

KIC 003642713

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})
003642713-01	OBS	No	0.895549	132.120662	2.5	0.926	10.3	1.1	2.10	6889	0.39	21982.40
003642713-02	OBS	No	0.895578	132.499120	2.6	1.062	9.6	1.3	2.10	6889	0.39	21981.43
003642713-03	OBS	No	2.686660	134.117993	22.3	2.108	8.4	8.6	2.10	6889	1.00	5080.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003642713-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003642713-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
003642713-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD

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

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

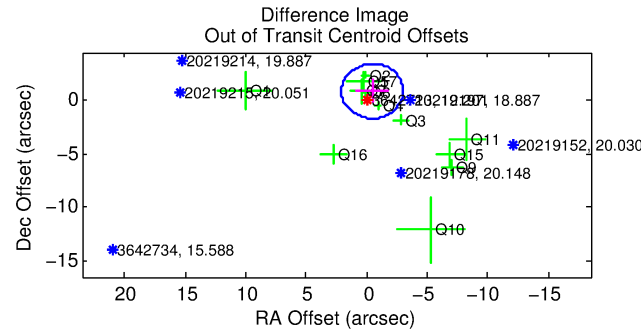
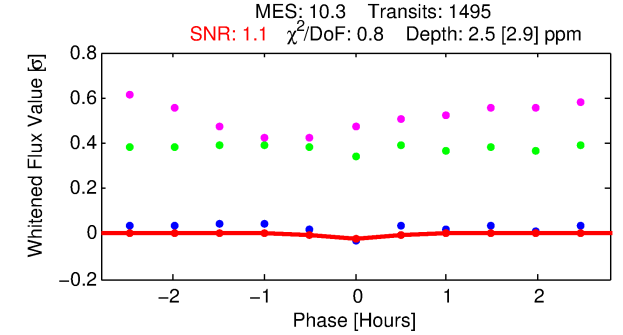
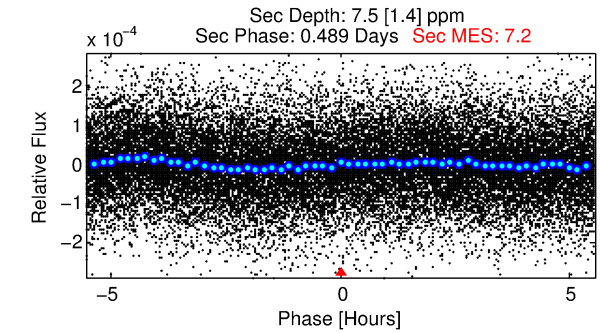
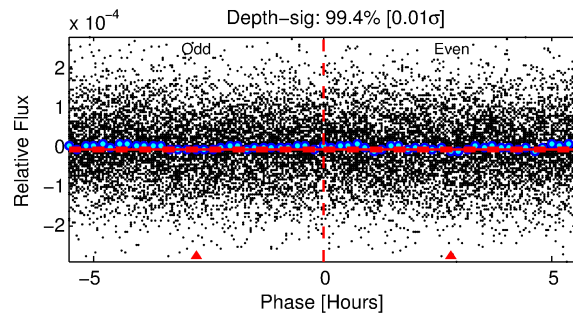
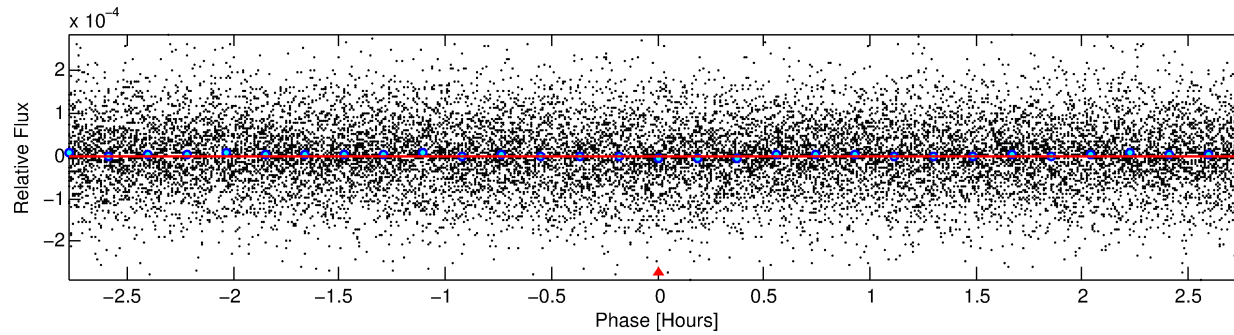
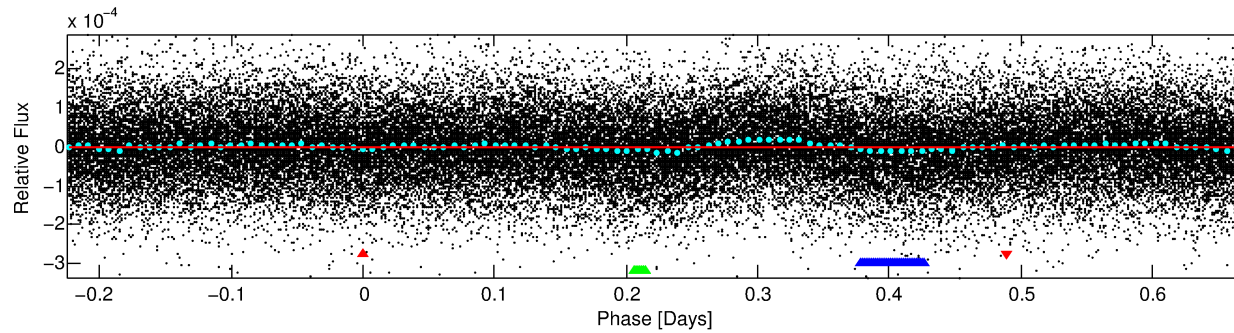
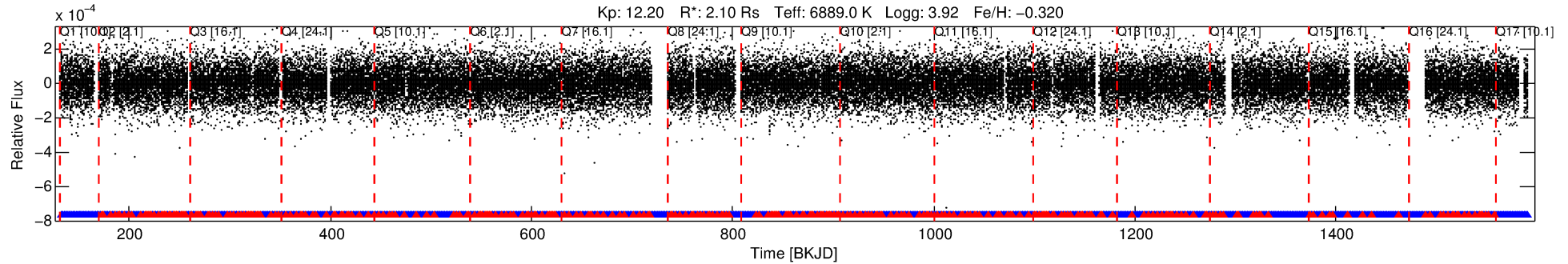
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003642713-01

No Significant Match Found

DV One-Page Summary

KIC: 3642713 Candidate: 1 of 3 Period: 0.896 d



DV Fit Results:

Period = 0.89555 [0.00009] d
Epoch = 132.1207 [0.0133] BKJD
Rp/R* = 0.0017 [0.0012]
a/R* = 3.37 [7.58]
b = 0.90 [0.52]
Seff = 21982.40 [9563.99]
Teq = 3105 [338] K
Rp = 0.39 [0.30] Re
a = 0.0201 [0.0055] AU
Ag = 11.22 [17.07] [0.60 σ]
Teffp = 8786 [3222] K [1.75 σ]

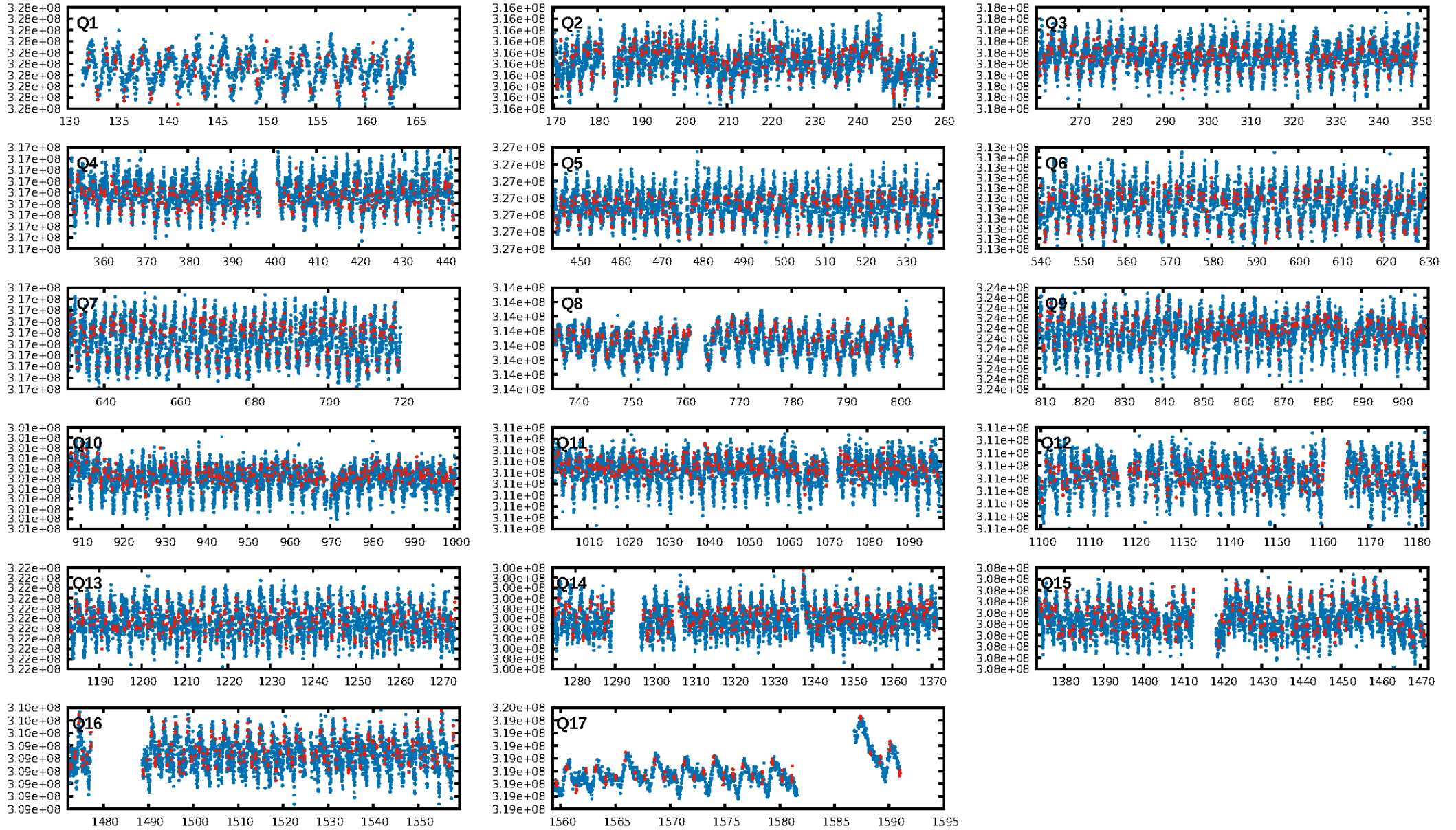
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.09e-19
RollingBand-fgt: 0.76 [1090/1428]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.977 arcsec [1.15 σ]
KicOffset-rm: 0.945 arcsec [1.14 σ]
OotOffset-st: 3/4/2/4 [13]
KicOffset-st: 3/4/2/4 [13]
DiffImageQuality-fgm: 0.23 [3/13]
DiffImageOverlap-fno: 1.00 [17/17]

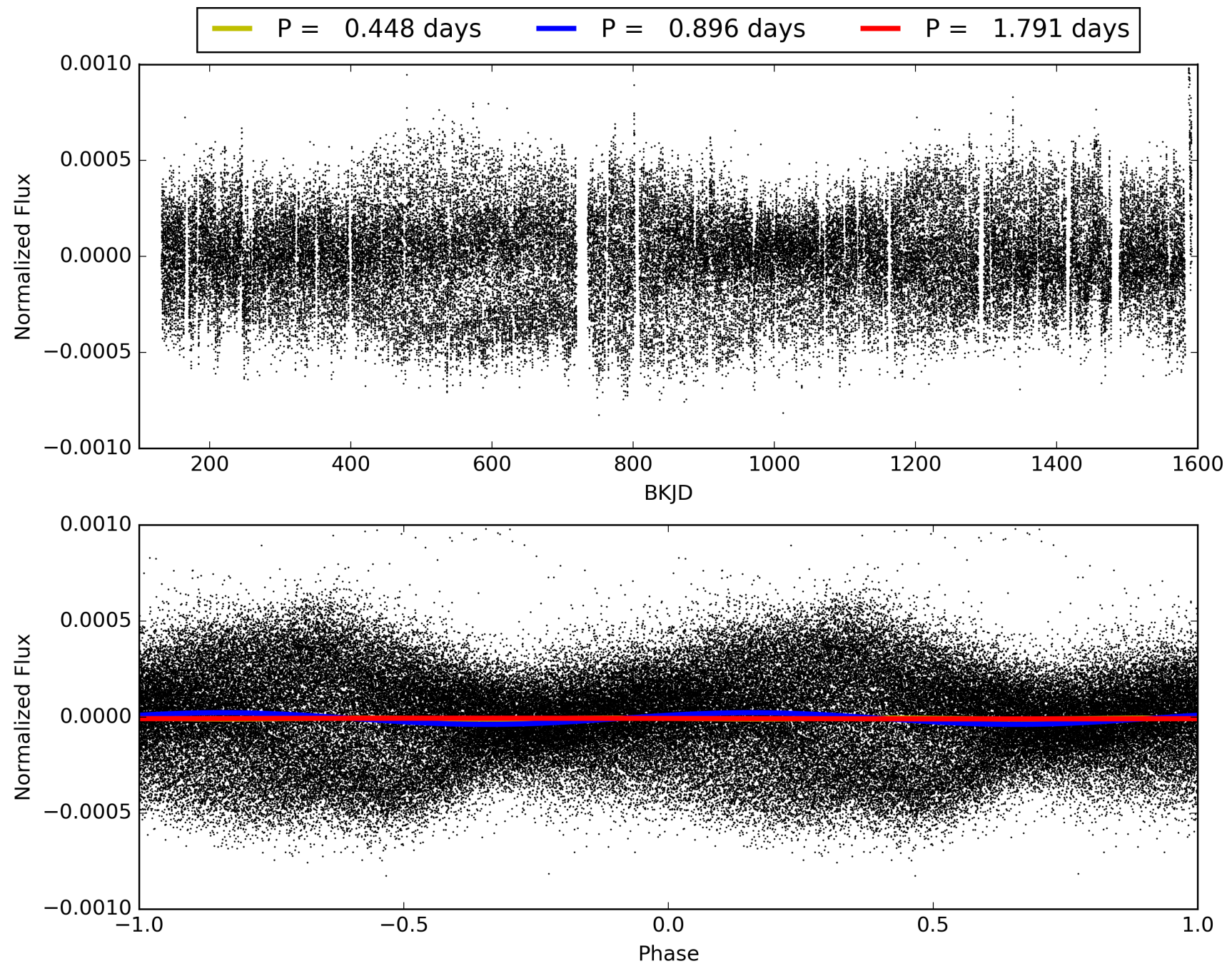
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:22:59 Z

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

TCE 003642713-01, PDC Light Curves

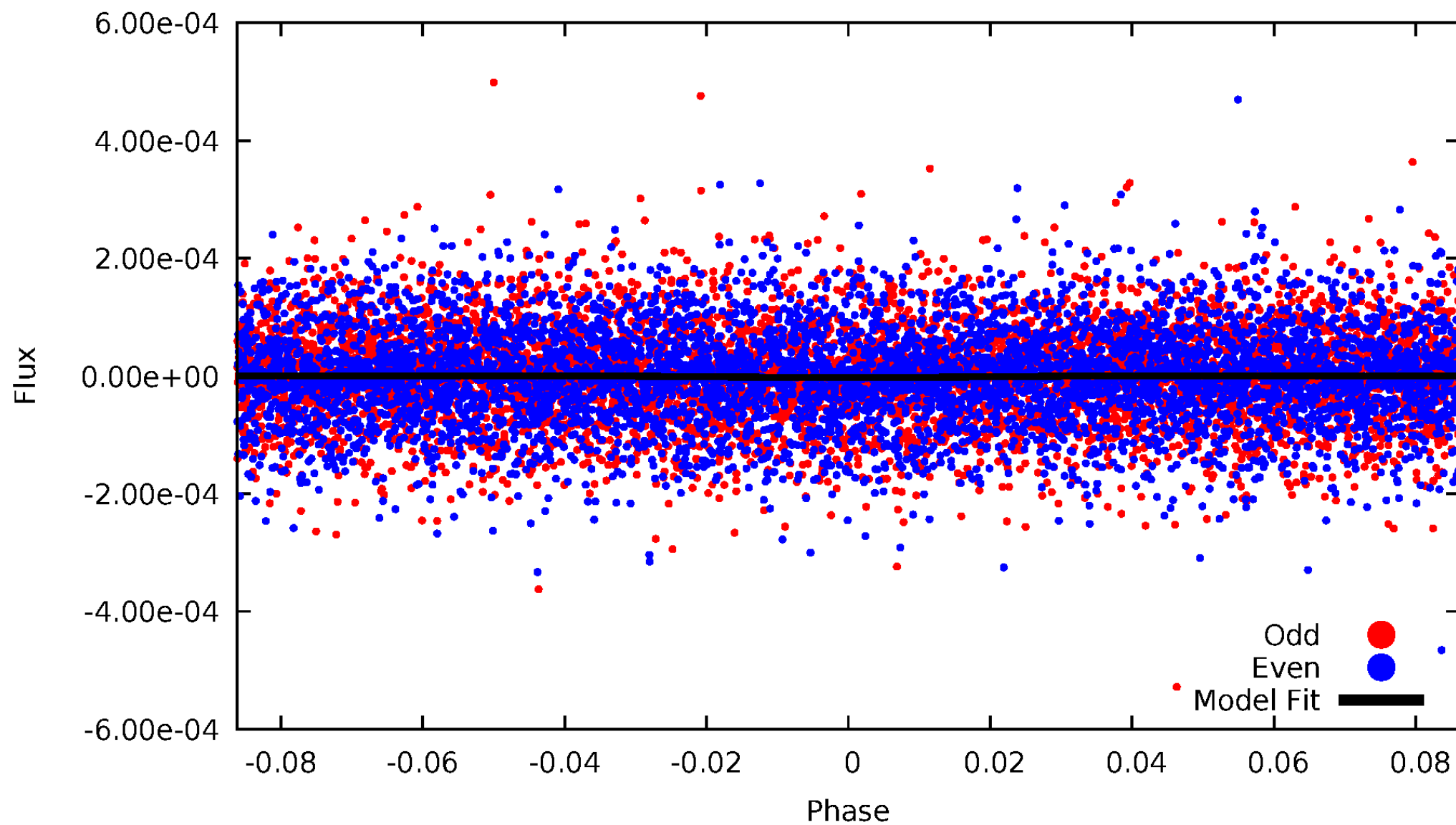


TCE 003642713-01



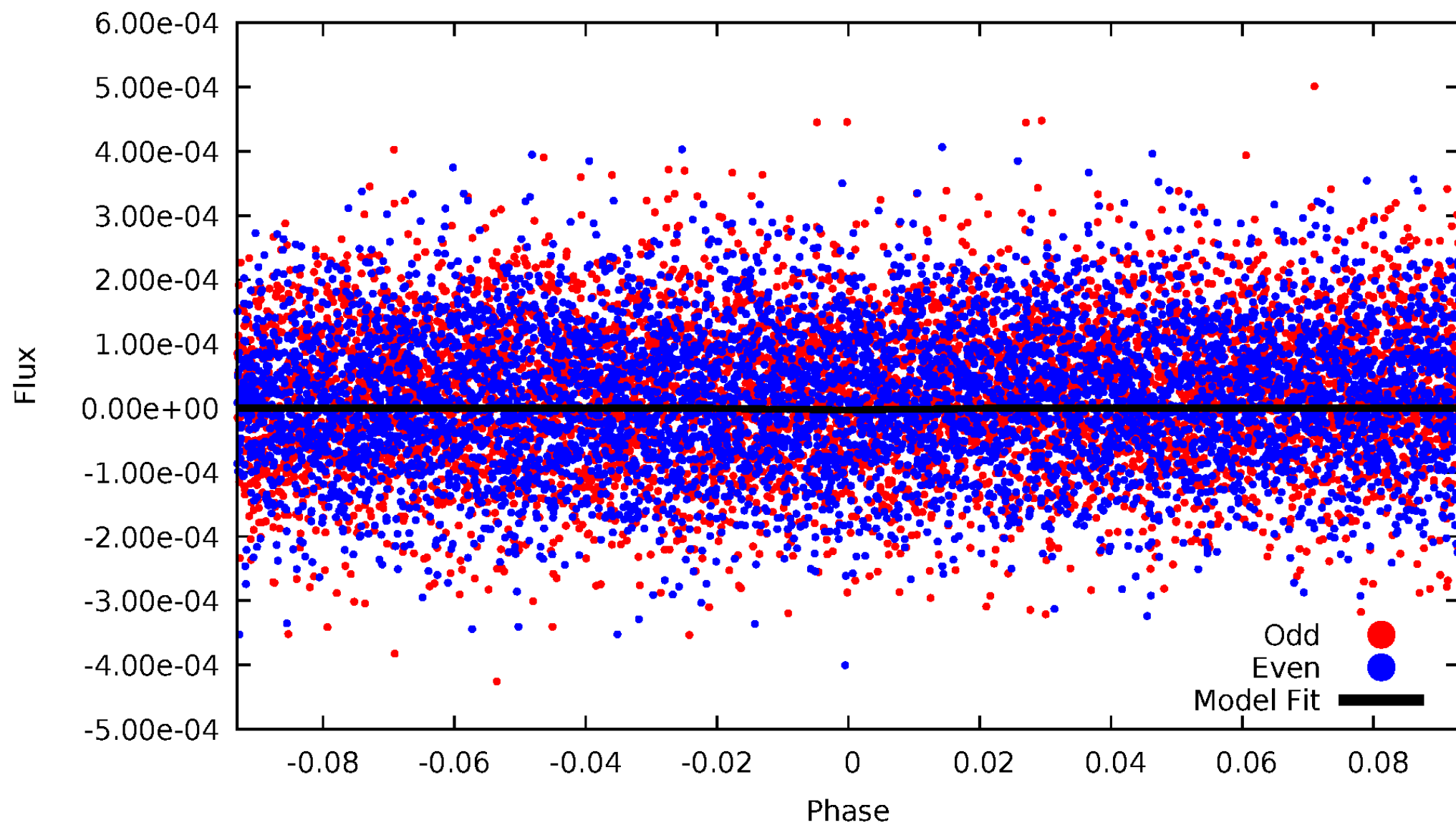
DV Odd/Even

TCE 003642713-01



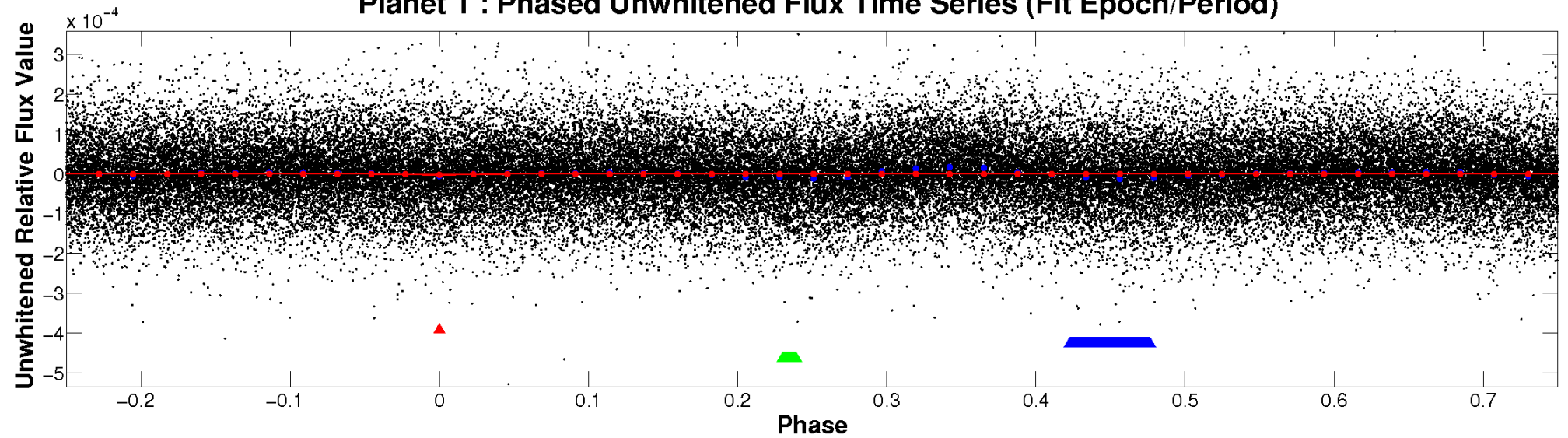
ALT Odd/Even

TCE 003642713-01

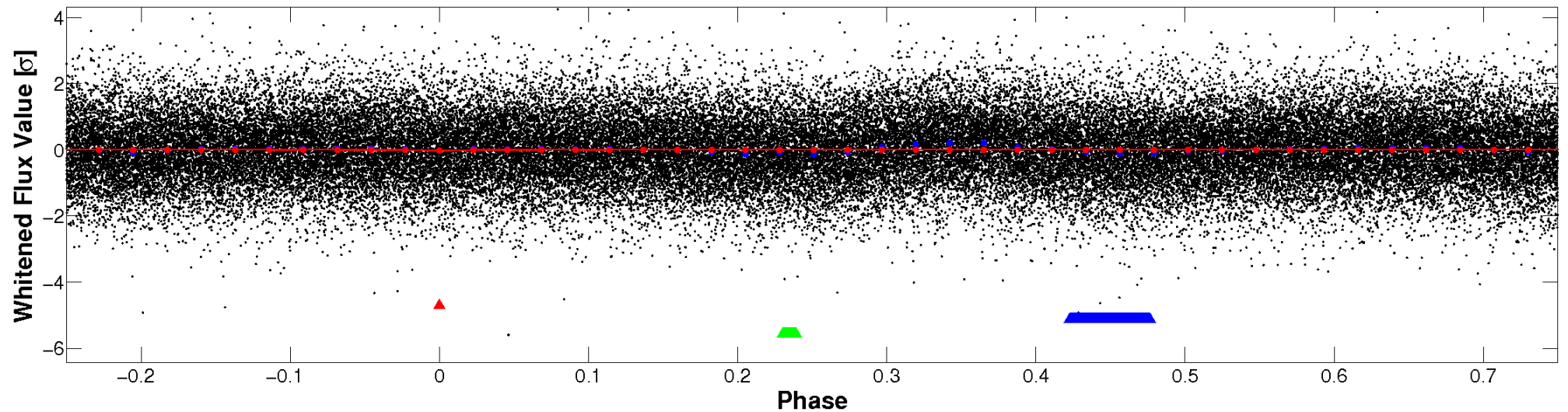


Non-Whitened Vs. Whitened Light Curve

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

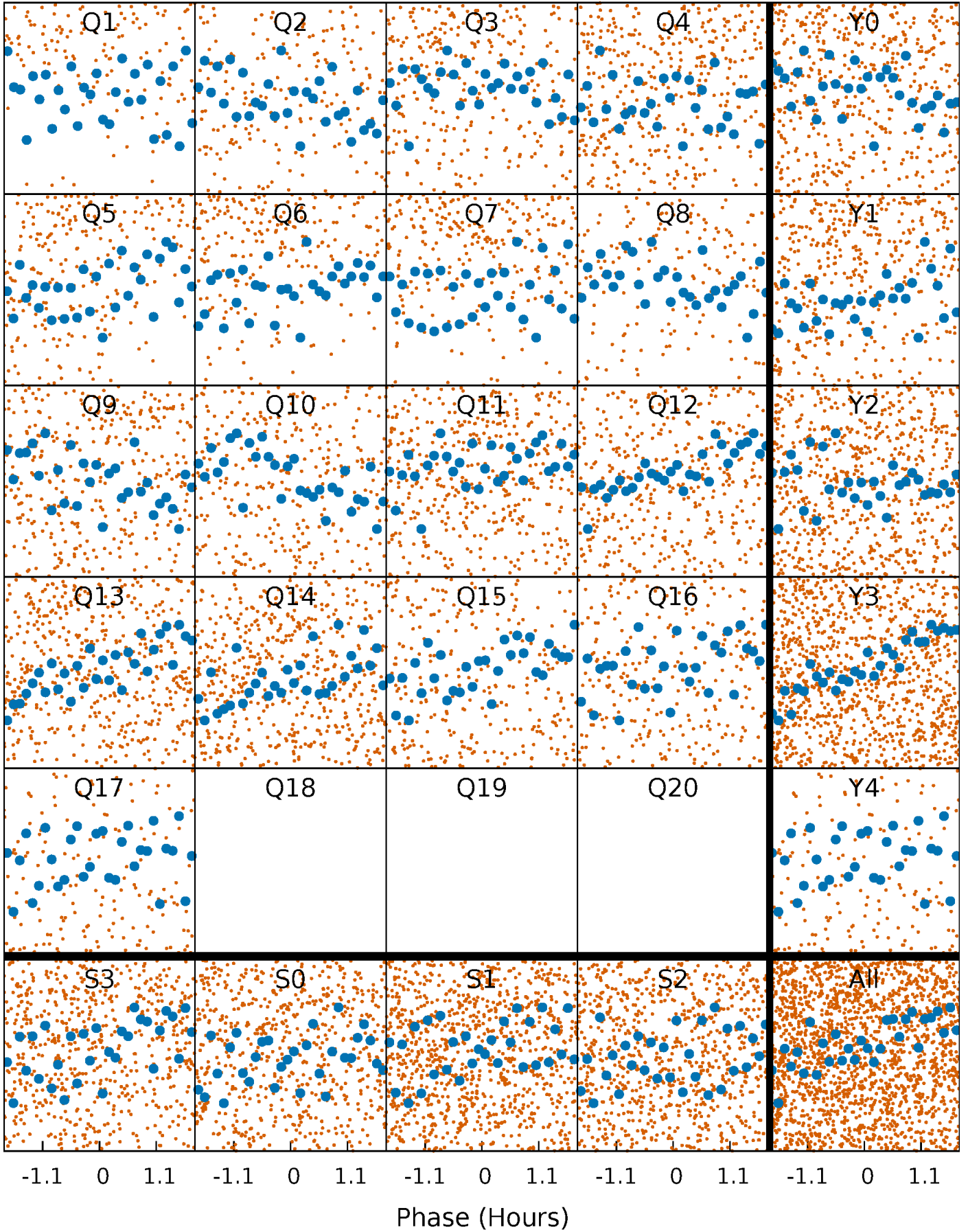


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



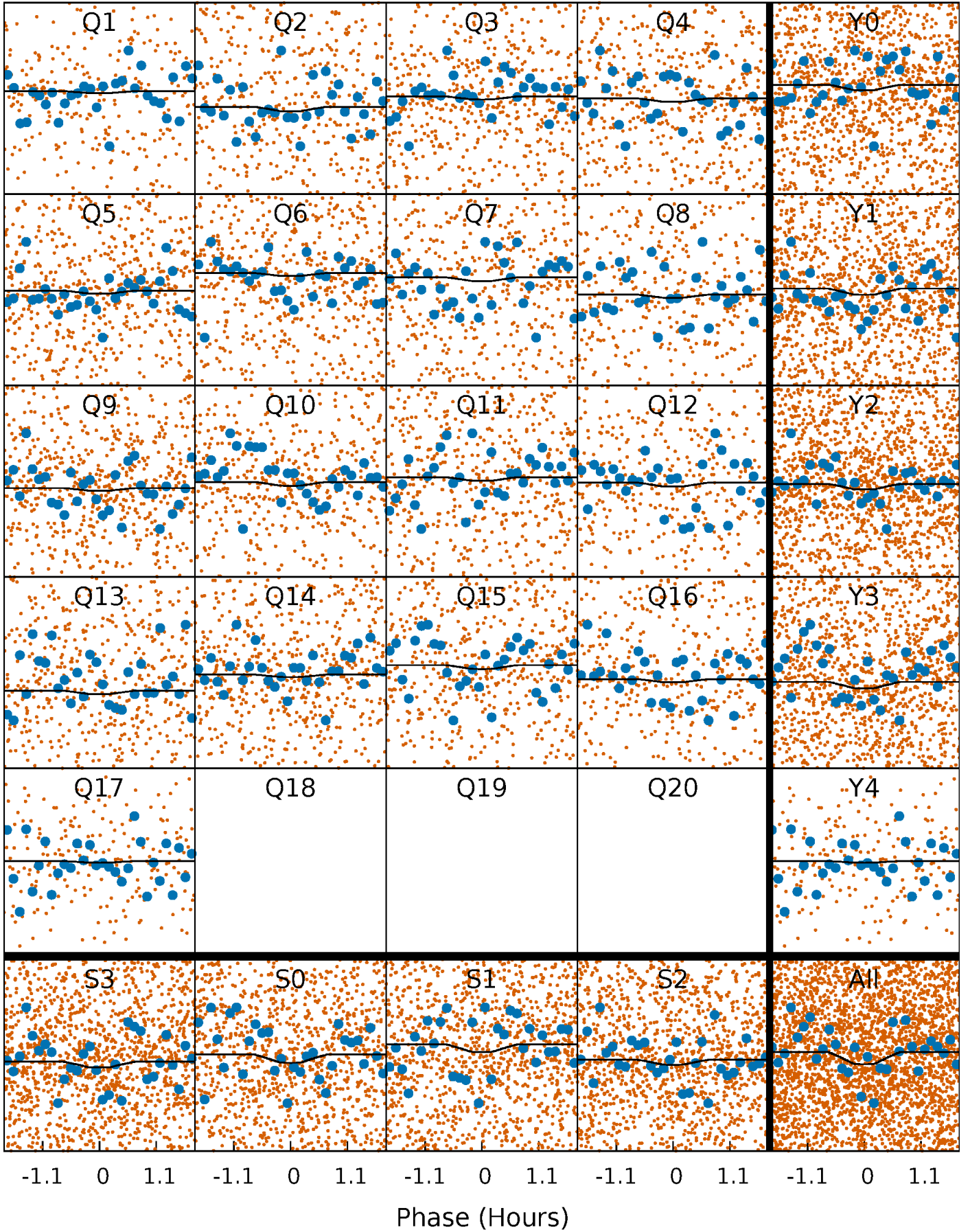
PDC Quarter-Phased Transit Curves

TCE 003642713-01 P= 0.895549 Days $T_0=132.120662$ (BKJD)



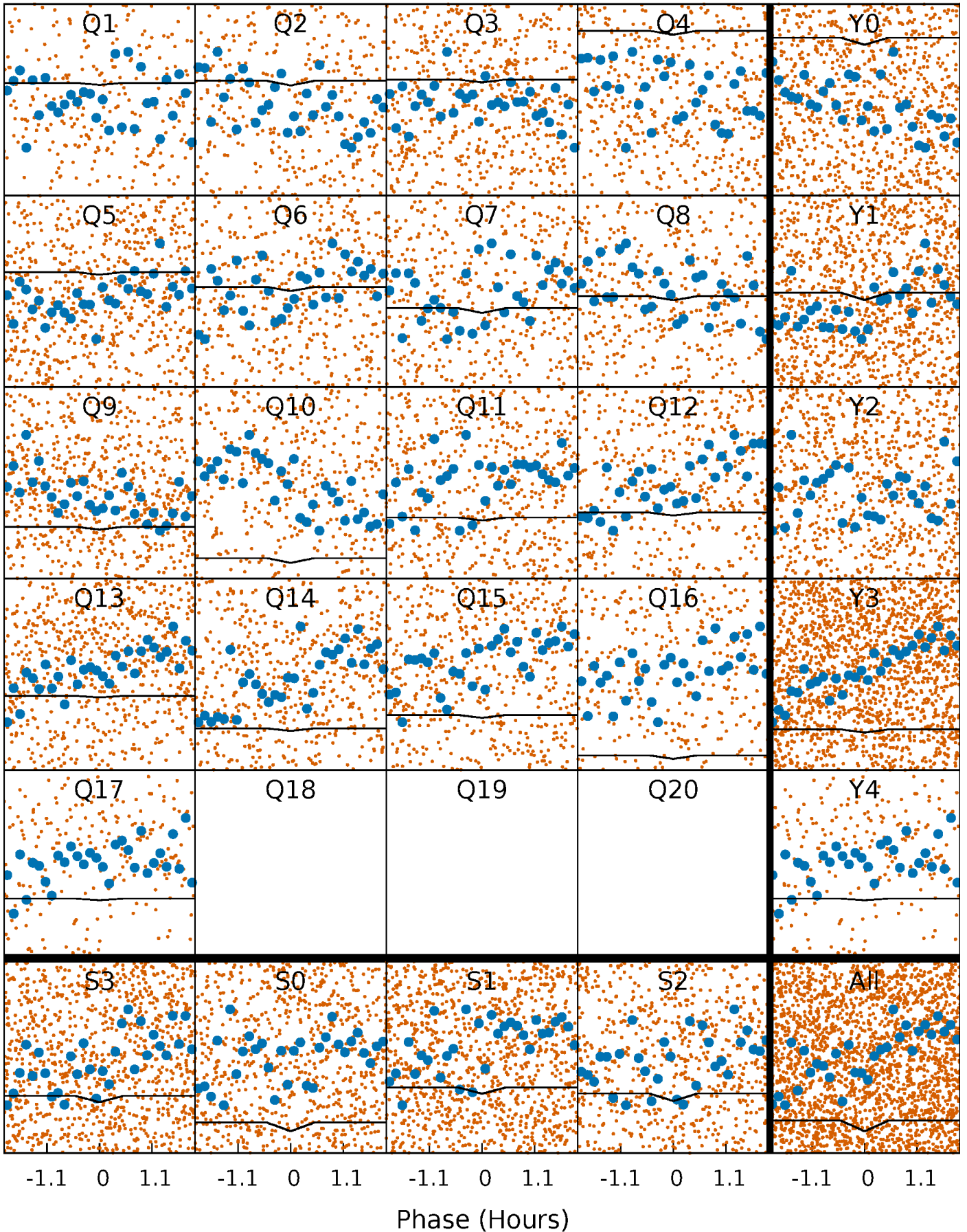
DV Quarter-Phased Transit Curves

TCE 003642713-01 P= 0.895549 Days $T_0=132.120662$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

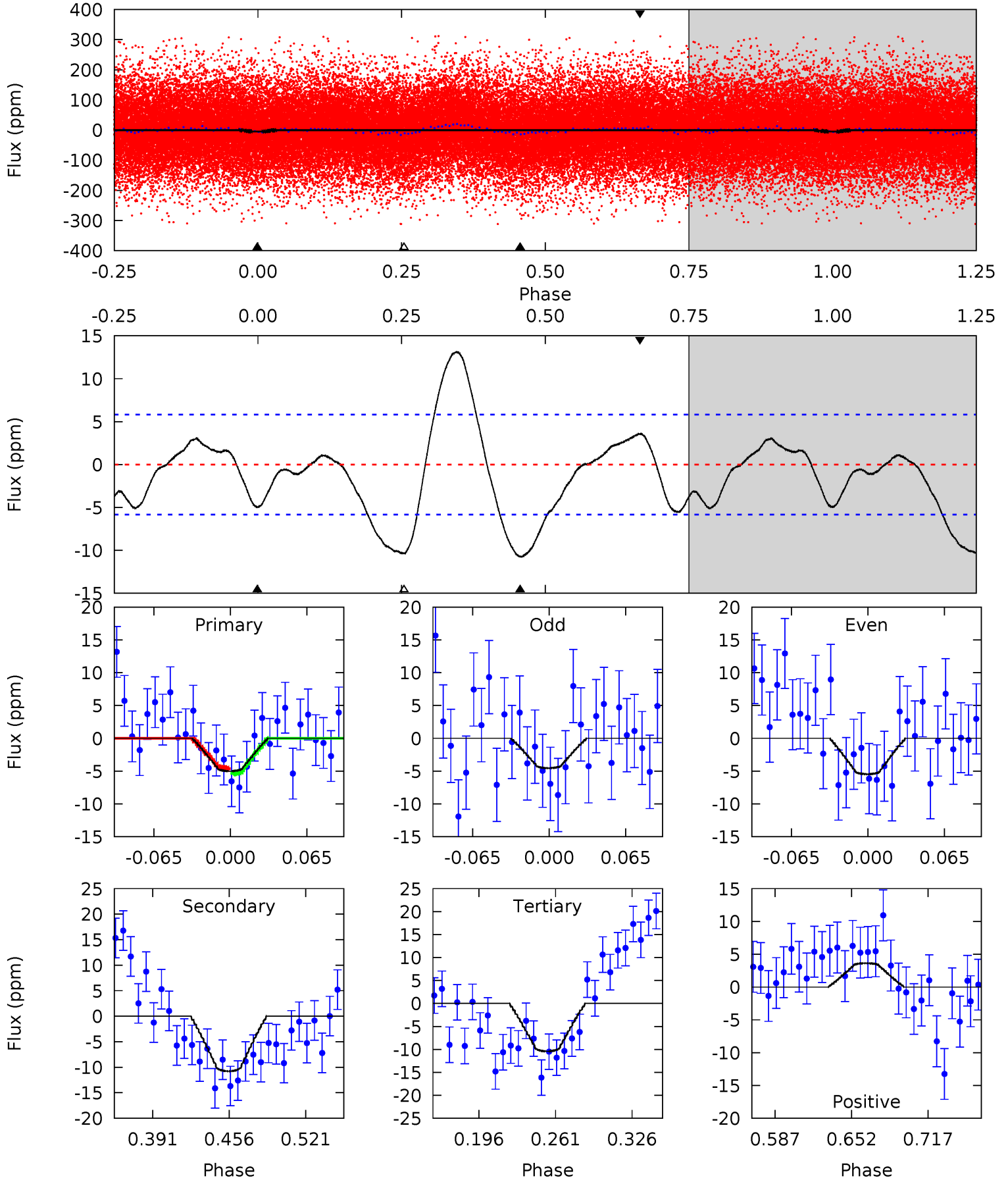
TCE 003642713-01 P= 0.895554 Days $T_0=132.122085$ (BKJD)



DV Model-Shift Uniqueness Test

003642713-01, P = 0.895549 Days, E = 131.225113 Days

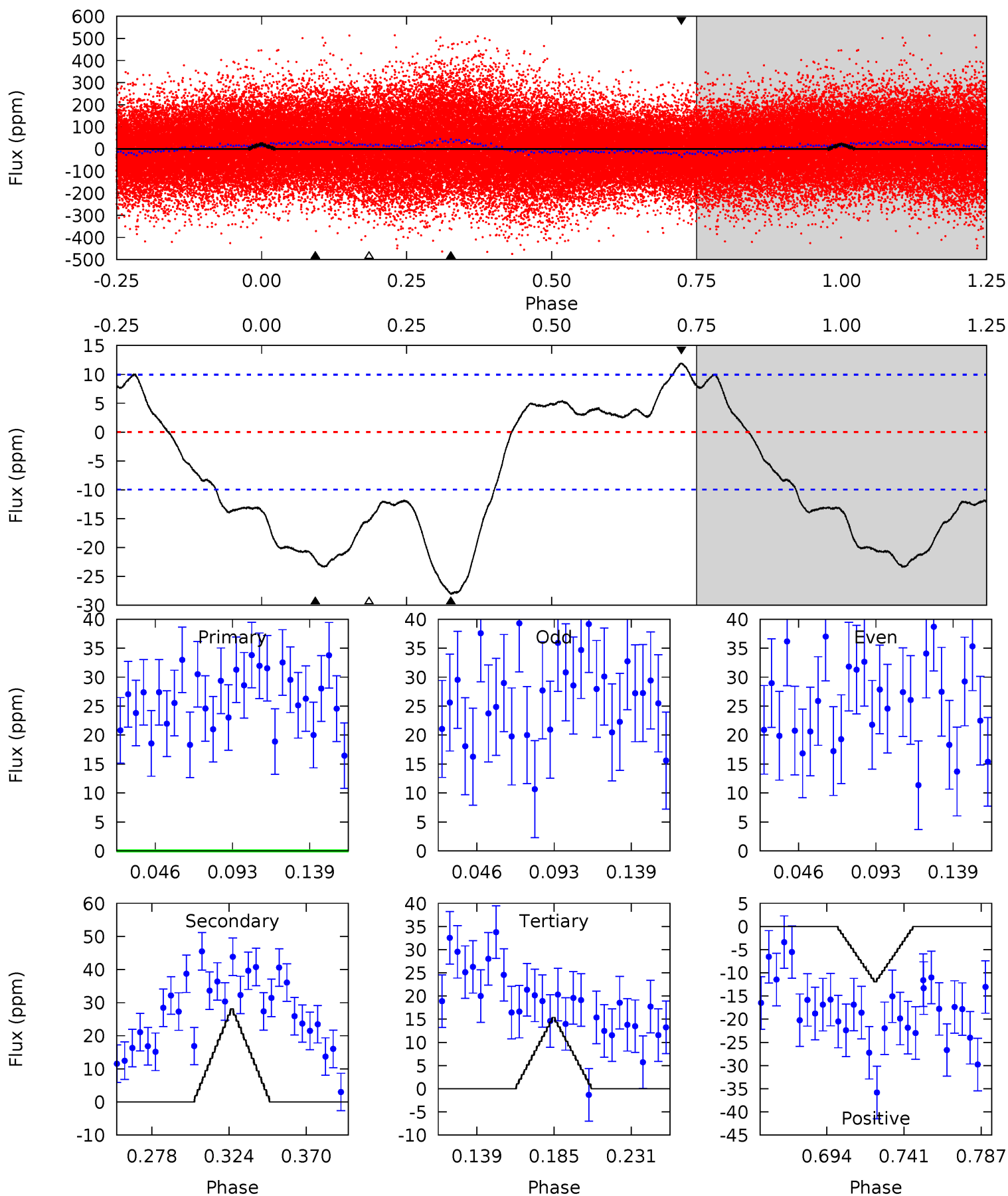
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.00	8.62	8.32	2.90	4.65	1.84	4.12	-4.33	1.10	0.29	5.72	0.37	1.62	0.55	0.29



Alt Model-Shift Uniqueness Test

003642713-01, P = 0.895554 Days, E = 131.226531 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.5	13.3	7.30	5.66	4.72	1.99	4.56	3.22	4.85	6.04	7.68	0.61	1.11	0.30	0.33



Stellar Parameters For KIC 003642713

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6889^{+183}_{-204}	$3.925^{+0.240}_{-0.111}$	$-0.320^{+0.300}_{-0.250}$	$2.099^{+0.470}_{-0.626}$	$1.355^{+0.238}_{-0.216}$	$0.206^{+0.298}_{-0.079}$
	+3%/-3%	+6%/-3%	+94%/-78%	+22%/-30%	+18%/-16%	+144%/-38%
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 003642713-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11 ± 1	$0.42^{+0.25}_{-0.25}$	4273^{+278}_{-324}	9846^{+11309}_{-2742}	14^{+67}_{-9}
Alt.	-28 ± 2	$0.40^{+0.30}_{-0.22}$	4269^{+278}_{-323}	14451^{+23398}_{-5048}	38^{+152}_{-25}

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 $A_{obs} \gg 1.0$

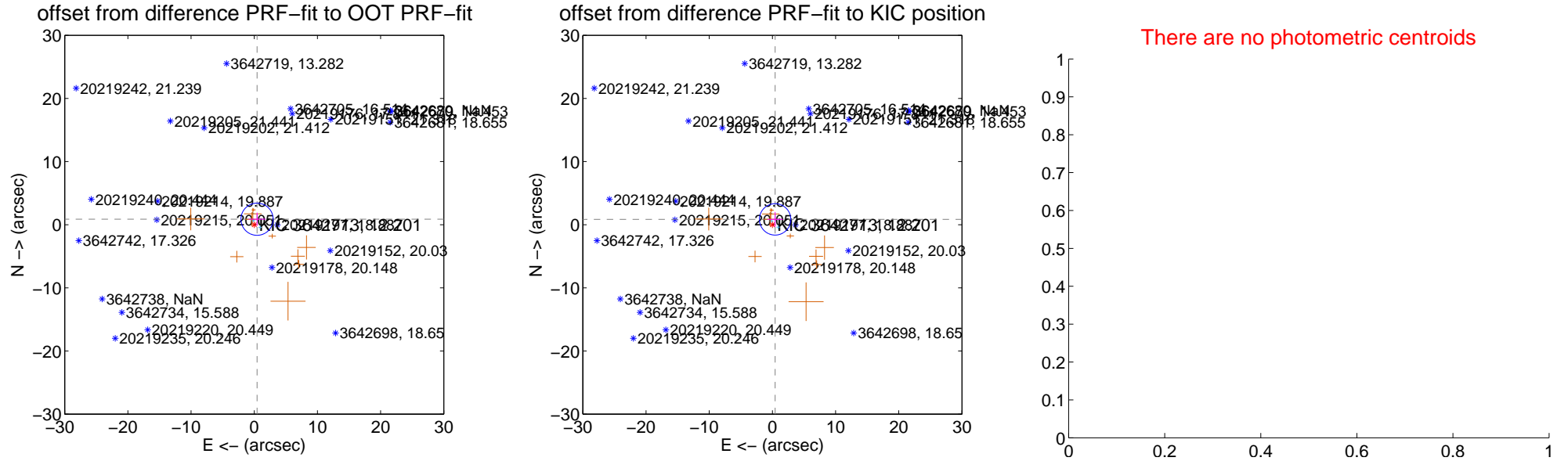
DV Centroid Data

Supplemental centroid analysis for 003642713-01. Kepler magnitude: 12.20. Transit SNR 1.14

There are 3 quarters with good PRF difference image offsets

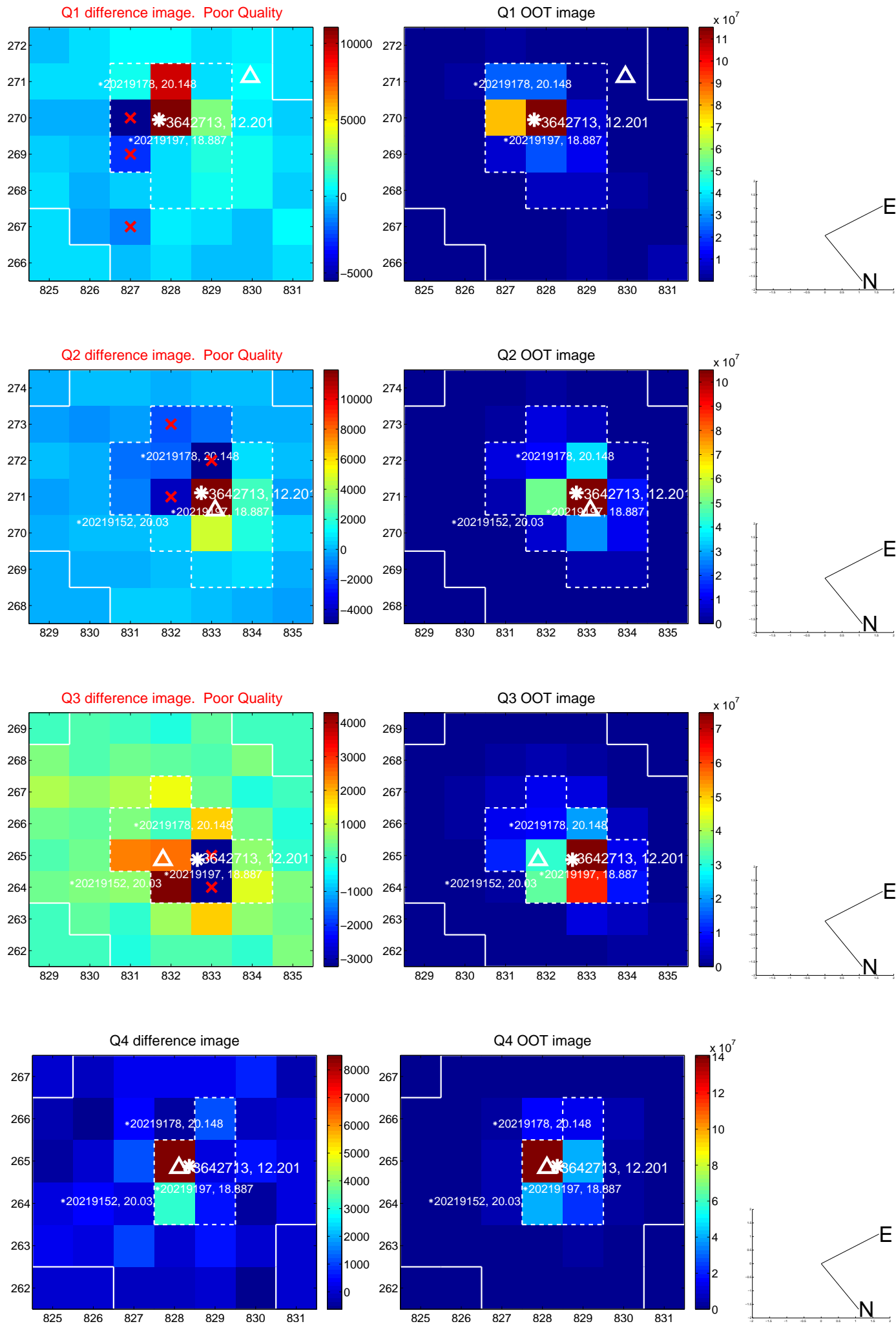
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.977 ± 0.850	1.15	-0.443 ± 1.323	0.871 ± 1.048
PRF-fit source offset from KIC position	0.945 ± 0.828	1.14	-0.429 ± 1.222	0.842 ± 1.161
photometric centroid source offset	—	—	—	—

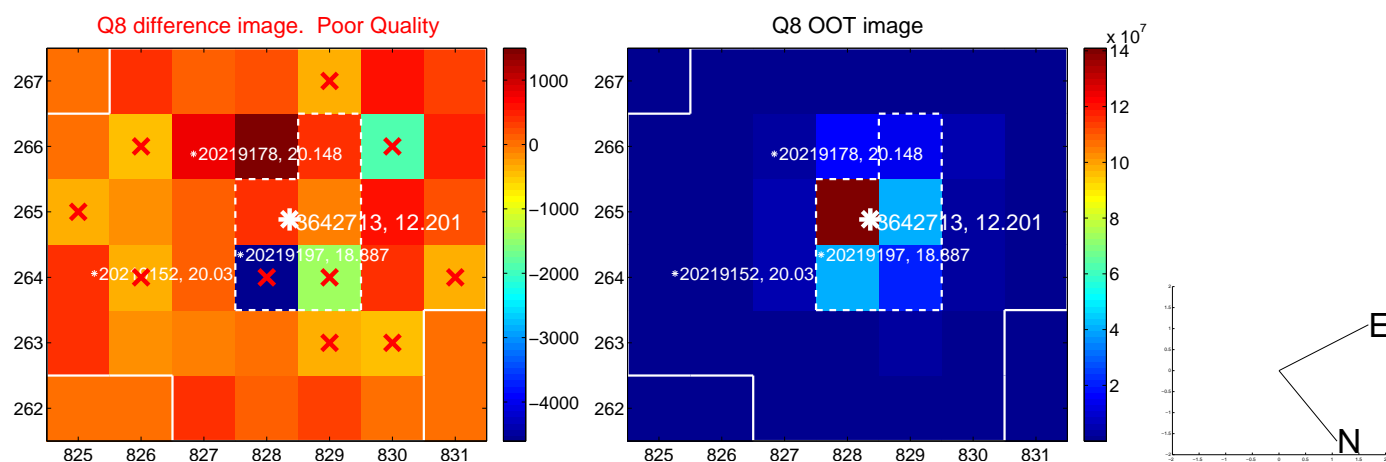
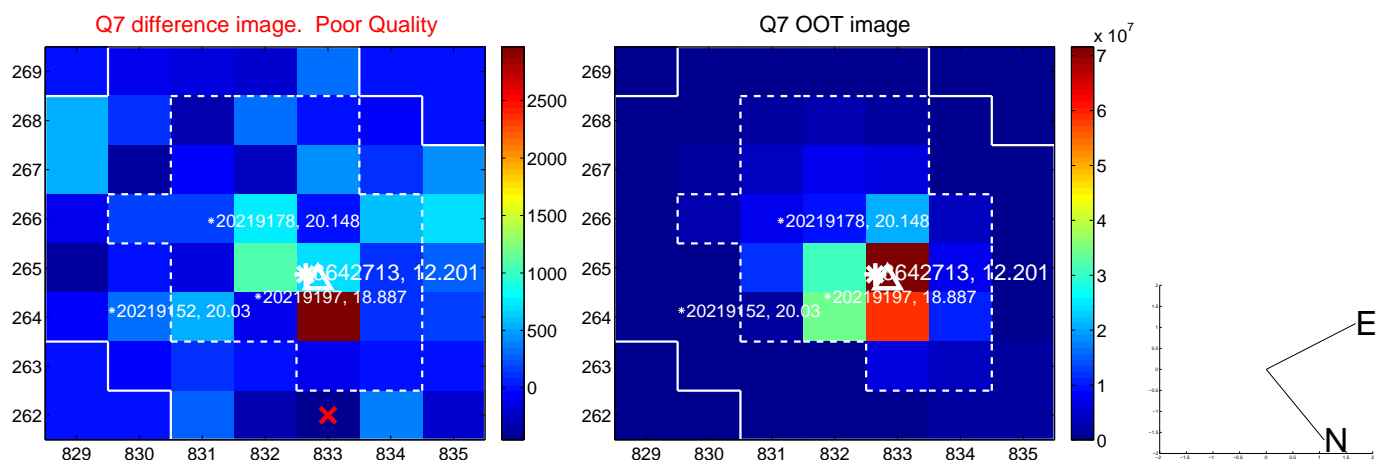
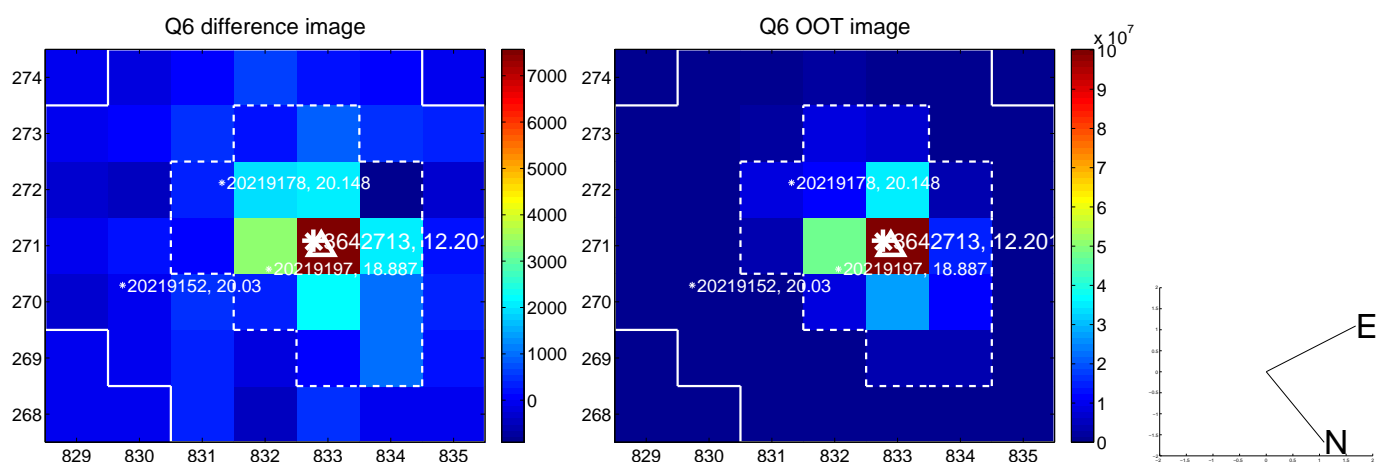
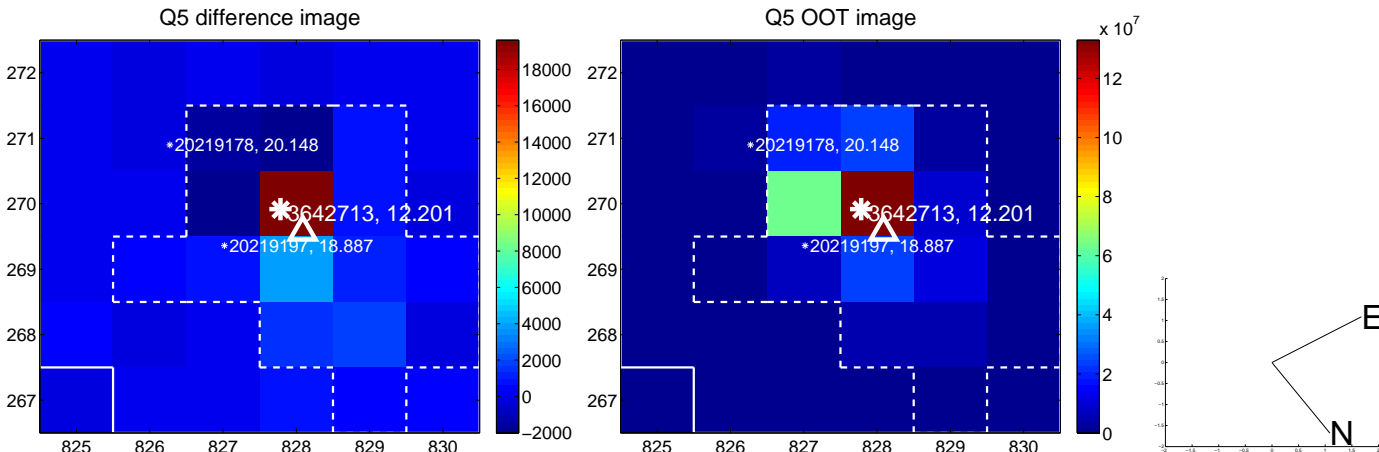


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

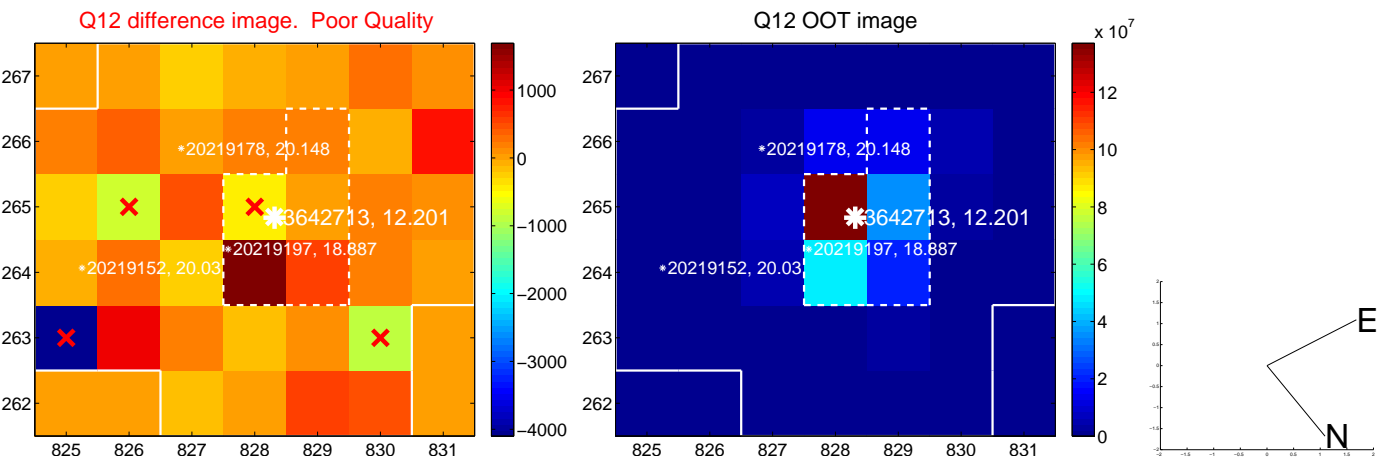
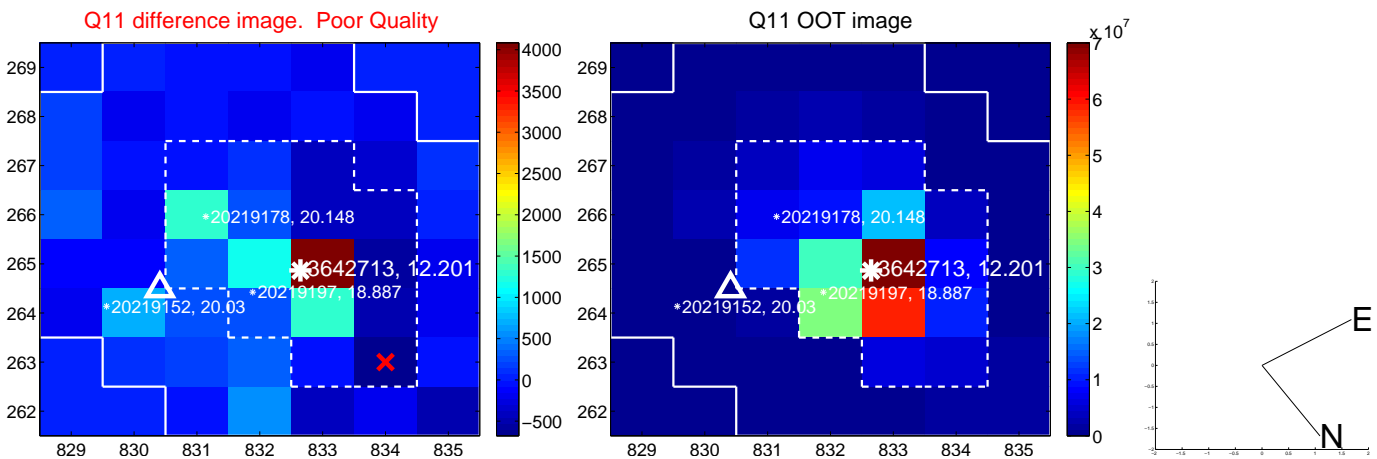
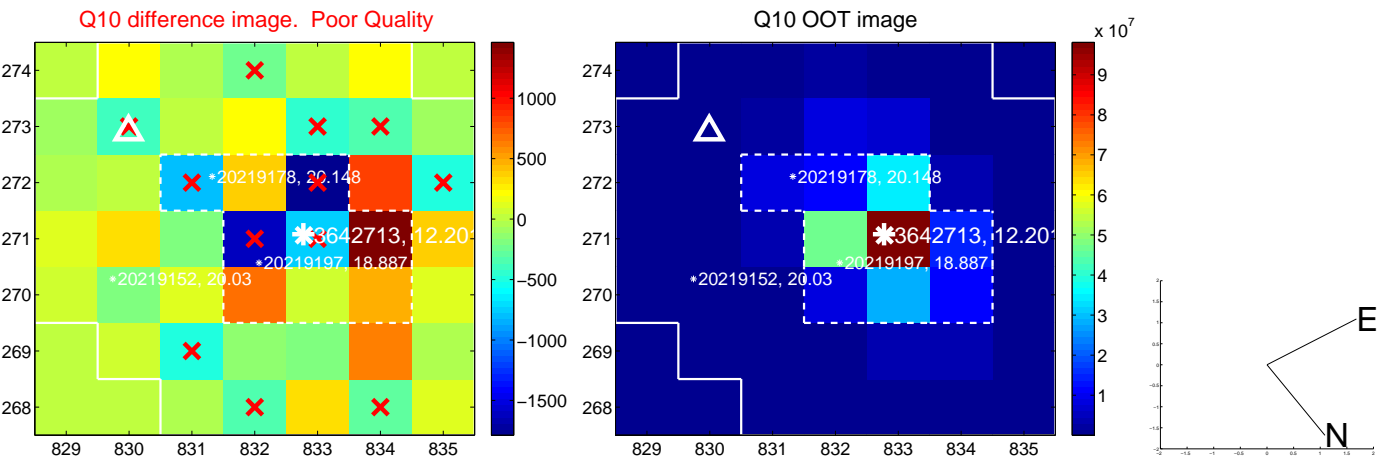
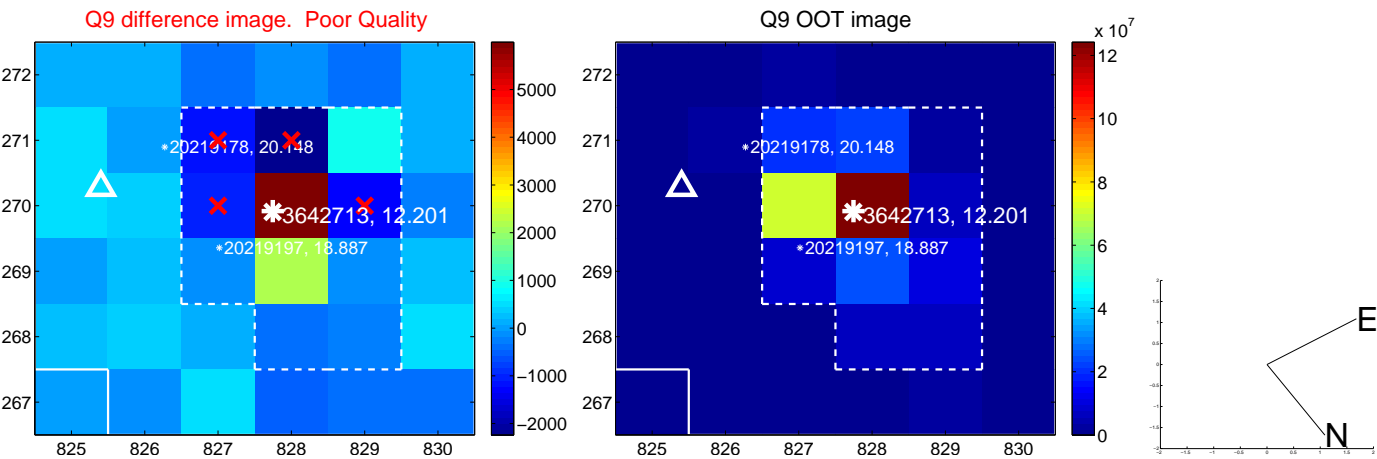
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



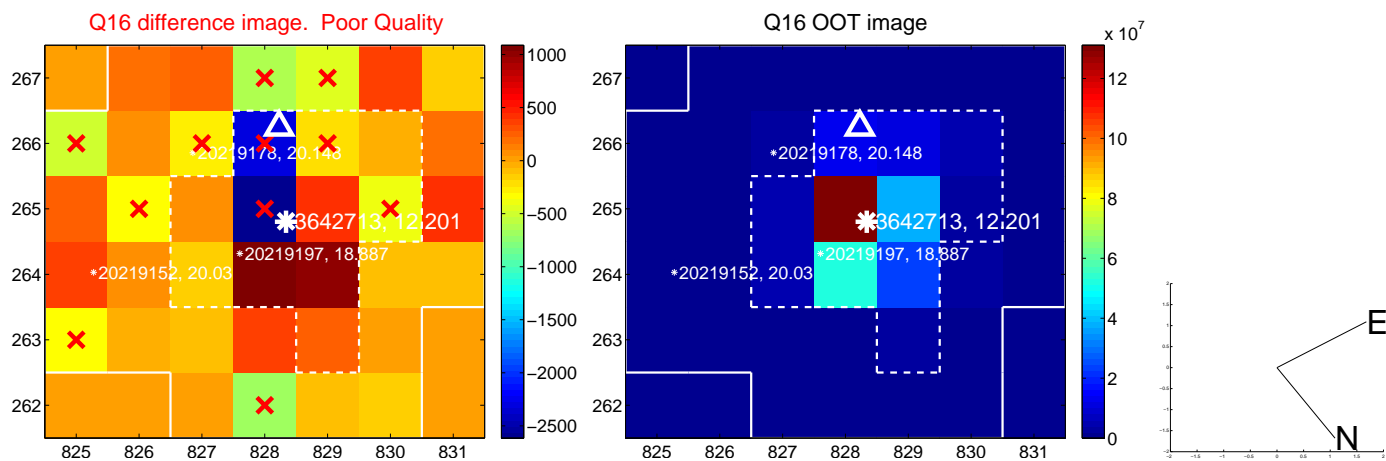
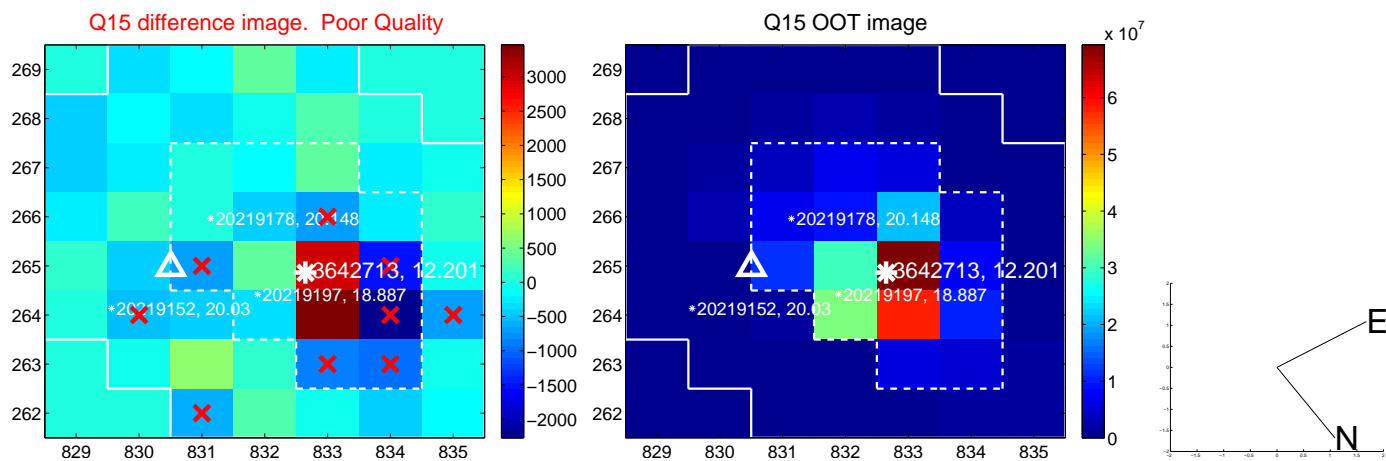
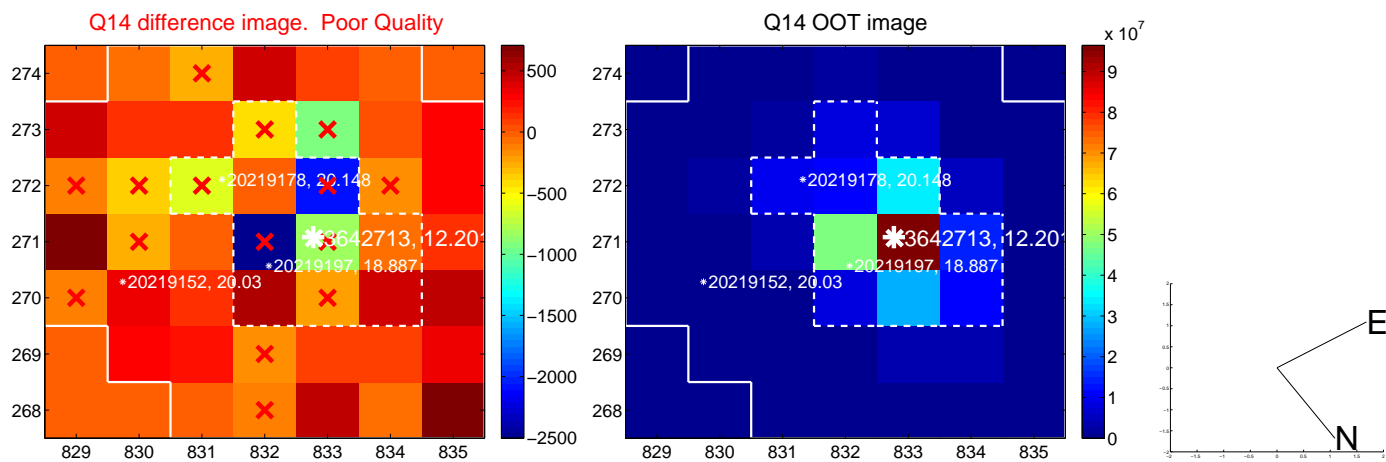
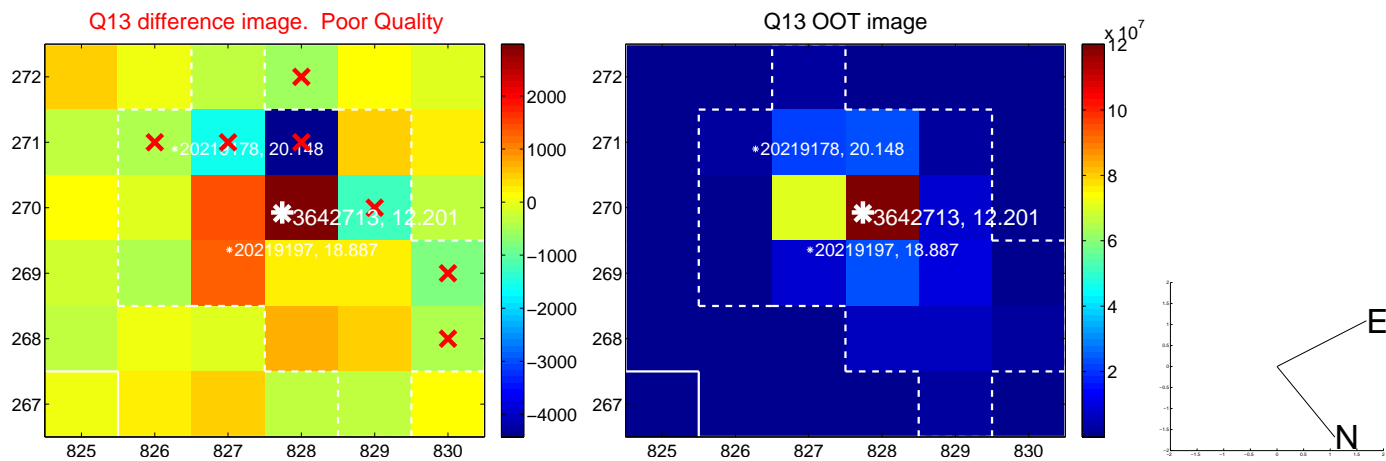
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



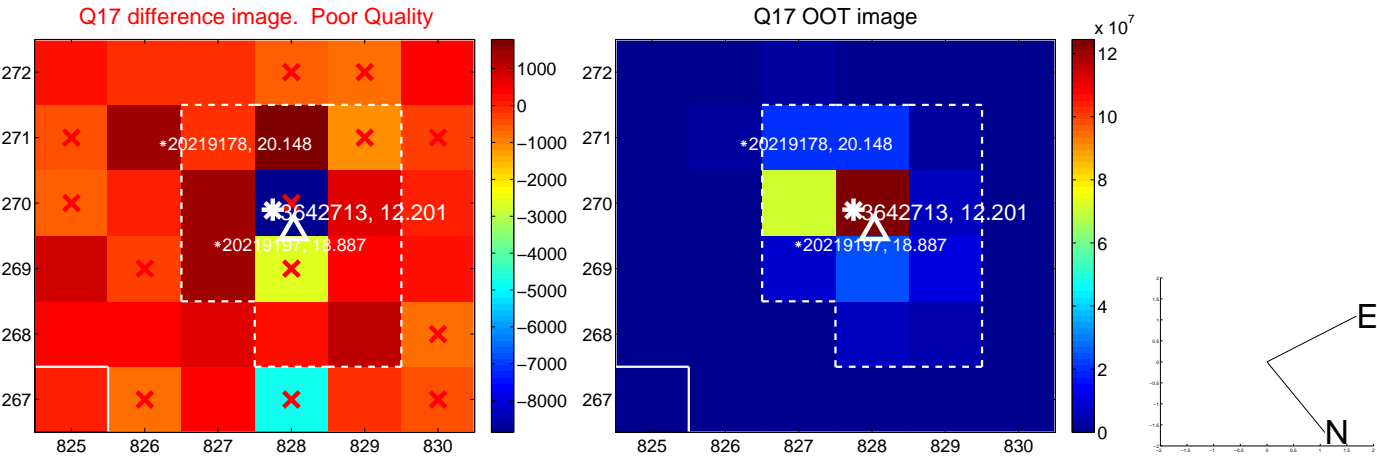
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

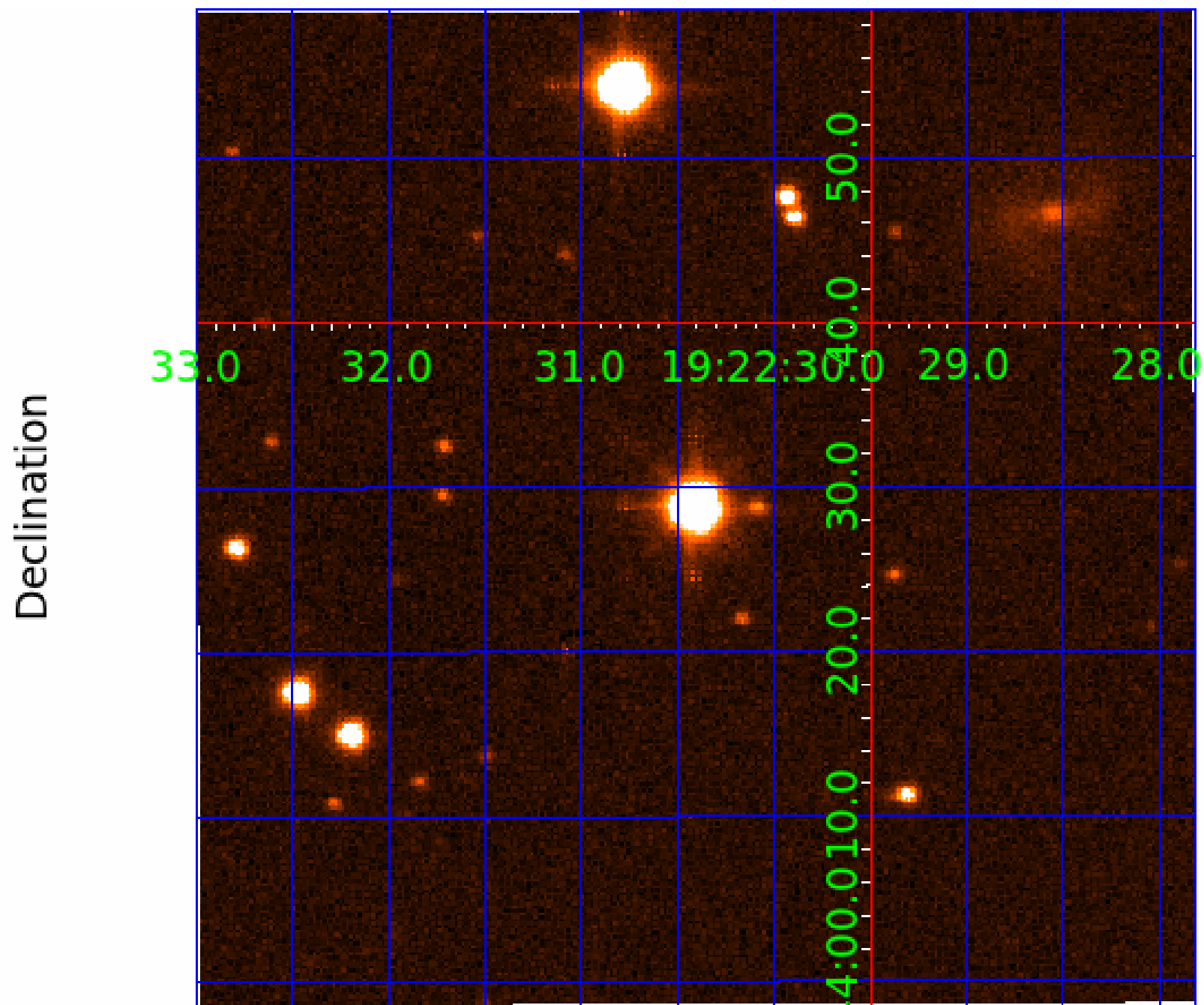


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 003642713

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})
003642713-01	OBS	No	0.895549	132.120662	2.5	0.926	10.3	1.1	2.10	6889	0.39	21982.40
003642713-02	OBS	No	0.895578	132.499120	2.6	1.062	9.6	1.3	2.10	6889	0.39	21981.43
003642713-03	OBS	No	2.686660	134.117993	22.3	2.108	8.4	8.6	2.10	6889	1.00	5080.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003642713-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003642713-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
003642713-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD

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

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

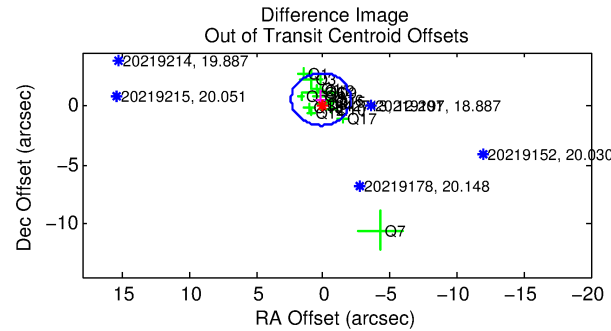
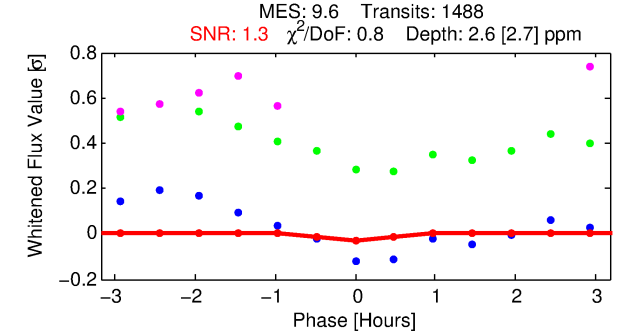
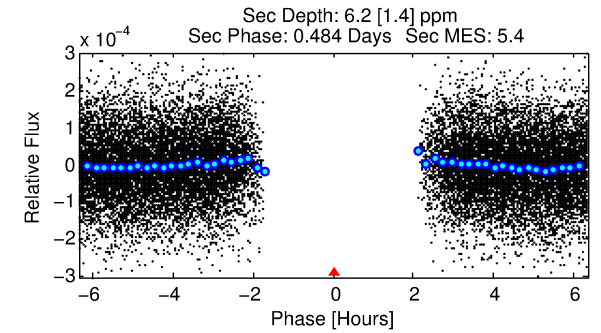
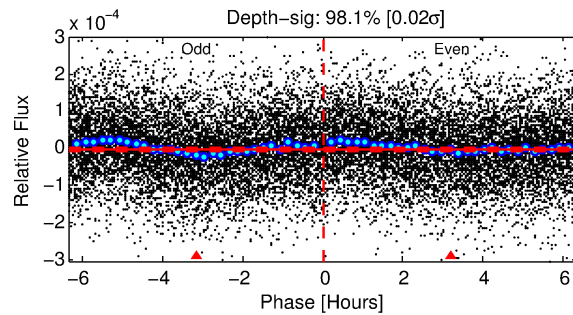
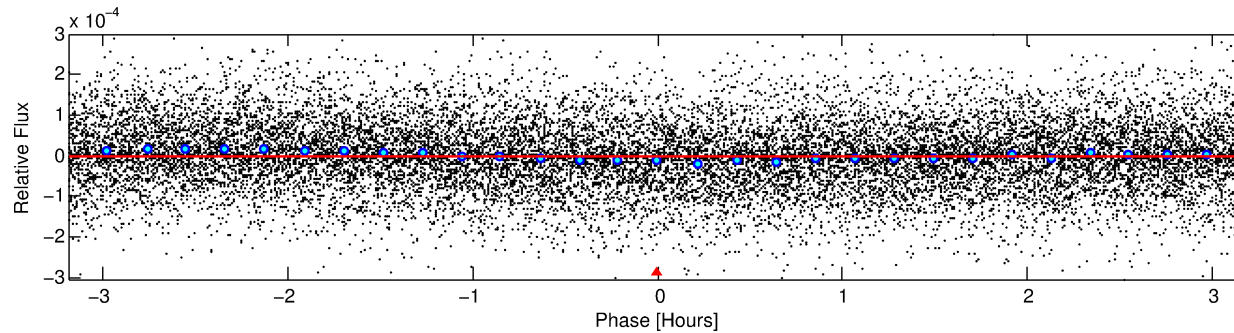
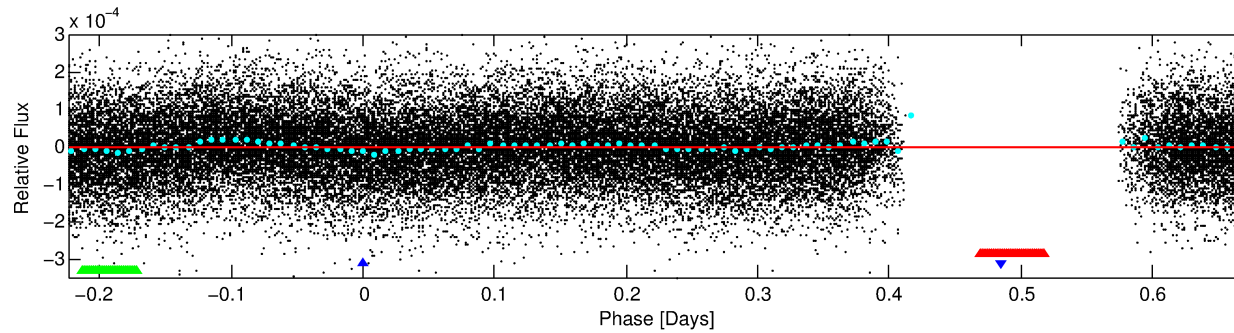
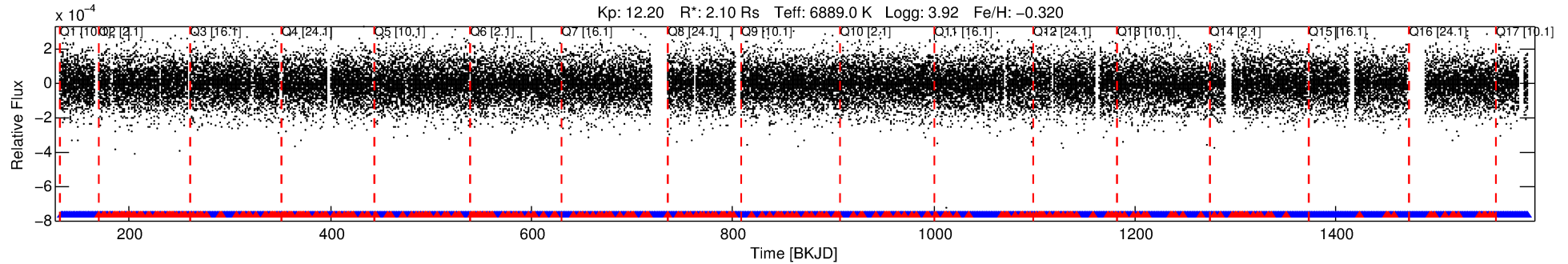
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003642713-02

No Significant Match Found

DV One-Page Summary

KIC: 3642713 Candidate: 2 of 3 Period: 0.896 d



DV Fit Results:

Period = 0.89558 [0.00008] d
Epoch = 132.4991 [0.0131] BKJD
Rp/R* = 0.0017 [0.0011]
a/R* = 3.01 [6.14]
b = 0.90 [0.50]
Seff = 21981.43 [9563.57]
Teq = 3105 [338] K
Rp = 0.39 [0.28] Re
a = 0.0201 [0.0055] AU
Ag = 8.95 [12.51] [0.64σ]
Teffp = 8304 [2778] K [1.86σ]

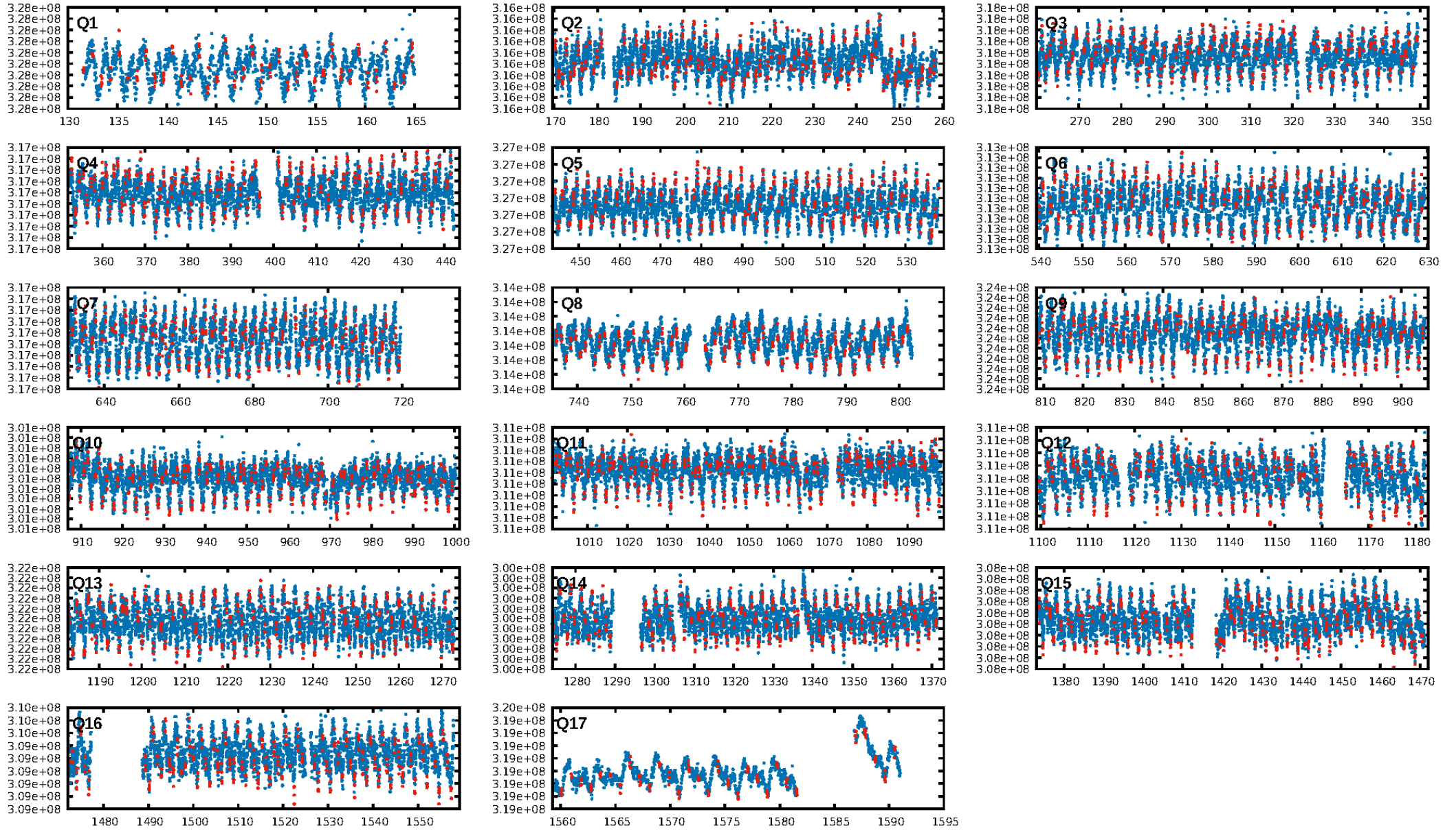
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [18.21σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.56e-18
RollingBand-fgt: 0.79 [1120/1420]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.556 arcsec [0.75σ]
KicOffset-rm: 0.541 arcsec [0.73σ]
OotOffset-st: 3/4/4/5 [16]
KicOffset-st: 3/4/4/5 [16]
DiffImageQuality-fgm: 0.62 [10/16]
DiffImageOverlap-fno: 1.00 [17/17]

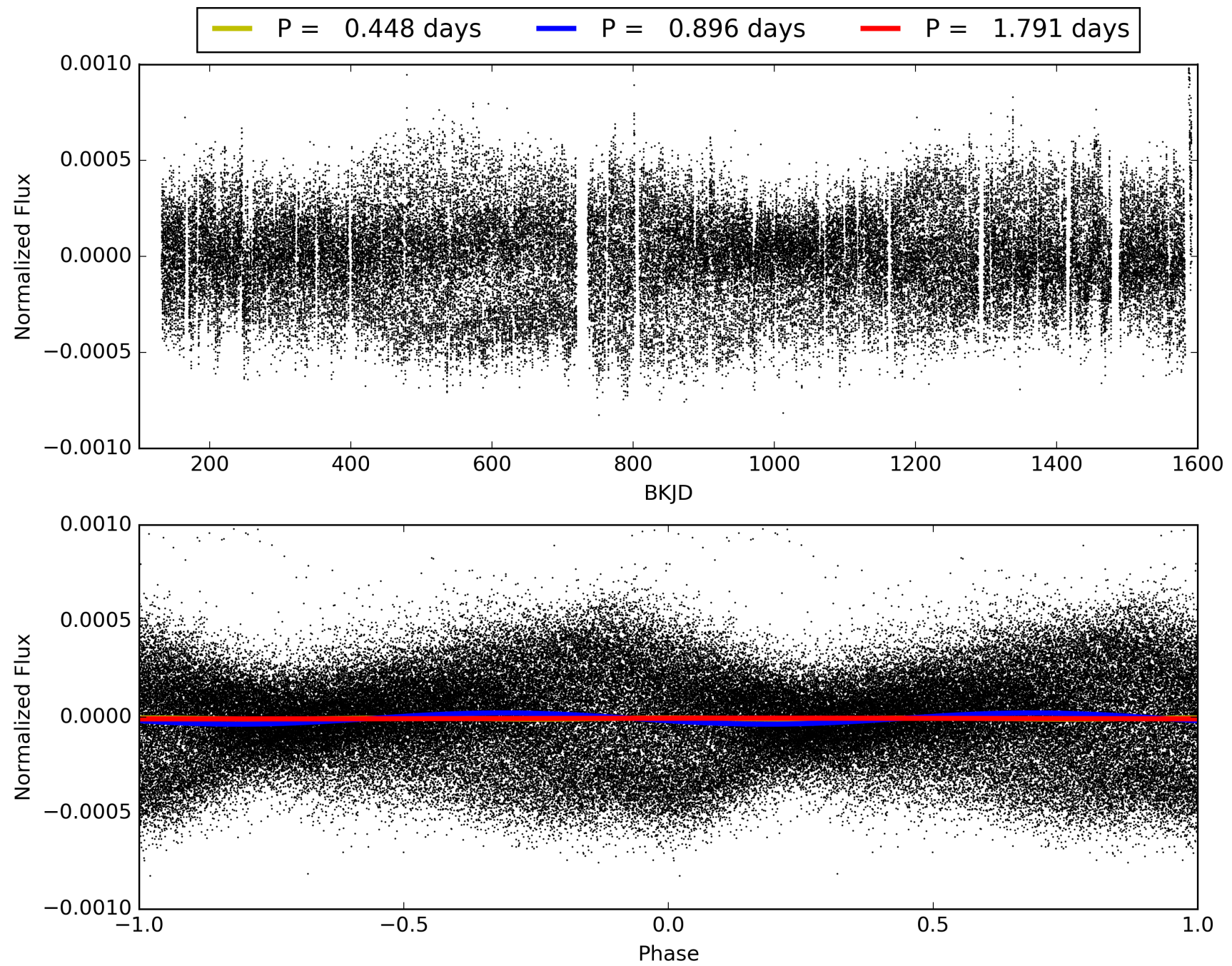
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:23:08 Z

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

TCE 003642713-02, PDC Light Curves

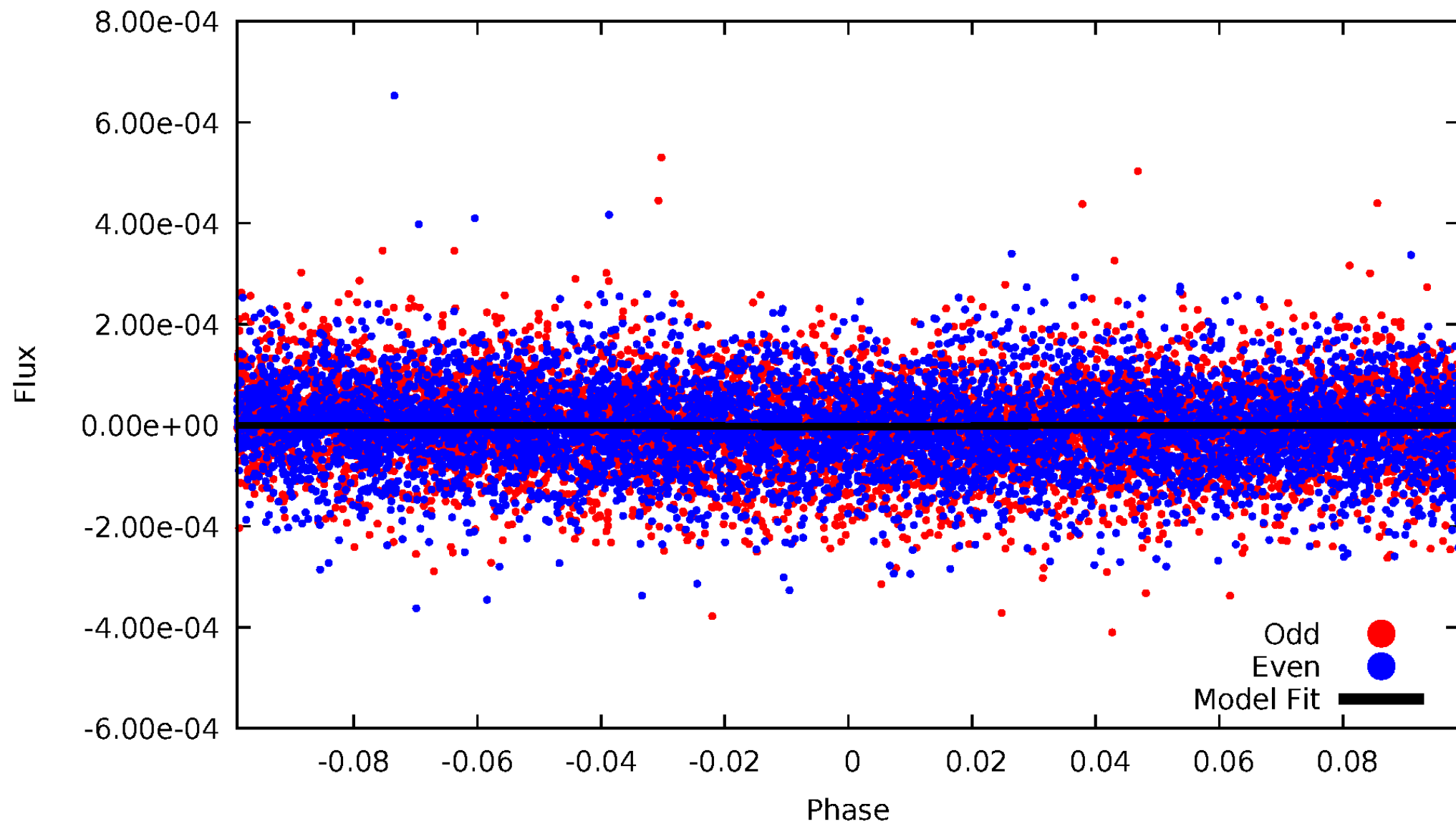


TCE 003642713-02



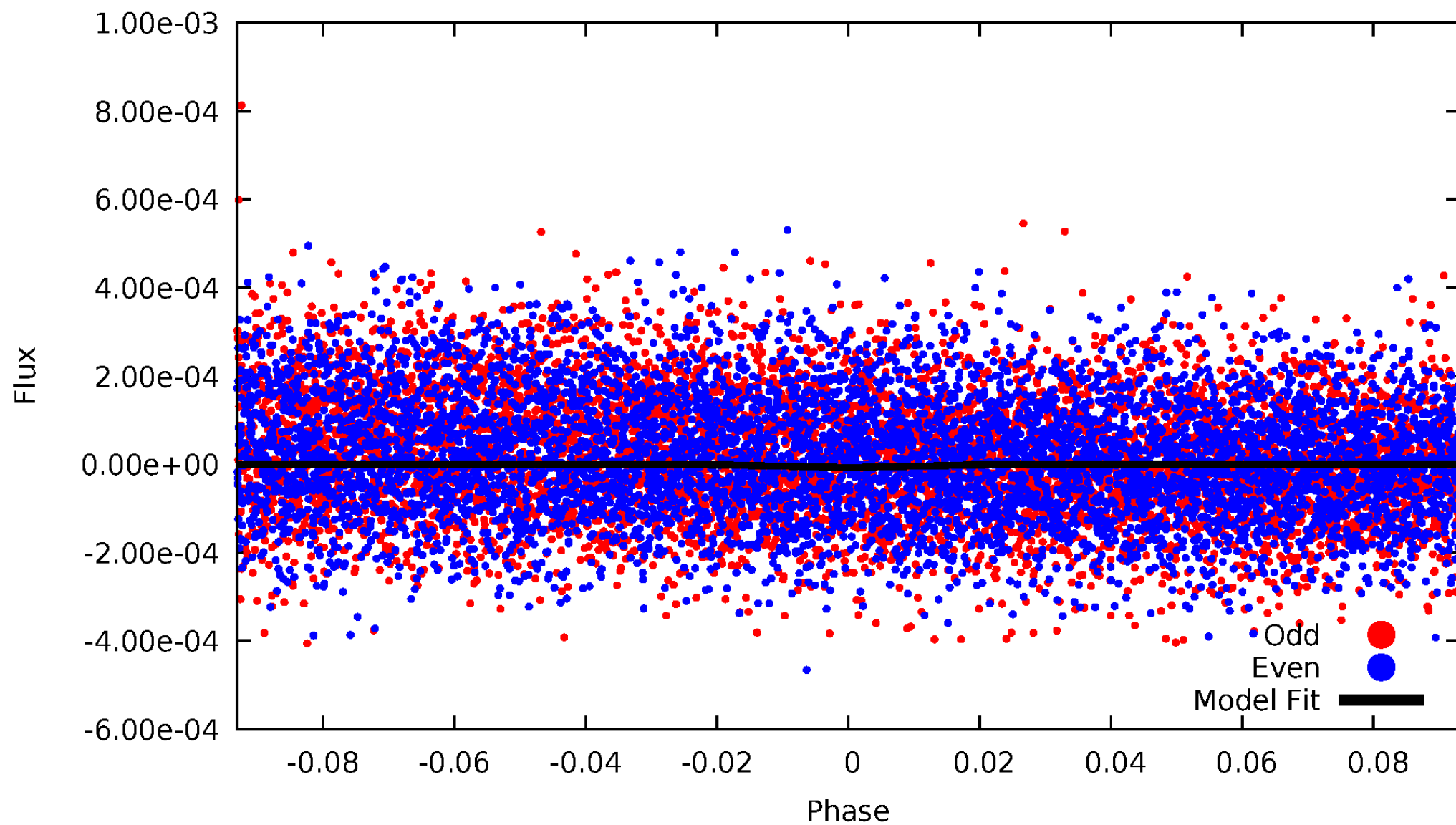
DV Odd/Even

TCE 003642713-02



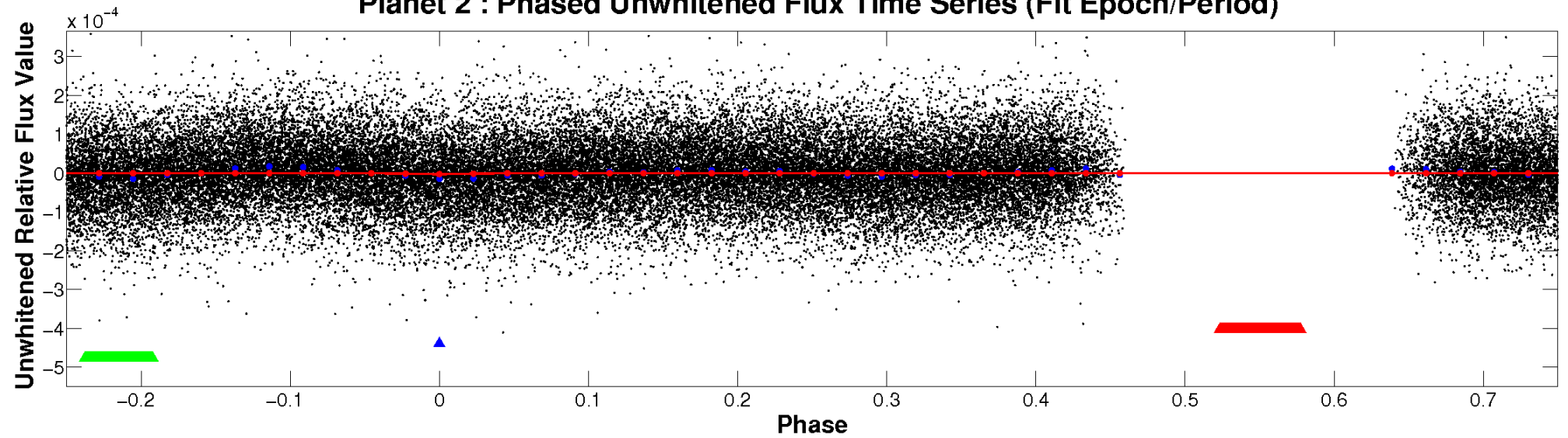
ALT Odd/Even

TCE 003642713-02

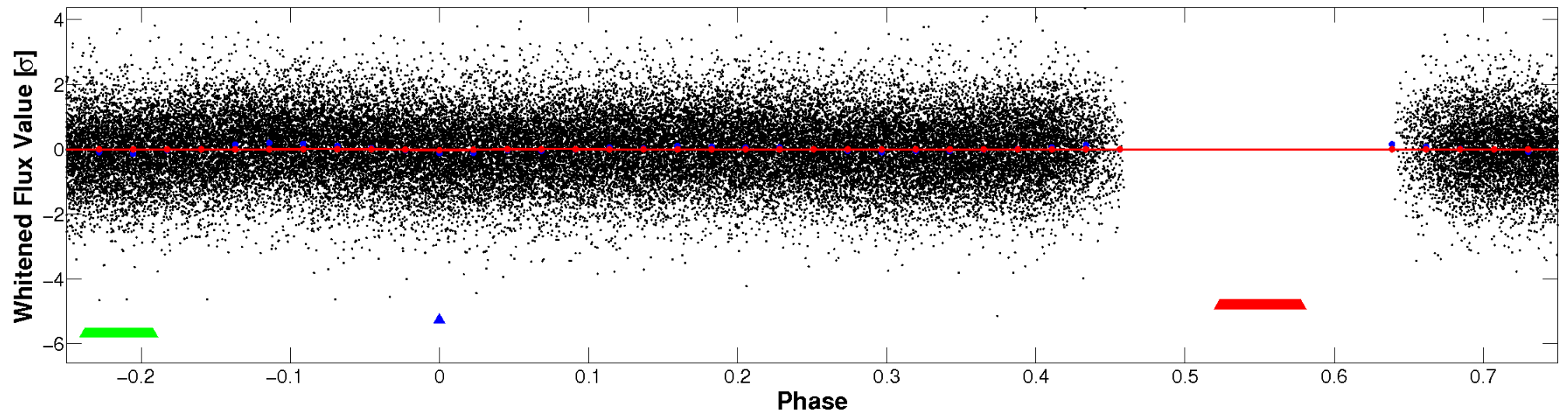


Non-Whitened Vs. Whitened Light Curve

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

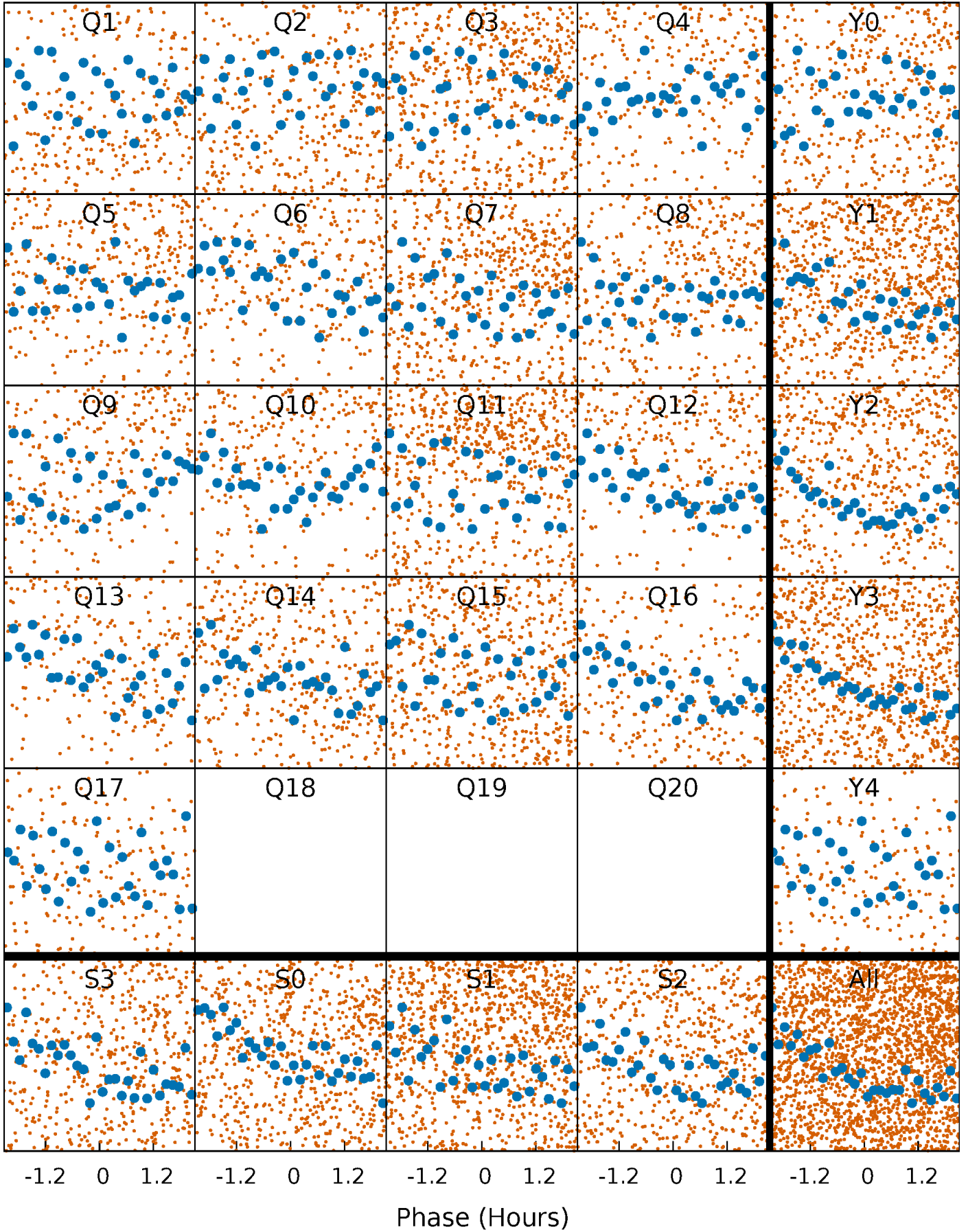


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



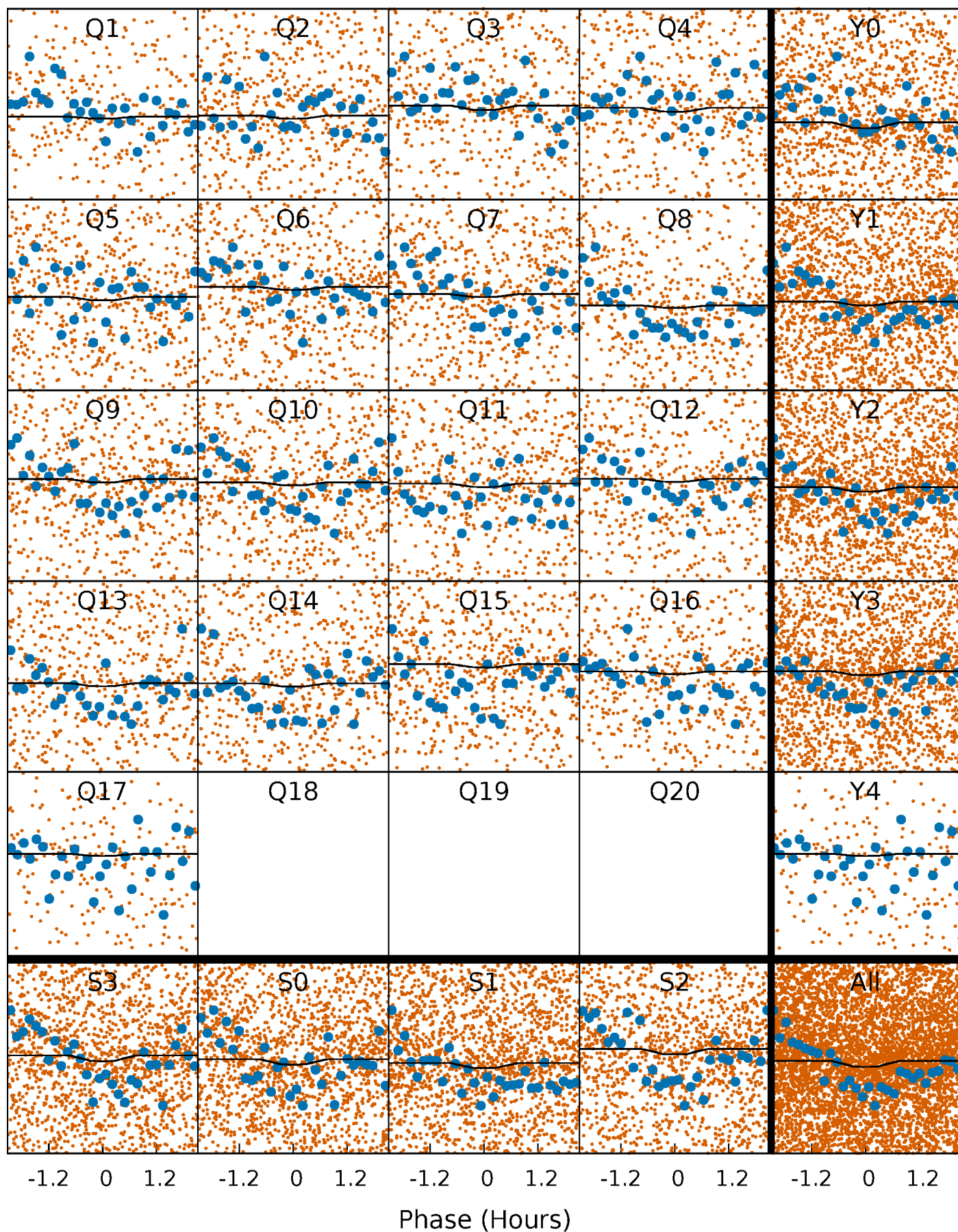
PDC Quarter-Phased Transit Curves

TCE 003642713-02 P= 0.895578 Days $T_0=132.499120$ (BKJD)



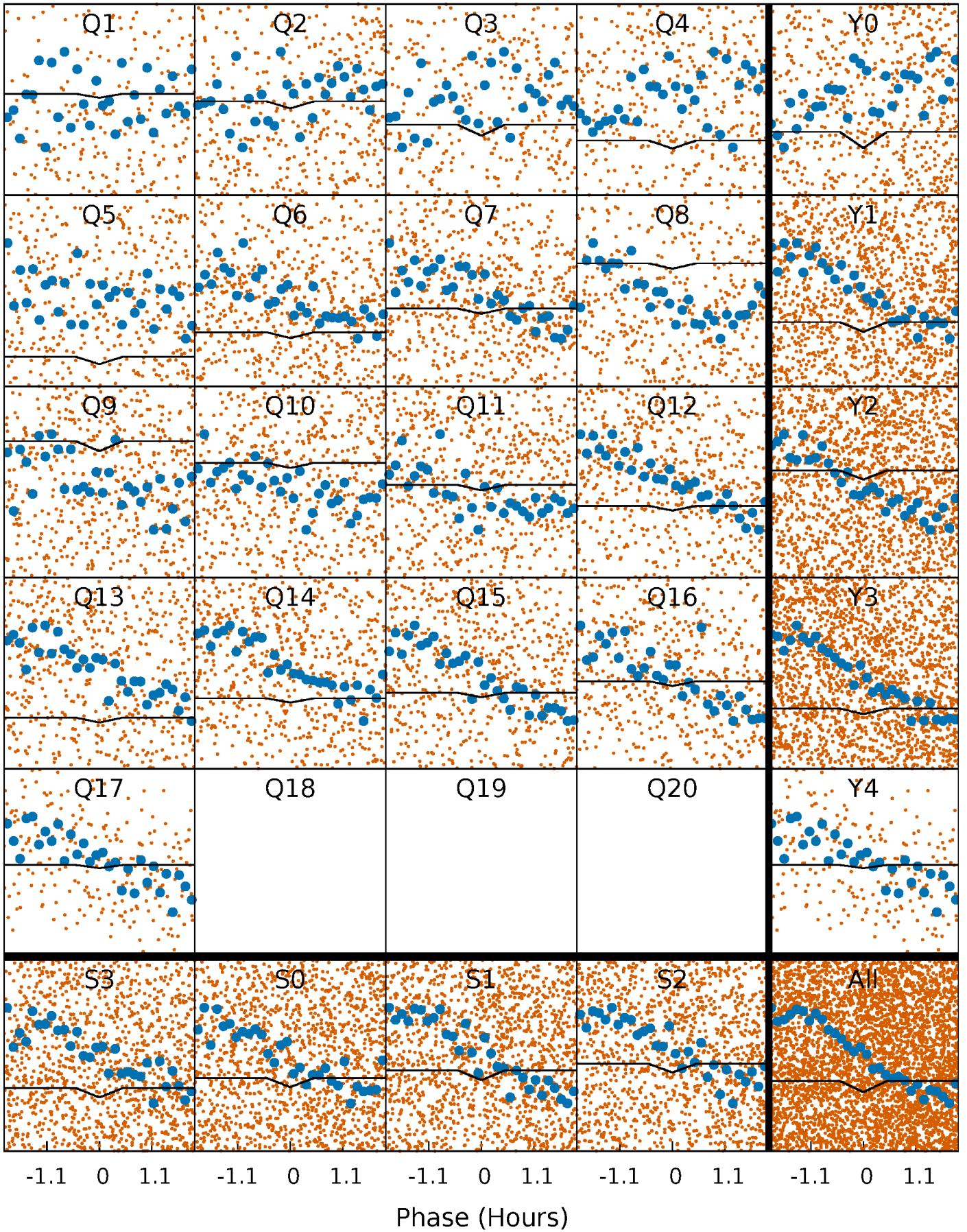
DV Quarter-Phased Transit Curves

TCE 003642713-02 $P = 0.895578$ Days $T_0 = 132.499120$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

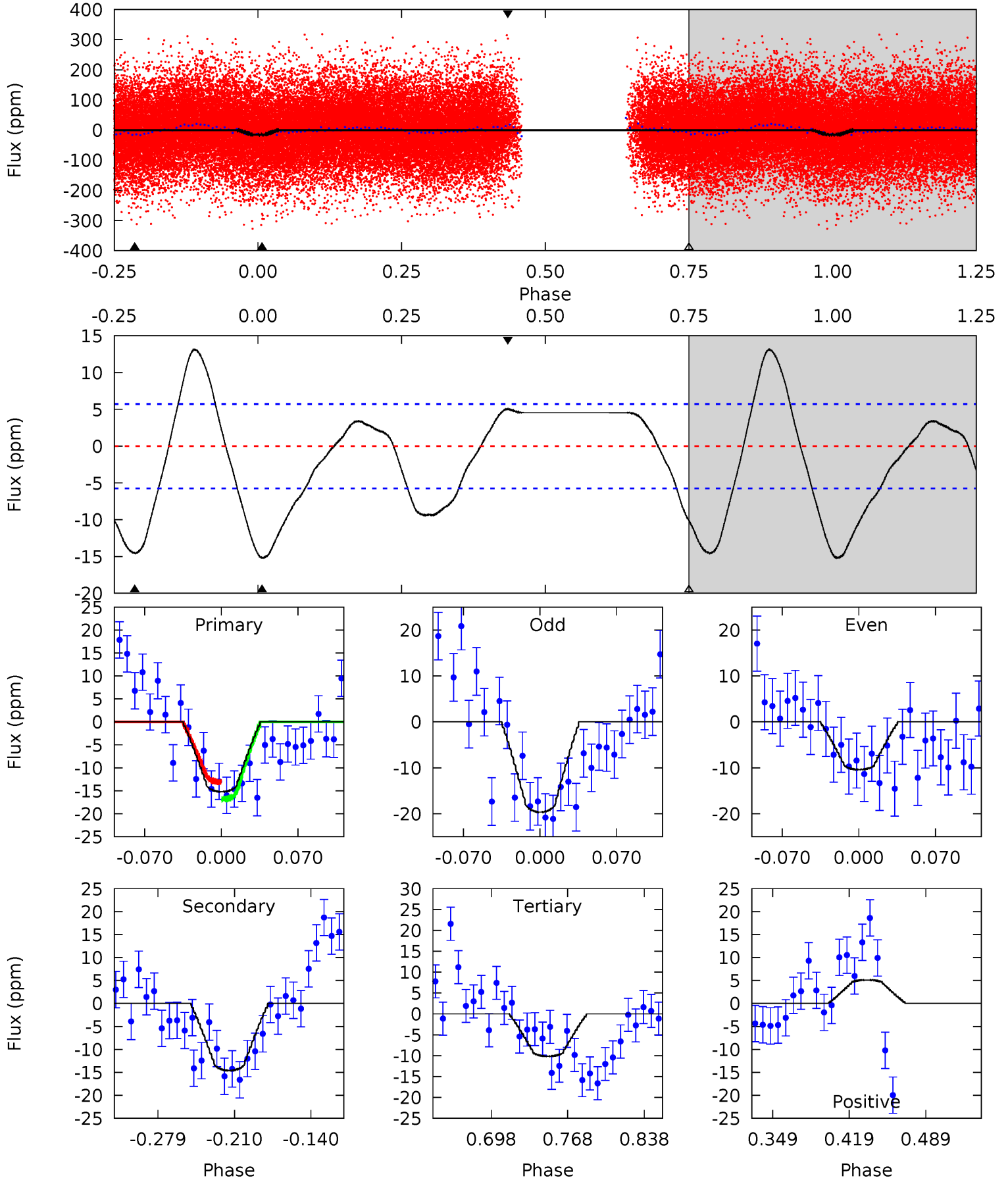
TCE 003642713-02 P= 0.895544 Days $T_0=132.486270$ (BKJD)



DV Model-Shift Uniqueness Test

003642713-02, P = 0.895578 Days, E = 130.707964 Days

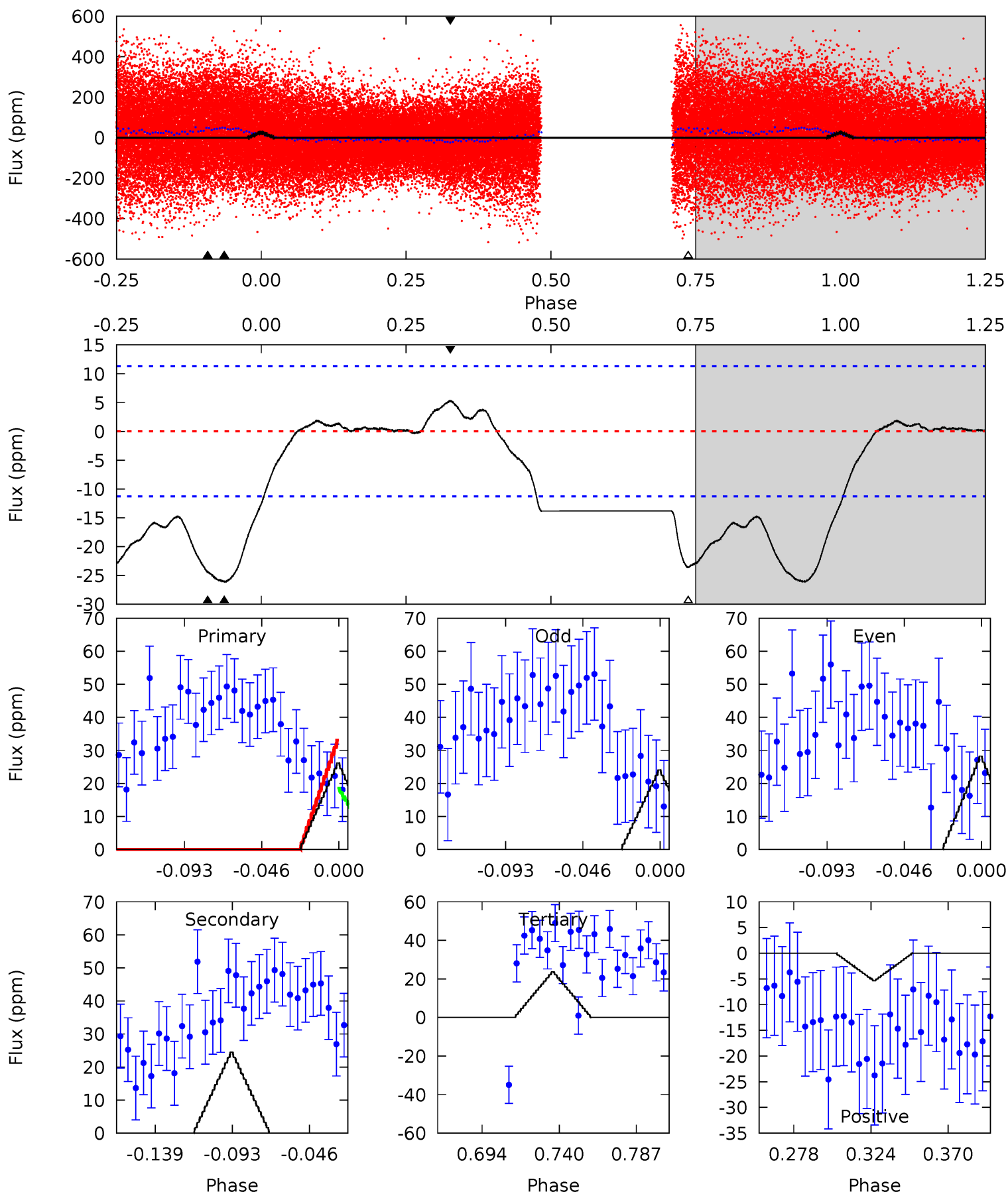
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.3	11.8	8.21	4.13	4.64	1.81	4.78	4.12	8.20	3.60	7.69	3.75	1.16	0.46	1.53



Alt Model-Shift Uniqueness Test

003642713-02, P = 0.895544 Days, E = 130.695182 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.0	10.3	9.92	2.24	4.72	1.99	3.61	1.04	8.72	0.34	8.01	0.88	1.27	0.17	2.93



Stellar Parameters For KIC 003642713

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6889^{+183}_{-204}	$3.925^{+0.240}_{-0.111}$	$-0.320^{+0.300}_{-0.250}$	$2.099^{+0.470}_{-0.626}$	$1.355^{+0.238}_{-0.216}$	$0.206^{+0.298}_{-0.079}$
	+3%/-3%	+6%/-3%	+94%/-78%	+22%/-30%	+18%/-16%	+144%/-38%
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 003642713-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-15 ± 1	$0.39^{+0.26}_{-0.22}$	4273^{+269}_{-332}	11374^{+15029}_{-3318}	22^{+95}_{-14}
Alt.	-24 ± 2	$0.58^{+0.30}_{-0.23}$	4270^{+264}_{-317}	9922^{+5200}_{-2171}	16^{+28}_{-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 $T_{obs} \gg T_{max}$ AND $A_{obs} \gg 1.0$

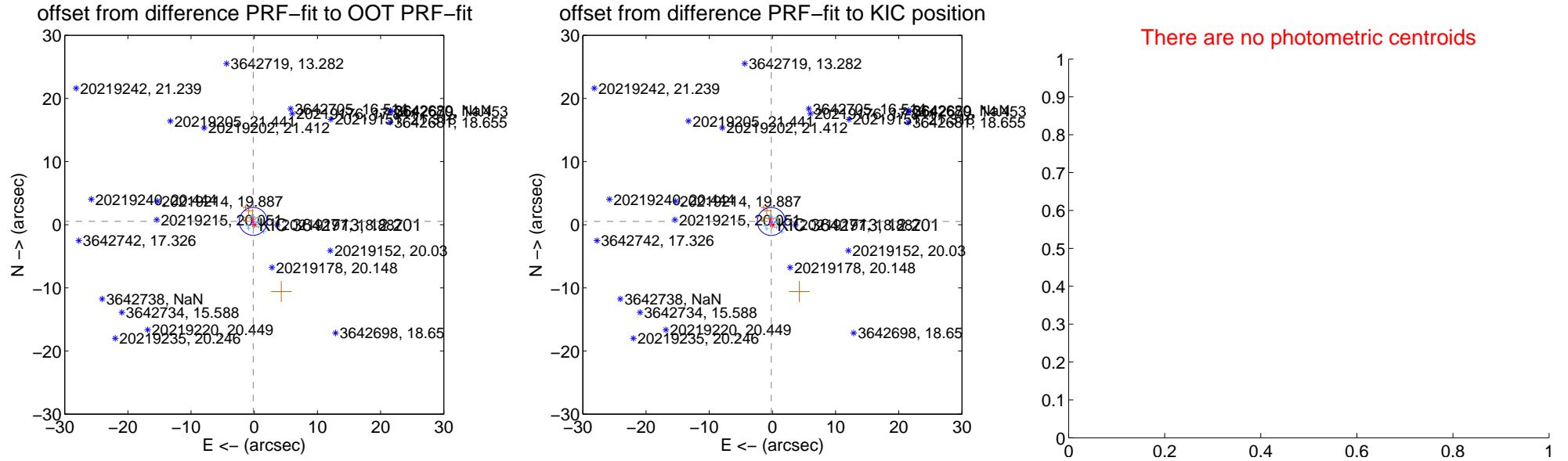
DV Centroid Data

Supplemental centroid analysis for 003642713-02. Kepler magnitude: 12.20. Transit SNR 1.29

There are 10 quarters with good PRF difference image offsets

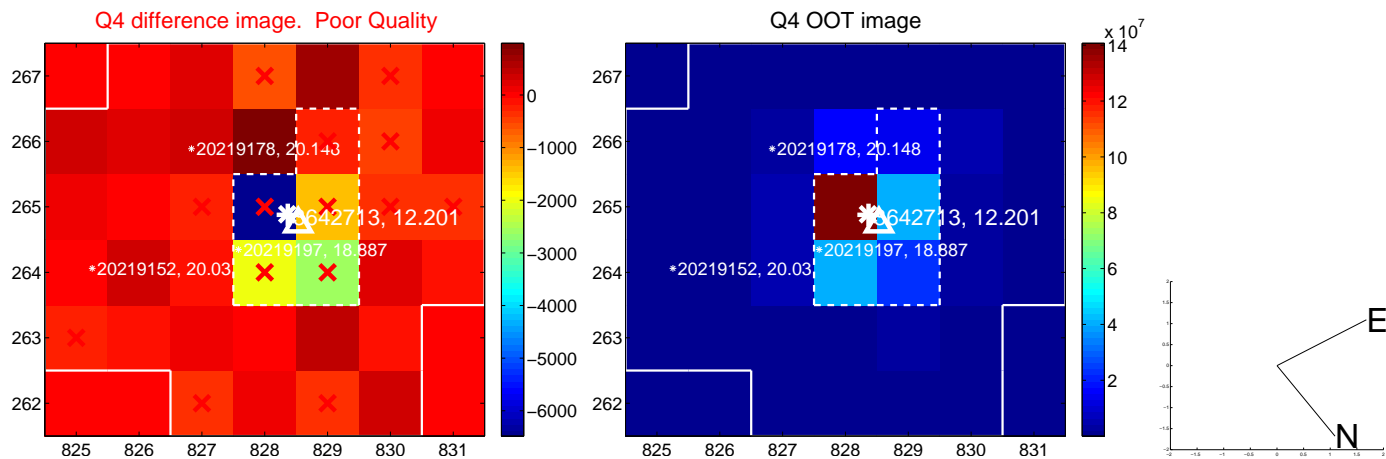
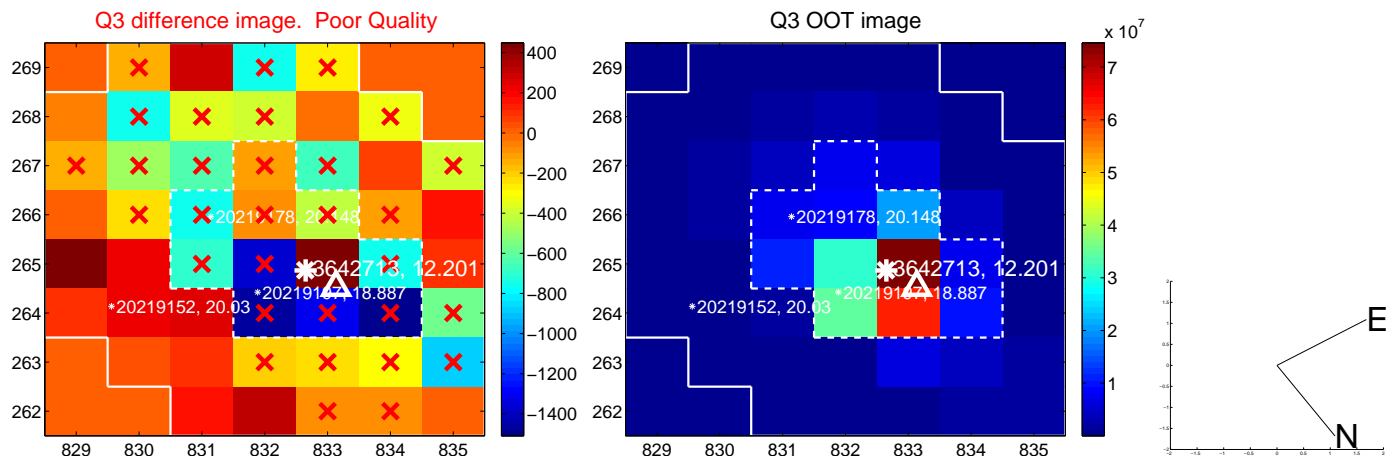
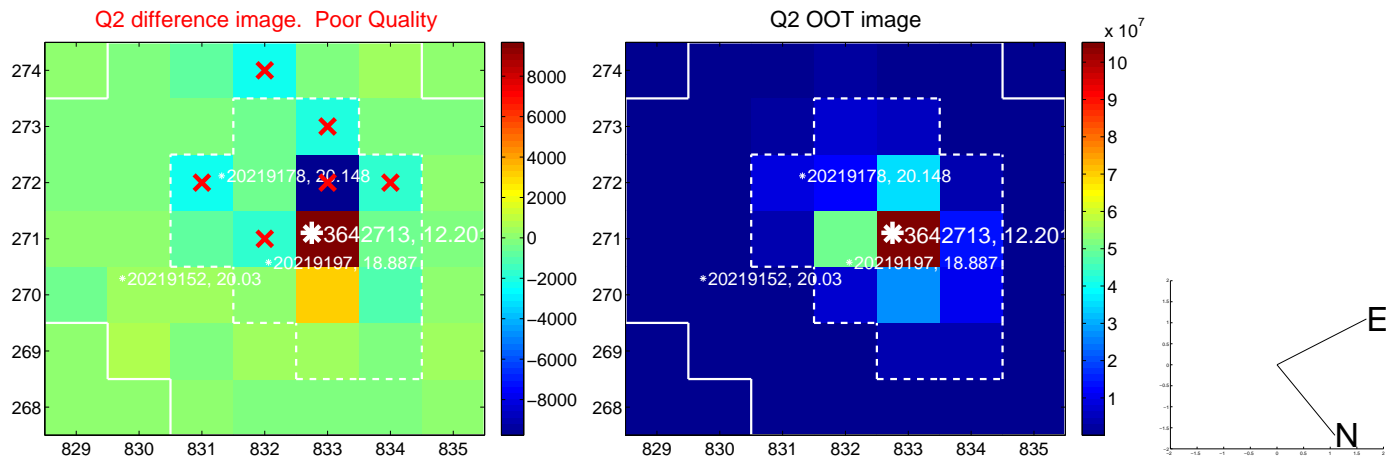
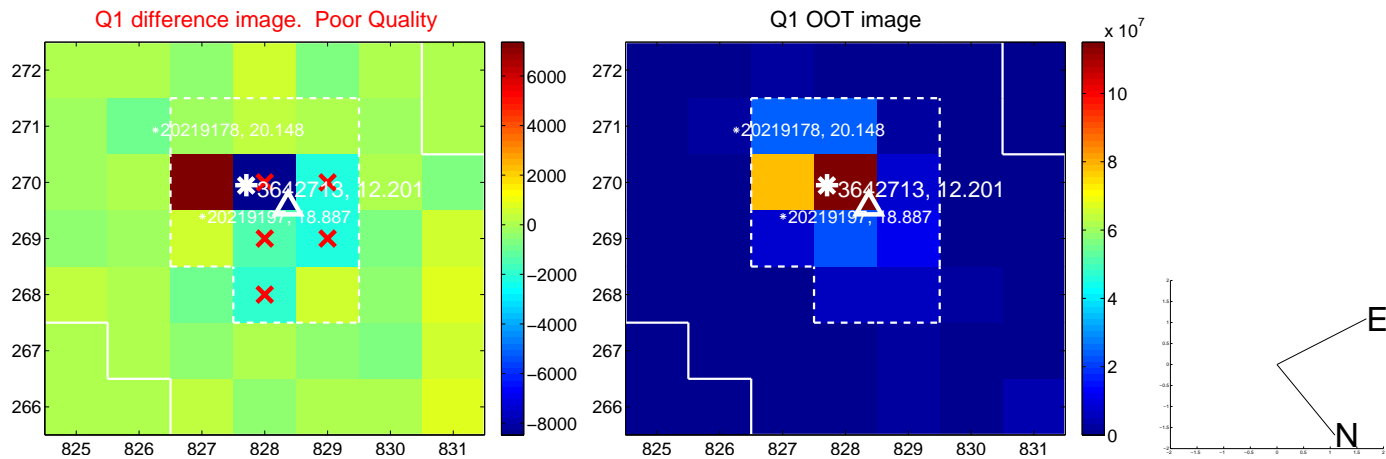
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.556 ± 0.737	0.75	0.167 ± 0.327	0.530 ± 0.687
PRF-fit source offset from KIC position	0.541 ± 0.737	0.73	0.176 ± 0.321	0.512 ± 0.689
photometric centroid source offset	—	—	—	—

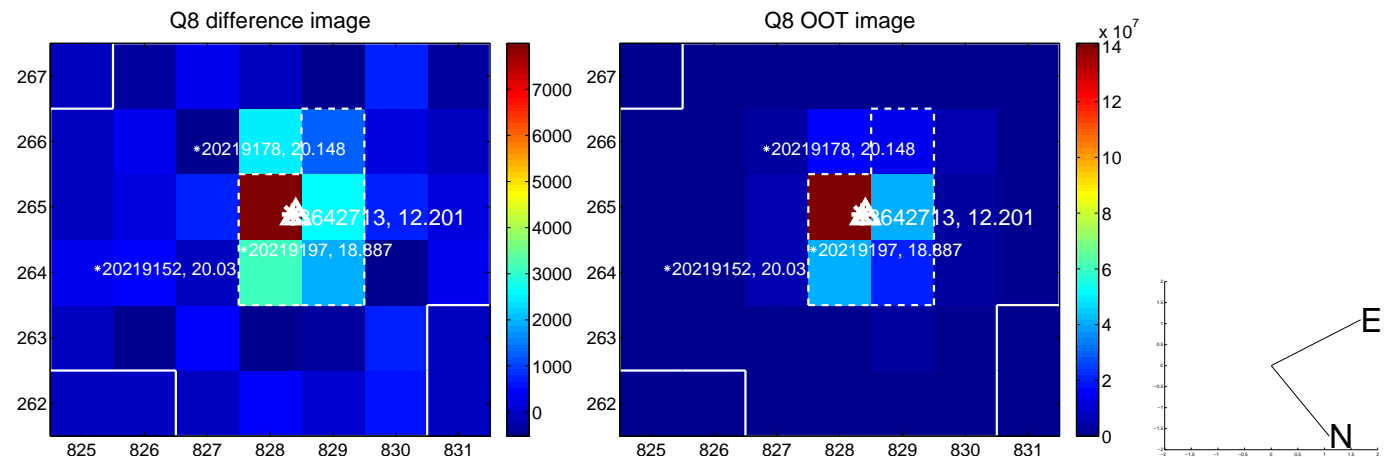
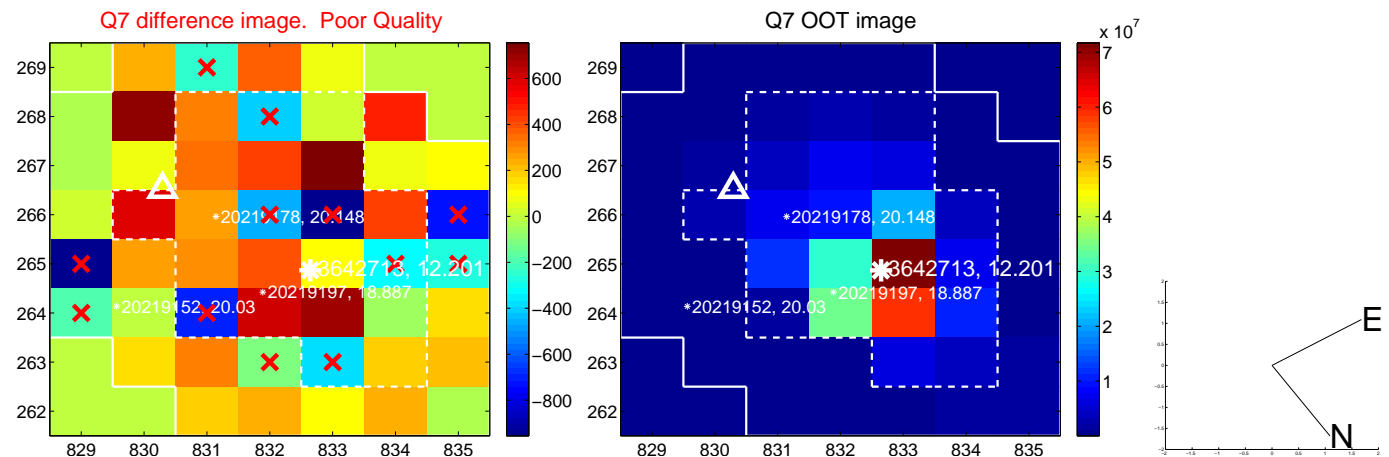
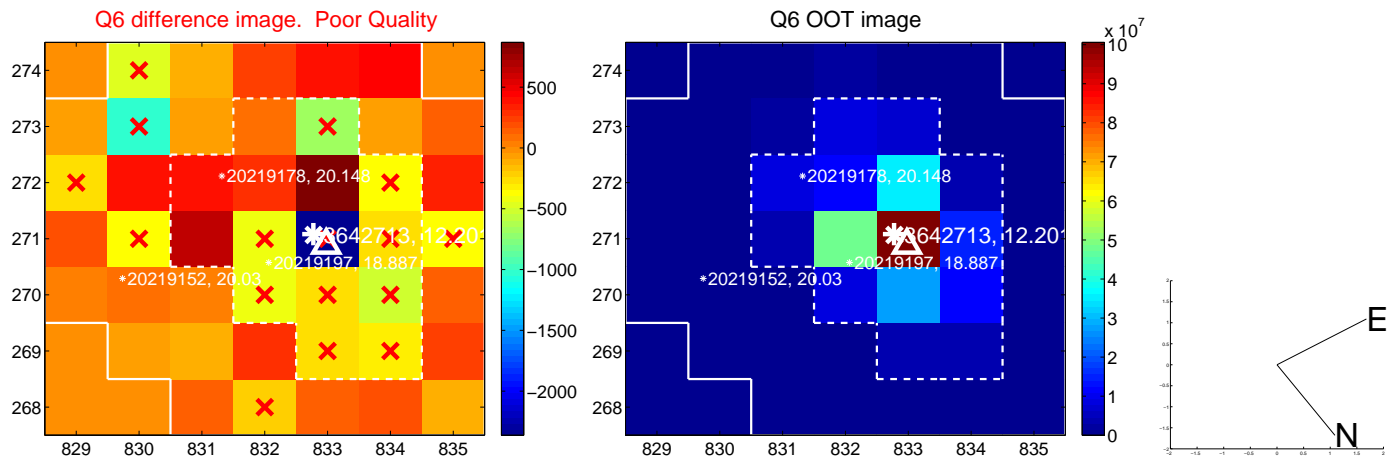
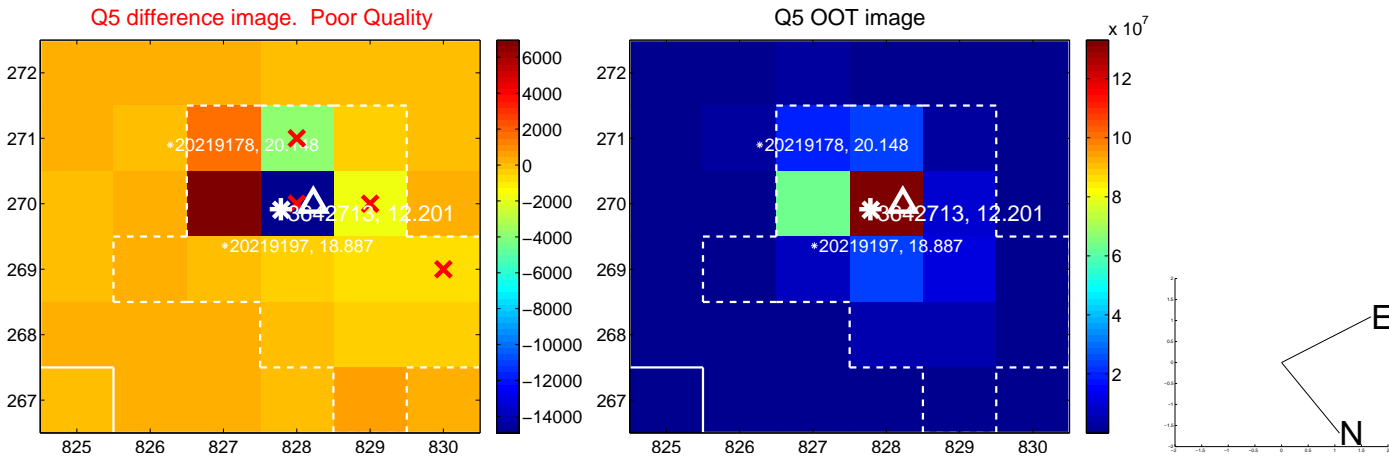


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

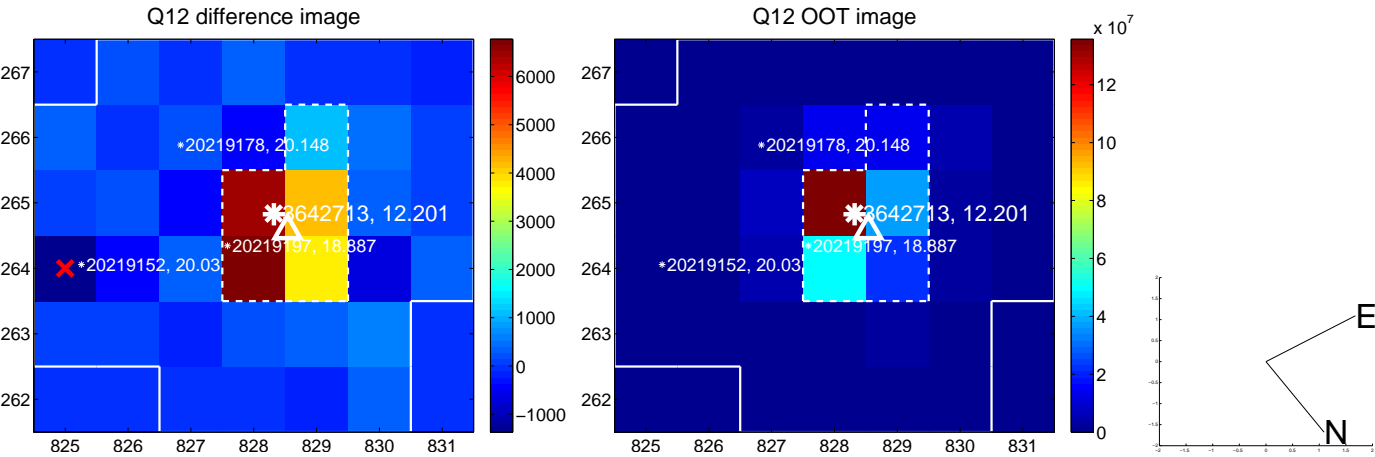
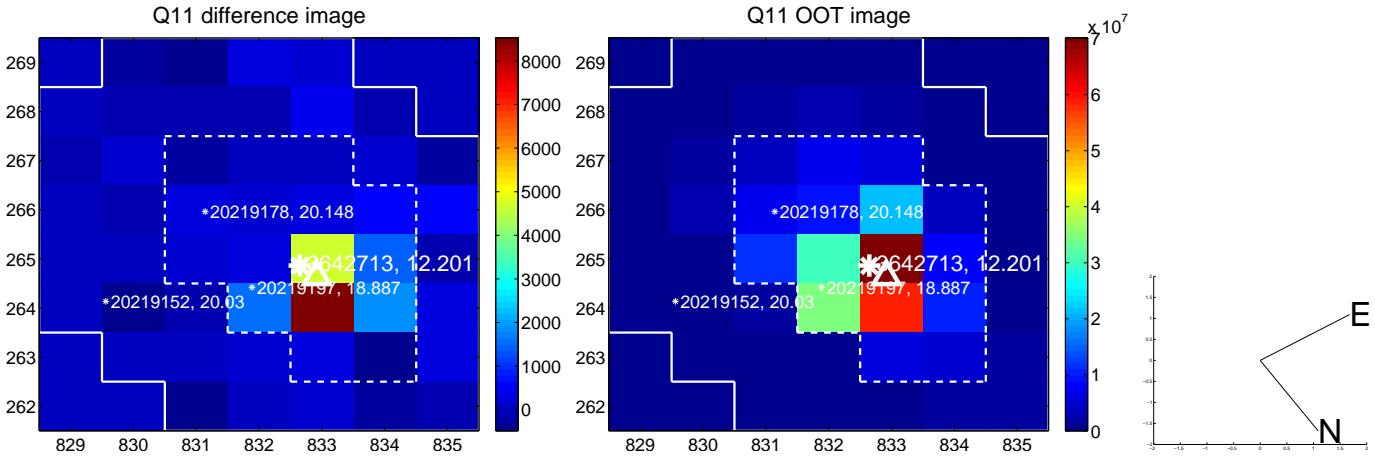
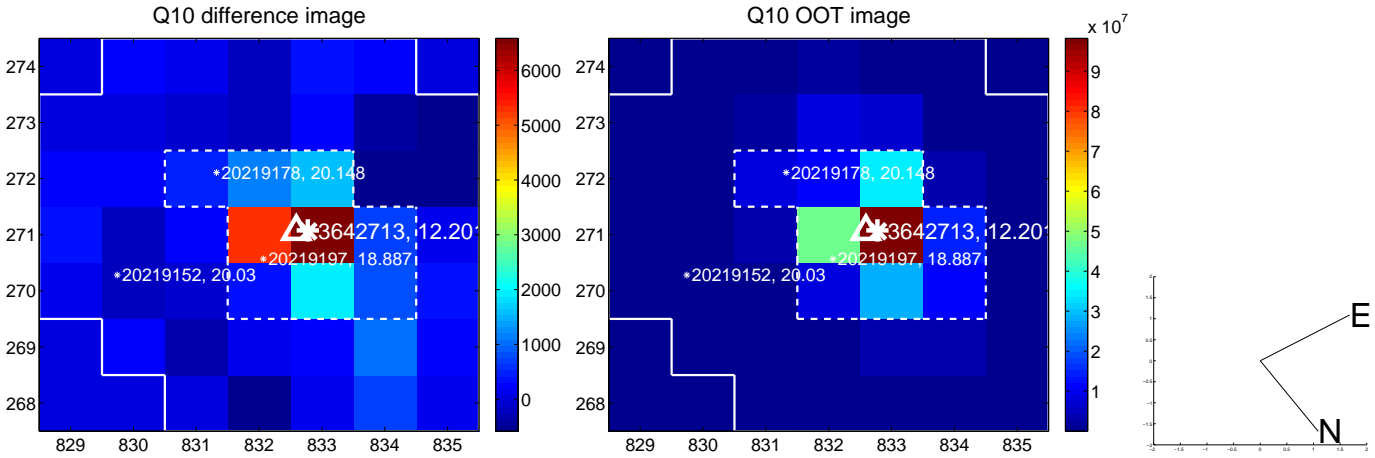
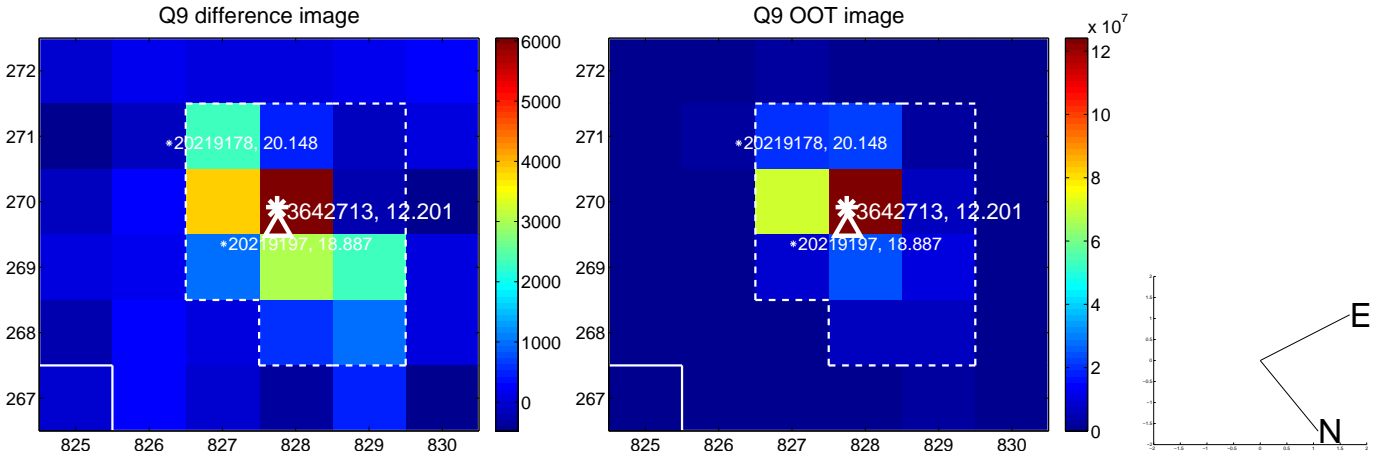
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



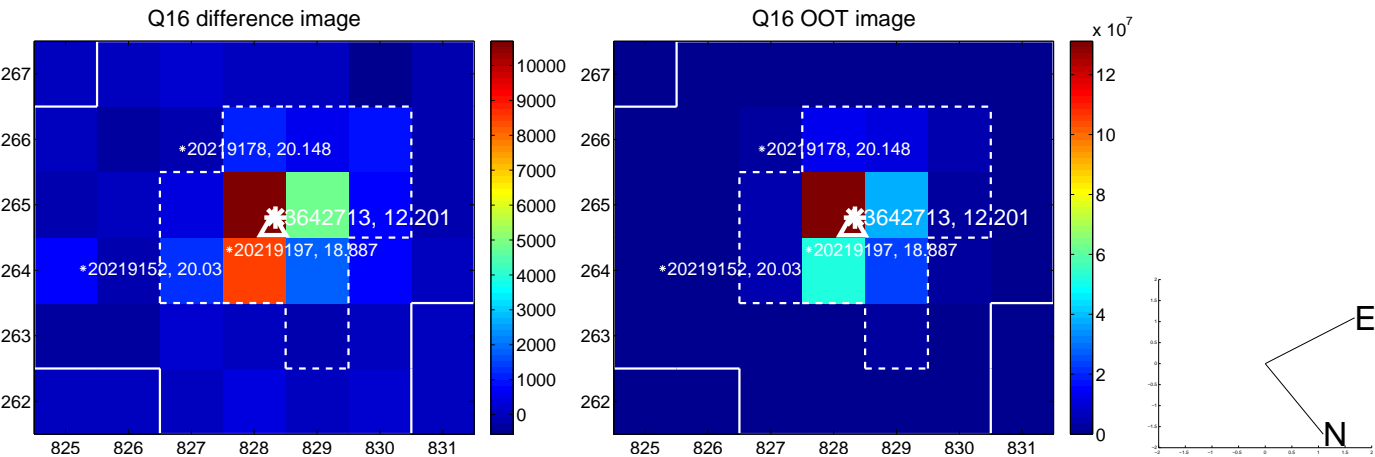
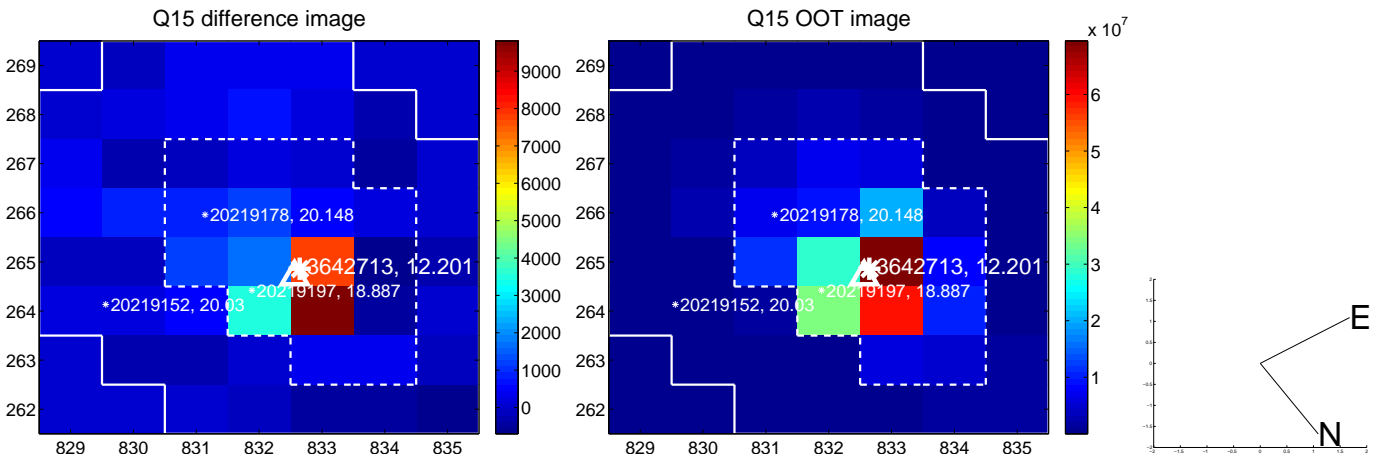
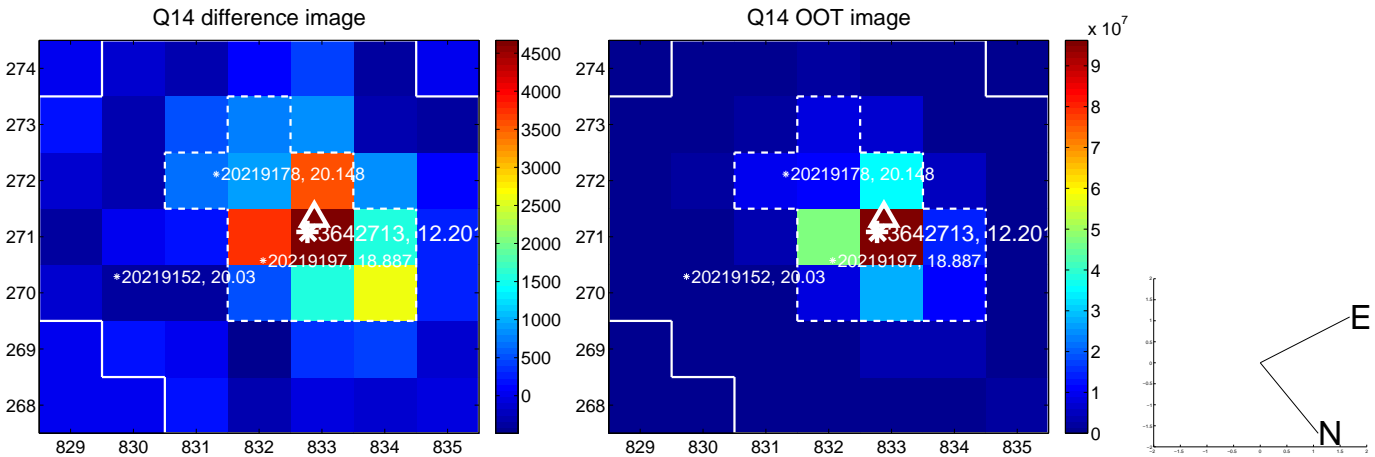
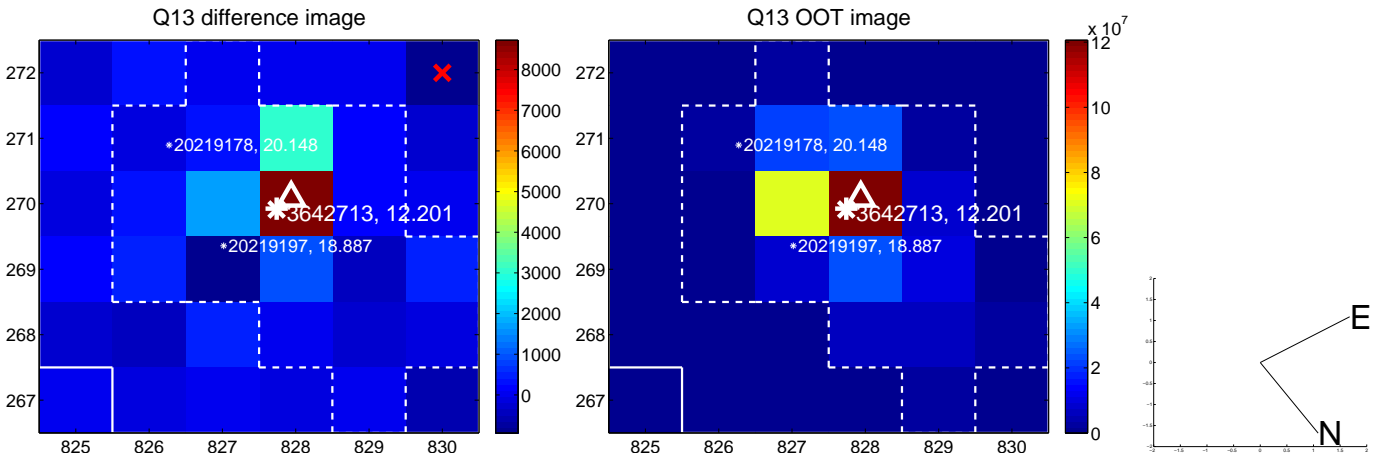
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



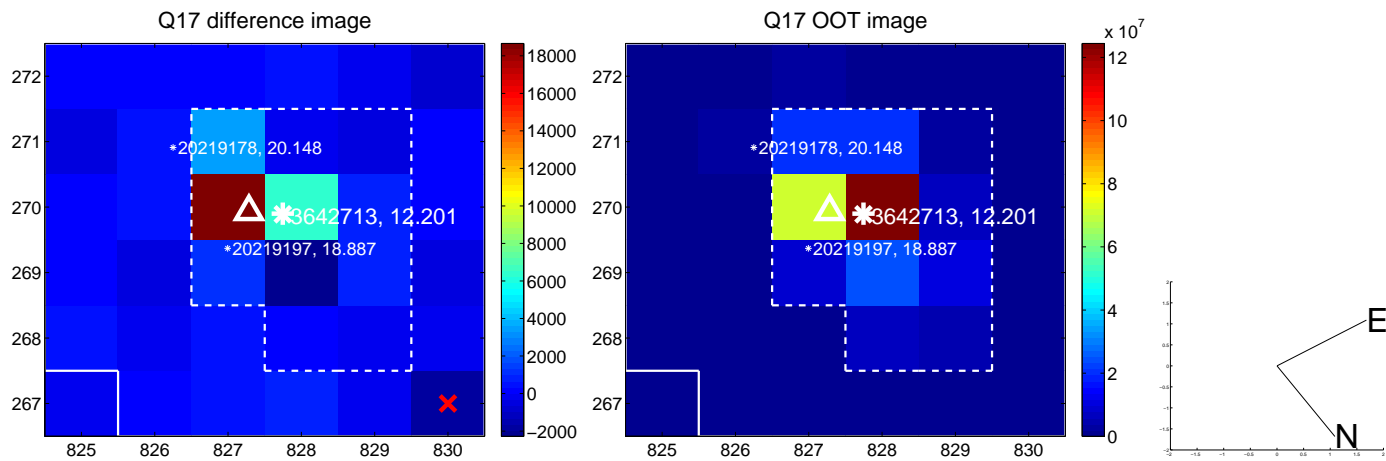
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

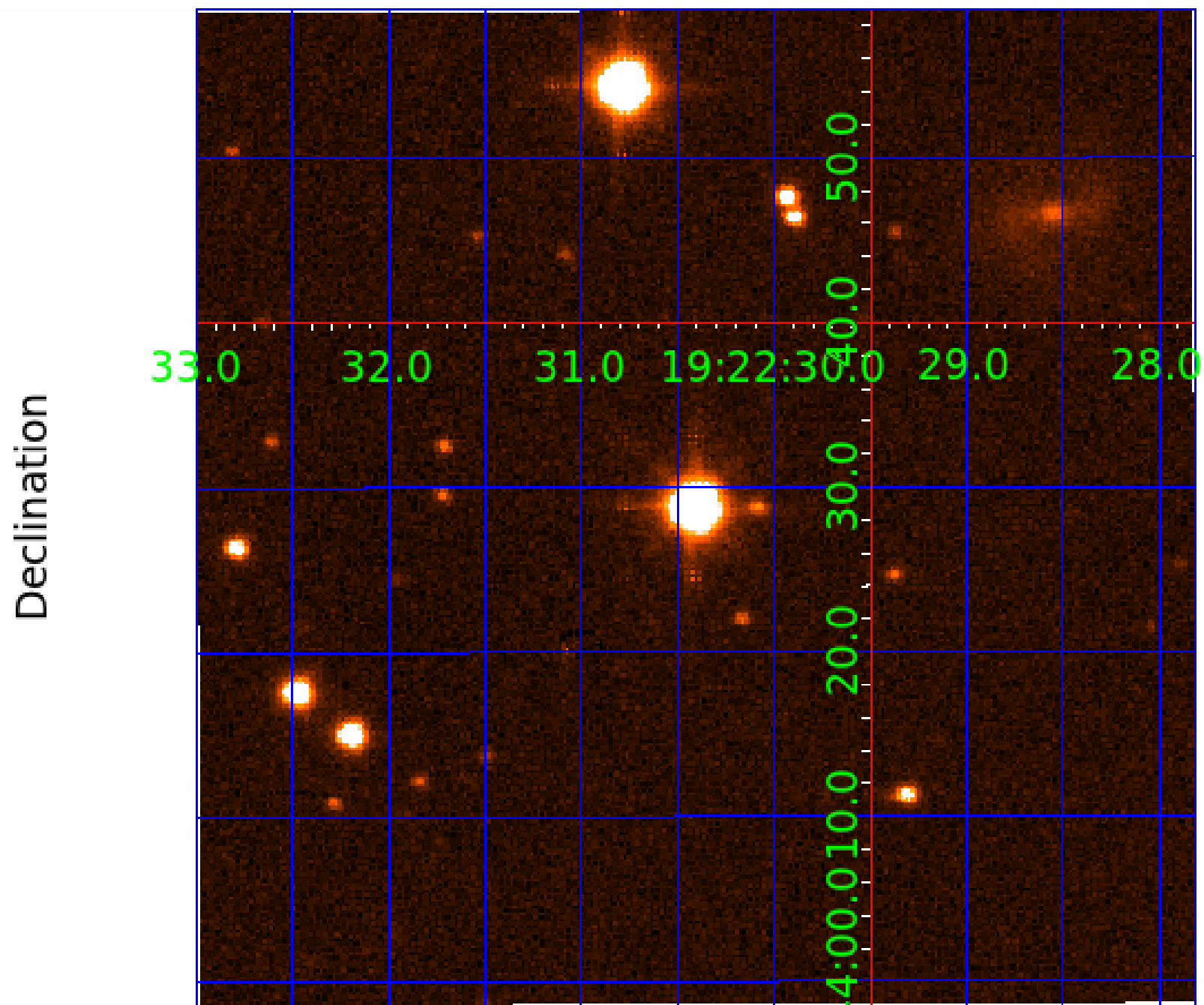


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



folded centroid time series figure for this object.

UKIRT Image



KIC 003642713

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})
003642713-01	OBS	No	0.895549	132.120662	2.5	0.926	10.3	1.1	2.10	6889	0.39	21982.40
003642713-02	OBS	No	0.895578	132.499120	2.6	1.062	9.6	1.3	2.10	6889	0.39	21981.43
003642713-03	OBS	No	2.686660	134.117993	22.3	2.108	8.4	8.6	2.10	6889	1.00	5080.55

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003642713-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT
003642713-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA_TRACKER—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
003642713-03	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—SAME_NTL_PERIOD

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

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

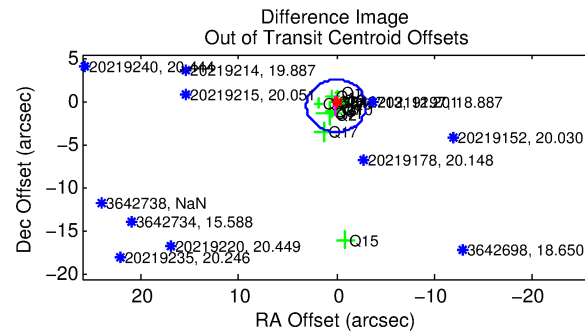
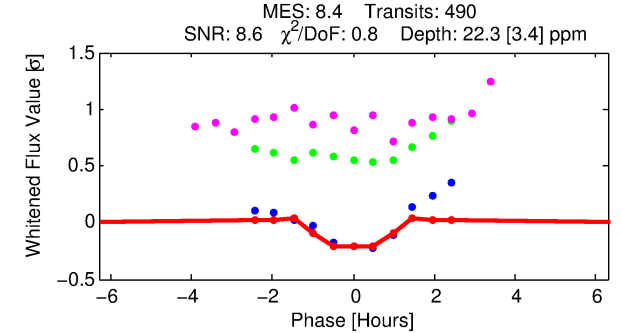
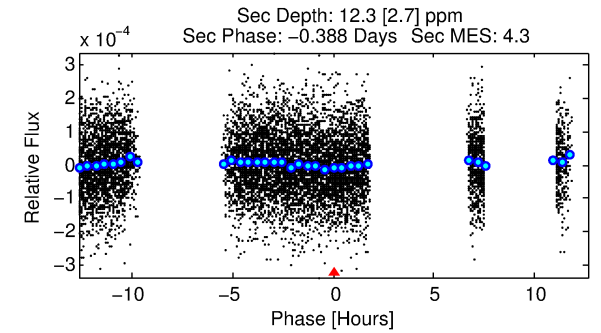
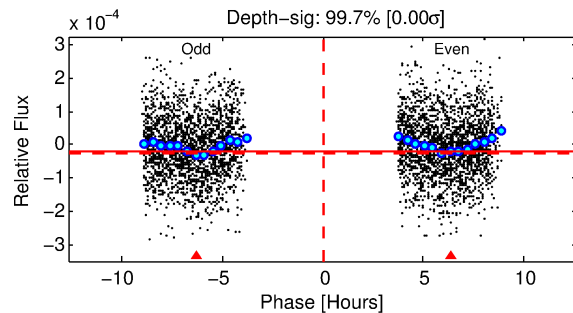
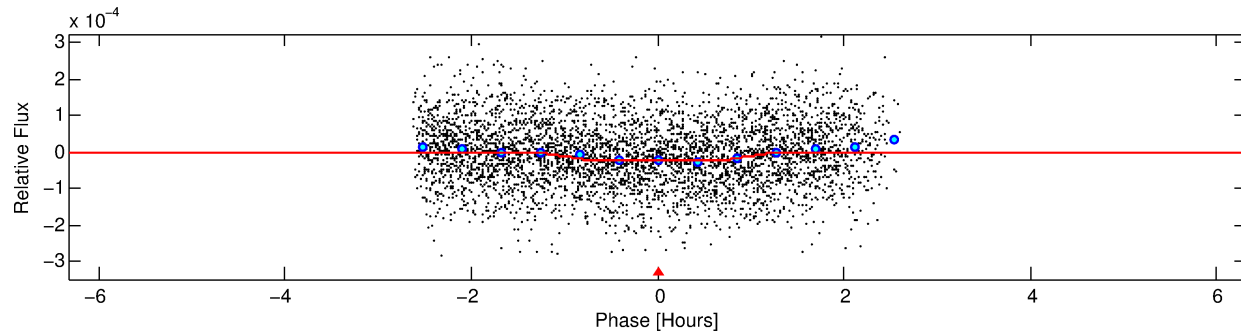
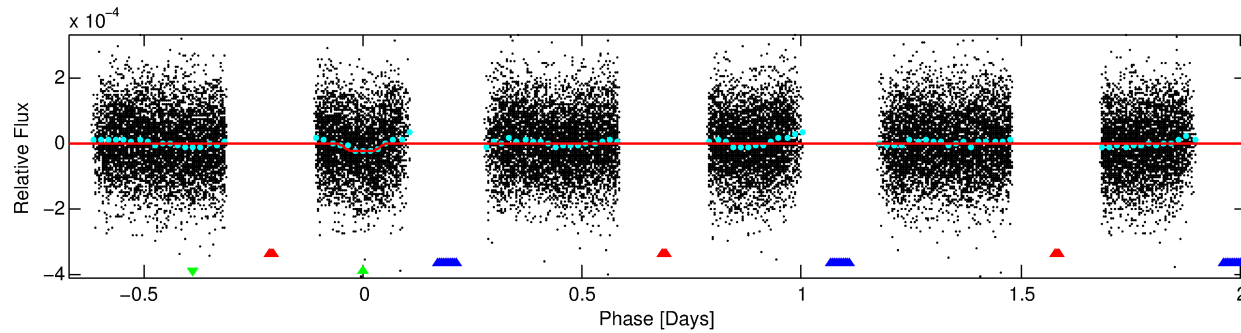
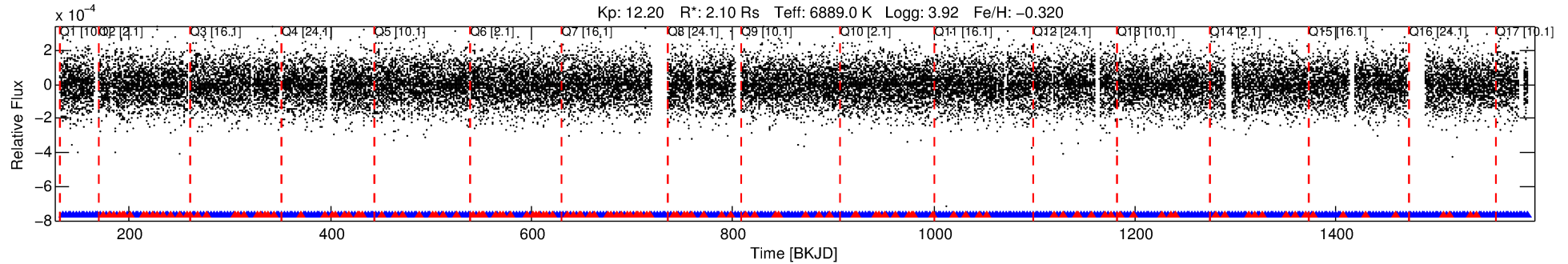
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003642713-03

No Significant Match Found

DV One-Page Summary

KIC: 3642713 Candidate: 3 of 3 Period: 2.687 d



DV Fit Results:

Period = 2.68666 [0.00002] d
Epoch = 134.1180 [0.0035] BKJD
Rp/R* = 0.0044 [0.0053]
a/R* = 9.76 [65.75]
b = 0.08 [79.86]
Seff = 5080.55 [2210.42]
Teq = 2153 [234] K
Rp = 1.00 [1.25] Re
a = 0.0418 [0.0113] AU
Ag = 11.72 [28.90] [0.37σ]
Teffp = 6158 [3747] K [1.07σ]

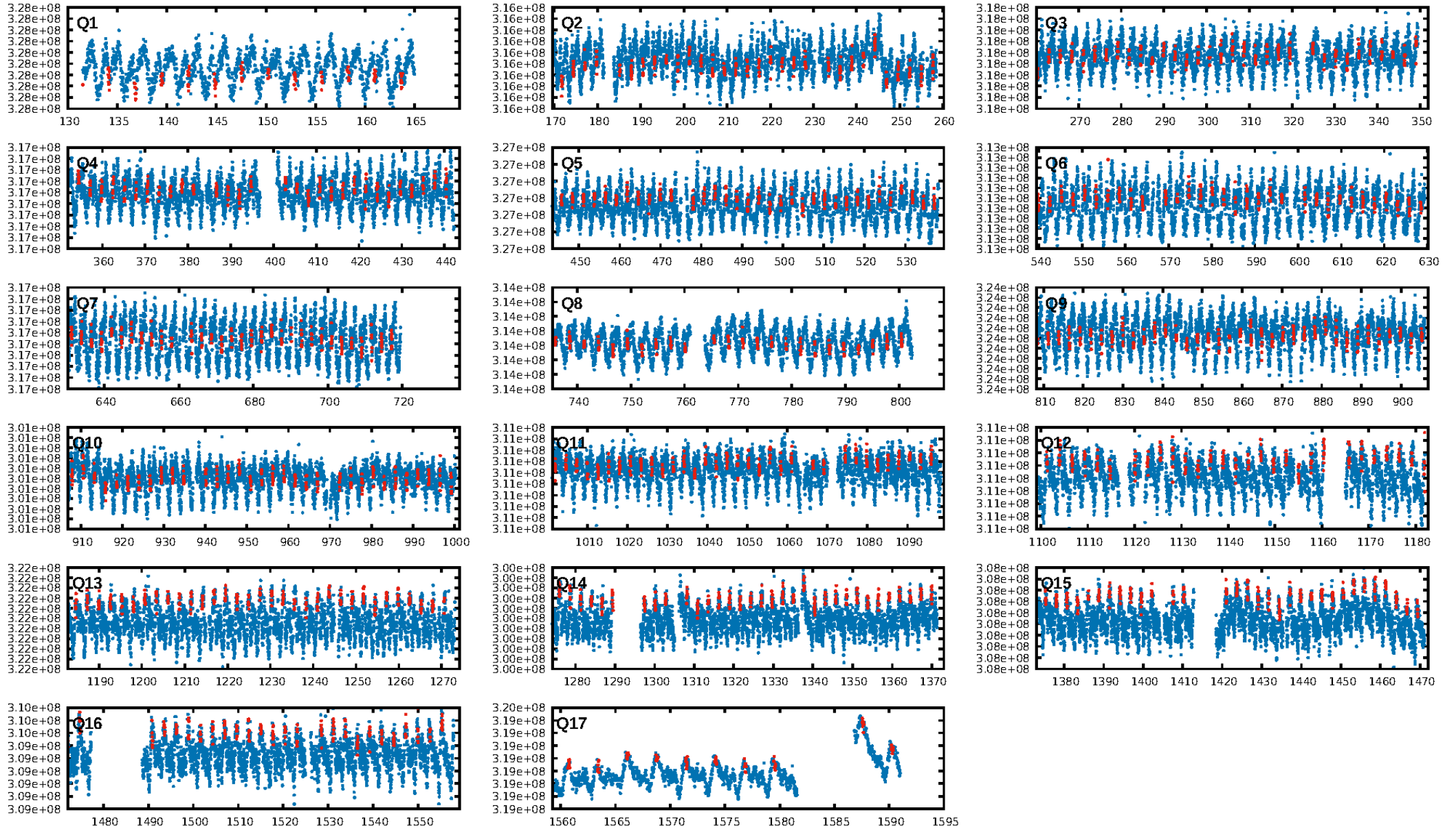
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [18.21σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.84e-14
RollingBand-fgt: 0.72 [336/468]
GhostDiagnostic-chr: 27.19
Centroid-sig: 23.5%
Centroid-so: 0.923 arcsec [0.83σ]
OotOffset-rm: 0.457 arcsec [0.45σ]
KicOffset-rm: 0.476 arcsec [0.43σ]
OotOffset-st: 4/4/3/3 [14]
KicOffset-st: 4/4/3/3 [14]
DiffImageQuality-fgm: 0.71 [10/14]
DiffImageOverlap-fno: 0.00 [0/17]

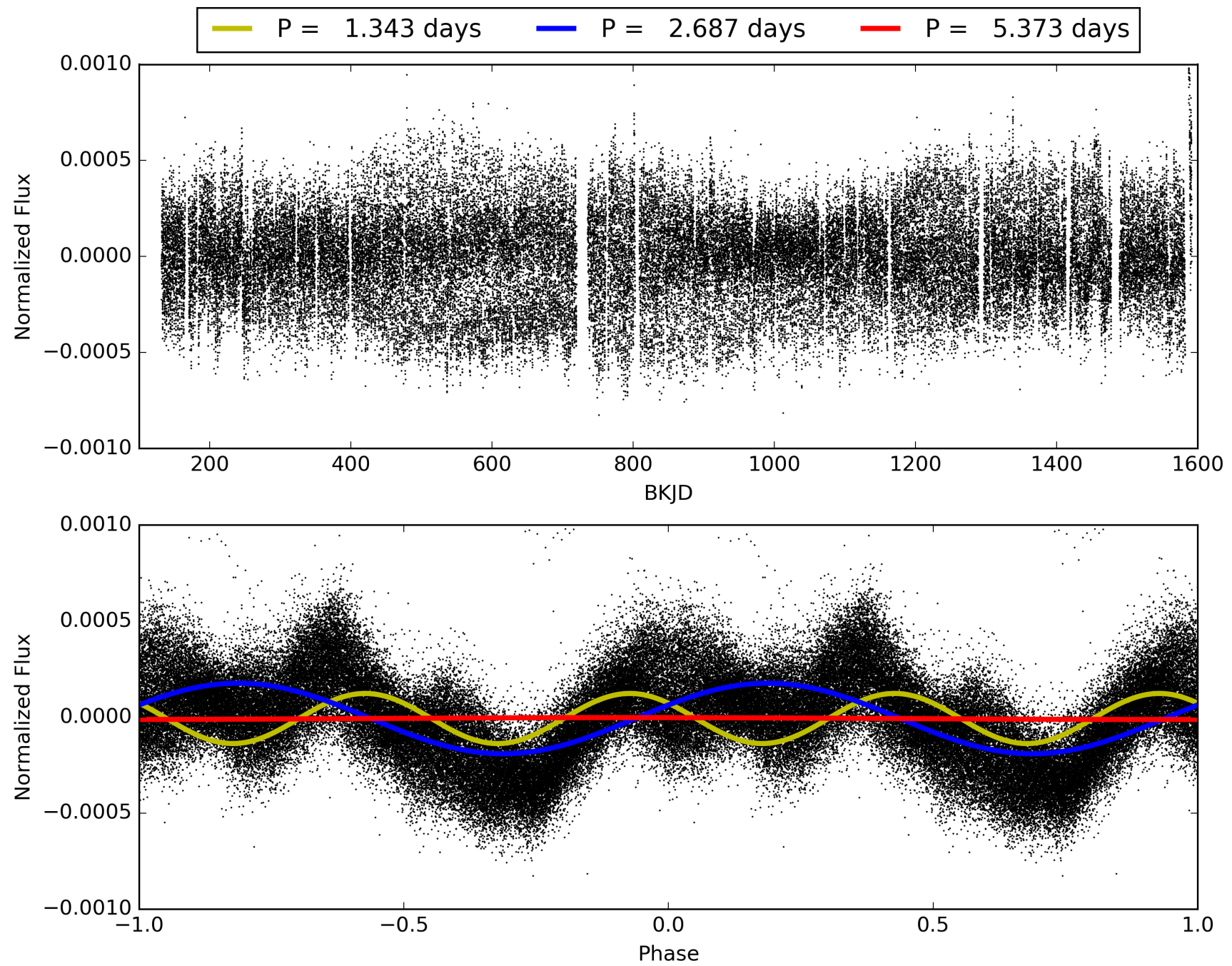
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 03:23:15 Z

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

TCE 003642713-03, PDC Light Curves

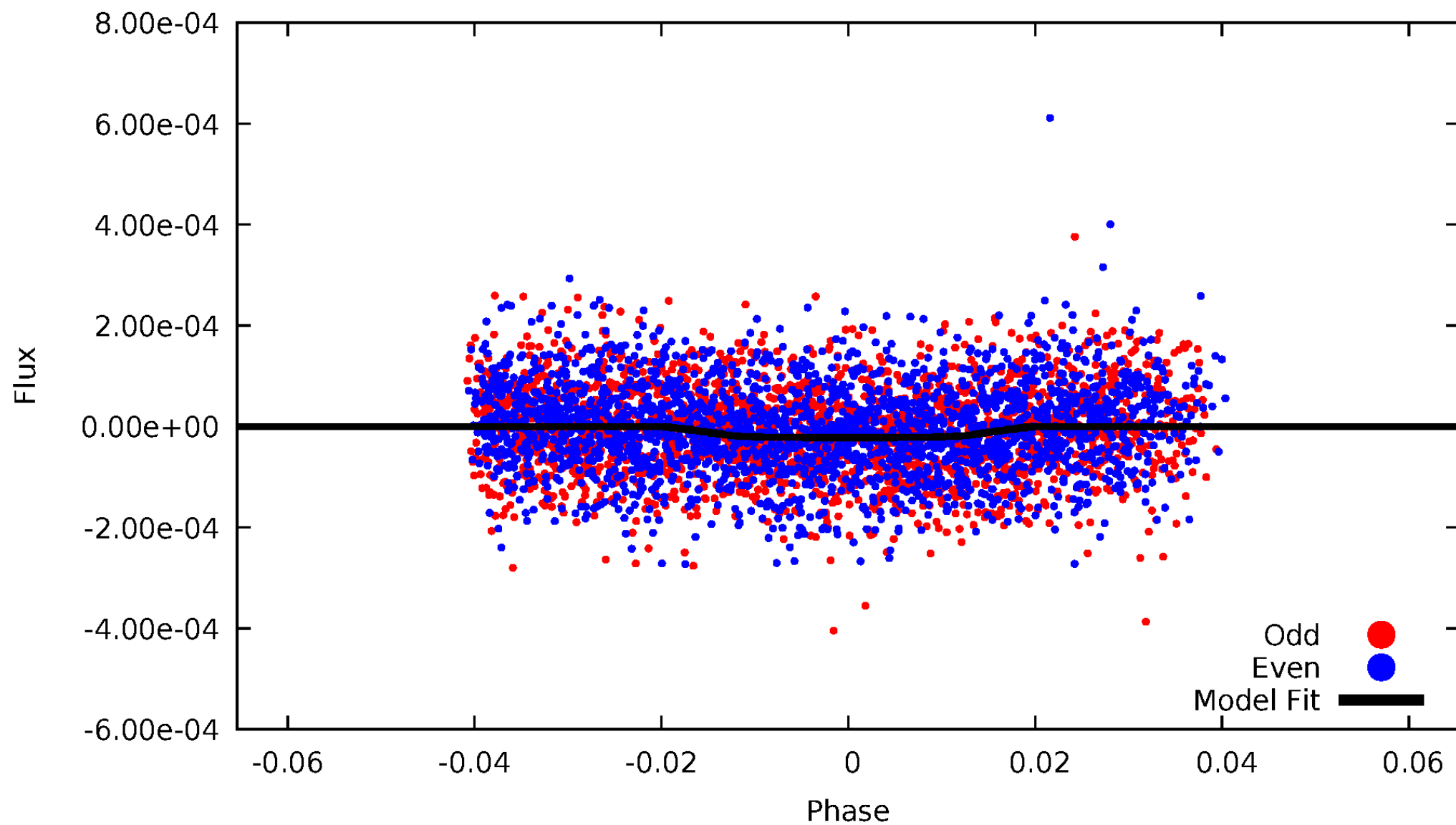


TCE 003642713-03



DV Odd/Even

TCE 003642713-03

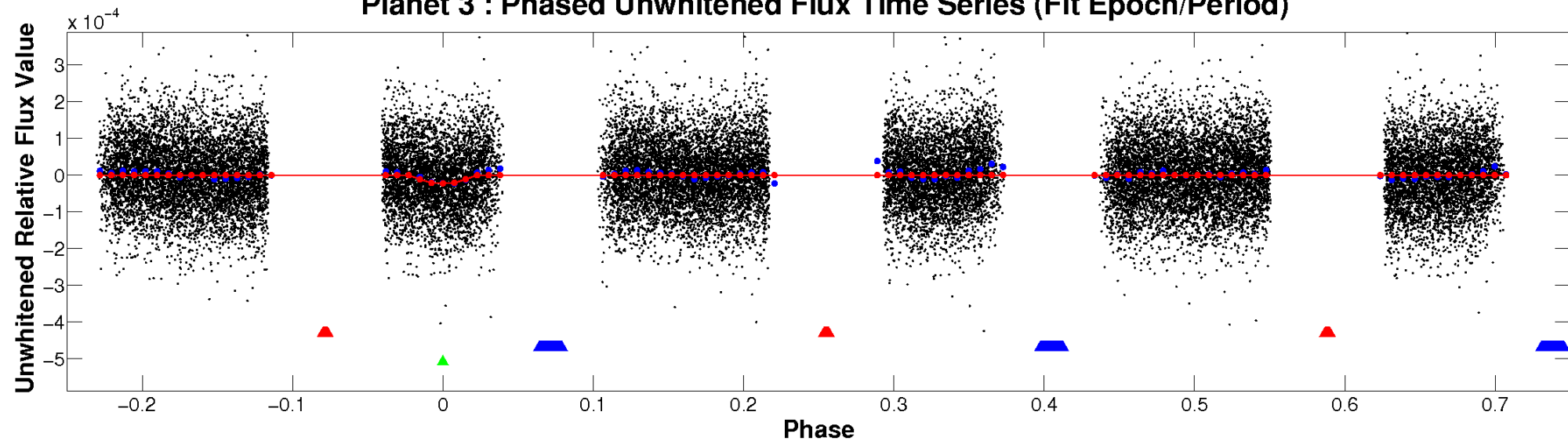


ALT Odd/Even

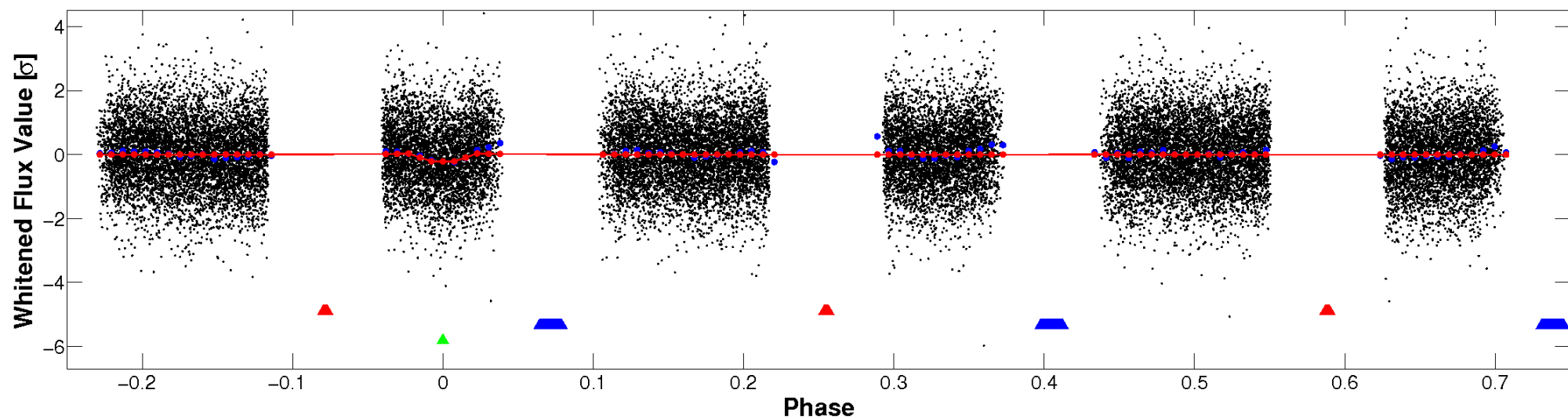
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

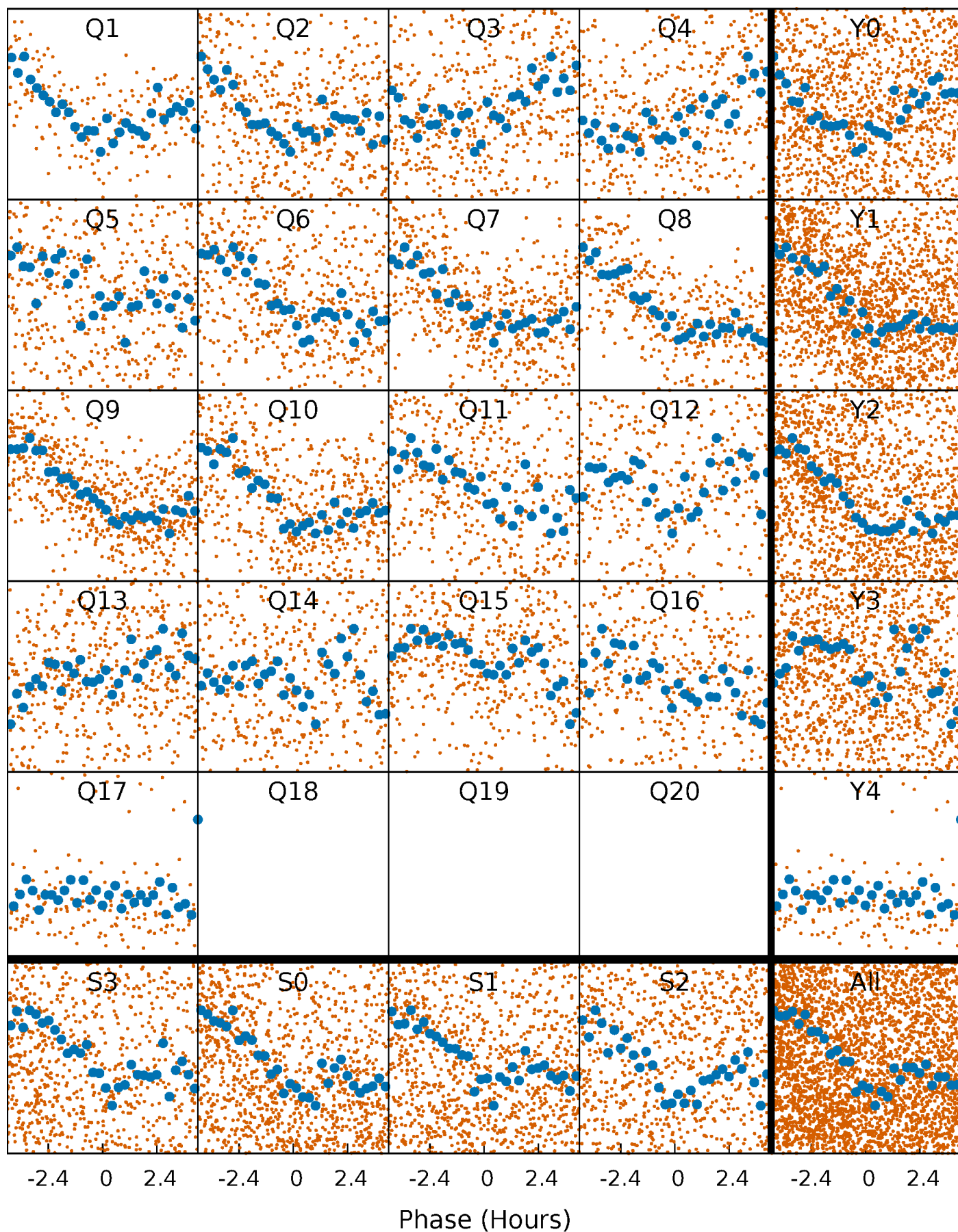


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



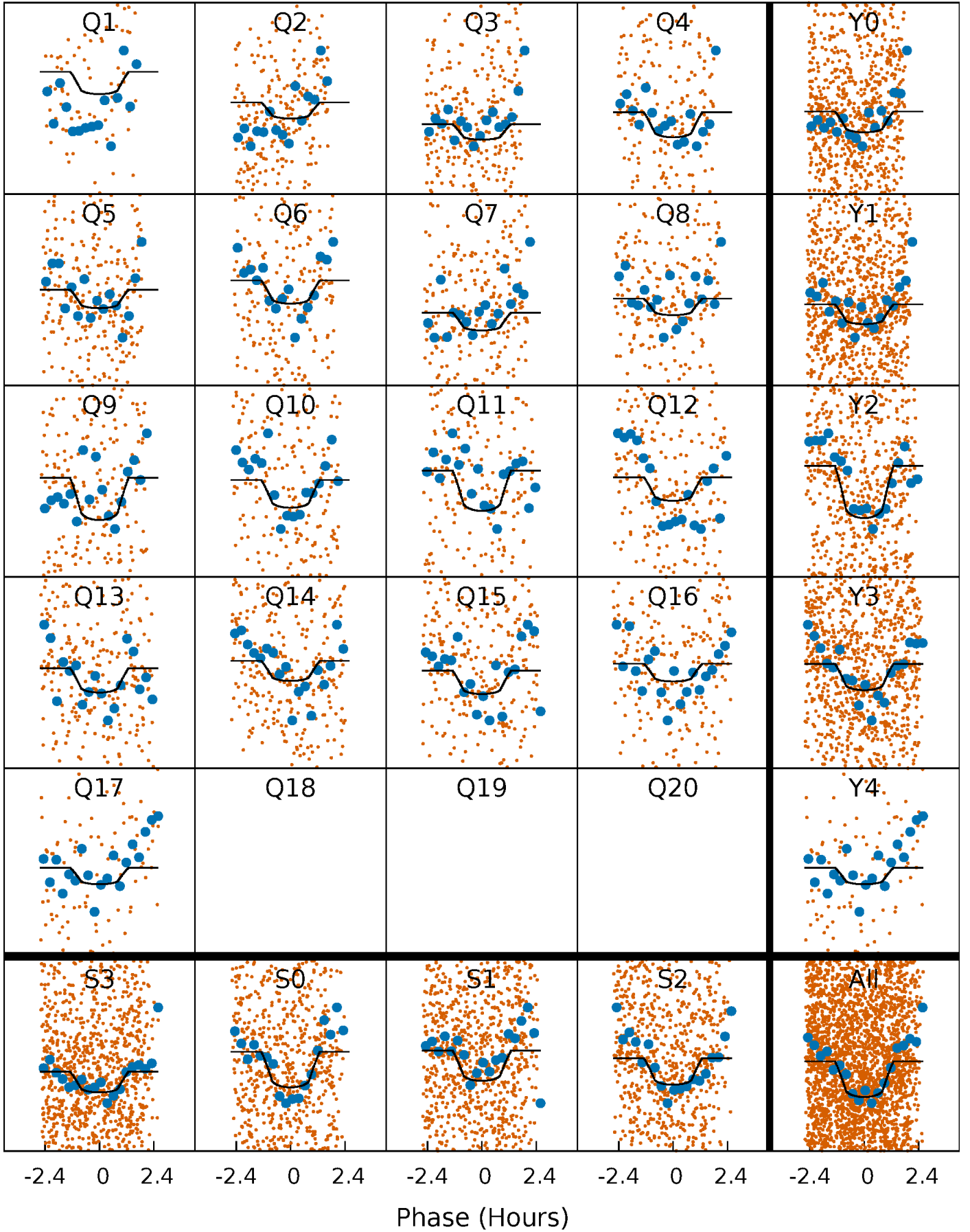
PDC Quarter-Phased Transit Curves

TCE 003642713-03 P= 2.686660 Days $T_0=134.117993$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 003642713-03 $P = 2.686660$ Days $T_0 = 134.117993$ (BKJD)

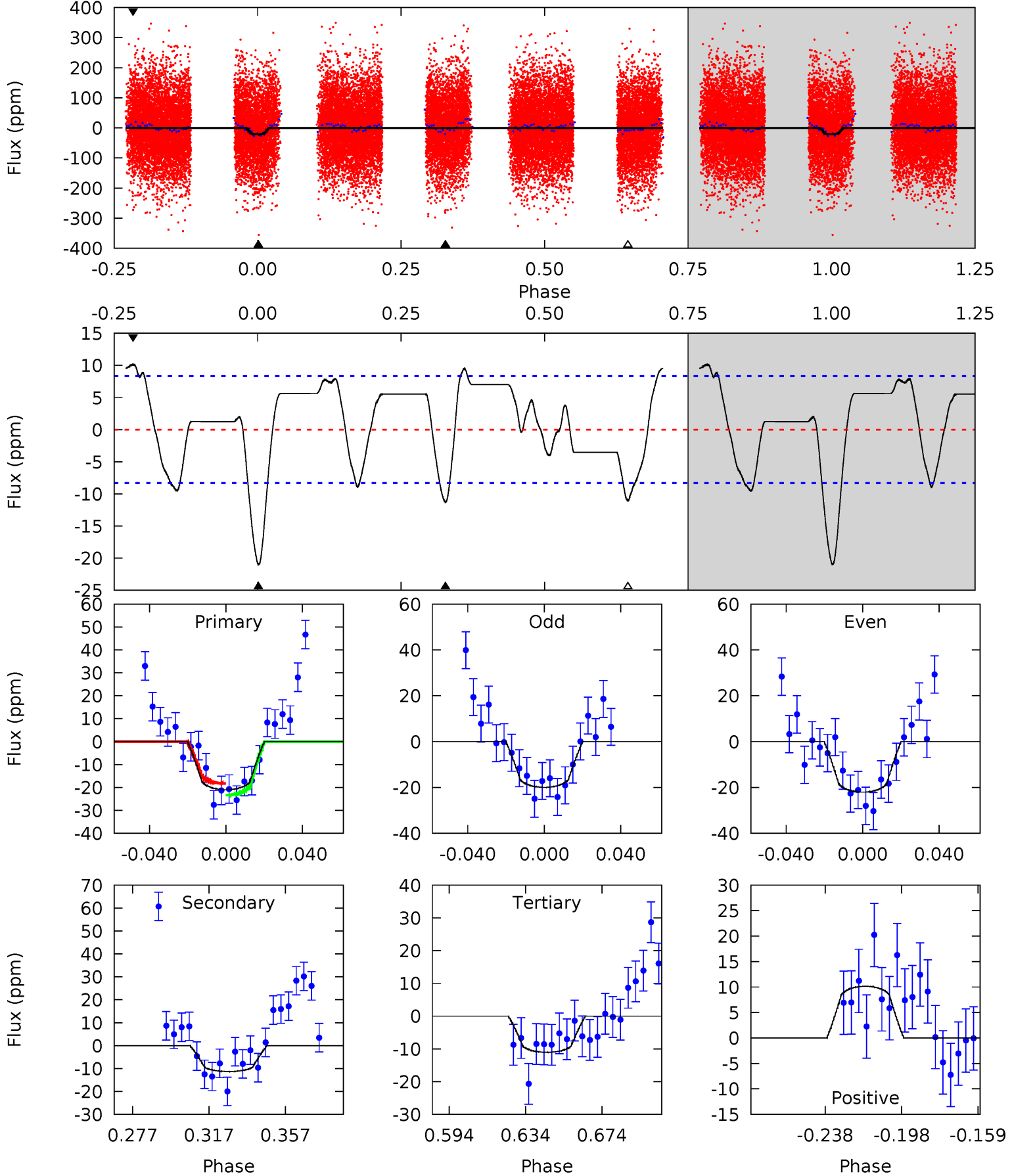


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

003642713-03, P = 2.686660 Days, E = 131.431333 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.0	6.46	6.31	5.80	4.76	2.06	3.34	5.69	6.21	0.15	0.66	0.60	1.00	0.33	1.45



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 003642713

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6889^{+183}_{-204}	$3.925^{+0.240}_{-0.111}$	$-0.320^{+0.300}_{-0.250}$	$2.099^{+0.470}_{-0.626}$	$1.355^{+0.238}_{-0.216}$	$0.206^{+0.298}_{-0.079}$
	+3%/-3%	+6%/-3%	+94%/-78%	+22%/-30%	+18%/-16%	+144%/-38%
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 003642713-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-11 ± 2	$1.27^{+1.08}_{-0.75}$	2962^{+185}_{-225}	5107^{+3202}_{-1061}	$6.491^{+33.032}_{-4.483}$
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 $A_{obs} \gg 1.0$

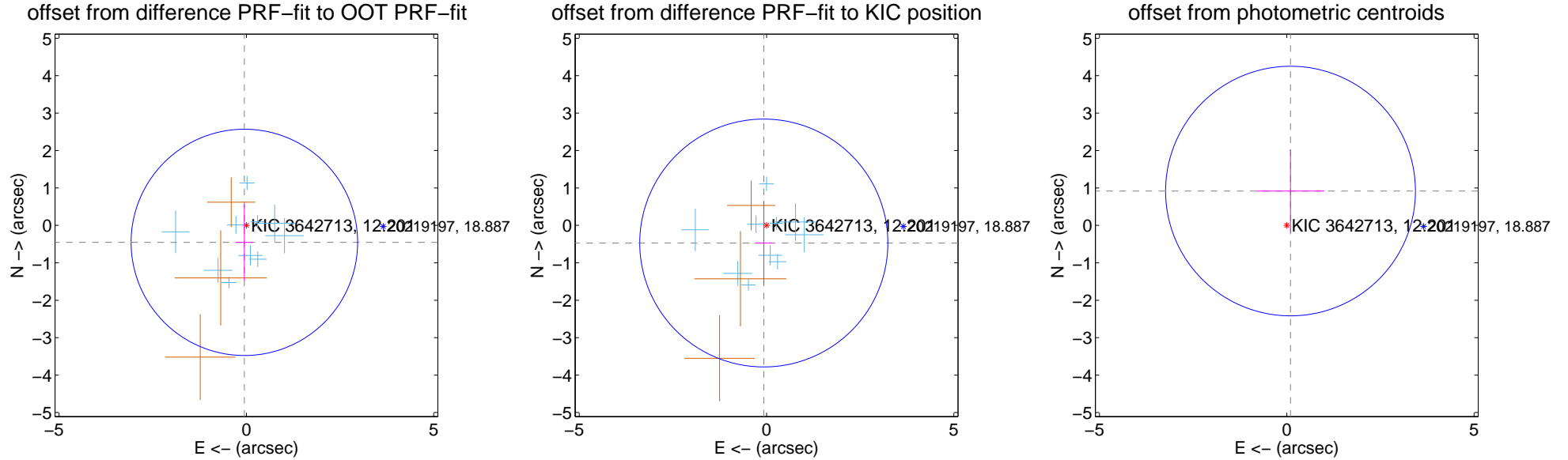
DV Centroid Data

Supplemental centroid analysis for 003642713-03. Kepler magnitude: 12.20. Transit SNR 8.60

There are 10 quarters with good PRF difference image offsets

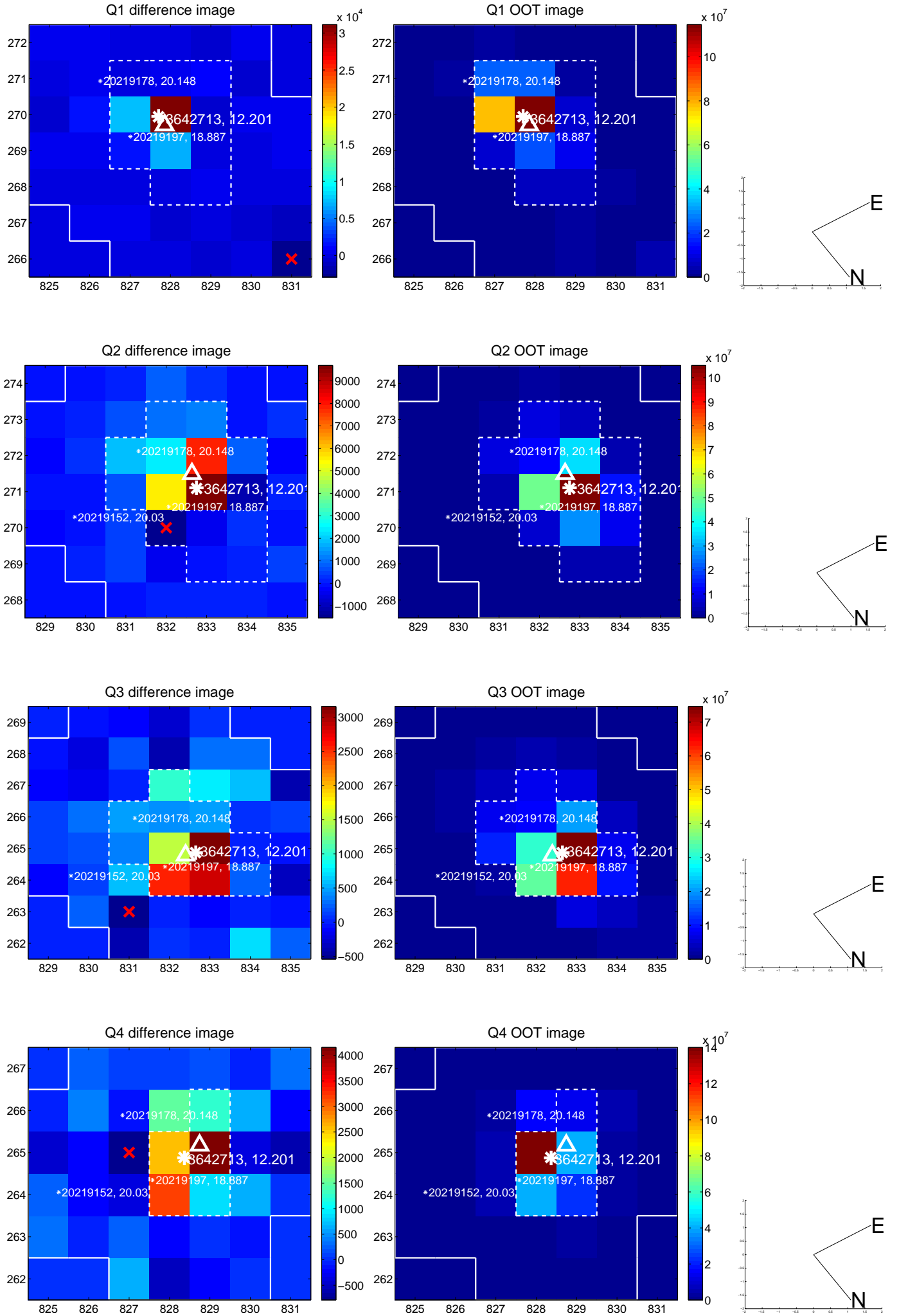
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.457 ± 1.008	0.45	0.054 ± 0.231	-0.454 ± 1.023
PRF-fit source offset from KIC position	0.476 ± 1.104	0.43	0.074 ± 0.232	-0.471 ± 1.127
photometric centroid source offset	0.92 ± 1.11	0.83	-0.10 ± 0.91	0.92 ± 1.11

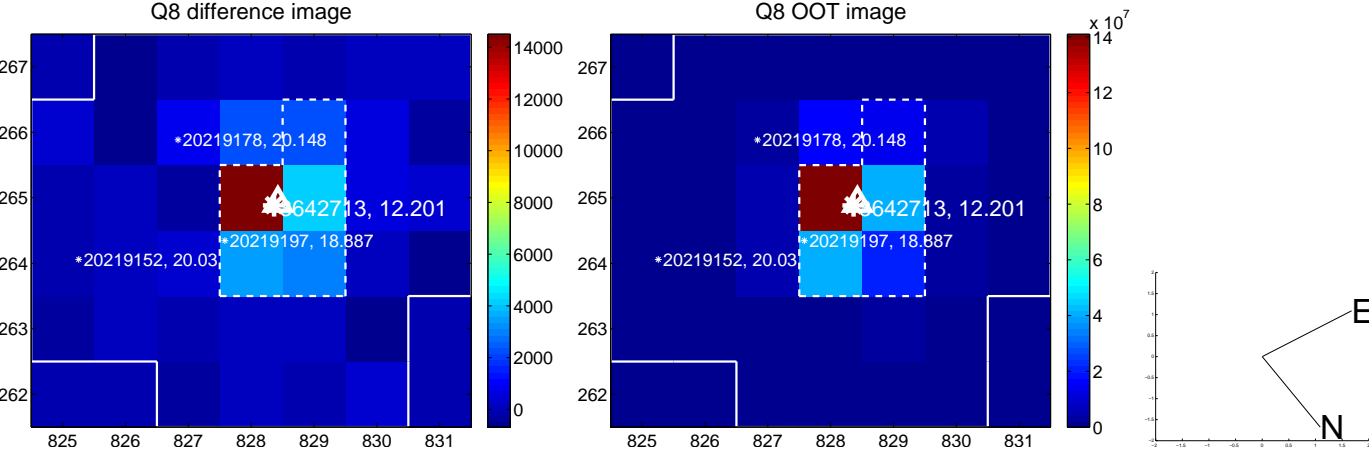
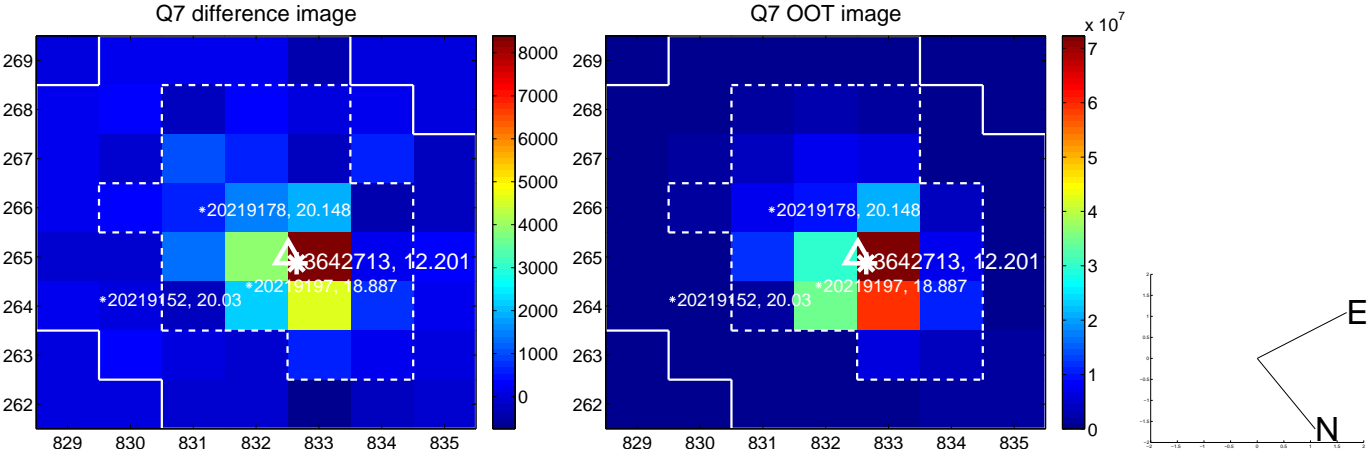
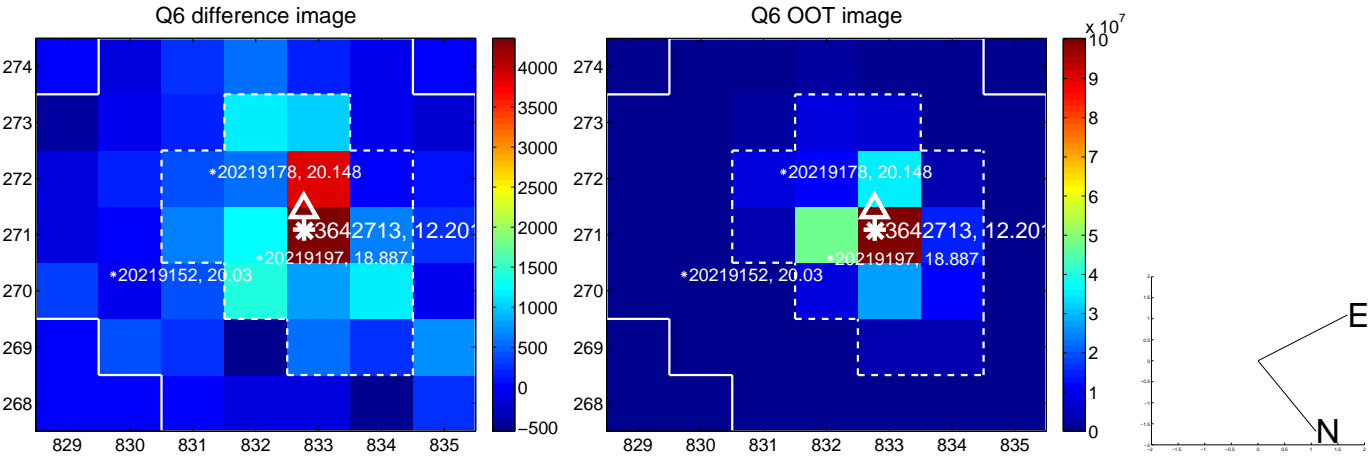
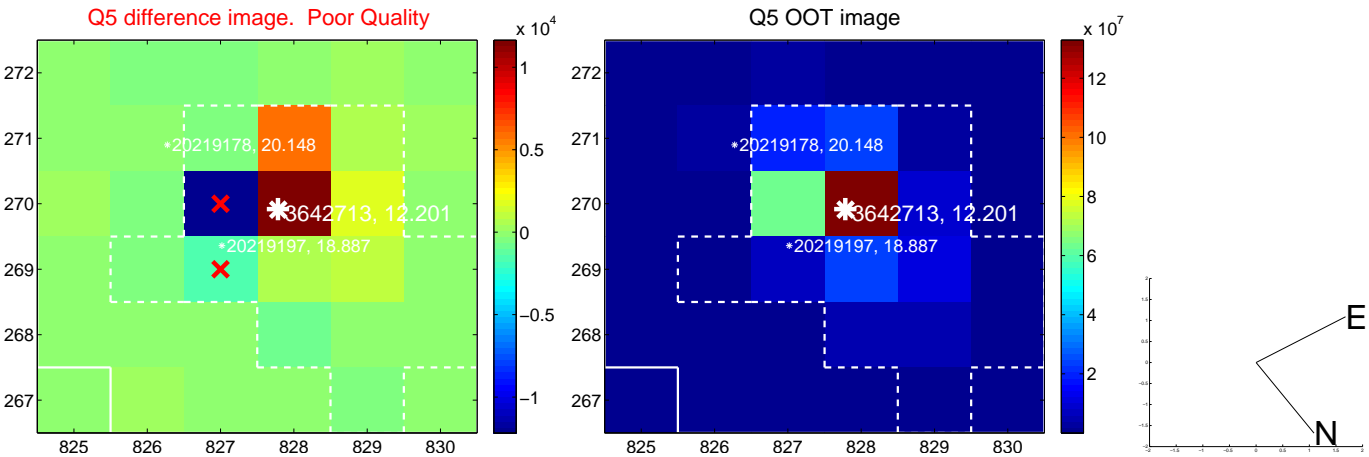


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

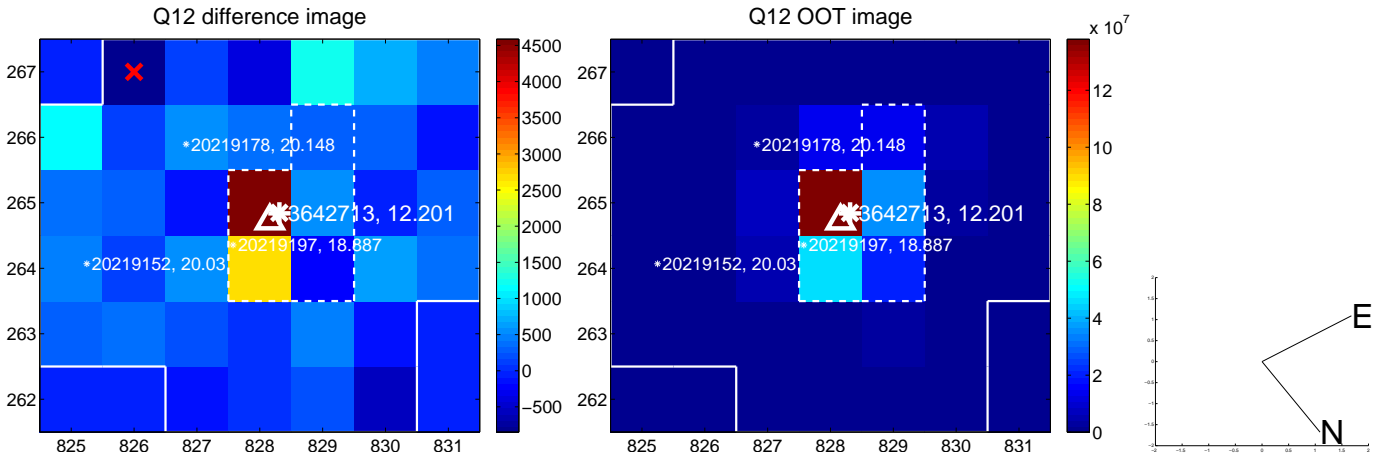
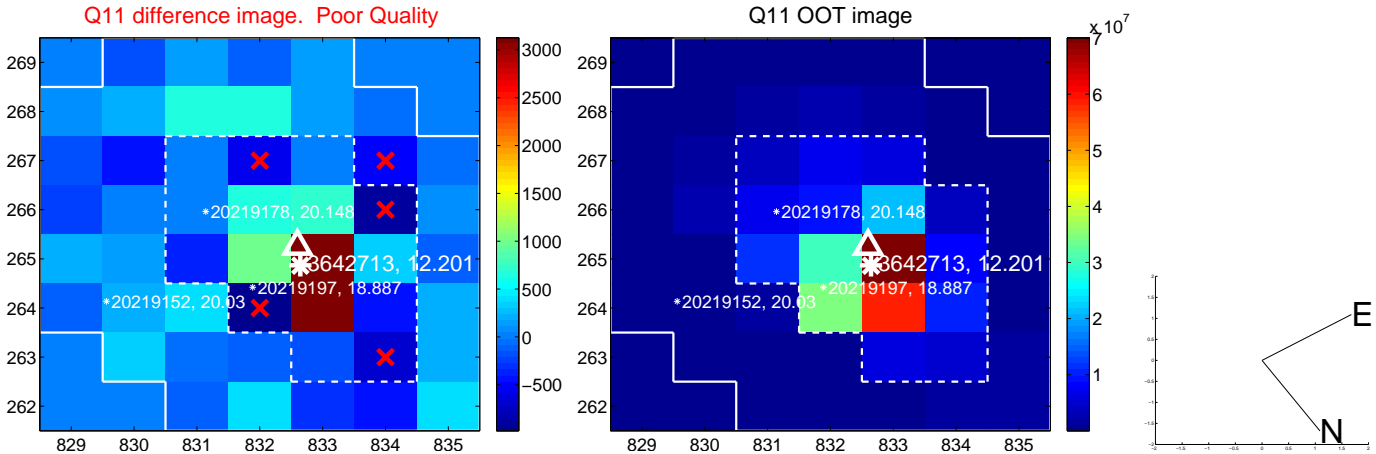
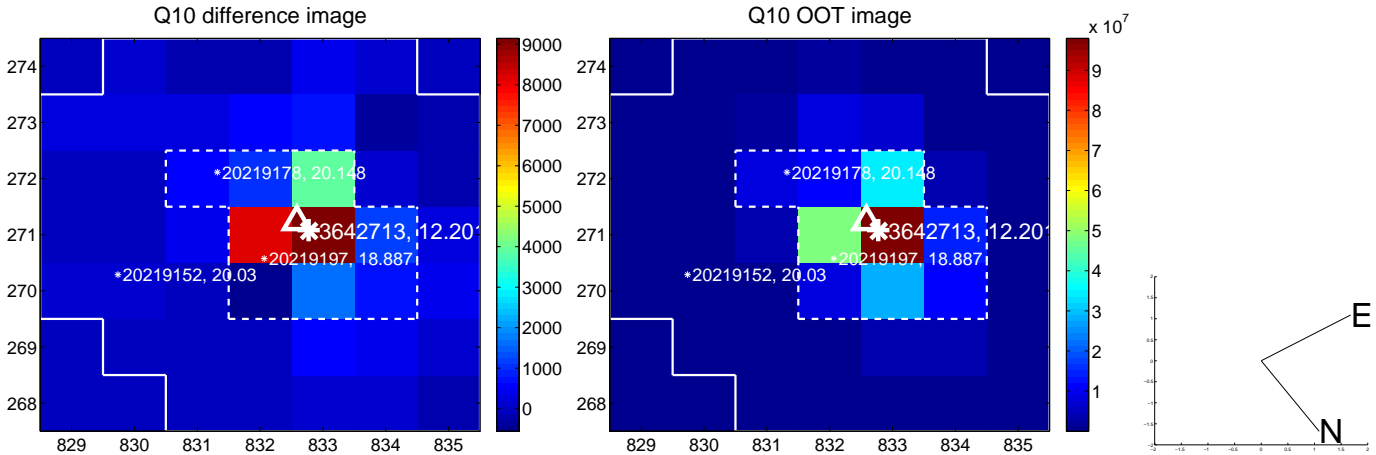
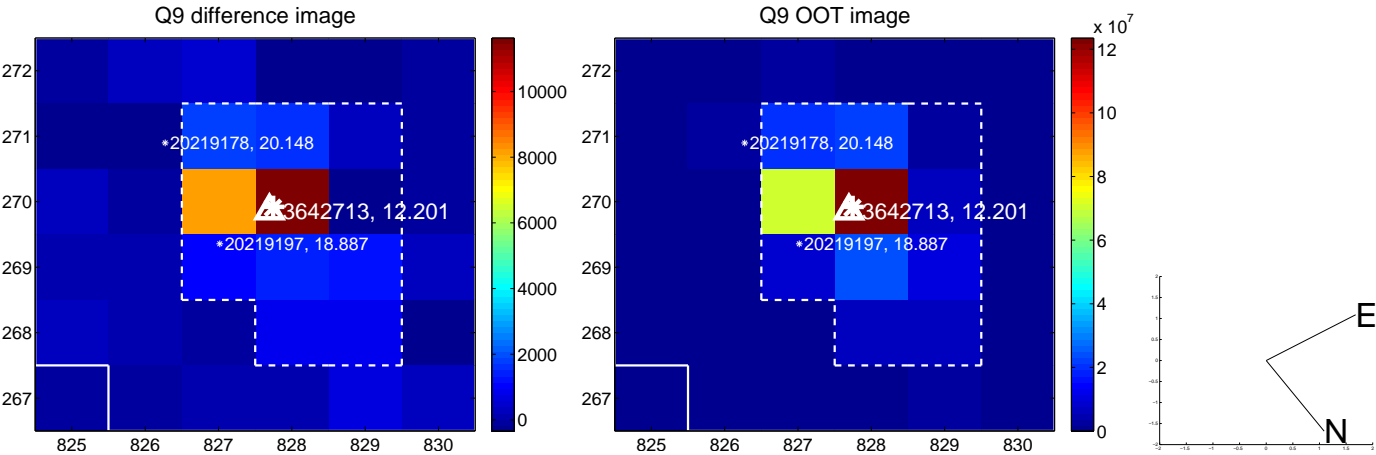
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



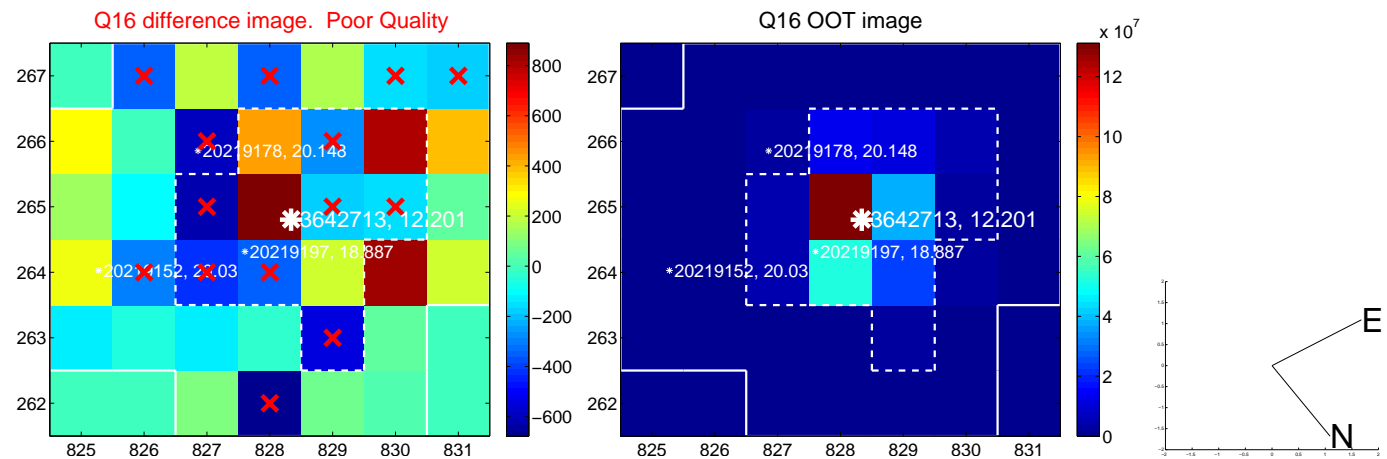
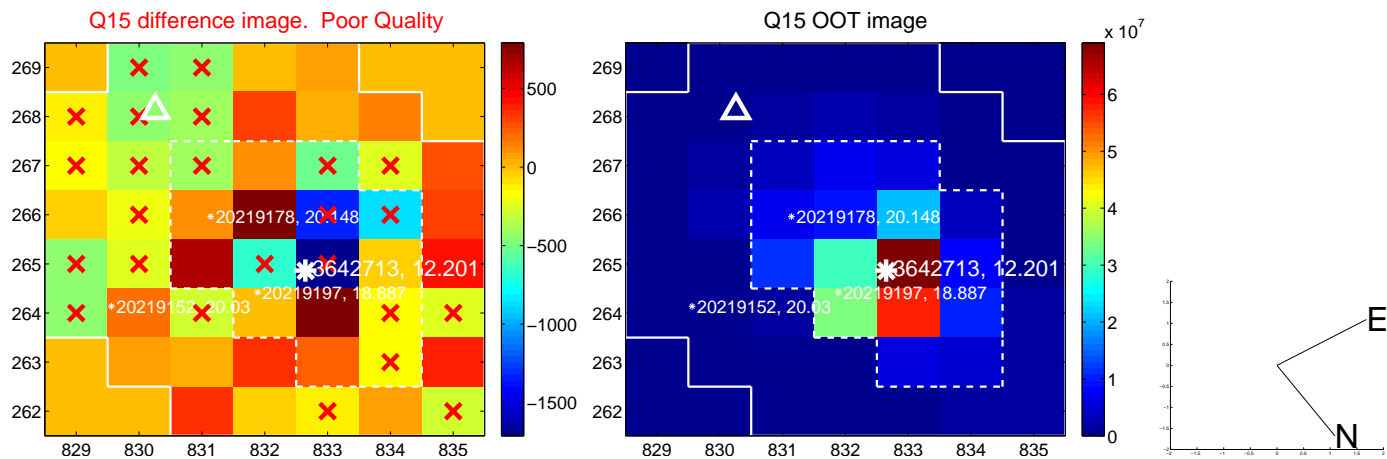
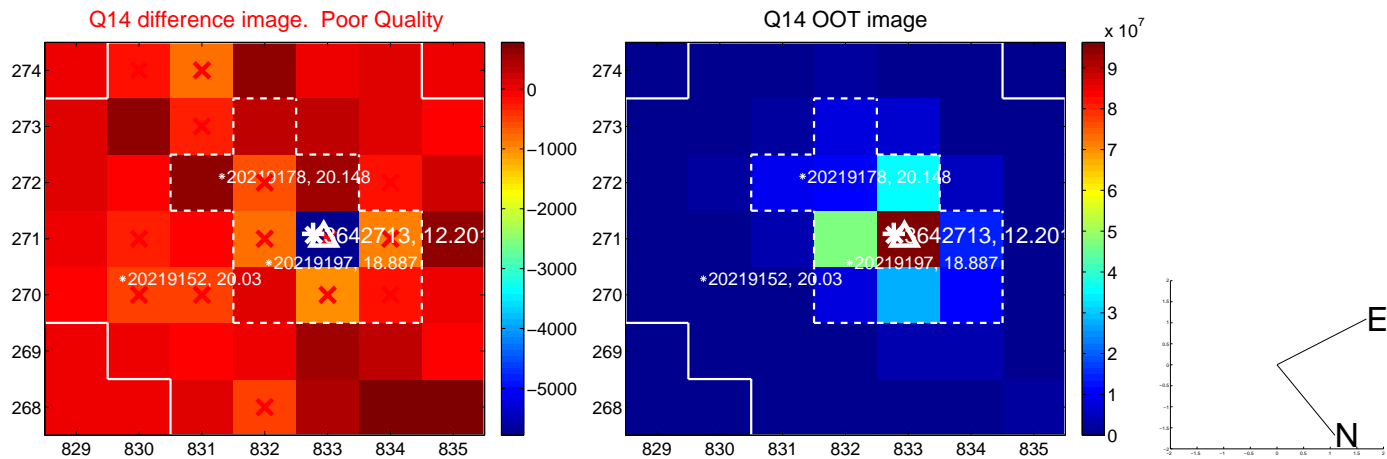
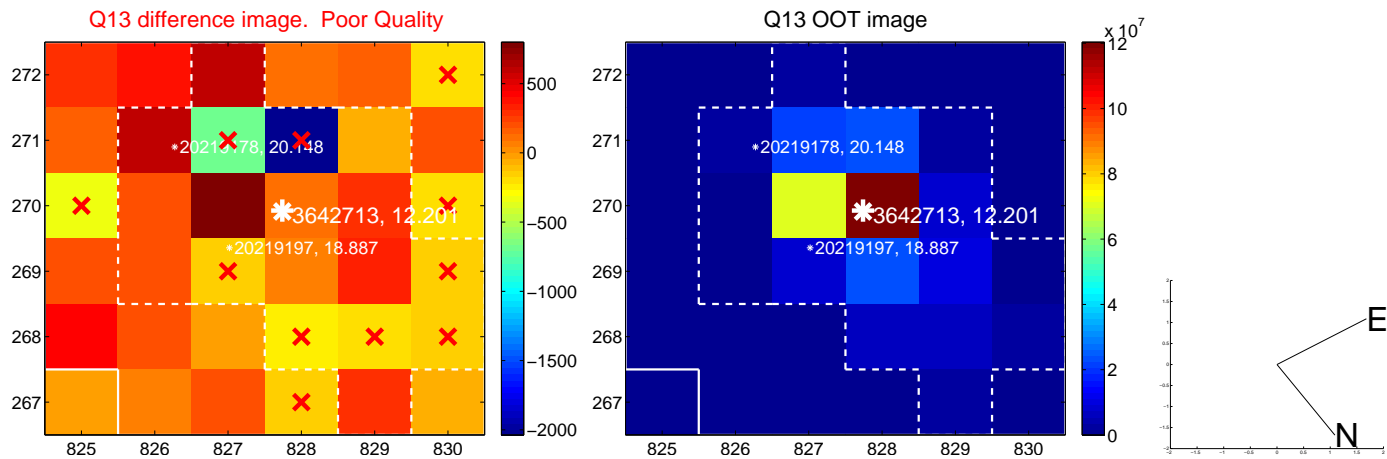
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



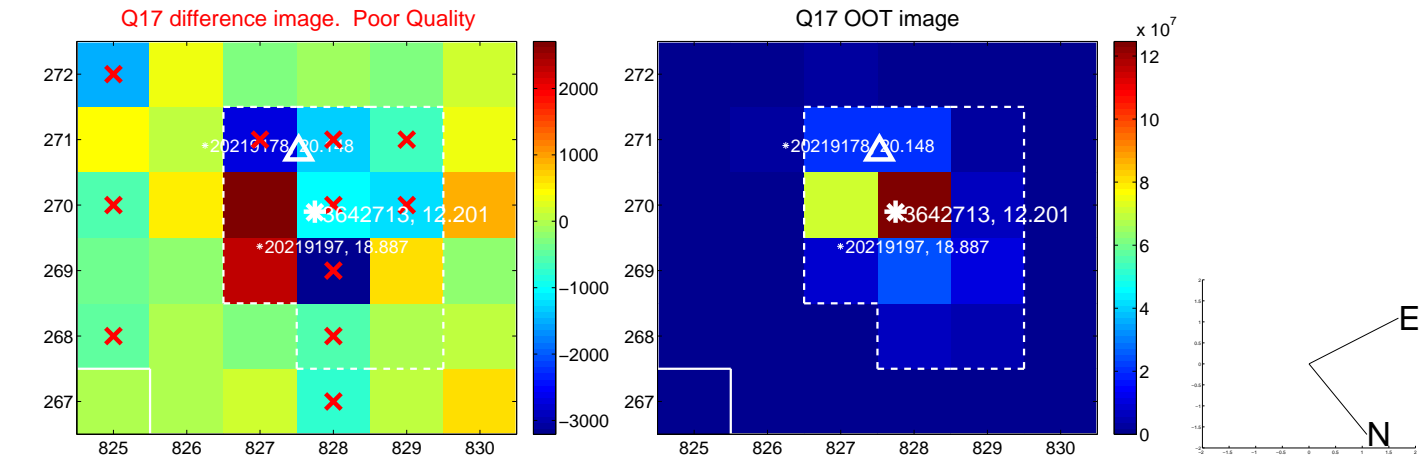
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



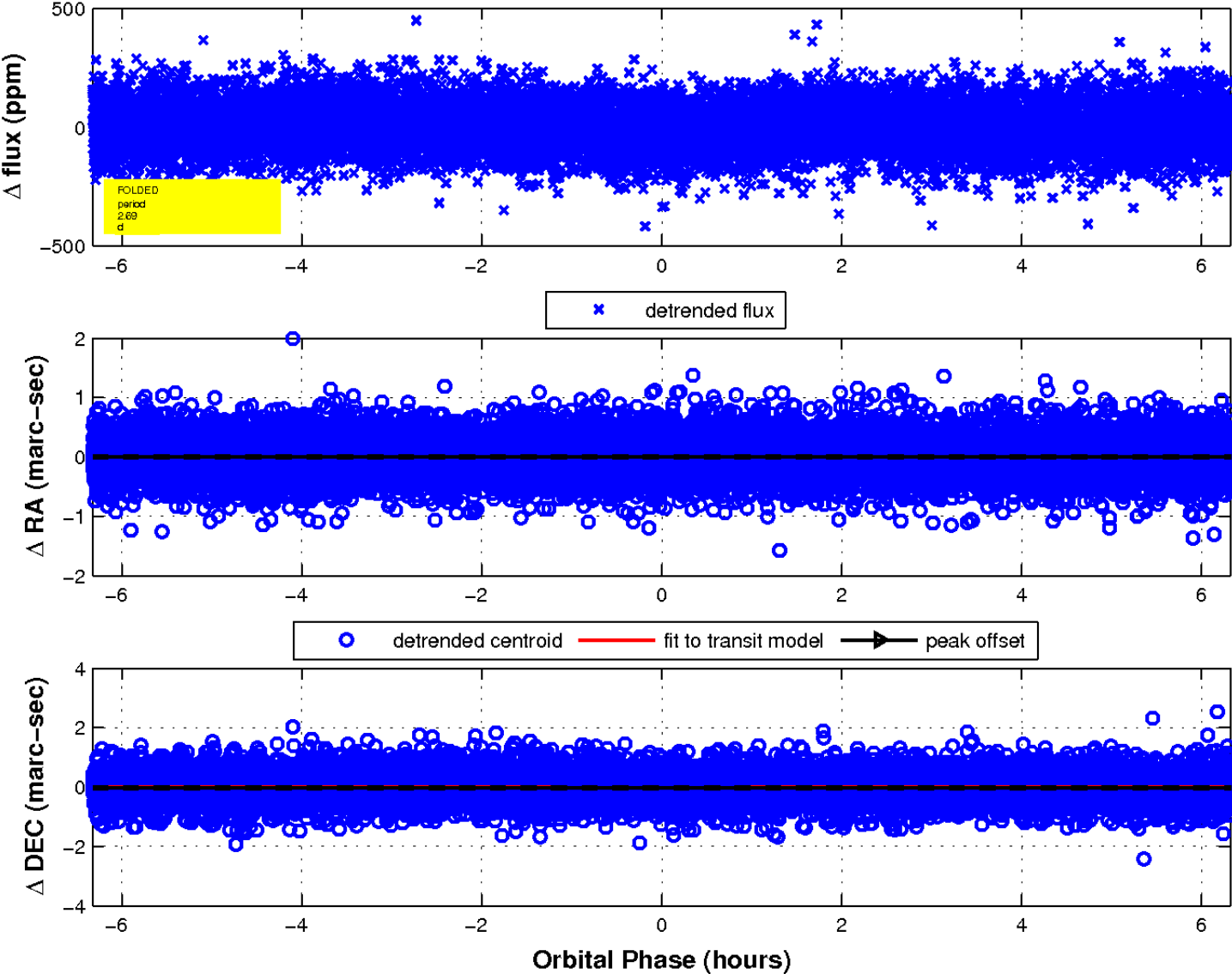
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

