

KIC 011619861

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})
011619861-01	OBS	No	1.697127	132.378599	208.4	7.532	15.2	16.3	2.40	7549	4.04	14909.25
011619861-02	OBS	No	1.697116	131.797823	171.5	5.221	11.7	12.8	2.40	7549	3.67	14909.39
011619861-03	OBS	No	1.802075	133.057673	190.8	11.360	8.9	7.6	2.40	7549	3.36	13762.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011619861-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011619861-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
011619861-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

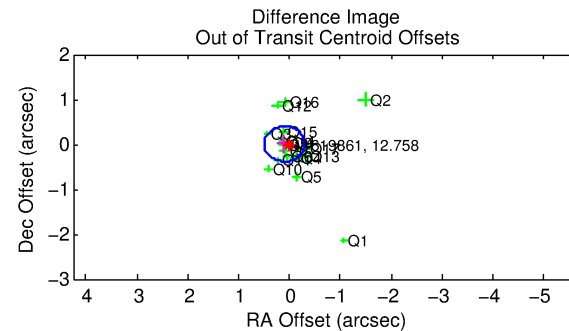
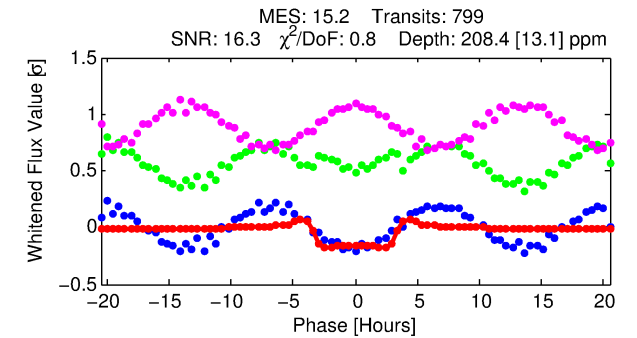
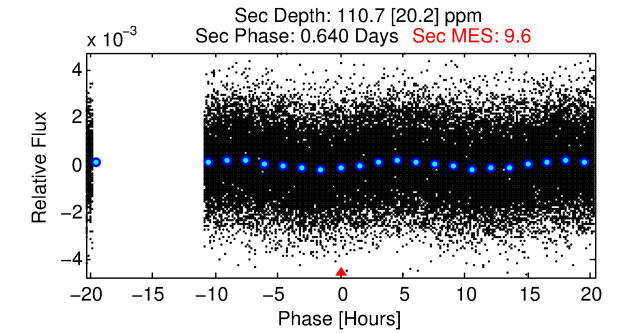
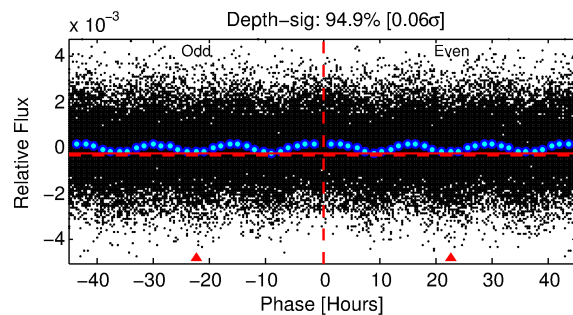
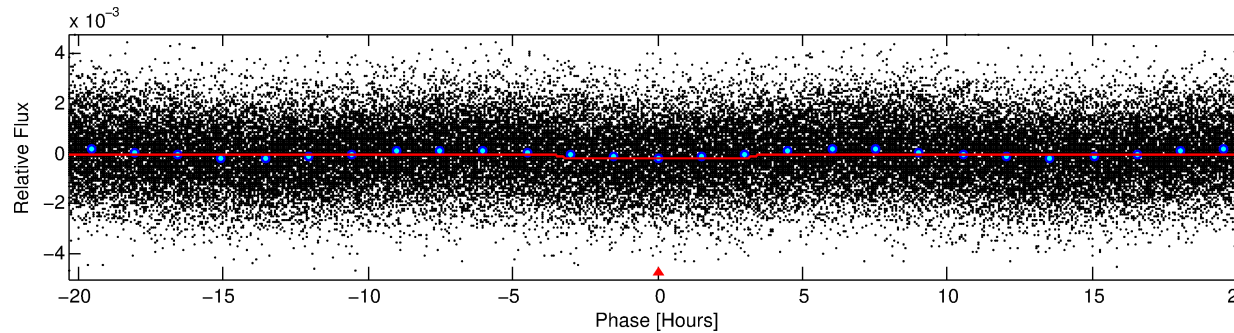
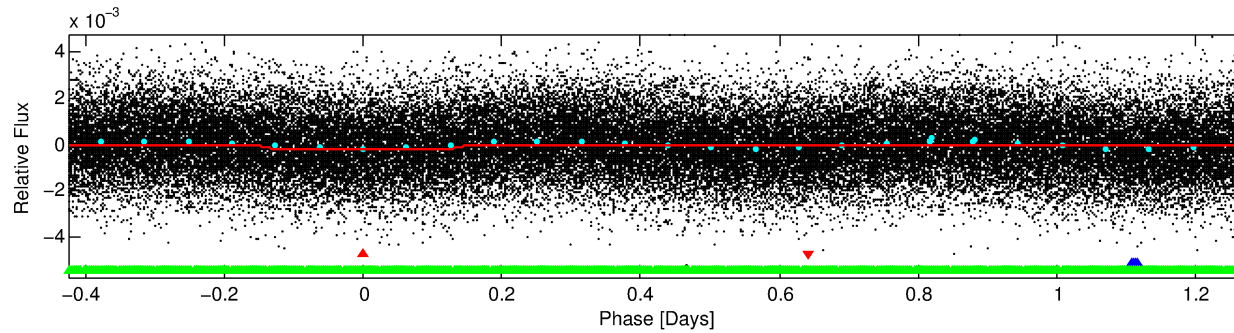
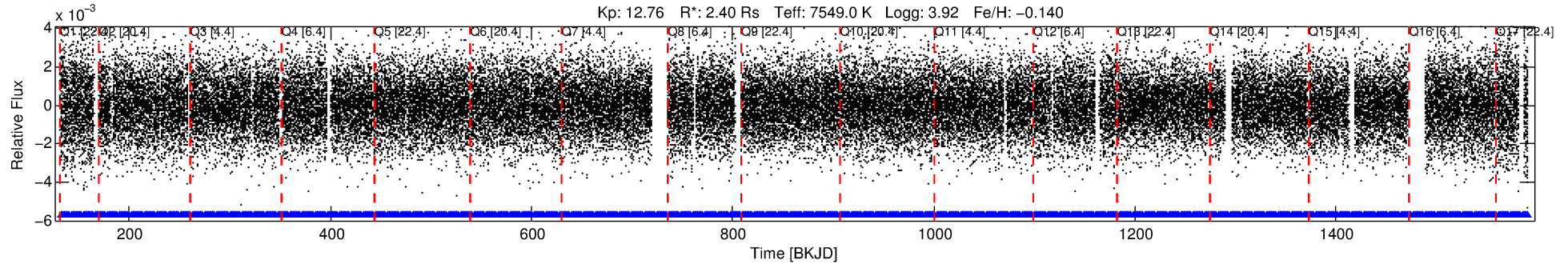
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011619861-01

No Significant Match Found

DV One-Page Summary

KIC: 11619861 Candidate: 1 of 3 Period: 1.697 d



DV Fit Results:

Period = 1.69713 [0.00001] d
Epoch = 132.3786 [0.0037] BKJD
Rp/R* = 0.0154 [0.0017]
a/R* = 1.24 [0.27]
b = 0.90 [0.13]
Seff = 14909.25 [7989.92]
Teq = 2818 [377] K
Rp = 4.04 [1.56] Re
a = 0.0336 [0.0111] AU
Ag = 4.20 [2.43] [1.32 σ]
Teffp = 6237 [522] K [5.31 σ]

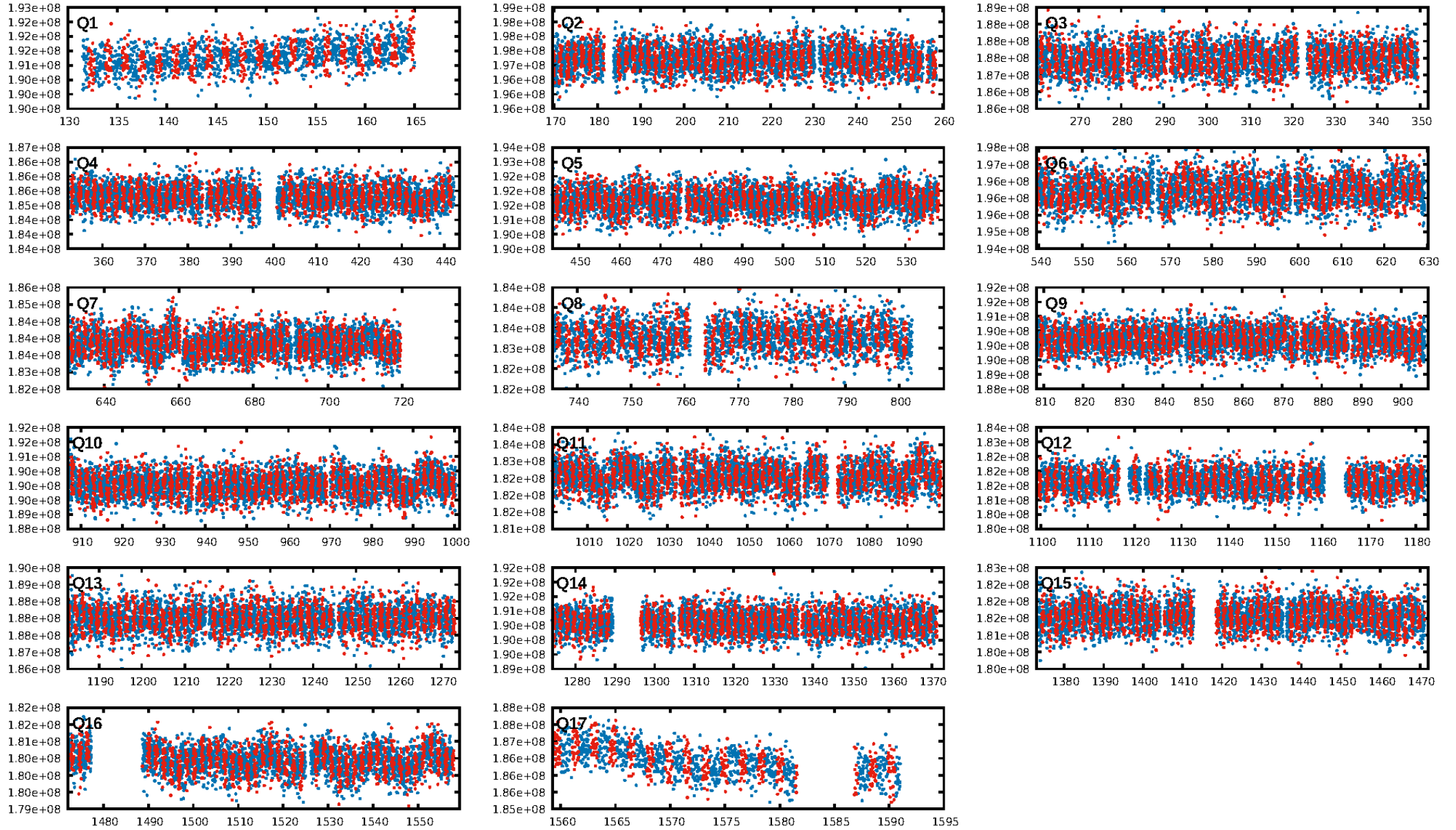
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00 σ]
LongPeriod-sig: 14.7% [0.18 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [762/762]
GhostDiagnostic-chr: 1.306
Centroid-sig: 99.3%
Centroid-so: 0.127 arcsec [1.66 σ]
OotOffset-rm: 0.099 arcsec [0.75 σ]
KicOffset-rm: 0.114 arcsec [0.62 σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

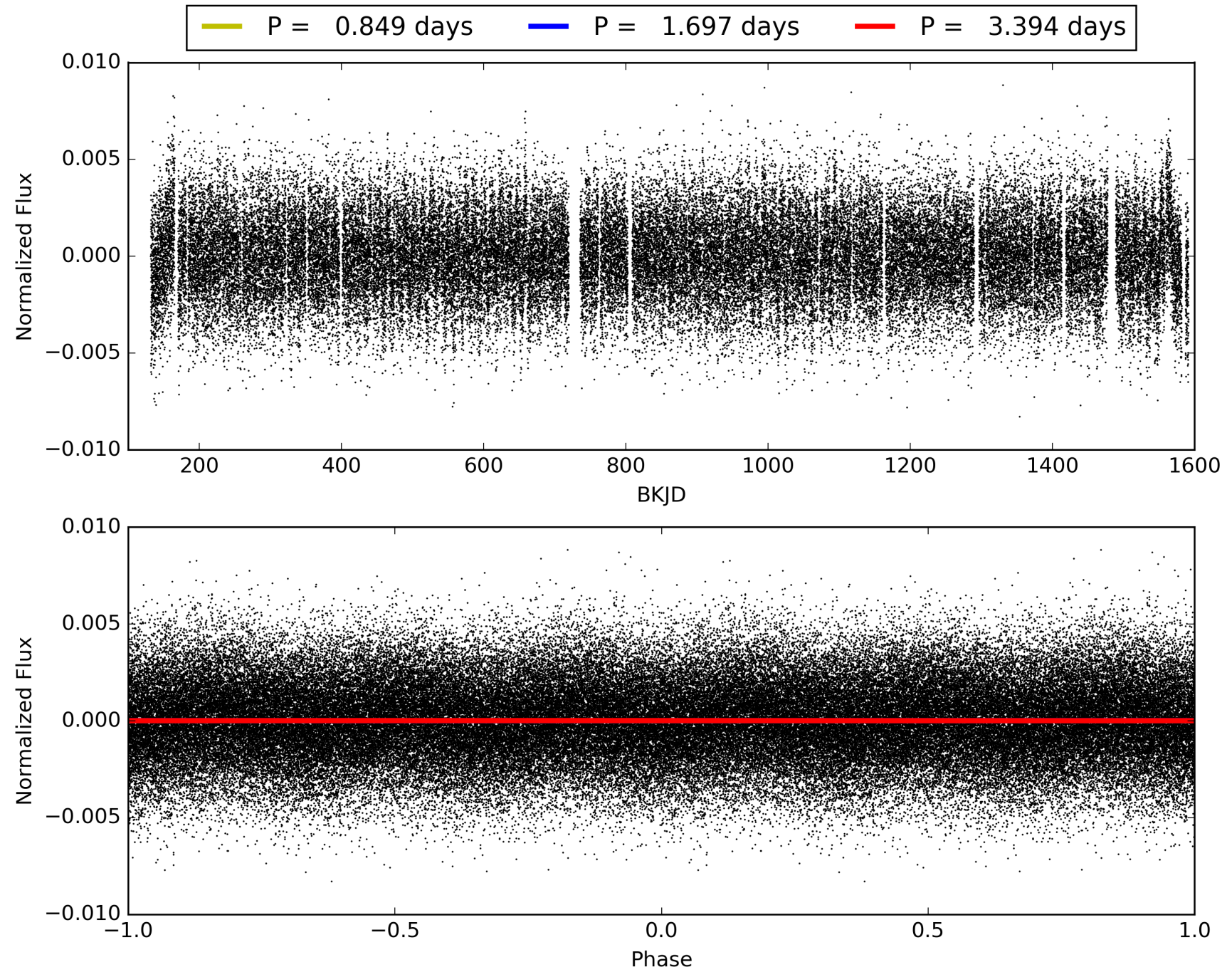
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:29:36 Z

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

TCE 011619861-01, PDC Light Curves

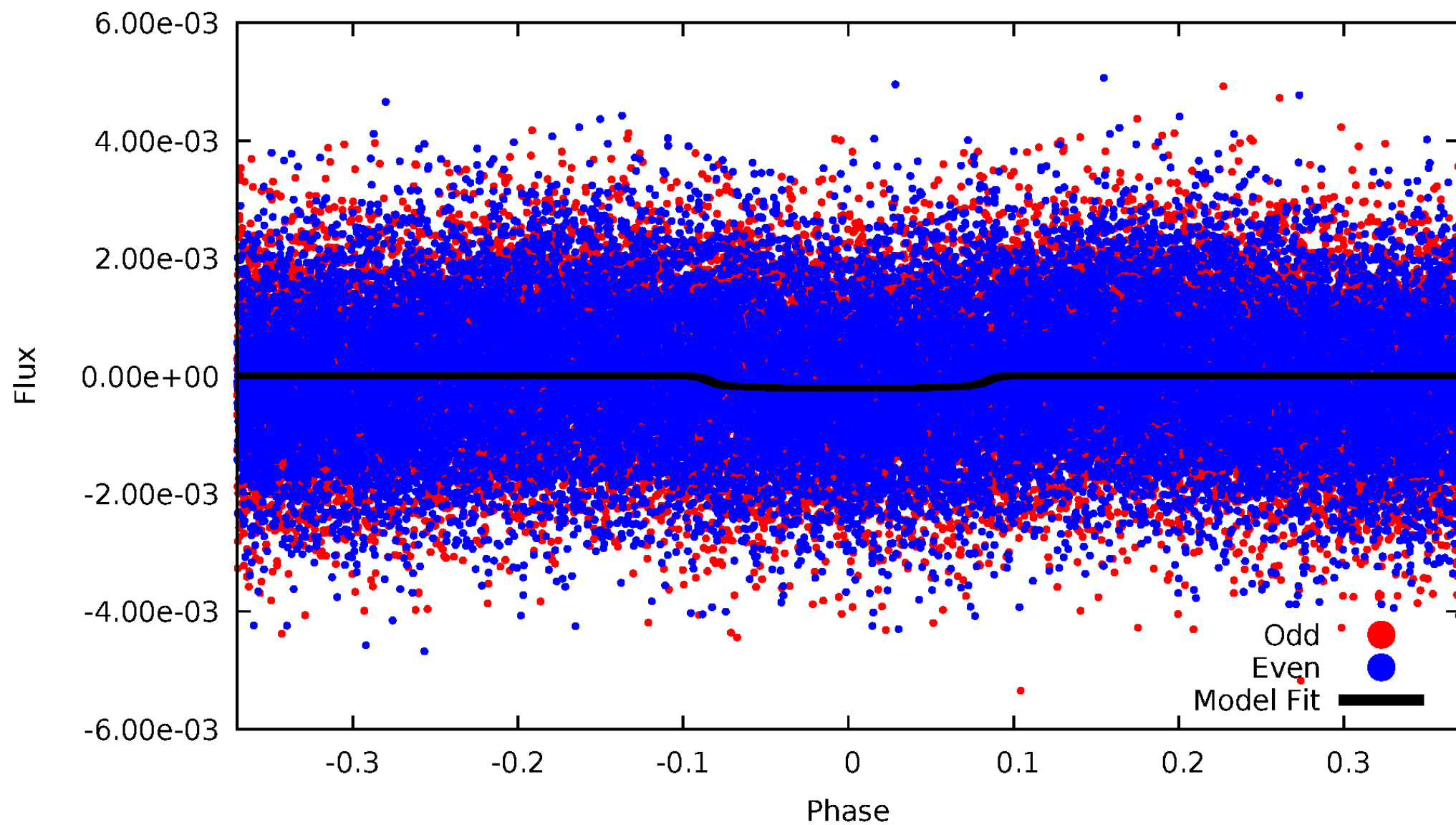


TCE 011619861-01



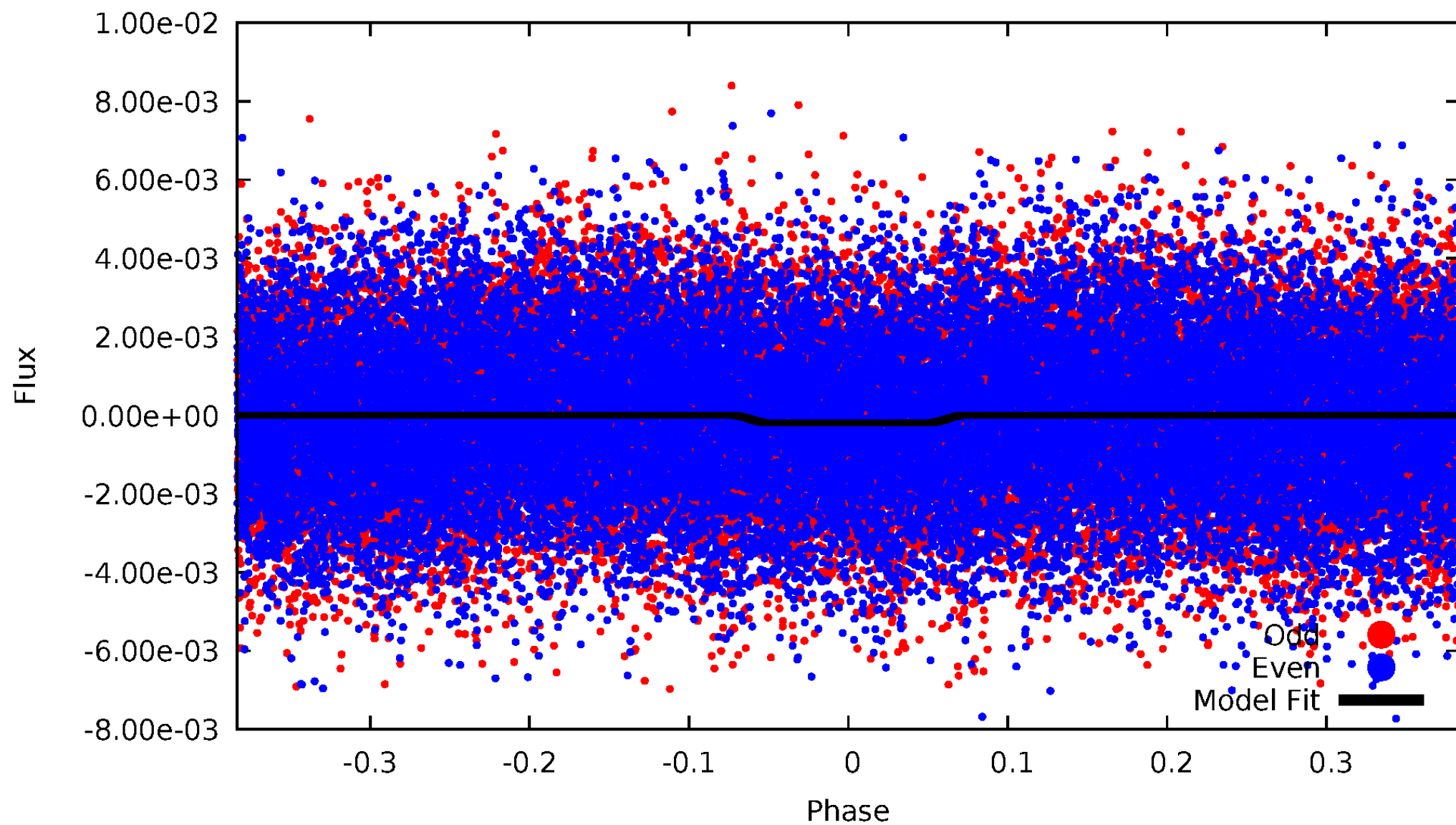
DV Odd/Even

TCE 011619861-01

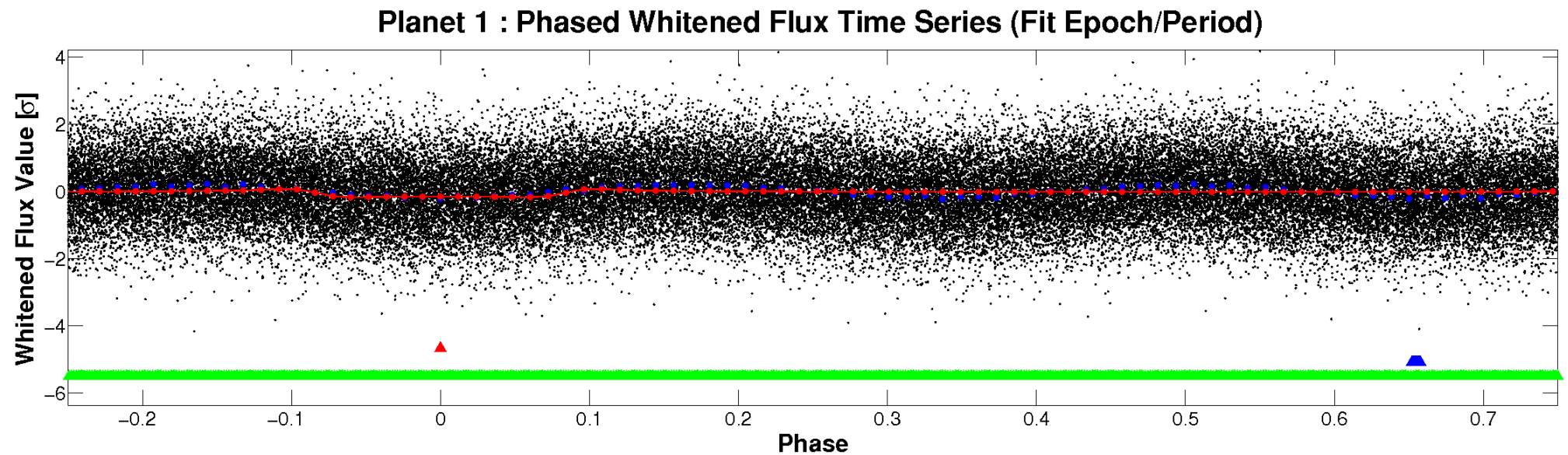
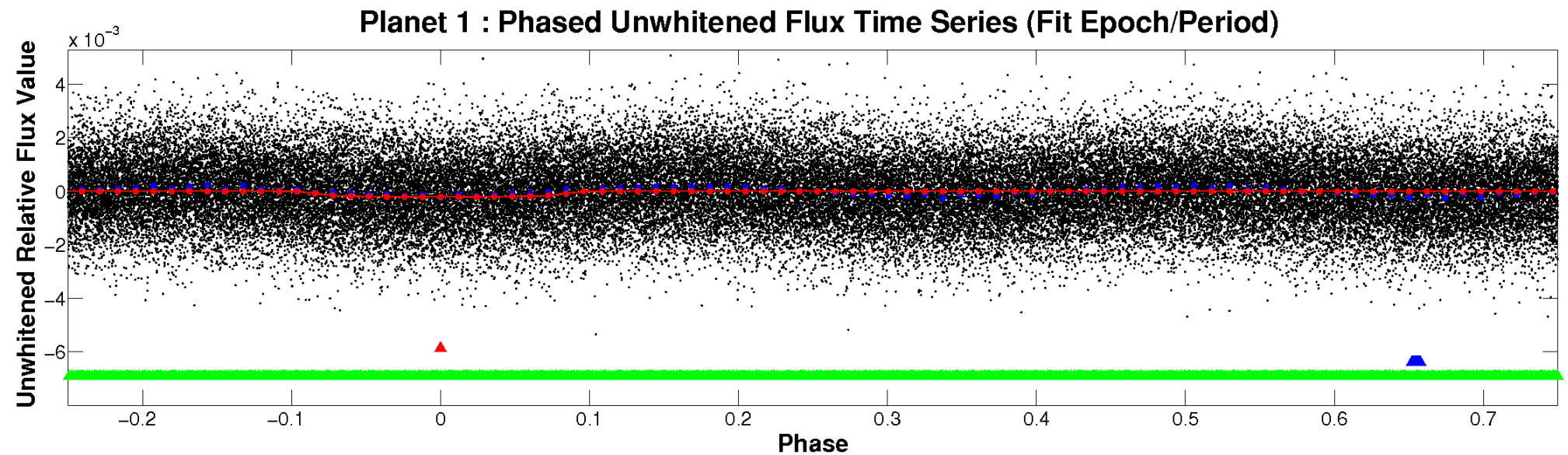


ALT Odd/Even

TCE 011619861-01

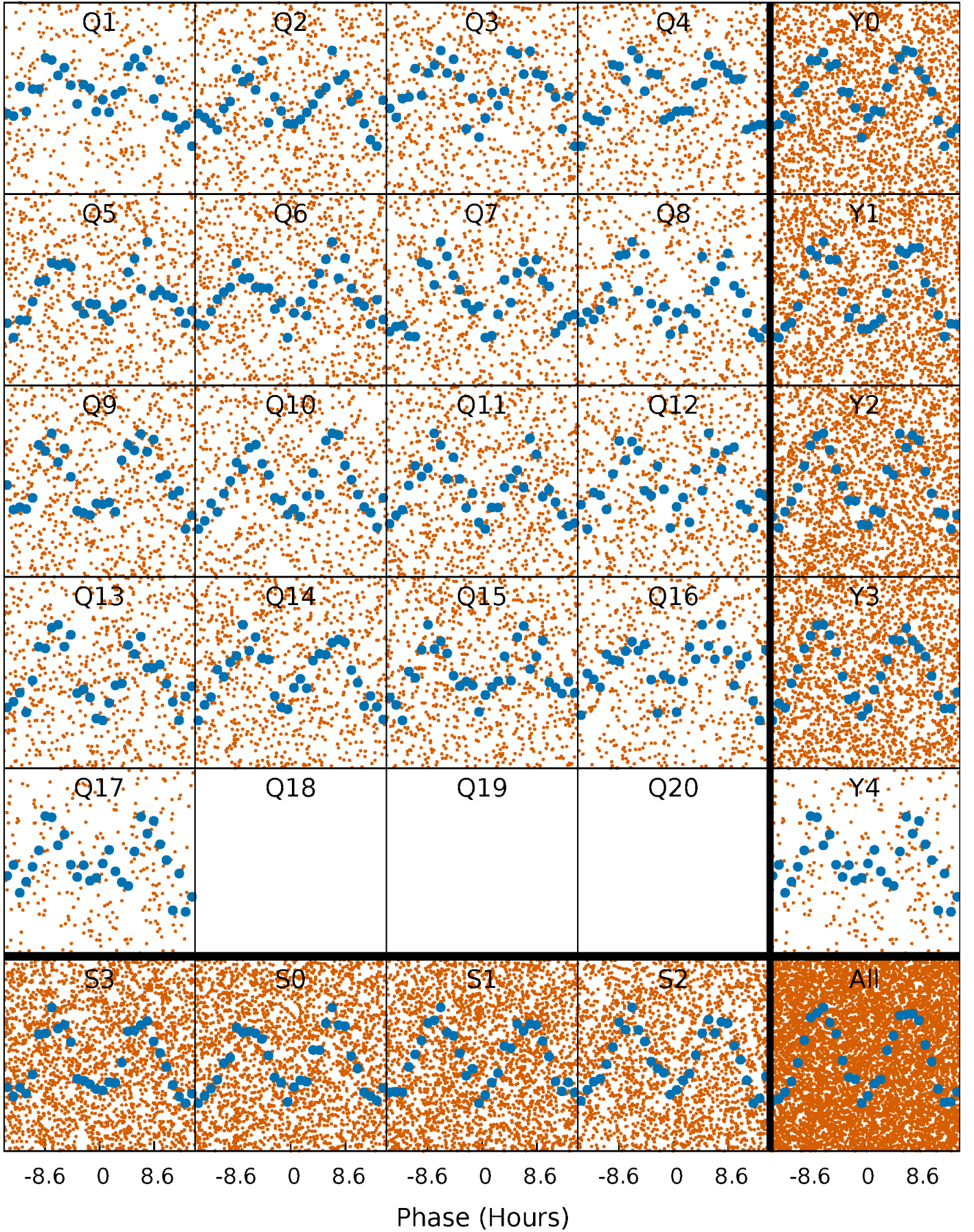


Non-Whitened Vs. Whitened Light Curve



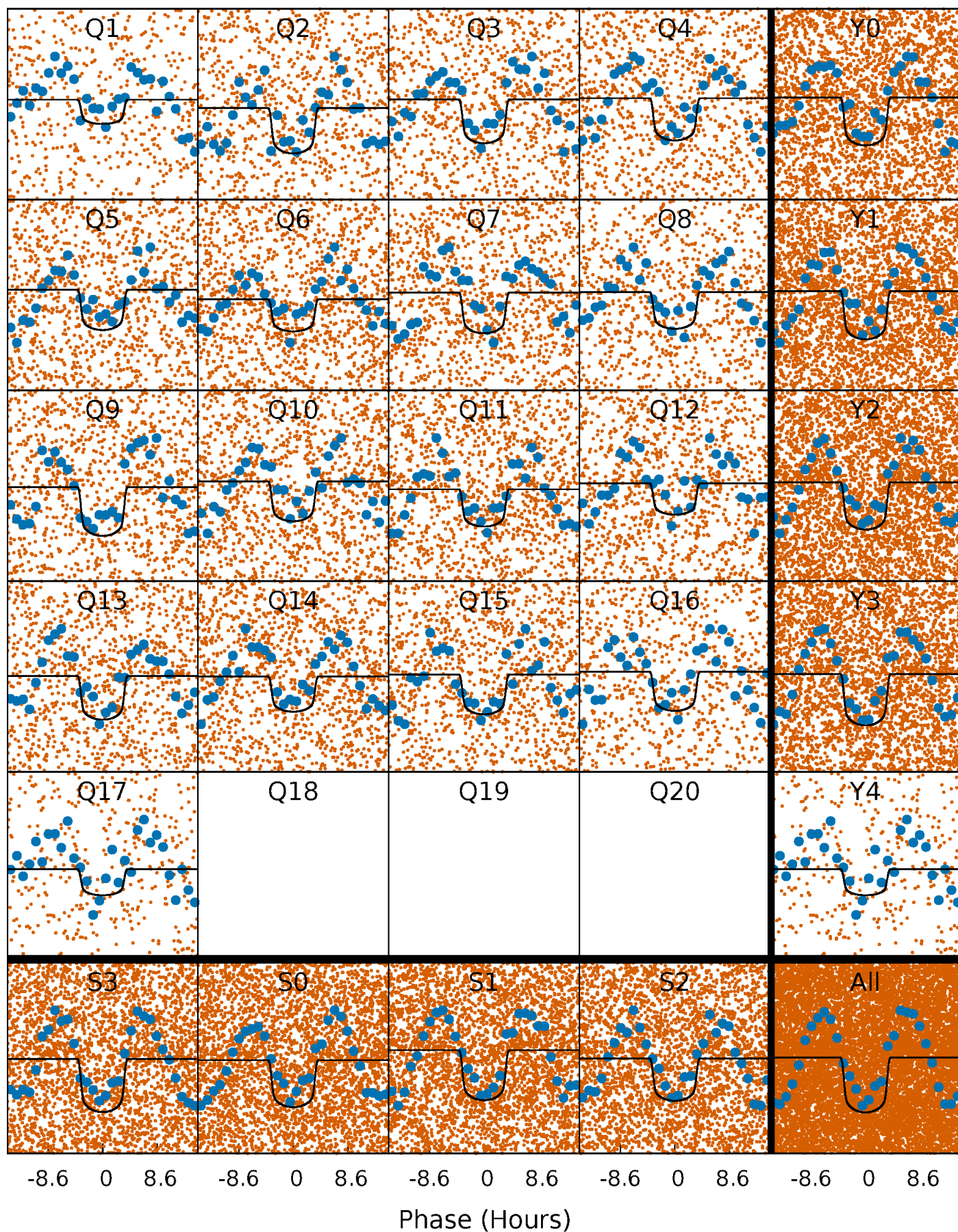
PDC Quarter-Phased Transit Curves

TCE 011619861-01 P= 1.697127 Days $T_0=132.378599$ (BKJD)



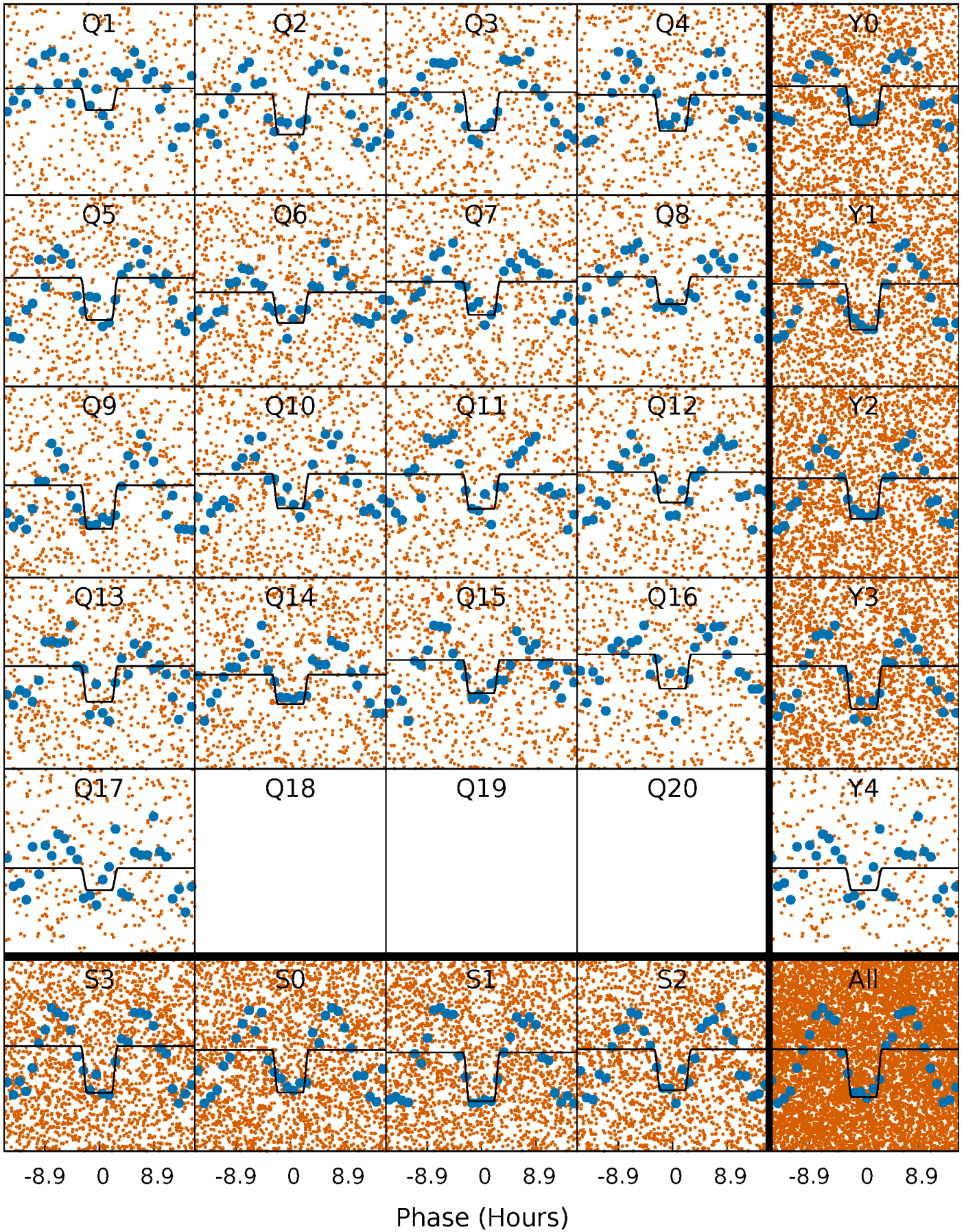
DV Quarter-Phased Transit Curves

TCE 011619861-01 P= 1.697127 Days $T_0=132.378599$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

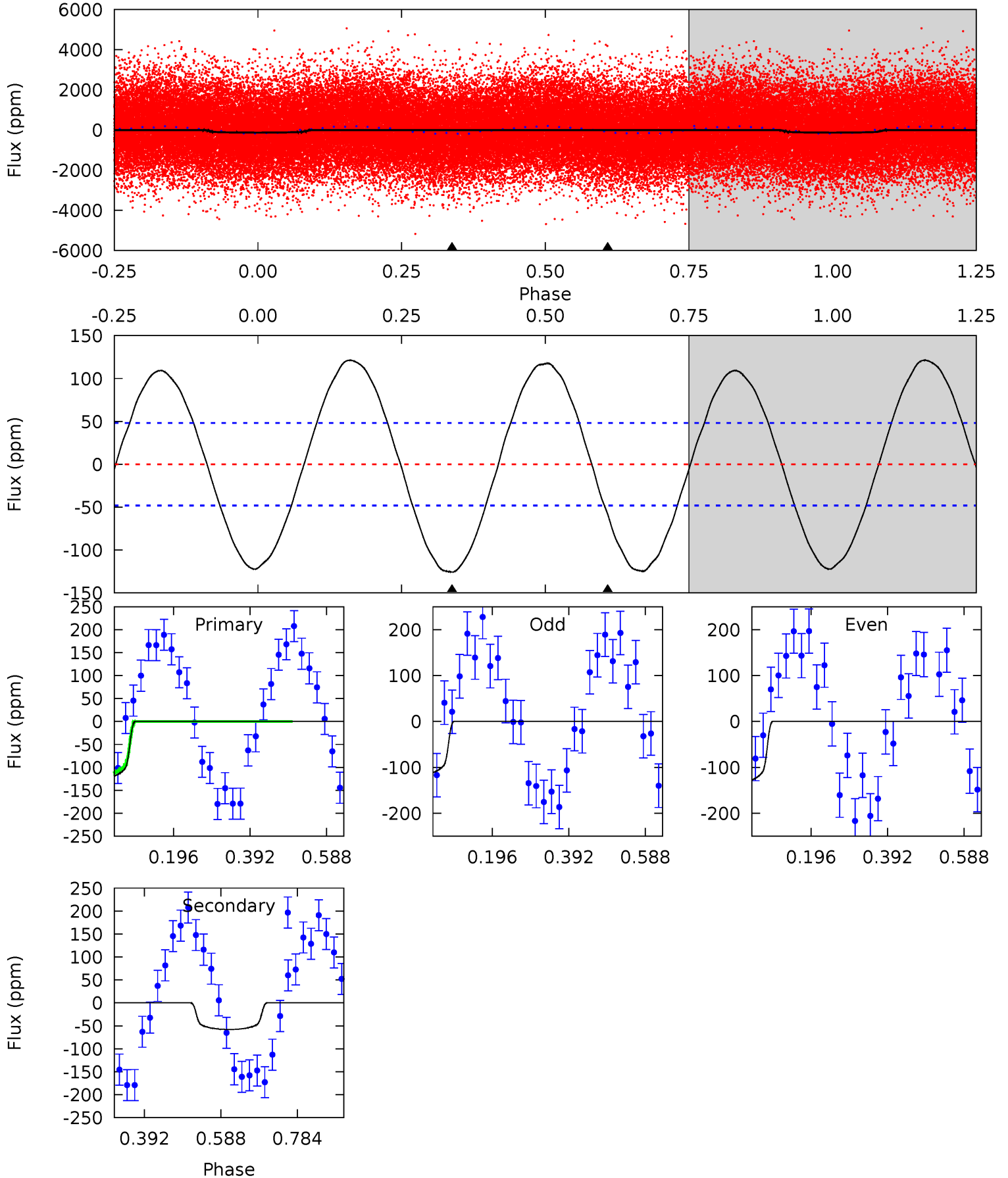
TCE 011619861-01 P= 1.697072 Days $T_0=132.394233$ (BKJD)



DV Model-Shift Uniqueness Test

011619861-01, P = 1.697127 Days, E = 130.681472 Days

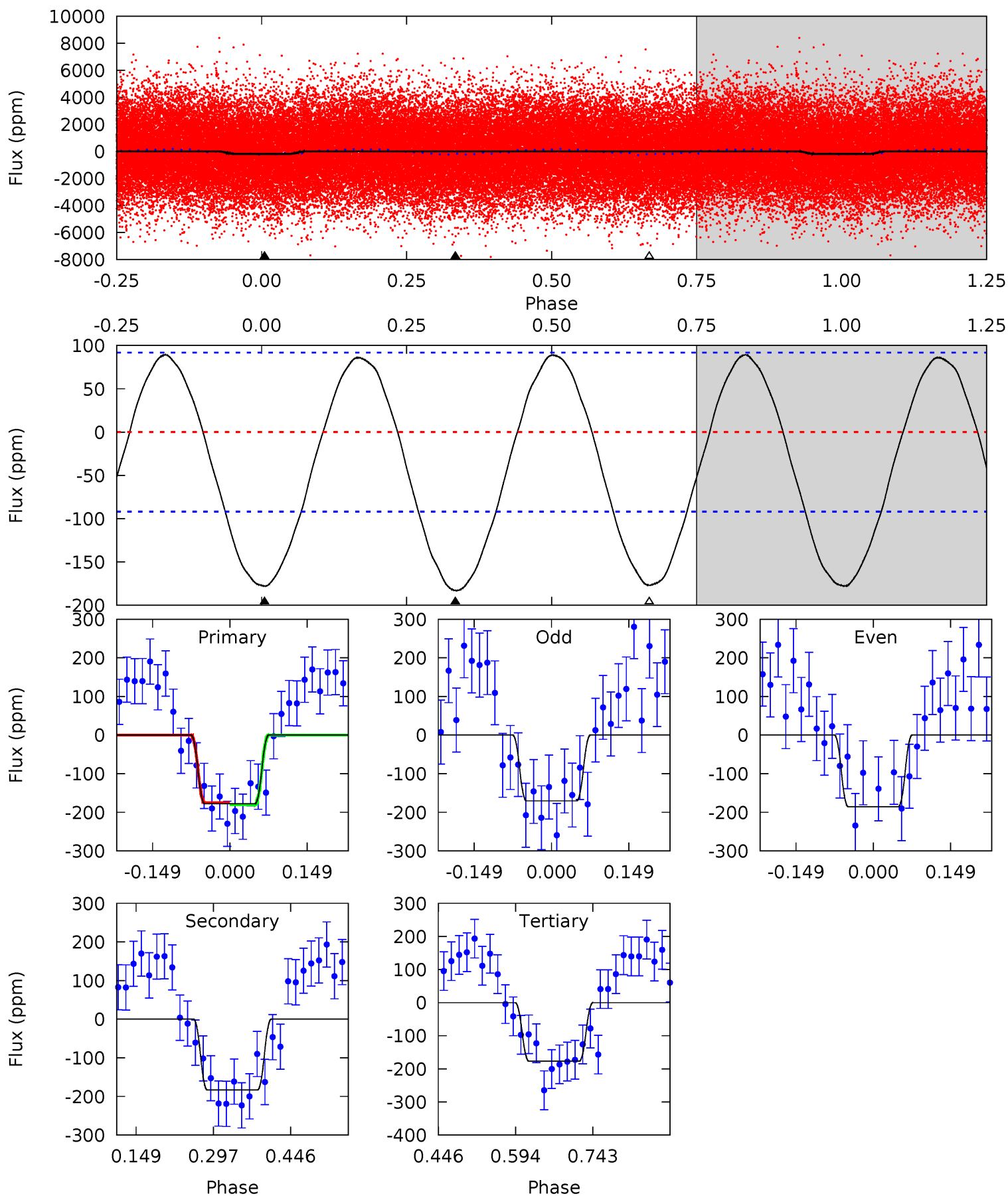
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	5.33	0	0	4.42	1.29	7.56	11.5	11.5	5.33	5.33	0.80	0.92	0.49	0.75



Alt Model-Shift Uniqueness Test

011619861-01, P = 1.697072 Days, E = 130.697161 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.68	8.93	8.63	0	4.48	1.44	4.79	0.04	8.68	0.30	8.93	0.36	0.90	0.33	0.11



Stellar Parameters For KIC 011619861

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7549^{+209}_{-340}	$3.920^{+0.287}_{-0.123}$	$-0.140^{+0.200}_{-0.350}$	$2.404^{+0.478}_{-0.888}$	$1.752^{+0.195}_{-0.363}$	$0.178^{+0.362}_{-0.068}$
	+3%/-5%	+7%/-3%	+143%/-250%	+20%/-37%	+11%/-21%	+204%/-38%
Source	KIC0	KIC0	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 011619861-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-58 ± 11	$3.89^{+0.79}_{-0.79}$	3865^{+283}_{-365}	5078^{+430}_{-389}	$2.330^{+1.282}_{-0.755}$
Alt.	-183 ± 20	$3.53^{+0.63}_{-0.73}$	3852^{+270}_{-328}	7327^{+656}_{-589}	$9.069^{+5.237}_{-2.610}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

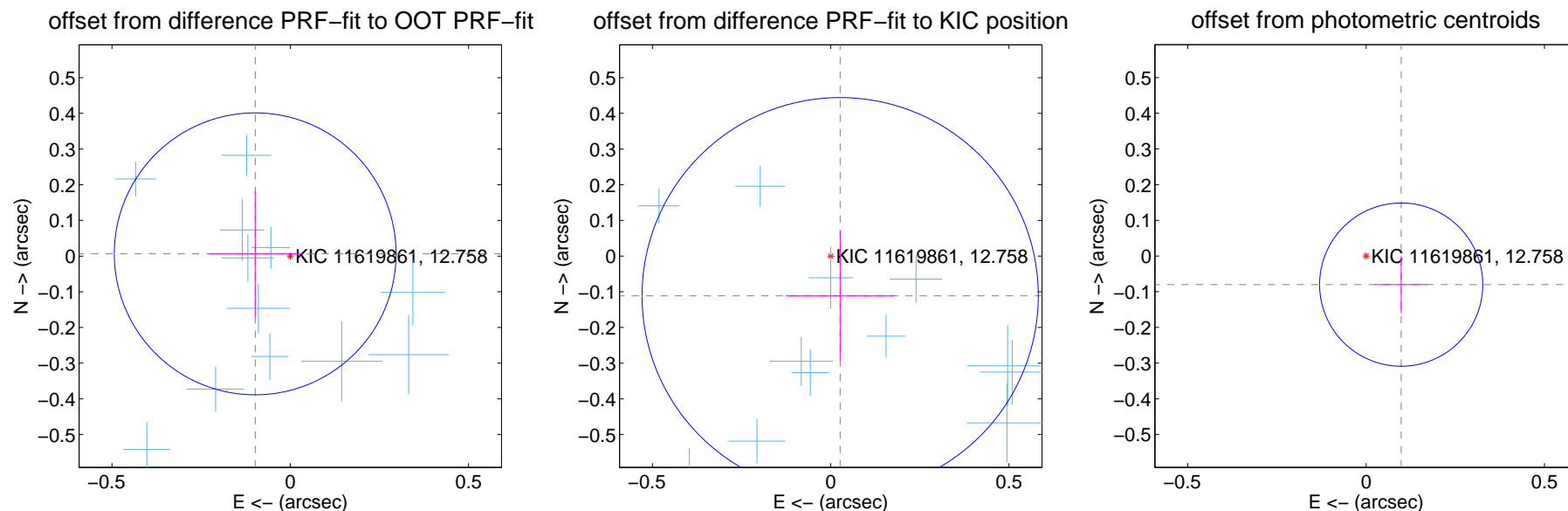
DV Centroid Data

Supplemental centroid analysis for 011619861-01. Kepler magnitude: 12.76. Transit SNR 16.31

There are 17 quarters with good PRF difference image offsets

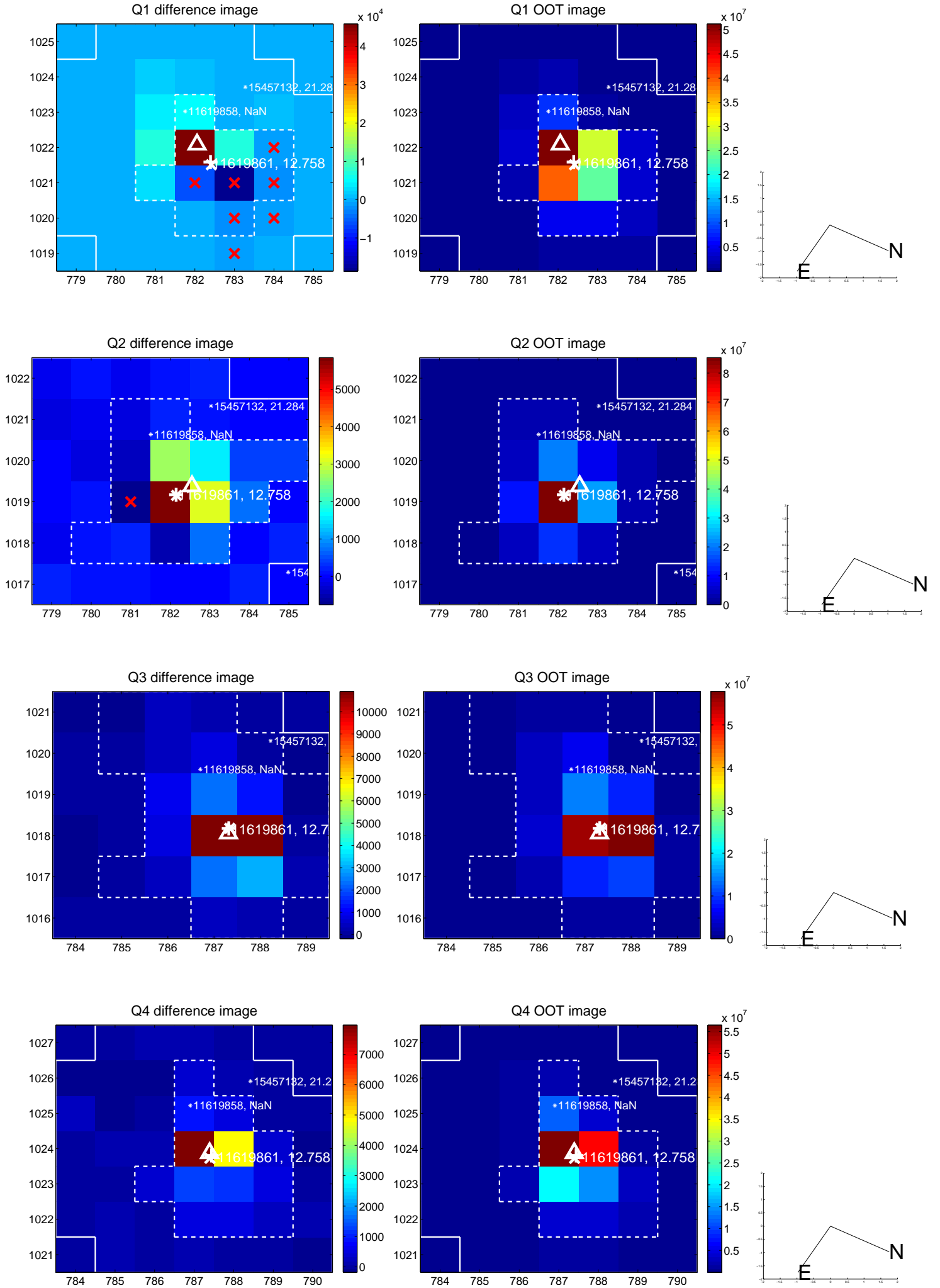
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.099 ± 0.132	0.75	0.098 ± 0.130	0.006 ± 0.177
PRF-fit source offset from KIC position	0.114 ± 0.185	0.62	-0.027 ± 0.152	-0.111 ± 0.182
photometric centroid source offset	0.13 ± 0.08	1.66	-0.10 ± 0.07	-0.08 ± 0.08

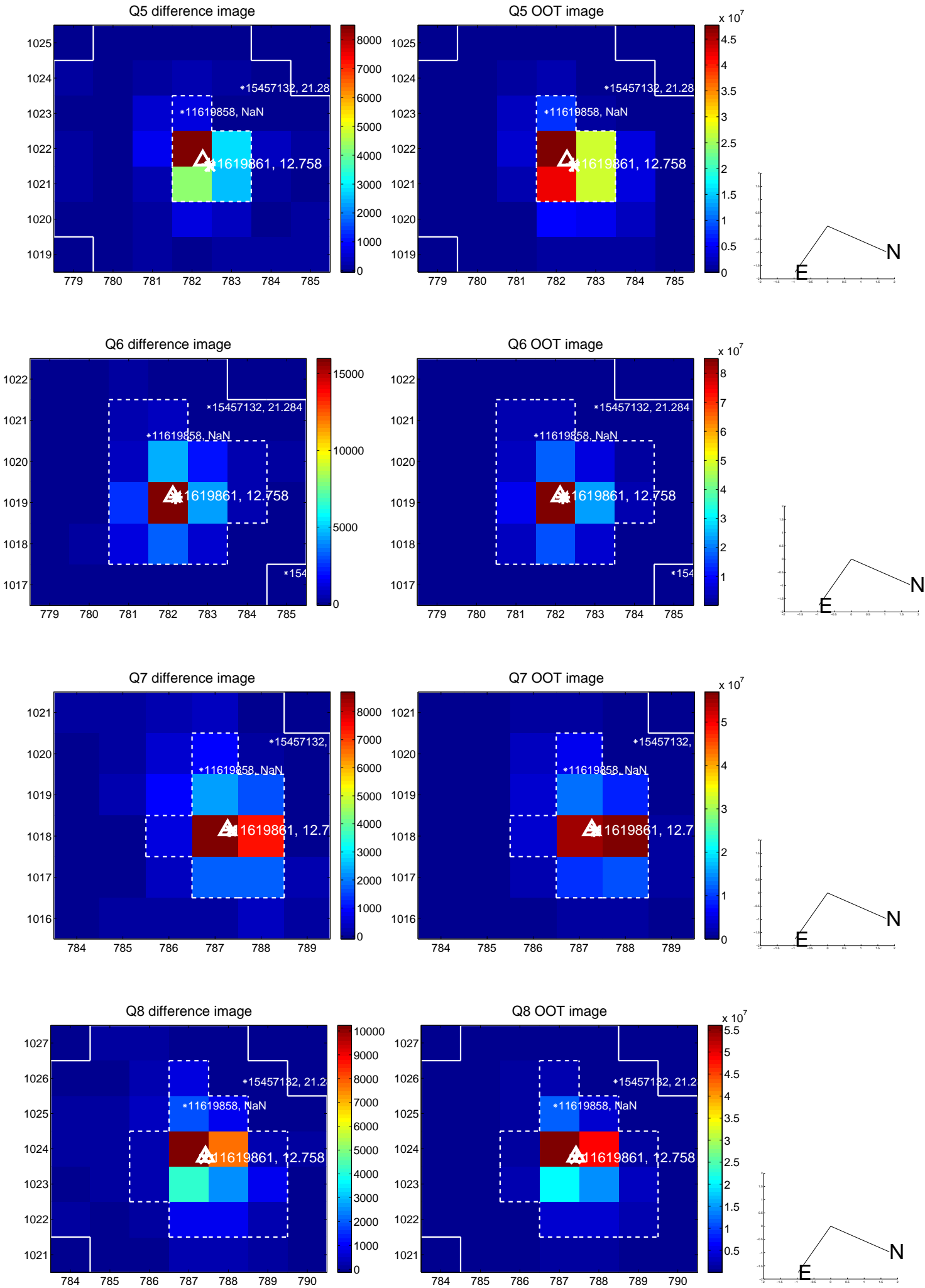


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

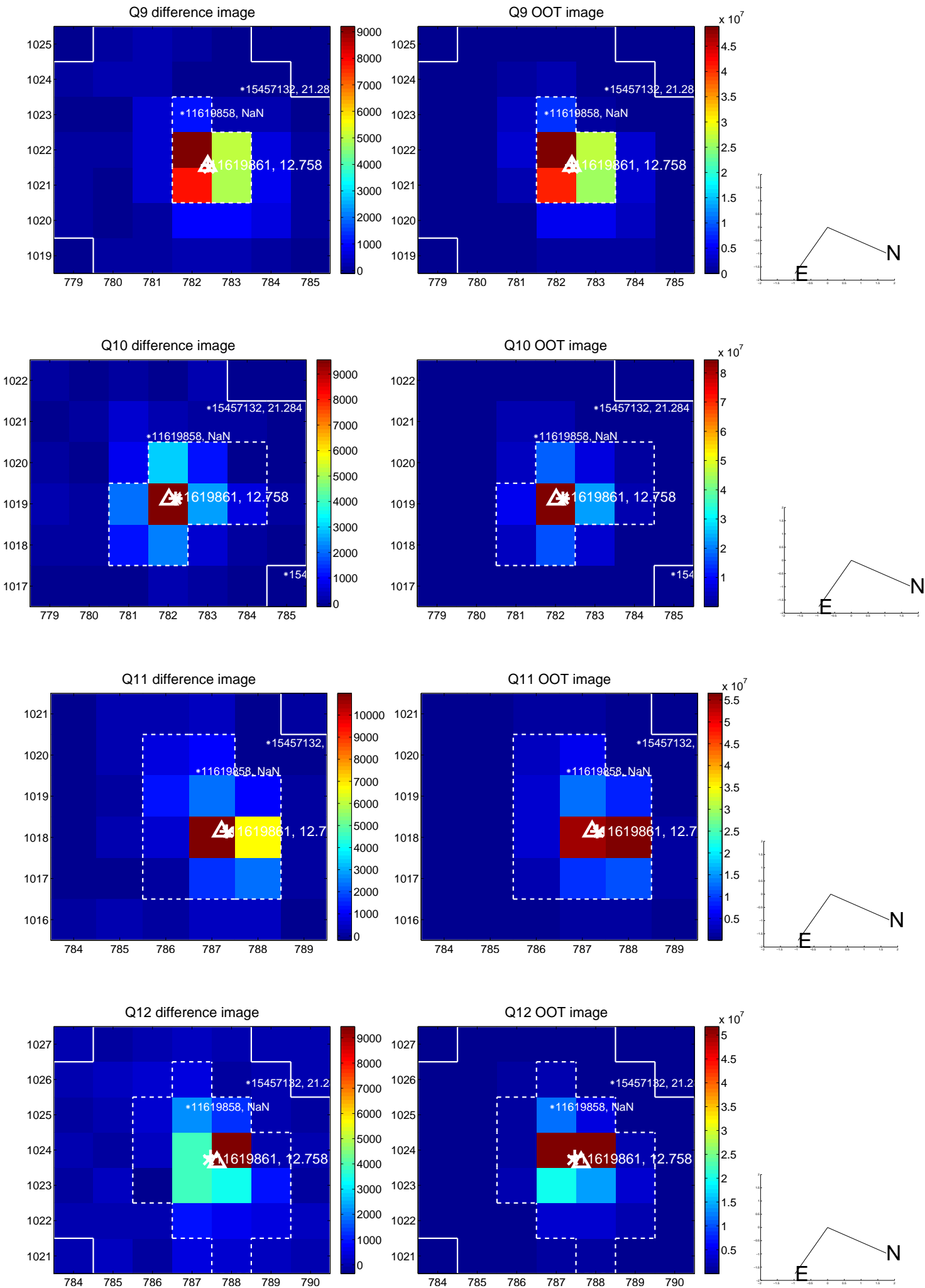
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



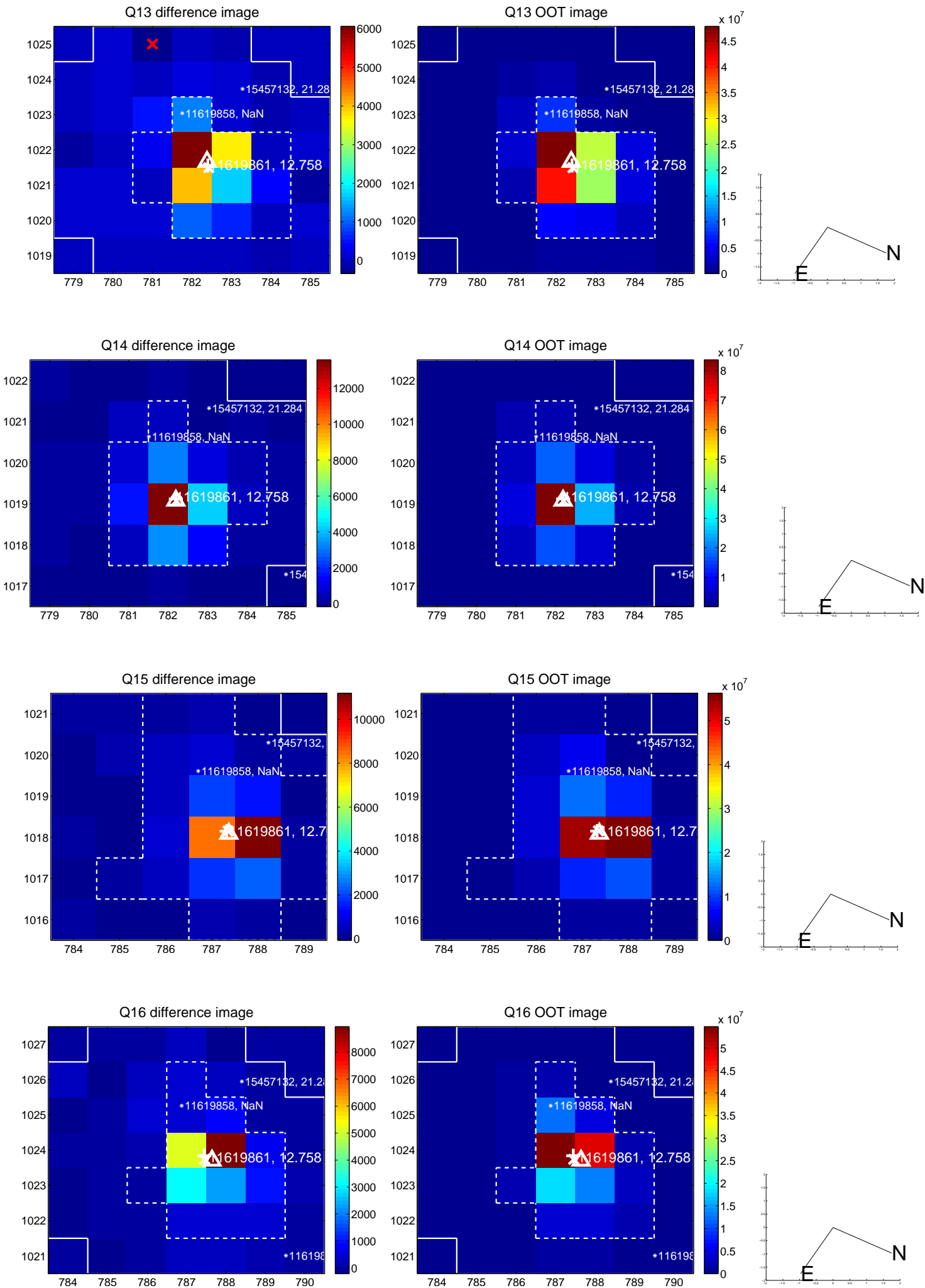
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



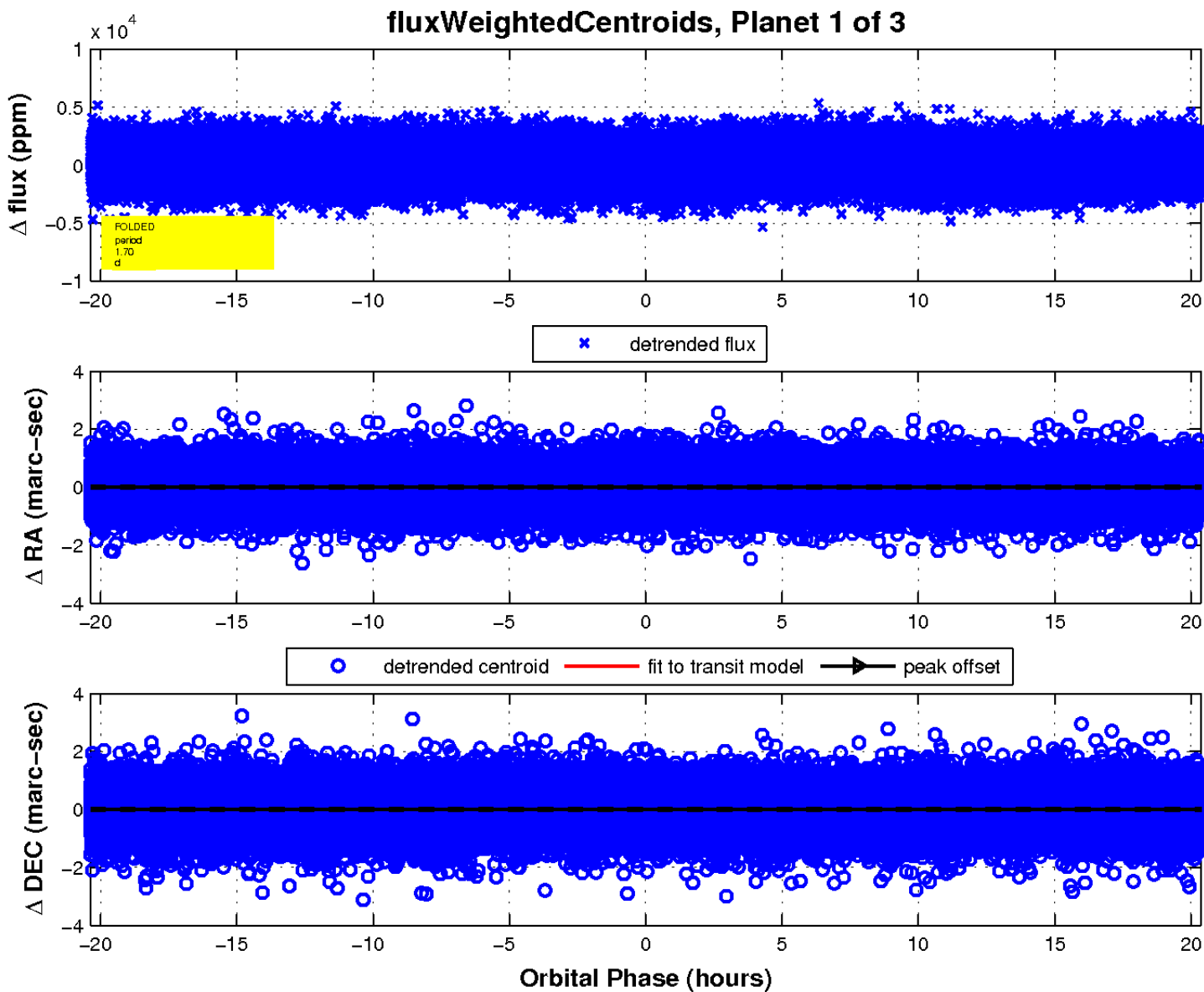
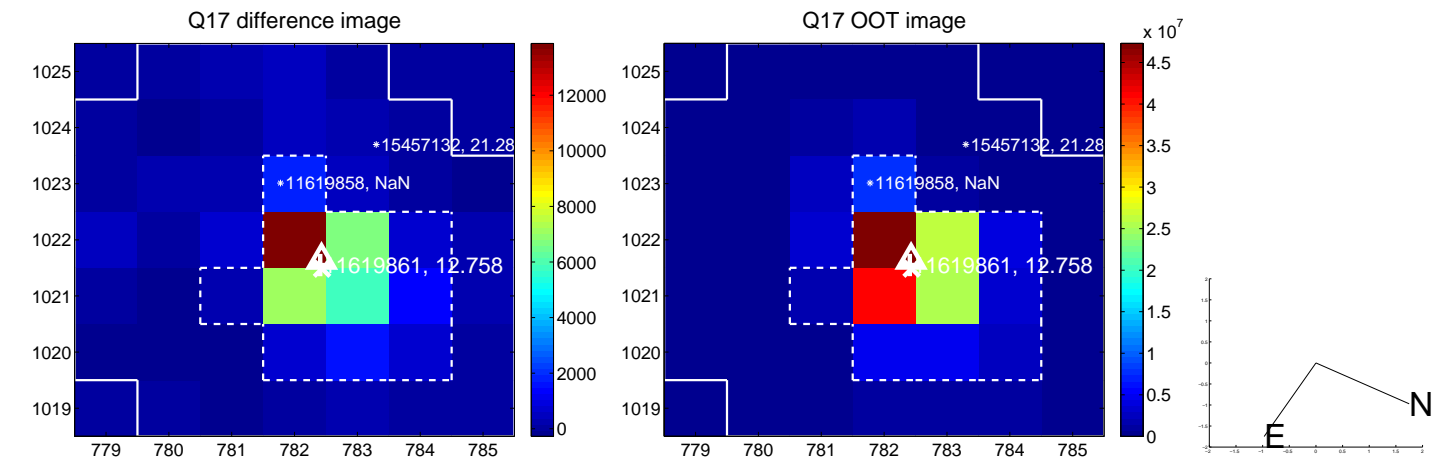
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

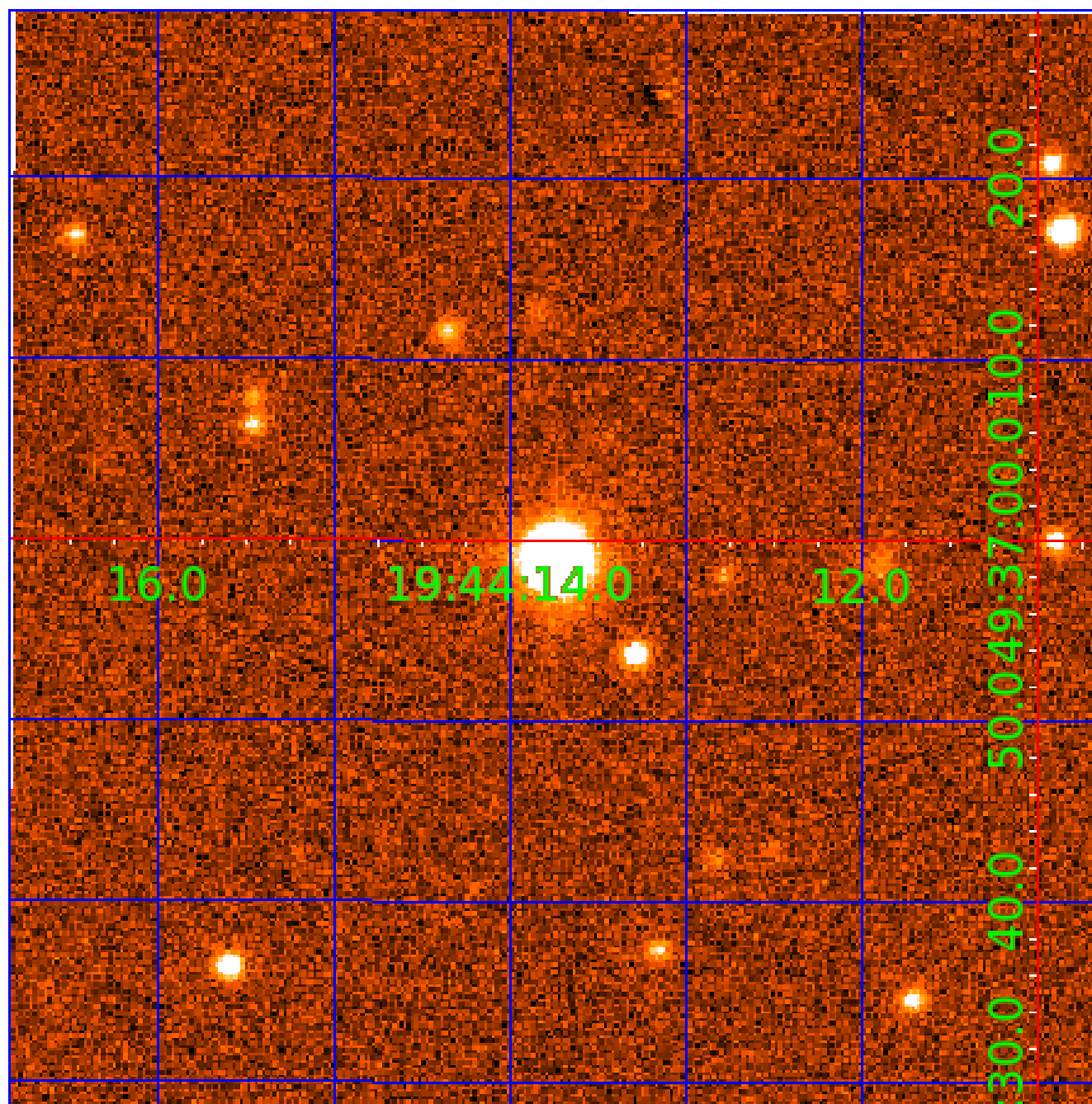


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 011619861

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})
011619861-01	OBS	No	1.697127	132.378599	208.4	7.532	15.2	16.3	2.40	7549	4.04	14909.25
011619861-02	OBS	No	1.697116	131.797823	171.5	5.221	11.7	12.8	2.40	7549	3.67	14909.39
011619861-03	OBS	No	1.802075	133.057673	190.8	11.360	8.9	7.6	2.40	7549	3.36	13762.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011619861-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011619861-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
011619861-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

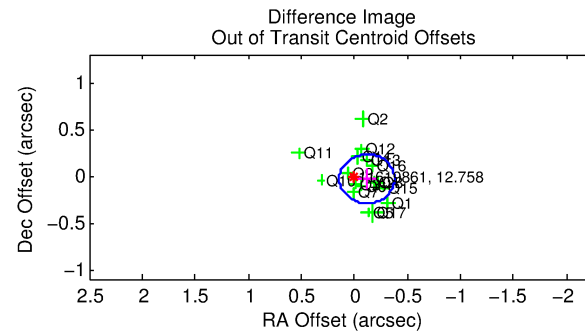
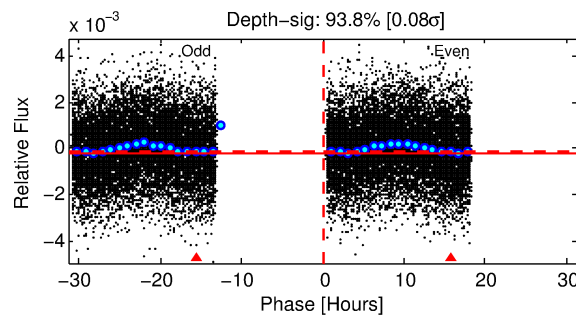
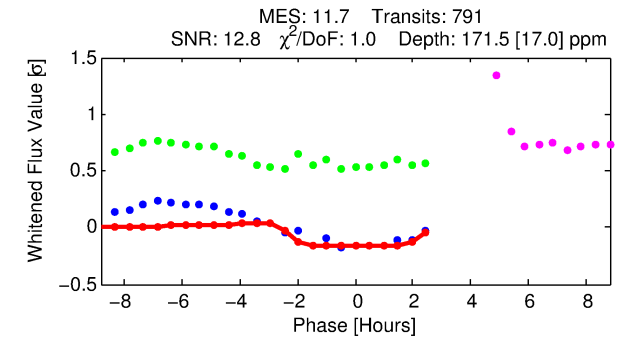
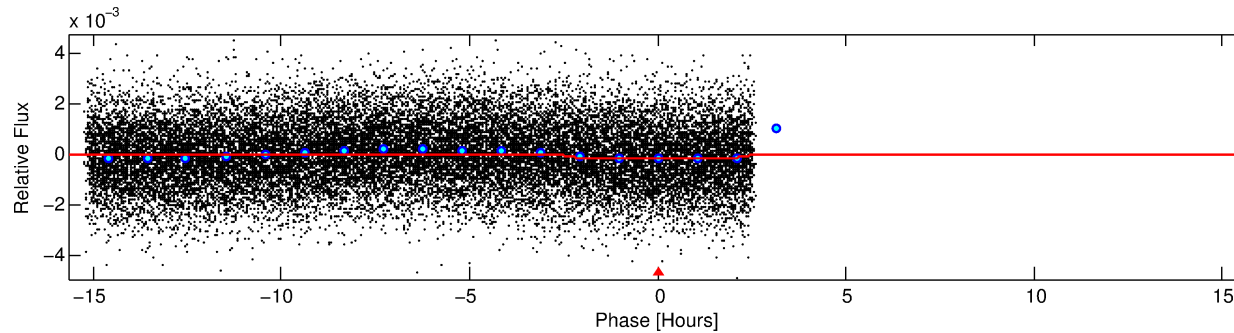
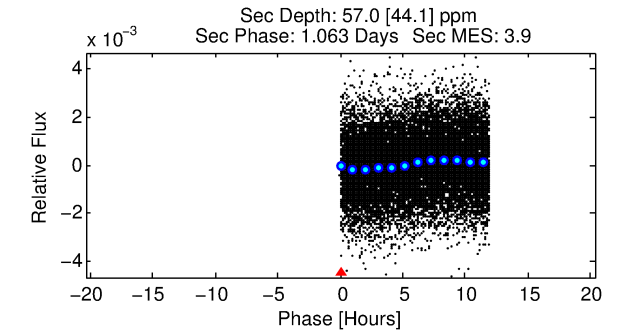
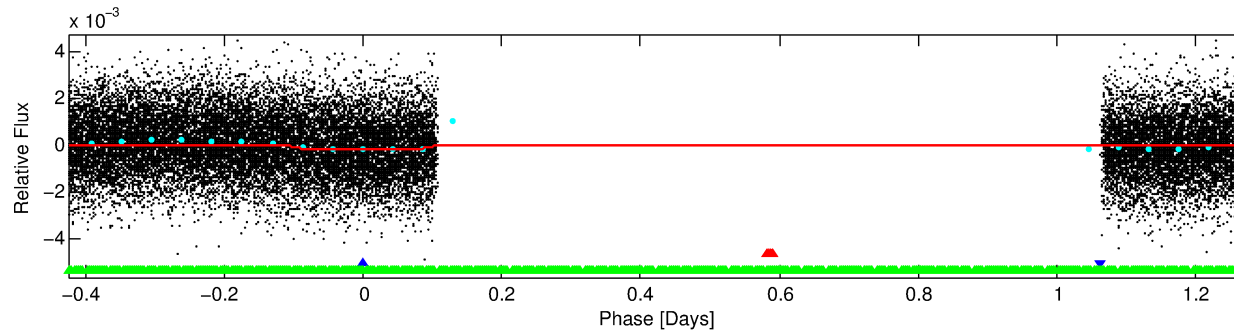
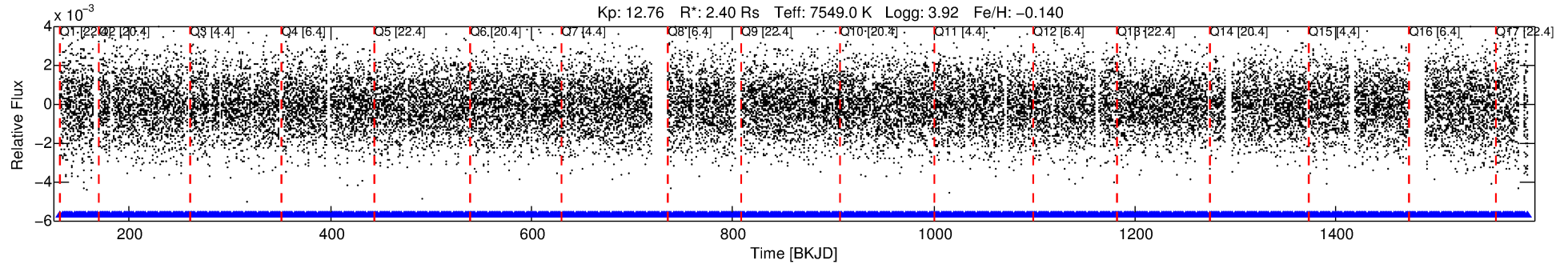
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011619861-02

No Significant Match Found

DV One-Page Summary

KIC: 11619861 Candidate: 2 of 3 Period: 1.697 d



DV Fit Results:

Period = 1.69712 [0.00002] d
Epoch = 131.7978 [0.0059] BKJD
Rp/R* = 0.0140 [0.0041]
a/R* = 1.49 [1.45]
b = 0.90 [0.38]
Seff = 14909.38 [7989.99]
Teq = 2818 [378] K
Rp = 3.67 [1.73] Re
a = 0.0336 [0.0111] AU
Ag = 2.63 [2.88] [0.57σ]
Teffp = 5550 [1370] K [1.92σ]

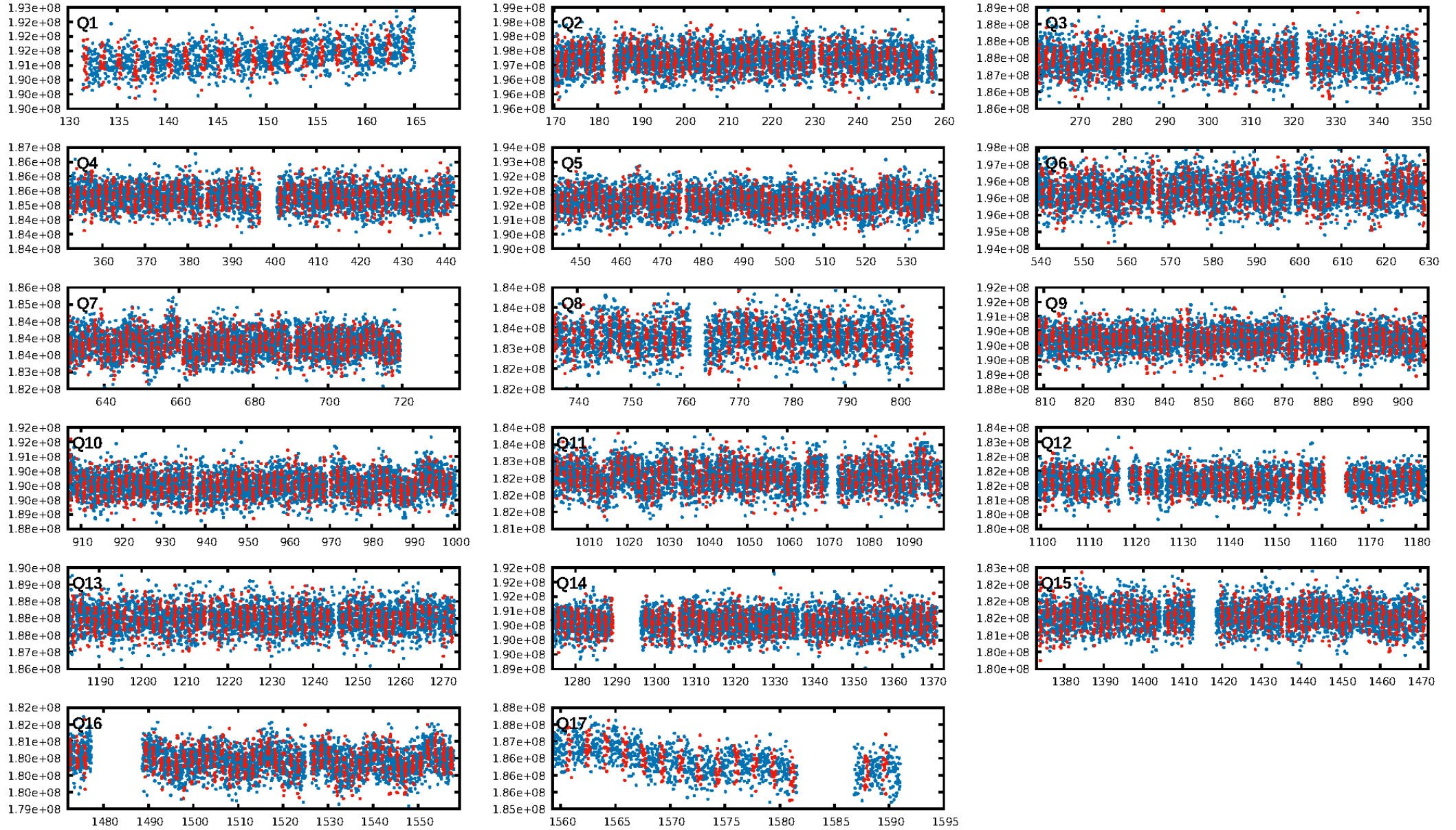
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [756/756]
GhostDiagnostic-chr: 1.117
Centroid-sig: 18.3%
Centroid-so: 0.215 arcsec [1.97σ]
OotOffset-rm: 0.122 arcsec [1.41σ]
KicOffset-rm: 0.244 arcsec [2.46σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

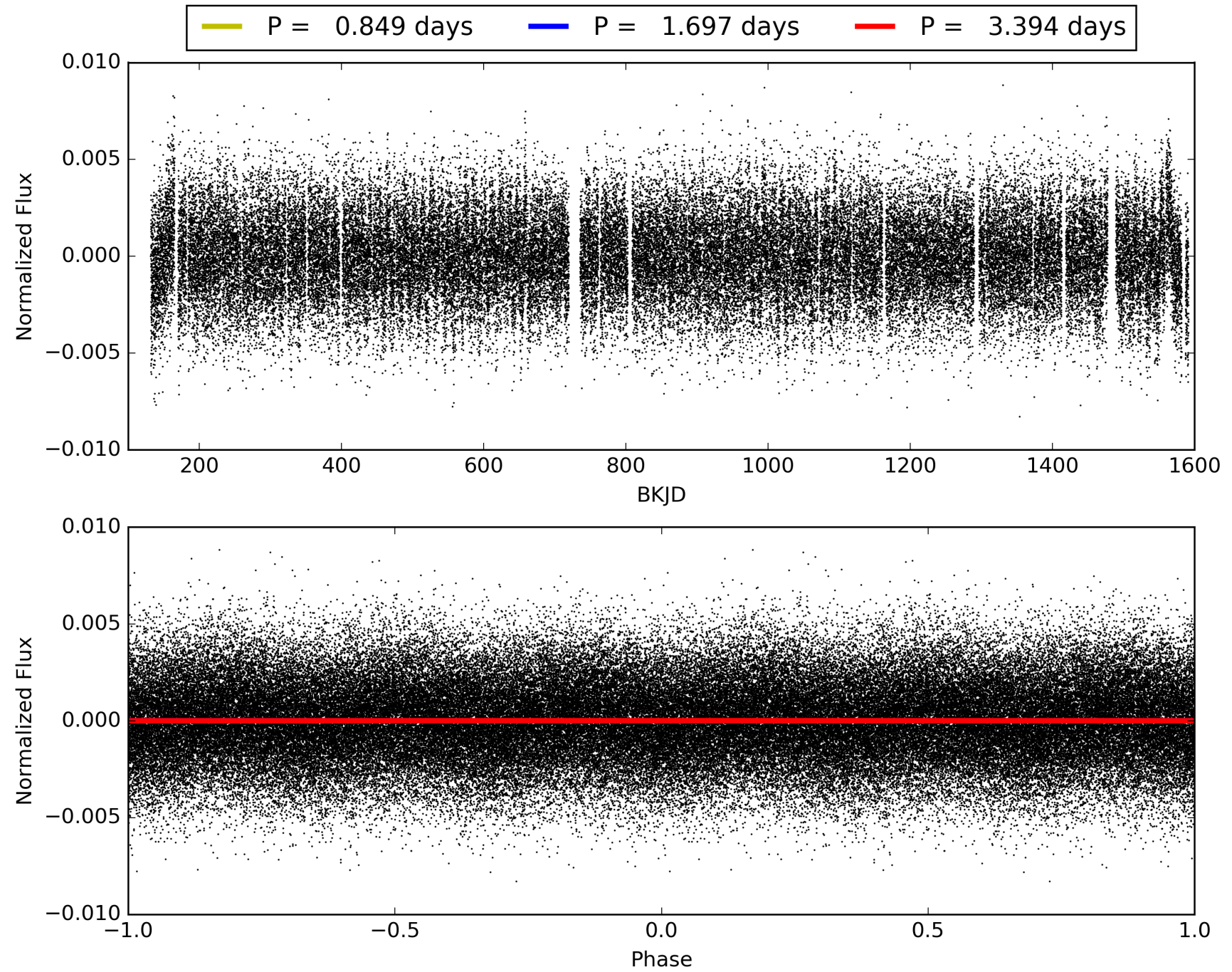
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 011619861-02, PDC Light Curves

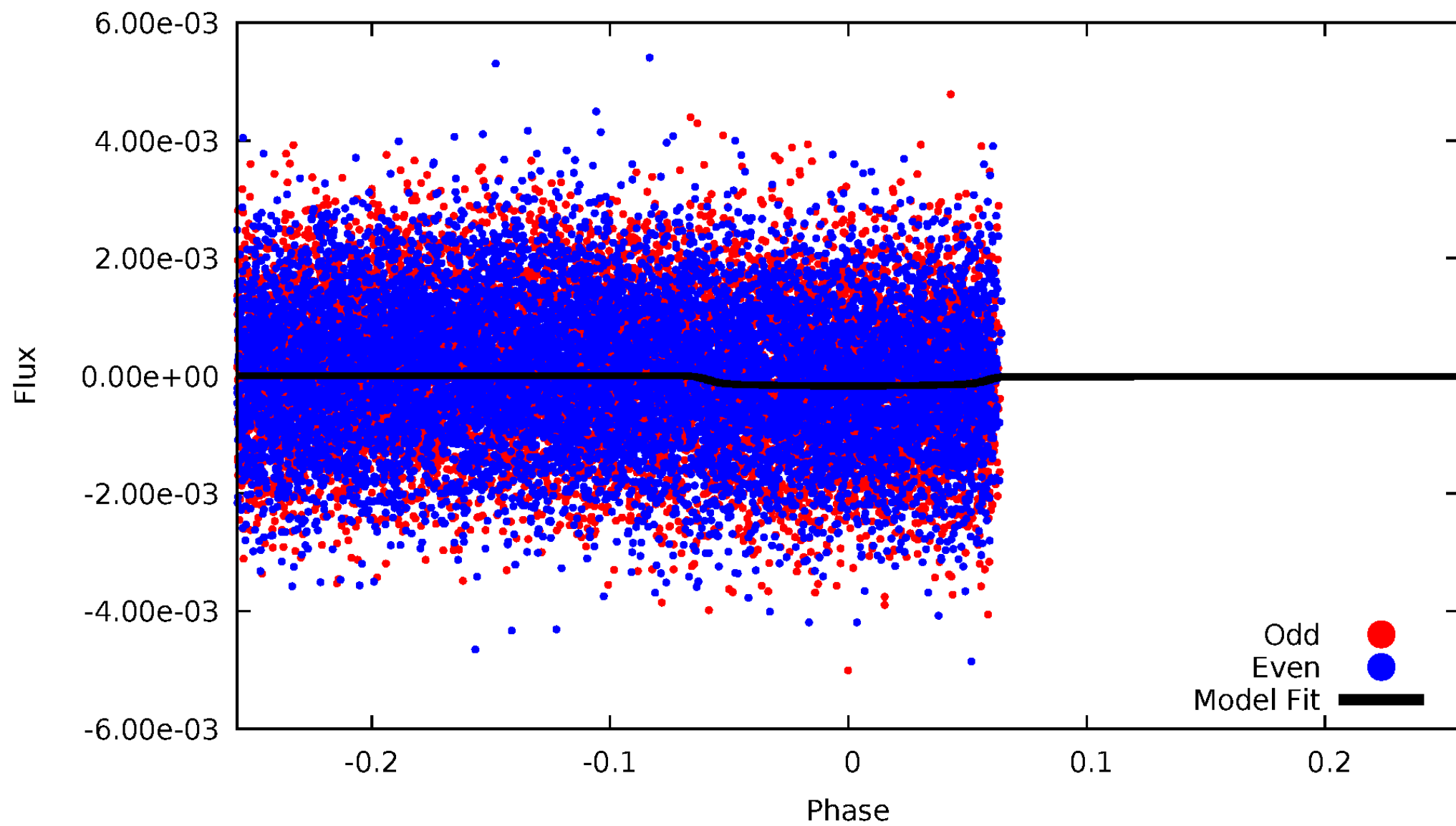


TCE 011619861-02



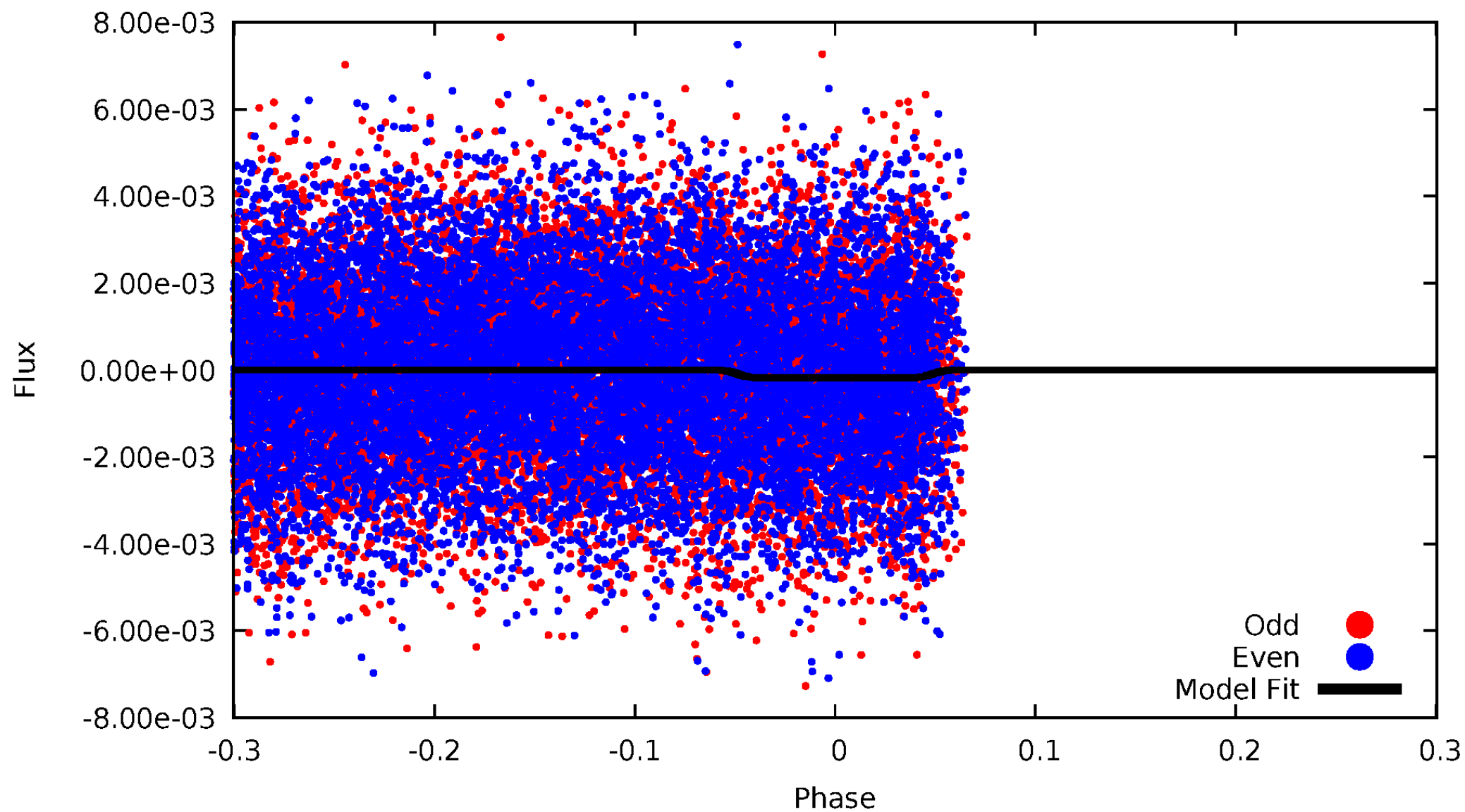
DV Odd/Even

TCE 011619861-02



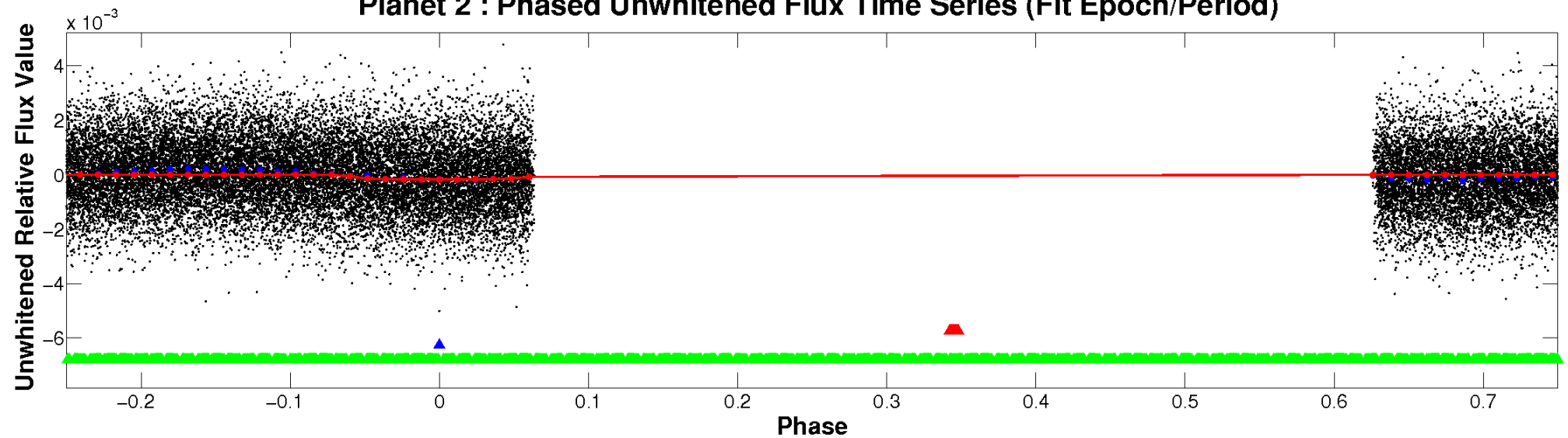
ALT Odd/Even

TCE 011619861-02

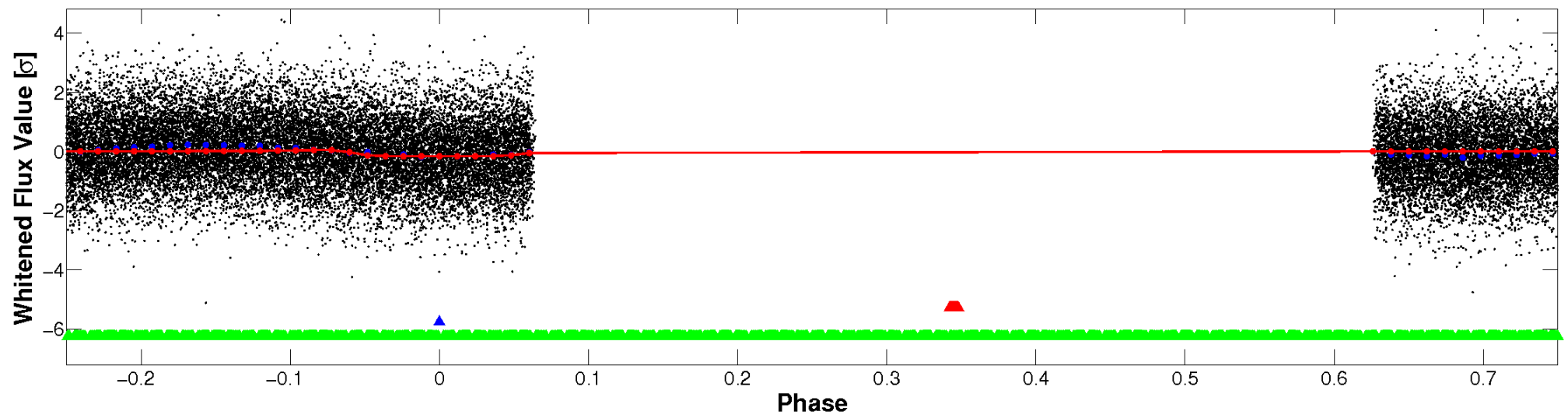


Non-Whitened Vs. Whitened Light Curve

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

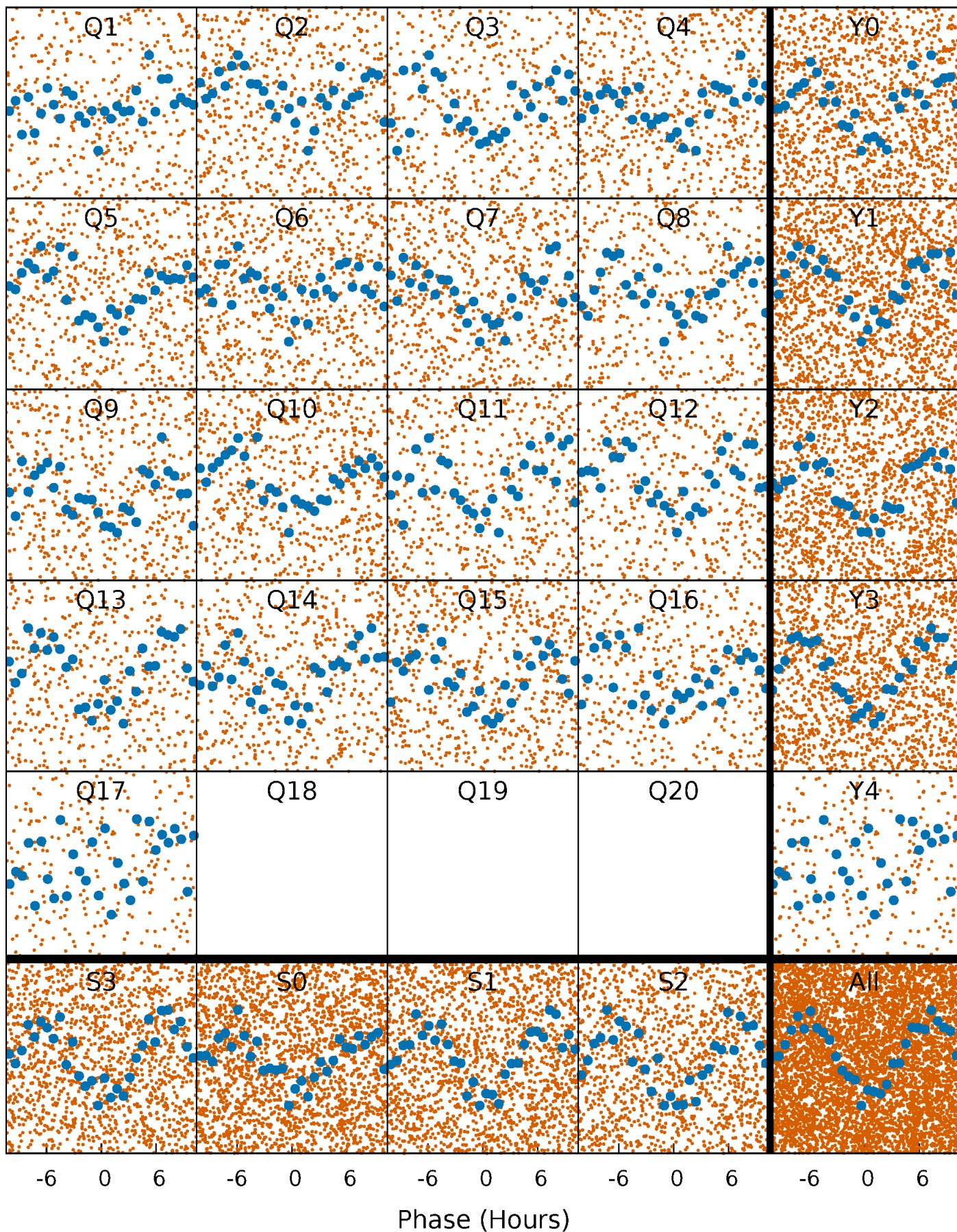


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



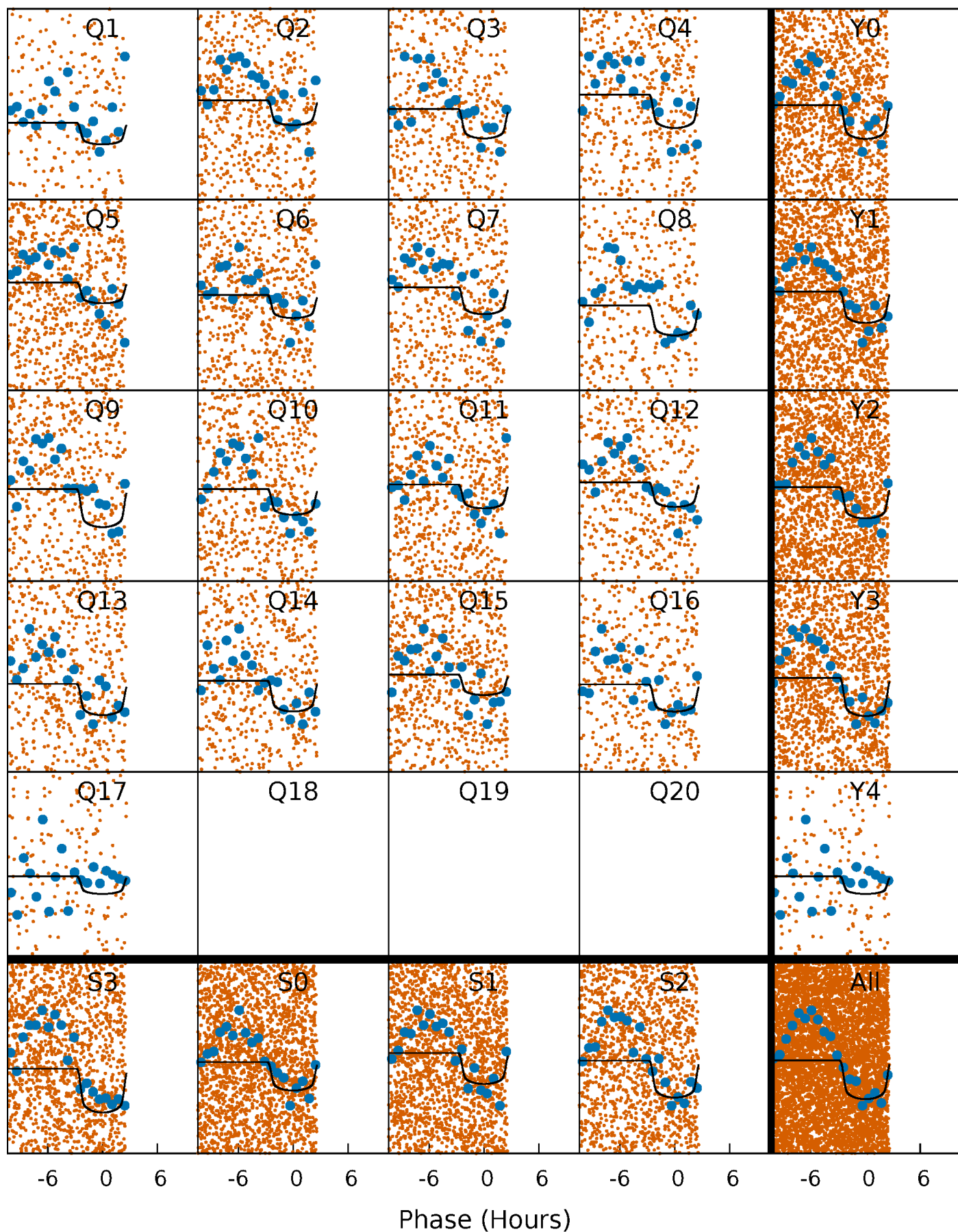
PDC Quarter-Phased Transit Curves

TCE 011619861-02 P= 1.697116 Days $T_0=131.797823$ (BKJD)



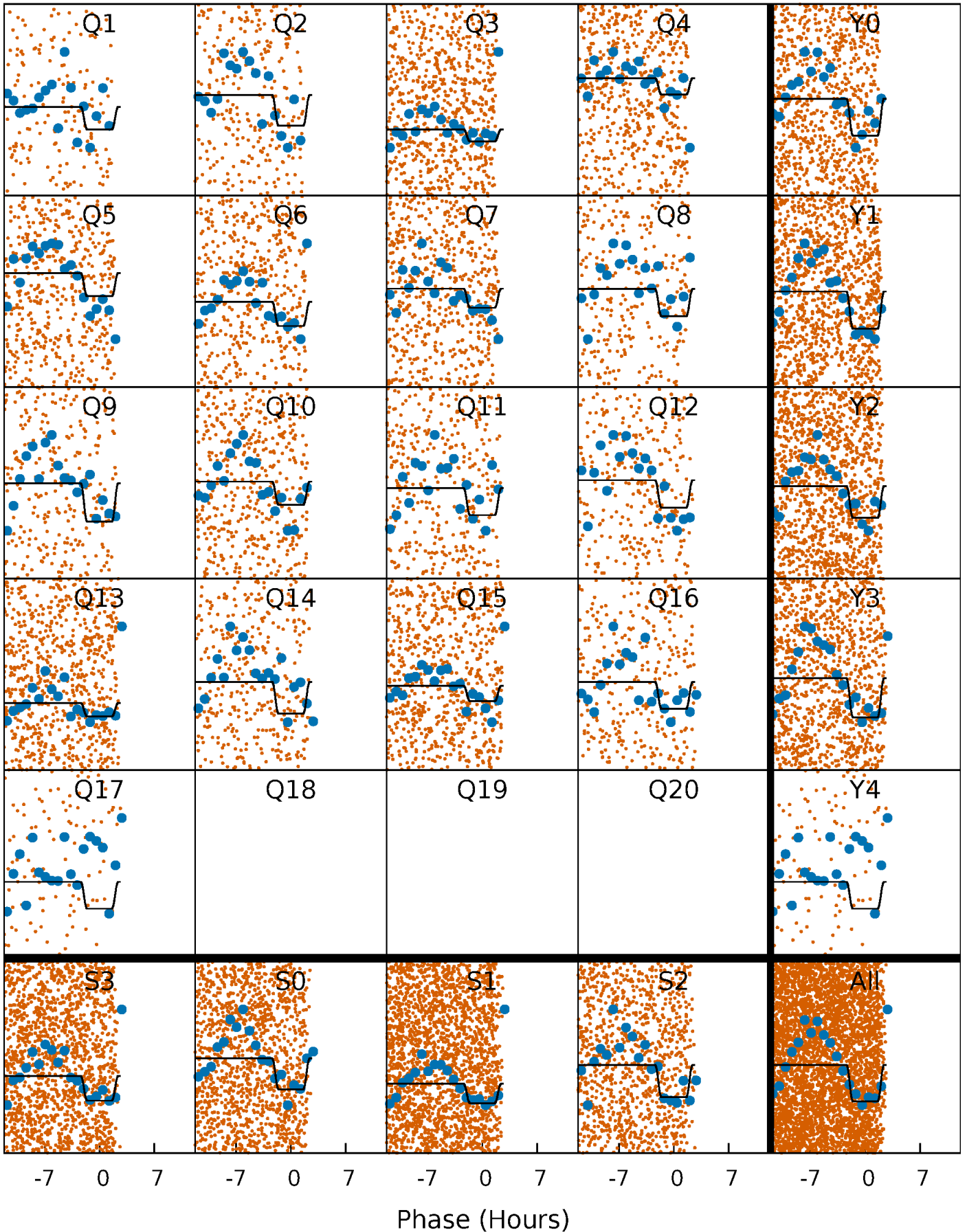
DV Quarter-Phased Transit Curves

TCE 011619861-02 P= 1.697116 Days $T_0=131.797823$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

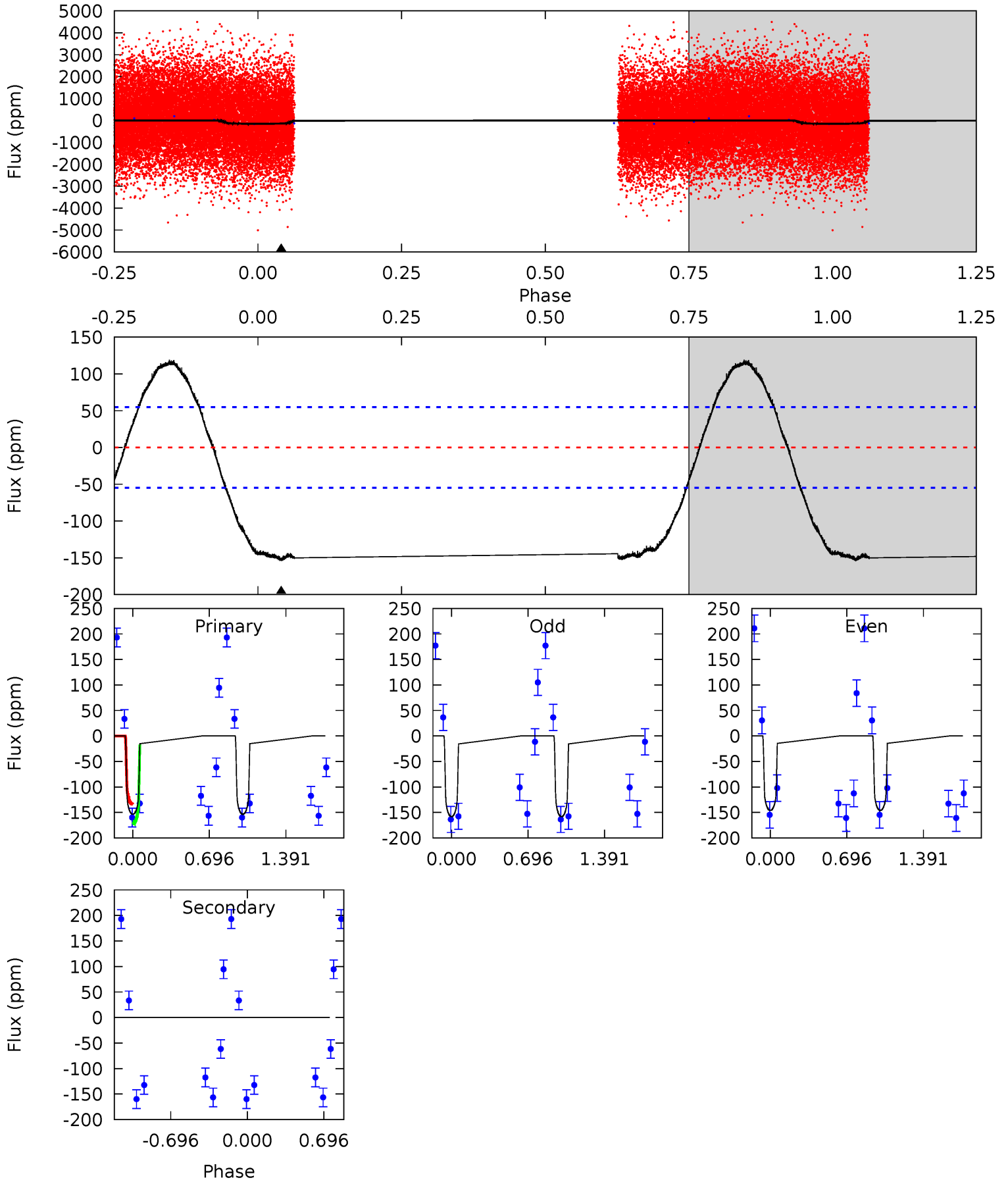
TCE 011619861-02 P= 1.697072 Days $T_0=131.831590$ (BKJD)



DV Model-Shift Uniqueness Test

011619861-02, P = 1.697116 Days, E = 130.100707 Days

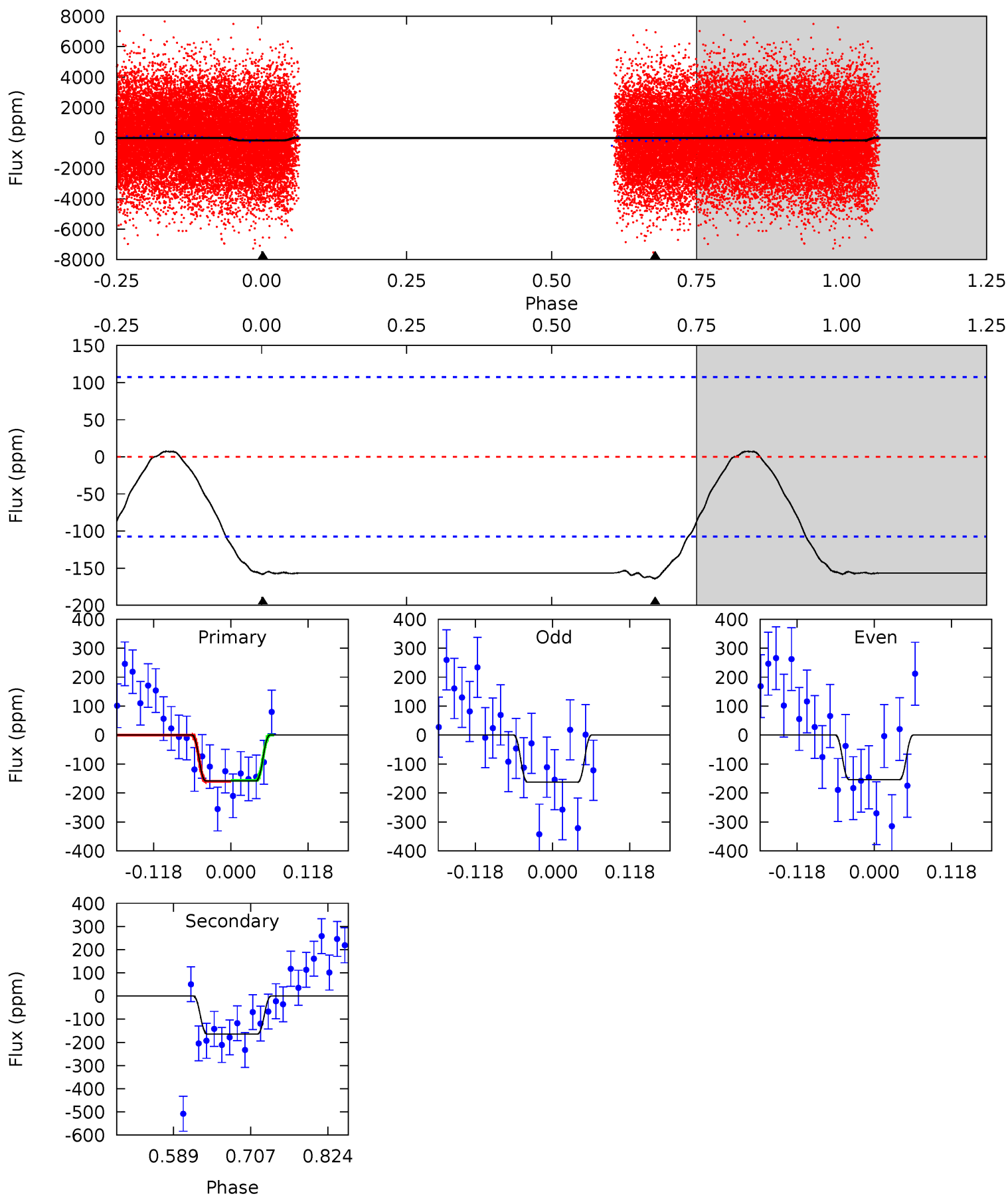
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	0	0	0	4.14	0.39	2.43	11.6	11.6	0	0	0.47	1.05	0.44	1.45



Alt Model-Shift Uniqueness Test

011619861-02, P = 1.697072 Days, E = 130.134518 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.66	6.91	0	0	4.53	1.56	0.40	6.66	6.66	6.91	6.91	0.19	1.08	0.04	0.06



Stellar Parameters For KIC 011619861

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7549^{+209}_{-340}	$3.920^{+0.287}_{-0.123}$	$-0.140^{+0.200}_{-0.350}$	$2.404^{+0.478}_{-0.888}$	$1.752^{+0.195}_{-0.363}$	$0.178^{+0.362}_{-0.068}$
	+3%/-5%	+7%/-3%	+143%/-250%	+20%/-37%	+11%/-21%	+204%/-38%
Source	KIC0	KIC0	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 011619861-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 13	$3.54^{+1.42}_{-1.11}$	3876^{+279}_{-392}	-3559^{+7354}_{-783}	$0.023^{+0.788}_{-0.702}$
Alt.	-164 ± 24	$3.30^{+1.19}_{-1.09}$	3862^{+287}_{-364}	7199^{+1844}_{-945}	$9.107^{+10.779}_{-4.170}$

T_{max} = Theoretical Maximum Planetary Temperature

T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)

A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

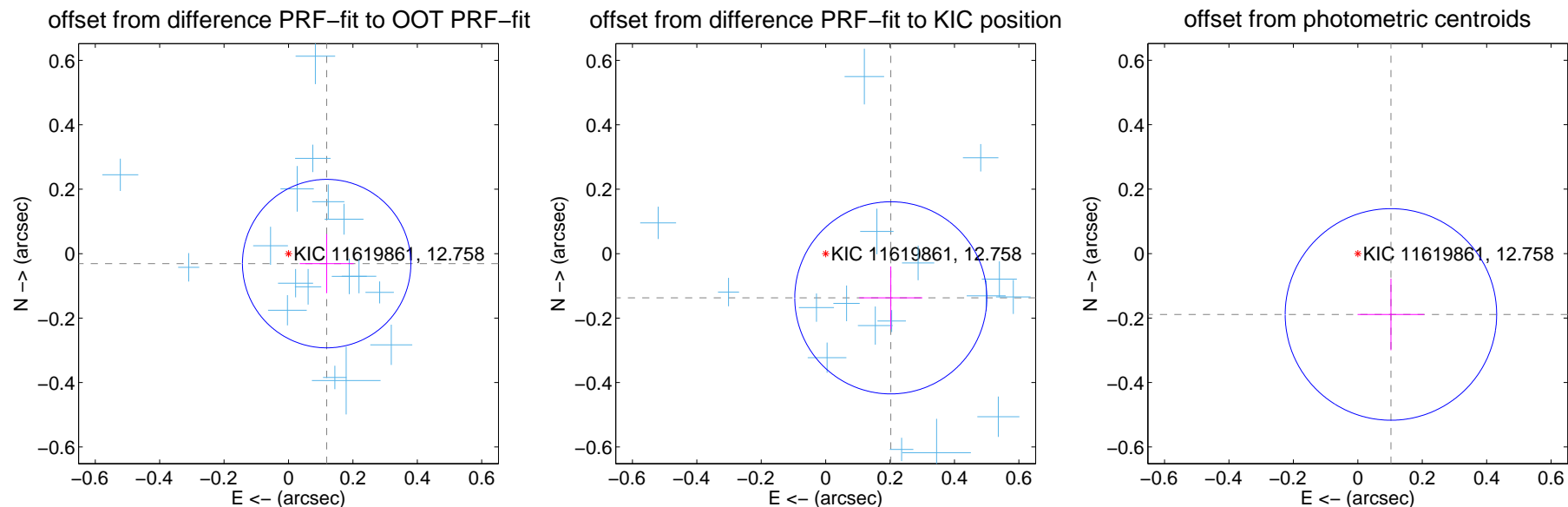
DV Centroid Data

Supplemental centroid analysis for 011619861-02. Kepler magnitude: 12.76. Transit SNR 12.84

There are 17 quarters with good PRF difference image offsets

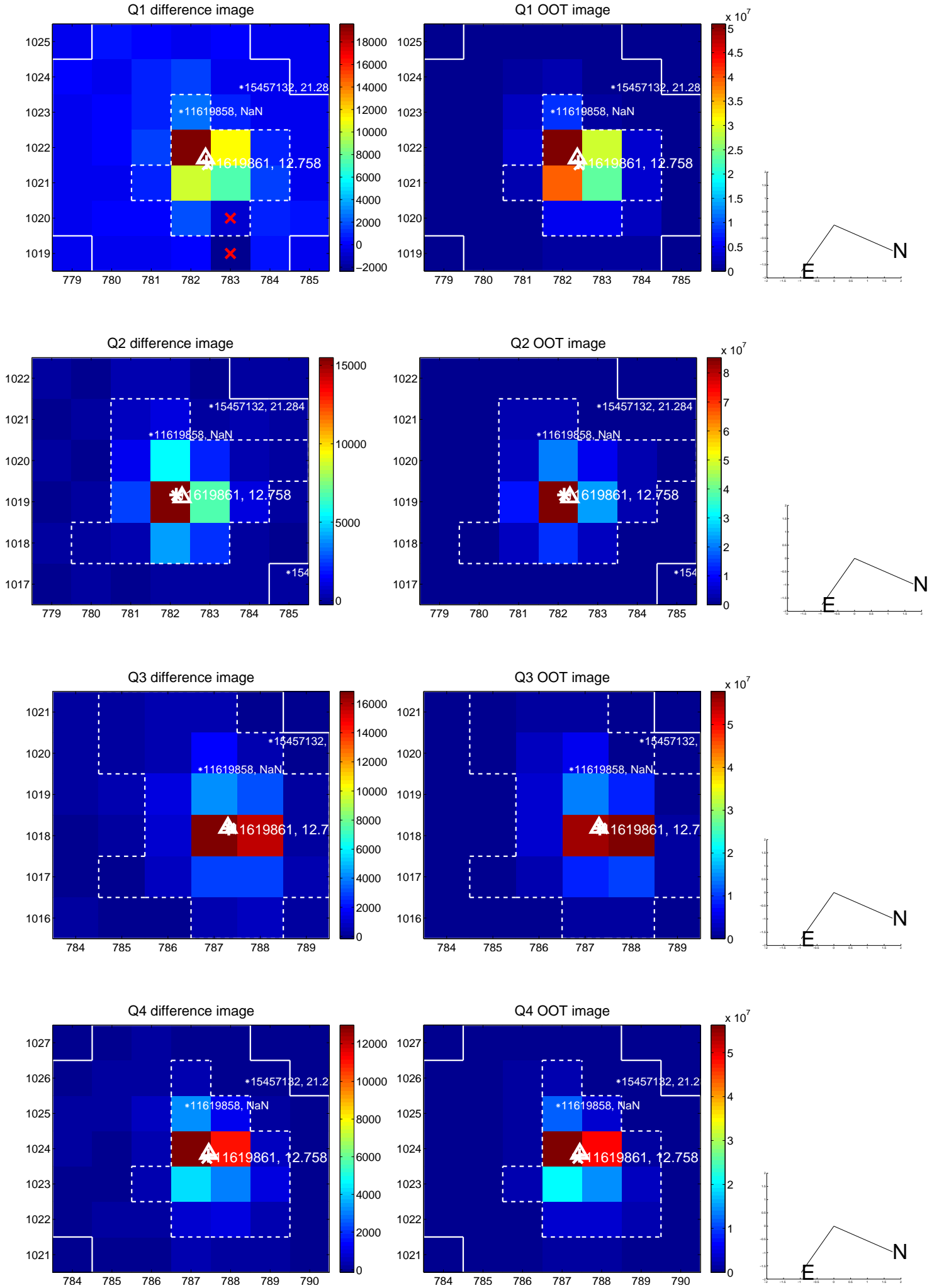
The direct PRF centroid is offset from the target star catalog position by about 0.28 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.122 ± 0.087	1.41	-0.119 ± 0.084	-0.031 ± 0.092
PRF-fit source offset from KIC position	0.244 ± 0.099	2.46	-0.202 ± 0.098	-0.137 ± 0.097
photometric centroid source offset	0.22 ± 0.11	1.97	-0.10 ± 0.10	-0.19 ± 0.11

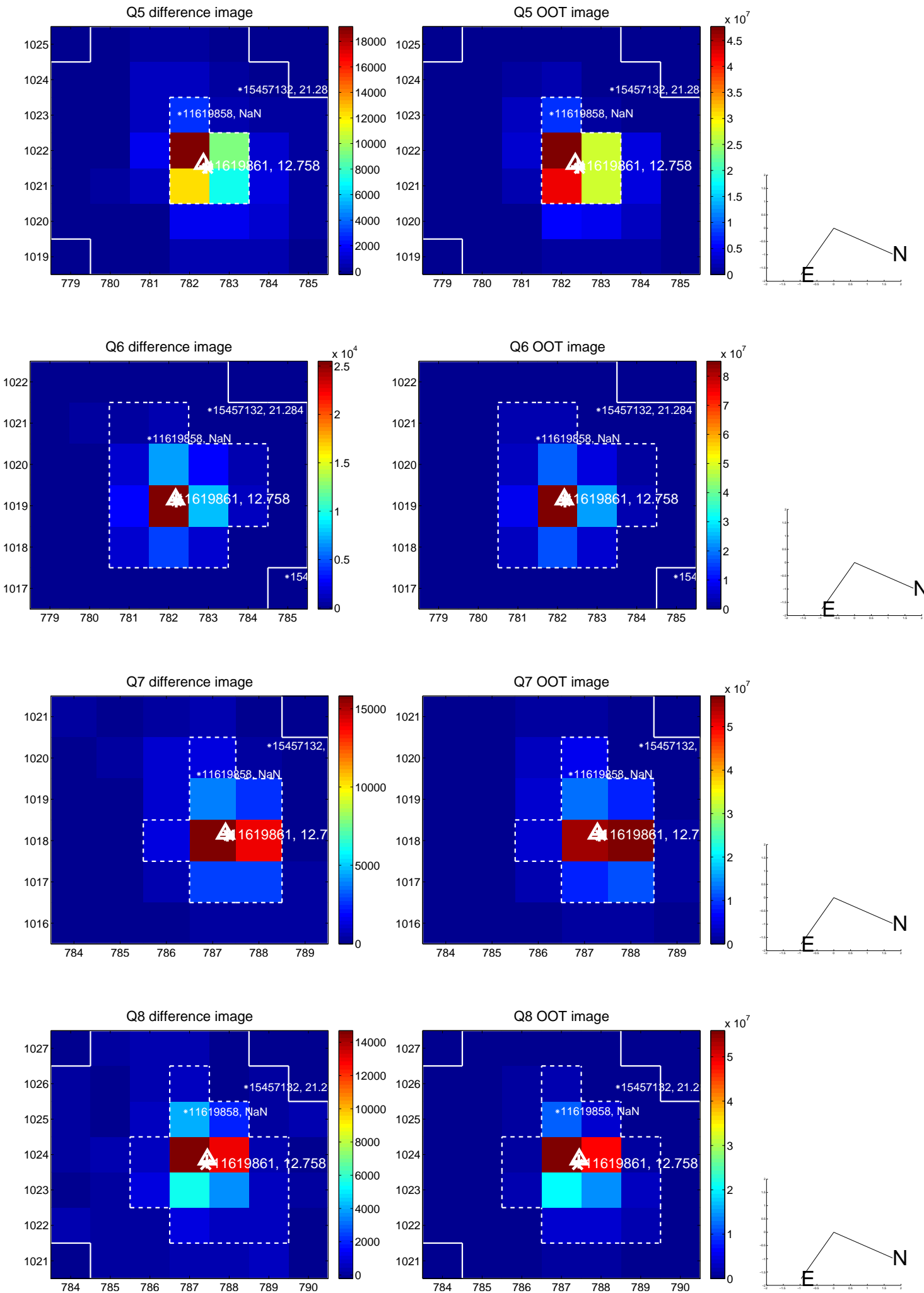


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

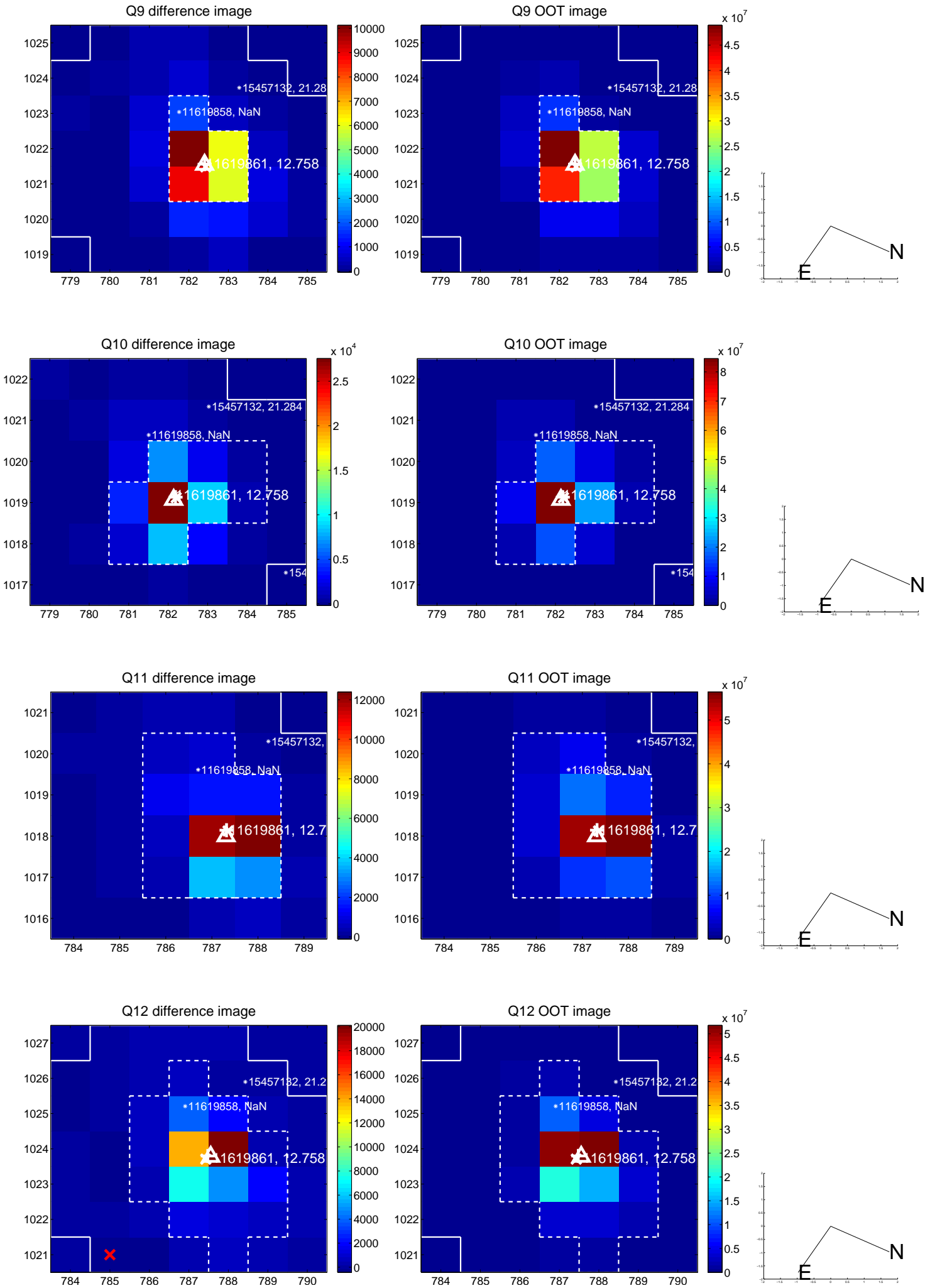
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



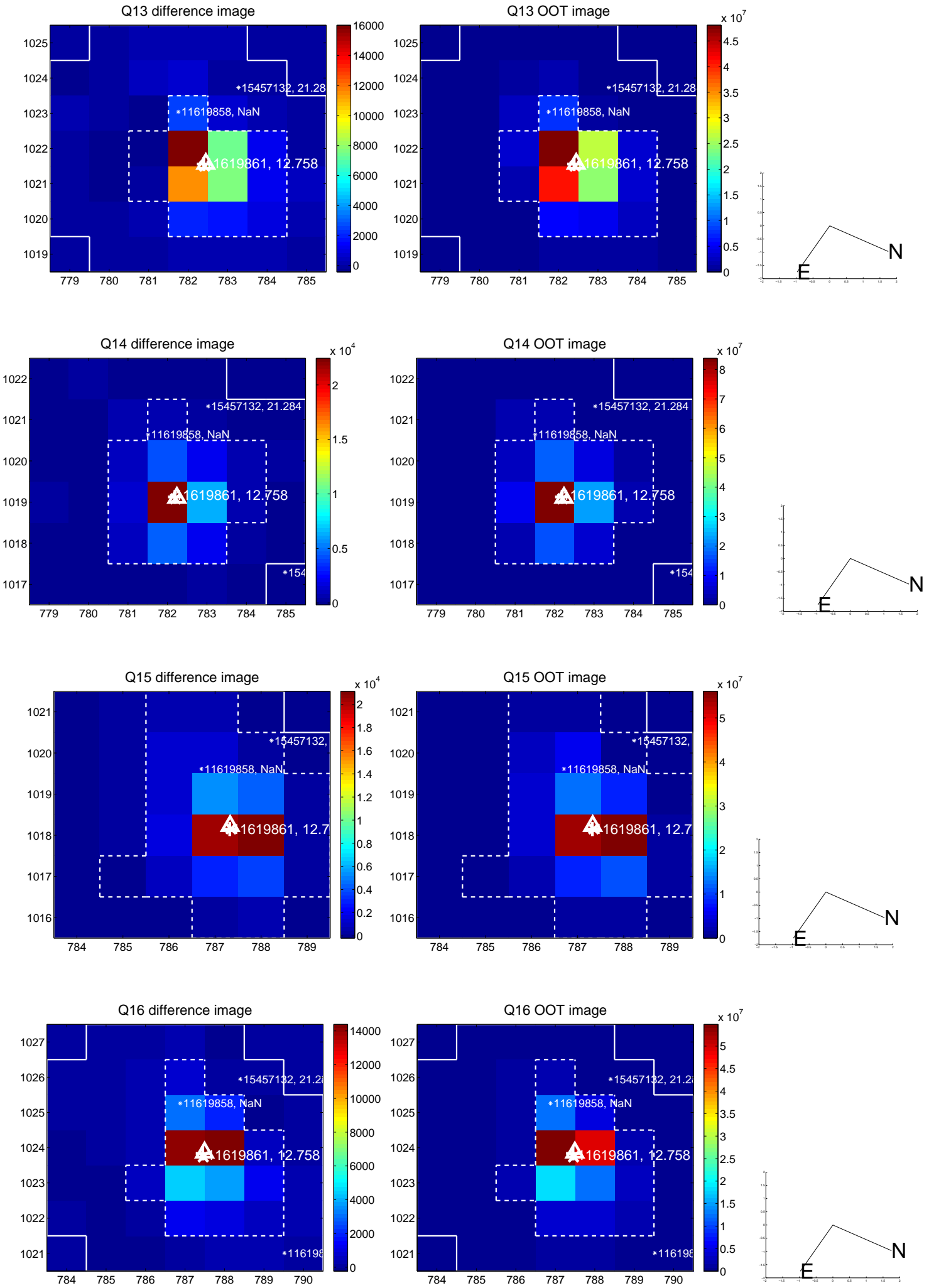
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



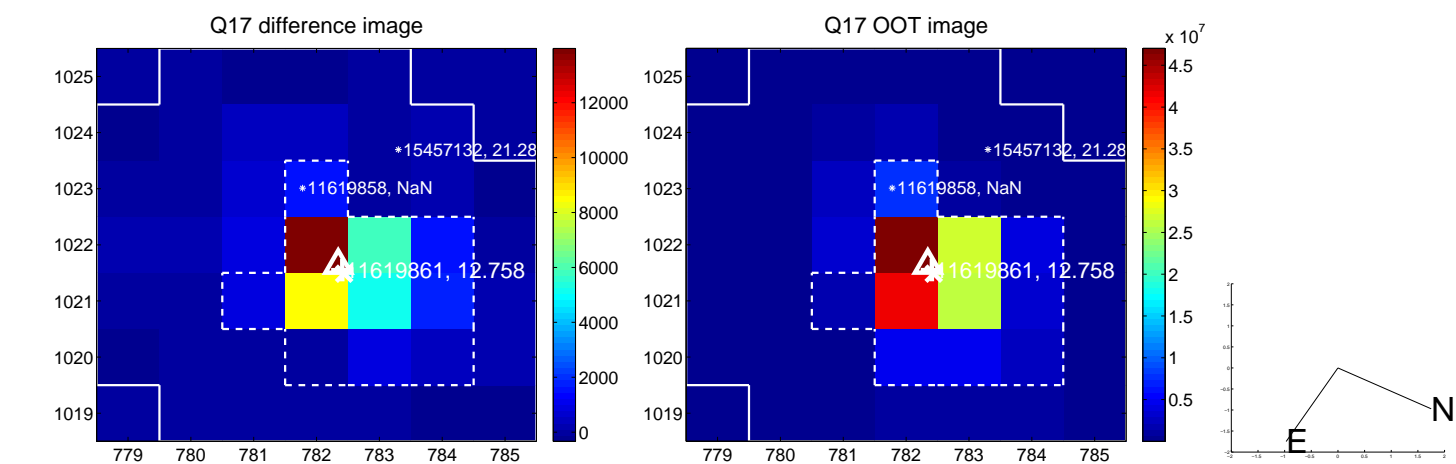
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



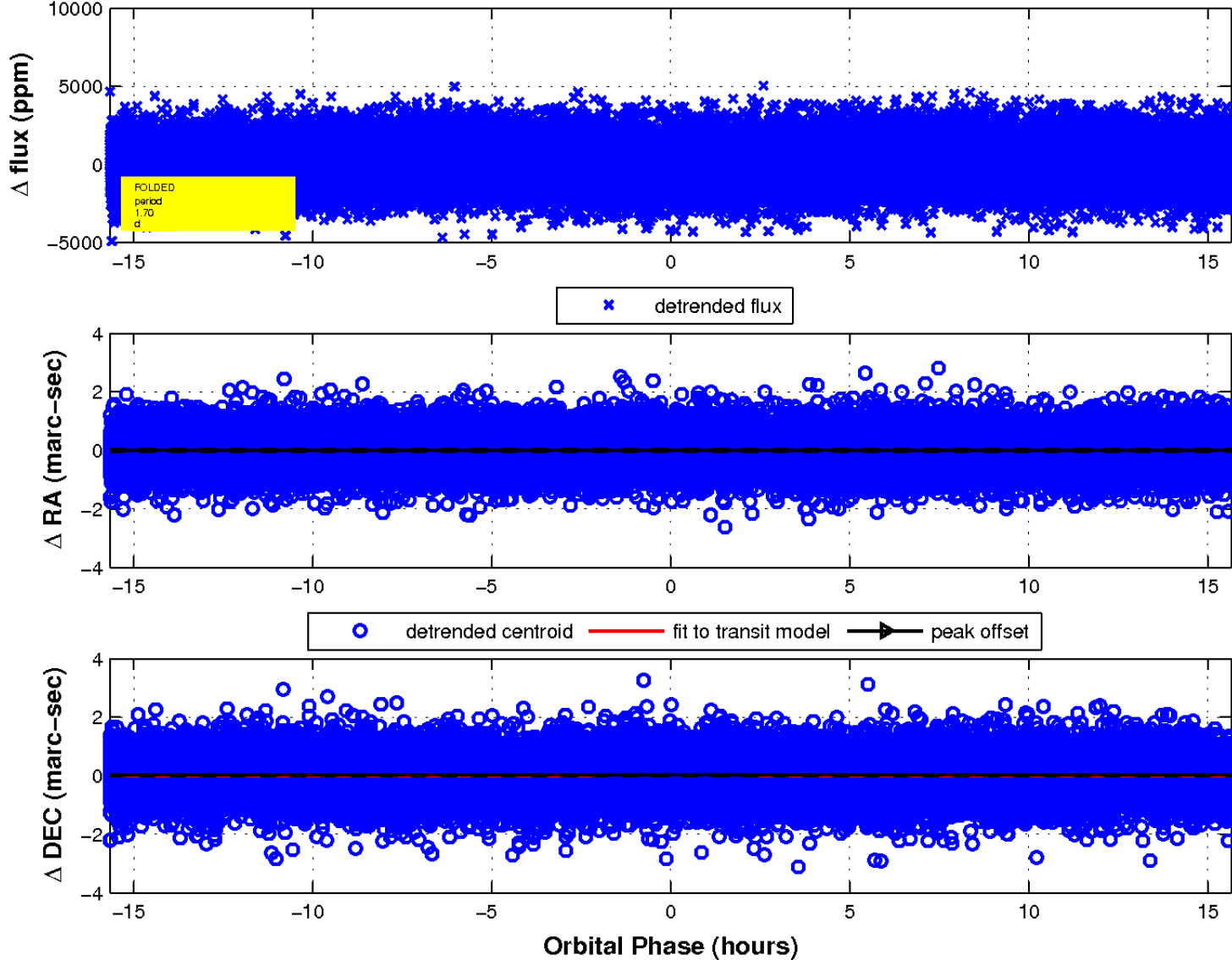
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

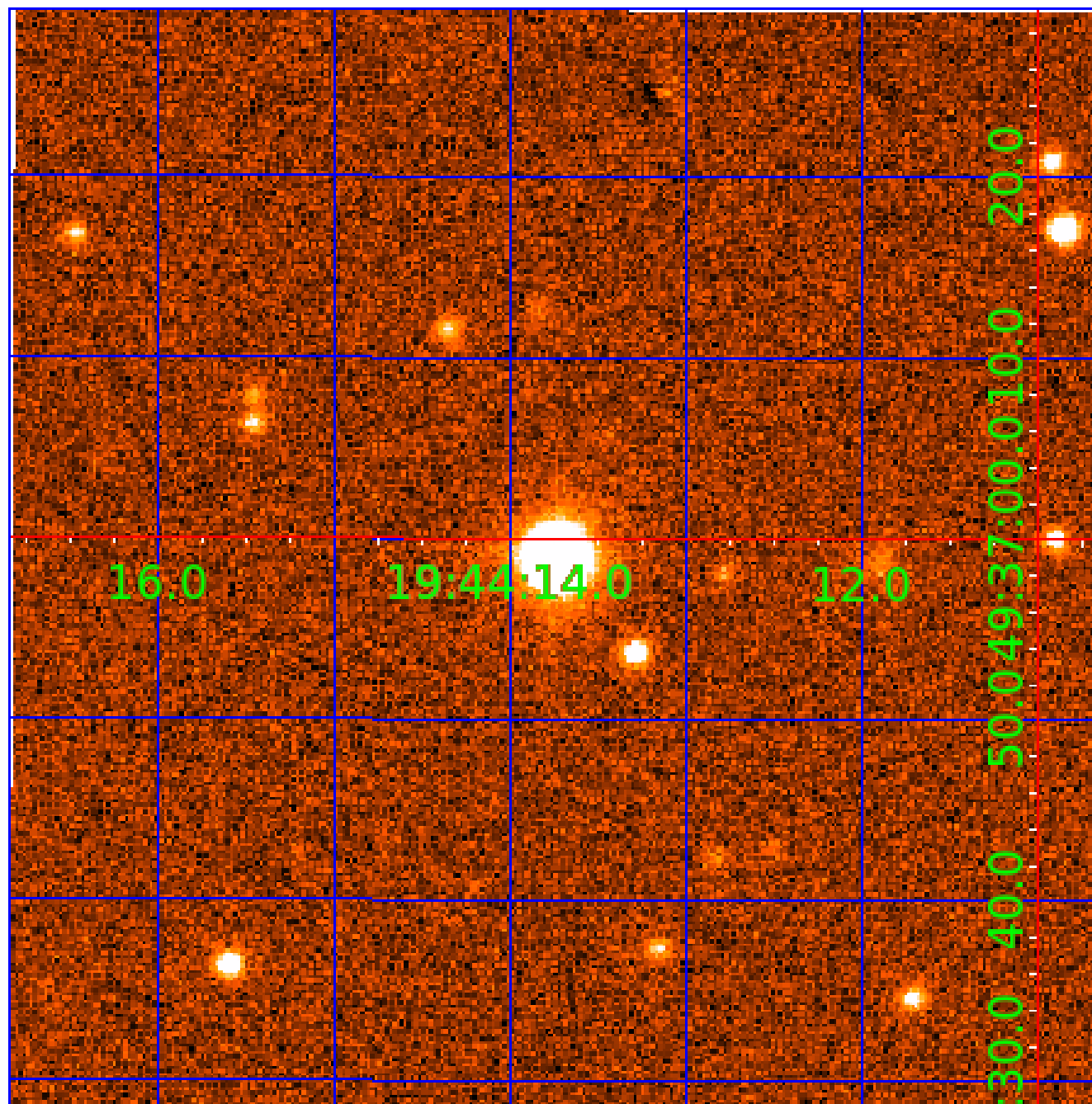


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 011619861

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})
011619861-01	OBS	No	1.697127	132.378599	208.4	7.532	15.2	16.3	2.40	7549	4.04	14909.25
011619861-02	OBS	No	1.697116	131.797823	171.5	5.221	11.7	12.8	2.40	7549	3.67	14909.39
011619861-03	OBS	No	1.802075	133.057673	190.8	11.360	8.9	7.6	2.40	7549	3.36	13762.94

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011619861-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT
011619861-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—SAME_NTL_PERIOD
011619861-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_ZUMA—TRANS_GAPPED—LPP_DV—LPP_ALT—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.

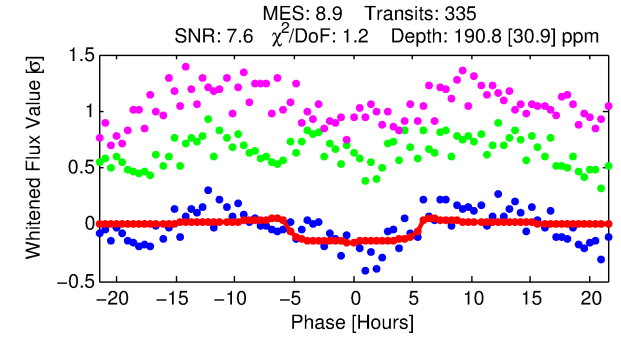
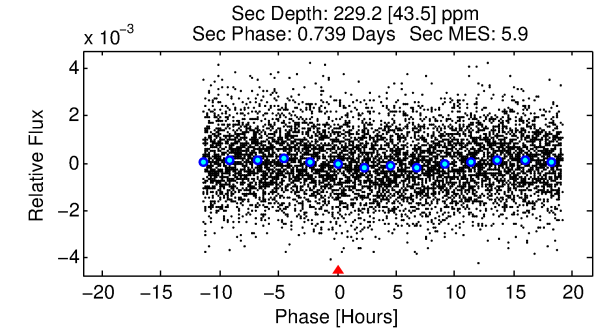
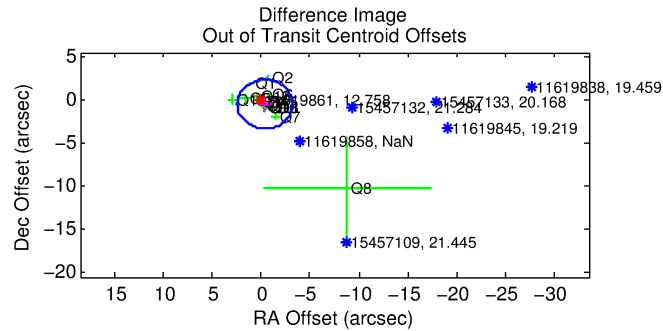
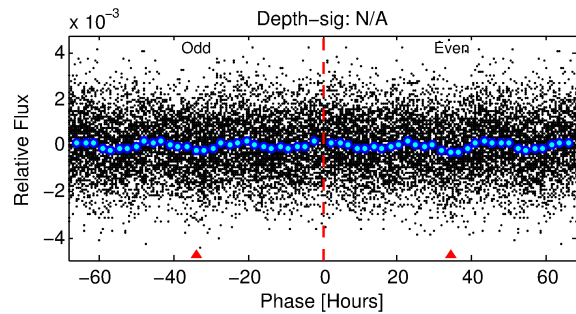
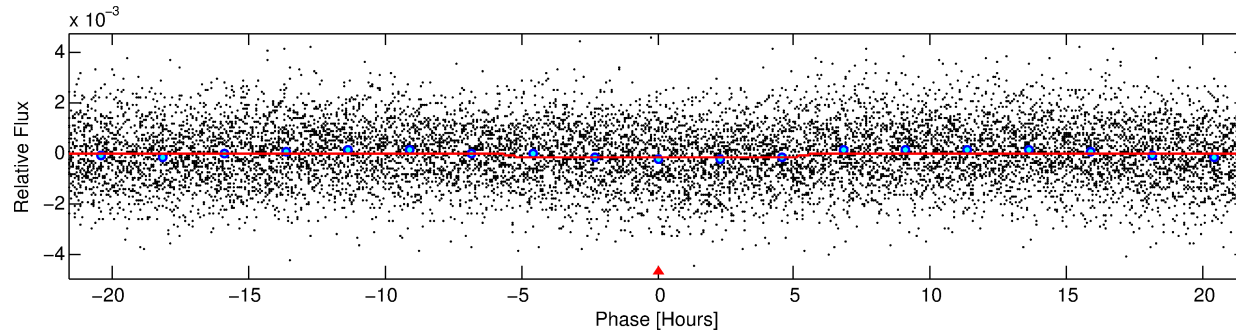
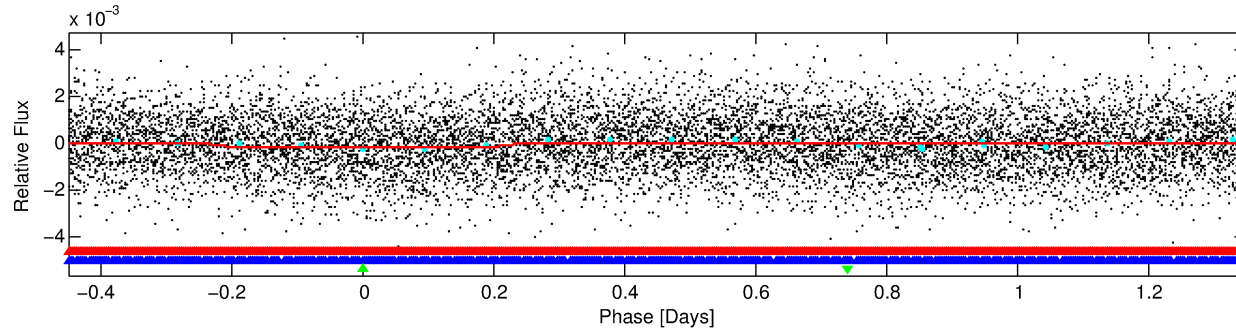
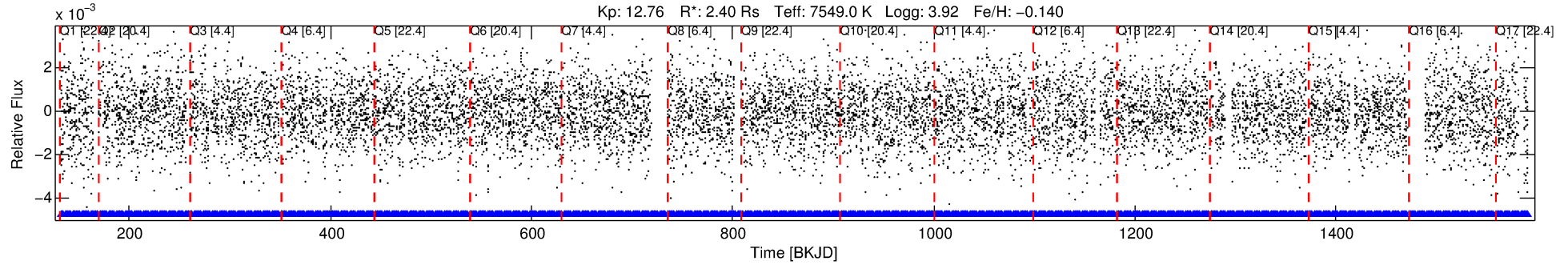
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011619861-03

No Significant Match Found

DV One-Page Summary

KIC: 11619861 Candidate: 3 of 3 Period: 1.802 d



DV Fit Results:

Period = 1.80207 [0.00004] d
Epoch = 133.0577 [0.0140] BKJD
Rp/R* = 0.0128 [0.0257]
a/R* = 1.37 [7.22]
b = 0.17 [65.72]
Seff = 13762.94 [7375.61]
Teq = 2762 [370] K
Rp = 3.36 [6.85] Re
a = 0.0350 [0.0115] AU
Ag = 13.65 [55.26] [0.23σ]
Teffp = 8208 [8251] K [0.66σ]

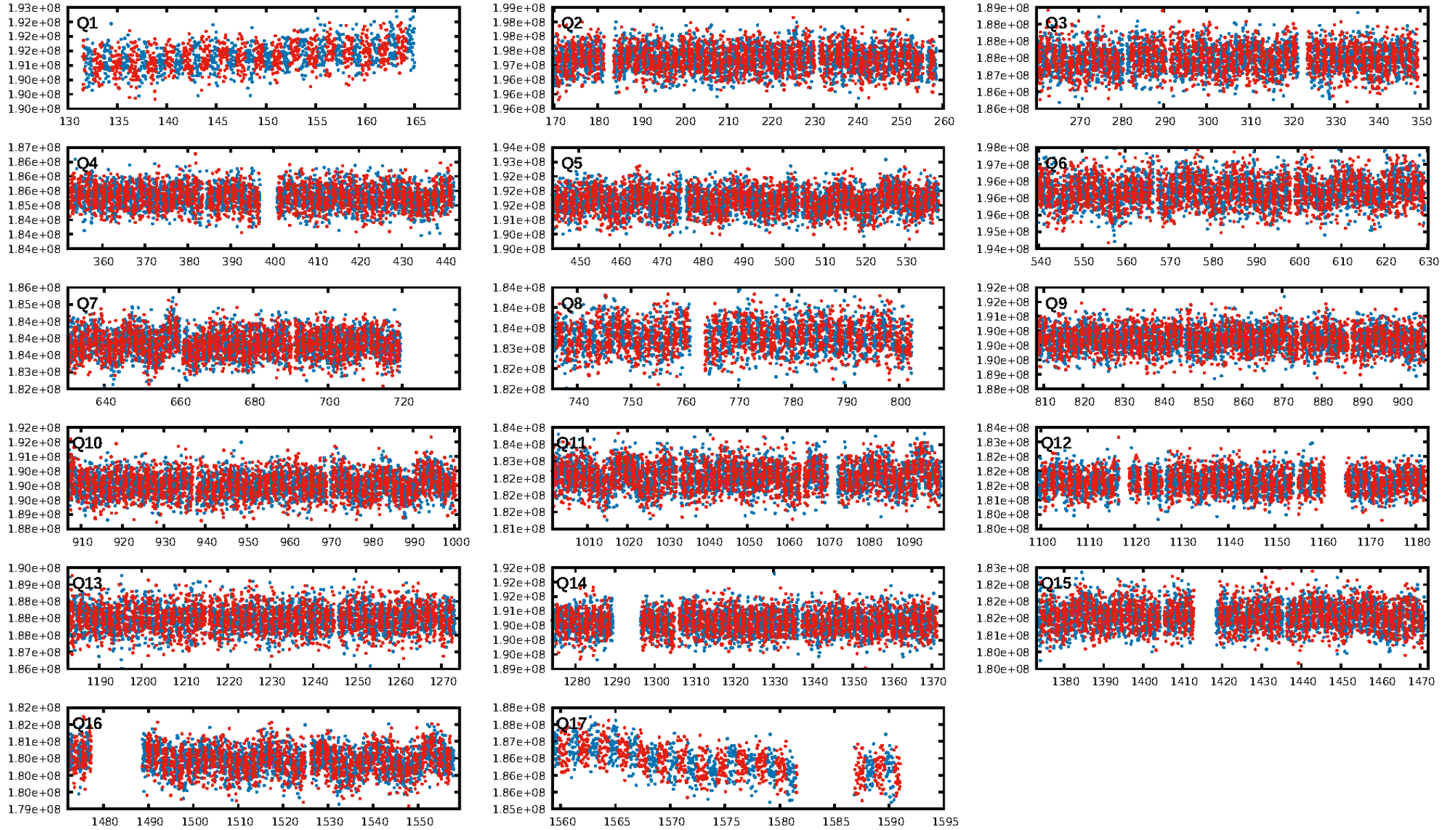
DV Diagnostic Results:

ShortPeriod-sig: 14.7% [0.18σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [319/319]
GhostDiagnostic-chr: -2.746
Centroid-sig: 55.1%
Centroid-so: 0.071 arcsec [0.99σ]
OotOffset-rm: 0.632 arcsec [0.67σ]
KicOffset-rm: 0.790 arcsec [0.90σ]
OotOffset-st: 2/4/4/4 [14]
KicOffset-st: 2/4/4/4 [14]
DiffImageQuality-fgm: 0.57 [8/14]
DiffImageOverlap-fno: 0.00 [0/17]

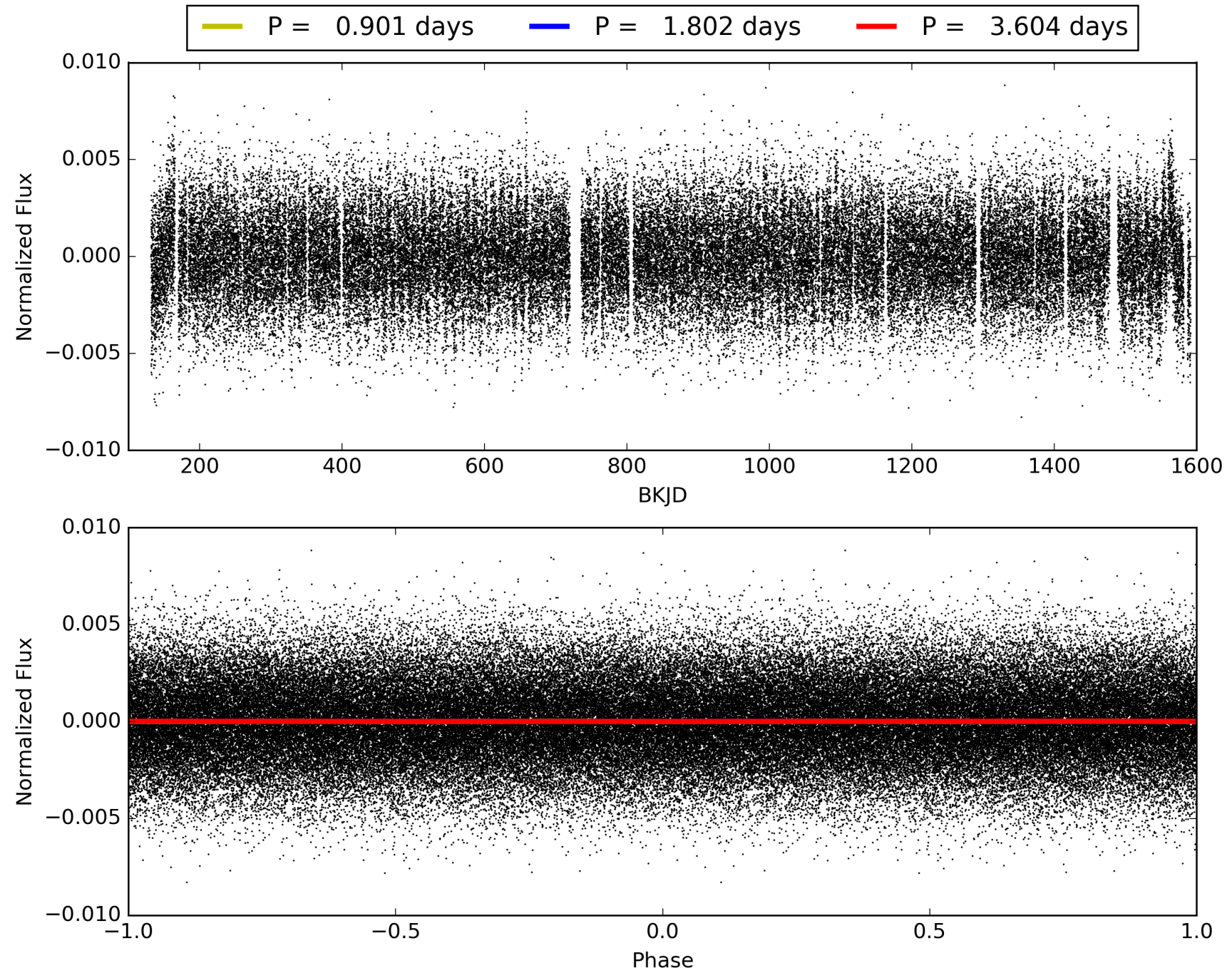
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:29:59 Z

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

TCE 011619861-03, PDC Light Curves

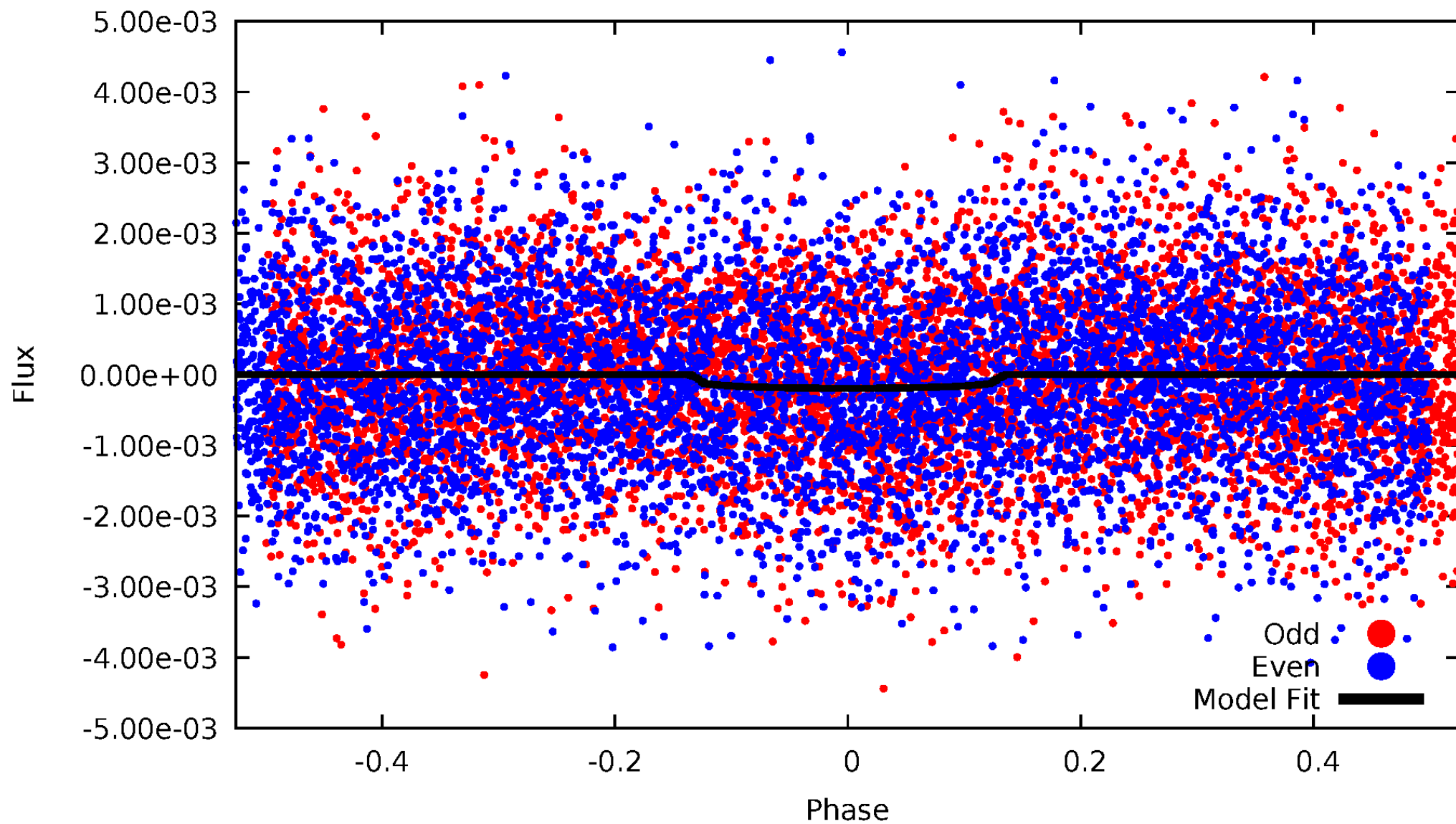


TCE 011619861-03



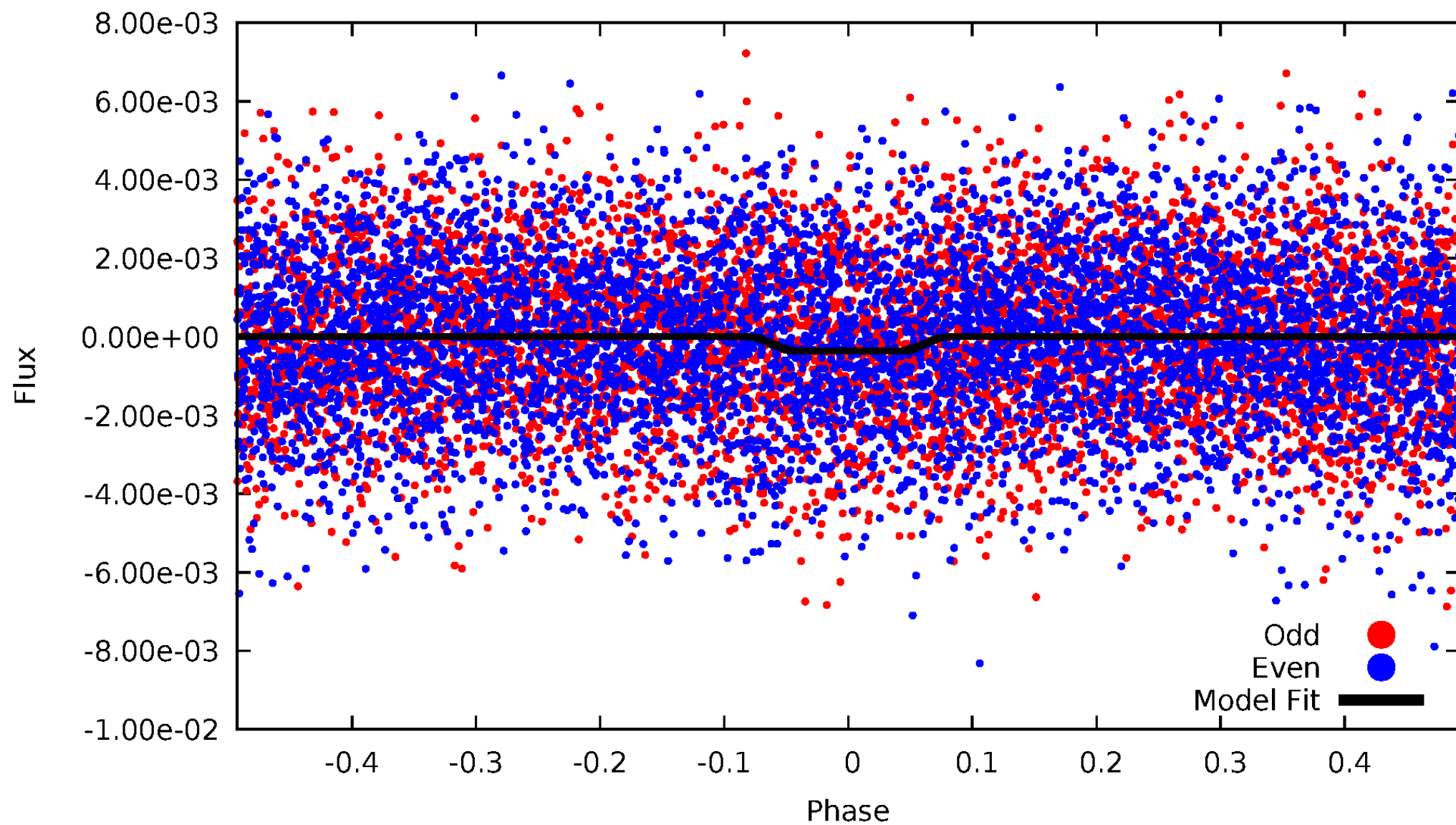
DV Odd/Even

TCE 011619861-03

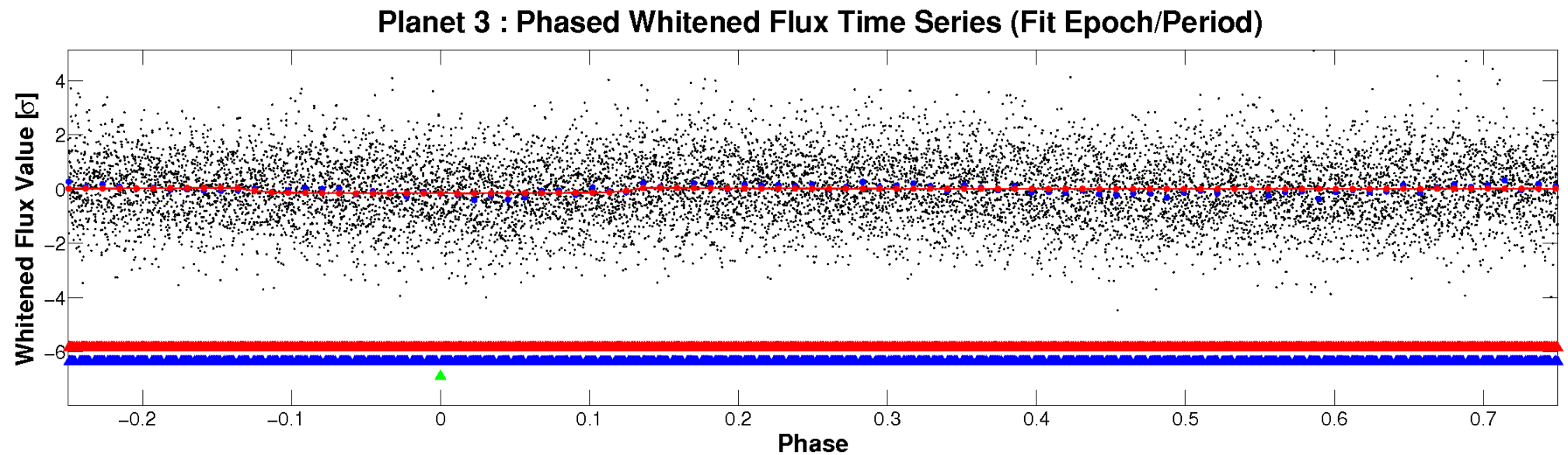
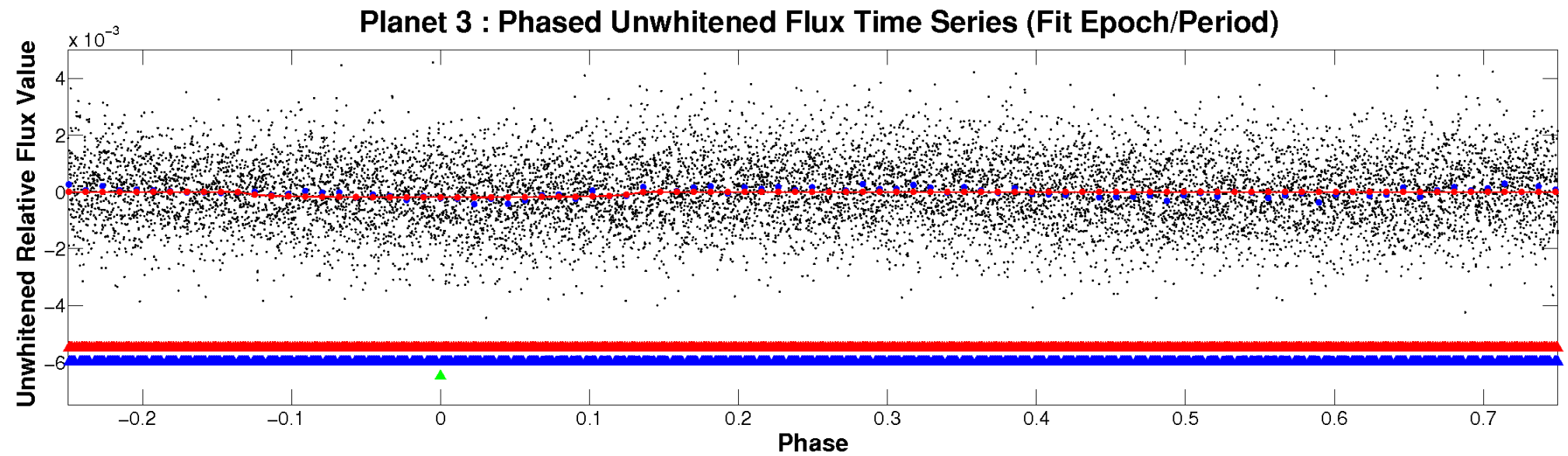


ALT Odd/Even

TCE 011619861-03

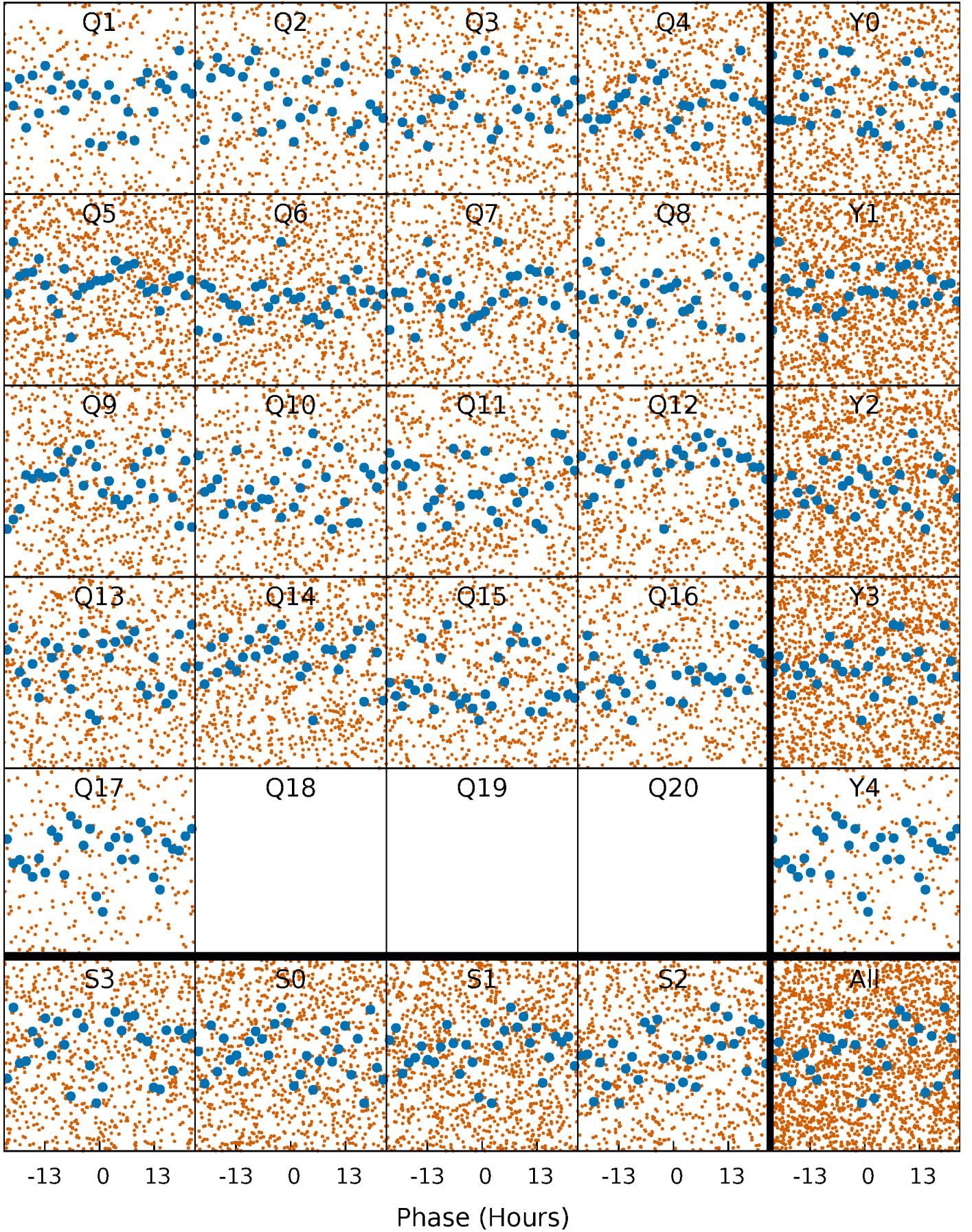


Non-Whitened Vs. Whitened Light Curve



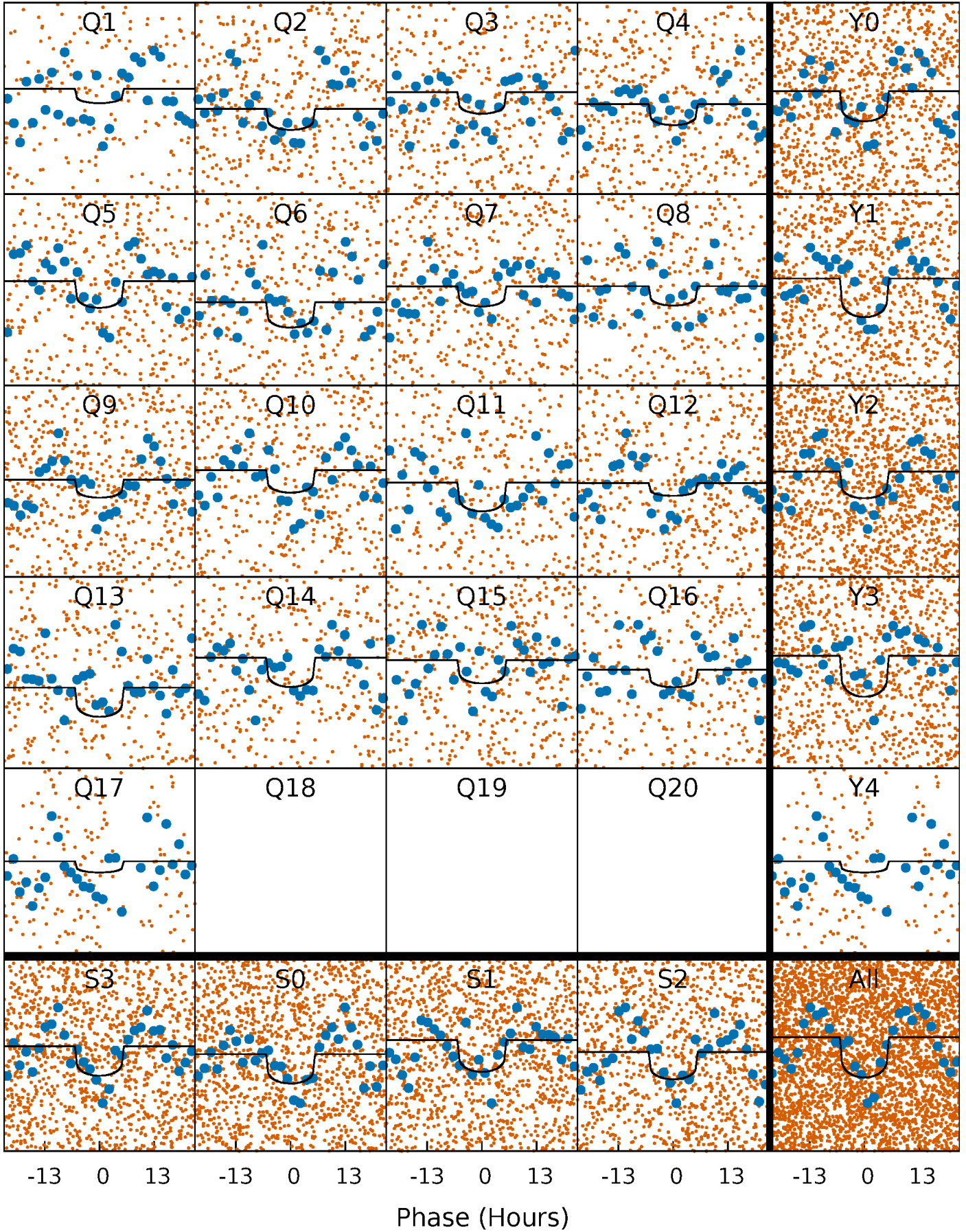
PDC Quarter-Phased Transit Curves

TCE 011619861-03 P= 1.802075 Days $T_0=133.057673$ (BKJD)



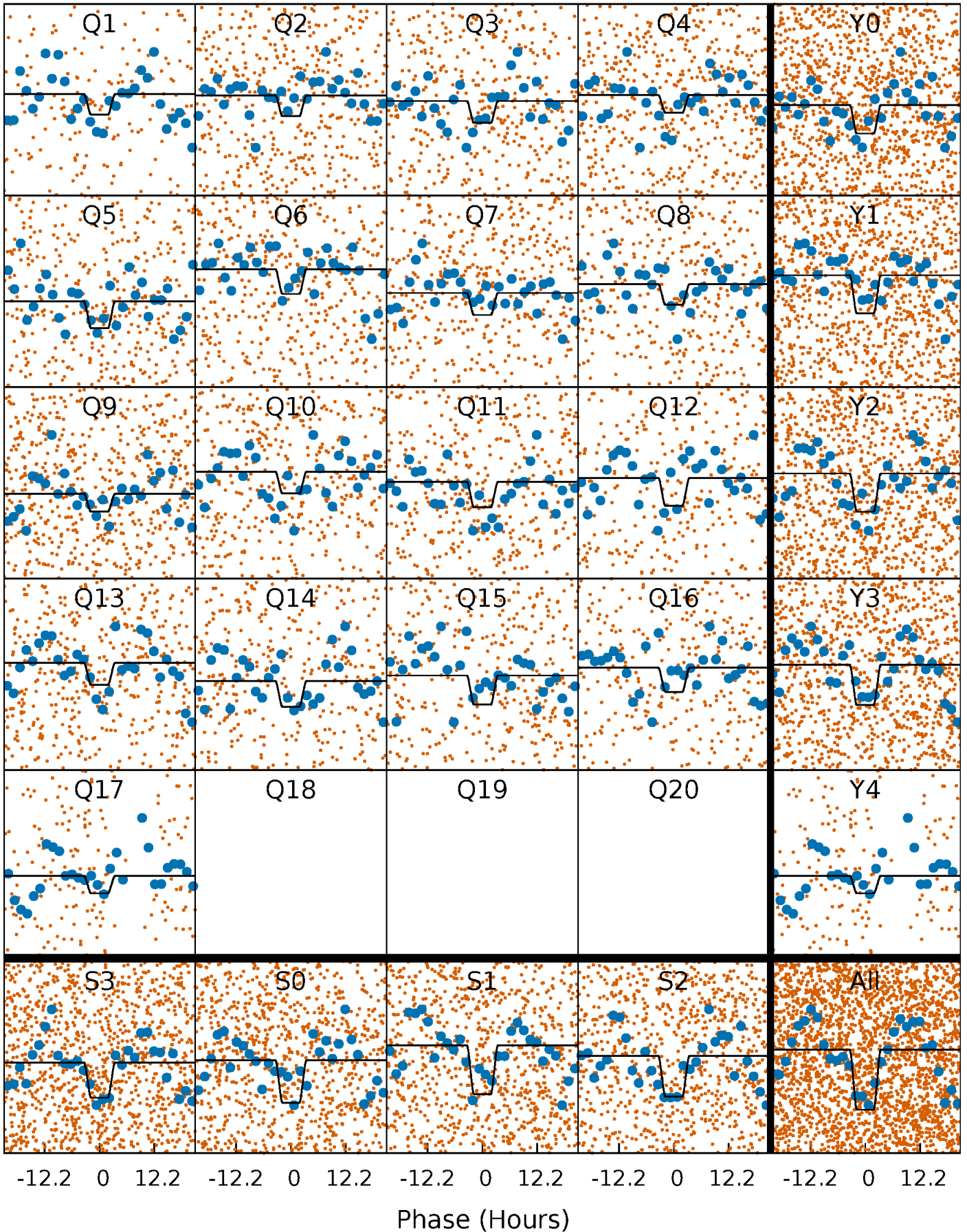
DV Quarter-Phased Transit Curves

TCE 011619861-03 P= 1.802075 Days $T_0=133.057673$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

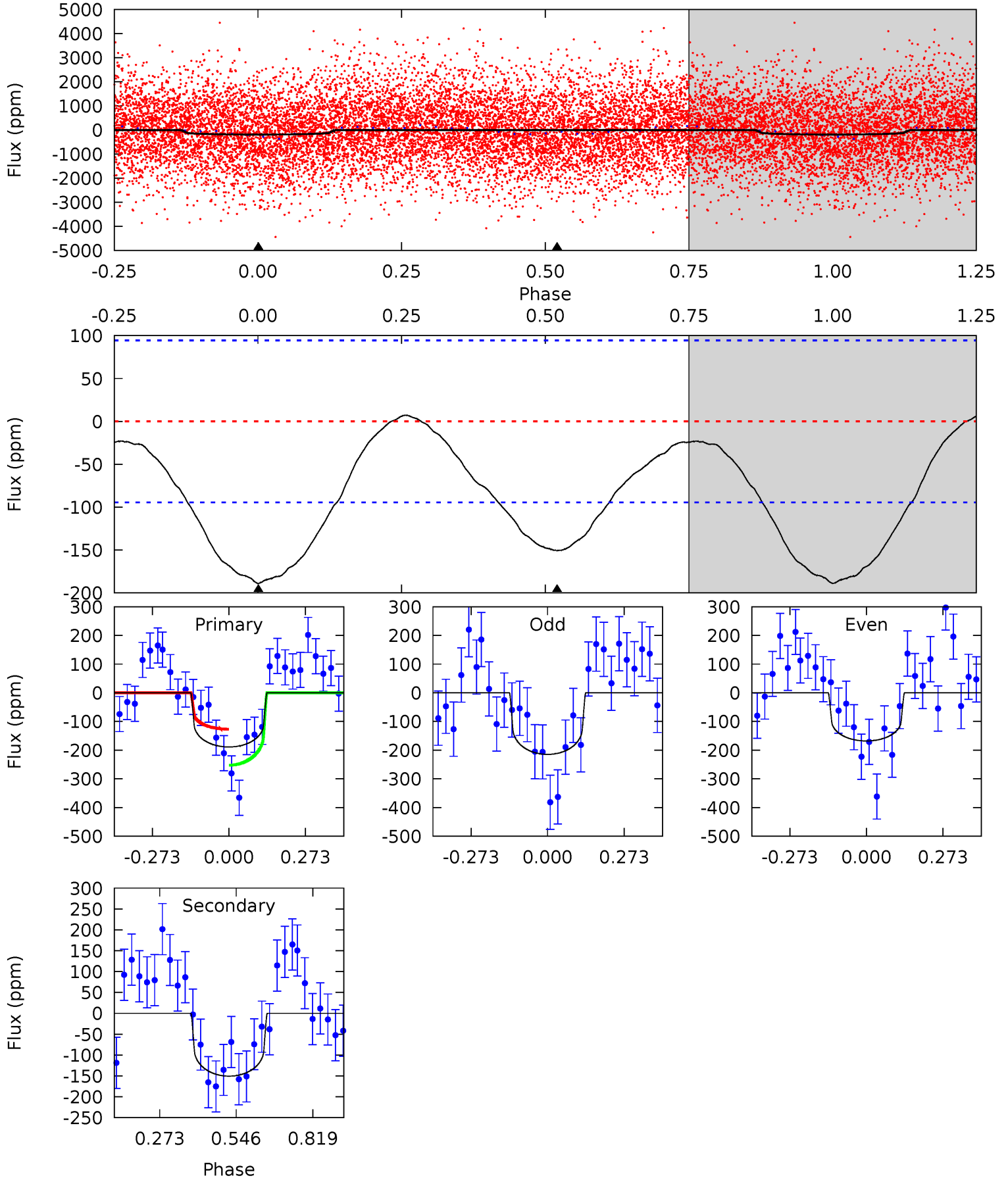
TCE 011619861-03 P= 1.801983 Days $T_0=133.125915$ (BKJD)



DV Model-Shift Uniqueness Test

011619861-03, P = 1.802075 Days, E = 131.255598 Days

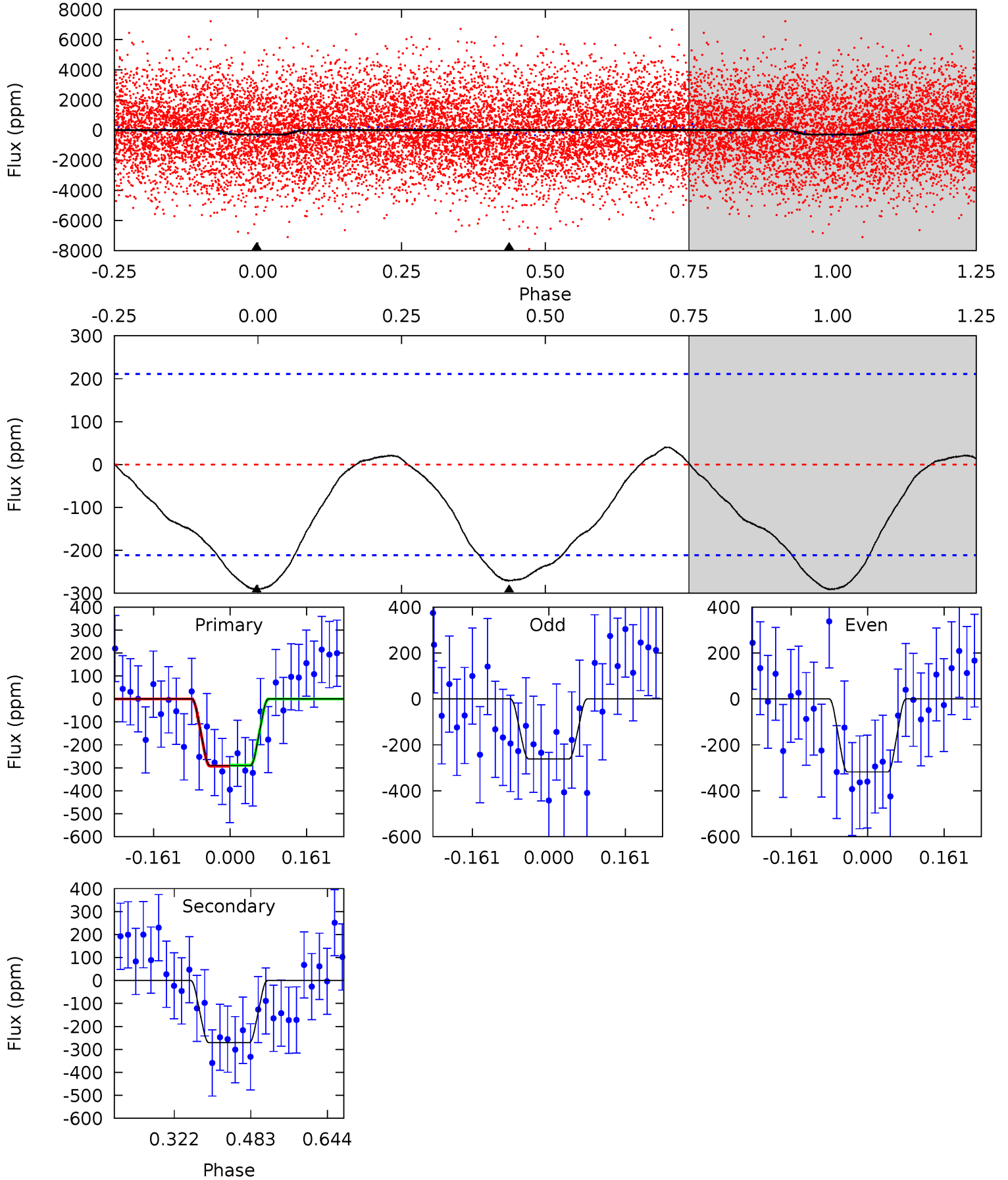
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.70	6.94	0	0	4.35	1.10	0.57	8.70	8.70	6.94	6.94	1.10	1.32	0.04	2.89



Alt Model-Shift Uniqueness Test

011619861-03, P = 1.801983 Days, E = 131.323932 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.14	5.72	0	0	4.46	1.40	0.91	6.14	6.14	5.72	5.72	0.60	0.51	0.12	0.04



Stellar Parameters For KIC 011619861

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7549^{+209}_{-340}	$3.920^{+0.287}_{-0.123}$	$-0.140^{+0.200}_{-0.350}$	$2.404^{+0.478}_{-0.888}$	$1.752^{+0.195}_{-0.363}$	$0.178^{+0.362}_{-0.068}$
	+3%/-5%	+7%/-3%	+143%/-250%	+20%/-37%	+11%/-21%	+204%/-38%
Source	KIC0	KIC0	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 011619861-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-151 ± 22	$5.86^{+5.62}_{-3.94}$	3795^{+274}_{-357}	5238^{+4828}_{-1482}	$2.944^{+27.060}_{-2.207}$
Alt.	-271 ± 47	$7.07^{+5.93}_{-4.68}$	3792^{+274}_{-353}	5531^{+4720}_{-1436}	$3.482^{+26.541}_{-2.428}$

T_{max} = Theoretical Maximum Planetary Temperature
 T_{obs} = Observed Planetary Temperature (Assuming $A=0.3$)
 A_{obs} = Observed Albedo (Assuming $T=0$)

If a secondary eclipse is present, the system is likely an EB if $T_{\text{obs}} \gg T_{\text{max}}$ AND $A_{\text{obs}} \gg 1.0$

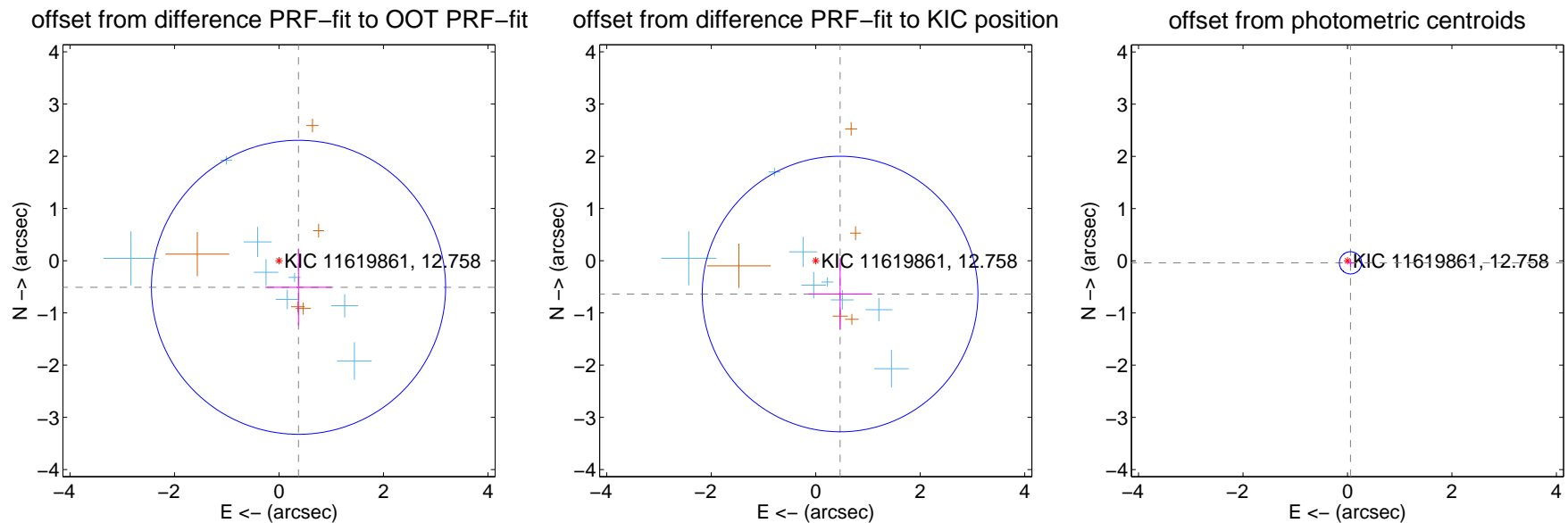
DV Centroid Data

Supplemental centroid analysis for 011619861-03. Kepler magnitude: 12.76. Transit SNR 7.62

There are 8 quarters with good PRF difference image offsets

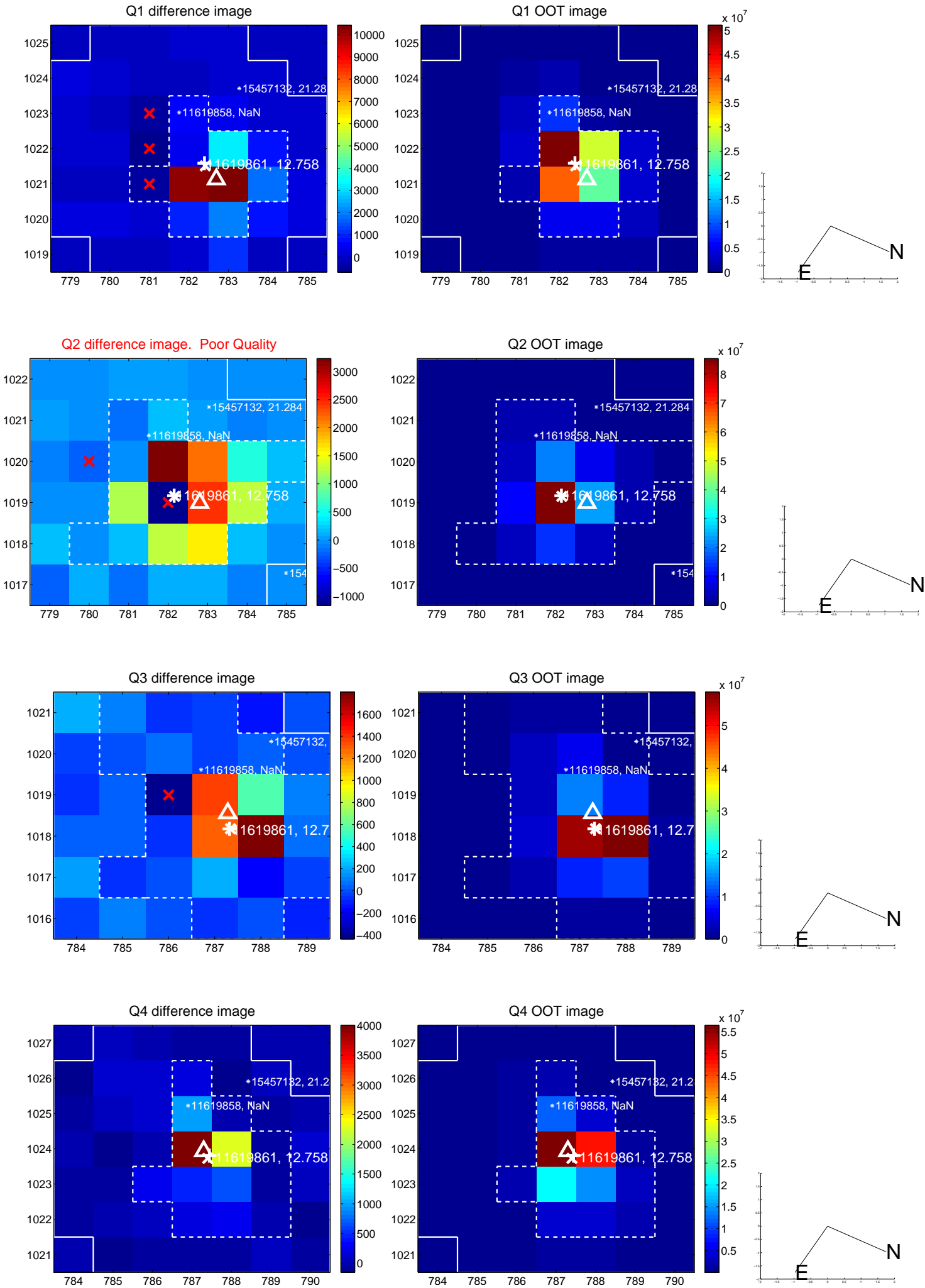
The direct PRF centroid is offset from the target star catalog position by about 0.41 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.632 ± 0.938	0.67	-0.374 ± 0.638	-0.510 ± 0.730
PRF-fit source offset from KIC position	0.790 ± 0.880	0.90	-0.466 ± 0.610	-0.638 ± 0.684
photometric centroid source offset	0.07 ± 0.07	0.99	-0.06 ± 0.07	-0.04 ± 0.08

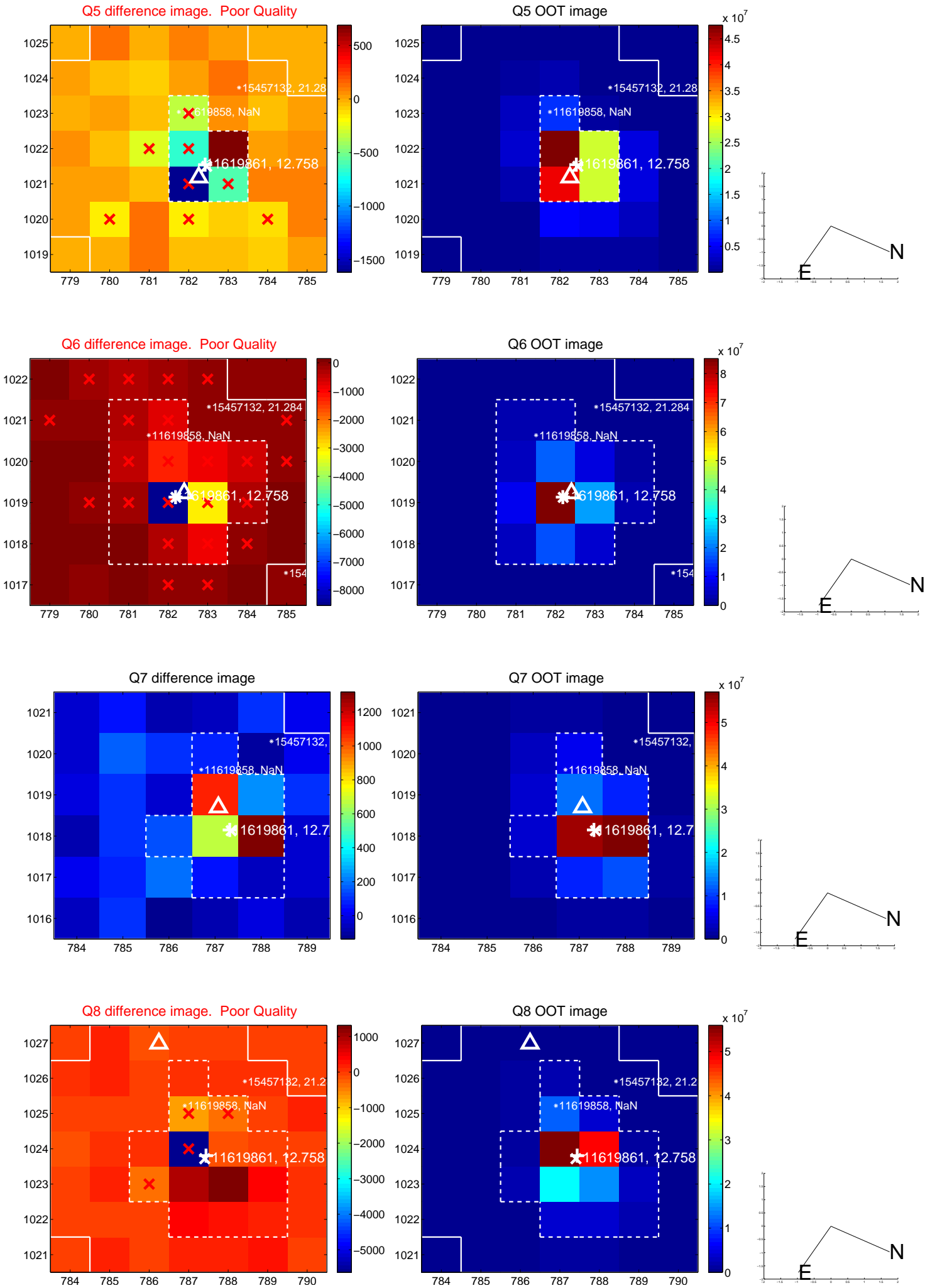


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

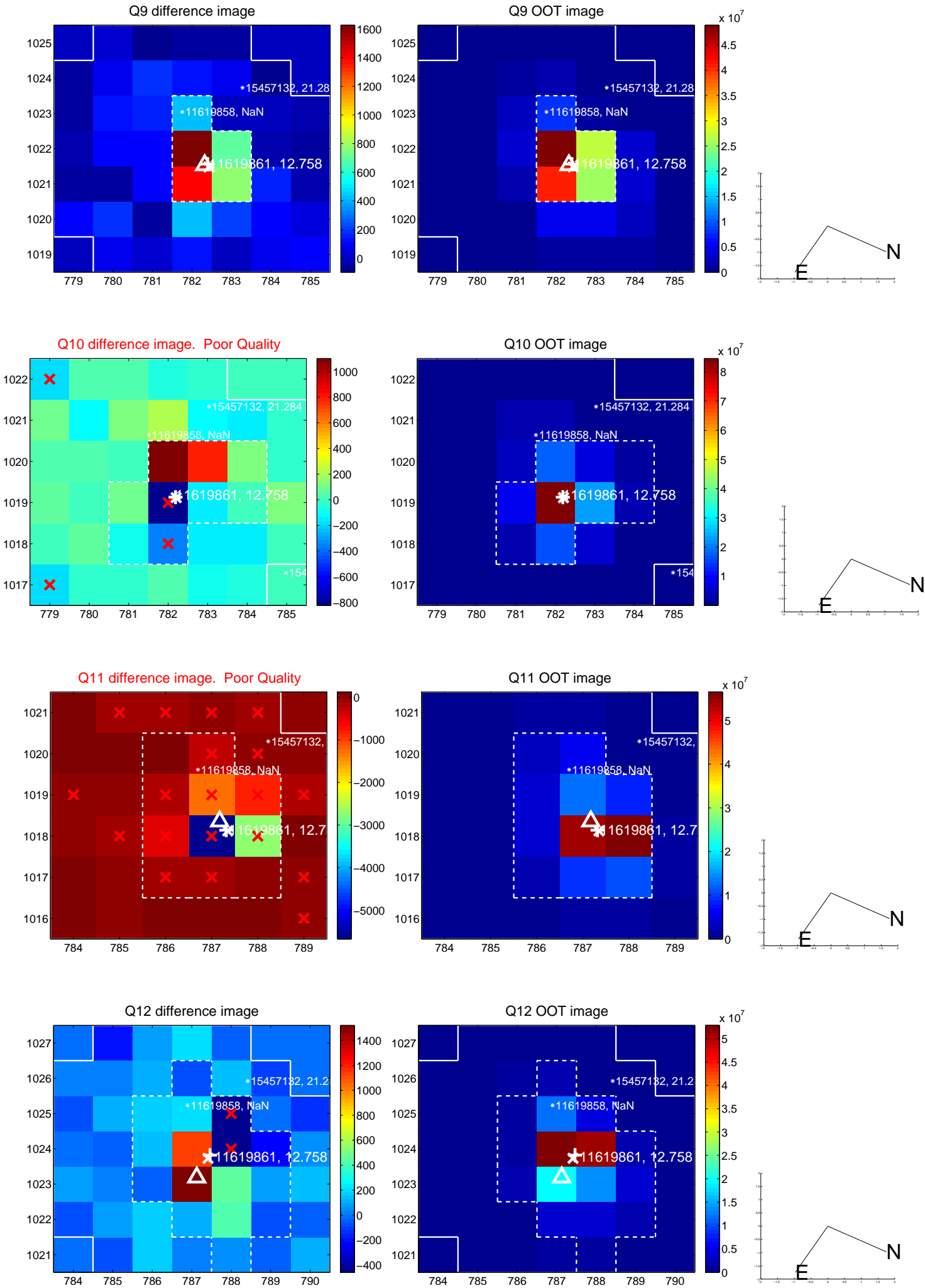
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



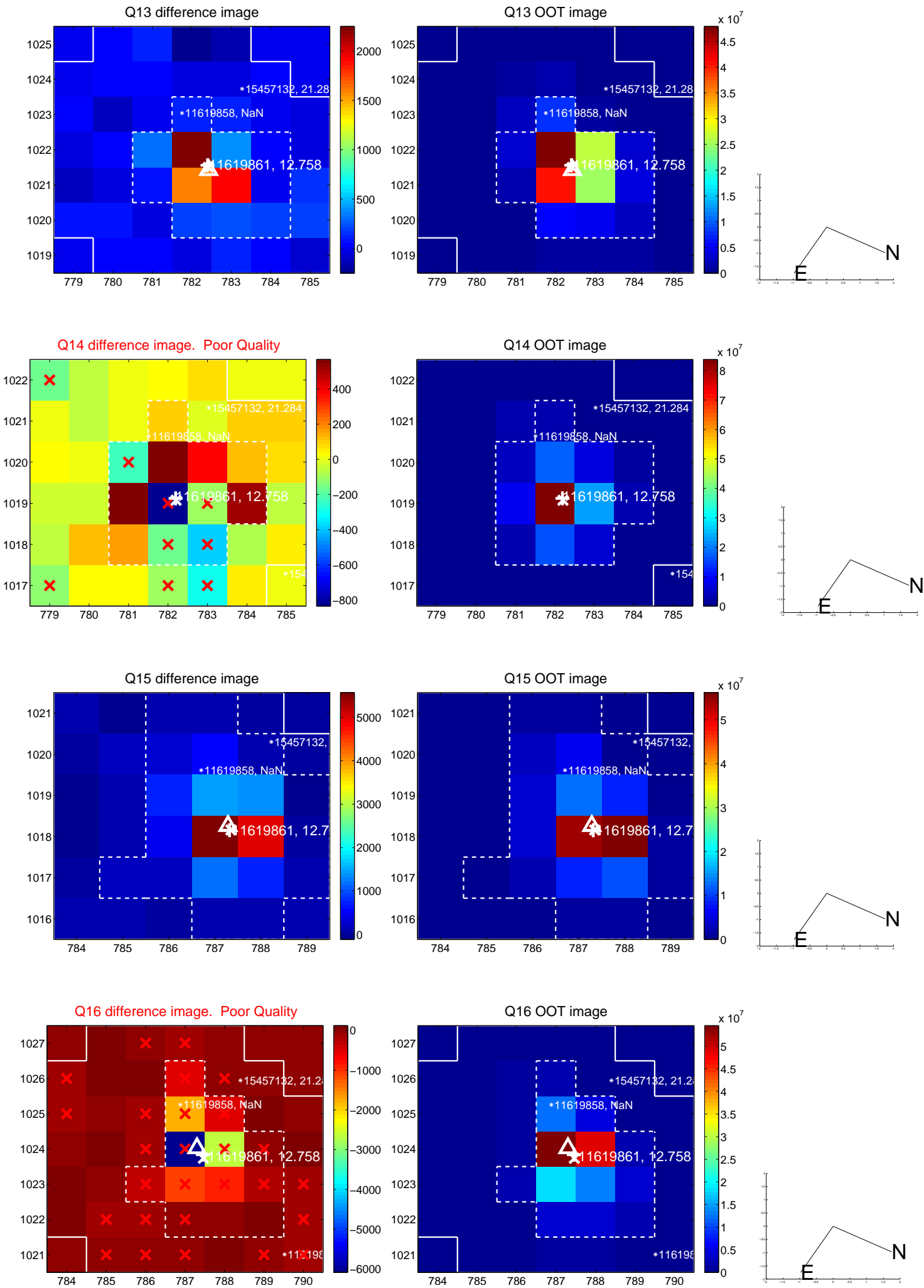
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



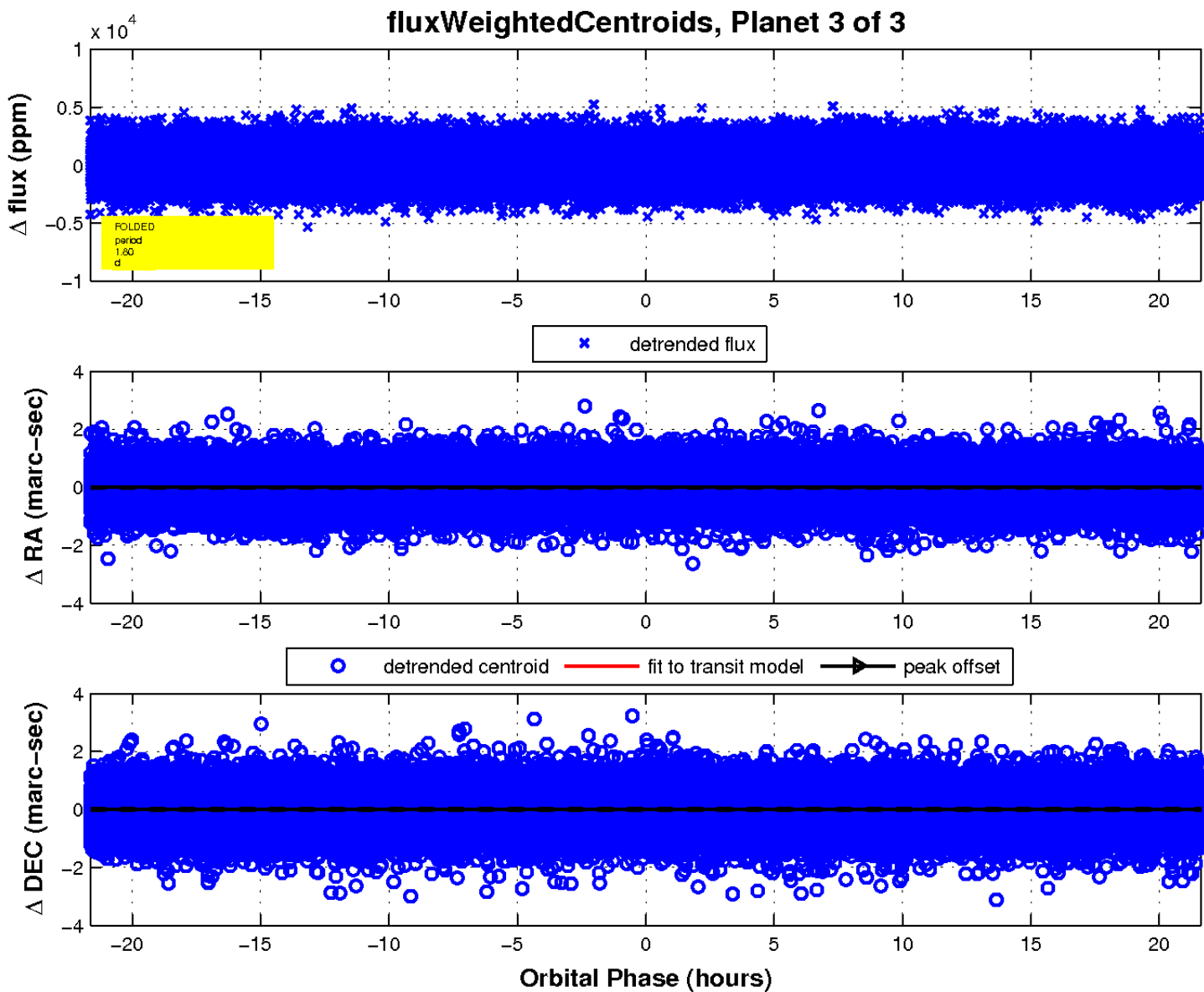
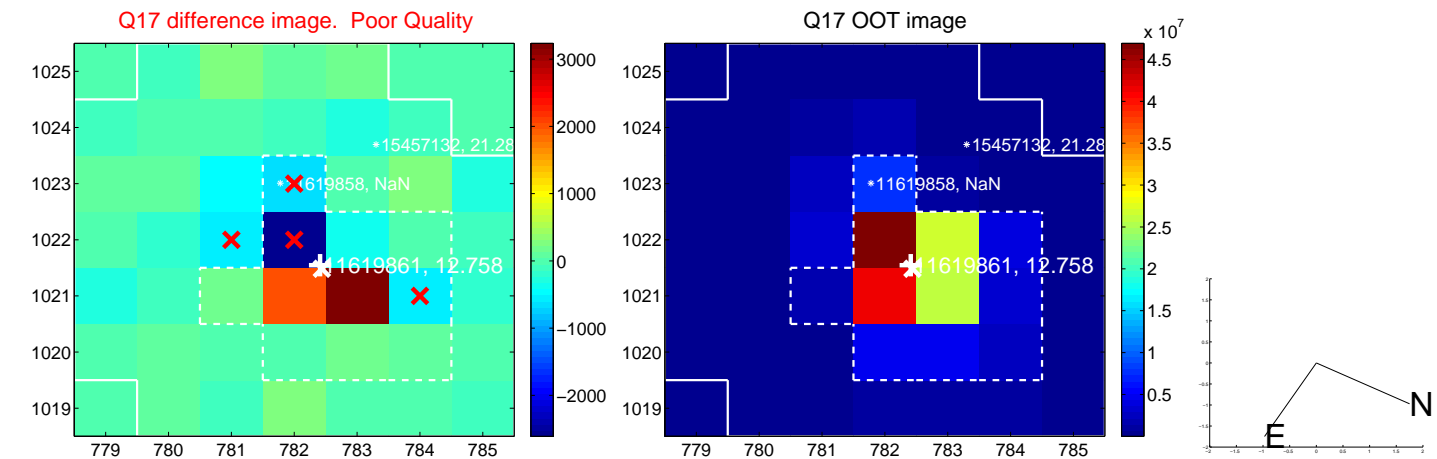
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

