

KIC 006381128

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})
006381128-01	OBS	No	0.612843	131.913526	60.7	1.287	13.3	13.8	2.10	7730	1.71	48079.45
006381128-02	OBS	No	0.612837	131.606907	49.3	1.299	10.9	11.7	2.10	7730	1.71	48080.12
006381128-03	OBS	No	1.424516	131.700437	63.9	5.183	8.4	10.9	2.10	7730	1.96	15614.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006381128-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006381128-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006381128-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_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.

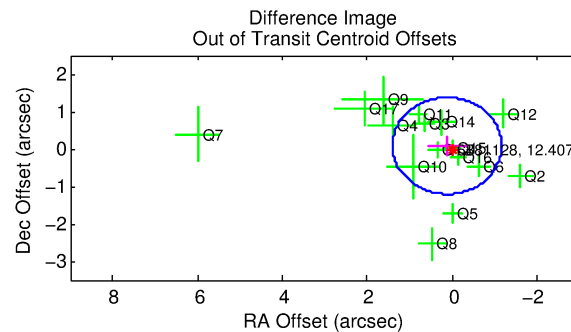
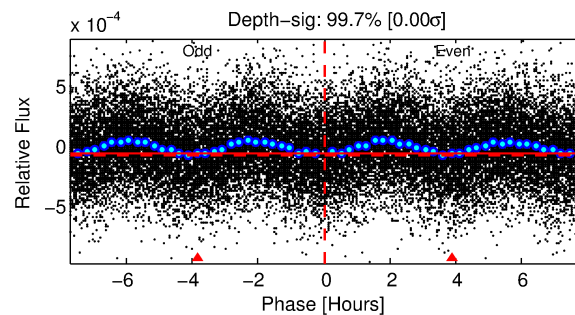
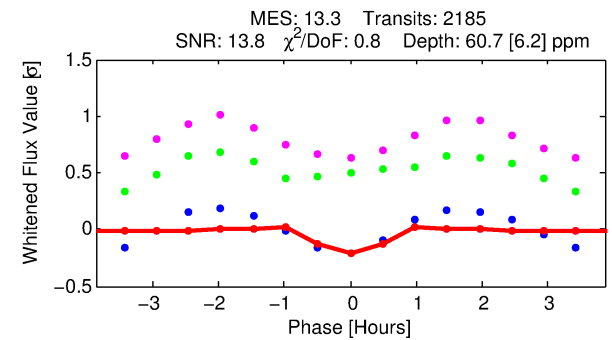
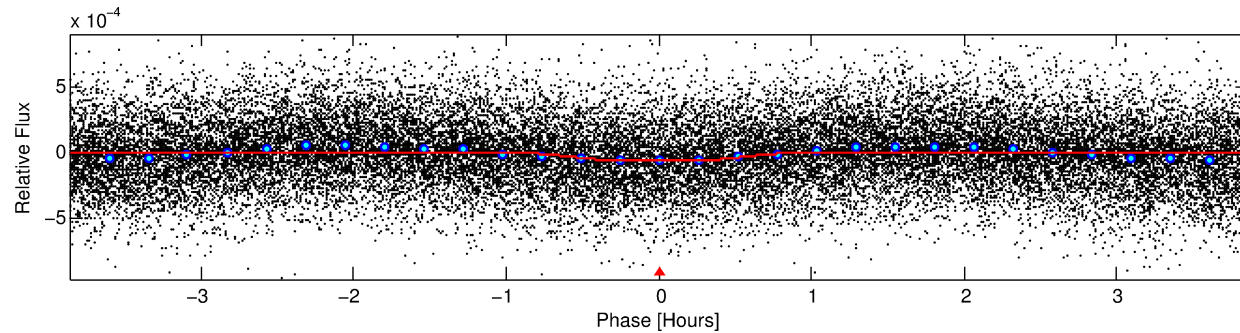
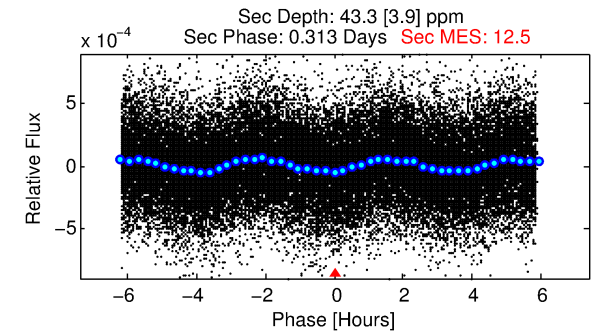
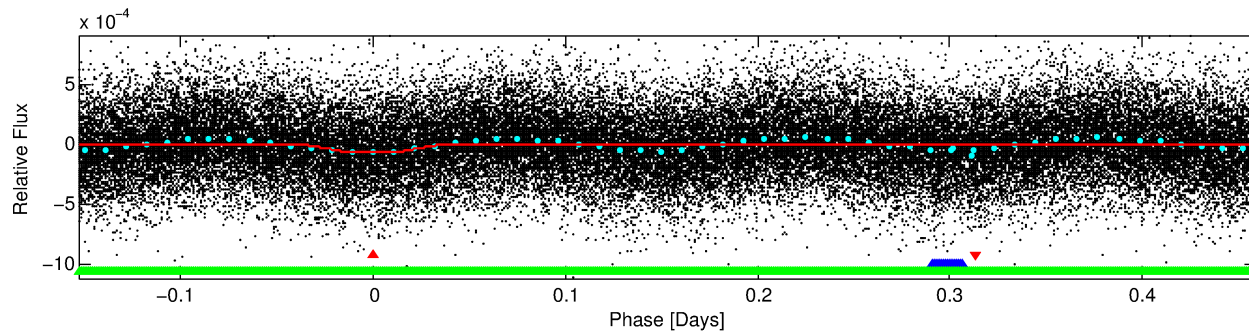
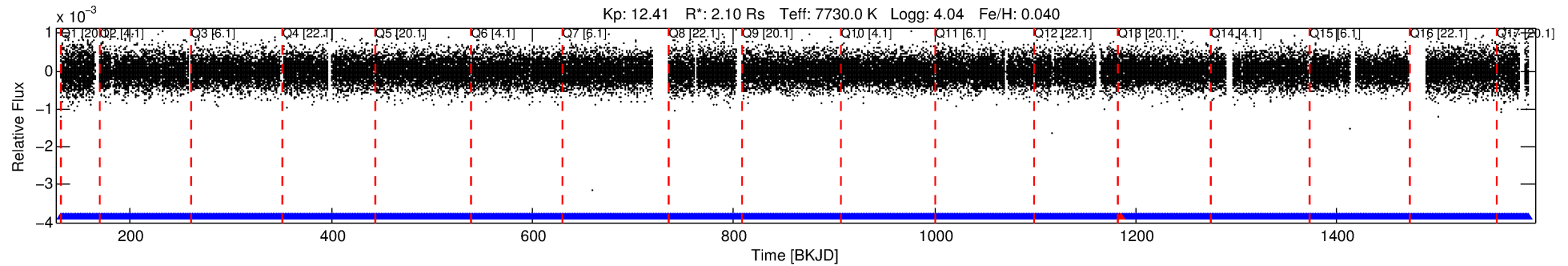
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006381128-01

No Significant Match Found

DV One-Page Summary

KIC: 6381128 Candidate: 1 of 3 Period: 0.613 d



DV Fit Results:

Period = 0.61284 [0.00001] d
Epoch = 131.9135 [0.0013] BKJD
Rp/R* = 0.0074 [0.0017]
a/R* = 3.27 [4.06]
b = 0.50 [2.09]
Seff = 48079.45 [16924.65]
Teq = 3776 [332] K
Rp = 1.71 [0.57] Re
a = 0.0171 [0.0036] AU
Ag = 2.40 [1.34] [1.05σ]
Teffp = 7267 [910] K [3.60σ]

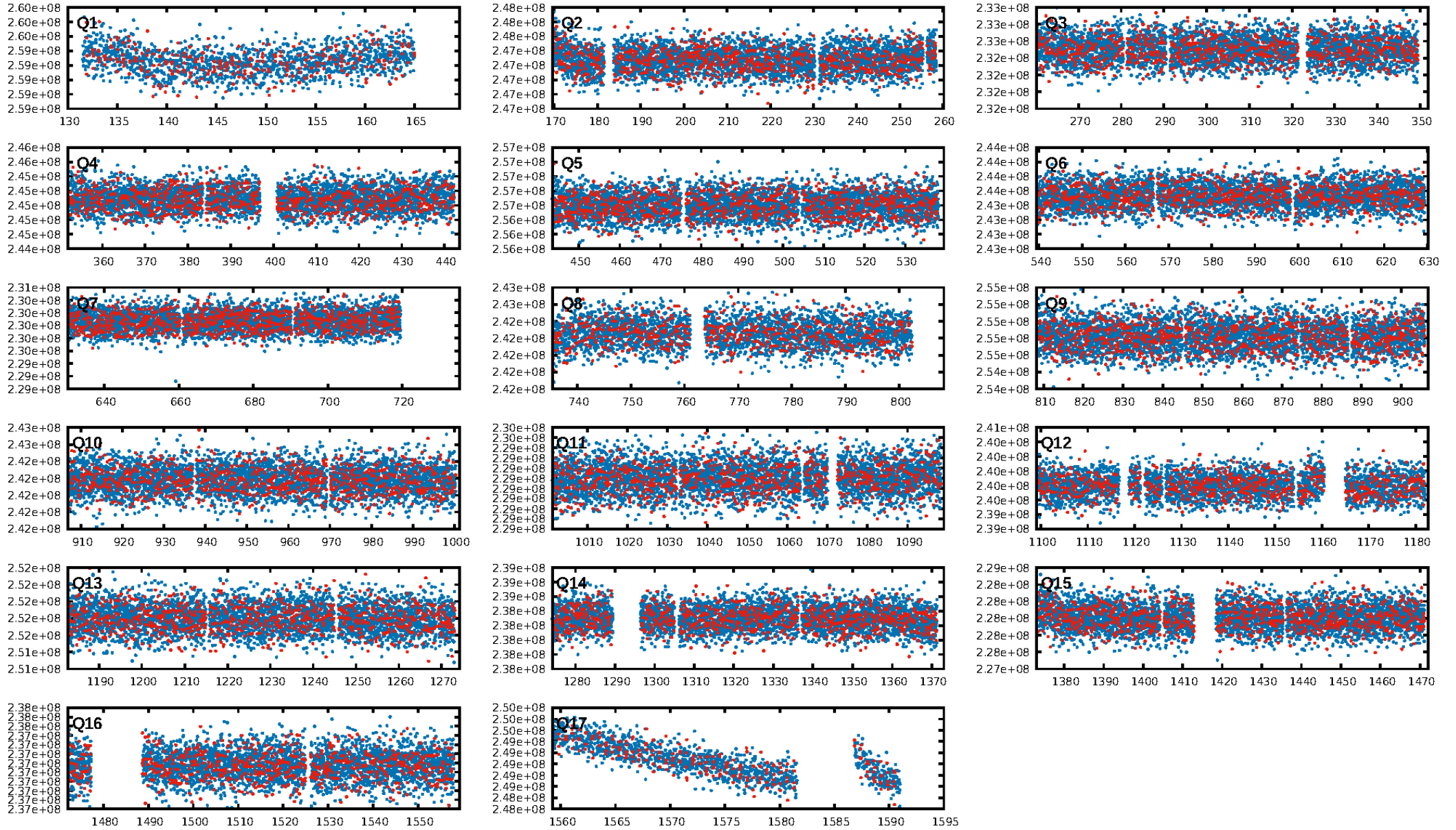
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: 100.0% [3.65σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 6.83e-22
RollingBand-fgt: 1.00 [2085/2086]
GhostDiagnostic-chr: 0.6937
Centroid-sig: 1.9%
Centroid-so: 0.396 arcsec [1.48σ]
OotOffset-rm: 0.143 arcsec [0.33σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-rm: 0.371 arcsec [1.38σ]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.94 [15/16]
DiffImageOverlap-fno: 1.00 [17/17]

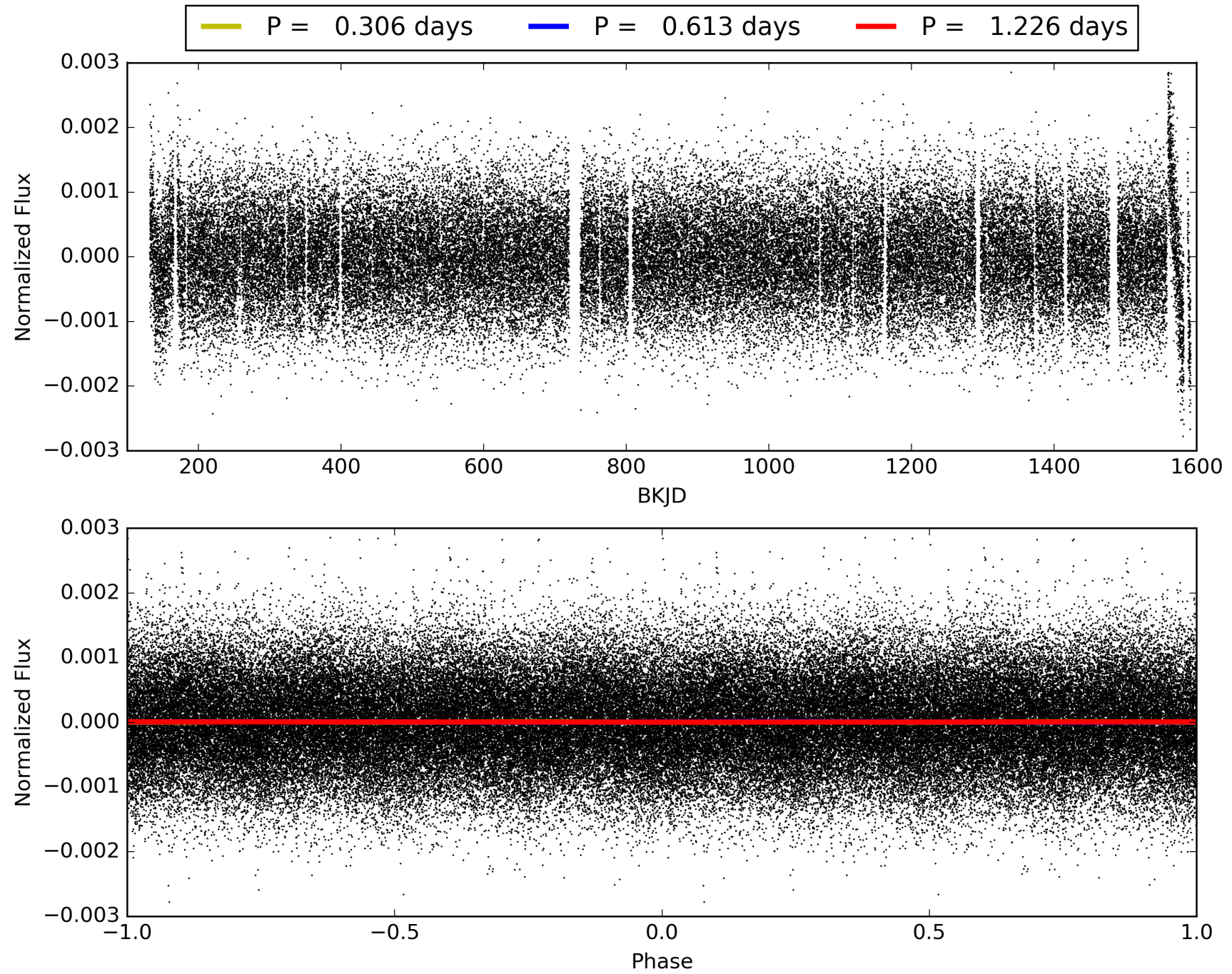
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:11:28 Z

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

TCE 006381128-01, PDC Light Curves

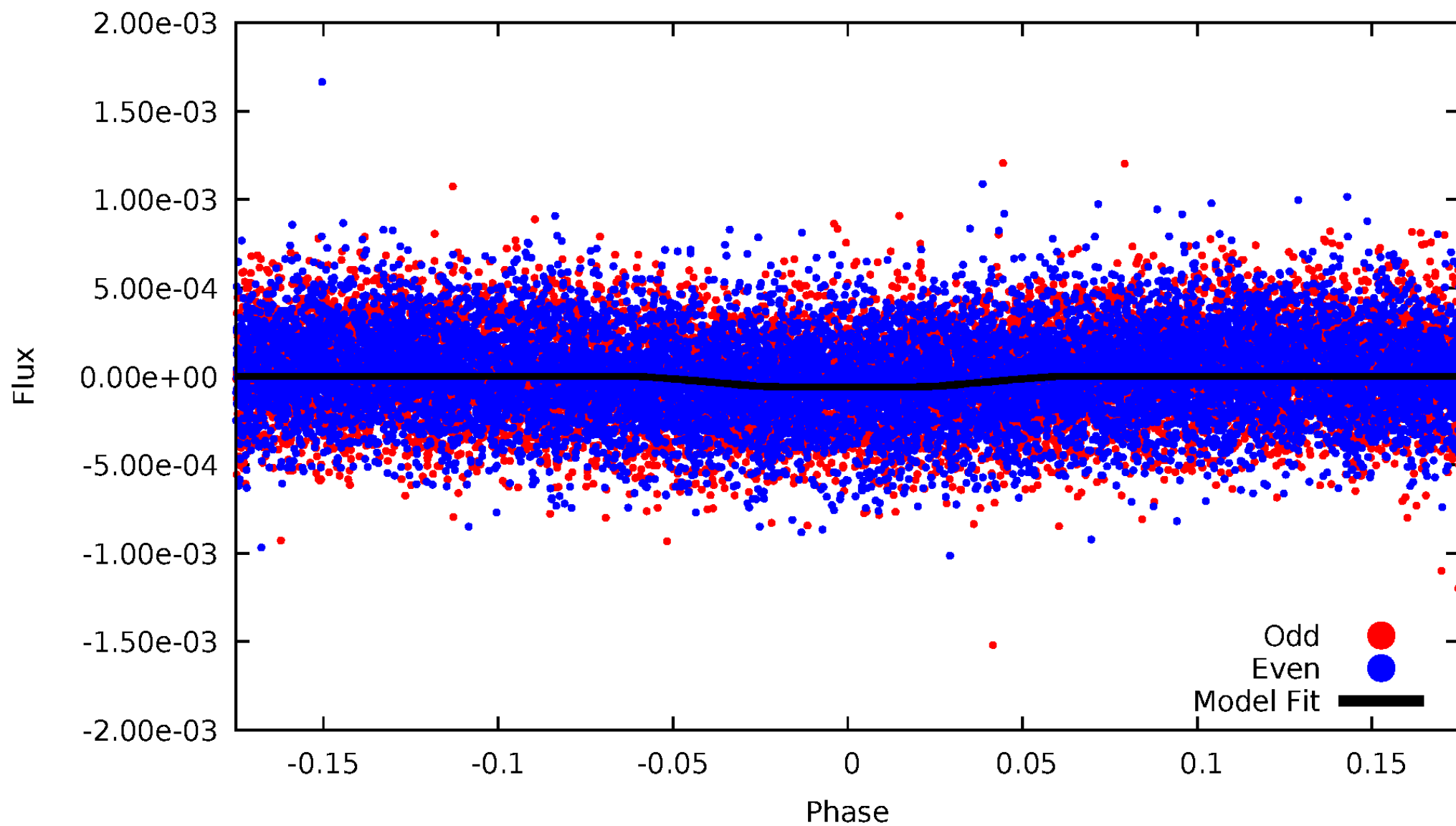


TCE 006381128-01



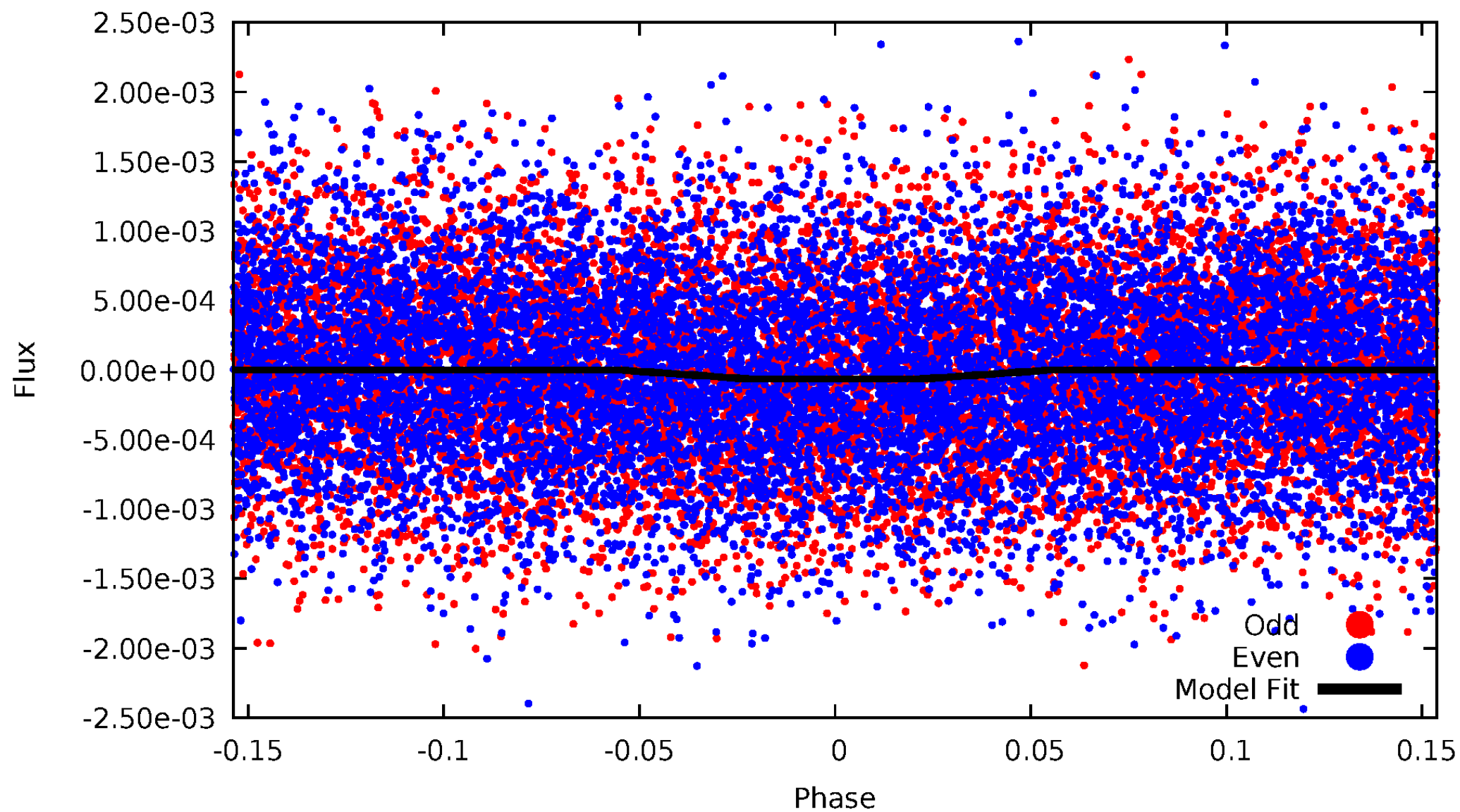
DV Odd/Even

TCE 006381128-01



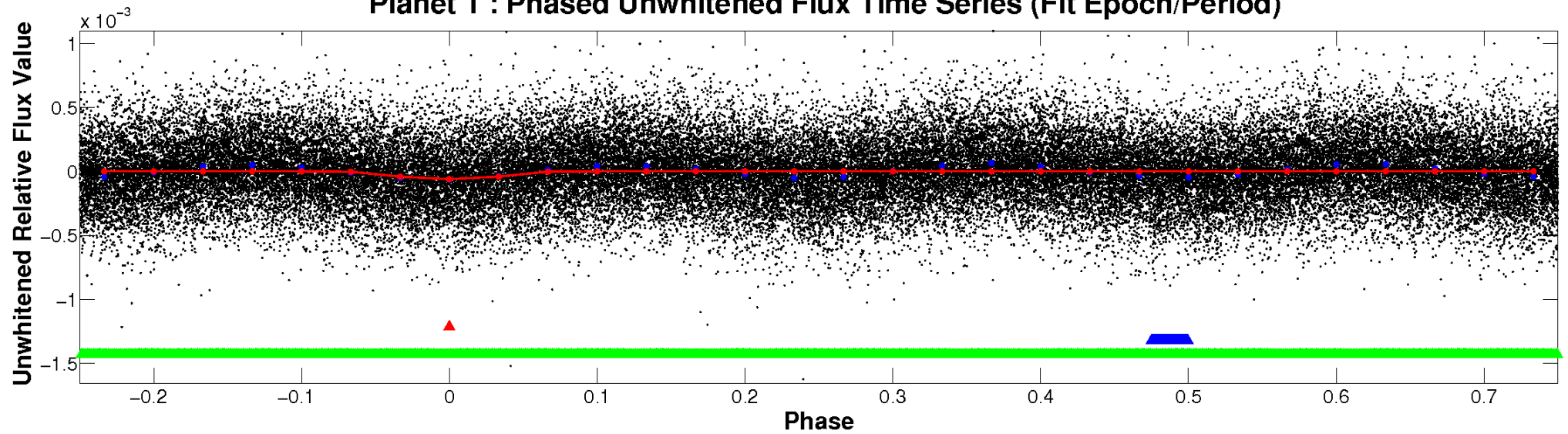
ALT Odd/Even

TCE 006381128-01

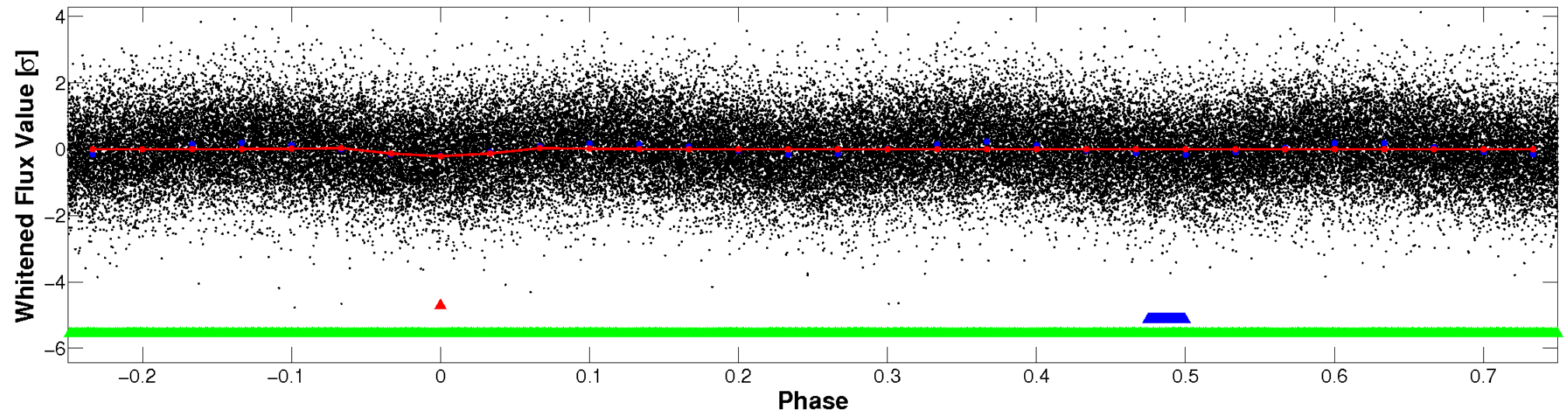


Non-Whitened Vs. Whitened Light Curve

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

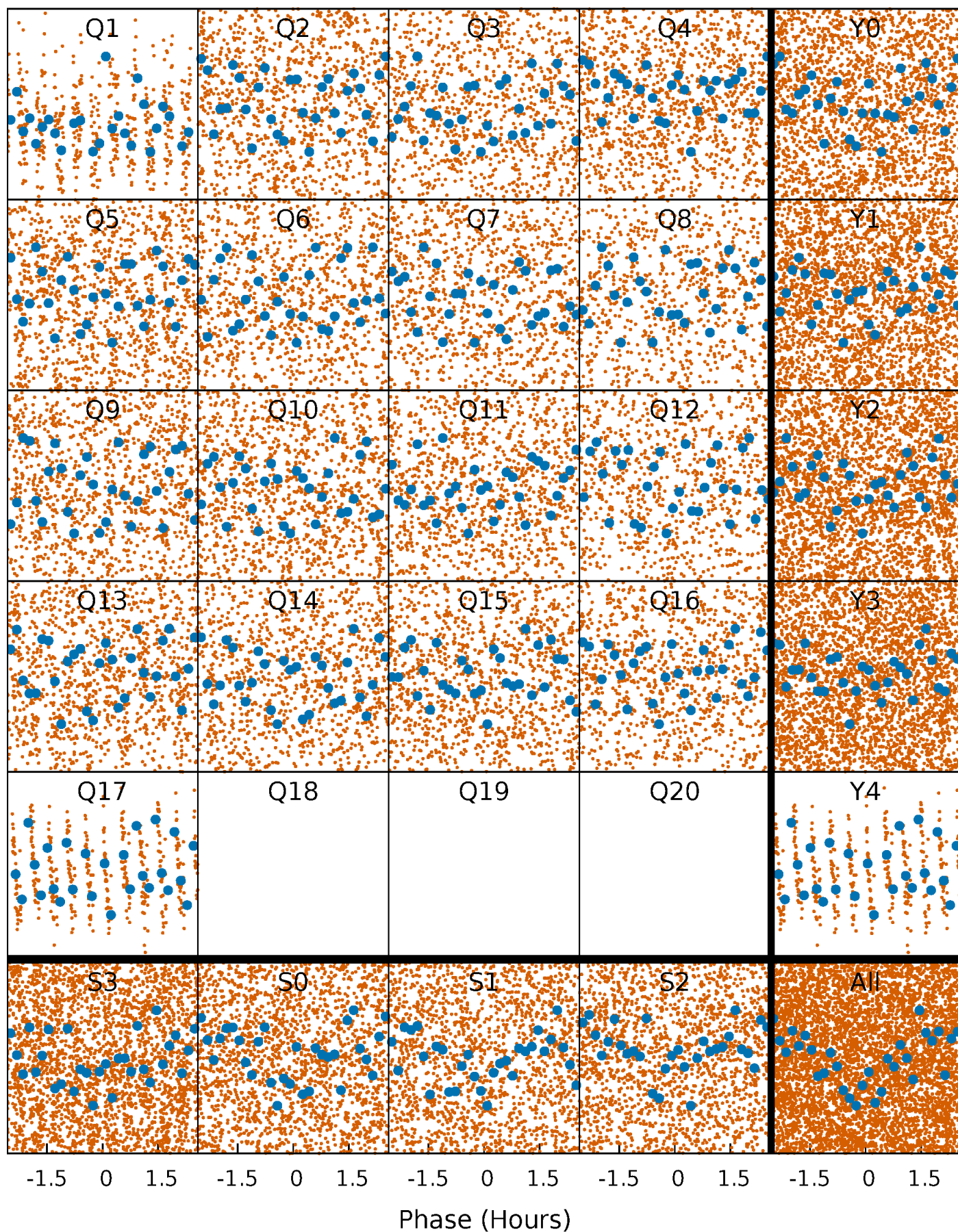


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



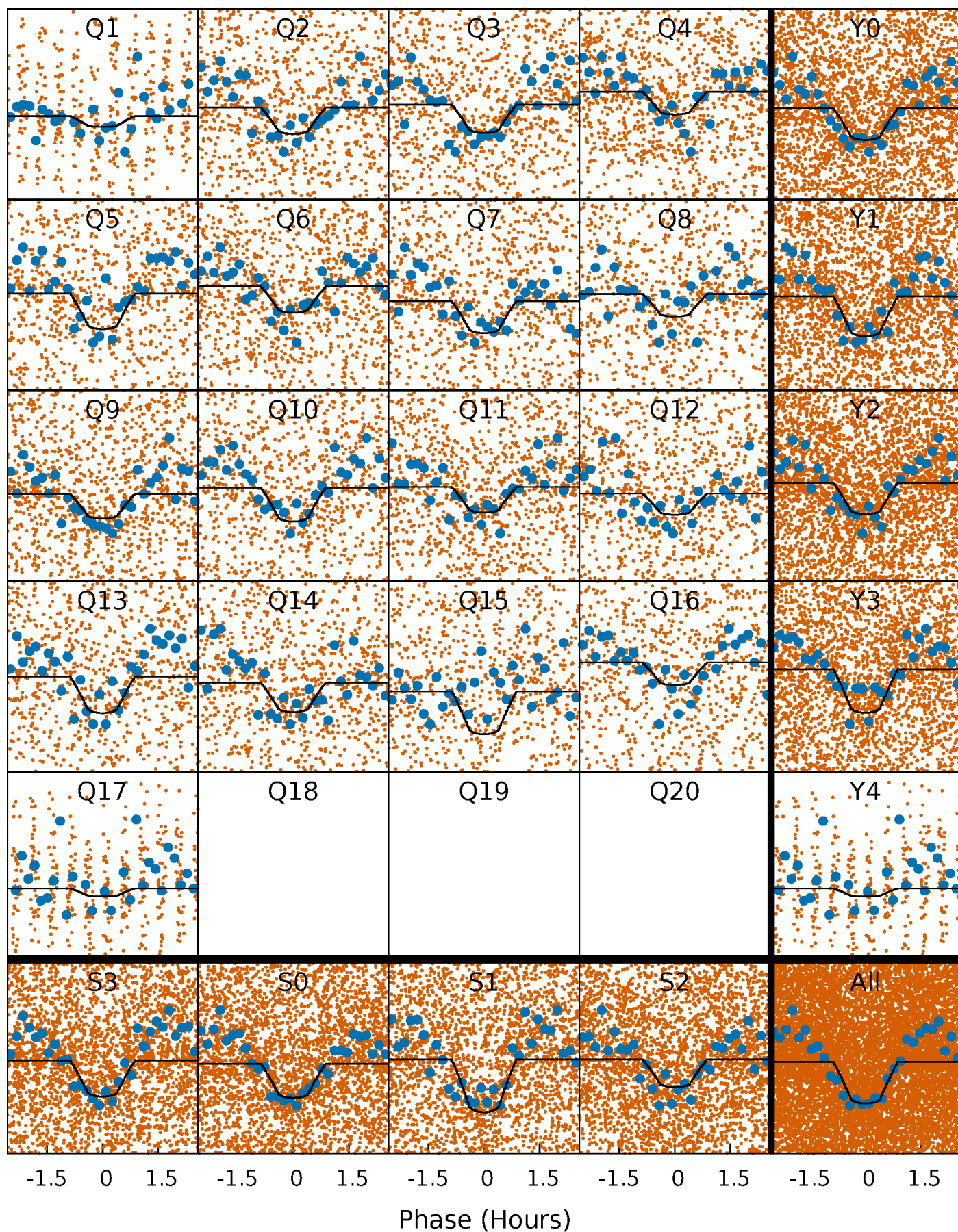
PDC Quarter-Phased Transit Curves

TCE 006381128-01 P= 0.612843 Days $T_0=131.913526$ (BKJD)



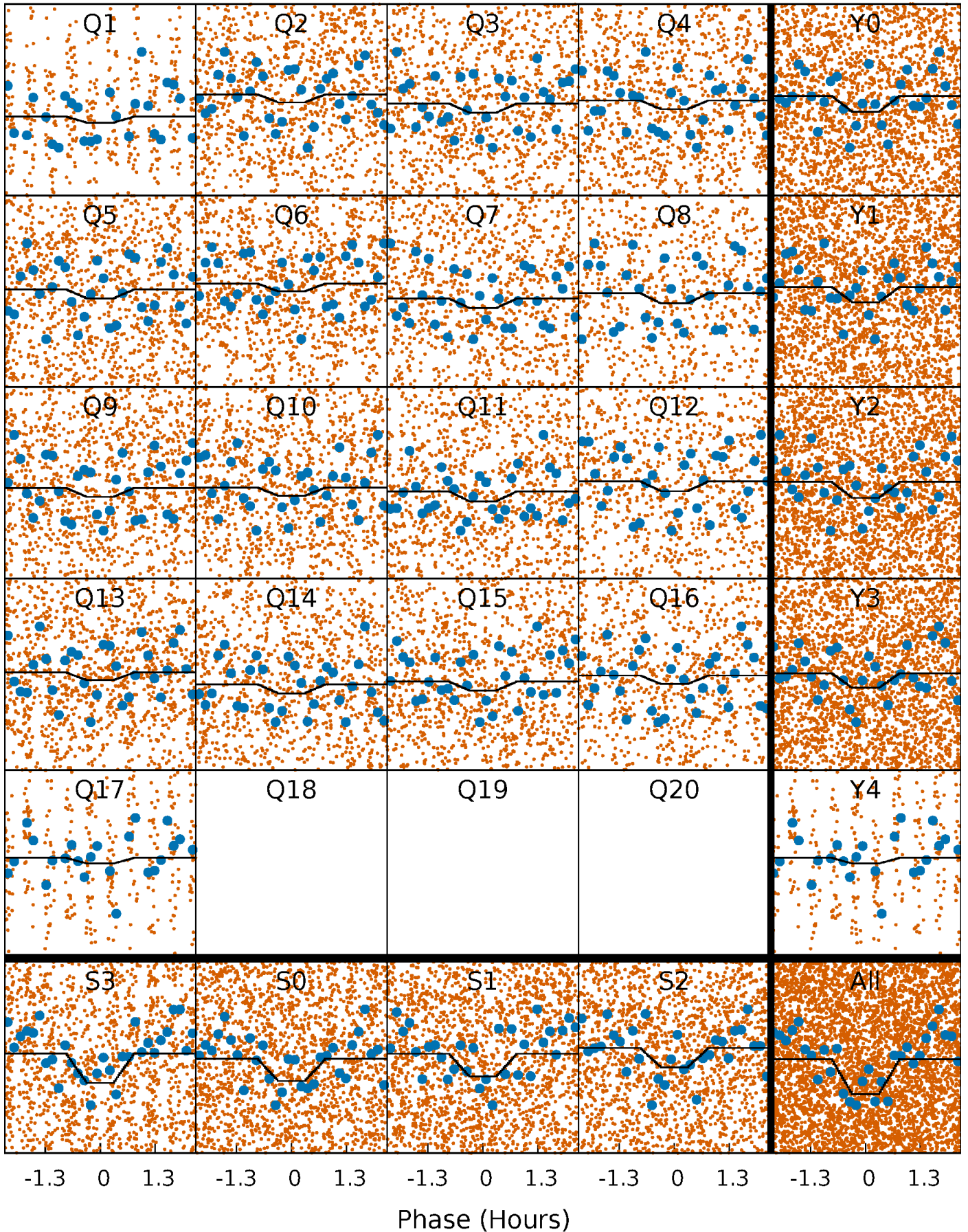
DV Quarter-Phased Transit Curves

TCE 006381128-01 P= 0.612843 Days $T_0=131.913526$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

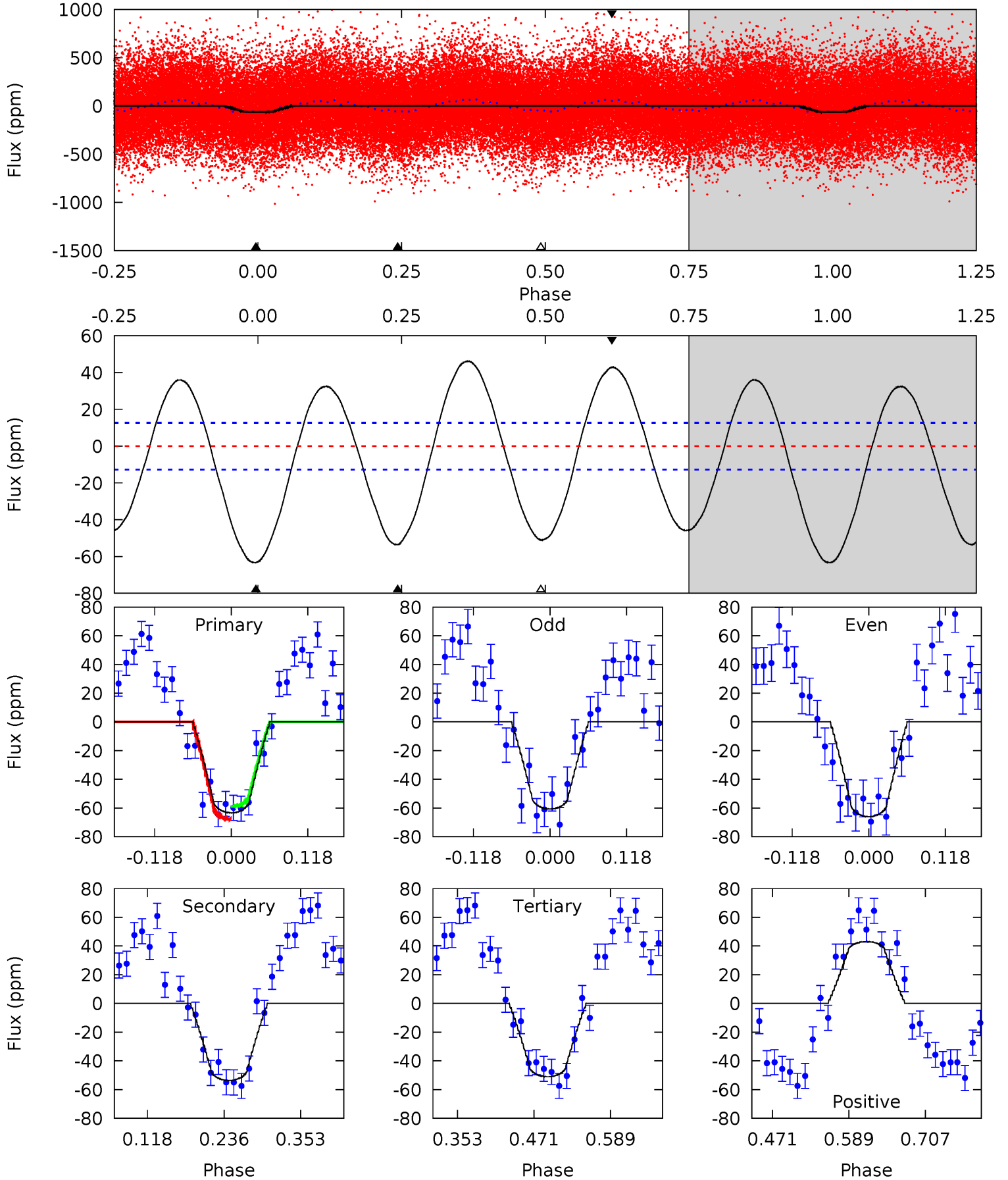
TCE 006381128-01 P= 0.612841 Days $T_0=131.913524$ (BKJD)



DV Model-Shift Uniqueness Test

006381128-01, P = 0.612843 Days, E = 131.300683 Days

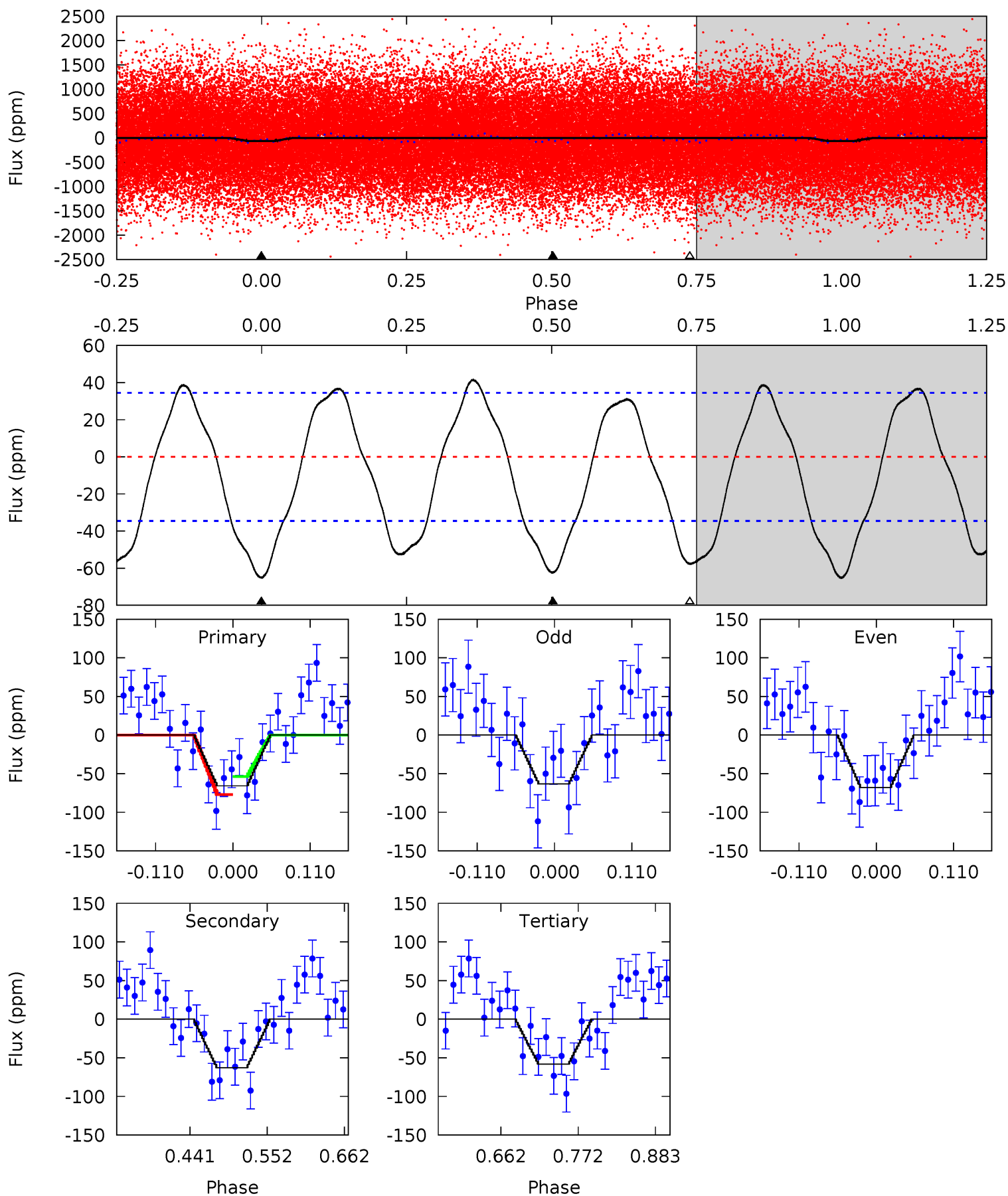
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.5	19.0	18.1	15.3	4.53	1.56	11.5	4.38	7.21	0.92	3.76	0.94	0.95	0.42	1.58



Alt Model-Shift Uniqueness Test

006381128-01, P = 0.612841 Days, E = 131.300683 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.65	8.28	7.66	0	4.54	1.60	4.39	0.99	8.65	0.61	8.28	0.31	0.89	0.39	1.53



Stellar Parameters For KIC 006381128

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7730^{+214}_{-349}	$4.045^{+0.165}_{-0.165}$	$0.040^{+0.150}_{-0.400}$	$2.100^{+0.519}_{-0.519}$	$1.784^{+0.170}_{-0.315}$	$0.272^{+0.271}_{-0.118}$
	+3%/-5%	+4%/-4%	+375%/-1000%	+25%/-25%	+10%/-18%	+100%/-44%
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 006381128-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-54 ± 3	$1.69^{+0.50}_{-0.45}$	5298^{+376}_{-410}	7472^{+1324}_{-1032}	$2.986^{+2.485}_{-1.212}$
Alt.	-63 ± 8	$1.86^{+0.49}_{-0.44}$	5268^{+390}_{-378}	7328^{+1311}_{-879}	$2.890^{+2.067}_{-1.130}$

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 $A_{obs} \gg 1.0$

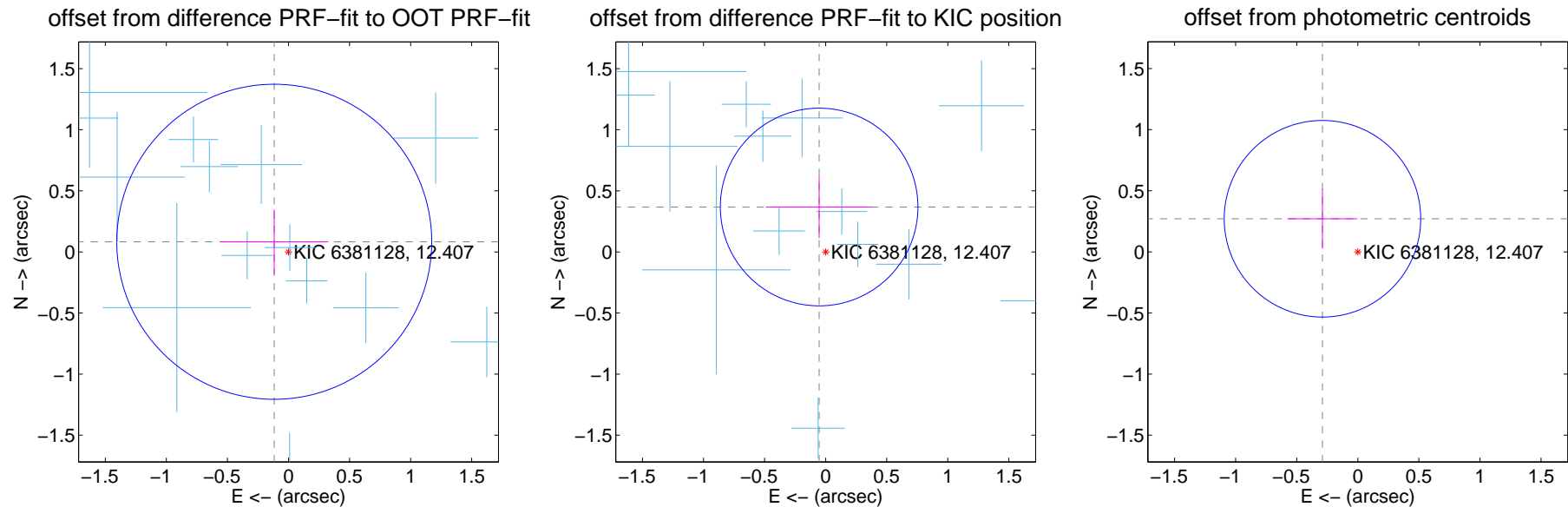
DV Centroid Data

Supplemental centroid analysis for 006381128-01. Kepler magnitude: 12.41. Transit SNR 13.81

There are 15 quarters with good PRF difference image offsets

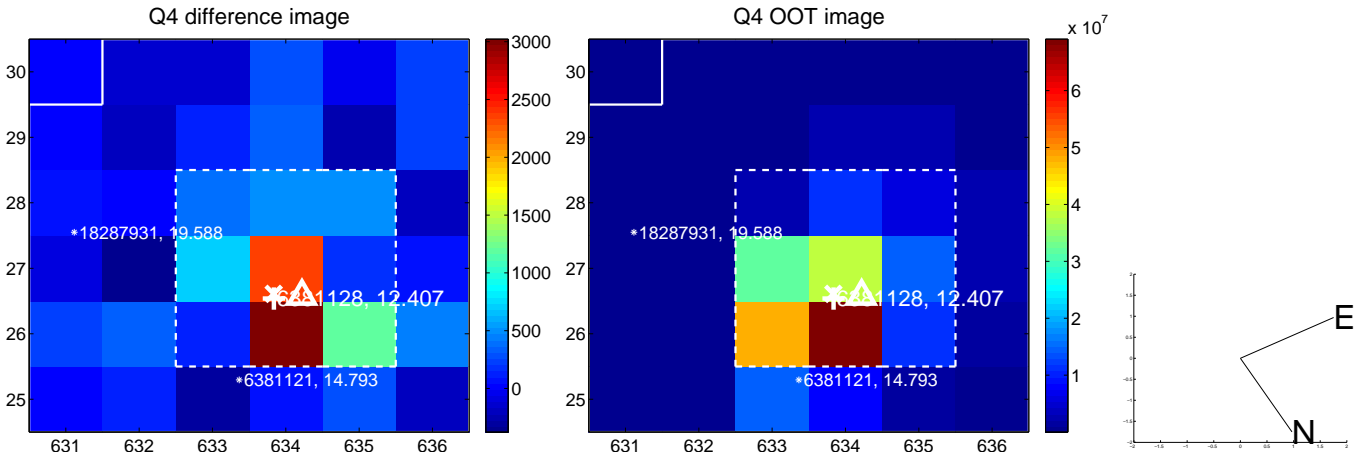
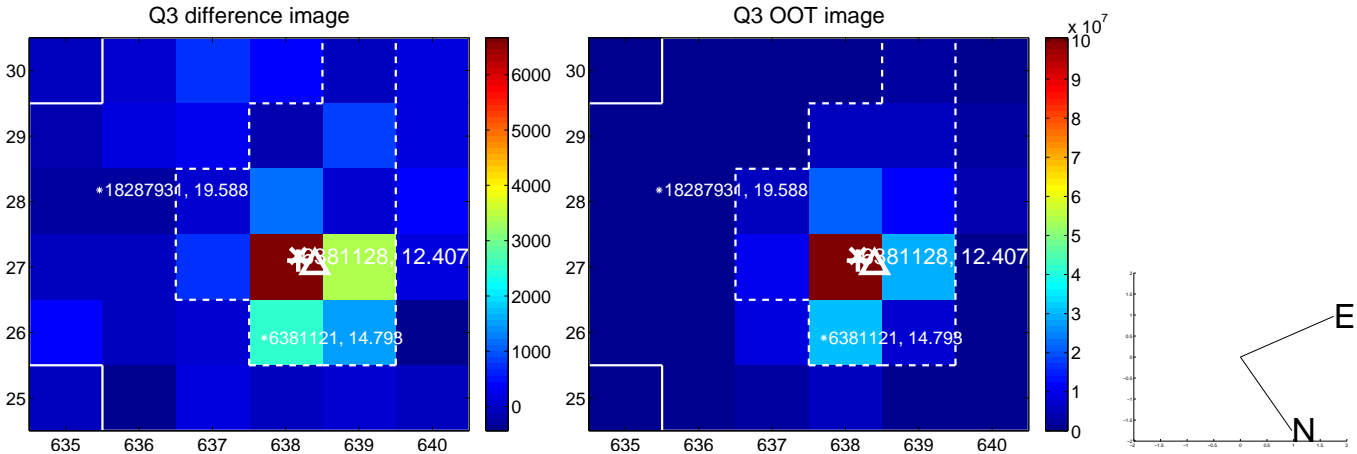
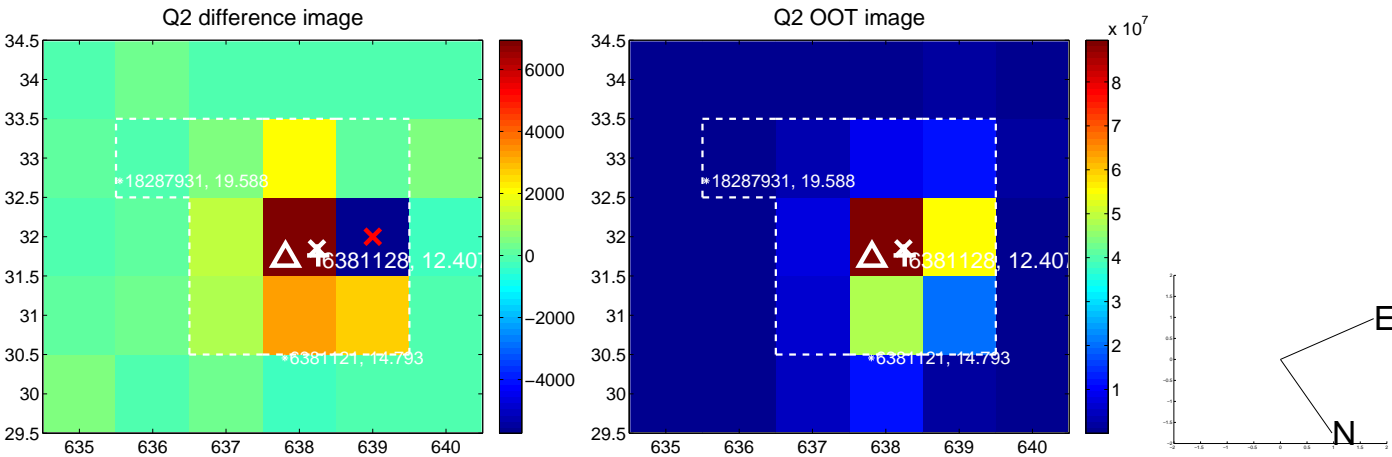
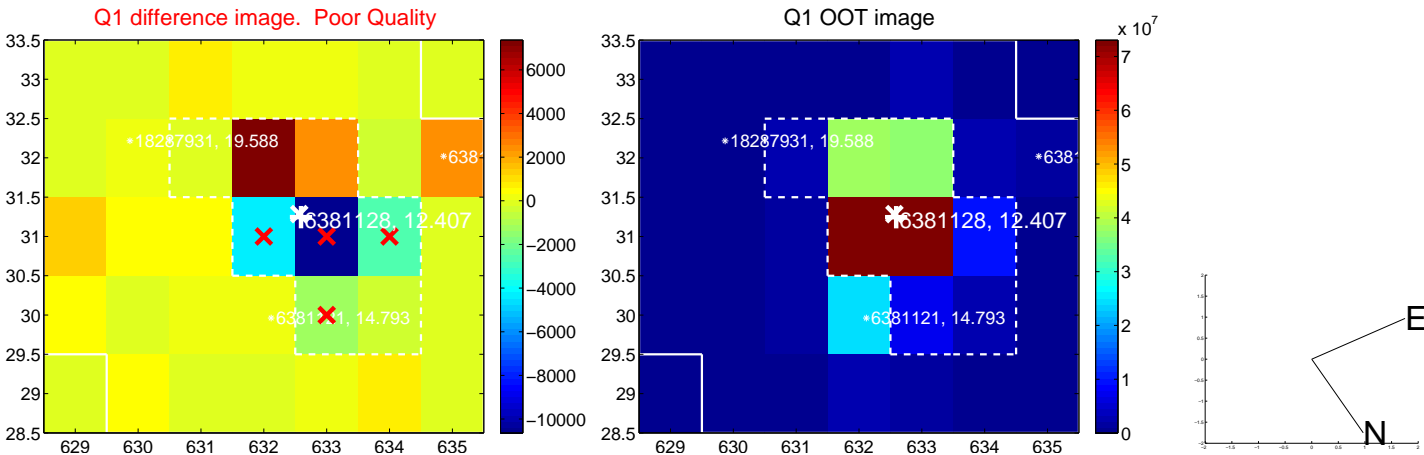
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.143 ± 0.430	0.33	0.117 ± 0.444	0.083 ± 0.264
PRF-fit source offset from KIC position	0.371 ± 0.270	1.38	0.054 ± 0.437	0.368 ± 0.255
photometric centroid source offset	0.40 ± 0.27	1.48	0.29 ± 0.29	0.27 ± 0.24

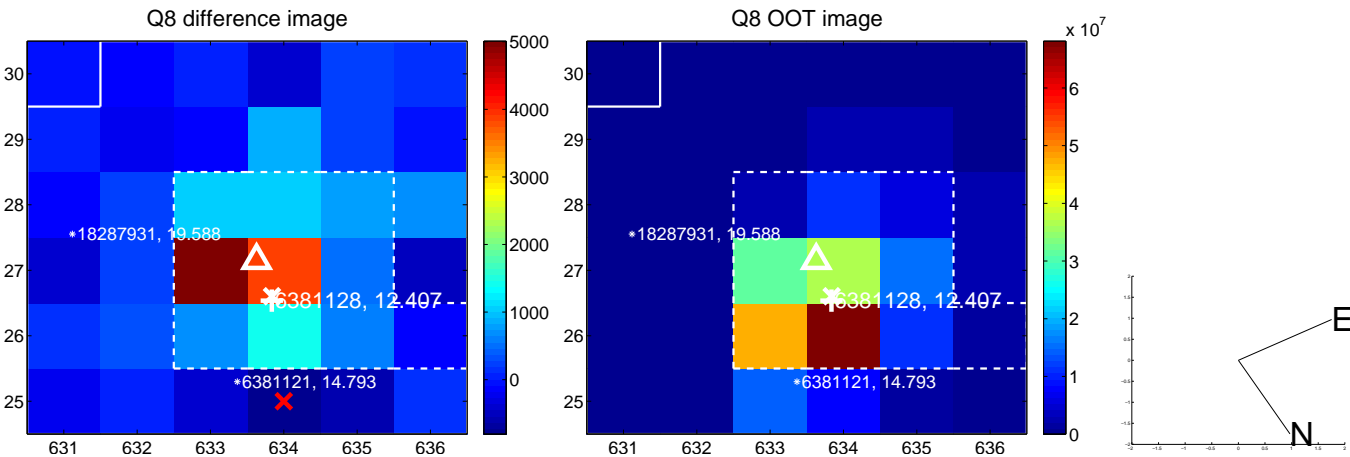
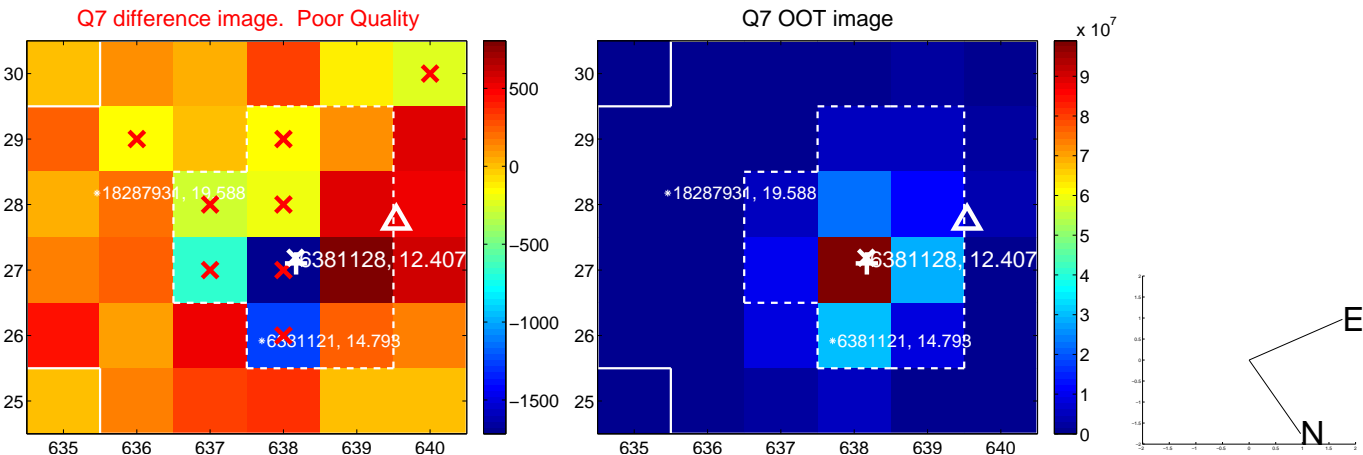
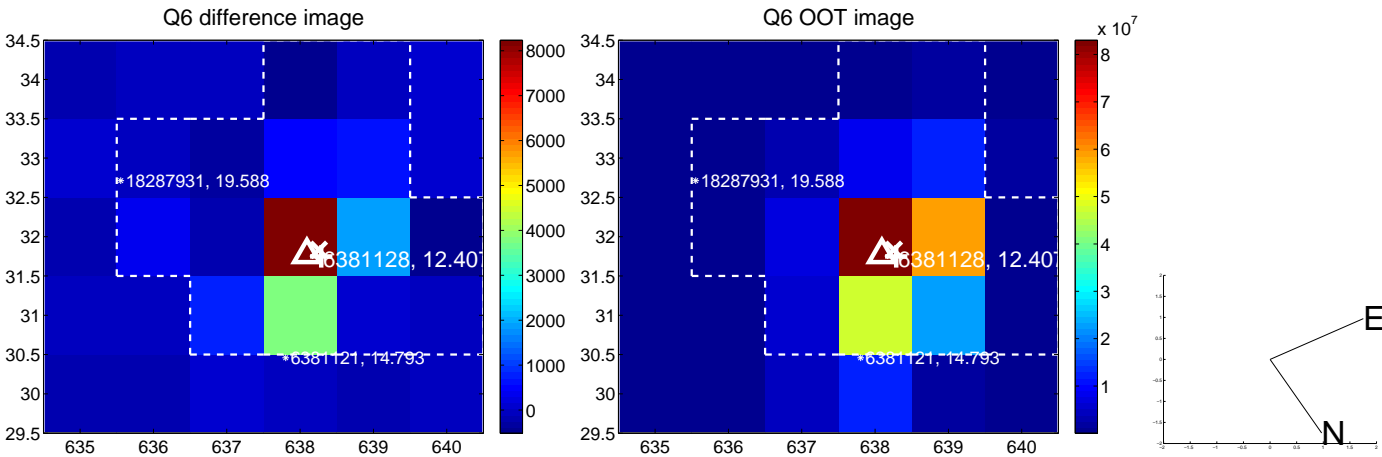
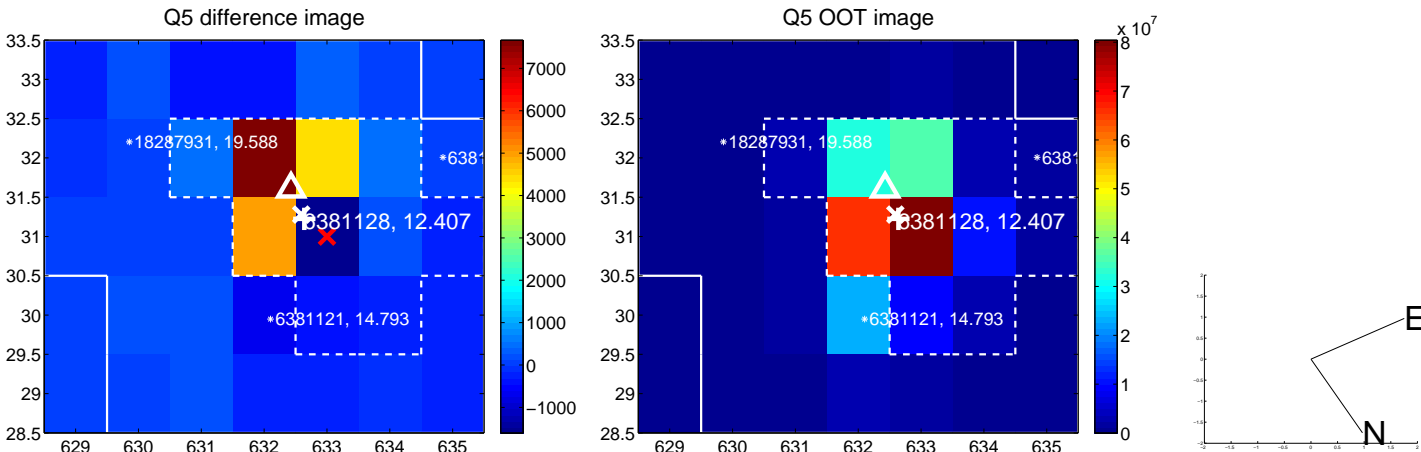


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

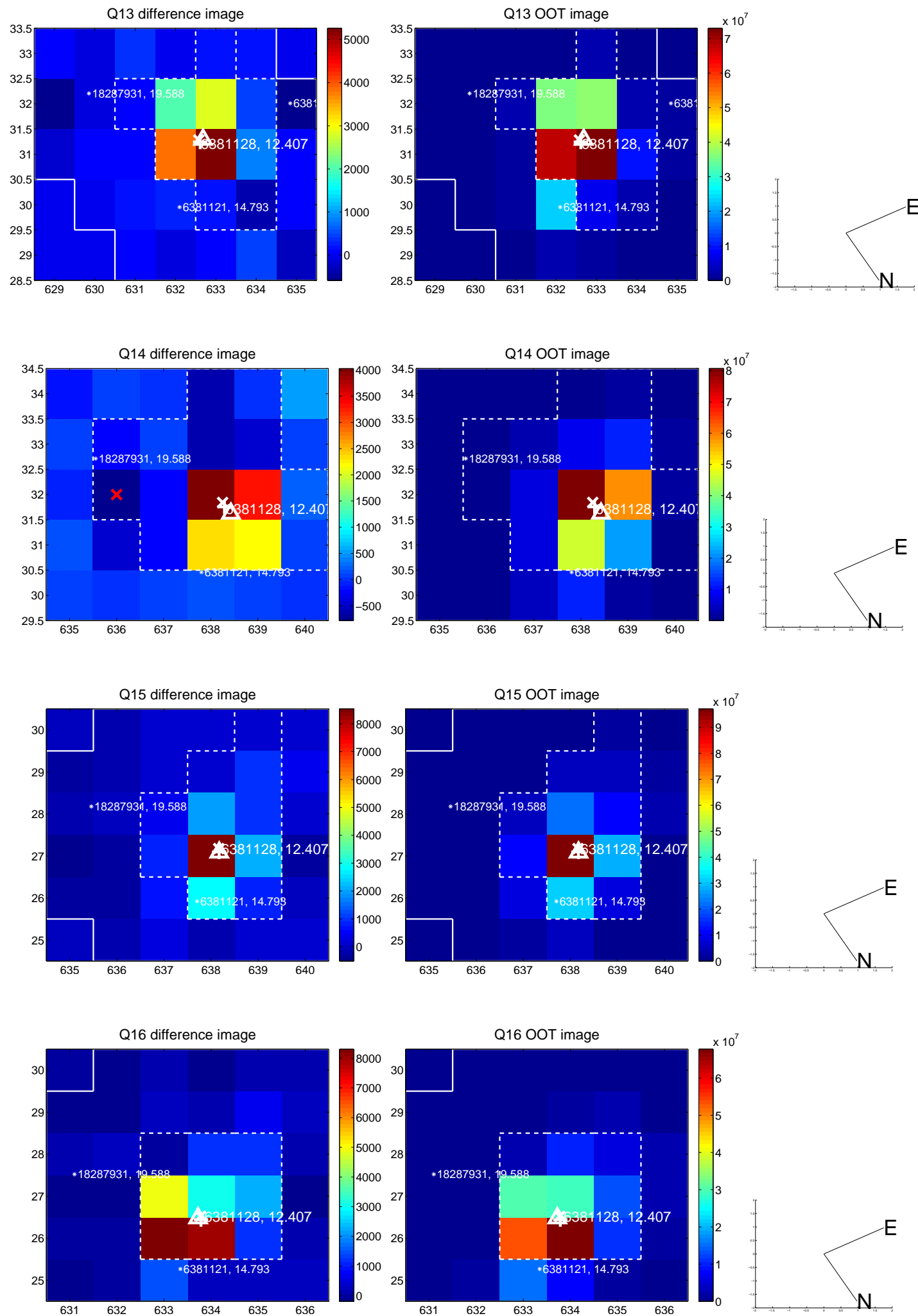
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



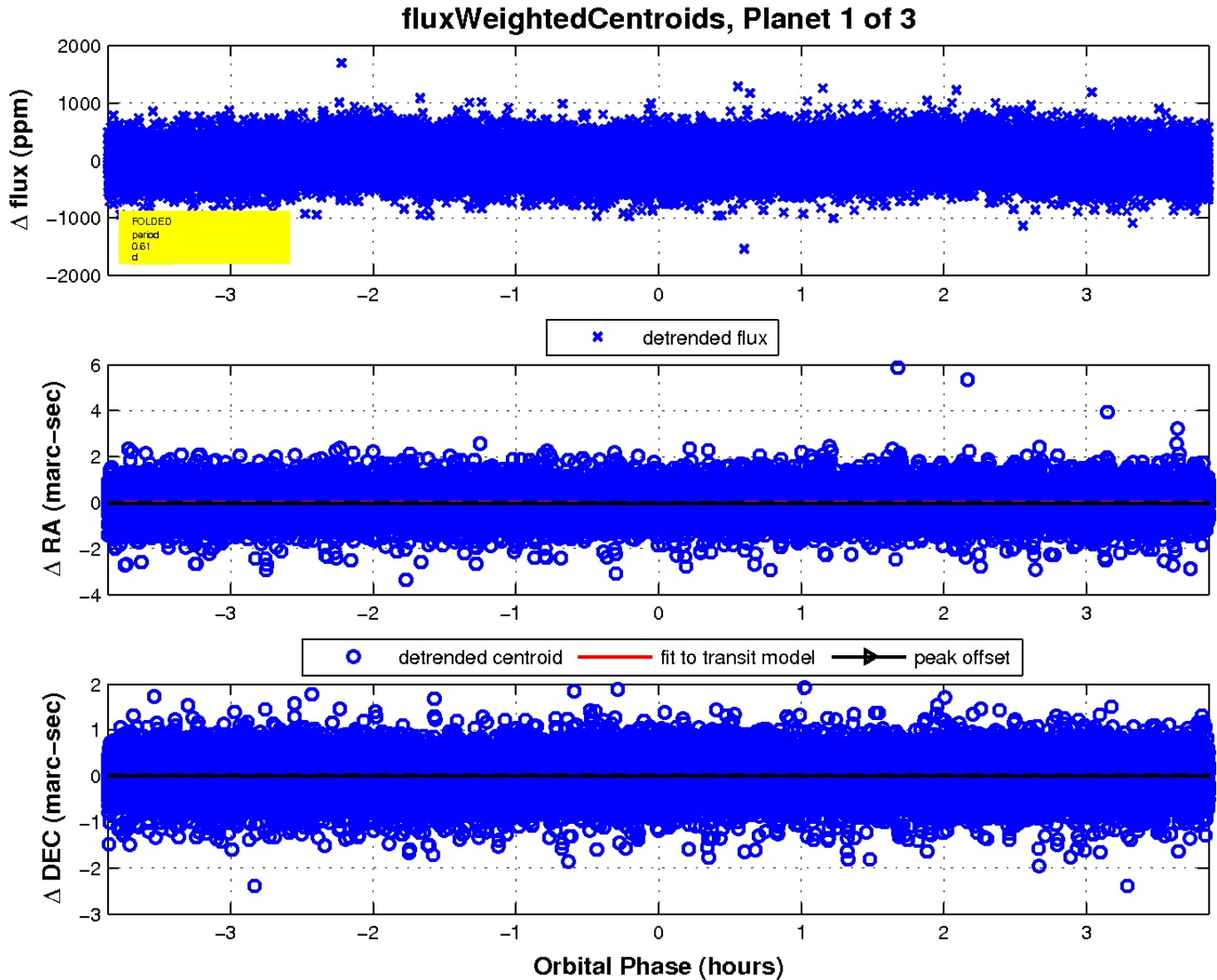
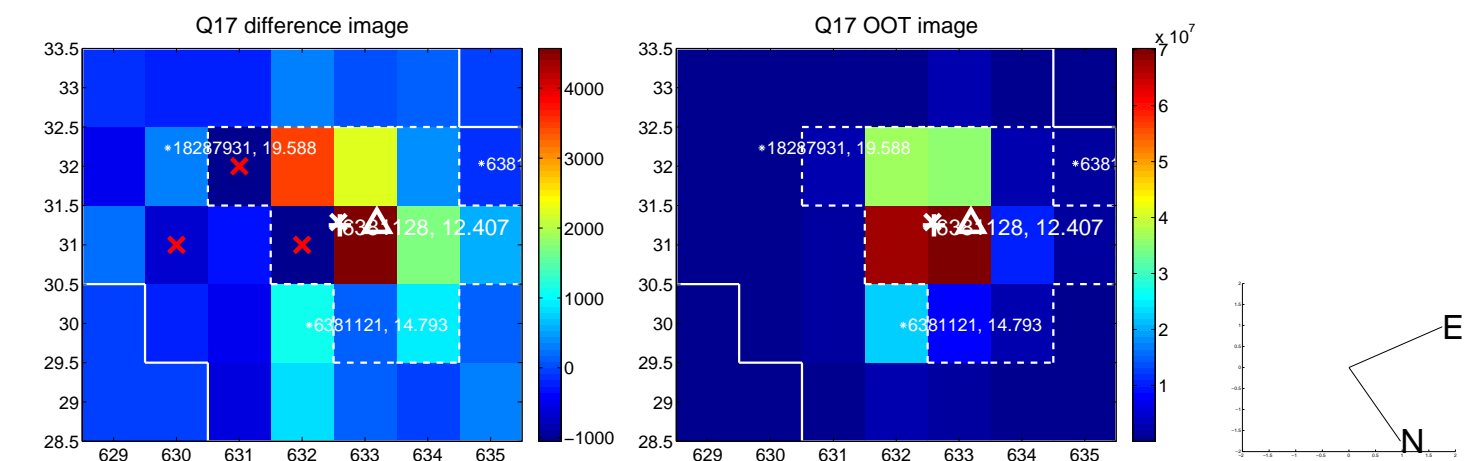
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

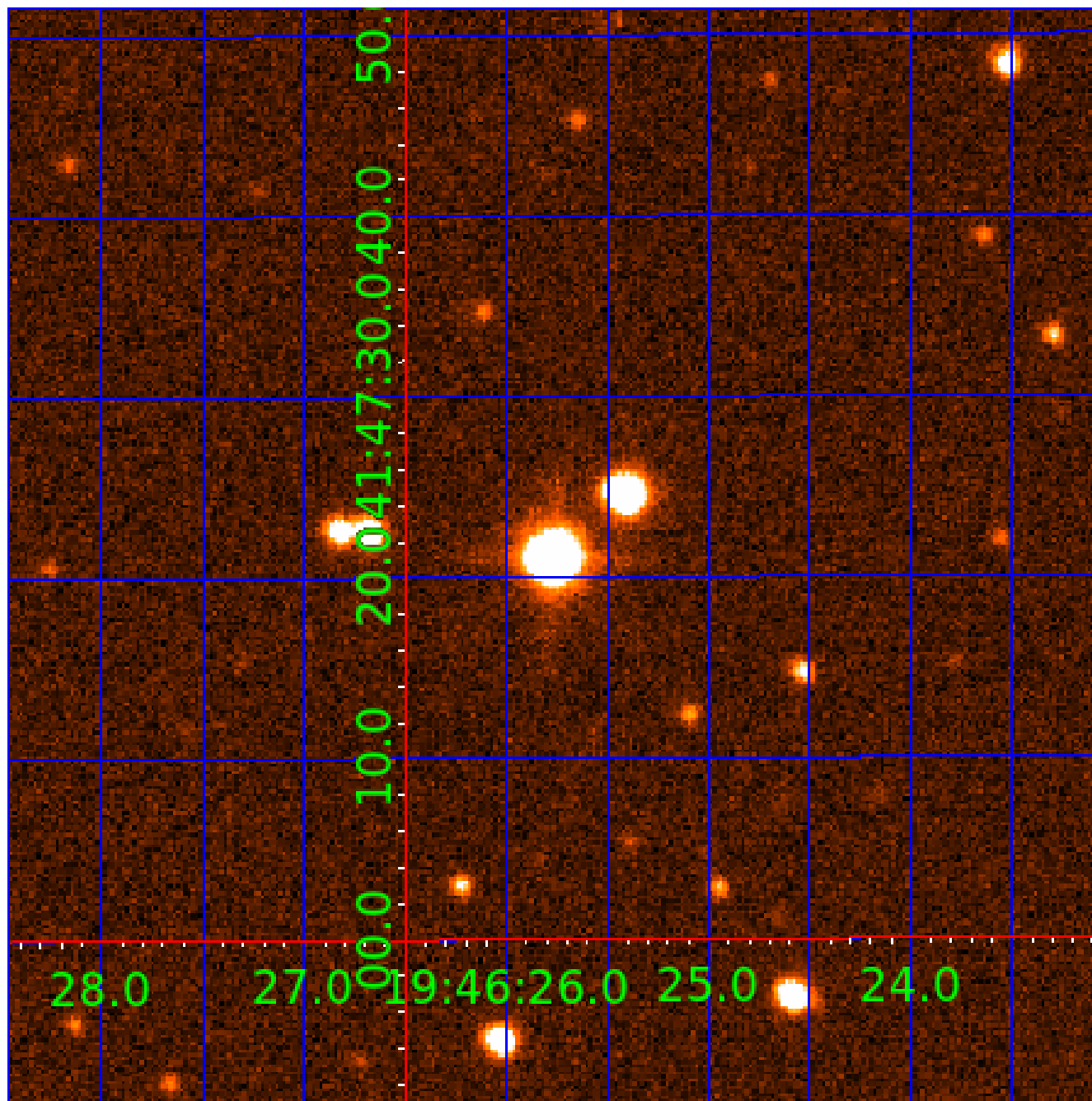


white \times : KIC target position; $+$: OOT centroid; Δ : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006381128

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})
006381128-01	OBS	No	0.612843	131.913526	60.7	1.287	13.3	13.8	2.10	7730	1.71	48079.45
006381128-02	OBS	No	0.612837	131.606907	49.3	1.299	10.9	11.7	2.10	7730	1.71	48080.12
006381128-03	OBS	No	1.424516	131.700437	63.9	5.183	8.4	10.9	2.10	7730	1.96	15614.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006381128-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006381128-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006381128-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_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.

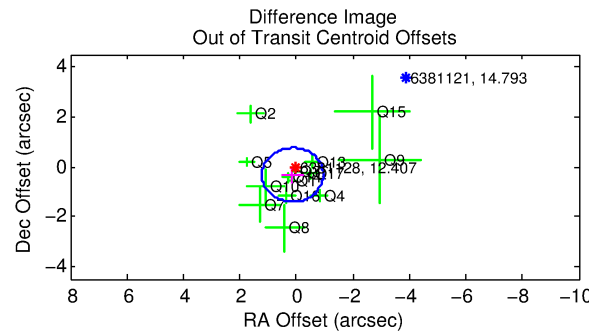
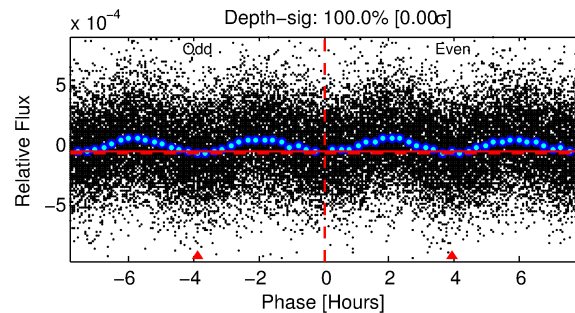
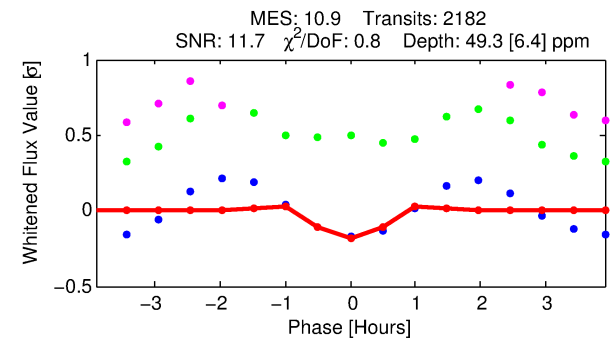
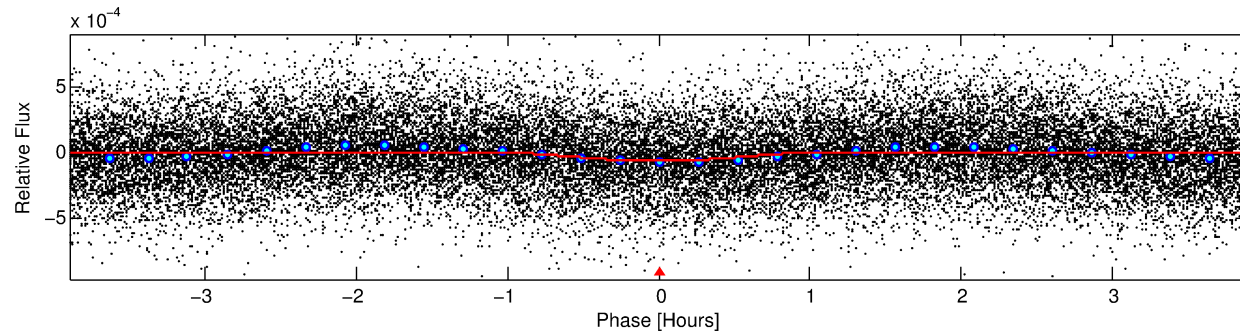
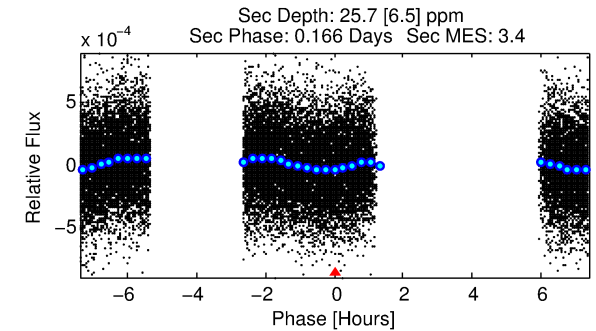
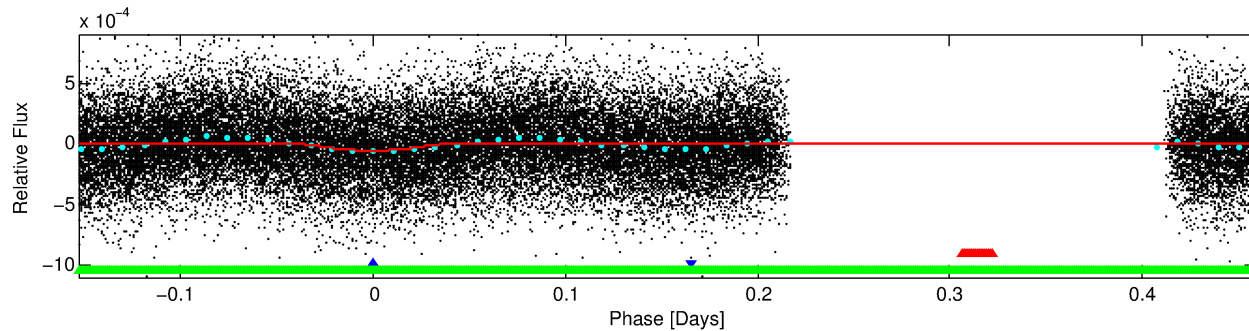
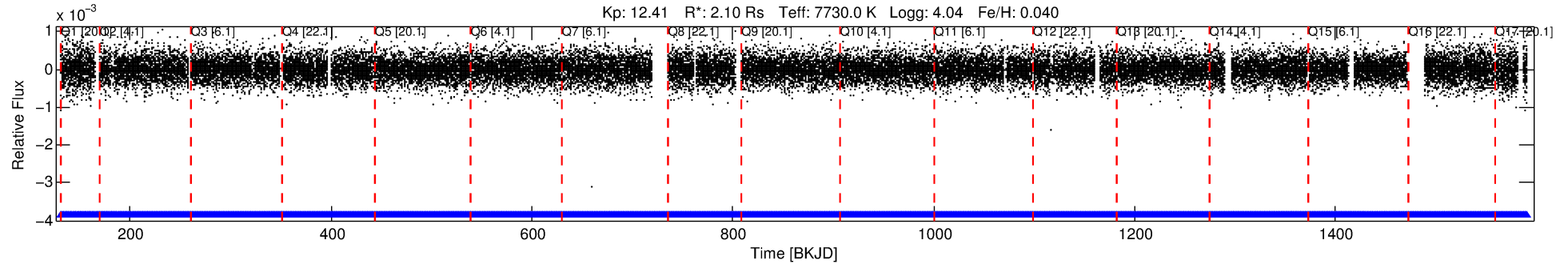
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006381128-02

No Significant Match Found

DV One-Page Summary

KIC: 6381128 Candidate: 2 of 3 Period: 0.613 d



DV Fit Results:

Period = 0.61284 [0.00001] d
Epoch = 131.6069 [0.0016] BKJD
Rp/R* = 0.0075 [0.0020]
a/R* = 1.88 [2.26]
b = 0.90 [0.36]
Seff = 48080.12 [16924.89]
Teq = 3776 [332] K
Rp = 1.71 [0.62] Re
a = 0.0171 [0.0036] AU
Ag = 1.41 [0.93] [0.45σ]
Teffp = 6367 [971] K [2.52σ]

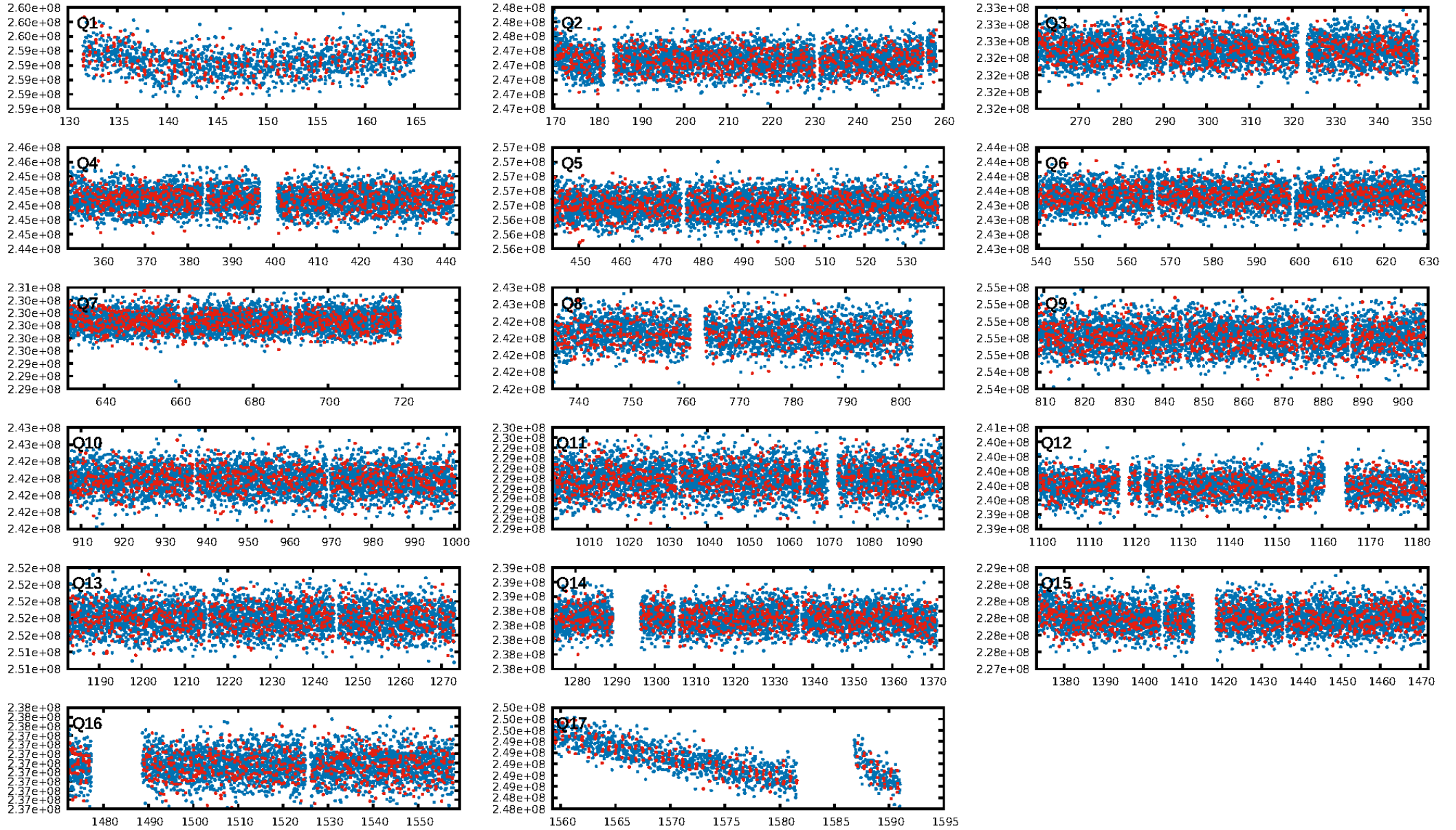
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.29e-14
RollingBand-fgt: 1.00 [2083/2083]
GhostDiagnostic-chr: 1.867
Centroid-sig: 0.1%
Centroid-so: 0.735 arcsec [2.12σ]
OotOffset-rm: 0.358 arcsec [0.99σ]
KicOffset-rm: 0.124 arcsec [0.32σ]
OotOffset-st: 3/3/3/5 [14]
KicOffset-st: 3/3/3/5 [14]
DiffImageQuality-fgm: 0.64 [9/14]
DiffImageOverlap-fno: 1.00 [17/17]

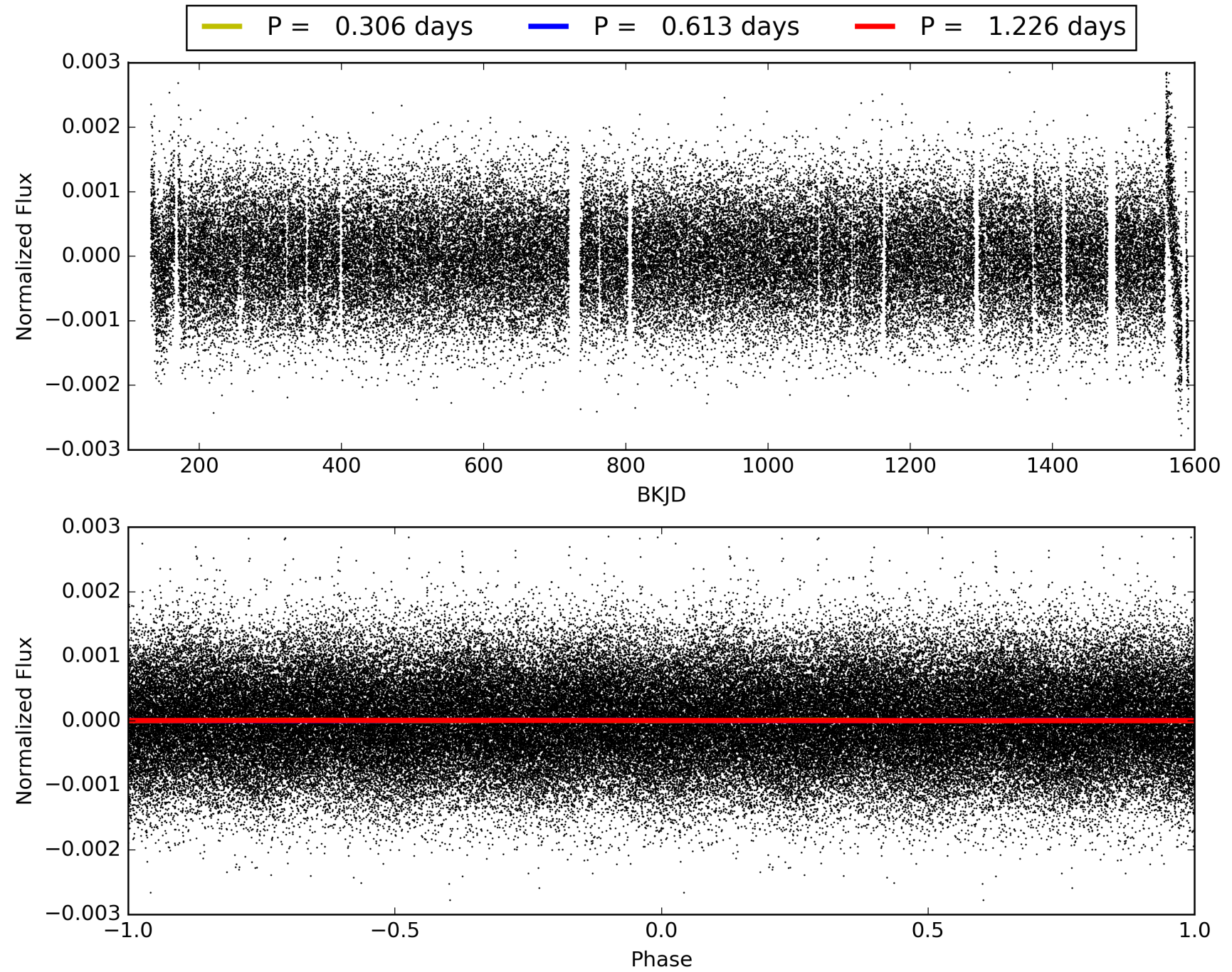
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:11:39 Z

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

TCE 006381128-02, PDC Light Curves

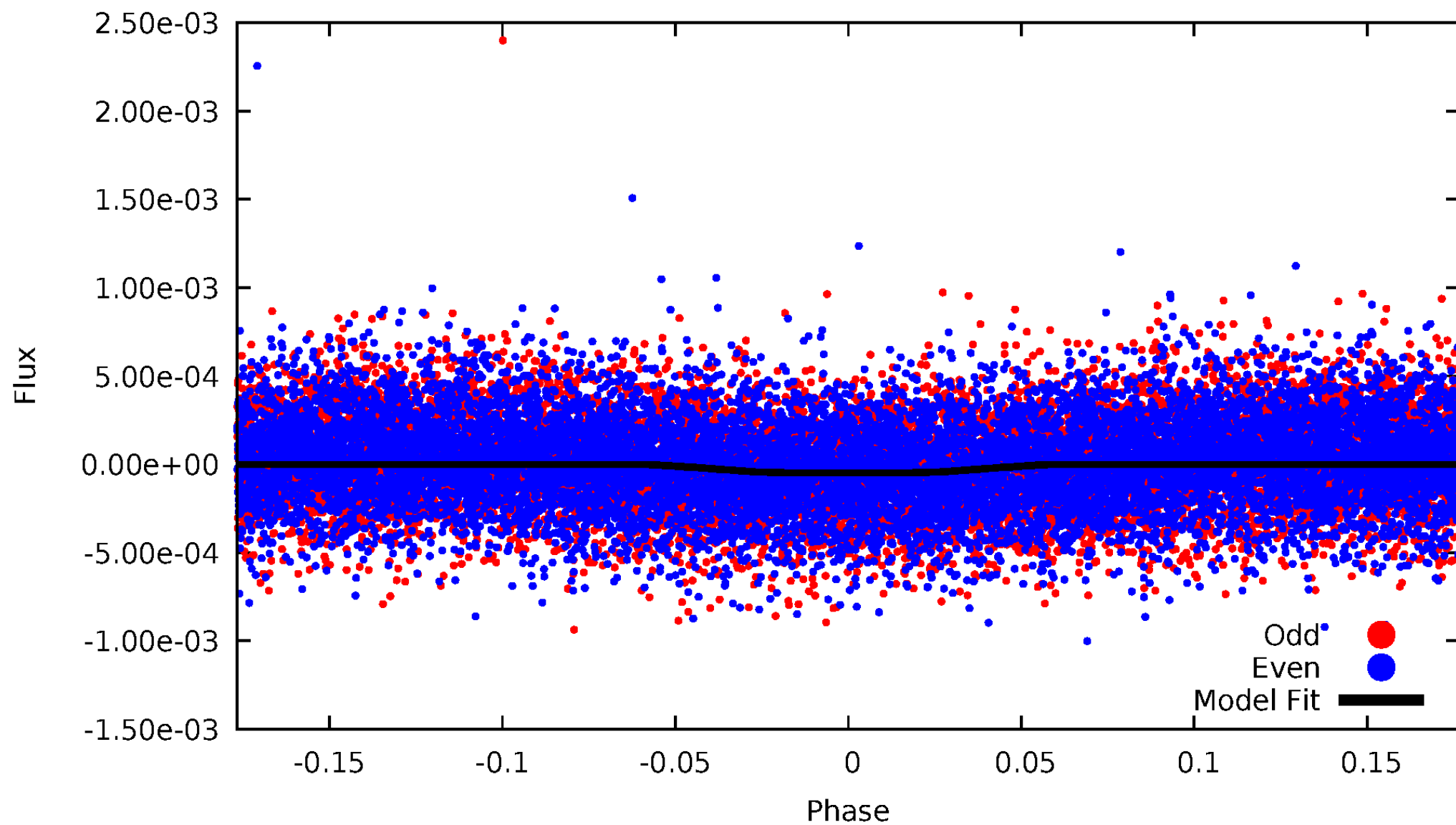


TCE 006381128-02



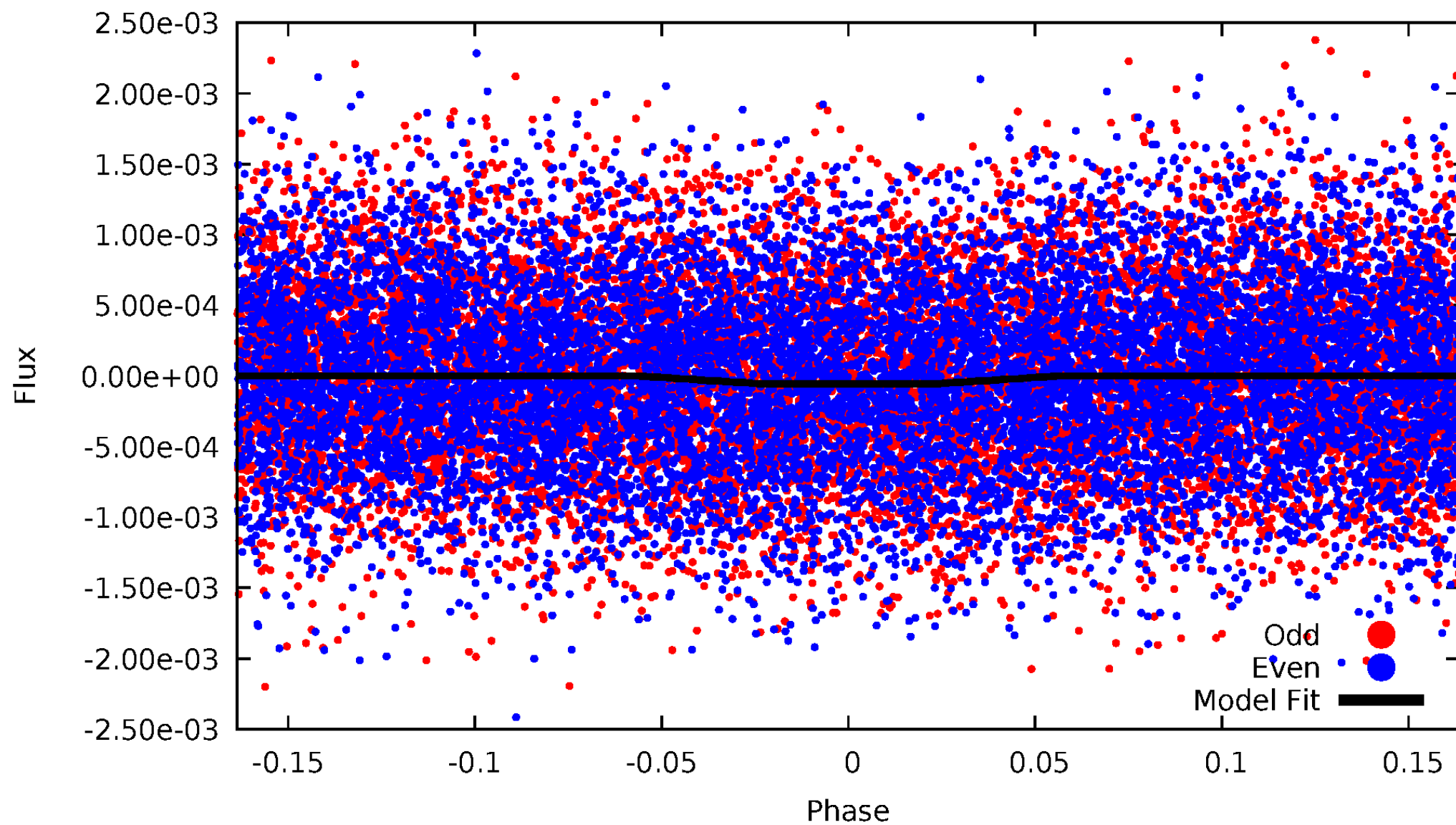
DV Odd/Even

TCE 006381128-02



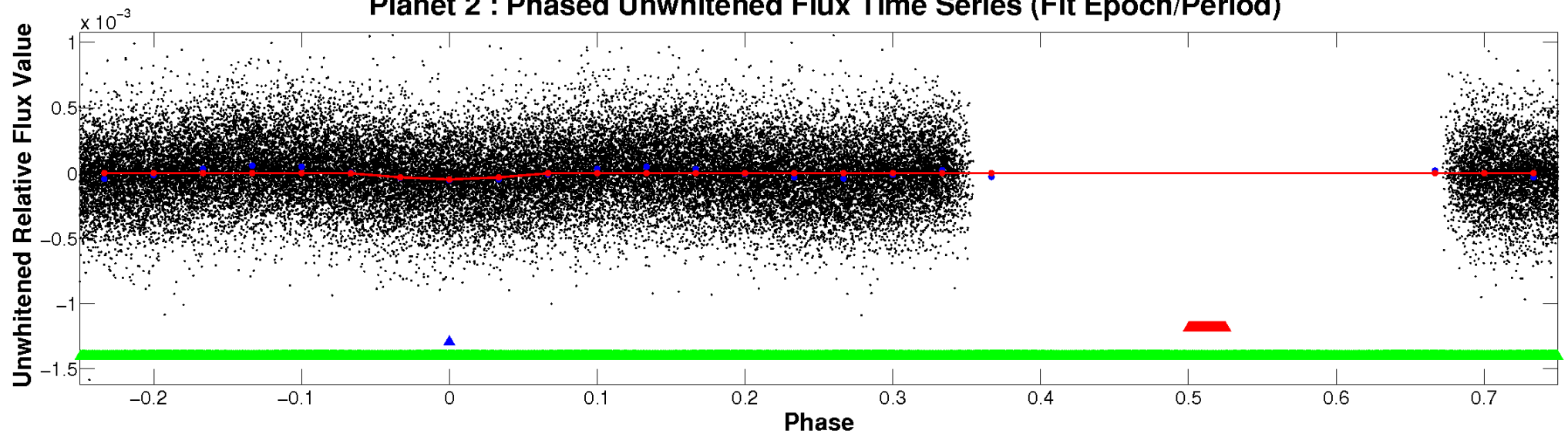
ALT Odd/Even

TCE 006381128-02

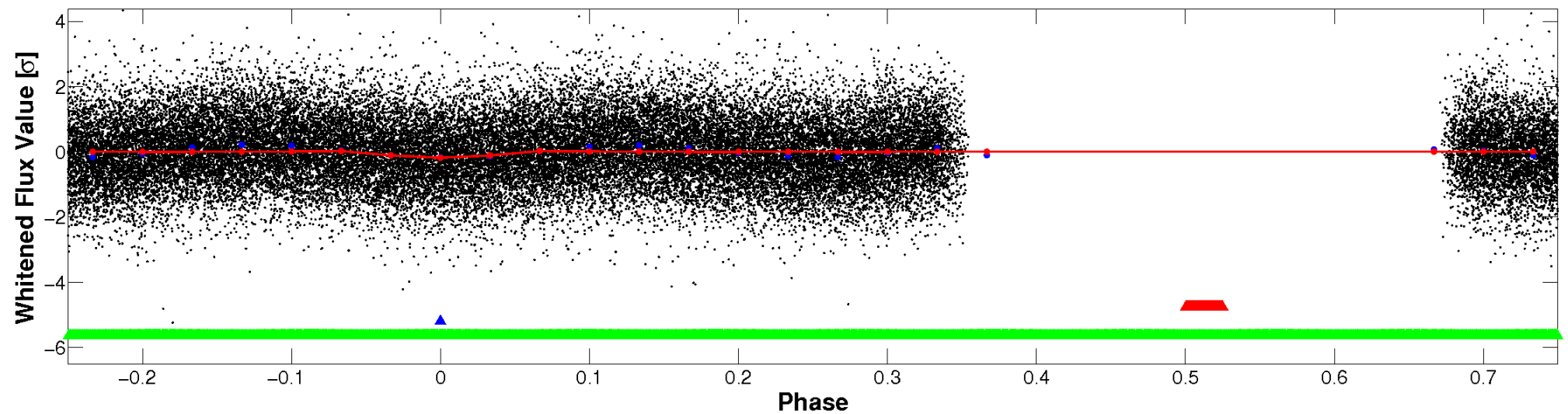


Non-Whitened Vs. Whitened Light Curve

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

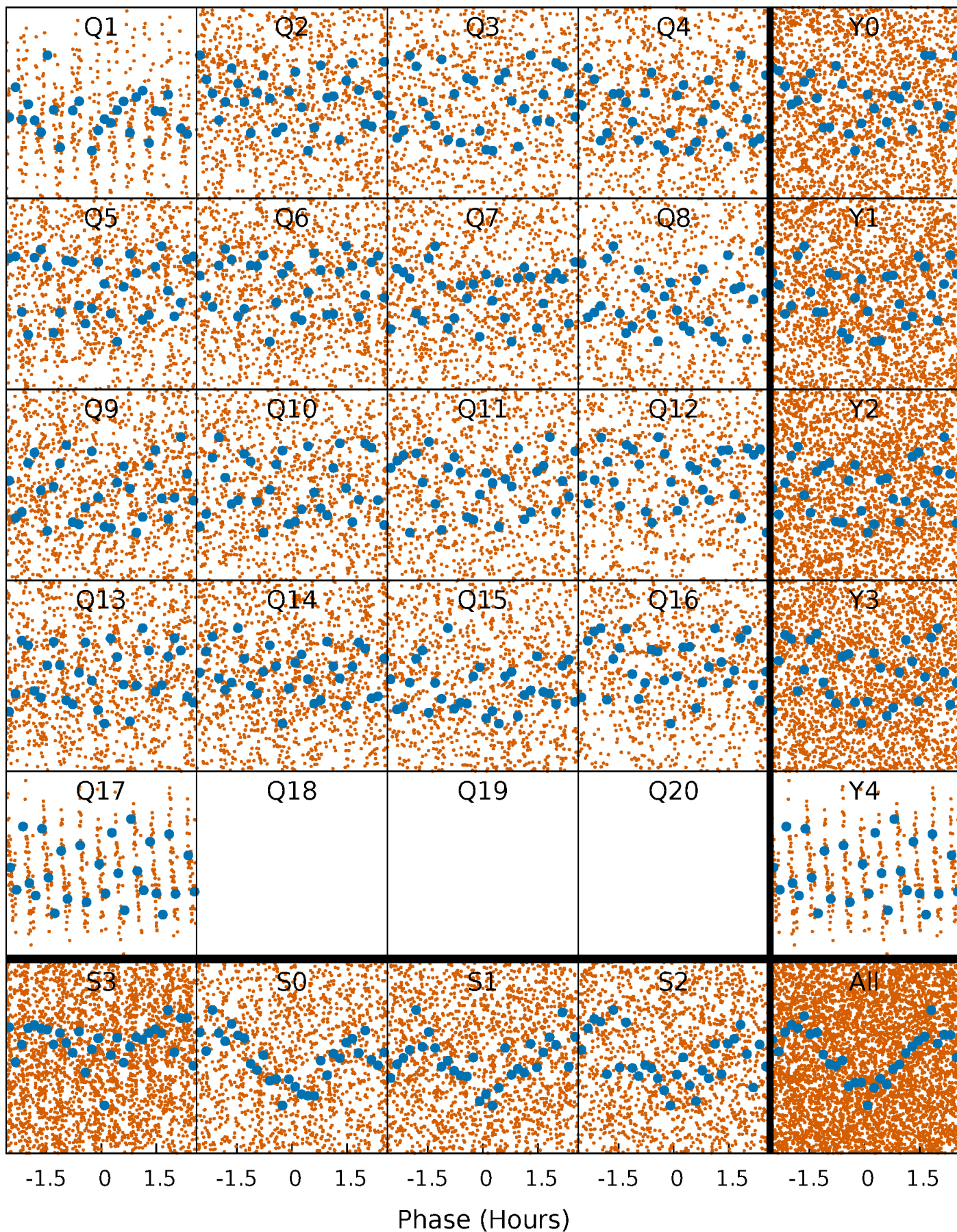


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



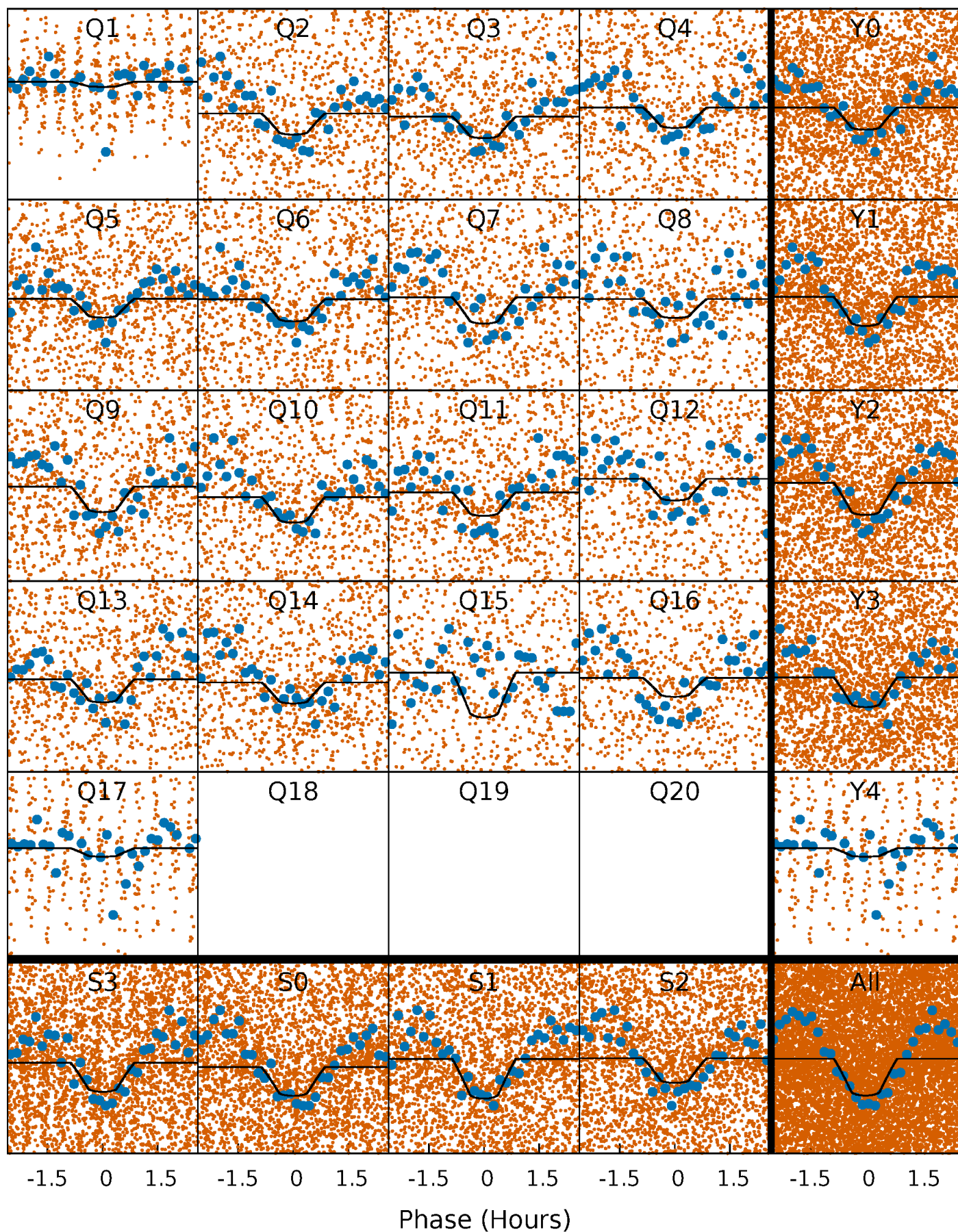
PDC Quarter-Phased Transit Curves

TCE 006381128-02 P= 0.612837 Days $T_0=131.606907$ (BKJD)



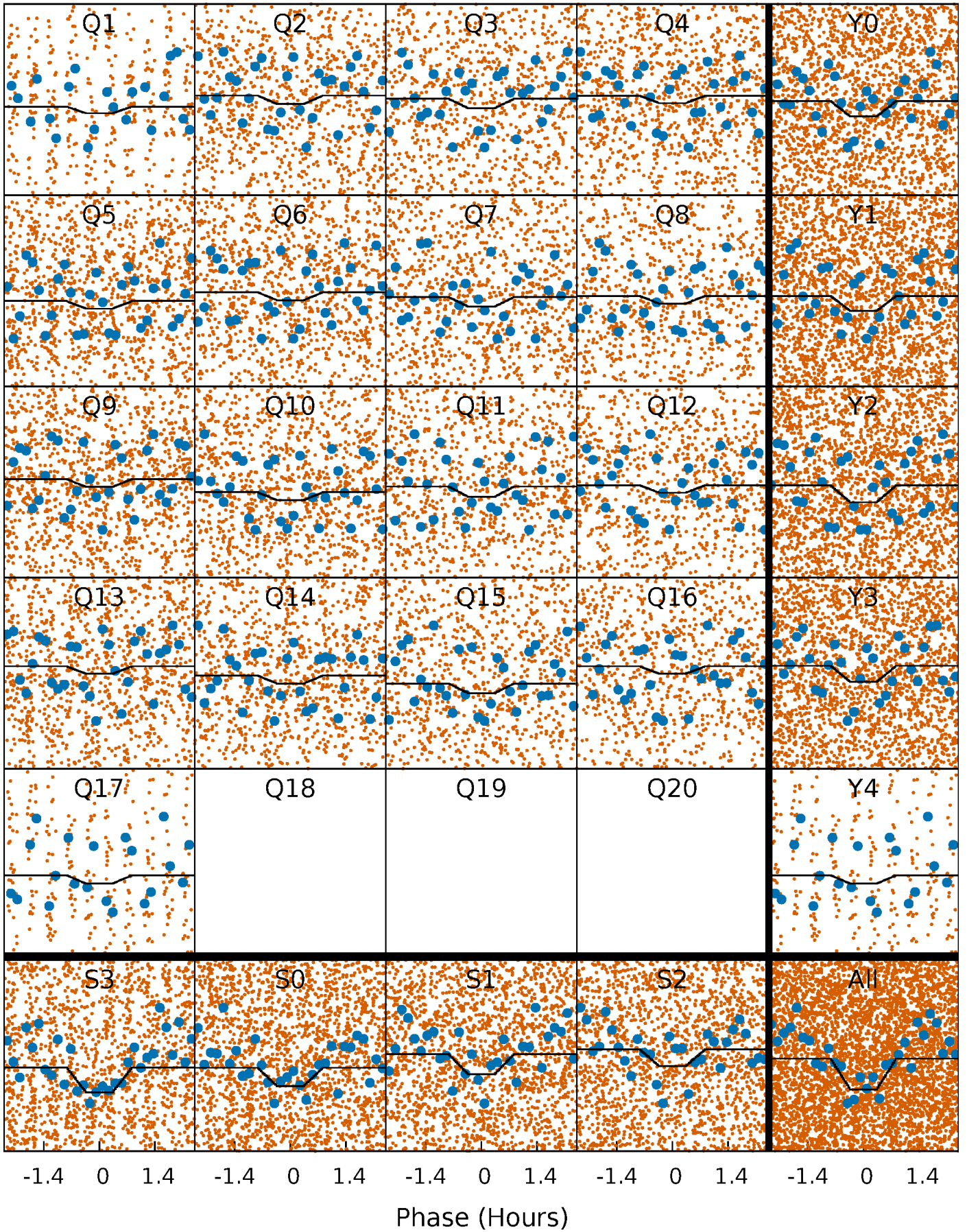
DV Quarter-Phased Transit Curves

TCE 006381128-02 P= 0.612837 Days $T_0=131.606907$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

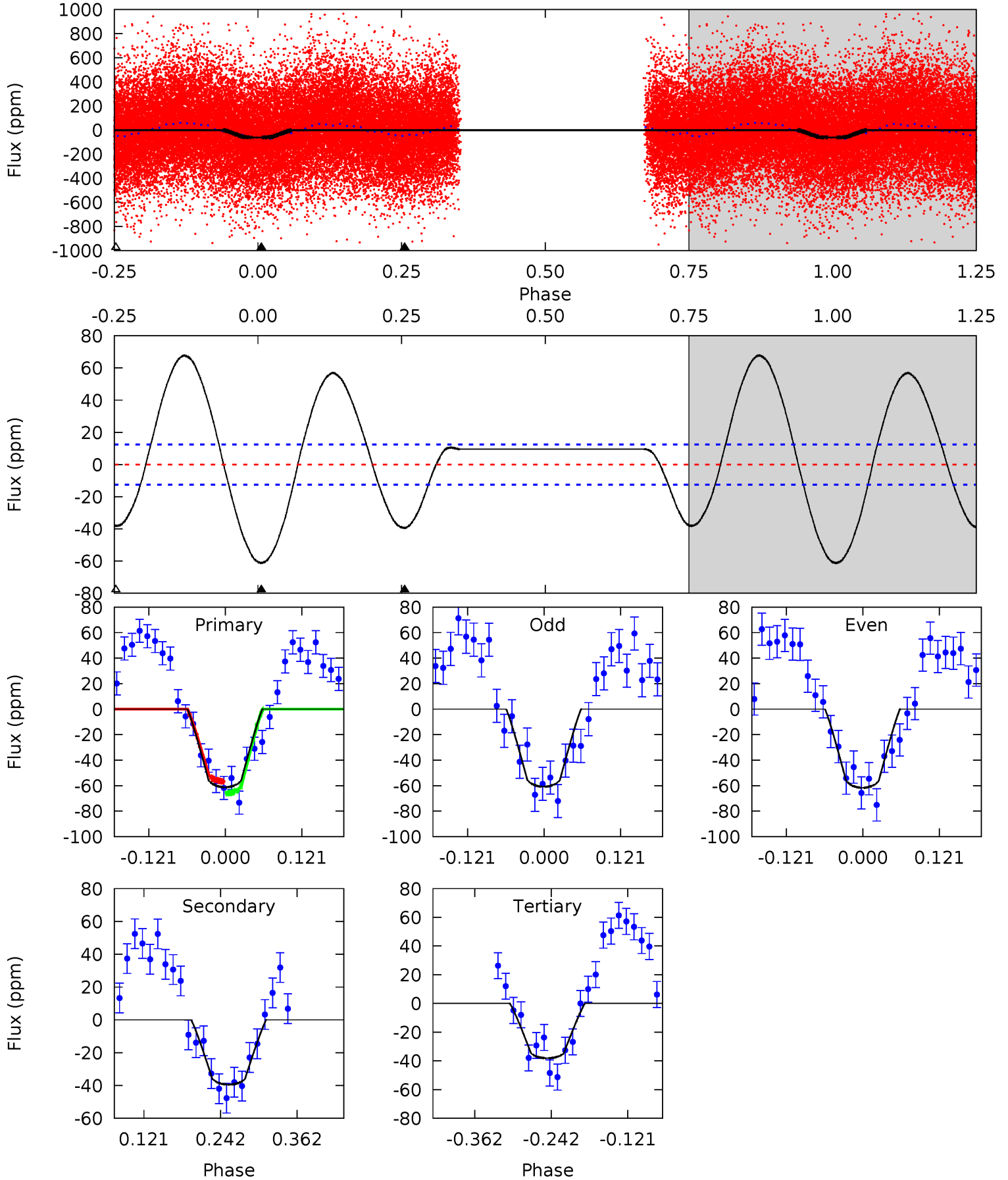
TCE 006381128-02 P= 0.612841 Days $T_0=131.607599$ (BKJD)



DV Model-Shift Uniqueness Test

006381128-02, P = 0.612837 Days, E = 130.994070 Days

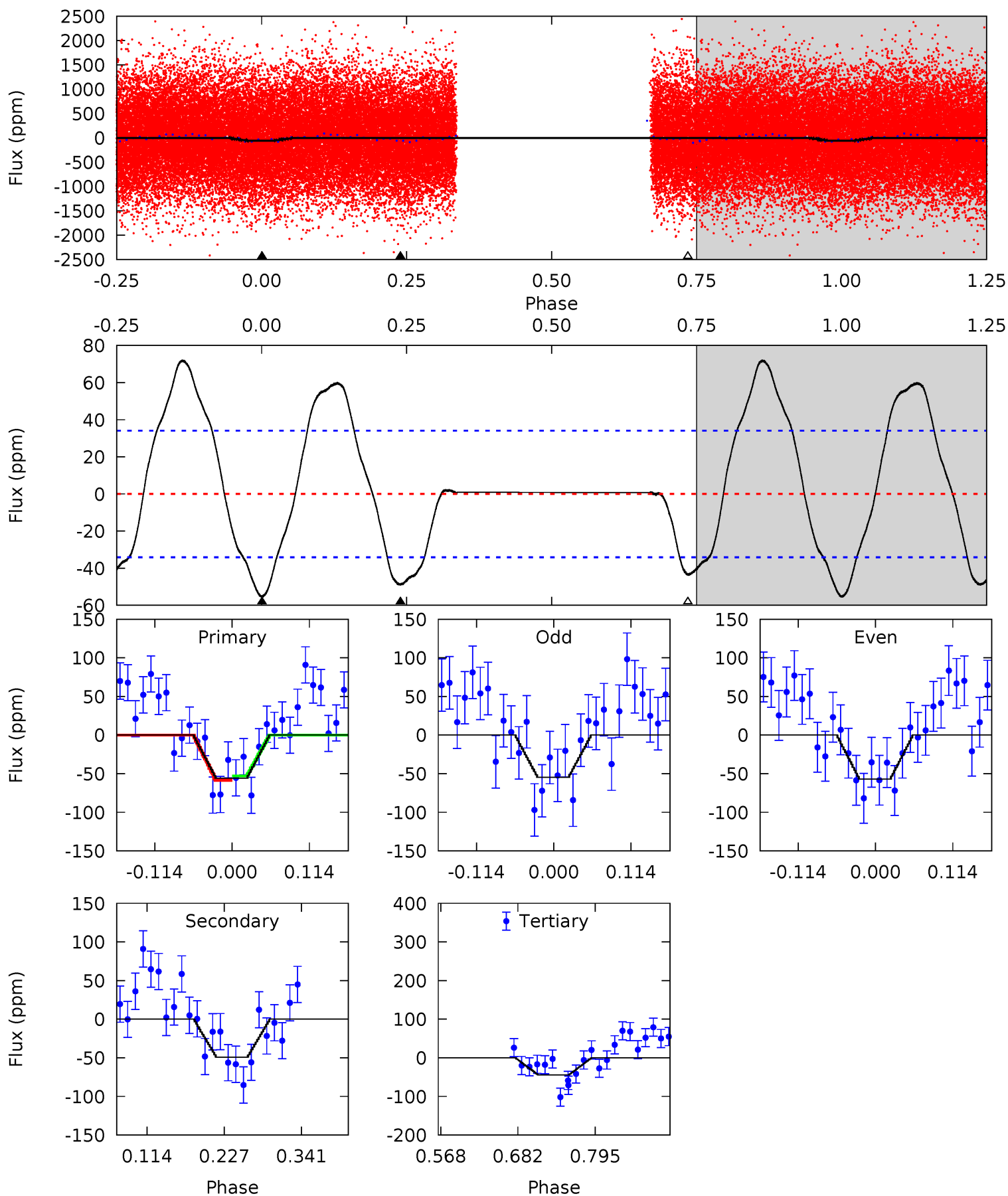
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.1	14.3	13.8	0	4.52	1.55	13.5	8.36	22.1	0.48	14.3	0.15	1.06	0.53	1.70



Alt Model-Shift Uniqueness Test

006381128-02, P = 0.612841 Days, E = 130.994758 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.44	6.56	5.86	0	4.54	1.58	5.39	1.57	7.44	0.70	6.56	0.15	0.88	0.56	0.37



Stellar Parameters For KIC 006381128

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7730^{+214}_{-349}	$4.045^{+0.165}_{-0.165}$	$0.040^{+0.150}_{-0.400}$	$2.100^{+0.519}_{-0.519}$	$1.784^{+0.170}_{-0.315}$	$0.272^{+0.271}_{-0.118}$
	+3%/-5%	+4%/-4%	+375%/-1000%	+25%/-25%	+10%/-18%	+100%/-44%
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 006381128-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-39 ± 3	$1.71^{+0.58}_{-0.49}$	5282^{+368}_{-370}	6639^{+1478}_{-954}	$2.155^{+2.049}_{-0.962}$
Alt.	-49 ± 8	$1.70^{+0.54}_{-0.48}$	5247^{+397}_{-350}	7088^{+1839}_{-1023}	$2.653^{+2.675}_{-1.159}$

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 $A_{obs} \gg 1.0$

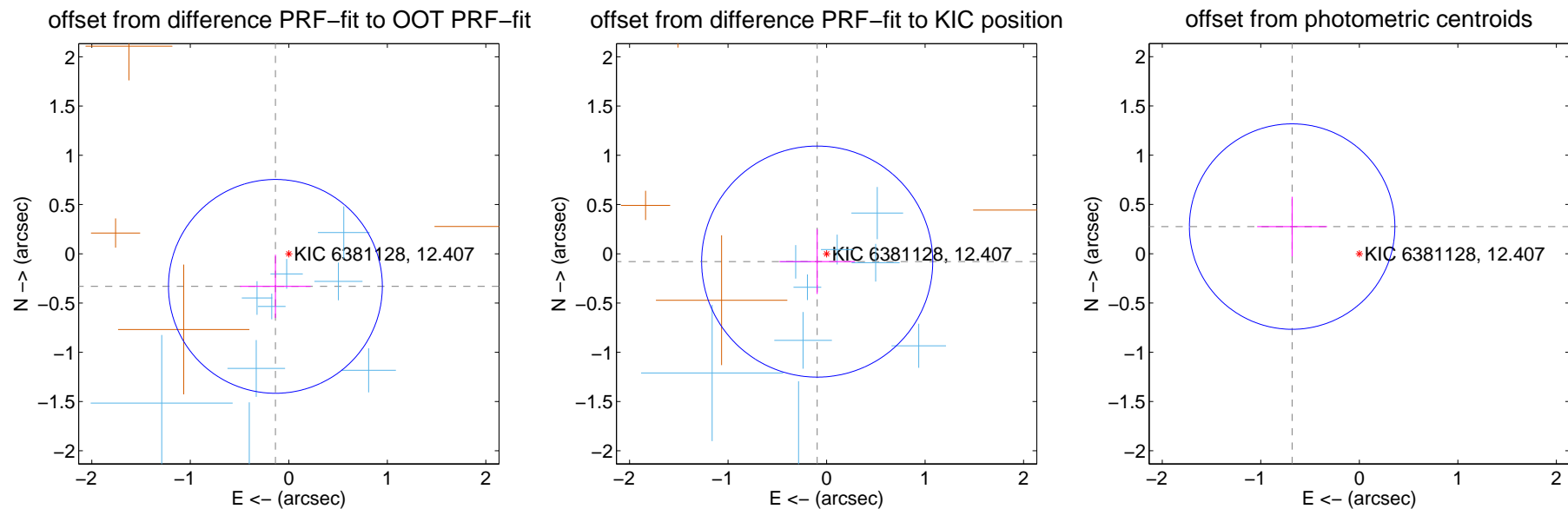
DV Centroid Data

Supplemental centroid analysis for 006381128-02. Kepler magnitude: 12.41. Transit SNR 11.65

There are 9 quarters with good PRF difference image offsets

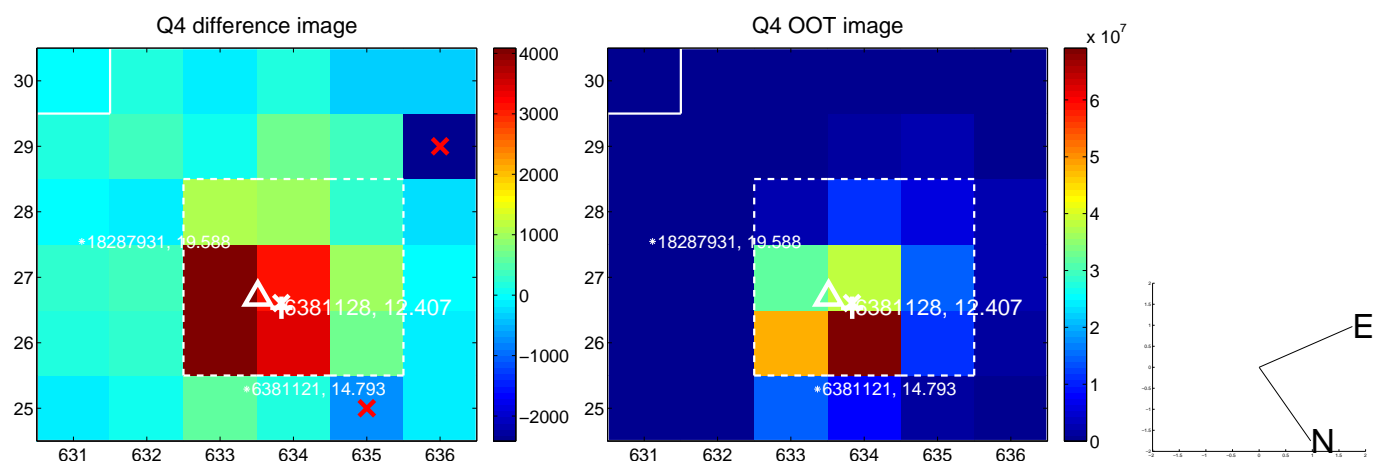
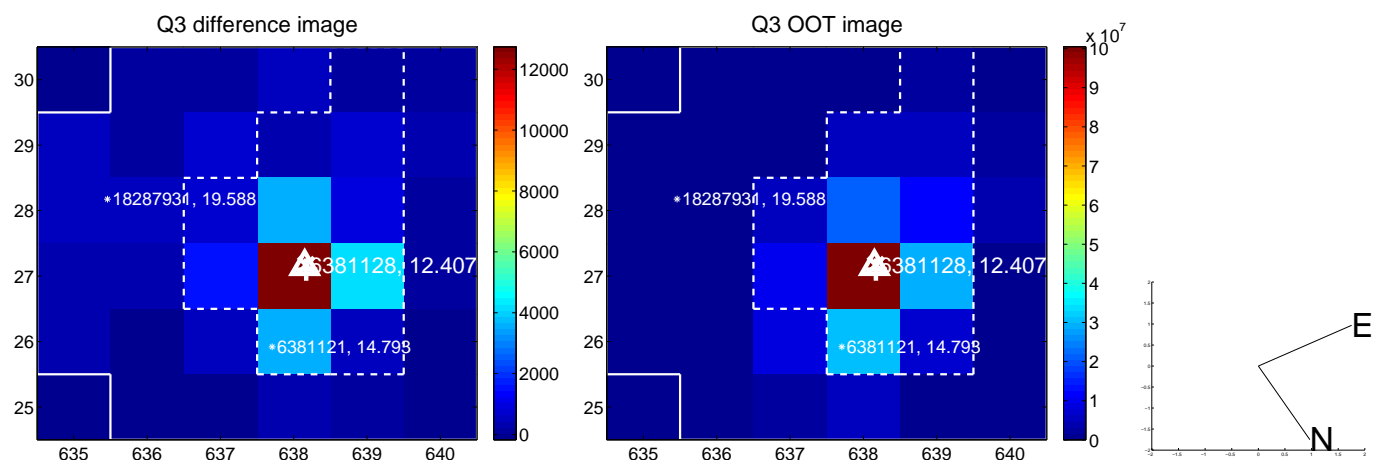
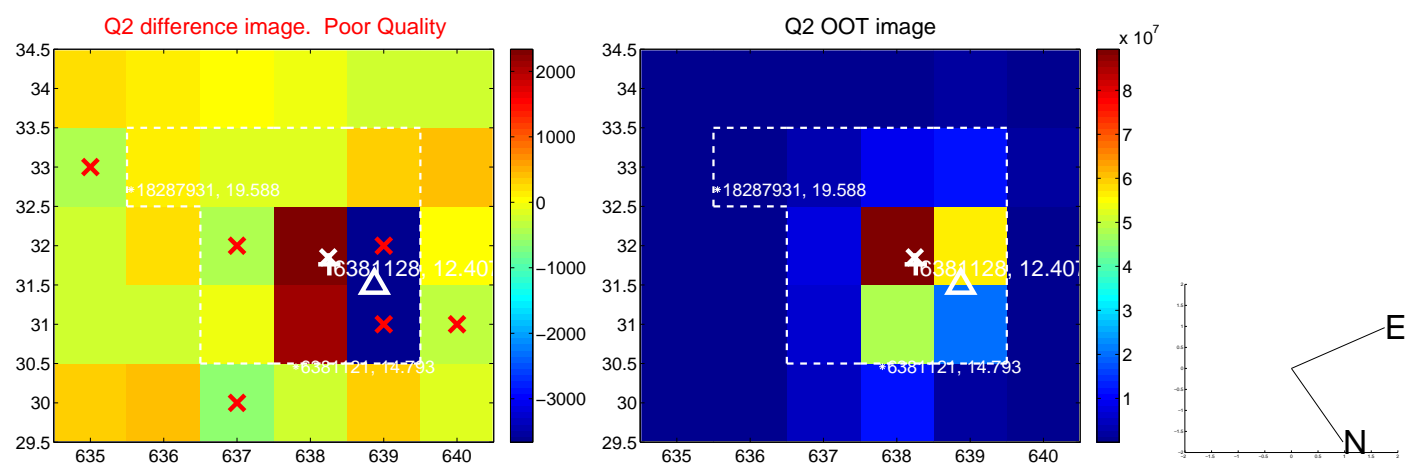
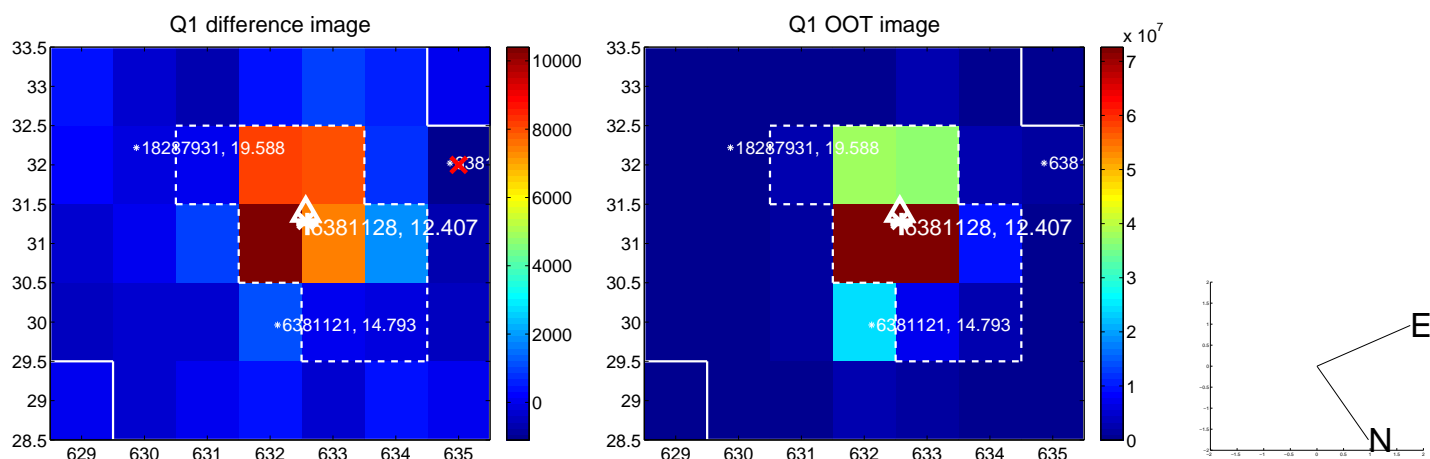
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.358 ± 0.362	0.99	0.136 ± 0.358	-0.331 ± 0.321
PRF-fit source offset from KIC position	0.124 ± 0.391	0.32	0.095 ± 0.383	-0.079 ± 0.329
photometric centroid source offset	0.74 ± 0.35	2.12	0.68 ± 0.35	0.28 ± 0.30

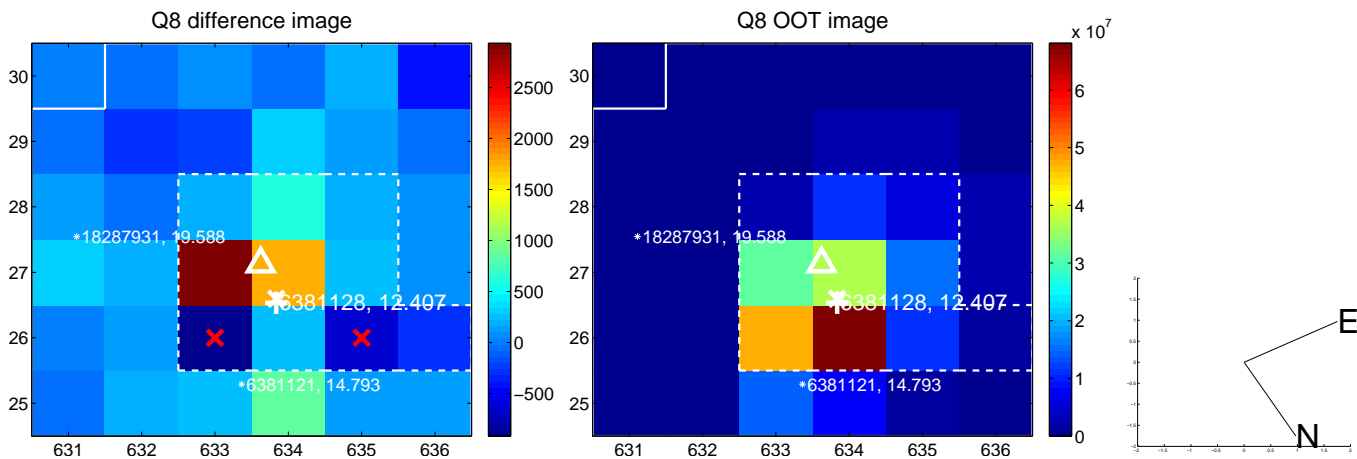
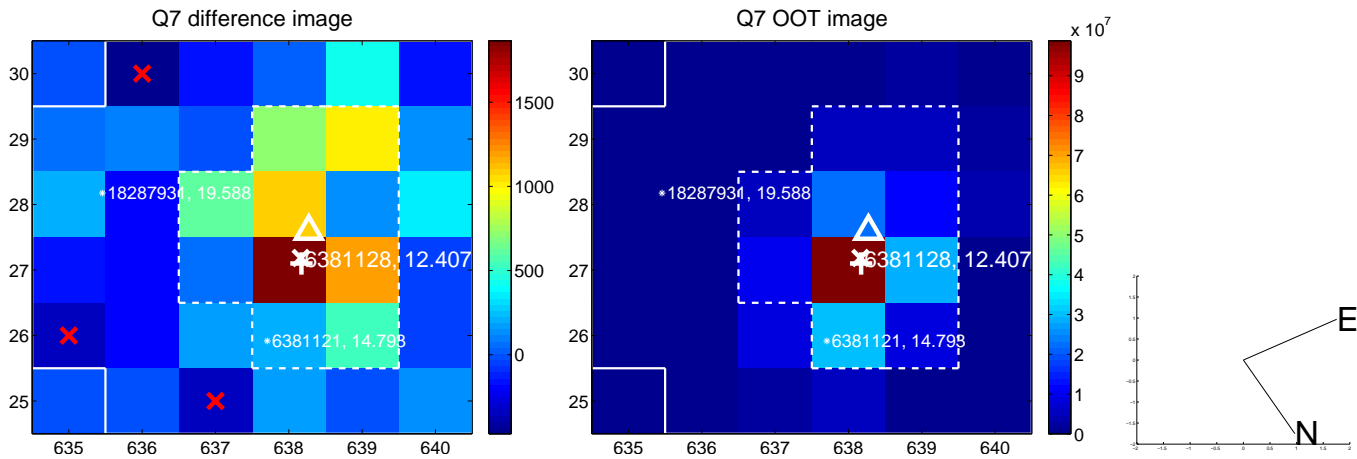
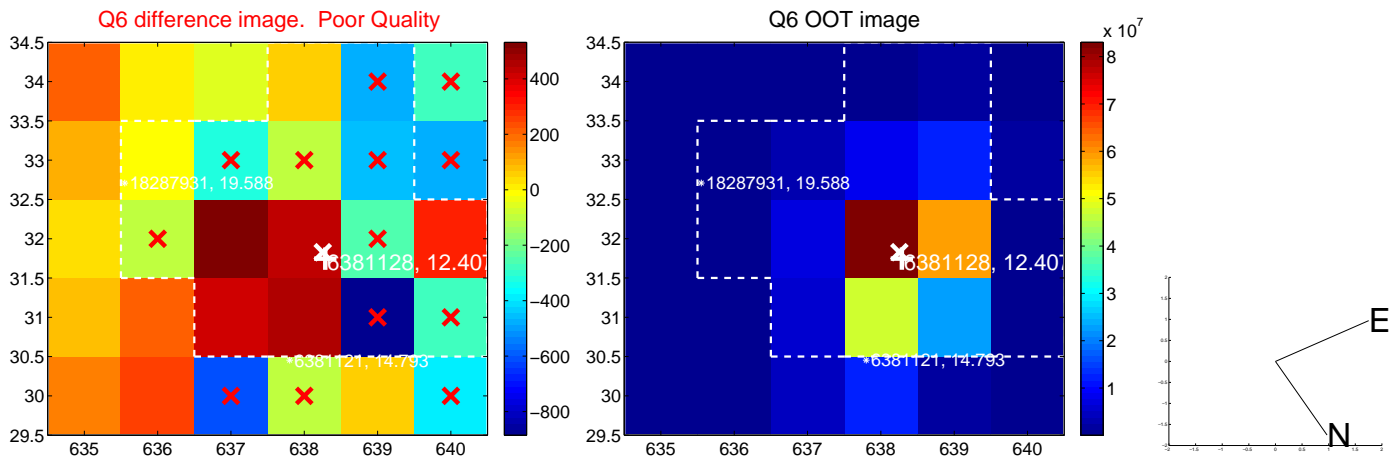
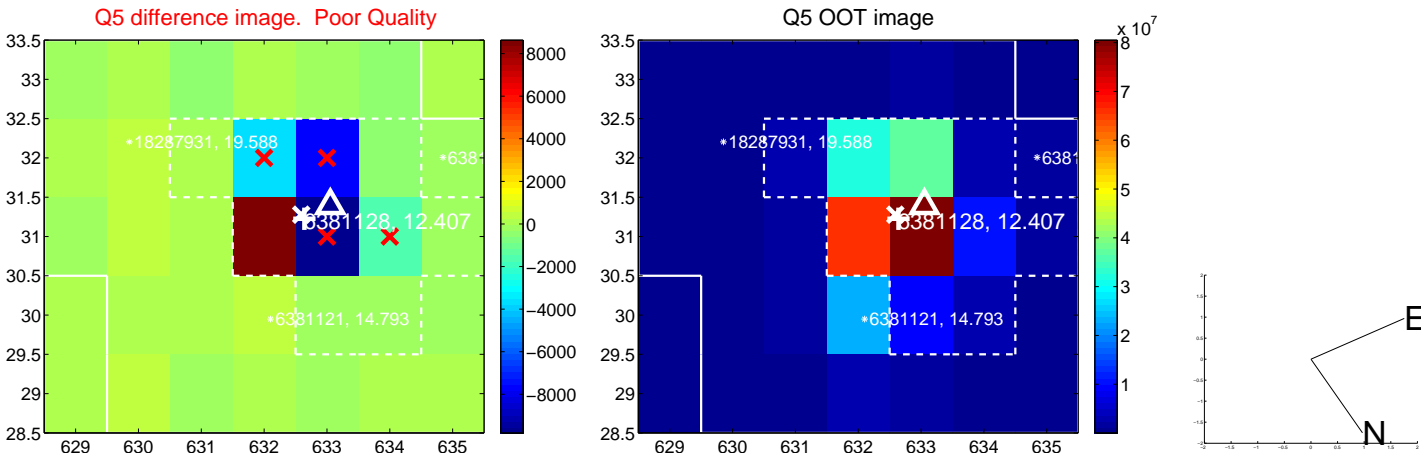


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

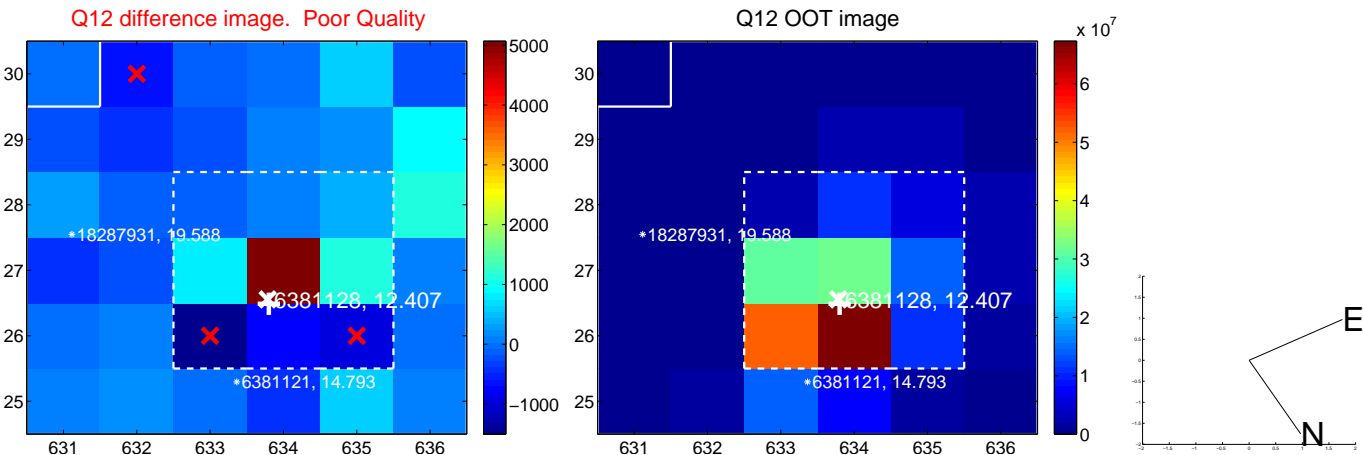
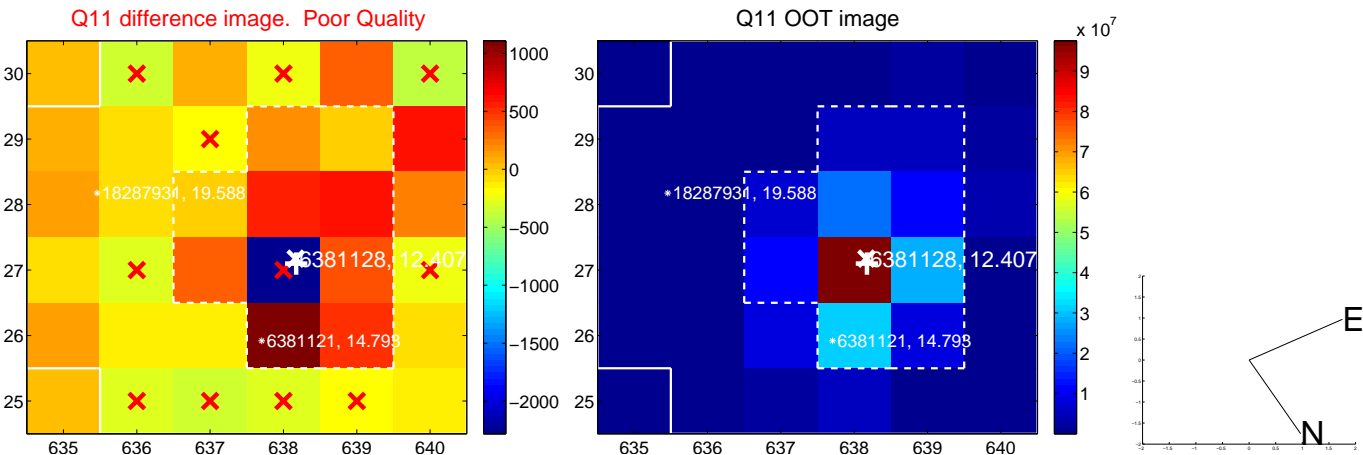
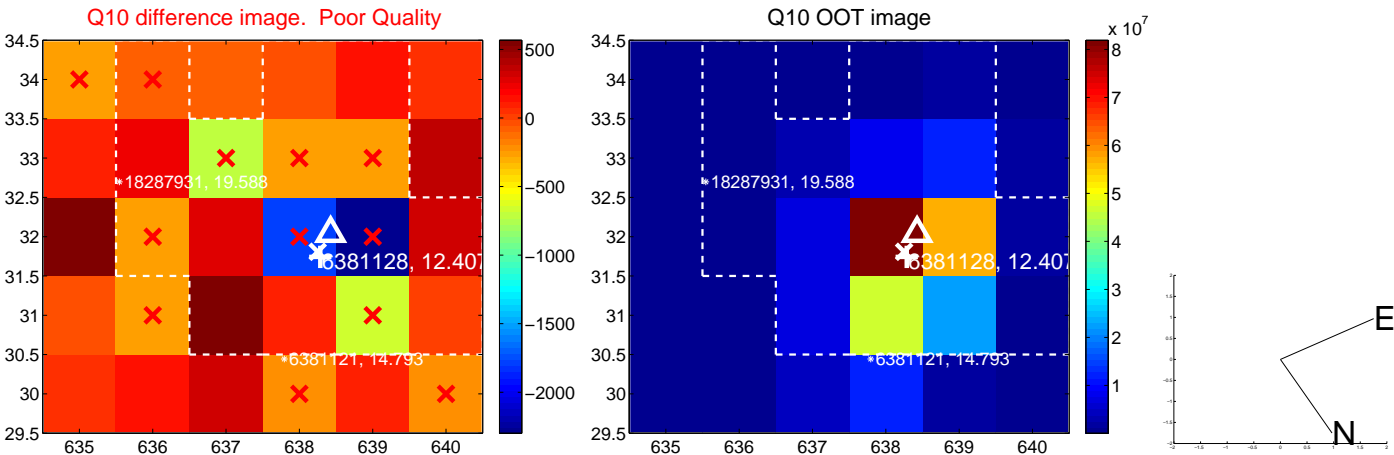
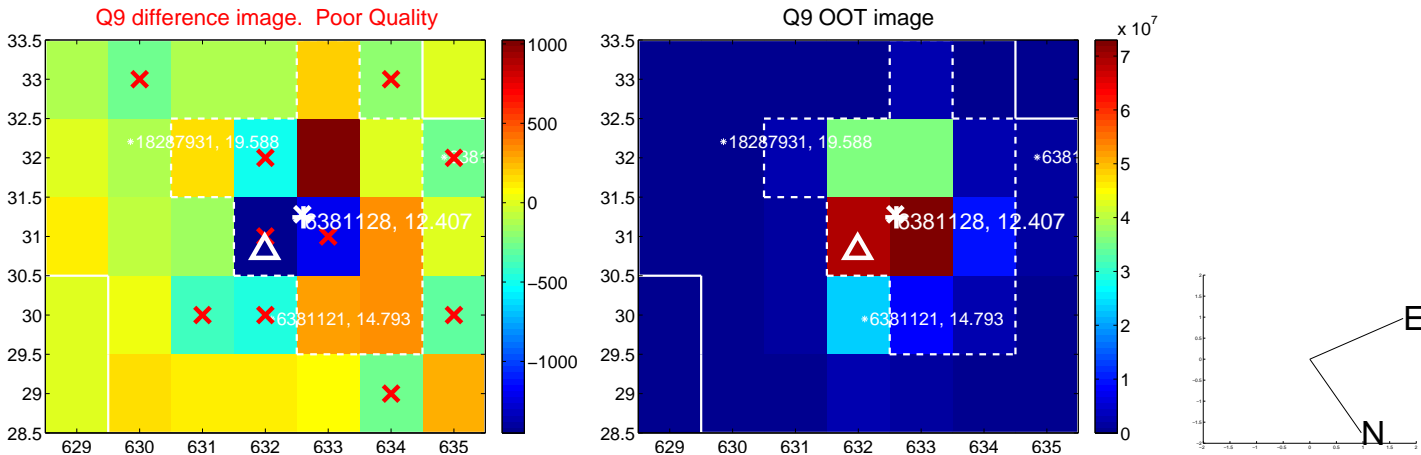
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



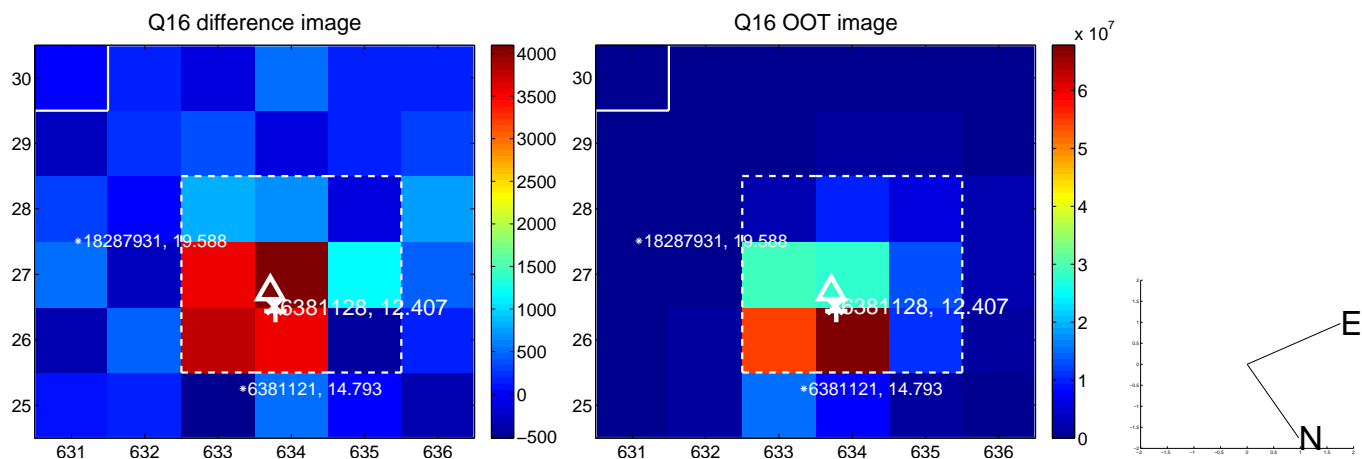
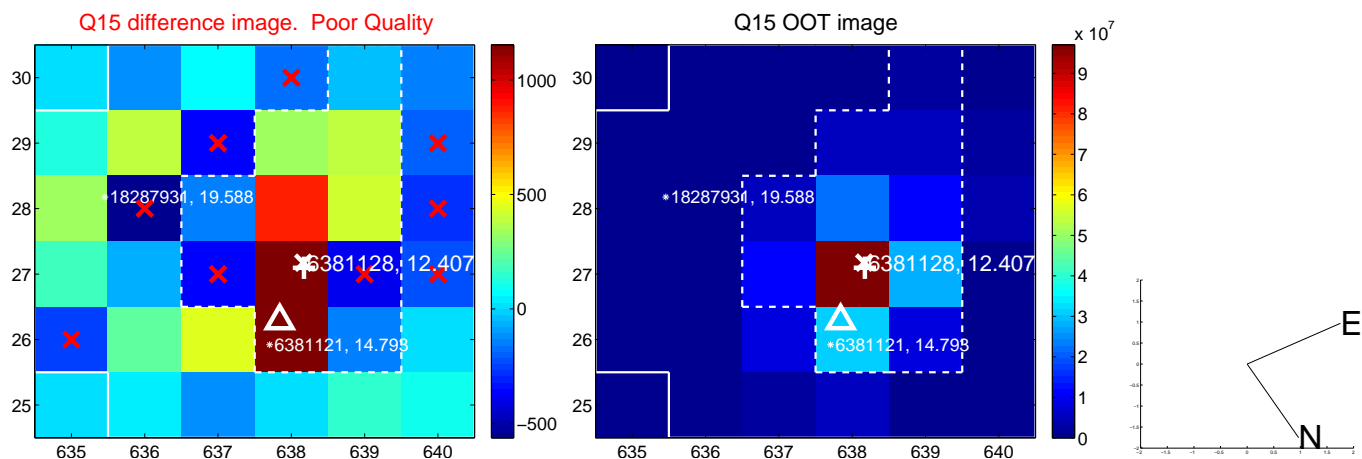
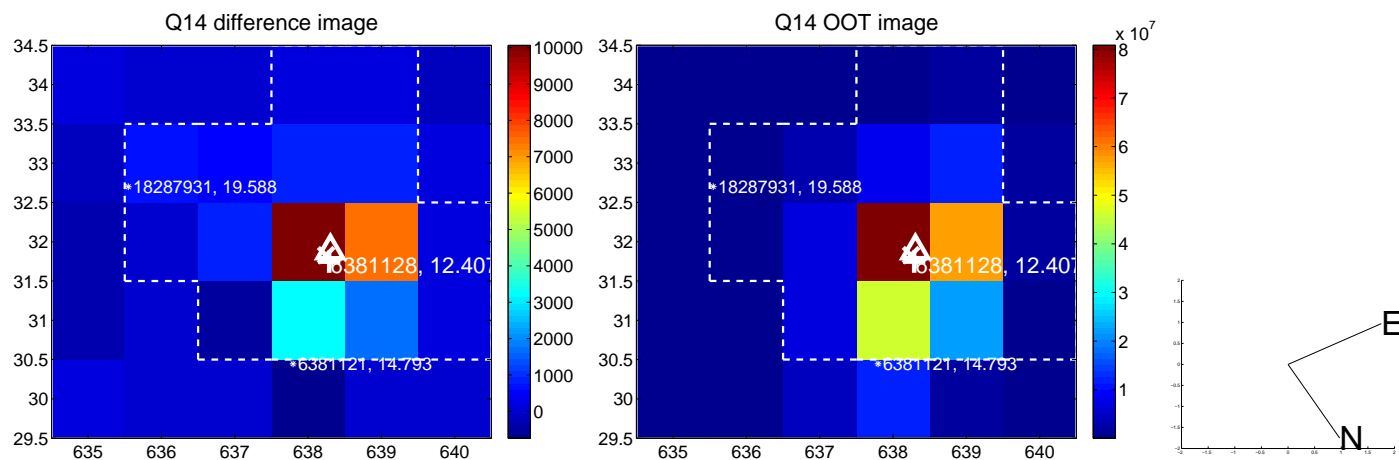
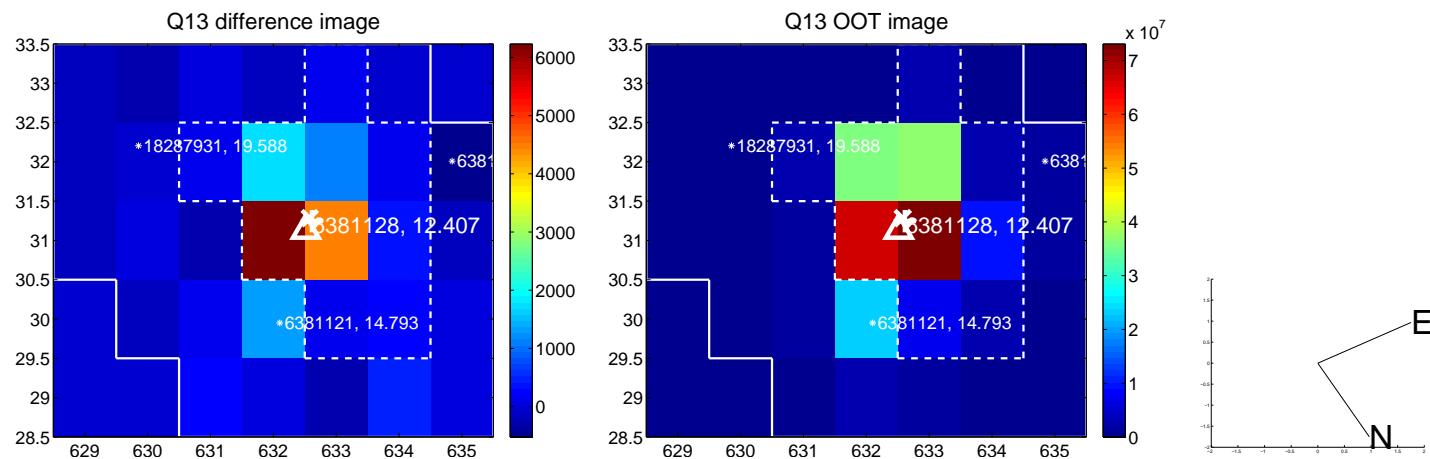
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



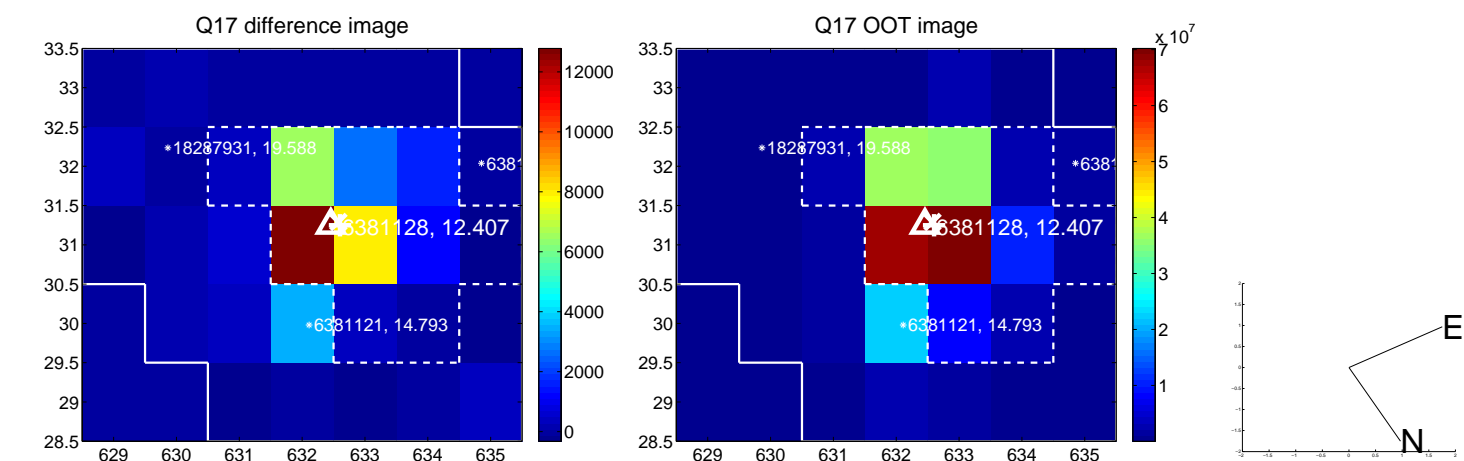
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



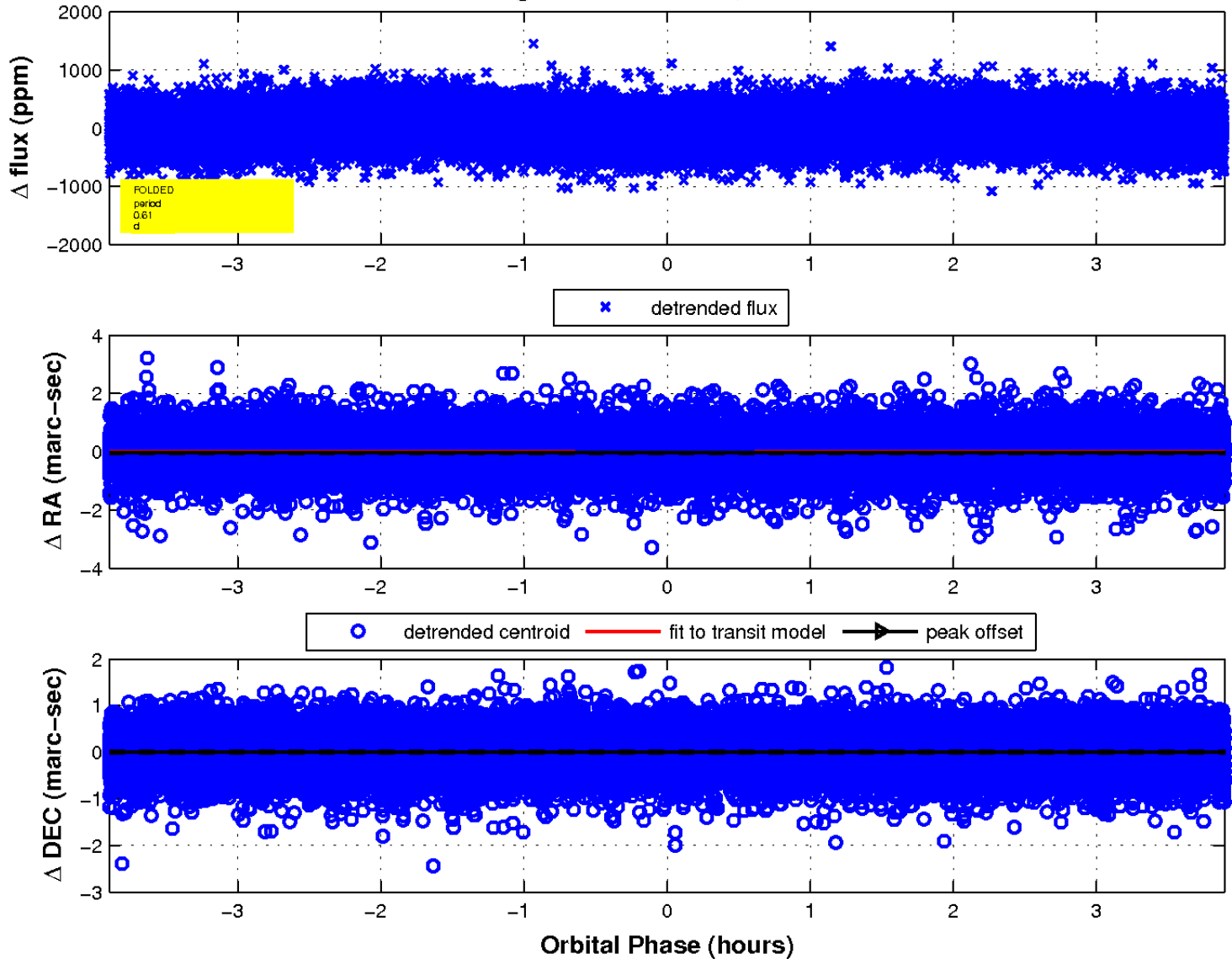
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

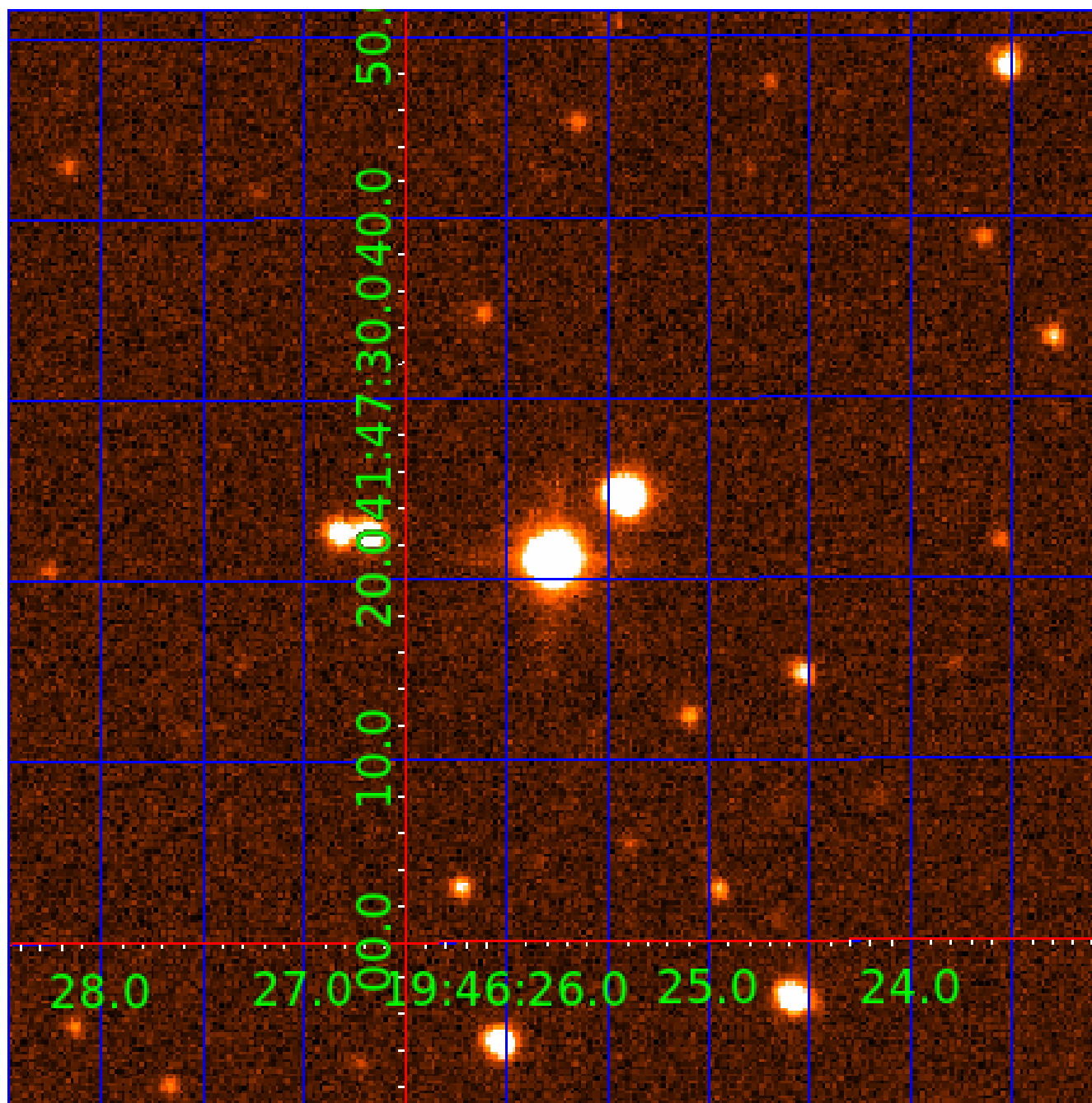


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006381128

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})
006381128-01	OBS	No	0.612843	131.913526	60.7	1.287	13.3	13.8	2.10	7730	1.71	48079.45
006381128-02	OBS	No	0.612837	131.606907	49.3	1.299	10.9	11.7	2.10	7730	1.71	48080.12
006381128-03	OBS	No	1.424516	131.700437	63.9	5.183	8.4	10.9	2.10	7730	1.96	15614.76

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006381128-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT
006381128-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
006381128-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_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.

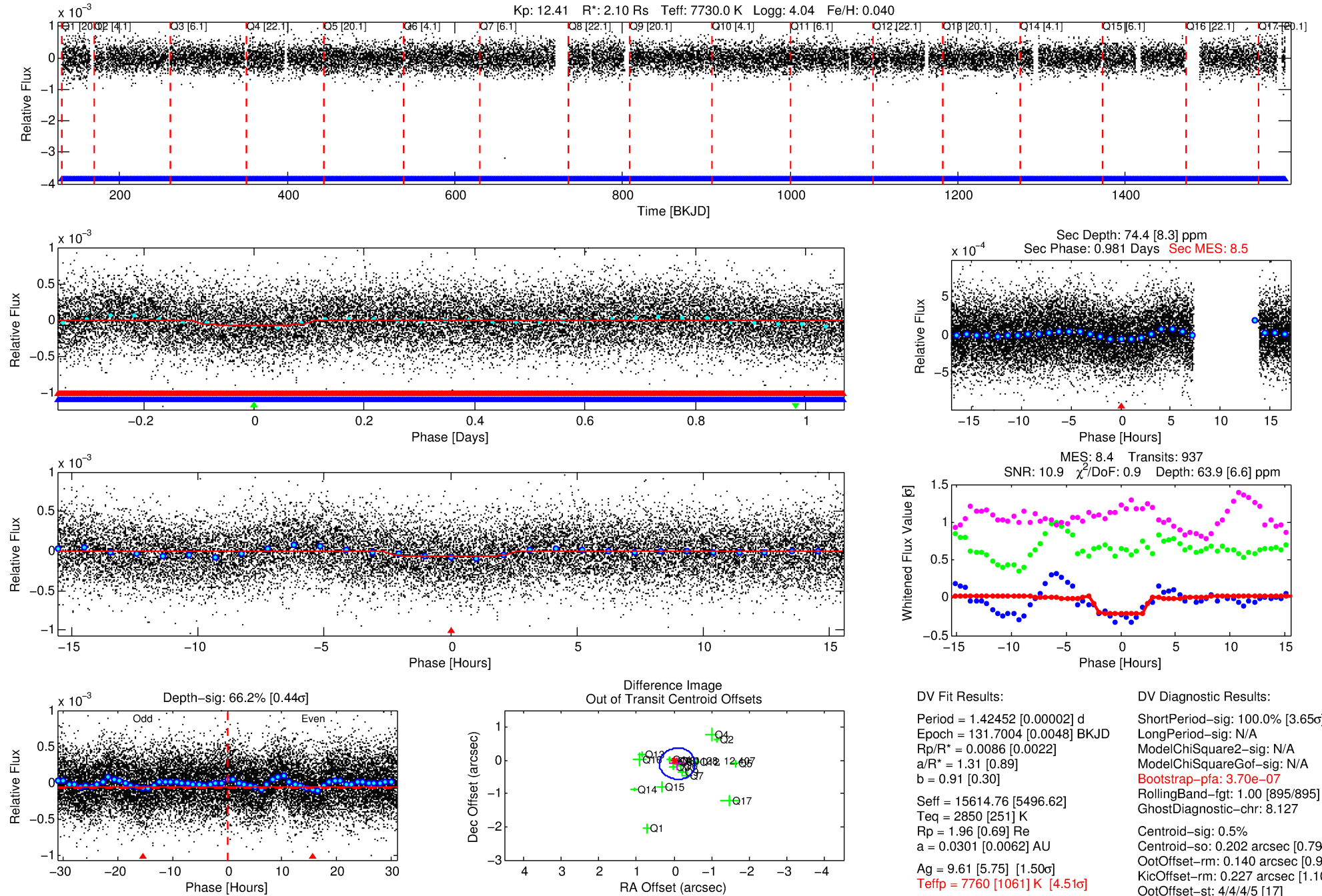
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 006381128-03

No Significant Match Found

DV One-Page Summary

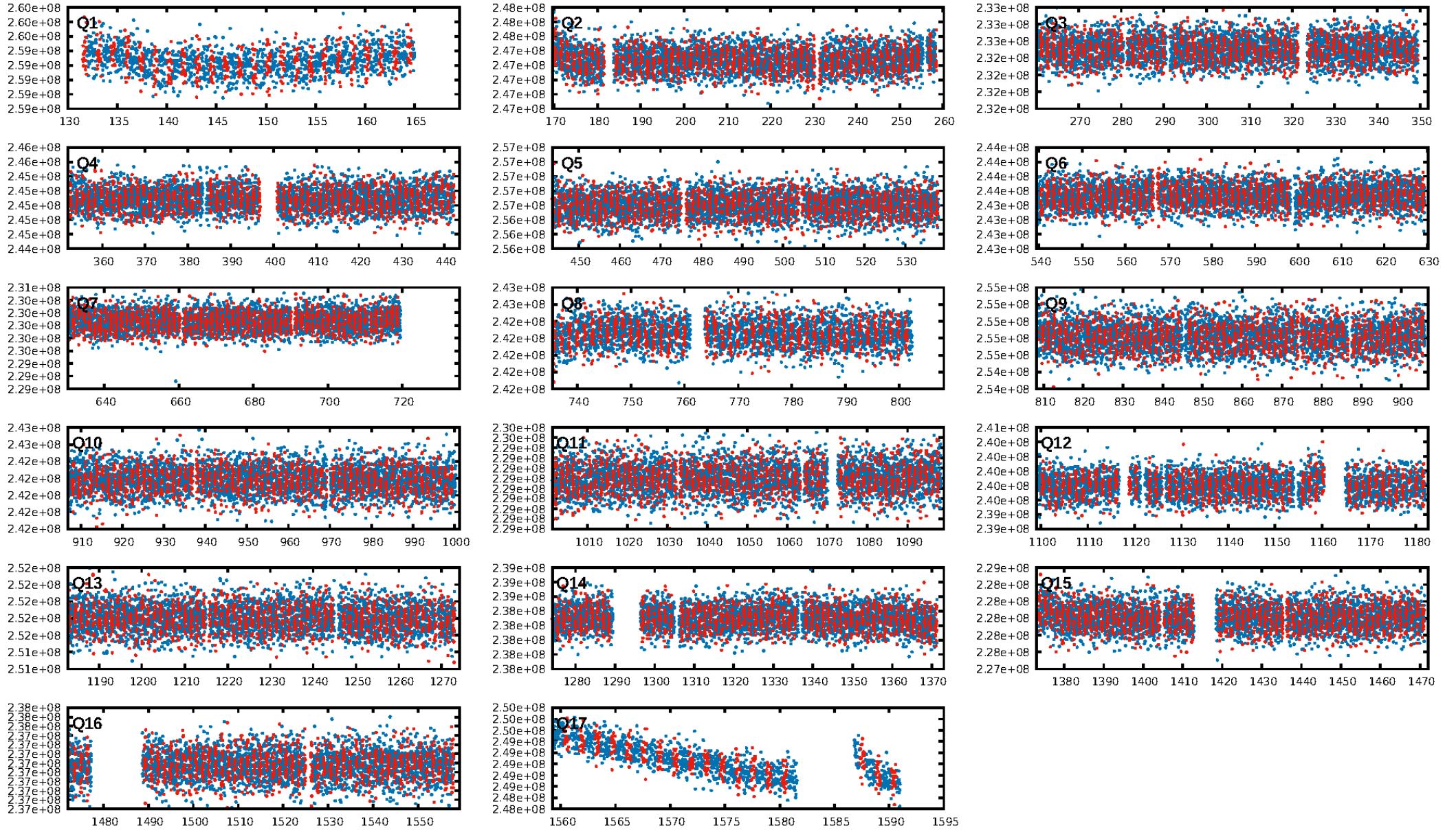
KIC: 6381128 Candidate: 3 of 3 Period: 1.425 d



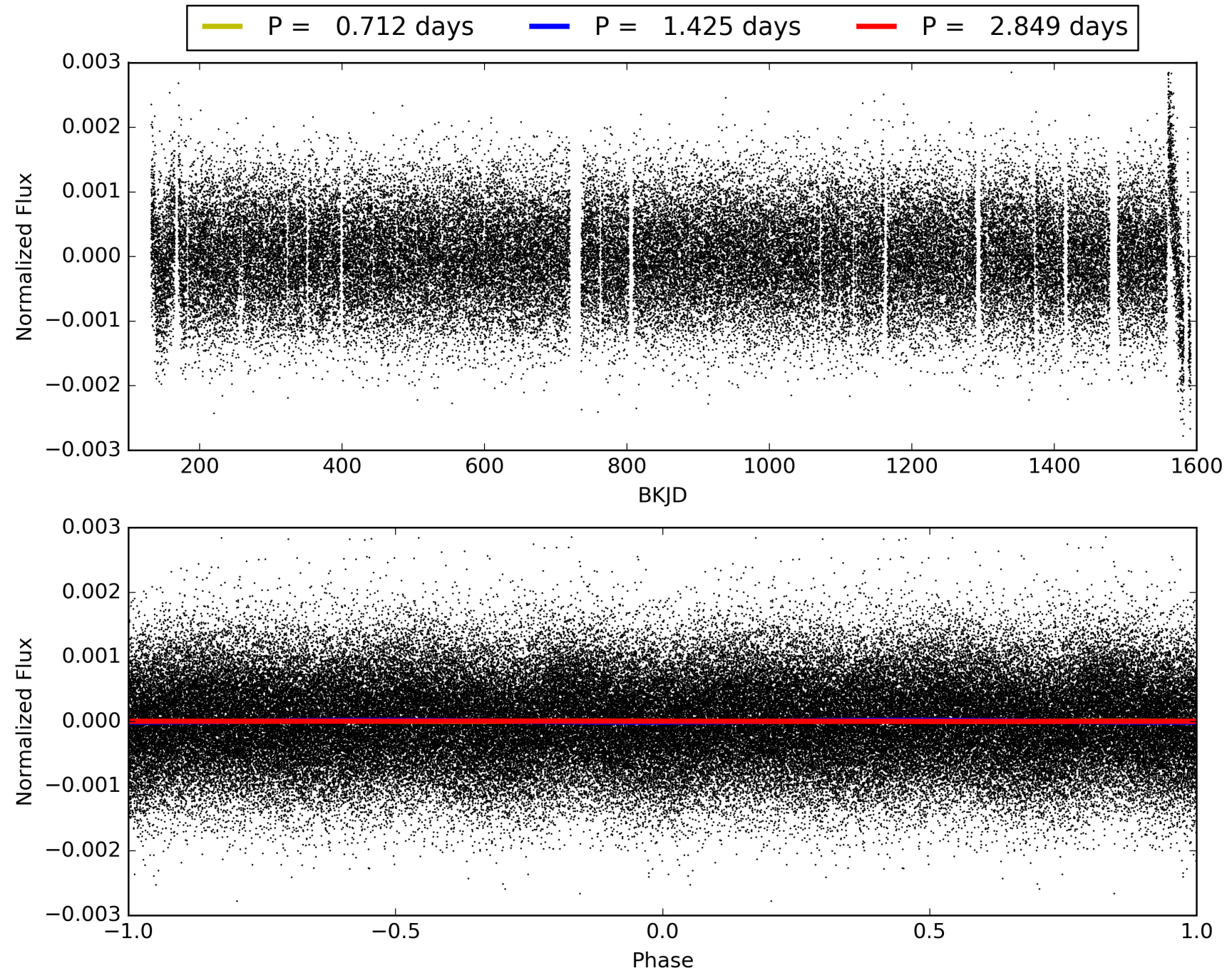
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 09:11:48 Z

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

TCE 006381128-03, PDC Light Curves

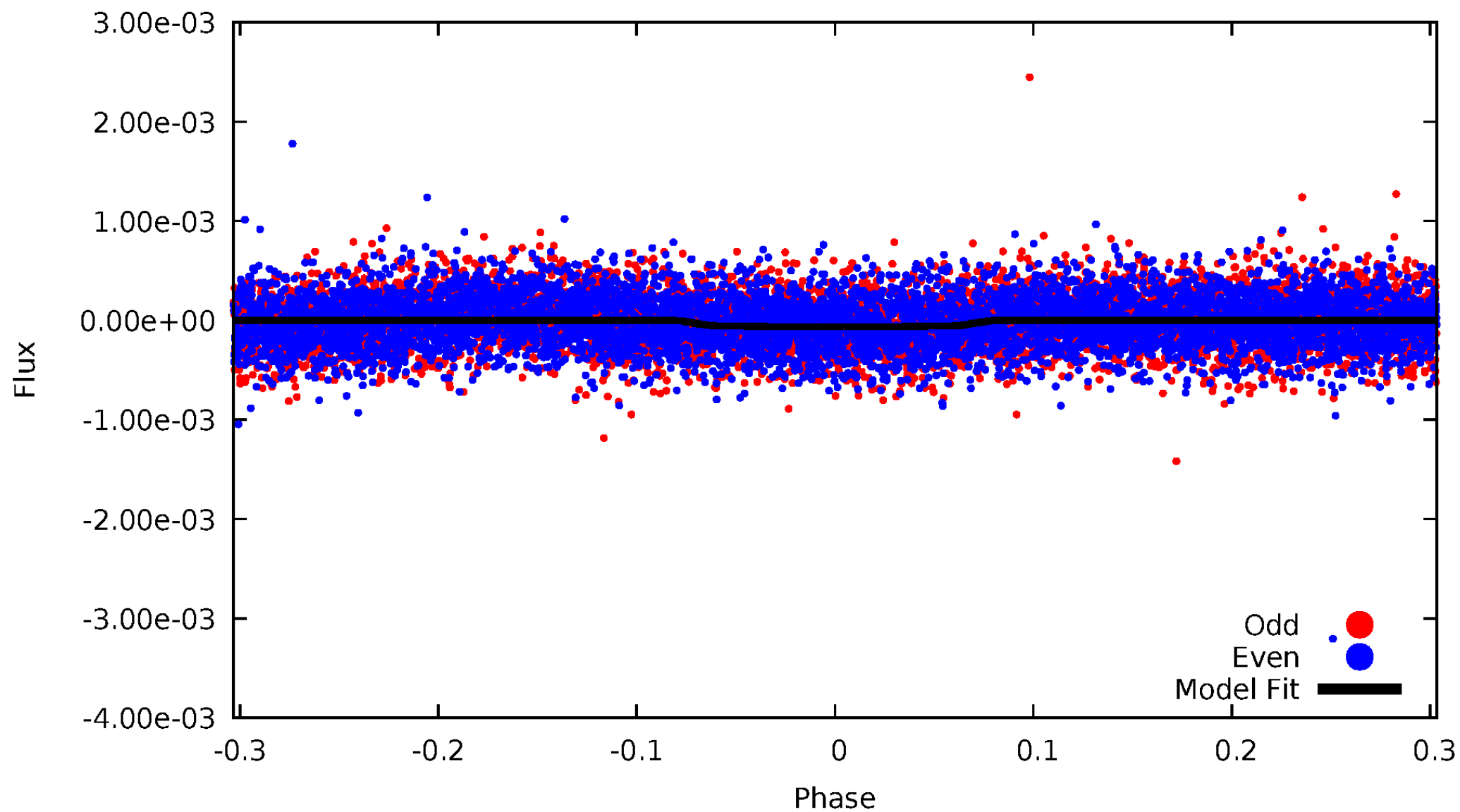


TCE 006381128-03



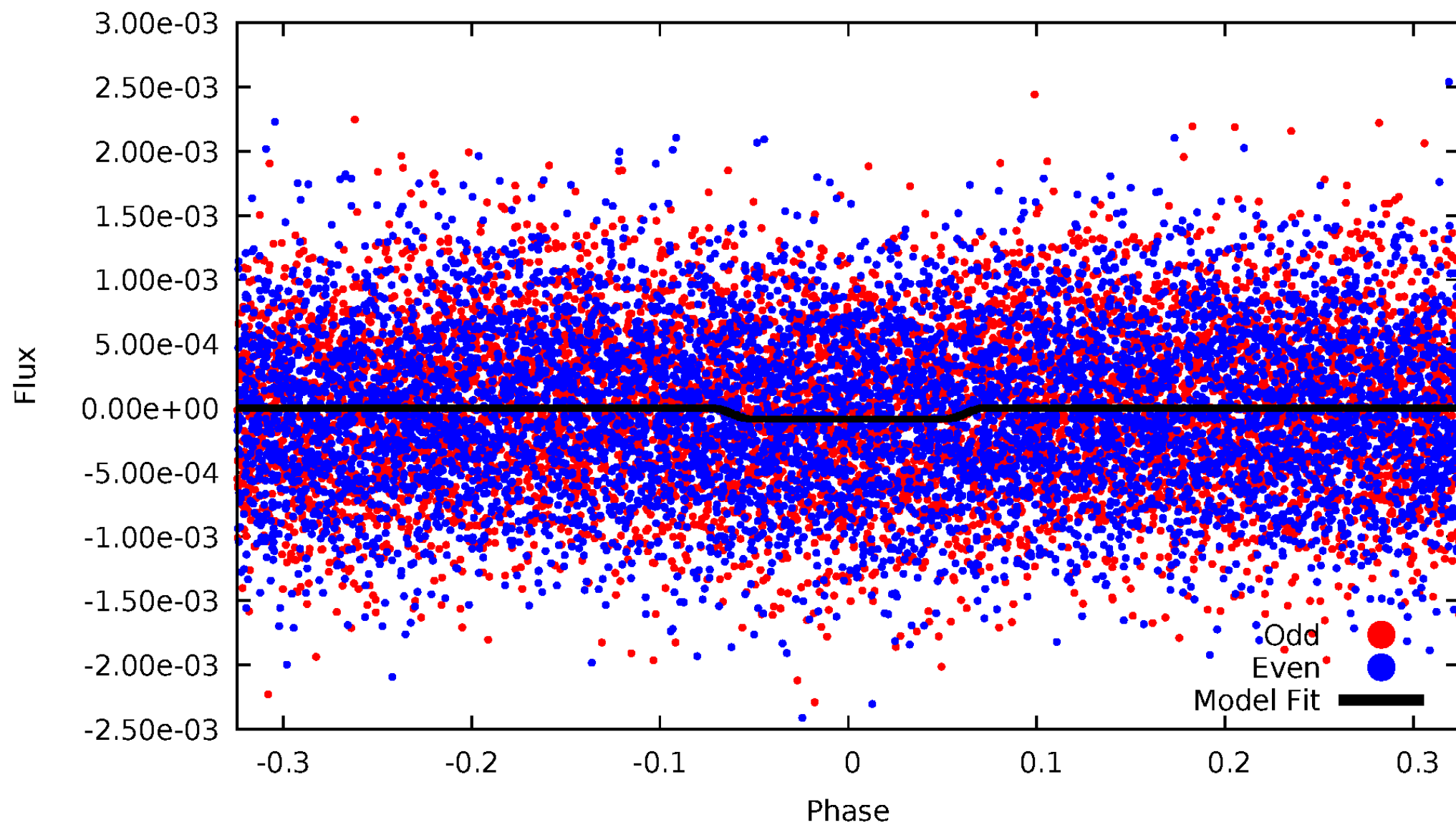
DV Odd/Even

TCE 006381128-03



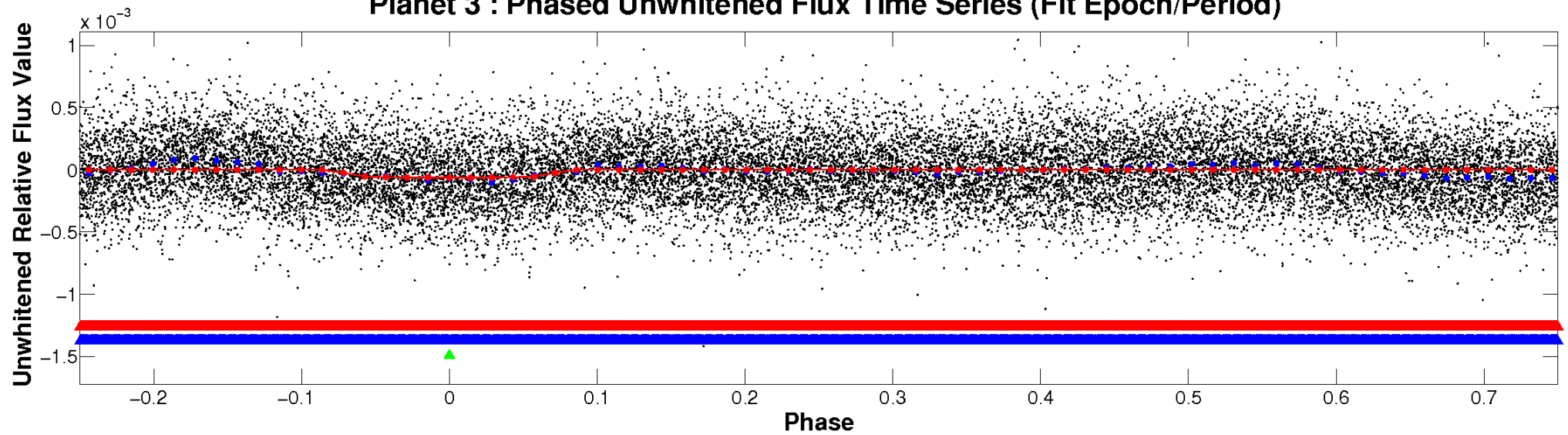
ALT Odd/Even

TCE 006381128-03

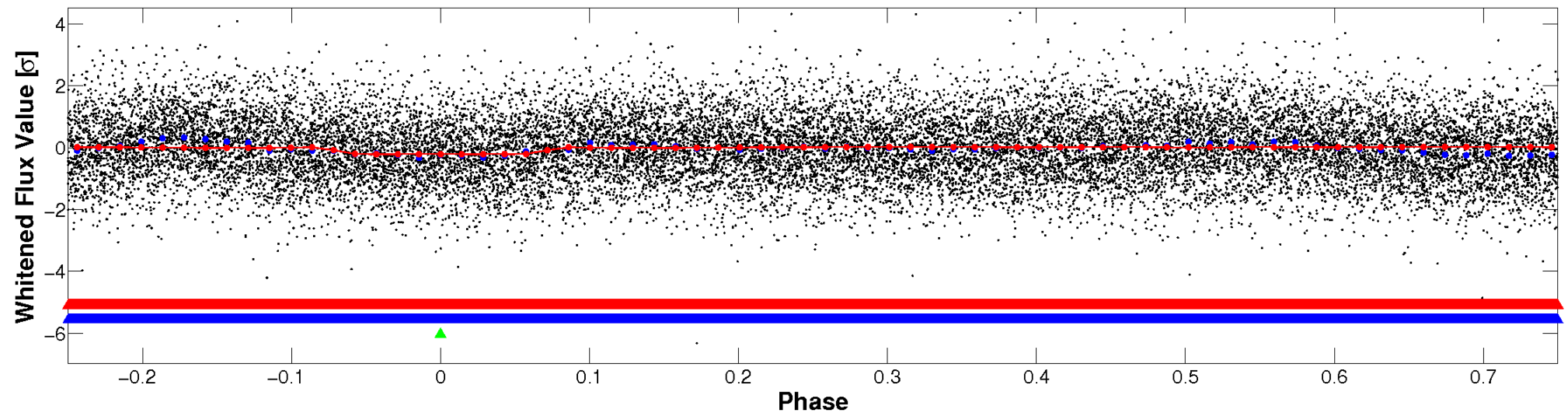


Non-Whitened Vs. Whitened Light Curve

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

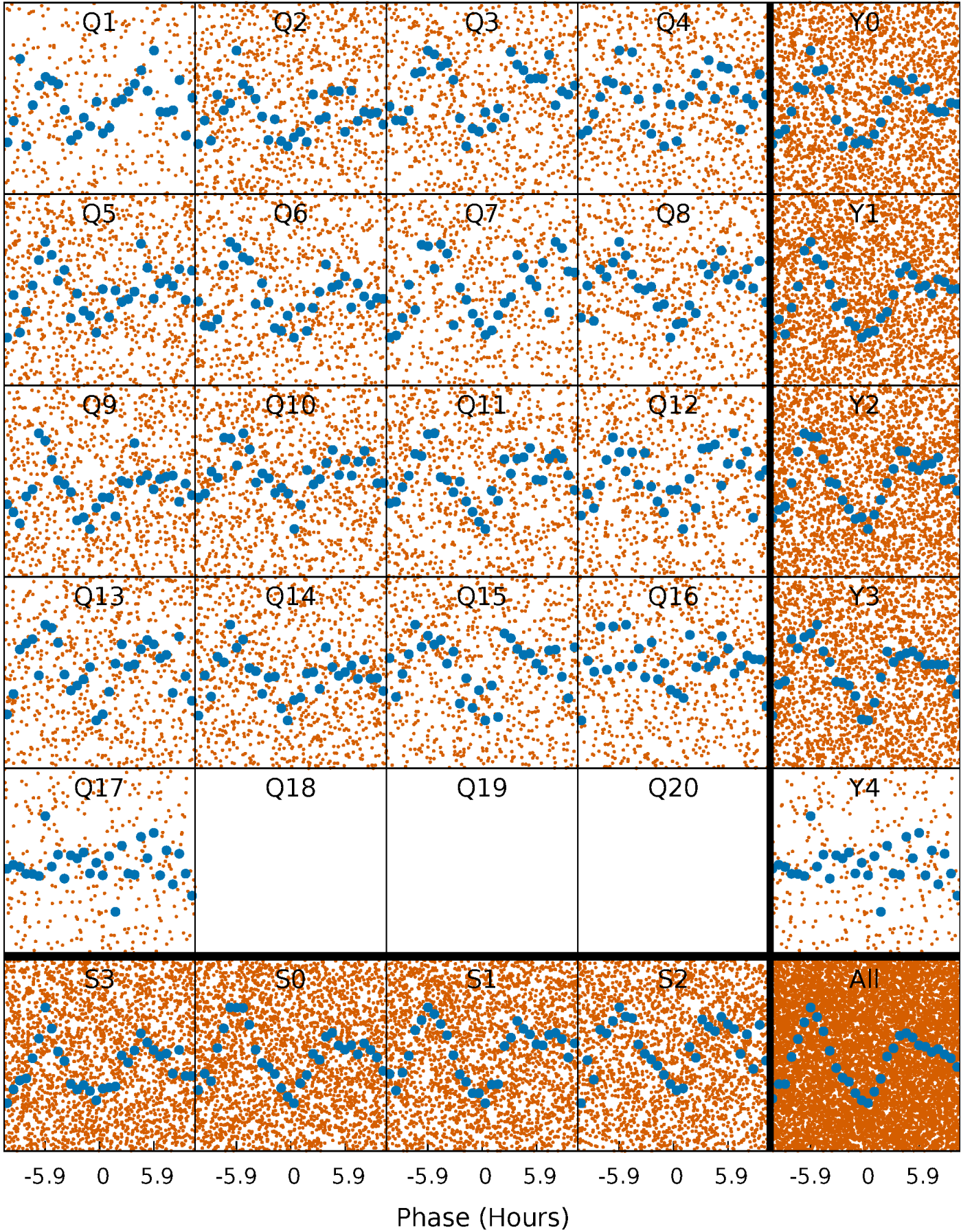


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



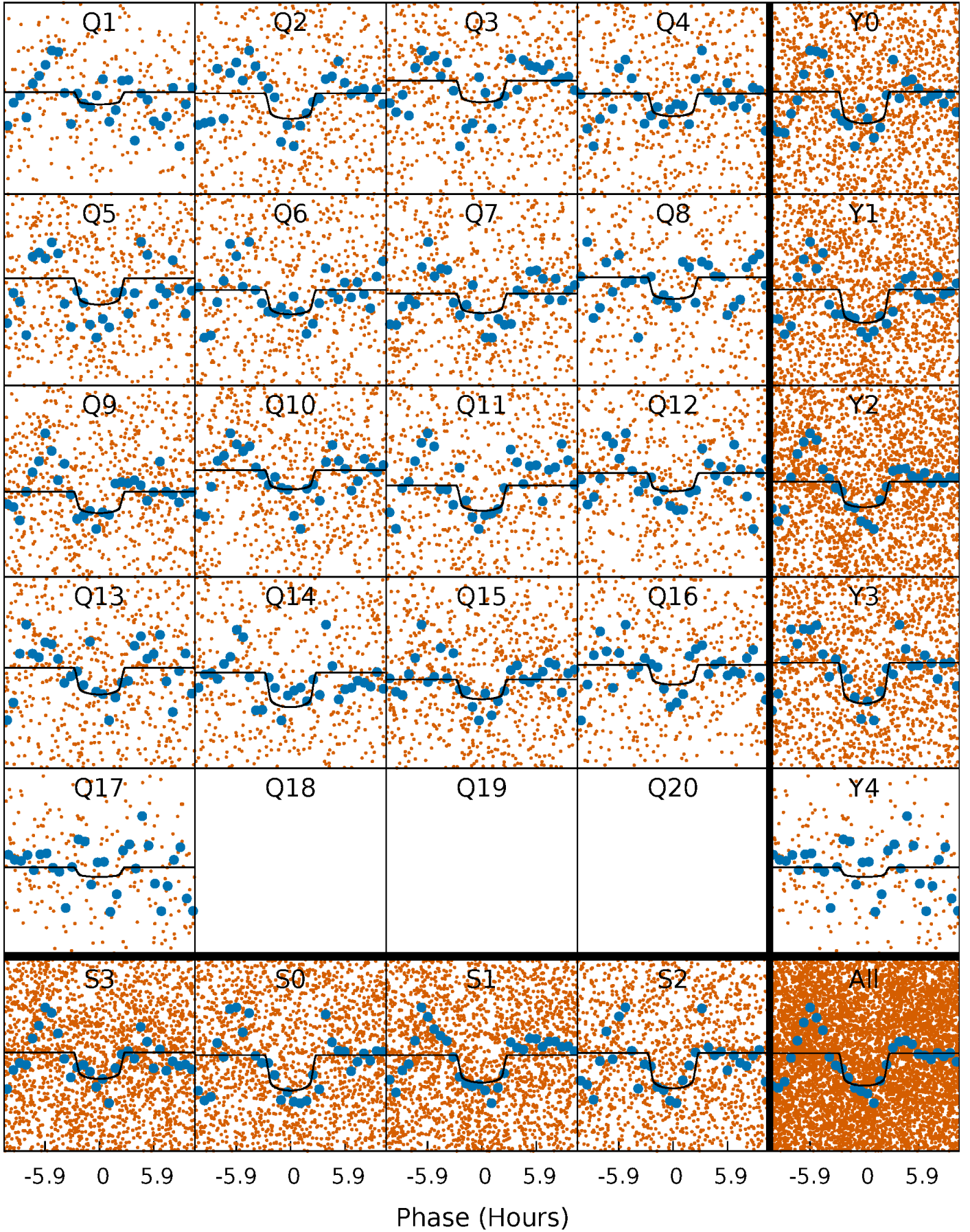
PDC Quarter-Phased Transit Curves

TCE 006381128-03 P= 1.424516 Days $T_0=131.700437$ (BKJD)



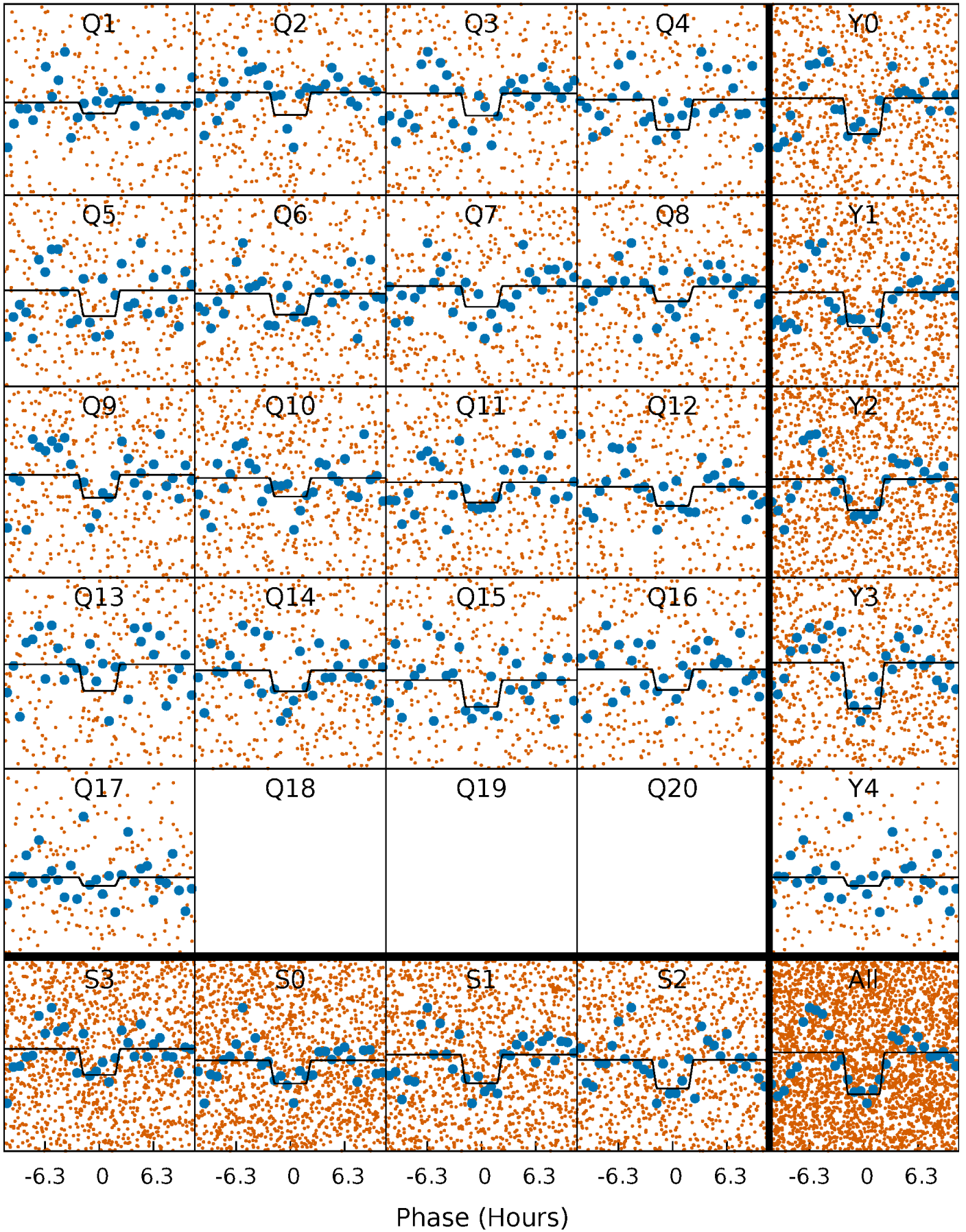
DV Quarter-Phased Transit Curves

TCE 006381128-03 P= 1.424516 Days $T_0=131.700437$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

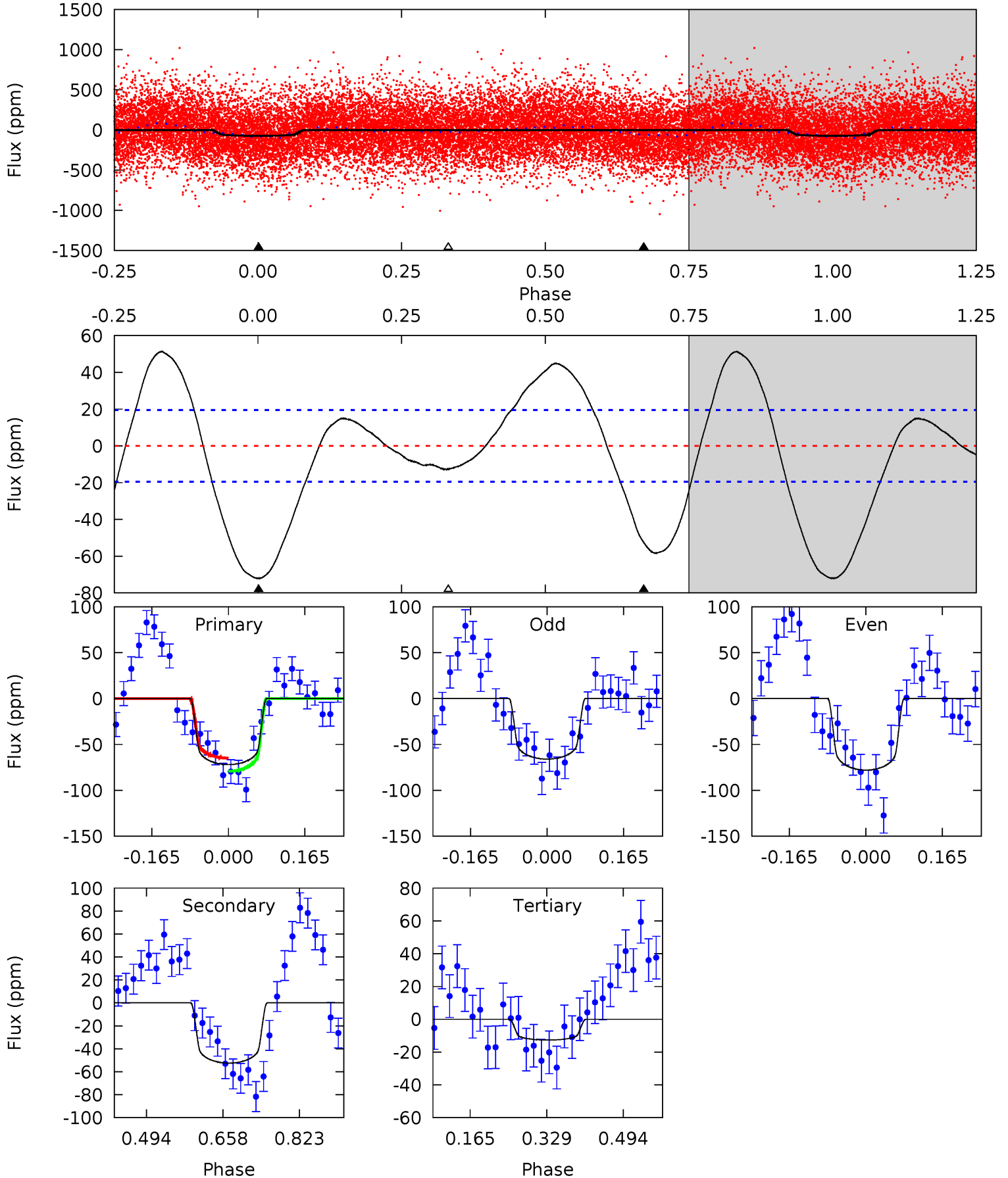
TCE 006381128-03 P= 1.424522 Days $T_0=131.695165$ (BKJD)



DV Model-Shift Uniqueness Test

006381128-03, P = 1.424516 Days, E = 131.700437 Days

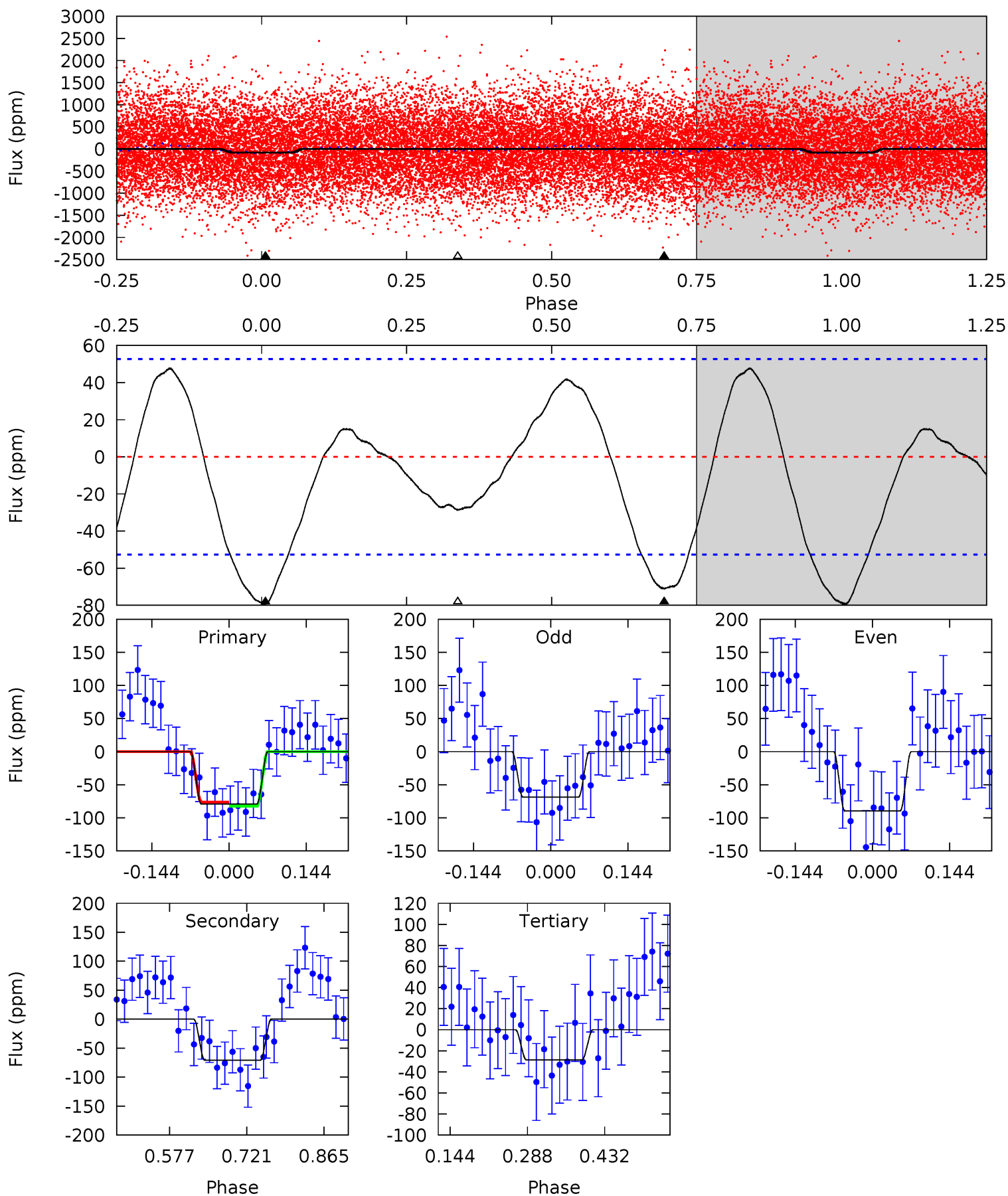
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.5	12.0	2.90	0	4.46	1.39	3.68	13.6	16.5	9.11	12.0	1.37	1.01	0.42	1.66



Alt Model-Shift Uniqueness Test

006381128-03, P = 1.424522 Days, E = 131.695165 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.75	6.05	2.44	0	4.49	1.46	1.99	4.31	6.75	3.61	6.05	0.88	1.11	0.38	0.25



Stellar Parameters For KIC 006381128

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7730^{+214}_{-349}	$4.045^{+0.165}_{-0.165}$	$0.040^{+0.150}_{-0.400}$	$2.100^{+0.519}_{-0.519}$	$1.784^{+0.170}_{-0.315}$	$0.272^{+0.271}_{-0.118}$
	+3%/-5%	+4%/-4%	+375%/-1000%	+25%/-25%	+10%/-18%	+100%/-44%
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 006381128-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-52 ± 4	$1.95^{+0.60}_{-0.54}$	3965^{+288}_{-286}	6904^{+1410}_{-857}	$6.852^{+6.048}_{-2.819}$
Alt.	-71 ± 12	$2.07^{+0.62}_{-0.52}$	3961^{+268}_{-257}	7201^{+1397}_{-943}	$7.970^{+6.410}_{-3.374}$

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 $A_{obs} \gg 1.0$

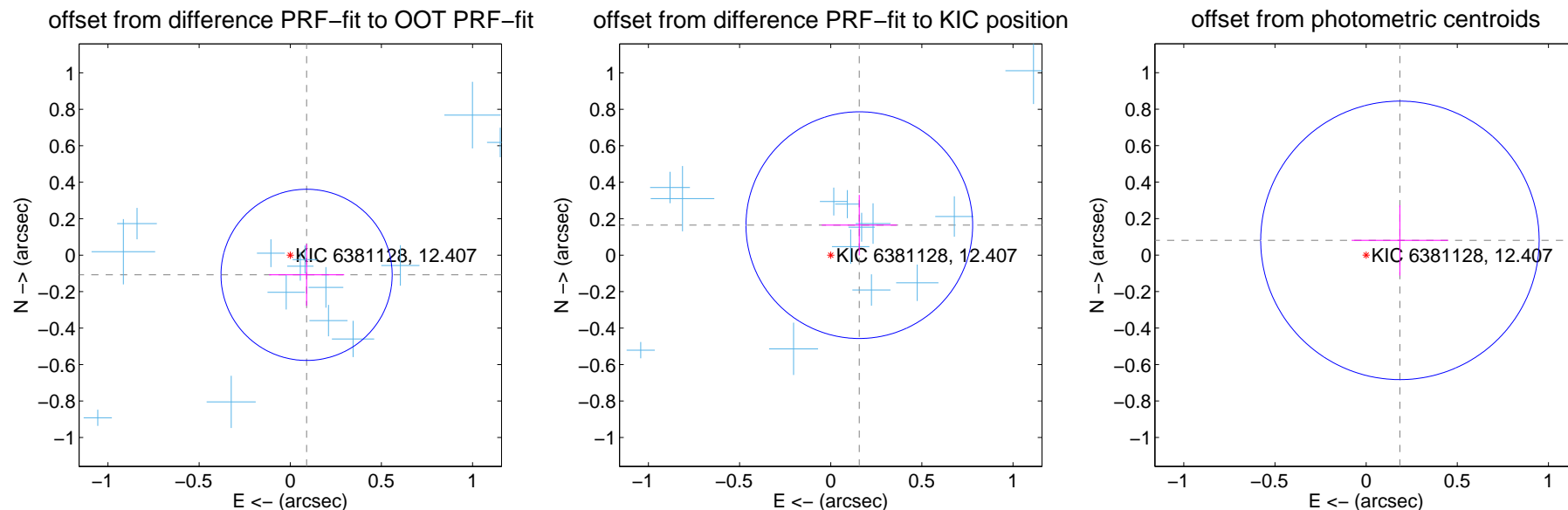
DV Centroid Data

Supplemental centroid analysis for 006381128-03. Kepler magnitude: 12.41. Transit SNR 10.87

There are 17 quarters with good PRF difference image offsets

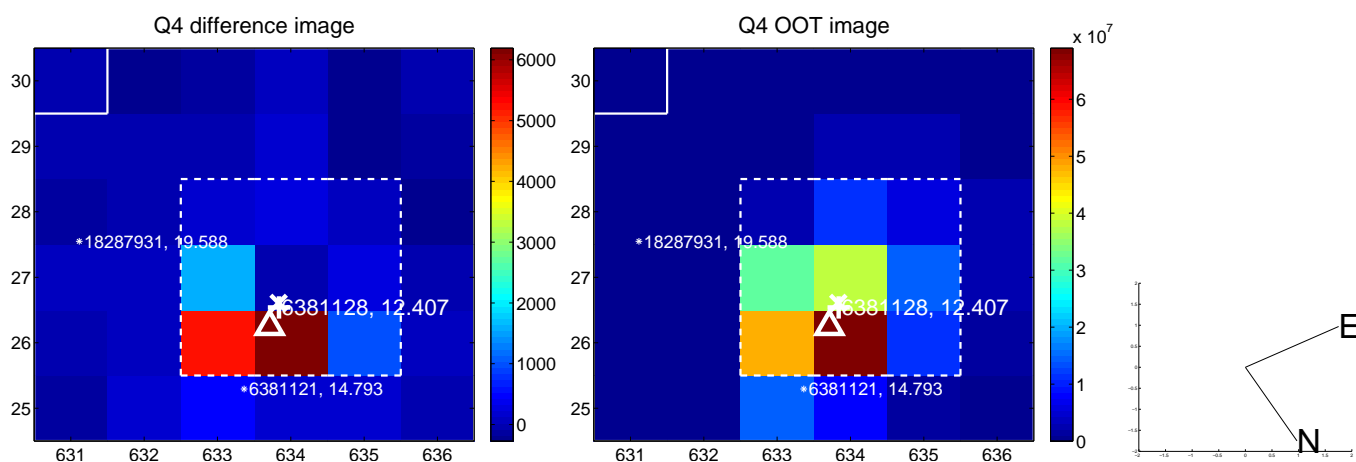
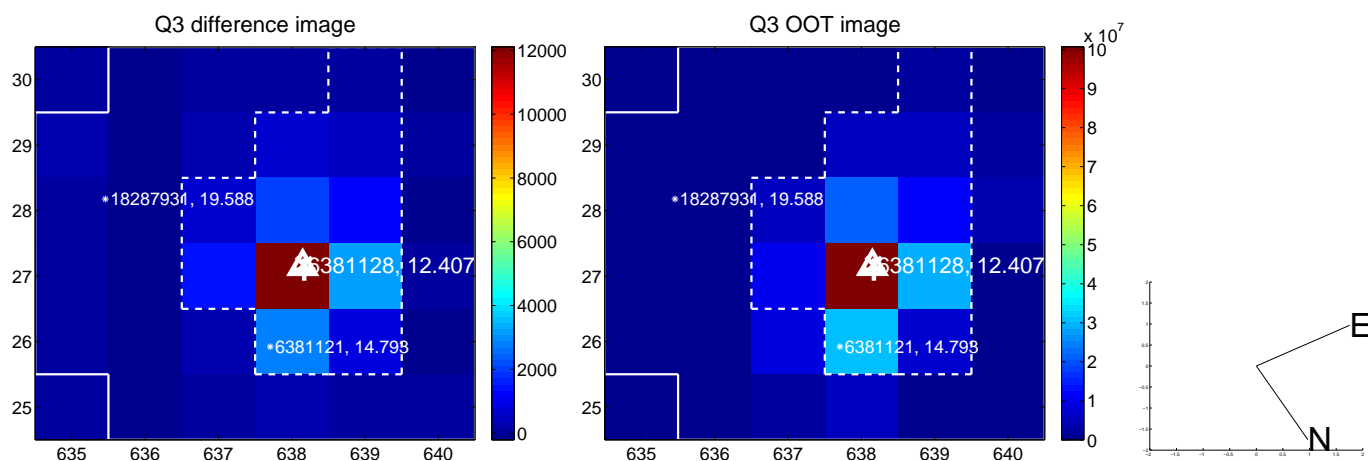
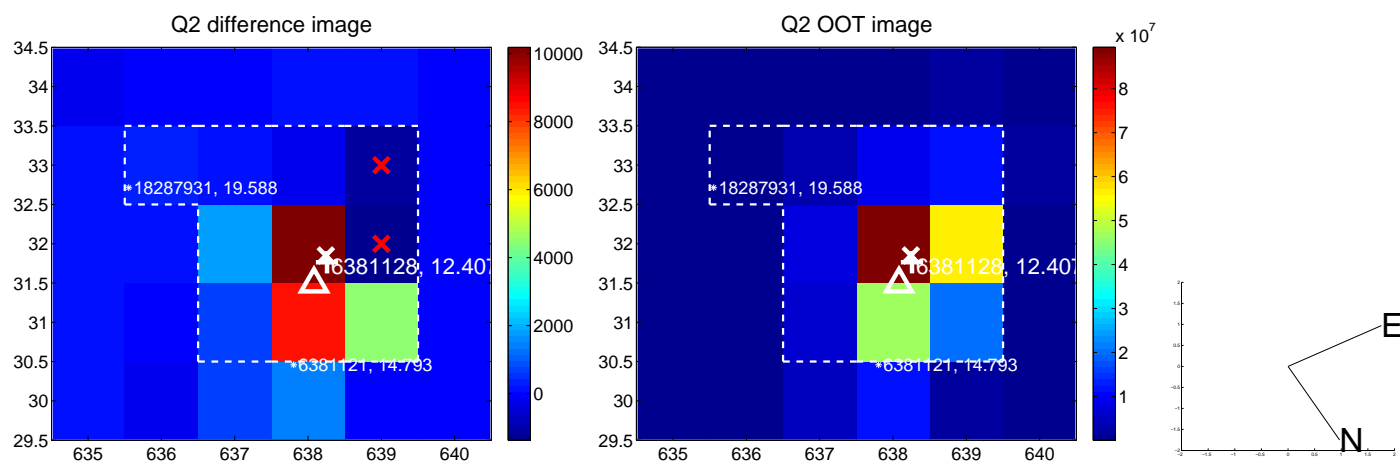
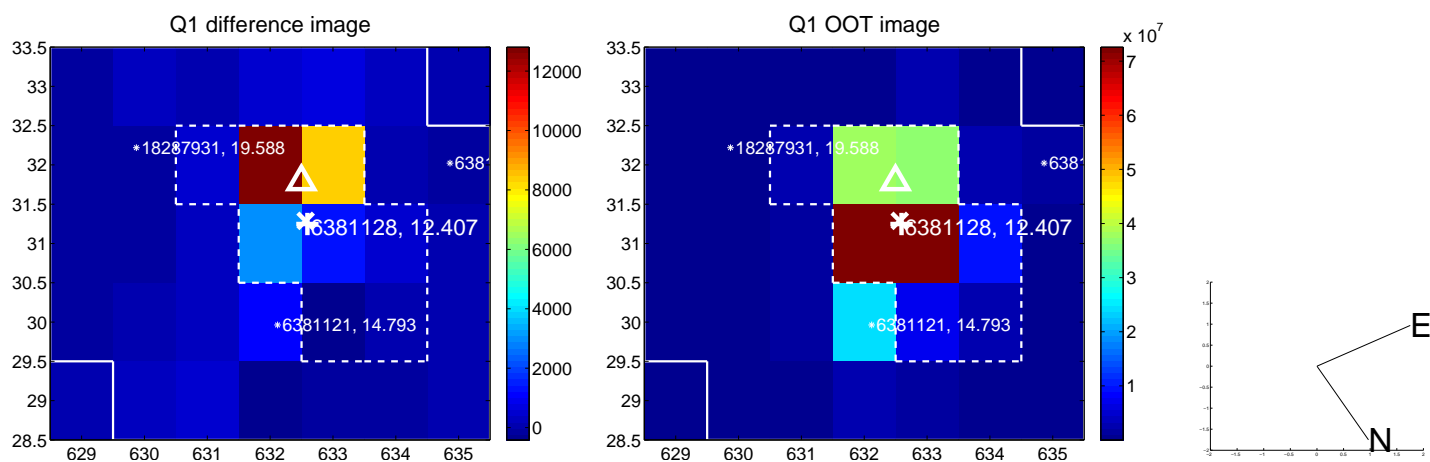
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.140 ± 0.156	0.90	-0.090 ± 0.206	-0.108 ± 0.169
PRF-fit source offset from KIC position	0.227 ± 0.207	1.10	-0.157 ± 0.206	0.165 ± 0.166
photometric centroid source offset	0.20 ± 0.25	0.79	-0.19 ± 0.26	0.08 ± 0.19

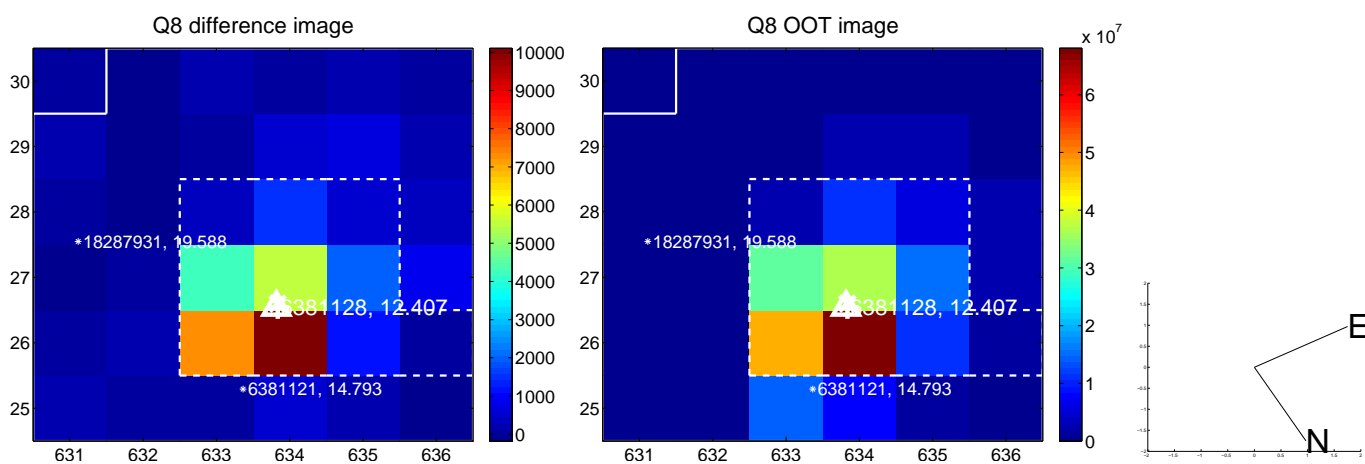
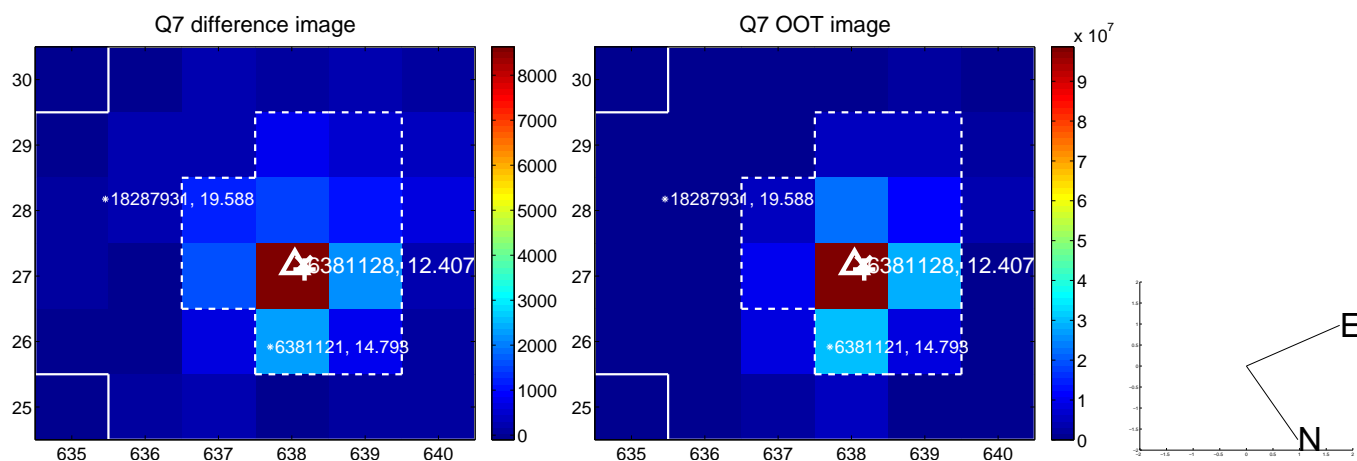
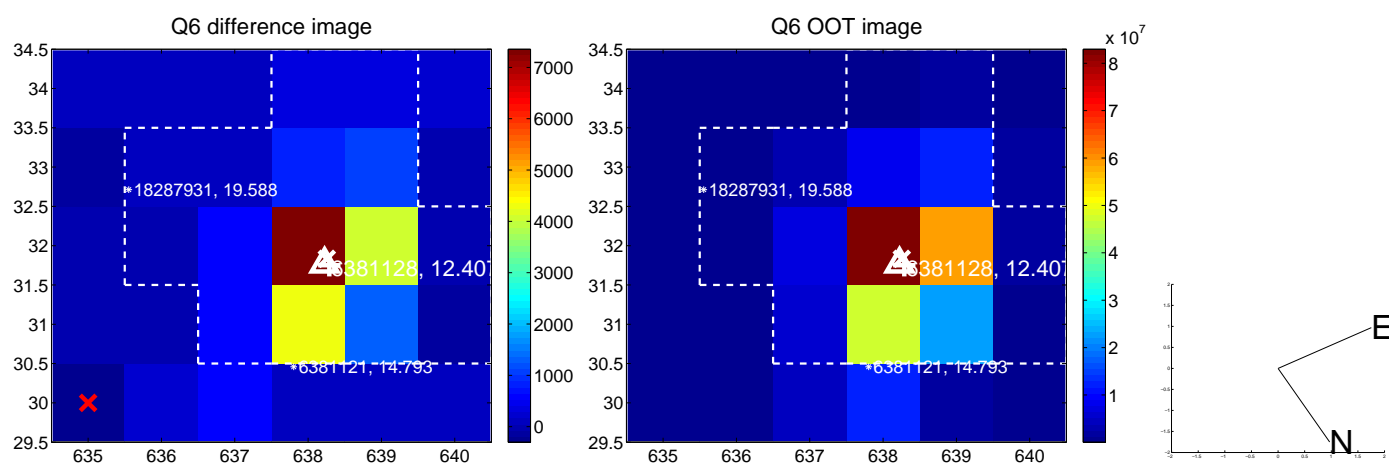
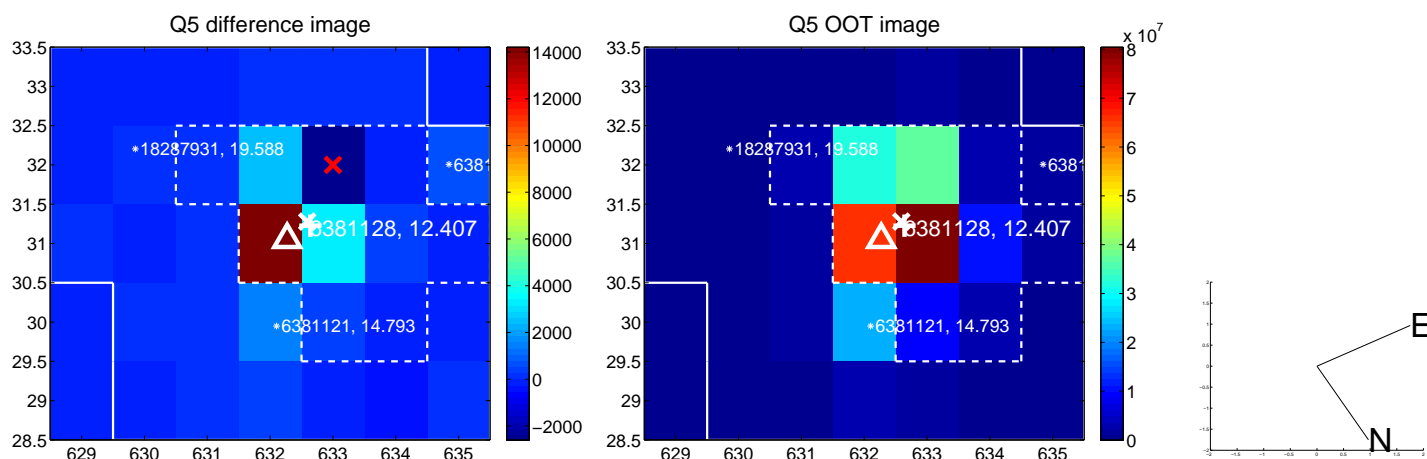


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

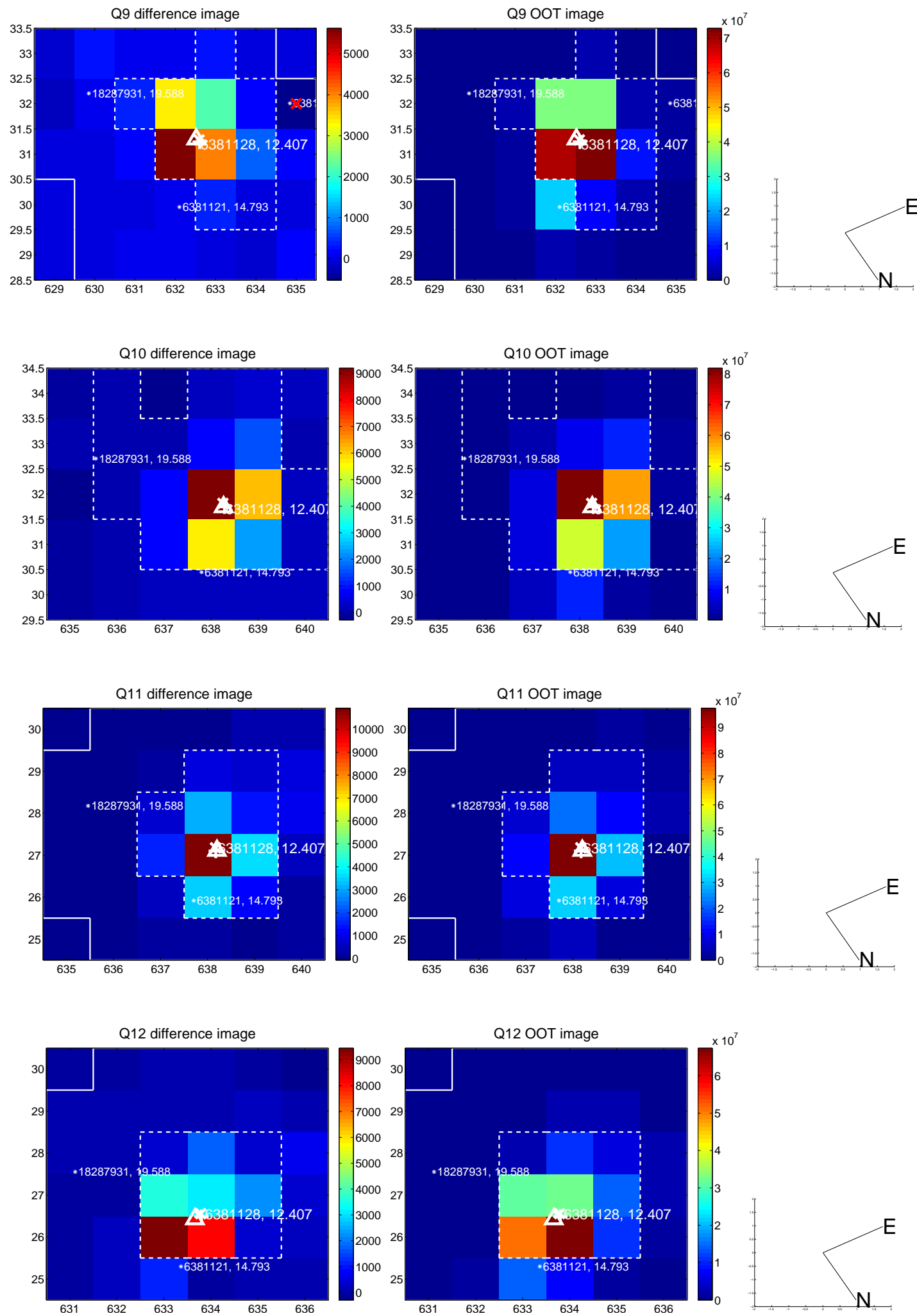
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



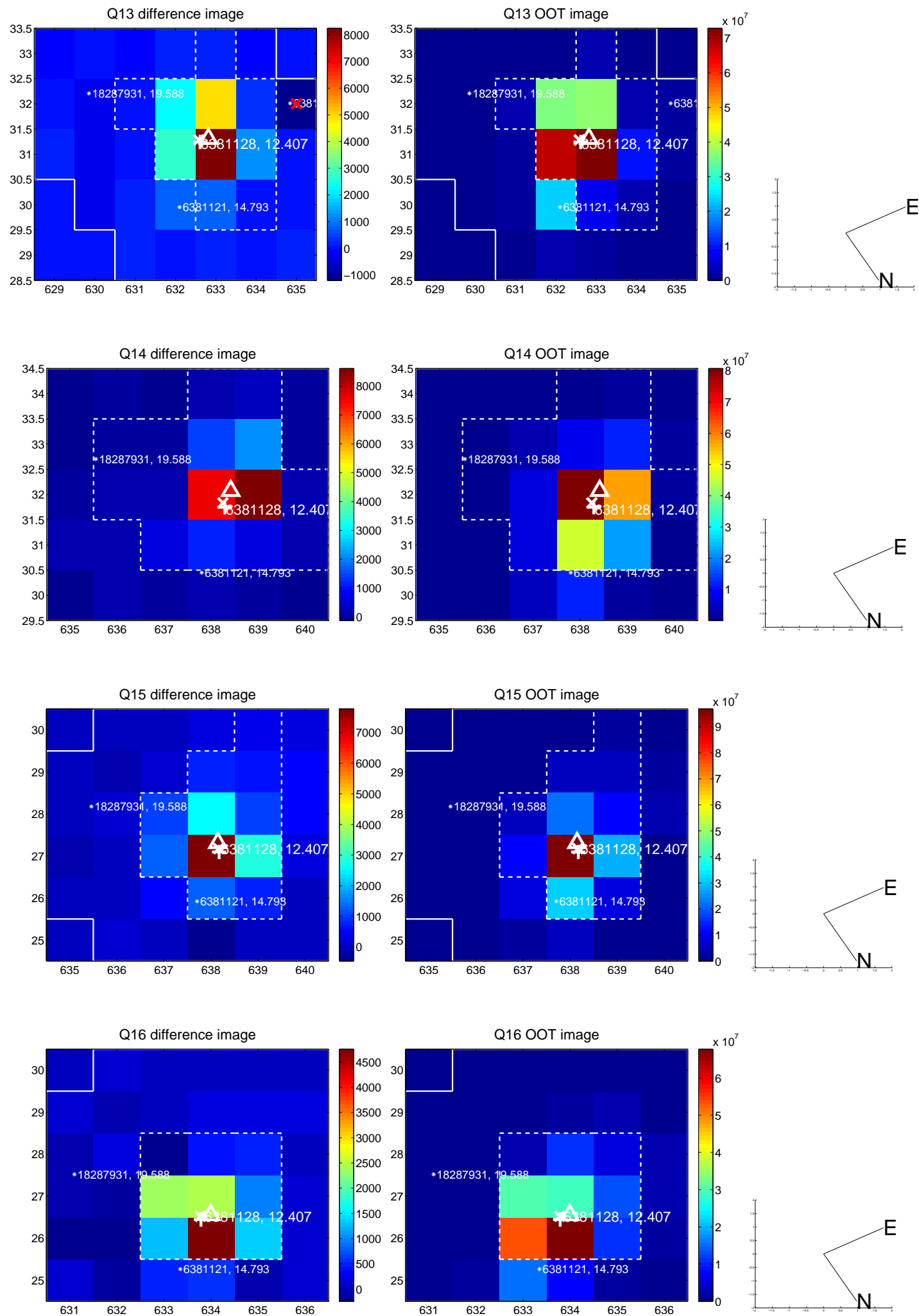
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



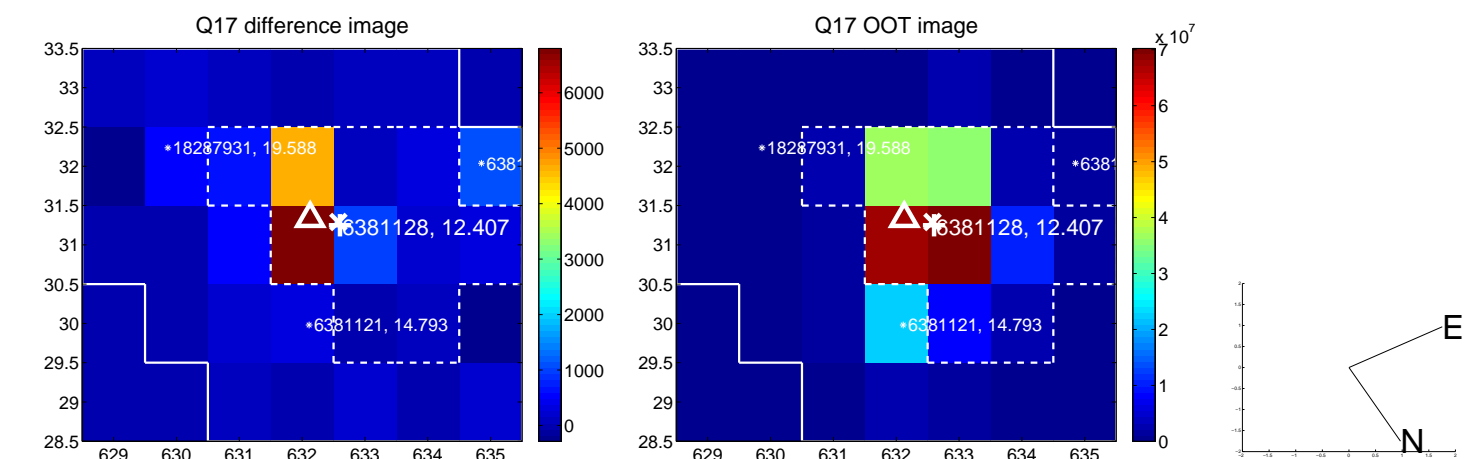
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



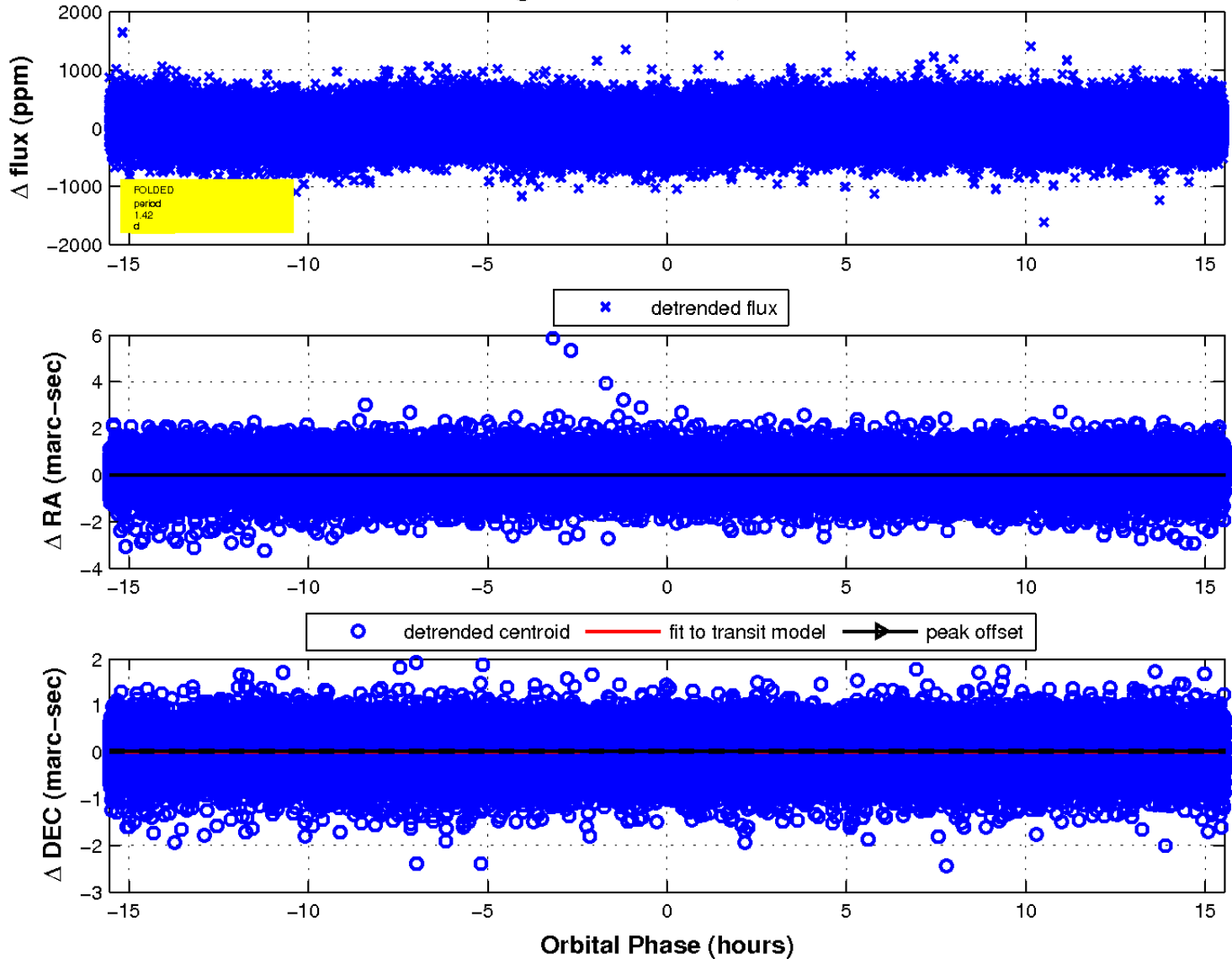
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



fluxWeightedCentroids, Planet 3 of 3



UKIRT Image

Declination

