

KIC 008183389

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})
008183389-01	OBS	6986.01	32.440568	142.250780	282915.2	3.000	4610.7	-1.0	0.70	5081	37.28	9.54
008183389-02	OBS	No	32.440334	133.034360	23010.0	5.326	447.5	424.9	0.70	5081	15.84	9.54
008183389-03	OBS	No	4.055005	133.928965	10717.0	15.000	140.2	-1.0	0.70	5081	7.04	152.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008183389-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
008183389-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008183389-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_POS_ALT—RESIDUAL_TCE—CENT_NOFITS—HALO_GHOST

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.

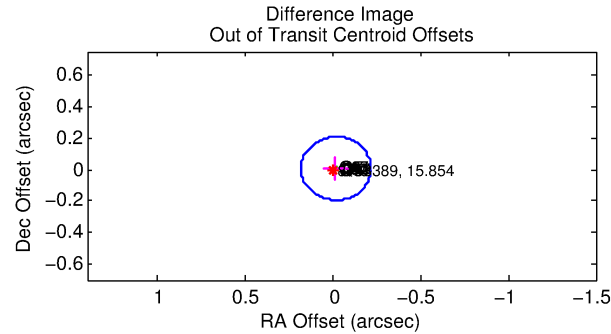
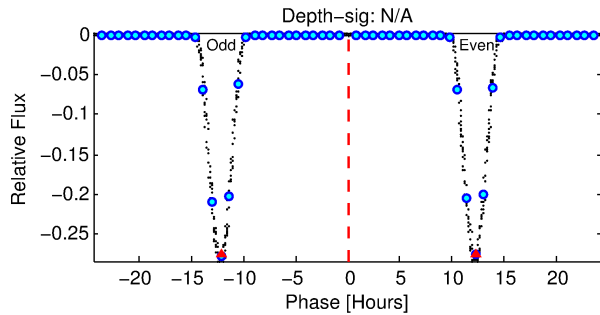
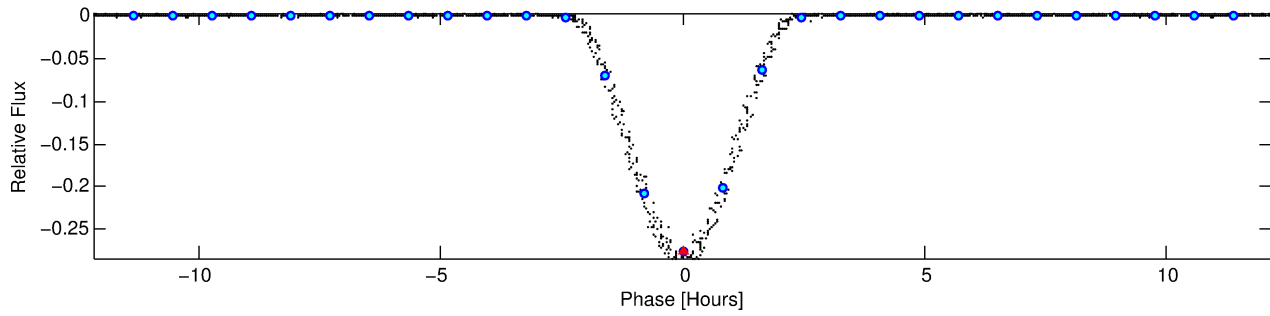
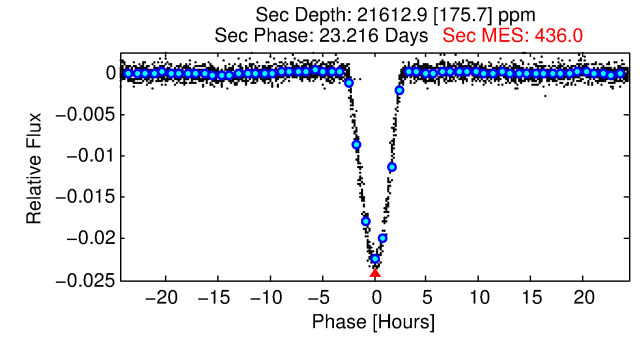
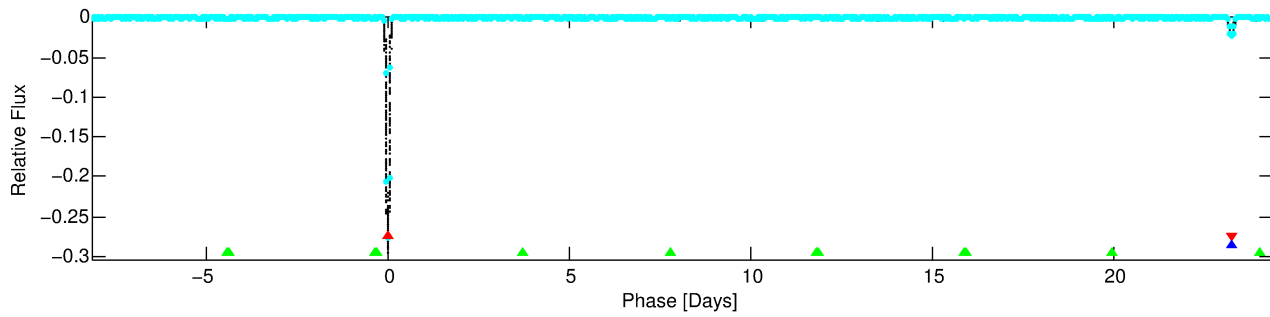
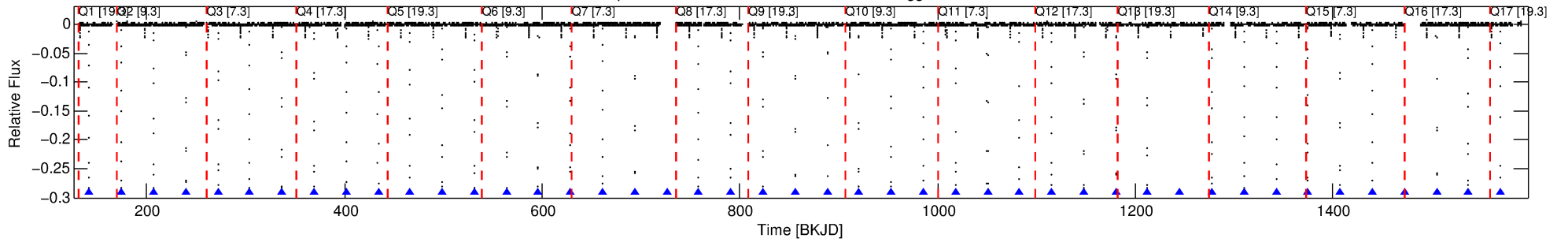
Ephemeris Match Information For 008183389-01

No Significant Match Found

DV One-Page Summary

KIC: 8183389 Candidate: 1 of 3 Period: 32.441 d
KOI: K06986.01 Corr: 0.815

Kp: 15.85 R*: 0.70 Rs Teff: 5081.0 K Logg: 4.58 Fe/H: -0.500



TPS TCE Results:

Period = 32.44057 d
Epoch = 142.2508 BKJD

DV fit results are unavailable

DV Diagnostic Results:

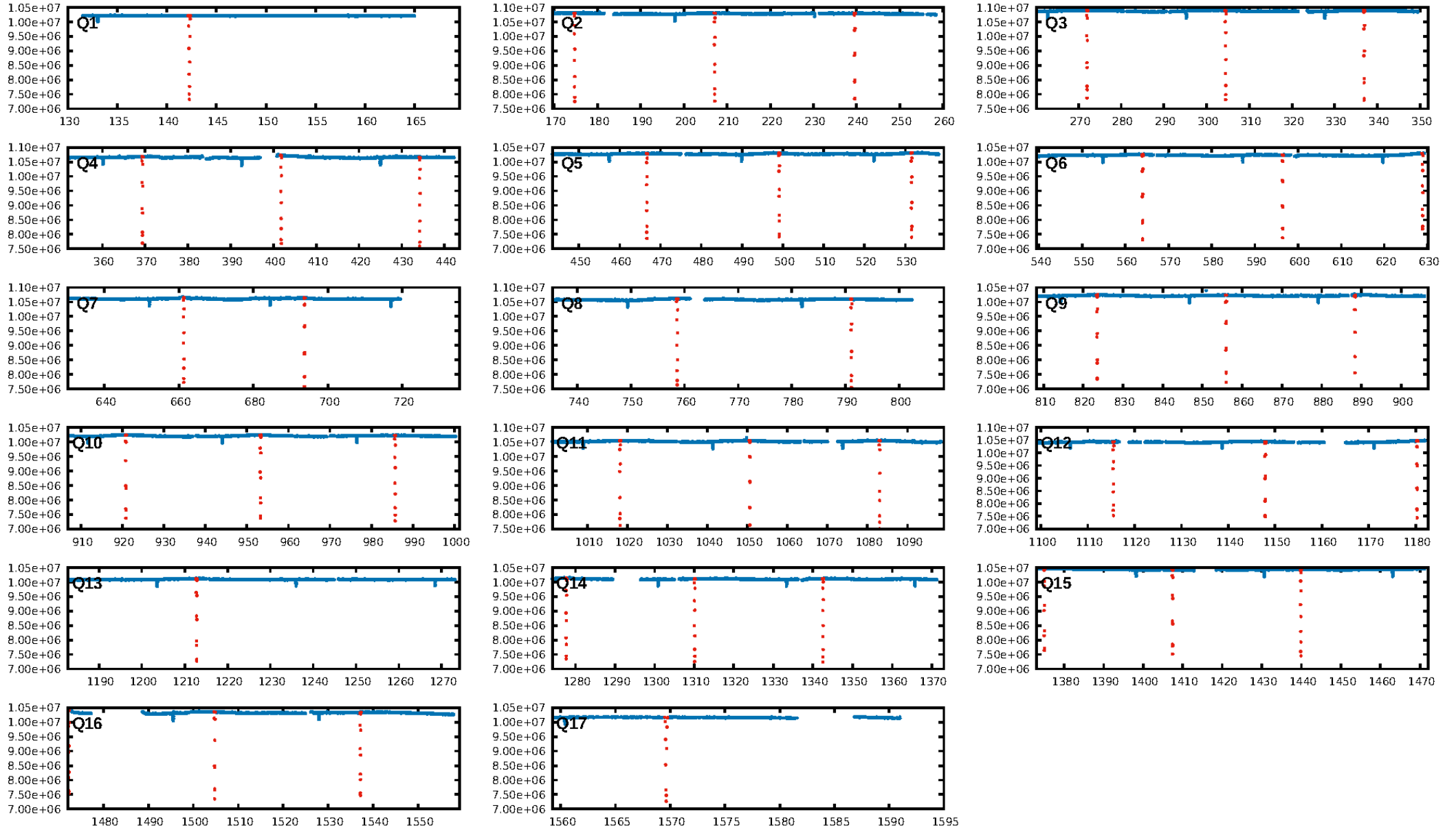
ShortPeriod-sig: 0.1% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [40/40]
GhostDiagnostic-chr: 3.008

Centroid-sig: 0.0%
Centroid-so: 0.100 arcsec [46.03σ]
OotOffset-rm: 0.019 arcsec [0.28σ]
KicOffset-rm: 0.014 arcsec [0.20σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

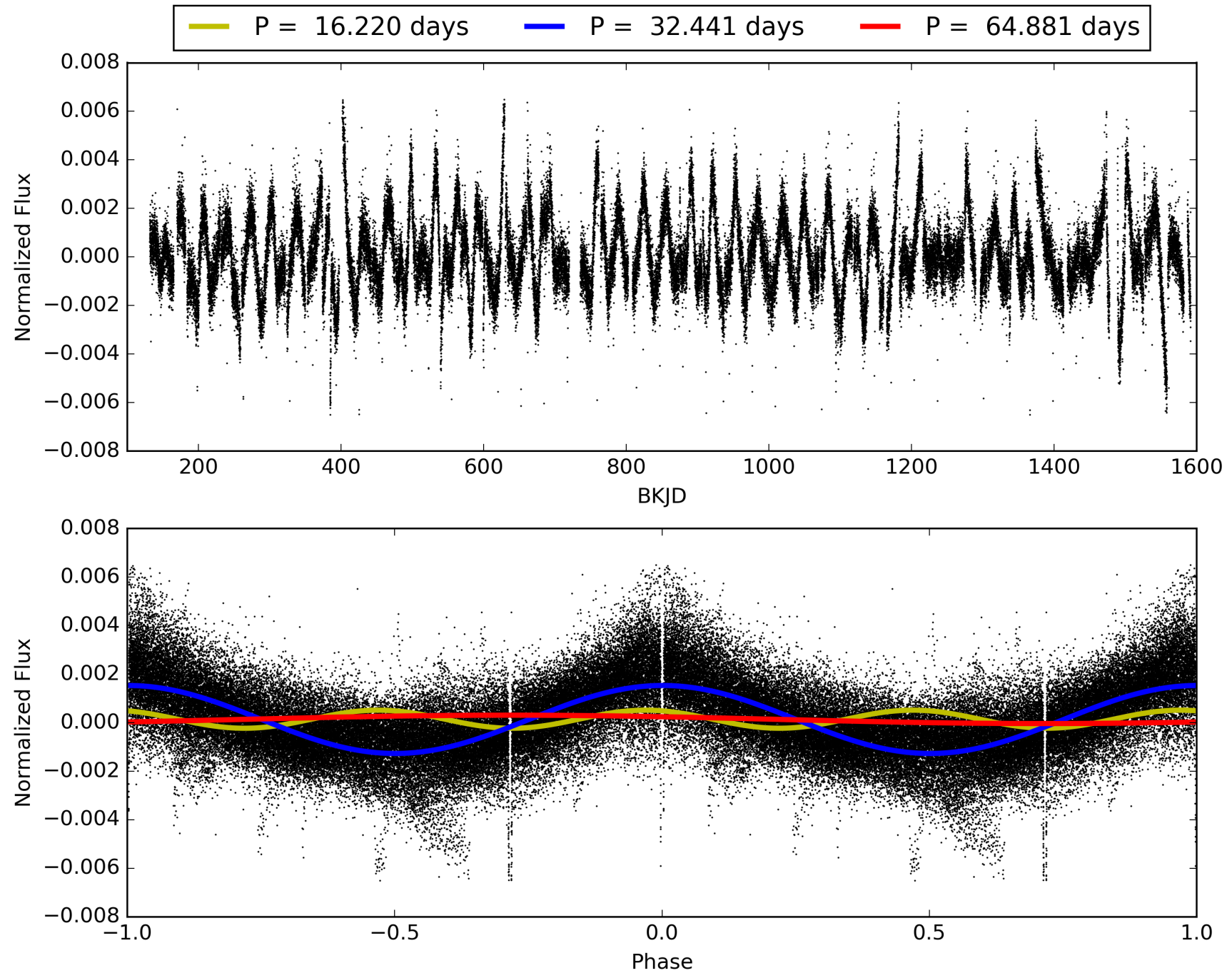
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:42:41 Z

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

TCE 008183389-01, PDC Light Curves

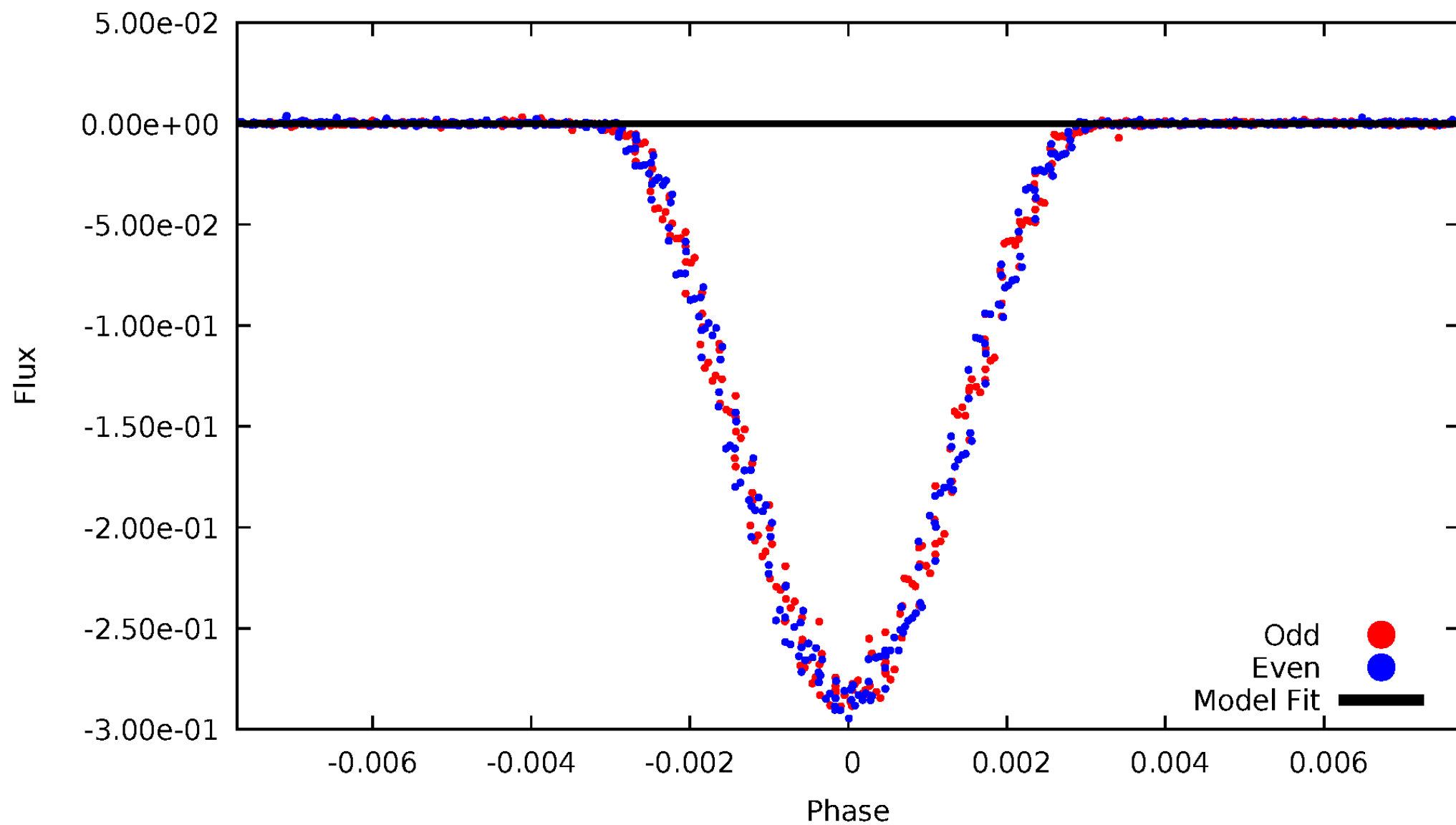


TCE 008183389-01



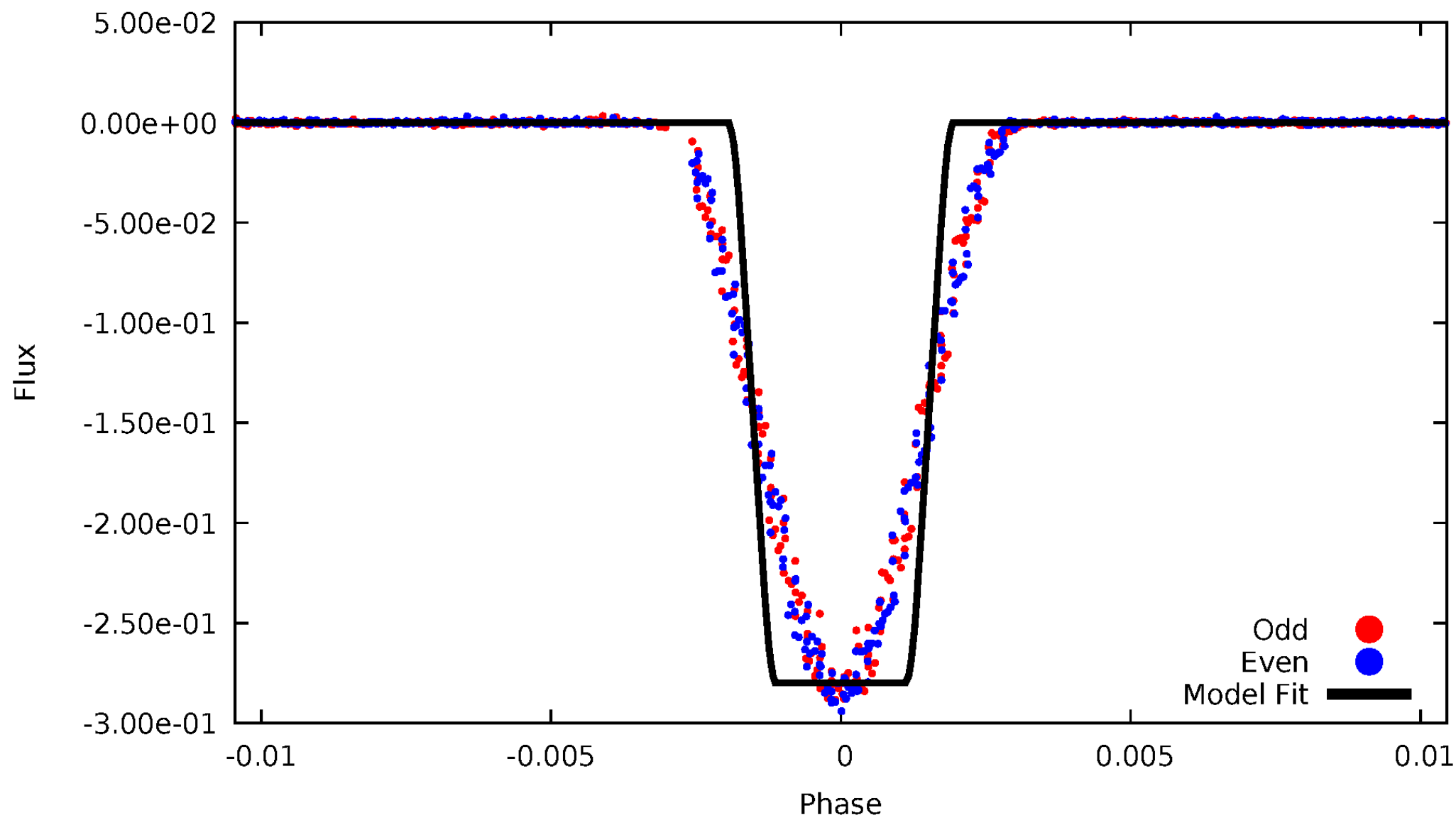
DV Odd/Even

TCE 008183389-01



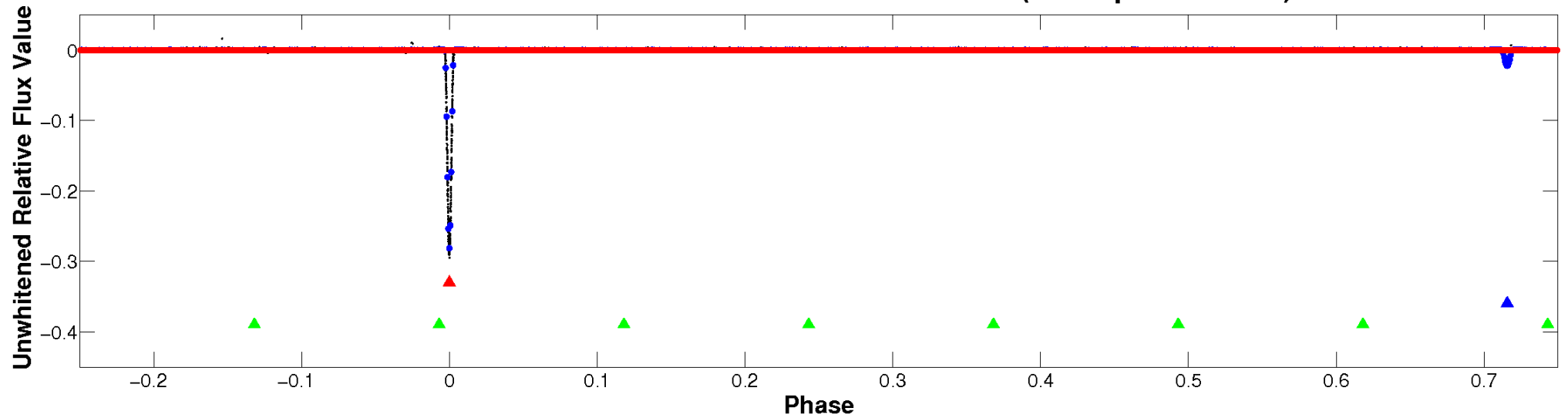
ALT Odd/Even

TCE 008183389-01

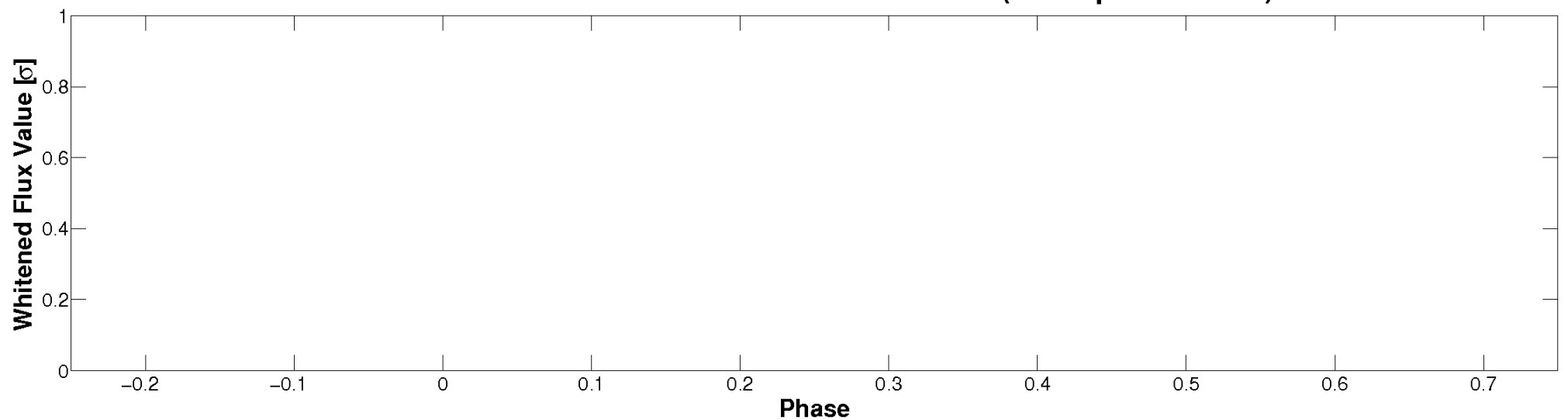


Non-Whitened Vs. Whitened Light Curve

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

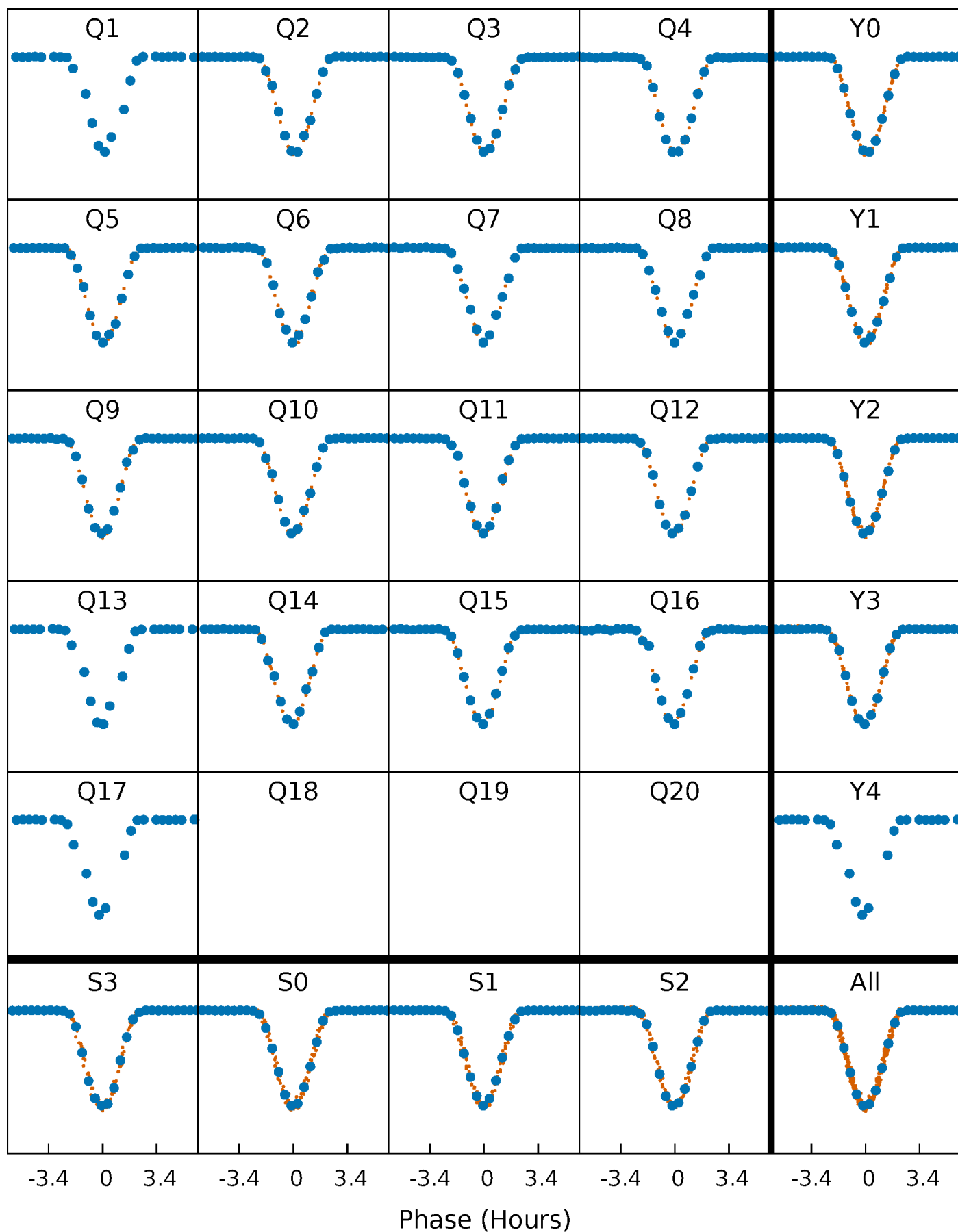


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



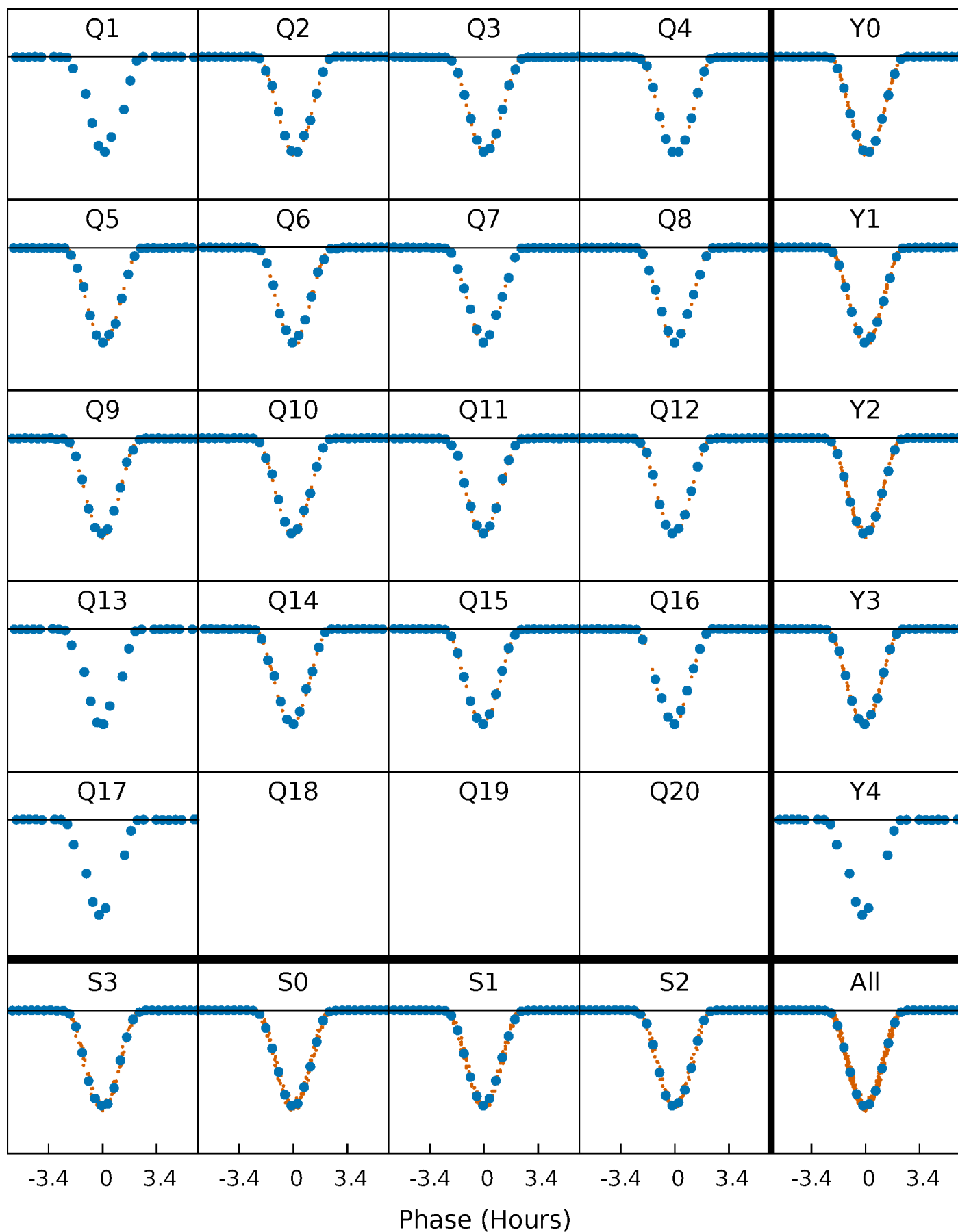
PDC Quarter-Phased Transit Curves

TCE 008183389-01 P= 32.440568 Days $T_0=142.250780$ (BKJD)



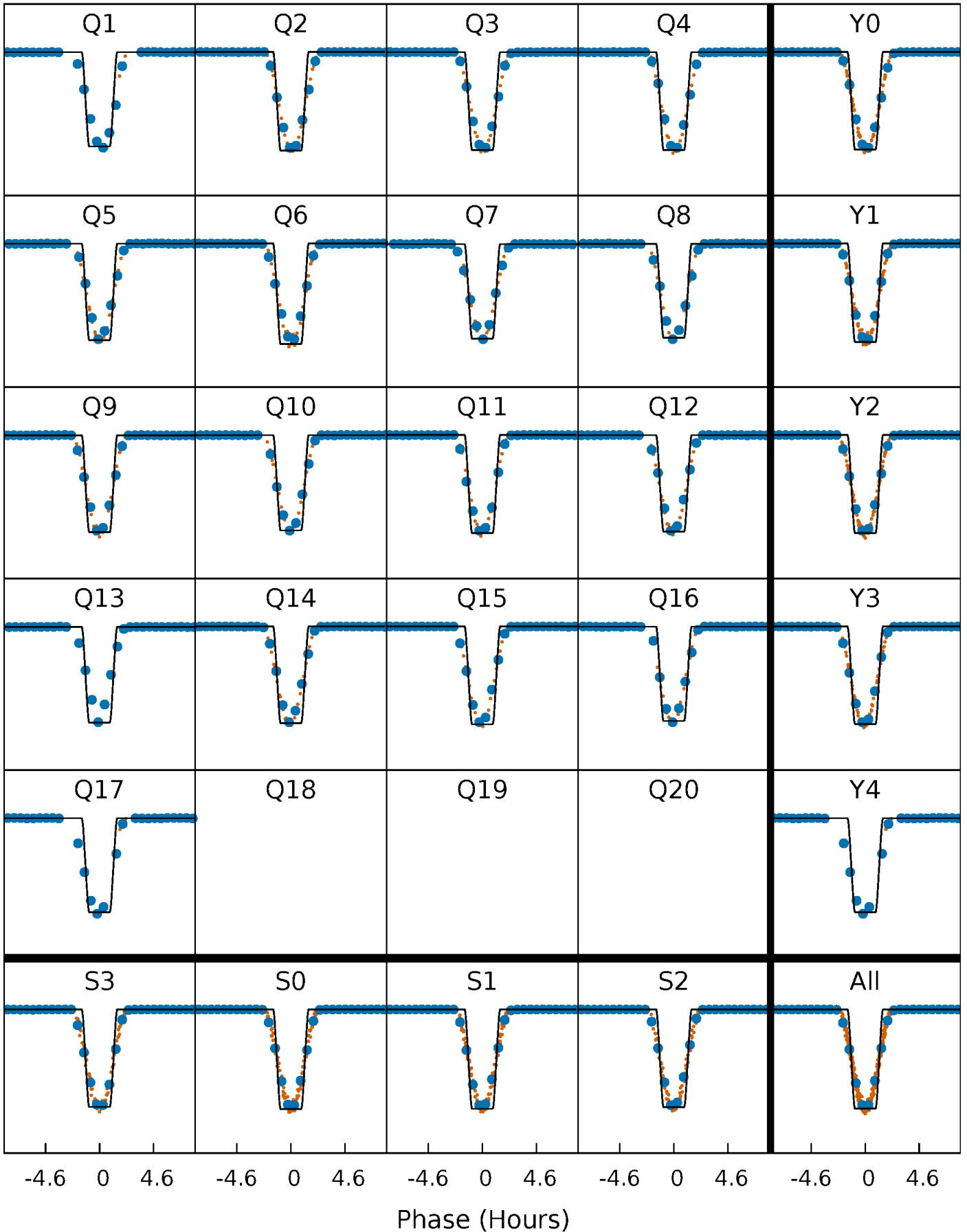
DV Quarter-Phased Transit Curves

TCE 008183389-01 P= 32.440568 Days $T_0=142.250780$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

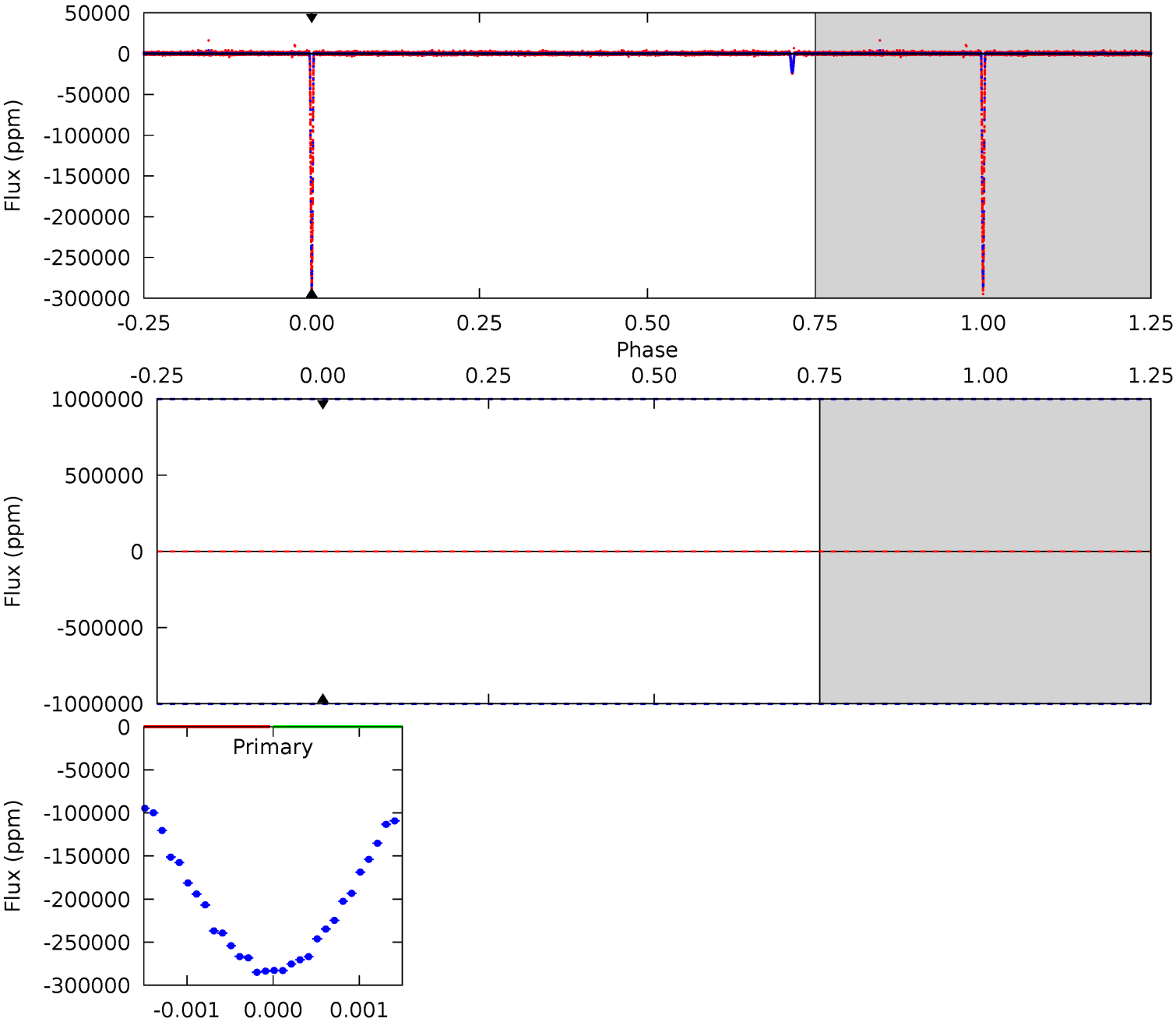
TCE 008183389-01 P= 32.440568 Days $T_0=142.250643$ (BKJD)



DV Model-Shift Uniqueness Test

008183389-01, P = 32.440568 Days, E = 109.810212 Days

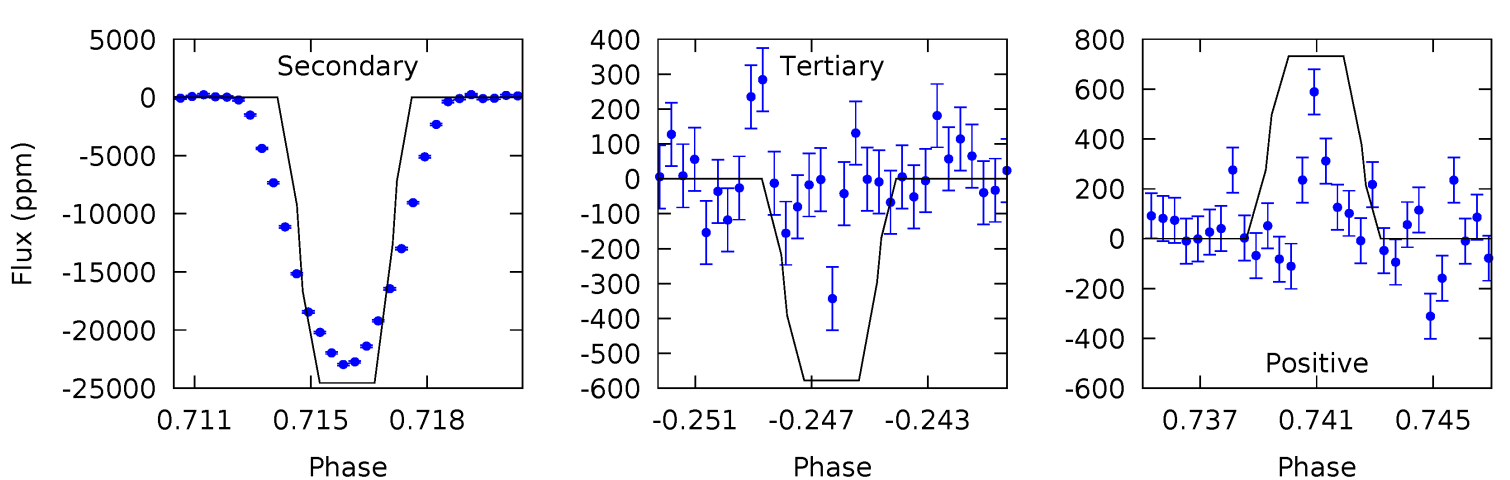
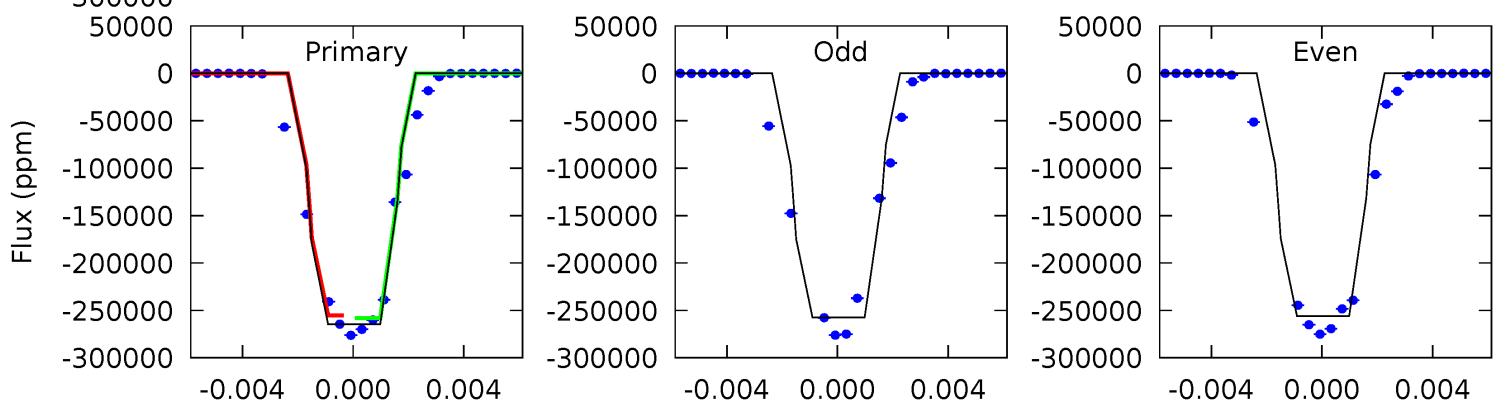
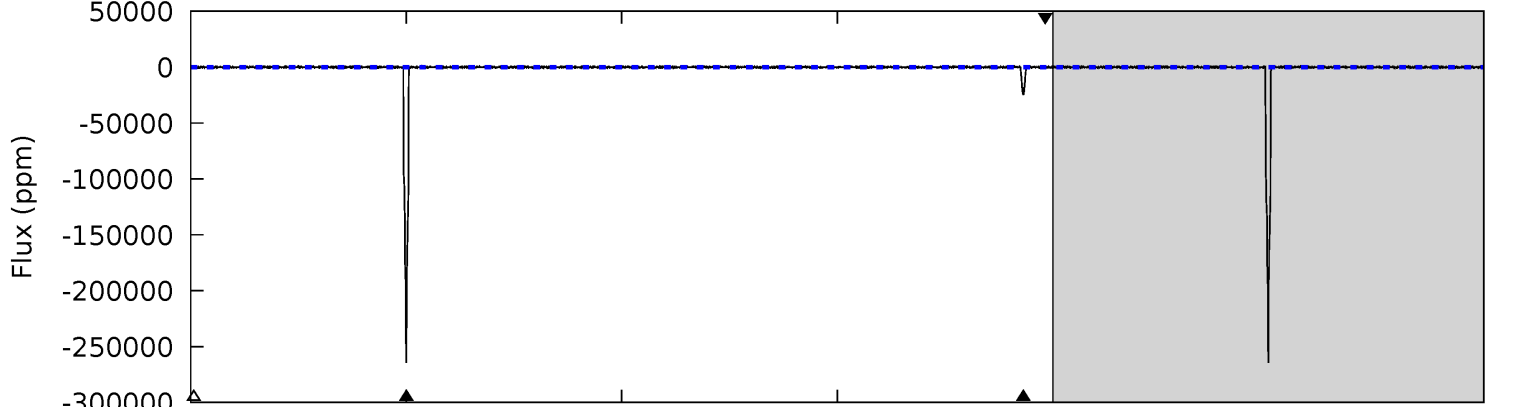
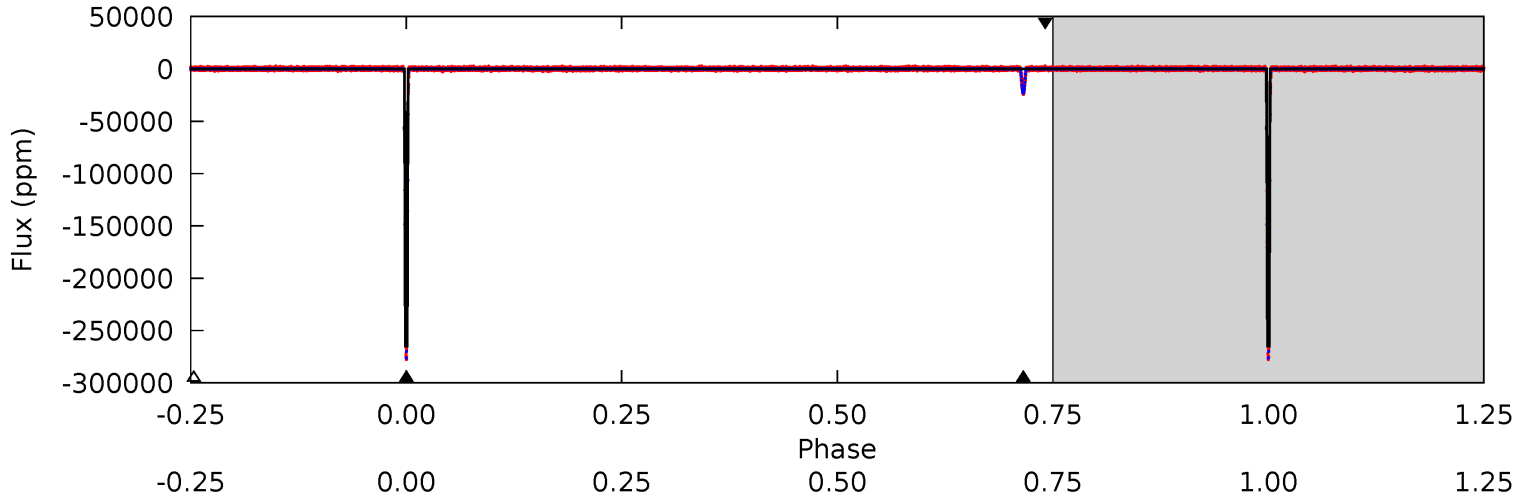
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008183389-01, P = 32.440568 Days, E = 109.810075 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2198	203.9	4.79	6.08	5.21	2.89	1.11	2193	2192	199.1	197.8	6.23	1.00	0.00	0



Stellar Parameters For KIC 008183389

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5081^{+151}_{-151}	$4.578^{+0.077}_{-0.044}$	$-0.500^{+0.300}_{-0.300}$	$0.696^{+0.067}_{-0.067}$	$0.668^{+0.088}_{-0.038}$	$2.796^{+0.882}_{-0.466}$
	+3%/-3%	+2%/-1%	+60%/-60%	+10%/-10%	+13%/-6%	+32%/-17%
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 008183389-01 / KOI 6986.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$37.35^{+7.38}_{-8.22}$	622^{+24}_{-25}	-2561^{+6924}_{-1656}	$-46.765^{+1421.162}_{-1147.751}$
Alt.	-24548 ± 120	$40.81^{+7.94}_{-8.57}$	623^{+23}_{-24}	3291^{+233}_{-180}	263^{+143}_{-83}

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 $A_{obs} \gg 1.0$

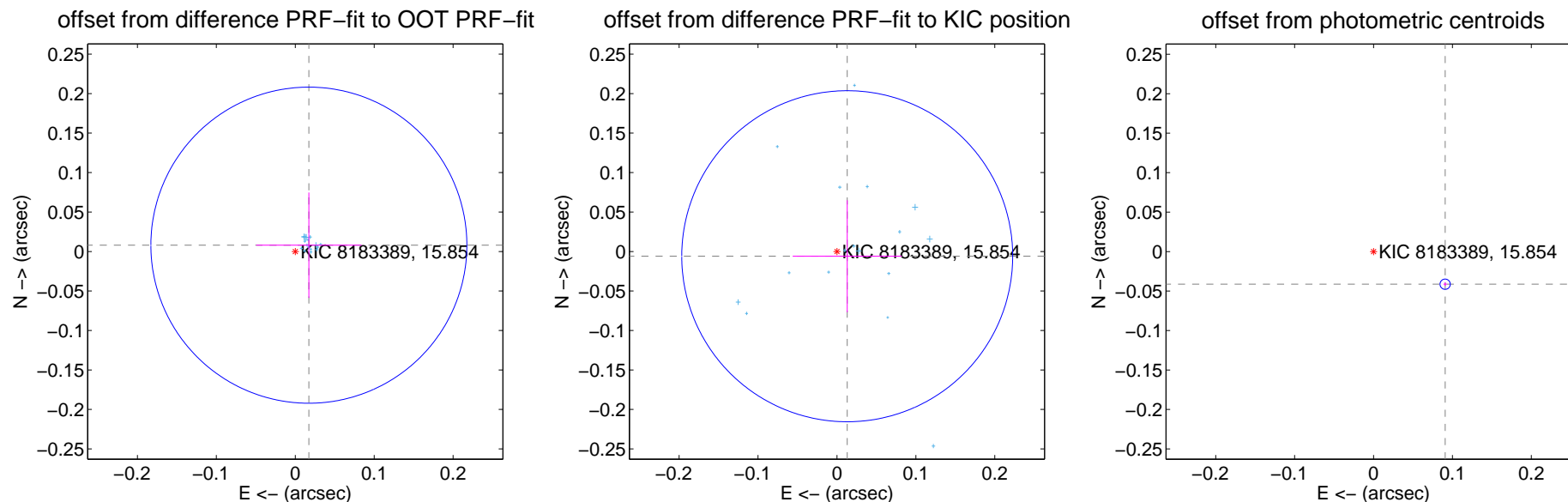
DV Centroid Data

Supplemental centroid analysis for 008183389-01. Kepler magnitude: 15.85. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

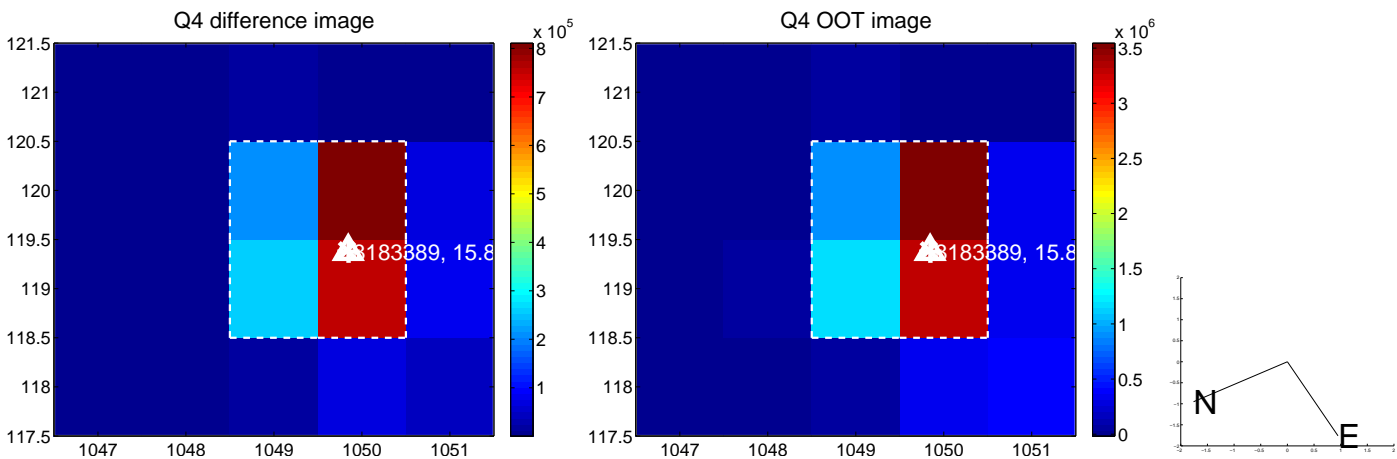
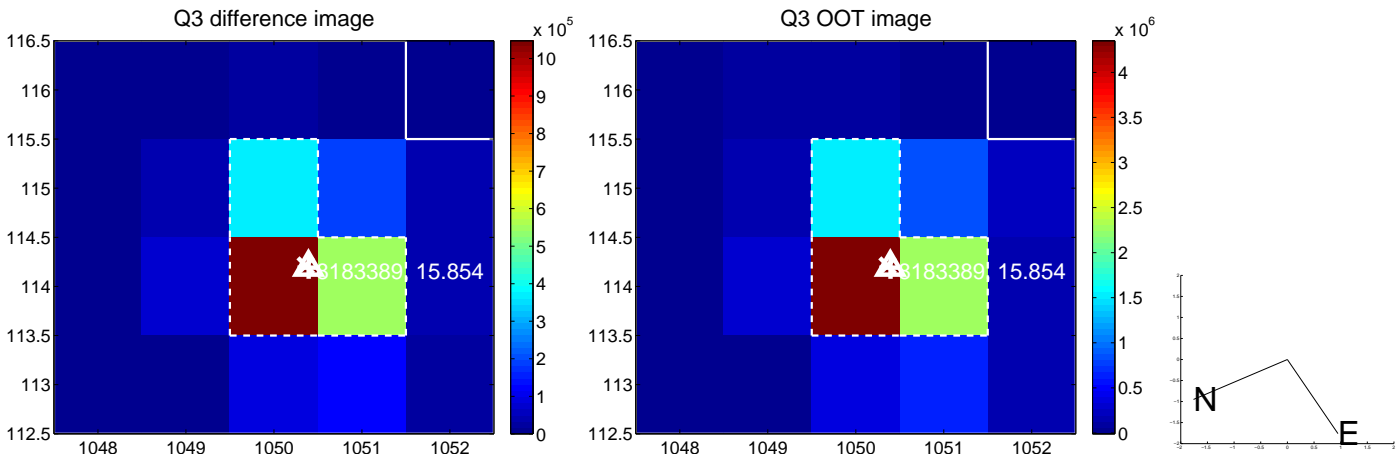
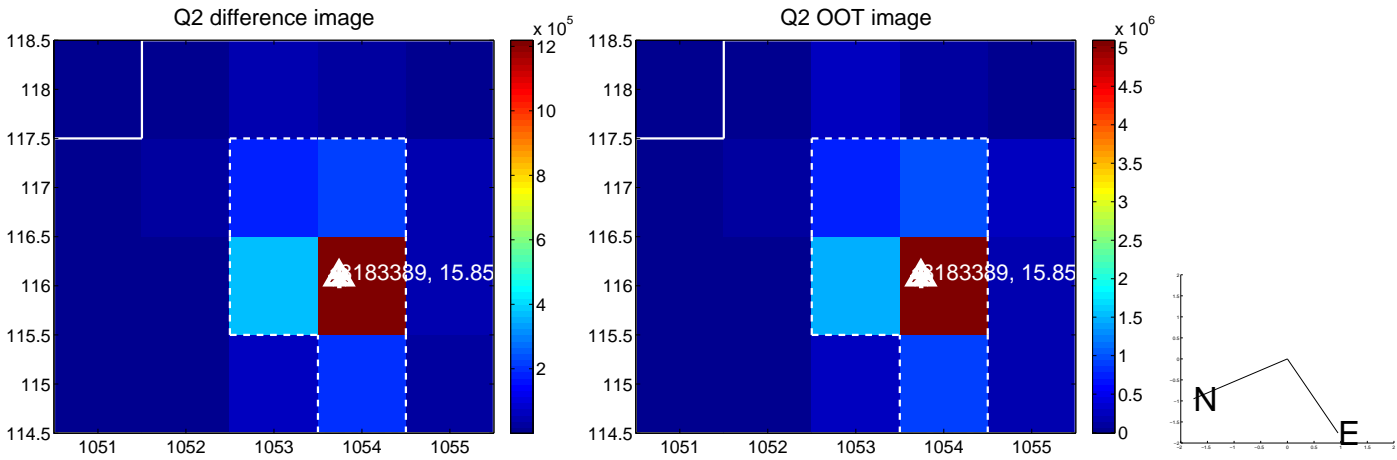
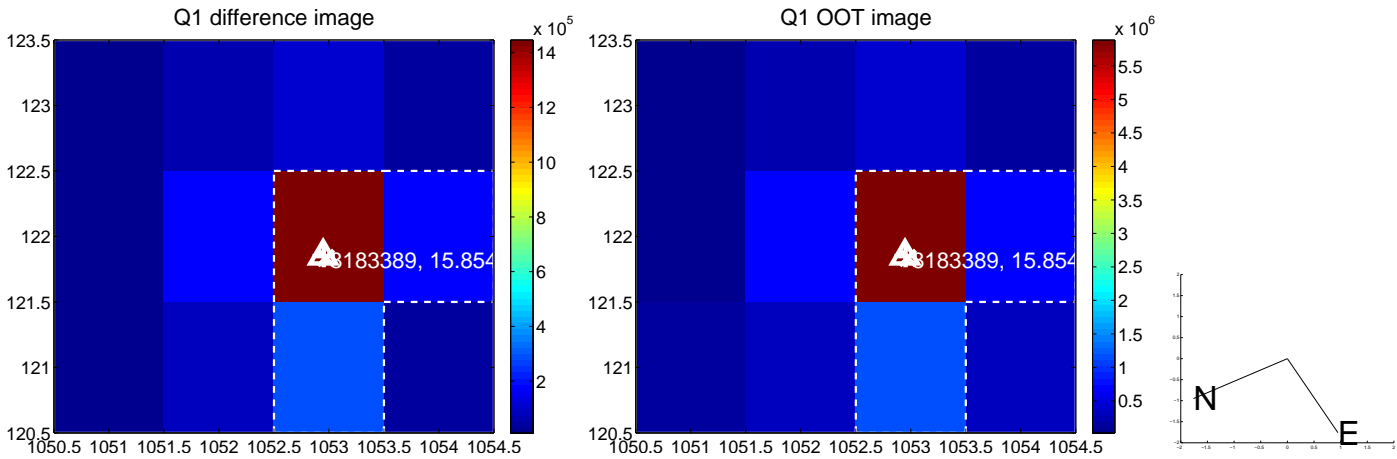
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.019 ± 0.067	0.28	-0.017 ± 0.067	0.008 ± 0.067
PRF-fit source offset from KIC position	0.014 ± 0.070	0.20	-0.013 ± 0.069	-0.006 ± 0.071
photometric centroid source offset	0.10 ± 0.00	46.03	-0.09 ± 0.00	-0.04 ± 0.00

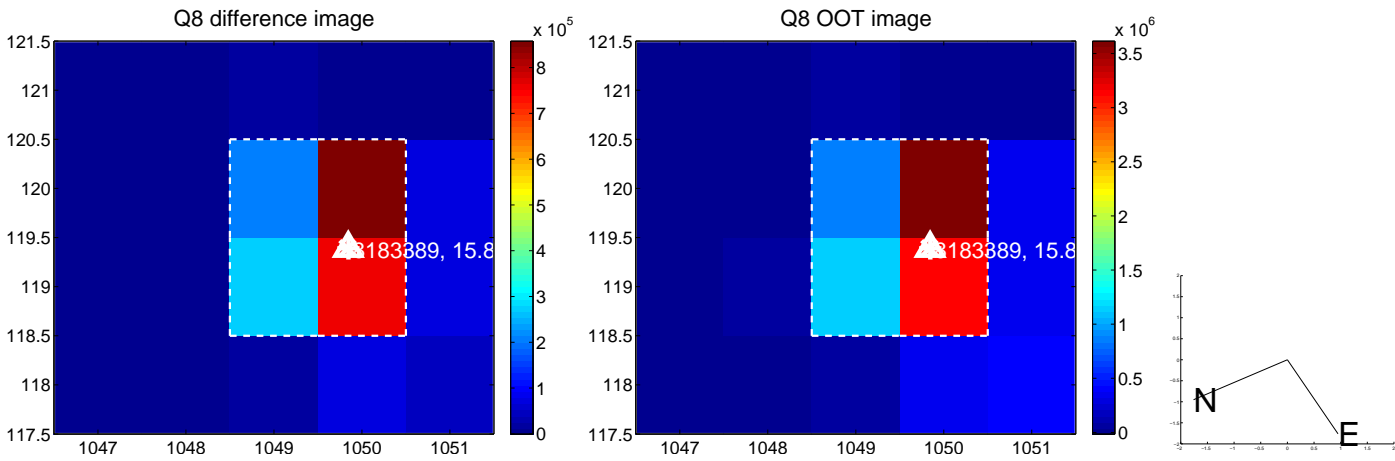
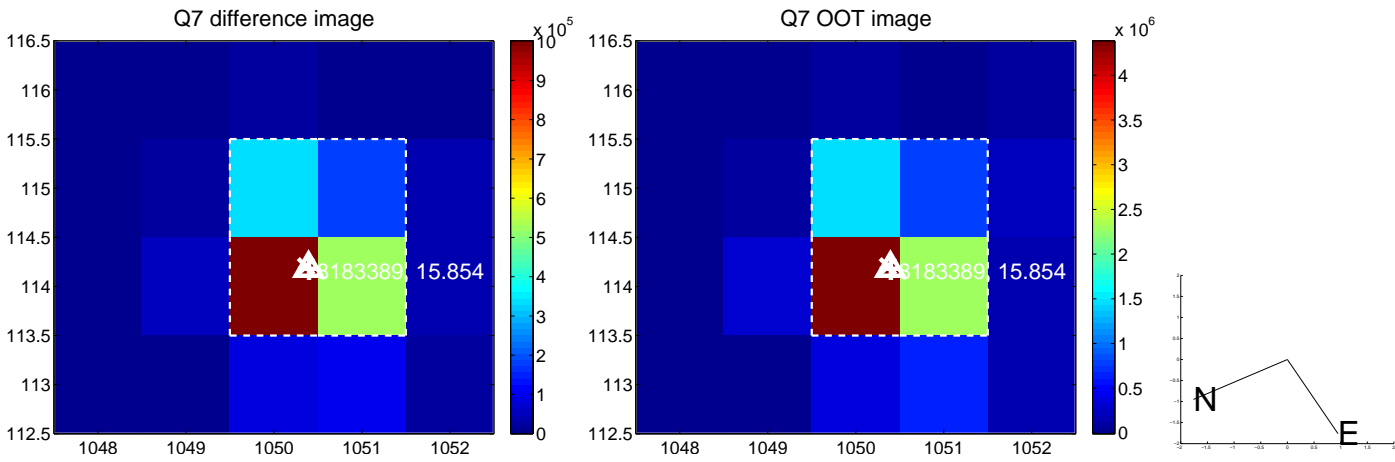
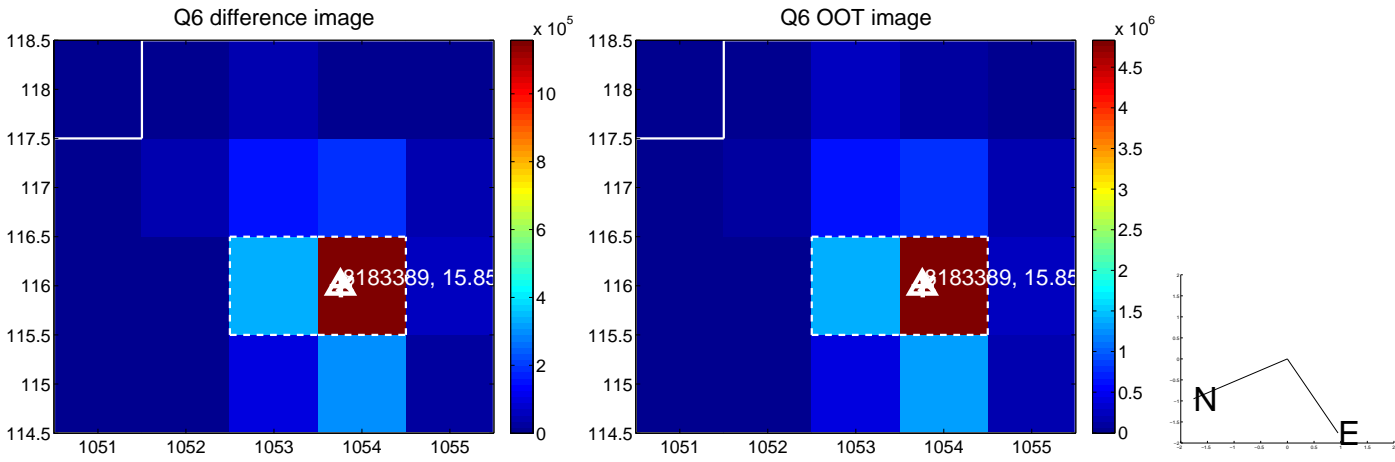
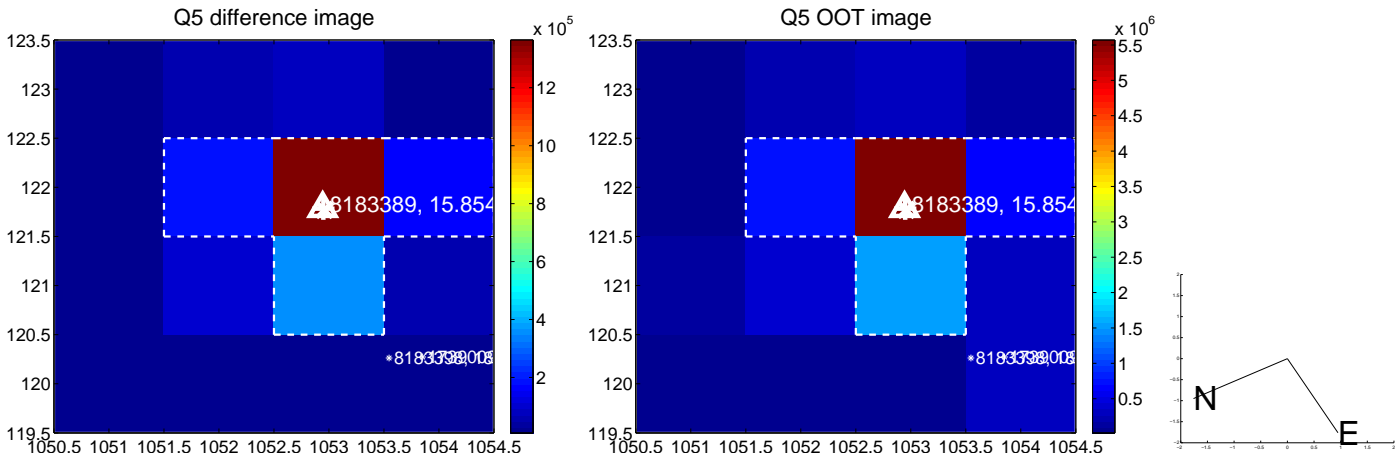


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

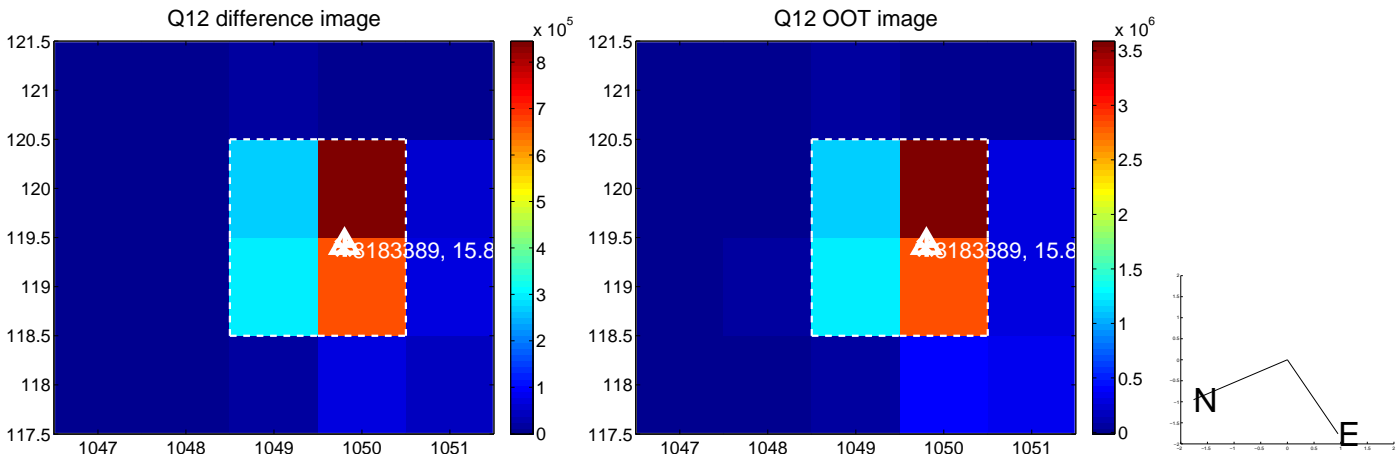
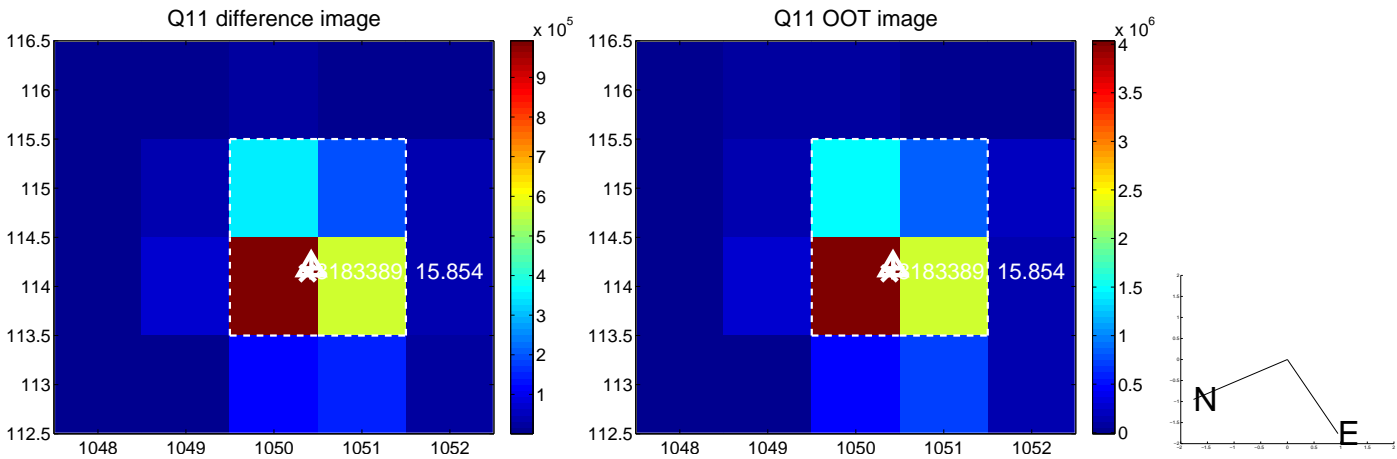
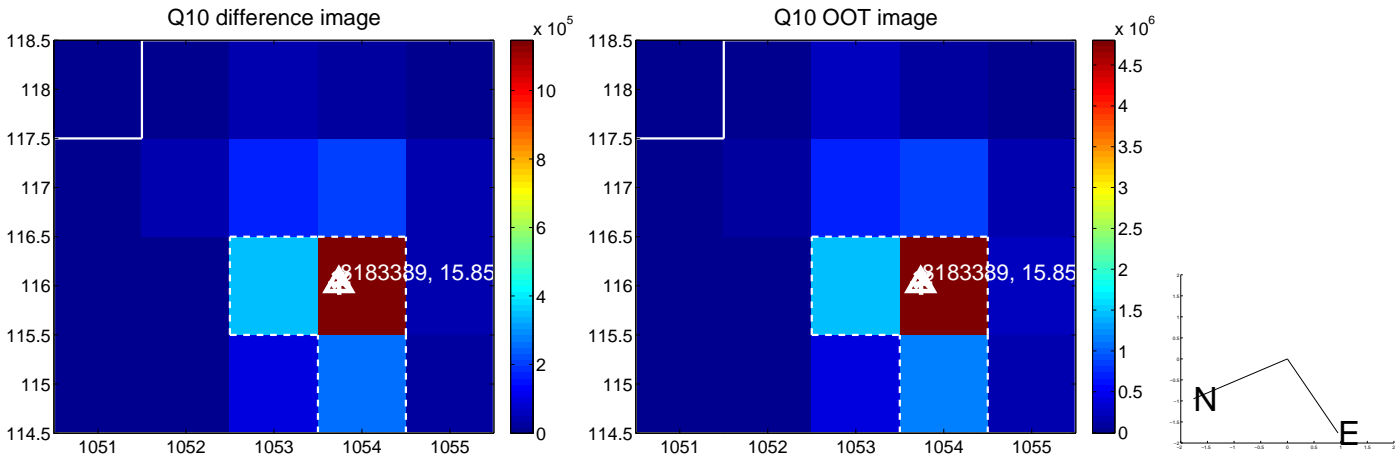
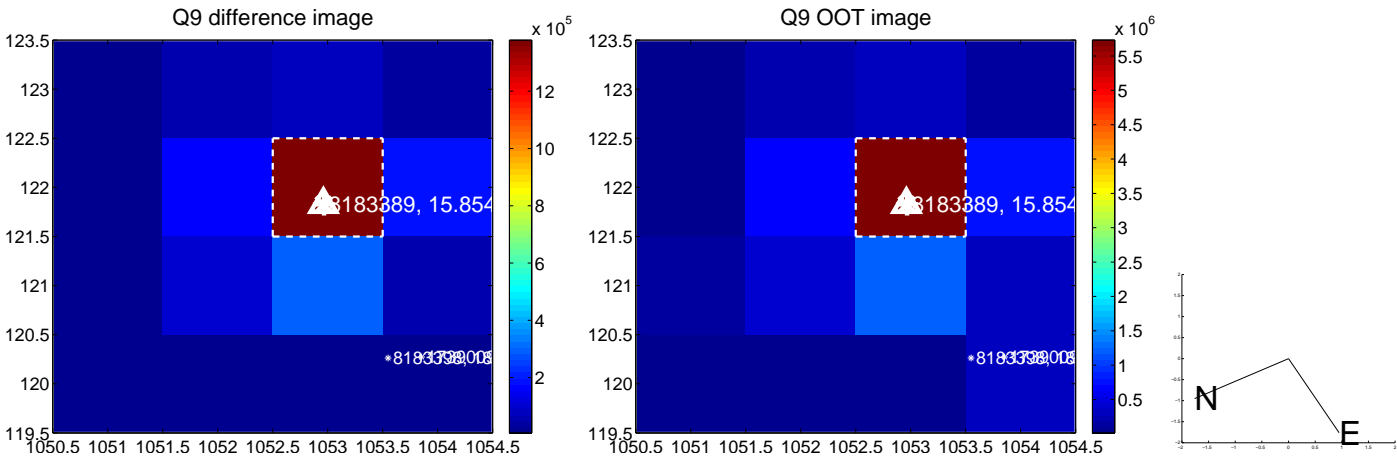
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



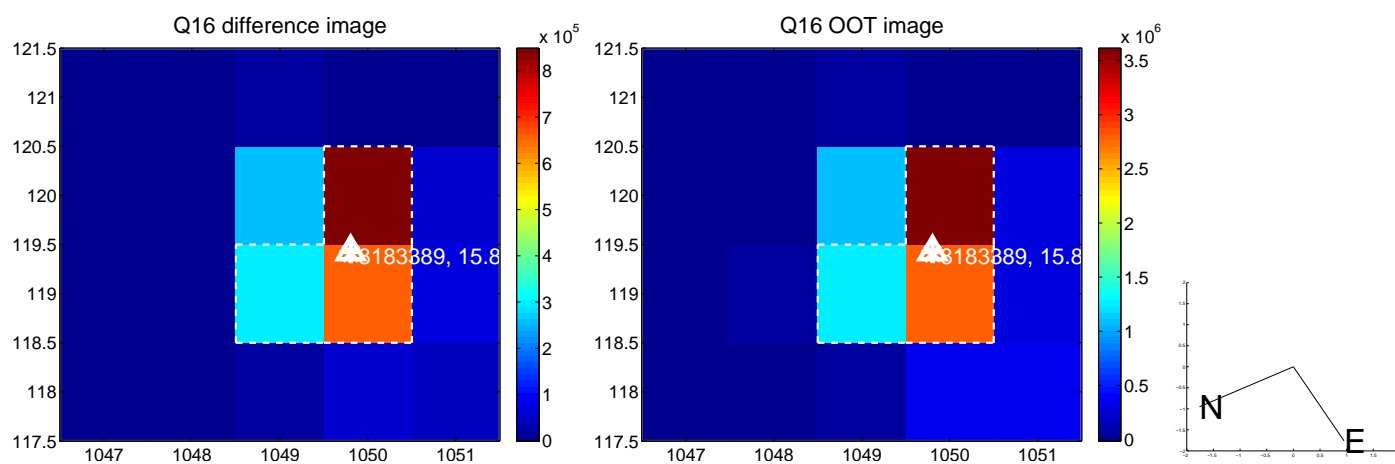
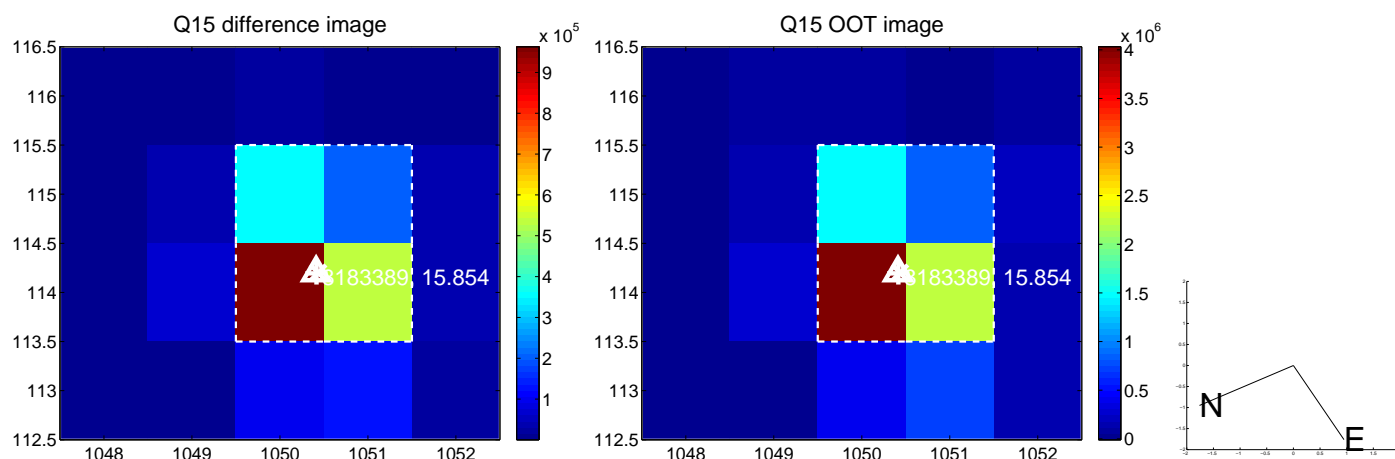
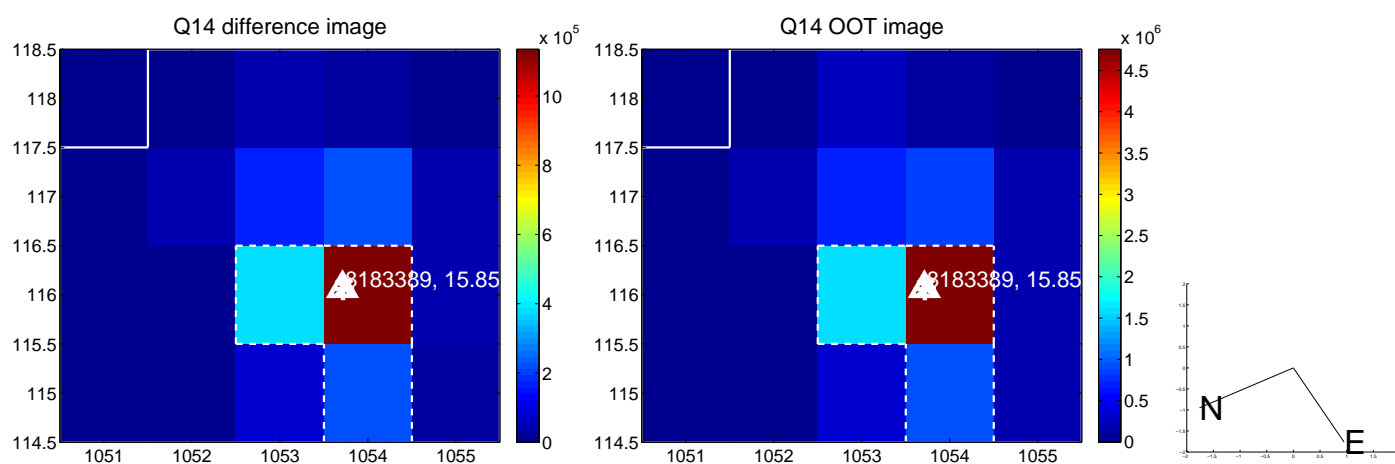
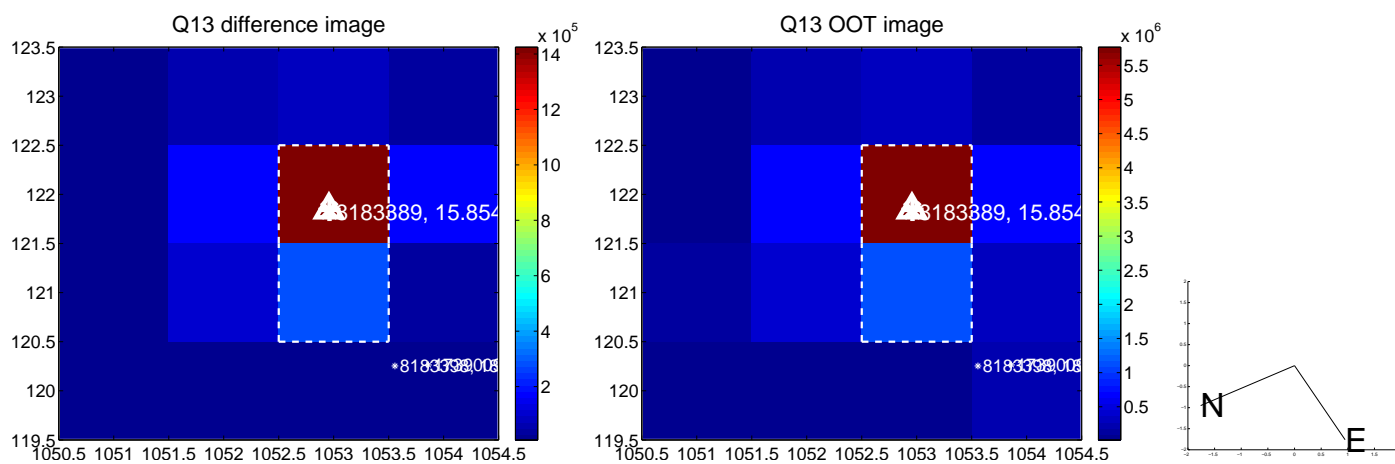
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



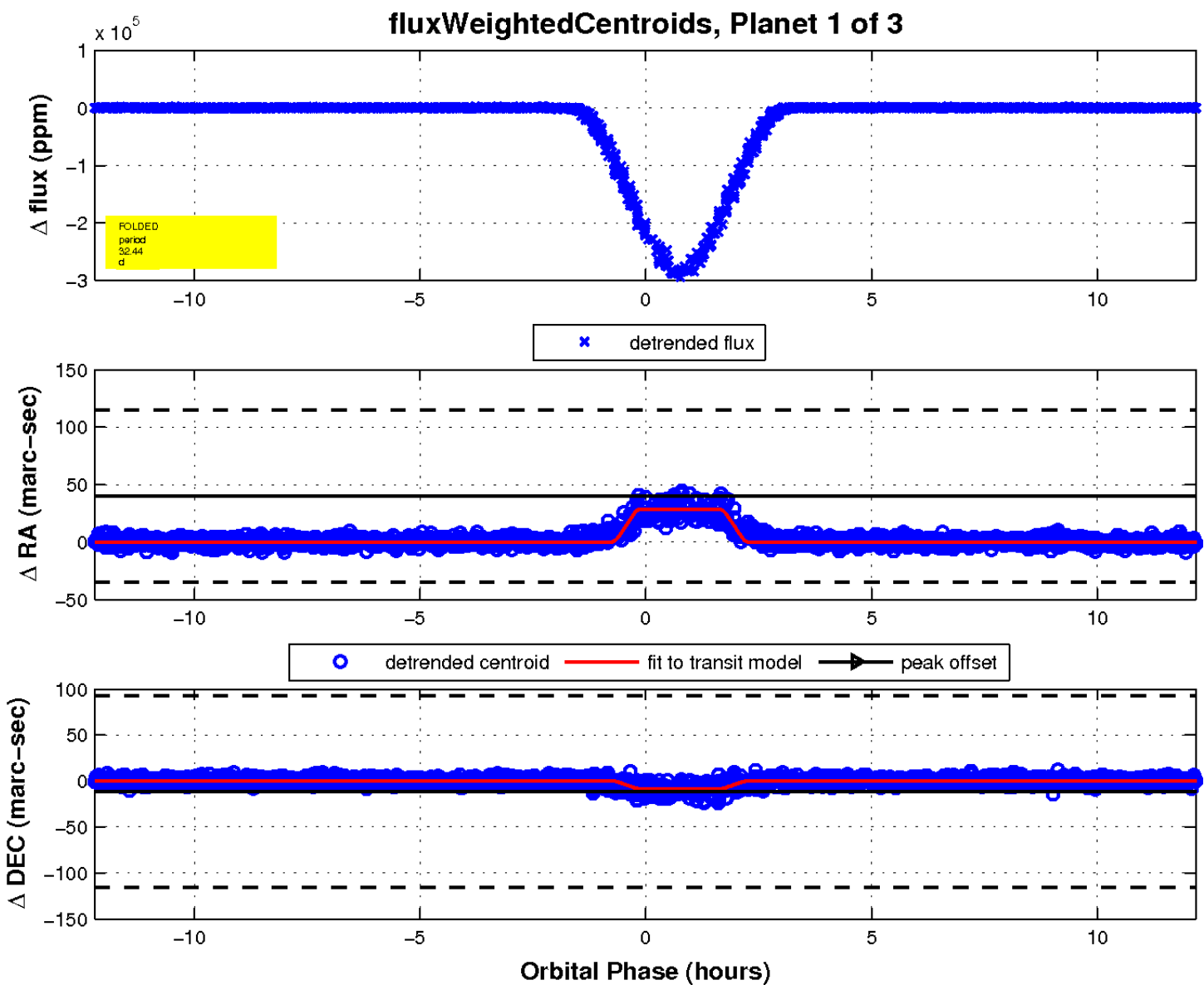
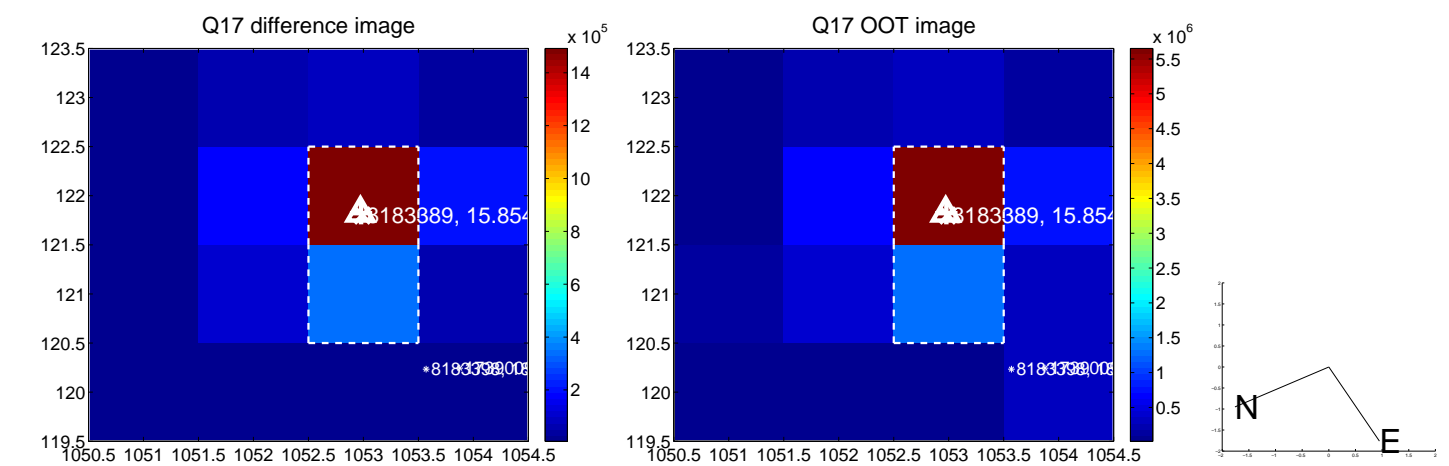
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

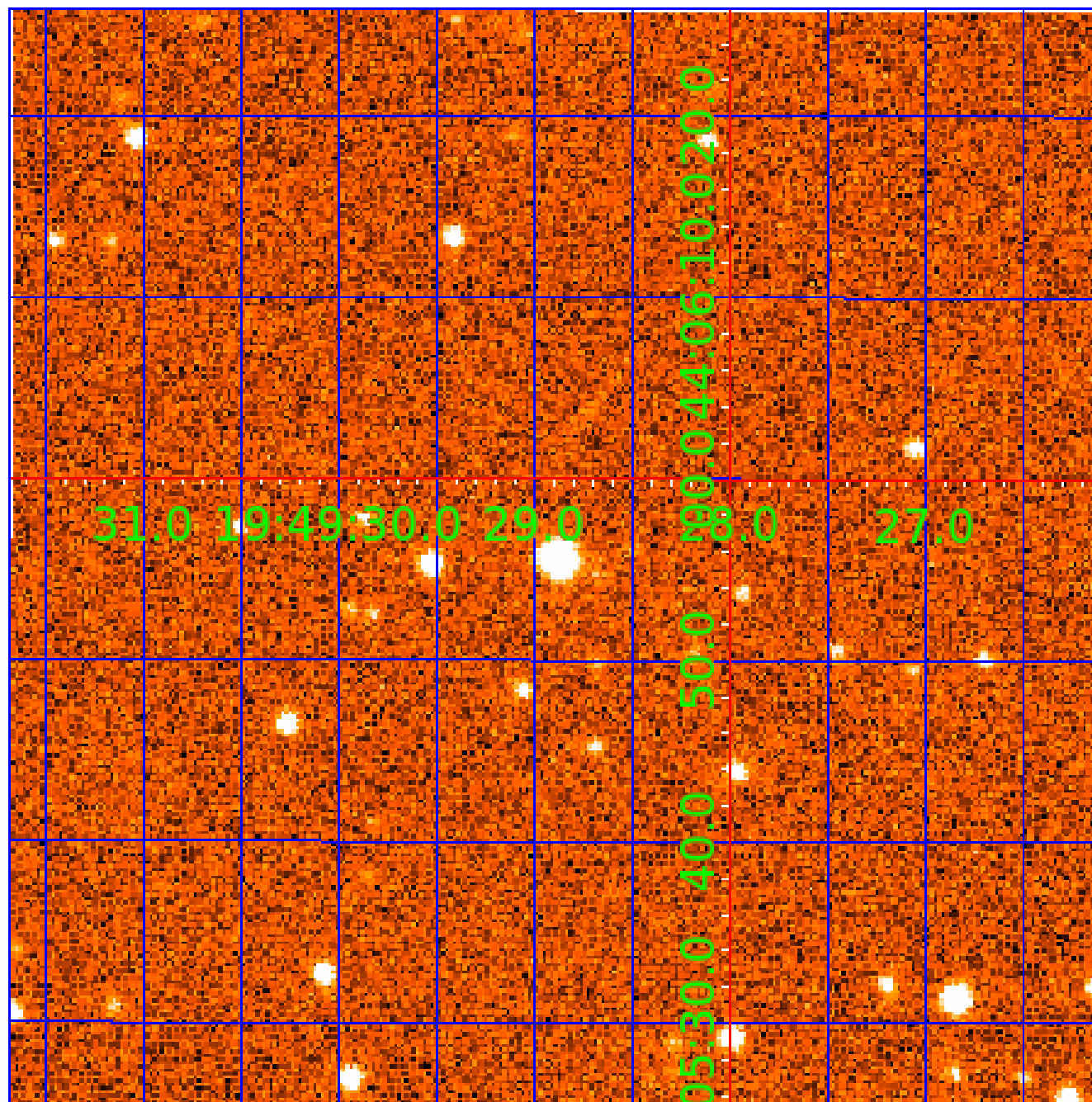


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008183389

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})
008183389-01	OBS	6986.01	32.440568	142.250780	282915.2	3.000	4610.7	-1.0	0.70	5081	37.28	9.54
008183389-02	OBS	No	32.440334	133.034360	23010.0	5.326	447.5	424.9	0.70	5081	15.84	9.54
008183389-03	OBS	No	4.055005	133.928965	10717.0	15.000	140.2	-1.0	0.70	5081	7.04	152.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008183389-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
008183389-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008183389-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_POS_ALT—RESIDUAL_TCE—CENT_NOFITS—HALO_GHOST

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.

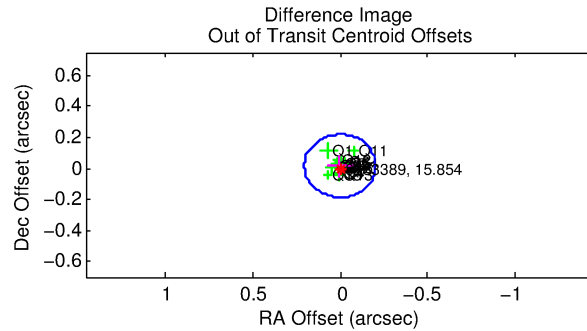
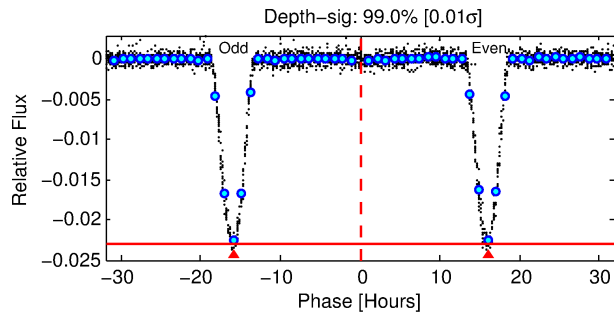
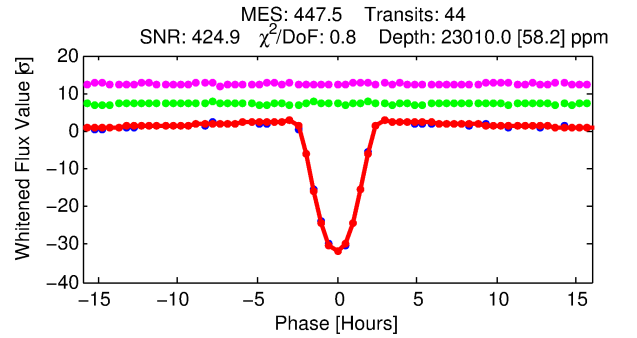
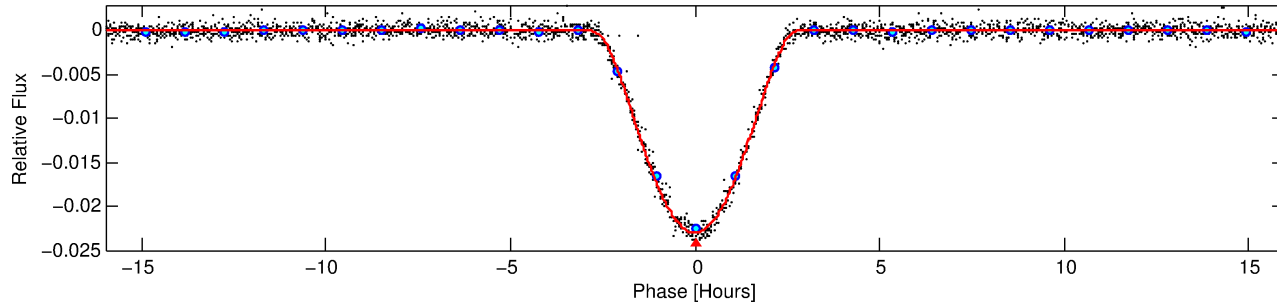
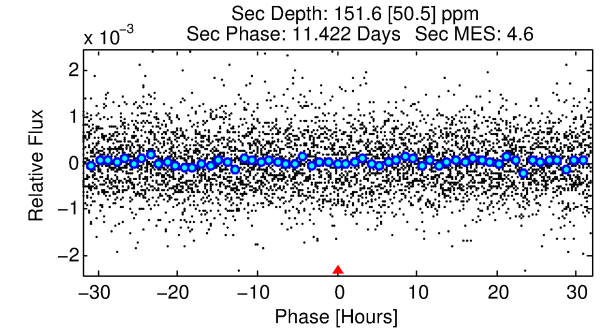
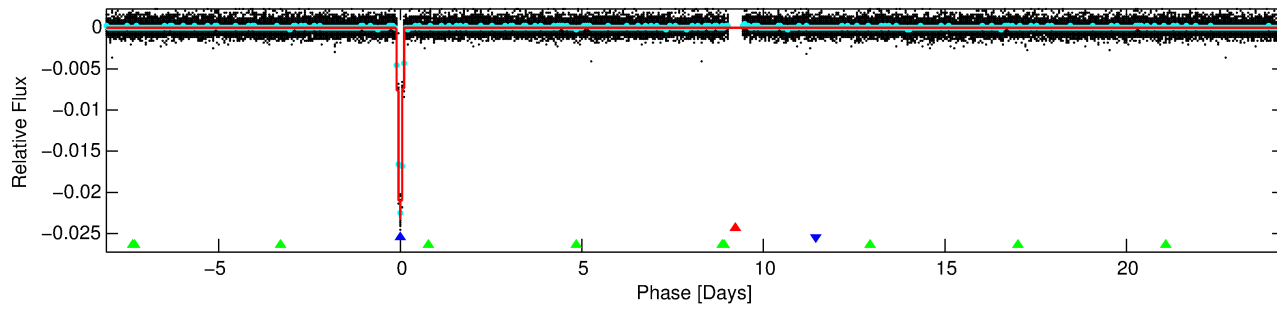
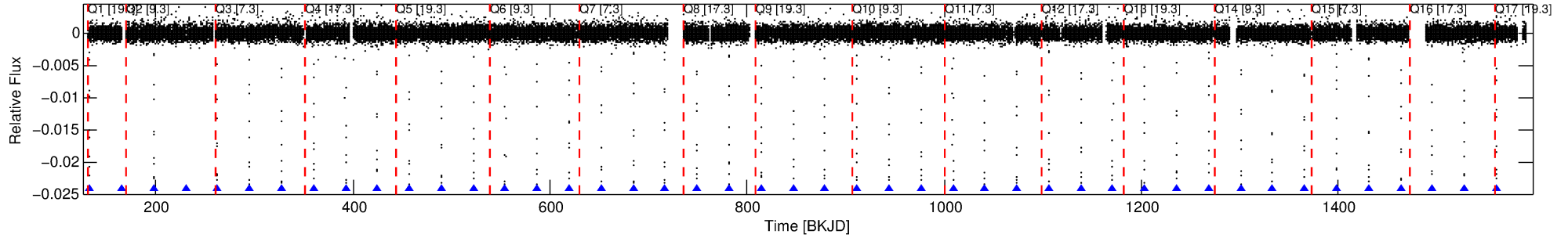
Ephemeris Match Information For 008183389-02

No Significant Match Found

DV One-Page Summary

KIC: 8183389 Candidate: 2 of 3 Period: 32.440 d
KOI: K06986 Corr: No Ephemeris Match

Kp: 15.85 R*: 0.70 Rs Teff: 5081.0 K Logg: 4.58 Fe/H: -0.500



DV Fit Results:

Period = 32.44033 [0.00001] d
Epoch = 133.0344 [0.0003] BKJD
Rp/R* = 0.2085 [0.0142]
a/R* = 35.29 [0.38]
b = 0.94 [0.02]
Seff = 9.54 [1.71]
Teq = 448 [20] K
Rp = 15.84 [1.87] Re
a = 0.1741 [0.0152] AU
Ag = 10.08 [3.87] [2.35σ]
Teffp = 1235 [117] K [6.63σ]

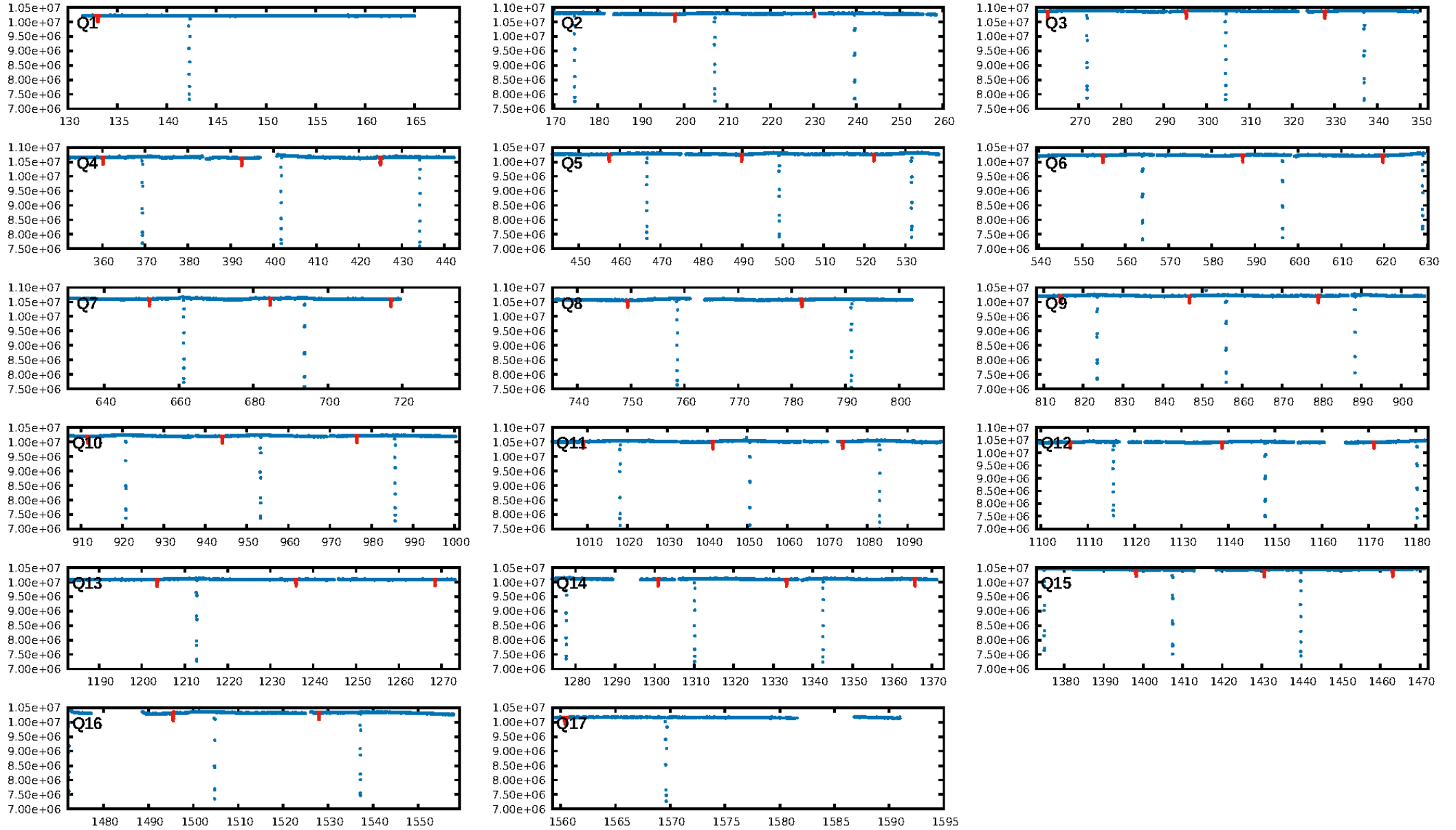
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [42.80σ]
LongPeriod-sig: 0.1% [0.00σ]
ModelChiSquare2-sig: 5.1%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [42/42]
GhostDiagnostic-chr: 3.528
Centroid-sig: 0.0%
Centroid-so: 0.071 arcsec [2.90σ]
OotOffset-rm: 0.017 arcsec [0.25σ]
KicOffset-rm: 0.016 arcsec [0.23σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 1.00 [16/16]
DiffImageOverlap-fno: 1.00 [16/16]

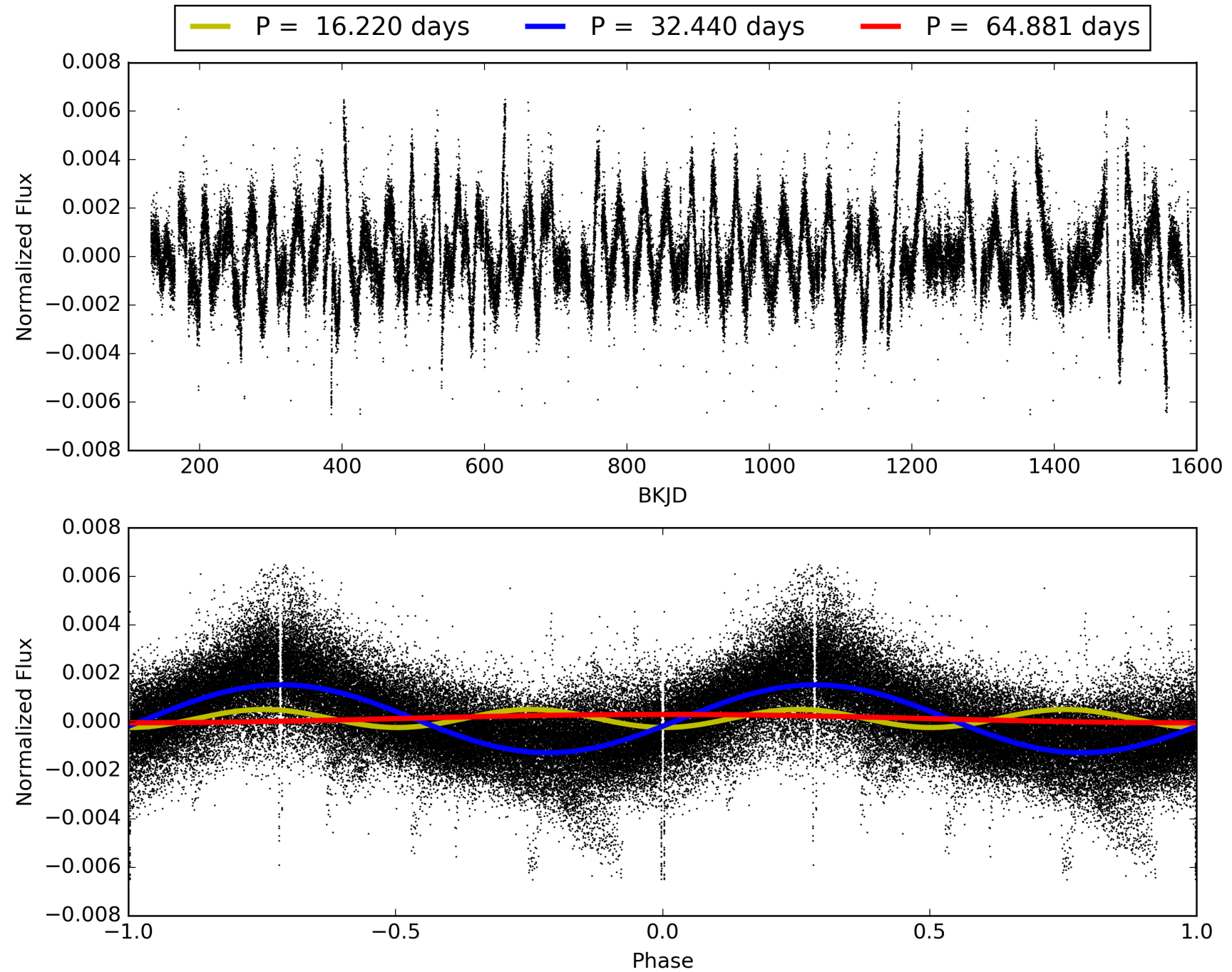
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:42:46 Z

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

TCE 008183389-02, PDC Light Curves

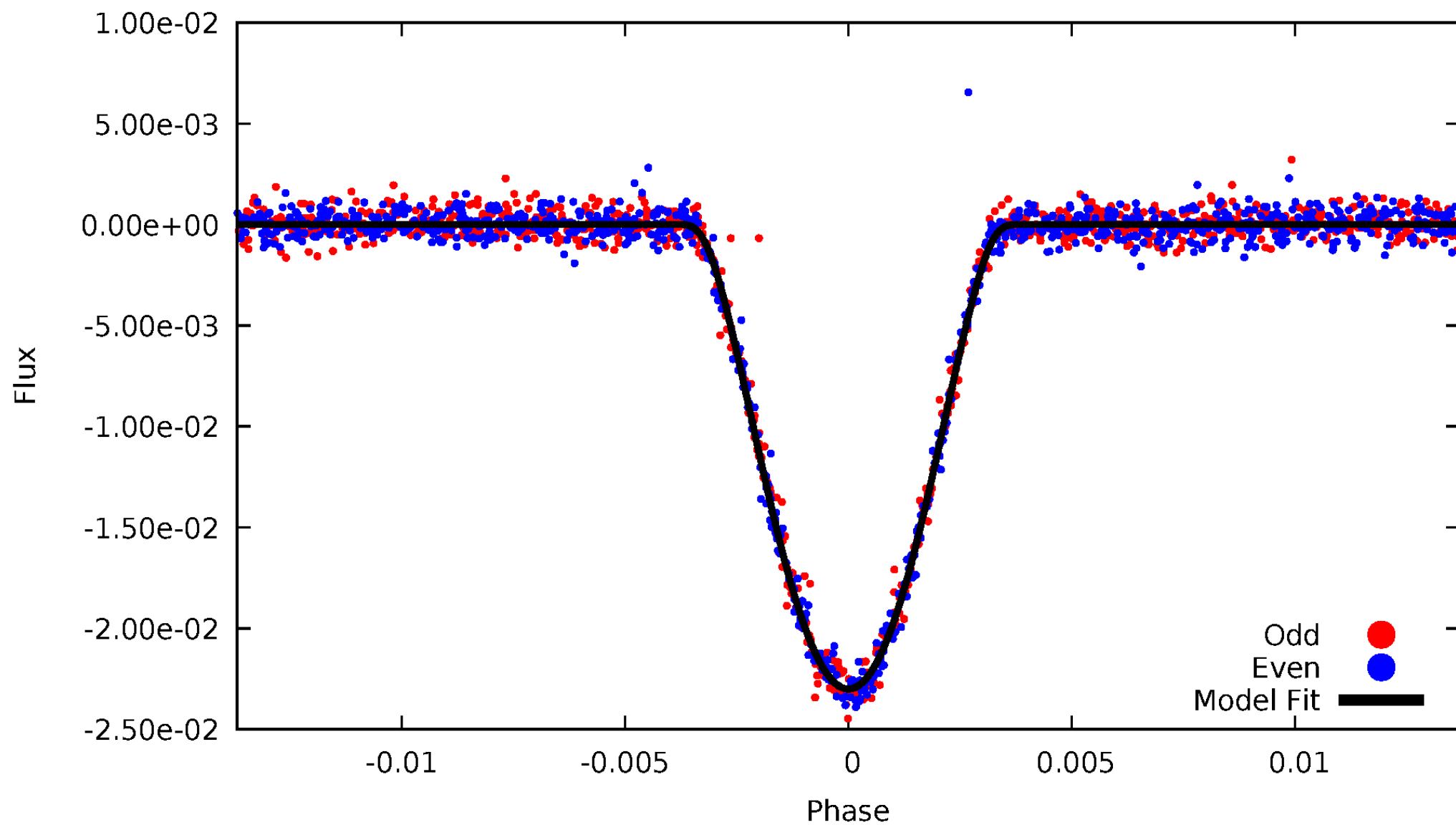


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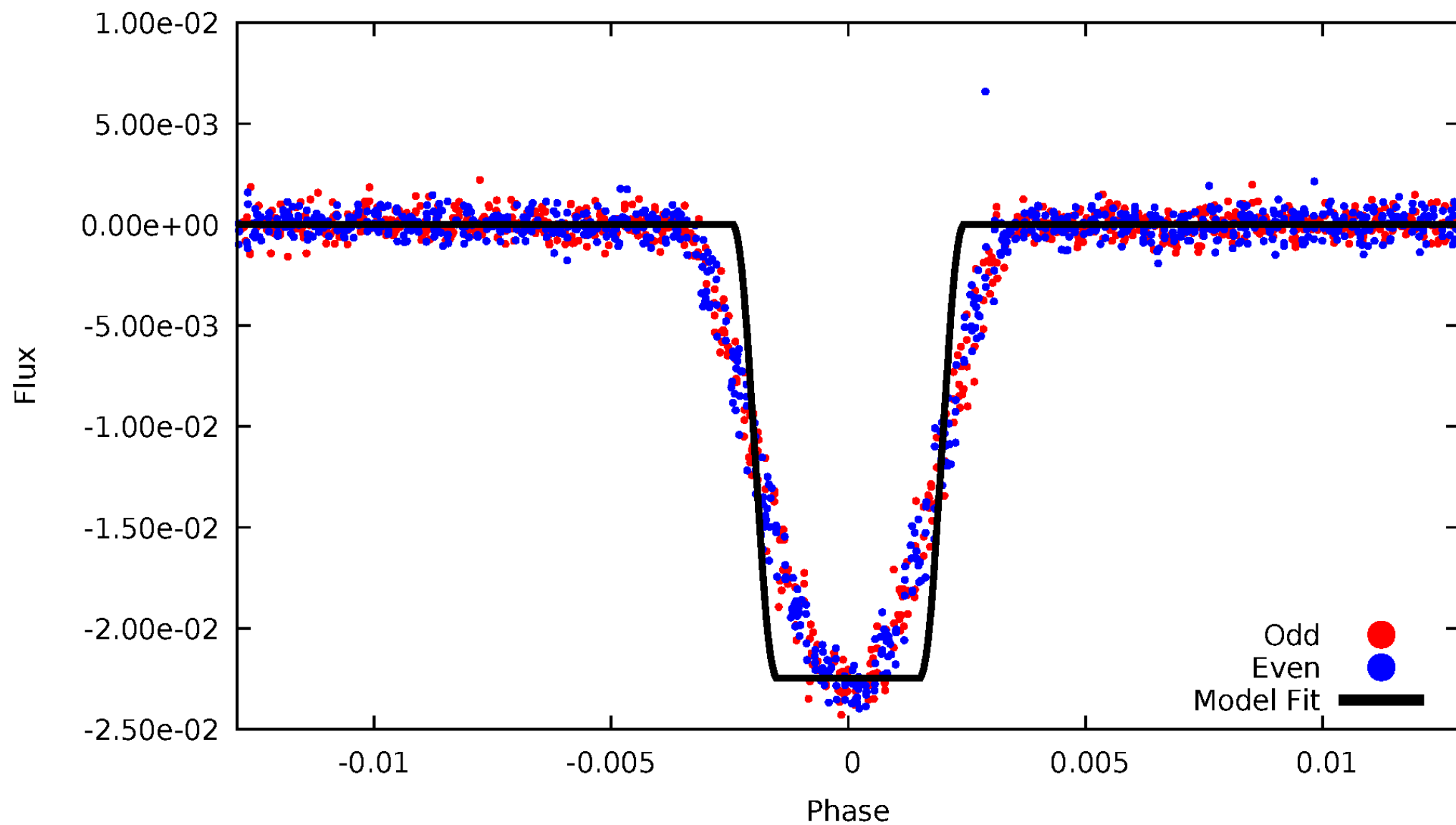
DV Odd/Even

TCE 008183389-02



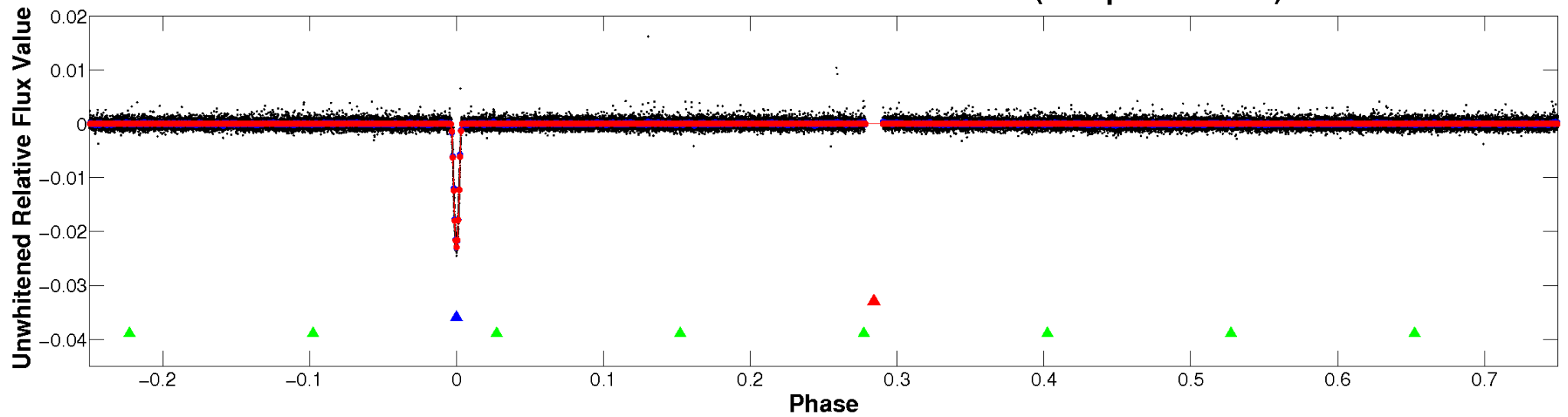
ALT Odd/Even

TCE 008183389-02

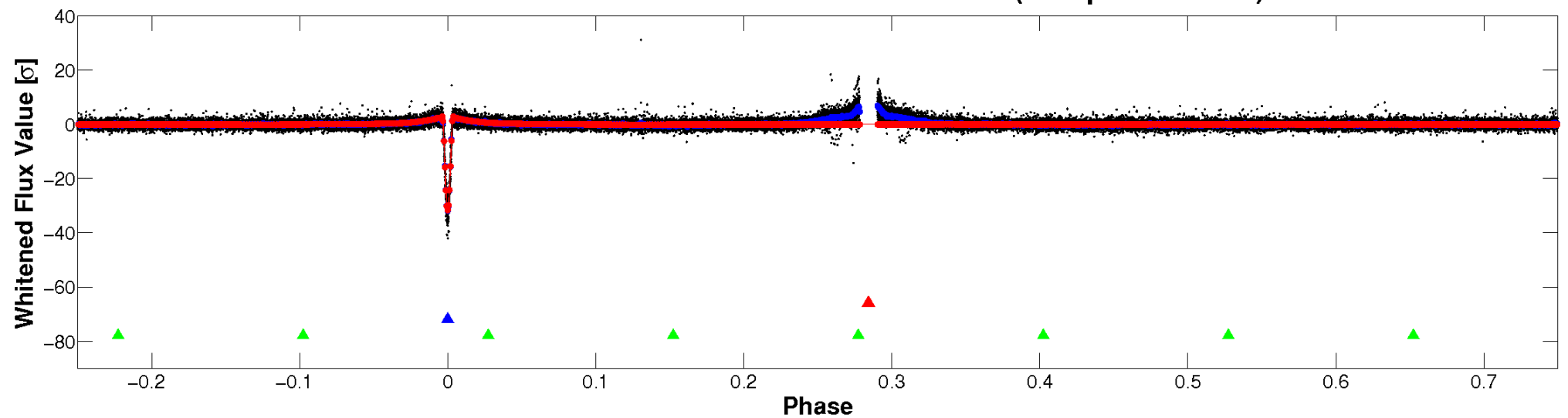


Non-Whitened Vs. Whitened Light Curve

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

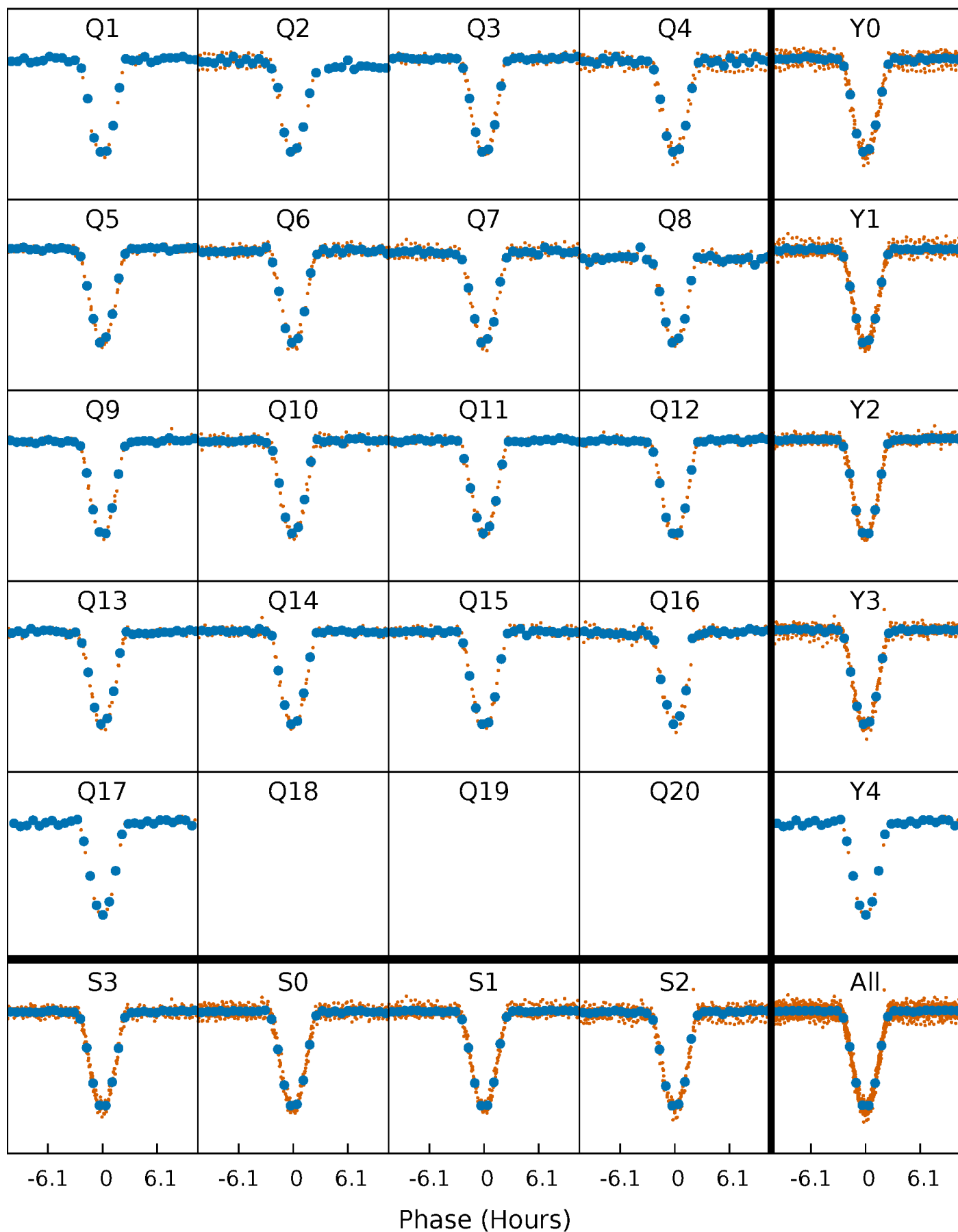


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



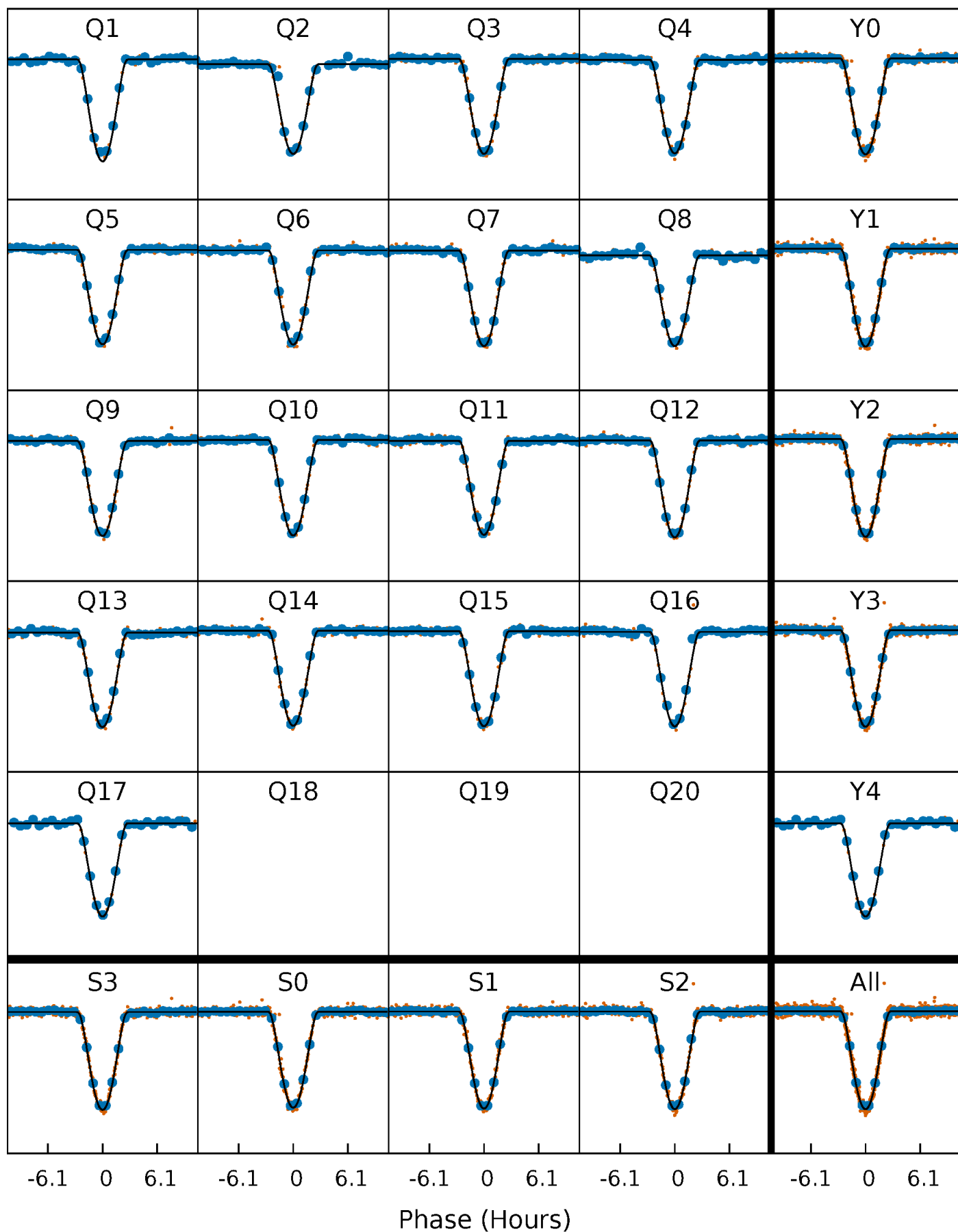
PDC Quarter-Phased Transit Curves

TCE 008183389-02 P= 32.440334 Days $T_0=133.034360$ (BKJD)



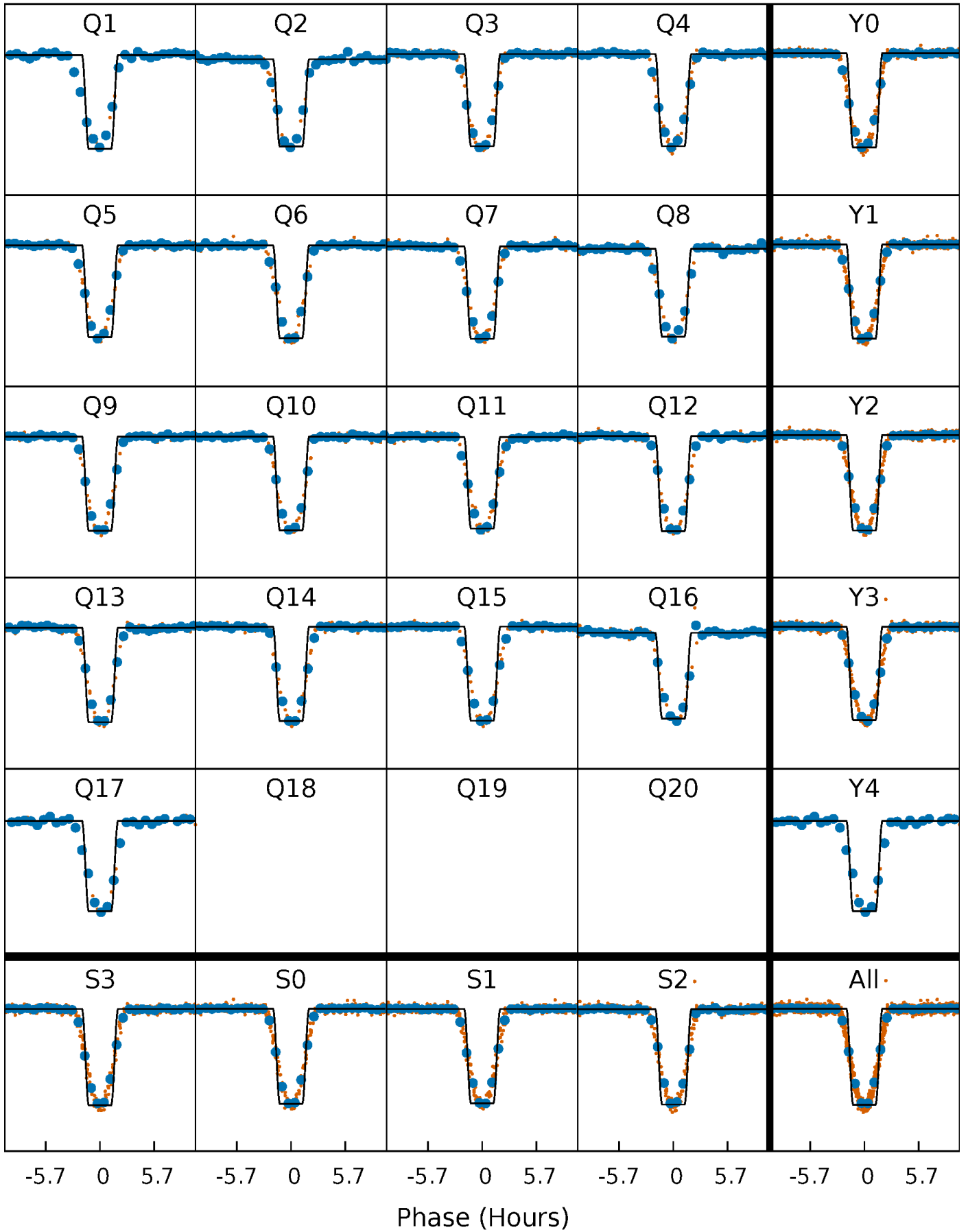
DV Quarter-Phased Transit Curves

TCE 008183389-02 P= 32.440334 Days $T_0=133.034360$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

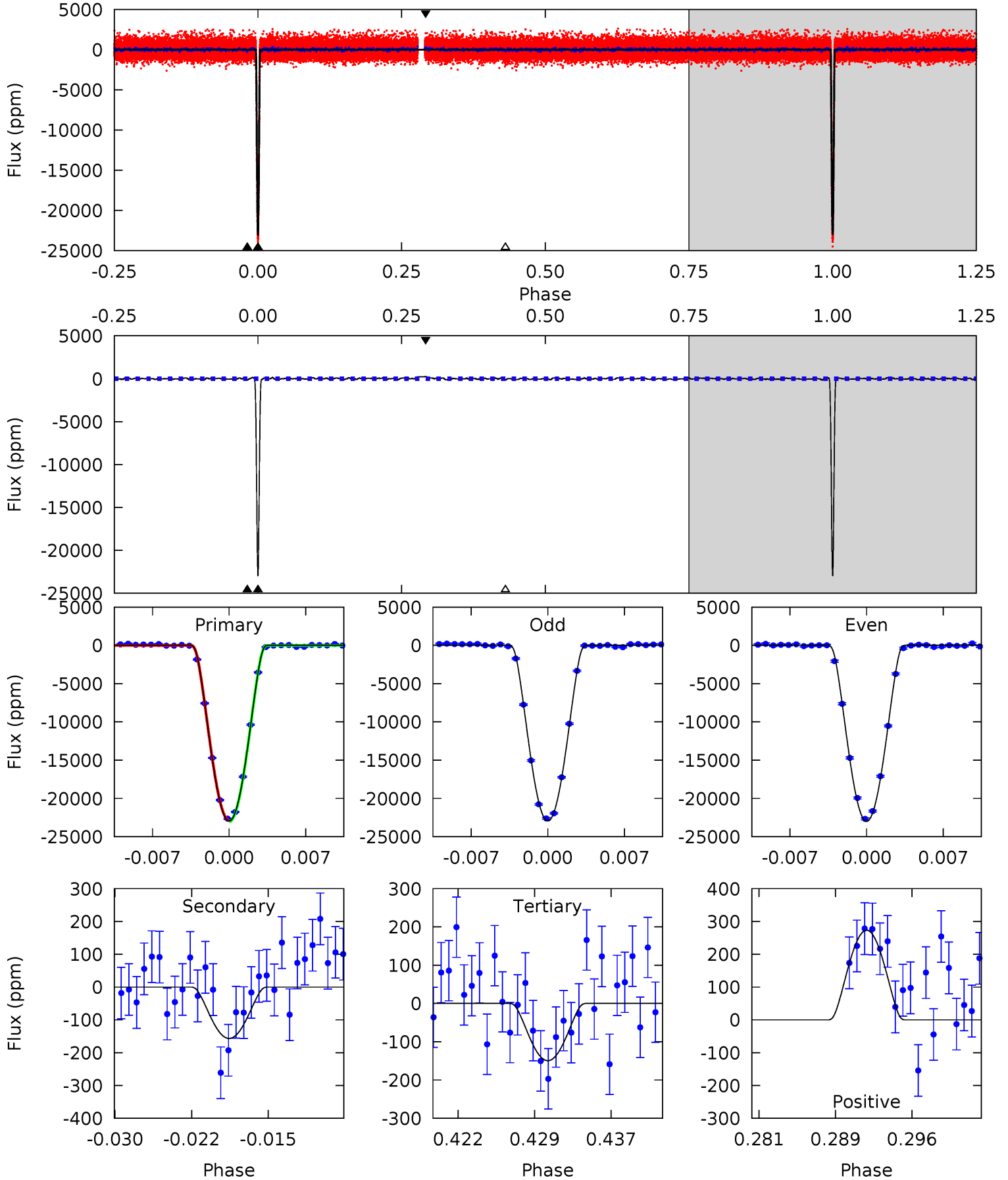
TCE 008183389-02 P= 32.440002 Days $T_0=133.041742$ (BKJD)



DV Model-Shift Uniqueness Test

008183389-02, P = 32.440334 Days, E = 100.594026 Days

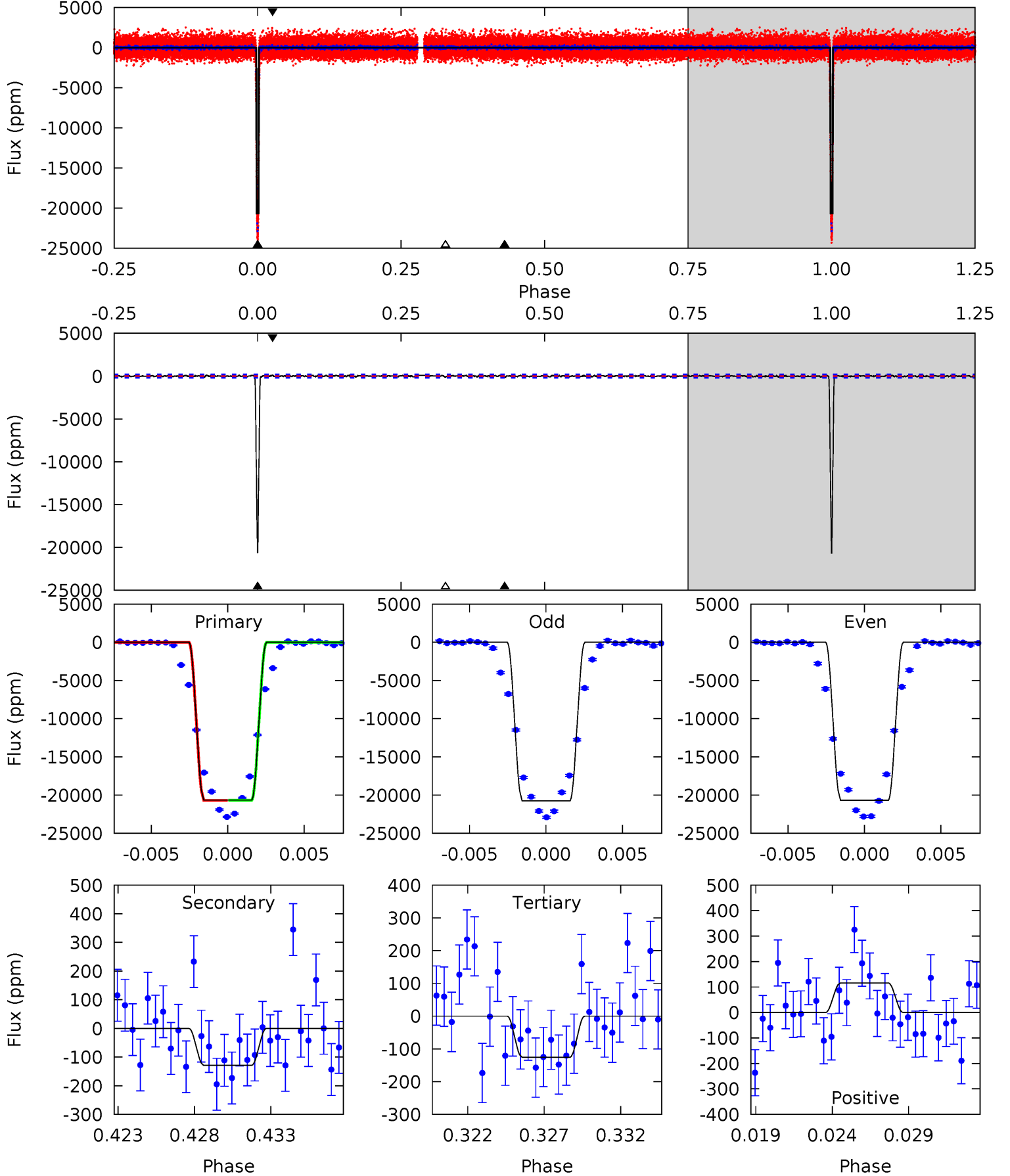
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
839.9	5.73	5.47	10.00	5.08	2.68	1.95	834.4	829.9	0.26	-4.27	0.85	0.98	0.01	3.09



Alt Model-Shift Uniqueness Test

008183389-02, P = 32.440002 Days, E = 100.601740 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
580.4	3.62	3.53	3.26	5.16	2.82	1.06	576.8	577.1	0.09	0.36	1.12	1.00	0.01	0.39



Stellar Parameters For KIC 008183389

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5081^{+151}_{-151}	$4.578^{+0.077}_{-0.044}$	$-0.500^{+0.300}_{-0.300}$	$0.696^{+0.067}_{-0.067}$	$0.668^{+0.088}_{-0.038}$	$2.796^{+0.882}_{-0.466}$
	+3%/-3%	+2%/-1%	+60%/-60%	+10%/-10%	+13%/-6%	+32%/-17%
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 008183389-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-157 ± 27	$15.84^{+1.50}_{-1.53}$	622^{+24}_{-23}	2172^{+67}_{-63}	11^{+3}_{-2}
Alt.	-129 ± 36	$11.40^{+1.24}_{-1.26}$	621^{+27}_{-24}	2287^{+100}_{-97}	17^{+7}_{-5}

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

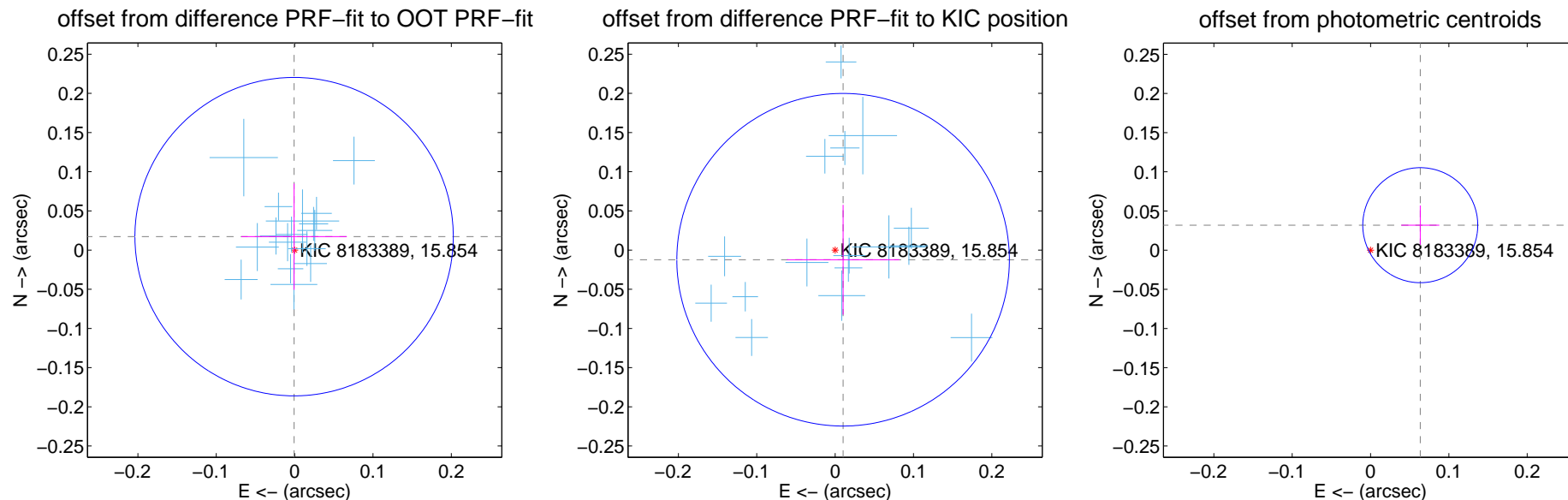
DV Centroid Data

Supplemental centroid analysis for 008183389-02. Kepler magnitude: 15.85. Transit SNR 424.86

There are 16 quarters with good PRF difference image offsets

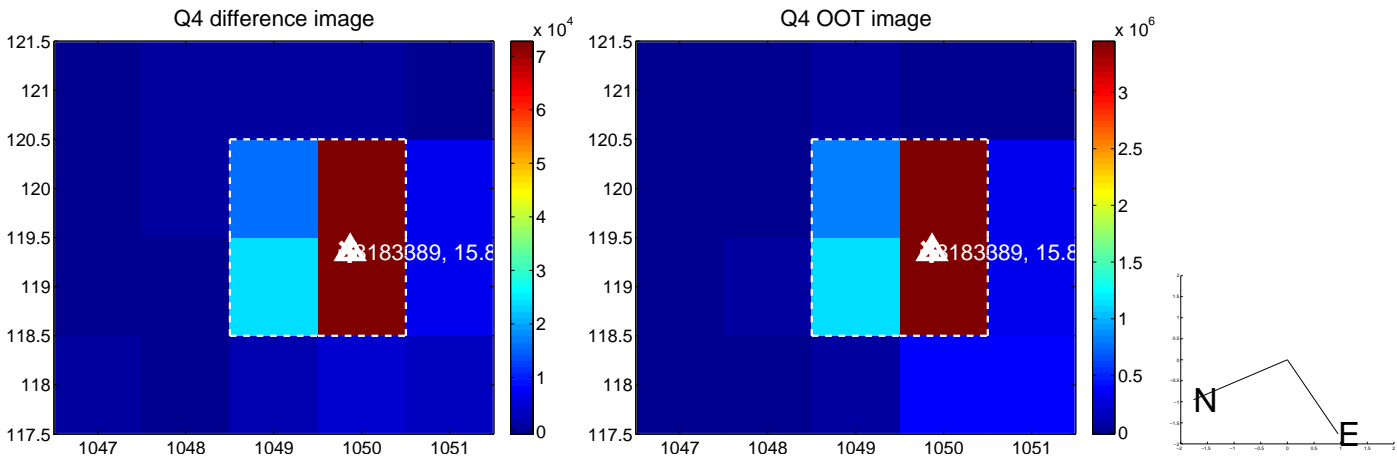
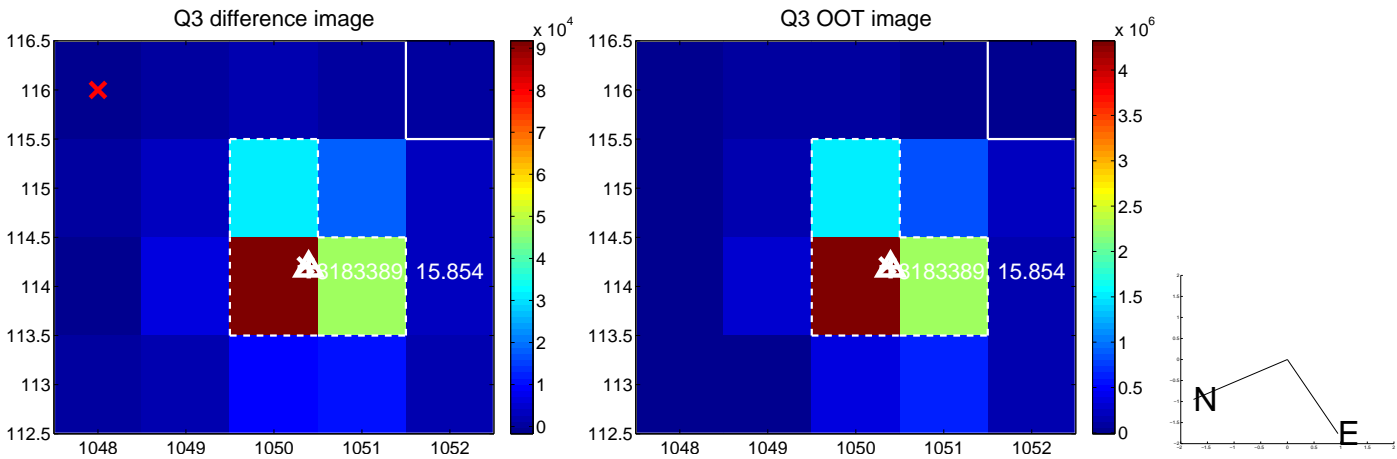
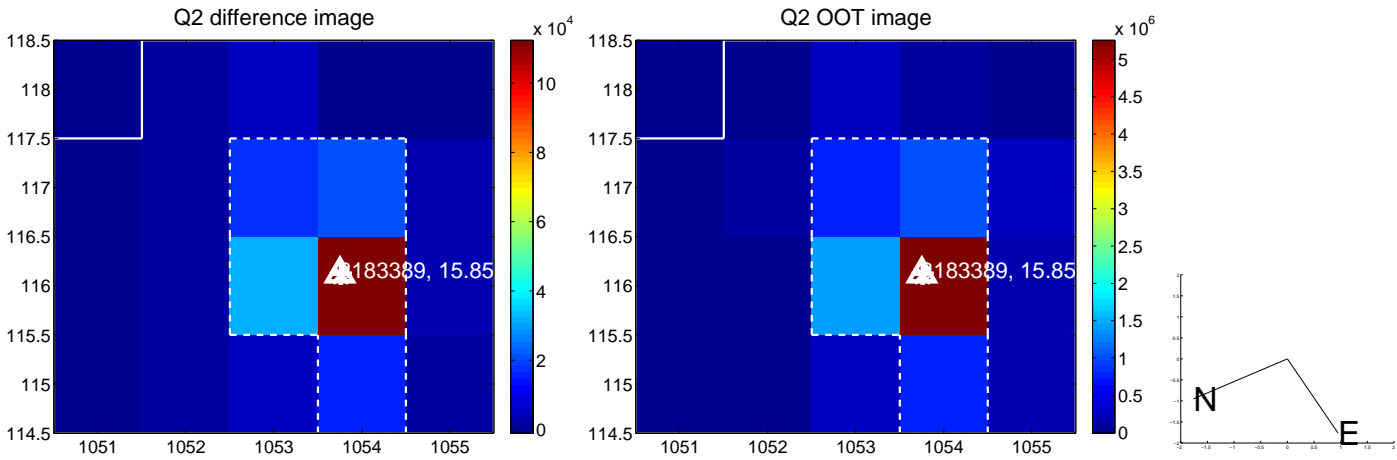
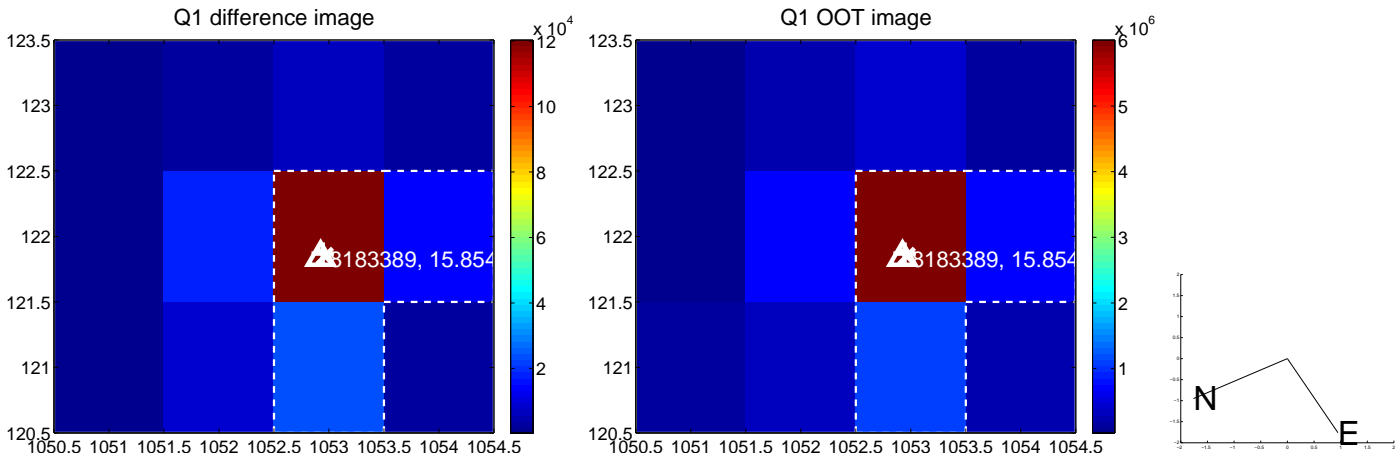
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.017 ± 0.068	0.25	0.001 ± 0.067	0.017 ± 0.068
PRF-fit source offset from KIC position	0.016 ± 0.071	0.23	-0.010 ± 0.072	-0.012 ± 0.070
photometric centroid source offset	0.07 ± 0.02	2.90	-0.06 ± 0.02	0.03 ± 0.03

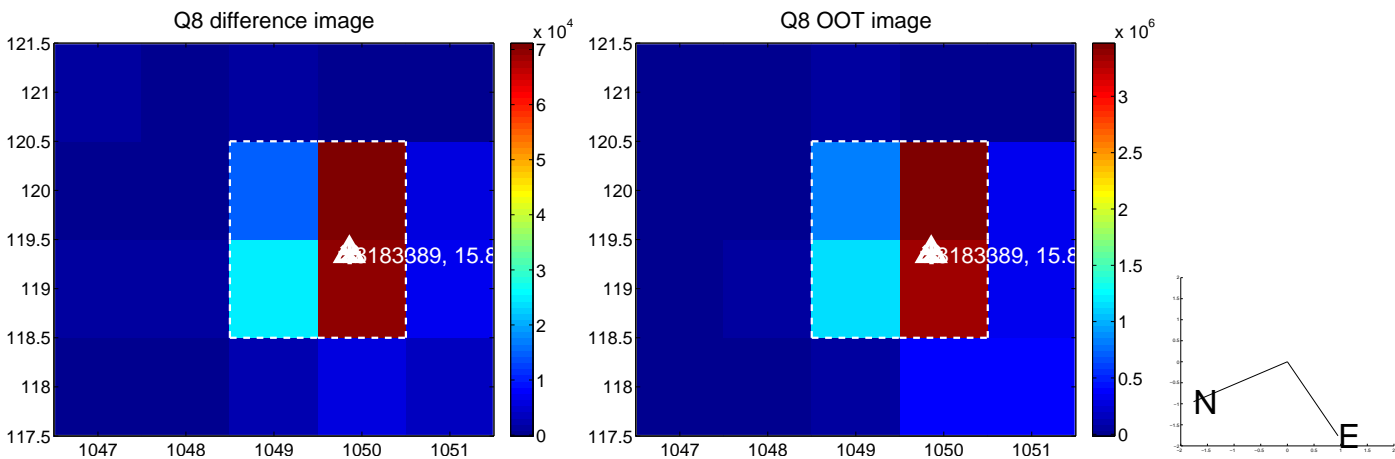
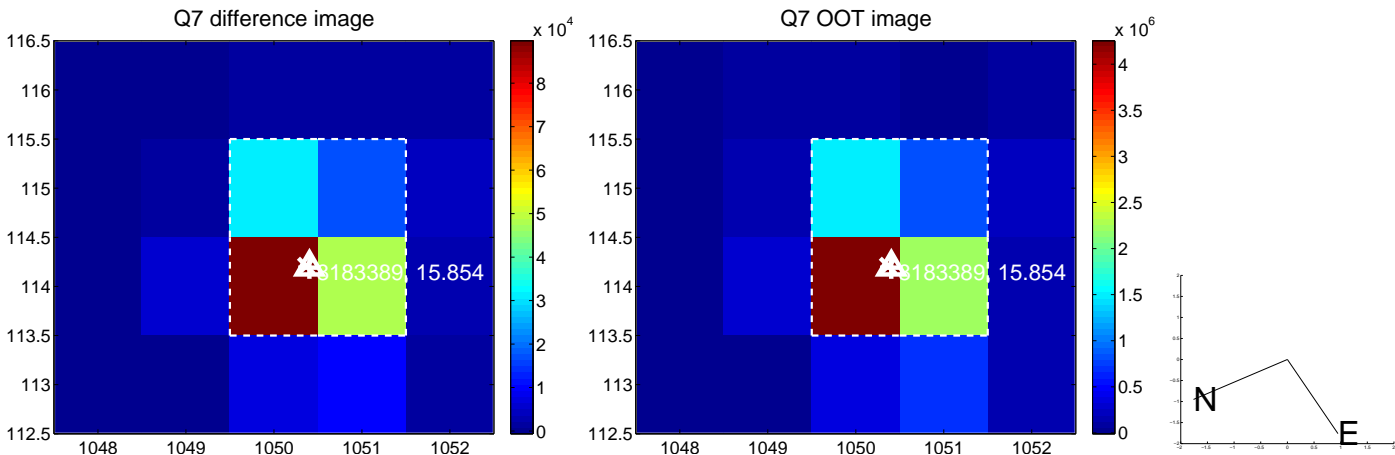
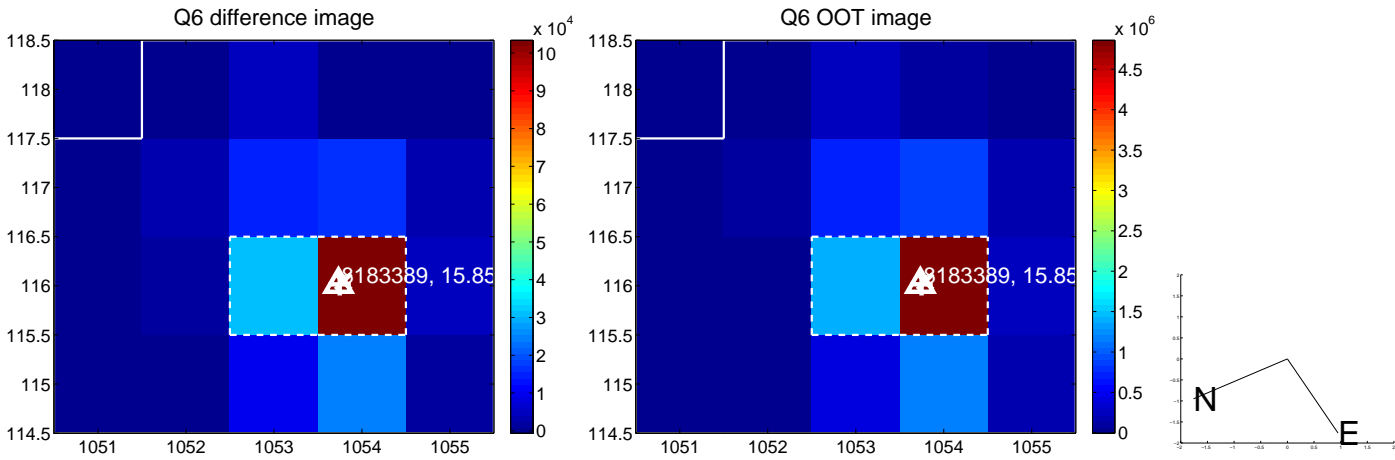
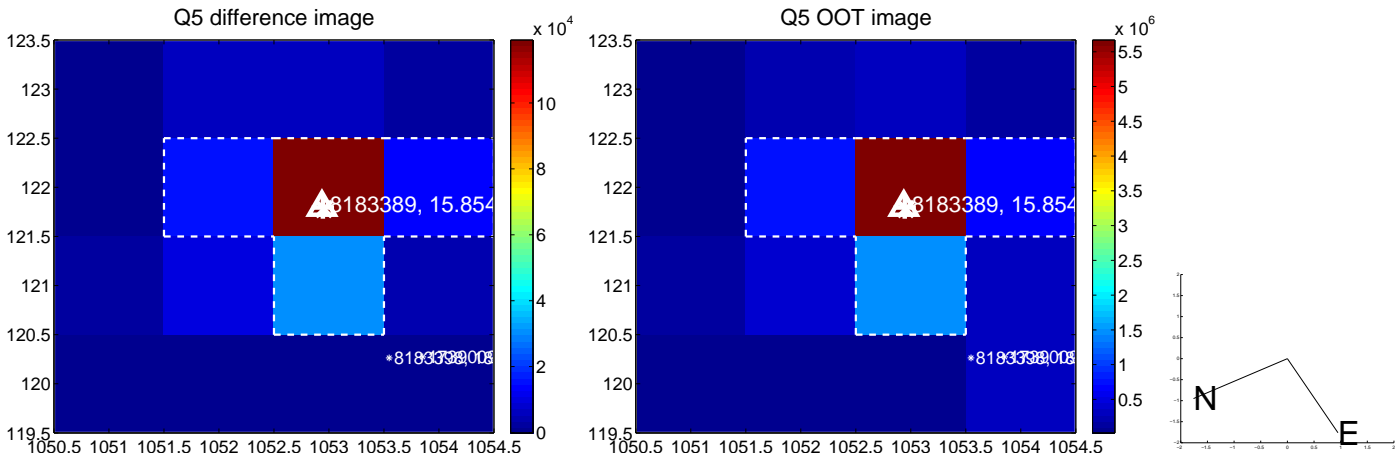


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

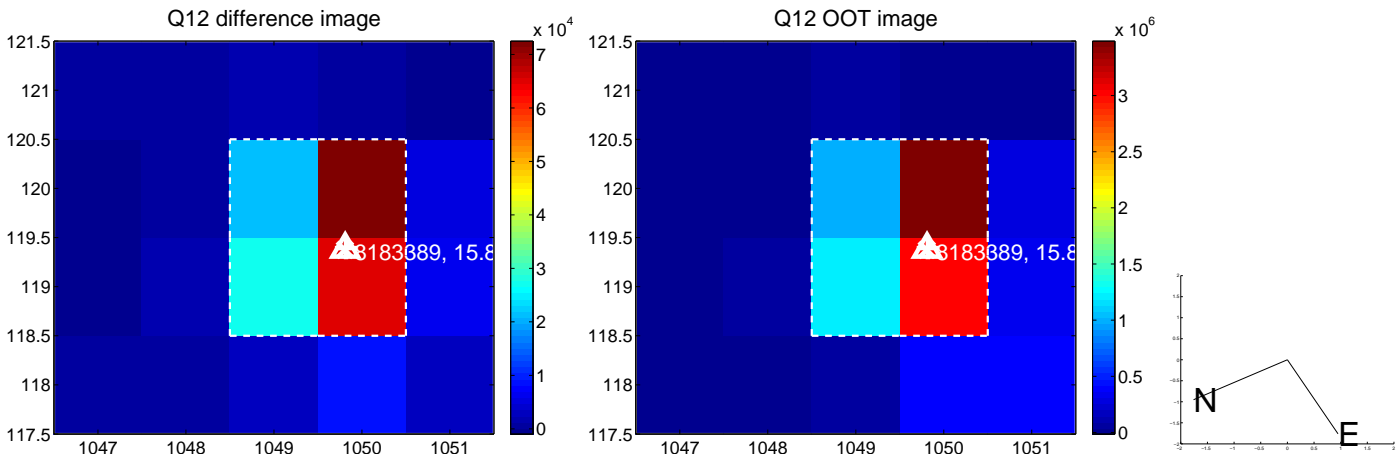
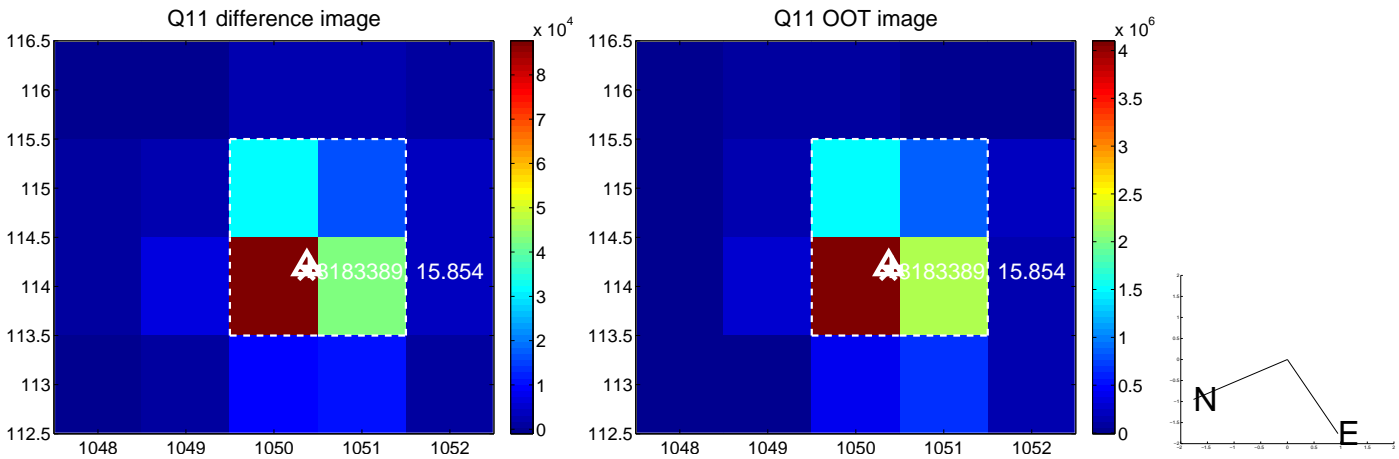
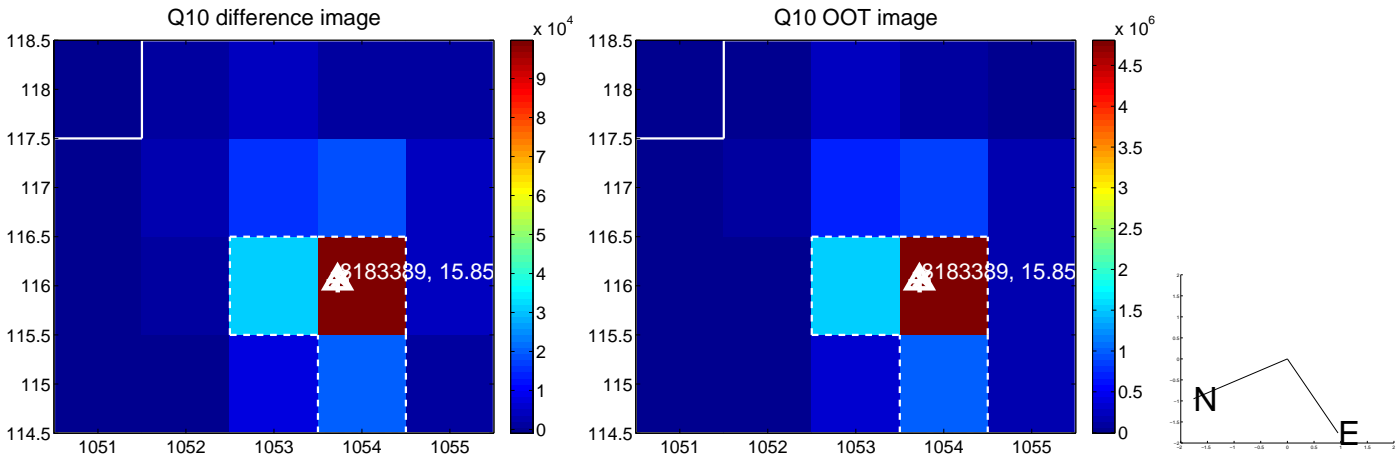
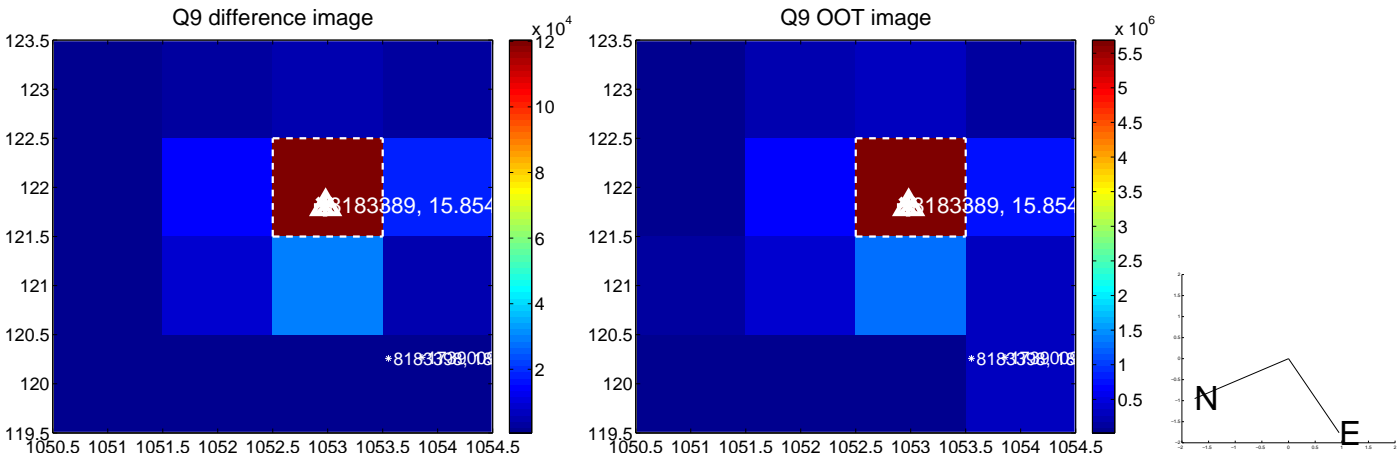
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



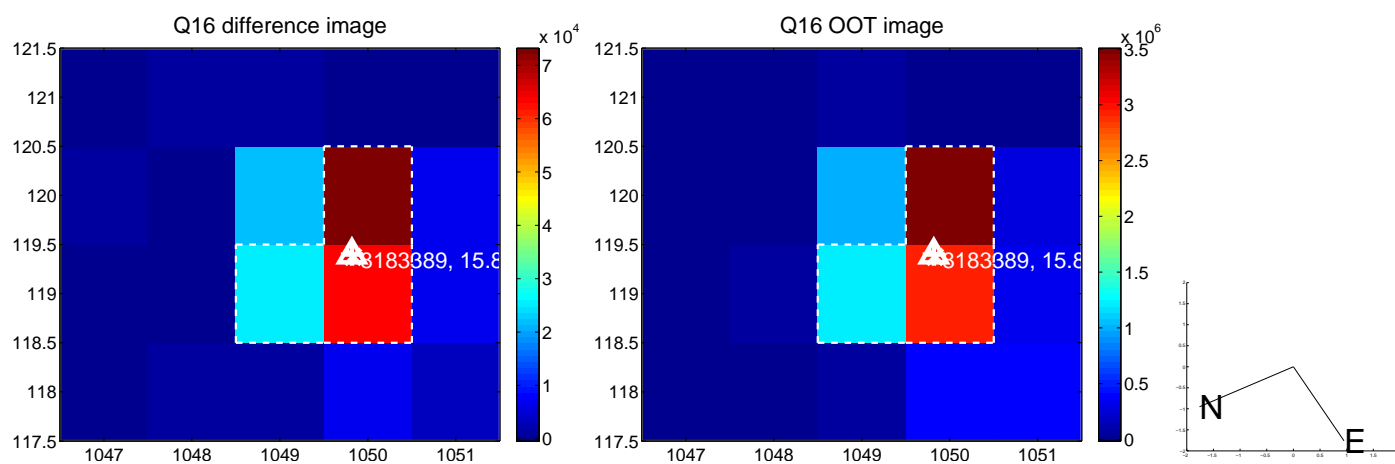
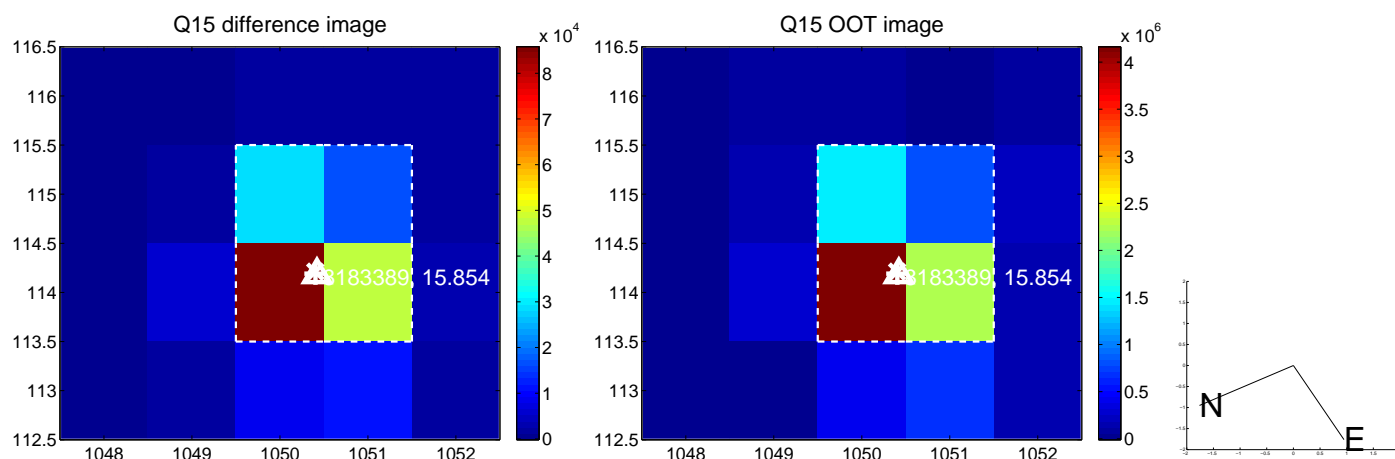
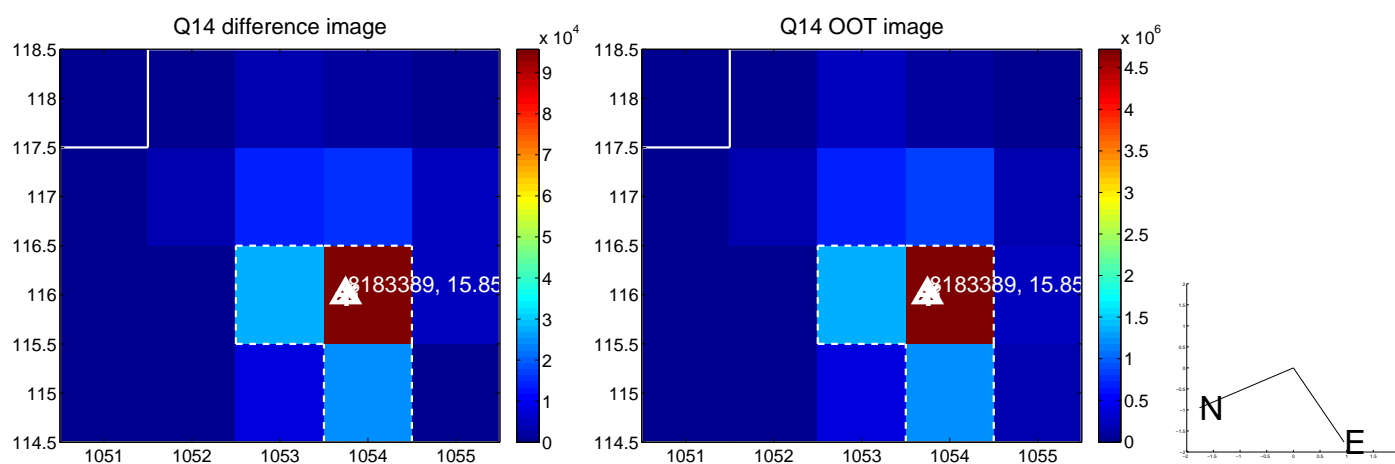
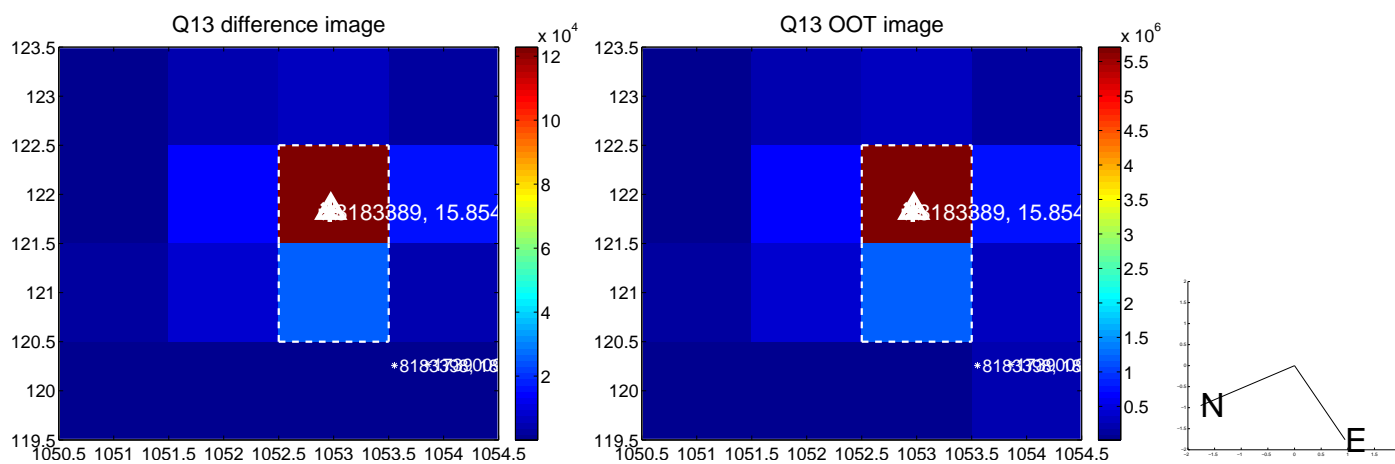
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



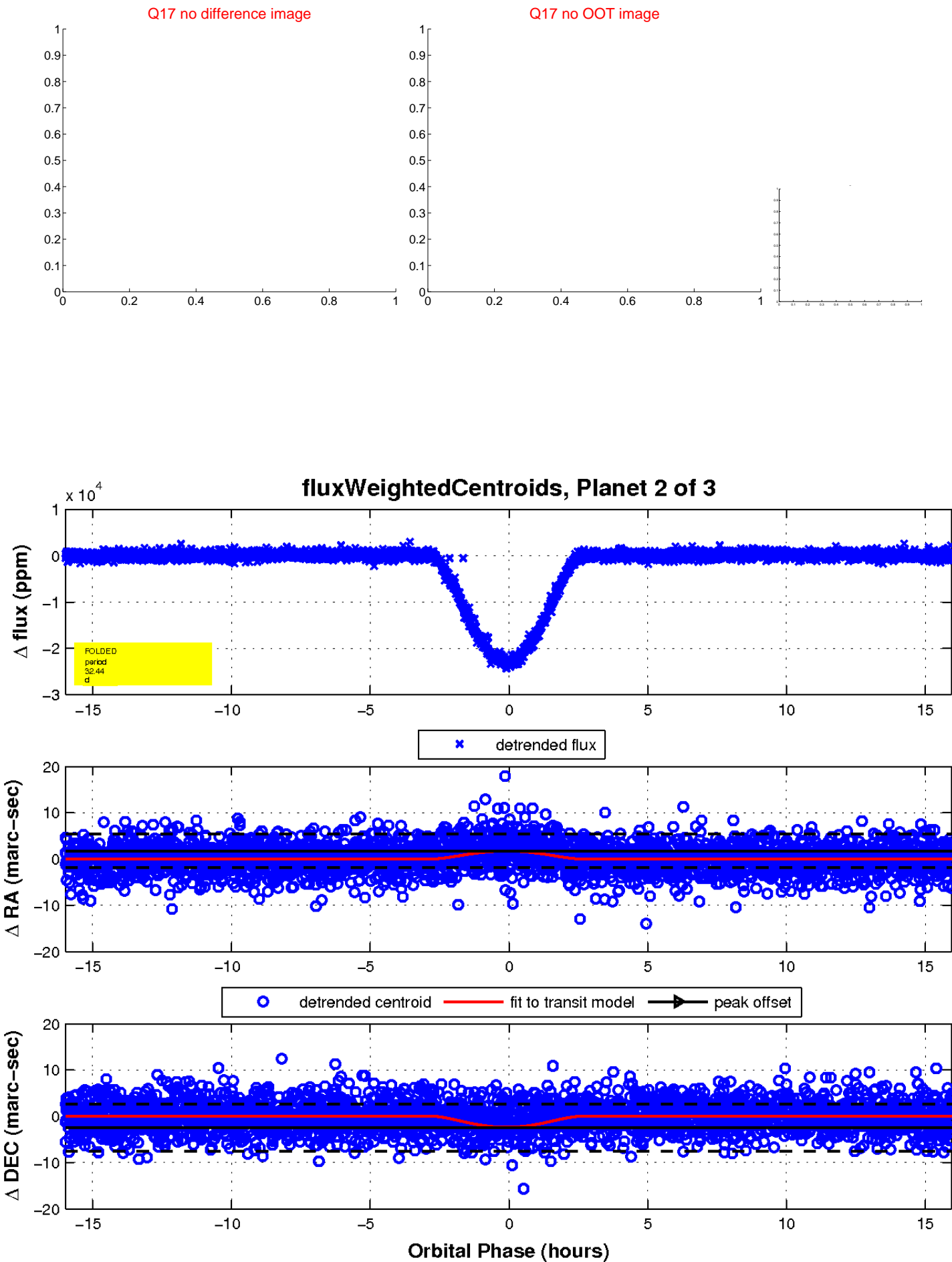
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

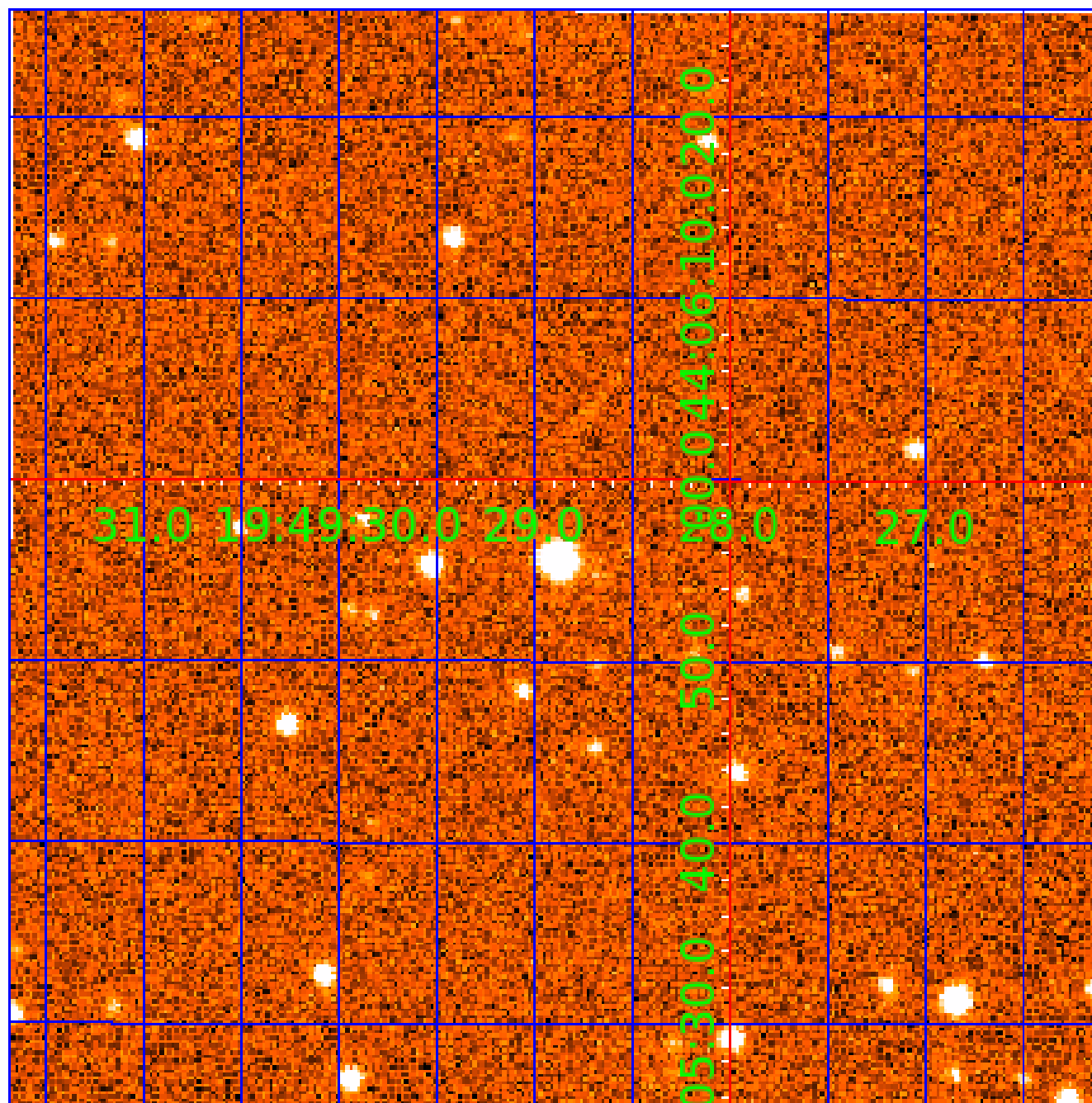


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008183389

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})
008183389-01	OBS	6986.01	32.440568	142.250780	282915.2	3.000	4610.7	-1.0	0.70	5081	37.28	9.54
008183389-02	OBS	No	32.440334	133.034360	23010.0	5.326	447.5	424.9	0.70	5081	15.84	9.54
008183389-03	OBS	No	4.055005	133.928965	10717.0	15.000	140.2	-1.0	0.70	5081	7.04	152.68

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008183389-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—HAS_SEC_TCE—CENT_NOFITS
008183389-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
008183389-03	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_POS_ALT—RESIDUAL_TCE—CENT_NOFITS—HALO_GHOST

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.

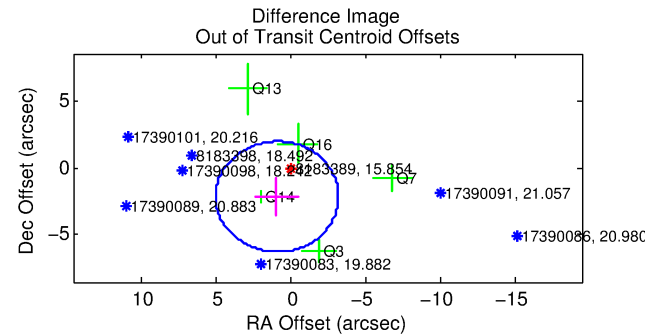
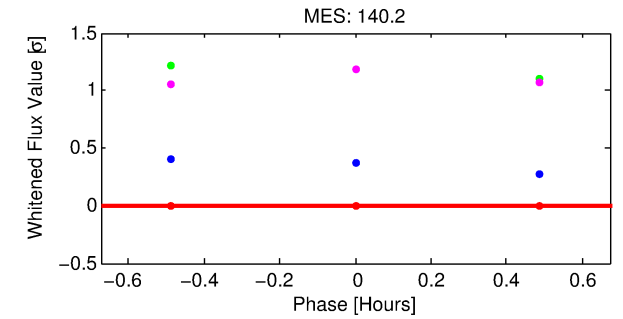
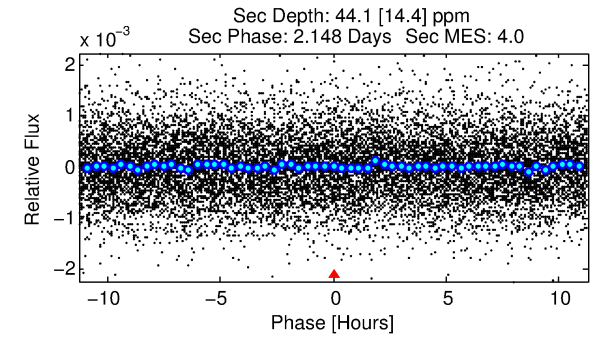
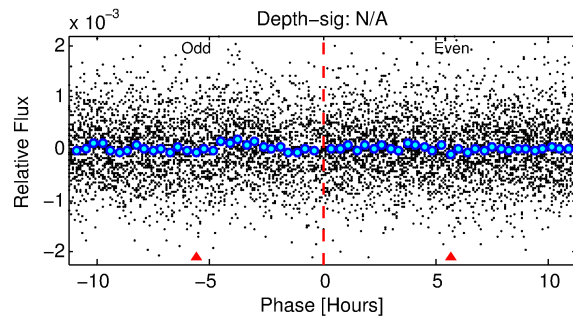
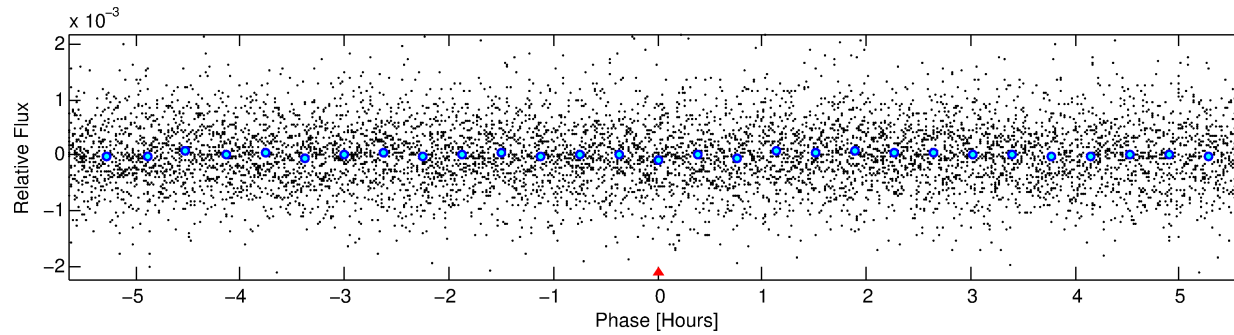
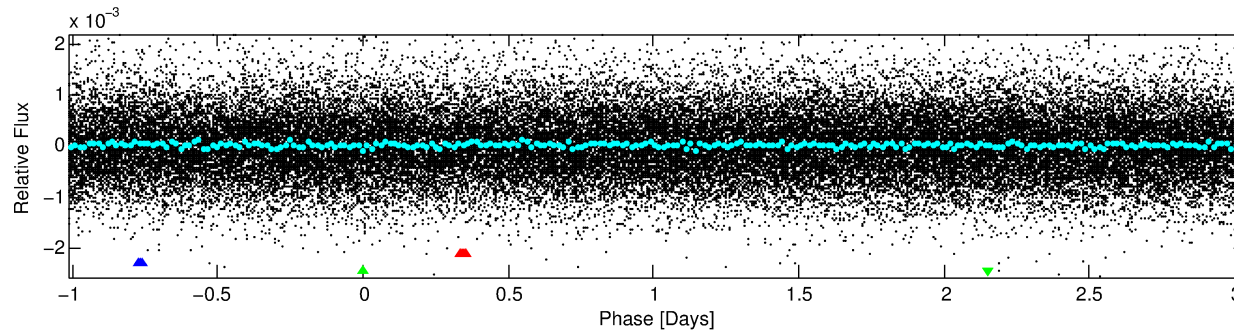
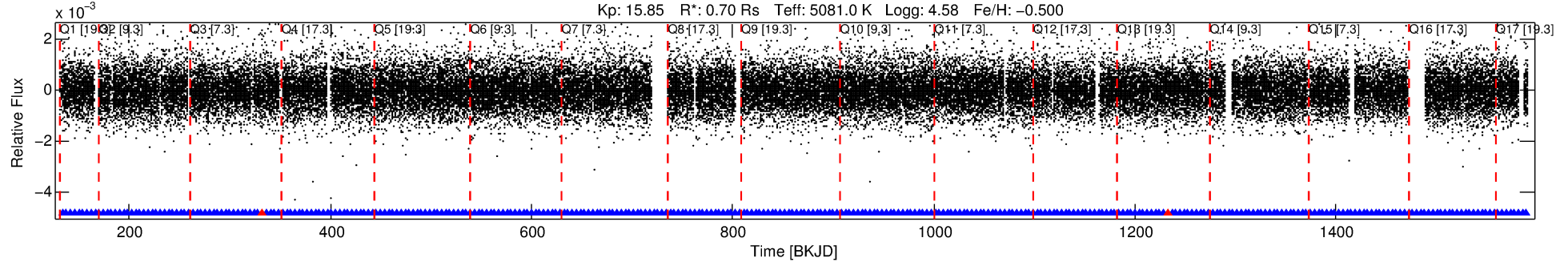
Ephemeris Match Information For 008183389-03

No Significant Match Found

DV One-Page Summary

KIC: 8183389 Candidate: 3 of 3 Period: 4.055 d
KOI: K06986 Corr: No Ephemeris Match

Kp: 15.85 R*: 0.70 Rs Teff: 5081.0 K Logg: 4.58 Fe/H: -0.500



TPS TCE Results:

Period = 4.05500 d
Epoch = 133.9290 BKJD

DV fit results are unavailable

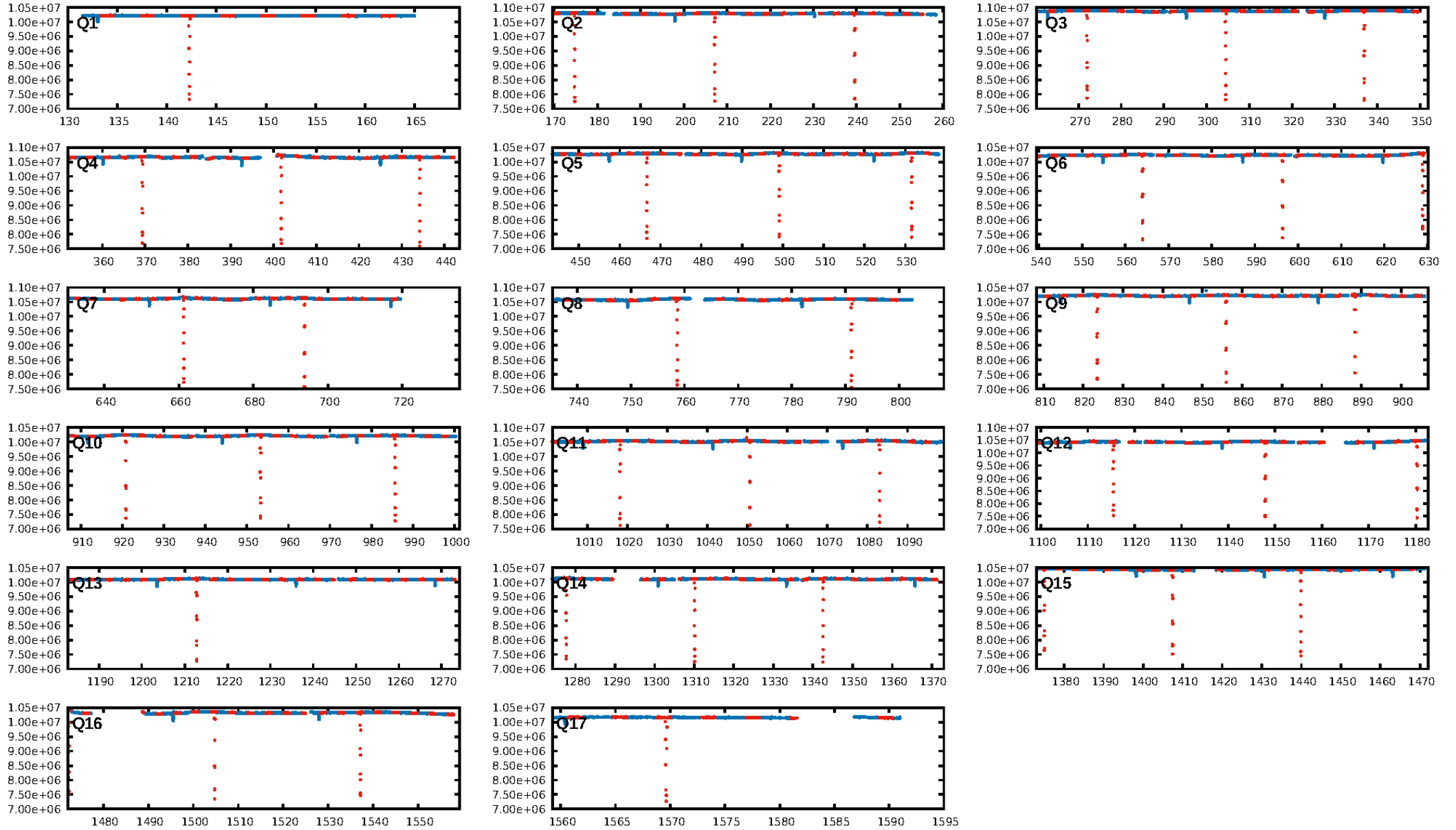
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [42.80σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 0.99 [314/316]
GhostDiagnostic-chr: 0.1588
Centroid-sig: 0.2%
Centroid-so: 12.880 arcsec [2.12σ]
OotOffset-rm: 2.321 arcsec [1.69σ]
KicOffset-rm: 2.292 arcsec [1.39σ]
OotOffset-st: 1/2/1/1 [5]
KicOffset-st: 1/2/1/1 [5]
DiffImageQuality-fgm: 0.20 [1/5]
DiffImageOverlap-fno: 1.00 [17/17]

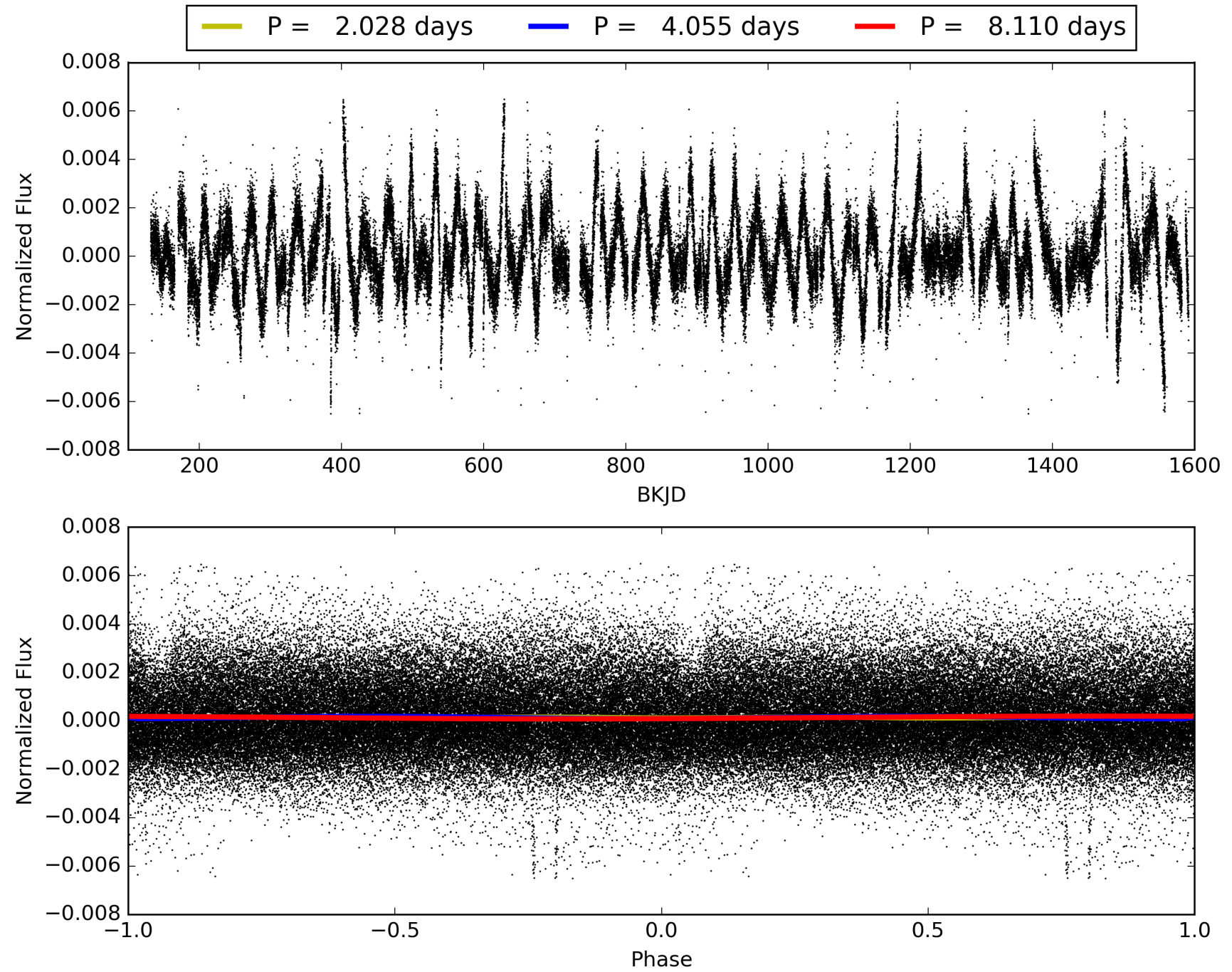
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 00:42:51 Z

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

TCE 008183389-03, PDC Light Curves

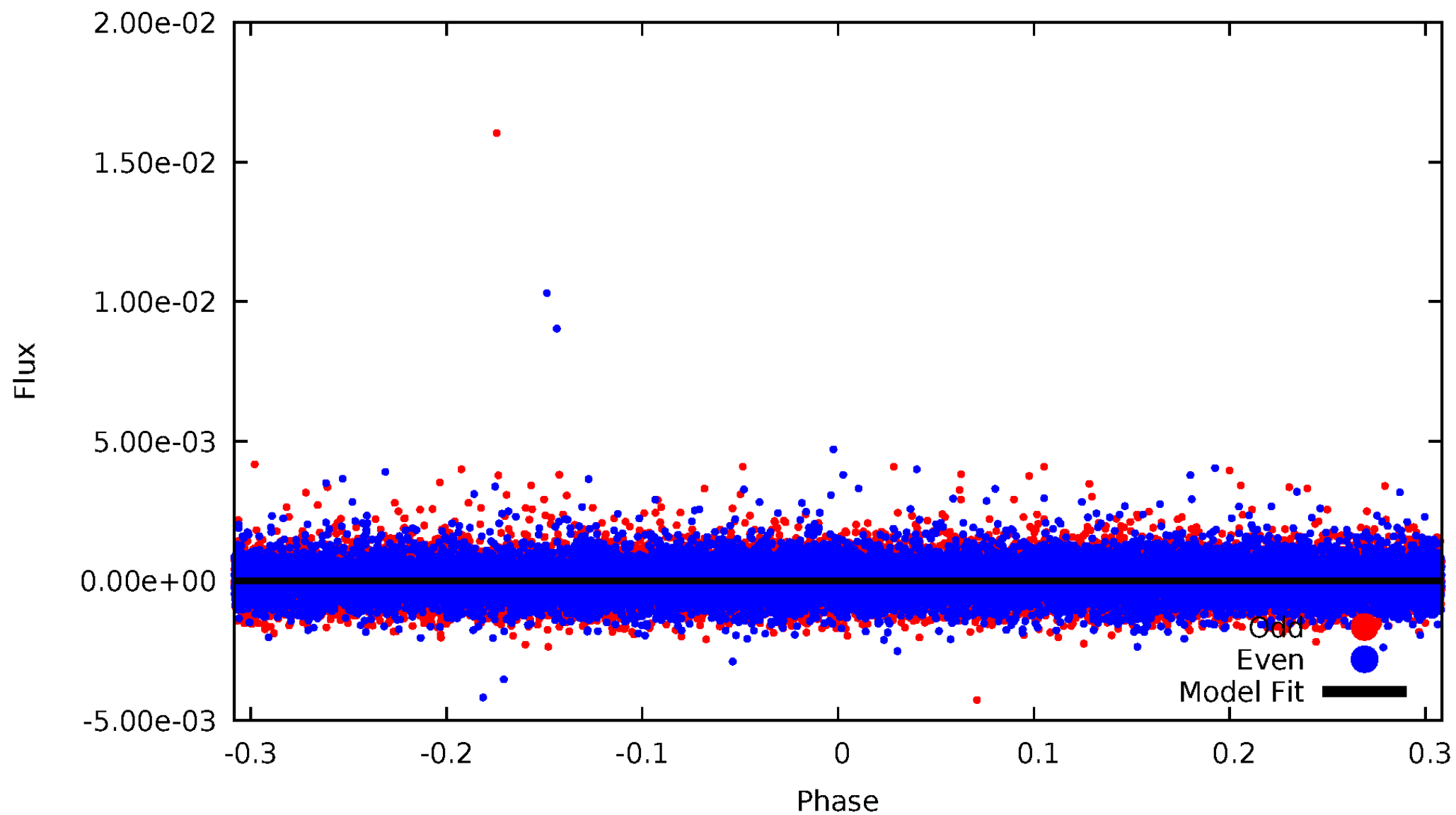


TCE 008183389-03



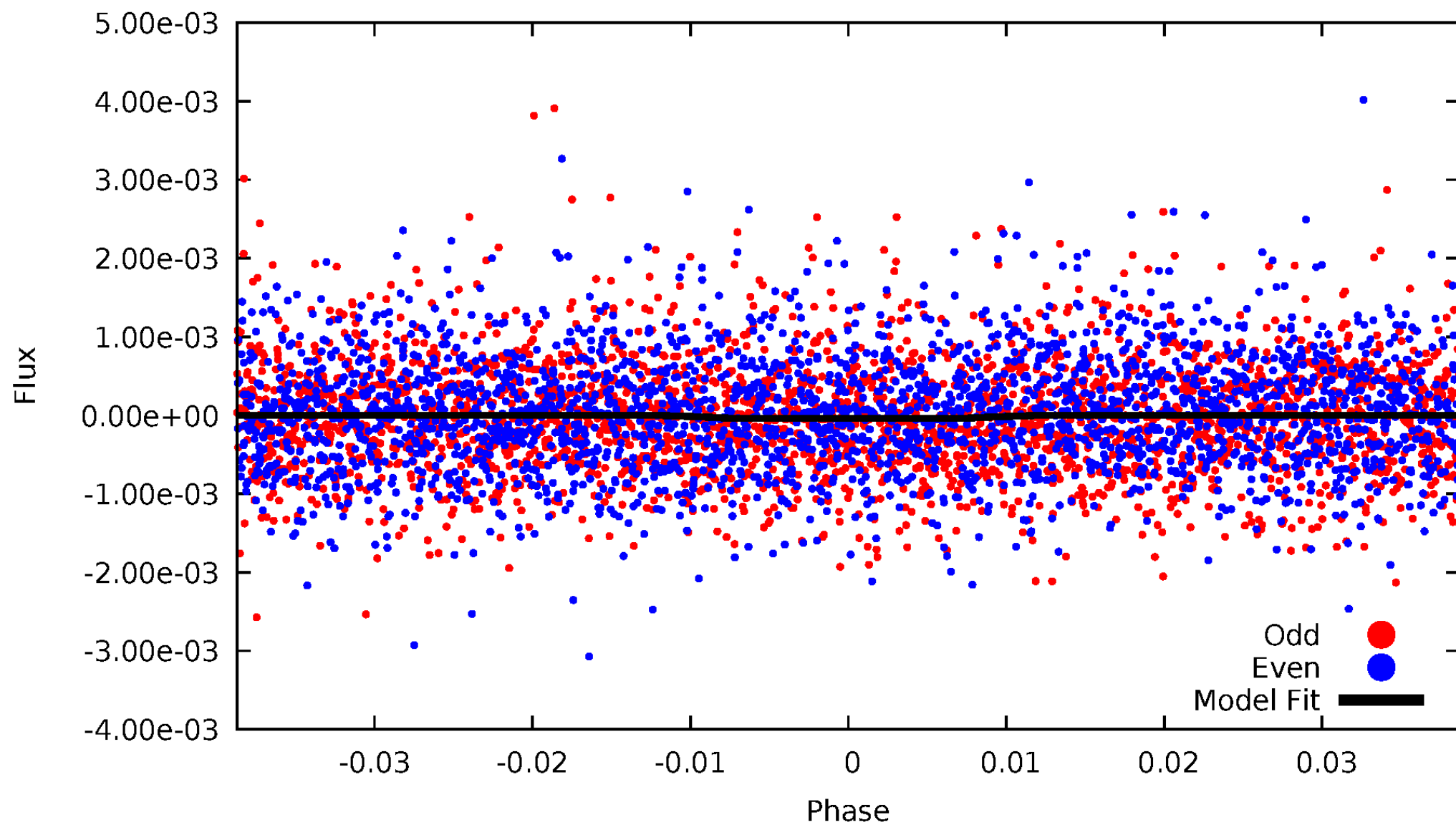
DV Odd/Even

TCE 008183389-03

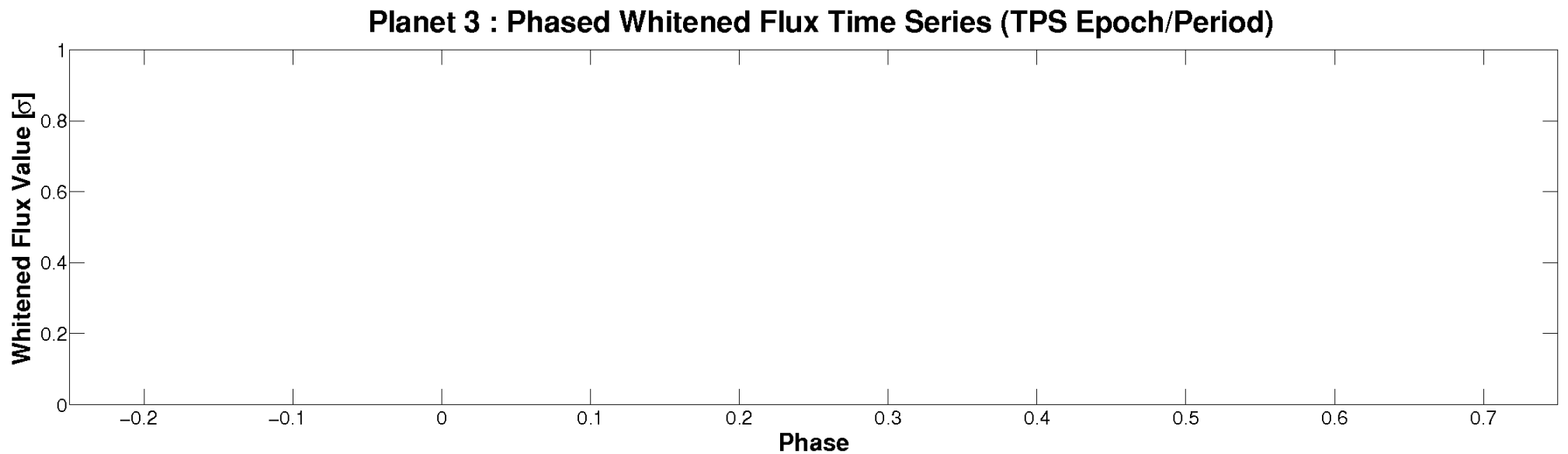
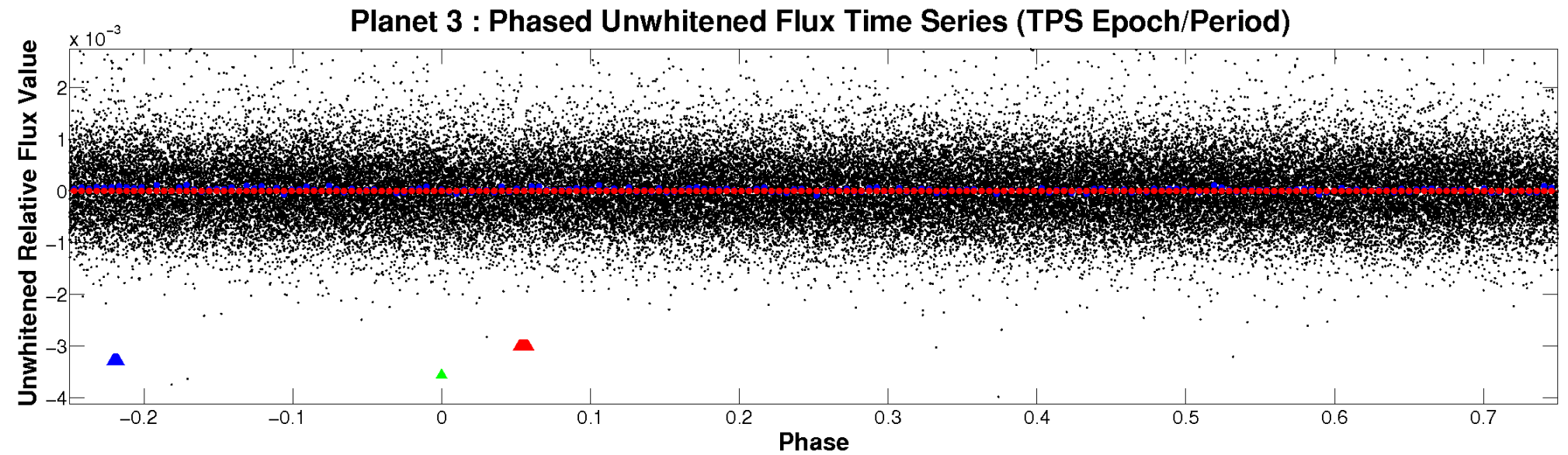


ALT Odd/Even

TCE 008183389-03

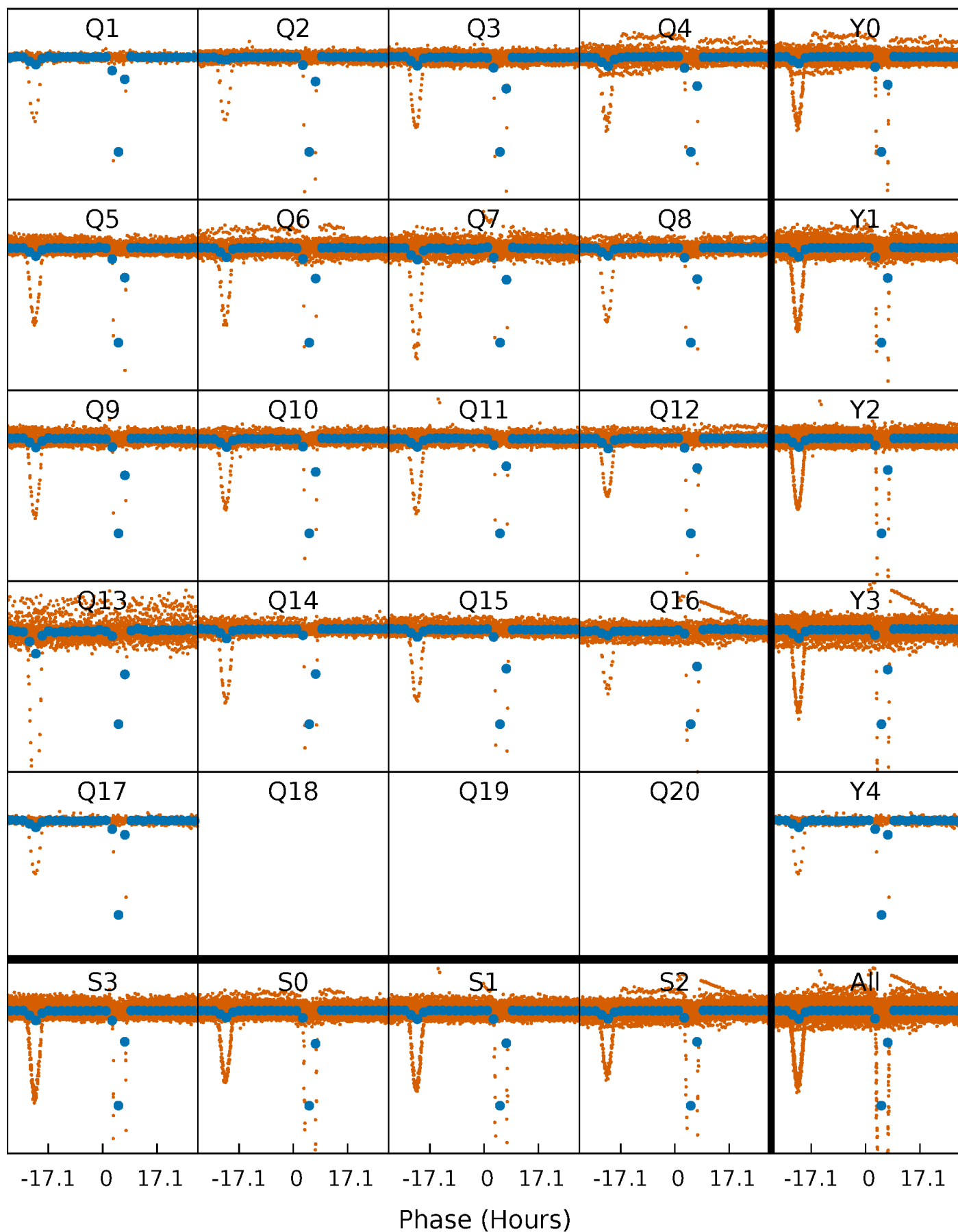


Non-Whitened Vs. Whitened Light Curve



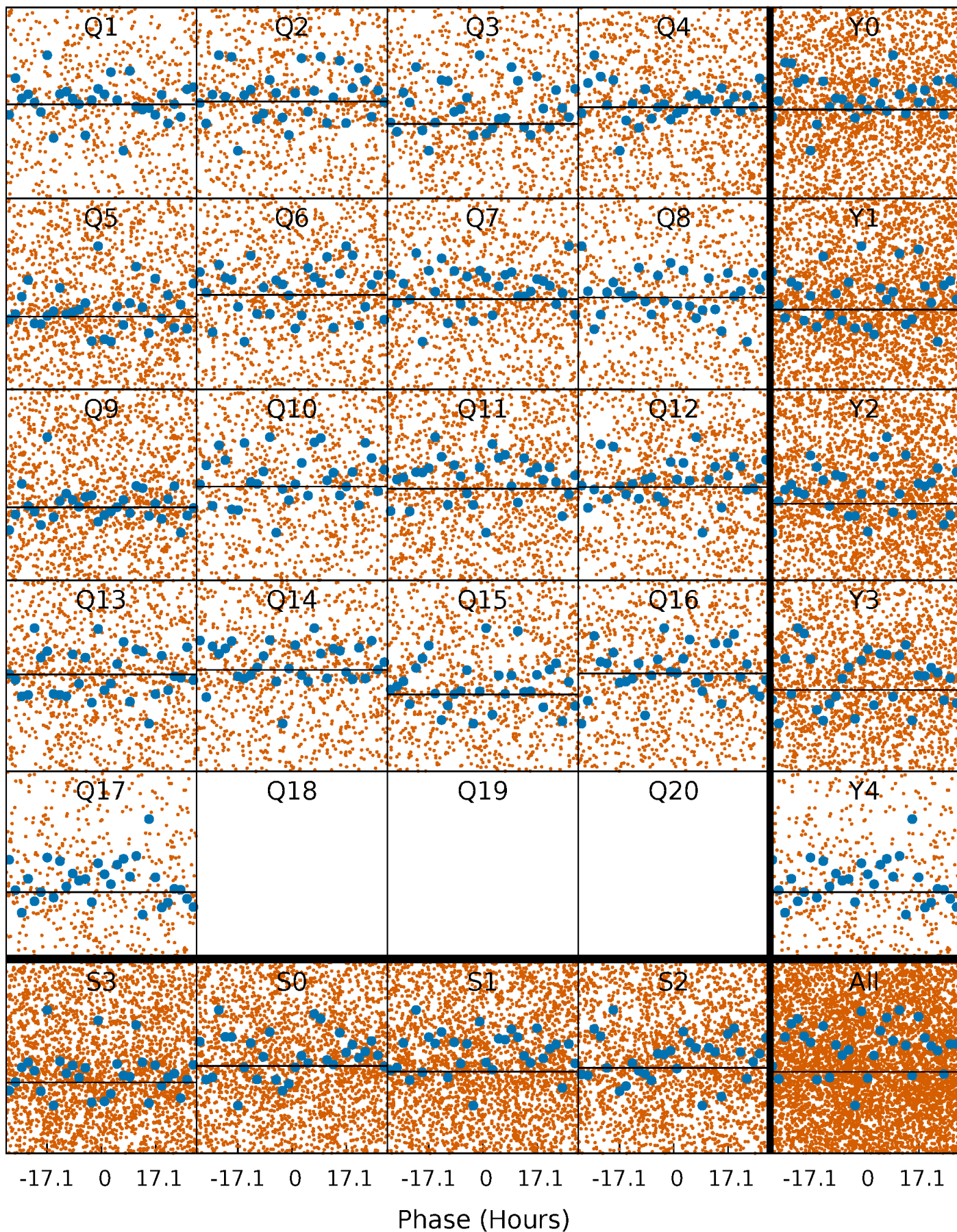
PDC Quarter-Phased Transit Curves

TCE 008183389-03 P= 4.055005 Days $T_0=133.928965$ (BKJD)



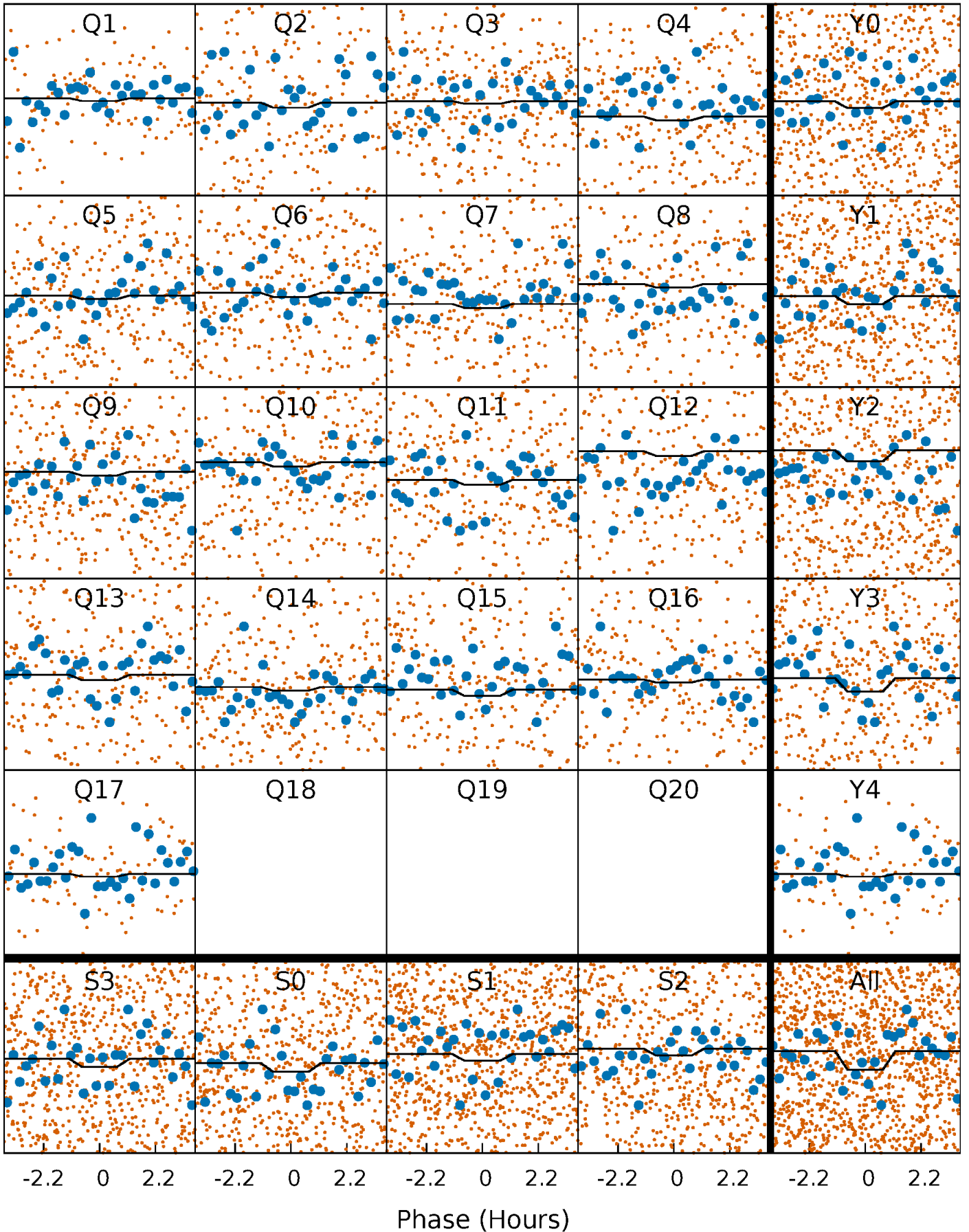
DV Quarter-Phased Transit Curves

TCE 008183389-03 P= 4.055005 Days $T_0=133.928965$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

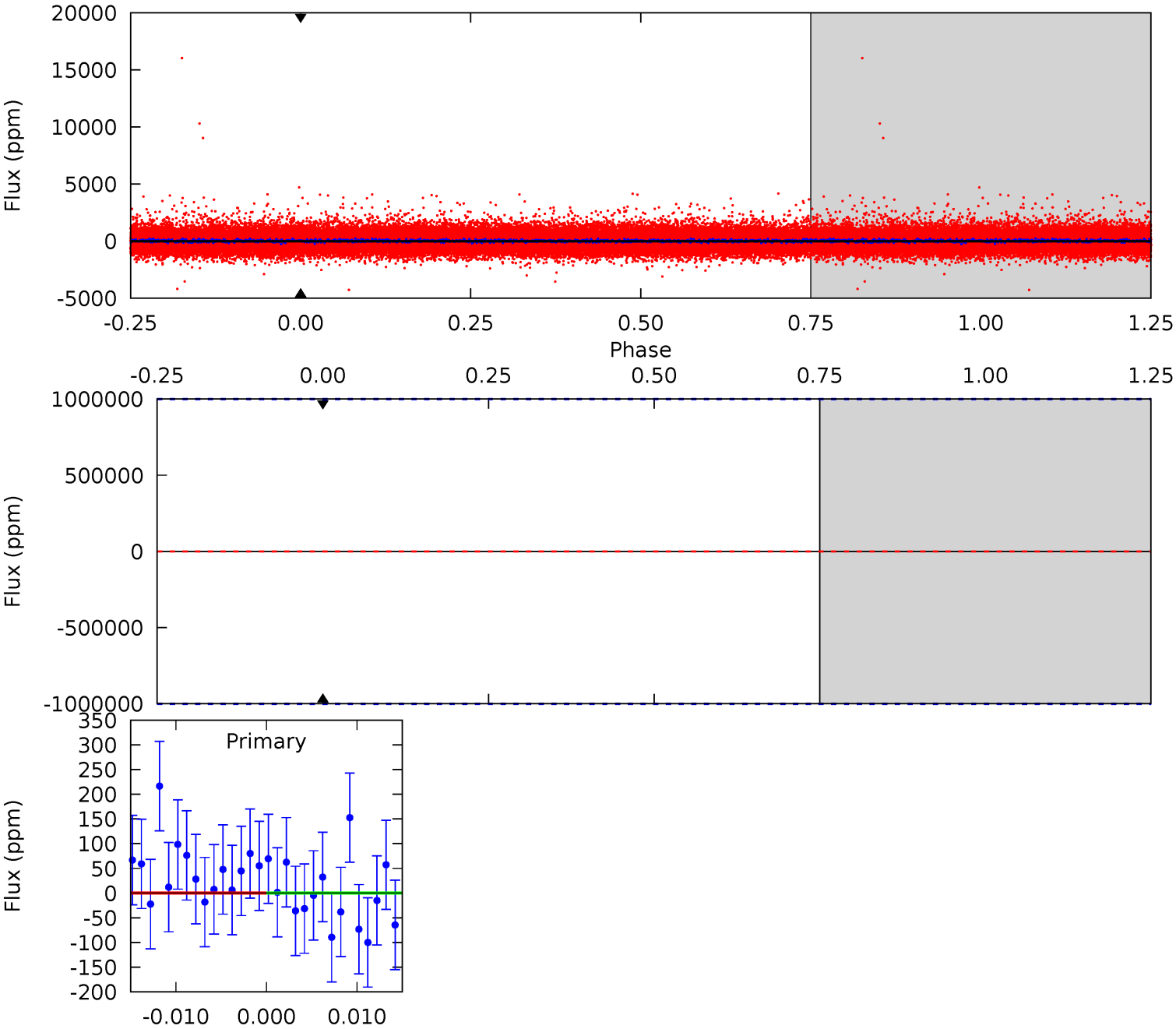
TCE 008183389-03 P= 4.055005 Days $T_0=133.807669$ (BKJD)



DV Model-Shift Uniqueness Test

008183389-03, P = 4.055005 Days, E = 129.873960 Days

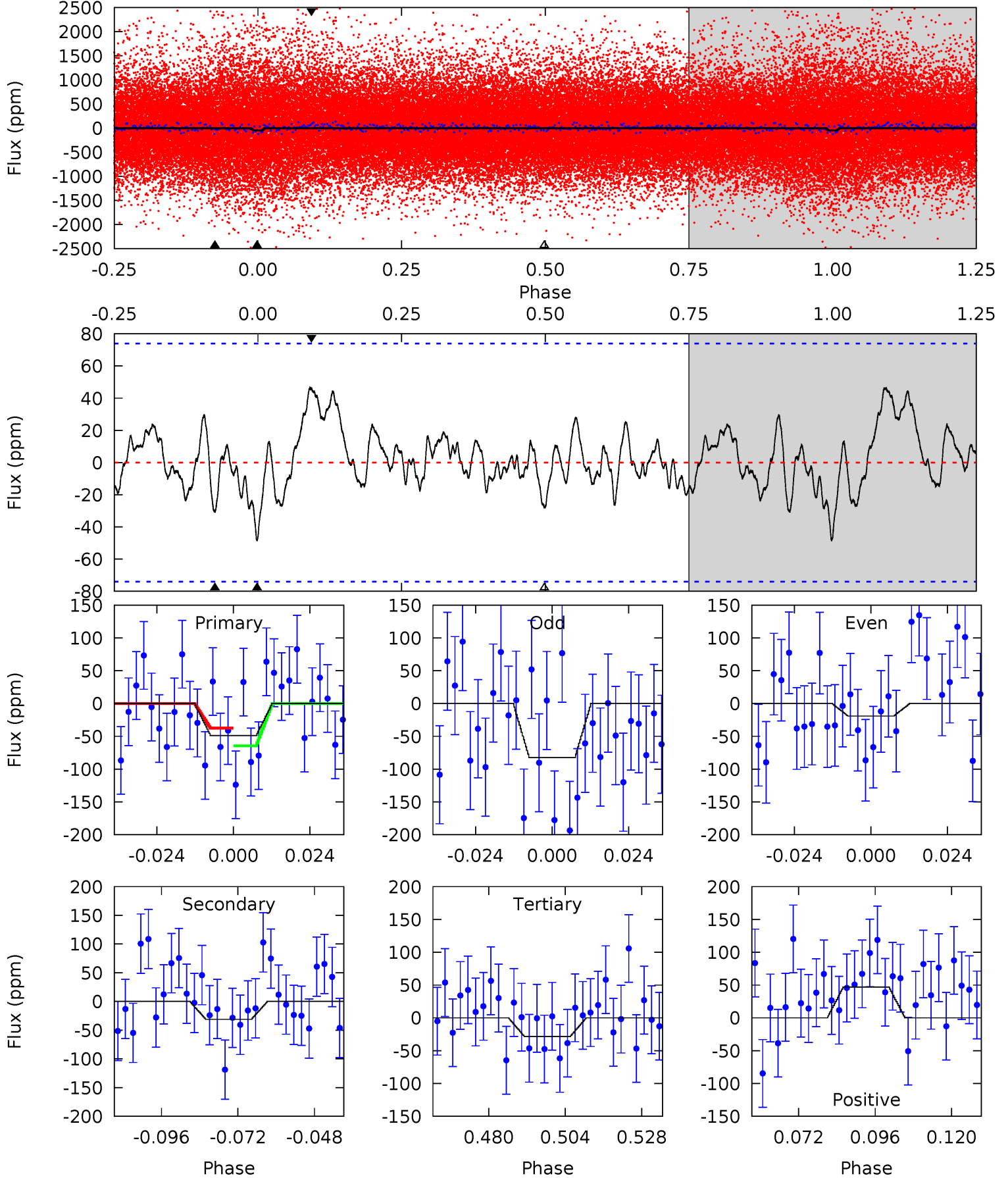
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

008183389-03, P = 4.055005 Days, E = 129.752664 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.20	2.04	1.86	3.07	4.86	2.26	0.97	1.34	0.13	0.17	-1.03	2.08	0.98	0.49	0.89



Stellar Parameters For KIC 008183389

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5081^{+151}_{-151}	$4.578^{+0.077}_{-0.044}$	$-0.500^{+0.300}_{-0.300}$	$0.696^{+0.067}_{-0.067}$	$0.668^{+0.088}_{-0.038}$	$2.796^{+0.882}_{-0.466}$
	+3%/-3%	+2%/-1%	+60%/-60%	+10%/-10%	+13%/-6%	+32%/-17%
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 008183389-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$8.96^{+6.65}_{-5.45}$	1244^{+45}_{-48}	2761^{+7757}_{-11960}	$4.680^{+2271.810}_{-1680.549}$
Alt.	-31 ± 15	$5.29^{+5.93}_{-3.77}$	1242^{+50}_{-48}	2201^{+965}_{-3980}	$1.030^{+11.956}_{-0.820}$

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 $A_{obs} \gg 1.0$

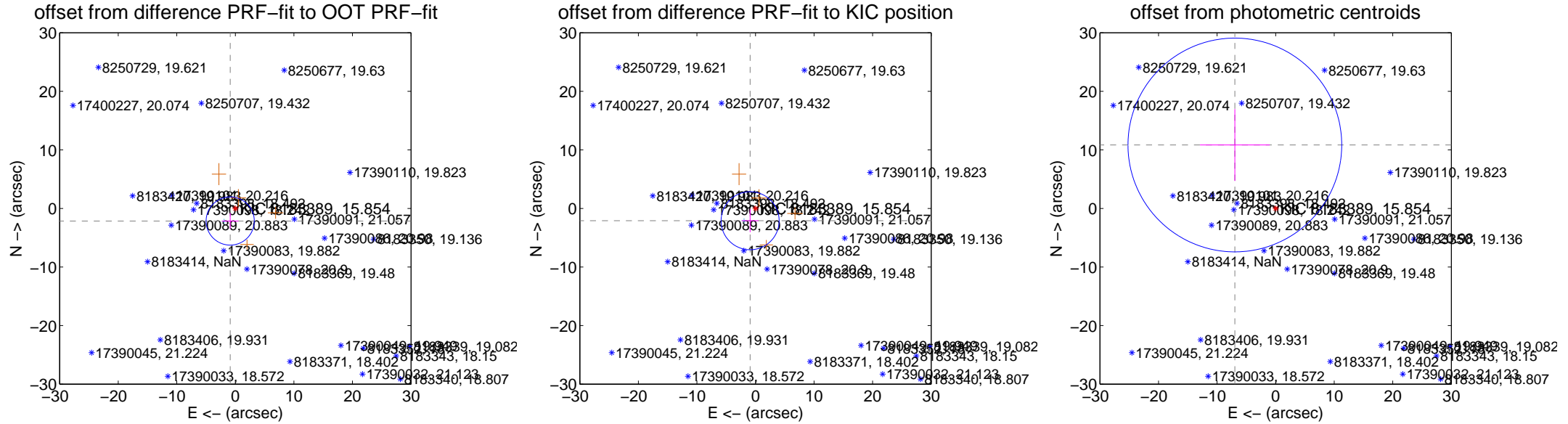
DV Centroid Data

Supplemental centroid analysis for 008183389-03. Kepler magnitude: 15.85. Transit SNR -1.00

There are 1 quarters with good PRF difference image offsets

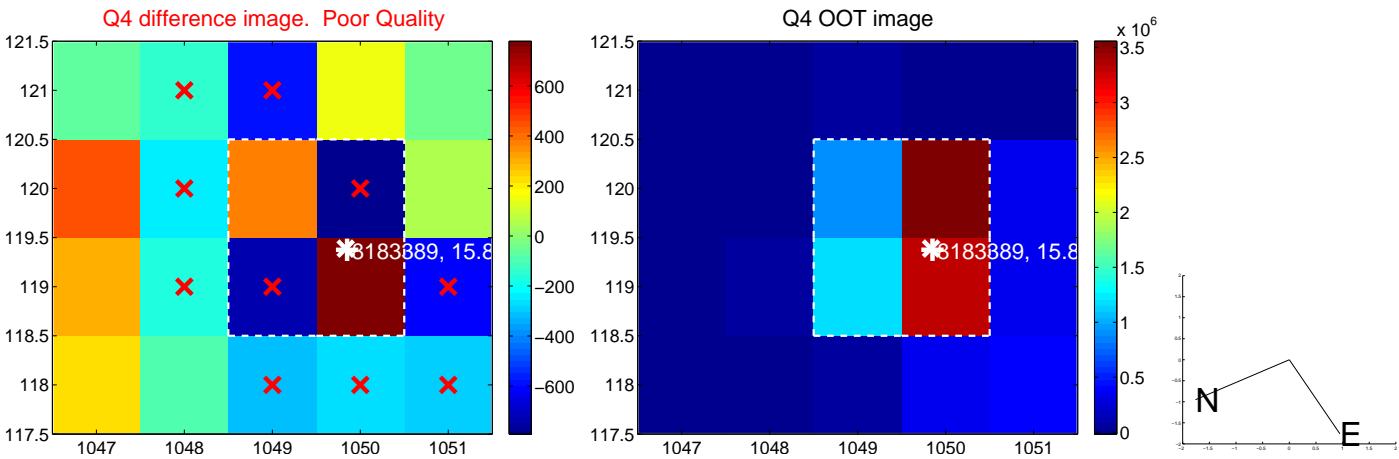
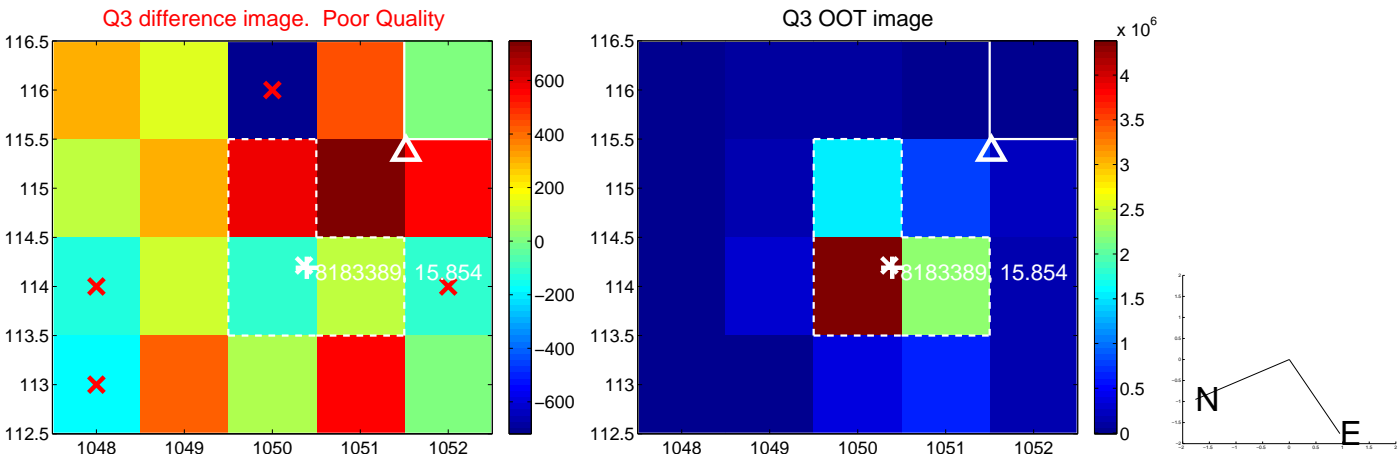
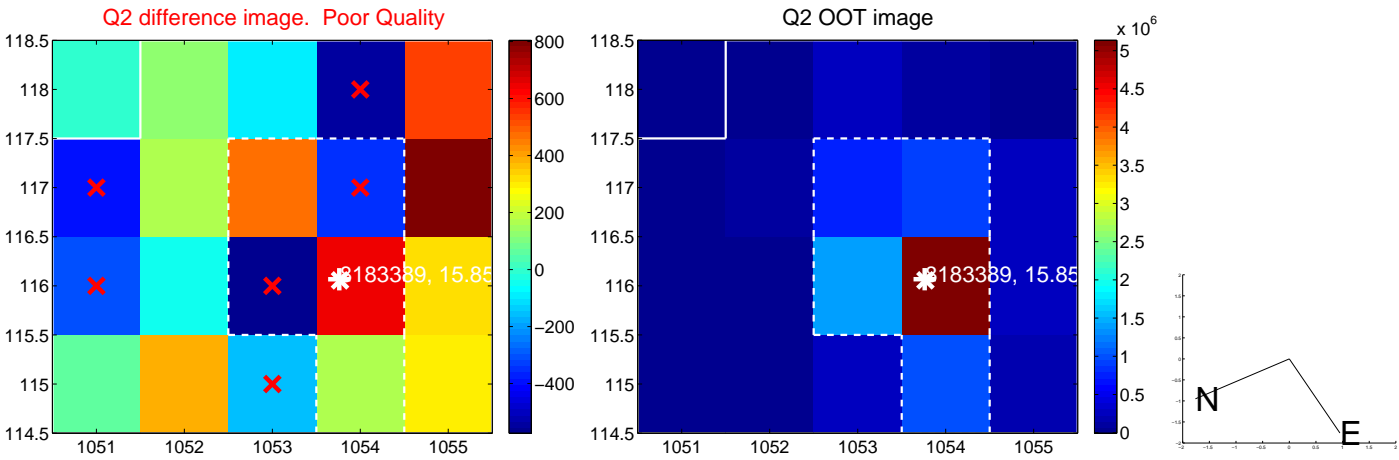
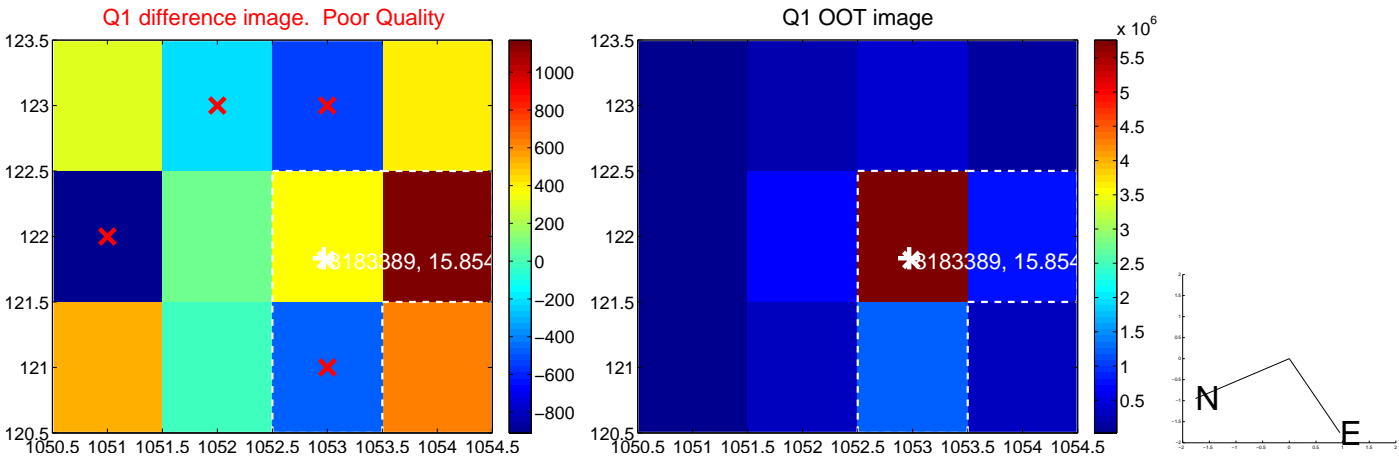
The direct PRF centroid is offset from the target star catalog position by about 0.09 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.321 ± 1.371	1.69	0.878 ± 1.416	-2.149 ± 1.363
PRF-fit source offset from KIC position	2.292 ± 1.652	1.39	0.920 ± 1.426	-2.099 ± 1.956
photometric centroid source offset	12.88 ± 6.08	2.12	6.97 ± 5.95	10.83 ± 6.14

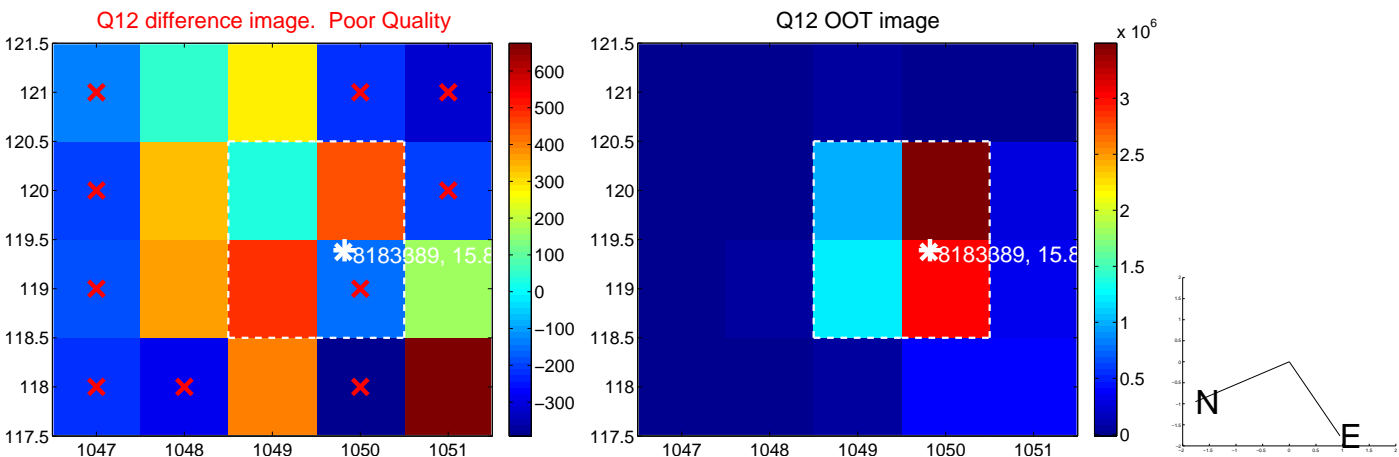
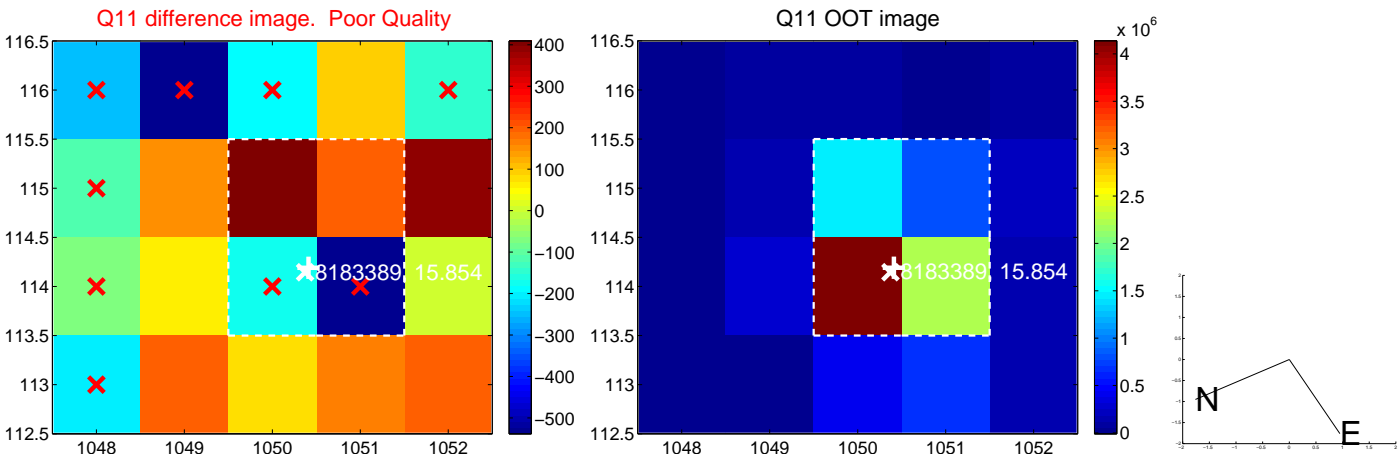
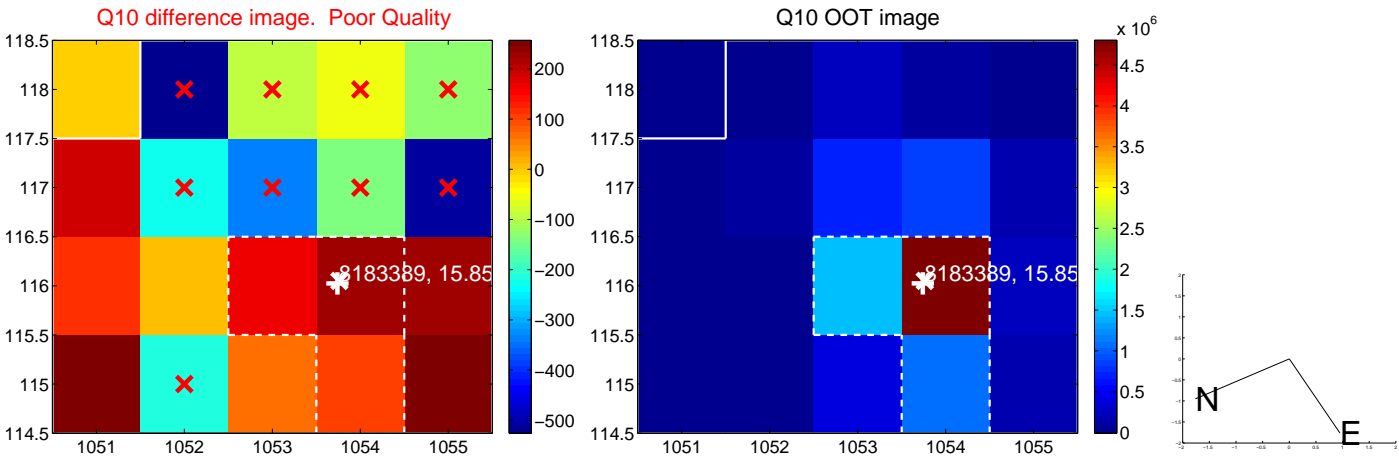
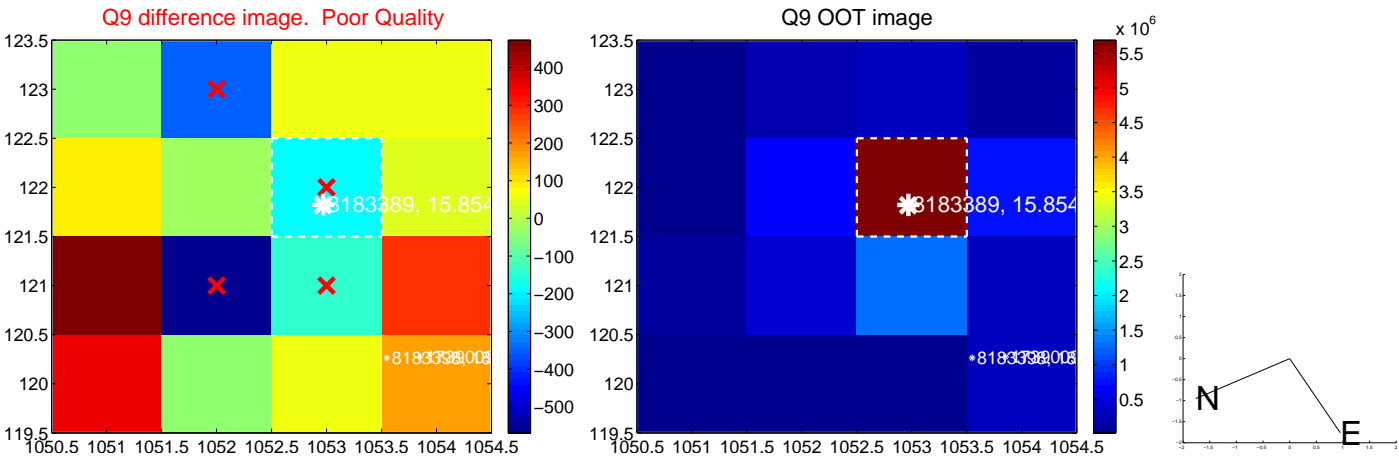


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

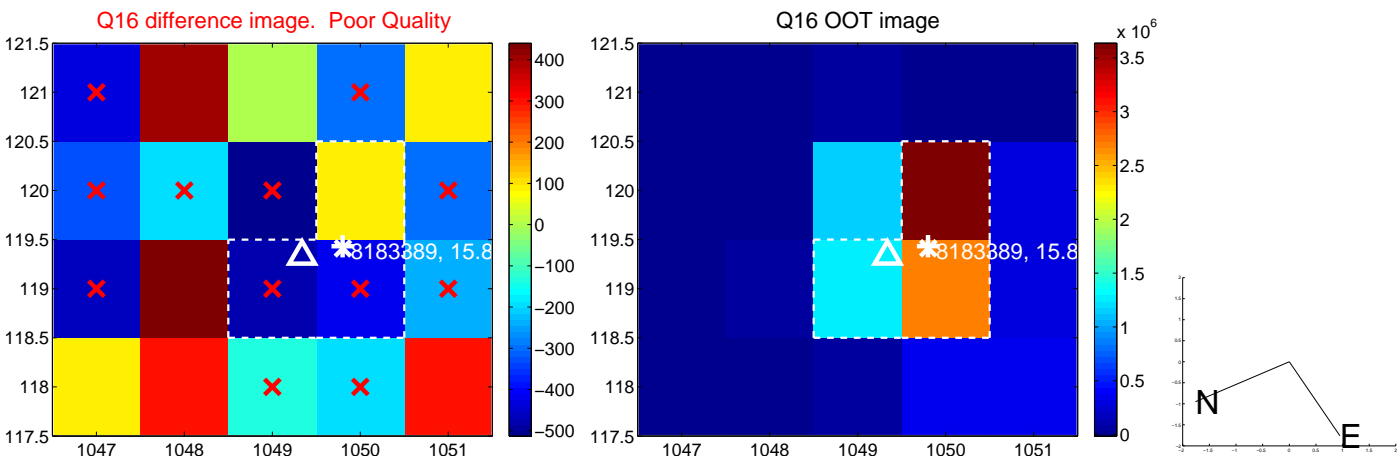
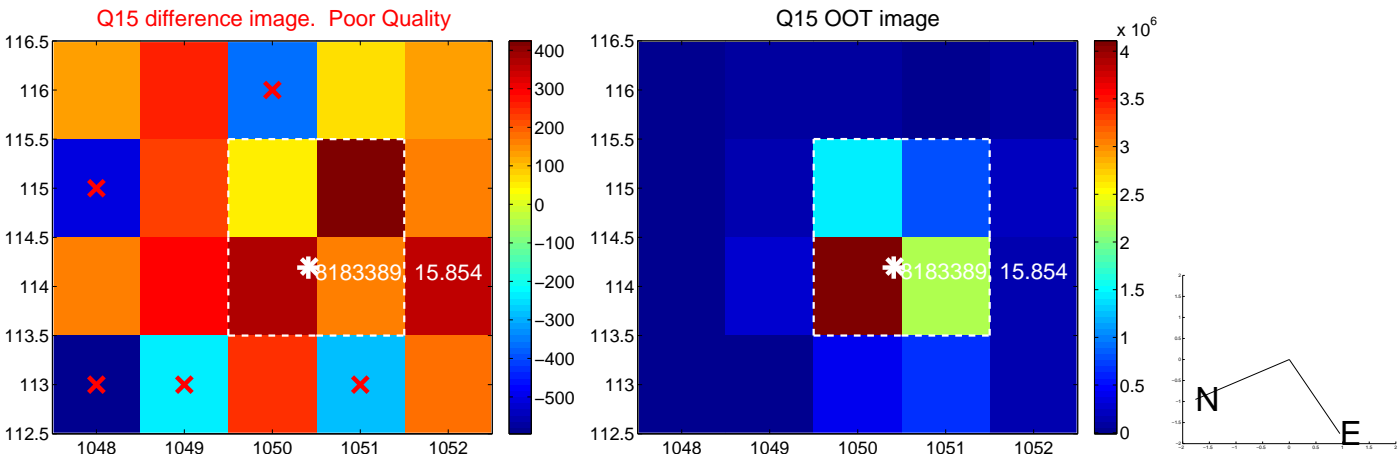
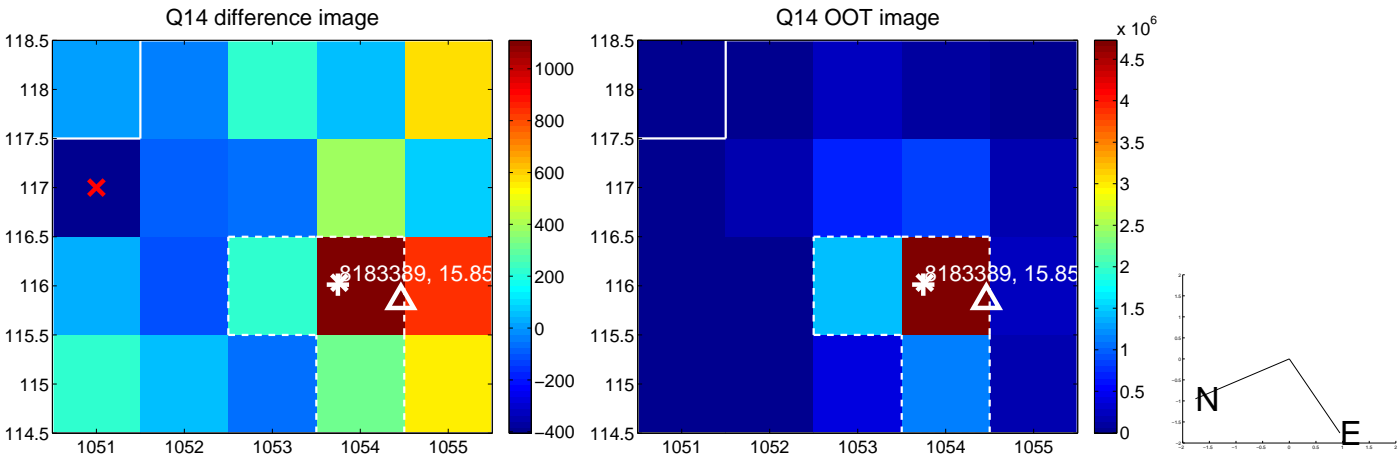
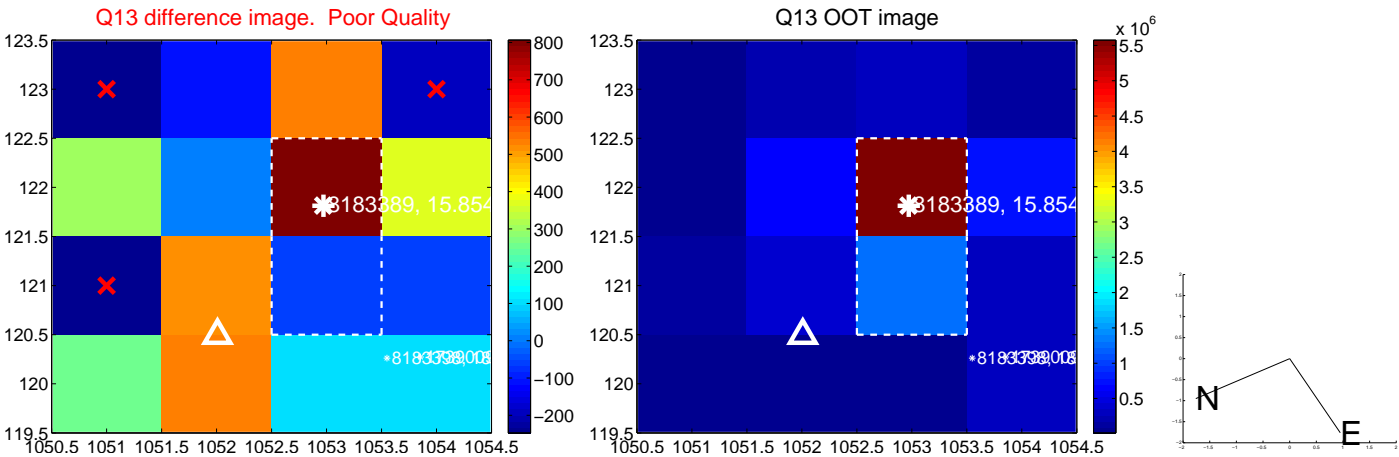
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

