

KIC 011288686

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})
011288686-01	OBS	No	0.509362	131.750988	321.9	1.426	13.5	15.4	1.57	7063	3.28	27051.70
011288686-02	OBS	No	0.509379	131.617993	532.1	0.976	12.9	19.4	1.57	7063	3.69	27050.56
011288686-03	OBS	No	0.509369	131.873494	123.6	1.500	11.8	6.9	1.57	7063	1.77	27051.24
011288686-04	OBS	No	0.509369	131.995369	120.1	1.500	11.1	-1.0	1.57	7063	1.74	27051.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288686-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011288686-02	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_UNRESOLVED_OFFSET
011288686-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011288686-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—NO_FITS—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.

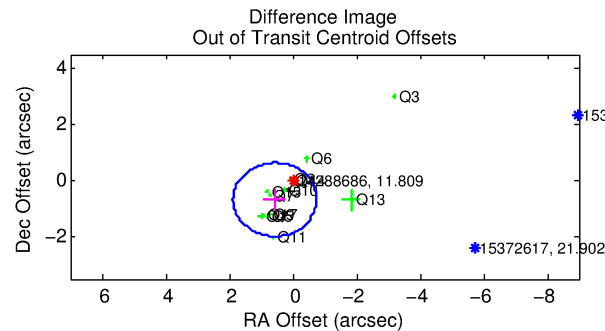
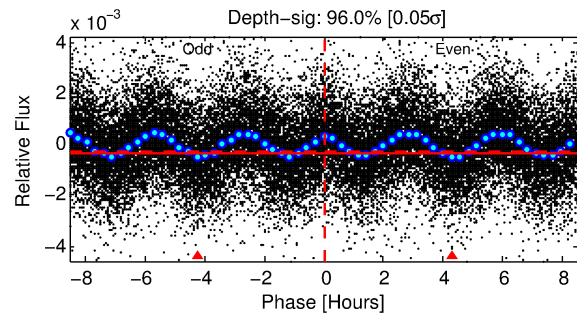
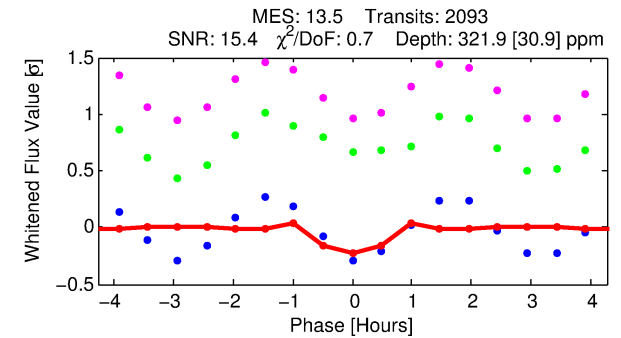
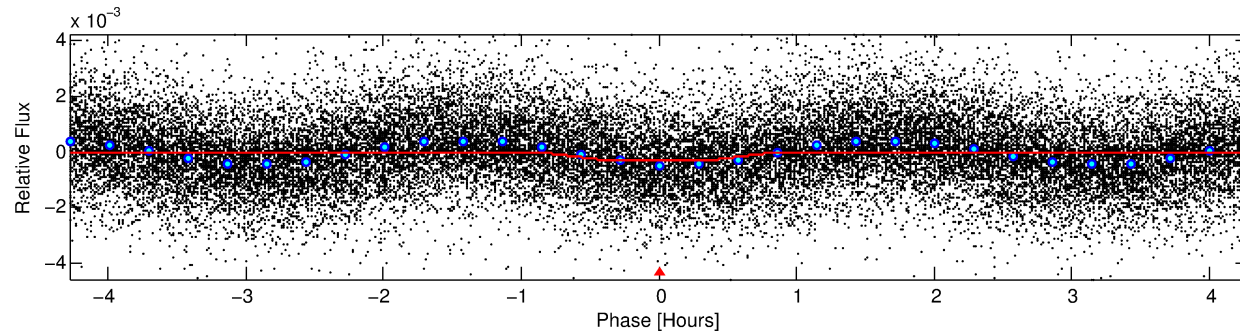
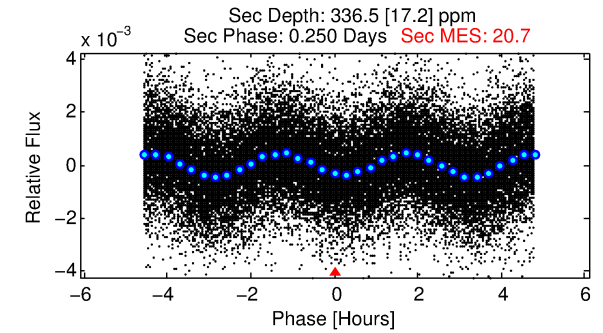
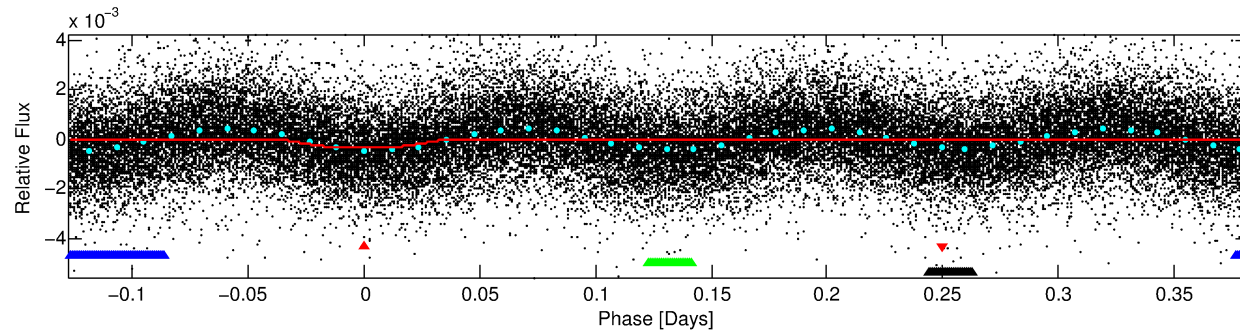
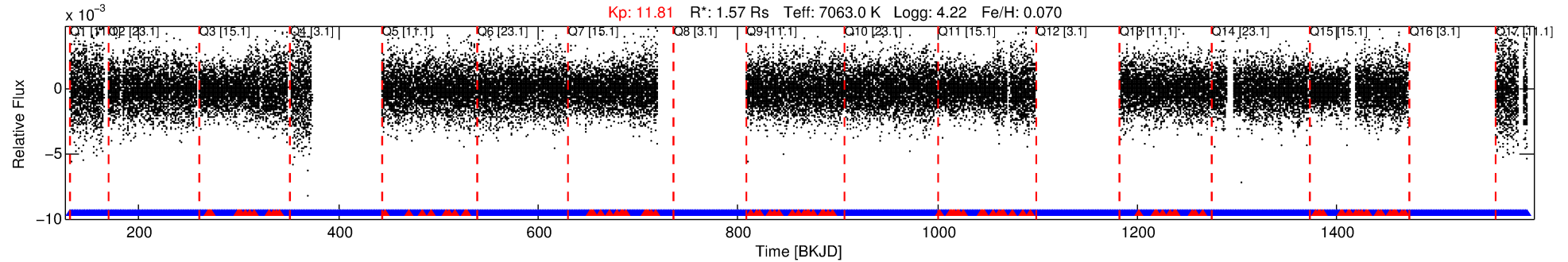
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288686-01

No Significant Match Found

DV One-Page Summary

KIC: 11288686 Candidate: 1 of 4 Period: 0.509 d



DV Fit Results:

Period = 0.50936 [0.00001] d
Epoch = 131.7510 [0.0010] BKJD
Rp/R* = 0.0192 [0.0040]
a/R* = 1.61 [1.20]
b = 0.90 [0.26]
Seff = 27051.70 [11973.56]
Teq = 3270 [362] K
Rp = 3.28 [1.34] Re
a = 0.0142 [0.0041] AU
Ag = 3.49 [2.02] [1.24σ]
Teffp = 6911 [794] K [4.17σ]

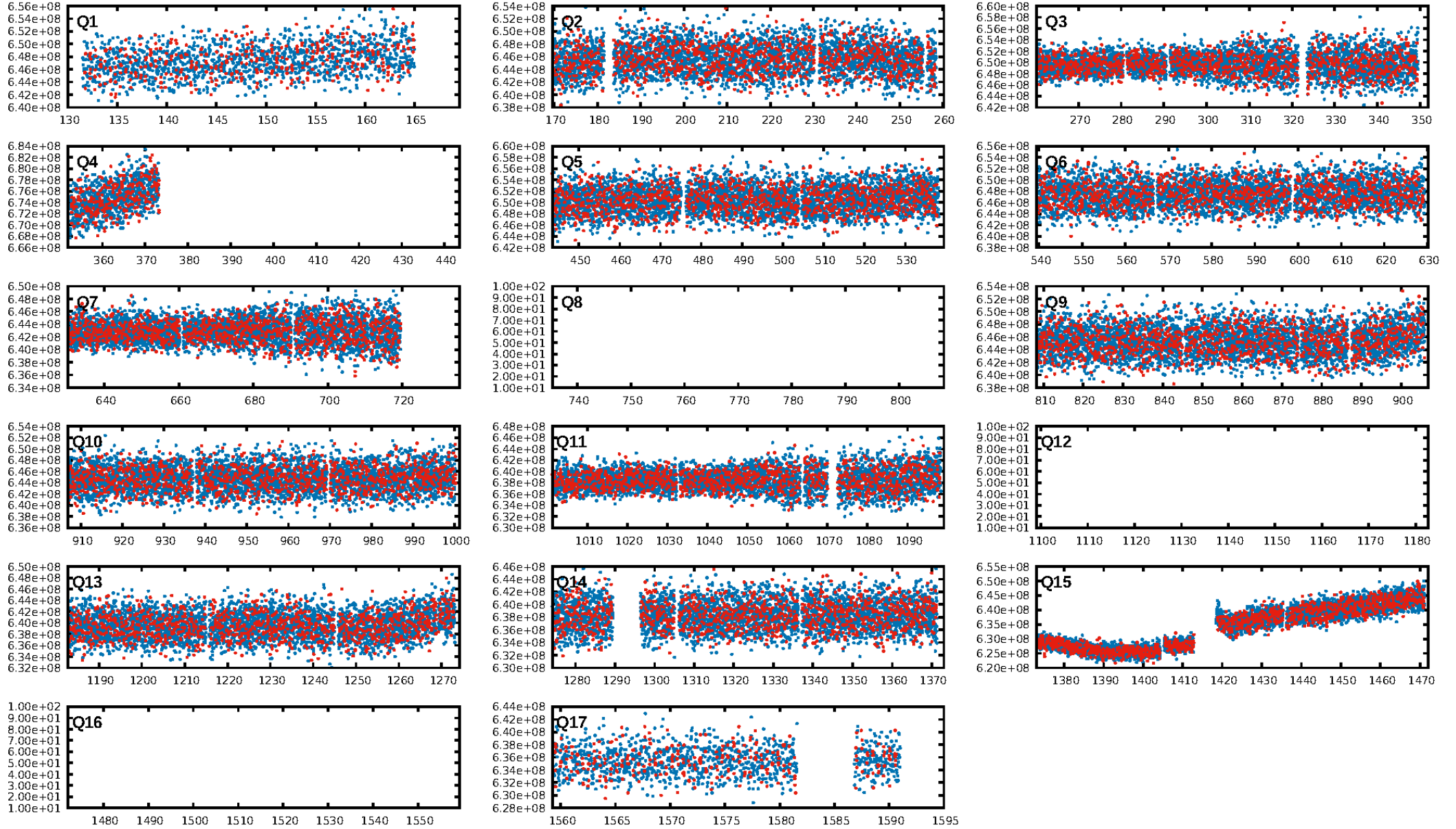
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.94 [1824/1934]
GhostDiagnostic-chr: 15.79
Centroid-sig: 85.6%
Centroid-so: 0.104 arcsec [1.96σ]
OotOffset-rm: 0.885 arcsec [2.03σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-rm: 0.950 arcsec [2.20σ]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 0.86 [12/14]
DiffImageOverlap-fno: 0.00 [0/14]

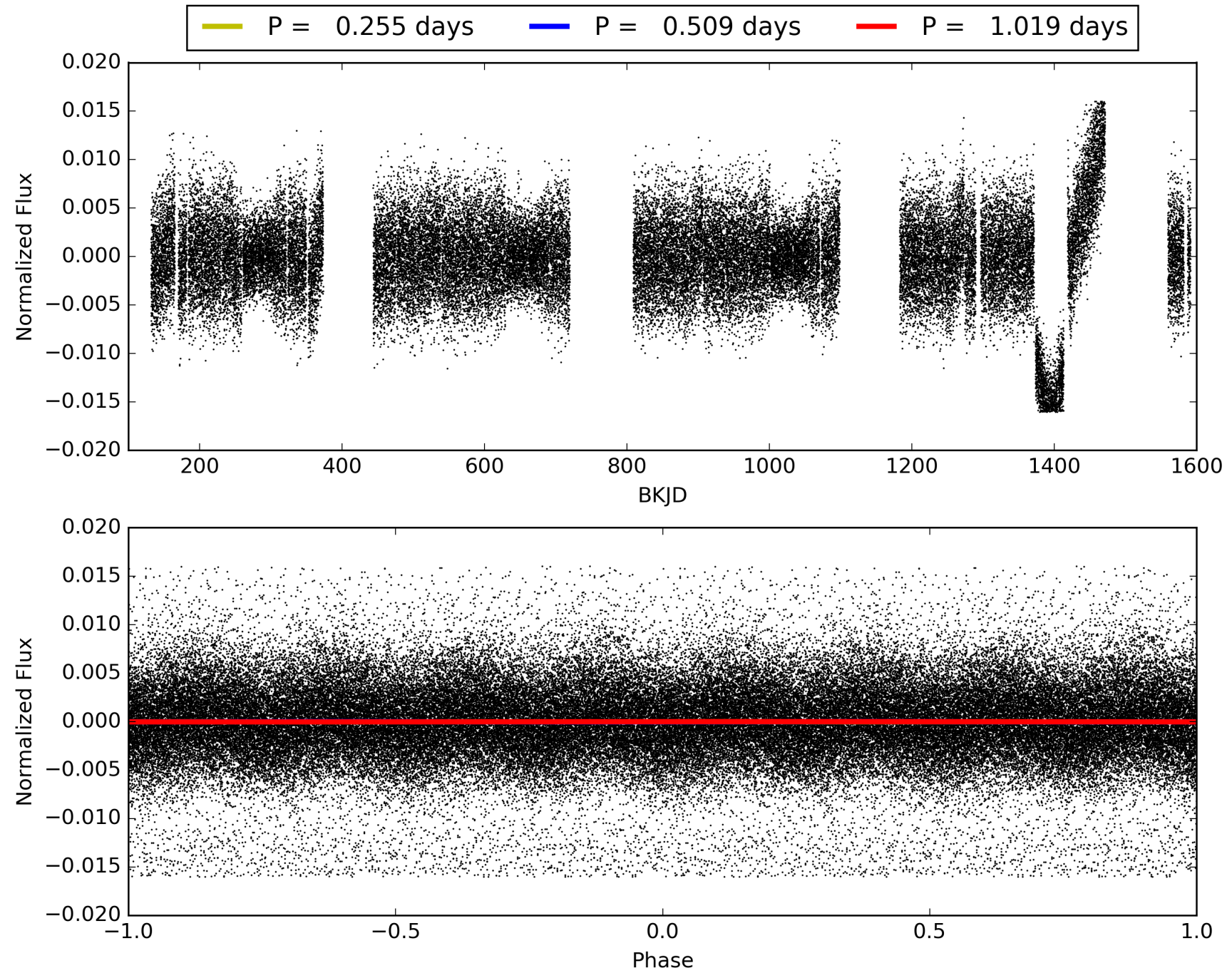
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011288686-01, PDC Light Curves

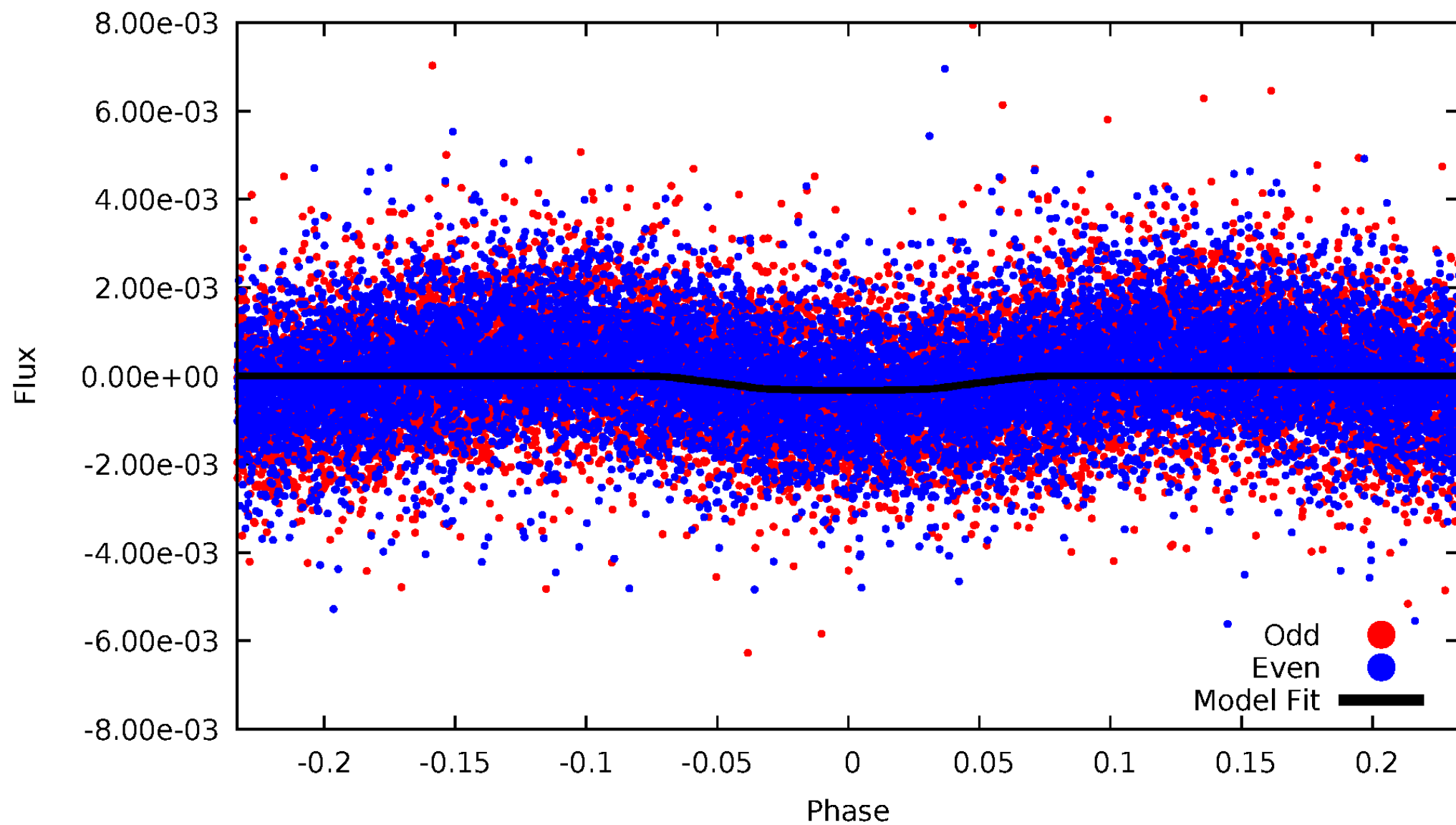


TCE 011288686-01



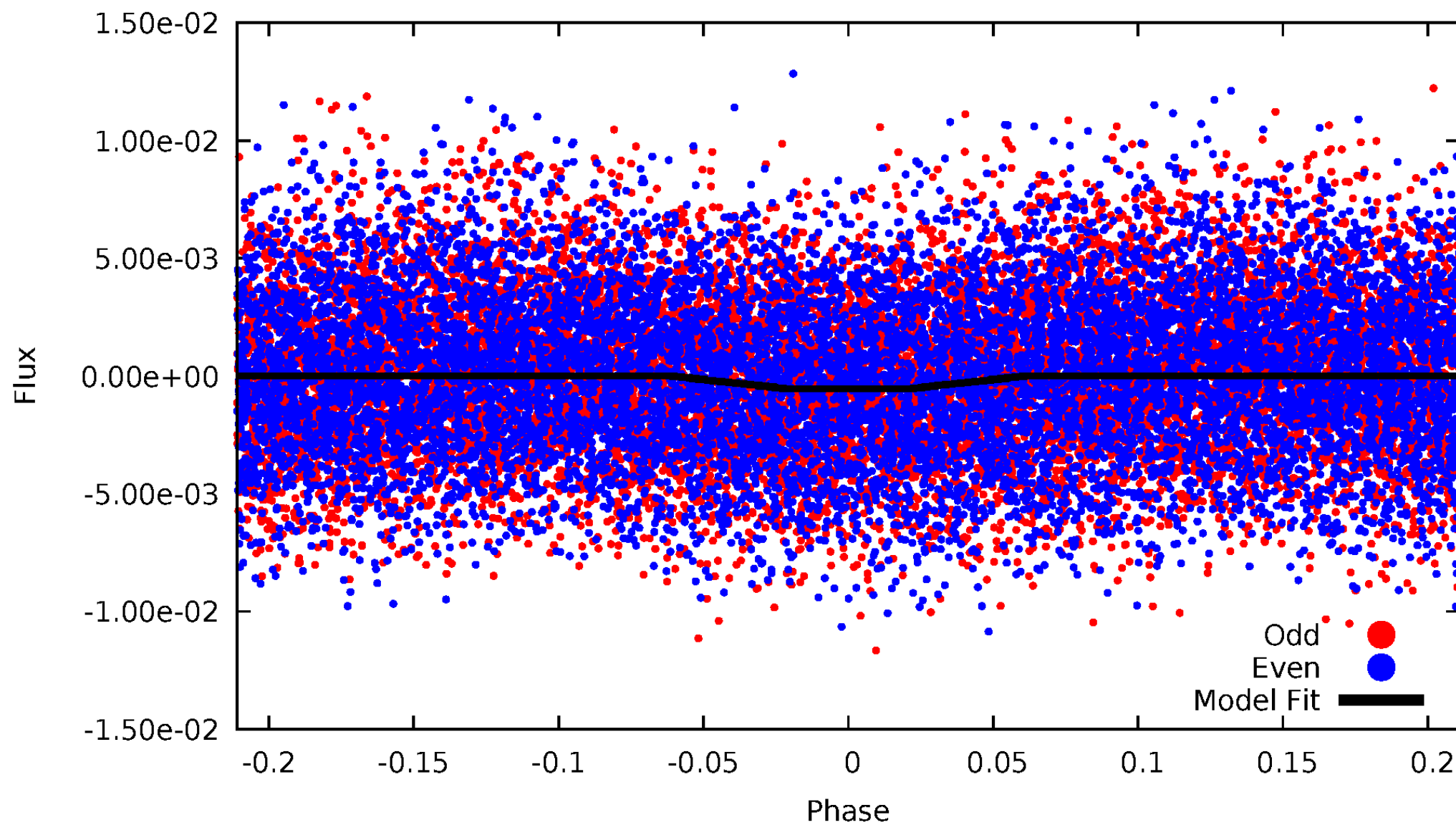
DV Odd/Even

TCE 011288686-01



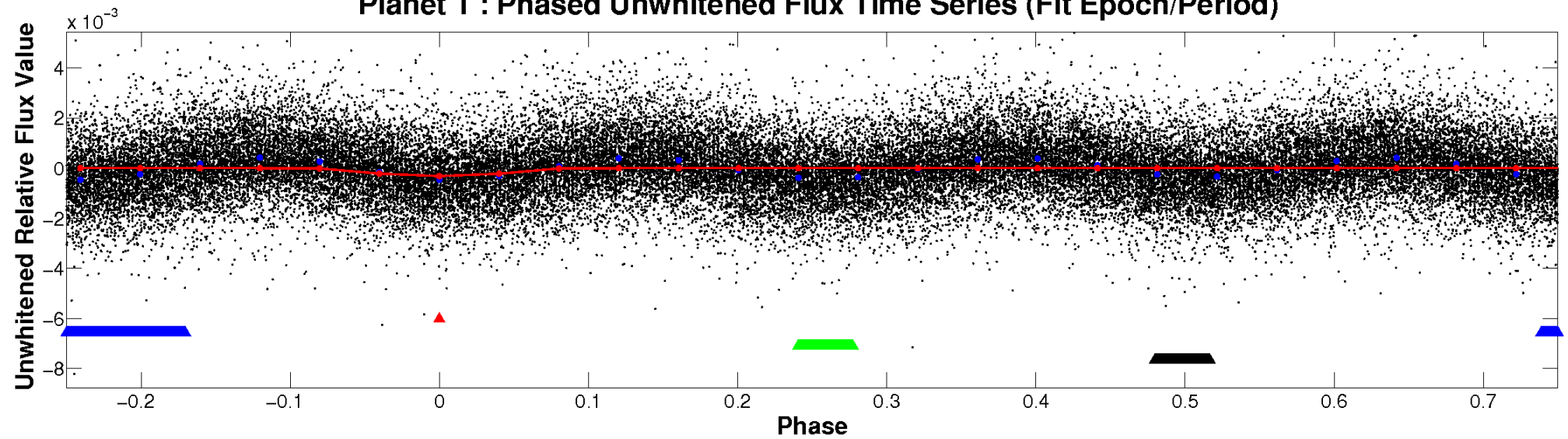
ALT Odd/Even

TCE 011288686-01

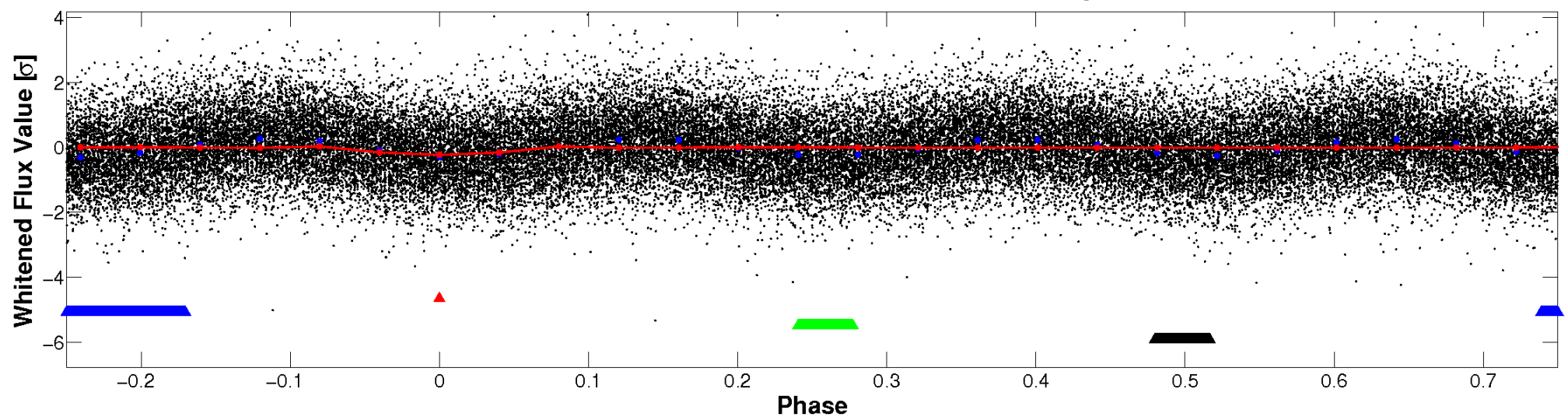


Non-Whitened Vs. Whitened Light Curve

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

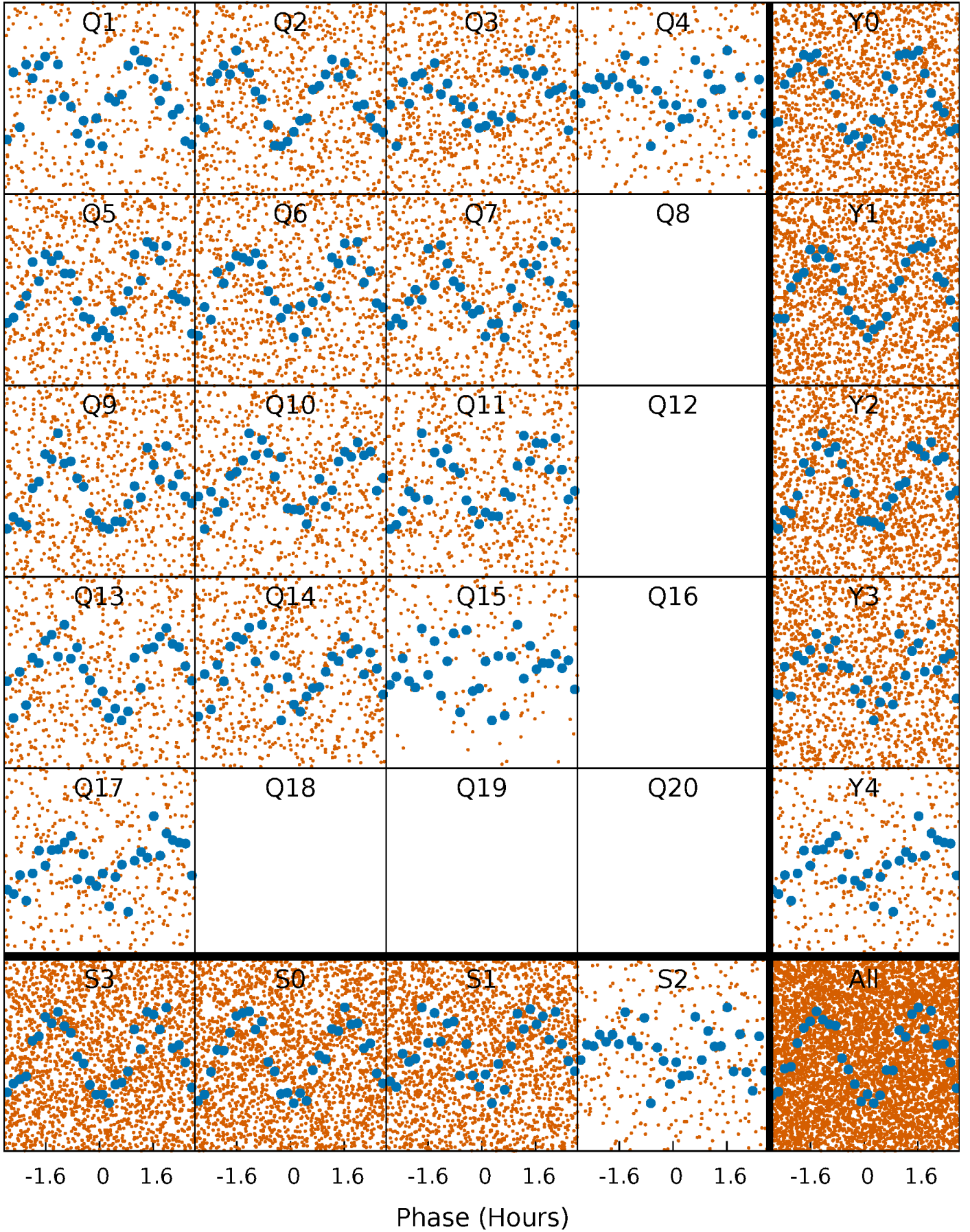


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



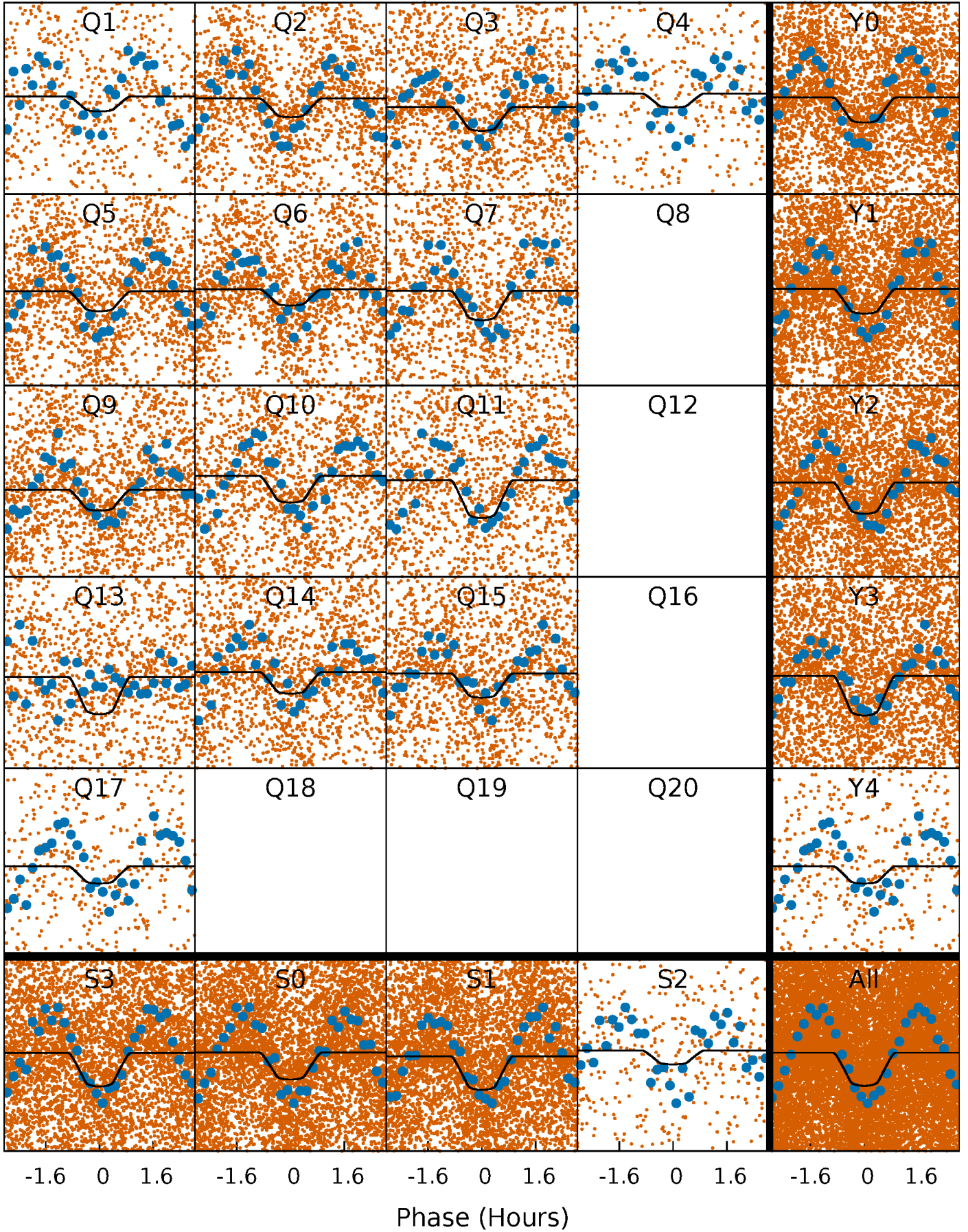
PDC Quarter-Phased Transit Curves

TCE 011288686-01 P= 0.509362 Days $T_0=131.750988$ (BKJD)



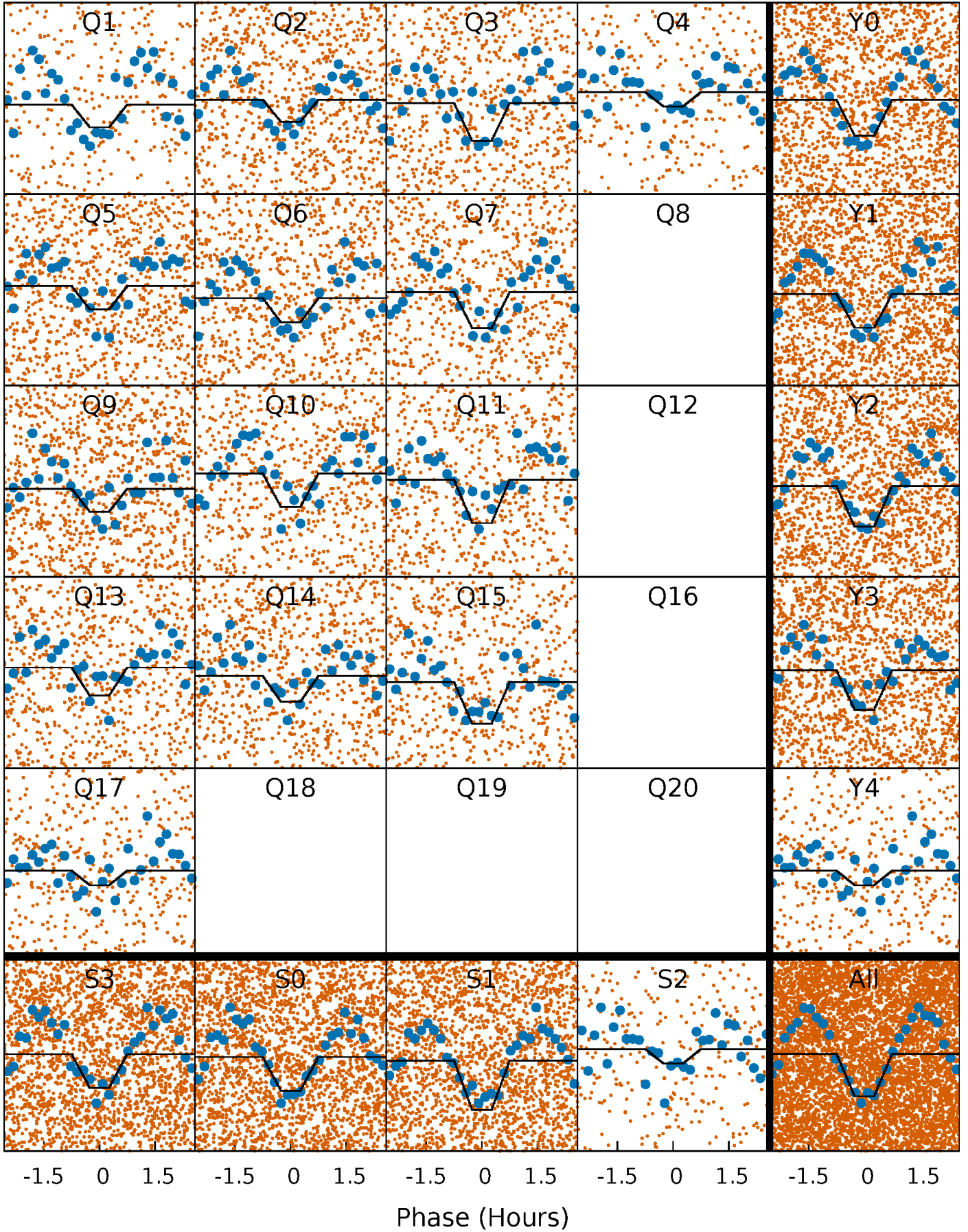
DV Quarter-Phased Transit Curves

TCE 011288686-01 P= 0.509362 Days $T_0=131.750988$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

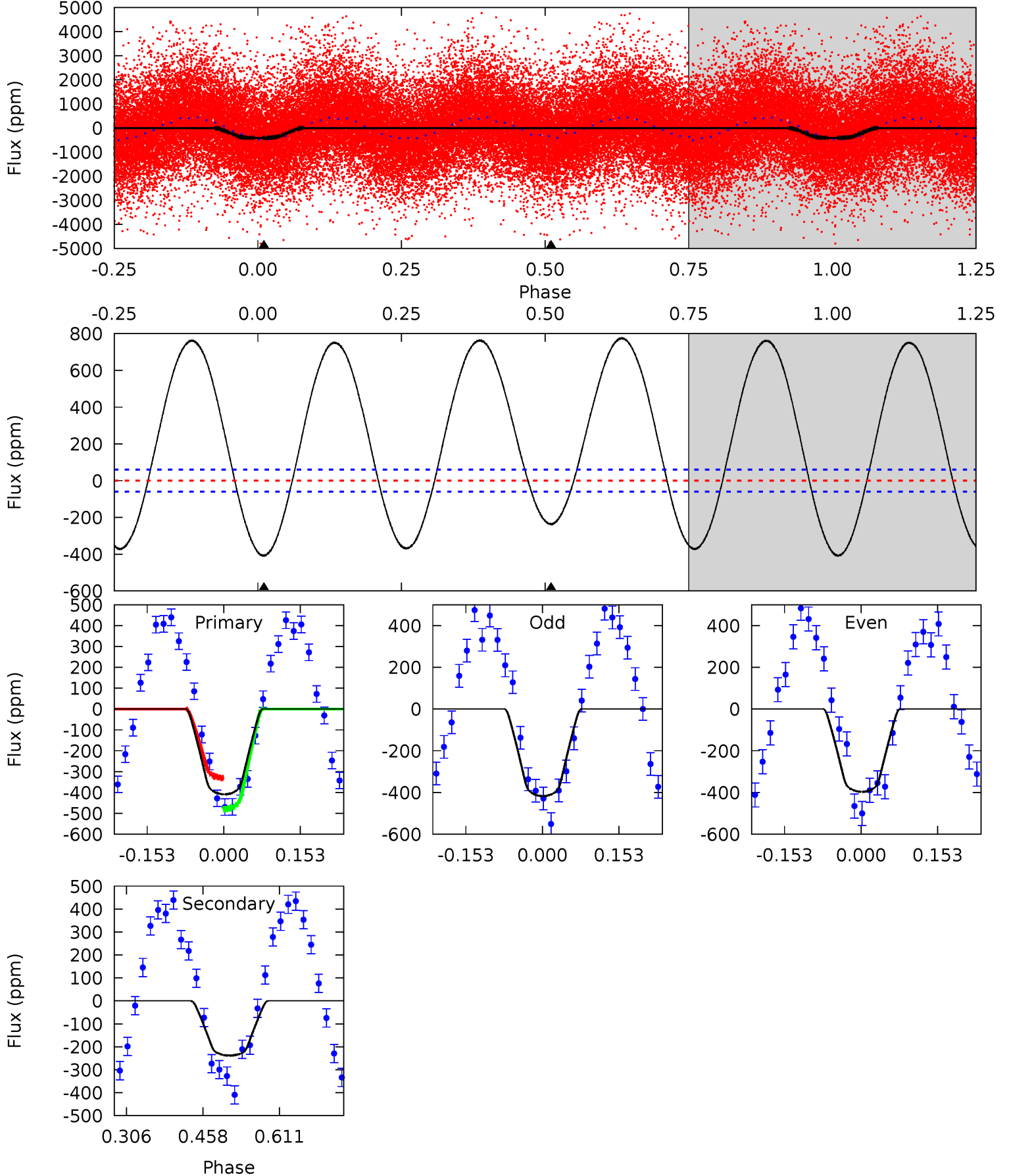
TCE 011288686-01 P= 0.509369 Days $T_0=131.748495$ (BKJD)



DV Model-Shift Uniqueness Test

011288686-01, P = 0.509362 Days, E = 131.241626 Days

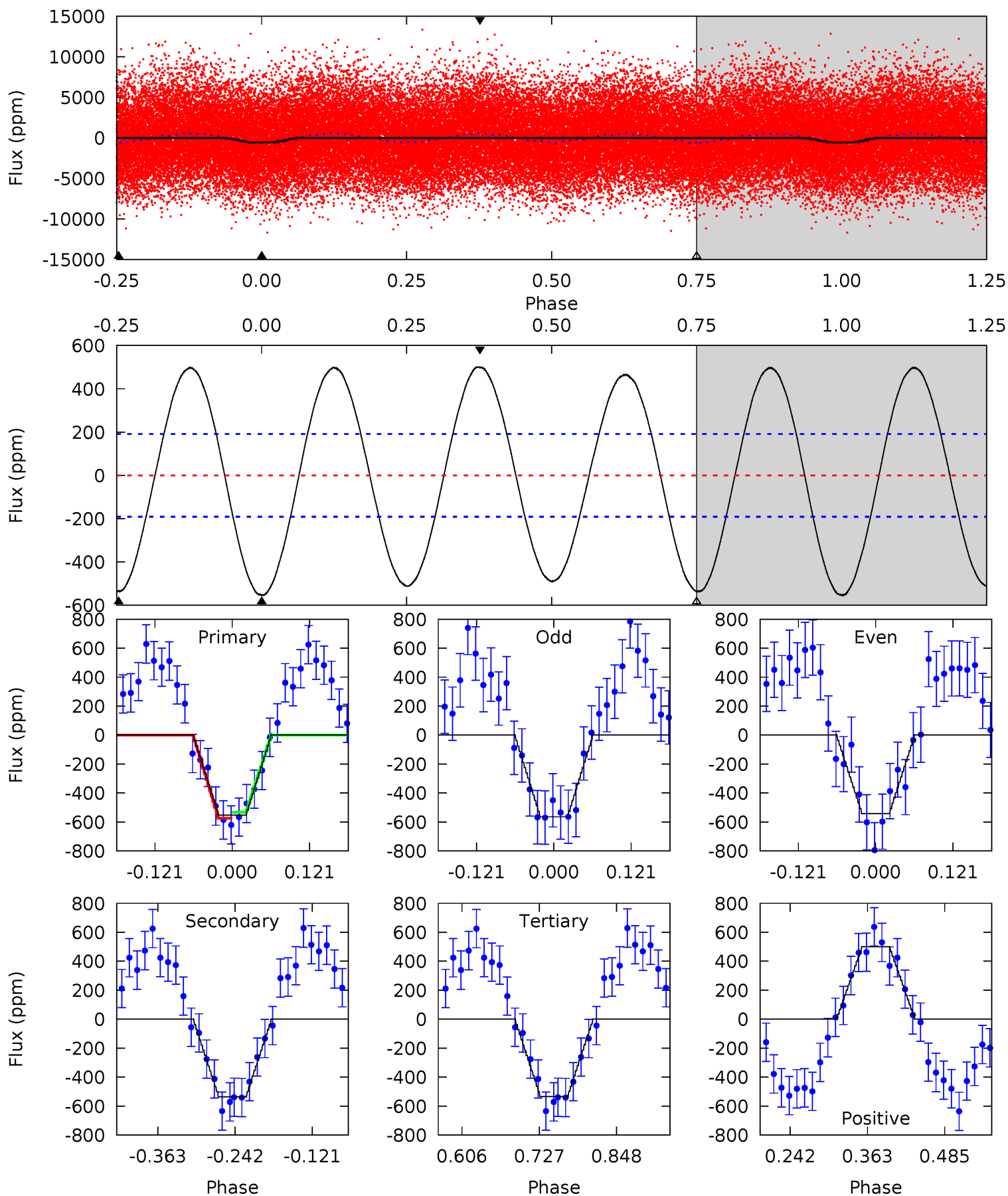
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
30.5	17.8	0	0	4.48	1.43	24.2	30.5	30.5	17.8	17.8	0.78	1.02	0.65	5.79



Alt Model-Shift Uniqueness Test

011288686-01, P = 0.509369 Days, E = 131.239126 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.1	12.7	12.6	11.9	4.52	1.55	8.37	0.46	1.25	0.04	0.83	0.25	0.95	0.47	0.47



Stellar Parameters For KIC 011288686

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7063^{+197}_{-338}	$4.218^{+0.090}_{-0.210}$	$0.070^{+0.200}_{-0.350}$	$1.567^{+0.553}_{-0.237}$	$1.480^{+0.214}_{-0.214}$	$0.541^{+0.228}_{-0.305}$
	+3%/-5%	+2%/-5%	+286%/-500%	+35%/-15%	+14%/-14%	+42%/-56%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011288686-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-238 ± 13	$3.35^{+0.91}_{-0.78}$	4605^{+343}_{-288}	6009^{+894}_{-620}	$2.376^{+1.532}_{-0.935}$
Alt.	-536 ± 42	$4.10^{+0.96}_{-0.83}$	4617^{+358}_{-265}	6795^{+952}_{-626}	$3.435^{+1.976}_{-1.153}$

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 $A_{obs} \gg 1.0$

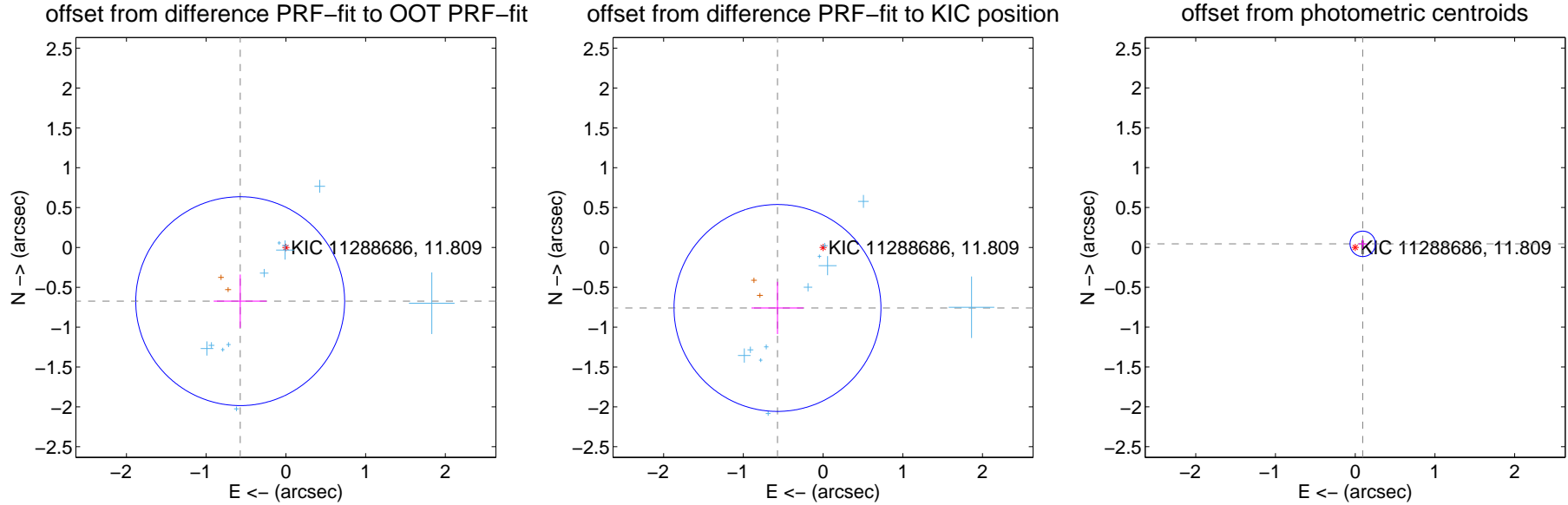
DV Centroid Data

Supplemental centroid analysis for 011288686-01. **Kepler magnitude: 11.81.** Transit SNR 15.42

There are 12 quarters with good PRF difference image offsets

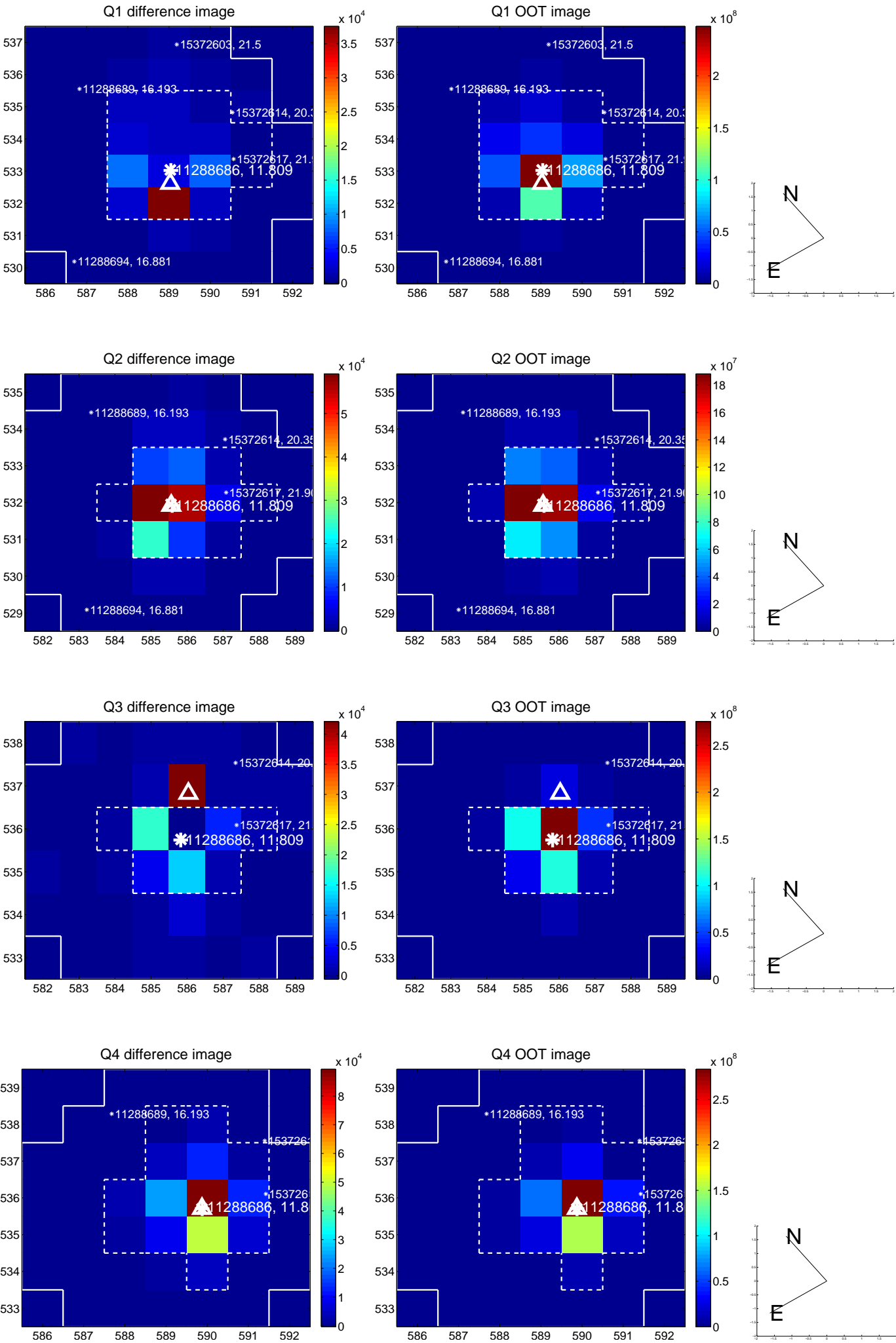
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.885 ± 0.437	2.03	0.573 ± 0.332	-0.674 ± 0.334
PRF-fit source offset from KIC position	0.950 ± 0.433	2.20	0.572 ± 0.326	-0.759 ± 0.327
photometric centroid source offset	0.10 ± 0.05	1.96	-0.09 ± 0.05	0.04 ± 0.06

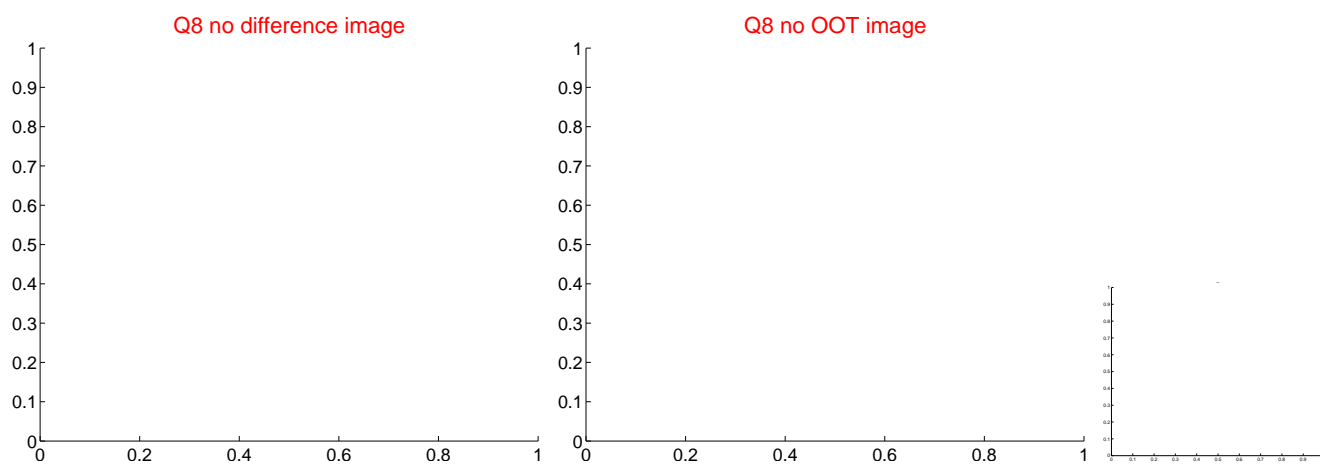
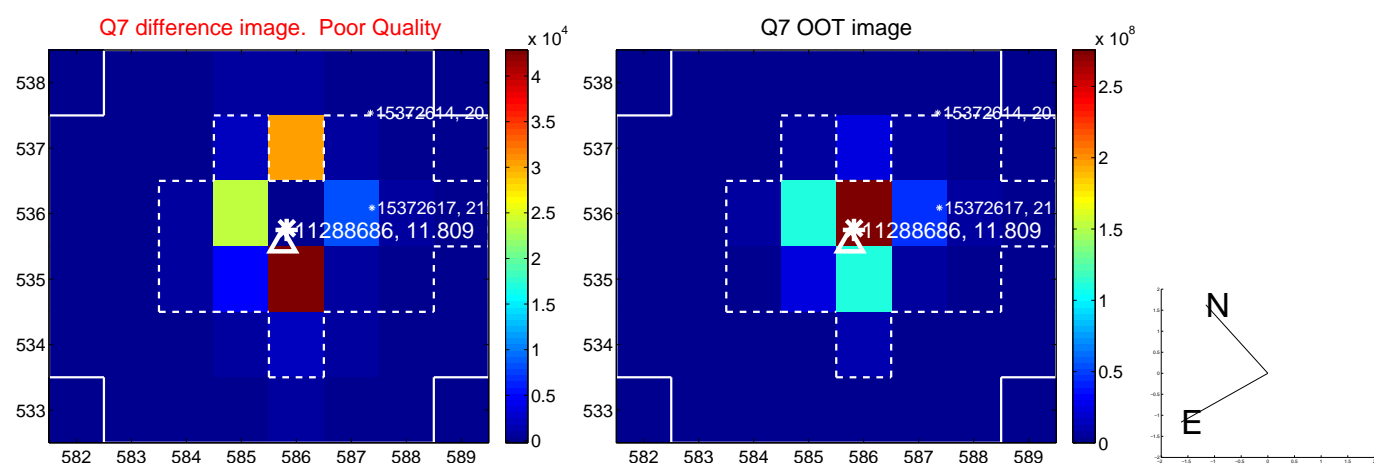
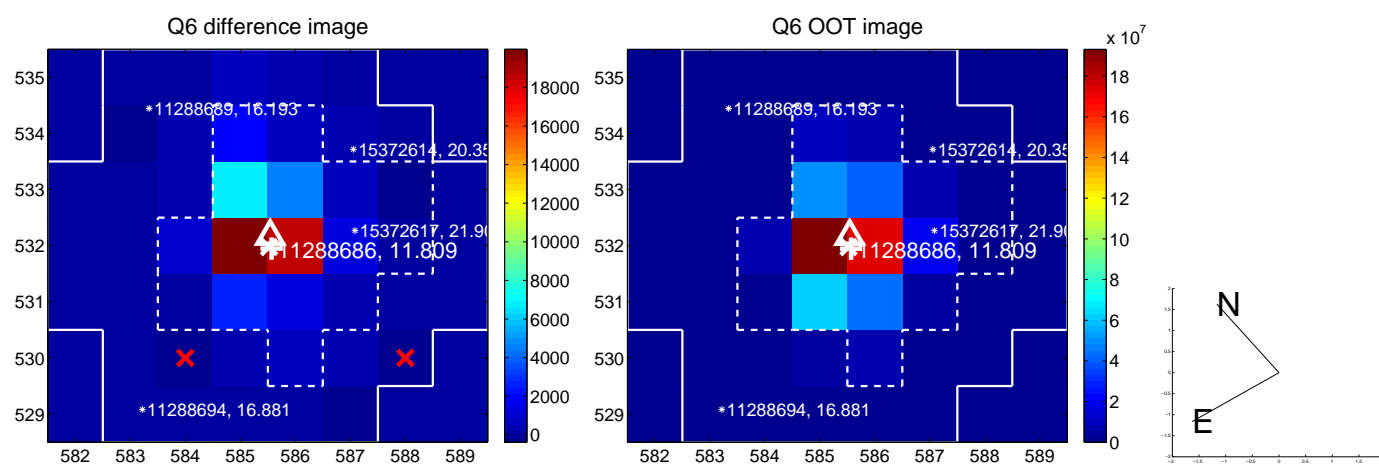
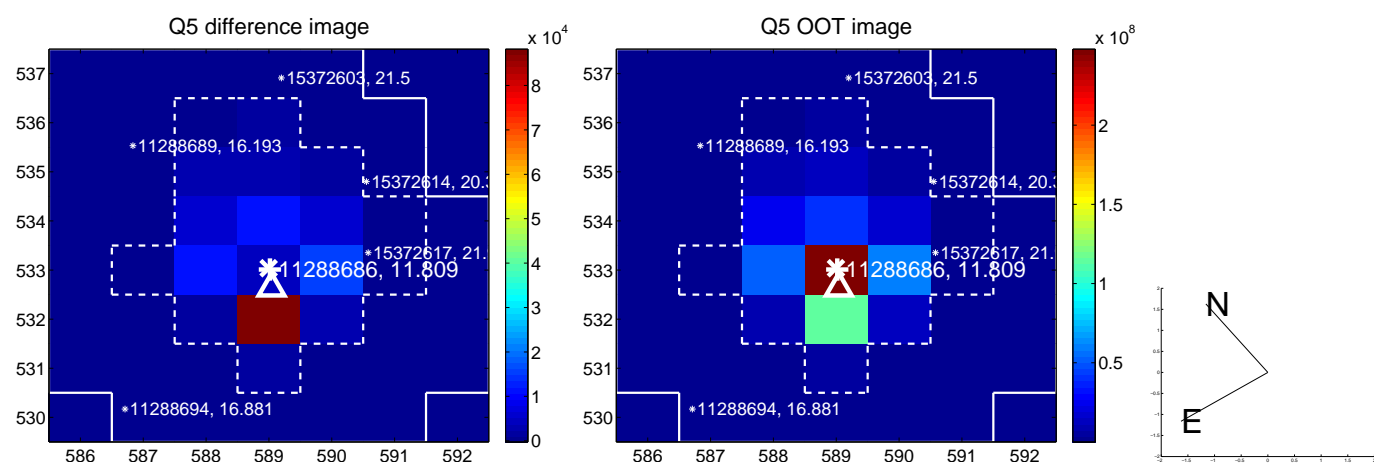


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

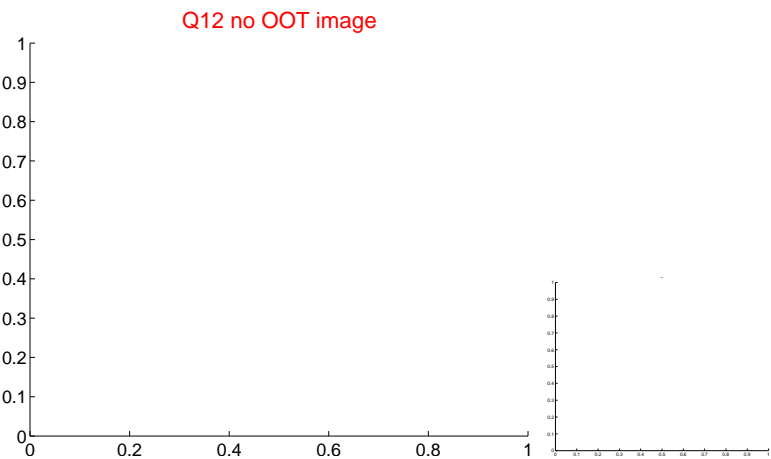
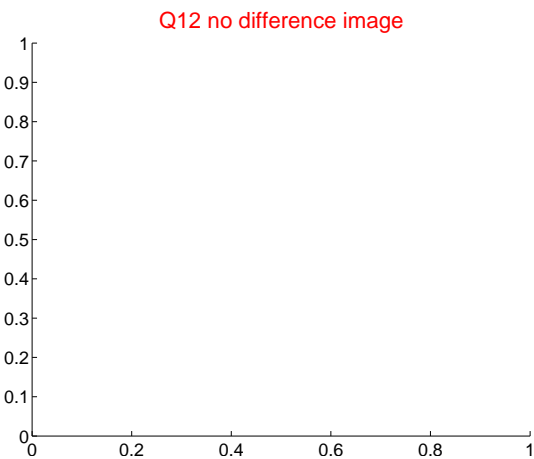
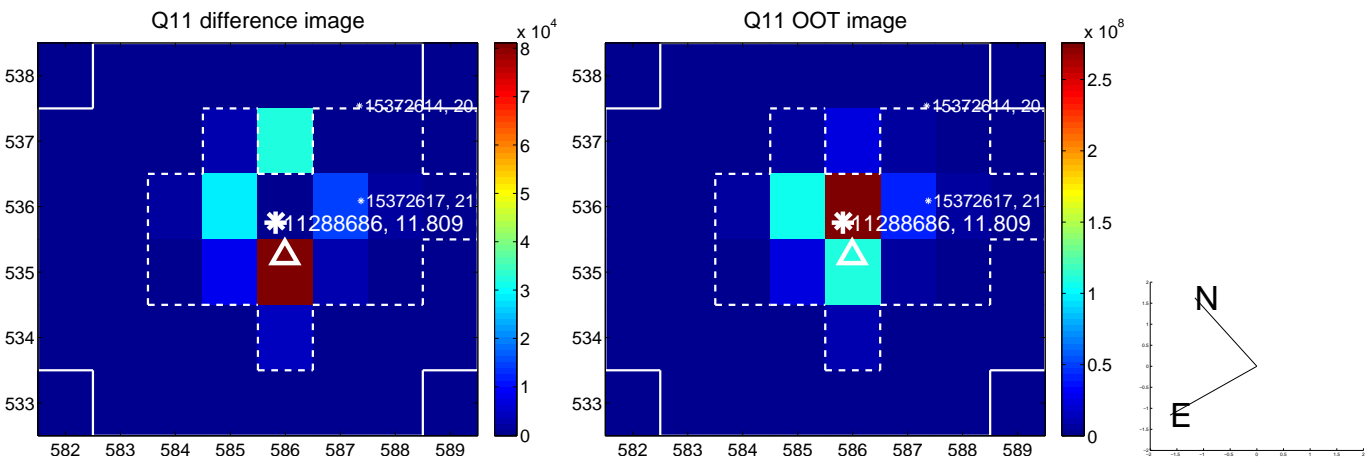
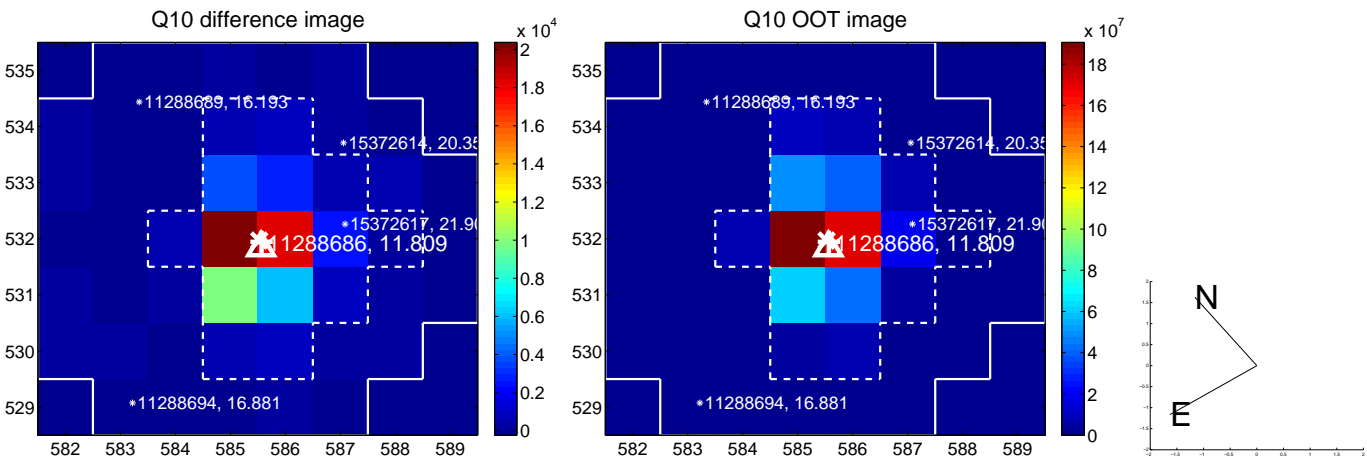
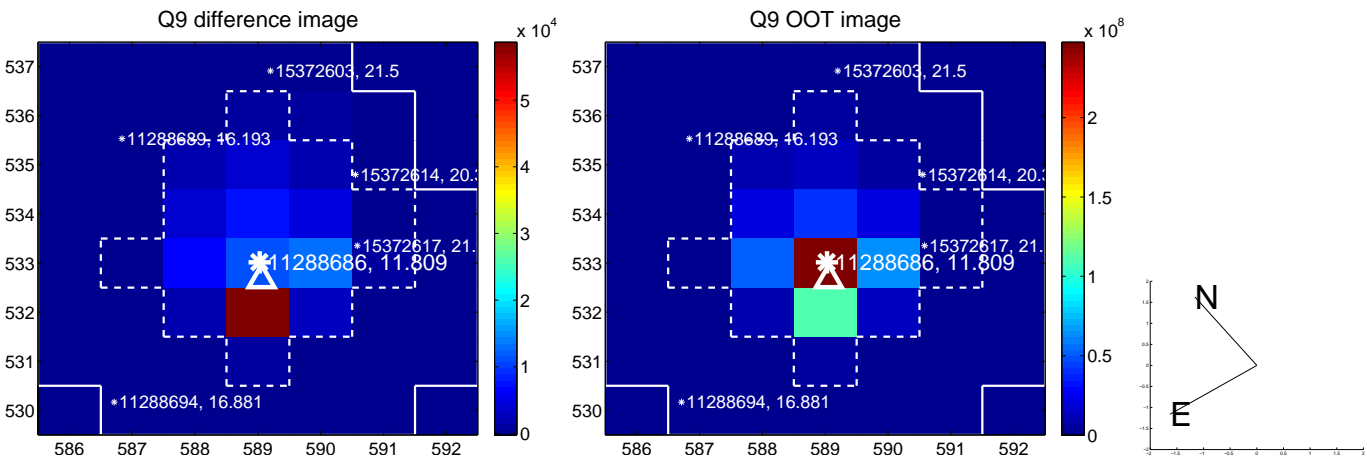
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



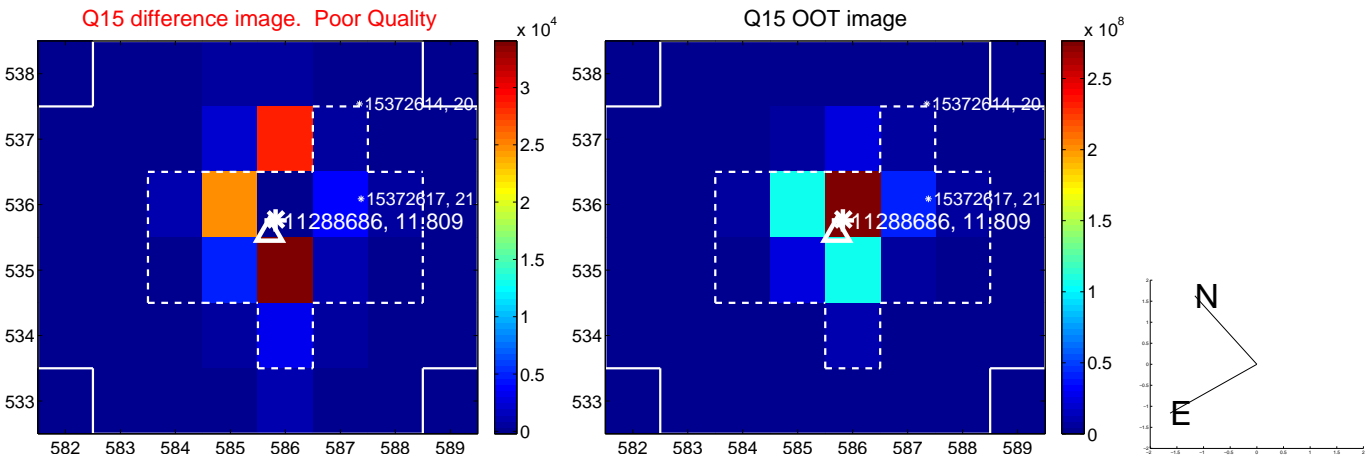
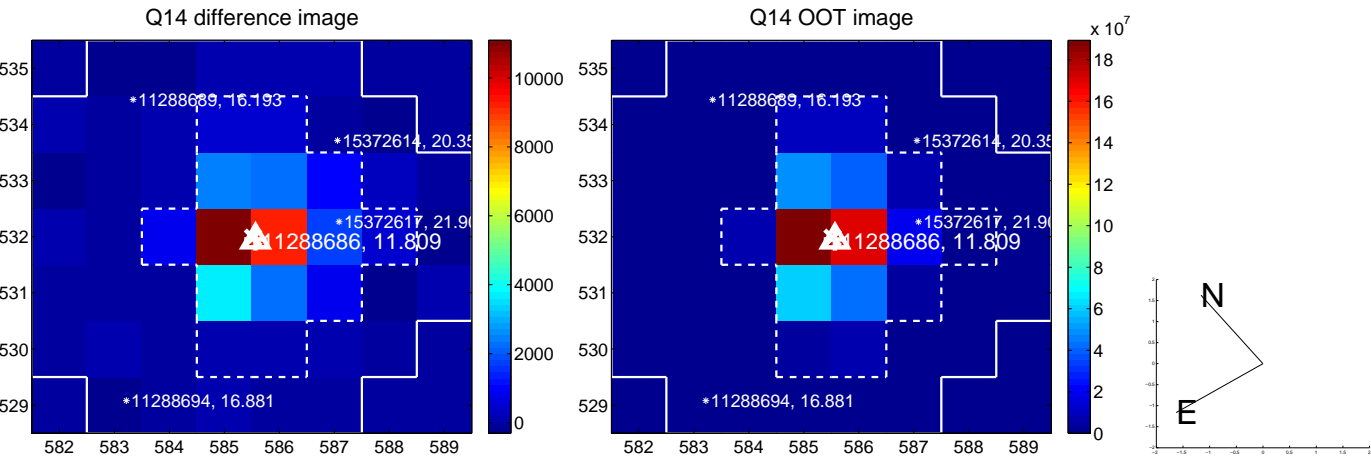
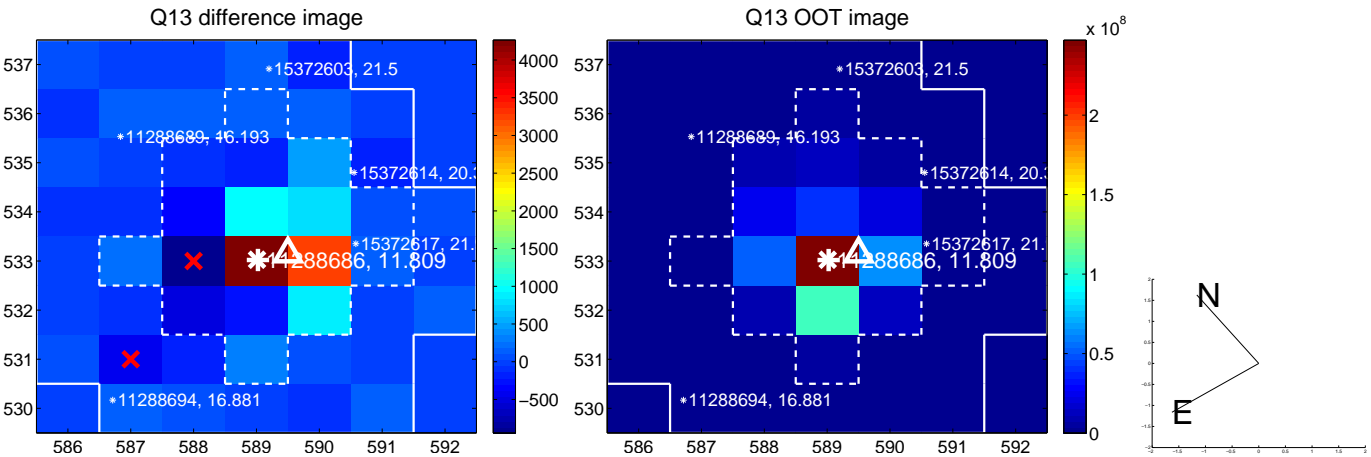
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



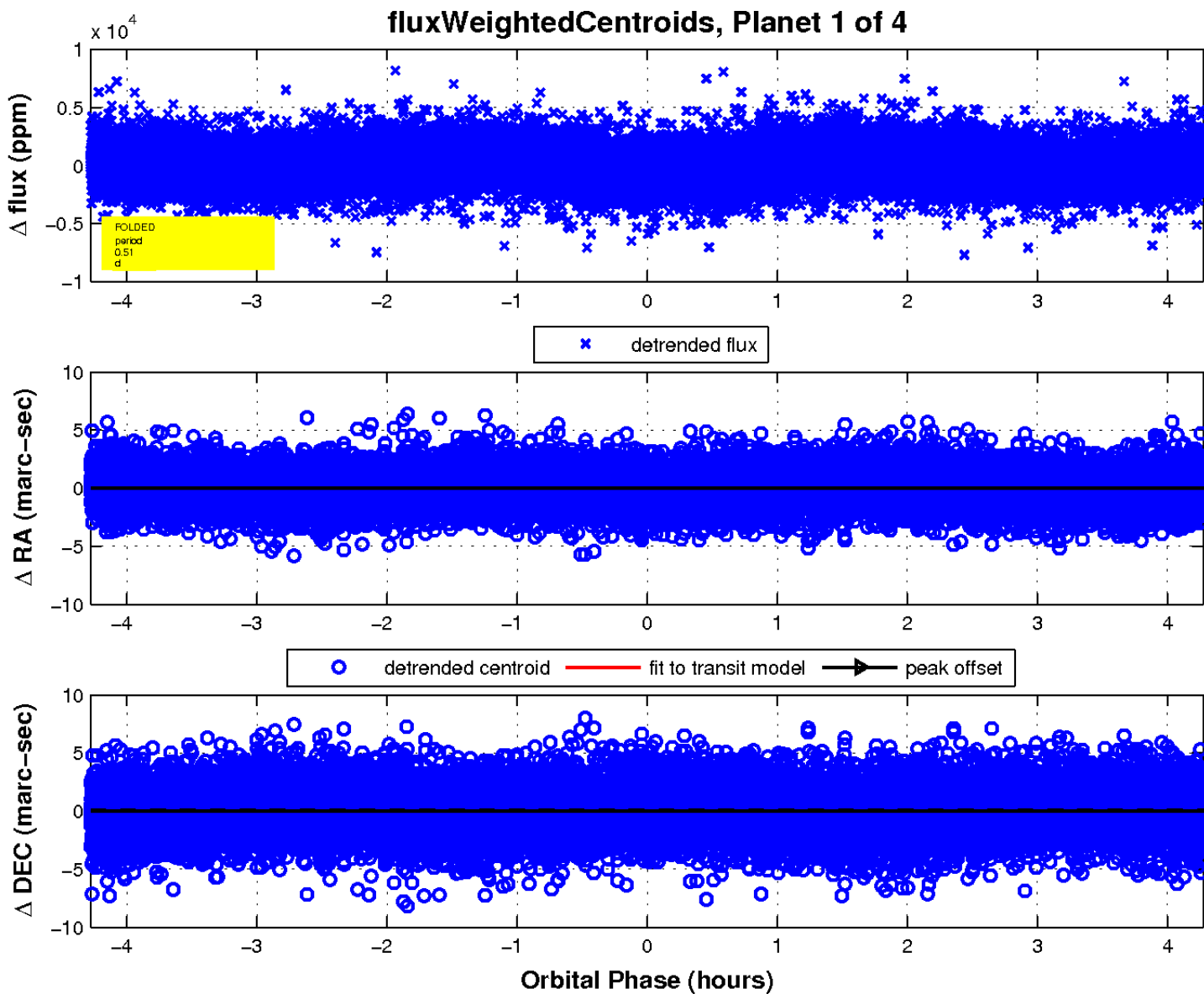
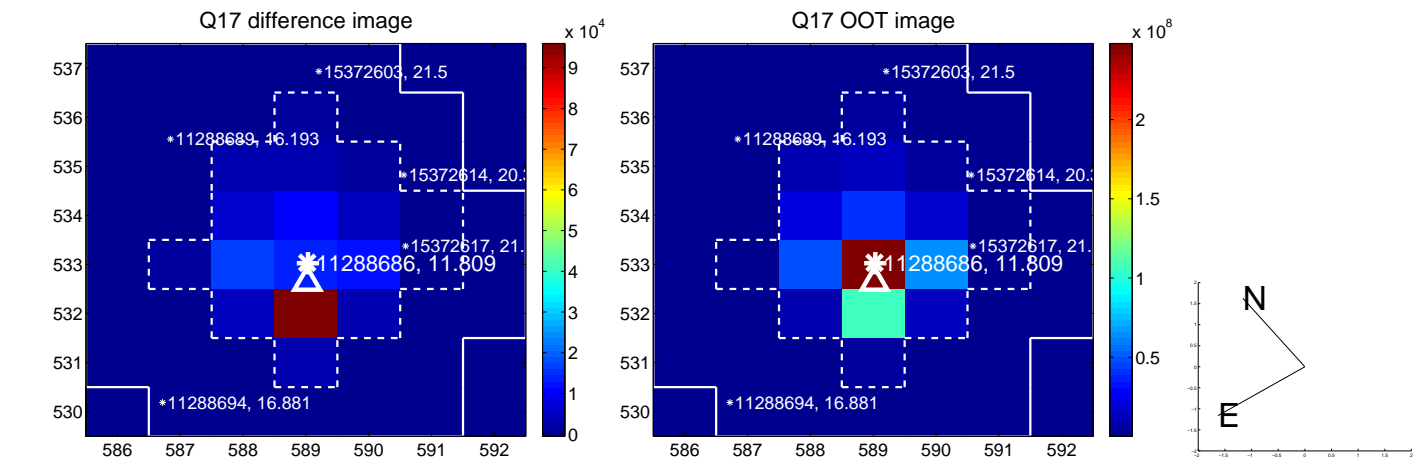
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

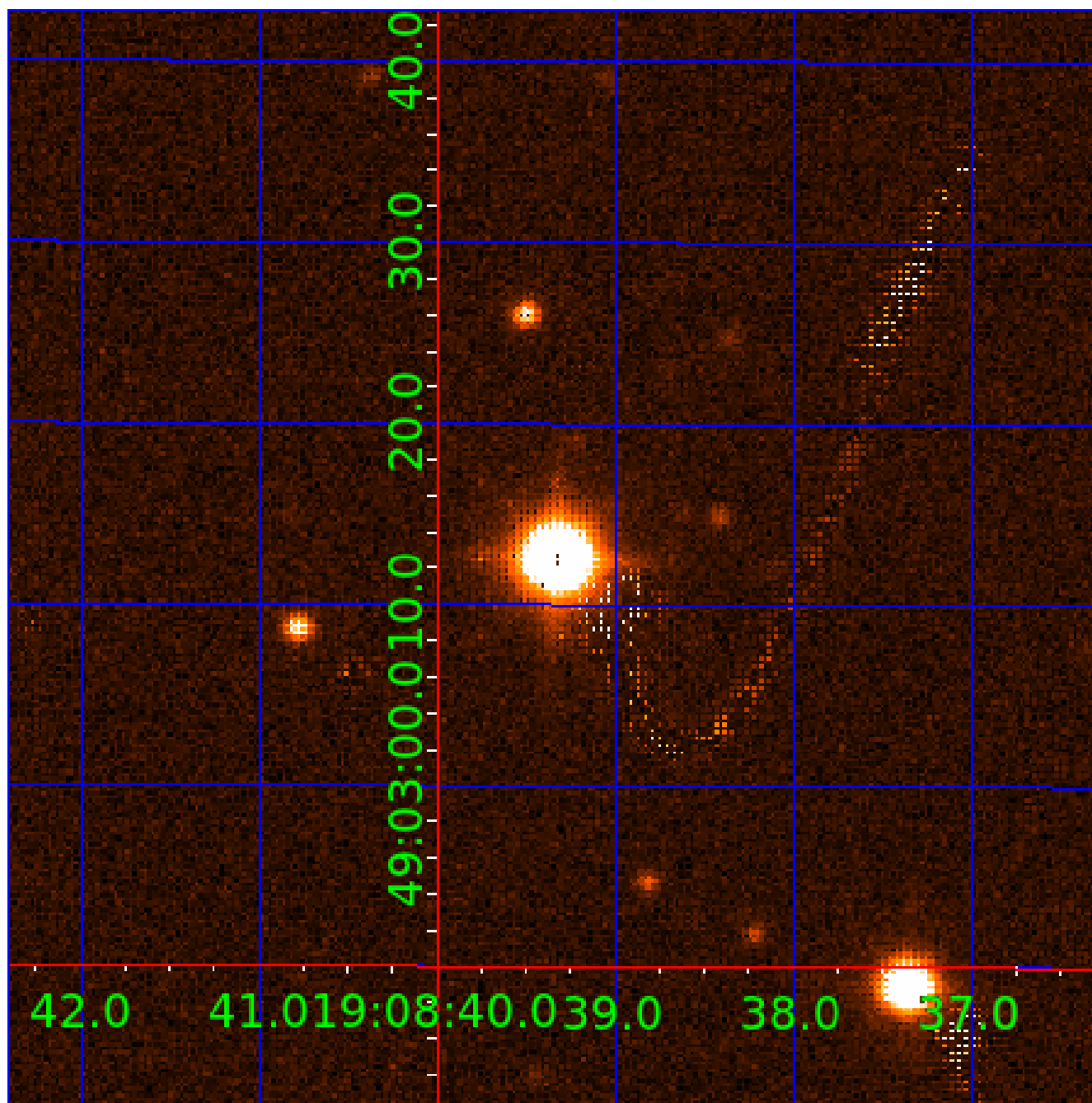


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011288686

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})
011288686-01	OBS	No	0.509362	131.750988	321.9	1.426	13.5	15.4	1.57	7063	3.28	27051.70
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011288686-03	OBS	No	0.509369	131.873494	123.6	1.500	11.8	6.9	1.57	7063	1.77	27051.24
011288686-04	OBS	No	0.509369	131.995369	120.1	1.500	11.1	-1.0	1.57	7063	1.74	27051.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288686-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011288686-02	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_UNRESOLVED_OFFSET
011288686-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011288686-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—NO_FITS—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.

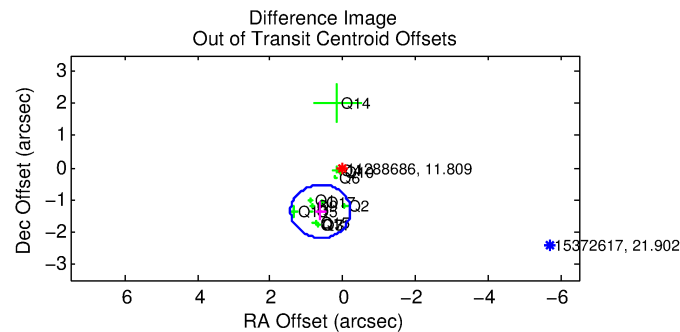
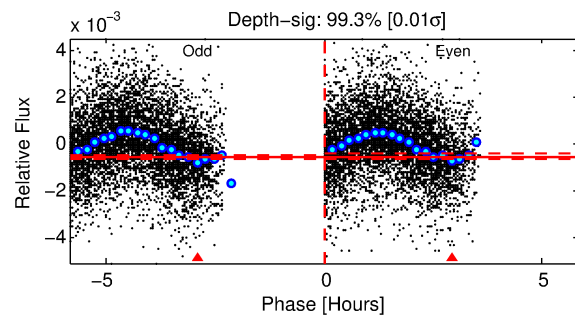
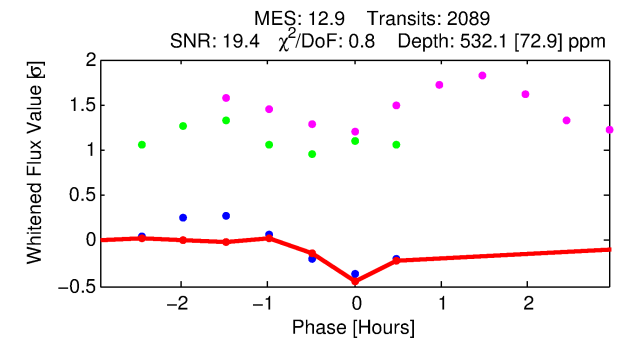
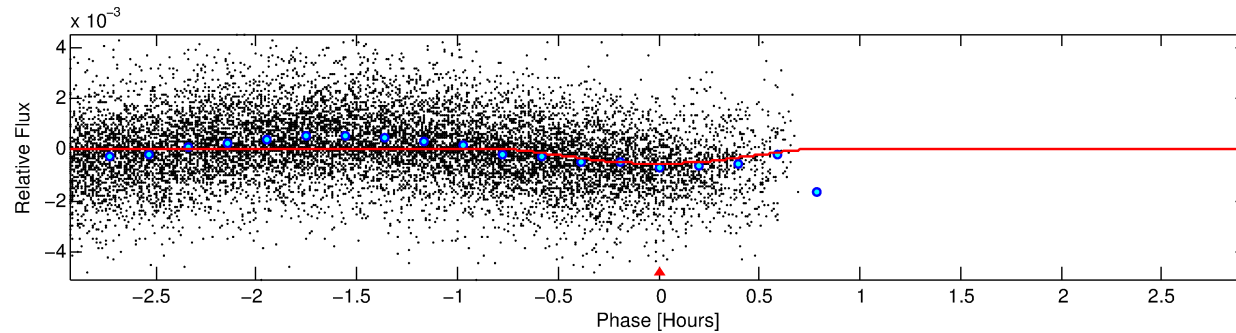
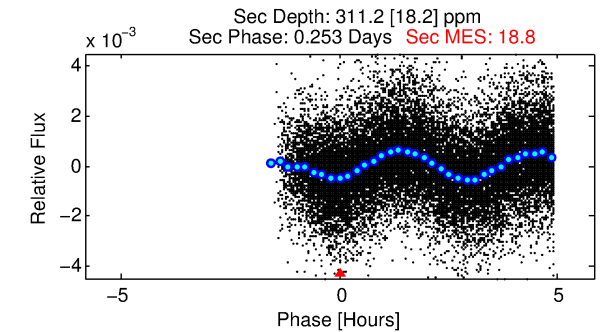
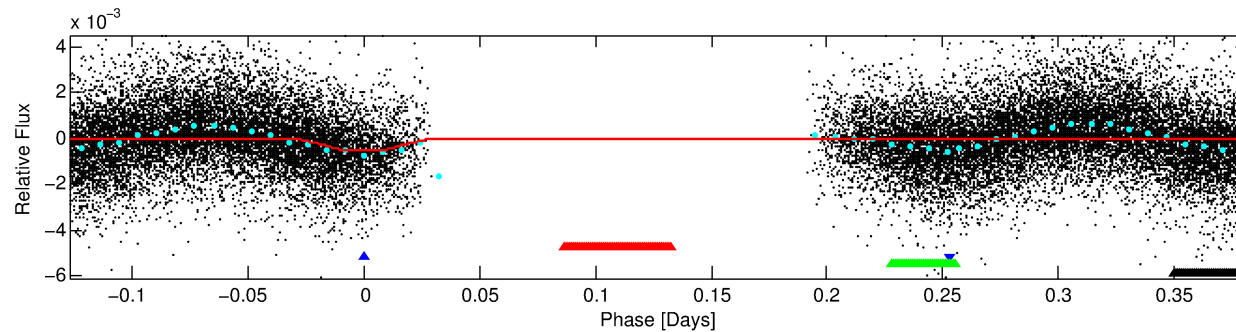
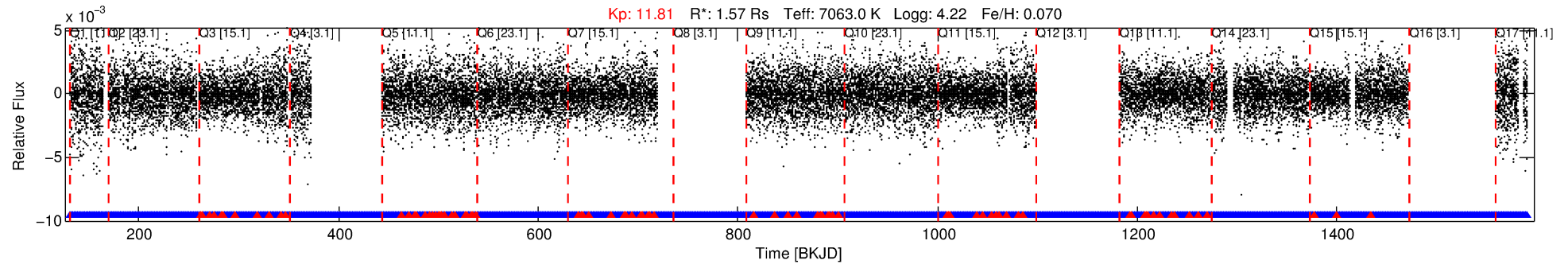
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288686-02

No Significant Match Found

DV One-Page Summary

KIC: 11288686 Candidate: 2 of 4 Period: 0.509 d



DV Fit Results:

Period = 0.50938 [0.00001] d
Epoch = 131.6180 [0.0011] BKJD
Rp/R* = 0.0216 [0.0083]
a/R* = 4.10 [8.35]
b = 0.10 [21.68]
Seff = 27050.56 [11973.06]
Teq = 3270 [362] K
Rp = 3.69 [1.92] Re
a = 0.0142 [0.0041] AU
Ag = 2.55 [2.21] [0.70σ]
Teffp = 6389 [1265] K [2.37σ]

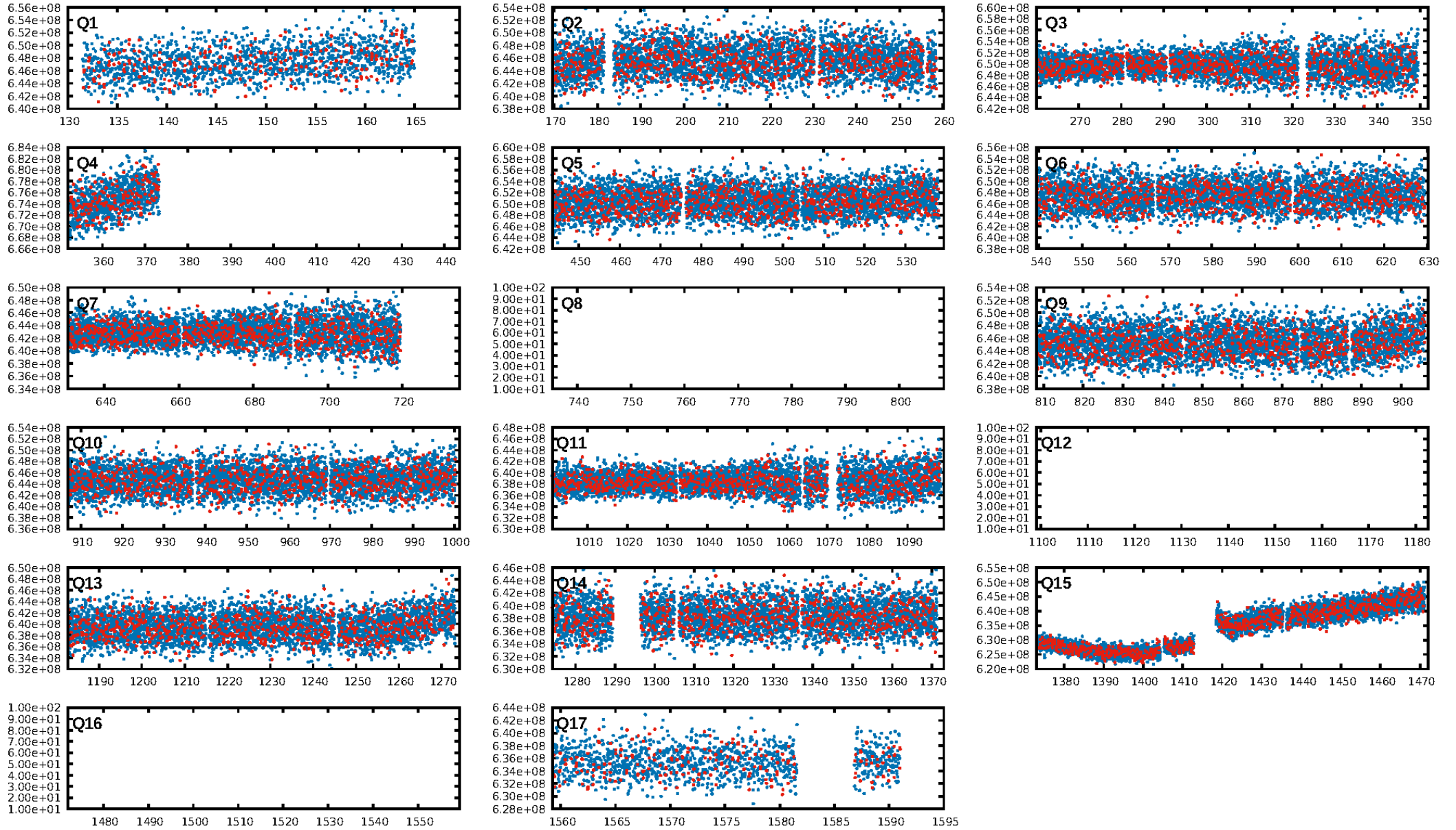
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.95 [1842/1930]
GhostDiagnostic-chr: -6.714
Centroid-sig: 1.6%
Centroid-so: 0.164 arcsec [4.16σ]
OotOffset-rm: 1.494 arcsec [5.43σ]
KicOffset-rm: 1.581 arcsec [5.40σ]
OotOffset-st: 4/4/1/5 [14]
KicOffset-st: 4/4/1/5 [14]
DiffImageQuality-fgm: 1.00 [14/14]
DiffImageOverlap-fno: 0.00 [0/14]

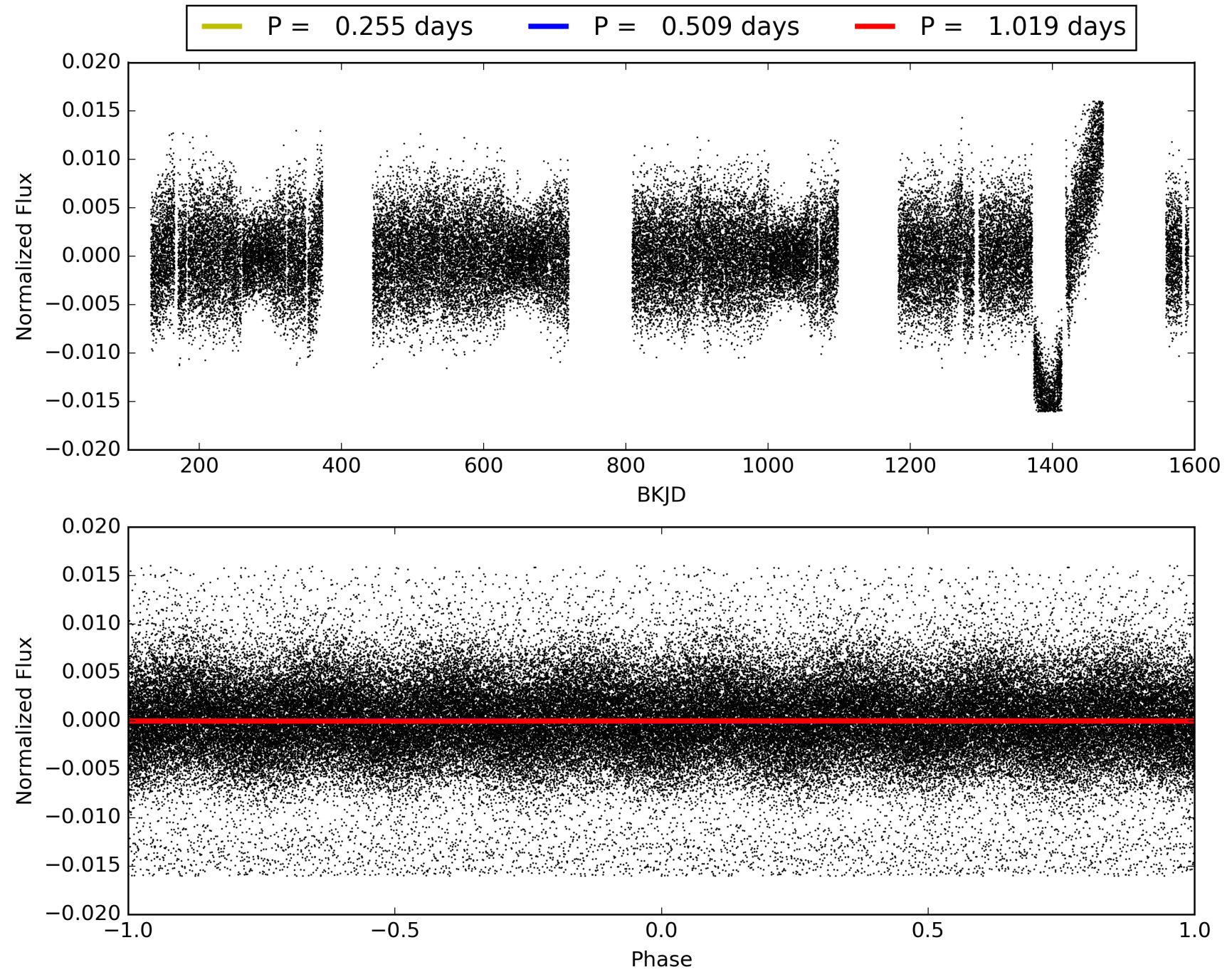
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:07:38 Z

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

TCE 011288686-02, PDC Light Curves

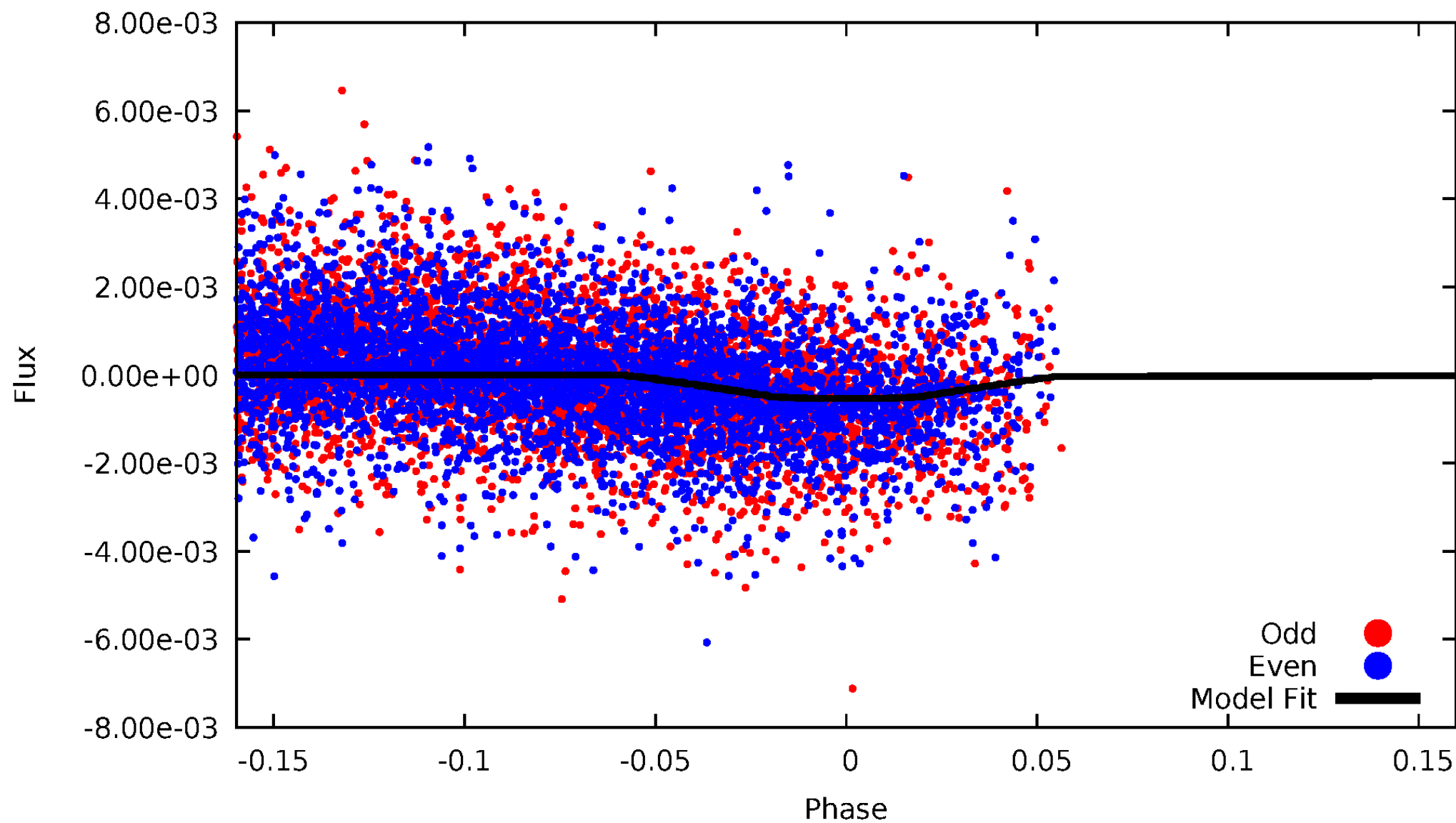


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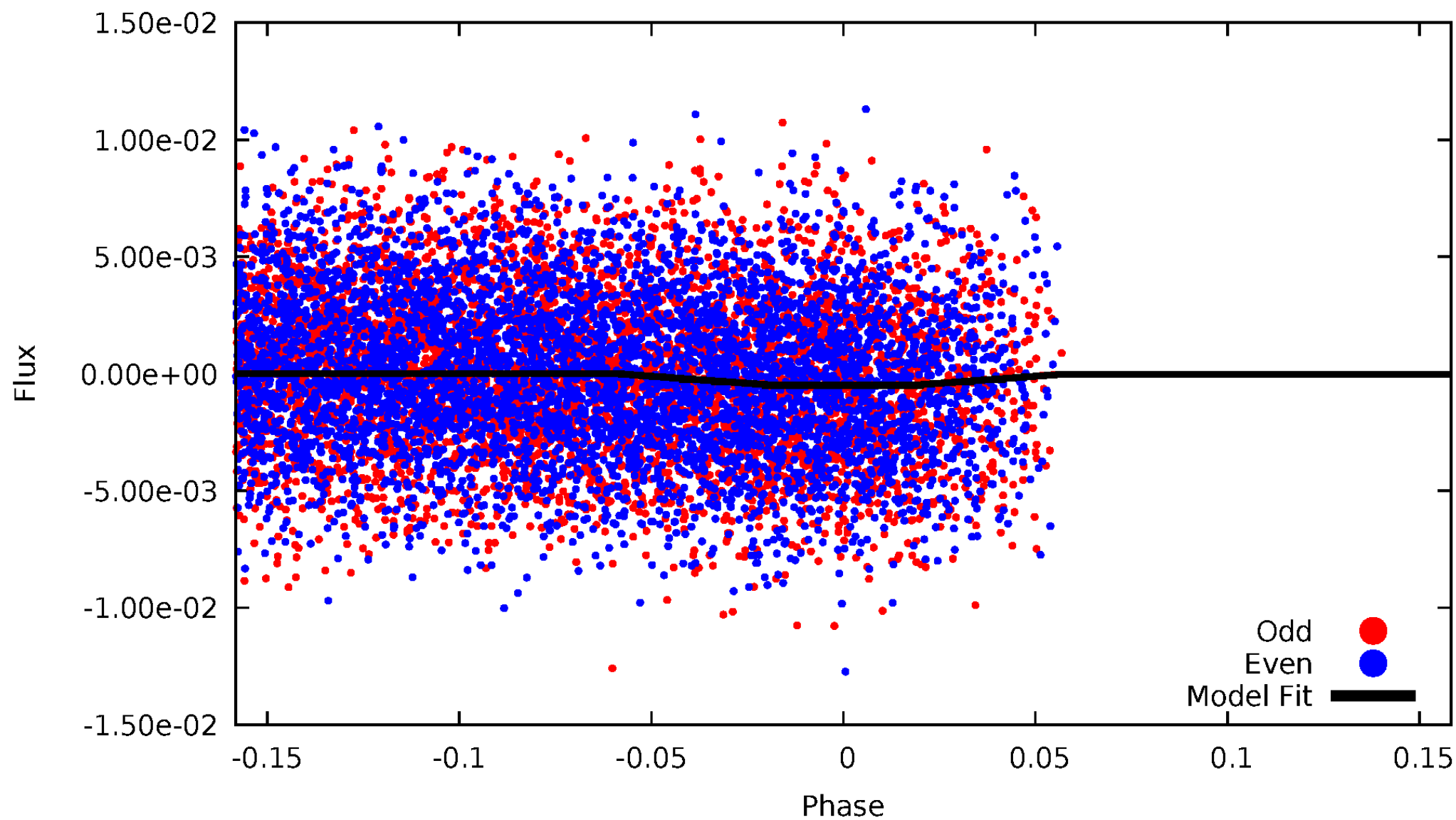
DV Odd/Even

TCE 011288686-02



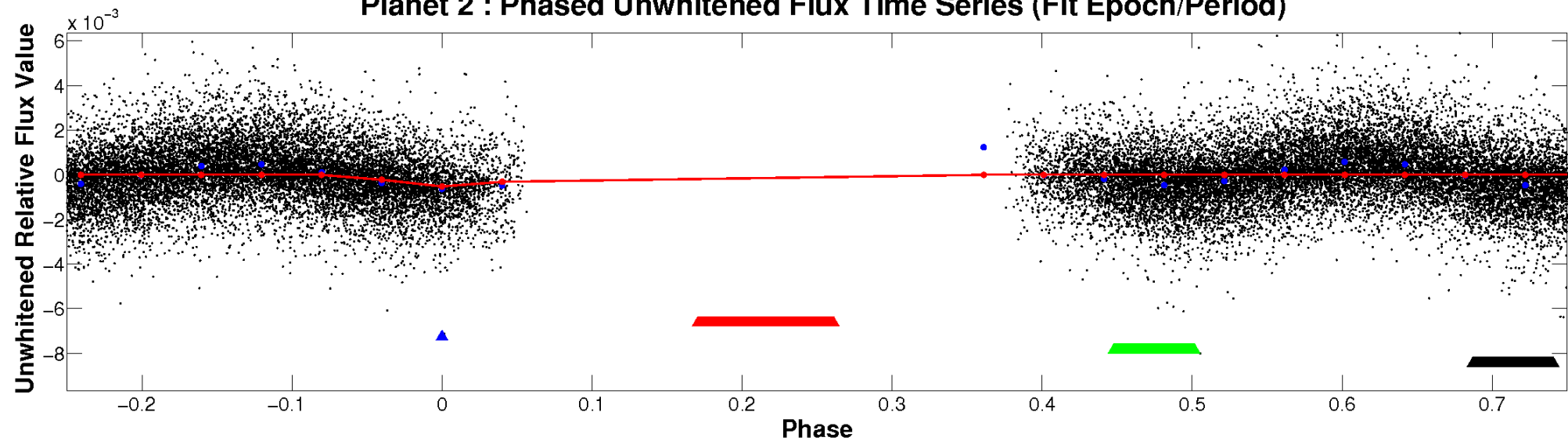
ALT Odd/Even

TCE 011288686-02

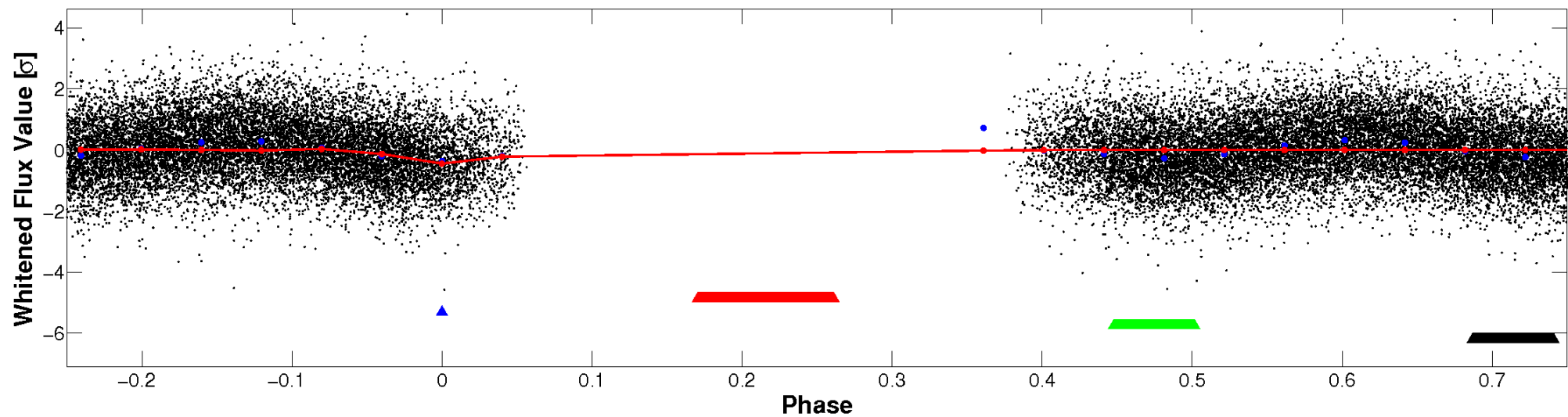


Non-Whitened Vs. Whitened Light Curve

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

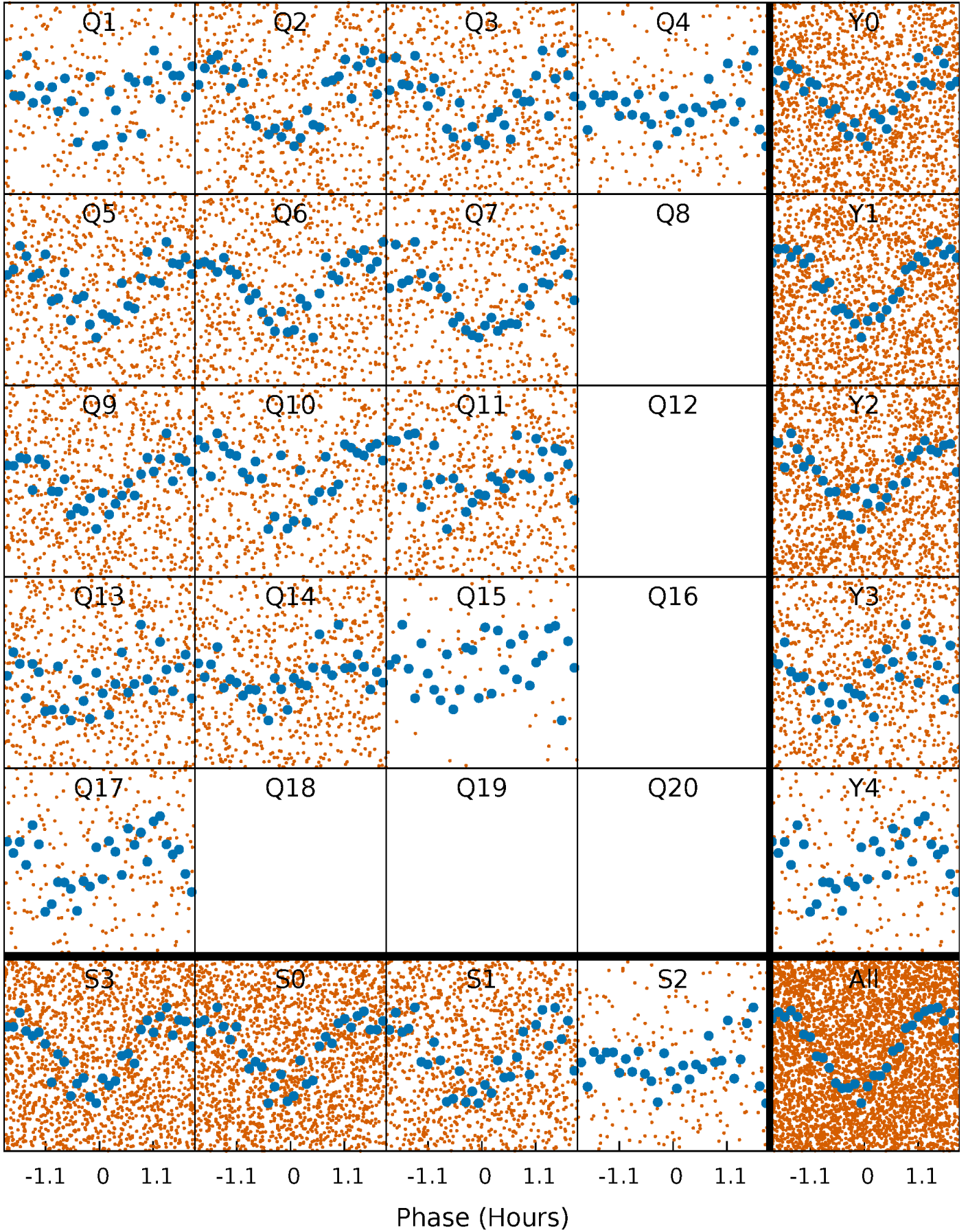


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



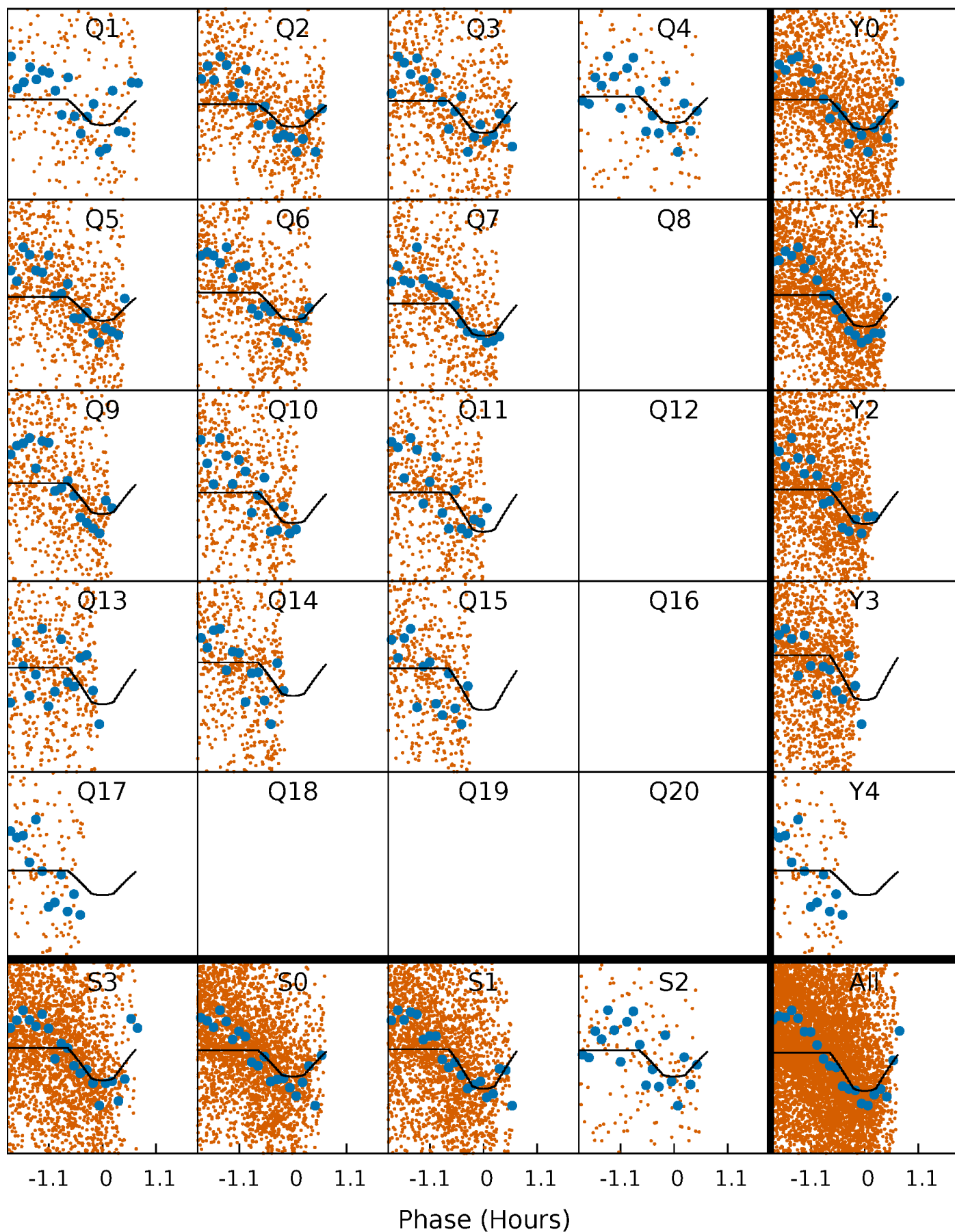
PDC Quarter-Phased Transit Curves

TCE 011288686-02 P= 0.509379 Days $T_0=131.617993$ (BKJD)



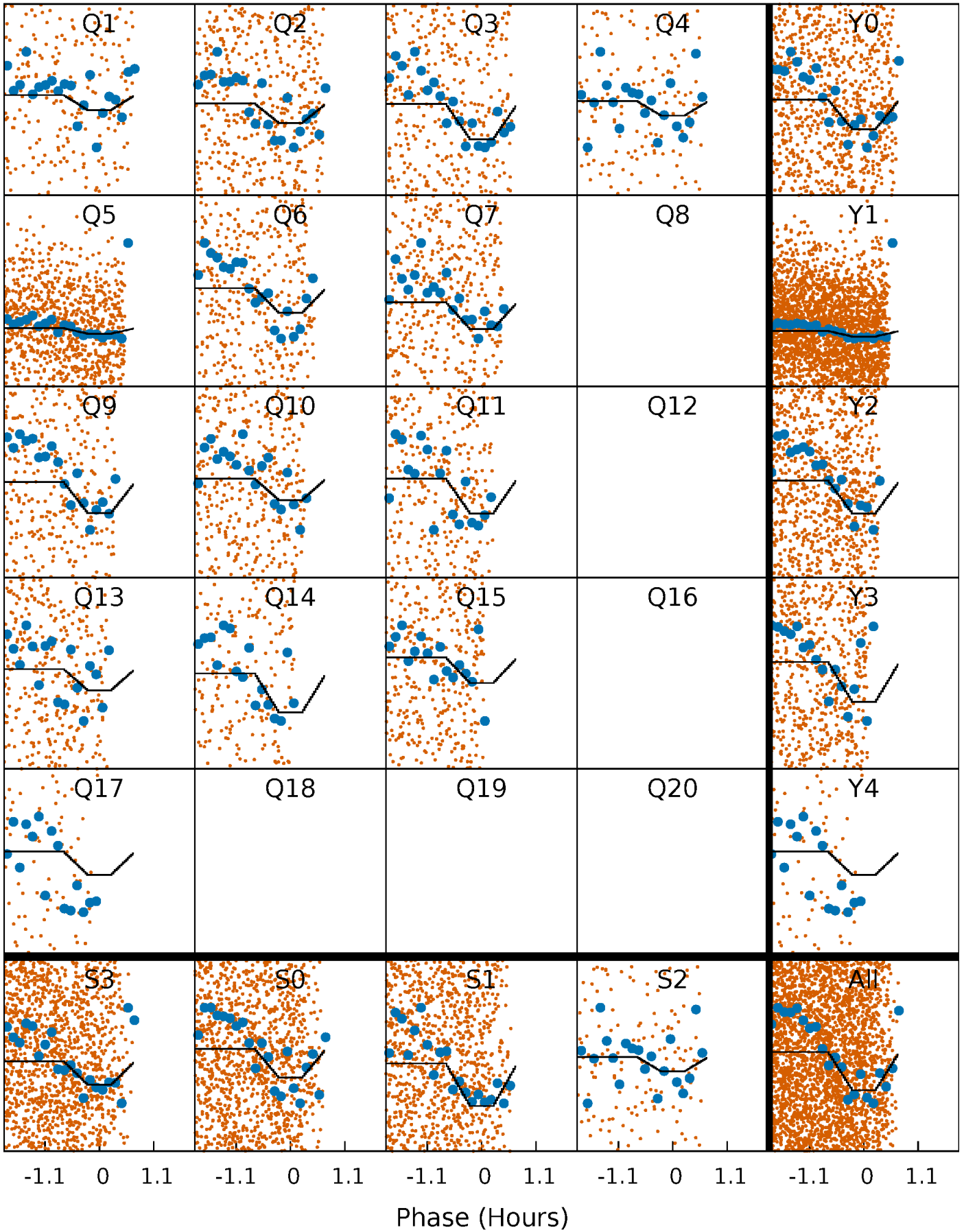
DV Quarter-Phased Transit Curves

TCE 011288686-02 P= 0.509379 Days $T_0=131.617993$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

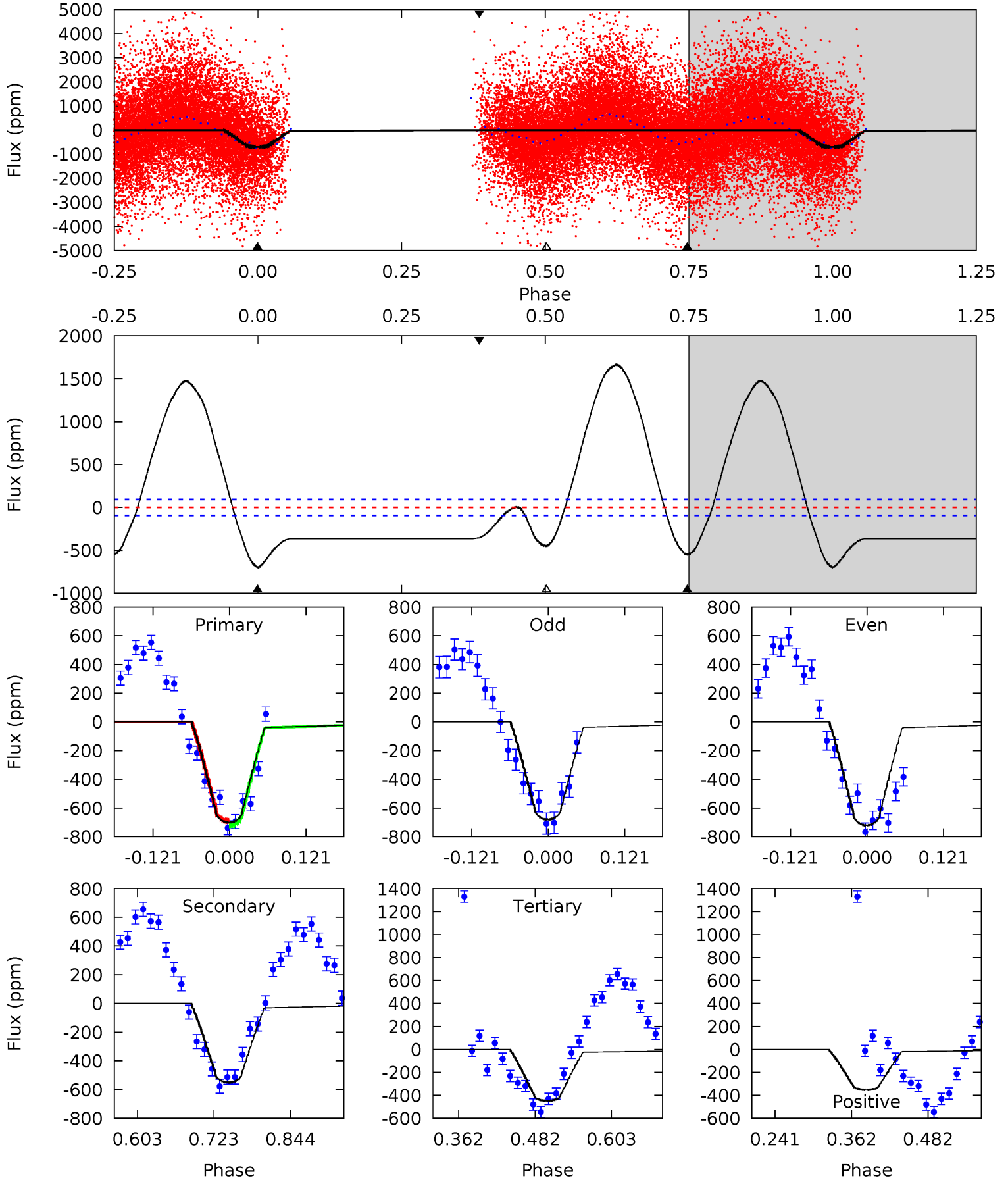
TCE 011288686-02 P= 0.509373 Days $T_0=131.617828$ (BKJD)



DV Model-Shift Uniqueness Test

011288686-02, P = 0.509379 Days, E = 131.108614 Days

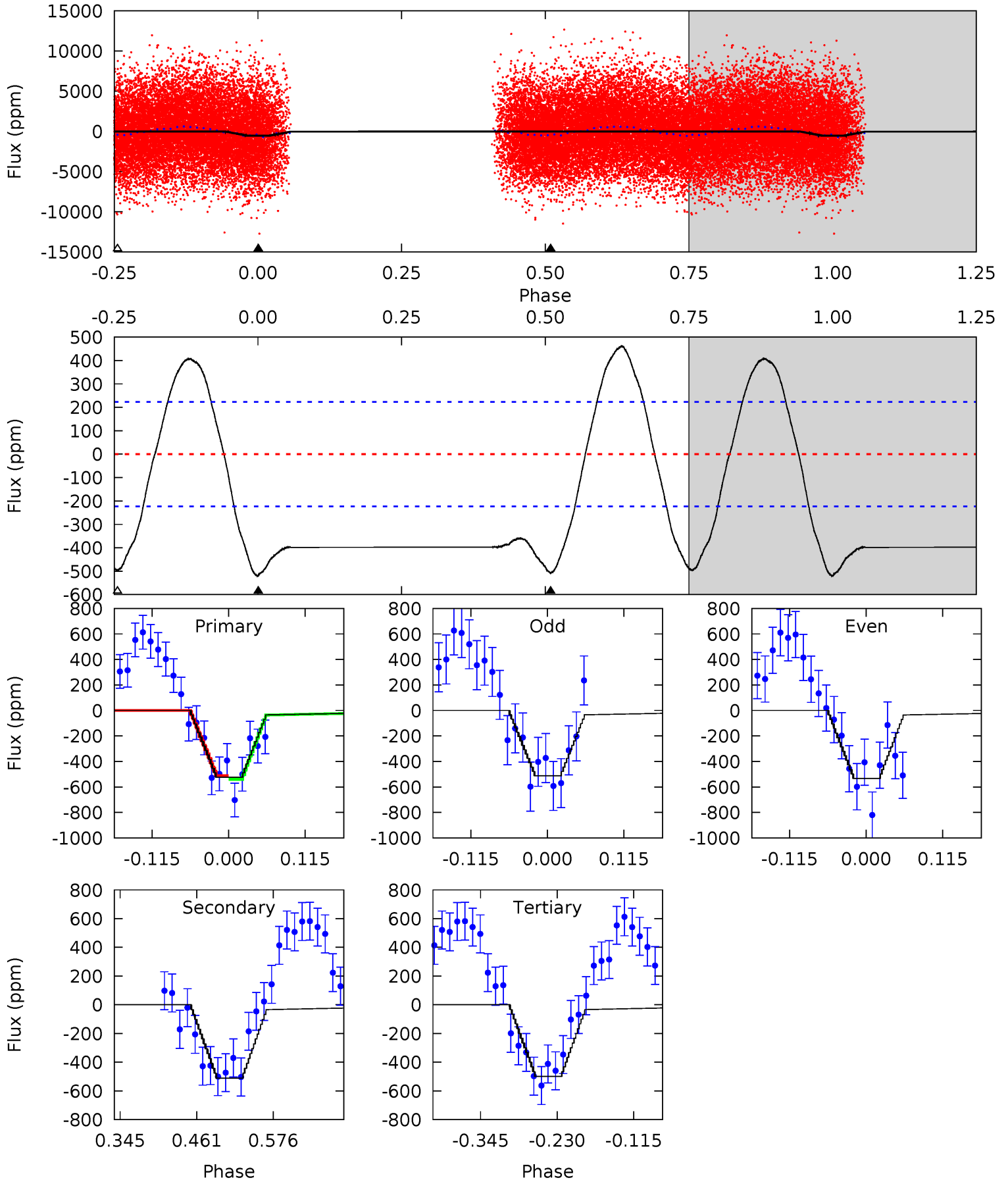
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
33.5	26.4	21.5	-16.9	4.53	1.55	35.8	12.0	50.4	4.84	43.2	0.98	1.05	0.70	0.64



Alt Model-Shift Uniqueness Test

011288686-02, P = 0.509373 Days, E = 131.108455 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.6	10.4	10.2	0	4.54	1.58	6.68	0.48	10.6	0.22	10.4	0.22	0.83	0.47	0.26



Stellar Parameters For KIC 011288686

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7063^{+197}_{-338}	$4.218^{+0.090}_{-0.210}$	$0.070^{+0.200}_{-0.350}$	$1.567^{+0.553}_{-0.237}$	$1.480^{+0.214}_{-0.214}$	$0.541^{+0.228}_{-0.305}$
	+3%/-5%	+2%/-5%	+286%/-500%	+35%/-15%	+14%/-14%	+42%/-56%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011288686-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-550 ± 21	$3.77^{+1.66}_{-1.53}$	4623^{+373}_{-284}	7207^{+2967}_{-1253}	$4.244^{+7.383}_{-2.181}$
Alt.	-511 ± 49	$3.85^{+1.70}_{-1.43}$	4611^{+377}_{-268}	6928^{+2522}_{-1235}	$3.733^{+5.418}_{-1.919}$

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 $A_{obs} \gg 1.0$

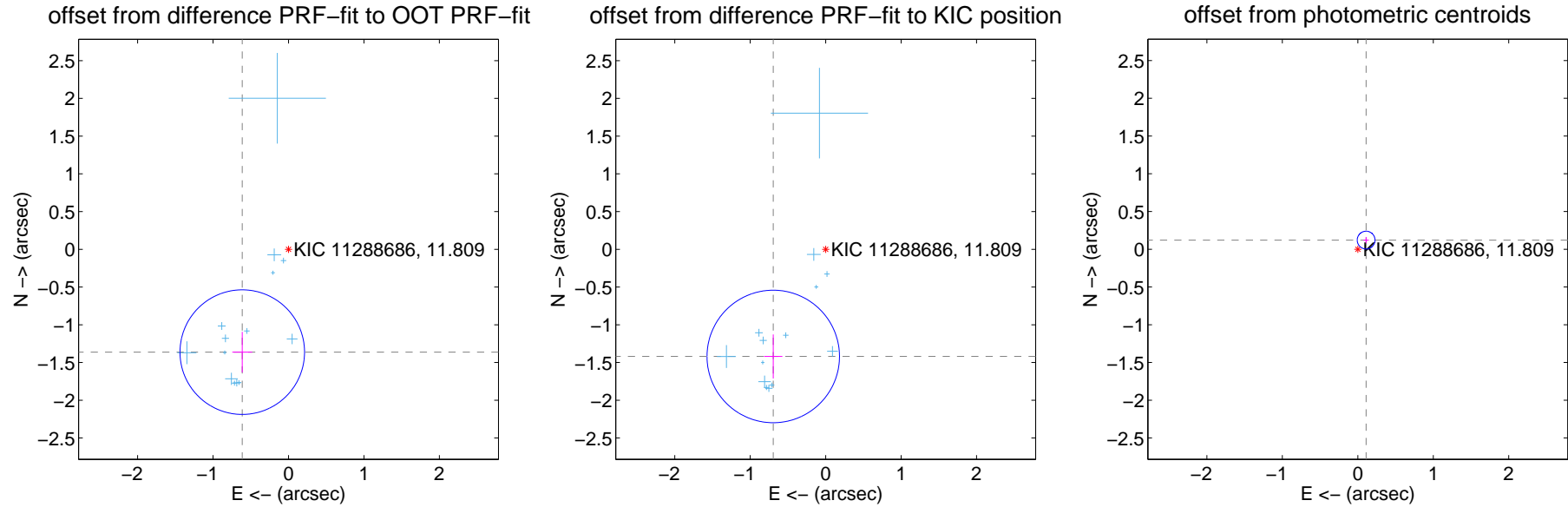
DV Centroid Data

Supplemental centroid analysis for 011288686-02. **Kepler magnitude: 11.81.** Transit SNR 19.35

There are 14 quarters with good PRF difference image offsets

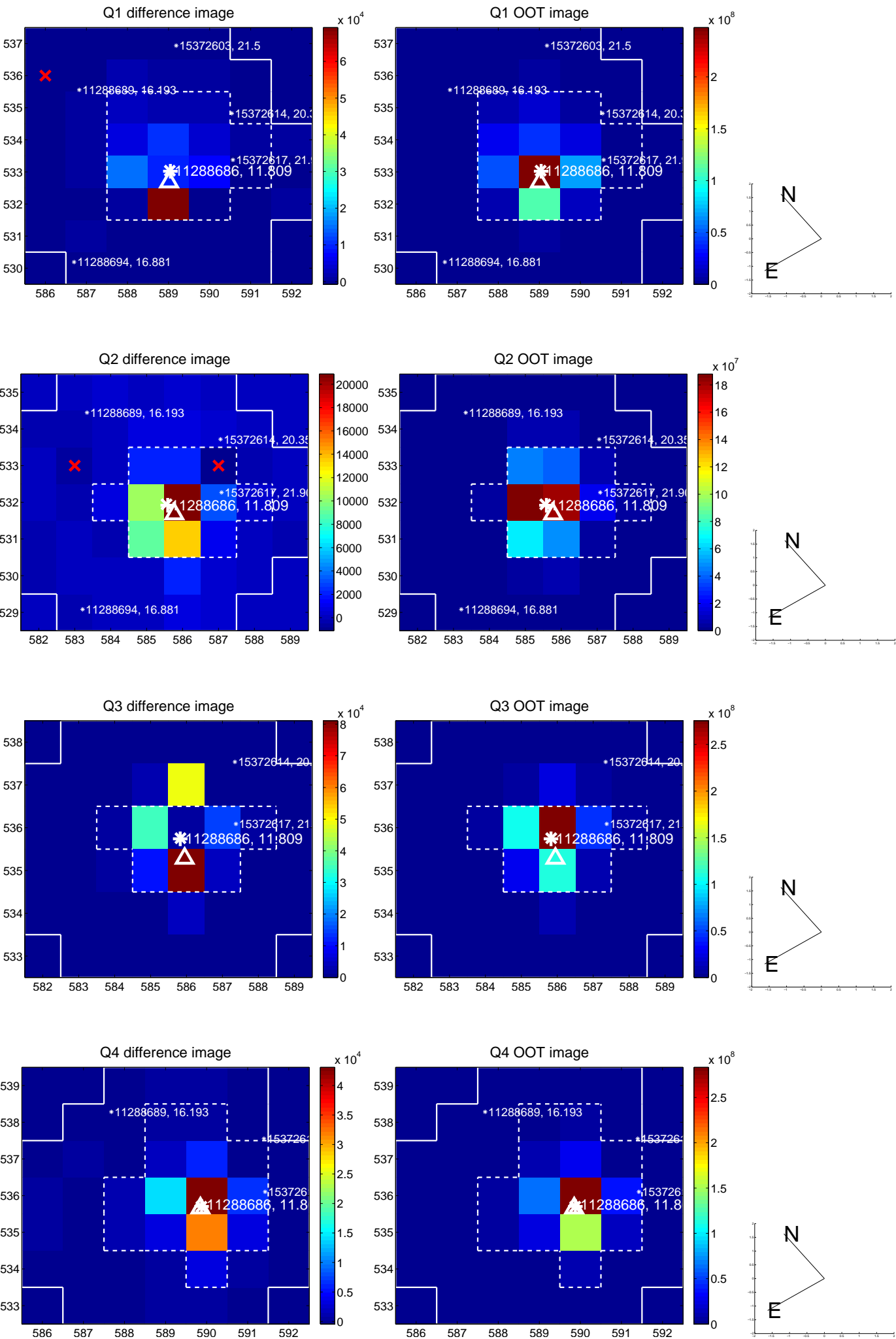
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.494 ± 0.275	5.43	0.613 ± 0.131	-1.362 ± 0.269
PRF-fit source offset from KIC position	1.581 ± 0.293	5.40	0.695 ± 0.121	-1.420 ± 0.291
photometric centroid source offset	0.16 ± 0.04	4.16	-0.11 ± 0.04	0.12 ± 0.04

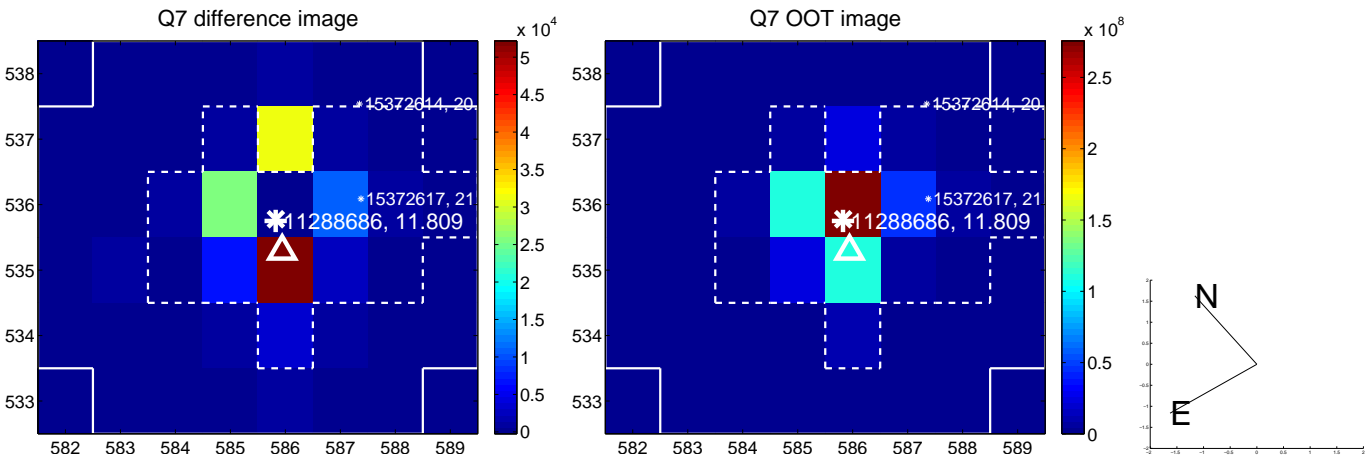
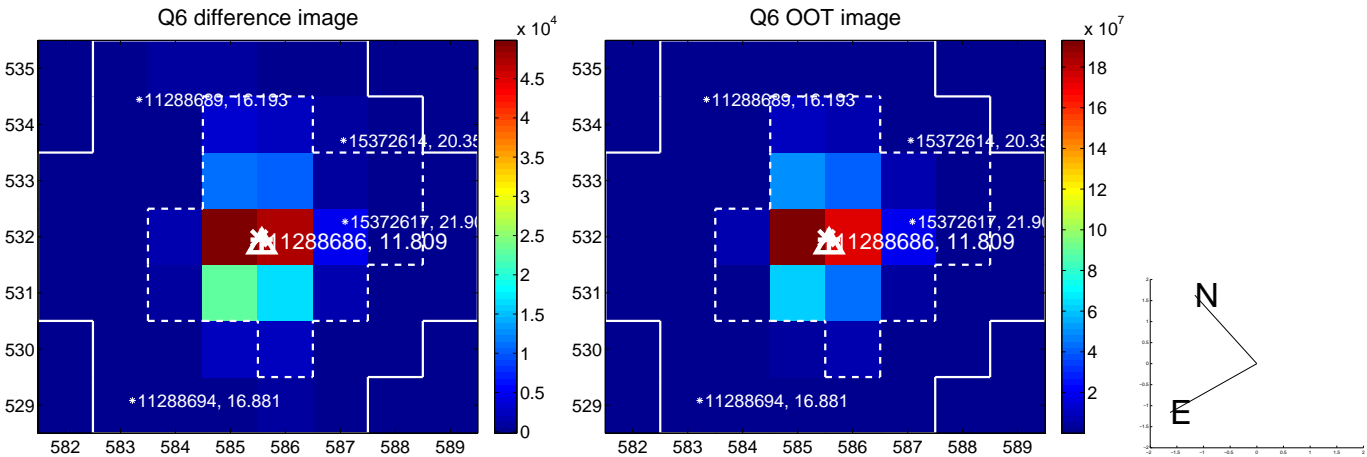
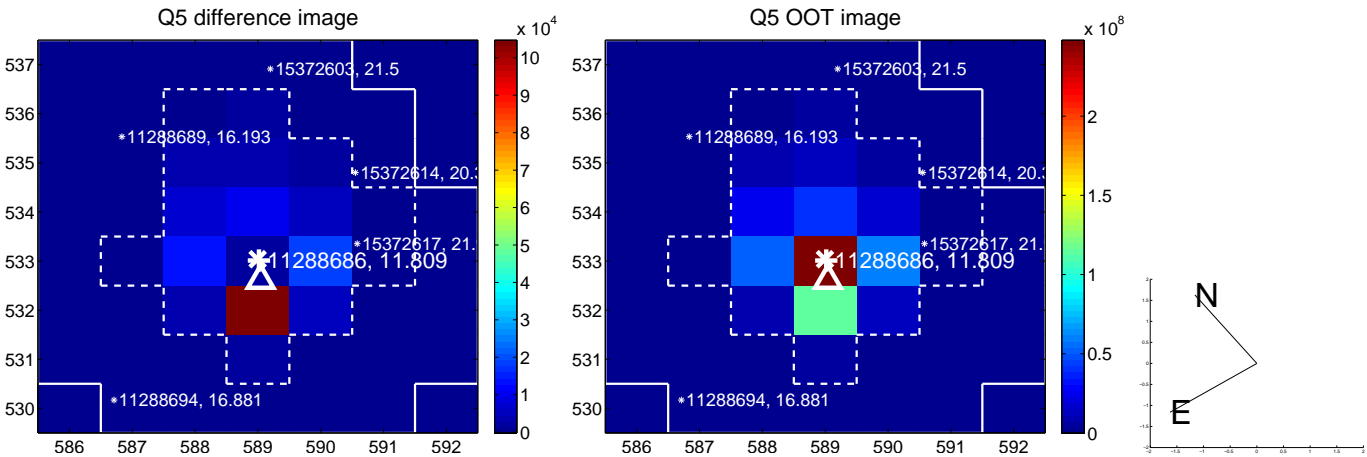


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

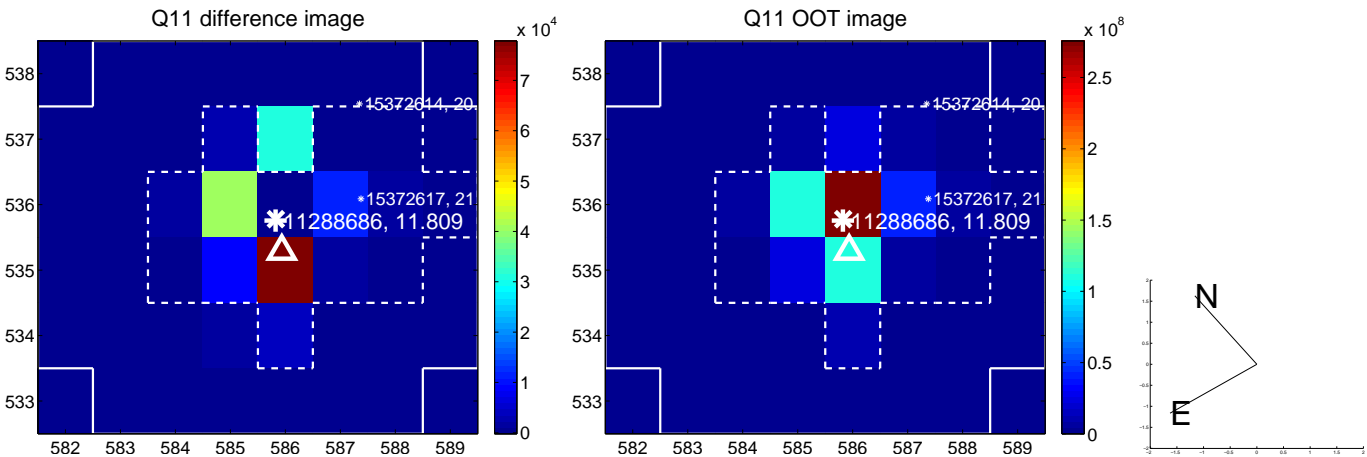
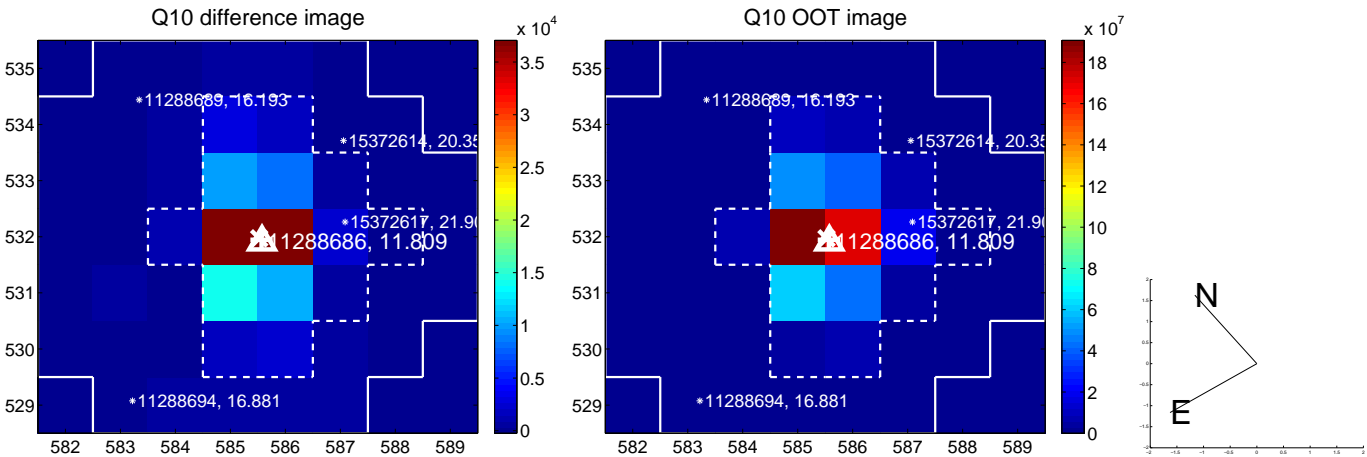
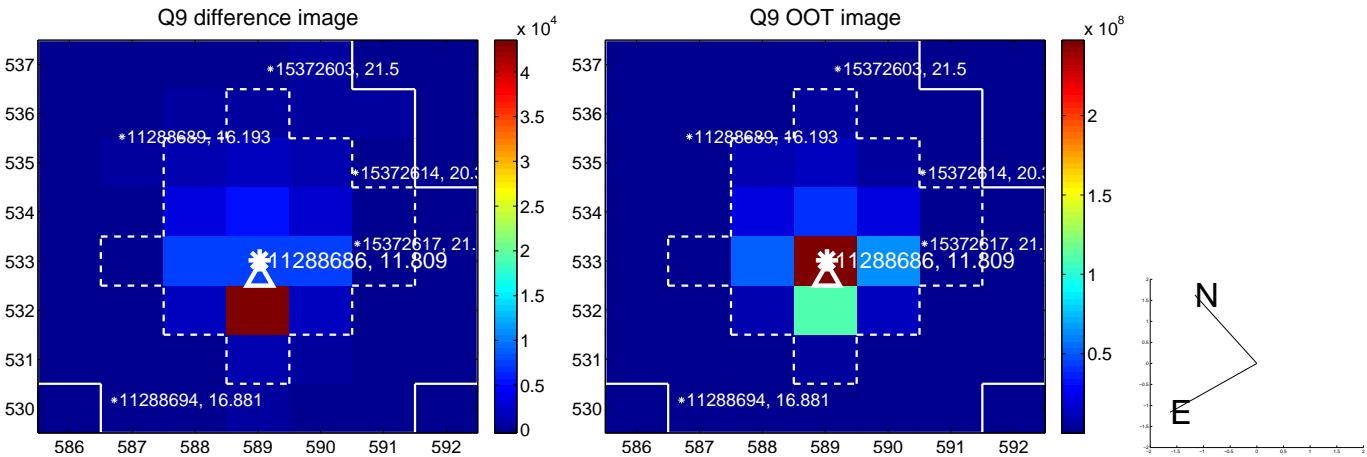
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



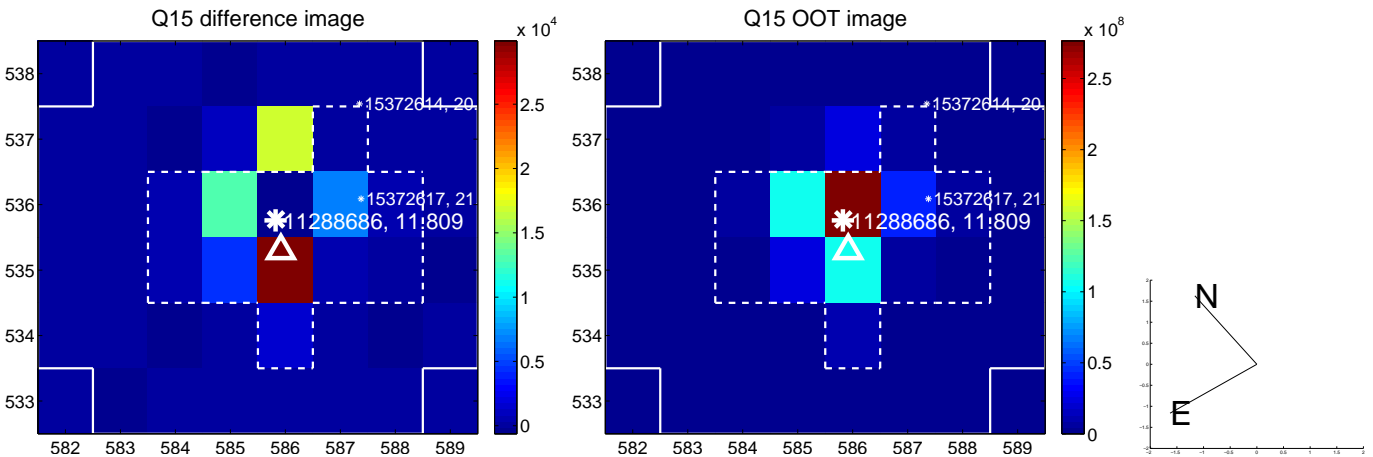
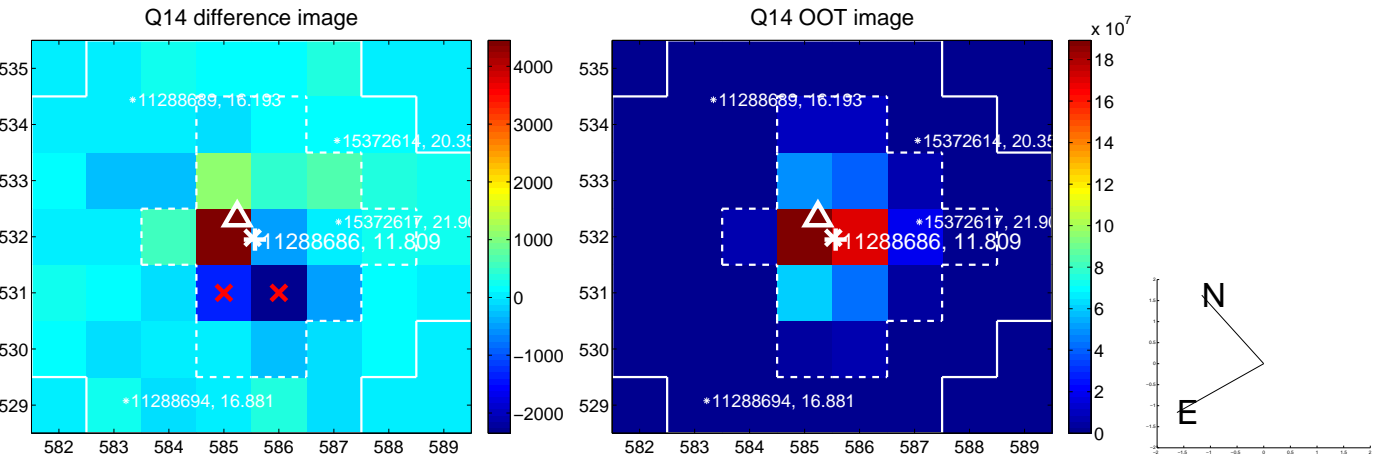
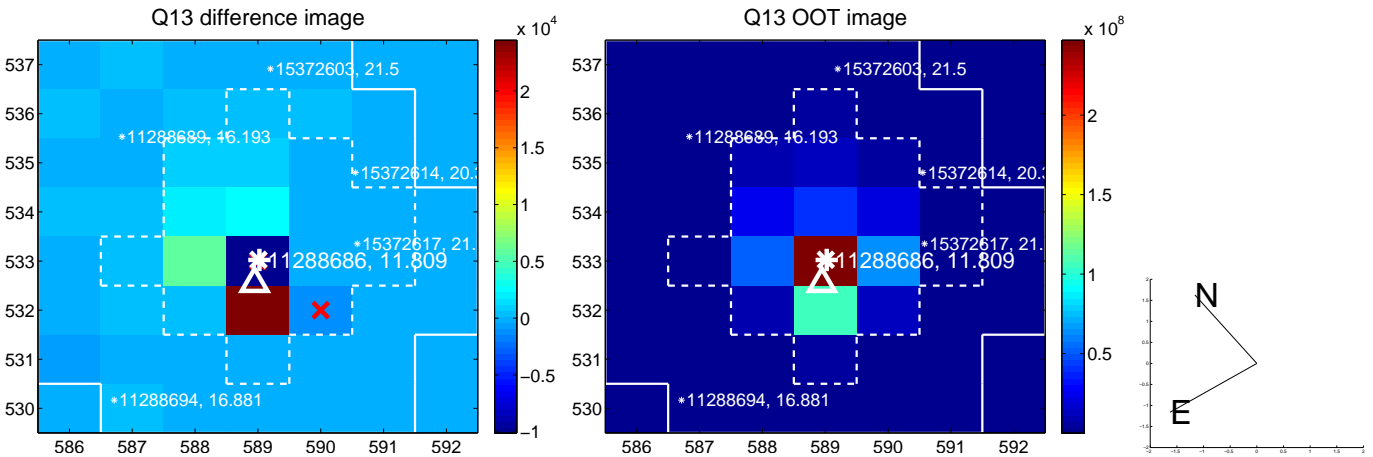
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



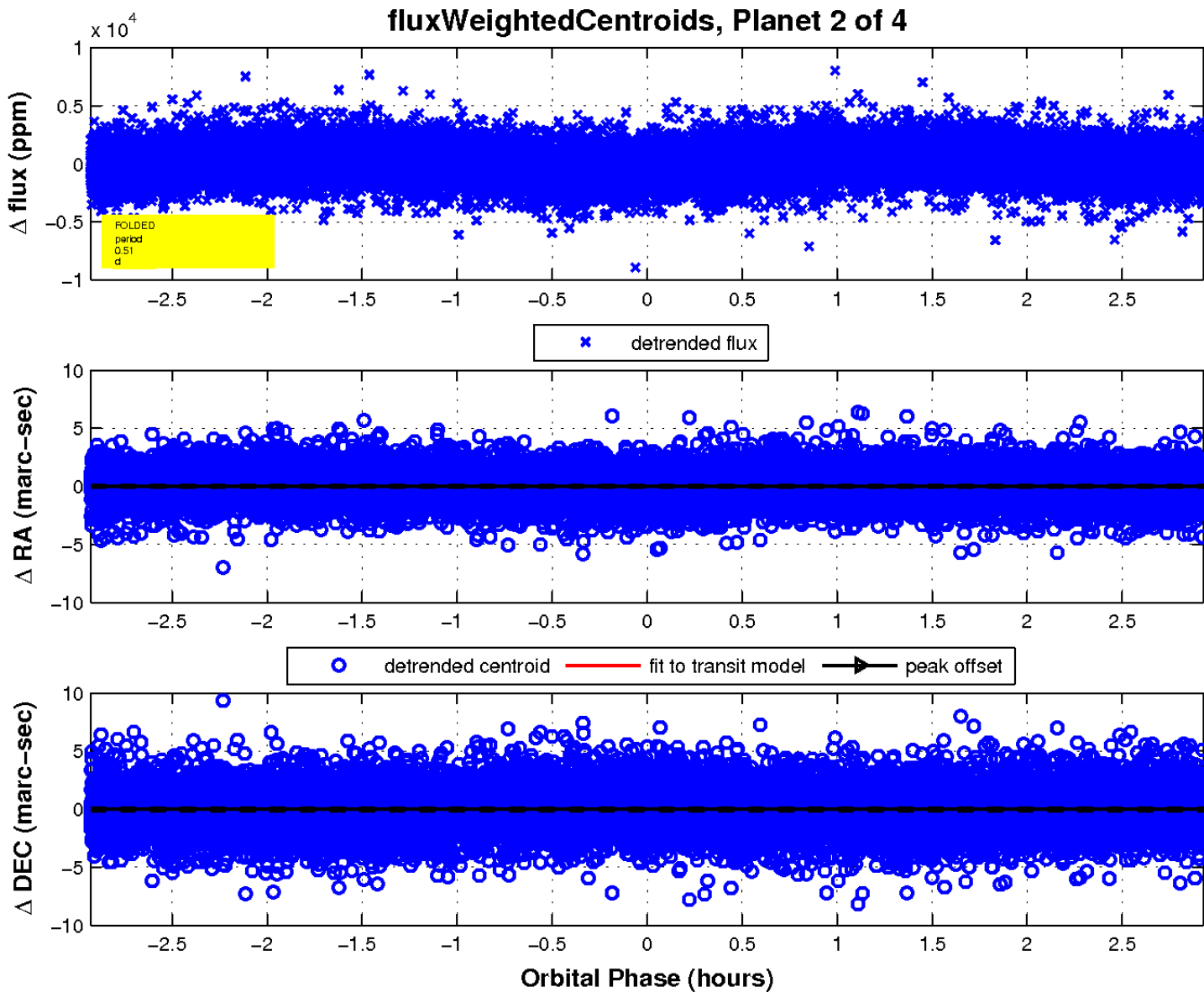
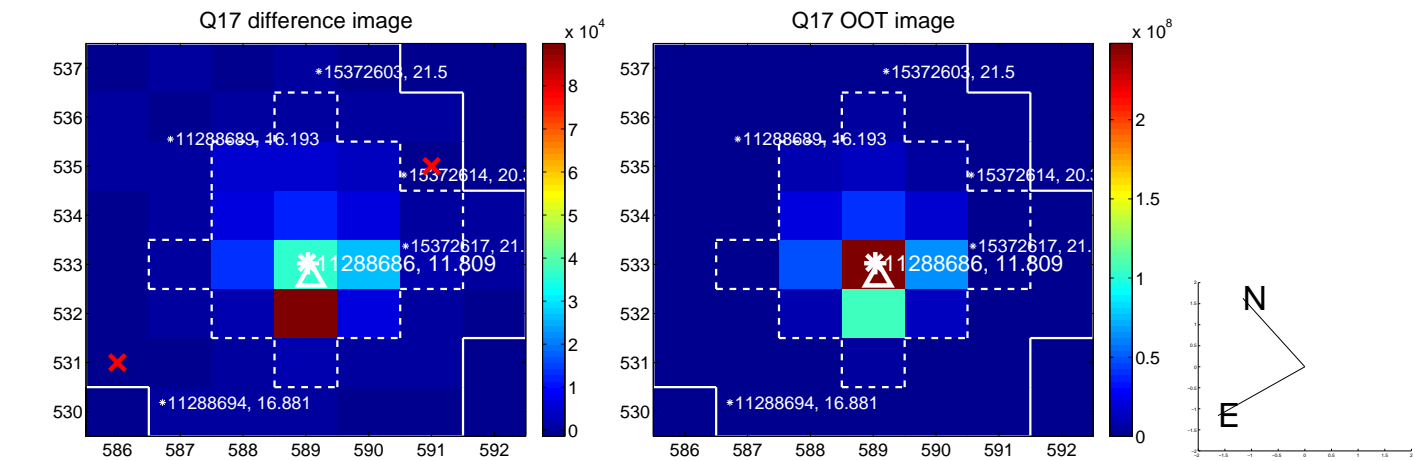
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

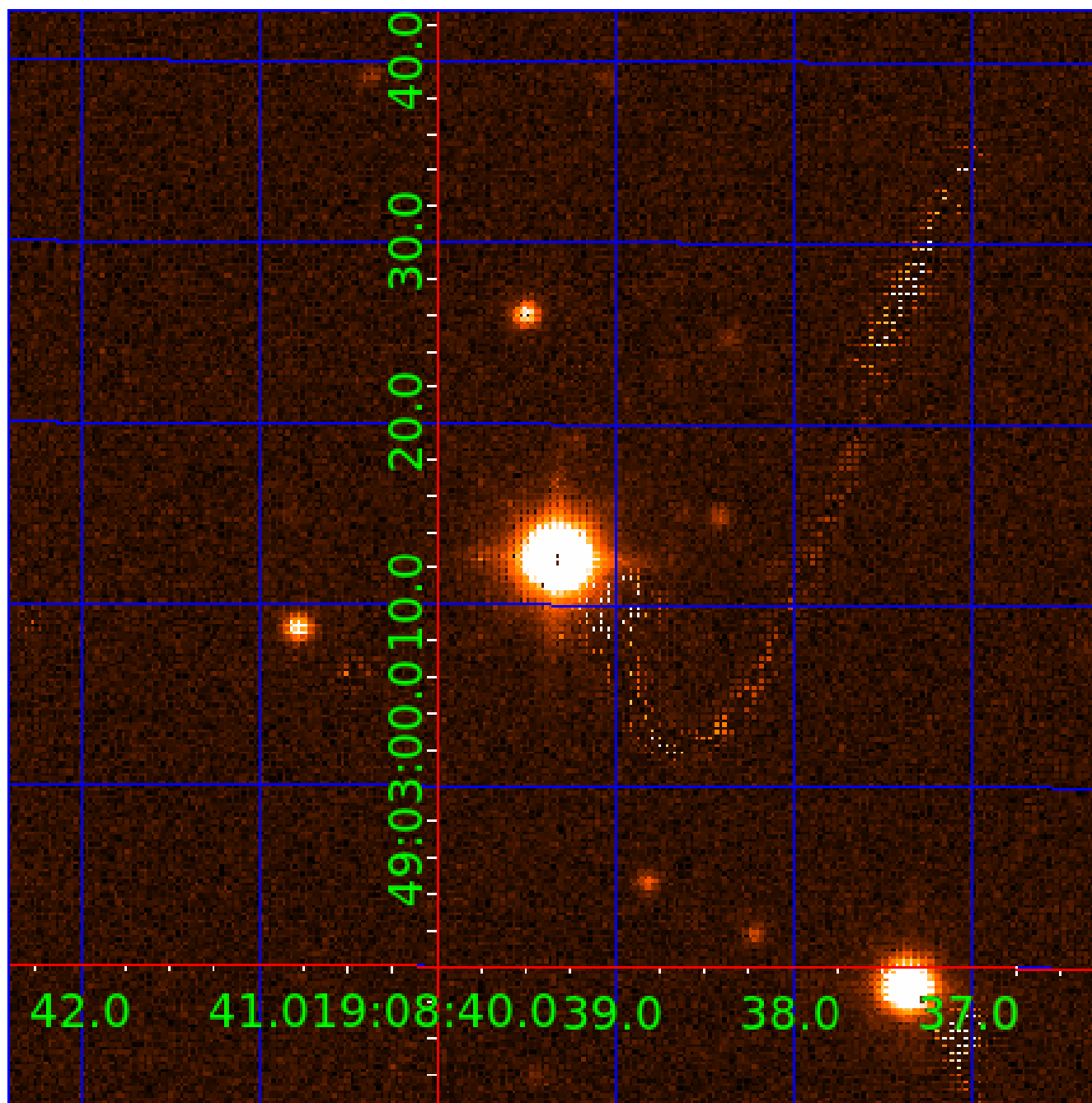


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011288686

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})
011288686-01	OBS	No	0.509362	131.750988	321.9	1.426	13.5	15.4	1.57	7063	3.28	27051.70
011288686-02	OBS	No	0.509379	131.617993	532.1	0.976	12.9	19.4	1.57	7063	3.69	27050.56
011288686-03	OBS	No	0.509369	131.873494	123.6	1.500	11.8	6.9	1.57	7063	1.77	27051.24
011288686-04	OBS	No	0.509369	131.995369	120.1	1.500	11.1	-1.0	1.57	7063	1.74	27051.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288686-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011288686-02	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_UNRESOLVED_OFFSET
011288686-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011288686-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—NO_FITS—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.

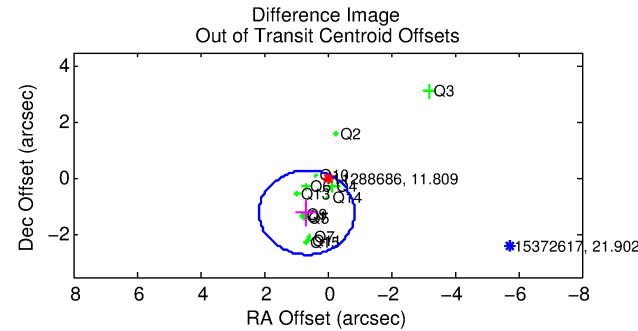
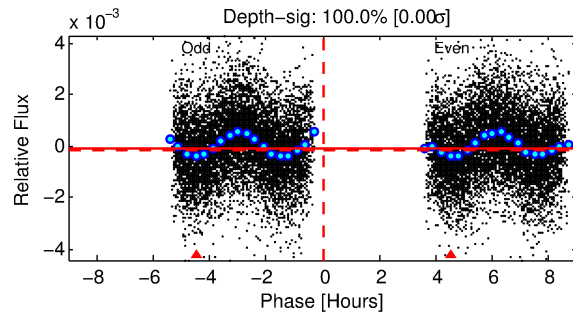
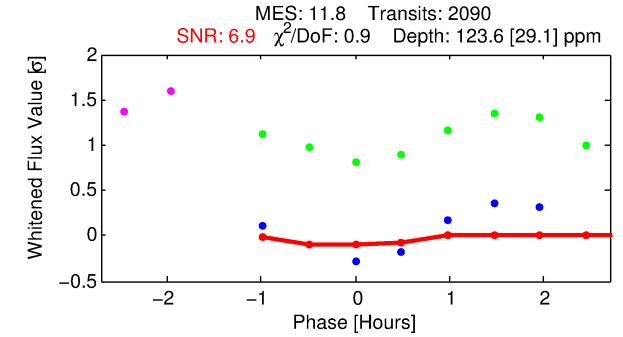
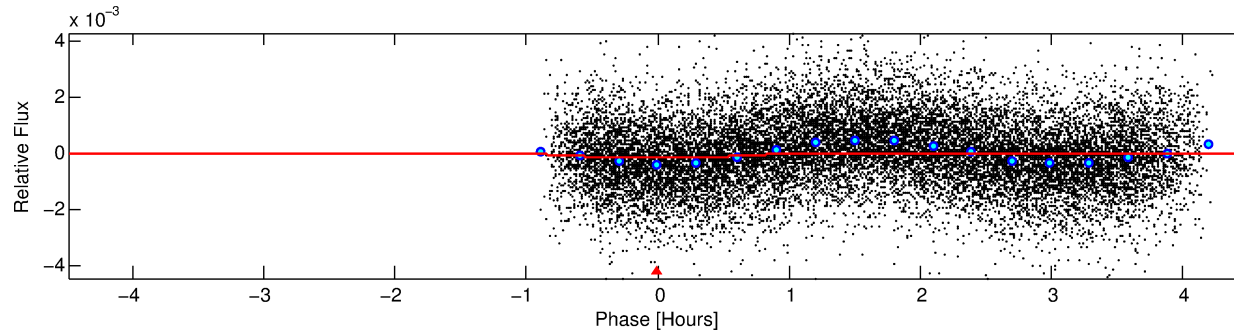
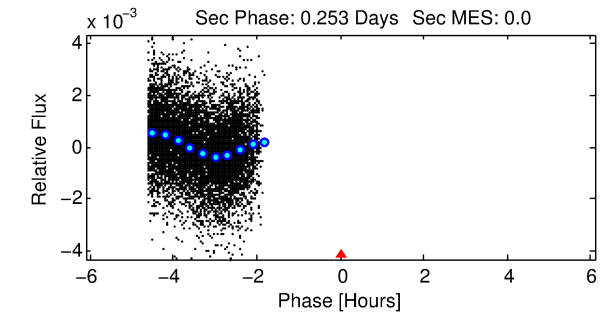
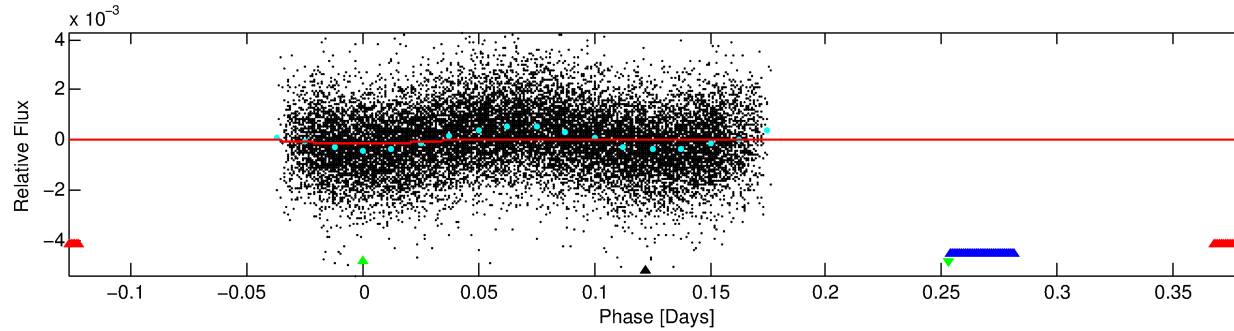
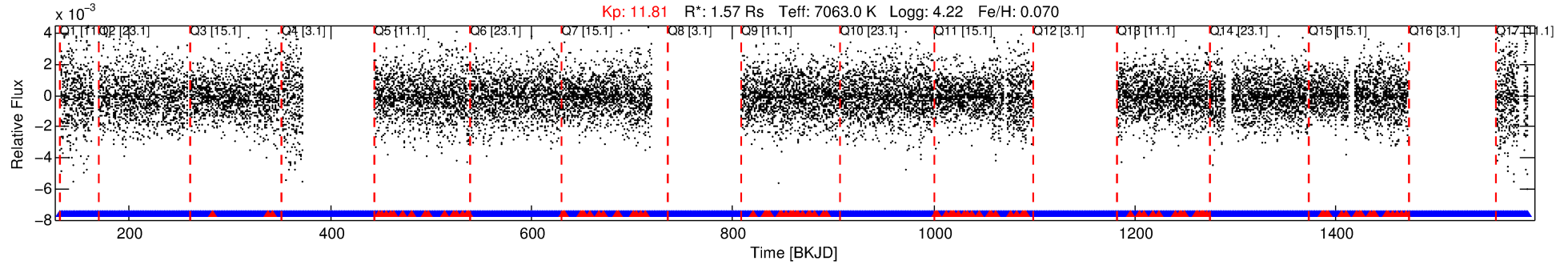
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288686-03

No Significant Match Found

DV One-Page Summary

KIC: 11288686 Candidate: 3 of 4 Period: 0.509 d



DV Fit Results:

Period = 0.50937 [0.00002] d
Epoch = 131.8735 [0.0036] BKJD
Rp/R* = 0.0103 [0.0165]
a/R* = 2.68 [20.85]
b = 0.10 [90.21]
Seff = 27051.24 [11973.36]
Teq = 3270 [362] K
Rp = 1.77 [2.89] Re
a = 0.0142 [0.0041] AU
Ag = N/A
Teffp = N/A

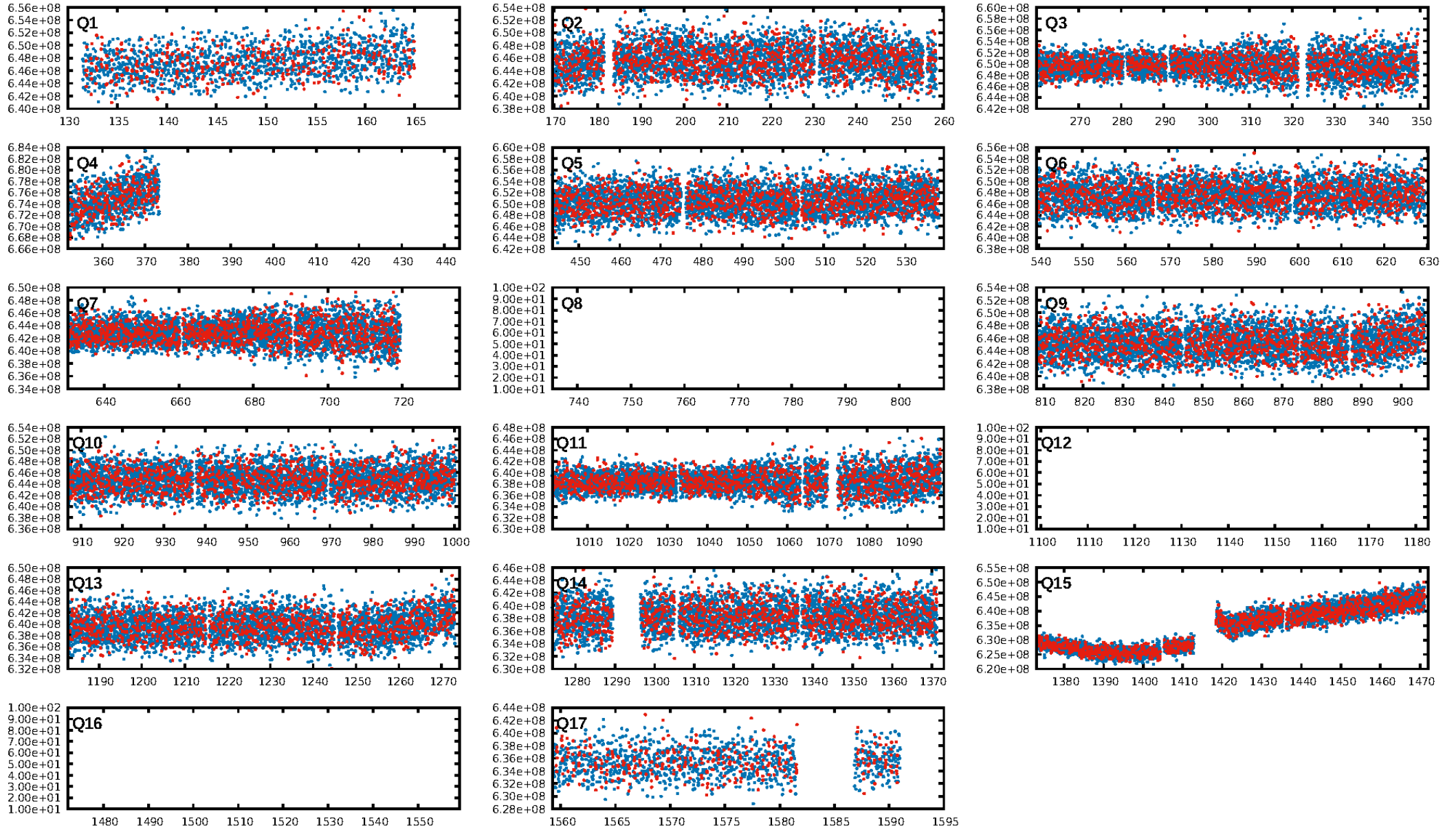
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.94 [1815/1931]
GhostDiagnostic-chr: 0.7643
Centroid-sig: 38.7%
Centroid-so: 0.124 arcsec [0.95σ]
OotOffset-rm: 1.371 arcsec [2.74σ]
OotOffset-st: 4/4/1/4 [13]
KicOffset-rm: 1.512 arcsec [3.17σ]
KicOffset-st: 4/4/1/4 [13]
DiffImageQuality-fgm: 0.85 [11/13]
DiffImageOverlap-fno: 0.00 [0/14]

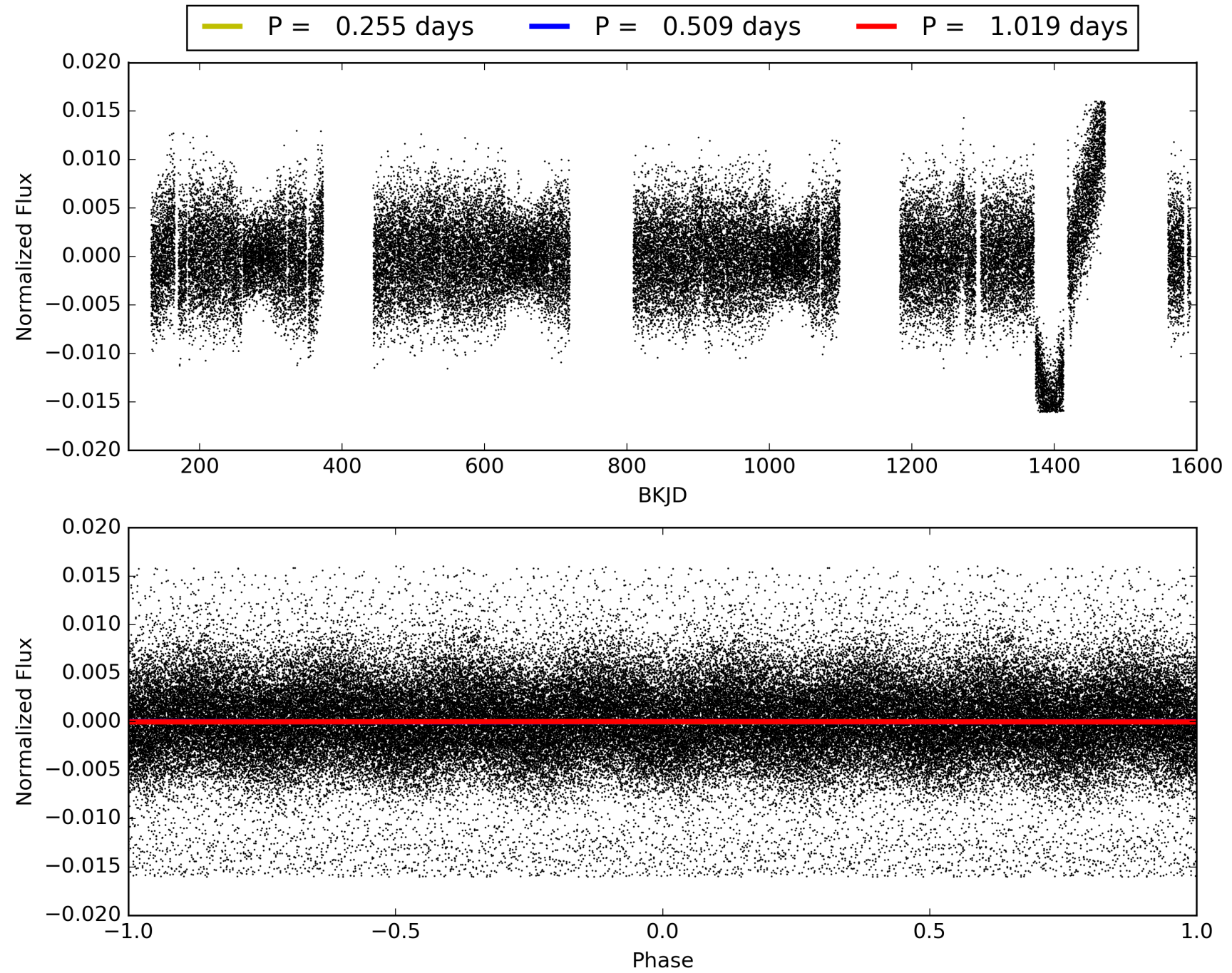
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 07:07:45 Z

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

TCE 011288686-03, PDC Light Curves

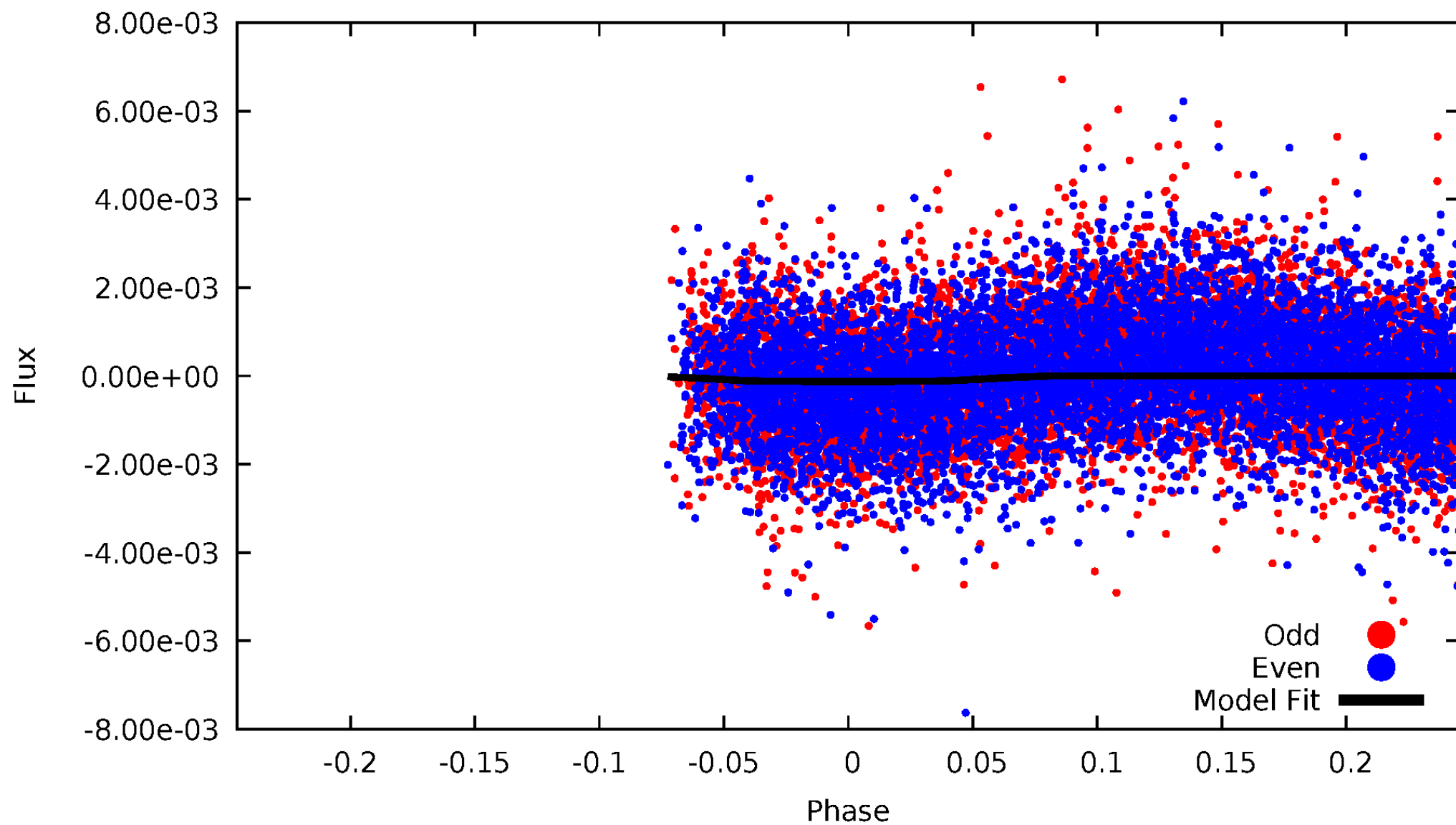


TCE 011288686-03



DV Odd/Even

TCE 011288686-03

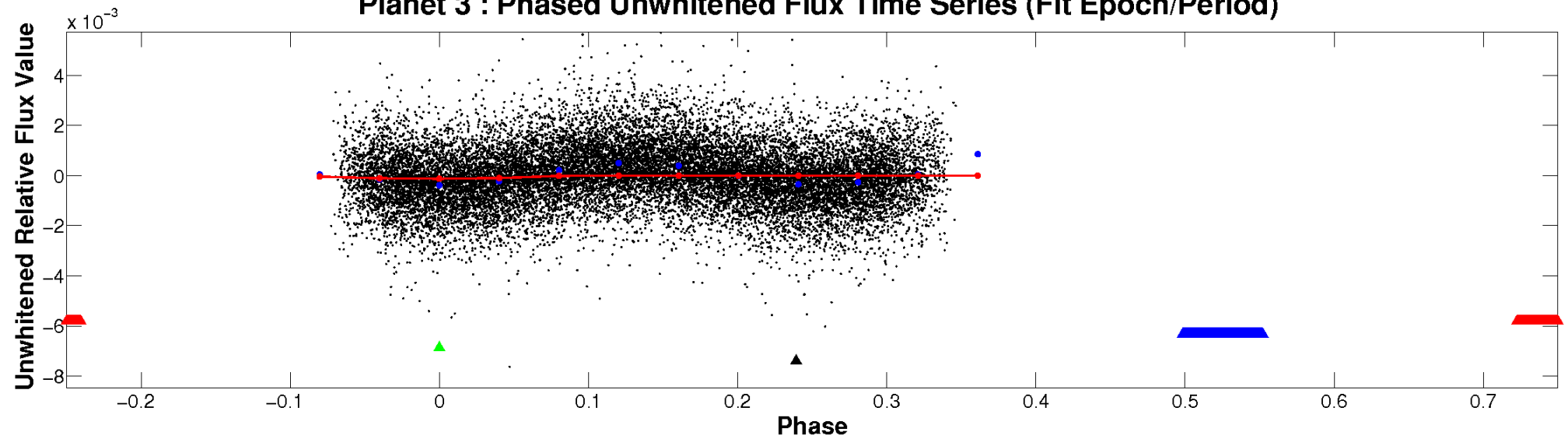


ALT Odd/Even

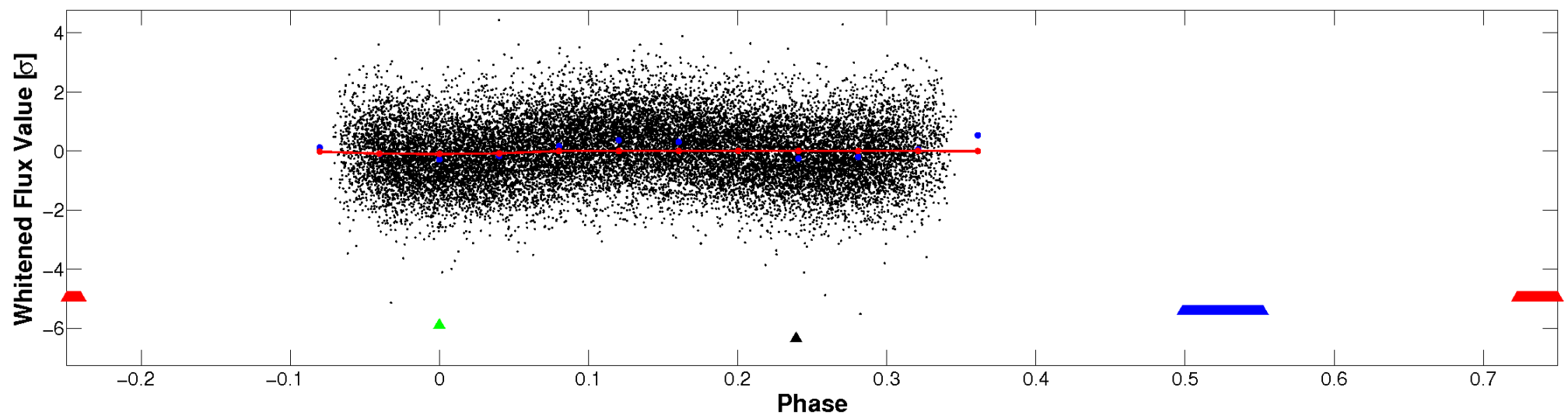
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

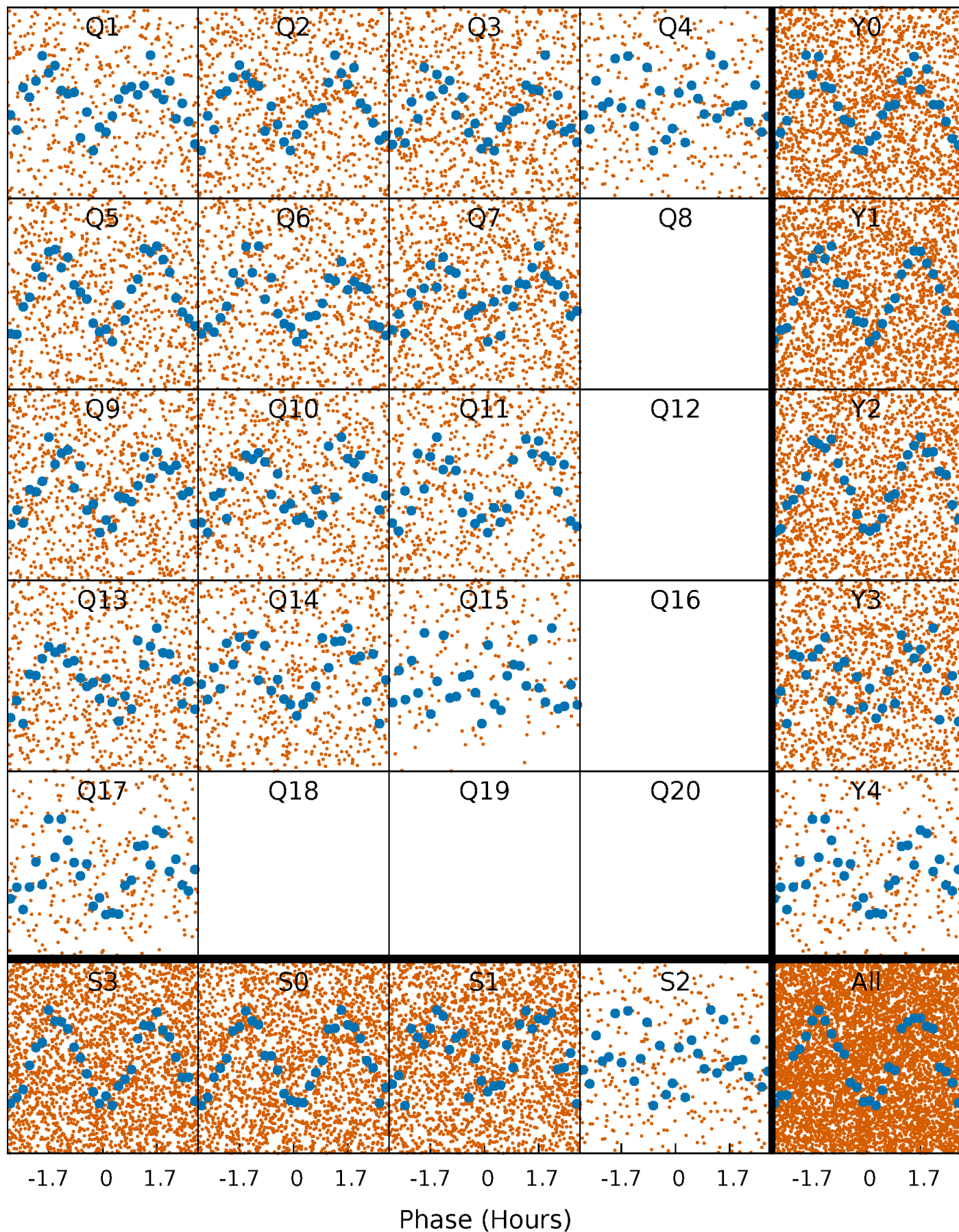


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



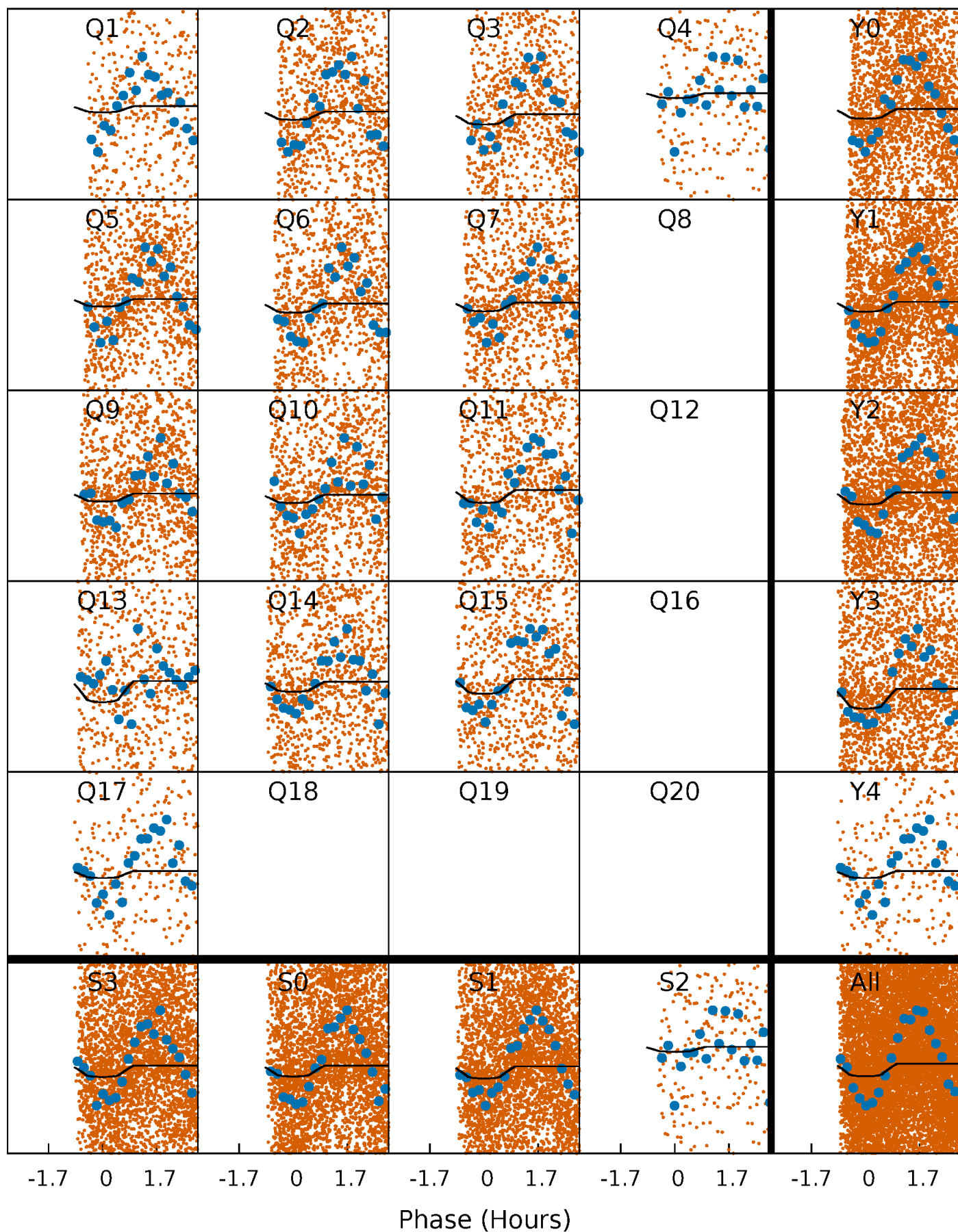
PDC Quarter-Phased Transit Curves

TCE 011288686-03 P= 0.509369 Days $T_0=131.873494$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011288686-03 P= 0.509369 Days $T_0=131.873494$ (BKJD)

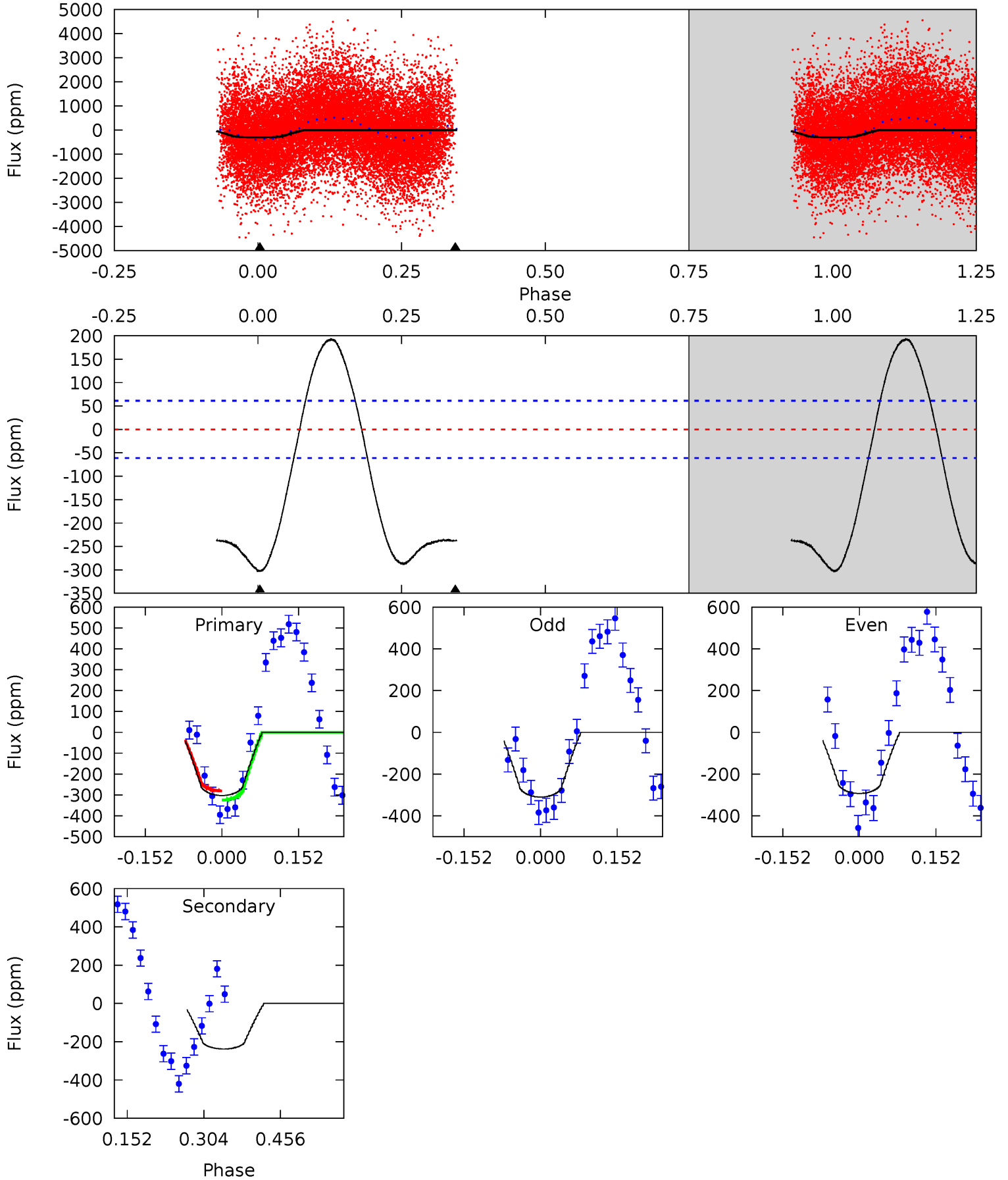


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011288686-03, P = 0.509369 Days, E = 131.364125 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.2	17.4	0	0	4.48	1.43	4.75	22.2	22.2	17.4	17.4	0.62	1.06	0.39	1.54



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011288686

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7063^{+197}_{-338}	$4.218^{+0.090}_{-0.210}$	$0.070^{+0.200}_{-0.350}$	$1.567^{+0.553}_{-0.237}$	$1.480^{+0.214}_{-0.214}$	$0.541^{+0.228}_{-0.305}$
	+3%/-5%	+2%/-5%	+286%/-500%	+35%/-15%	+14%/-14%	+42%/-56%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011288686-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-238 ± 14	$2.96^{+2.45}_{-1.87}$	4621^{+370}_{-294}	6723^{+6344}_{-2150}	$3.013^{+19.087}_{-2.118}$
Alt.	N/A	N/A	N/A	N/A	N/A

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

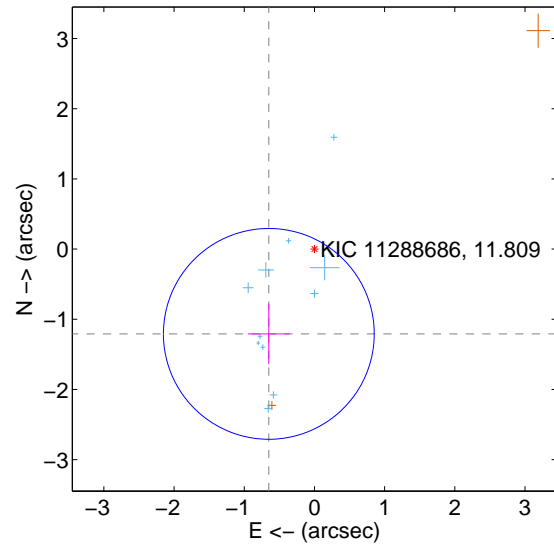
Supplemental centroid analysis for 011288686-03. **Kepler magnitude: 11.81.** Transit SNR 6.85

There are 11 quarters with good PRF difference image offsets

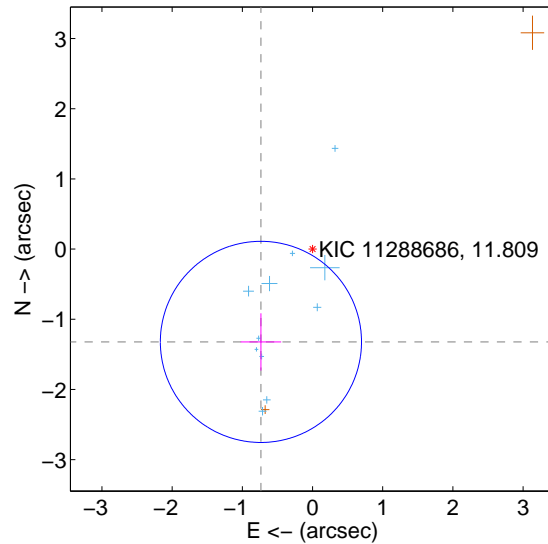
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.371 ± 0.500	2.74	0.650 ± 0.297	-1.208 ± 0.430
PRF-fit source offset from KIC position	1.512 ± 0.478	3.17	0.735 ± 0.289	-1.322 ± 0.408
photometric centroid source offset	0.12 ± 0.13	0.95	-0.11 ± 0.13	-0.05 ± 0.15

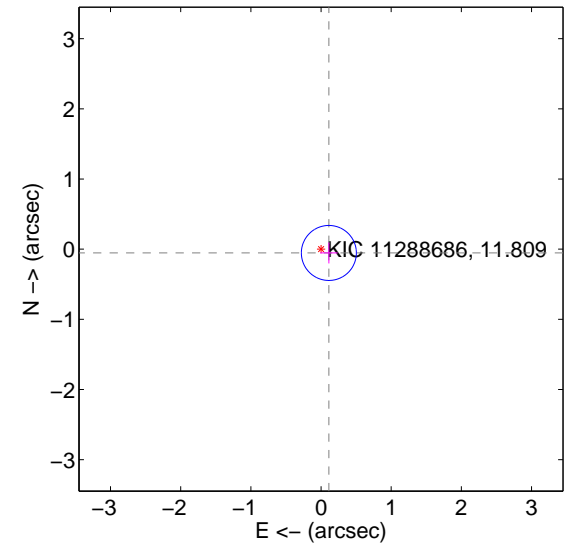
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

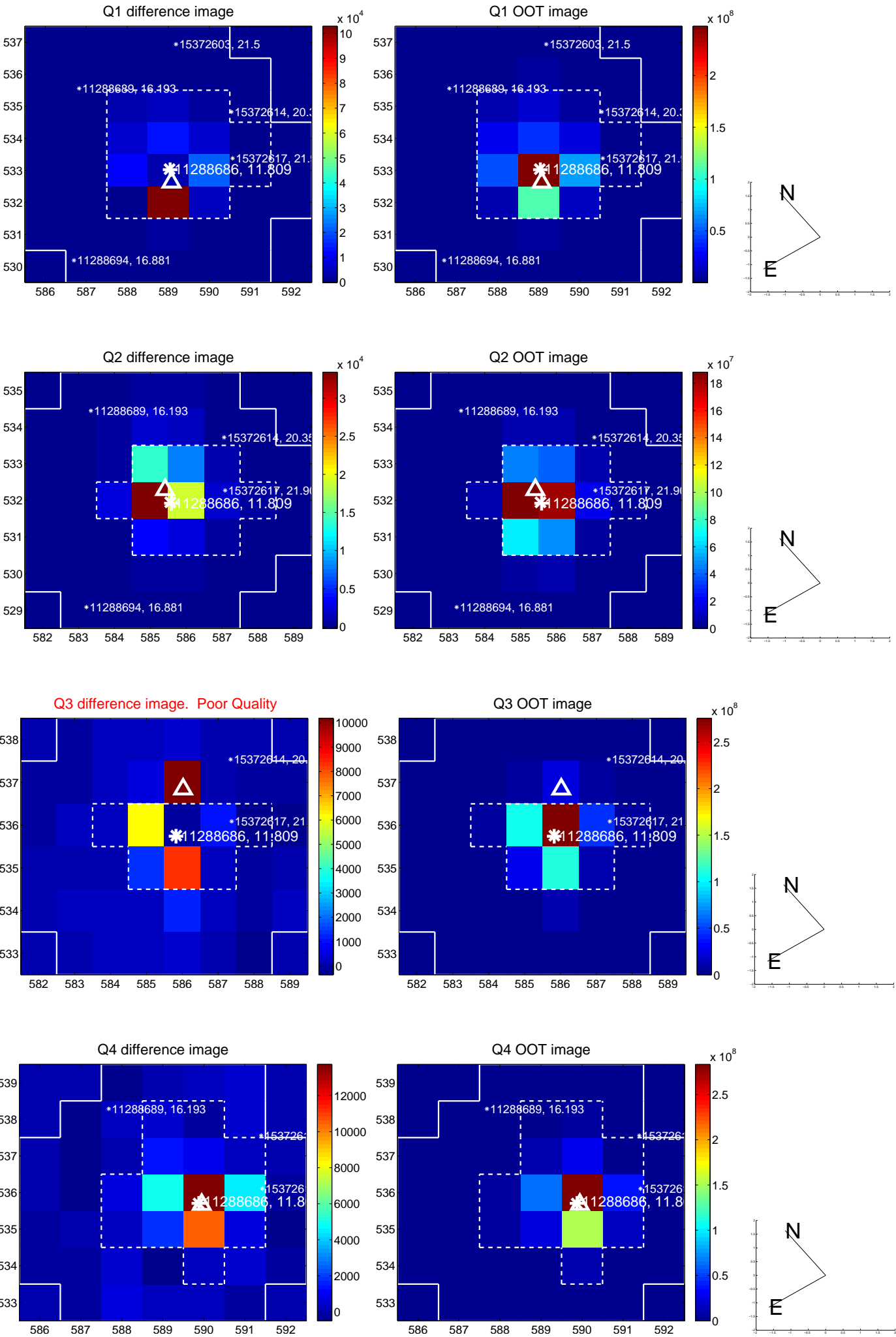


offset from photometric centroids

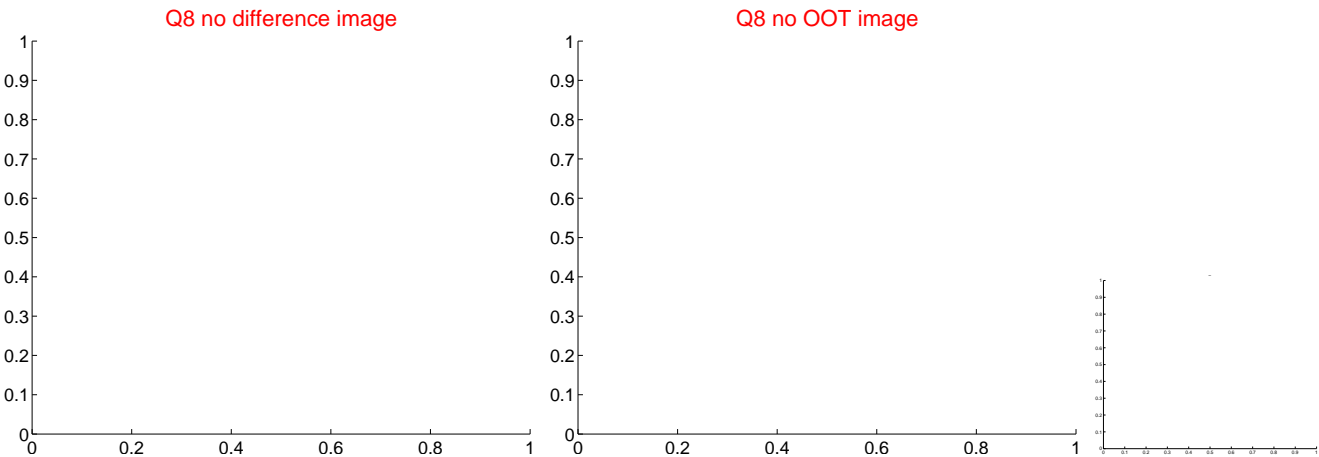
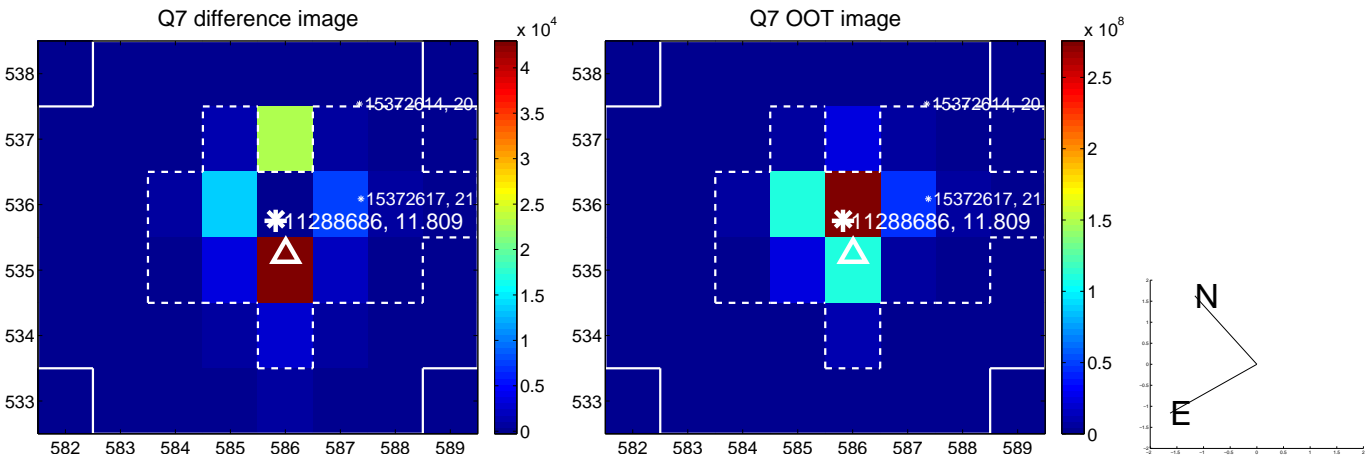
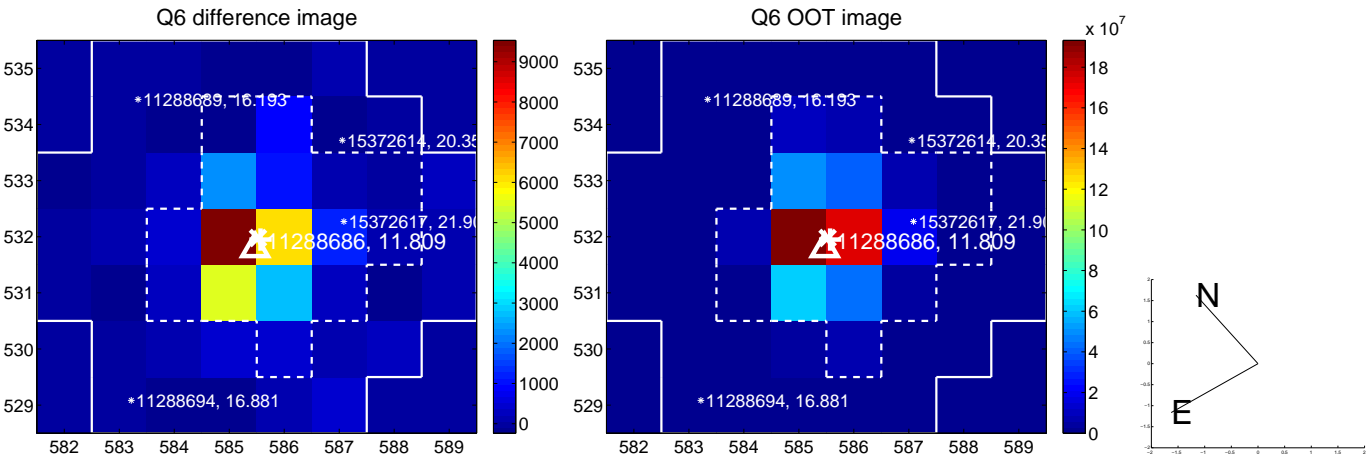
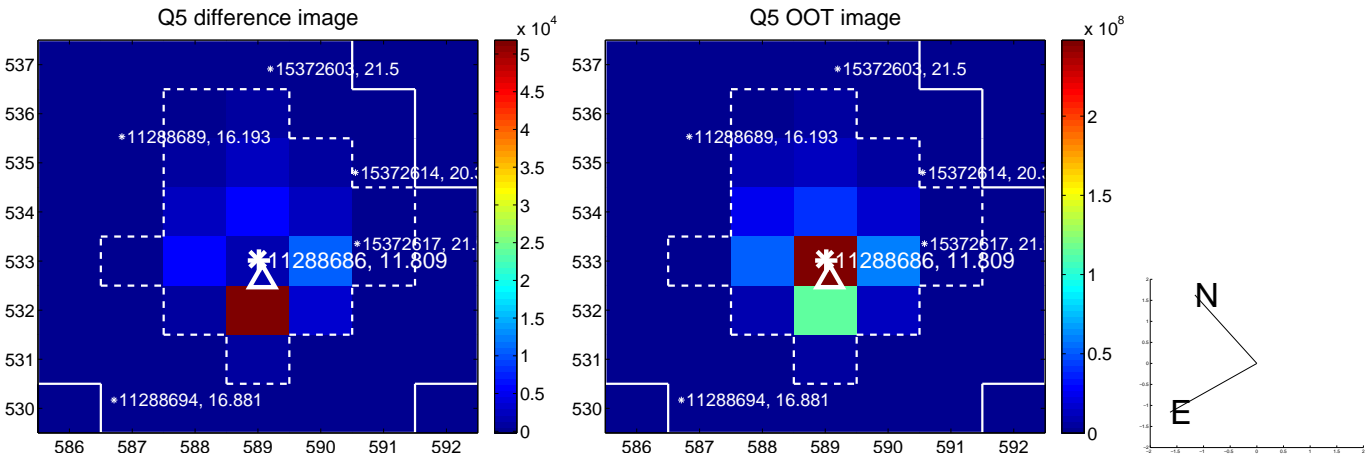


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

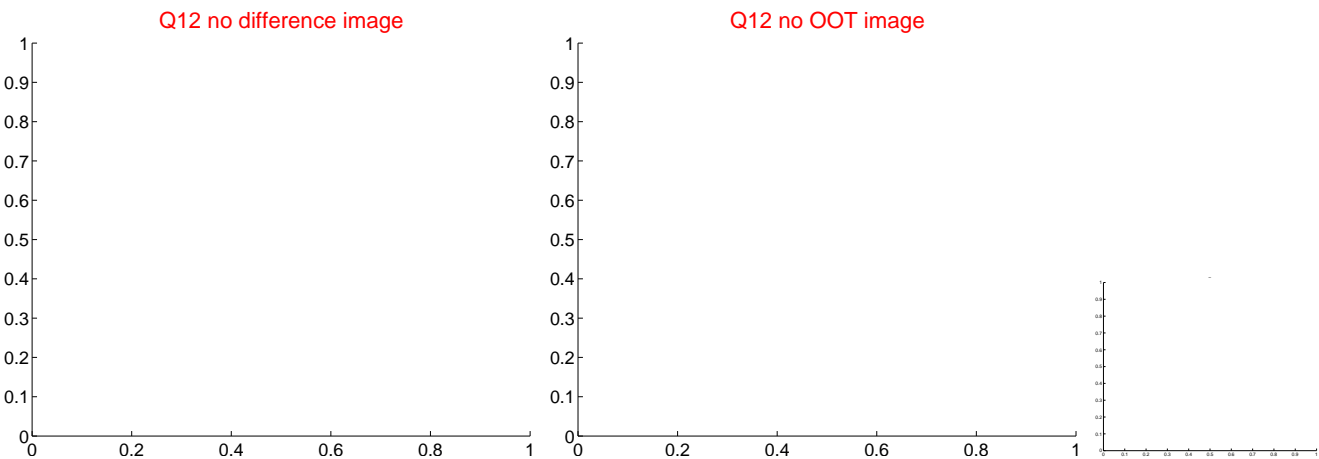
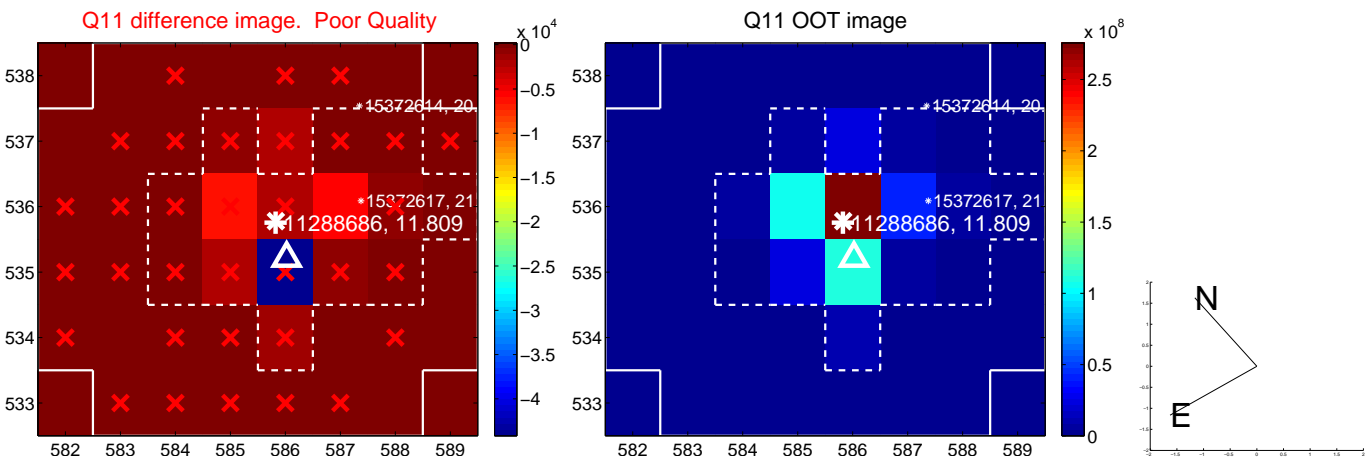
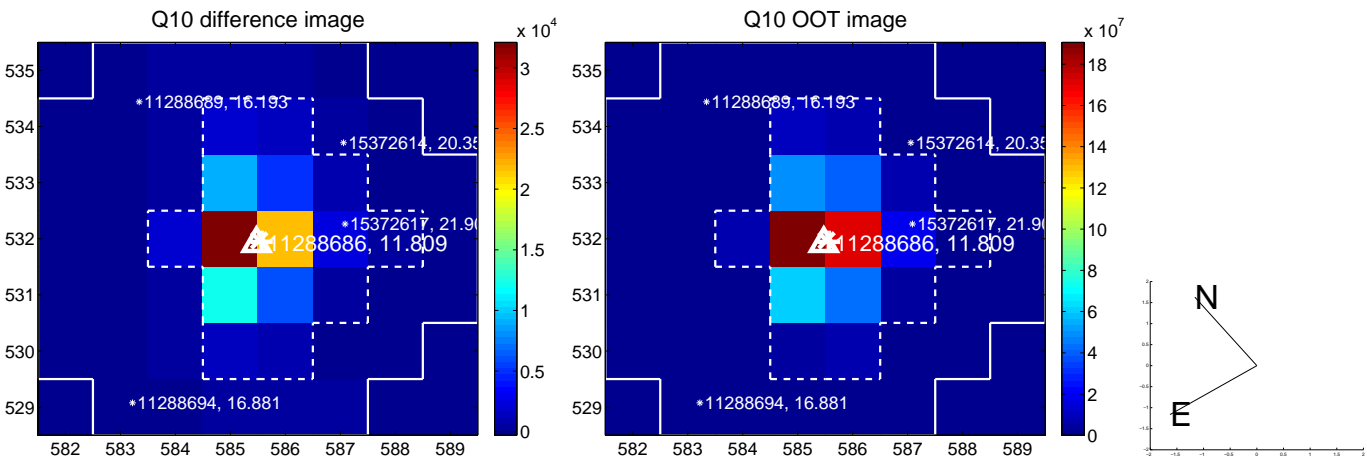
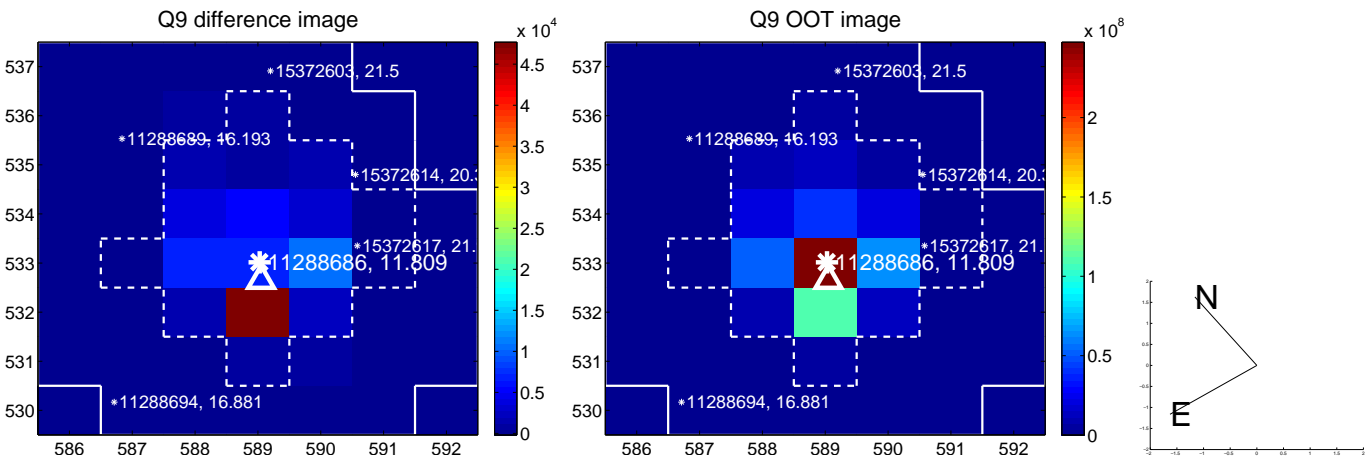
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



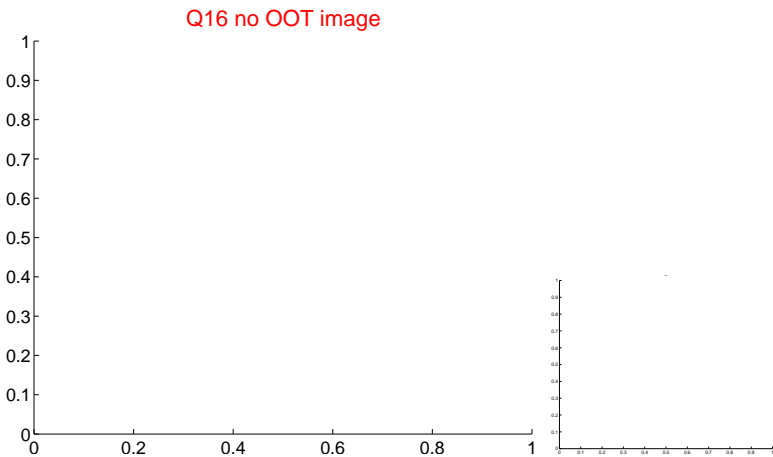
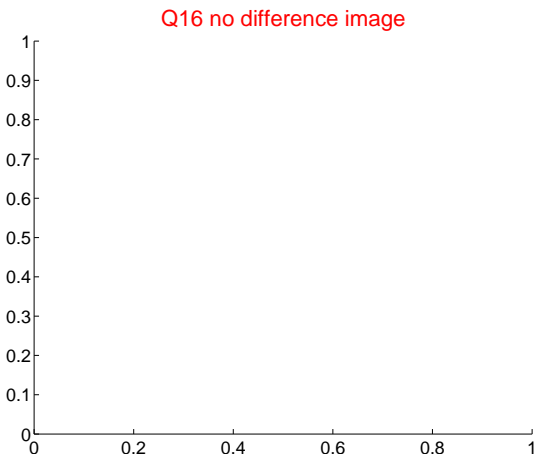
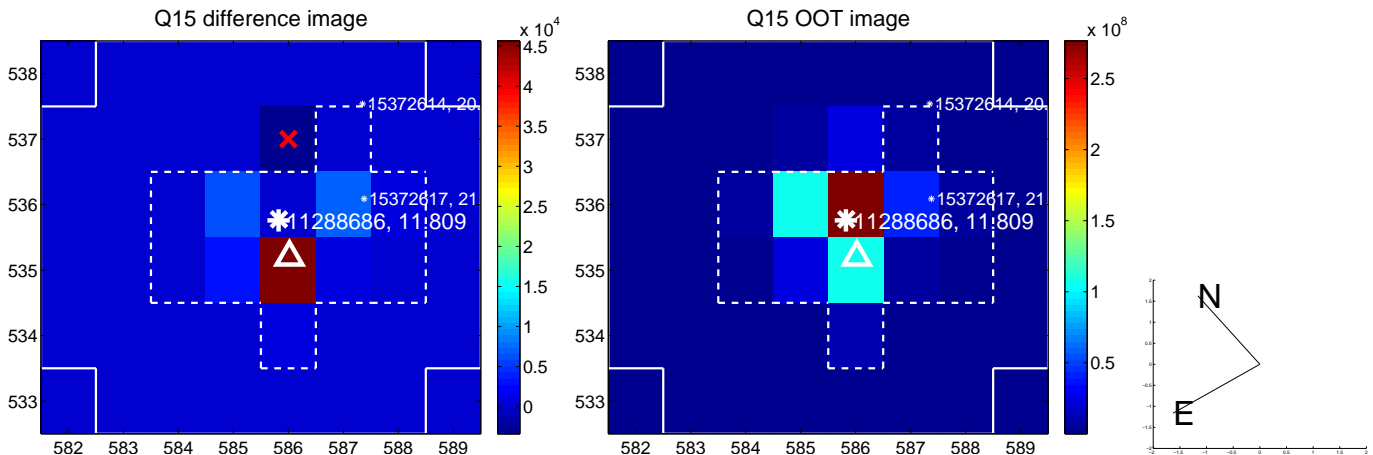
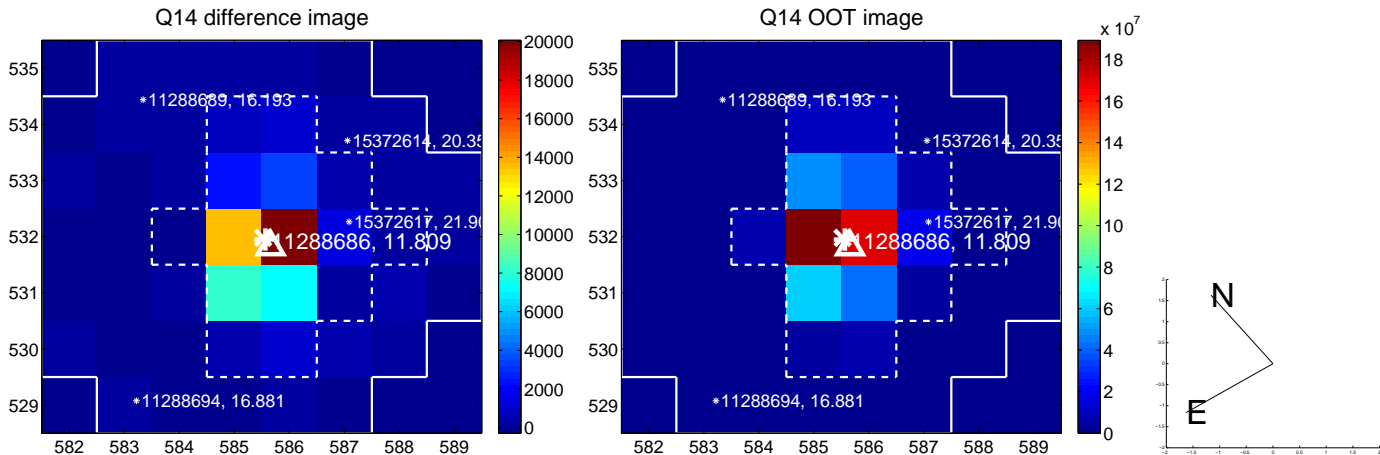
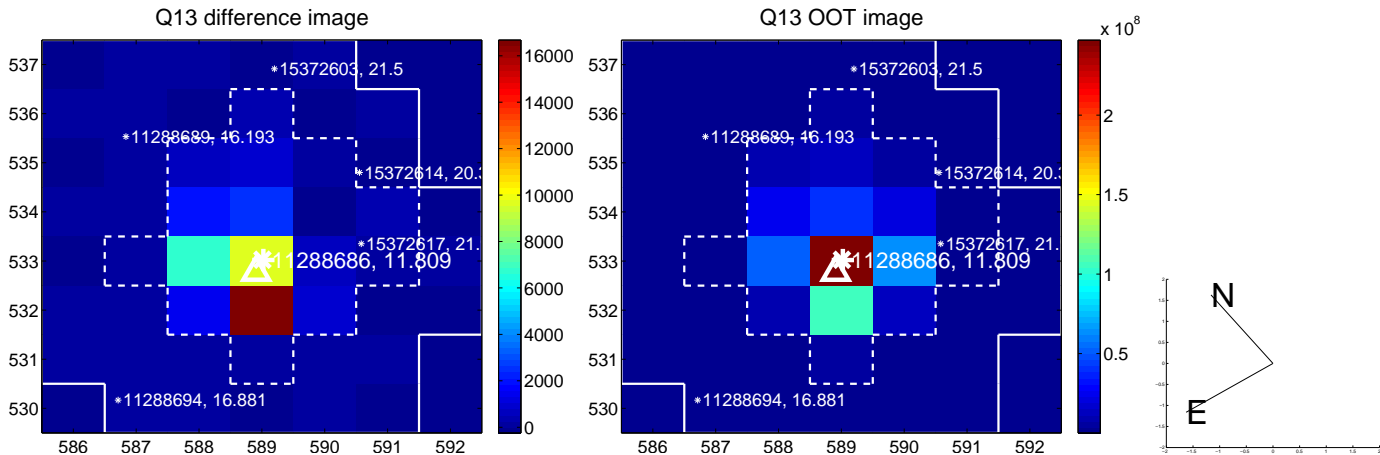
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



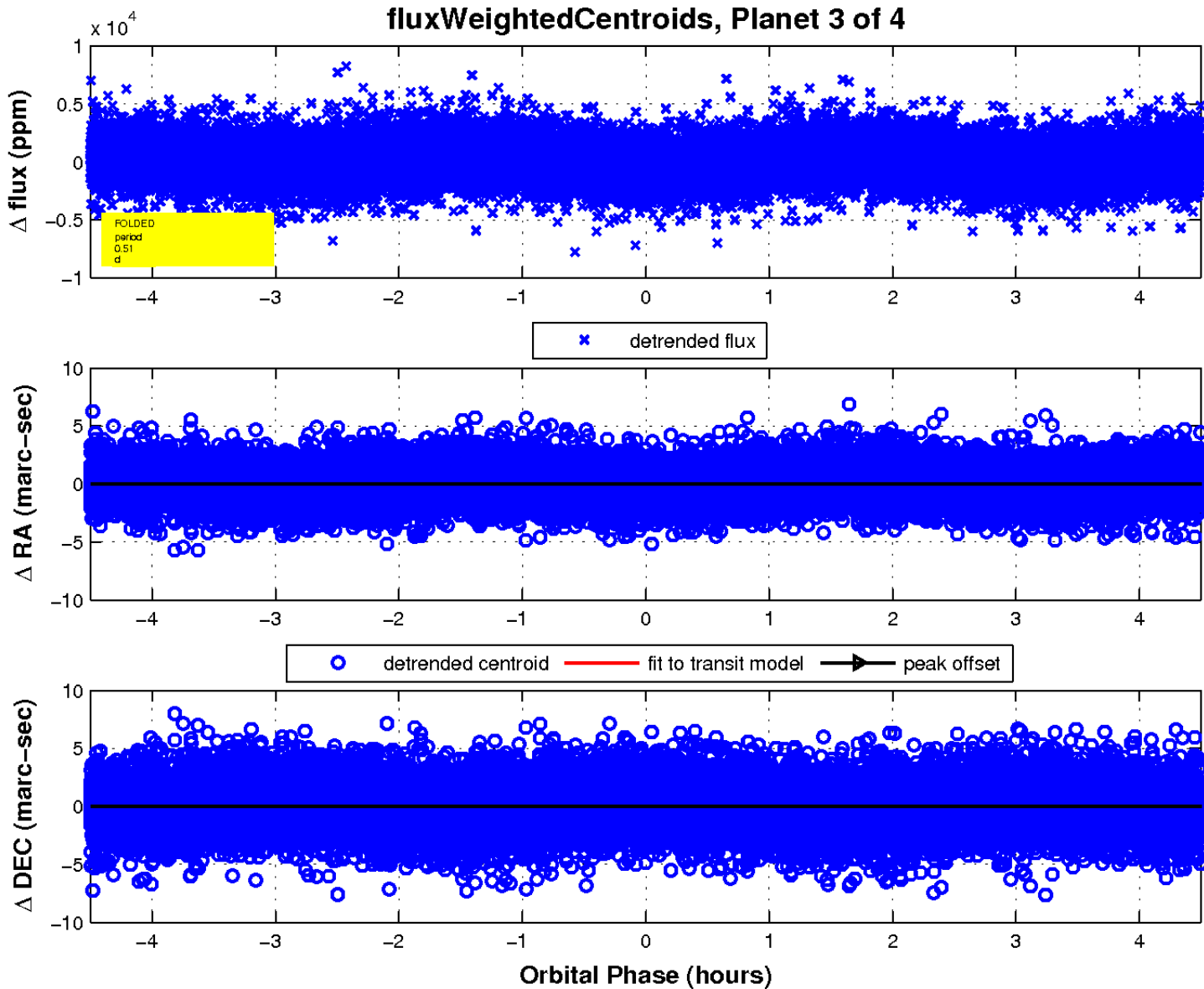
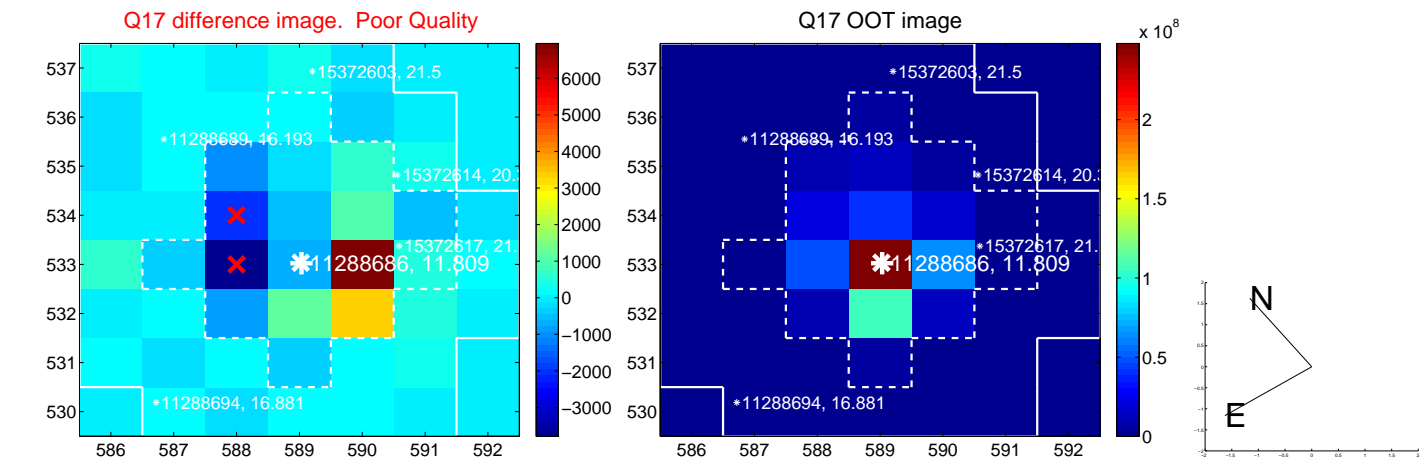
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



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

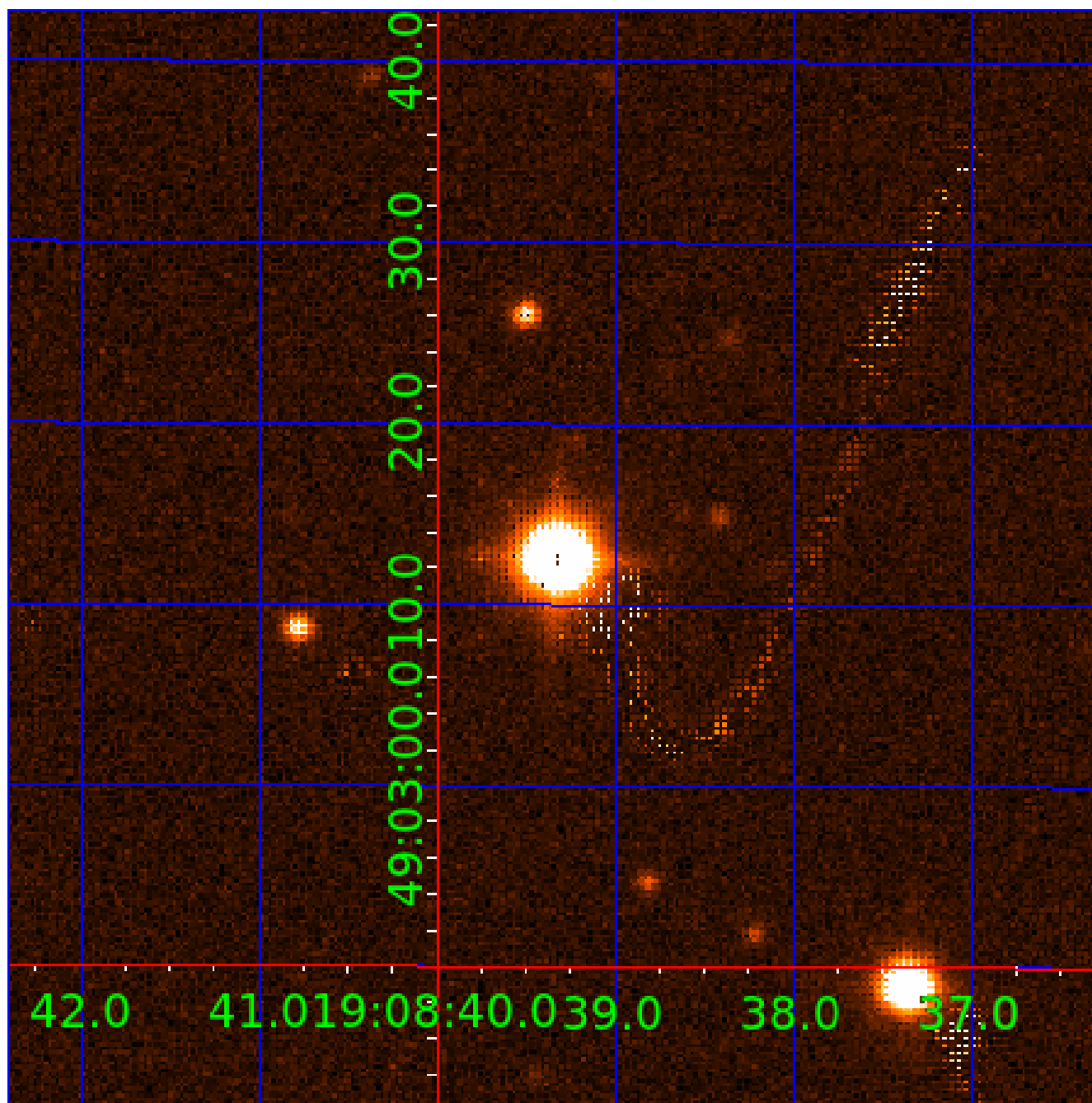


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011288686

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})
011288686-01	OBS	No	0.509362	131.750988	321.9	1.426	13.5	15.4	1.57	7063	3.28	27051.70
011288686-02	OBS	No	0.509379	131.617993	532.1	0.976	12.9	19.4	1.57	7063	3.69	27050.56
011288686-03	OBS	No	0.509369	131.873494	123.6	1.500	11.8	6.9	1.57	7063	1.77	27051.24
011288686-04	OBS	No	0.509369	131.995369	120.1	1.500	11.1	-1.0	1.57	7063	1.74	27051.24

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011288686-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011288686-02	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—SAME_NTL_PERIOD—CENT_UNRESOLVED_OFFSET
011288686-03	OBS	FP	0.00	1	0	0	0	LPP_DV—SAME_NTL_PERIOD
011288686-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—LPP_DV—NO_FITS—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.

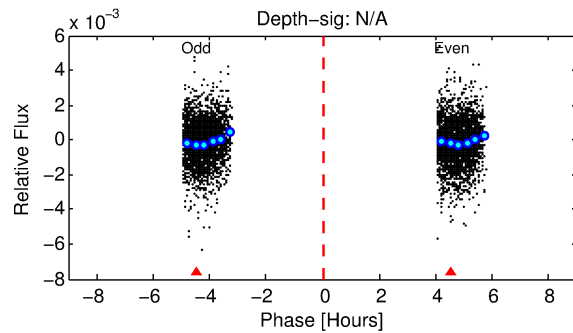
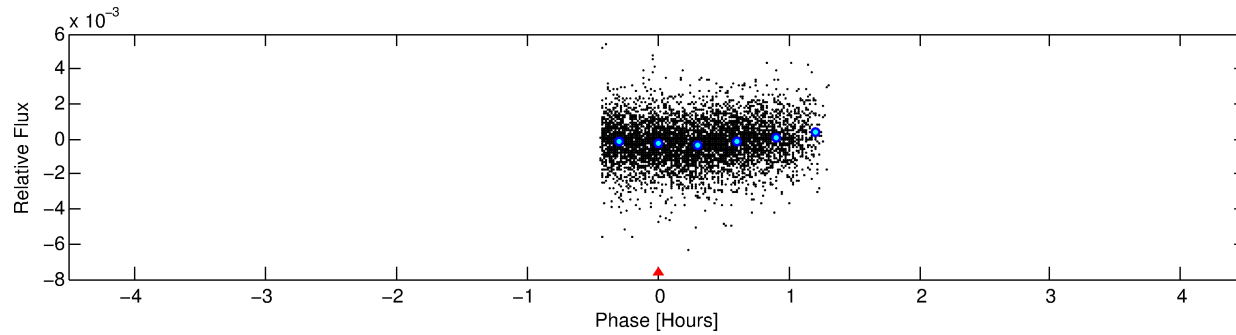
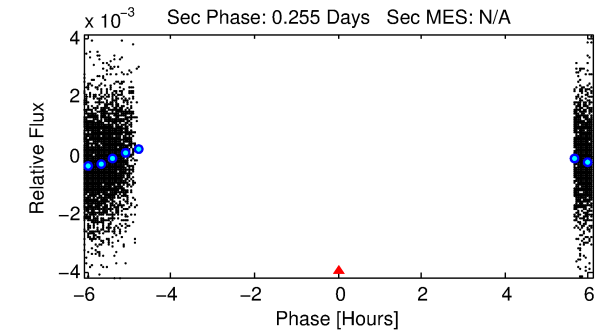
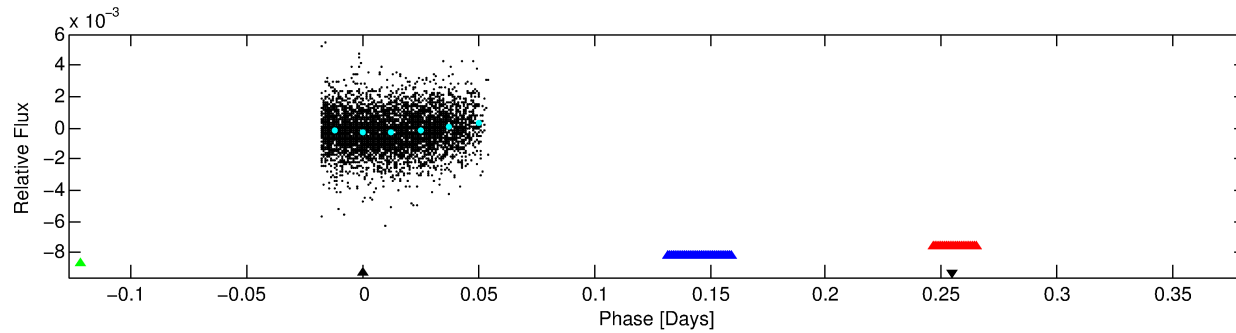
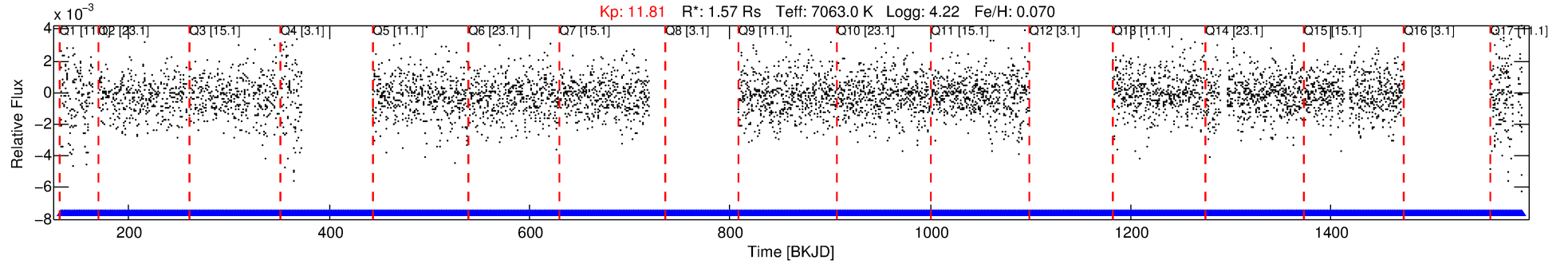
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011288686-04

No Significant Match Found

DV One-Page Summary

KIC: 11288686 Candidate: 4 of 4 Period: 0.509 d



TPS TCE Results:

Period = 0.50937 d
Epoch = 131.9954 BKJD

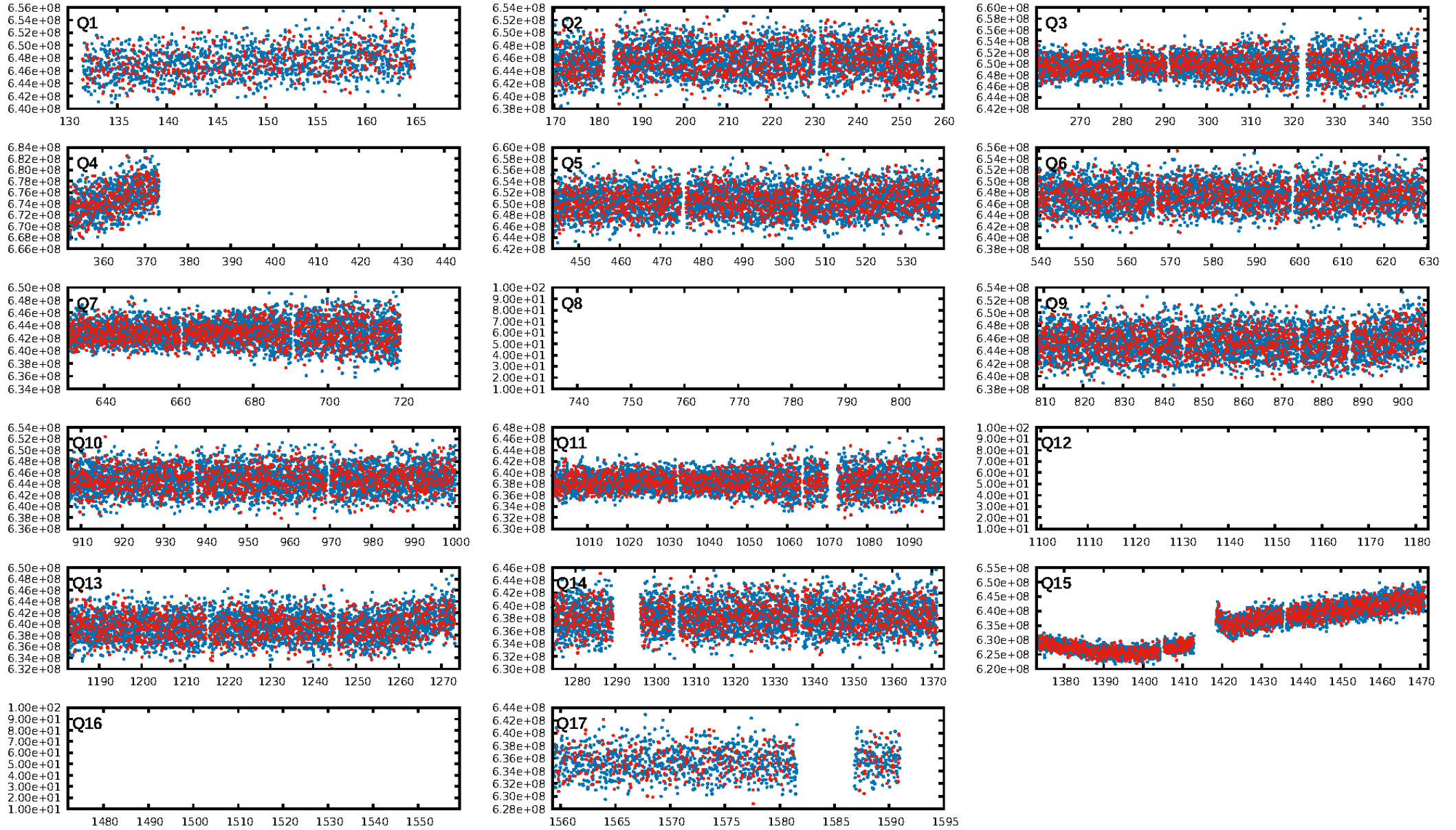
DV fit results are unavailable

DV Diagnostic Results:

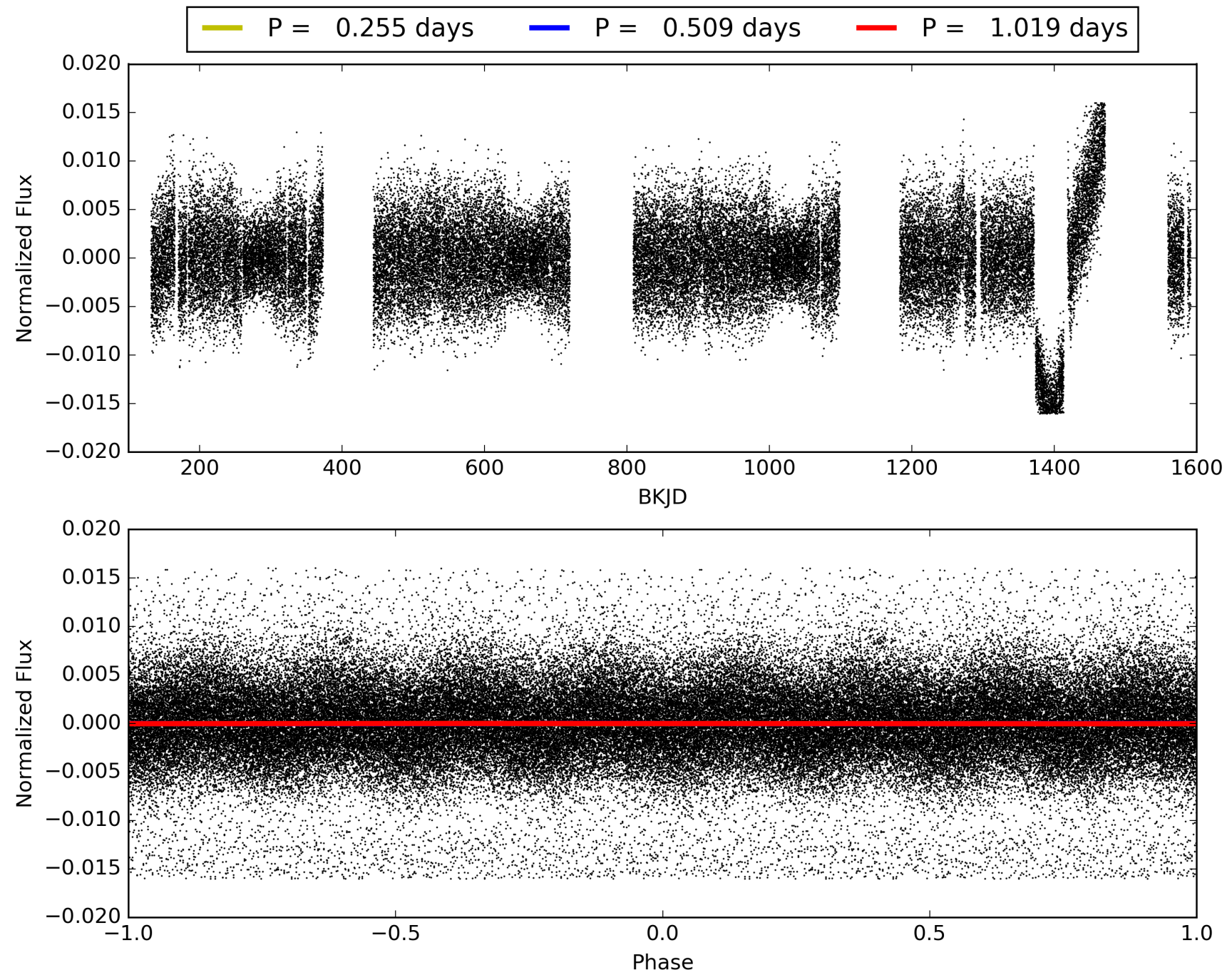
ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: N/A
GhostDiagnostic-chr: N/A

Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0 [0]
KicOffset-st: 0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: N/A

TCE 011288686-04, PDC Light Curves

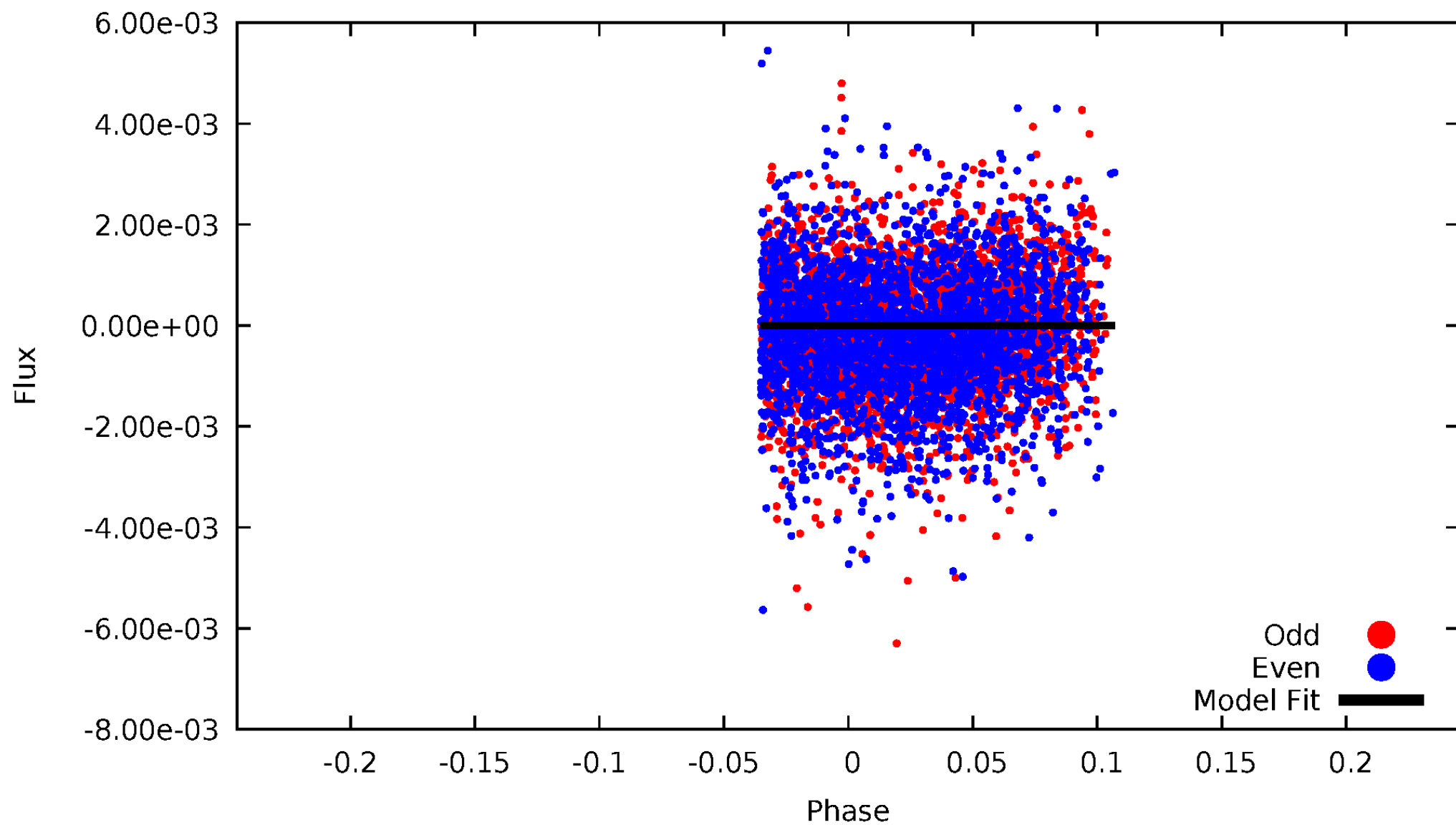


TCE 011288686-04



DV Odd/Even

TCE 011288686-04

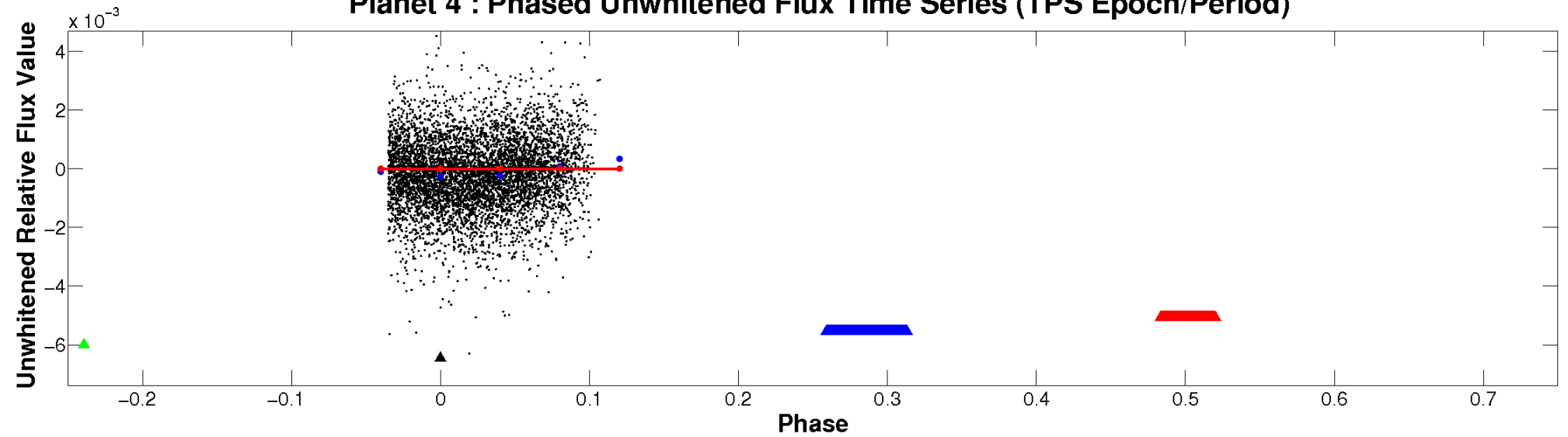


ALT Odd/Even

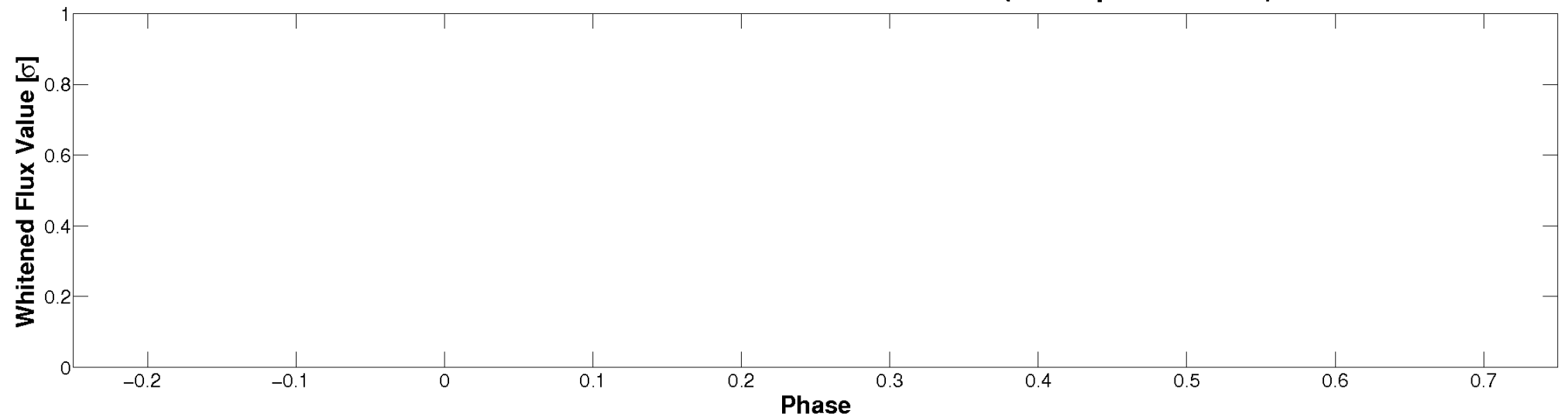
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

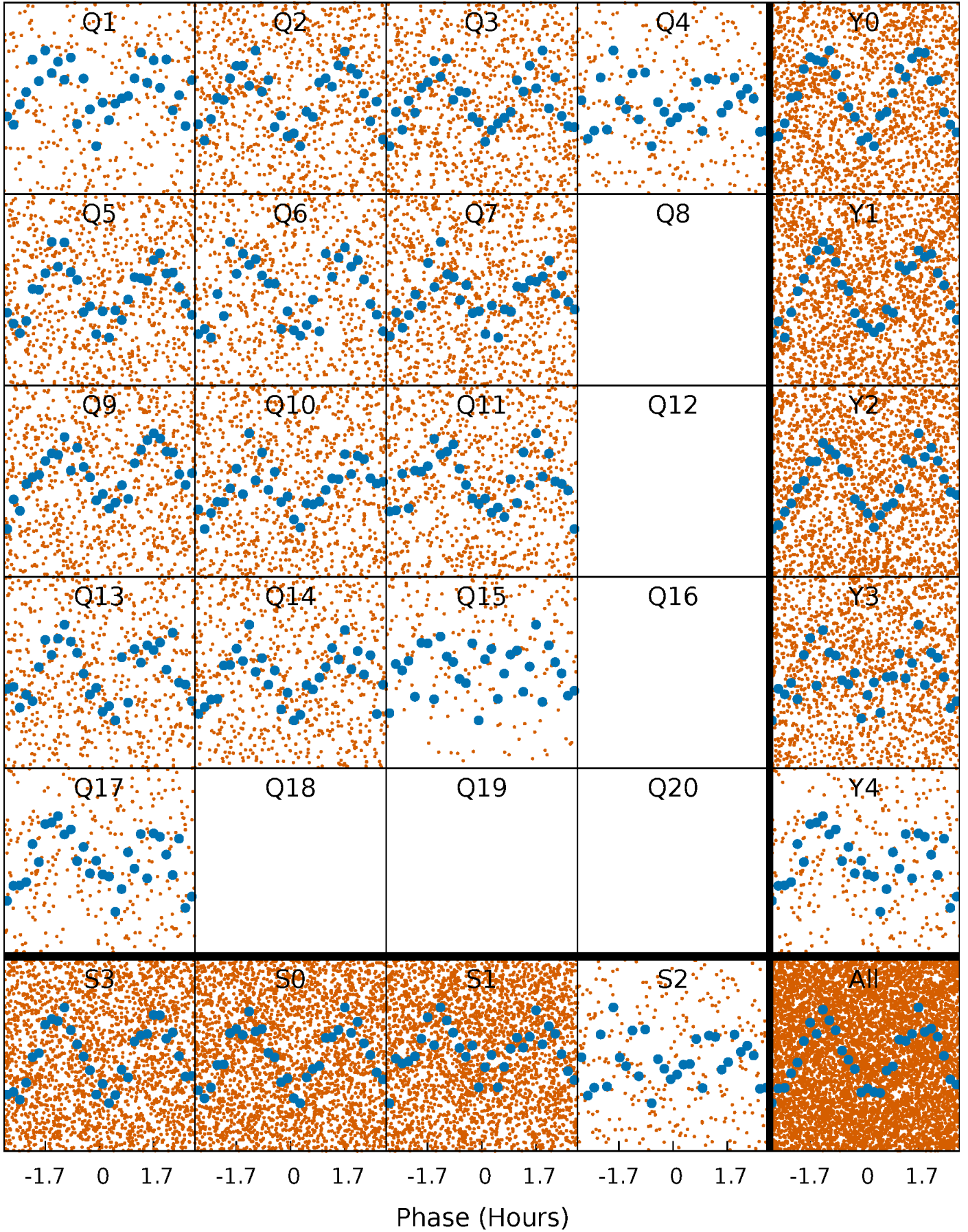


Planet 4 : Phased Whitened Flux Time Series (TPS Epoch/Period)



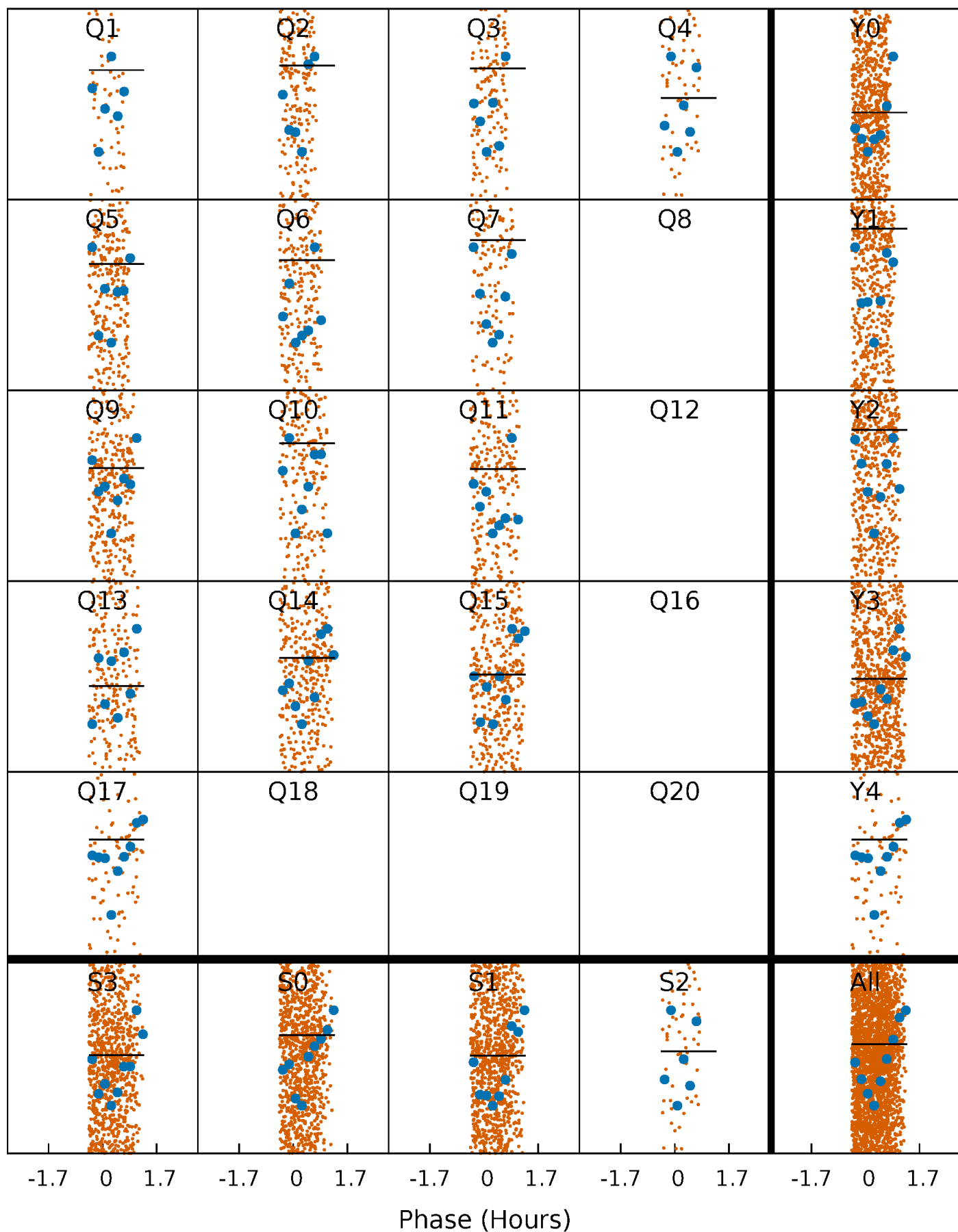
PDC Quarter-Phased Transit Curves

TCE 011288686-04 P= 0.509369 Days $T_0=131.995369$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011288686-04 P= 0.509369 Days $T_0=131.995369$ (BKJD)

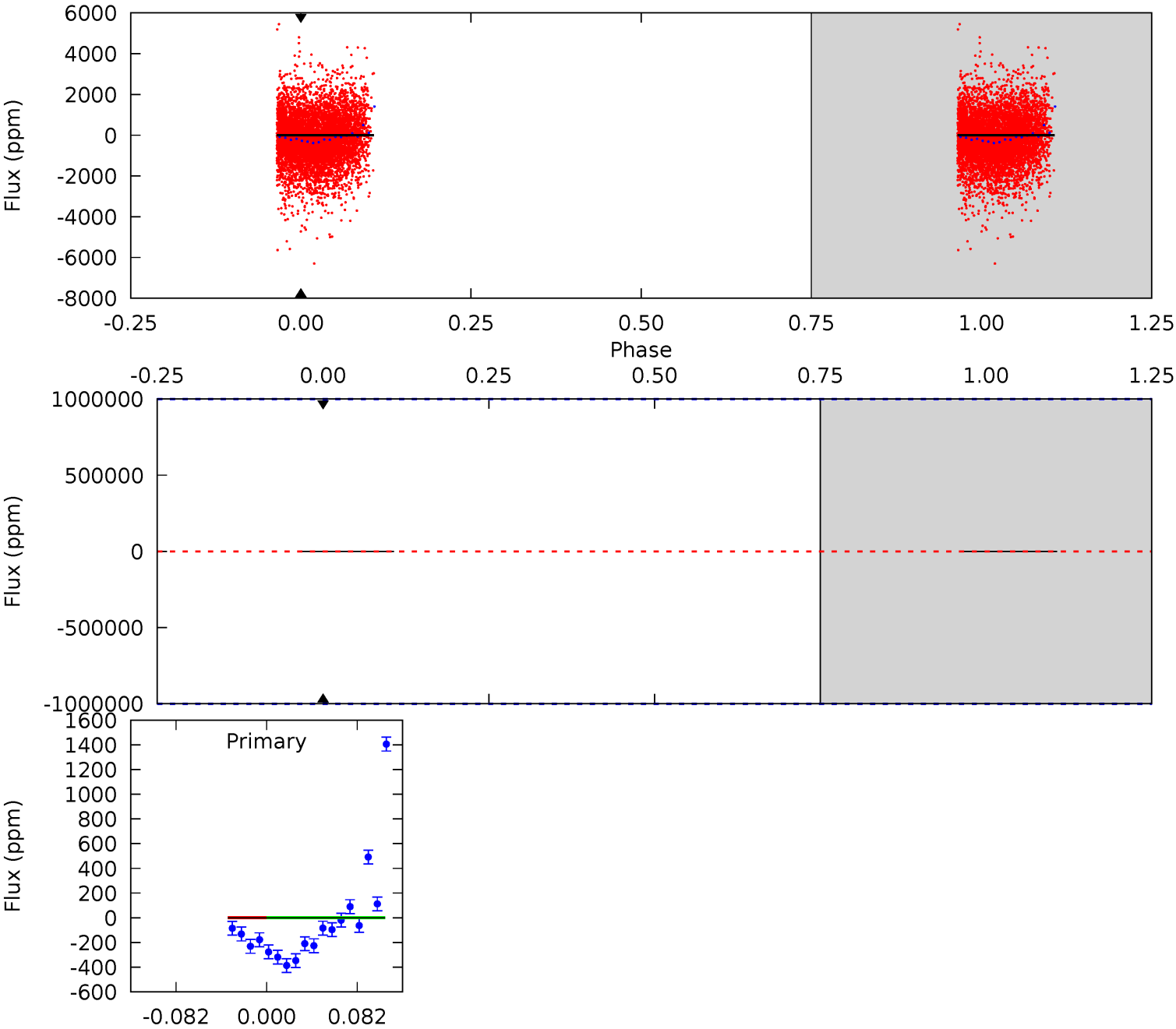


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011288686-04, P = 0.509369 Days, E = 131.486000 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

This plot does not exist for this TCE.

Stellar Parameters For KIC 011288686

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7063^{+197}_{-338}	$4.218^{+0.090}_{-0.210}$	$0.070^{+0.200}_{-0.350}$	$1.567^{+0.553}_{-0.237}$	$1.480^{+0.214}_{-0.214}$	$0.541^{+0.228}_{-0.305}$
	+3%/-5%	+2%/-5%	+286%/-500%	+35%/-15%	+14%/-14%	+42%/-56%
Source	PHO54	PHO54	PHO54	DSEP		

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

Secondary Eclipse Parameters for KIC 011288686-04 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$12.47^{+14.12}_{-8.57}$	4617^{+353}_{-284}	4600^{+37435}_{-33945}	$0.970^{+154.737}_{-89.554}$
Alt.	N/A	N/A	N/A	N/A	N/A

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 $A_{obs} \gg 1.0$

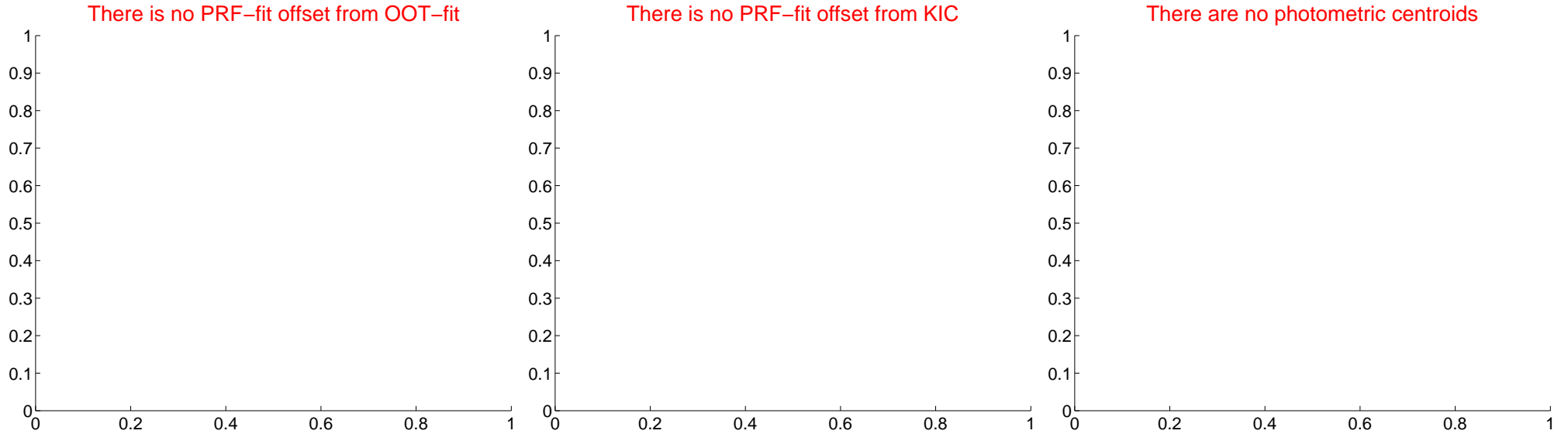
DV Centroid Data

Supplemental centroid analysis for 011288686-04. **Kepler magnitude: 11.81.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

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

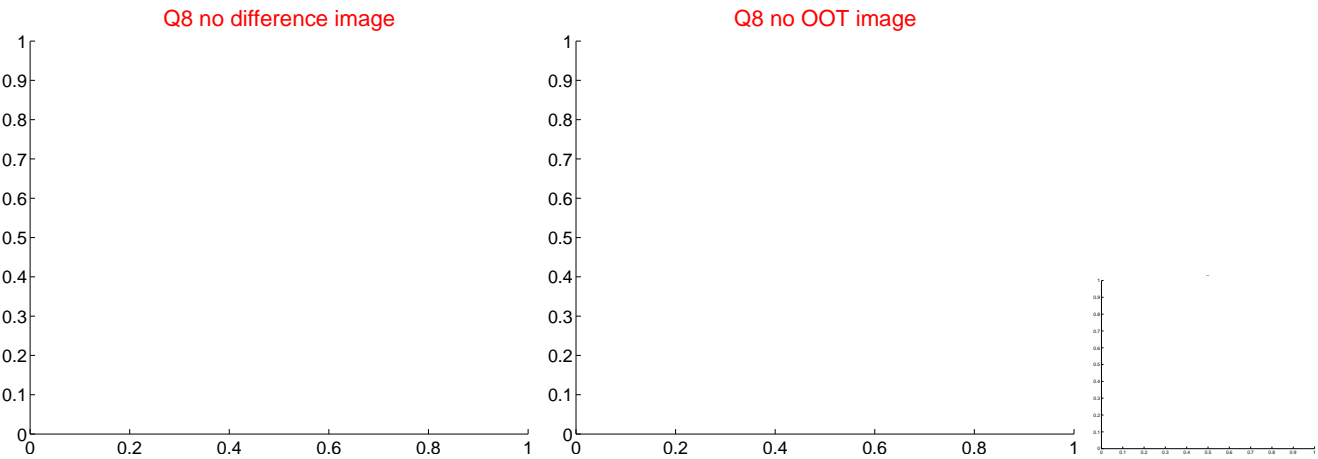
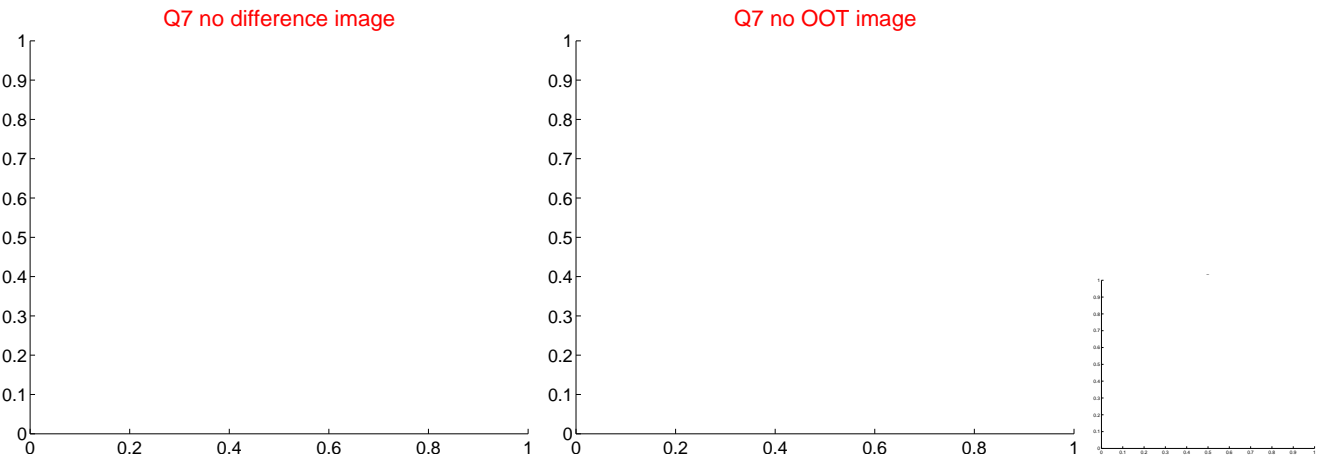
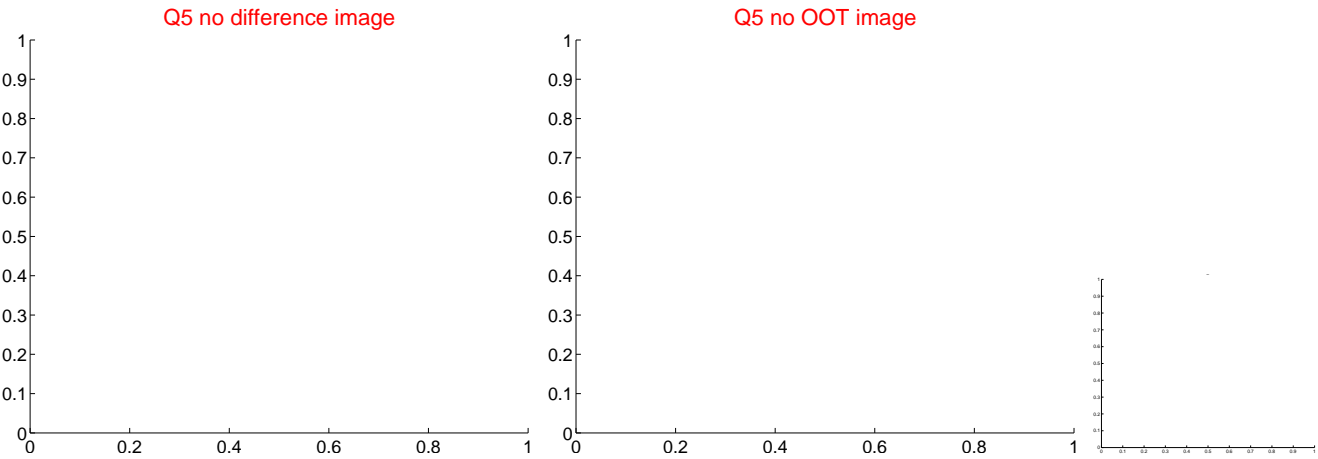


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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



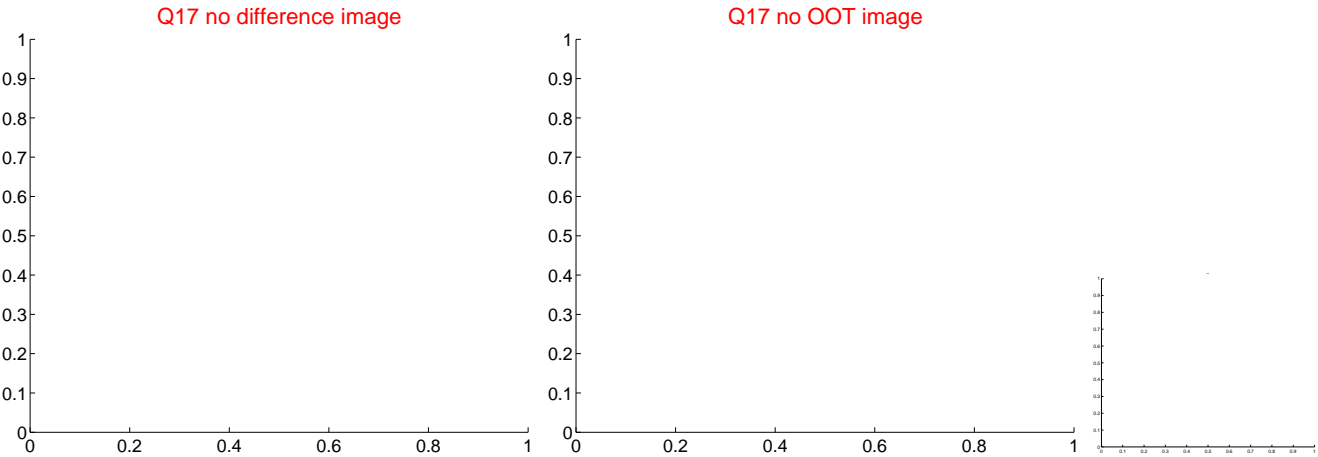
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.



folded centroid time series figure for this object.

UKIRT Image

Declination

