

KIC 010264728

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})
010264728-01	OBS	No	0.567310	131.623698	249.4	3.540	13.3	12.6	2.47	7994	5.06	81596.75
010264728-02	OBS	No	112.563603	196.674830	4196.6	2.376	12.1	11.4	2.47	7994	16.87	70.51
010264728-03	OBS	No	66.455272	168.079818	3422.1	1.891	11.8	11.4	2.47	7994	17.33	142.36
010264728-04	OBS	No	61.912884	181.197029	2719.6	4.758	10.2	10.0	2.47	7994	23.32	156.46
010264728-05	OBS	No	68.101018	174.196701	38.1	4.500	8.5	-1.0	2.47	7994	1.54	137.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264728-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
010264728-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED
010264728-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

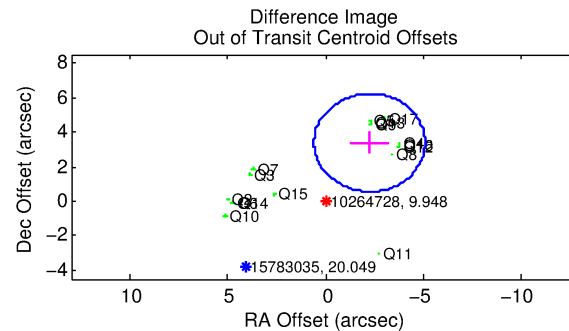
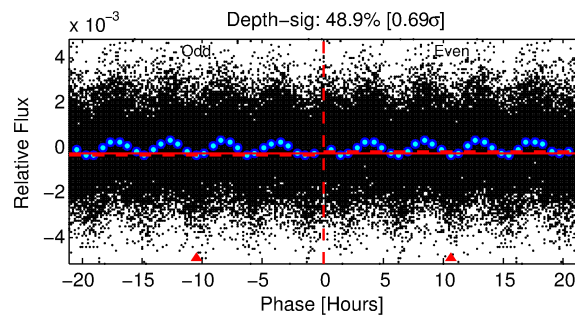
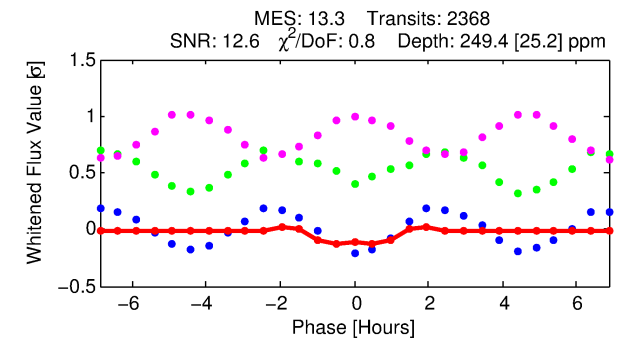
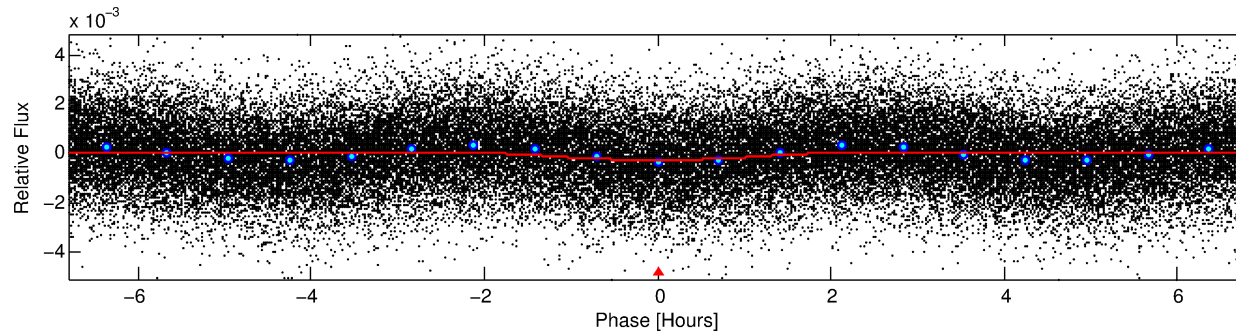
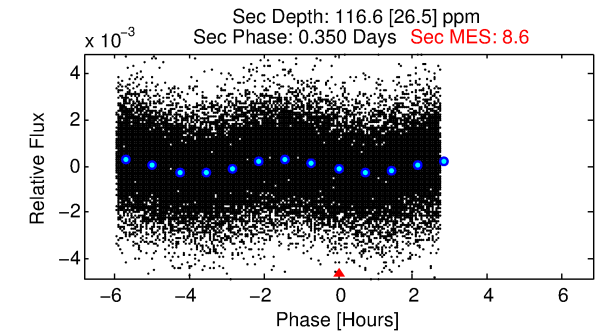
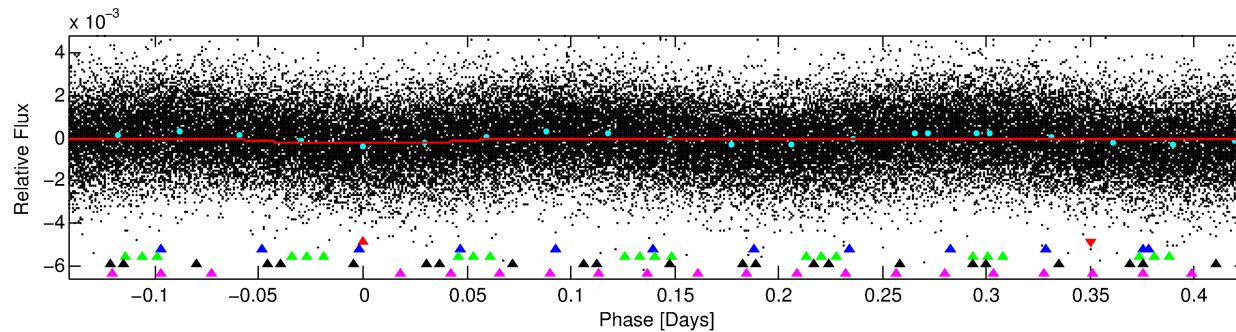
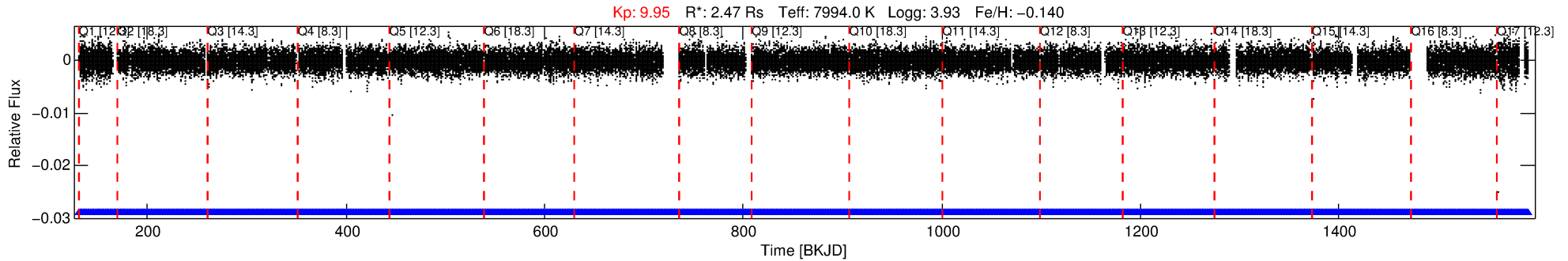
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010264728-01

No Significant Match Found

DV One-Page Summary

KIC: 10264728 Candidate: 1 of 5 Period: 0.567 d



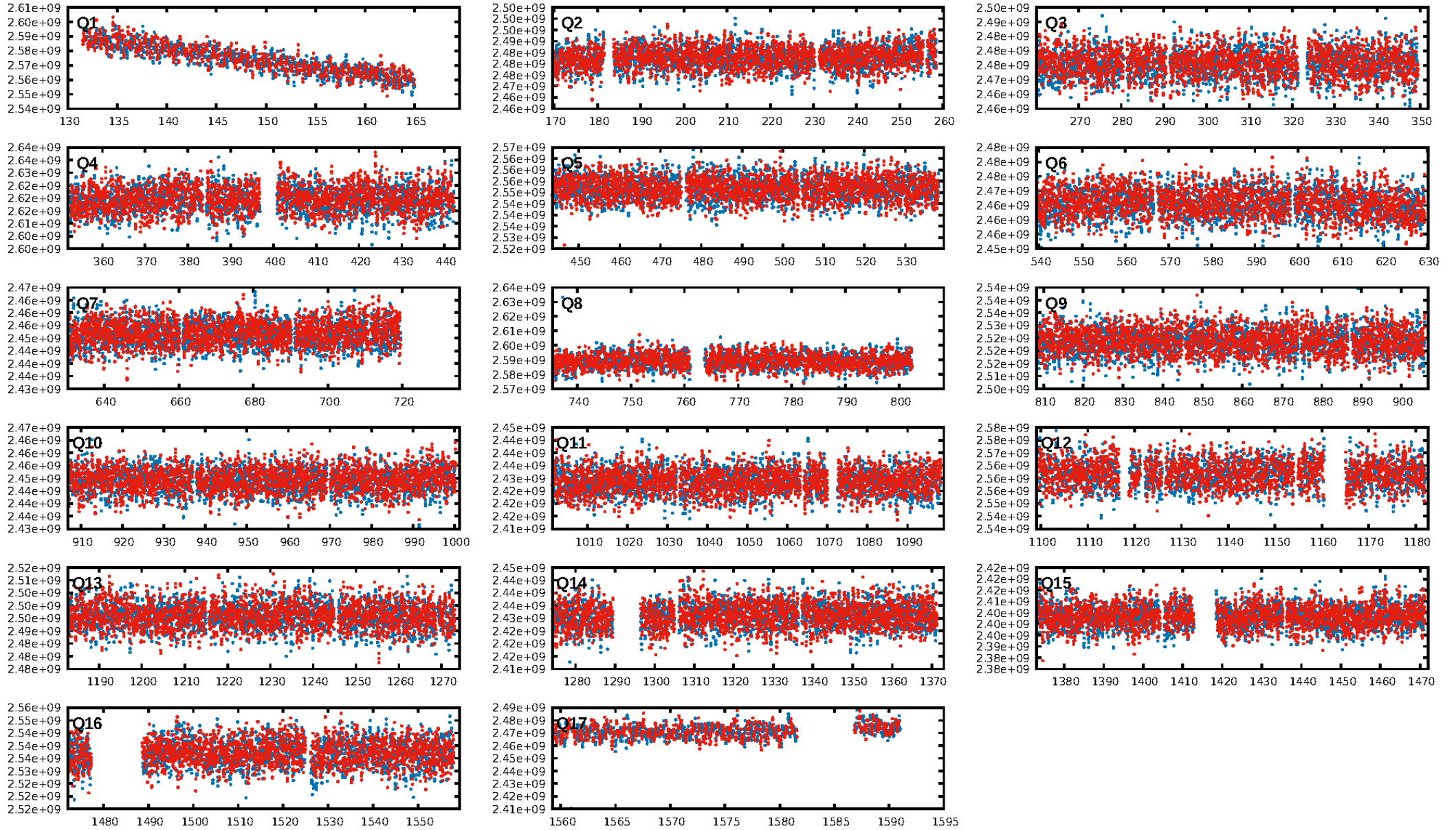
DV Fit Results:

Period = 0.56731 [0.00001] d
Epoch = 131.6237 [0.0022] BKJD
Rp/R* = 0.0188 [0.0010]
a/R* = 1.06 [0.01]
b = 0.98 [0.00]
Seff = 81596.75 [39310.56]
Teff = 4310 [519] K
Rp = 5.06 [1.65] Re
a = 0.0166 [0.0048] AU
Ag = 0.69 [0.35] [-0.88σ]
Teffp = 6066 [458] K [2.54σ]

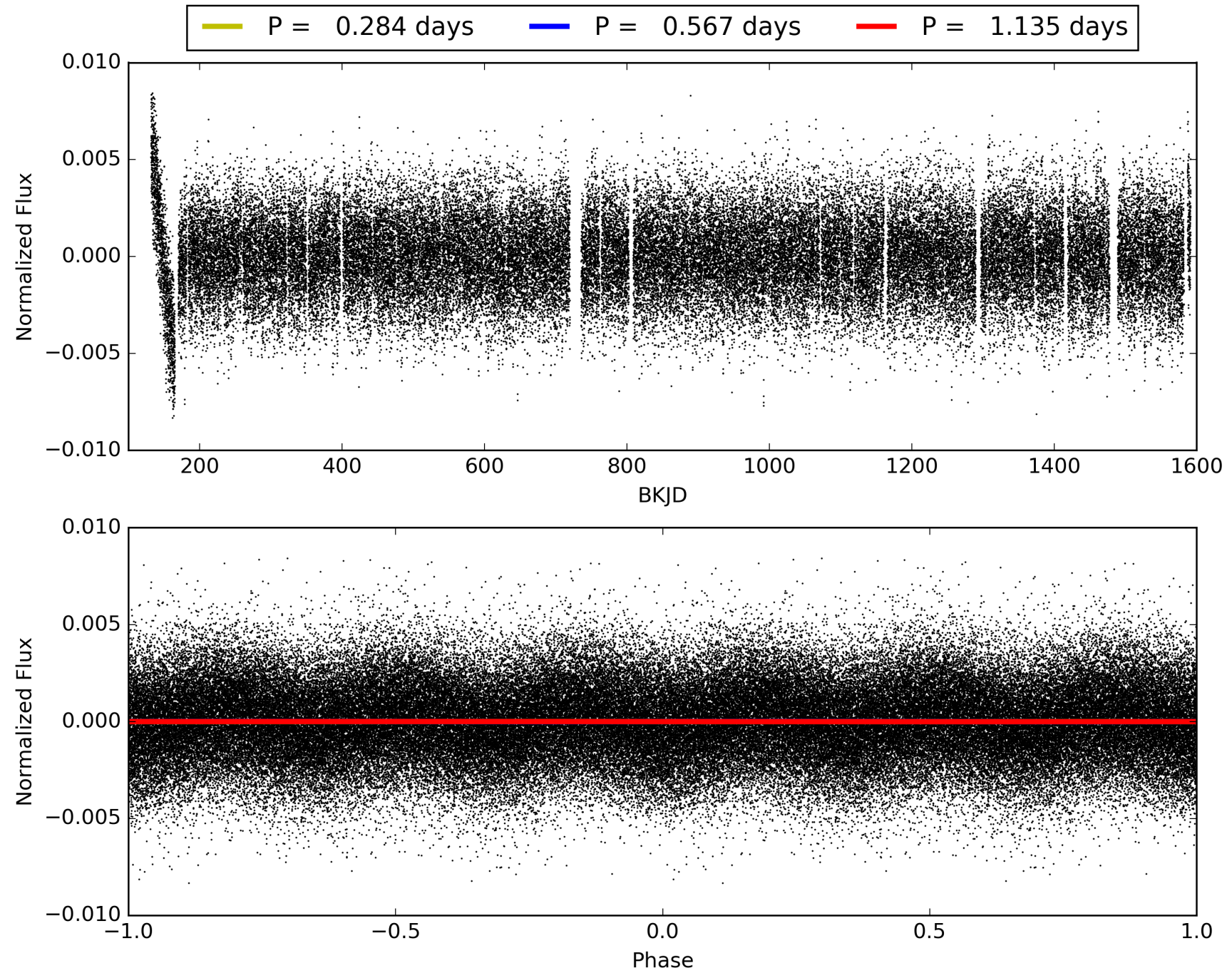
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [248.27σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [2262/2262]
GhostDiagnostic-chr: N/A
Centroid-sig: 0.1%
Centroid-so: 1.742 arcsec [7.58σ]
OotOffset-rm: 4.062 arcsec [4.30σ]
KicOffset-rm: 3.829 arcsec [4.09σ]
OotOffset-st: 4/4/4/4 [16]
KicOffset-st: 4/4/4/4 [16]
DiffImageQuality-fgm: 0.00 [0/16]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 010264728-01, PDC Light Curves

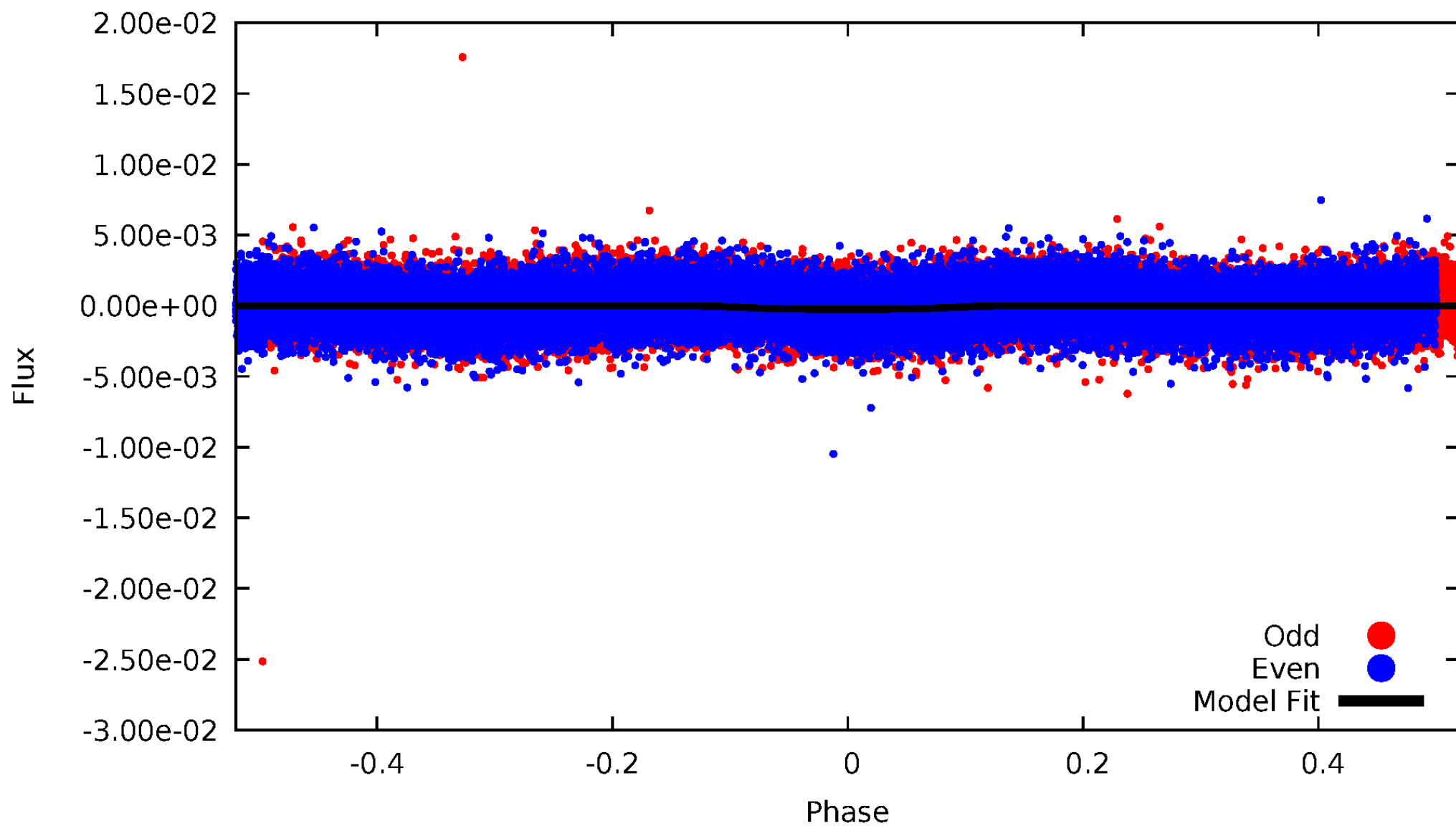


TCE 010264728-01



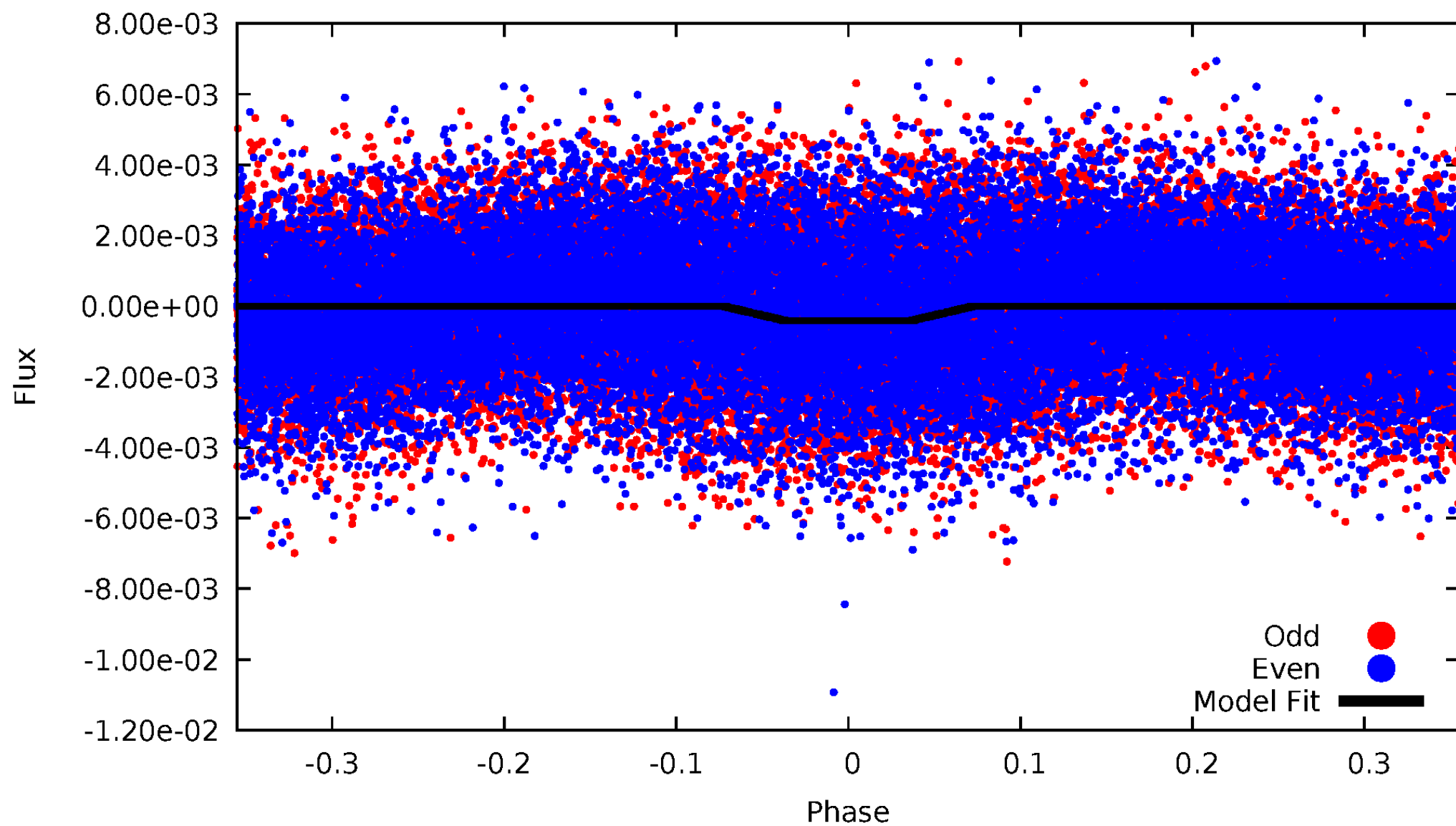
DV Odd/Even

TCE 010264728-01

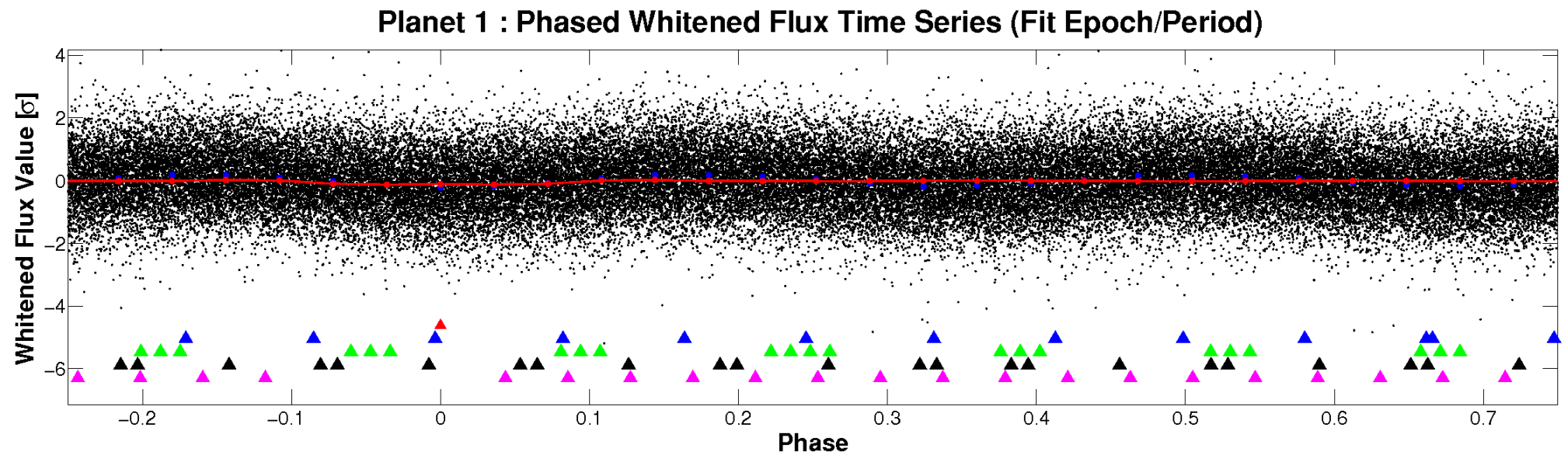
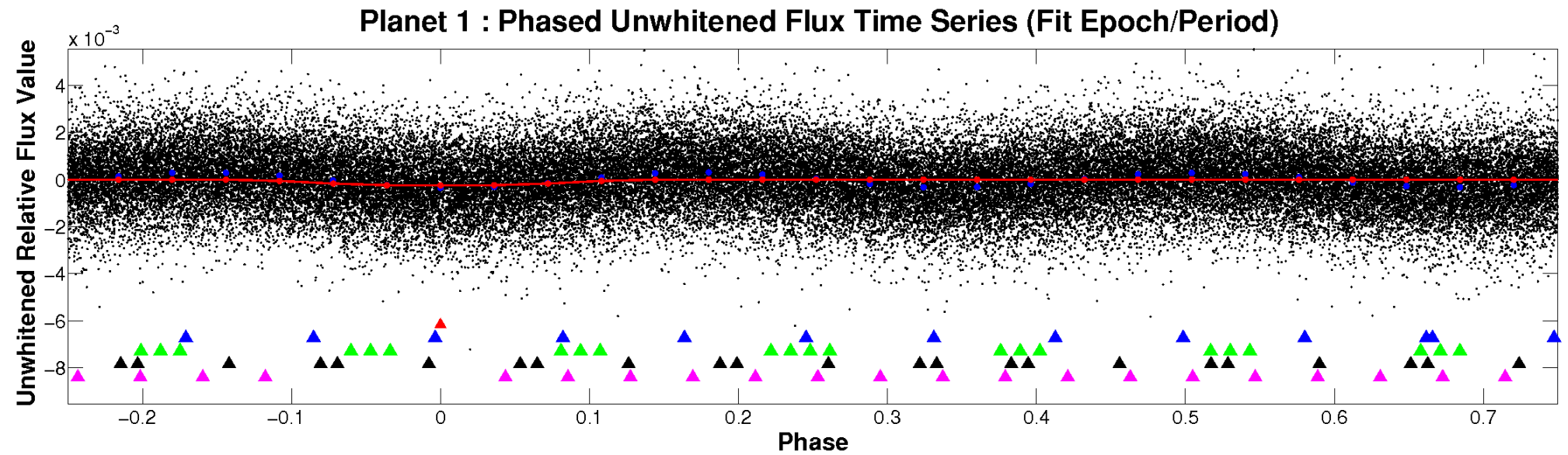


ALT Odd/Even

TCE 010264728-01

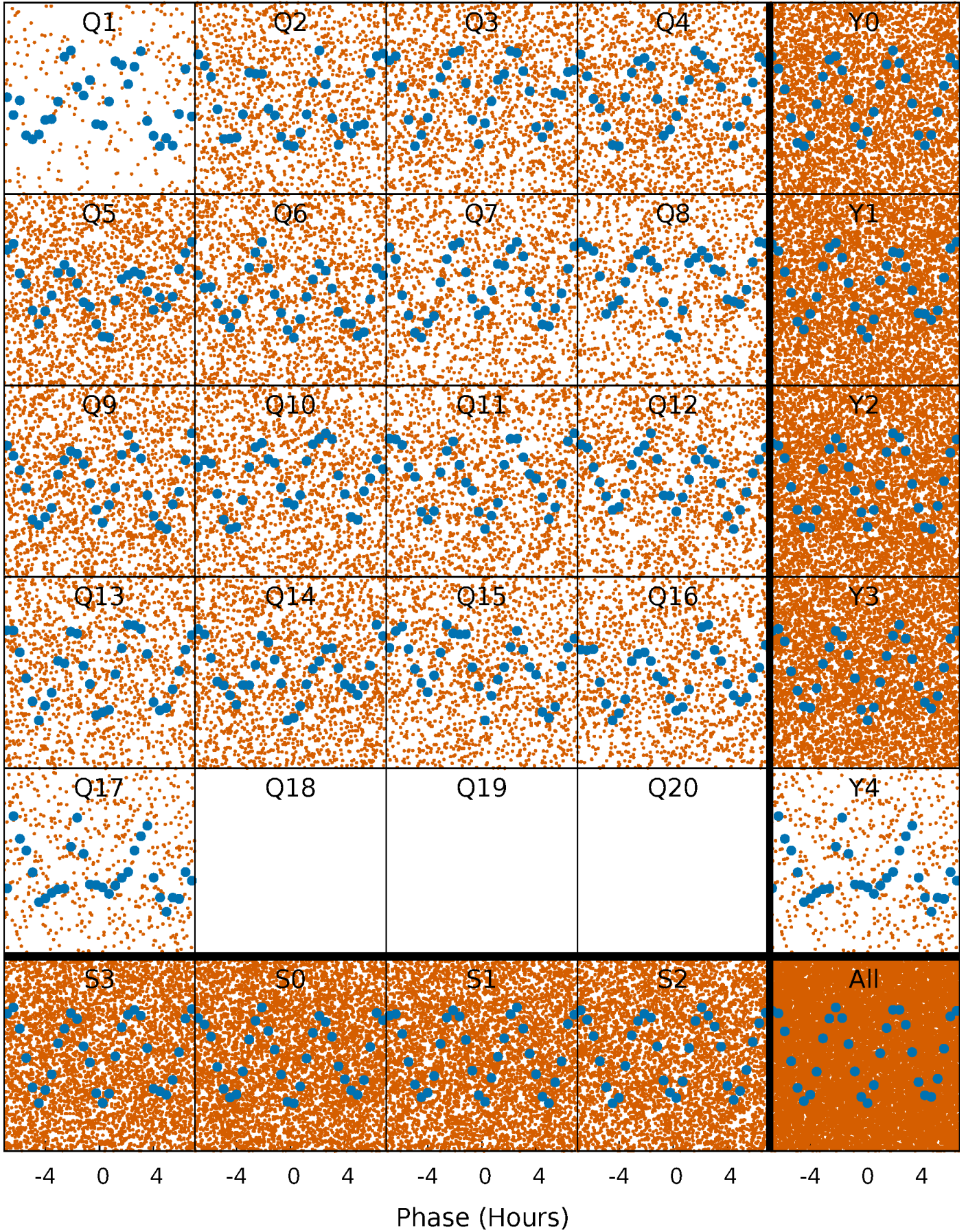


Non-Whitened Vs. Whitened Light Curve



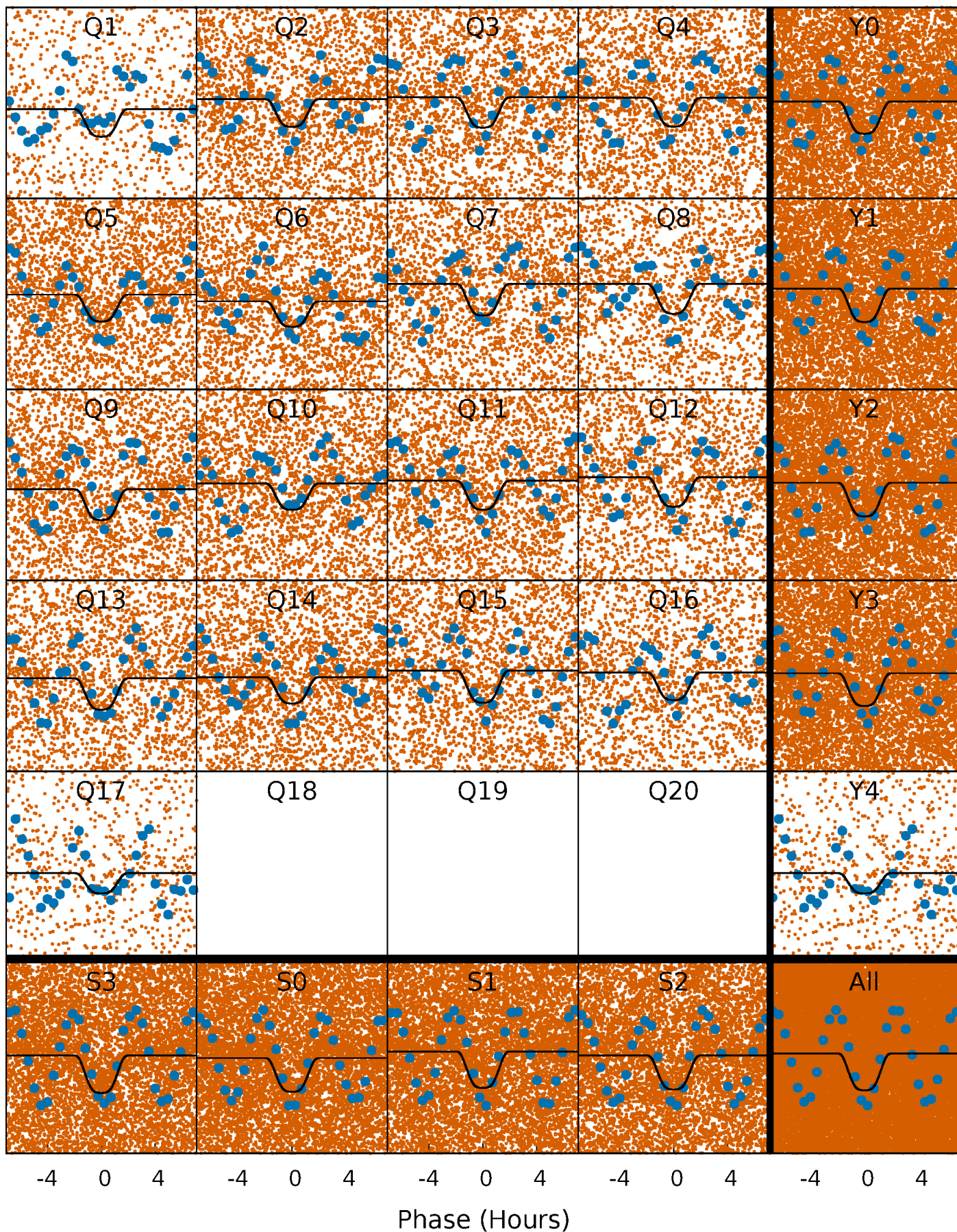
PDC Quarter-Phased Transit Curves

TCE 010264728-01 P= 0.567310 Days $T_0=131.623698$ (BKJD)



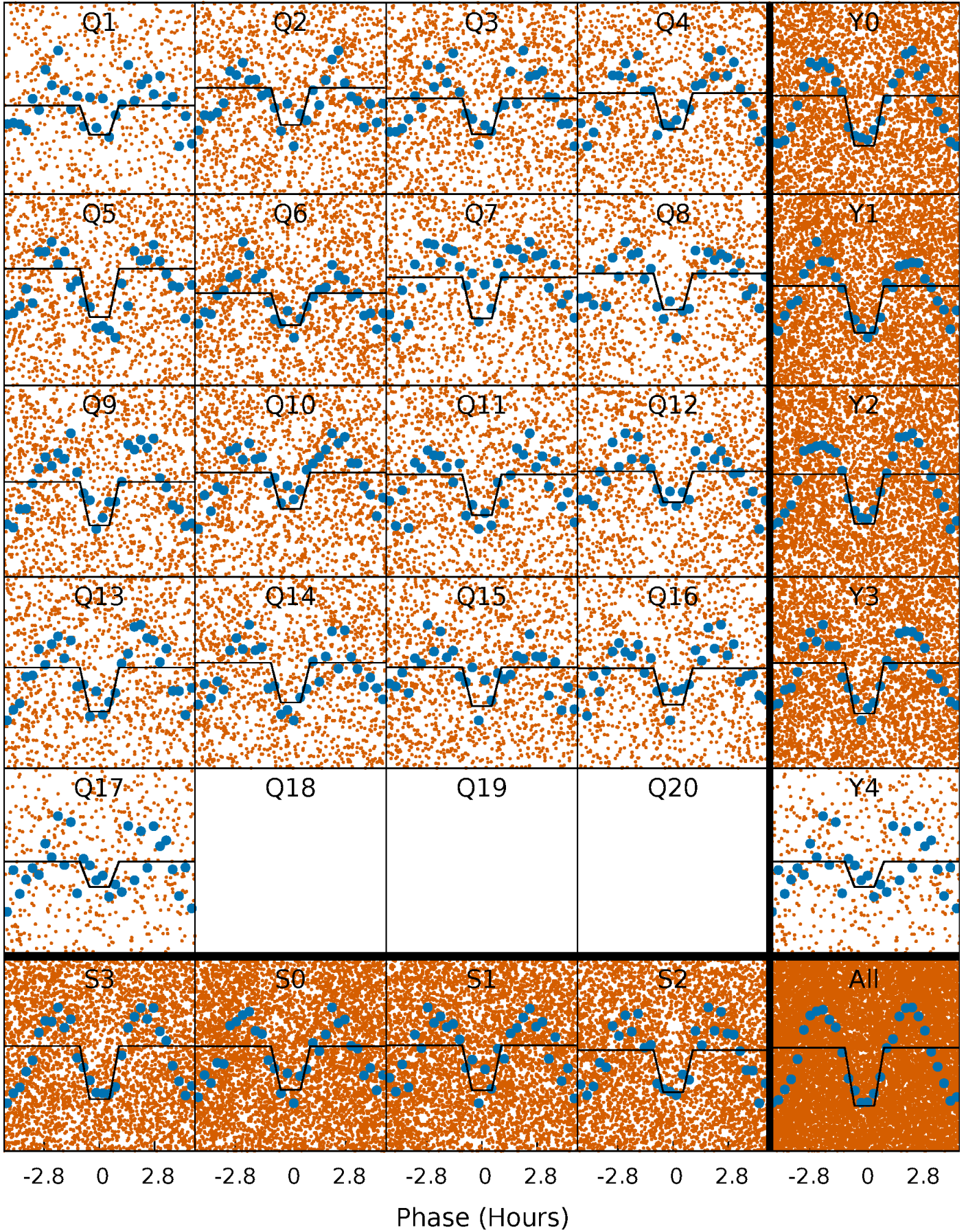
DV Quarter-Phased Transit Curves

TCE 010264728-01 P= 0.567310 Days $T_0=131.623698$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

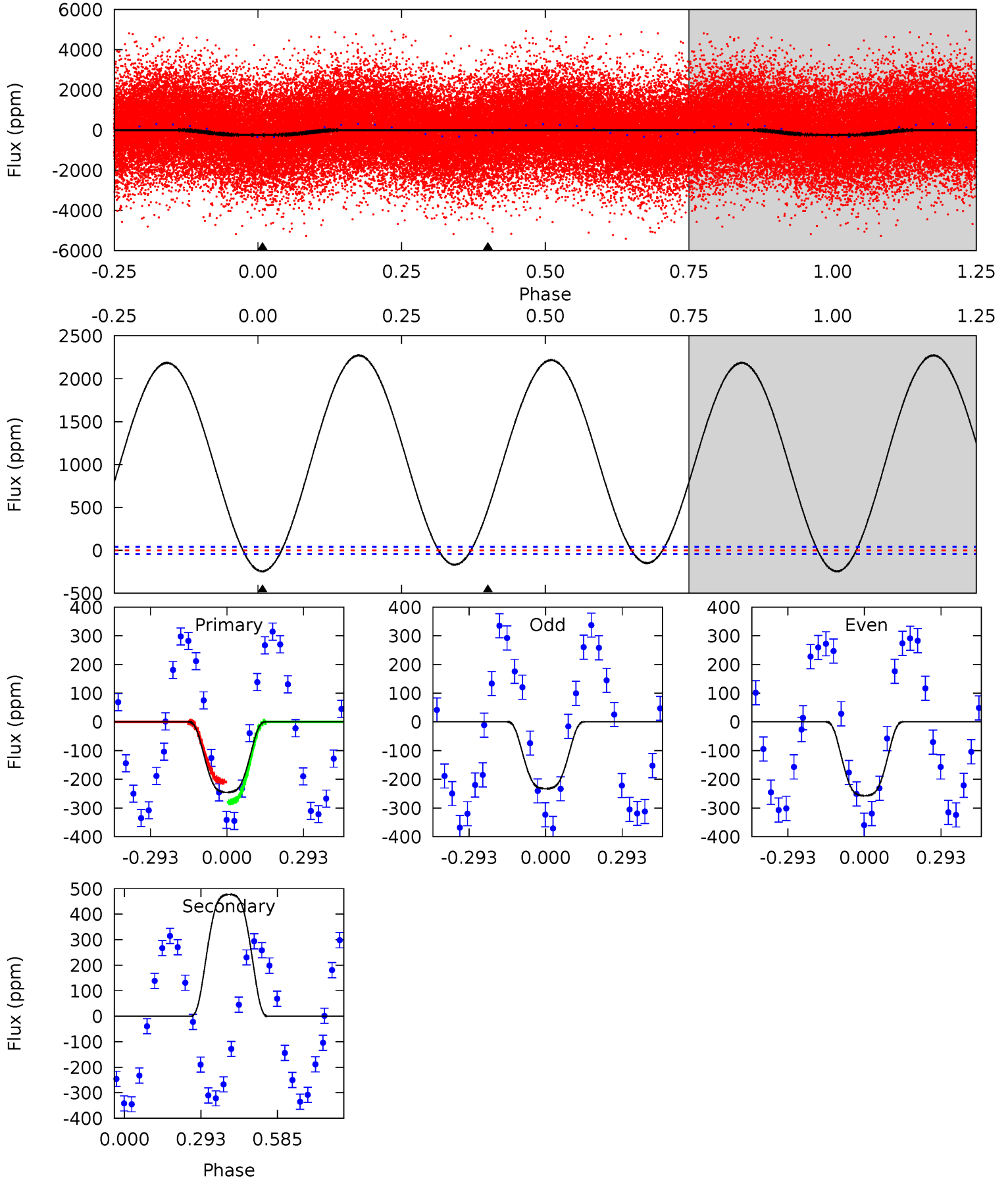
TCE 010264728-01 P= 0.567319 Days $T_0=131.616589$ (BKJD)



DV Model-Shift Uniqueness Test

010264728-01, P = 0.567310 Days, E = 131.056388 Days

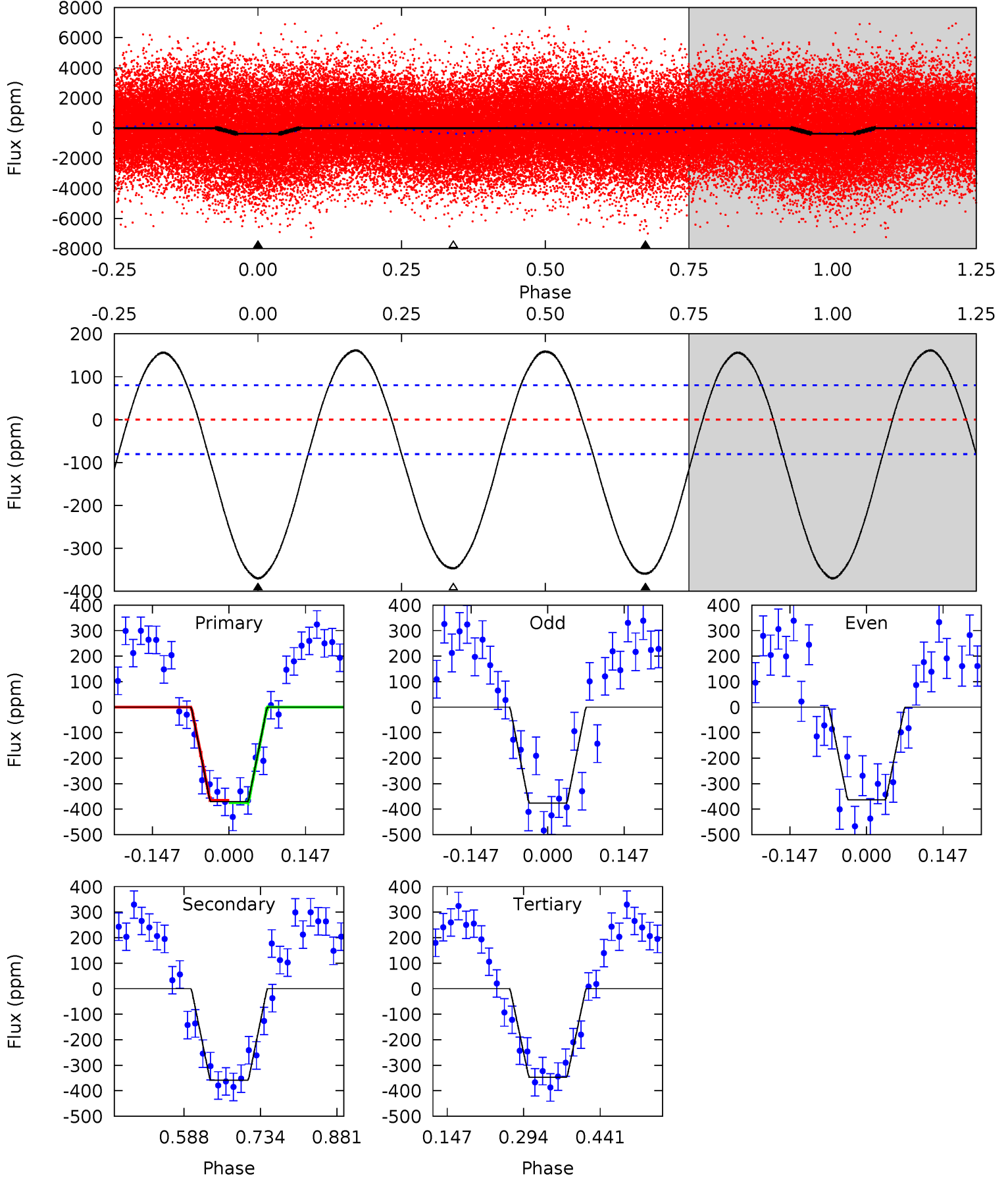
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.2	-50.9	0	0	4.33	1.05	33.8	26.2	26.2	-50.9	-50.9	1.32	1.00	0.90	3.81



Alt Model-Shift Uniqueness Test

010264728-01, P = 0.567319 Days, E = 131.049270 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.6	20.0	19.4	0	4.48	1.45	10.5	1.30	20.6	0.69	20.0	0.36	0.91	0.30	0.24



Stellar Parameters For KIC 010264728

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7994^{+223}_{-335}	$3.926^{+0.259}_{-0.130}$	$-0.140^{+0.200}_{-0.300}$	$2.473^{+0.428}_{-0.795}$	$1.883^{+0.136}_{-0.381}$	$0.175^{+0.293}_{-0.059}$
	+3%/-4%	+7%/-3%	+143%/-214%	+17%/-32%	+7%/-20%	+167%/-34%
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 010264728-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	478 ± 9	$5.03^{+0.64}_{-0.89}$	5944^{+418}_{-502}	-9071^{+462}_{-447}	$-2.863^{+0.619}_{-1.164}$
Alt.	-359 ± 18	$5.35^{+0.67}_{-0.92}$	5949^{+405}_{-492}	7300^{+343}_{-387}	$1.871^{+0.768}_{-0.391}$

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 $A_{obs} \gg 1.0$

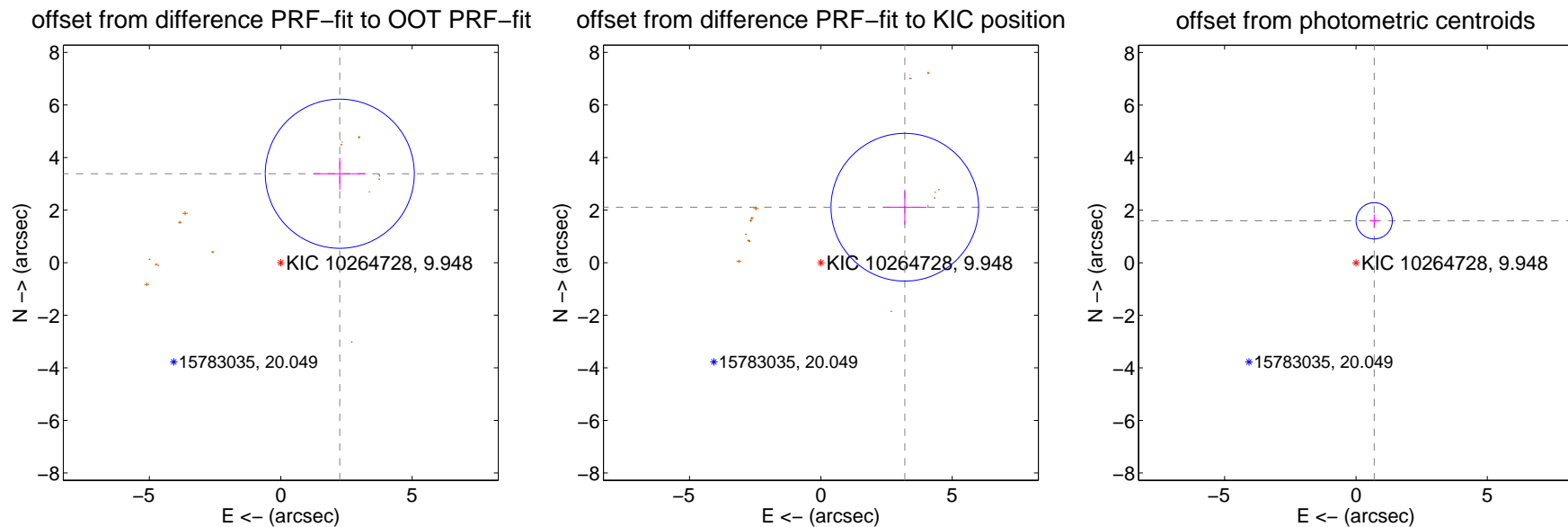
DV Centroid Data

Supplemental centroid analysis for 010264728-01. **Kepler magnitude: 9.95.** Transit SNR 12.61

There are 0 quarters with good PRF difference image offsets

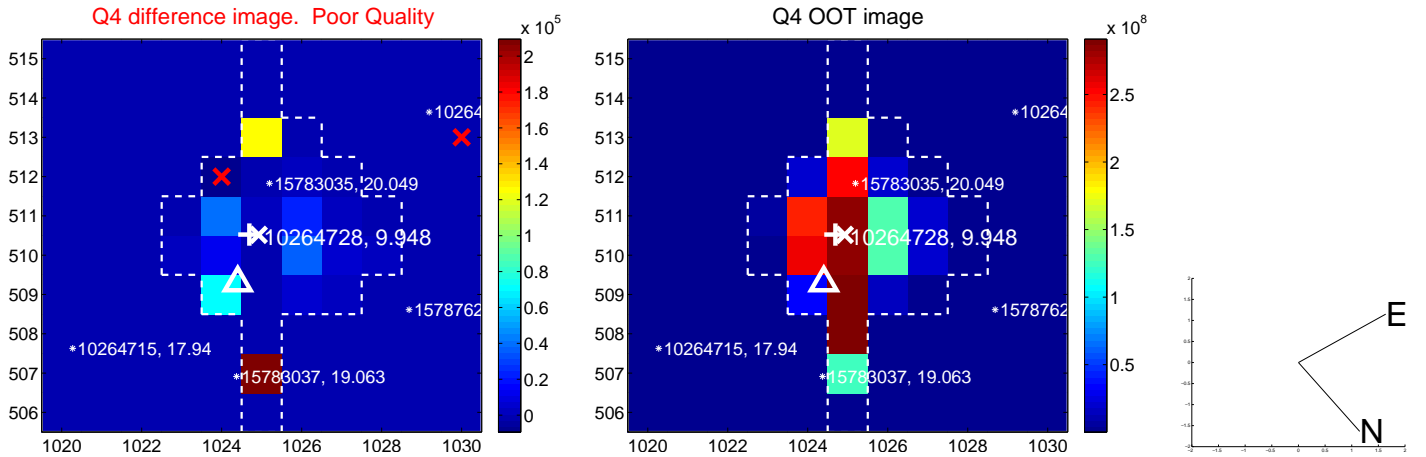
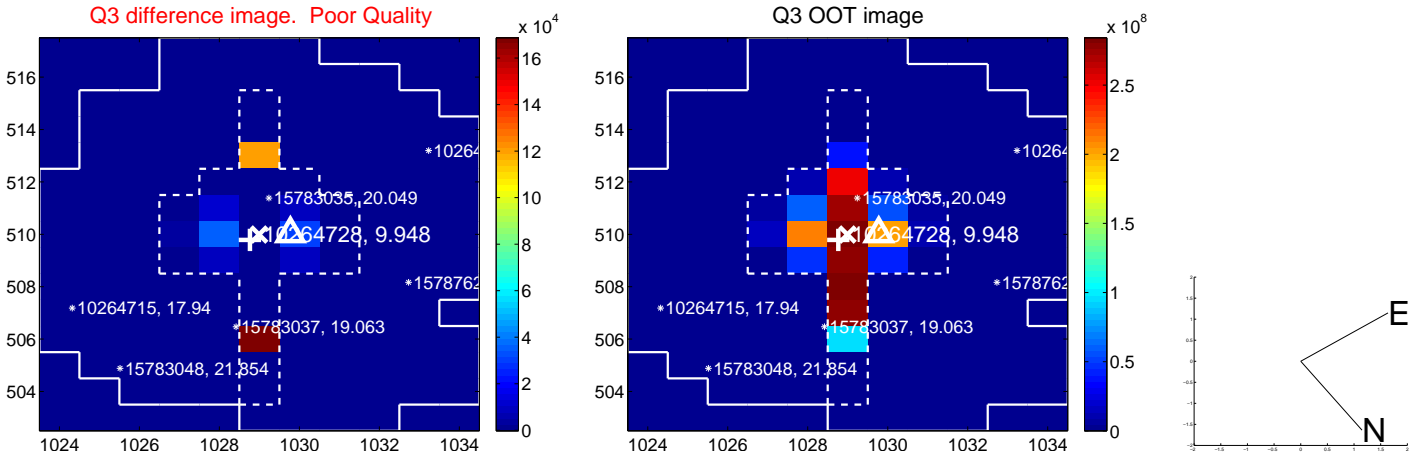
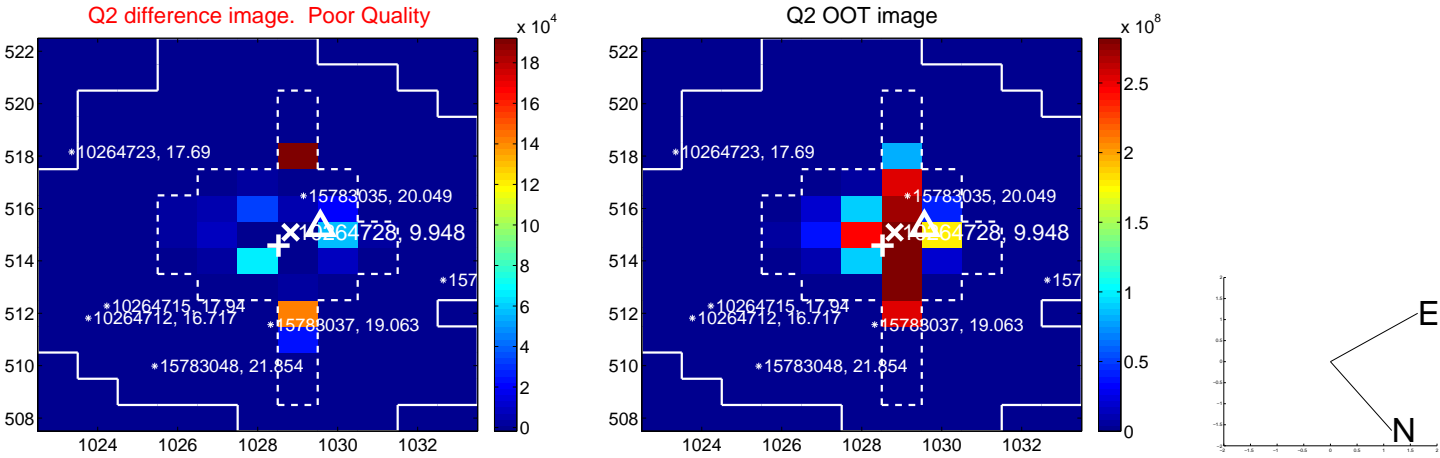
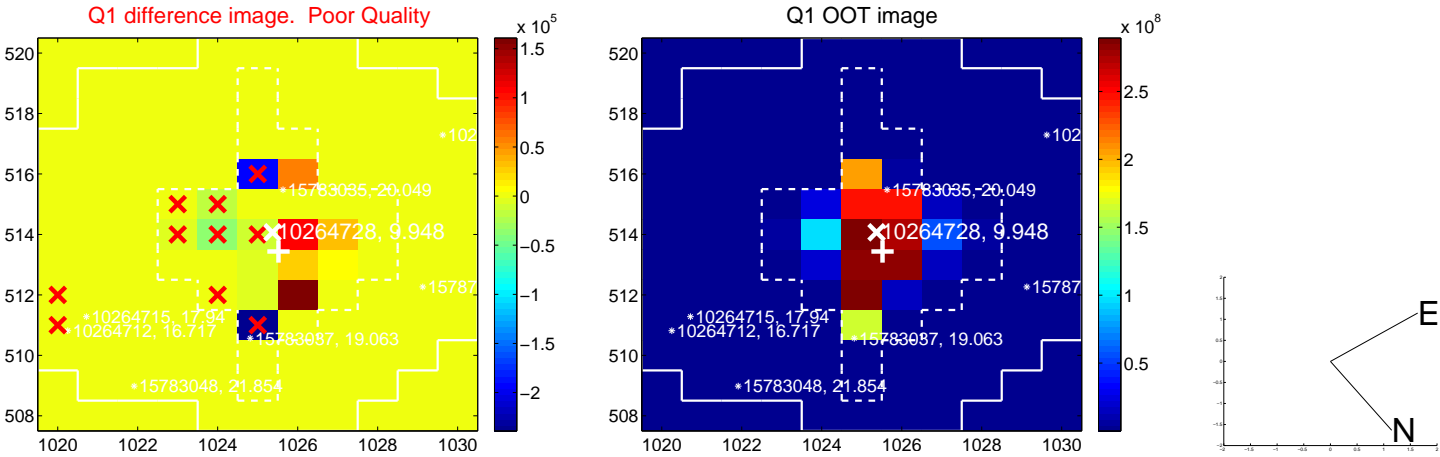
The OOT PRF centroid is offset from the target star catalog position by about 2.69 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.062 ± 0.946	4.30	-2.247 ± 0.993	3.384 ± 0.606
PRF-fit source offset from KIC position	3.829 ± 0.937	4.09	-3.196 ± 0.825	2.109 ± 0.664
photometric centroid source offset	1.74 ± 0.23	7.58	-0.69 ± 0.17	1.60 ± 0.24

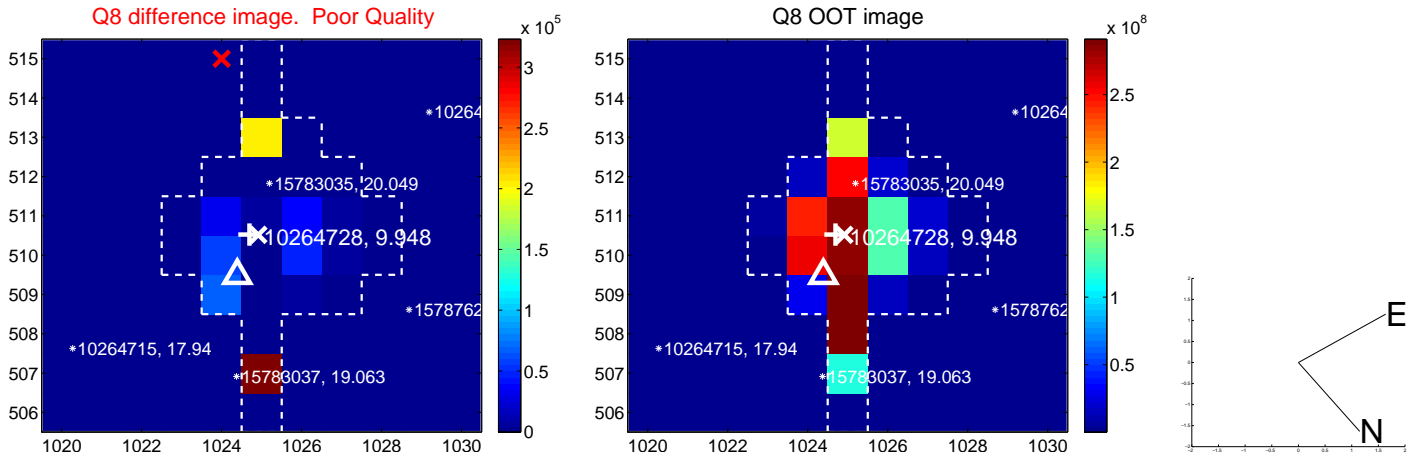
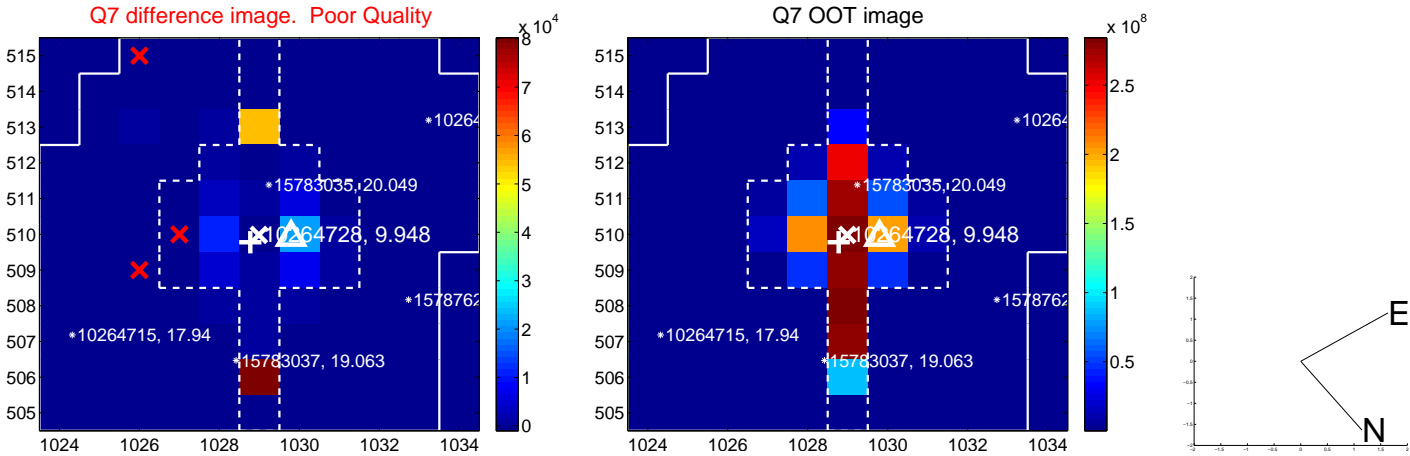
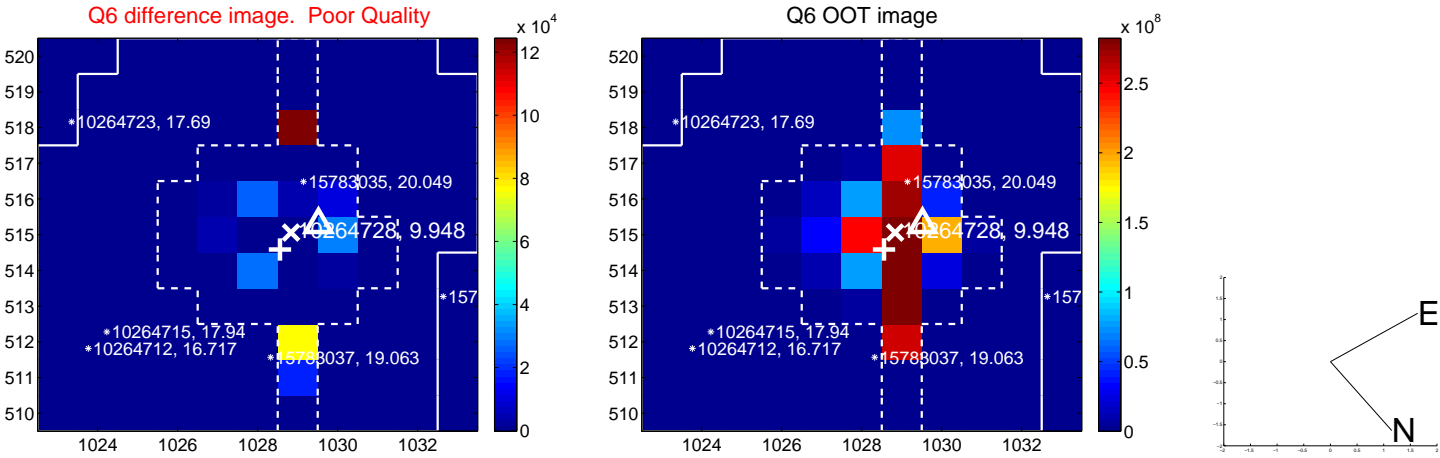
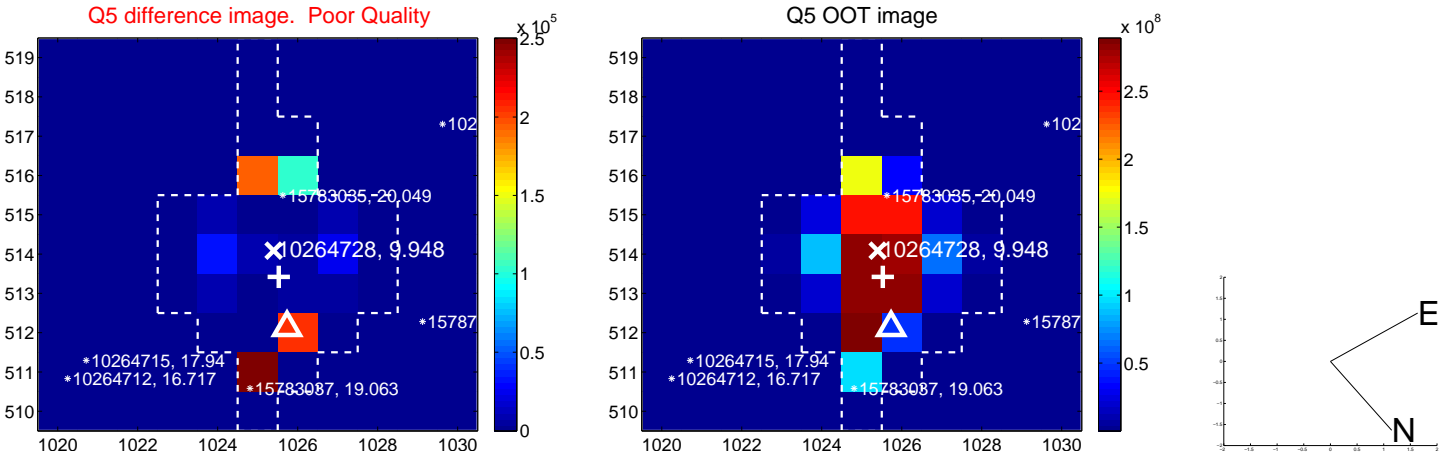


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

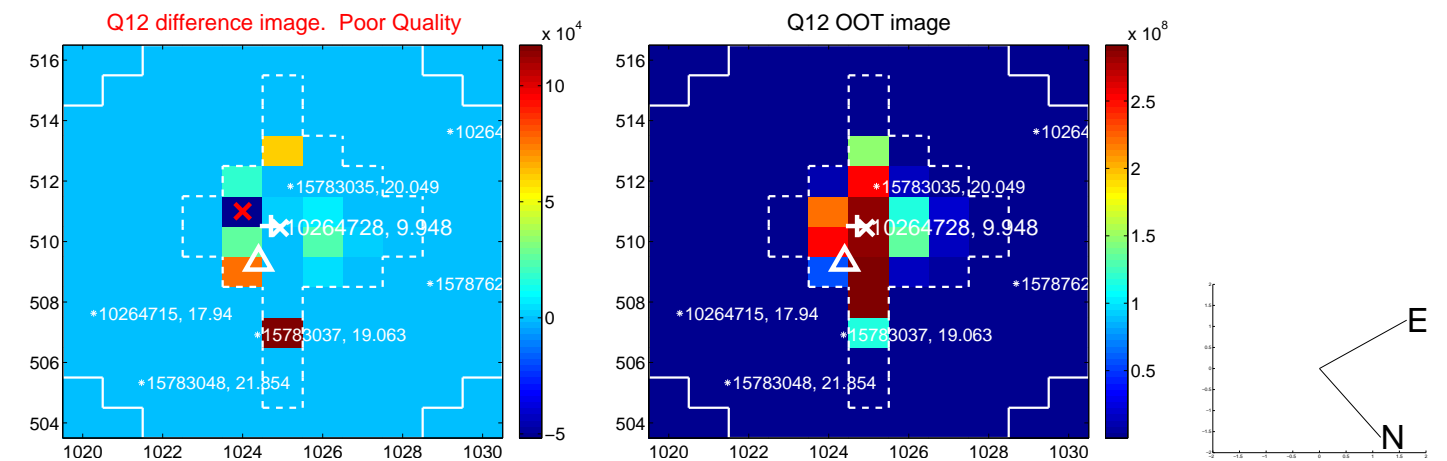
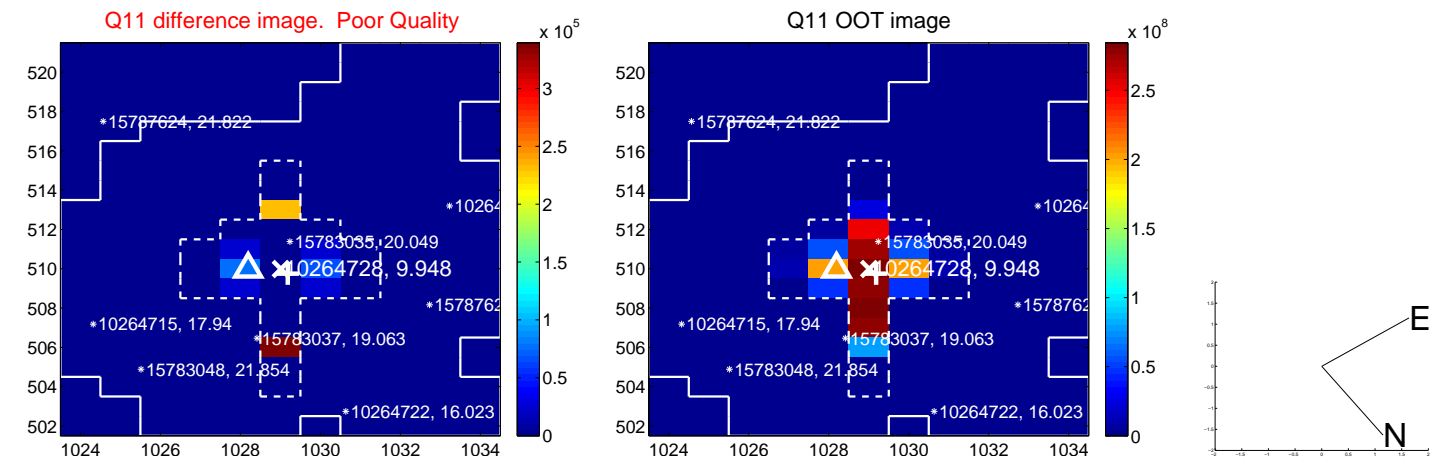
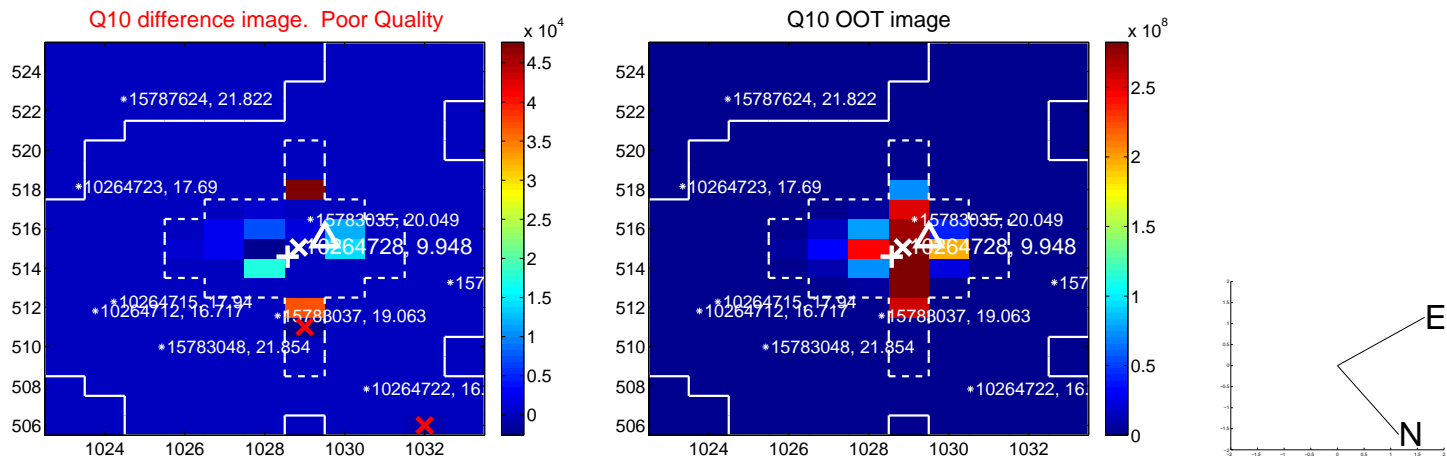
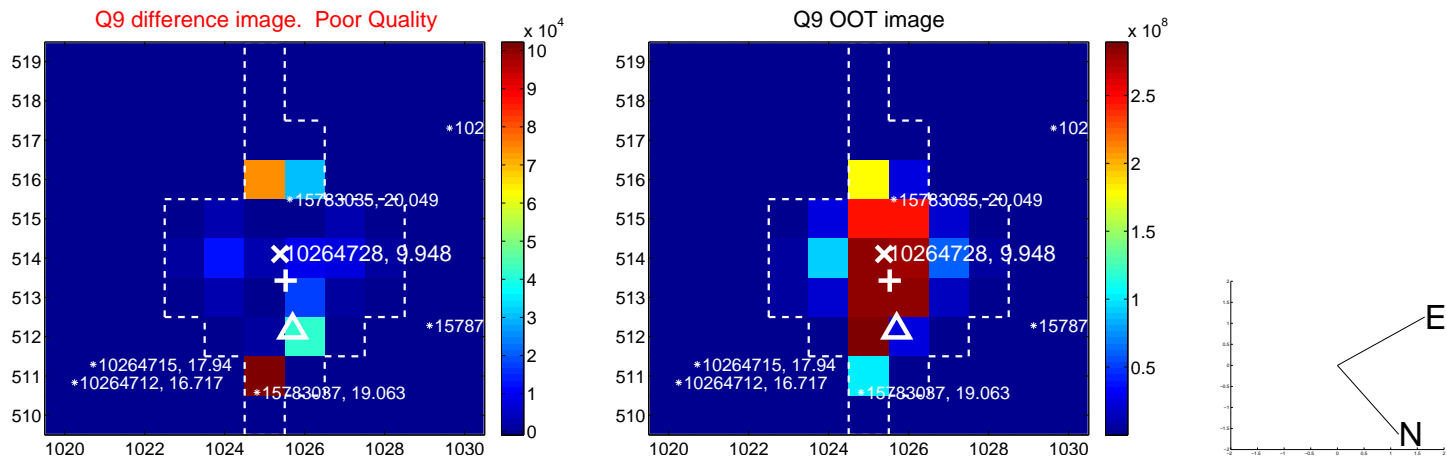
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



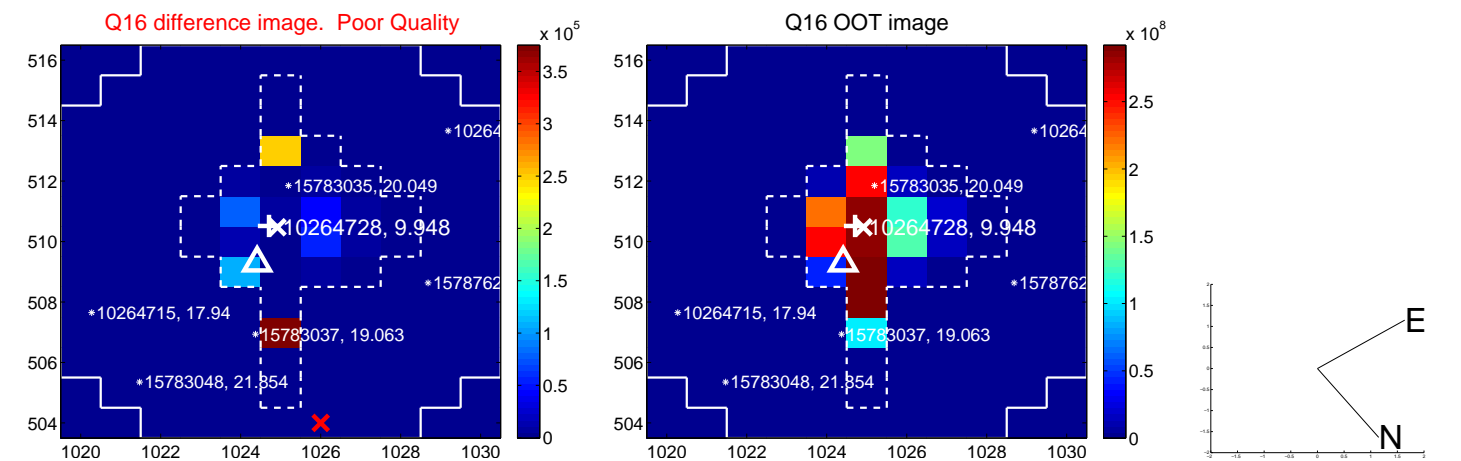
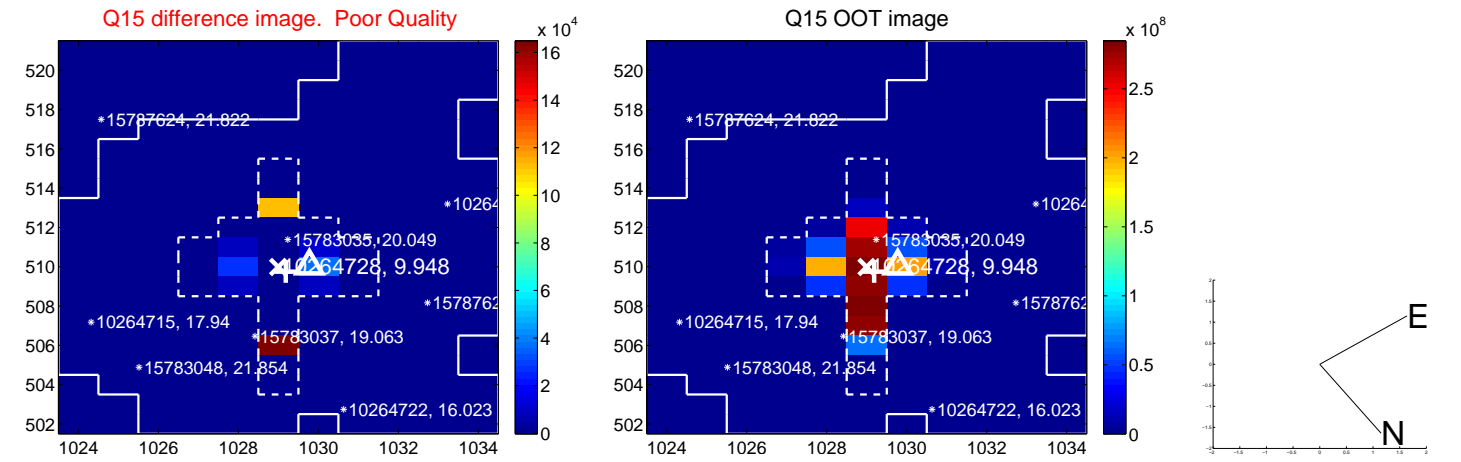
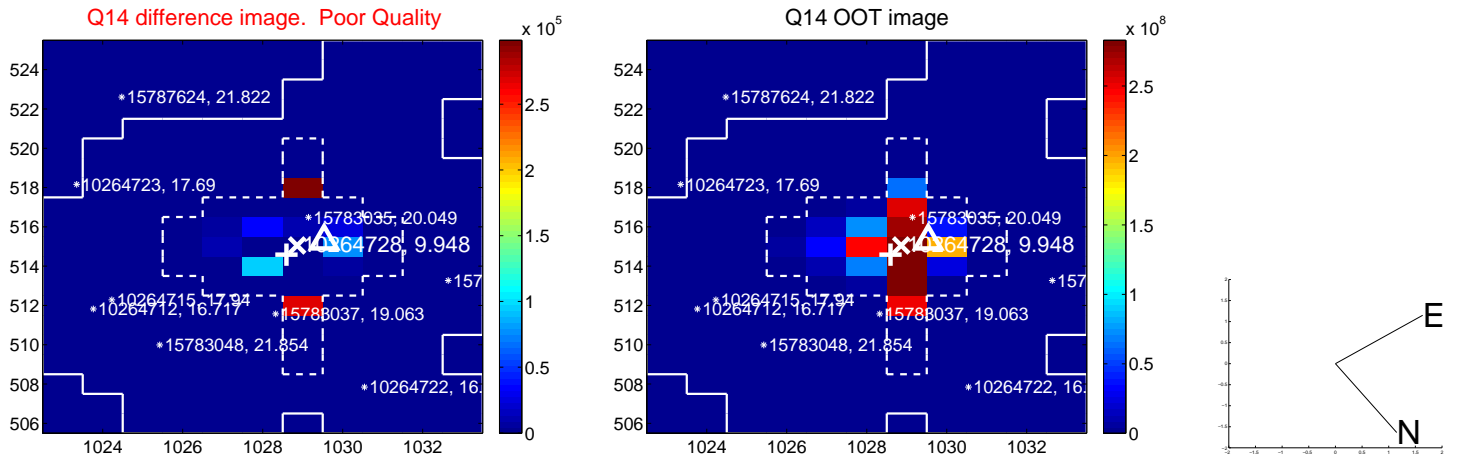
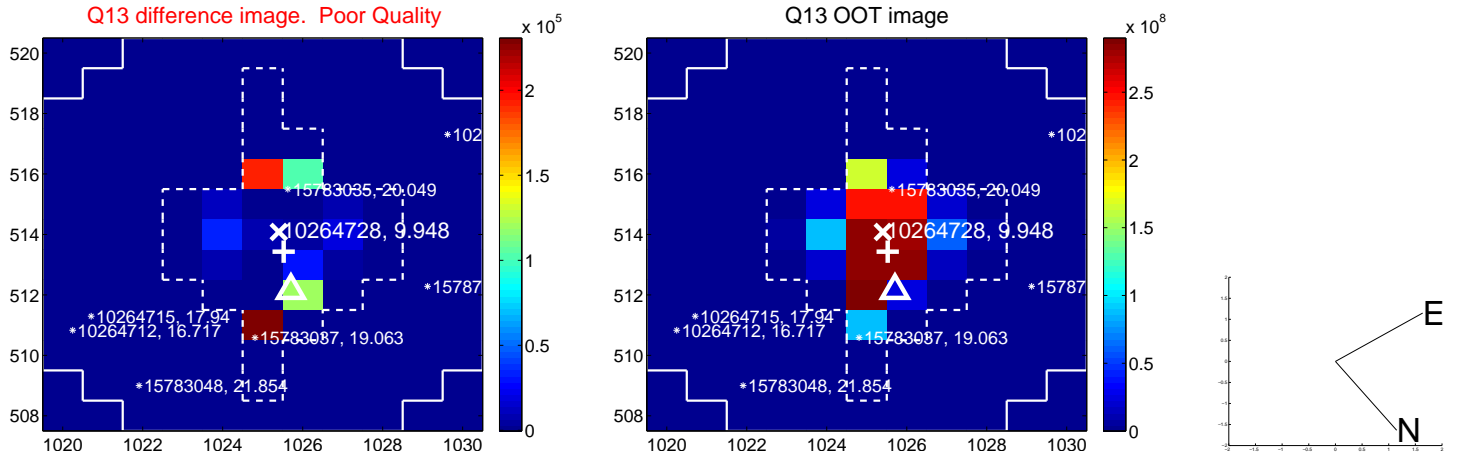
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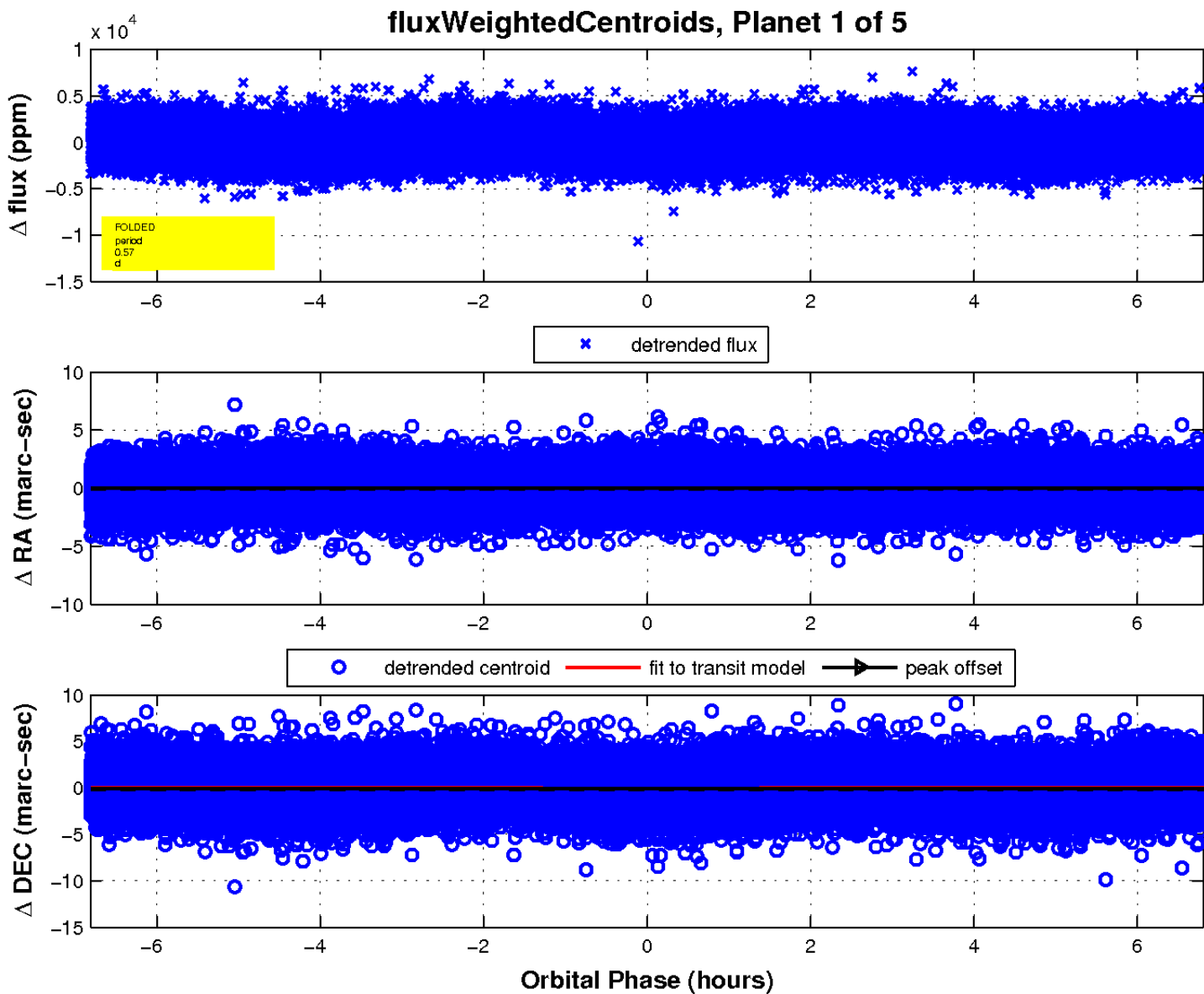
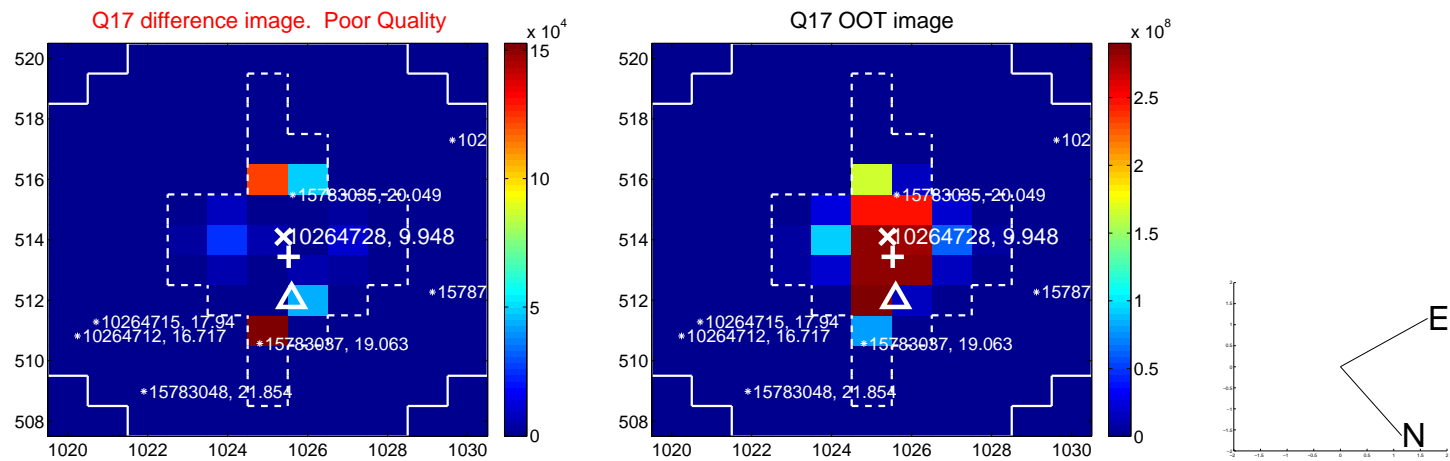
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



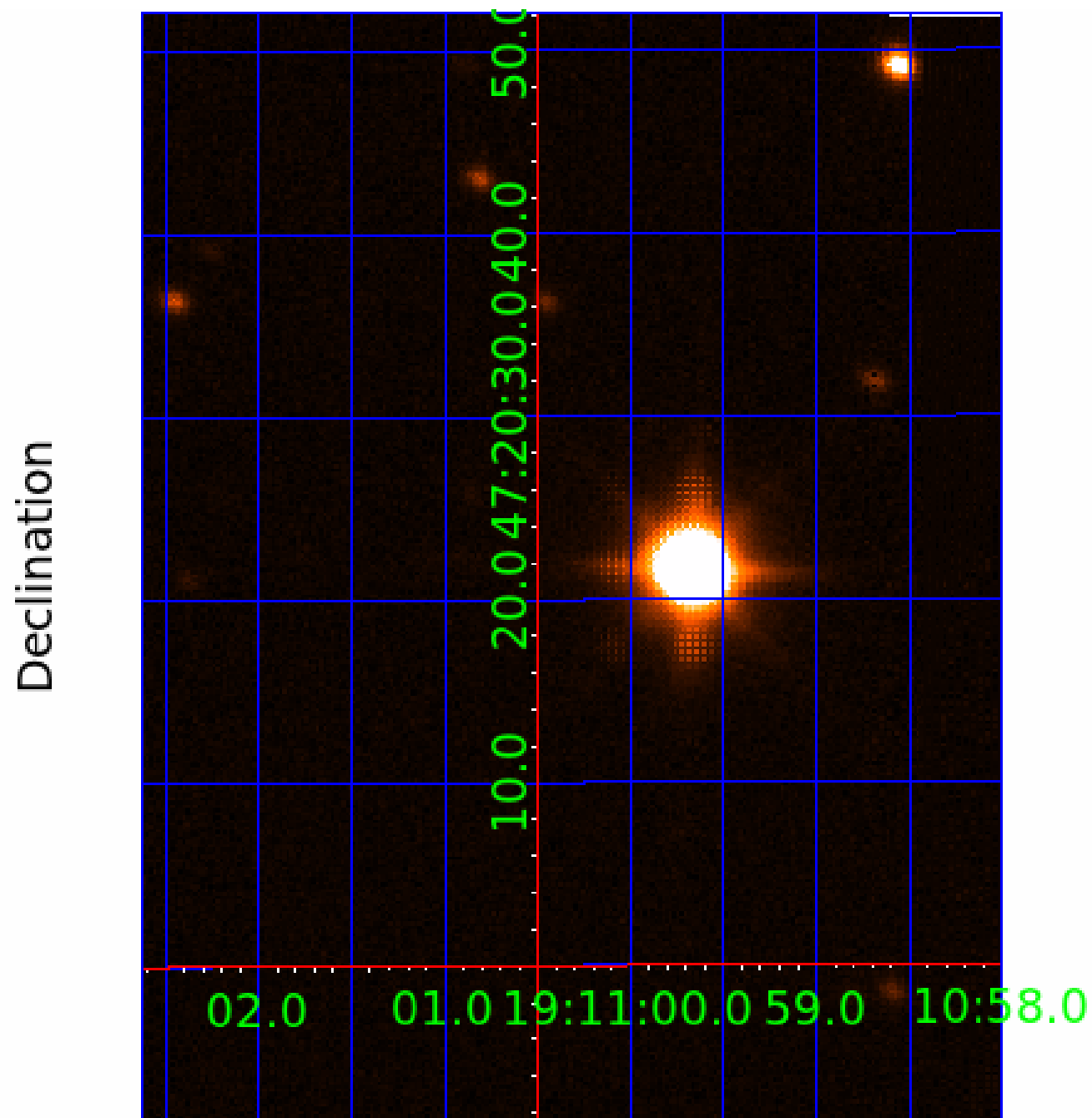
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 010264728

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})
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Robovetter Results

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010264728-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
010264728-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED
010264728-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

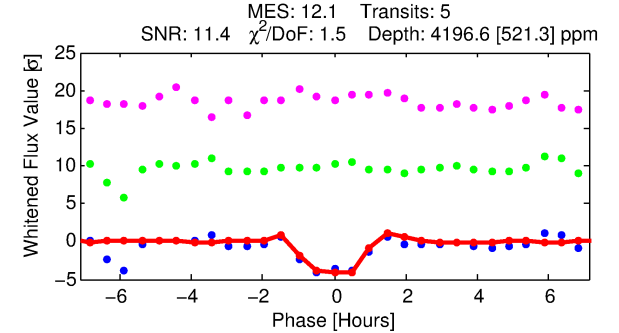
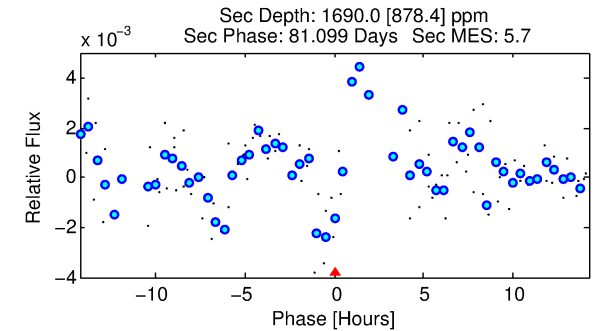
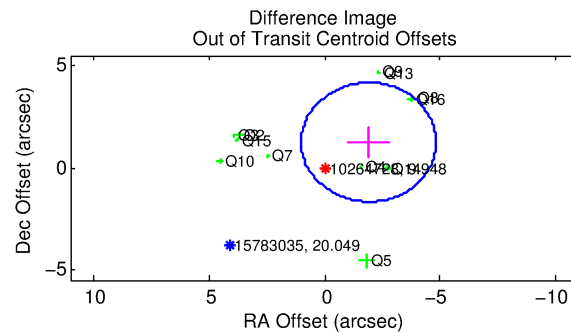
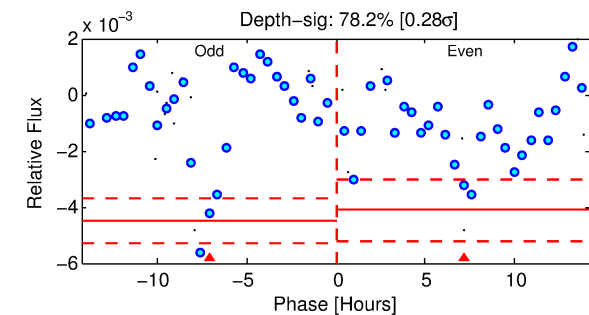
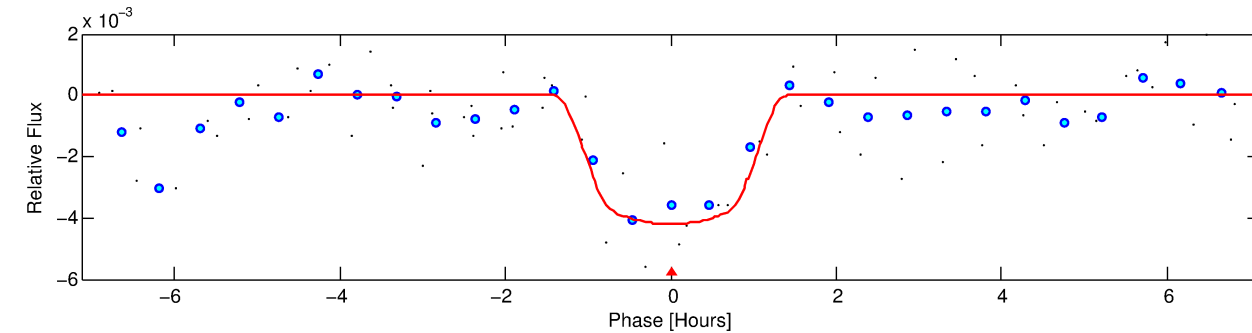
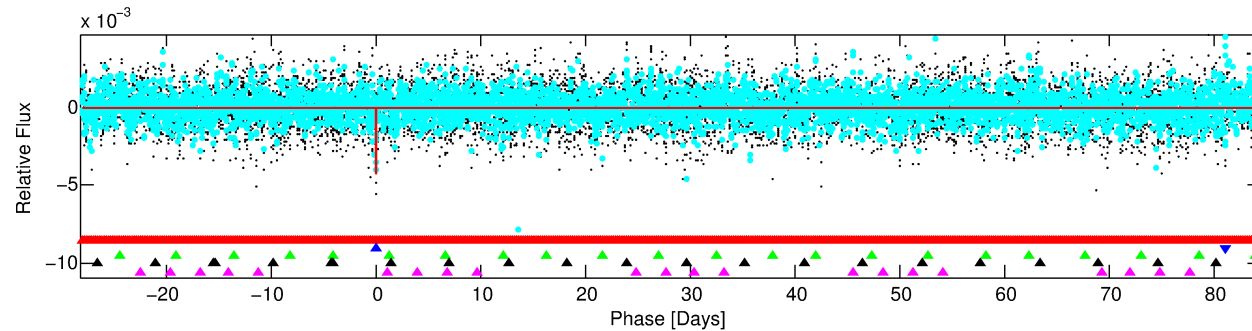
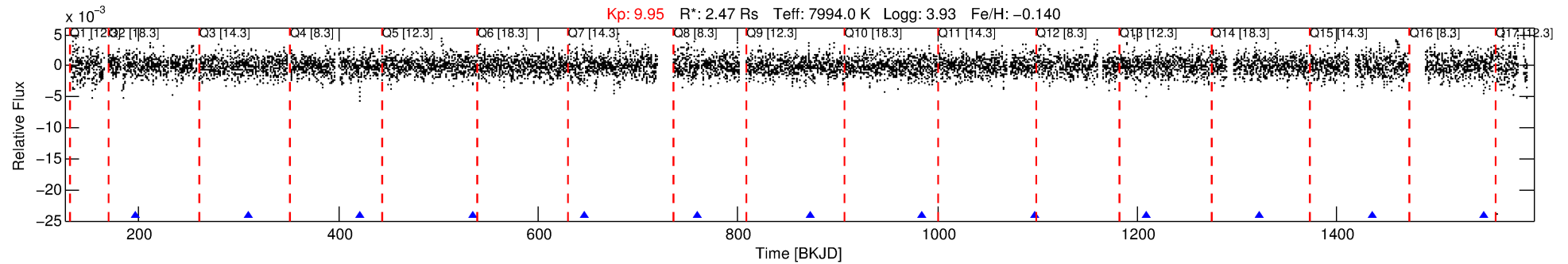
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010264728-02

No Significant Match Found

DV One-Page Summary

KIC: 10264728 Candidate: 2 of 5 Period: 112.564 d



DV Fit Results:

Period = 112.56360 [0.00104] d
Epoch = 196.6748 [0.0087] BKJD
Rp/R* = 0.0625 [0.0857]
a/R* = 315.16 [2400.22]
b = 0.61 [7.91]
Seff = 70.51 [33.97]
Teq = 739 [89] K
Rp = 16.87 [23.75] Re
a = 0.5634 [0.1647] AU
Ag = 1036.76 [2929.86] [0.35 σ]
Teffp = 6483 [4529] K [1.27 σ]

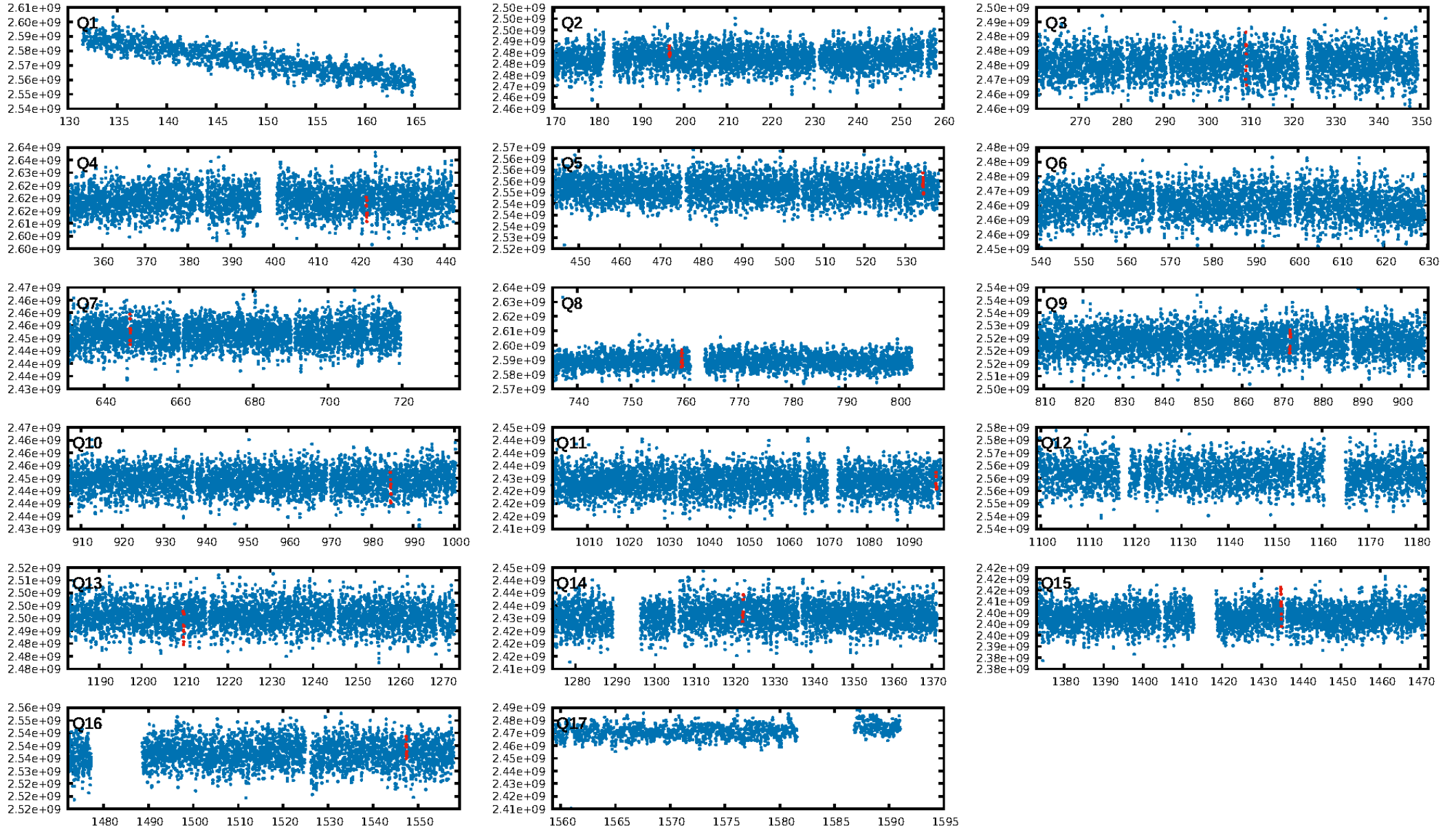
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [209.70 σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 13.6%
ModelChiSquareGof-sig: 98.8%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: N/A
Centroid-sig: 17.9%
Centroid-so: 1.203 arcsec [7.07 σ]
OotOffset-rm: 2.272 arcsec [2.34 σ]
KicOffset-rm: 3.639 arcsec [3.89 σ]
OotOffset-st: 3/3/3 [12]
KicOffset-st: 3/3/3 [12]
DiffImageQuality-fgm: 0.00 [0/12]
DiffImageOverlap-fno: 0.00 [0/12]

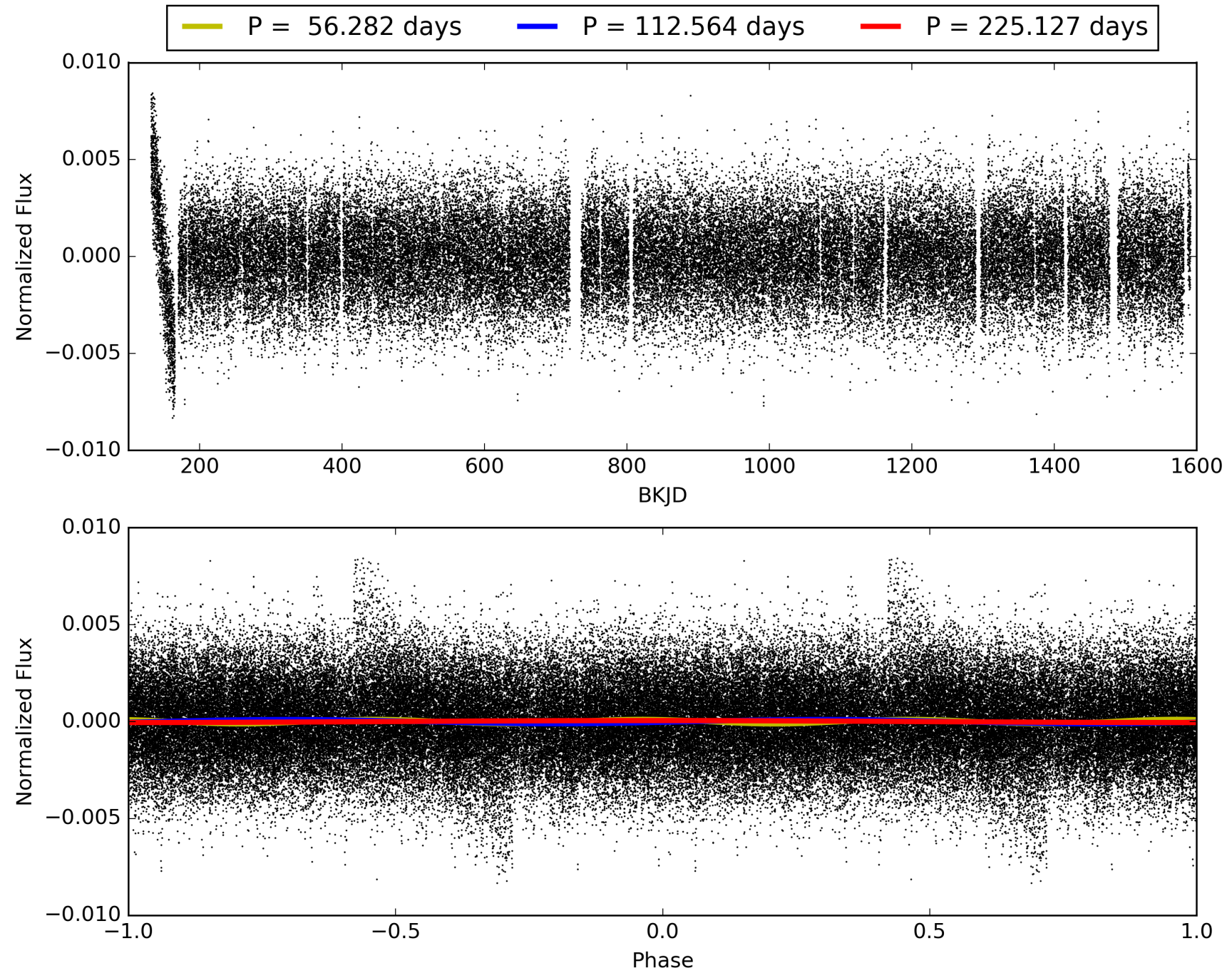
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This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 010264728-02, PDC Light Curves

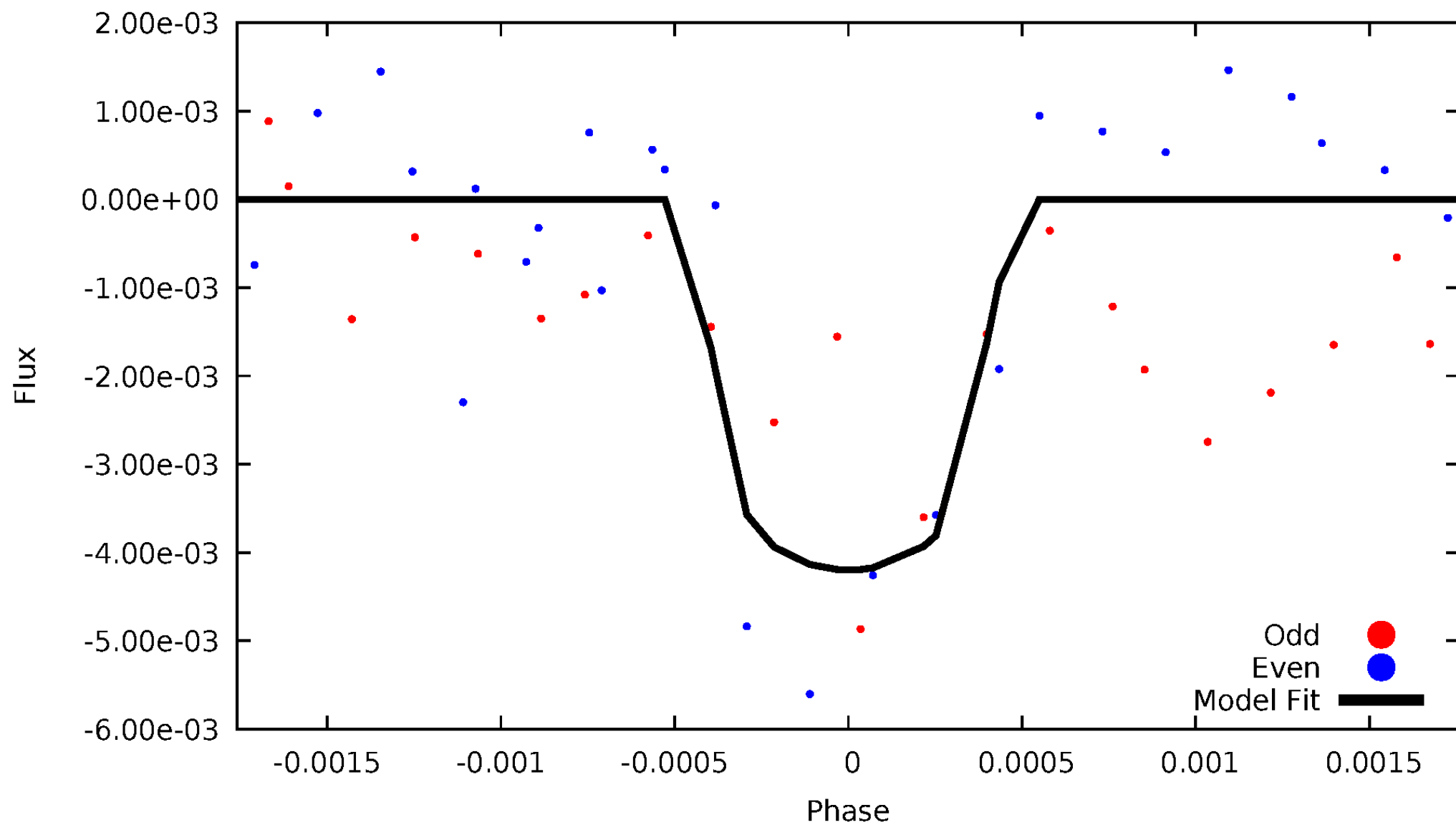


TCE 010264728-02



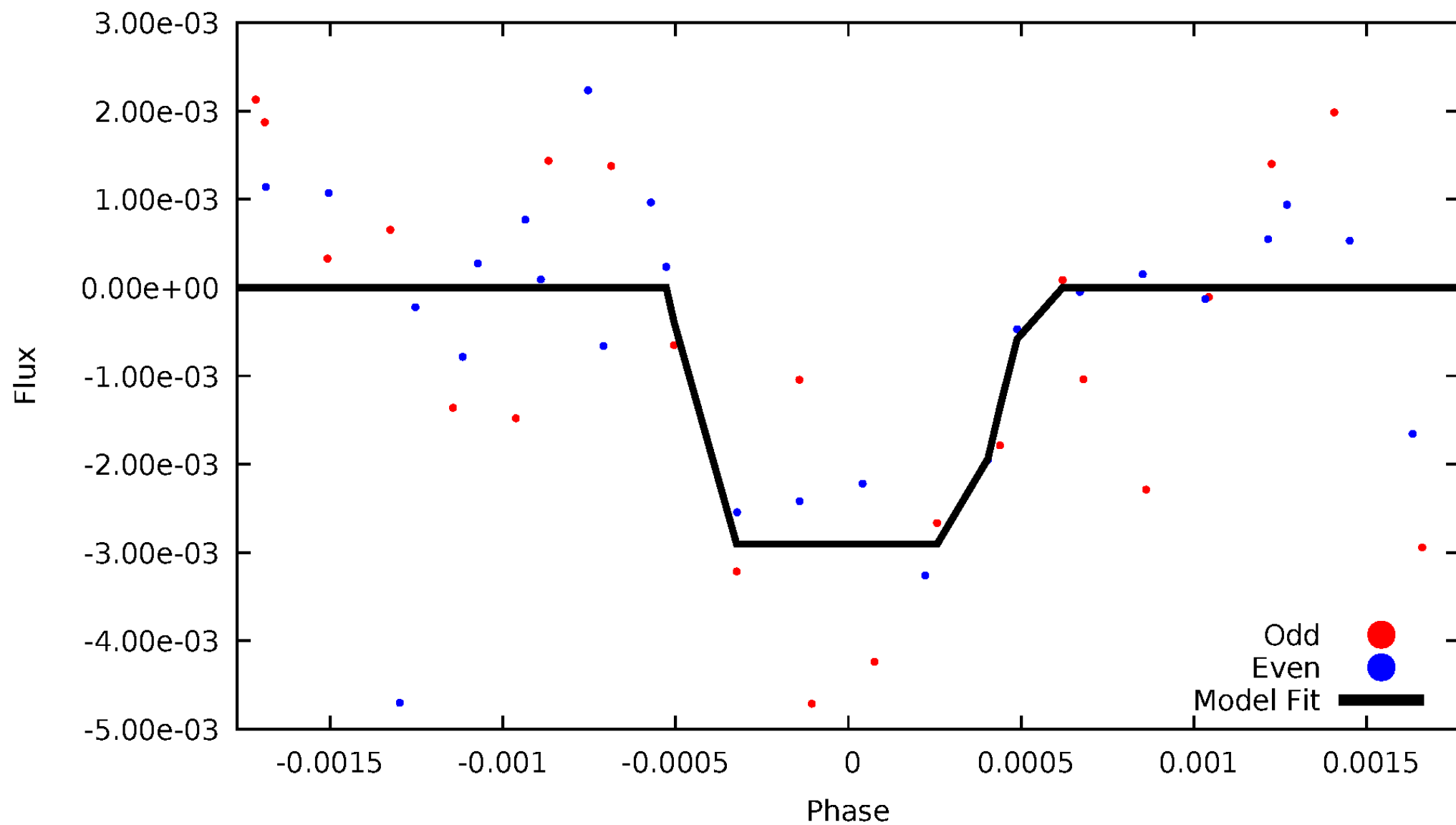
DV Odd/Even

TCE 010264728-02



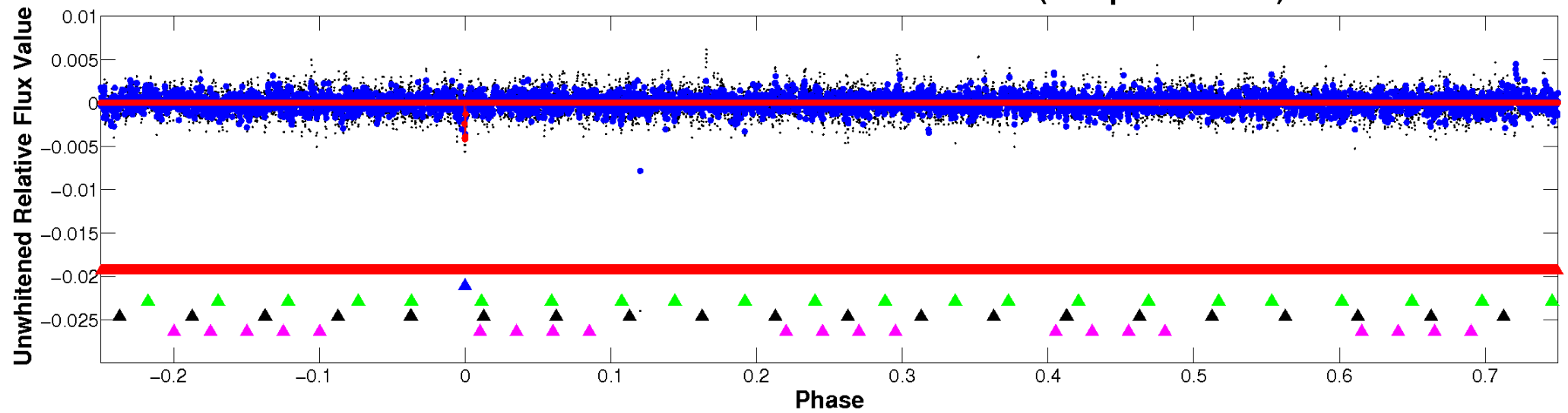
ALT Odd/Even

TCE 010264728-02

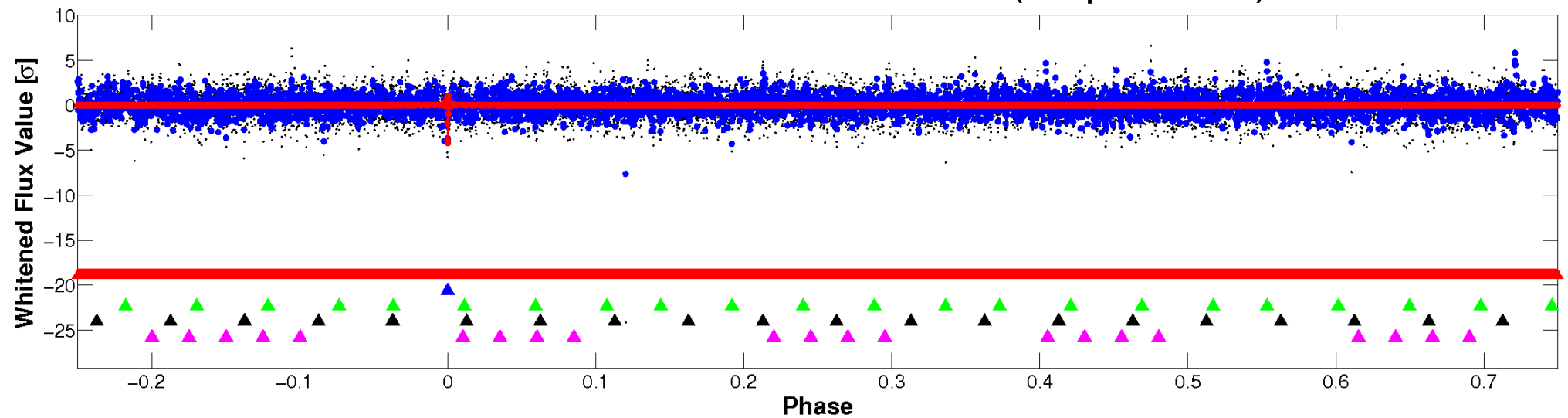


Non-Whitened Vs. Whitened Light Curve

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

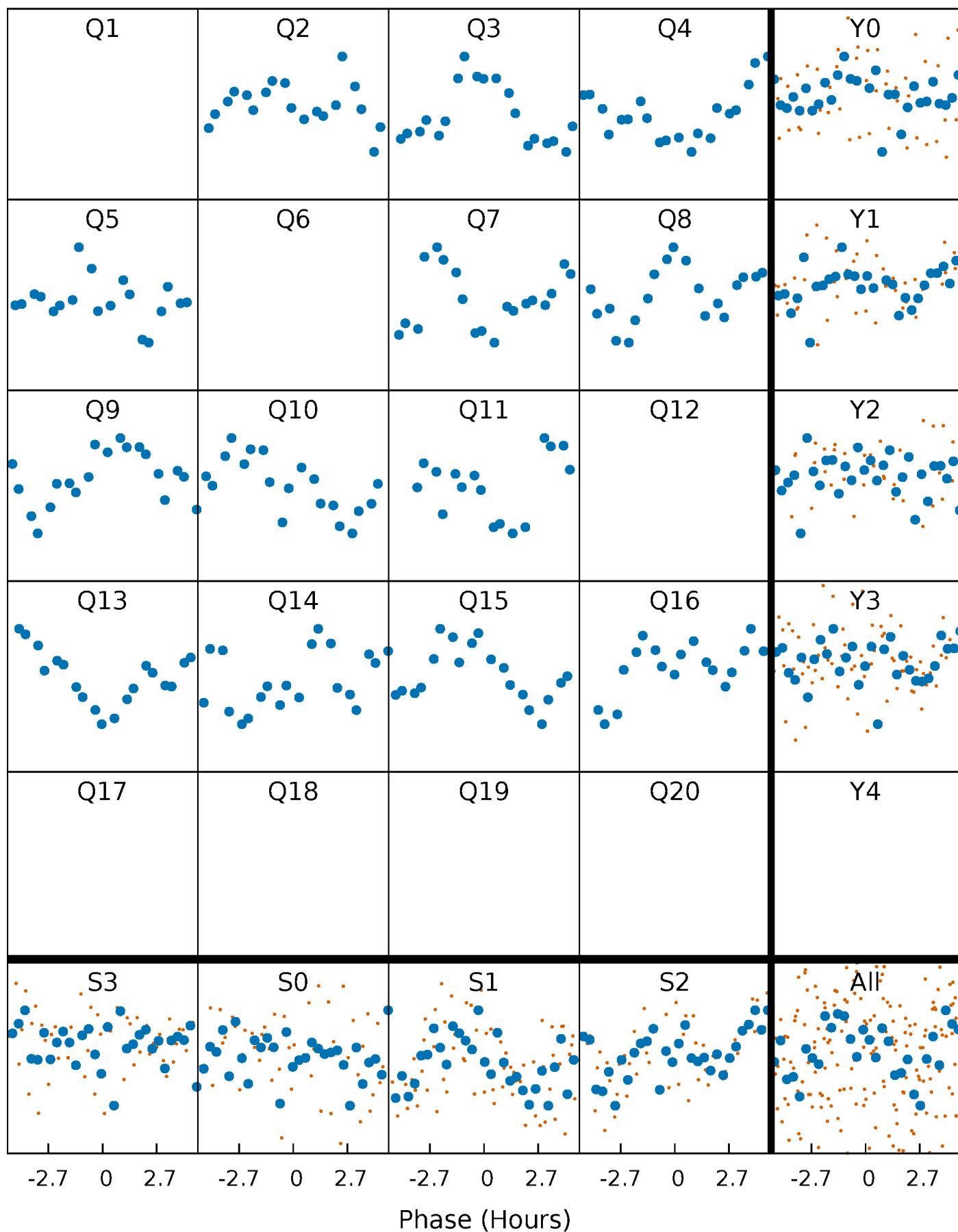


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



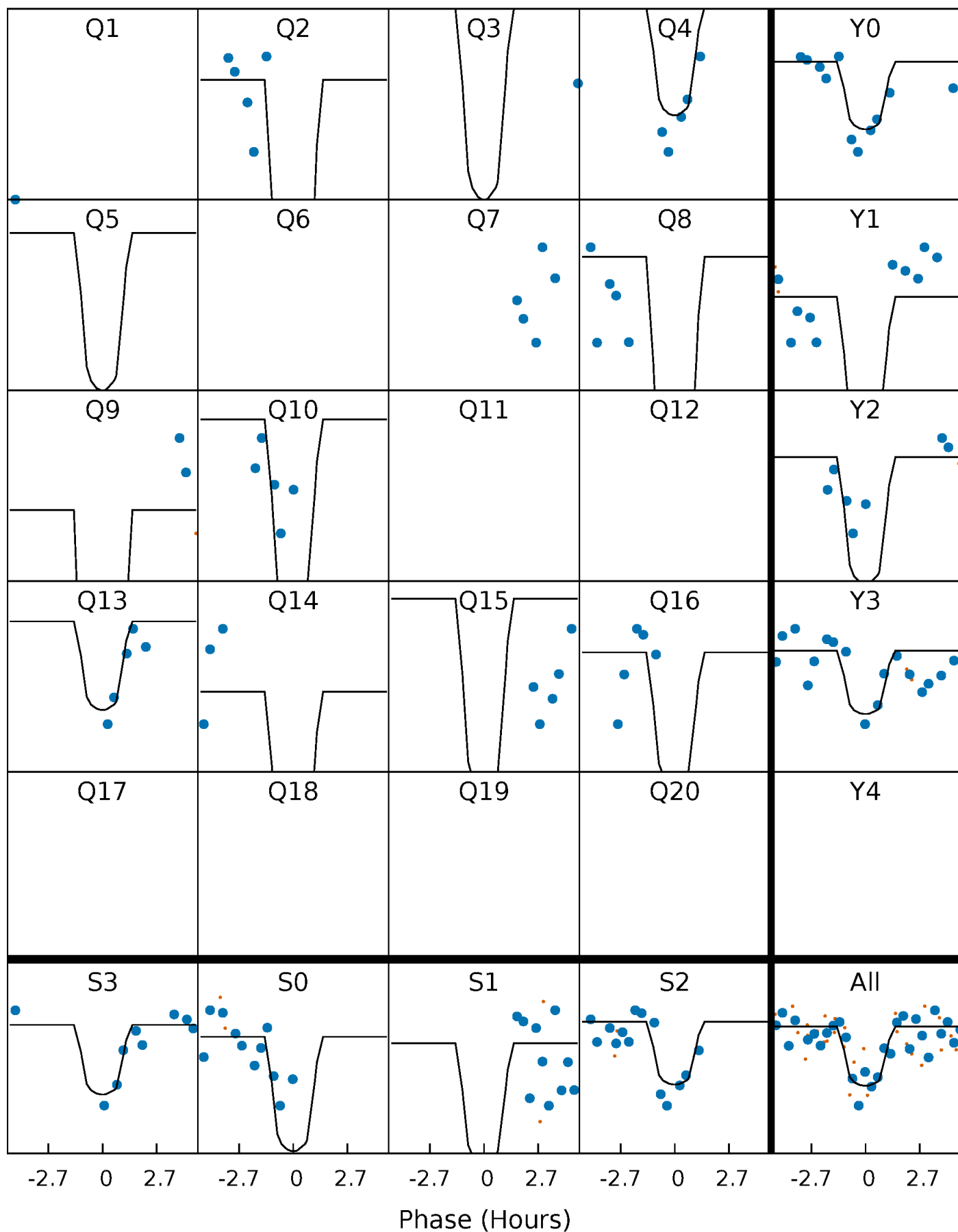
PDC Quarter-Phased Transit Curves

TCE 010264728-02 P=112.563603 Days $T_0=196.674830$ (BKJD)



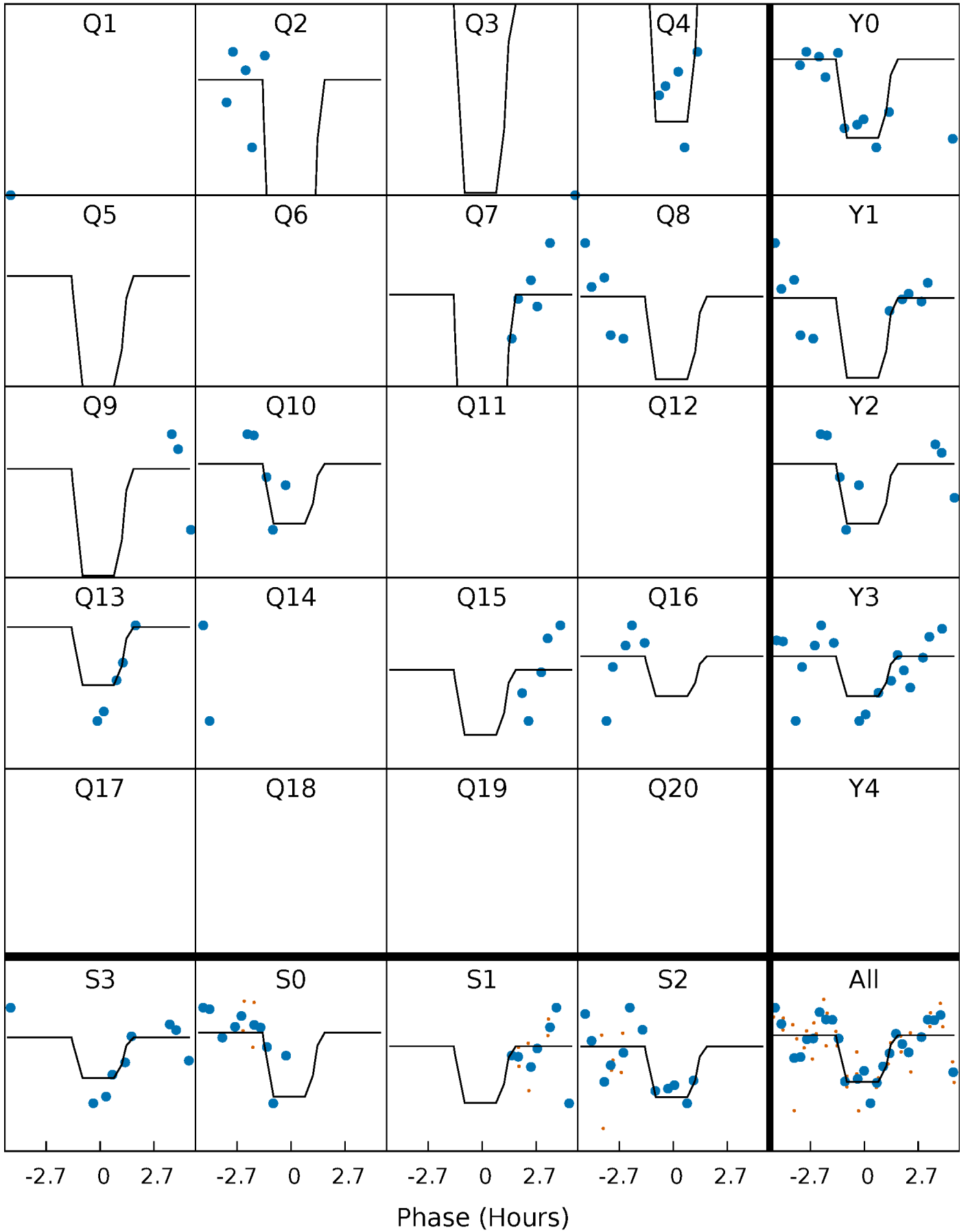
DV Quarter-Phased Transit Curves

TCE 010264728-02 P=112.563603 Days $T_0=196.674830$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

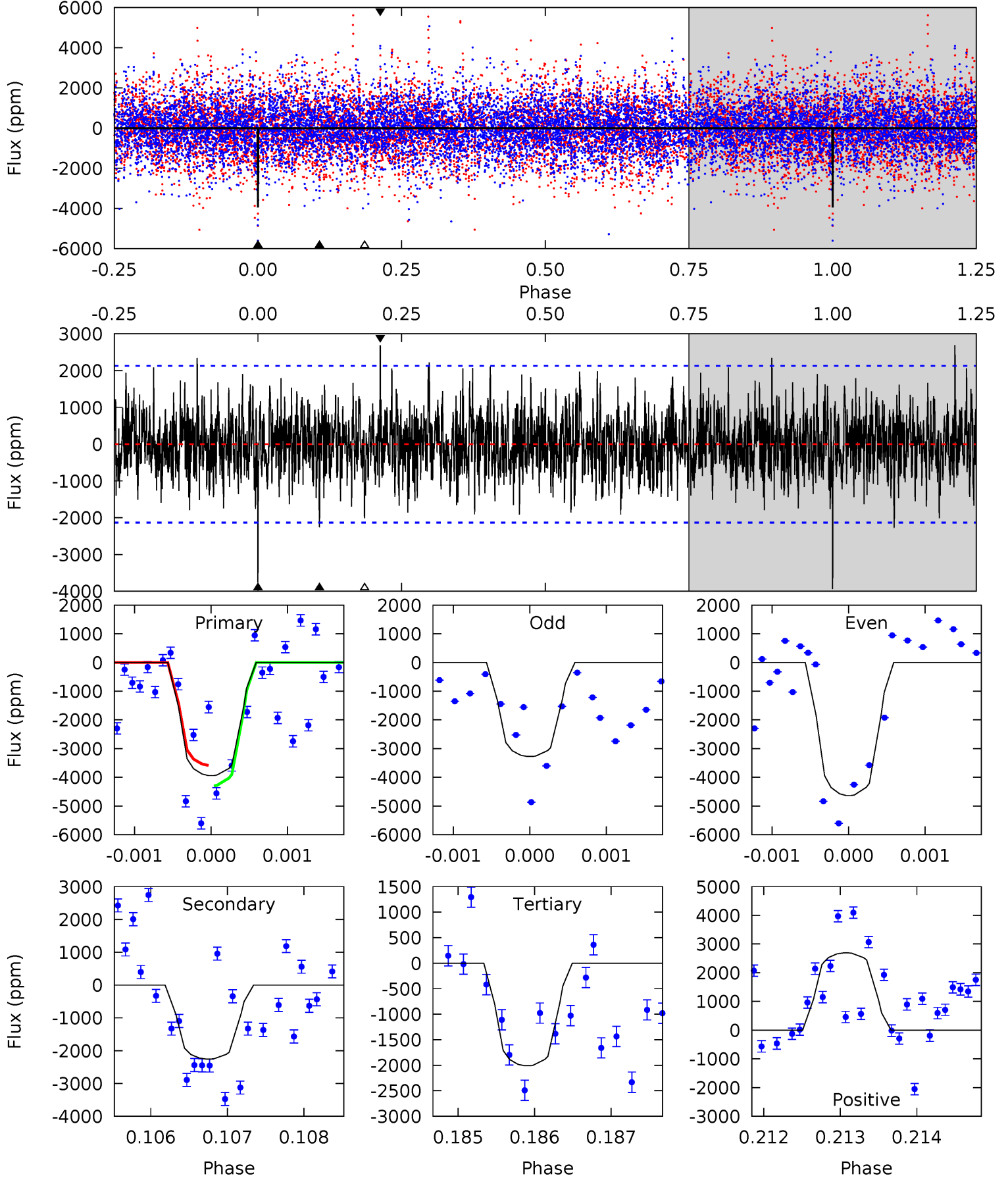
TCE 010264728-02 P=112.565393 Days $T_0=196.674605$ (BKJD)



DV Model-Shift Uniqueness Test

010264728-02, P = 112.563603 Days, E = 84.111227 Days

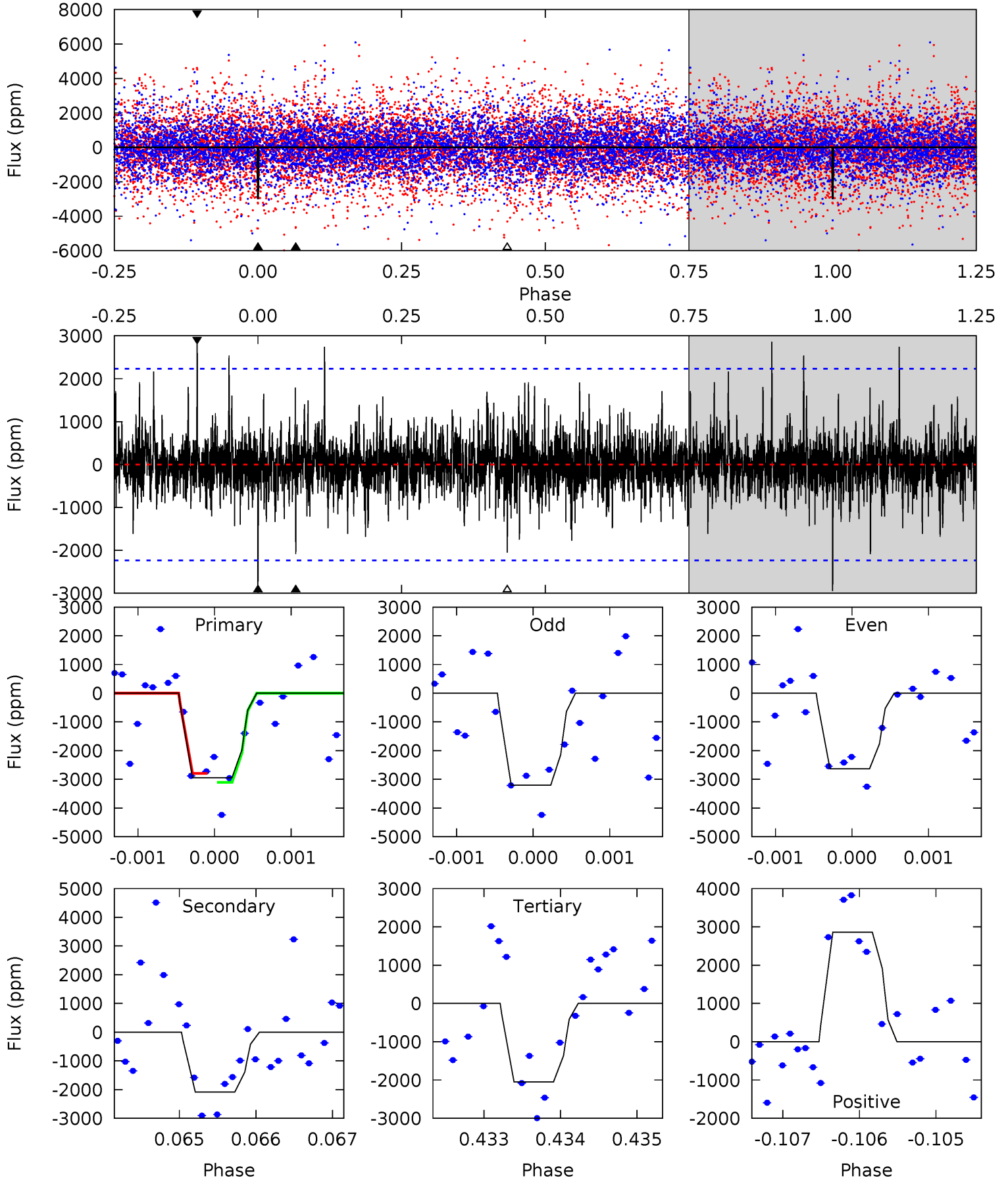
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	5.78	5.16	6.91	5.46	3.31	1.69	4.95	3.20	0.63	-1.12	1.83	0.88	0.41	0.90



Alt Model-Shift Uniqueness Test

010264728-02, P = 112.565393 Days, E = 84.109212 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.16	5.07	4.98	6.96	5.43	3.26	1.21	2.18	0.20	0.08	-1.89	0.69	1.09	0.49	0.38



Stellar Parameters For KIC 010264728

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7994^{+223}_{-335}	$3.926^{+0.259}_{-0.130}$	$-0.140^{+0.200}_{-0.300}$	$2.473^{+0.428}_{-0.795}$	$1.883^{+0.136}_{-0.381}$	$0.175^{+0.293}_{-0.059}$
	+3%/-4%	+7%/-3%	+143%/-214%	+17%/-32%	+7%/-20%	+167%/-34%
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 010264728-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-2254±390	$22.75^{+19.15}_{-14.36}$	1018^{+69}_{-85}	5703^{+4194}_{-1285}	775^{+4484}_{-560}
Alt.	-2083±411	$19.61^{+19.21}_{-12.29}$	1021^{+66}_{-88}	5862^{+5551}_{-1416}	879^{+6310}_{-653}

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 $A_{obs} \gg 1.0$

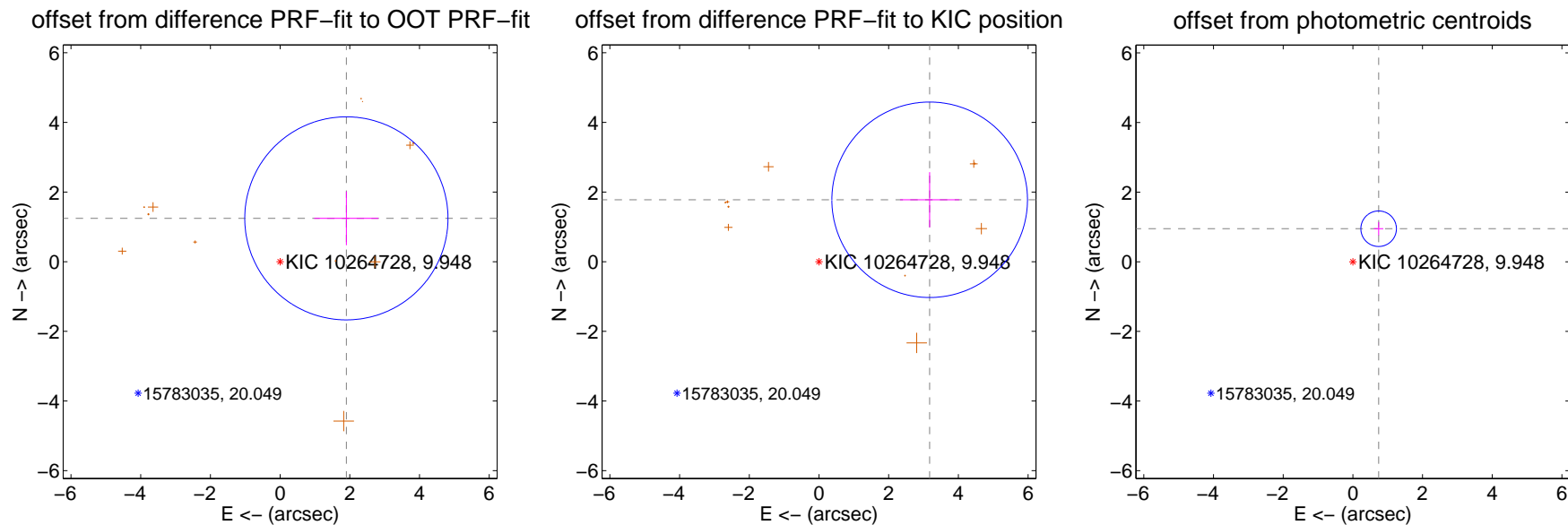
DV Centroid Data

Supplemental centroid analysis for 010264728-02. **Kepler magnitude: 9.95.** Transit SNR 11.35

There are 0 quarters with good PRF difference image offsets

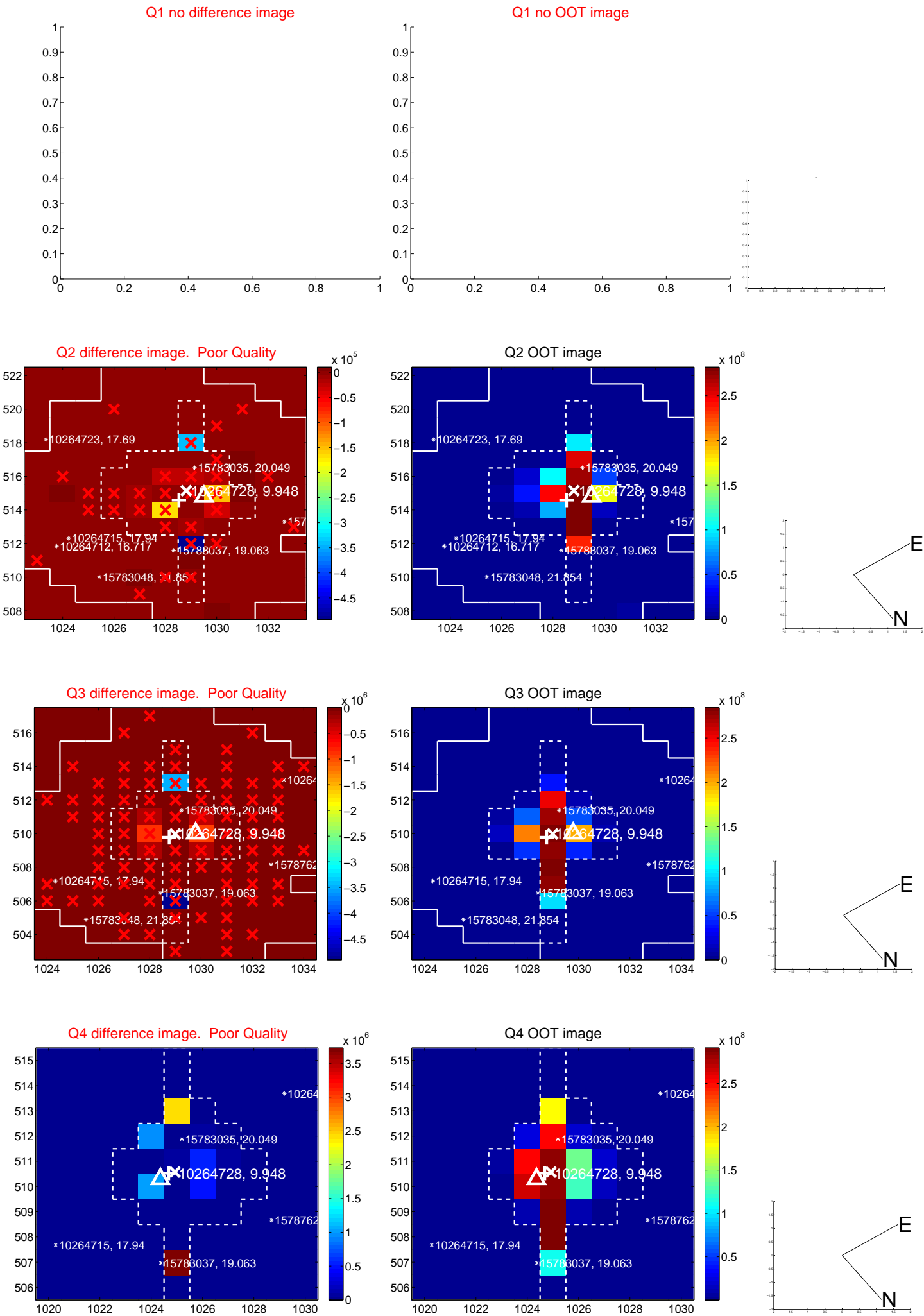
The direct PRF centroid is offset from the target star catalog position by about 0.89 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.272 ± 0.972	2.34	-1.901 ± 0.924	1.244 ± 0.771
PRF-fit source offset from KIC position	3.639 ± 0.935	3.89	-3.175 ± 0.849	1.778 ± 0.793
photometric centroid source offset	1.20 ± 0.17	7.07	-0.74 ± 0.13	0.95 ± 0.19

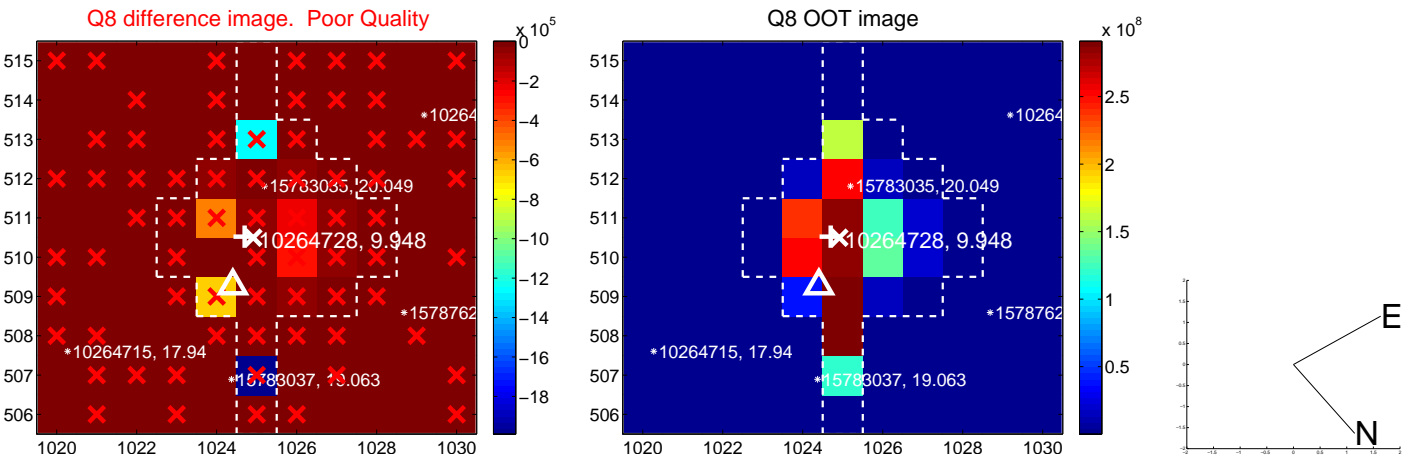
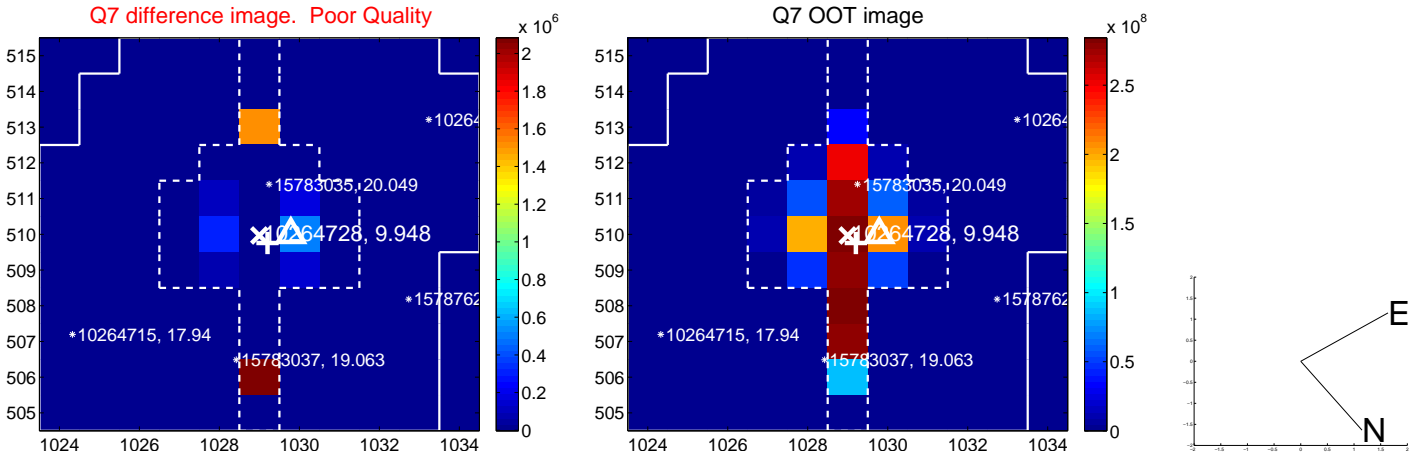
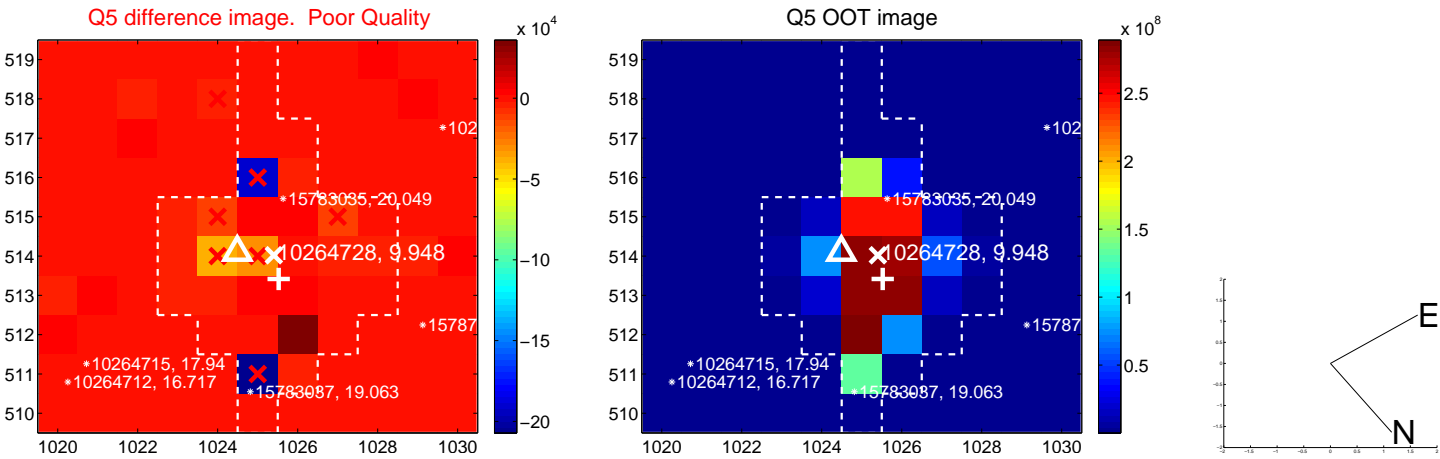


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

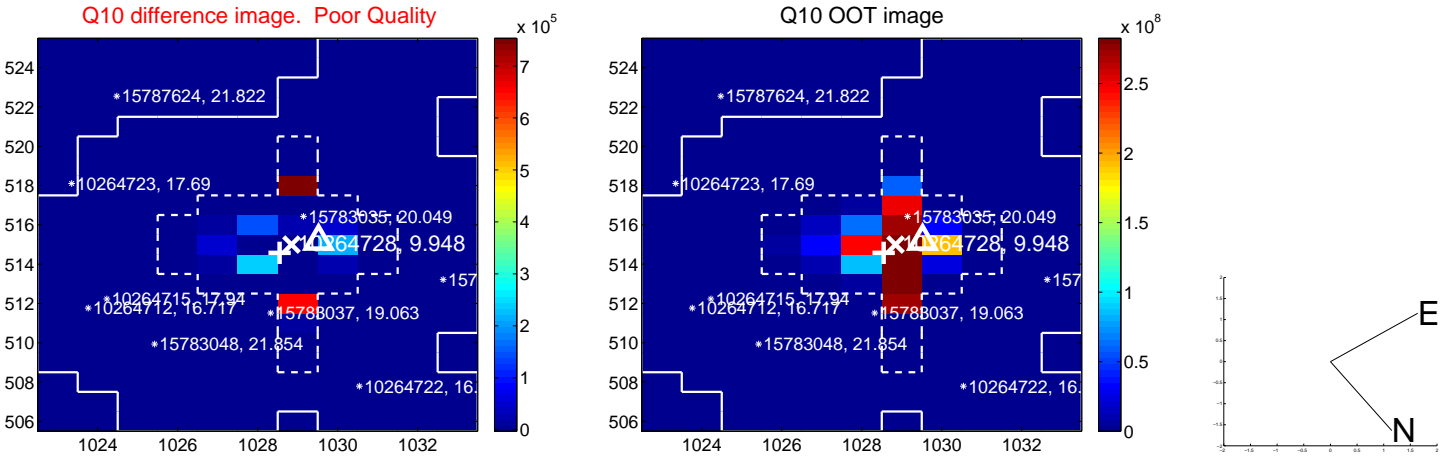
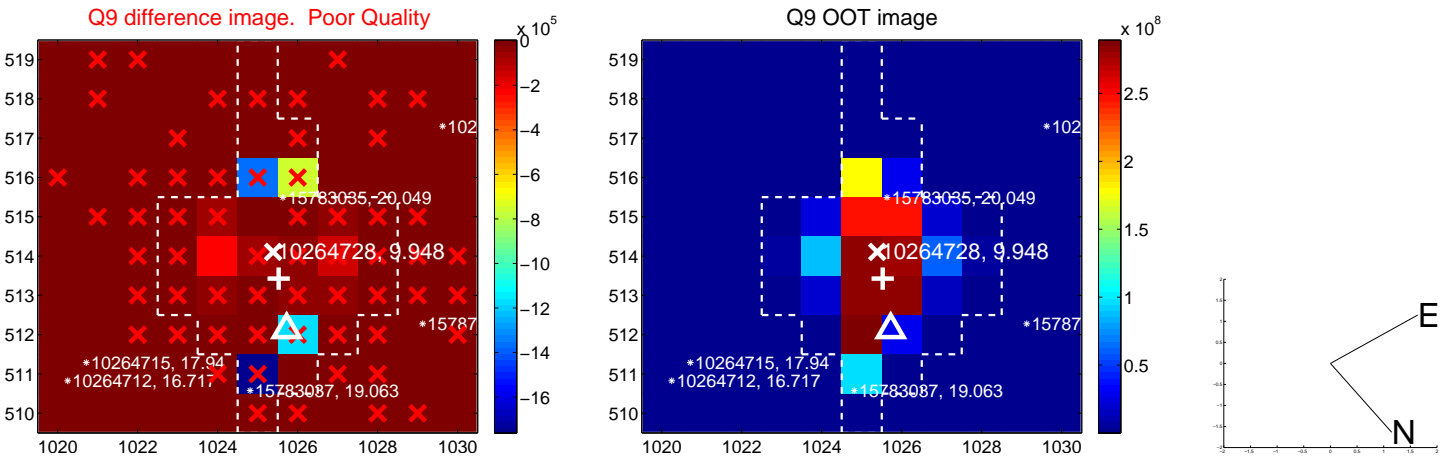
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



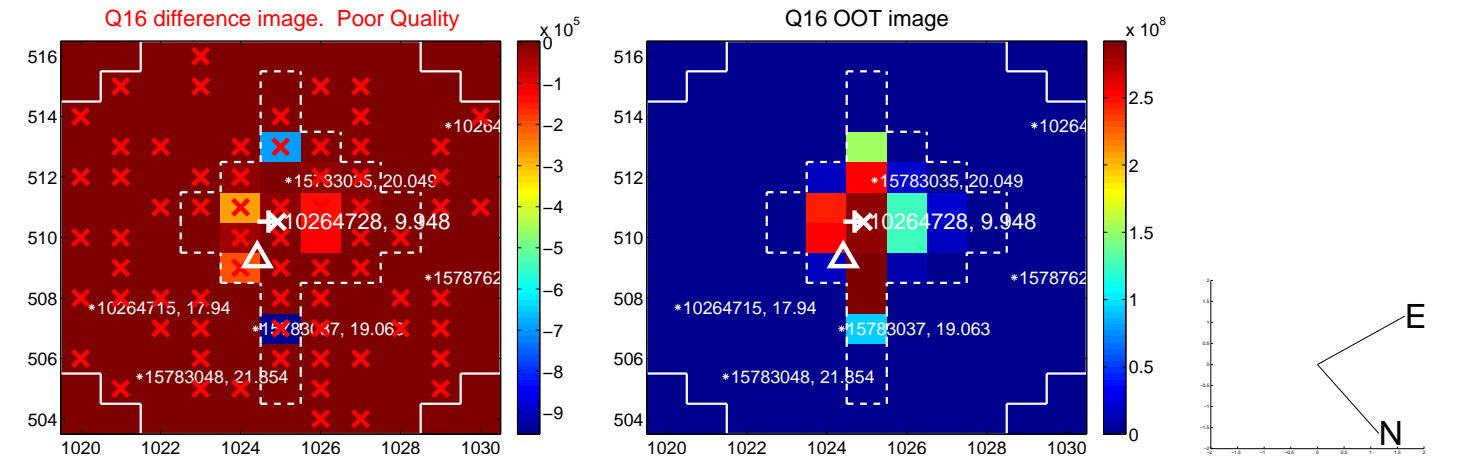
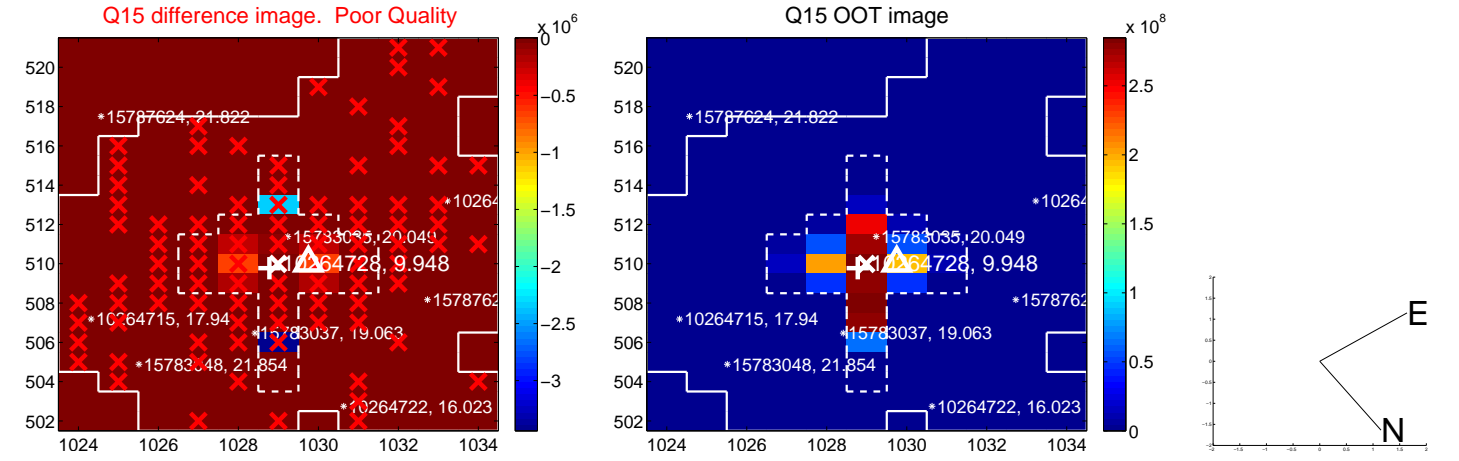
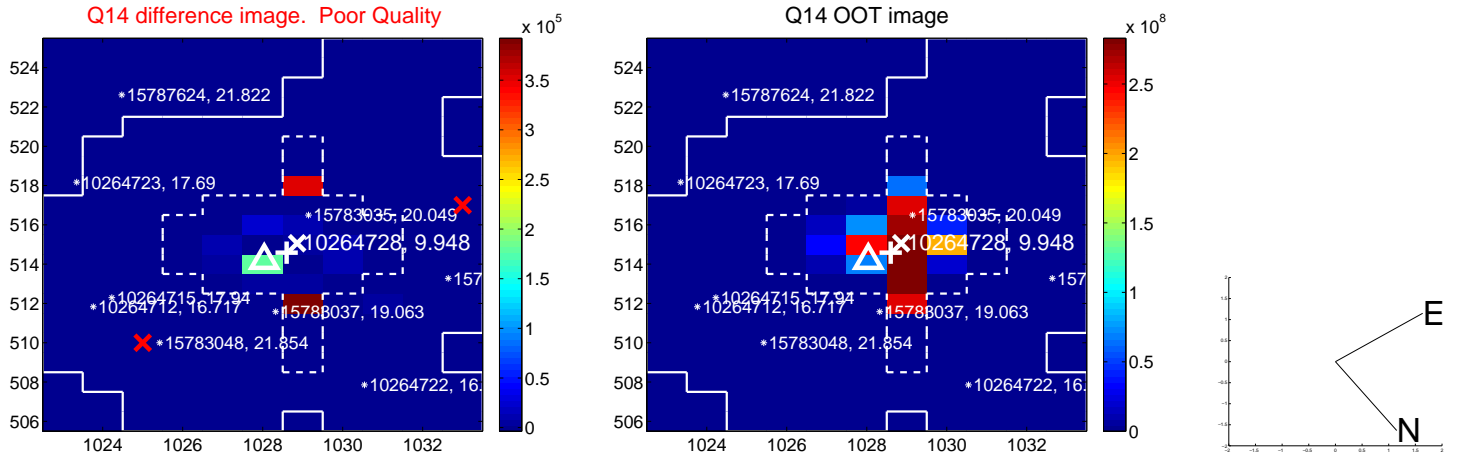
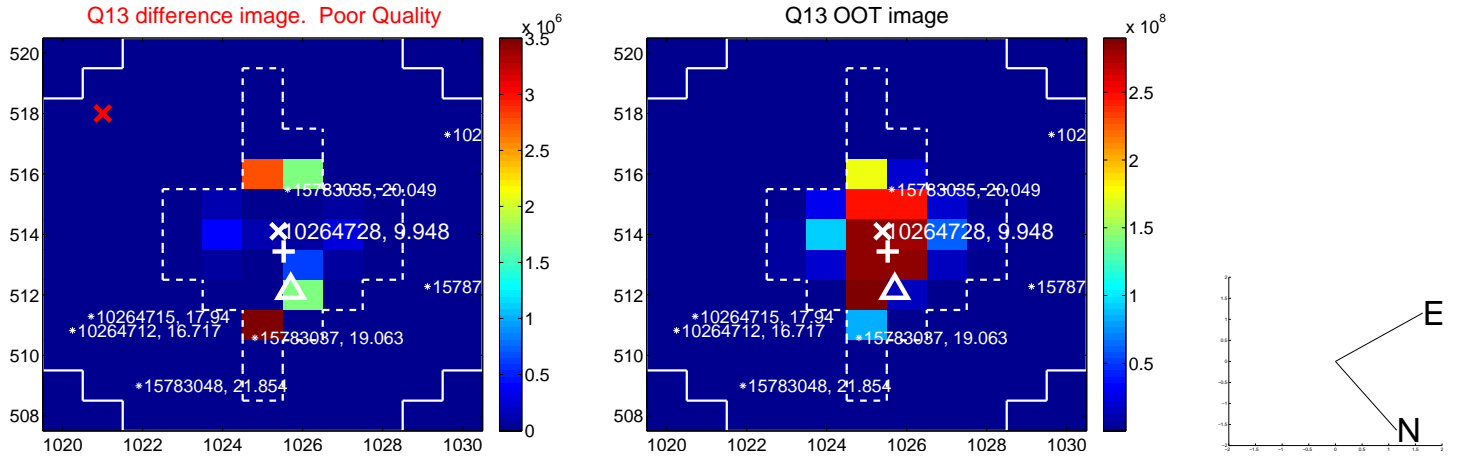
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



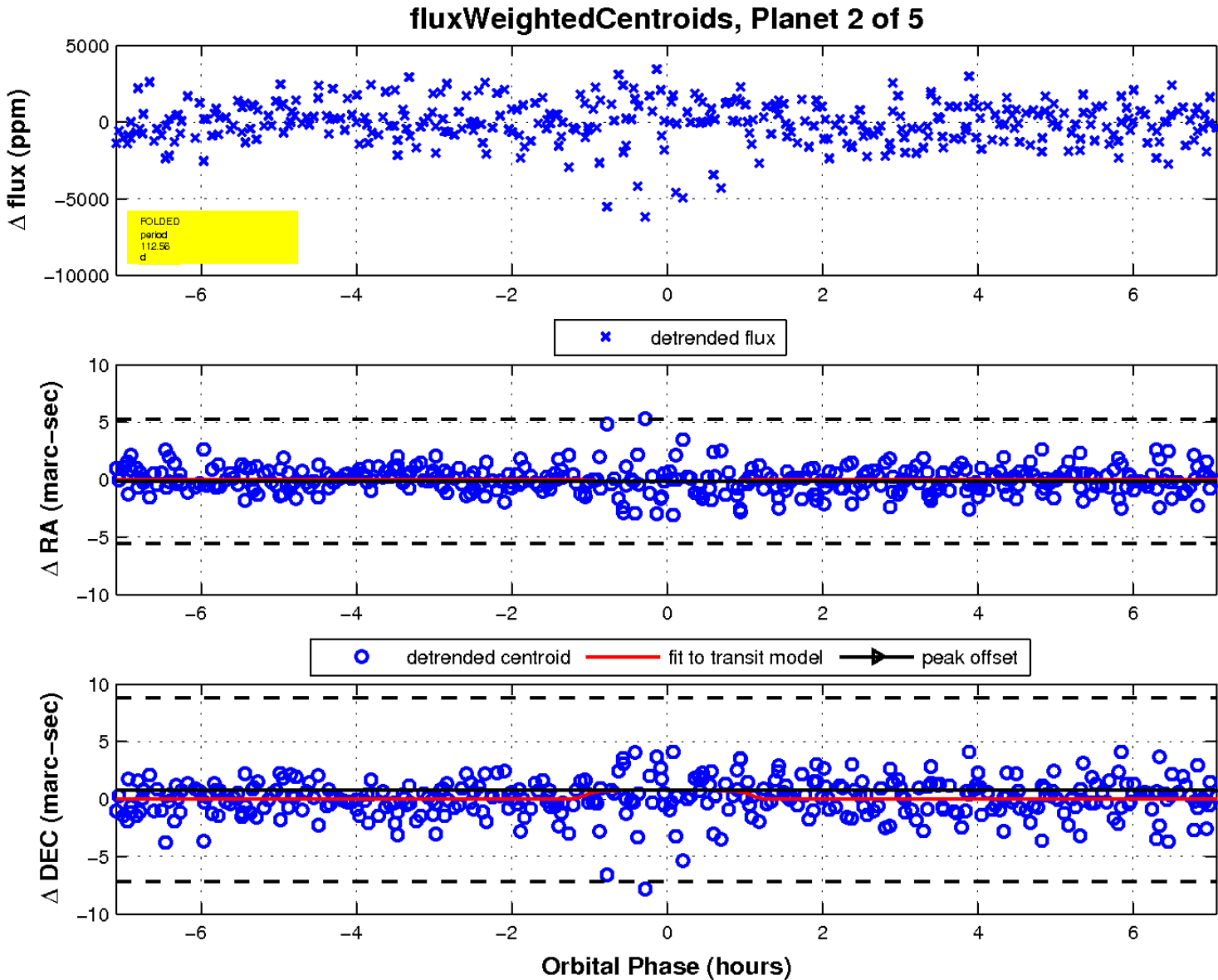
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



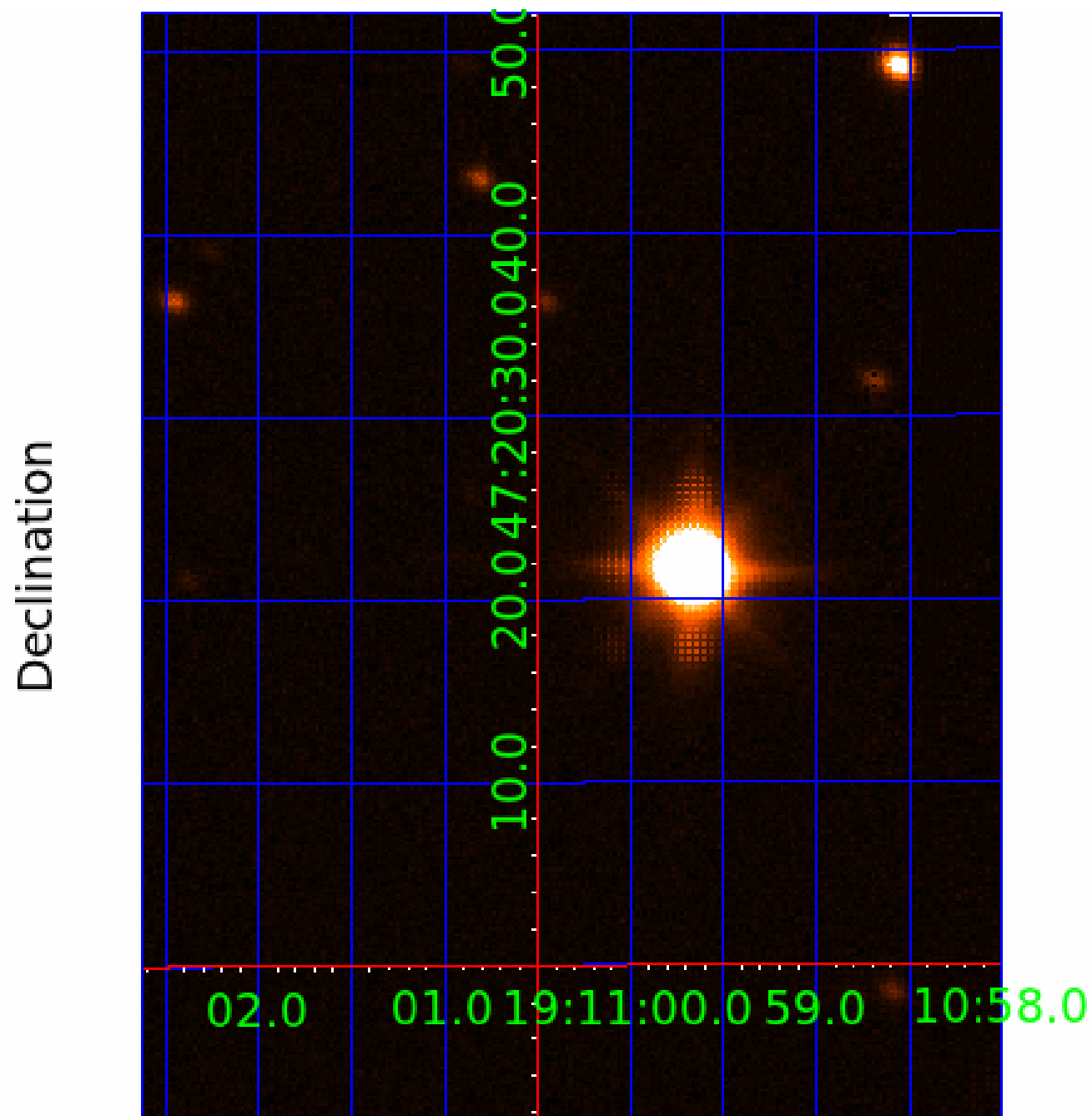
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q17 no difference image

Q17 no OOT image



UKIRT Image



KIC 010264728

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})
010264728-01	OBS	No	0.567310	131.623698	249.4	3.540	13.3	12.6	2.47	7994	5.06	81596.75
010264728-02	OBS	No	112.563603	196.674830	4196.6	2.376	12.1	11.4	2.47	7994	16.87	70.51
010264728-03	OBS	No	66.455272	168.079818	3422.1	1.891	11.8	11.4	2.47	7994	17.33	142.36
010264728-04	OBS	No	61.912884	181.197029	2719.6	4.758	10.2	10.0	2.47	7994	23.32	156.46
010264728-05	OBS	No	68.101018	174.196701	38.1	4.500	8.5	-1.0	2.47	7994	1.54	137.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264728-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
010264728-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED
010264728-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

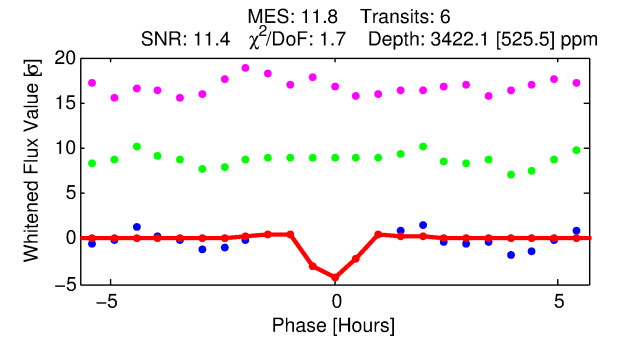
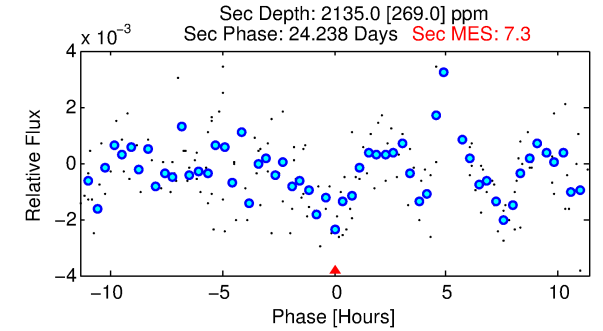
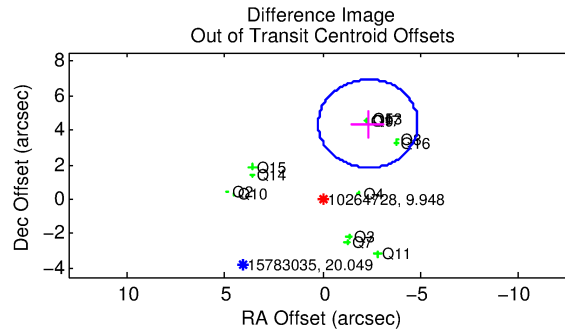
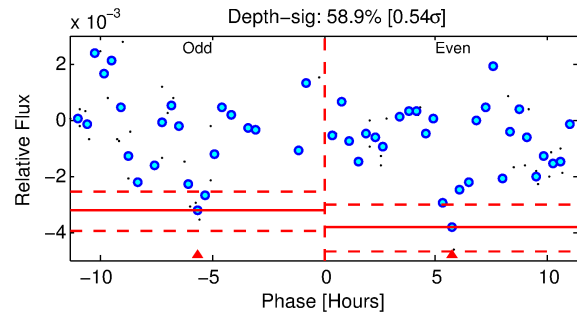
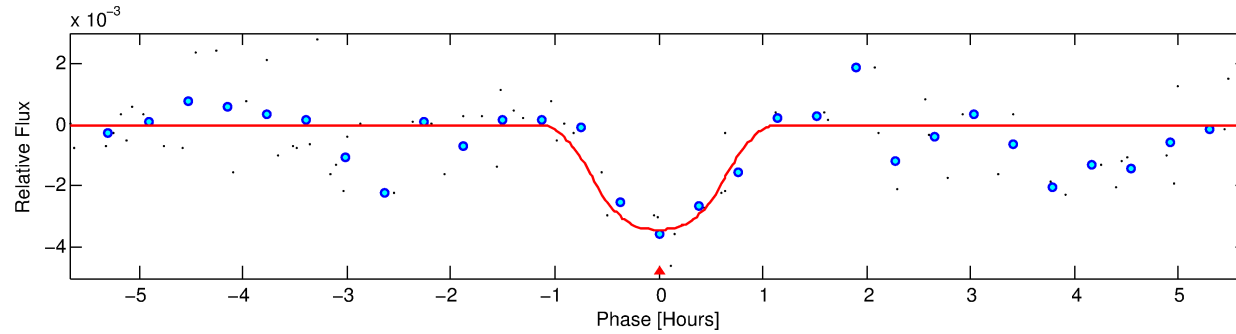
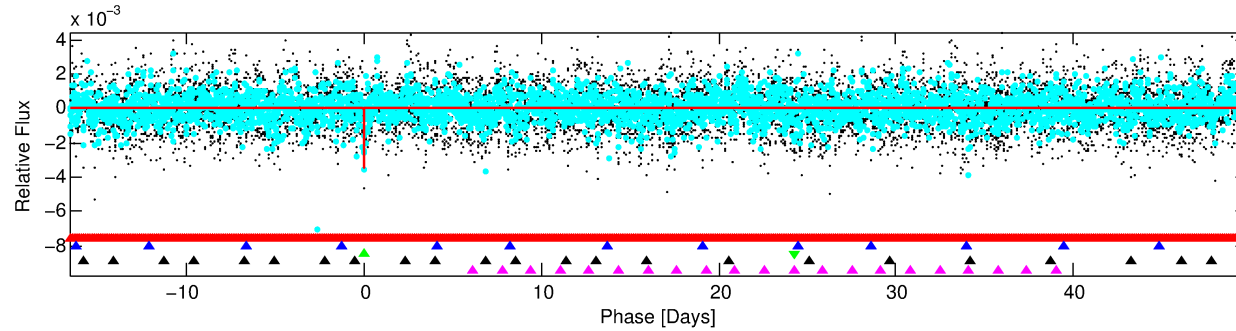
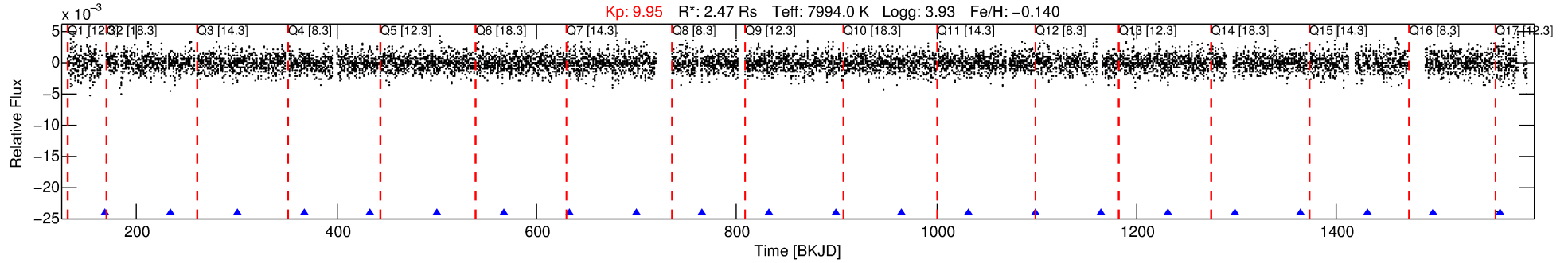
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010264728-03

No Significant Match Found

DV One-Page Summary

KIC: 10264728 Candidate: 3 of 5 Period: 66.455 d



DV Fit Results:

Period = 66.45527 [0.00046] d
Epoch = 168.0798 [0.0051] BKJD
Rp/R* = 0.0642 [0.0083]
a/R* = 143.04 [58.69]
b = 0.92 [0.07]
Seff = 142.36 [68.59]
Teq = 881 [106] K
Rp = 17.33 [6.01] Re
a = 0.3965 [0.1159] AU
Ag = 615.01 [329.54] [1.86σ]
Teffp = 6782 [565] K [10.26σ]

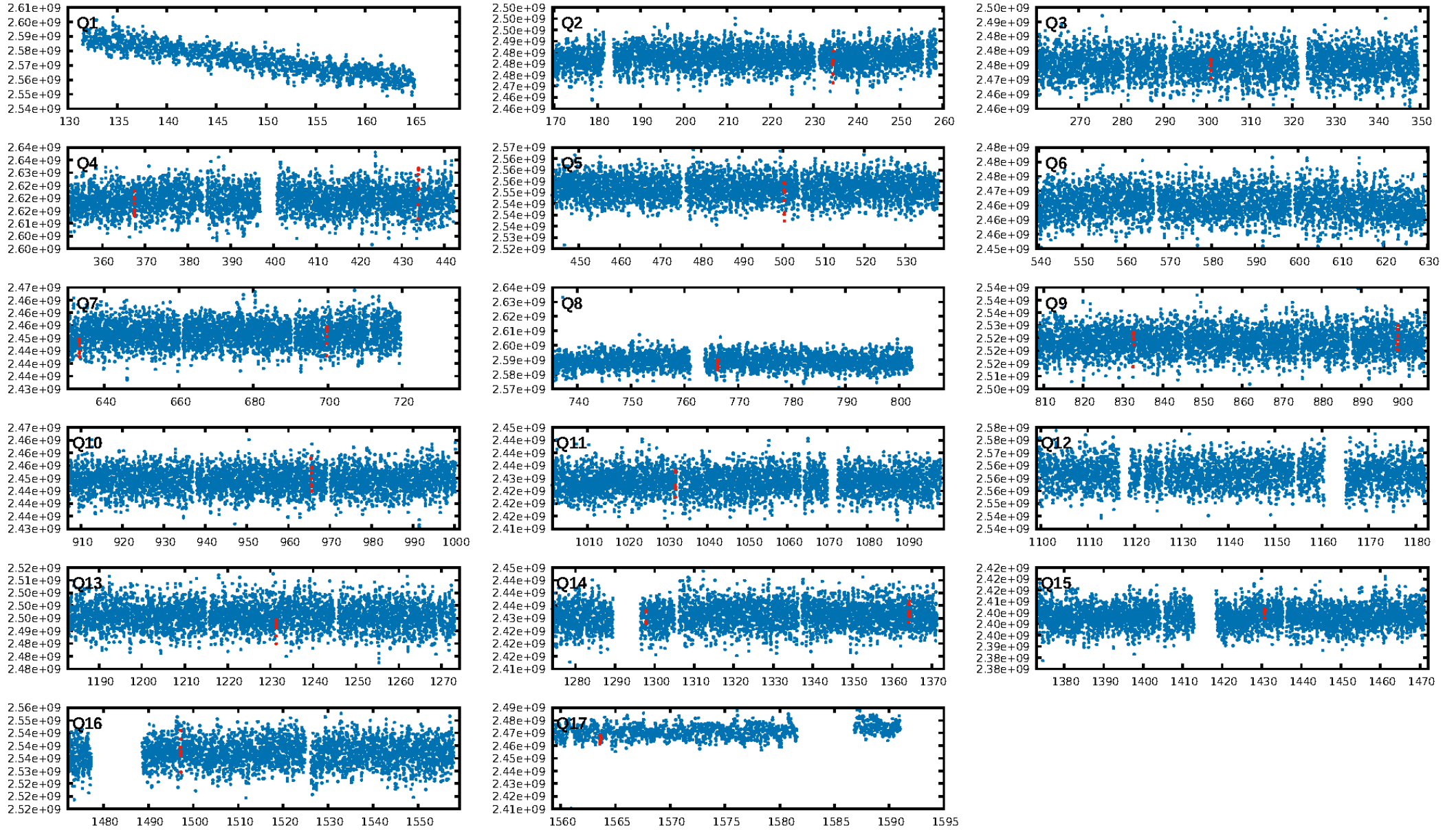
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [21.29σ]
LongPeriod-sig: 100.0% [8.09σ]
ModelChiSquare2-sig: 32.6%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: N/A
Centroid-sig: 47.2%
Centroid-so: 1.484 arcsec [7.77σ]
OotOffset-rm: 4.952 arcsec [5.83σ]
KicOffset-rm: 7.497 arcsec [7.80σ]
OotOffset-st: 3/4/3/4 [14]
KicOffset-st: 3/4/3/4 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

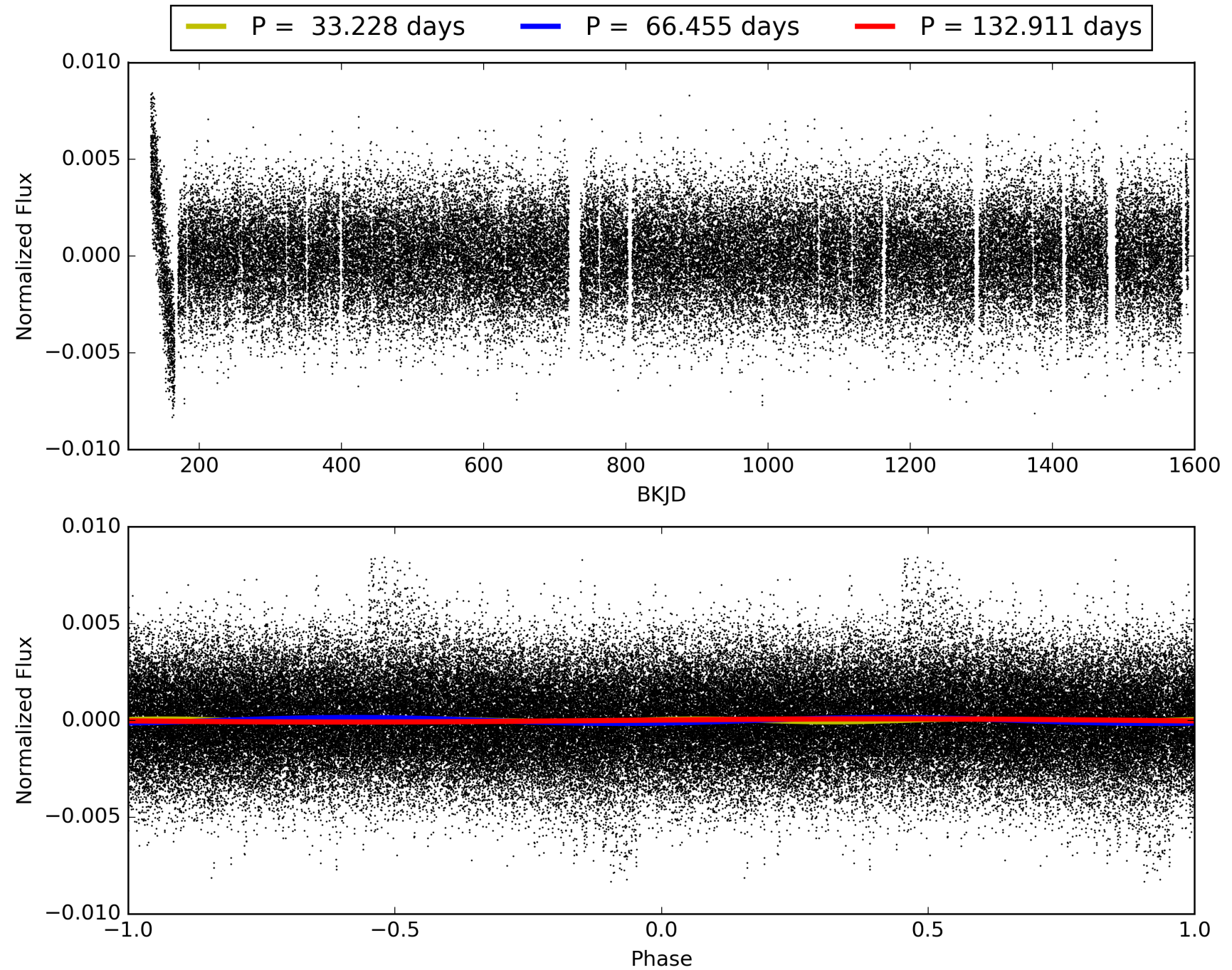
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:20:07 Z

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

TCE 010264728-03, PDC Light Curves

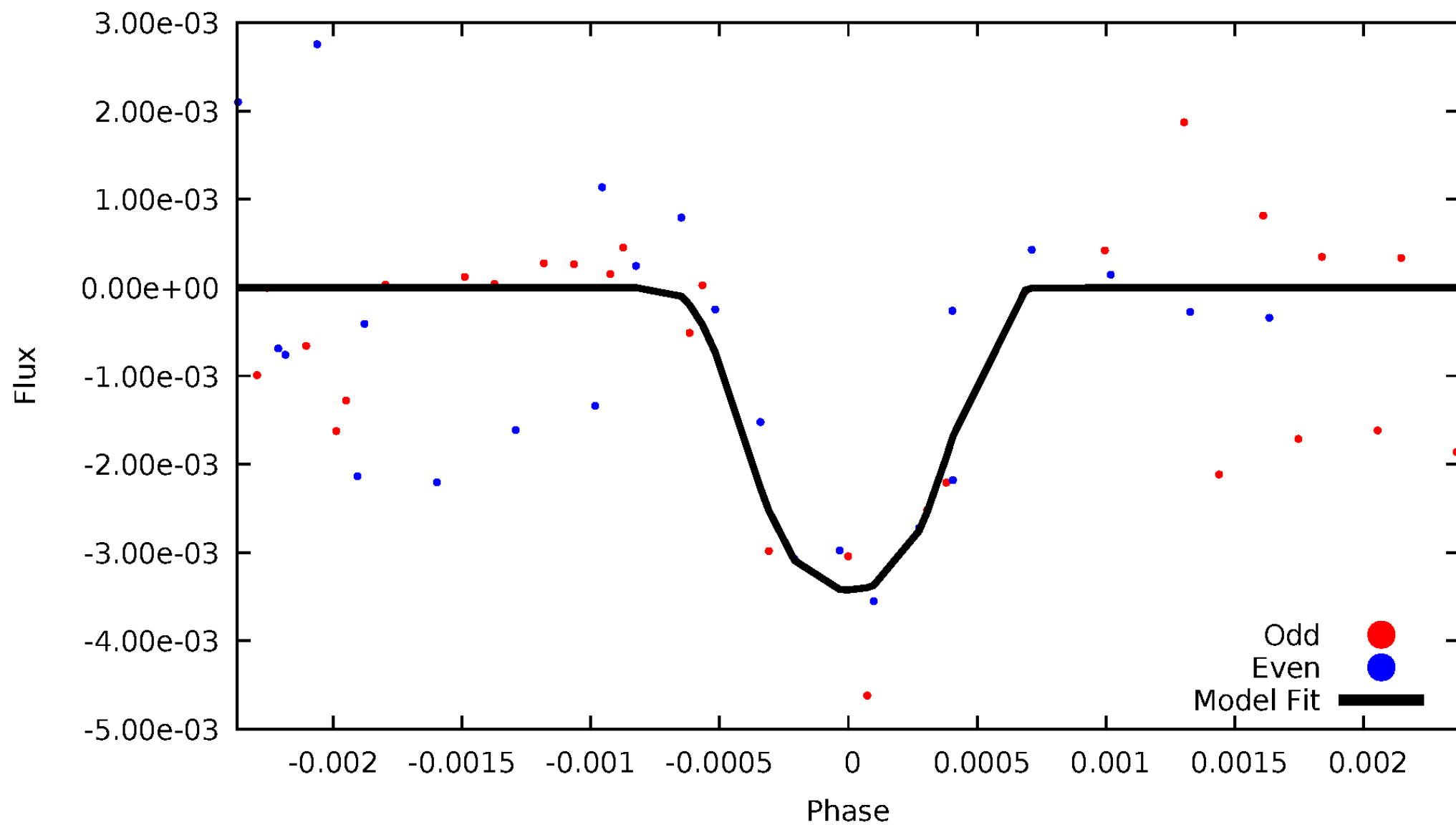


TCE 010264728-03



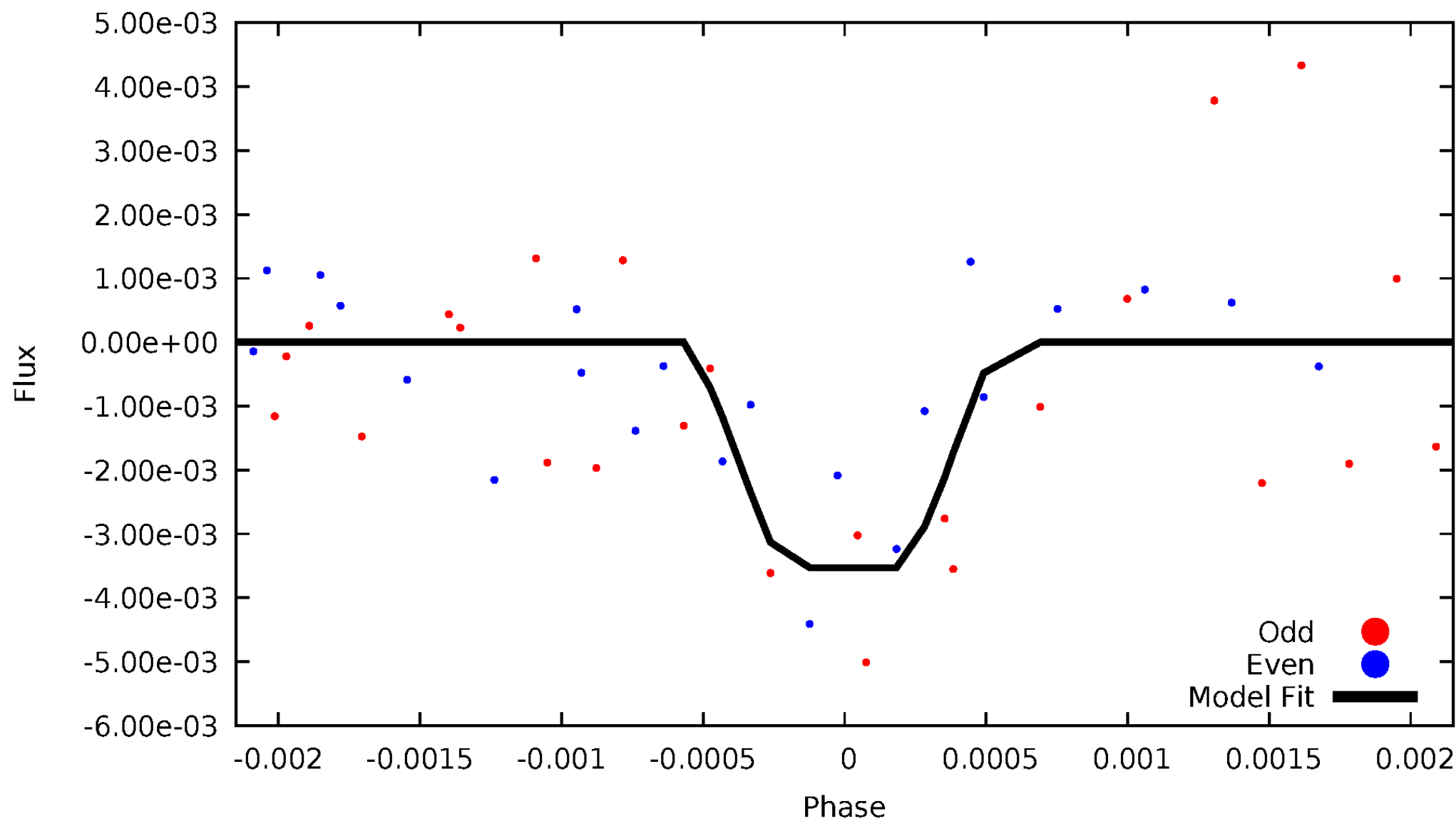
DV Odd/Even

TCE 010264728-03



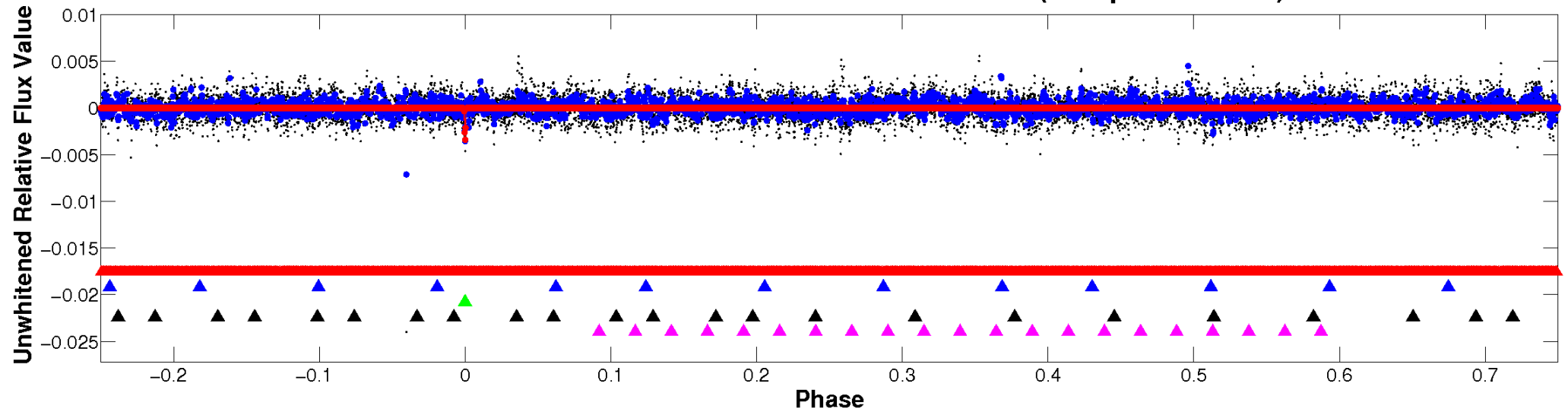
ALT Odd/Even

TCE 010264728-03

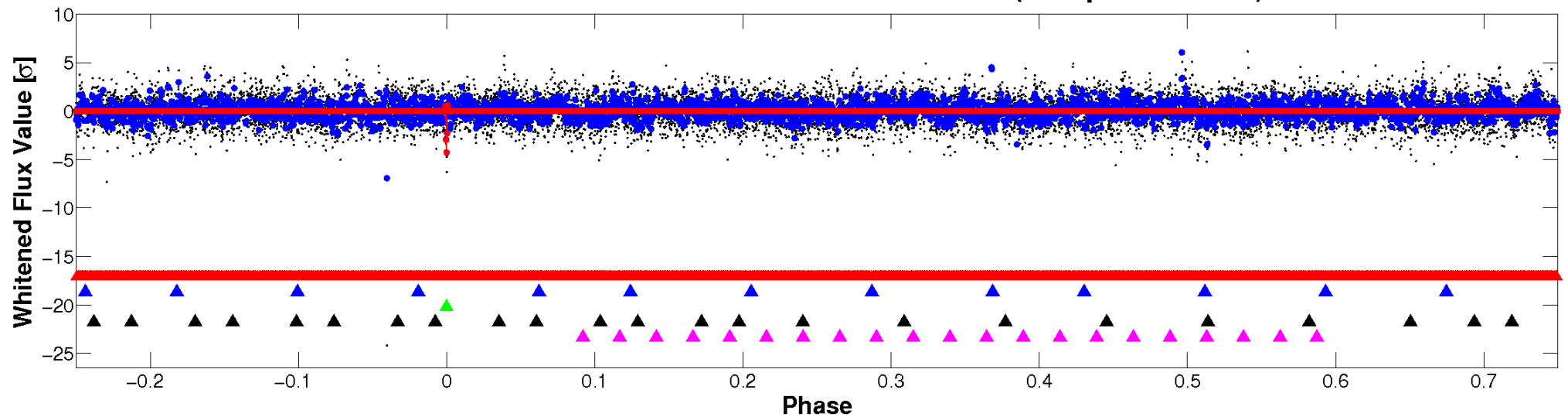


Non-Whitened Vs. Whitened Light Curve

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

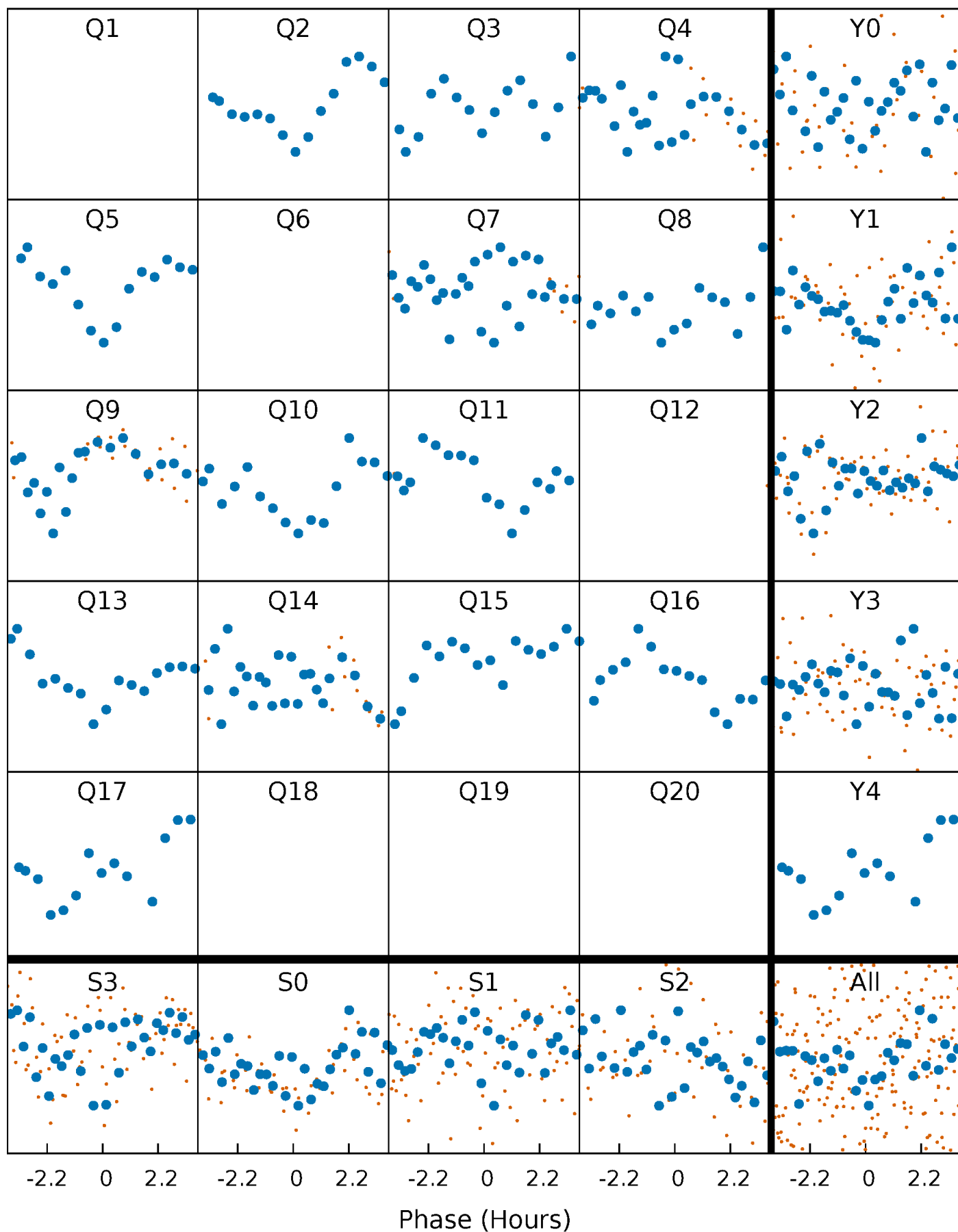


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



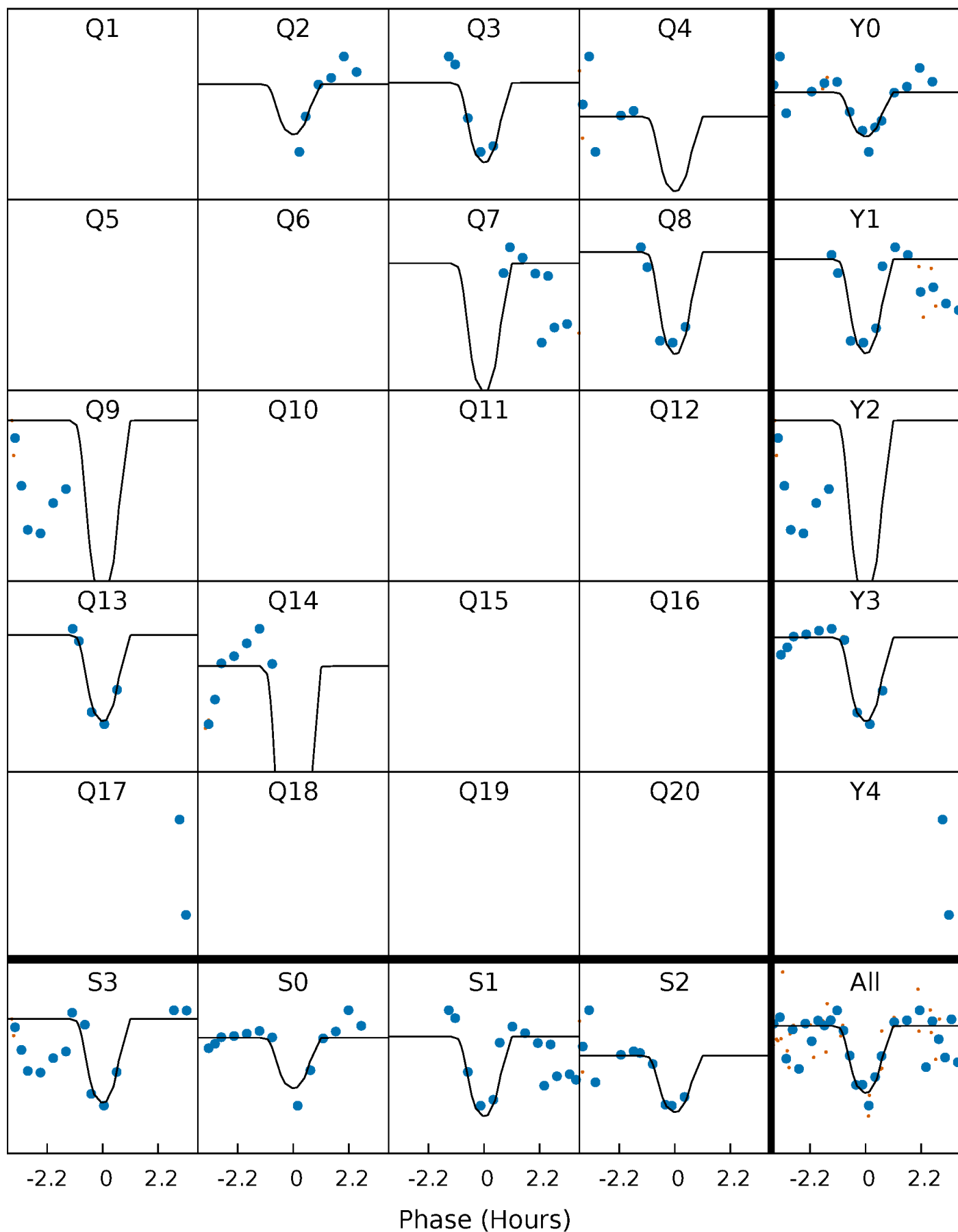
PDC Quarter-Phased Transit Curves

TCE 010264728-03 P= 66.455272 Days $T_0=168.079818$ (BKJD)



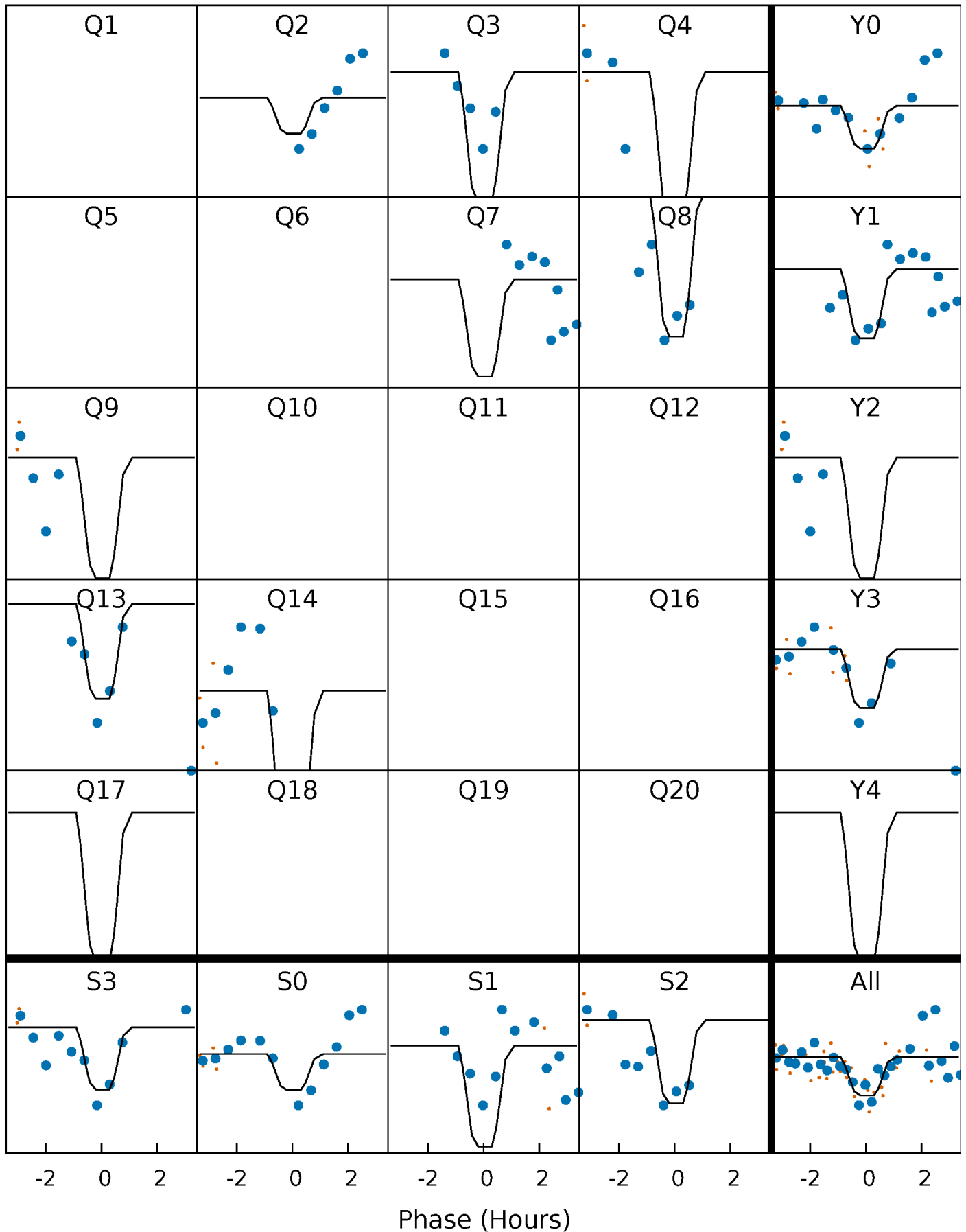
DV Quarter-Phased Transit Curves

TCE 010264728-03 P= 66.455272 Days $T_0=168.079818$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

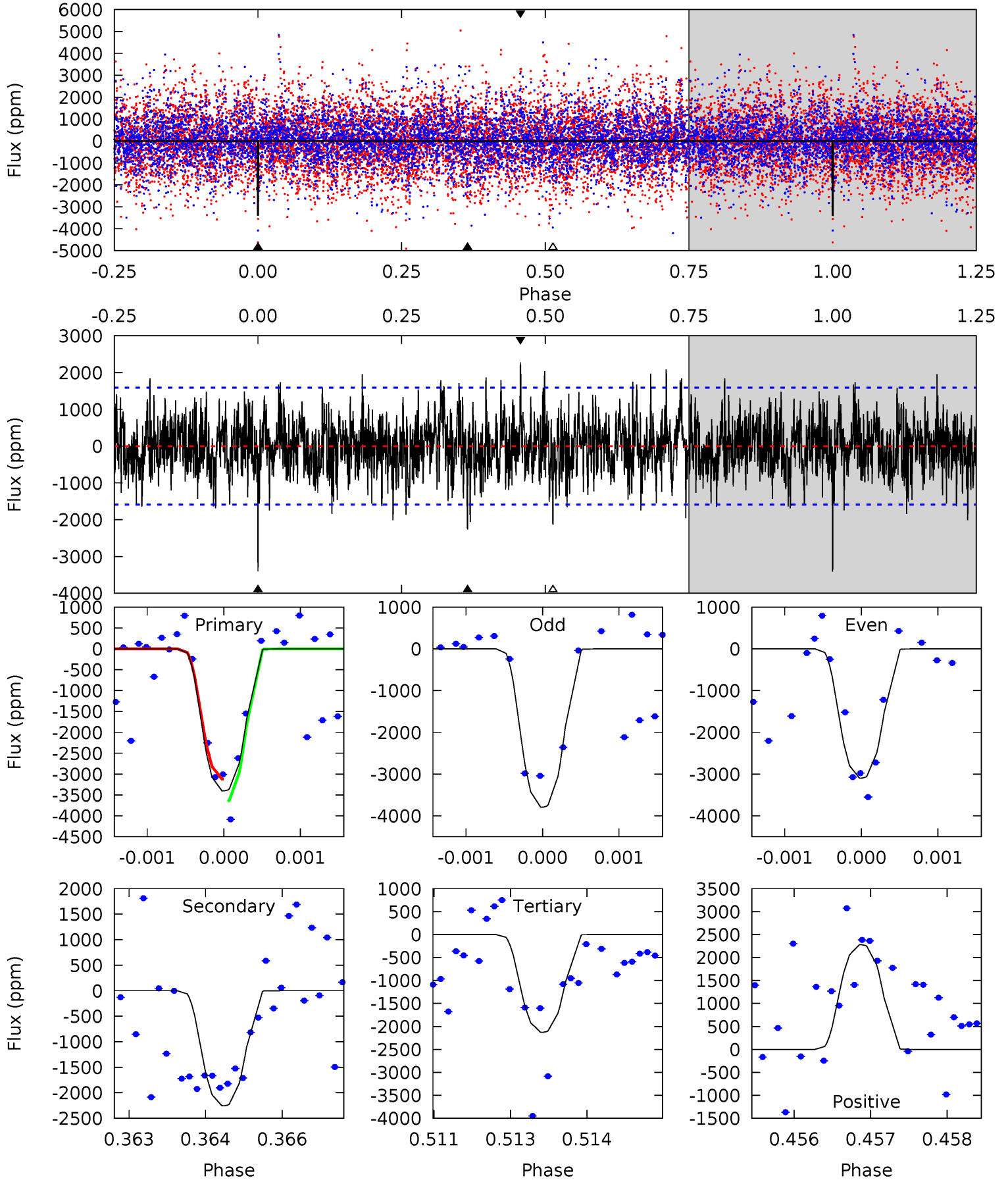
TCE 010264728-03 $P = 66.454909$ Days $T_0 = 168.079964$ (BKJD)



DV Model-Shift Uniqueness Test

010264728-03, P = 66.455272 Days, E = 101.624546 Days

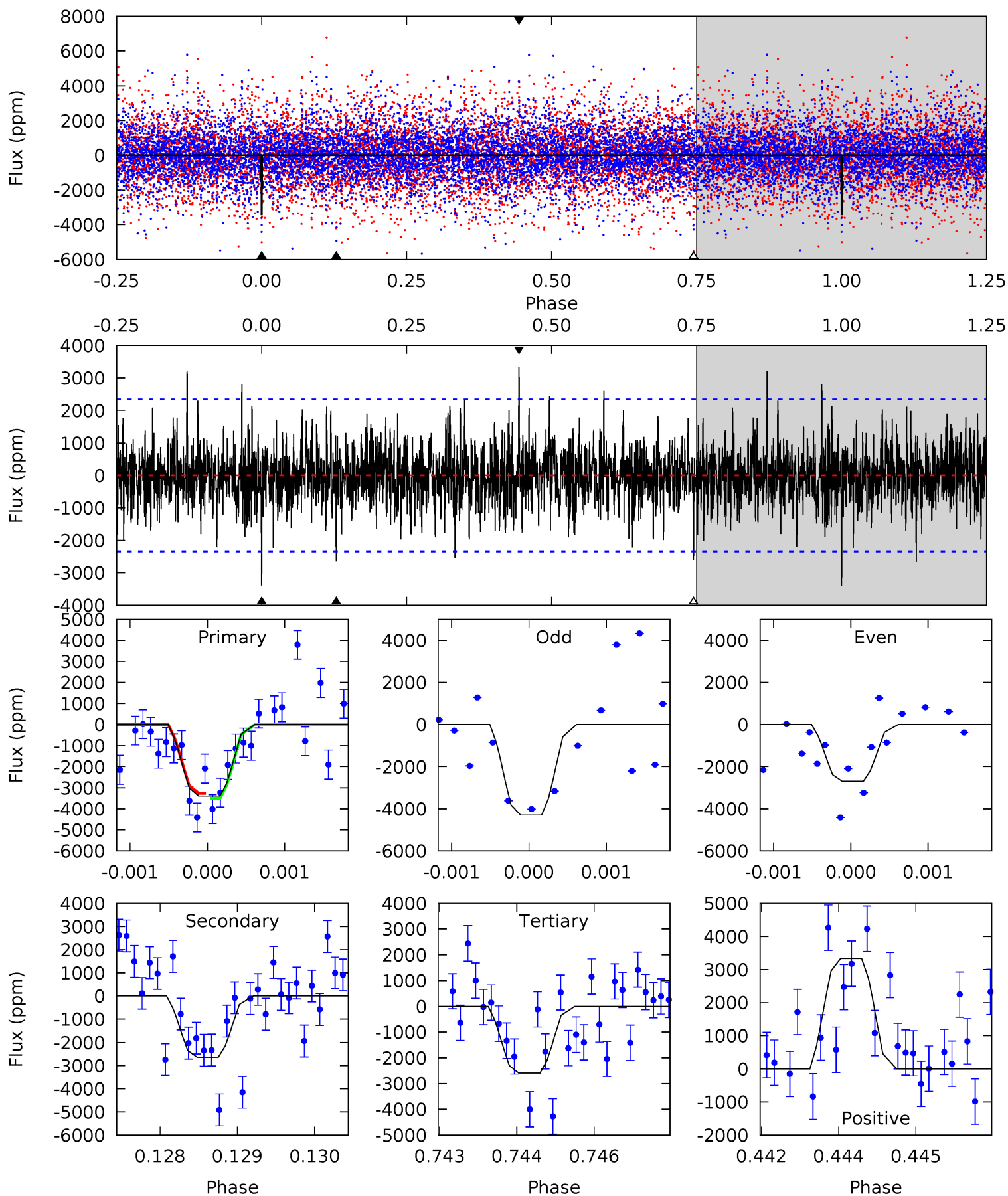
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.6	7.66	7.22	7.73	5.40	3.20	2.11	4.33	3.82	0.43	-0.08	1.18	0.88	0.40	0.91



Alt Model-Shift Uniqueness Test

010264728-03, P = 66.454909 Days, E = 101.625055 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.89	6.14	6.03	7.75	5.43	3.26	1.62	1.86	0.15	0.10	-1.61	1.84	0.97	0.50	0.25



Stellar Parameters For KIC 010264728

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7994^{+223}_{-335}	$3.926^{+0.259}_{-0.130}$	$-0.140^{+0.200}_{-0.300}$	$2.473^{+0.428}_{-0.795}$	$1.883^{+0.136}_{-0.381}$	$0.175^{+0.293}_{-0.059}$
	+3%/-4%	+7%/-3%	+143%/-214%	+17%/-32%	+7%/-20%	+167%/-34%
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 010264728-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-2257 ± 295	$16.44^{+3.38}_{-3.16}$	1210^{+82}_{-99}	6693^{+649}_{-513}	698^{+347}_{-225}
Alt.	-2641 ± 431	$15.25^{+3.24}_{-3.04}$	1215^{+75}_{-99}	7331^{+797}_{-666}	969^{+497}_{-325}

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 $A_{\text{obs}} \gg 1.0$

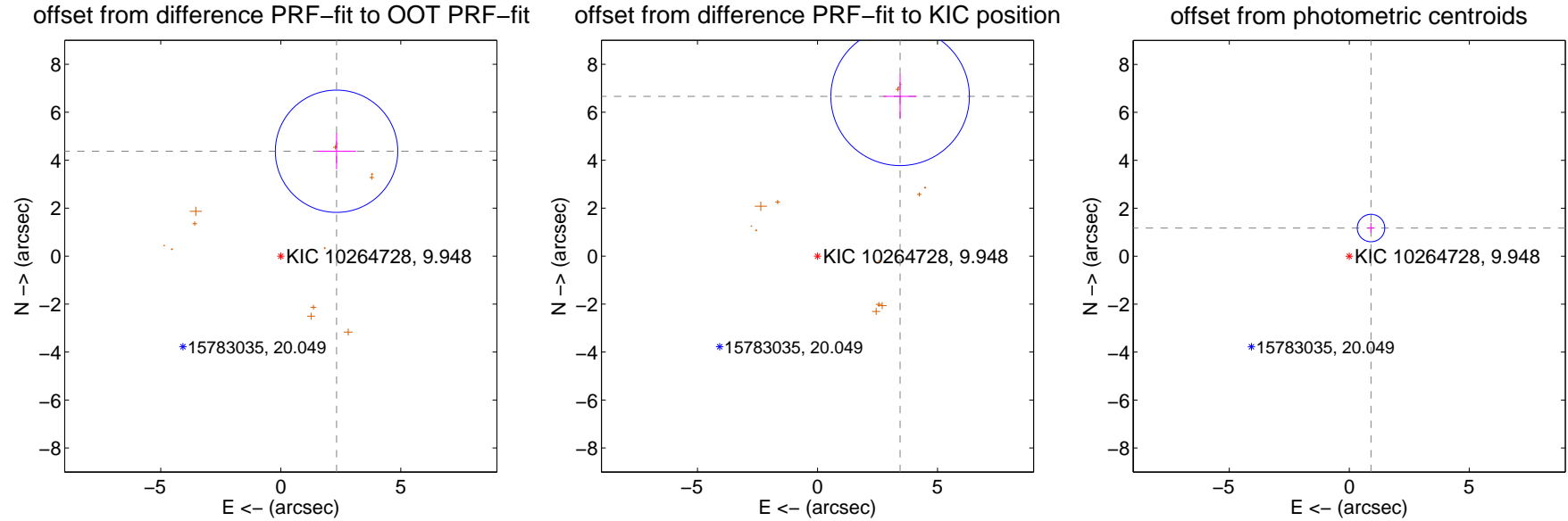
DV Centroid Data

Supplemental centroid analysis for 010264728-03. **Kepler magnitude: 9.95.** Transit SNR 11.45

There are 0 quarters with good PRF difference image offsets

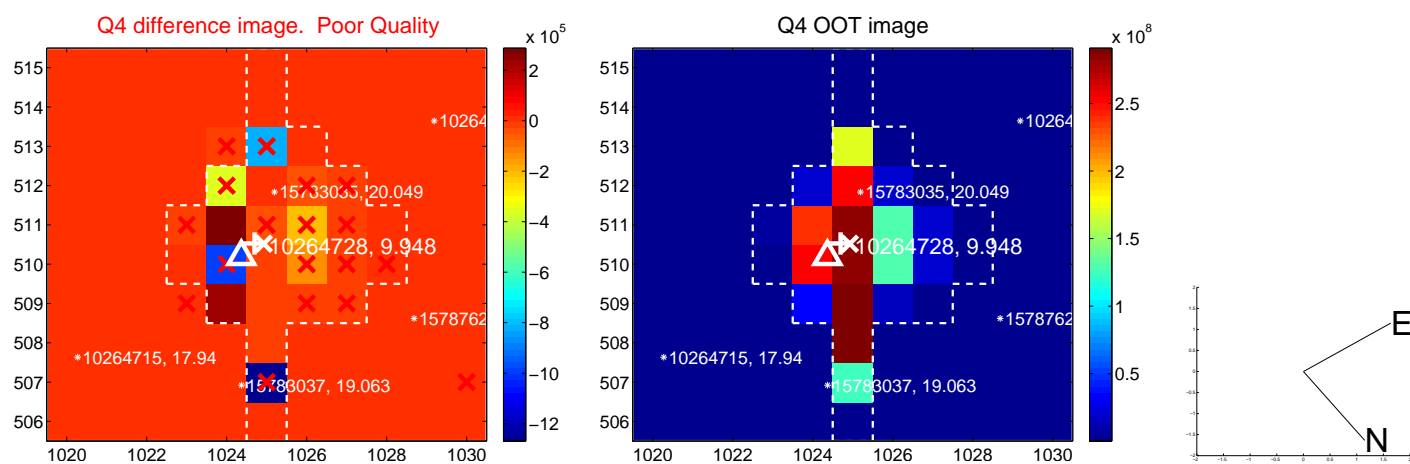
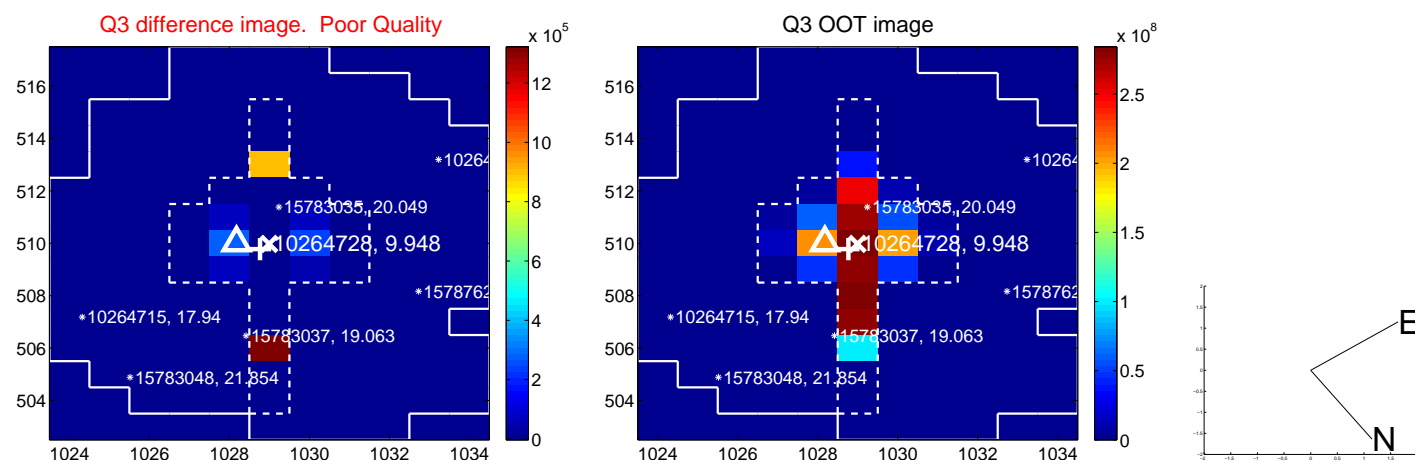
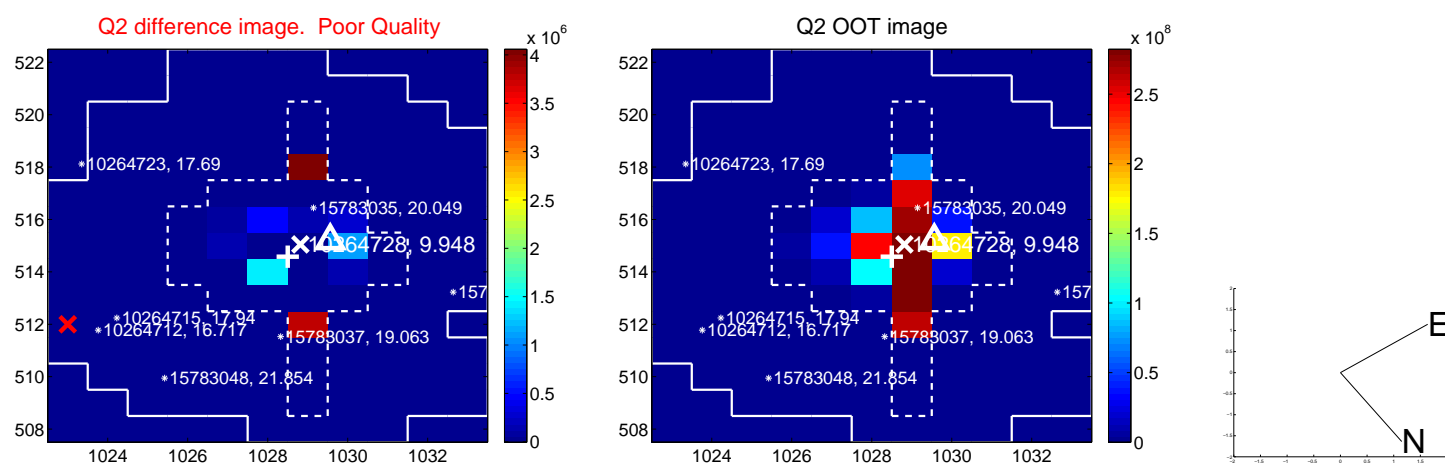
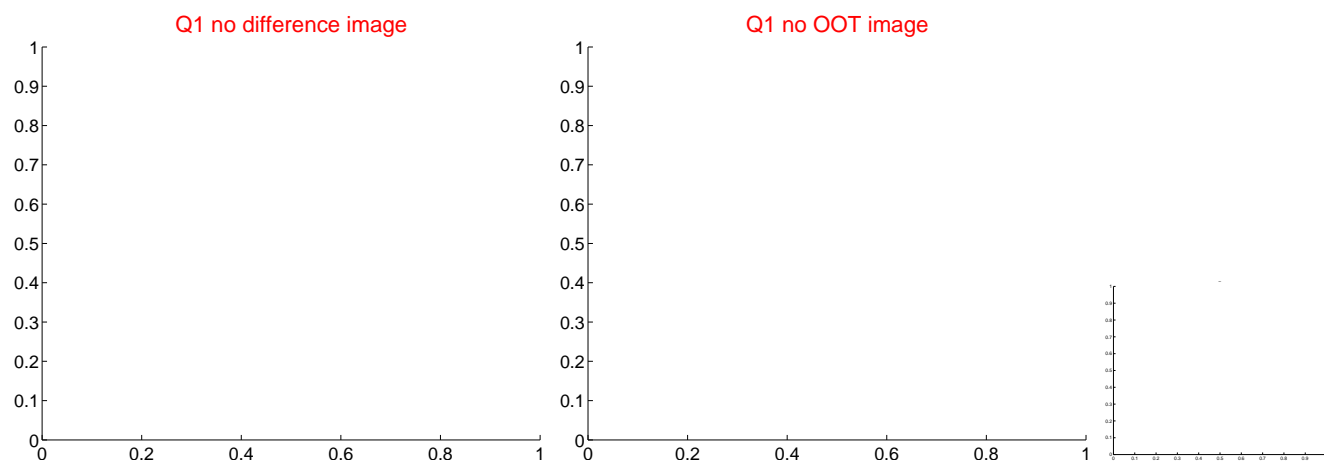
The OOT PRF centroid is offset from the target star catalog position by about 2.65 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.952 ± 0.850	5.83	-2.323 ± 0.809	4.373 ± 0.752
PRF-fit source offset from KIC position	7.497 ± 0.962	7.80	-3.441 ± 0.691	6.660 ± 0.916
photometric centroid source offset	1.48 ± 0.19	7.77	-0.91 ± 0.15	1.17 ± 0.21

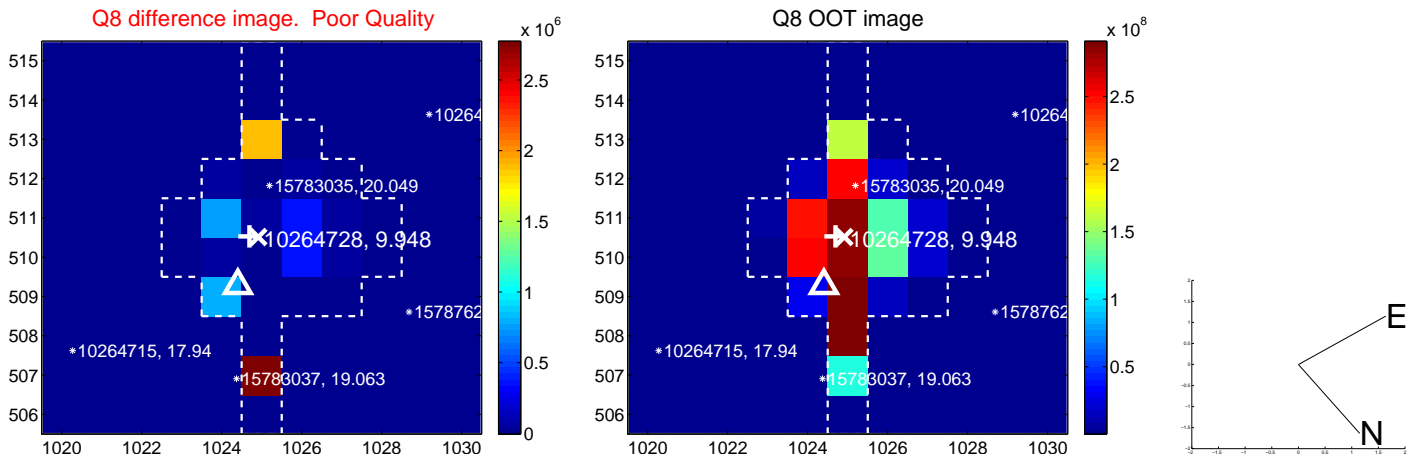
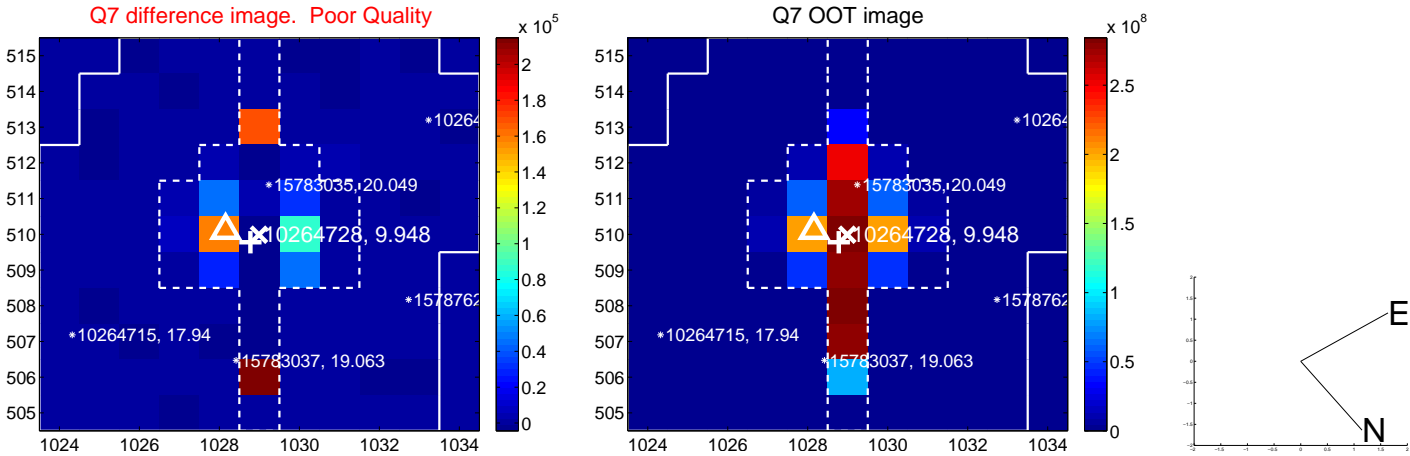
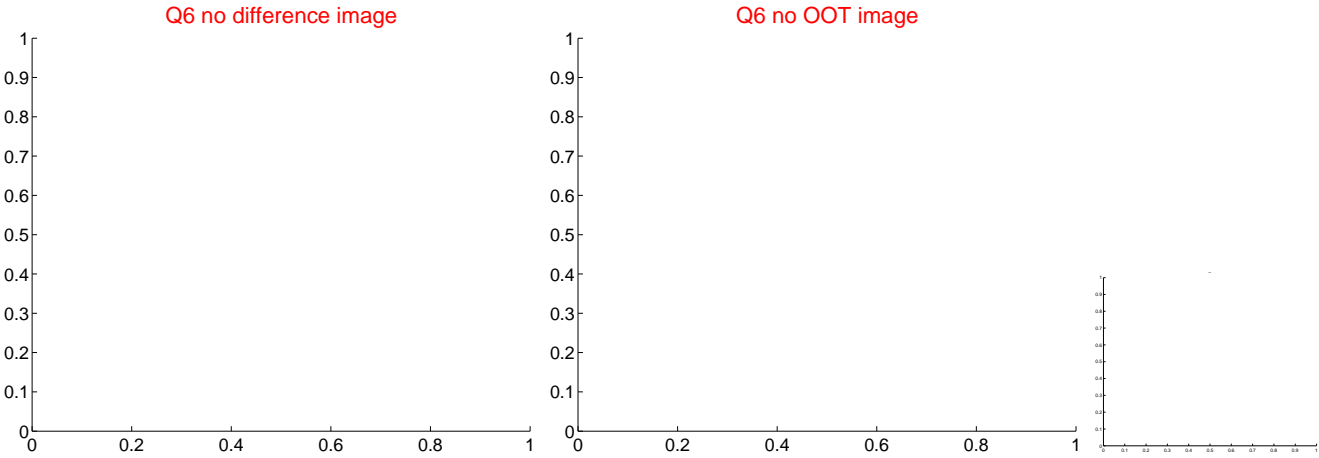
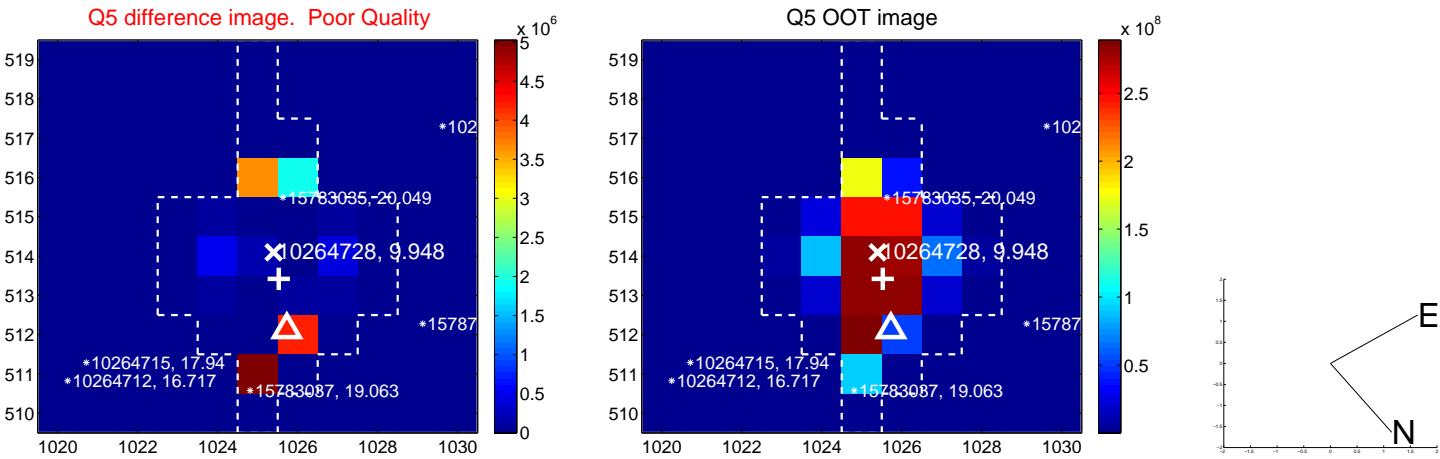


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

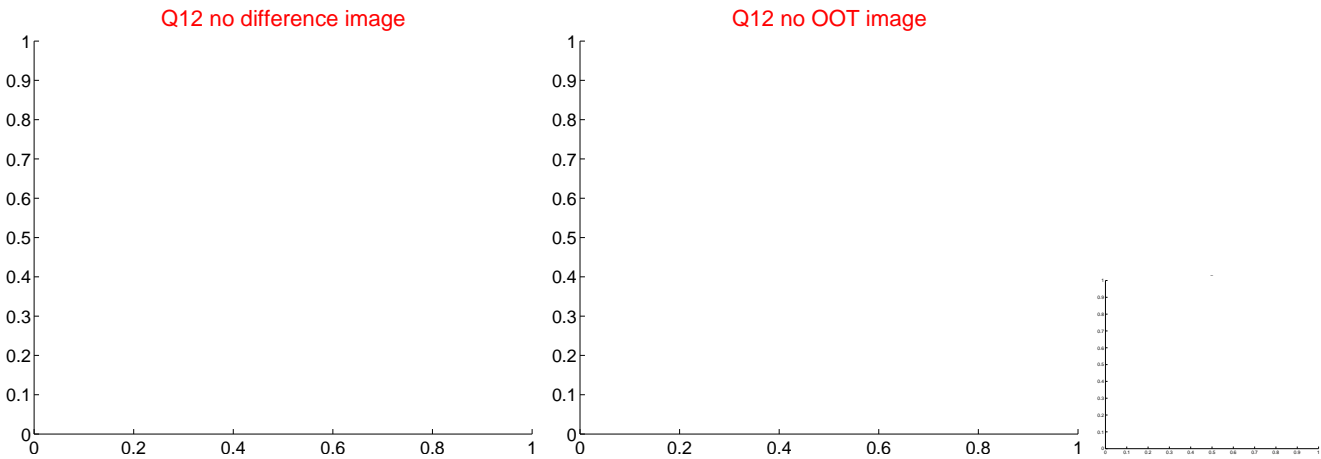
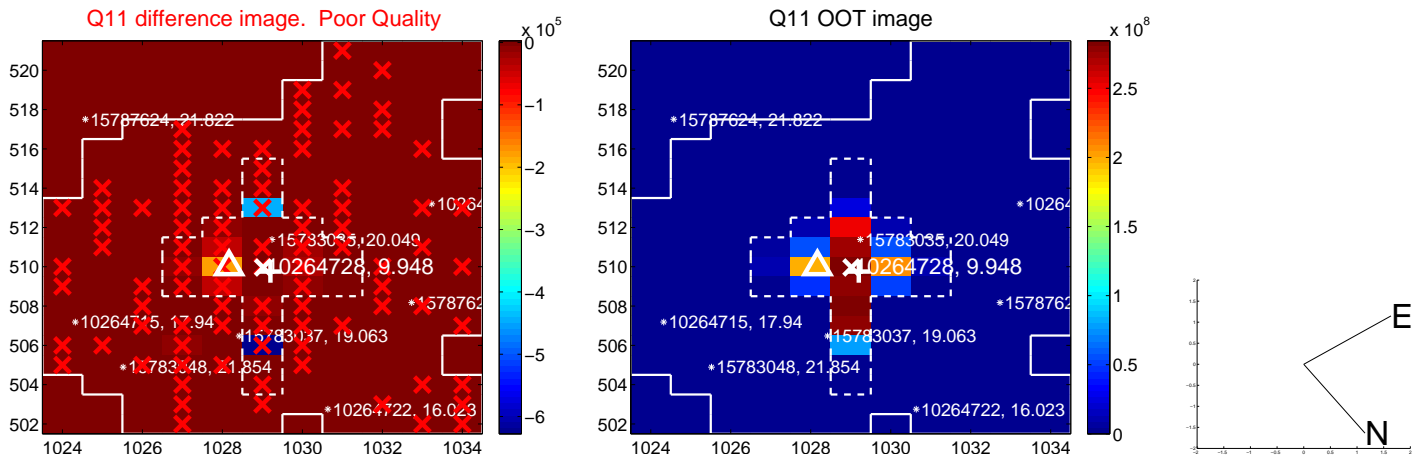
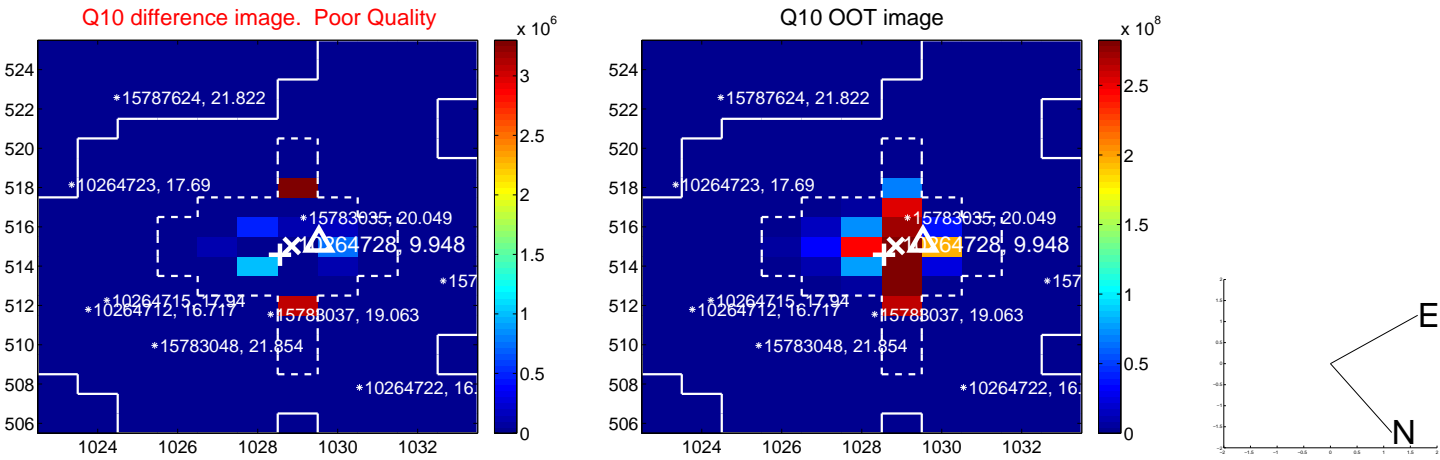
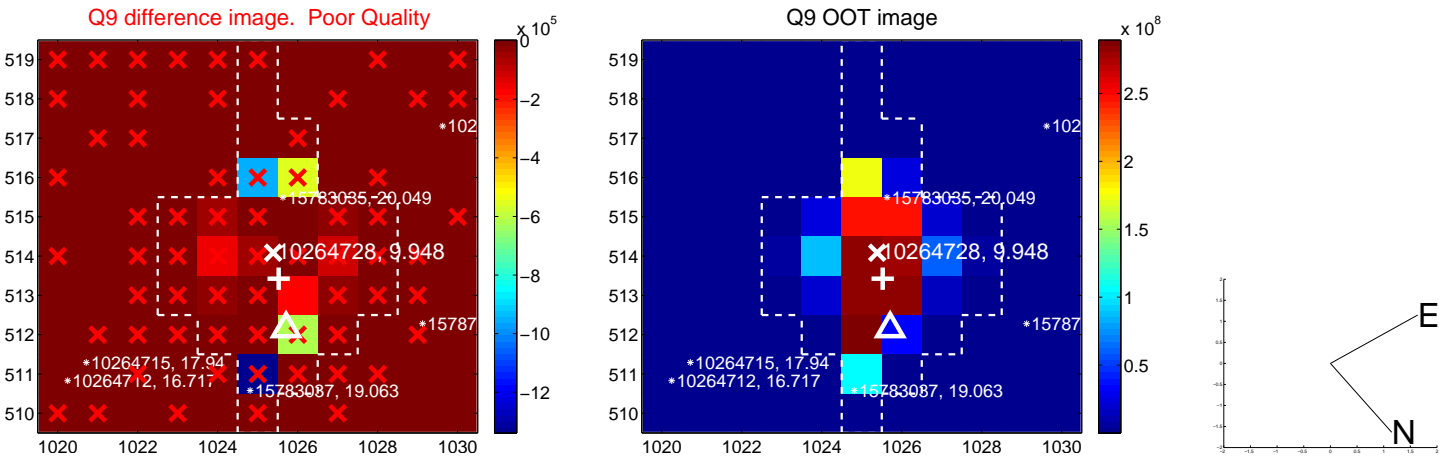
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



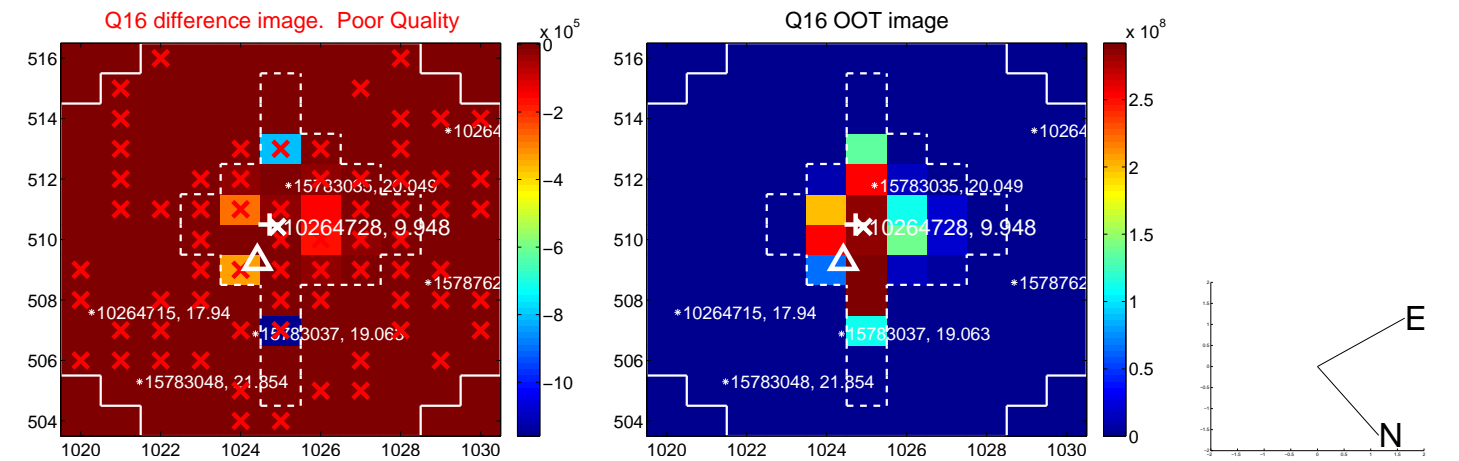
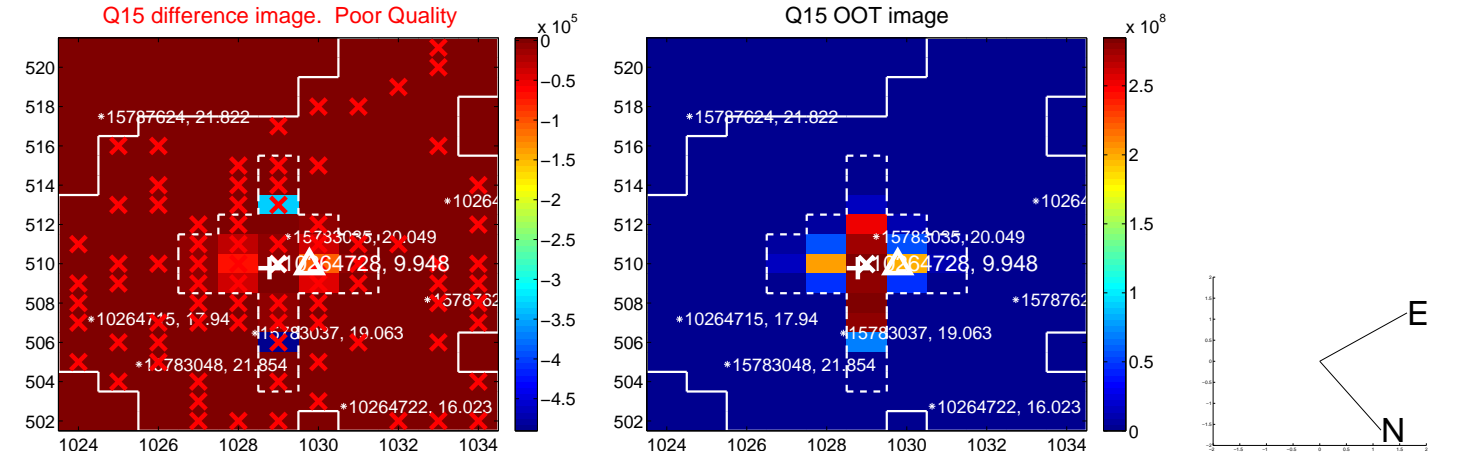
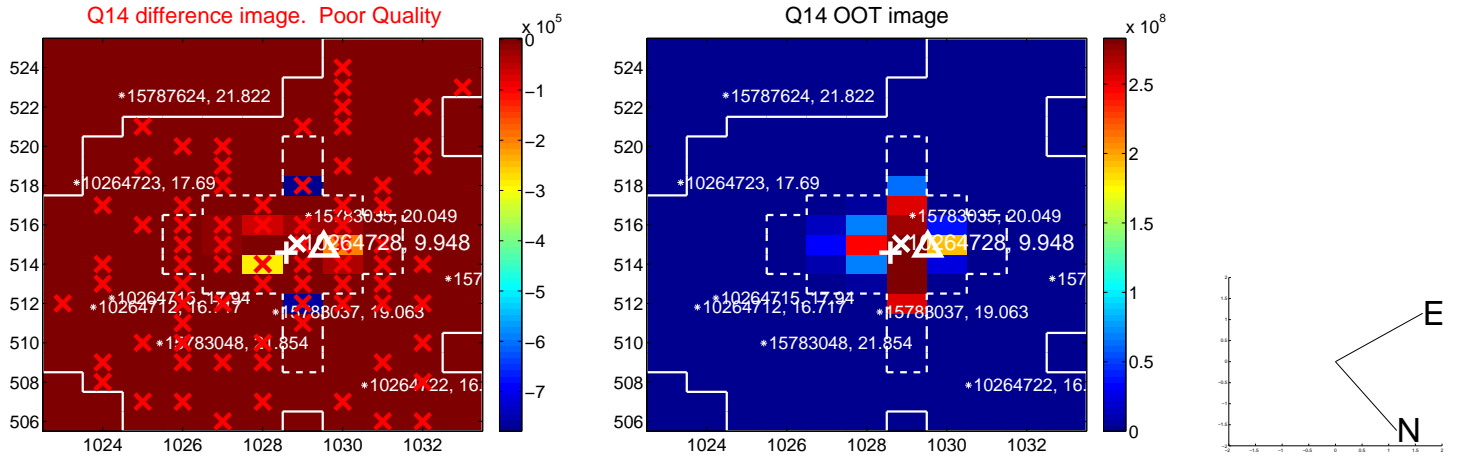
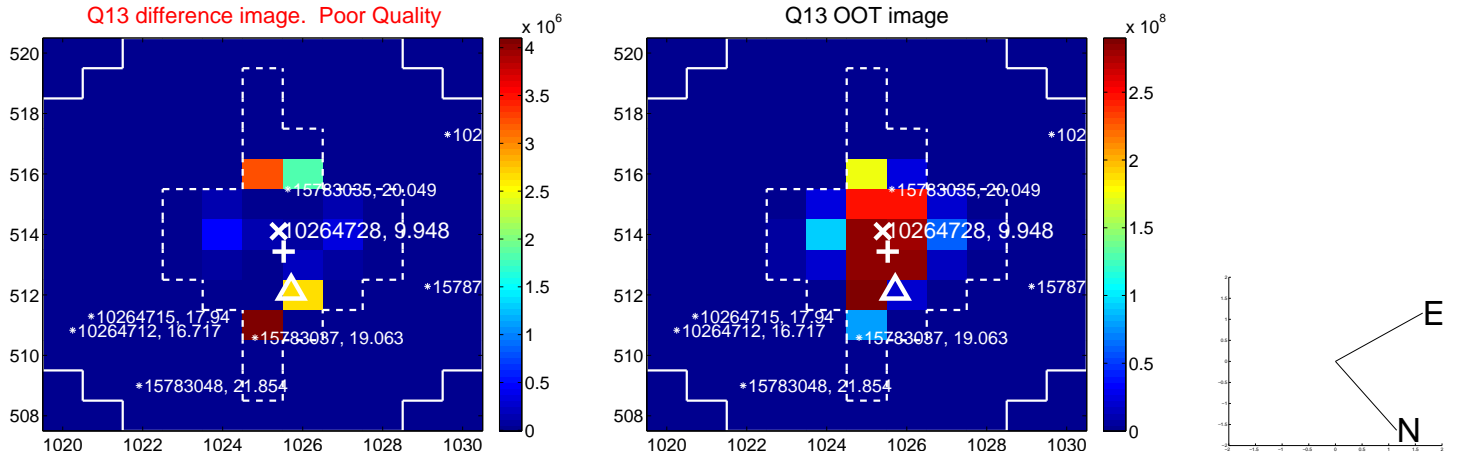
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



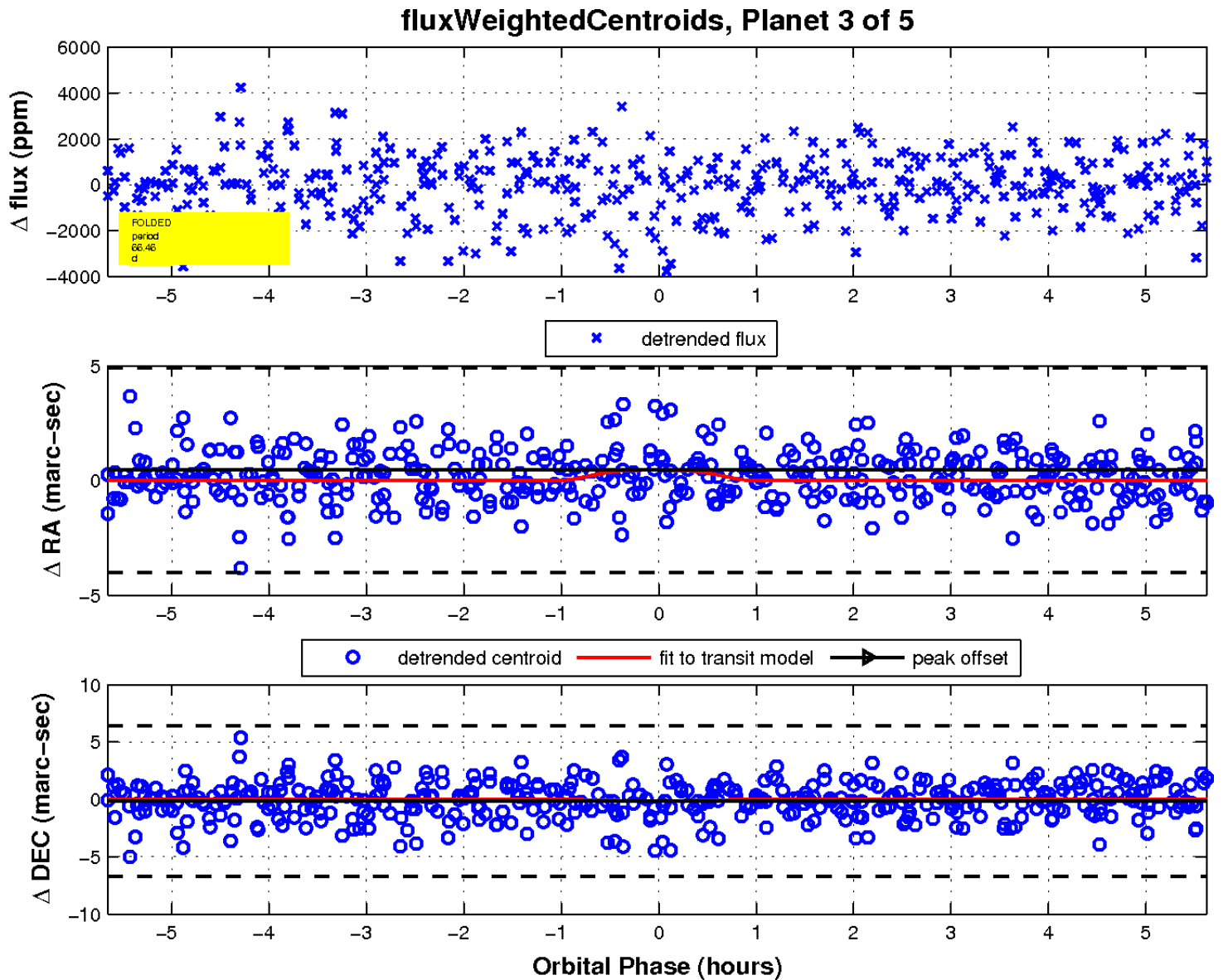
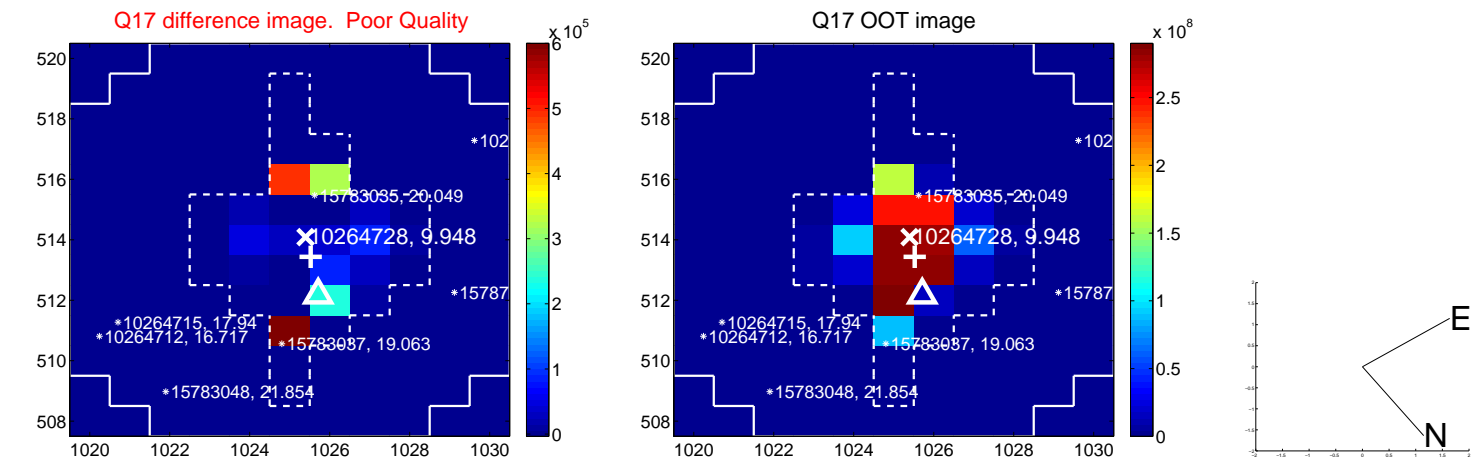
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



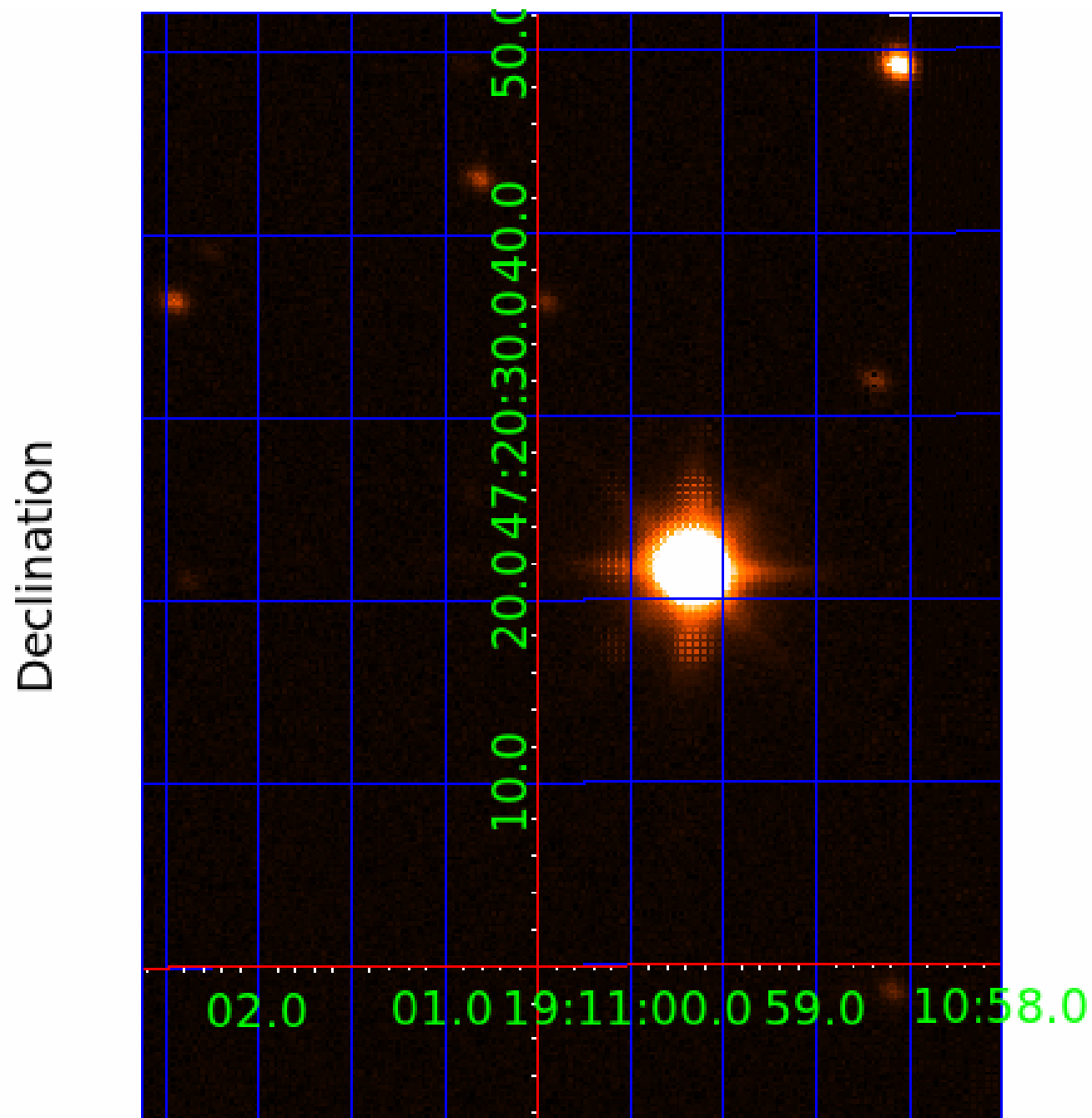
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image



KIC 010264728

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})
010264728-01	OBS	No	0.567310	131.623698	249.4	3.540	13.3	12.6	2.47	7994	5.06	81596.75
010264728-02	OBS	No	112.563603	196.674830	4196.6	2.376	12.1	11.4	2.47	7994	16.87	70.51
010264728-03	OBS	No	66.455272	168.079818	3422.1	1.891	11.8	11.4	2.47	7994	17.33	142.36
010264728-04	OBS	No	61.912884	181.197029	2719.6	4.758	10.2	10.0	2.47	7994	23.32	156.46
010264728-05	OBS	No	68.101018	174.196701	38.1	4.500	8.5	-1.0	2.47	7994	1.54	137.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264728-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
010264728-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED
010264728-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

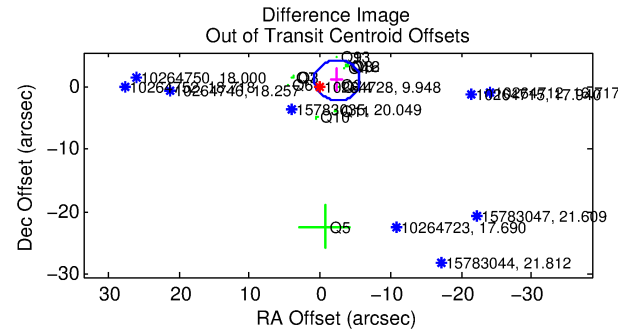
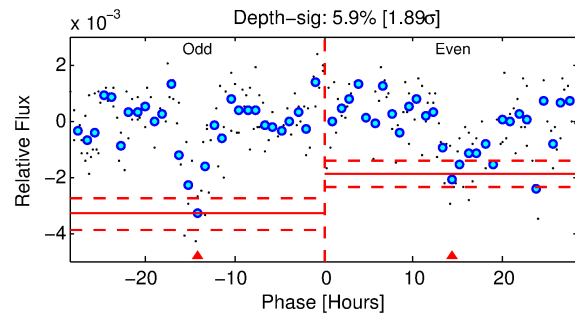
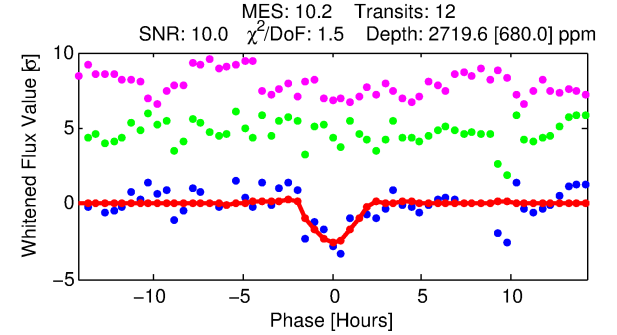
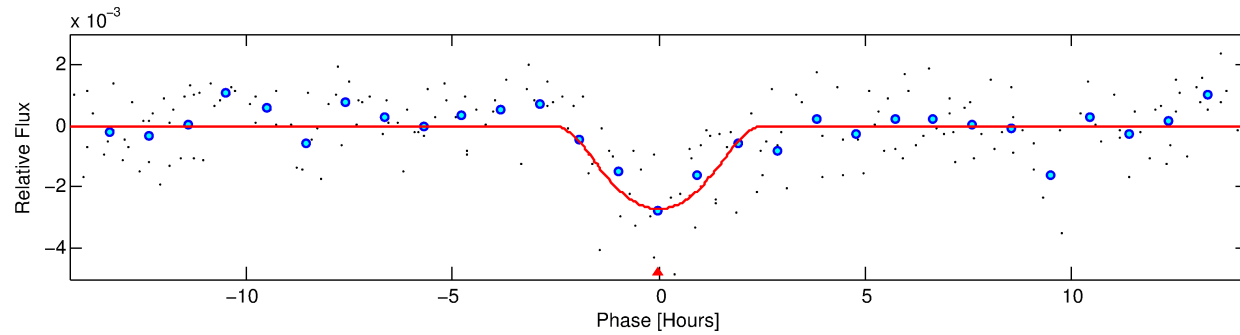
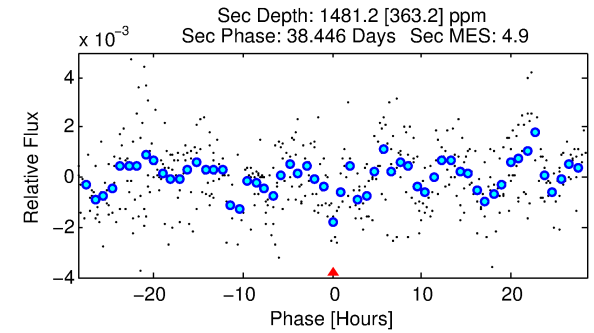
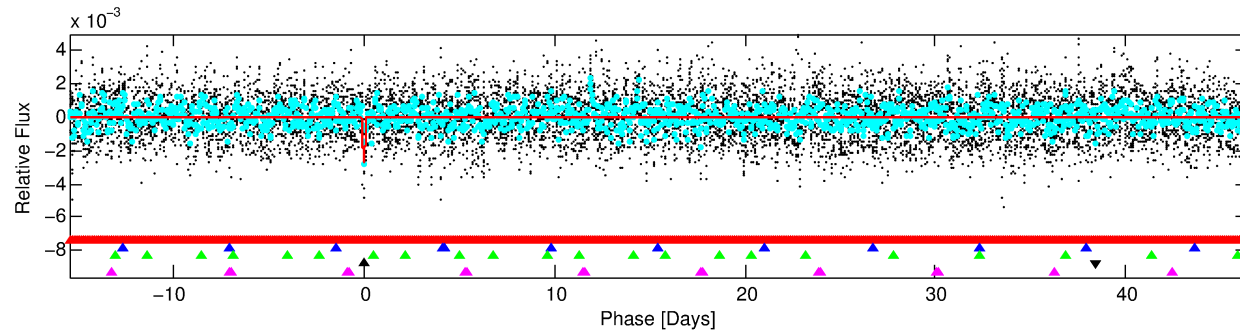
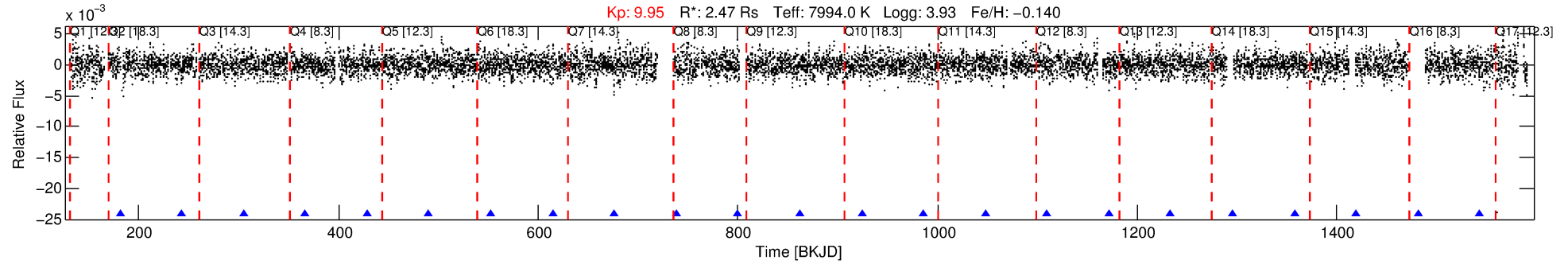
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010264728-04

No Significant Match Found

DV One-Page Summary

KIC: 10264728 Candidate: 4 of 5 Period: 61.913 d



DV Fit Results:

Period = 61.91288 [0.00103] d
Epoch = 181.1970 [0.0119] BKJD
Rp/R* = 0.0864 [0.3133]
a/R* = 42.40 [33.59]
b = 1.00 [0.47]
Seff = 156.46 [75.38]
Teq = 902 [109] K
Rp = 23.32 [84.89] Re
a = 0.3782 [0.1105] AU
Ag = 214.26 [1557.57] [0.14 σ]
Teffp = 5335 [9679] K [0.46 σ]

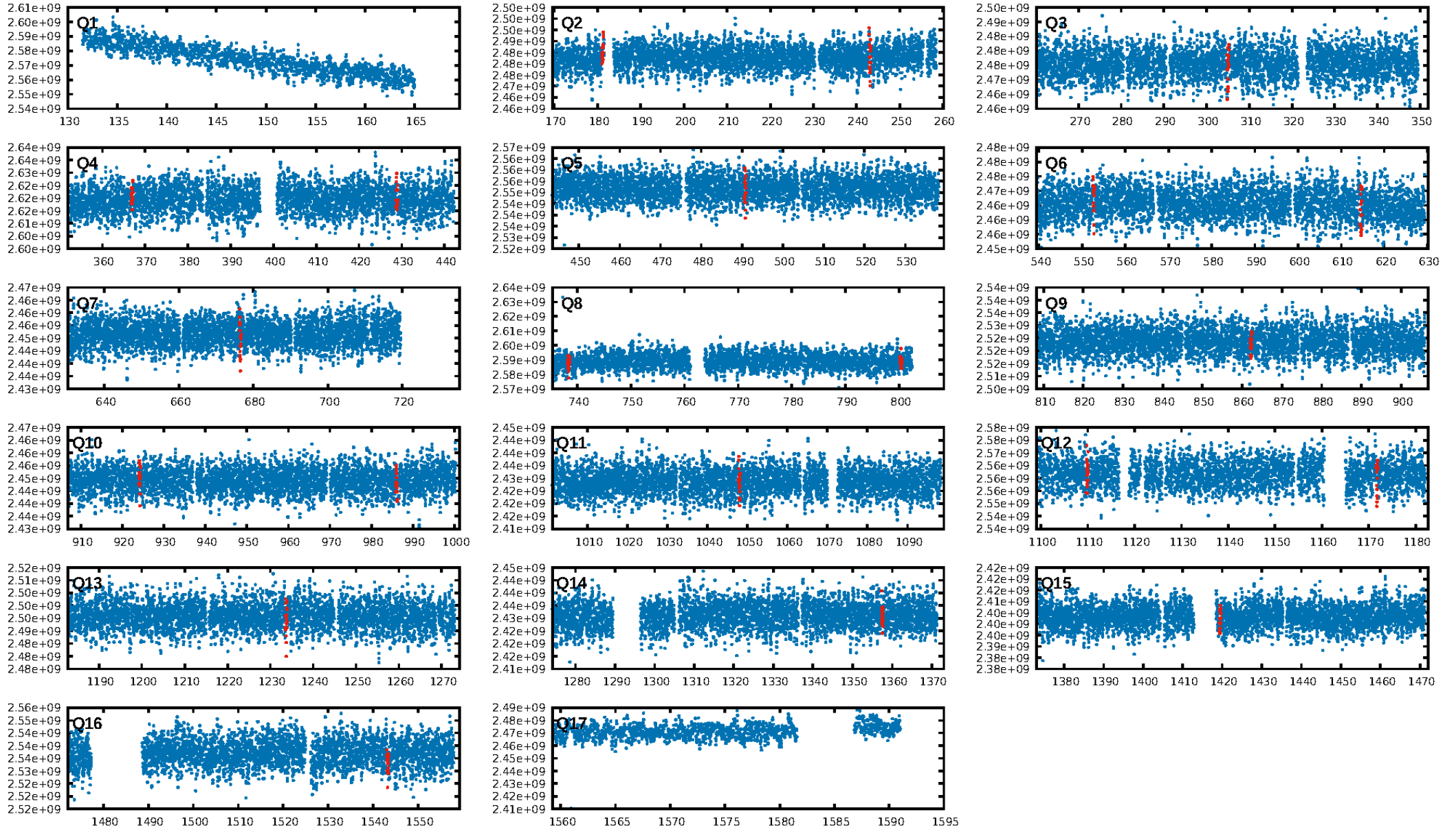
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [248.27 σ]
LongPeriod-sig: 100.0% [21.29 σ]
ModelChiSquare2-sig: 0.3%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [12/12]
GhostDiagnostic-chr: N/A
Centroid-sig: 18.3%
Centroid-so: 1.599 arcsec [7.03 σ]
OotOffset-rm: 2.645 arcsec [2.45 σ]
KicOffset-rm: 3.966 arcsec [4.03 σ]
OotOffset-st: 4/3/4/3 [14]
KicOffset-st: 4/3/4/3 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

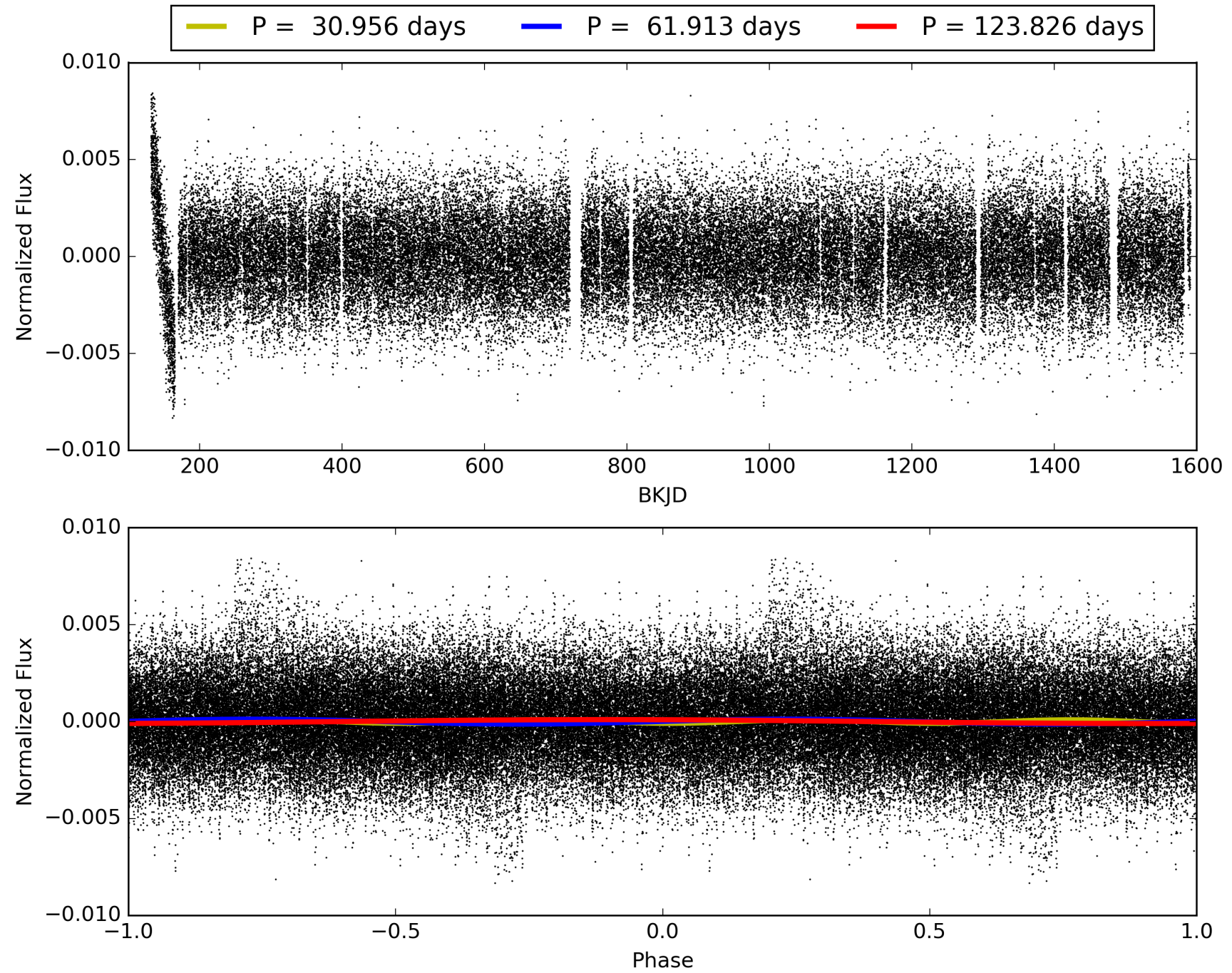
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:20:10 Z

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

TCE 010264728-04, PDC Light Curves

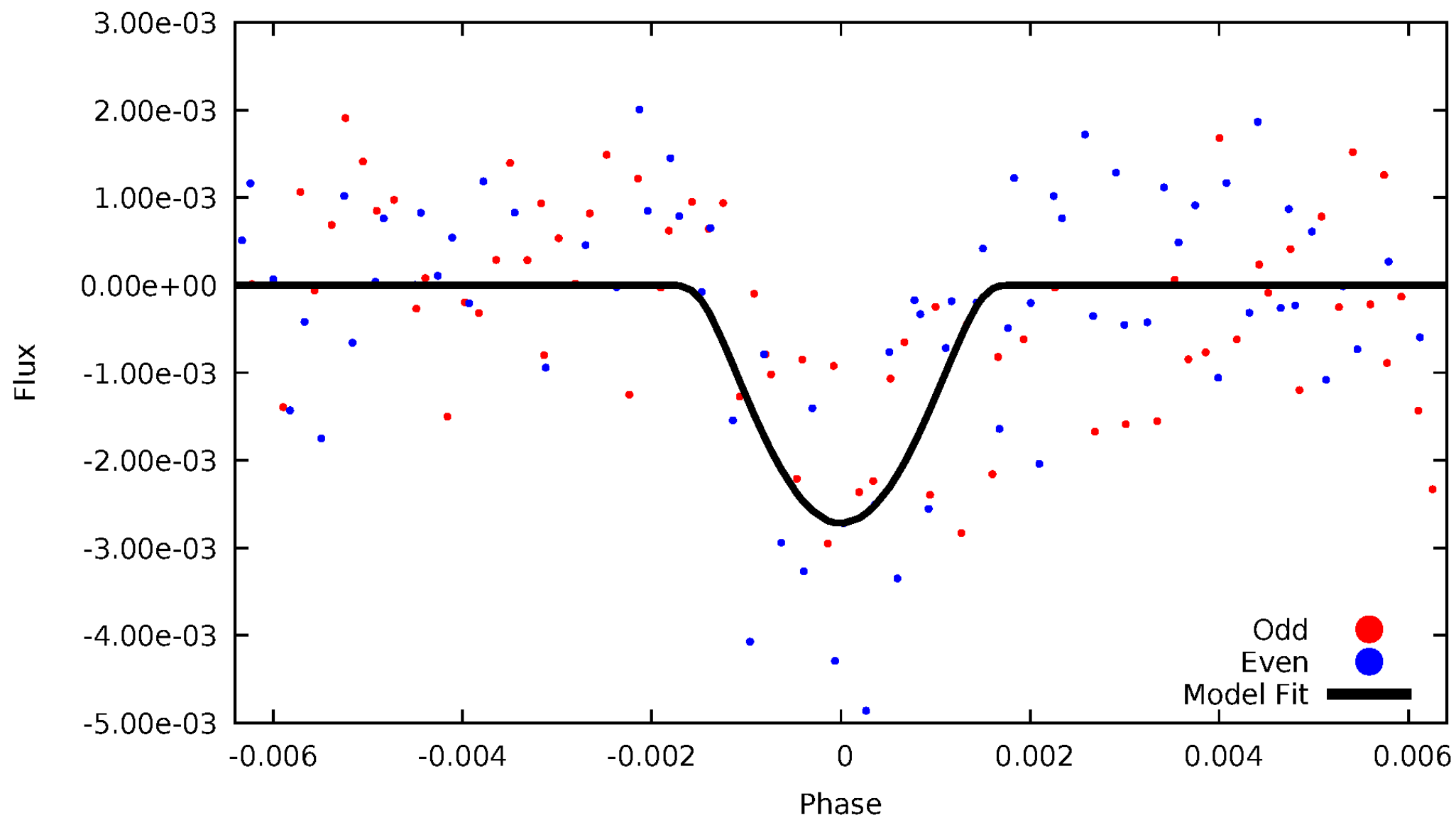


TCE 010264728-04



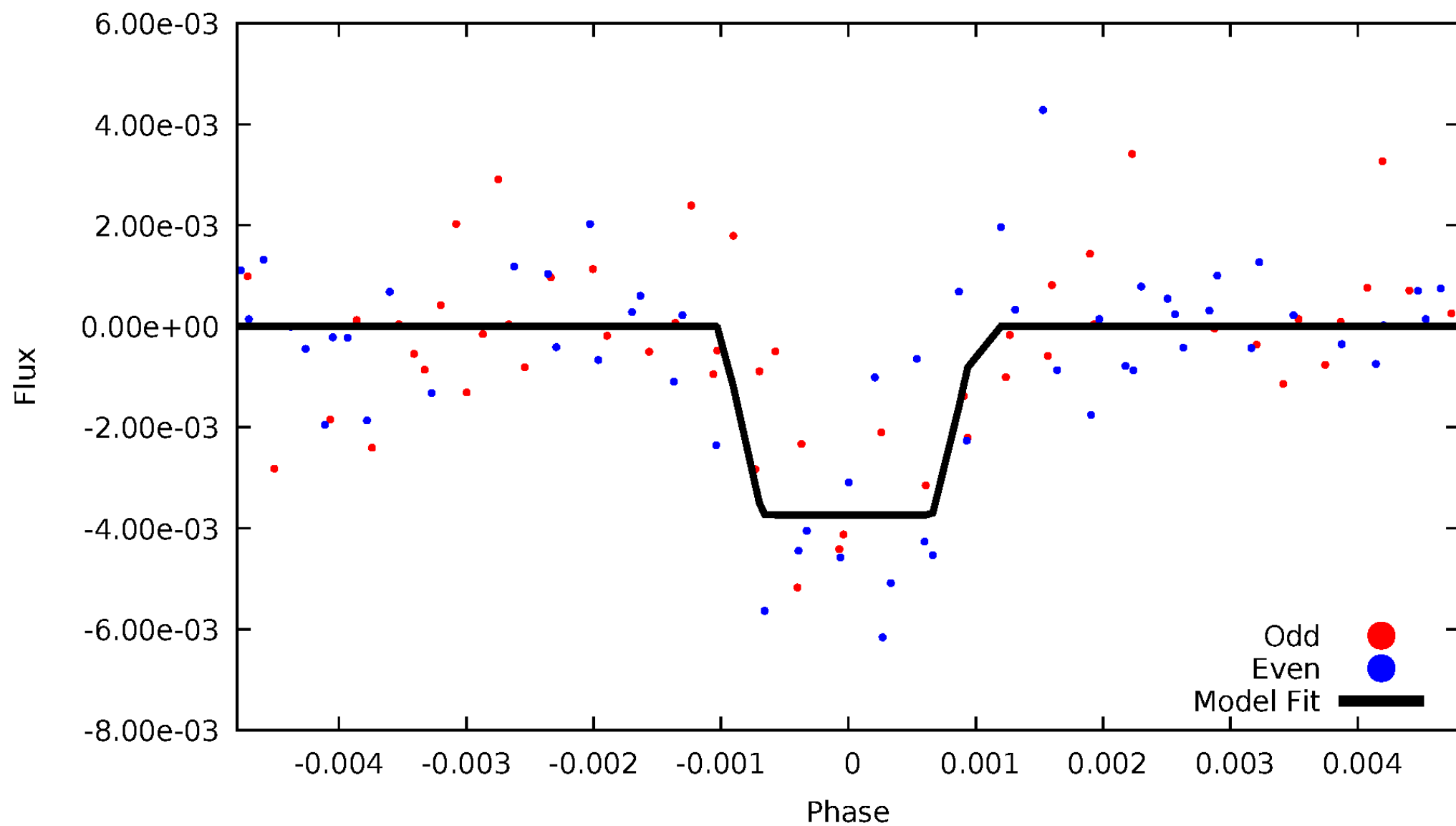
DV Odd/Even

TCE 010264728-04



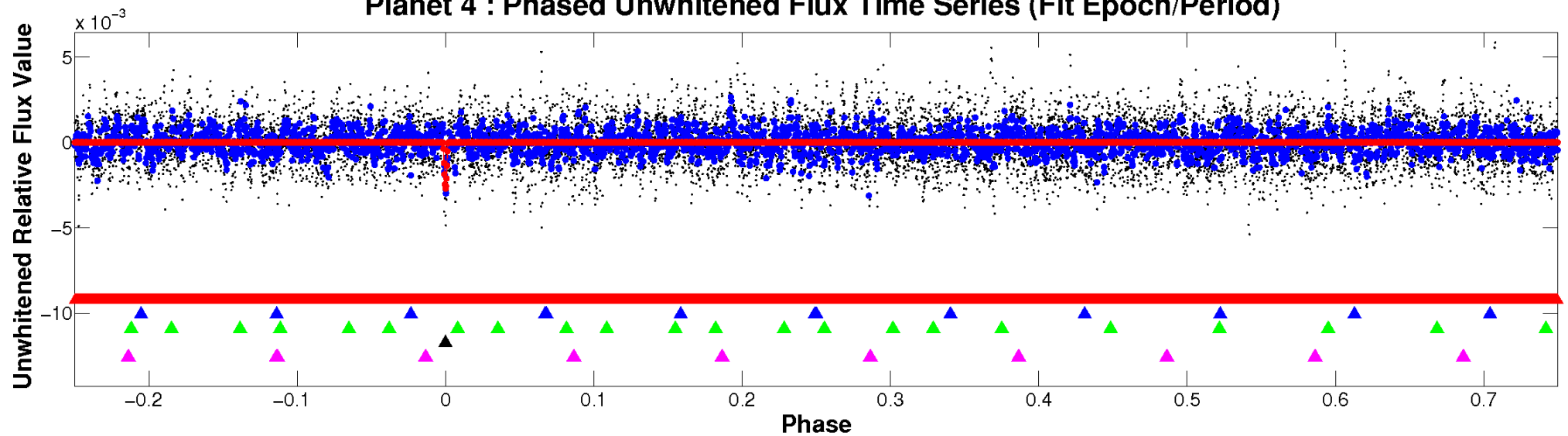
ALT Odd/Even

TCE 010264728-04

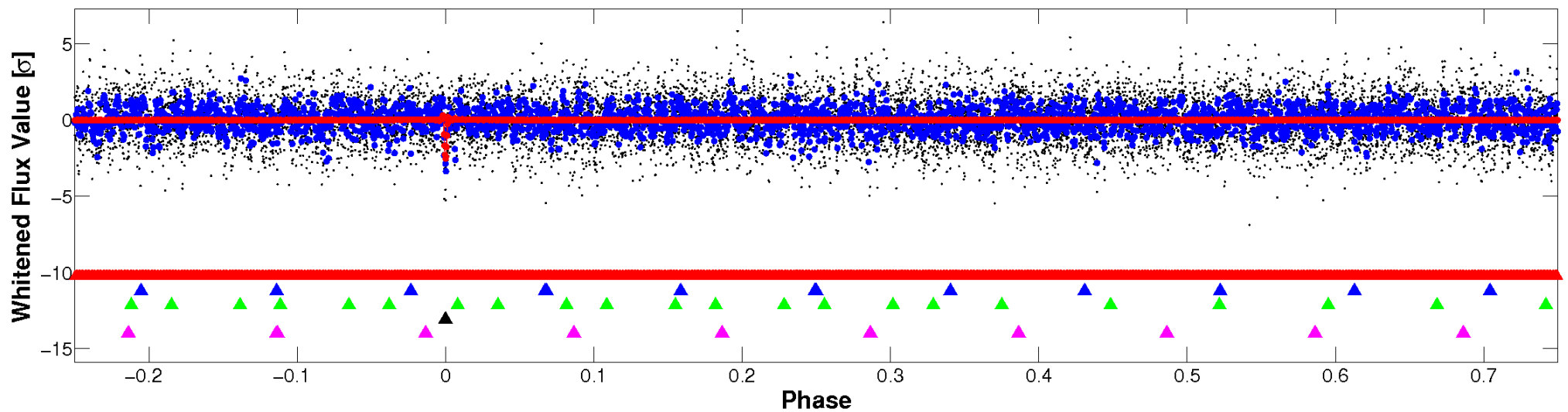


Non-Whitened Vs. Whitened Light Curve

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

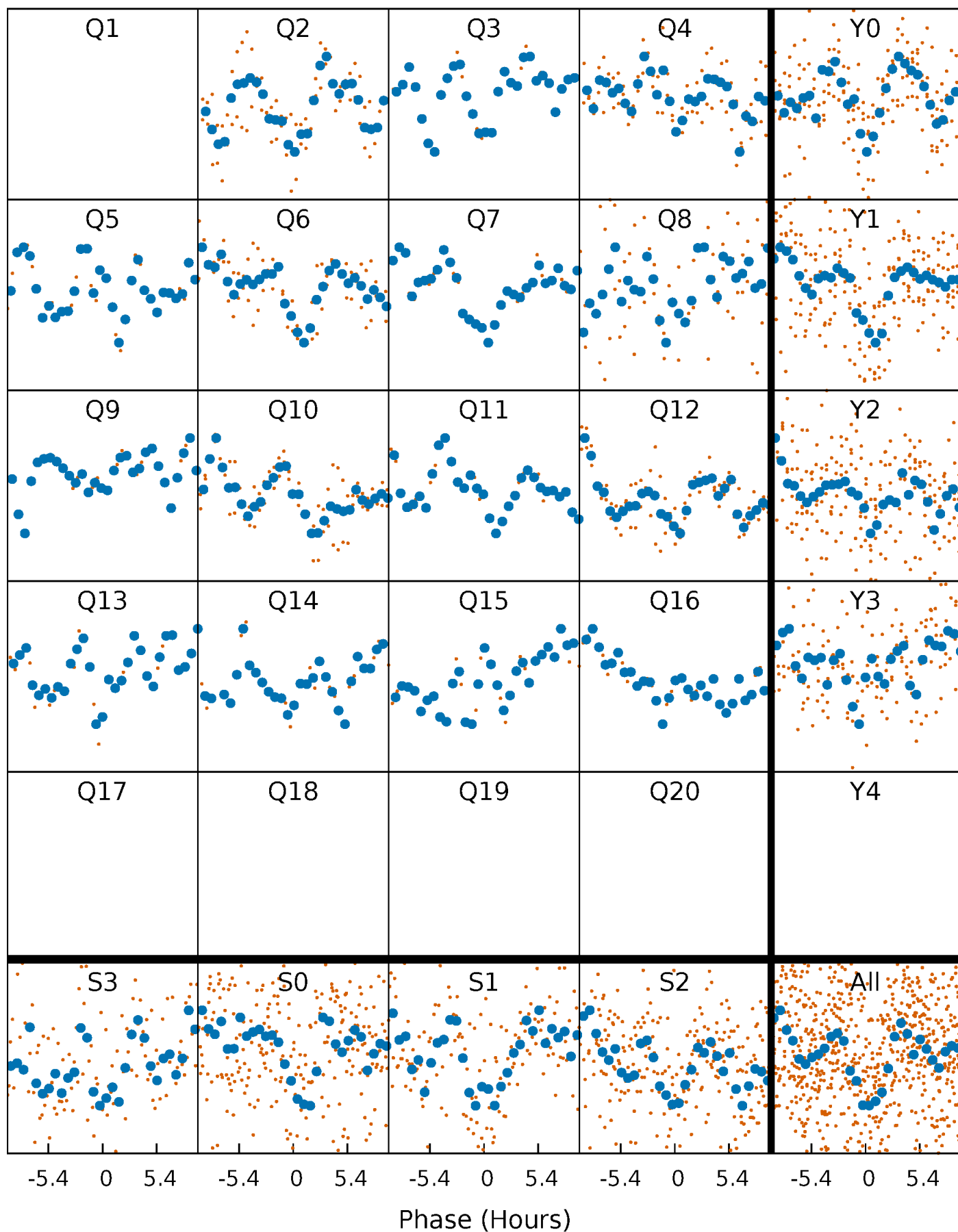


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



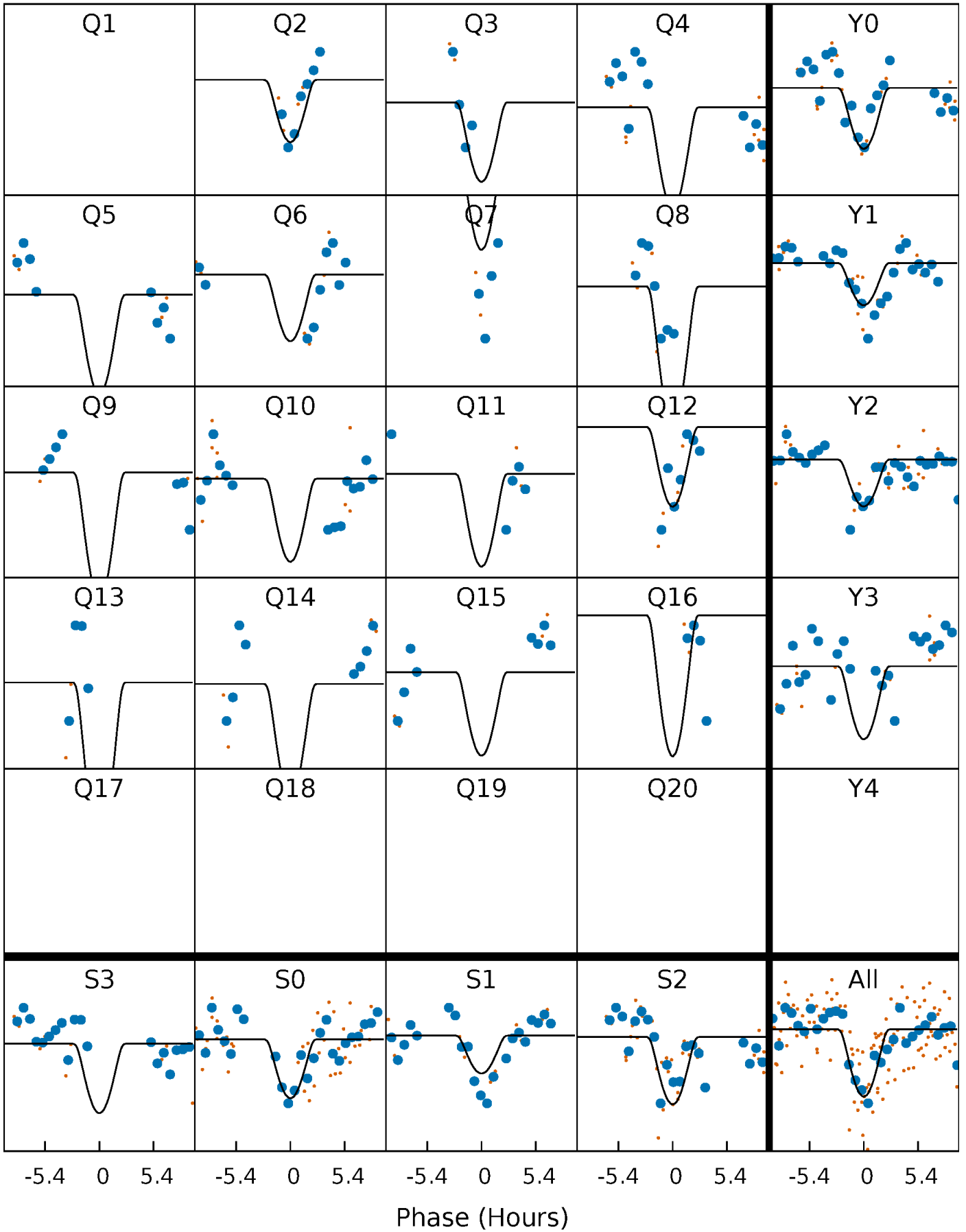
PDC Quarter-Phased Transit Curves

TCE 010264728-04 P= 61.912884 Days $T_0=181.197029$ (BKJD)



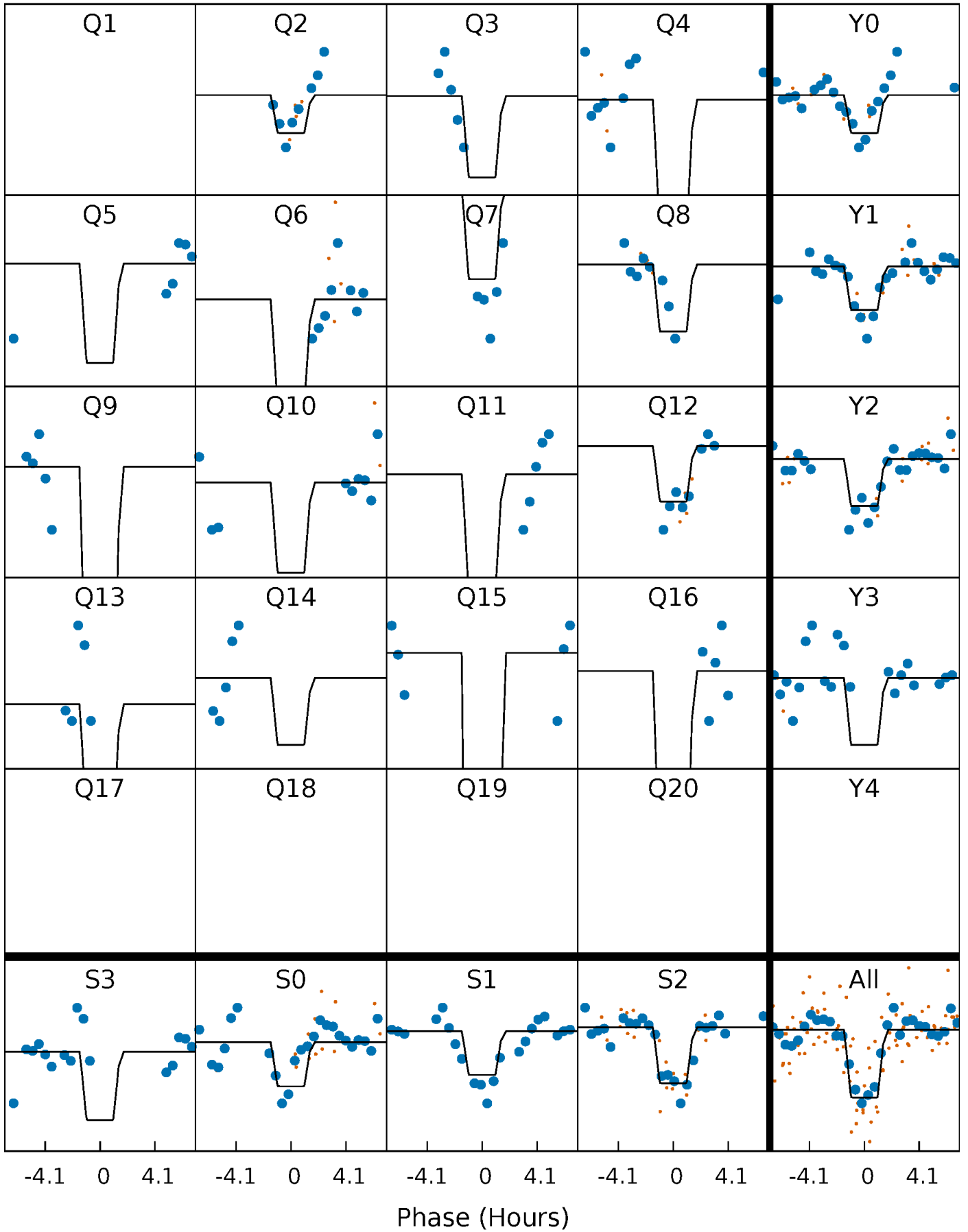
DV Quarter-Phased Transit Curves

TCE 010264728-04 $P = 61.912884$ Days $T_0 = 181.197029$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

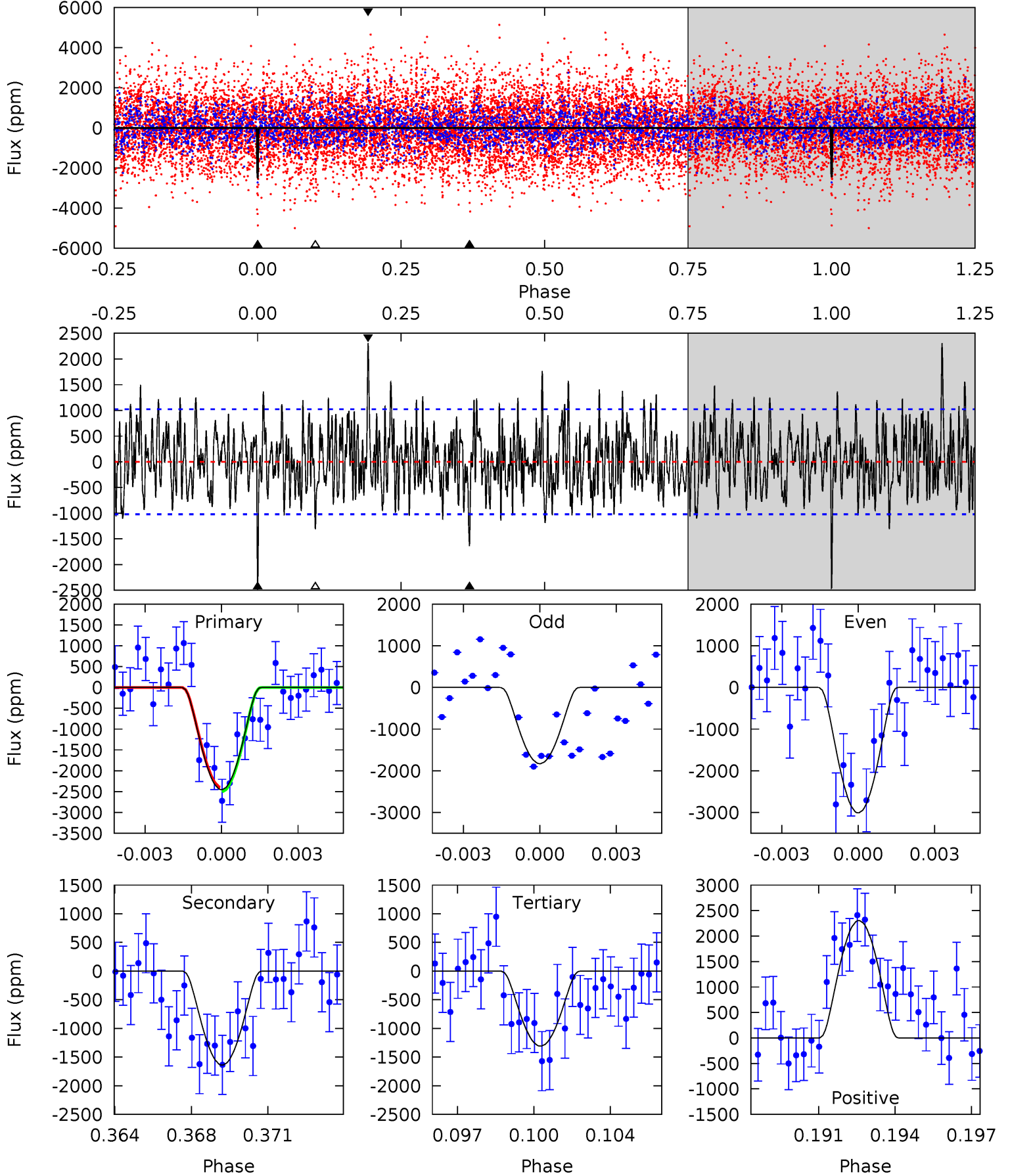
TCE 010264728-04 P= 61.910535 Days $T_0=181.215744$ (BKJD)



DV Model-Shift Uniqueness Test

010264728-04, P = 61.912884 Days, E = 119.284145 Days

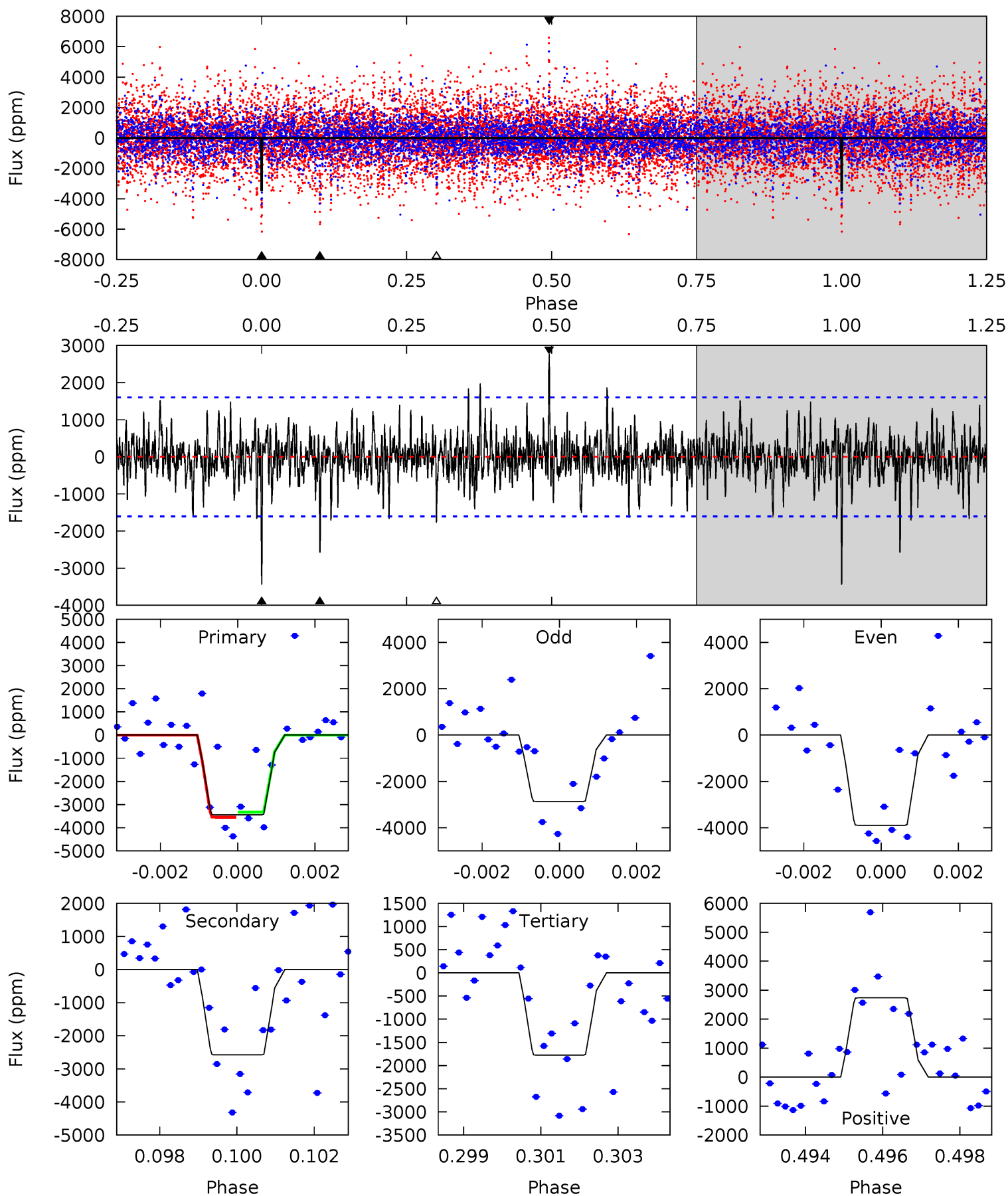
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
12.6	8.40	6.71	11.8	5.23	2.93	2.70	5.86	0.76	1.69	-3.41	3.03	0.87	0.48	0.28



Alt Model-Shift Uniqueness Test

010264728-04, P = 61.910535 Days, E = 119.305209 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.4	8.57	5.91	9.10	5.33	3.10	1.63	5.54	2.35	2.67	-0.53	1.68	0.81	0.44	0.36



Stellar Parameters For KIC 010264728

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	7994^{+223}_{-335}	$3.926^{+0.259}_{-0.130}$	$-0.140^{+0.200}_{-0.300}$	$2.473^{+0.428}_{-0.795}$	$1.883^{+0.136}_{-0.381}$	$0.175^{+0.293}_{-0.059}$
	+3%/-4%	+7%/-3%	+143%/-214%	+17%/-32%	+7%/-20%	+167%/-34%
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 010264728-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-1640 ± 195	$66.61^{+63.96}_{-45.30}$	1250^{+80}_{-99}	3568^{+1989}_{-687}	29^{+237}_{-22}
Alt.	-2579 ± 301	$60.82^{+64.58}_{-40.49}$	1239^{+85}_{-103}	3953^{+2222}_{-850}	55^{+429}_{-42}

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 $A_{\text{obs}} \gg 1.0$

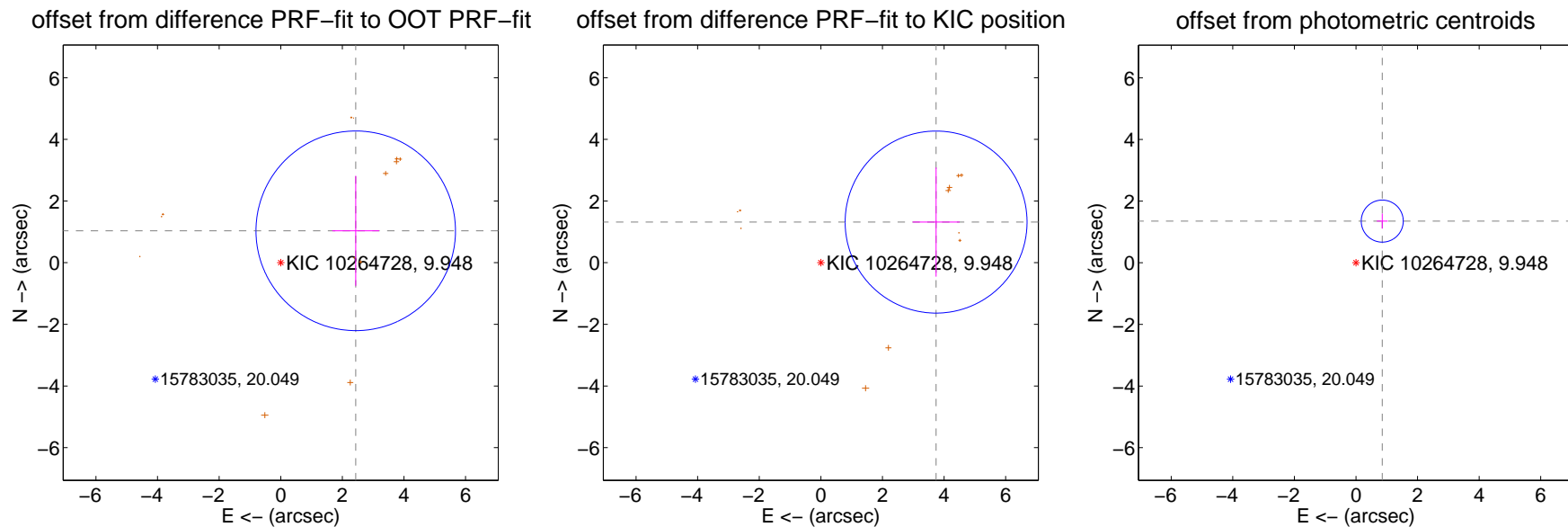
DV Centroid Data

Supplemental centroid analysis for 010264728-04. **Kepler magnitude: 9.95.** Transit SNR 10.04

There are 0 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.89 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.645 ± 1.079	2.45	-2.435 ± 0.763	1.034 ± 1.785
PRF-fit source offset from KIC position	3.966 ± 0.984	4.03	-3.741 ± 0.763	1.317 ± 1.772
photometric centroid source offset	1.60 ± 0.23	7.03	-0.85 ± 0.18	1.35 ± 0.25



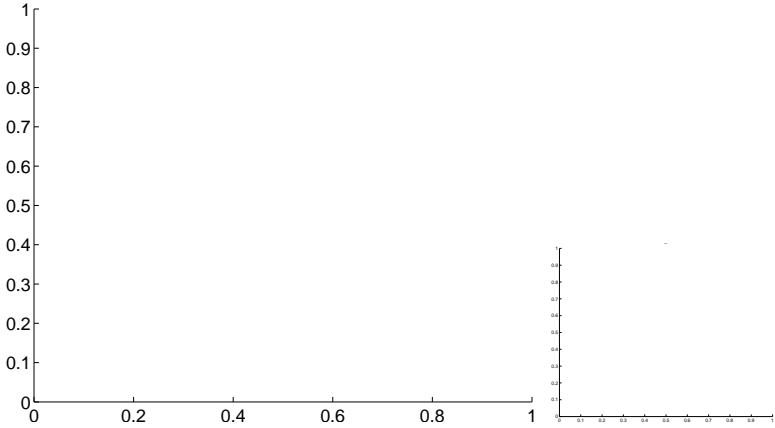
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

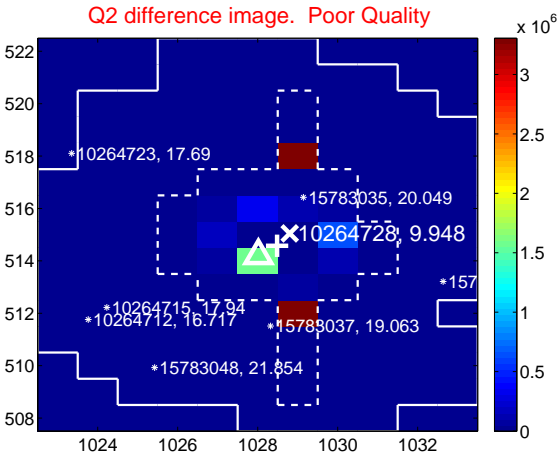
Q1 no difference image



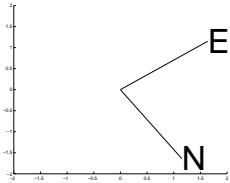
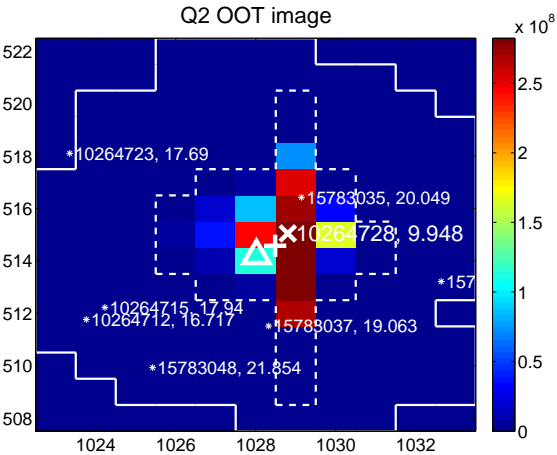
Q1 no OOT image



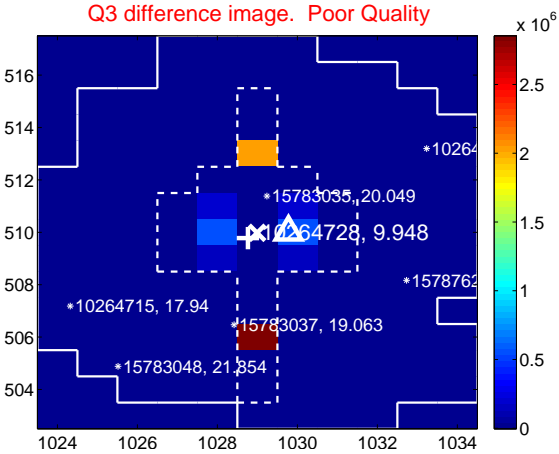
Q2 difference image. Poor Quality



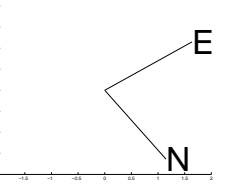
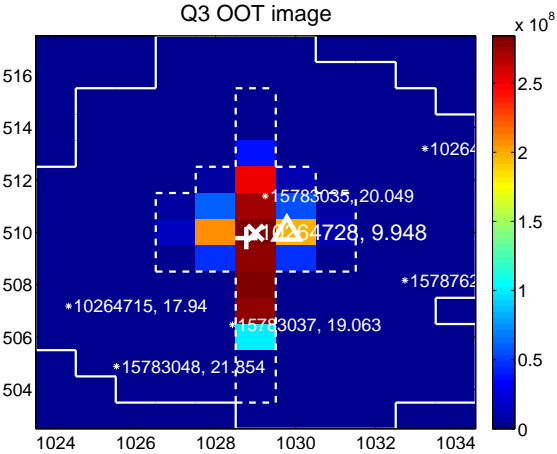
Q2 OOT image



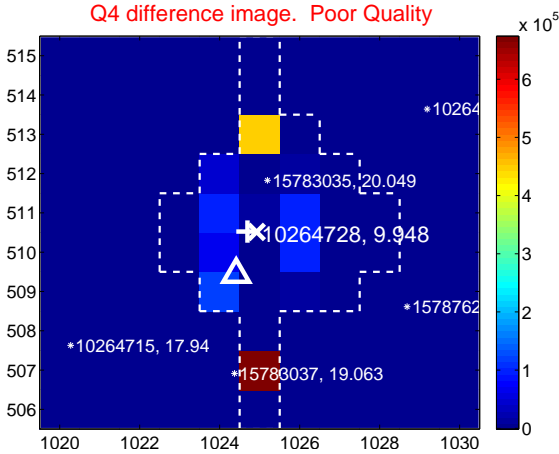
Q3 difference image. Poor Quality



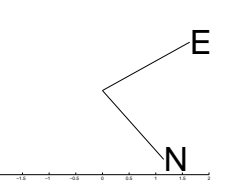
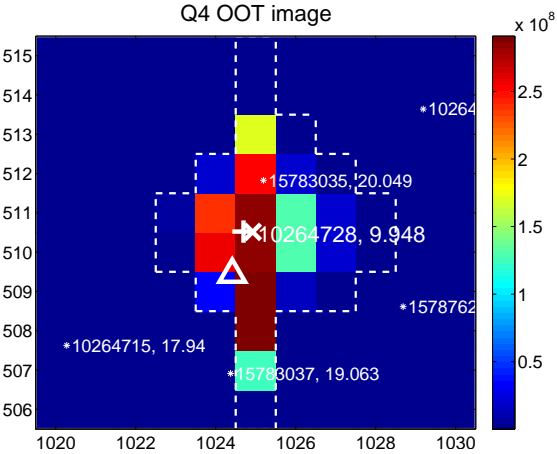
Q3 OOT image



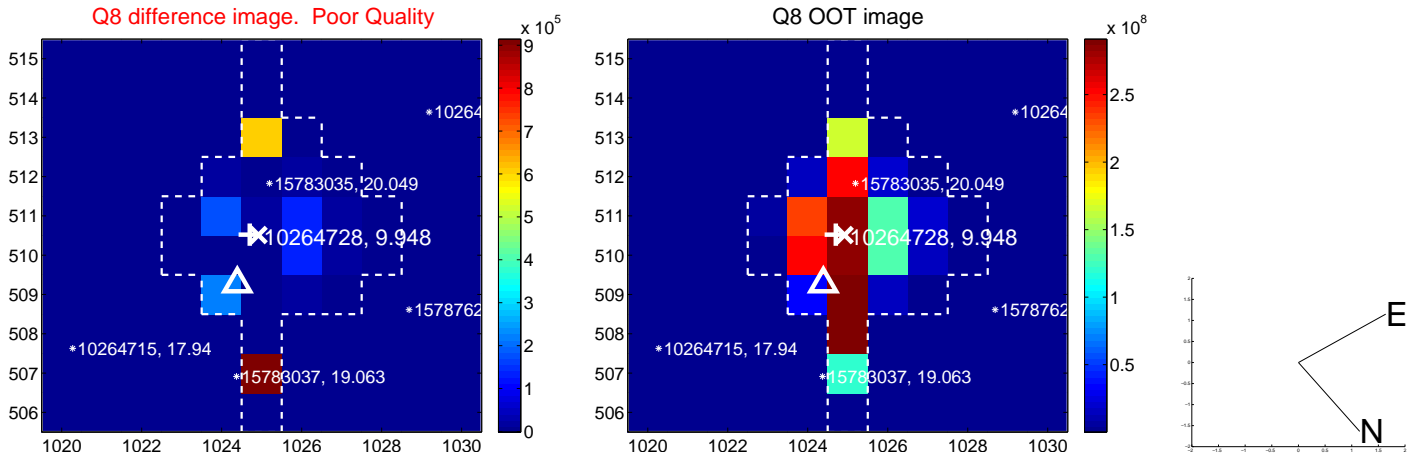
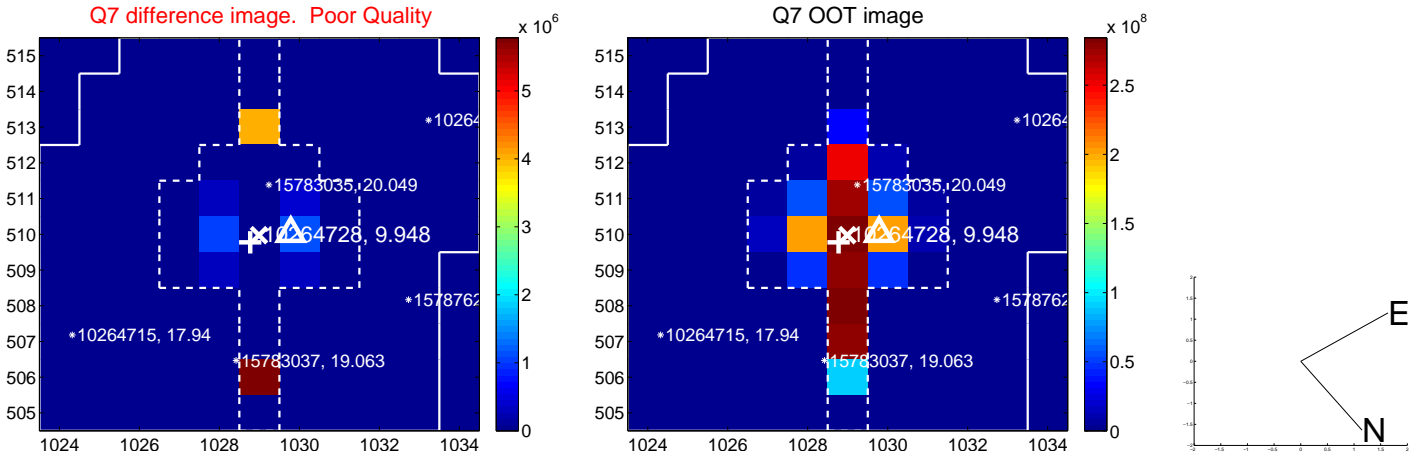
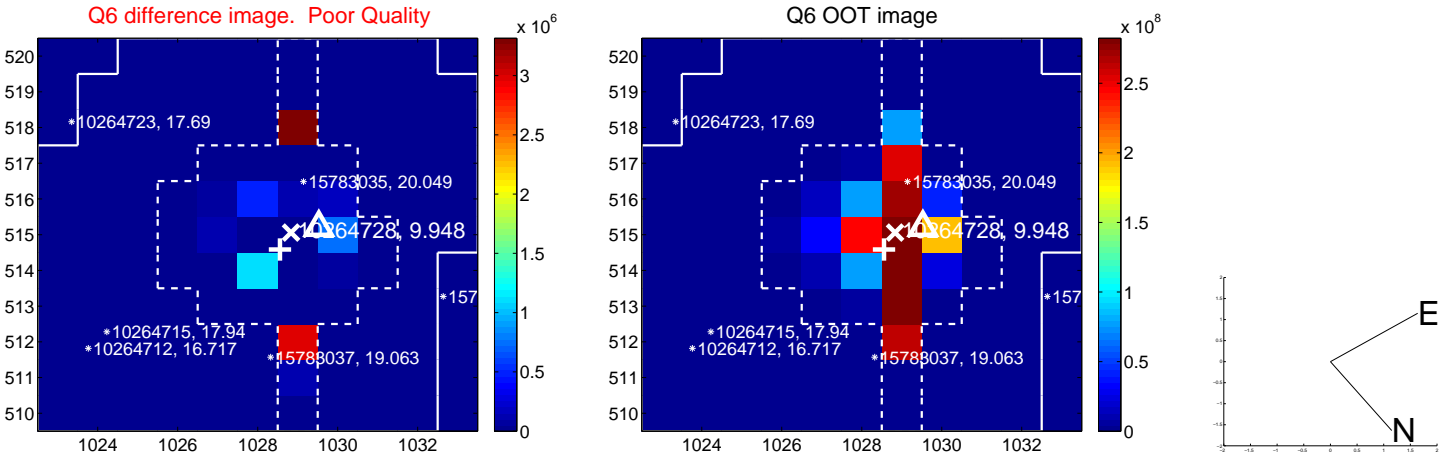
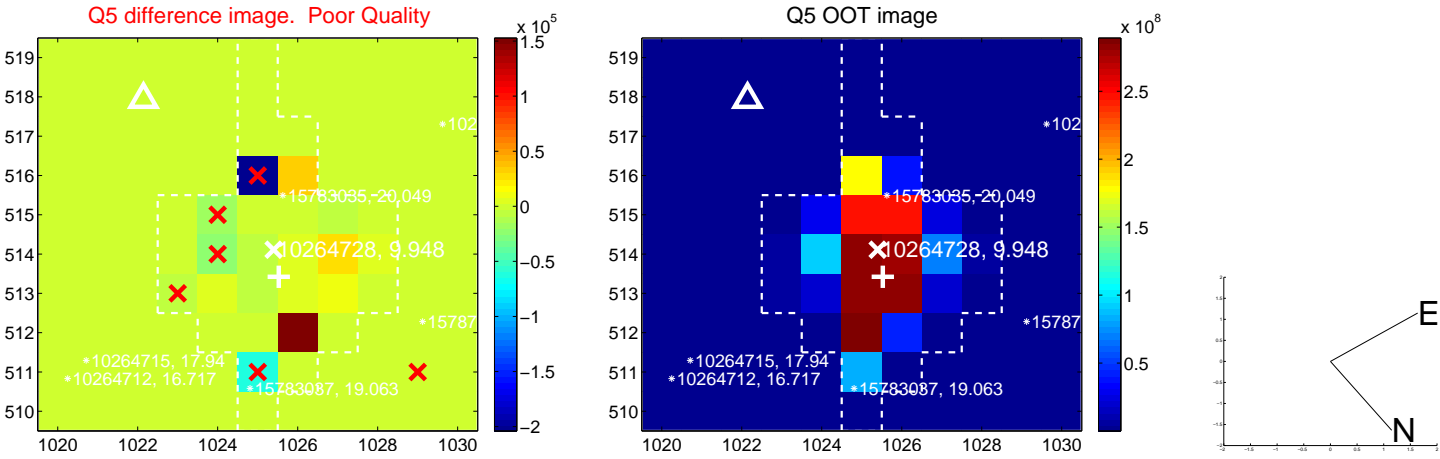
Q4 difference image. Poor Quality



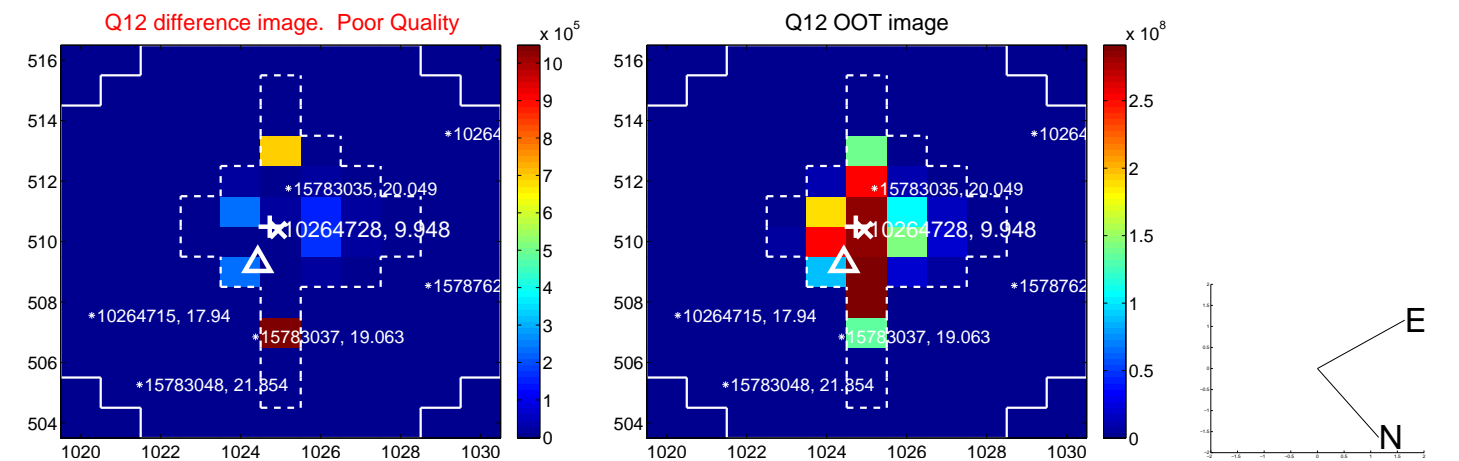
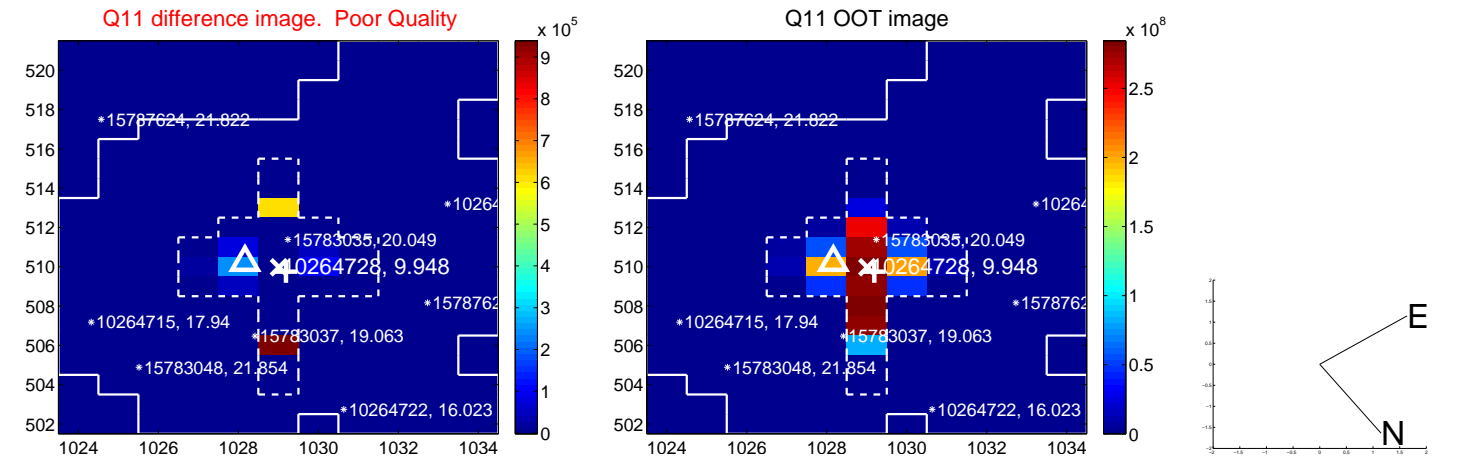
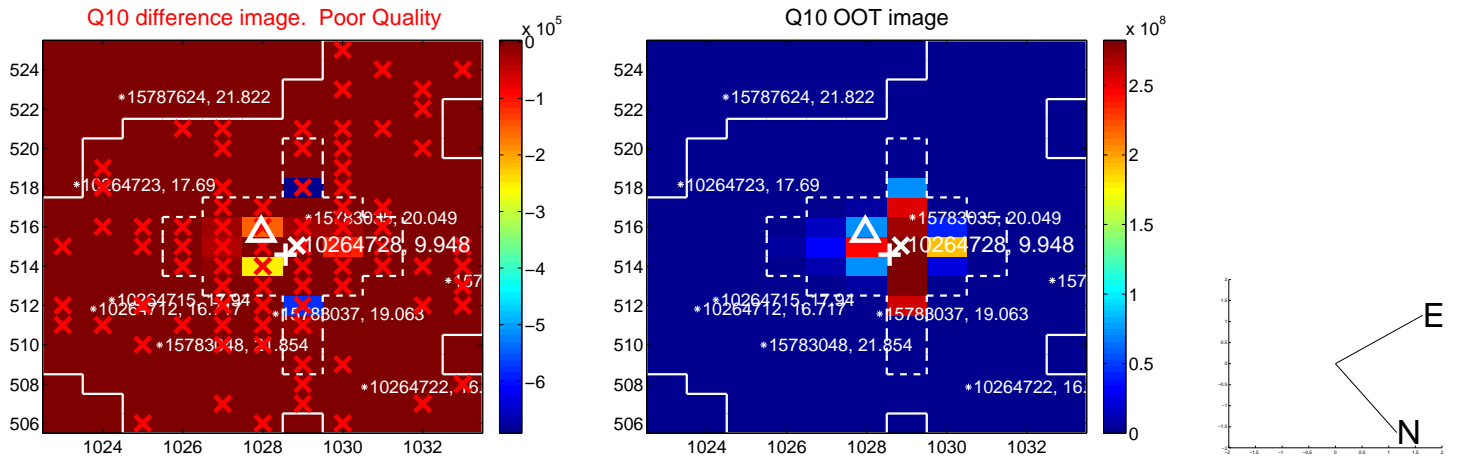
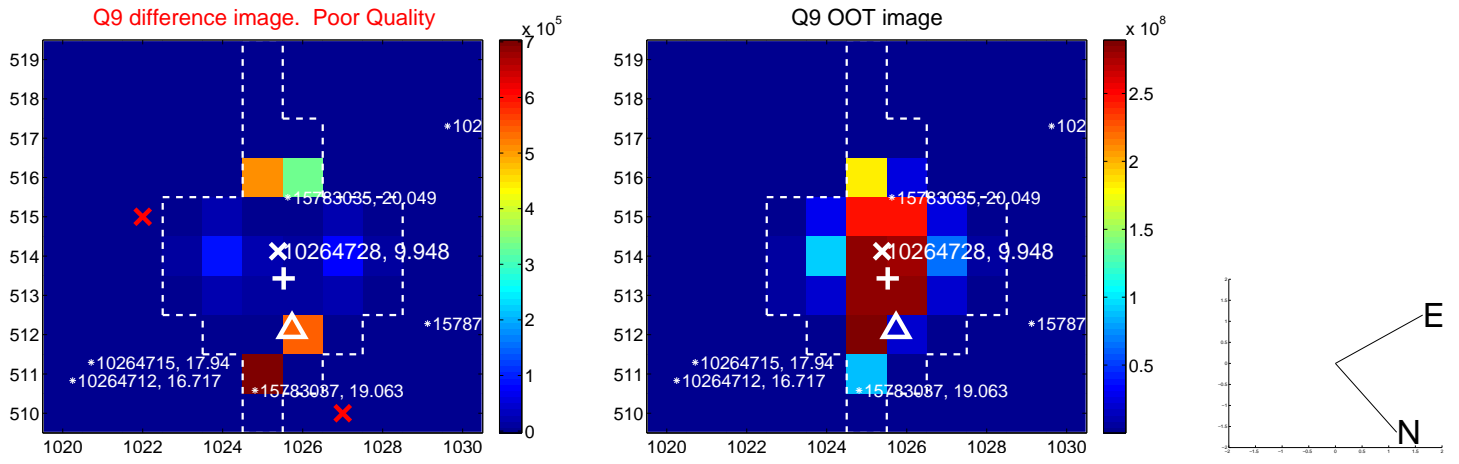
Q4 OOT image



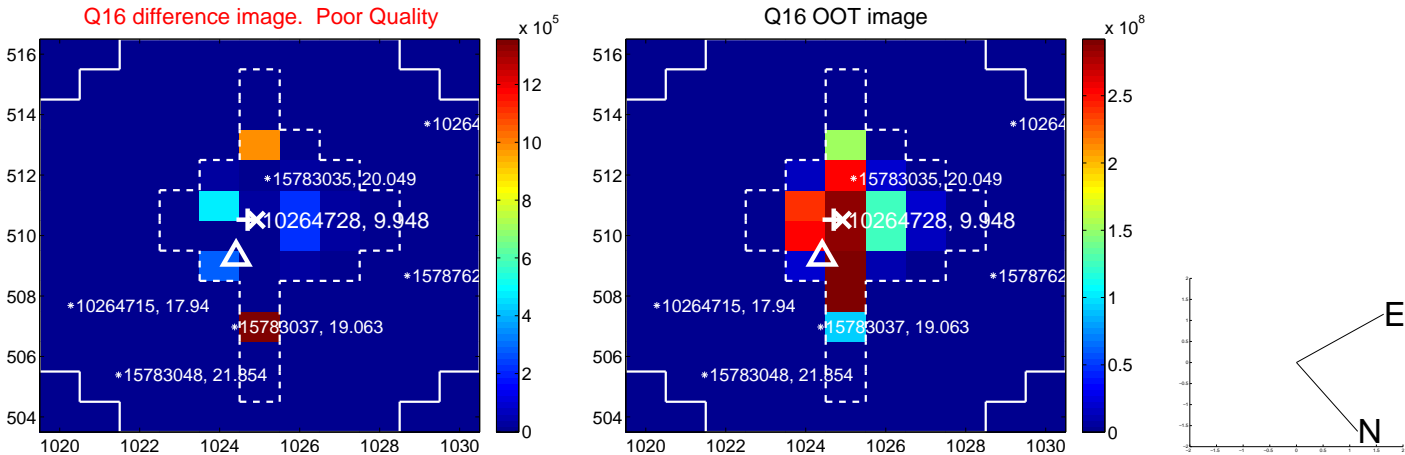
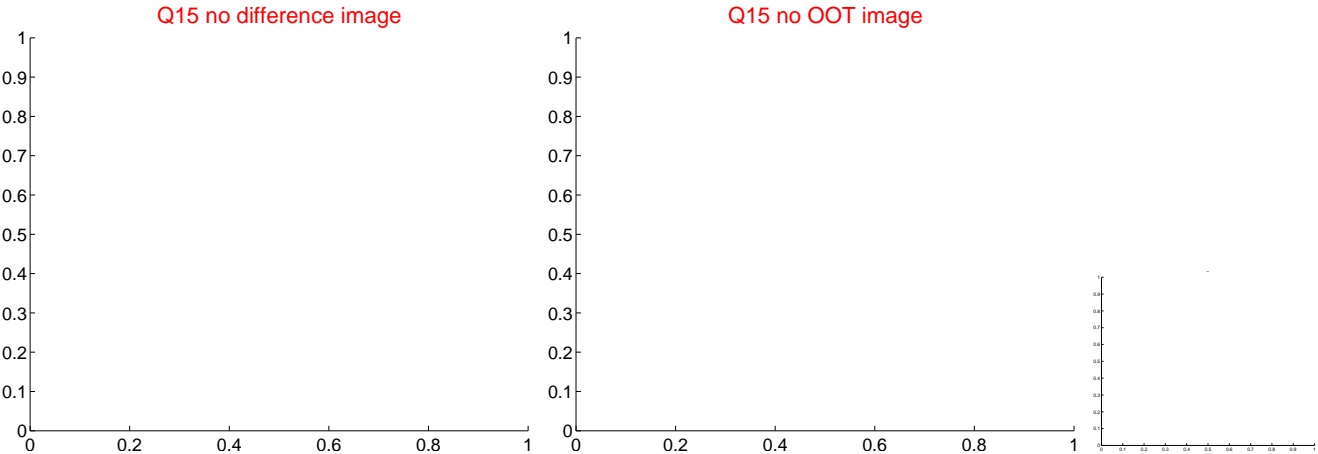
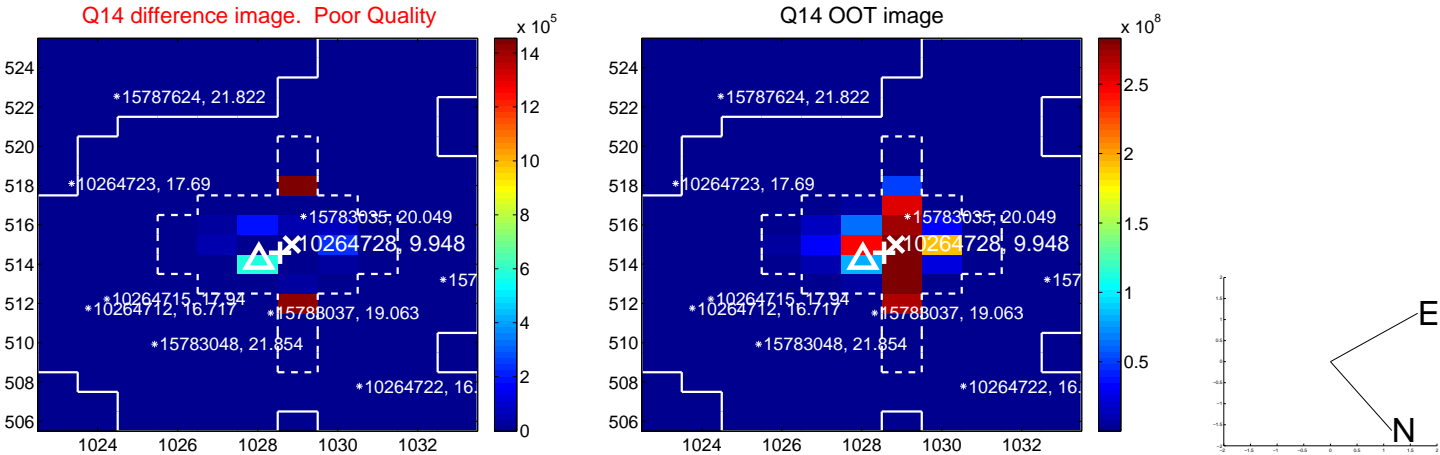
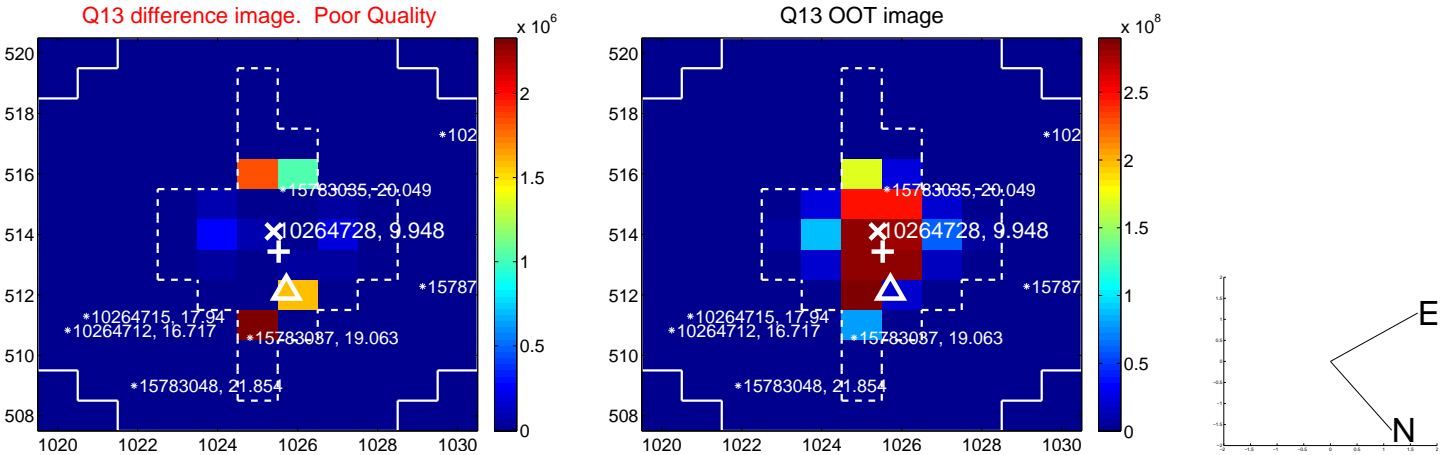
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



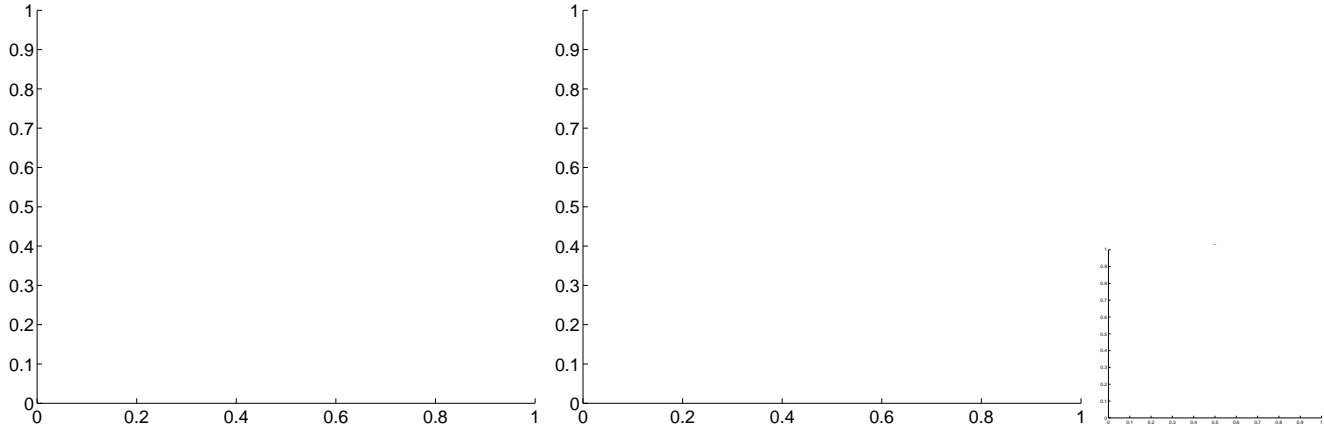
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



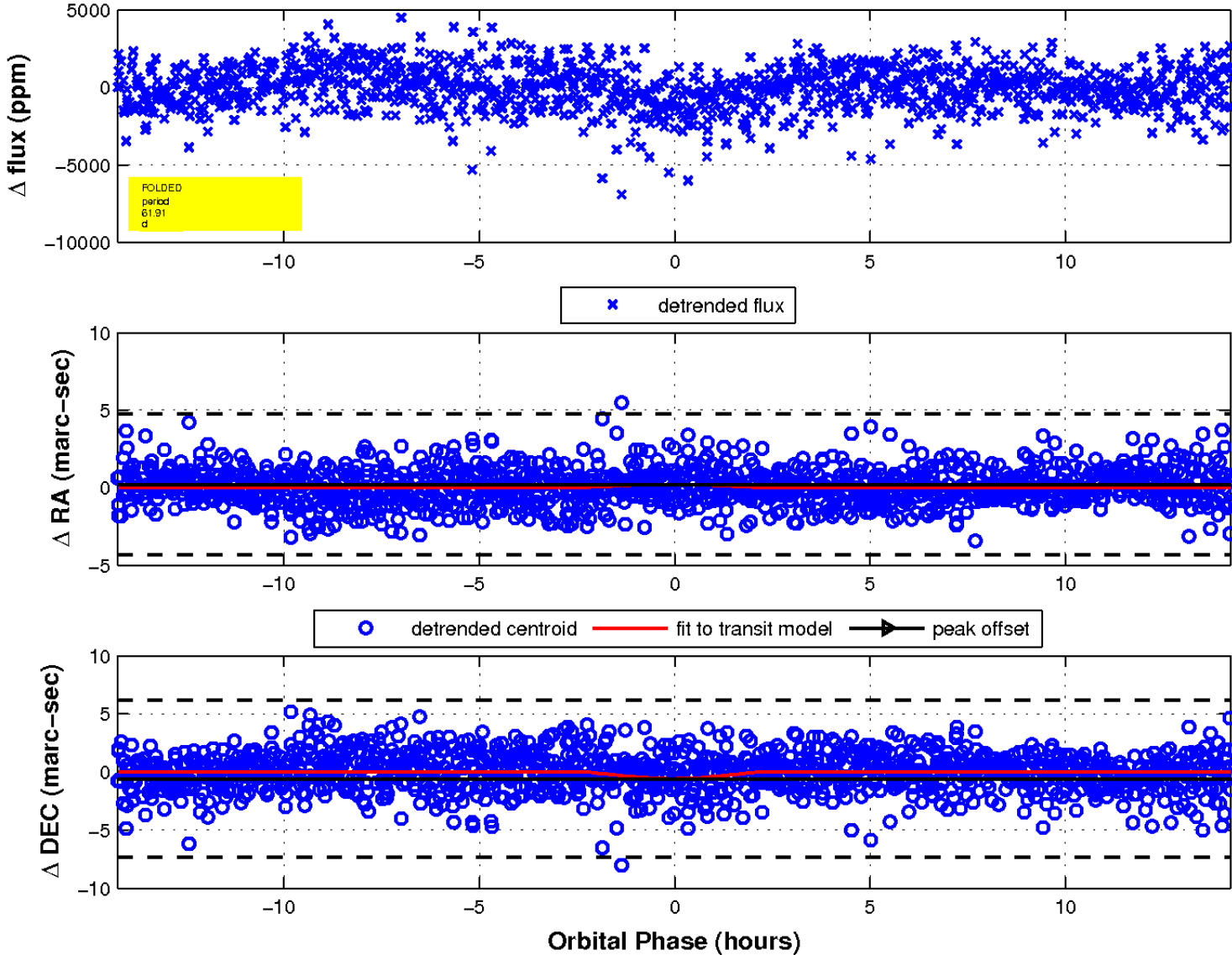
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

Q17 no difference image

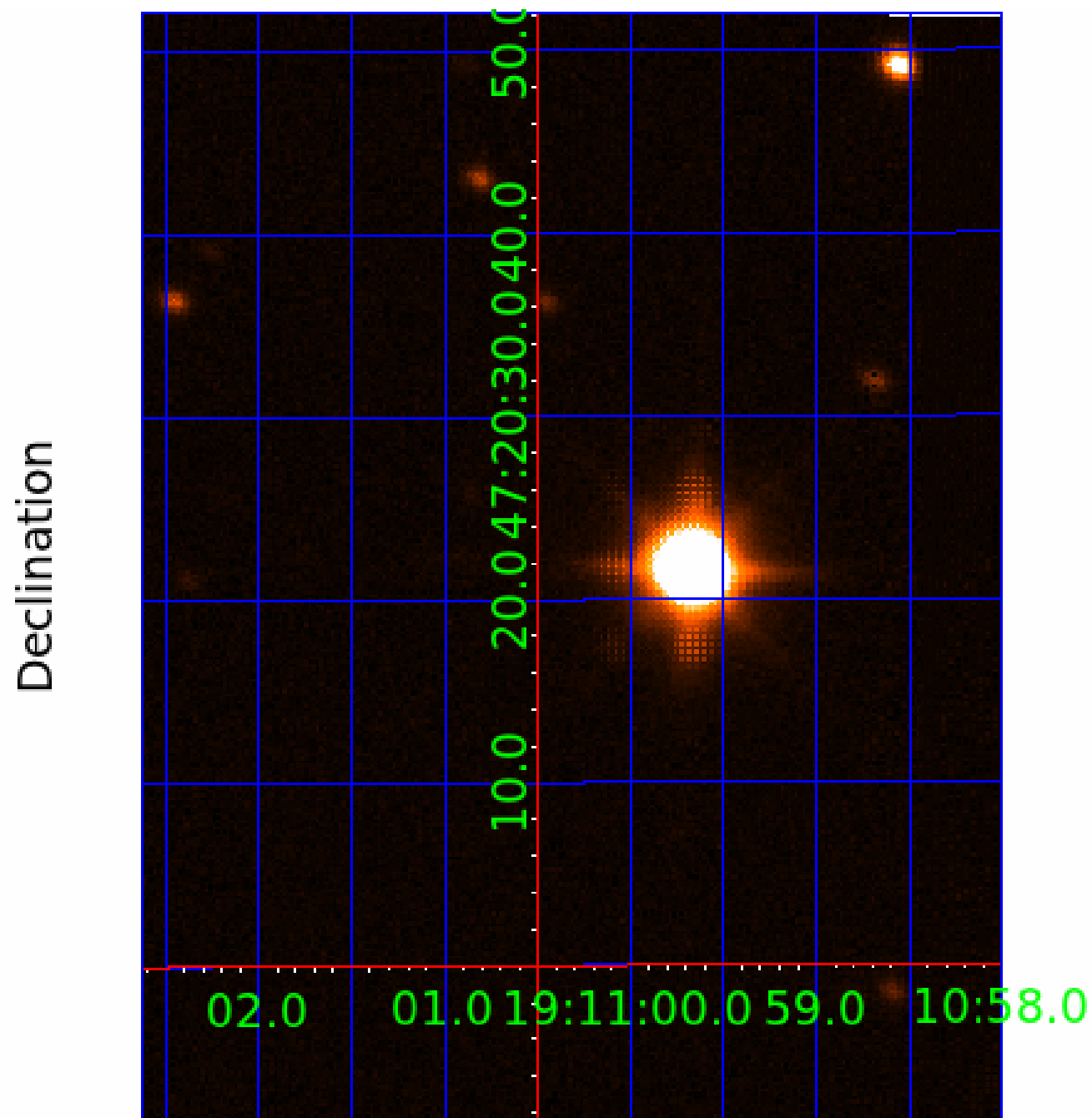
Q17 no OOT image



fluxWeightedCentroids, Planet 4 of 5



UKIRT Image



KIC 010264728

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})
010264728-01	OBS	No	0.567310	131.623698	249.4	3.540	13.3	12.6	2.47	7994	5.06	81596.75
010264728-02	OBS	No	112.563603	196.674830	4196.6	2.376	12.1	11.4	2.47	7994	16.87	70.51
010264728-03	OBS	No	66.455272	168.079818	3422.1	1.891	11.8	11.4	2.47	7994	17.33	142.36
010264728-04	OBS	No	61.912884	181.197029	2719.6	4.758	10.2	10.0	2.47	7994	23.32	156.46
010264728-05	OBS	No	68.101018	174.196701	38.1	4.500	8.5	-1.0	2.47	7994	1.54	137.79

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010264728-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_SATURATED
010264728-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT— CENT_SATURATED
010264728-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
010264728-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_SATURATED

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

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

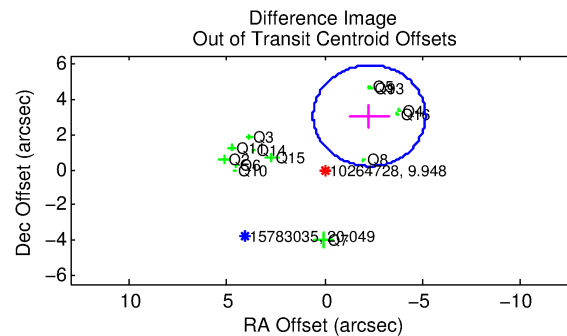
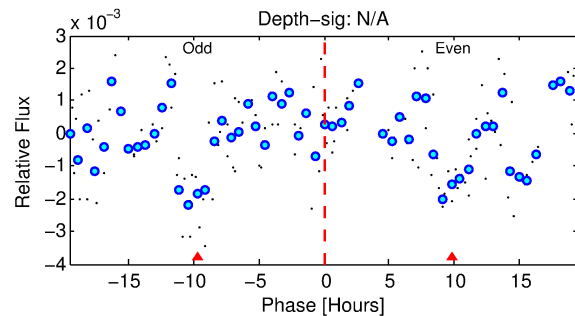
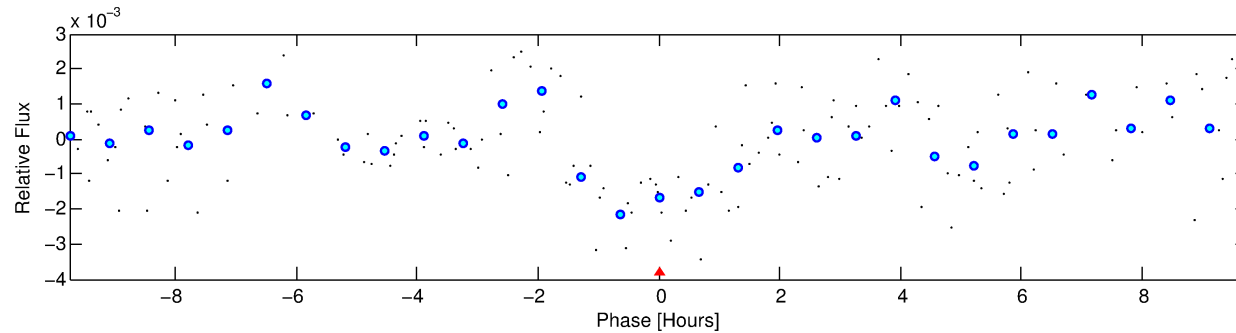
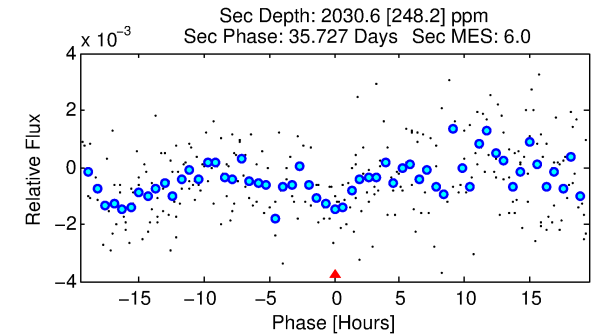
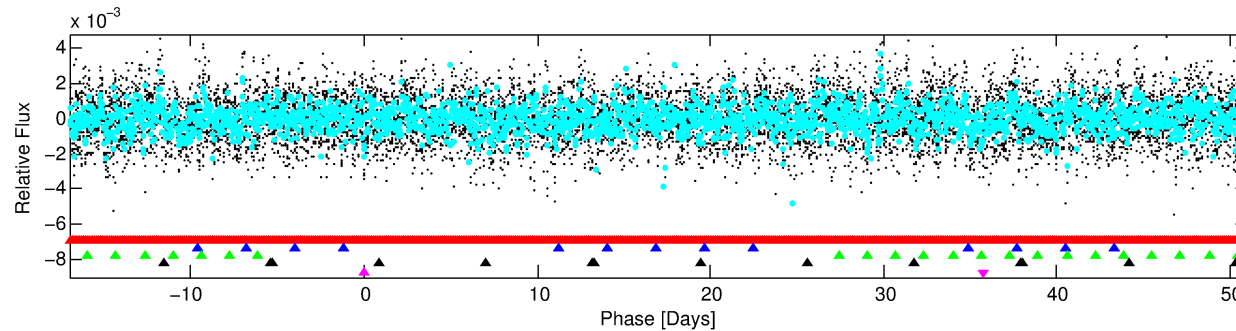
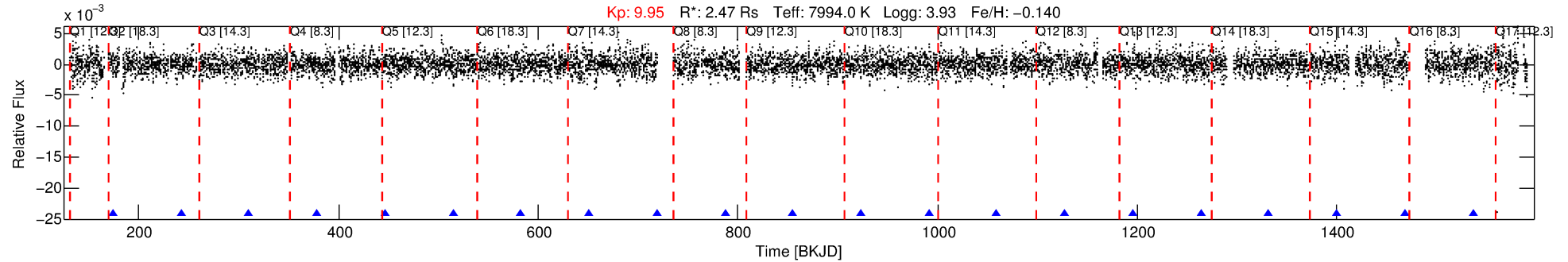
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010264728-05

No Significant Match Found

DV One-Page Summary

KIC: 10264728 Candidate: 5 of 5 Period: 68.101 d



TPS TCE Results:

Period = 68.10102 d
Epoch = 174.1967 BKJD

DV fit results are unavailable

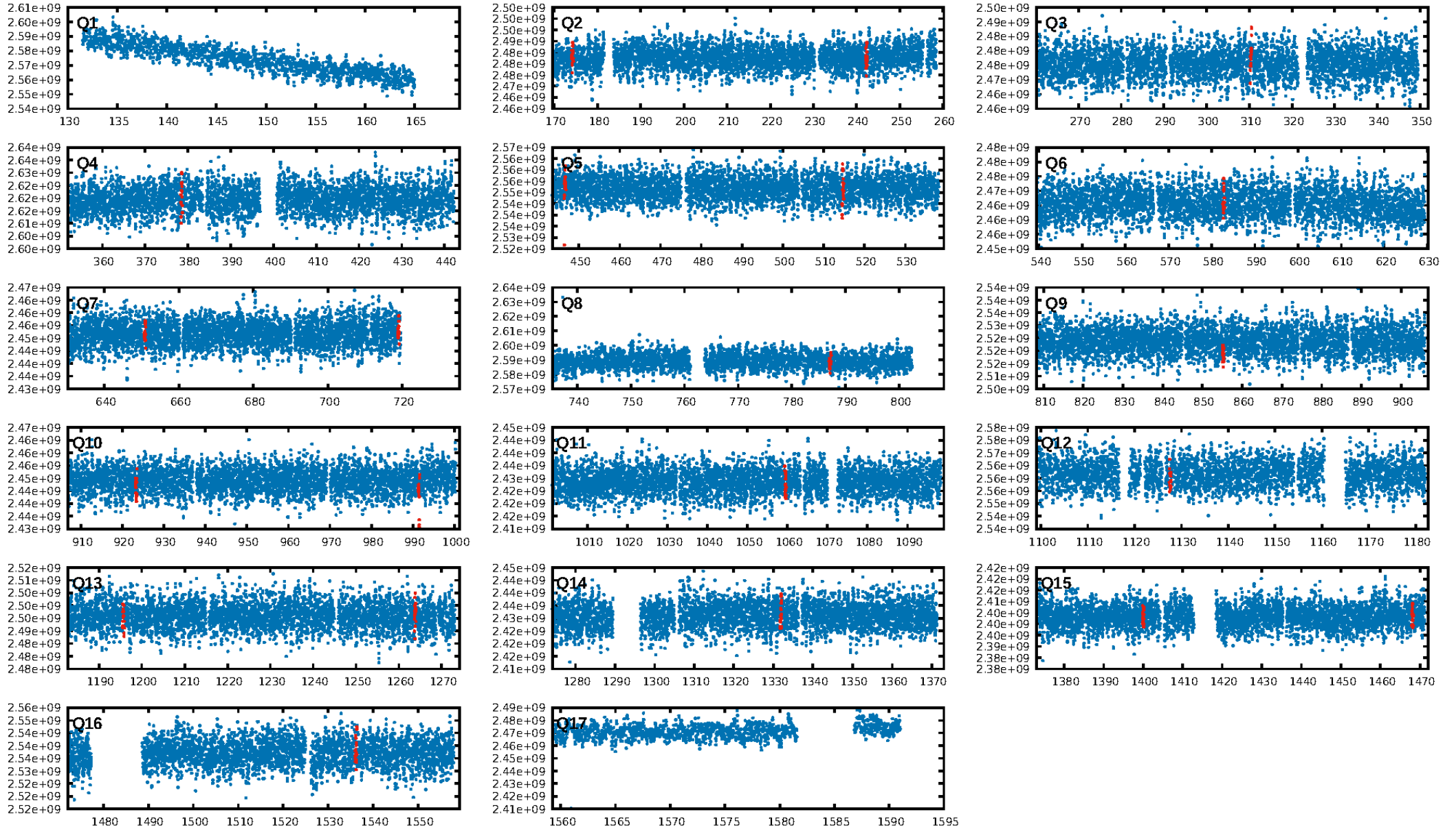
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [8.09 σ]
LongPeriod-sig: 100.0% [209.70 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [11/11]
GhostDiagnostic-chr: N/A
Centroid-sig: 73.7%
Centroid-so: 1.364 arcsec [6.39 σ]
OotOffset-rm: 3.834 arcsec [4.00 σ]
KicOffset-rm: 3.814 arcsec [4.53 σ]
OotOffset-st: 4/4/3 [14]
KicOffset-st: 4/4/3 [14]
DiffImageQuality-fgm: 0.00 [0/14]
DiffImageOverlap-fno: 0.00 [0/14]

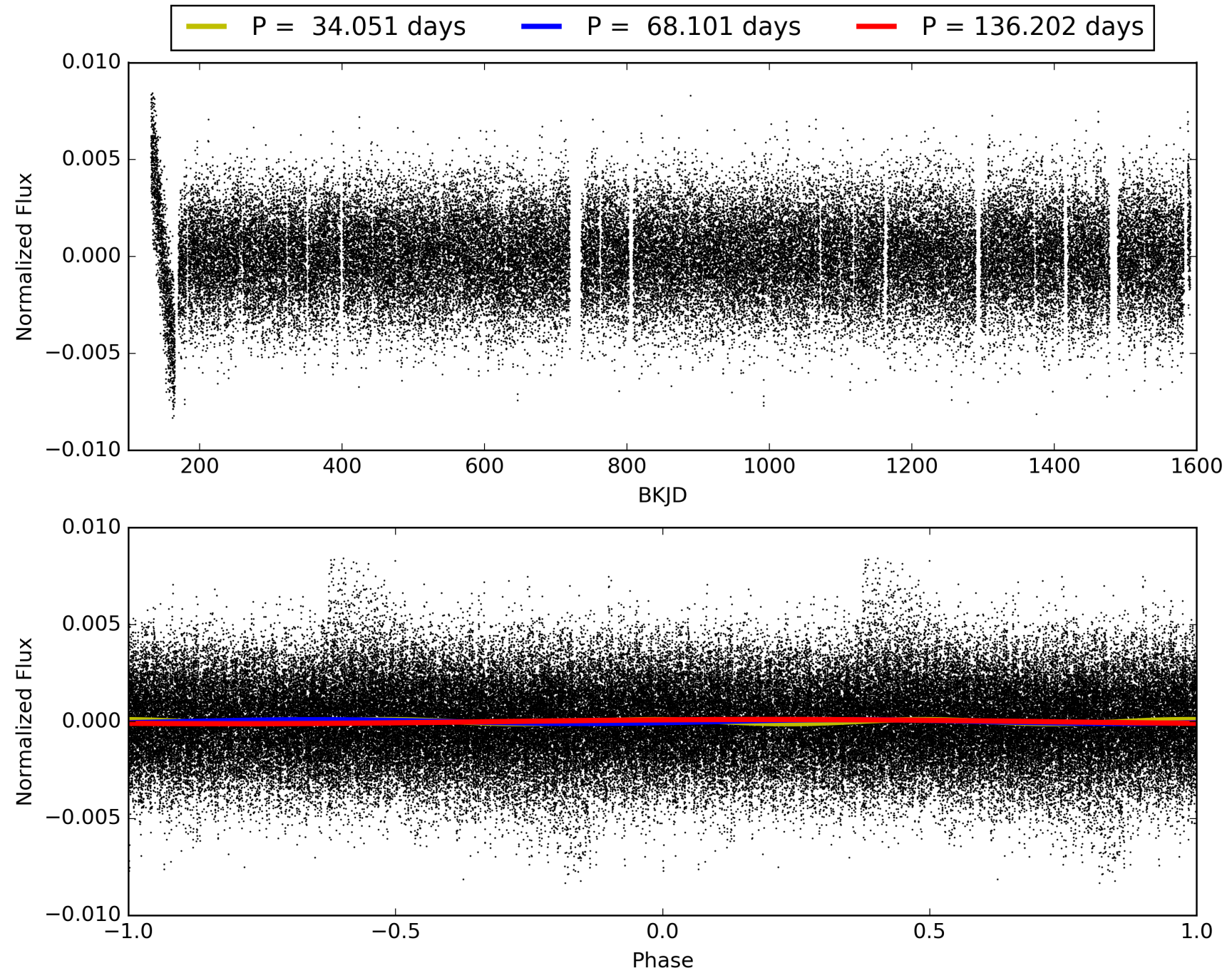
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 06:20:14 Z

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

TCE 010264728-05, PDC Light Curves

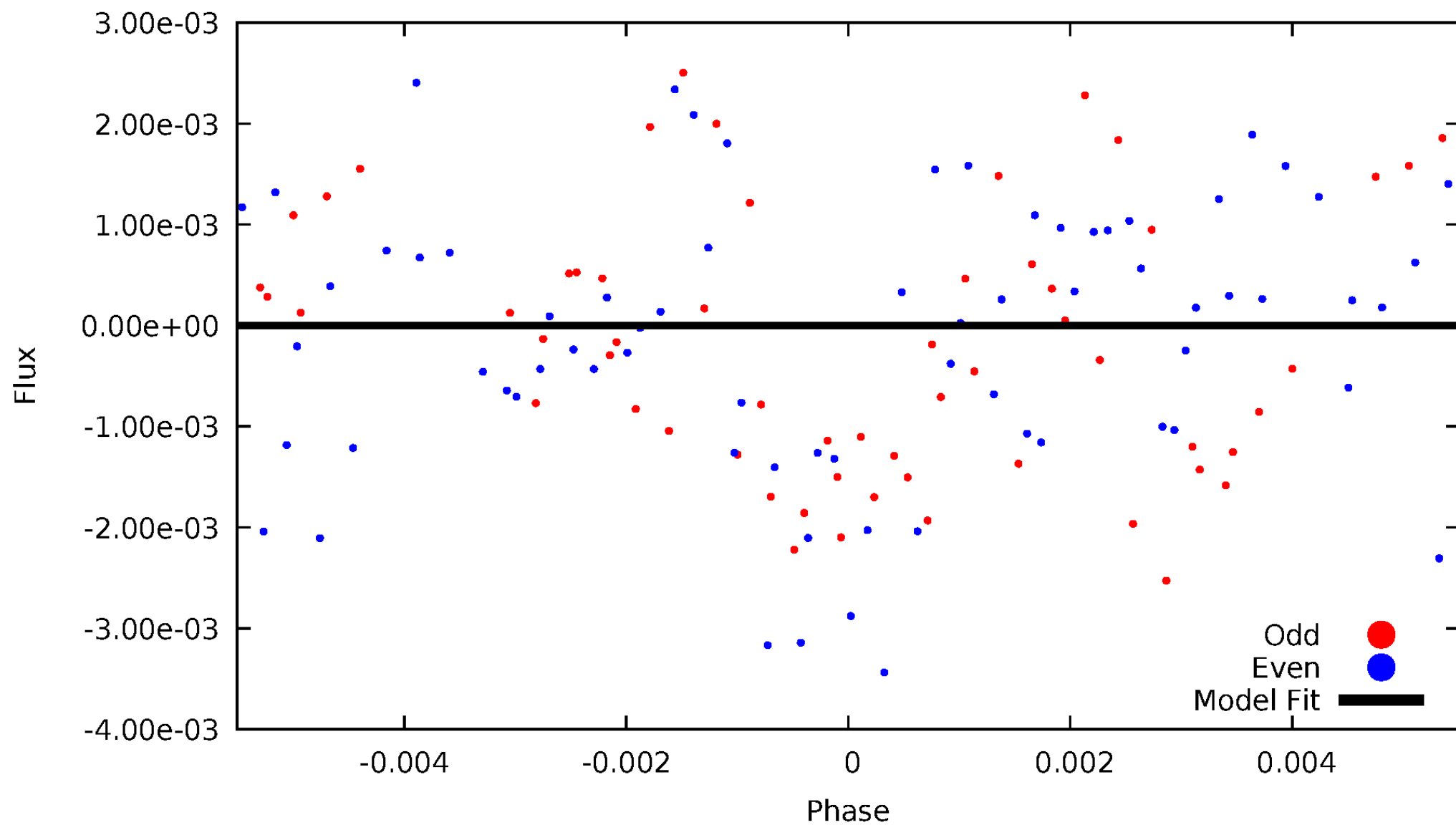


TCE 010264728-05



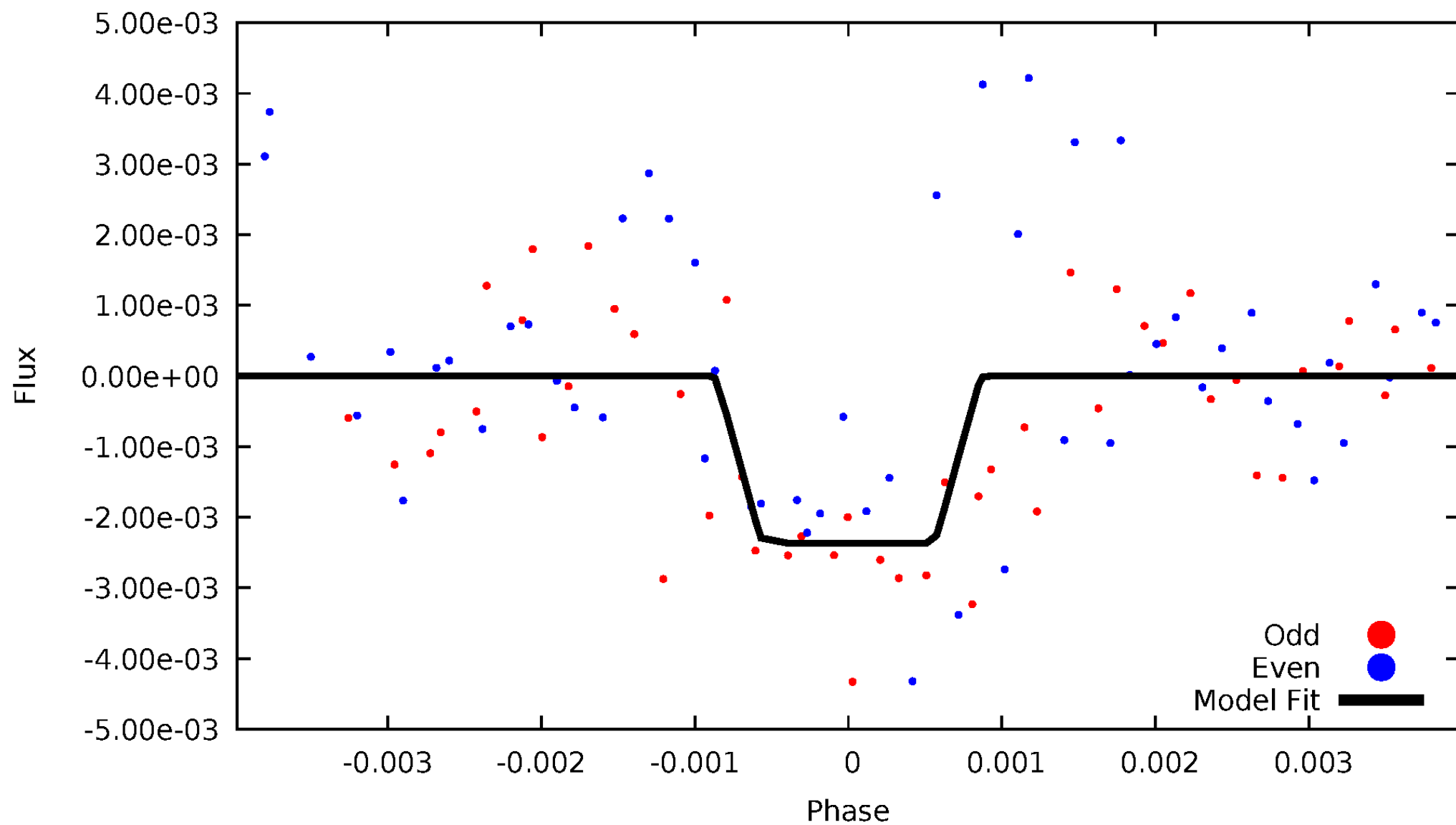
DV Odd/Even

TCE 010264728-05



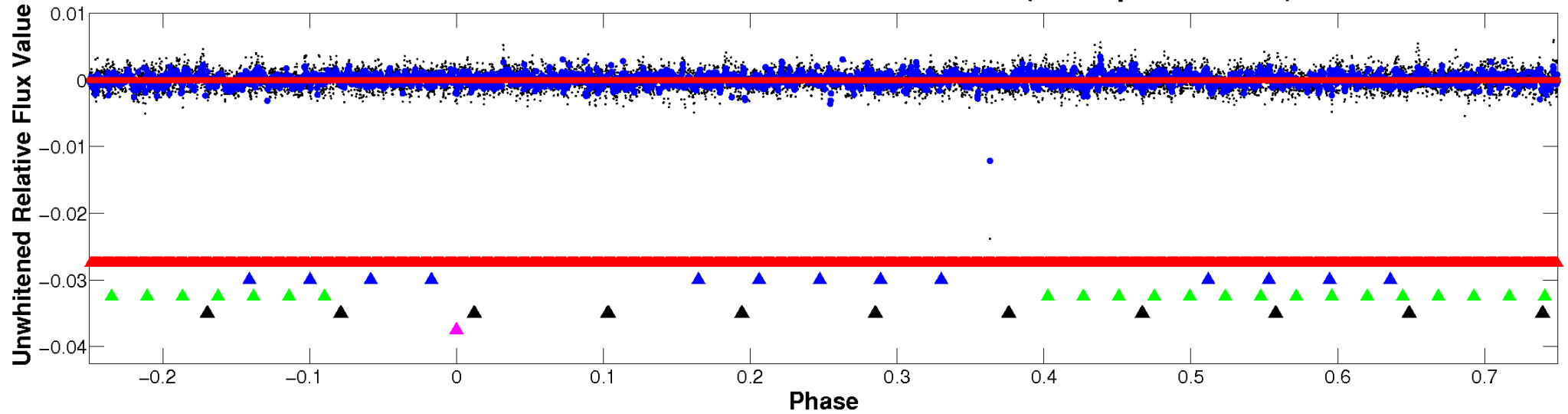
ALT Odd/Even

TCE 010264728-05



Non-Whitened Vs. Whitened Light Curve

Planet 5 : Phased Unwhitened Flux Time Series (TPS Epoch/Period)

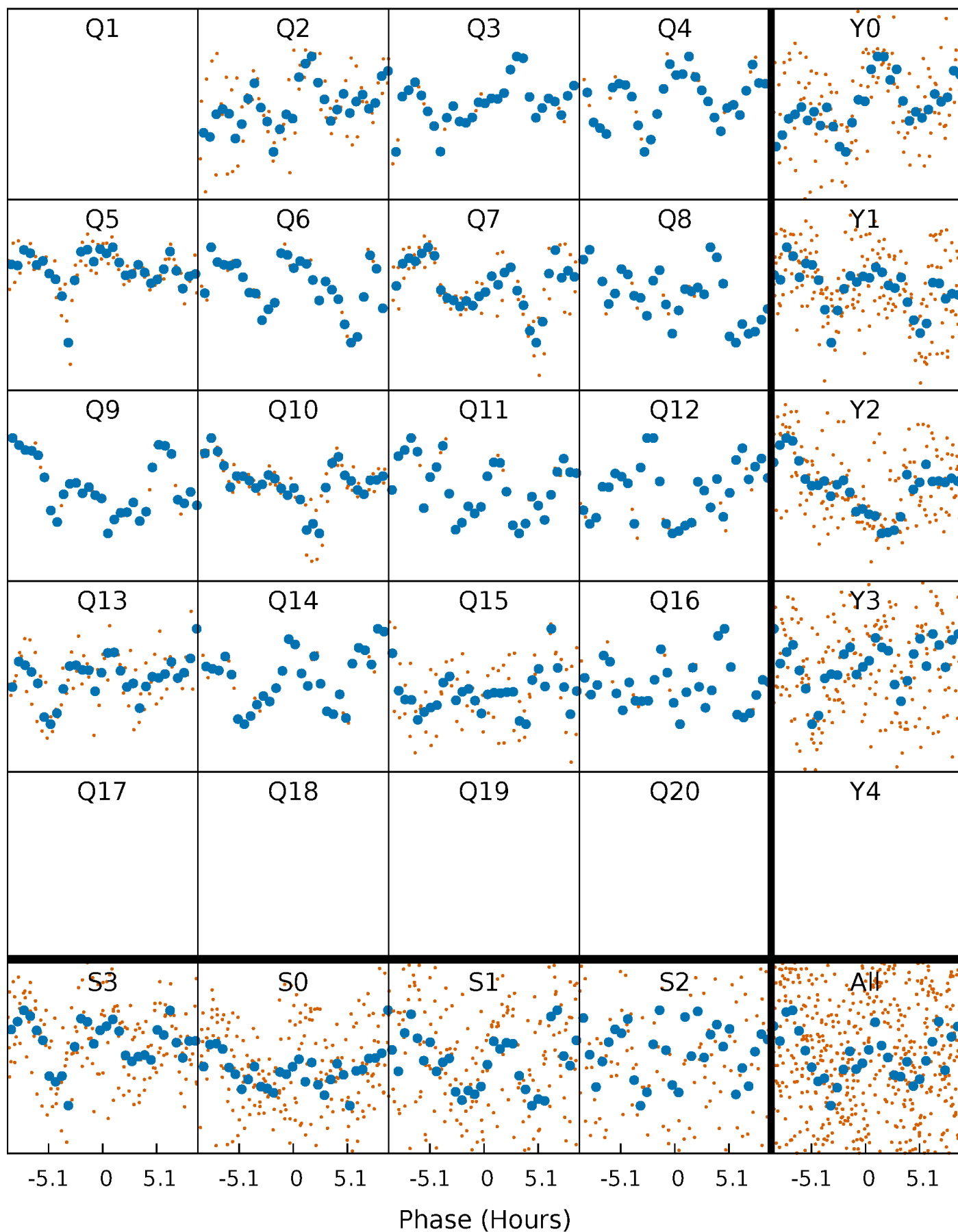


Planet 5 : Phased Whitened Flux Time Series (TPS Epoch/Period)



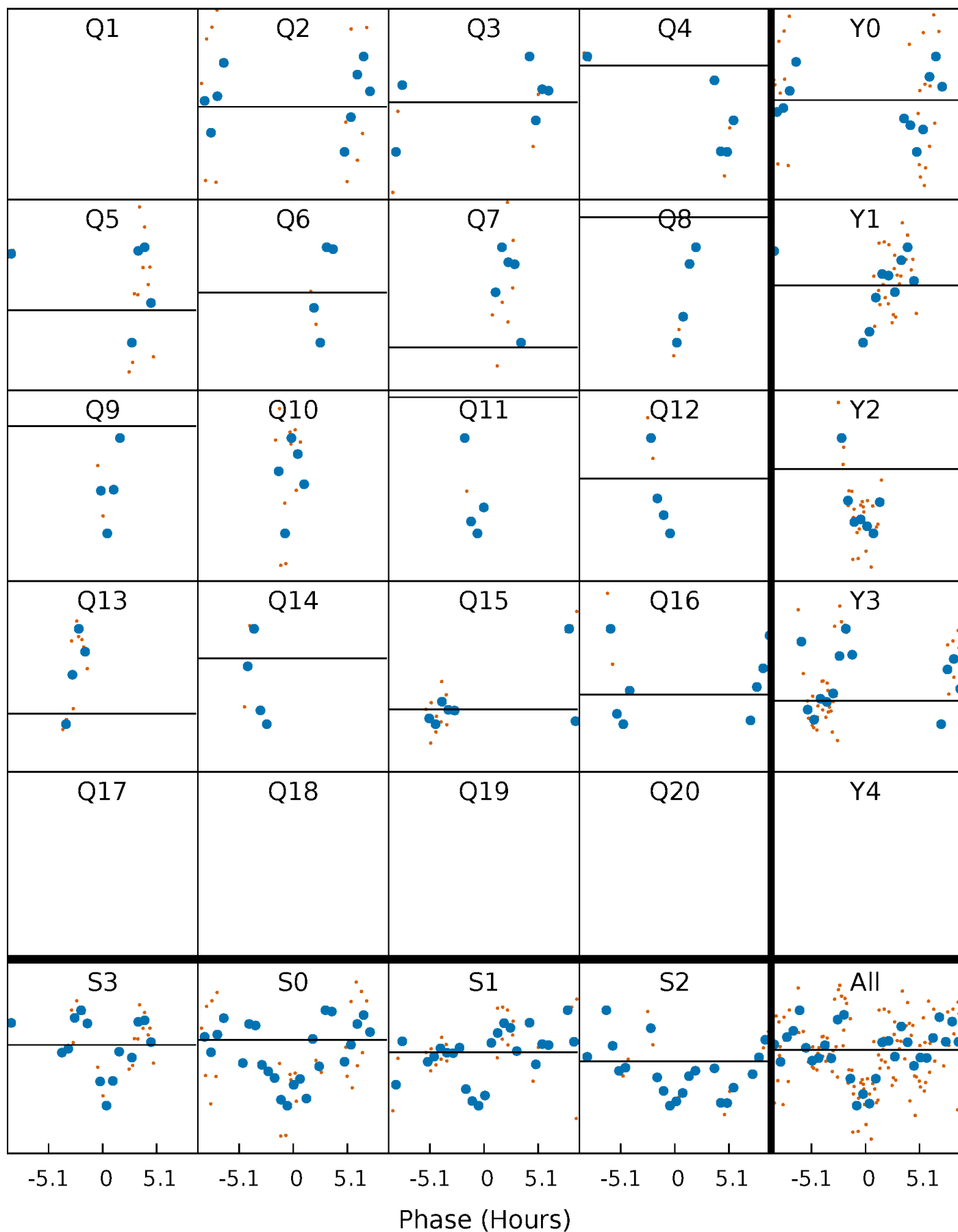
PDC Quarter-Phased Transit Curves

TCE 010264728-05 P= 68.101018 Days $T_0=174.196701$ (BKJD)



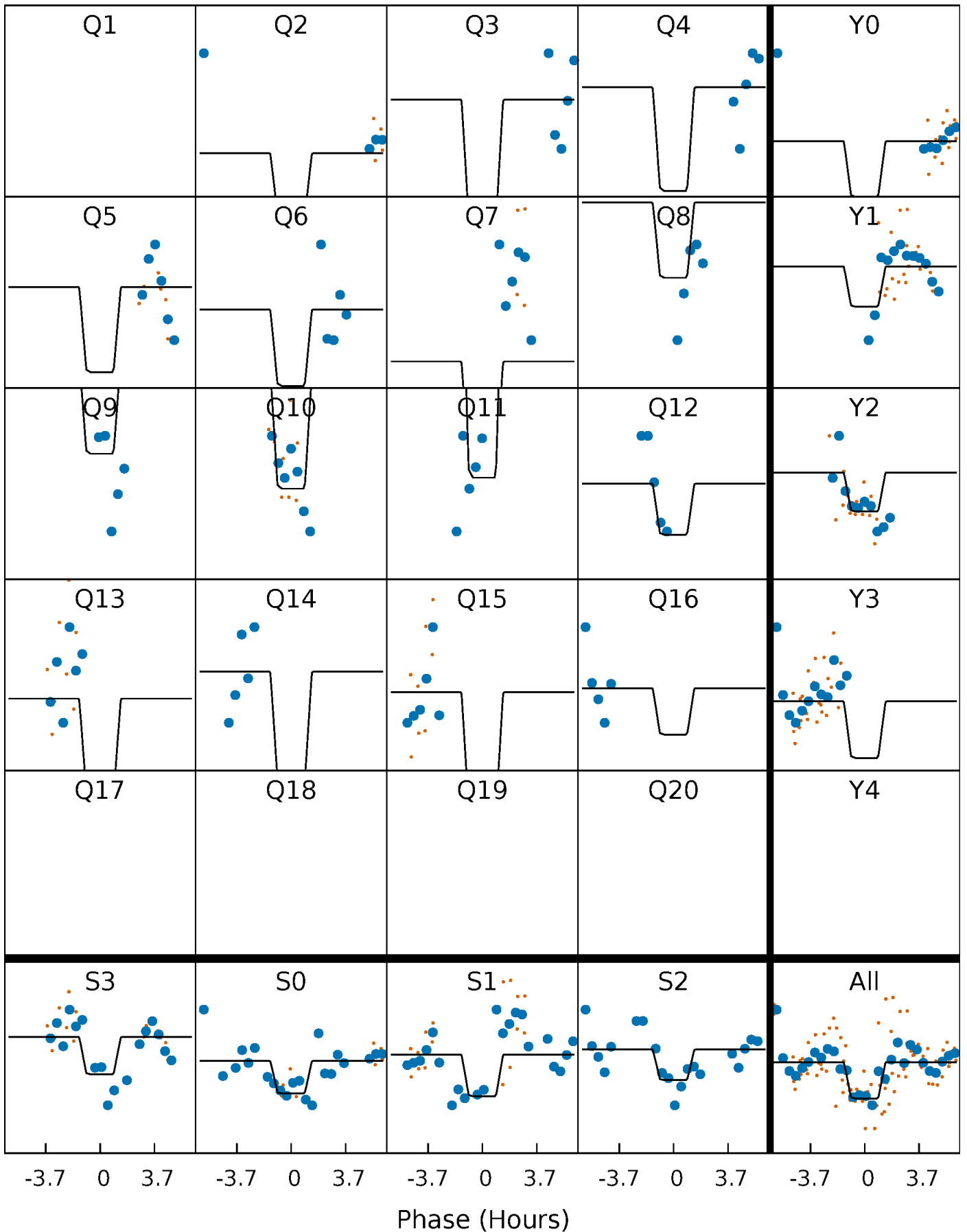
DV Quarter-Phased Transit Curves

TCE 010264728-05 P= 68.101018 Days $T_0=174.196701$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

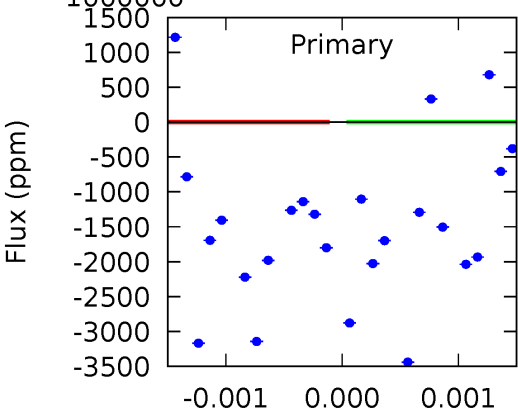
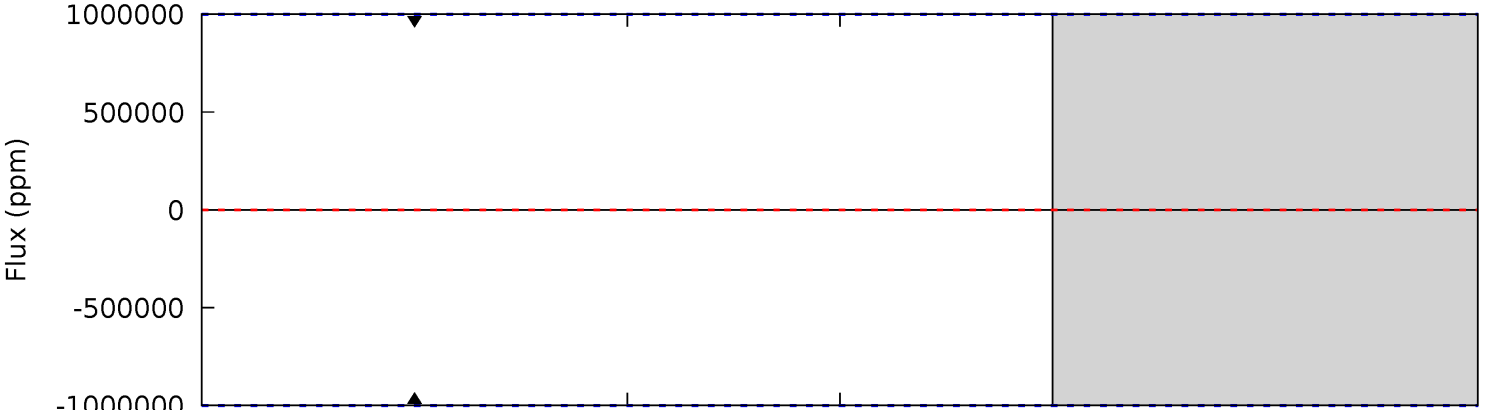
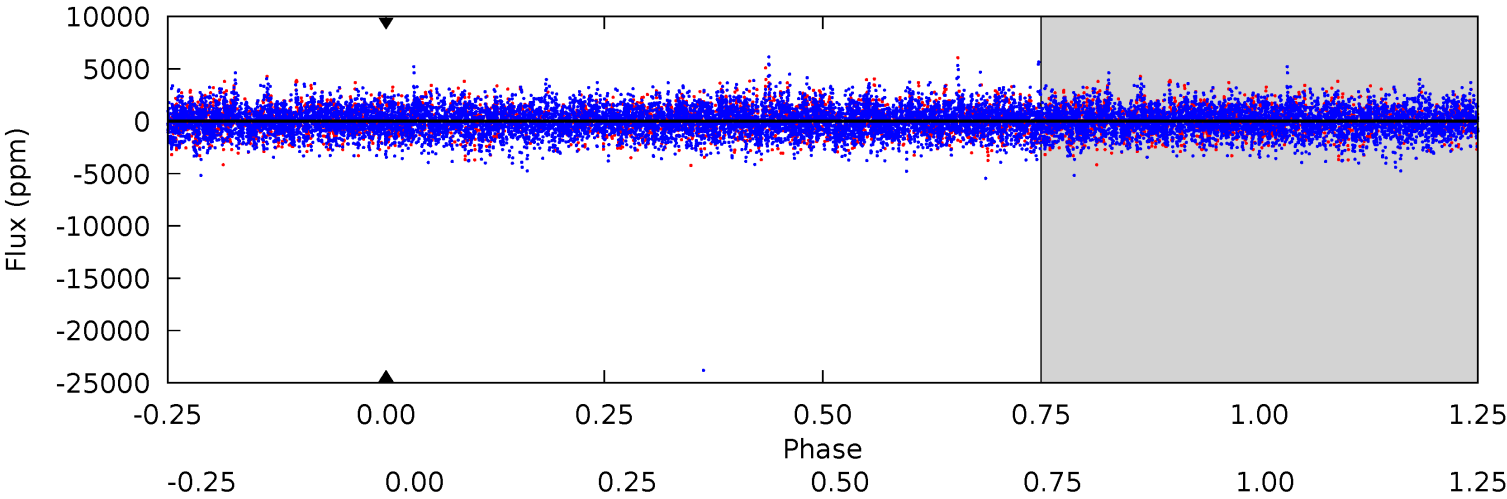
TCE 010264728-05 $P = 68.101018$ Days $T_0 = 174.190299$ (BKJD)



DV Model-Shift Uniqueness Test

010264728-05, P = 68.101018 Days, E = 106.095683 Days

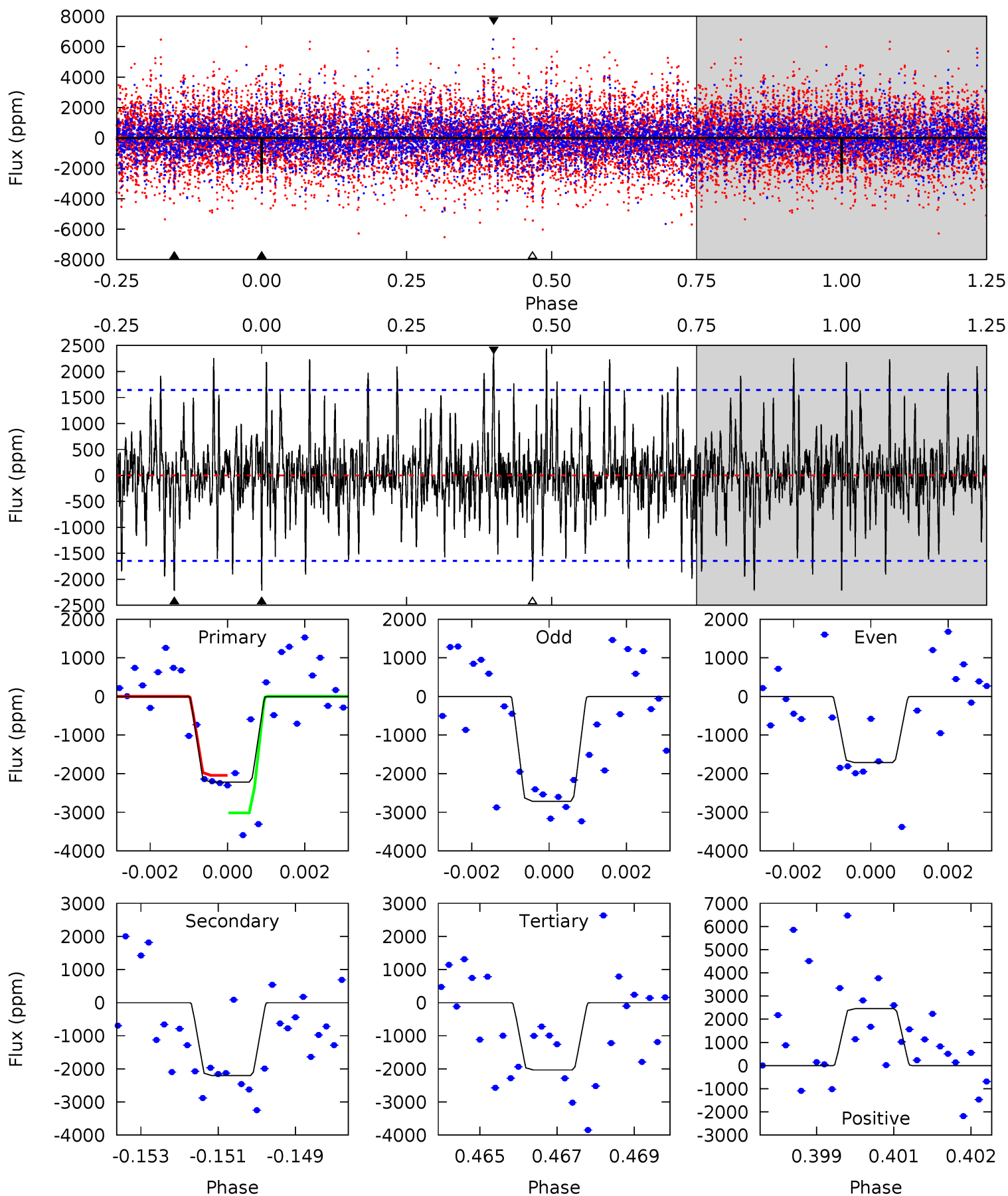
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

010264728-05, P = 68.101018 Days, E = 106.089281 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.20	7.17	6.62	7.98	5.35	3.12	2.03	0.58	-0.78	0.55	-0.81	1.63	0.74	0.53	1.56



Stellar Parameters For KIC 010264728

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7994^{+223}_{-335}	$3.926^{+0.259}_{-0.130}$	$-0.140^{+0.200}_{-0.300}$	$2.473^{+0.428}_{-0.795}$	$1.883^{+0.136}_{-0.381}$	$0.175^{+0.293}_{-0.059}$
	+3%/-4%	+7%/-3%	+143%/-214%	+17%/-32%	+7%/-20%	+167%/-34%
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 010264728-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	0 ± 1000000	$18.60^{+19.72}_{-13.08}$	1214^{+75}_{-102}	3509^{+55179}_{-49145}	34^{+50728}_{-43281}
Alt.	-2204 ± 307	$22.53^{+19.36}_{-15.07}$	1207^{+80}_{-112}	5694^{+5920}_{-1311}	390^{+3228}_{-283}

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 $A_{obs} \gg 1.0$

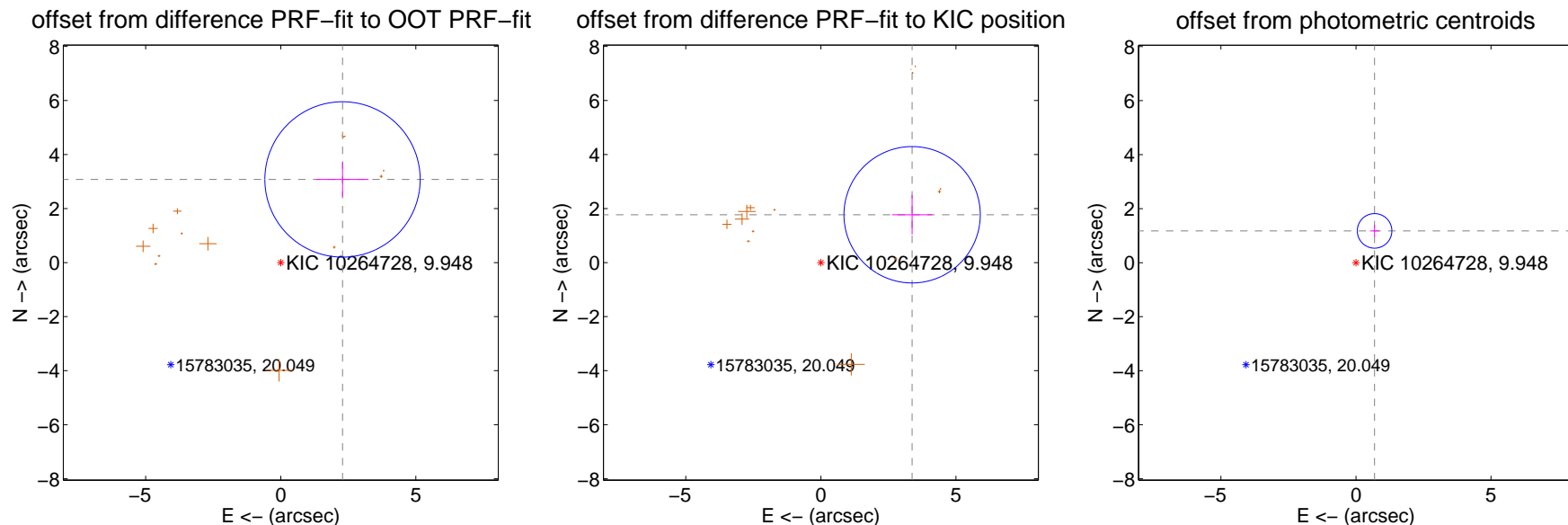
DV Centroid Data

Supplemental centroid analysis for 010264728-05. **Kepler magnitude: 9.95.** Transit SNR -1.00

There are 0 quarters with good PRF difference image offsets

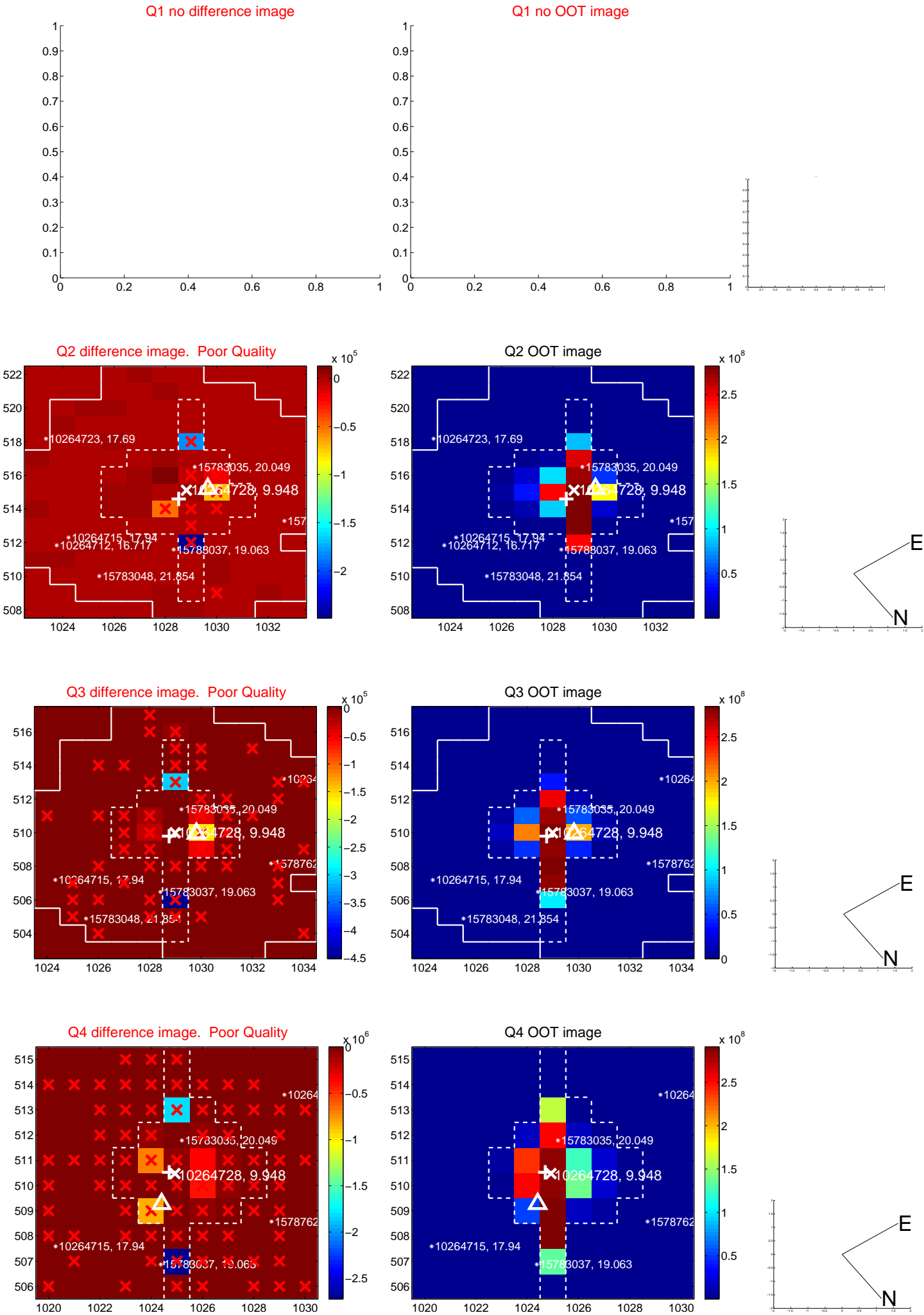
The direct PRF centroid is offset from the target star catalog position by about 0.88 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.834 ± 0.958	4.00	-2.287 ± 0.964	3.077 ± 0.635
PRF-fit source offset from KIC position	3.814 ± 0.841	4.53	-3.379 ± 0.746	1.770 ± 0.727
photometric centroid source offset	1.36 ± 0.21	6.39	-0.69 ± 0.16	1.18 ± 0.23

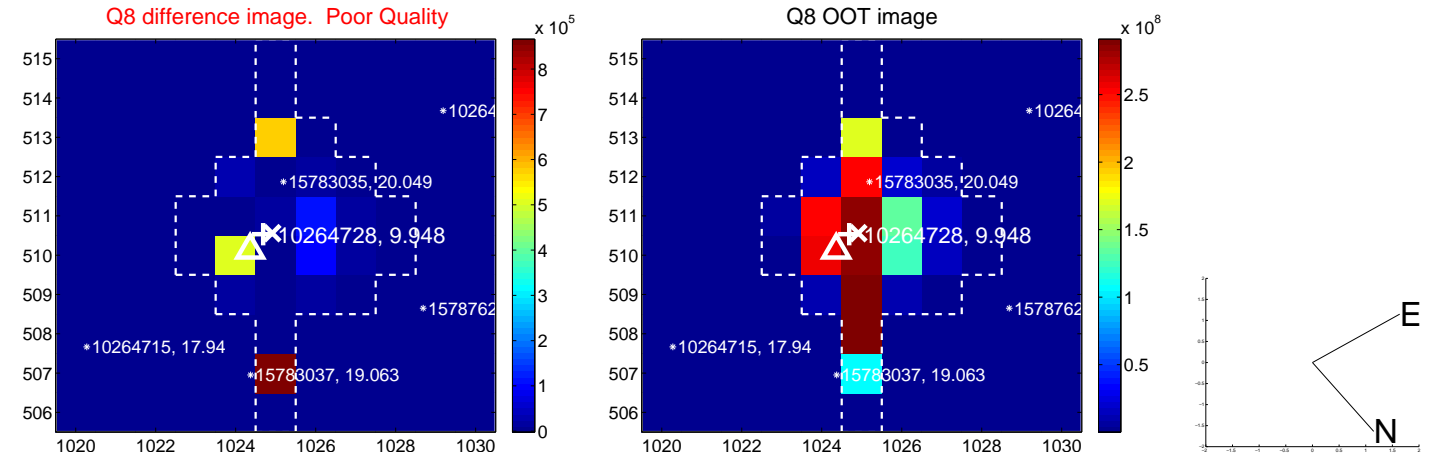
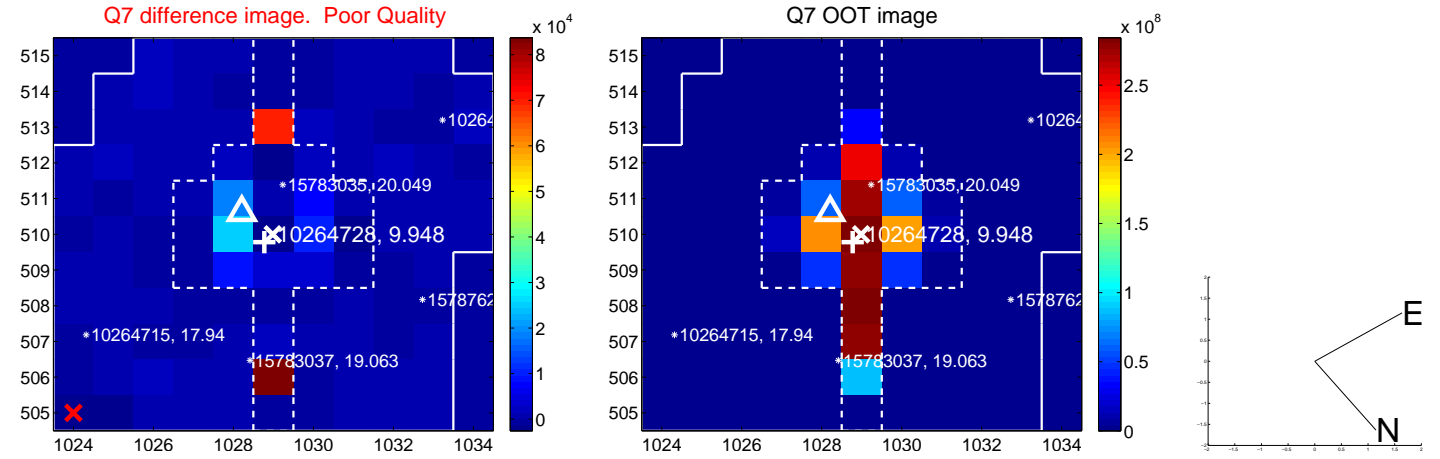
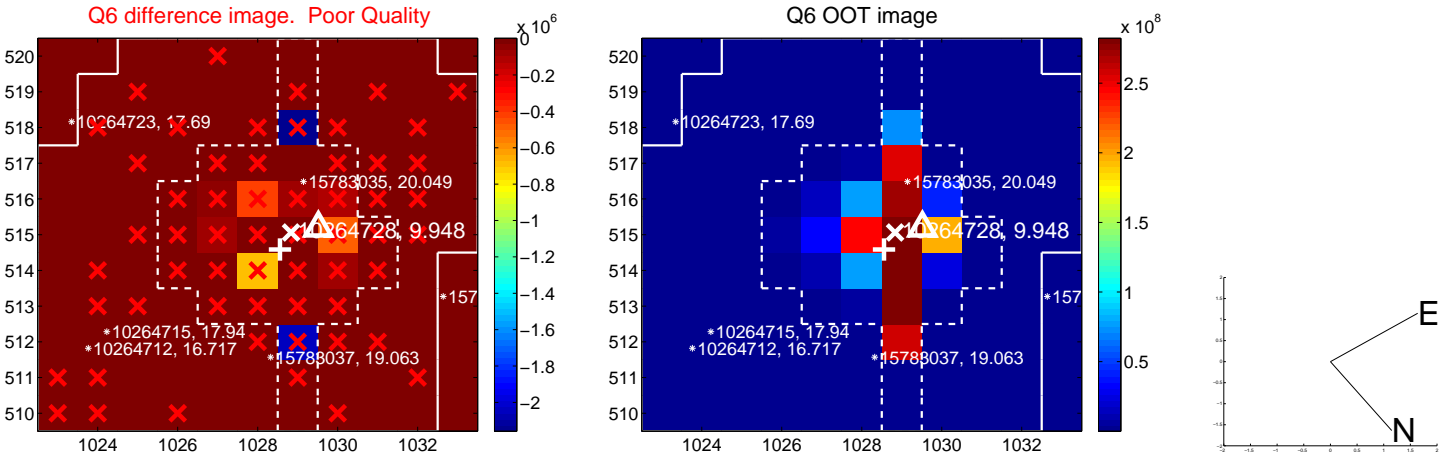
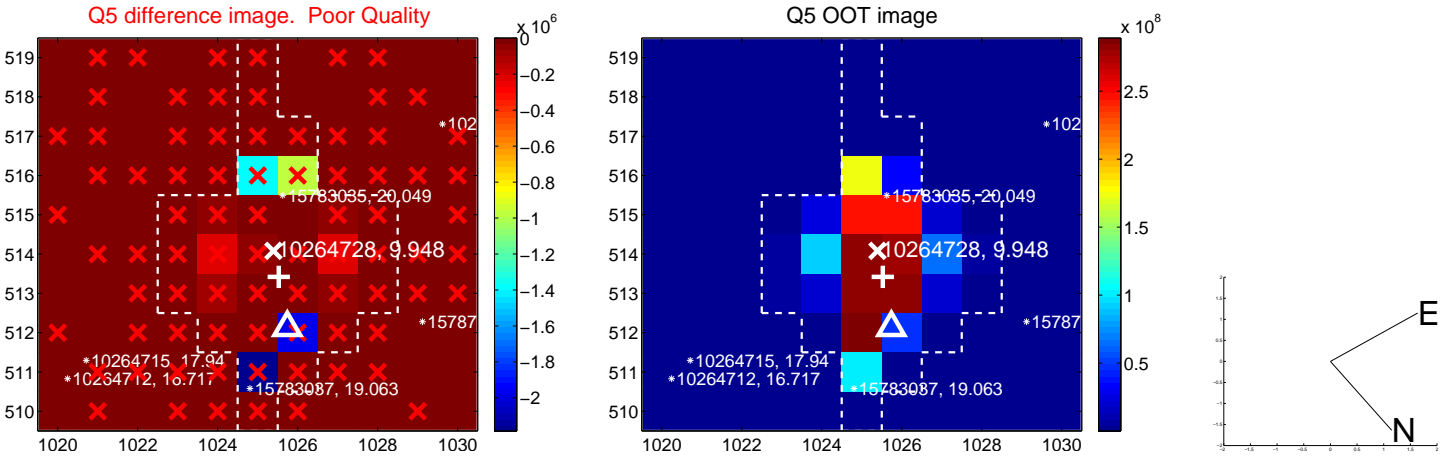


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

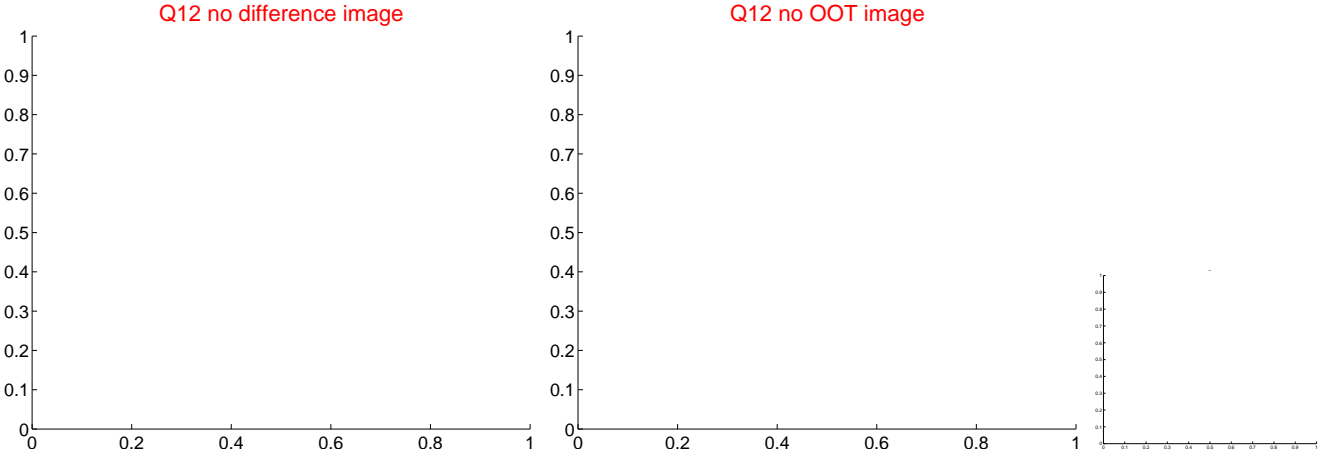
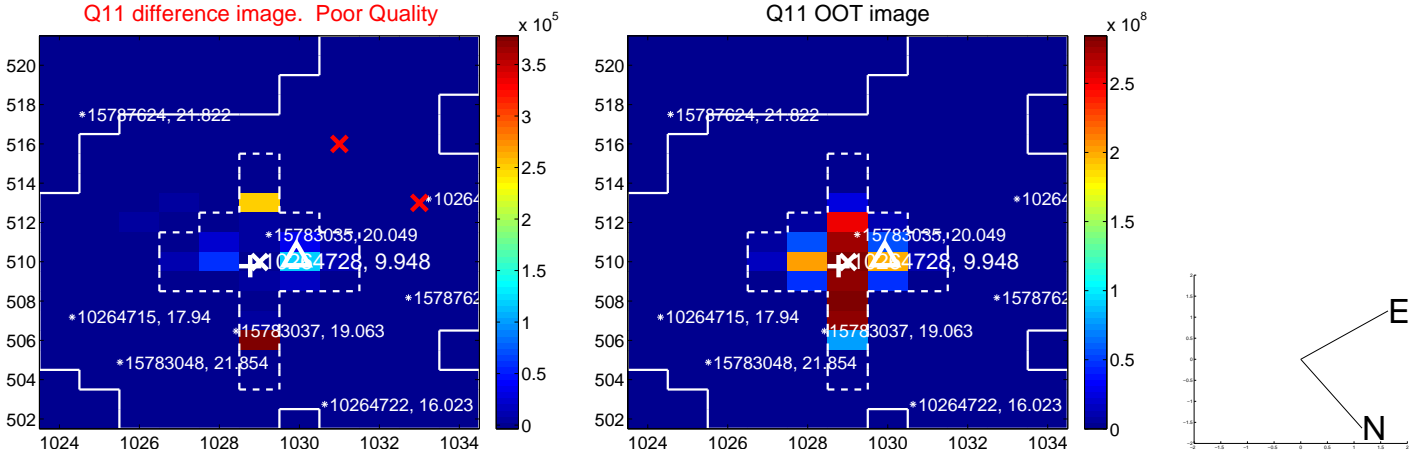
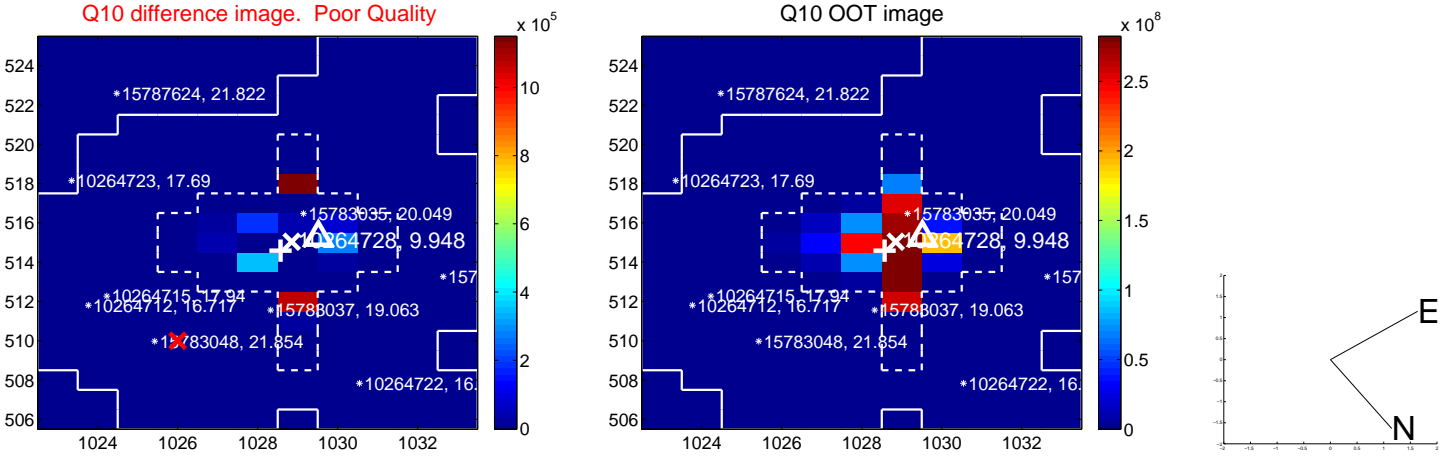
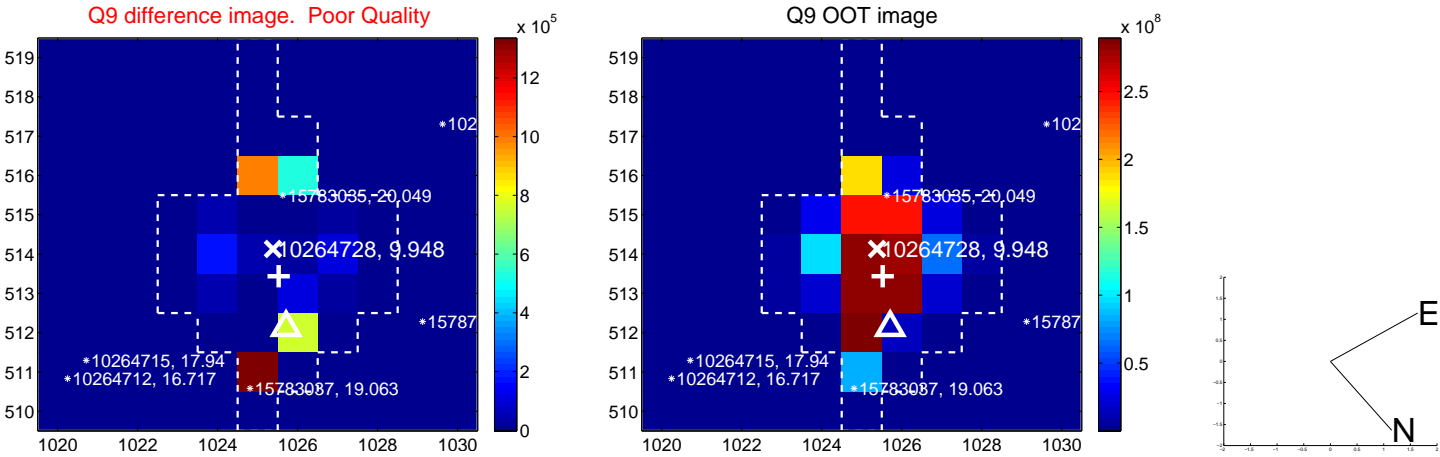
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



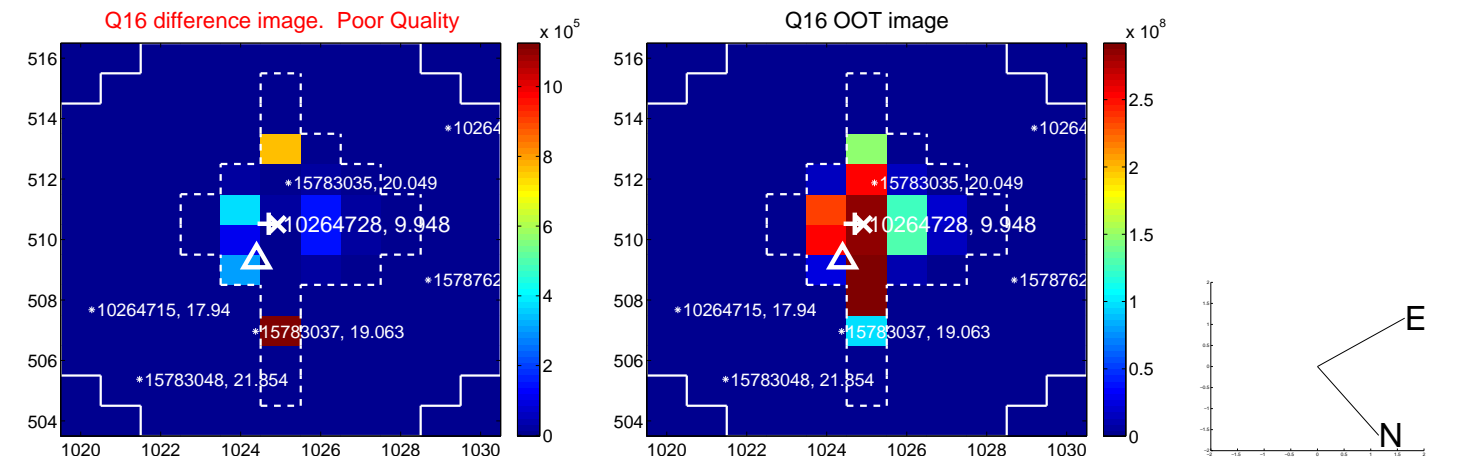
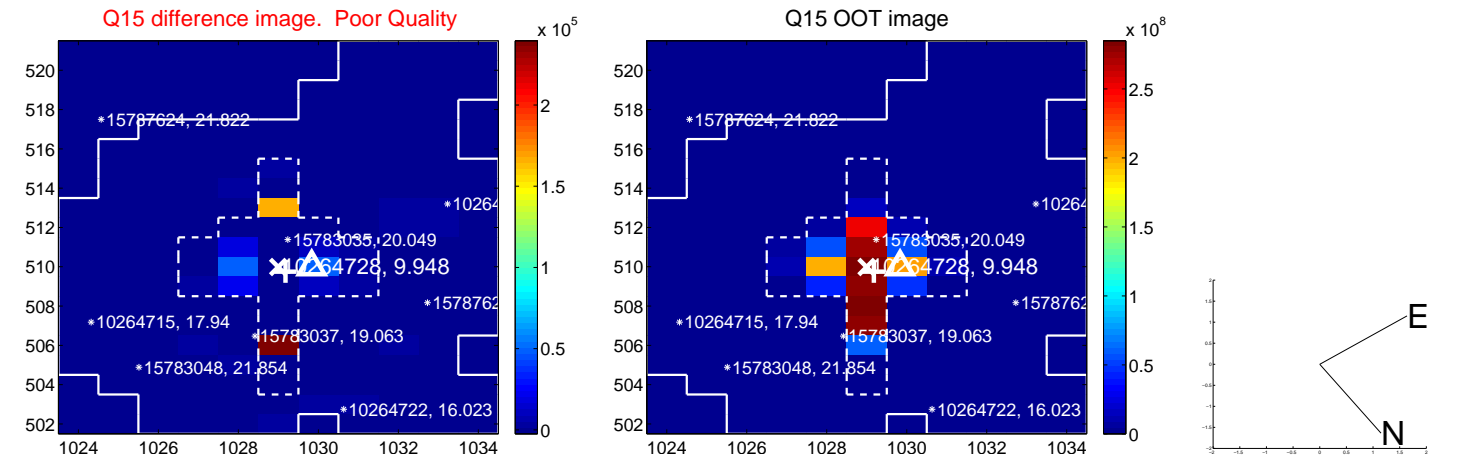
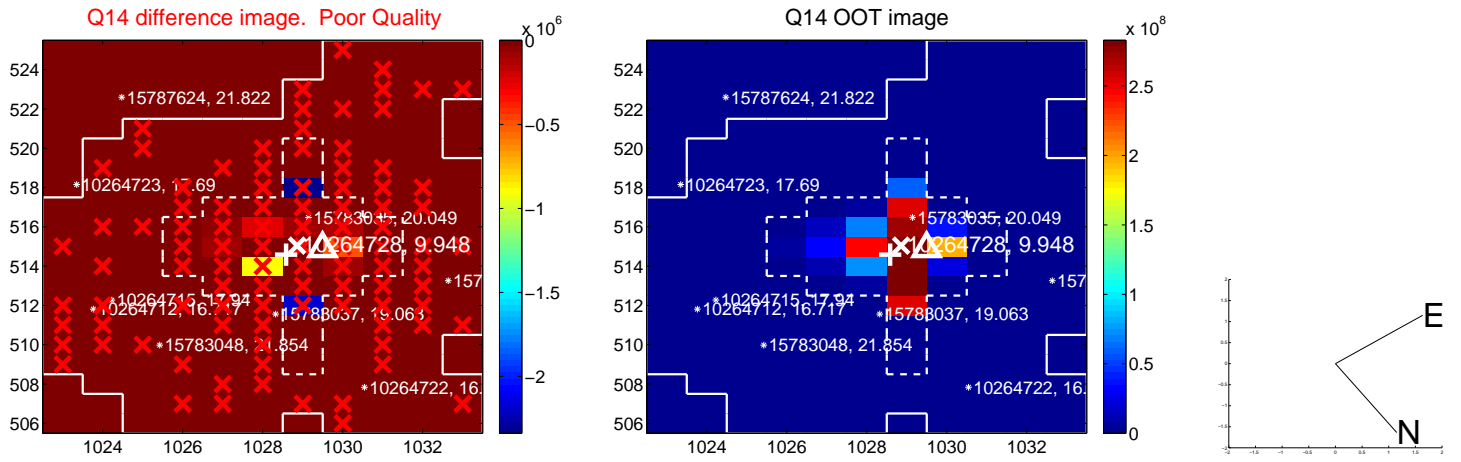
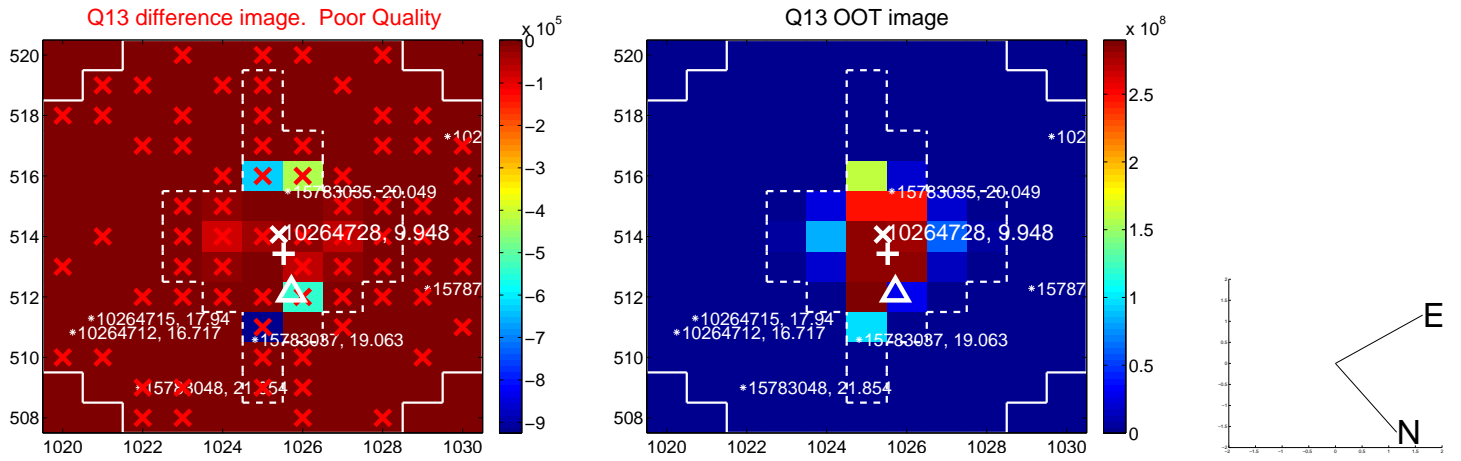
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



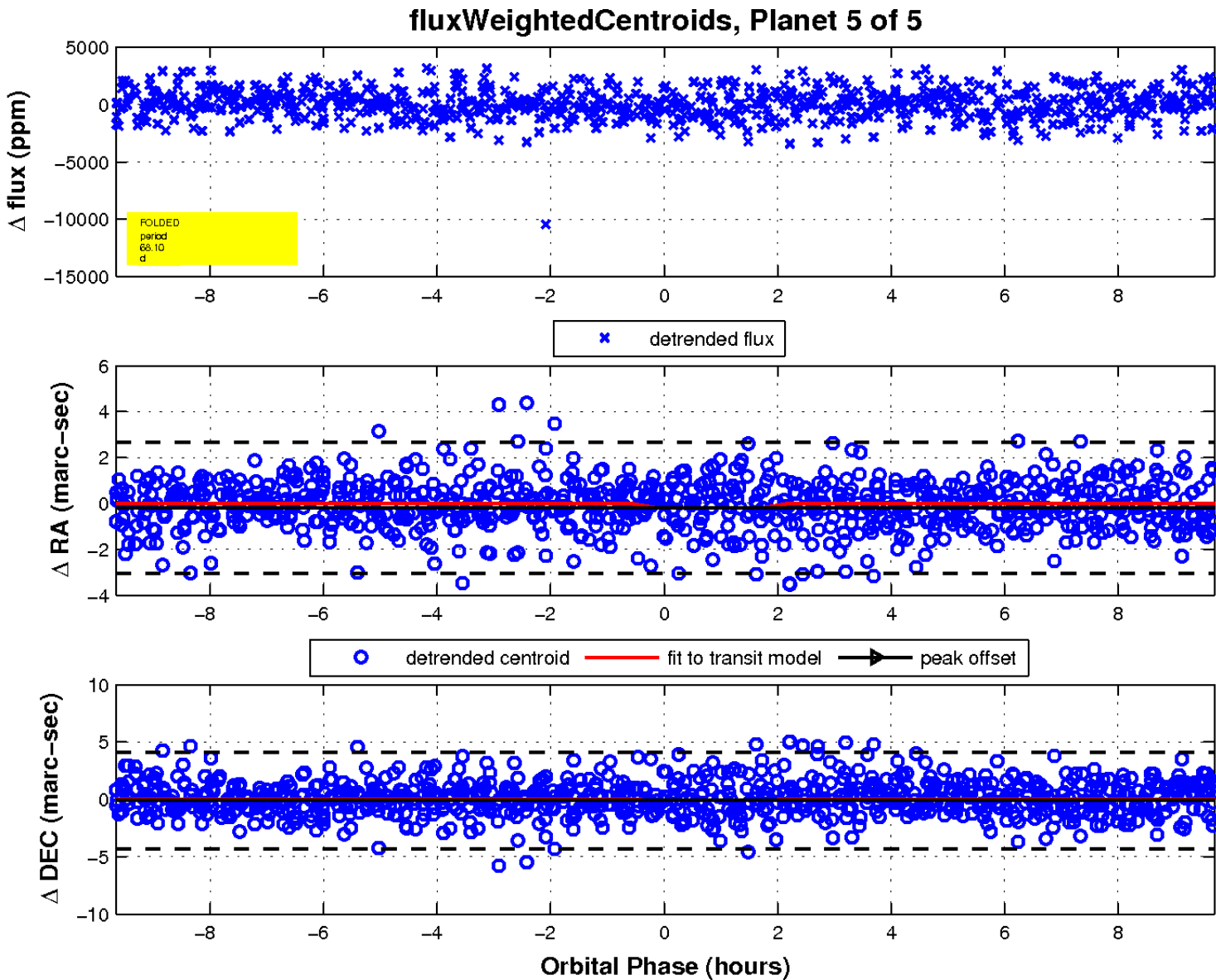
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

Q17 no difference image

Q17 no OOT image



UKIRT Image

