

KIC 008711548

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})
008711548-01	OBS	7079.01	18.778091	149.676429	486266.9	4.500	20726.3	-1.0	1.71	6794	93.30	239.07
008711548-02	OBS	No	18.778170	142.164193	213076.2	10.542	10789.0	4217.1	1.71	6794	99.37	239.07
008711548-03	OBS	No	87.658167	149.640773	3032.9	48.761	900.6	45.4	1.71	6794	9.49	30.64
008711548-04	OBS	No	299.855682	356.545790	26636.1	15.000	781.5	-1.0	1.71	6794	28.18	5.95
008711548-05	OBS	No	28.167194	149.390359	25936.5	15.000	729.9	-1.0	1.71	6794	27.81	139.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008711548-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
008711548-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008711548-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008711548-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
008711548-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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.

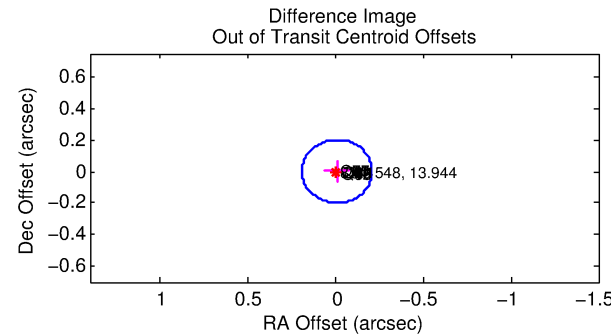
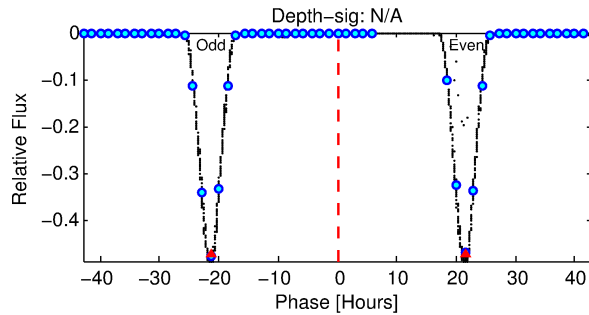
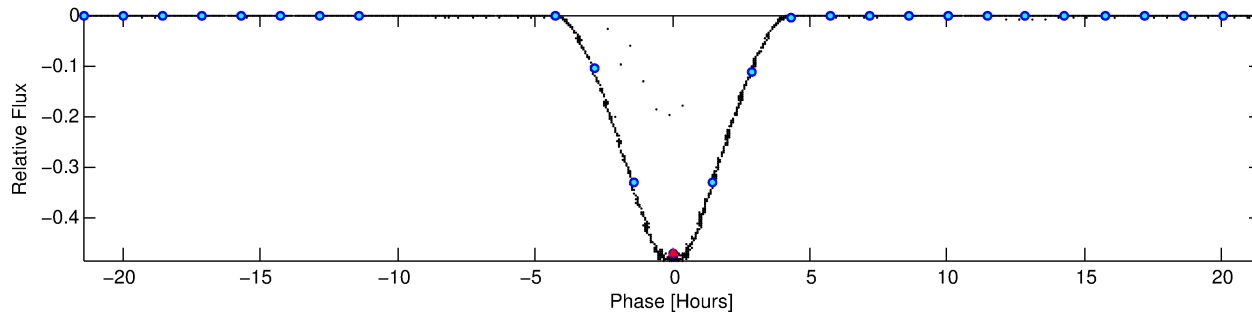
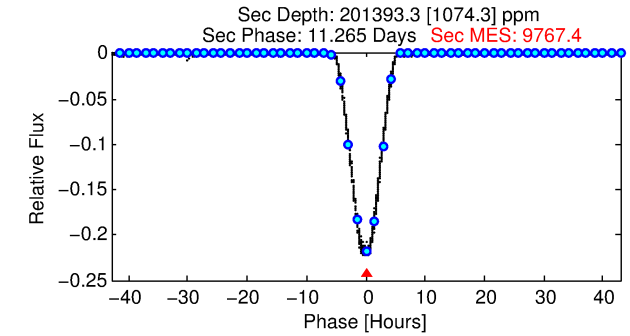
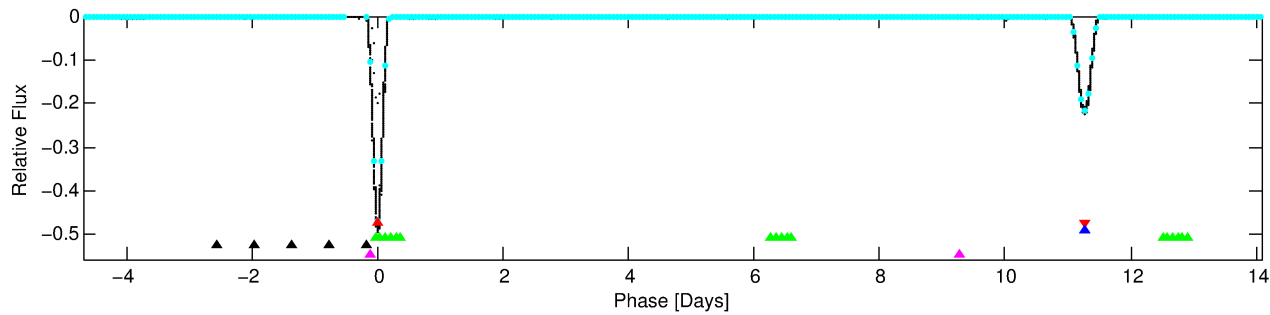
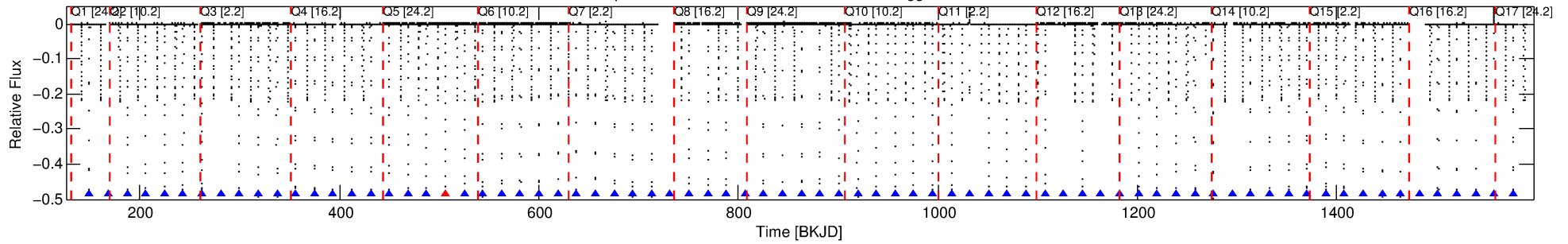
Ephemeris Match Information For 008711548-01

No Significant Match Found

DV One-Page Summary

KIC: 8711548 Candidate: 1 of 5 Period: 18.778 d
KOI: K07079 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.71 Rs Teff: 6794.0 K Logg: 4.10 Fe/H: -0.200



TPS TCE Results:

Period = 18.77809 d
Epoch = 149.6764 BKJD

DV fit results are unavailable

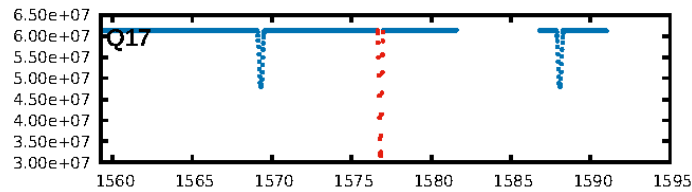
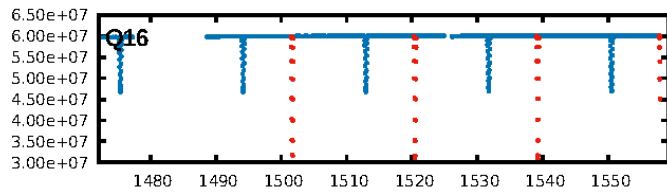
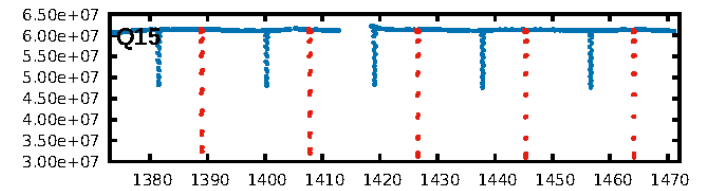
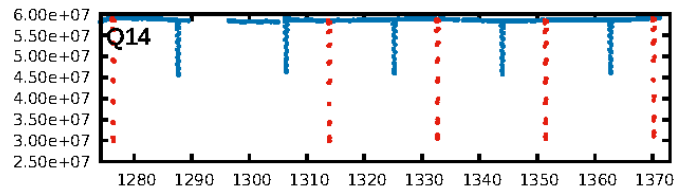
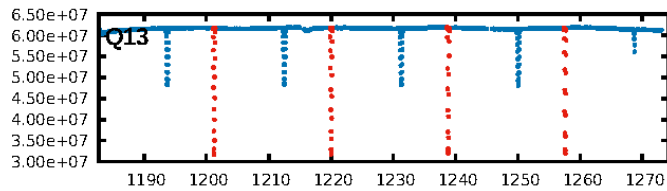
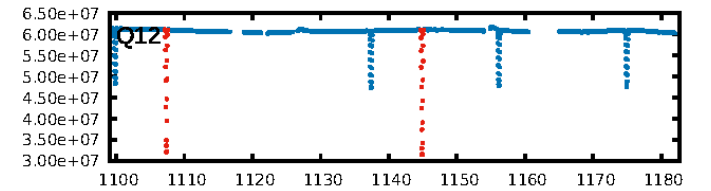
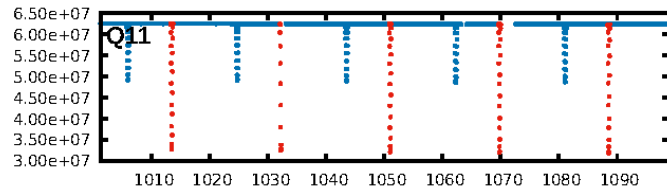
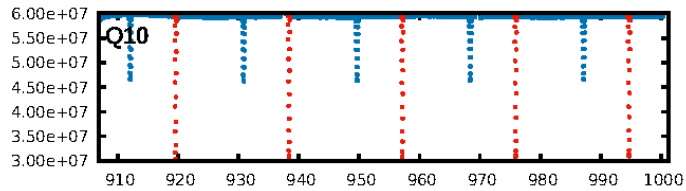
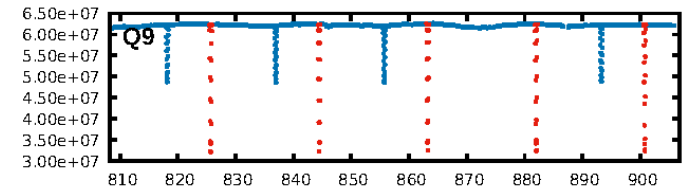
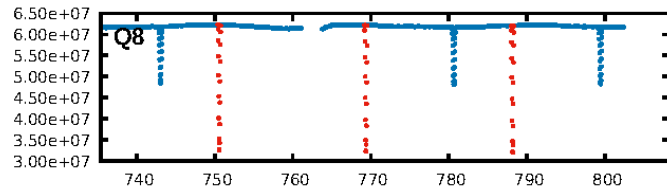
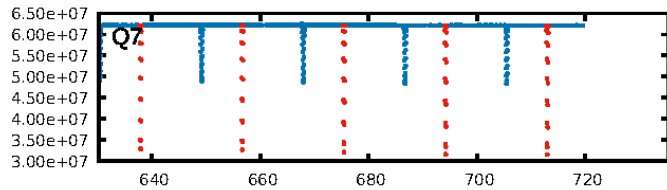
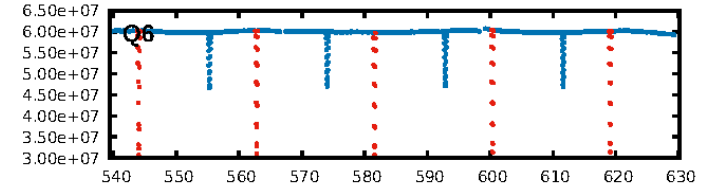
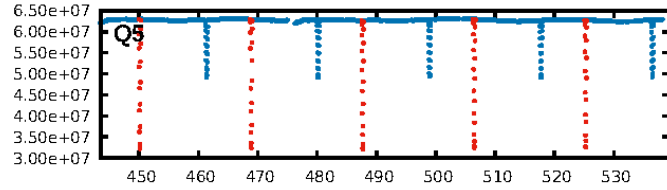
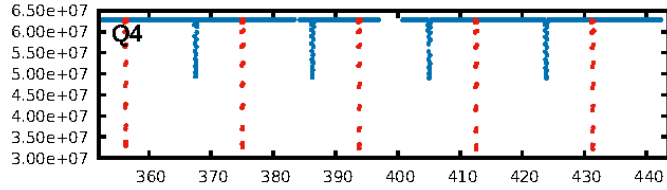
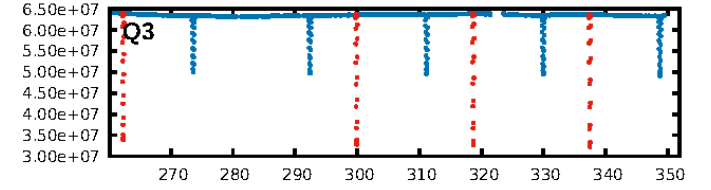
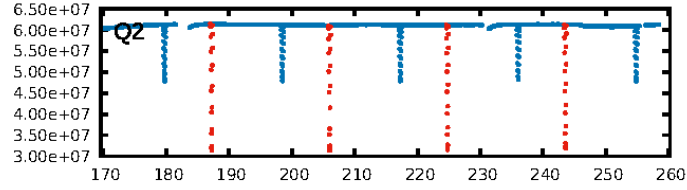
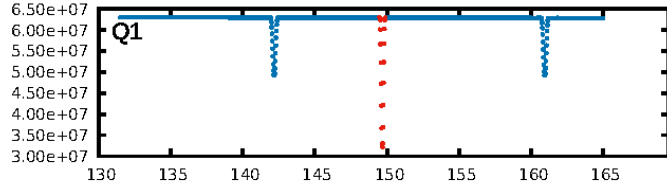
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.98 [65/66]
GhostDiagnostic-chr: 4.166
Centroid-sig: 0.0%
Centroid-so: 0.121 arcsec [276.13 σ]
OotOffset-rm: 0.008 arcsec [0.12 σ]
KicOffset-rm: 0.092 arcsec [1.34 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.94 [16/17]

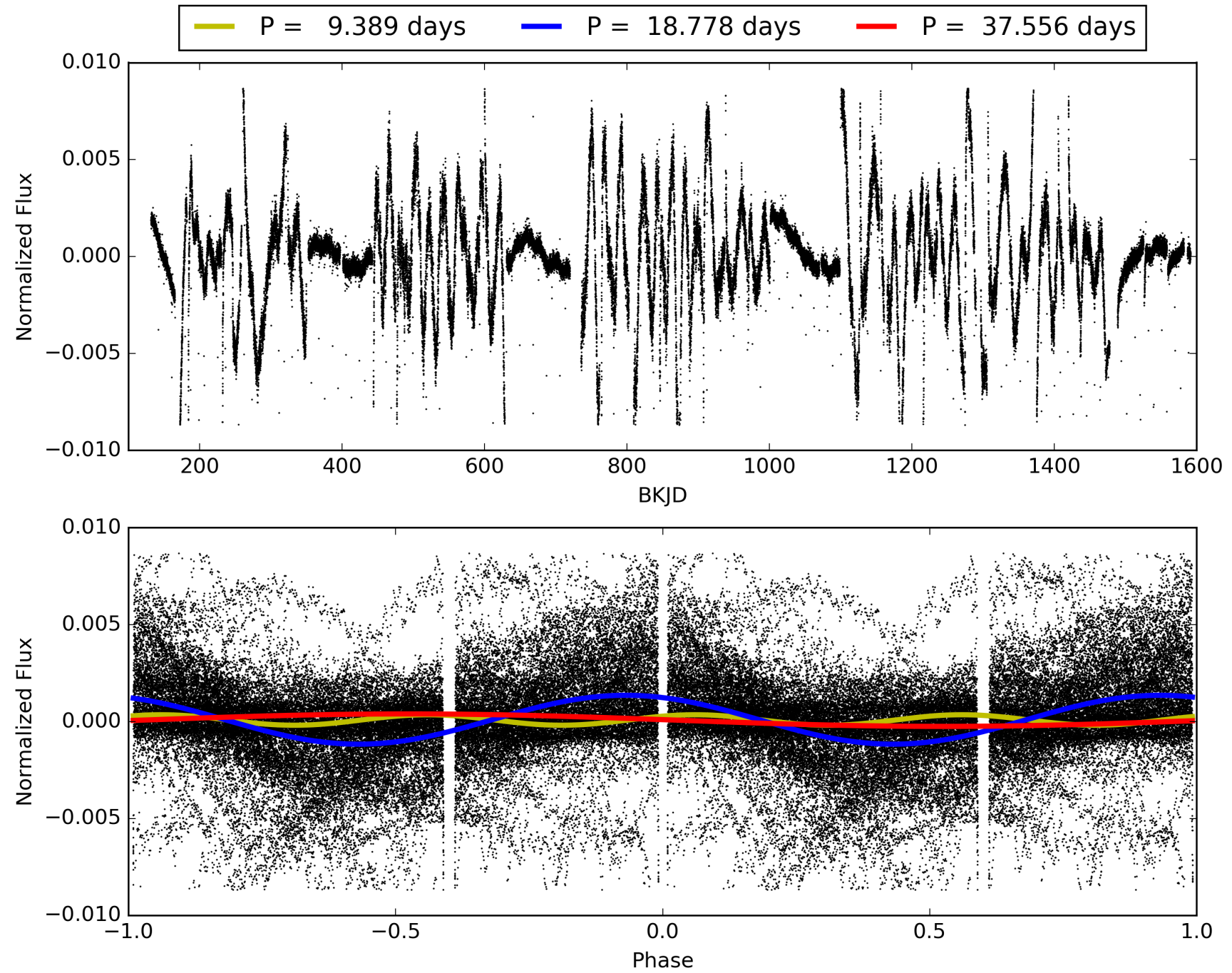
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:02:55 Z

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

TCE 008711548-01, PDC Light Curves

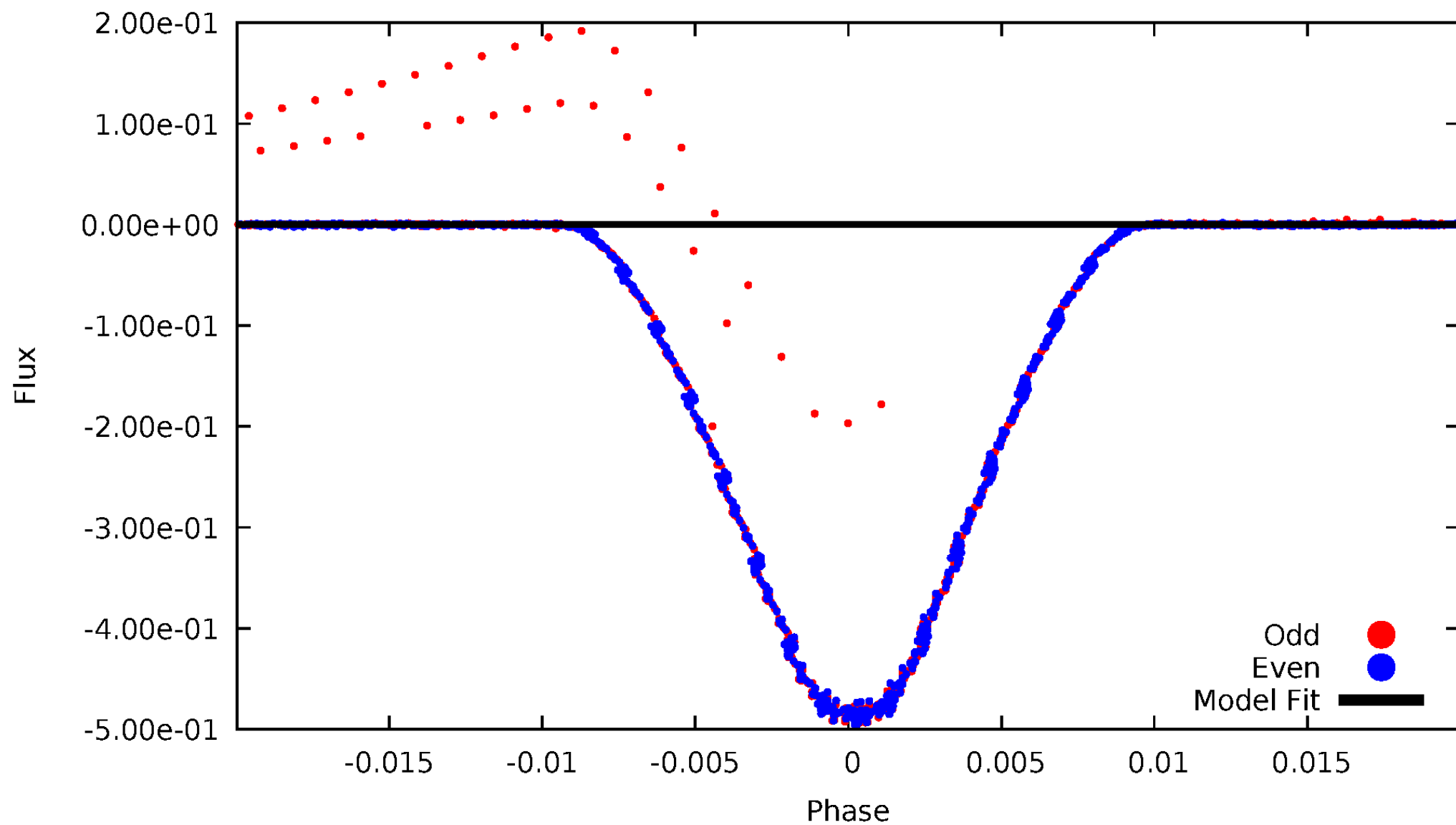


TCE 008711548-01



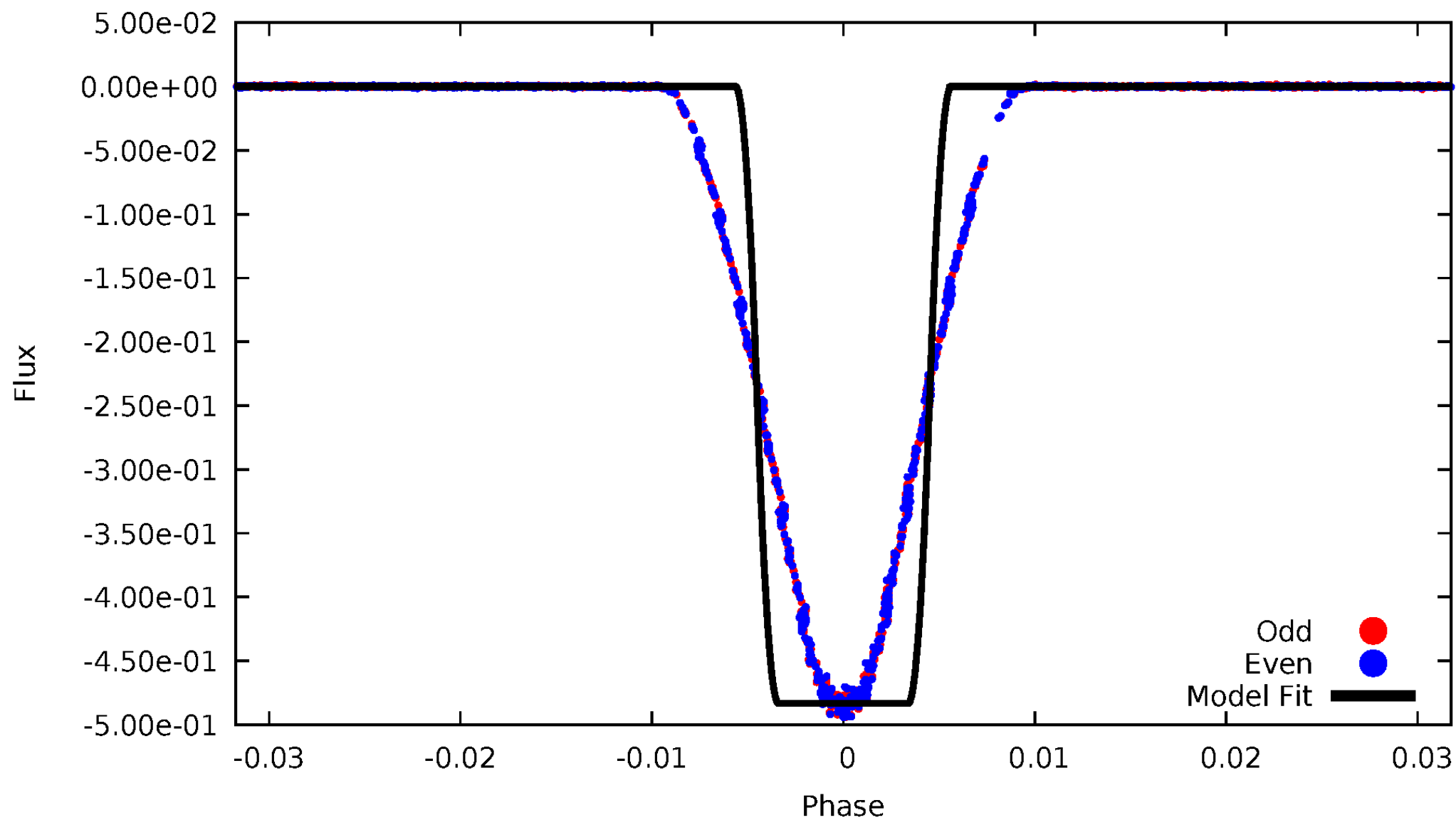
DV Odd/Even

TCE 008711548-01



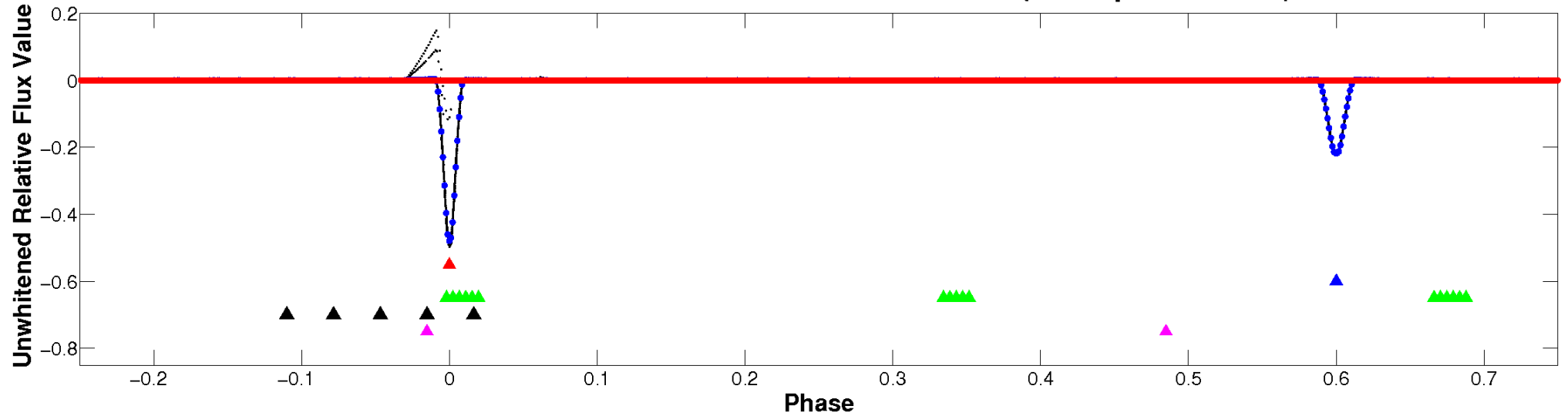
ALT Odd/Even

TCE 008711548-01



Non-Whitened Vs. Whitened Light Curve

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

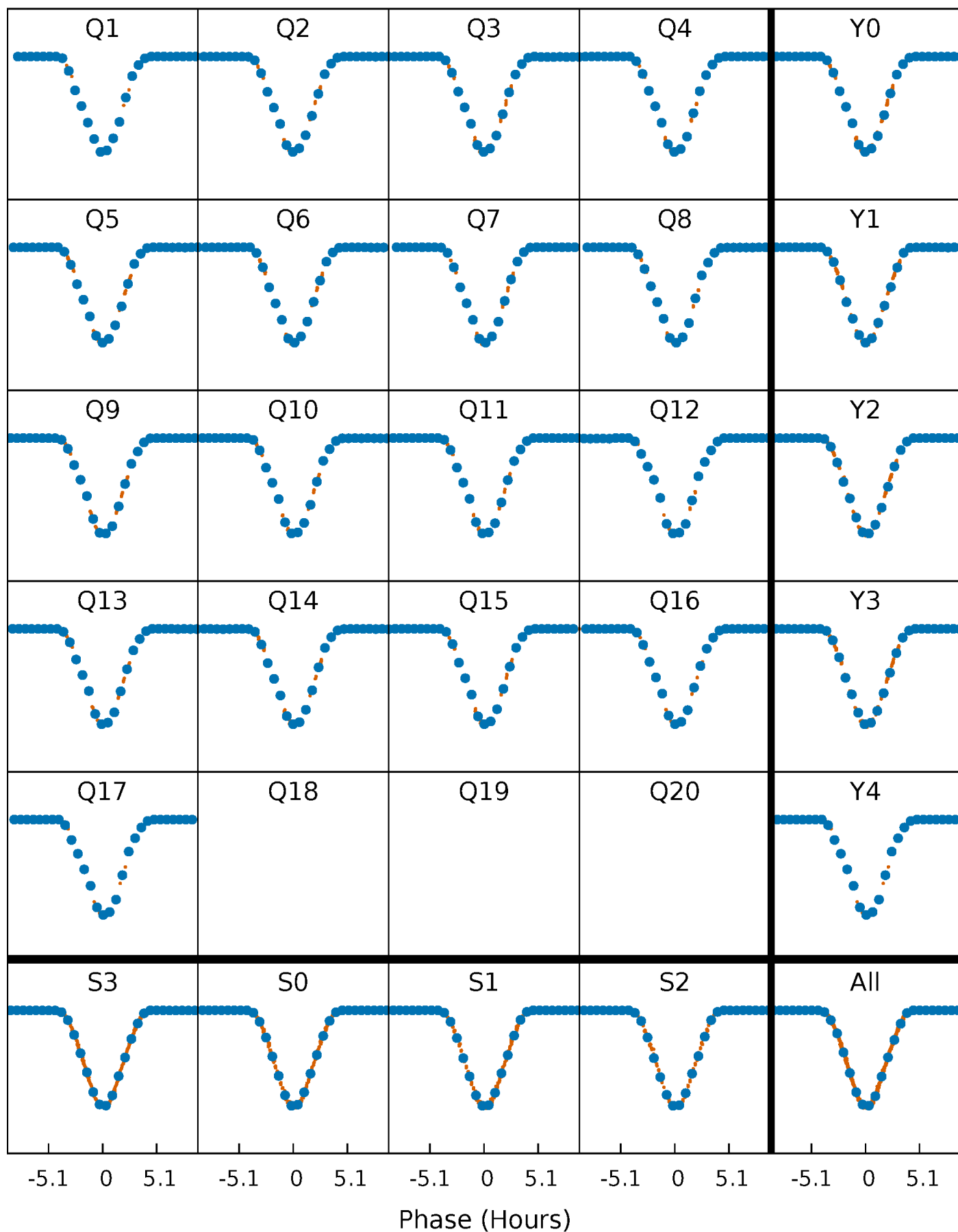


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



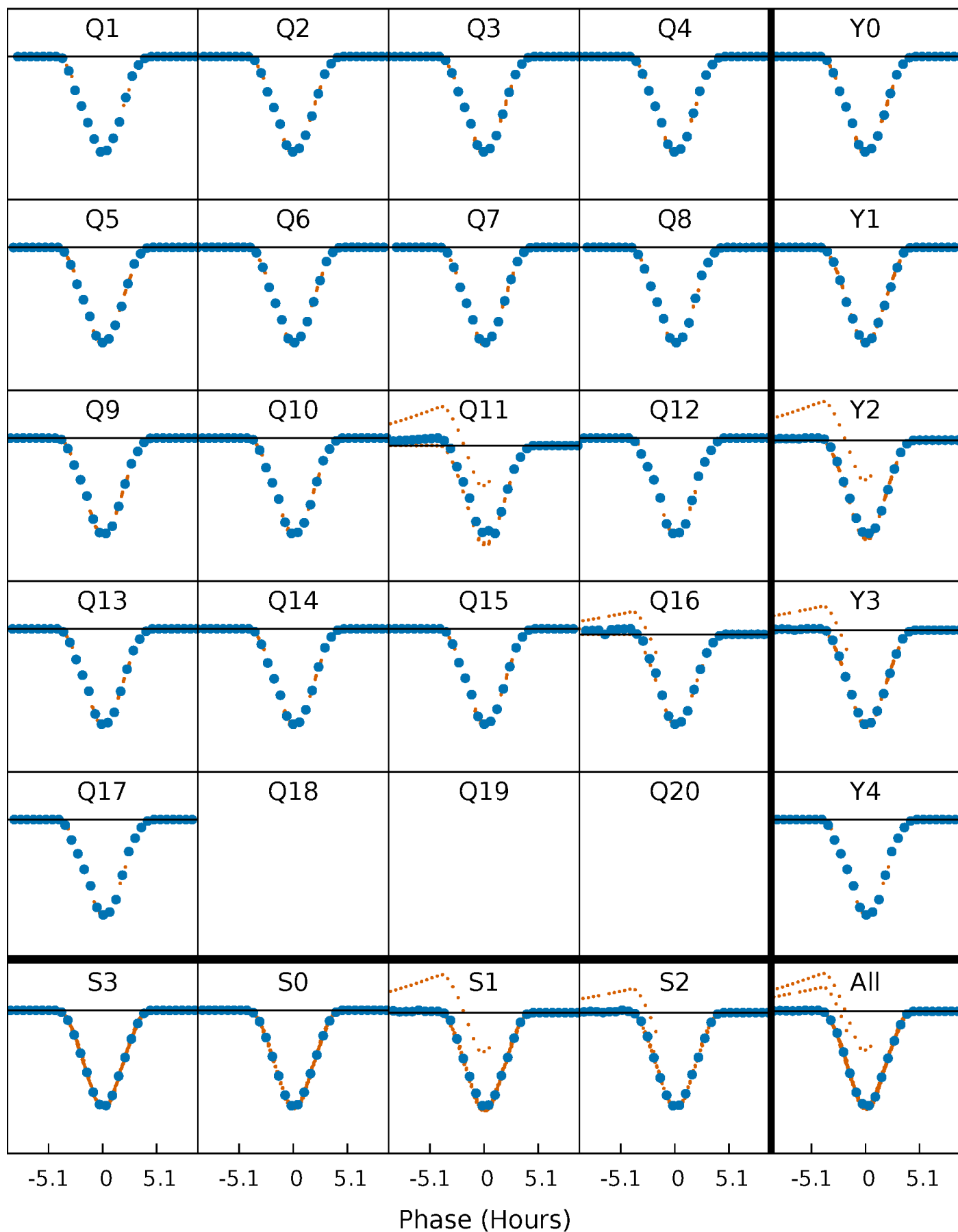
PDC Quarter-Phased Transit Curves

TCE 008711548-01 P= 18.778091 Days $T_0=149.676429$ (BKJD)



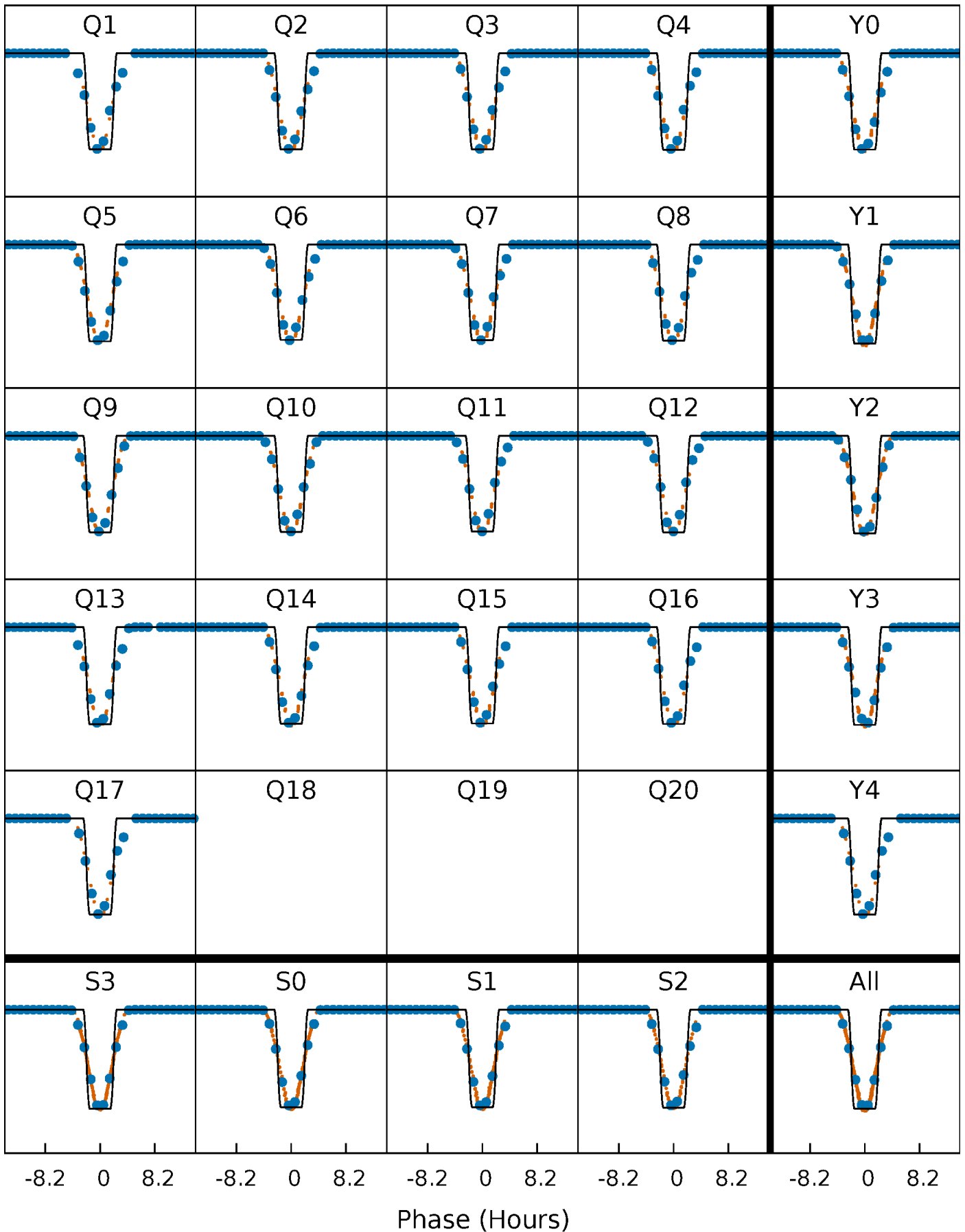
DV Quarter-Phased Transit Curves

TCE 008711548-01 P= 18.778091 Days $T_0=149.676429$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

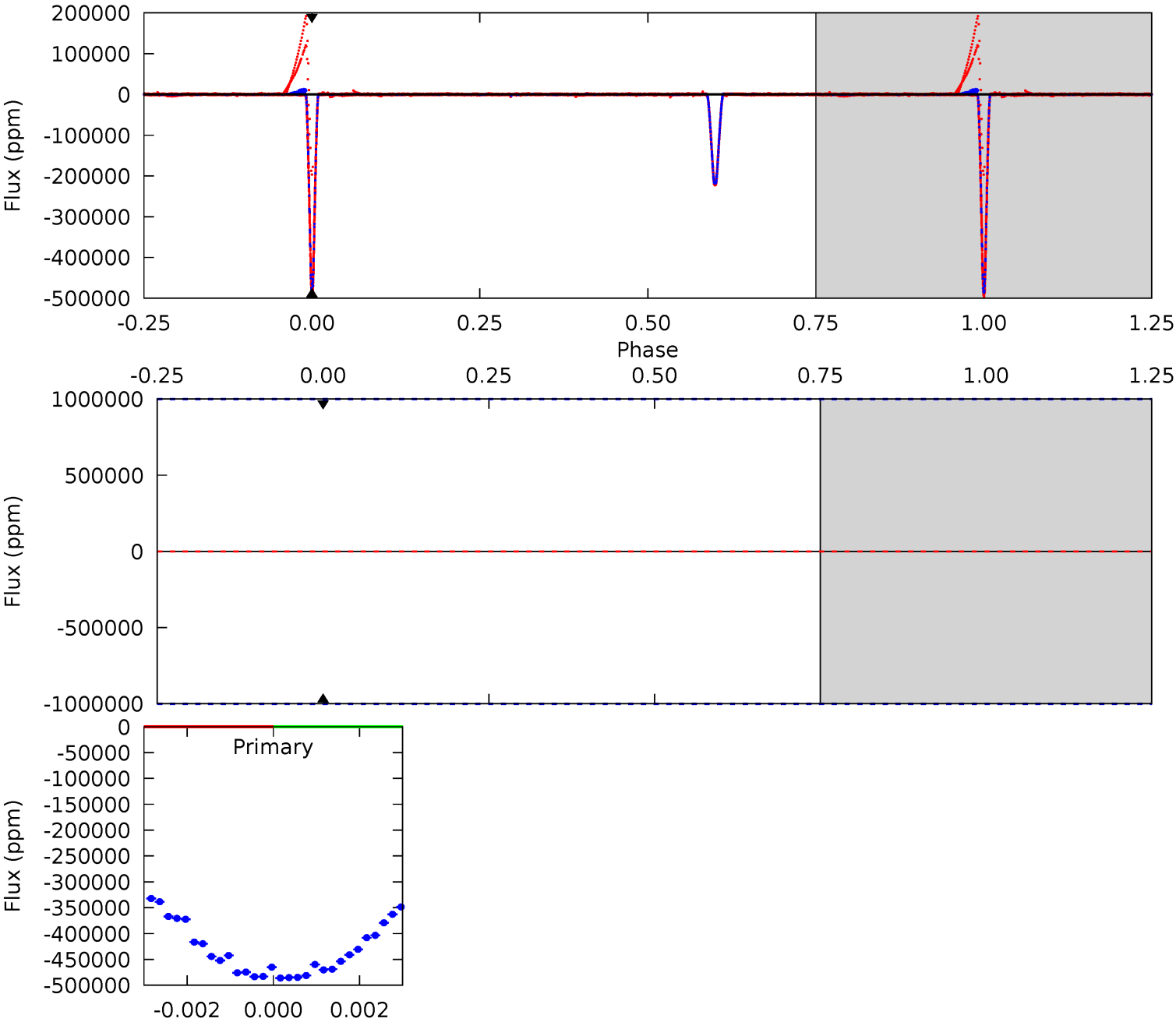
TCE 008711548-01 P= 18.778091 Days $T_0=149.680170$ (BKJD)



DV Model-Shift Uniqueness Test

008711548-01, P = 18.778091 Days, E = 130.898338 Days

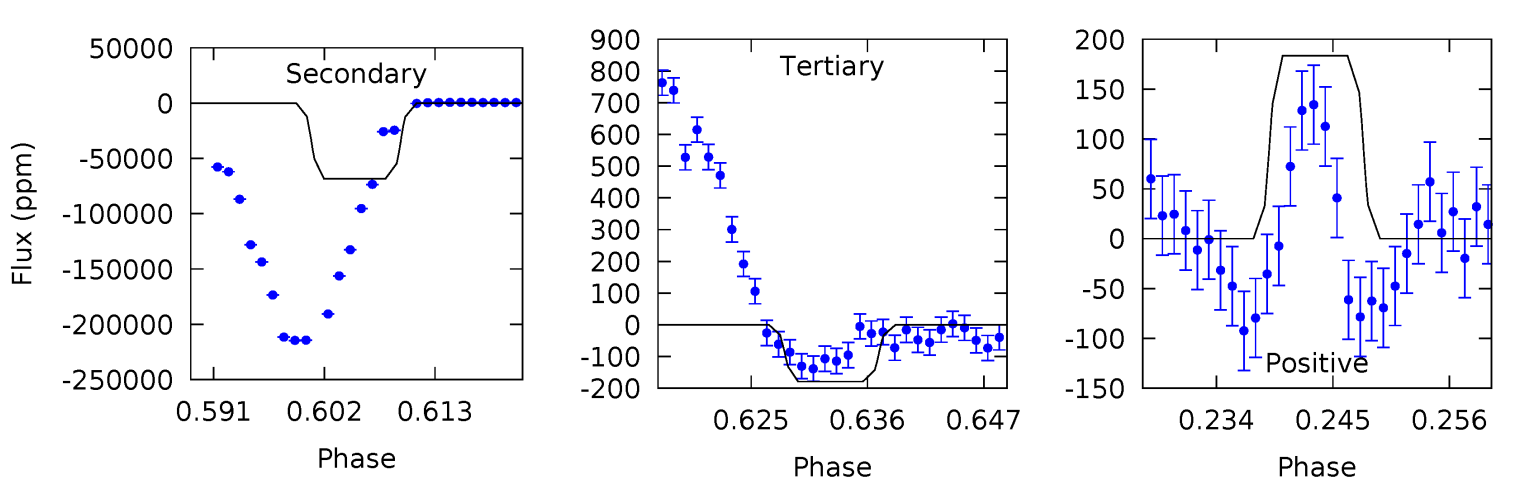
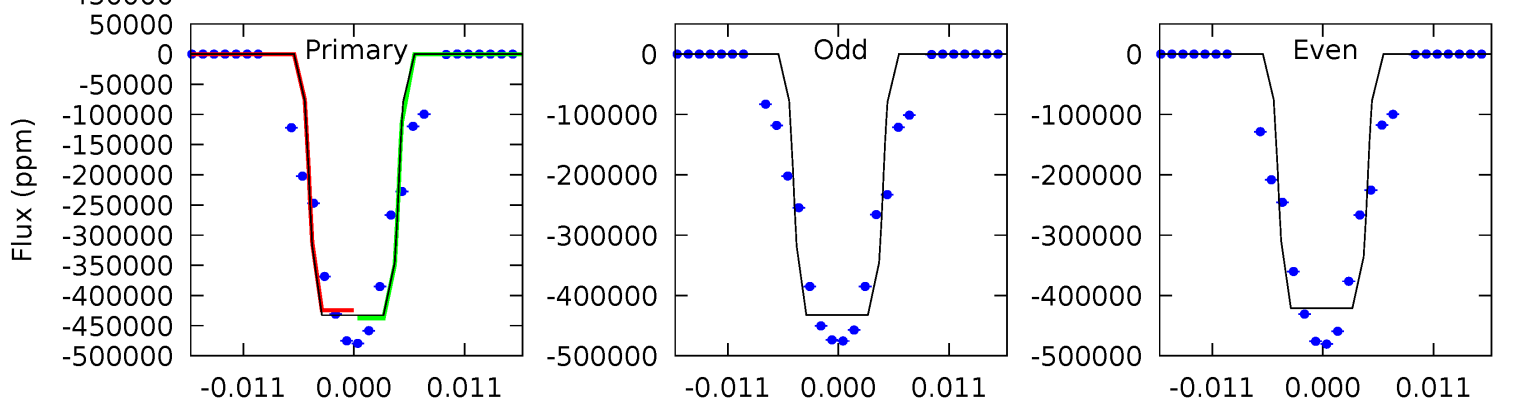
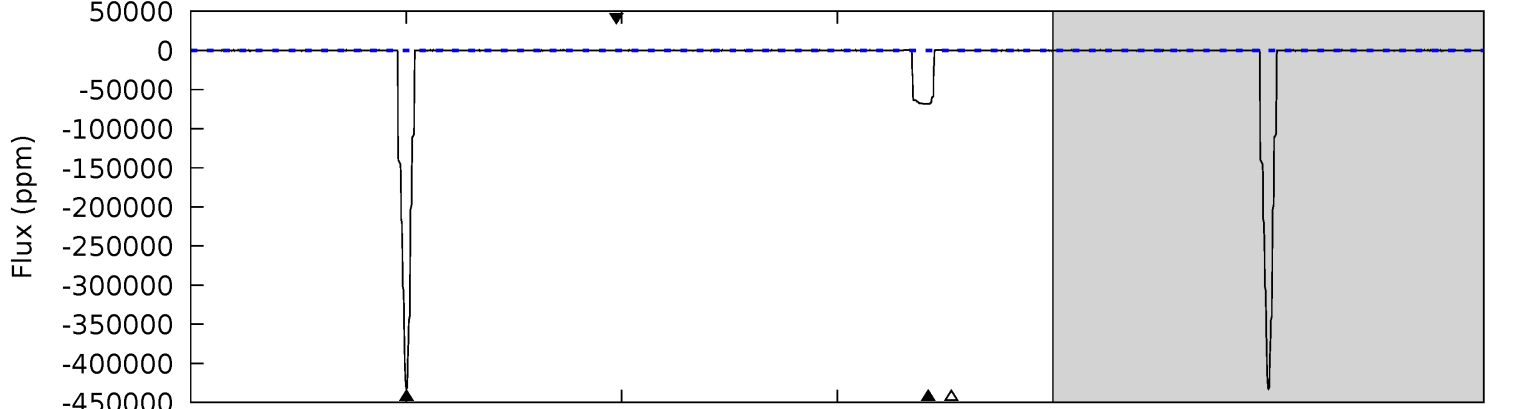
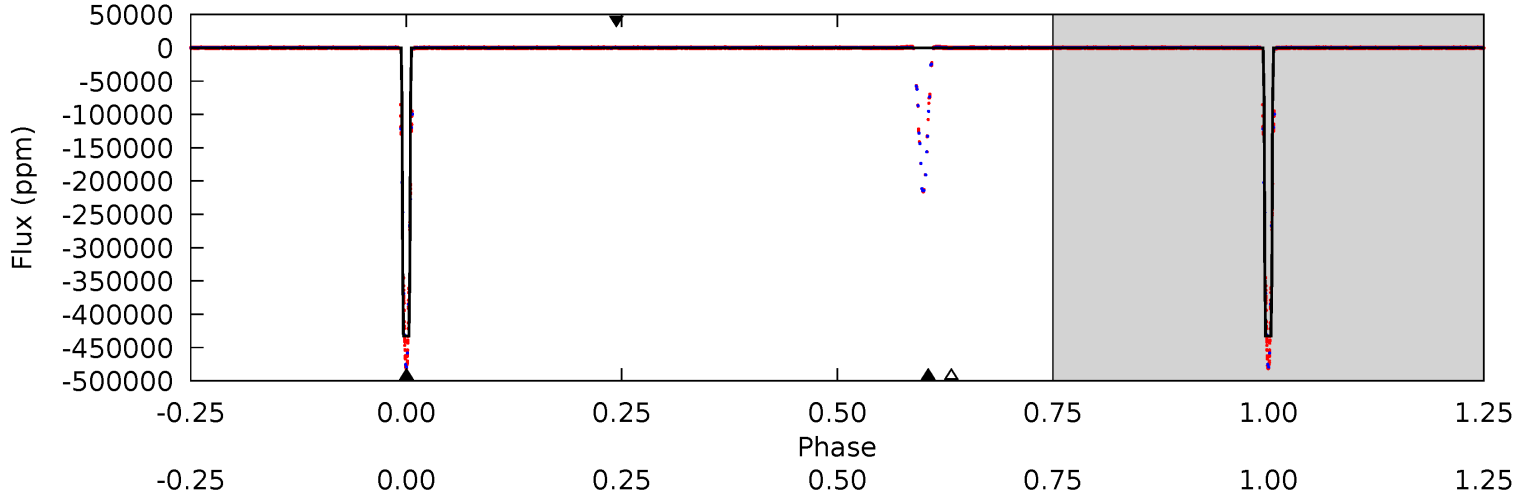
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008711548-01, P = 18.778091 Days, E = 130.902079 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4761	751.5	1.97	2.02	5.01	2.54	14.1	4759	4759	749.5	749.5	46.5	1.00	0.00	0



Stellar Parameters For KIC 008711548

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6794^{+189}_{-284}	$4.102^{+0.214}_{-0.175}$	$-0.200^{+0.250}_{-0.300}$	$1.710^{+0.503}_{-0.453}$	$1.356^{+0.194}_{-0.259}$	$0.382^{+0.485}_{-0.186}$
	+3%/-4%	+5%/-4%	+125%/-150%	+29%/-26%	+14%/-19%	+127%/-49%
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 008711548-01 / KOI 7079.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$90.68^{+23.79}_{-21.23}$	1391^{+114}_{-111}	3222^{+2358}_{-8476}	$8.251^{+162.049}_{-147.612}$
Alt.	-68294 ± 91	$128.22^{+28.11}_{-28.35}$	1384^{+111}_{-100}	4409^{+294}_{-259}	57^{+37}_{-18}

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

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

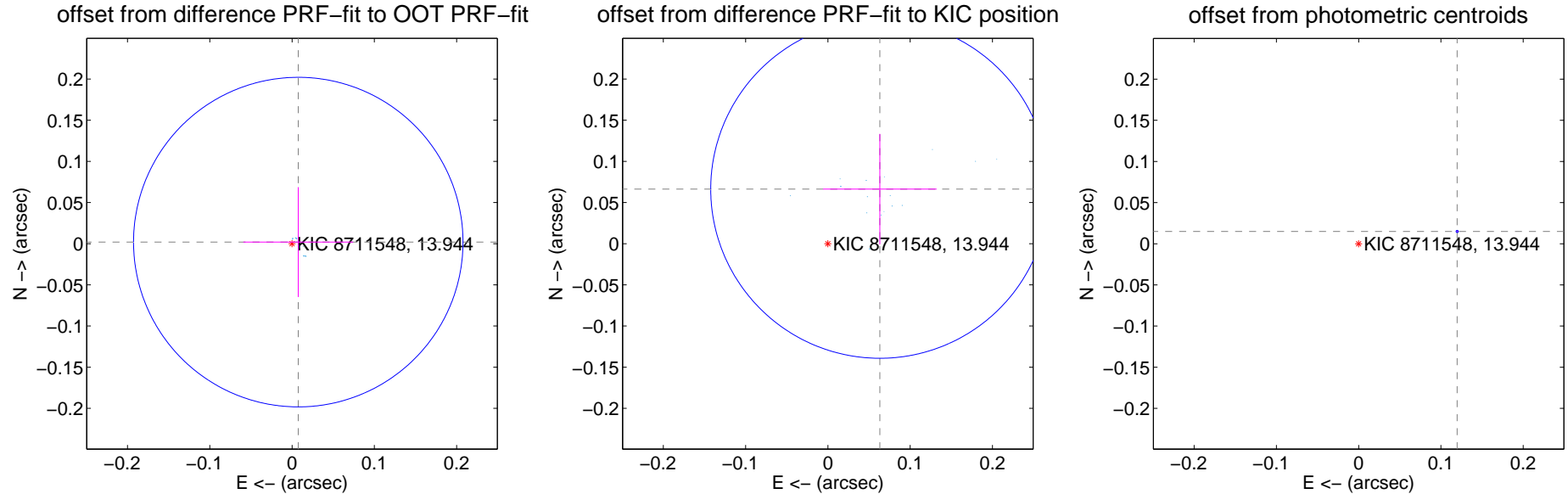
DV Centroid Data

Supplemental centroid analysis for 008711548-01. Kepler magnitude: 13.94. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

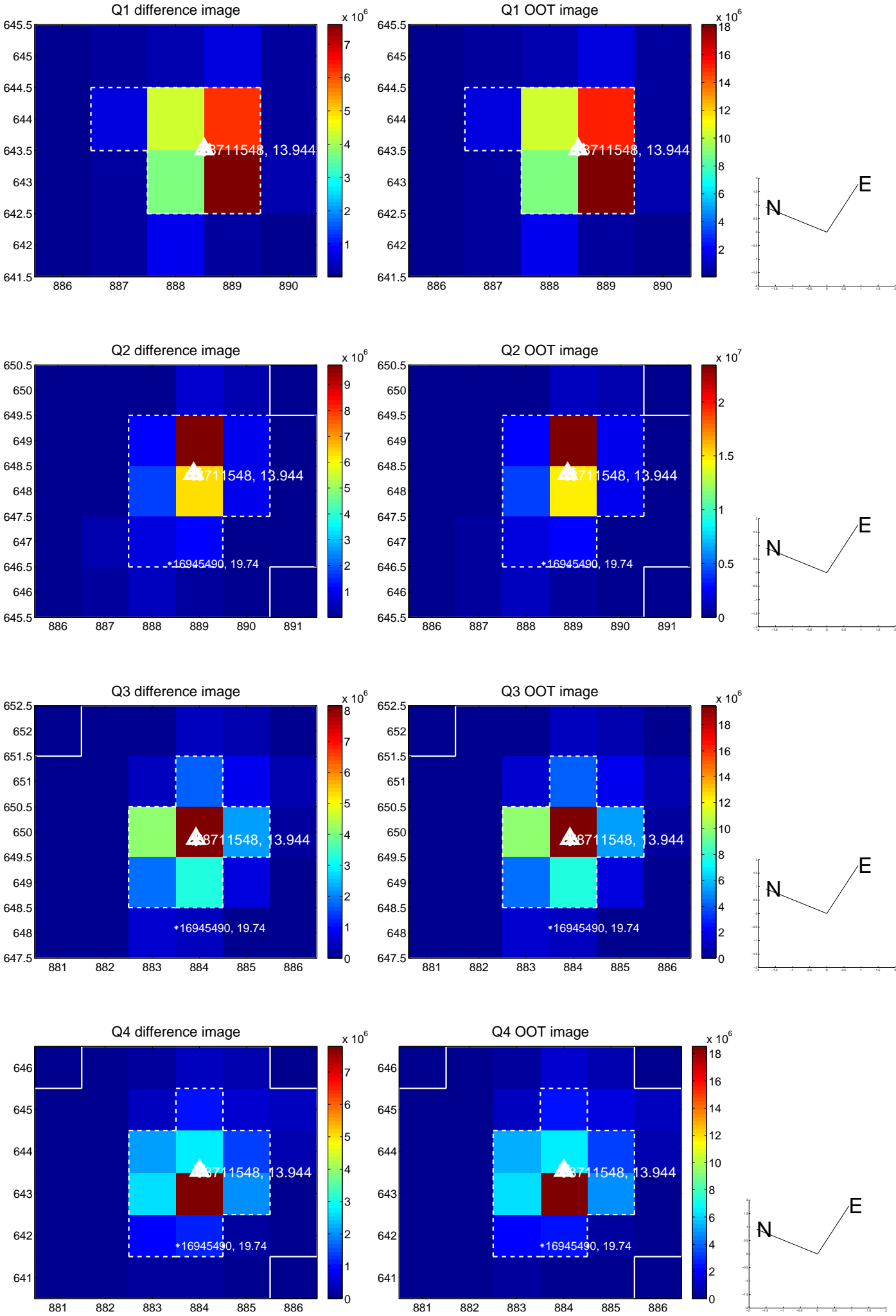
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.008 ± 0.067	0.12	-0.008 ± 0.067	0.002 ± 0.067
PRF-fit source offset from KIC position	0.092 ± 0.068	1.34	-0.063 ± 0.069	0.066 ± 0.067
photometric centroid source offset	0.12 ± 0.00	276.13	-0.12 ± 0.00	0.01 ± 0.00

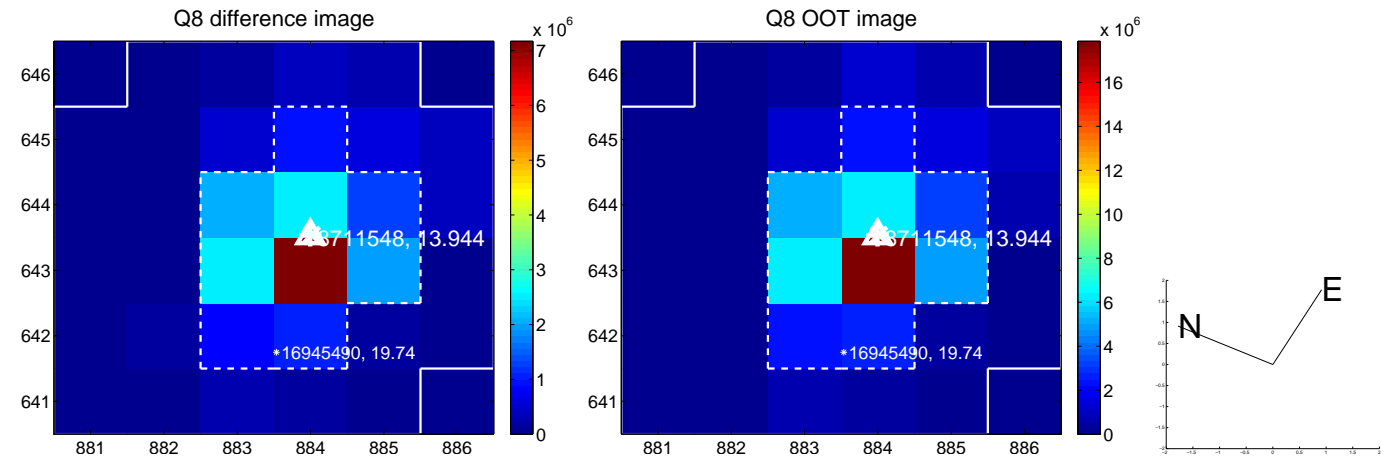
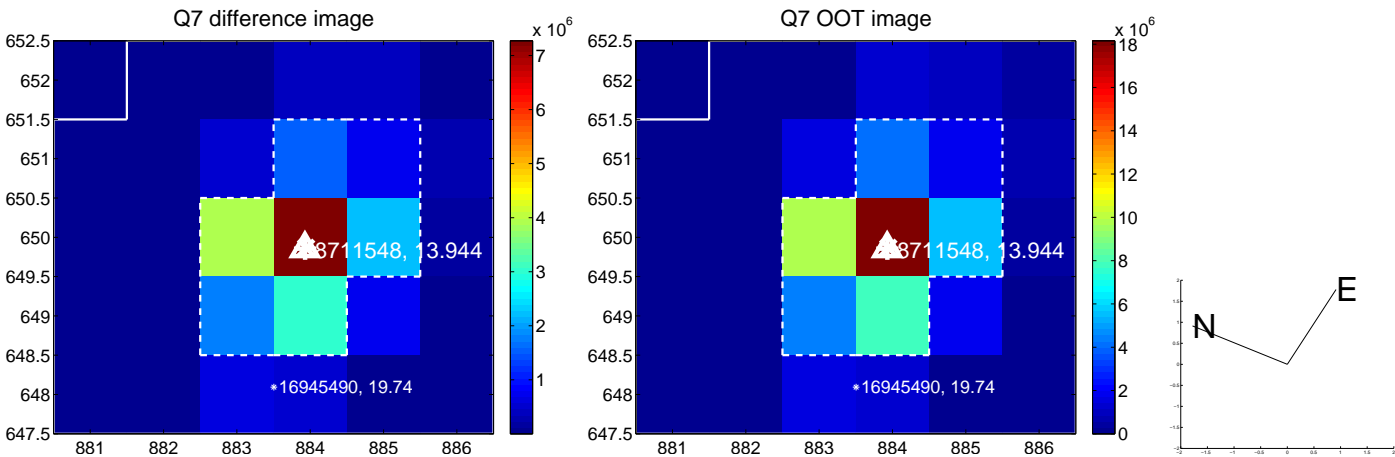
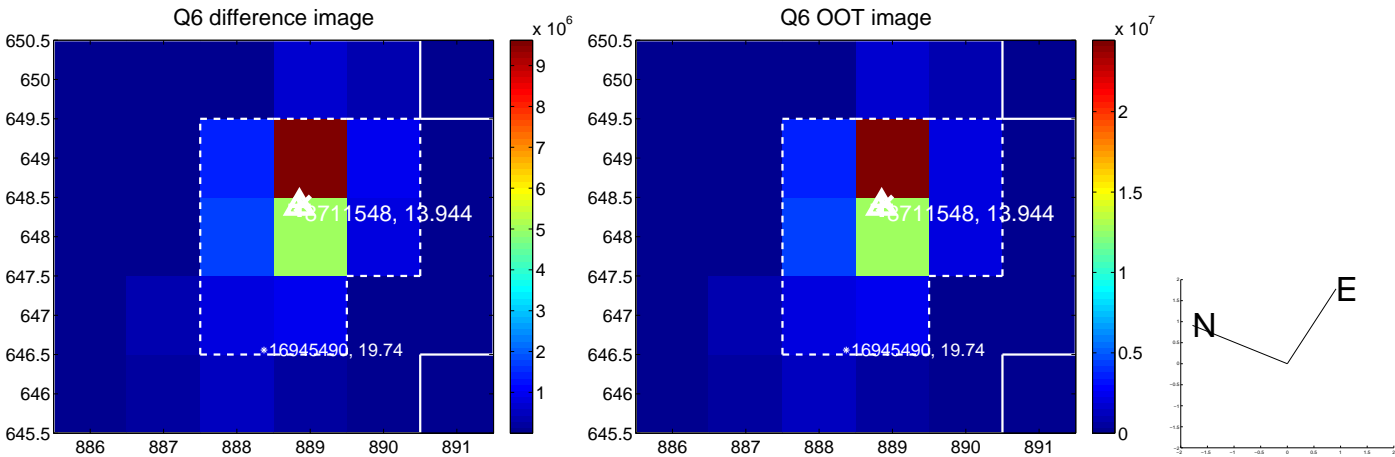
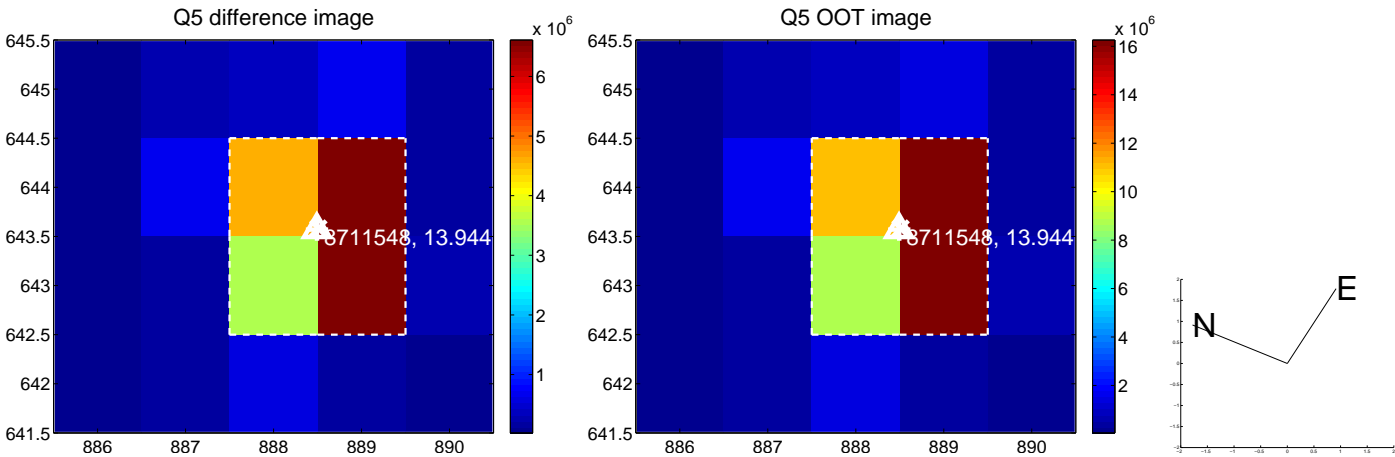


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

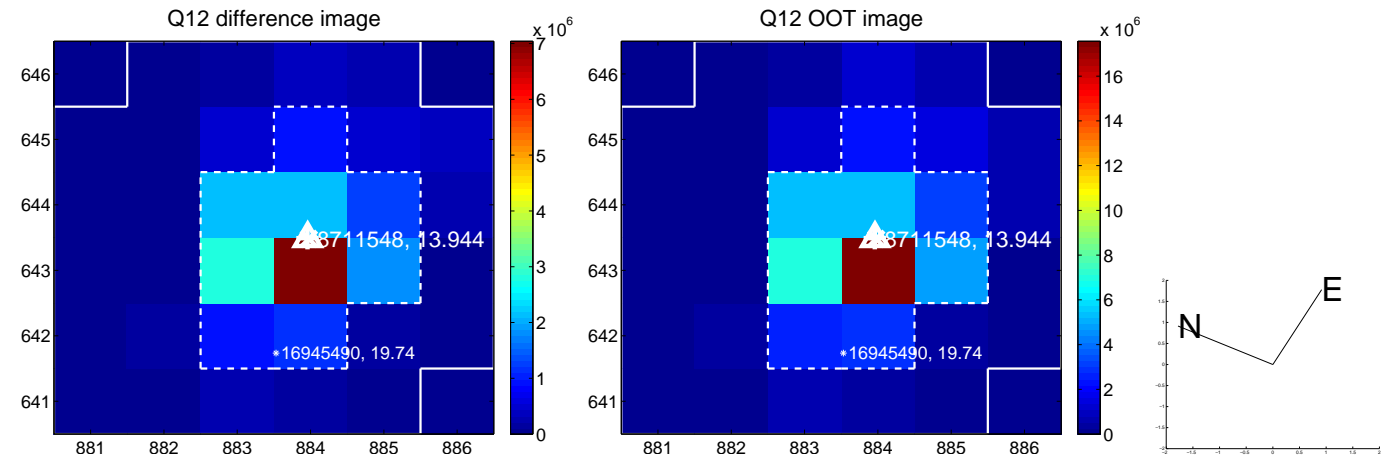
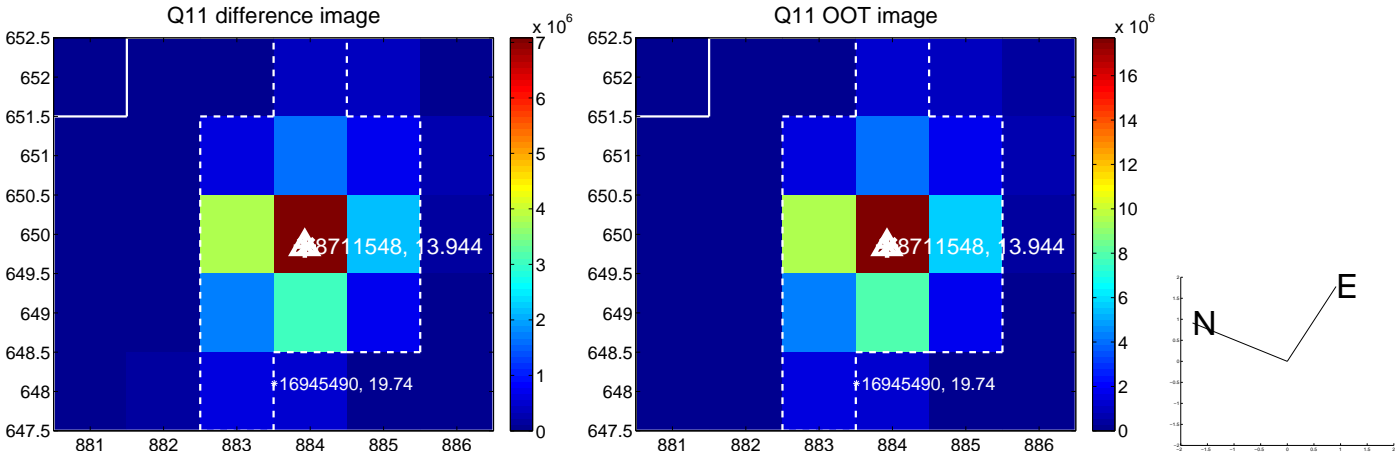
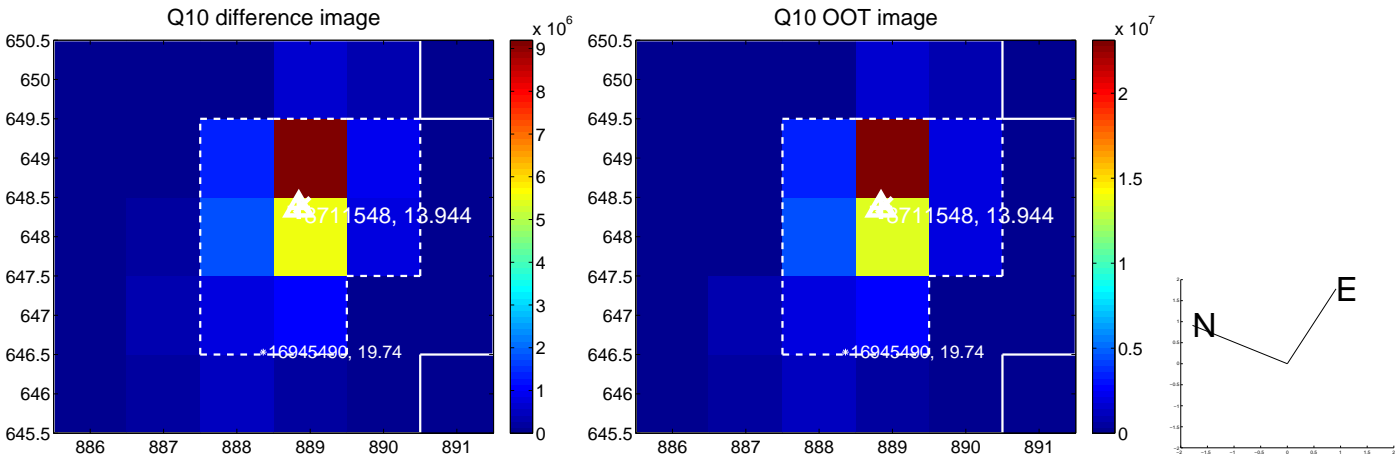
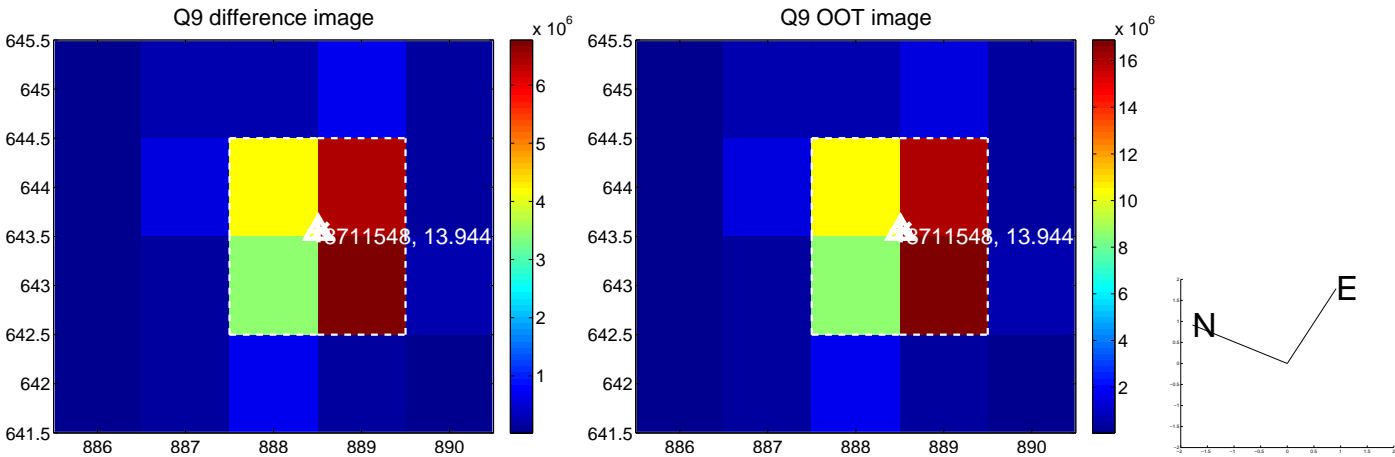
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



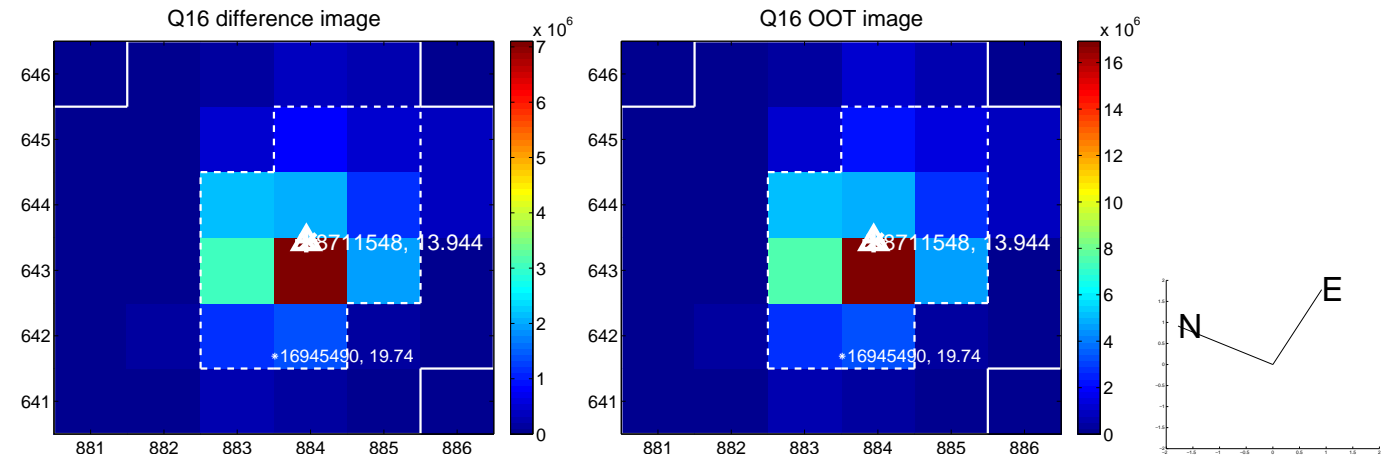
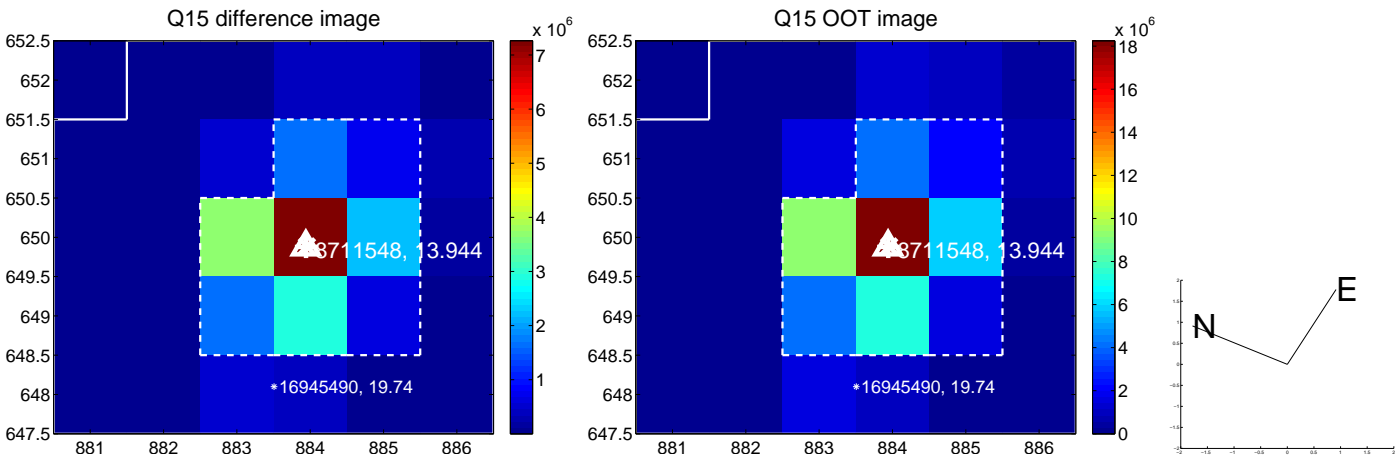
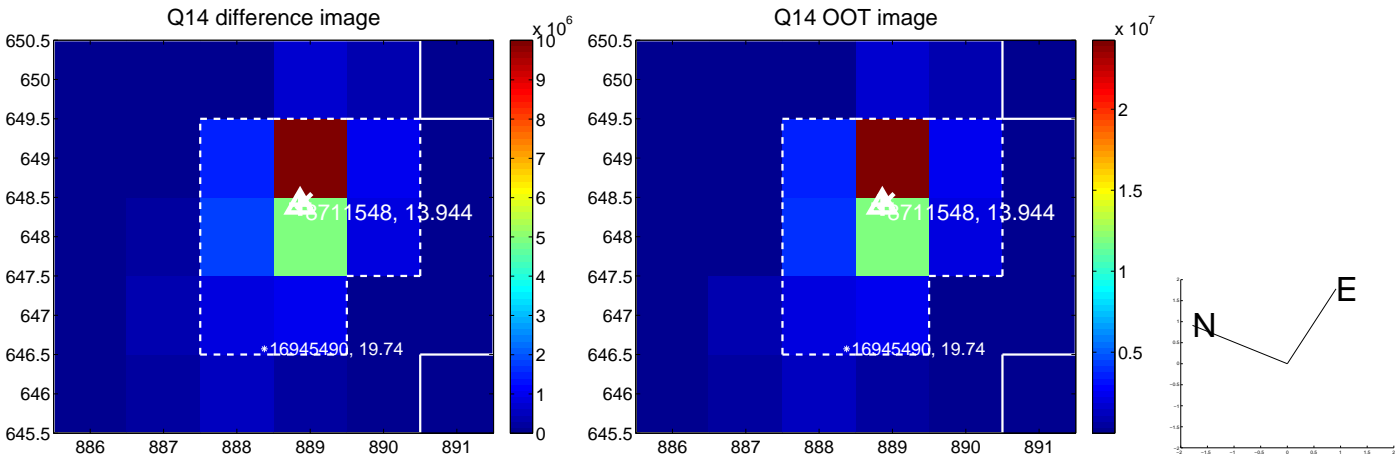
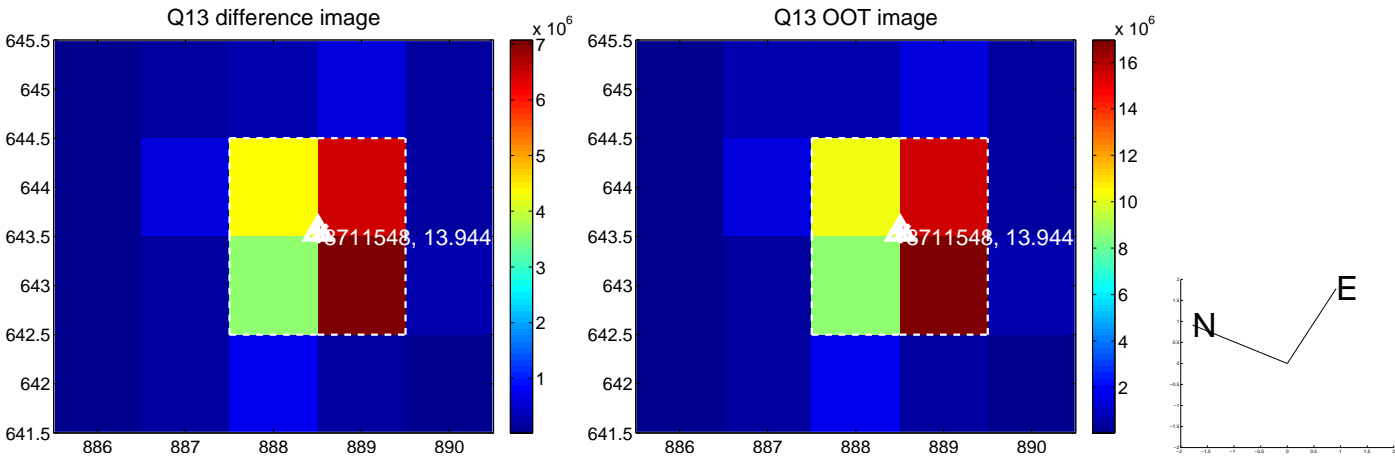
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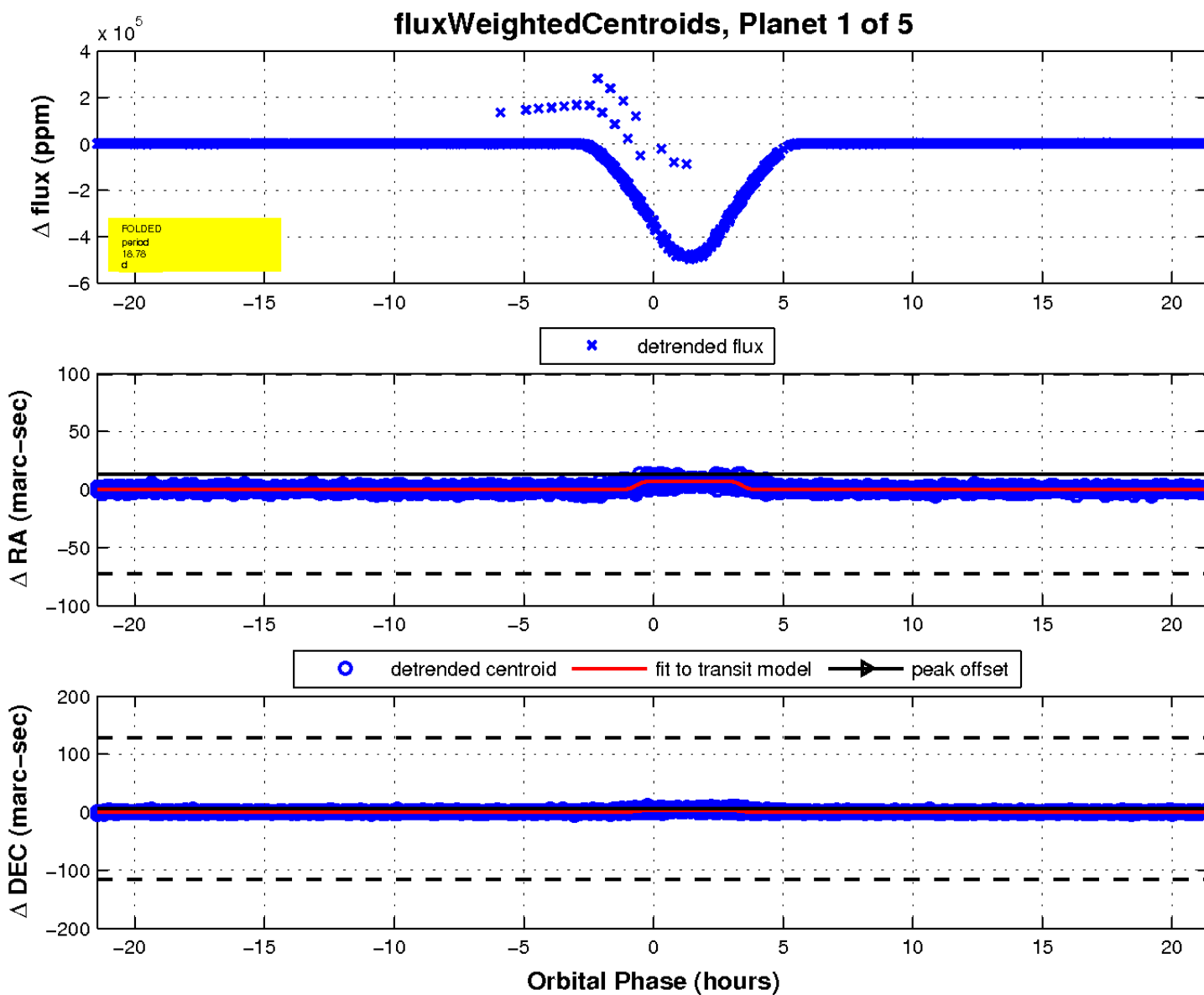
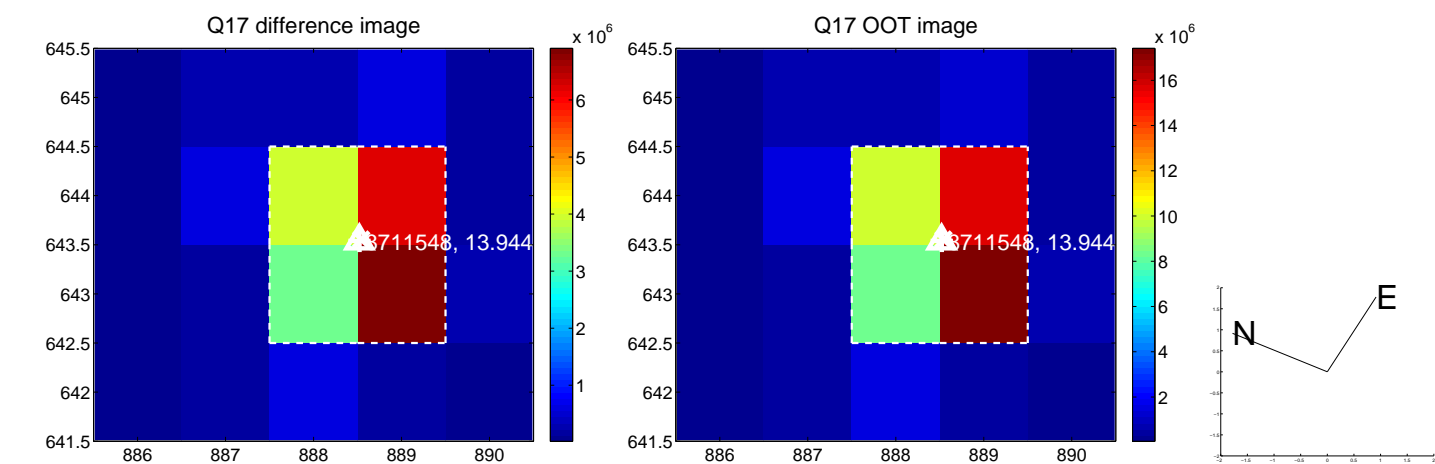
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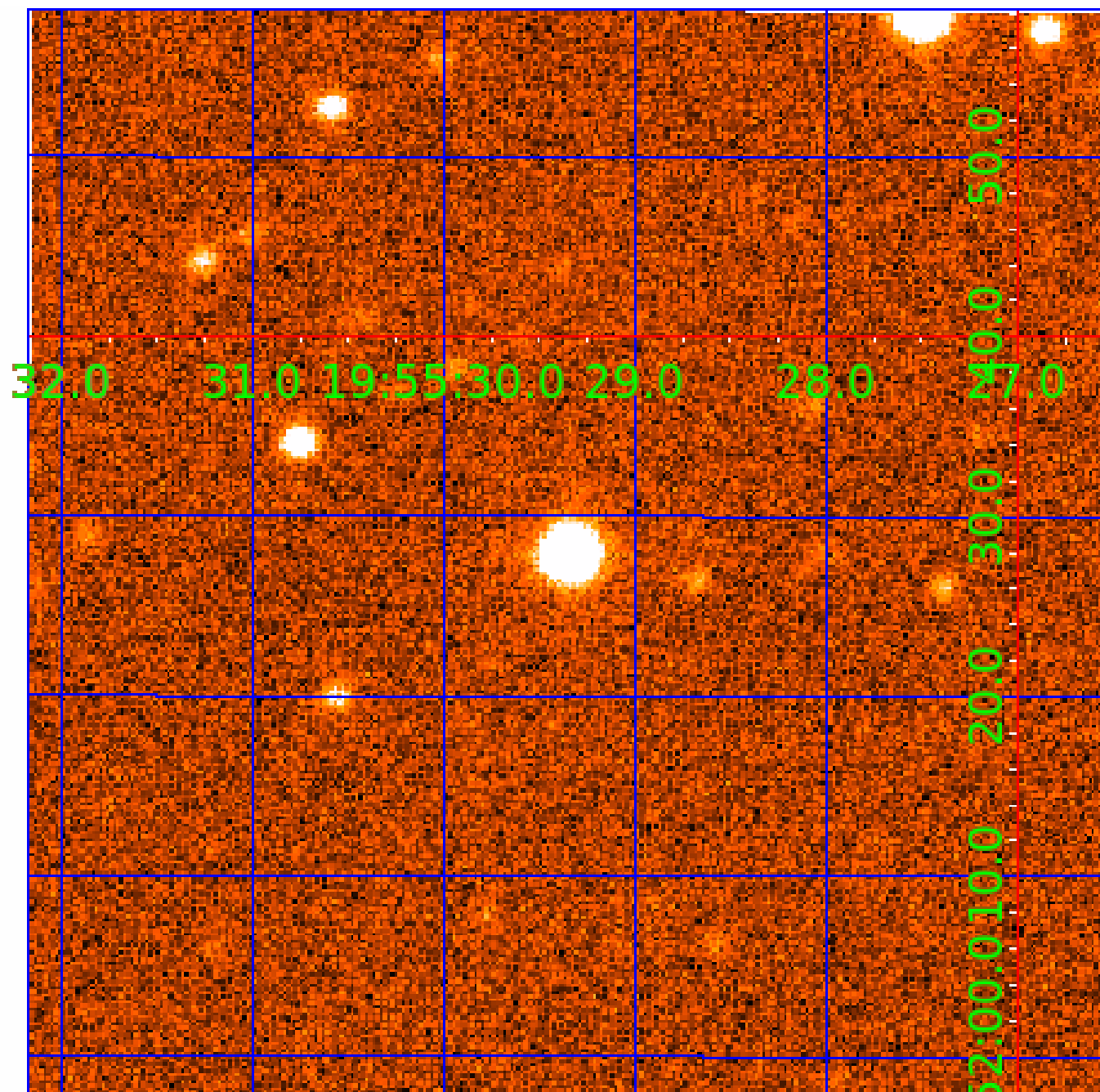


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UKIRT Image

Declination



KIC 008711548

Q1-17 DR25 TCE Parameters

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008711548-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008711548-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008711548-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
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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.

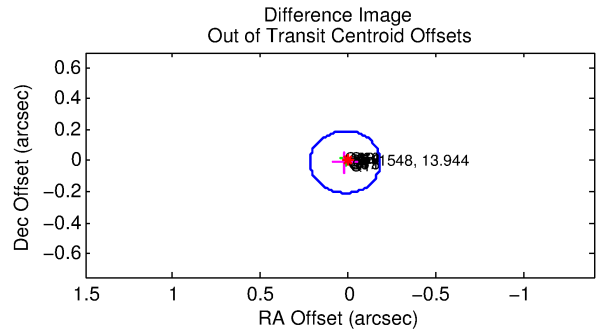
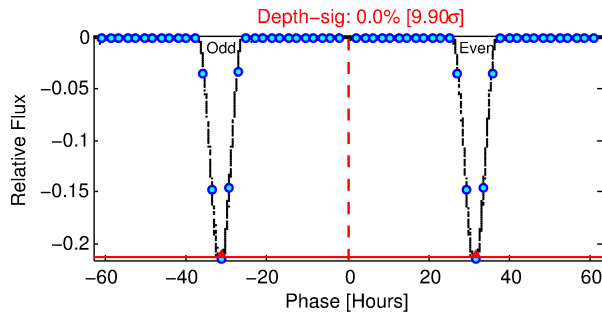
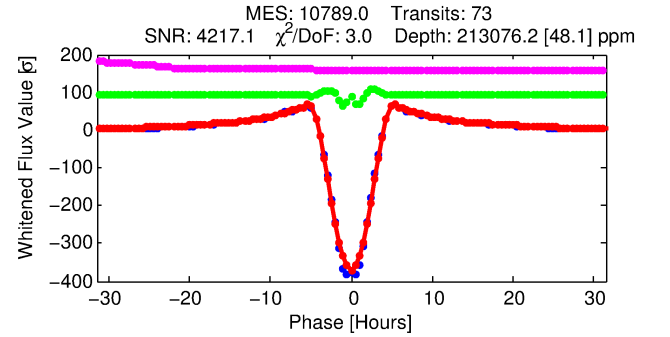
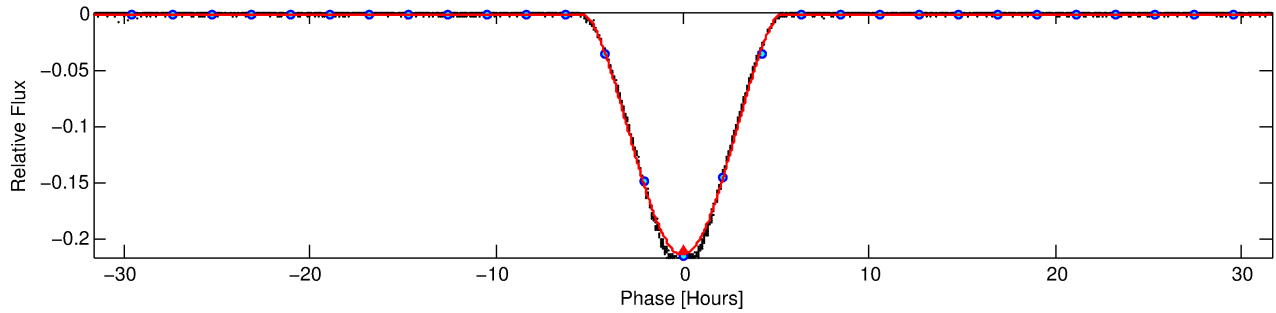
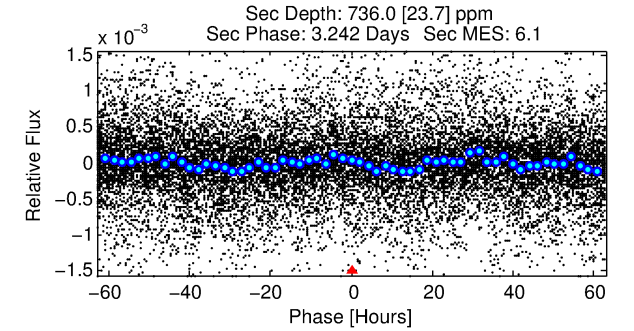
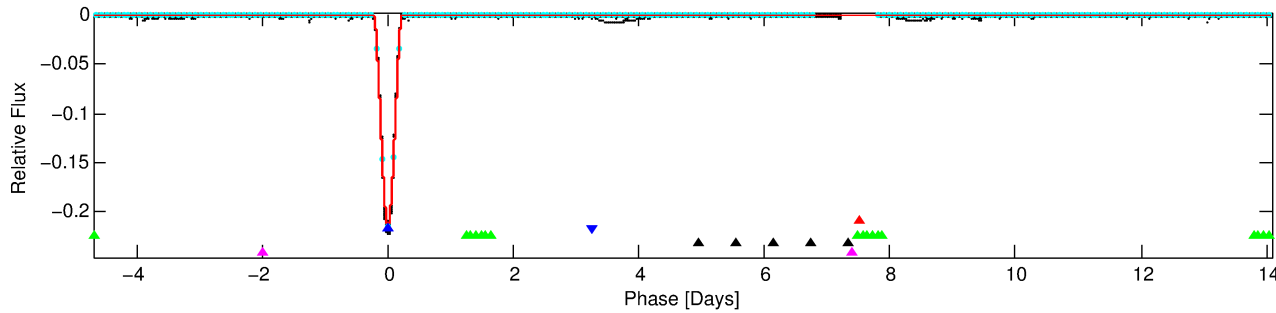
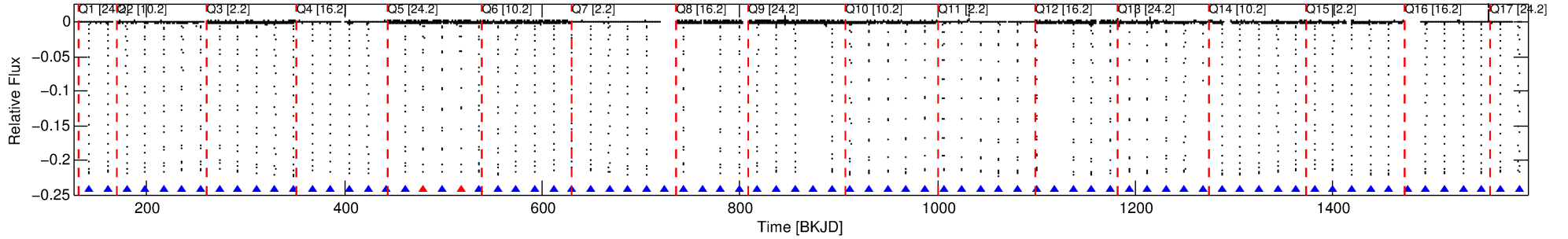
Ephemeris Match Information For 008711548-02

No Significant Match Found

DV One-Page Summary

KIC: 8711548 Candidate: 2 of 5 Period: 18.778 d
KOI: K07079 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.71 Rs Teff: 6794.0 K Logg: 4.10 Fe/H: -0.200



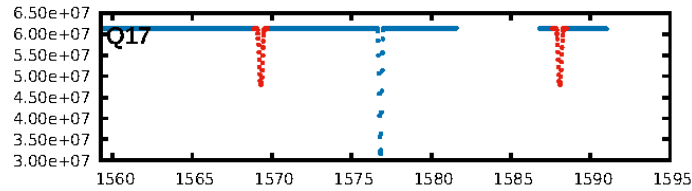
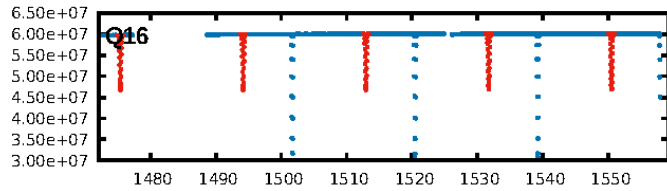
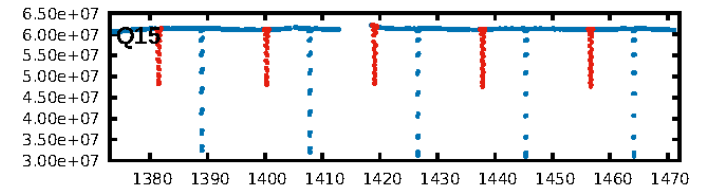
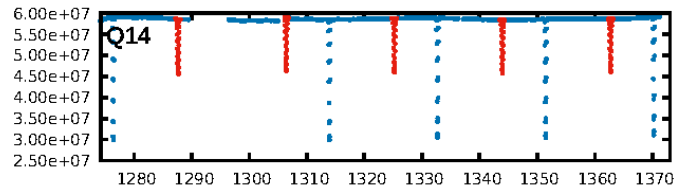
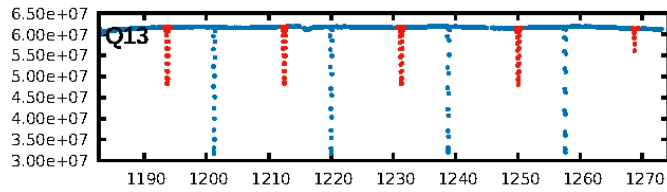
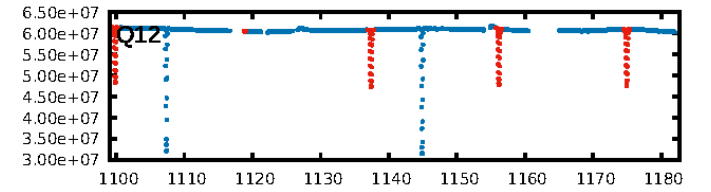
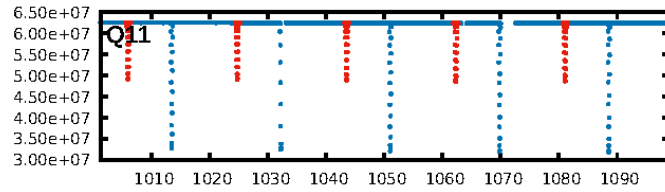
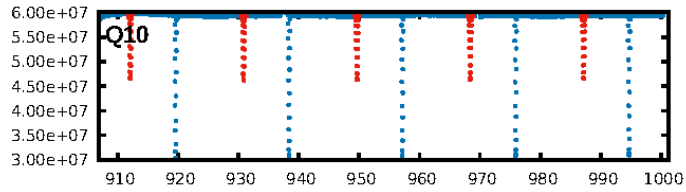
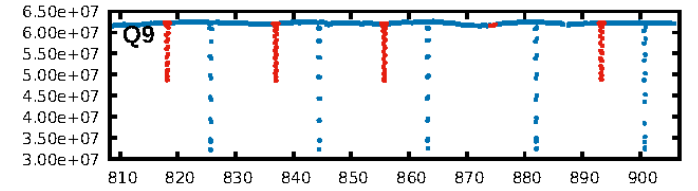
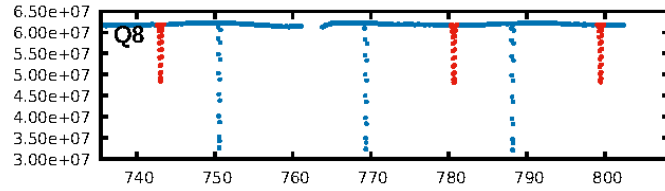
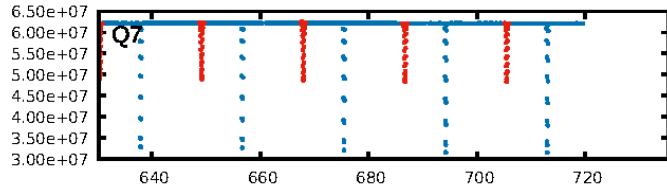
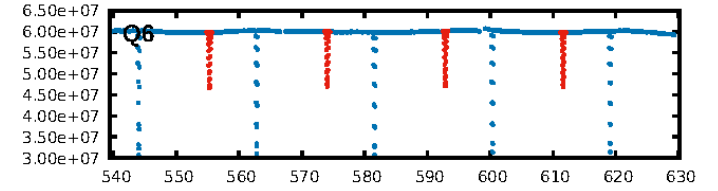
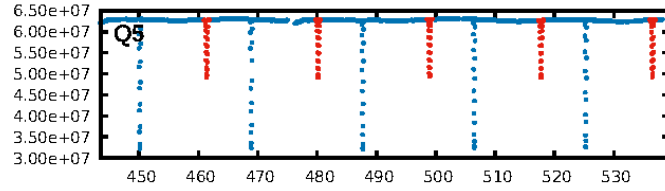
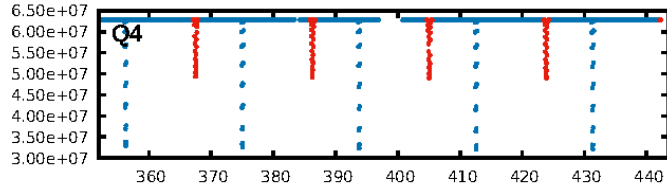
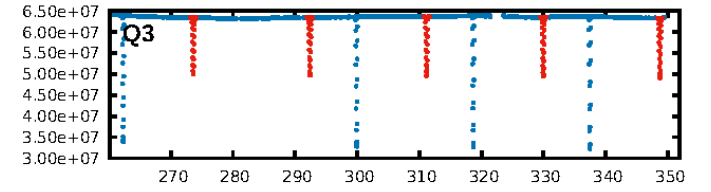
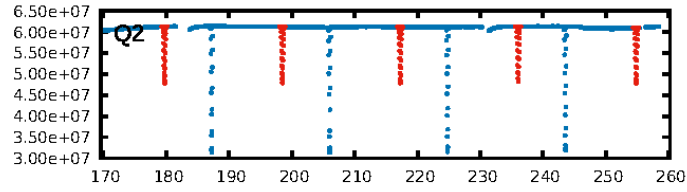
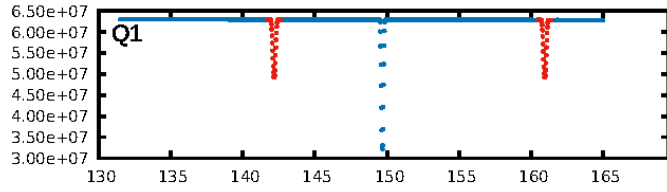
DV Fit Results:

Period = 18.77817 [0.00000] d
Epoch = 142.1642 [0.0000] BKJD
Rp/R* = 0.5325 [0.0075]
a/R* = 18.29 [0.02]
b = 0.74 [0.01]
Seff = 239.07 [99.82]
Teq = 1003 [105] K
Rp = 99.37 [29.26] Re
a = 0.1528 [0.0391] AU
Ag = 0.96 [0.37] [-0.12σ]
Teffp = 1533 [66] K [4.29σ]

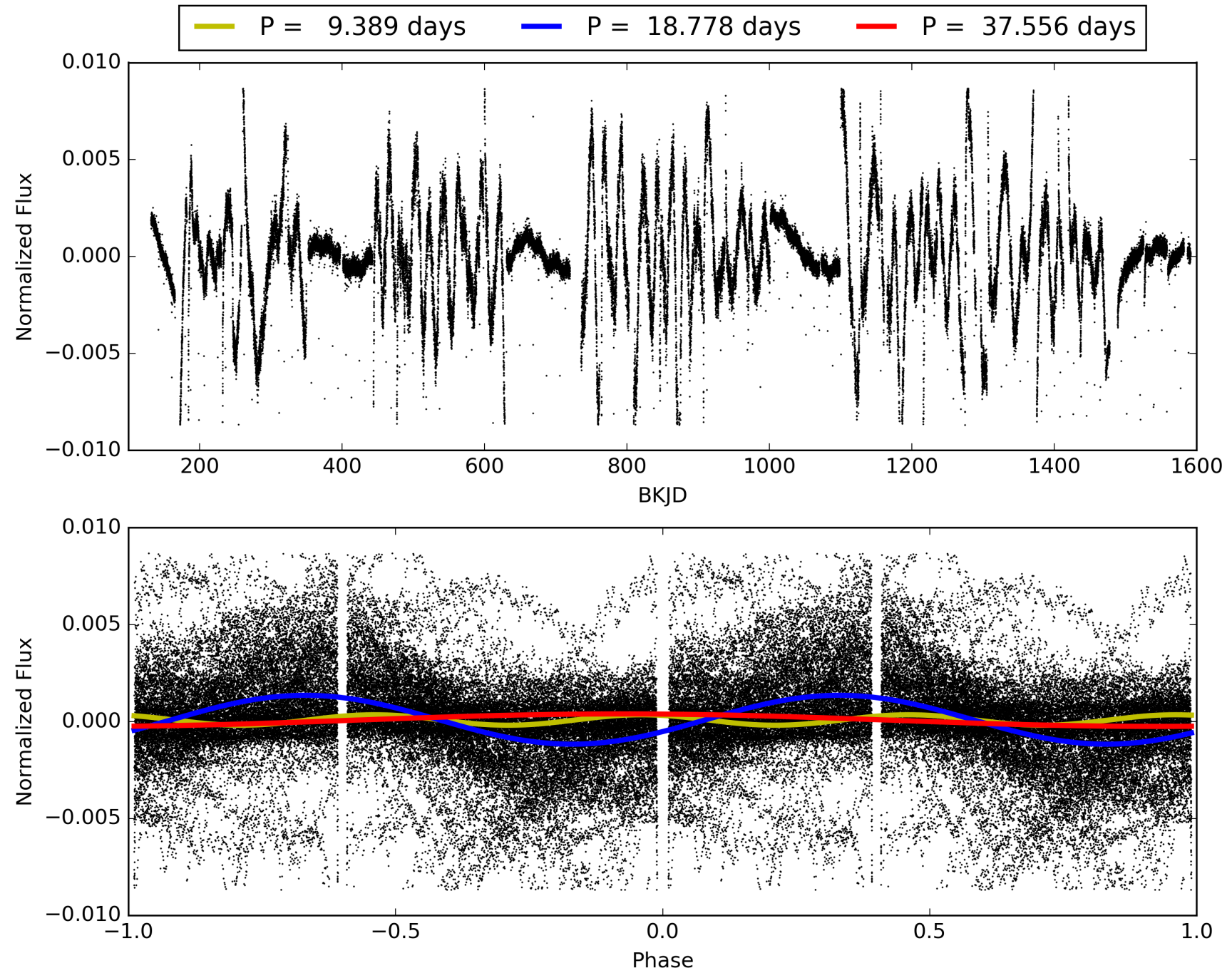
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [12.29σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.97 [67/69]
GhostDiagnostic-chr: 3.861
Centroid-sig: 0.0%
Centroid-so: 0.079 arcsec [98.66σ]
OotOffset-rm: 0.020 arcsec [0.30σ]
KicOffset-rm: 0.066 arcsec [0.97σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008711548-02, PDC Light Curves

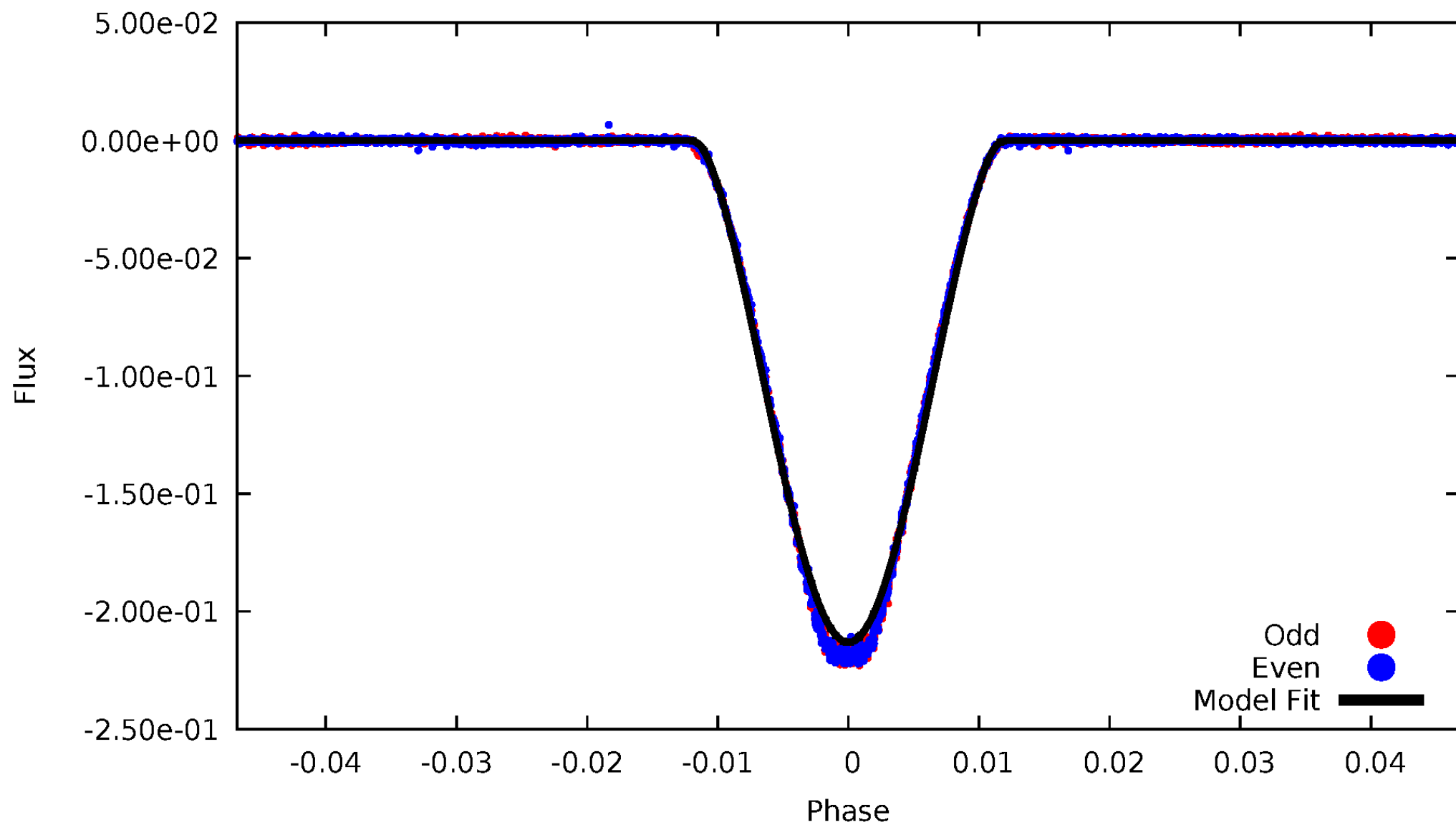


TCE 008711548-02



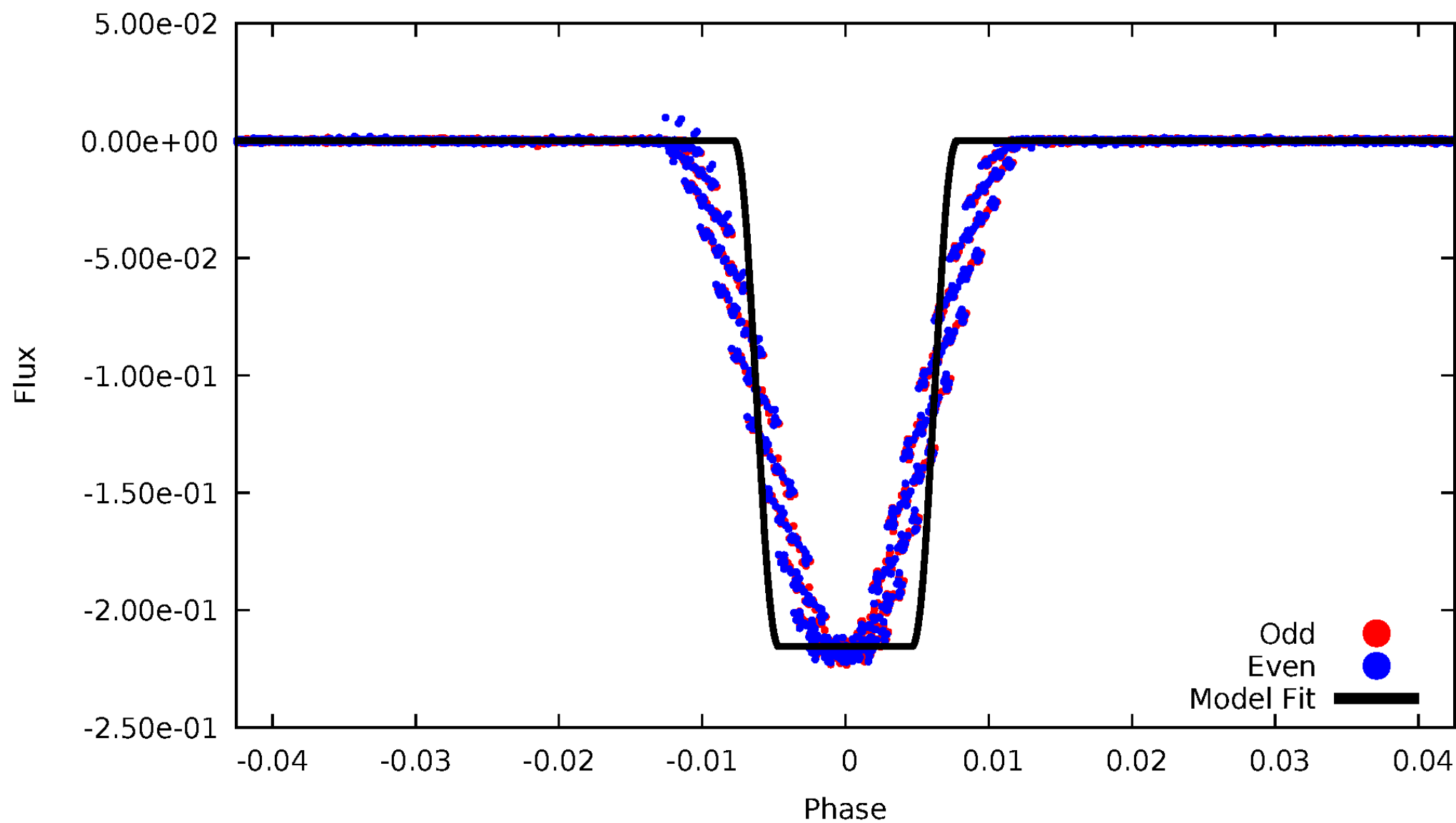
DV Odd/Even

TCE 008711548-02



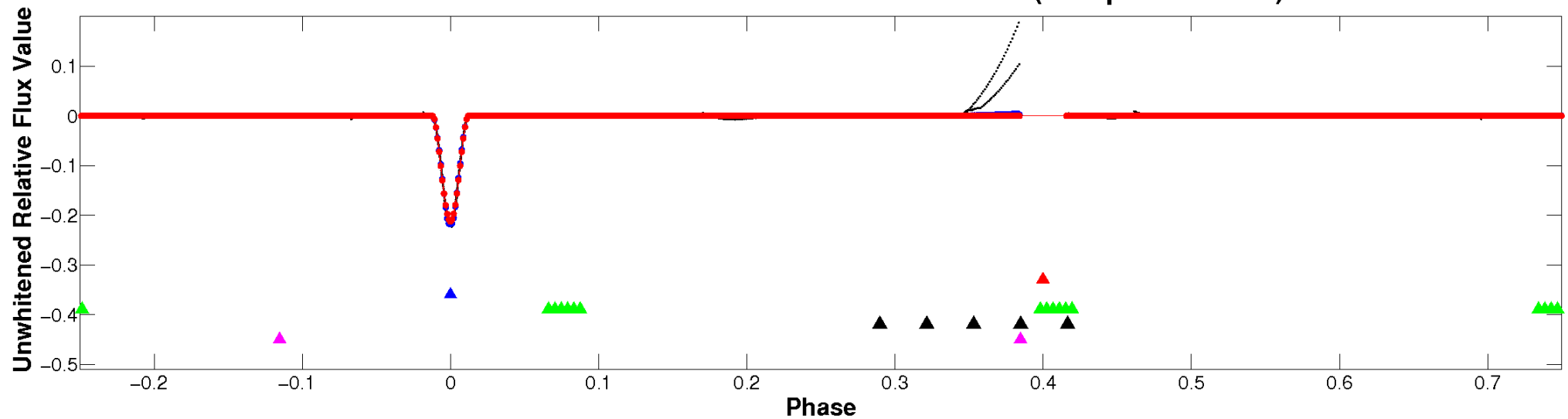
ALT Odd/Even

TCE 008711548-02

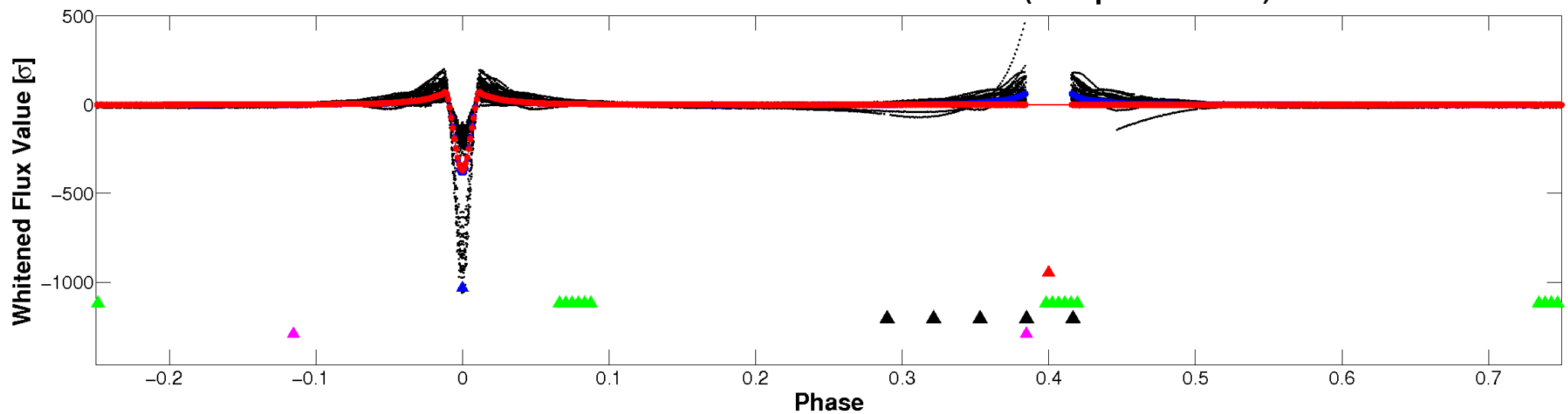


Non-Whitened Vs. Whitened Light Curve

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

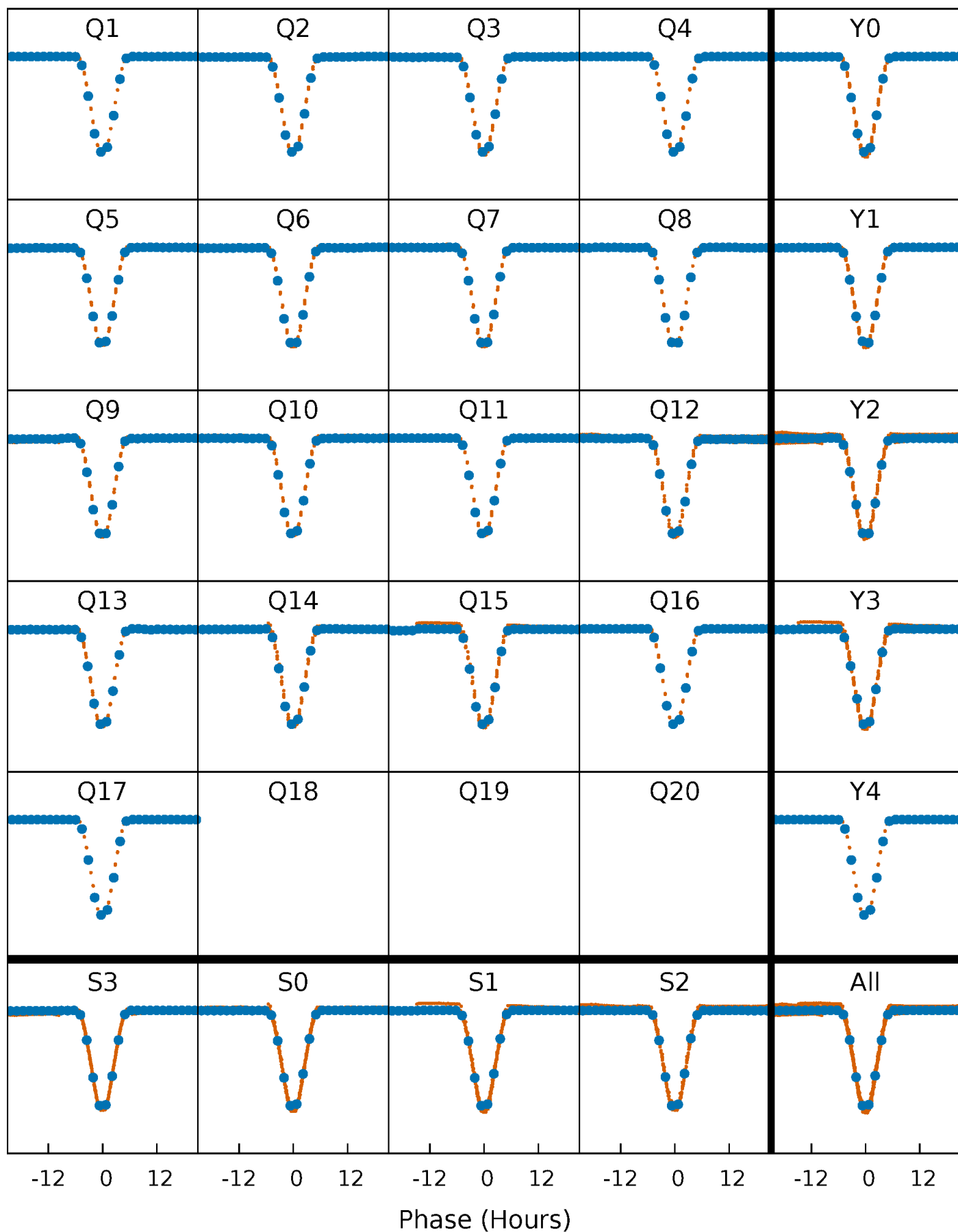


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



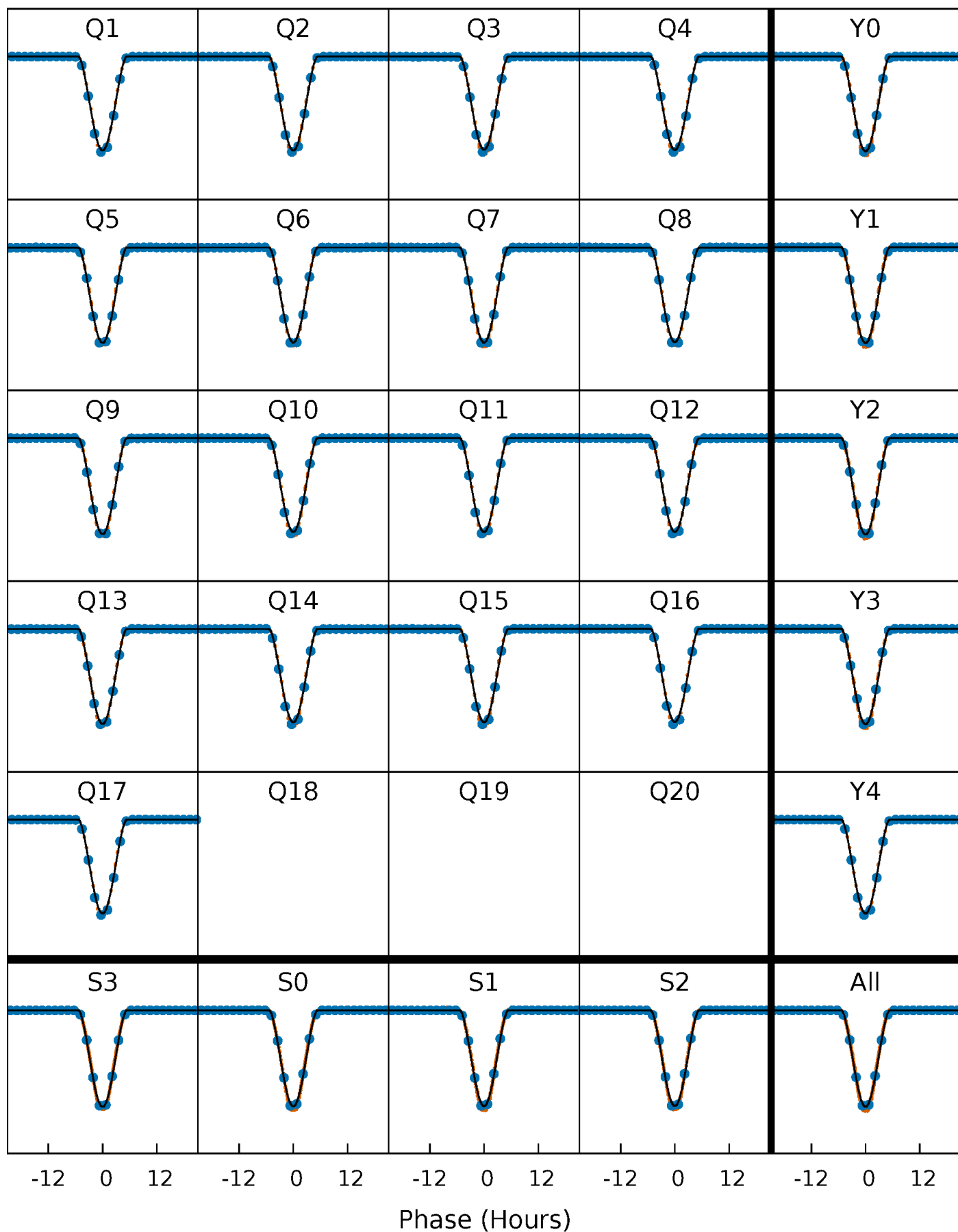
PDC Quarter-Phased Transit Curves

TCE 008711548-02 P= 18.778170 Days $T_0=142.164193$ (BKJD)



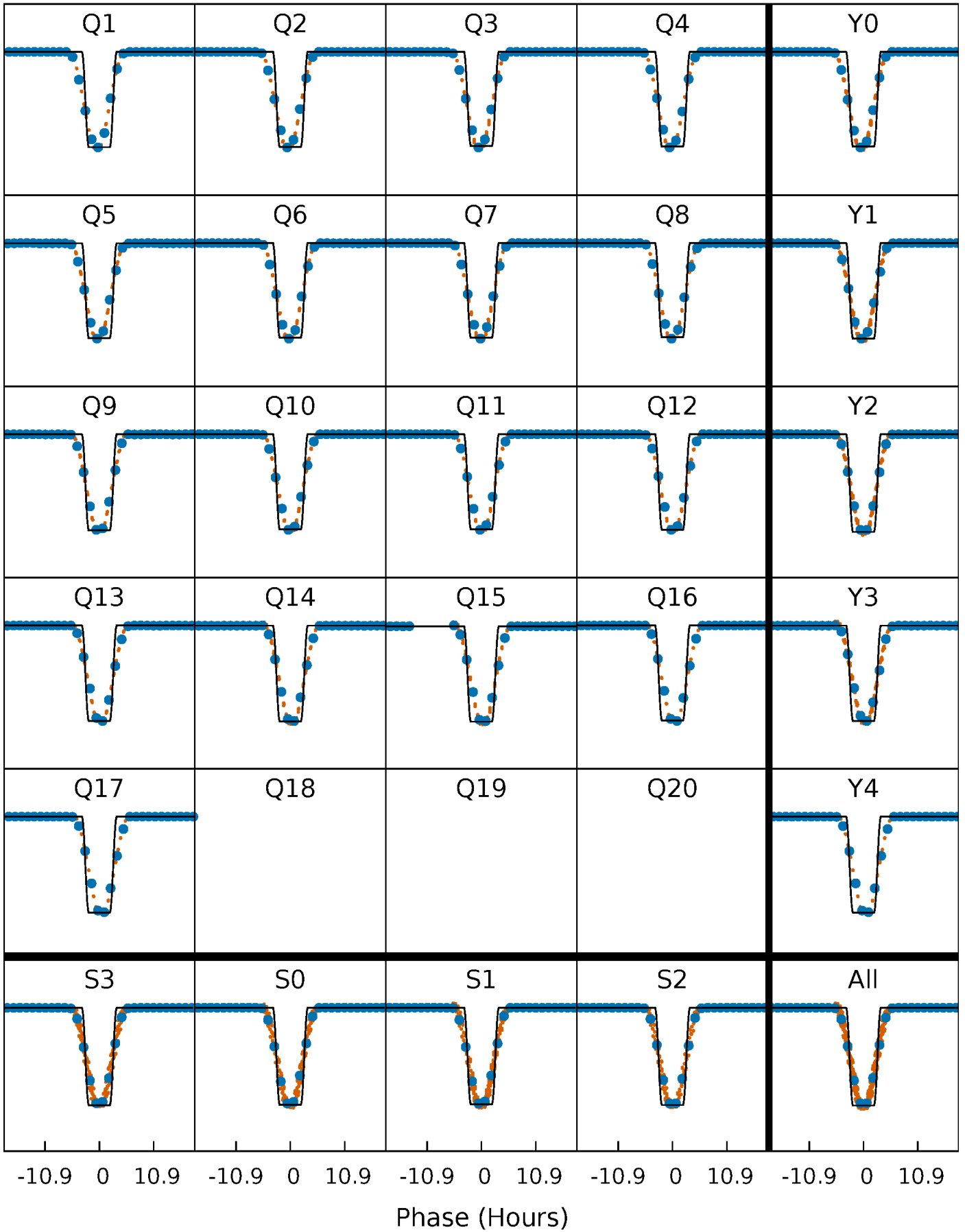
DV Quarter-Phased Transit Curves

TCE 008711548-02 P= 18.778170 Days $T_0=142.164193$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

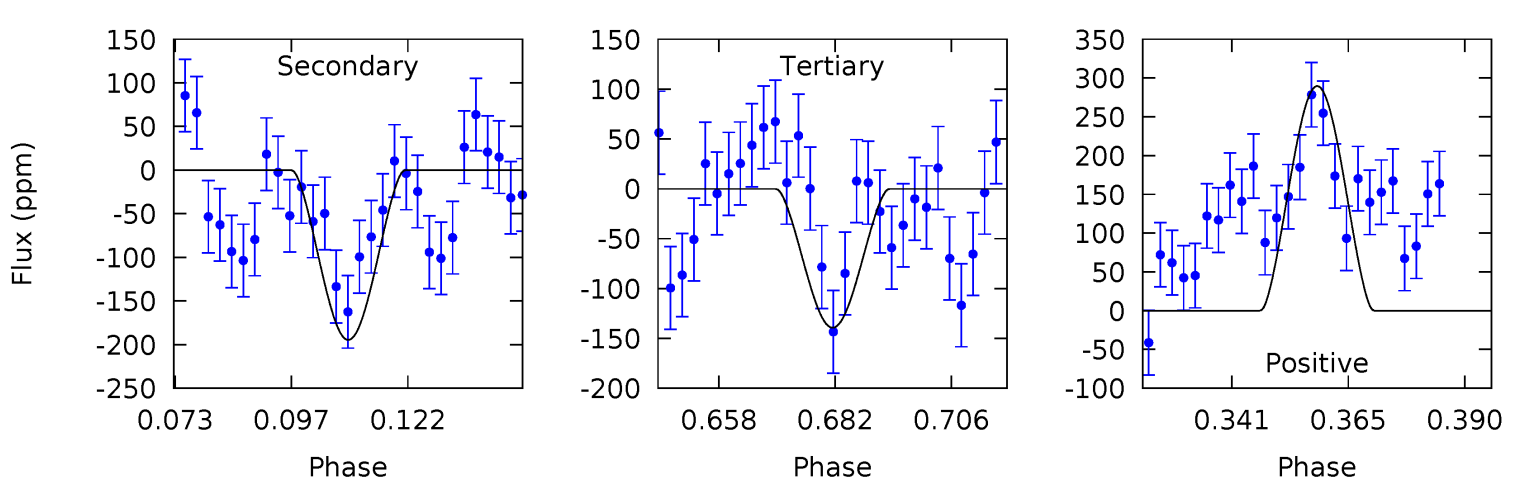
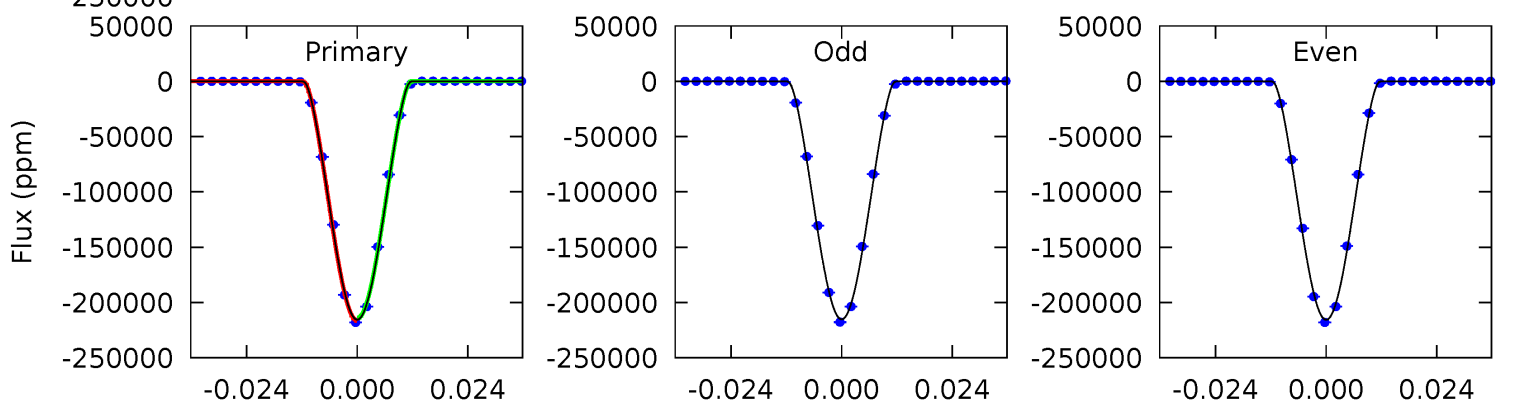
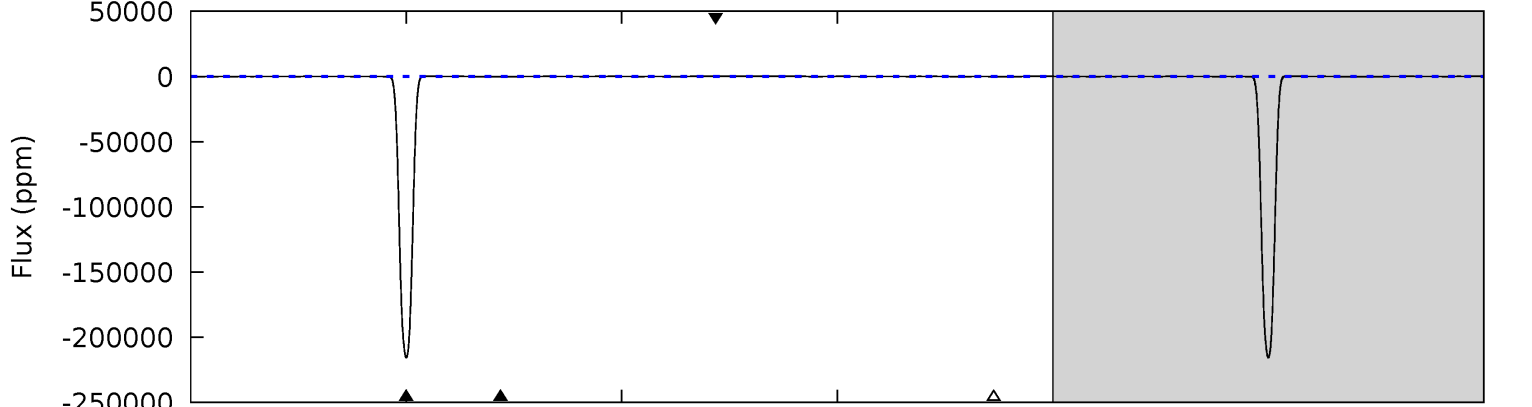
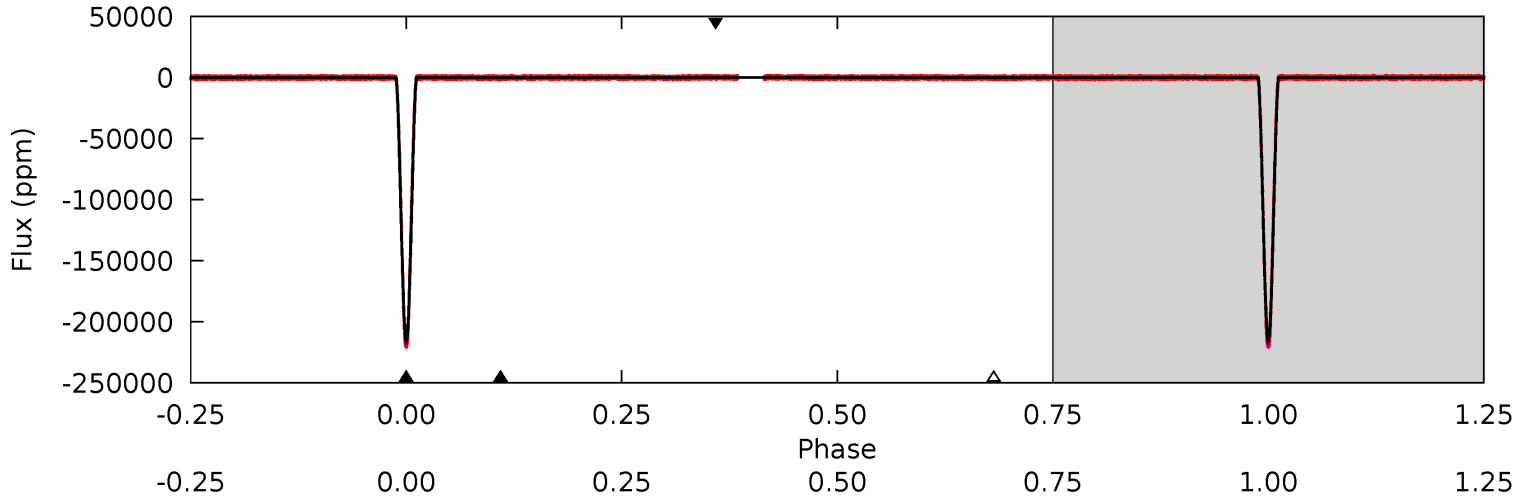
TCE 008711548-02 P= 18.777651 Days $T_0=142.184577$ (BKJD)



DV Model-Shift Uniqueness Test

008711548-02, P = 18.778170 Days, E = 123.386023 Days

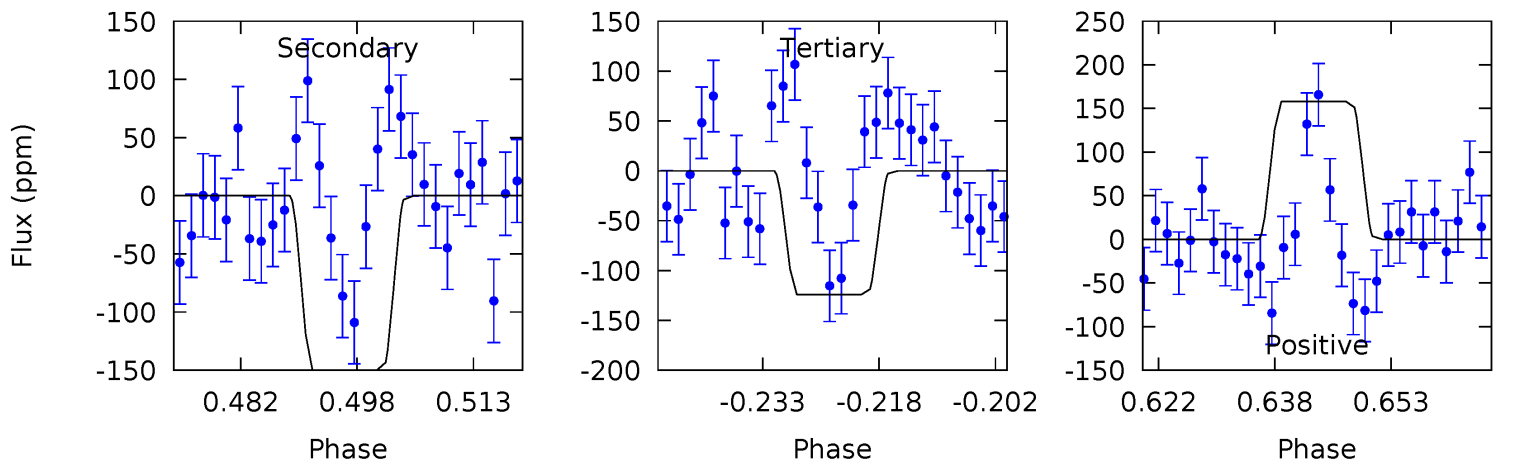
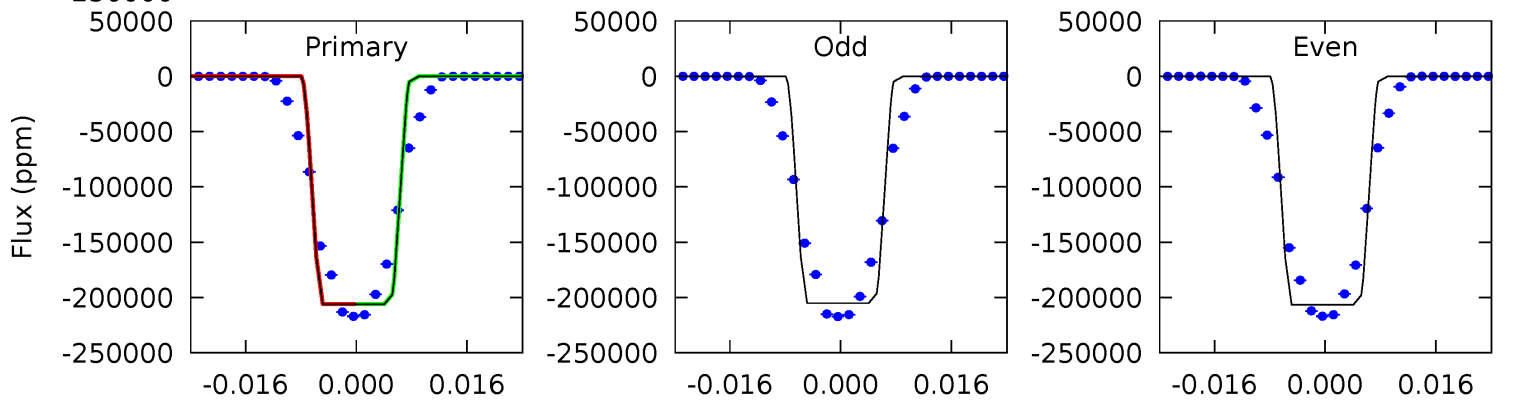
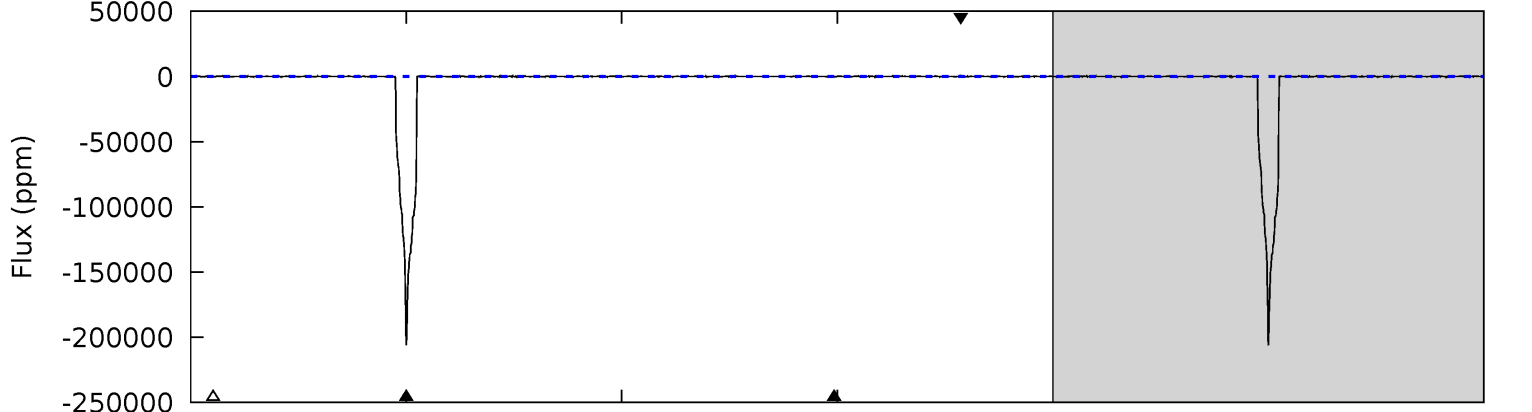
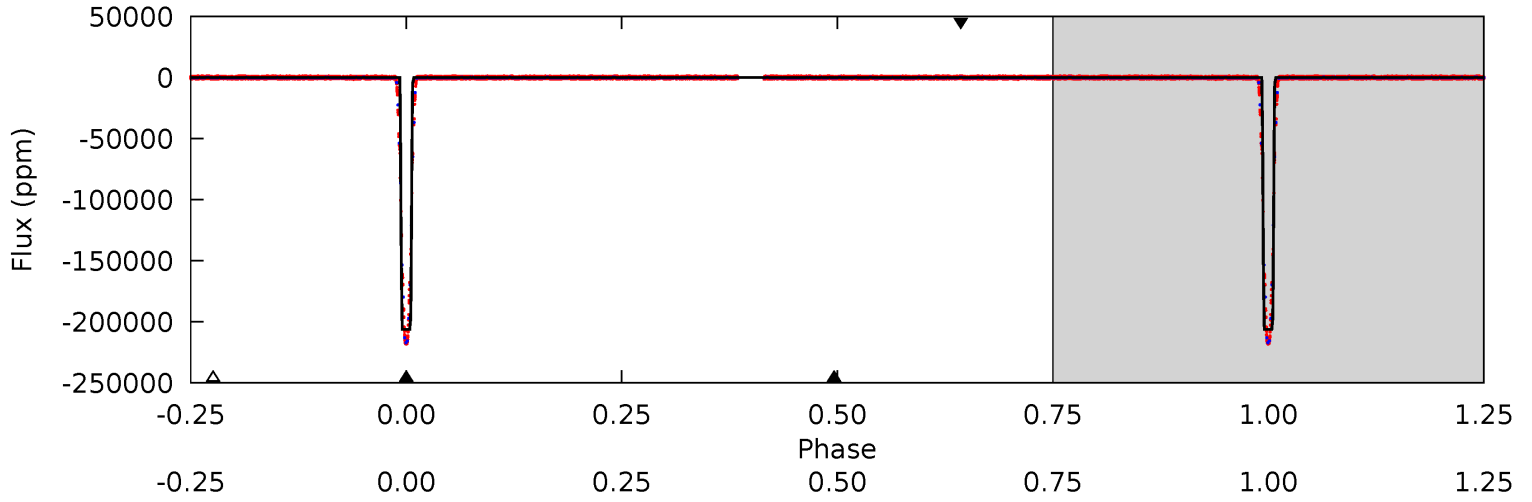
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14997	13.5	9.69	20.2	4.85	2.25	5.47	14988	14977	3.85	-6.61	17.0	1.00	0.00	0



Alt Model-Shift Uniqueness Test

008711548-02, P = 18.777651 Days, E = 123.406926 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6724	4.88	4.04	5.15	4.94	2.42	1.36	6720	6719	0.84	-0.27	25.6	1.00	0.00	1.80



Stellar Parameters For KIC 008711548

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6794^{+189}_{-284}	$4.102^{+0.214}_{-0.175}$	$-0.200^{+0.250}_{-0.300}$	$1.710^{+0.503}_{-0.453}$	$1.356^{+0.194}_{-0.259}$	$0.382^{+0.485}_{-0.186}$
	+3%/-4%	+5%/-4%	+125%/-150%	+29%/-26%	+14%/-19%	+127%/-49%
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 008711548-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-195 ± 14	$98.06^{+17.14}_{-13.77}$	1393^{+113}_{-109}	-1752^{+3451}_{-212}	$0.254^{+0.089}_{-0.065}$
Alt.	-150 ± 31	$85.53^{+14.69}_{-13.05}$	1384^{+115}_{-108}	-1738^{+3508}_{-230}	$0.259^{+0.105}_{-0.076}$

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

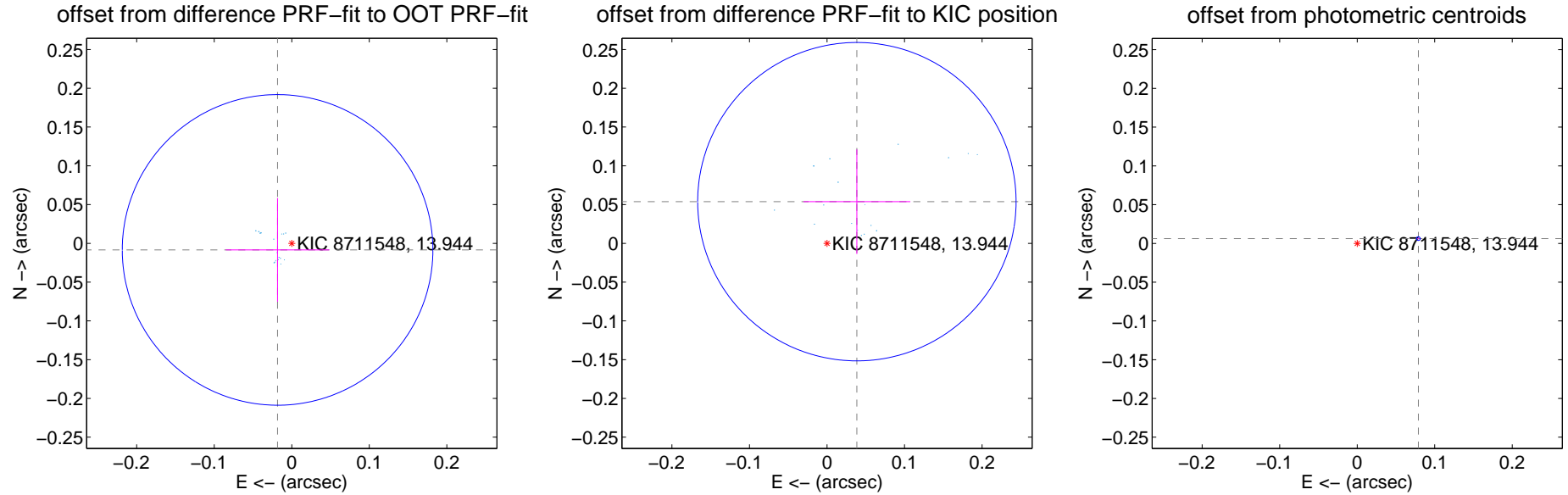
DV Centroid Data

Supplemental centroid analysis for 008711548-02. Kepler magnitude: 13.94. Transit SNR 4217.08

There are 17 quarters with good PRF difference image offsets

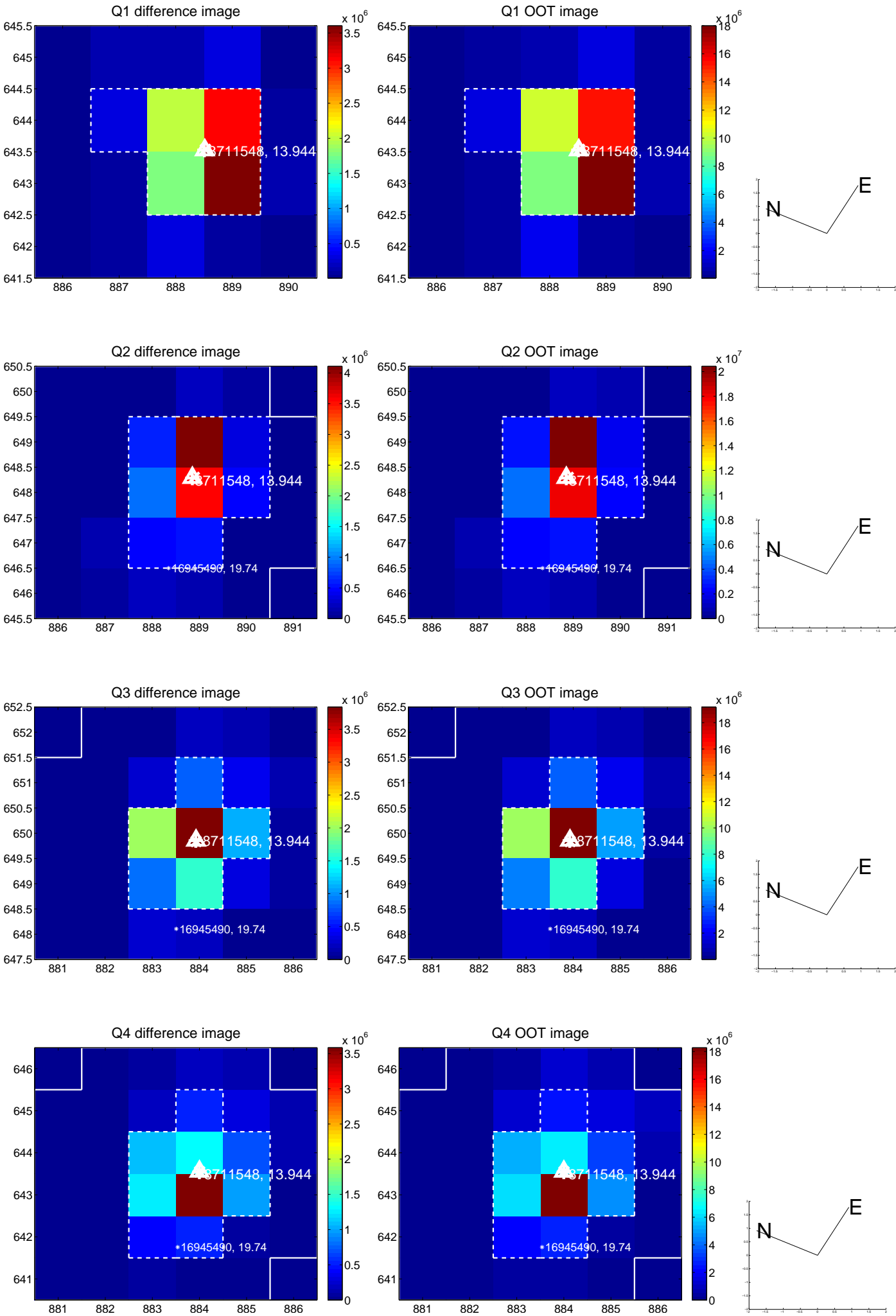
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.020 ± 0.067	0.30	0.018 ± 0.067	-0.008 ± 0.067
PRF-fit source offset from KIC position	0.066 ± 0.068	0.97	-0.039 ± 0.069	0.054 ± 0.067
photometric centroid source offset	0.08 ± 0.00	98.66	-0.08 ± 0.00	0.01 ± 0.00

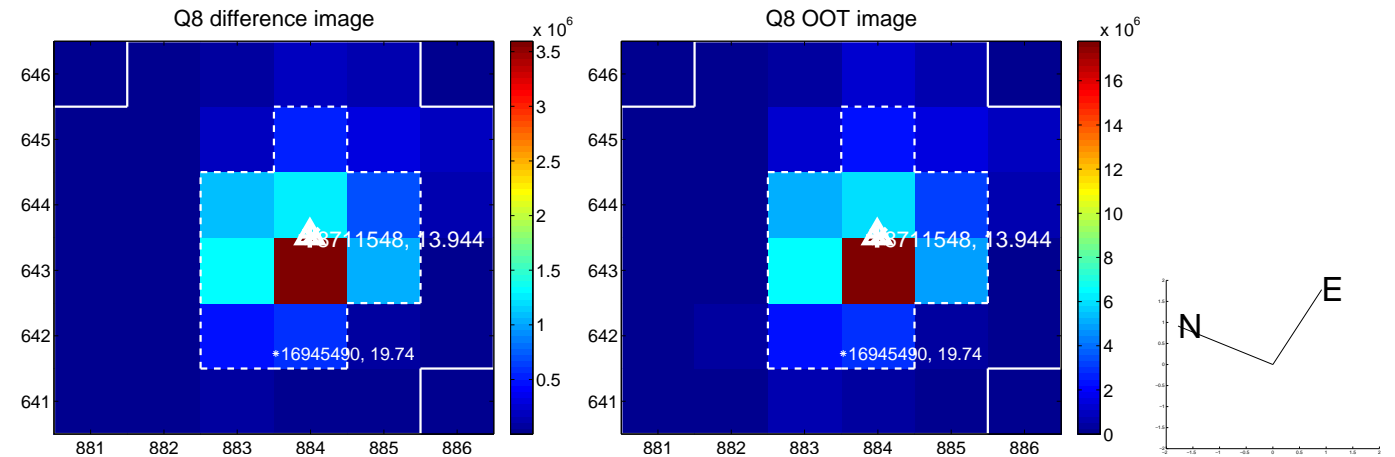
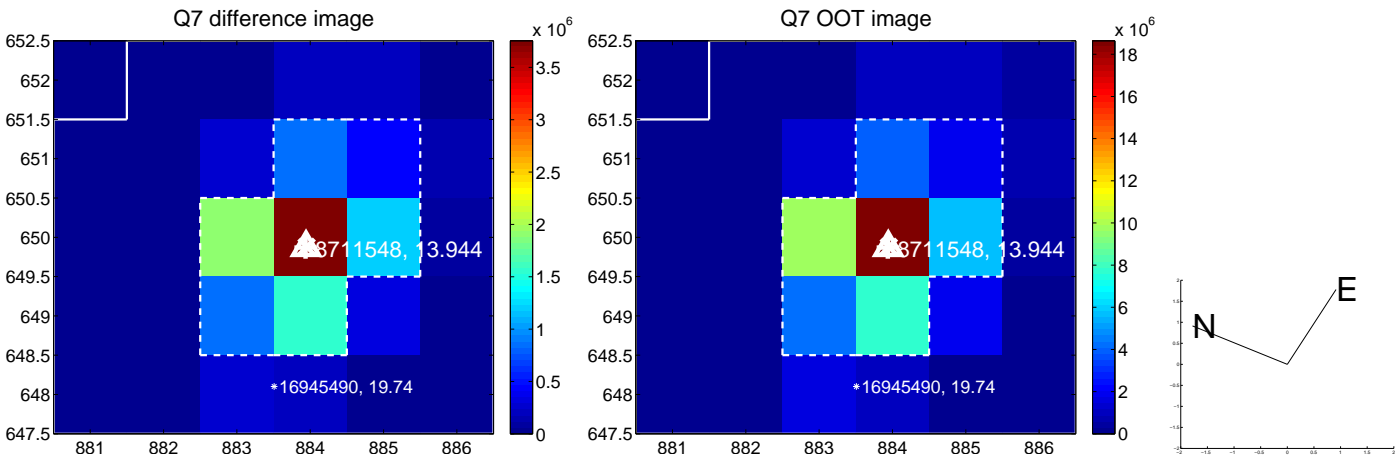
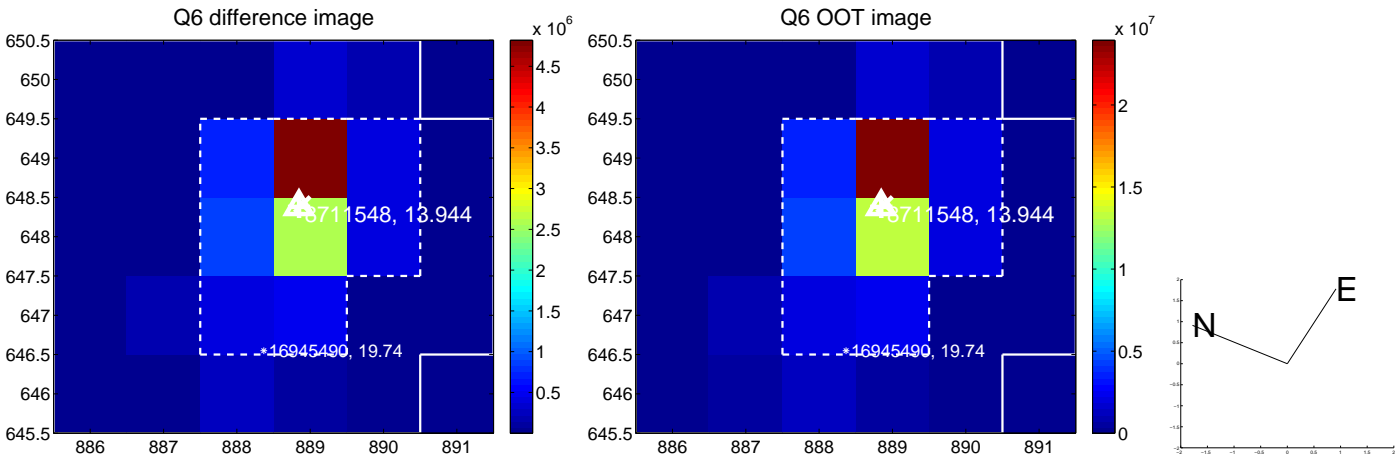
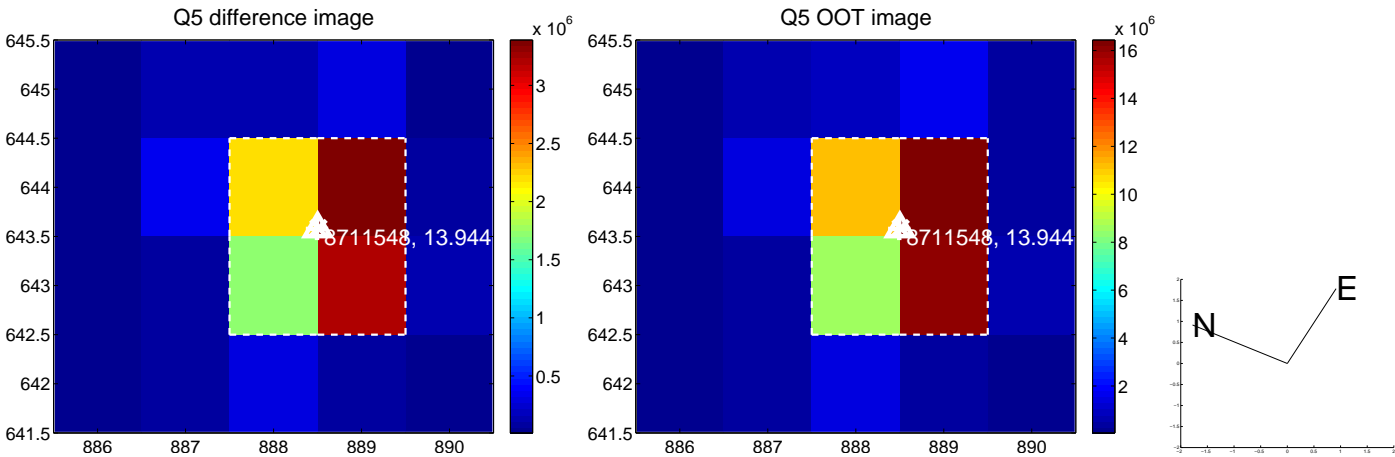


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

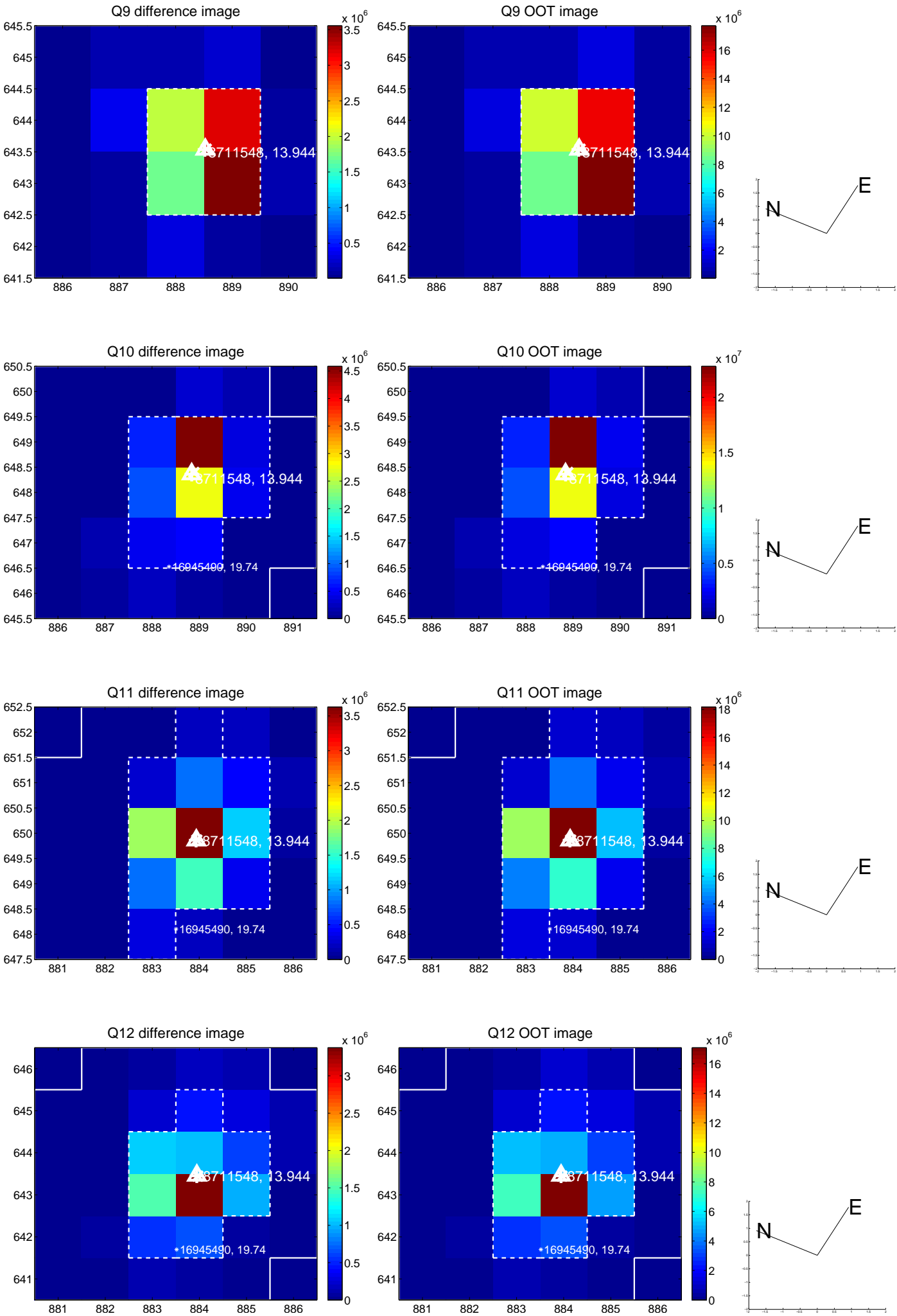
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



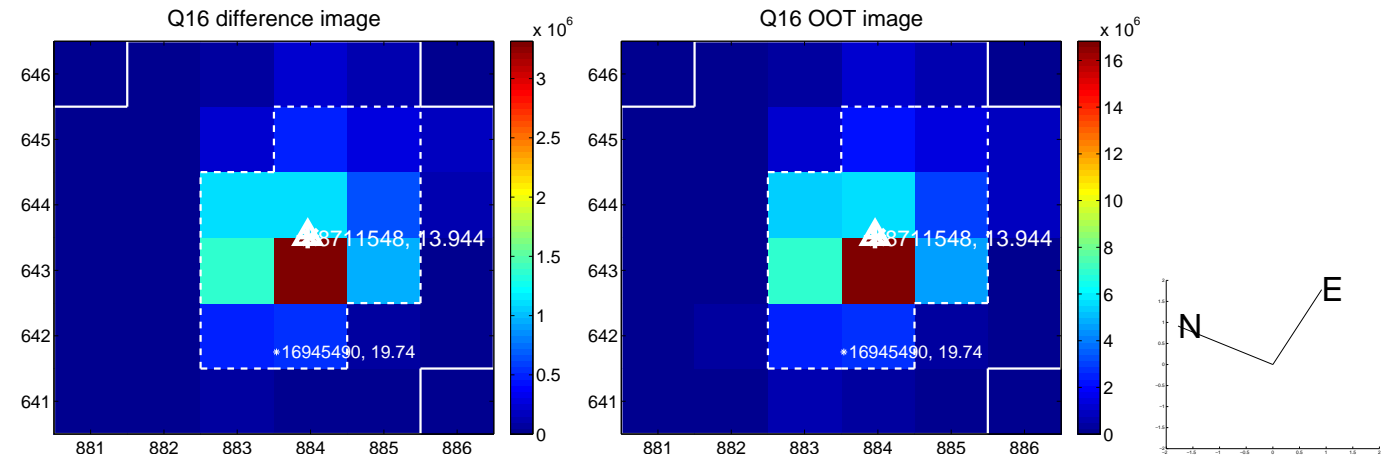
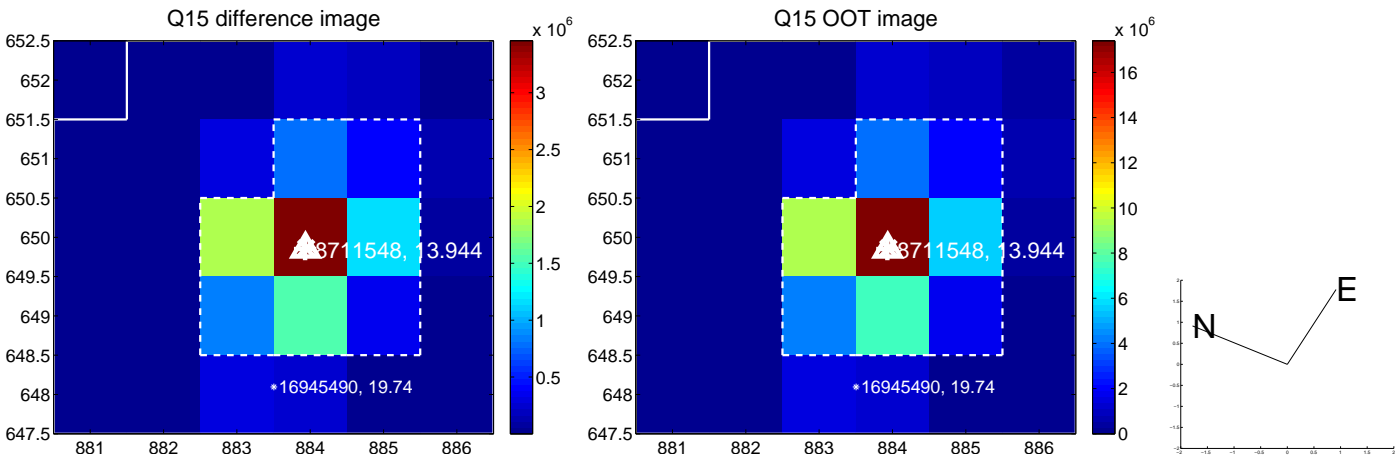
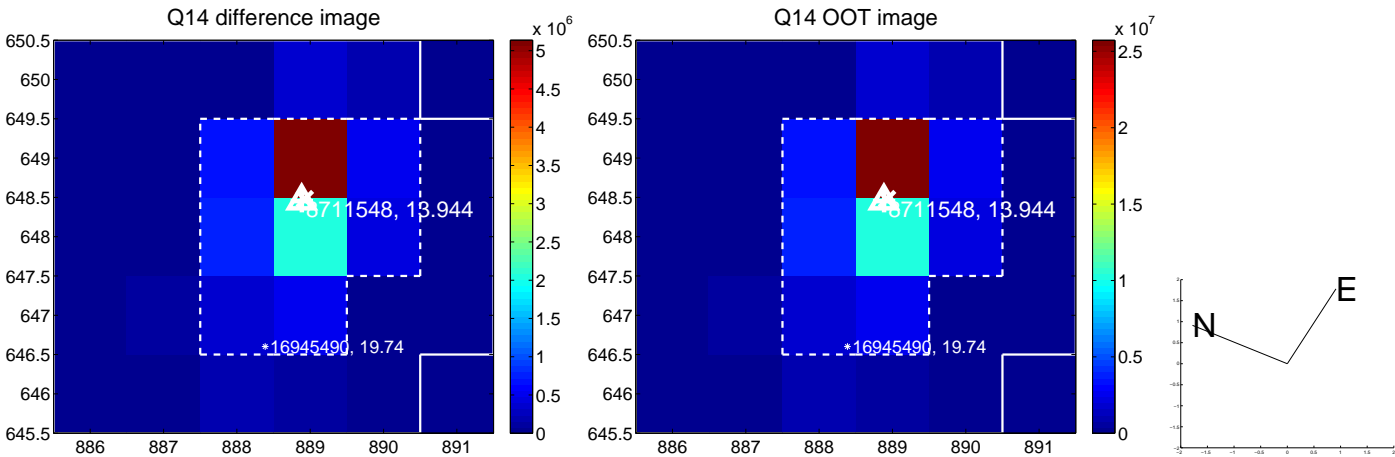
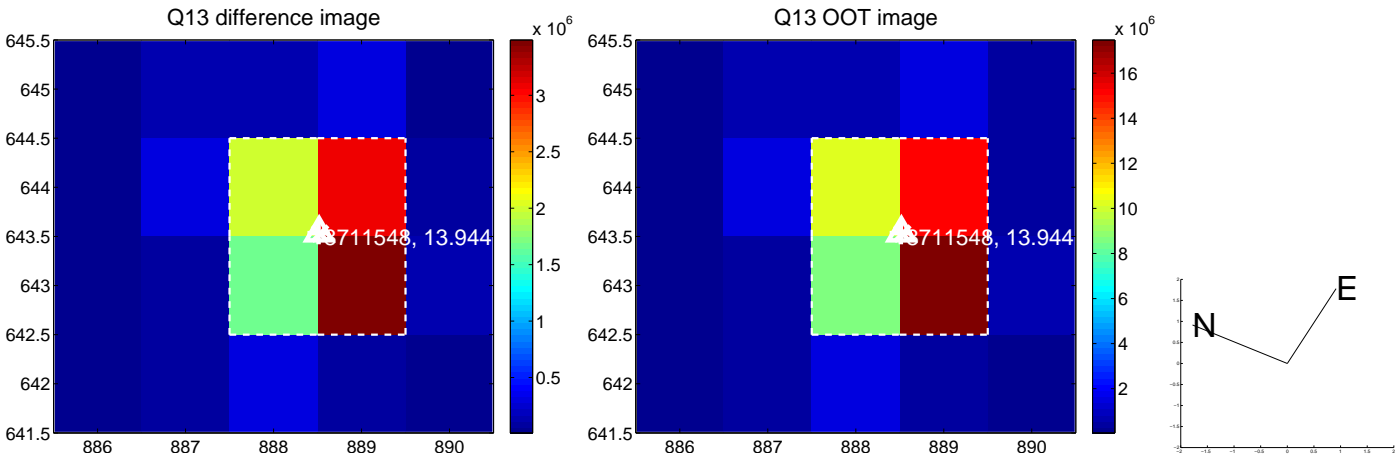
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



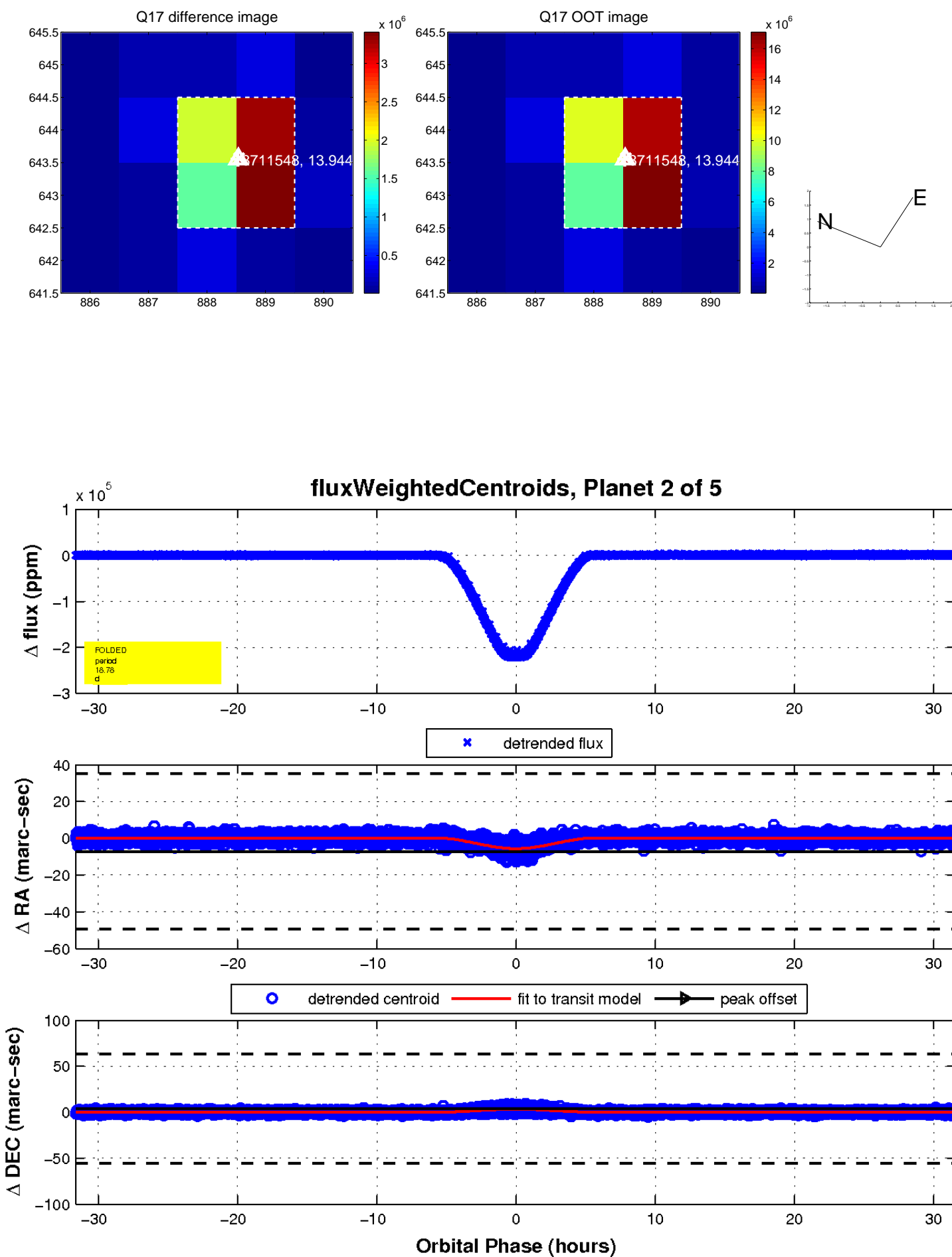
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

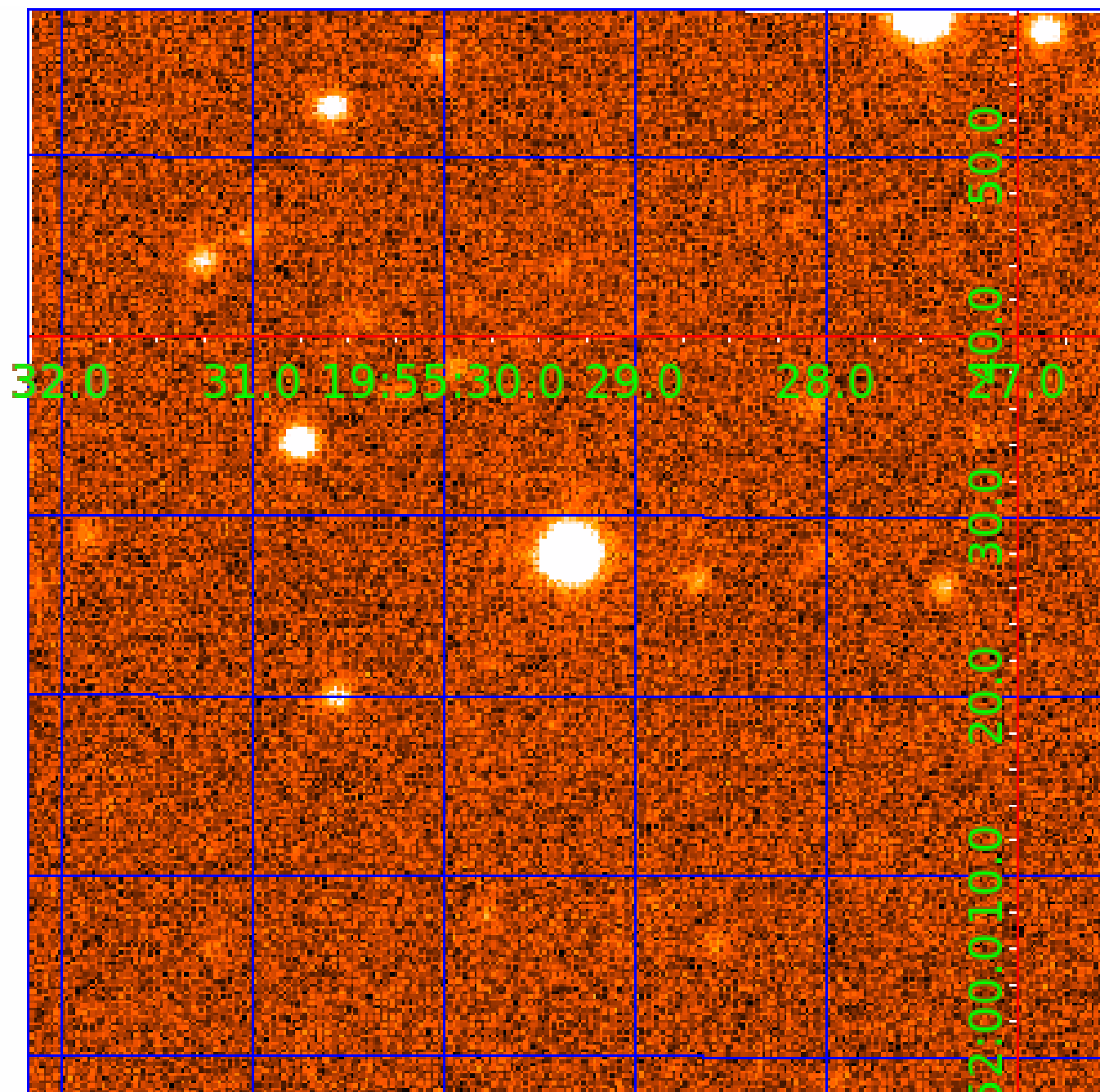


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008711548

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})
008711548-01	OBS	7079.01	18.778091	149.676429	486266.9	4.500	20726.3	-1.0	1.71	6794	93.30	239.07
008711548-02	OBS	No	18.778170	142.164193	213076.2	10.542	10789.0	4217.1	1.71	6794	99.37	239.07
008711548-03	OBS	No	87.658167	149.640773	3032.9	48.761	900.6	45.4	1.71	6794	9.49	30.64
008711548-04	OBS	No	299.855682	356.545790	26636.1	15.000	781.5	-1.0	1.71	6794	28.18	5.95
008711548-05	OBS	No	28.167194	149.390359	25936.5	15.000	729.9	-1.0	1.71	6794	27.81	139.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008711548-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
008711548-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008711548-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008711548-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
008711548-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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.

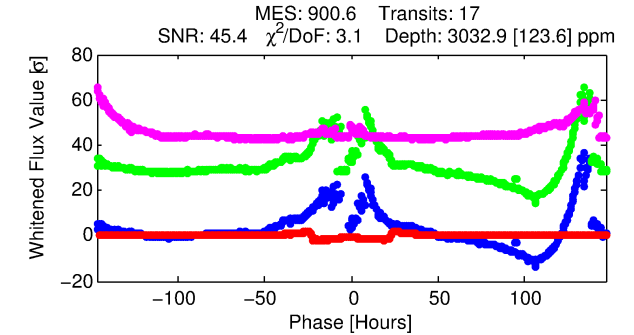
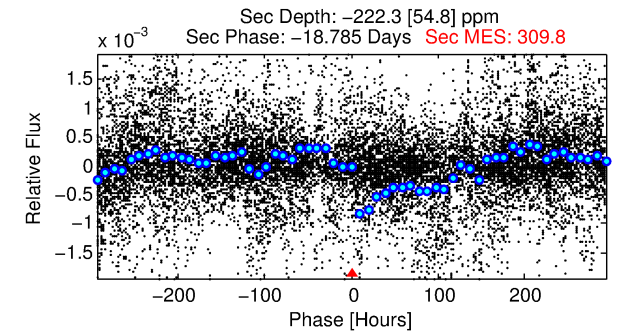
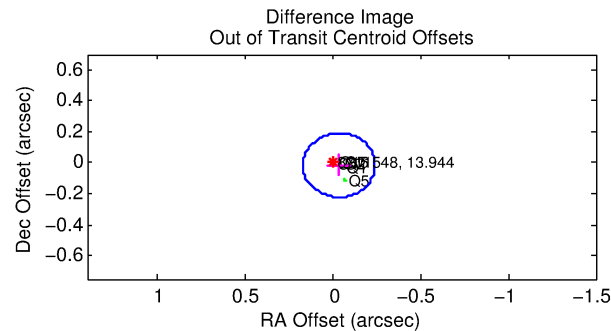
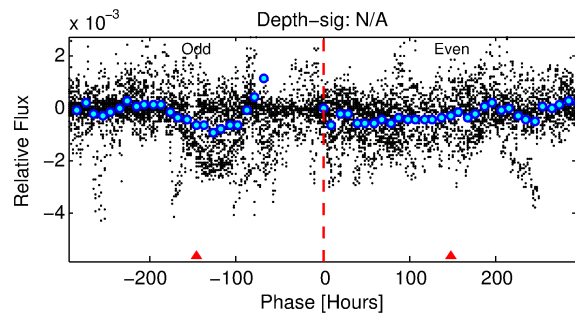
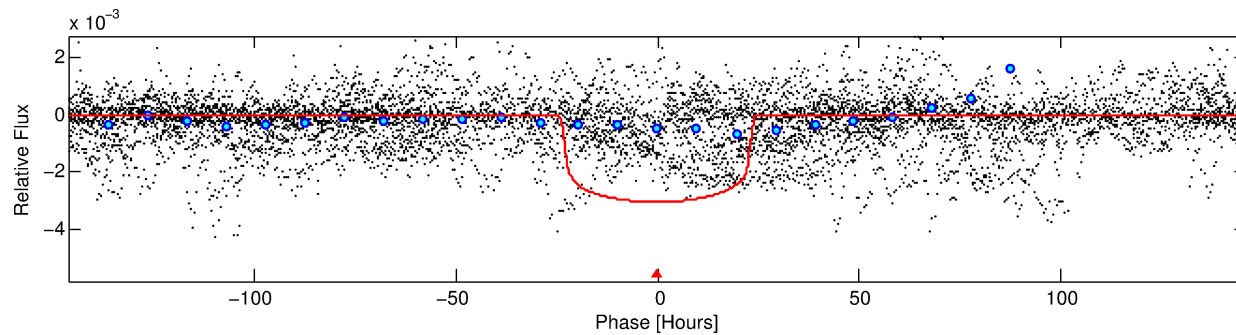
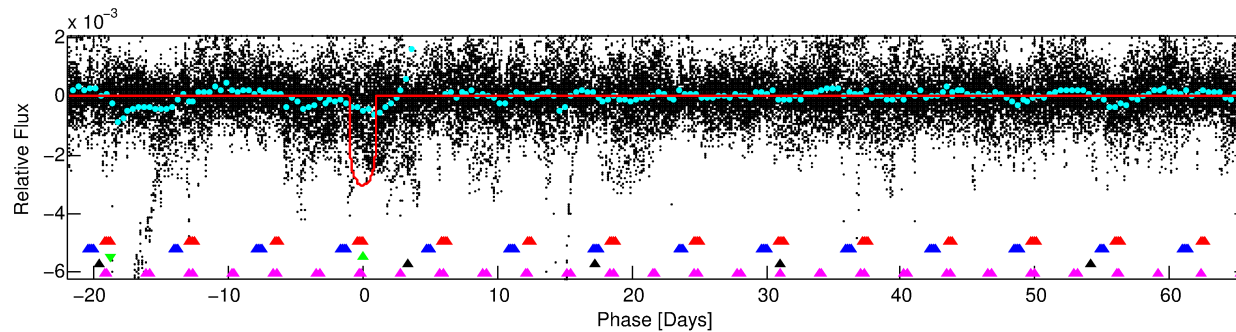
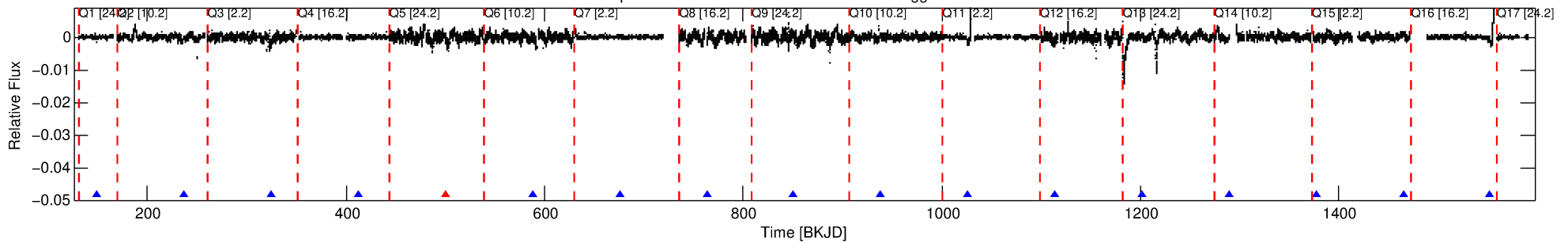
Ephemeris Match Information For 008711548-03

No Significant Match Found

DV One-Page Summary

KIC: 8711548 Candidate: 3 of 5 Period: 87.658 d
KOI: K07079 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.71 Rs Teff: 6794.0 K Logg: 4.10 Fe/H: -0.200



DV Fit Results:

Period = 87.65817 [0.00104] d
Epoch = 149.6408 [0.0085] BKJD
Rp/R* = 0.0509 [0.0015]
a/R* = 14.44 [1.54]
b = 0.02 [6.78]
Seff = 30.64 [12.79]
Teq = 600 [63] K
Rp = 9.49 [2.81] Re
a = 0.4268 [0.1092] AU
Ag = N/A
Teffp = N/A

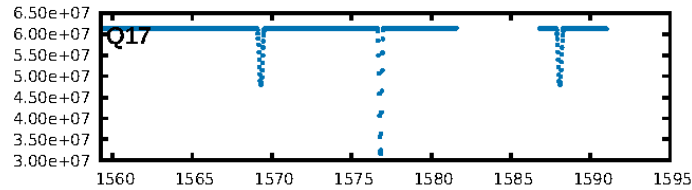
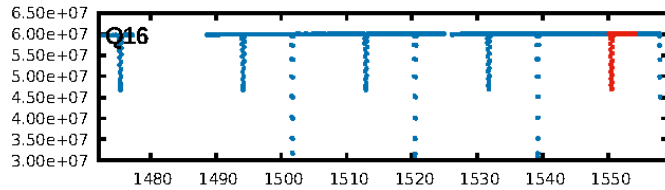
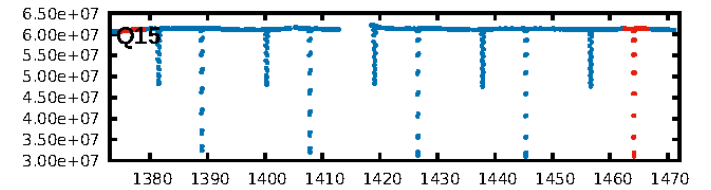
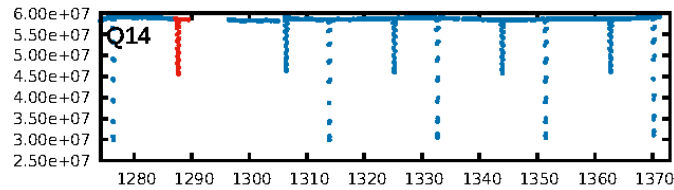
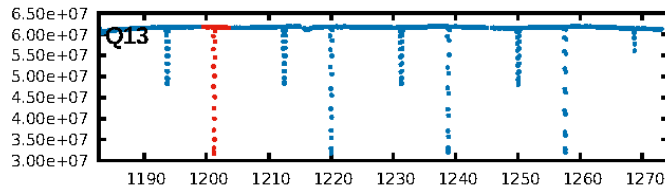
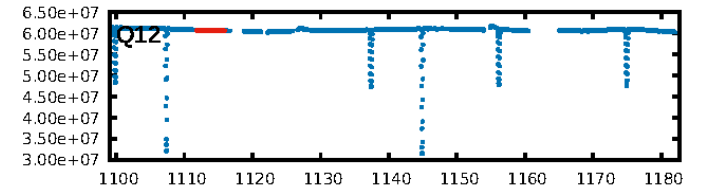
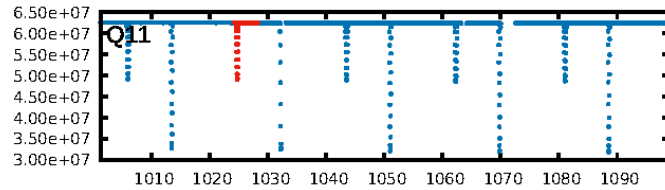
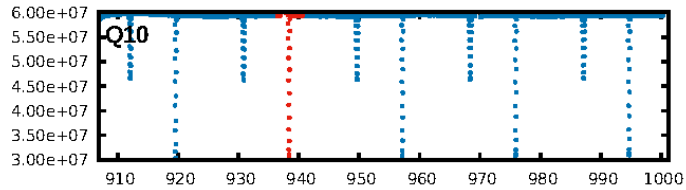
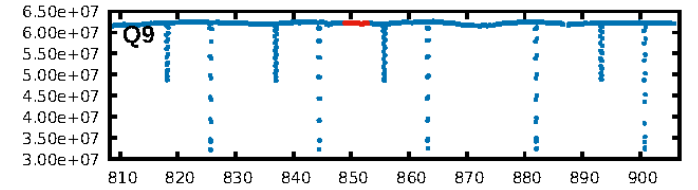
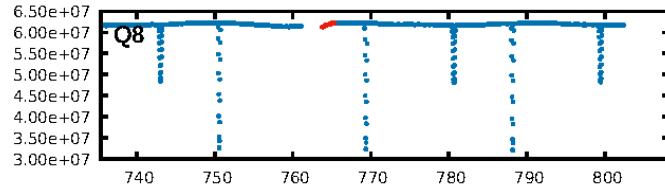
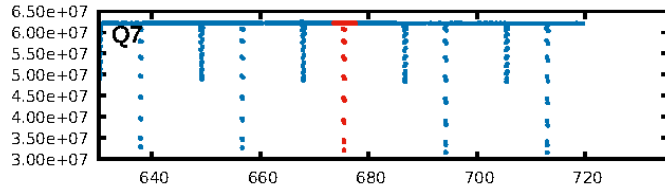
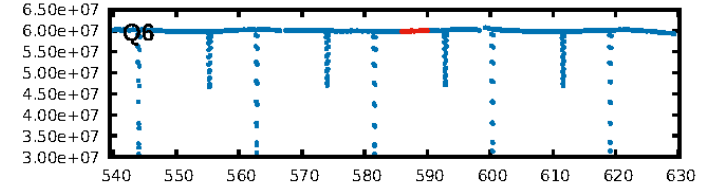
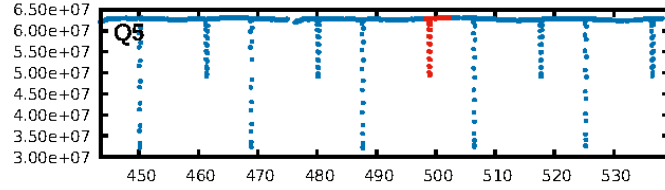
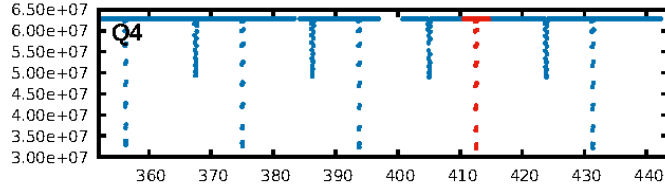
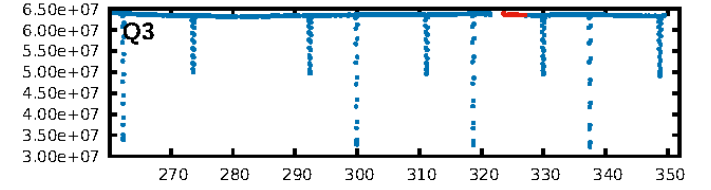
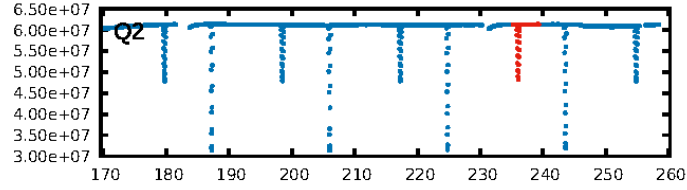
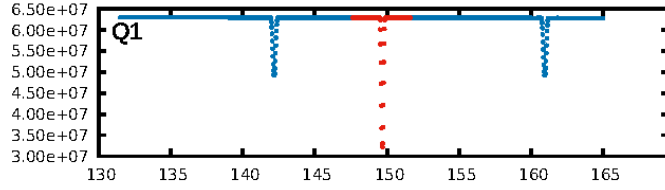
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [27.99σ]
LongPeriod-sig: 100.0% [99.83σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 0.94 [15/16]
GhostDiagnostic-chr: 0.4234
Centroid-sig: 0.8%
Centroid-so: 0.112 arcsec [2.39σ]
OotOffset-rm: 0.038 arcsec [0.55σ]
KicOffset-rm: 0.082 arcsec [1.15σ]
OotOffset-st: 1/2/1/2 [6]
KicOffset-st: 1/2/1/2 [6]
DiffImageQuality-fgm: 0.67 [4/6]
DiffImageOverlap-fno: 0.12 [1/8]

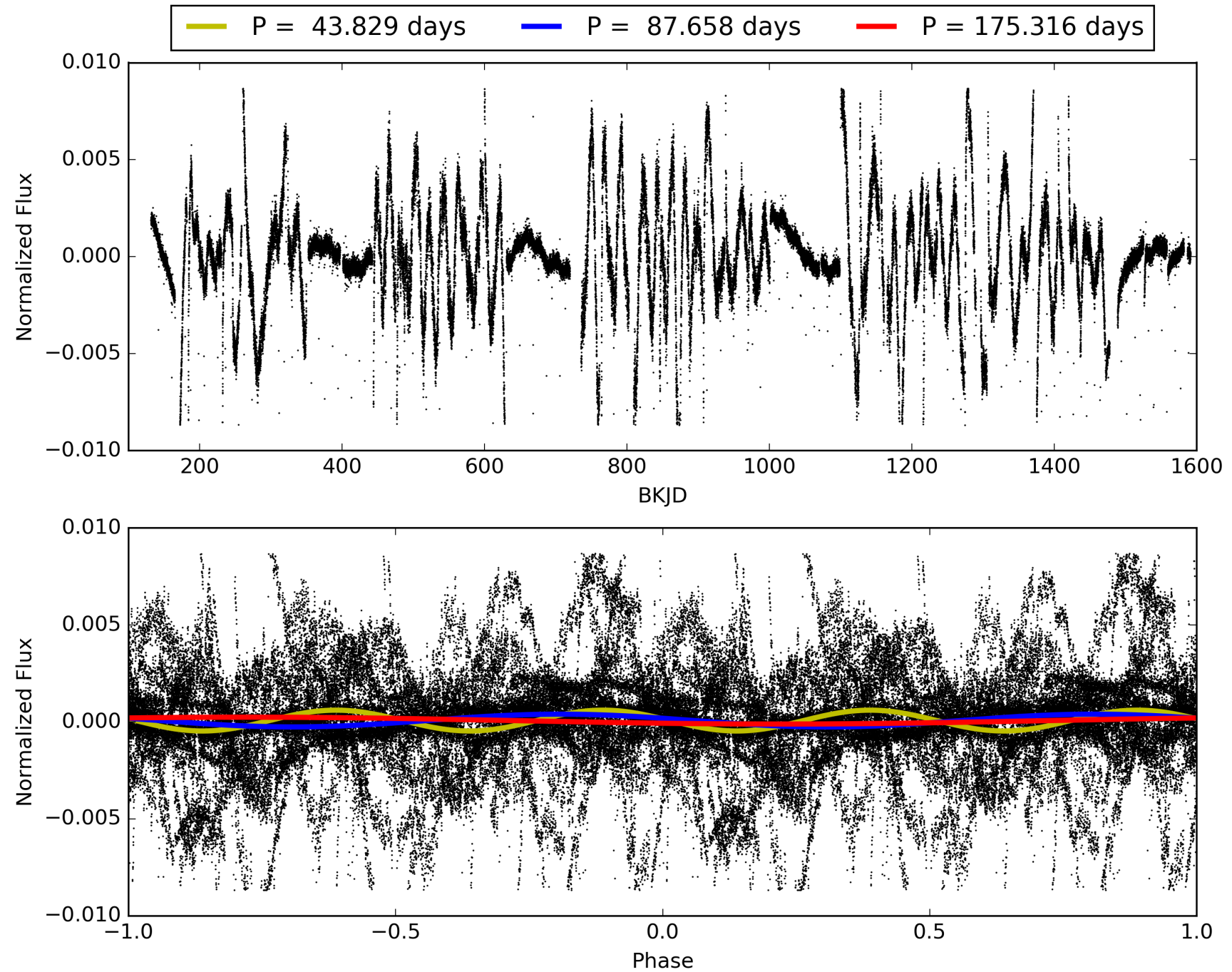
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:03:05 Z

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

TCE 008711548-03, PDC Light Curves

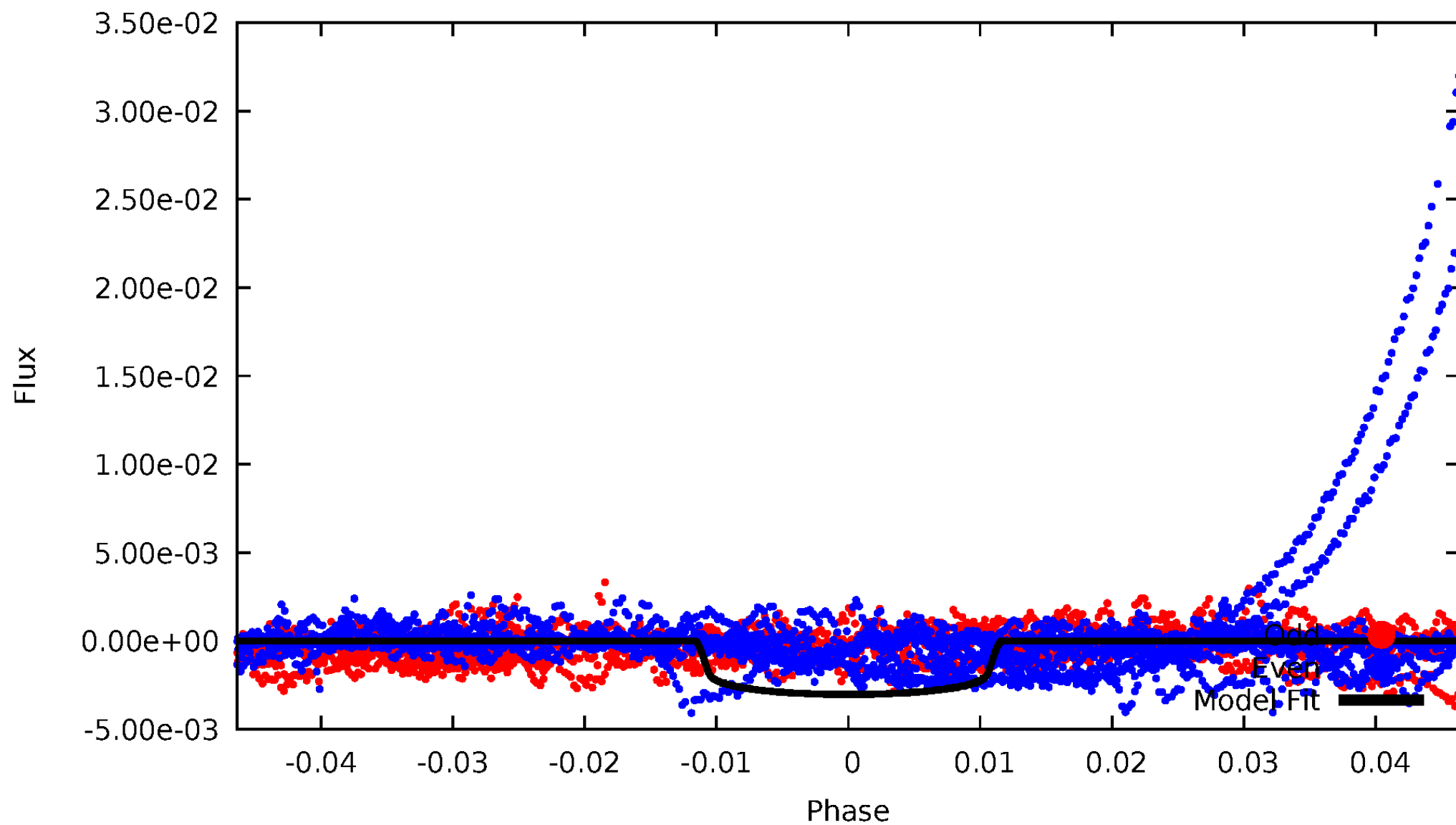


TCE 008711548-03



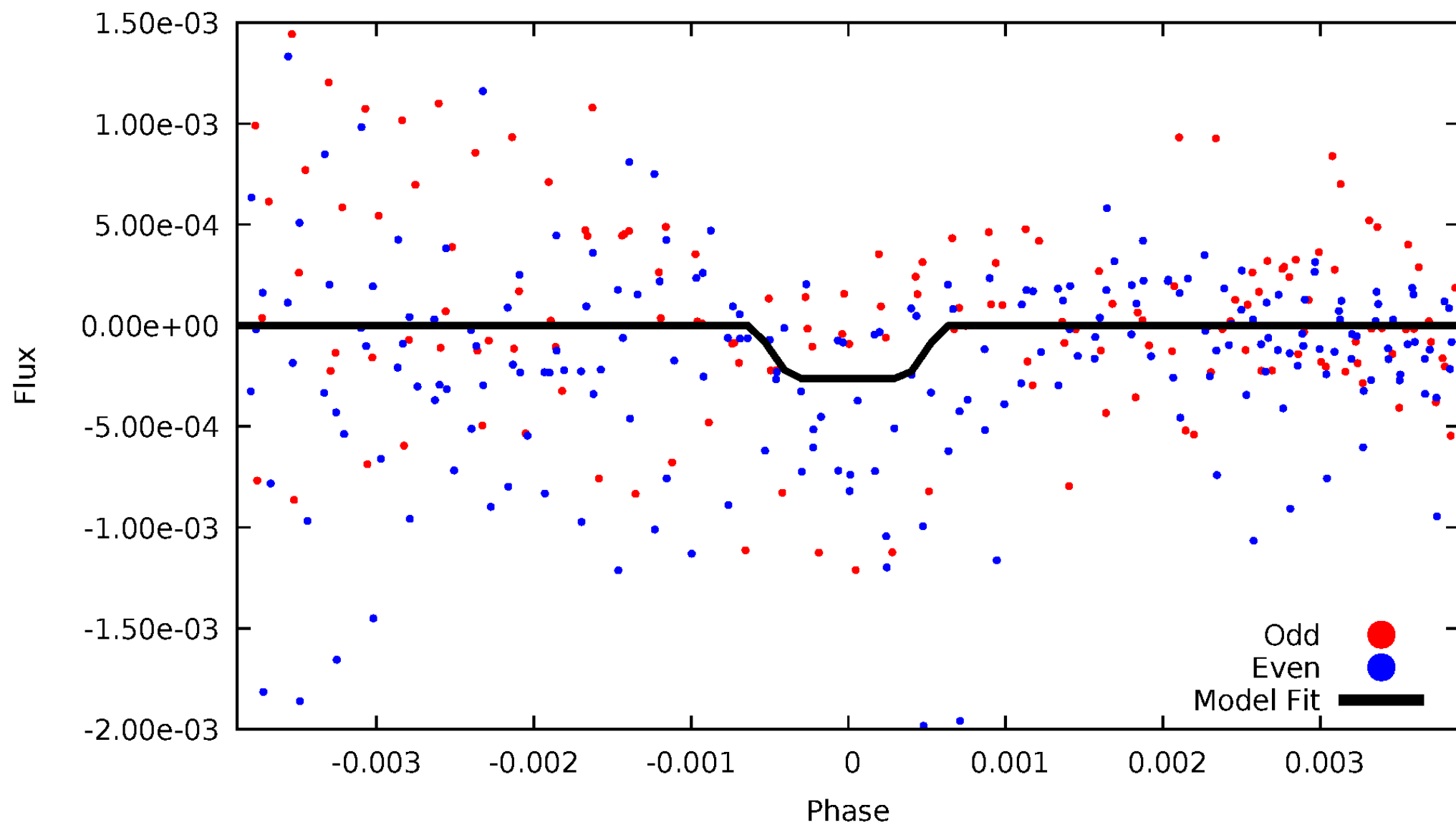
DV Odd/Even

TCE 008711548-03



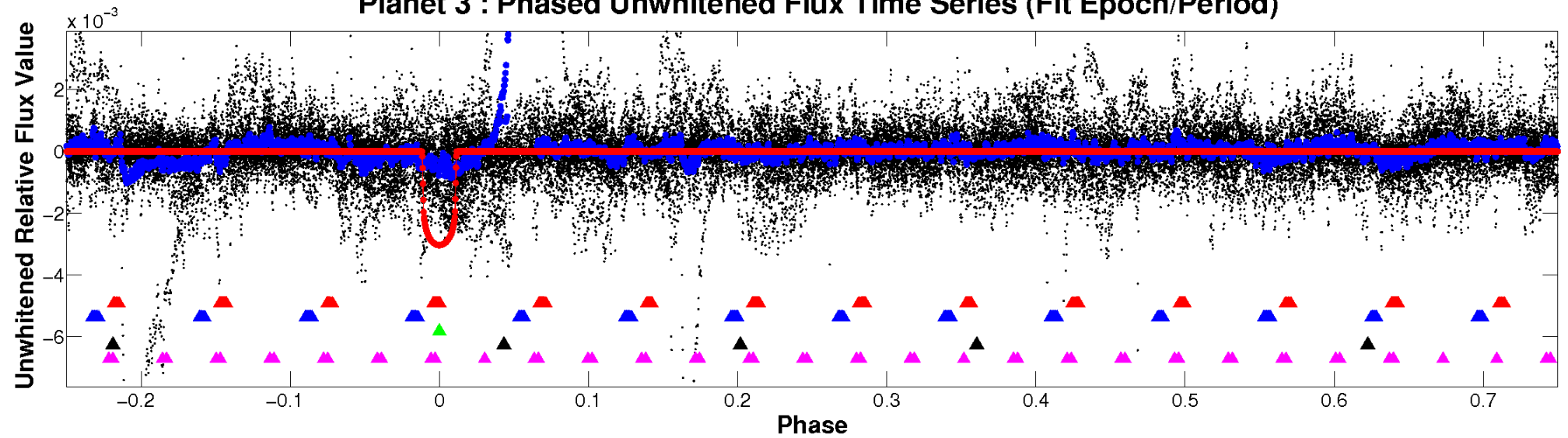
ALT Odd/Even

TCE 008711548-03

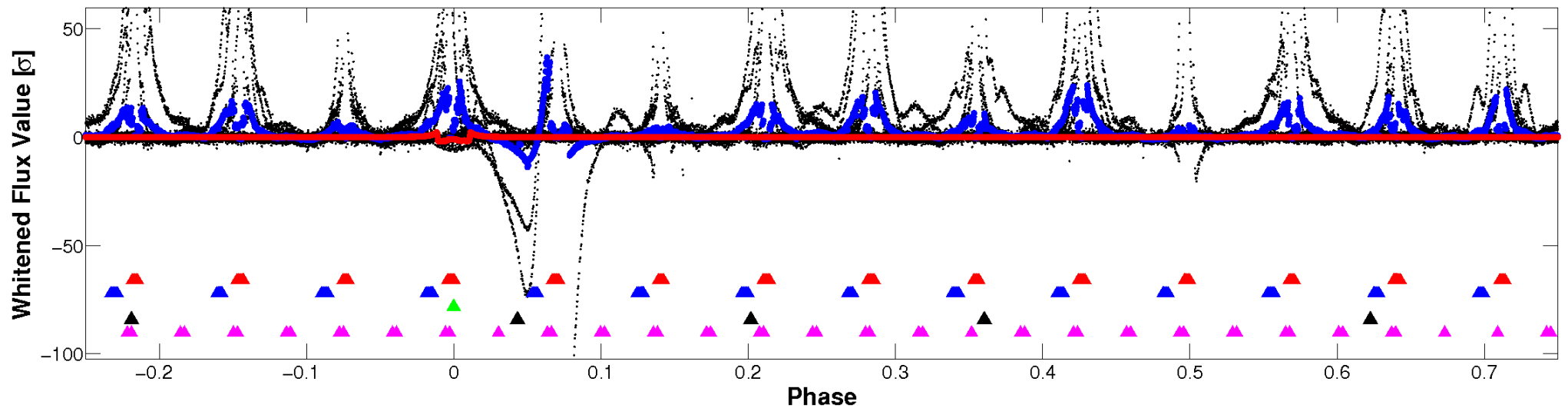


Non-Whitened Vs. Whitened Light Curve

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

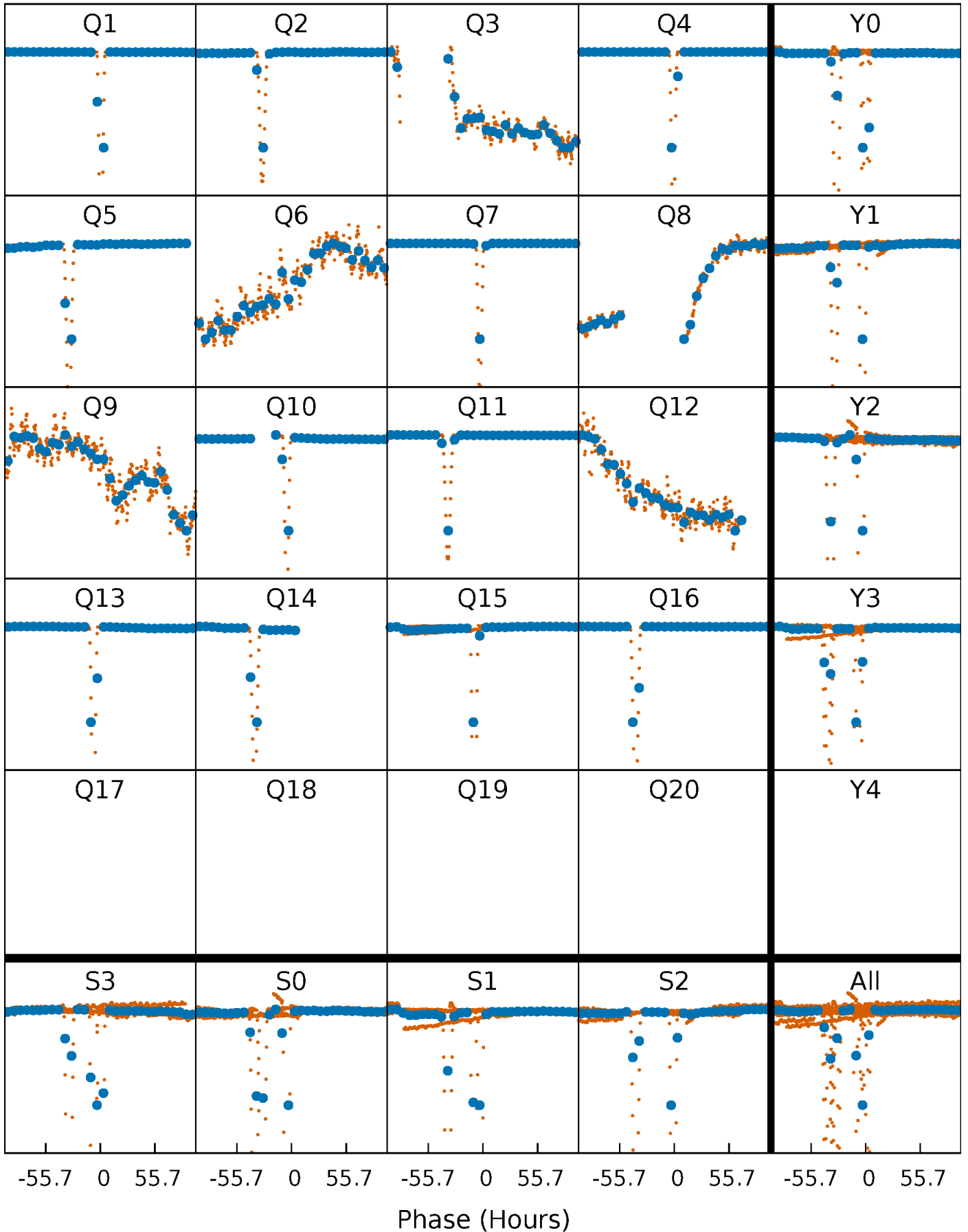


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



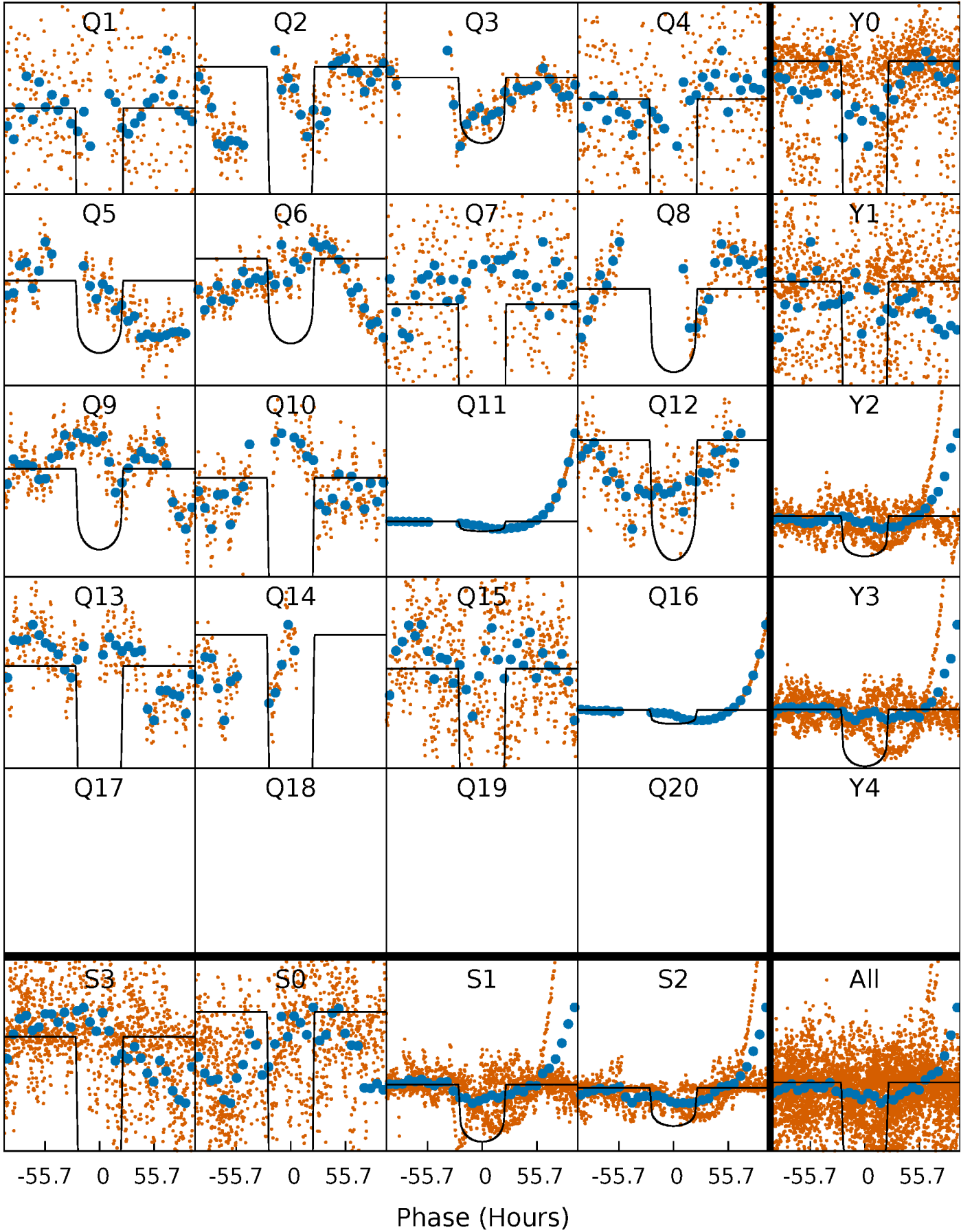
PDC Quarter-Phased Transit Curves

TCE 008711548-03 P= 87.658167 Days $T_0=149.640773$ (BKJD)



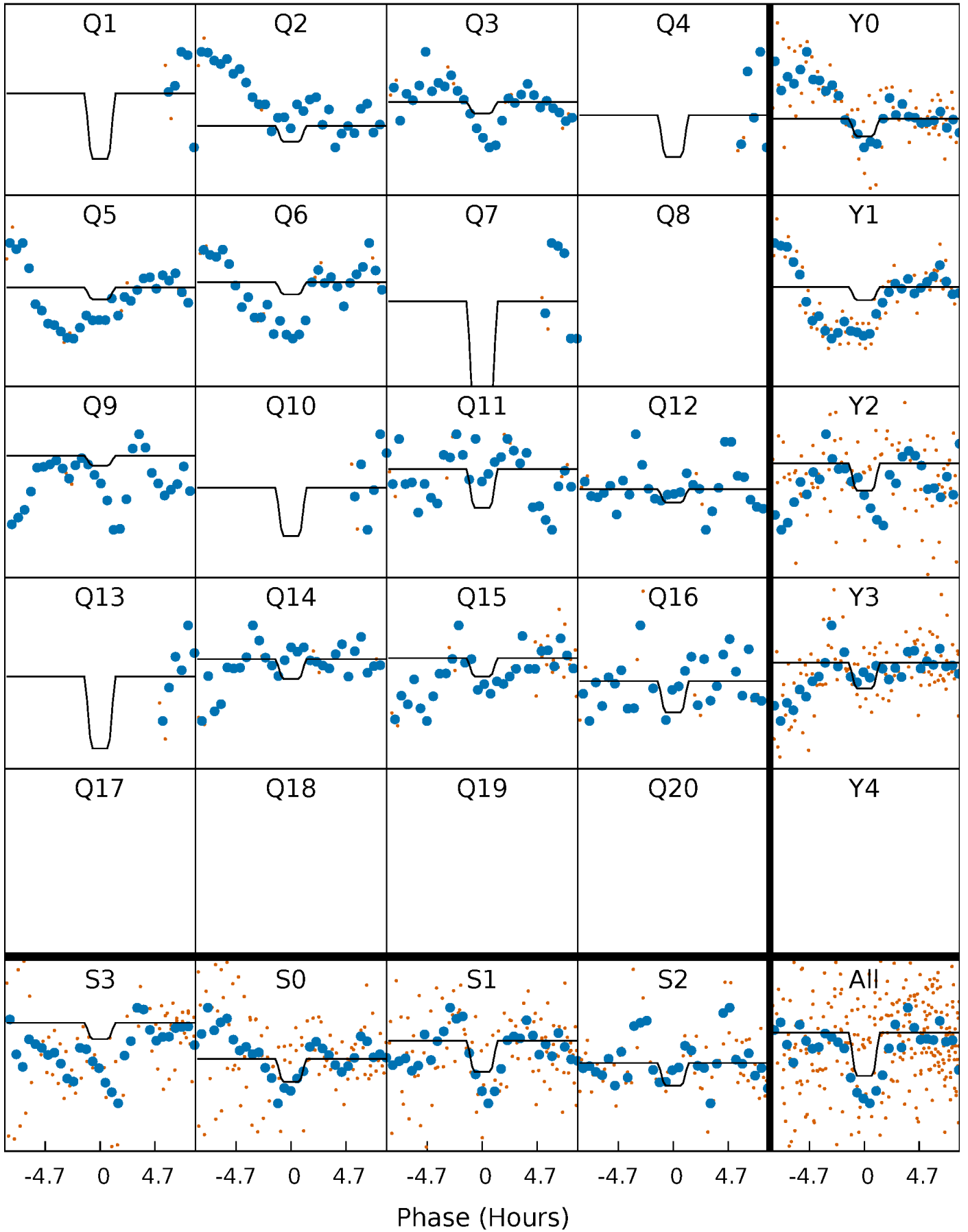
DV Quarter-Phased Transit Curves

TCE 008711548-03 P= 87.658167 Days $T_0=149.640773$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

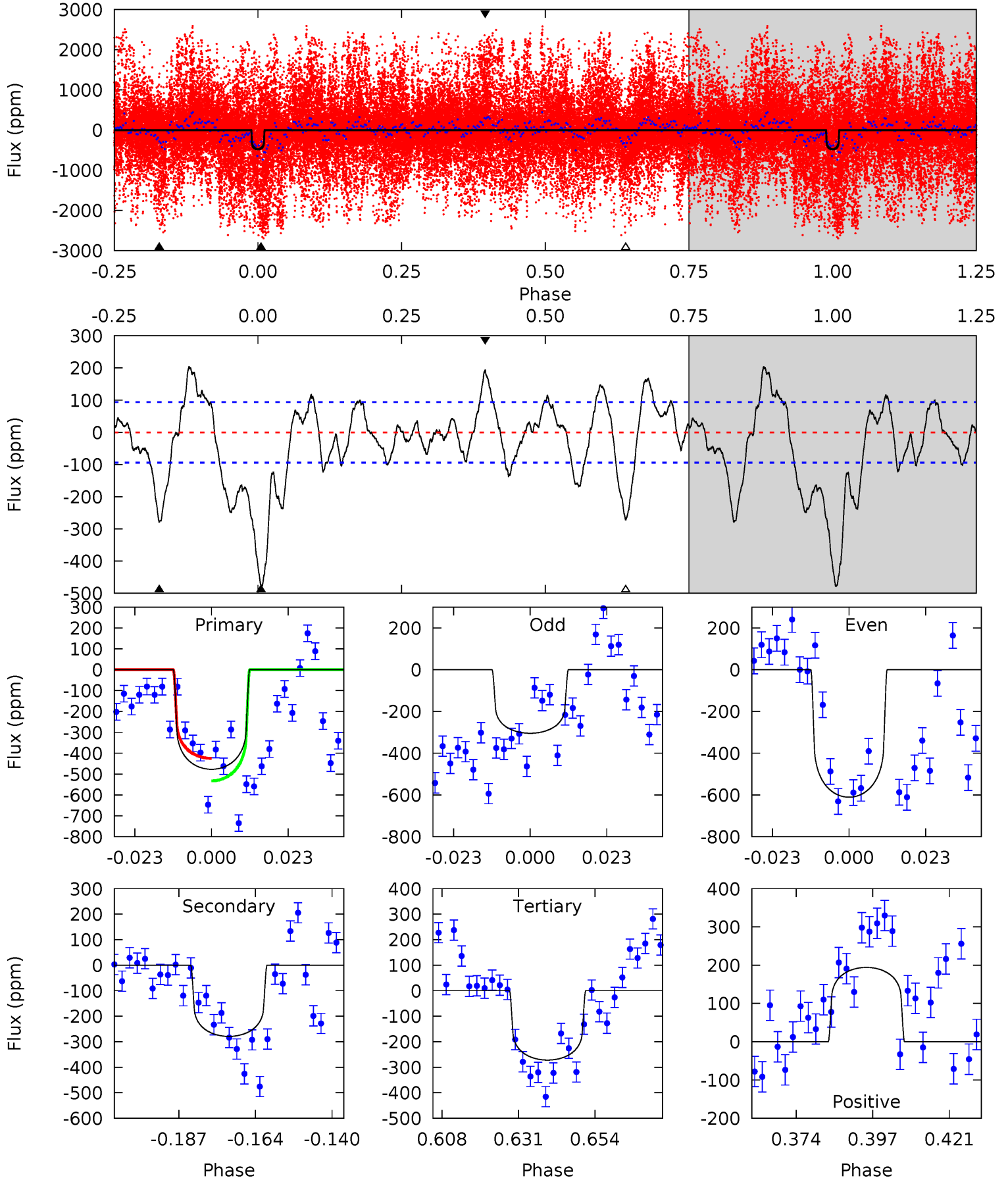
TCE 008711548-03 P= 87.632728 Days $T_0=149.751515$ (BKJD)



DV Model-Shift Uniqueness Test

008711548-03, P = 87.658167 Days, E = 61.982606 Days

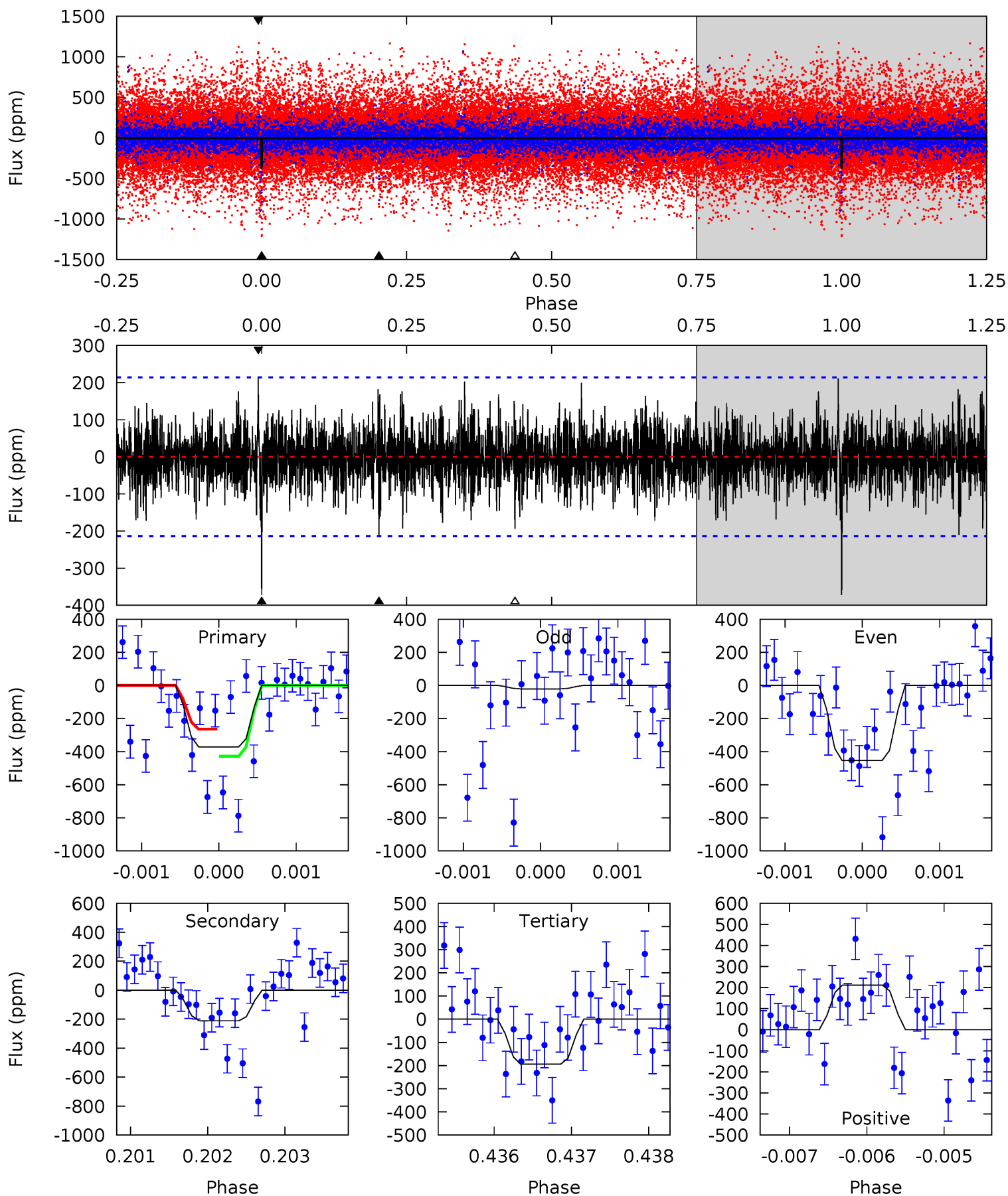
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.7	14.4	14.1	10.0	4.86	2.27	5.13	10.6	14.6	0.37	4.39	7.85	1.15	0.30	2.81



Alt Model-Shift Uniqueness Test

008711548-03, P = 87.632728 Days, E = 62.118787 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.42	5.34	4.92	5.37	5.43	3.25	1.40	4.50	4.06	0.41	-0.03	5.10	1.65	0.36	2.07



Stellar Parameters For KIC 008711548

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6794^{+189}_{-284}	$4.102^{+0.214}_{-0.175}$	$-0.200^{+0.250}_{-0.300}$	$1.710^{+0.503}_{-0.453}$	$1.356^{+0.194}_{-0.259}$	$0.382^{+0.485}_{-0.186}$
	+3%/-4%	+5%/-4%	+125%/-150%	+29%/-26%	+14%/-19%	+127%/-49%
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 008711548-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-279 ± 19	$9.49^{+1.53}_{-1.49}$	837^{+67}_{-72}	4146^{+114}_{-130}	309^{+114}_{-81}
Alt.	-210 ± 39	$3.03^{+0.62}_{-0.55}$	834^{+71}_{-62}	6369^{+504}_{-429}	2265^{+1165}_{-760}

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

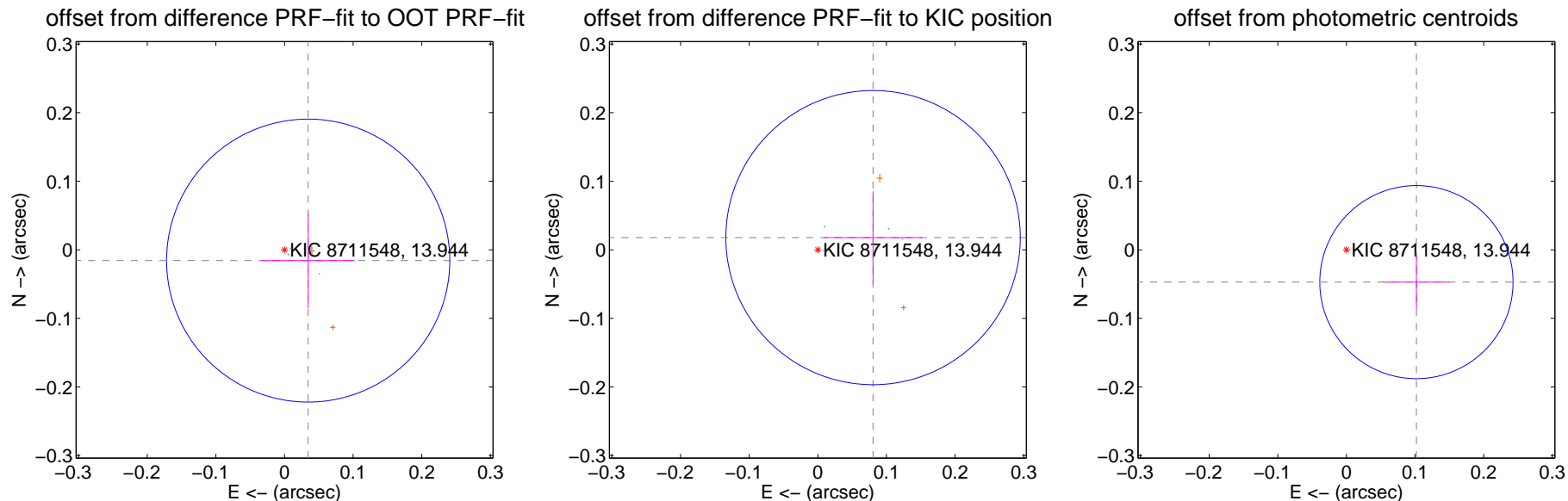
DV Centroid Data

Supplemental centroid analysis for 008711548-03. Kepler magnitude: 13.94. Transit SNR 45.37

There are 4 quarters with good PRF difference image offsets

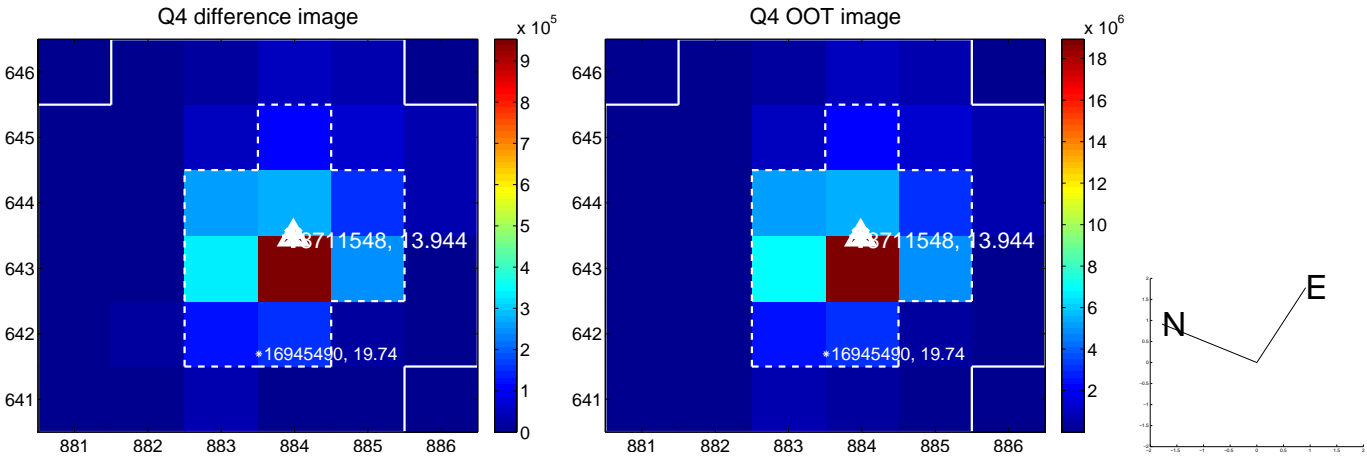
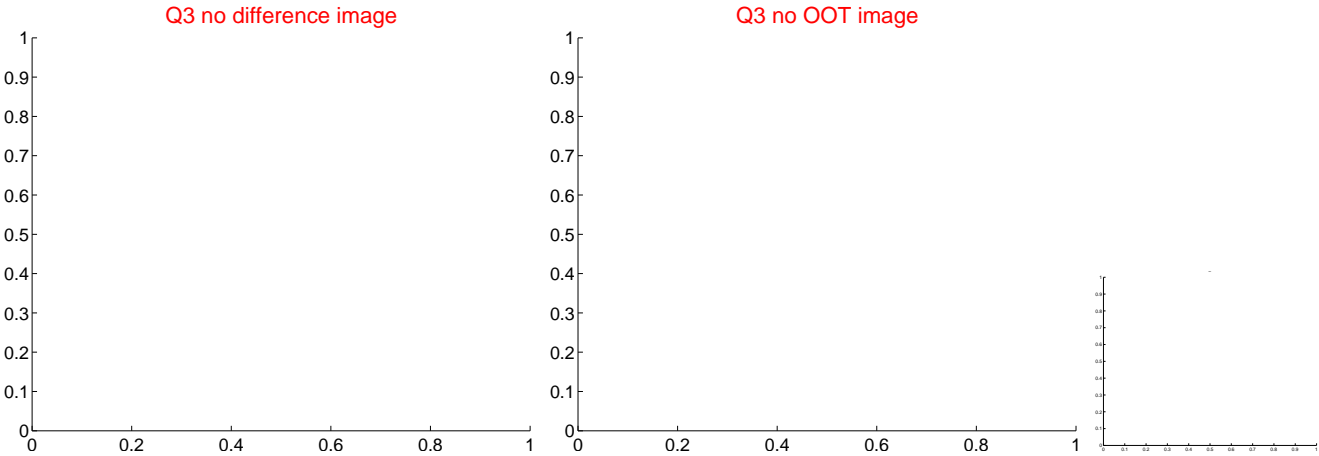
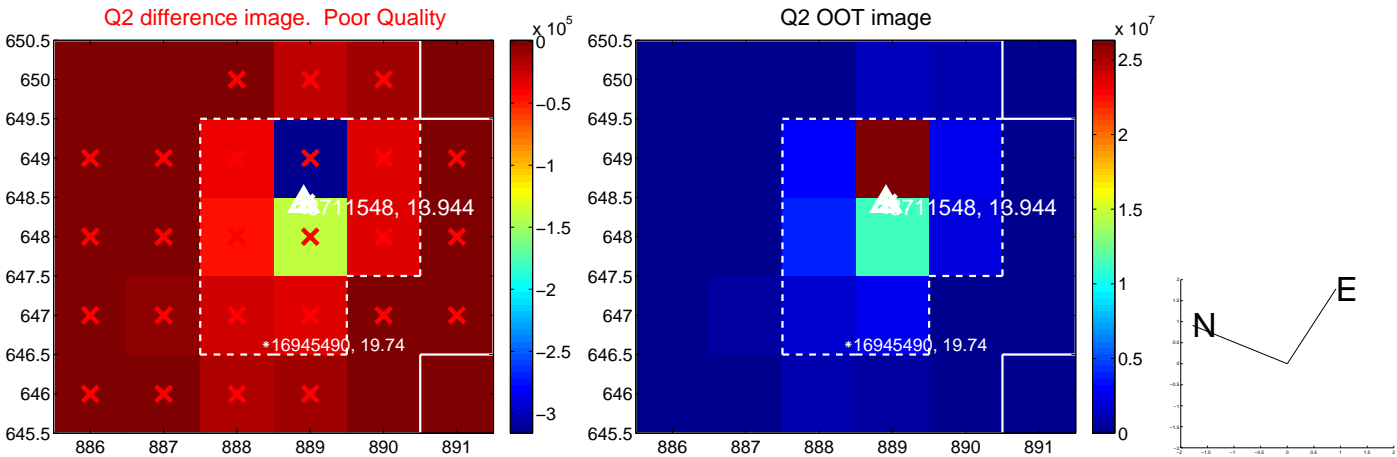
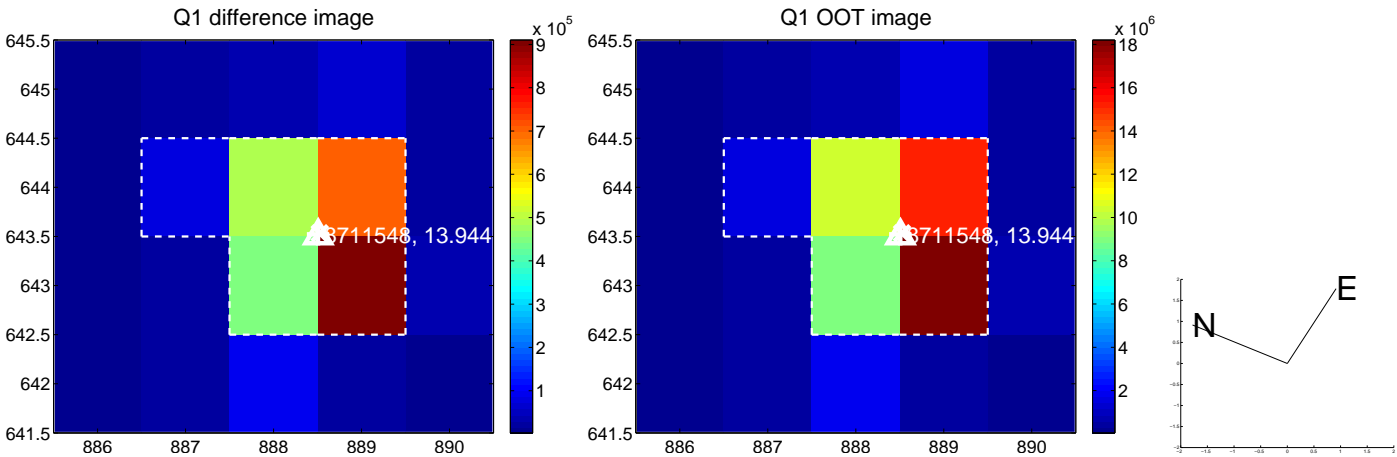
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.038 ± 0.069	0.55	-0.034 ± 0.067	-0.016 ± 0.070
PRF-fit source offset from KIC position	0.082 ± 0.071	1.15	-0.080 ± 0.072	0.018 ± 0.068
photometric centroid source offset	0.11 ± 0.05	2.39	-0.10 ± 0.05	-0.05 ± 0.04

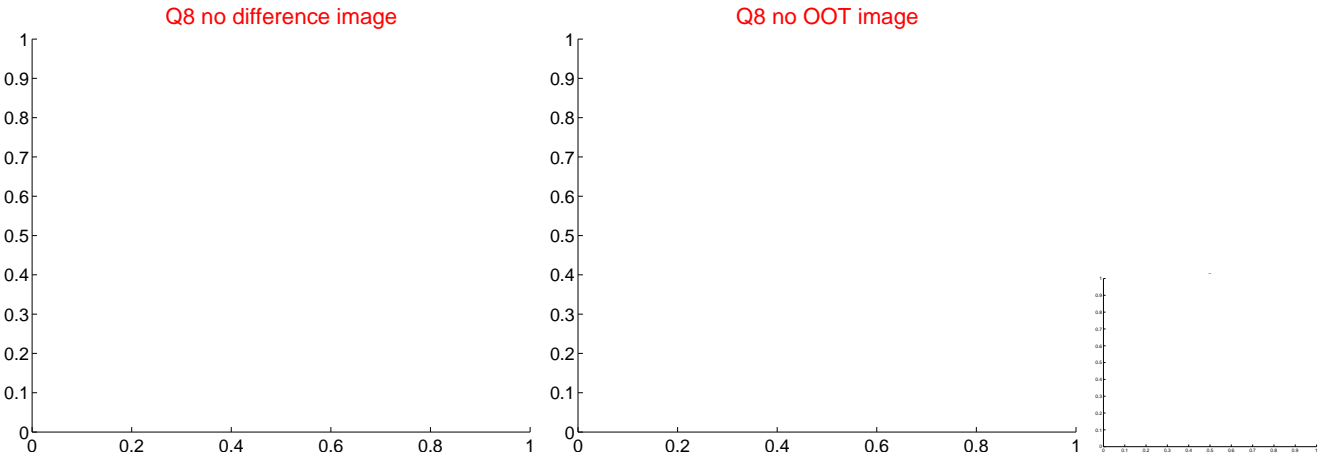
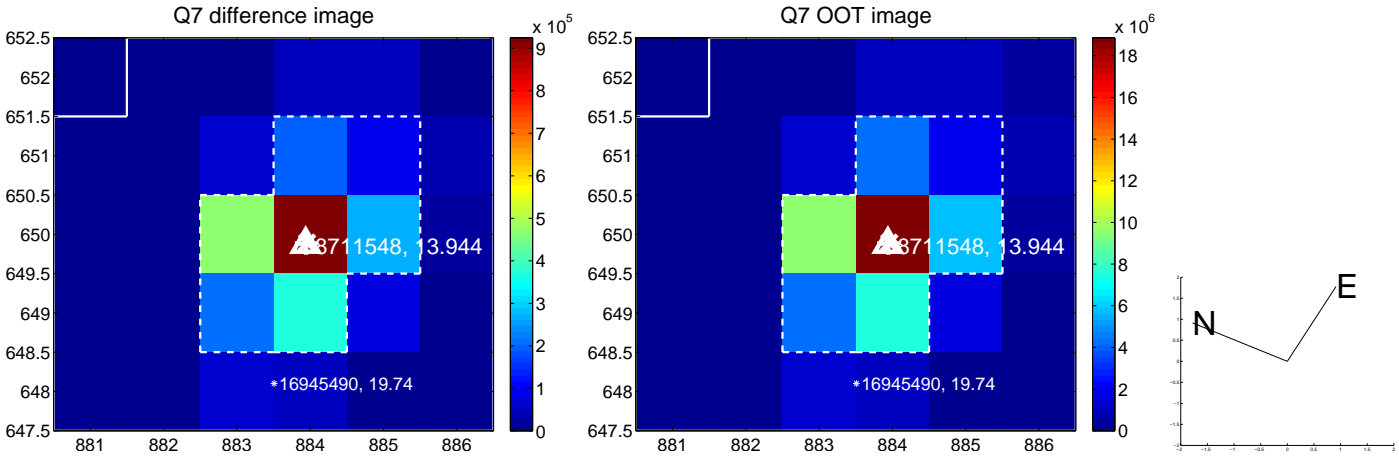
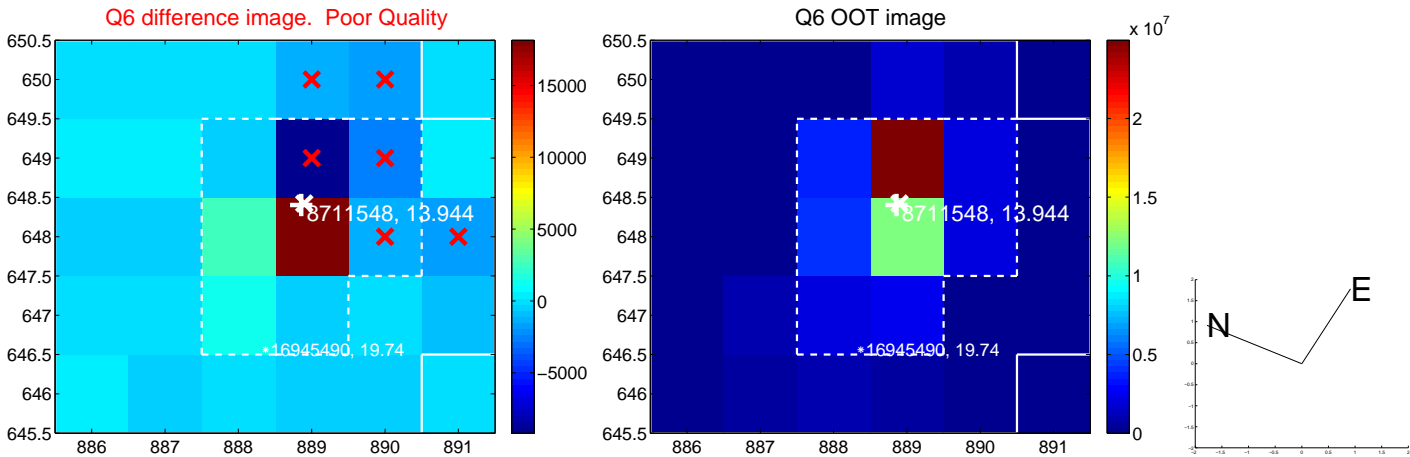
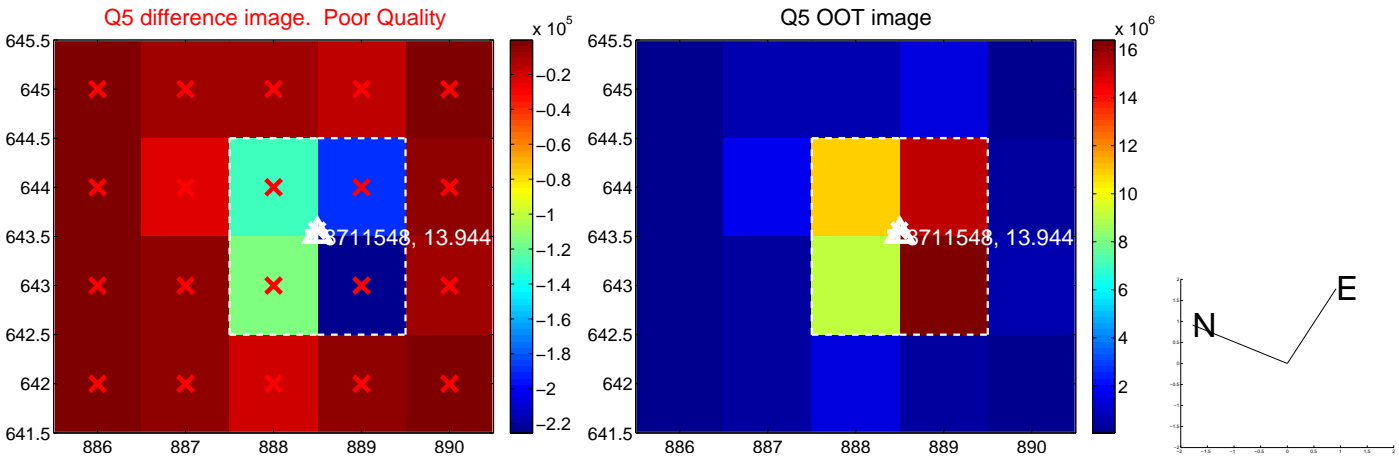


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

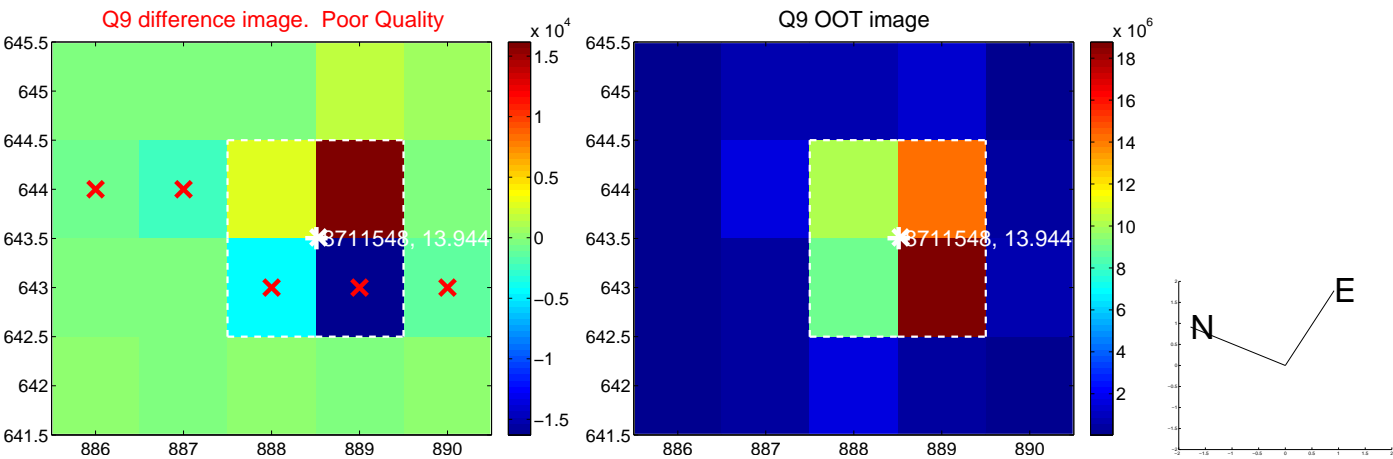
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

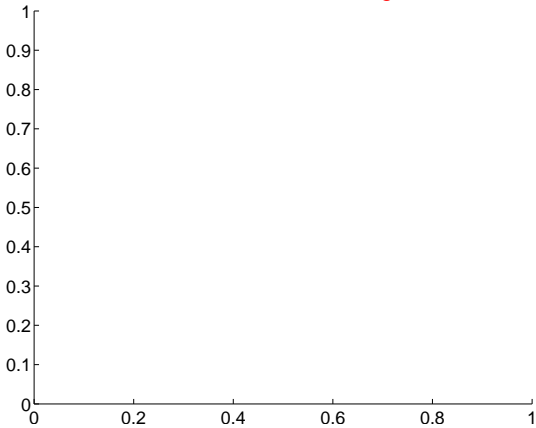


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

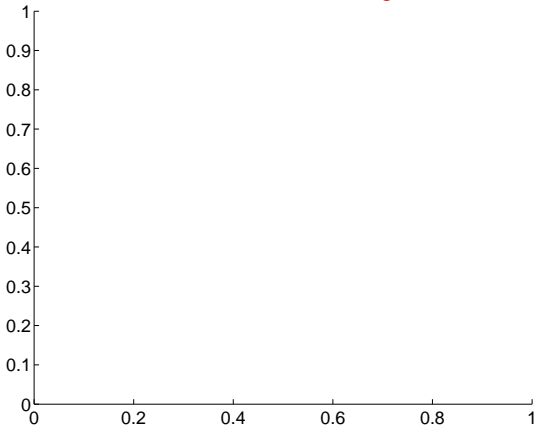
Q13 no difference image



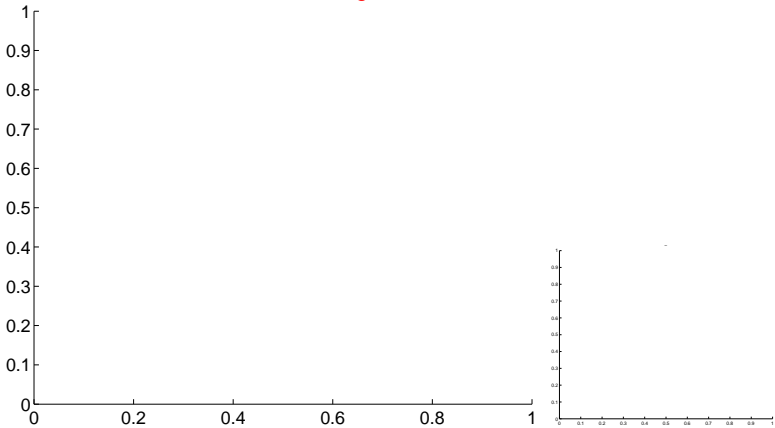
Q13 no OOT image



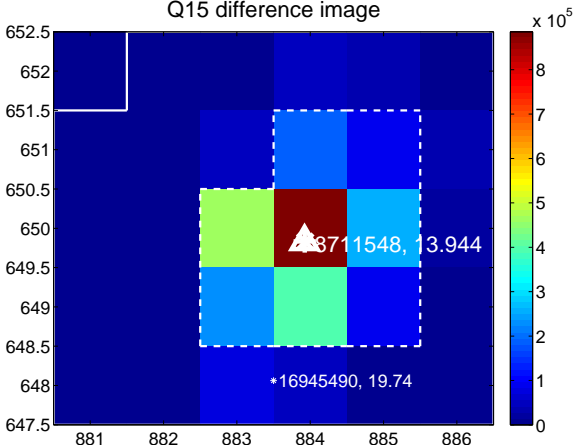
Q14 no difference image



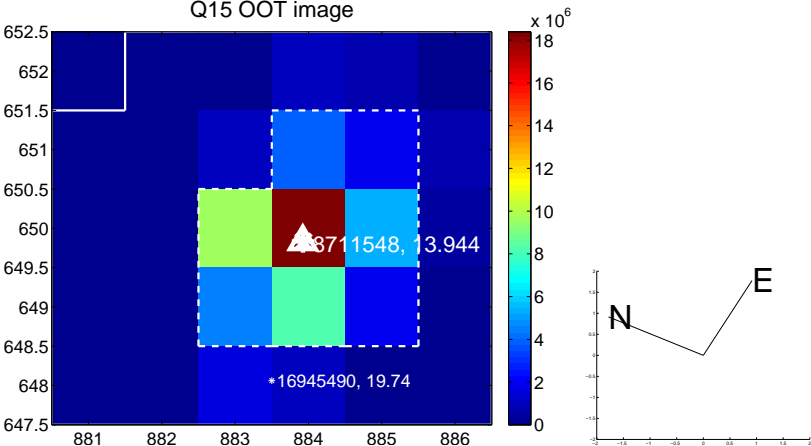
Q14 no OOT image



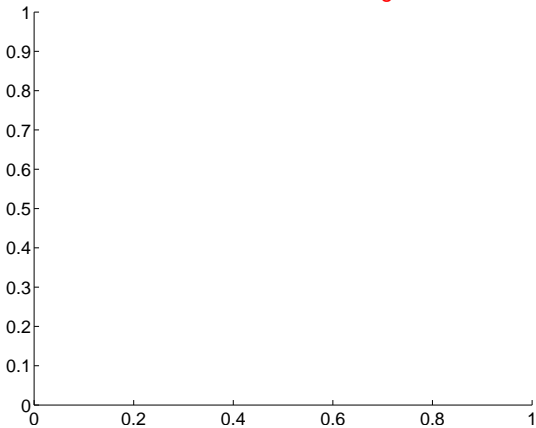
Q15 difference image



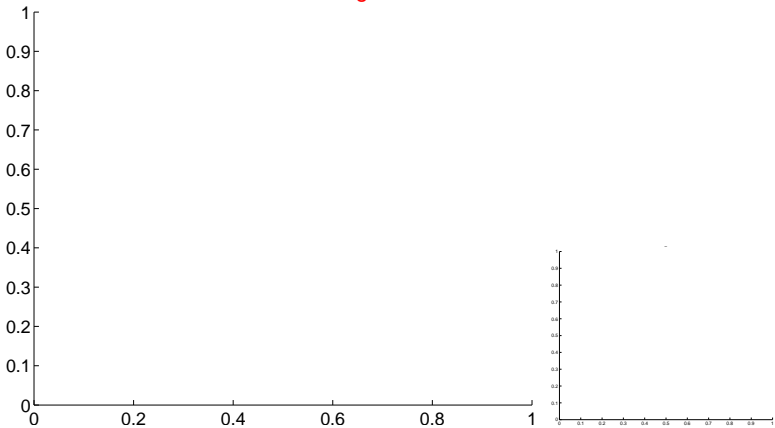
Q15 OOT image



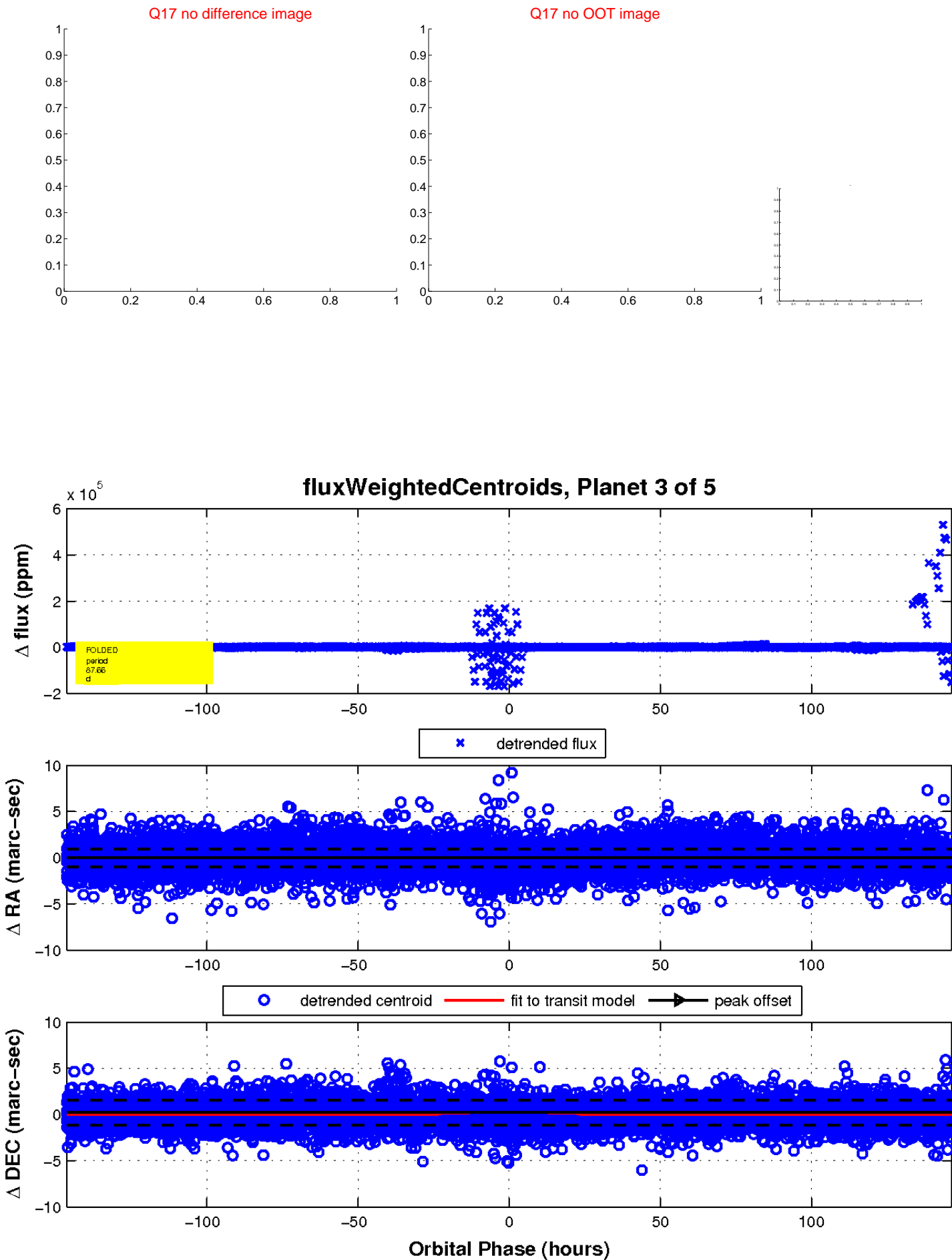
Q16 no difference image



Q16 no OOT image

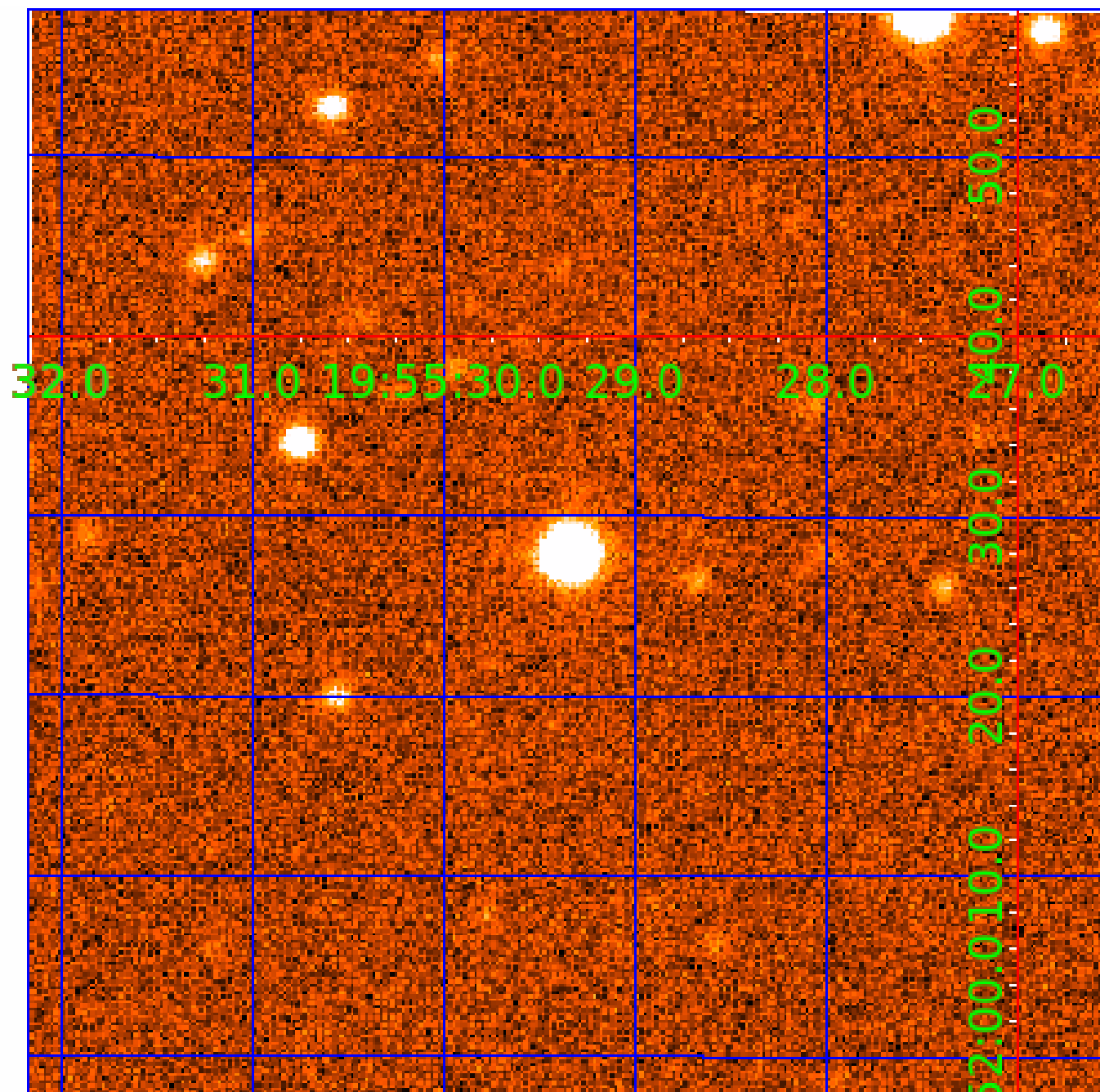


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008711548

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})
008711548-01	OBS	7079.01	18.778091	149.676429	486266.9	4.500	20726.3	-1.0	1.71	6794	93.30	239.07
008711548-02	OBS	No	18.778170	142.164193	213076.2	10.542	10789.0	4217.1	1.71	6794	99.37	239.07
008711548-03	OBS	No	87.658167	149.640773	3032.9	48.761	900.6	45.4	1.71	6794	9.49	30.64
008711548-04	OBS	No	299.855682	356.545790	26636.1	15.000	781.5	-1.0	1.71	6794	28.18	5.95
008711548-05	OBS	No	28.167194	149.390359	25936.5	15.000	729.9	-1.0	1.71	6794	27.81	139.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008711548-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
008711548-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008711548-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008711548-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
008711548-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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 008711548-04

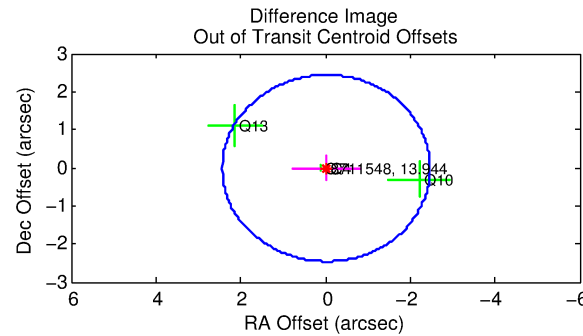
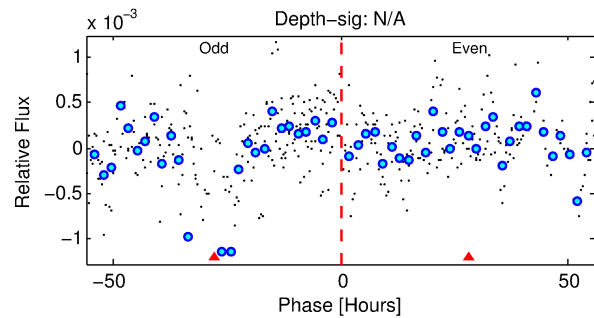
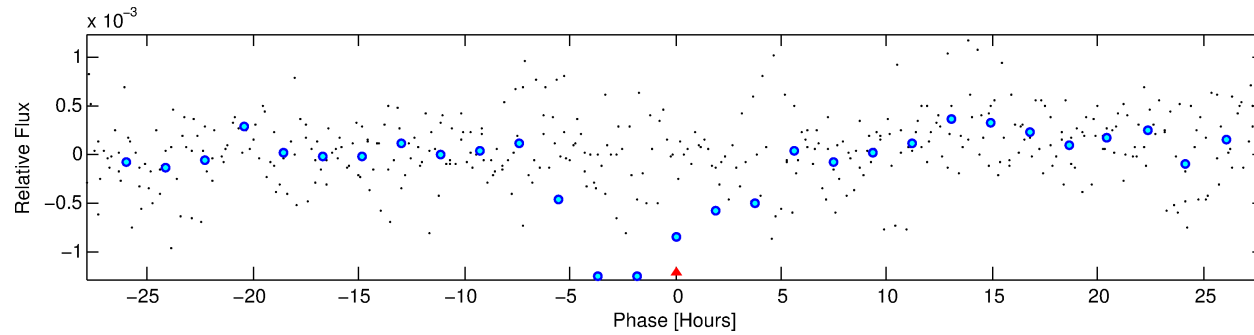
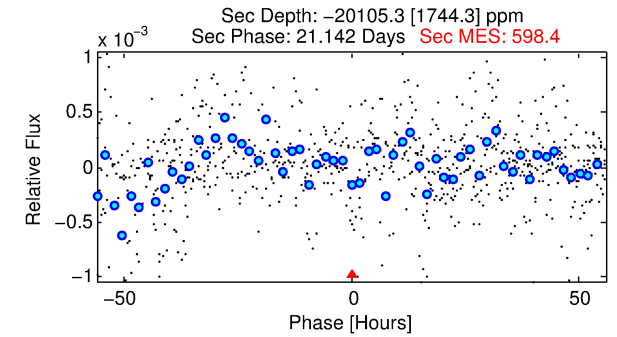
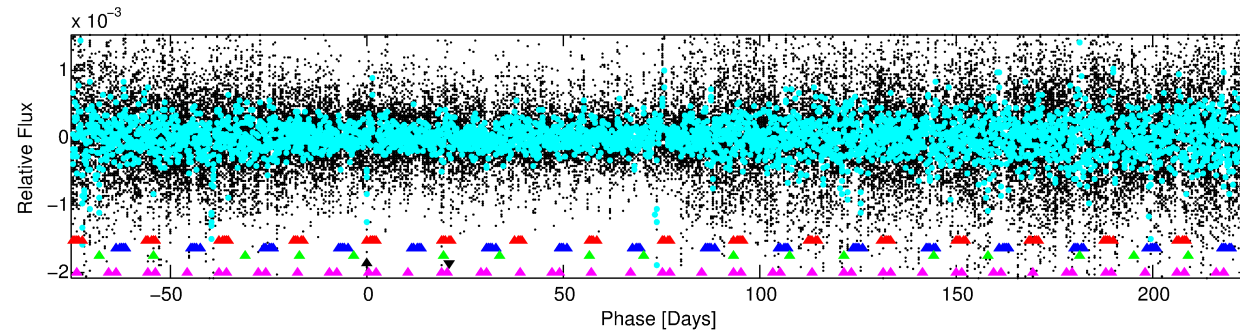
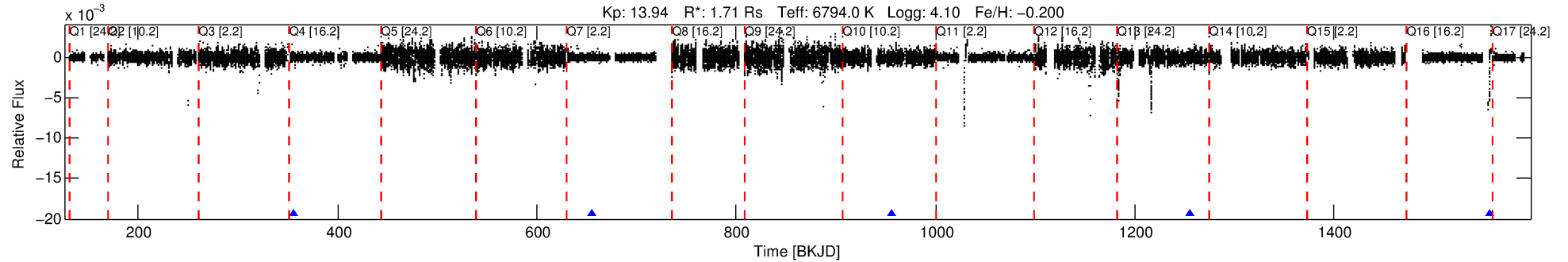
No Significant Match Found

DV One-Page Summary

KIC: 8711548 Candidate: 4 of 5 Period: 299.856 d

KOI: K07079 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.71 Rs Teff: 6794.0 K Logg: 4.10 Fe/H: -0.200



TPS TCE Results:

Period = 299.85568 d
Epoch = 356.5458 BKJD

DV fit results are unavailable

DV Diagnostic Results:

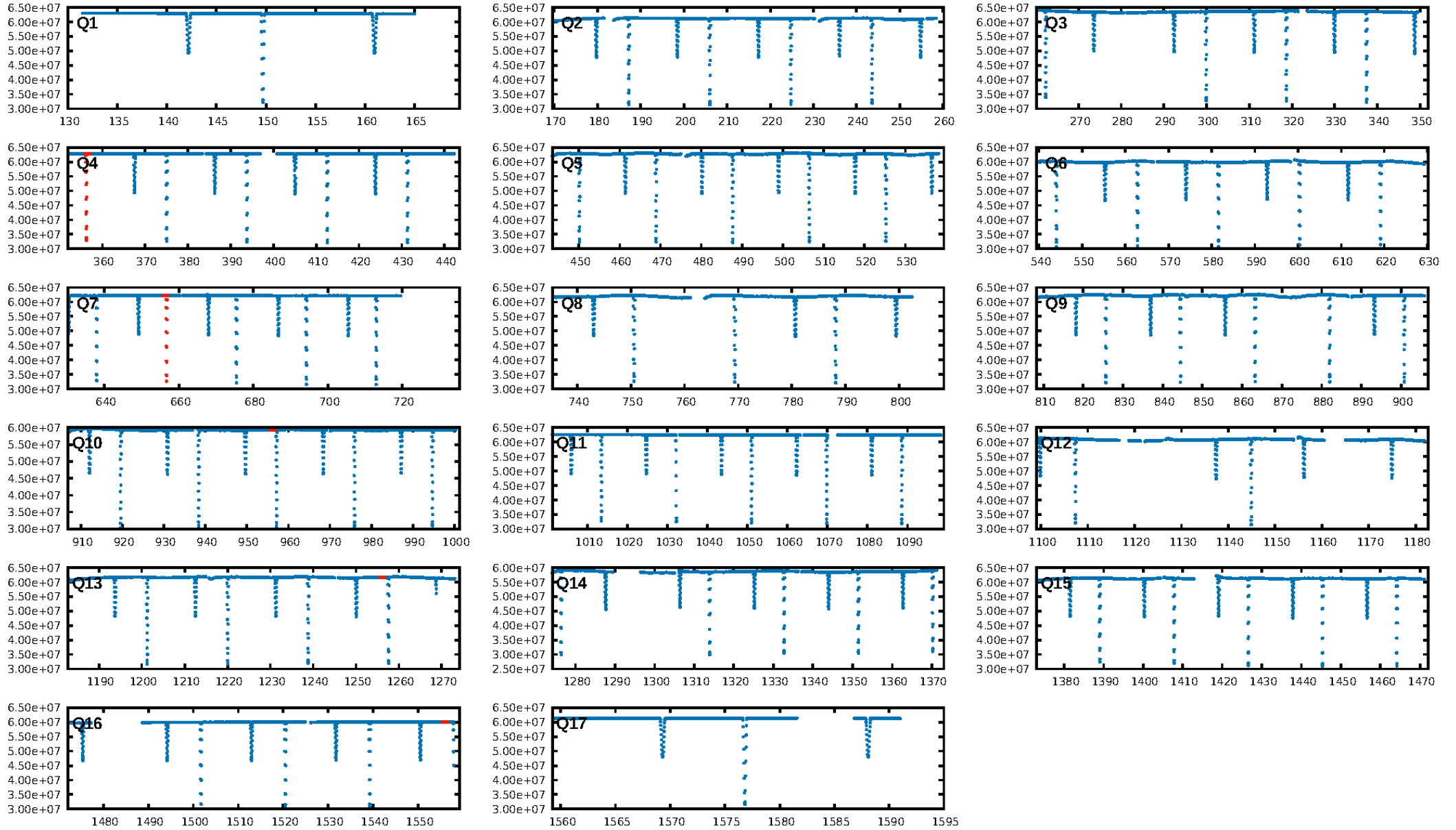
ShortPeriod-sig: 100.0% [99.83σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: 10.36

Centroid-sig: 28.5%
Centroid-so: 10.011 arcsec [0.98σ]
OotOffset-rm: 0.023 arcsec [0.03σ]
KicOffset-rm: 0.084 arcsec [0.11σ]
OotOffset-st: 1/1/1/1 [4]
KicOffset-st: 1/1/1/1 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 0.60 [3/5]

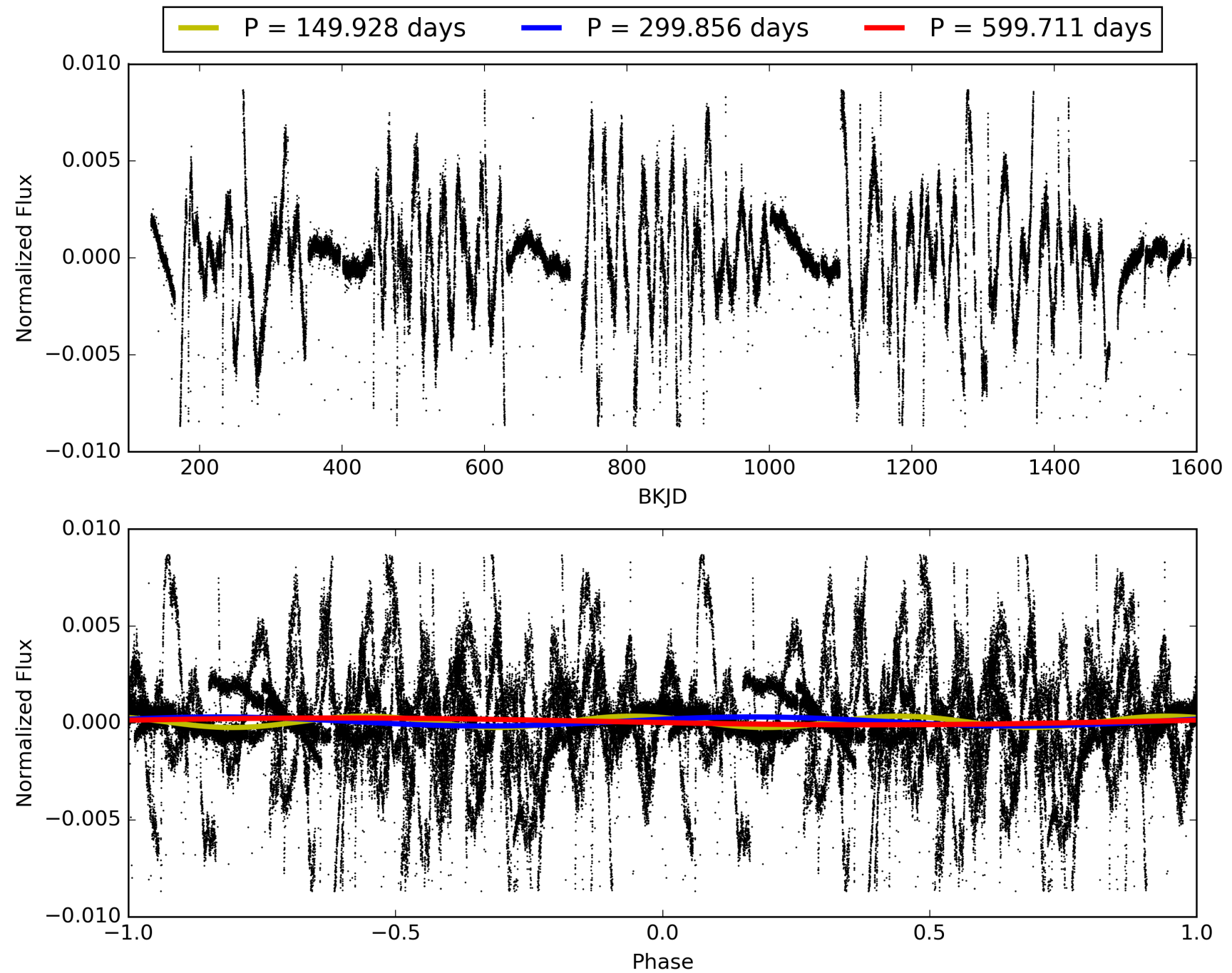
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:03:13 Z

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

TCE 008711548-04, PDC Light Curves

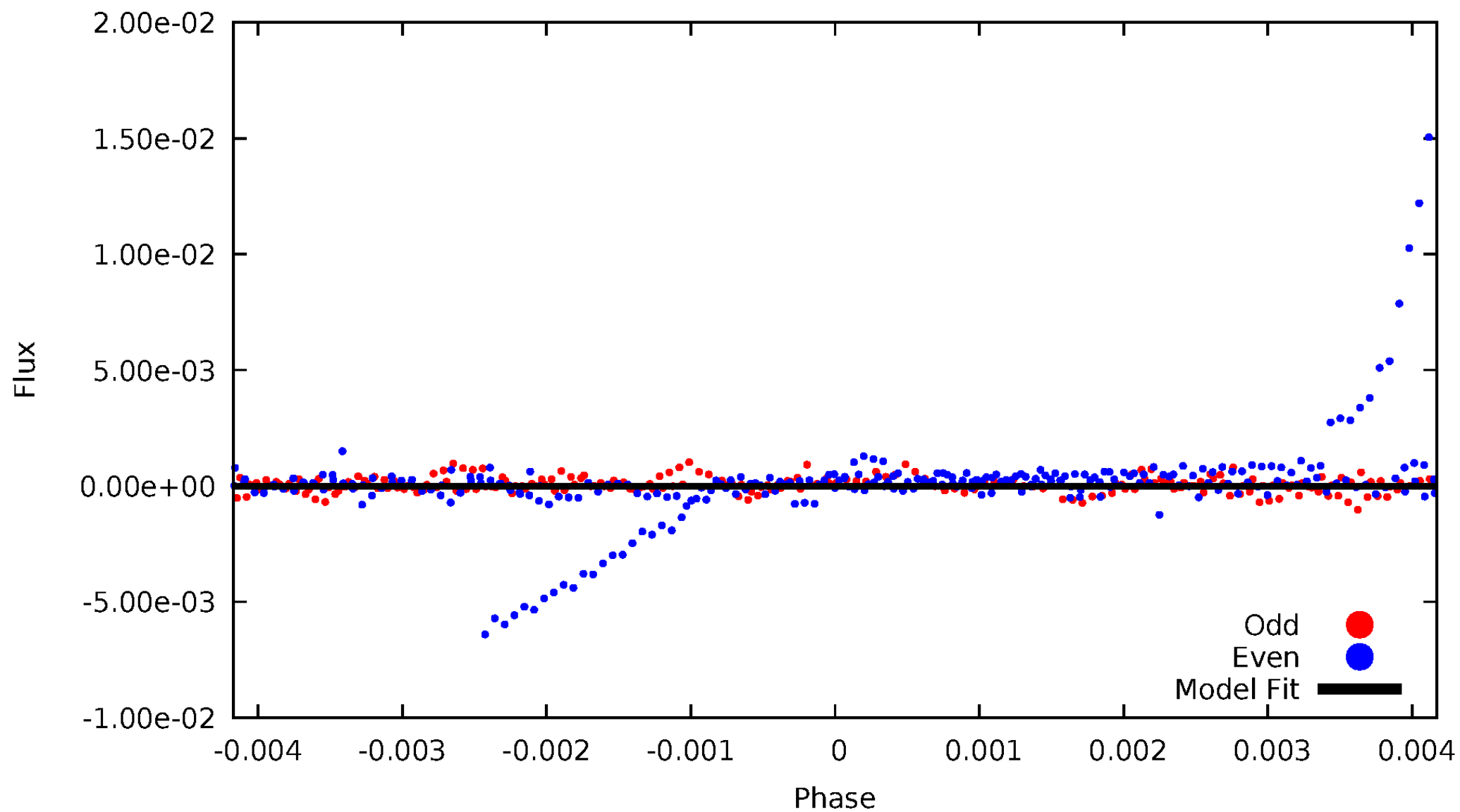


TCE 008711548-04



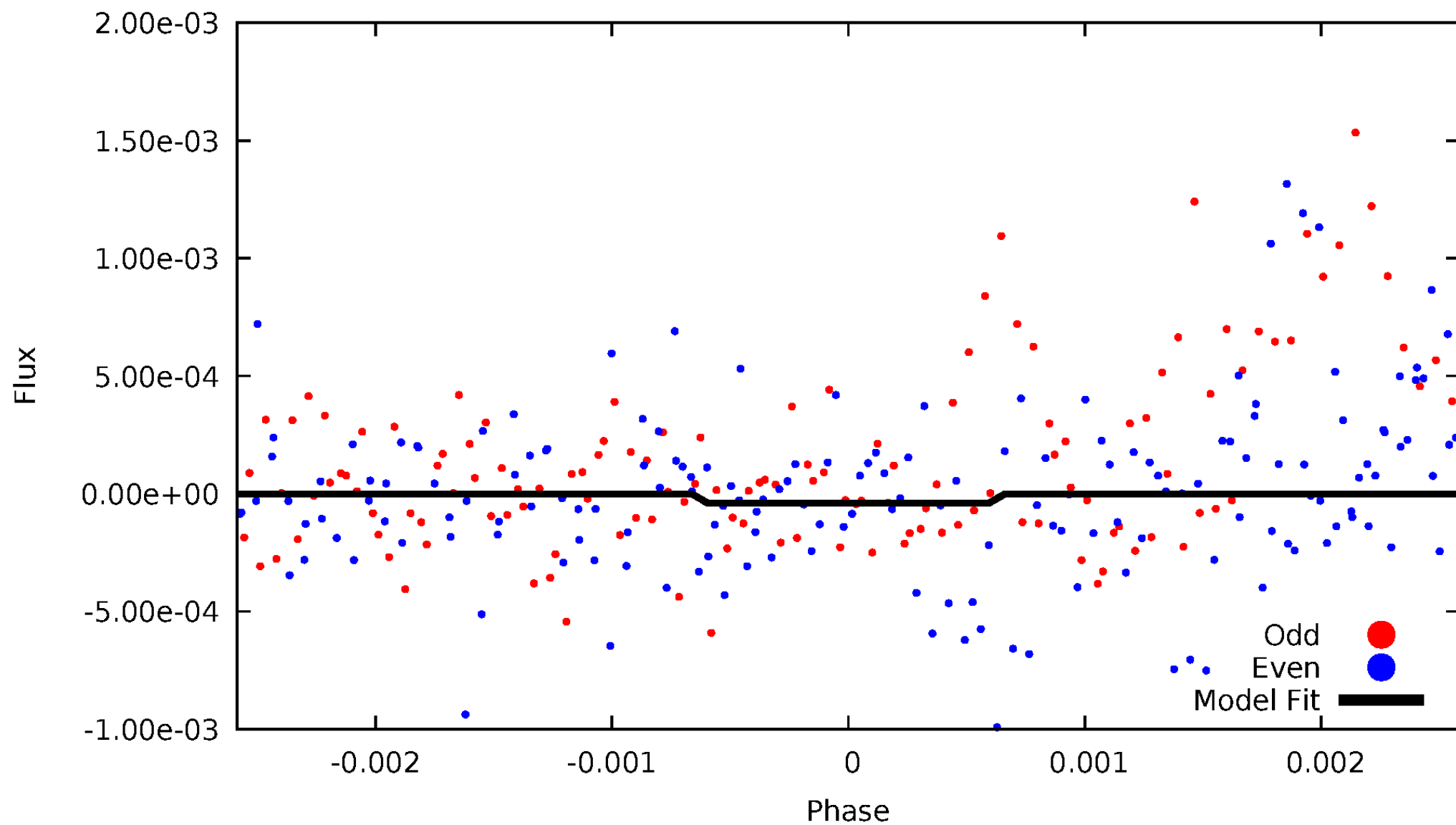
DV Odd/Even

TCE 008711548-04



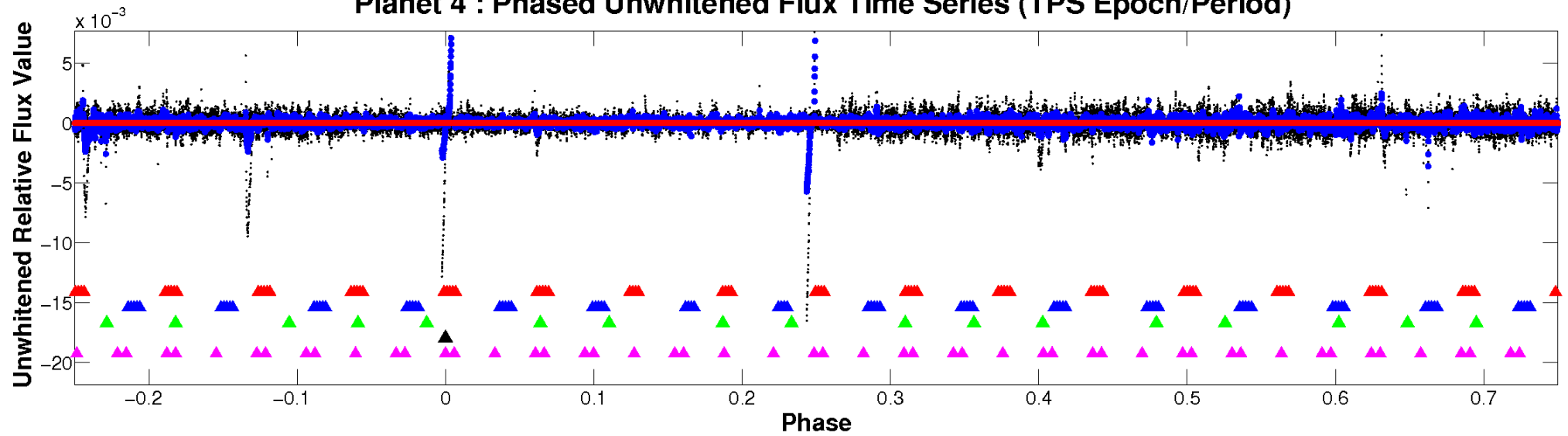
ALT Odd/Even

TCE 008711548-04

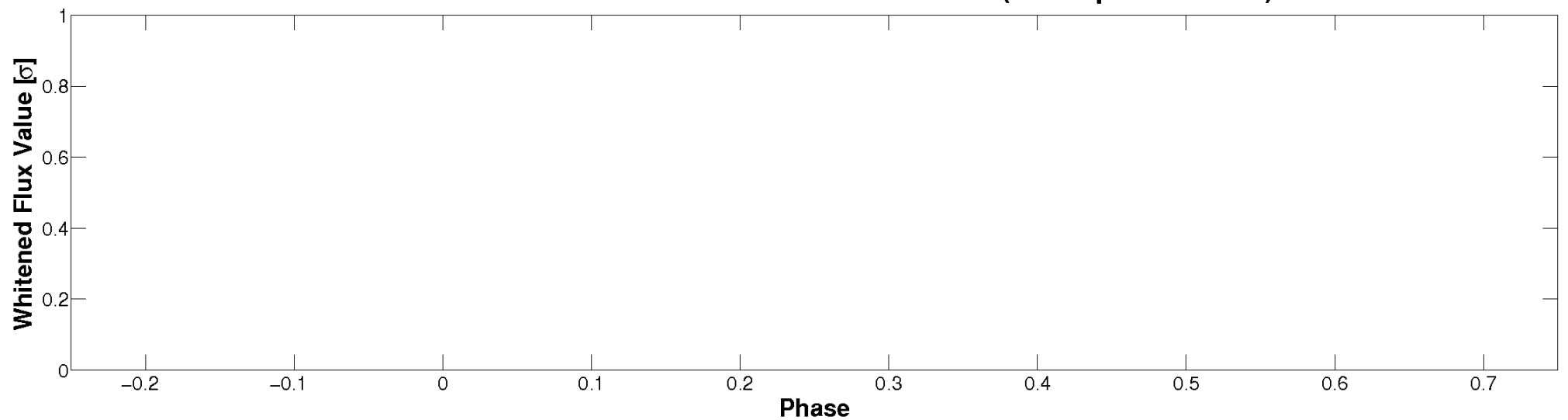


Non-Whitened Vs. Whitened Light Curve

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

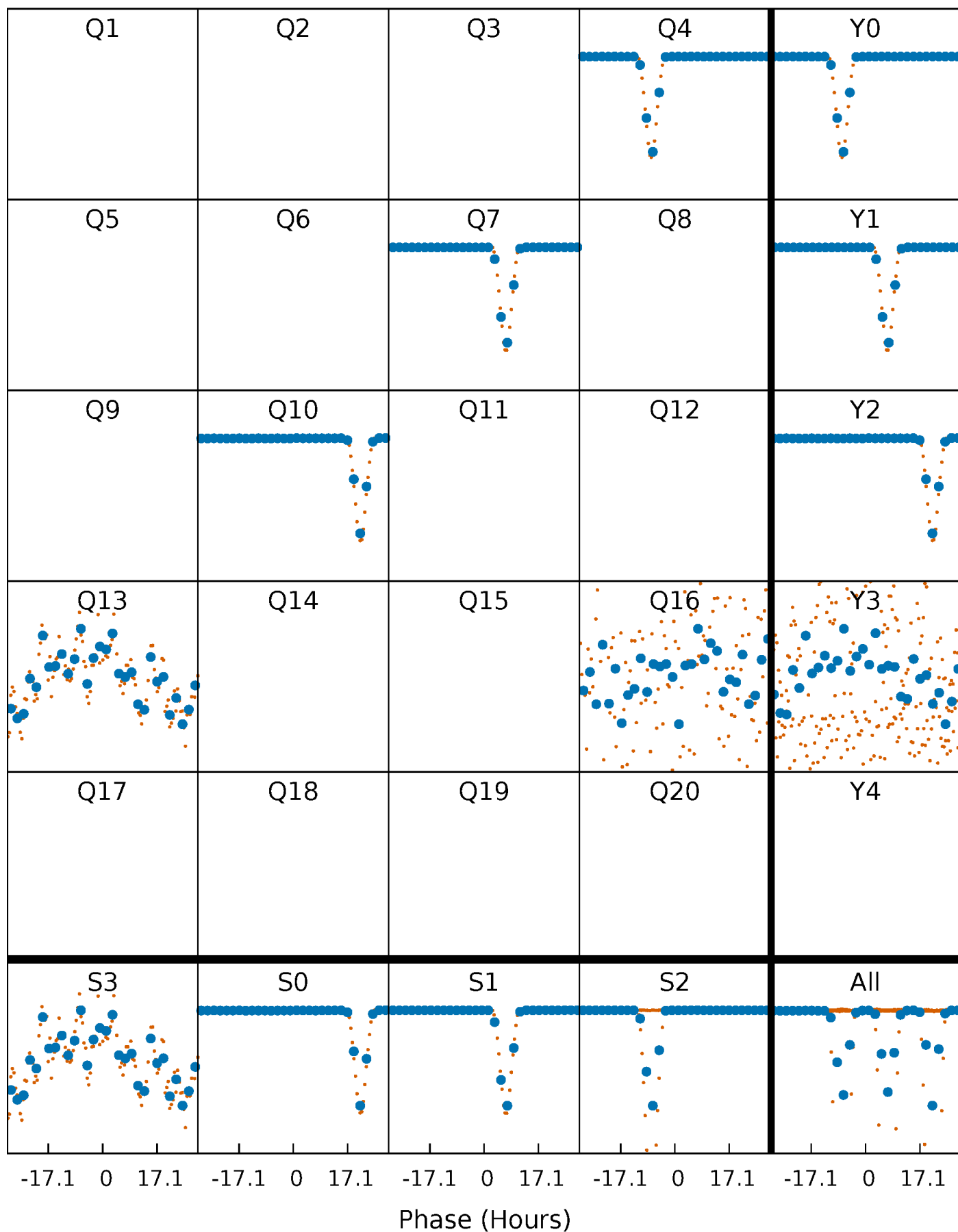


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



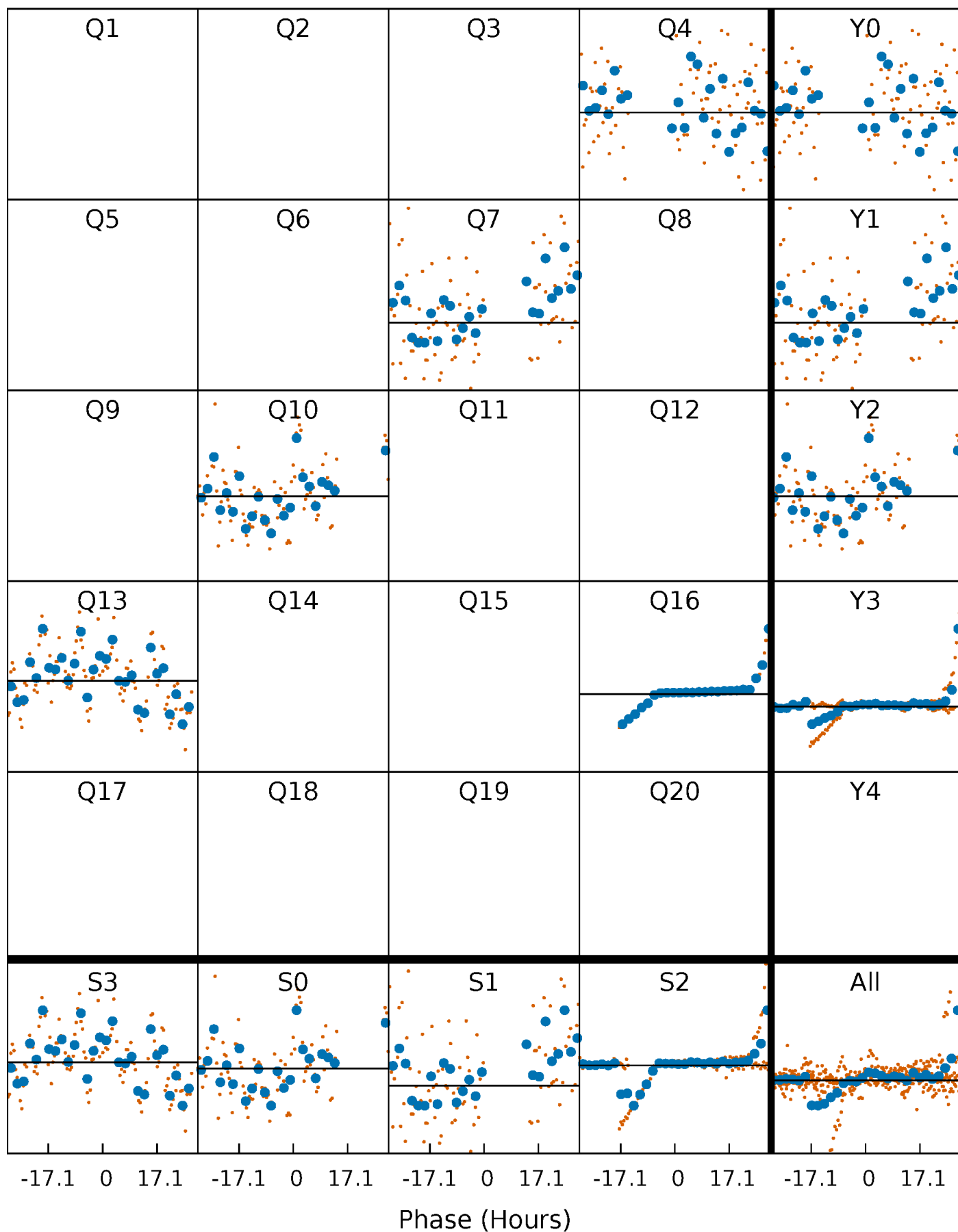
PDC Quarter-Phased Transit Curves

TCE 008711548-04 P=299.855682 Days $T_0=356.545790$ (BKJD)



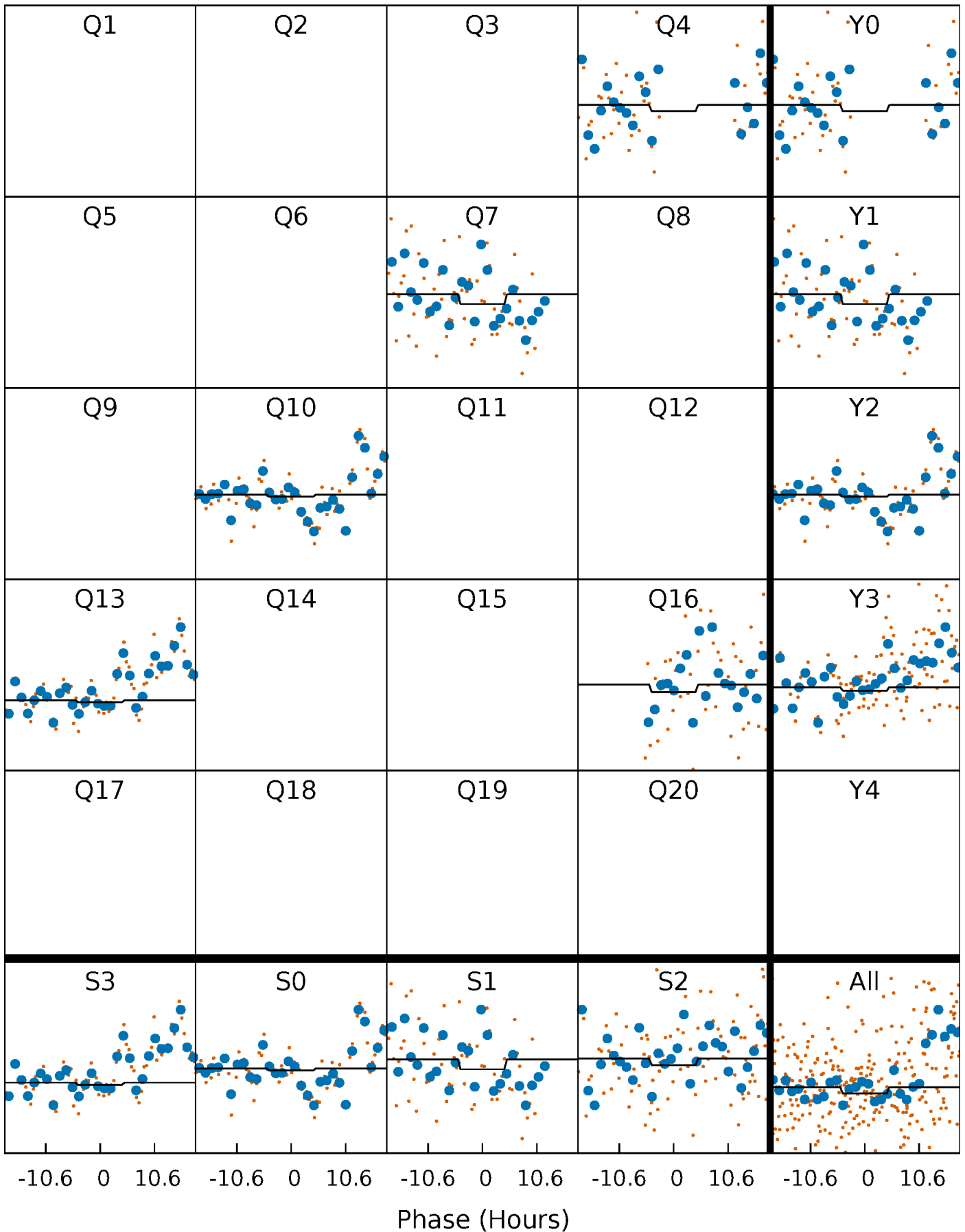
DV Quarter-Phased Transit Curves

TCE 008711548-04 $P=299.855682$ Days $T_0=356.545790$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

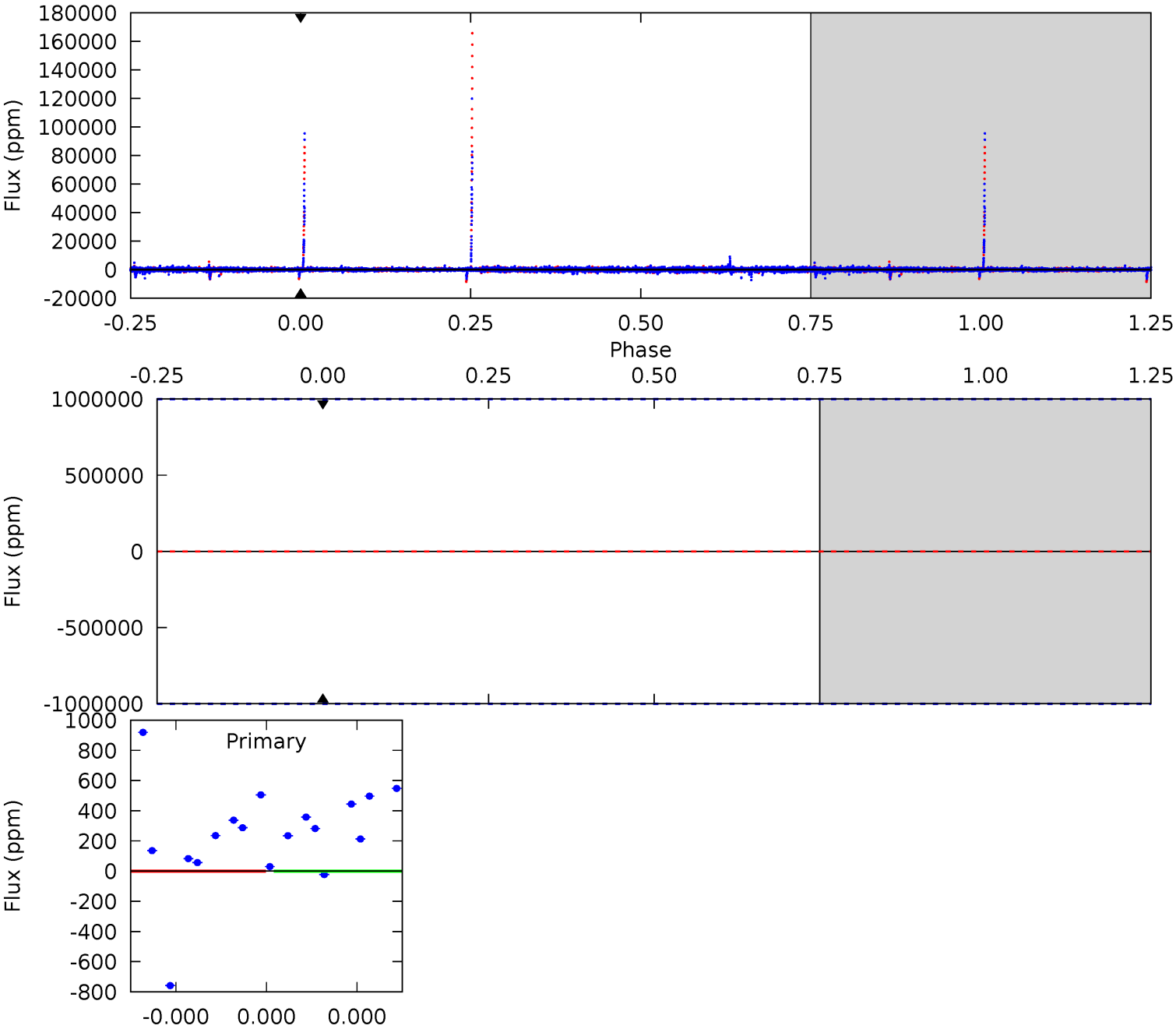
TCE 008711548-04 $P=299.855682$ Days $T_0=356.048794$ (BKJD)



DV Model-Shift Uniqueness Test

008711548-04, P = 299.855682 Days, E = 56.690108 Days

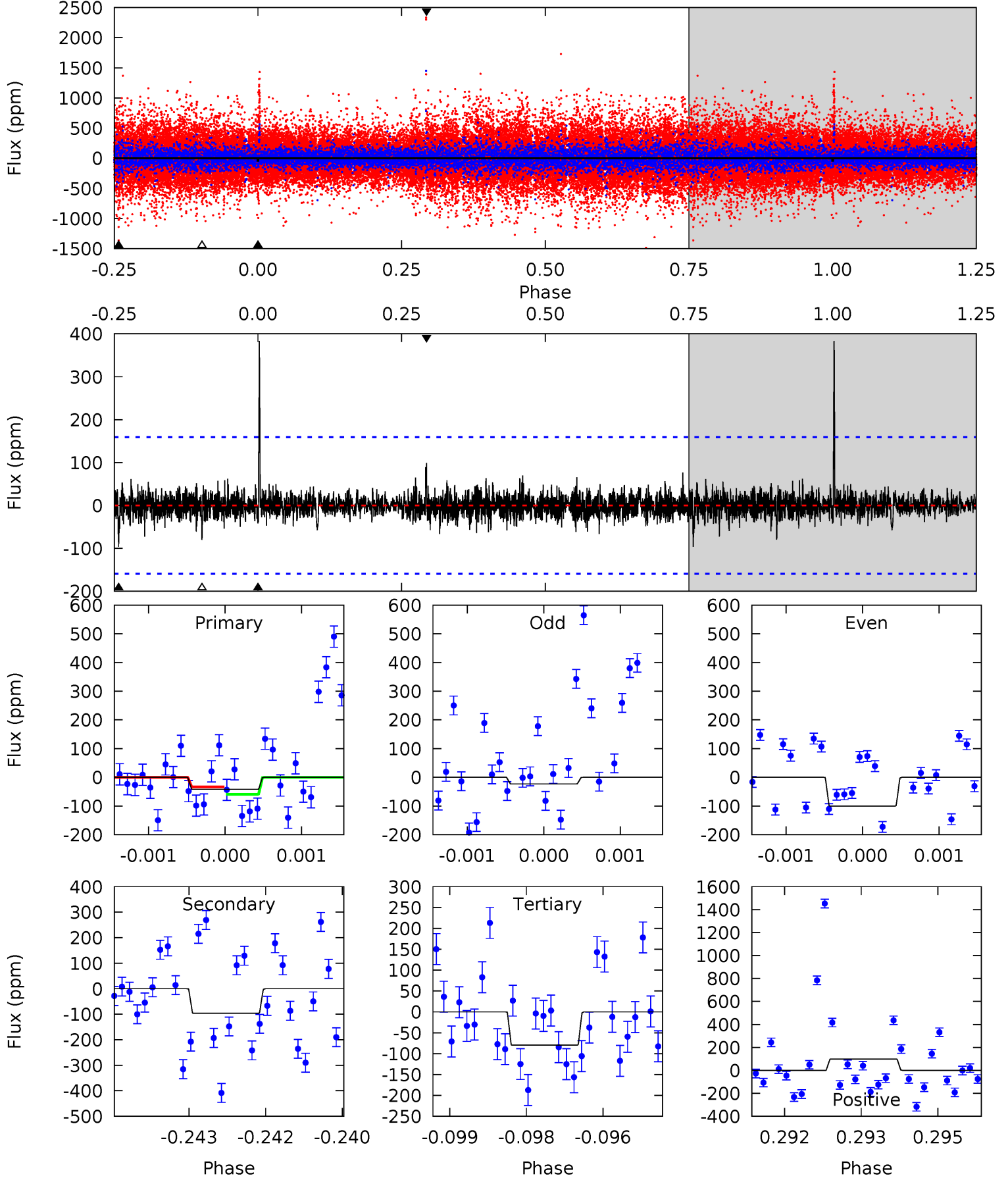
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008711548-04, P = 299.855682 Days, E = 56.193112 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1.42	3.26	2.71	3.35	5.40	3.20	0.74	-1.28	-1.93	0.56	-0.09	1.28	1.28	0.80	0.44



Stellar Parameters For KIC 008711548

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6794^{+189}_{-284}	$4.102^{+0.214}_{-0.175}$	$-0.200^{+0.250}_{-0.300}$	$1.710^{+0.503}_{-0.453}$	$1.356^{+0.194}_{-0.259}$	$0.382^{+0.485}_{-0.186}$
	+3%/-4%	+5%/-4%	+125%/-150%	+29%/-26%	+14%/-19%	+127%/-49%
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 008711548-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$29.42^{+19.23}_{-16.36}$	554^{+42}_{-44}	4079^{+8645}_{-15214}	1197^{+96357}_{-73149}
Alt.	-96 ± 29	$13.49^{+14.35}_{-9.46}$	548^{+47}_{-42}	3115^{+1512}_{-565}	271^{+2869}_{-209}

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

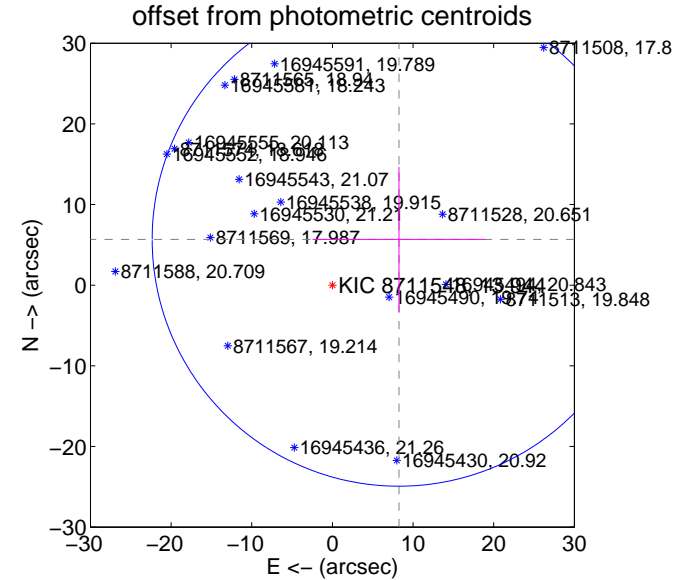
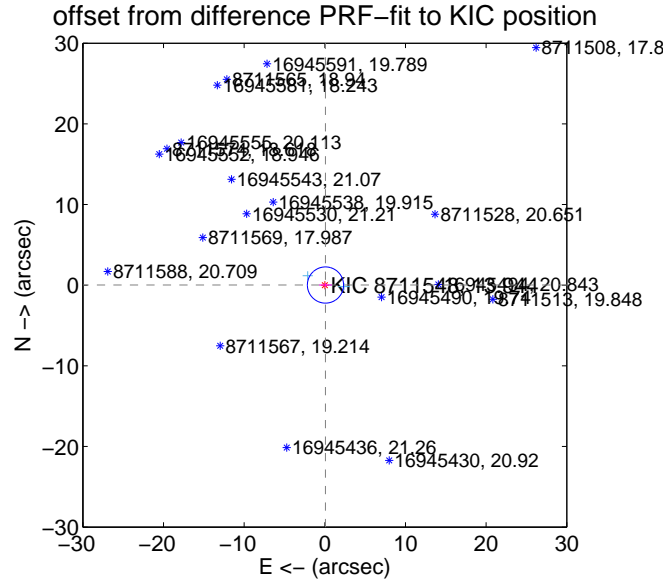
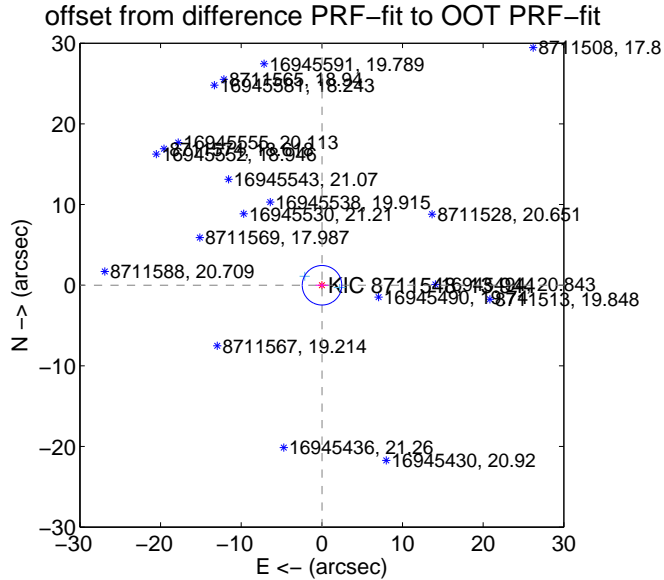
DV Centroid Data

Supplemental centroid analysis for 008711548-04. Kepler magnitude: 13.94. Transit SNR -1.00

There are 3 quarters with good PRF difference image offsets

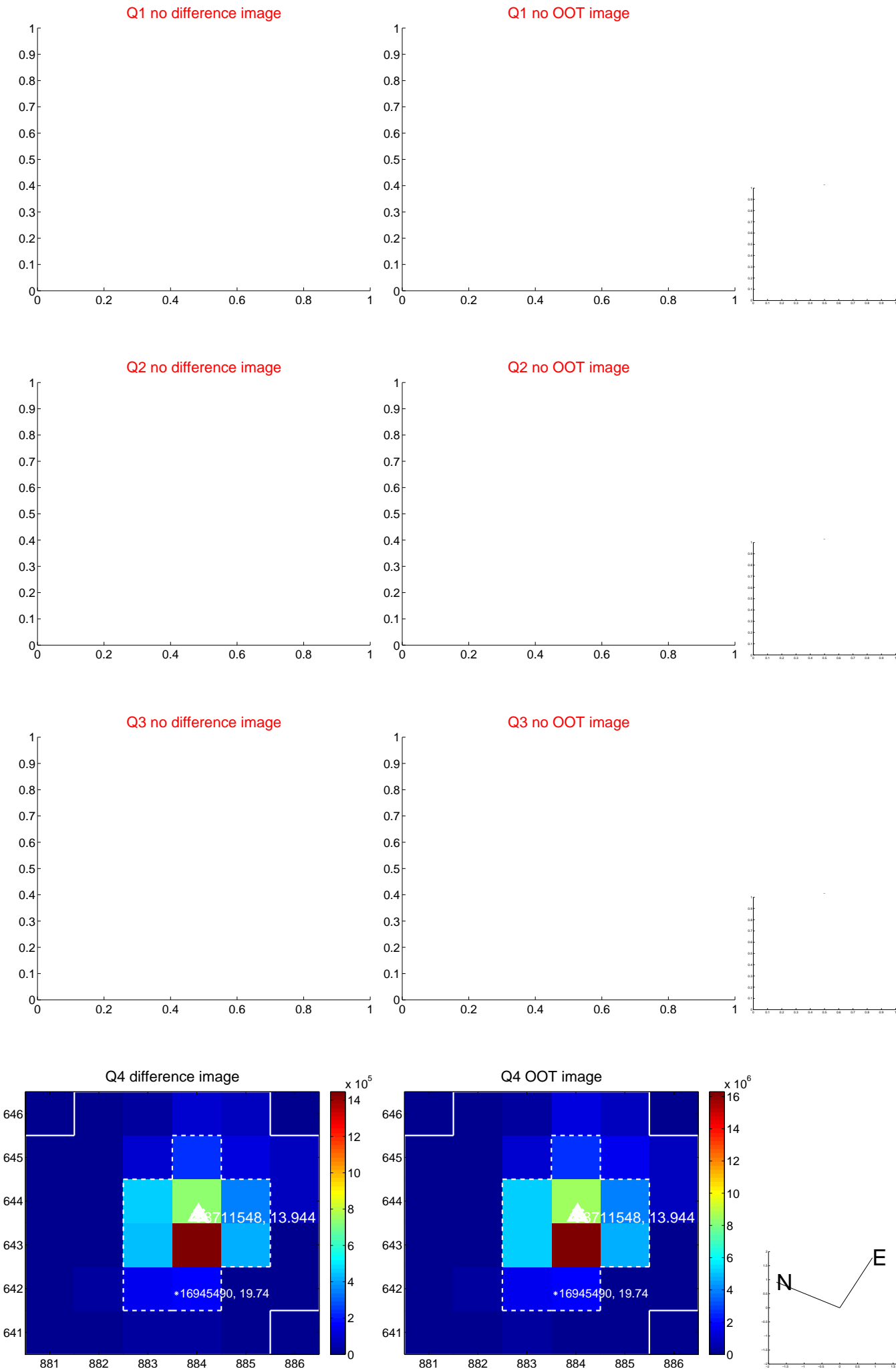
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.023 ± 0.817	0.03	-0.019 ± 0.779	-0.012 ± 0.322
PRF-fit source offset from KIC position	0.084 ± 0.748	0.11	-0.082 ± 0.805	0.018 ± 0.223
photometric centroid source offset	10.01 ± 10.20	0.98	-8.25 ± 10.72	5.67 ± 8.99

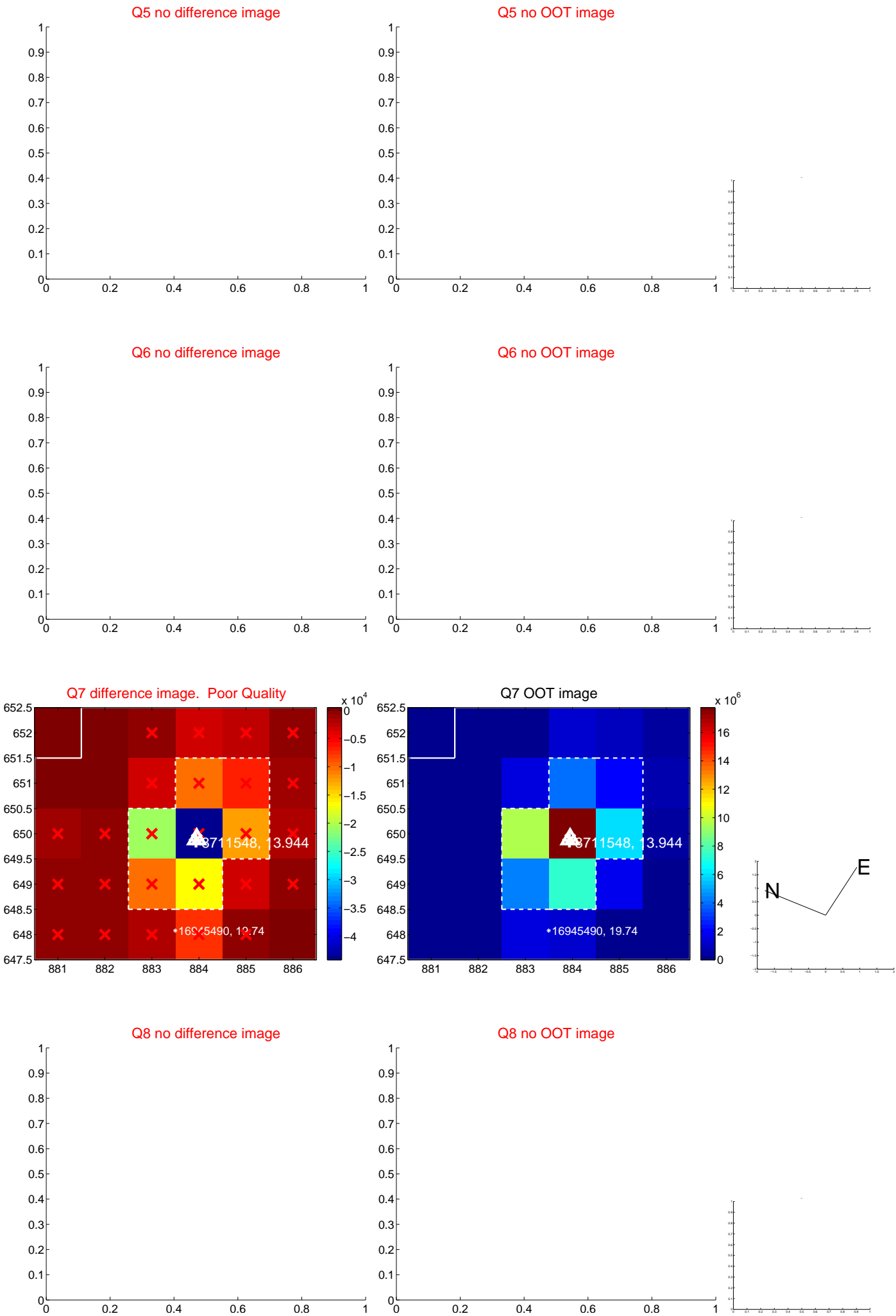


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

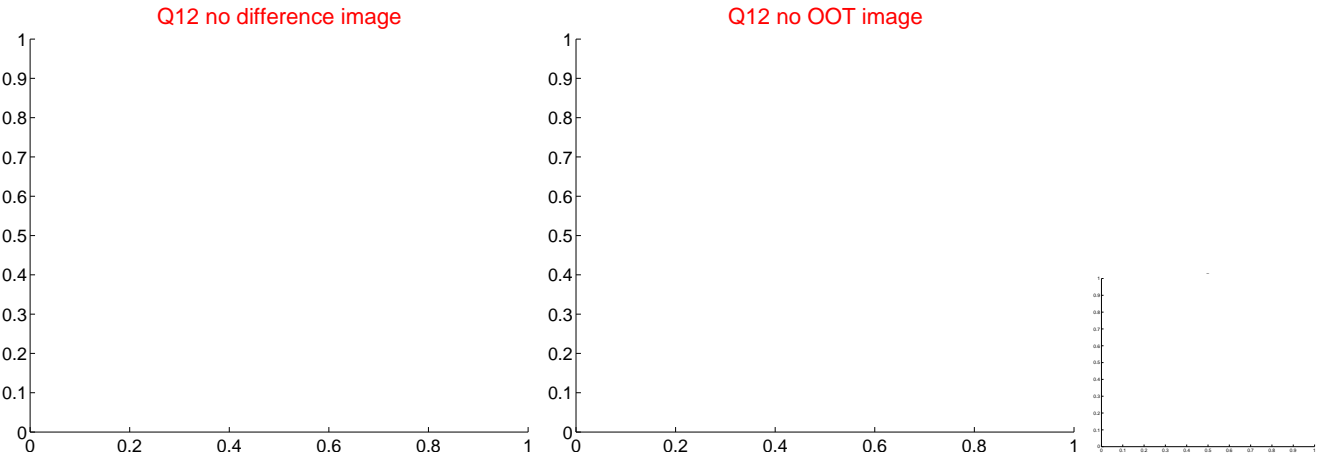
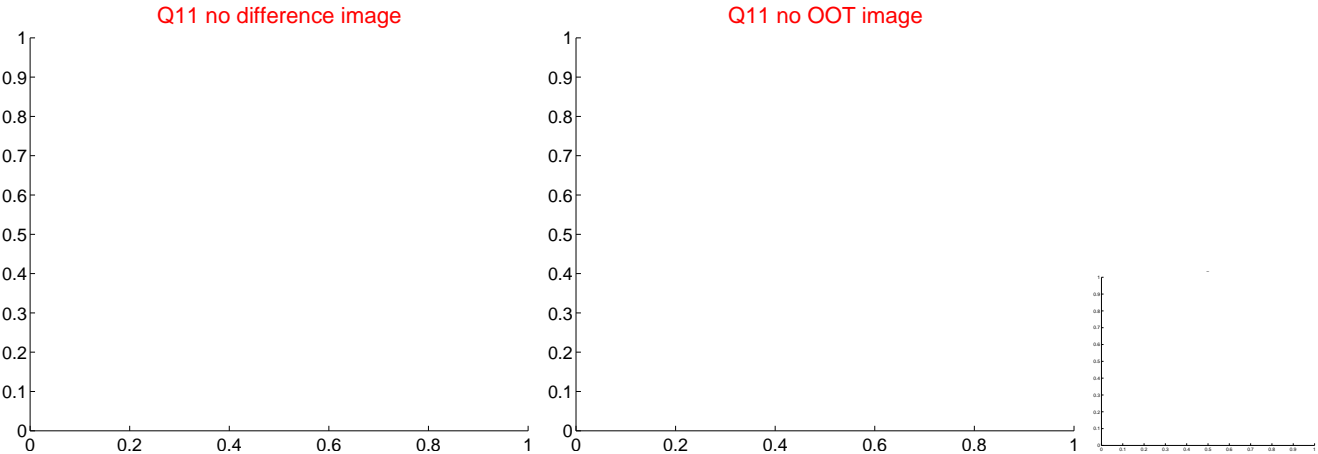
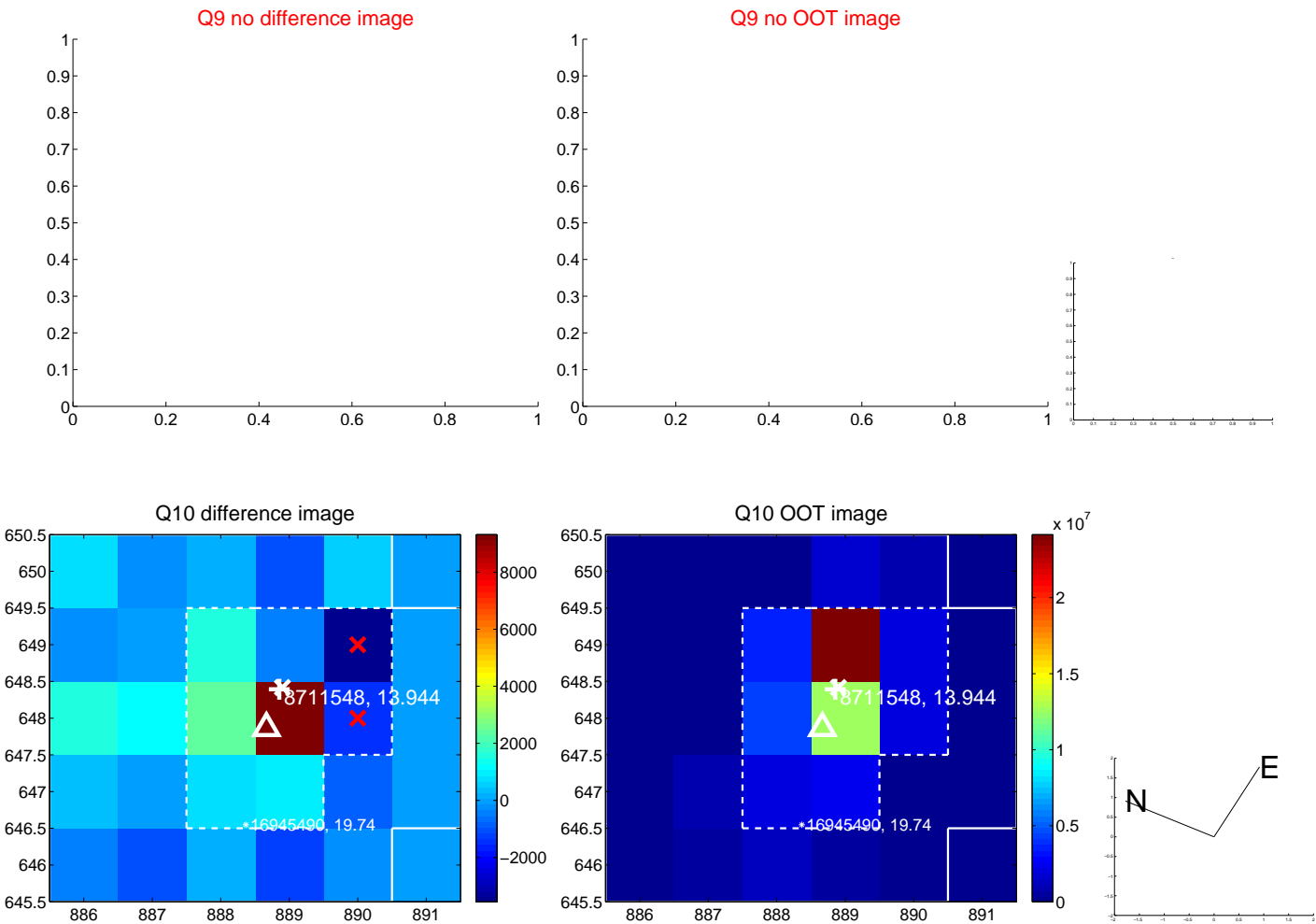
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



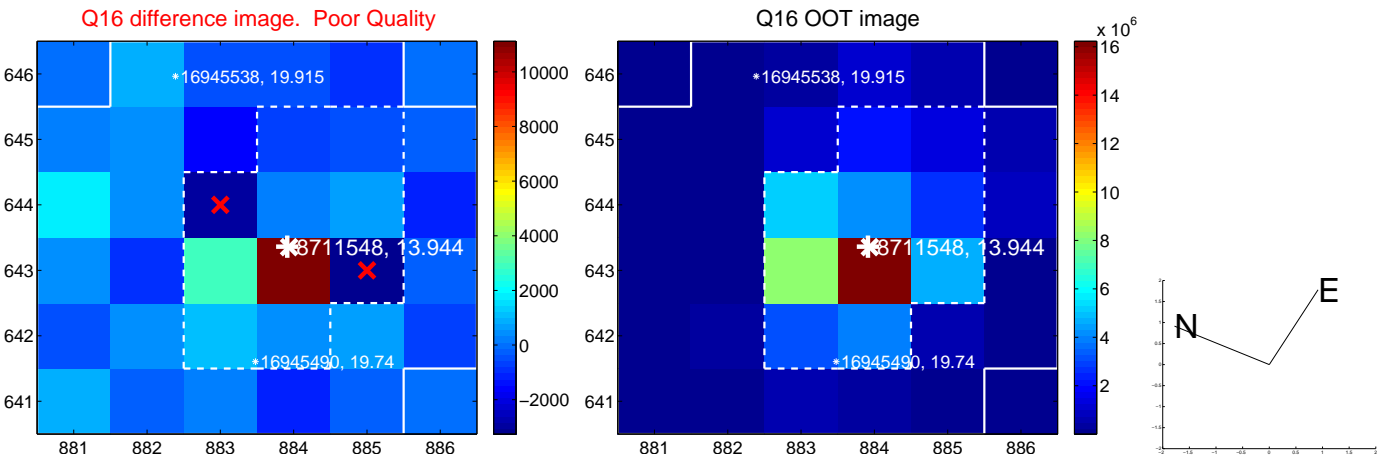
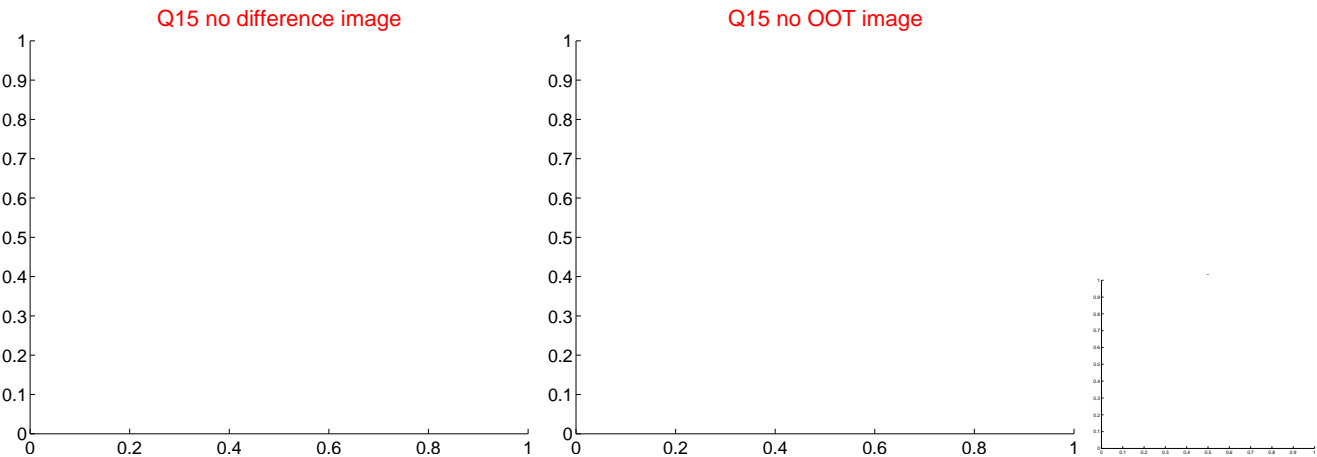
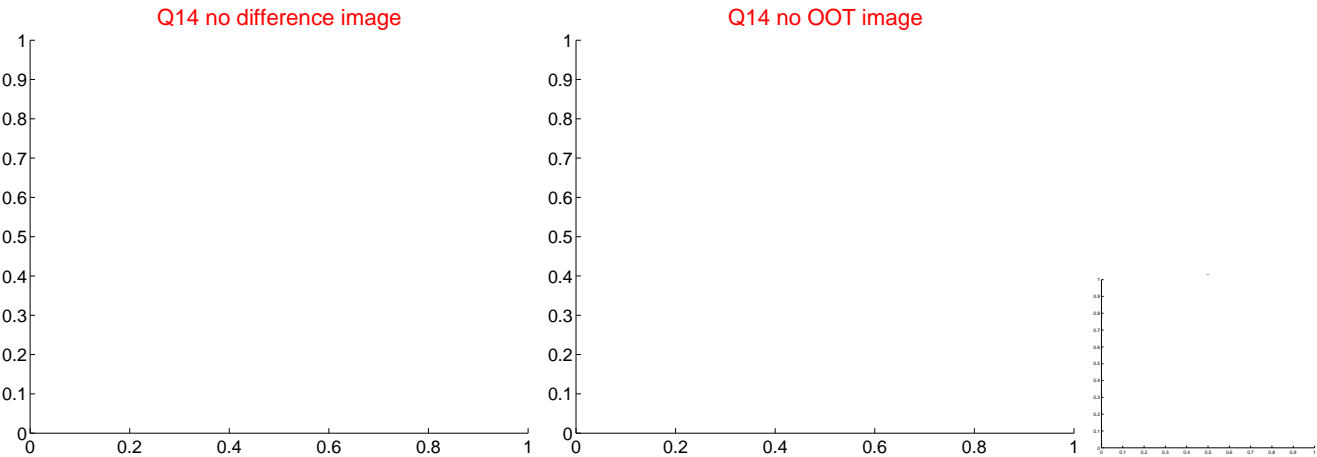
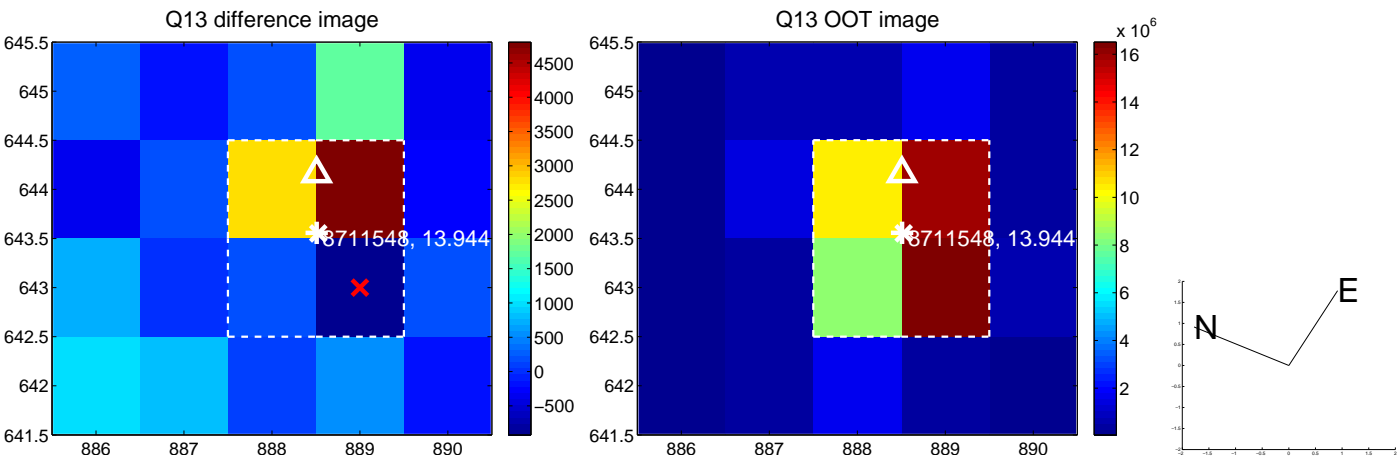
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



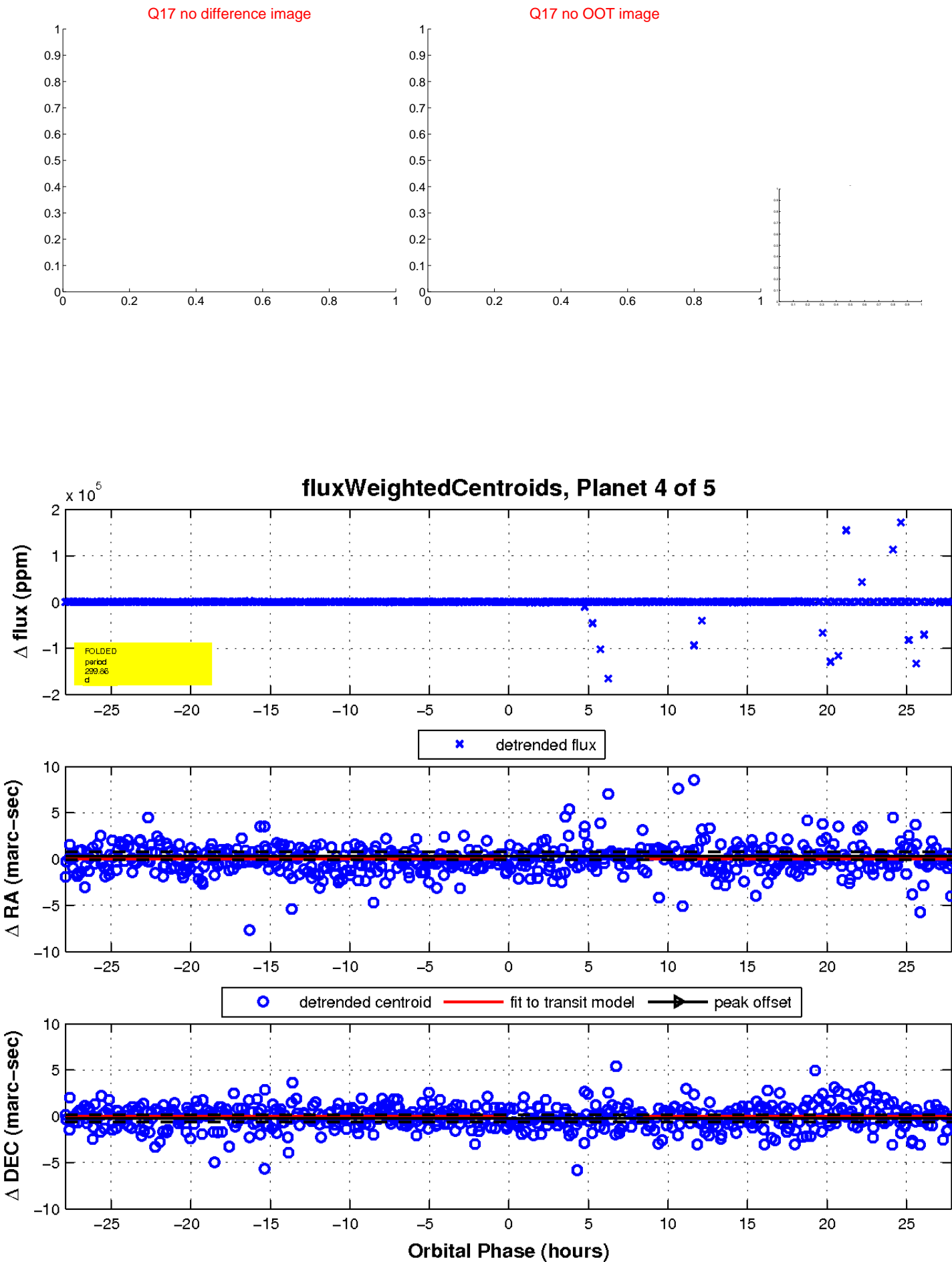
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

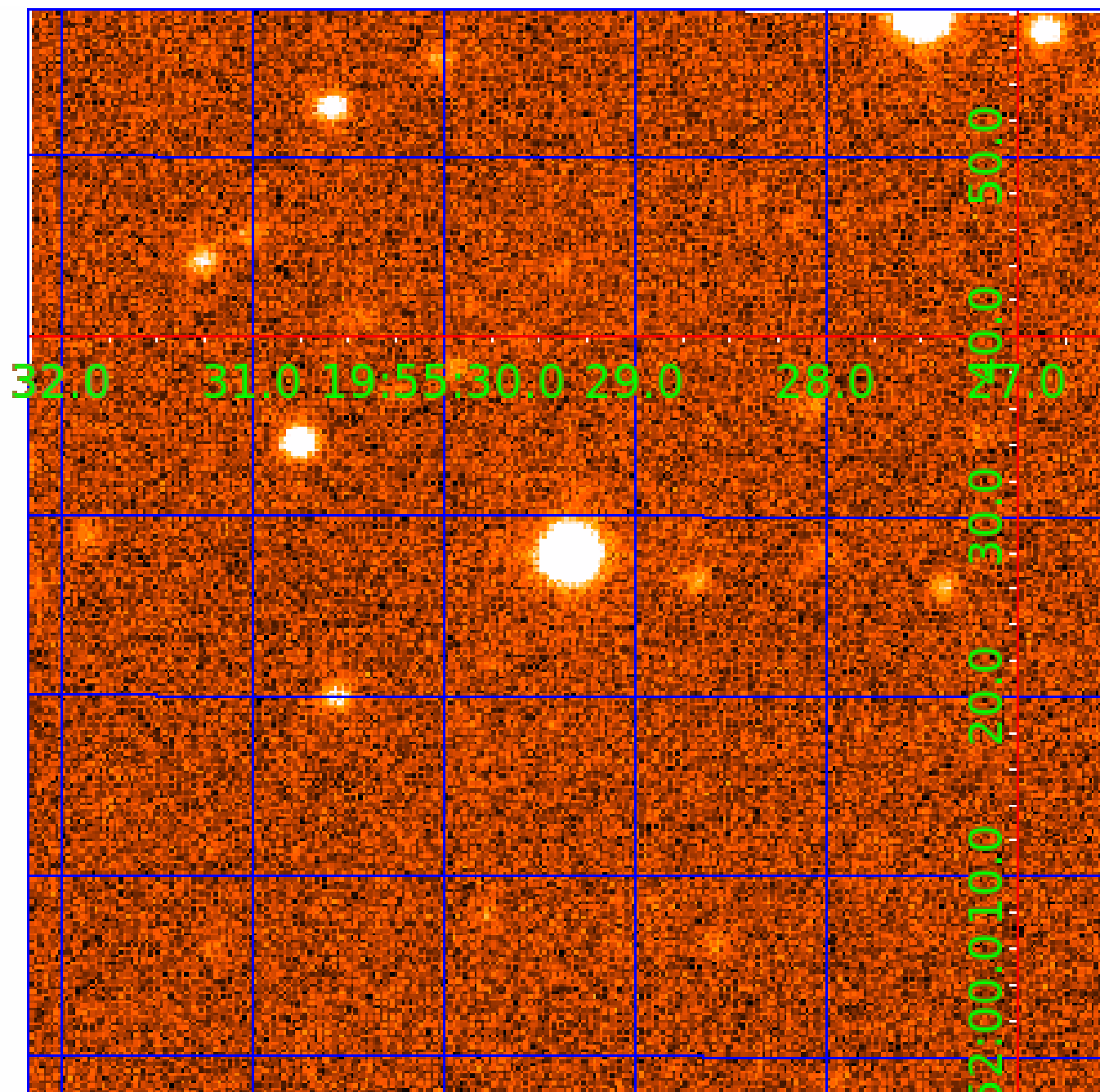


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008711548

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})
008711548-01	OBS	7079.01	18.778091	149.676429	486266.9	4.500	20726.3	-1.0	1.71	6794	93.30	239.07
008711548-02	OBS	No	18.778170	142.164193	213076.2	10.542	10789.0	4217.1	1.71	6794	99.37	239.07
008711548-03	OBS	No	87.658167	149.640773	3032.9	48.761	900.6	45.4	1.71	6794	9.49	30.64
008711548-04	OBS	No	299.855682	356.545790	26636.1	15.000	781.5	-1.0	1.71	6794	28.18	5.95
008711548-05	OBS	No	28.167194	149.390359	25936.5	15.000	729.9	-1.0	1.71	6794	27.81	139.23

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008711548-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
008711548-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008711548-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT
008711548-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_NOFITS
008711548-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—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.

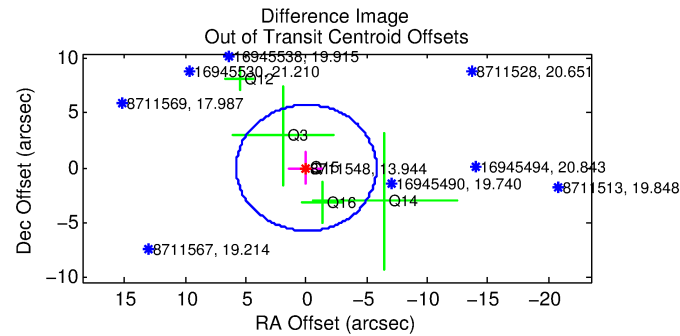
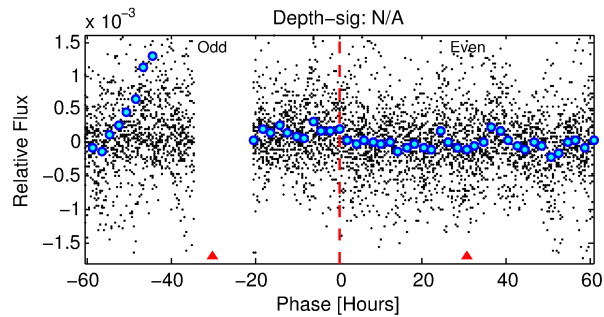
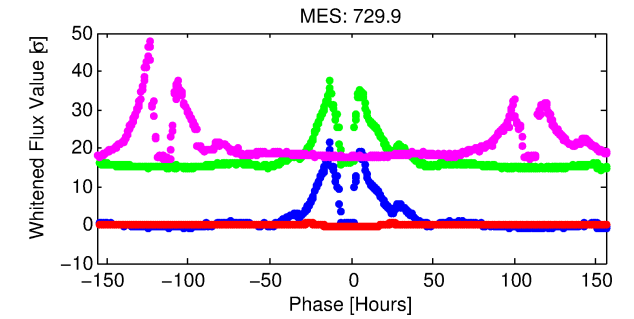
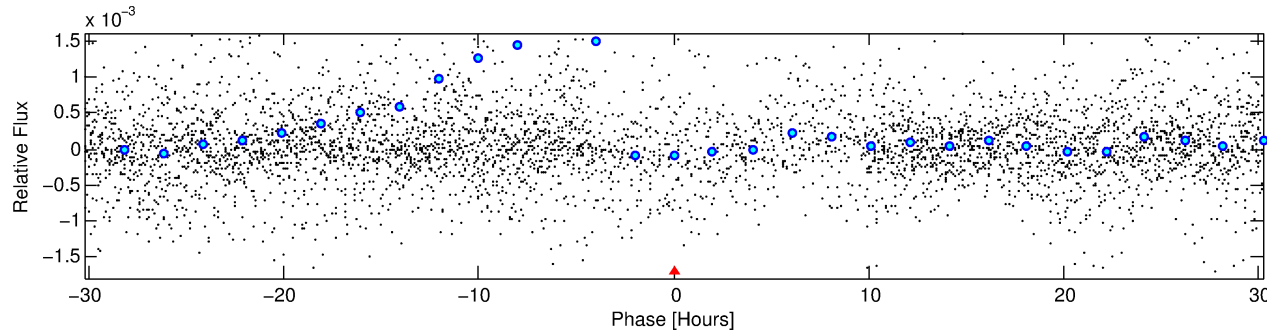
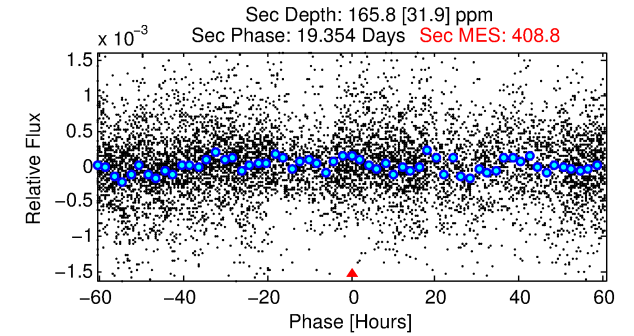
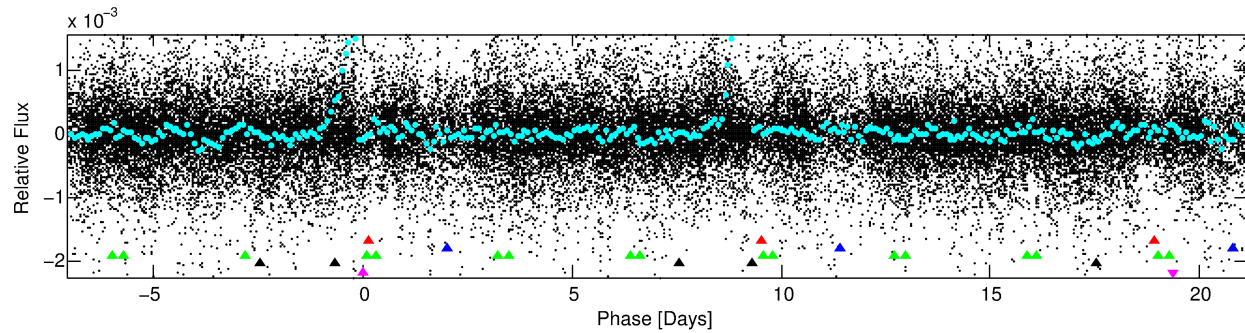
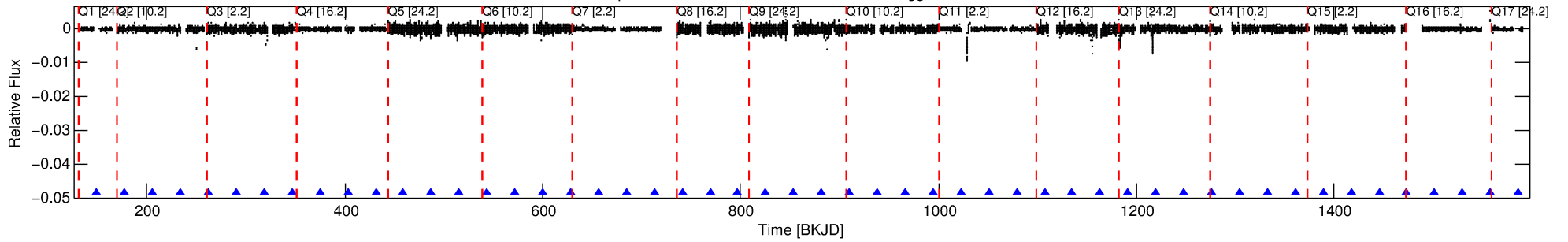
Ephemeris Match Information For 008711548-05

No Significant Match Found

DV One-Page Summary

KIC: 8711548 Candidate: 5 of 5 Period: 28.167 d
KOI: K07079 Corr: No Ephemeris Match

Kp: 13.94 R*: 1.71 Rs Teff: 6794.0 K Logg: 4.10 Fe/H: -0.200



TPS TCE Results:

Period = 28.16719 d
Epoch = 149.3904 BKJD

DV fit results are unavailable

DV Diagnostic Results:

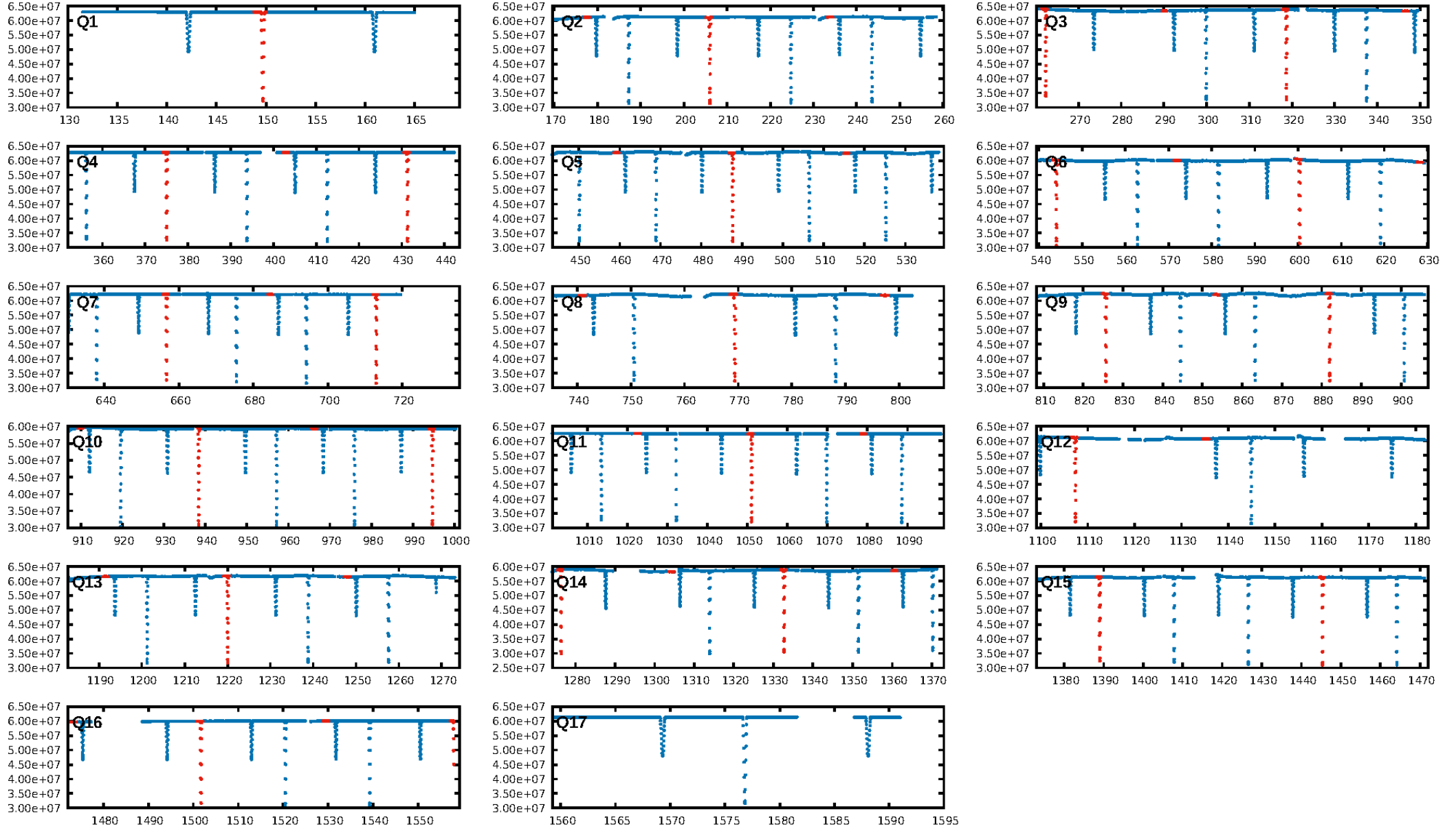
ShortPeriod-sig: 100.0% [12.29σ]
LongPeriod-sig: 100.0% [27.99σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [44/44]
GhostDiagnostic-chr: 1.305

Centroid-sig: 0.1%
Centroid-so: 2.111 arcsec [2.39σ]
OotOffset-rm: 0.009 arcsec [0.00σ]
KicOffset-rm: 3.161 arcsec [2.31σ]
OotOffset-st: 1/2/2/1 [6]
KicOffset-st: 1/2/2/1 [6]
DiffImageQuality-fgm: 0.33 [2/6]
DiffImageOverlap-fno: 0.88 [14/16]

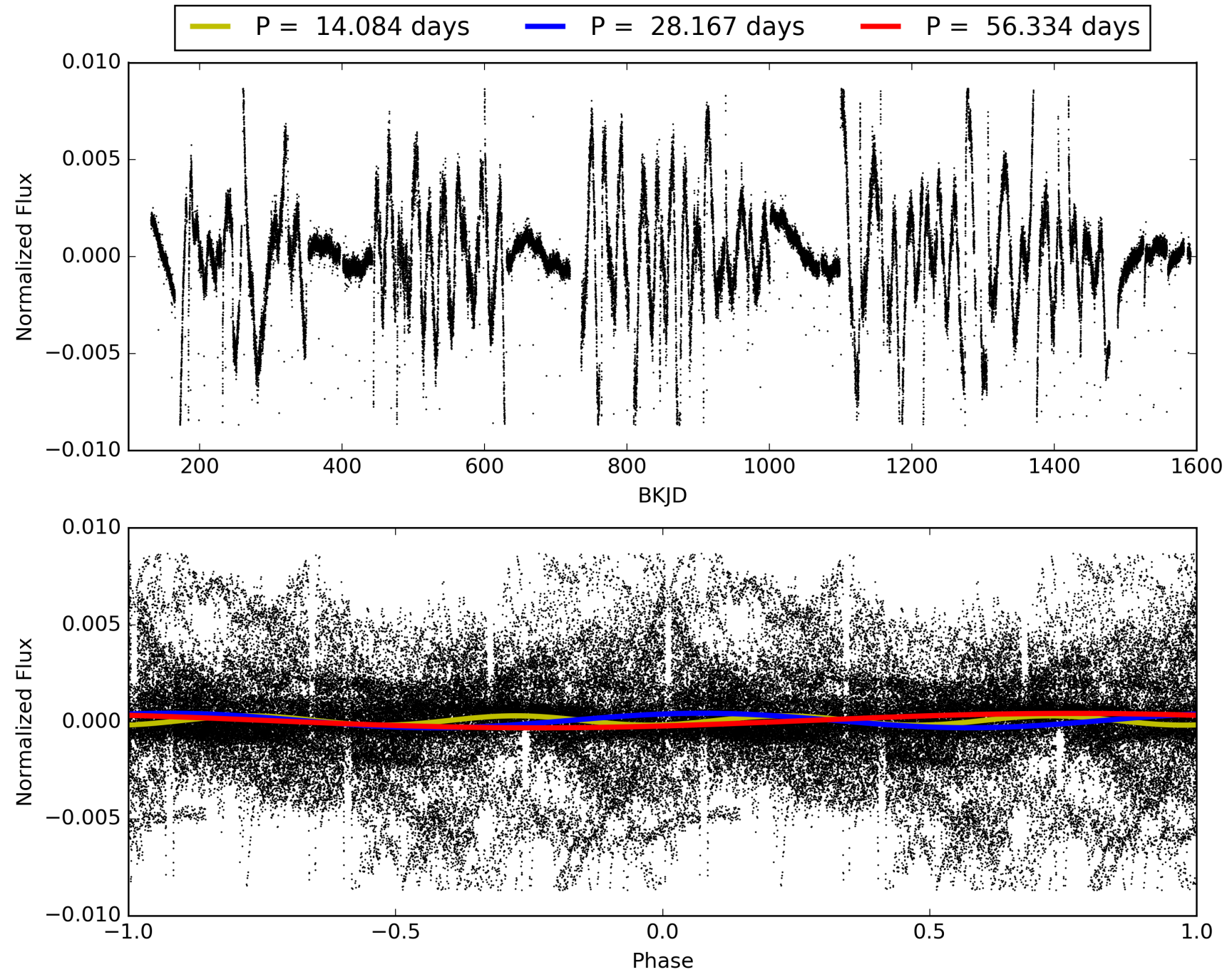
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 02-Feb-2016 00:03:18 Z

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

TCE 008711548-05, PDC Light Curves

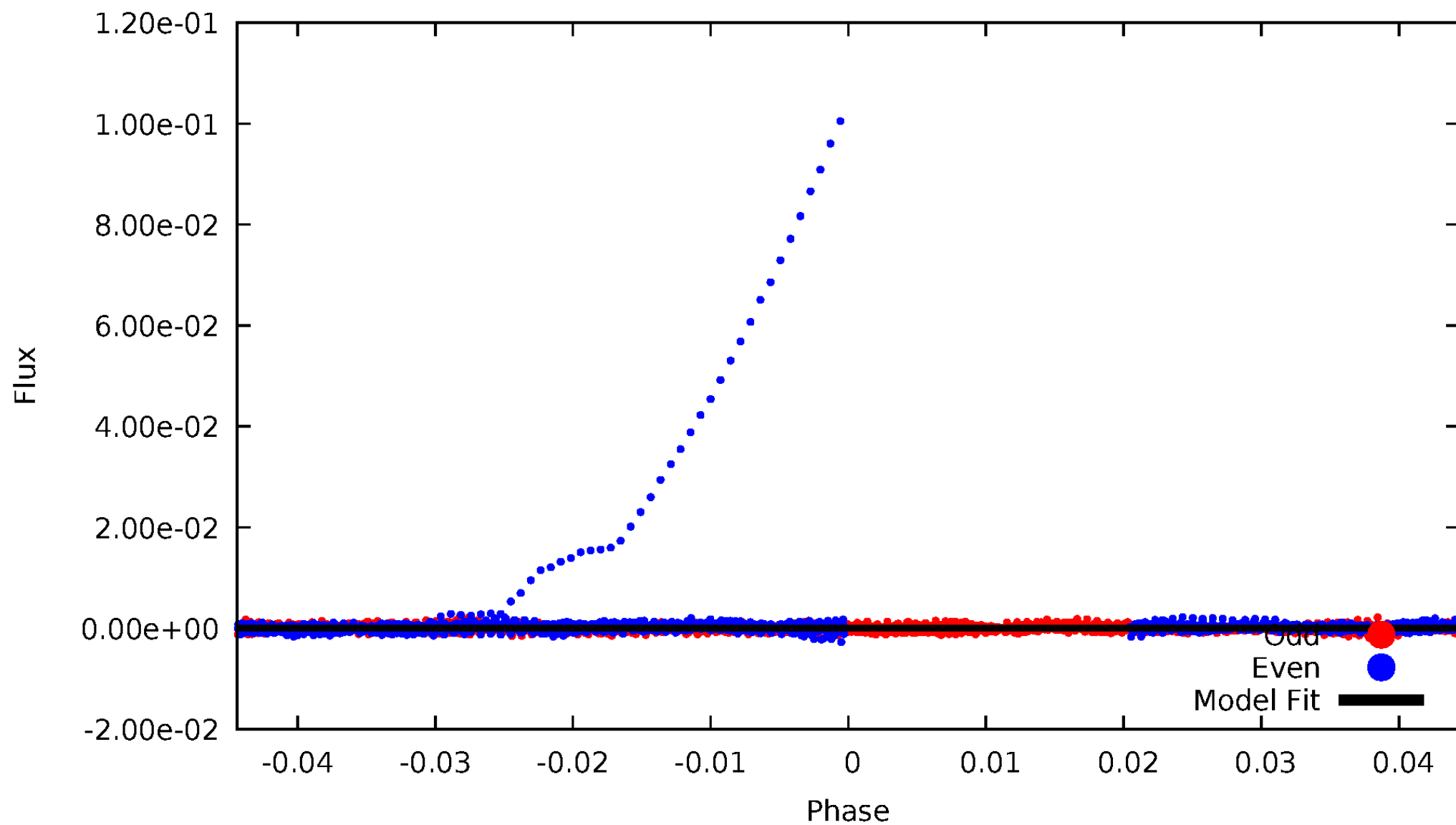


TCE 008711548-05



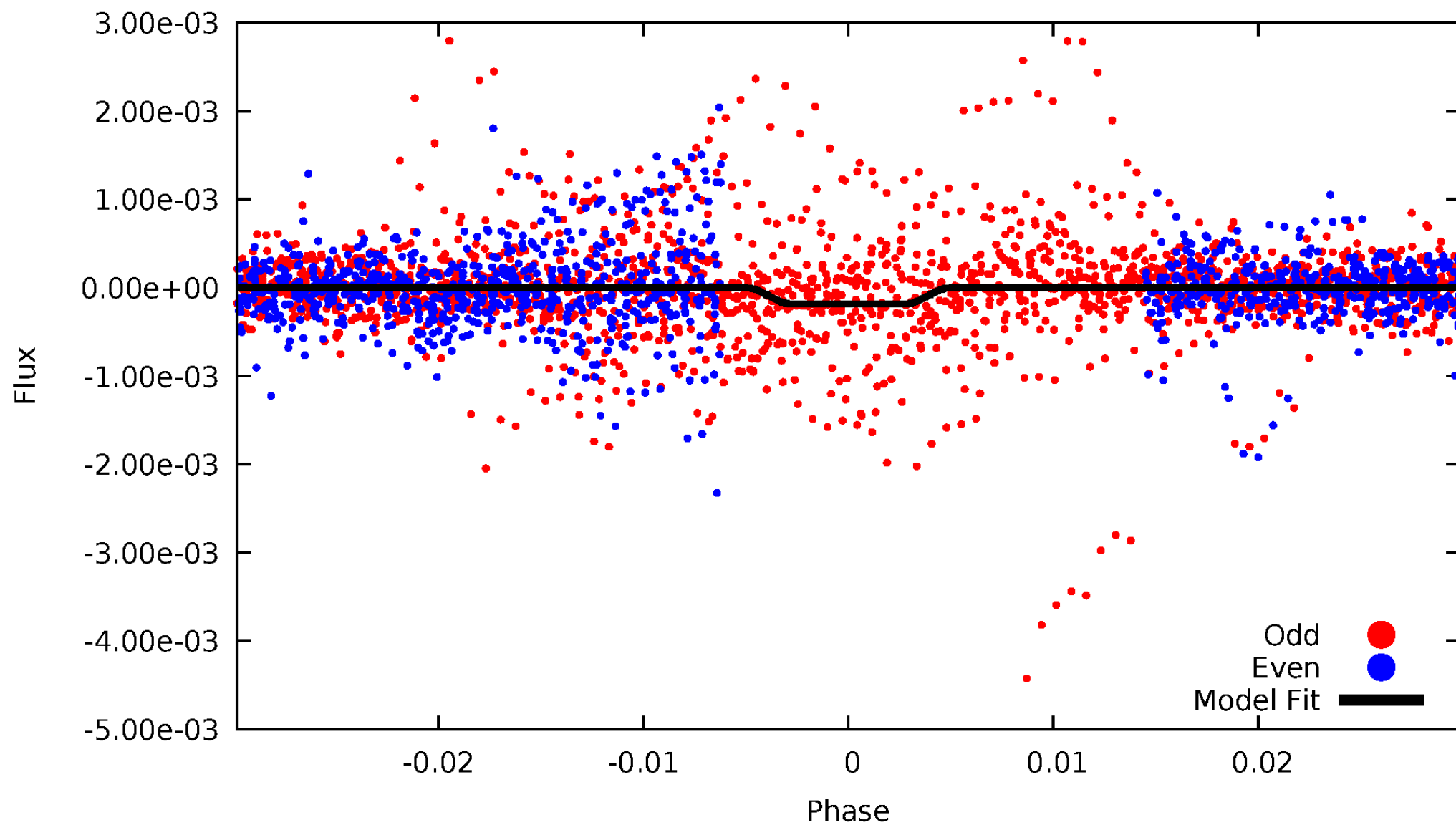
DV Odd/Even

TCE 008711548-05

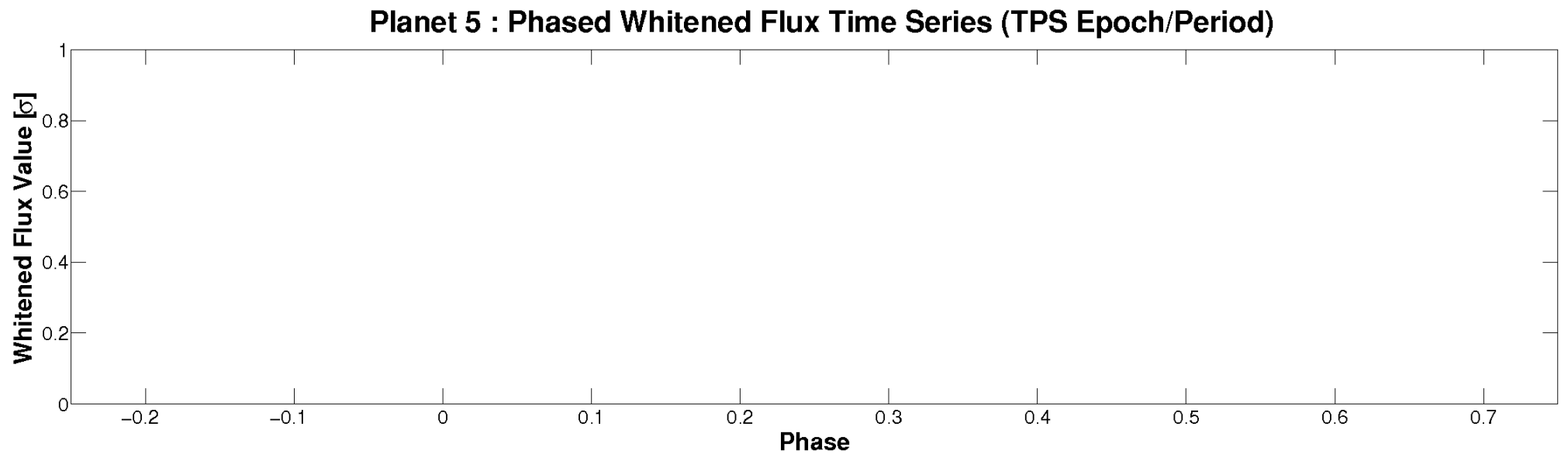
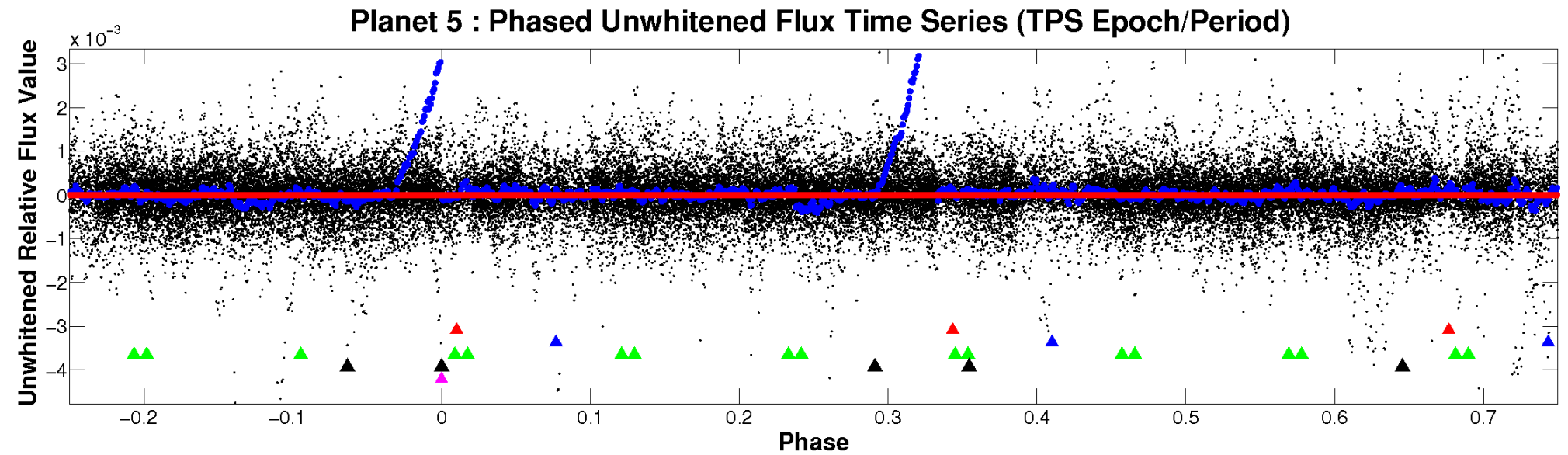


ALT Odd/Even

TCE 008711548-05

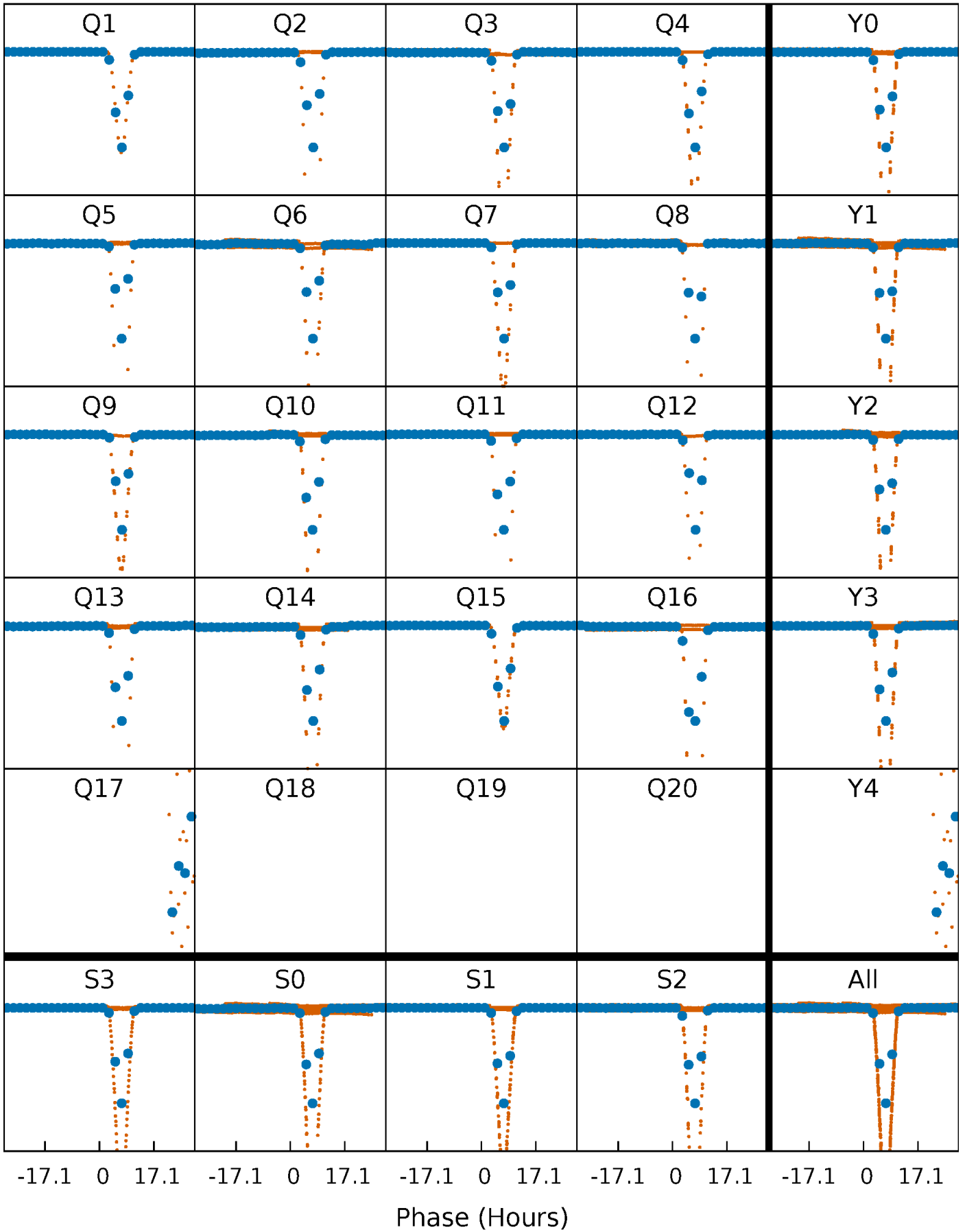


Non-Whitened Vs. Whitened Light Curve



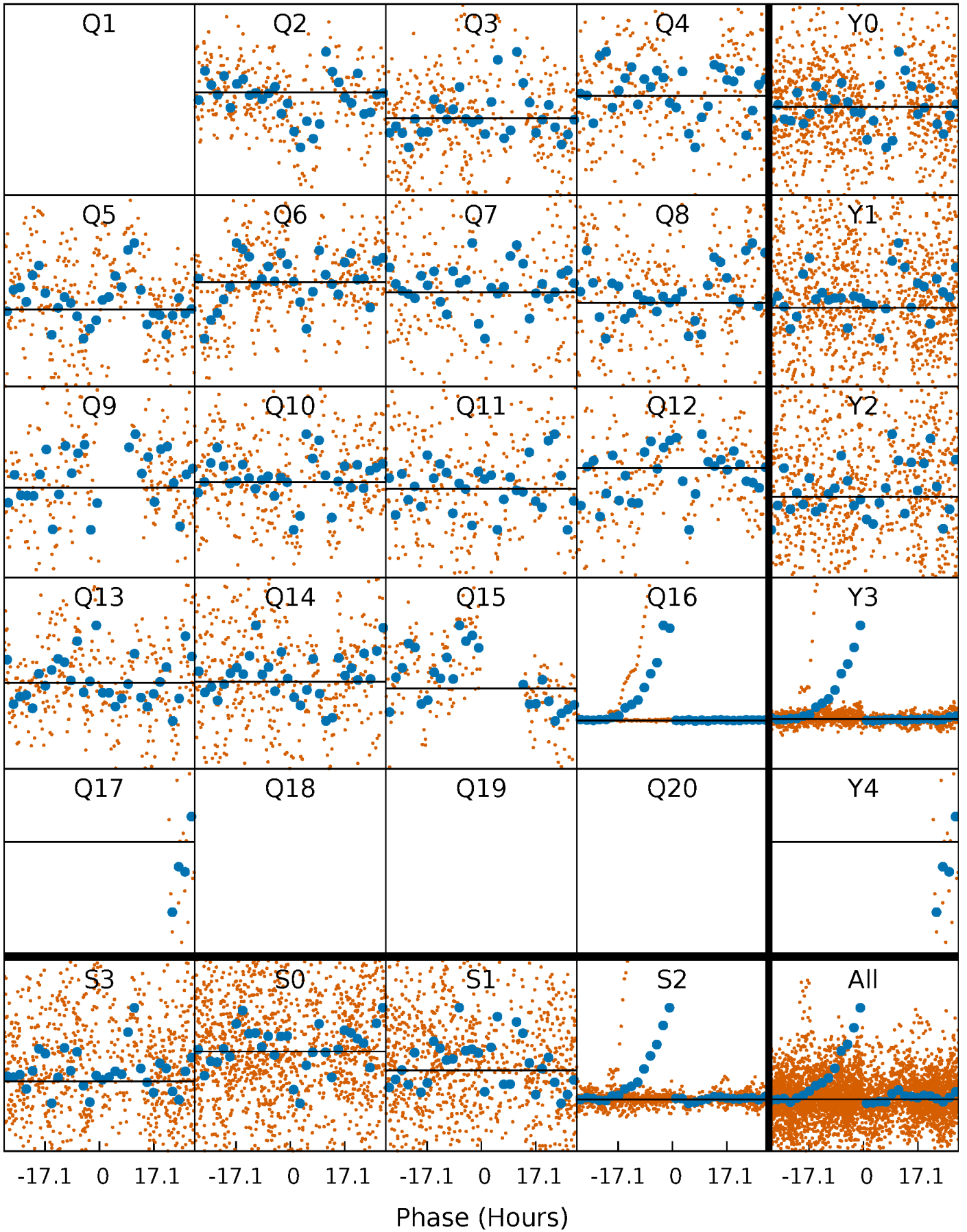
PDC Quarter-Phased Transit Curves

TCE 008711548-05 P= 28.167194 Days $T_0=149.390359$ (BKJD)



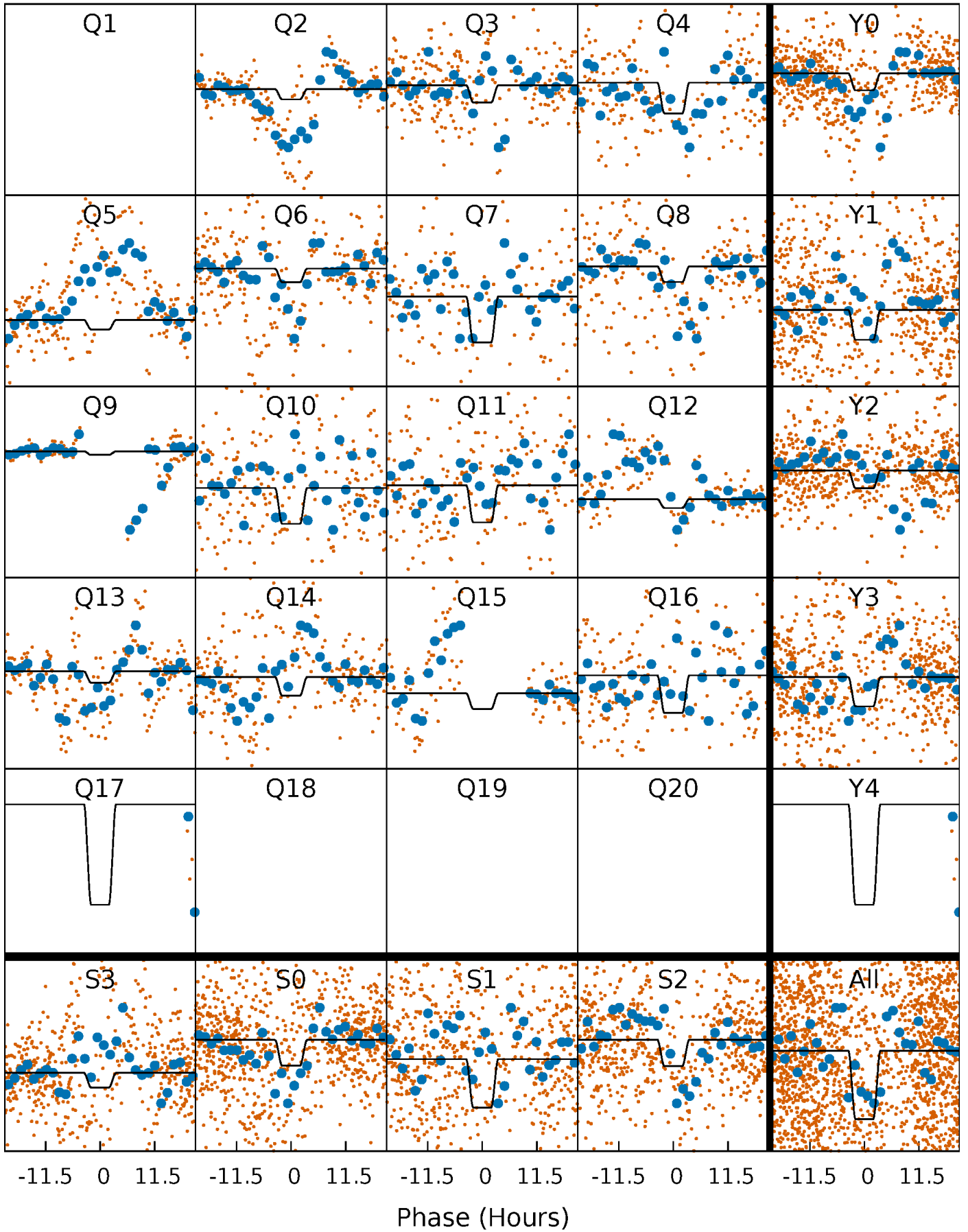
DV Quarter-Phased Transit Curves

TCE 008711548-05 P= 28.167194 Days $T_0=149.390359$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

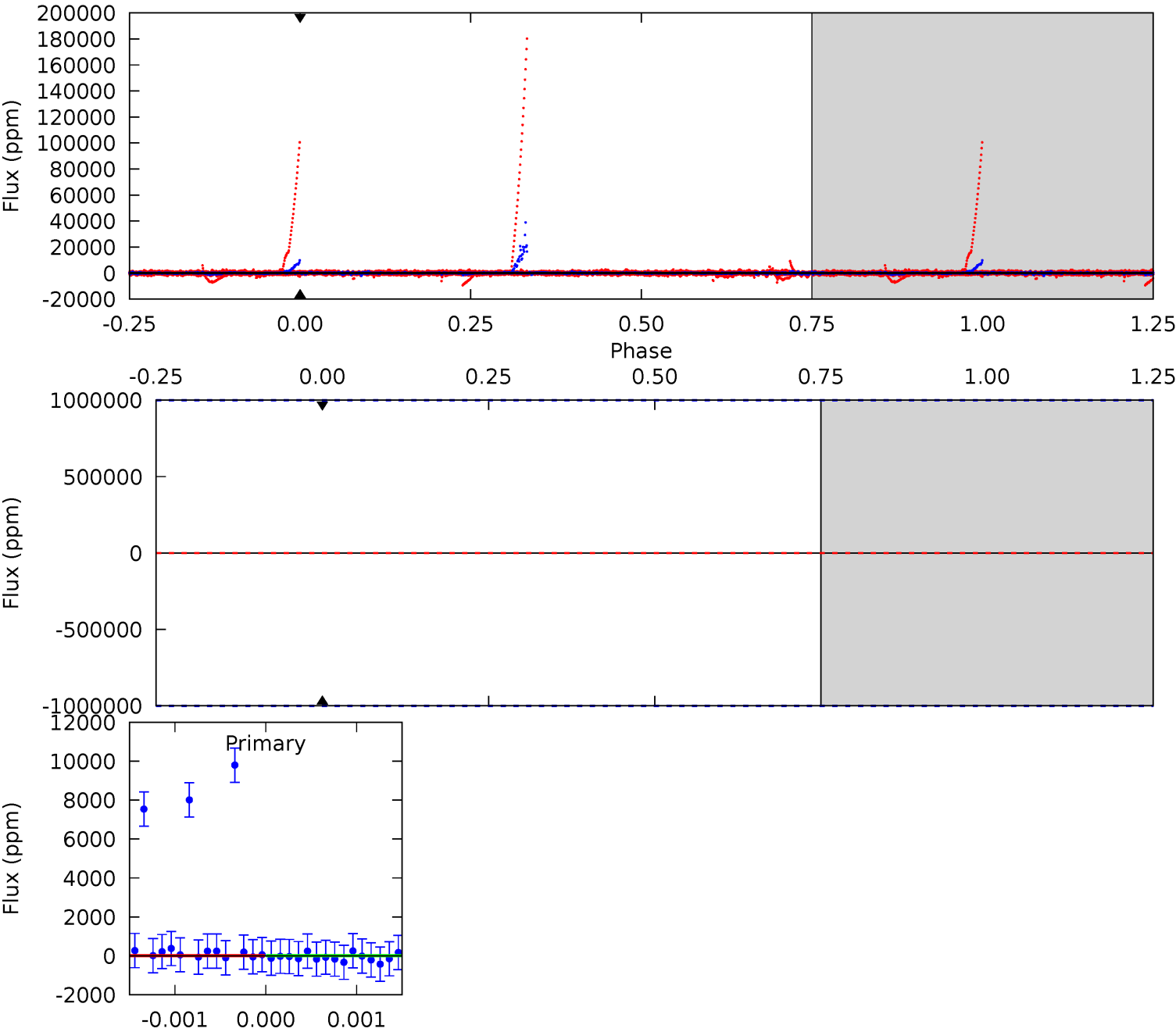
TCE 008711548-05 P= 28.167194 Days $T_0=149.556729$ (BKJD)



DV Model-Shift Uniqueness Test

008711548-05, P = 28.167194 Days, E = 121.223165 Days

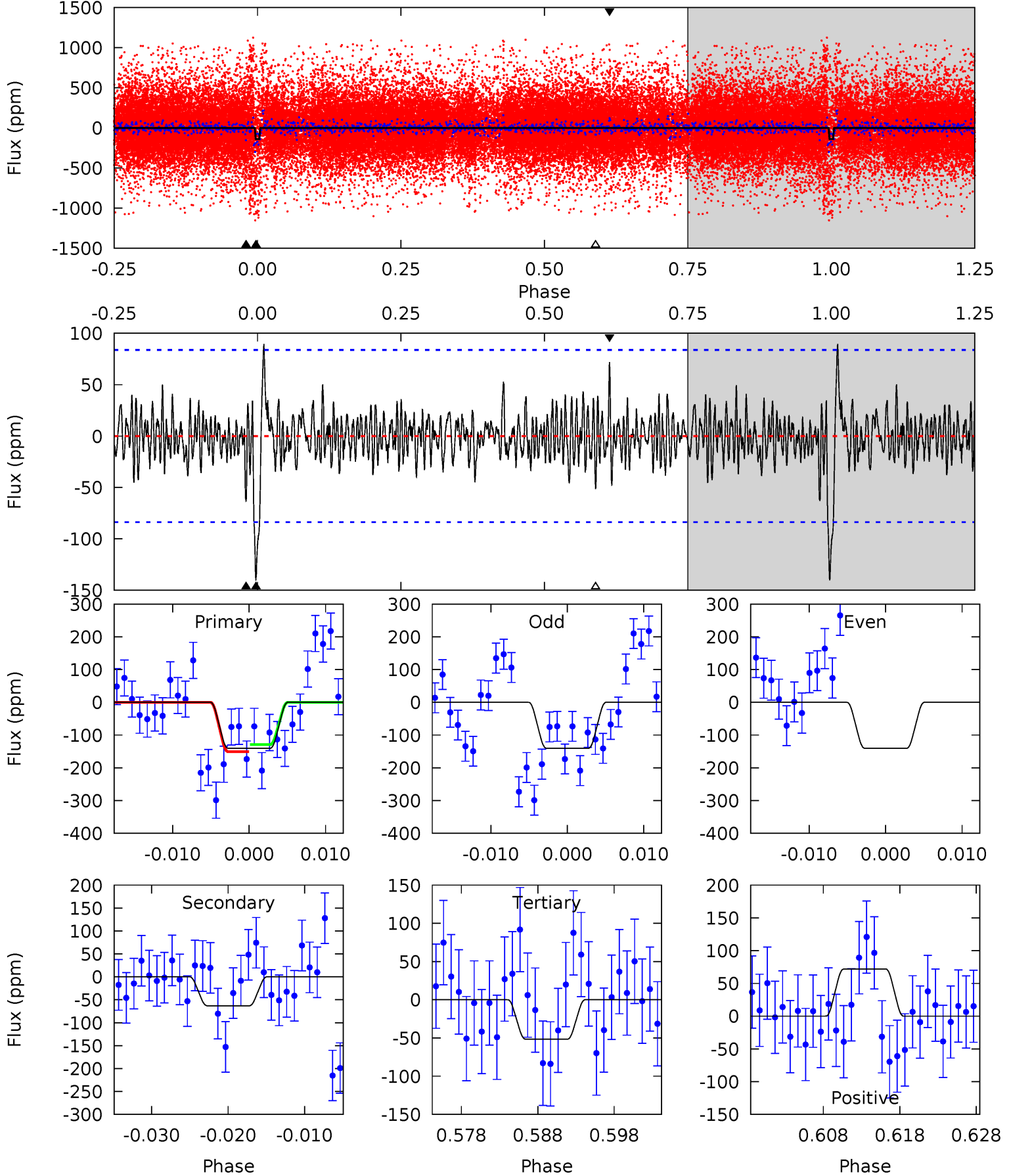
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008711548-05, P = 28.167194 Days, E = 121.389535 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.42	3.79	3.09	4.32	5.03	2.58	1.10	5.33	4.10	0.69	-0.53	0	10.4	0.39	0.66



Stellar Parameters For KIC 008711548

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6794^{+189}_{-284}	$4.102^{+0.214}_{-0.175}$	$-0.200^{+0.250}_{-0.300}$	$1.710^{+0.503}_{-0.453}$	$1.356^{+0.194}_{-0.259}$	$0.382^{+0.485}_{-0.186}$
	+3%/-4%	+5%/-4%	+125%/-150%	+29%/-26%	+14%/-19%	+127%/-49%
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 008711548-05 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$29.48^{+17.79}_{-15.80}$	1212^{+99}_{-96}	3959^{+8486}_{-14778}	51^{+4147}_{-2989}
Alt.	-63 ± 17	$13.97^{+13.51}_{-9.90}$	1209^{+97}_{-84}	2863^{+1414}_{-505}	$6.881^{+75.866}_{-5.150}$

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 $A_{obs} \gg 1.0$

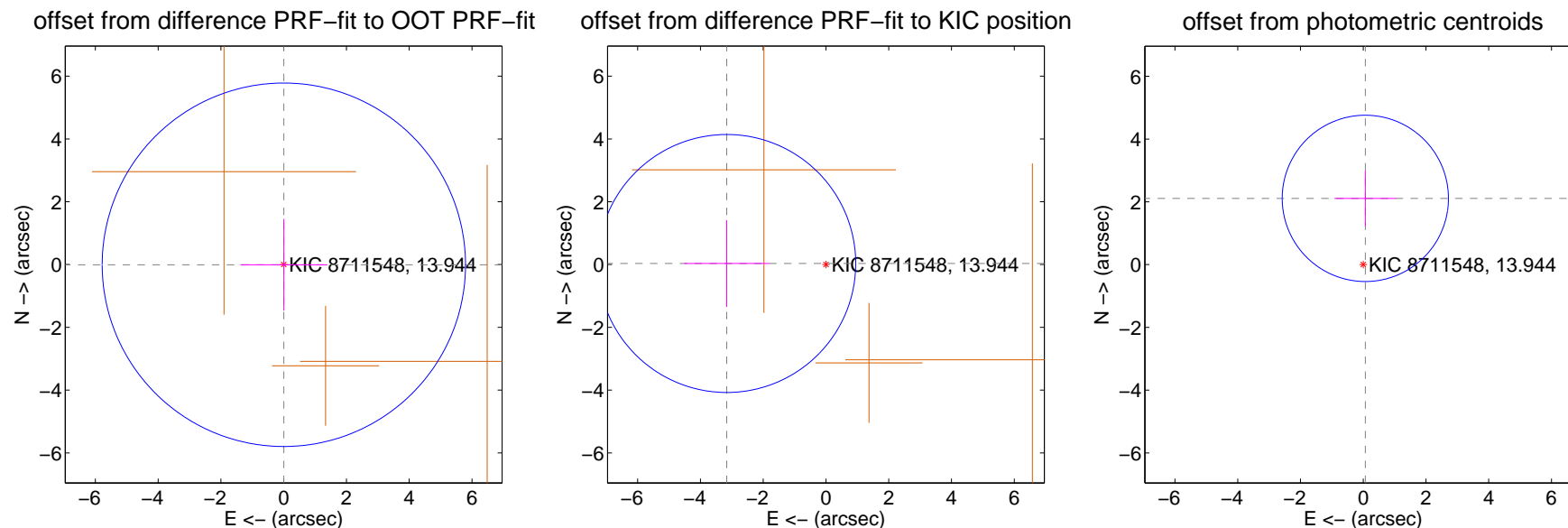
DV Centroid Data

Supplemental centroid analysis for 008711548-05. Kepler magnitude: 13.94. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

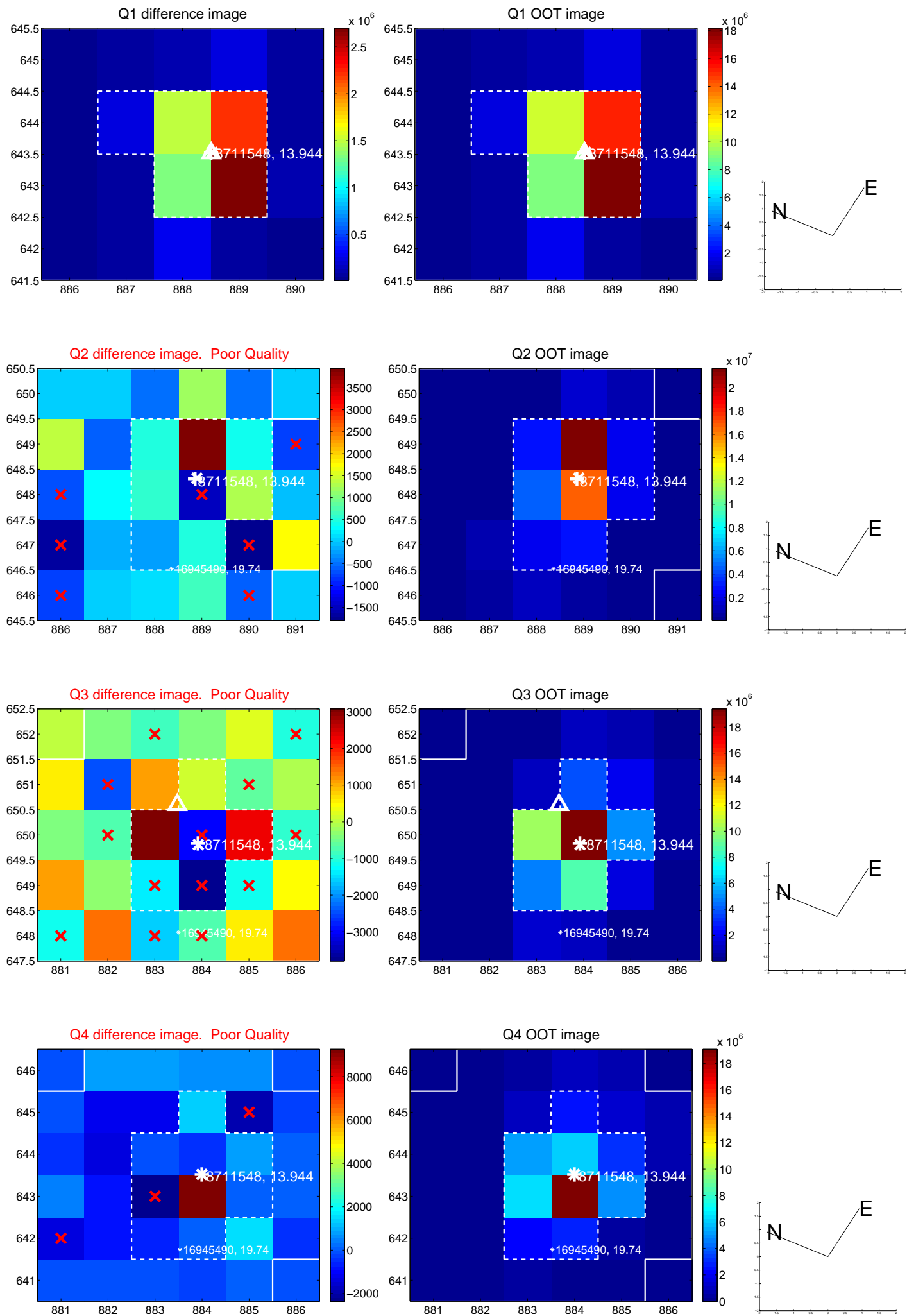
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.009 ± 1.929	0.00	-0.006 ± 1.385	-0.007 ± 1.460
PRF-fit source offset from KIC position	3.161 ± 1.369	2.31	3.161 ± 1.357	0.034 ± 1.381
photometric centroid source offset	2.11 ± 0.88	2.39	-0.07 ± 0.98	2.11 ± 0.88

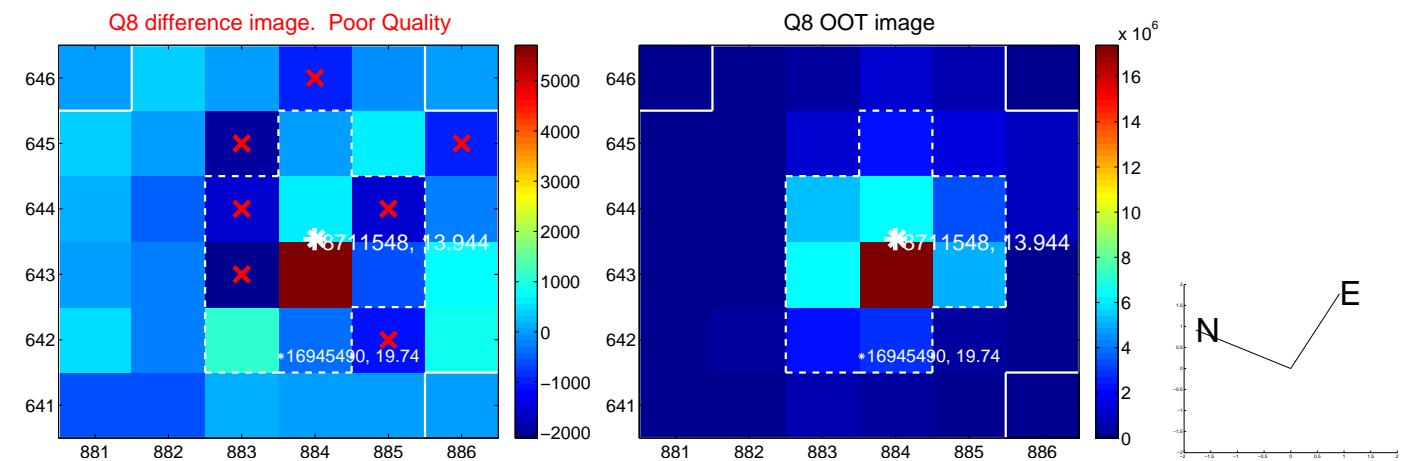
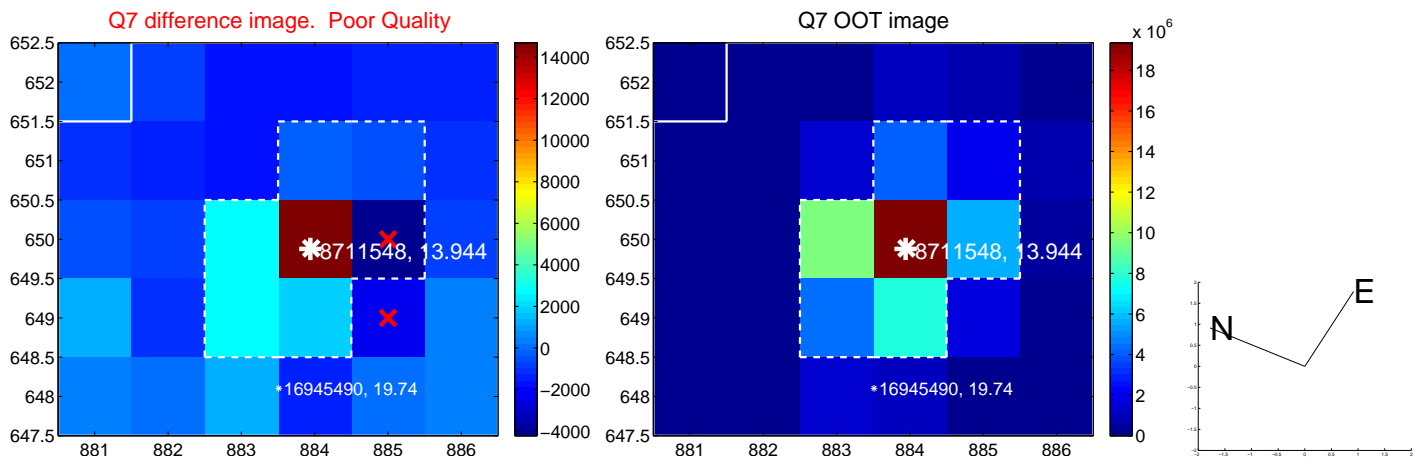
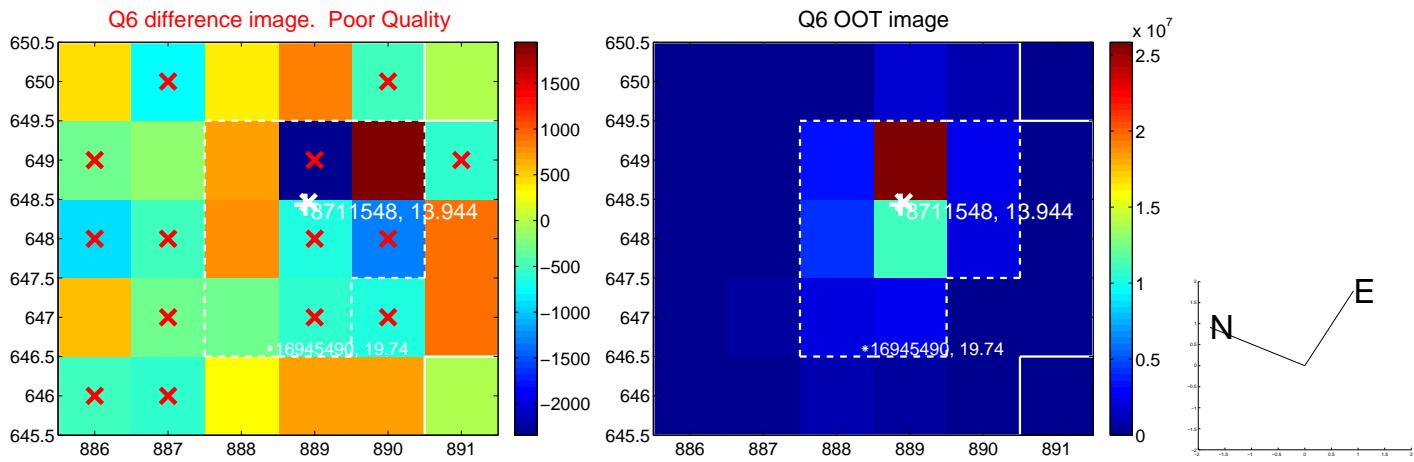
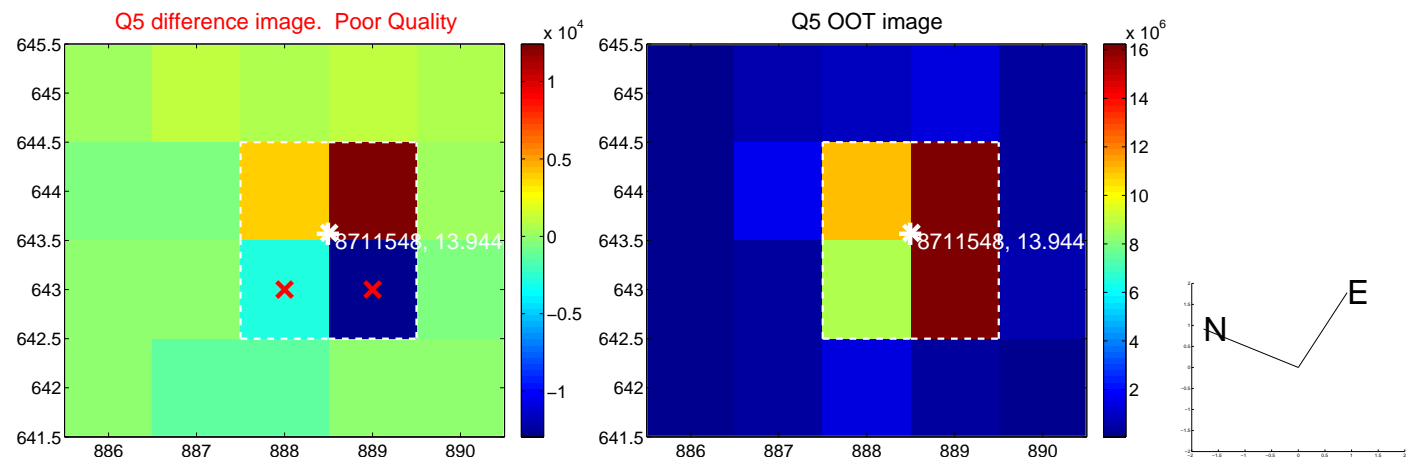


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

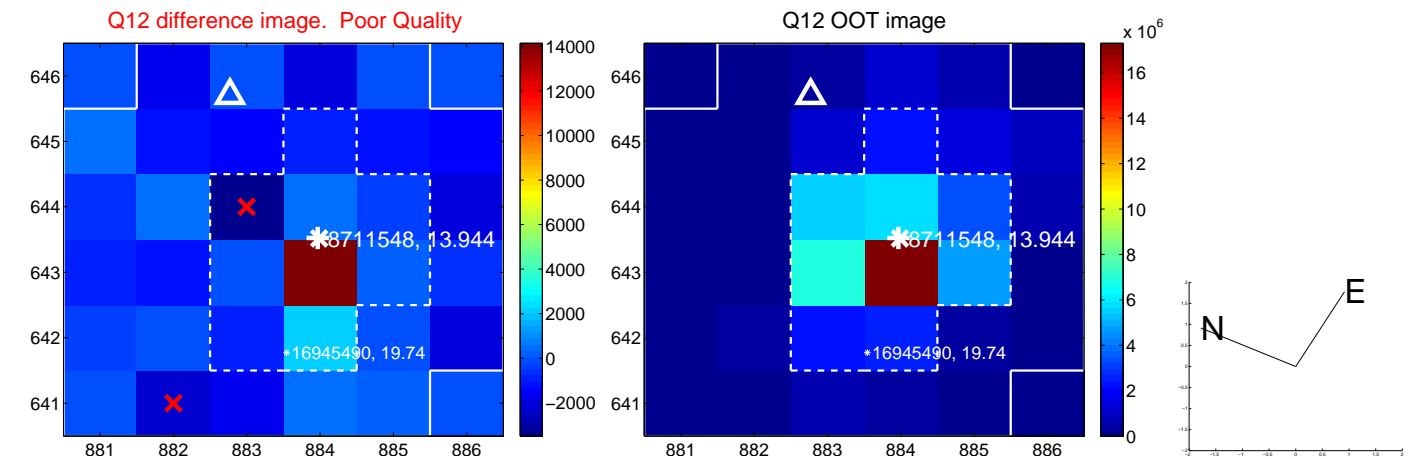
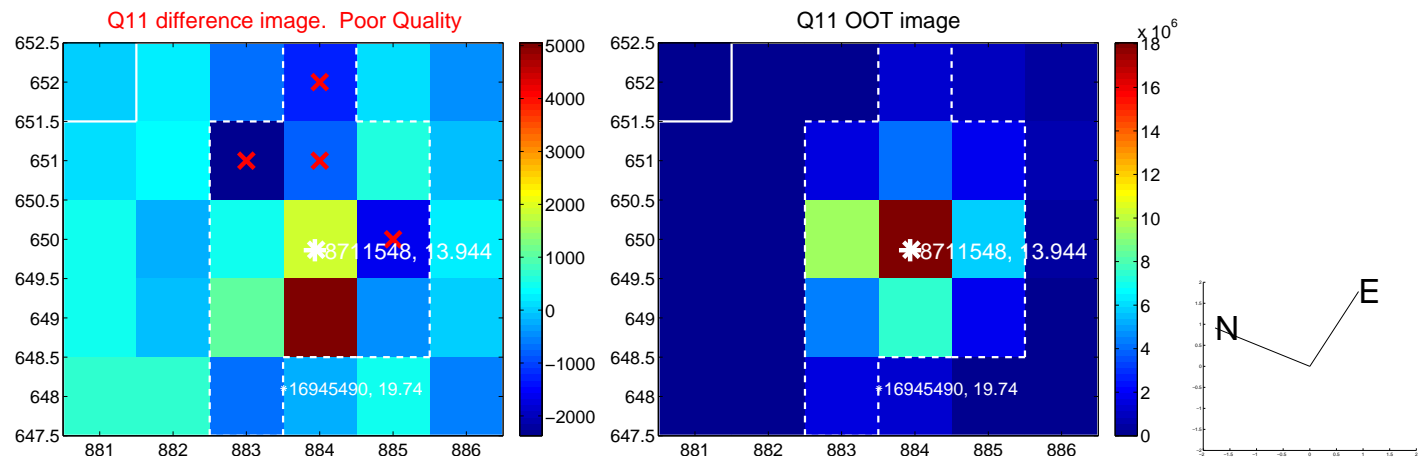
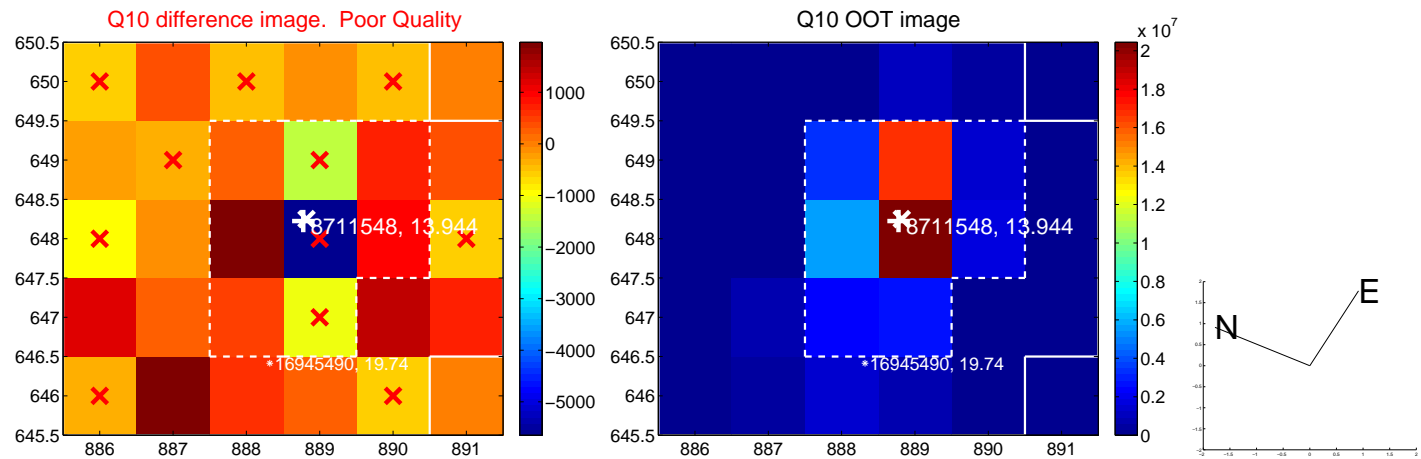
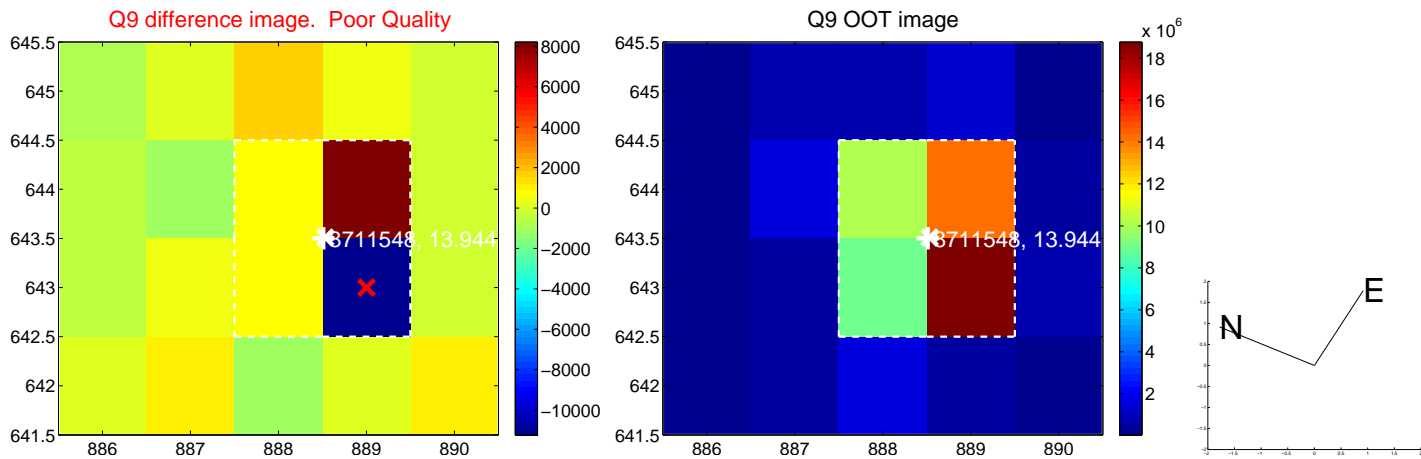
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



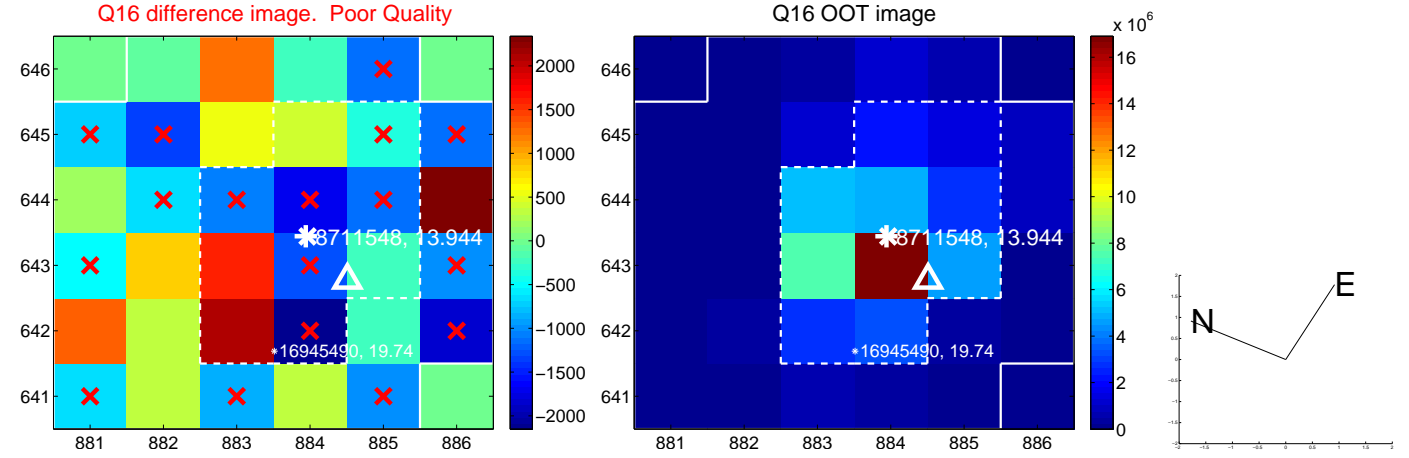
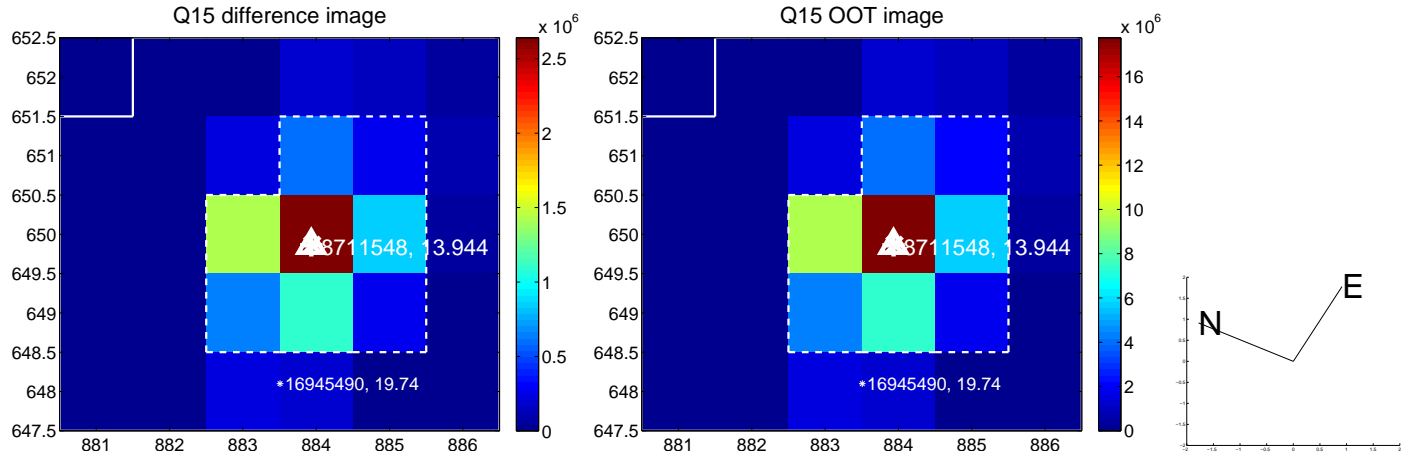
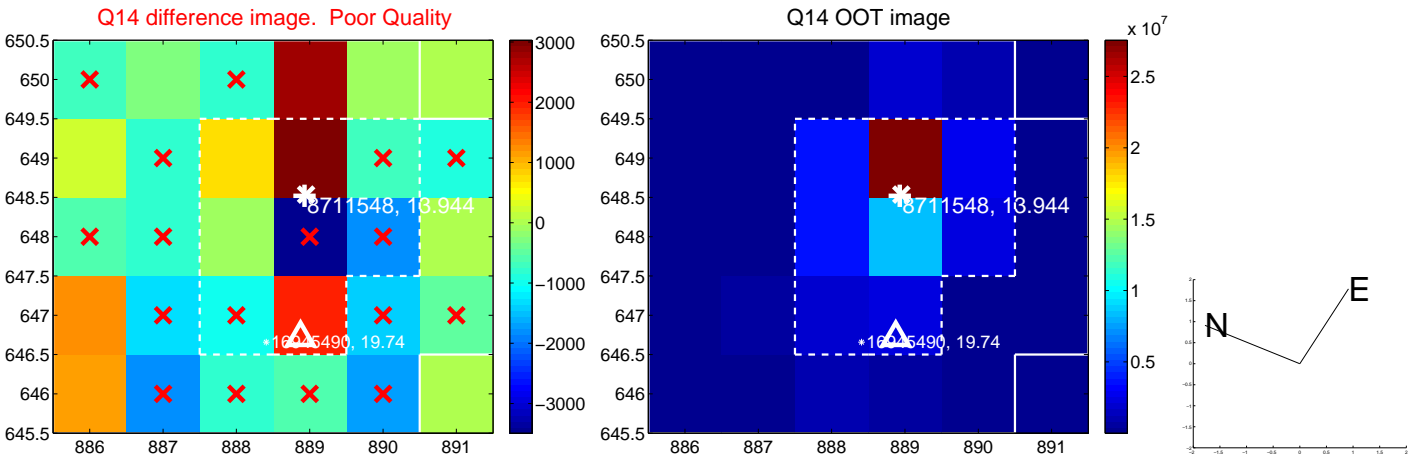
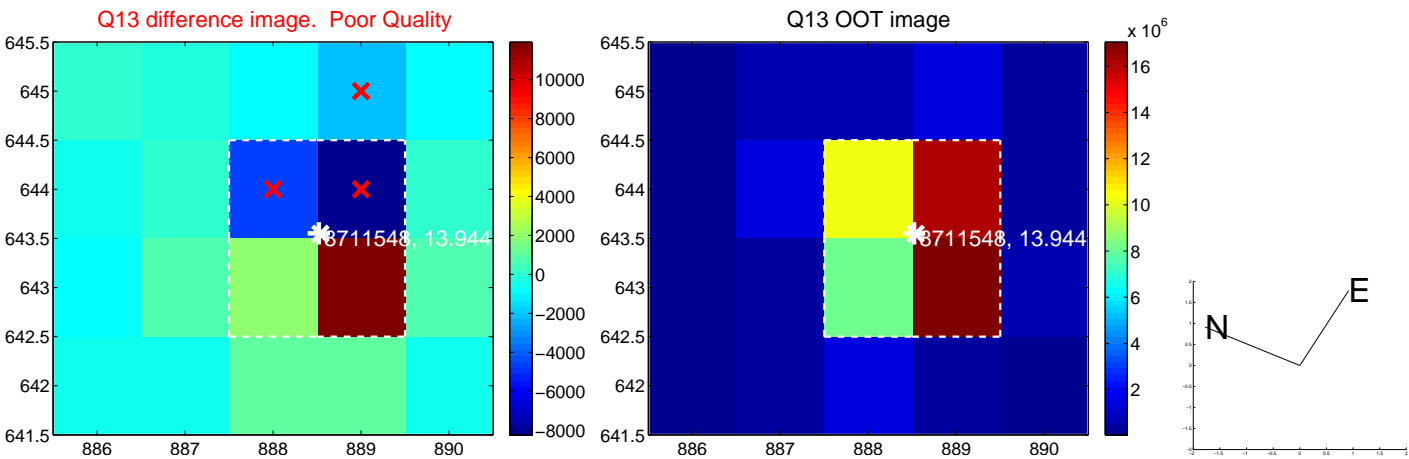
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



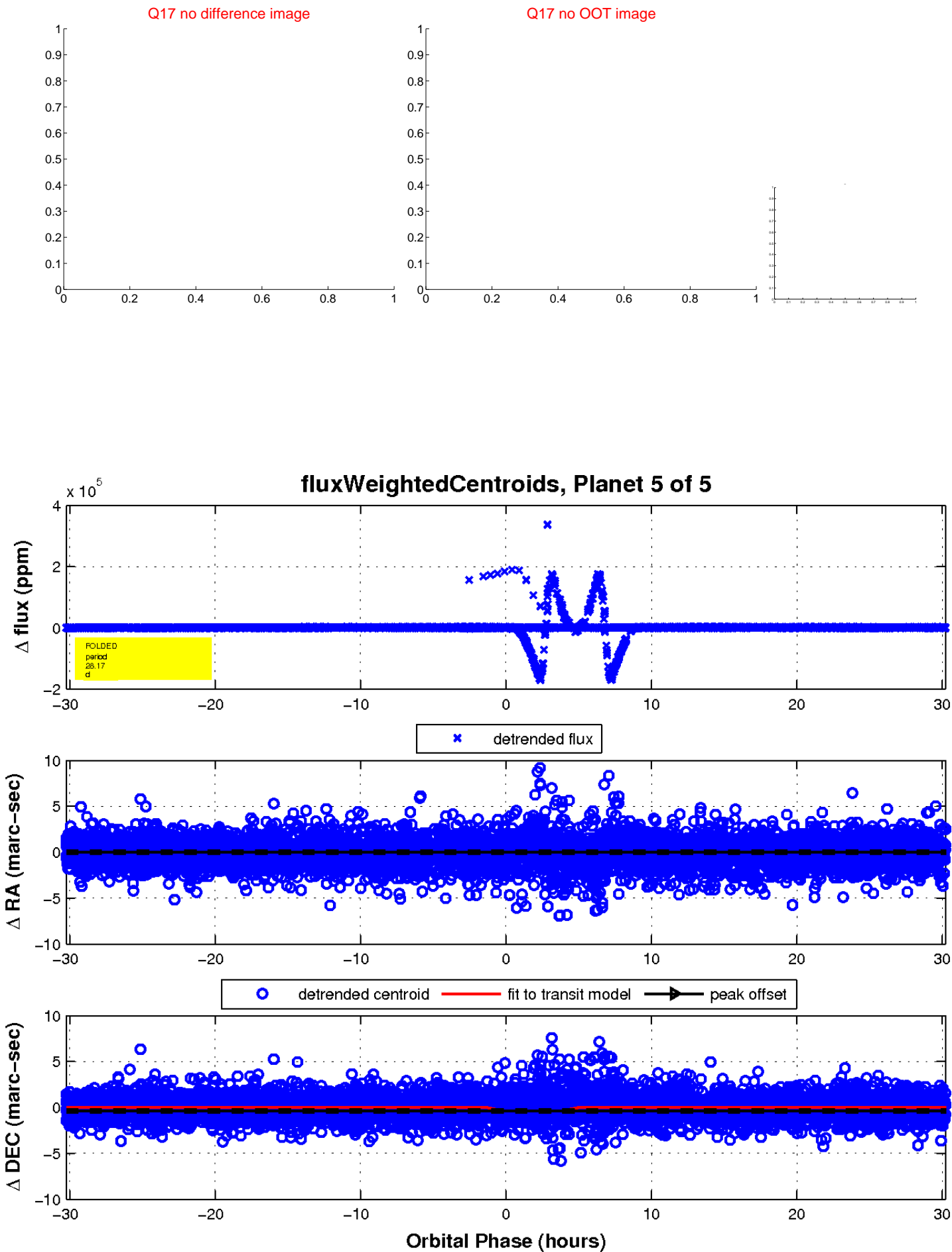
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

