

KIC 006778289

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})
006778289-01	OBS	6767.01	30.130297	152.220407	280559.4	9.000	15425.7	-1.0	1.35	6674	47.50	76.21
006778289-02	OBS	No	30.130143	138.173215	162220.1	8.612	10081.7	4737.7	1.35	6674	57.37	76.21
006778289-03	OBS	No	30.132084	154.328469	2160.6	15.000	220.9	-1.0	1.35	6674	6.31	76.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006778289-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
006778289-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006778289-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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.

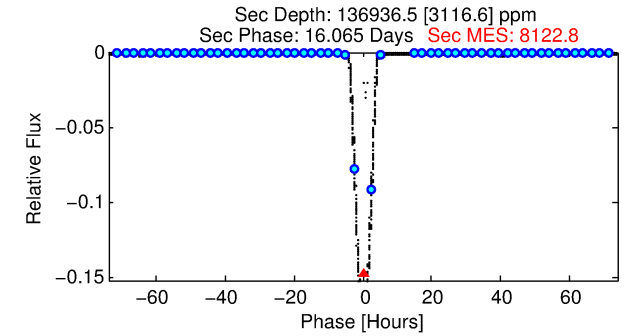
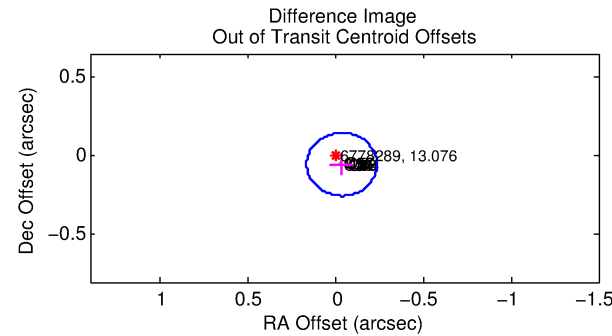
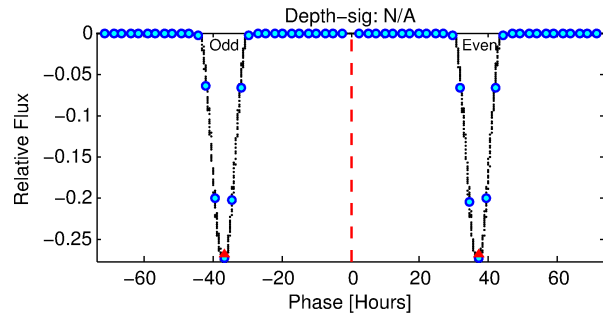
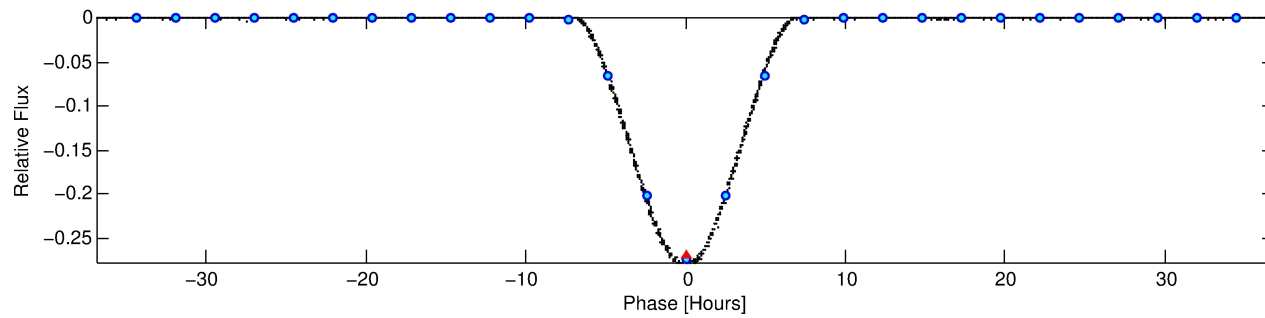
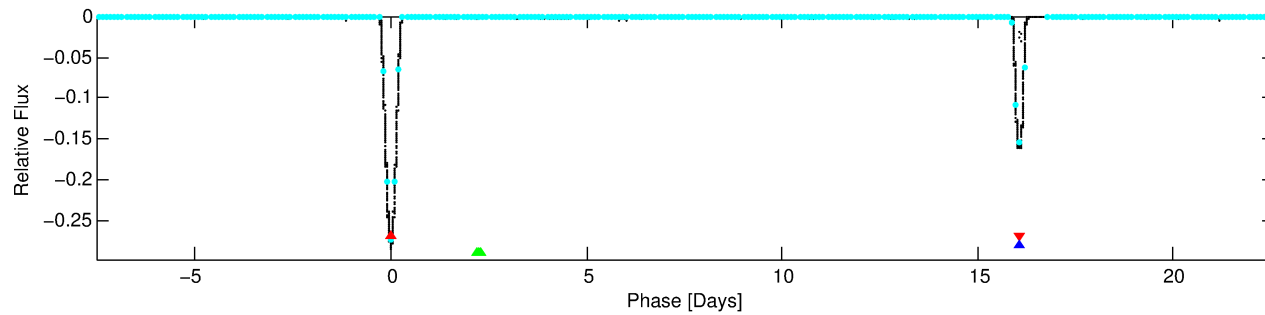
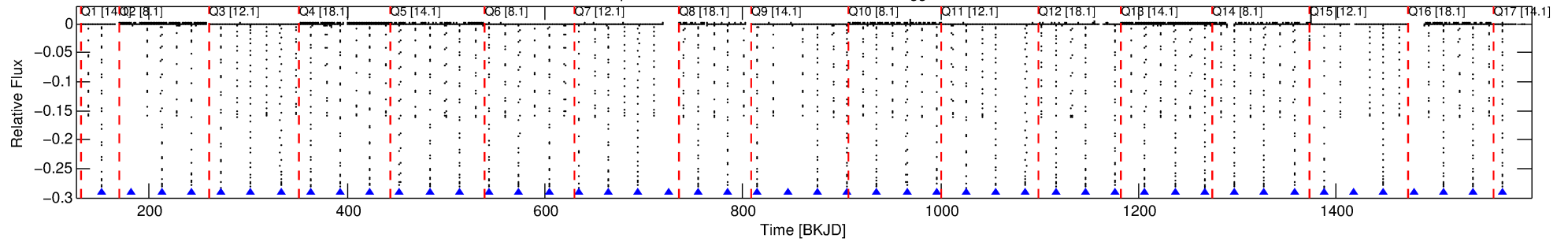
Ephemeris Match Information For 006778289-01

No Significant Match Found

DV One-Page Summary

KIC: 6778289 Candidate: 1 of 3 Period: 30.130 d
KOI: K06767.01 Corr: 0.817

Kp: 13.08 R*: 1.35 Rs Teff: 6674.0 K Logg: 4.29 Fe/H: -0.060



TPS TCE Results:

Period = 30.13030 d
Epoch = 152.2204 BKJD

DV fit results are unavailable

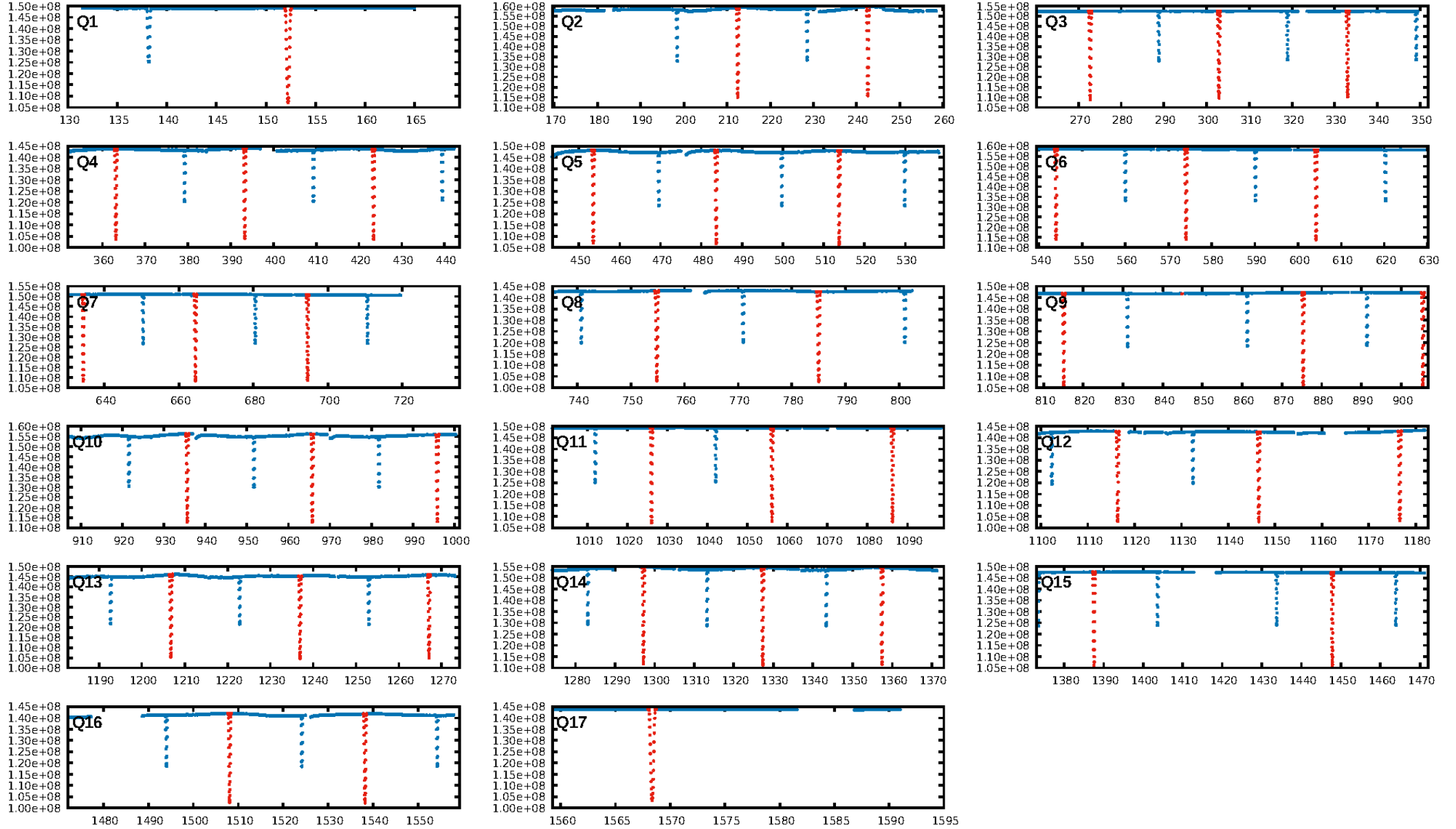
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 0.2% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [41/41]
GhostDiagnostic-chr: 4.357
Centroid-sig: N/A
Centroid-so: 0.186 arcsec [624.75 σ]
OotOffset-rm: 0.064 arcsec [0.96 σ]
KicOffset-rm: 0.112 arcsec [1.67 σ]
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]

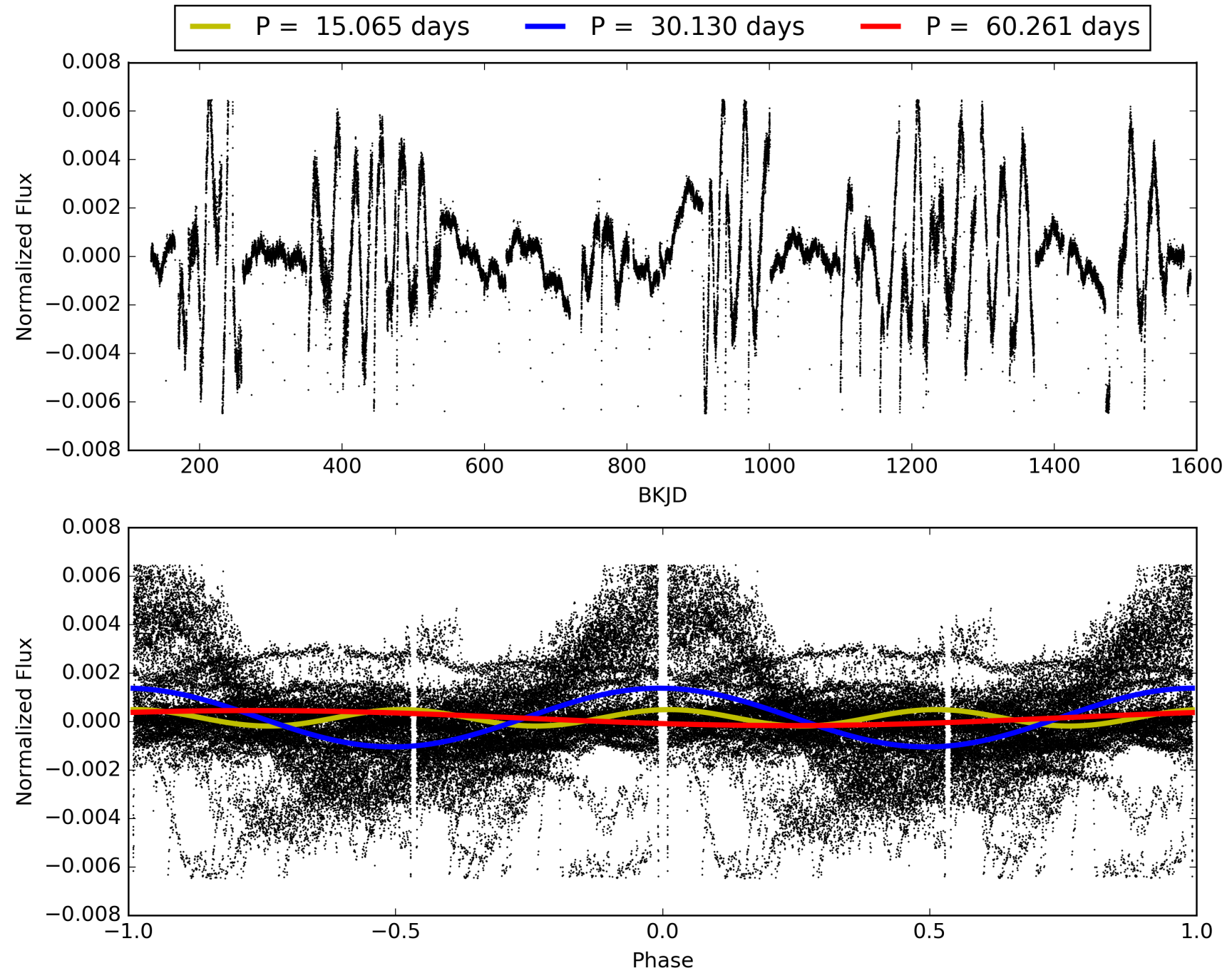
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:32:05 Z

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

TCE 006778289-01, PDC Light Curves

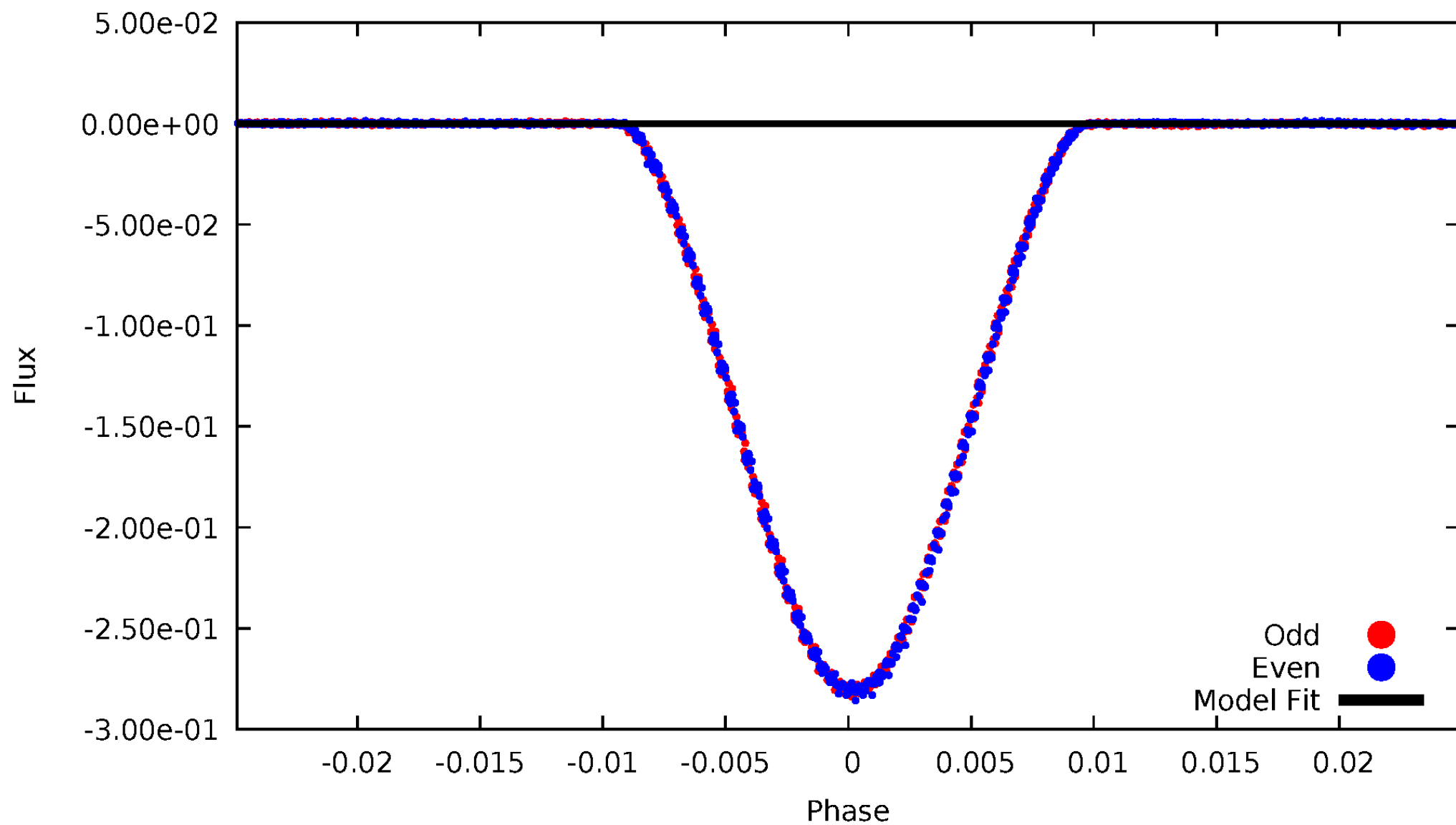


TCE 006778289-01



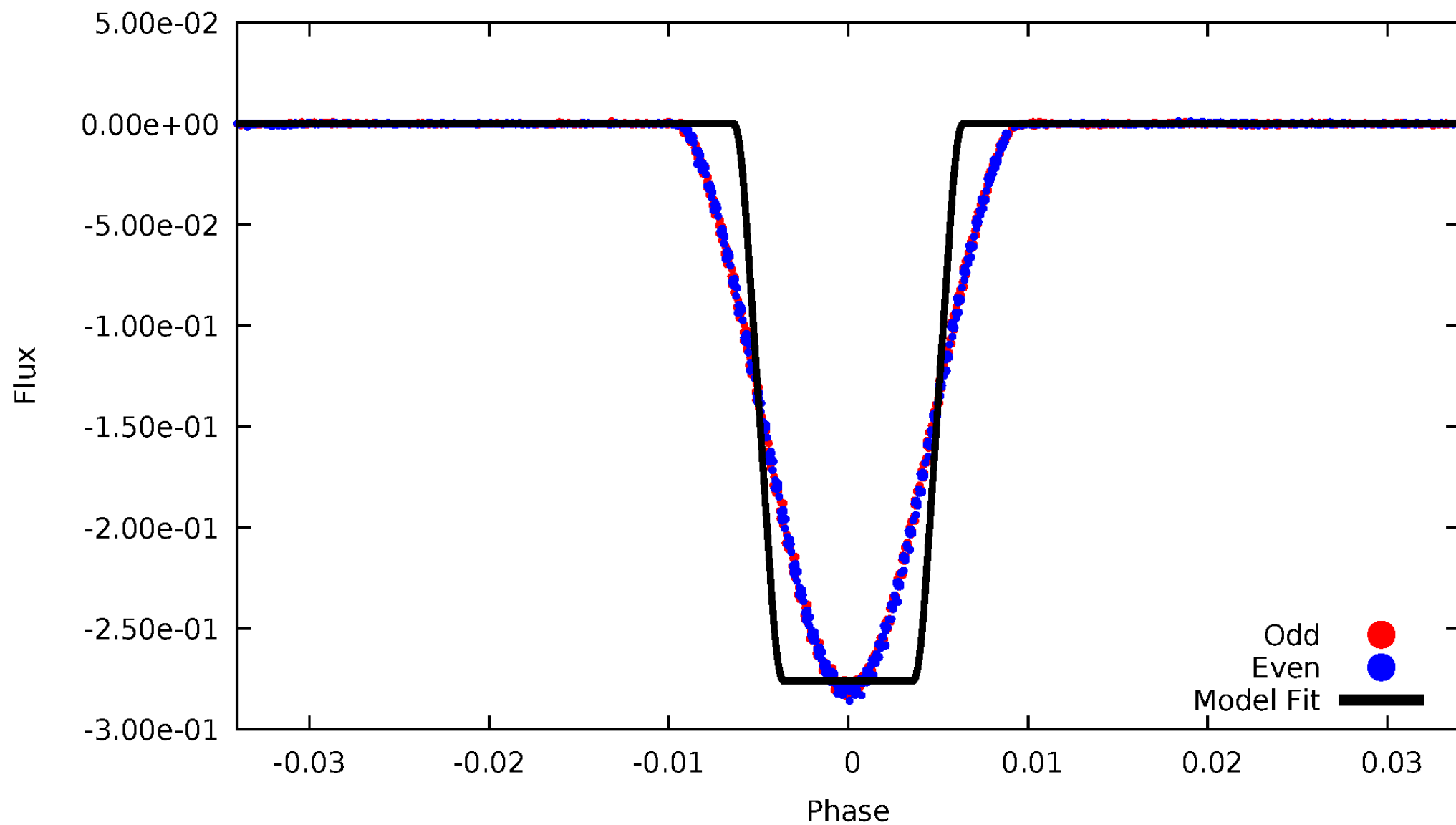
DV Odd/Even

TCE 006778289-01



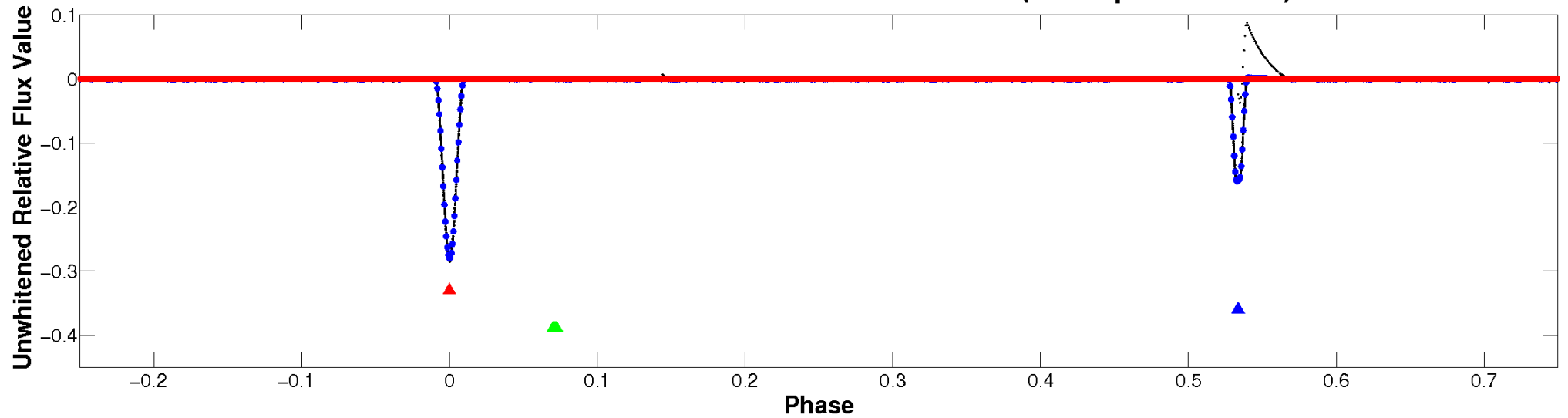
ALT Odd/Even

TCE 006778289-01



Non-Whitened Vs. Whitened Light Curve

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

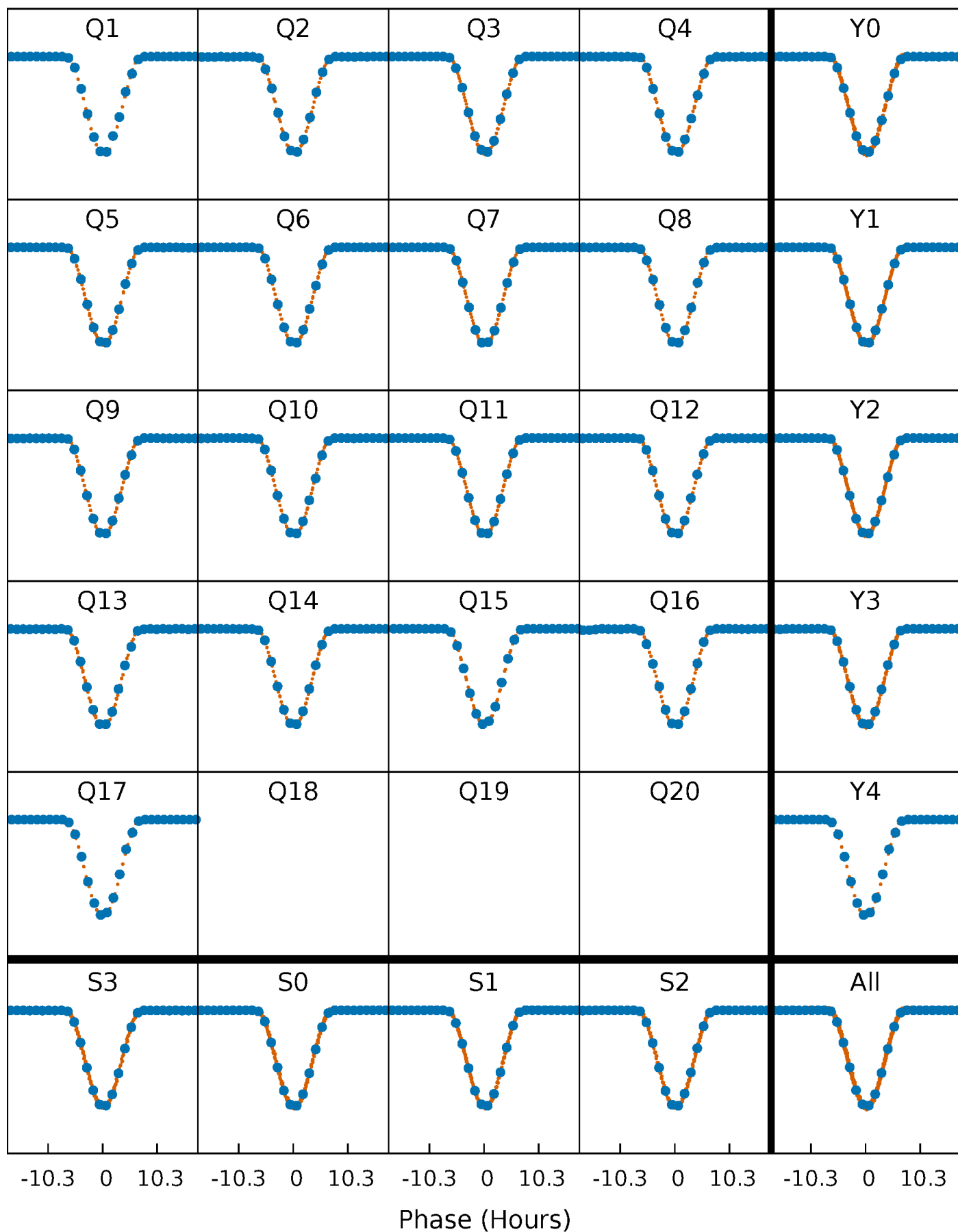


Planet 1 : Phased Whitened Flux Time Series (TPS Epoch/Period)



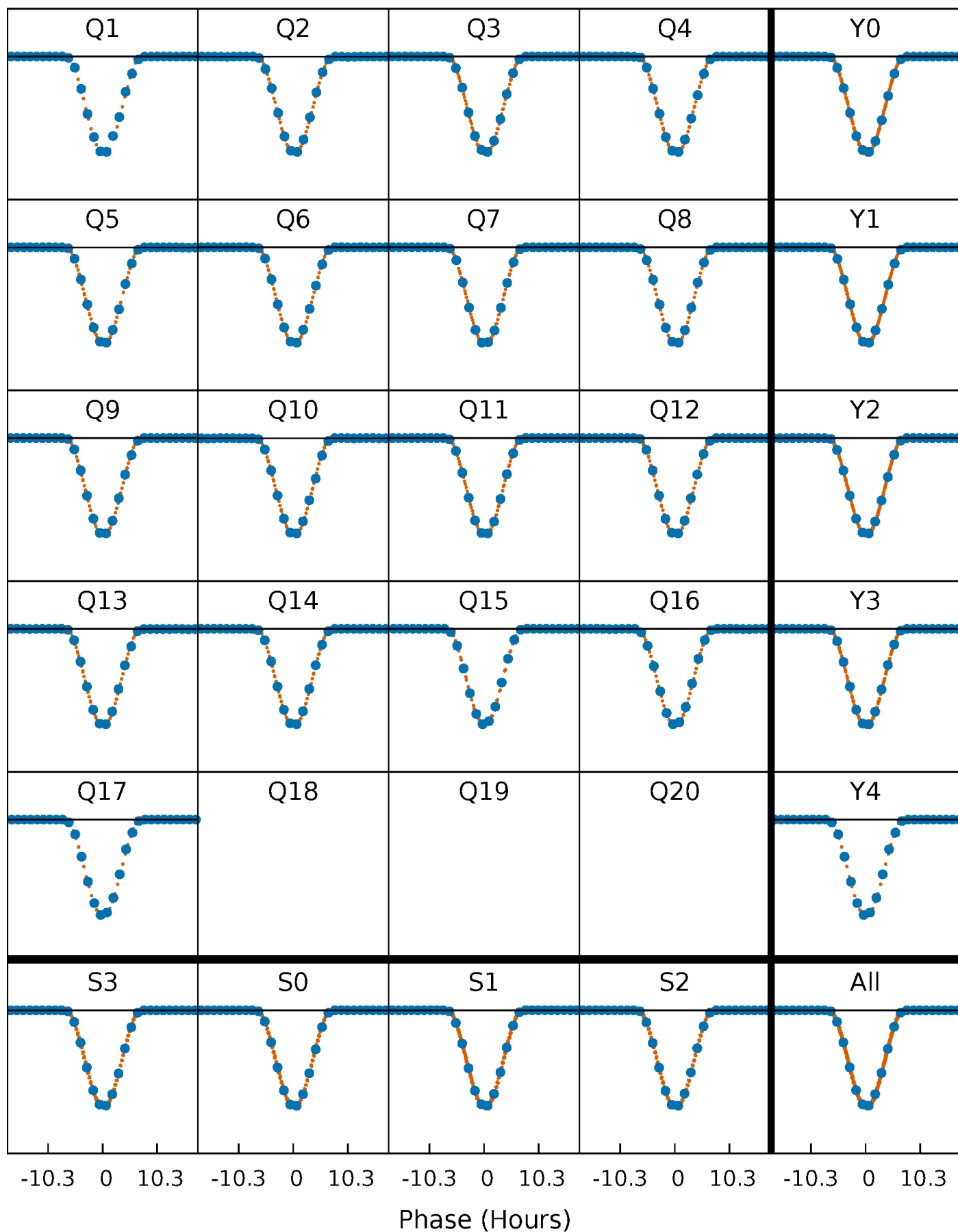
PDC Quarter-Phased Transit Curves

TCE 006778289-01 P= 30.130297 Days $T_0=152.220407$ (BKJD)



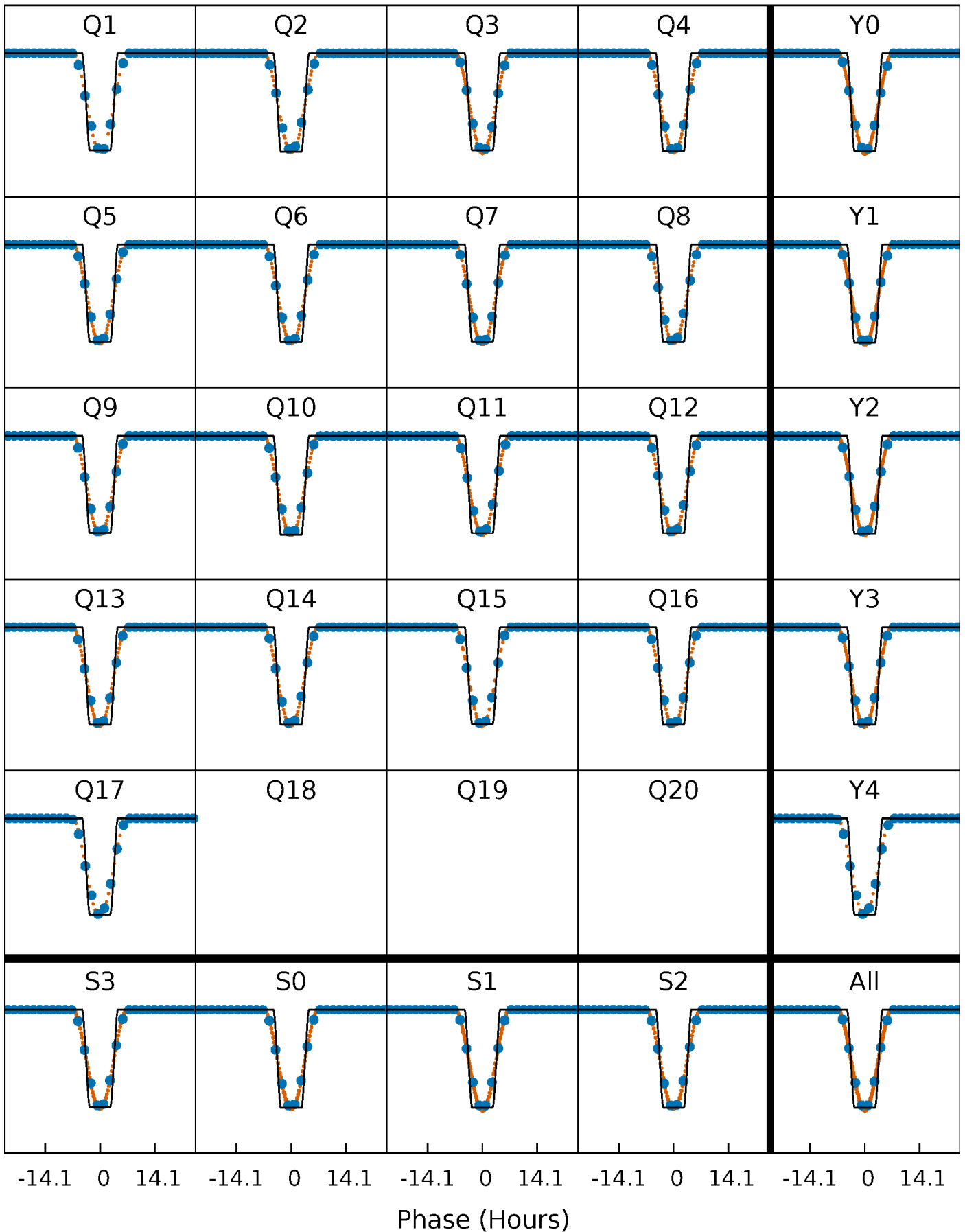
DV Quarter-Phased Transit Curves

TCE 006778289-01 P= 30.130297 Days $T_0=152.220407$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

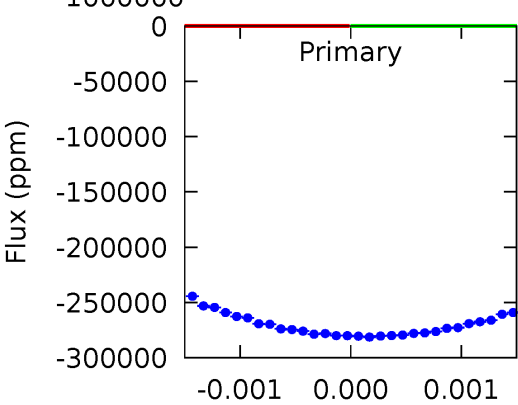
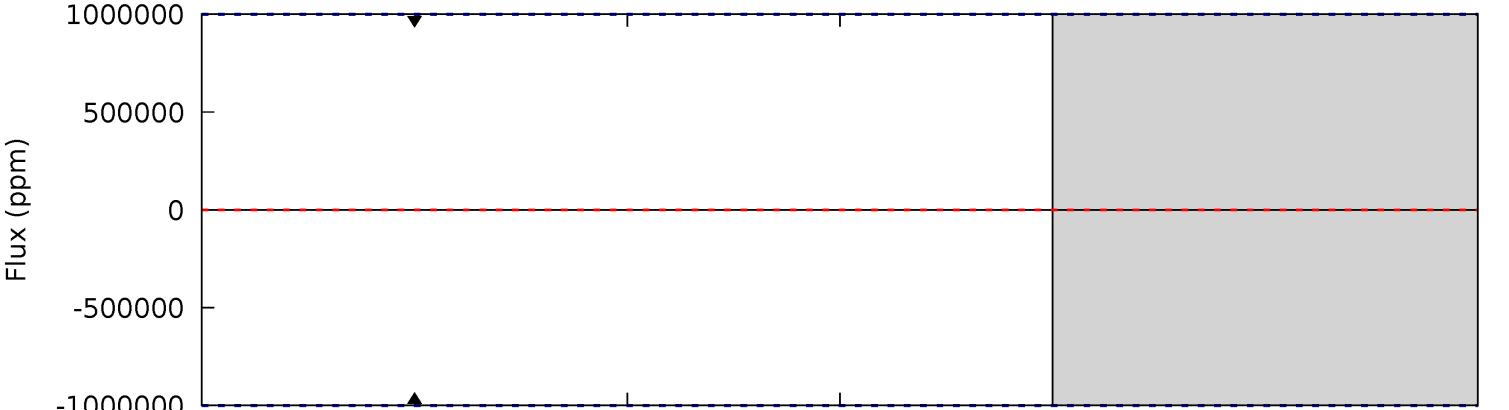
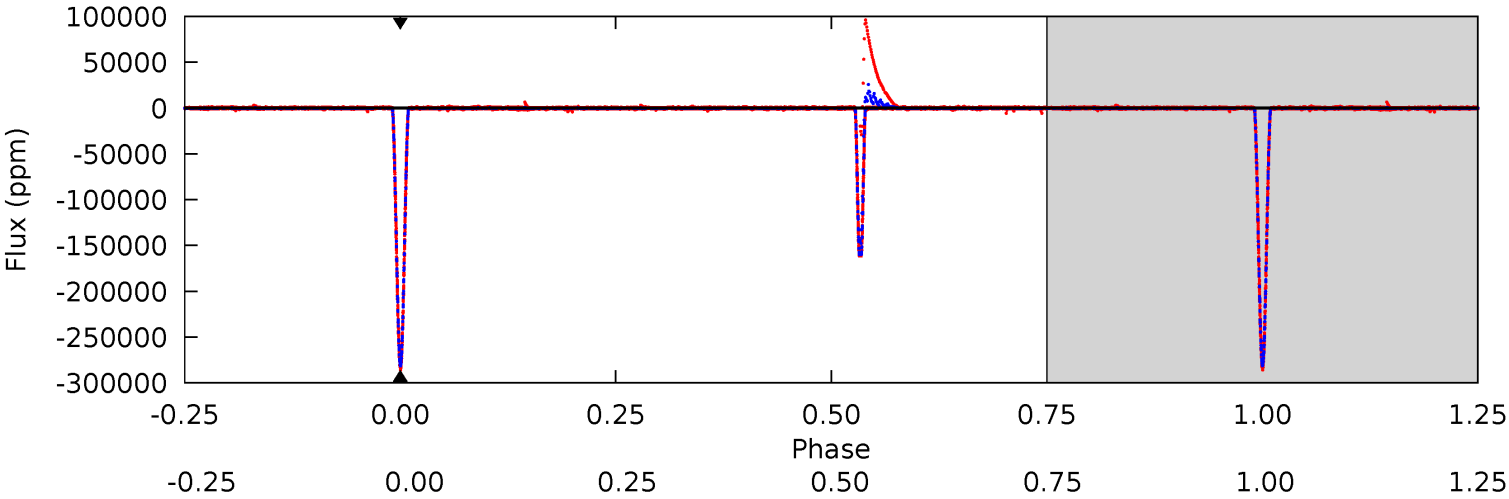
TCE 006778289-01 P= 30.130297 Days $T_0=152.227449$ (BKJD)



DV Model-Shift Uniqueness Test

006778289-01, P = 30.130297 Days, E = 122.090110 Days

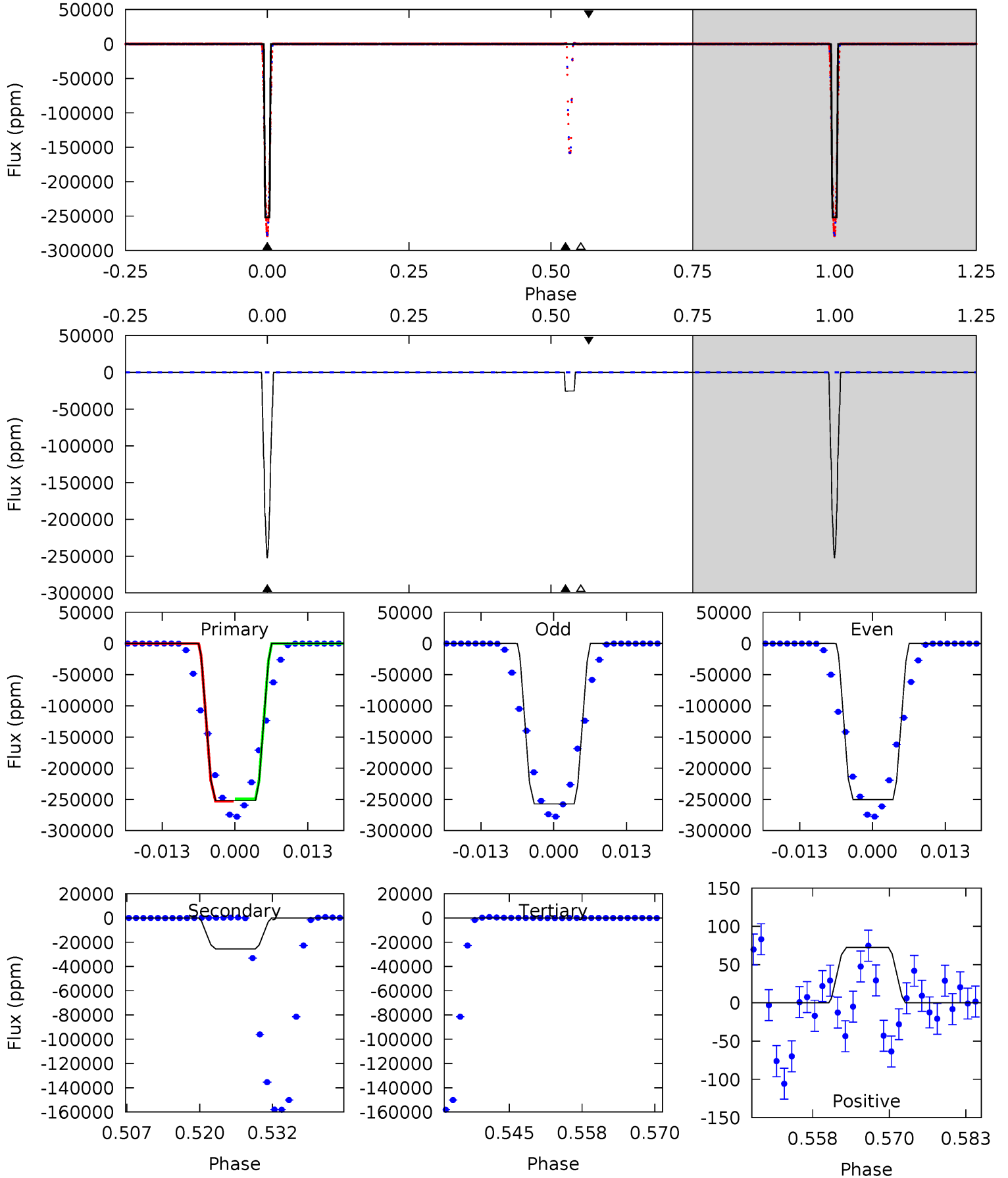
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006778289-01, P = 30.130297 Days, E = 122.097152 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18124	1829	7.99	5.21	4.98	2.49	55.6	18116	18119	1821	1823	244.1	1.00	0.00	0



Stellar Parameters For KIC 006778289

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6674^{+150}_{-218}	$4.286^{+0.088}_{-0.143}$	$-0.060^{+0.250}_{-0.300}$	$1.347^{+0.300}_{-0.200}$	$1.284^{+0.144}_{-0.192}$	$0.740^{+0.270}_{-0.308}$
	+2%/-3%	+2%/-3%	+417%/-500%	+22%/-15%	+11%/-15%	+37%/-42%
Source	PHO1	FLK73	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 006778289-01 / KOI 6767.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 1000000	$47.79^{+15.74}_{-13.62}$	1055^{+59}_{-52}	-3174^{+10124}_{-3309}	$-20.856^{+1211.568}_{-949.646}$
Alt.	-25422 ± 14	$78.90^{+16.99}_{-15.48}$	1058^{+64}_{-52}	3991^{+330}_{-225}	96^{+55}_{-29}

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

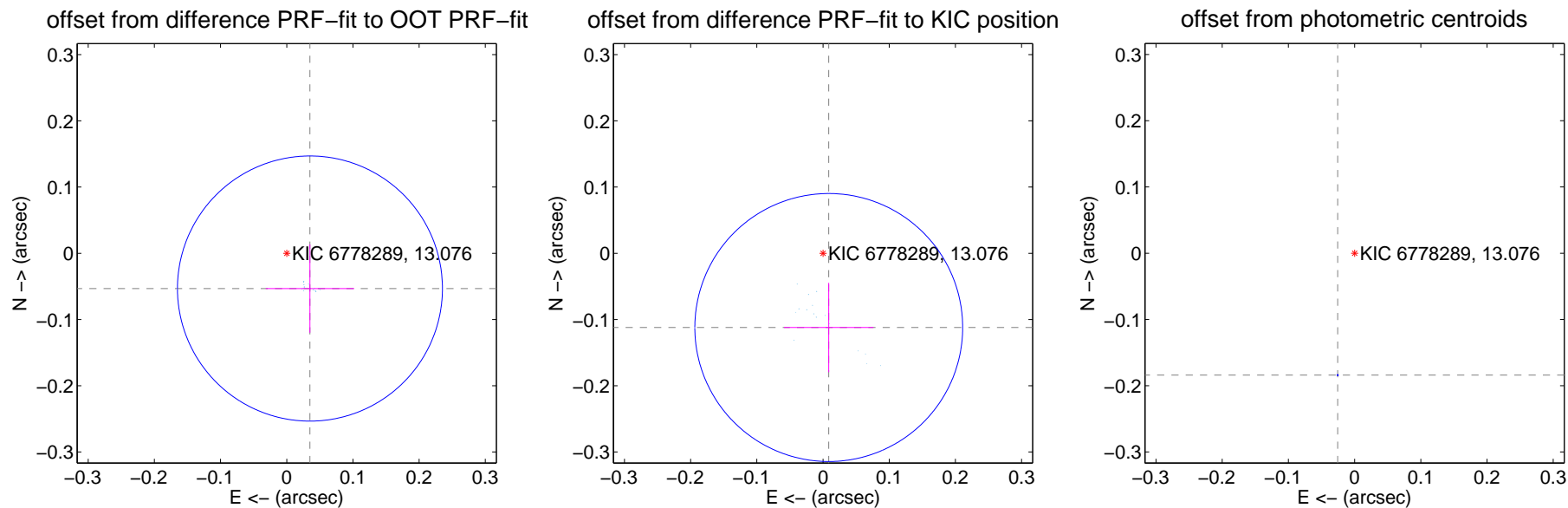
DV Centroid Data

Supplemental centroid analysis for 006778289-01. Kepler magnitude: 13.08. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

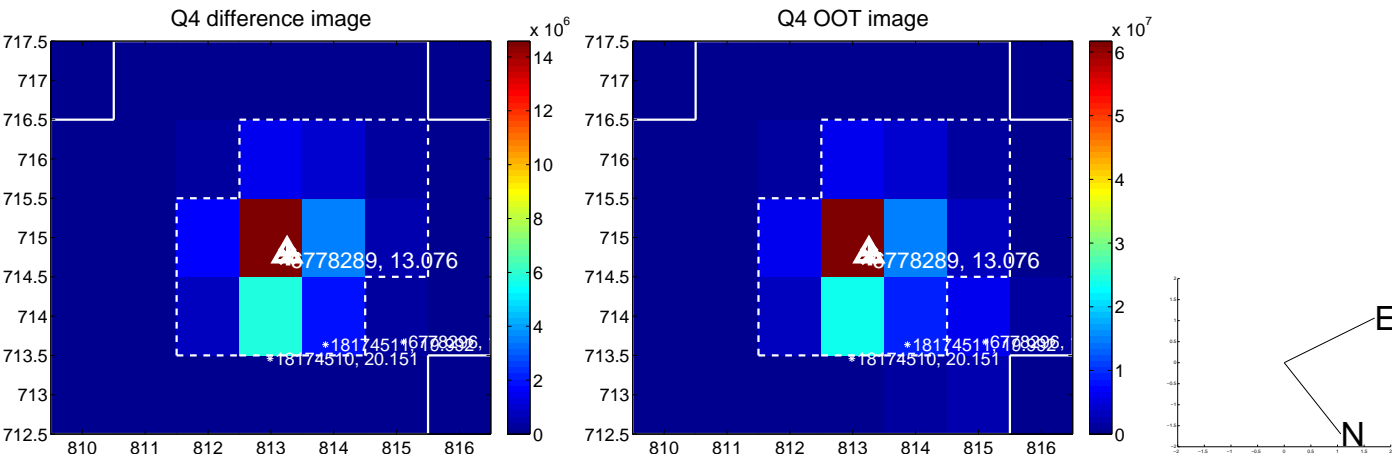
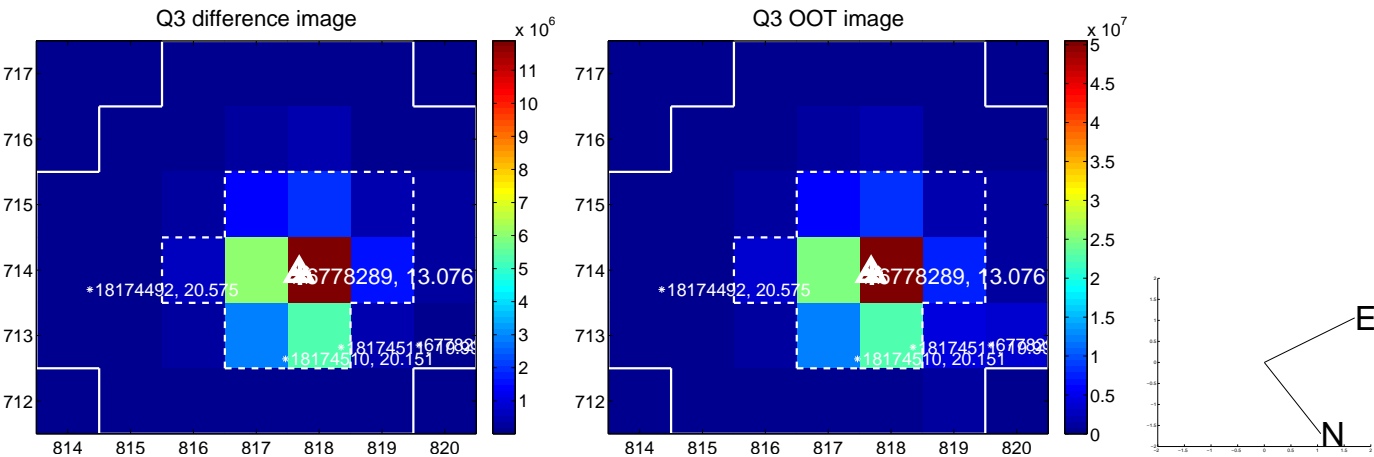
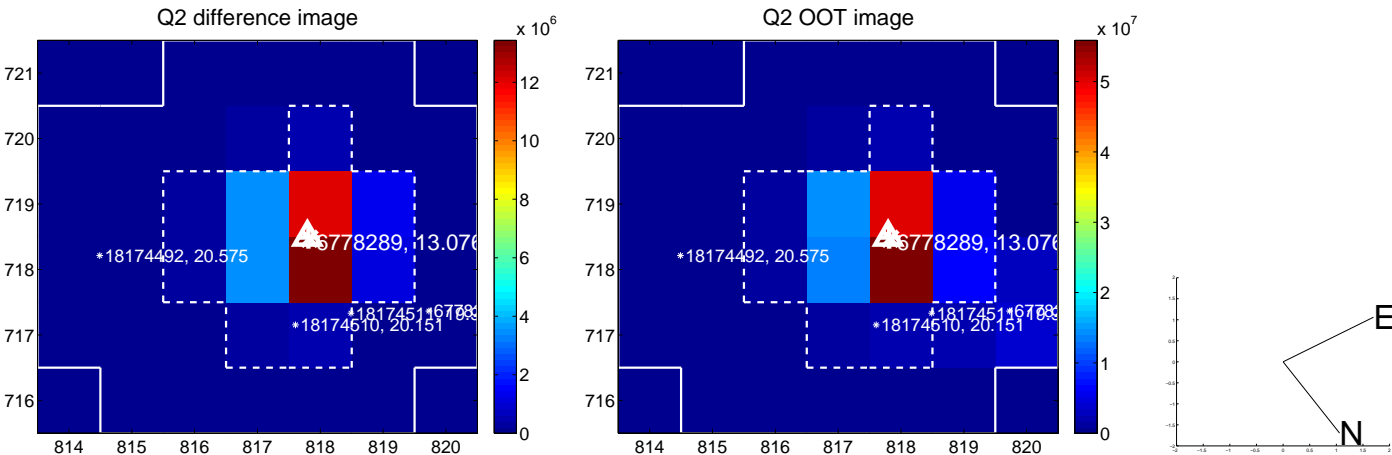
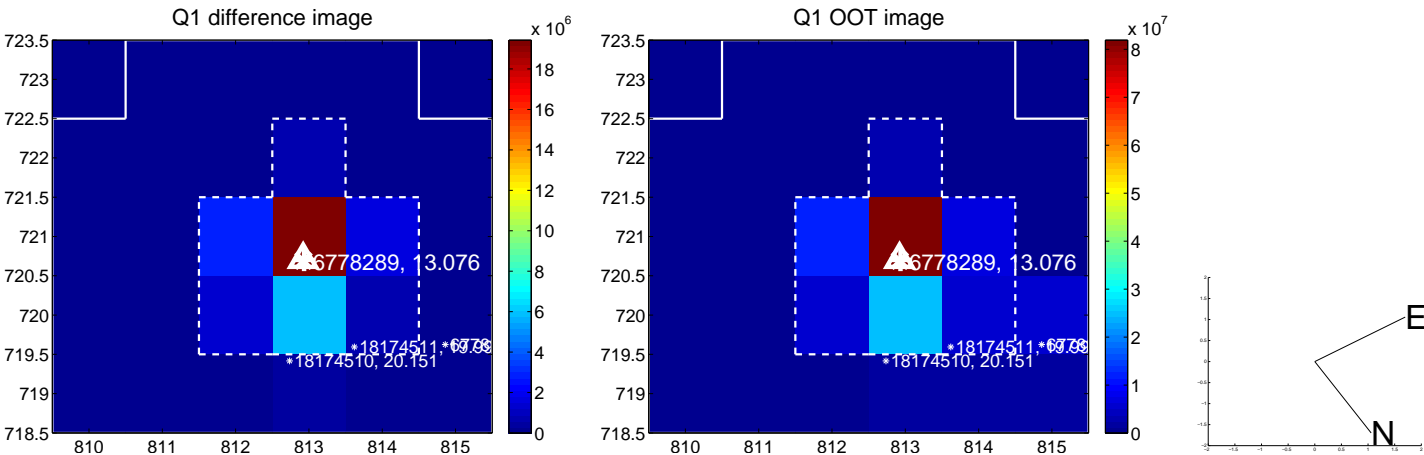
The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.064 ± 0.067	0.96	-0.035 ± 0.067	-0.053 ± 0.067
PRF-fit source offset from KIC position	0.112 ± 0.067	1.67	-0.009 ± 0.068	-0.112 ± 0.067
photometric centroid source offset	0.19 ± 0.00	624.75	0.03 ± 0.00	-0.18 ± 0.00

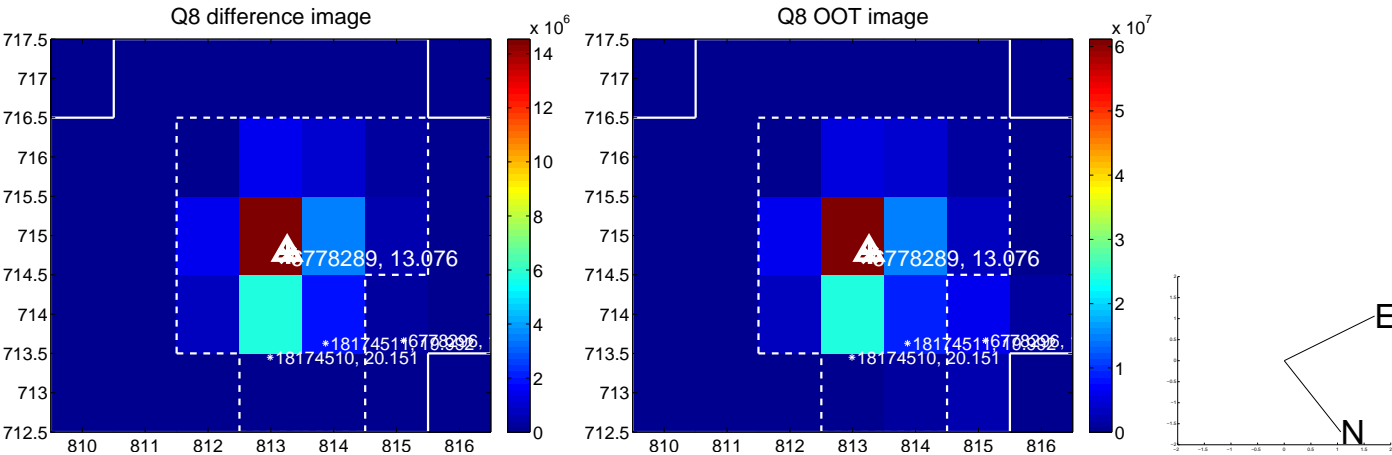
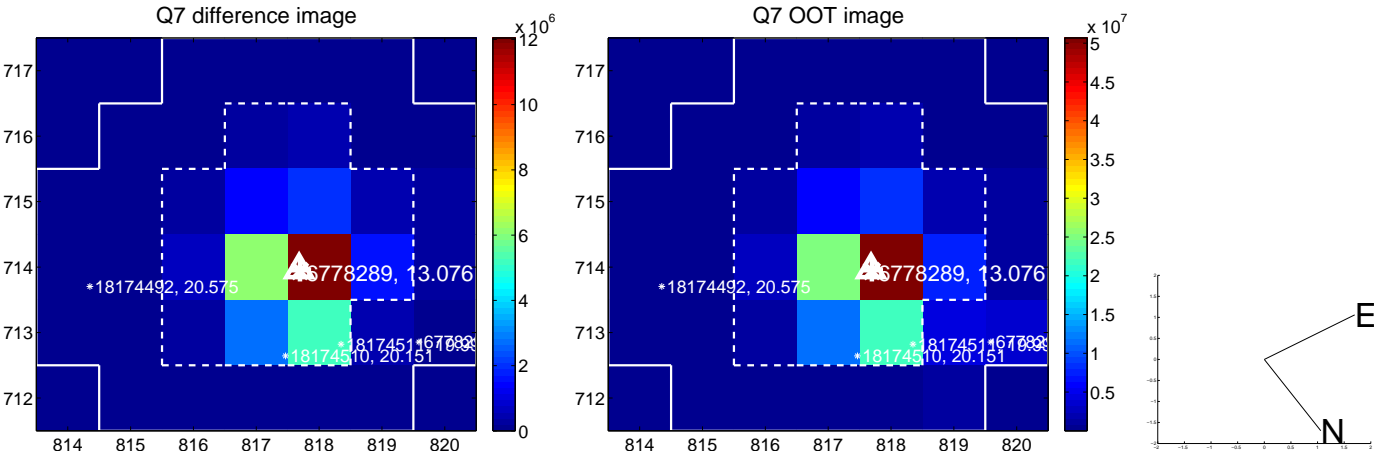
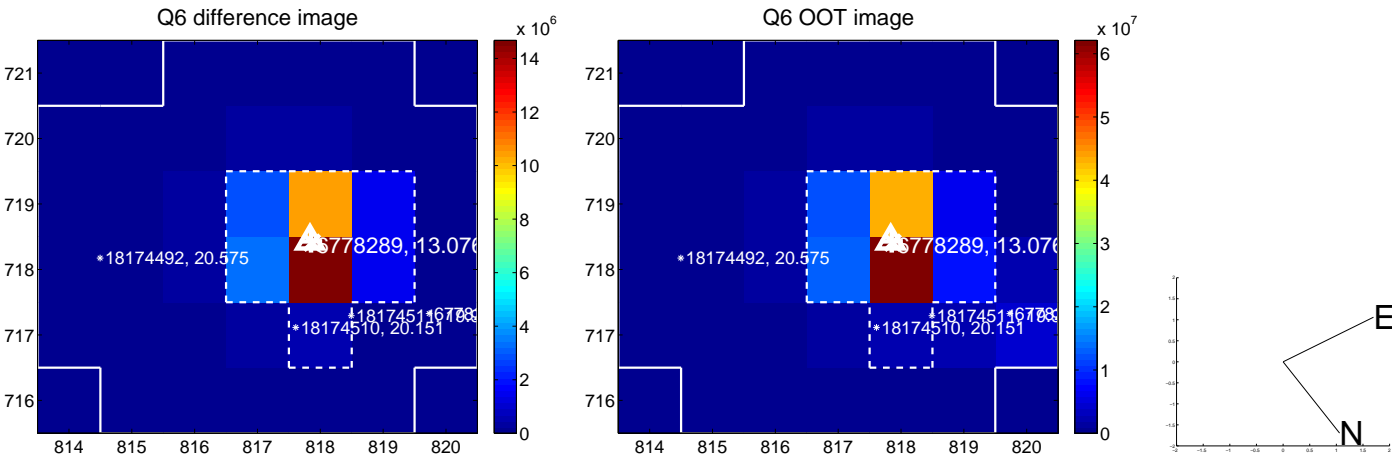
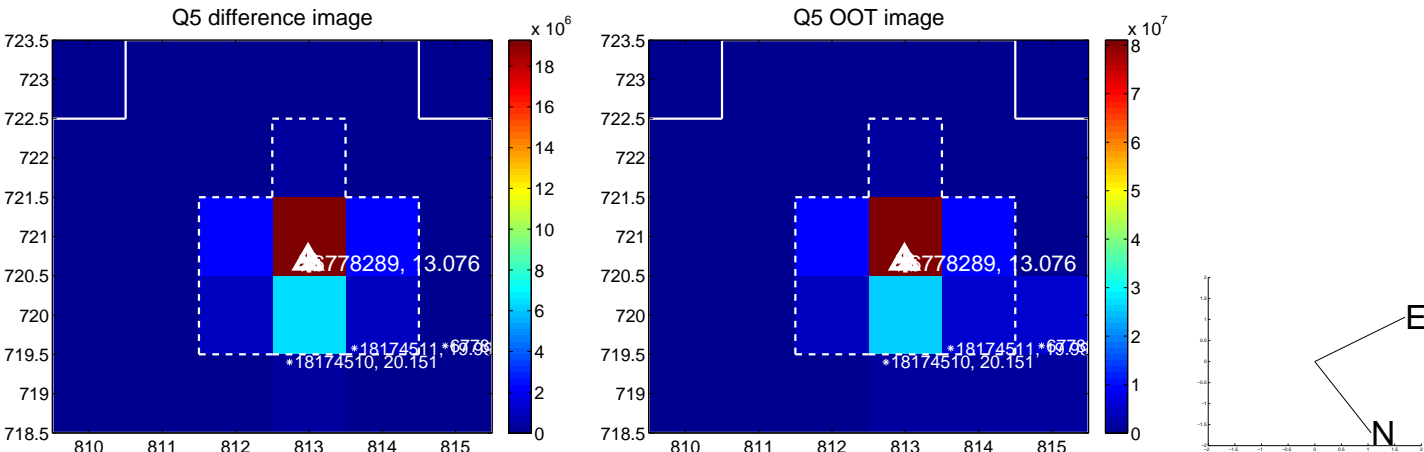


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

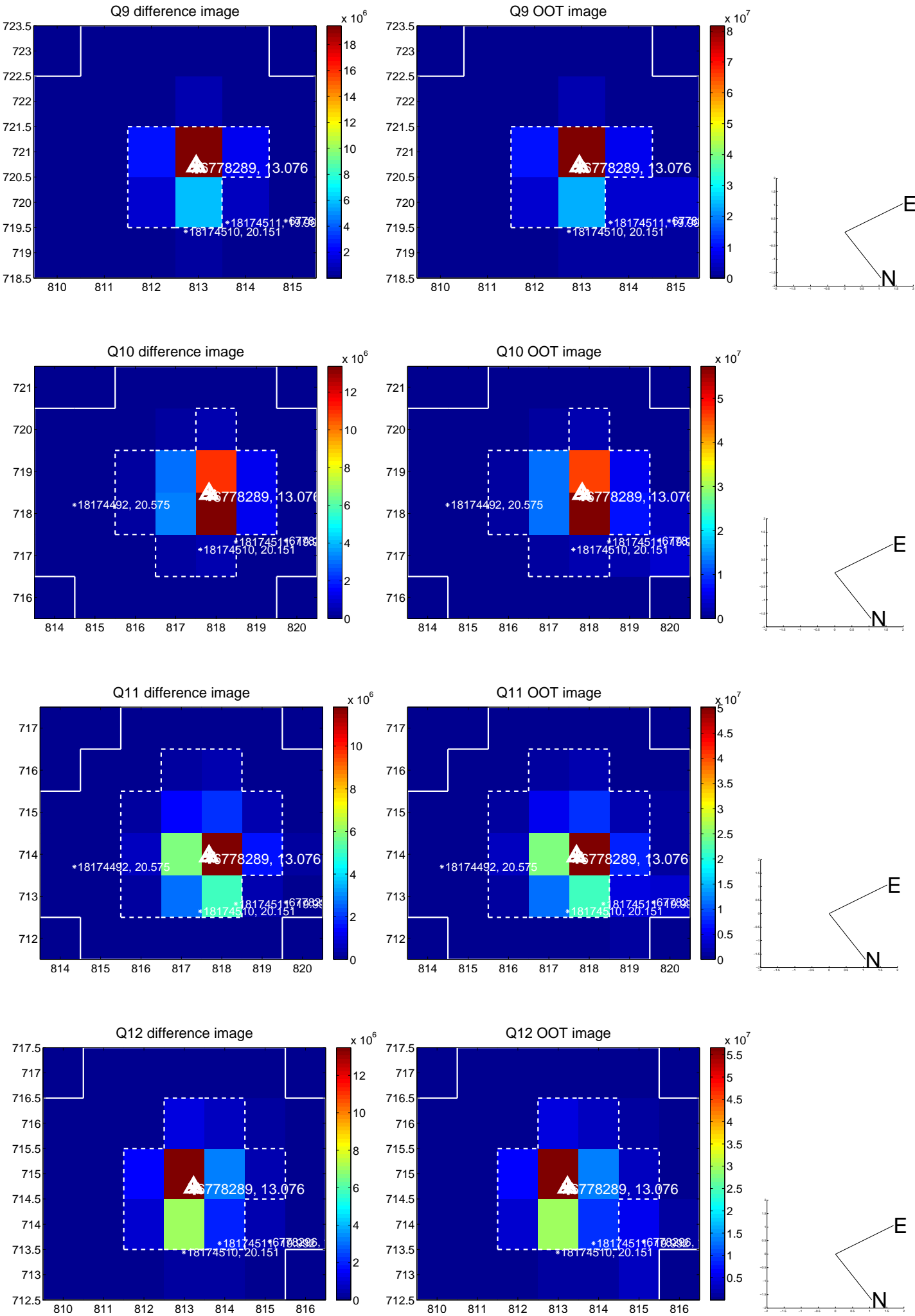
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



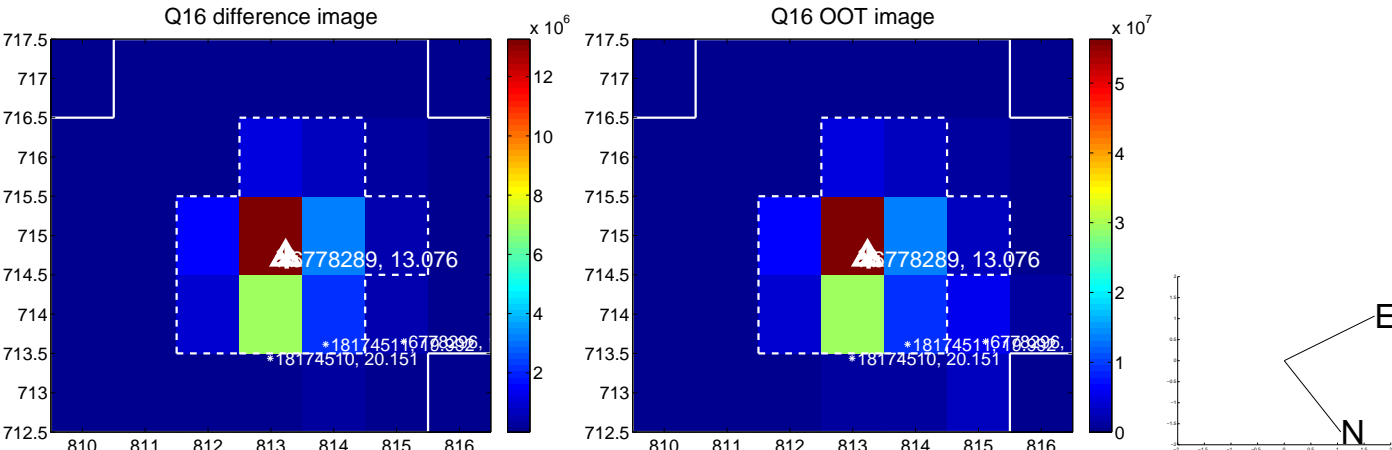
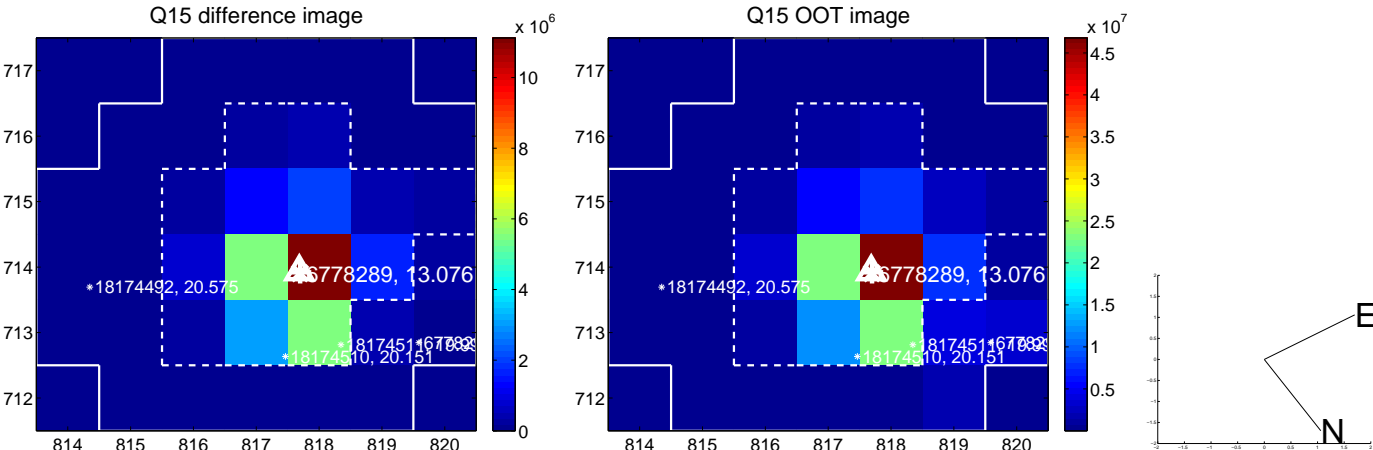
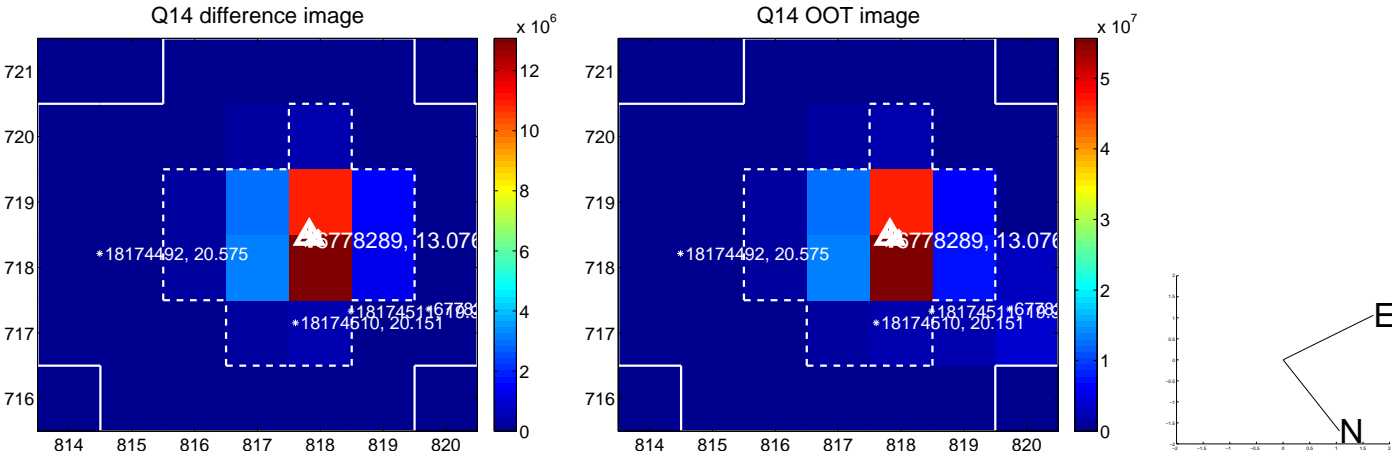
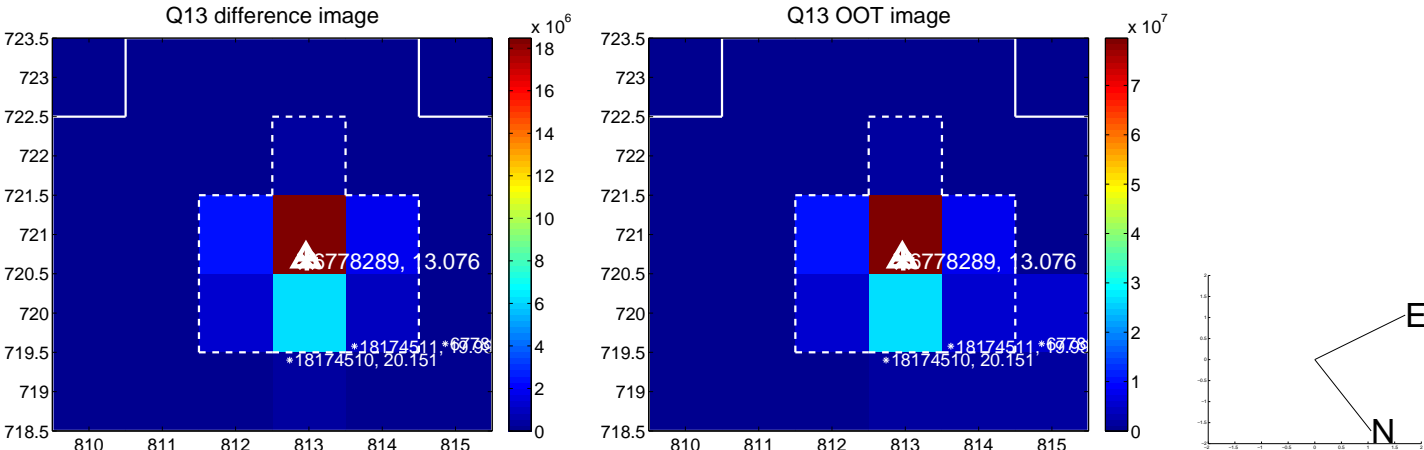
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

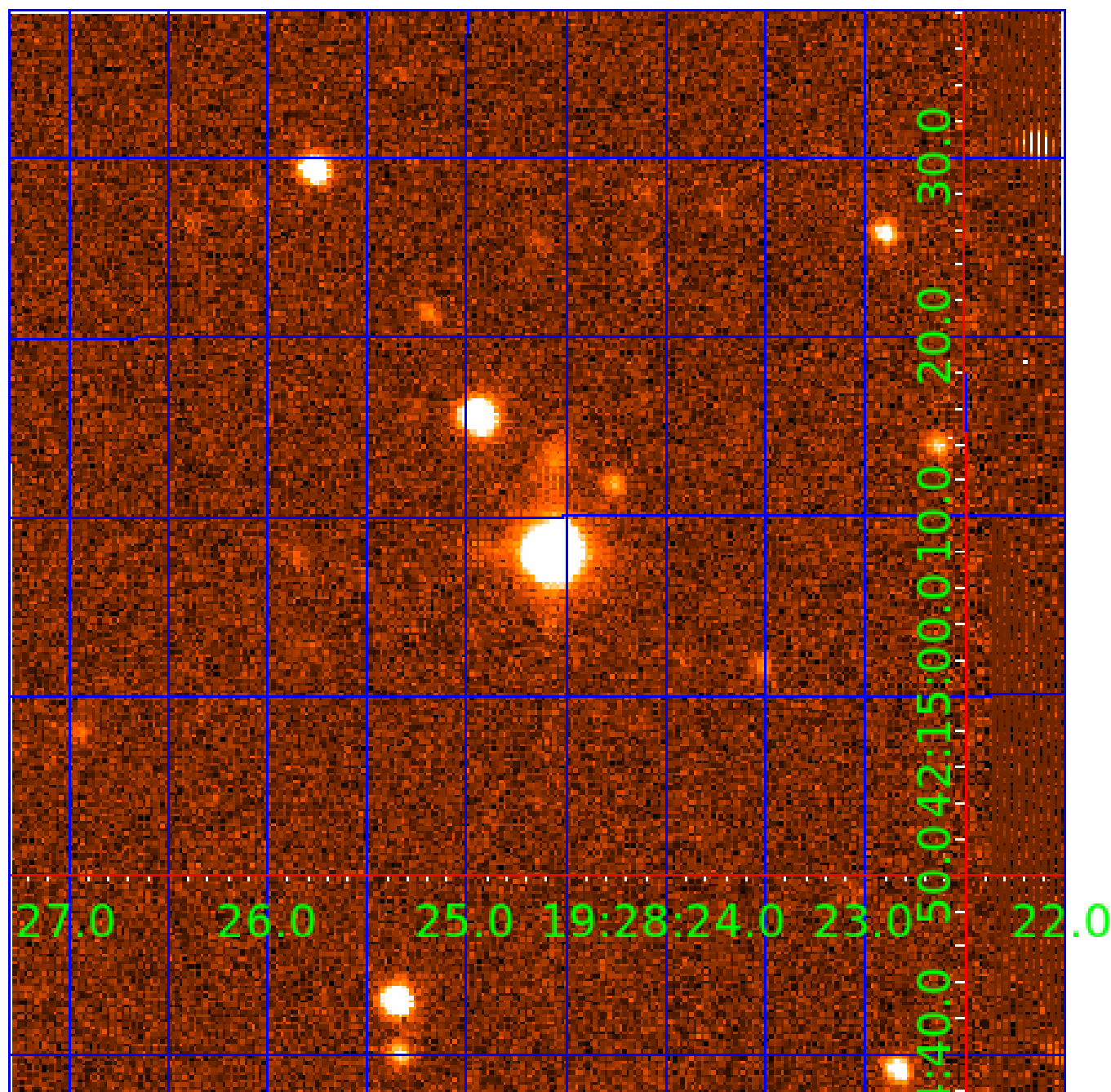


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006778289

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})
006778289-01	OBS	6767.01	30.130297	152.220407	280559.4	9.000	15425.7	-1.0	1.35	6674	47.50	76.21
006778289-02	OBS	No	30.130143	138.173215	162220.1	8.612	10081.7	4737.7	1.35	6674	57.37	76.21
006778289-03	OBS	No	30.132084	154.328469	2160.6	15.000	220.9	-1.0	1.35	6674	6.31	76.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006778289-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
006778289-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006778289-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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 006778289-02

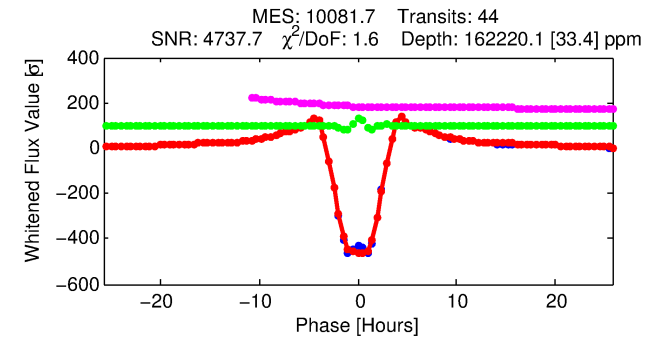
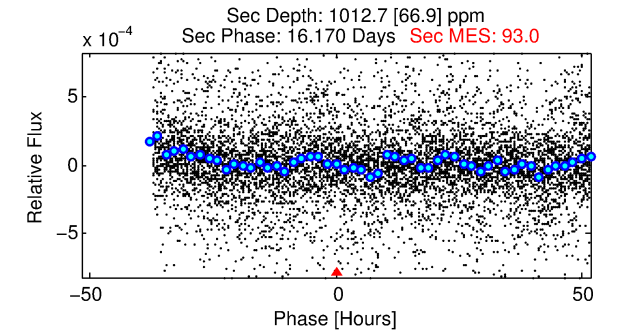
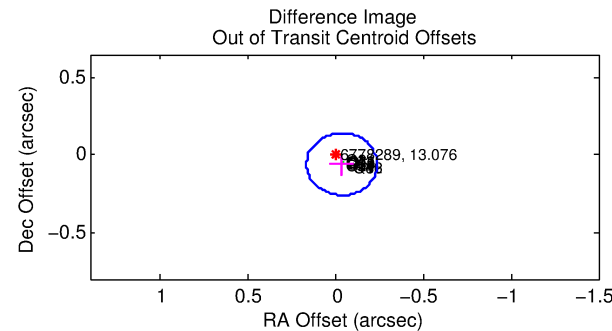
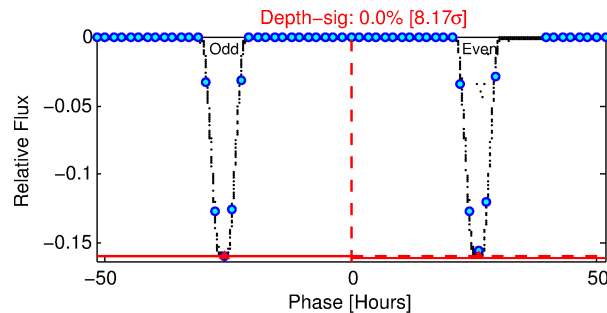
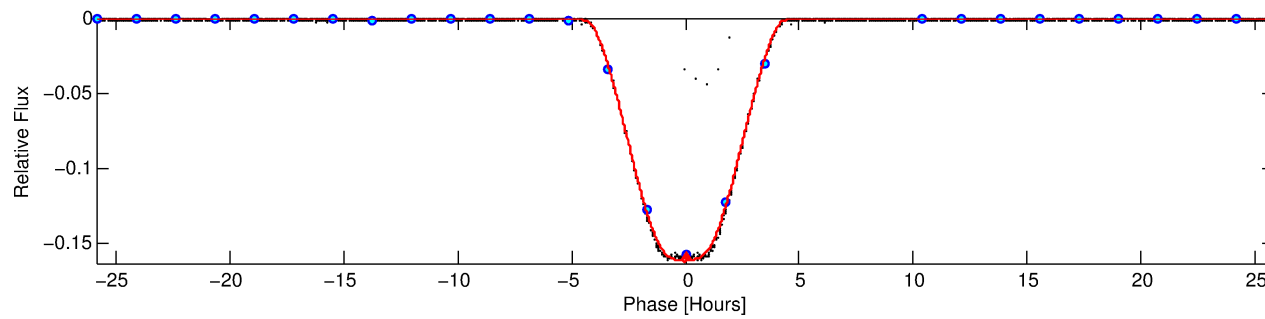
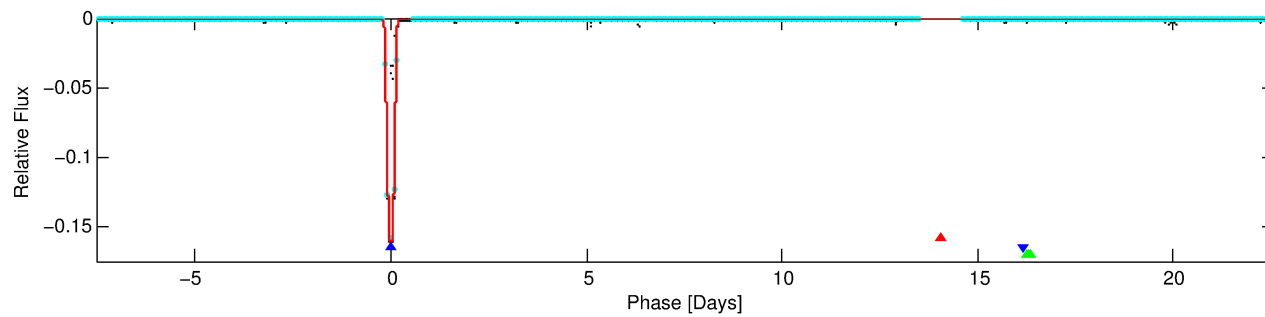
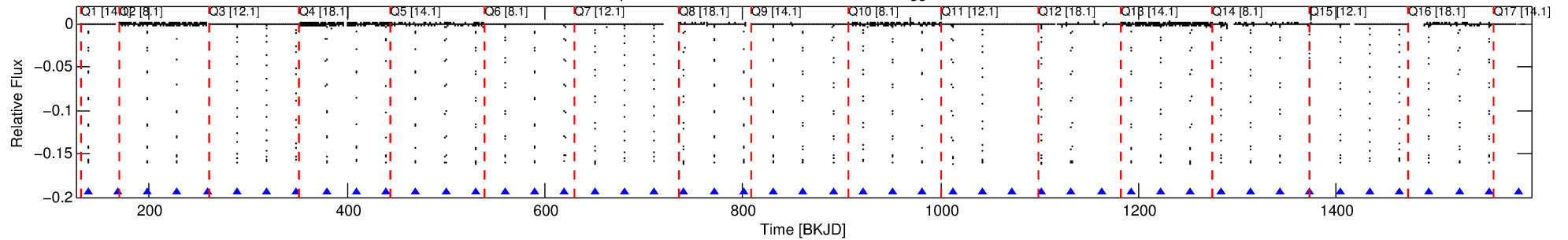
No Significant Match Found

DV One-Page Summary

KIC: 6778289 Candidate: 2 of 3 Period: 30.130 d

KOI: K06767 Corr: No Ephemeris Match

Kp: 13.08 R*: 1.35 Rs Teff: 6674.0 K Logg: 4.29 Fe/H: -0.060



DV Fit Results:

Period = 30.13014 [0.00000] d
Epoch = 138.1732 [0.0000] BKJD
Rp/R* = 0.3903 [0.0001]
a/R* = 34.13 [0.01]
b = 0.55 [0.00]
Seff = 76.21 [22.52]
Teq = 753 [56] K
Rp = 57.37 [12.78] Re
a = 0.2057 [0.0380] AU
Ag = 7.16 [1.96] [3.15σ]
Teffp = 1906 [70] K [12.91σ]

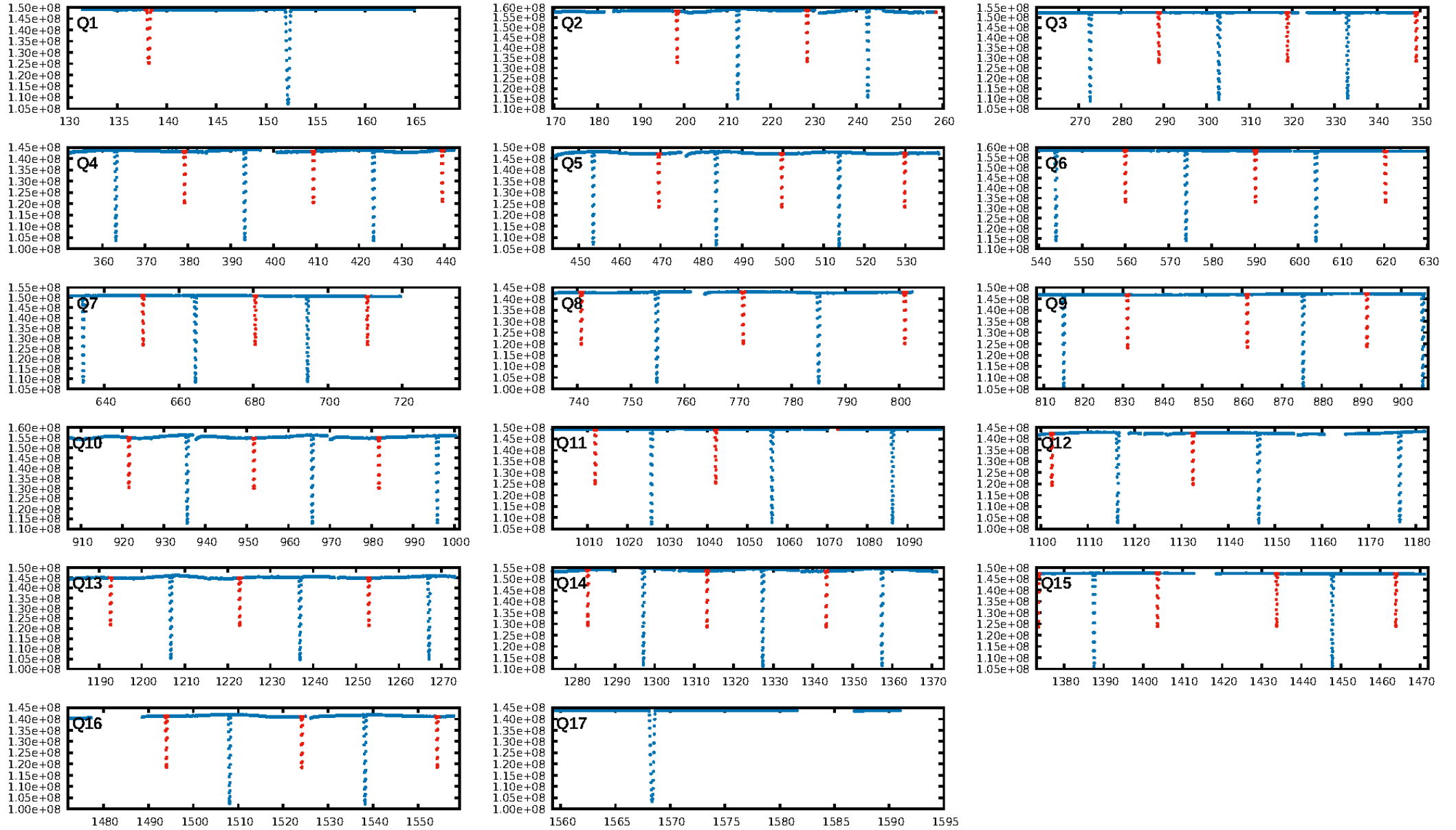
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 0.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [43/43]
GhostDiagnostic-chr: 7.181
Centroid-sig: N/A
Centroid-so: 0.164 arcsec [298.03σ]
OotOffset-rm: 0.069 arcsec [1.03σ]
KicOffset-rm: 0.114 arcsec [1.70σ]
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]

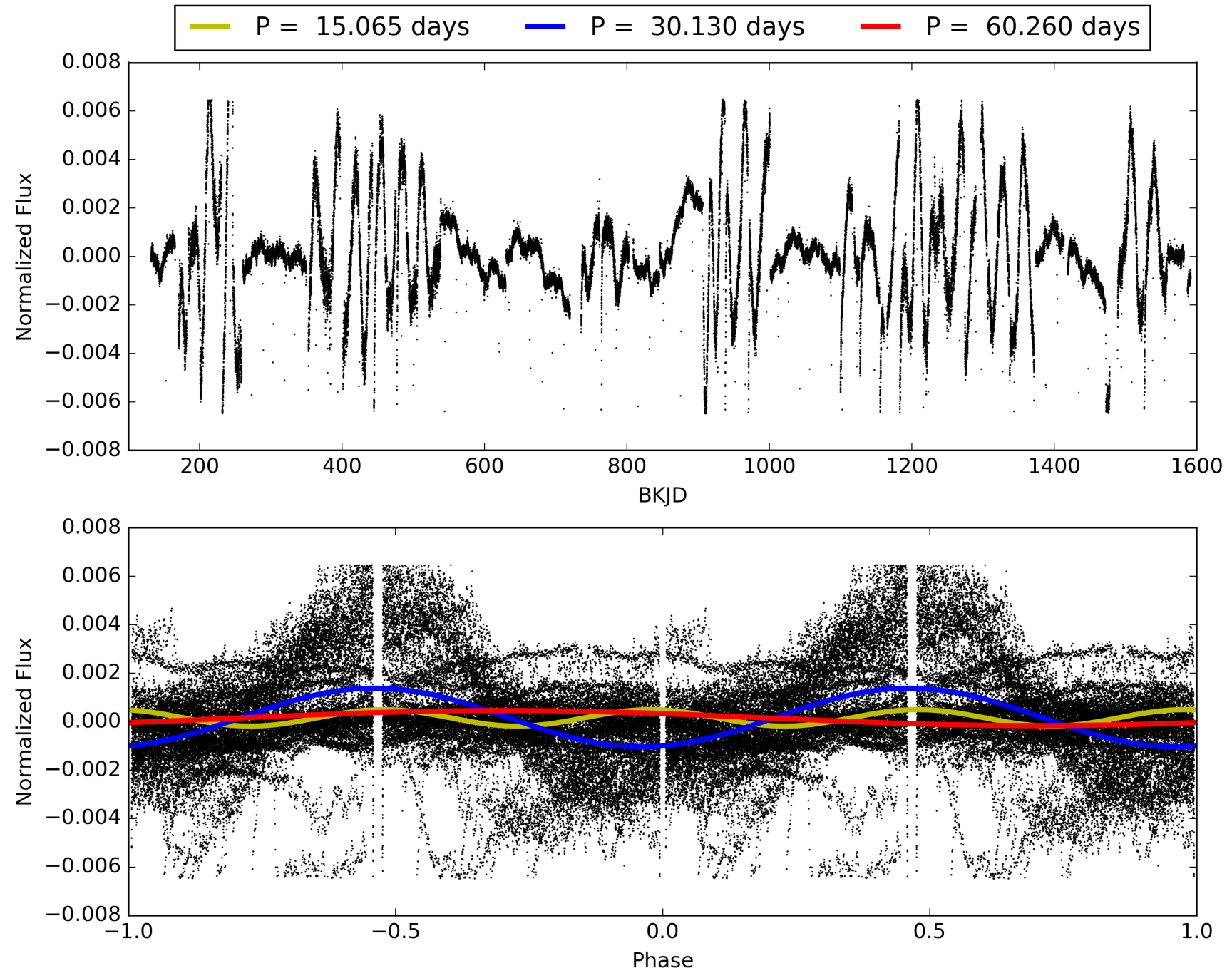
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:32:08 Z

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

TCE 006778289-02, PDC Light Curves

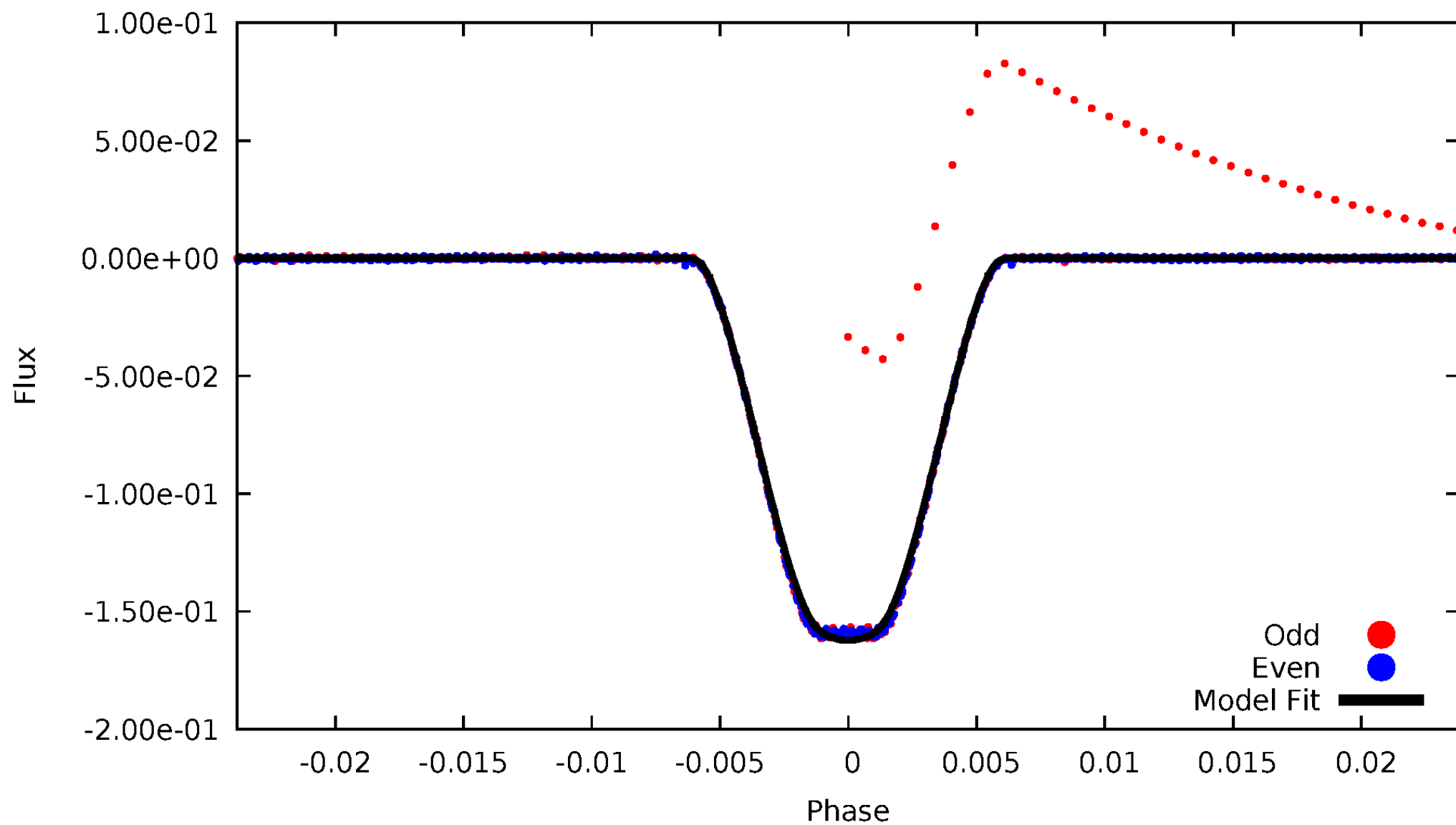


TCE 006778289-02



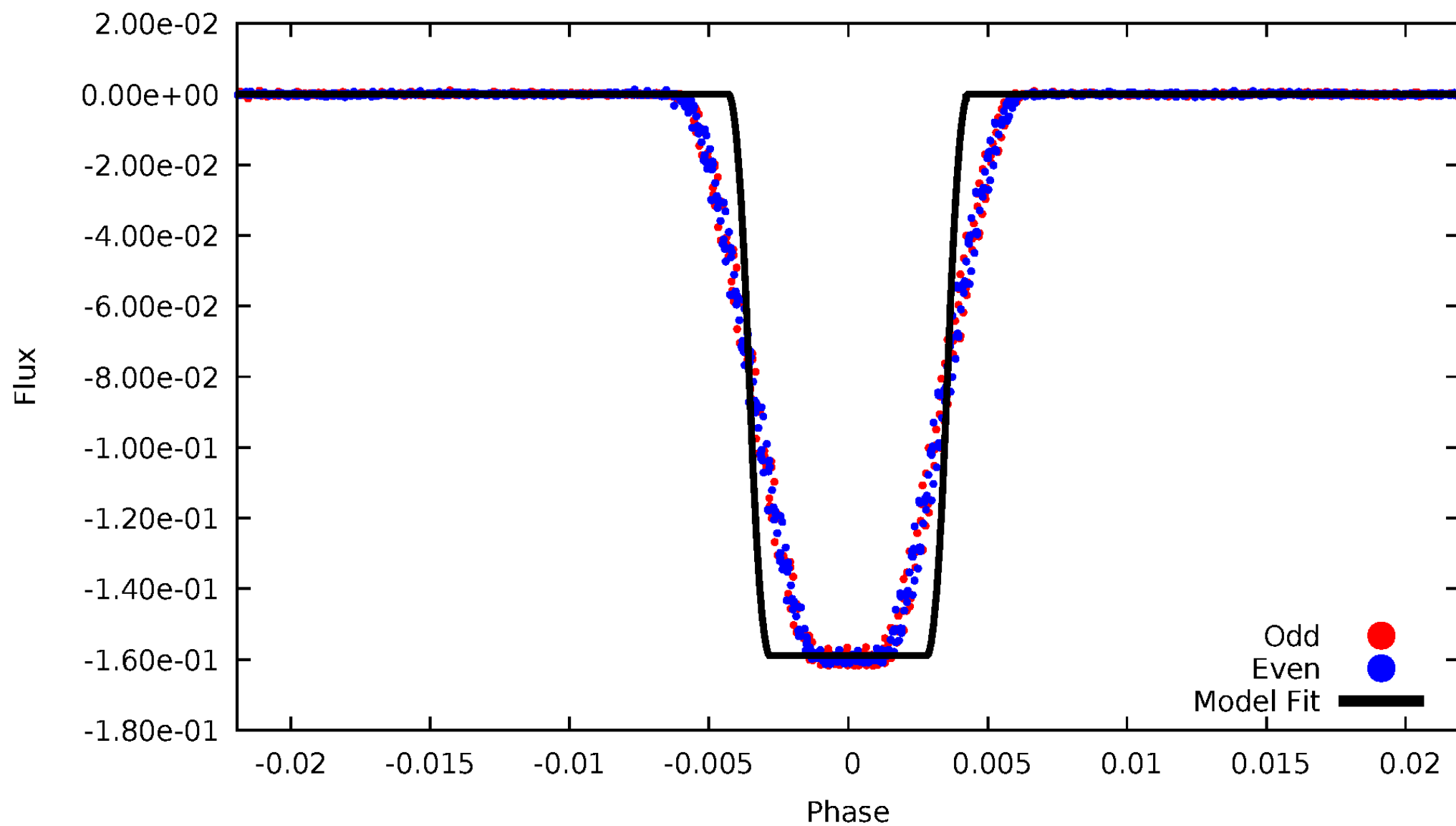
DV Odd/Even

TCE 006778289-02



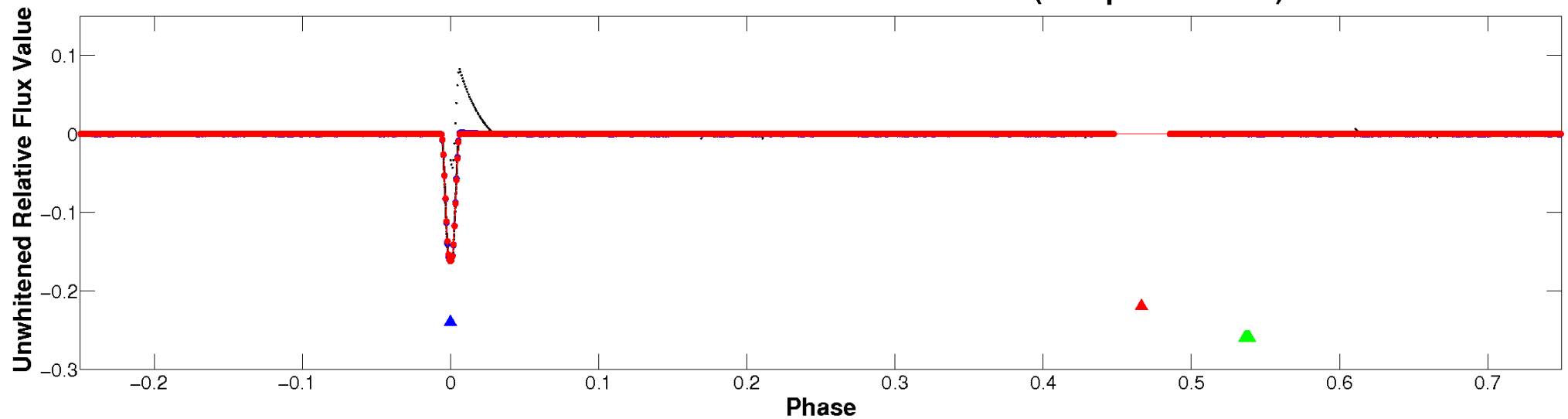
ALT Odd/Even

TCE 006778289-02

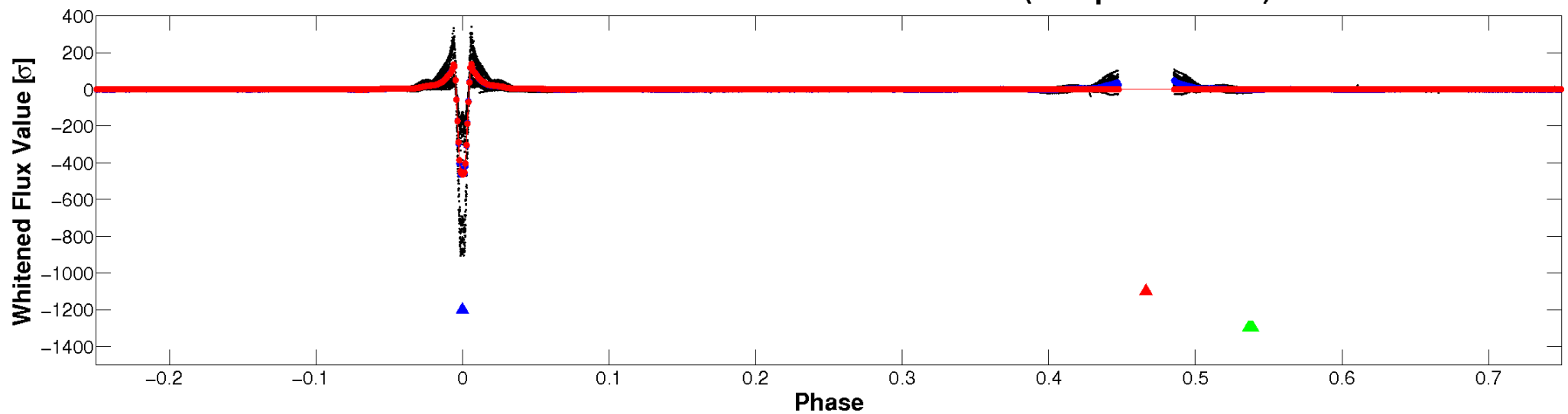


Non-Whitened Vs. Whitened Light Curve

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

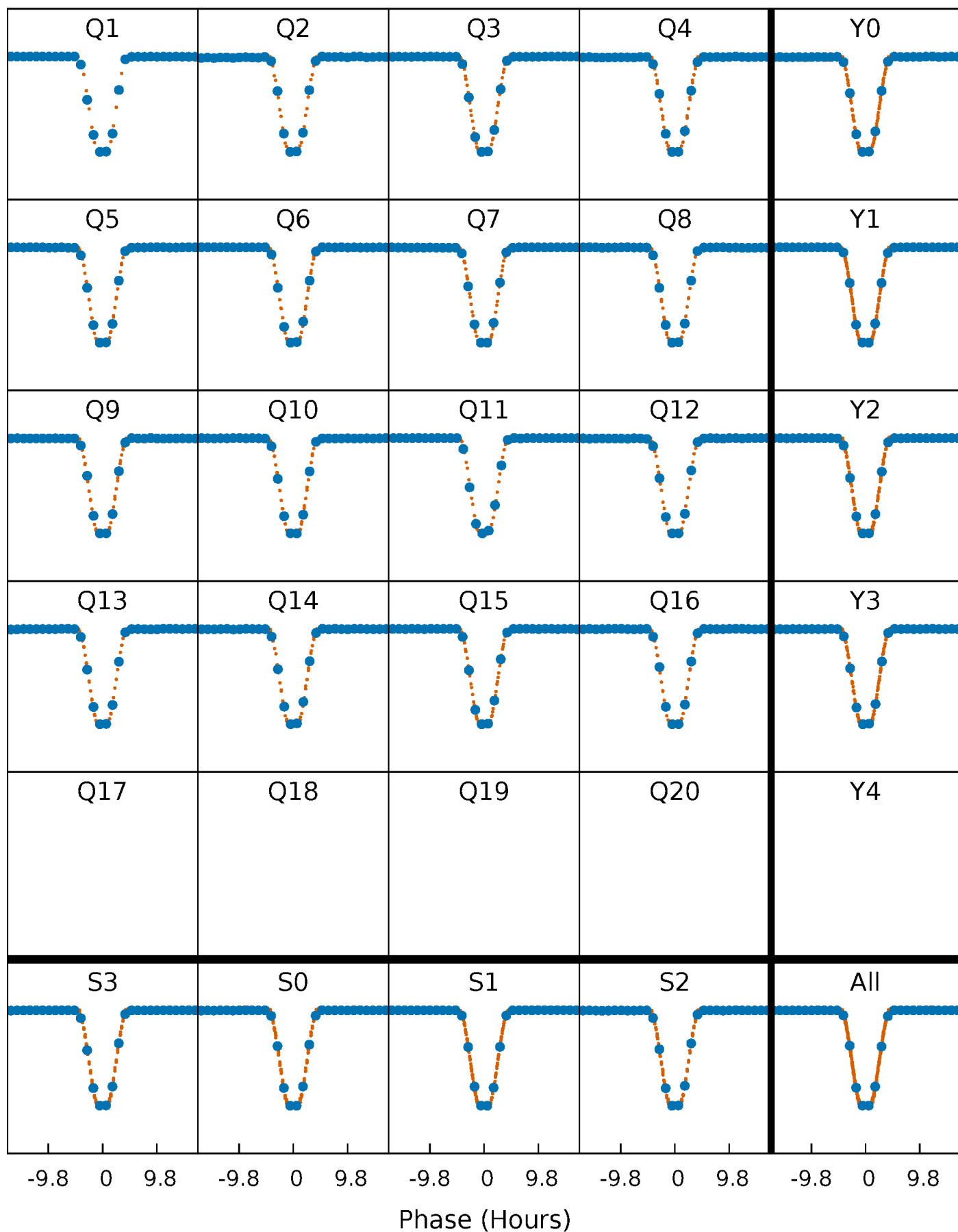


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



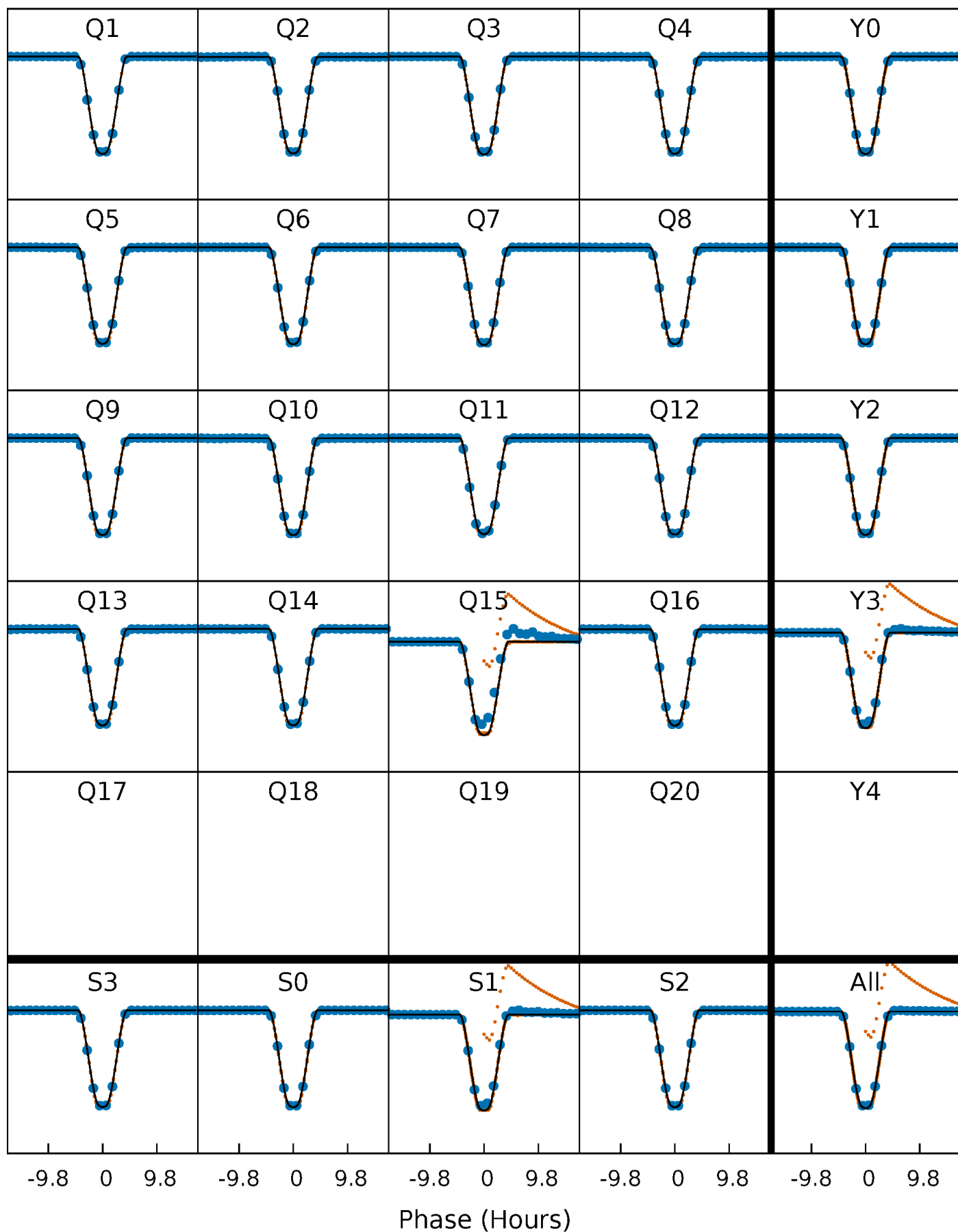
PDC Quarter-Phased Transit Curves

TCE 006778289-02 P= 30.130143 Days $T_0=138.173215$ (BKJD)



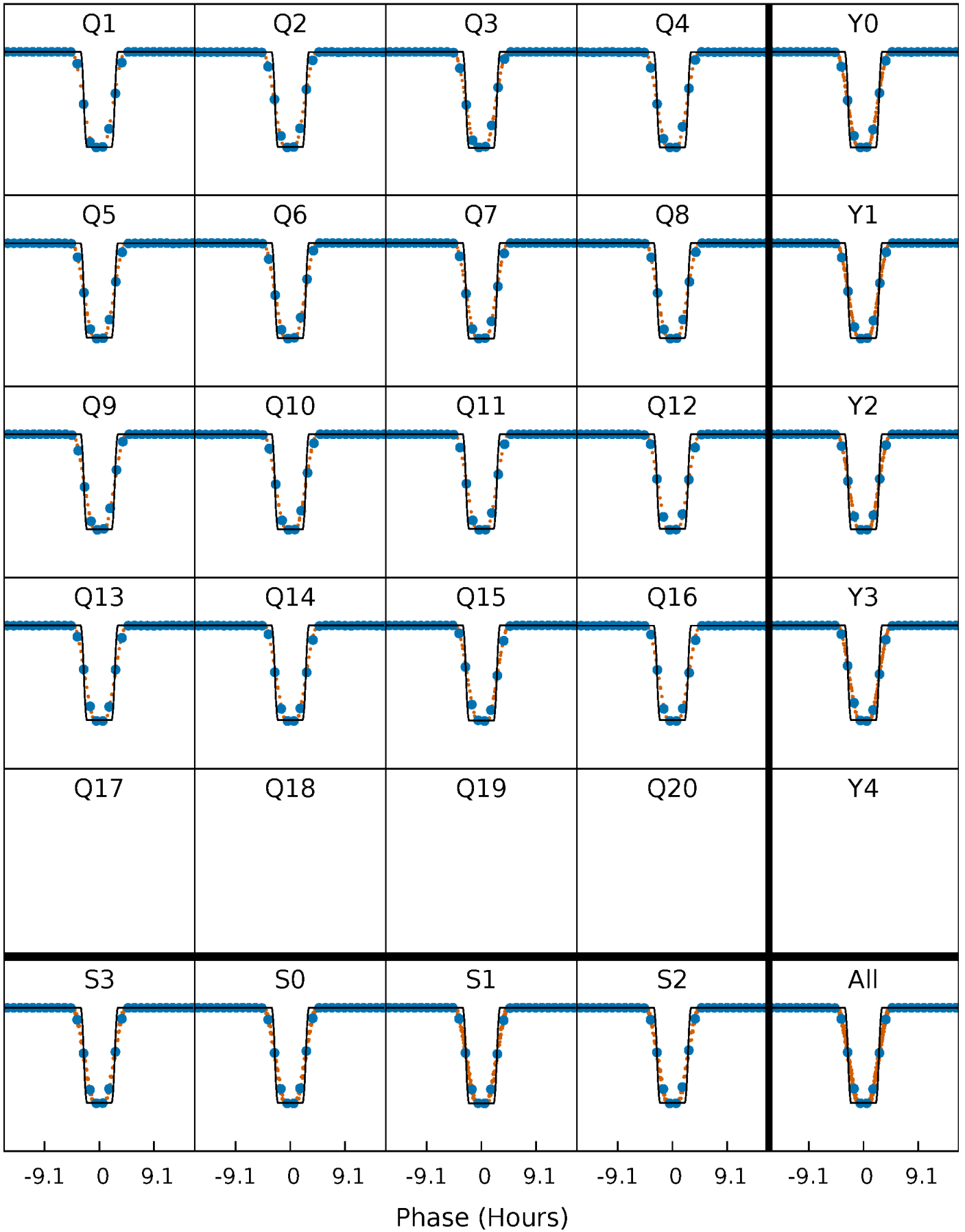
DV Quarter-Phased Transit Curves

TCE 006778289-02 P= 30.130143 Days $T_0=138.173215$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

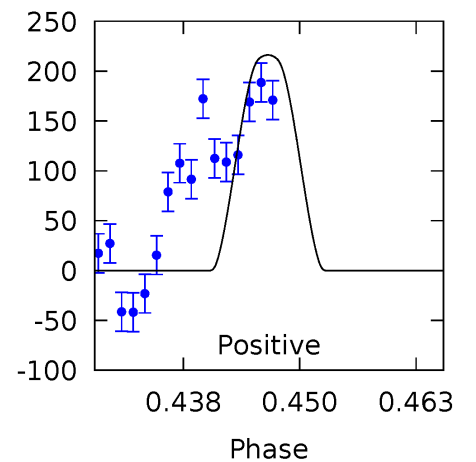
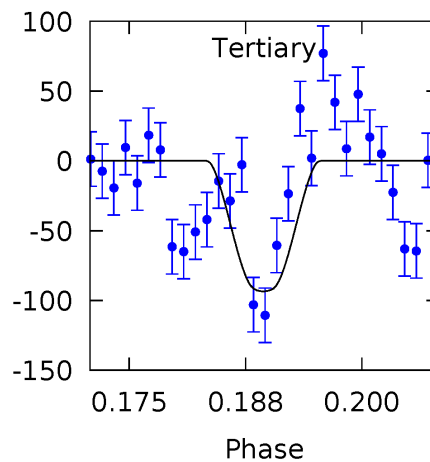
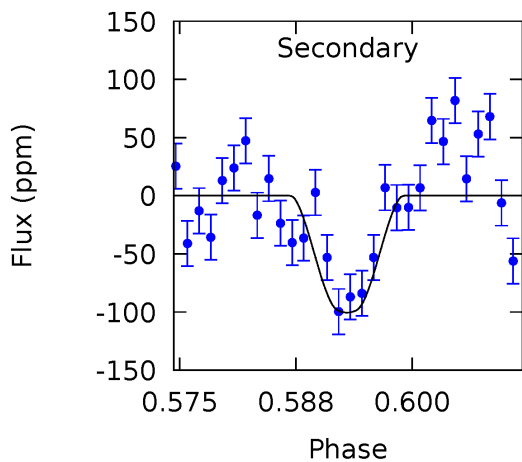
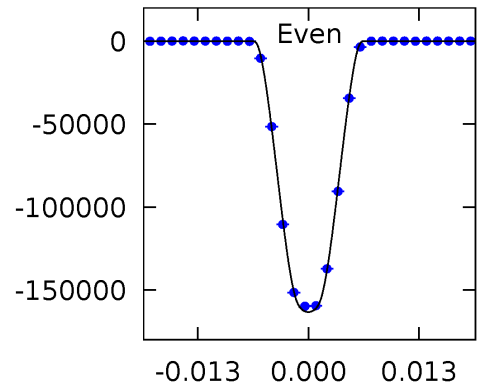
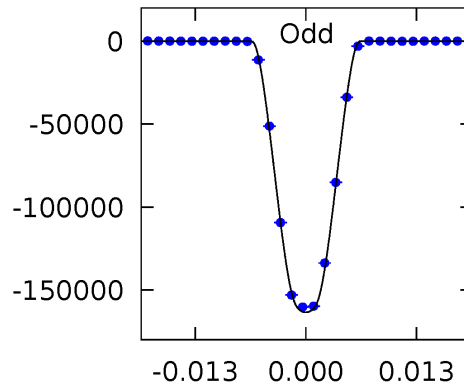
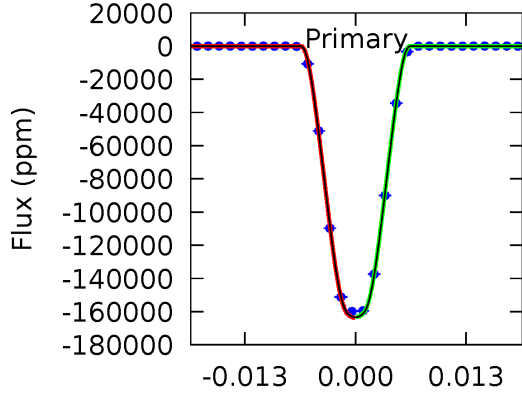
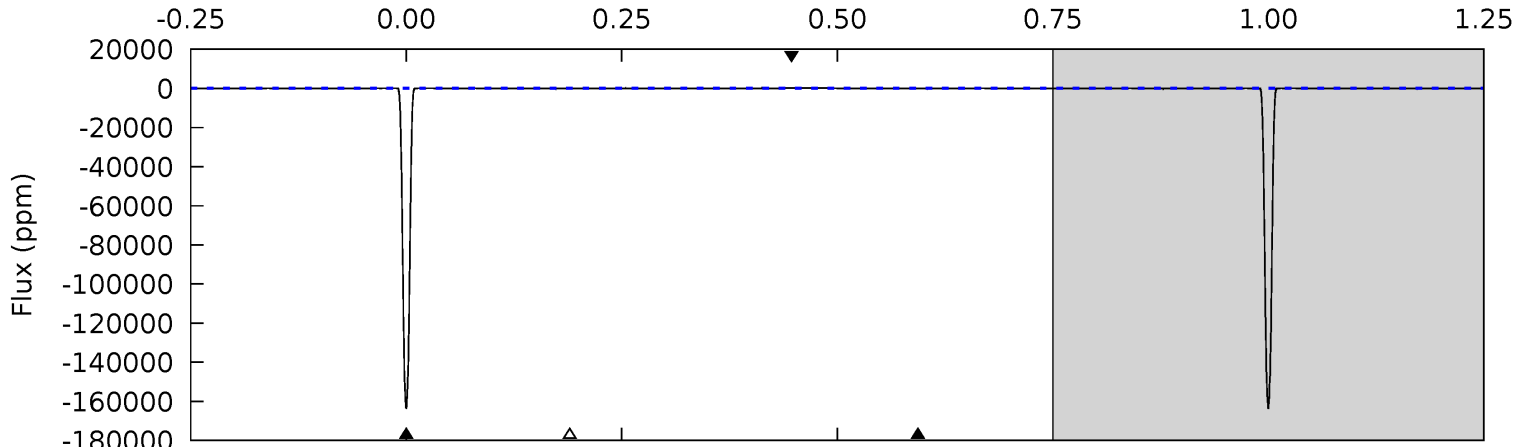
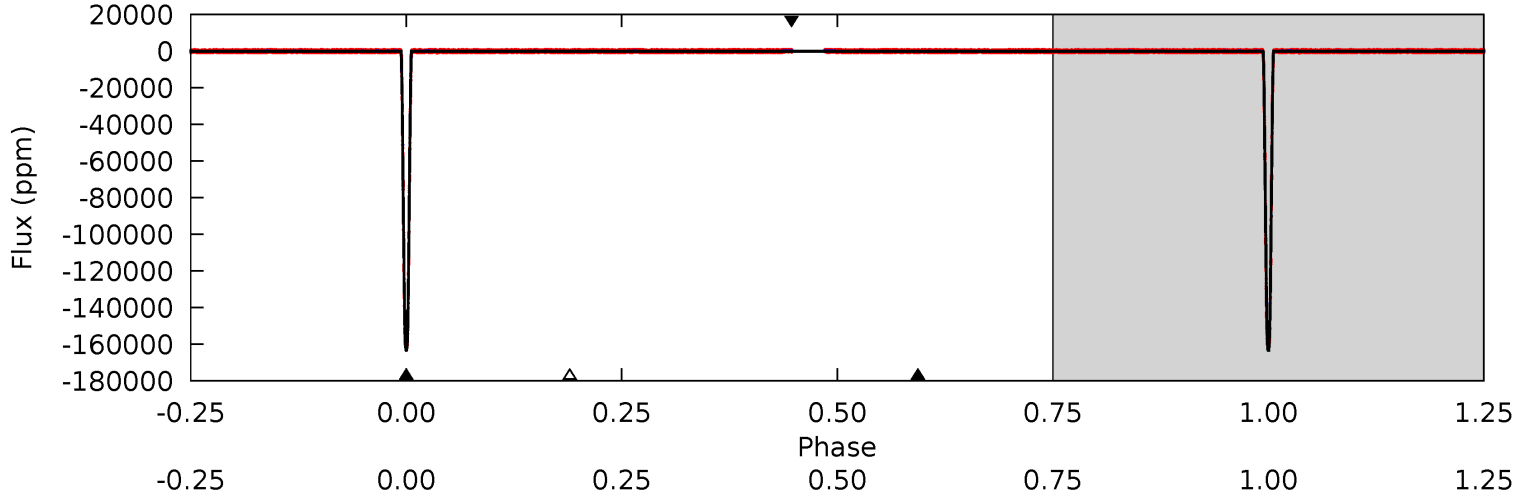
TCE 006778289-02 P= 30.129856 Days $T_0=138.179322$ (BKJD)



DV Model-Shift Uniqueness Test

006778289-02, P = 30.130143 Days, E = 108.043072 Days

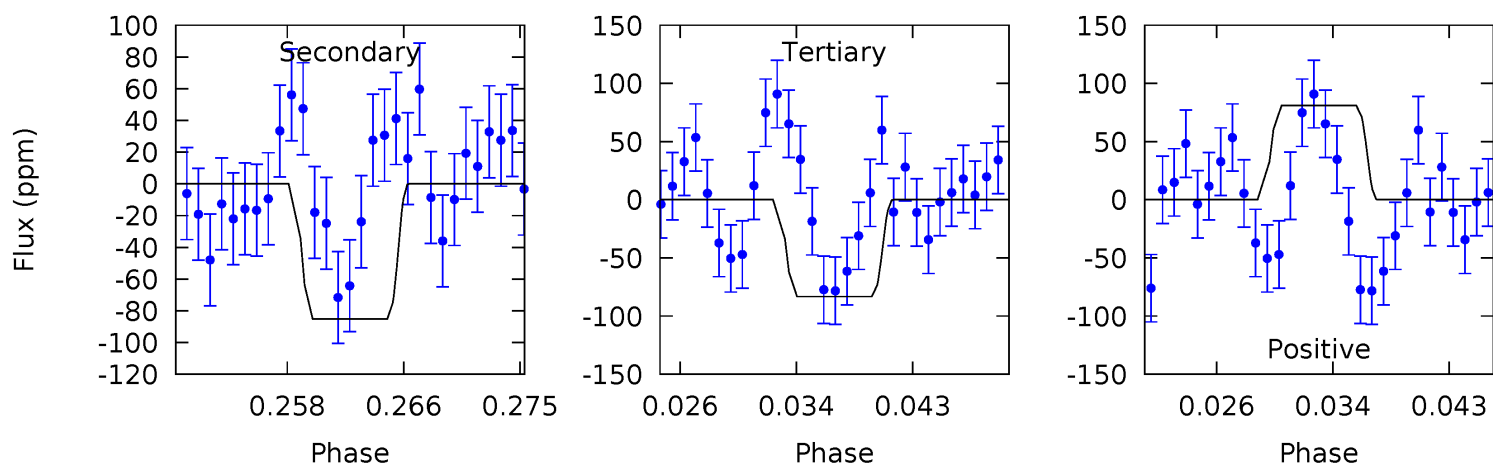
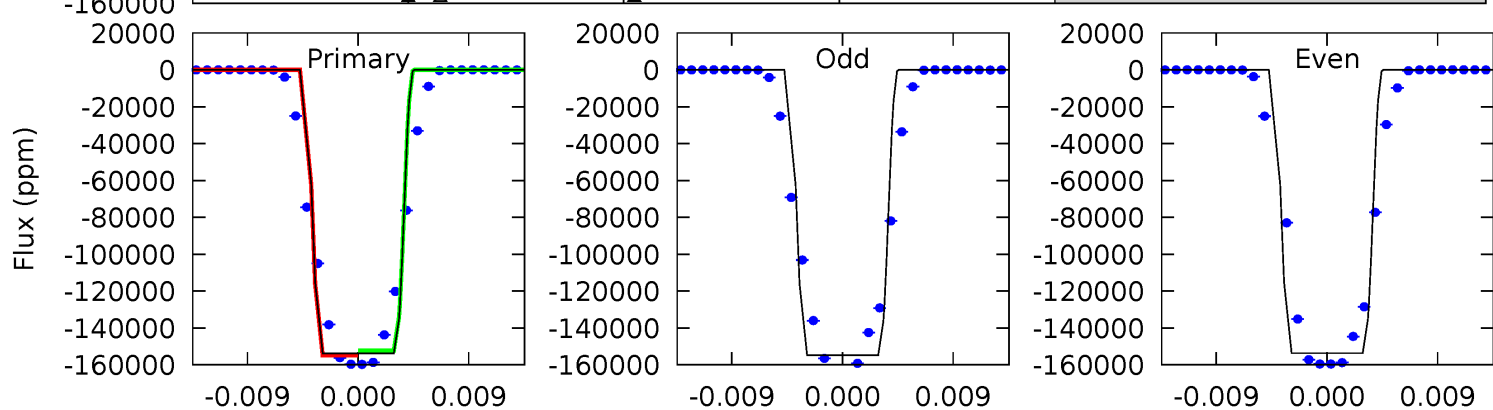
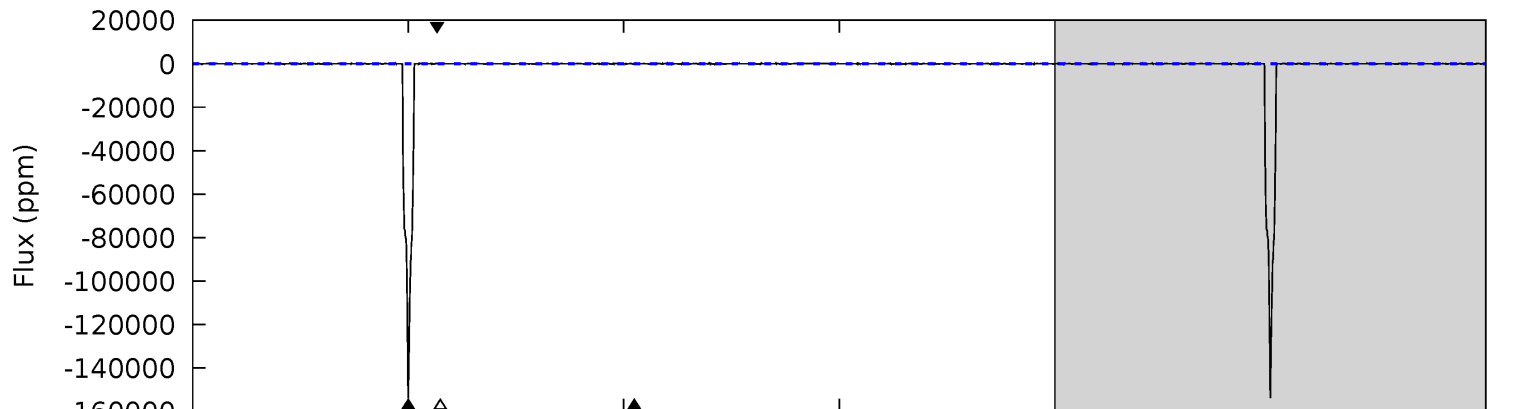
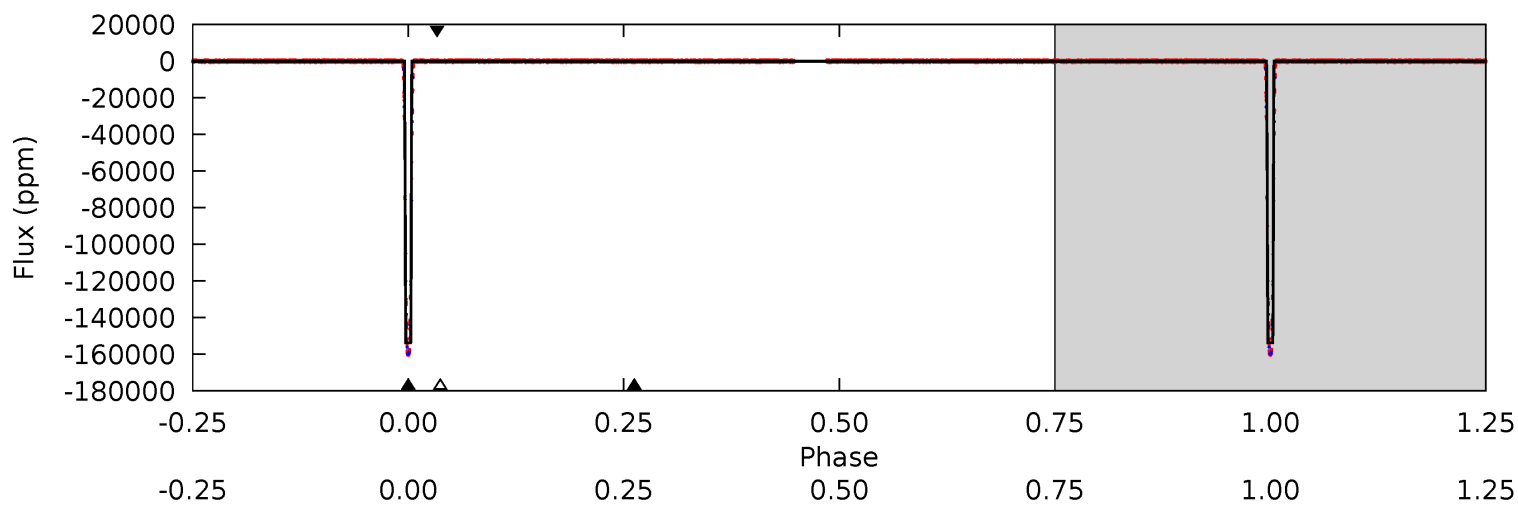
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
14886	9.15	8.52	19.7	4.98	2.50	4.23	14878	14867	0.63	-10.5	6.94	0.98	0.00	0



Alt Model-Shift Uniqueness Test

006778289-02, P = 30.129856 Days, E = 108.049466 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8729	4.83	4.73	4.59	5.06	2.63	1.42	8724	8725	0.10	0.24	33.9	1.00	0.00	70.4



Stellar Parameters For KIC 006778289

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6674^{+150}_{-218}	$4.286^{+0.088}_{-0.143}$	$-0.060^{+0.250}_{-0.300}$	$1.347^{+0.300}_{-0.200}$	$1.284^{+0.144}_{-0.192}$	$0.740^{+0.270}_{-0.308}$
	+2%/-3%	+2%/-3%	+417%/-500%	+22%/-15%	+11%/-15%	+37%/-42%
Source	PHO1	FLK73	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 006778289-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-100 ± 11	$57.73^{+6.98}_{-4.87}$	1060^{+59}_{-55}	1934^{+44}_{-64}	$0.677^{+0.142}_{-0.135}$
Alt.	-85 ± 18	$59.77^{+6.87}_{-5.49}$	1060^{+58}_{-50}	1851^{+85}_{-141}	$0.543^{+0.174}_{-0.152}$

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

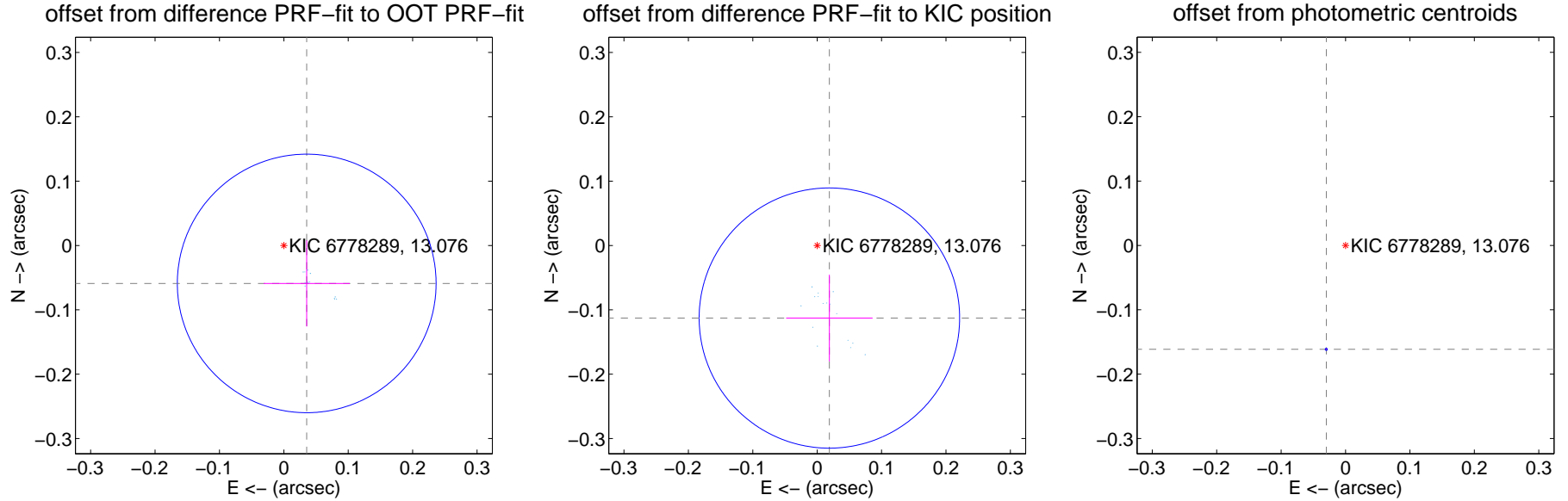
DV Centroid Data

Supplemental centroid analysis for 006778289-02. Kepler magnitude: 13.08. Transit SNR 4737.67

There are 16 quarters with good PRF difference image offsets

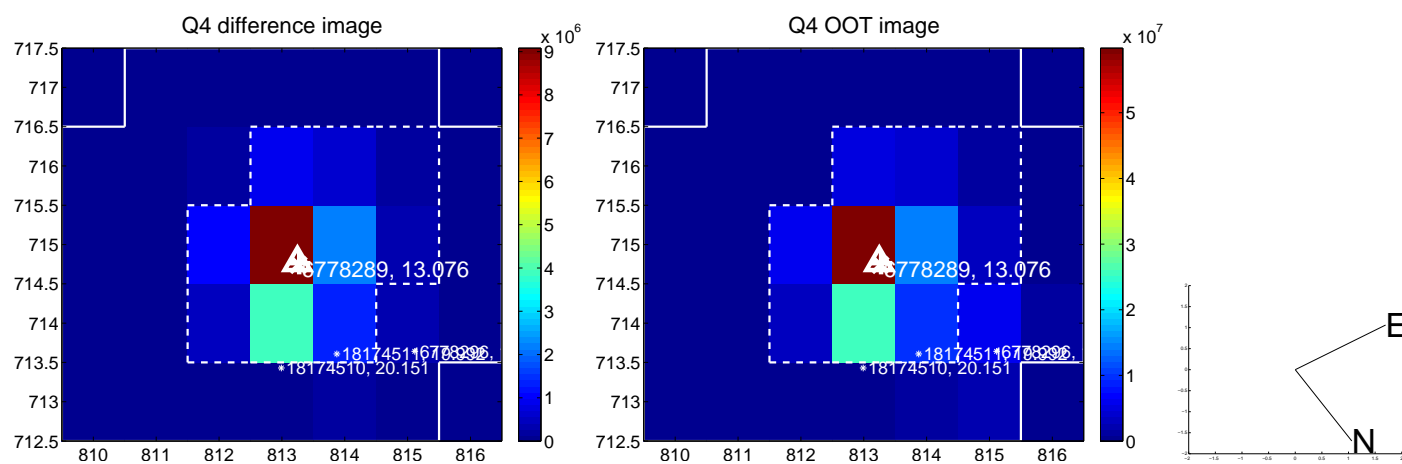
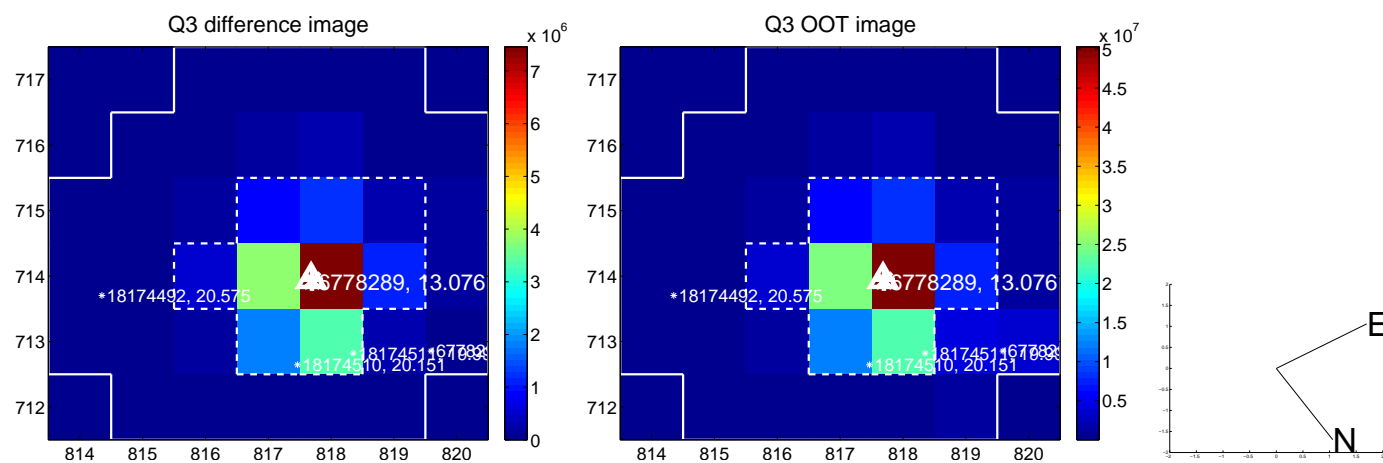
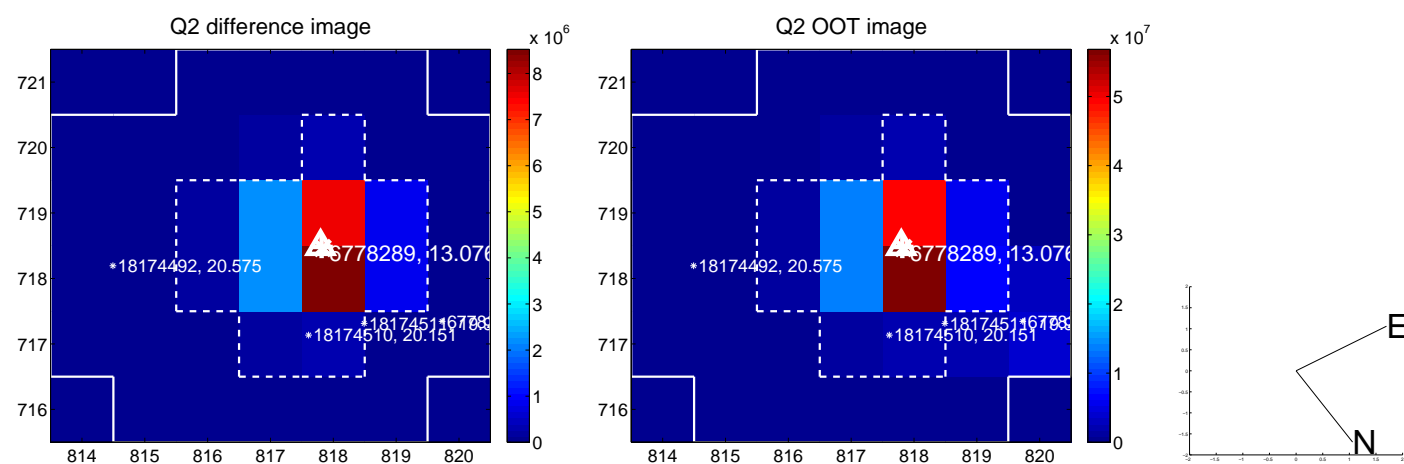
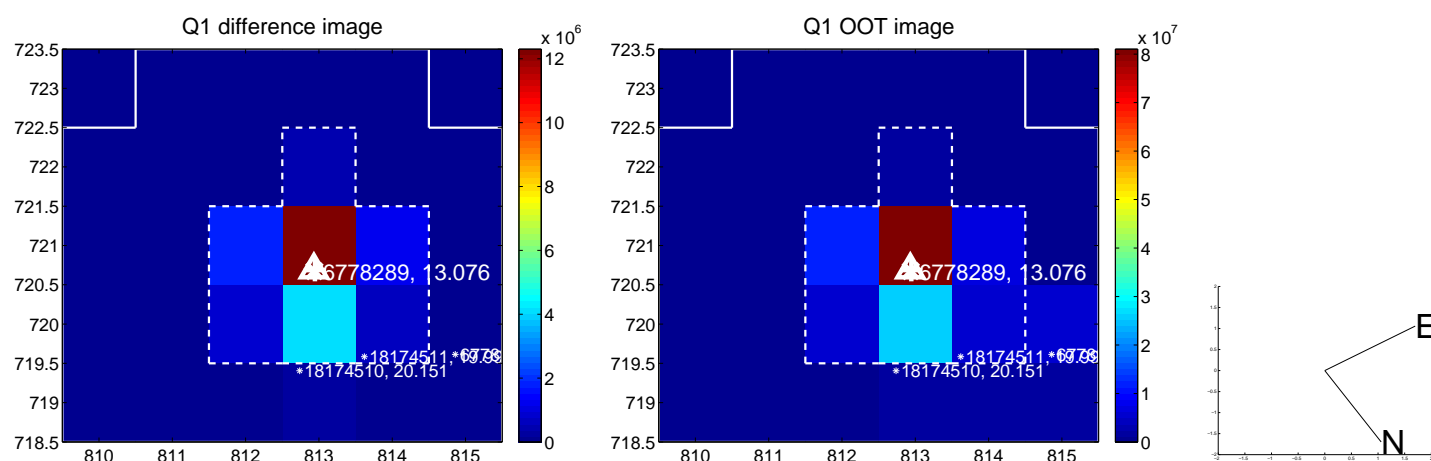
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.069 ± 0.067	1.03	-0.036 ± 0.067	-0.059 ± 0.067
PRF-fit source offset from KIC position	0.114 ± 0.067	1.70	-0.019 ± 0.067	-0.113 ± 0.067
photometric centroid source offset	0.16 ± 0.00	298.03	0.03 ± 0.00	-0.16 ± 0.00

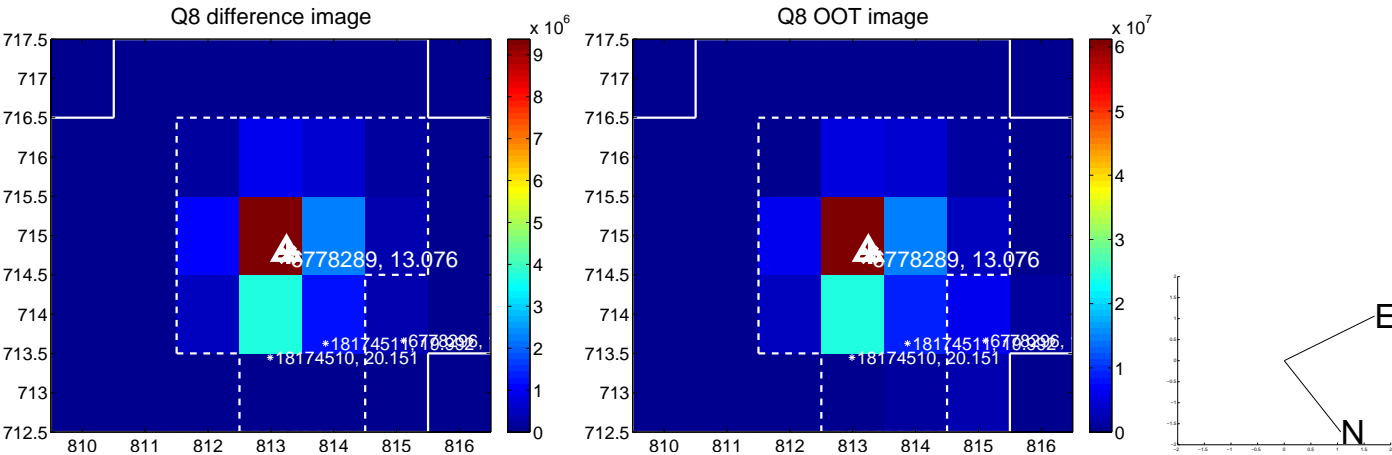
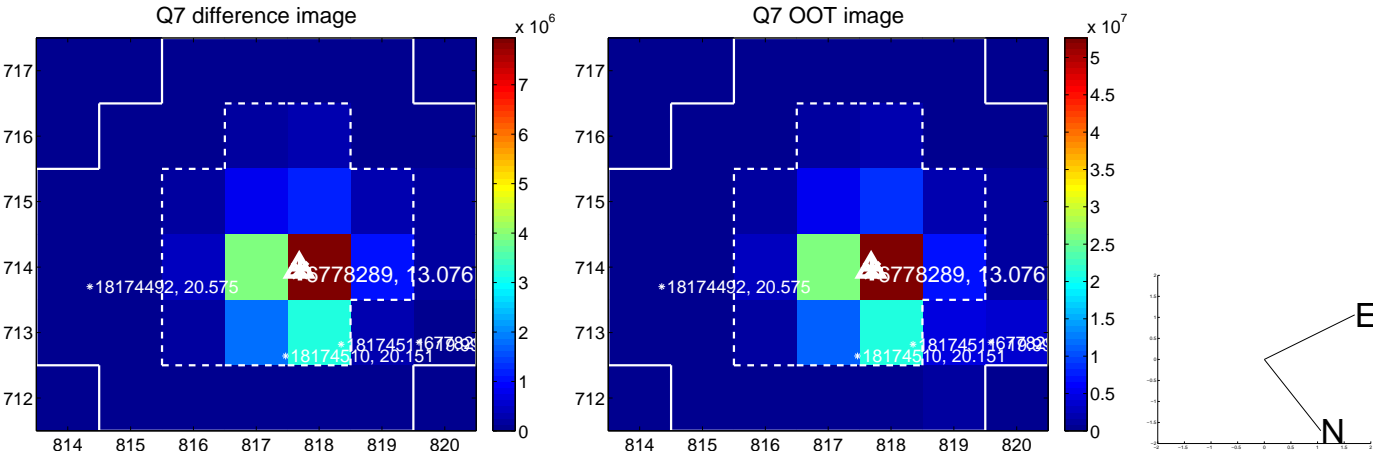
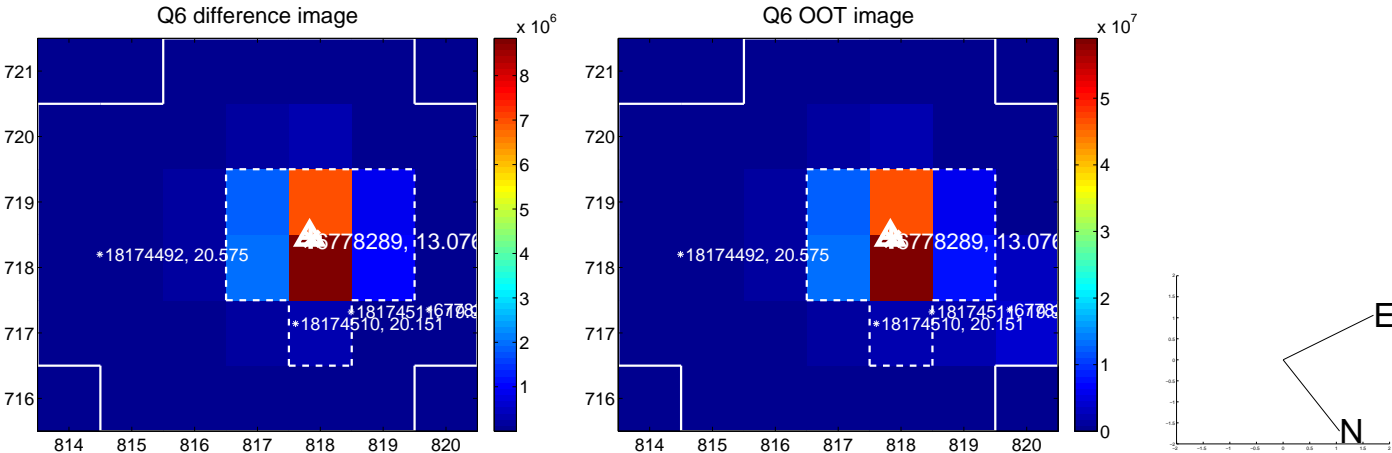
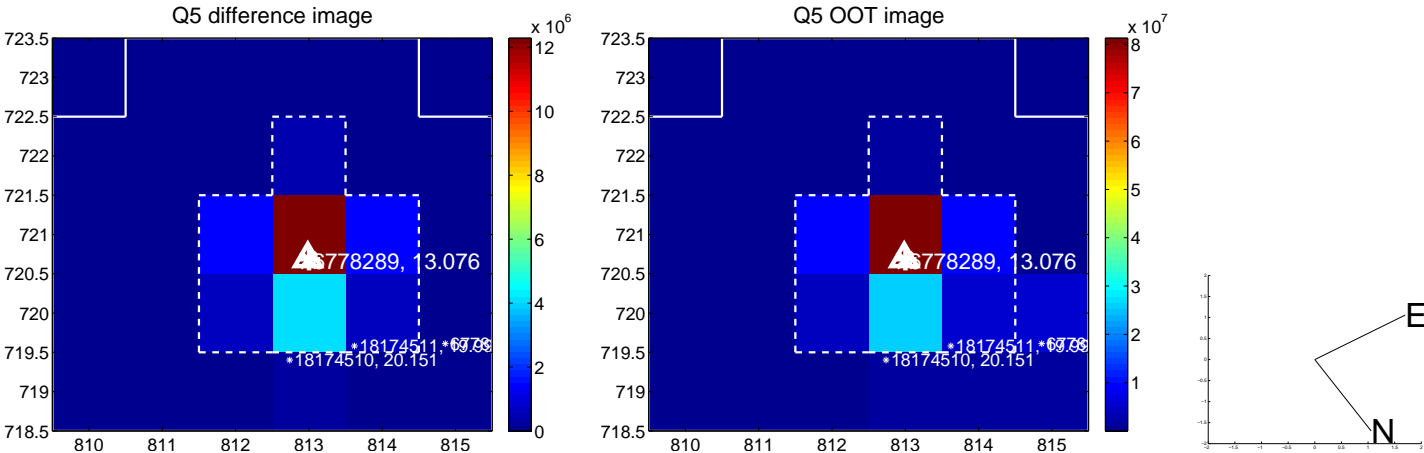


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

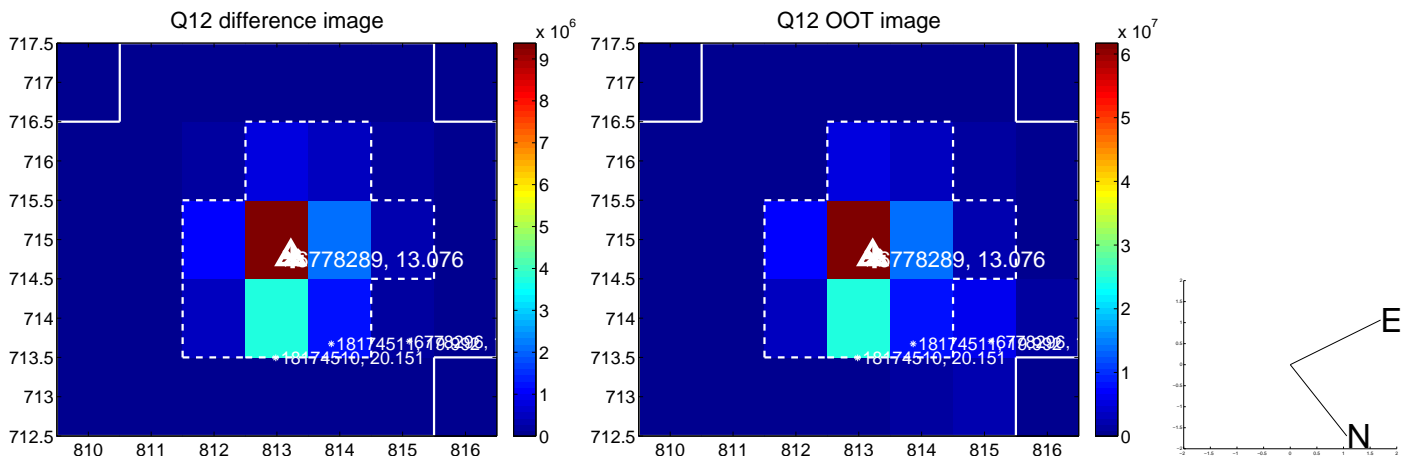
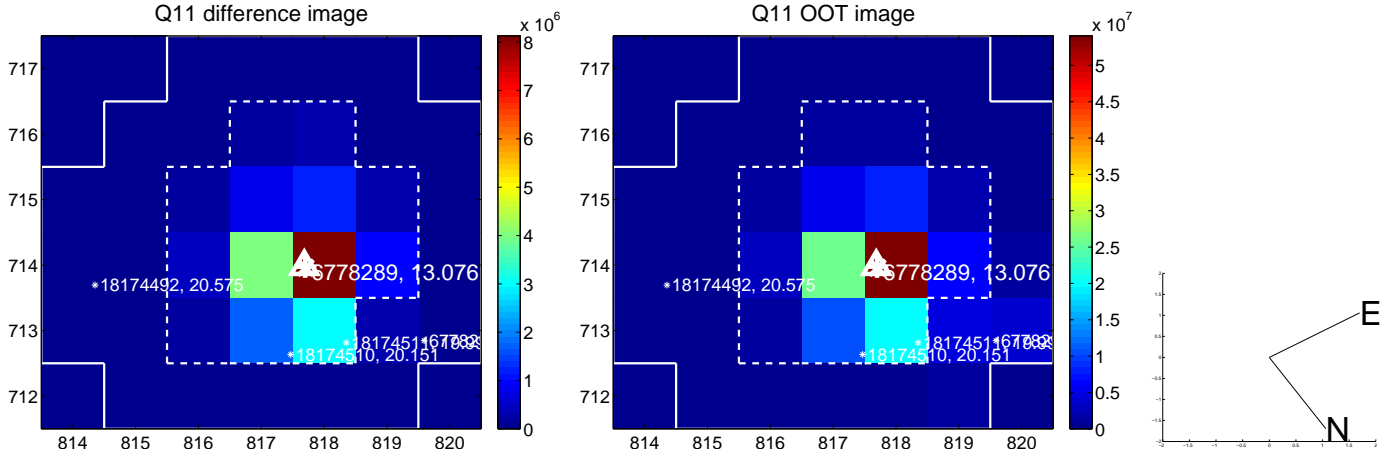
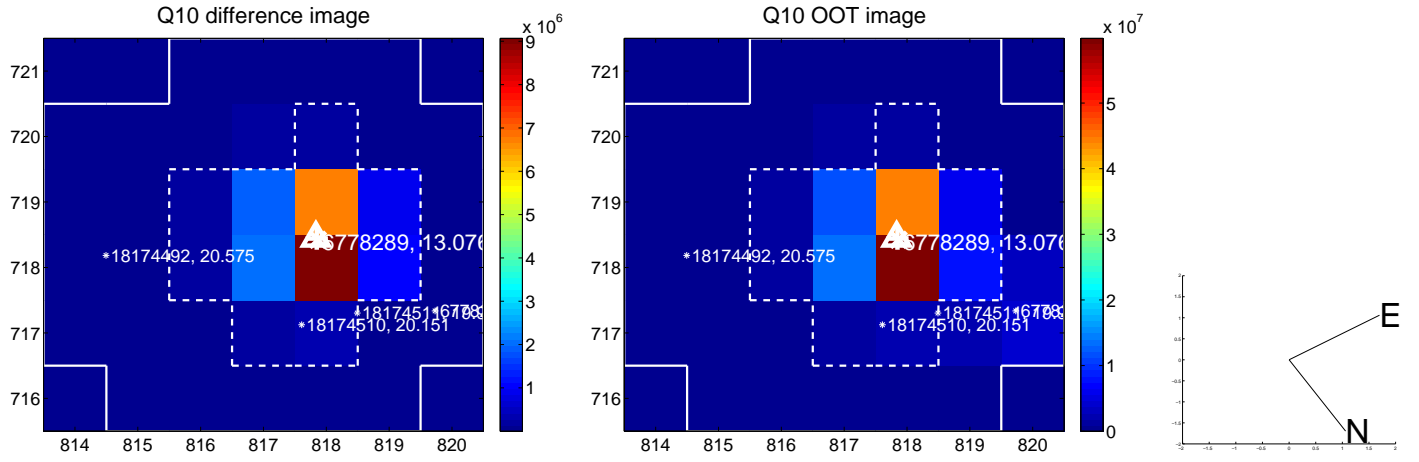
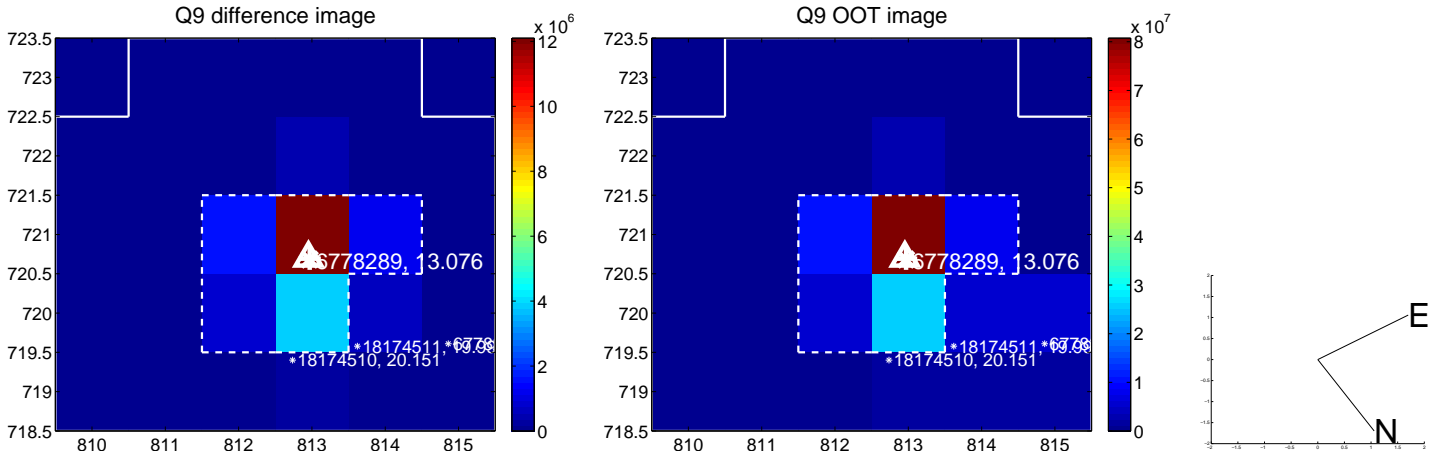
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



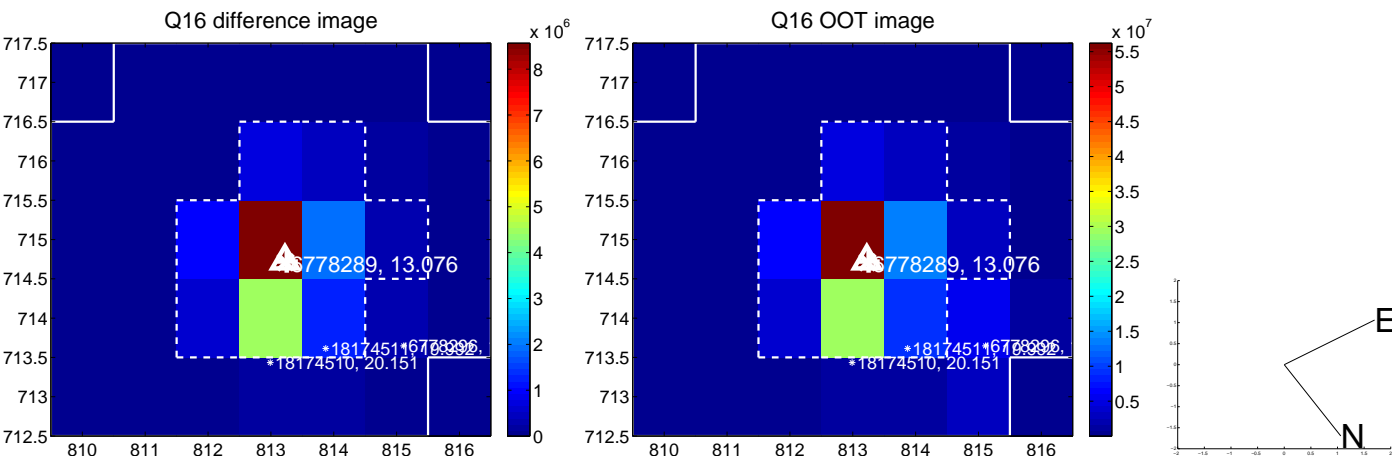
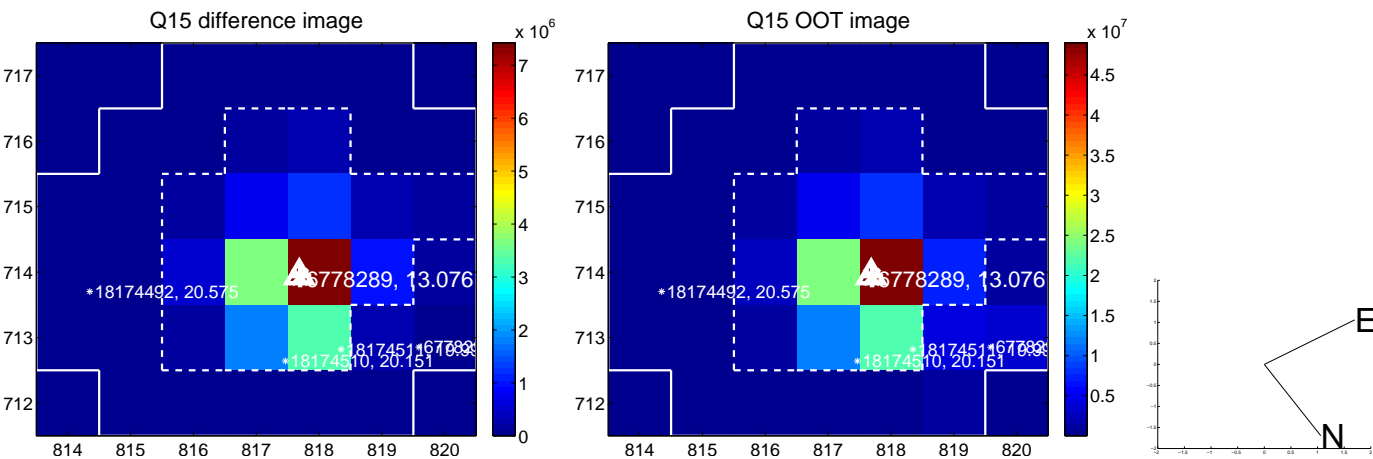
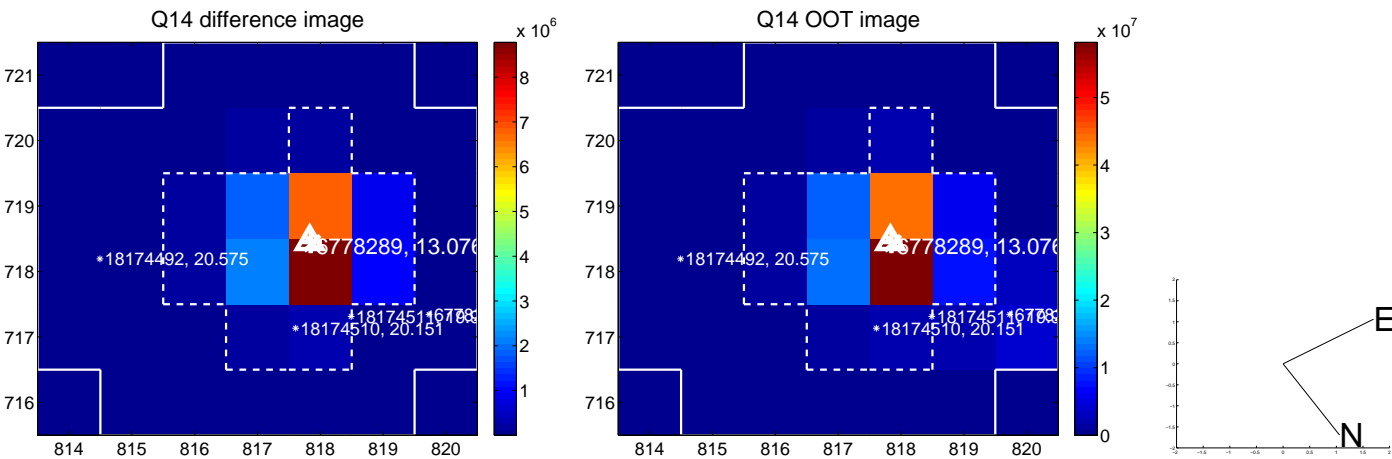
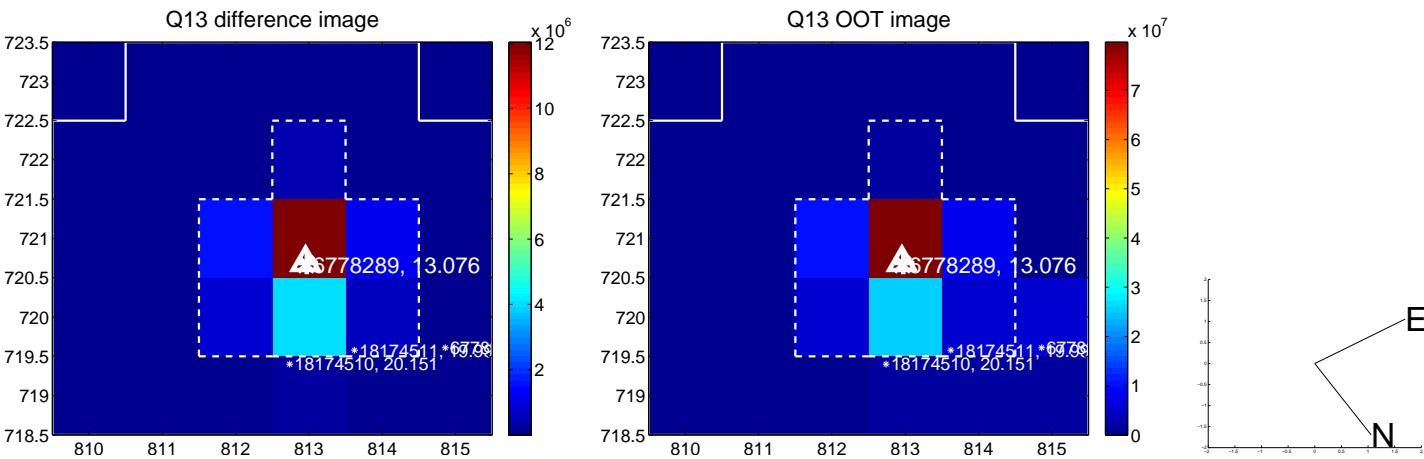
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



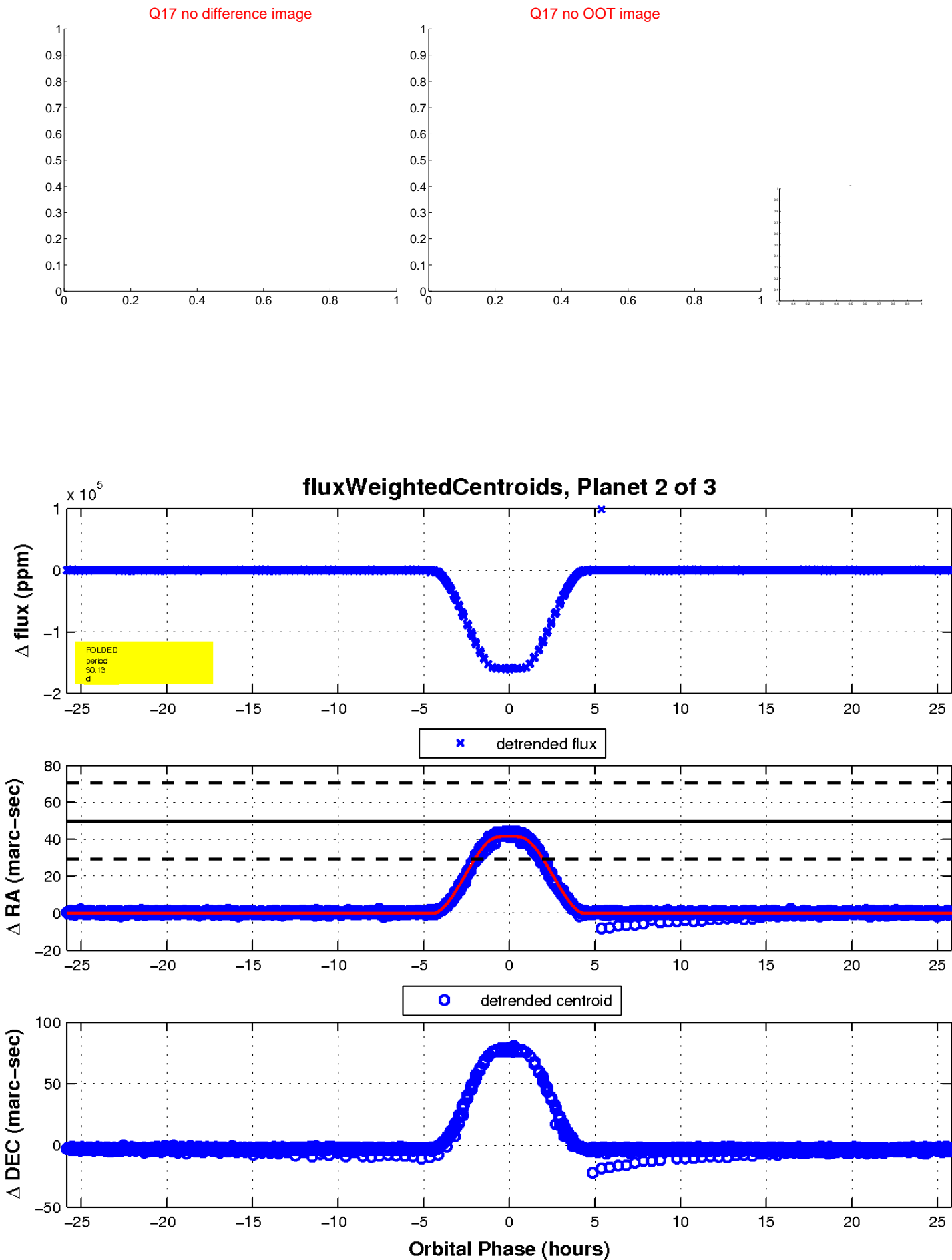
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

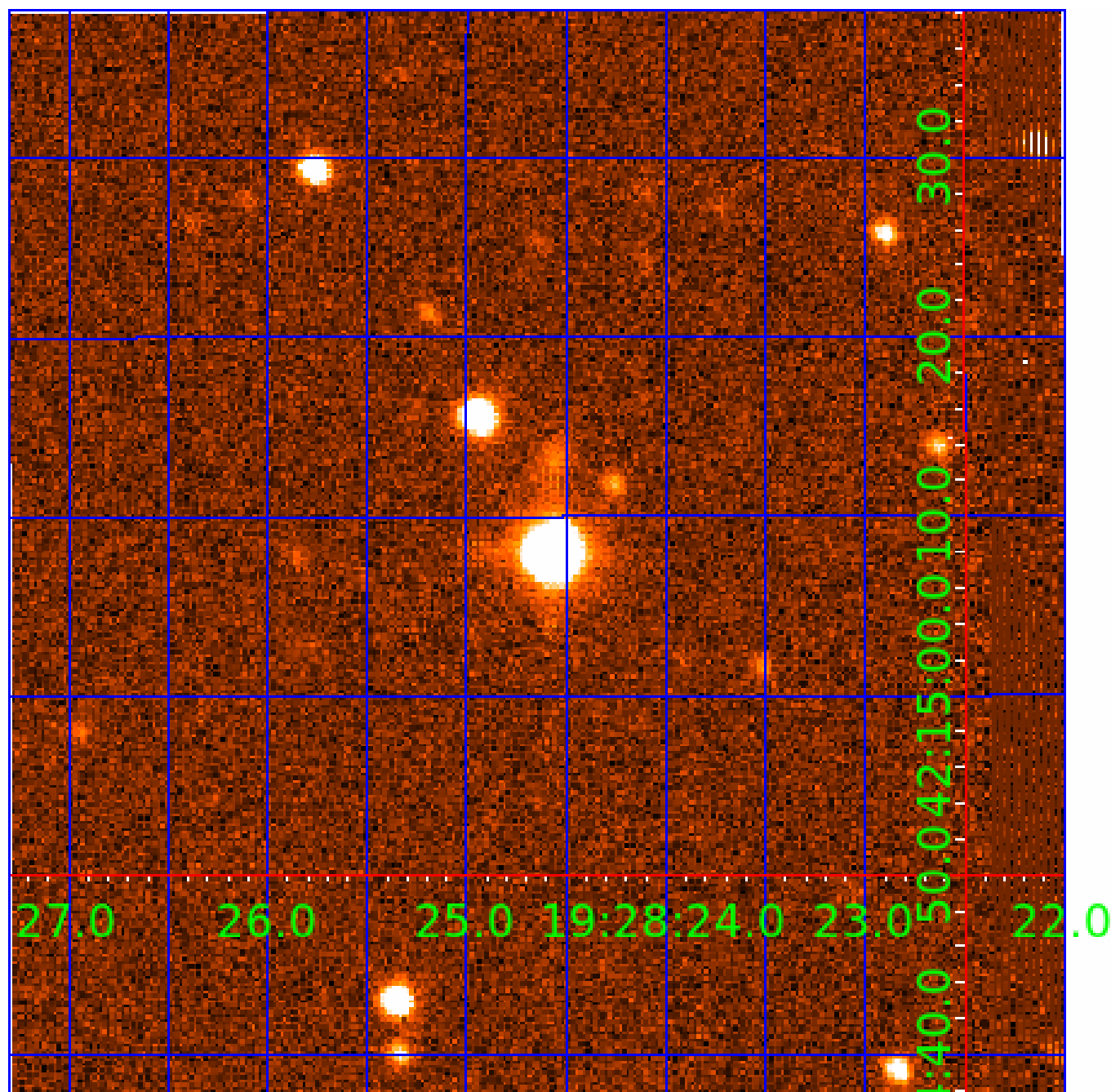


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006778289

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})
006778289-01	OBS	6767.01	30.130297	152.220407	280559.4	9.000	15425.7	-1.0	1.35	6674	47.50	76.21
006778289-02	OBS	No	30.130143	138.173215	162220.1	8.612	10081.7	4737.7	1.35	6674	57.37	76.21
006778289-03	OBS	No	30.132084	154.328469	2160.6	15.000	220.9	-1.0	1.35	6674	6.31	76.20

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006778289-01	OBS	FP	0.00	0	1	0	0	MOD_SEC_ALT—MOD_ODDEVEN_ALT—HAS_SEC_TCE—CENT_NOFITS
006778289-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006778289-03	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—SAME_NTL_PERIOD—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 006778289-03

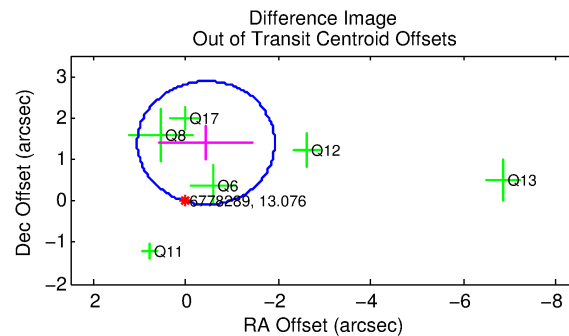
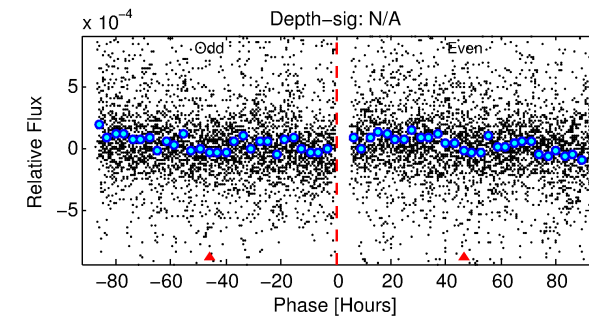
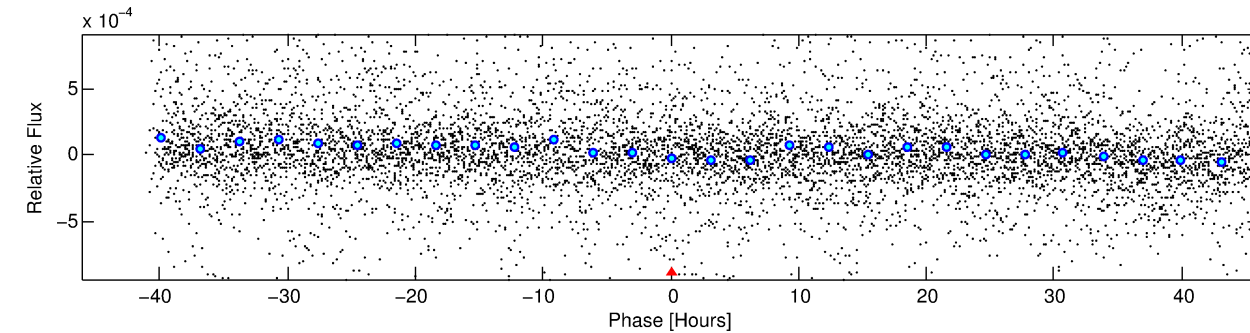
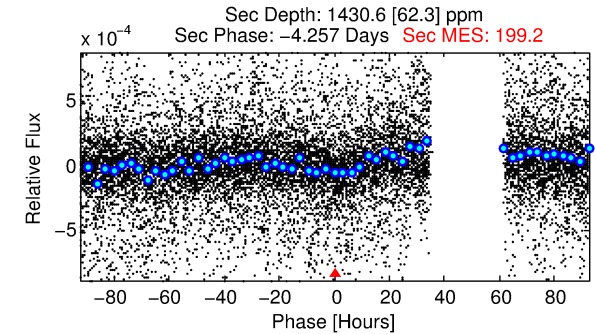
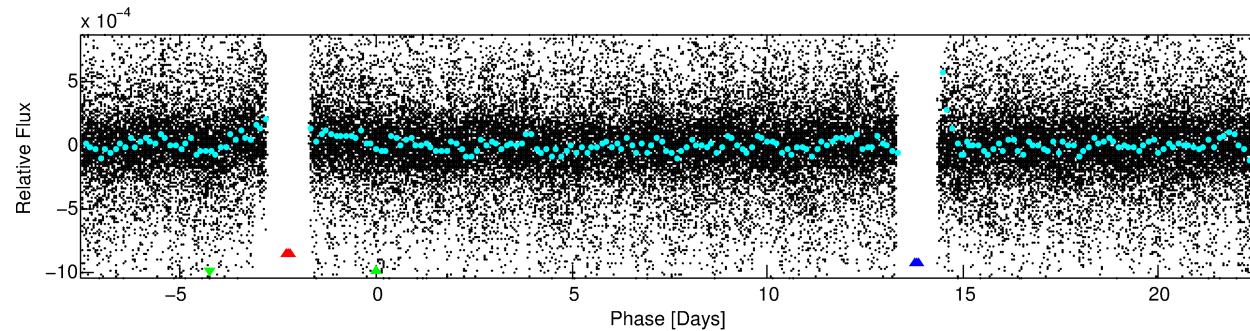
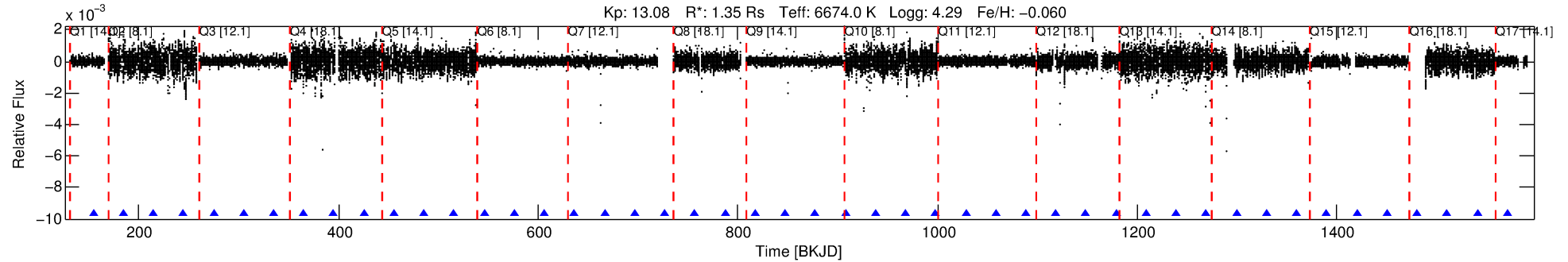
No Significant Match Found

DV One-Page Summary

KIC: 6778289 Candidate: 3 of 3 Period: 30.132 d

KOI: K06767 Corr: No Ephemeris Match

Kp: 13.08 R*: 1.35 Rs Teff: 6674.0 K Logg: 4.29 Fe/H: -0.060



TPS TCE Results:

Period = 30.13208 d

Epoch = 154.3285 BKJD

DV fit results are unavailable

DV Diagnostic Results:

ShortPeriod-sig: 0.2% [0.00σ]

LongPeriod-sig: N/A

ModelChiSquare2-sig: N/A

ModelChiSquareGof-sig: N/A

Bootstrap-pfa: N/A

RollingBand-fgt: 1.00 [44/44]

GhostDiagnostic-chr: 0.525

Centroid-sig: N/A

Centroid-so: 4.670 arcsec [2.20σ]

OotOffset-rm: 1.465 arcsec [2.96σ]

KicOffset-rm: 1.416 arcsec [3.04σ]

OotOffset-st: 1/1/2/2 [6]

KicOffset-st: 1/1/2/2 [6]

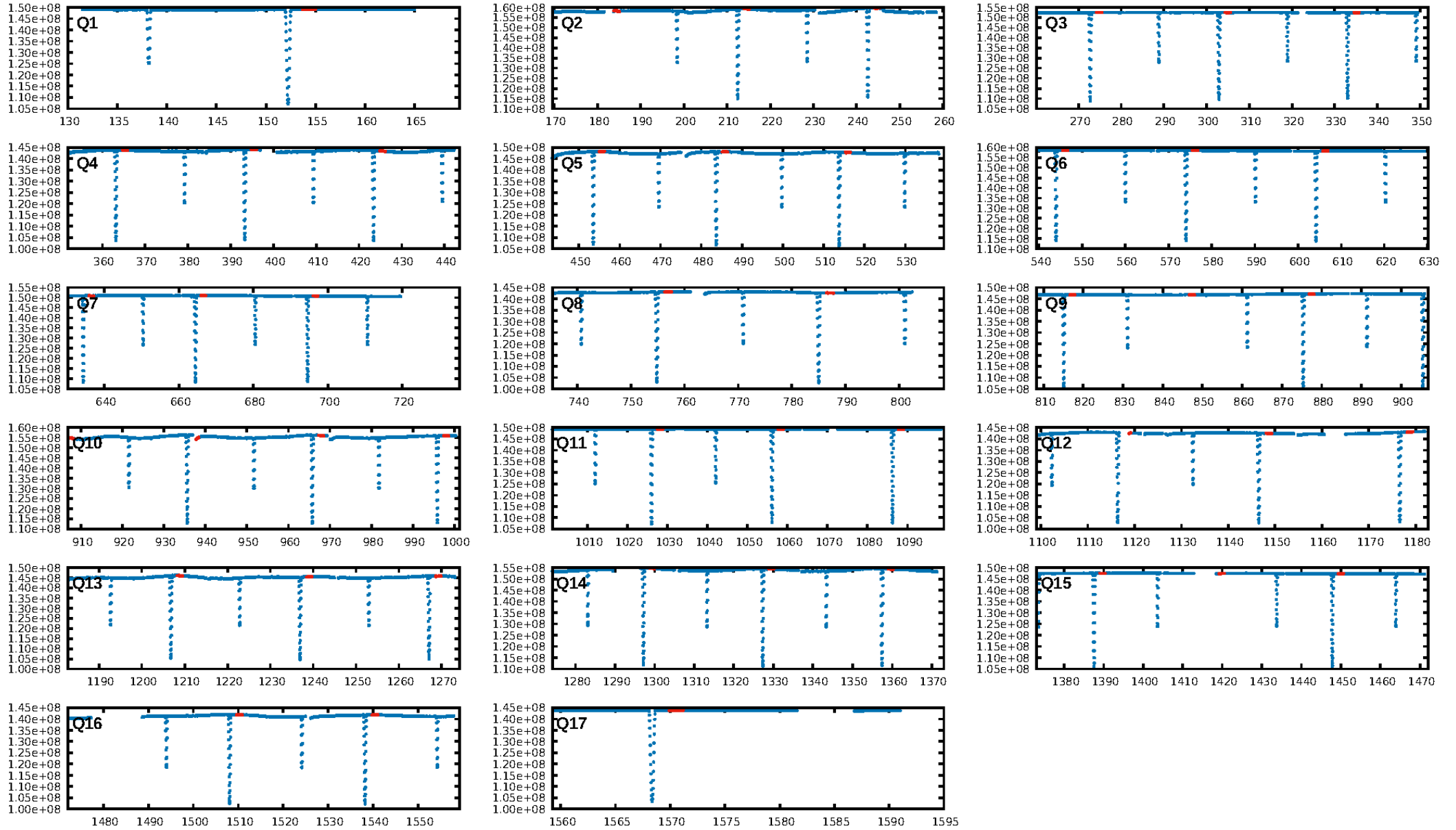
DiffImageQuality-fgm: 0.33 [2/6]

DiffImageOverlap-fno: 1.00 [17/17]

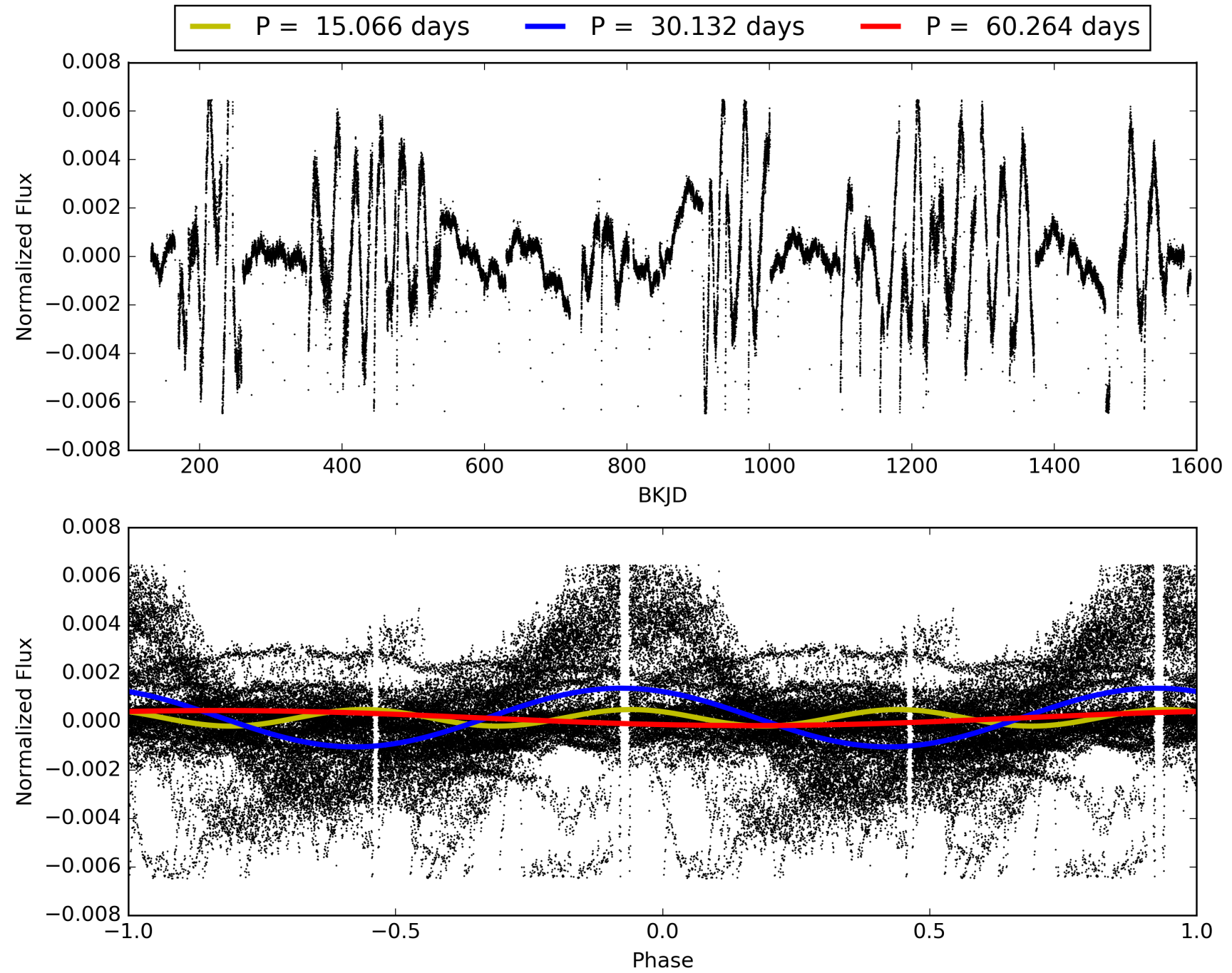
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 14:32:12 Z

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

TCE 006778289-03, PDC Light Curves

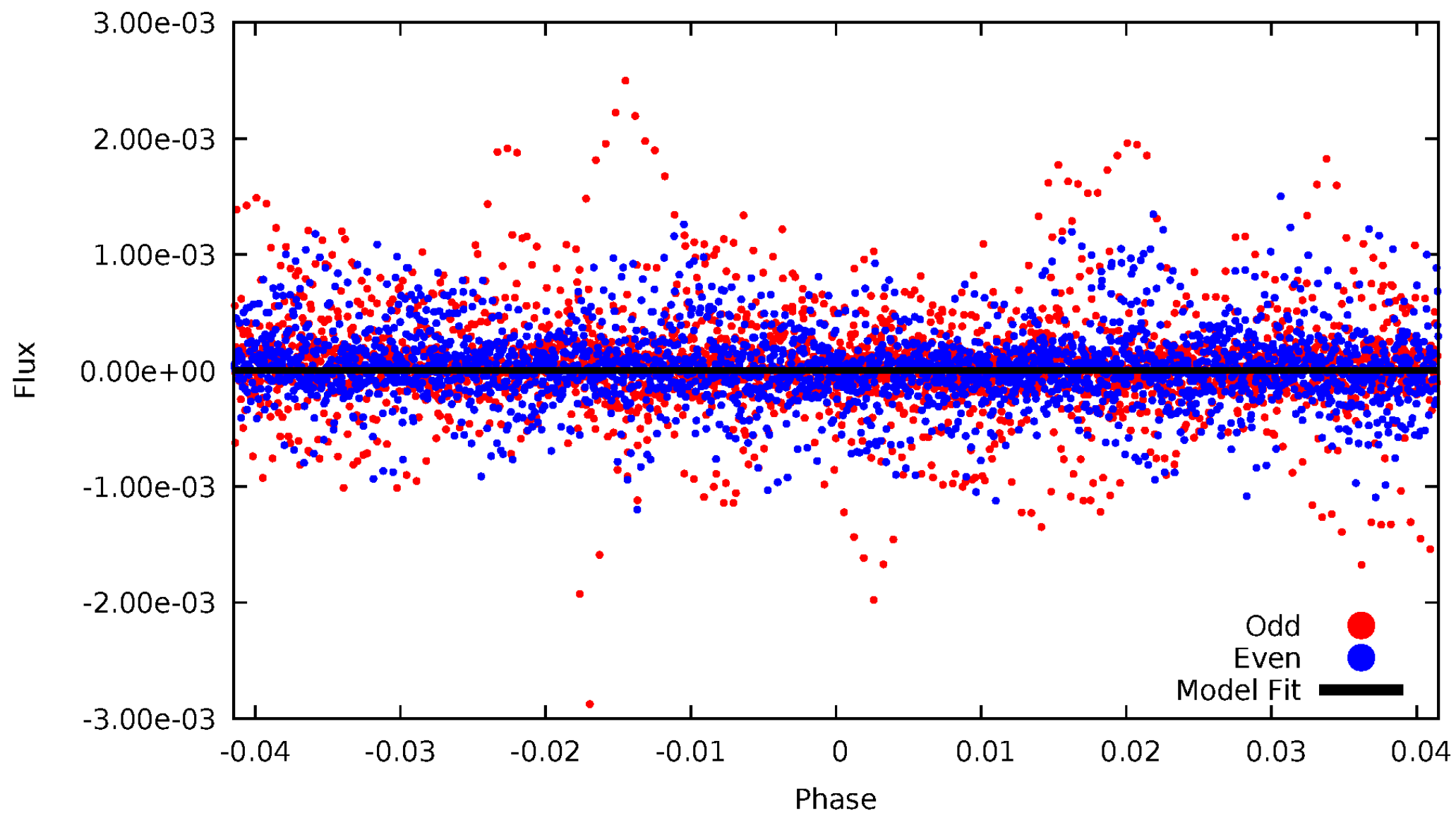


TCE 006778289-03



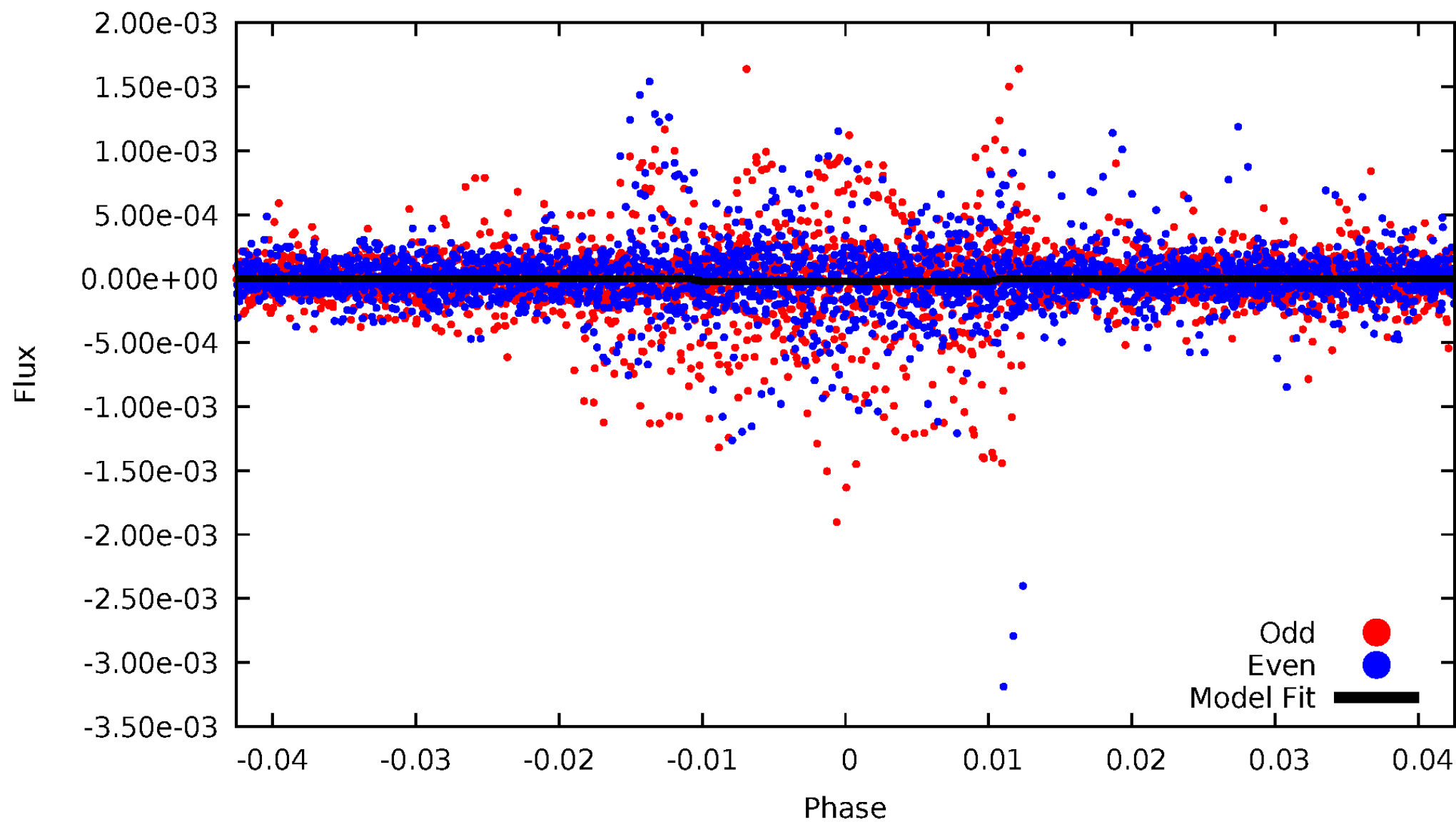
DV Odd/Even

TCE 006778289-03



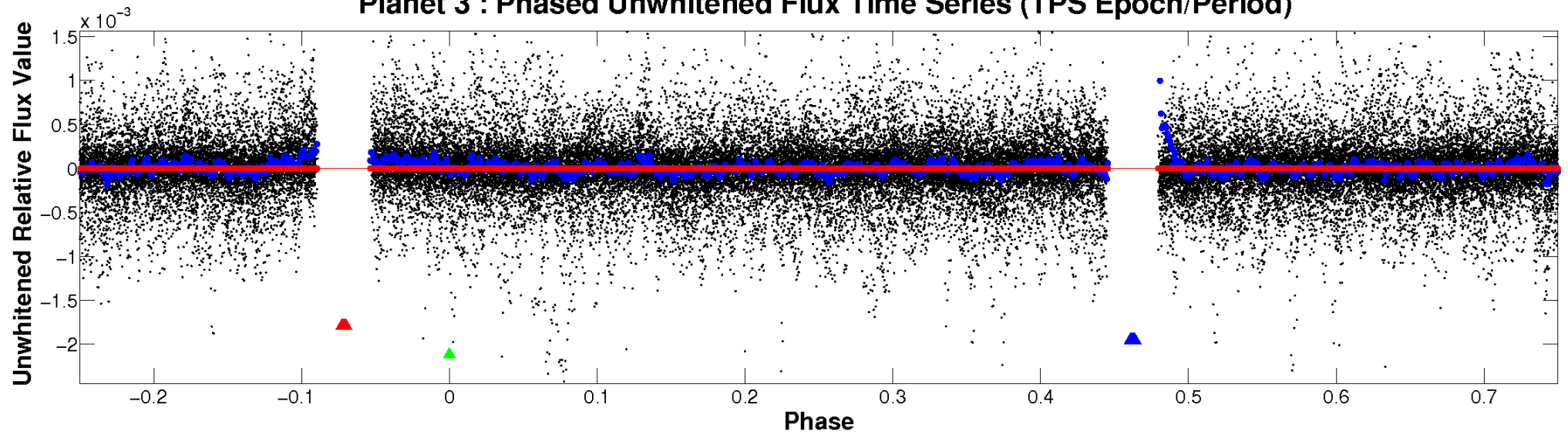
ALT Odd/Even

TCE 006778289-03



Non-Whitened Vs. Whitened Light Curve

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

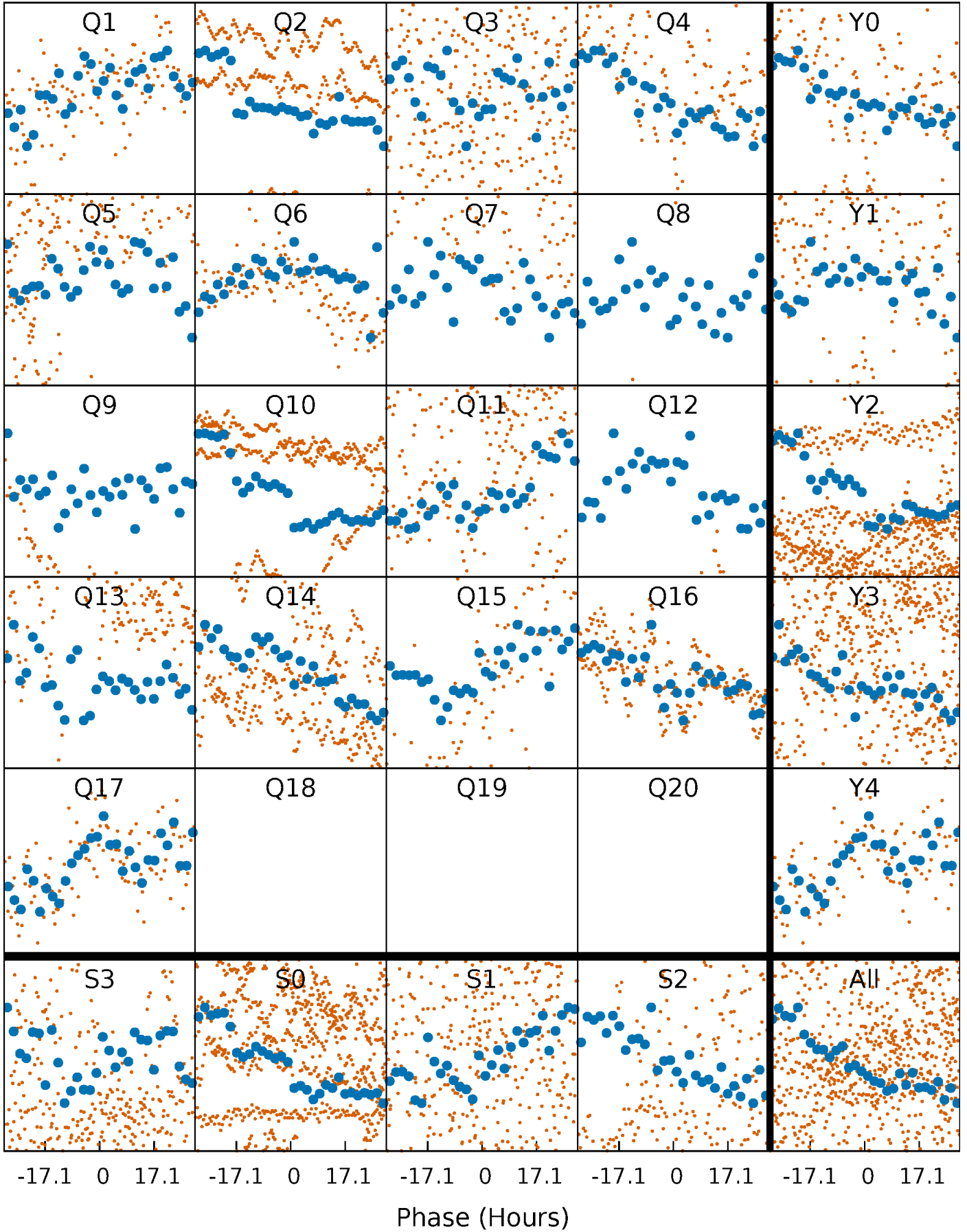


Planet 3 : Phased Whitened Flux Time Series (TPS Epoch/Period)



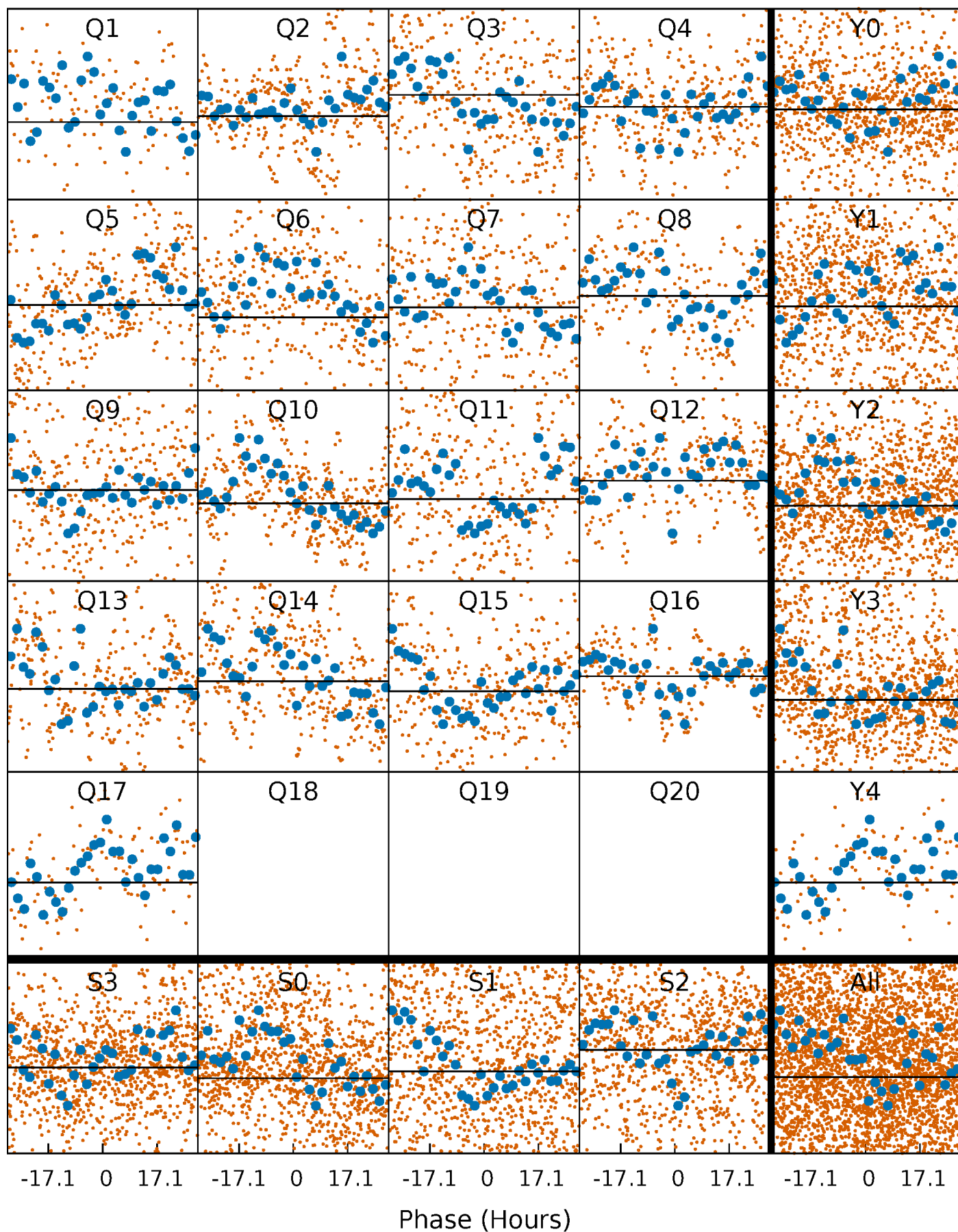
PDC Quarter-Phased Transit Curves

TCE 006778289-03 P= 30.132084 Days $T_0=154.328469$ (BKJD)



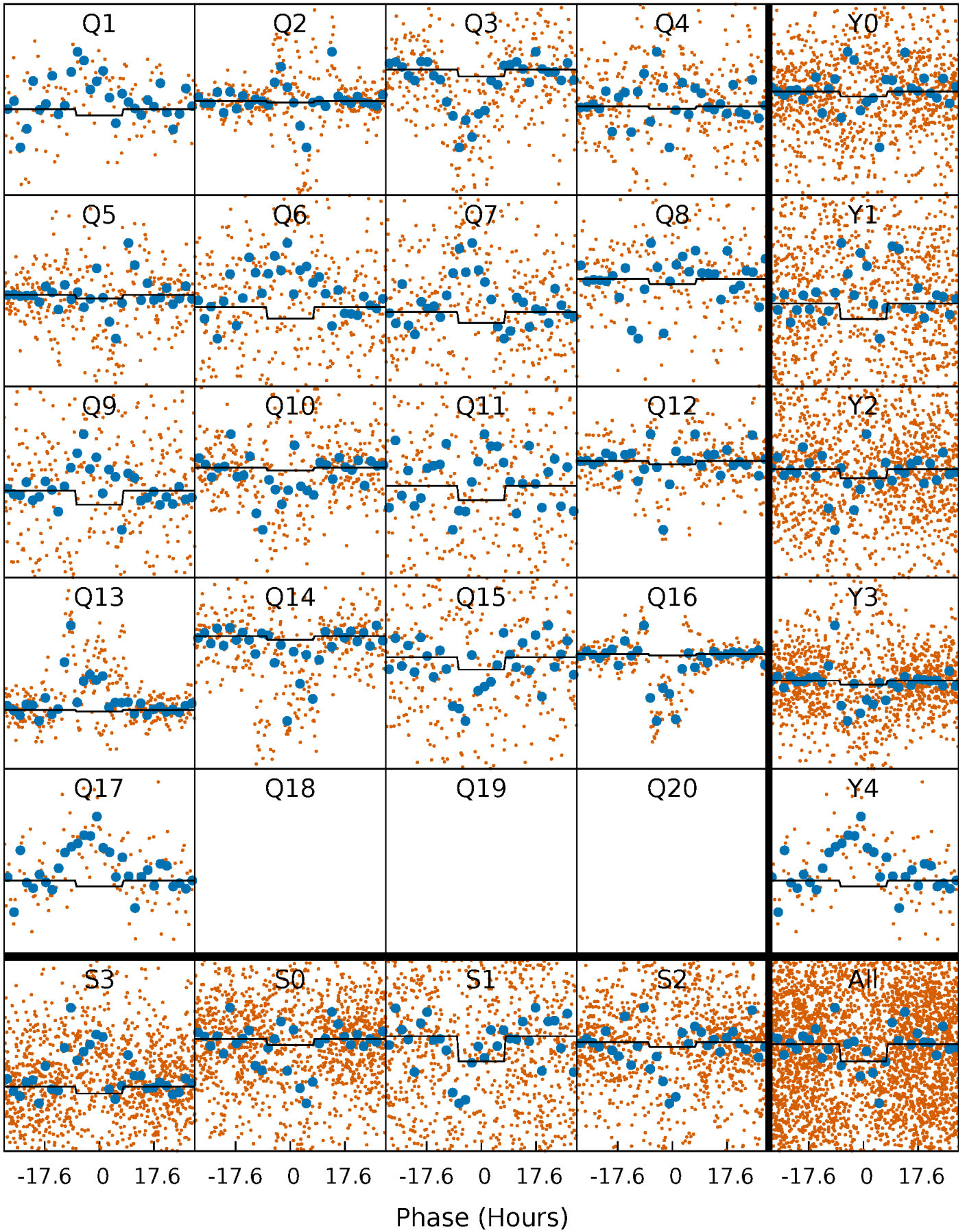
DV Quarter-Phased Transit Curves

TCE 006778289-03 P= 30.132084 Days $T_0=154.328469$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

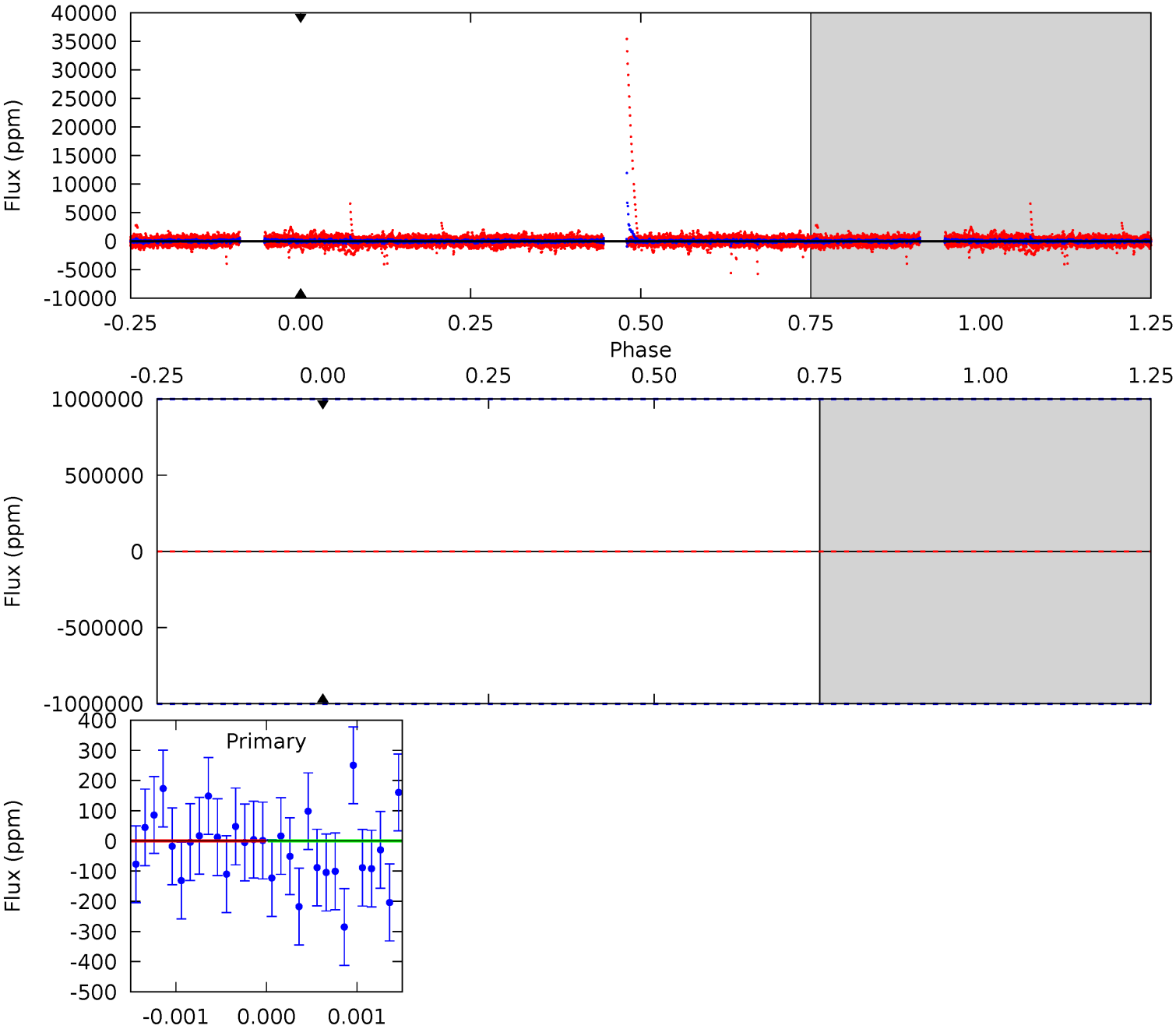
TCE 006778289-03 P= 30.132084 Days $T_0=154.425099$ (BKJD)



DV Model-Shift Uniqueness Test

006778289-03, P = 30.132084 Days, E = 124.196385 Days

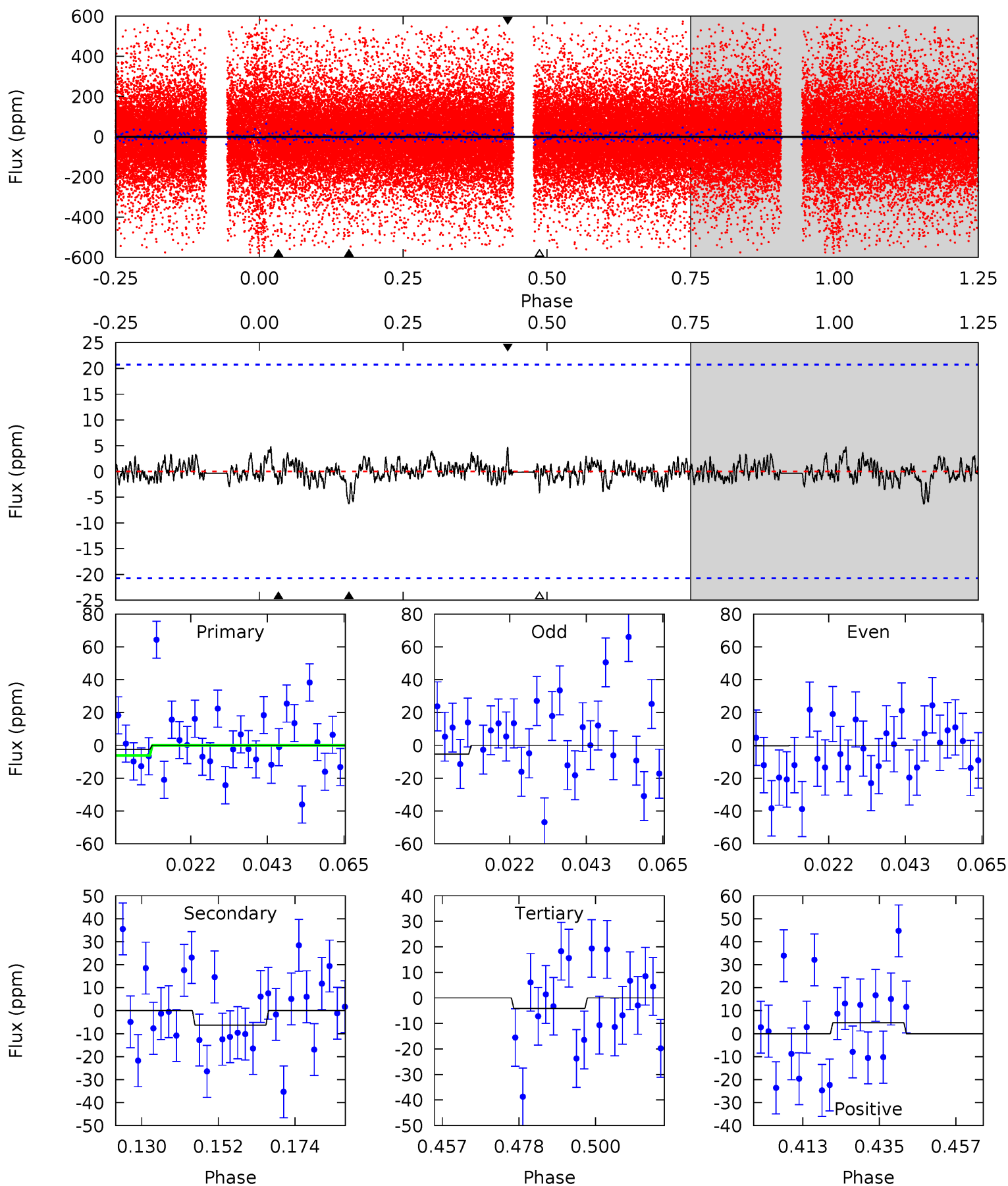
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006778289-03, P = 30.132084 Days, E = 124.293015 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0.59	1.47	0.96	1.11	4.88	2.29	0.33	-0.38	-0.52	0.51	0.36	0.61	4.58	0.43	0.16



Stellar Parameters For KIC 006778289

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6674^{+150}_{-218}	$4.286^{+0.088}_{-0.143}$	$-0.060^{+0.250}_{-0.300}$	$1.347^{+0.300}_{-0.200}$	$1.284^{+0.144}_{-0.192}$	$0.740^{+0.270}_{-0.308}$
	+2%/-3%	+2%/-3%	+417%/-500%	+22%/-15%	+11%/-15%	+37%/-42%
Source	PHO1	FLK73	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 006778289-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$13.00^{+12.67}_{-8.74}$	1060^{+55}_{-55}	-3013^{+28831}_{-19216}	$-17.198^{+27020.254}_{-24315.366}$
Alt.	-6 ± 4	$11.23^{+10.50}_{-8.20}$	1061^{+60}_{-52}	2067^{+814}_{-3817}	$1.017^{+11.987}_{-0.846}$

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

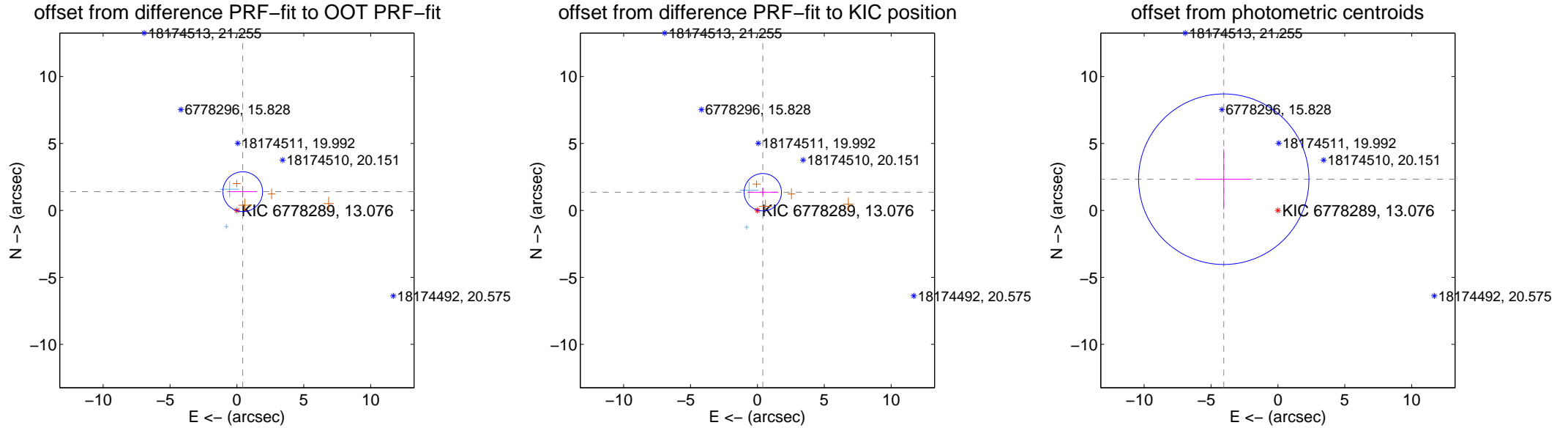
DV Centroid Data

Supplemental centroid analysis for 006778289-03. Kepler magnitude: 13.08. Transit SNR -1.00

There are 2 quarters with good PRF difference image offsets

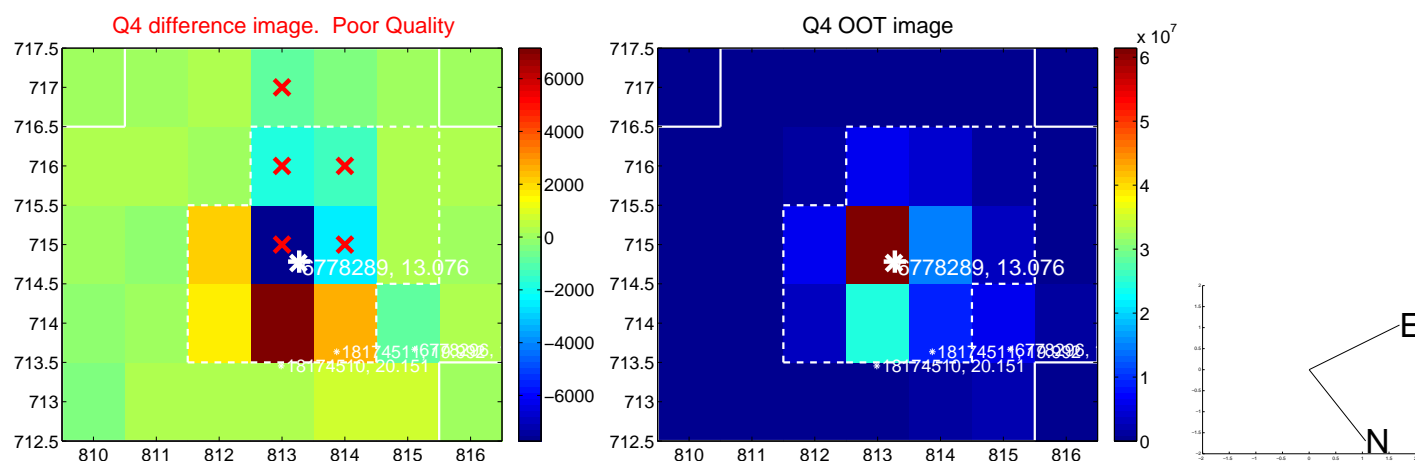
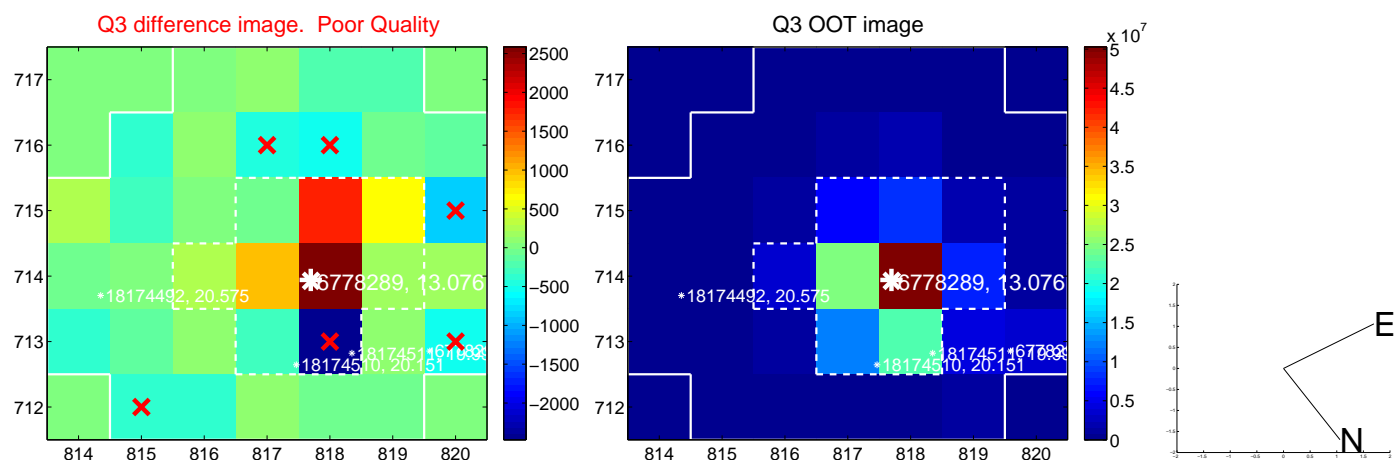
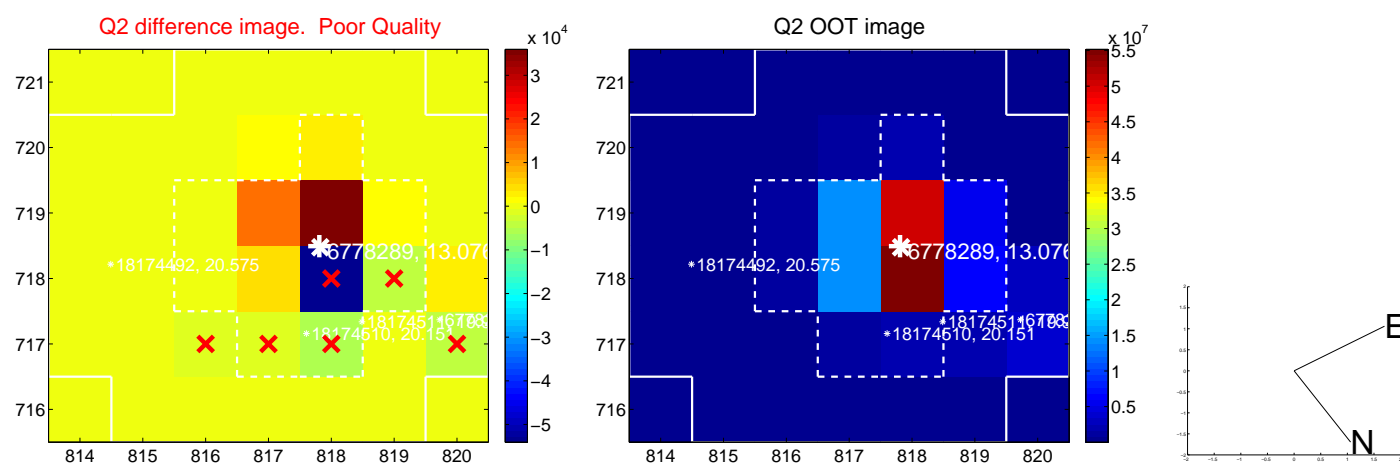
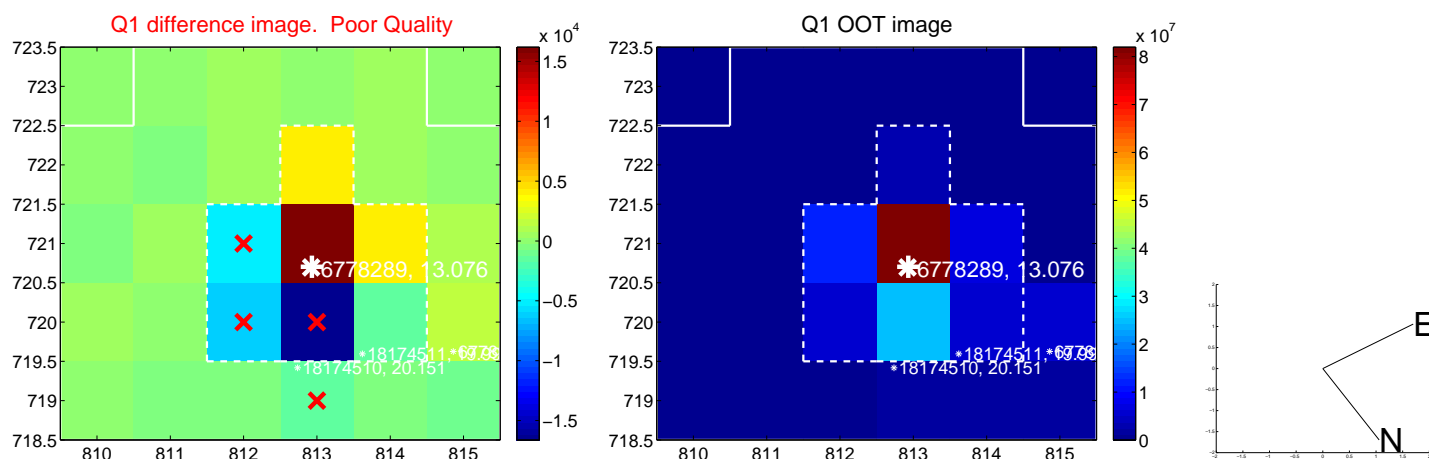
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.465 ± 0.495	2.96	-0.437 ± 1.012	1.398 ± 0.421
PRF-fit source offset from KIC position	1.416 ± 0.465	3.04	-0.403 ± 1.144	1.358 ± 0.347
photometric centroid source offset	4.67 ± 2.12	2.20	4.05 ± 2.08	2.33 ± 2.25

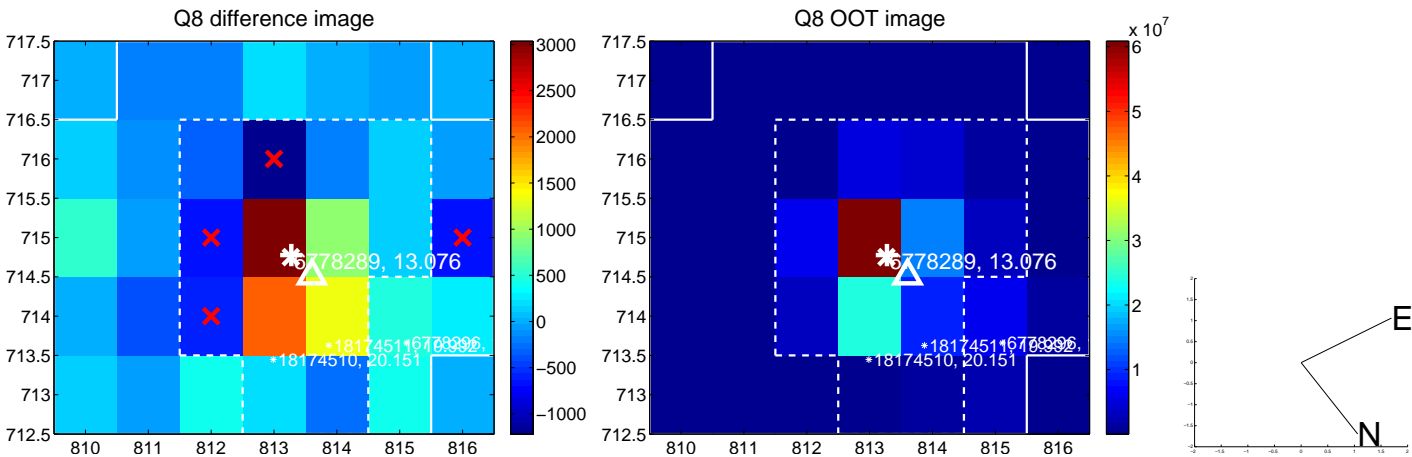
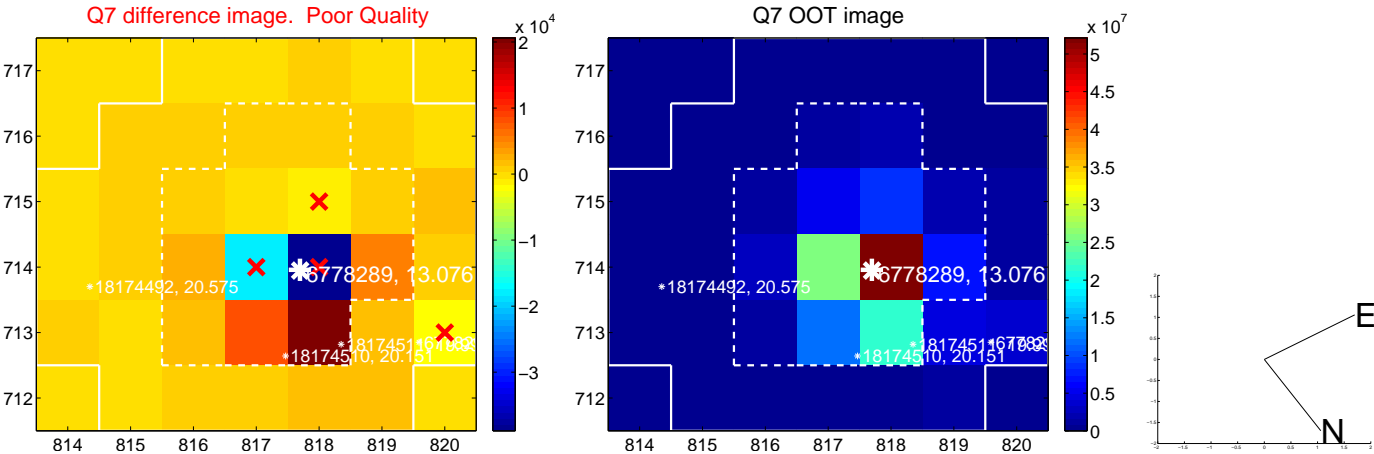
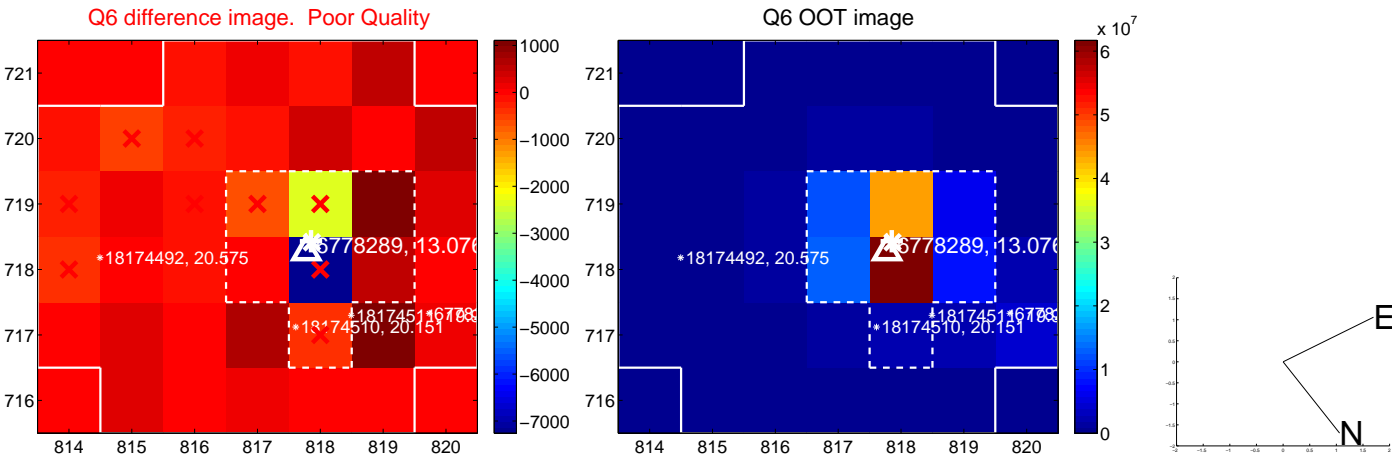
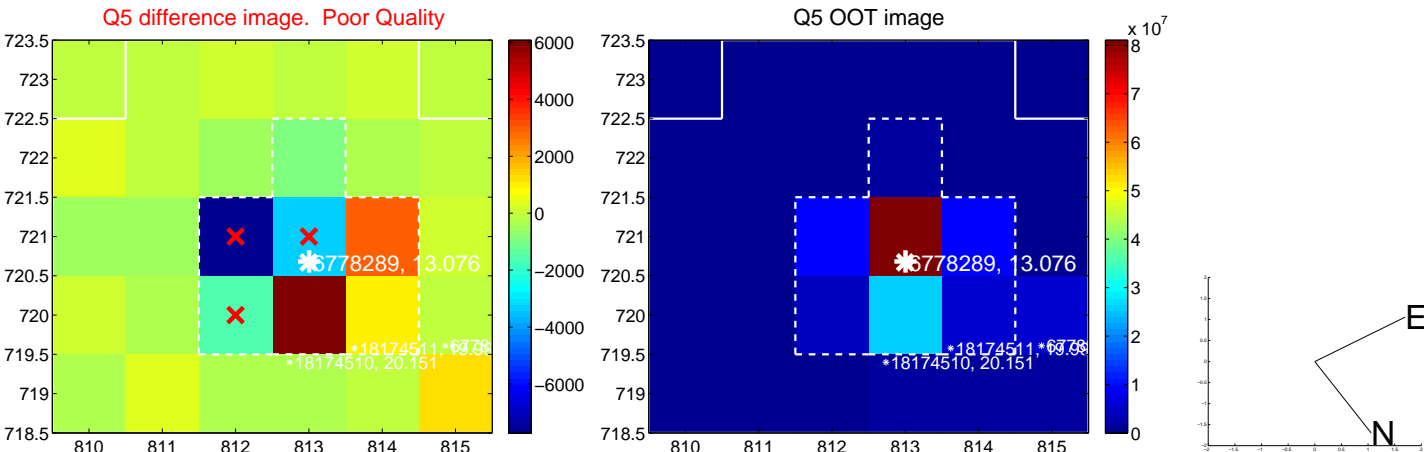


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

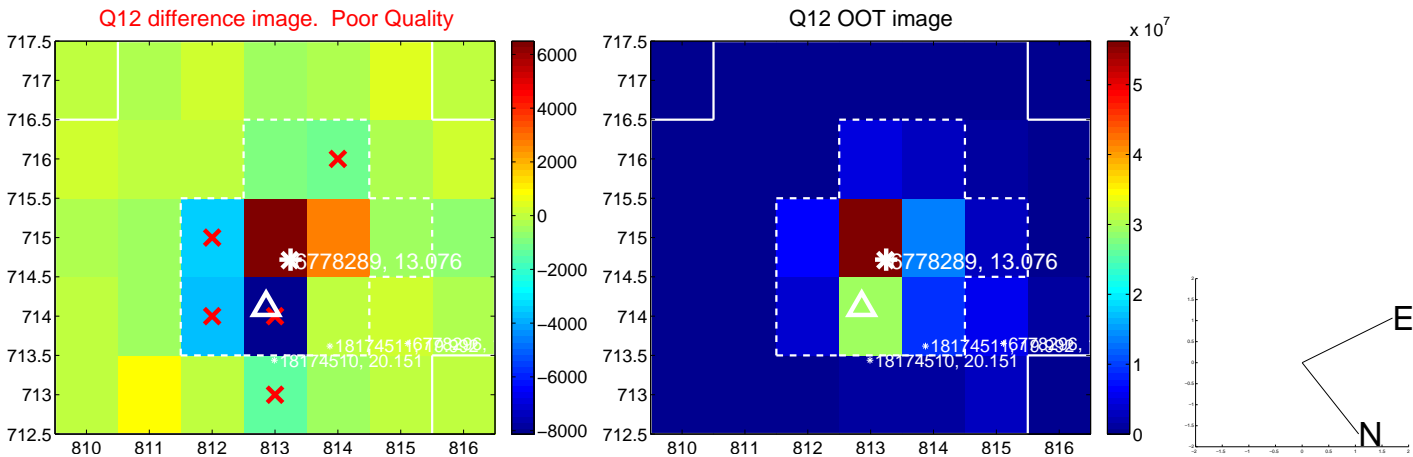
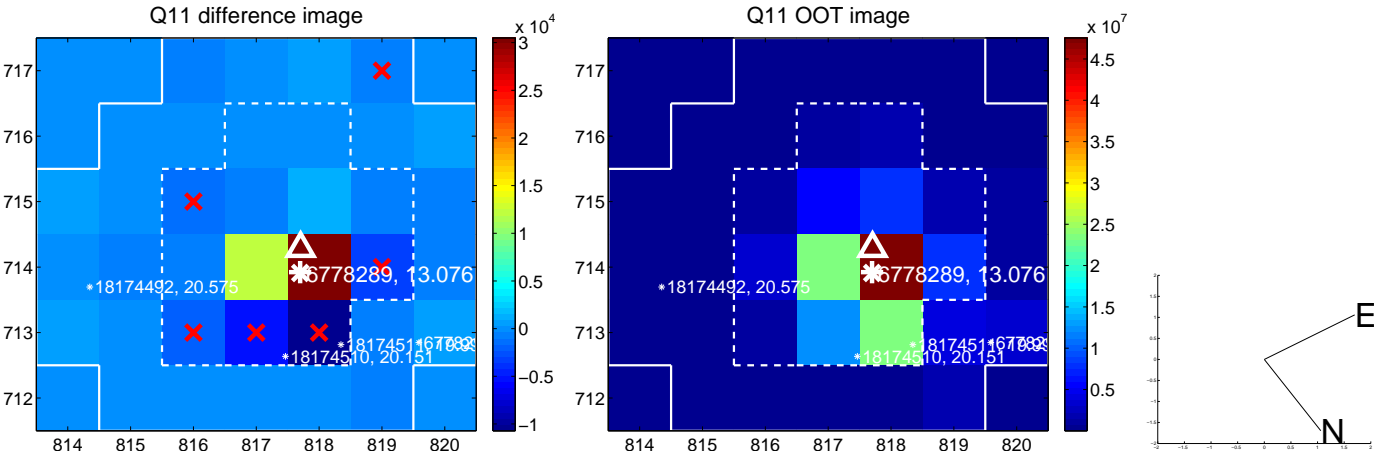
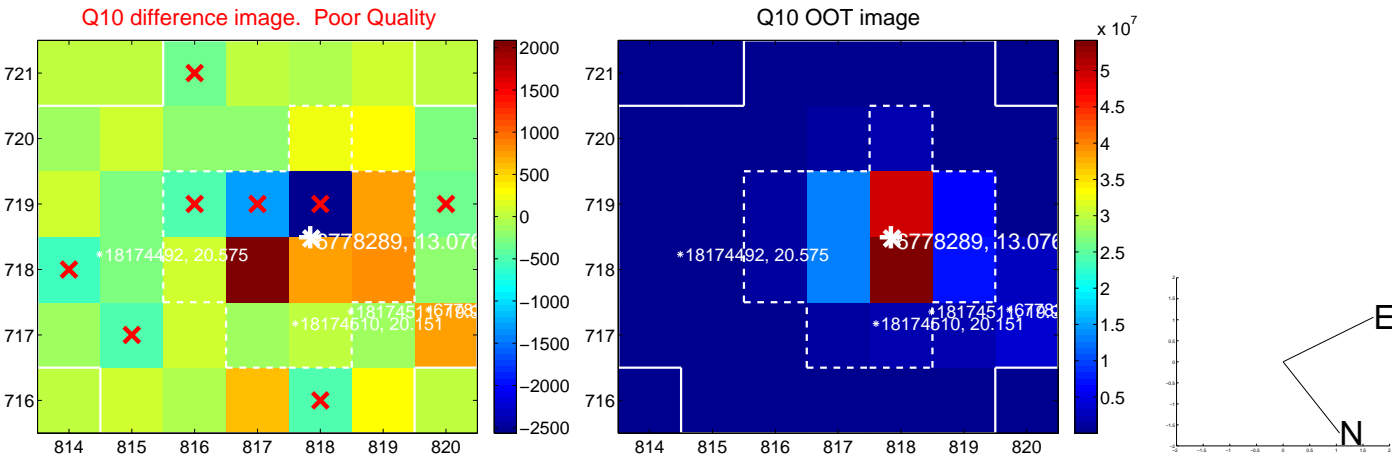
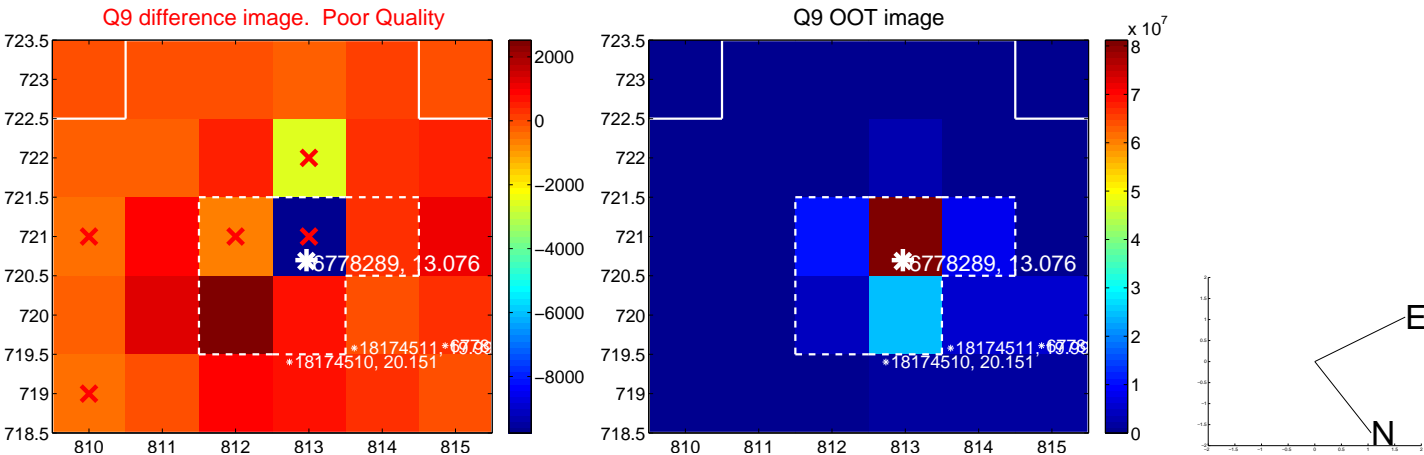
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



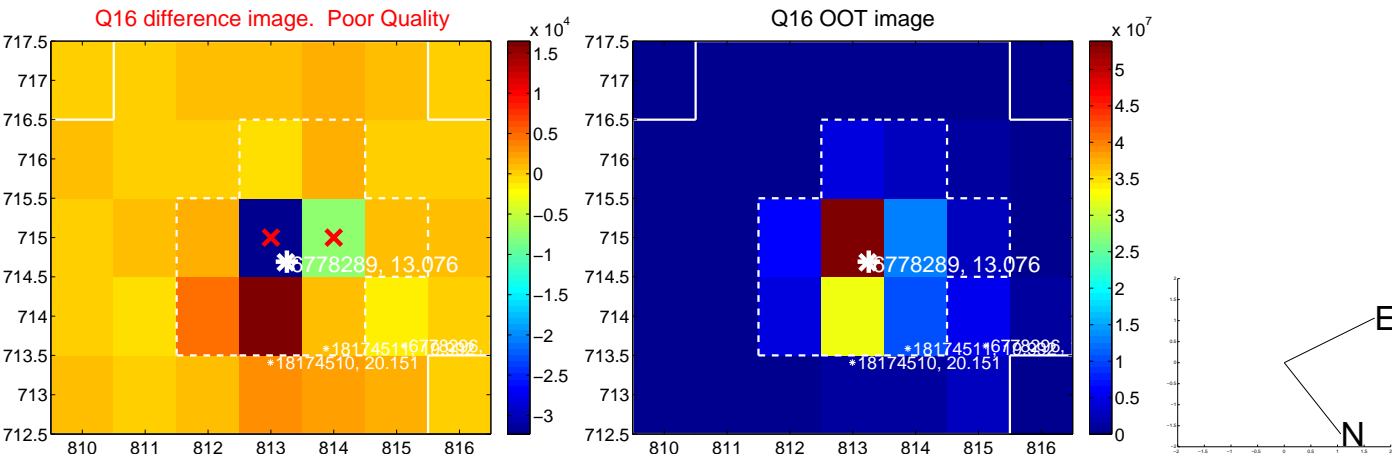
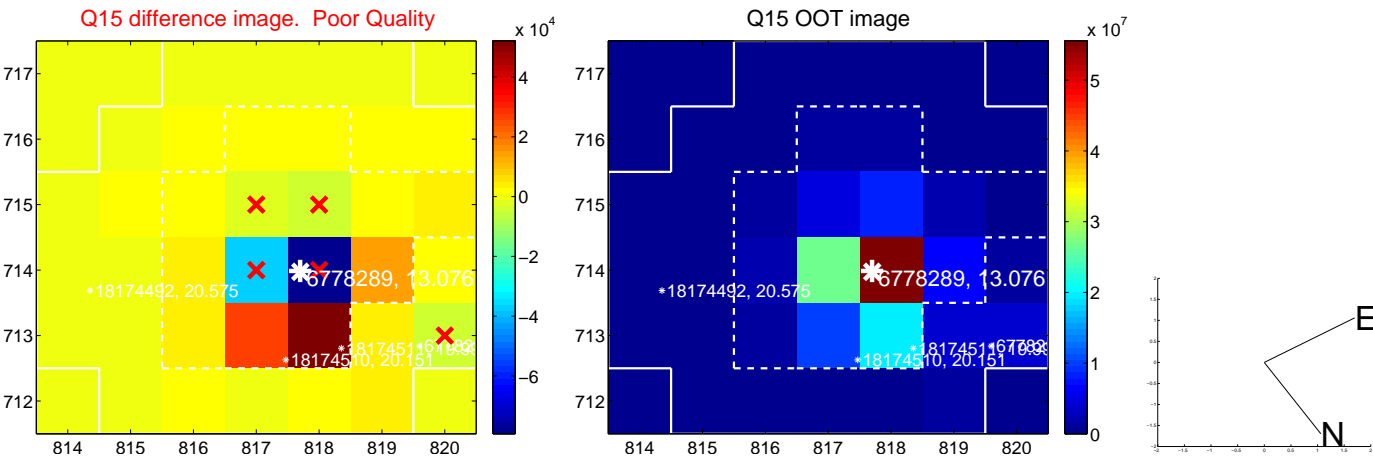
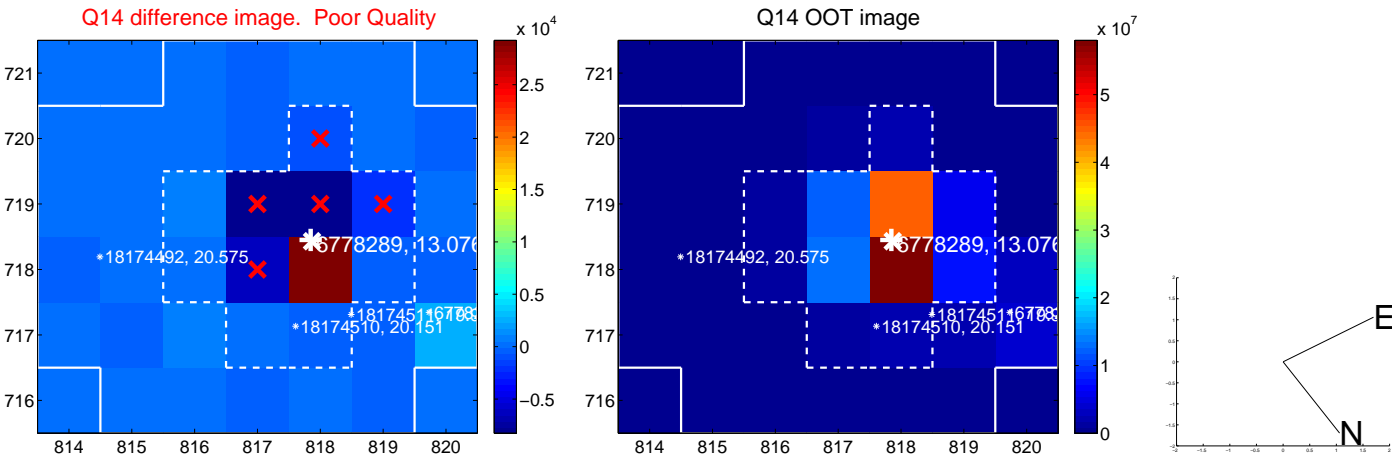
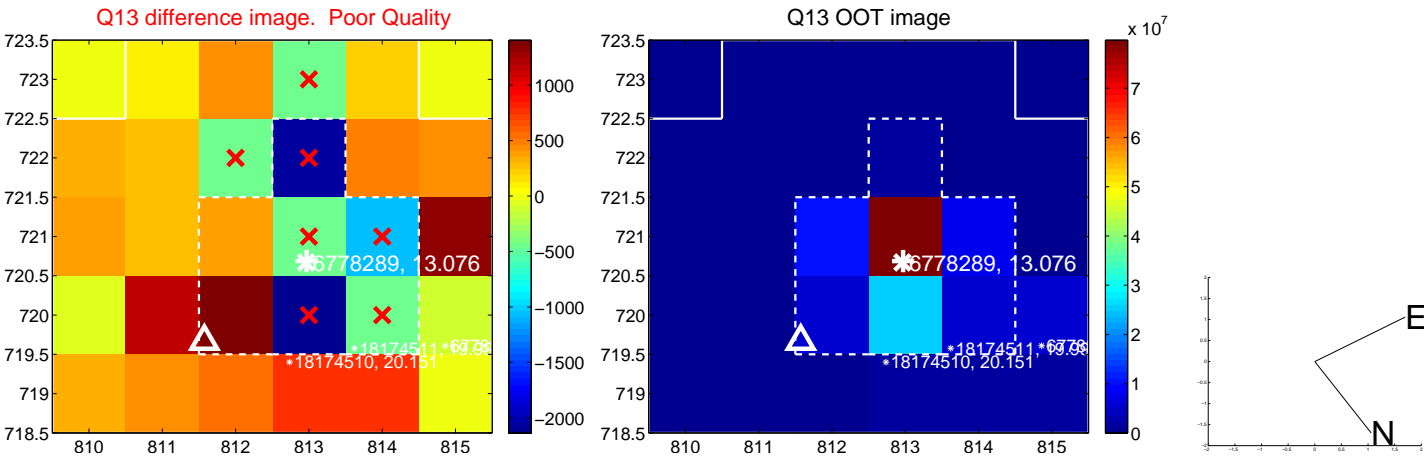
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



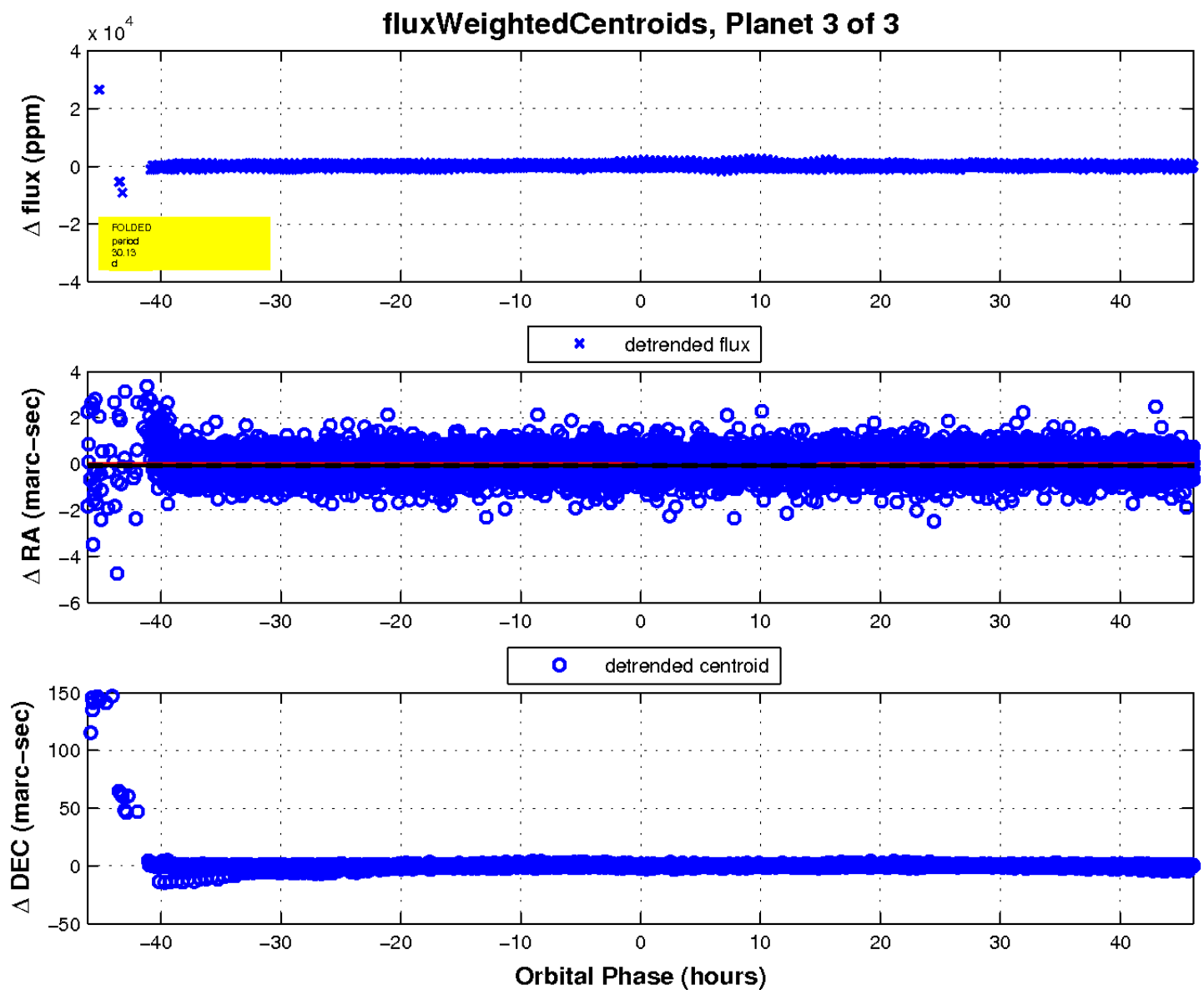
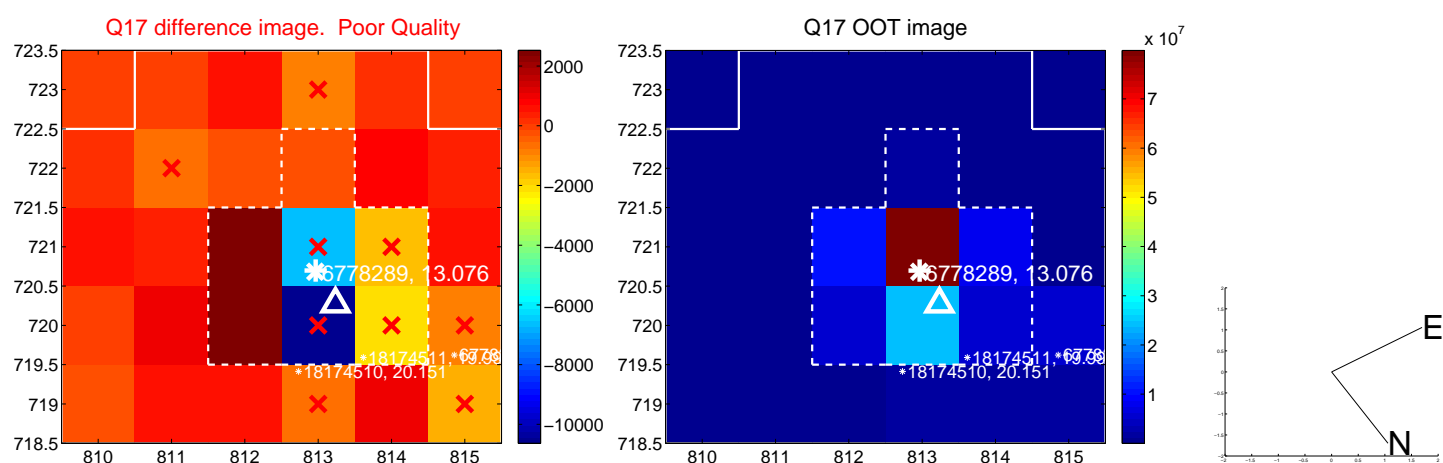
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

