

KIC 005880537

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})
005880537-01	OBS	No	3.141662	134.385362	121.7	12.207	8.4	8.3	0.79	5151	1.24	265.15
005880537-02	OBS	No	274.838193	240.496792	1738.2	15.000	17.2	-1.0	0.79	5151	3.19	0.68
005880537-03	OBS	No	413.103995	308.053753	1847.4	23.069	9.3	7.4	0.79	5151	4.29	0.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005880537-01	OBS	FP	0.00	1	0	0	0	LPP_DV
005880537-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_NOFITS
005880537-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

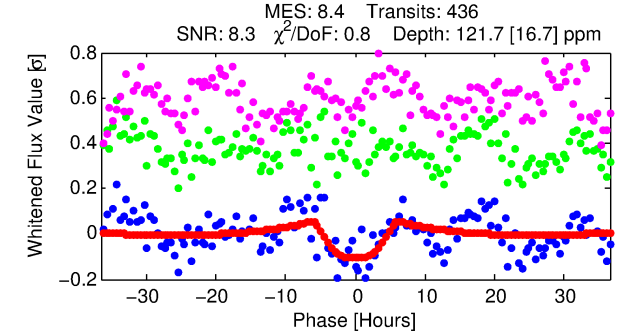
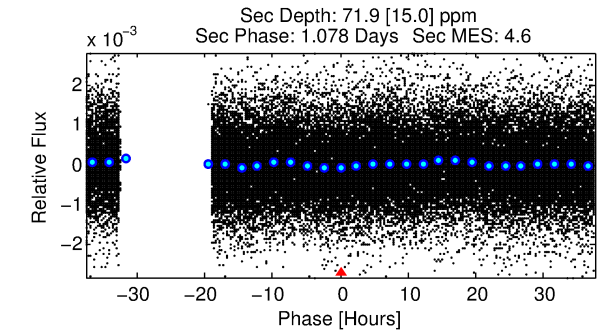
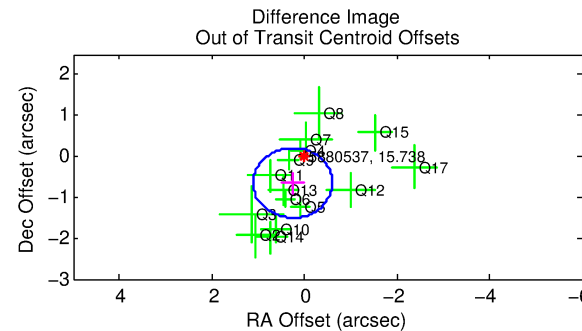
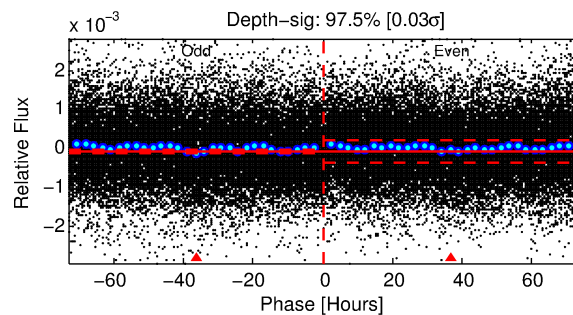
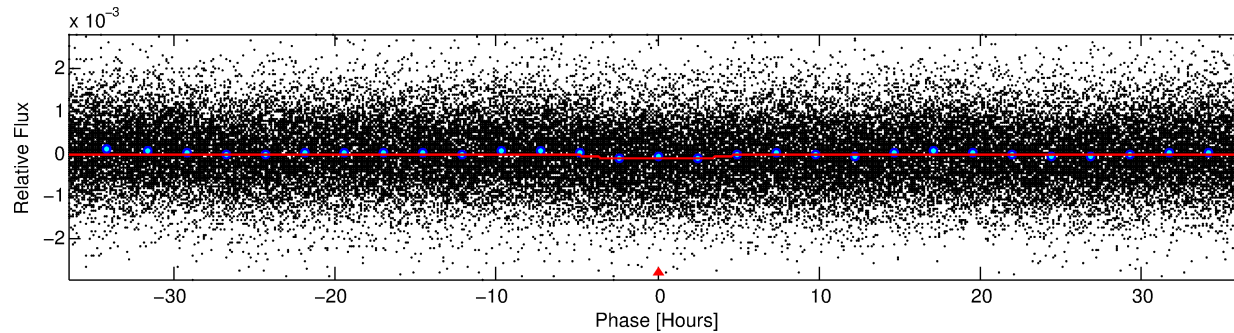
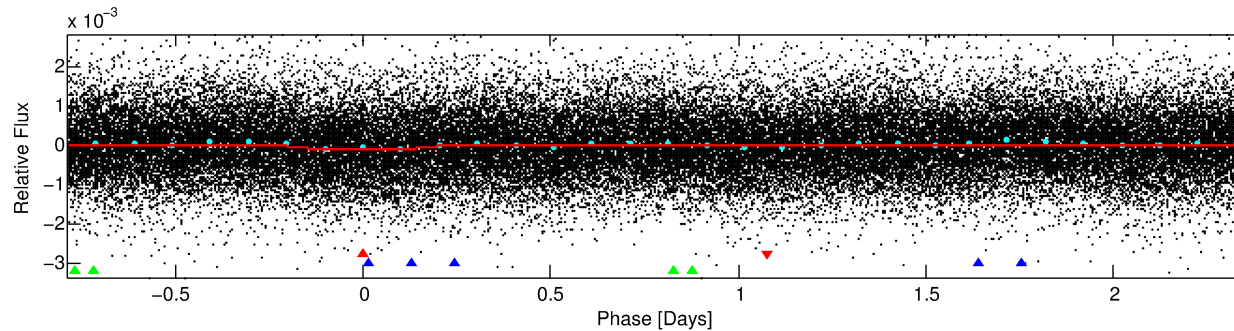
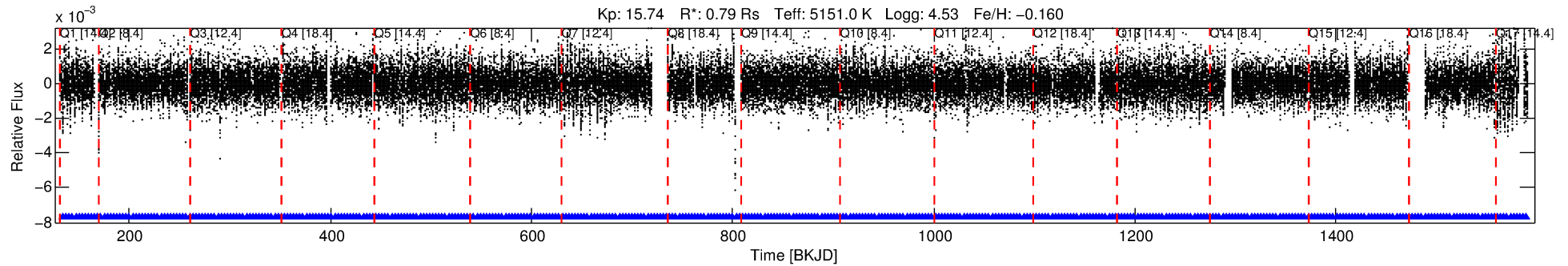
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005880537-01

No Significant Match Found

DV One-Page Summary

KIC: 5880537 Candidate: 1 of 3 Period: 3.142 d



DV Fit Results:

Period = 3.14166 [0.00009] d
Epoch = 134.3854 [0.0230] BKJD
Rp/R* = 0.0145 [0.0012]
a/R* = 1.11 [0.04]
b = 0.98 [0.01]
Seff = 265.15 [48.66]
Teq = 1029 [47] K
Rp = 1.24 [0.18] Re
a = 0.0383 [0.0036] AU
Ag = 37.61 [11.45] [3.20 σ]
Teffp = 3940 [291] K [9.88 σ]

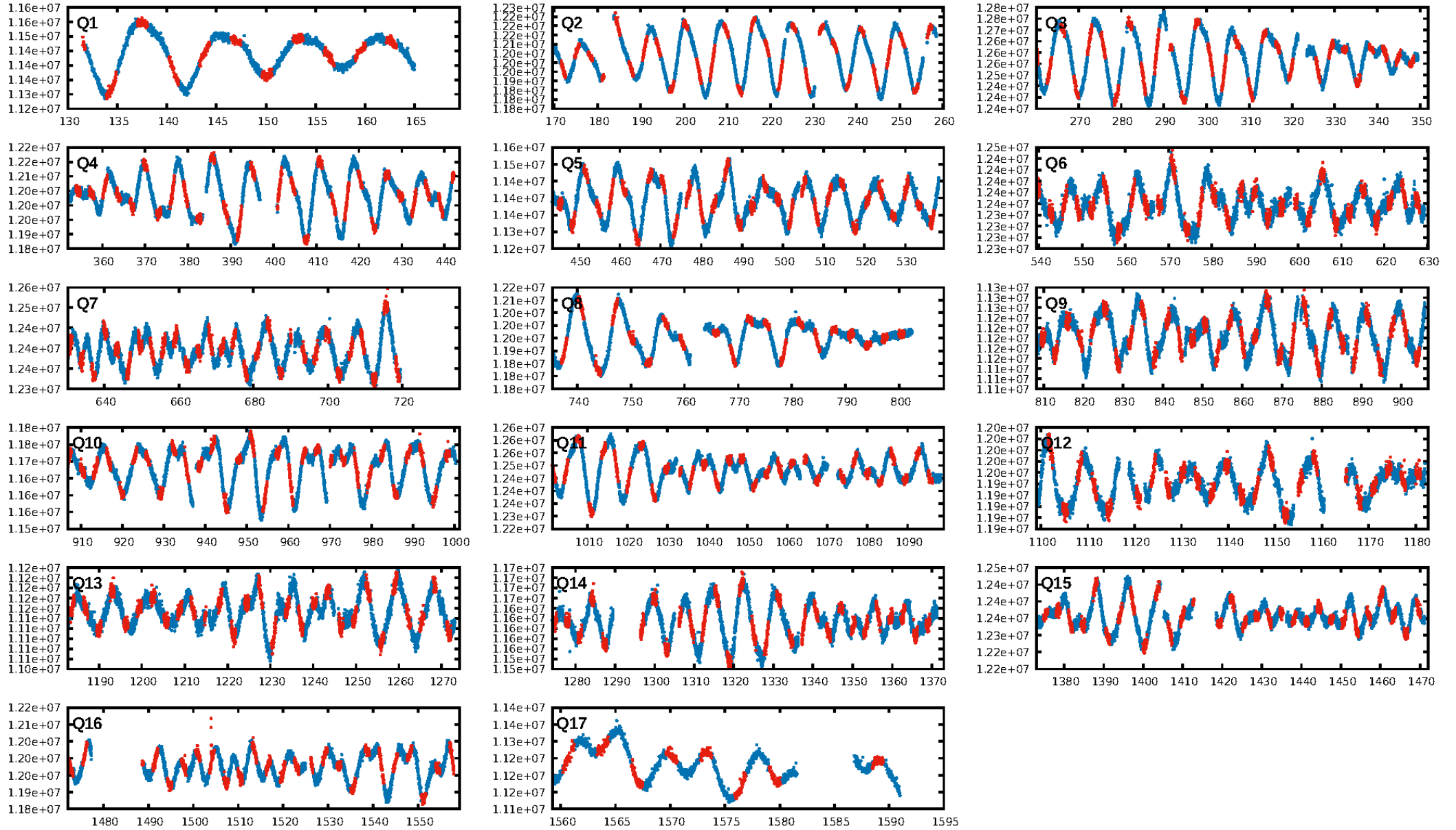
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [337.17 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.76e-13
RollingBand-fgt: 1.00 [418/418]
GhostDiagnostic-chr: 1.496
Centroid-sig: 90.8%
Centroid-so: 0.933 arcsec [0.93 σ]
OotOffset-rm: 0.697 arcsec [2.44 σ]
KicOffset-rm: 0.793 arcsec [2.74 σ]
OotOffset-st: 4/4/3/4 [15]
KicOffset-st: 4/4/3/4 [15]
DiffImageQuality-fgm: 1.00 [15/15]
DiffImageOverlap-fno: 1.00 [17/17]

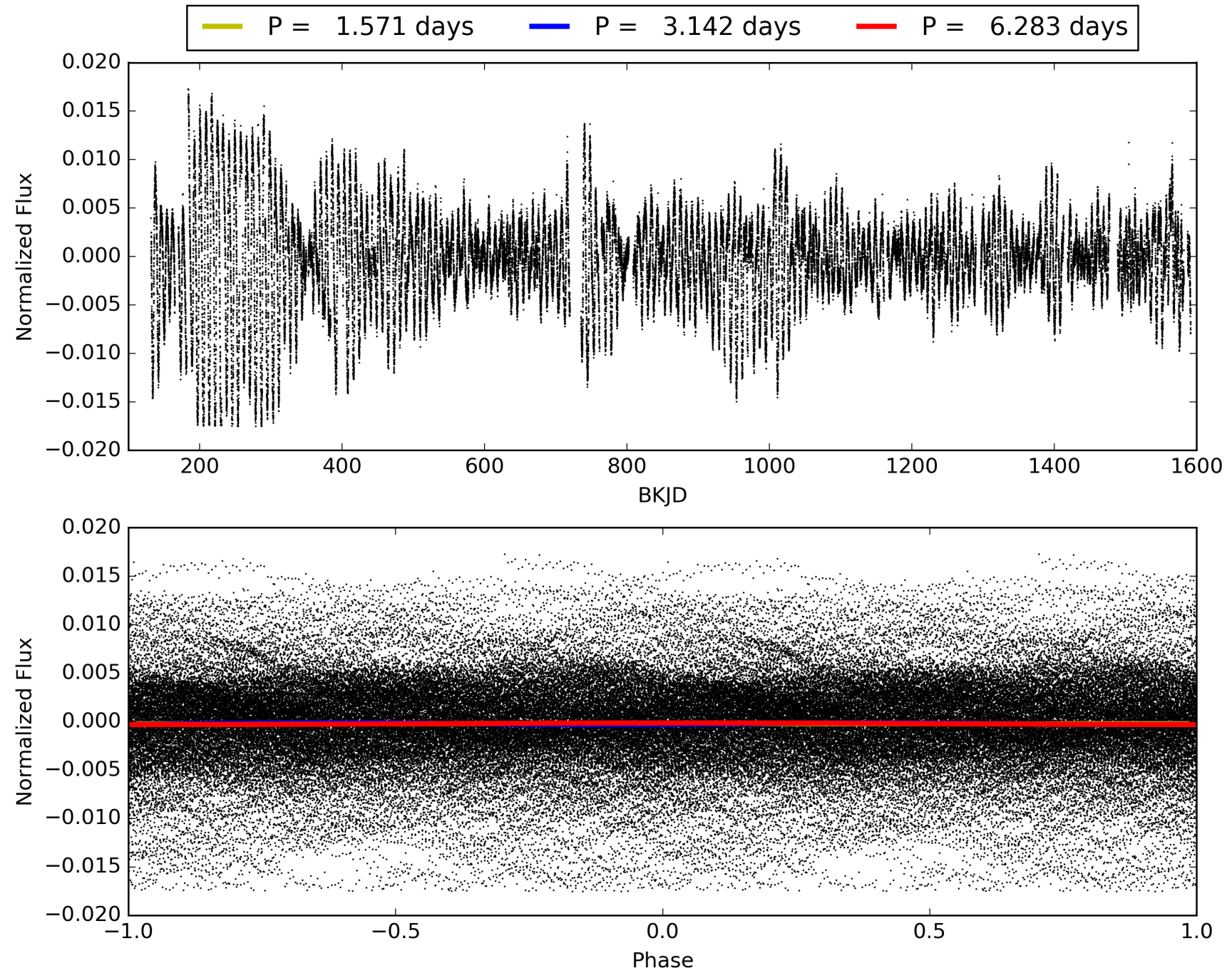
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:24:53 Z

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

TCE 005880537-01, PDC Light Curves

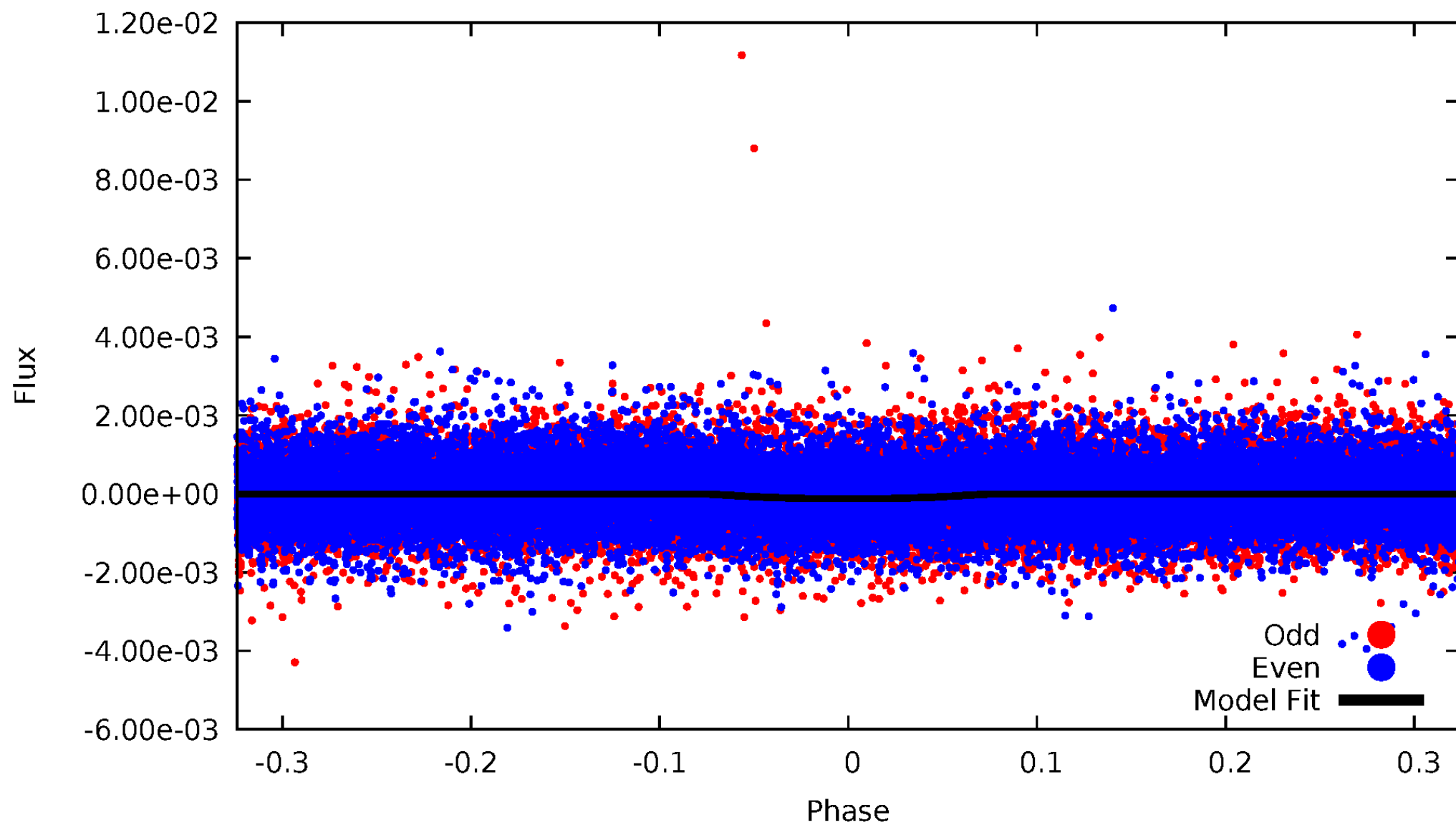


TCE 005880537-01



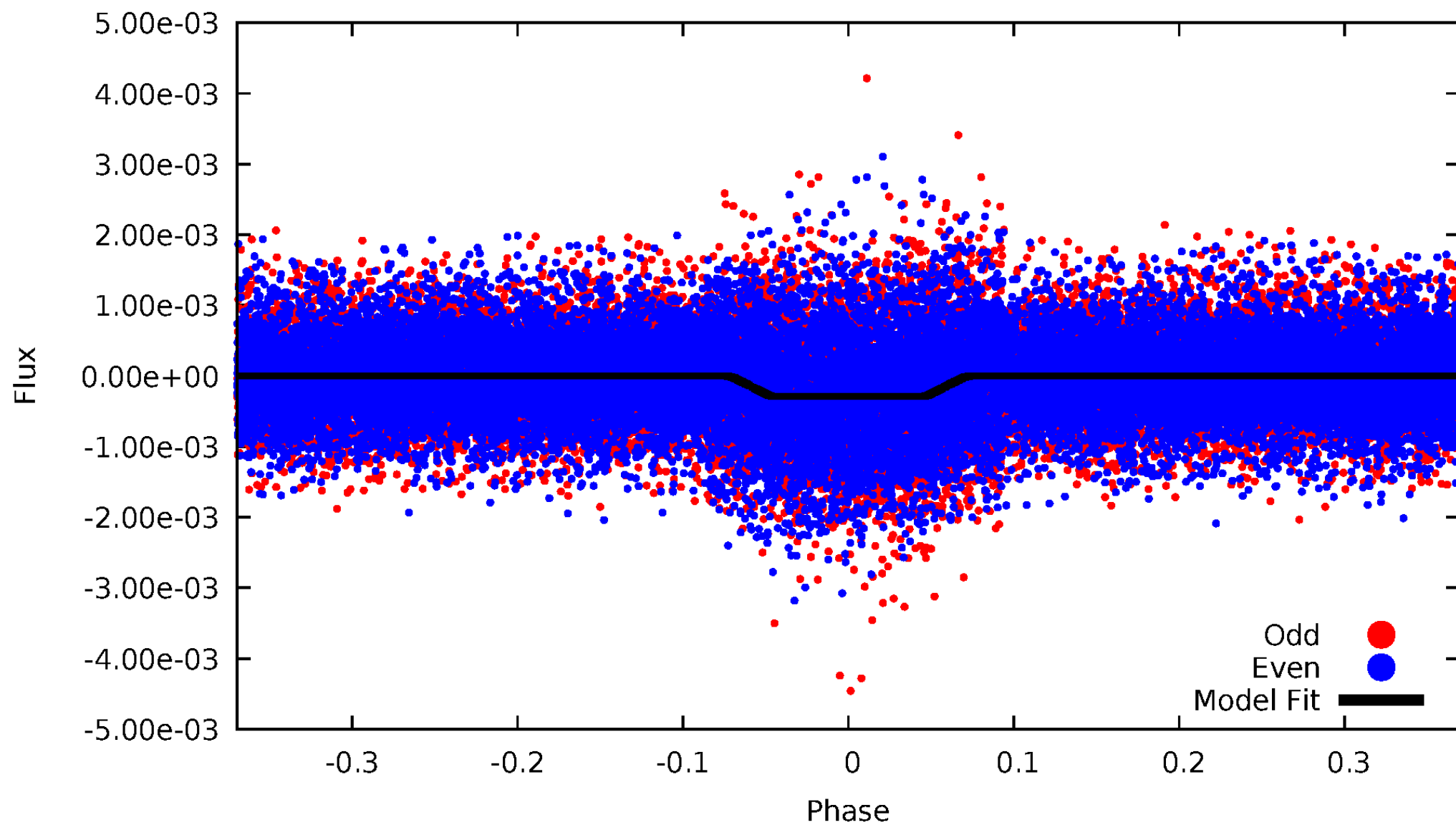
DV Odd/Even

TCE 005880537-01



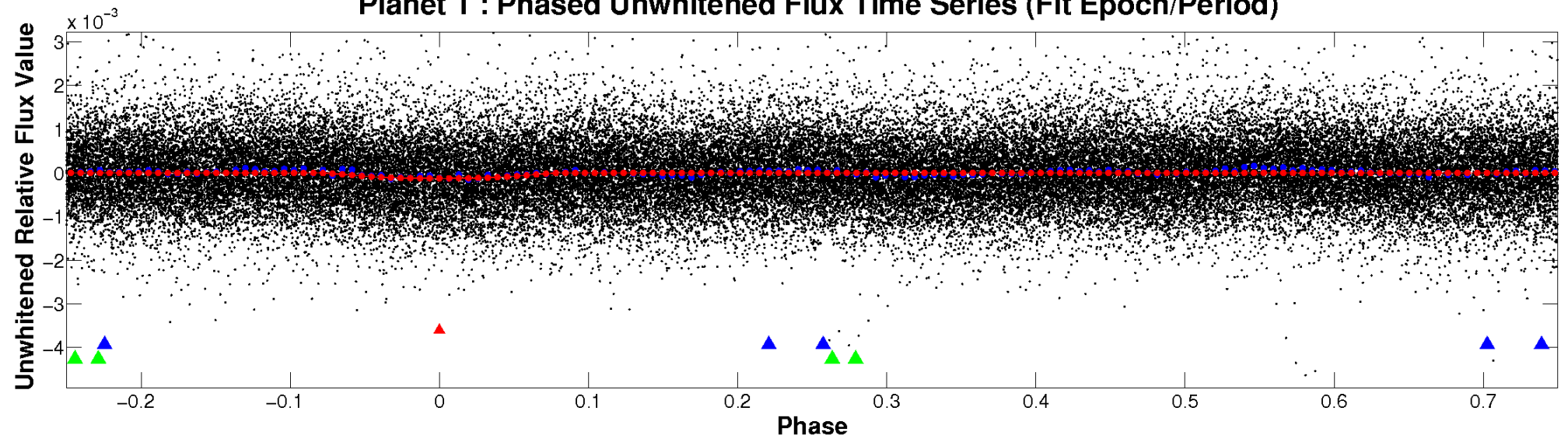
ALT Odd/Even

TCE 005880537-01

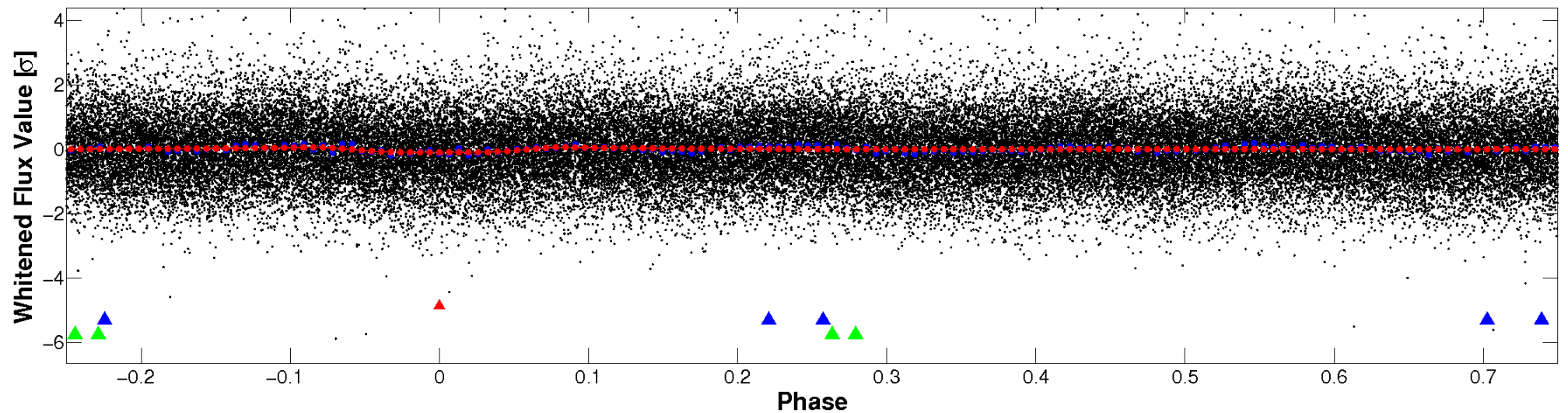


Non-Whitened Vs. Whitened Light Curve

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

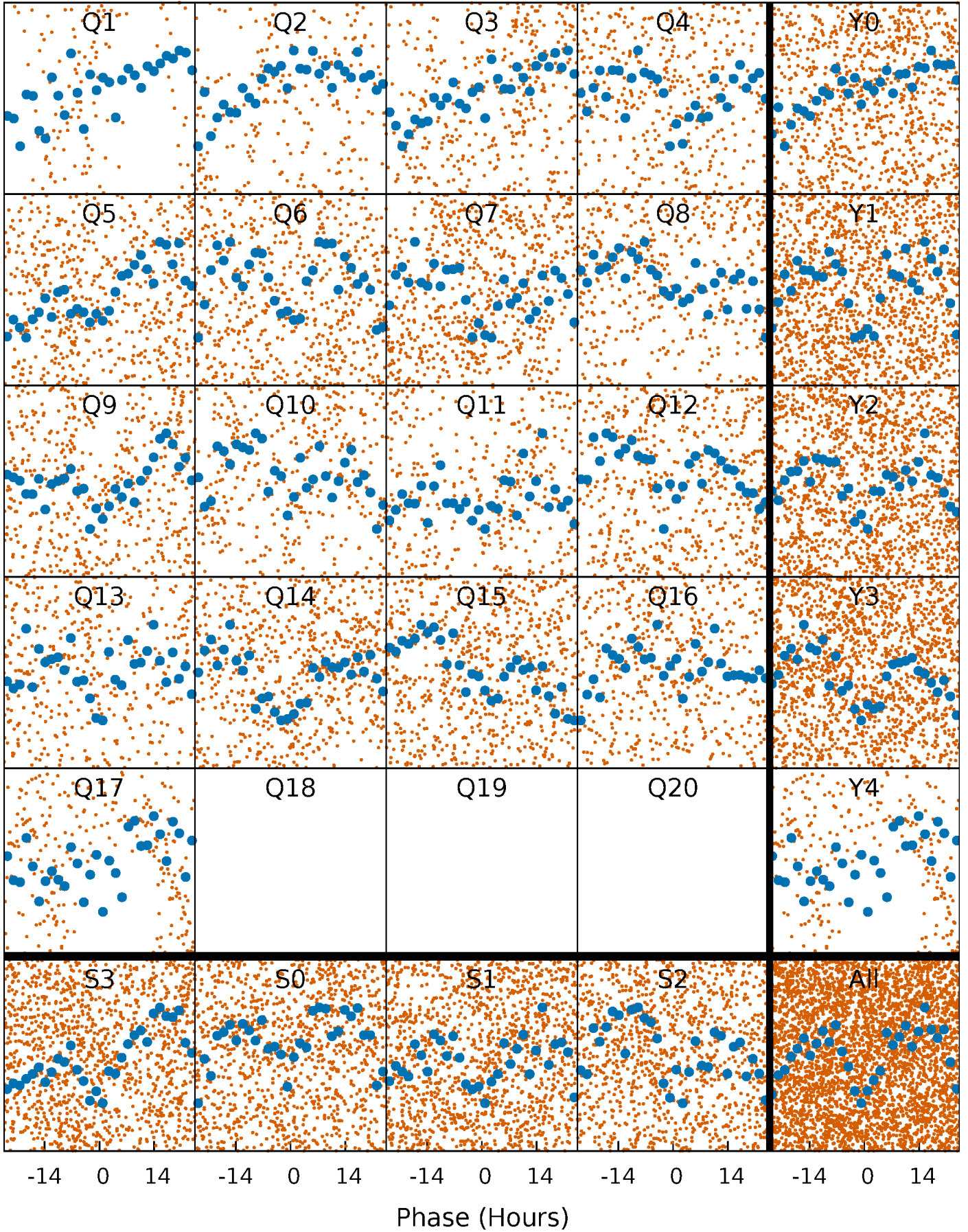


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



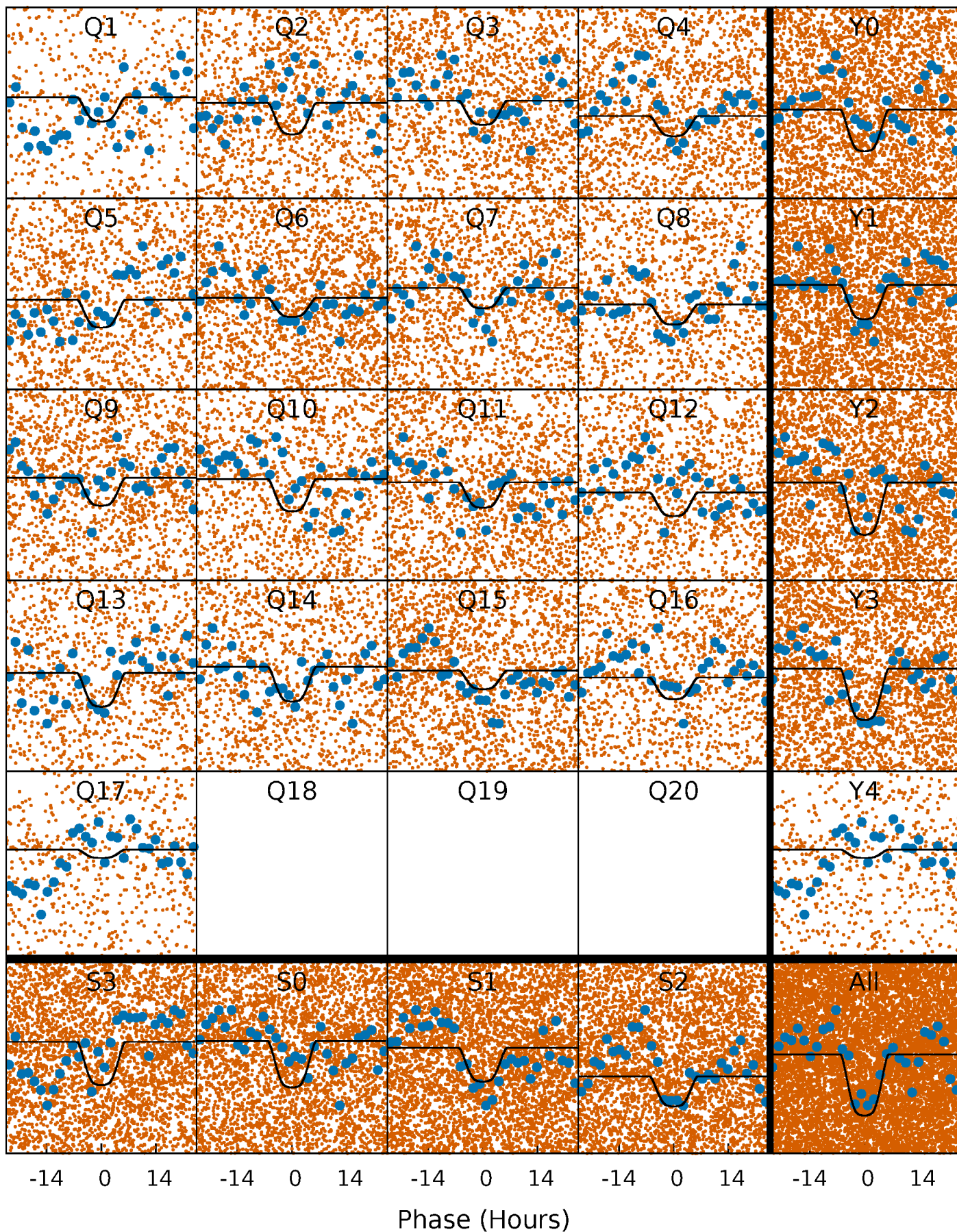
PDC Quarter-Phased Transit Curves

TCE 005880537-01 P= 3.141662 Days $T_0=134.385361$ (BKJD)



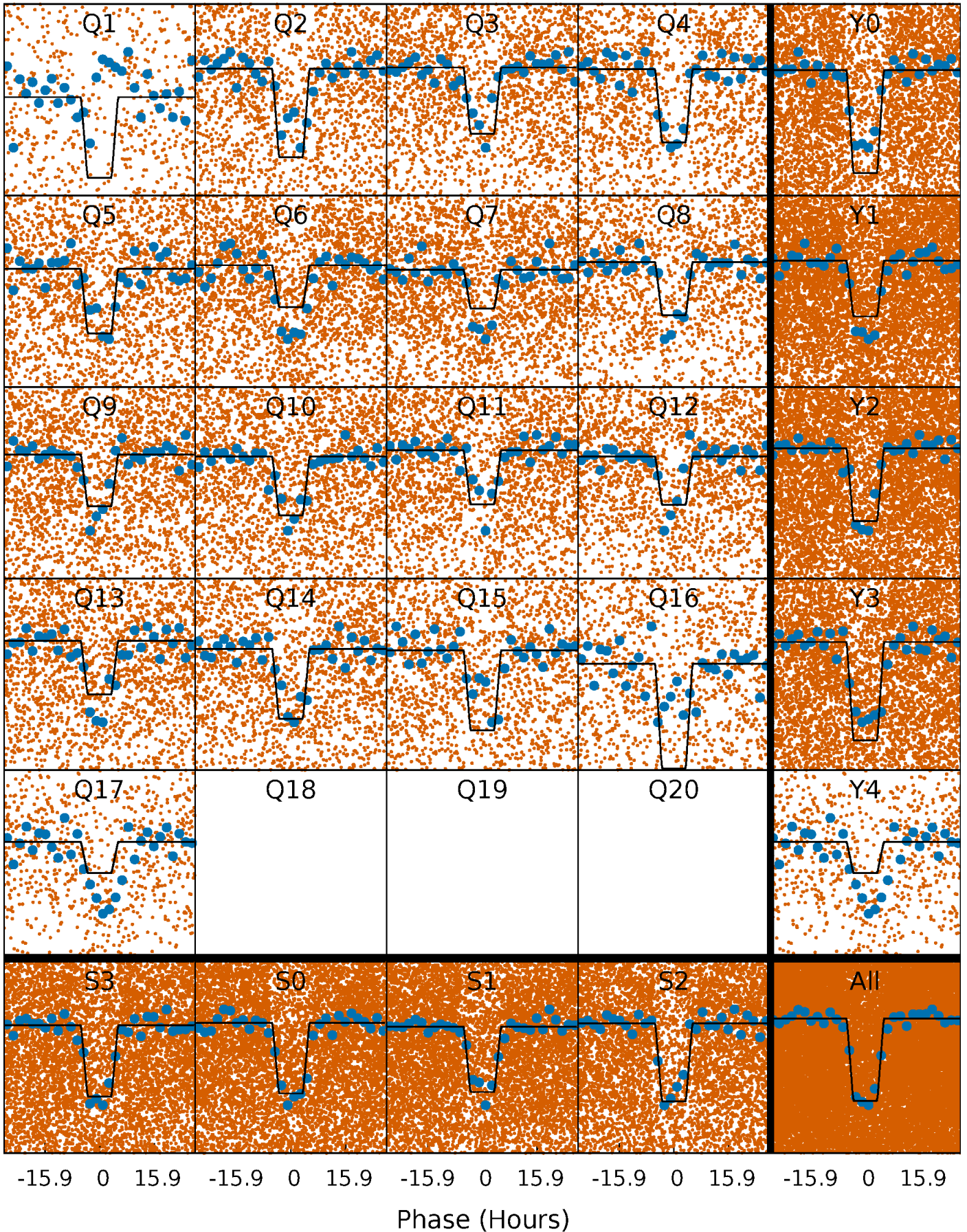
DV Quarter-Phased Transit Curves

TCE 005880537-01 P= 3.141662 Days $T_0=134.385361$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

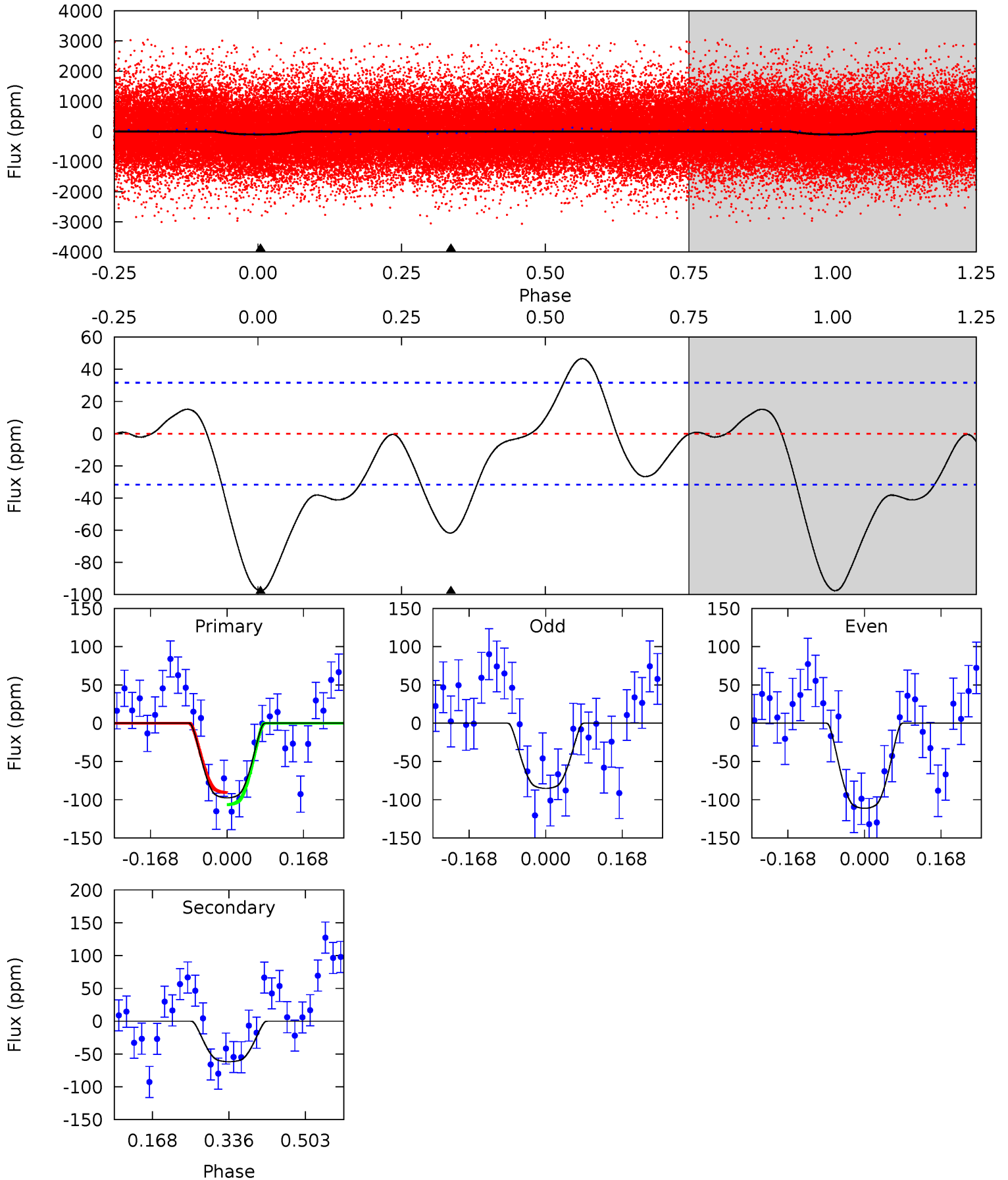
TCE 005880537-01 P= 3.141619 Days $T_0=134.381357$ (BKJD)



DV Model-Shift Uniqueness Test

005880537-01, P = 3.141662 Days, E = 131.243699 Days

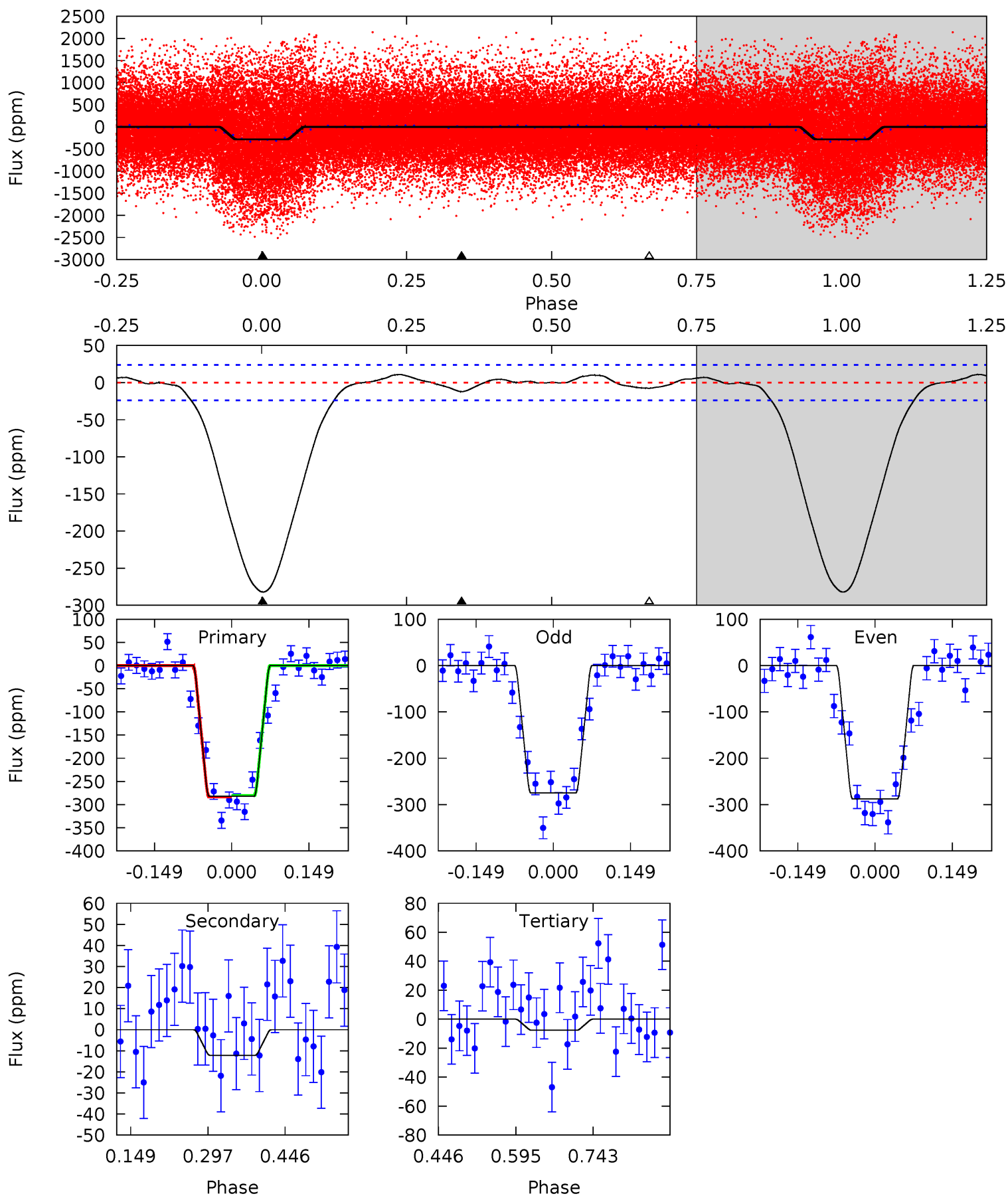
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.7	8.69	0	0	4.45	1.38	3.13	13.7	13.7	8.69	8.69	1.84	1.11	0.32	1.11



Alt Model-Shift Uniqueness Test

005880537-01, P = 3.141619 Days, E = 131.239738 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
53.0	2.28	1.44	0	4.48	1.44	0.91	51.5	53.0	0.84	2.28	1.19	0.93	0.04	0.28



Stellar Parameters For KIC 005880537

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5151^{+153}_{-153}	$4.528^{+0.077}_{-0.063}$	$-0.160^{+0.300}_{-0.300}$	$0.785^{+0.088}_{-0.080}$	$0.758^{+0.098}_{-0.057}$	$2.209^{+0.746}_{-0.468}$
	+3%/-3%	+2%/-1%	+188%/-188%	+11%/-10%	+13%/-8%	+34%/-21%
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 005880537-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-62 ± 7	$1.24^{+0.14}_{-0.13}$	1434^{+54}_{-60}	4037^{+194}_{-180}	33^{+9}_{-7}
Alt.	-12 ± 5	$1.47^{+0.15}_{-0.14}$	1435^{+59}_{-63}	2955^{+182}_{-277}	$4.617^{+2.387}_{-2.150}$

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 $A_{obs} \gg 1.0$

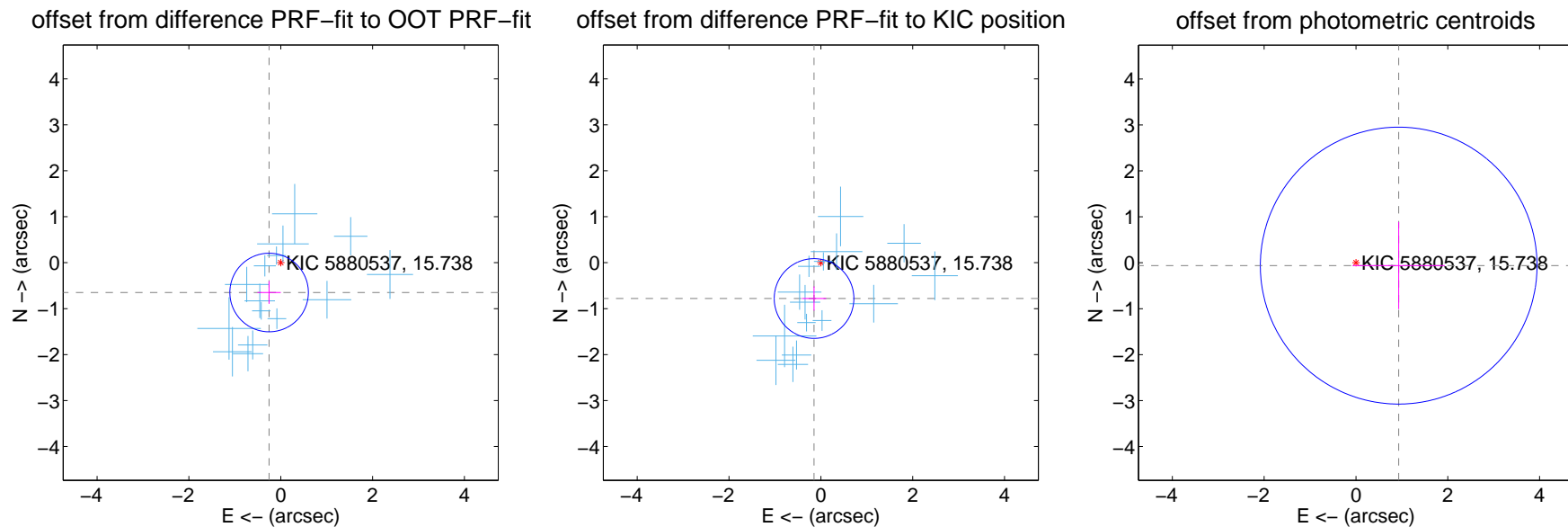
DV Centroid Data

Supplemental centroid analysis for 005880537-01. Kepler magnitude: 15.74. Transit SNR 8.30

There are 15 quarters with good PRF difference image offsets

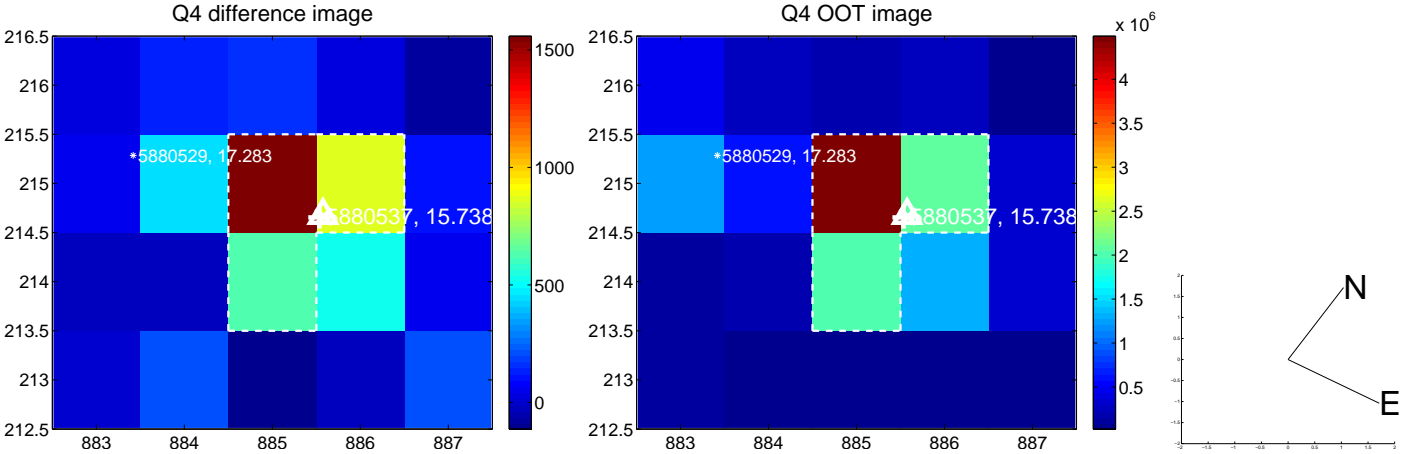
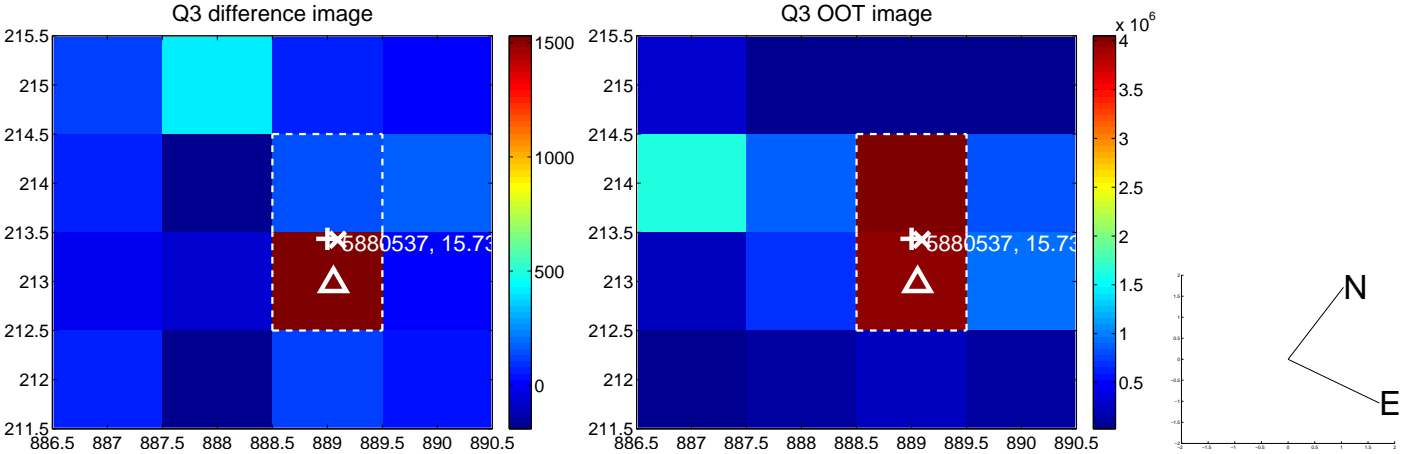
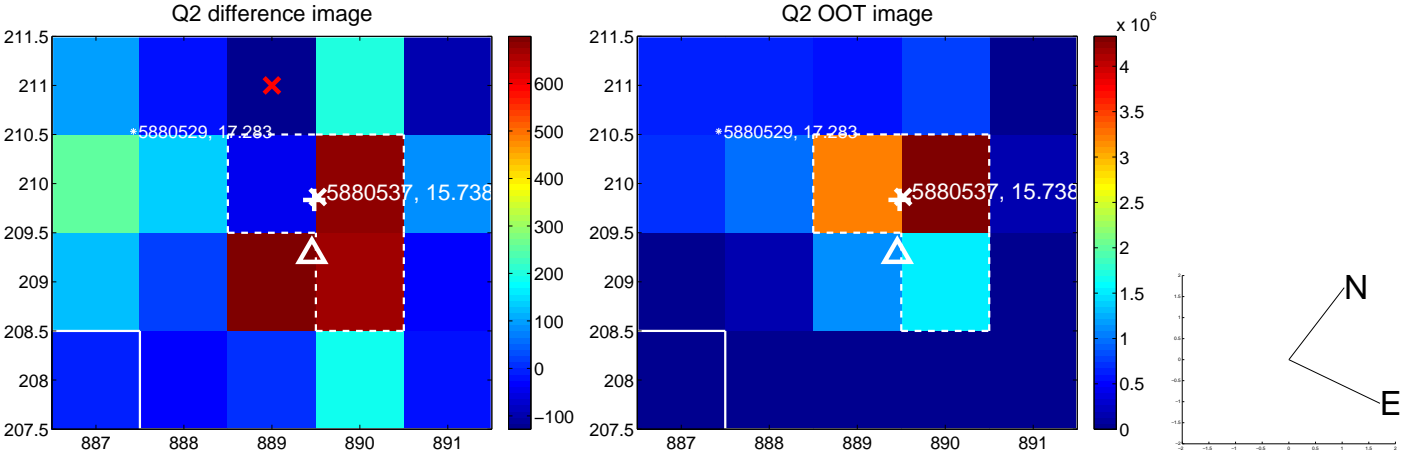
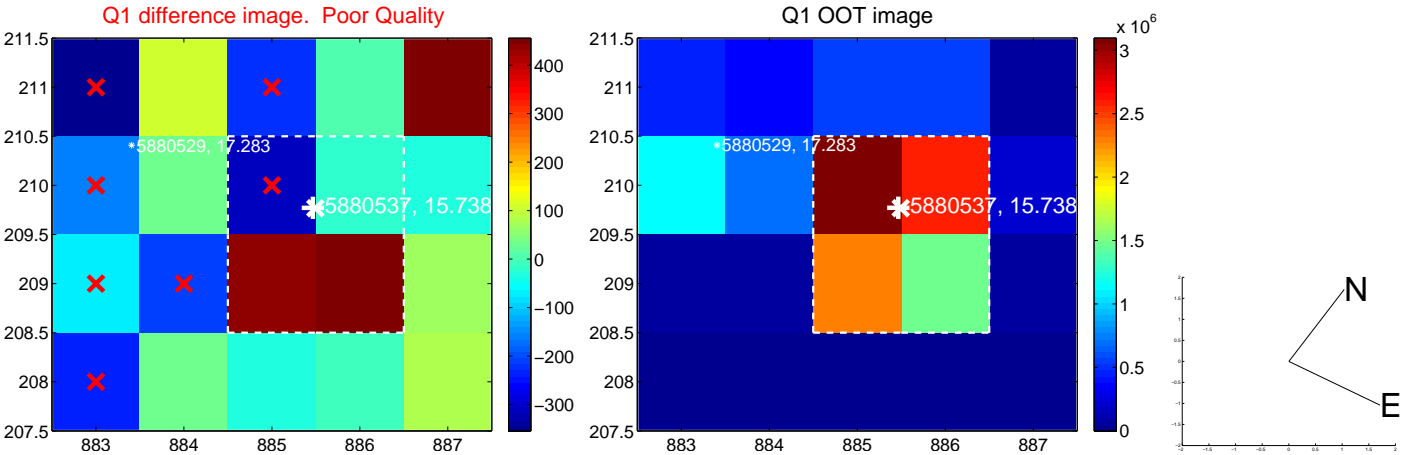
The direct PRF centroid is offset from the target star catalog position by about 0.11 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.697 ± 0.285	2.44	0.253 ± 0.254	-0.649 ± 0.245
PRF-fit source offset from KIC position	0.793 ± 0.289	2.74	0.148 ± 0.264	-0.780 ± 0.263
photometric centroid source offset	0.93 ± 1.00	0.93	-0.93 ± 1.00	-0.06 ± 0.95

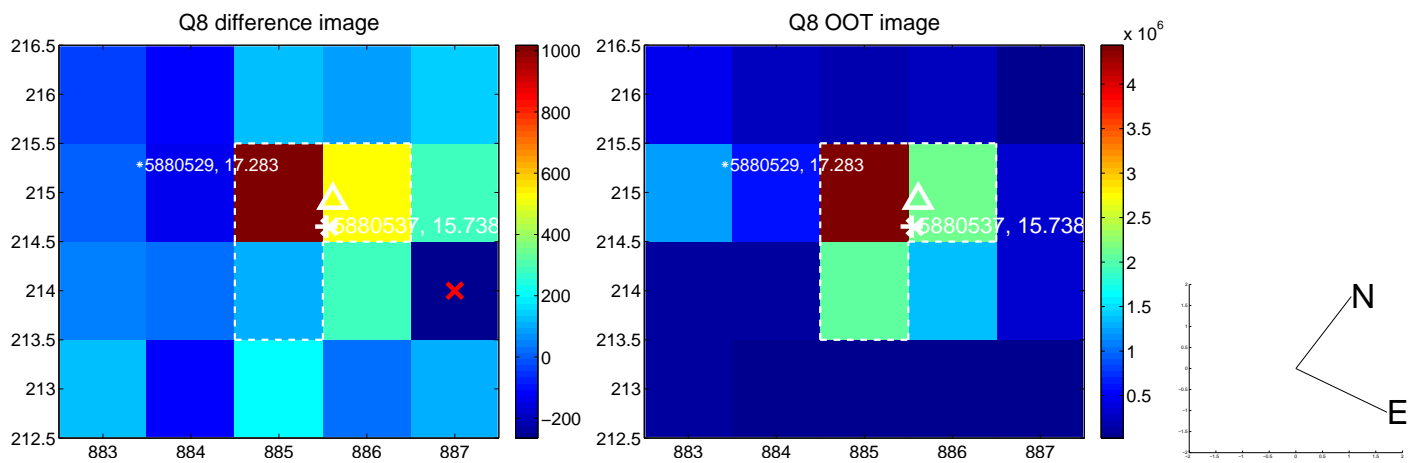
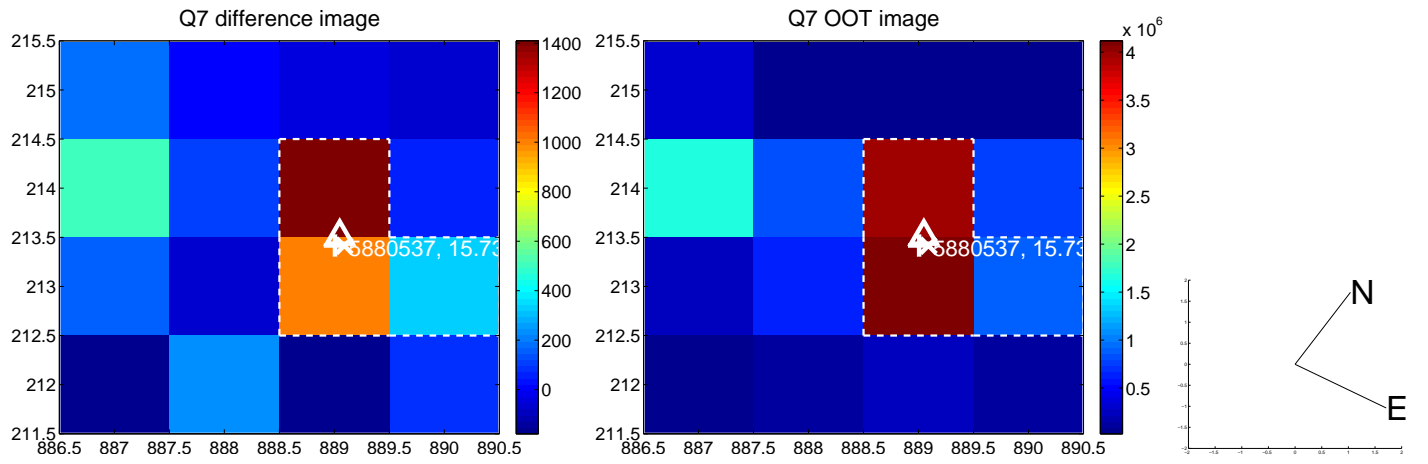
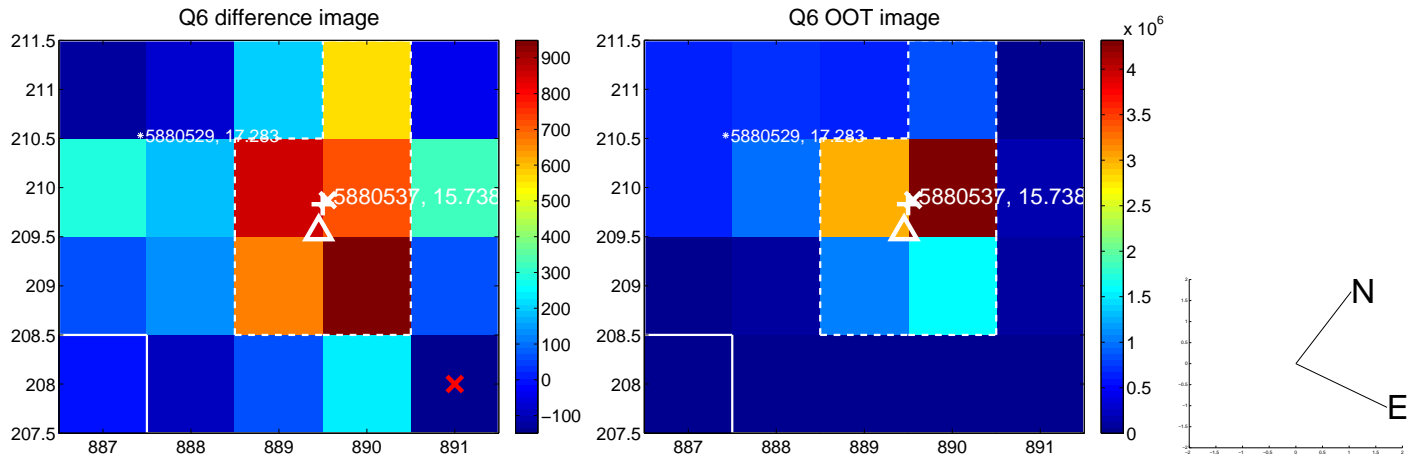
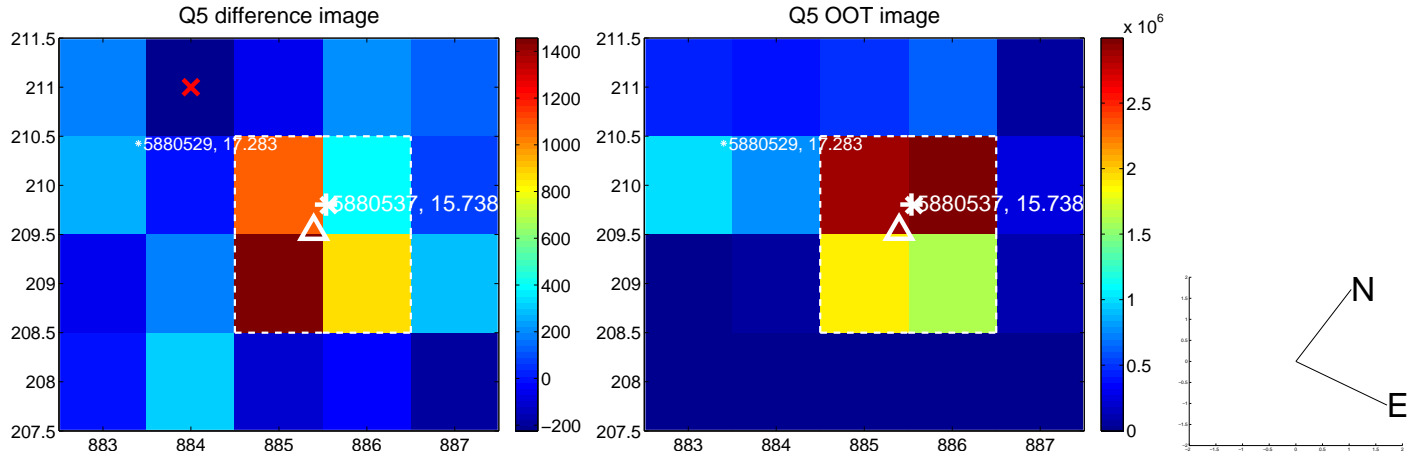


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

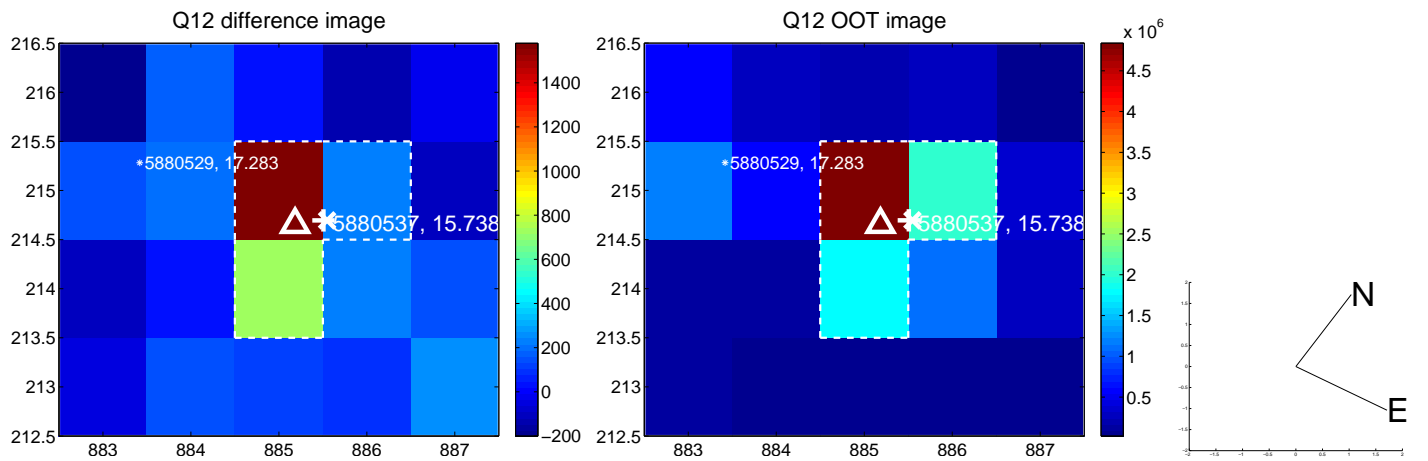
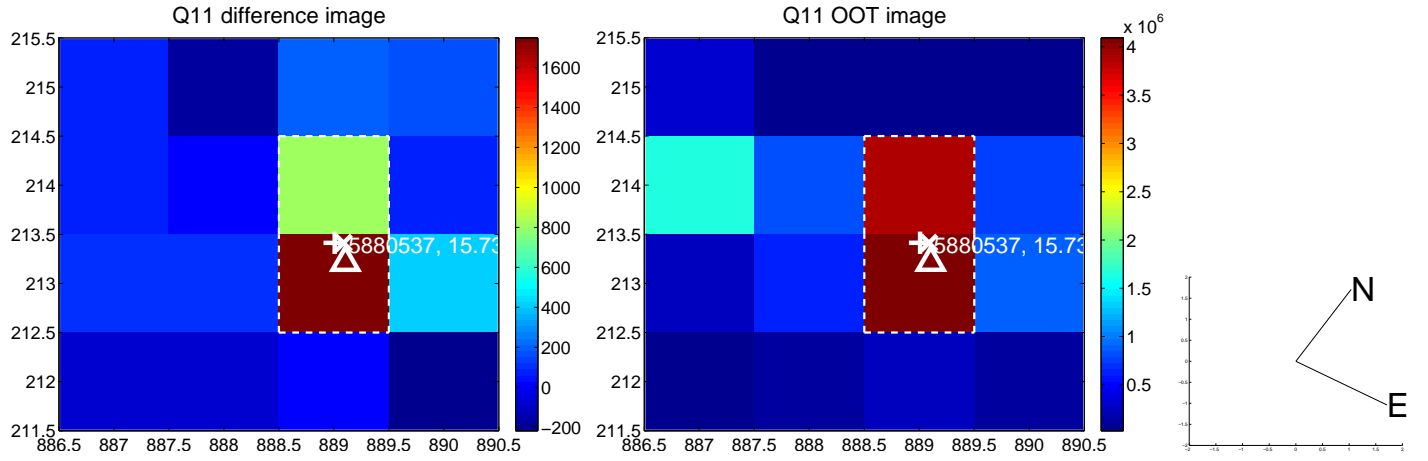
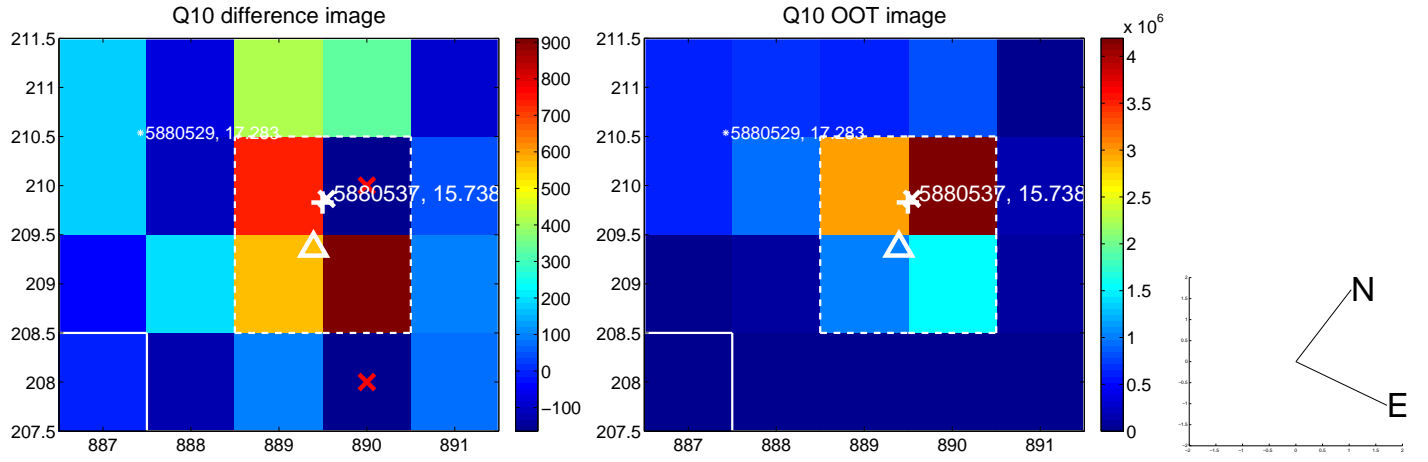
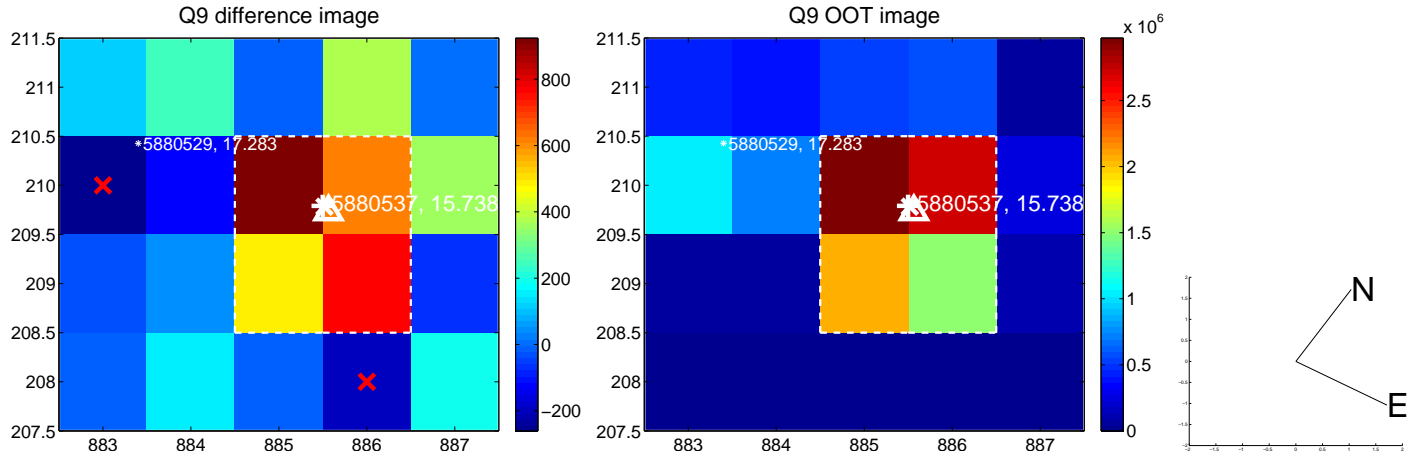
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



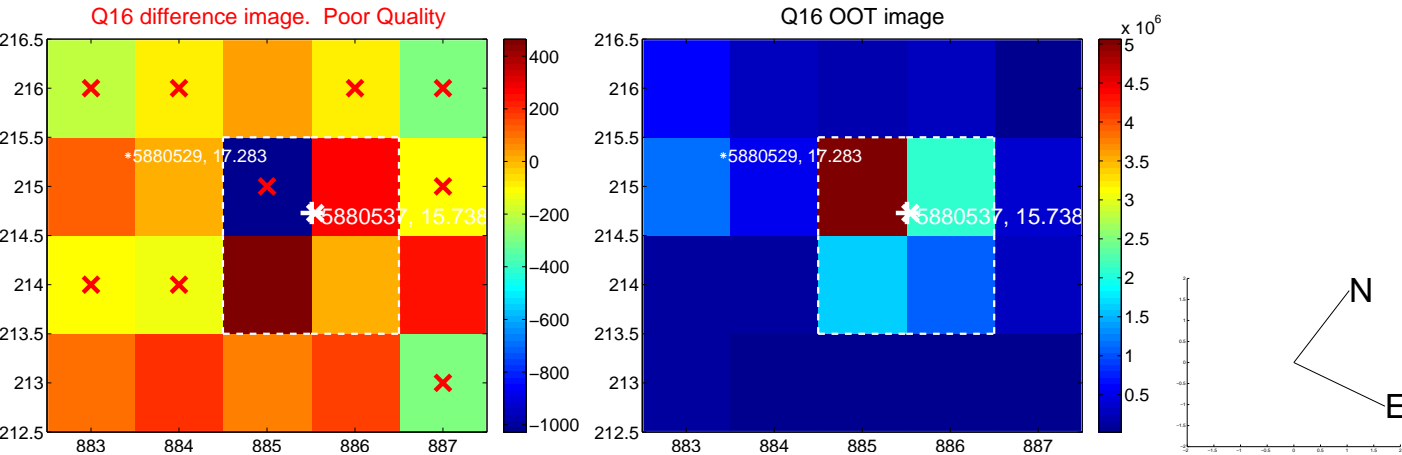
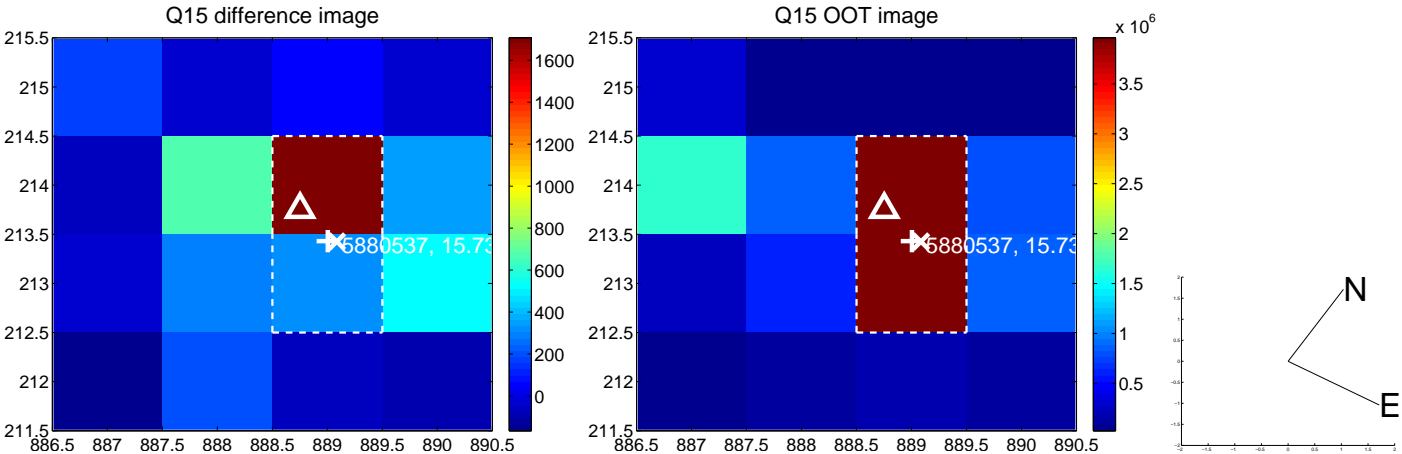
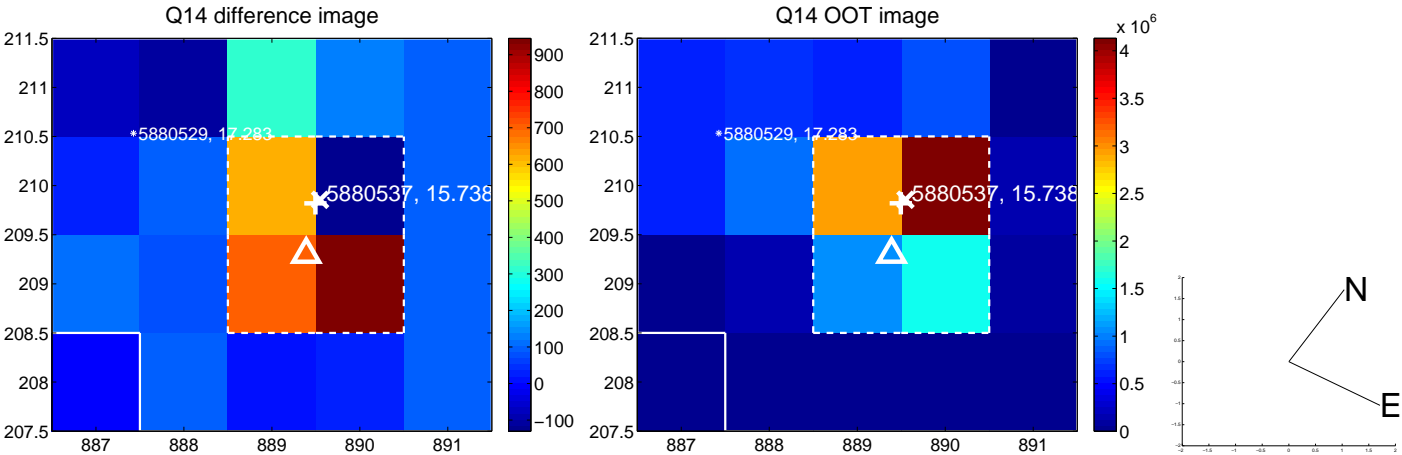
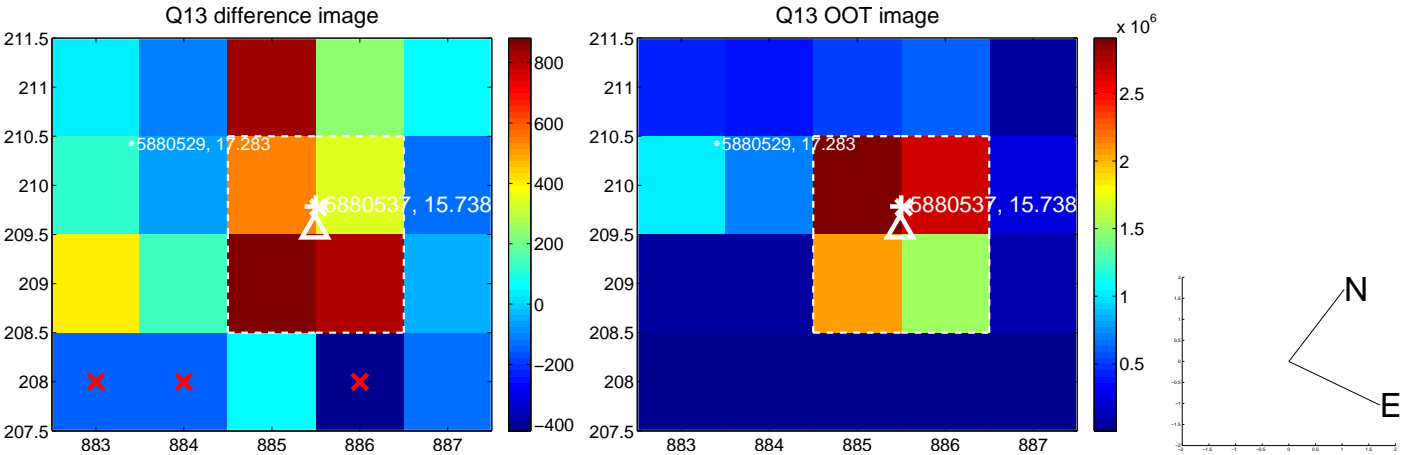
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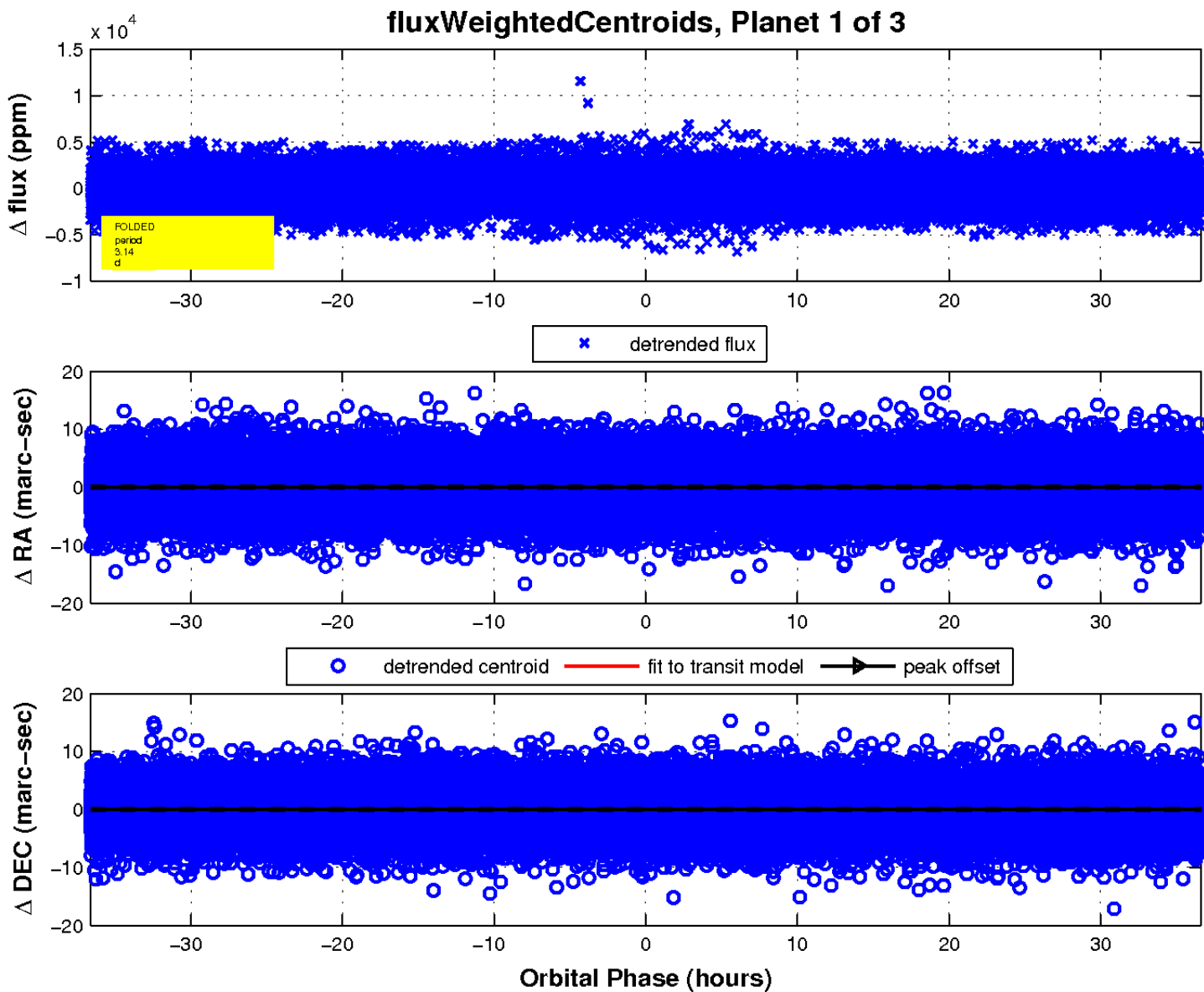
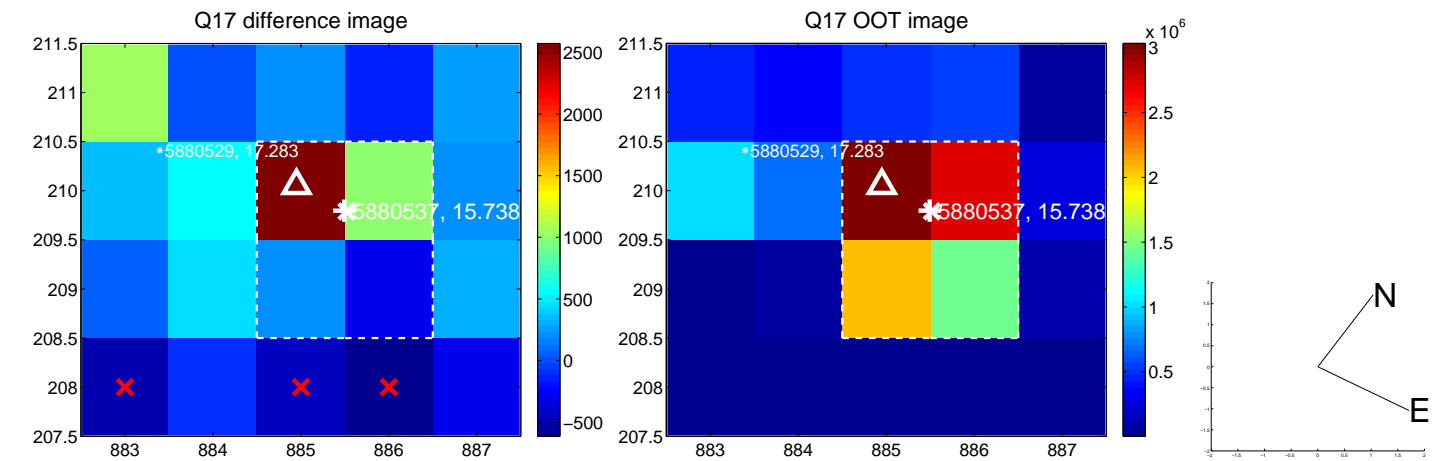
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white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

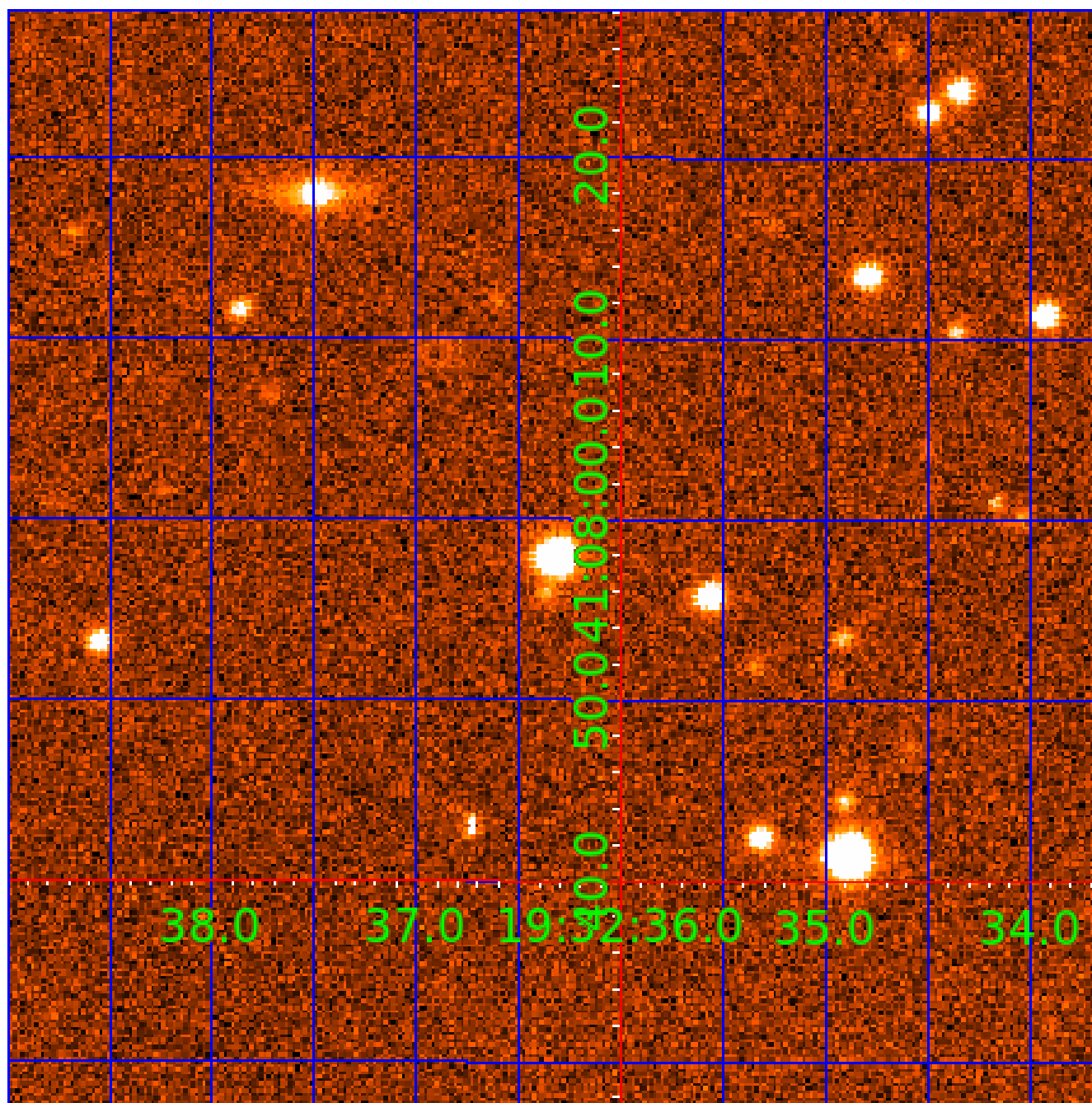


white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005880537

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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Robovetter Results

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005880537-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—INCONSISTENT_TRANS— CENT_FEW_DIFFS

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

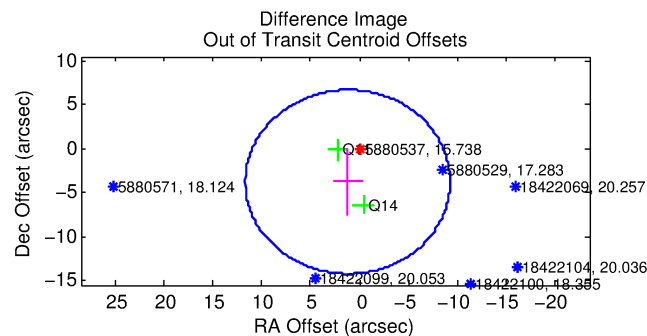
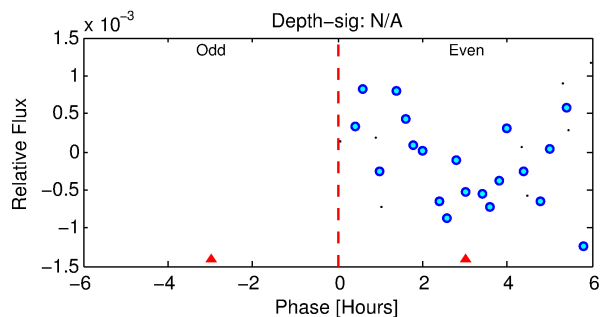
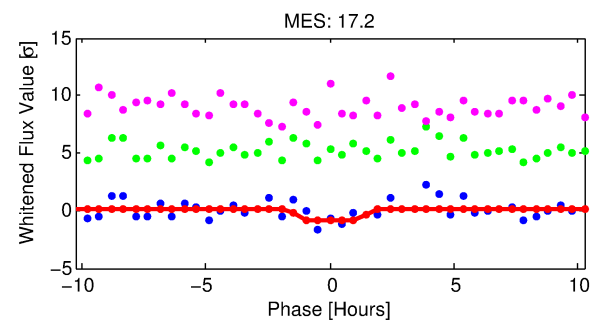
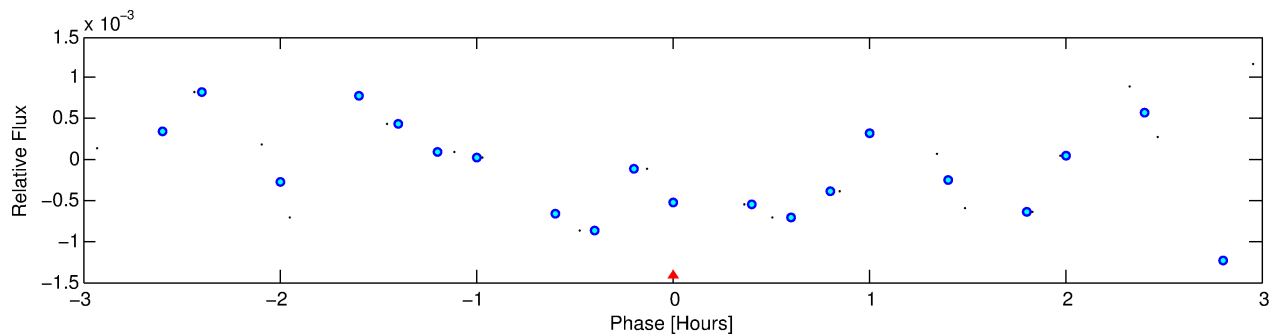
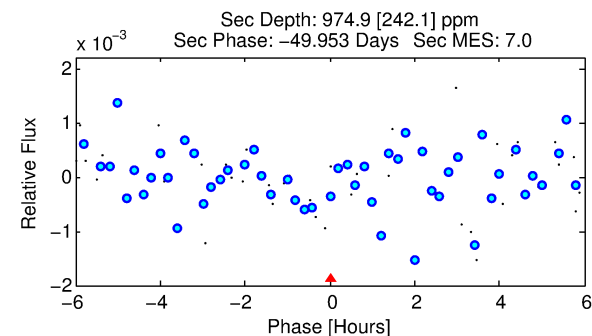
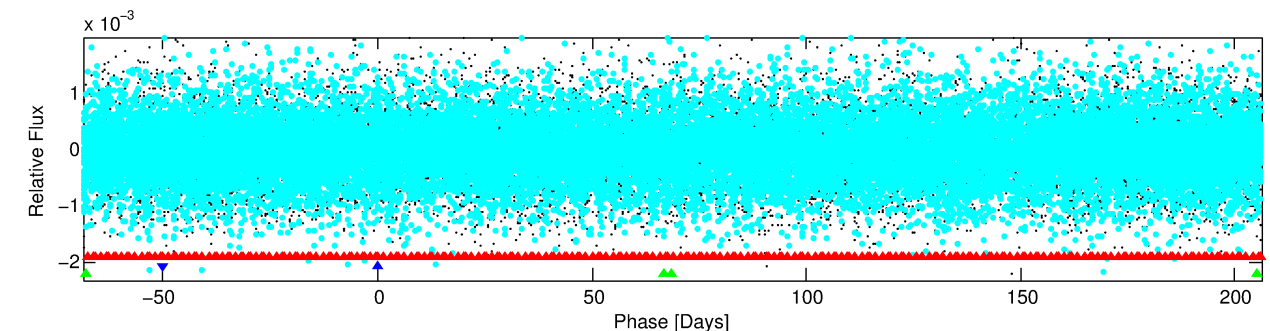
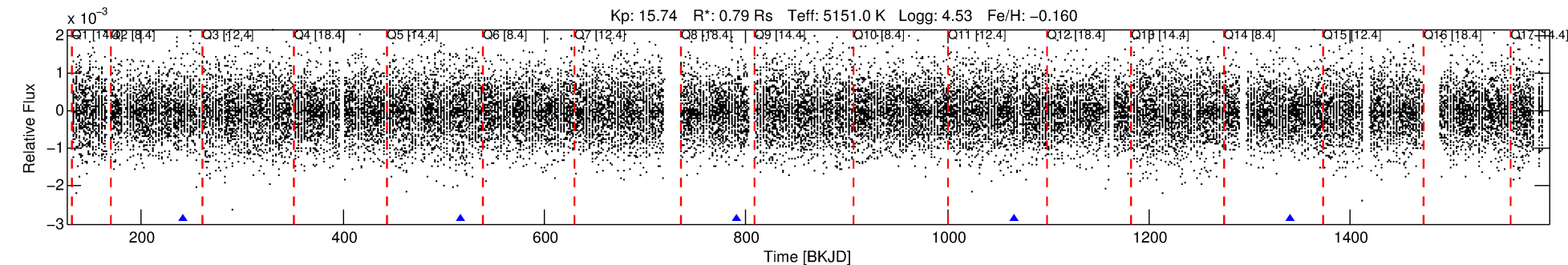
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005880537-02

No Significant Match Found

DV One-Page Summary

KIC: 5880537 Candidate: 2 of 3 Period: 274.838 d



TPS TCE Results:

Period = 274.83819 d
Epoch = 240.4968 BKJD

DV fit results are unavailable

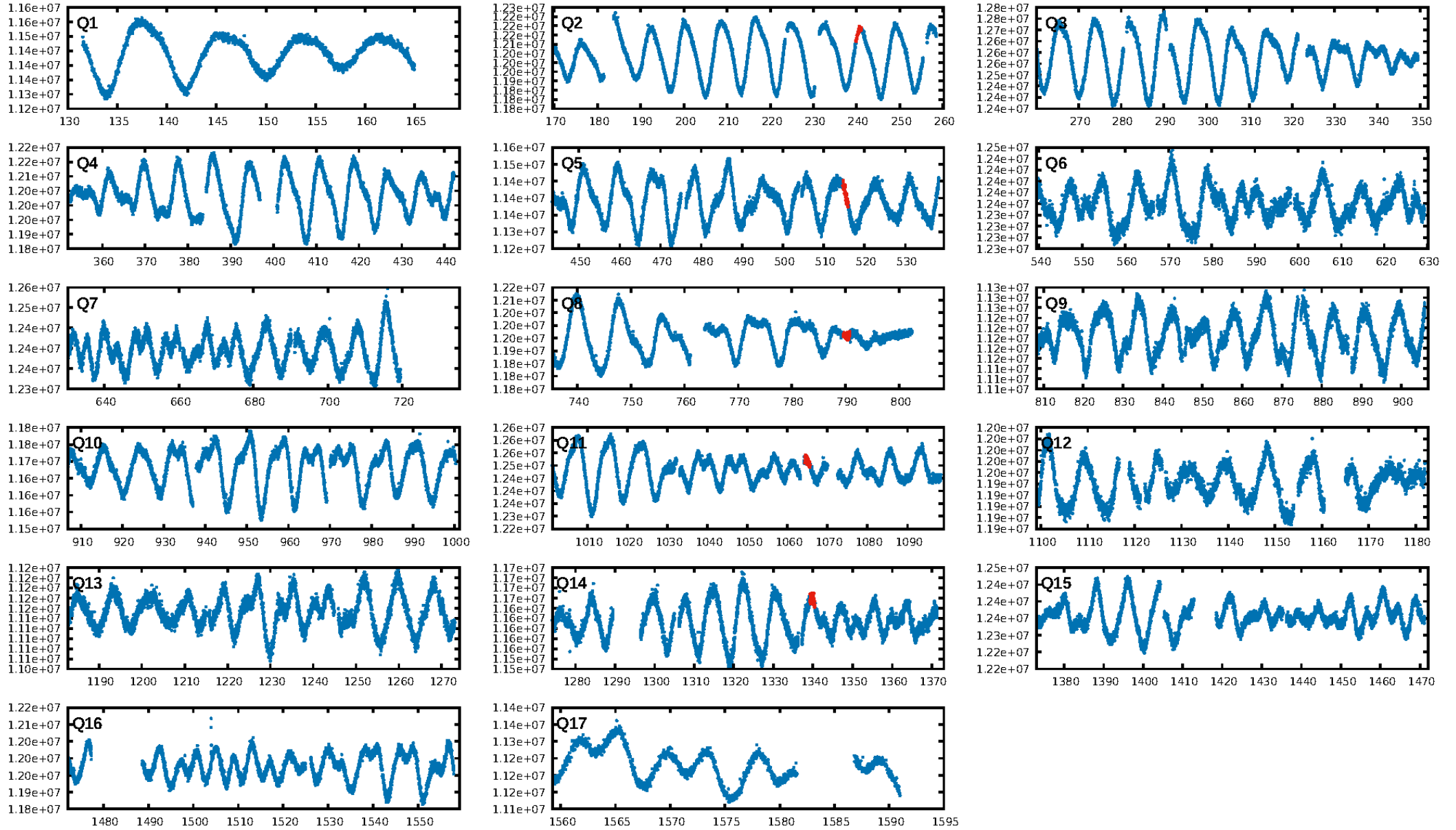
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [337.17σ]
LongPeriod-sig: 100.0% [120.59σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.29e-22
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -1.421
Centroid-sig: 75.0%
Centroid-so: 238.036 arcsec [0.50σ]
OotOffset-rm: 3.962 arcsec [1.14σ]
KicOffset-rm: 4.100 arcsec [1.15σ]
OotOffset-st: 1/1/0/0 [2]
KicOffset-st: 1/1/0/0 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.33 [1/3]

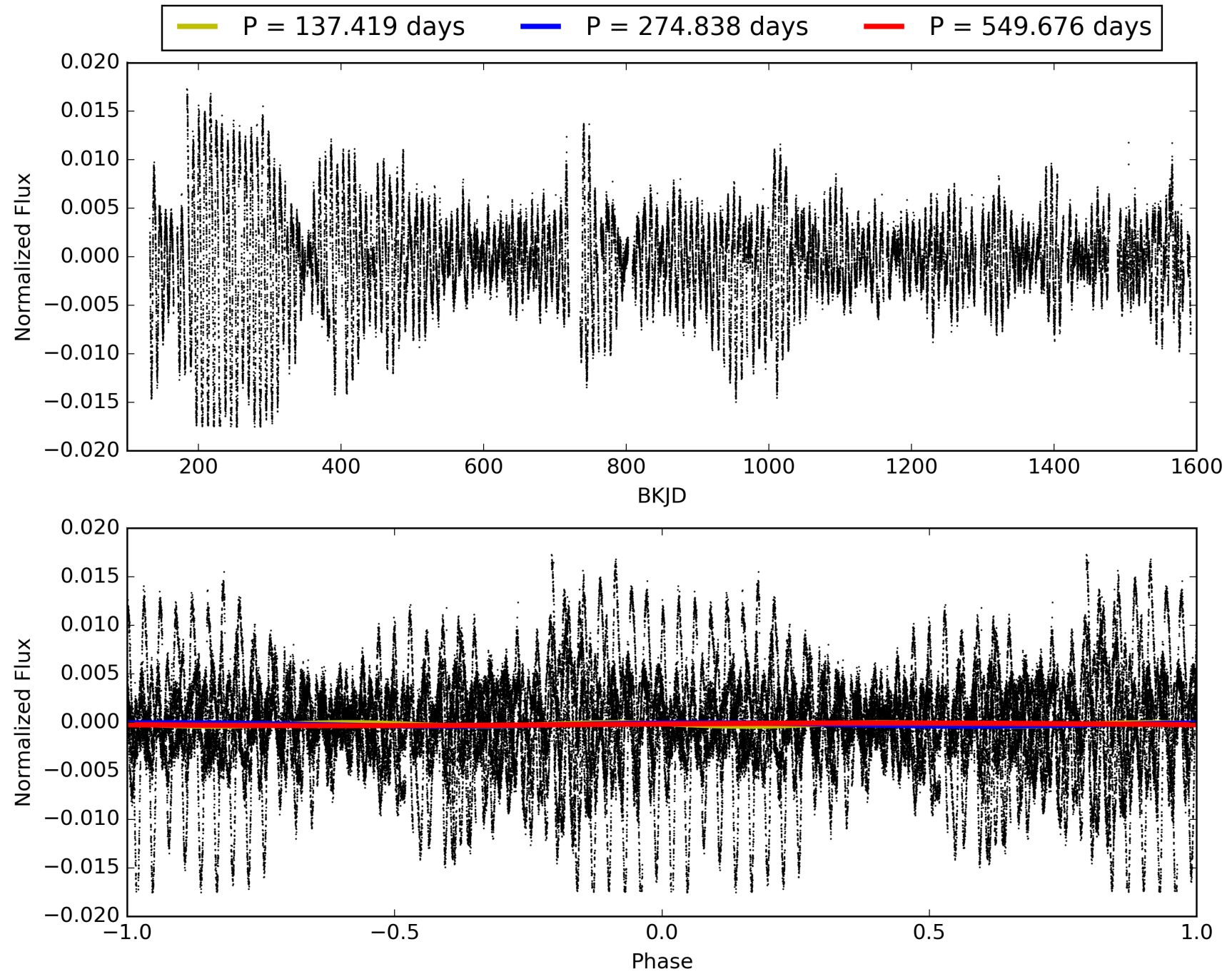
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:25:17 Z

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

TCE 005880537-02, PDC Light Curves

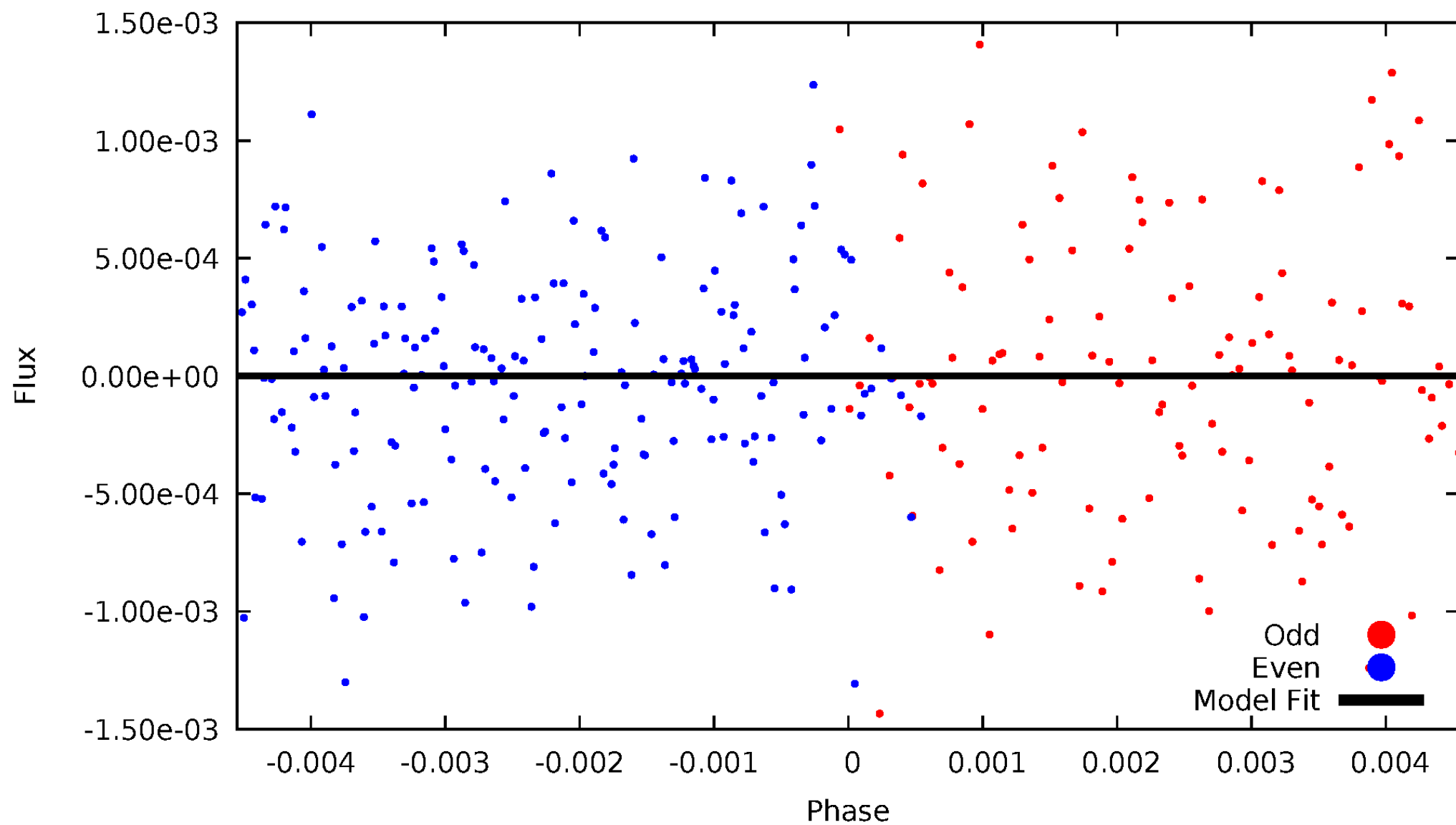


TCE 005880537-02



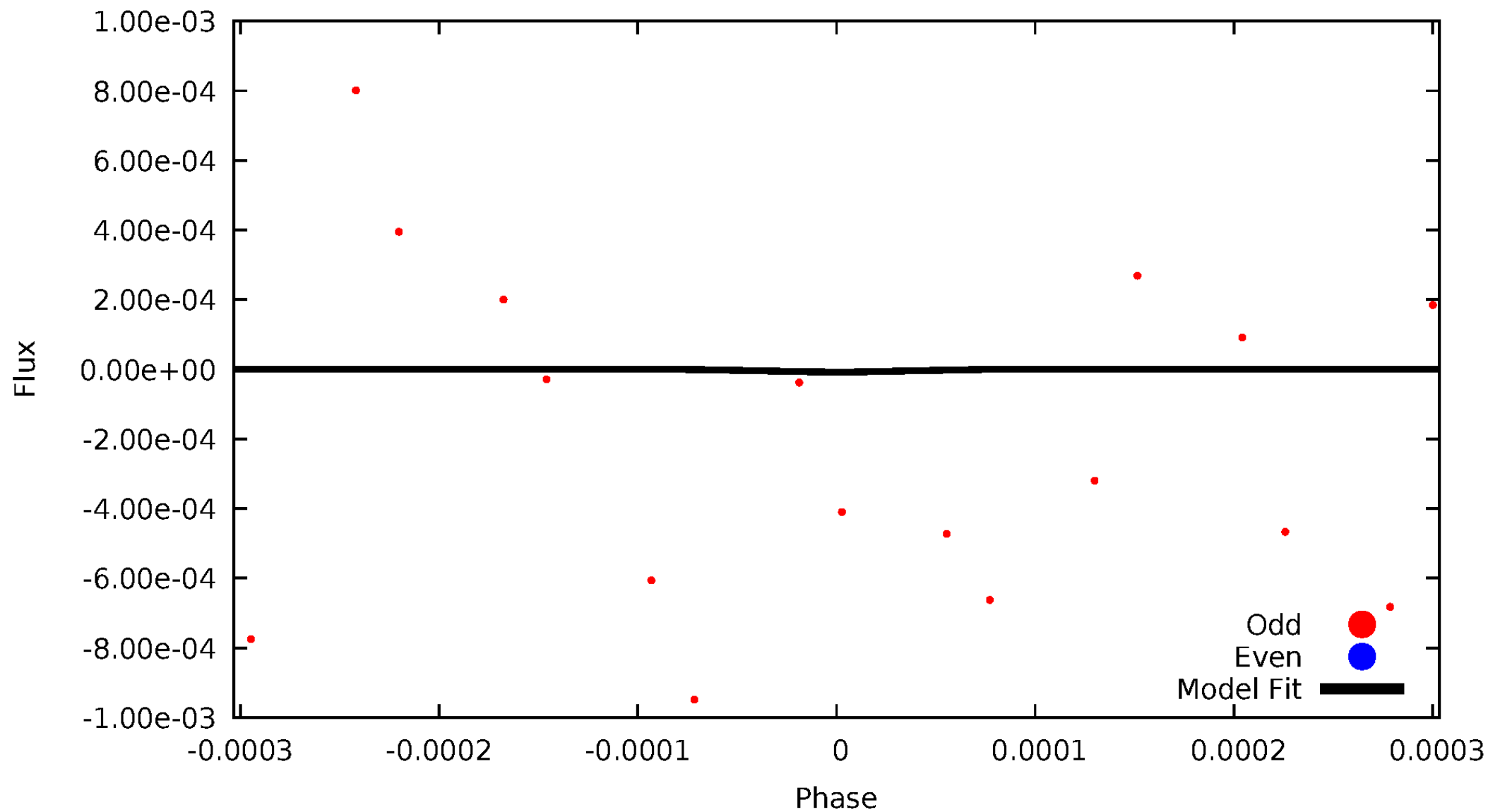
DV Odd/Even

TCE 005880537-02



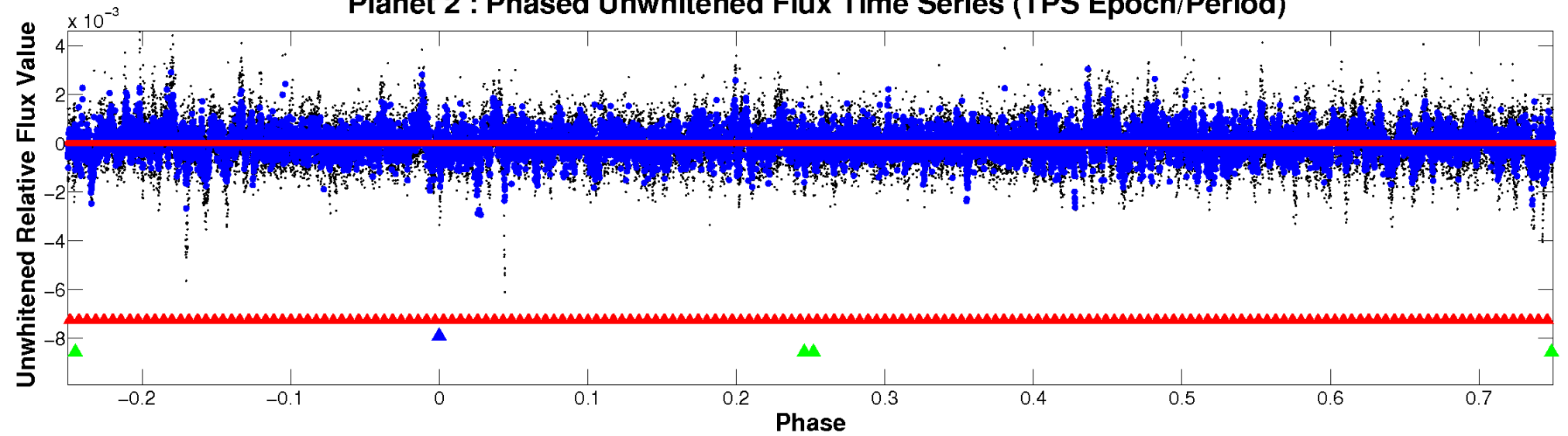
ALT Odd/Even

TCE 005880537-02



Non-Whitened Vs. Whitened Light Curve

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

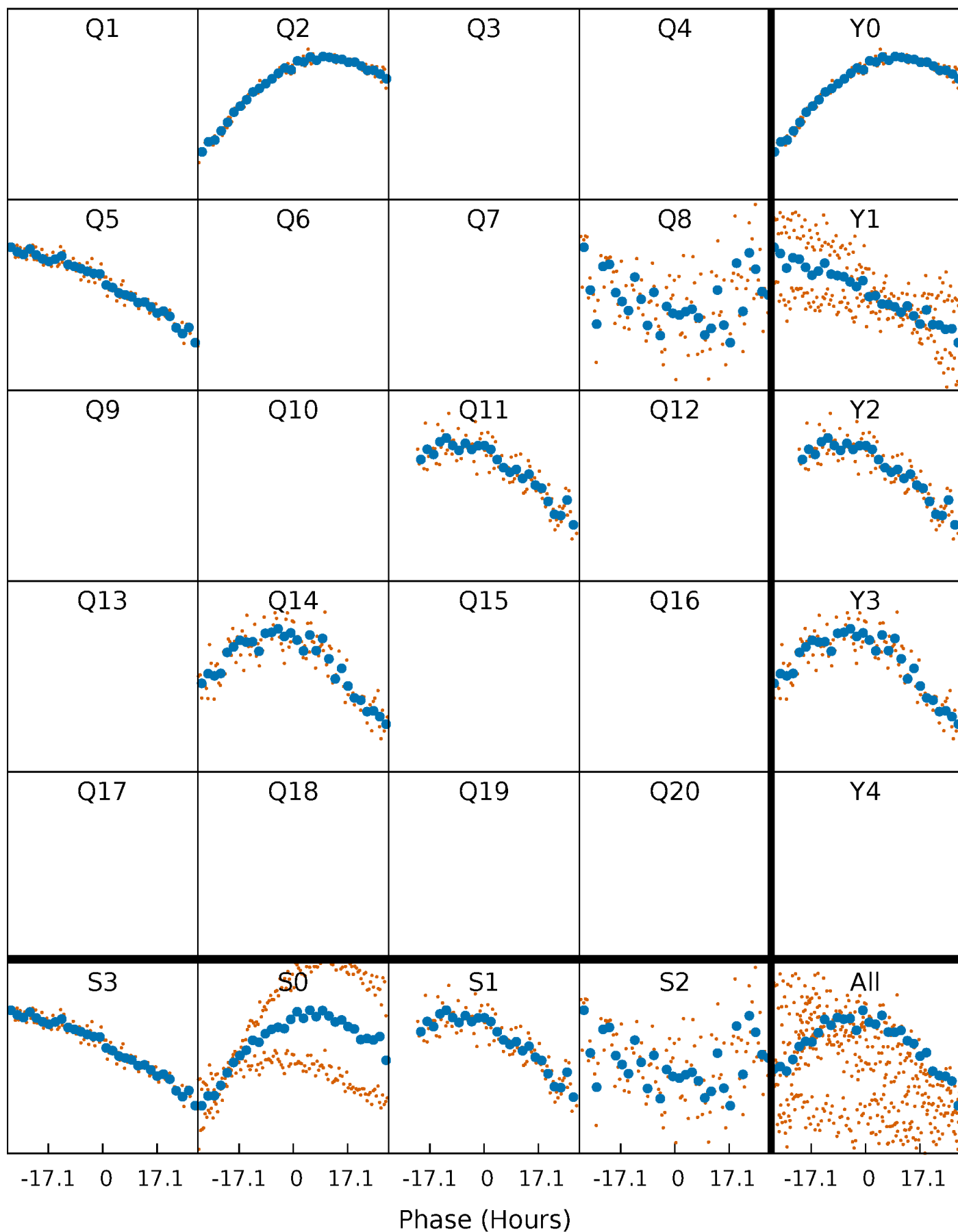


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



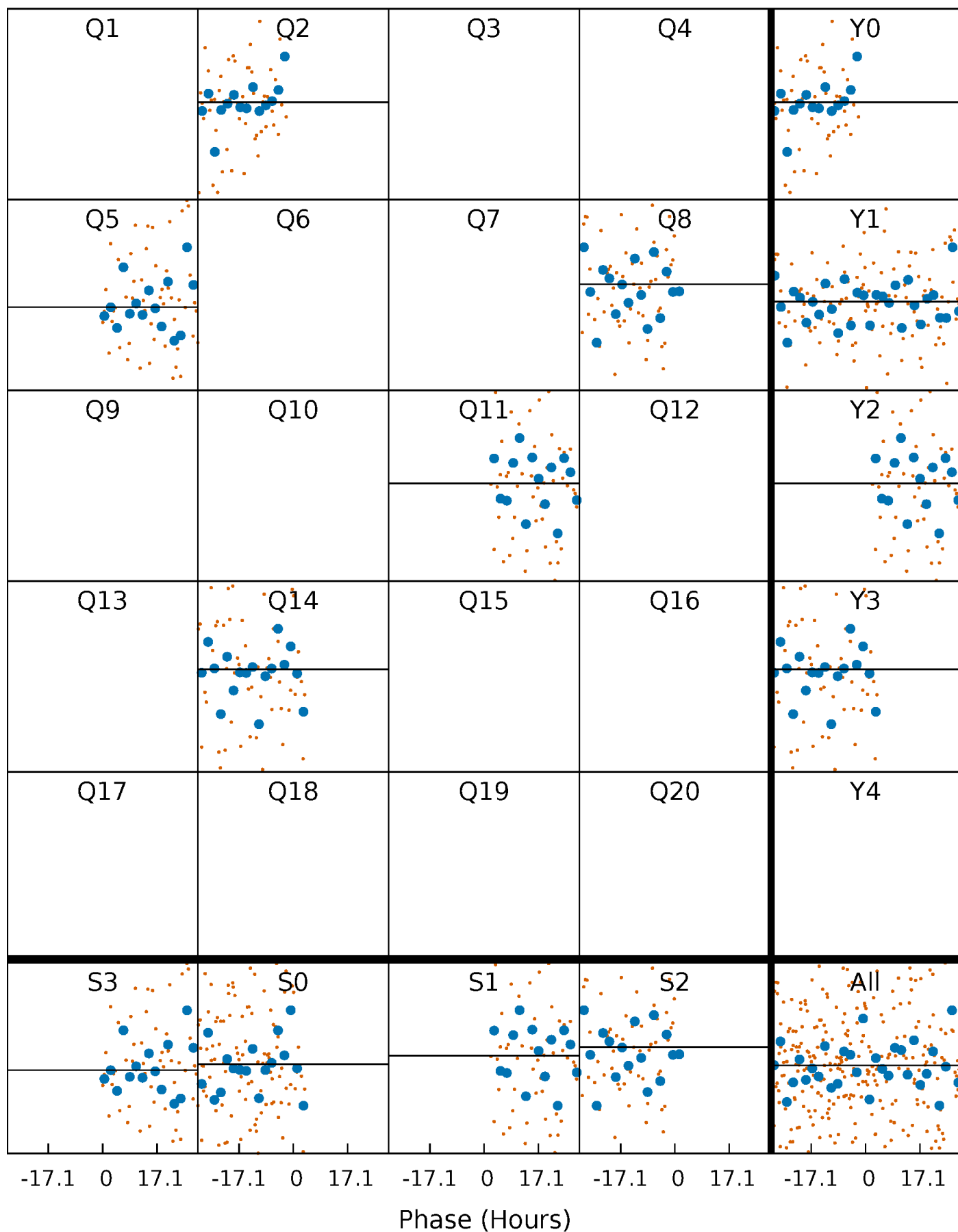
PDC Quarter-Phased Transit Curves

TCE 005880537-02 P=274.838193 Days $T_0=240.496792$ (BKJD)



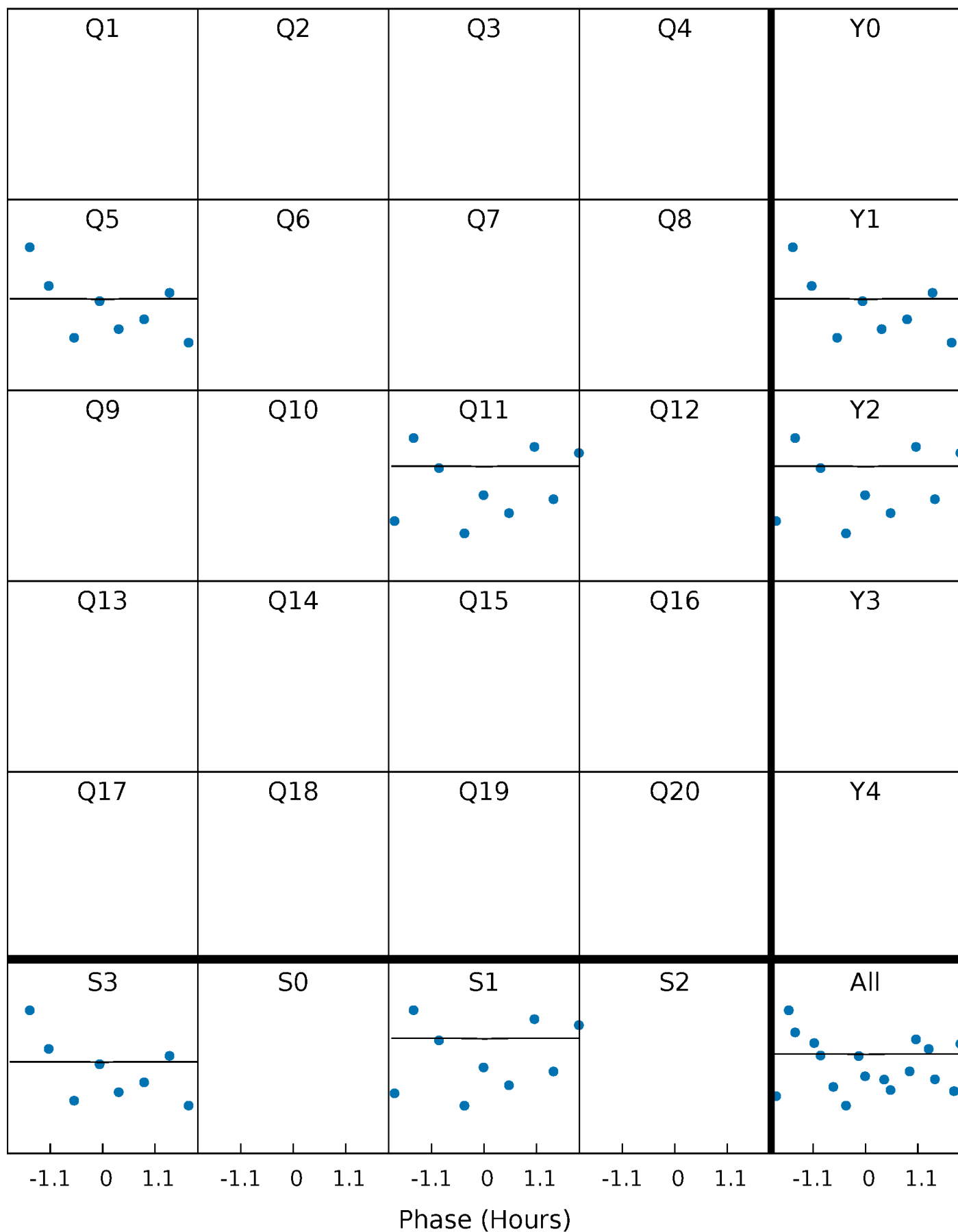
DV Quarter-Phased Transit Curves

TCE 005880537-02 P=274.838193 Days $T_0=240.496792$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

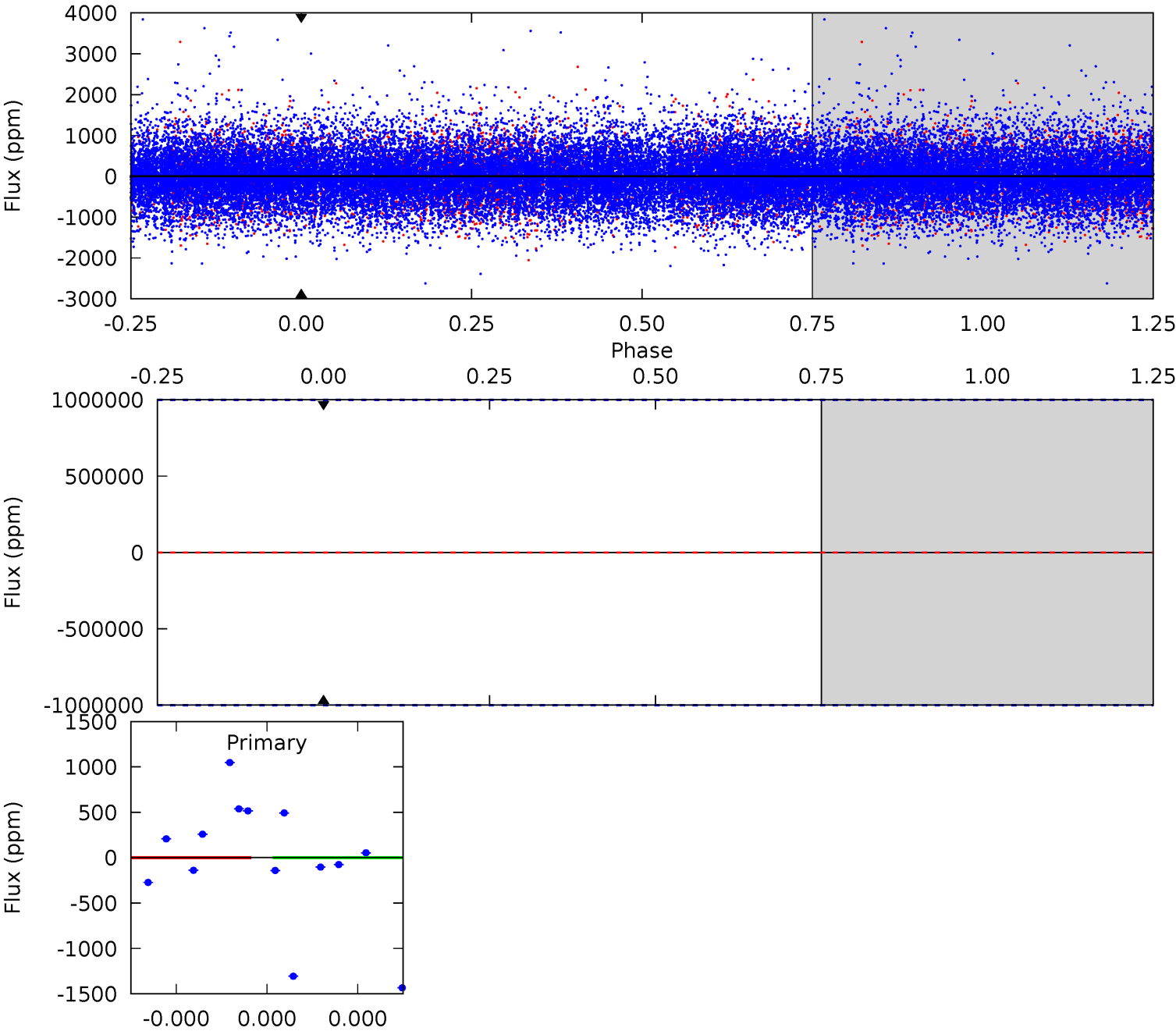
TCE 005880537-02 P=274.838193 Days $T_0=241.444636$ (BKJD)



DV Model-Shift Uniqueness Test

005880537-02, P = 274.838193 Days, E = 240.496792 Days

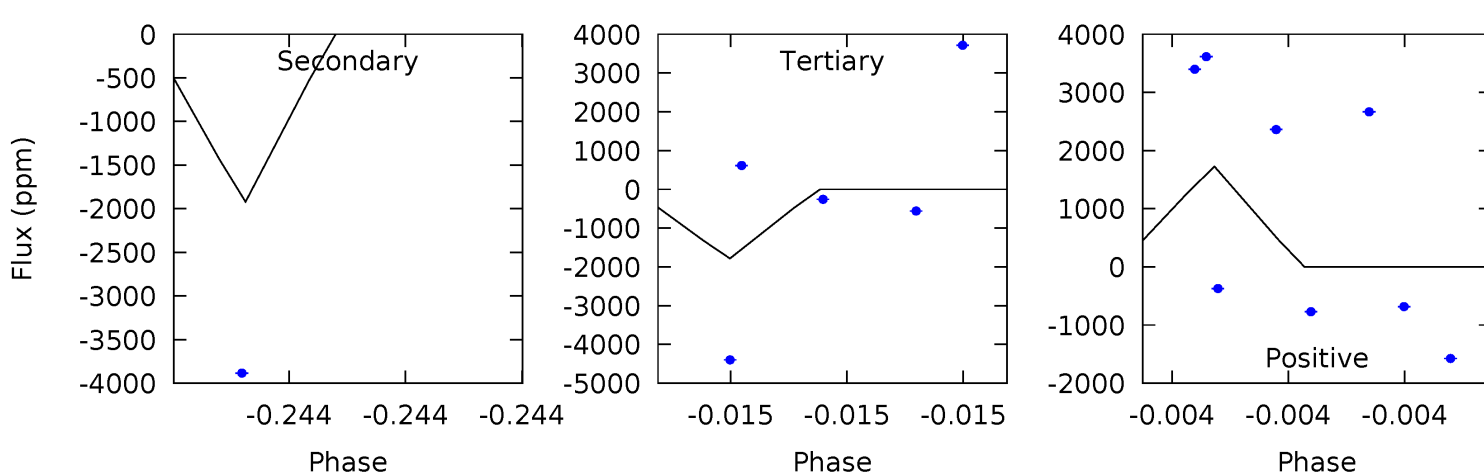
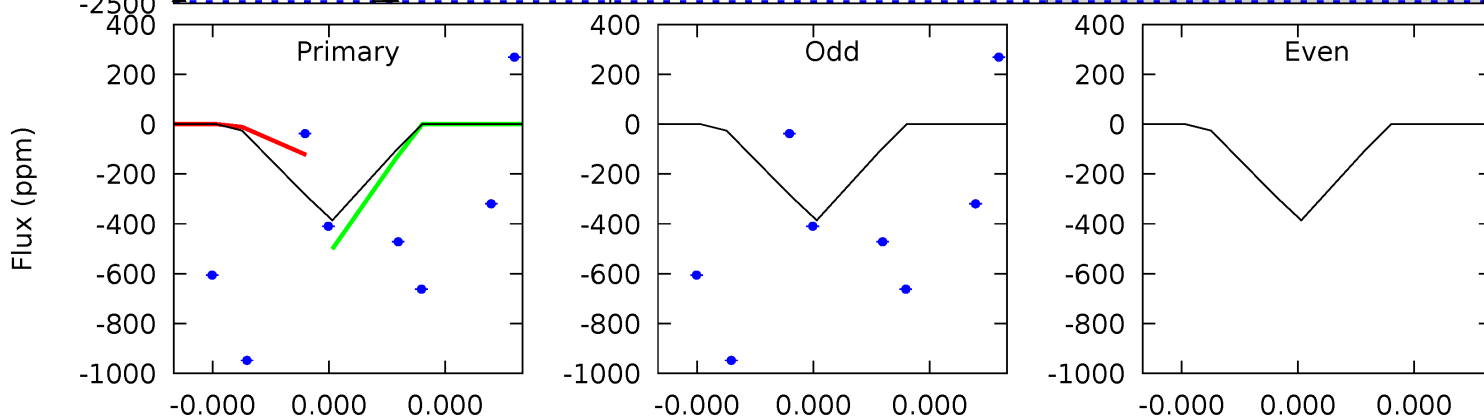
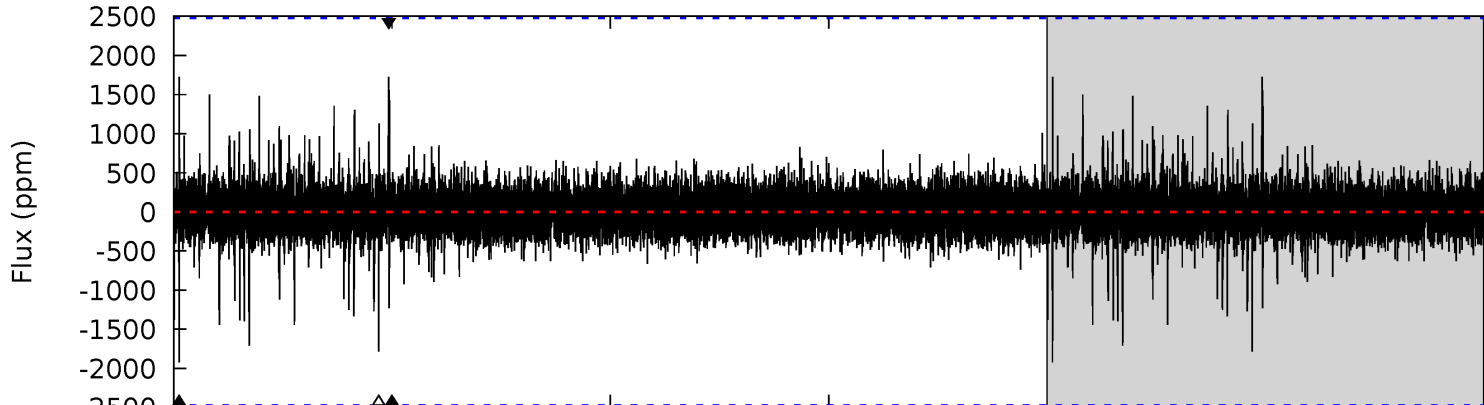
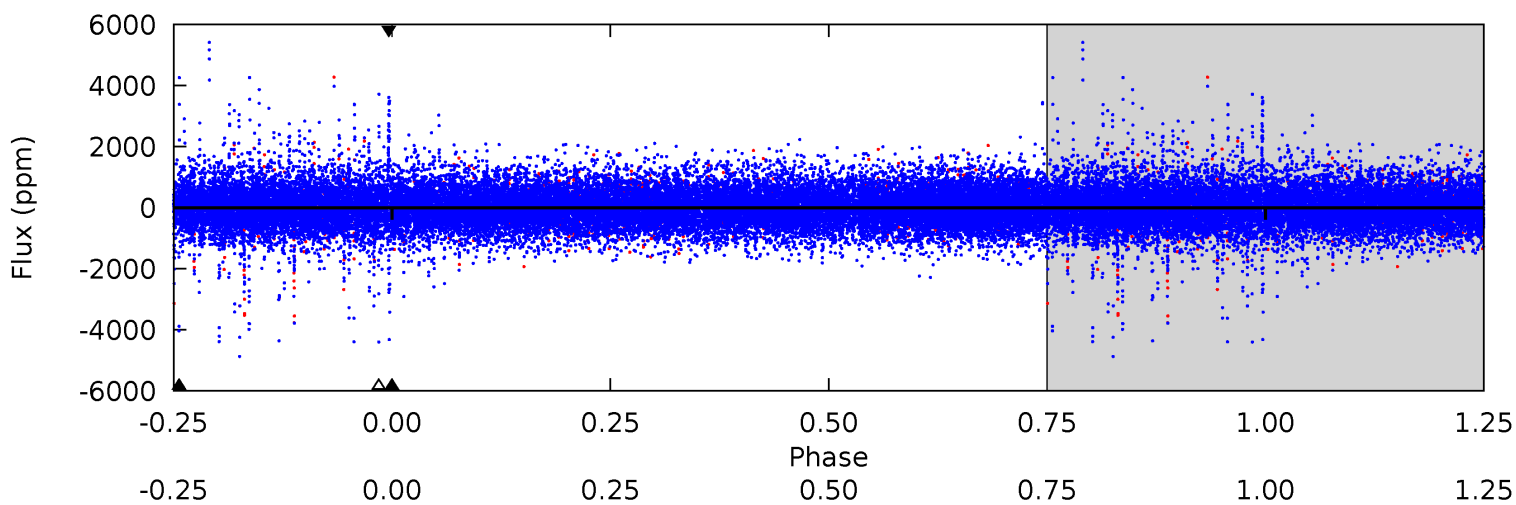
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

005880537-02, P = 274.838193 Days, E = 241.444636 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.91	4.54	4.21	4.08	5.85	3.90	0.49	-3.30	-3.16	0.33	0.46	0	1.00	0.47	0.00



Stellar Parameters For KIC 005880537

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5151^{+153}_{-153}	$4.528^{+0.077}_{-0.063}$	$-0.160^{+0.300}_{-0.300}$	$0.785^{+0.088}_{-0.080}$	$0.758^{+0.098}_{-0.057}$	$2.209^{+0.746}_{-0.468}$
	+3%/-3%	+2%/-1%	+188%/-188%	+11%/-10%	+13%/-8%	+34%/-21%
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 005880537-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$7.16^{+6.47}_{-4.73}$	323^{+14}_{-13}	-3301^{+16872}_{-10176}	$-3614.068^{+1003252.916}_{-1005178.202}$
Alt.	-1920 ± 423	$6.02^{+6.21}_{-4.12}$	323^{+14}_{-13}	4217^{+2929}_{-889}	$16302^{+155083}_{-12395}$

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 $A_{obs} \gg 1.0$

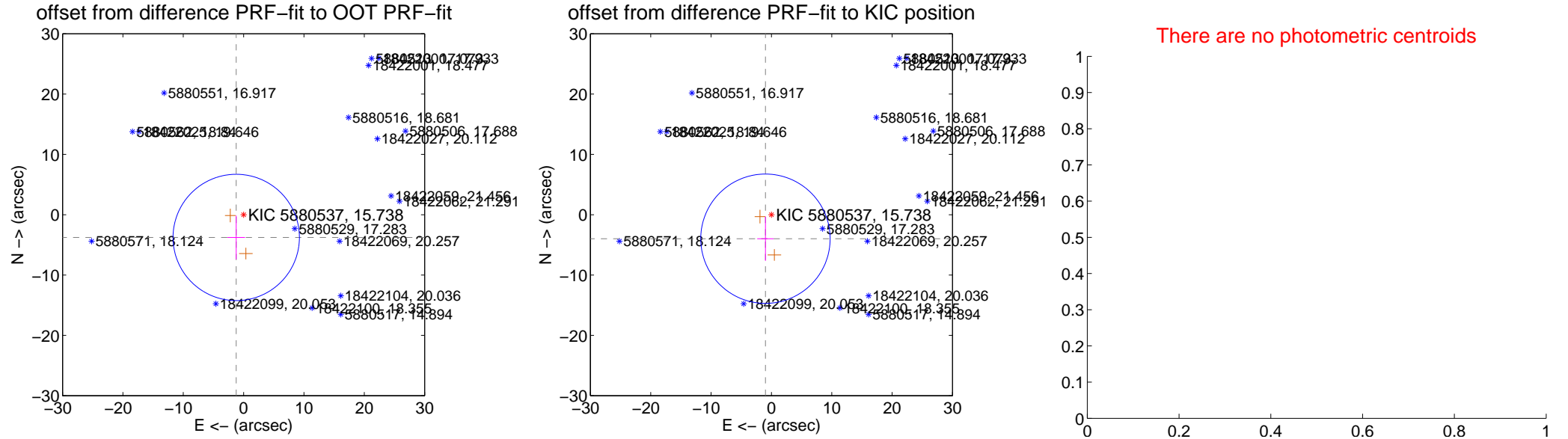
DV Centroid Data

Supplemental centroid analysis for 005880537-02. Kepler magnitude: 15.74. Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

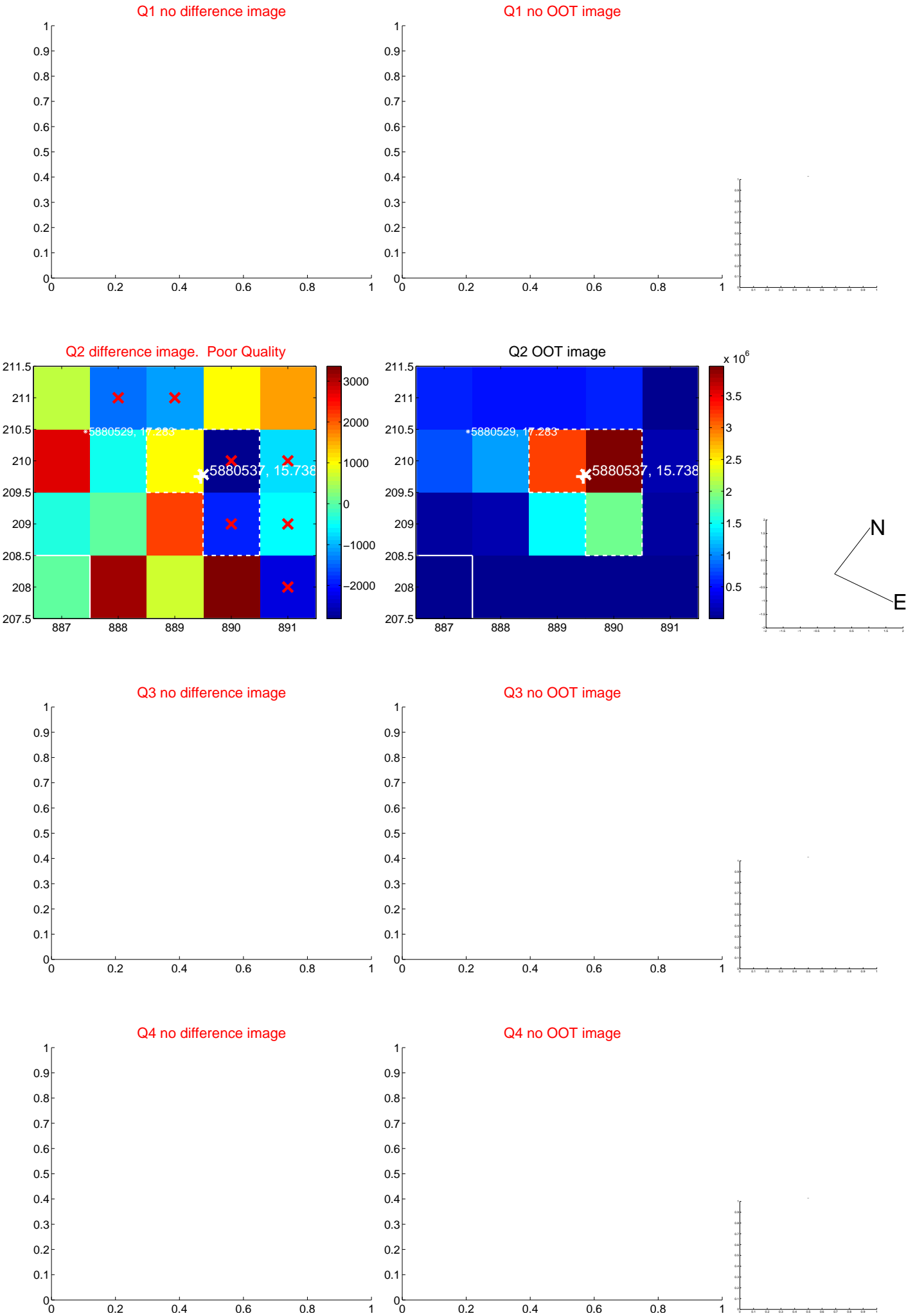
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.962 ± 3.490	1.14	1.224 ± 1.463	-3.768 ± 3.639
PRF-fit source offset from KIC position	4.100 ± 3.573	1.15	0.990 ± 1.358	-3.978 ± 3.666
photometric centroid source offset	—	—	—	—

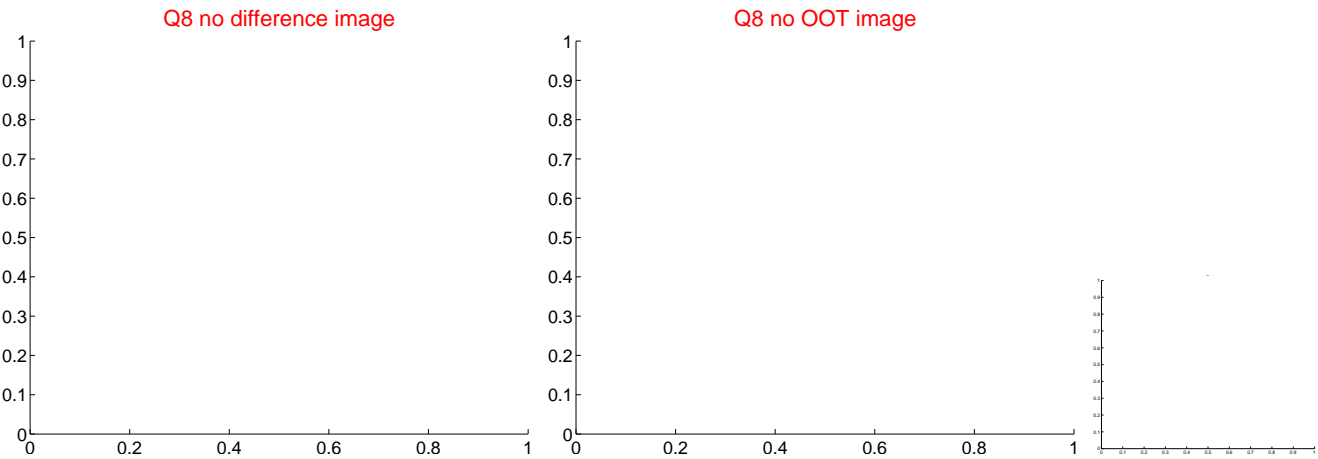
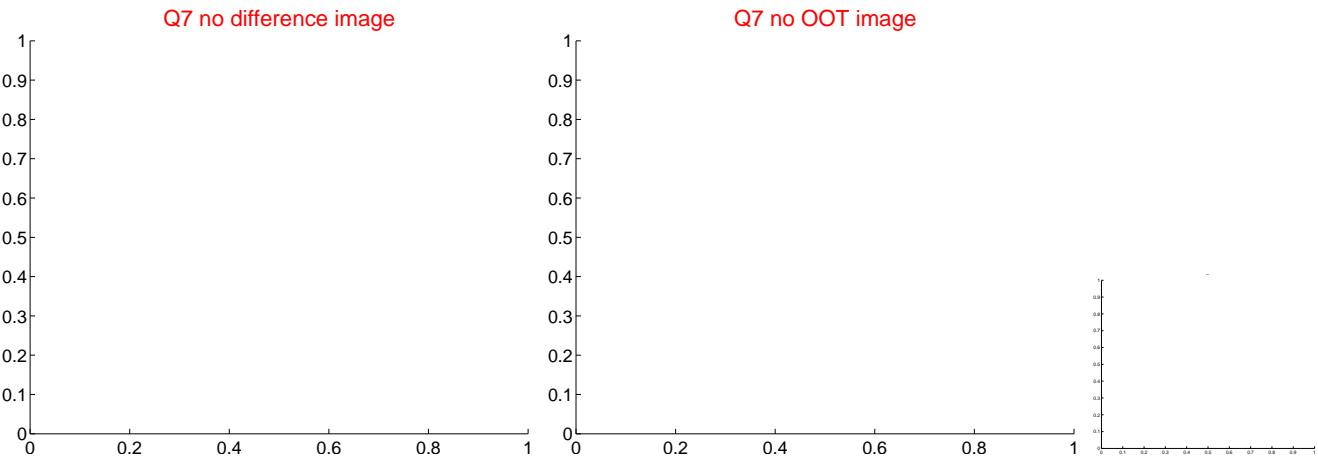
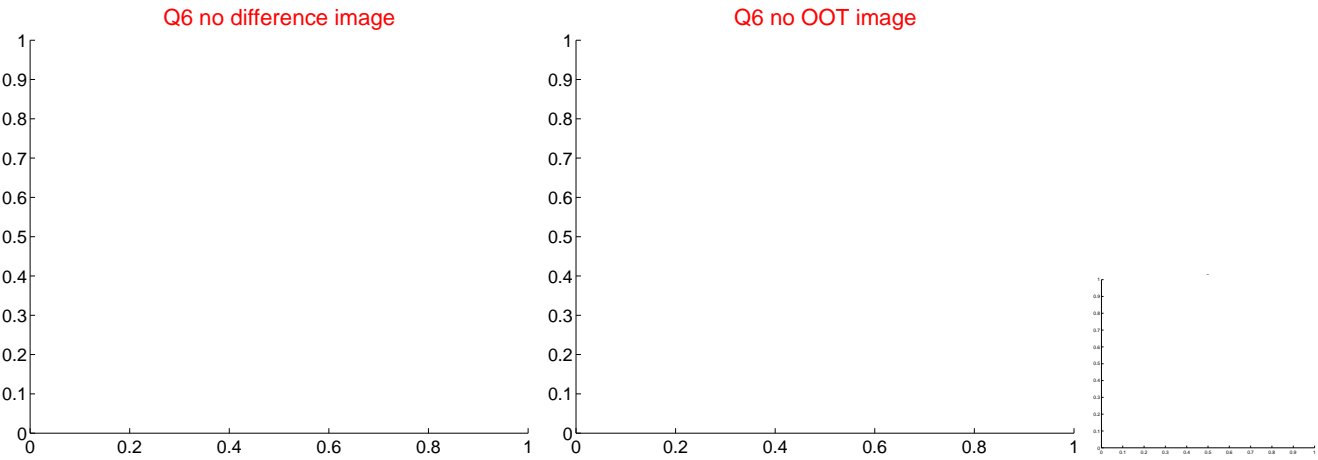
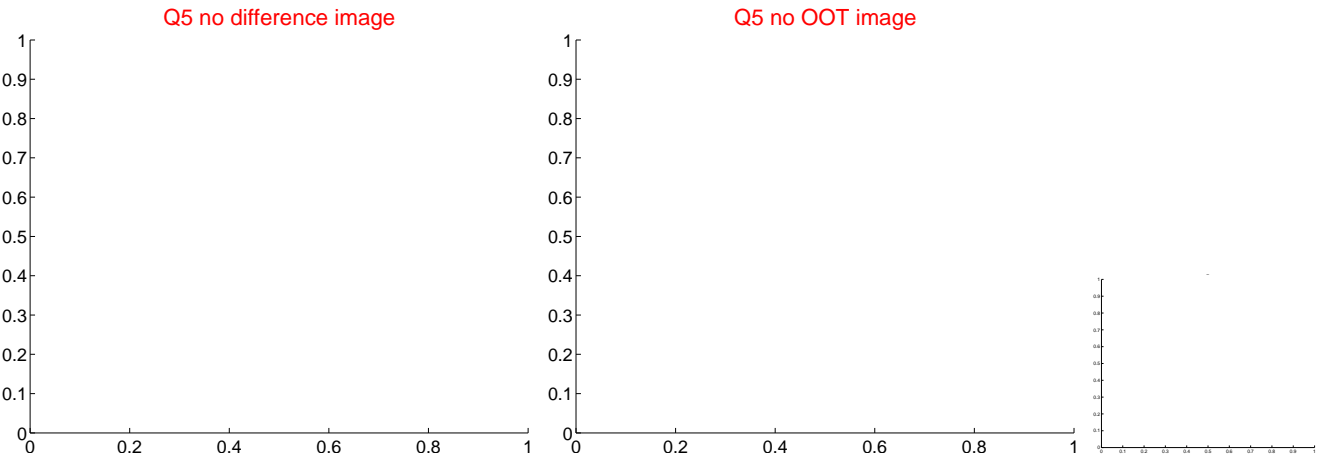


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

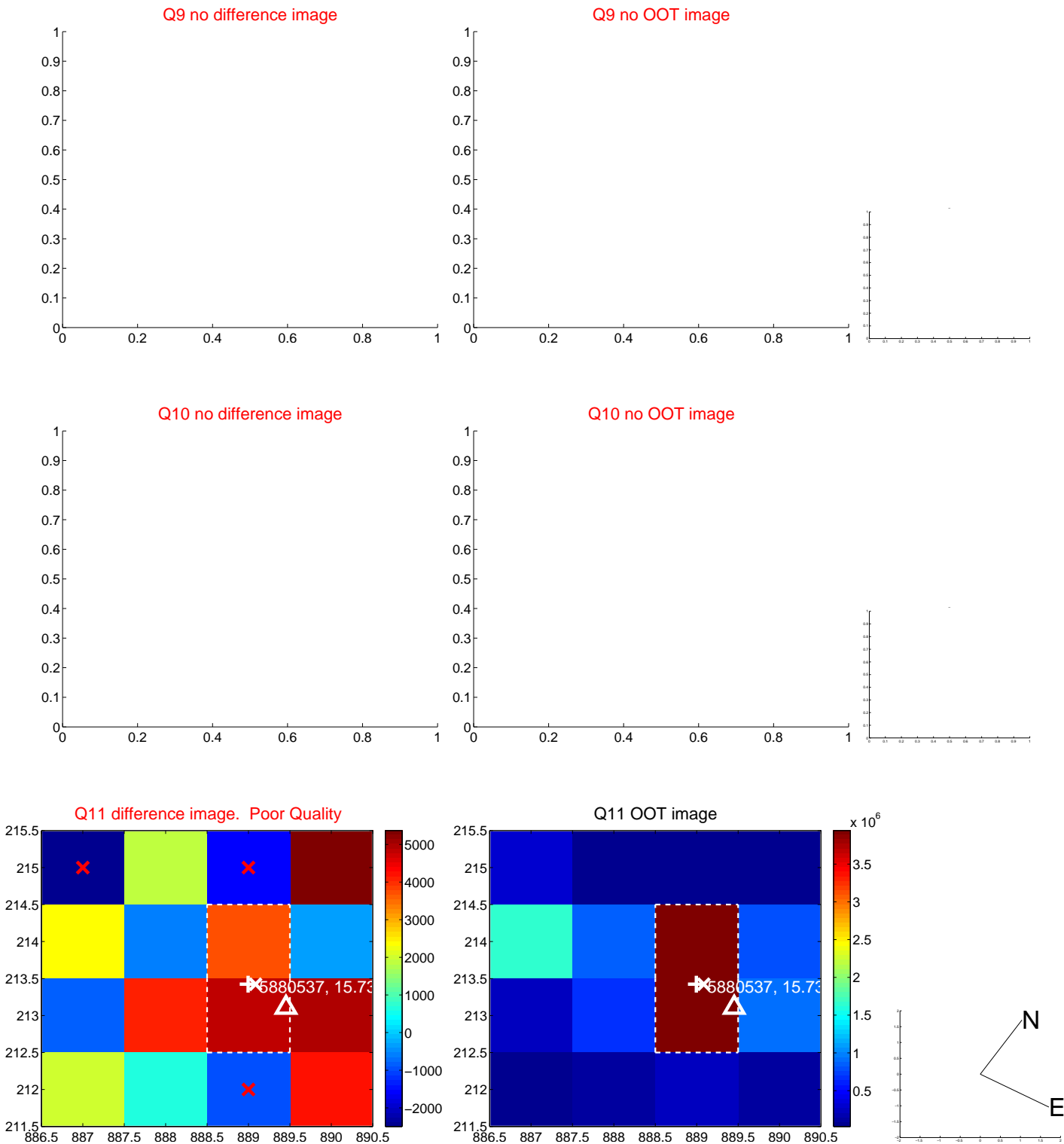
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



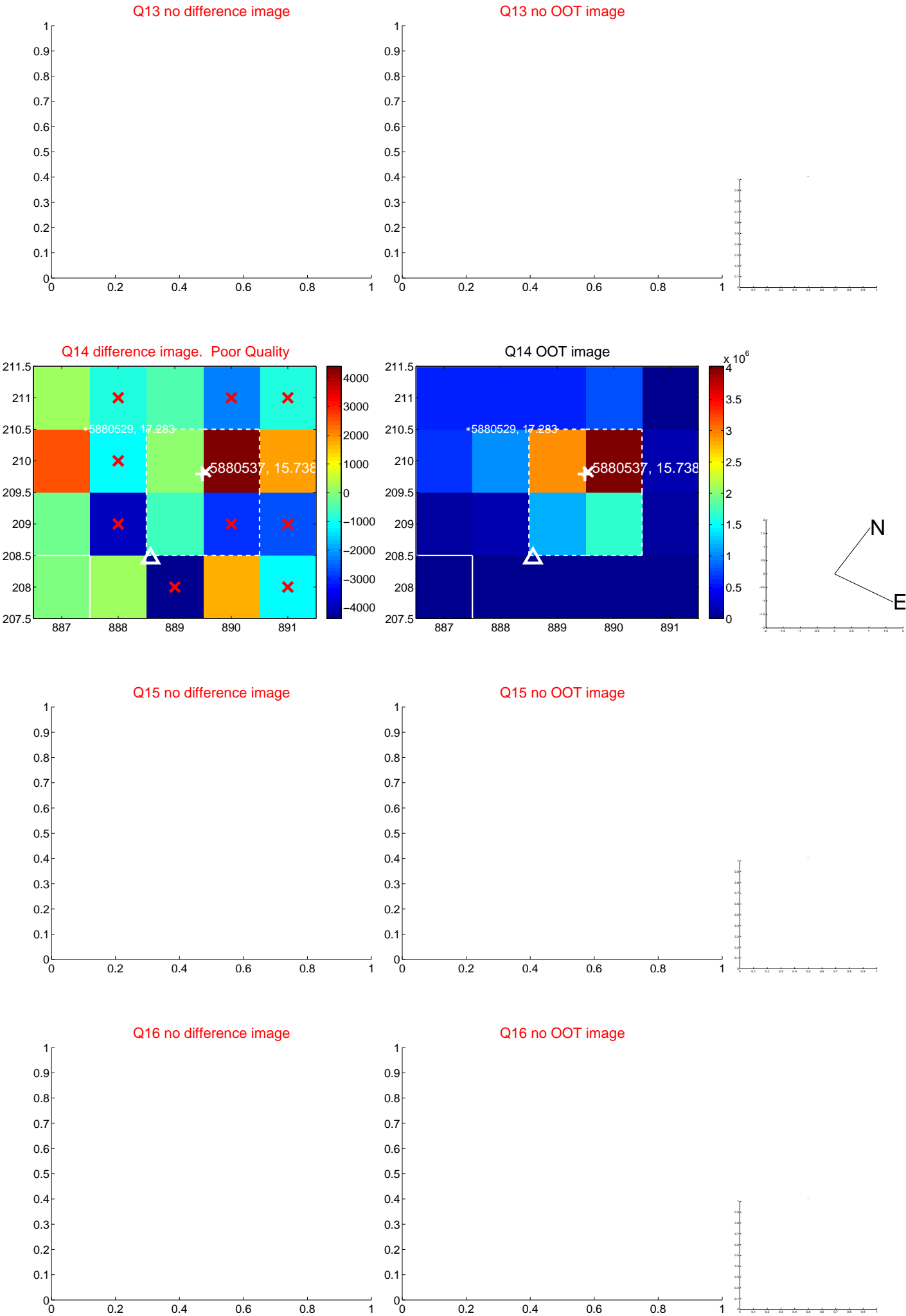
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



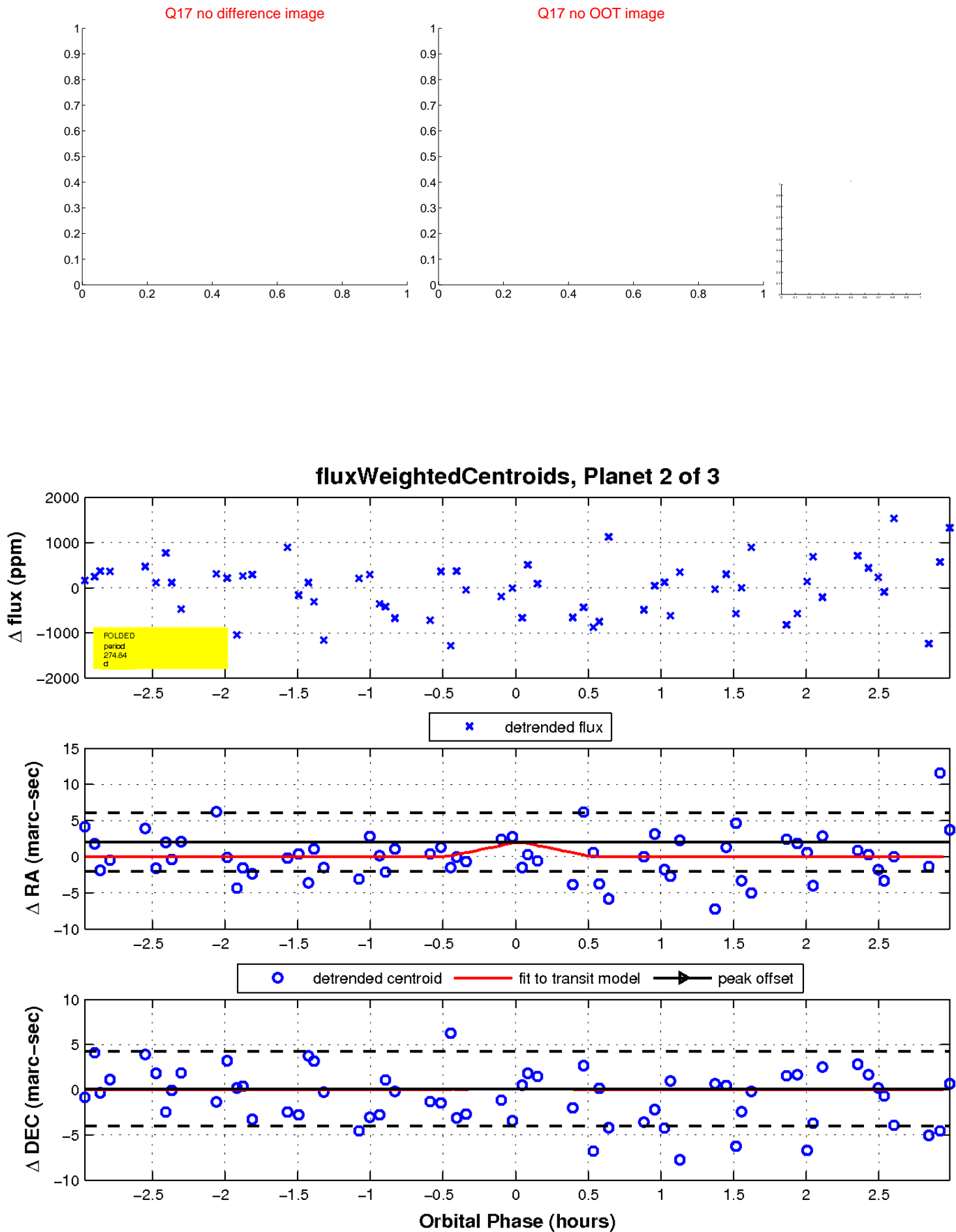
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

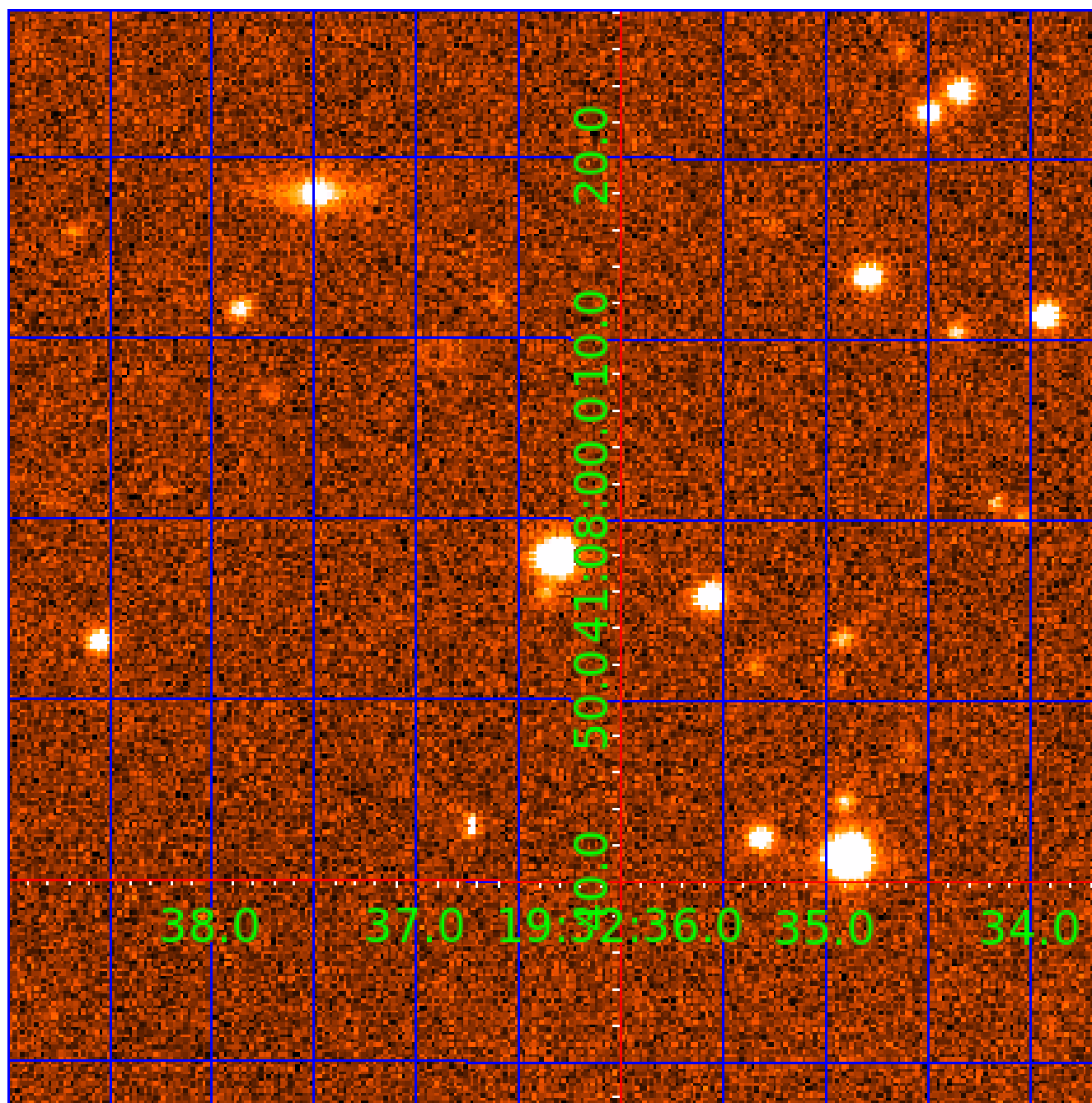


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005880537

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})
005880537-01	OBS	No	3.141662	134.385362	121.7	12.207	8.4	8.3	0.79	5151	1.24	265.15
005880537-02	OBS	No	274.838193	240.496792	1738.2	15.000	17.2	-1.0	0.79	5151	3.19	0.68
005880537-03	OBS	No	413.103995	308.053753	1847.4	23.069	9.3	7.4	0.79	5151	4.29	0.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005880537-01	OBS	FP	0.00	1	0	0	0	LPP_DV
005880537-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_NOFITS
005880537-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_POS_DV—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.

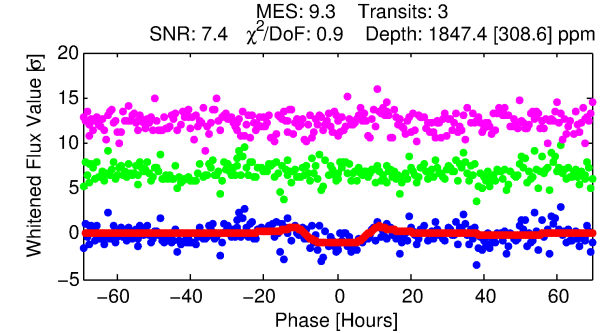
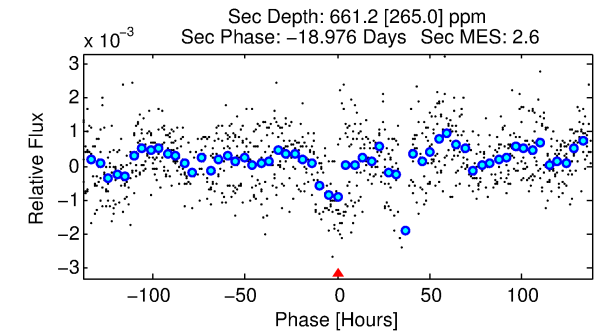
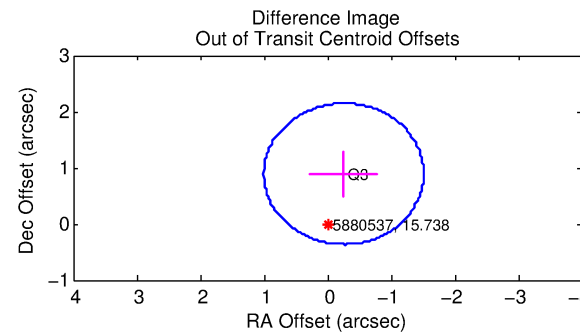
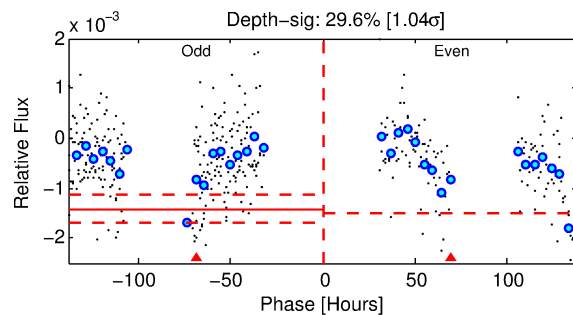
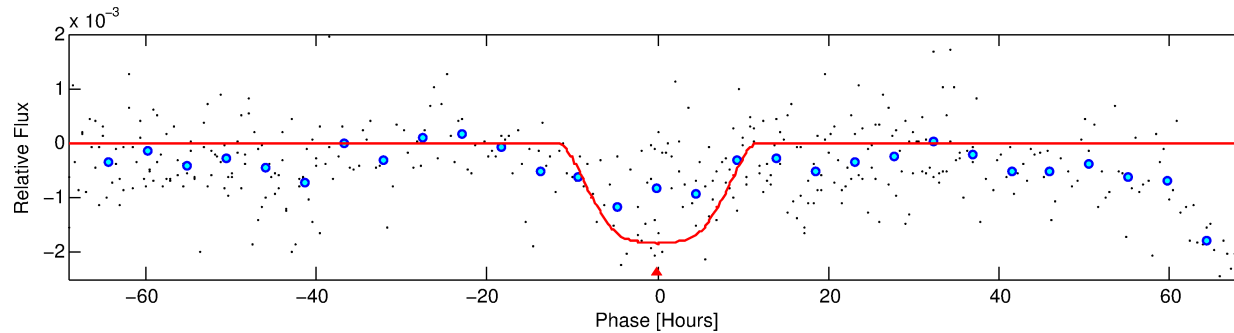
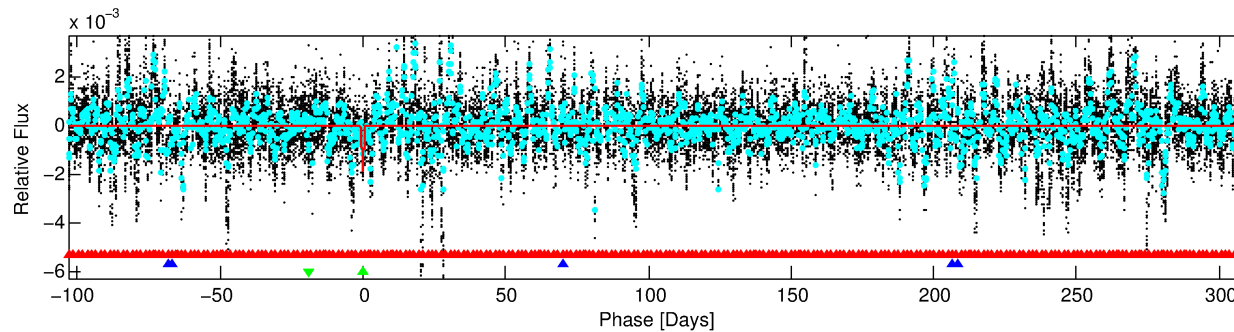
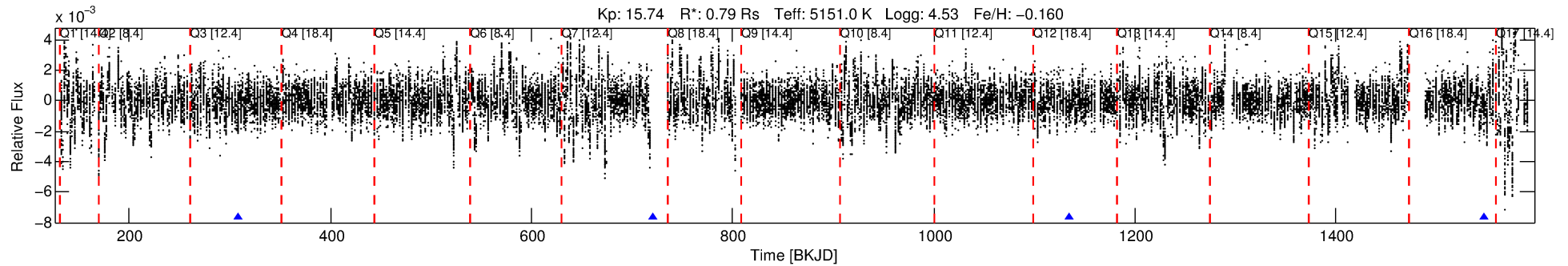
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005880537-03

No Significant Match Found

DV One-Page Summary

KIC: 5880537 Candidate: 3 of 3 Period: 413.104 d



DV Fit Results:

Period = 413.10400 [0.02897] d
Epoch = 308.0538 [0.0631] BKJD
Rp/R* = 0.0501 [0.0049]
a/R* = 65.64 [10.67]
b = 0.93 [0.02]
Seff = 0.40 [0.07]
Teq = 202 [9] K
Rp = 4.29 [0.64] Re
a = 0.9900 [0.0943] AU
Ag = 19350.90 [9053.96] [2.14 σ]
Teffp = 3690 [426] K [8.18 σ]

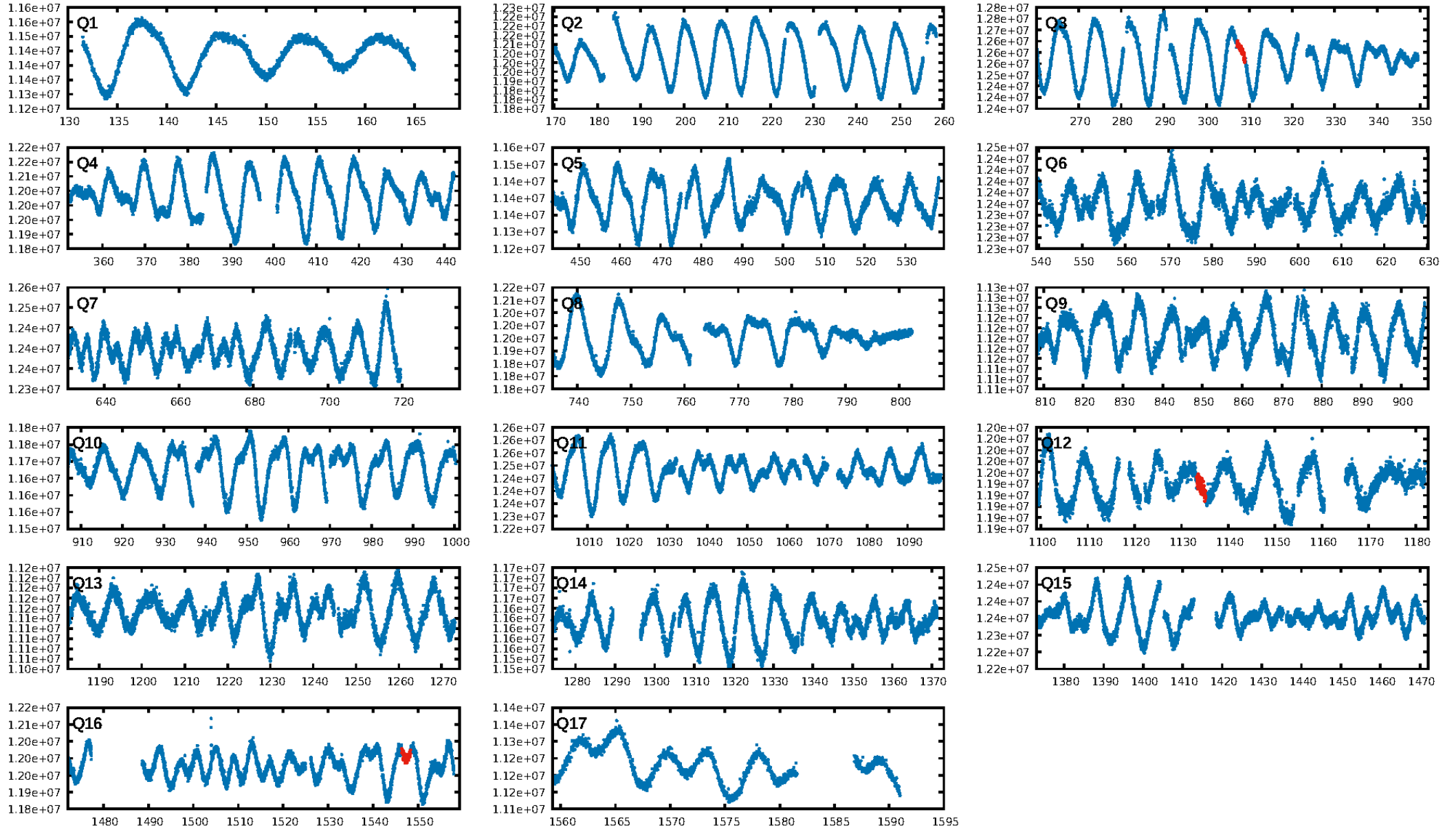
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [120.59 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 76.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 2.79e-09
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -0.4702
Centroid-sig: 4.8%
Centroid-so: 0.496 arcsec [0.81 σ]
OotOffset-rm: 0.925 arcsec [2.21 σ]
OotOffset-st: 0/1/0/0 [1]
KicOffset-rm: 0.931 arcsec [2.01 σ]
KicOffset-st: 0/1/0/0 [1]
DiffImageQuality-fgm: 0.00 [0/1]
DiffImageOverlap-fno: 0.00 [0/1]

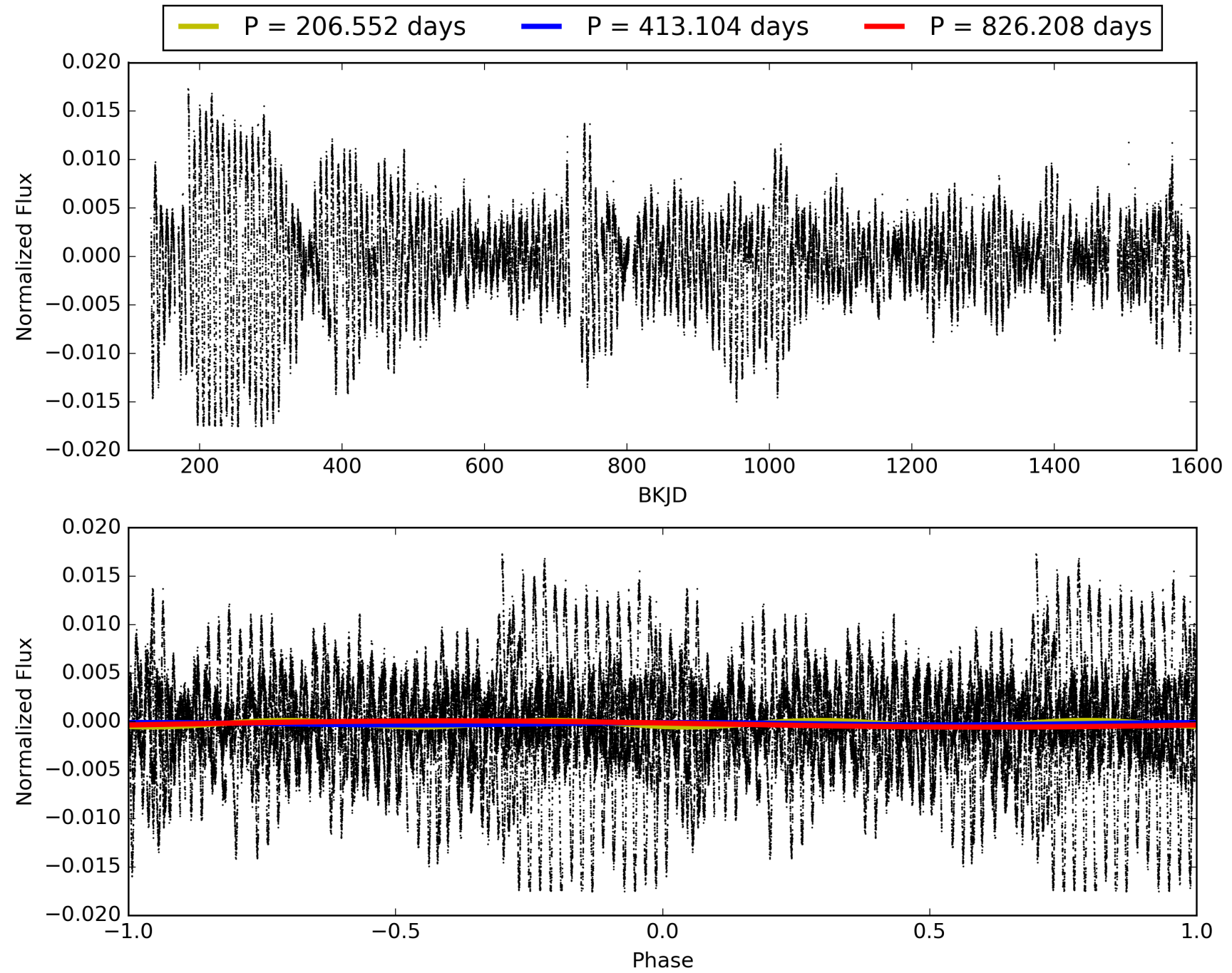
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 21:25:24 Z

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

TCE 005880537-03, PDC Light Curves

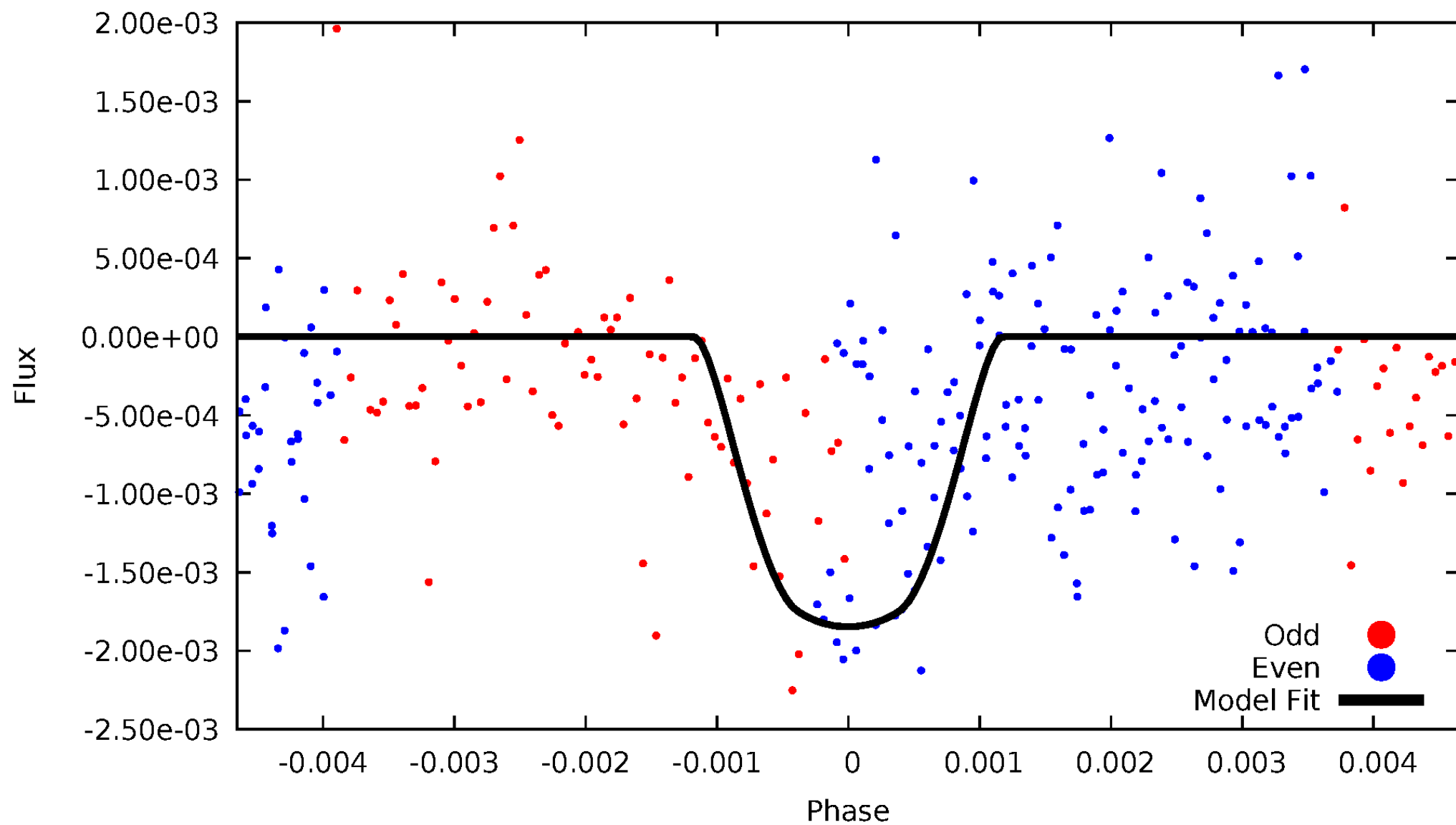


TCE 005880537-03



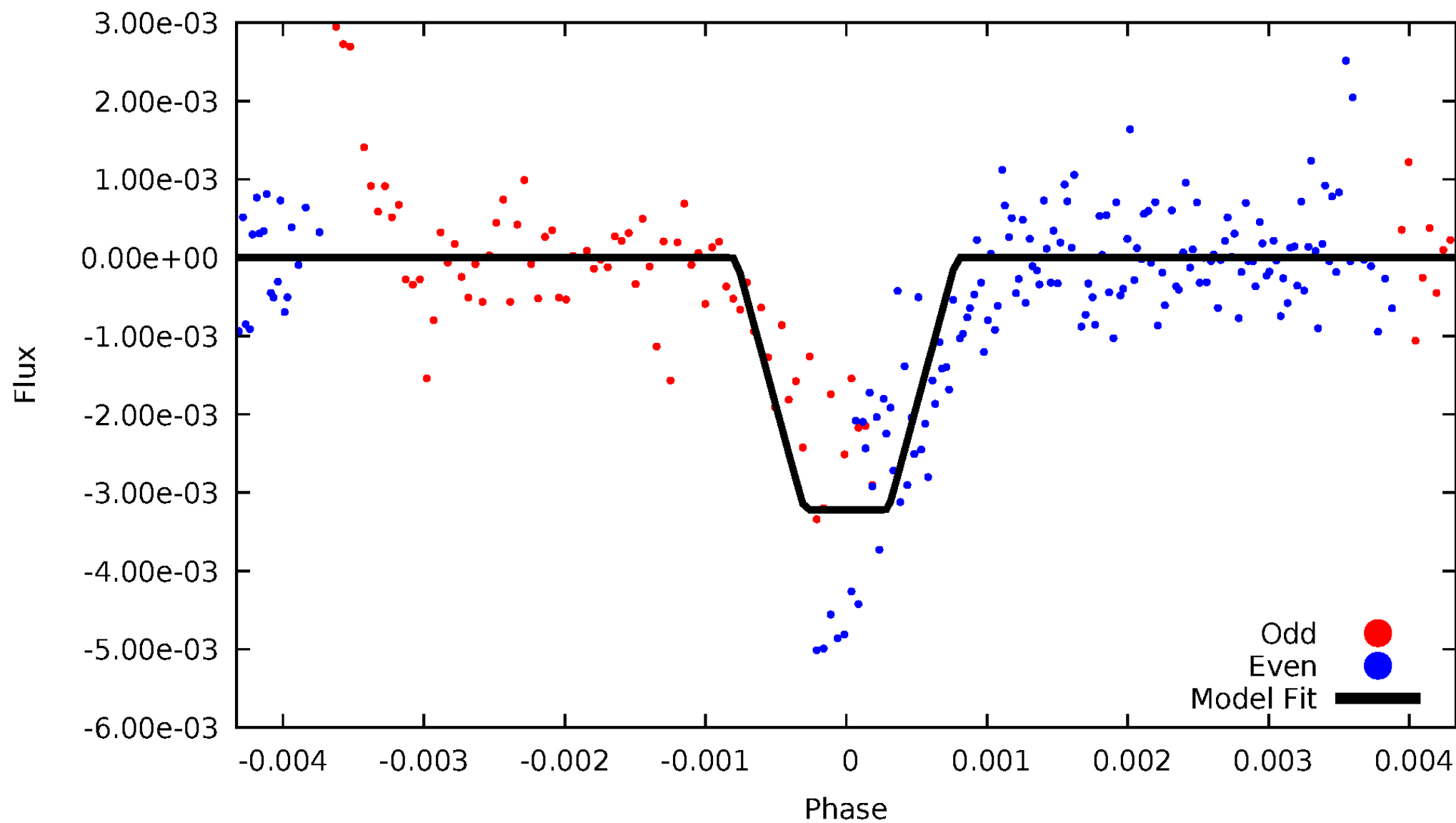
DV Odd/Even

TCE 005880537-03



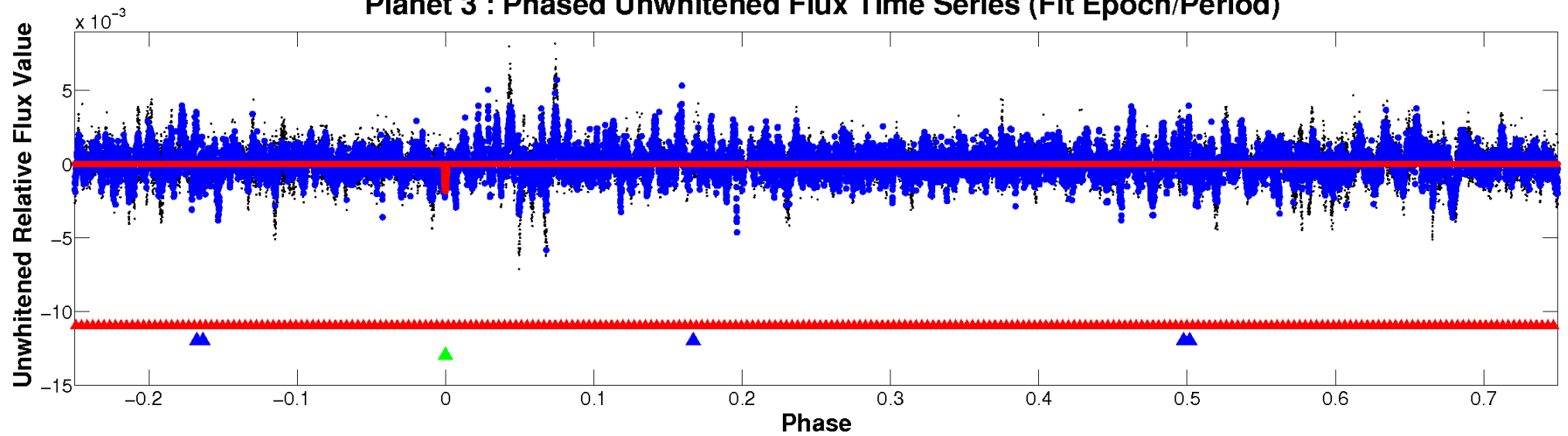
ALT Odd/Even

TCE 005880537-03

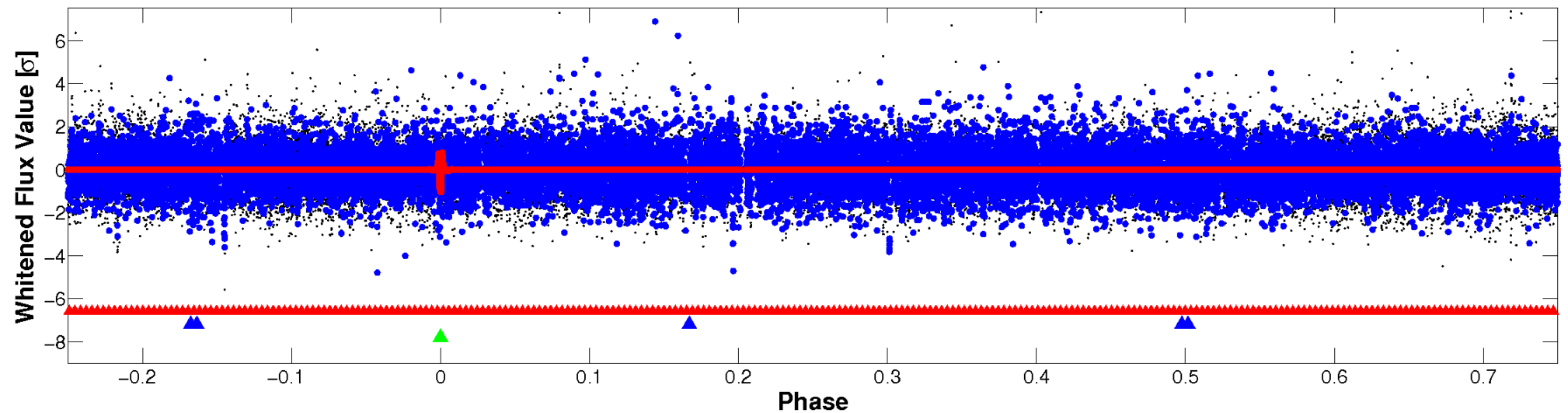


Non-Whitened Vs. Whitened Light Curve

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

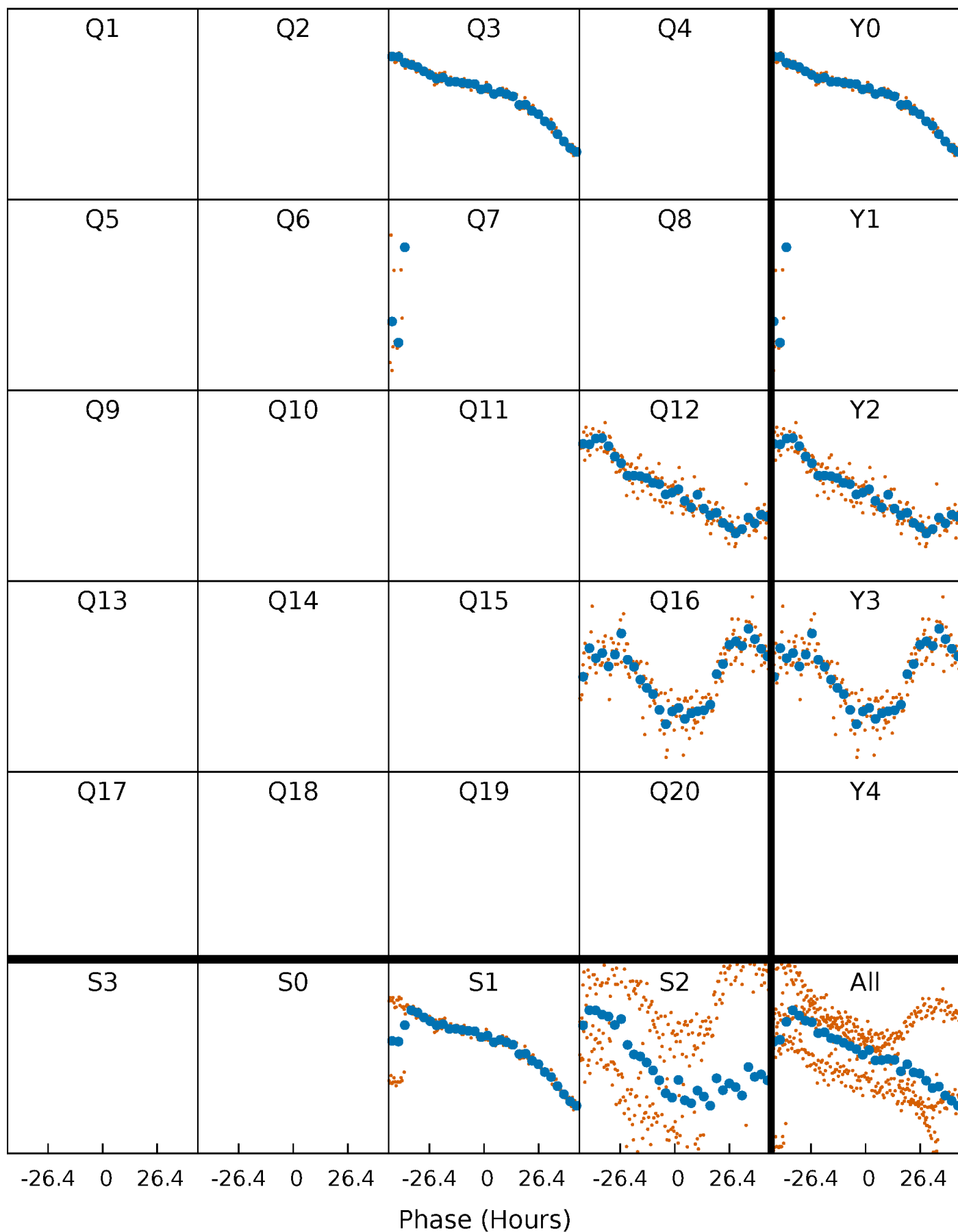


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



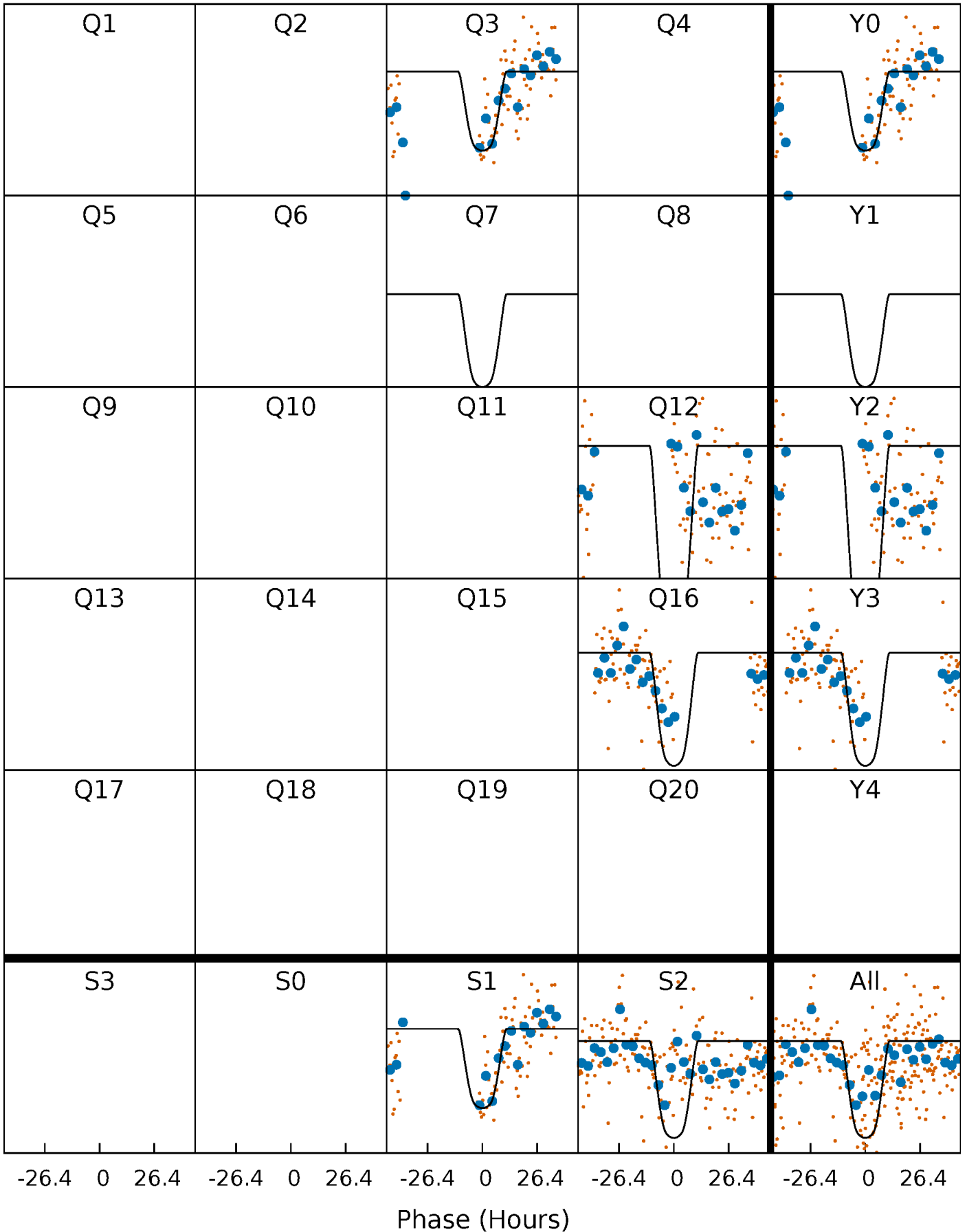
PDC Quarter-Phased Transit Curves

TCE 005880537-03 P=413.103995 Days $T_0=308.053753$ (BKJD)



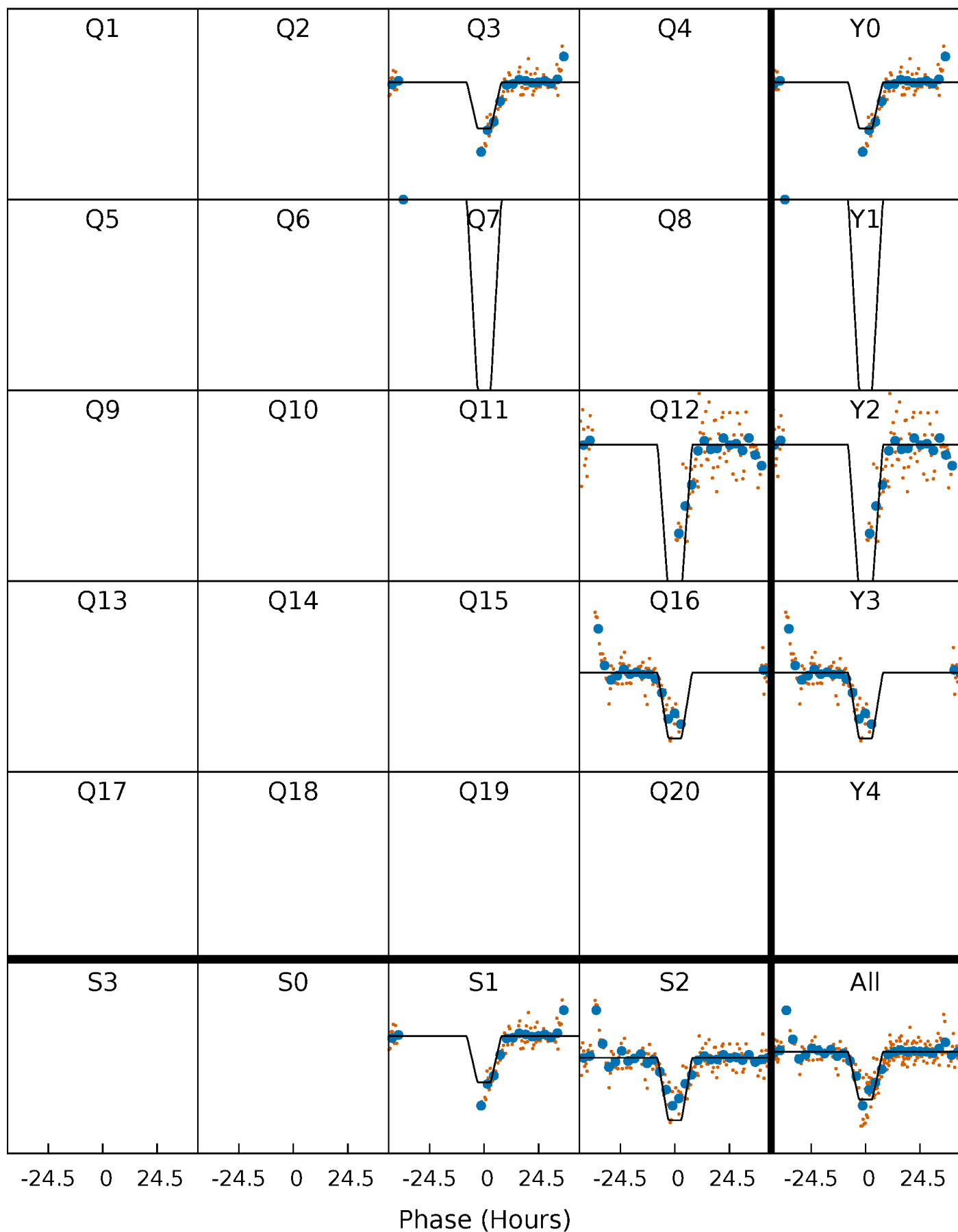
DV Quarter-Phased Transit Curves

TCE 005880537-03 $P=413.103995$ Days $T_0=308.053753$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

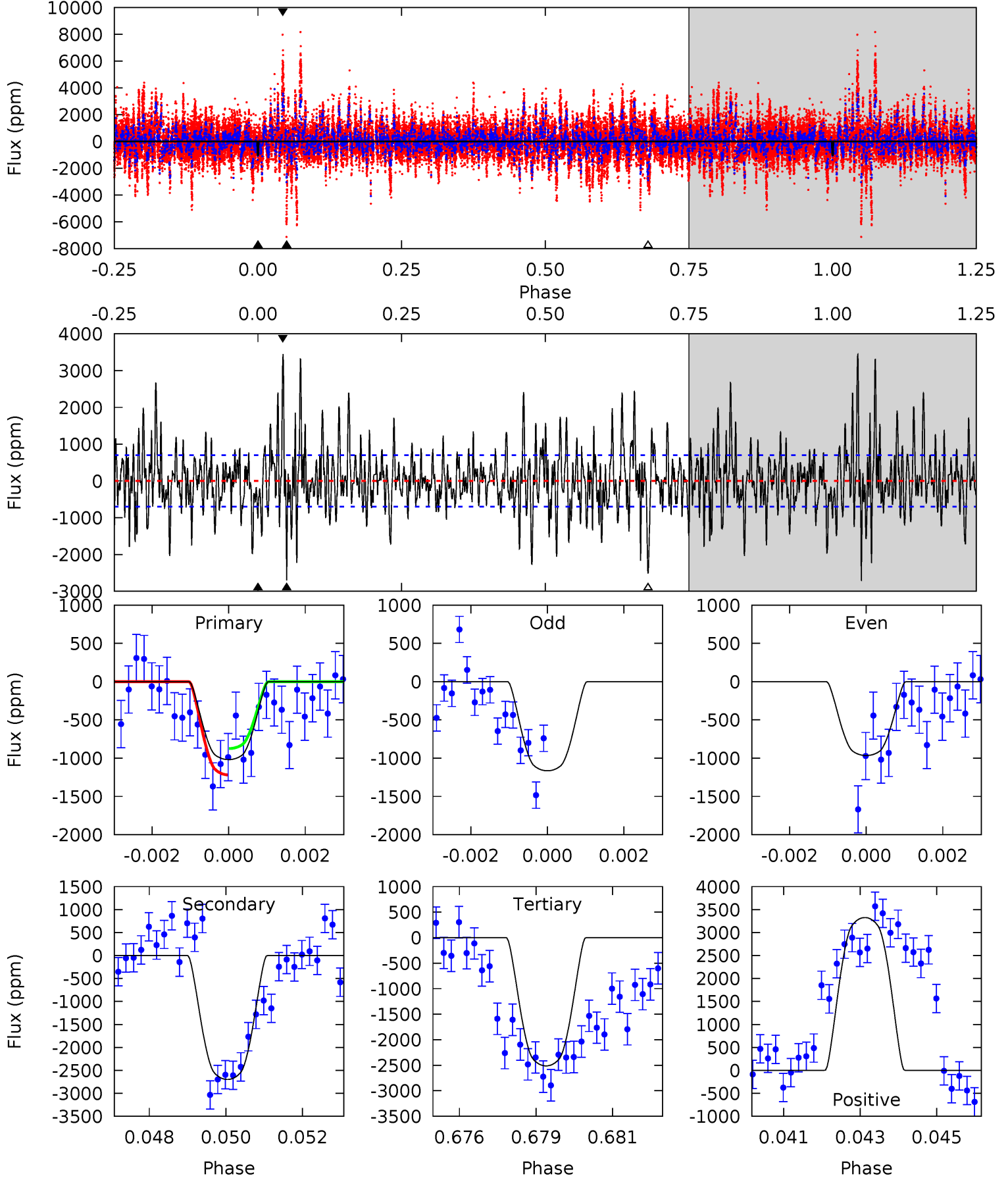
TCE 005880537-03 $P=413.078038$ Days $T_0=308.042547$ (BKJD)



DV Model-Shift Uniqueness Test

005880537-03, P = 413.103995 Days, E = 308.053753 Days

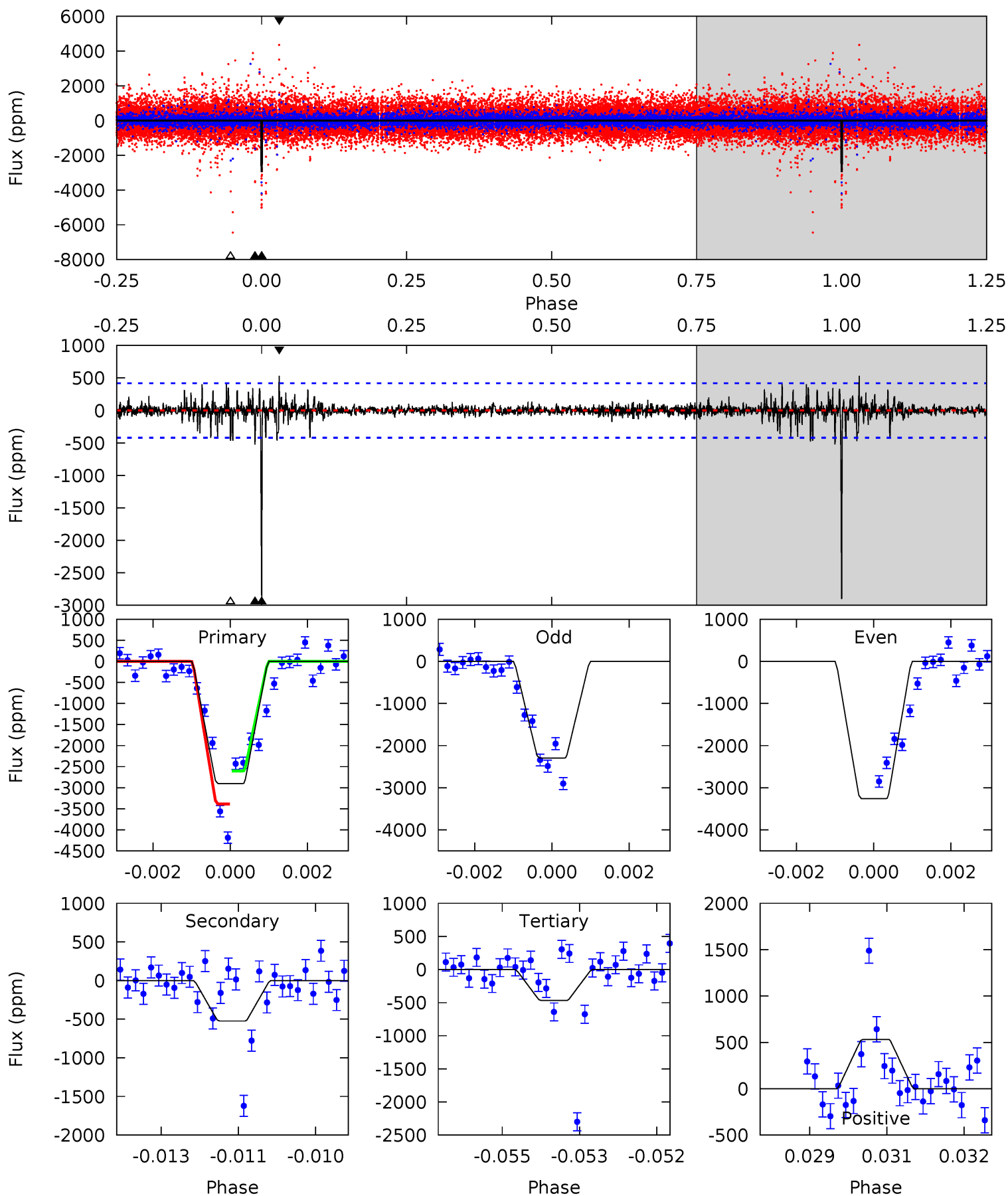
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.72	20.4	19.0	25.2	5.30	3.05	5.61	-11.3	-17.5	1.41	-4.76	0.64	0.86	0.56	1.27



Alt Model-Shift Uniqueness Test

005880537-03, P = 413.078038 Days, E = 308.042547 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
37.2	6.71	5.99	6.82	5.37	3.15	0.88	31.2	30.3	0.72	-0.11	5.86	1.21	0.15	4.85



Stellar Parameters For KIC 005880537

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5151^{+153}_{-153}	$4.528^{+0.077}_{-0.063}$	$-0.160^{+0.300}_{-0.300}$	$0.785^{+0.088}_{-0.080}$	$0.758^{+0.098}_{-0.057}$	$2.209^{+0.746}_{-0.468}$
	+3%/-3%	+2%/-1%	+188%/-188%	+11%/-10%	+13%/-8%	+34%/-21%
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 005880537-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2698 ± 132	$4.32^{+0.49}_{-0.49}$	282^{+11}_{-11}	5230^{+293}_{-269}	79000^{+22973}_{-14977}
Alt.	-524 ± 78	$4.86^{+0.52}_{-0.47}$	282^{+11}_{-11}	3658^{+154}_{-146}	12000^{+3527}_{-2539}

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 $A_{obs} \gg 1.0$

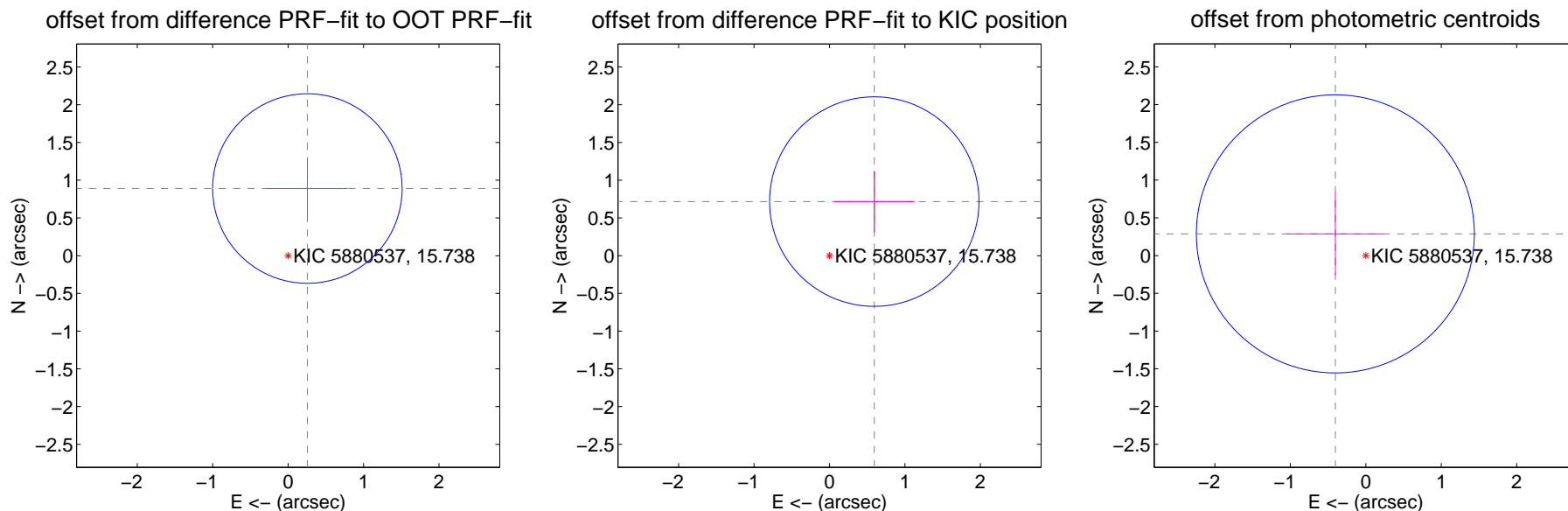
DV Centroid Data

Supplemental centroid analysis for 005880537-03. Kepler magnitude: 15.74. Transit SNR 7.40

There are 0 quarters with good PRF difference image offsets

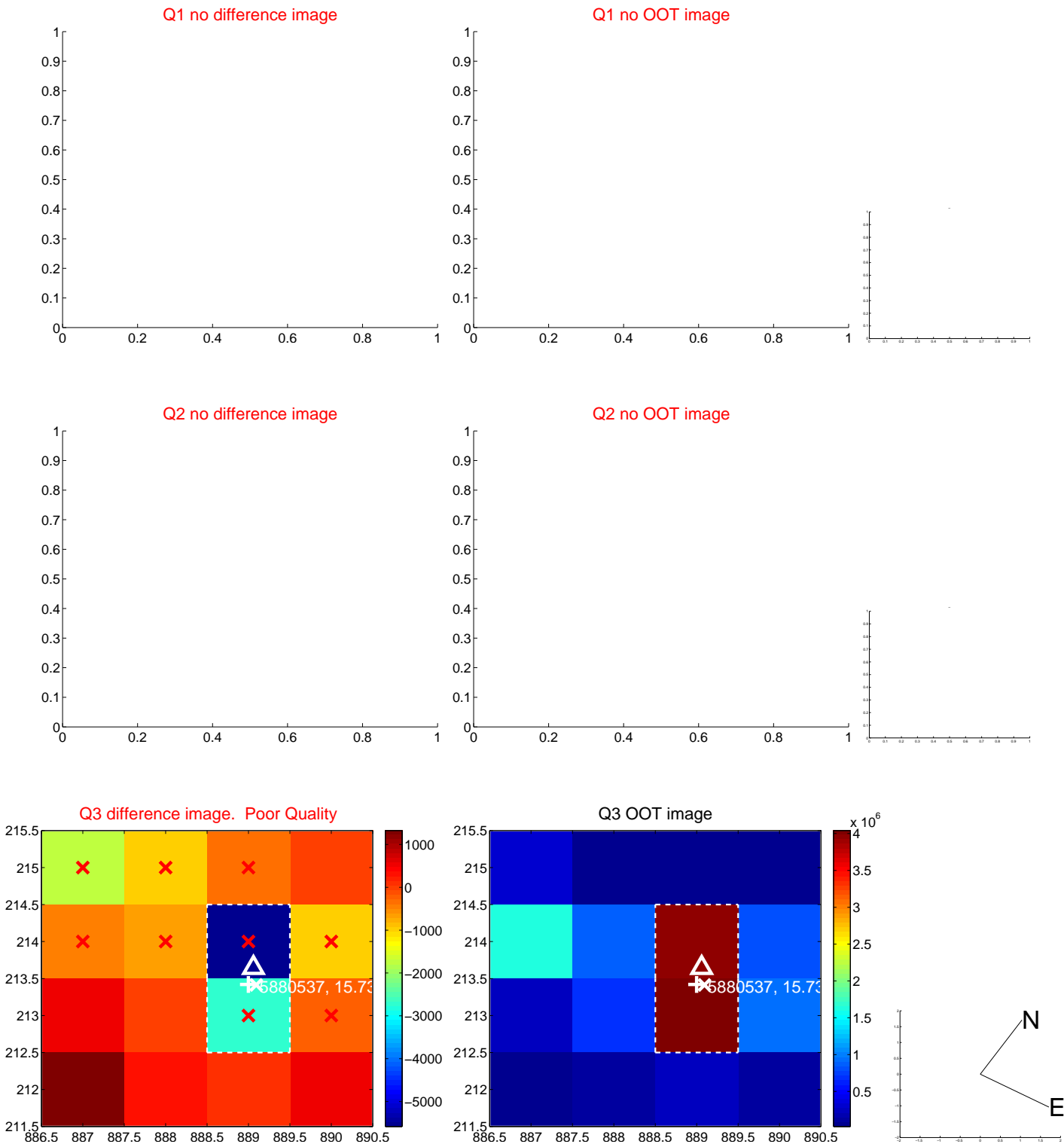
The direct PRF centroid is offset from the target star catalog position by about 0.38 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.925 ± 0.419	2.21	-0.255 ± 0.533	0.889 ± 0.408
PRF-fit source offset from KIC position	0.931 ± 0.463	2.01	-0.594 ± 0.533	0.717 ± 0.408
photometric centroid source offset	0.50 ± 0.61	0.81	0.40 ± 0.65	0.29 ± 0.55



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.



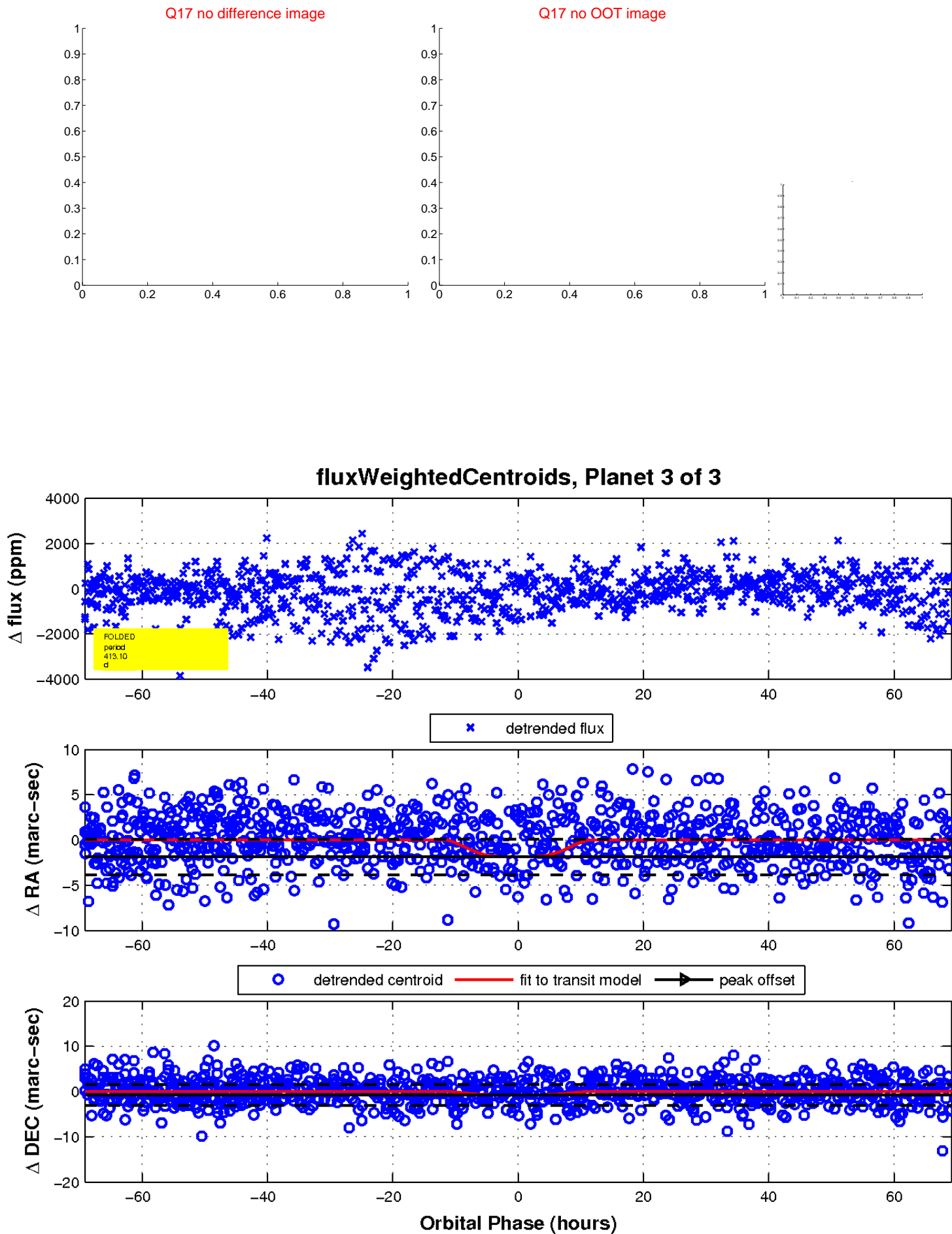
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

