

KIC 007292380

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})
007292380-01	OBS	No	1.100612	132.575754	93.5	2.882	8.0	8.7	1.00	5780	1.09	2296.64
007292380-02	OBS	No	340.876065	148.491588	1109.6	6.654	7.2	7.1	1.00	5780	3.98	1.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007292380-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
007292380-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

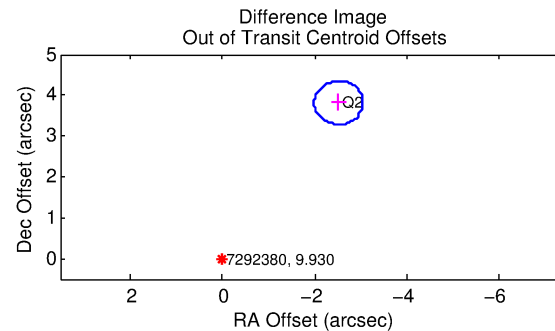
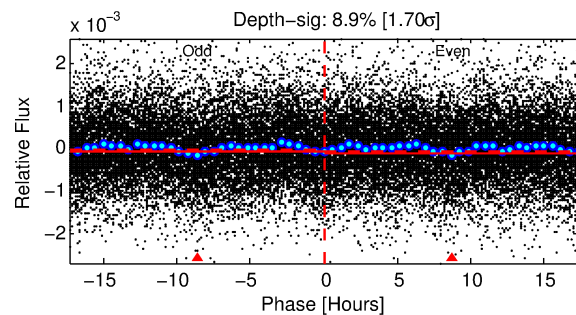
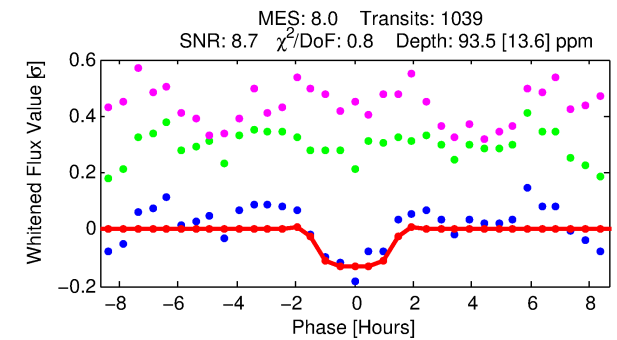
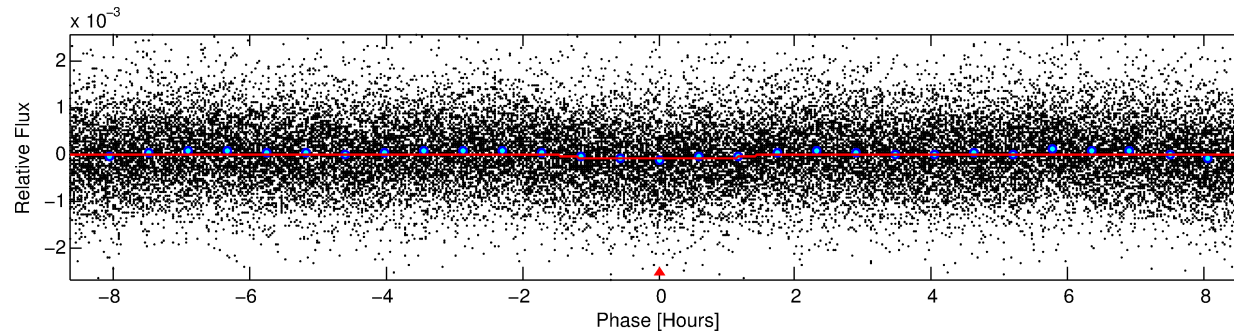
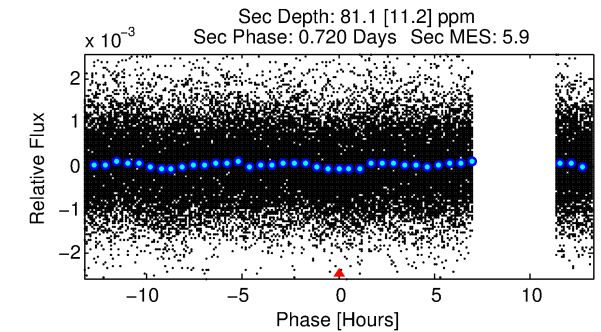
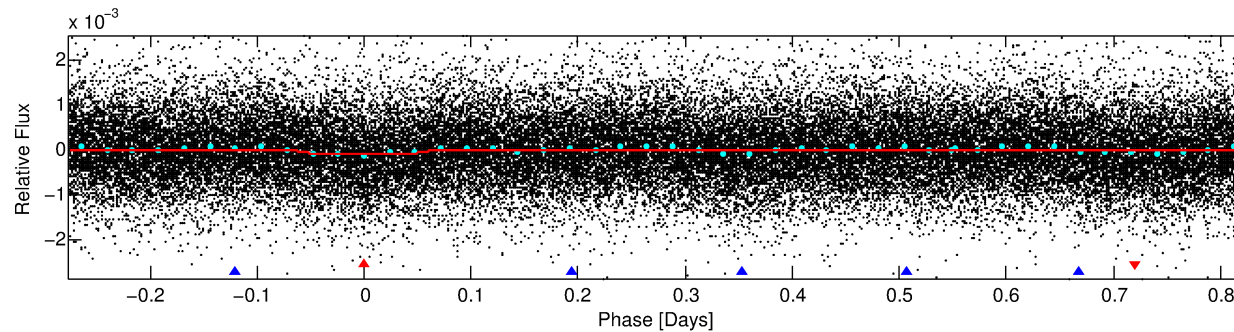
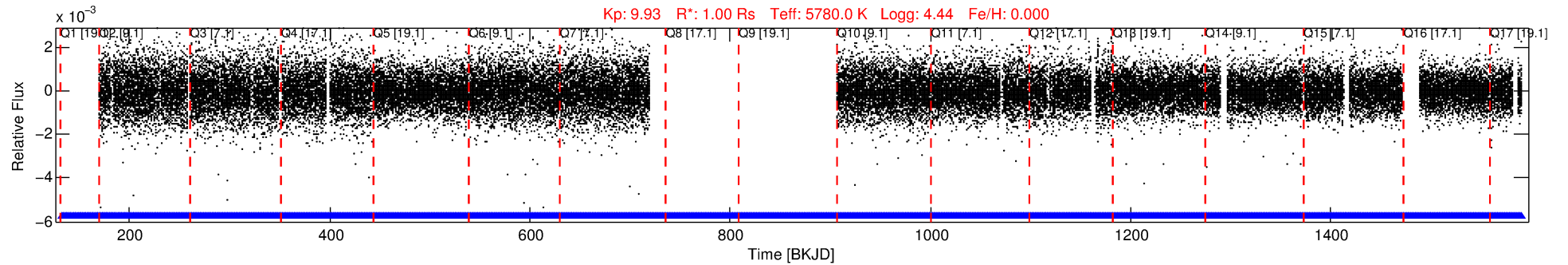
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007292380-01

No Significant Match Found

DV One-Page Summary

KIC: 7292380 Candidate: 1 of 2 Period: 1.101 d



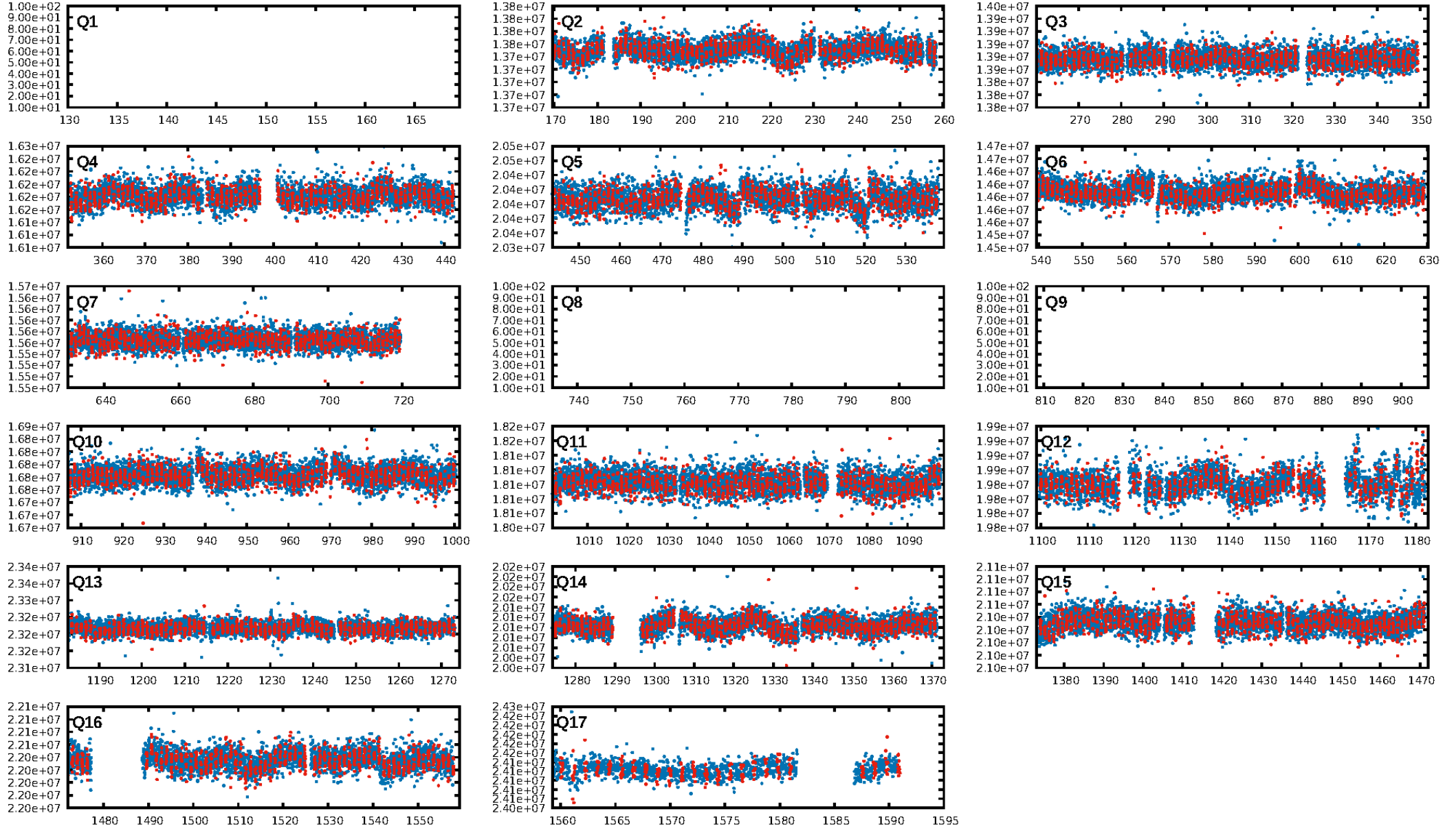
DV Fit Results:

Period = 1.10061 [0.00001] d
Epoch = 132.5758 [0.0042] BKJD
Rp/R* = 0.0100 [0.0085]
a/R* = 1.91 [5.39]
b = 0.83 [1.51]
Seff = 2296.64 [0.03]
Teq = 1765 [0] K
Rp = 1.09 [0.93] Re
a = 0.0209 [0.0000] AU
Ag = 16.34 [27.86] [0.55σ]
Teff = 5487 [2339] K [1.59σ]

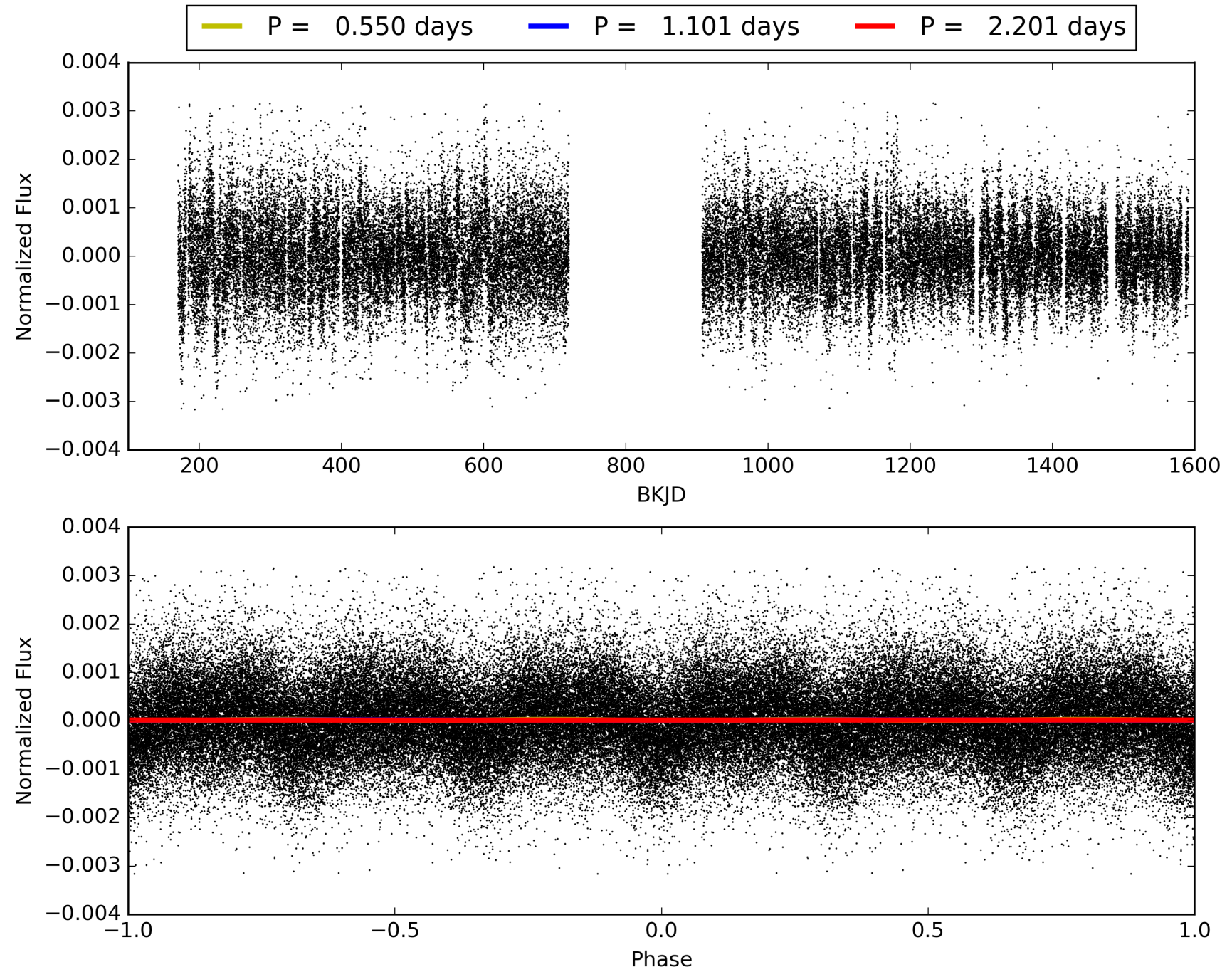
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [1124.55σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.05e-14
RollingBand-fgt: 1.00 [1015/1015]
GhostDiagnostic-chr: N/A
Centroid-sig: 73.0%
Centroid-so: 2.811 arcsec [2.15σ]
OotOffset-rm: 4.572 arcsec [25.95σ]
KicOffset-rm: 17.855 arcsec [23.21σ]
OotOffset-st: 1/0/0/0 [1]
KicOffset-st: 1/0/0/1 [2]
DiffImageQuality-fgm: 0.50 [1/2]
DiffImageOverlap-fno: 1.00 [14/14]

TCE 007292380-01, PDC Light Curves

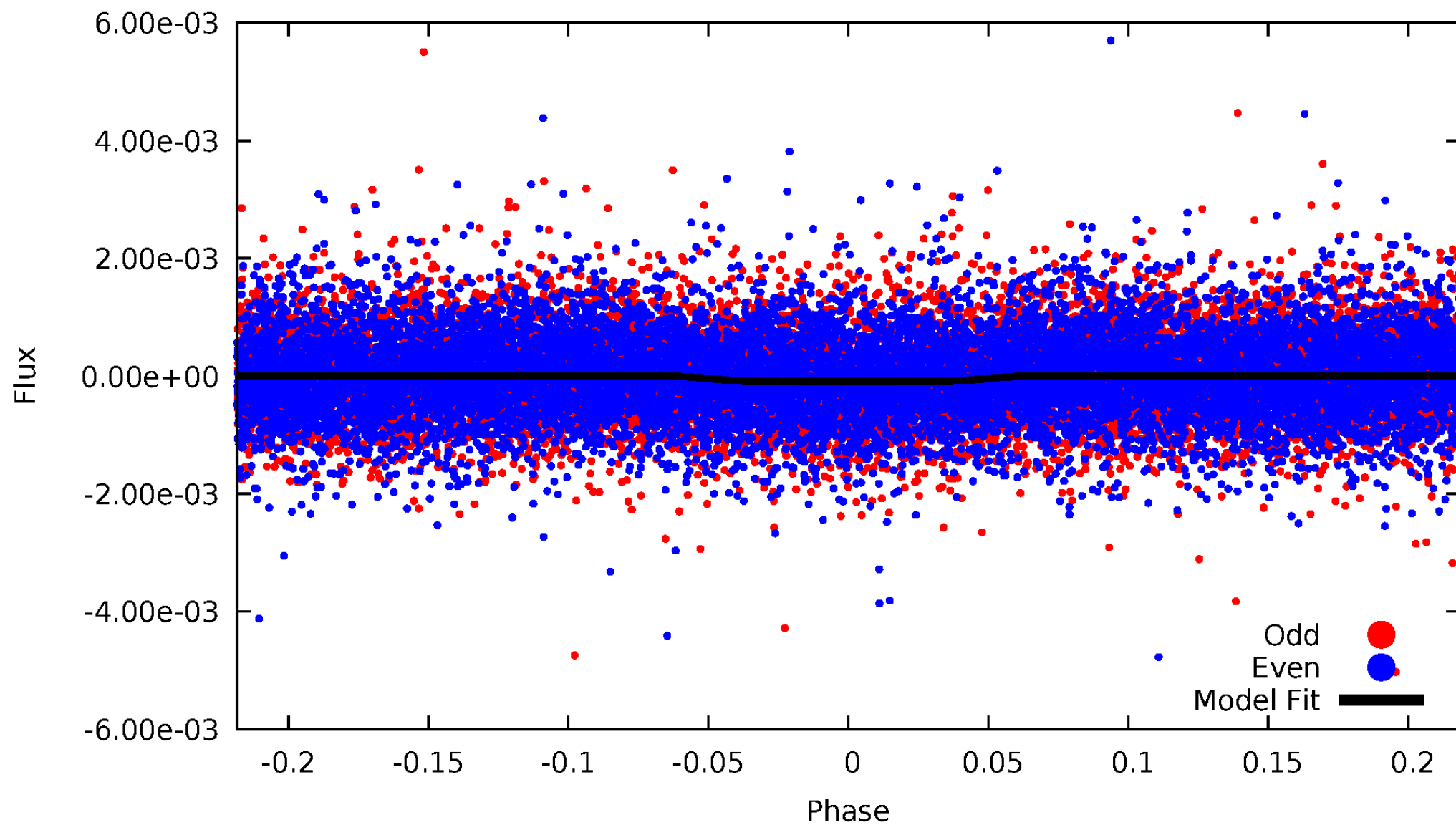


TCE 007292380-01



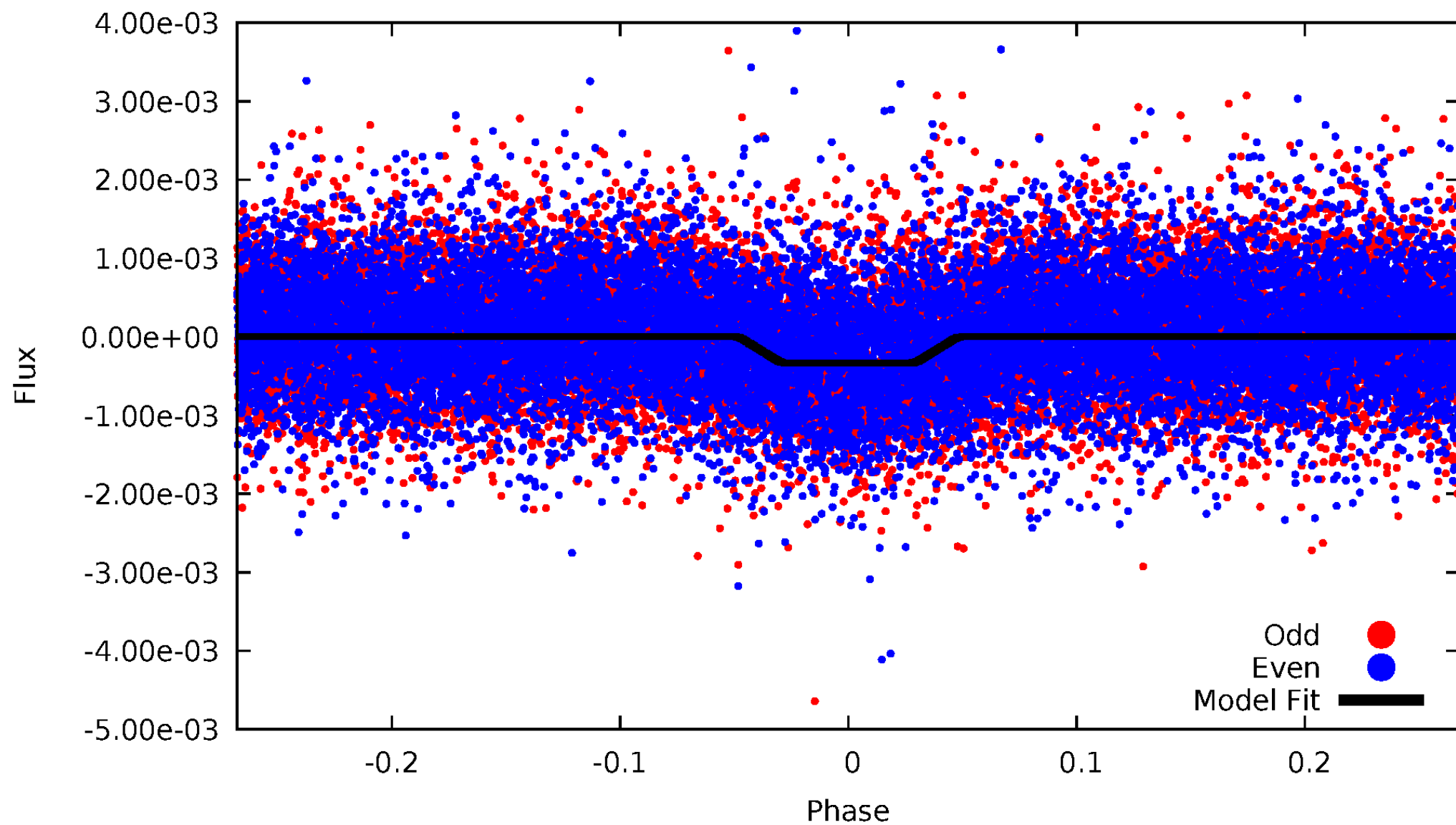
DV Odd/Even

TCE 007292380-01



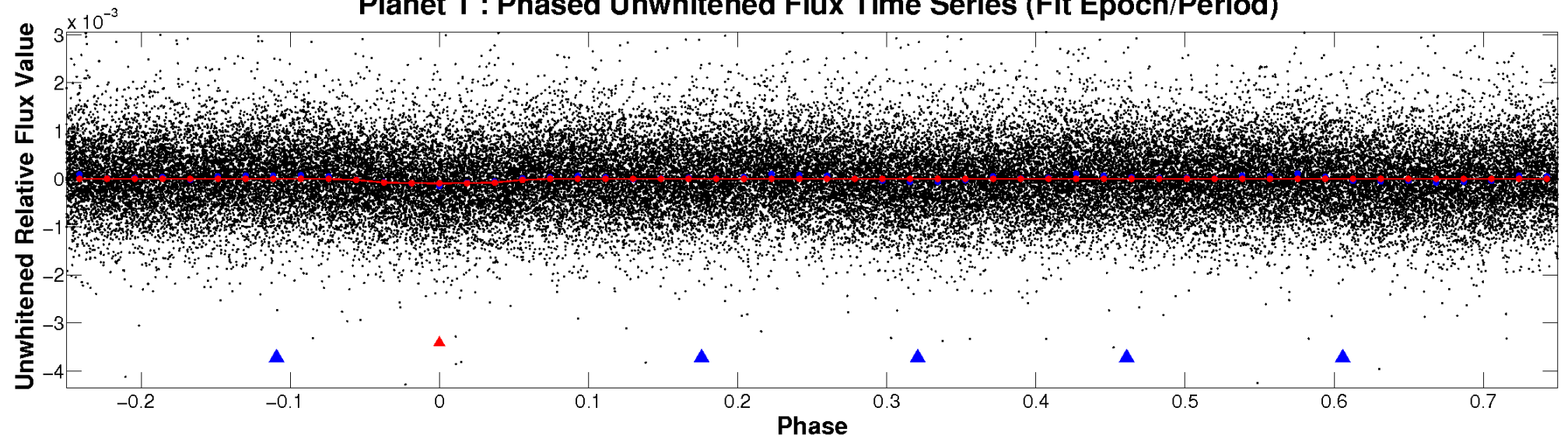
ALT Odd/Even

TCE 007292380-01

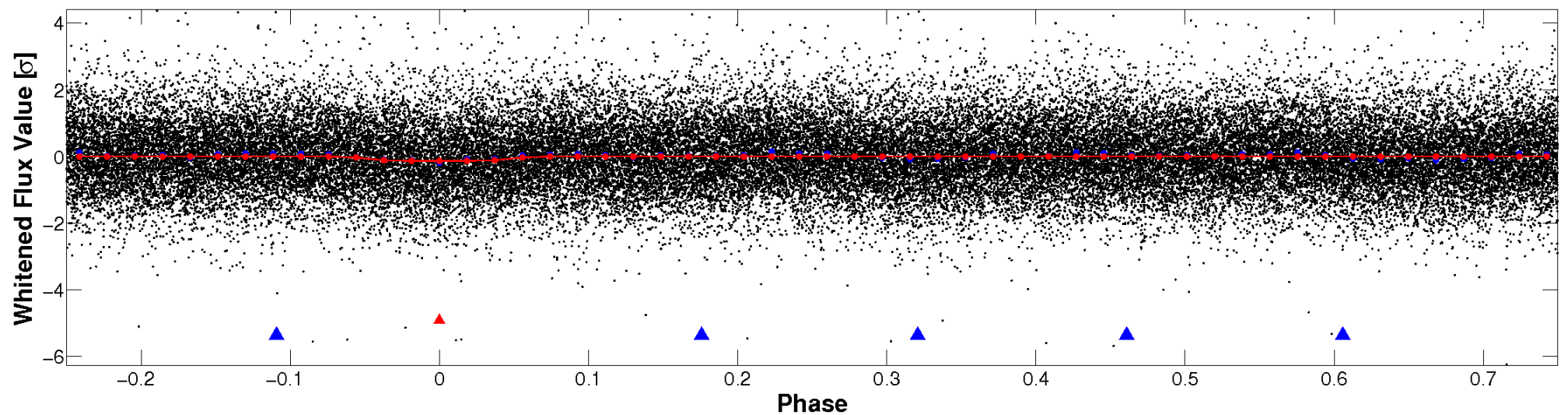


Non-Whitened Vs. Whitened Light Curve

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

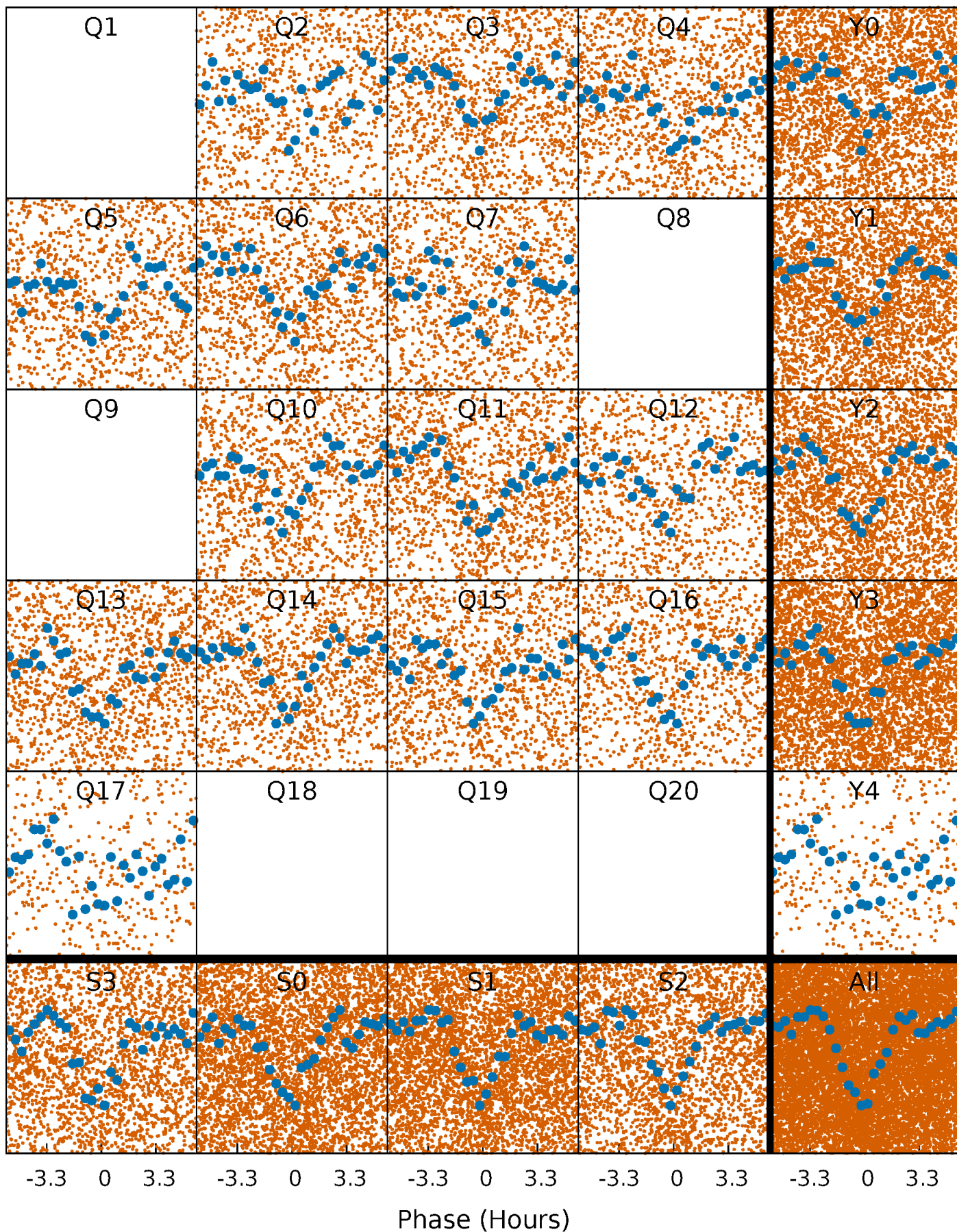


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



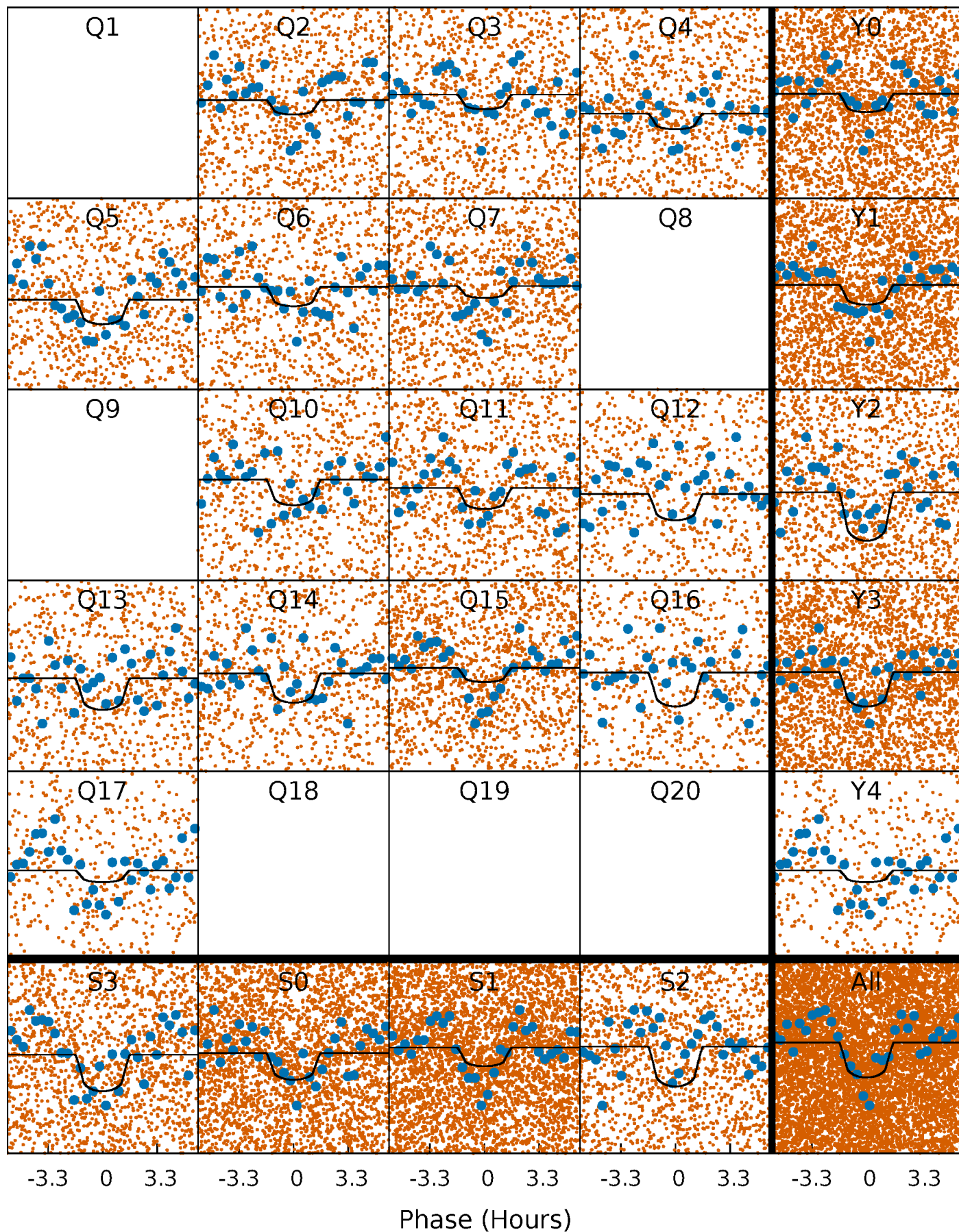
PDC Quarter-Phased Transit Curves

TCE 007292380-01 P= 1.100612 Days $T_0=132.575754$ (BKJD)



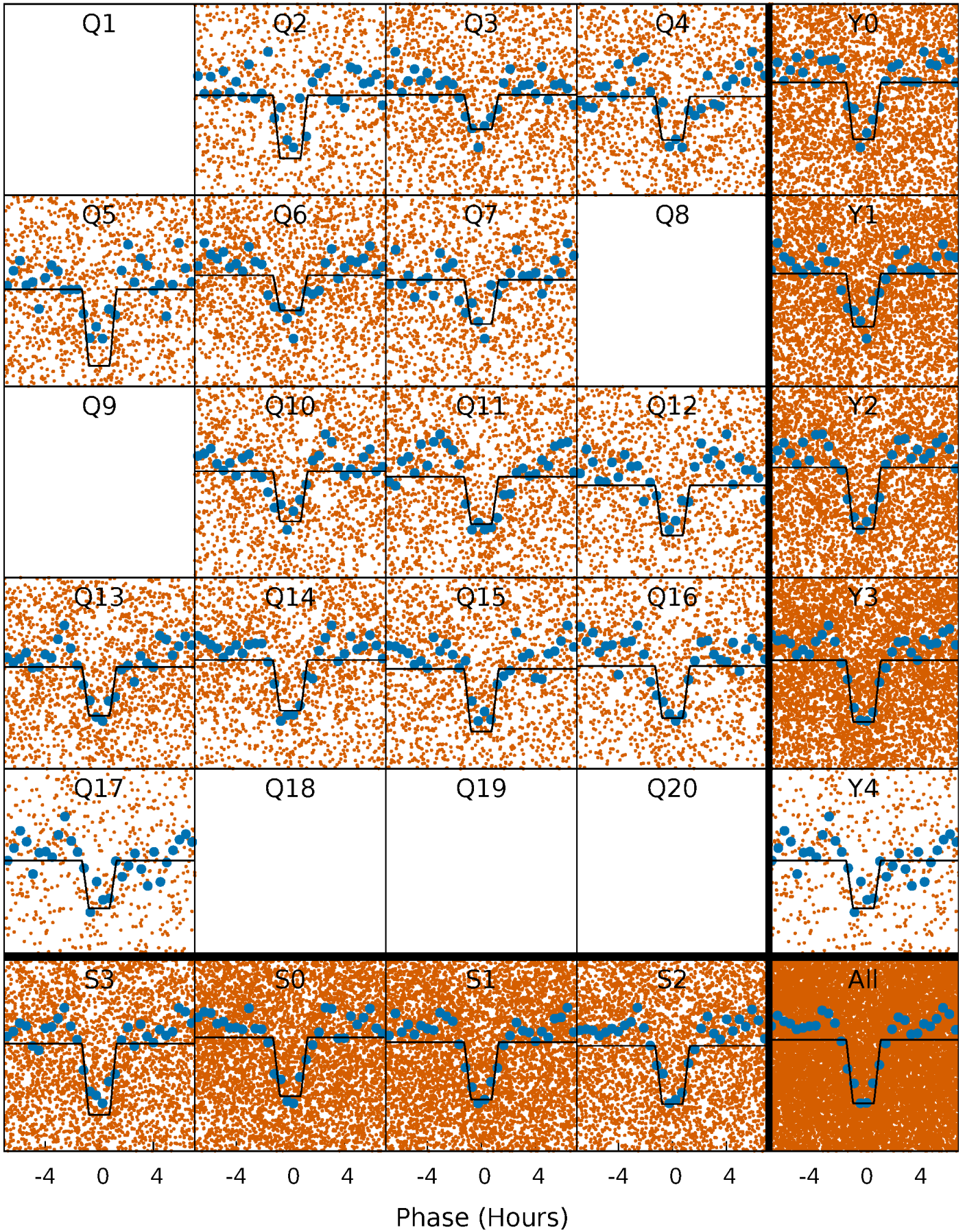
DV Quarter-Phased Transit Curves

TCE 007292380-01 P= 1.100612 Days $T_0=132.575754$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

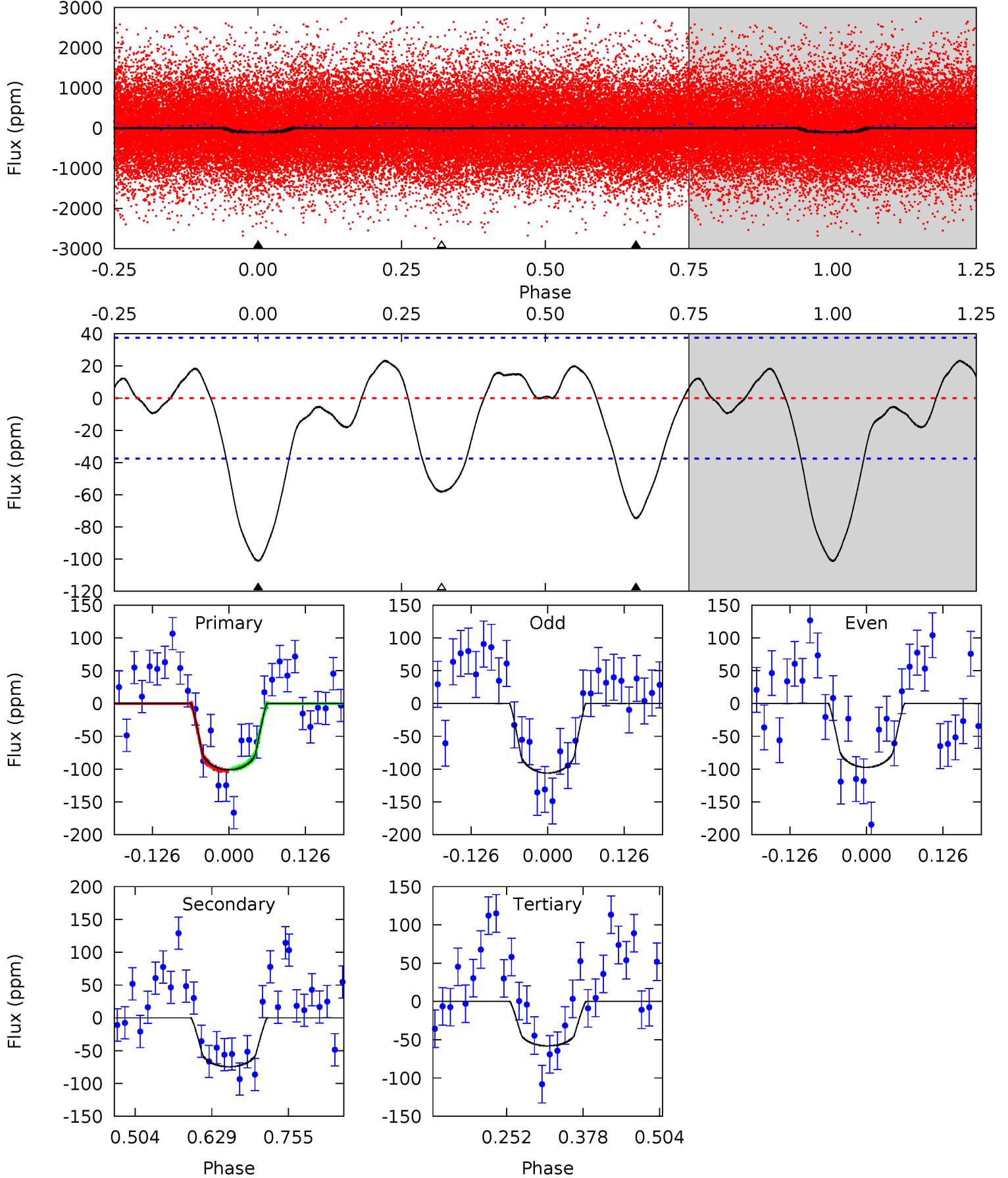
TCE 007292380-01 P= 1.100596 Days $T_0=132.578395$ (BKJD)



DV Model-Shift Uniqueness Test

007292380-01, P = 1.100612 Days, E = 132.575754 Days

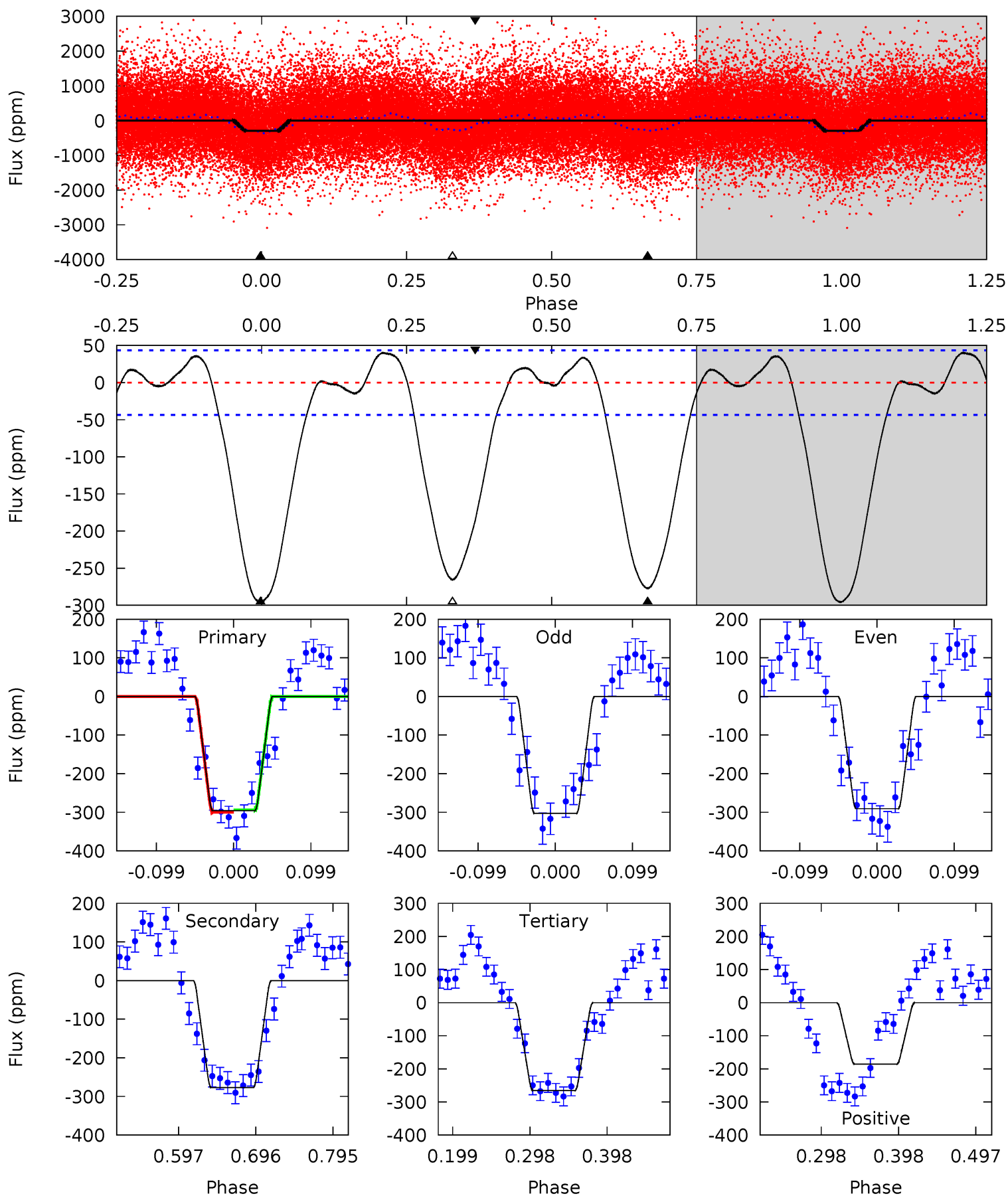
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.2	8.96	6.99	0	4.52	1.53	2.75	5.17	12.2	1.97	8.96	0.53	1.06	0.19	0.18



Alt Model-Shift Uniqueness Test

007292380-01, P = 1.100596 Days, E = 132.578395 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
31.0	29.1	27.9	-19.5	4.57	1.65	9.16	3.15	50.5	1.22	48.6	0.64	0.97	0.12	0.35



Stellar Parameters For KIC 007292380

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007292380-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-75 ± 8	$1.21^{+0.87}_{-0.70}$	2469^{+117}_{-117}	5127^{+2870}_{-1027}	12^{+54}_{-8}
Alt.	-277 ± 10	$2.02^{+1.03}_{-0.88}$	2467^{+110}_{-120}	5444^{+2044}_{-865}	16^{+34}_{-9}

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

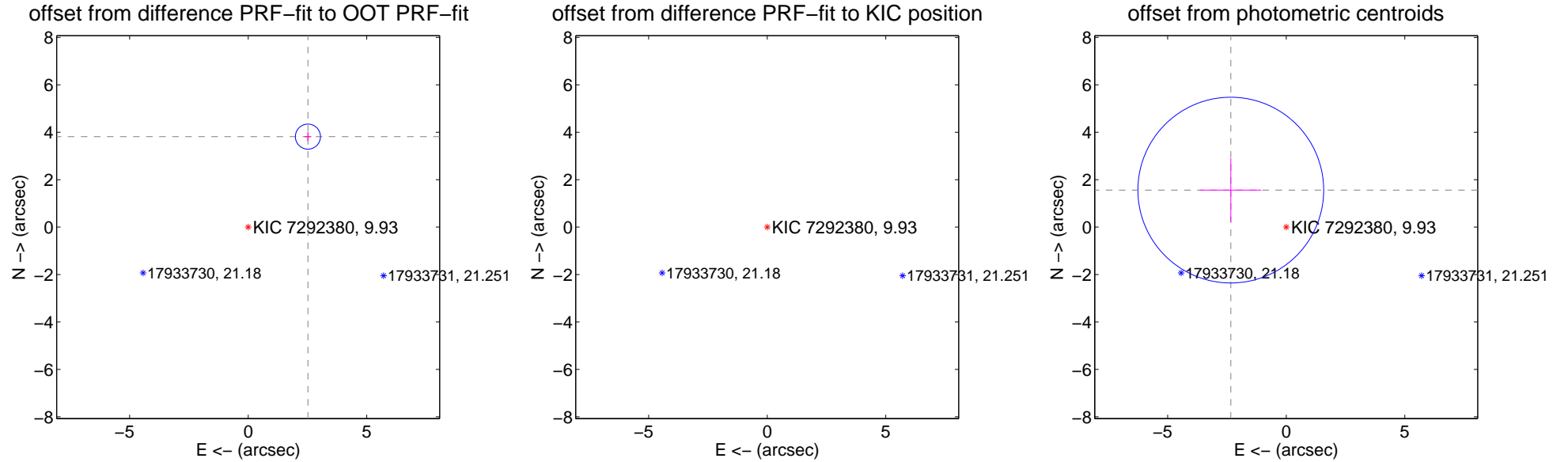
DV Centroid Data

Supplemental centroid analysis for 007292380-01. **Kepler magnitude: 9.93.** Transit SNR 8.73

There are 1 quarters with good PRF difference image offsets

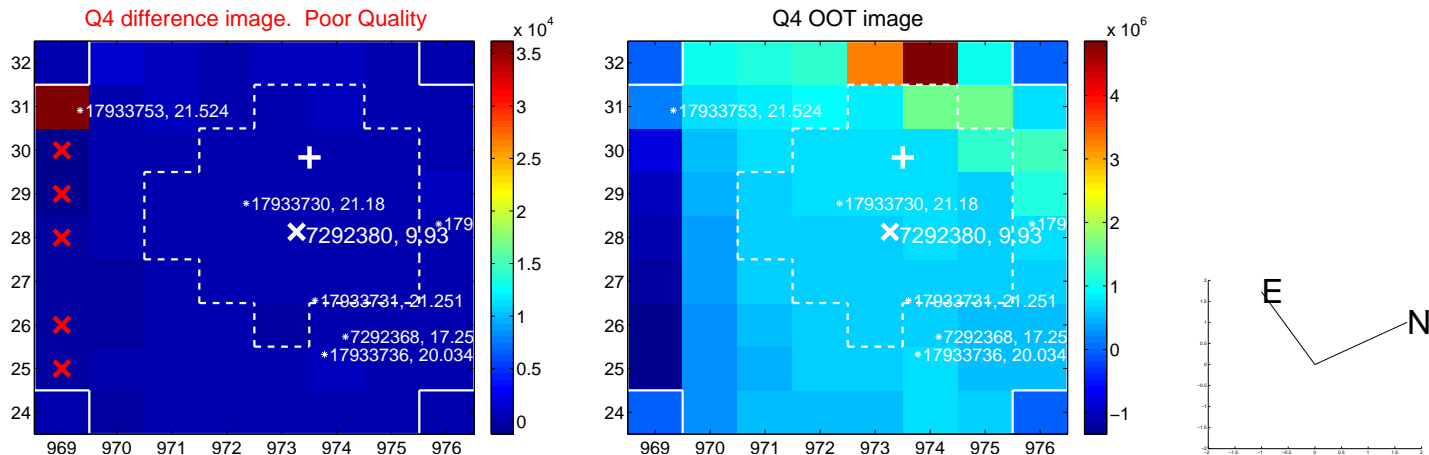
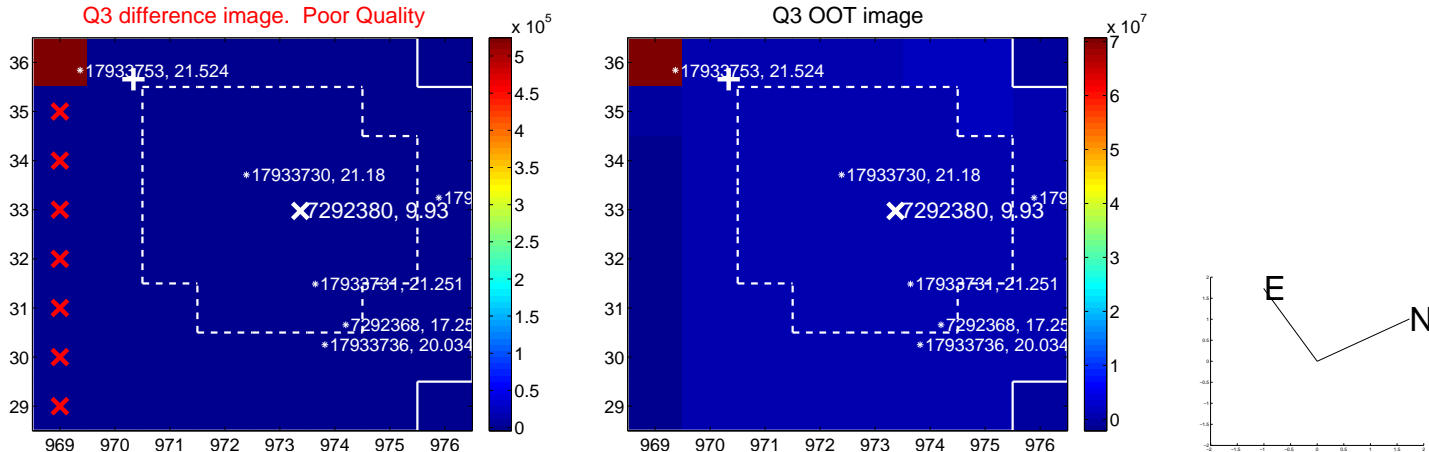
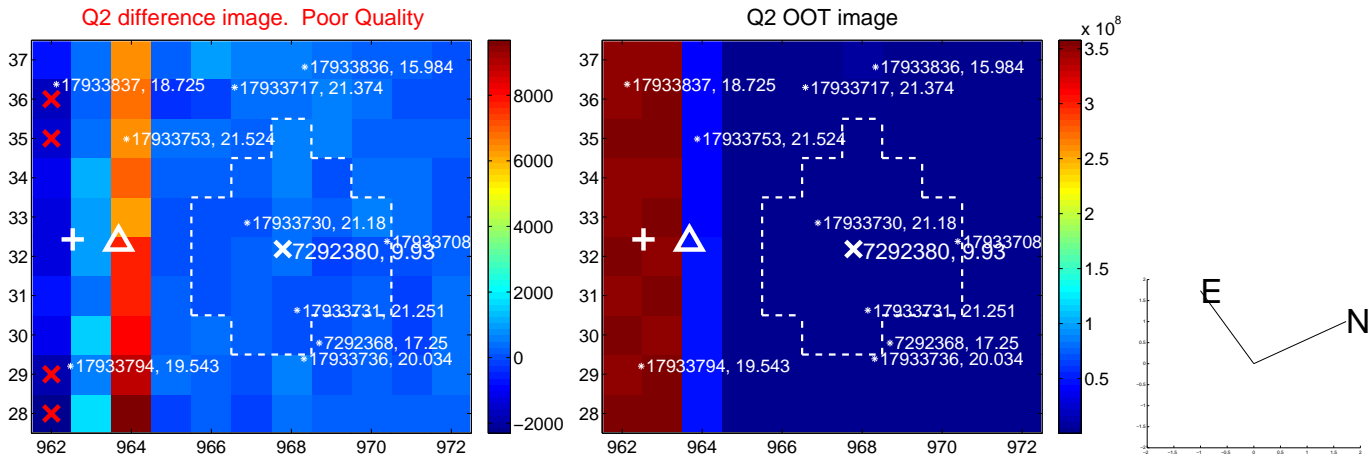
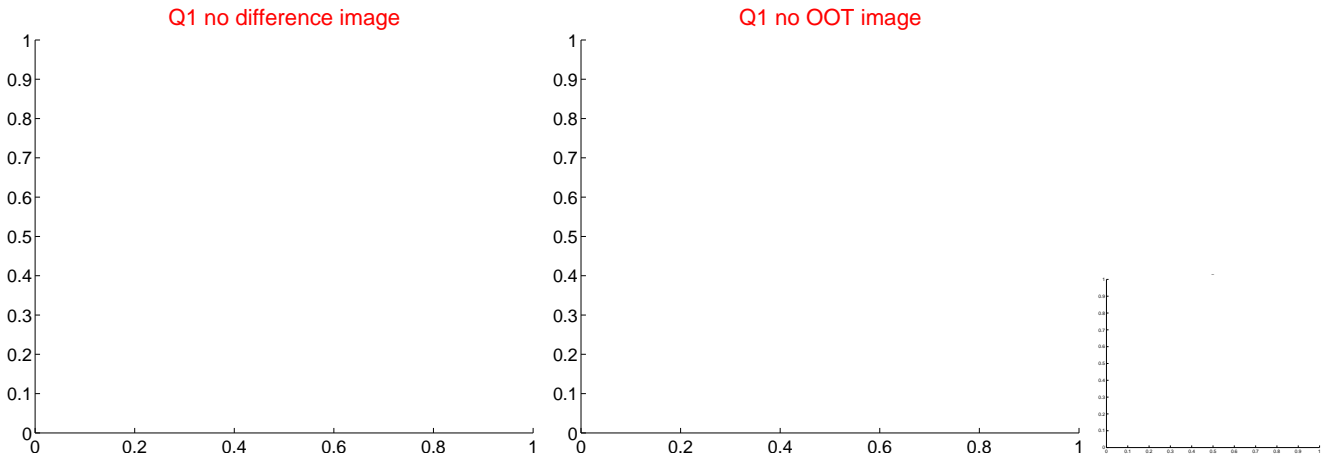
The OOT PRF centroid is offset from the target star catalog position by about 20.91 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.572 ± 0.176	25.95	-2.519 ± 0.143	3.816 ± 0.189
PRF-fit source offset from KIC position	17.855 ± 0.769	23.21	11.061 ± 1.098	-14.016 ± 0.130
photometric centroid source offset	2.81 ± 1.31	2.15	2.34 ± 1.29	1.56 ± 1.34

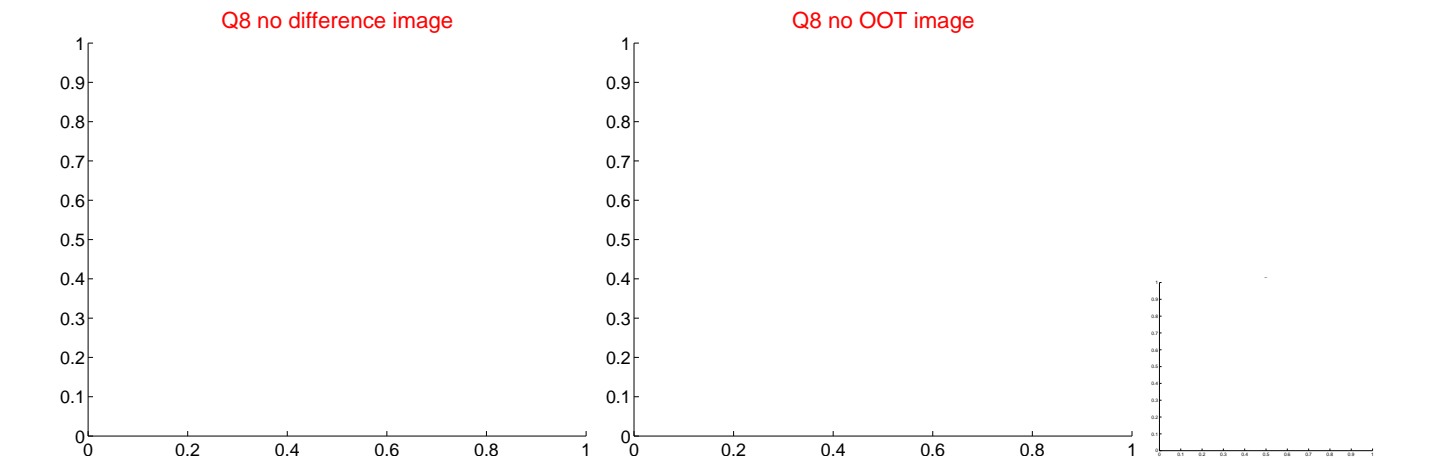
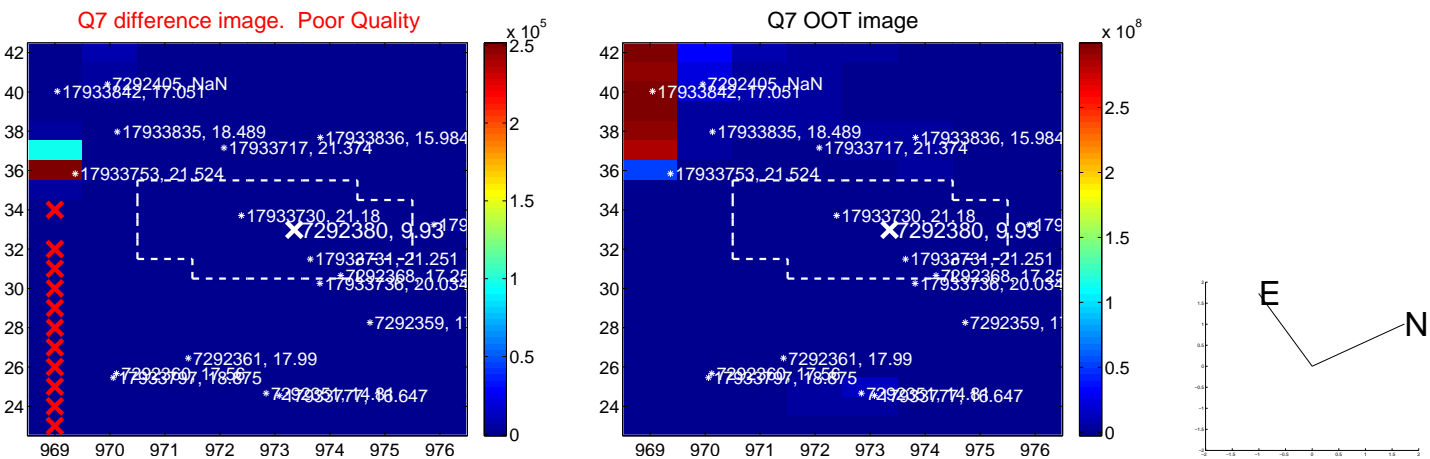
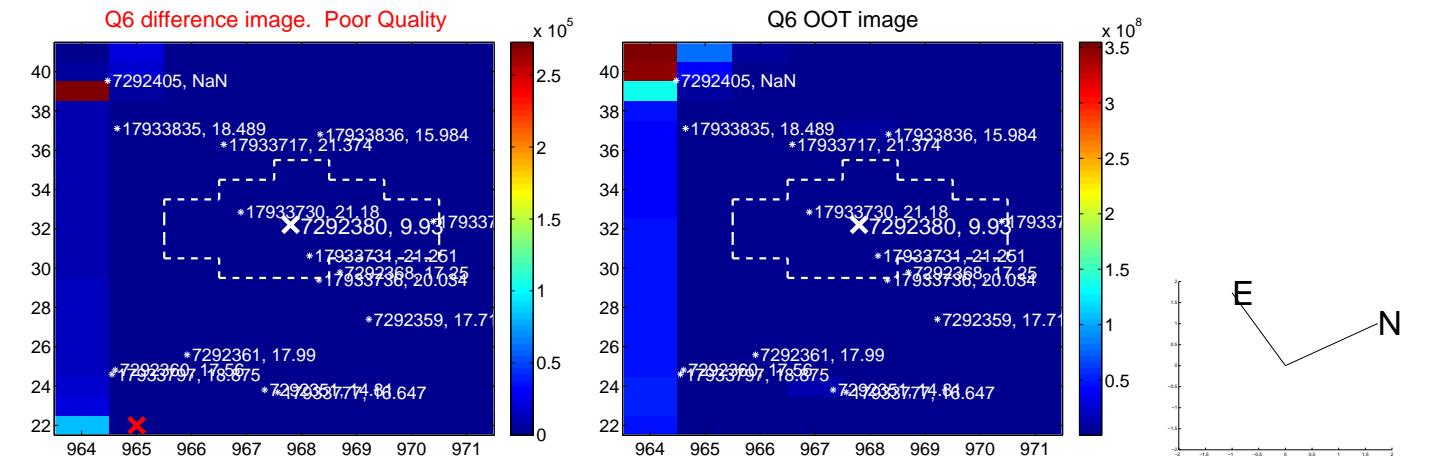
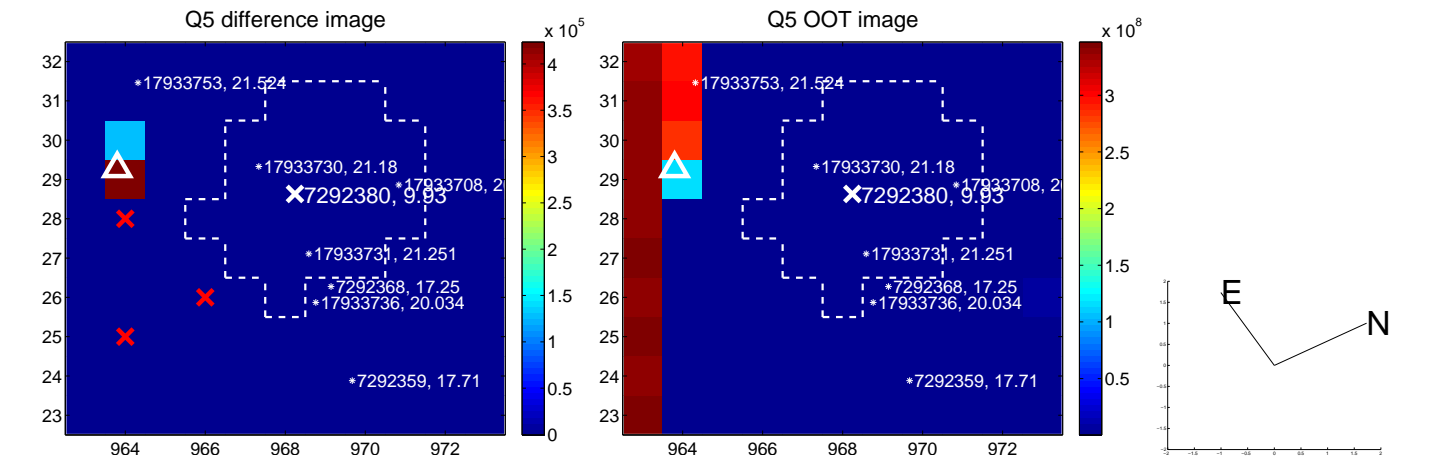


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

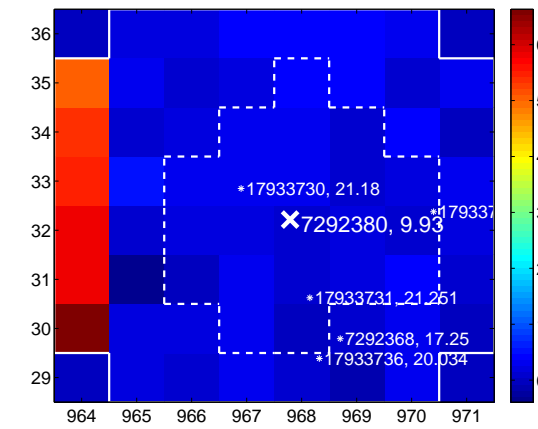
Q9 no difference image



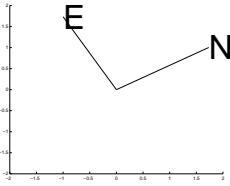
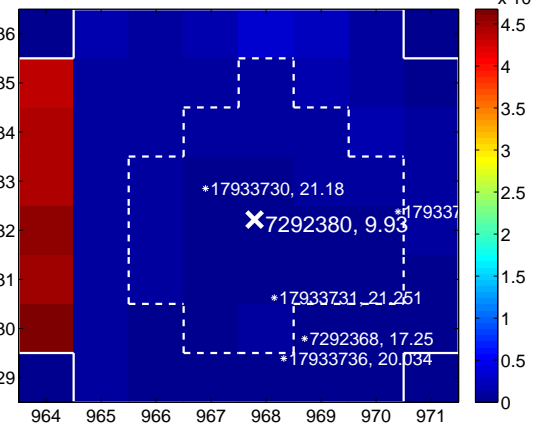
Q9 no OOT image



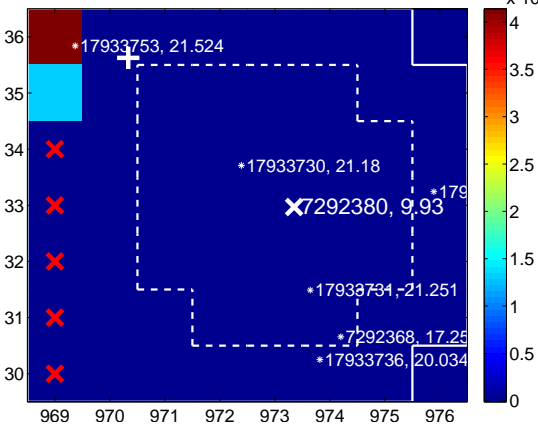
Q10 difference image. Poor Quality



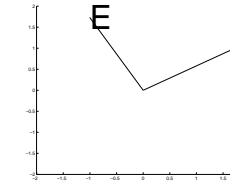
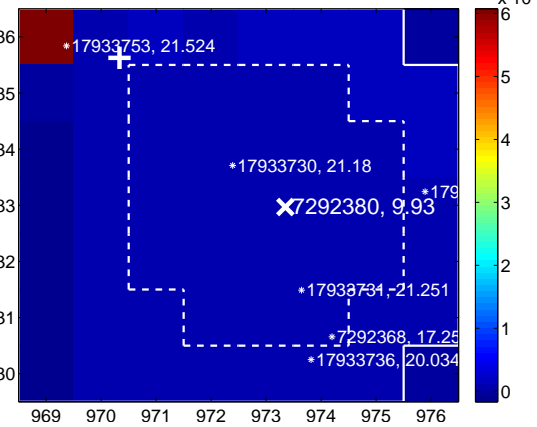
Q10 OOT image



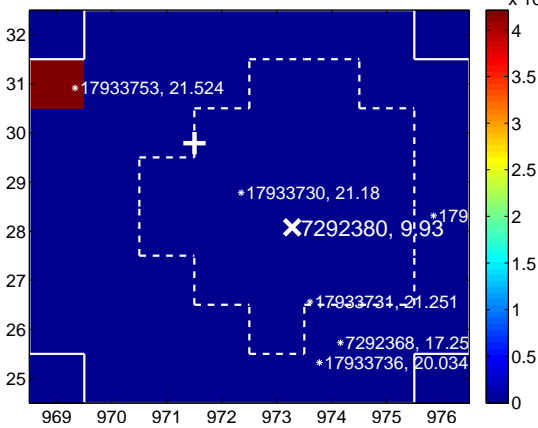
Q11 difference image. Poor Quality



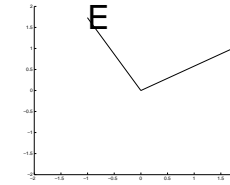
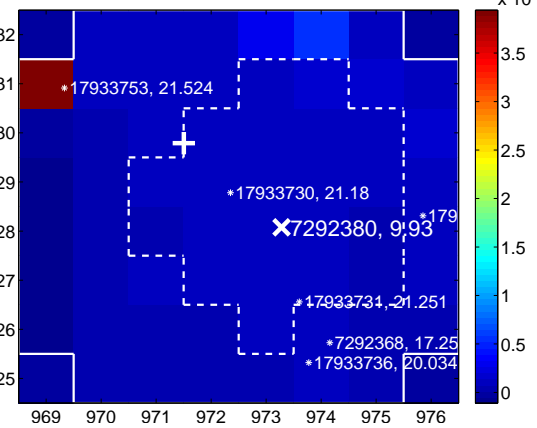
Q11 OOT image



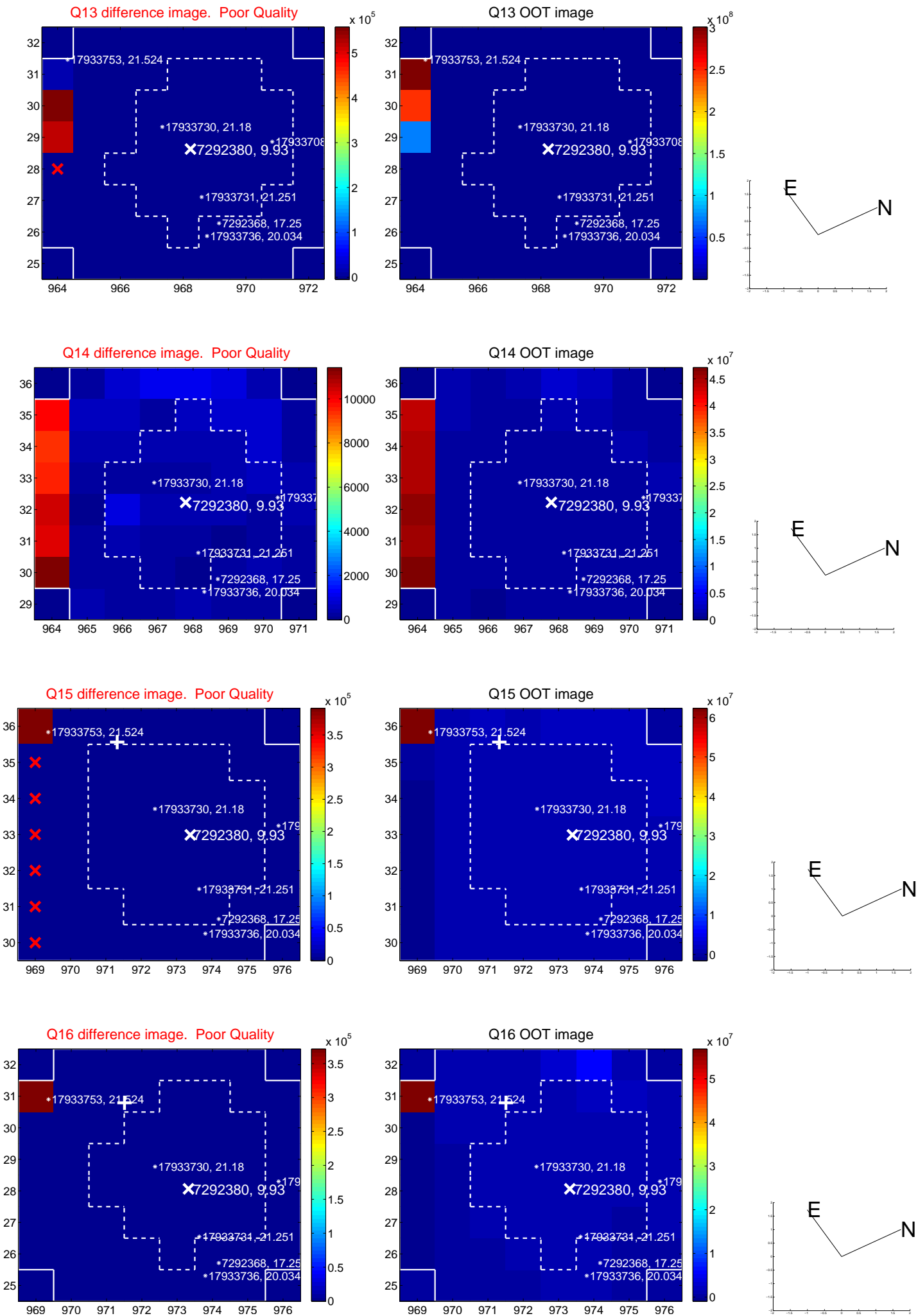
Q12 difference image. Poor Quality



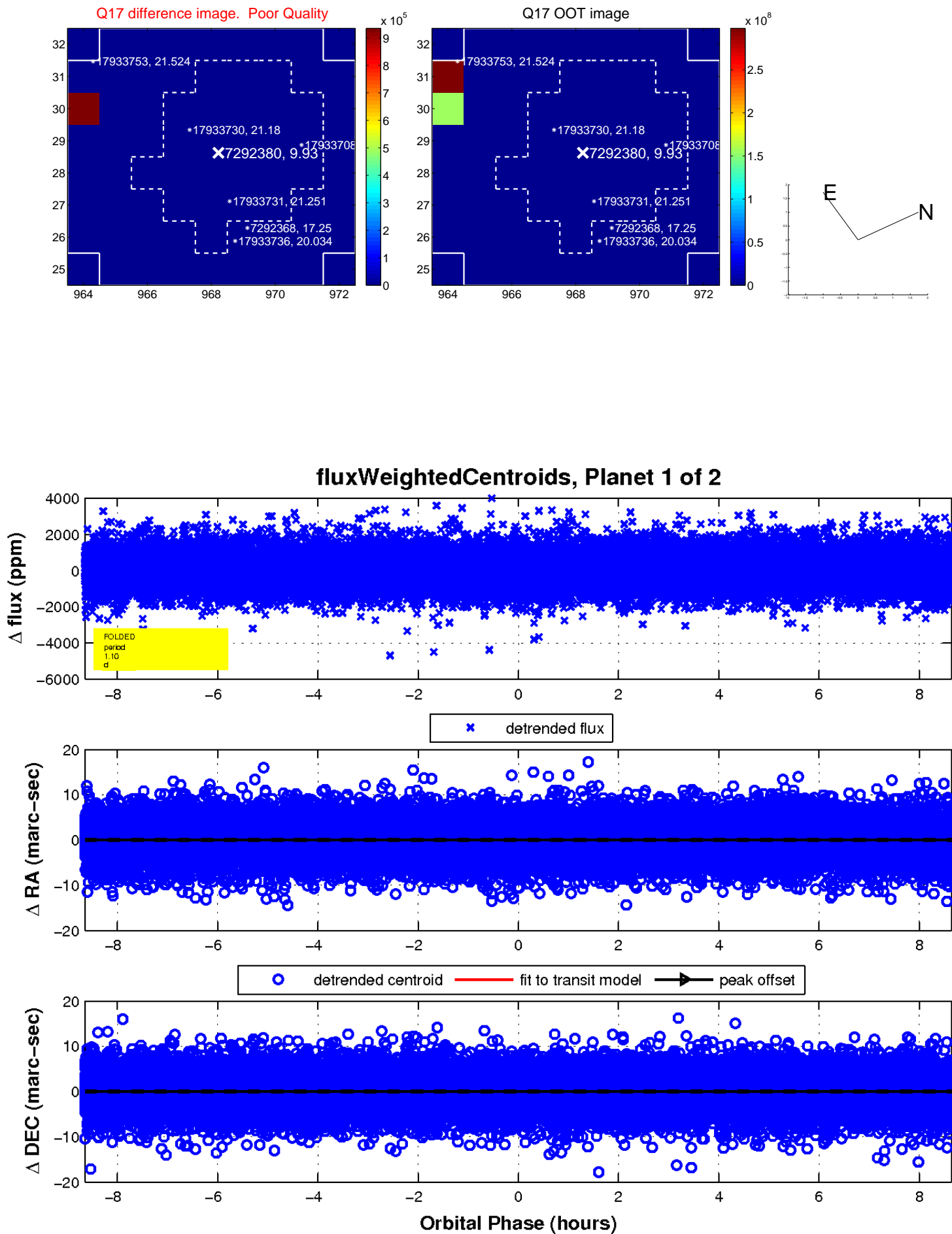
Q12 OOT image



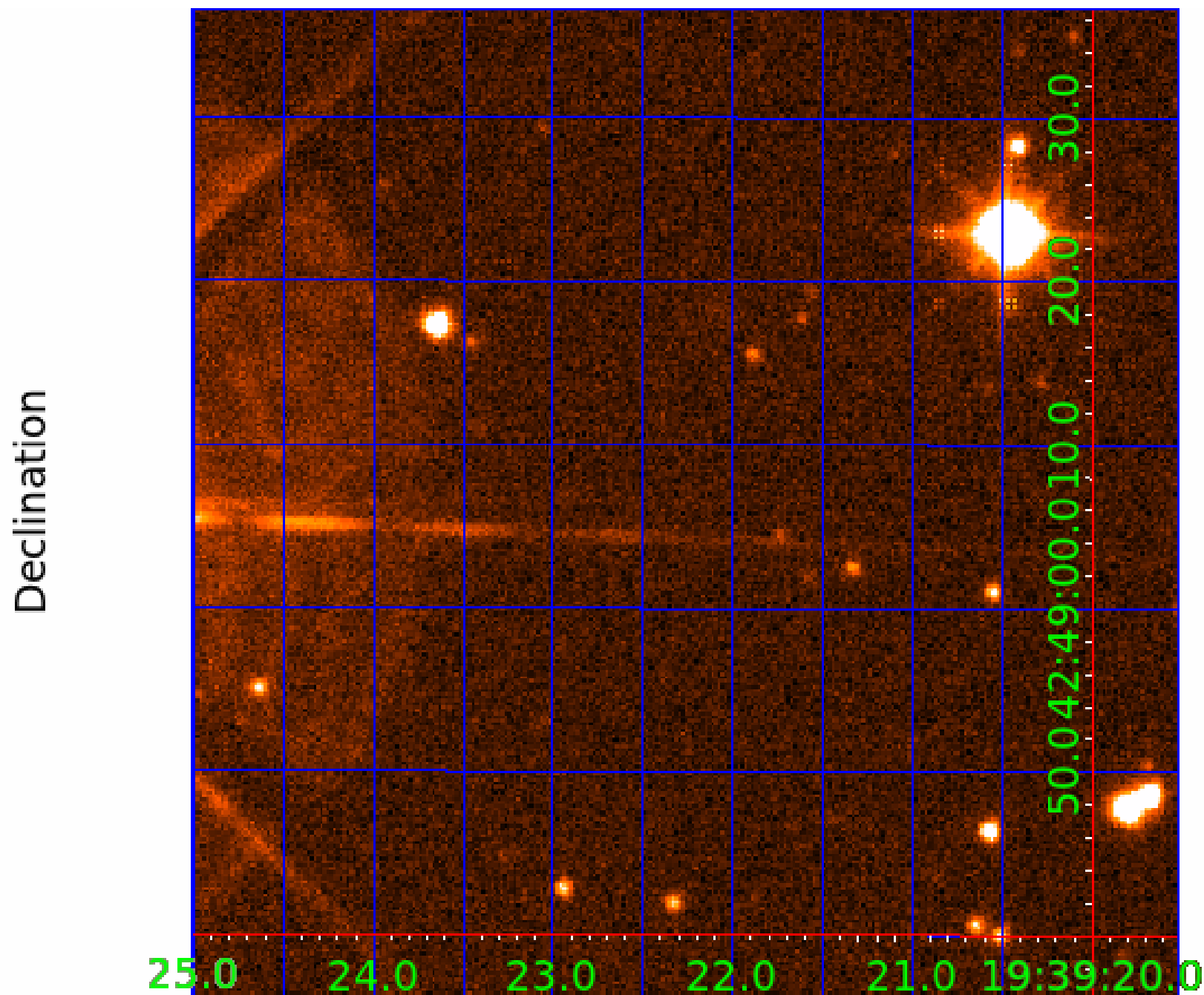
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 007292380

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})
007292380-01	OBS	No	1.100612	132.575754	93.5	2.882	8.0	8.7	1.00	5780	1.09	2296.64
007292380-02	OBS	No	340.876065	148.491588	1109.6	6.654	7.2	7.1	1.00	5780	3.98	1.10

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
007292380-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_SATURATED
007292380-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_ALT—CENT_SATURATED

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

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

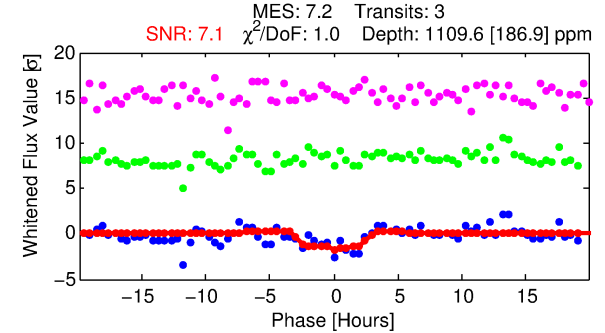
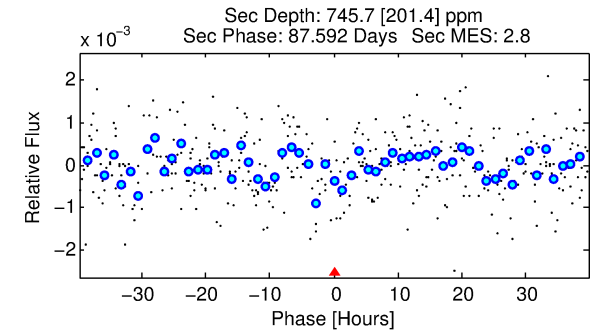
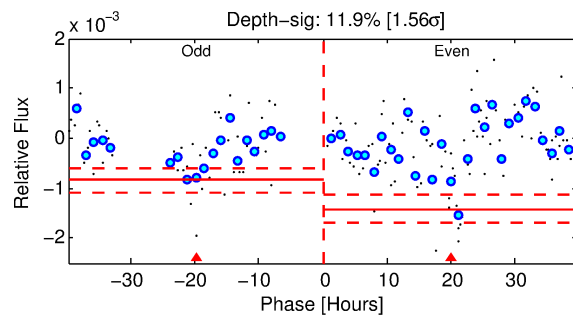
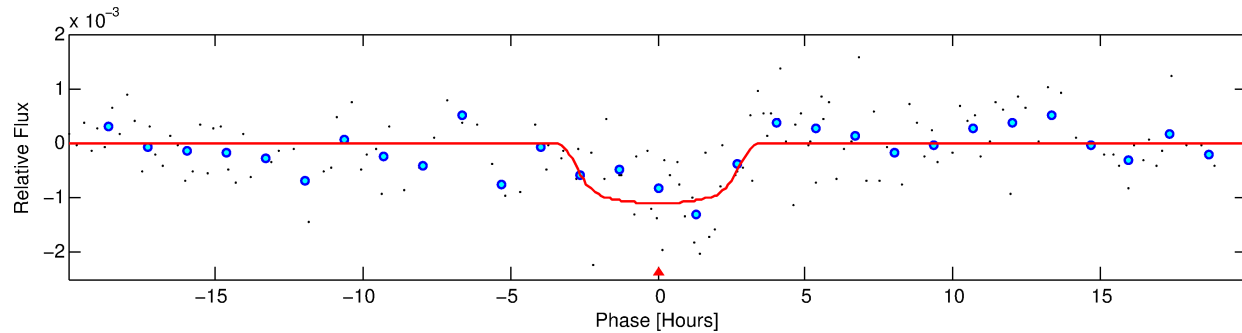
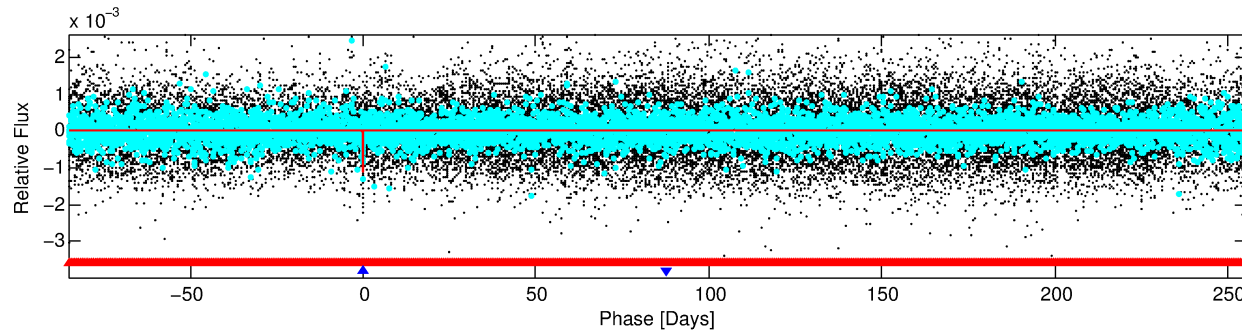
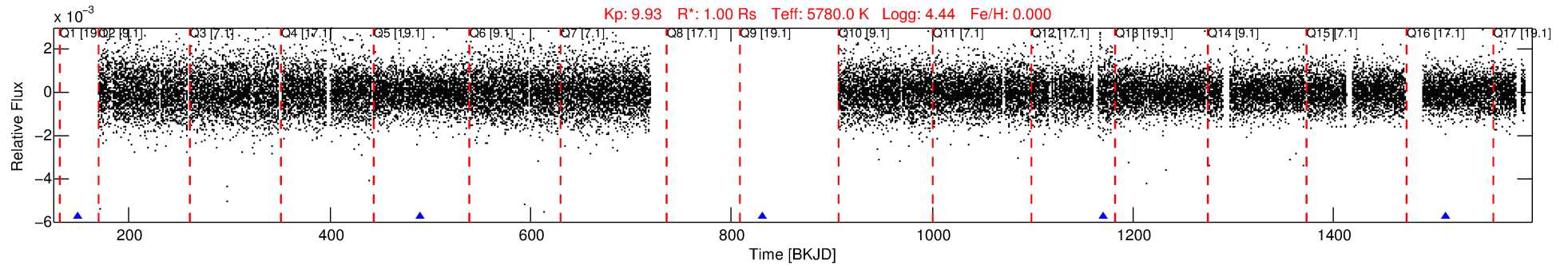
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 007292380-02

No Significant Match Found

DV One-Page Summary

KIC: 7292380 Candidate: 2 of 2 Period: 340.876 d



DV Fit Results:

Period = 340.87606 [0.01085] d
Epoch = 148.4916 [0.0365] BKJD
Rp/R* = 0.0365 [0.0079]
a/R* = 197.84 [167.56]
b = 0.90 [0.17]
Seff = 1.10 [0.00]
Teq = 261 [0] K
Rp = 3.98 [0.86] Re
a = 0.9552 [0.0000] AU
Ag = 23588.73 [12014.93] [1.96σ]
Teffp = 4999 [637] K [7.44σ]

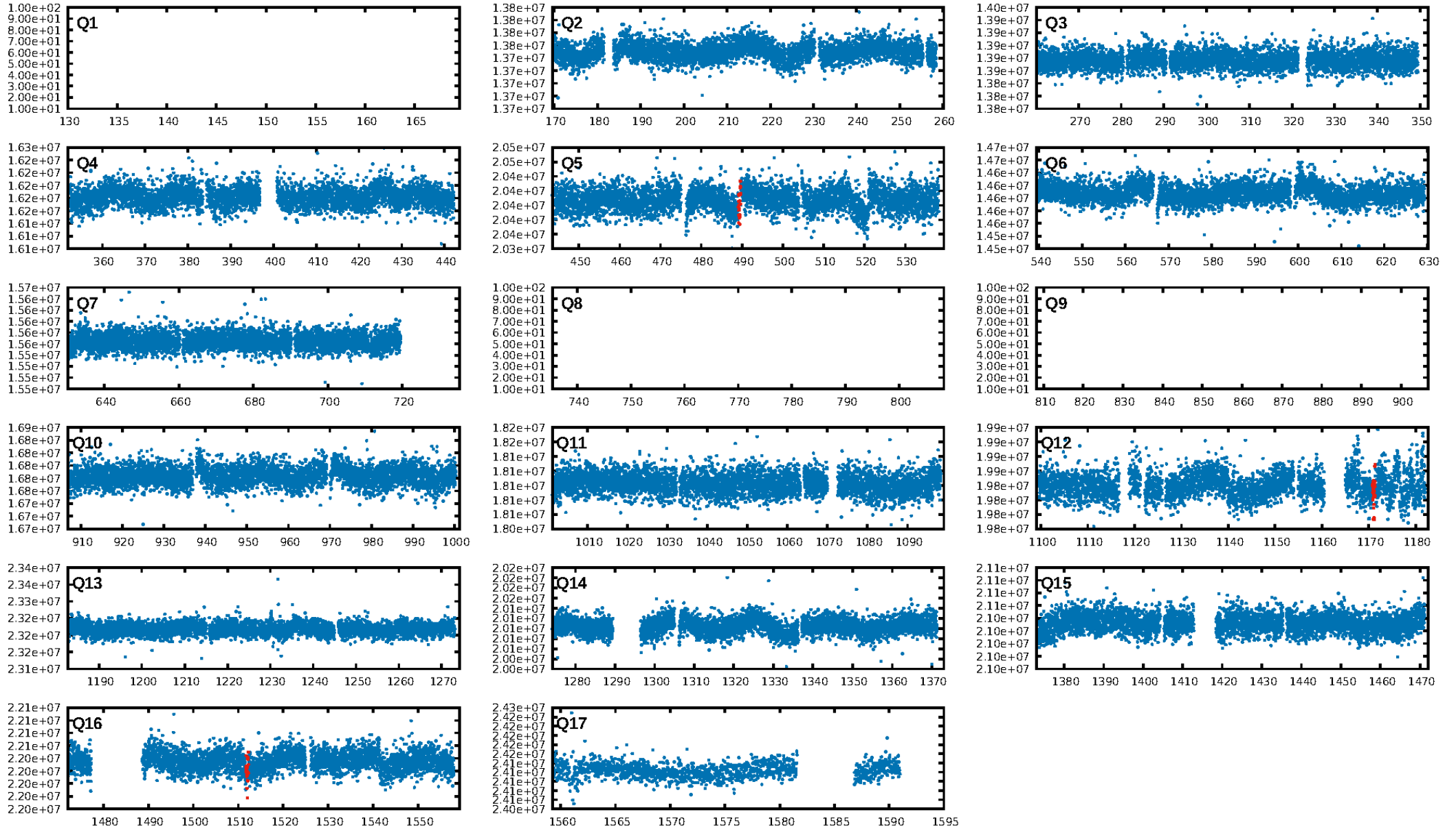
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [1124.55σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 24.4%
ModelChiSquareGof-sig: 97.9%
Bootstrap-pfa: 2.53e-12
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: N/A
Centroid-sig: 4.7%
Centroid-so: 1.005 arcsec [0.62σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/3]

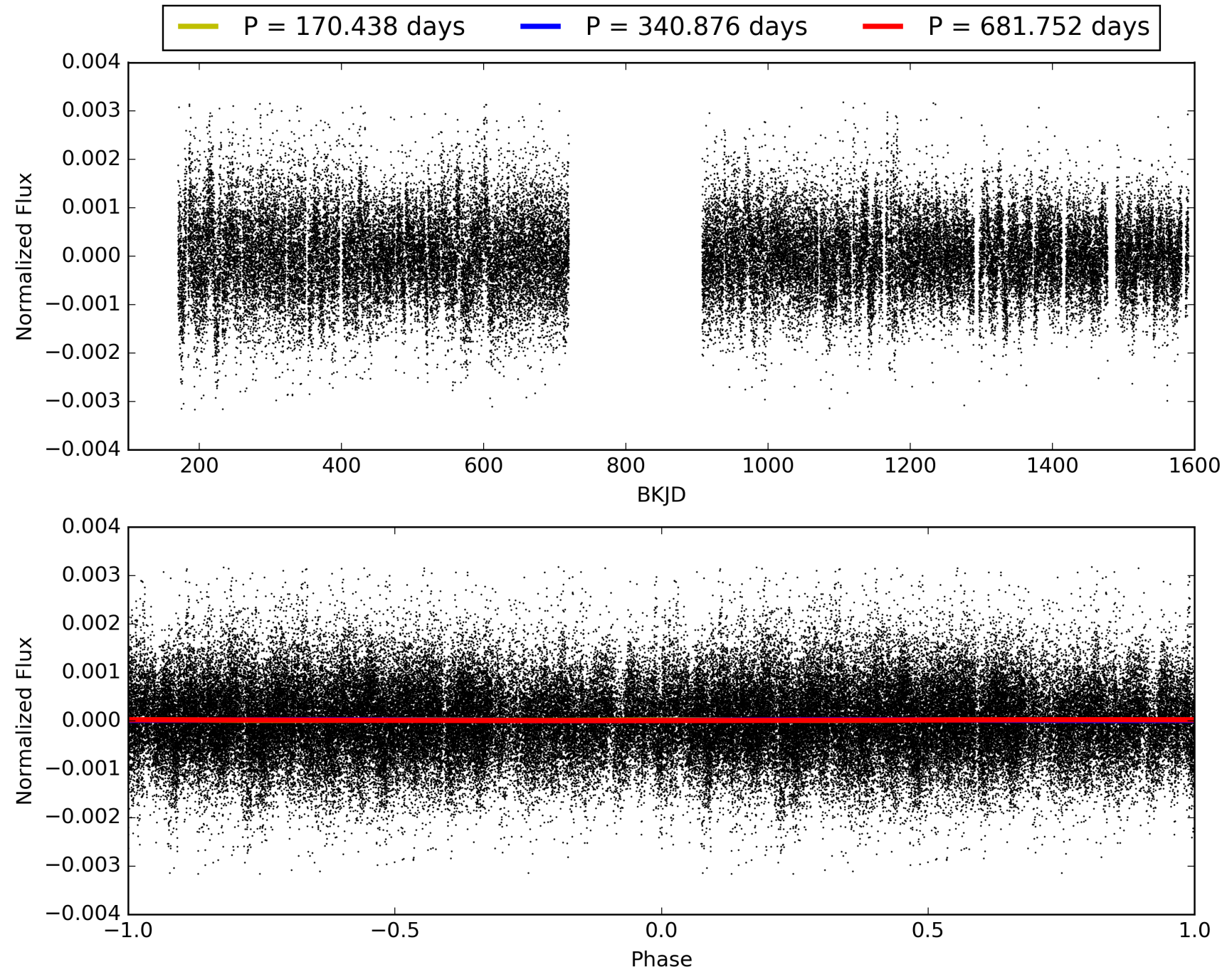
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 20:43:18 Z

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

TCE 007292380-02, PDC Light Curves

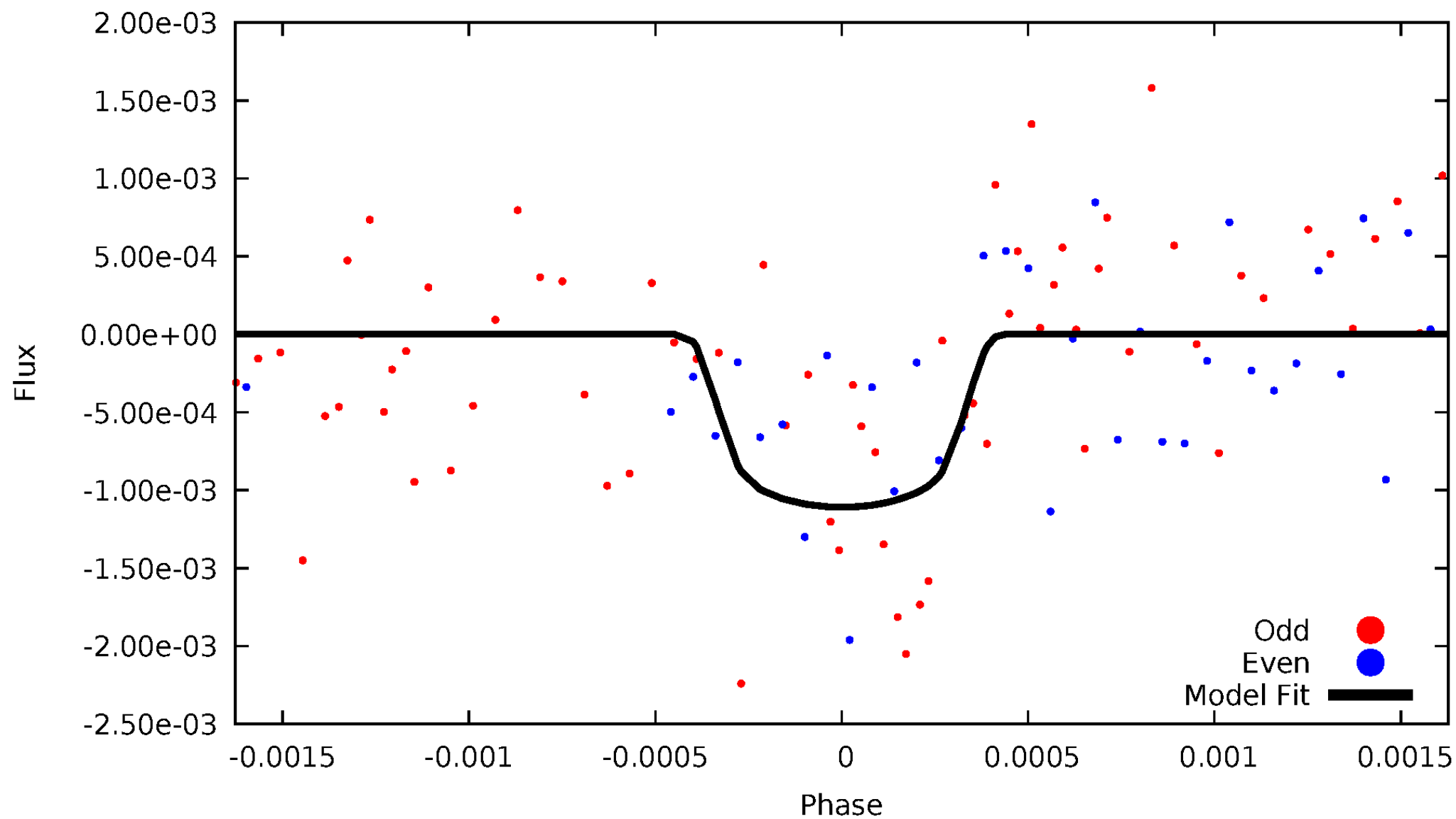


TCE 007292380-02



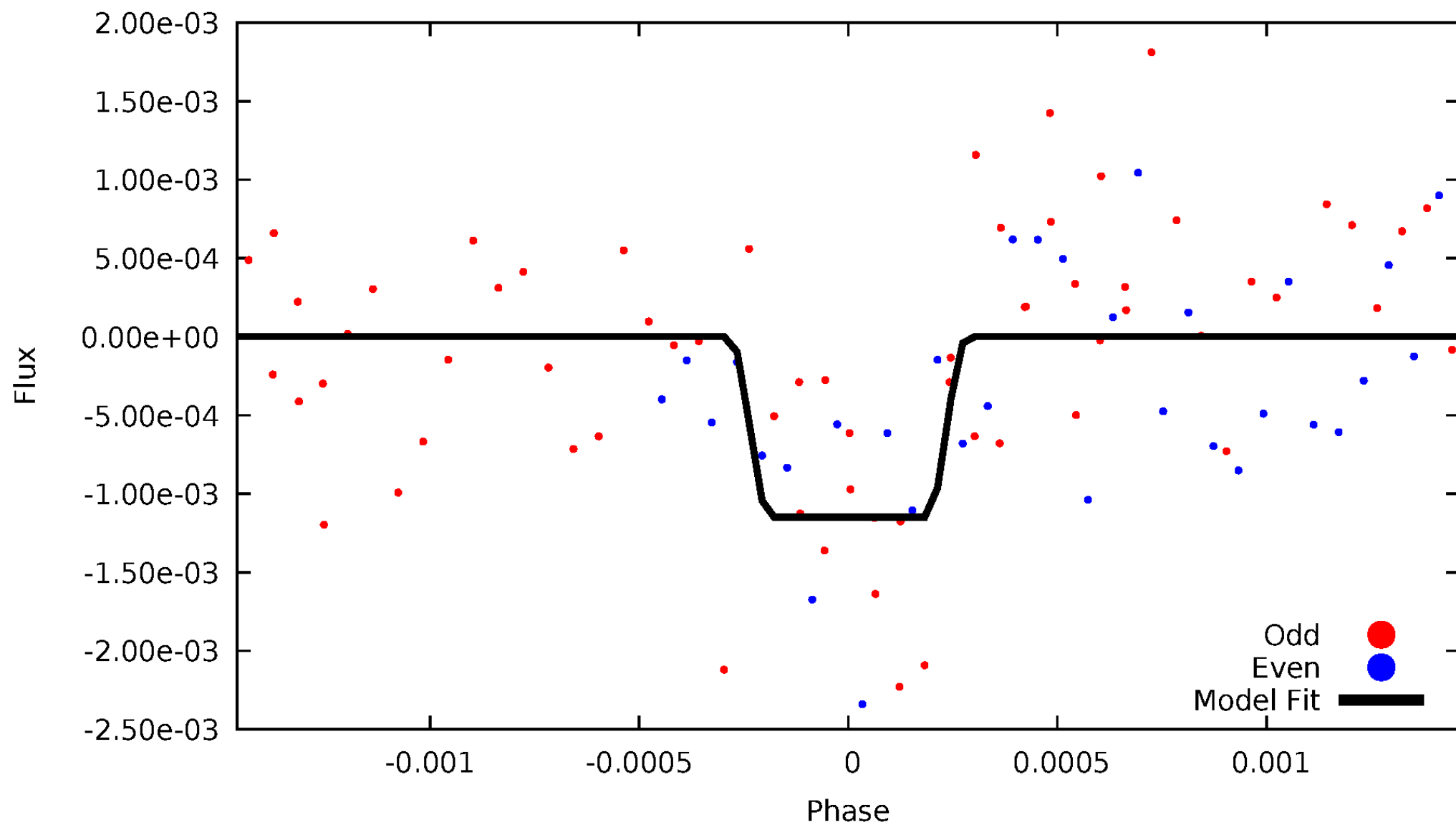
DV Odd/Even

TCE 007292380-02



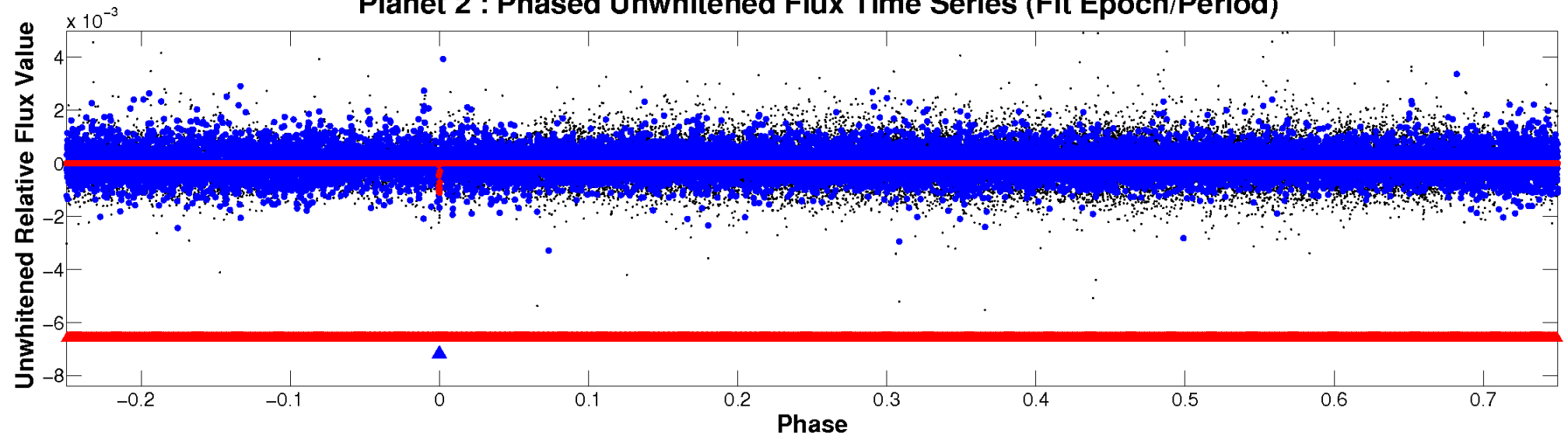
ALT Odd/Even

TCE 007292380-02

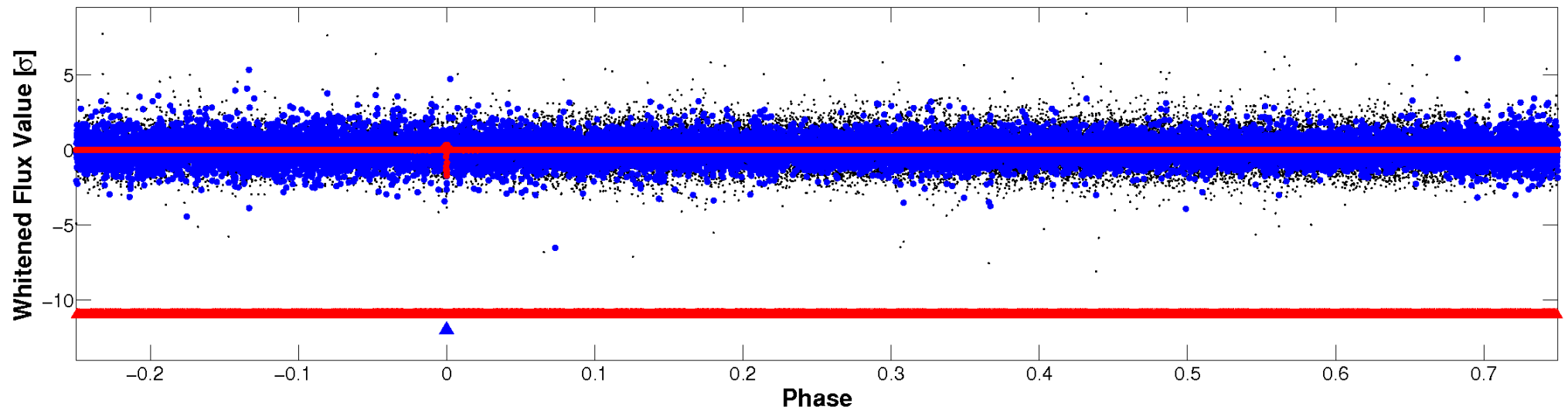


Non-Whitened Vs. Whitened Light Curve

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

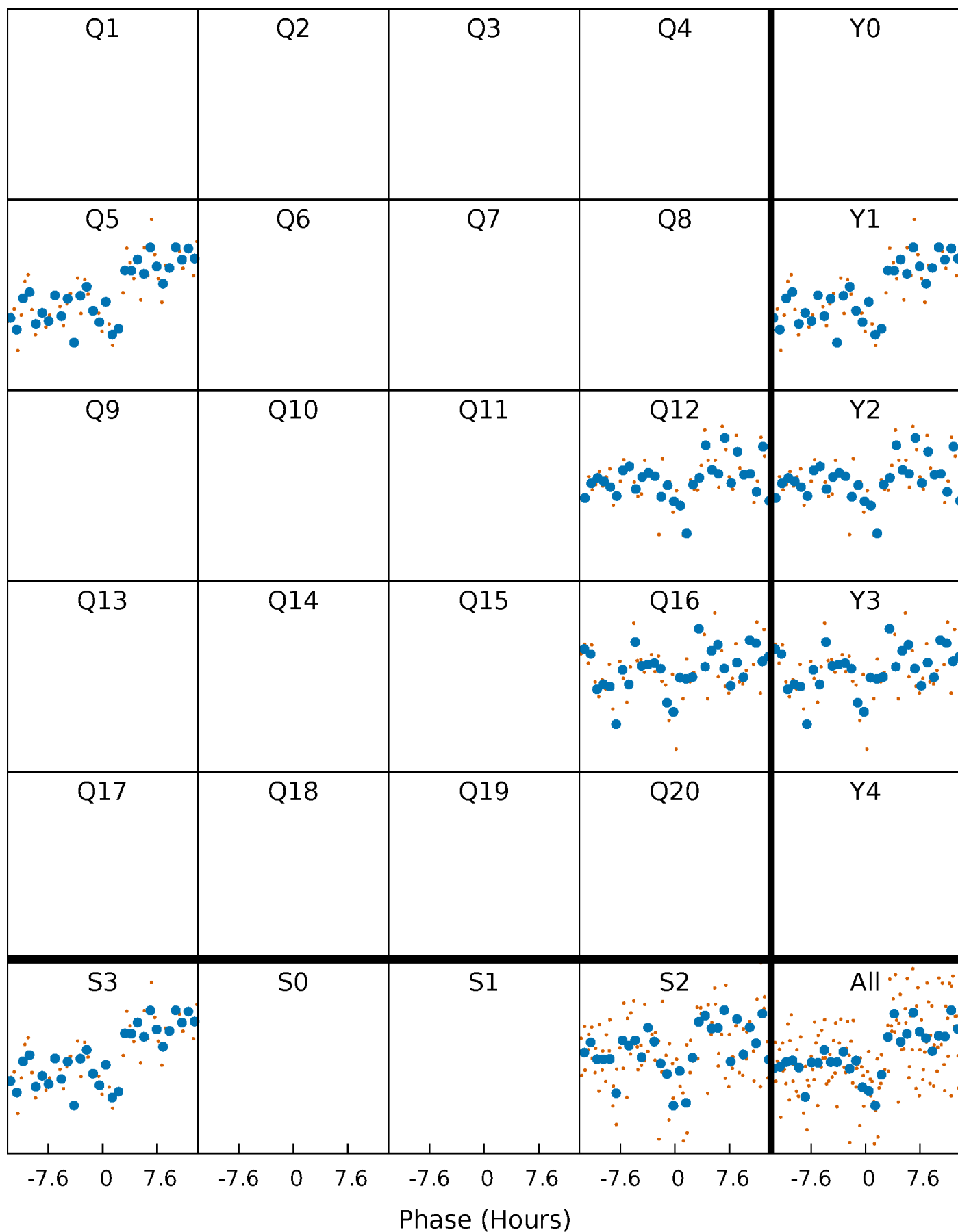


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



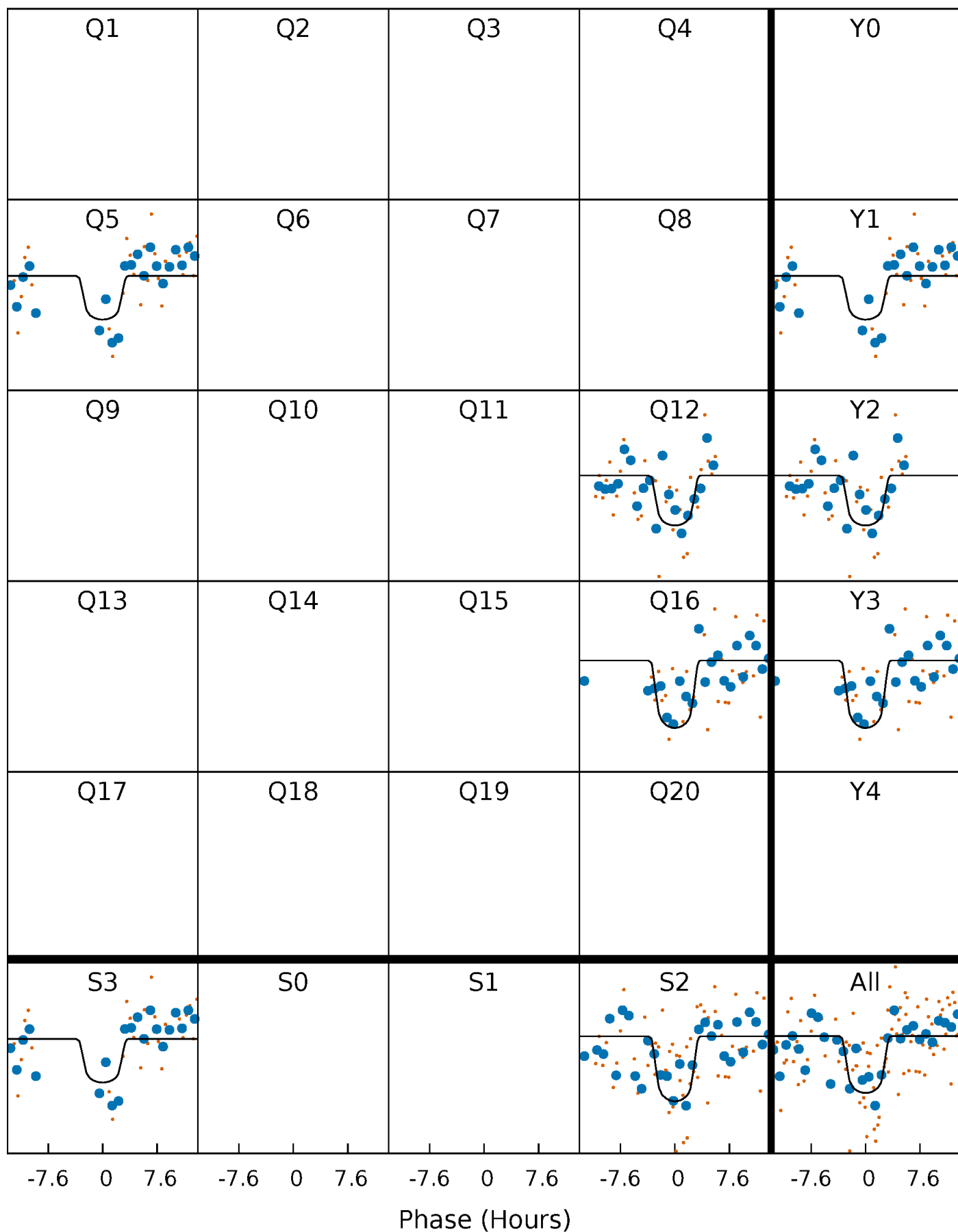
PDC Quarter-Phased Transit Curves

TCE 007292380-02 $P=340.876065$ Days $T_0=148.491588$ (BKJD)



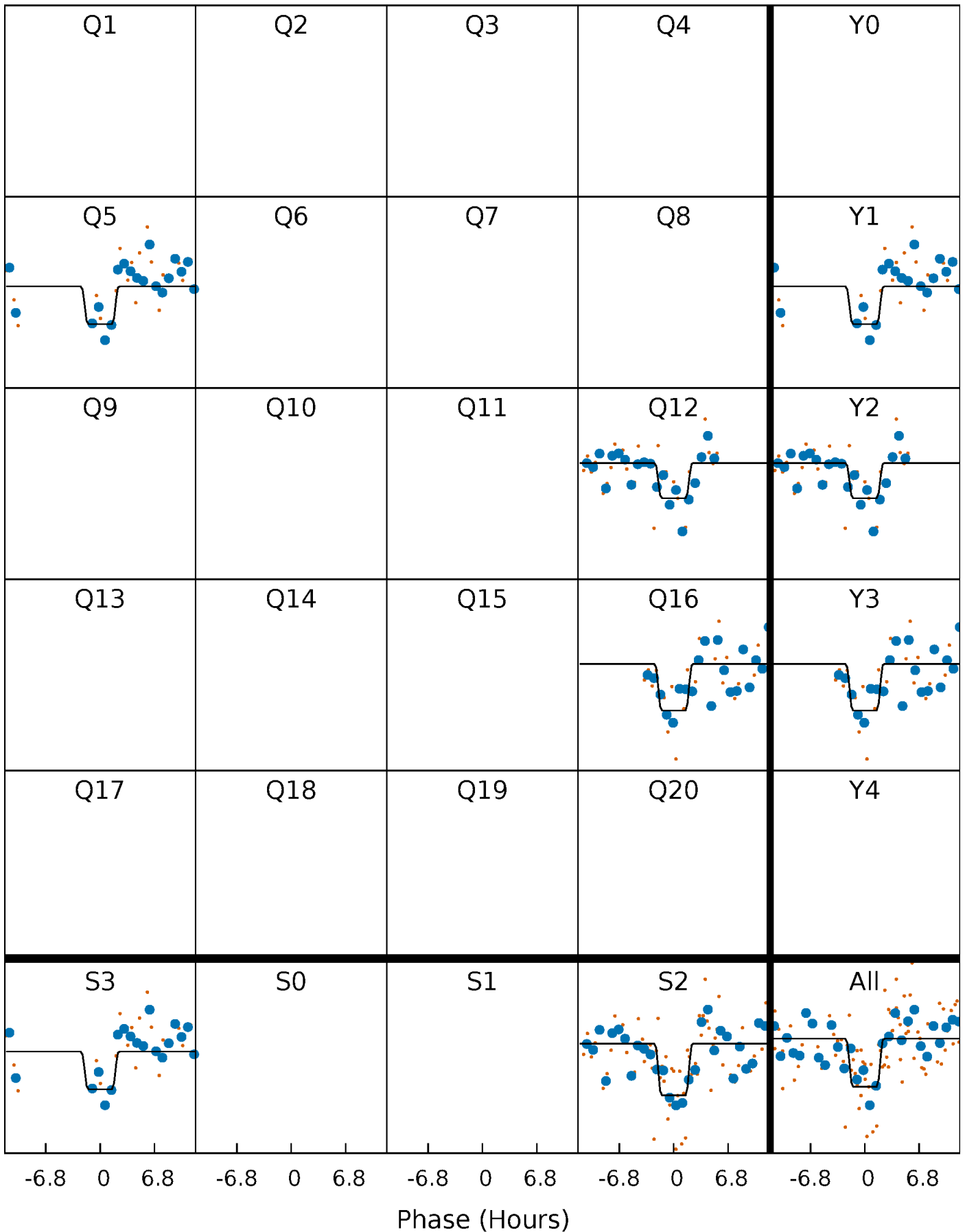
DV Quarter-Phased Transit Curves

TCE 007292380-02 P=340.876065 Days $T_0=148.491588$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

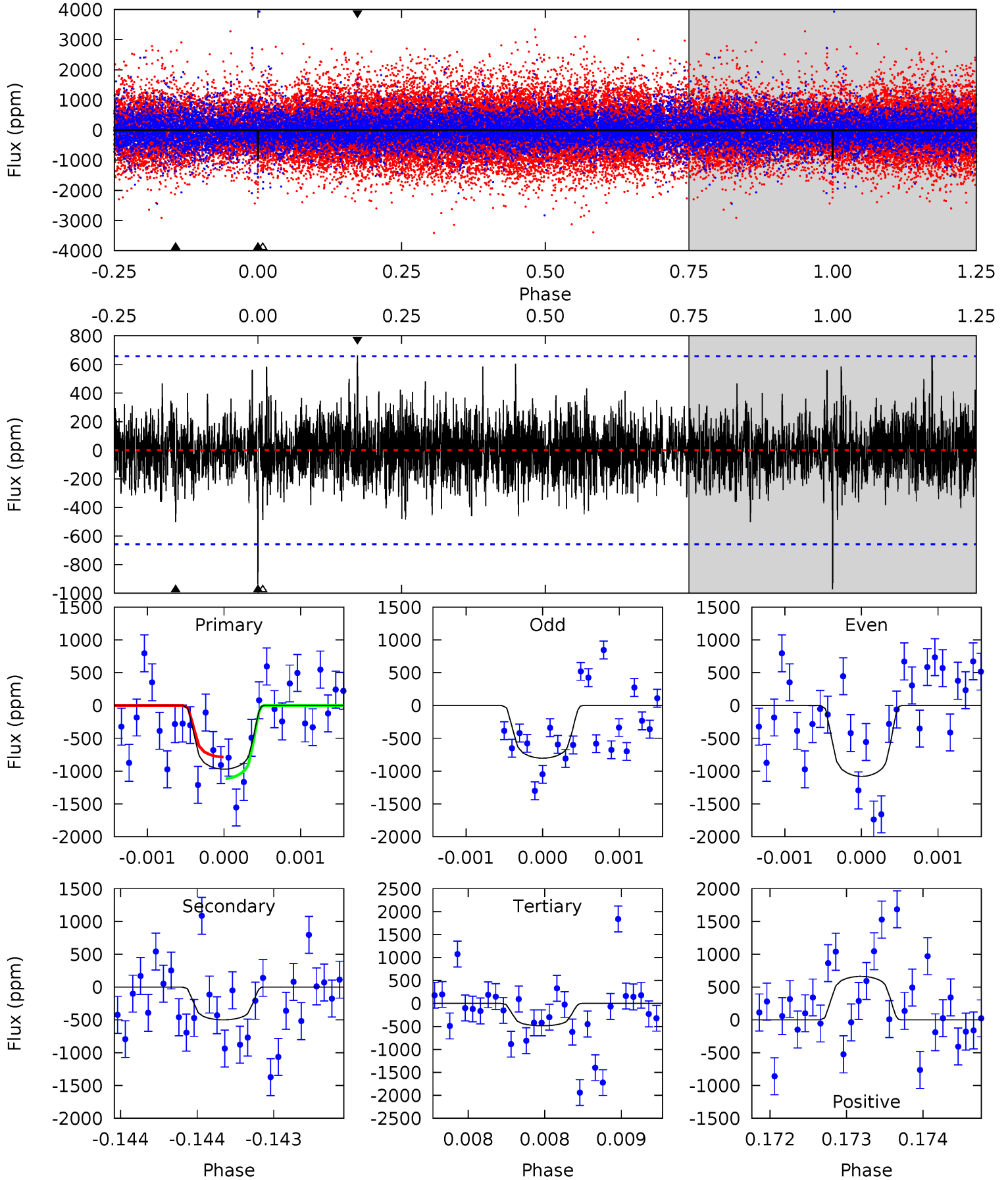
TCE 007292380-02 $P=340.862408$ Days $T_0=148.541949$ (BKJD)



DV Model-Shift Uniqueness Test

007292380-02, P = 340.876065 Days, E = 148.491588 Days

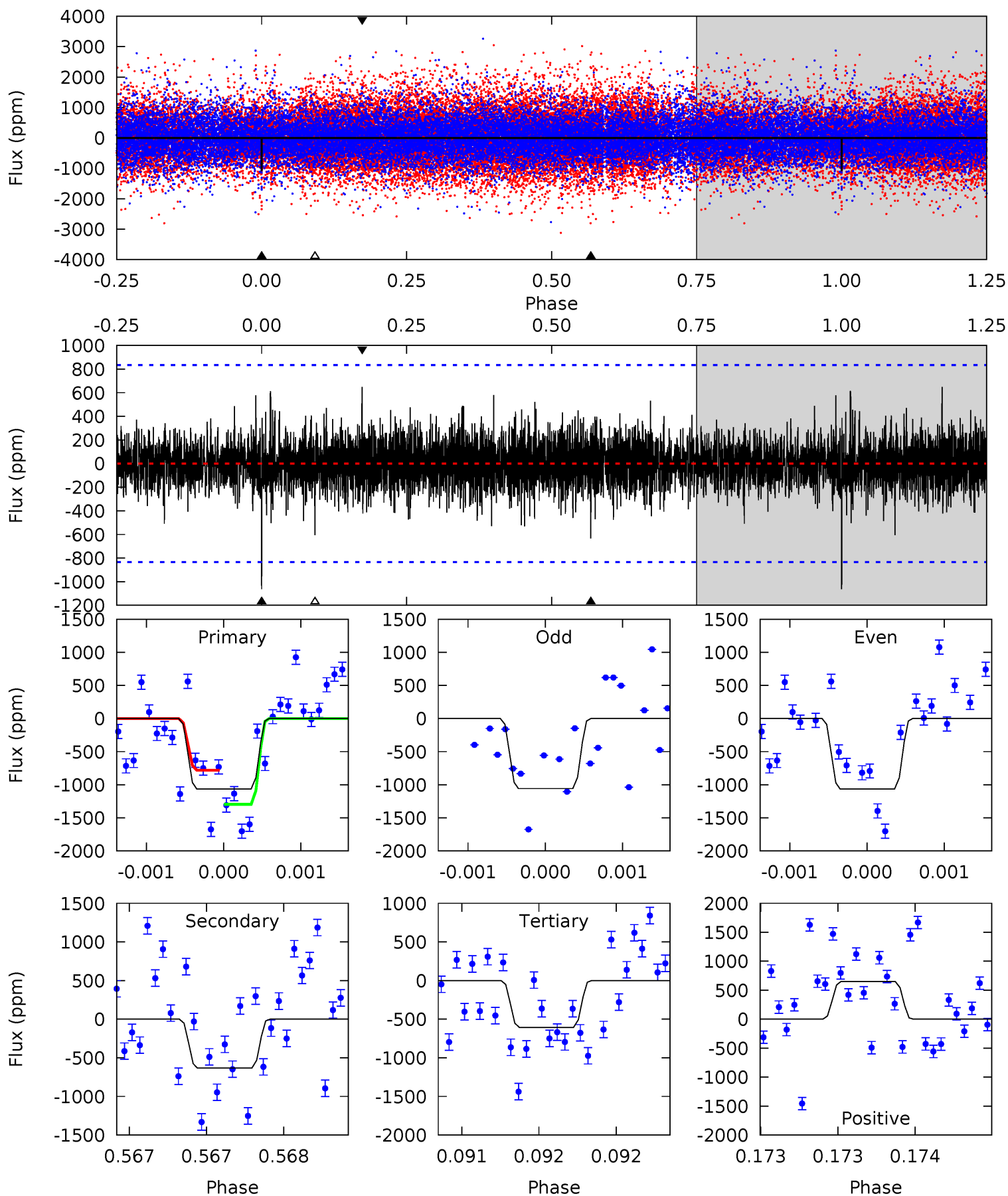
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.10	4.17	4.06	5.53	5.48	3.34	1.19	4.04	2.57	0.11	-1.36	1.12	1.17	0.41	1.36



Alt Model-Shift Uniqueness Test

007292380-02, P = 340.862408 Days, E = 148.541949 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.10	4.22	4.04	4.33	5.57	3.48	1.00	3.06	2.76	0.18	-0.11	0.03	1.00	0.38	1.71



Stellar Parameters For KIC 007292380

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5780^{+1}_{-1}	$4.438^{+1.000}_{-1.000}$	$0.000^{+1.000}_{-1.000}$	$1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$	$-1.000^{+1.000}_{-1.000}$
	+0%/-0%	+23%/-23%	+inf%/-inf%	+100%/-100%	+100%/-100%	+100%/-100%
Source	Solar	Solar	Solar	Solar		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 007292380-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-500 ± 120	$3.98^{+0.98}_{-0.91}$	364^{+17}_{-17}	4645^{+629}_{-444}	15338^{+12746}_{-6065}
Alt.	-633 ± 150	$3.64^{+0.95}_{-0.91}$	364^{+16}_{-17}	5074^{+721}_{-511}	24076^{+19348}_{-10383}

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

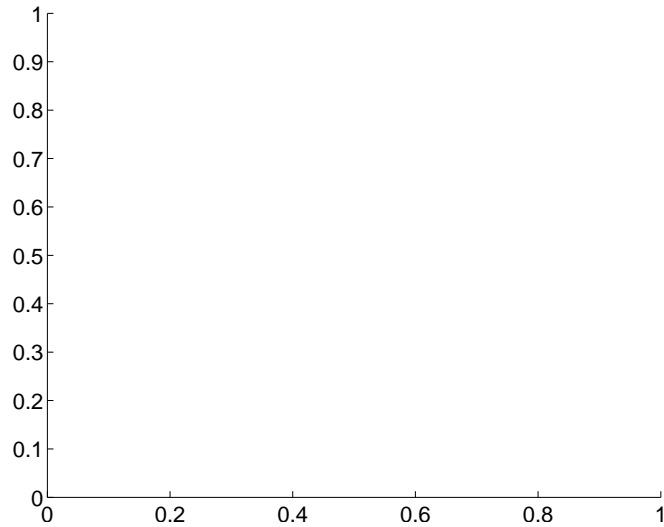
Supplemental centroid analysis for 007292380-02. **Kepler magnitude: 9.93.** Transit SNR 7.08

There are 0 quarters with good PRF difference image offsets

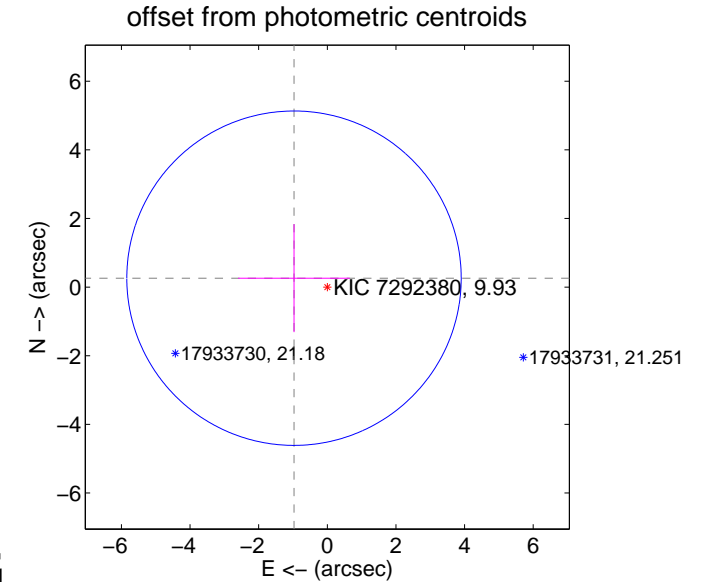
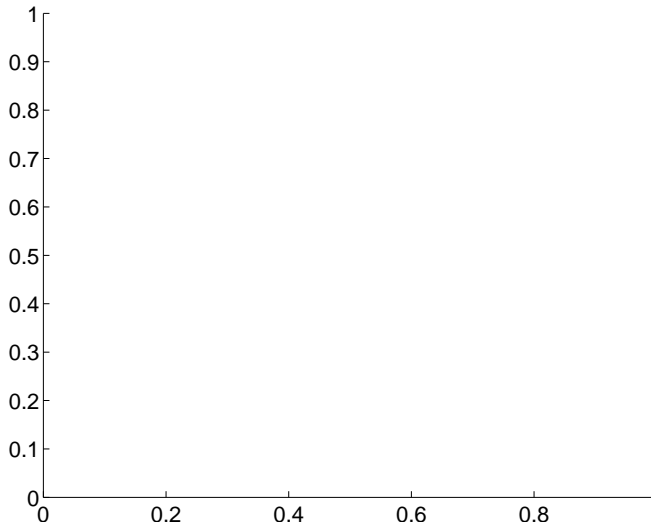
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.00 ± 1.62	0.62	0.97 ± 1.63	0.26 ± 1.57

There is no PRF-fit offset from OOT-fit



There is no PRF-fit offset from KIC

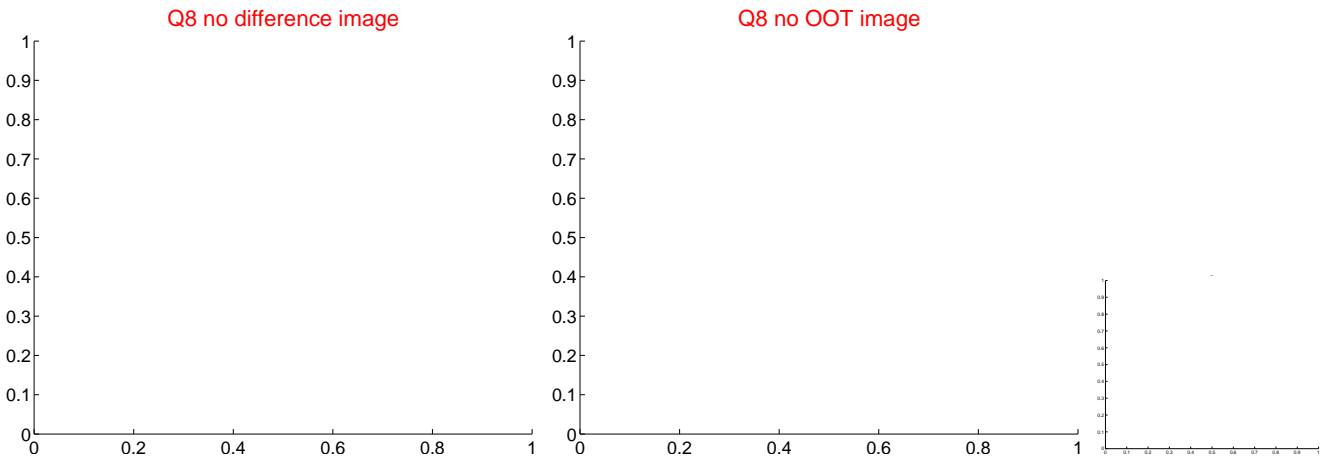
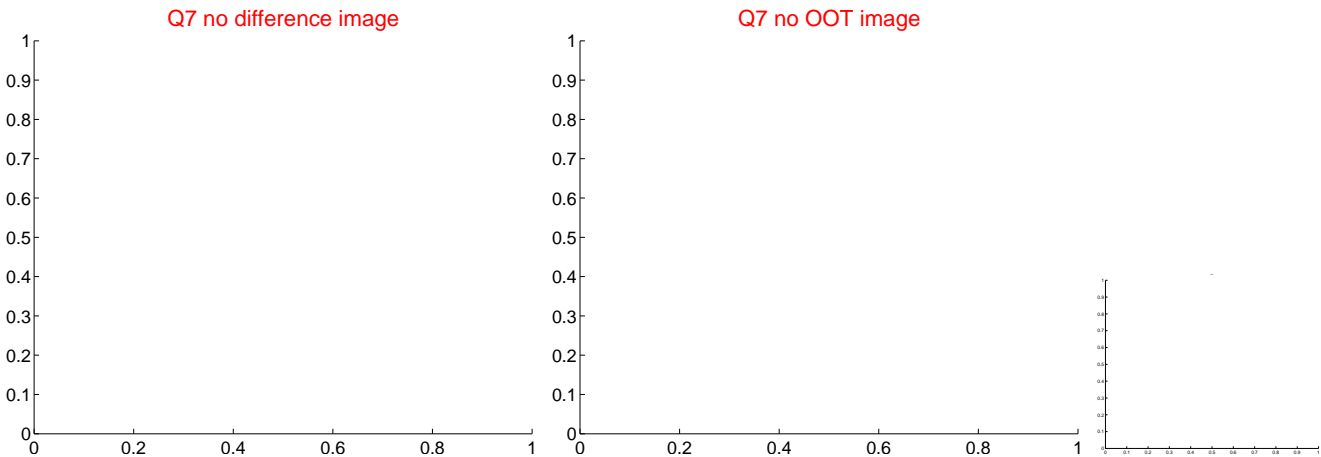
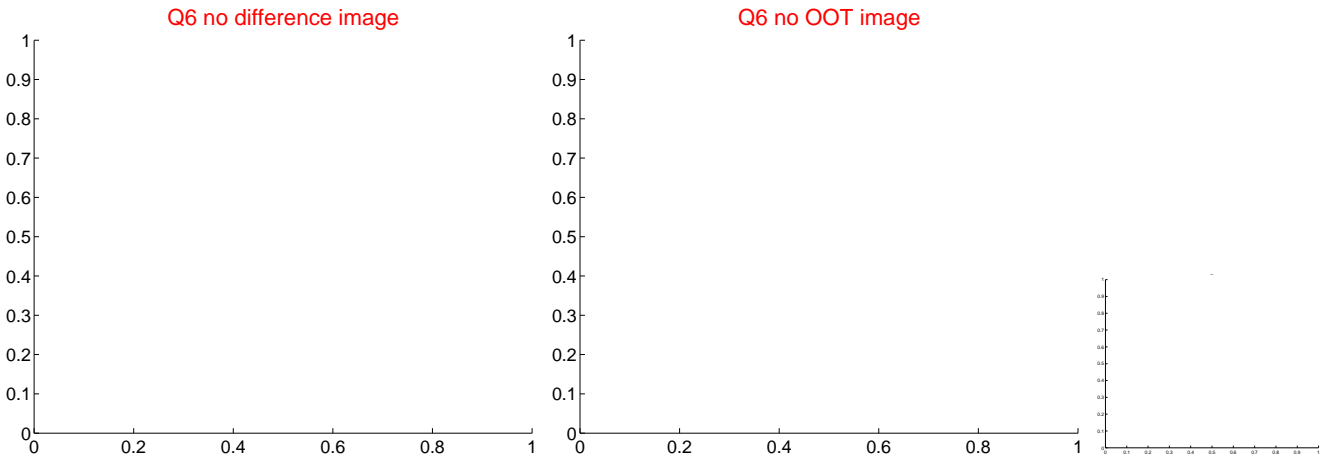
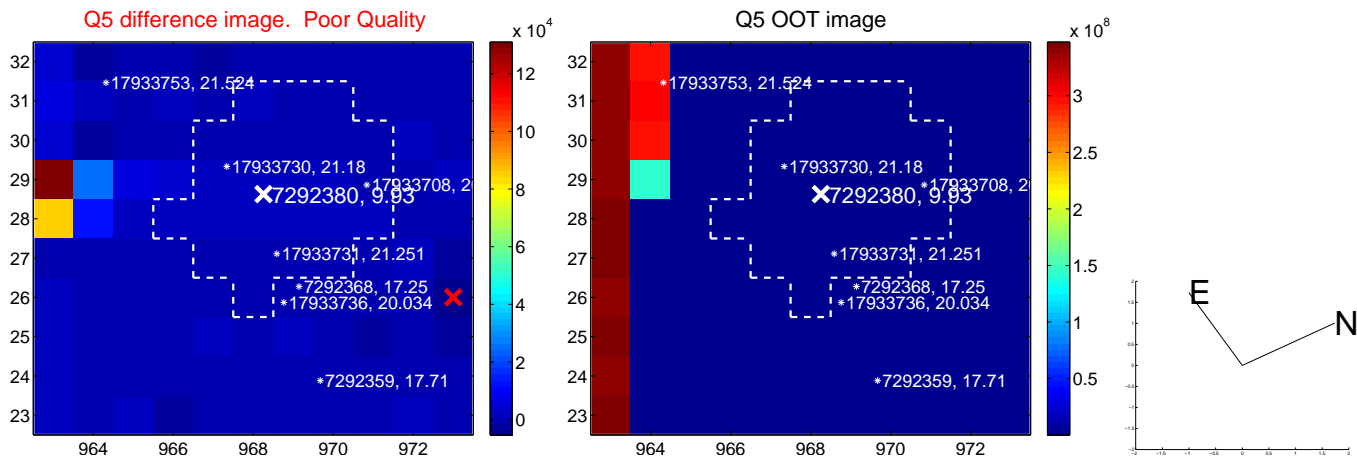


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

Q9 no difference image



Q9 no OOT image



Q10 no difference image



Q10 no OOT image



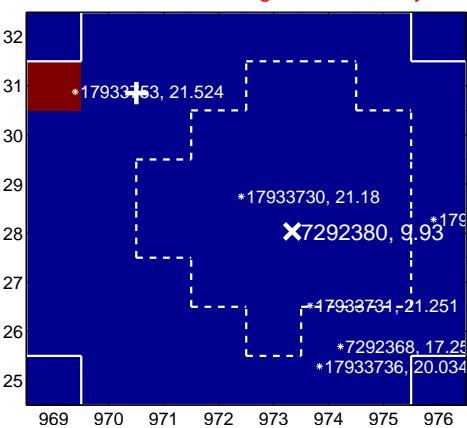
Q11 no difference image



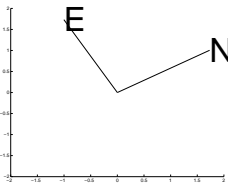
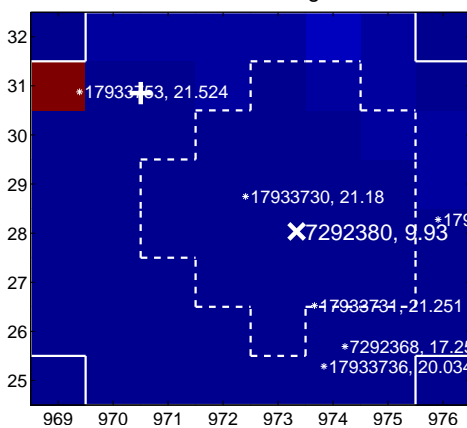
Q11 no OOT image



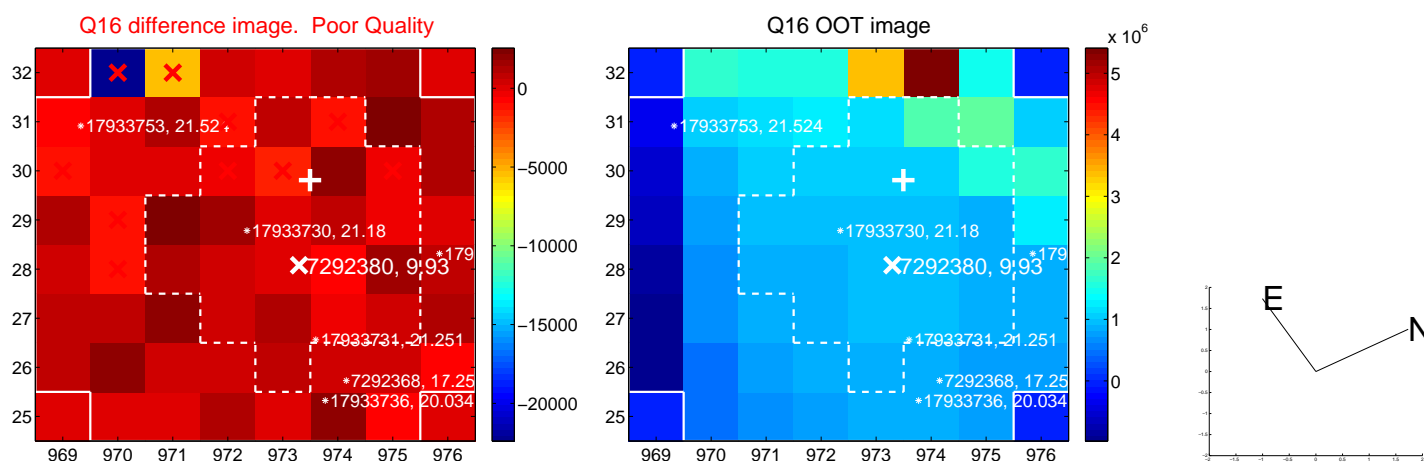
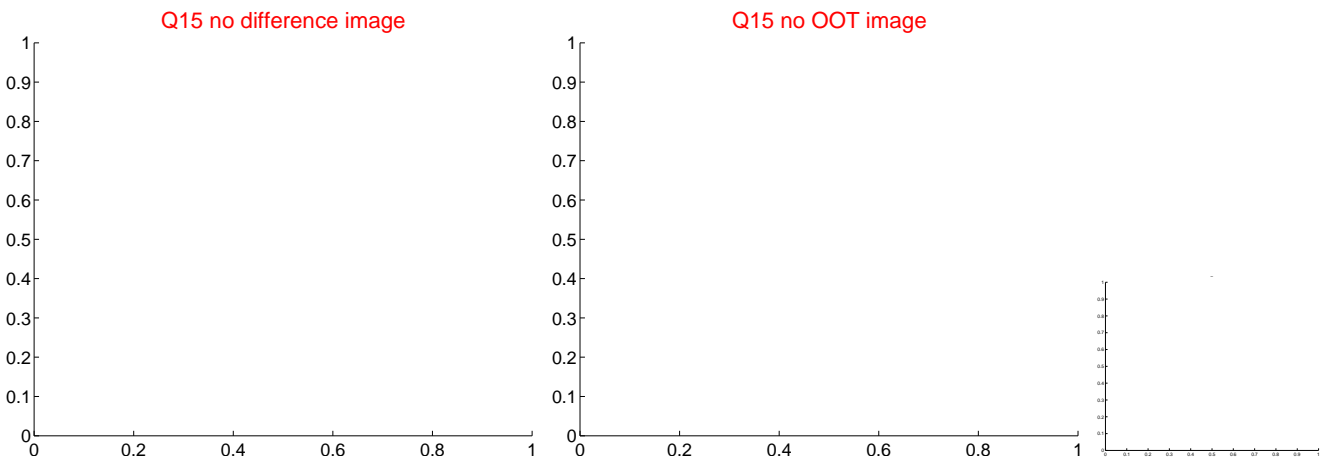
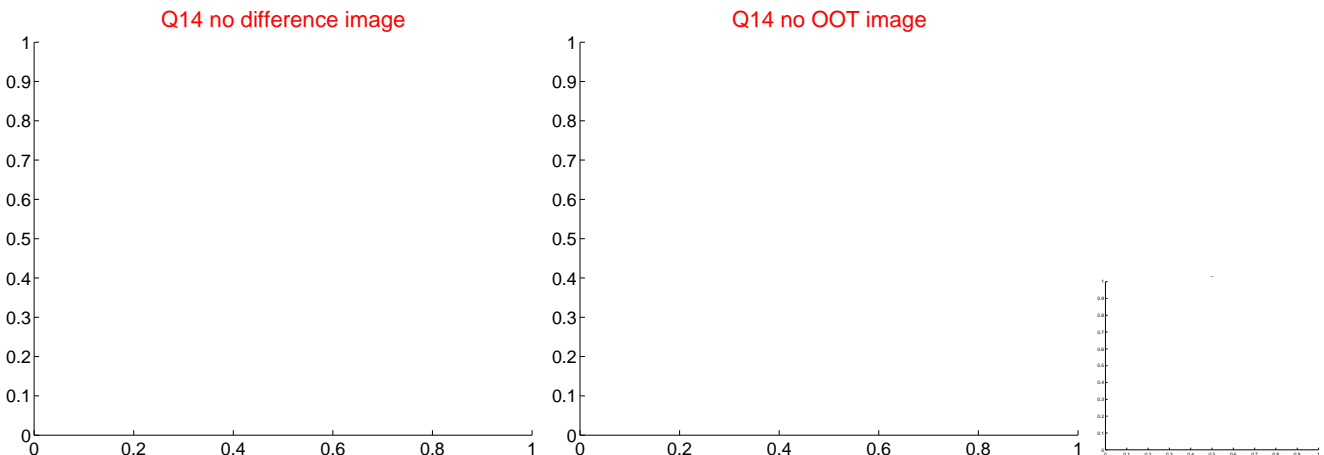
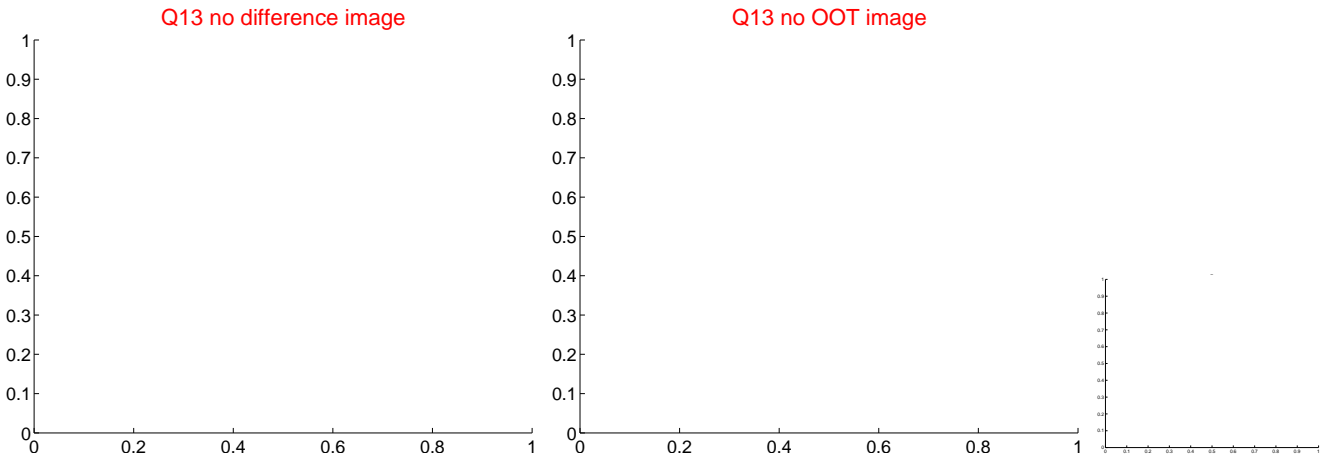
Q12 difference image. Poor Quality



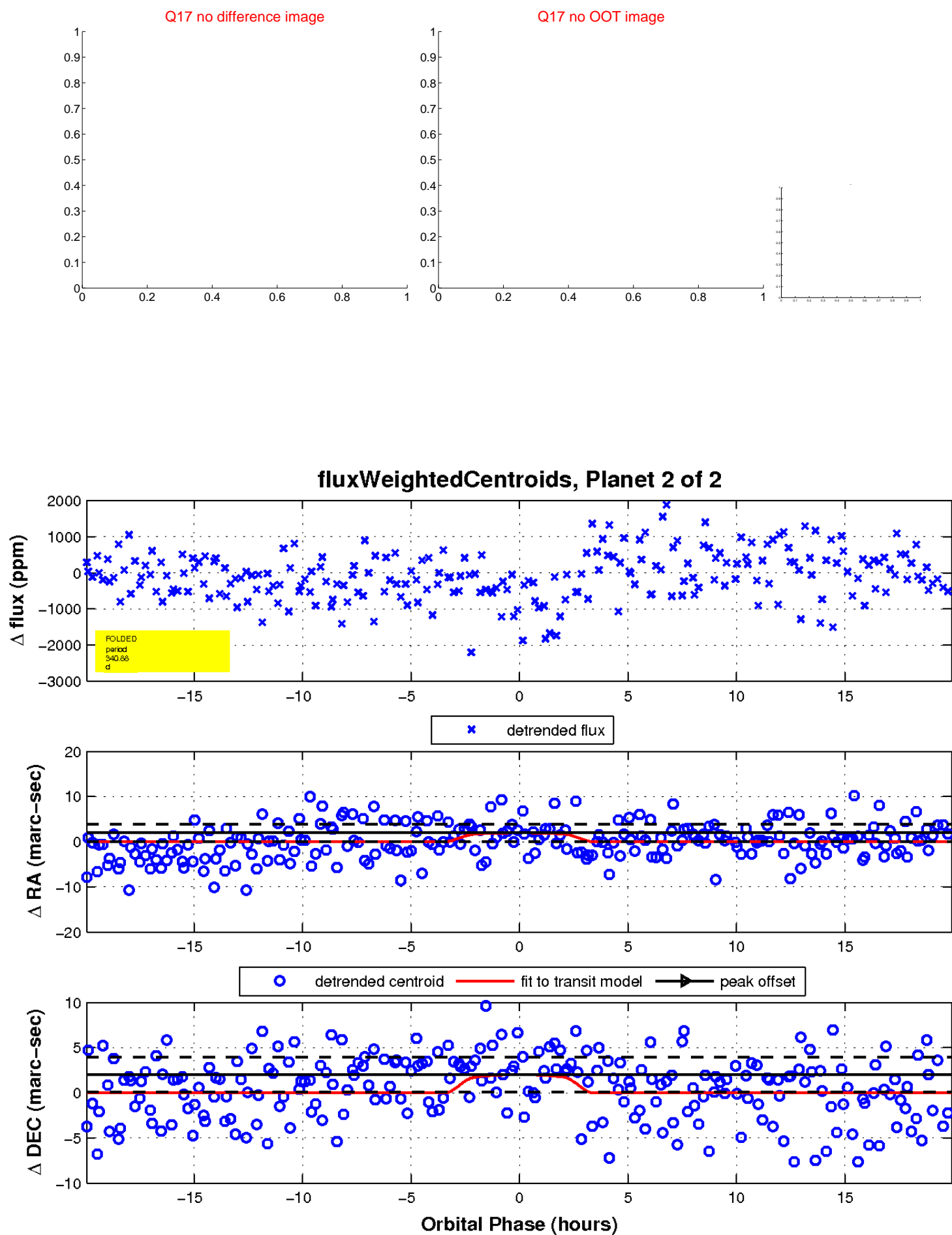
Q12 OOT image



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

