

KIC 011127000

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})
011127000-01	OBS	No	2.105567	131.595743	29.6	2.580	7.8	8.4	2.69	6921	1.57	9995.74
011127000-02	OBS	No	1.052521	132.622072	0.0	2.906	7.8	0.0	2.69	6921	0.01	25196.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127000-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
011127000-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

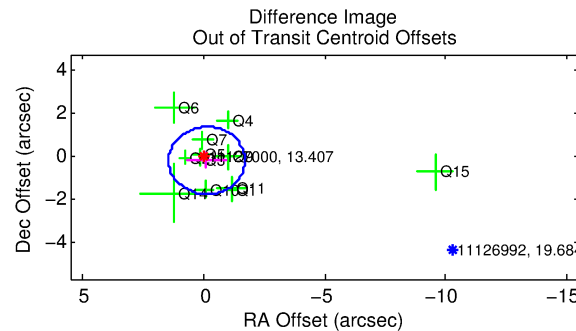
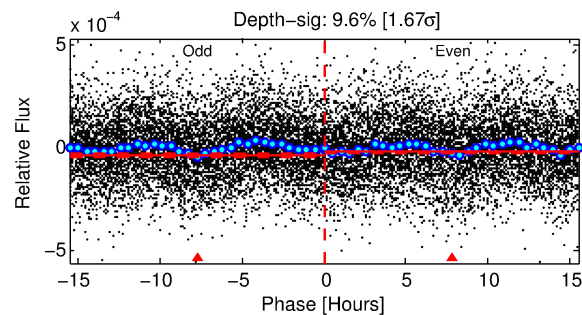
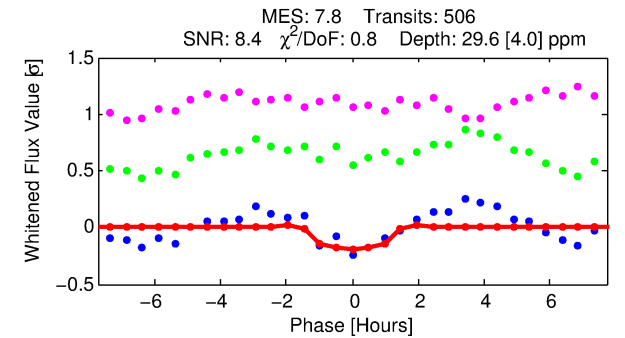
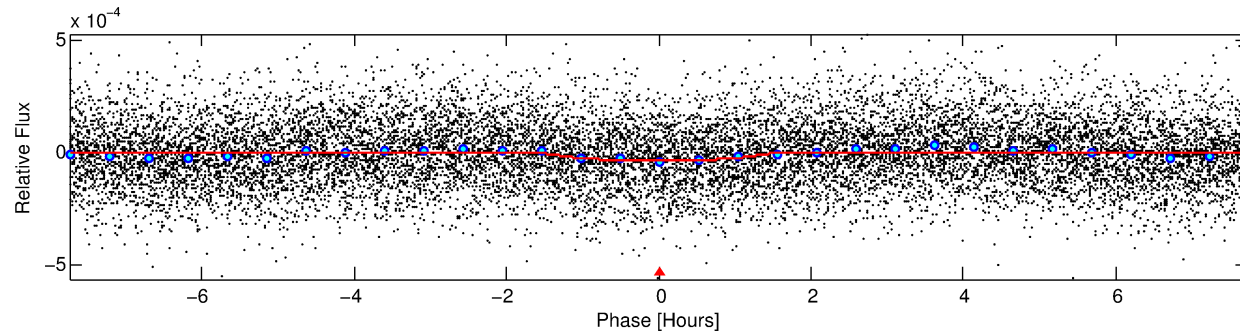
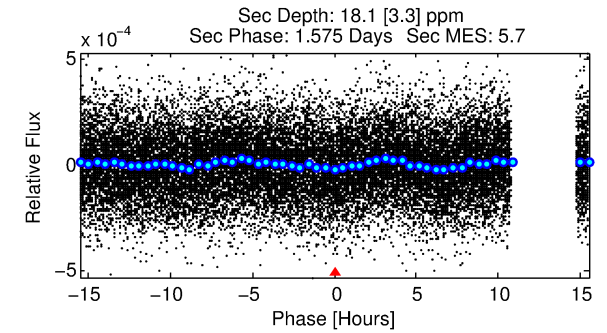
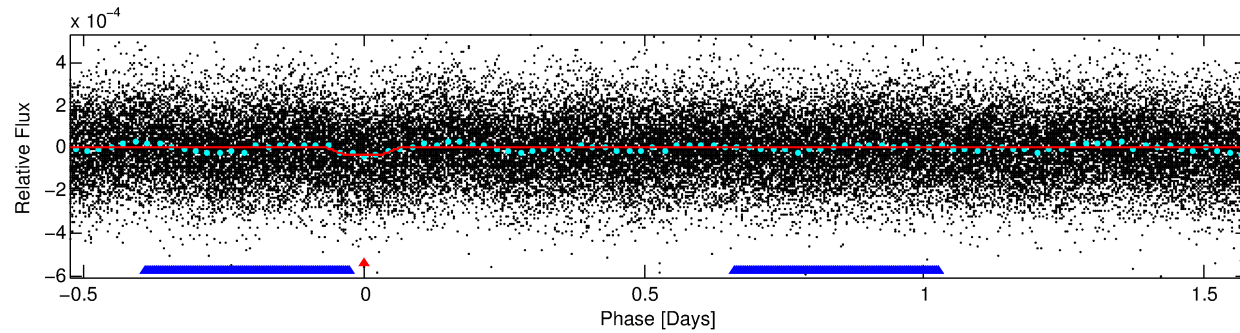
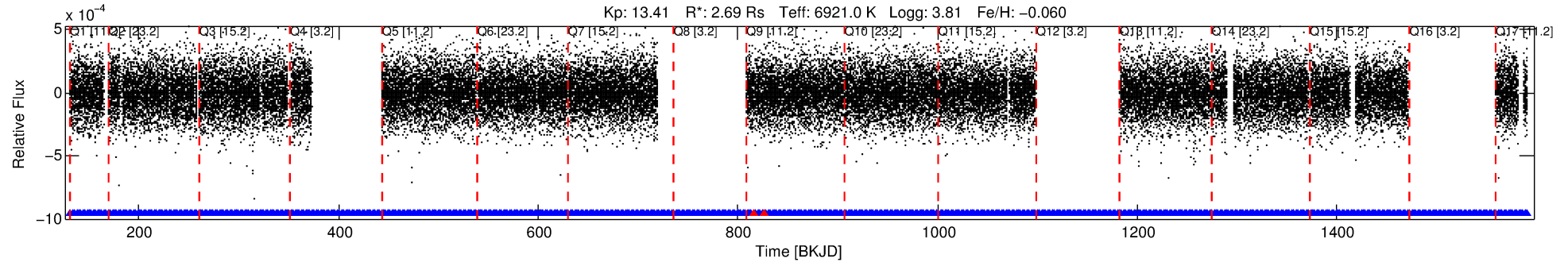
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127000-01

No Significant Match Found

DV One-Page Summary

KIC: 11127000 Candidate: 1 of 2 Period: 2.106 d



DV Fit Results:

Period = 2.10557 [0.00002] d
Epoch = 131.5957 [0.0043] BKJD
Rp/R* = 0.0053 [0.0012]
a/R* = 4.56 [5.61]
b = 0.70 [0.94]
Seff = 9995.74 [4882.46]
Teq = 2550 [311] K
Rp = 1.57 [0.65] Re
a = 0.0385 [0.0118] AU
Ag = 6.02 [4.11] [1.22σ]
Teffp = 6176 [793] K [4.26σ]

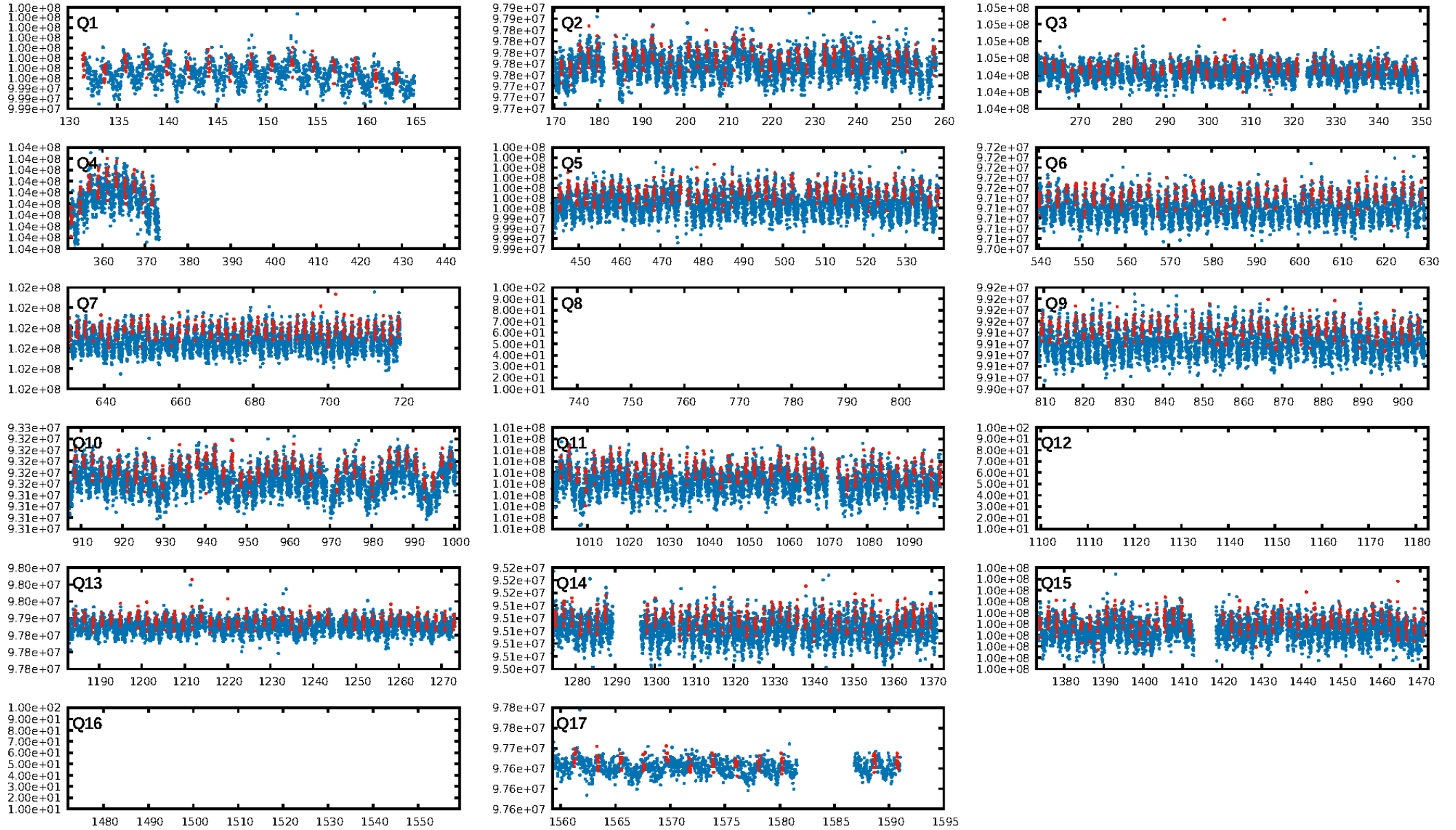
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [6.50σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 3.87e-13
RollingBand-fgt: 1.00 [466/468]
GhostDiagnostic-chr: 2.779
Centroid-sig: 2.5%
Centroid-so: 2.313 arcsec [1.57σ]
OotOffset-rm: 0.254 arcsec [0.48σ]
KicOffset-rm: 0.240 arcsec [0.47σ]
OotOffset-st: 4/4/1/3 [12]
KicOffset-st: 4/4/1/3 [12]
DiffImageQuality-fgm: 0.75 [9/12]
DiffImageOverlap-fno: 0.14 [2/14]

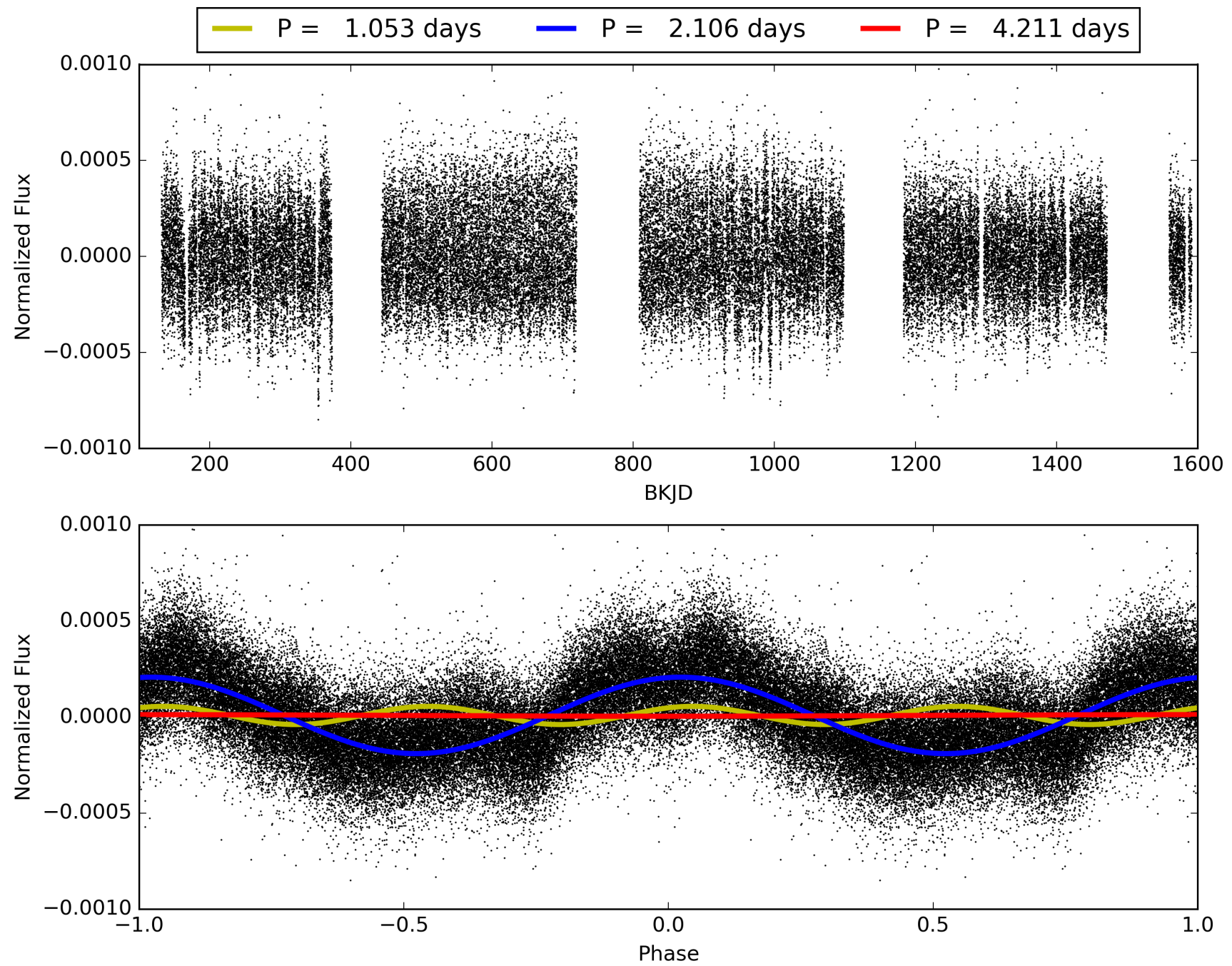
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:57:05 Z

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

TCE 011127000-01, PDC Light Curves

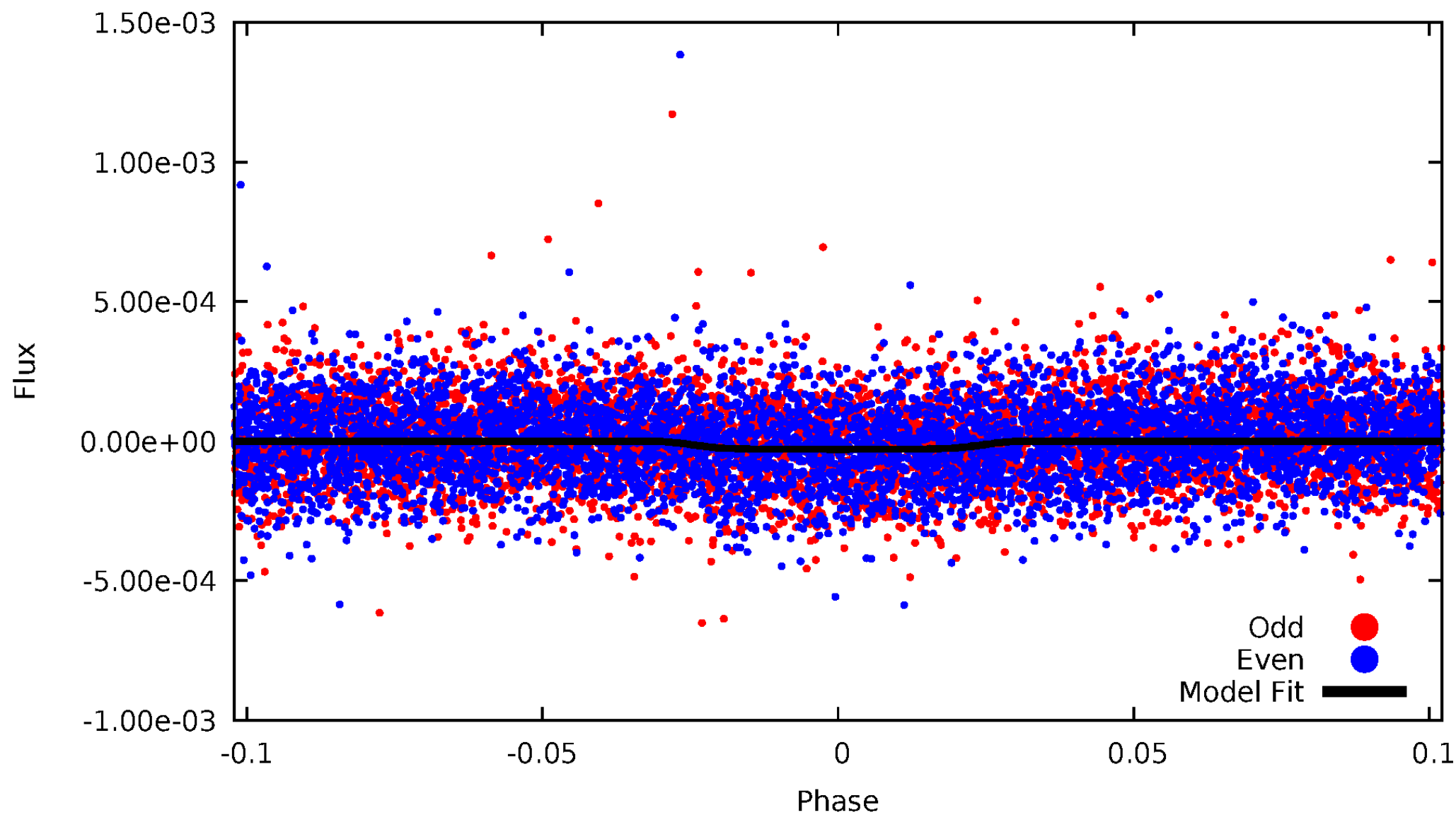


TCE 011127000-01



DV Odd/Even

TCE 011127000-01

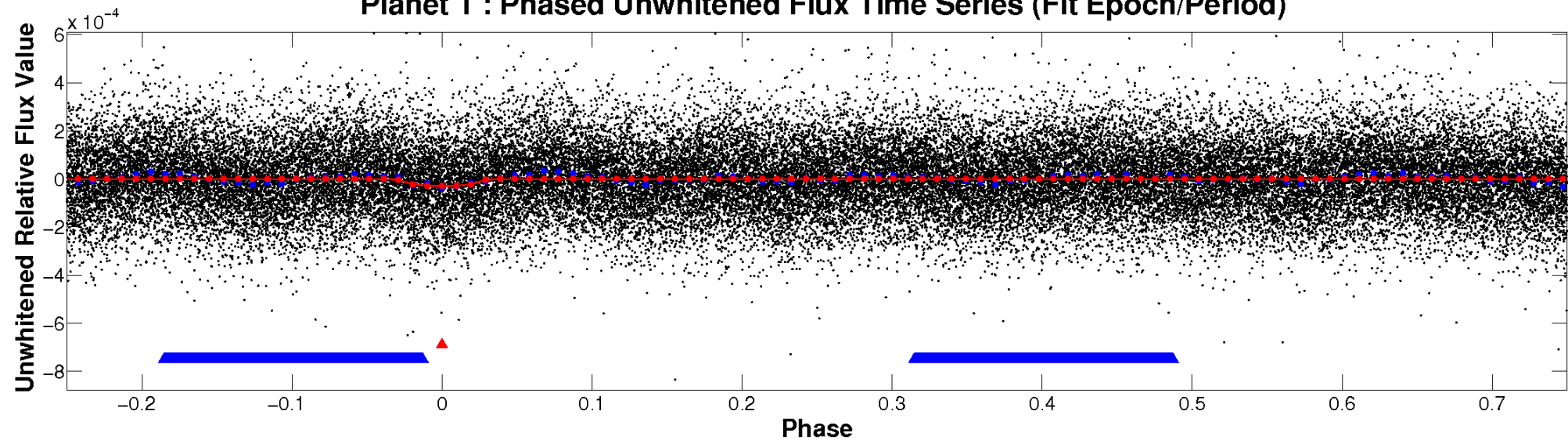


ALT Odd/Even

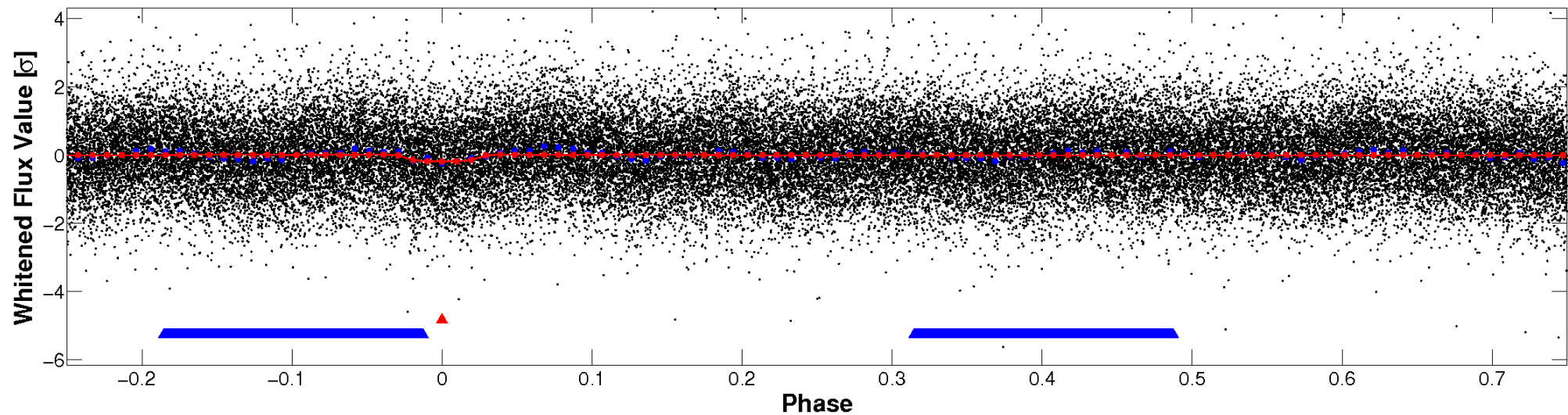
This plot does not exist for this TCE.

Non-Whitened Vs. Whitened Light Curve

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

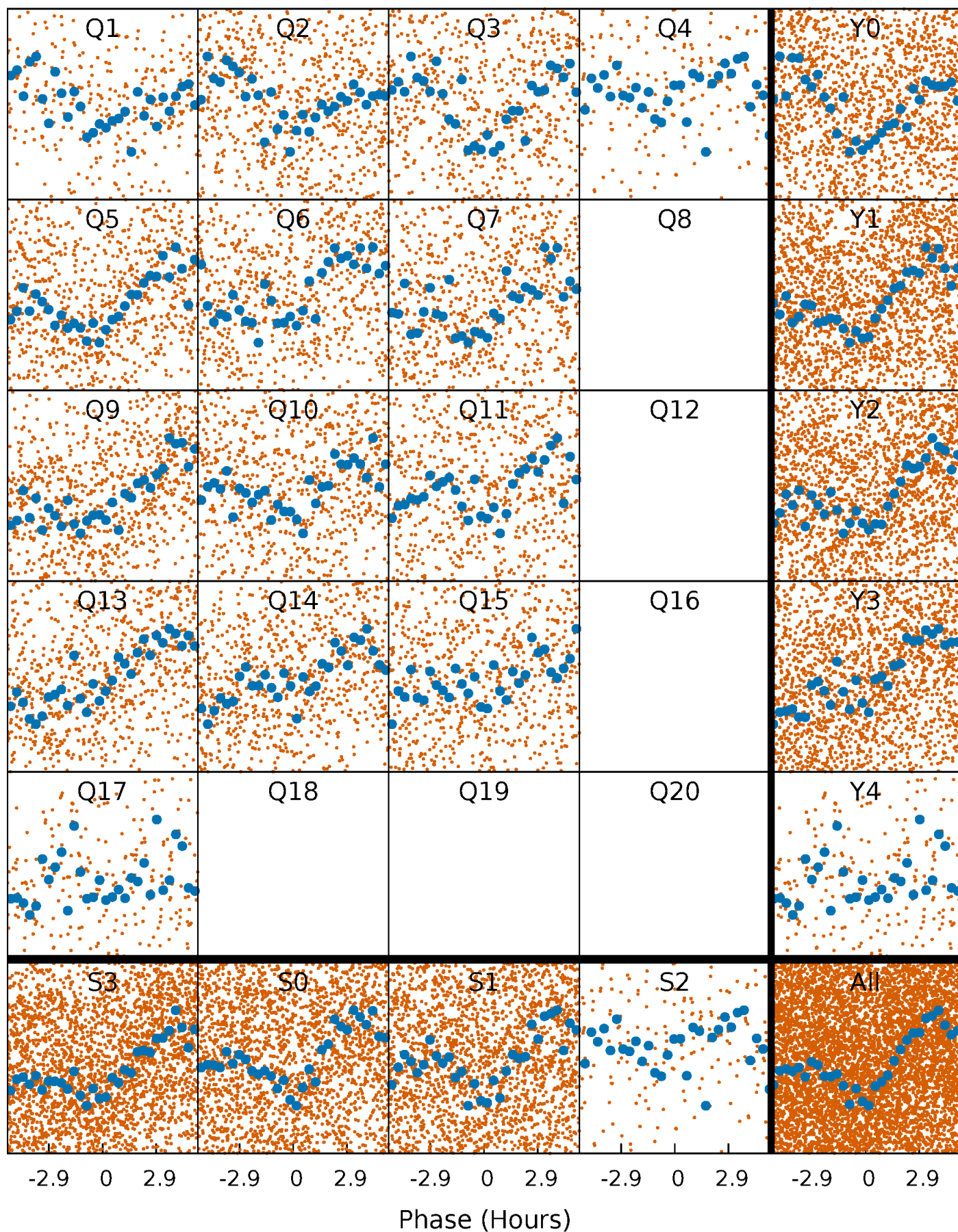


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



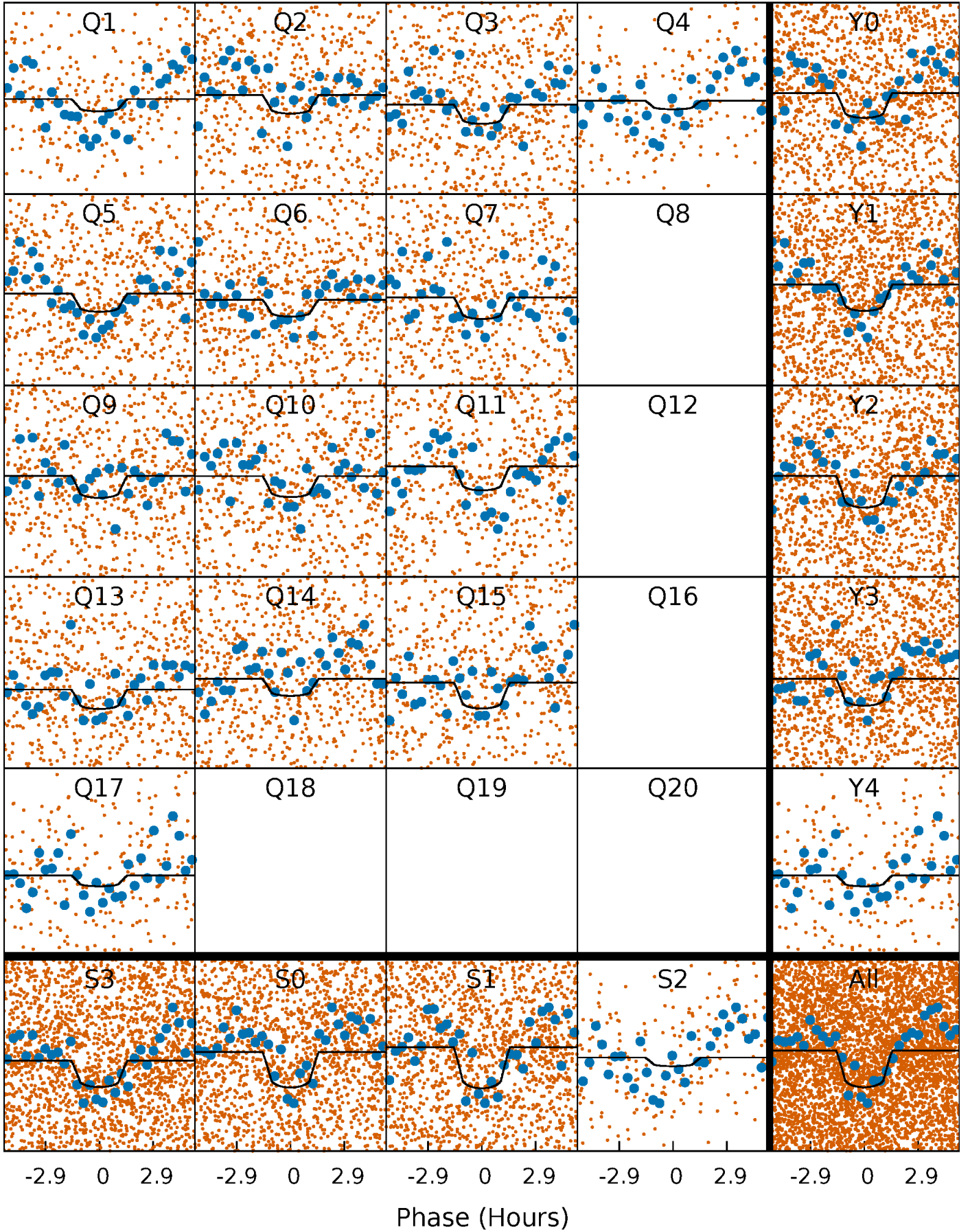
PDC Quarter-Phased Transit Curves

TCE 011127000-01 P= 2.105567 Days $T_0=131.595743$ (BKJD)



DV Quarter-Phased Transit Curves

TCE 011127000-01 P= 2.105567 Days $T_0=131.595743$ (BKJD)

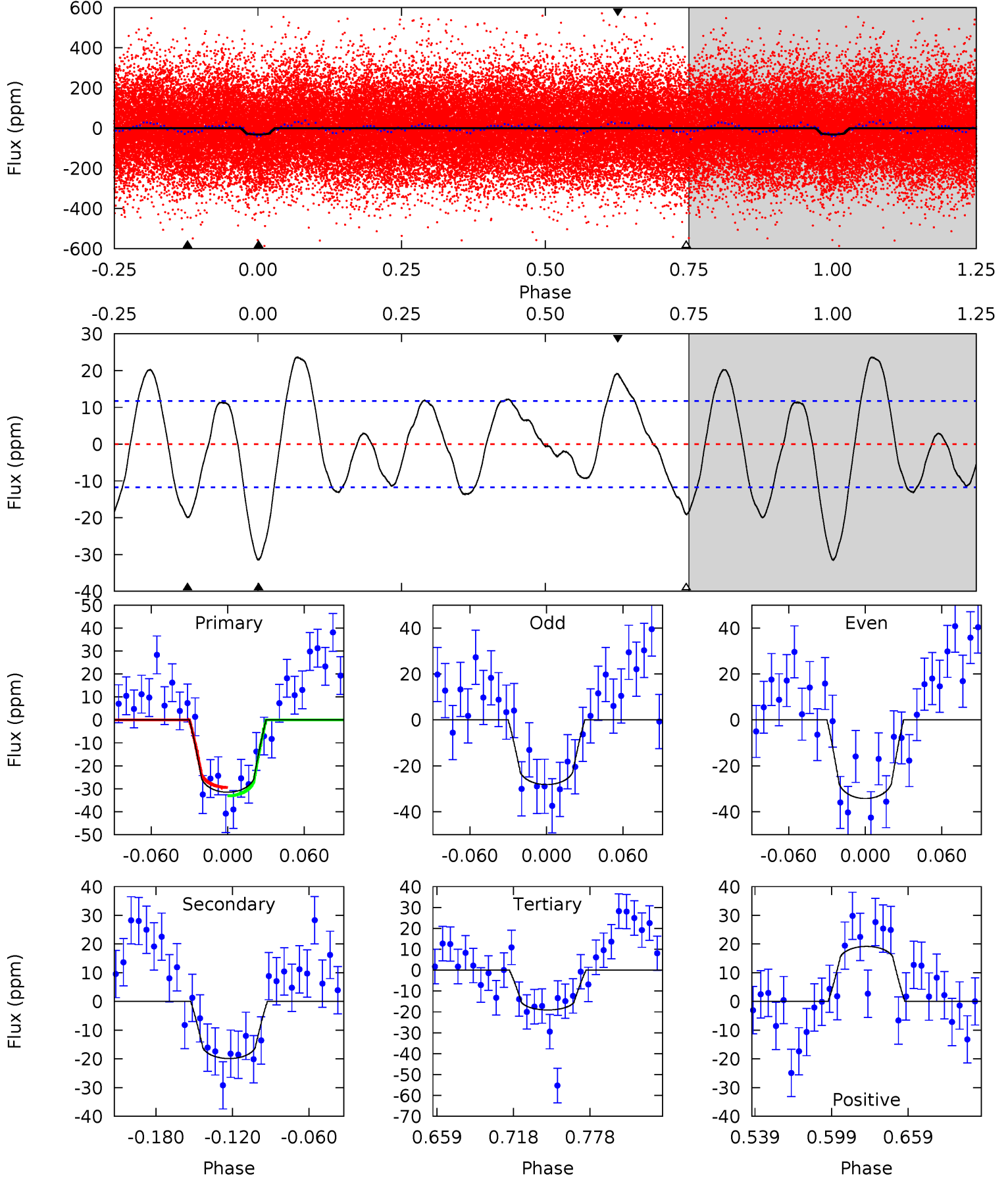


This plot does not exist for this TCE.

DV Model-Shift Uniqueness Test

011127000-01, P = 2.105567 Days, E = 129.490176 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	7.93	7.60	7.64	4.67	1.88	4.15	4.95	4.91	0.33	0.29	1.21	0.95	0.43	0.72



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 011127000

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6921^{+167}_{-238}	$3.815^{+0.266}_{-0.114}$	$-0.060^{+0.250}_{-0.300}$	$2.686^{+0.428}_{-0.927}$	$1.718^{+0.154}_{-0.360}$	$0.125^{+0.224}_{-0.045}$
	+2%/-3%	+7%/-3%	+417%/-500%	+16%/-35%	+9%/-21%	+179%/-36%
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 011127000-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-20 ± 3	$1.50^{+0.45}_{-0.41}$	3513^{+236}_{-293}	6156^{+1136}_{-666}	$7.002^{+6.557}_{-2.841}$
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 $A_{obs} \gg 1.0$

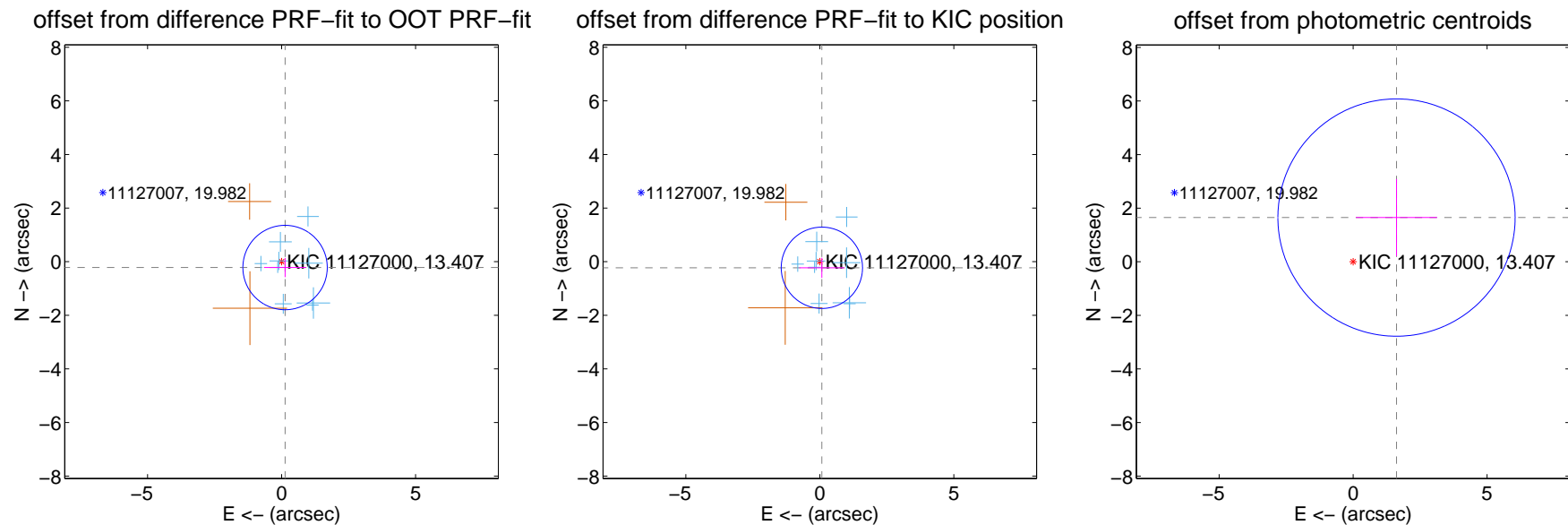
DV Centroid Data

Supplemental centroid analysis for 011127000-01. Kepler magnitude: 13.41. Transit SNR 8.37

There are 9 quarters with good PRF difference image offsets

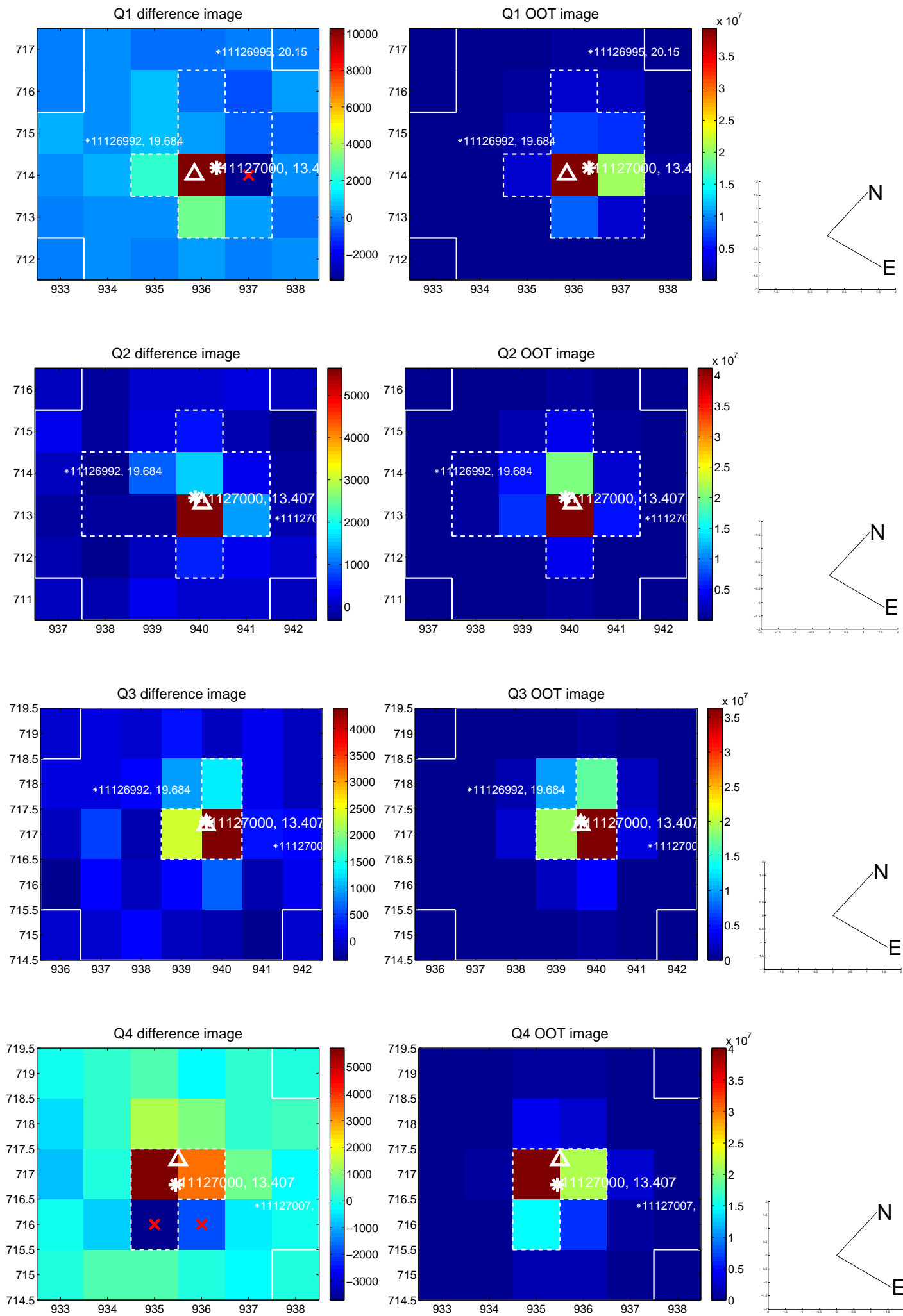
The direct PRF centroid is offset from the target star catalog position by about 0.06 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.254 ± 0.525	0.48	-0.130 ± 0.788	-0.218 ± 0.357
PRF-fit source offset from KIC position	0.240 ± 0.506	0.47	-0.076 ± 0.840	-0.228 ± 0.376
photometric centroid source offset	2.31 ± 1.48	1.57	-1.62 ± 1.52	1.65 ± 1.44

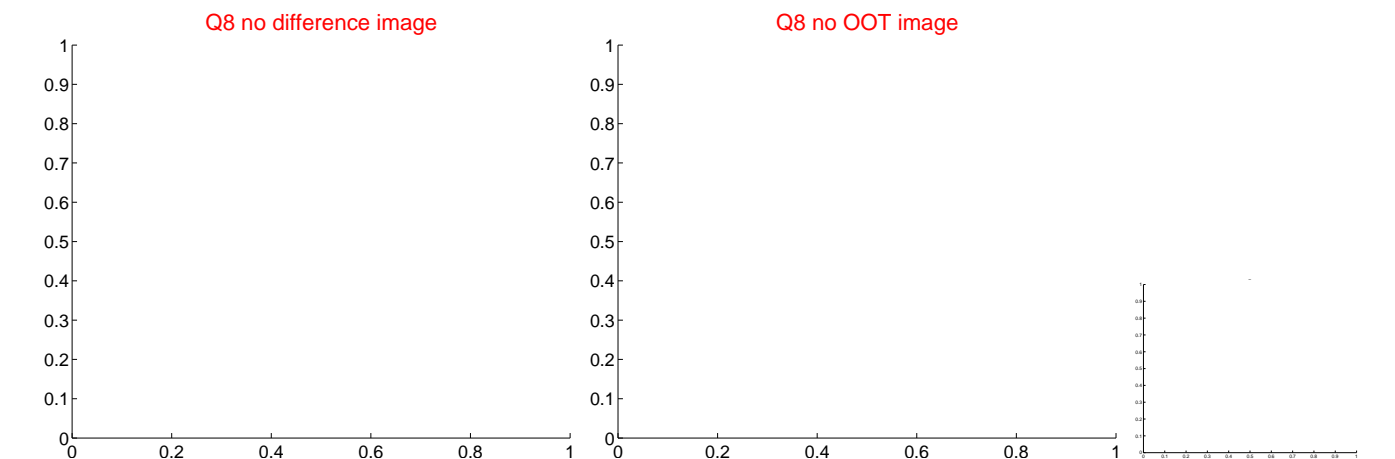
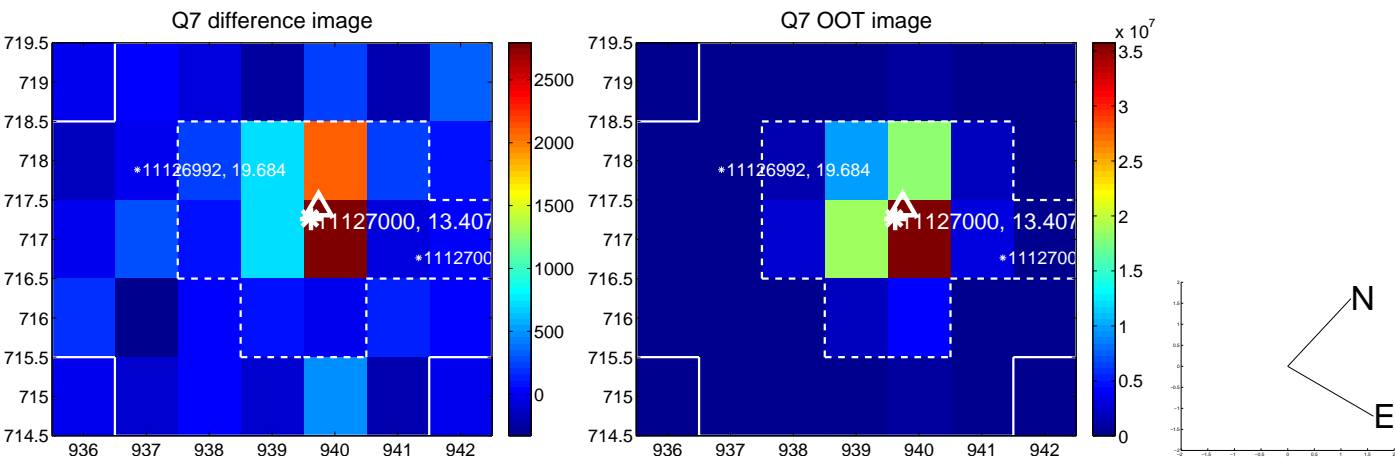
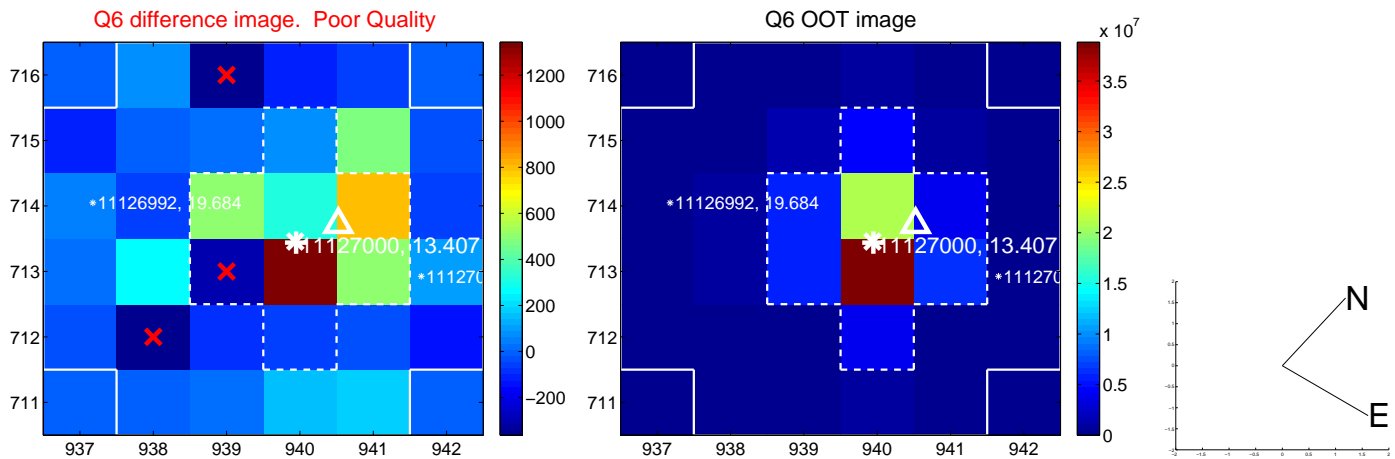
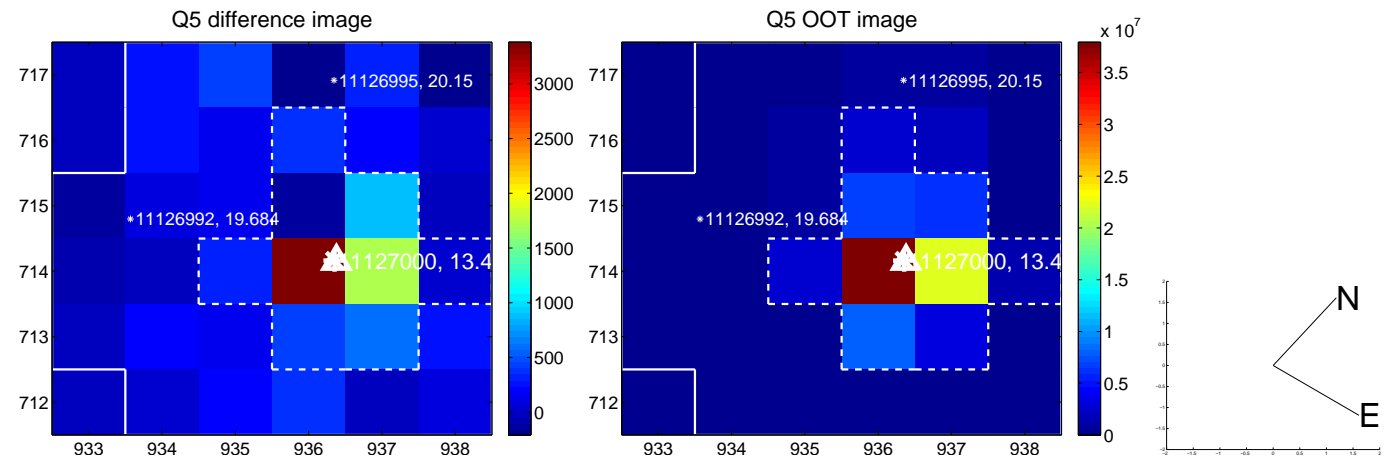


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

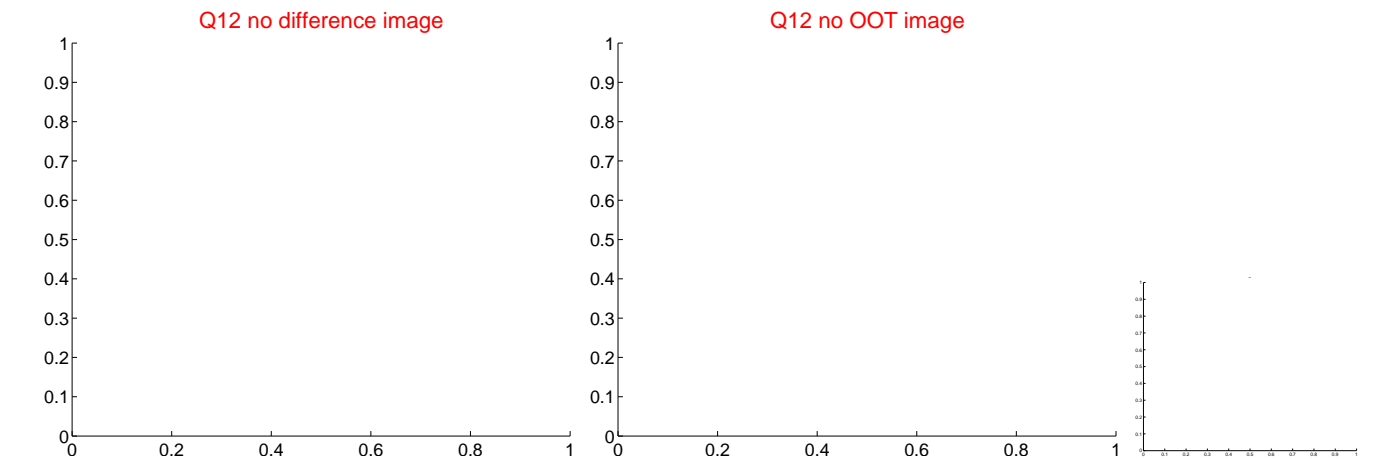
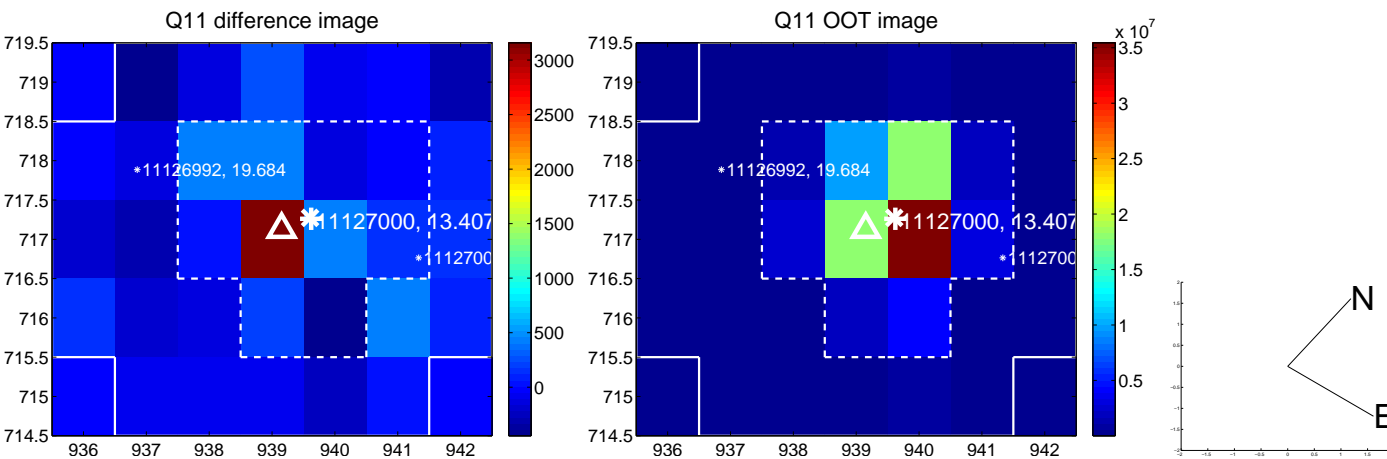
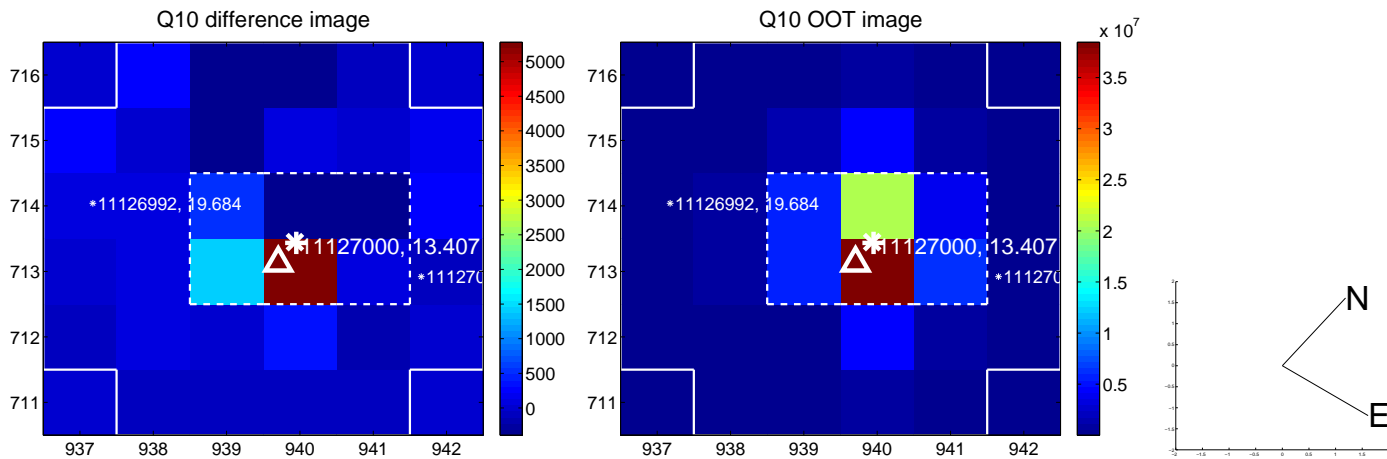
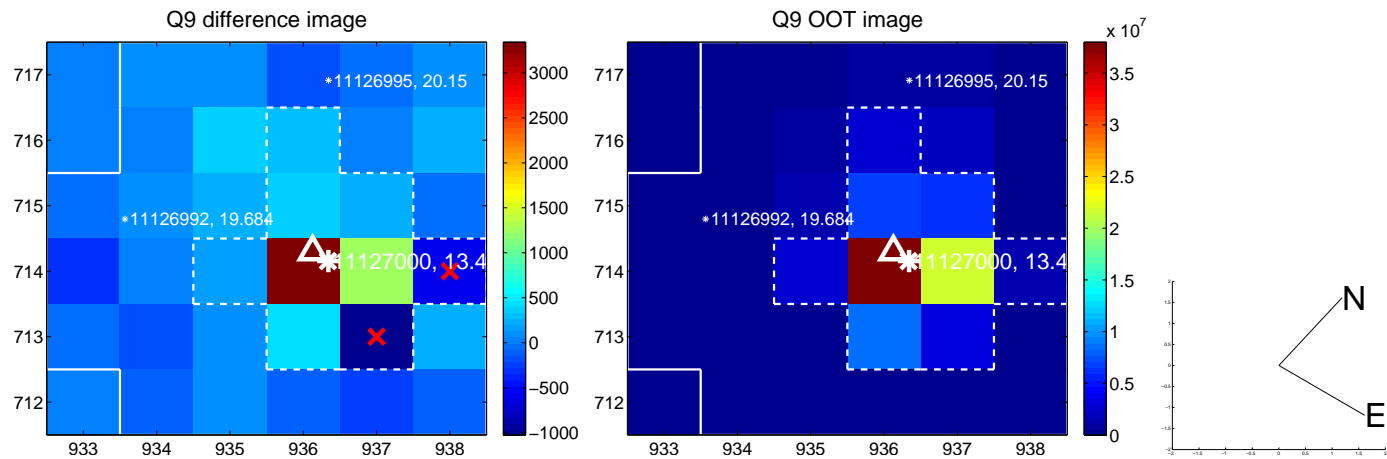
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



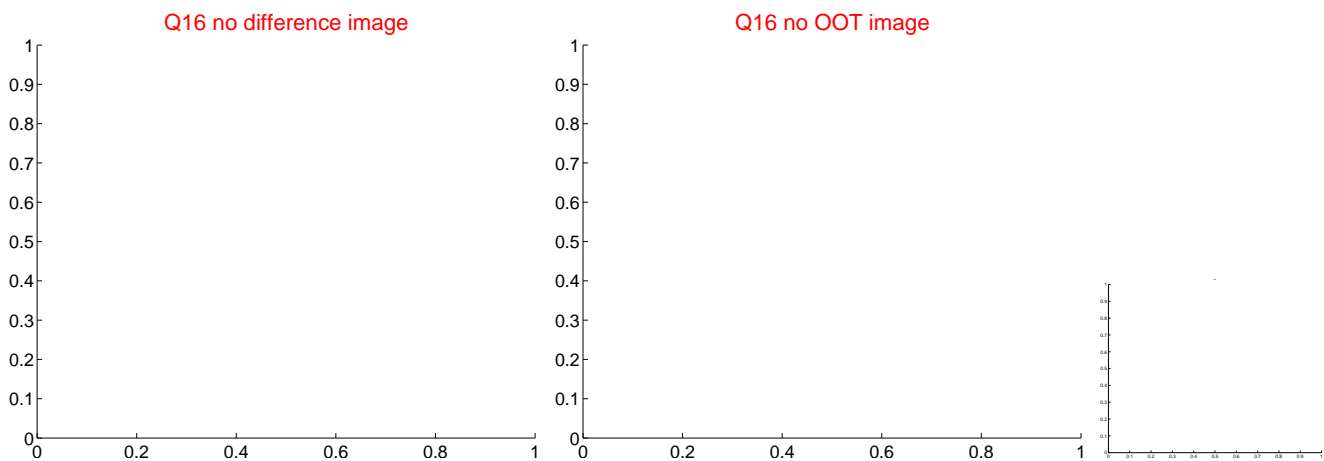
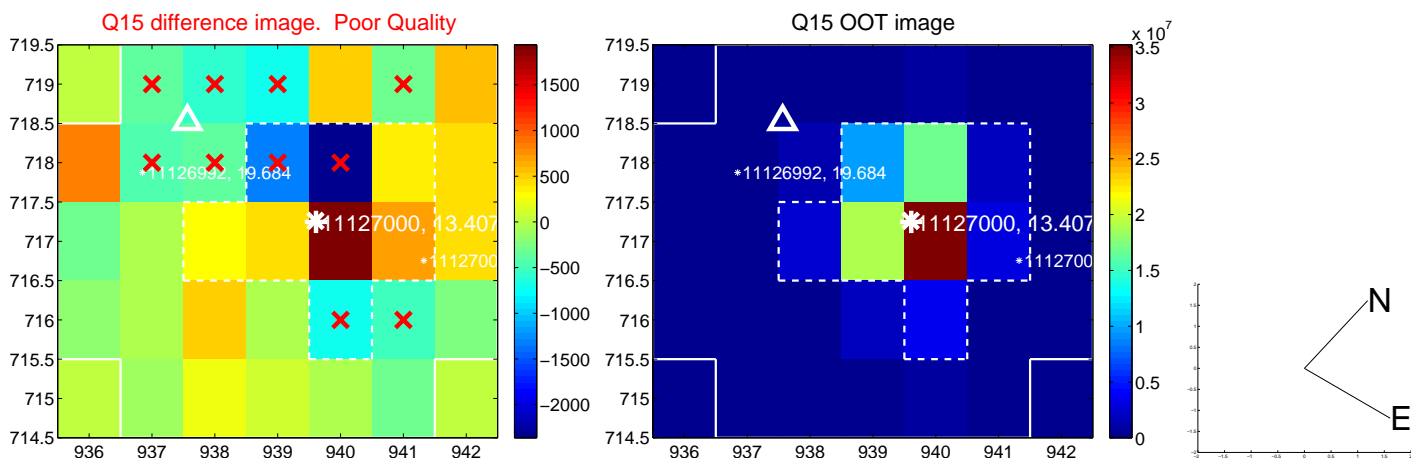
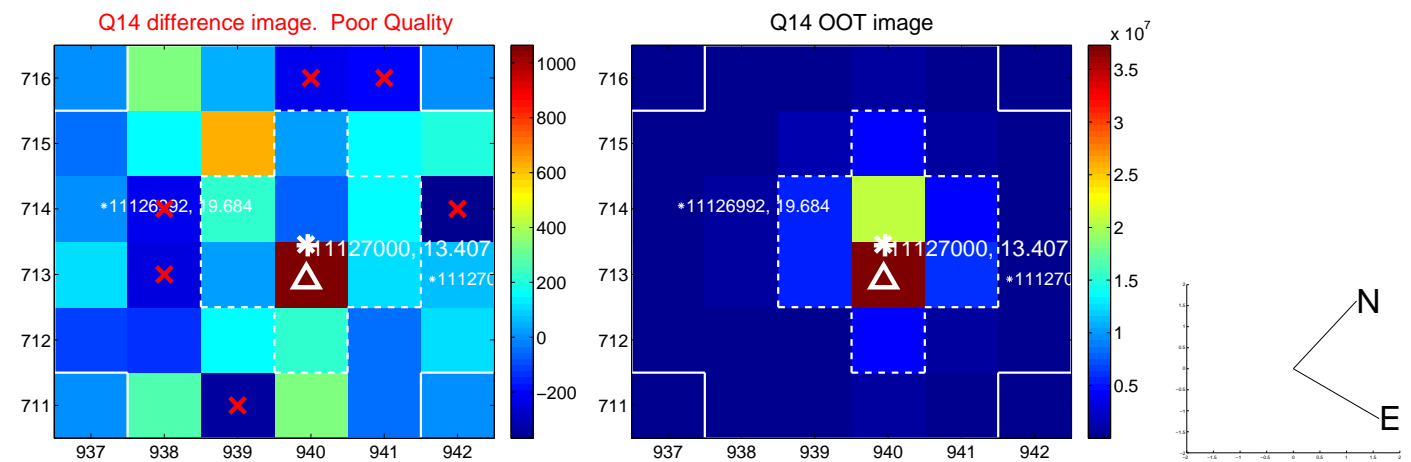
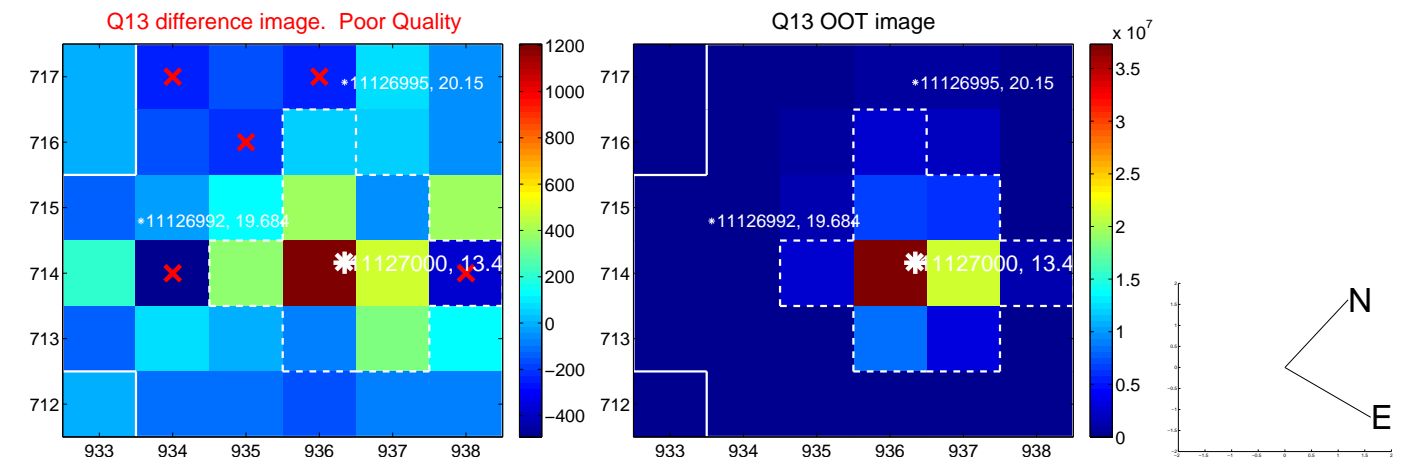
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



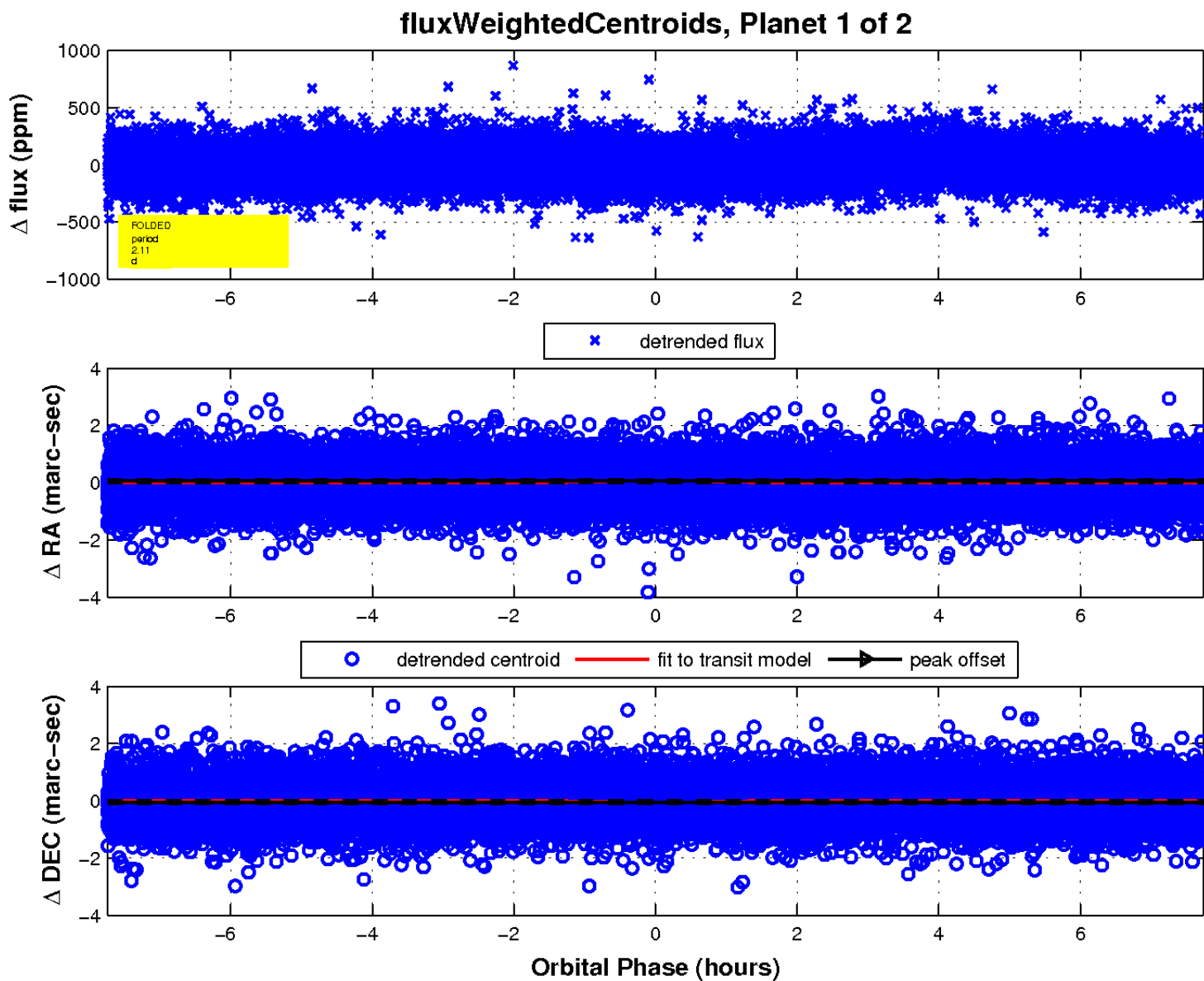
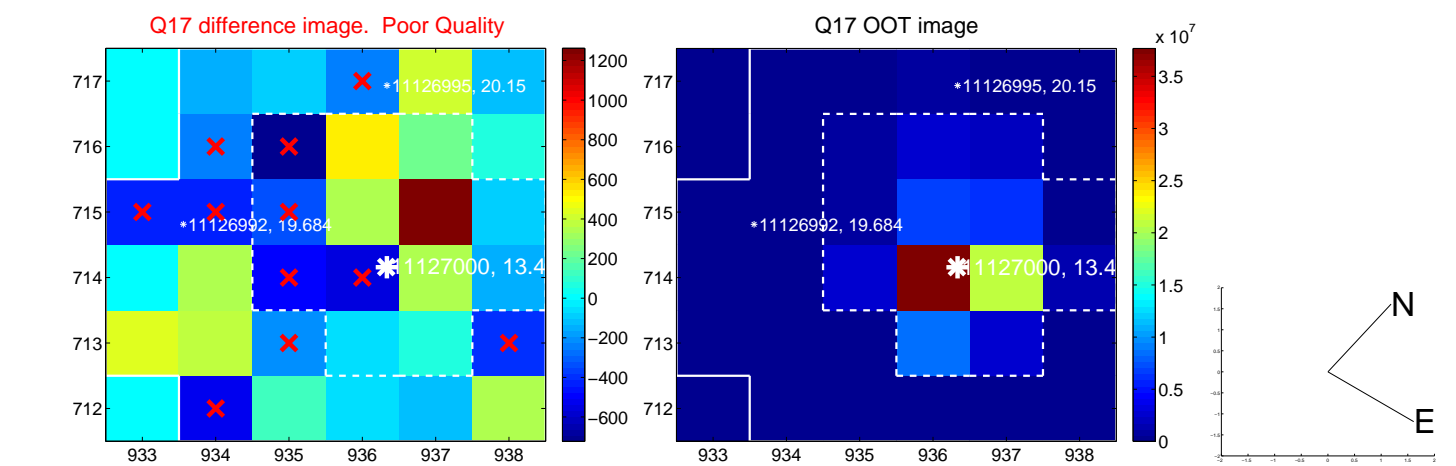
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

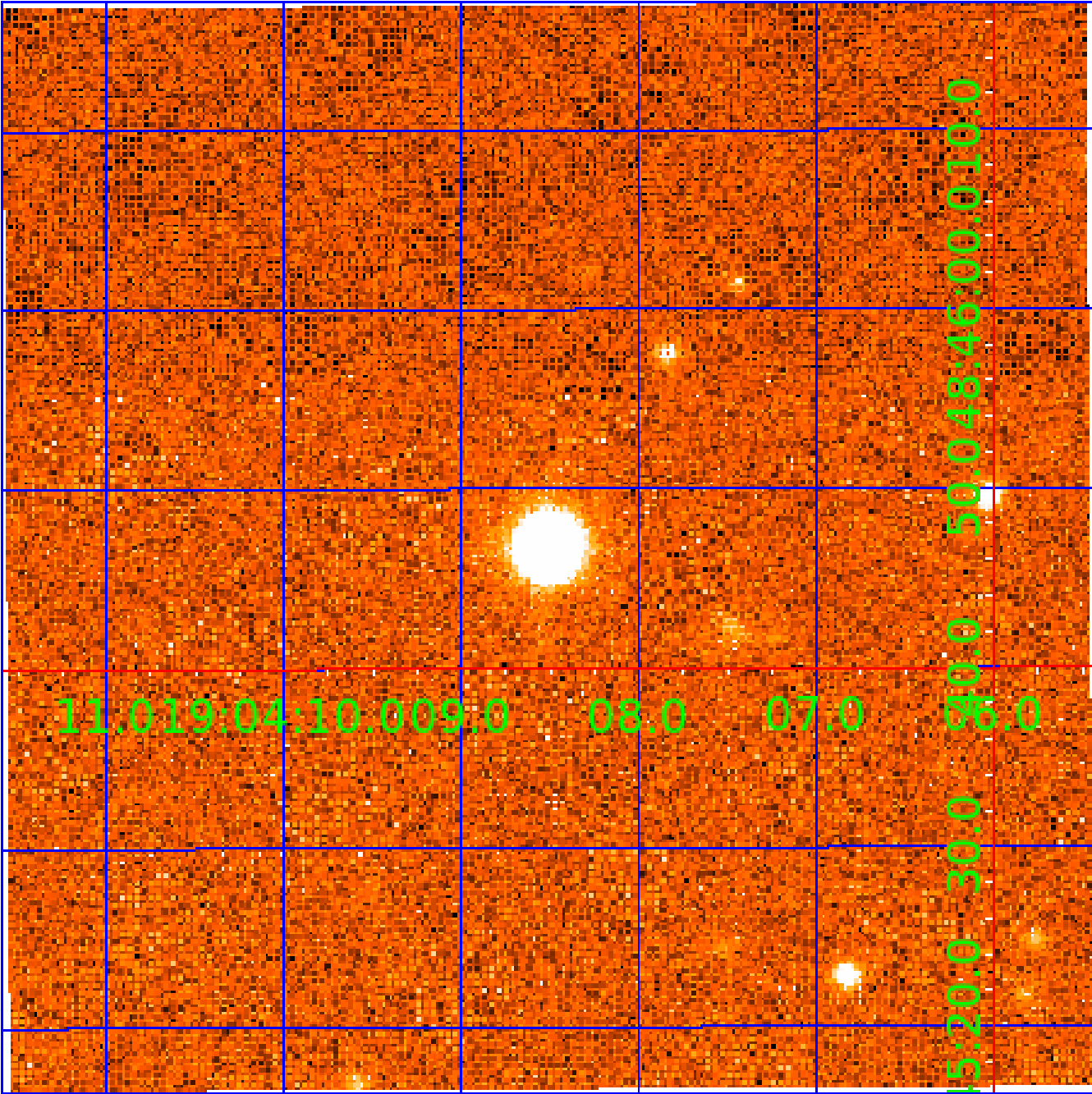


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011127000

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})
011127000-01	OBS	No	2.105567	131.595743	29.6	2.580	7.8	8.4	2.69	6921	1.57	9995.74
011127000-02	OBS	No	1.052521	132.622072	0.0	2.906	7.8	0.0	2.69	6921	0.01	25196.07

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011127000-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV
011127000-02	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

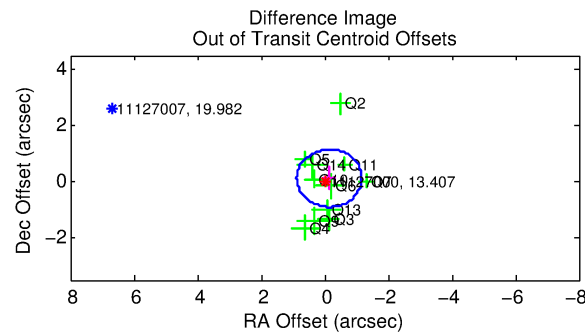
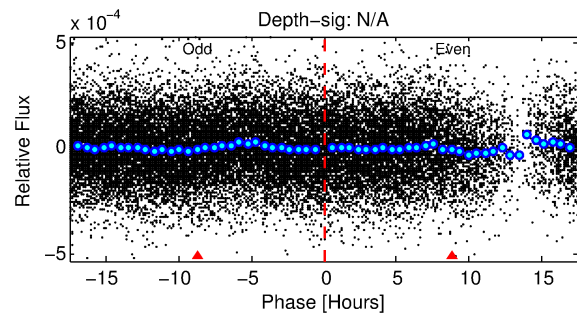
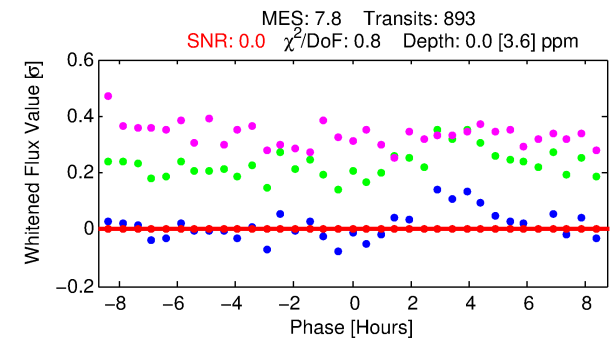
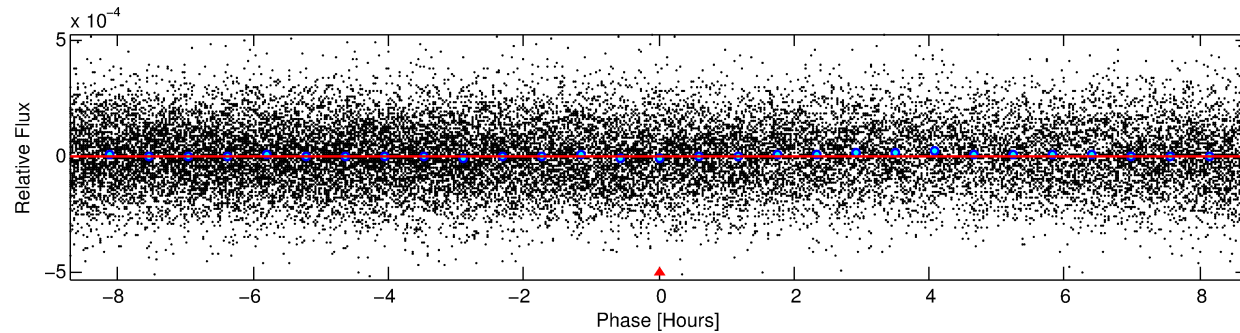
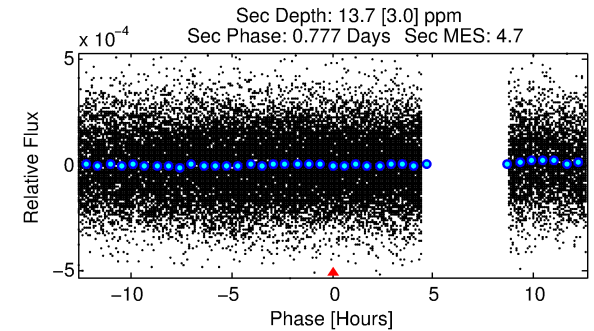
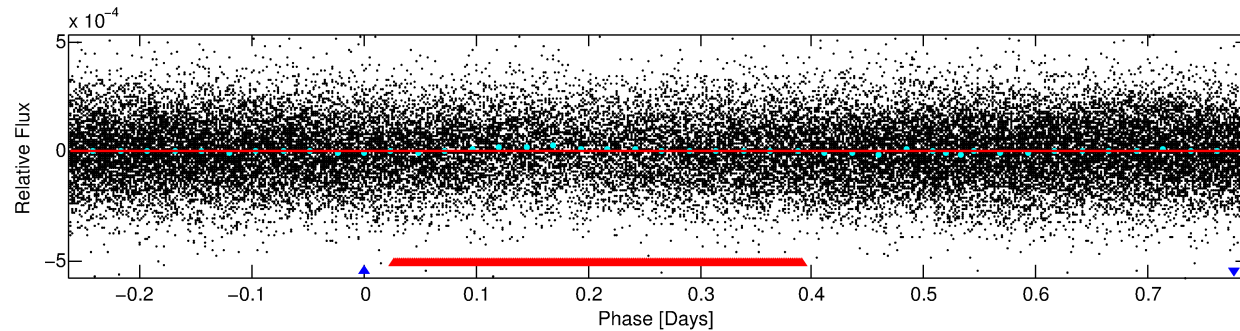
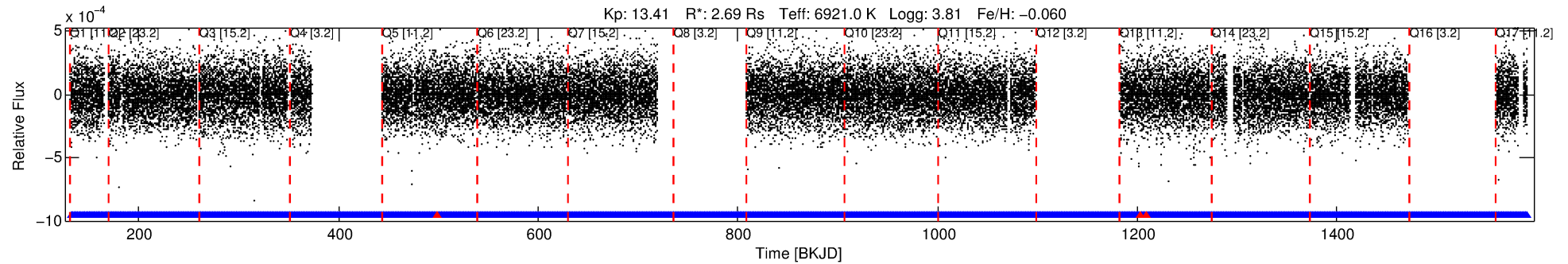
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011127000-02

No Significant Match Found

DV One-Page Summary

KIC: 11127000 Candidate: 2 of 2 Period: 1.053 d



DV Fit Results:

Period = 1.05252 [0.62269] d
Epoch = 132.6221 [212.7933] BKJD
Rp/R* = 0.0000 [0.0803]
a/R* = 1.88 [541.16]
b = 0.80 [544.05]
Seff = 25196.07 [23377.16]
Teq = 3213 [745] K
Rp = 0.01 [23.55] Re
a = 0.0243 [0.0121] AU
Ag = 97916.00 [686195715.39] [0.00σ]
Teffp = 87864 [153947502] K [0.00σ]

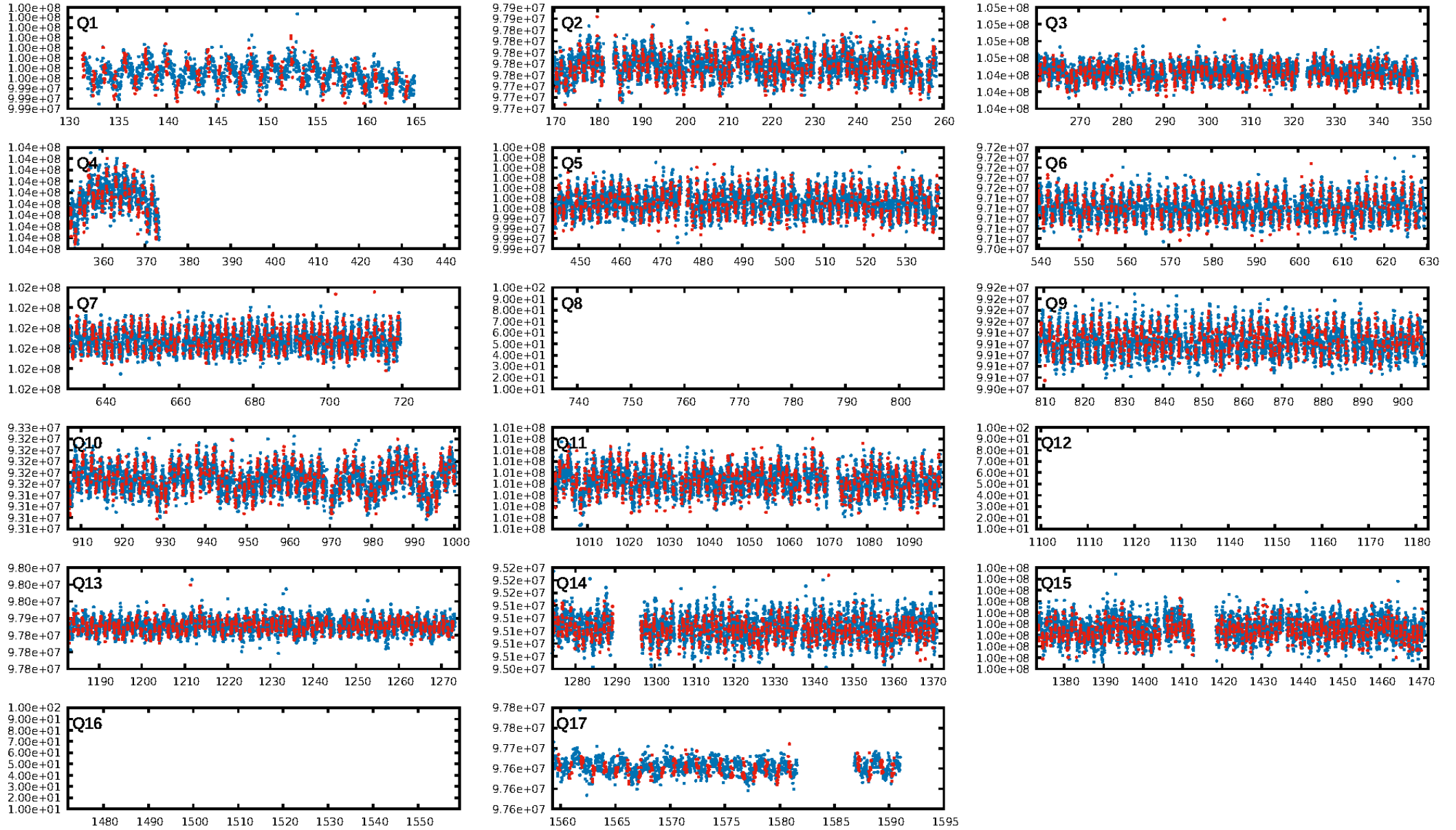
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [6.50σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.20e-13
RollingBand-fgt: 1.00 [839/842]
GhostDiagnostic-chr: N/A
Centroid-sig: N/A
Centroid-so: N/A
OotOffset-rm: 0.185 arcsec [0.54σ]
KicOffset-rm: 0.147 arcsec [0.42σ]
OotOffset-st: 4/3/1/3 [11]
KicOffset-st: 4/3/1/3 [11]
DiffImageQuality-fgm: 1.00 [11/11]
DiffImageOverlap-fno: 1.00 [14/14]

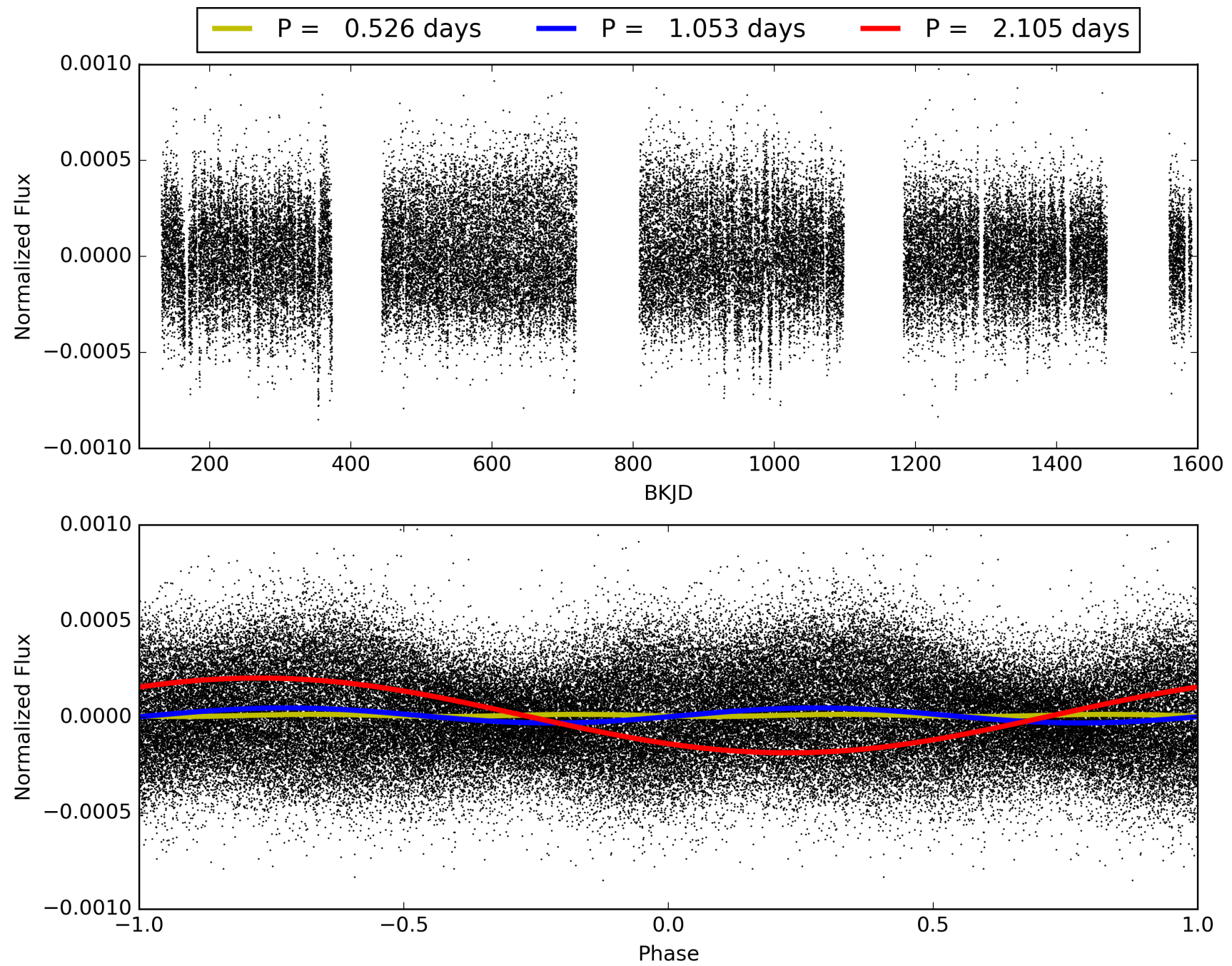
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 01:57:14 Z

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

TCE 011127000-02, PDC Light Curves

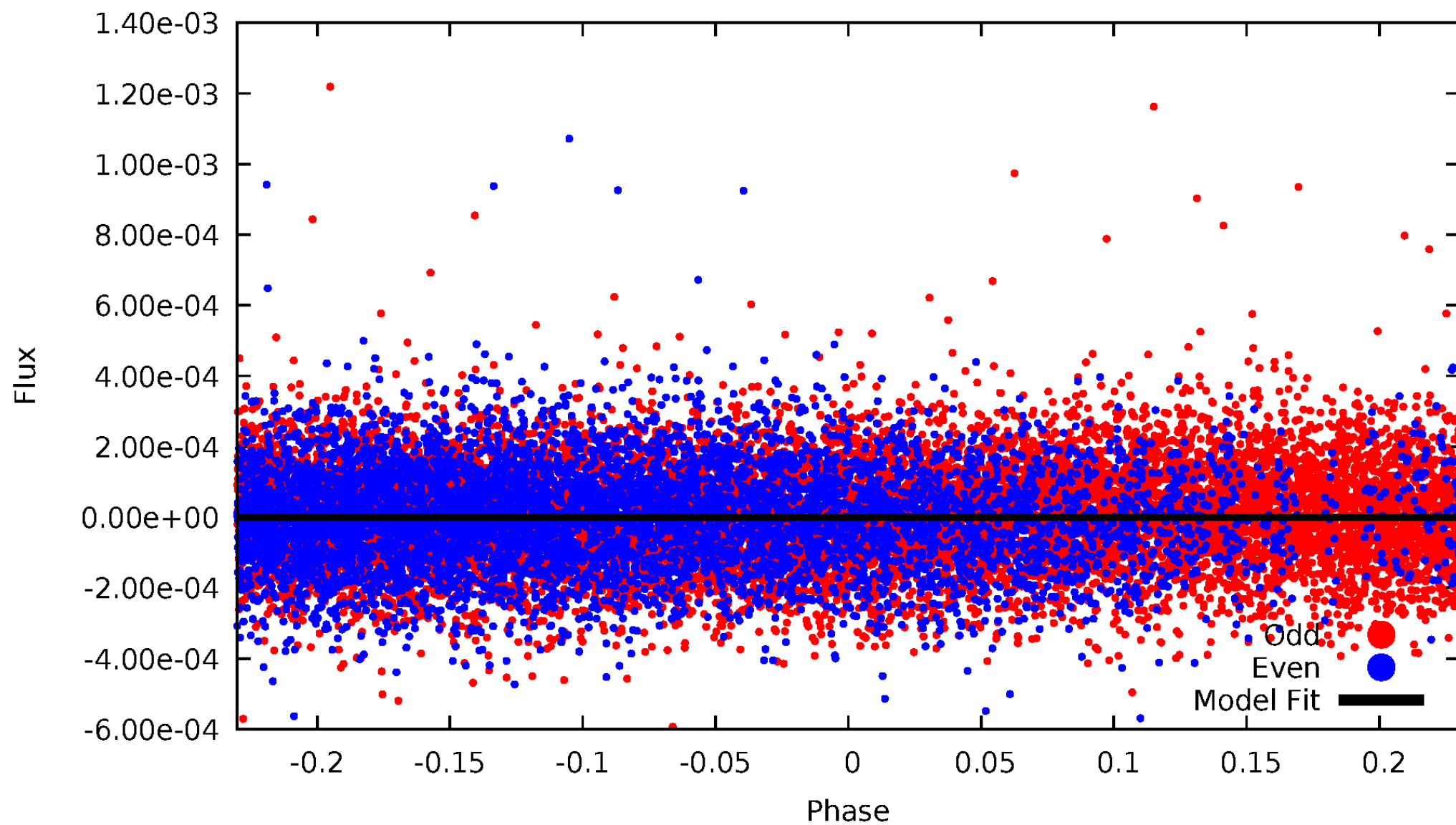


TCE 011127000-02



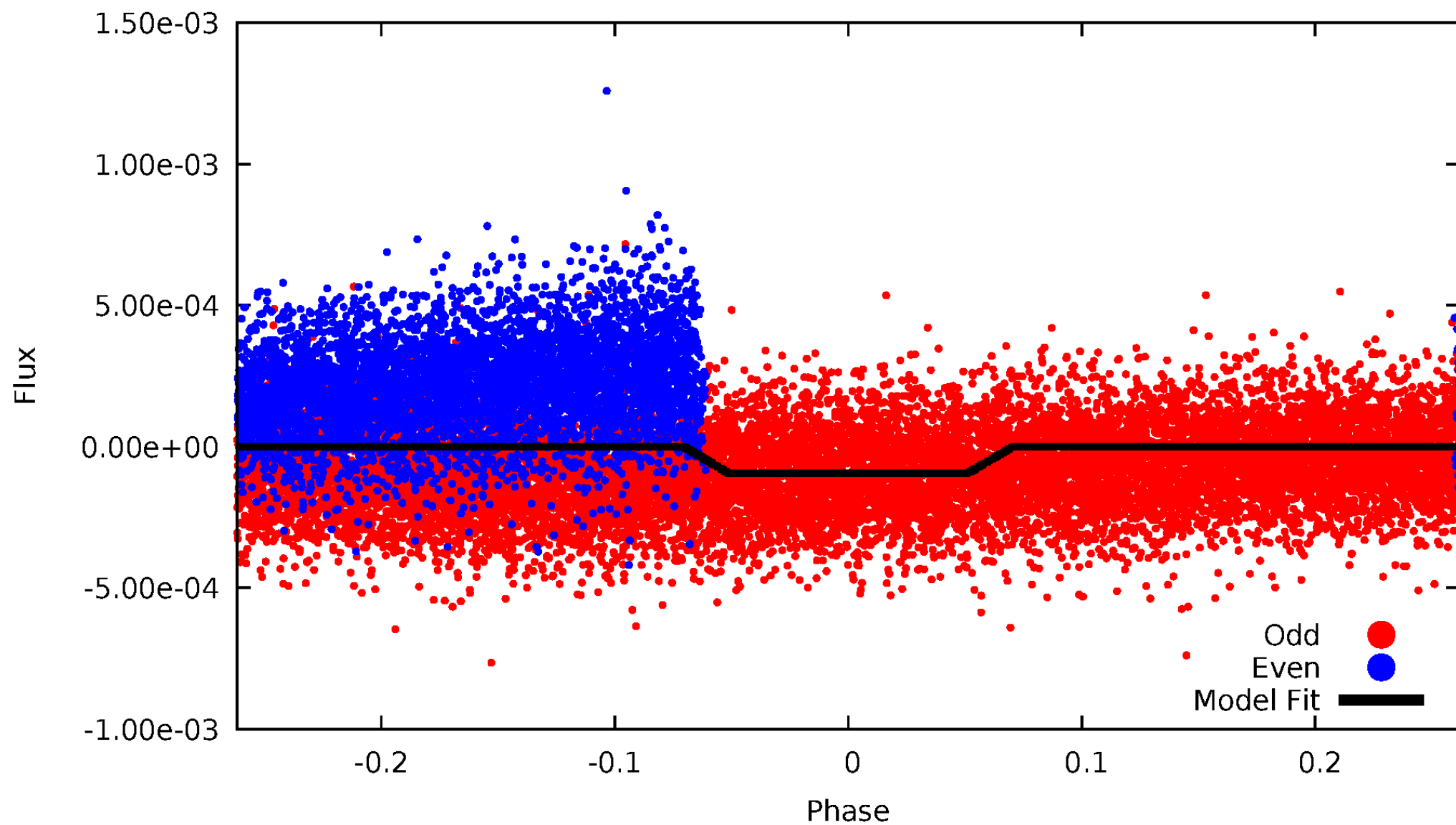
DV Odd/Even

TCE 011127000-02



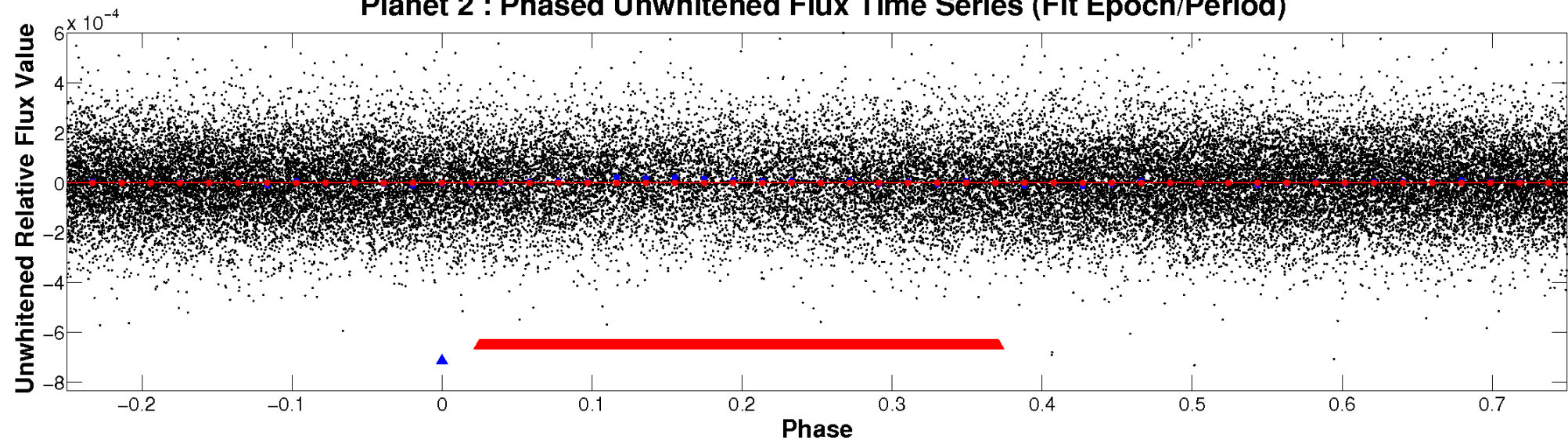
ALT Odd/Even

TCE 011127000-02

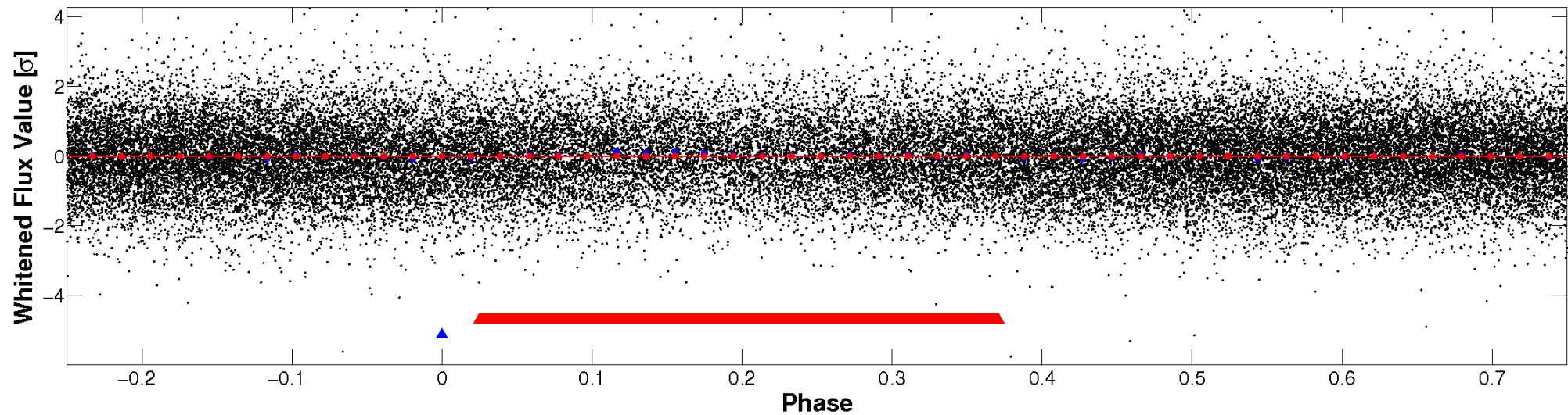


Non-Whitened Vs. Whitened Light Curve

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

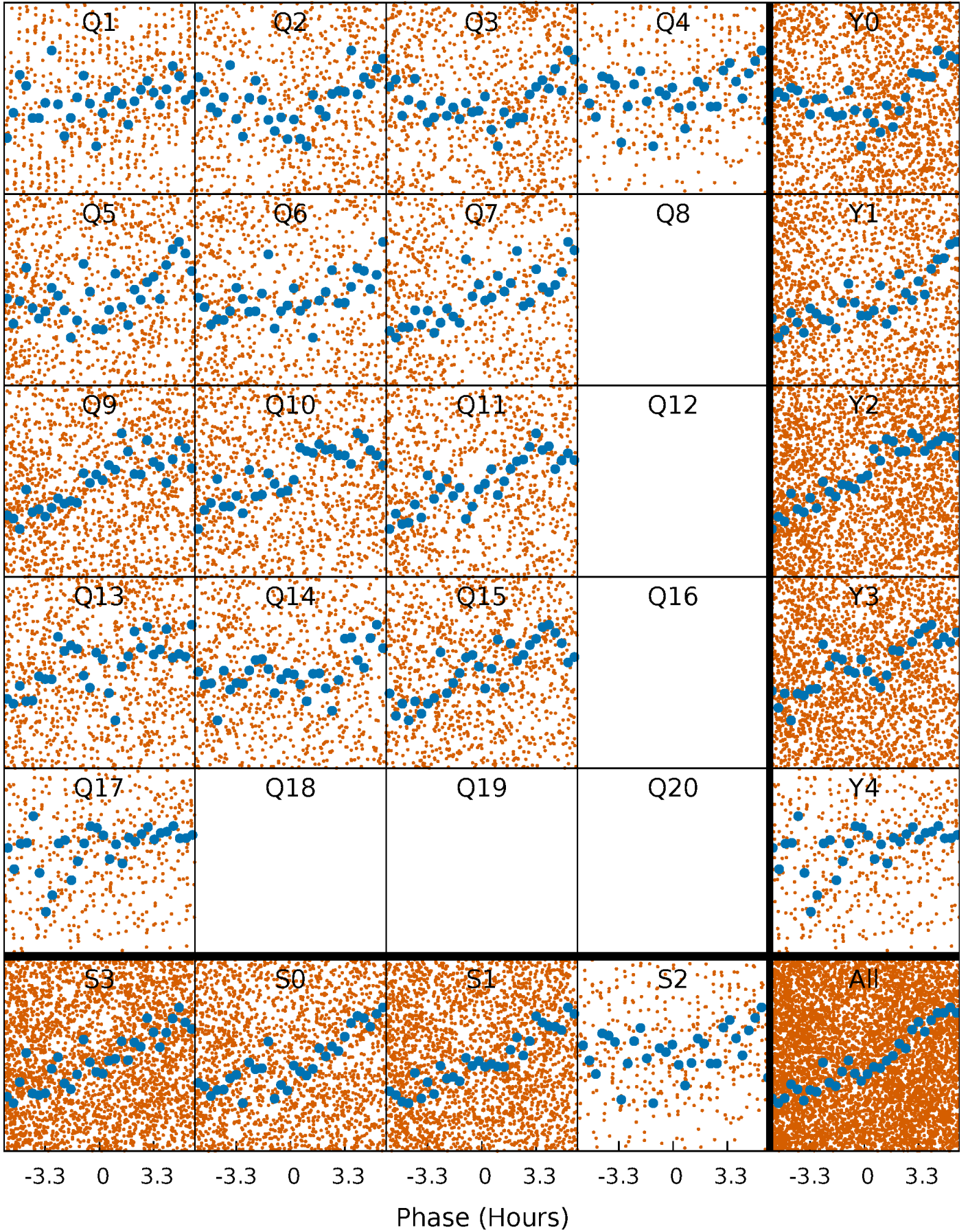


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



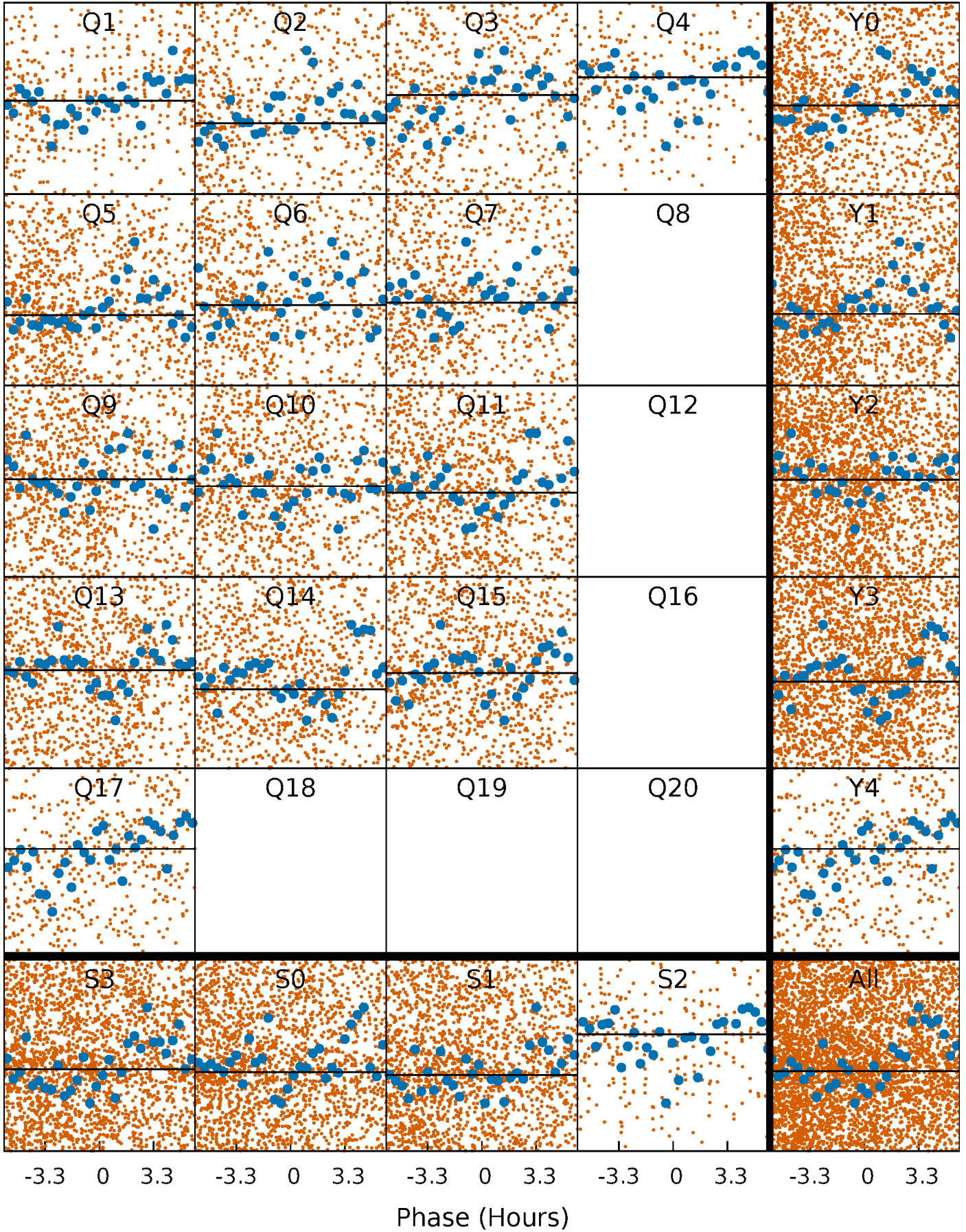
PDC Quarter-Phased Transit Curves

TCE 011127000-02 P= 1.052521 Days $T_0=132.622072$ (BKJD)



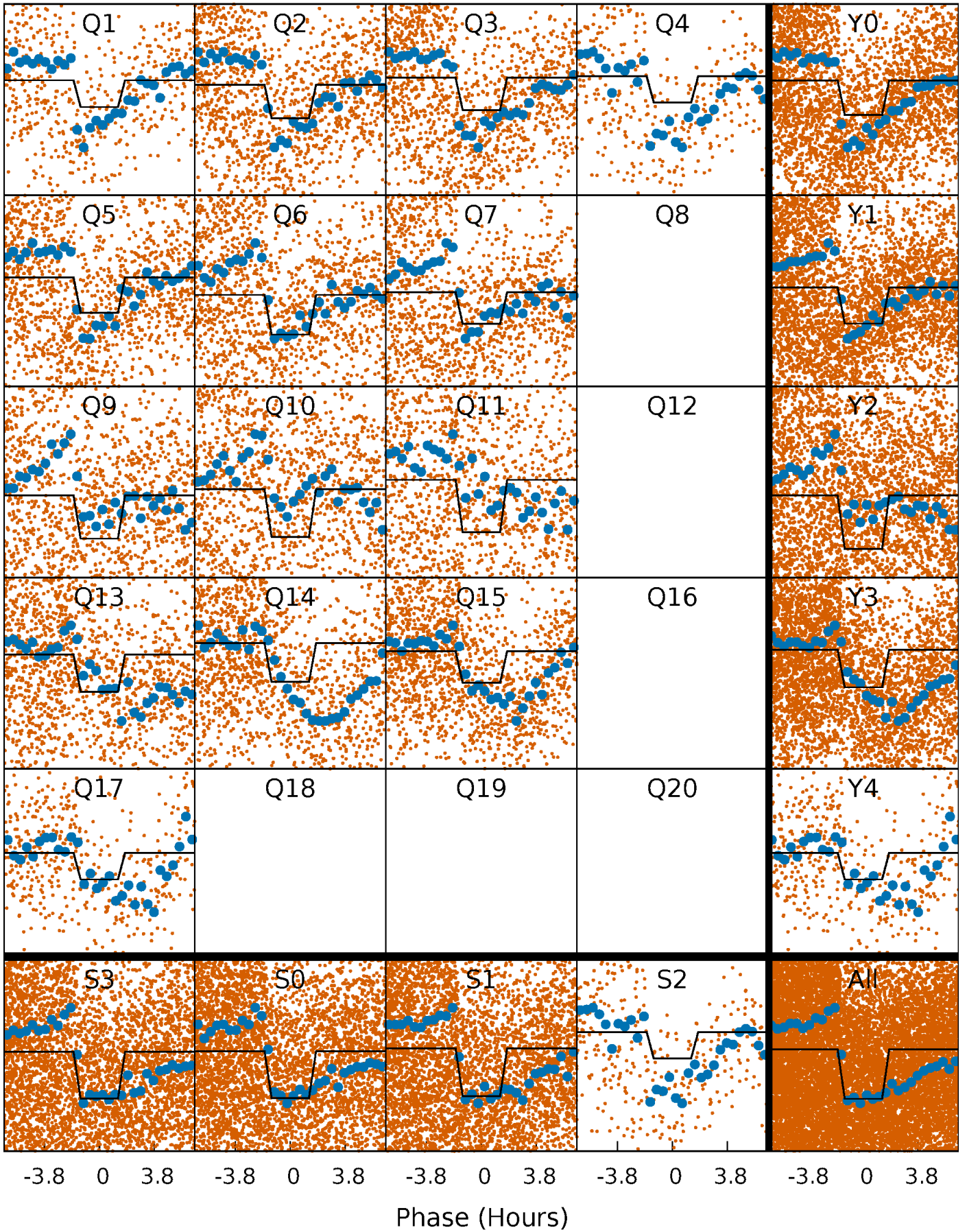
DV Quarter-Phased Transit Curves

TCE 011127000-02 P= 1.052521 Days $T_0=132.622072$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

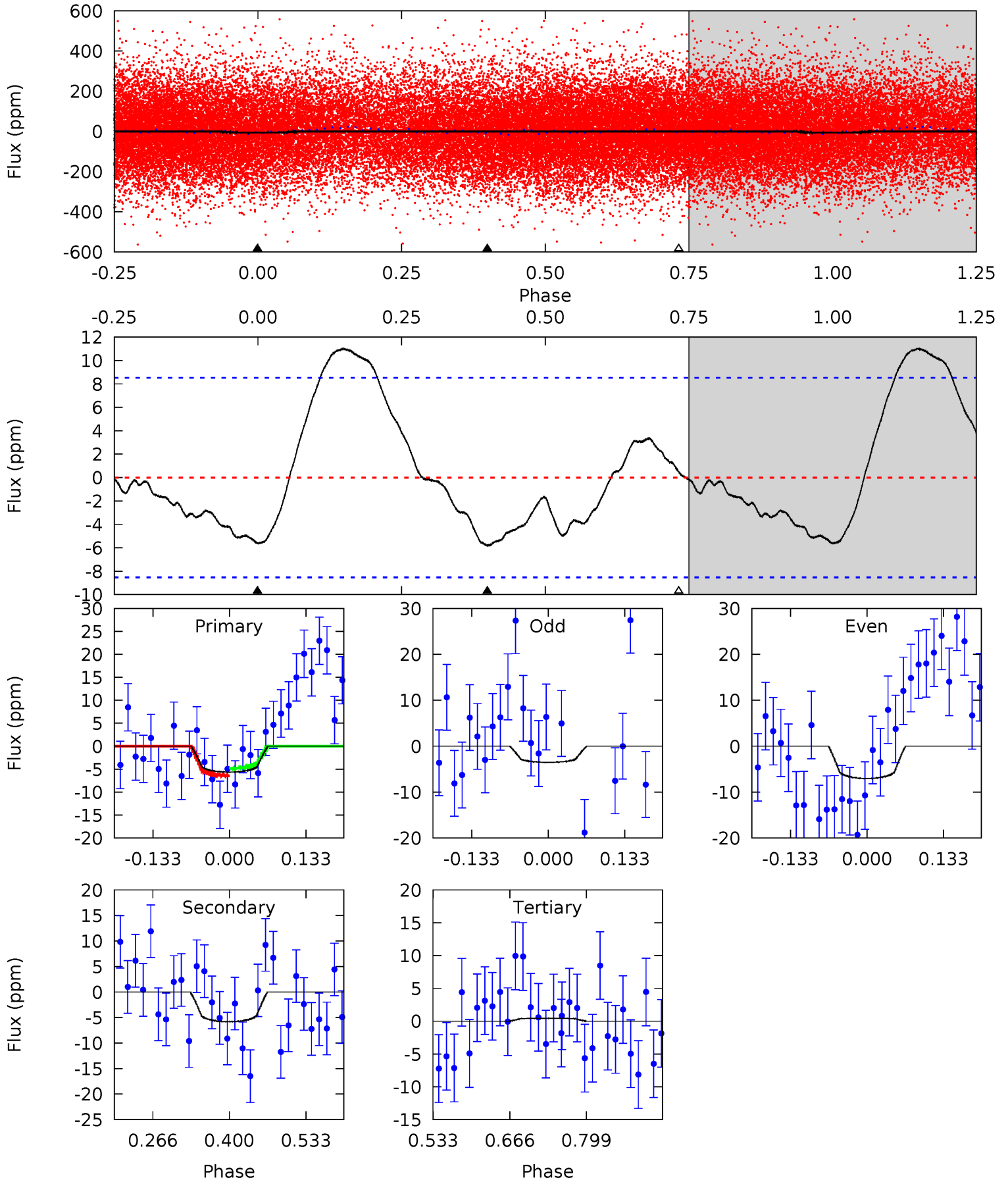
TCE 011127000-02 P= 1.052779 Days $T_0=132.547306$ (BKJD)



DV Model-Shift Uniqueness Test

011127000-02, P = 1.052521 Days, E = 131.569551 Days

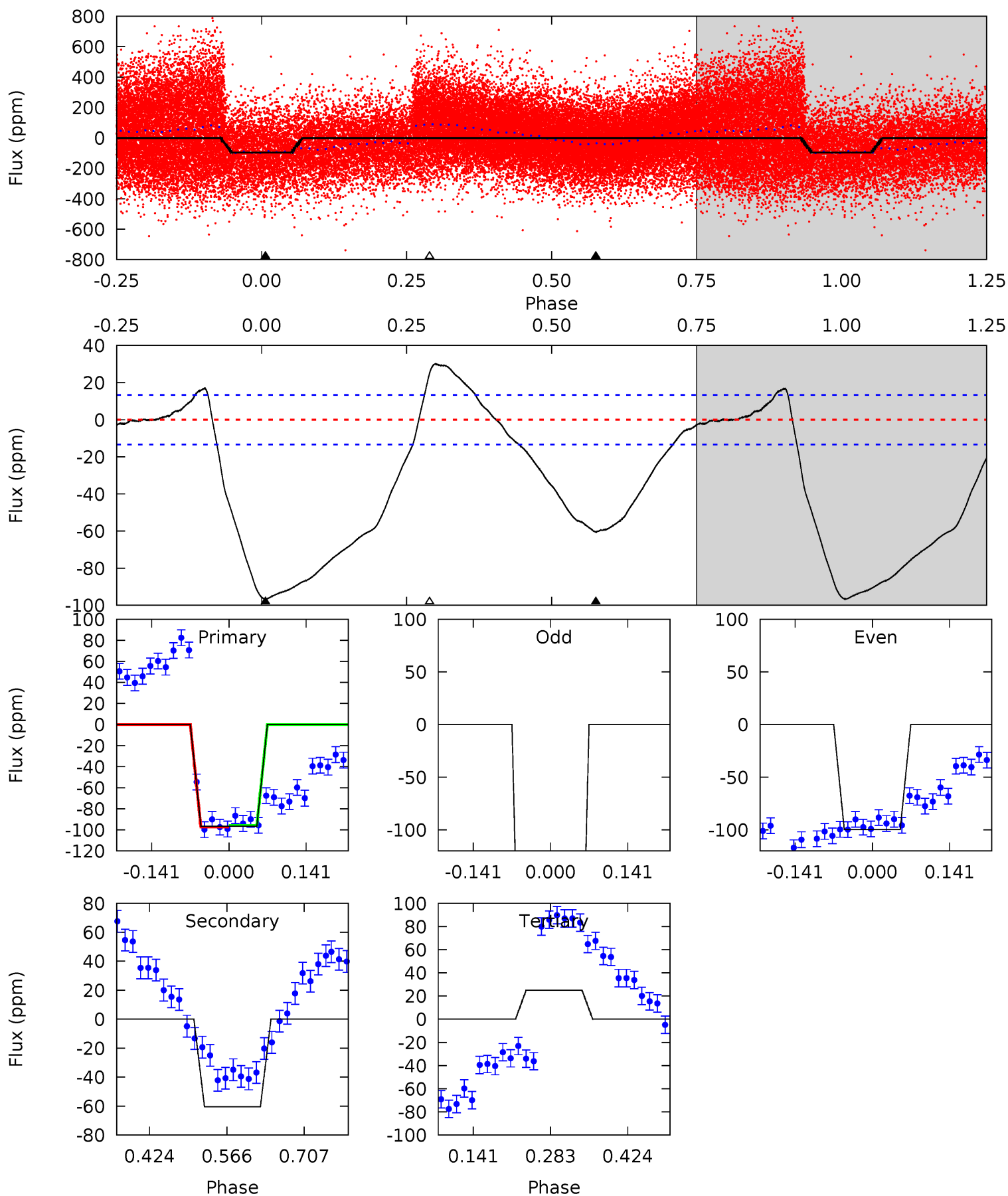
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.98	3.08	-0.24	0	4.50	1.50	2.12	3.22	2.98	3.32	3.08	0.90	0.55	0.65	0.43



Alt Model-Shift Uniqueness Test

011127000-02, P = 1.052779 Days, E = 131.494527 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.5	20.3	-8.41	0	4.49	1.47	7.72	40.9	32.5	28.7	20.3	24.7	0.99	0.24	0.26



Stellar Parameters For KIC 011127000

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6921^{+167}_{-238}	$3.815^{+0.266}_{-0.114}$	$-0.060^{+0.250}_{-0.300}$	$2.686^{+0.428}_{-0.927}$	$1.718^{+0.154}_{-0.360}$	$0.125^{+0.224}_{-0.045}$
	+2%/-3%	+7%/-3%	+417%/-500%	+16%/-35%	+9%/-21%	+179%/-36%
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 011127000-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-6 ± 2	$14.88^{+16.34}_{-9.93}$	4387^{+1324}_{-653}	-3828^{+502}_{-878}	$0.007^{+0.069}_{-0.006}$
Alt.	-60 ± 3	$16.34^{+16.20}_{-10.84}$	4415^{+1268}_{-711}	-3605^{+7615}_{-979}	$0.066^{+0.710}_{-0.054}$

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 $A_{obs} \gg 1.0$

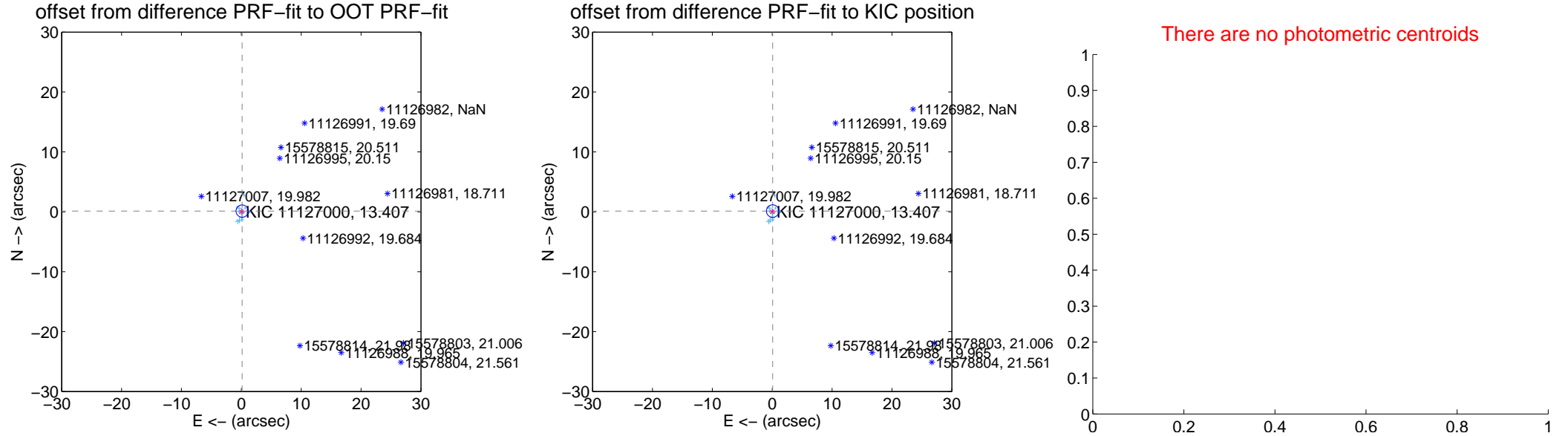
DV Centroid Data

Supplemental centroid analysis for 011127000-02. Kepler magnitude: 13.41. Transit SNR 0.00

There are 11 quarters with good PRF difference image offsets

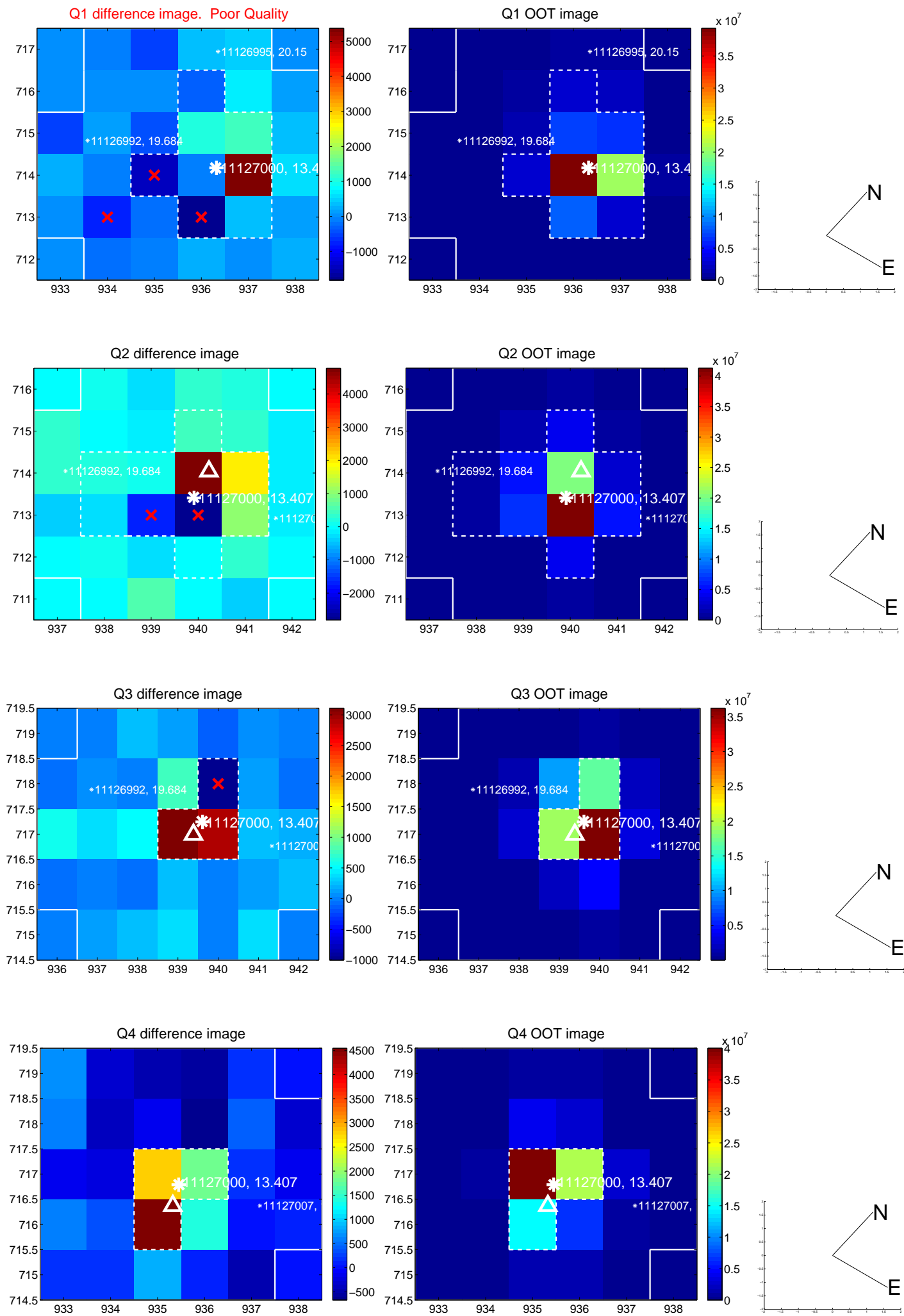
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.185 ± 0.342	0.54	-0.140 ± 0.191	0.121 ± 0.406
PRF-fit source offset from KIC position	0.147 ± 0.348	0.42	-0.080 ± 0.185	0.123 ± 0.366
photometric centroid source offset	—	—	—	—

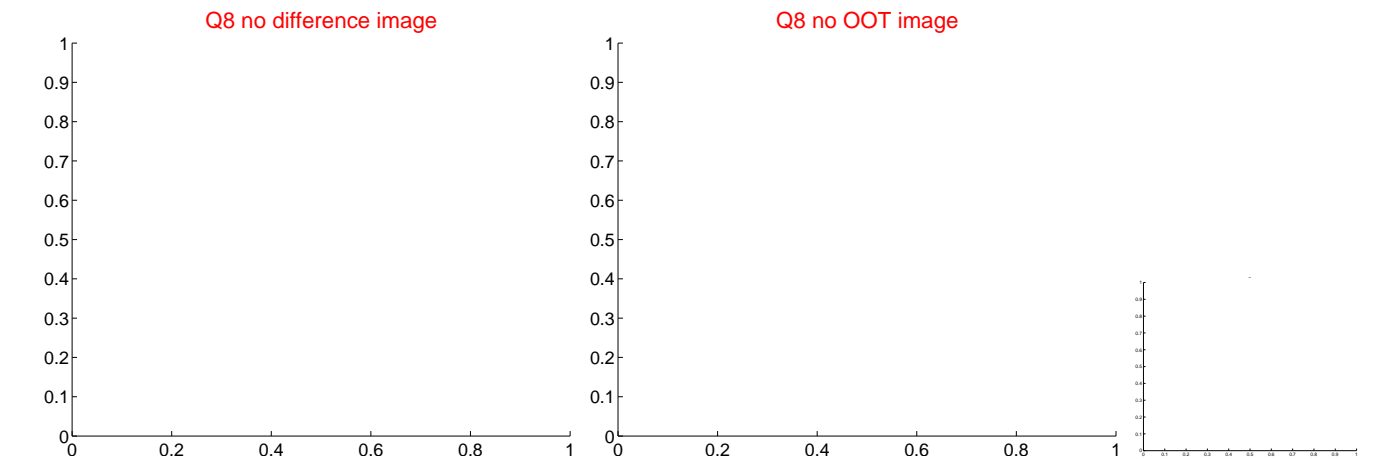
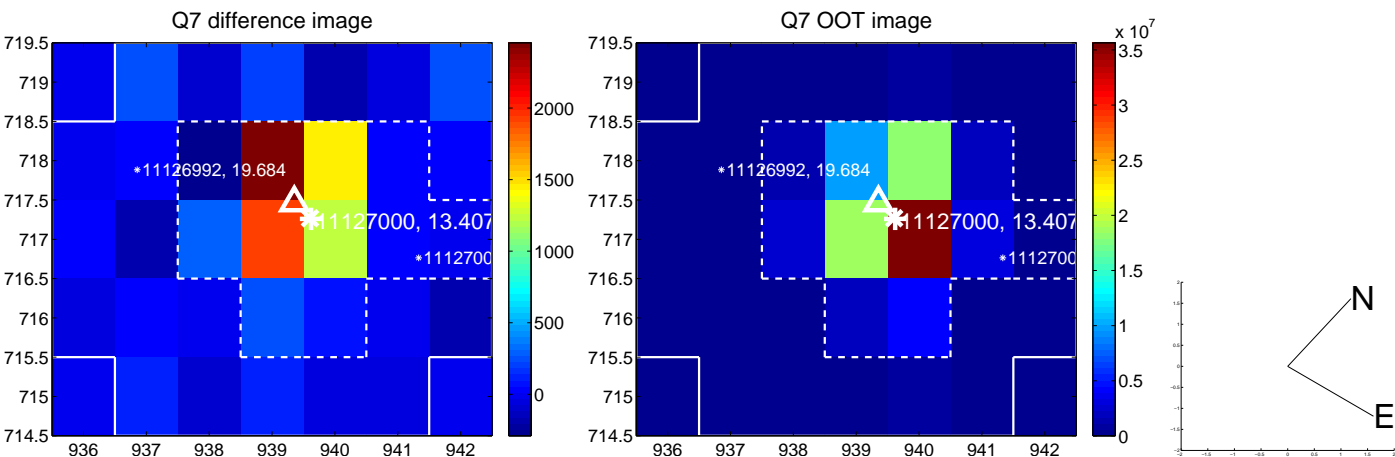
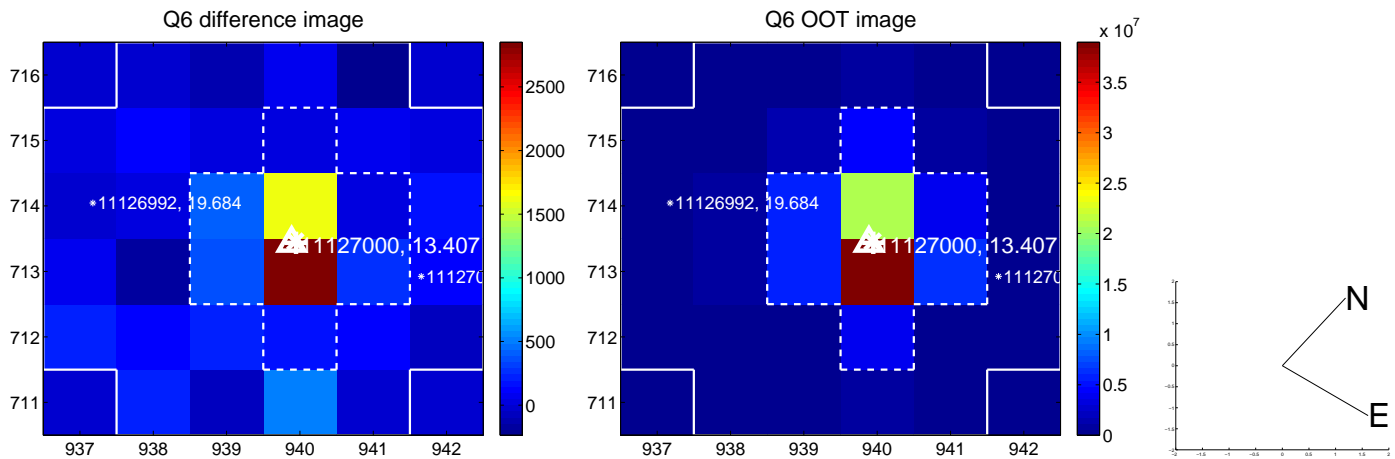
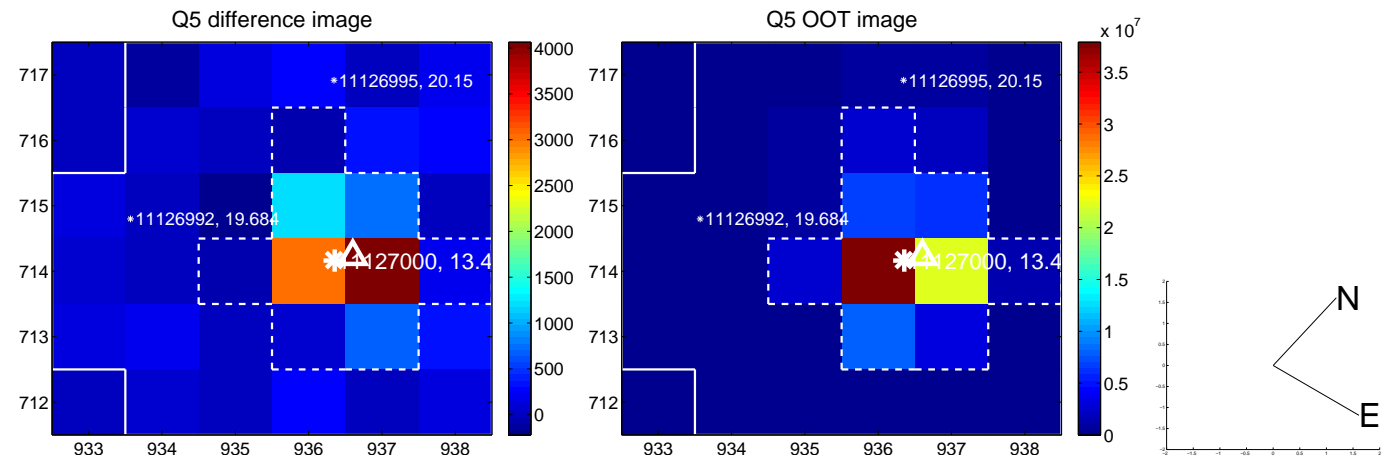


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

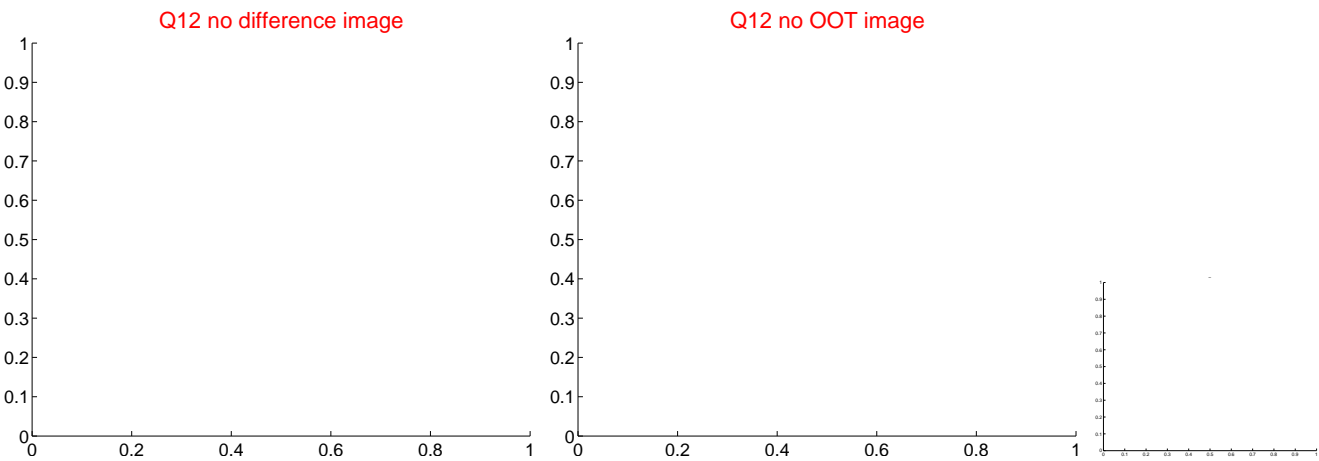
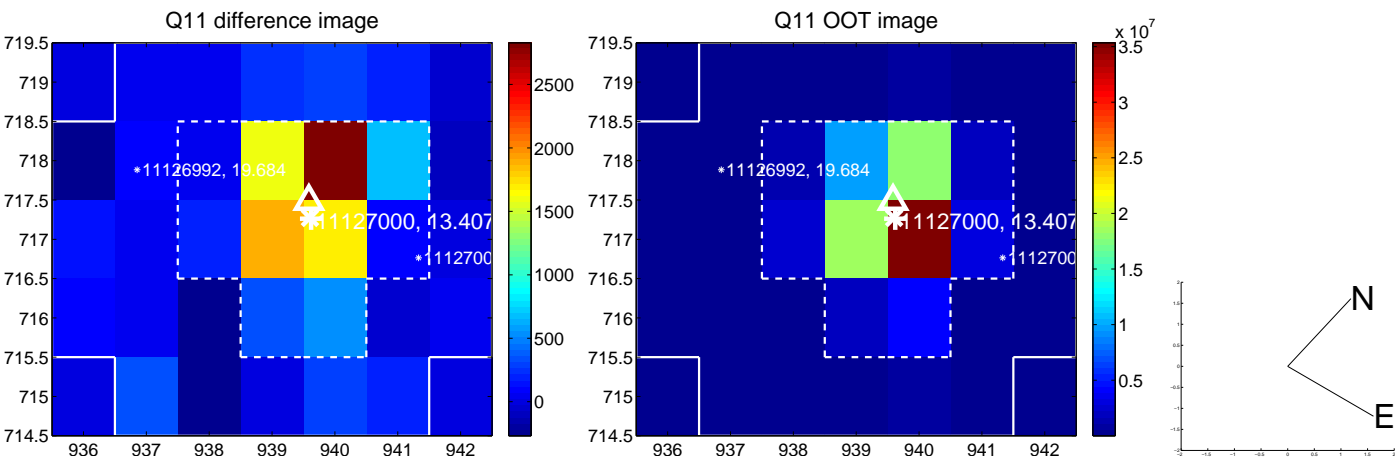
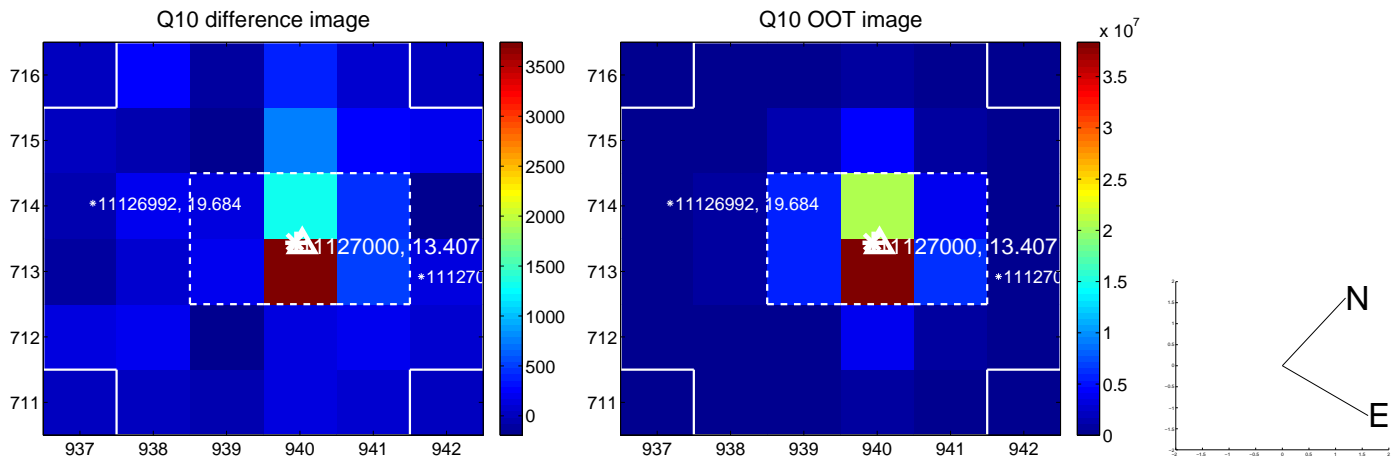
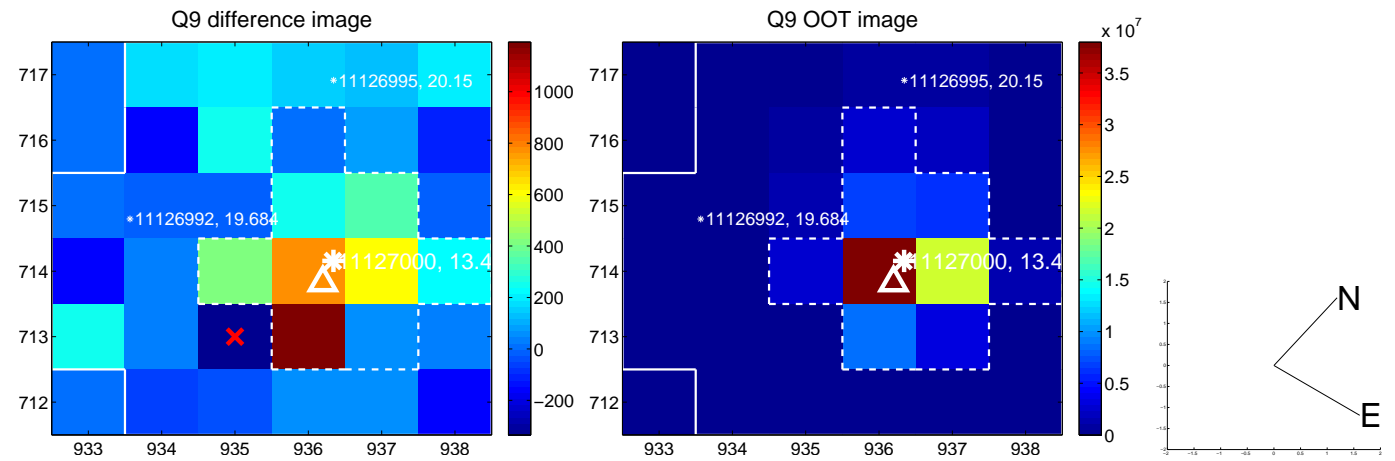
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



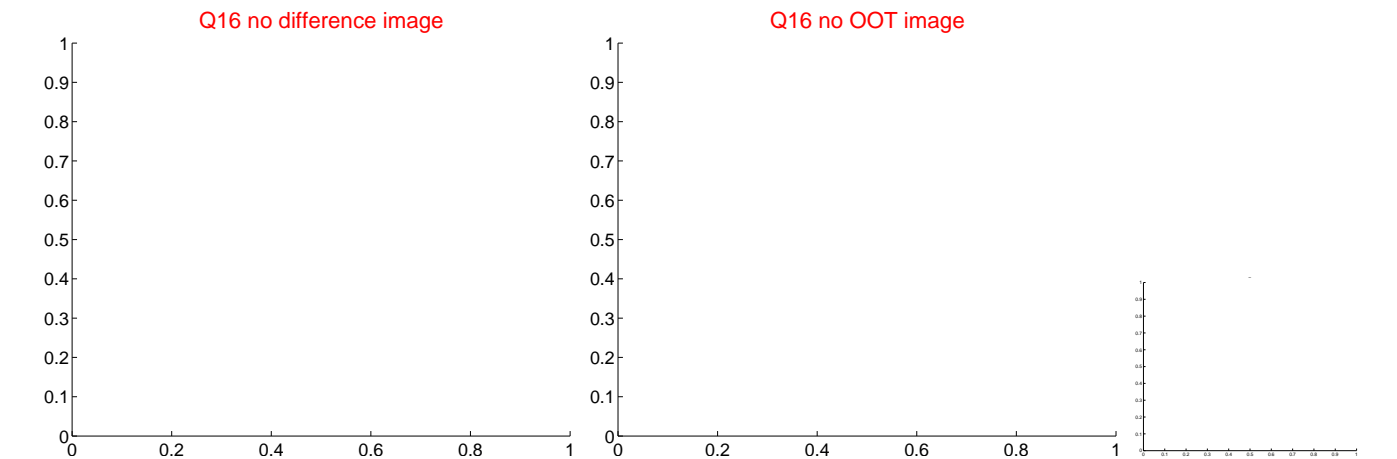
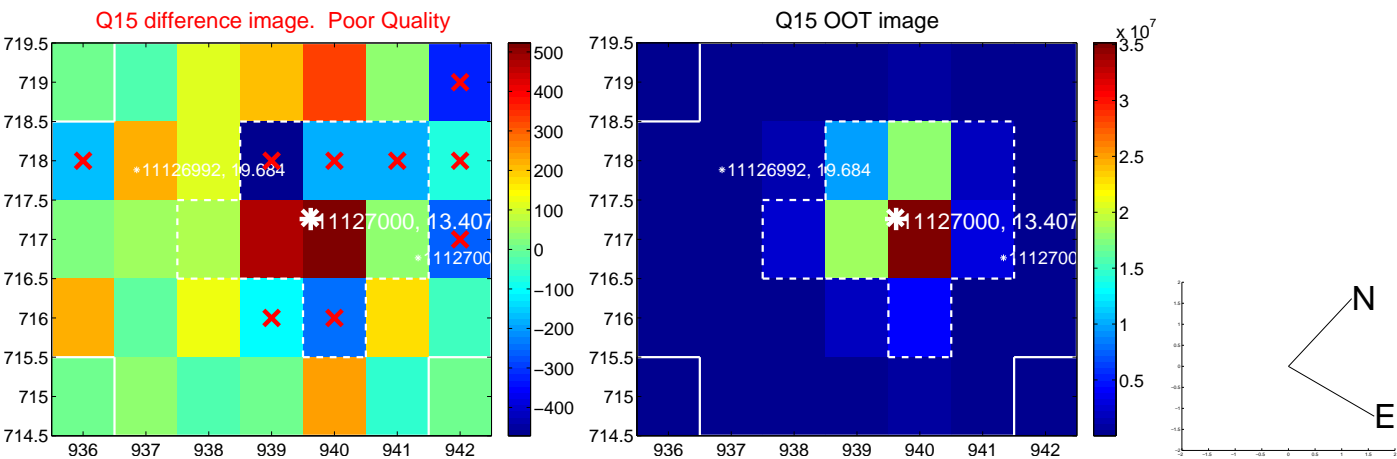
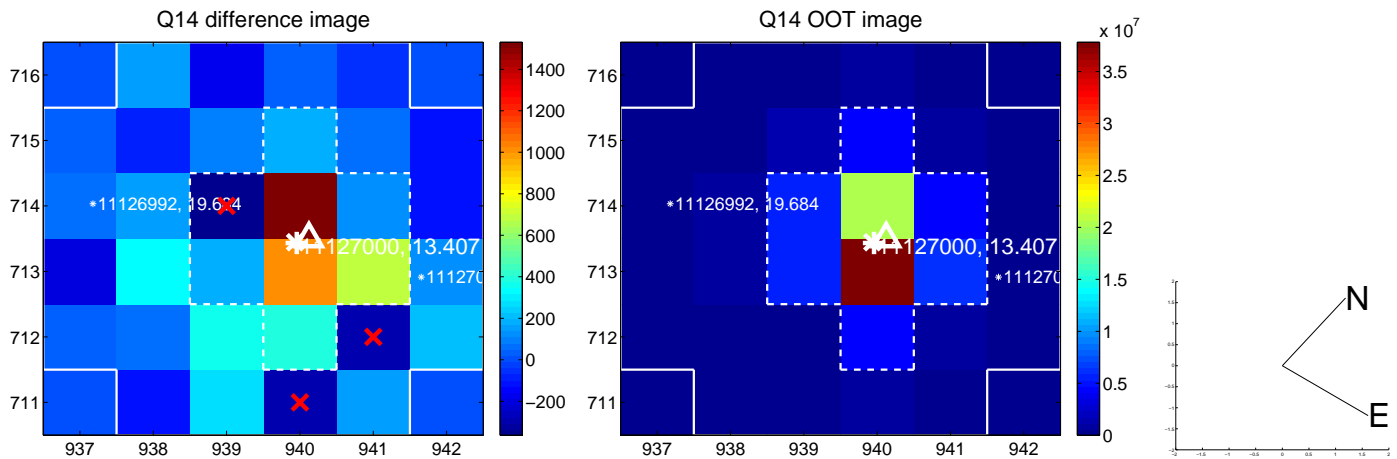
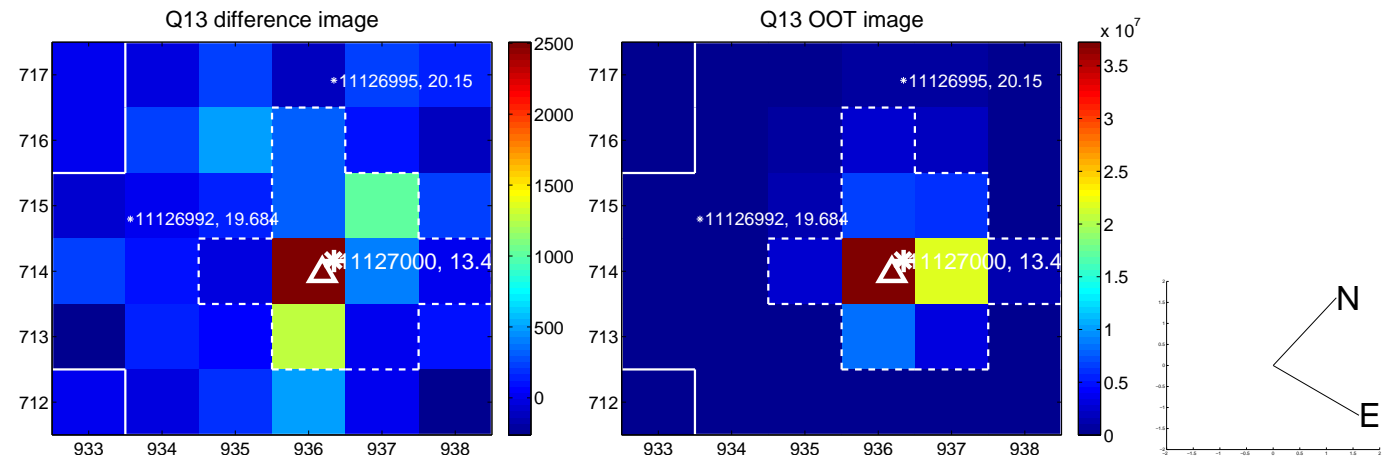
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



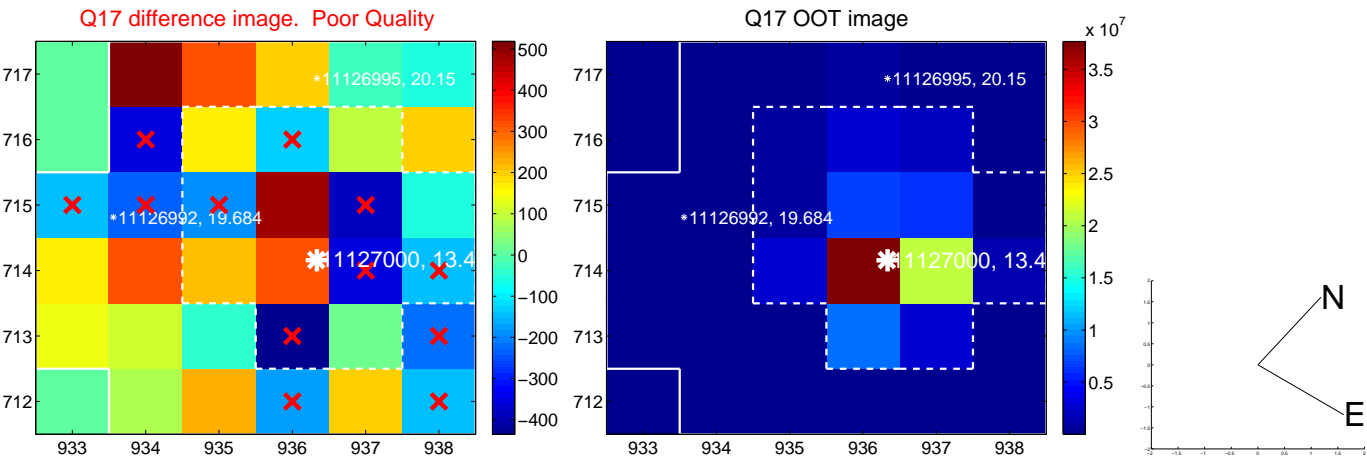
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

