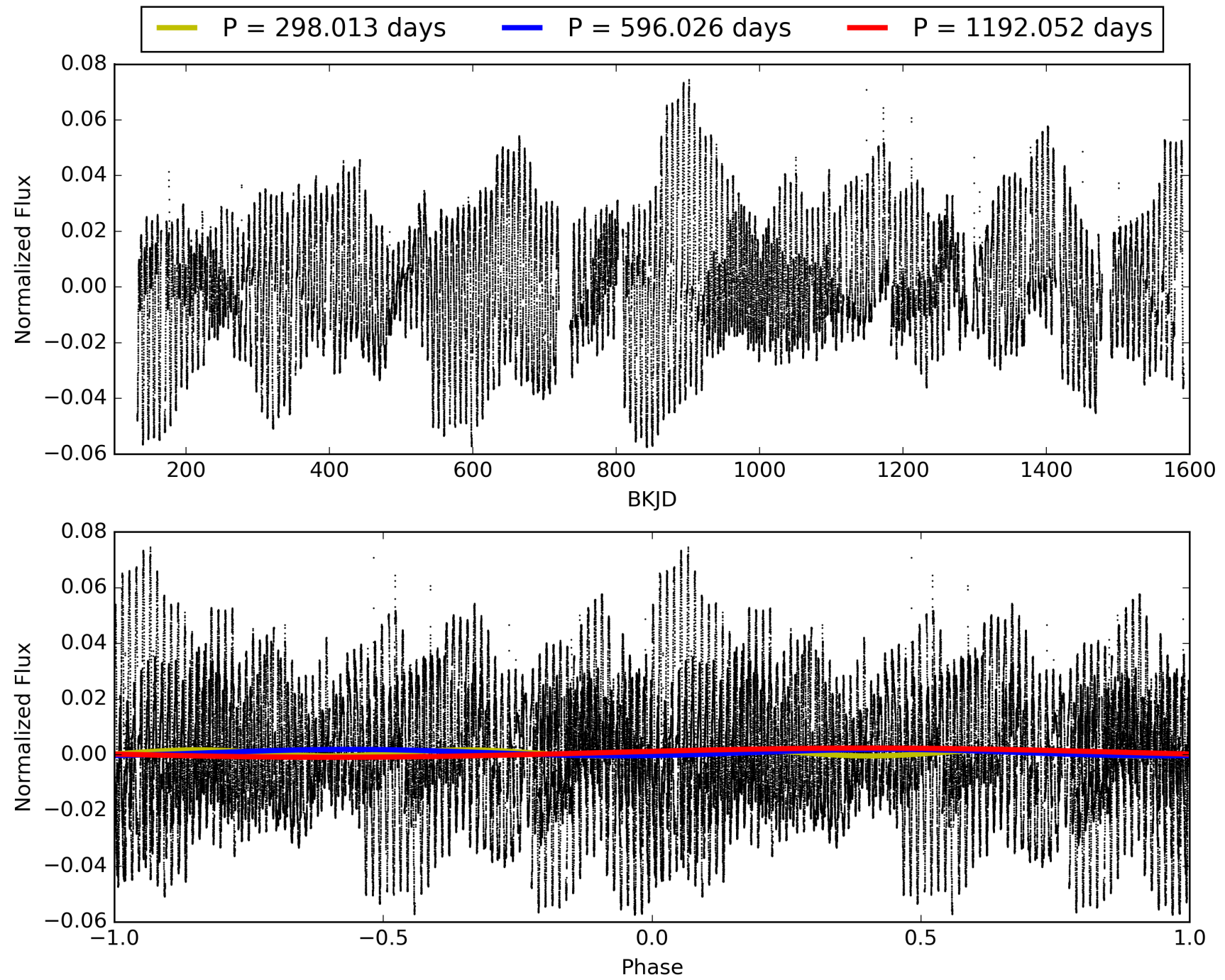
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:55:16 Z

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

TCE 005785906-01, PDC Light Curves

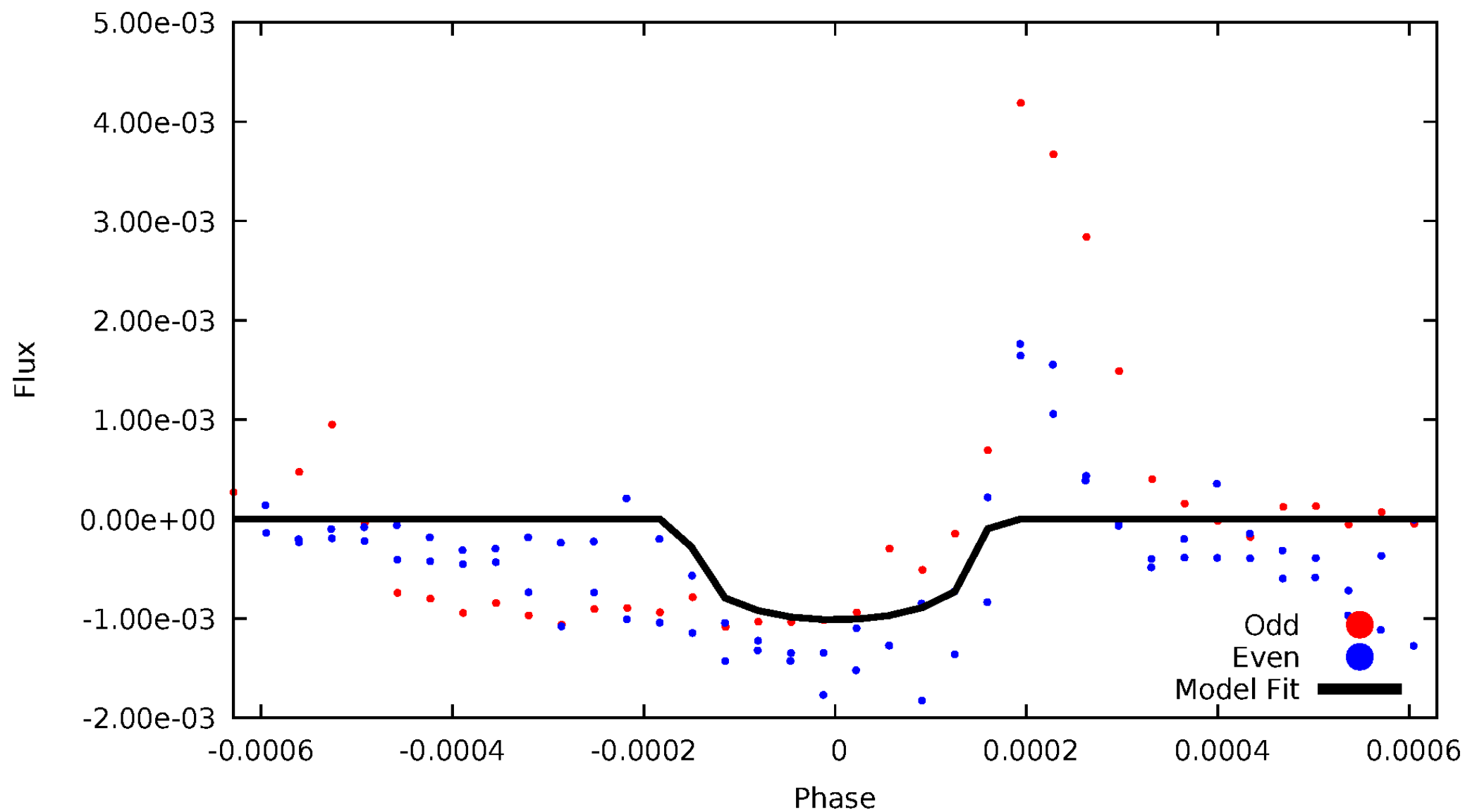


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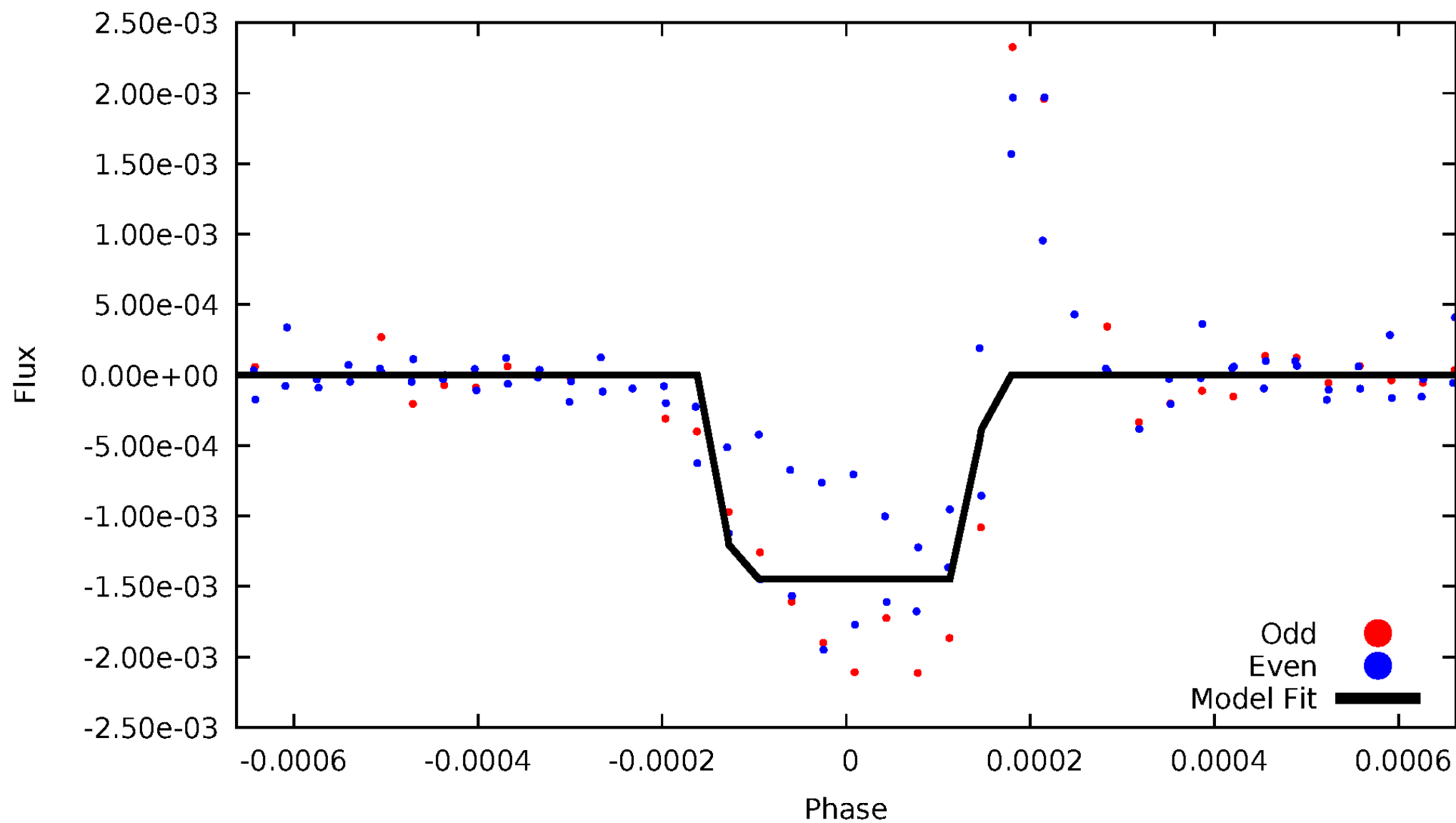
DV Odd/Even

TCE 005785906-01



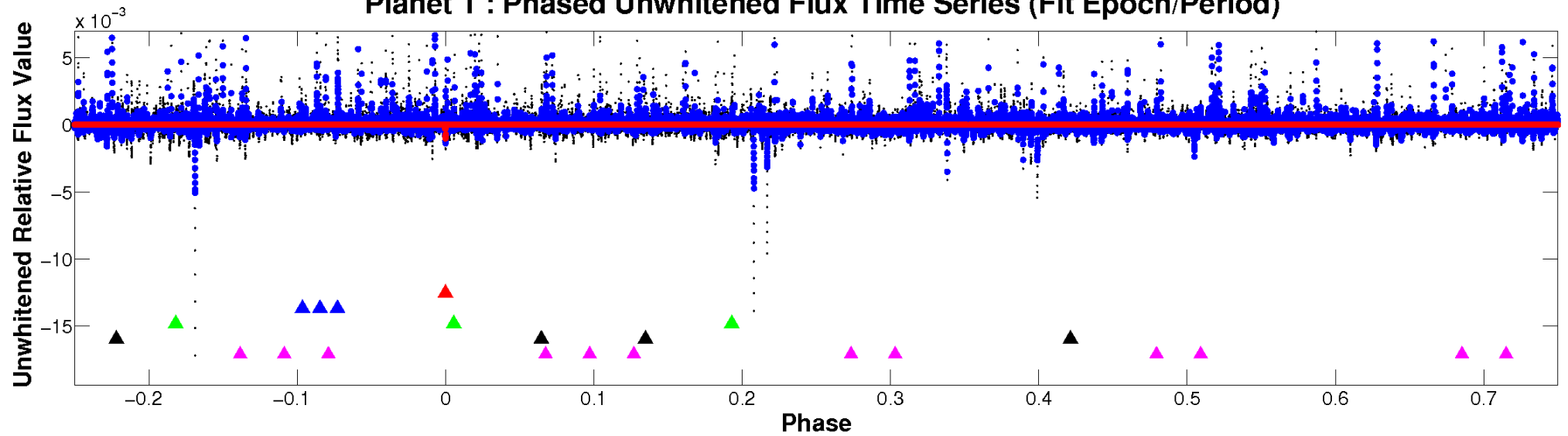
ALT Odd/Even

TCE 005785906-01

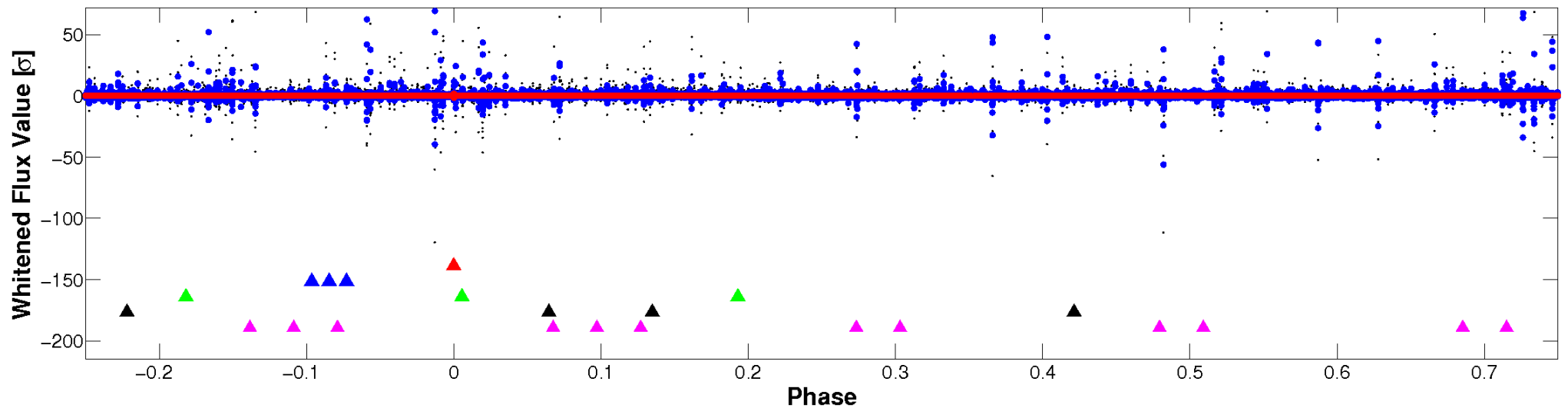


Non-Whitened Vs. Whitened Light Curve

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

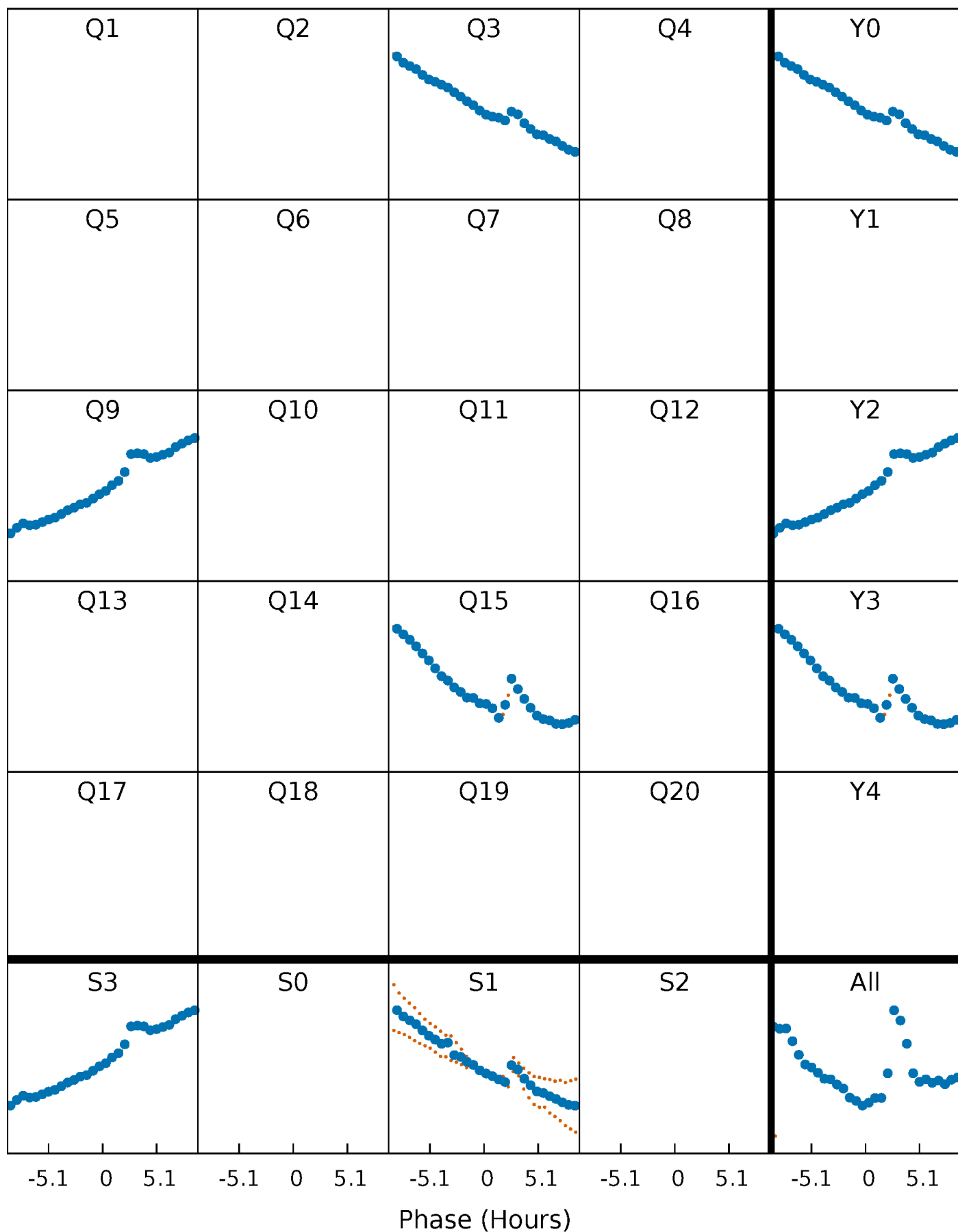


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



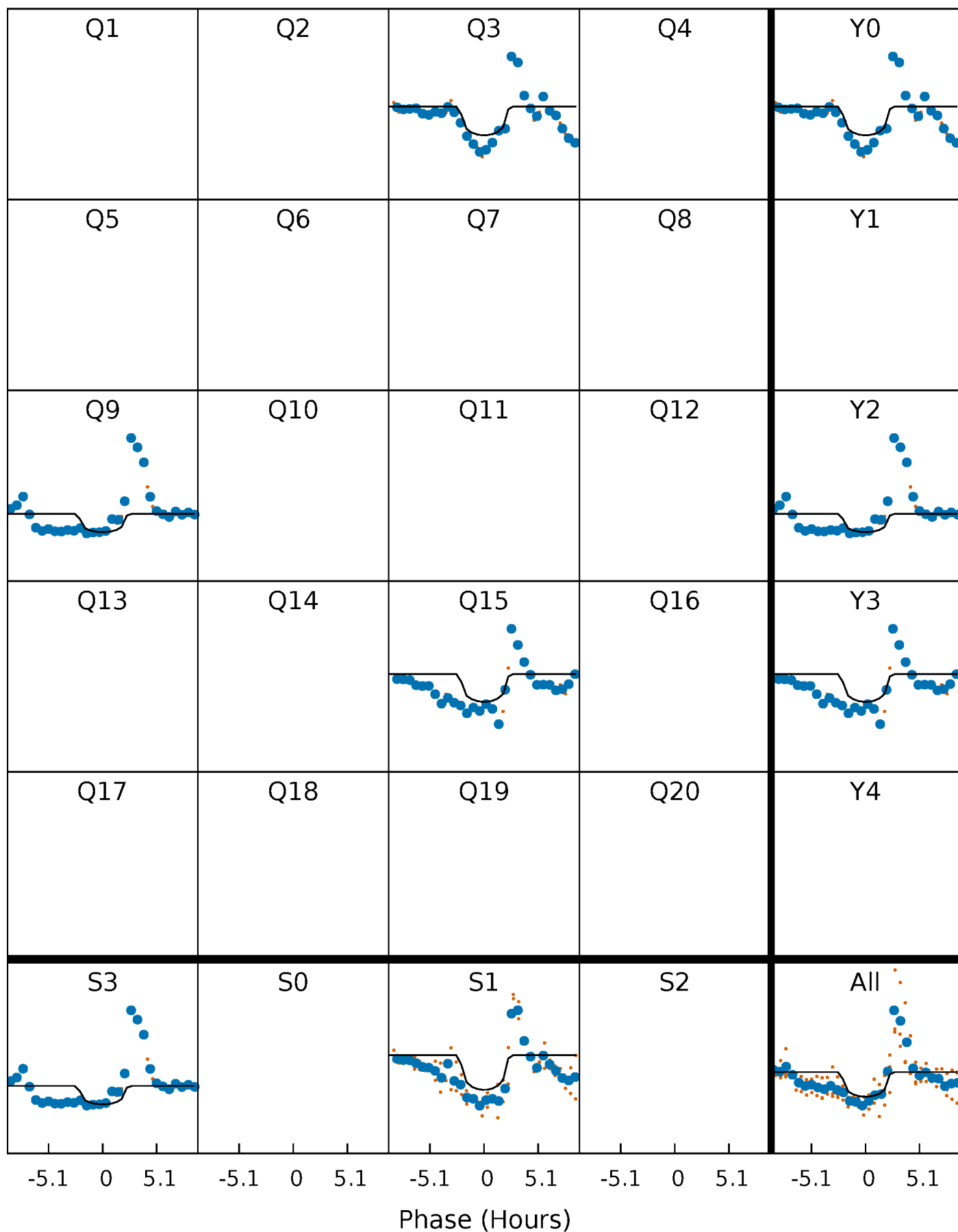
PDC Quarter-Phased Transit Curves

TCE 005785906-01 P=596.025820 Days $T_0=265.565191$ (BKJD)



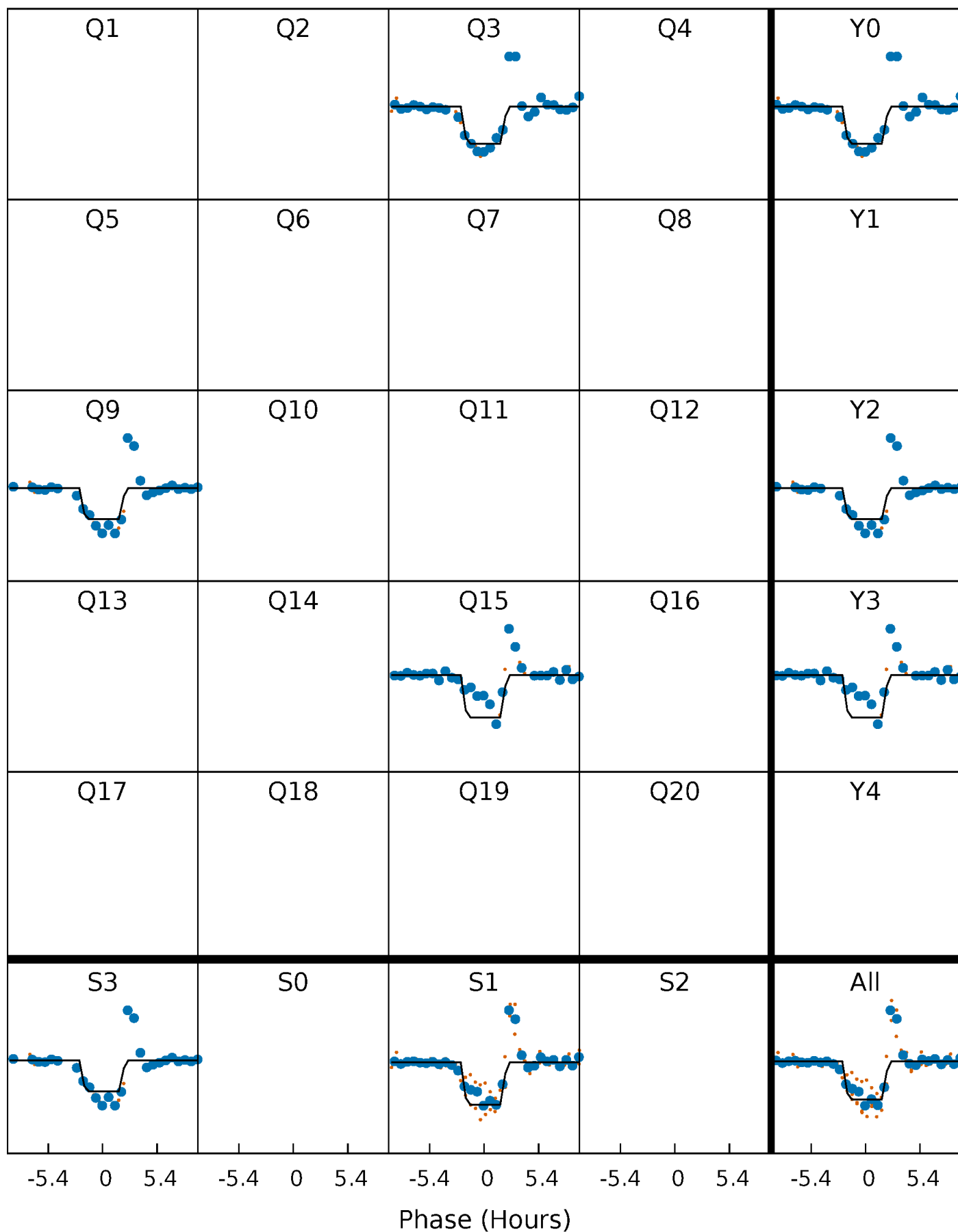
DV Quarter-Phased Transit Curves

TCE 005785906-01 $P=596.025820$ Days $T_0=265.565191$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

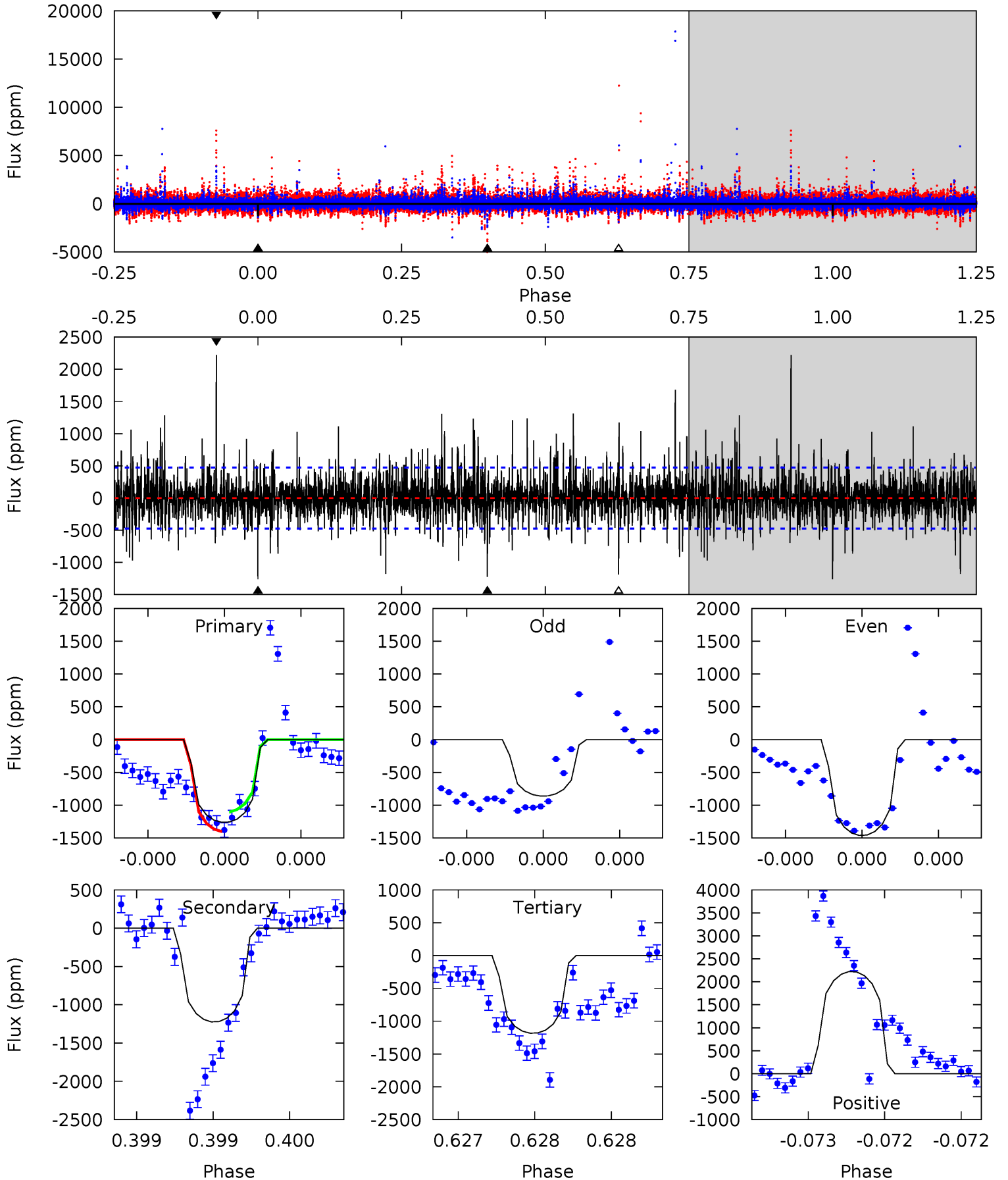
TCE 005785906-01 P=596.026512 Days $T_0=265.572504$ (BKJD)



DV Model-Shift Uniqueness Test

005785906-01, P = 596.025820 Days, E = 265.565191 Days

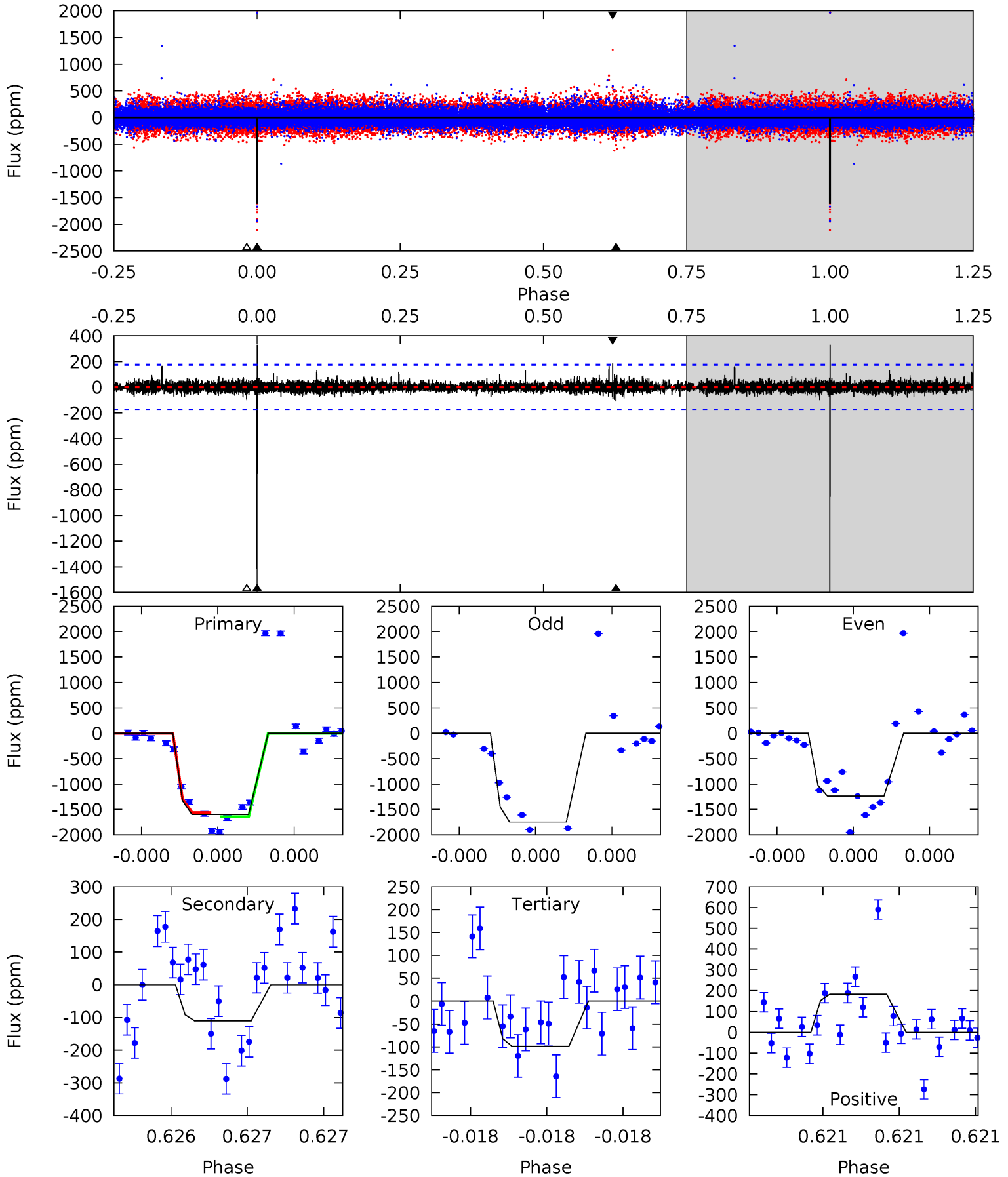
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.0	14.6	14.1	26.5	5.64	3.58	2.83	0.92	-11.5	0.48	-11.9	2.20	0.89	0.64	1.78



Alt Model-Shift Uniqueness Test

005785906-01, P = 596.026512 Days, E = 265.572504 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
51.6	3.56	3.20	5.93	5.68	3.64	0.64	48.4	45.7	0.36	-2.37	8.58	0.92	0.17	1.34



Stellar Parameters For KIC 005785906

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5004^{+123}_{-136}	$3.534^{+1.065}_{-0.355}$	$-0.360^{+0.250}_{-0.300}$	$2.622^{+1.371}_{-2.057}$	$0.857^{+0.243}_{-0.198}$	$0.067^{+2.974}_{-0.048}$
	+2%/-3%	+30%/-10%	+69%/-83%	+52%/-78%	+28%/-23%	+4442%/-72%
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 005785906-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1224 ± 84	$11.45^{+14.83}_{-7.85}$	431^{+66}_{-89}	4459^{+3032}_{-911}	8748^{+86819}_{-6968}
Alt.	-110 ± 31	$13.51^{+13.85}_{-9.27}$	433^{+64}_{-88}	2917^{+1064}_{-429}	585^{+4629}_{-443}

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

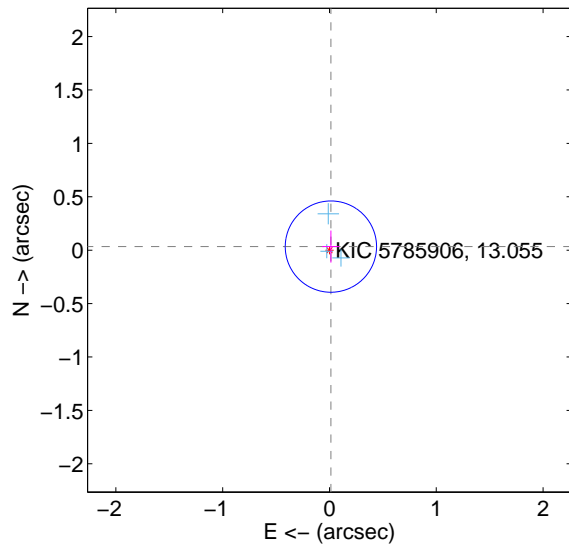
Supplemental centroid analysis for 005785906-01. Kepler magnitude: 13.05. Transit SNR 7.01

There are 3 quarters with good PRF difference image offsets

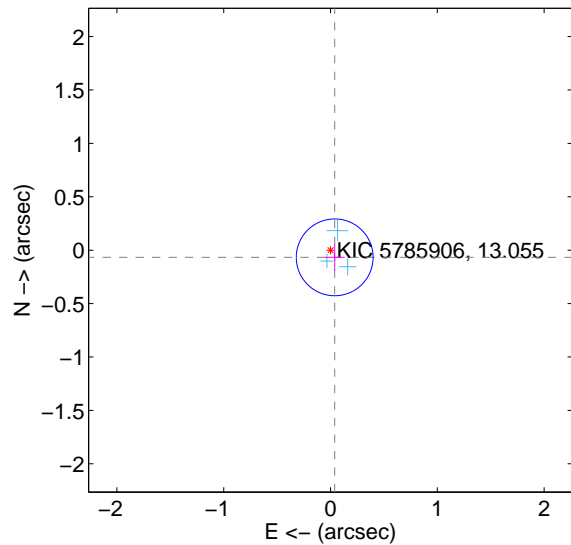
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.036 ± 0.142	0.25	-0.013 ± 0.081	0.033 ± 0.150
PRF-fit source offset from KIC position	0.078 ± 0.120	0.65	-0.039 ± 0.093	-0.067 ± 0.128
photometric centroid source offset	0.49 ± 0.47	1.05	0.39 ± 0.47	0.29 ± 0.46

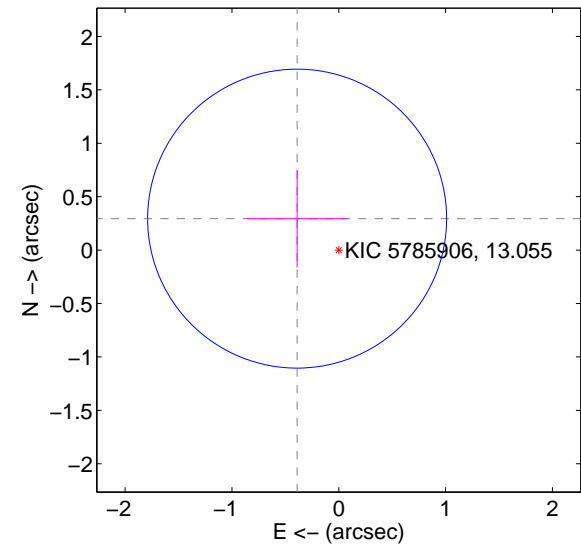
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids



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

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

Q1 no difference image



Q1 no OOT image



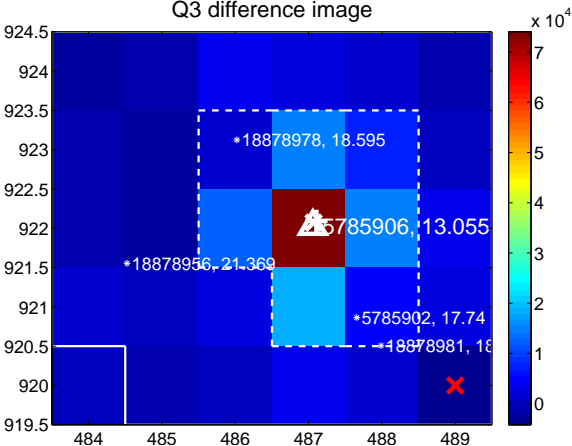
Q2 no difference image



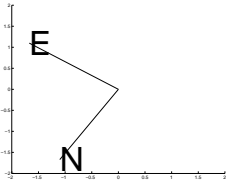
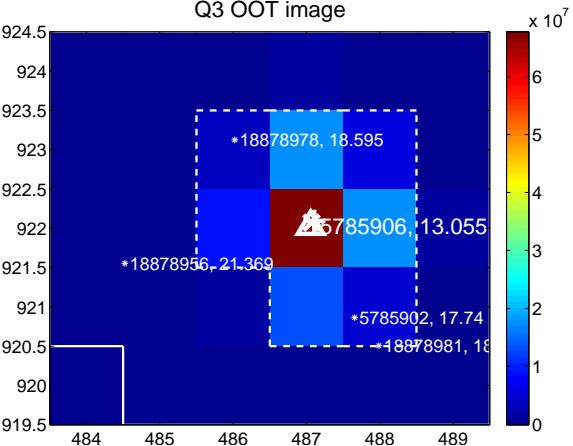
Q2 no OOT image



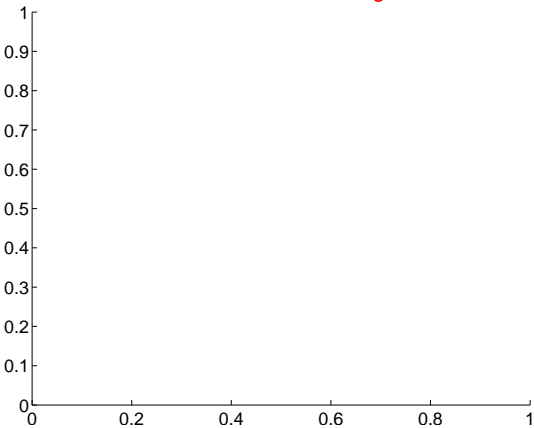
Q3 difference image



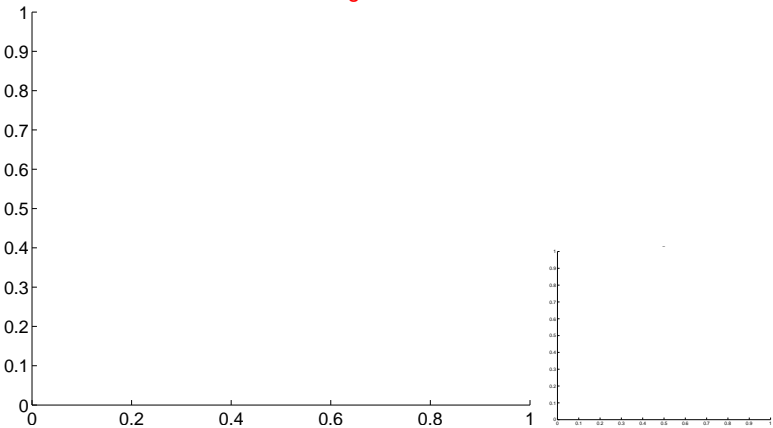
Q3 OOT image



Q4 no difference image



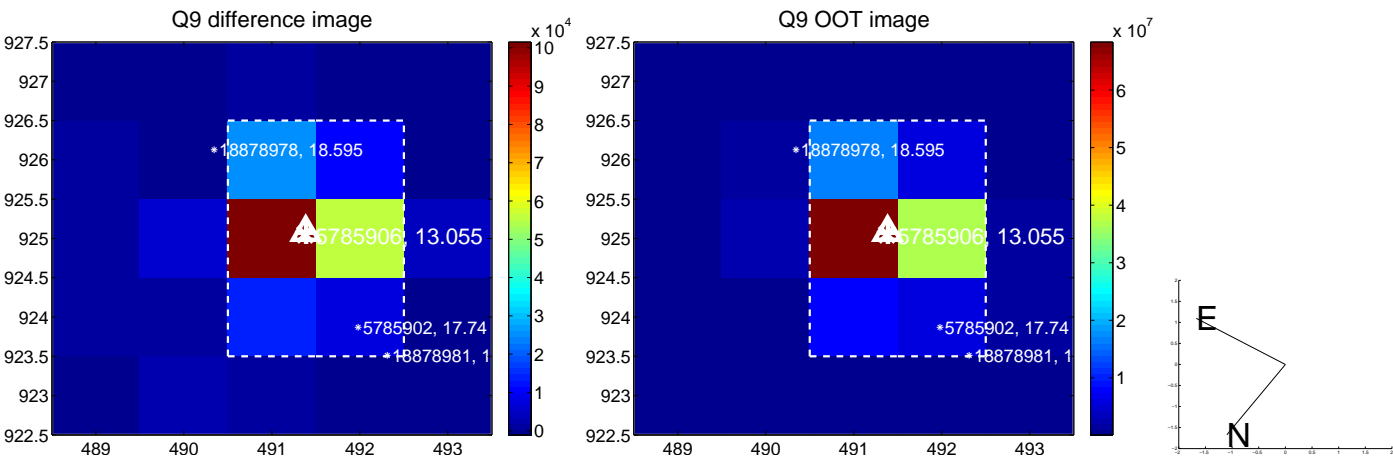
Q4 no OOT image



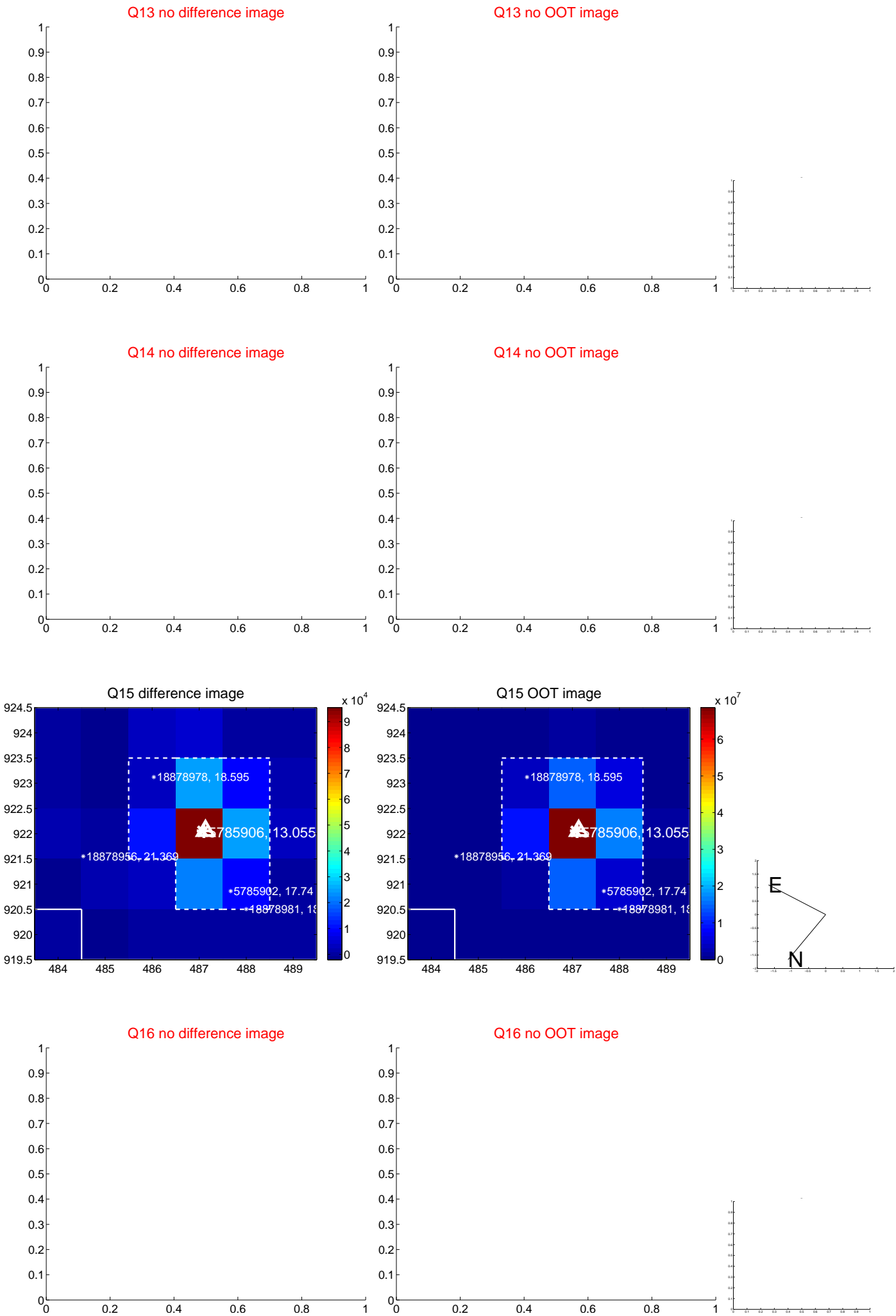
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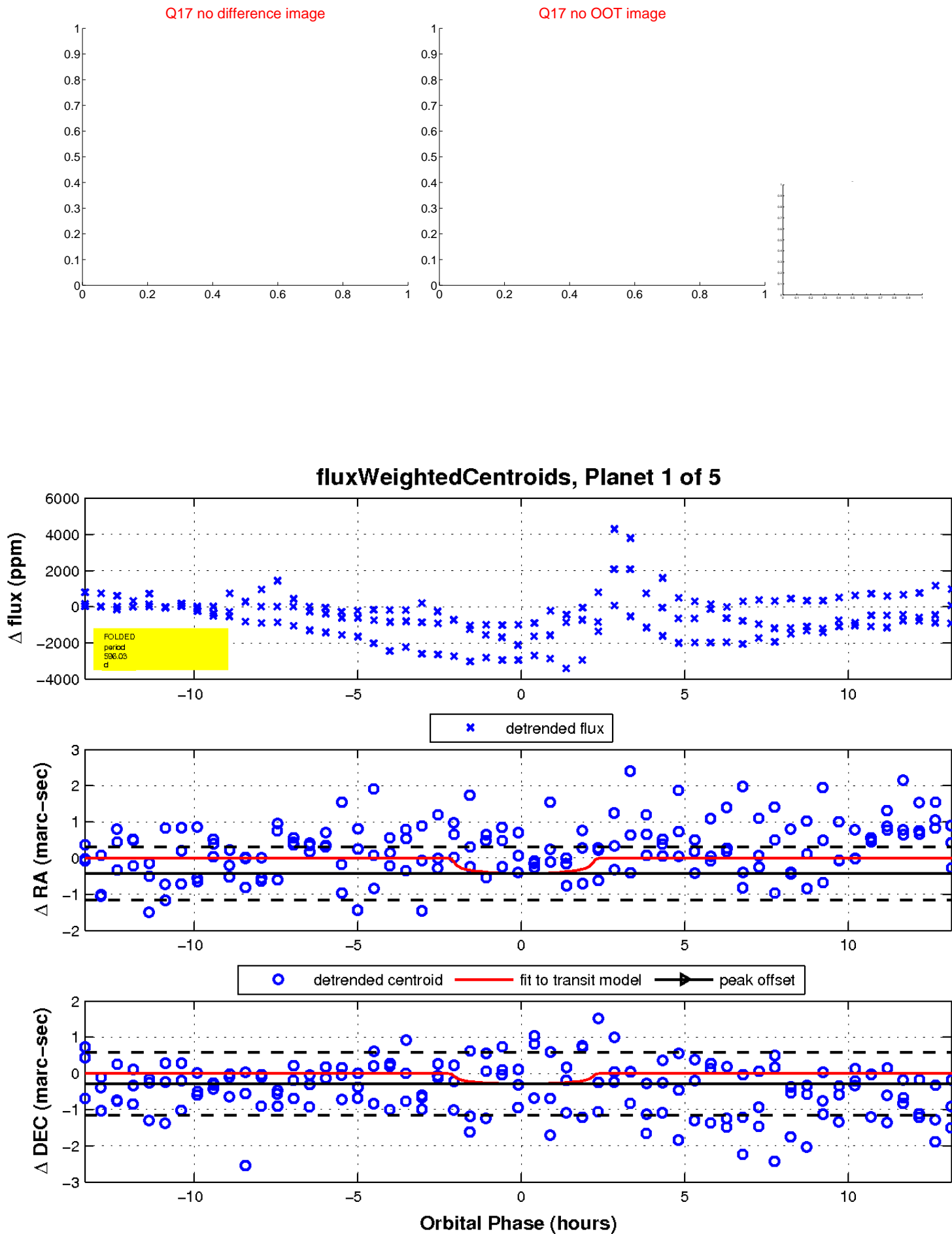
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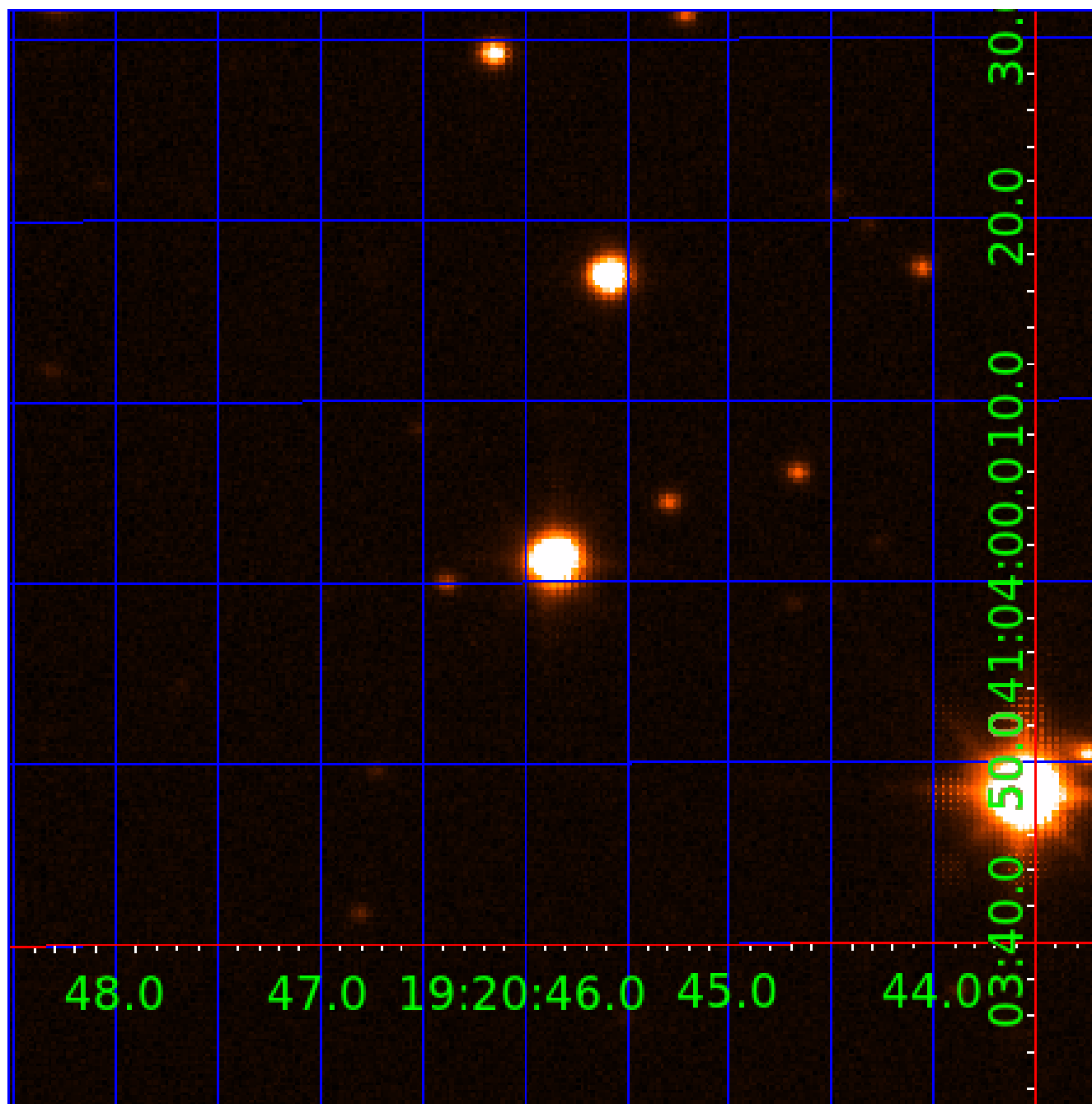


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UKIRT Image

Declination



KIC 005785906

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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005785906-04	OBS	No	383.395503	345.942061	1160.5	4.470	16.8	8.3	2.62	5004	9.11	4.01
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Robovetter Results

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005785906-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
005785906-05	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

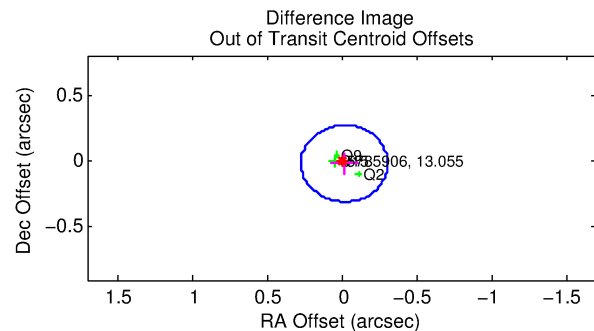
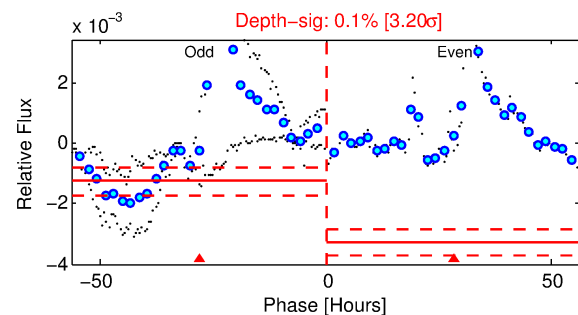
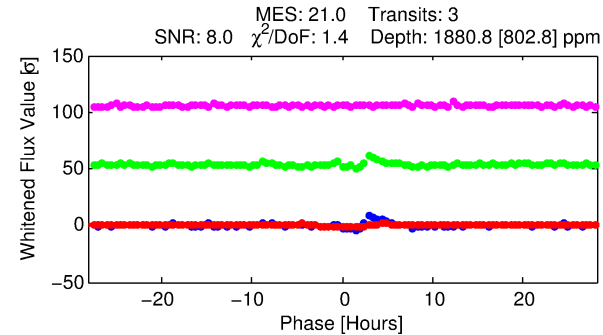
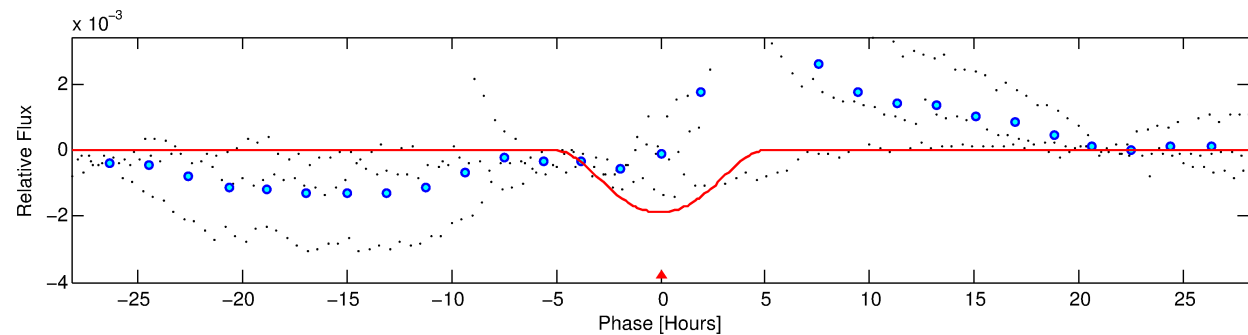
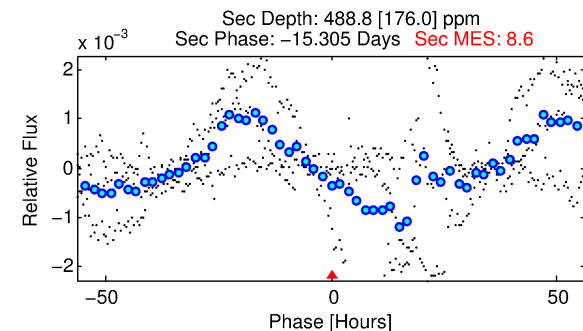
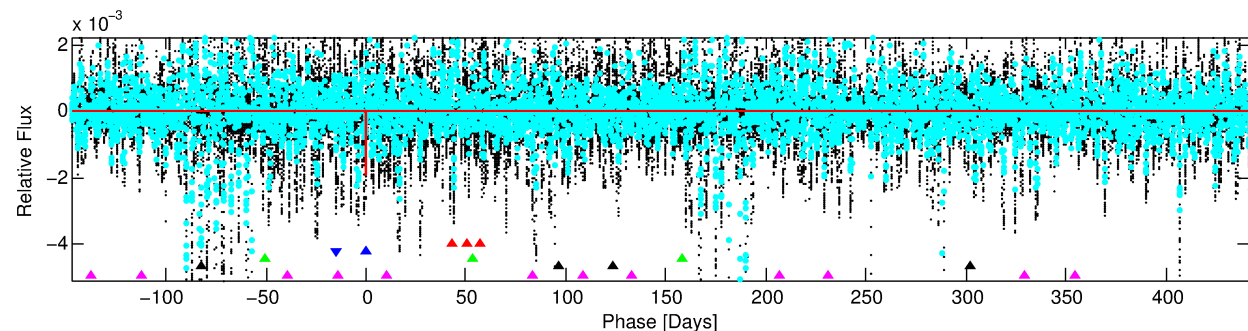
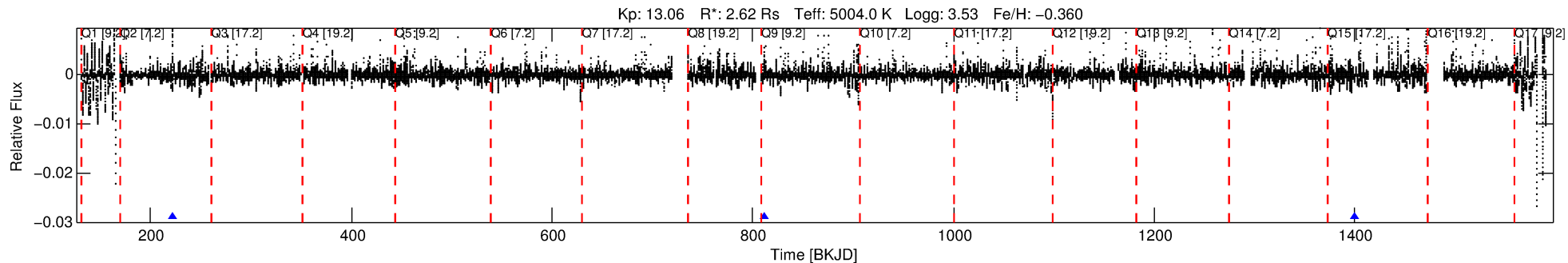
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005785906-02

No Significant Match Found

DV One-Page Summary

KIC: 5785906 Candidate: 2 of 5 Period: 588.990 d



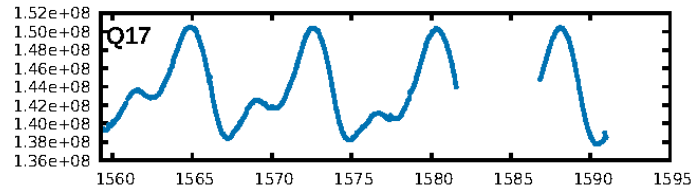
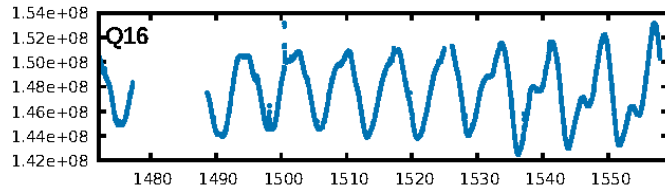
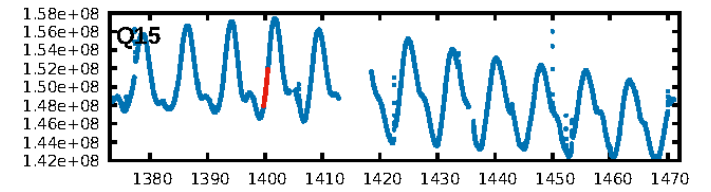
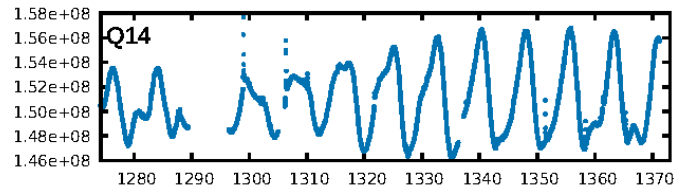
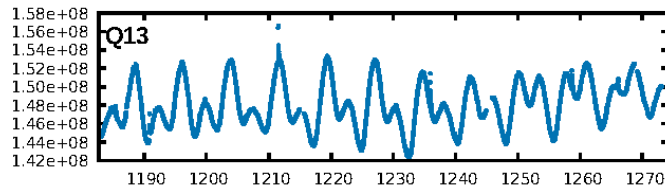
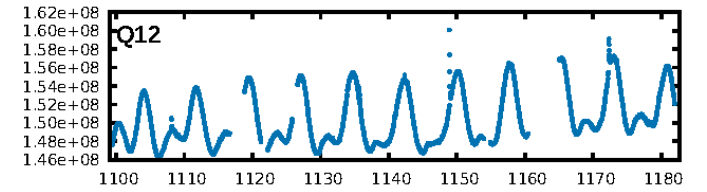
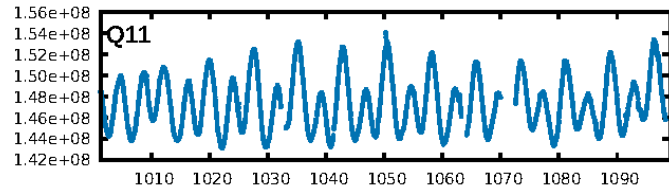
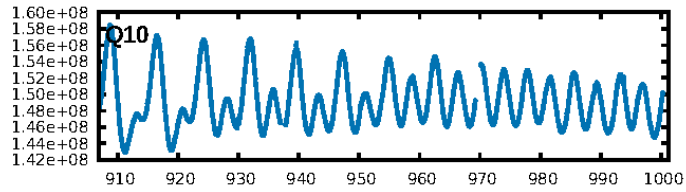
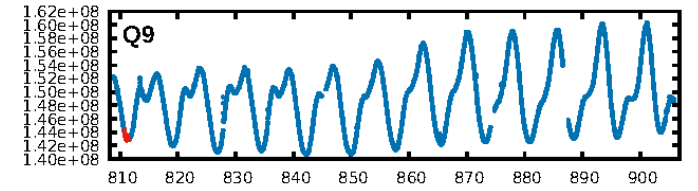
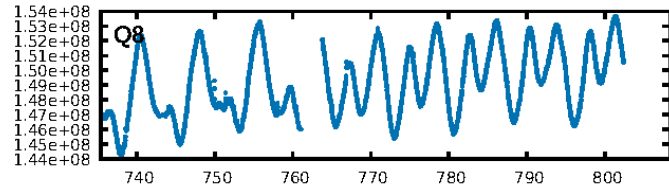
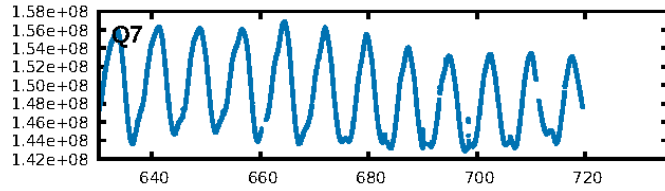
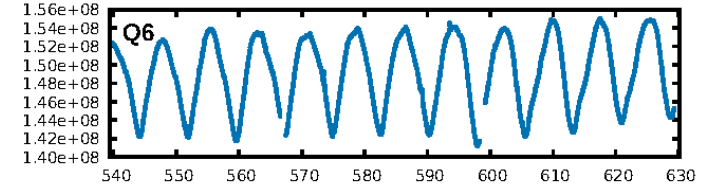
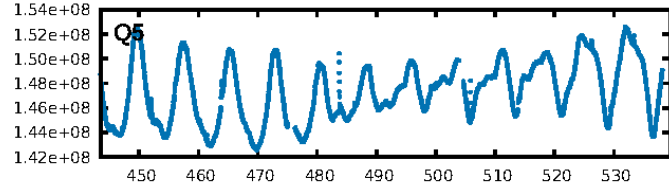
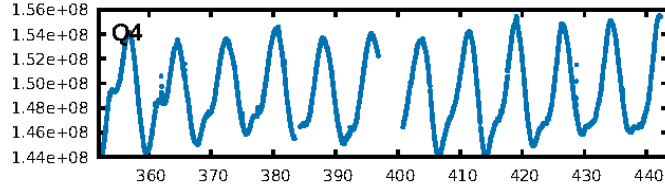
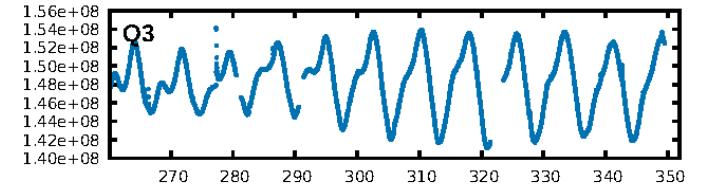
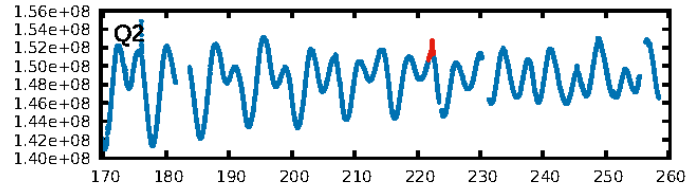
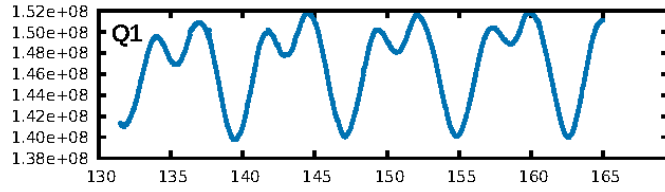
DV Fit Results:

Period = 588.98996 [0.01124] d
Epoch = 222.1658 [0.0134] BKJD
Rp/R* = 0.0783 [0.1381]
a/R* = 193.63 [69.93]
b = 1.00 [0.17]
Seff = 2.26 [3.89]
Teq = 313 [134] K
Rp = 22.40 [43.26] Re
a = 1.3067 [1.2681] AU
Ag = 914.94 [3605.29] [0.25σ]
Teffp = 2659 [2359] K [0.99σ]

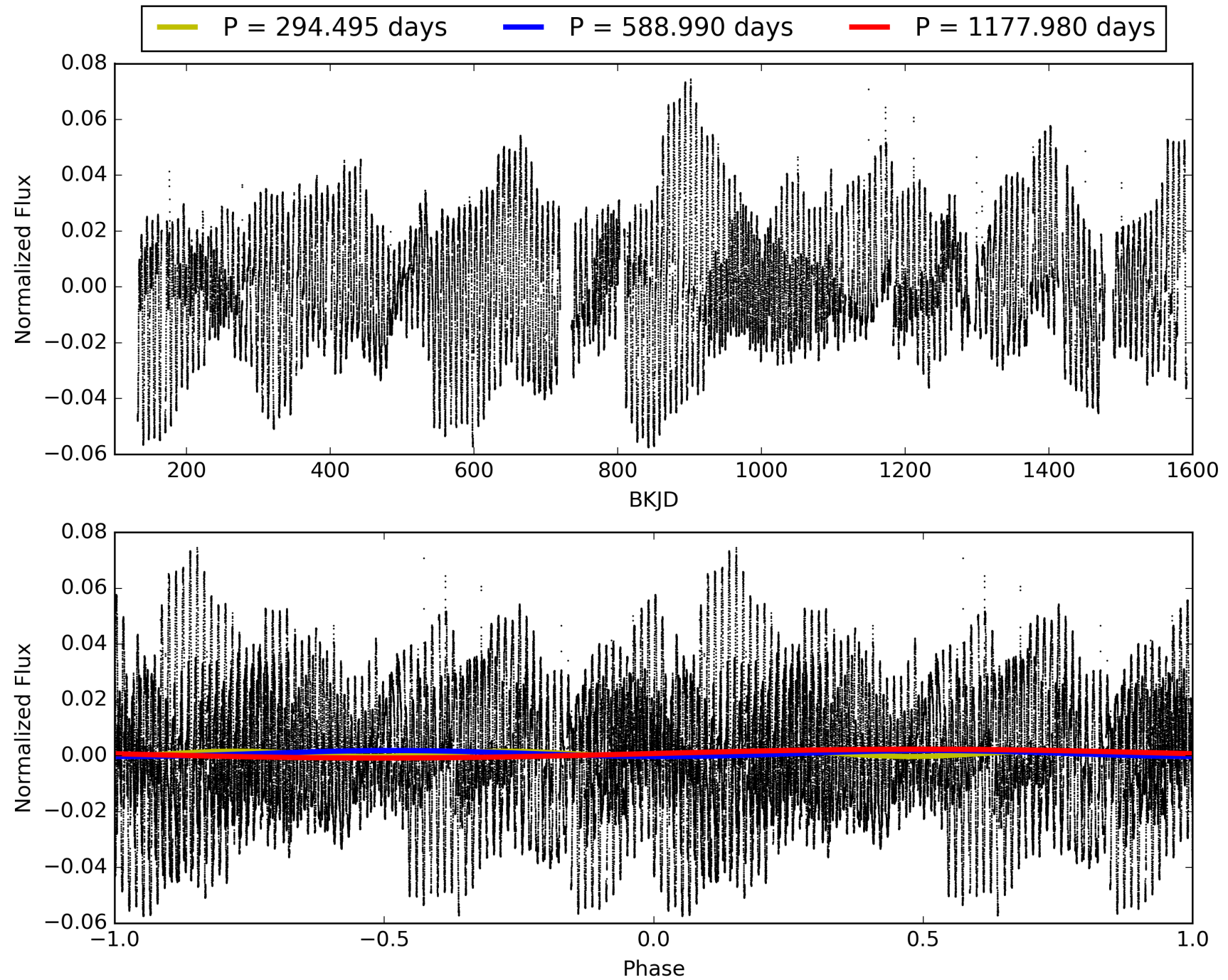
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [225.93σ]
LongPeriod-sig: 100.0% [16.24σ]
ModelChiSquare2-sig: 4.7%
ModelChiSquareGof-sig: 66.5%
Bootstrap-pfa: 1.15e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 13.76
Centroid-sig: 9.0%
Centroid-so: 0.319 arcsec [1.14σ]
OotOffset-rm: 0.027 arcsec [0.28σ]
KicOffset-rm: 0.155 arcsec [1.40σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

TCE 005785906-02, PDC Light Curves

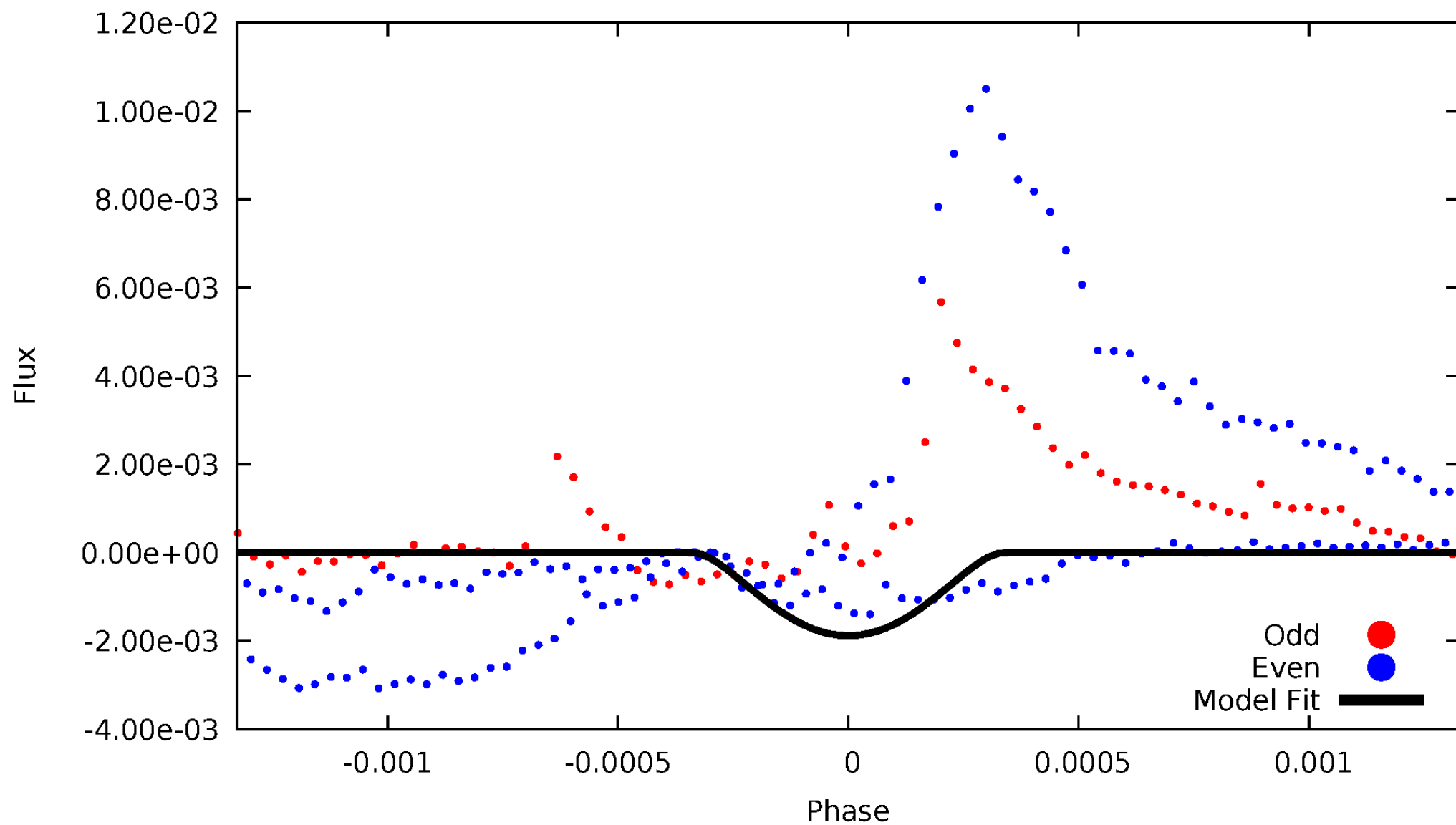


TCE 005785906-02



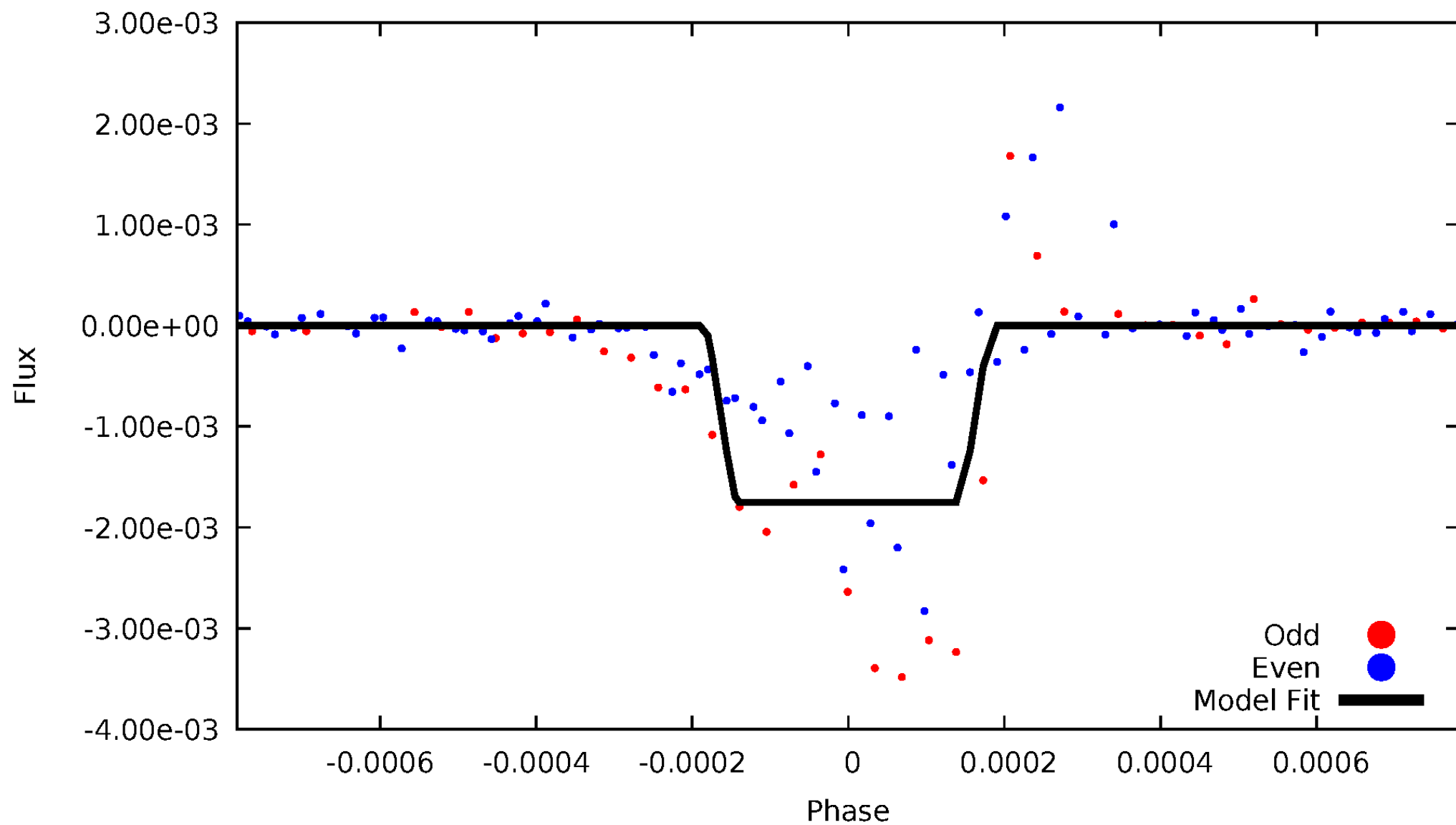
DV Odd/Even

TCE 005785906-02



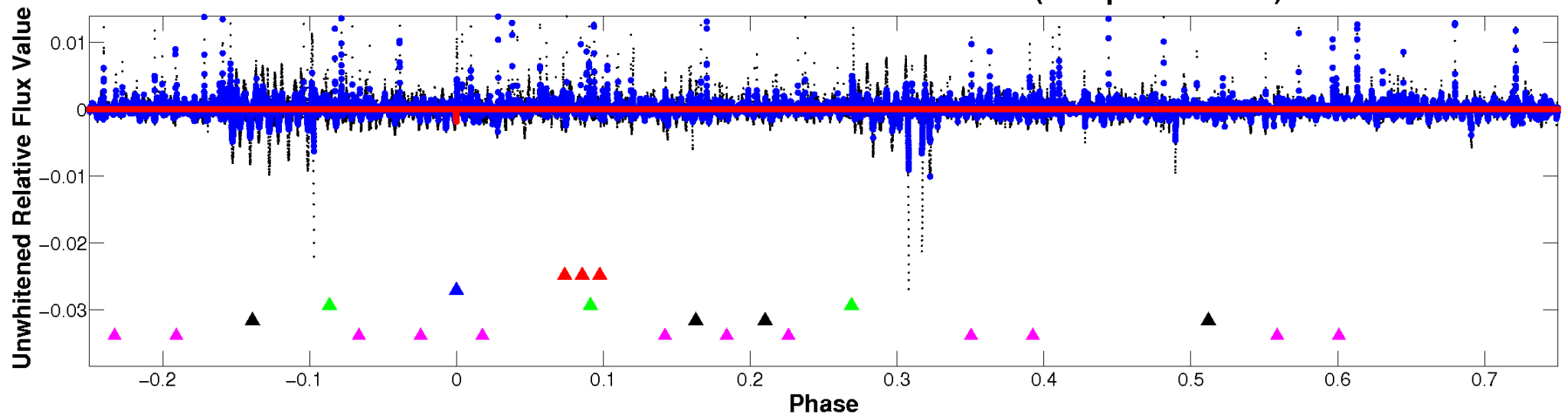
ALT Odd/Even

TCE 005785906-02

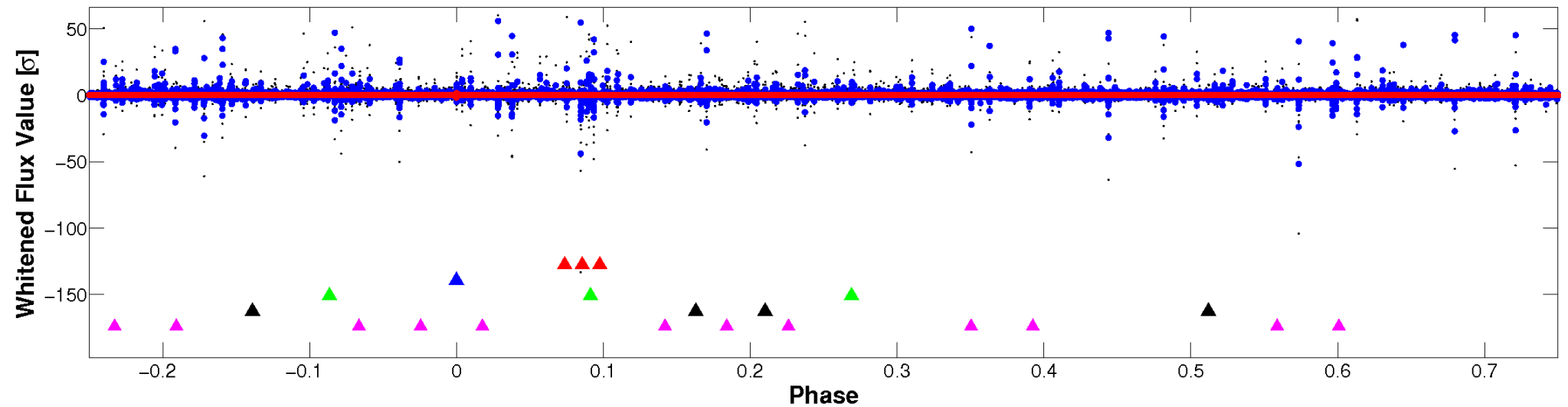


Non-Whitened Vs. Whitened Light Curve

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

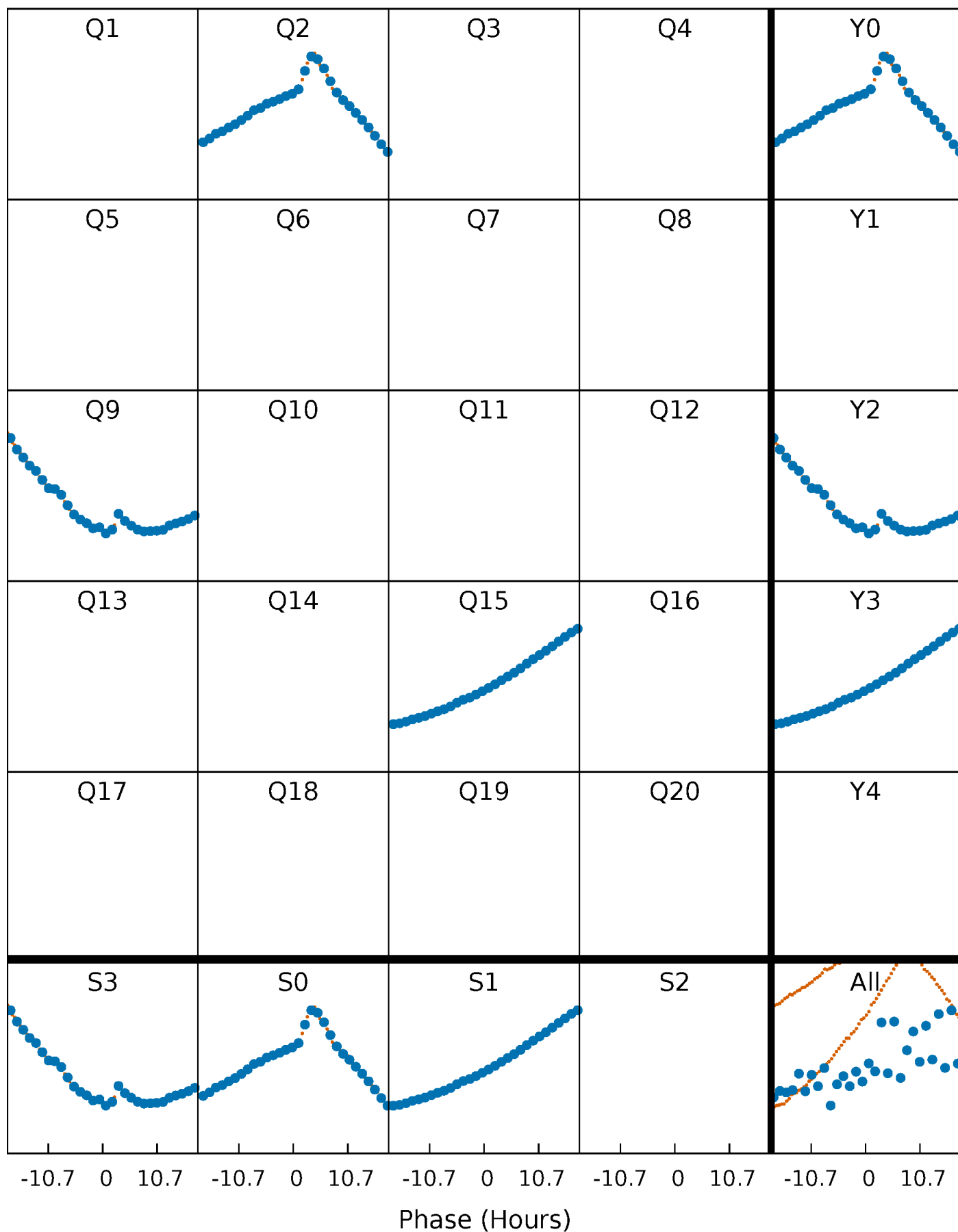


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



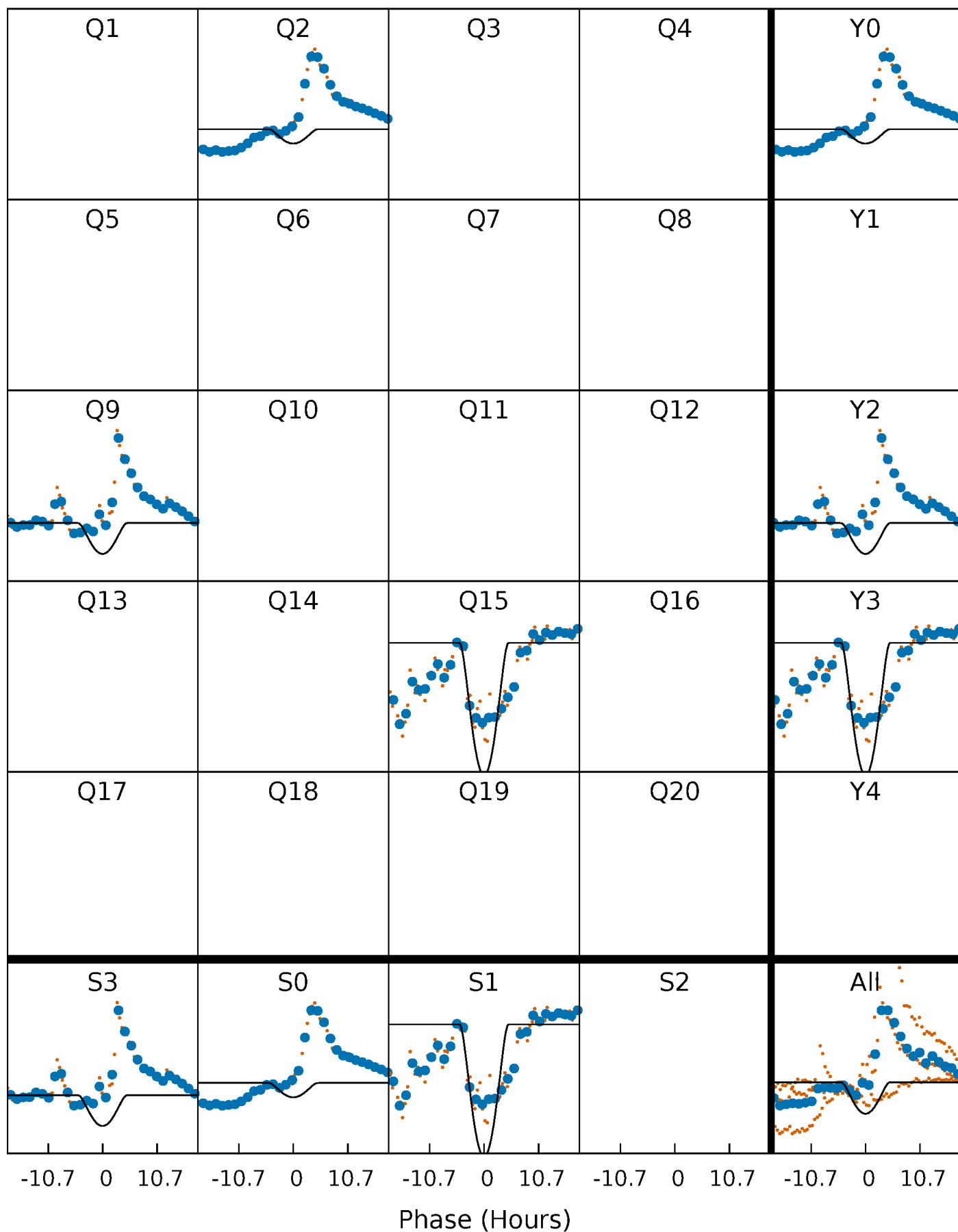
PDC Quarter-Phased Transit Curves

TCE 005785906-02 $P=588.989964$ Days $T_0=222.165847$ (BKJD)



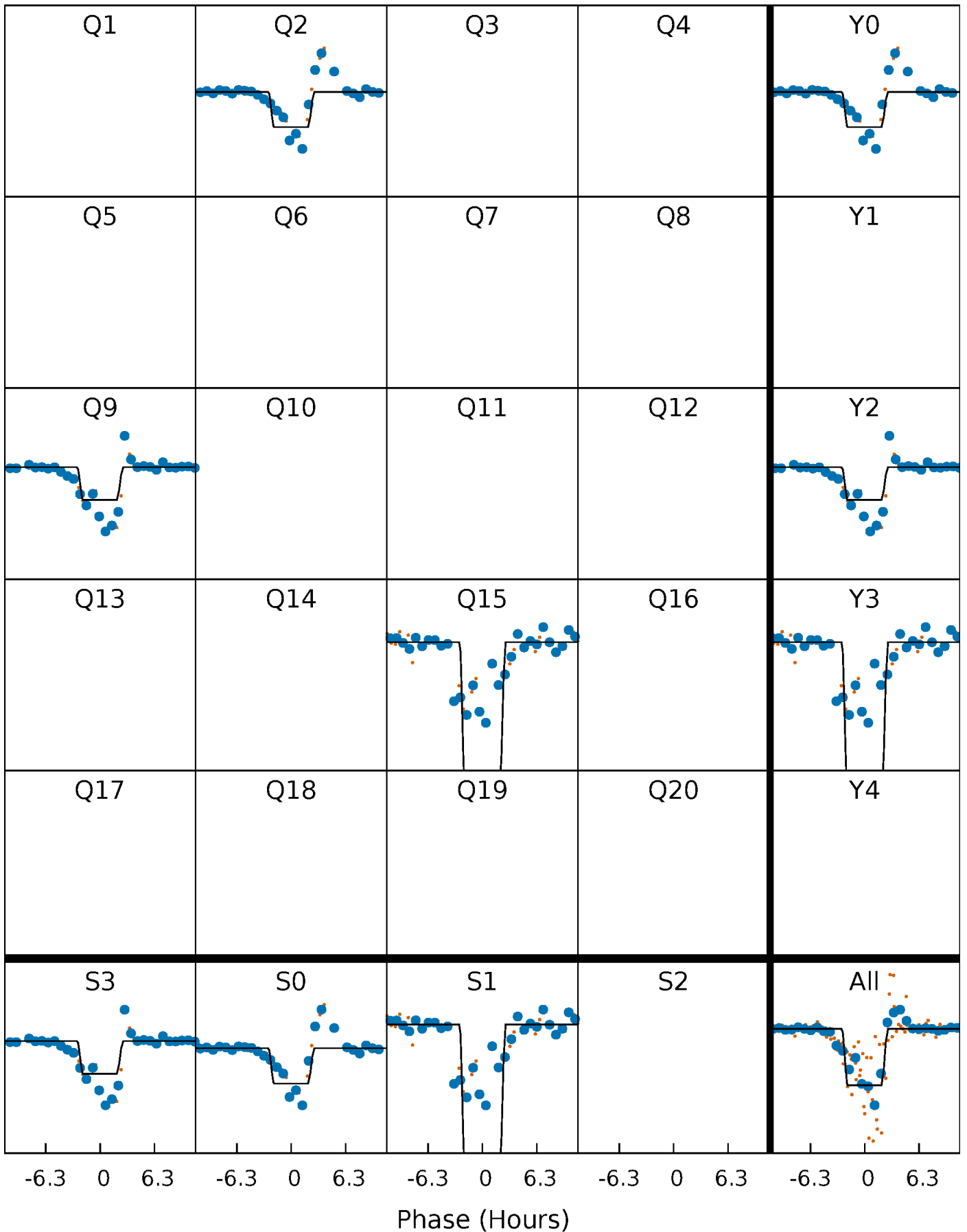
DV Quarter-Phased Transit Curves

TCE 005785906-02 $P=588.989964$ Days $T_0=222.165847$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

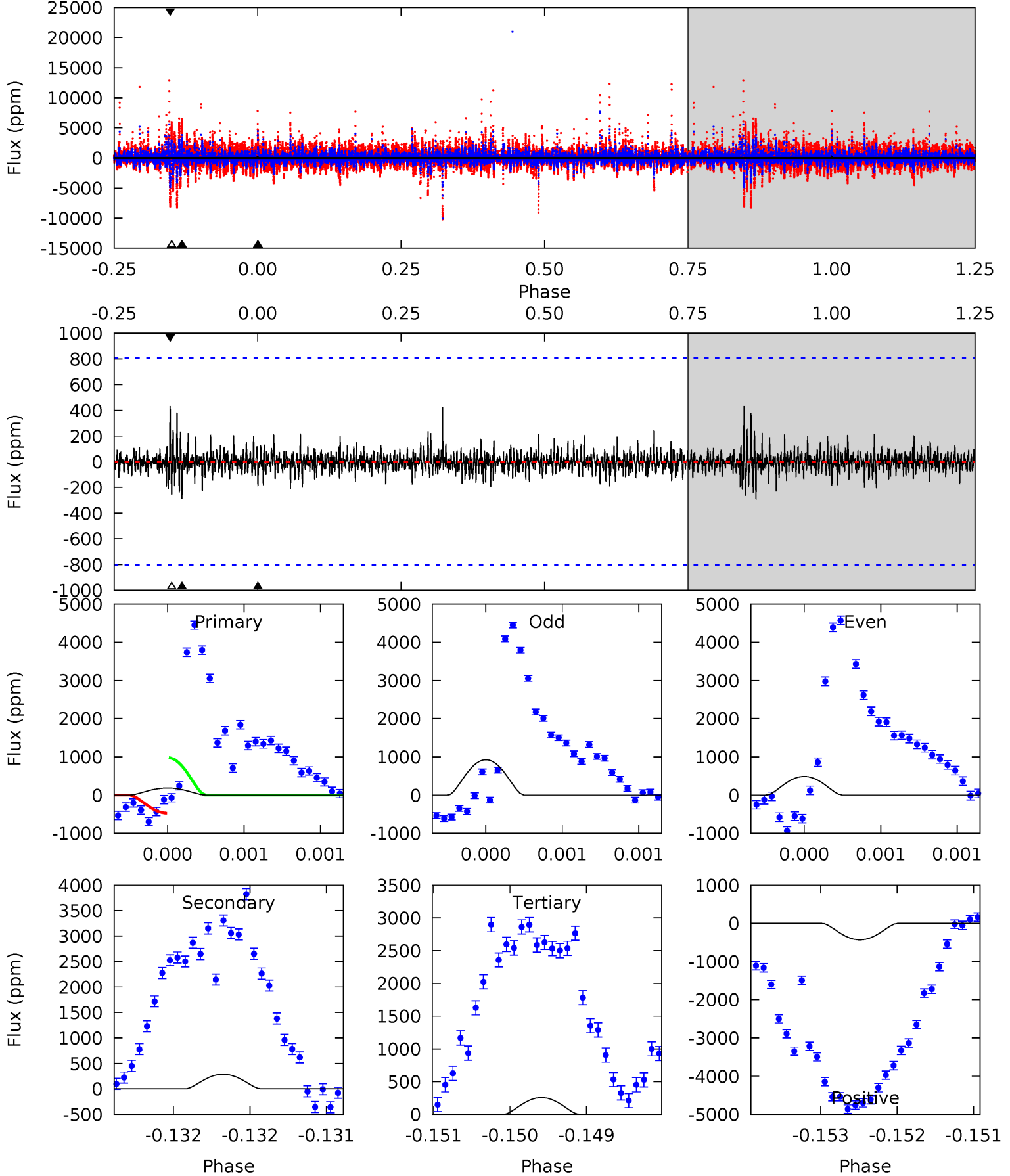
TCE 005785906-02 P=588.990556 Days $T_0=222.161726$ (BKJD)



DV Model-Shift Uniqueness Test

005785906-02, P = 588.989964 Days, E = 222.165847 Days

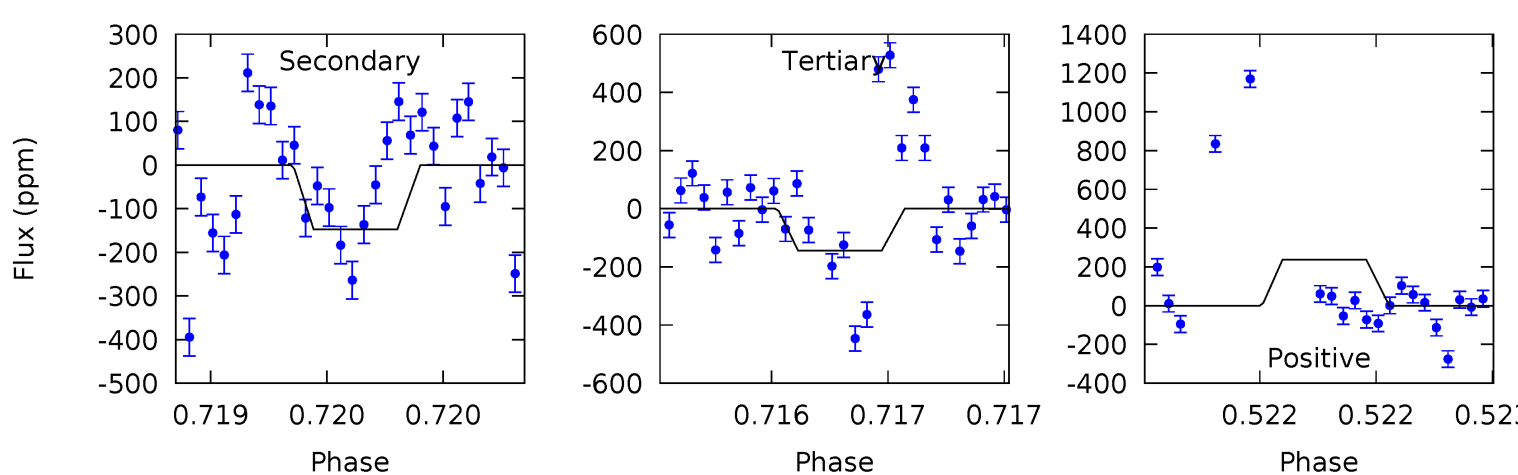
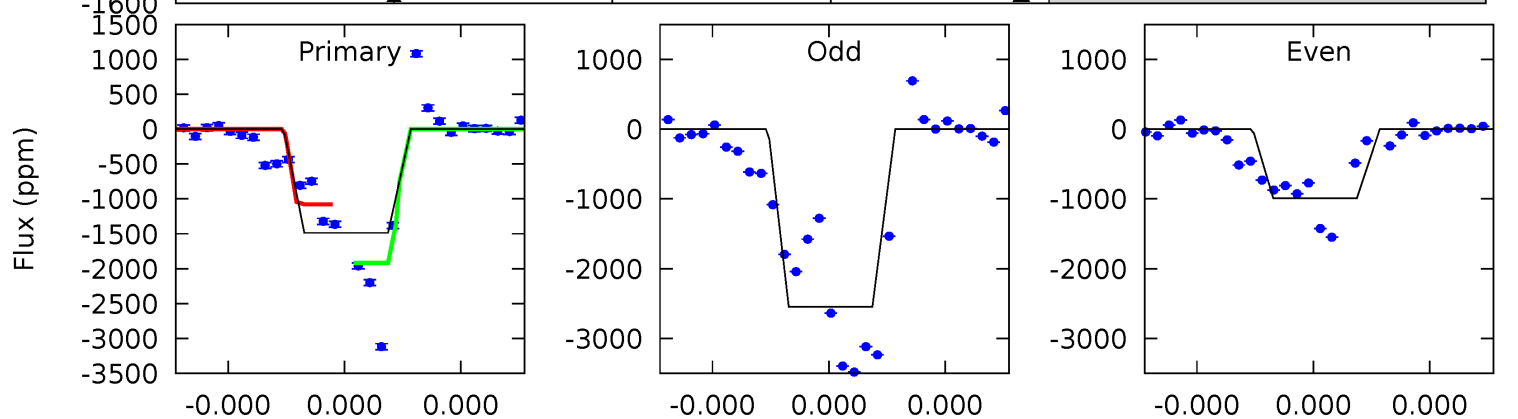
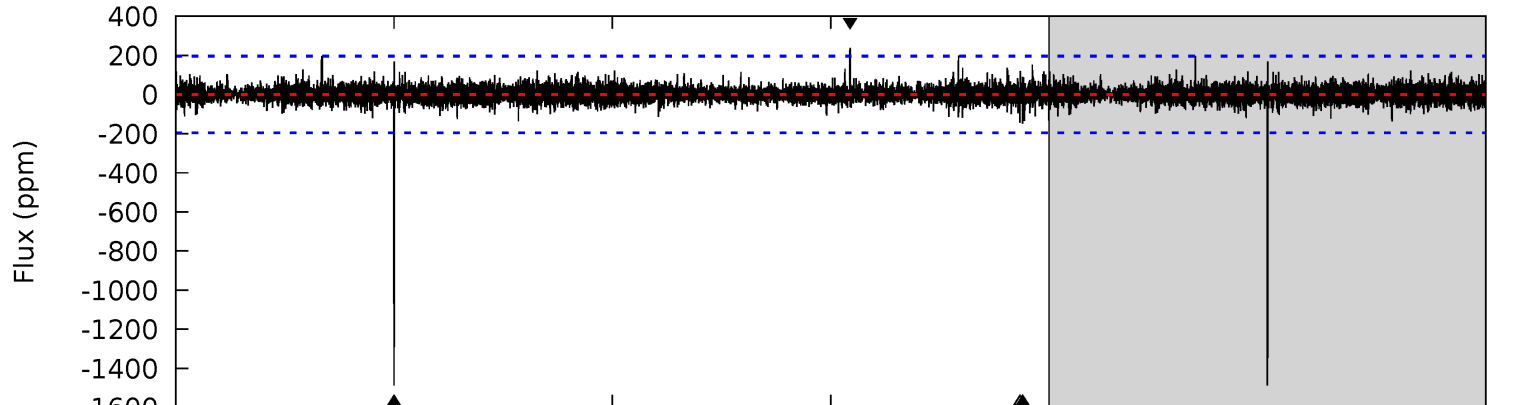
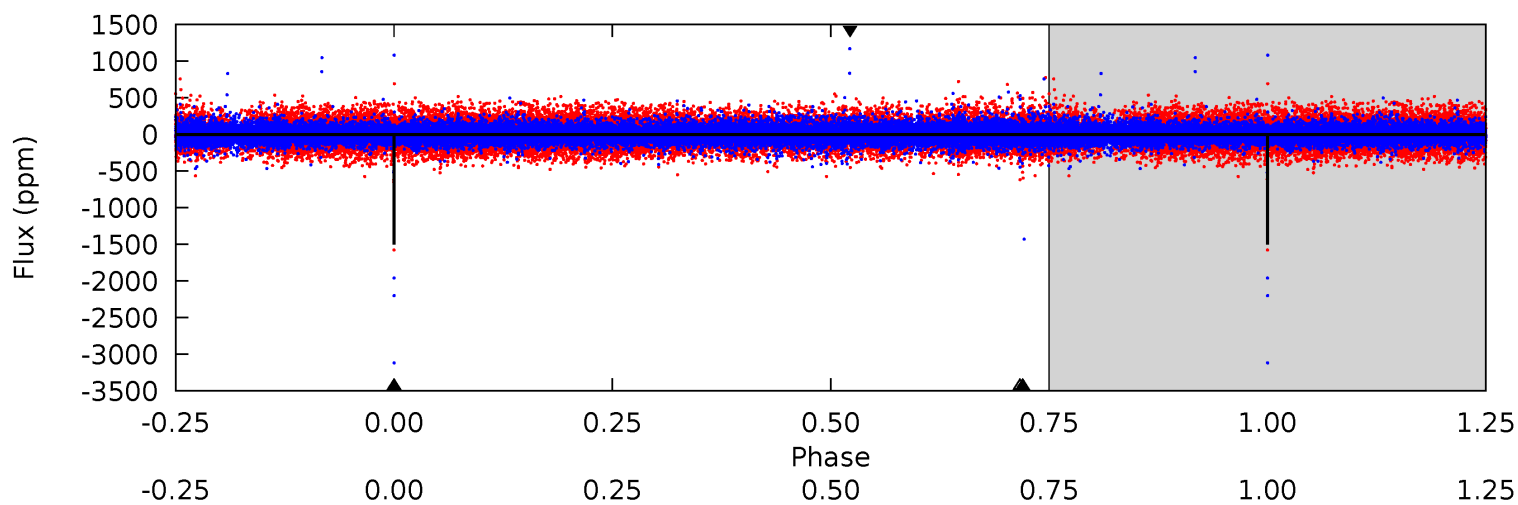
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.26	1.98	1.76	2.96	5.52	3.40	0.41	-0.49	-1.70	0.22	-0.99	1.31	0.69	0.60	1.74



Alt Model-Shift Uniqueness Test

005785906-02, P = 588.990556 Days, E = 222.161726 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
42.7	4.24	4.13	6.84	5.63	3.57	0.74	38.6	35.9	0.11	-2.60	29.5	0.98	0.14	0



Stellar Parameters For KIC 005785906

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5004^{+123}_{-136}	$3.534^{+1.065}_{-0.355}$	$-0.360^{+0.250}_{-0.300}$	$2.622^{+1.371}_{-2.057}$	$0.857^{+0.243}_{-0.198}$	$0.067^{+2.974}_{-0.048}$
	+2%/-3%	+30%/-10%	+69%/-83%	+52%/-78%	+28%/-23%	+4442%/-72%
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 005785906-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-288 ± 146	$32.78^{+42.22}_{-22.77}$	435^{+70}_{-101}	2557^{+892}_{-405}	222^{+1989}_{-185}
Alt.	-147 ± 35	$27.83^{+36.10}_{-21.25}$	426^{+76}_{-95}	2495^{+1061}_{-397}	190^{+2892}_{-156}

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 $A_{obs} \gg 1.0$

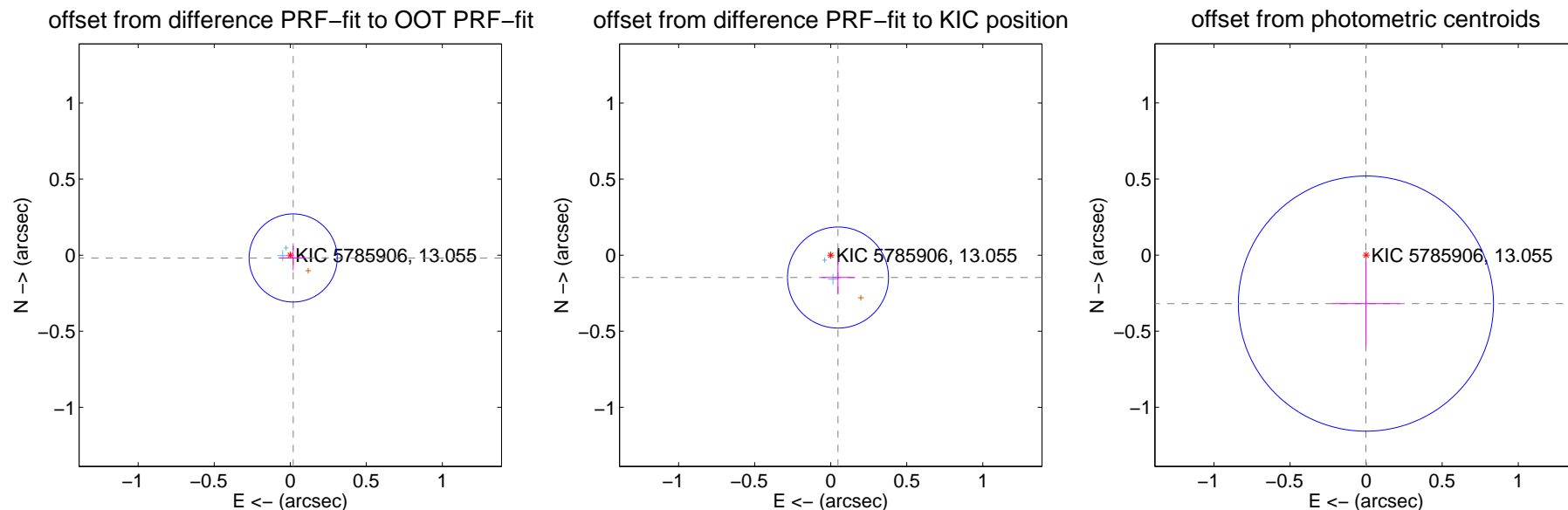
DV Centroid Data

Supplemental centroid analysis for 005785906-02. Kepler magnitude: 13.05. Transit SNR 7.96

There are 2 quarters with good PRF difference image offsets

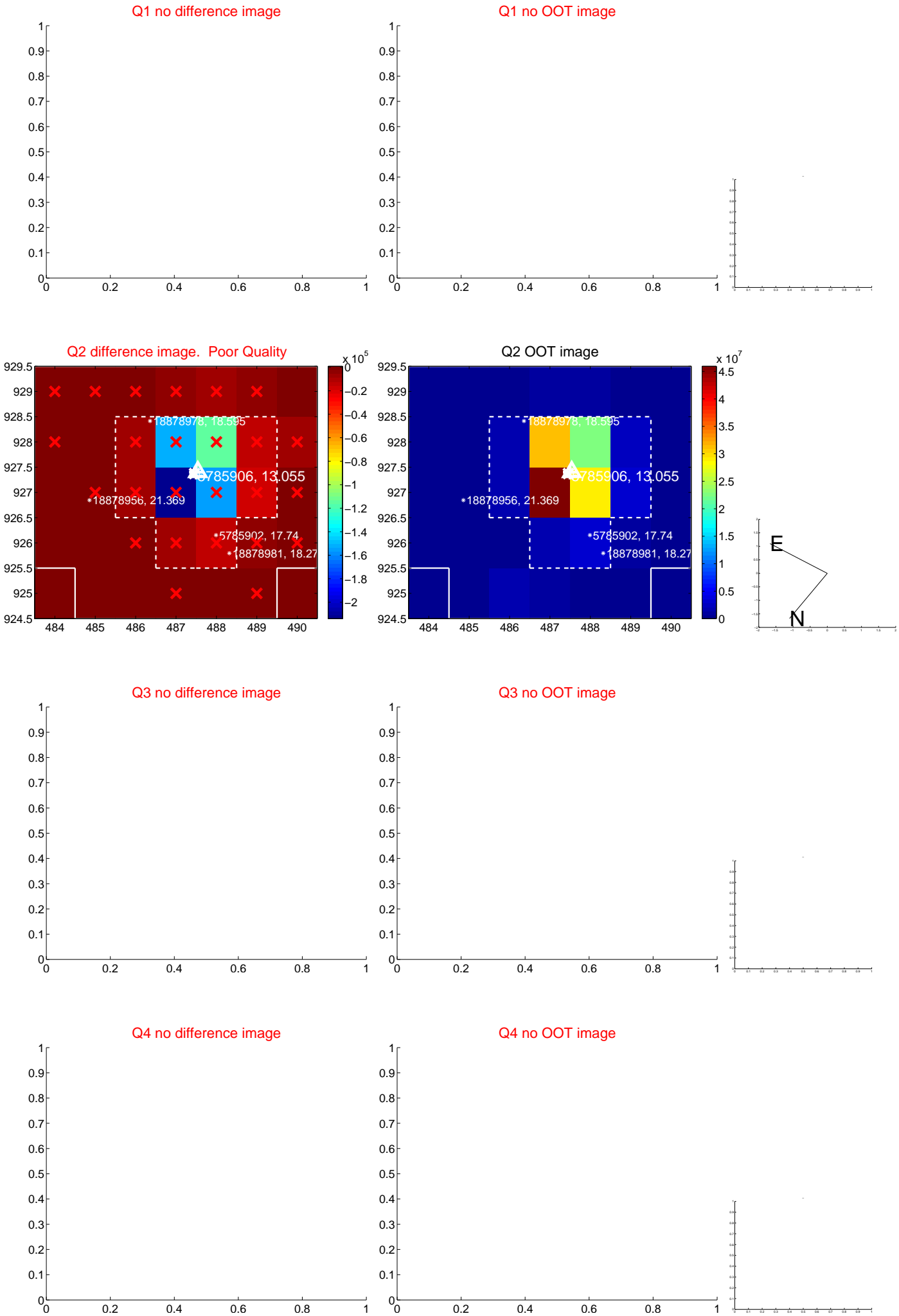
The direct PRF centroid is offset from the target star catalog position by about 0.17 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.027 ± 0.097	0.28	-0.019 ± 0.087	-0.019 ± 0.080
PRF-fit source offset from KIC position	0.155 ± 0.111	1.40	-0.048 ± 0.108	-0.147 ± 0.111
photometric centroid source offset	0.32 ± 0.28	1.14	0.00 ± 0.22	-0.32 ± 0.28



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.

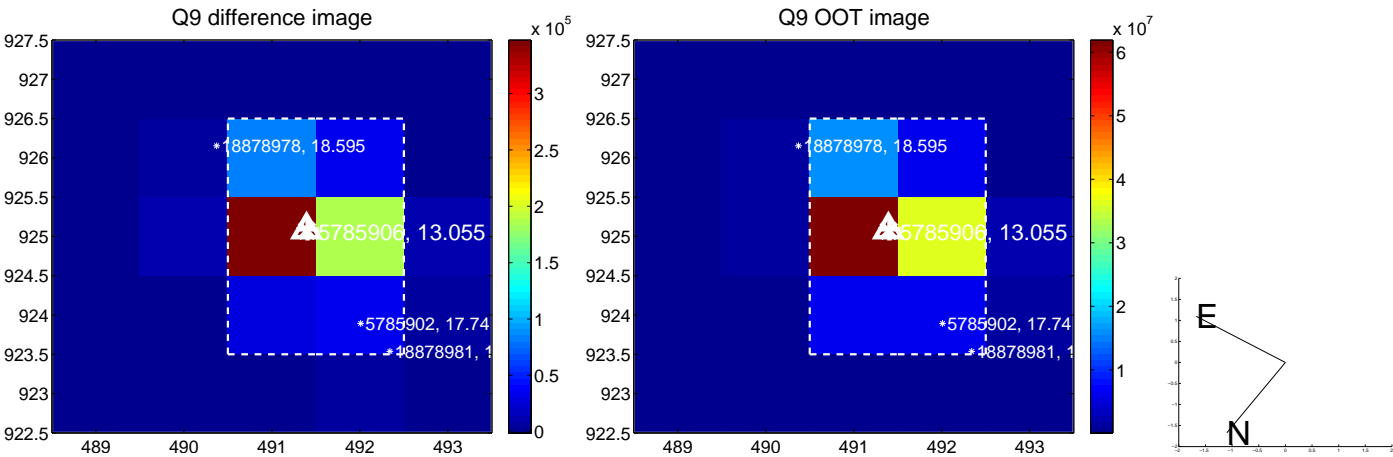
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



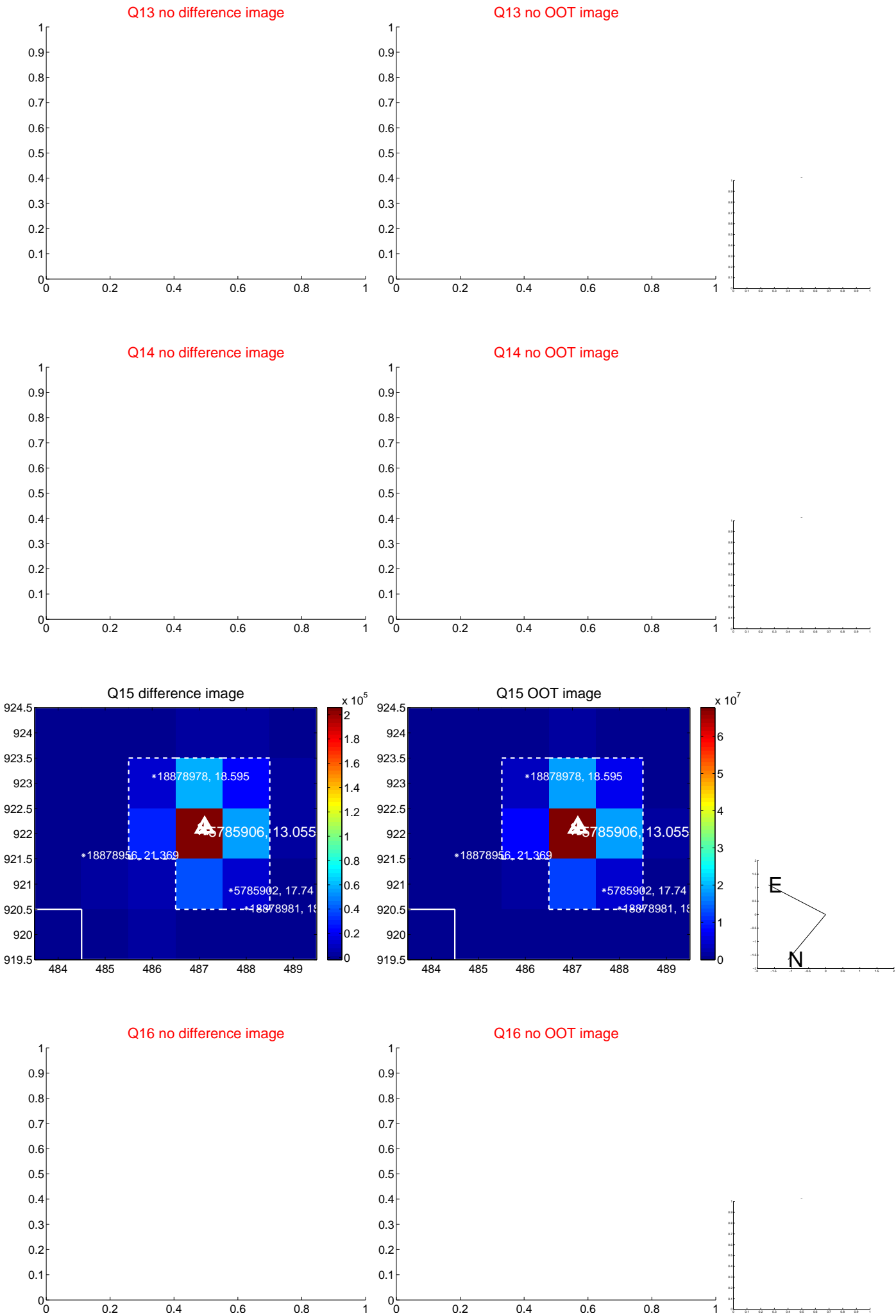
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



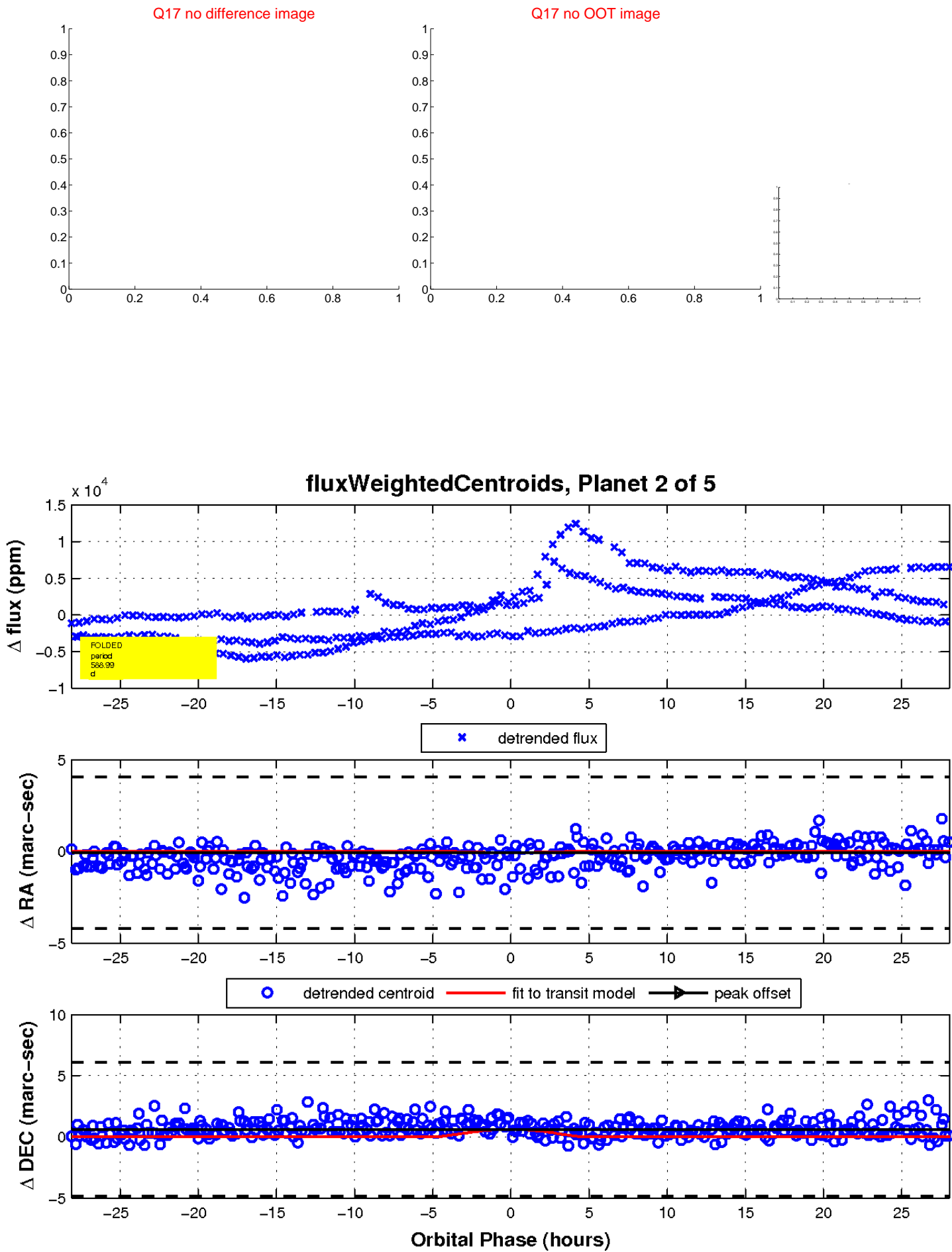
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

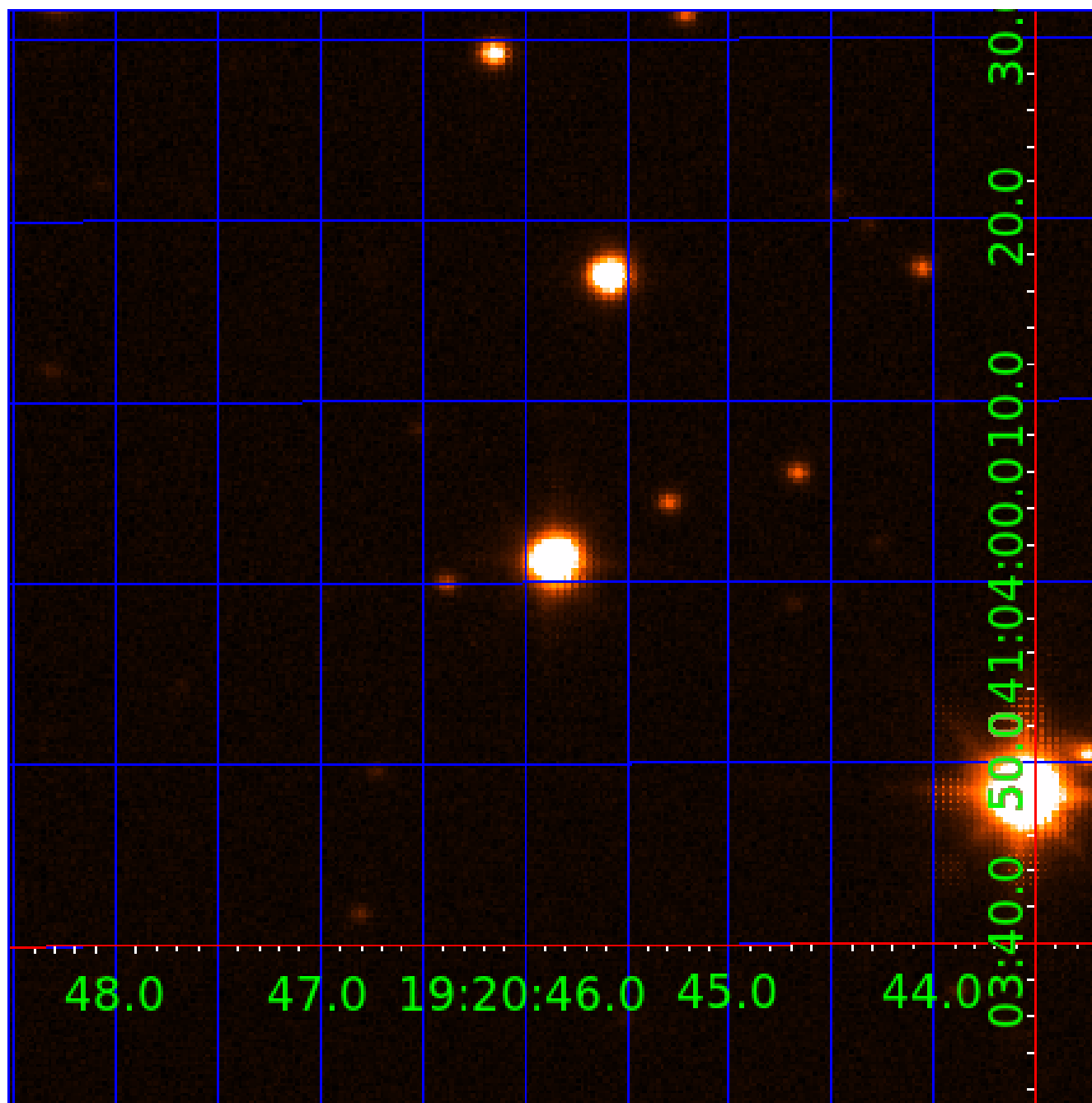


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005785906

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})
005785906-01	OBS	No	596.025820	265.565191	1011.7	4.497	18.2	7.0	2.62	5004	8.80	2.23
005785906-02	OBS	No	588.989964	222.165847	1880.8	9.376	21.0	8.0	2.62	5004	22.40	2.26
005785906-03	OBS	No	484.306596	380.605585	757.1	5.980	16.5	5.3	2.62	5004	7.37	2.94
005785906-04	OBS	No	383.395503	345.942061	1160.5	4.470	16.8	8.3	2.62	5004	9.11	4.01
005785906-05	OBS	No	122.748339	183.064866	479.0	4.500	15.6	-1.0	2.62	5004	5.59	18.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005785906-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV
005785906-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
005785906-05	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

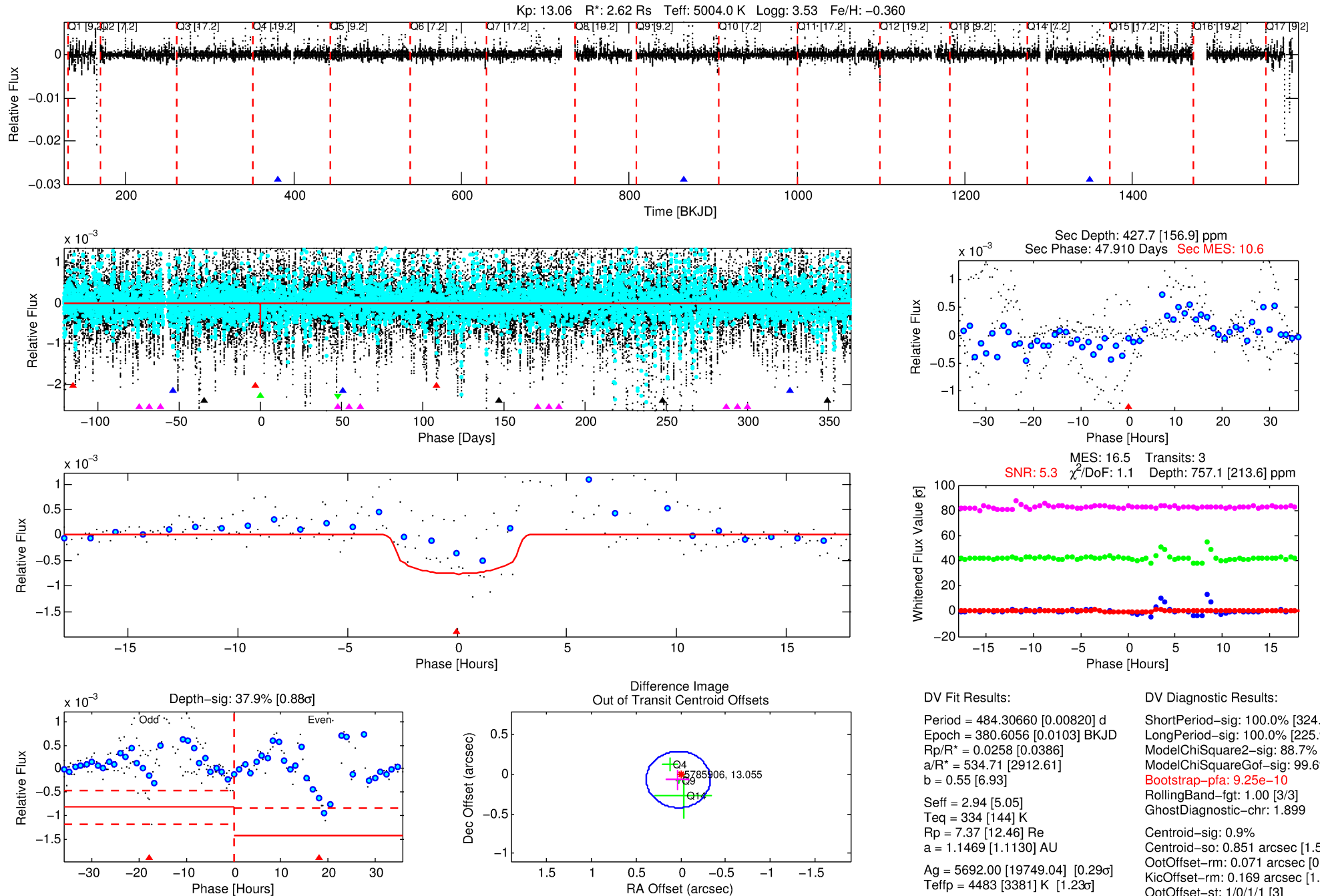
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005785906-03

No Significant Match Found

DV One-Page Summary

KIC: 5785906 Candidate: 3 of 5 Period: 484.307 d



DV Fit Results:

Period = 484.30660 [0.00820] d
Epoch = 380.6056 [0.0103] BKJD
Rp/R* = 0.0258 [0.0386]
a/R* = 534.71 [2912.61]
b = 0.55 [6.93]
Seff = 2.94 [5.05]
Teq = 334 [144] K
Rp = 7.37 [12.46] Re
a = 1.1469 [1.1130] AU
Ag = 5692.00 [19749.04] [0.29σ]
Teffp = 4483 [3381] K [1.23σ]

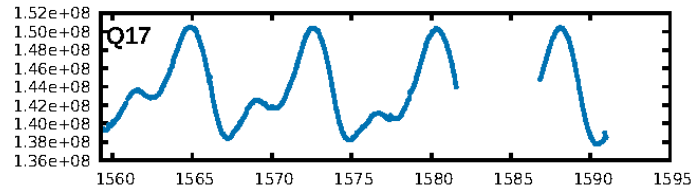
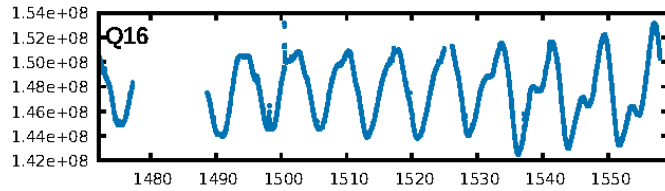
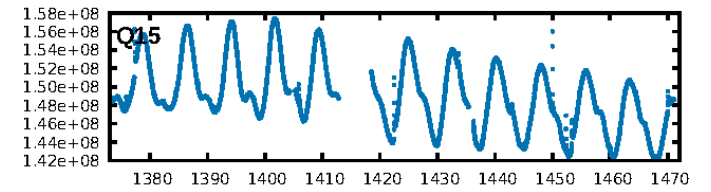
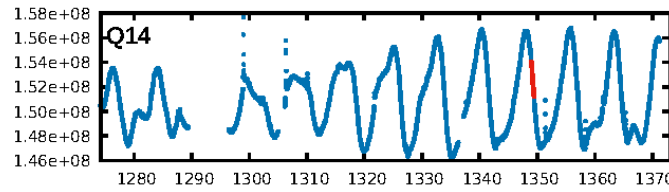
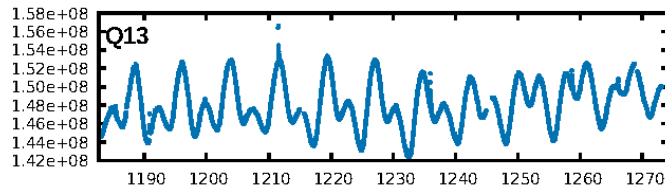
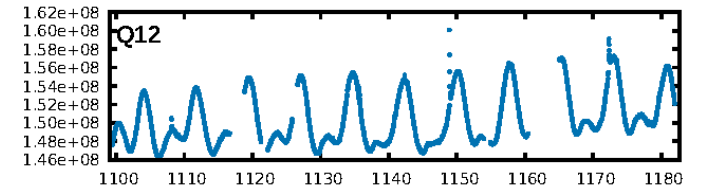
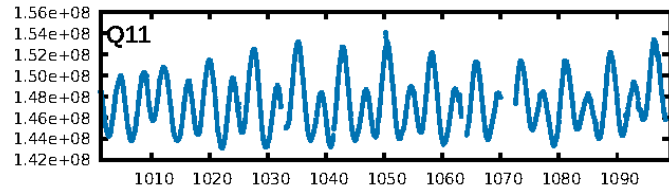
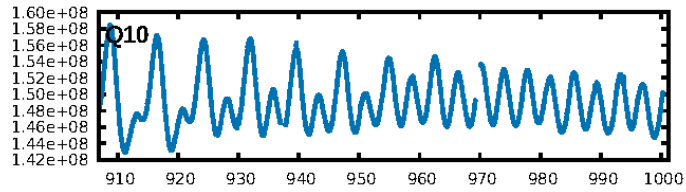
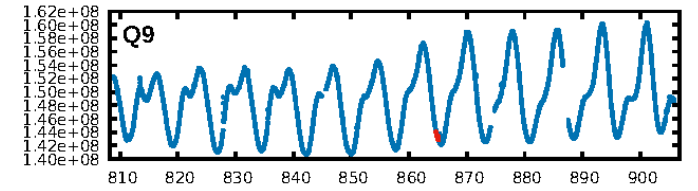
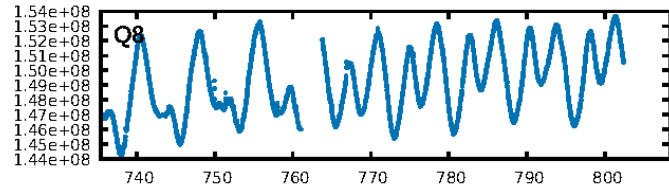
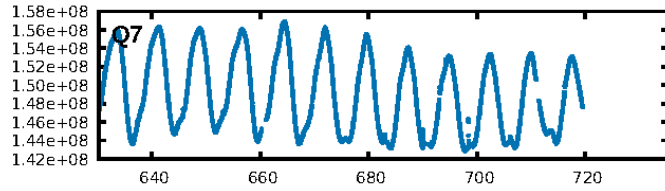
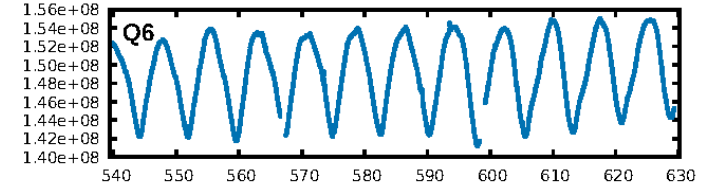
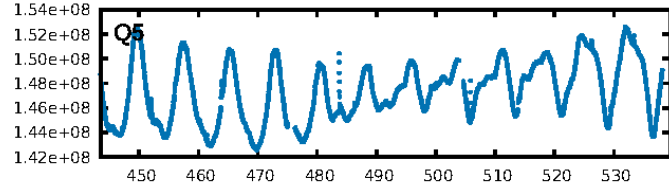
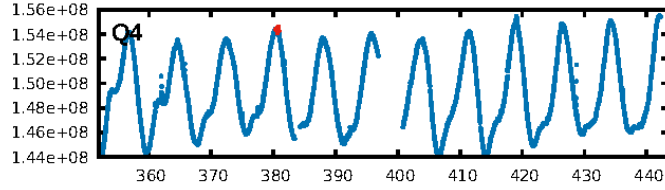
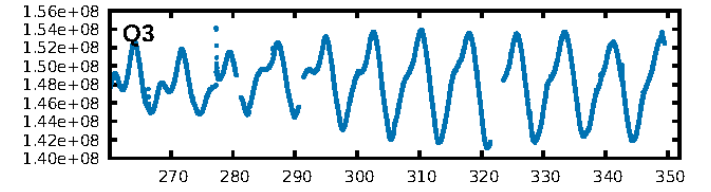
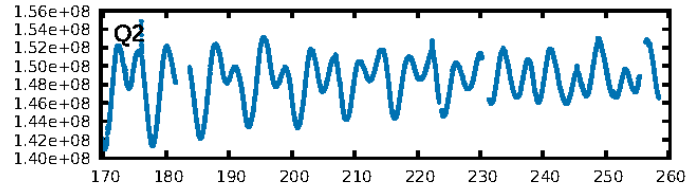
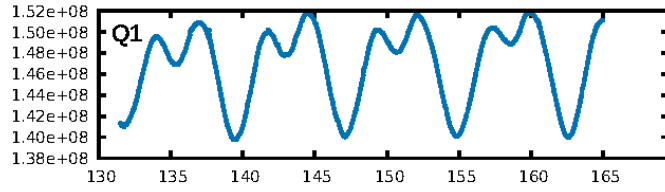
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [324.38σ]
LongPeriod-sig: 100.0% [225.93σ]
ModelChiSquare2-sig: 88.7%
ModelChiSquareGof-sig: 99.6%
Bootstrap-pfa: 9.25e-10
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.899
Centroid-sig: 0.9%
Centroid-so: 0.851 arcsec [1.58σ]
OotOffset-rm: 0.071 arcsec [0.59σ]
KicOffset-rm: 0.169 arcsec [1.35σ]
OotOffset-st: 1/0/1/1 [3]
KicOffset-st: 1/0/1/1 [3]
DiffImageQuality-fgm: 0.33 [1/3]
DiffImageOverlap-fno: 1.00 [3/3]

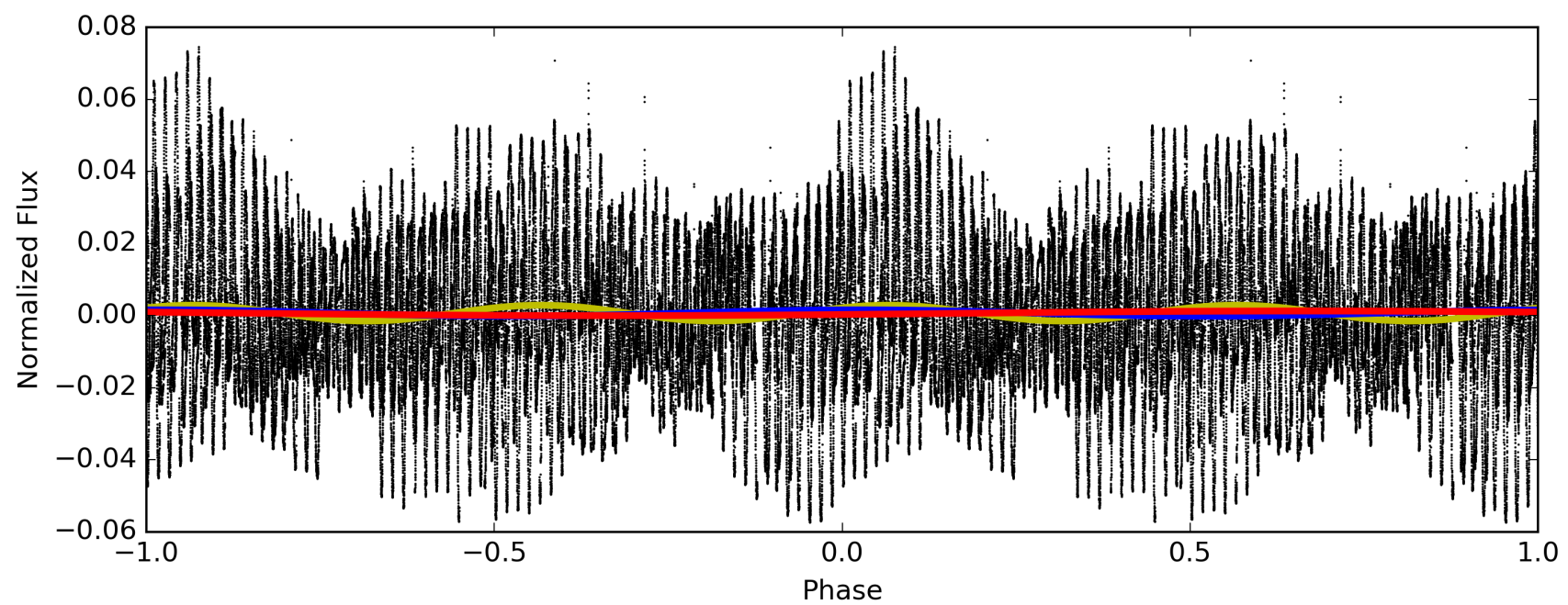
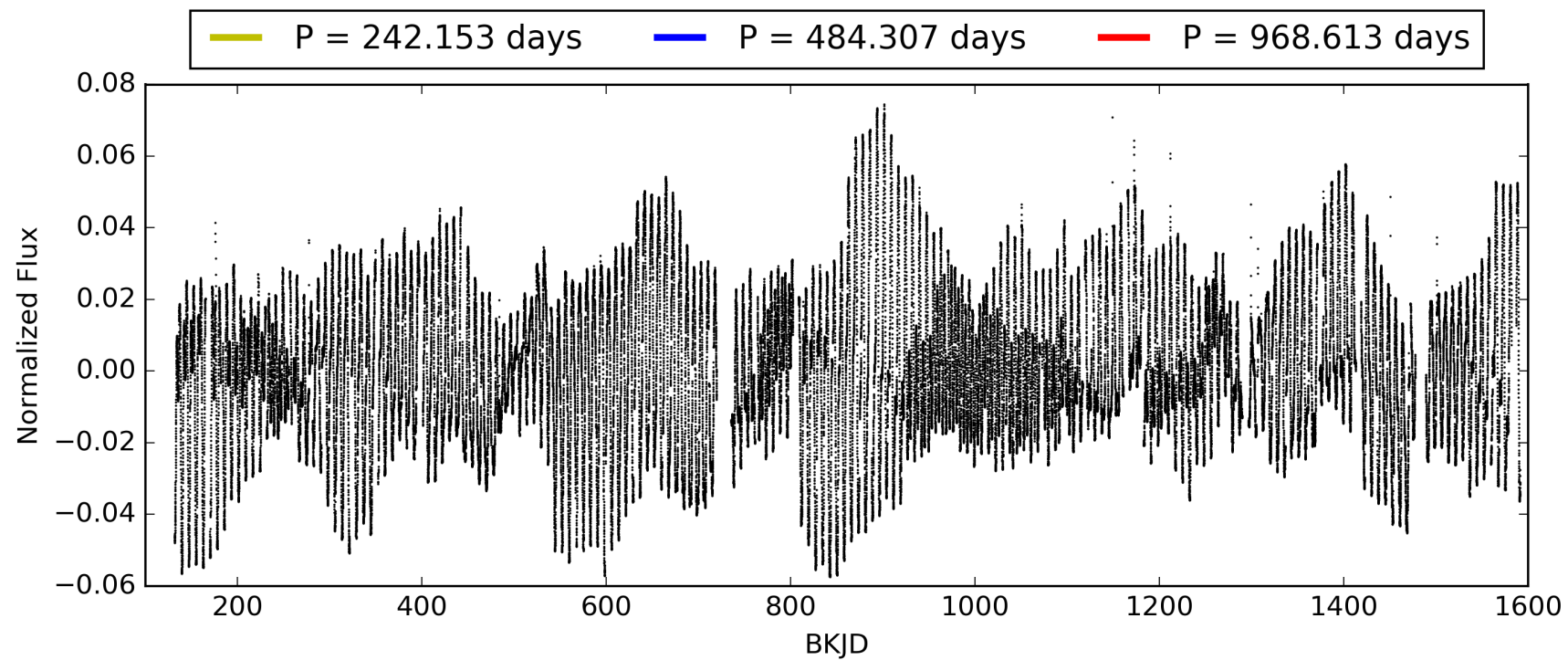
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:55:42 Z

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

TCE 005785906-03, PDC Light Curves

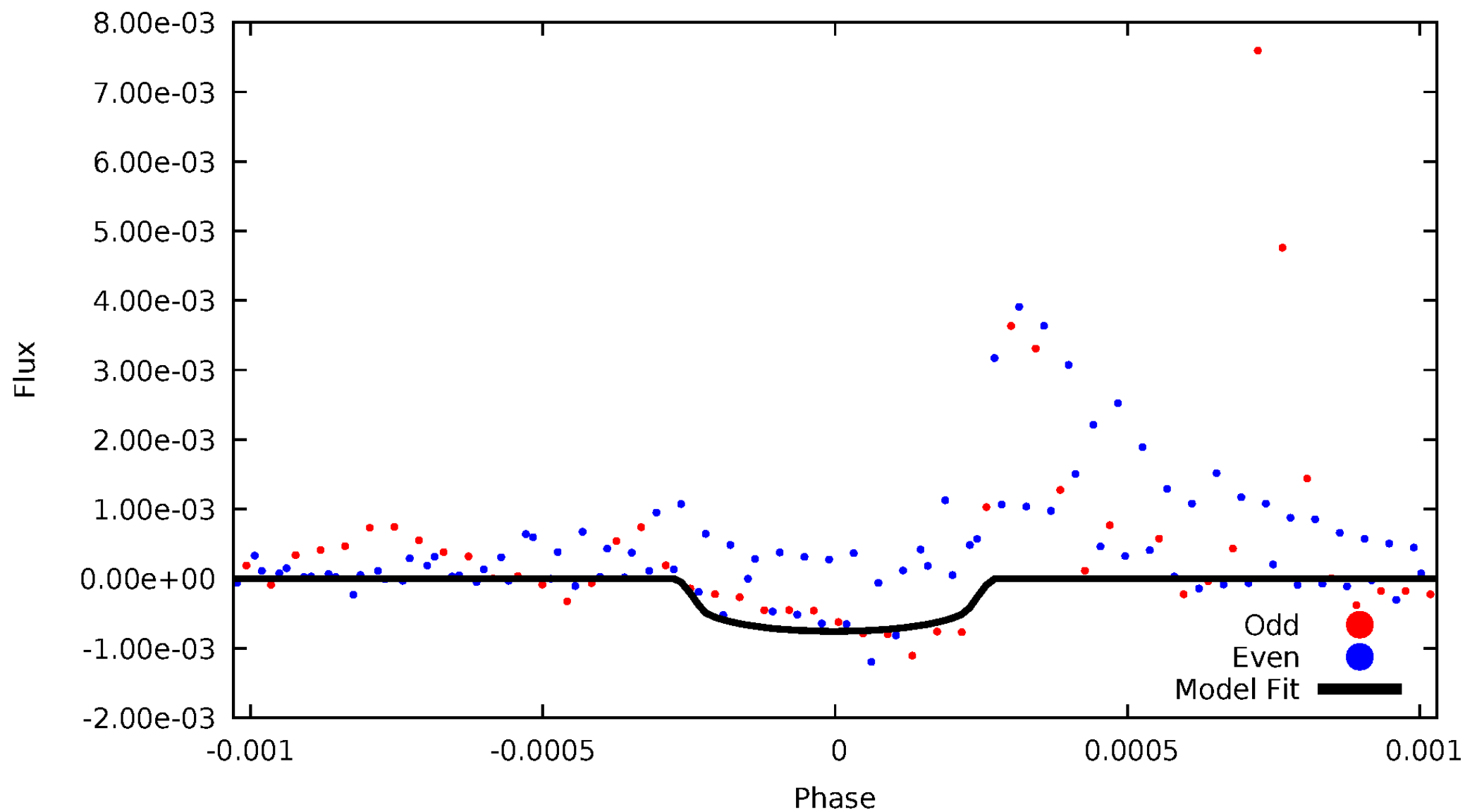


TCE 005785906-03



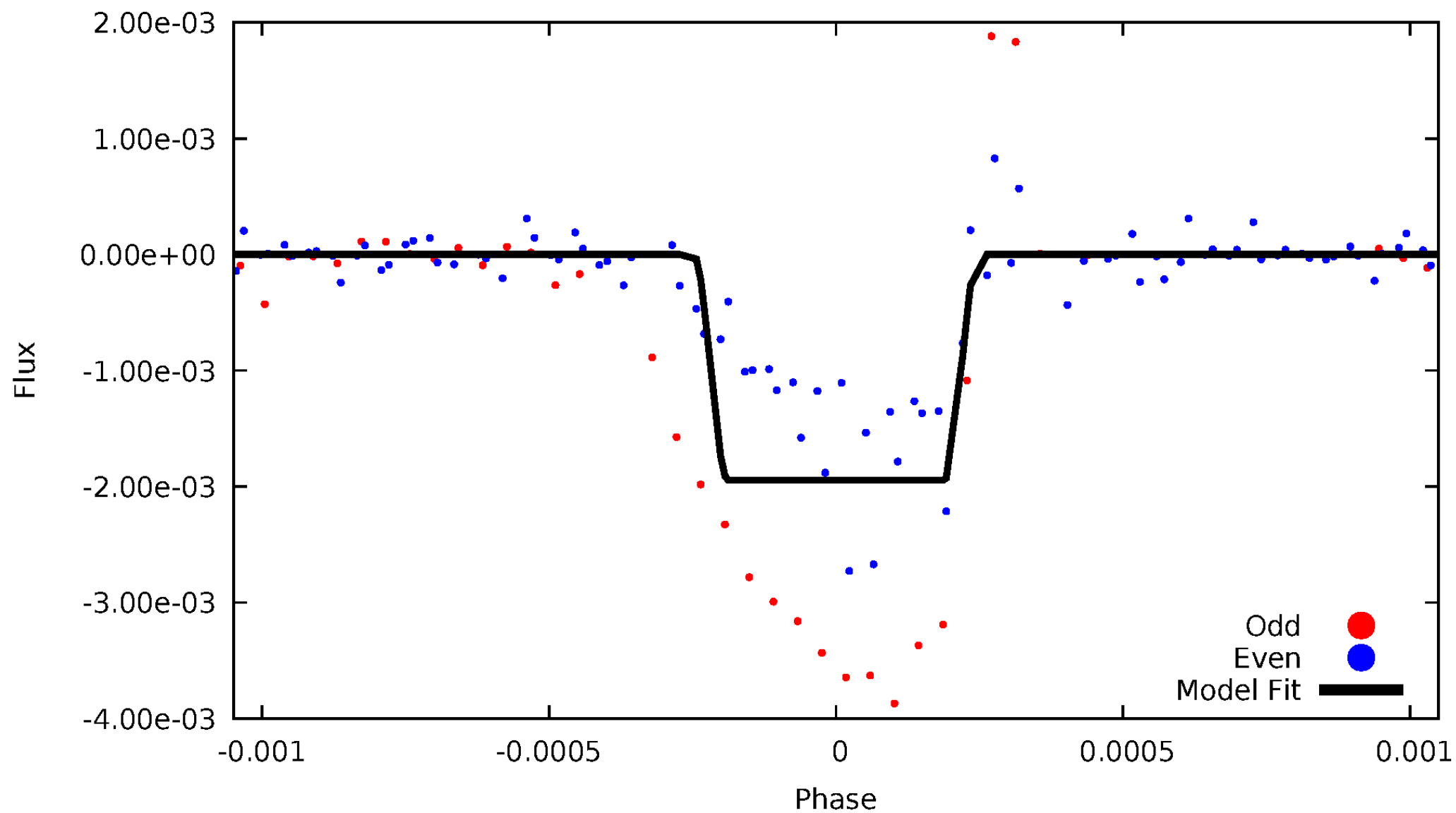
DV Odd/Even

TCE 005785906-03



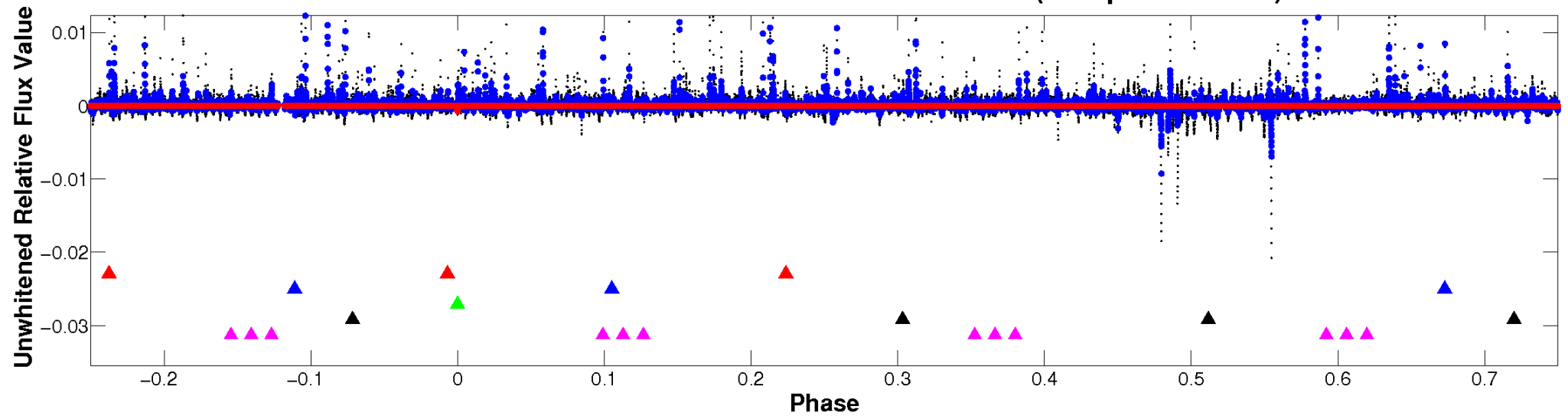
ALT Odd/Even

TCE 005785906-03

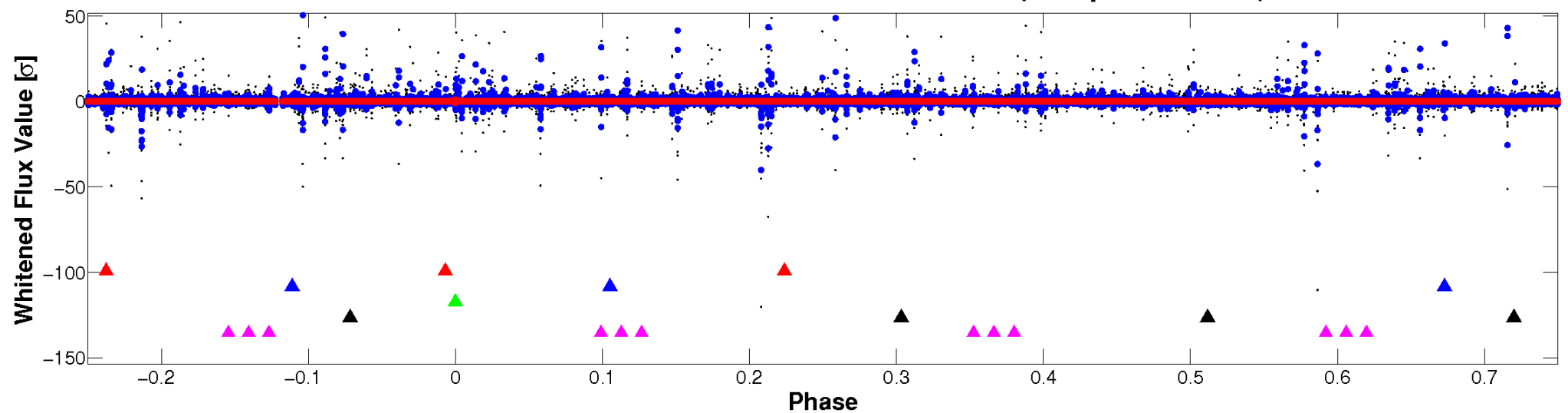


Non-Whitened Vs. Whitened Light Curve

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

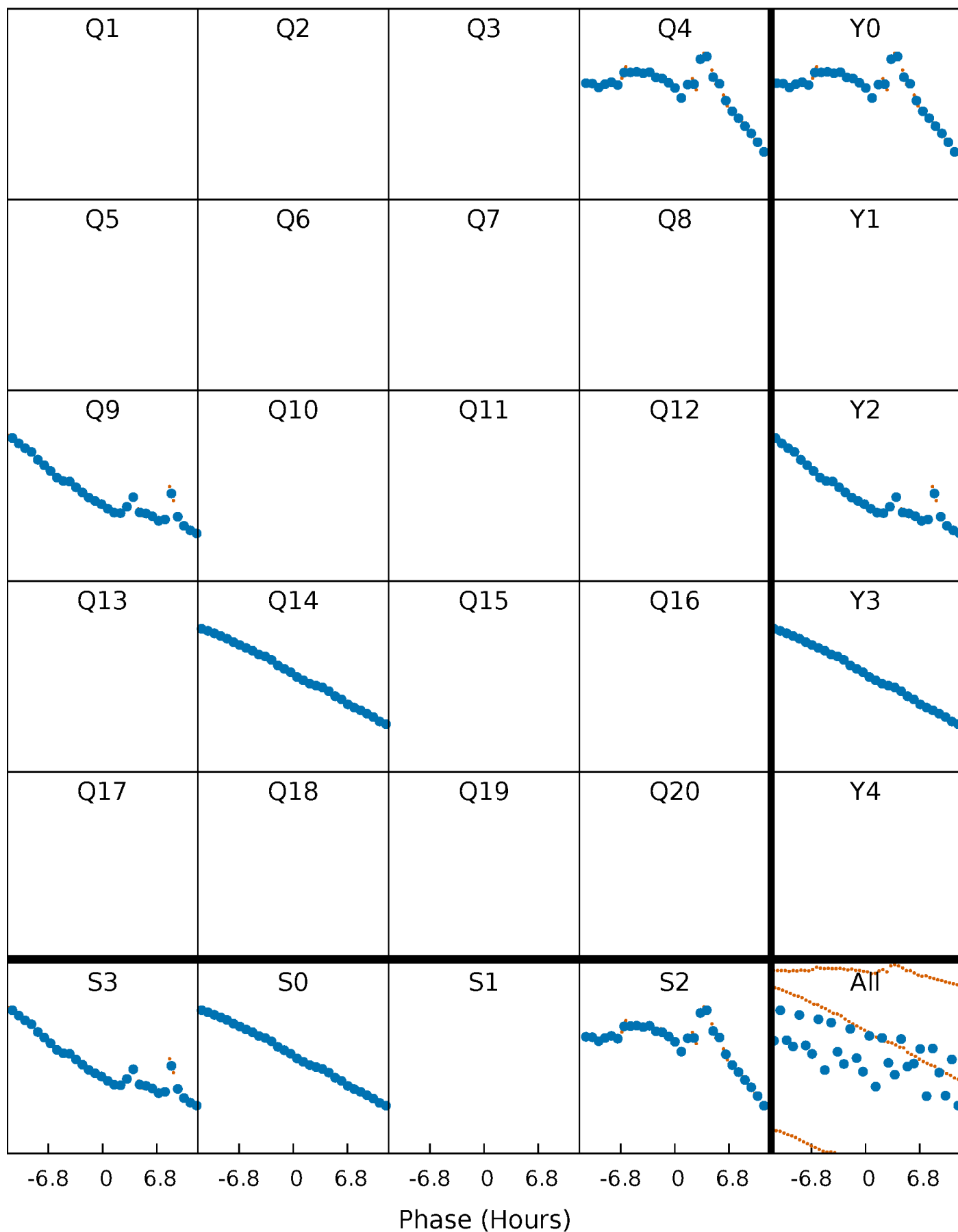


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



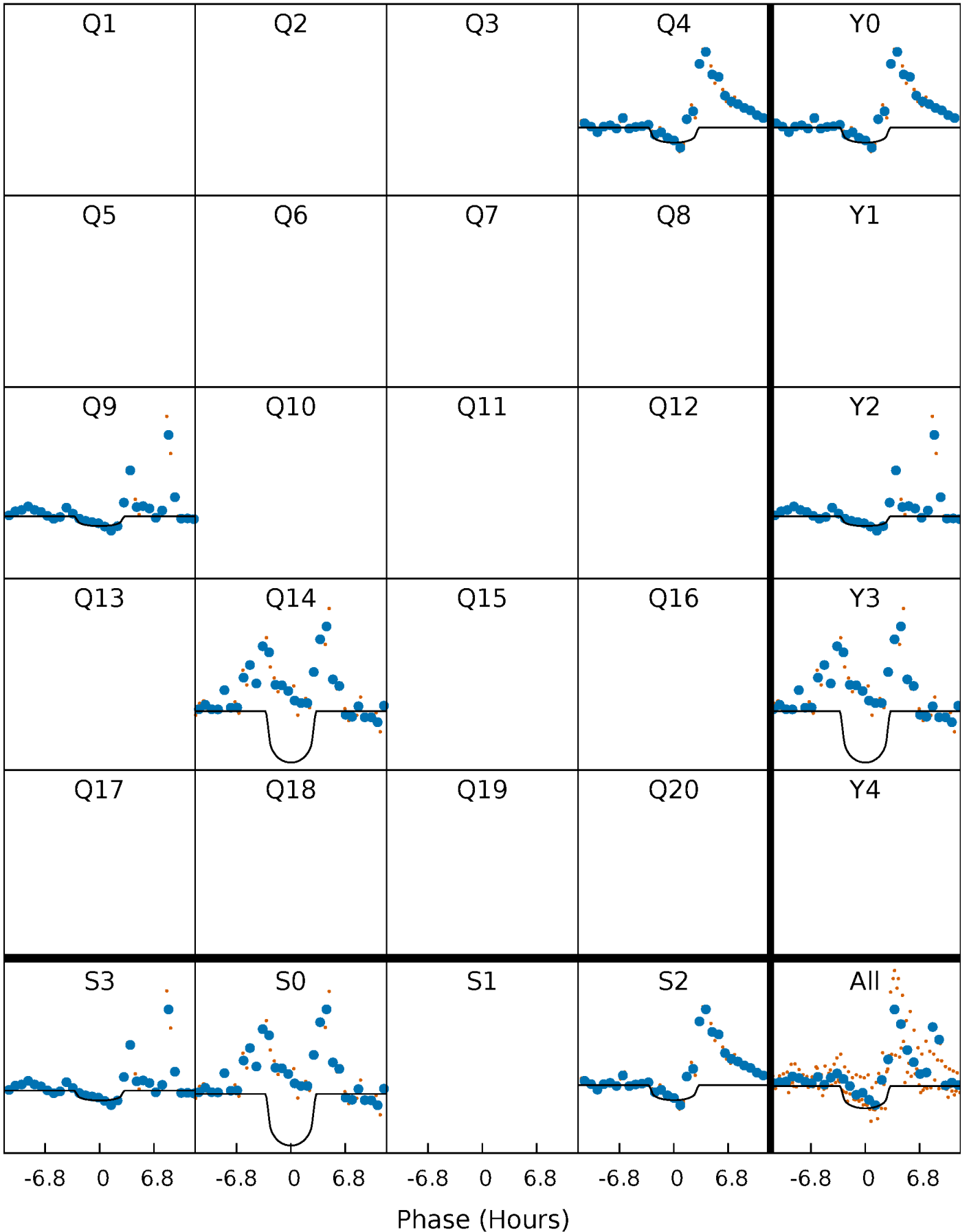
PDC Quarter-Phased Transit Curves

TCE 005785906-03 $P=484.306596$ Days $T_0=380.605585$ (BKJD)



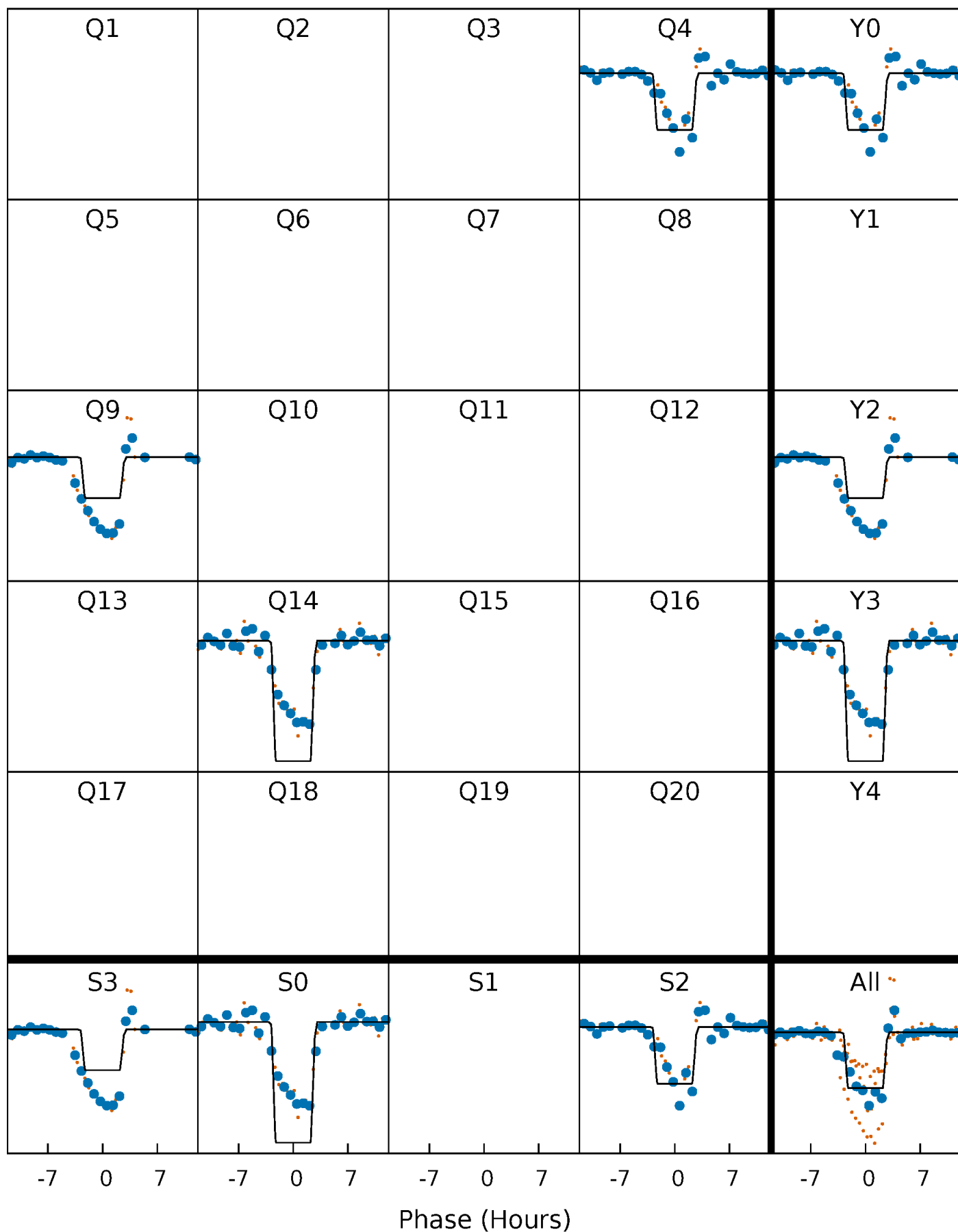
DV Quarter-Phased Transit Curves

TCE 005785906-03 P=484.306596 Days $T_0=380.605585$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

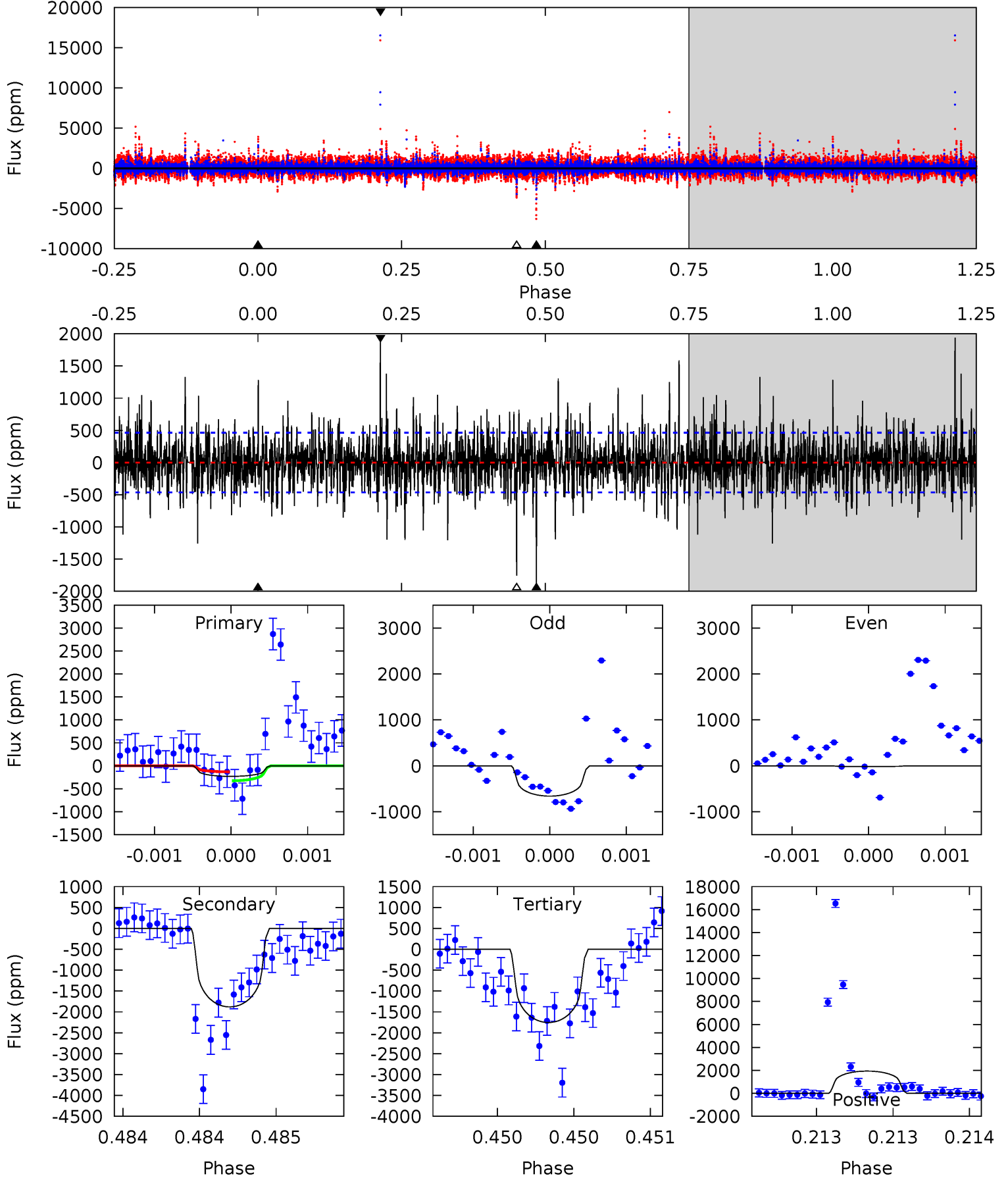
TCE 005785906-03 P=484.302617 Days $T_0=380.624250$ (BKJD)



DV Model-Shift Uniqueness Test

005785906-03, P = 484.306596 Days, E = 380.605585 Days

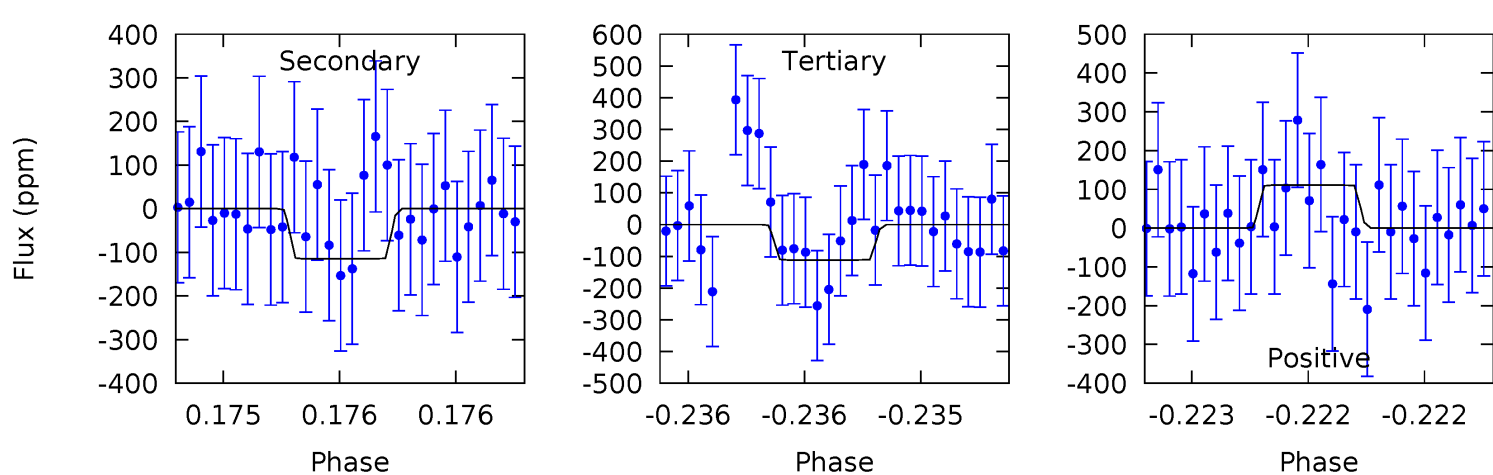
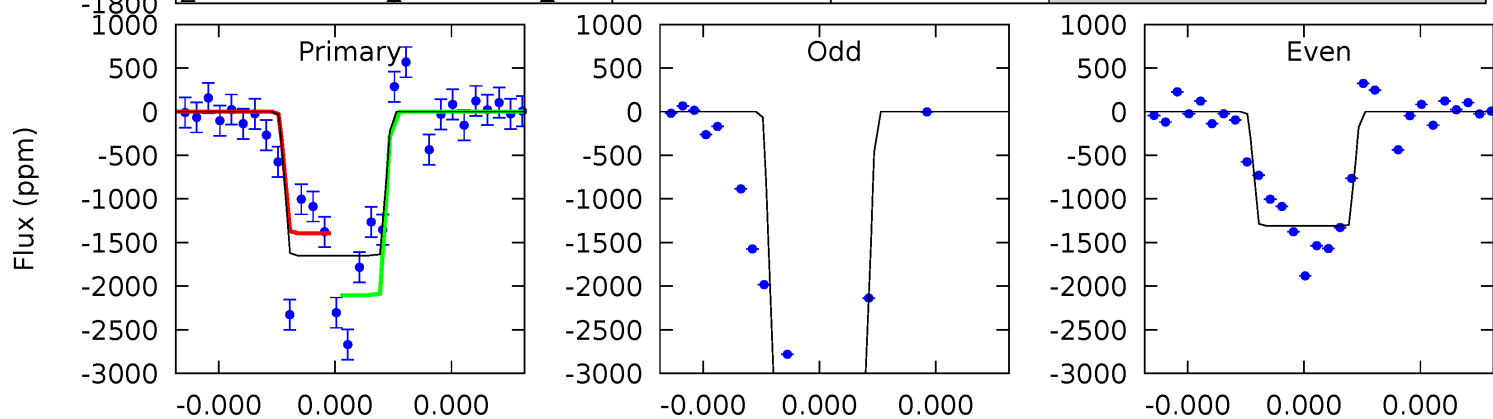
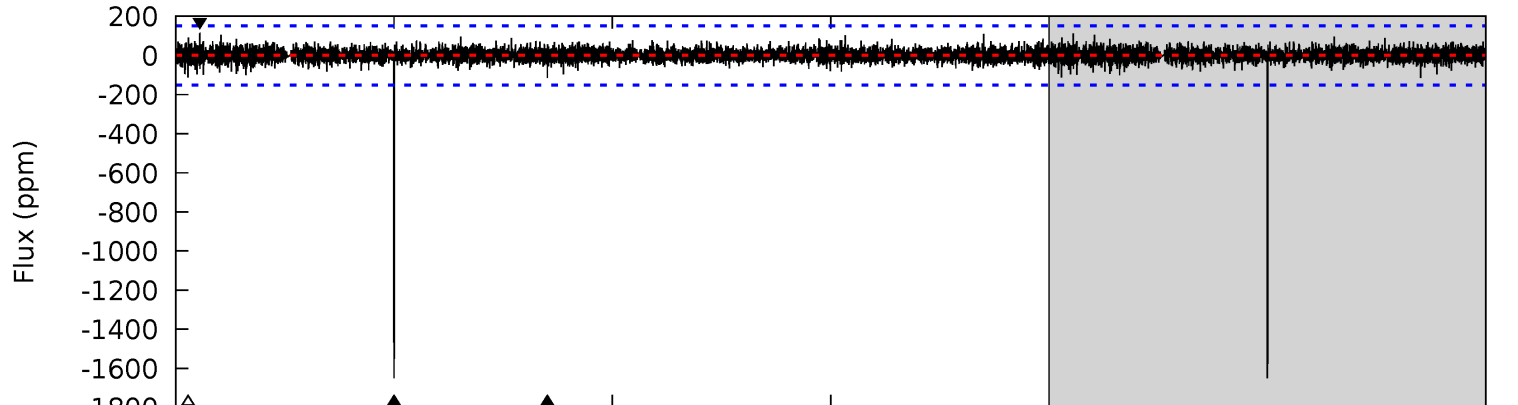
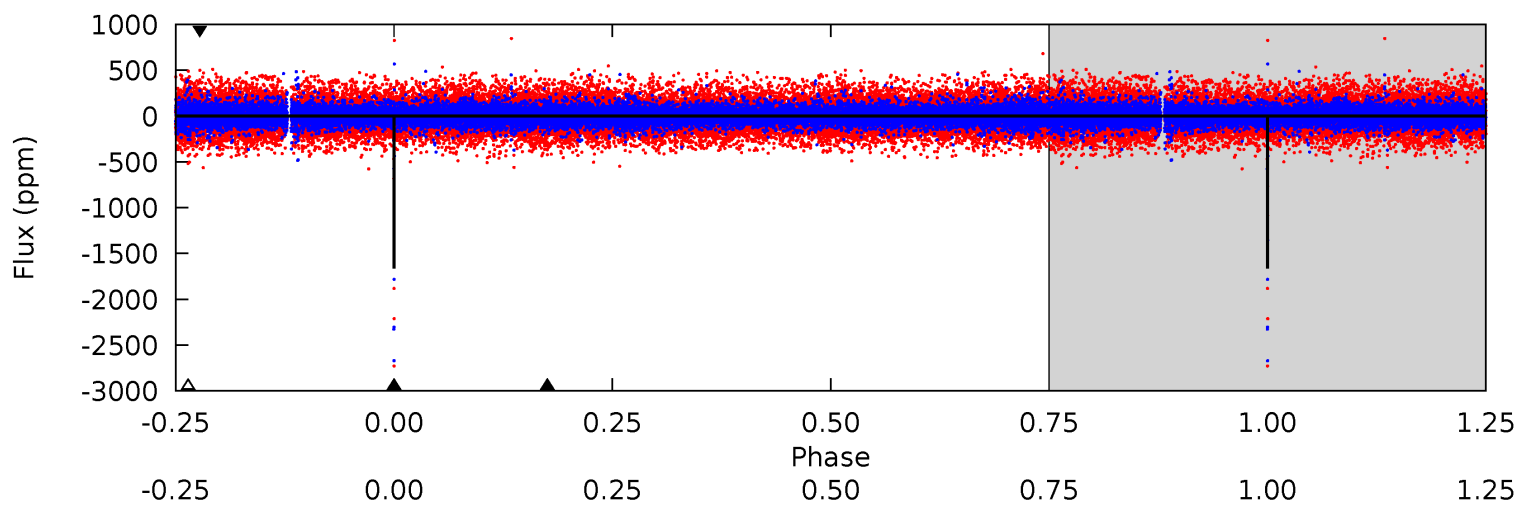
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.75	22.5	21.0	23.2	5.56	3.46	3.50	-18.3	-20.5	1.52	-0.68	2.71	0.66	0.51	1.18



Alt Model-Shift Uniqueness Test

005785906-03, P = 484.302617 Days, E = 380.624250 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
60.8	4.23	4.10	4.08	5.57	3.48	0.75	56.7	56.7	0.13	0.14	41.7	1.22	0.06	12.4



Stellar Parameters For KIC 005785906

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5004^{+123}_{-136}	$3.534^{+1.065}_{-0.355}$	$-0.360^{+0.250}_{-0.300}$	$2.622^{+1.371}_{-2.057}$	$0.857^{+0.243}_{-0.198}$	$0.067^{+2.974}_{-0.048}$
	+2%/-3%	+30%/-10%	+69%/-83%	+52%/-78%	+28%/-23%	+4442%/-72%
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 005785906-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1880 ± 83	$9.61^{+10.45}_{-6.69}$	461^{+74}_{-92}	5275^{+4459}_{-1102}	$14918^{+131510}_{-11520}$
Alt.	-115 ± 27	$13.28^{+13.15}_{-8.95}$	465^{+72}_{-98}	2973^{+911}_{-412}	491^{+3745}_{-375}

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 $A_{obs} \gg 1.0$

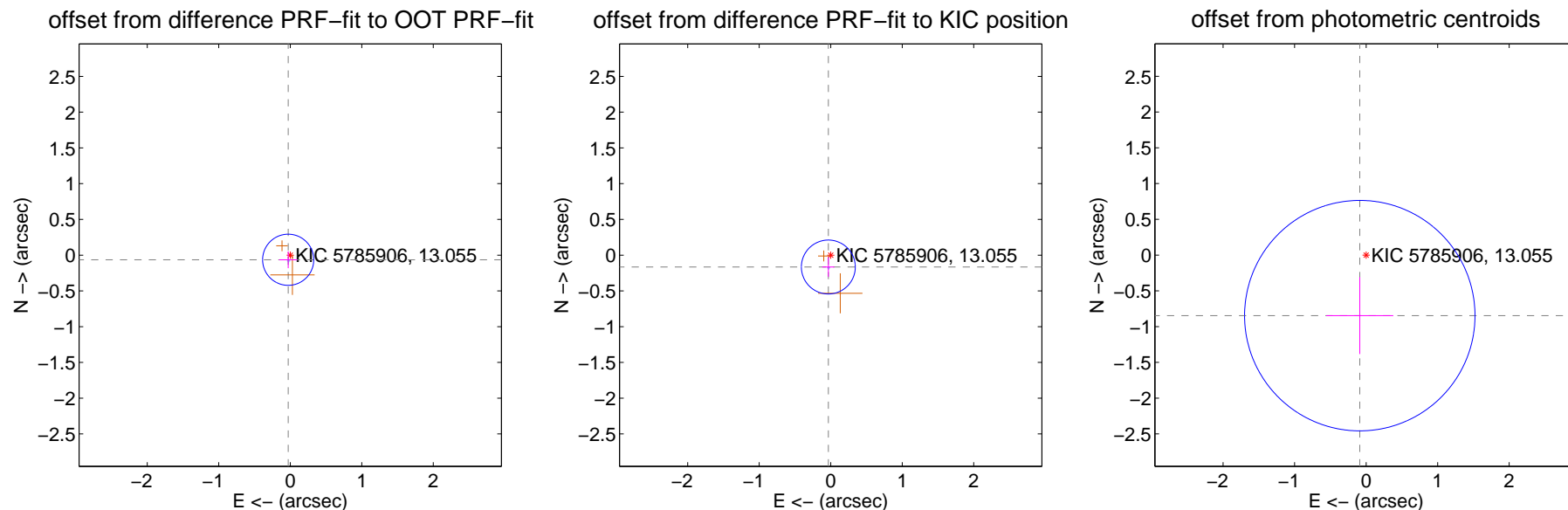
DV Centroid Data

Supplemental centroid analysis for 005785906-03. Kepler magnitude: 13.05. Transit SNR 5.27

There are 1 quarters with good PRF difference image offsets

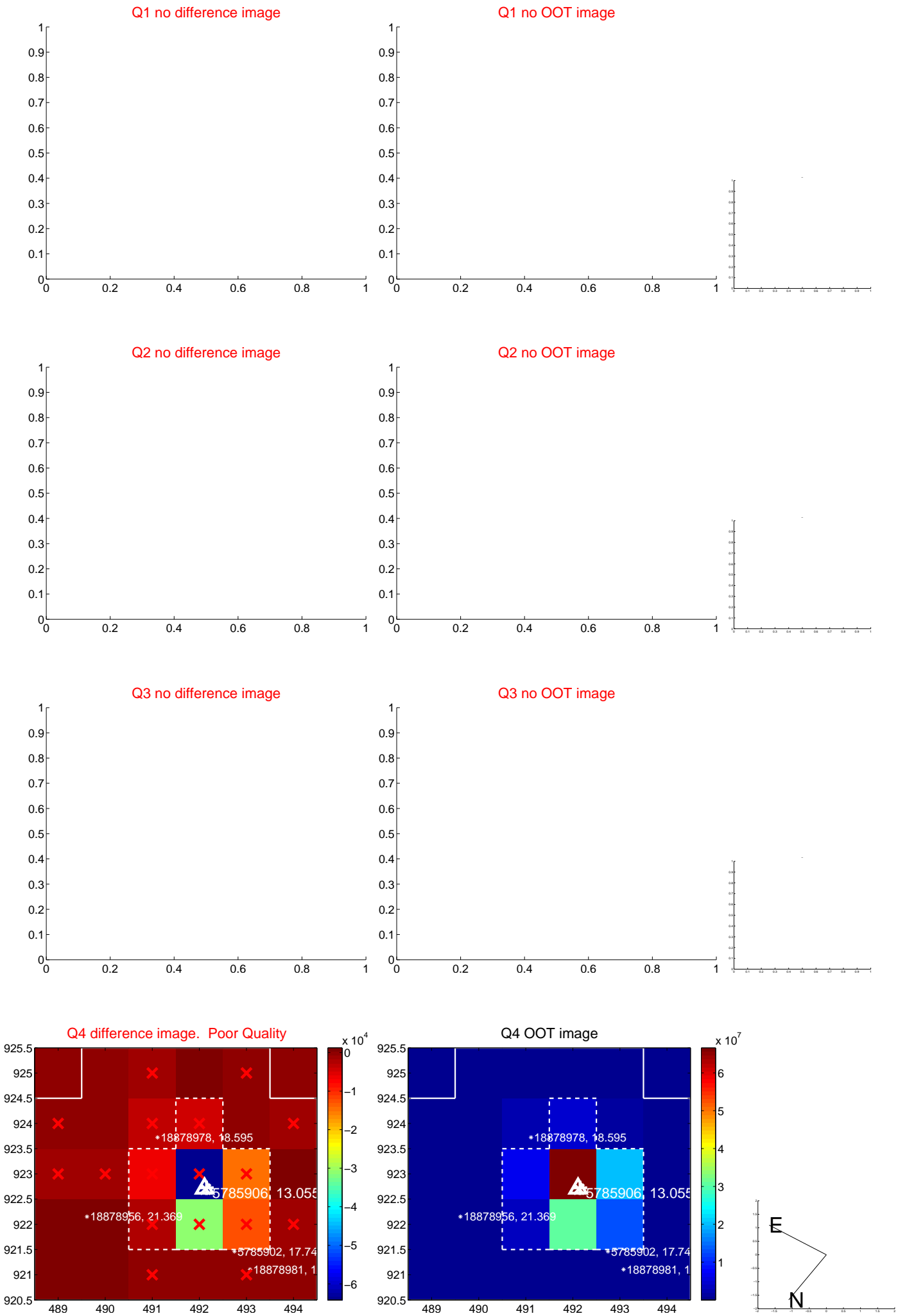
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.071 ± 0.119	0.59	0.029 ± 0.126	-0.064 ± 0.118
PRF-fit source offset from KIC position	0.169 ± 0.126	1.35	0.033 ± 0.084	-0.166 ± 0.136
photometric centroid source offset	0.85 ± 0.54	1.58	0.09 ± 0.47	-0.85 ± 0.54



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.

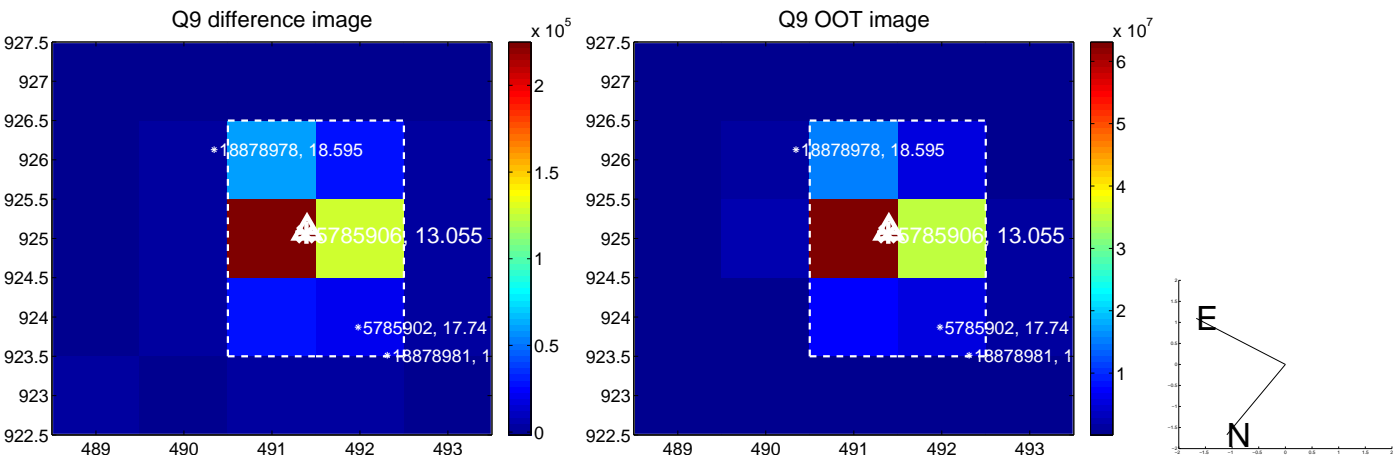
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



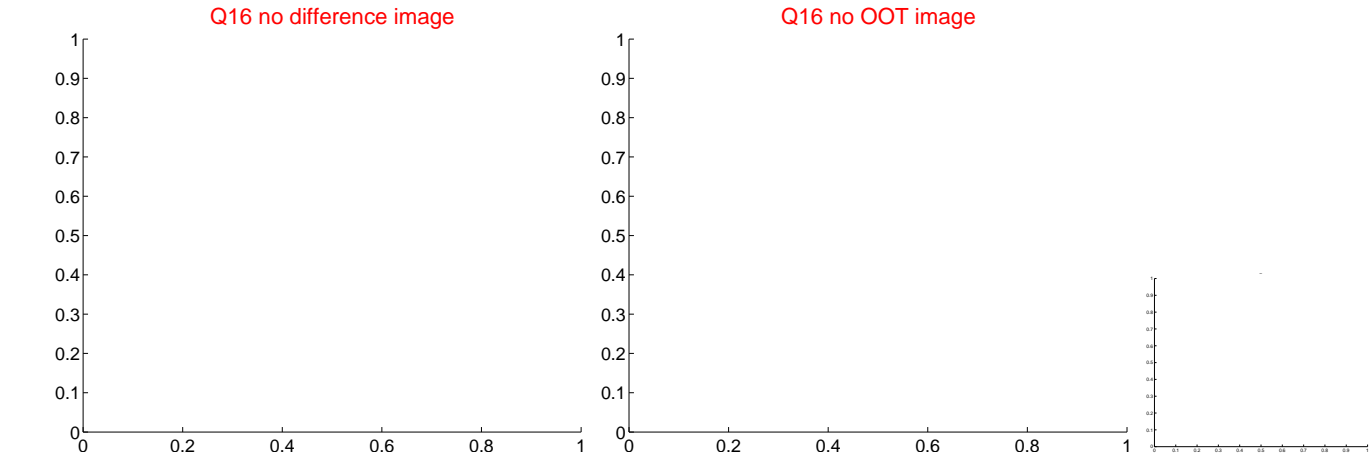
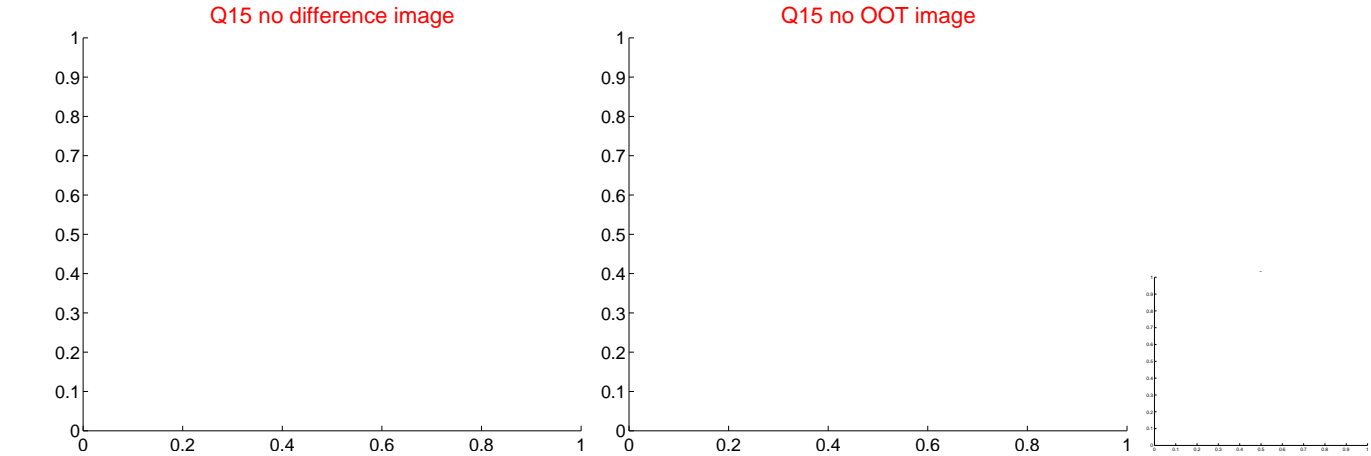
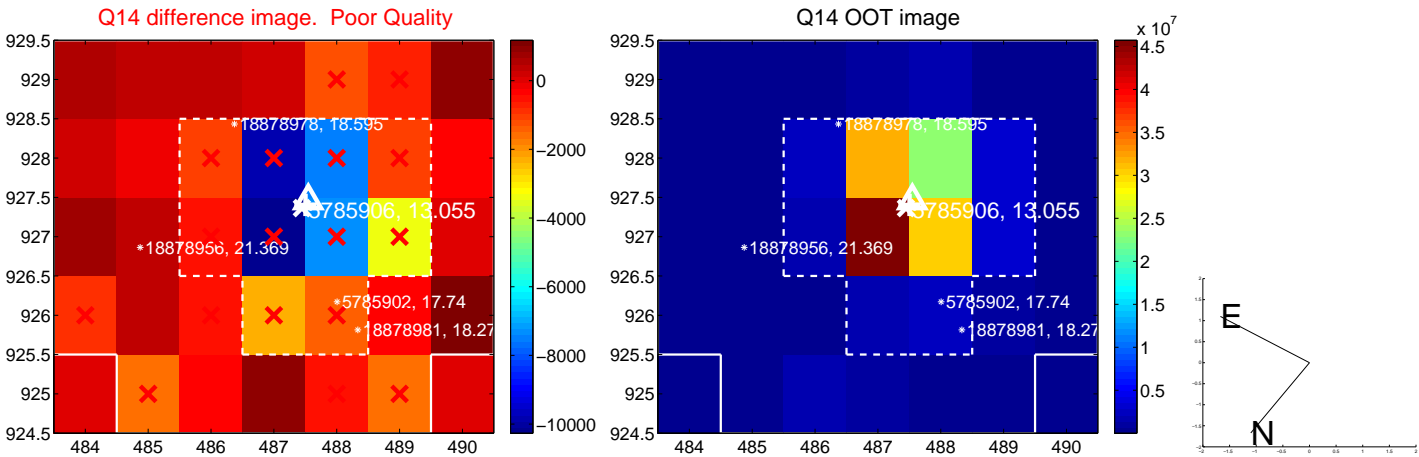
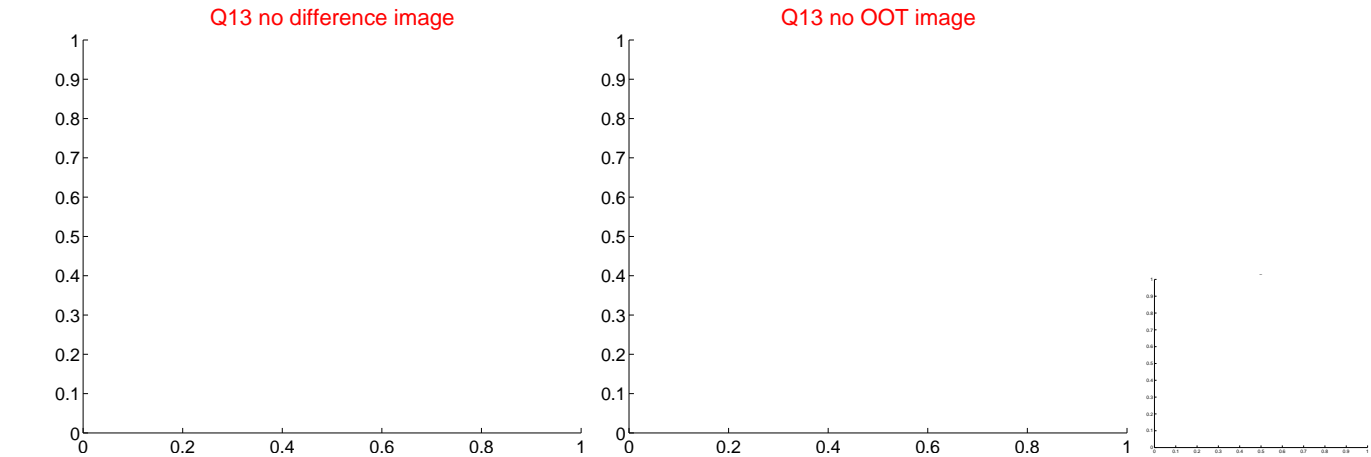
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



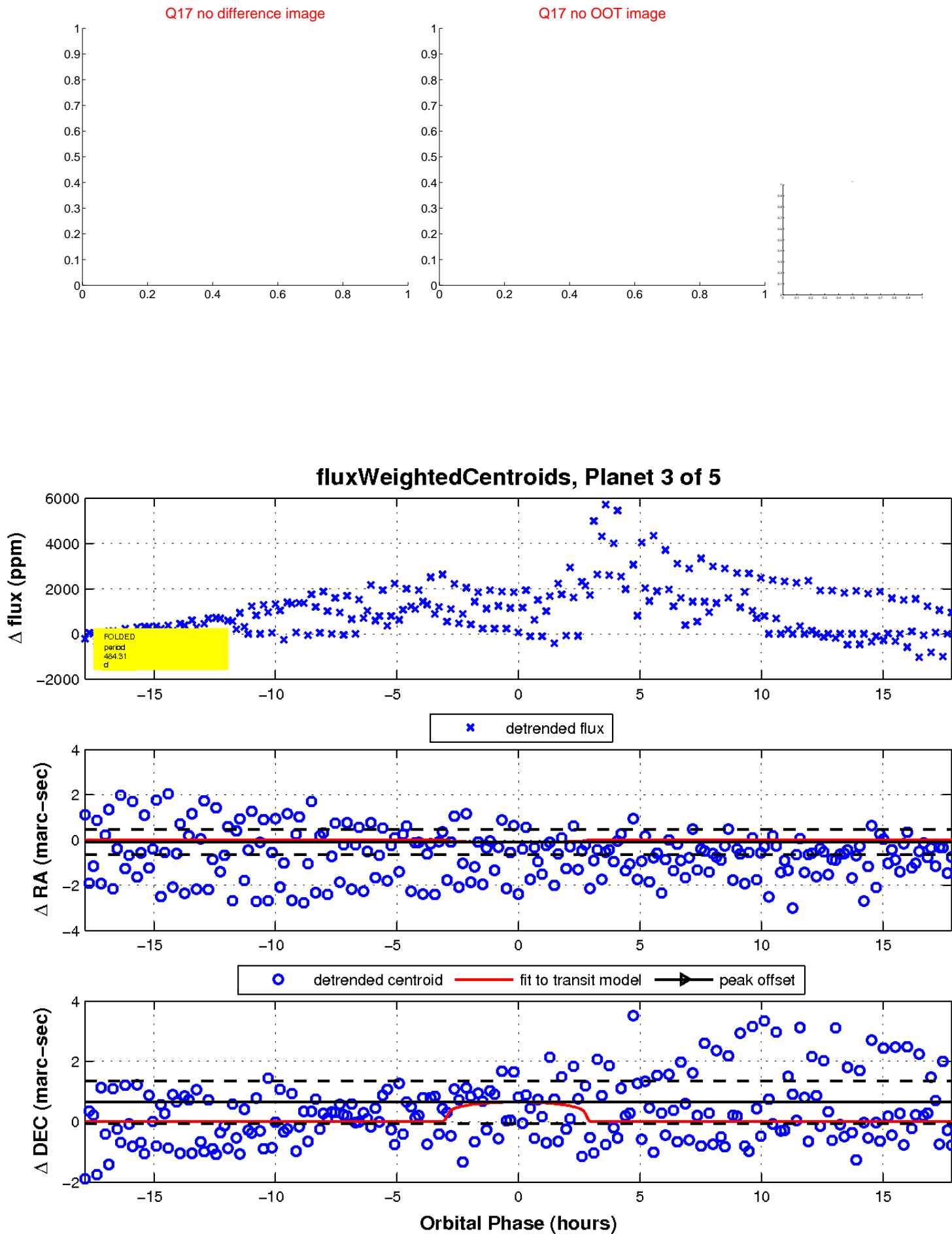
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

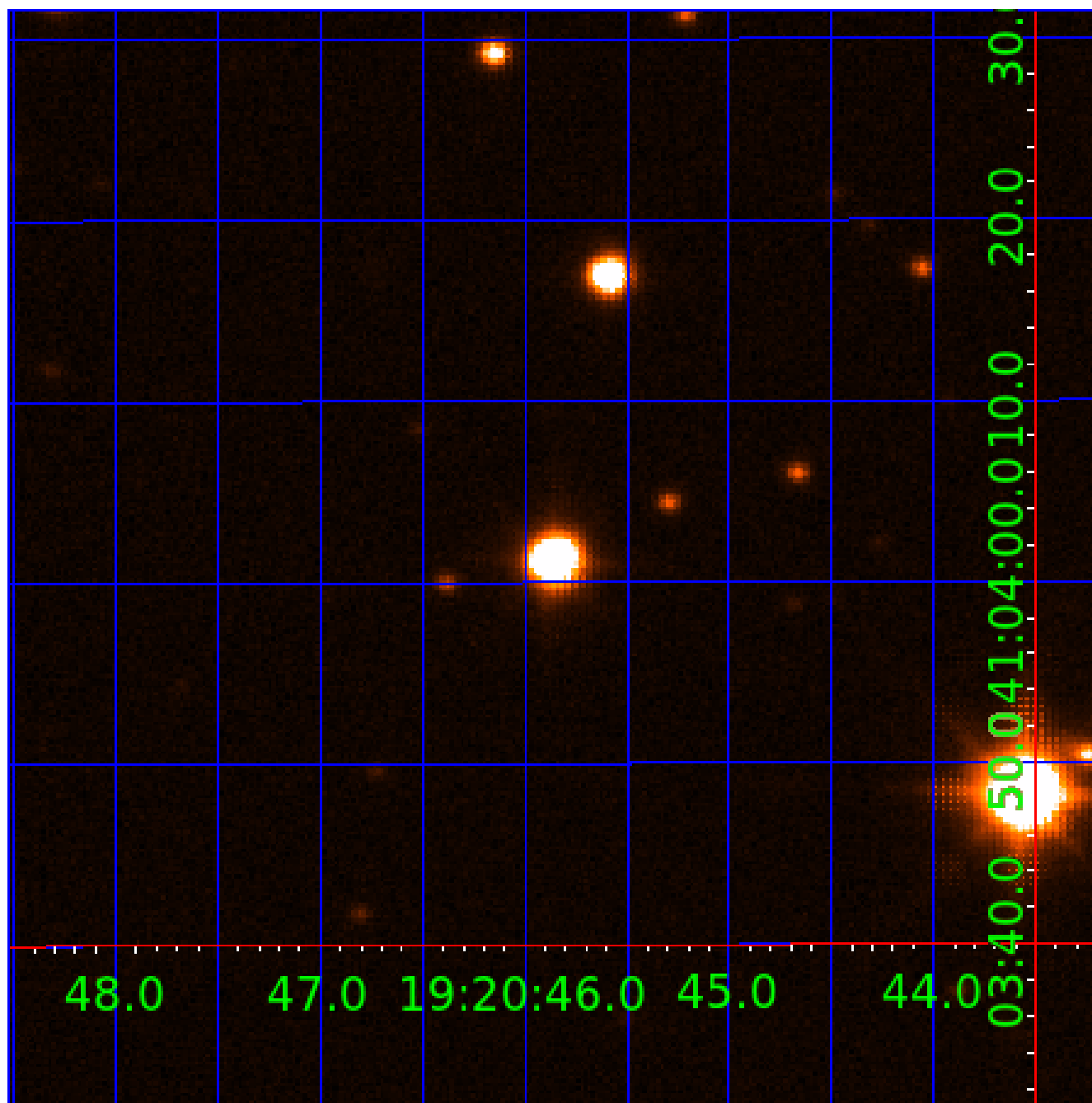


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005785906

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})
005785906-01	OBS	No	596.025820	265.565191	1011.7	4.497	18.2	7.0	2.62	5004	8.80	2.23
005785906-02	OBS	No	588.989964	222.165847	1880.8	9.376	21.0	8.0	2.62	5004	22.40	2.26
005785906-03	OBS	No	484.306596	380.605585	757.1	5.980	16.5	5.3	2.62	5004	7.37	2.94
005785906-04	OBS	No	383.395503	345.942061	1160.5	4.470	16.8	8.3	2.62	5004	9.11	4.01
005785906-05	OBS	No	122.748339	183.064866	479.0	4.500	15.6	-1.0	2.62	5004	5.59	18.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005785906-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV
005785906-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
005785906-05	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

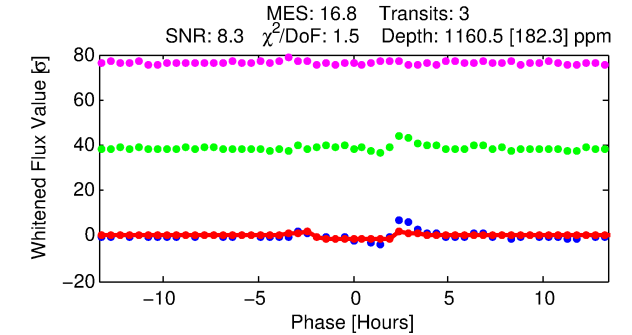
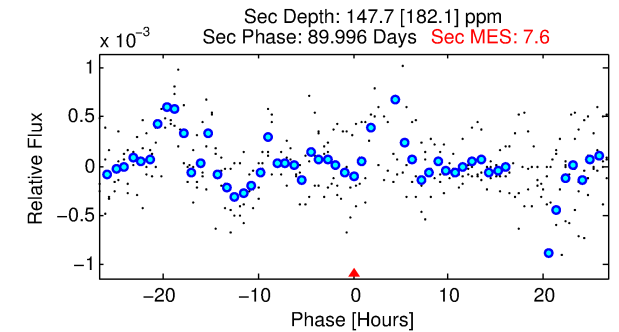
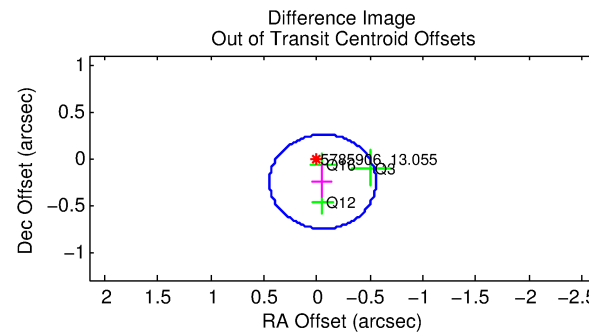
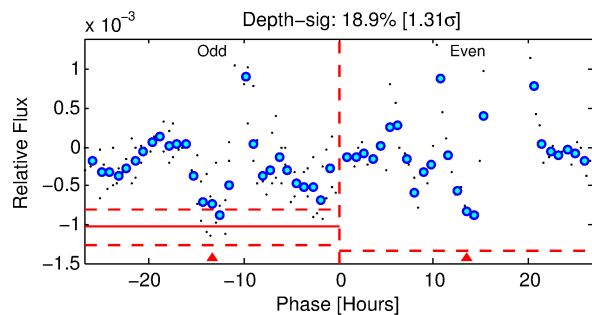
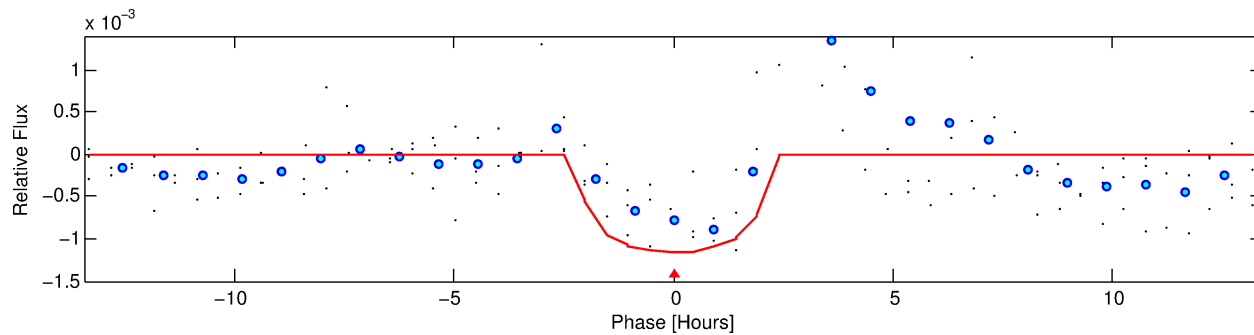
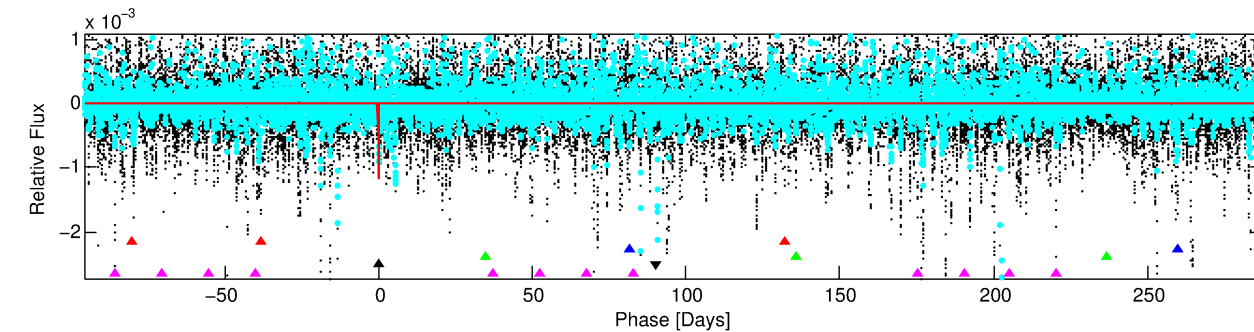
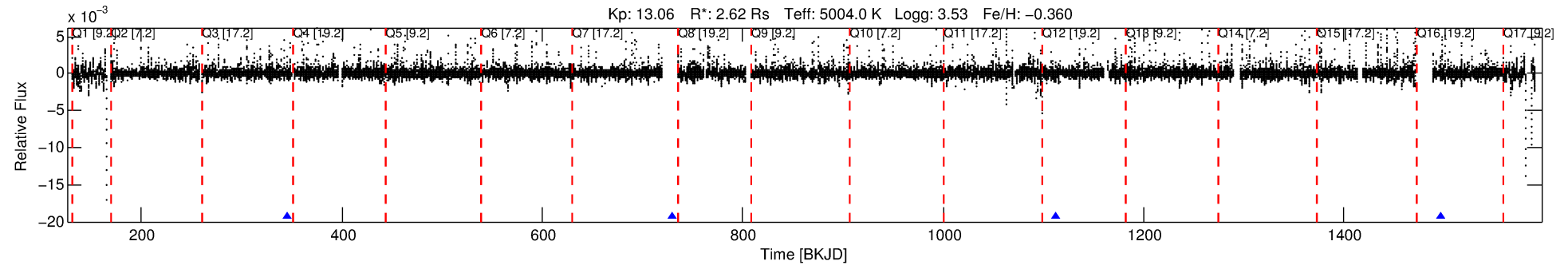
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005785906-04

No Significant Match Found

DV One-Page Summary

KIC: 5785906 Candidate: 4 of 5 Period: 383.396 d



DV Fit Results:

Period = 383.39550 [0.00283] d
Epoch = 345.9421 [0.0056] BKJD
Rp/R* = 0.0318 [0.0229]
a/R* = 576.53 [1444.85]
b = 0.54 [3.34]
Seff = 4.01 [6.90]
Teq = 361 [155] K
Rp = 9.11 [9.70] Re
a = 0.9815 [0.9525] AU
Ag = 943.93 [2414.74] [0.39 σ]
Teffp = 3092 [1469] K [1.85 σ]

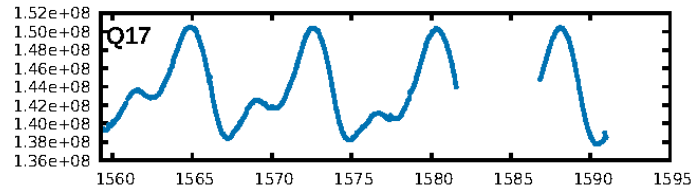
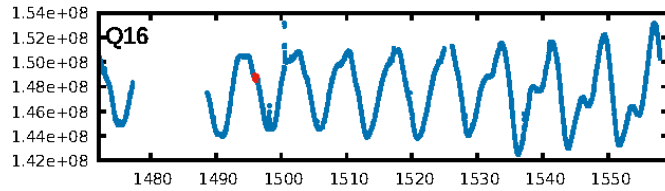
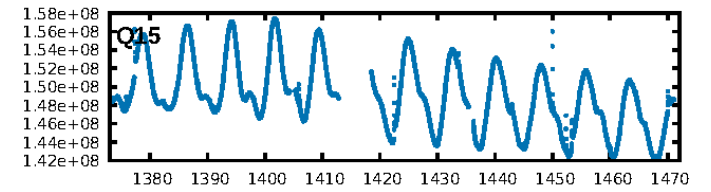
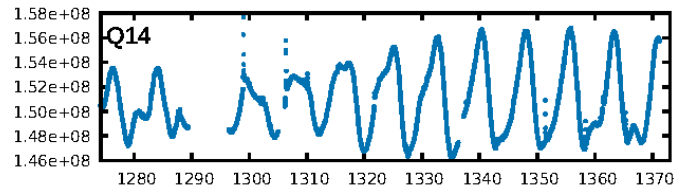
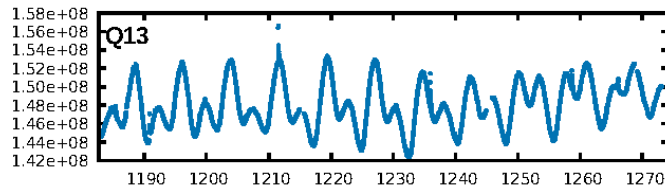
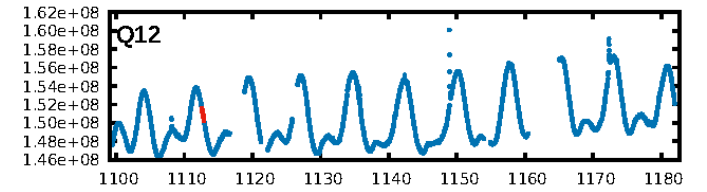
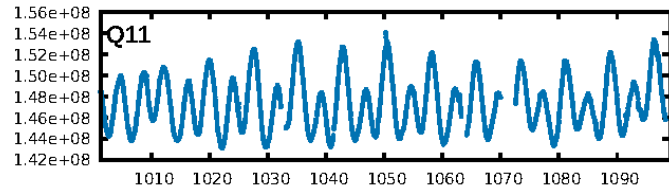
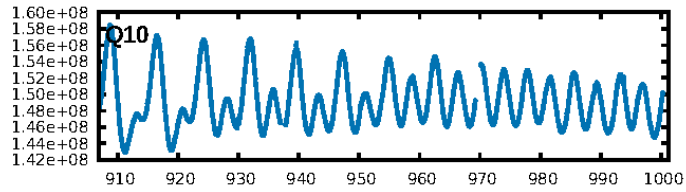
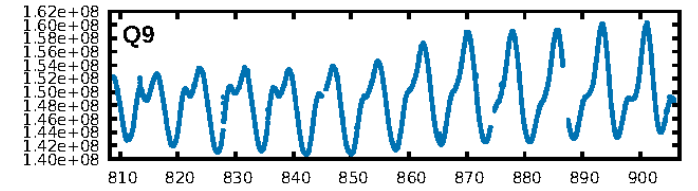
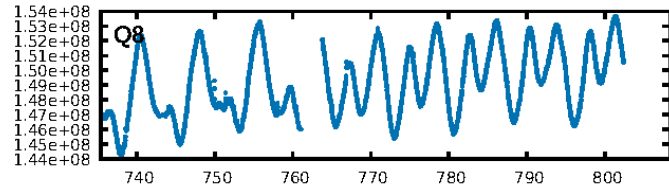
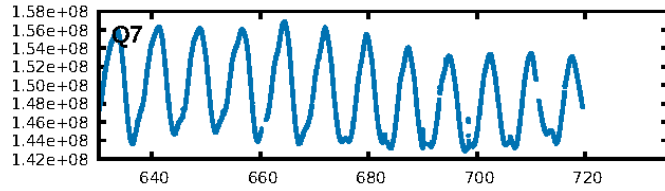
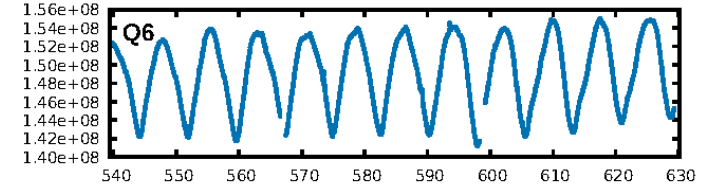
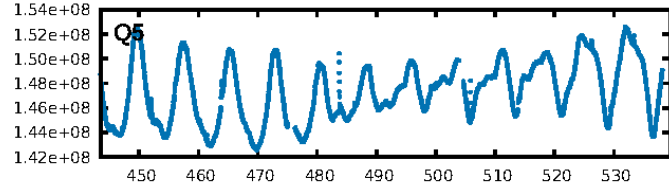
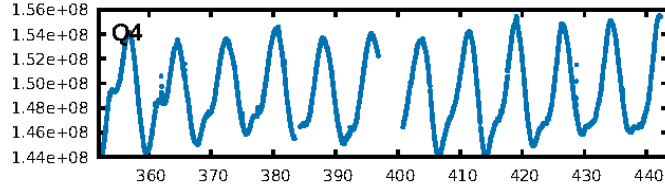
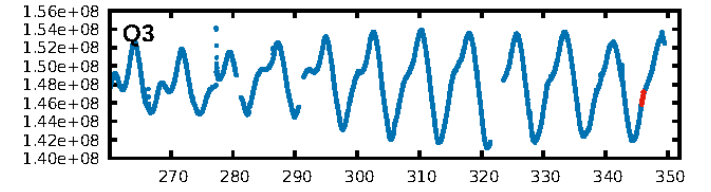
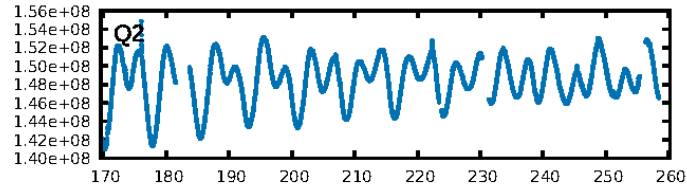
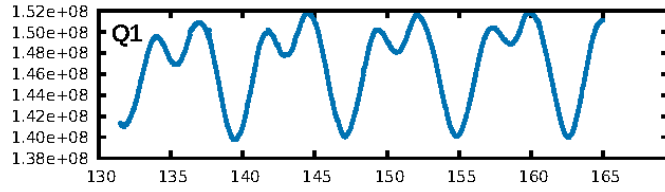
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [986.26 σ]
LongPeriod-sig: 100.0% [324.38 σ]
ModelChiSquare2-sig: 96.8%
ModelChiSquareGof-sig: 32.0%
Bootstrap-pfa: 1.34e-11
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: 1.988
Centroid-sig: 46.6%
Centroid-so: 0.194 arcsec [0.59 σ]
OotOffset-rm: 0.255 arcsec [1.52 σ]
KicOffset-rm: 0.432 arcsec [2.26 σ]
OotOffset-st: 0/1/2/0 [3]
KicOffset-st: 0/1/2/0 [3]
DiffImageQuality-fgm: 0.67 [2/3]
DiffImageOverlap-fno: 1.00 [3/3]

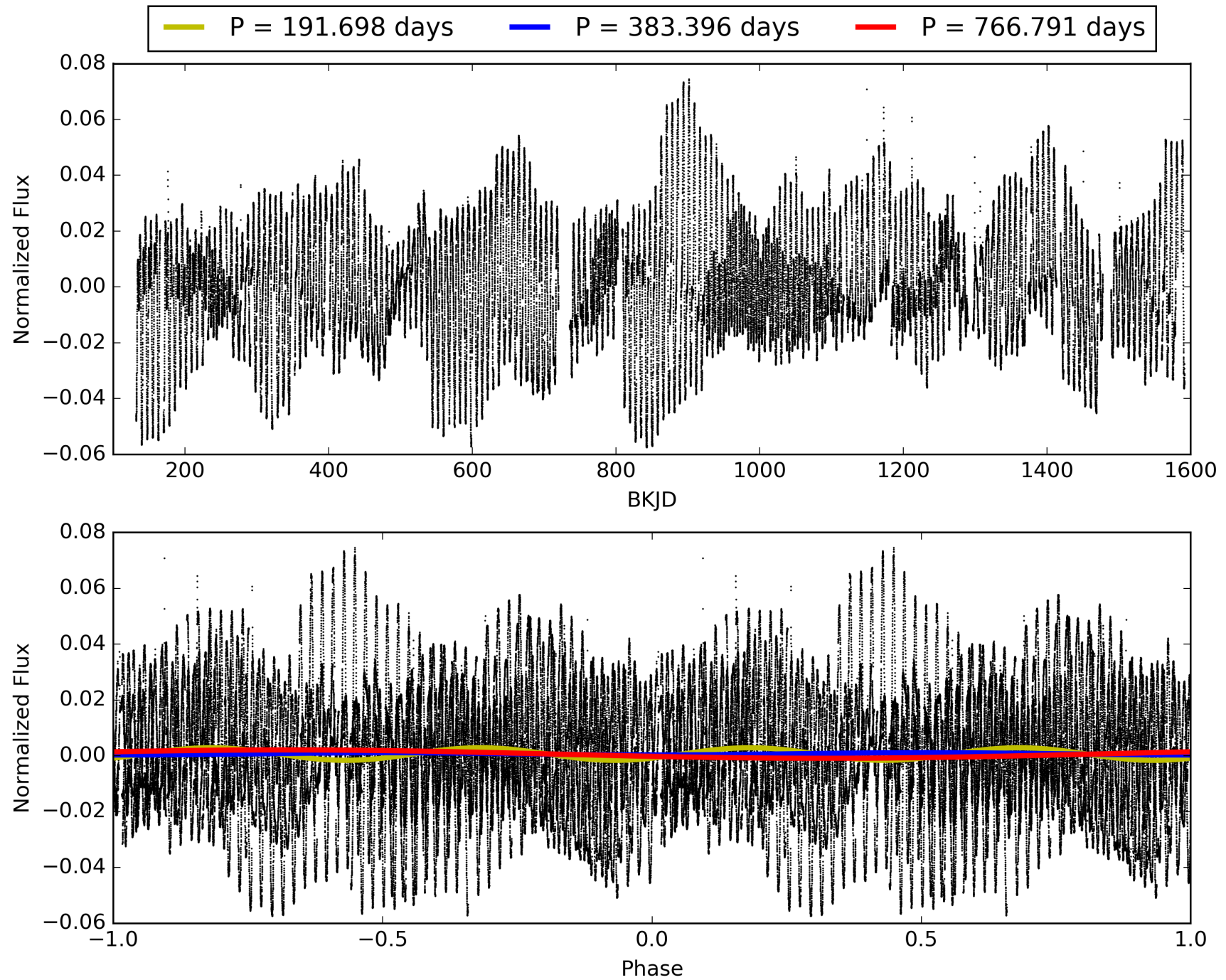
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:55:56 Z

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

TCE 005785906-04, PDC Light Curves

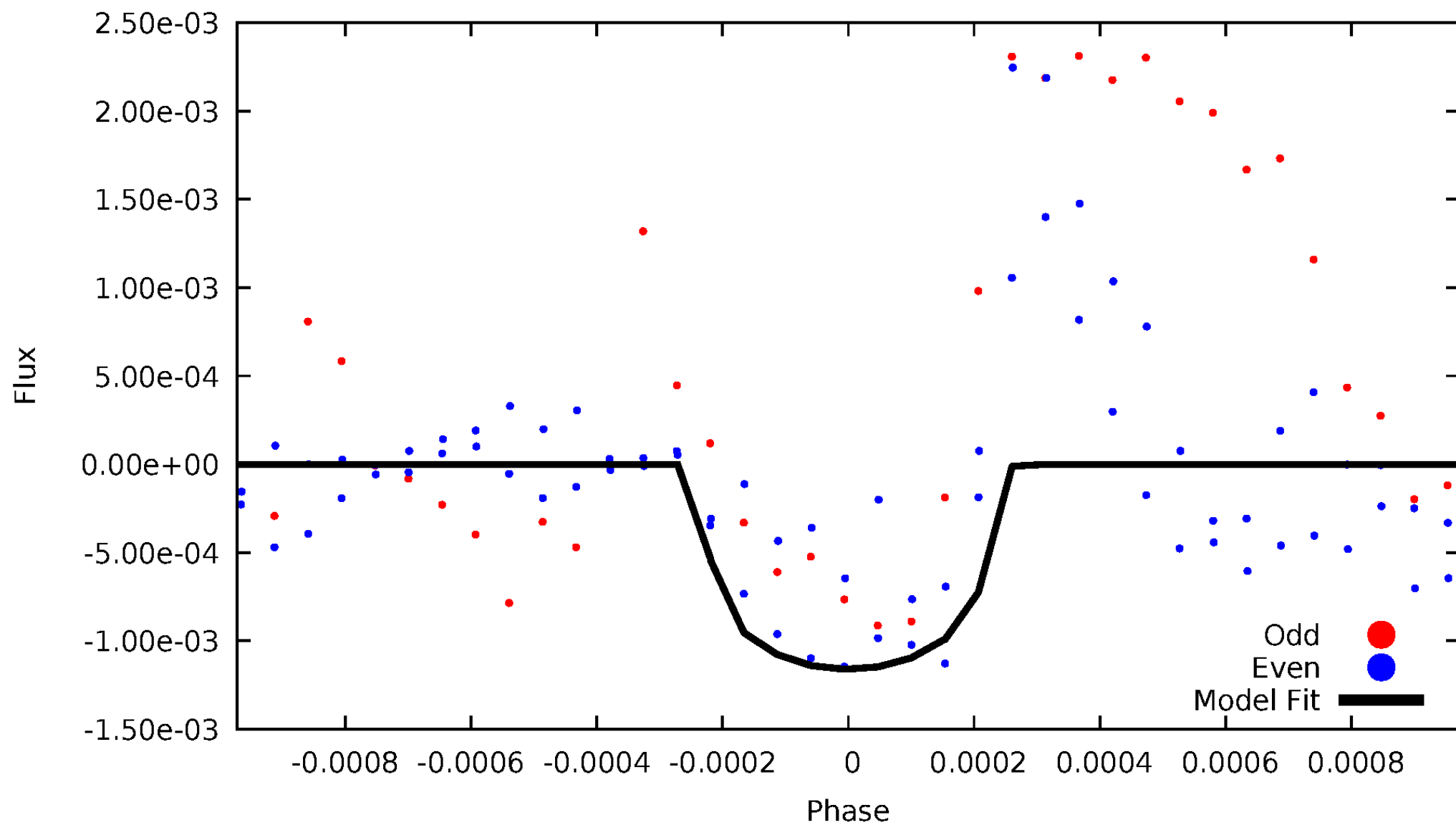


TCE 005785906-04



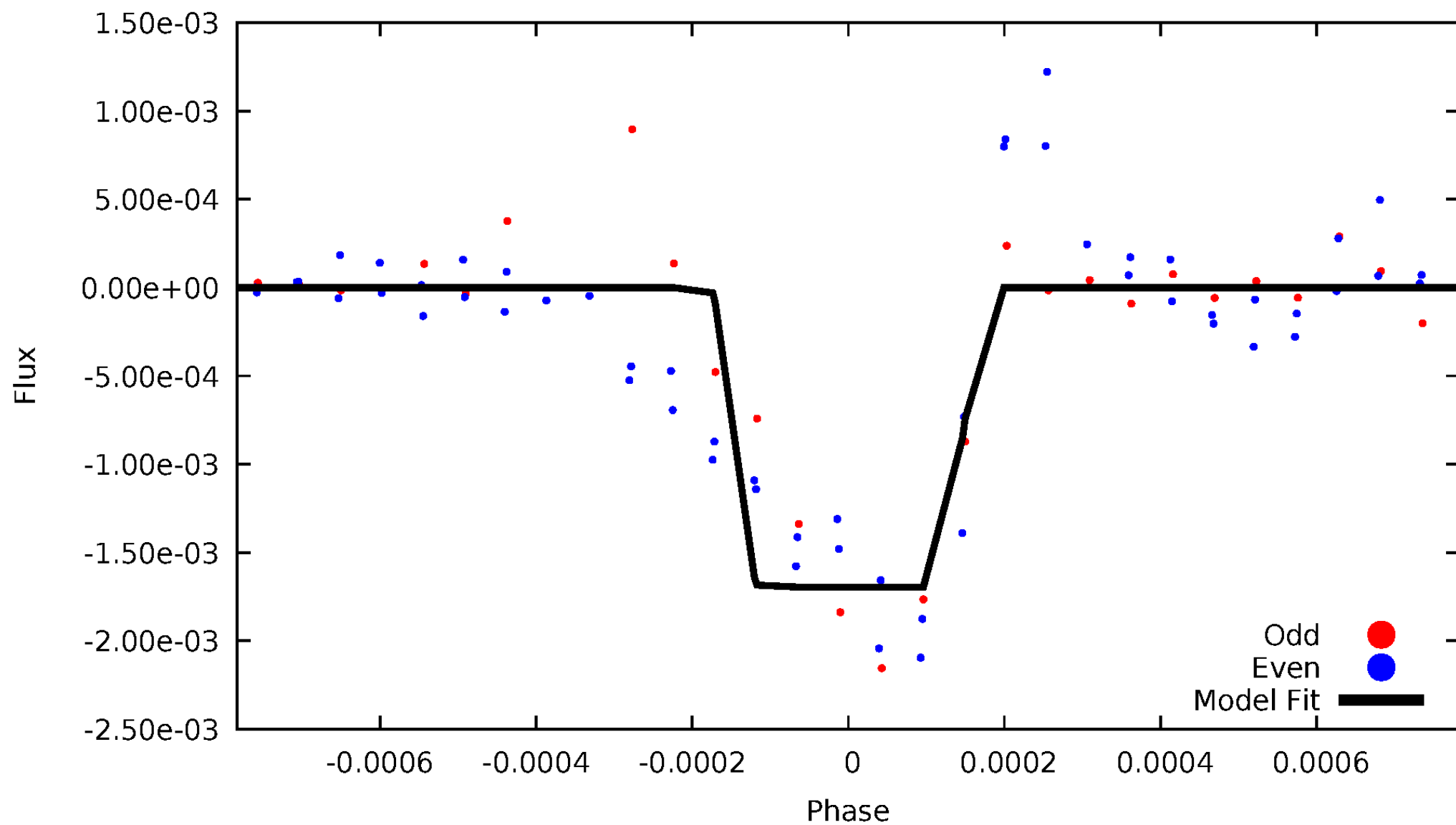
DV Odd/Even

TCE 005785906-04



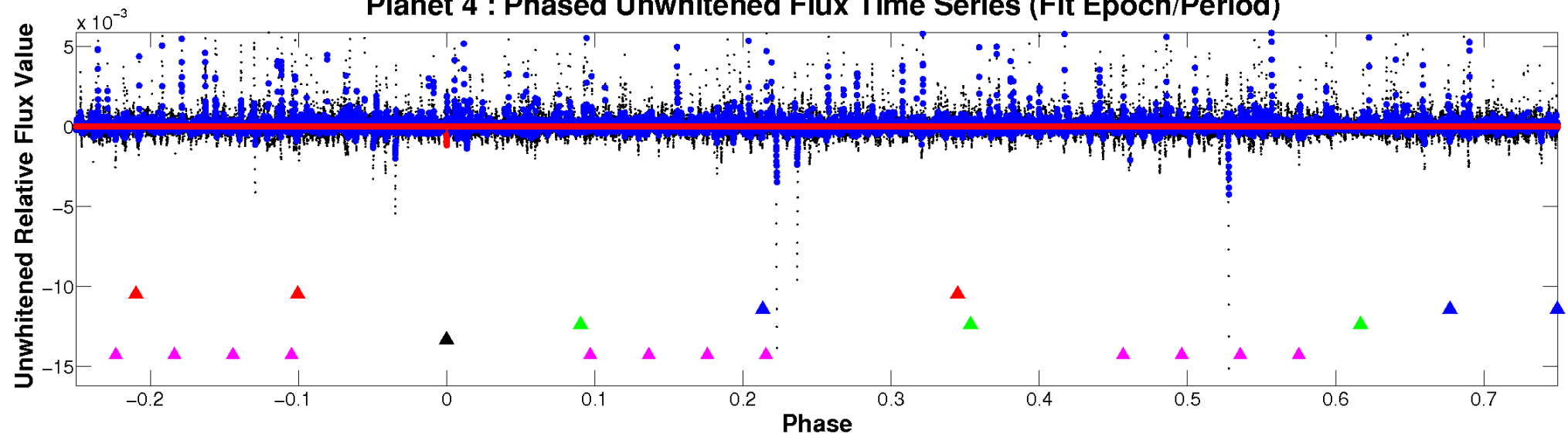
ALT Odd/Even

TCE 005785906-04

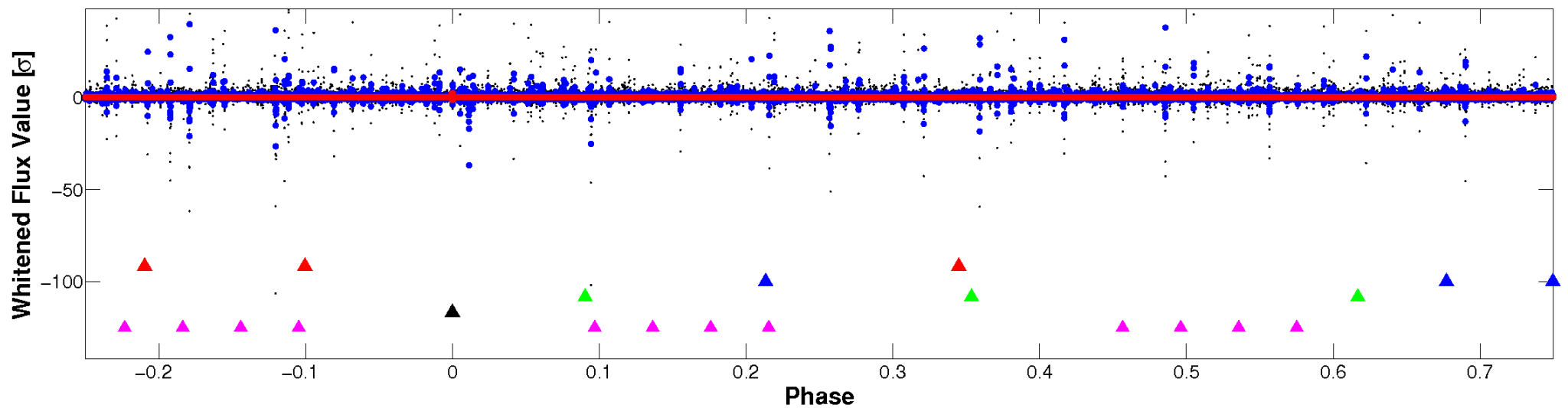


Non-Whitened Vs. Whitened Light Curve

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

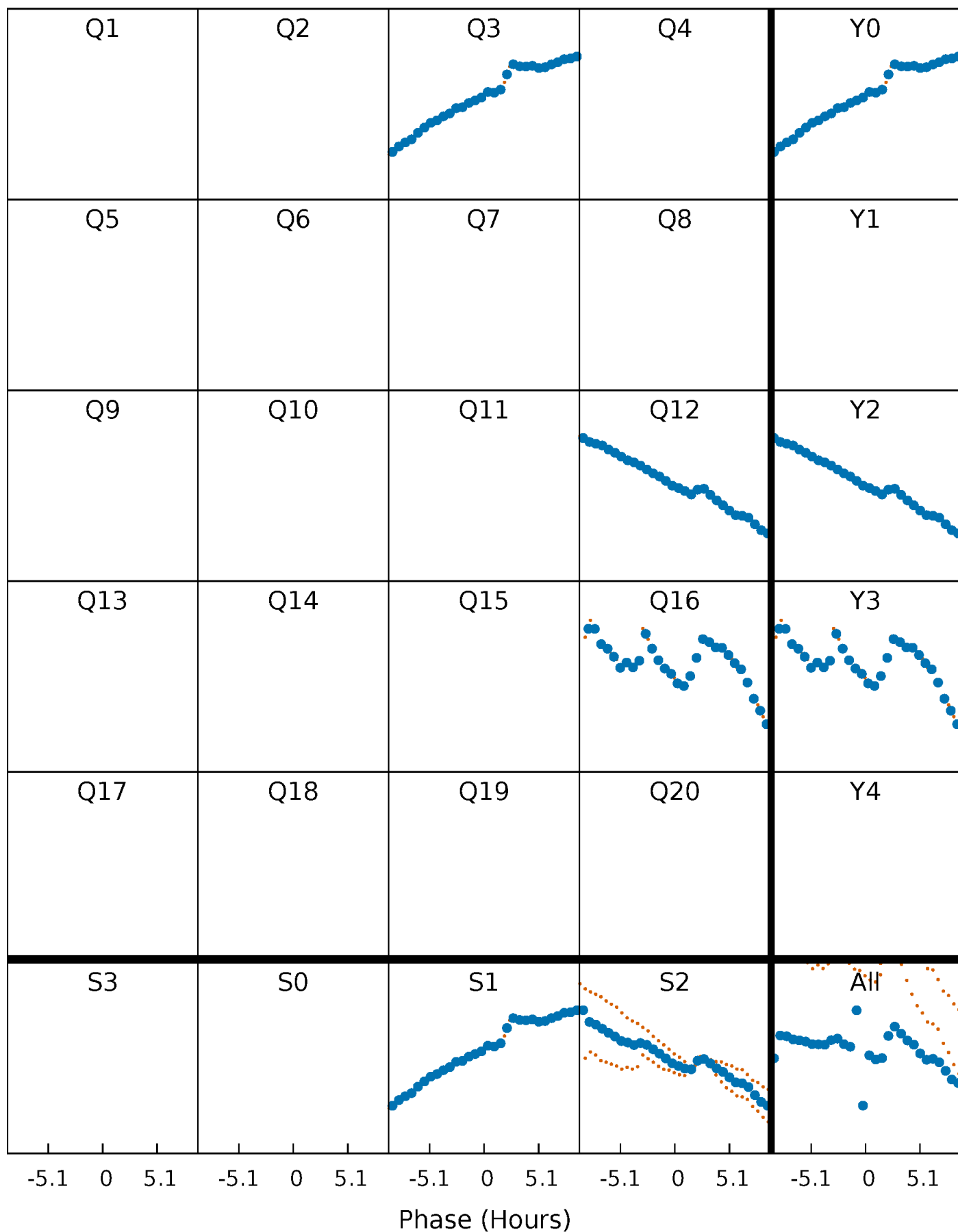


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



PDC Quarter-Phased Transit Curves

TCE 005785906-04 P=383.395503 Days $T_0=345.942061$ (BKJD)



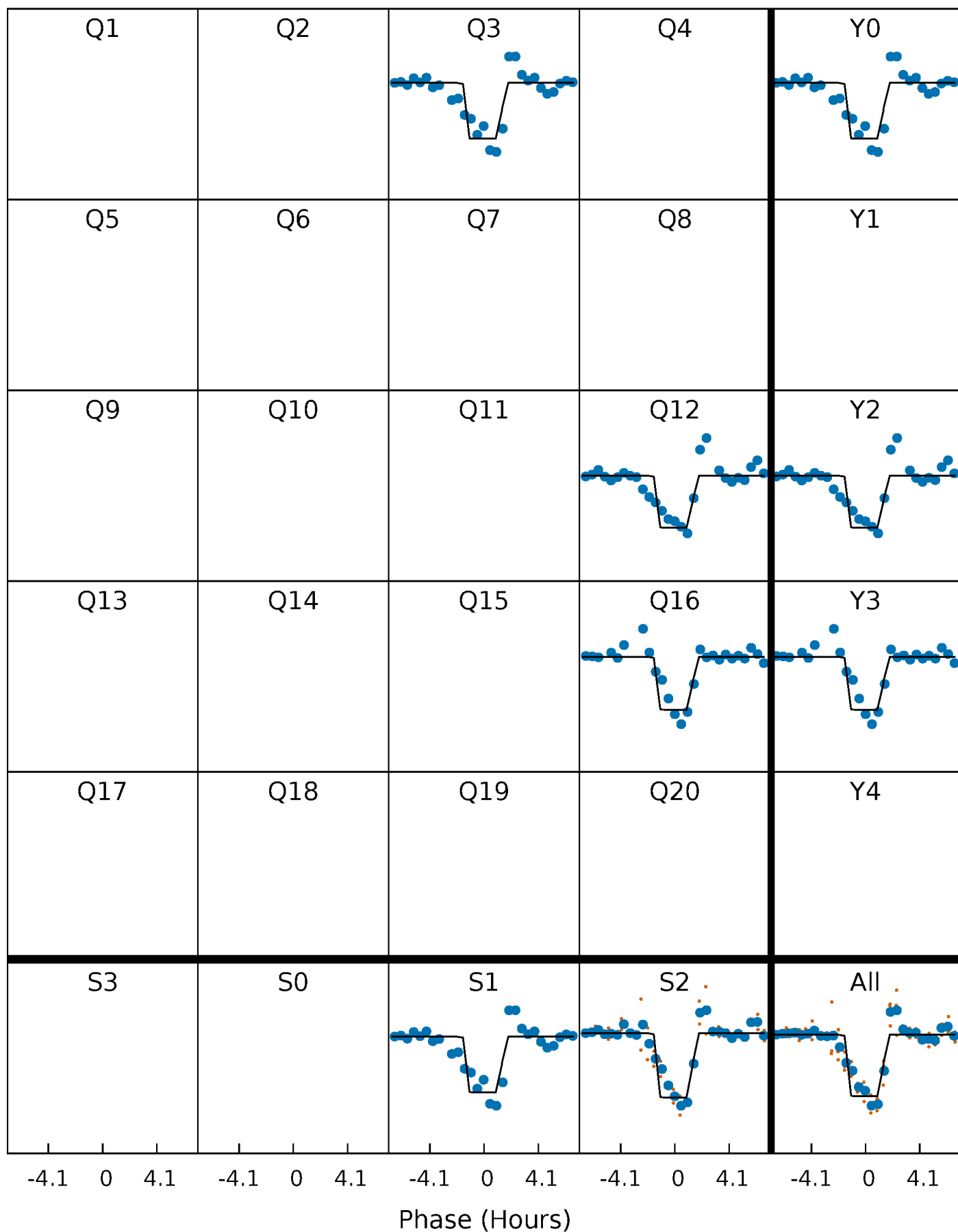
DV Quarter-Phased Transit Curves

TCE 005785906-04 $P=383.395503$ Days $T_0=345.942061$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

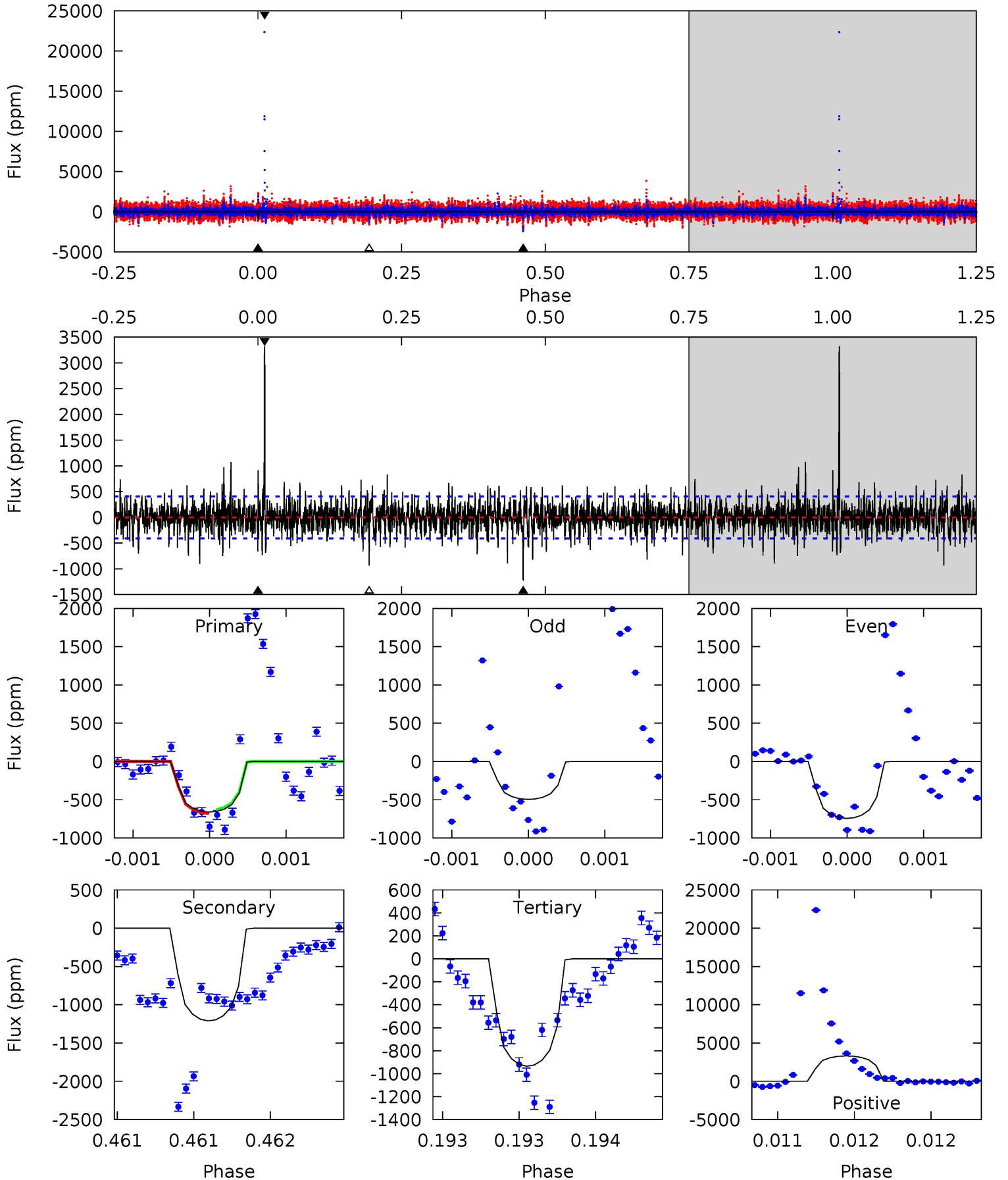
TCE 005785906-04 $P=383.394886$ Days $T_0=345.965849$ (BKJD)



DV Model-Shift Uniqueness Test

005785906-04, P = 383.395503 Days, E = 345.942061 Days

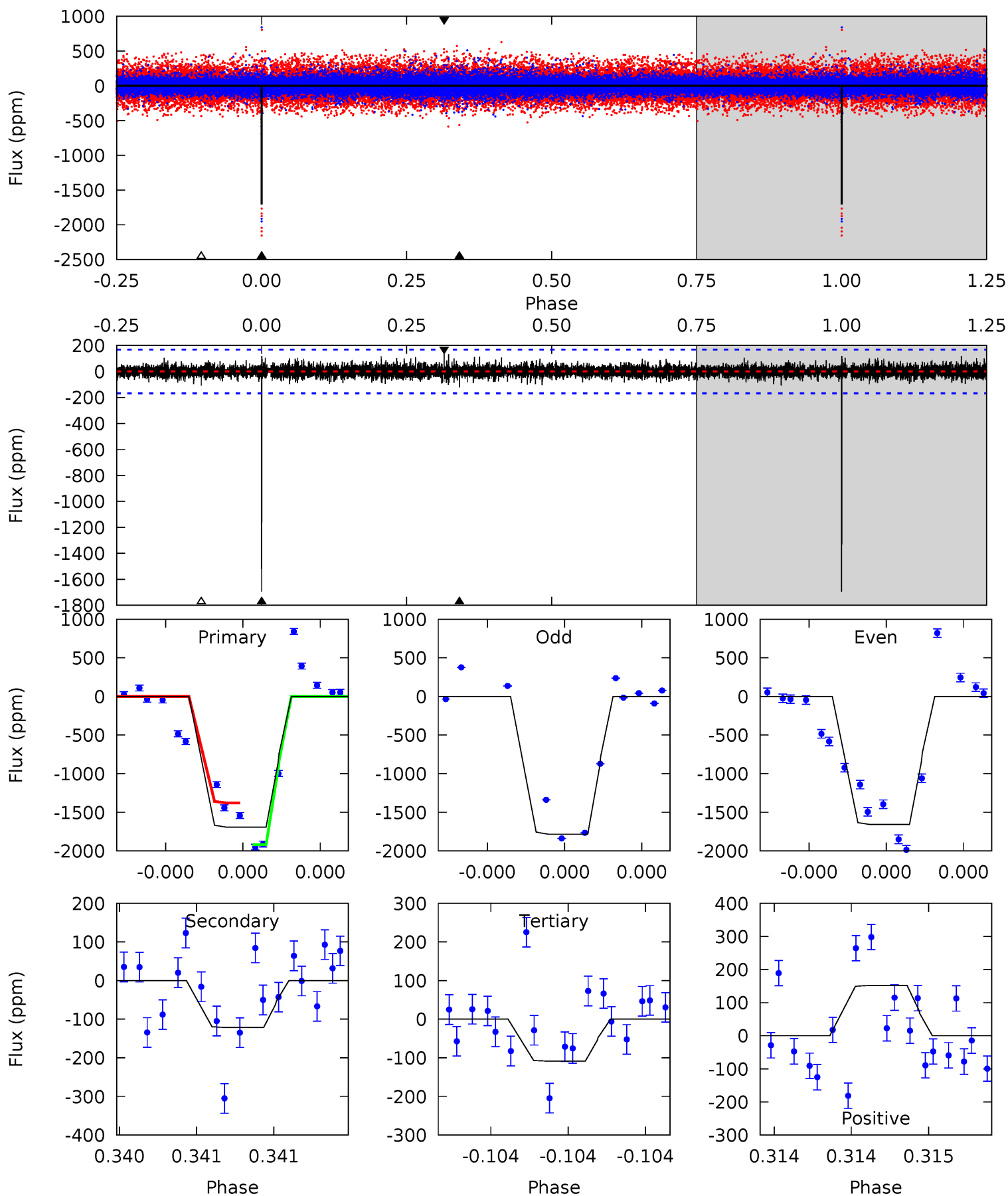
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.02	16.5	12.8	45.3	5.56	3.46	2.81	-3.73	-36.3	3.76	-28.8	1.15	1.33	0.73	0.34



Alt Model-Shift Uniqueness Test

005785906-04, P = 383.394886 Days, E = 345.965849 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
56.7	4.07	3.63	5.08	5.65	3.60	0.80	53.0	51.6	0.44	-1.01	1.83	1.01	0.08	0



Stellar Parameters For KIC 005785906

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5004^{+123}_{-136}	$3.534^{+1.065}_{-0.355}$	$-0.360^{+0.250}_{-0.300}$	$2.622^{+1.371}_{-2.057}$	$0.857^{+0.243}_{-0.198}$	$0.067^{+2.974}_{-0.048}$
	+2%/-3%	+30%/-10%	+69%/-83%	+52%/-78%	+28%/-23%	+4442%/-72%
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 005785906-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1211 ± 73	$8.45^{+7.56}_{-5.19}$	492^{+80}_{-103}	5065^{+2541}_{-913}	9264^{+50675}_{-6686}
Alt.	-122 ± 30	$10.87^{+8.38}_{-6.58}$	499^{+80}_{-101}	3158^{+746}_{-384}	551^{+2705}_{-379}

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

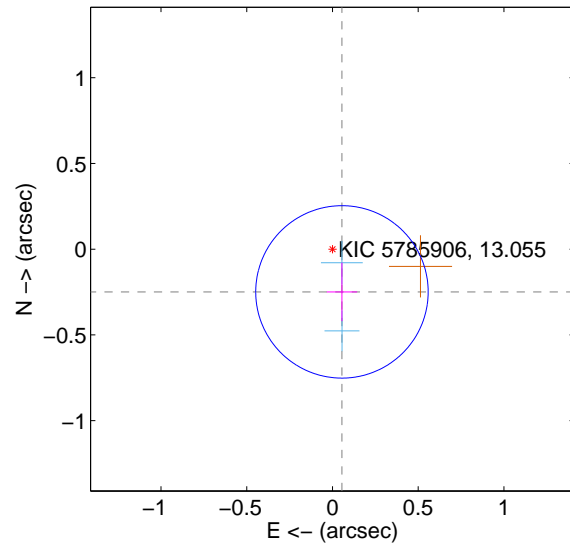
Supplemental centroid analysis for 005785906-04. Kepler magnitude: 13.05. Transit SNR 8.25

There are 2 quarters with good PRF difference image offsets

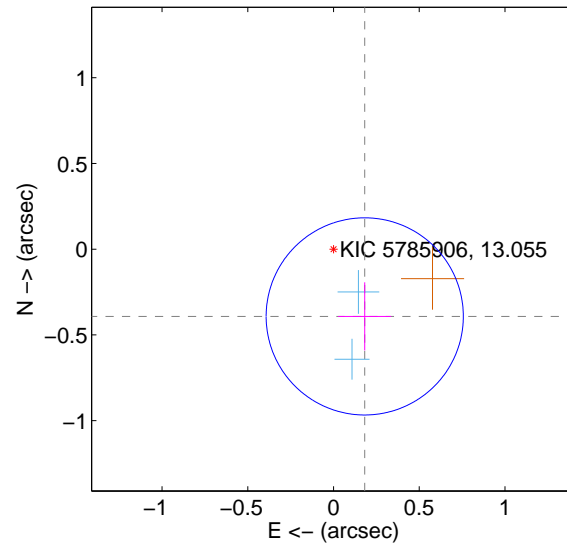
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.255 ± 0.168	1.52	-0.055 ± 0.089	-0.249 ± 0.171
PRF-fit source offset from KIC position	0.432 ± 0.192	2.26	-0.182 ± 0.154	-0.392 ± 0.199
photometric centroid source offset	0.19 ± 0.33	0.59	0.08 ± 0.33	0.17 ± 0.33

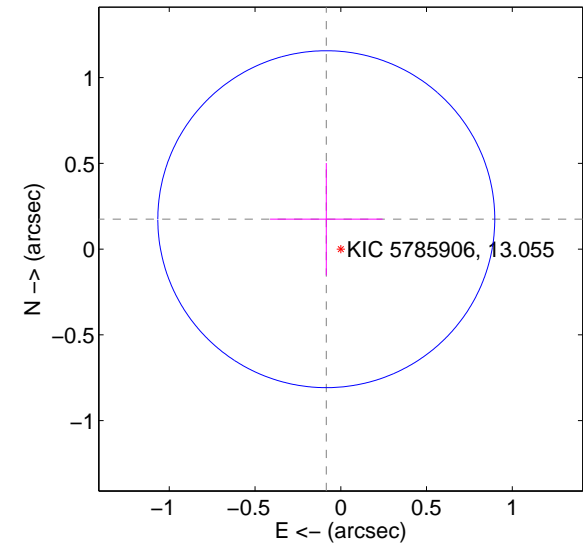
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

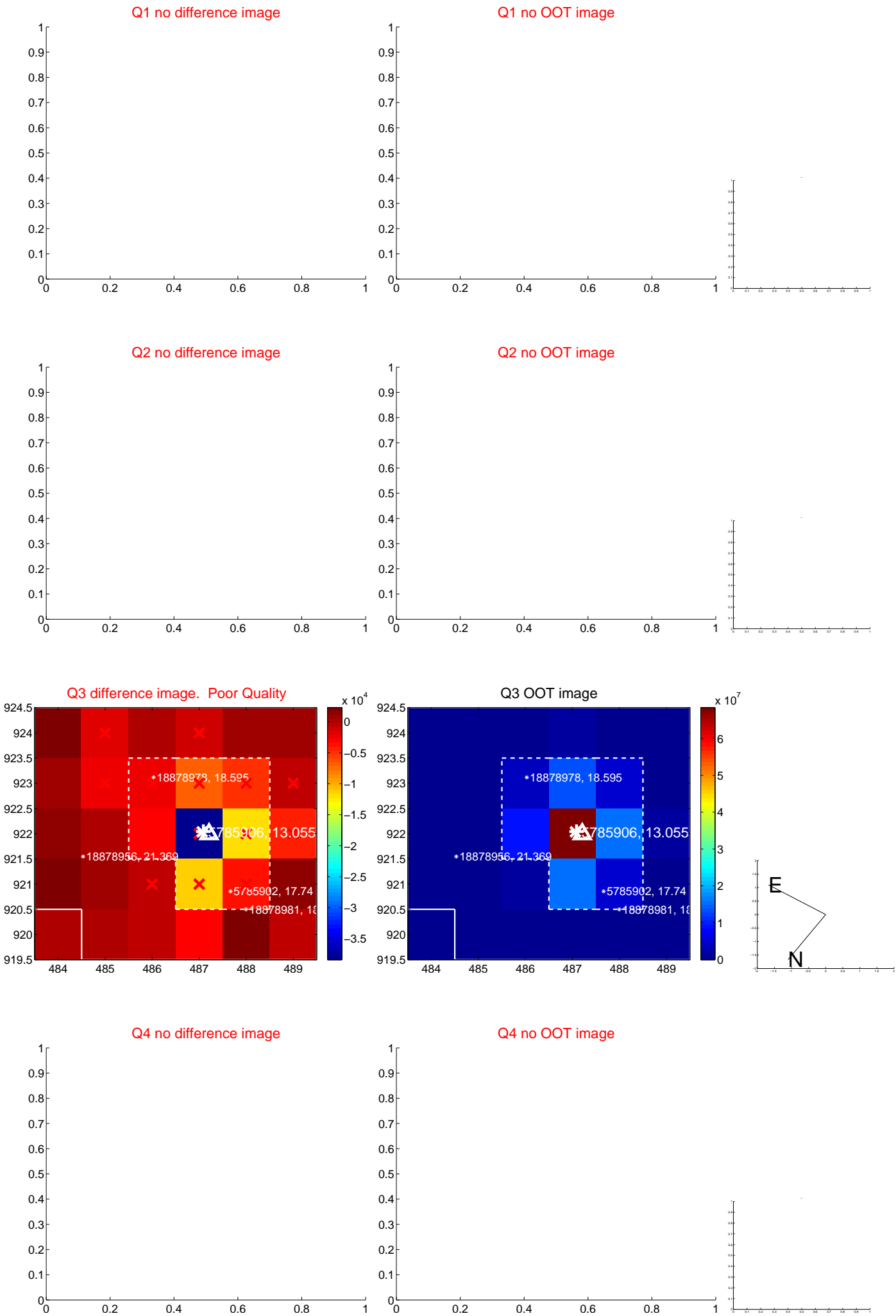


offset from photometric centroids



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.

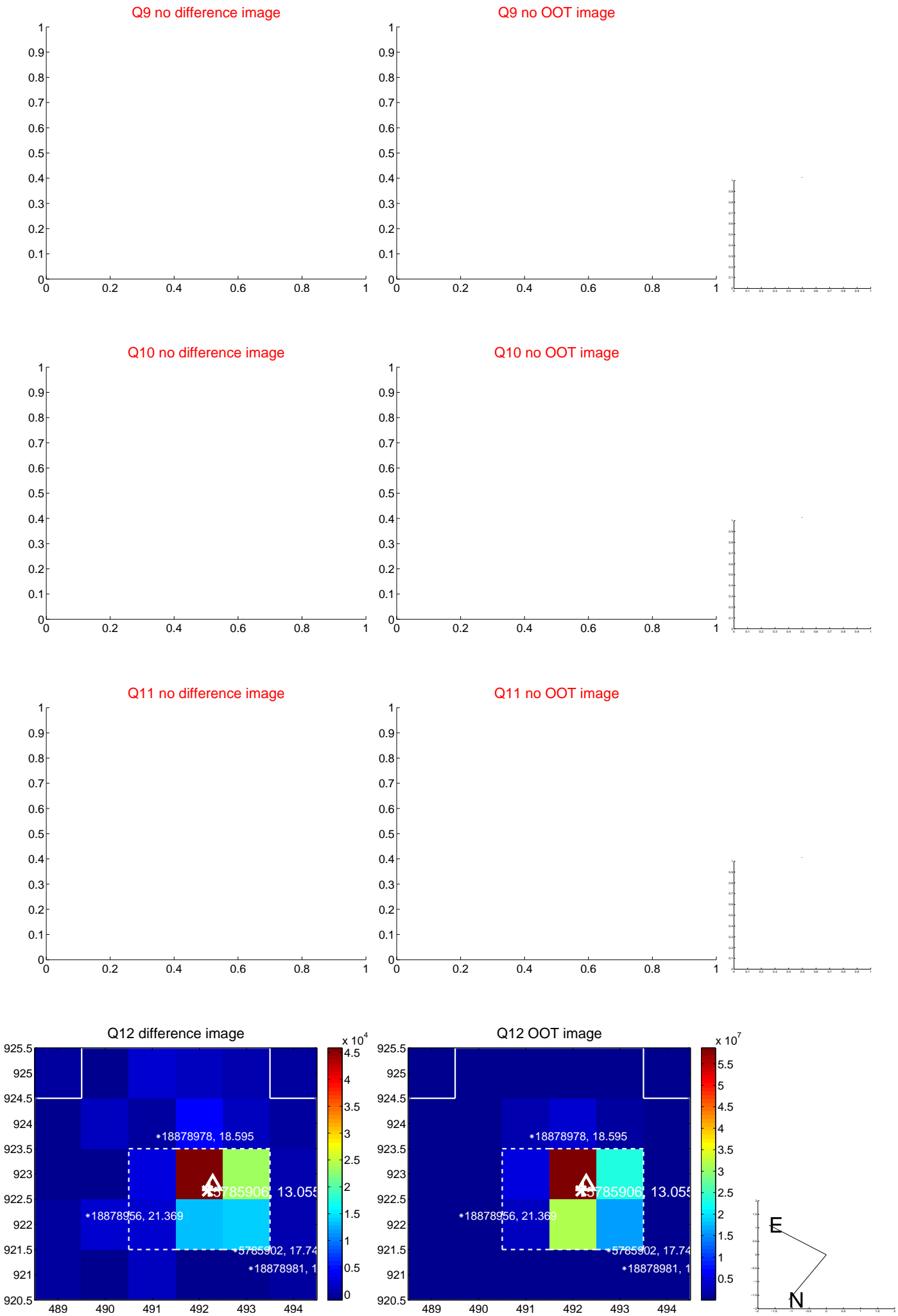
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



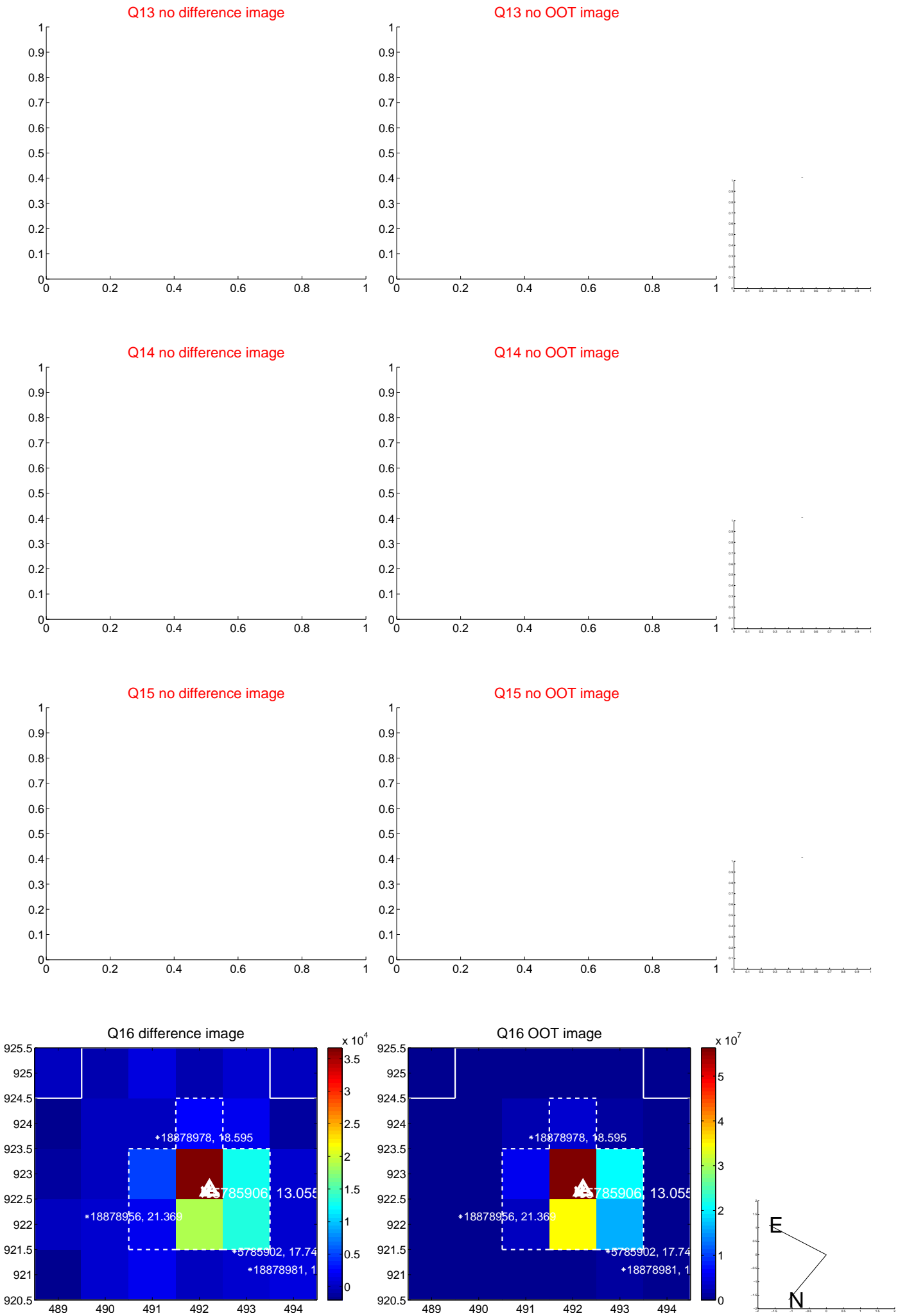
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



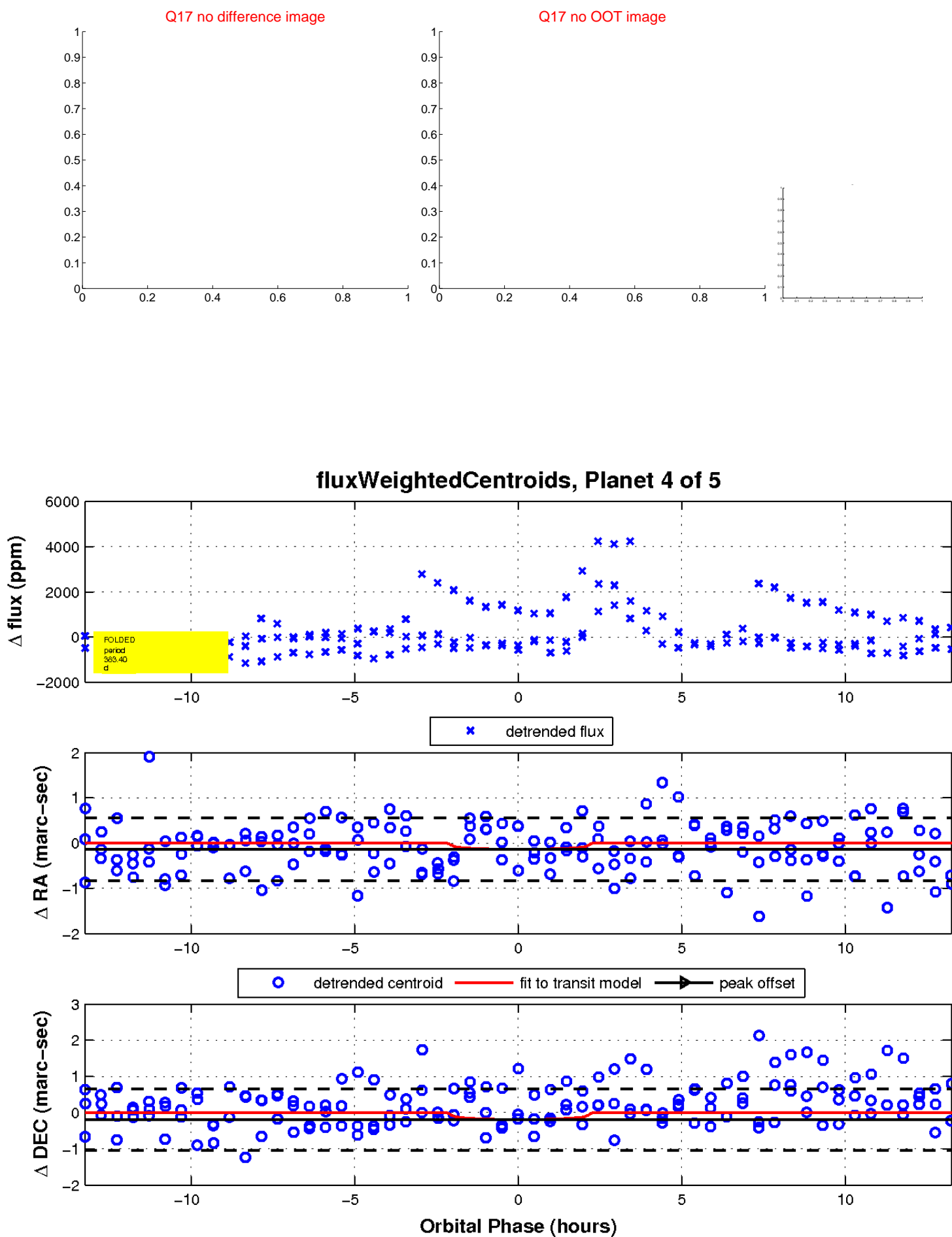
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

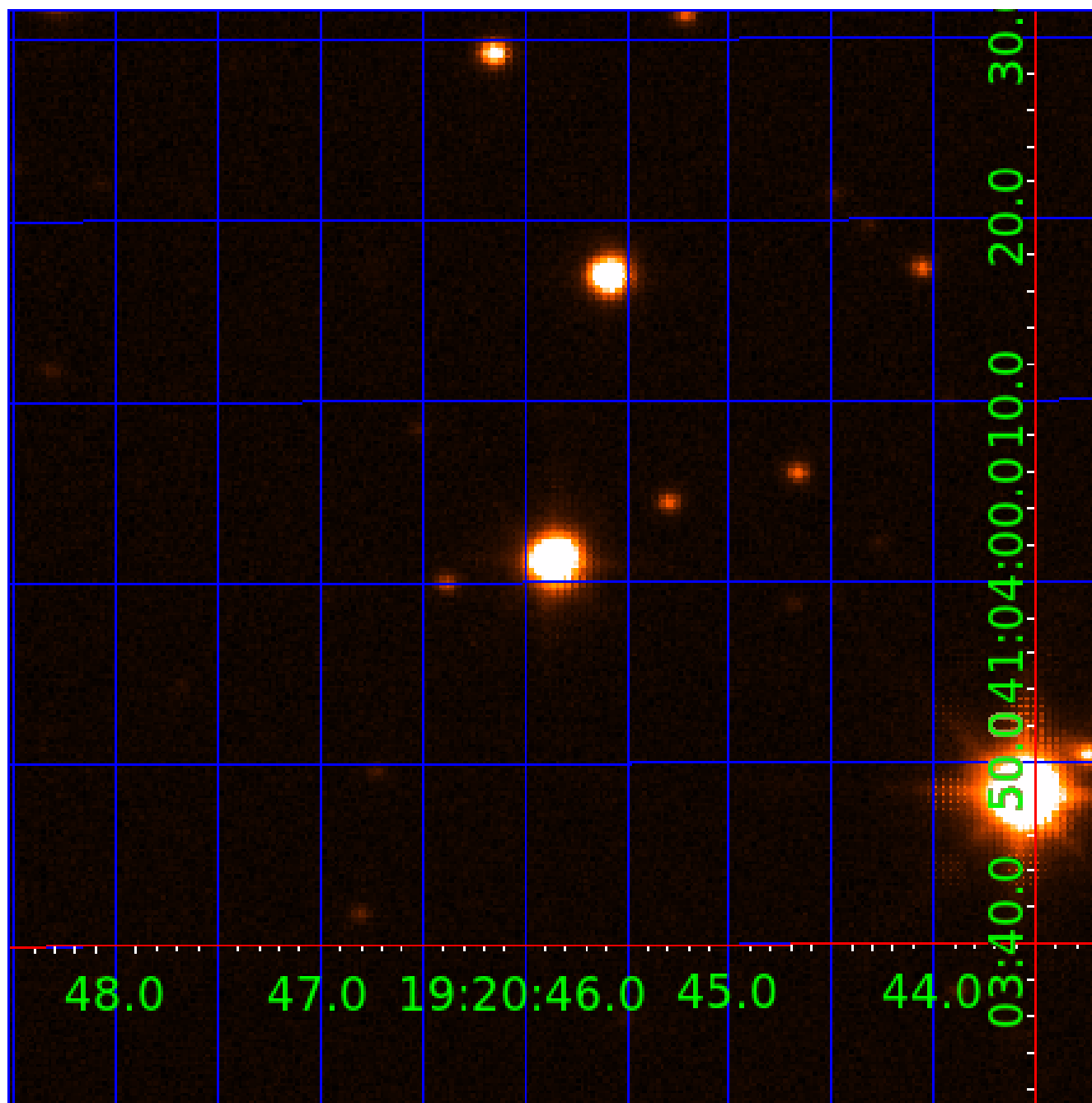


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005785906

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})
005785906-01	OBS	No	596.025820	265.565191	1011.7	4.497	18.2	7.0	2.62	5004	8.80	2.23
005785906-02	OBS	No	588.989964	222.165847	1880.8	9.376	21.0	8.0	2.62	5004	22.40	2.26
005785906-03	OBS	No	484.306596	380.605585	757.1	5.980	16.5	5.3	2.62	5004	7.37	2.94
005785906-04	OBS	No	383.395503	345.942061	1160.5	4.470	16.8	8.3	2.62	5004	9.11	4.01
005785906-05	OBS	No	122.748339	183.064866	479.0	4.500	15.6	-1.0	2.62	5004	5.59	18.30

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005785906-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_TER_DV—MOD_POS_DV
005785906-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005785906-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_CHASES—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—CENT_FEW_DIFFS
005785906-05	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_NOFITS

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

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

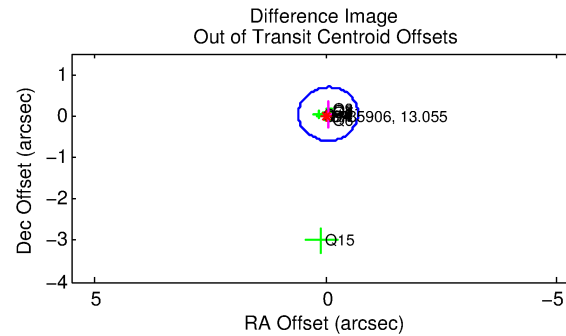
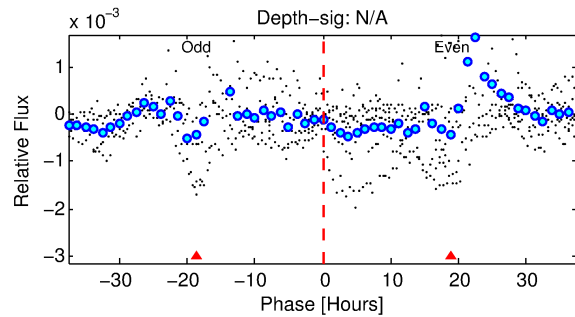
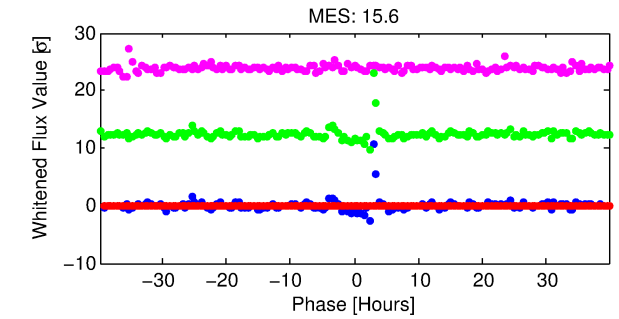
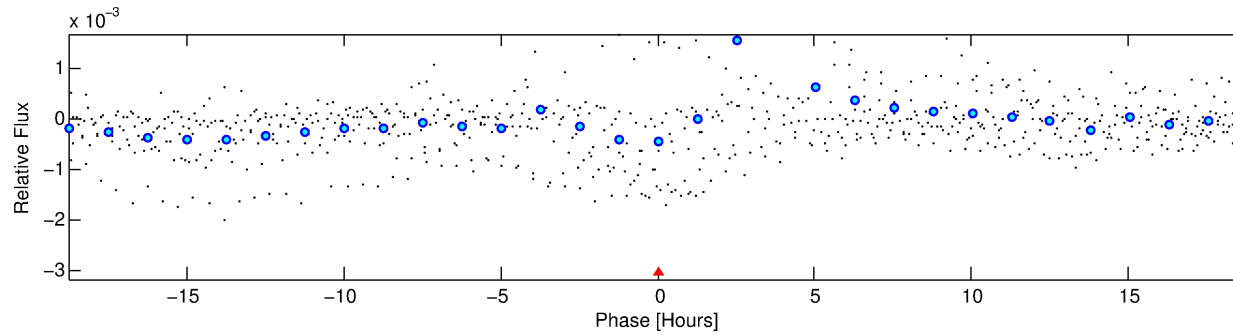
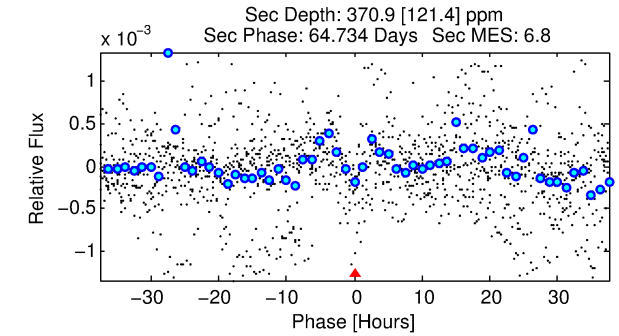
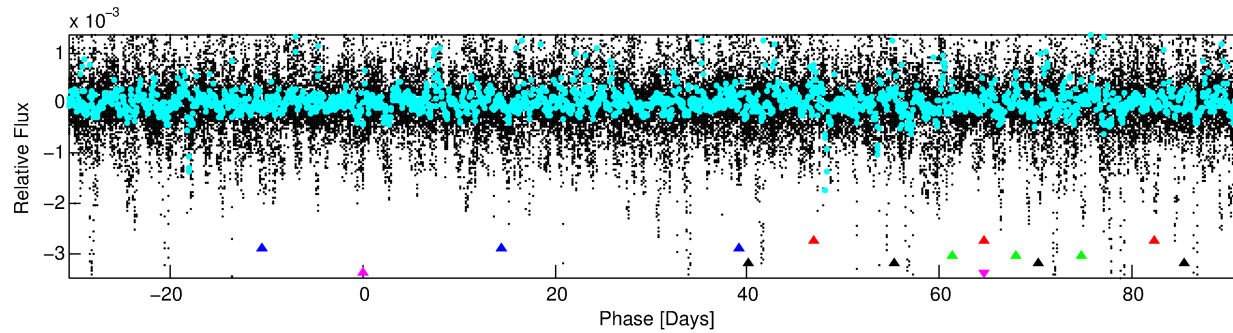
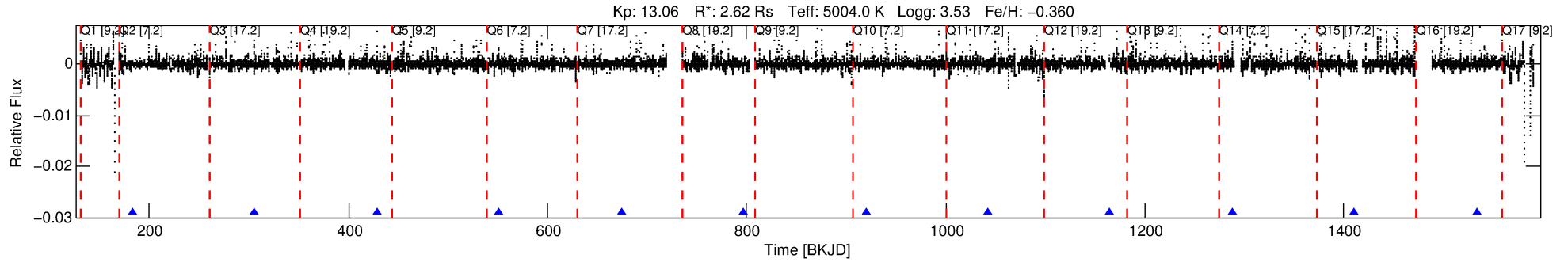
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005785906-05

No Significant Match Found

DV One-Page Summary

KIC: 5785906 Candidate: 5 of 5 Period: 122.748 d



TPS TCE Results:

Period = 122.74834 d
Epoch = 183.0649 BKJD

DV fit results are unavailable

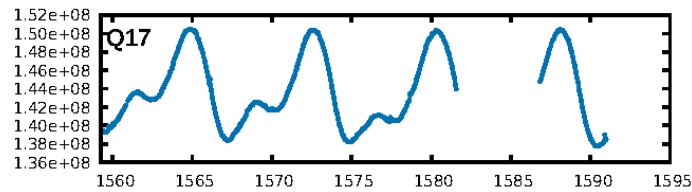
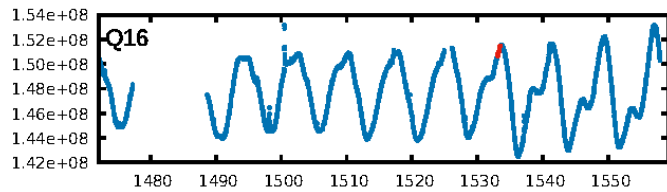
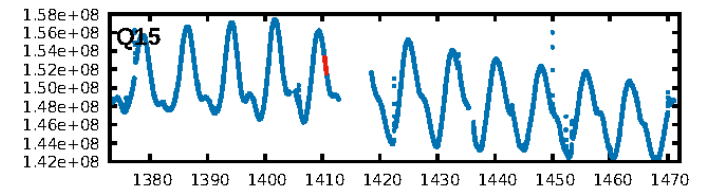
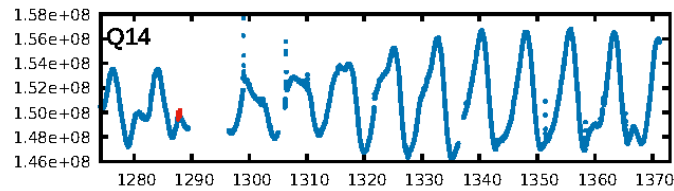
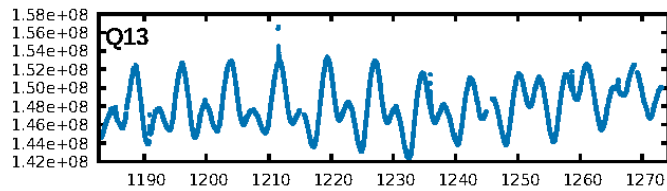
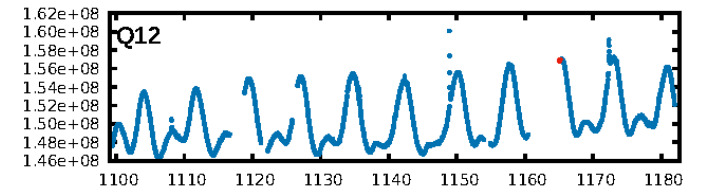
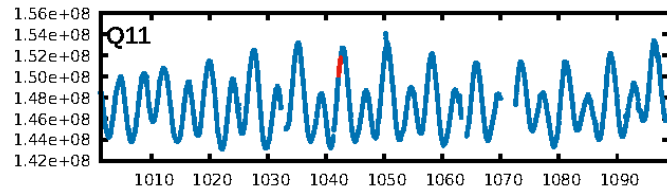
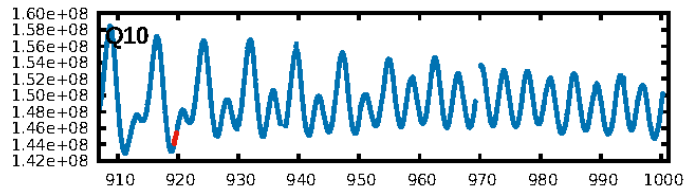
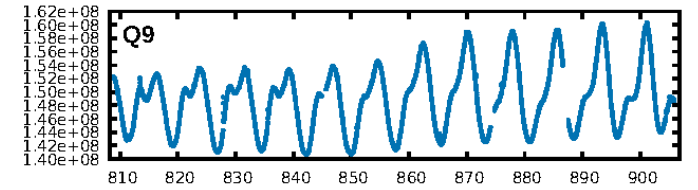
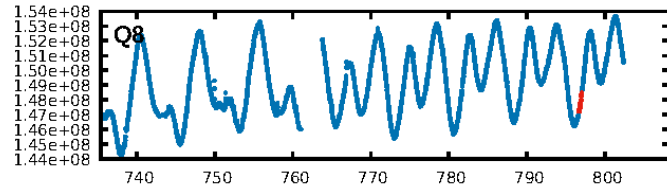
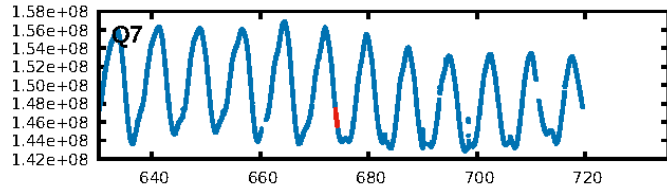
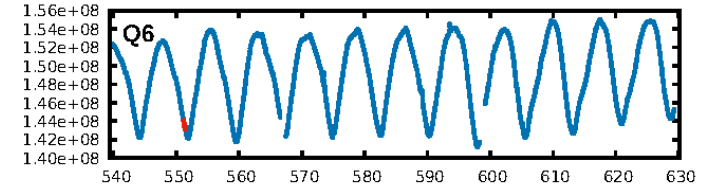
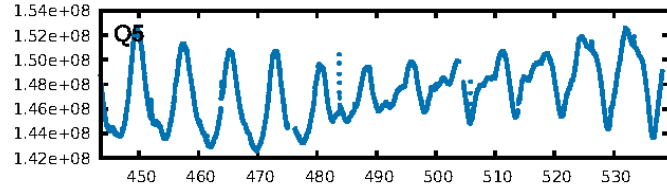
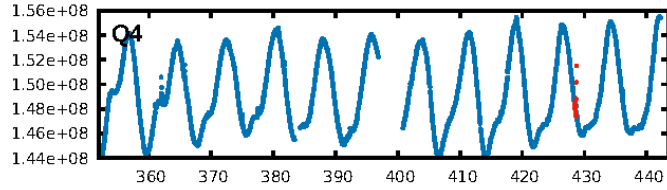
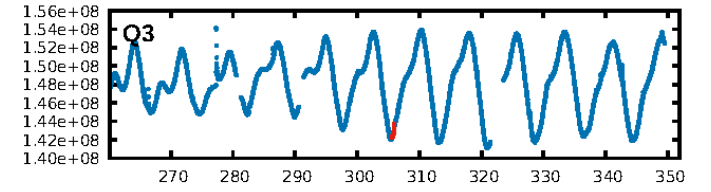
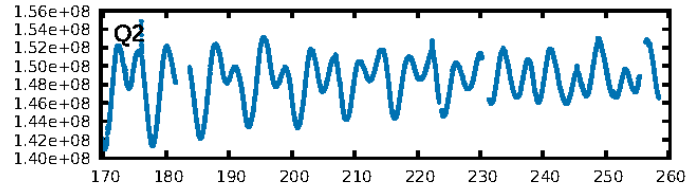
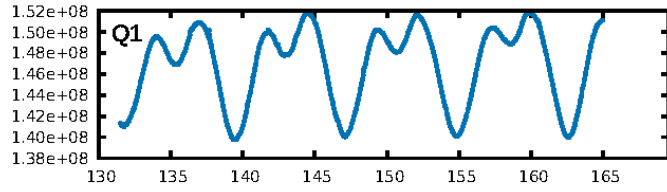
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [986.26σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.27e-13
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: -1.07
Centroid-sig: 29.7%
Centroid-so: 0.111 arcsec [0.79σ]
OotOffset-rm: 0.070 arcsec [0.33σ]
KicOffset-rm: 0.170 arcsec [0.75σ]
OotOffset-st: 3/4/2/0 [9]
KicOffset-st: 3/4/2/0 [9]
DiffImageQuality-fgm: 0.67 [6/9]
DiffImageOverlap-fno: 1.00 [9/9]

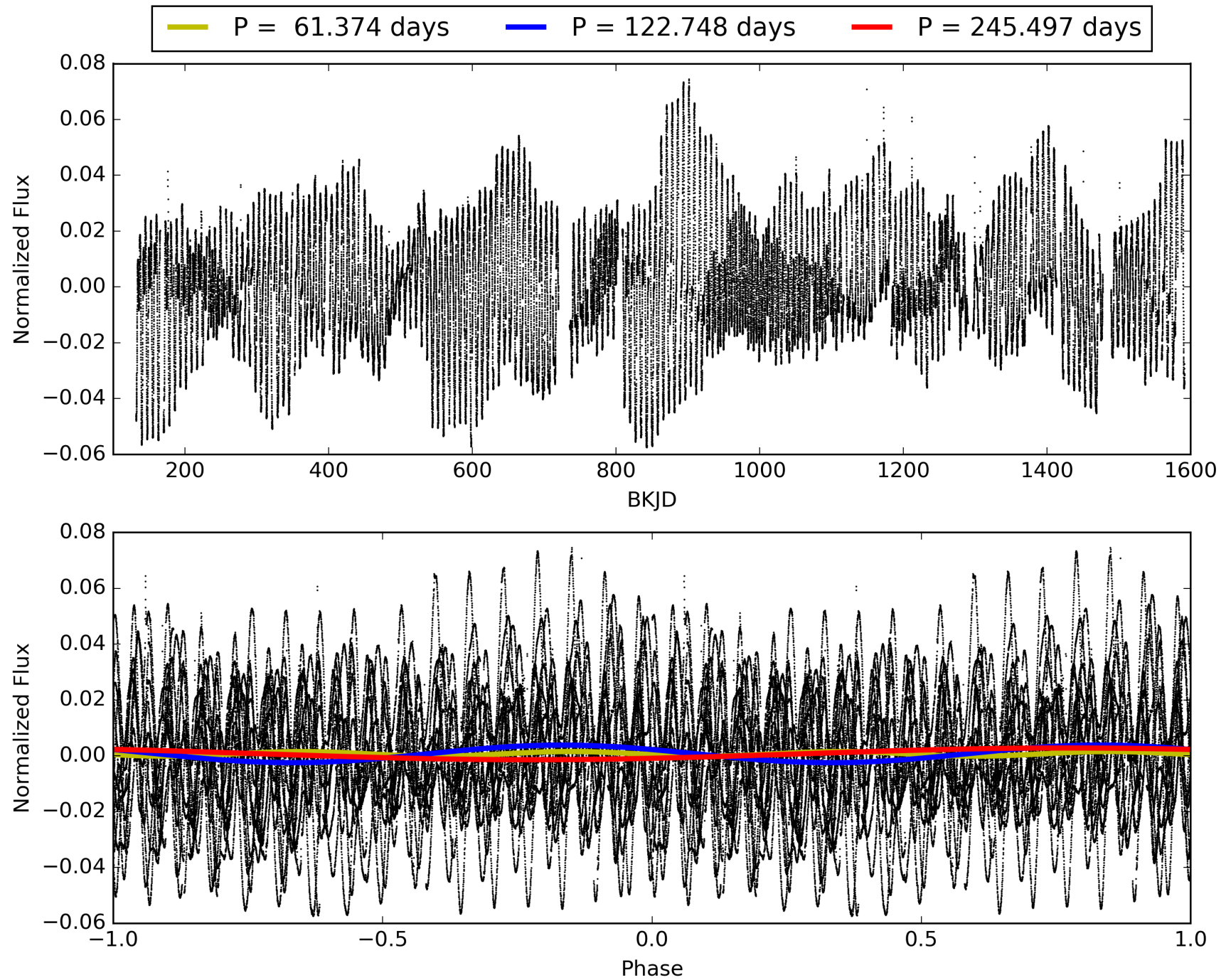
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:56:03 Z

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

TCE 005785906-05, PDC Light Curves

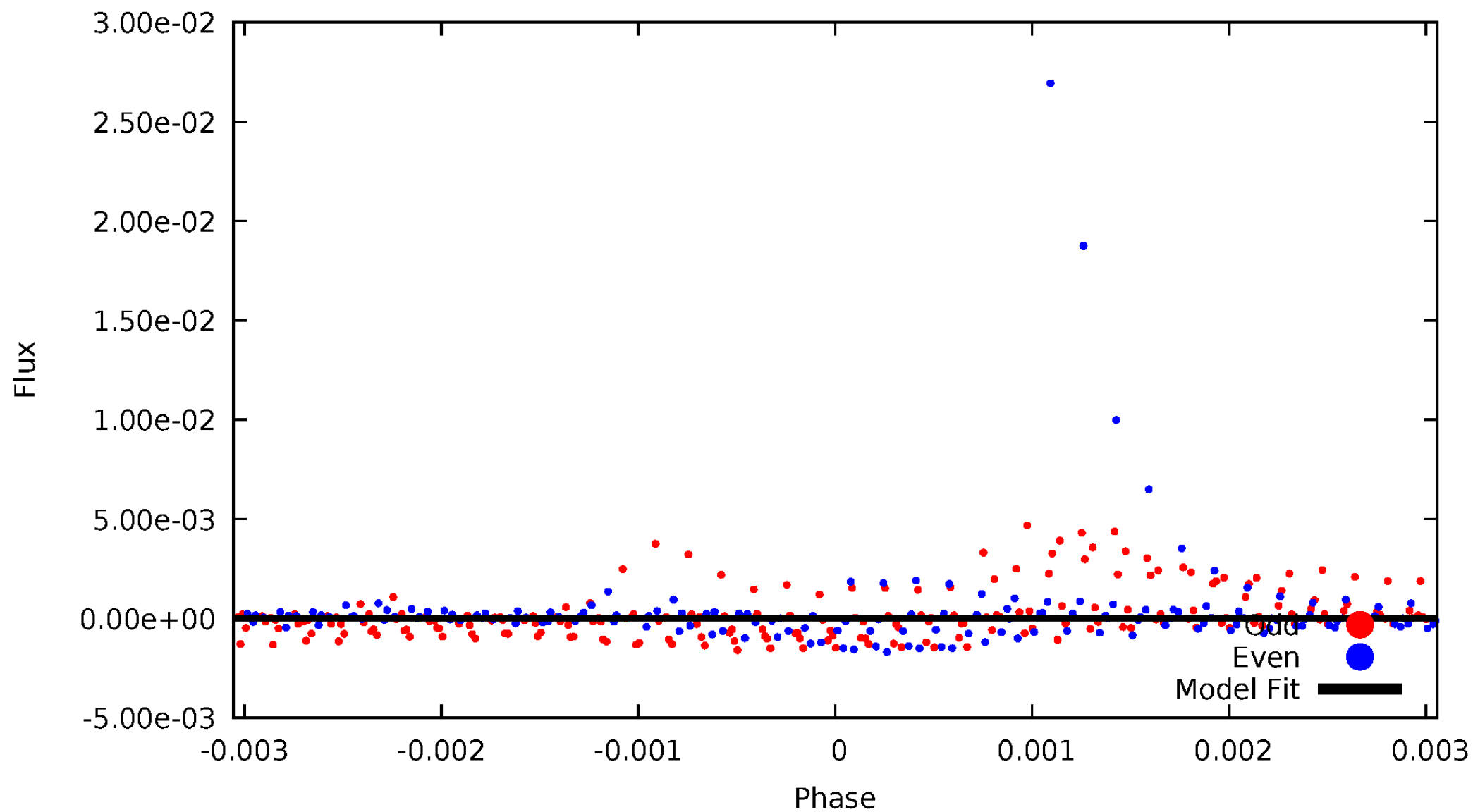


TCE 005785906-05



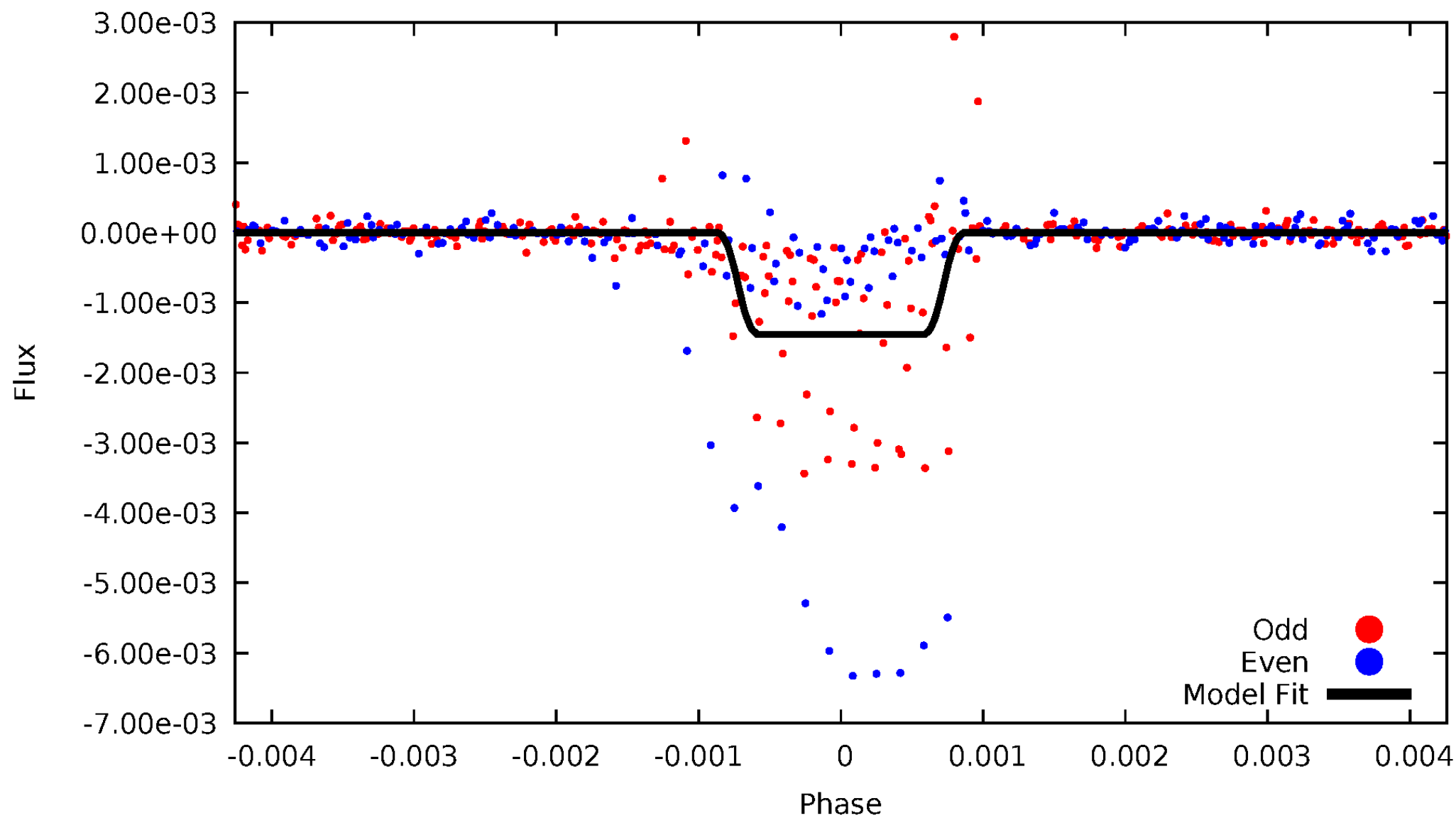
DV Odd/Even

TCE 005785906-05



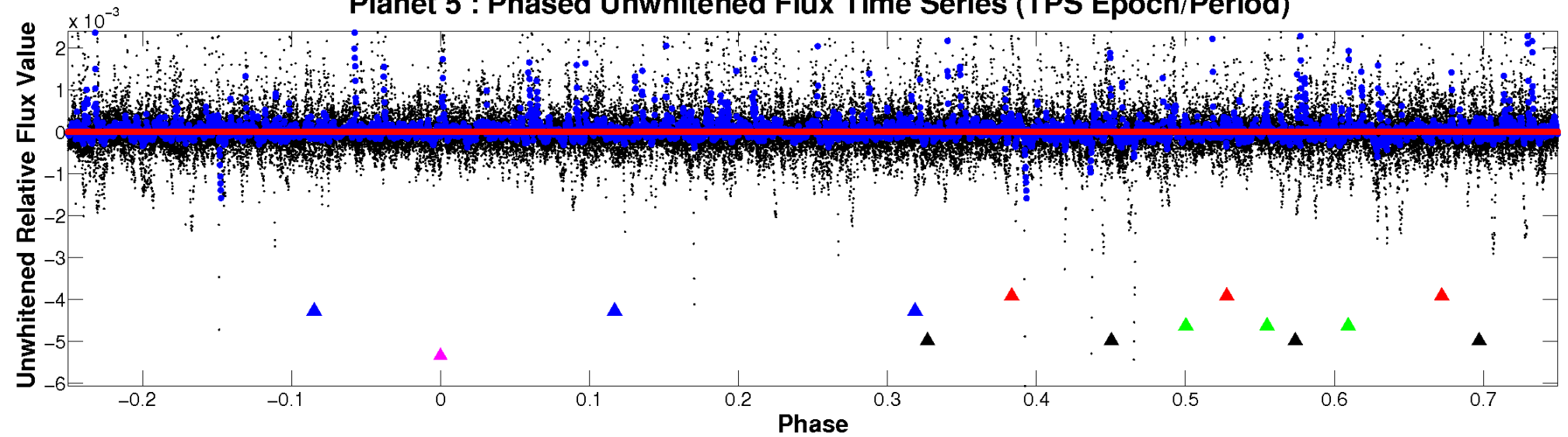
ALT Odd/Even

TCE 005785906-05



Non-Whitened Vs. Whitened Light Curve

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

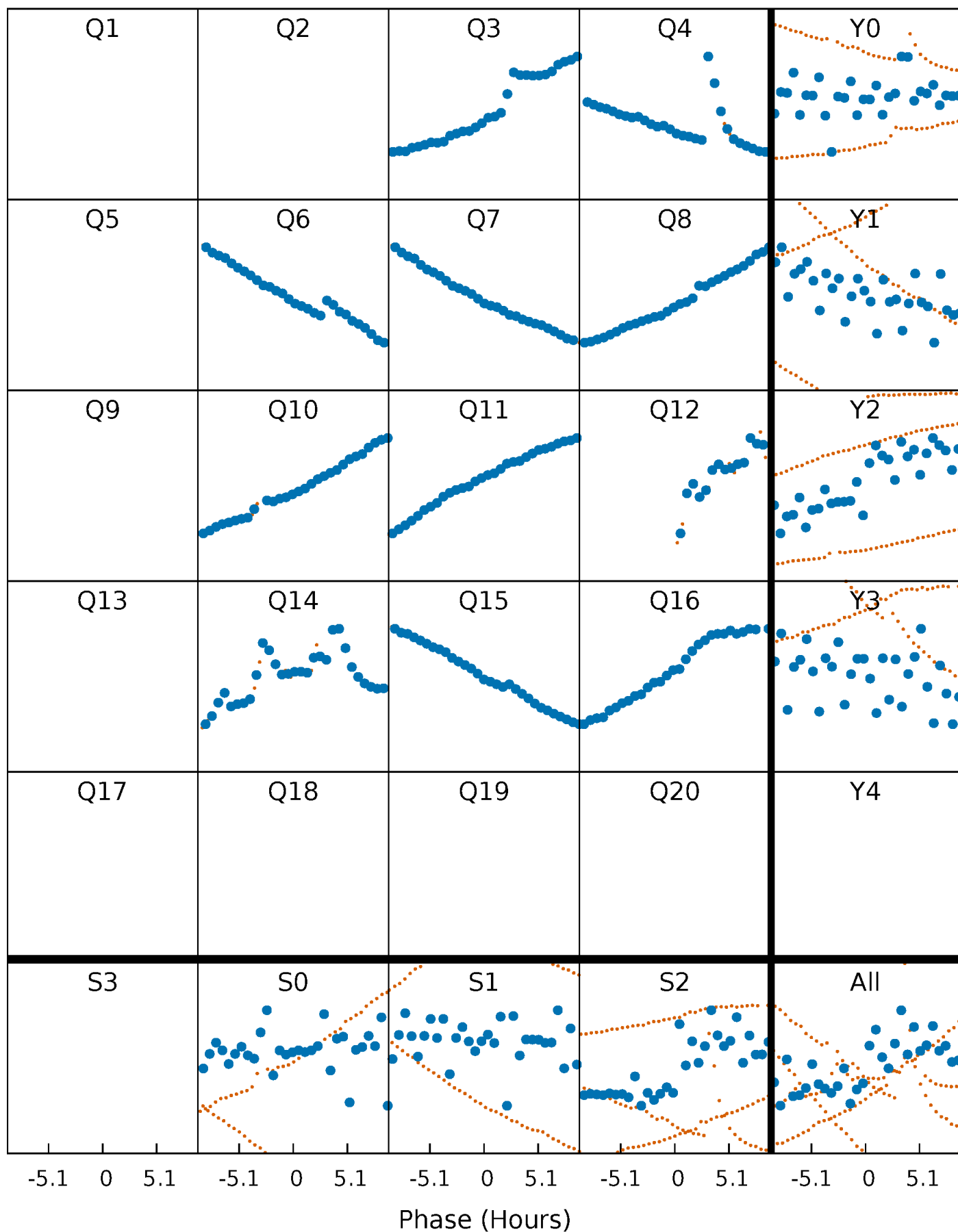


Planet 5 : Phased Whitened Flux Time Series (TPS Epoch/Period)



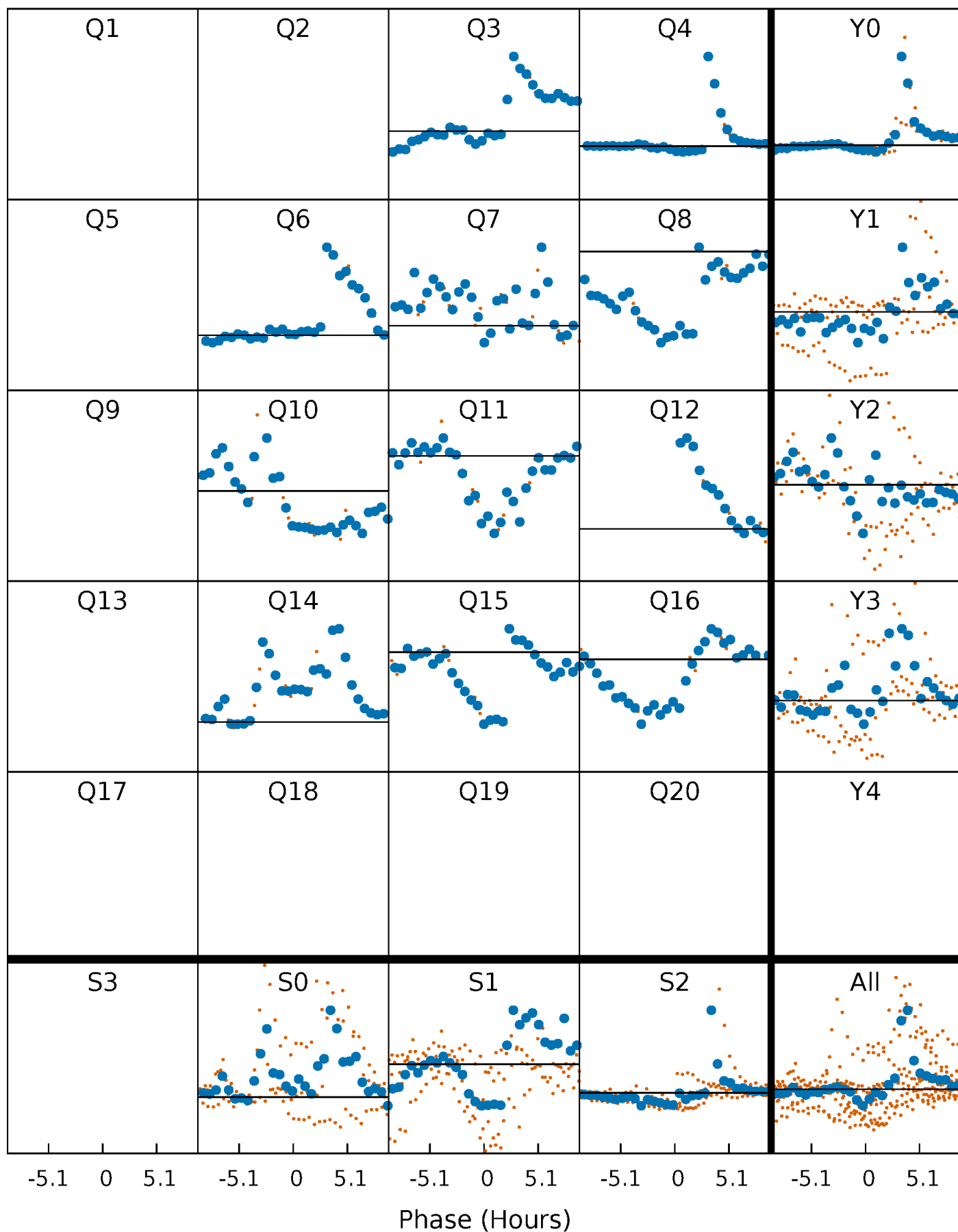
PDC Quarter-Phased Transit Curves

TCE 005785906-05 $P=122.748339$ Days $T_0=183.064866$ (BKJD)



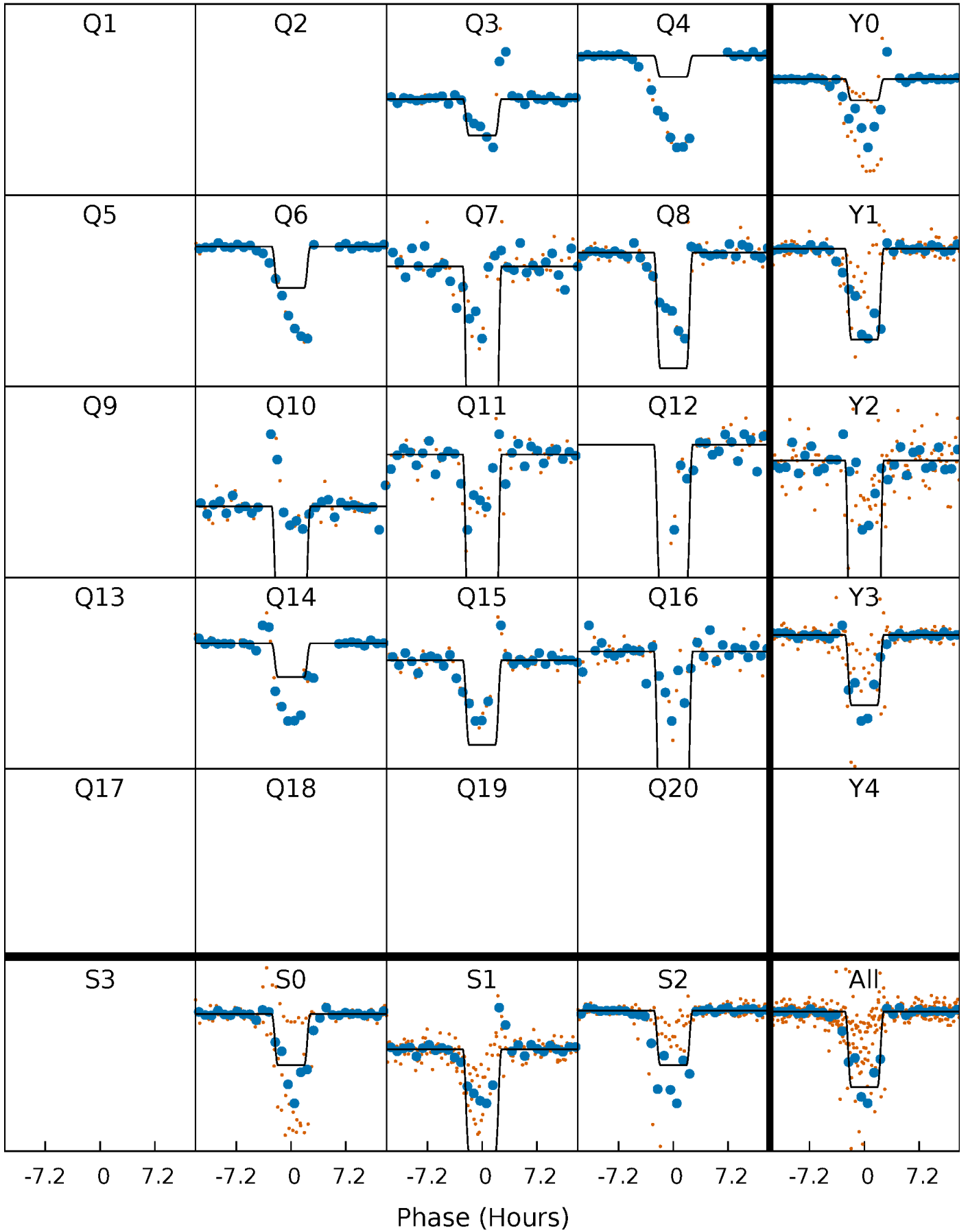
DV Quarter-Phased Transit Curves

TCE 005785906-05 $P=122.748339$ Days $T_0=183.064866$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

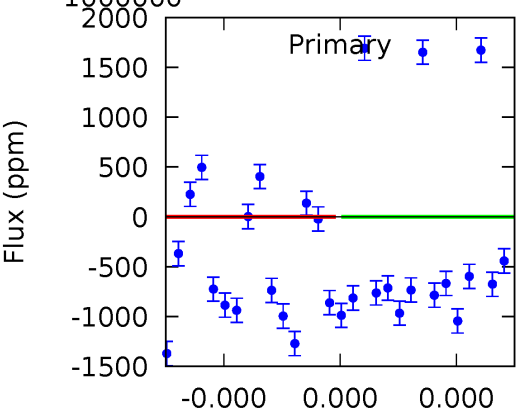
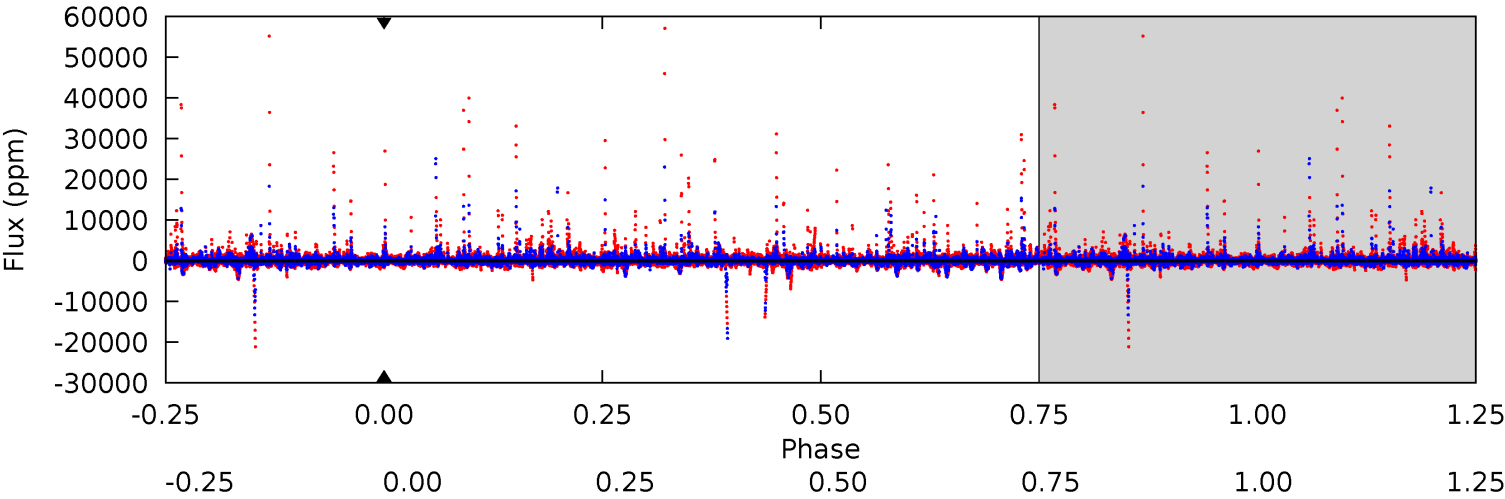
TCE 005785906-05 $P=122.748339$ Days $T_0=183.086636$ (BKJD)



DV Model-Shift Uniqueness Test

005785906-05, P = 122.748339 Days, E = 60.316527 Days

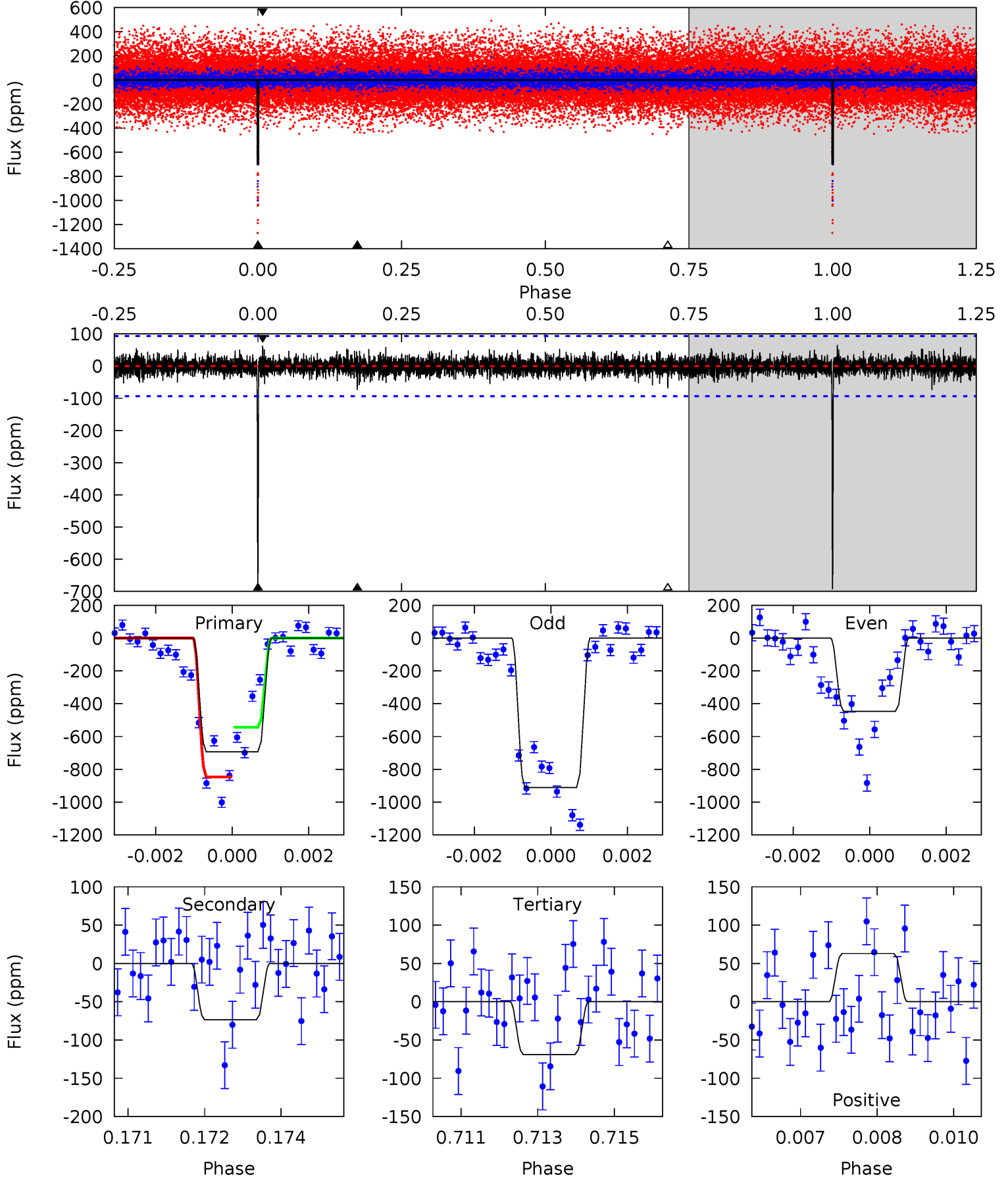
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005785906-05, P = 122.748339 Days, E = 60.338297 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
39.8	4.22	3.96	3.62	5.36	3.14	0.90	35.8	36.2	0.26	0.61	15.1	1.90	0.08	8.38



Stellar Parameters For KIC 005785906

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5004^{+123}_{-136}	$3.534^{+1.065}_{-0.355}$	$-0.360^{+0.250}_{-0.300}$	$2.622^{+1.371}_{-2.057}$	$0.857^{+0.243}_{-0.198}$	$0.067^{+2.974}_{-0.048}$
	+2%/-3%	+30%/-10%	+69%/-83%	+52%/-78%	+28%/-23%	+4442%/-72%
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 005785906-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$19.23^{+26.25}_{-13.97}$	734^{+115}_{-155}	-3624^{+18771}_{-9285}	$-166.062^{+68445.185}_{-49356.375}$
Alt.	-74 ± 17	$21.05^{+28.26}_{-15.23}$	727^{+105}_{-161}	2429^{+862}_{-348}	18^{+214}_{-15}

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

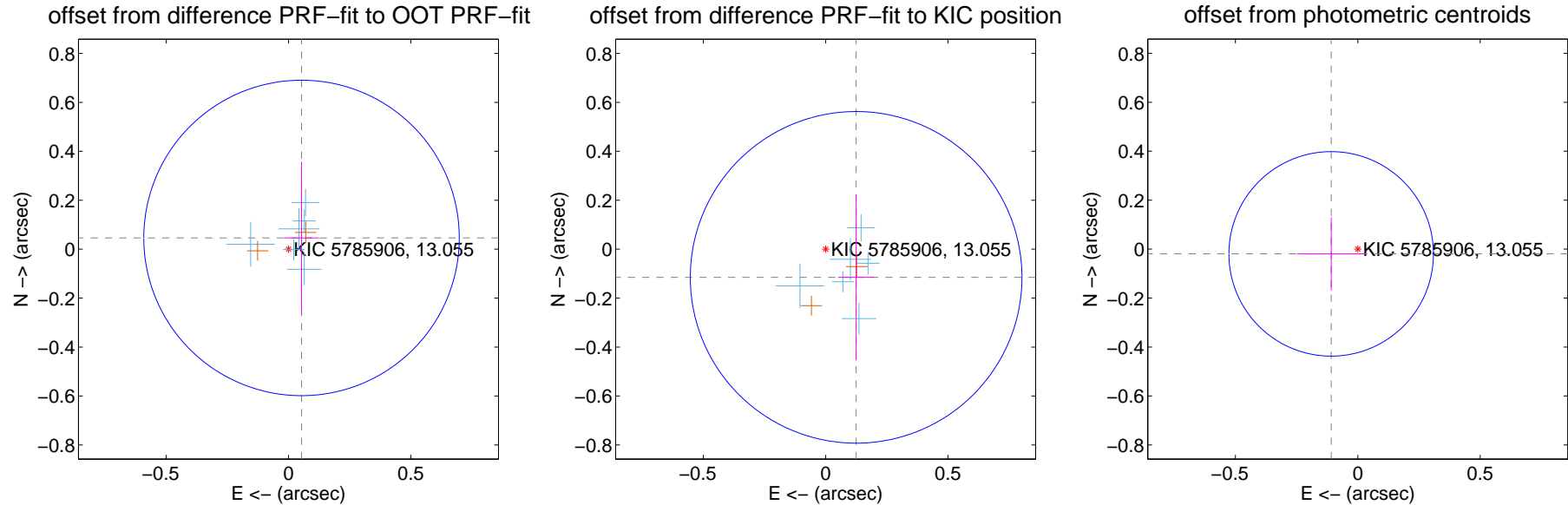
DV Centroid Data

Supplemental centroid analysis for 005785906-05. Kepler magnitude: 13.05. Transit SNR -1.00

There are 6 quarters with good PRF difference image offsets

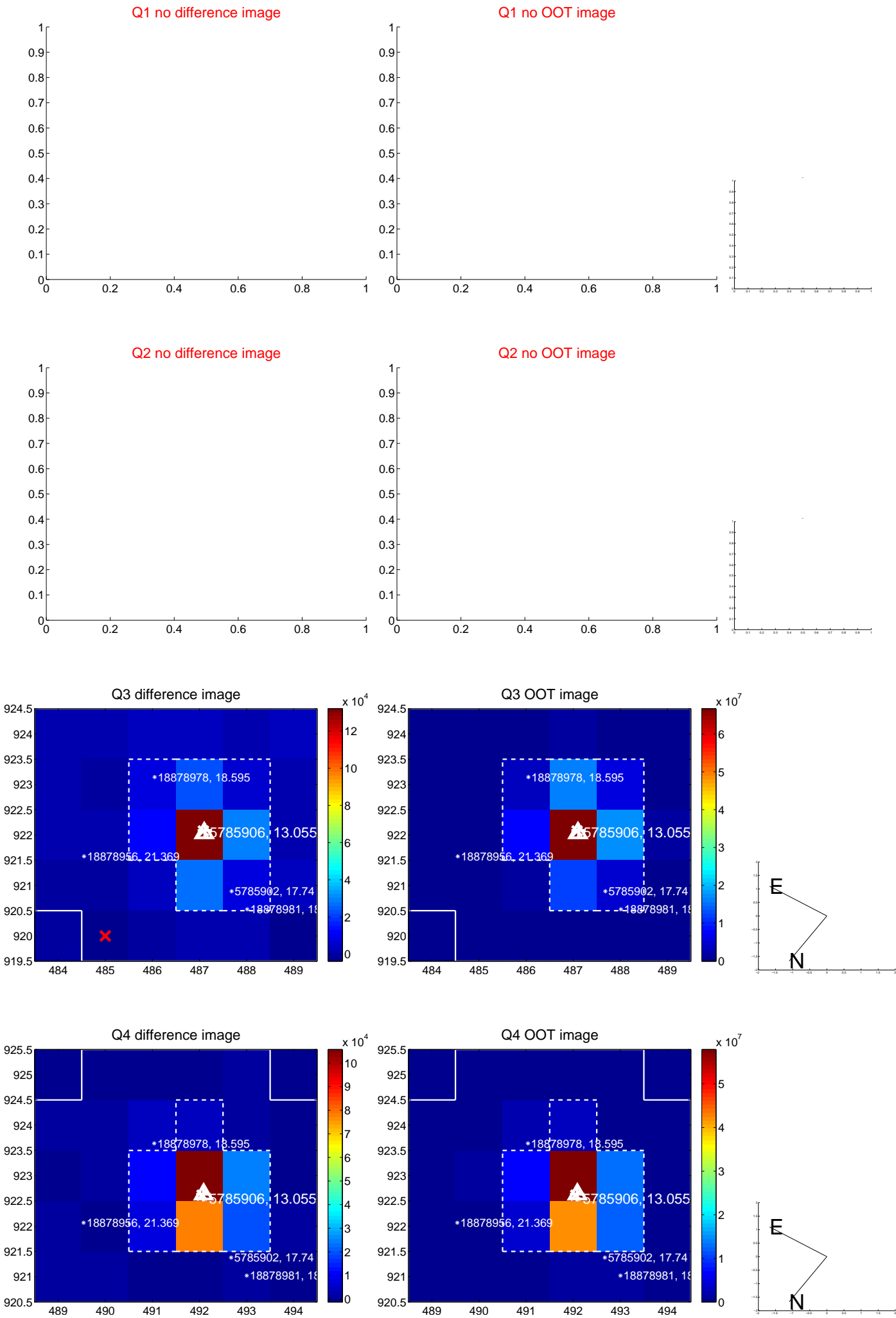
The direct PRF centroid is offset from the target star catalog position by about 0.15 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.070 ± 0.215	0.33	-0.053 ± 0.071	0.046 ± 0.311
PRF-fit source offset from KIC position	0.170 ± 0.226	0.75	-0.124 ± 0.074	-0.115 ± 0.339
photometric centroid source offset	0.11 ± 0.14	0.79	0.11 ± 0.14	-0.02 ± 0.15

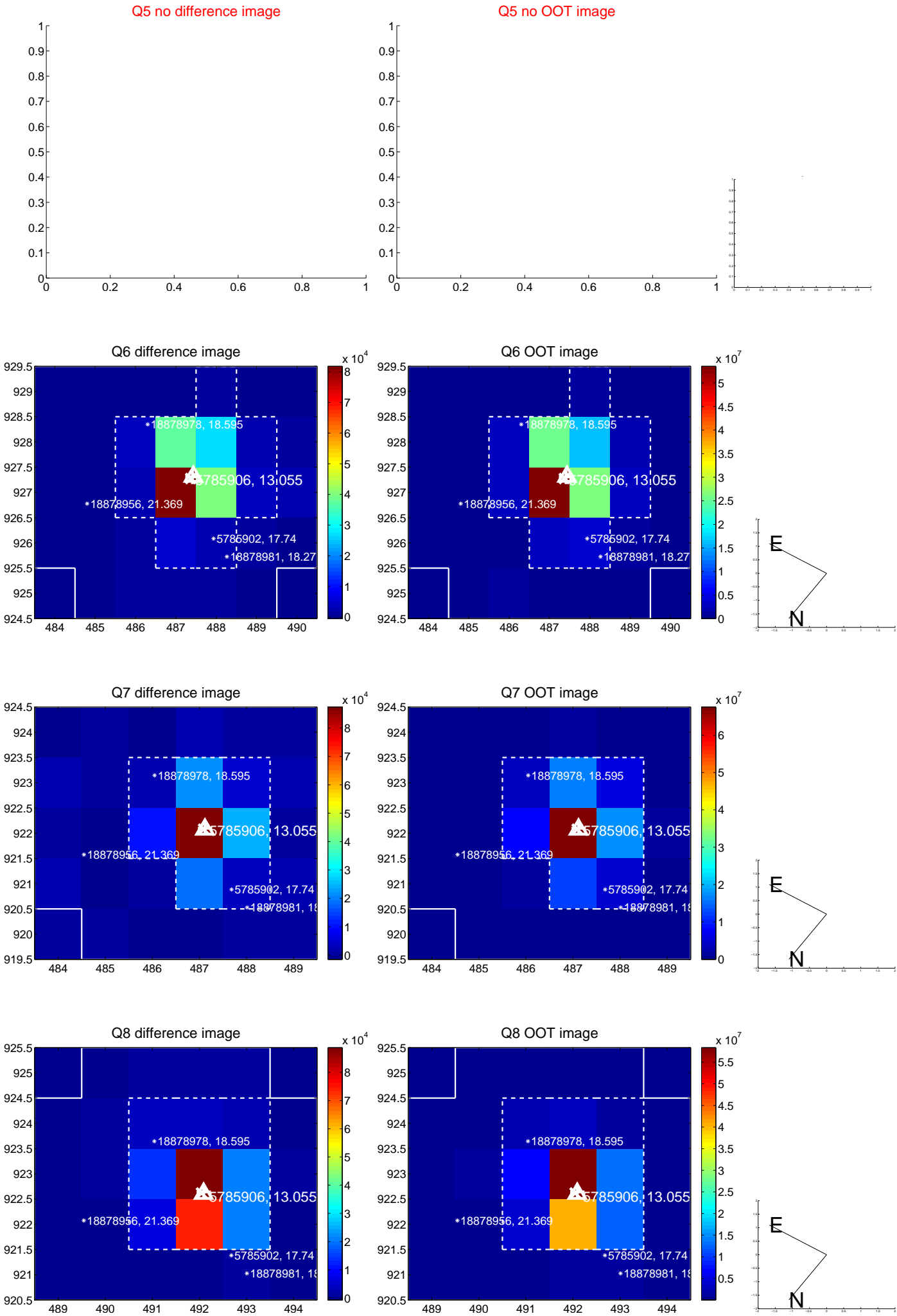


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

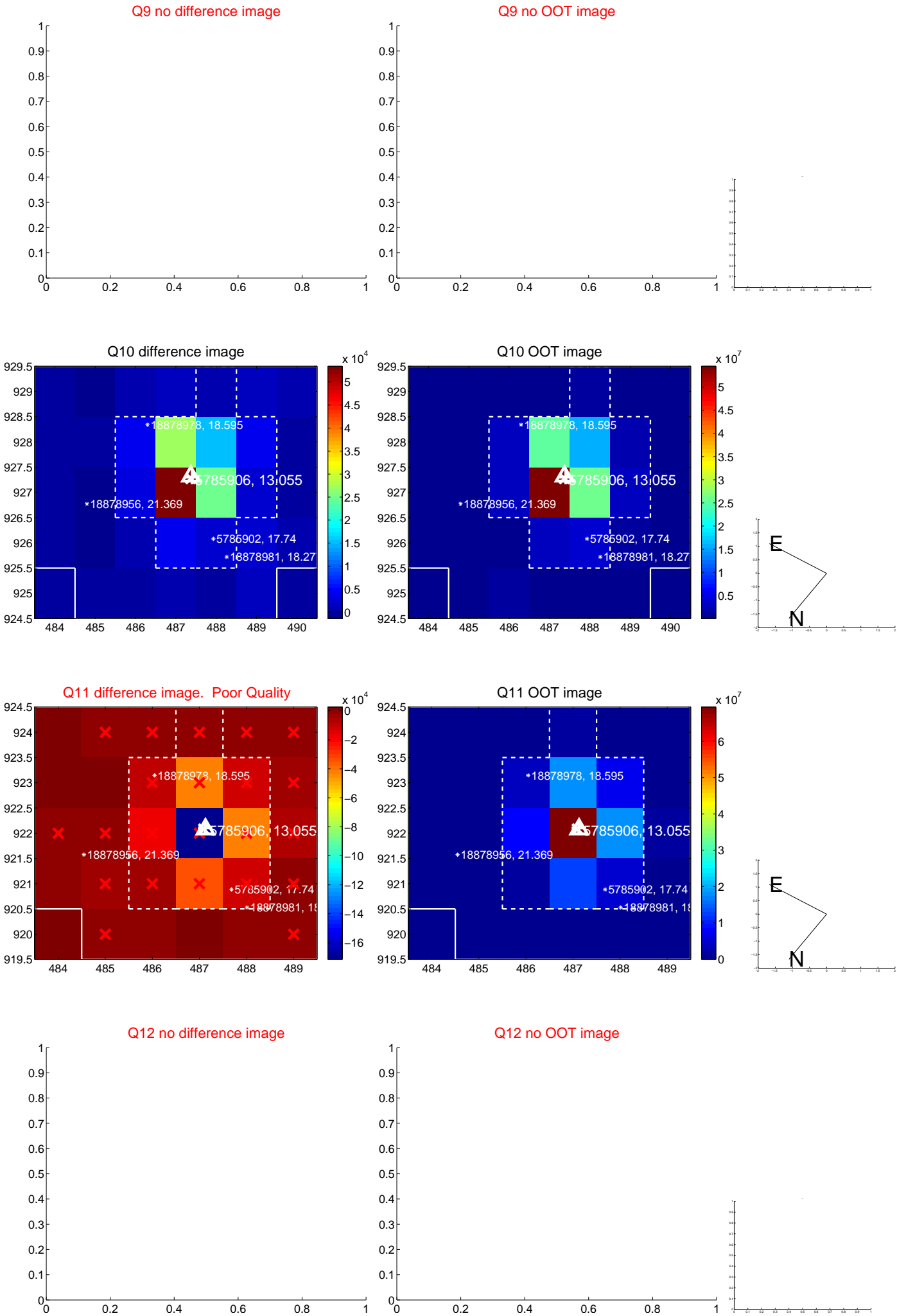
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



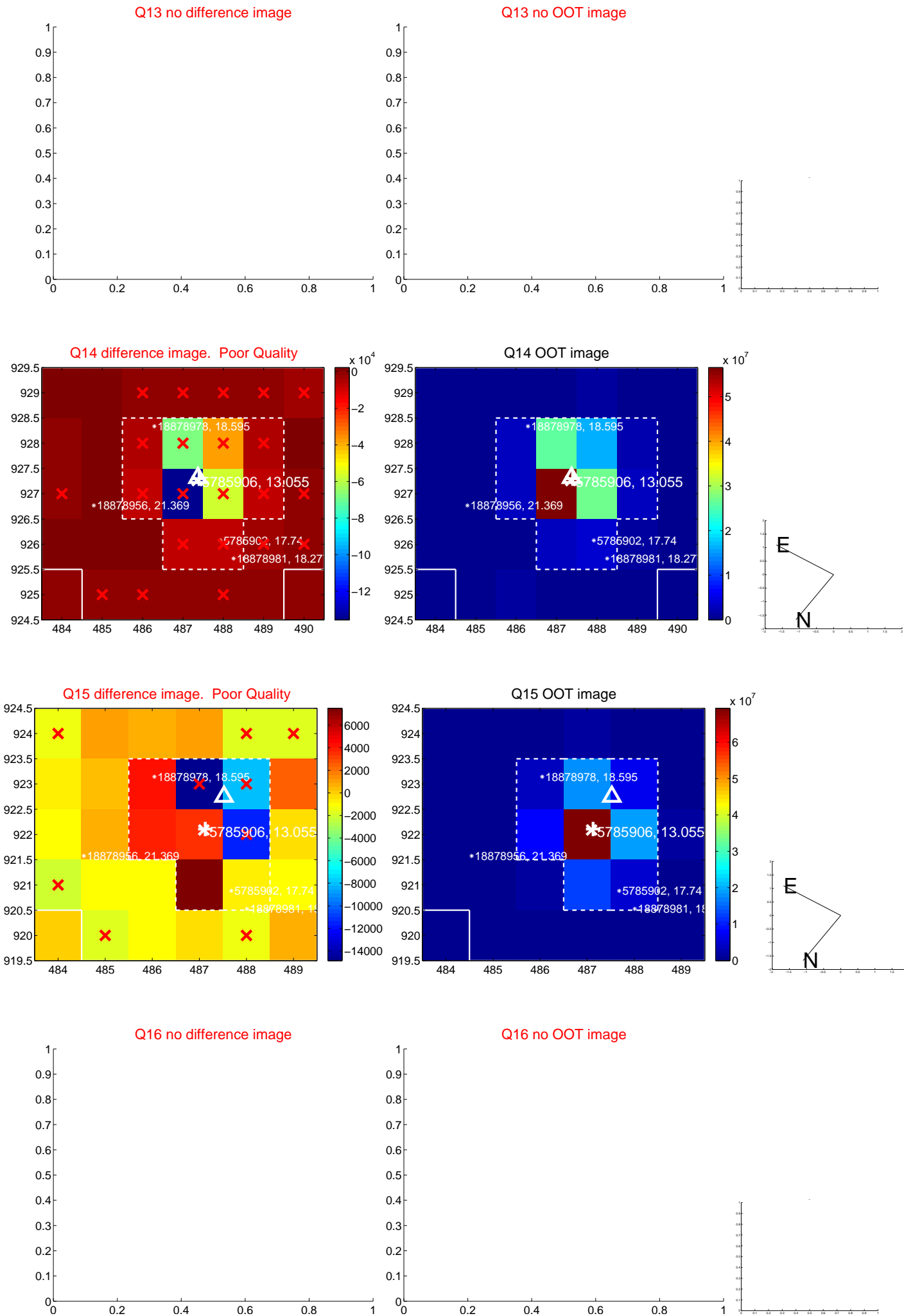
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



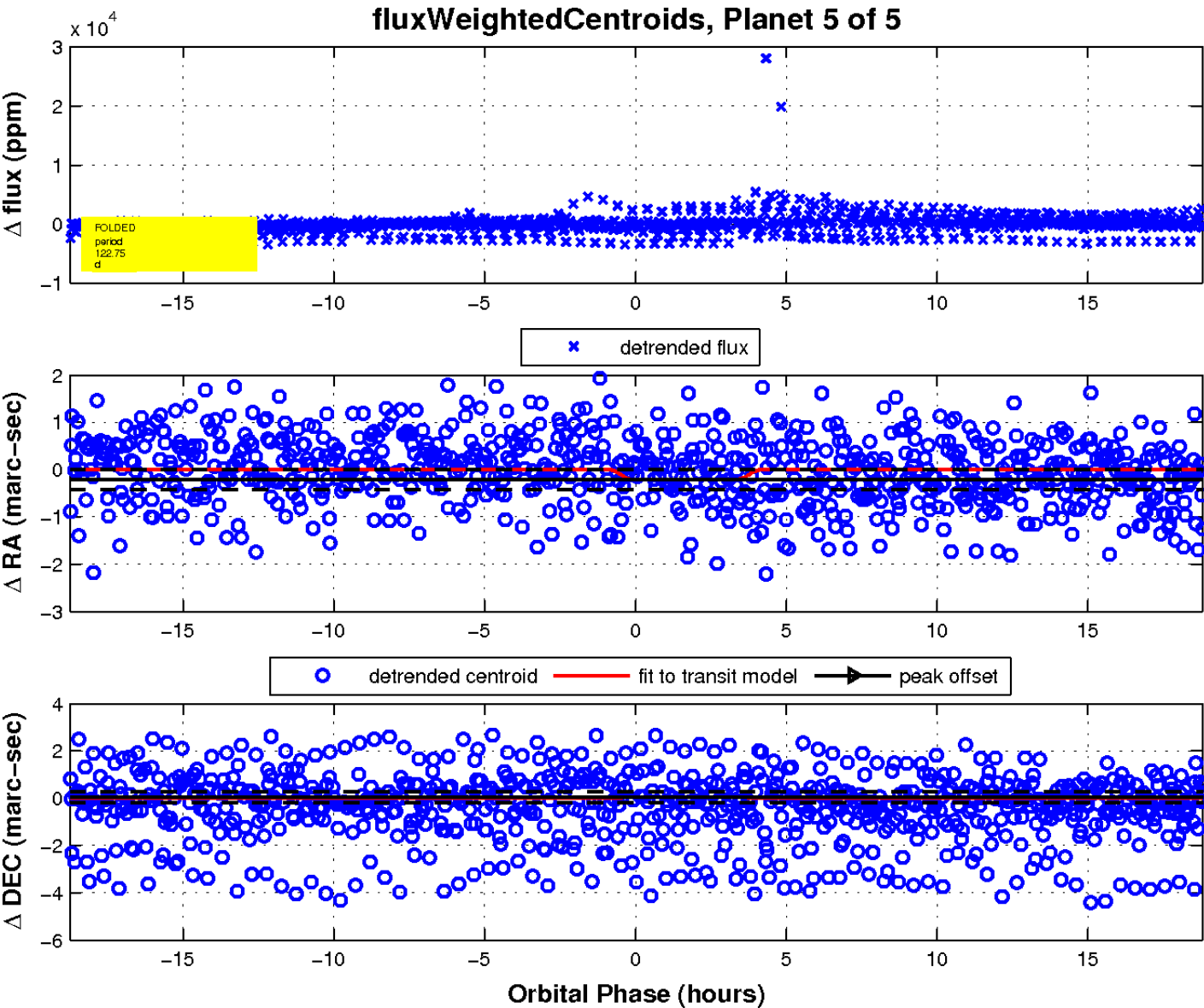
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

