

KIC 008779047

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})
008779047-01	OBS	No	2.204341	131.589122	69.5	4.605	7.8	4.3	1.74	6324	1.74	3546.95
008779047-02	OBS	No	2.204391	132.212354	94.2	6.294	8.3	5.3	1.74	6324	1.97	3546.85
008779047-03	OBS	No	1.102132	131.761748	170.9	4.943	8.2	8.2	1.74	6324	3.04	8938.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008779047-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
008779047-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
008779047-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD

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

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

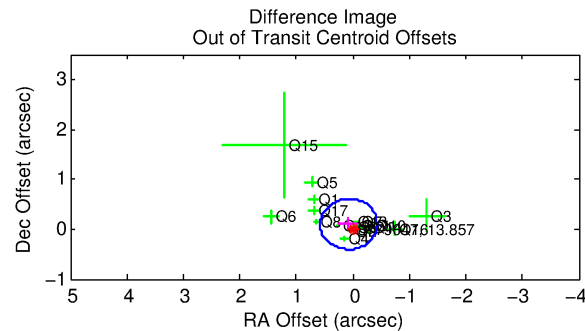
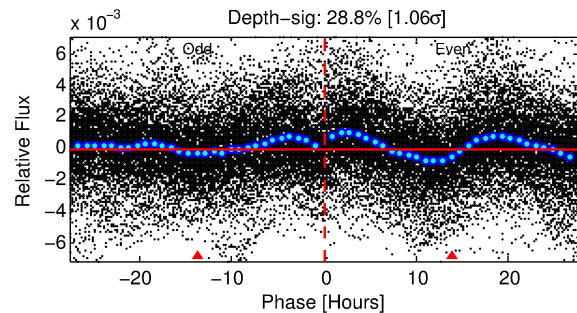
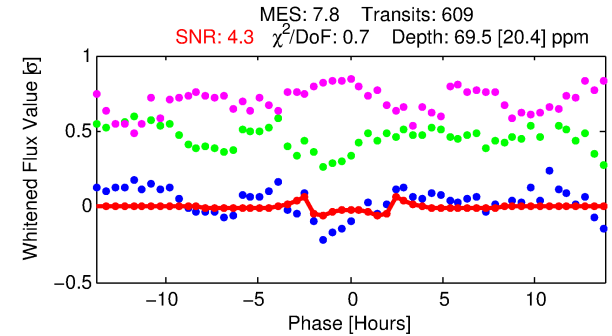
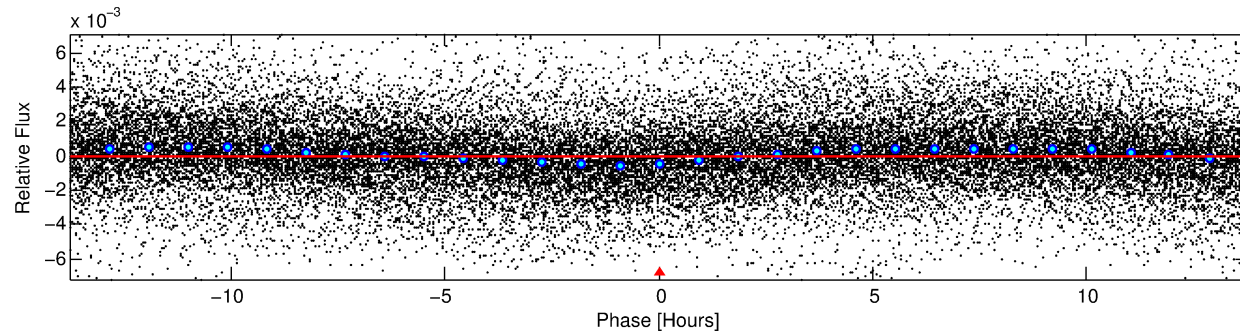
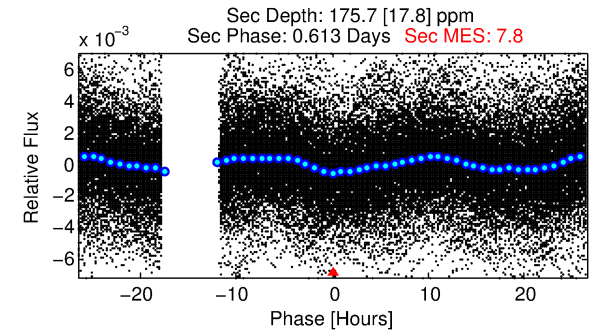
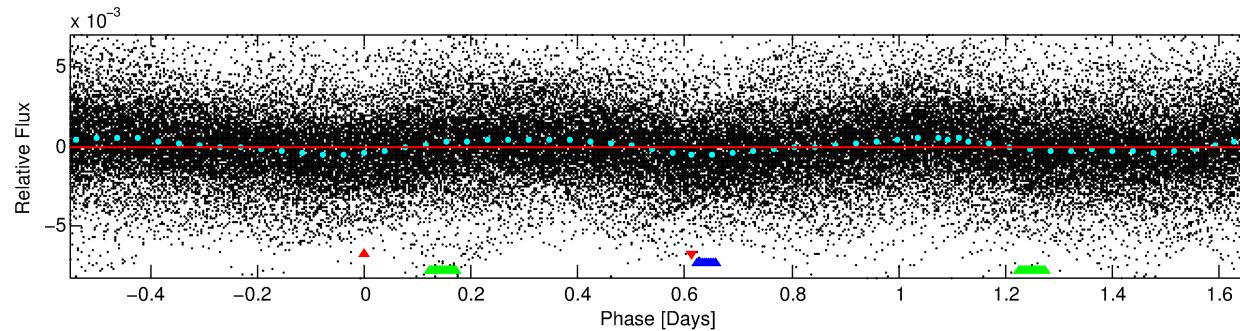
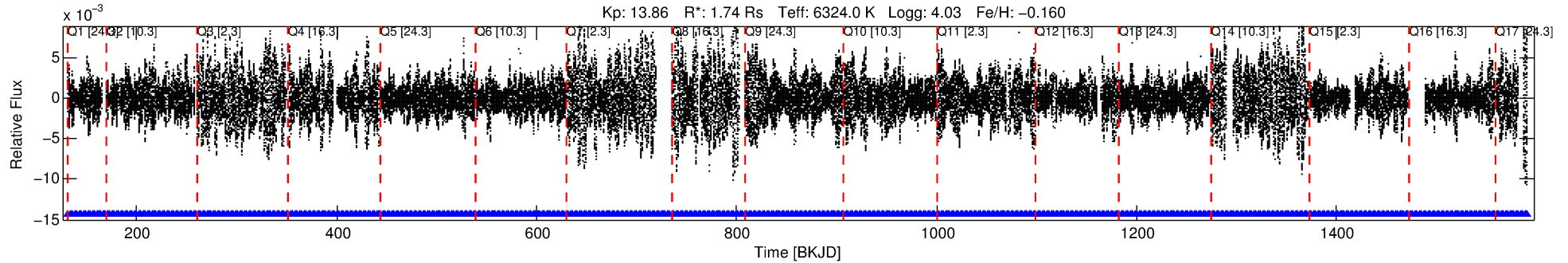
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008779047-01

No Significant Match Found

DV One-Page Summary

KIC: 8779047 Candidate: 1 of 3 Period: 2.204 d



DV Fit Results:

Period = 2.20434 [0.00002] d
Epoch = 131.5891 [0.0035] BKJD
Rp/R* = 0.0092 [0.0025]
a/R* = 1.75 [1.32]
b = 0.93 [0.17]
Seff = 3546.95 [2040.31]
Teq = 1968 [283] K
Rp = 1.74 [0.77] Re
a = 0.0350 [0.0121] AU
Ag = 39.01 [30.51] [1.25σ]
Teffp = 7604 [1078] K [5.06σ]

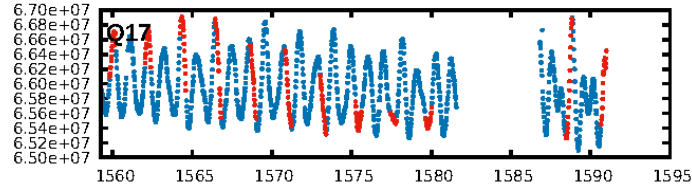
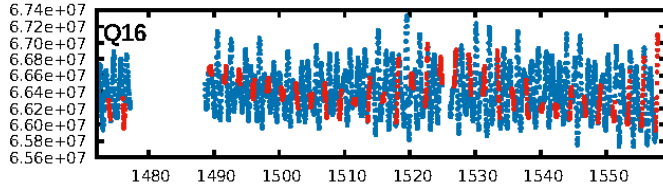
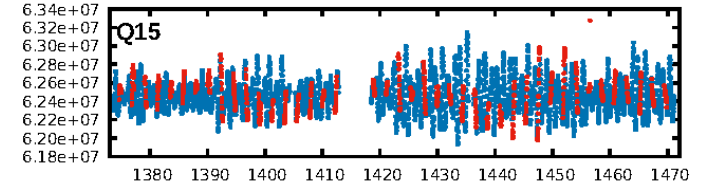
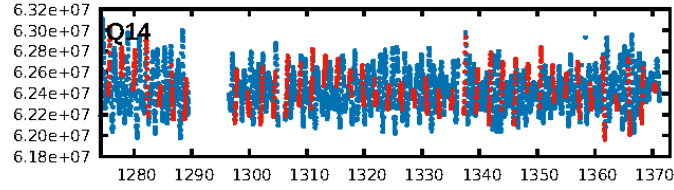
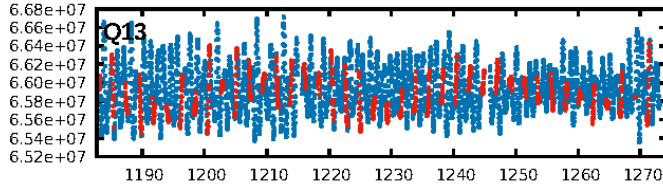
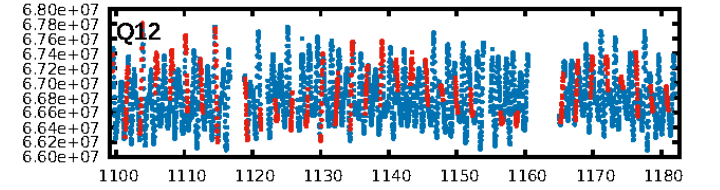
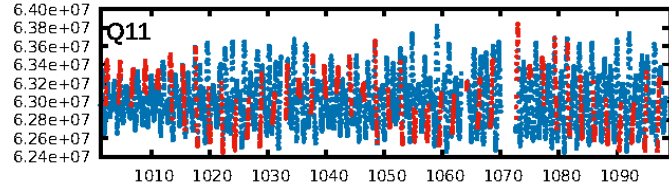
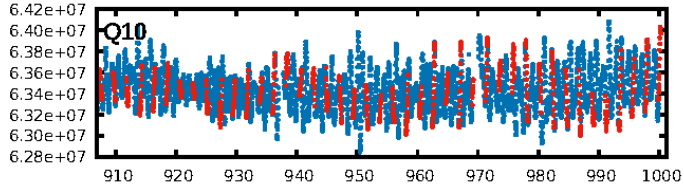
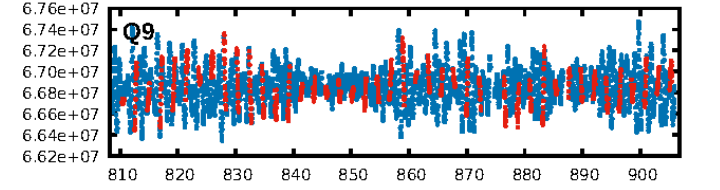
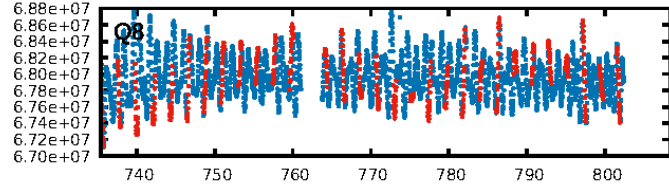
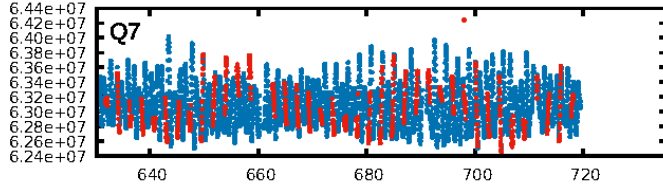
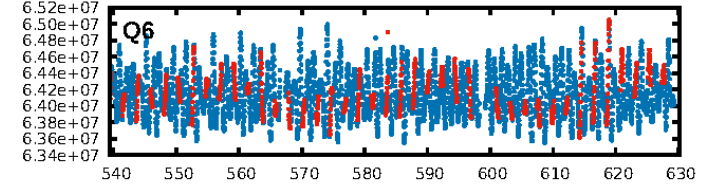
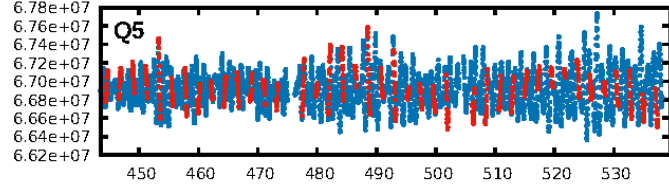
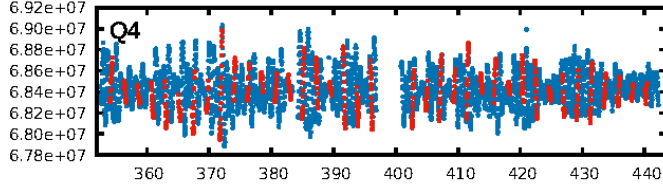
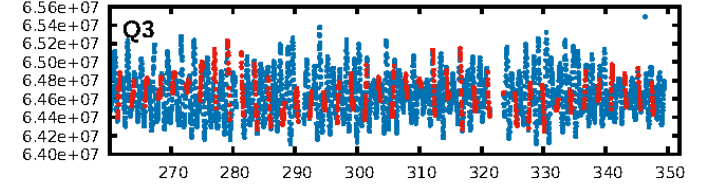
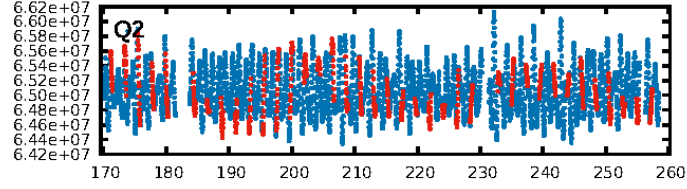
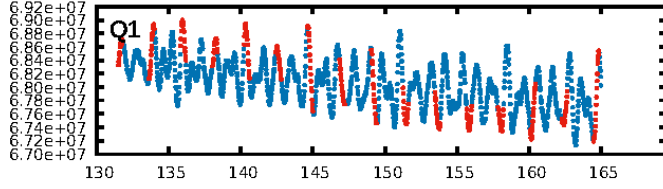
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [3.92σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 5.13e-18
RollingBand-fgt: 1.00 [581/581]
GhostDiagnostic-chr: 0.528
Centroid-sig: 0.0%
Centroid-so: 3.178 arcsec [3.20σ]
OotOffset-rm: 0.125 arcsec [0.74σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-rm: 0.231 arcsec [1.23σ]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.71 [12/17]
DiffImageOverlap-fno: 0.00 [0/17]

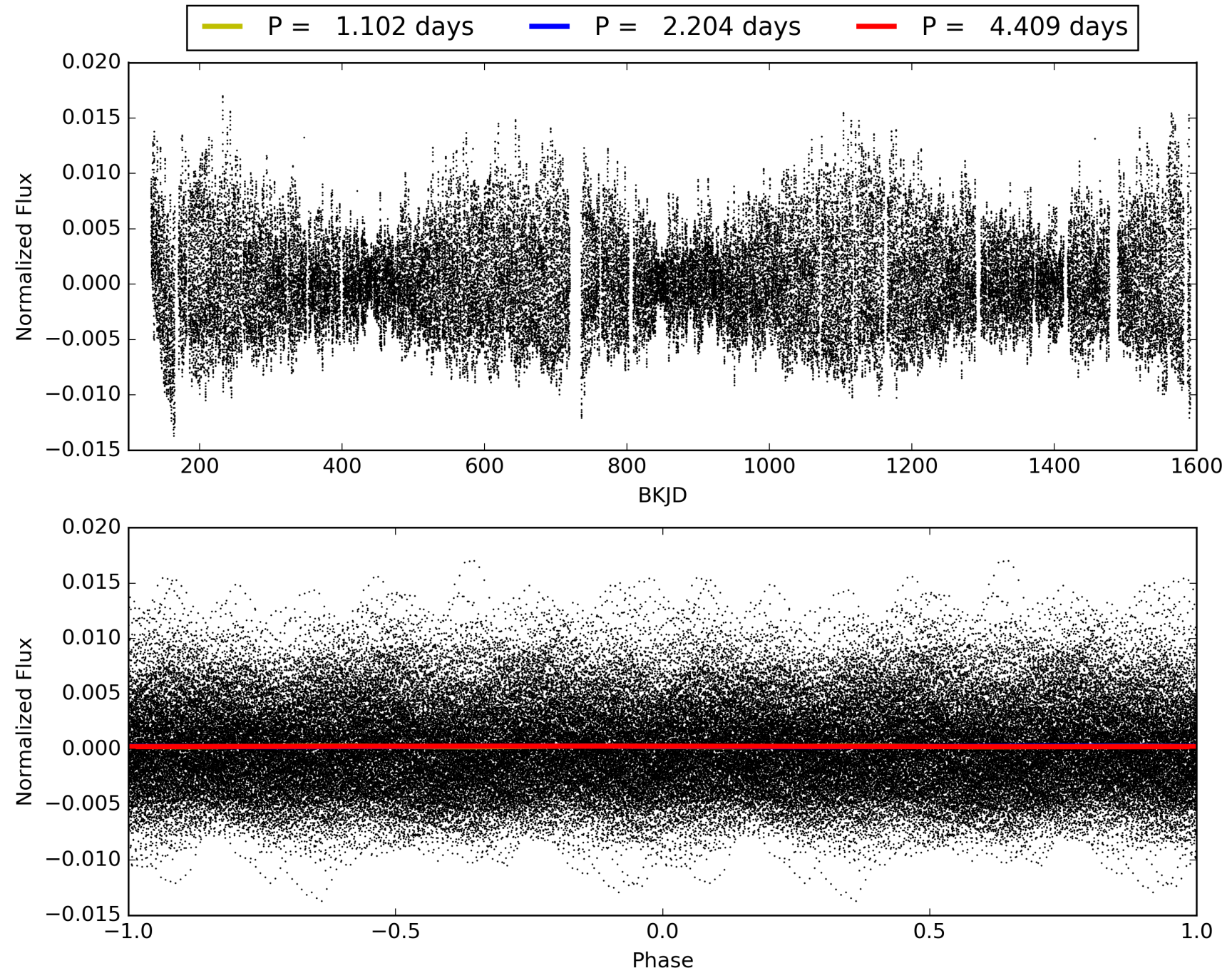
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:23:11 Z

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

TCE 008779047-01, PDC Light Curves

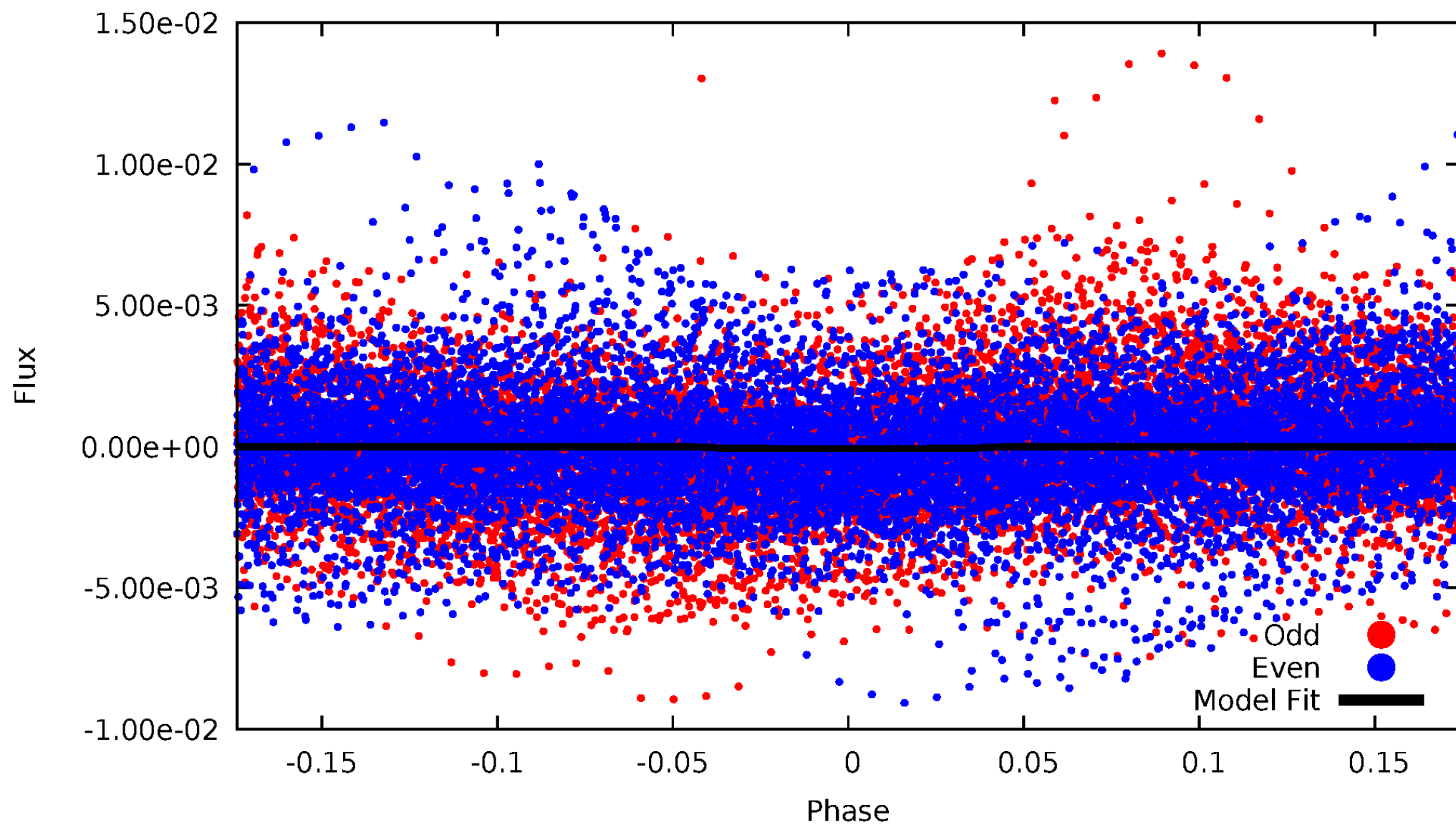


TCE 008779047-01



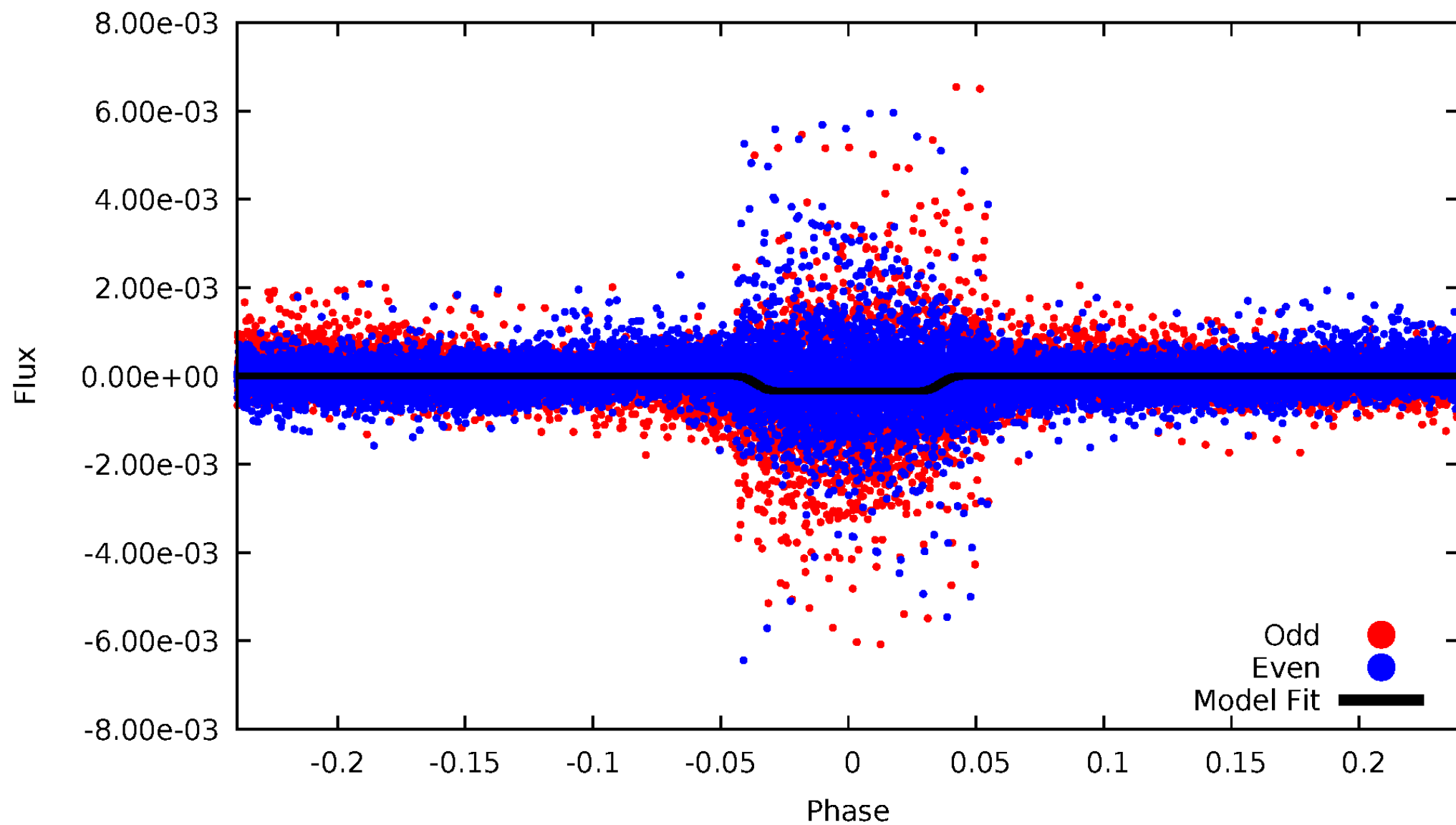
DV Odd/Even

TCE 008779047-01

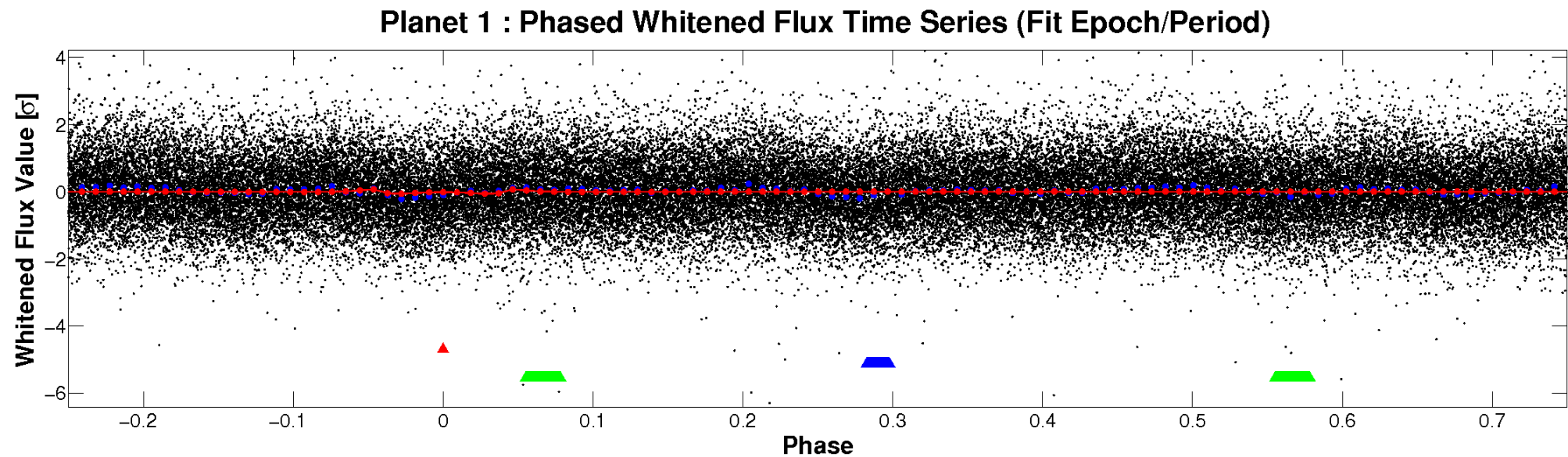
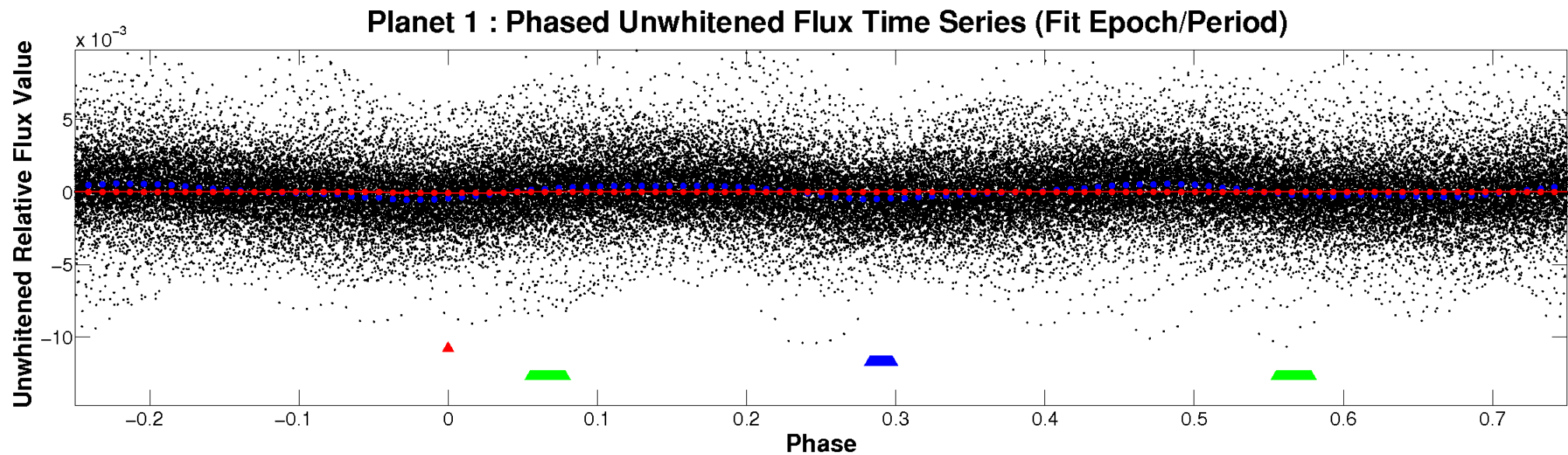


ALT Odd/Even

TCE 008779047-01

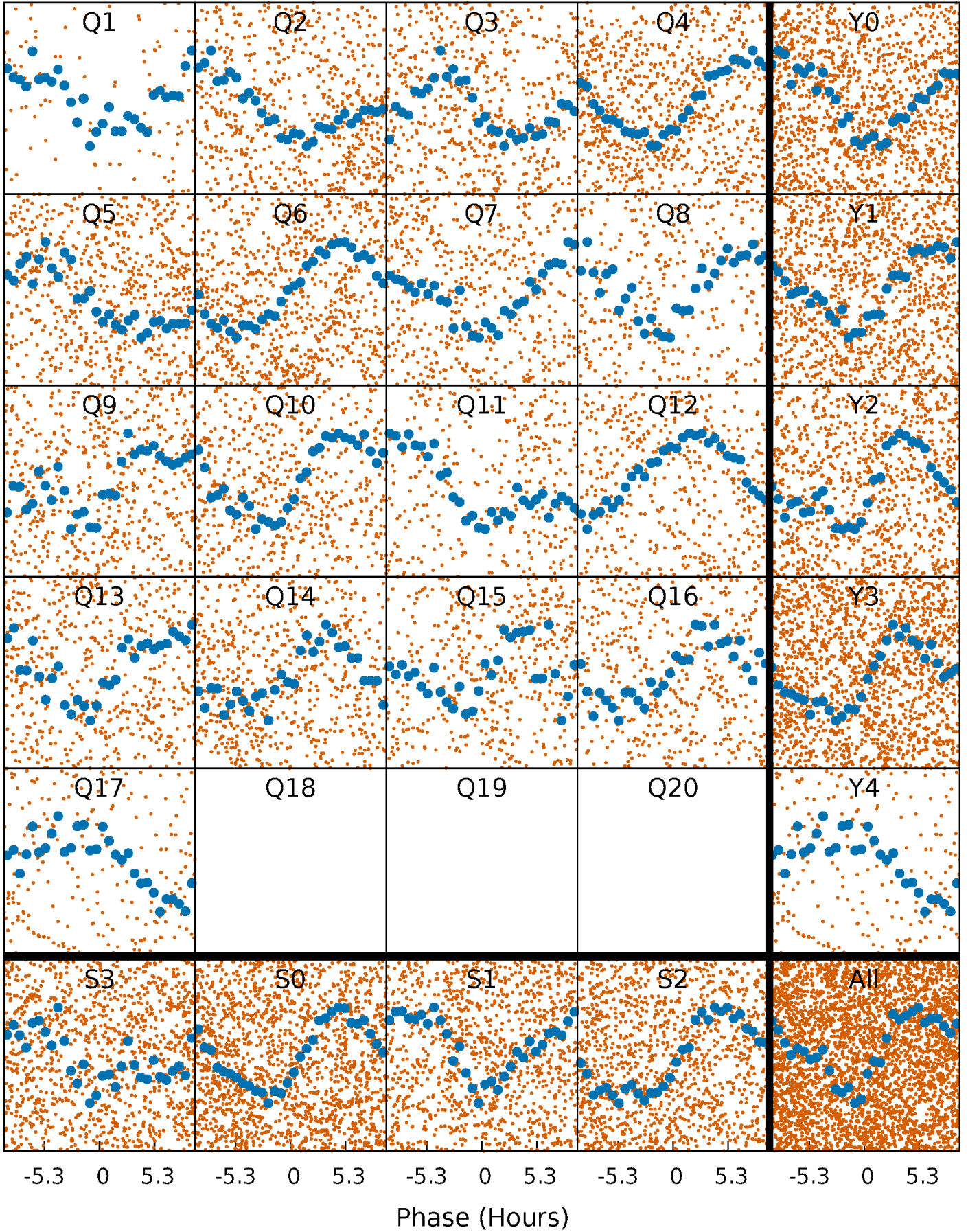


Non-Whitened Vs. Whitened Light Curve



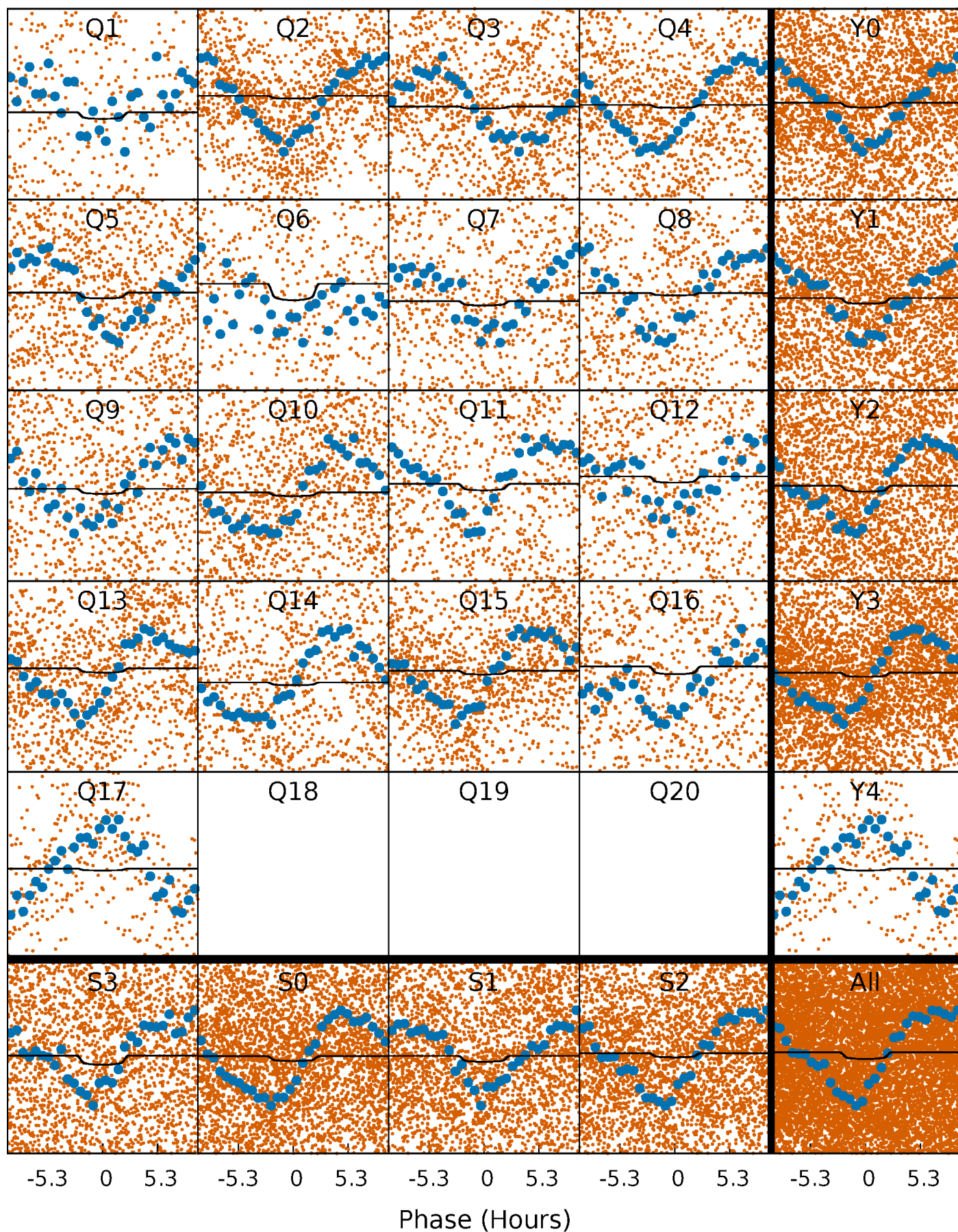
PDC Quarter-Phased Transit Curves

TCE 008779047-01 P= 2.204341 Days $T_0=131.589122$ (BKJD)



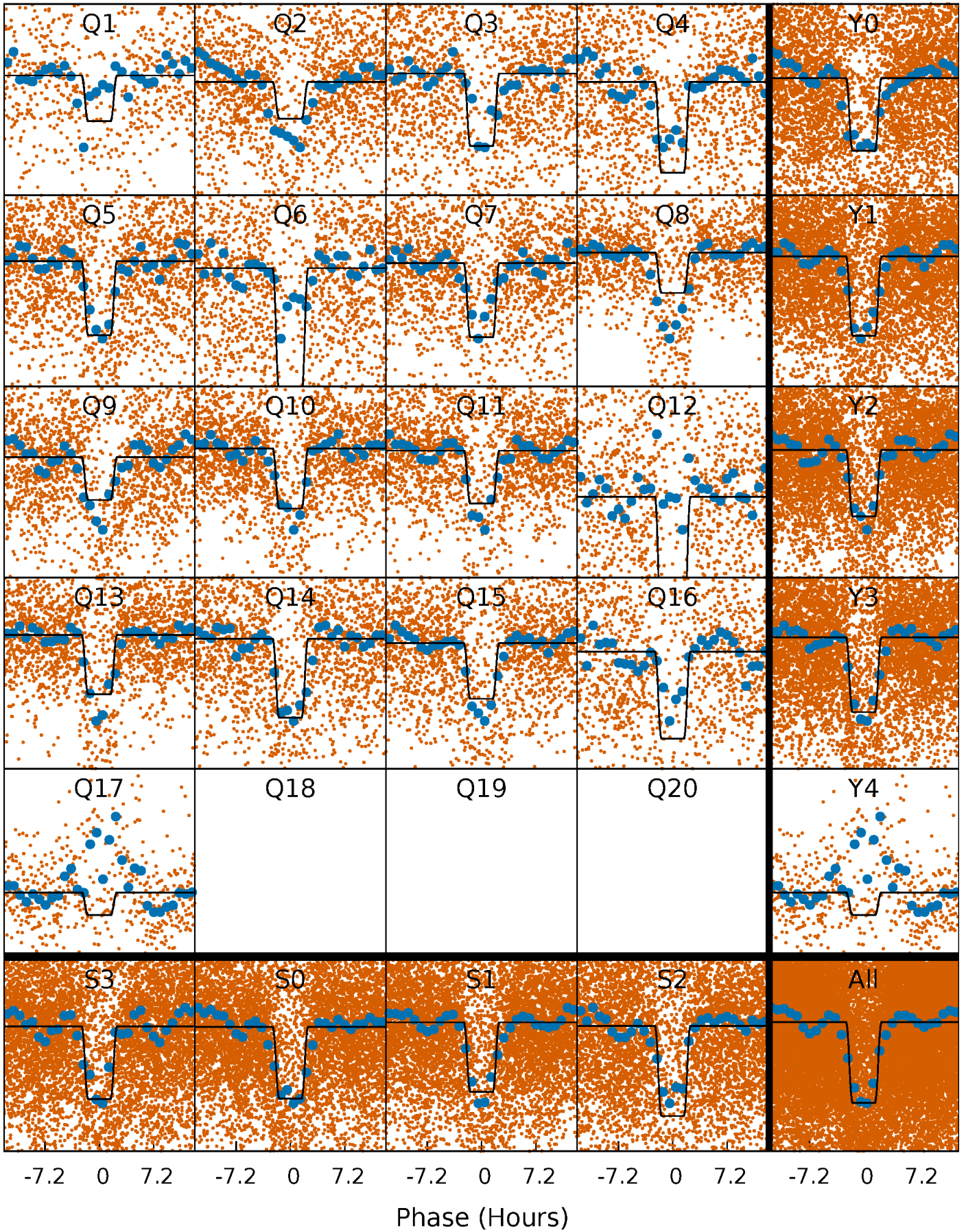
DV Quarter-Phased Transit Curves

TCE 008779047-01 P= 2.204341 Days $T_0=131.589122$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

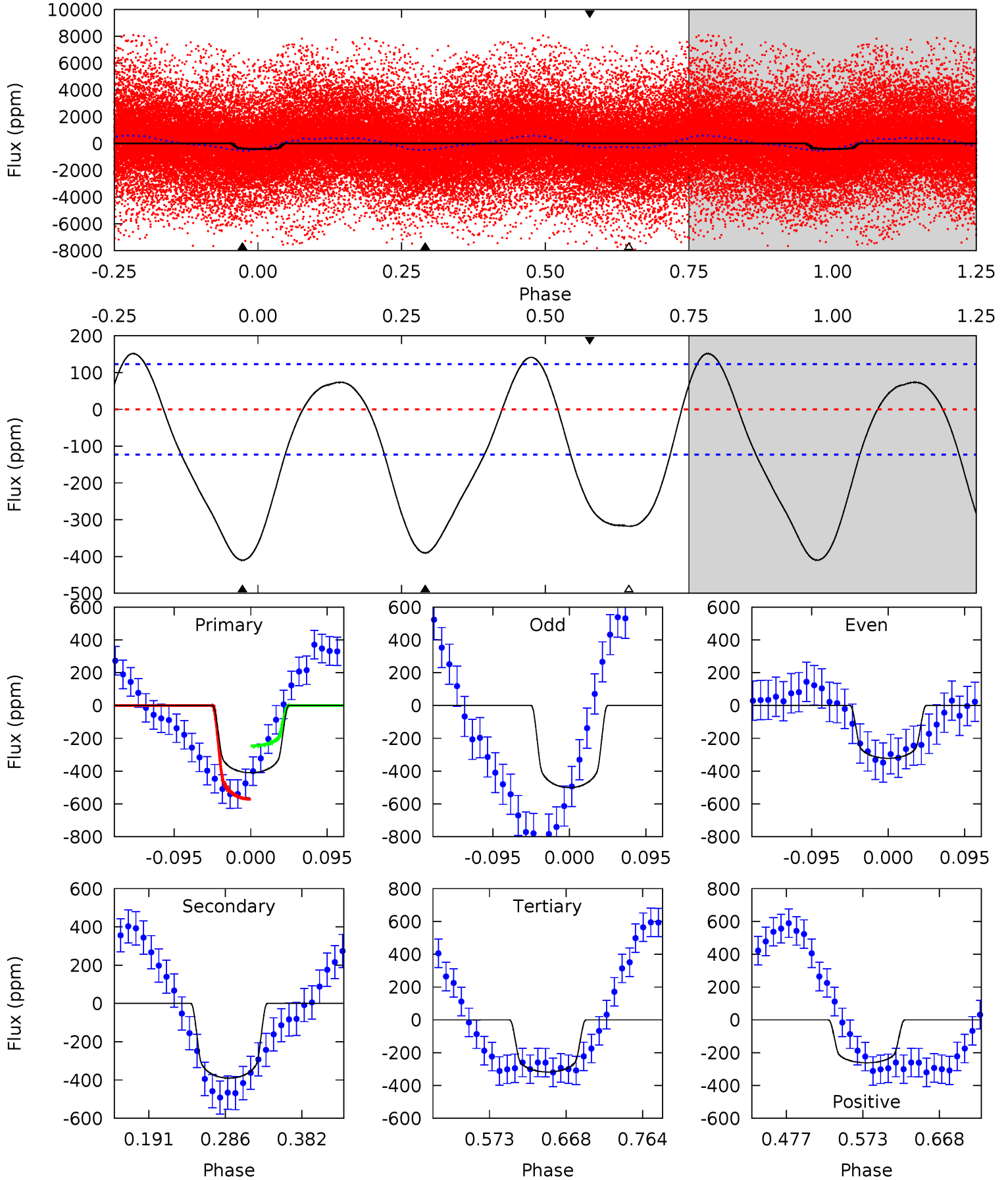
TCE 008779047-01 P= 2.204206 Days $T_0=131.602247$ (BKJD)



DV Model-Shift Uniqueness Test

008779047-01, P = 2.204341 Days, E = 129.384781 Days

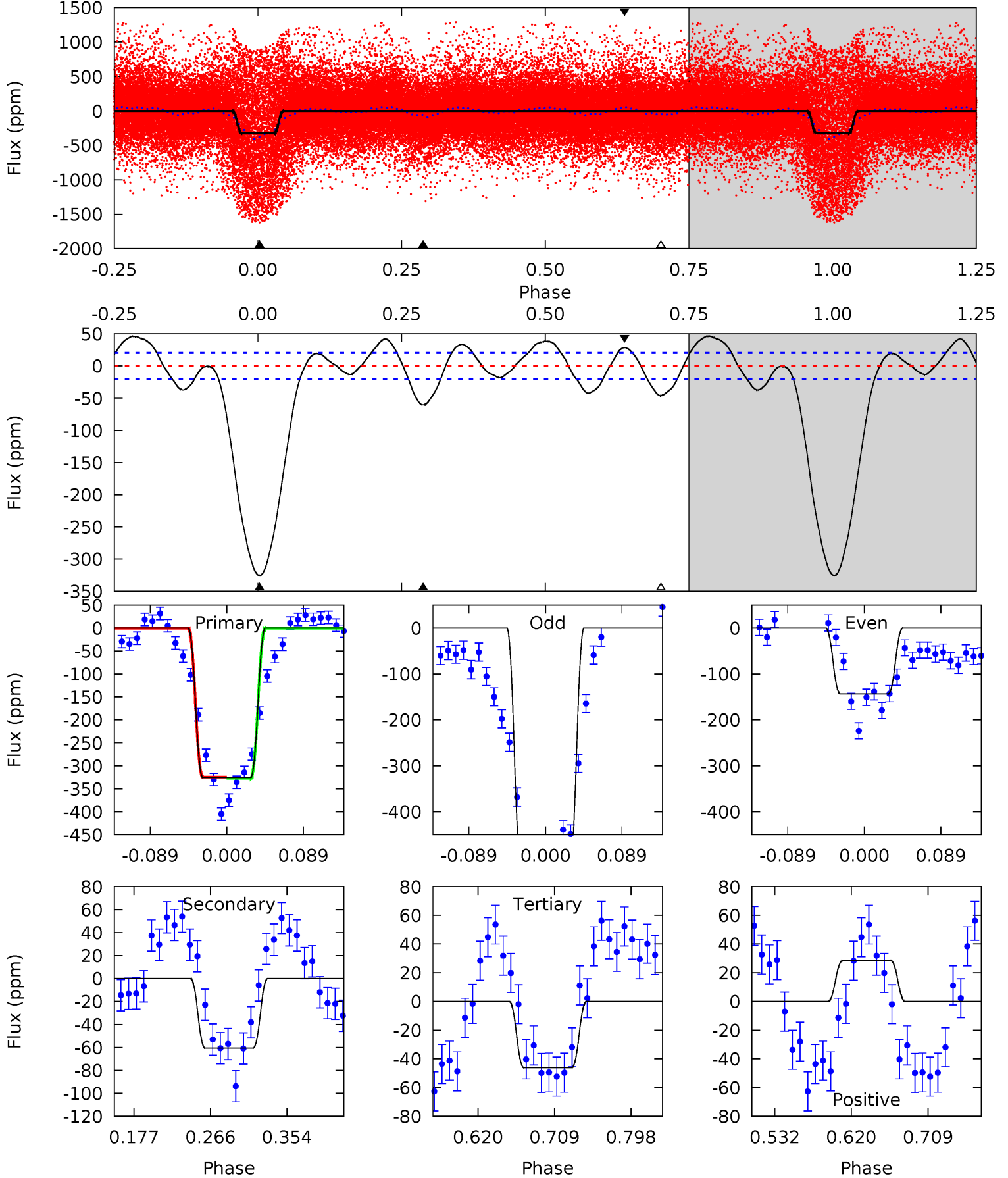
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	14.5	11.8	-9.73	4.57	1.67	5.70	3.44	25.0	2.70	24.2	3.32	1.19	0.27	6.08



Alt Model-Shift Uniqueness Test

008779047-01, P = 2.204206 Days, E = 129.398041 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
73.4	13.7	10.4	6.44	4.59	1.70	5.61	63.0	66.9	3.26	7.23	42.6	0.99	0.12	0.29



Stellar Parameters For KIC 008779047

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6324^{+181}_{-226}	$4.027^{+0.329}_{-0.141}$	$-0.160^{+0.250}_{-0.300}$	$1.742^{+0.503}_{-0.615}$	$1.176^{+0.189}_{-0.189}$	$0.313^{+0.741}_{-0.139}$
	+3%/-4%	+8%/-4%	+156%/-188%	+29%/-35%	+16%/-16%	+237%/-44%
Source	PHO1	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 008779047-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-390 ± 27	$1.66^{+0.56}_{-0.47}$	2702^{+221}_{-279}	10052^{+2594}_{-1573}	96^{+94}_{-44}
Alt.	-61 ± 4	$3.35^{+0.80}_{-0.70}$	2690^{+212}_{-237}	4271^{+272}_{-256}	$3.663^{+2.304}_{-1.223}$

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

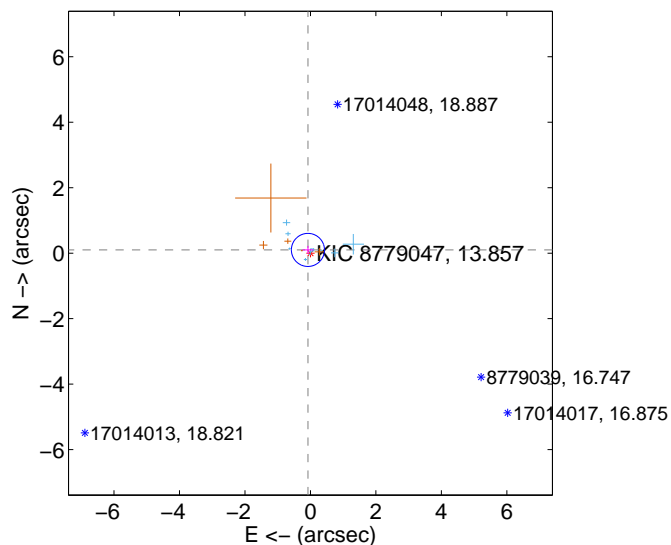
Supplemental centroid analysis for 008779047-01. Kepler magnitude: 13.86. Transit SNR 4.35

There are 12 quarters with good PRF difference image offsets

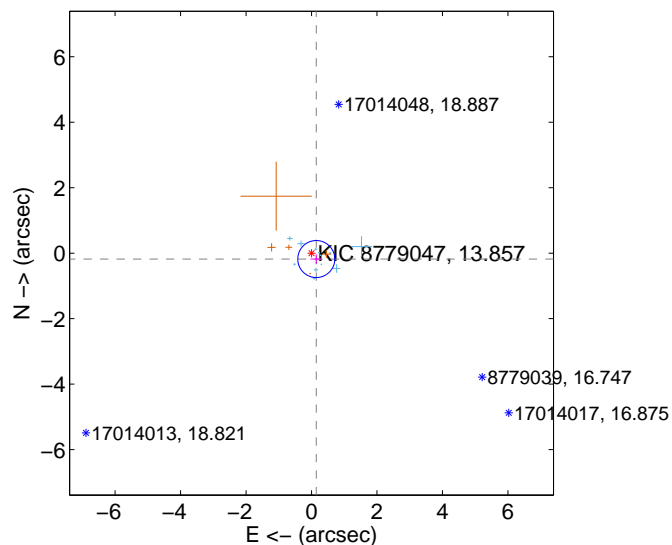
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.125 ± 0.168	0.74	0.077 ± 0.168	0.099 ± 0.122
PRF-fit source offset from KIC position	0.231 ± 0.188	1.23	-0.146 ± 0.179	-0.179 ± 0.147
photometric centroid source offset	3.18 ± 0.99	3.20	-0.30 ± 0.76	3.16 ± 1.00

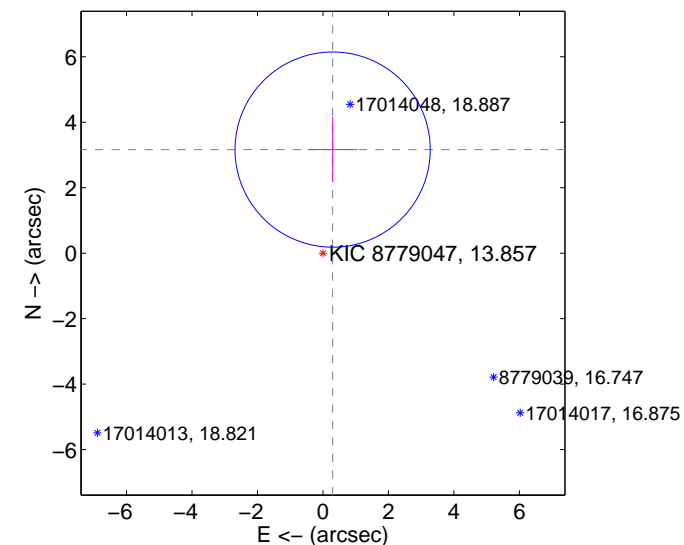
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

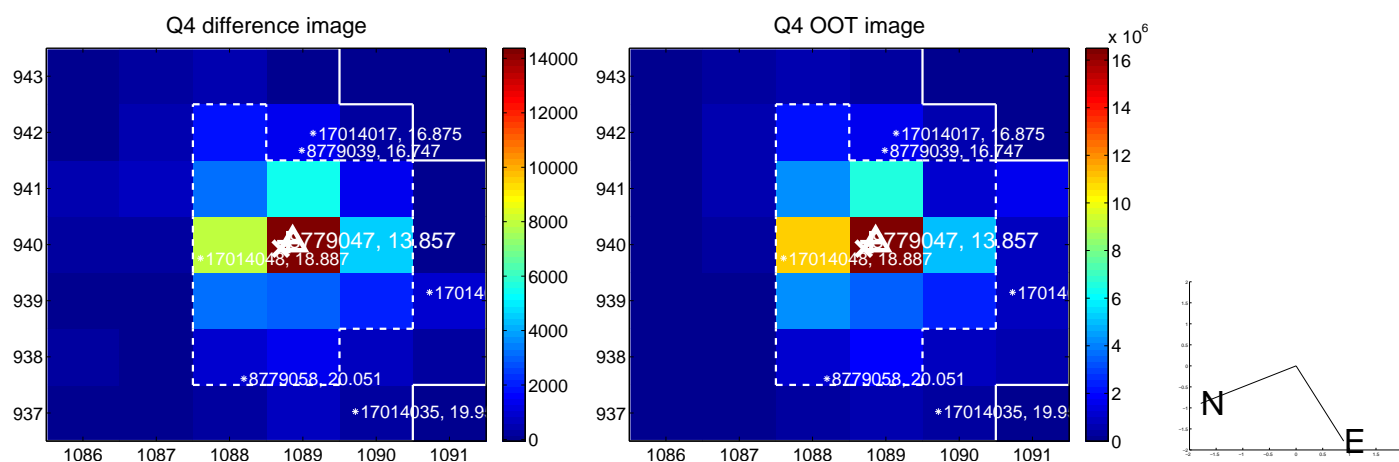
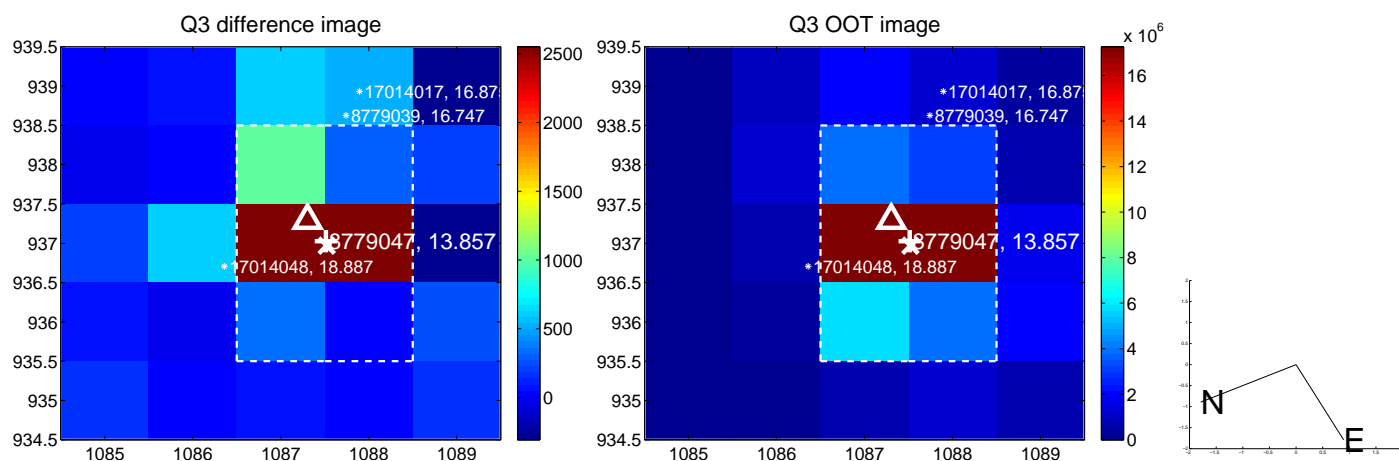
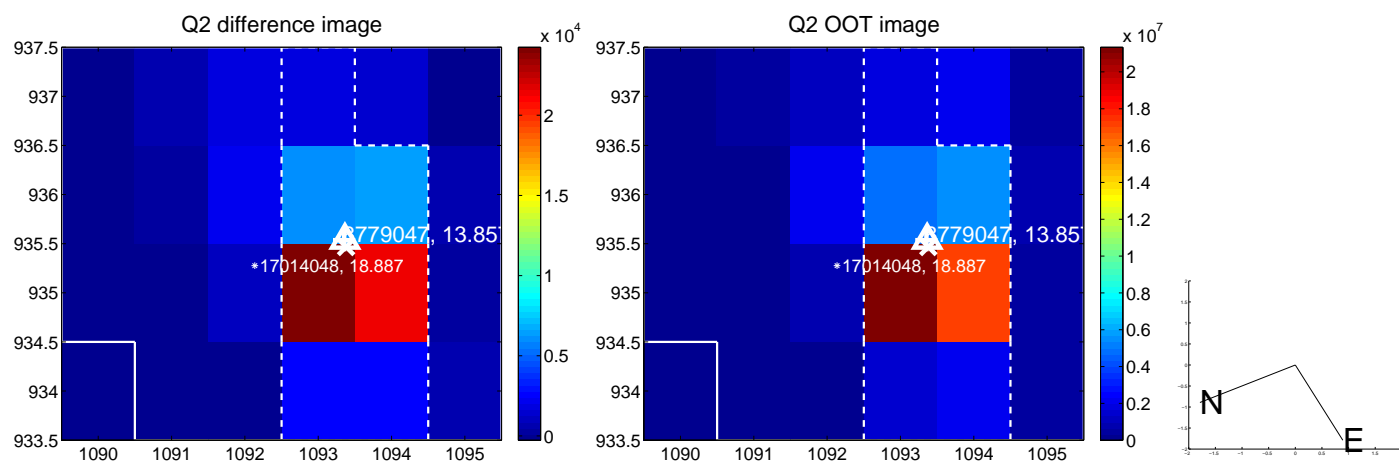
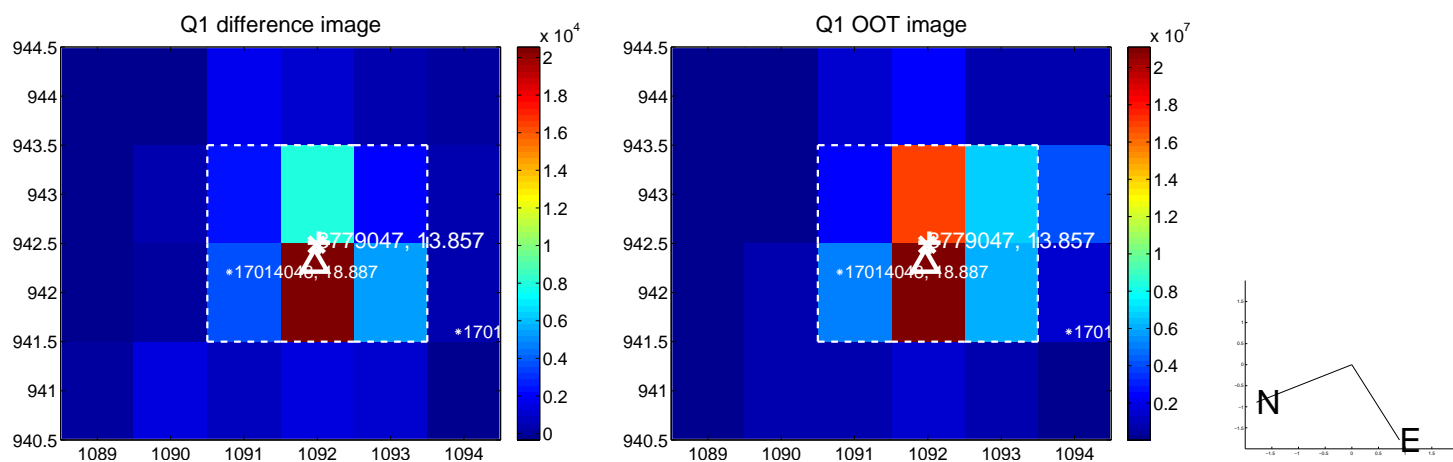


offset from photometric centroids

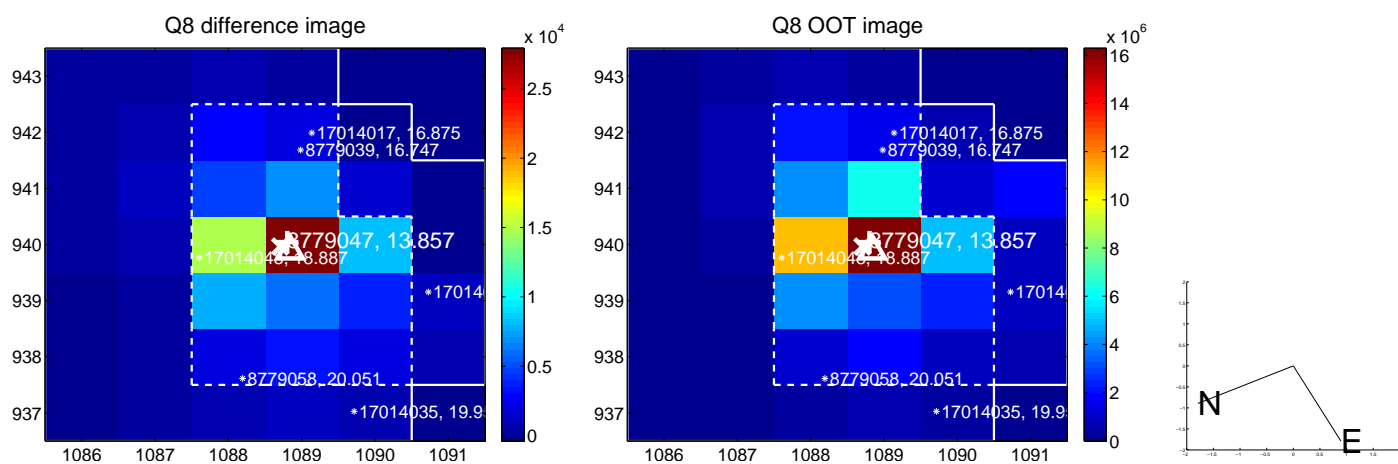
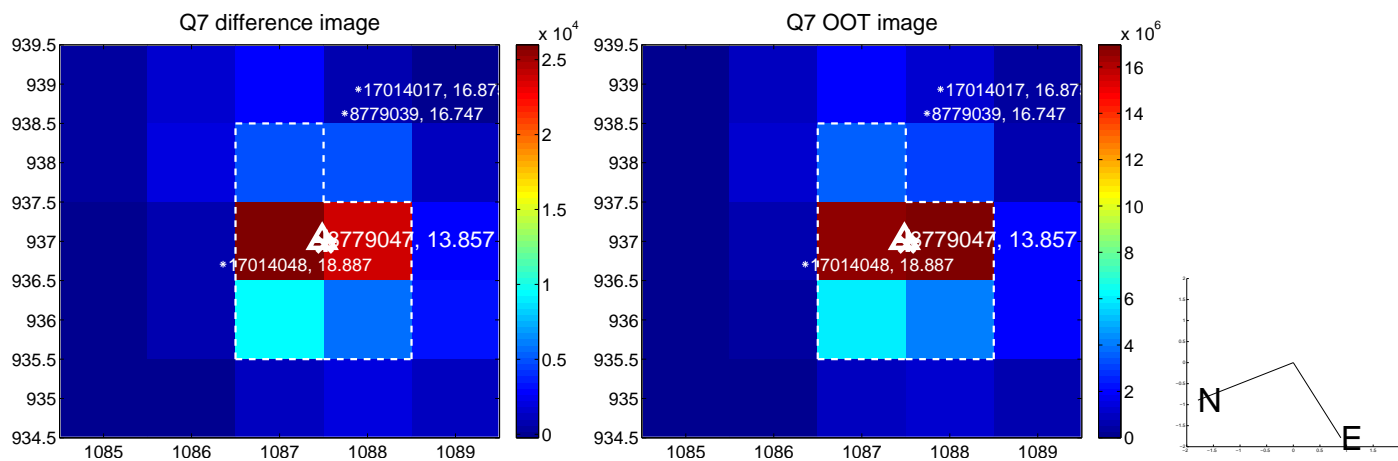
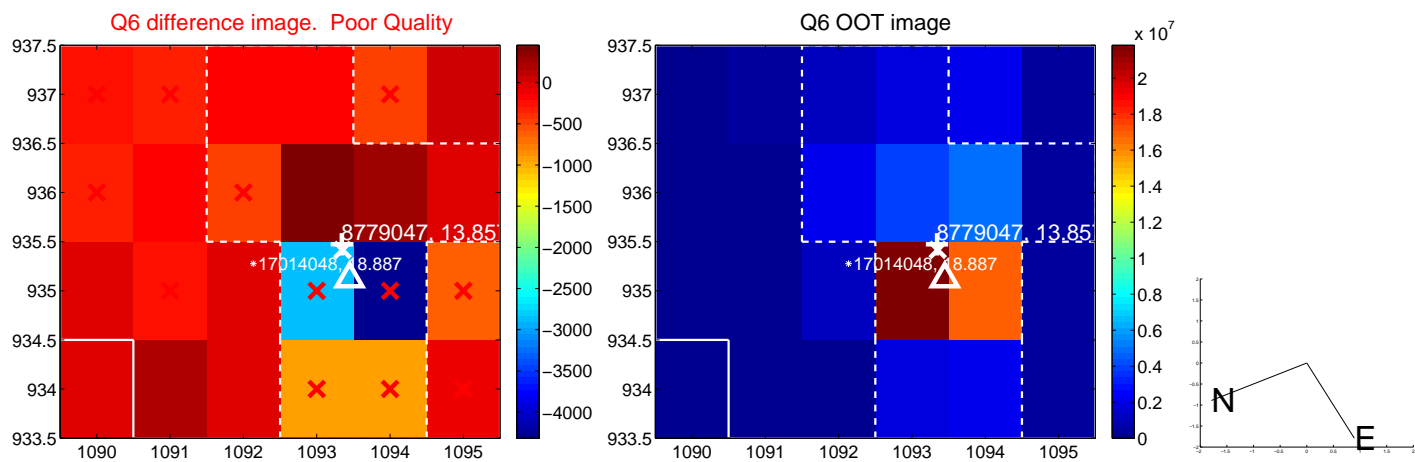
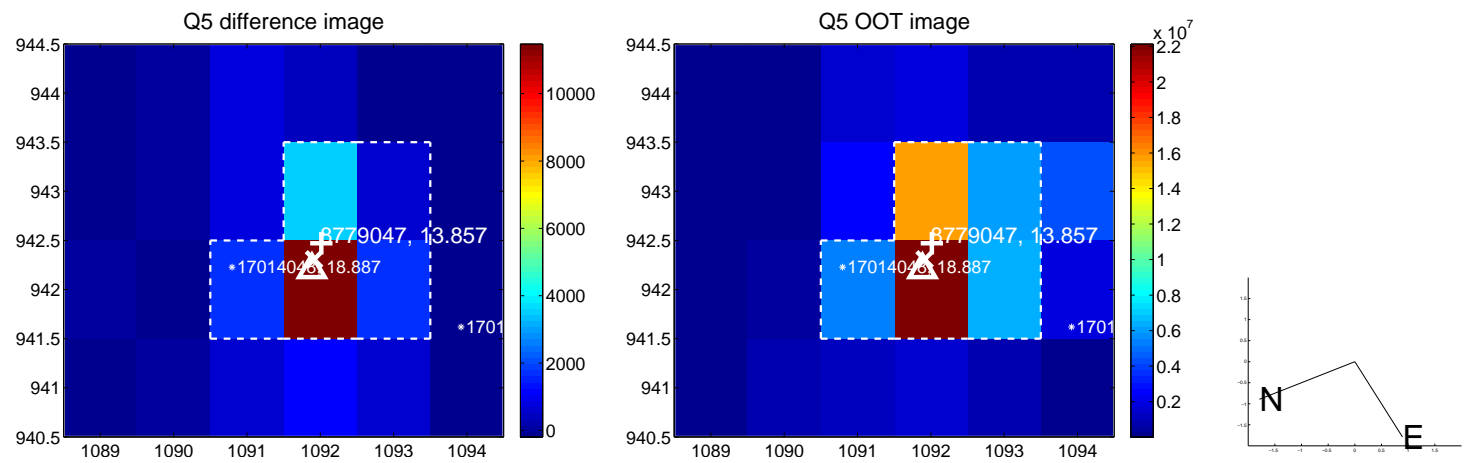


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

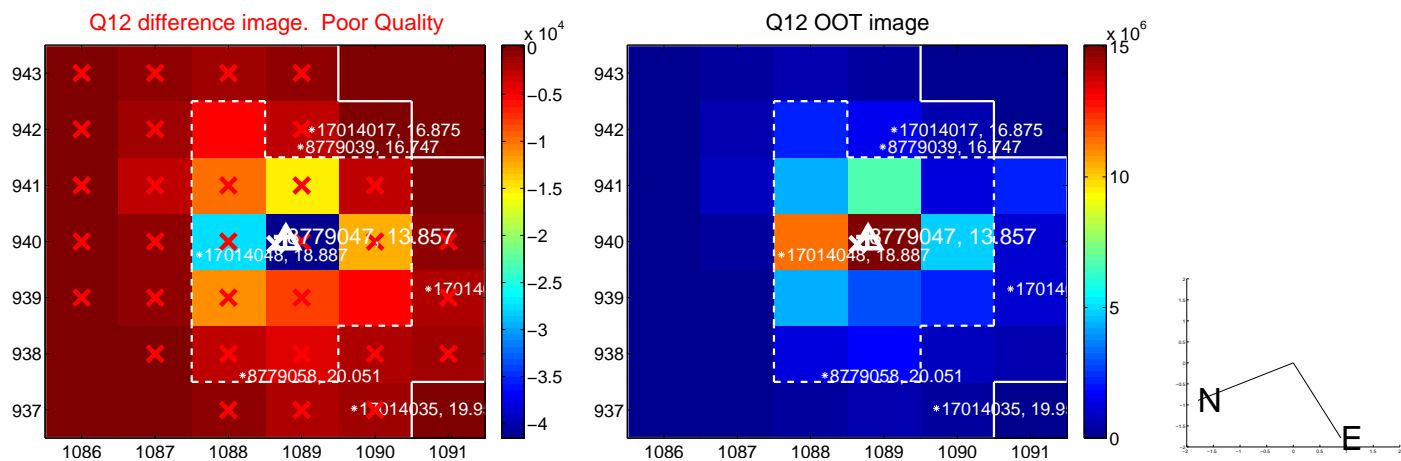
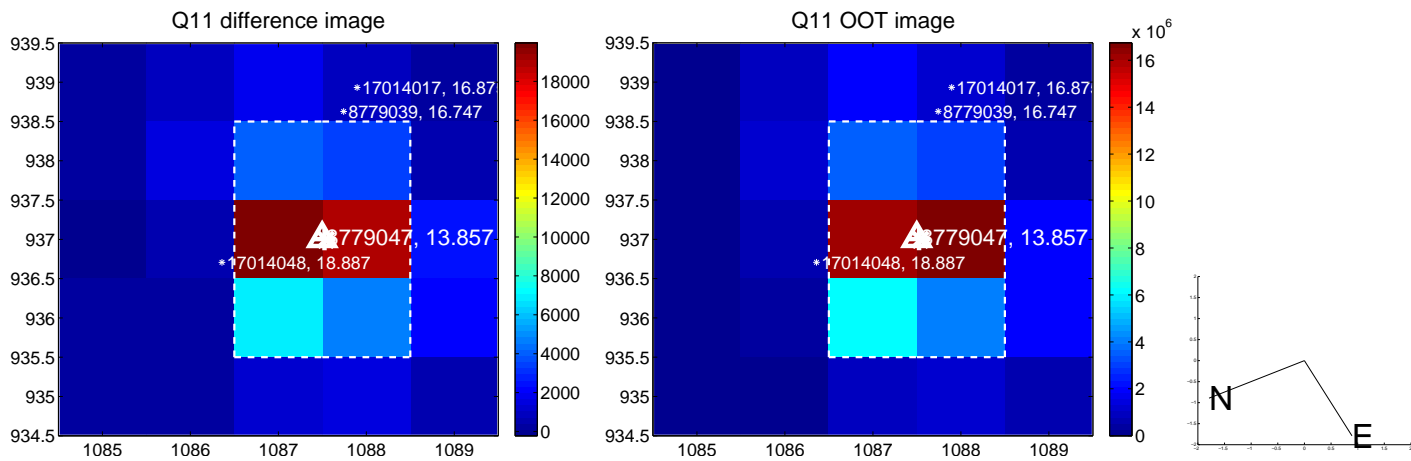
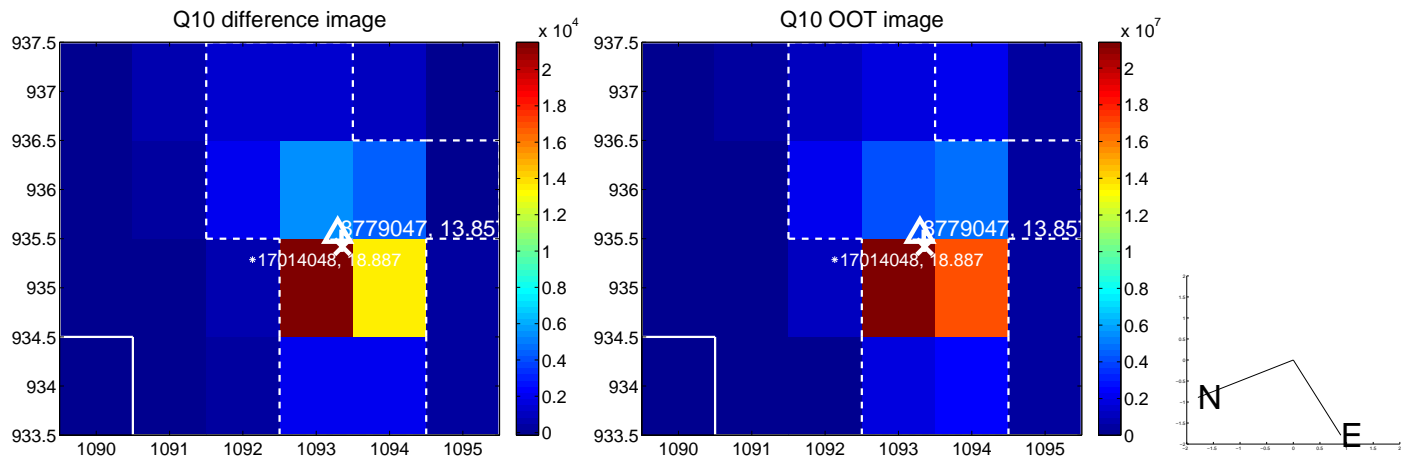
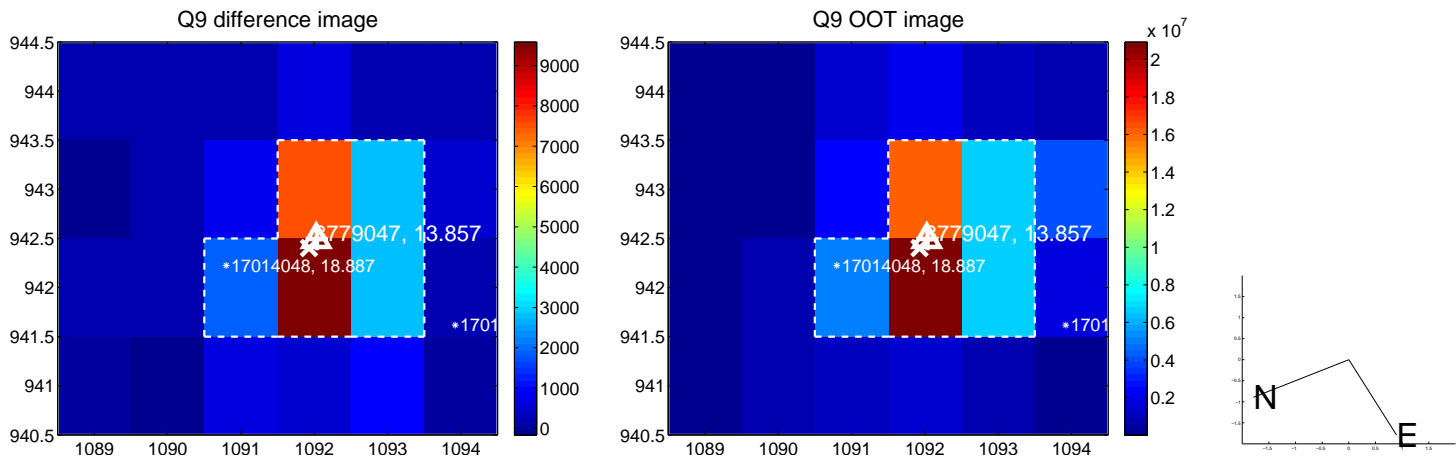
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



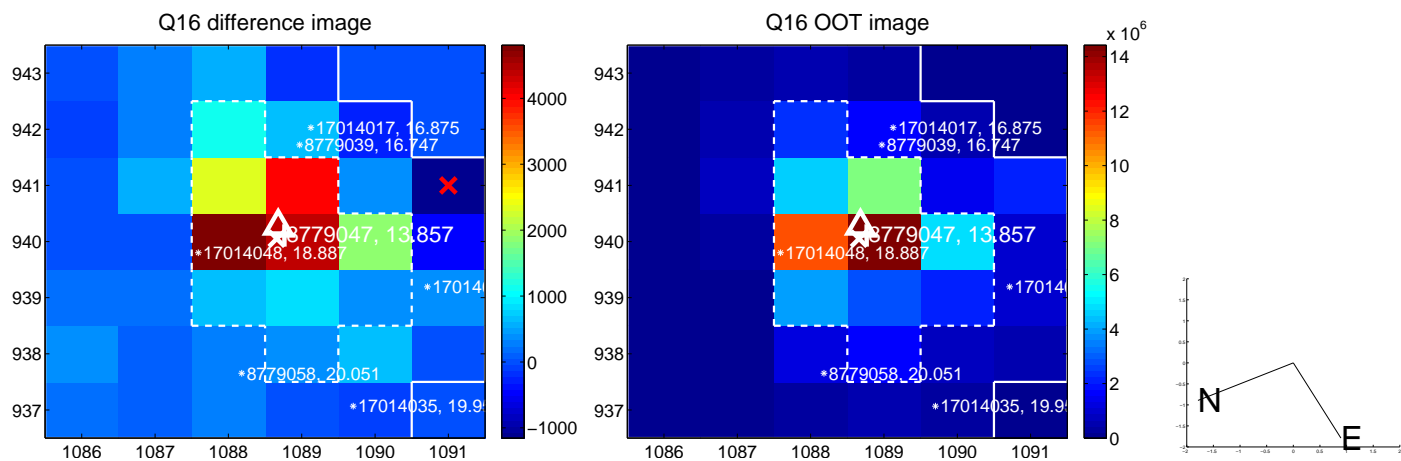
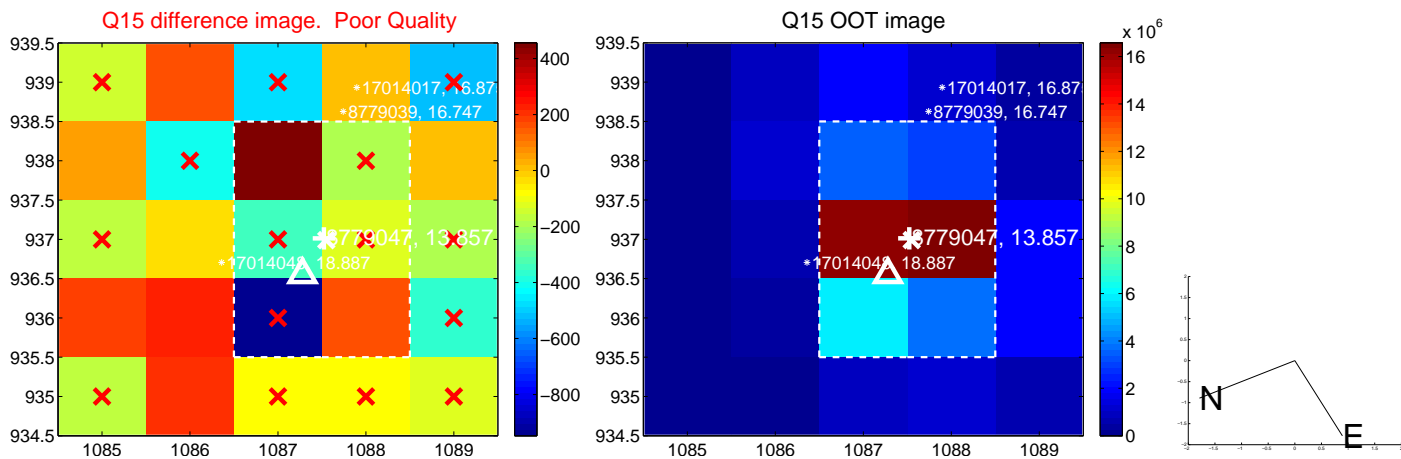
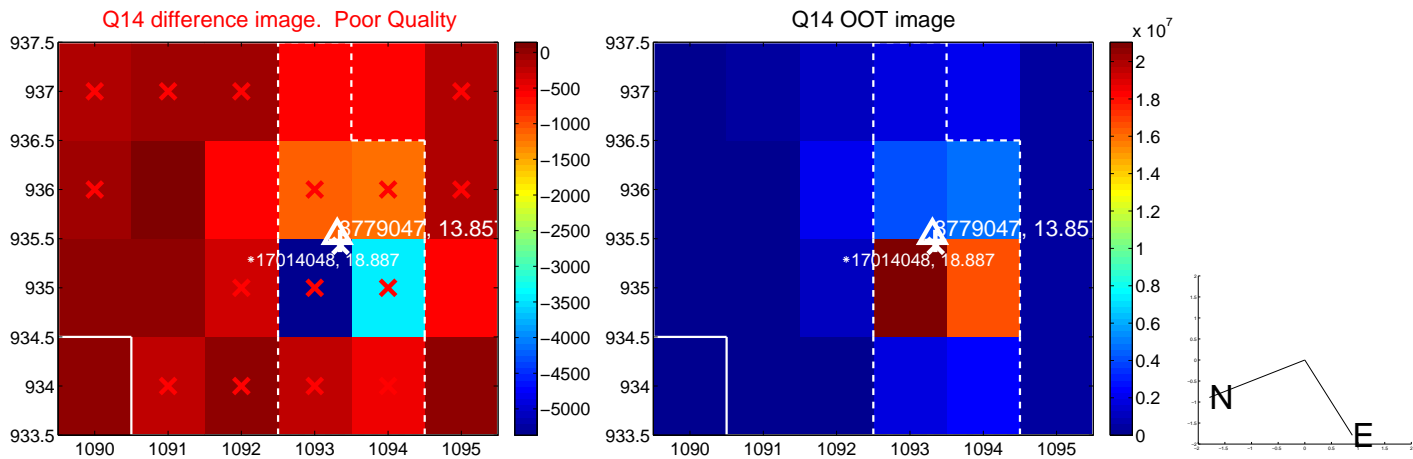
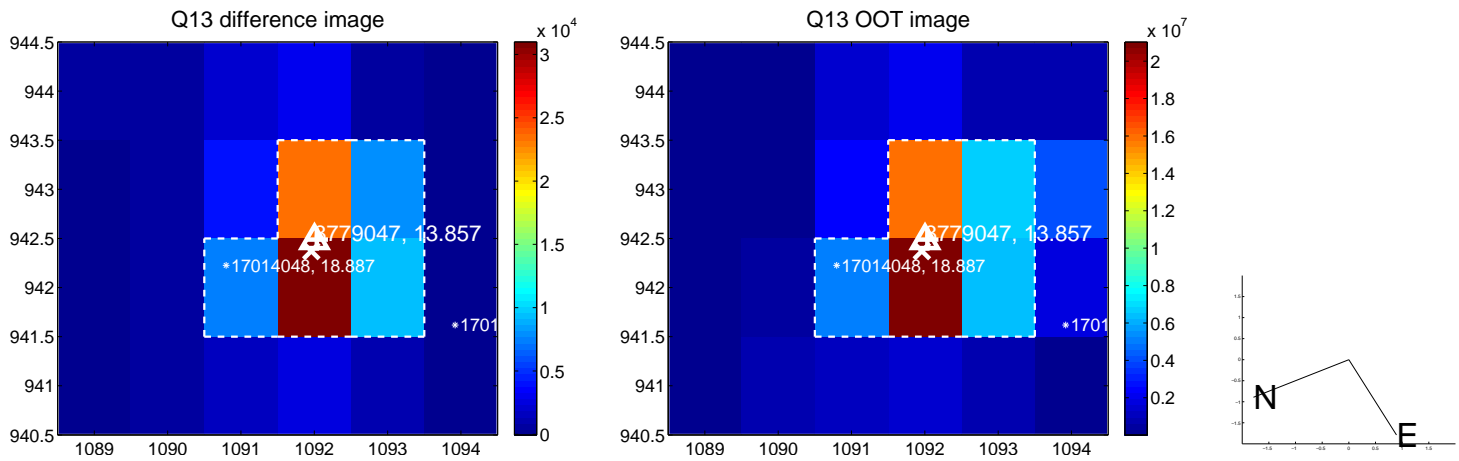
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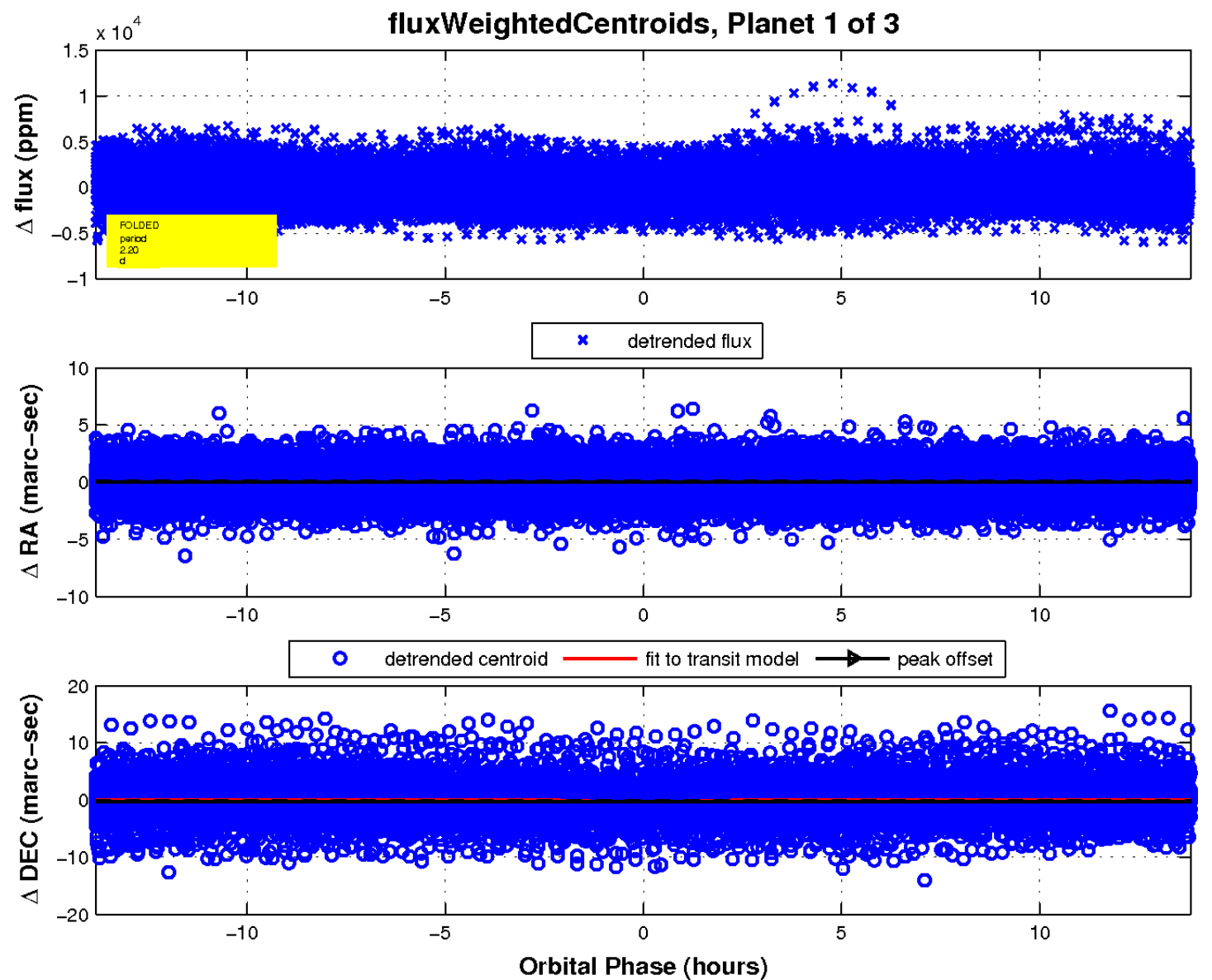
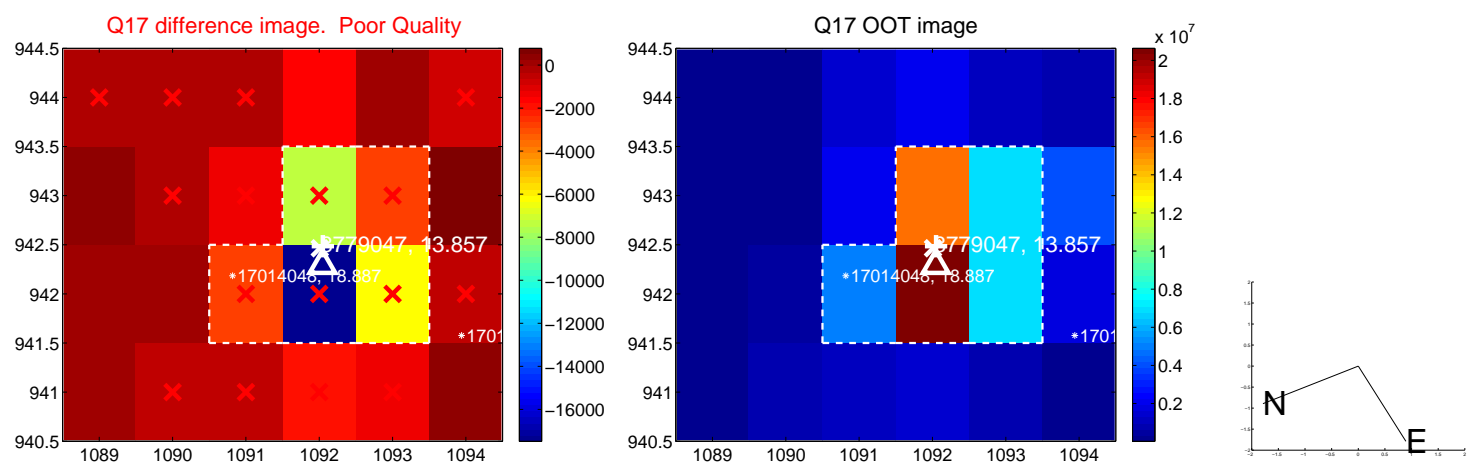
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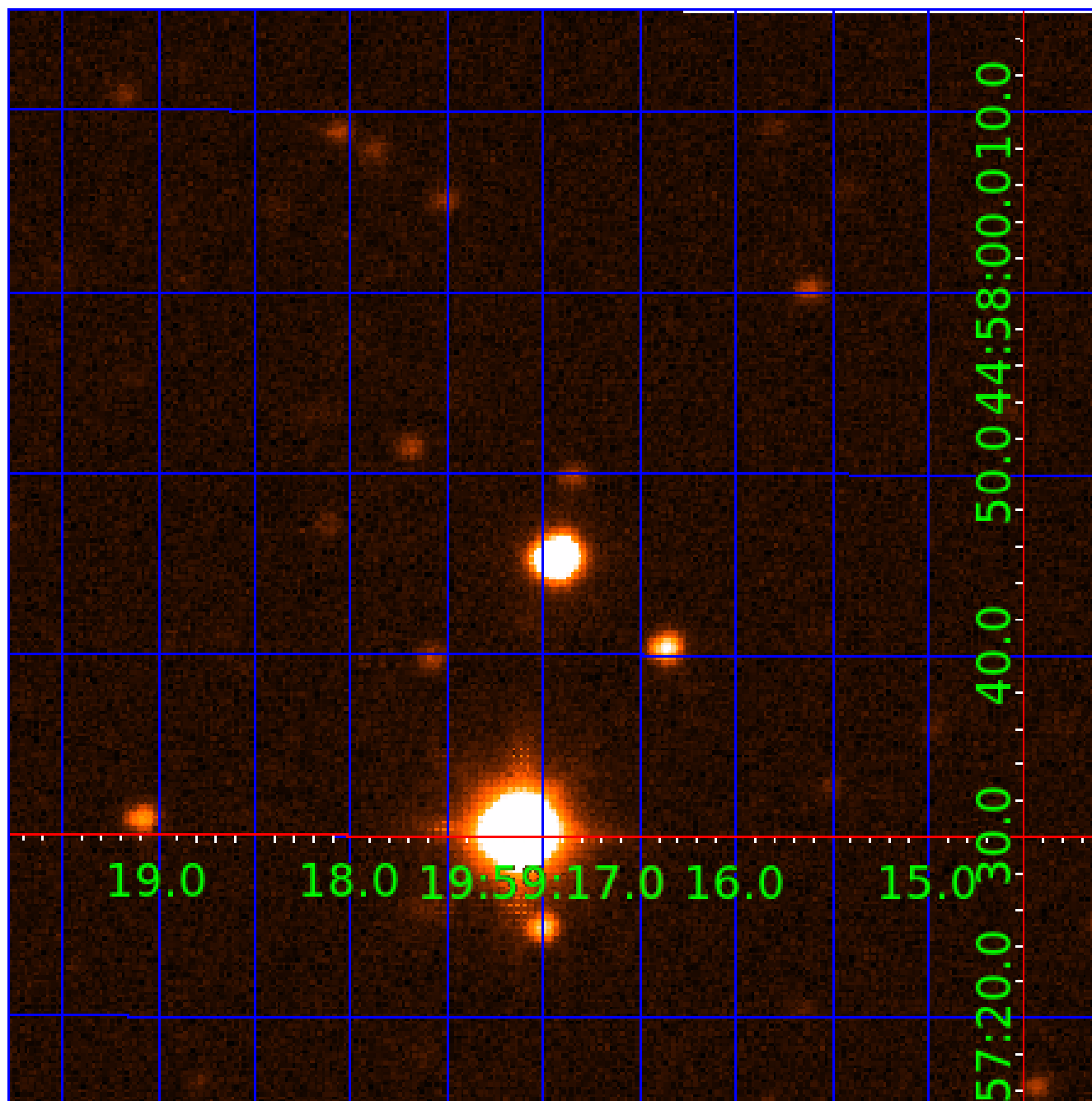


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UKIRT Image

Declination



KIC 008779047

Q1-17 DR25 TCE Parameters

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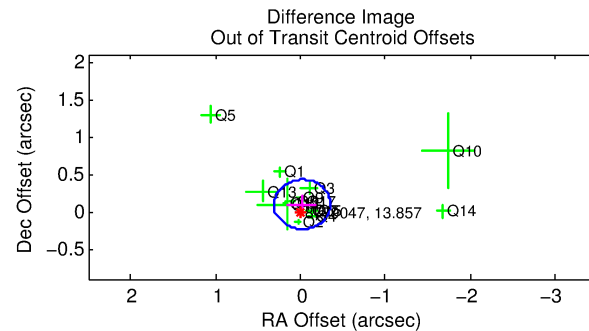
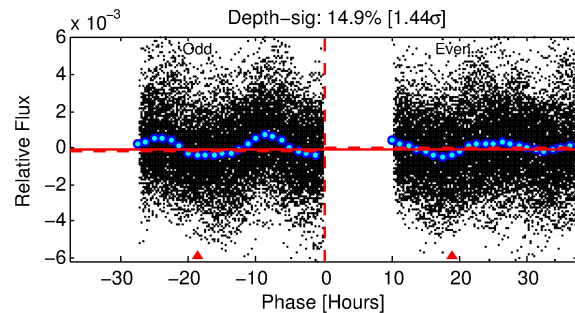
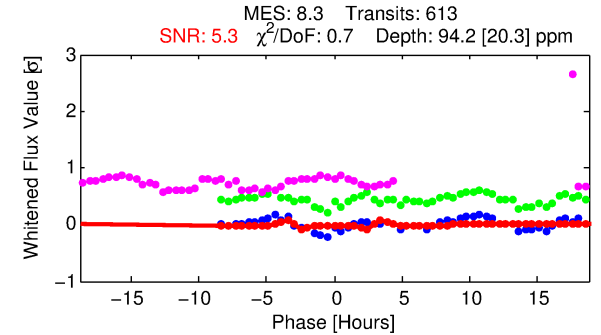
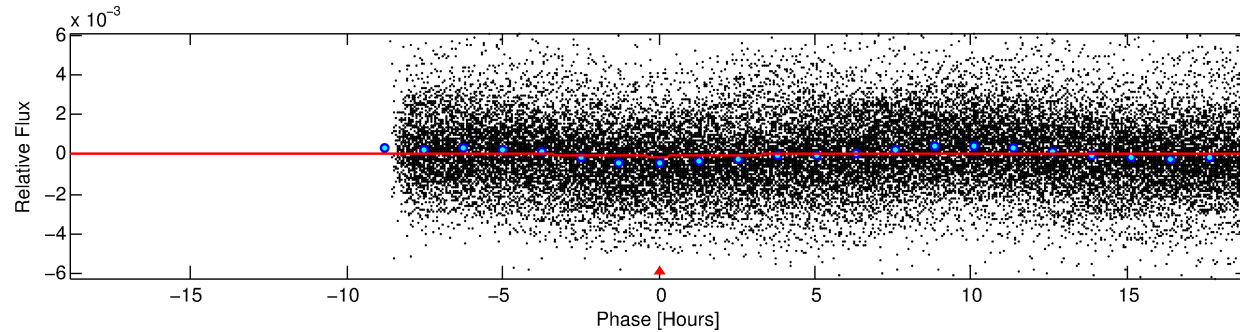
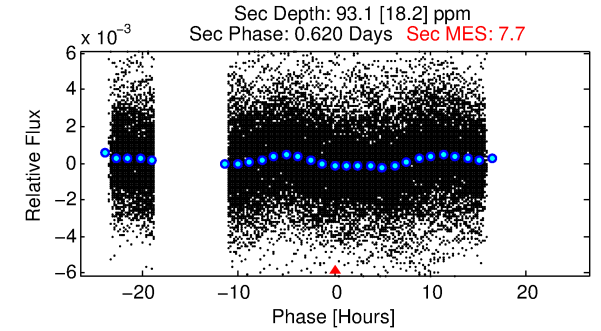
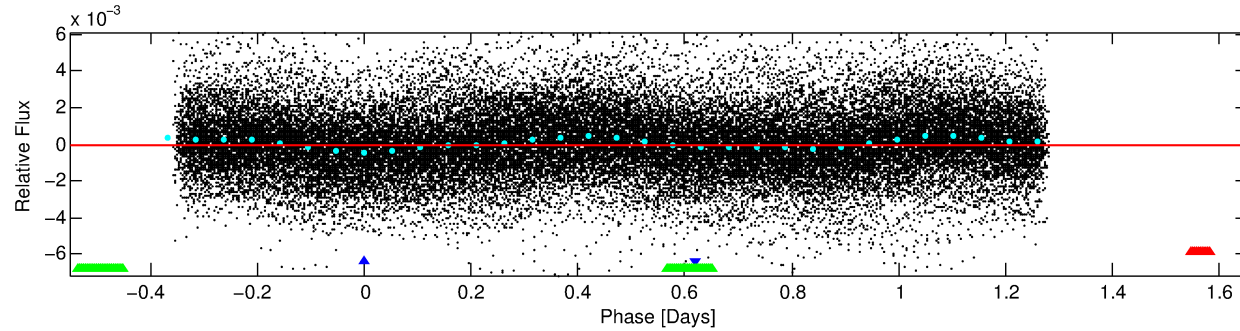
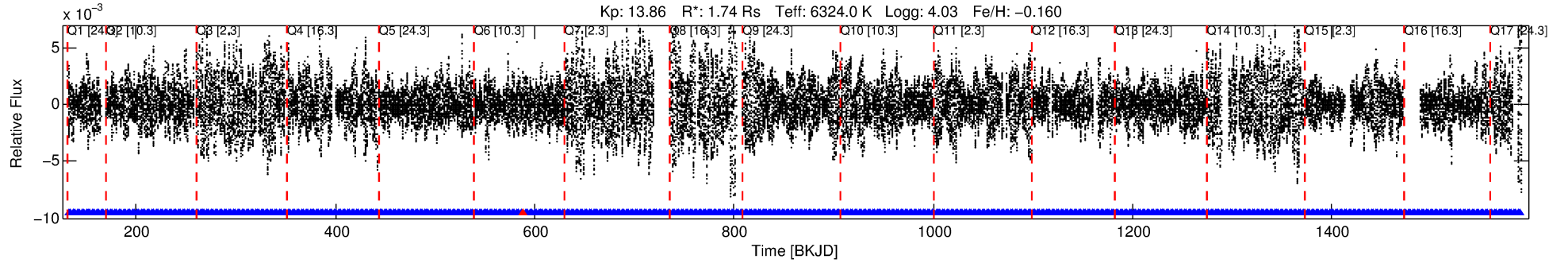
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008779047-02

No Significant Match Found

DV One-Page Summary

KIC: 8779047 Candidate: 2 of 3 Period: 2.204 d



DV Fit Results:

Period = 2.20439 [0.00002] d
Epoch = 132.2124 [0.0031] BKJD
Rp/R* = 0.0104 [0.0020]
a/R* = 1.56 [0.69]
b = 0.90 [0.16]
Seff = 3546.85 [2040.25]
Teq = 1968 [283] K
Rp = 1.97 [0.79] Re
a = 0.0350 [0.0121] AU
Ag = 16.10 [11.27] [1.34σ]
Teffp = 6095 [681] K [5.59σ]

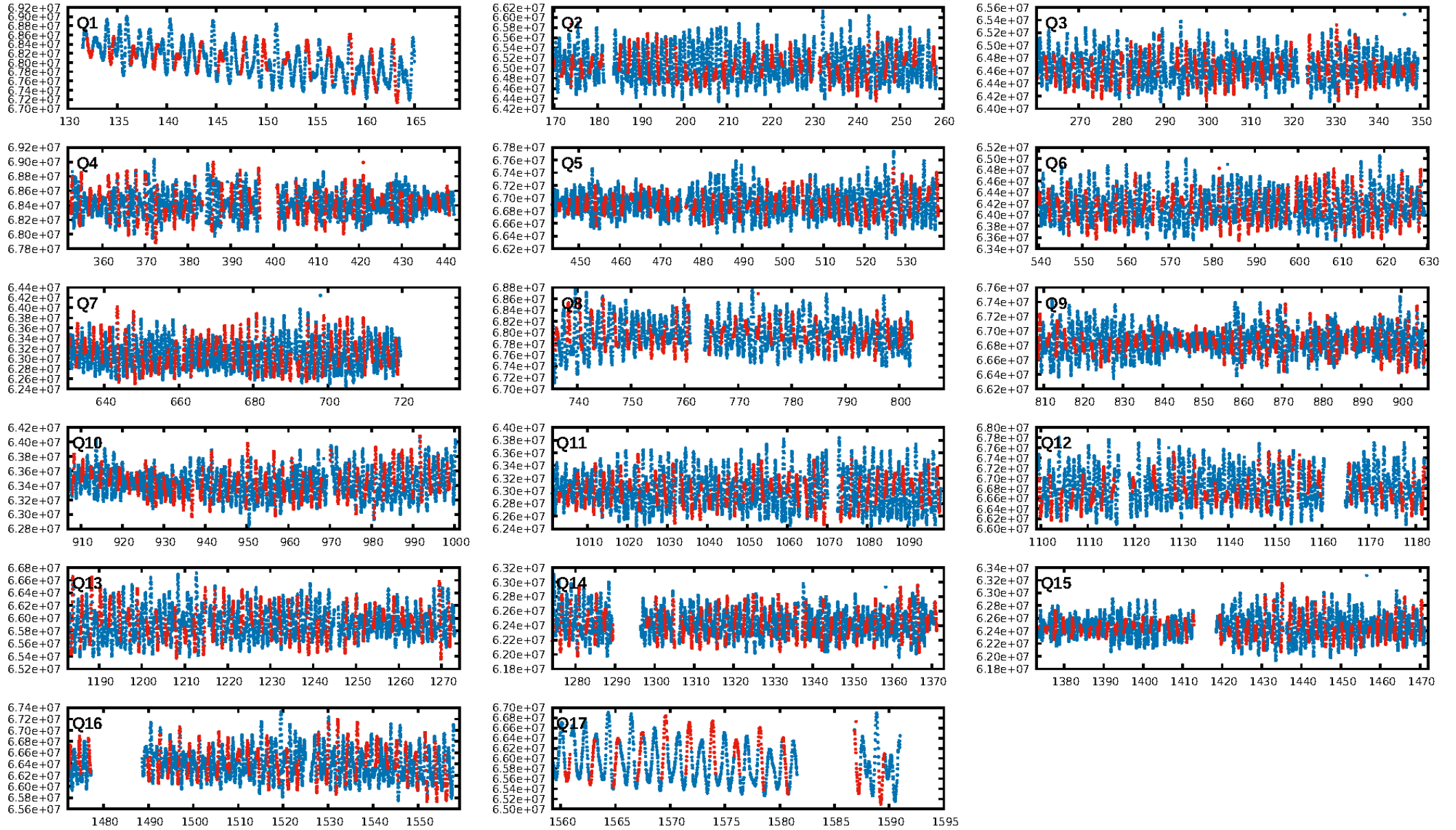
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.36e-20
RollingBand-fgt: 1.00 [585/586]
GhostDiagnostic-chr: 0.7737
Centroid-sig: 1.9%
Centroid-so: 0.465 arcsec [0.71σ]
OotOffset-rm: 0.099 arcsec [0.90σ]
KicOffset-rm: 0.164 arcsec [1.23σ]
OotOffset-st: 4/4/3/5 [16]
KicOffset-st: 4/4/3/5 [16]
DiffImageQuality-fgm: 0.62 [10/16]
DiffImageOverlap-fno: 0.00 [0/17]

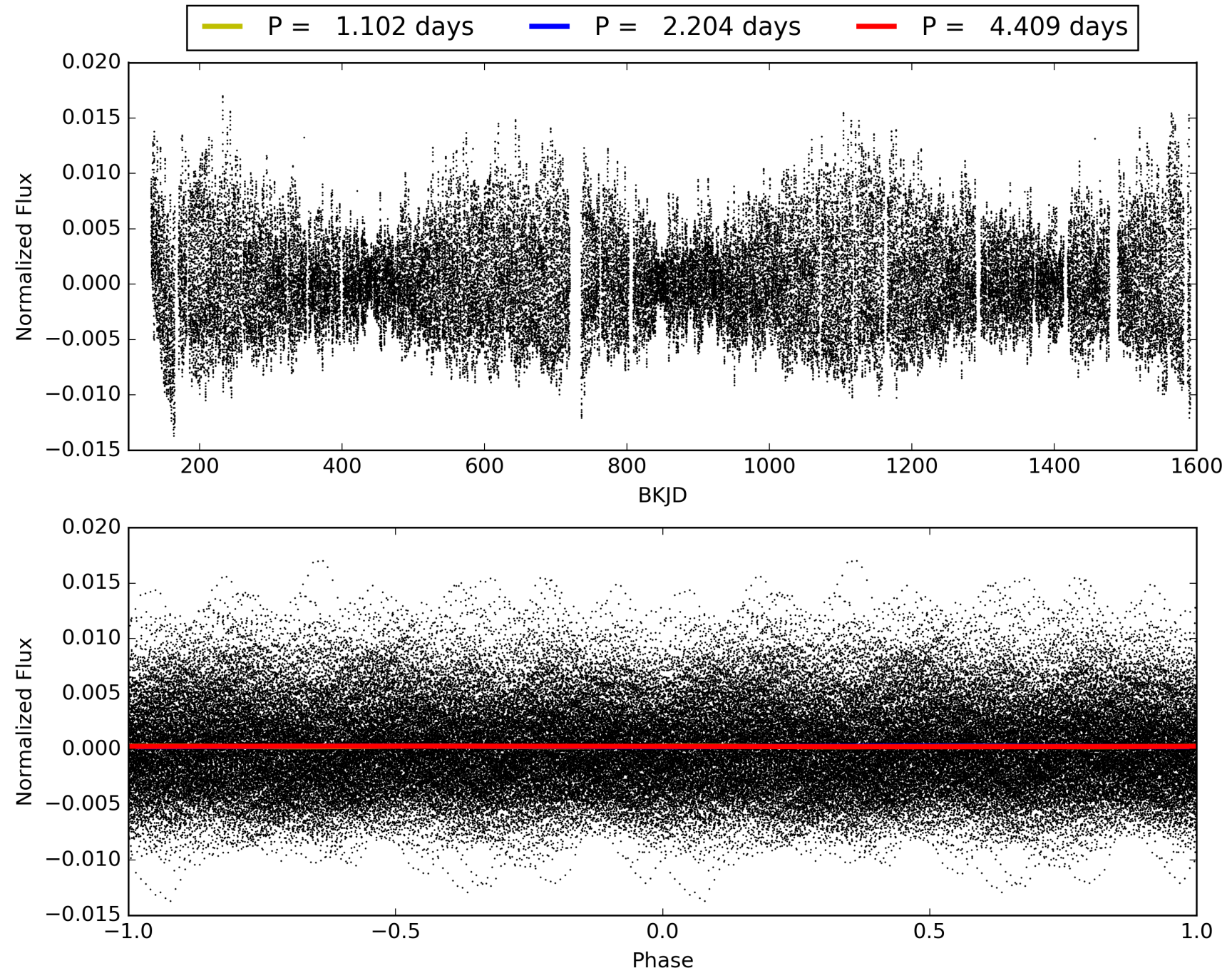
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:23:22 Z

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

TCE 008779047-02, PDC Light Curves

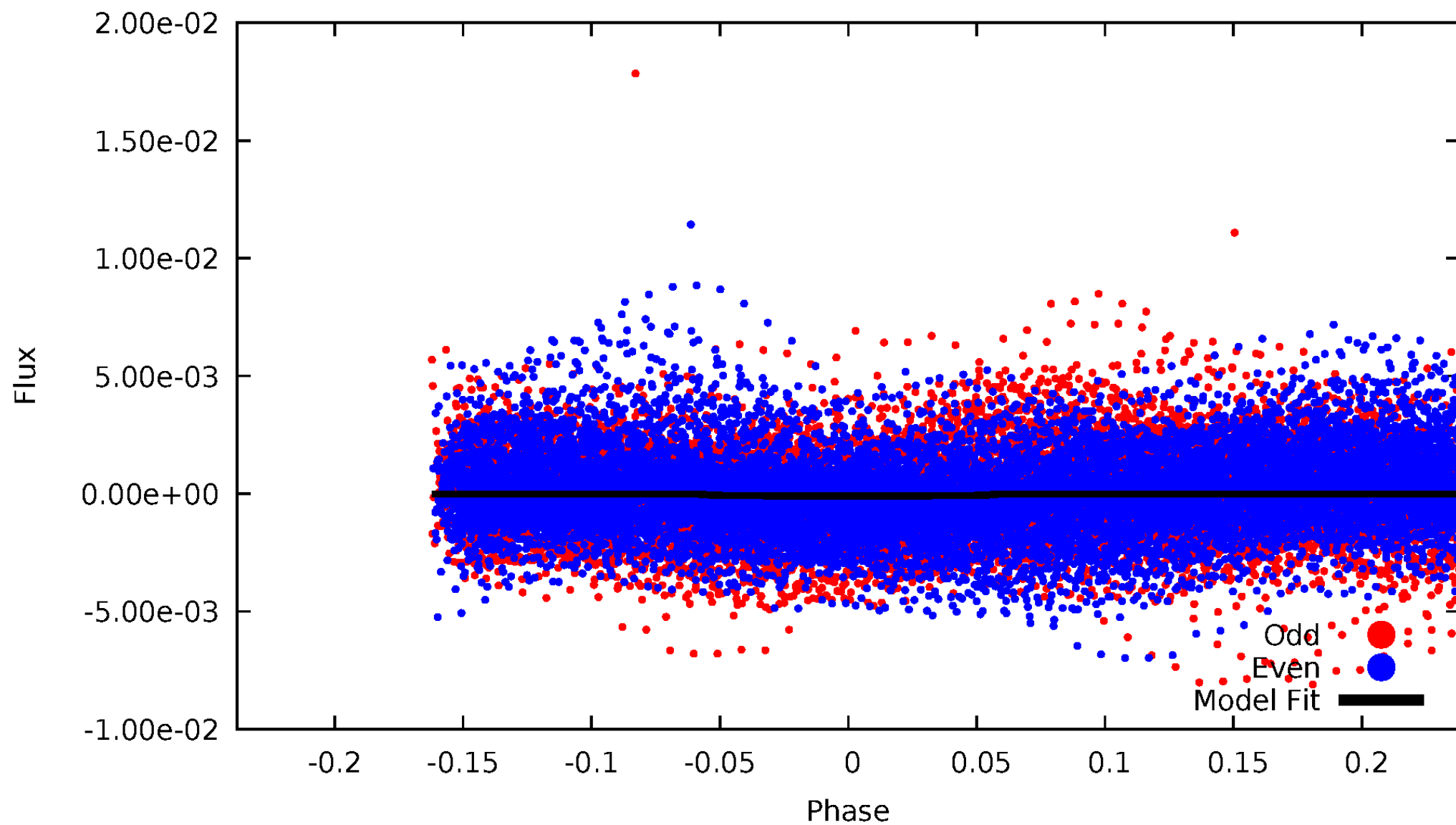


TCE 008779047-02



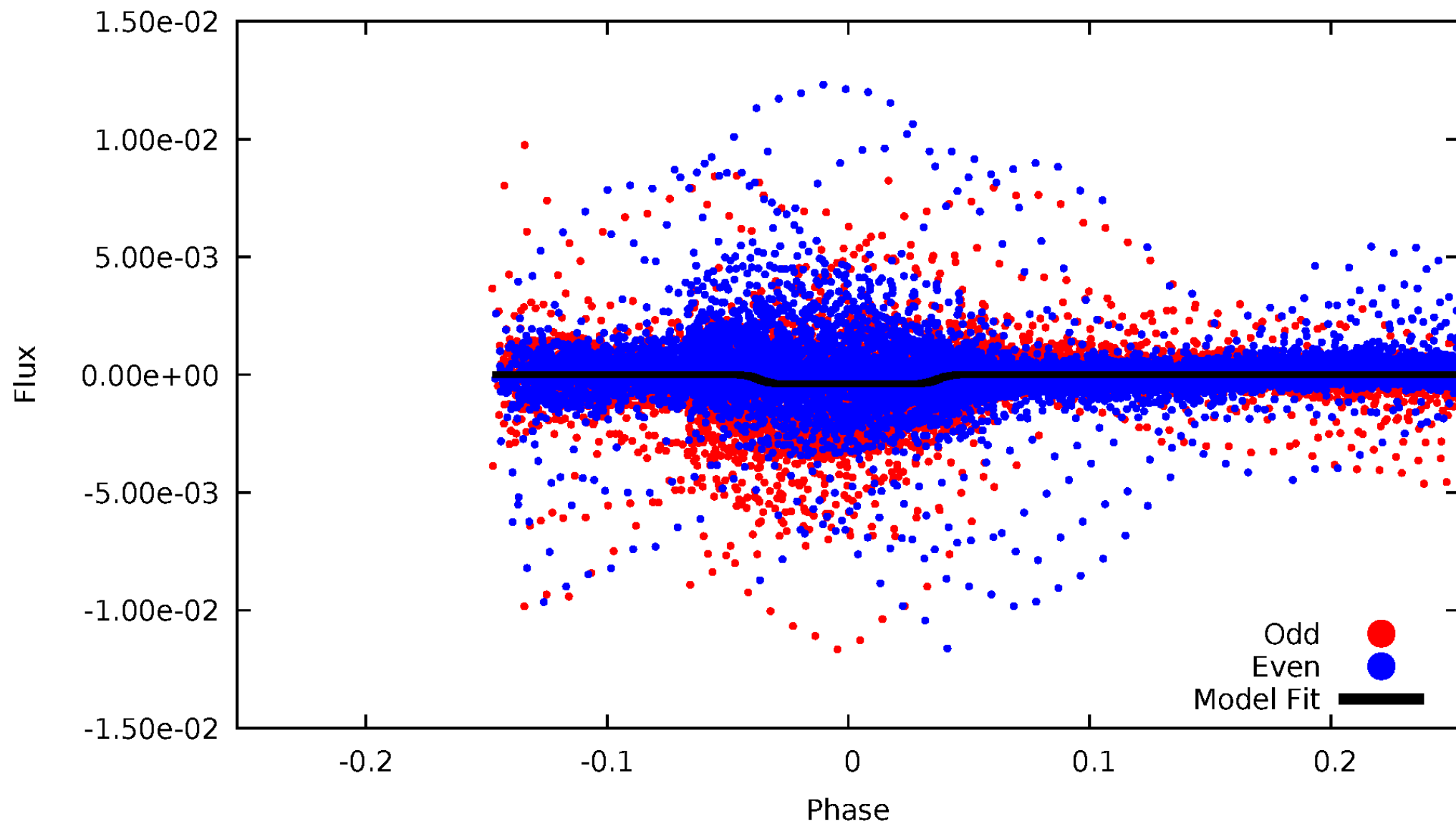
DV Odd/Even

TCE 008779047-02



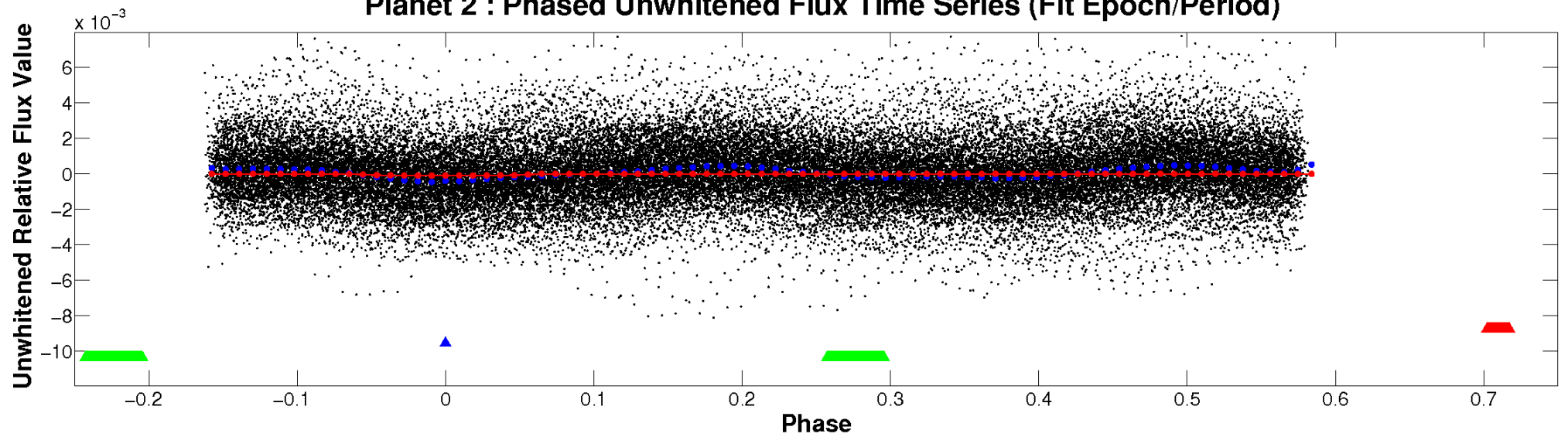
ALT Odd/Even

TCE 008779047-02

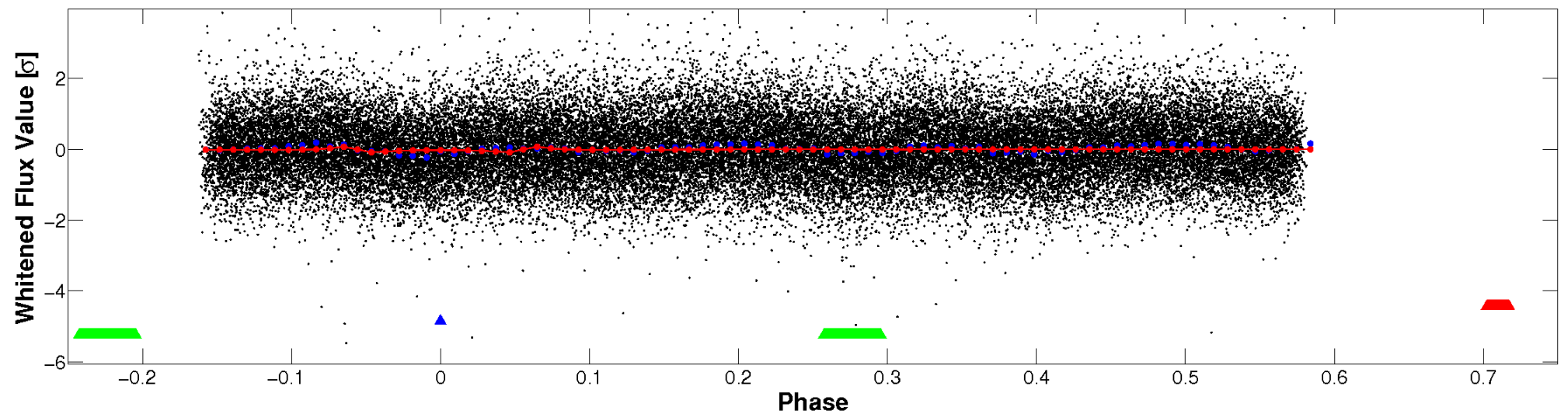


Non-Whitened Vs. Whitened Light Curve

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

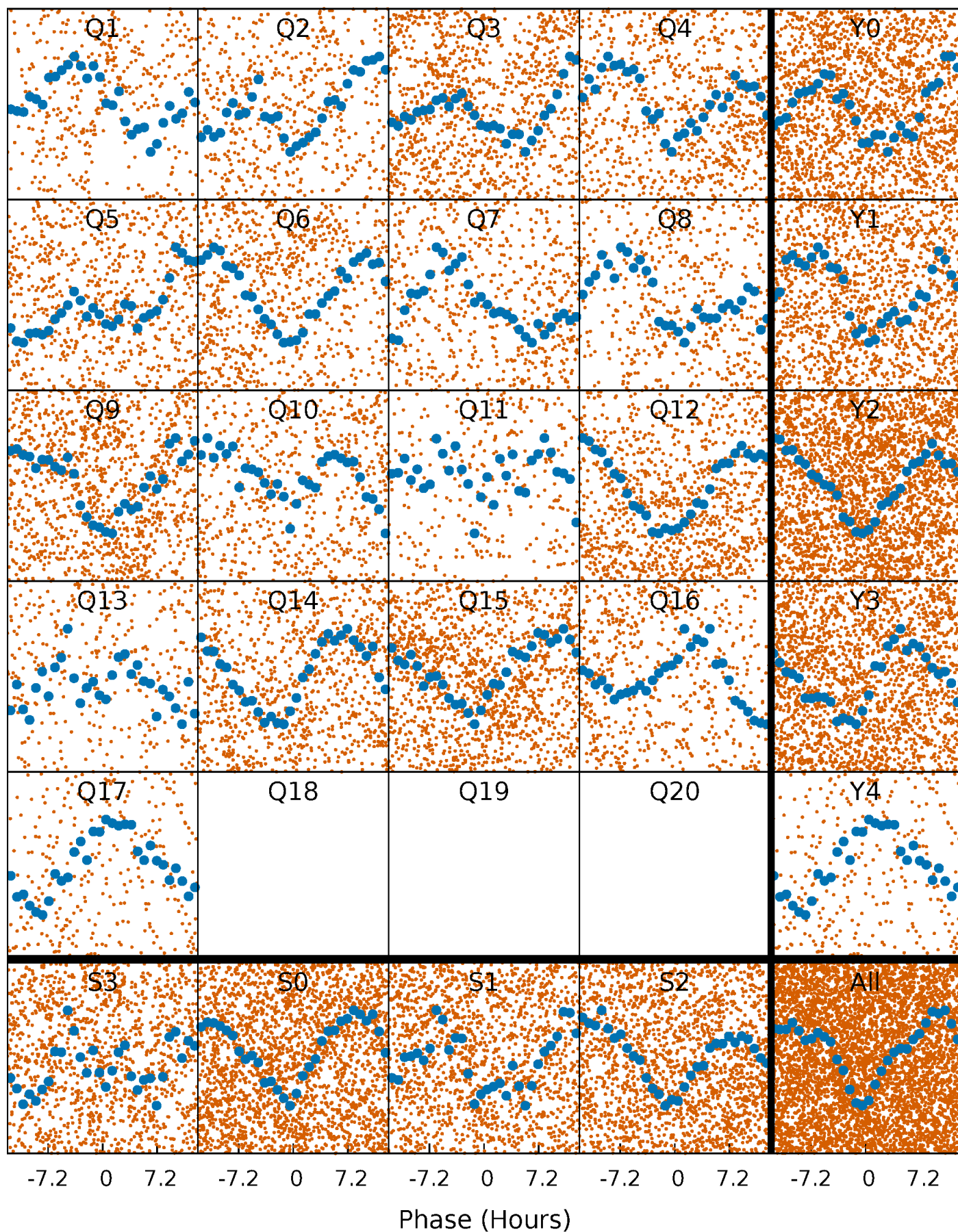


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



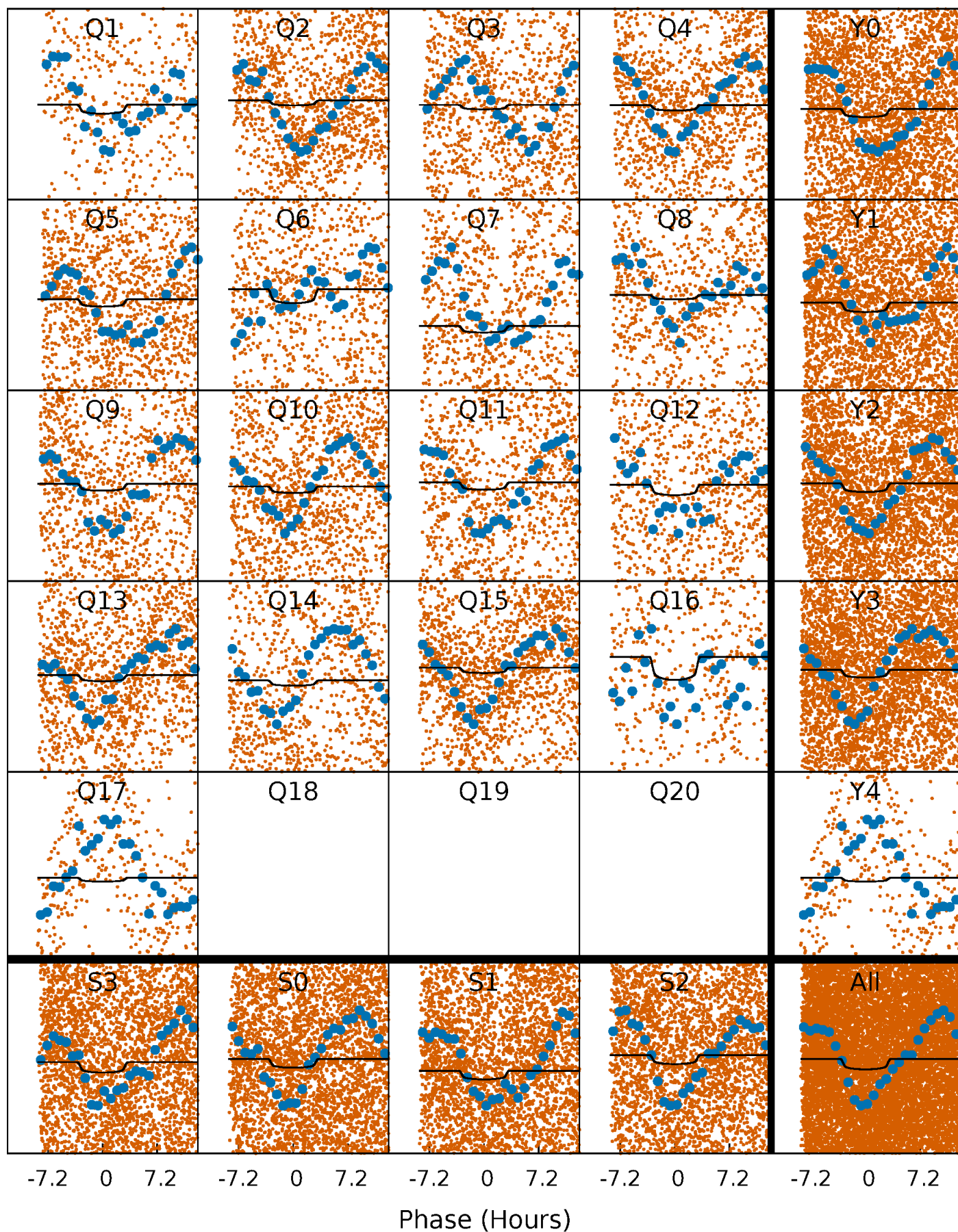
PDC Quarter-Phased Transit Curves

TCE 008779047-02 P= 2.204391 Days $T_0=132.212354$ (BKJD)



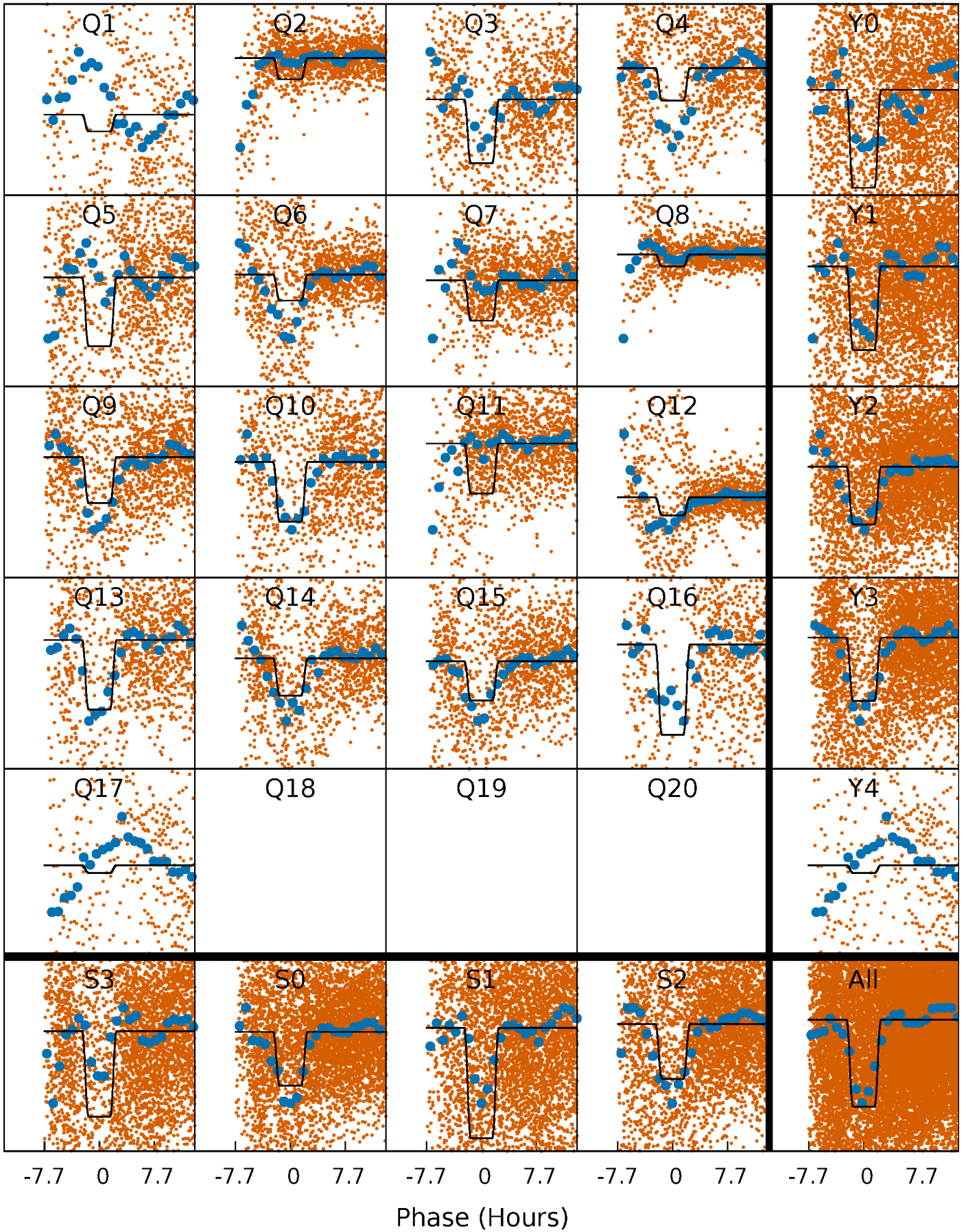
DV Quarter-Phased Transit Curves

TCE 008779047-02 P= 2.204391 Days $T_0=132.212354$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

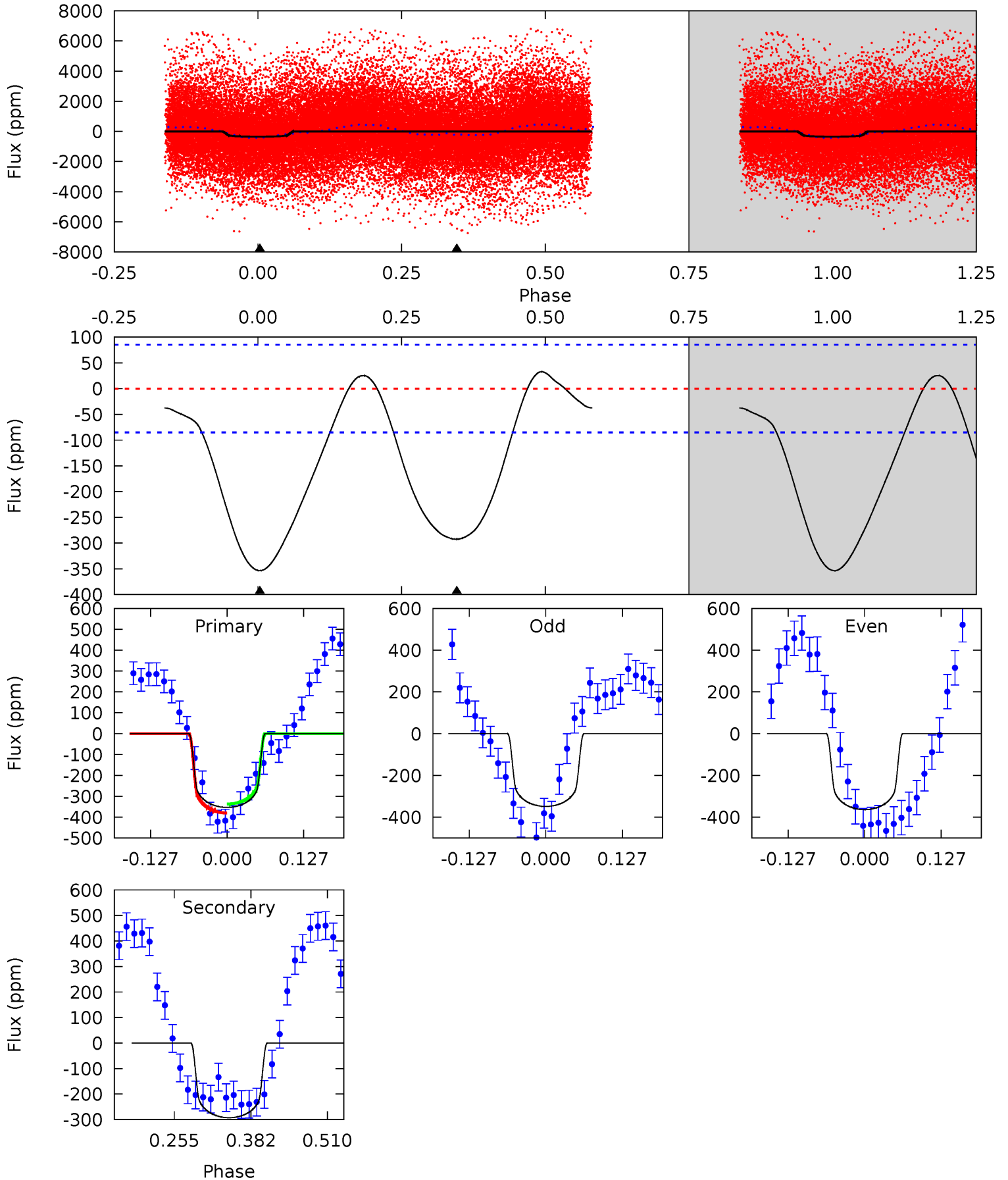
TCE 008779047-02 P= 2.204297 Days $T_0=132.212804$ (BKJD)



DV Model-Shift Uniqueness Test

008779047-02, P = 2.204391 Days, E = 130.007963 Days

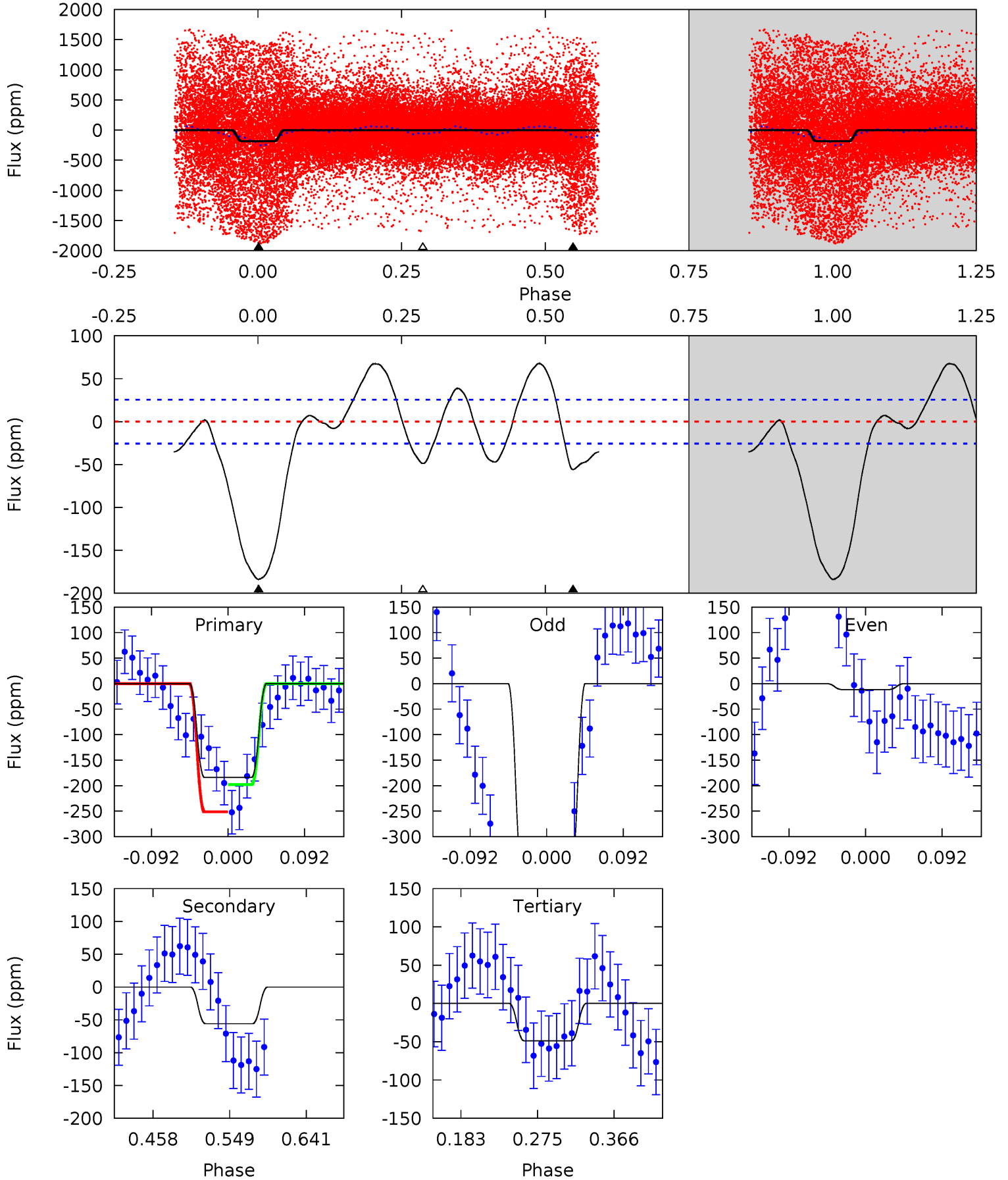
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.7	15.5	0	0	4.51	1.52	1.49	18.7	18.7	15.5	15.5	0.40	0.98	0.08	1.18



Alt Model-Shift Uniqueness Test

008779047-02, P = 2.204297 Days, E = 130.008507 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
32.8	9.98	8.72	0	4.58	1.69	5.84	24.1	32.8	1.26	9.98	26.3	2.30	0.27	3.25



Stellar Parameters For KIC 008779047

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6324^{+181}_{-226}	$4.027^{+0.329}_{-0.141}$	$-0.160^{+0.250}_{-0.300}$	$1.742^{+0.503}_{-0.615}$	$1.176^{+0.189}_{-0.189}$	$0.313^{+0.741}_{-0.139}$
	+3%/-4%	+8%/-4%	+156%/-188%	+29%/-35%	+16%/-16%	+237%/-44%
Source	PHO1	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 008779047-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-293 ± 19	$1.89^{+0.48}_{-0.50}$	2691^{+214}_{-249}	8382^{+1277}_{-893}	56^{+45}_{-22}
Alt.	-56 ± 6	$3.51^{+0.71}_{-0.71}$	2683^{+204}_{-265}	4099^{+230}_{-217}	$3.017^{+1.790}_{-0.892}$

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

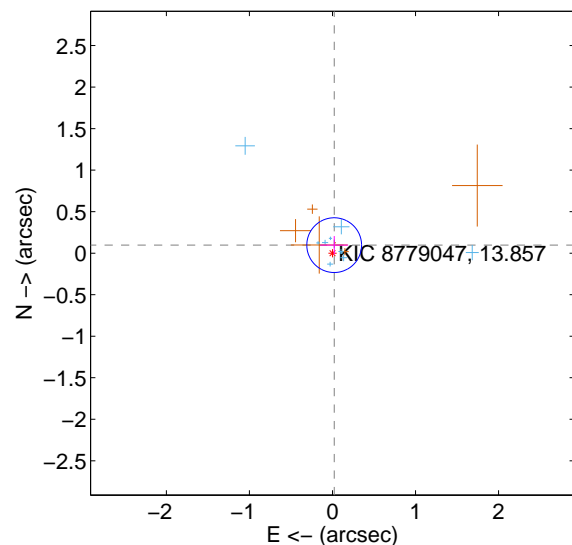
Supplemental centroid analysis for 008779047-02. Kepler magnitude: 13.86. Transit SNR 5.29

There are 10 quarters with good PRF difference image offsets

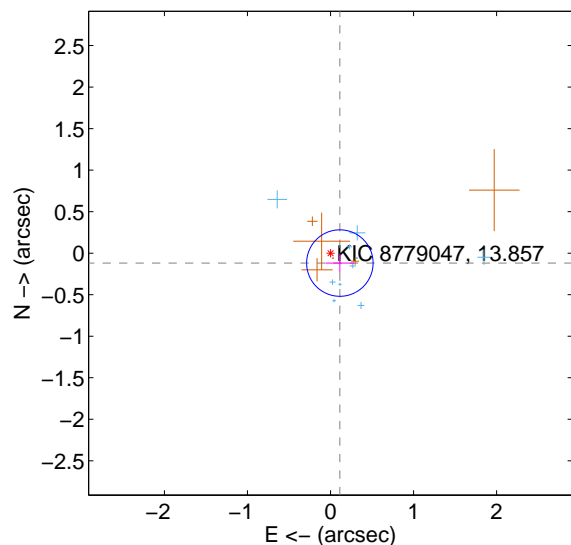
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.099 ± 0.110	0.90	-0.021 ± 0.169	0.097 ± 0.110
PRF-fit source offset from KIC position	0.164 ± 0.133	1.23	-0.113 ± 0.173	-0.119 ± 0.116
photometric centroid source offset	0.47 ± 0.65	0.71	-0.18 ± 0.50	0.43 ± 0.68

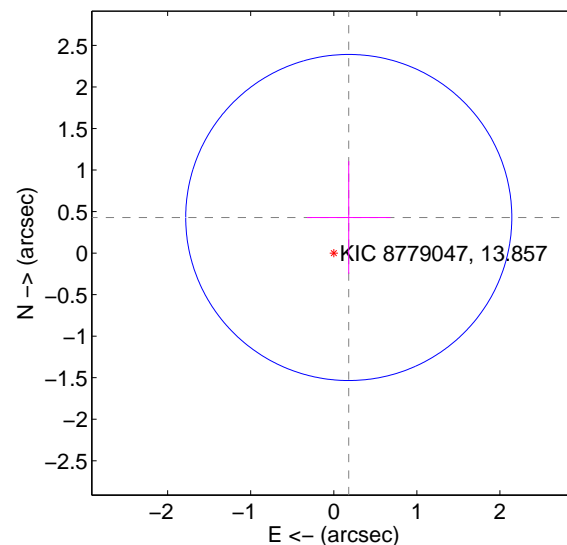
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

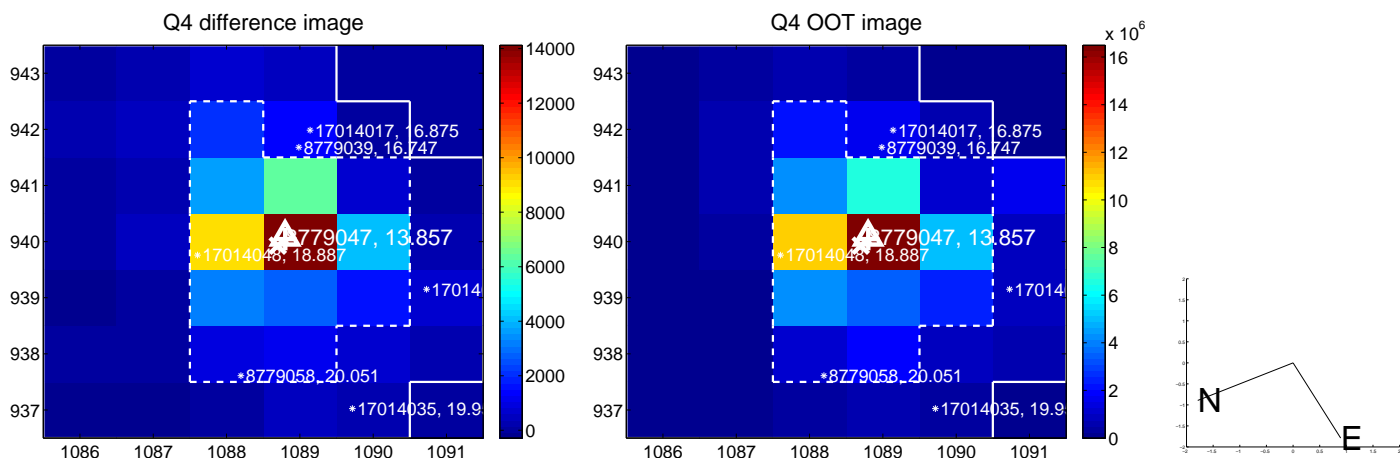
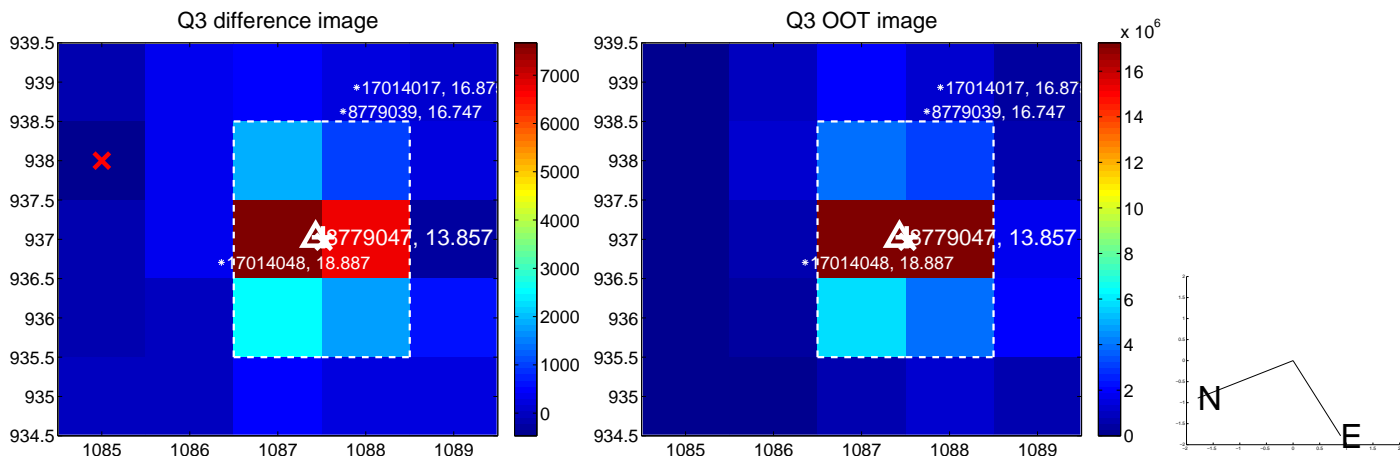
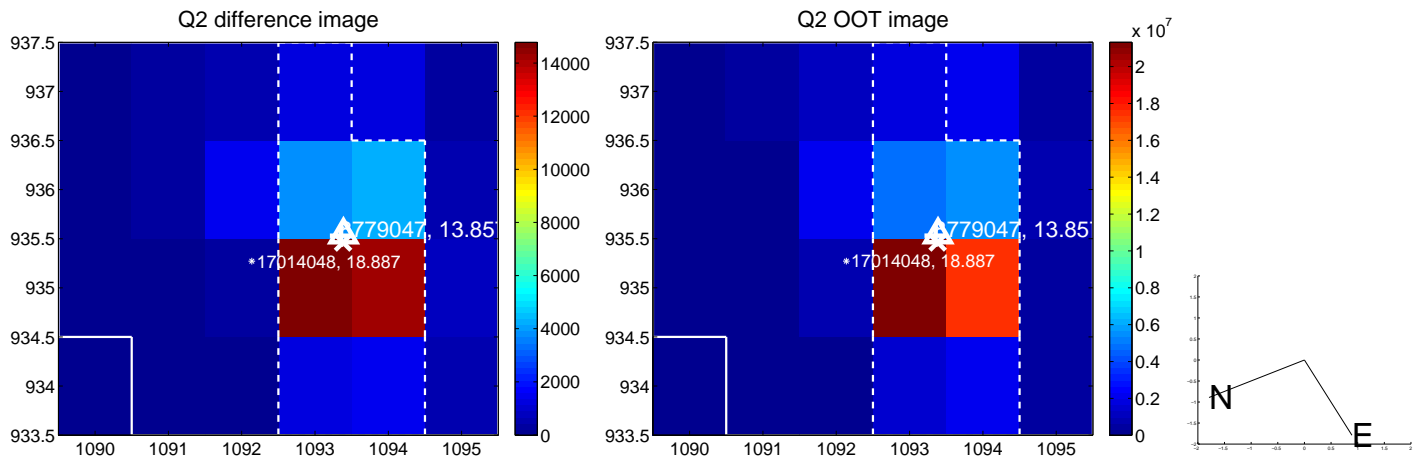
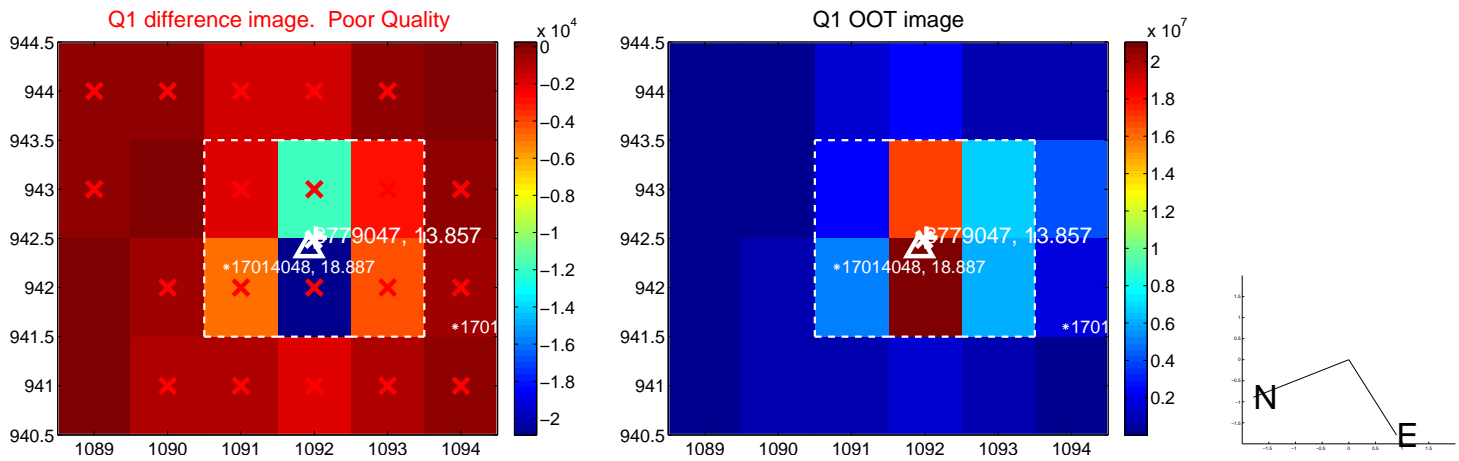


offset from photometric centroids

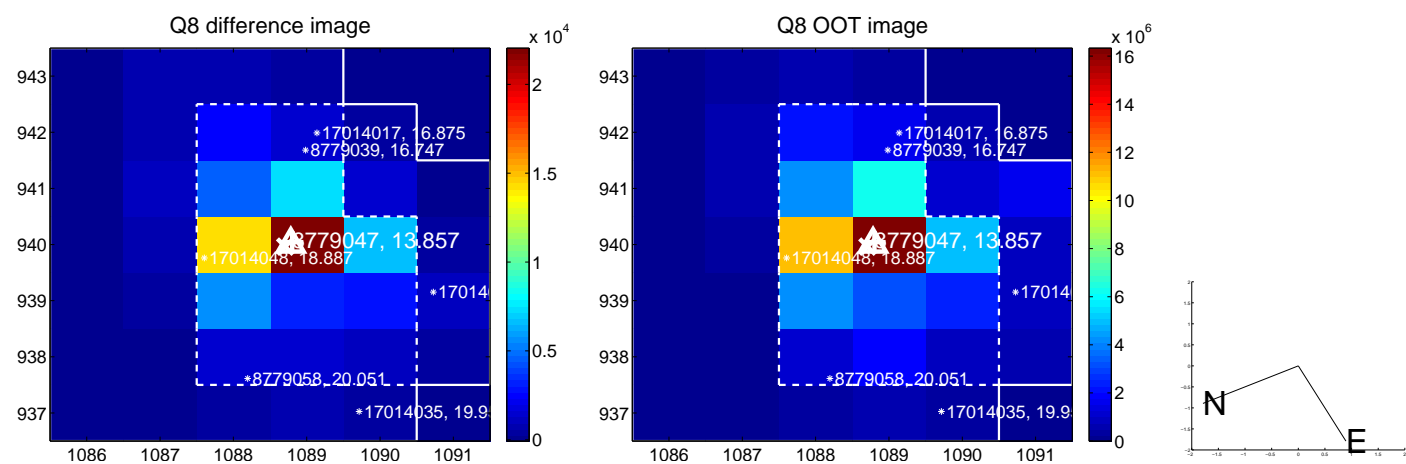
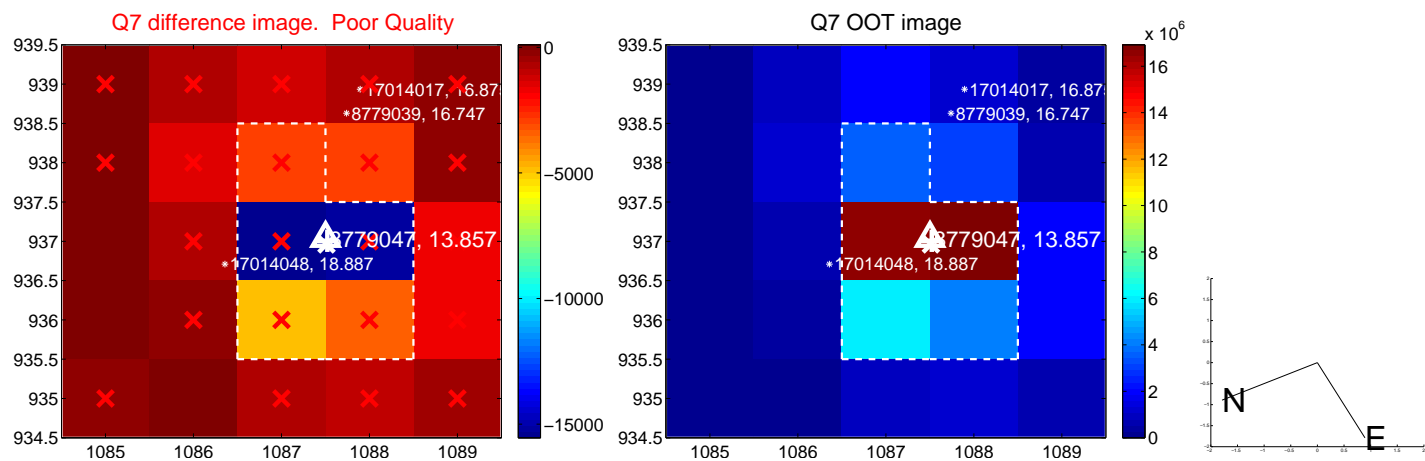
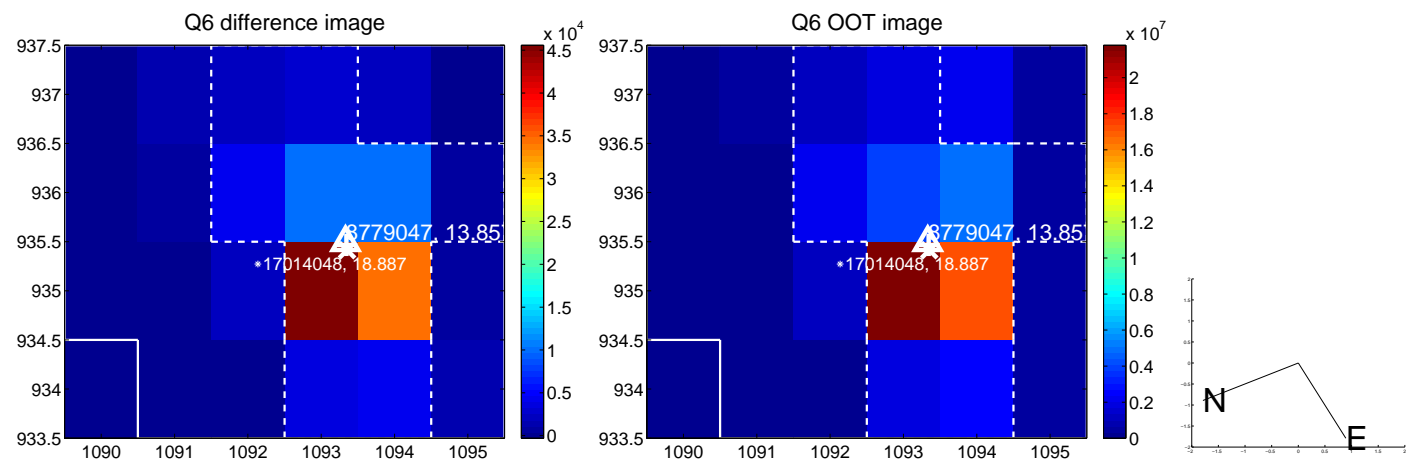
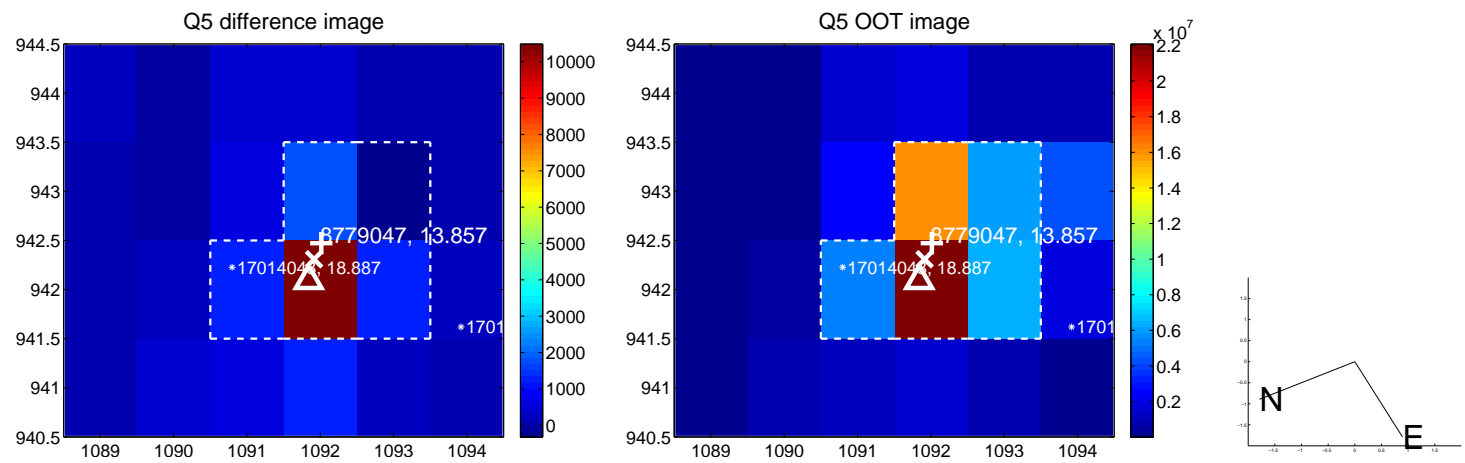


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

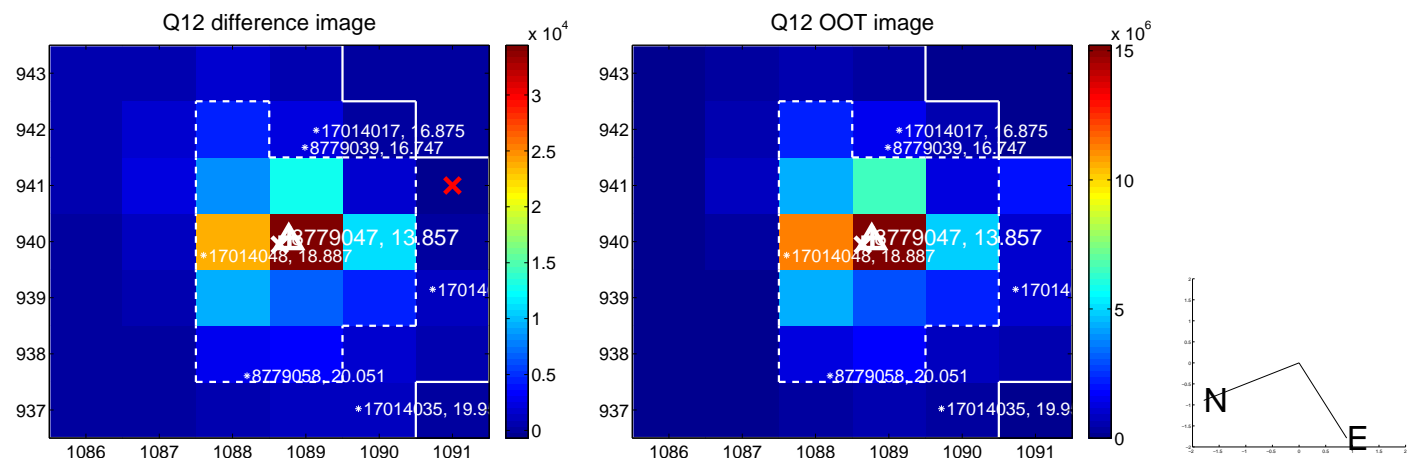
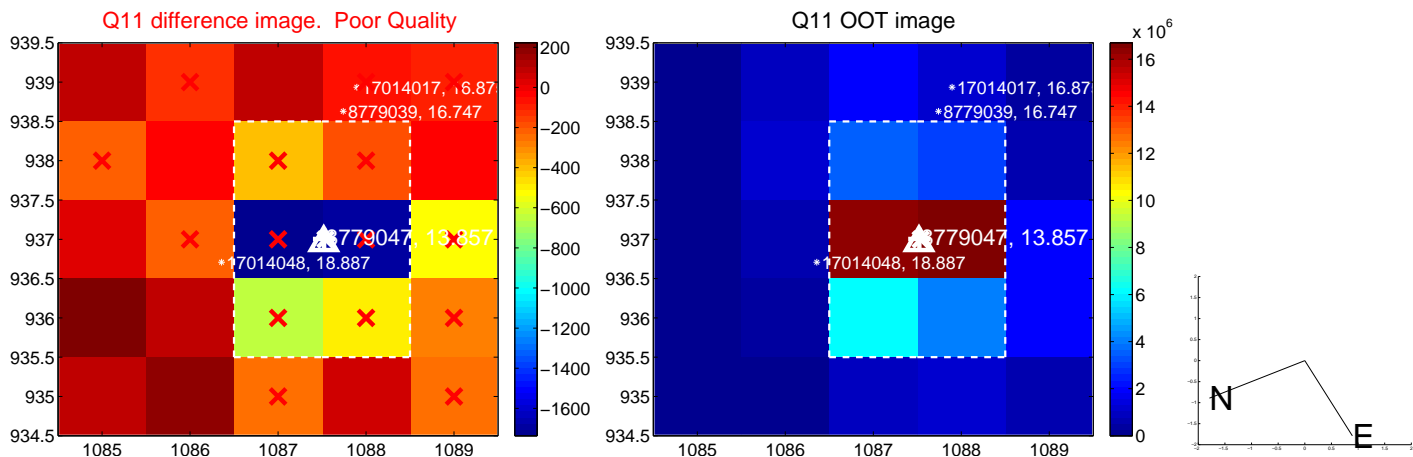
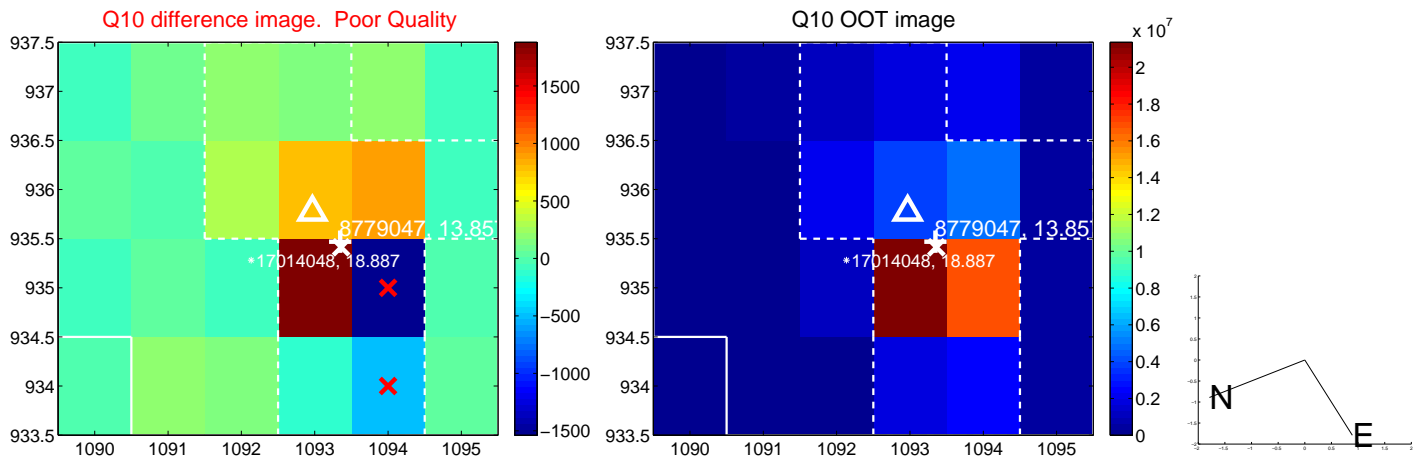
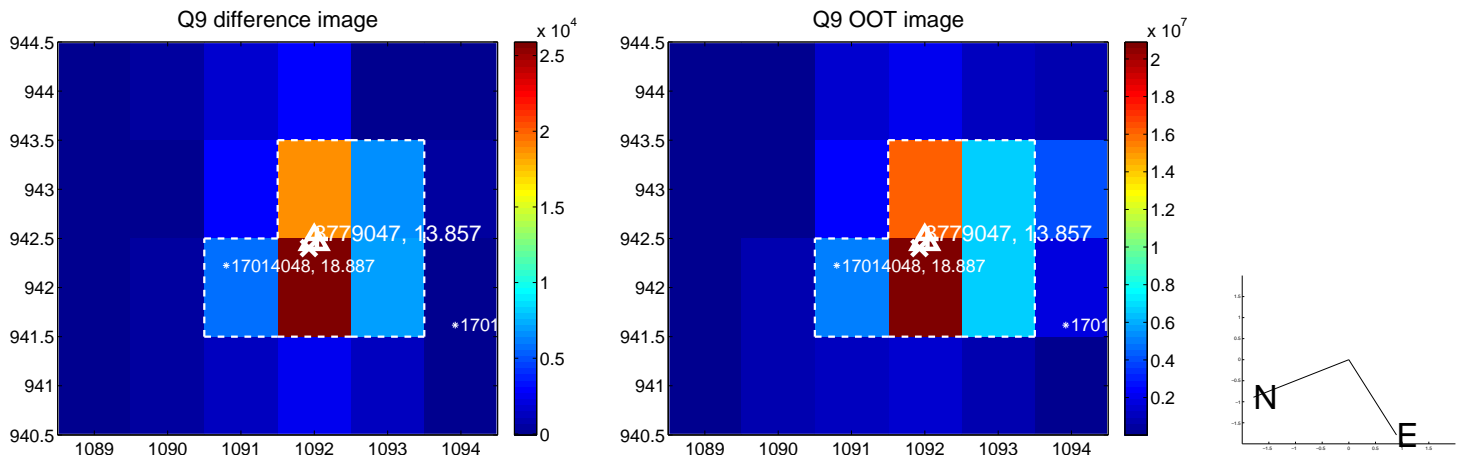
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



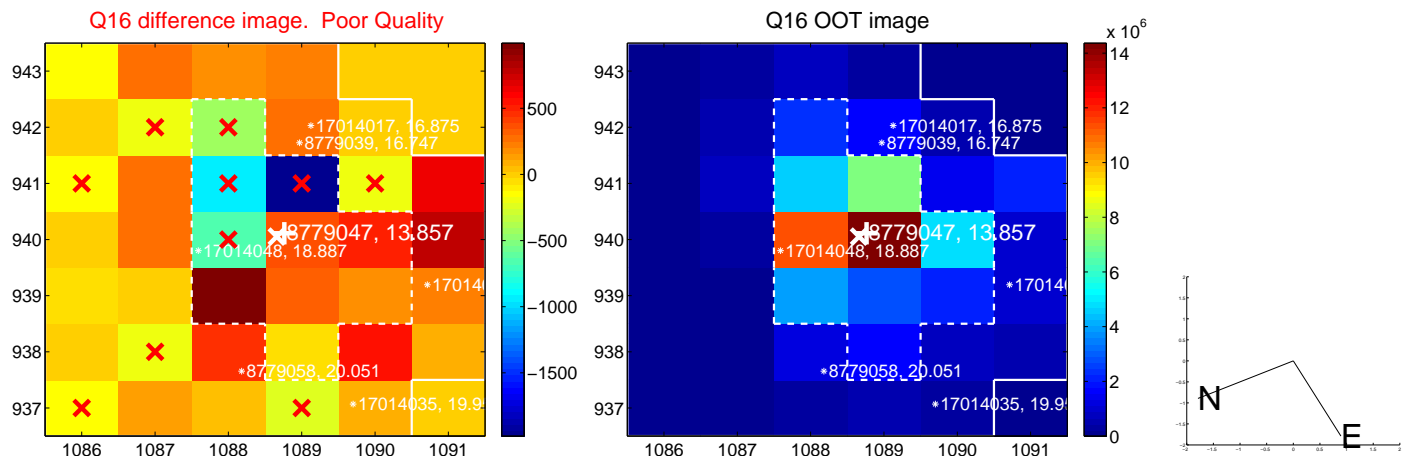
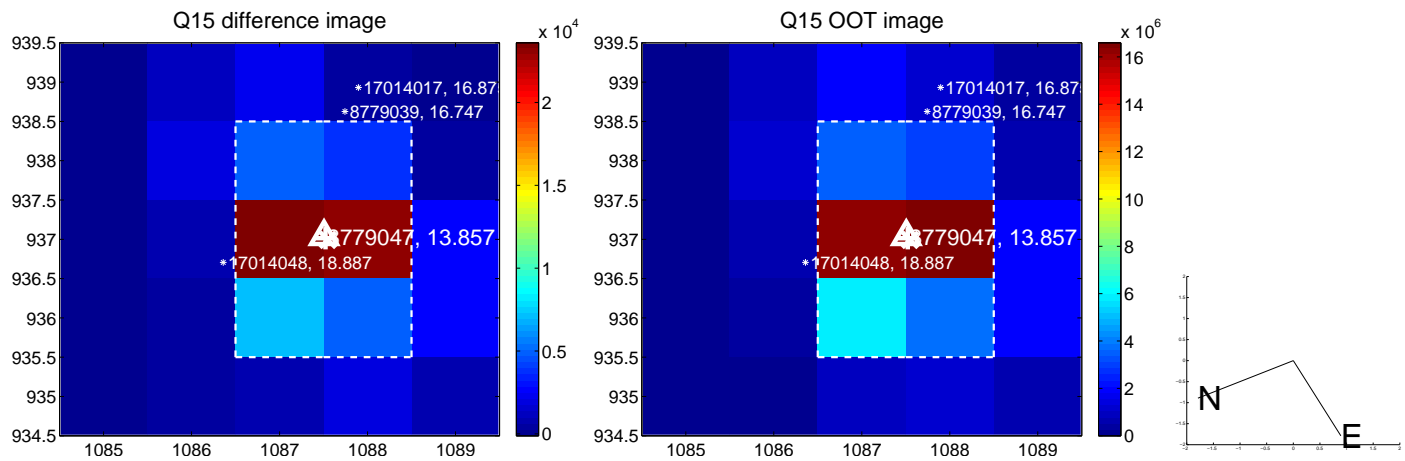
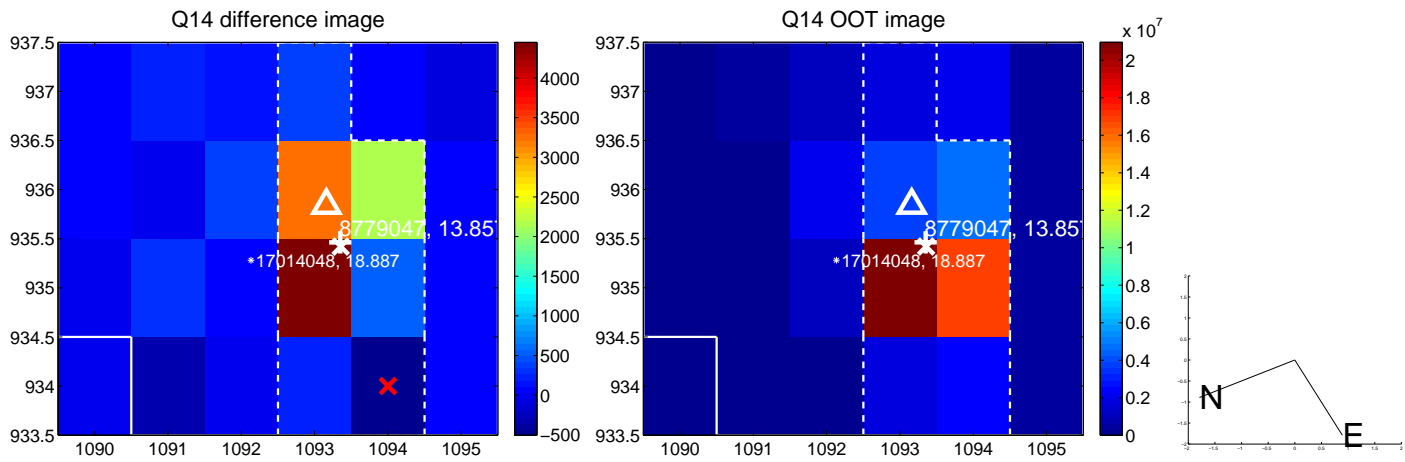
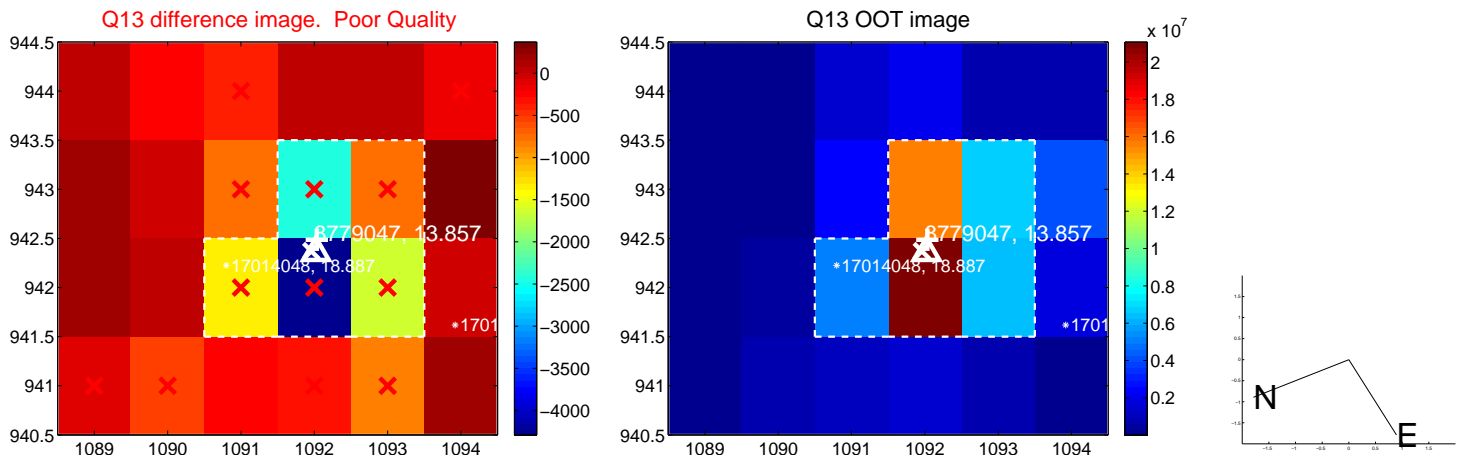
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



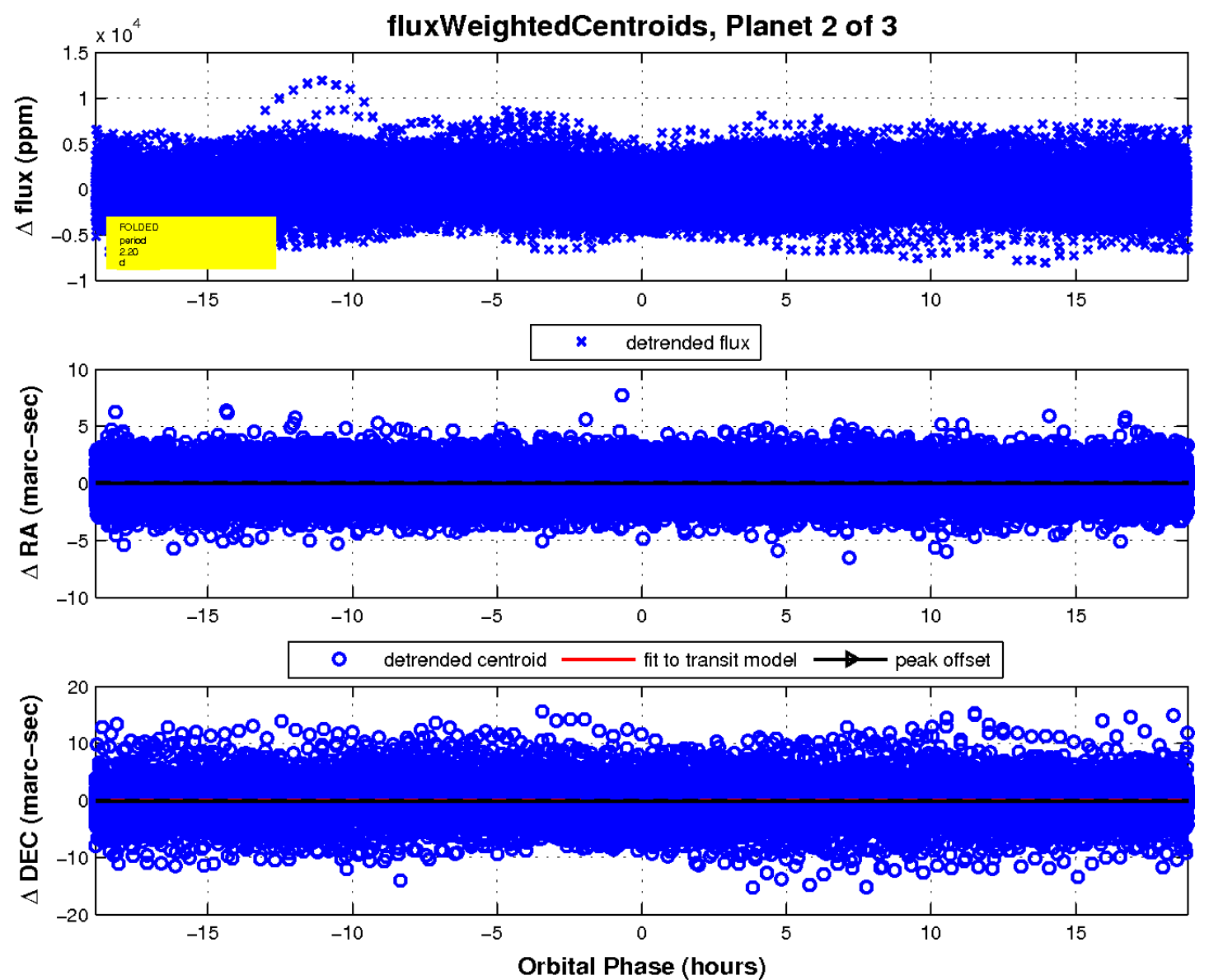
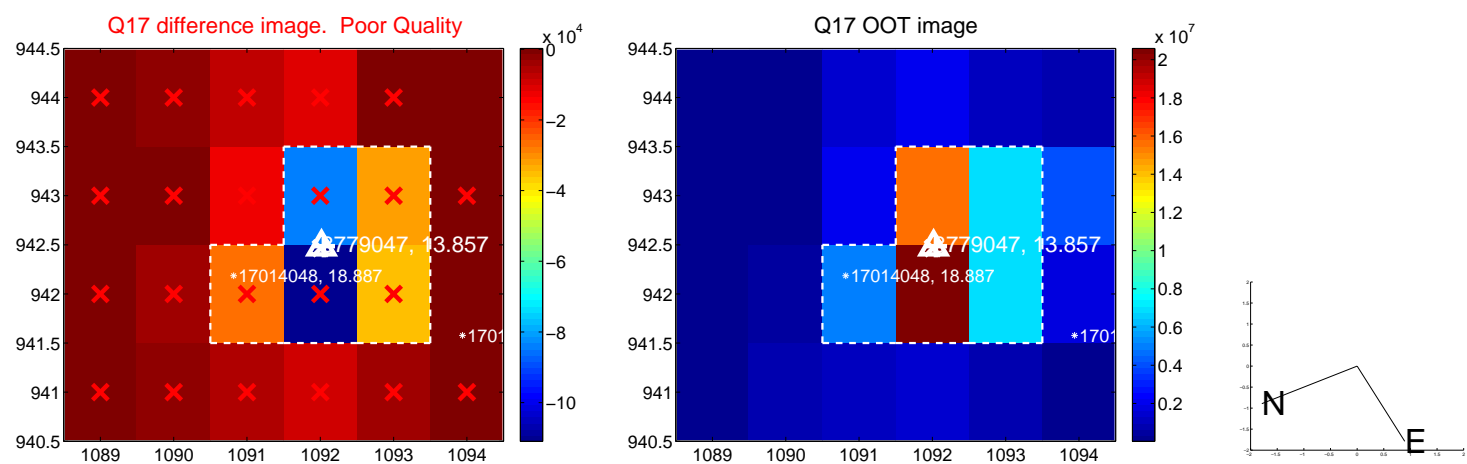
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

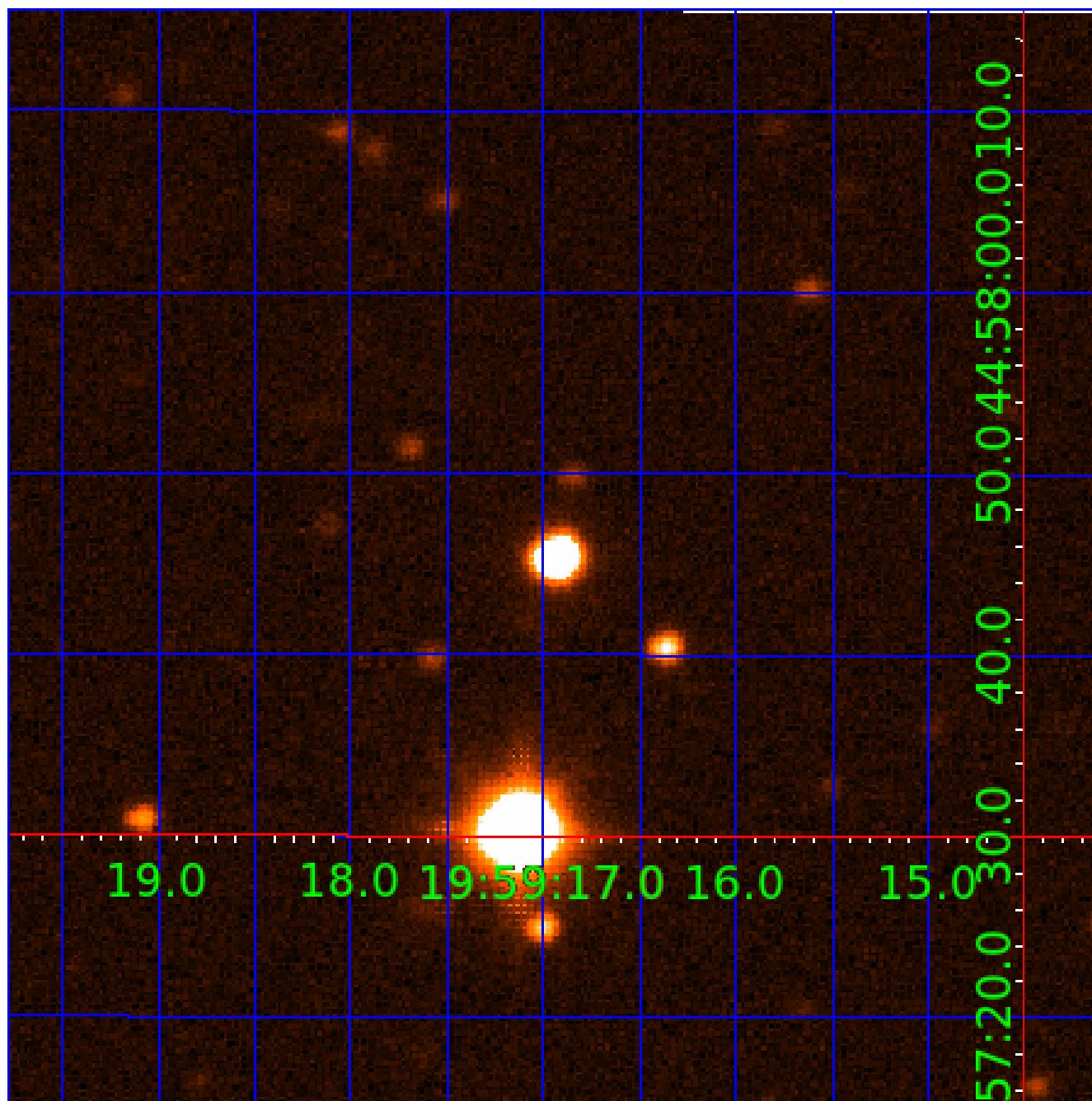


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008779047

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})
008779047-01	OBS	No	2.204341	131.589122	69.5	4.605	7.8	4.3	1.74	6324	1.74	3546.95
008779047-02	OBS	No	2.204391	132.212354	94.2	6.294	8.3	5.3	1.74	6324	1.97	3546.85
008779047-03	OBS	No	1.102132	131.761748	170.9	4.943	8.2	8.2	1.74	6324	3.04	8938.18

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008779047-01	OBS	FP	0.00	1	0	0	0	LPP_DV—MOD_NONUNIQ_DV
008779047-02	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD
008779047-03	OBS	FP	0.00	1	0	0	0	TRANS_GAPPED—LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—SAME_NTL_PERIOD

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

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

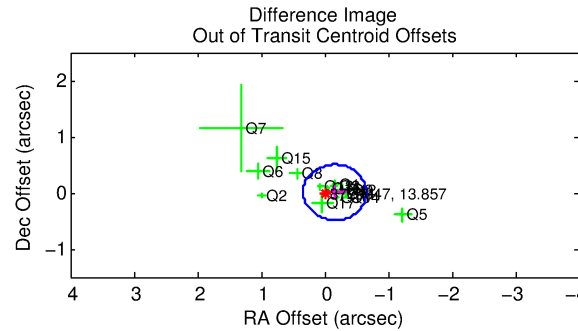
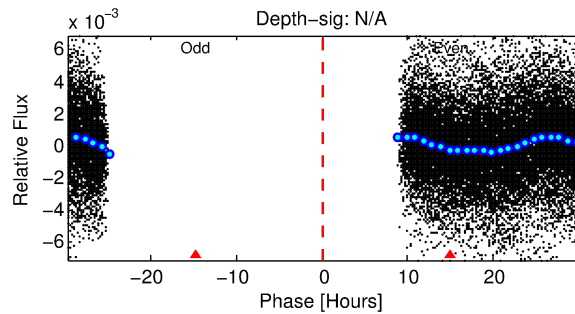
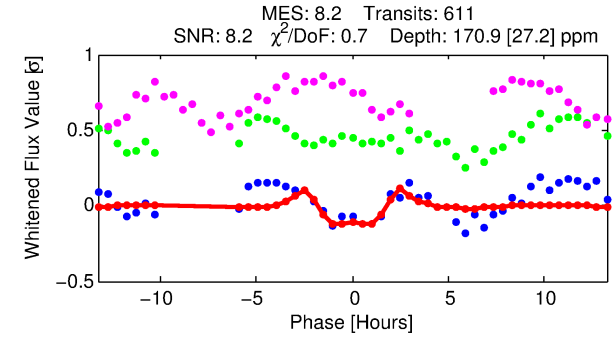
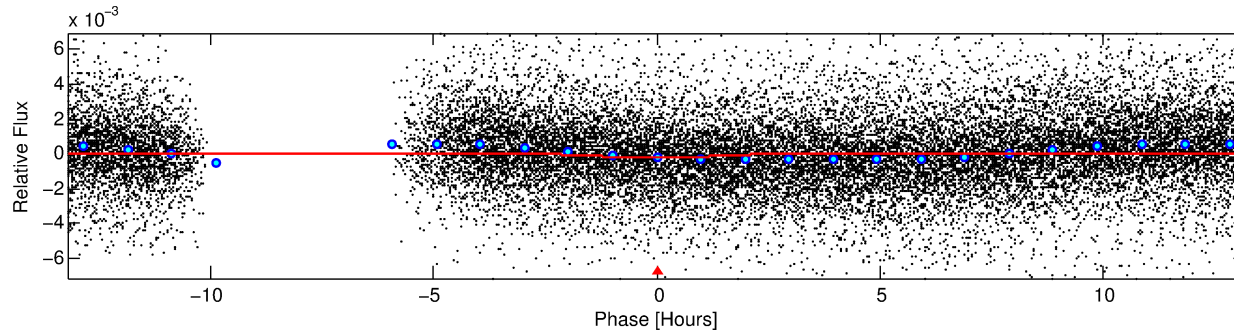
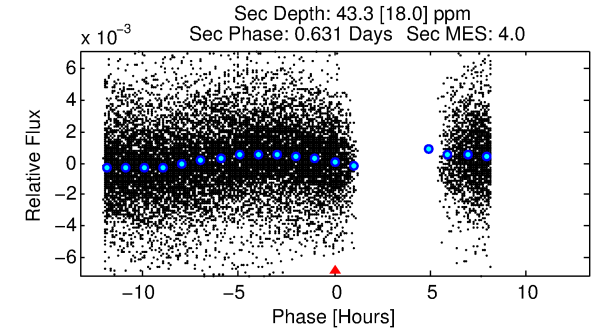
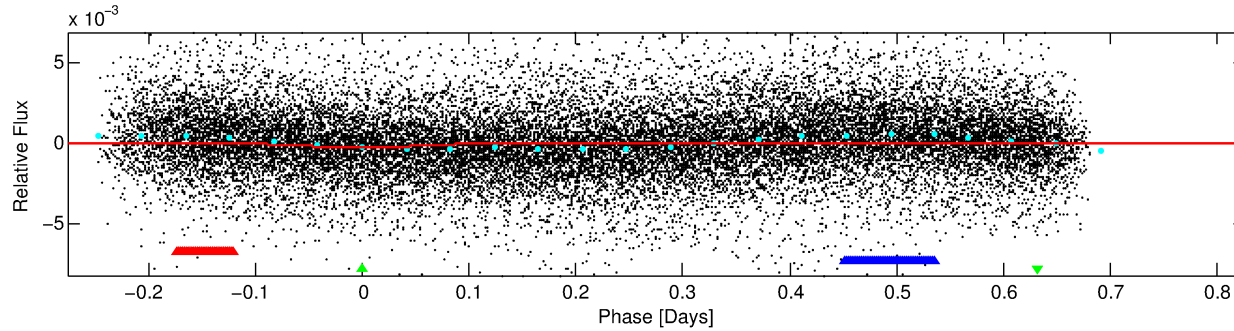
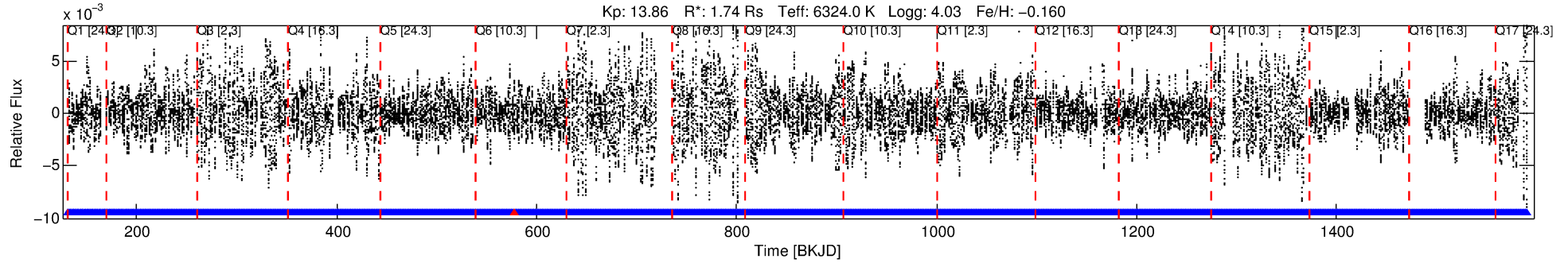
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008779047-03

No Significant Match Found

DV One-Page Summary

KIC: 8779047 Candidate: 3 of 3 Period: 1.102 d



DV Fit Results:

Period = 1.10213 [0.00001] d
Epoch = 131.7617 [0.0035] BKJD
Rp/R* = 0.0160 [0.0013]
a/R* = 1.09 [0.01]
b = 0.98 [0.00]
Seff = 8938.18 [5141.50]
Teq = 2479 [357] K
Rp = 3.04 [1.10] Re
a = 0.0221 [0.0076] AU
Ag = 1.25 [0.89] [0.28σ]
Teffp = 4053 [475] K [2.65σ]

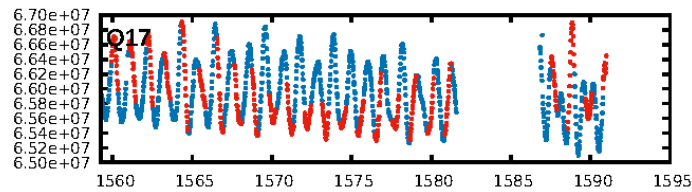
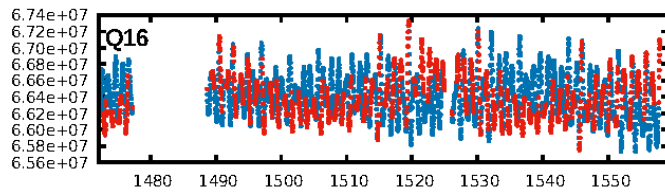
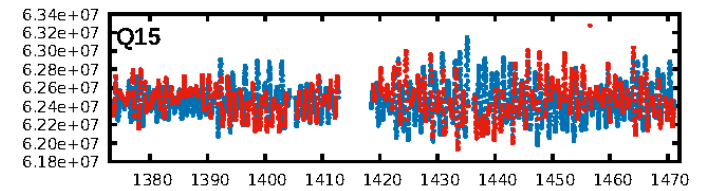
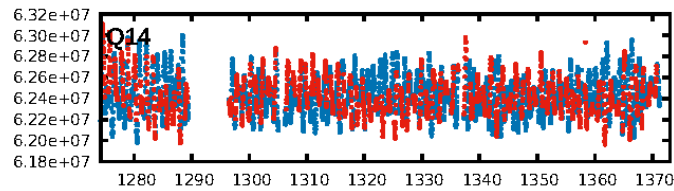
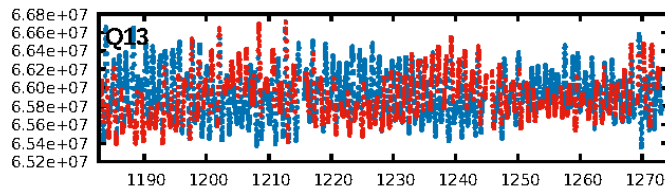
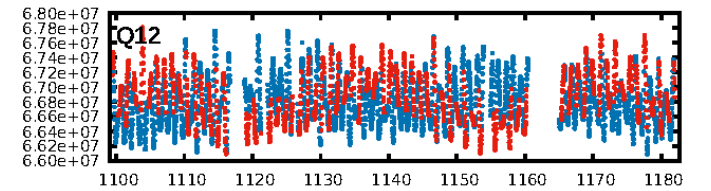
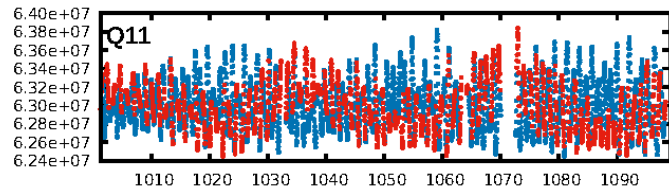
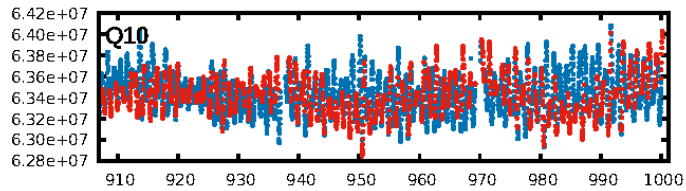
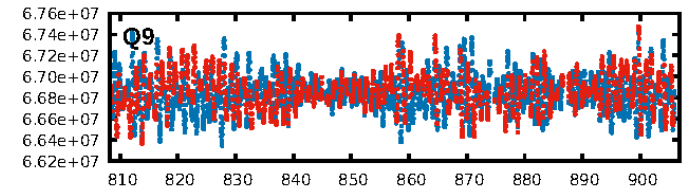
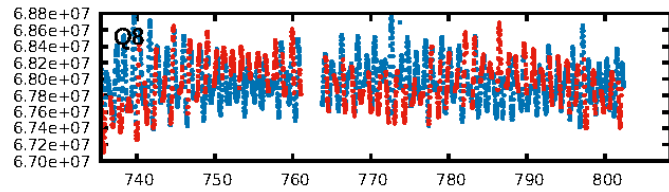
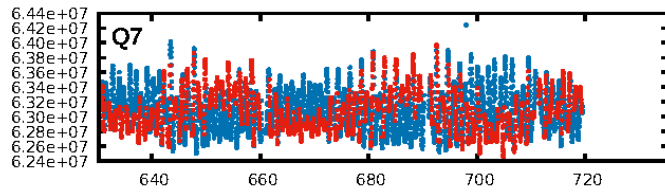
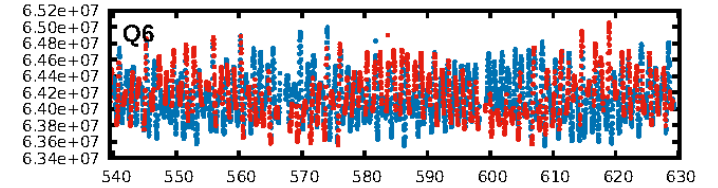
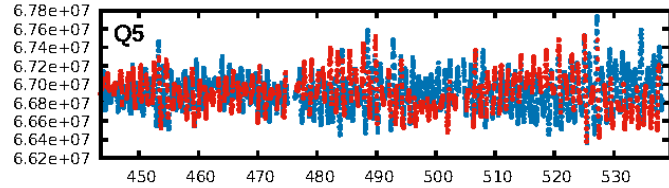
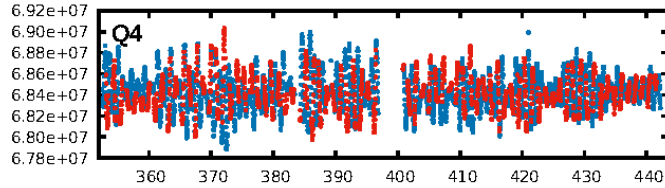
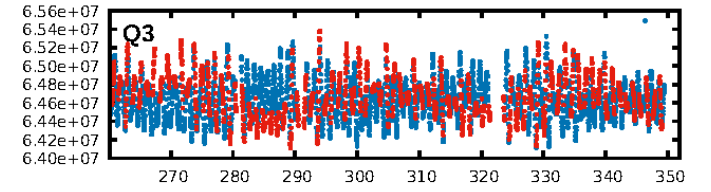
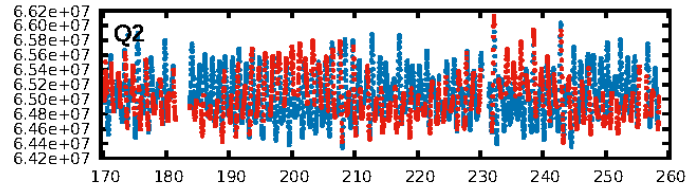
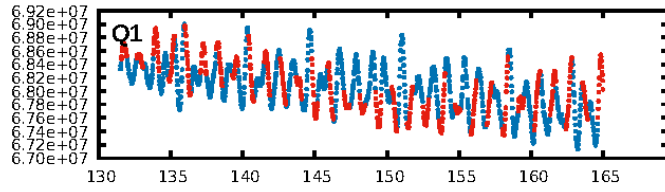
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [3.92σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.11e-21
RollingBand-fgt: 1.00 [583/584]
GhostDiagnostic-chr: 0.6693
Centroid-sig: 0.0%
Centroid-so: 0.187 arcsec [0.61σ]
OotOffset-rm: 0.156 arcsec [0.95σ]
KicOffset-rm: 0.338 arcsec [1.68σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 0.59 [10/17]
DiffImageOverlap-fno: 1.00 [17/17]

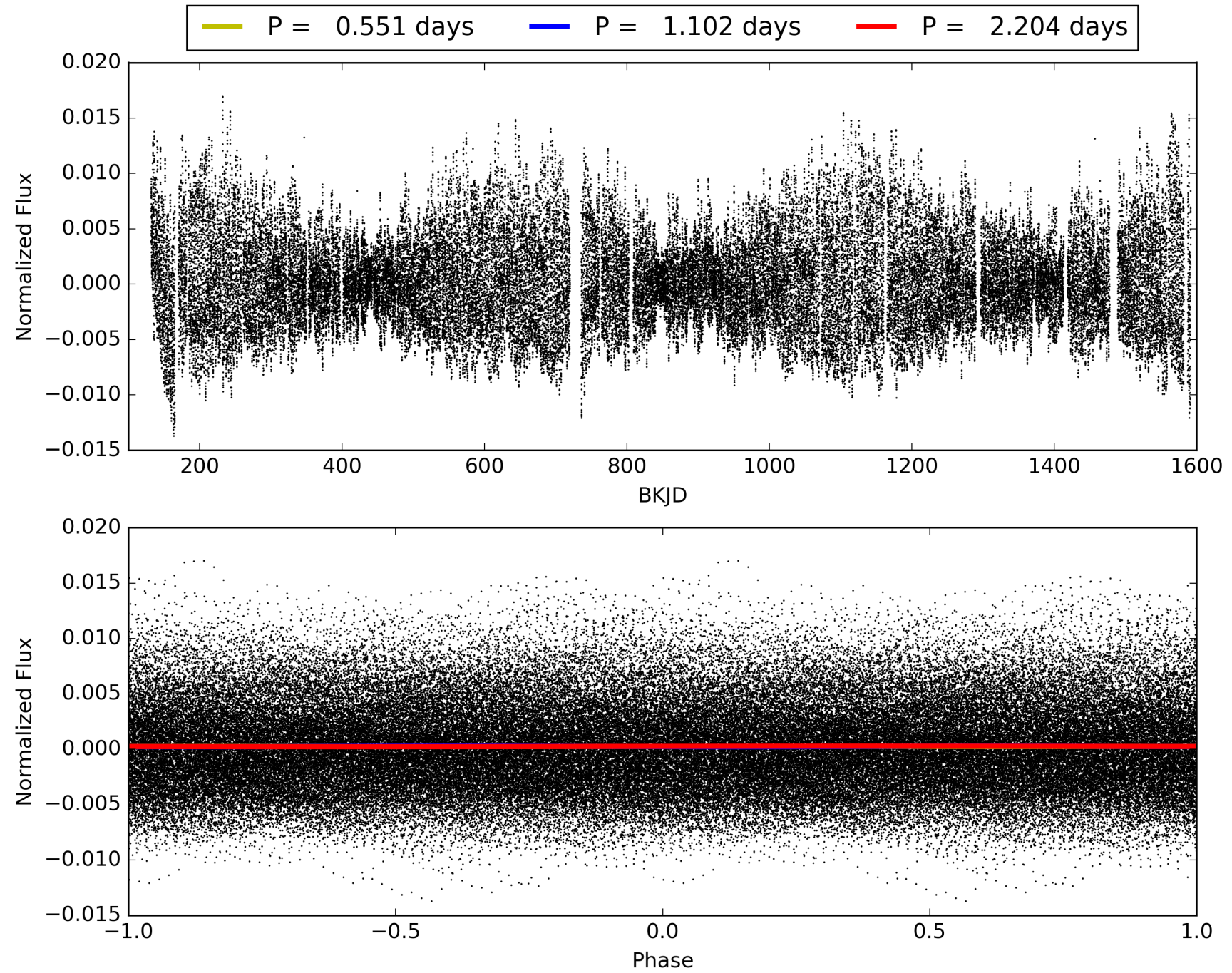
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 00:23:32 Z

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

TCE 008779047-03, PDC Light Curves

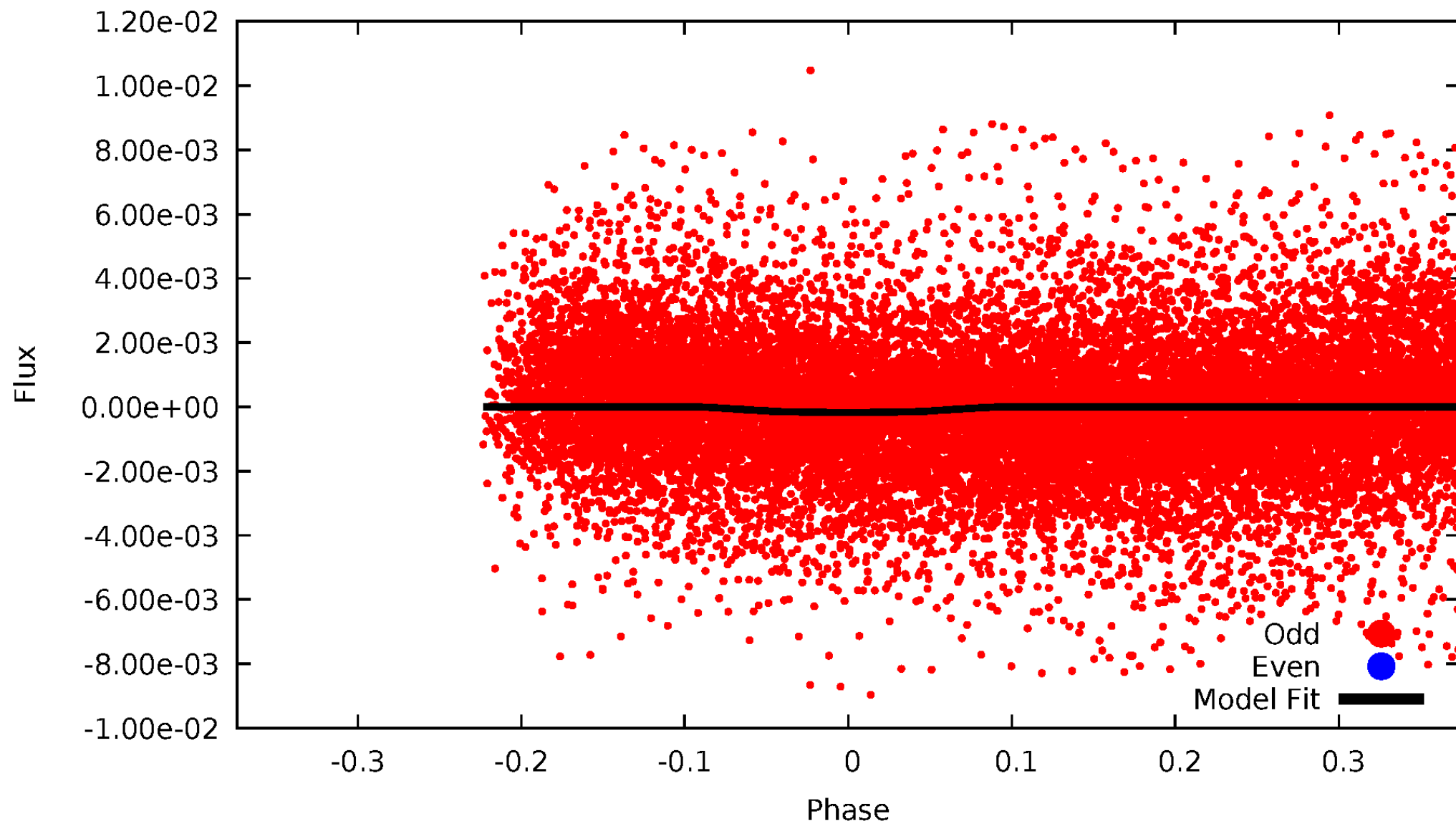


TCE 008779047-03



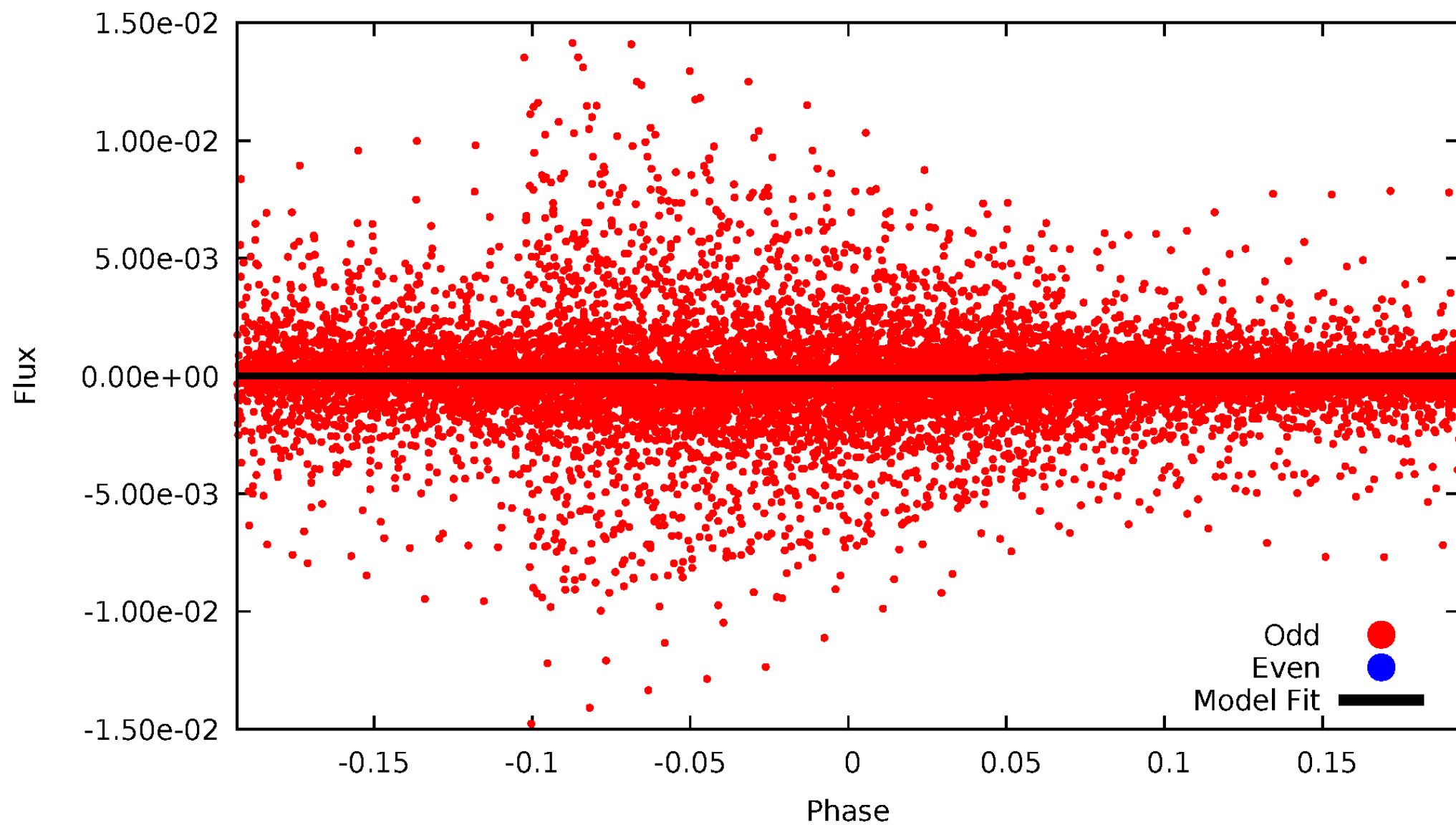
DV Odd/Even

TCE 008779047-03

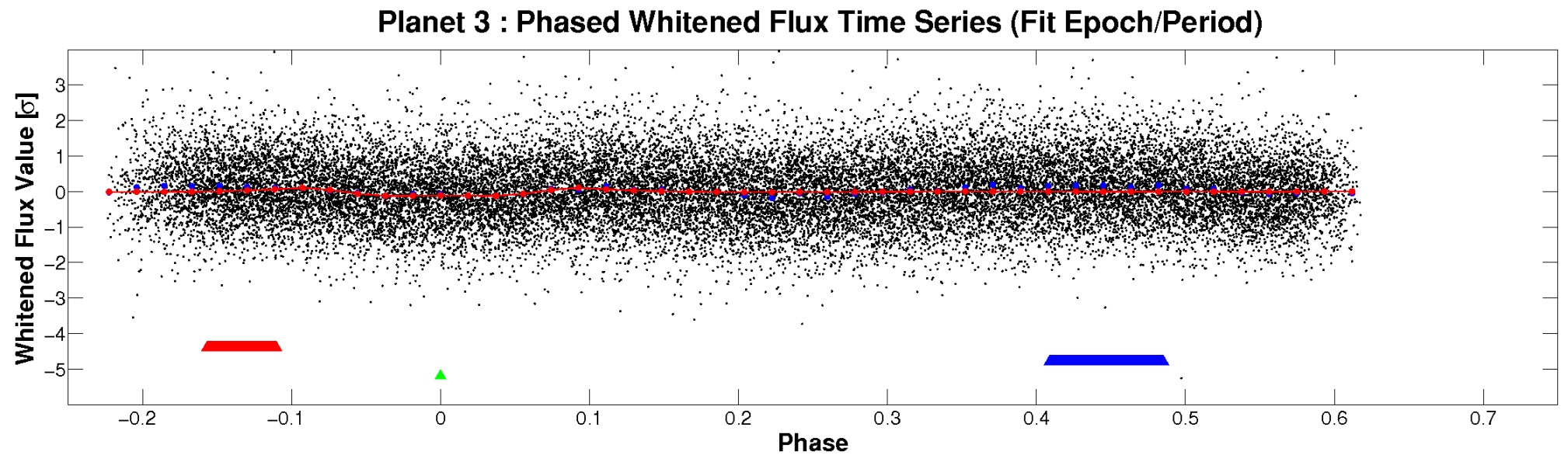
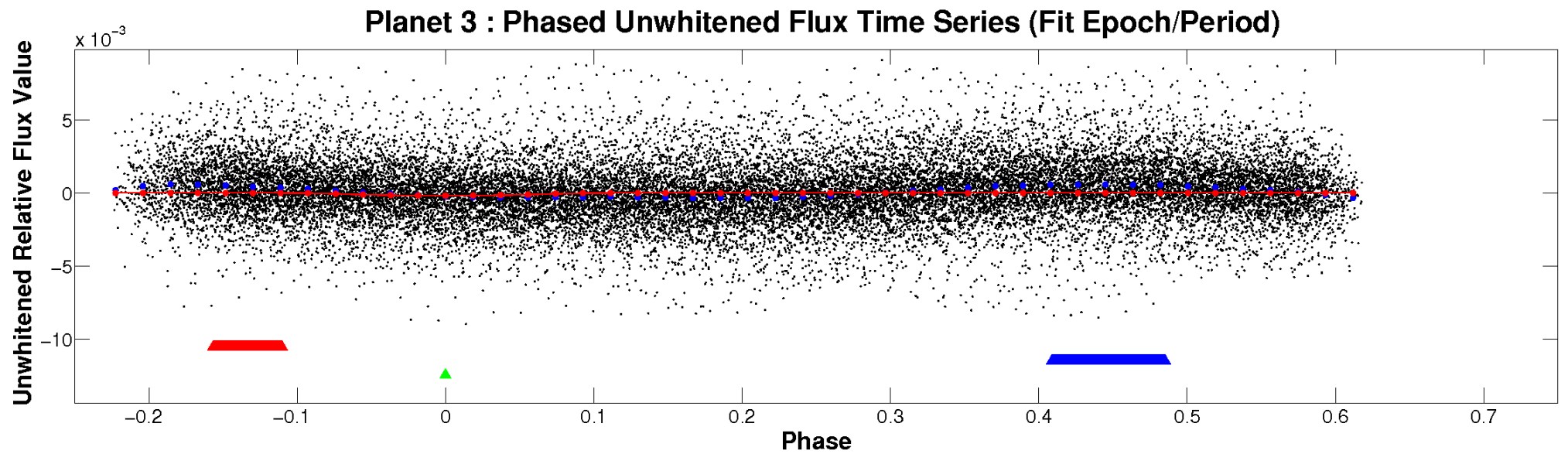


ALT Odd/Even

TCE 008779047-03

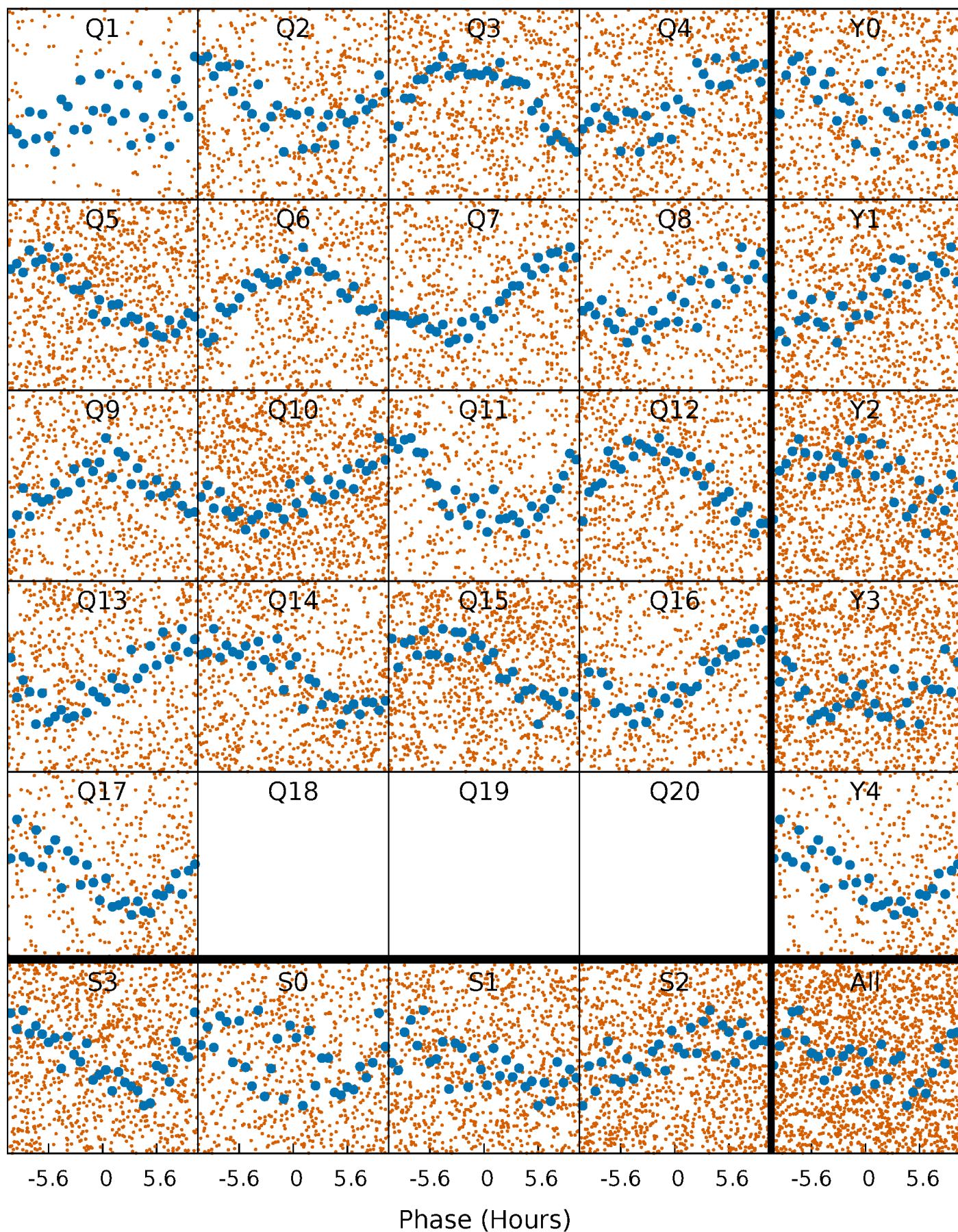


Non-Whitened Vs. Whitened Light Curve



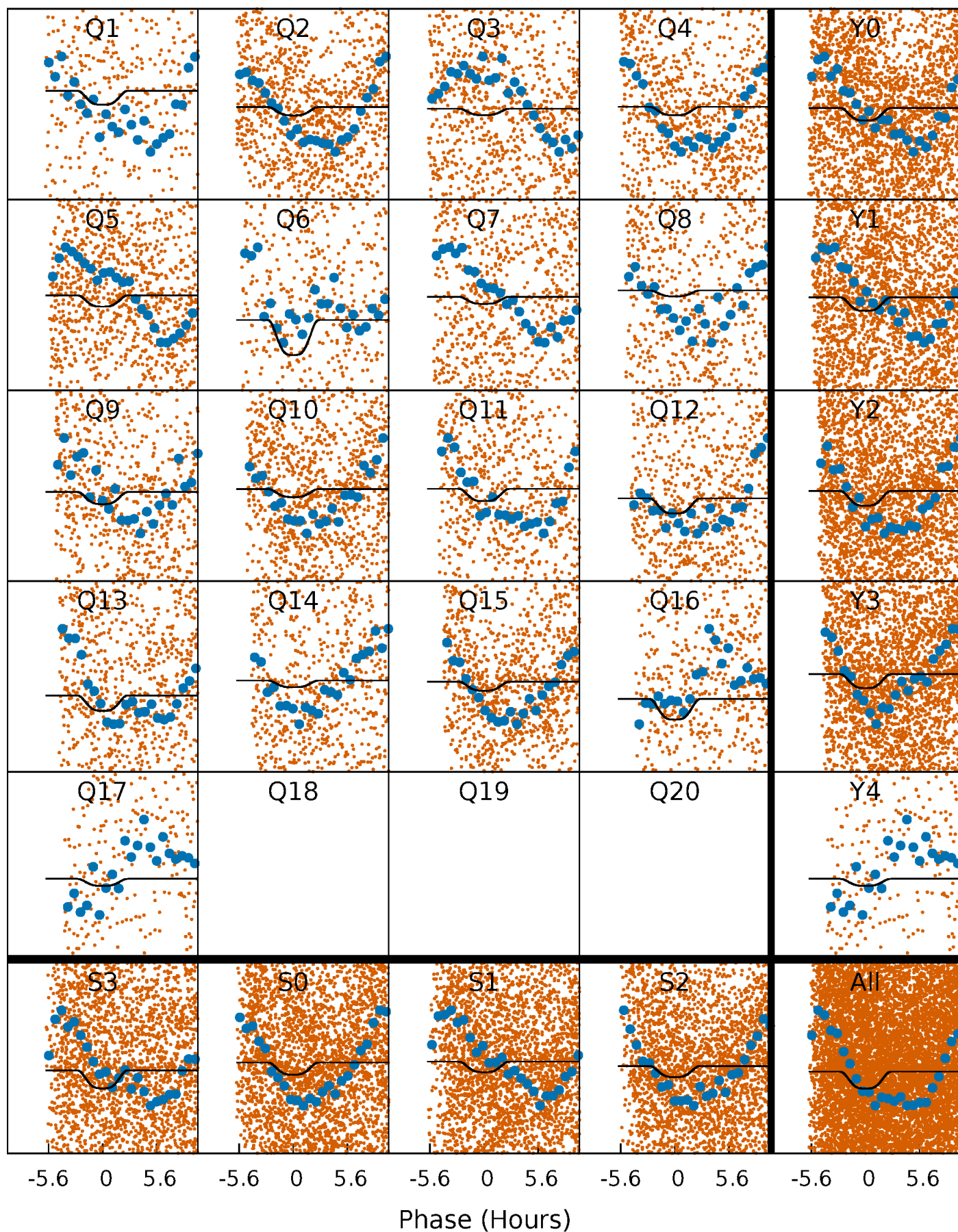
PDC Quarter-Phased Transit Curves

TCE 008779047-03 P= 1.102132 Days $T_0=131.761748$ (BKJD)



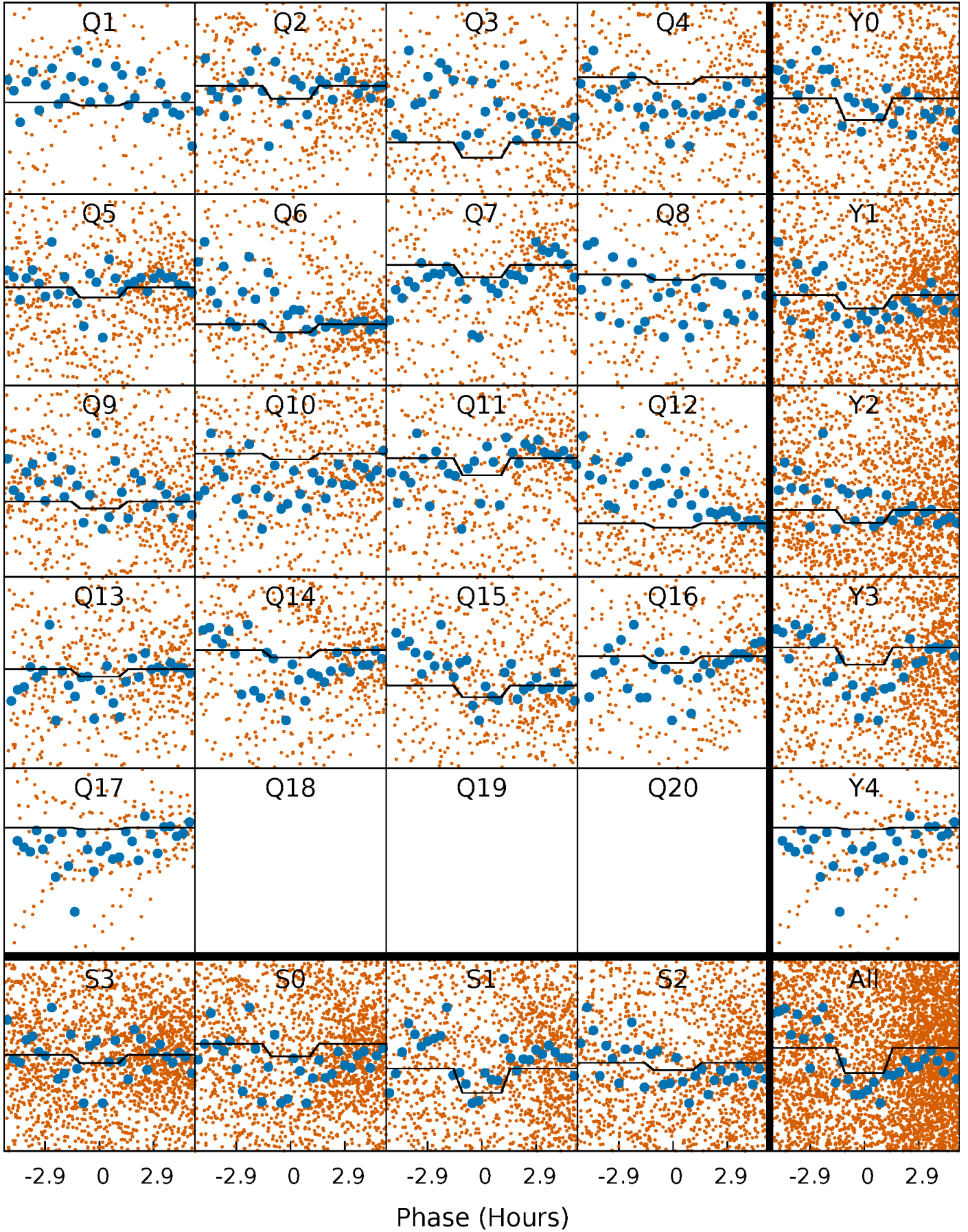
DV Quarter-Phased Transit Curves

TCE 008779047-03 P= 1.102132 Days $T_0=131.761748$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

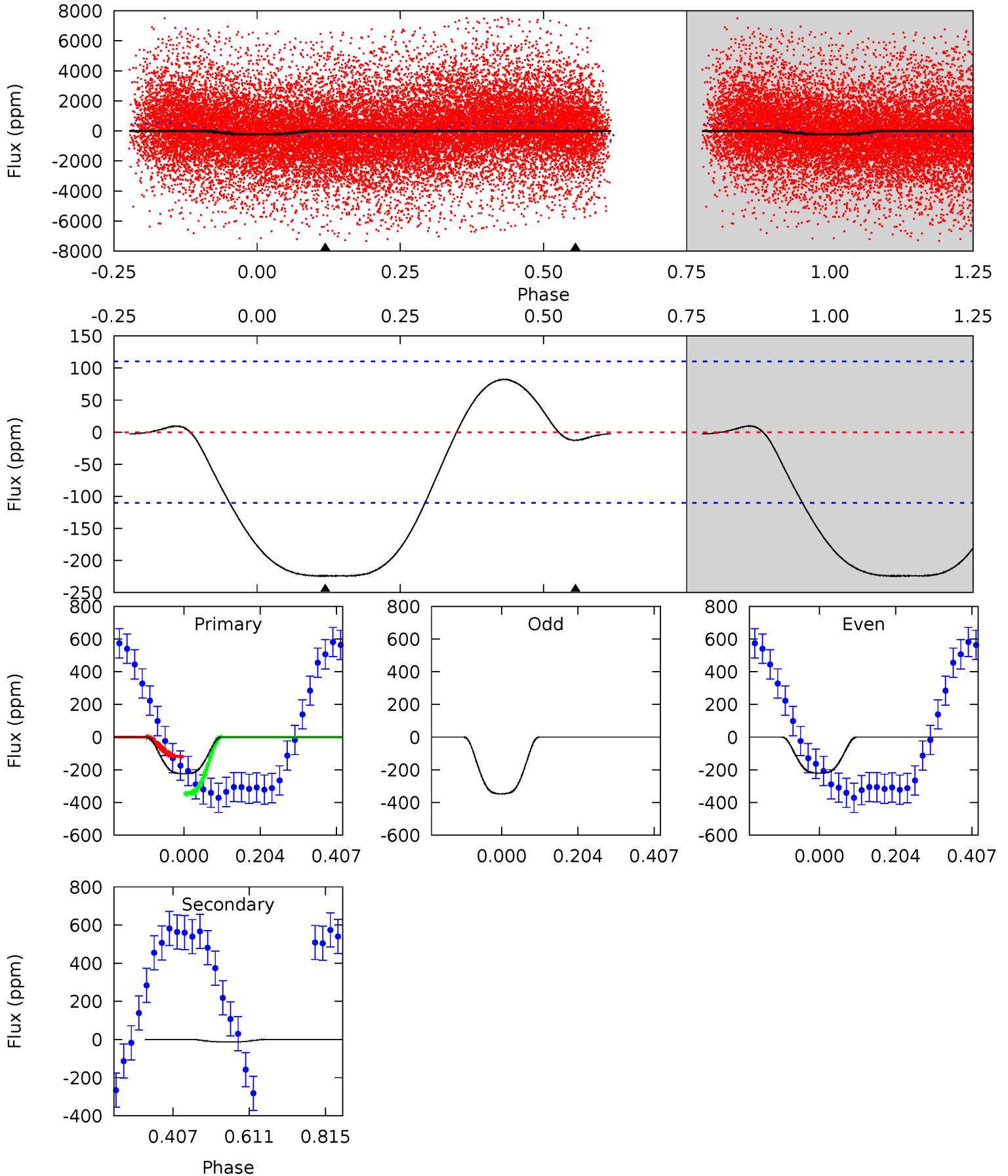
TCE 008779047-03 P= 1.102158 Days $T_0=131.755823$ (BKJD)



DV Model-Shift Uniqueness Test

008779047-03, P = 1.102132 Days, E = 131.761748 Days

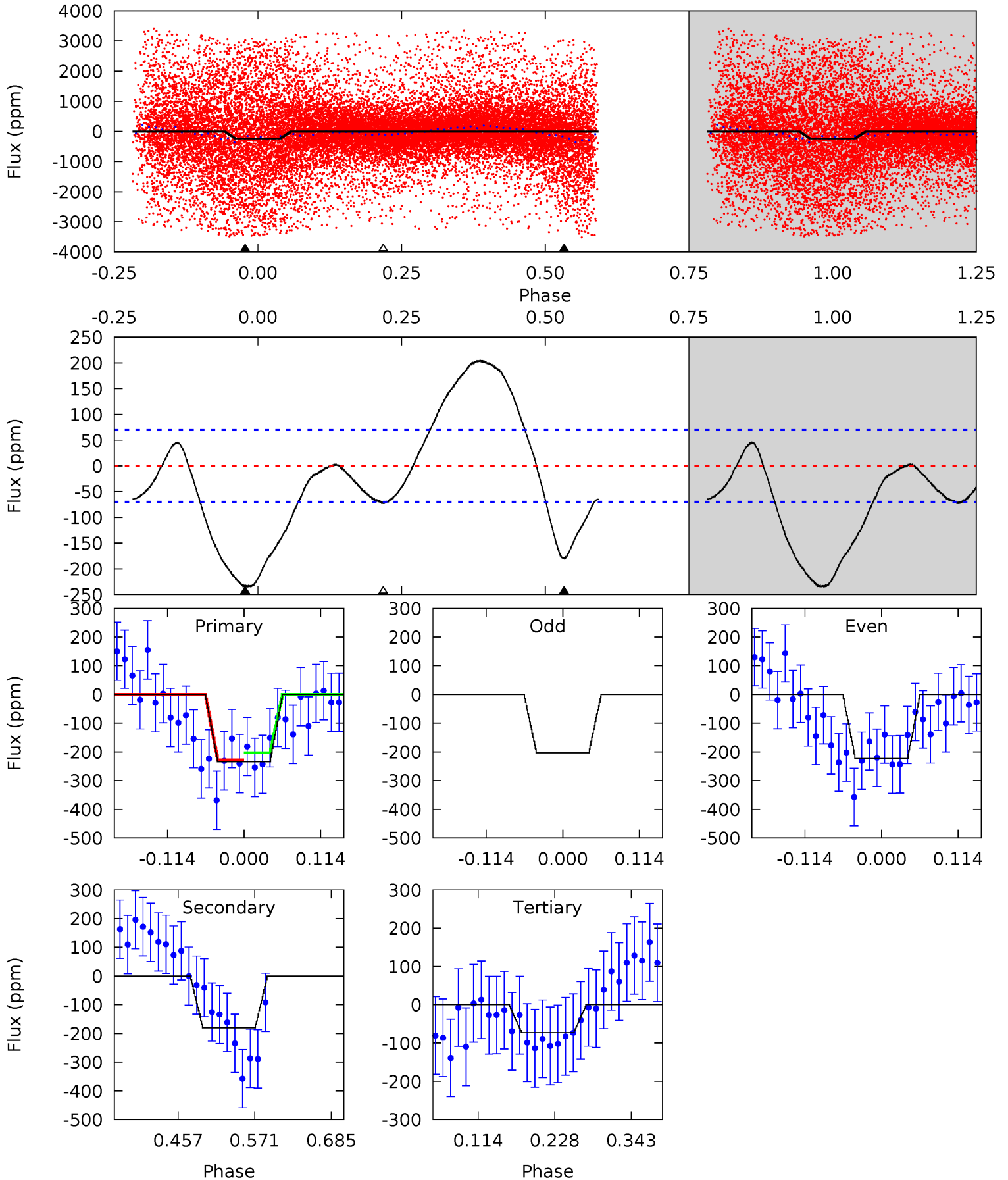
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.97	0.51	0	0	4.41	1.27	0.68	8.97	8.97	0.51	0.51	2.83	1.37	0.27	4.49



Alt Model-Shift Uniqueness Test

008779047-03, P = 1.102158 Days, E = 131.755823 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.3	11.7	4.71	0	4.54	1.58	6.10	10.6	15.3	7.04	11.7	0.81	0.86	0.47	0.50



Stellar Parameters For KIC 008779047

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6324^{+181}_{-226}	$4.027^{+0.329}_{-0.141}$	$-0.160^{+0.250}_{-0.300}$	$1.742^{+0.503}_{-0.615}$	$1.176^{+0.189}_{-0.189}$	$0.313^{+0.741}_{-0.139}$
	+3%/-4%	+8%/-4%	+156%/-188%	+29%/-35%	+16%/-16%	+237%/-44%
Source	PHO1	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 008779047-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-13 ± 25	$2.96^{+0.54}_{-0.52}$	3409^{+272}_{-318}	2893^{+1121}_{-6698}	$0.413^{+0.849}_{-0.817}$
Alt.	-180 ± 15	$1.81^{+0.43}_{-0.41}$	3390^{+288}_{-325}	7344^{+755}_{-554}	14^{+9}_{-5}

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

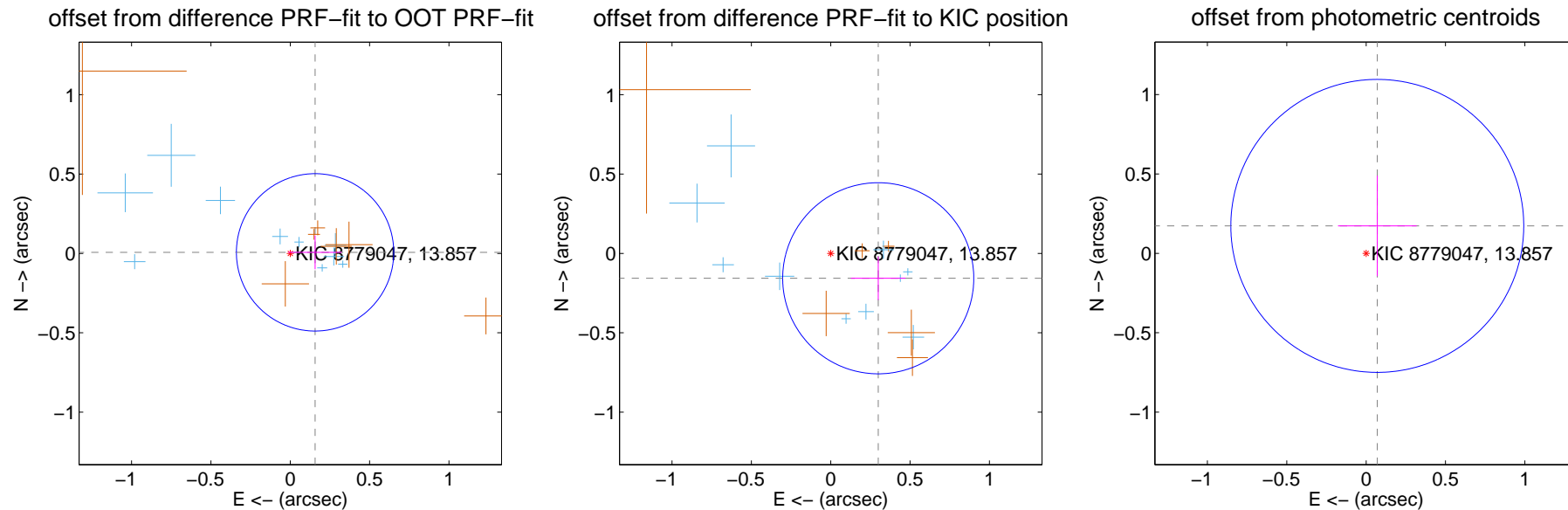
DV Centroid Data

Supplemental centroid analysis for 008779047-03. Kepler magnitude: 13.86. Transit SNR 8.25

There are 10 quarters with good PRF difference image offsets

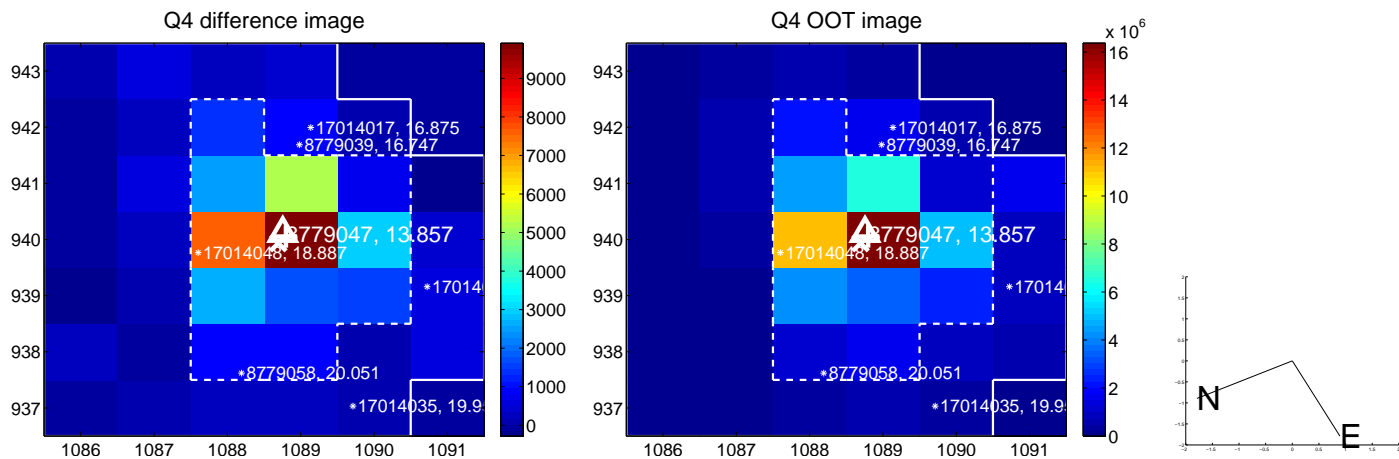
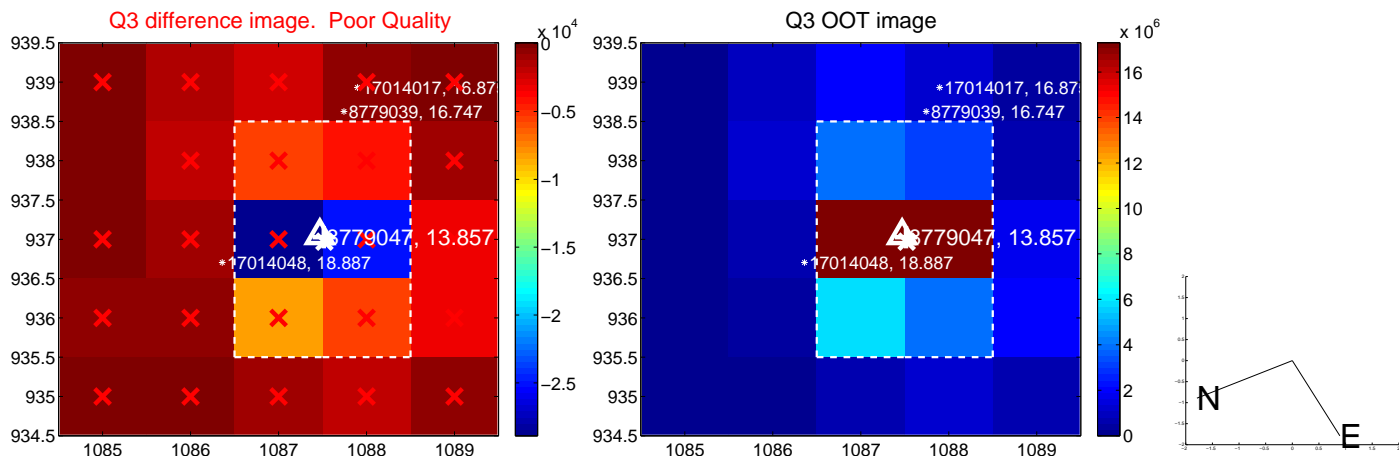
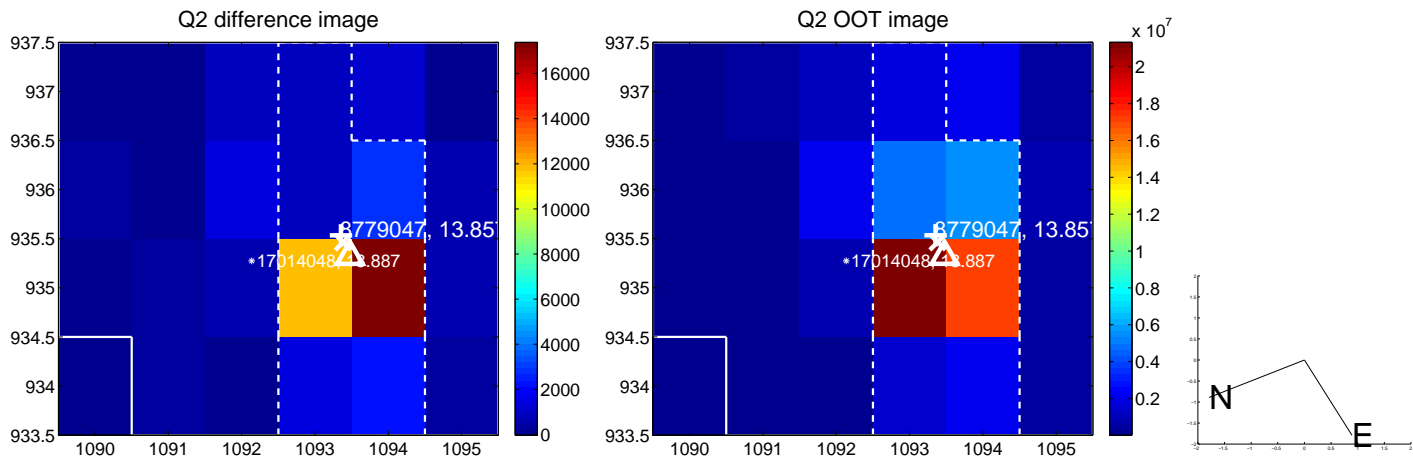
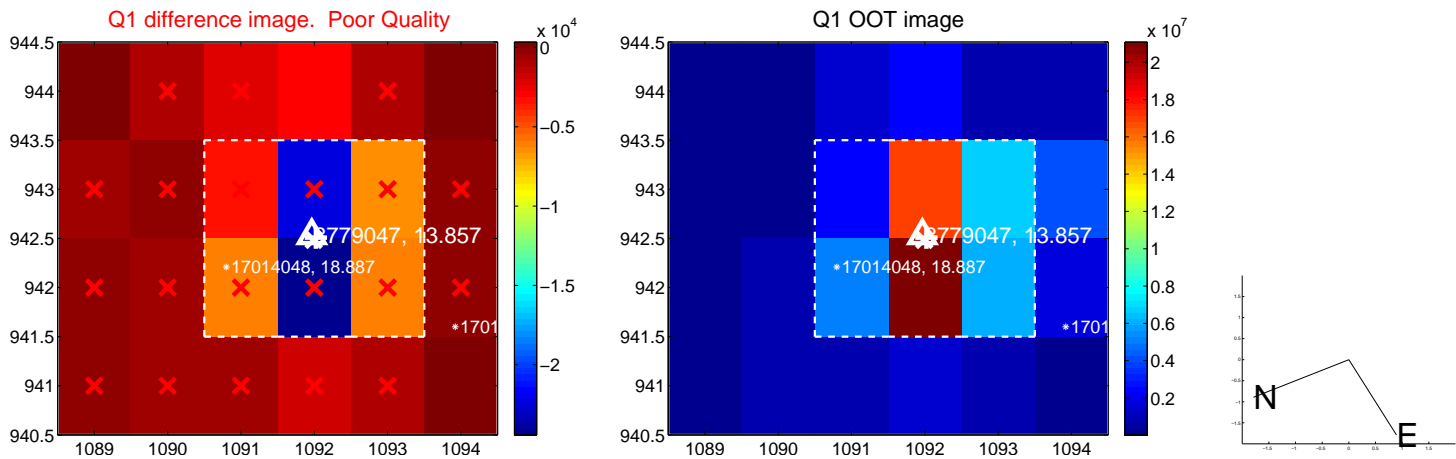
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.156 ± 0.165	0.95	-0.156 ± 0.168	0.007 ± 0.107
PRF-fit source offset from KIC position	0.338 ± 0.201	1.68	-0.299 ± 0.172	-0.157 ± 0.137
photometric centroid source offset	0.19 ± 0.31	0.61	-0.07 ± 0.25	0.17 ± 0.32

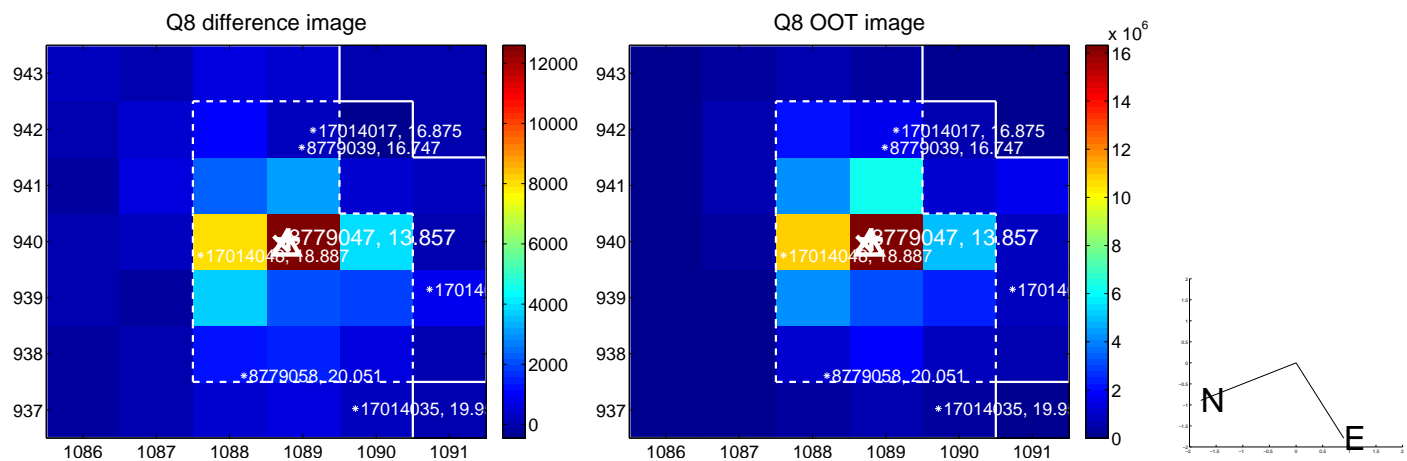
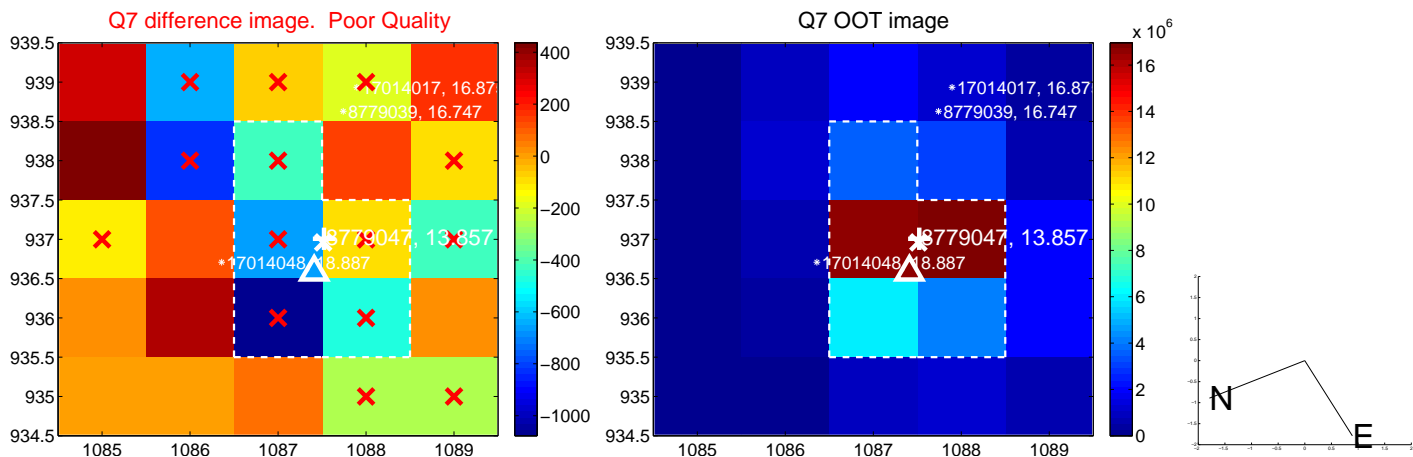
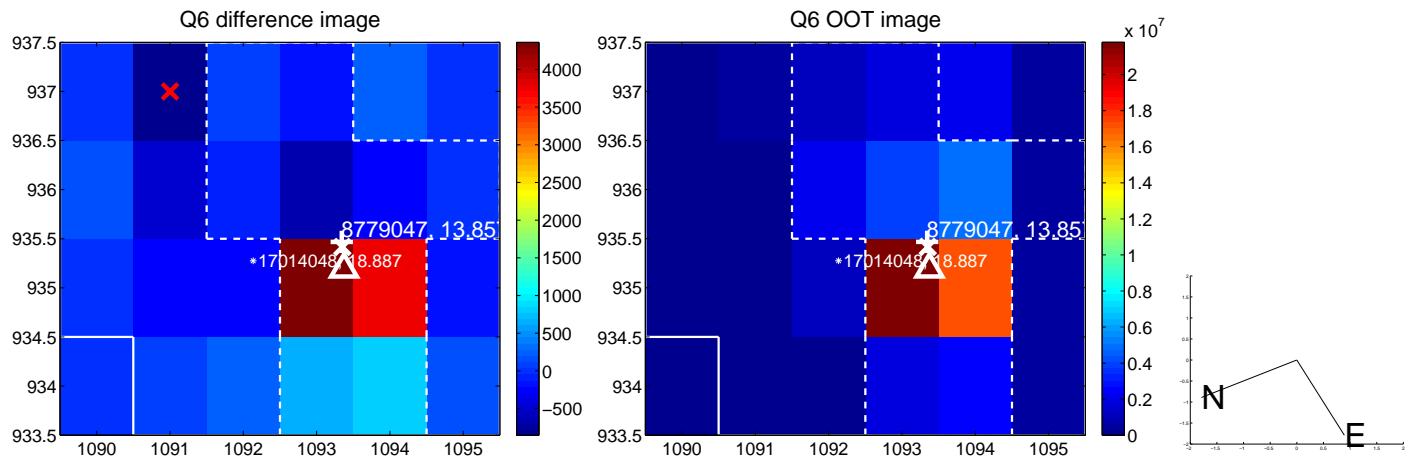
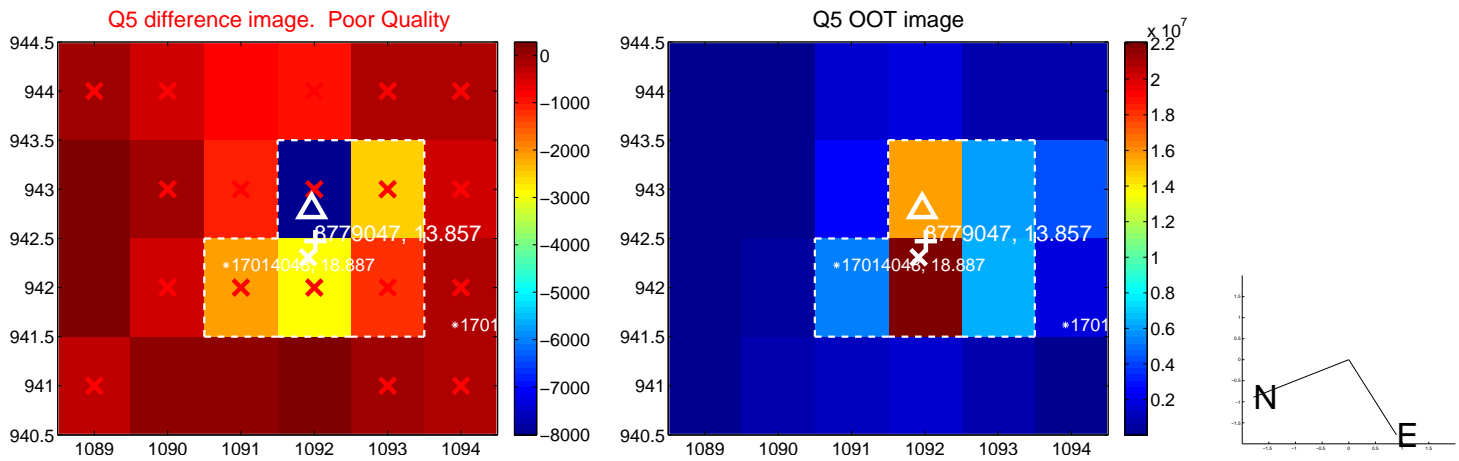


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

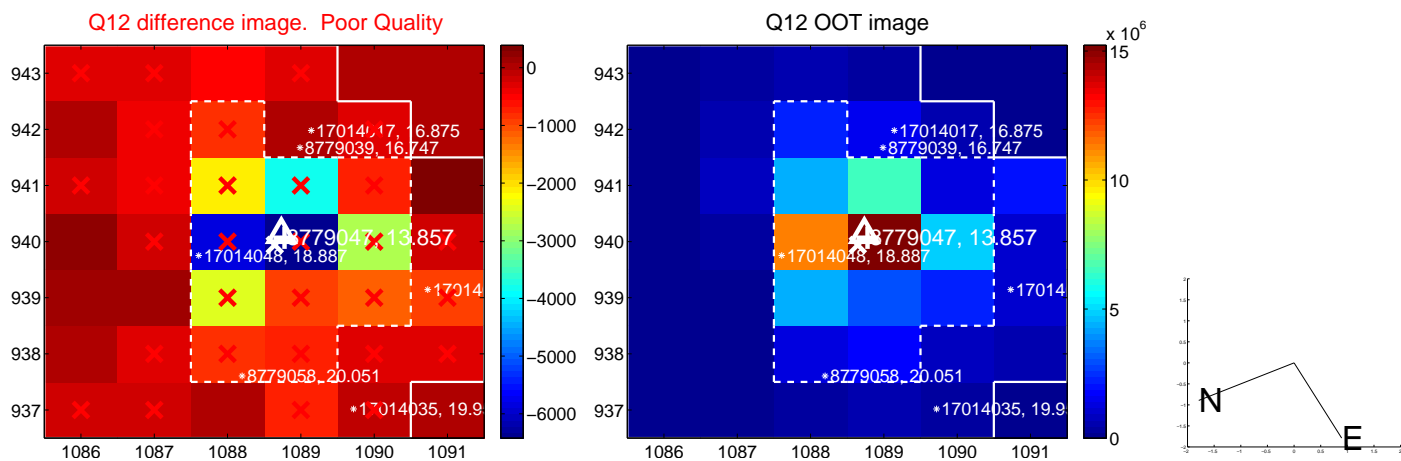
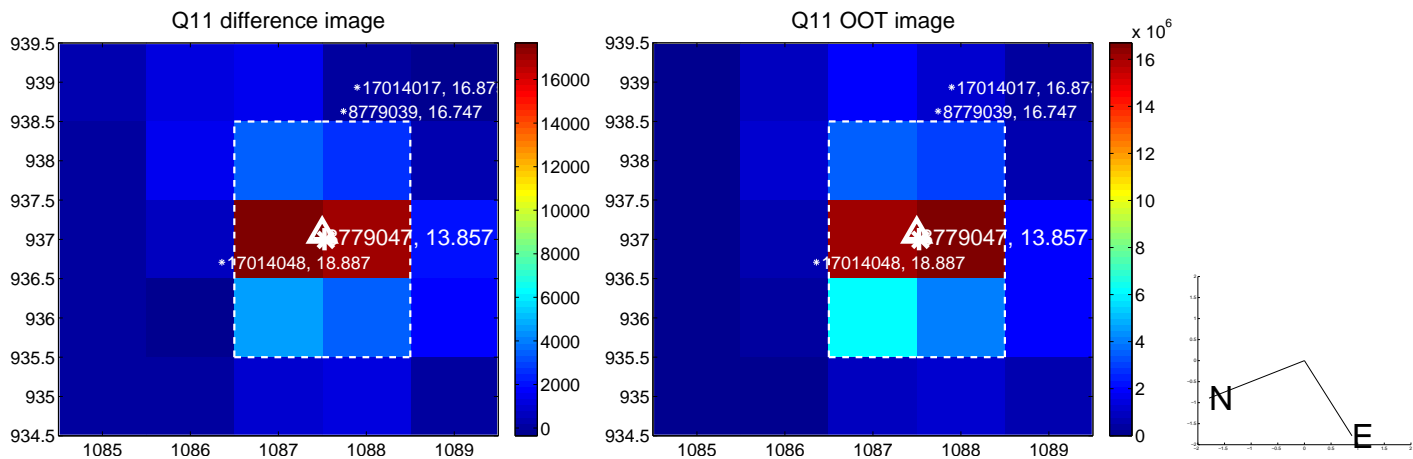
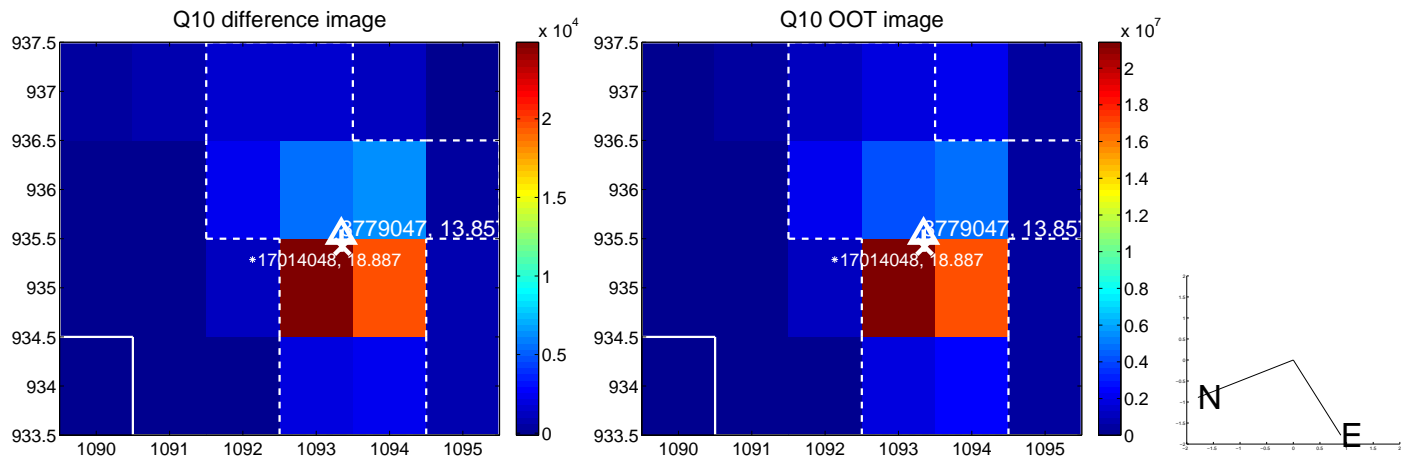
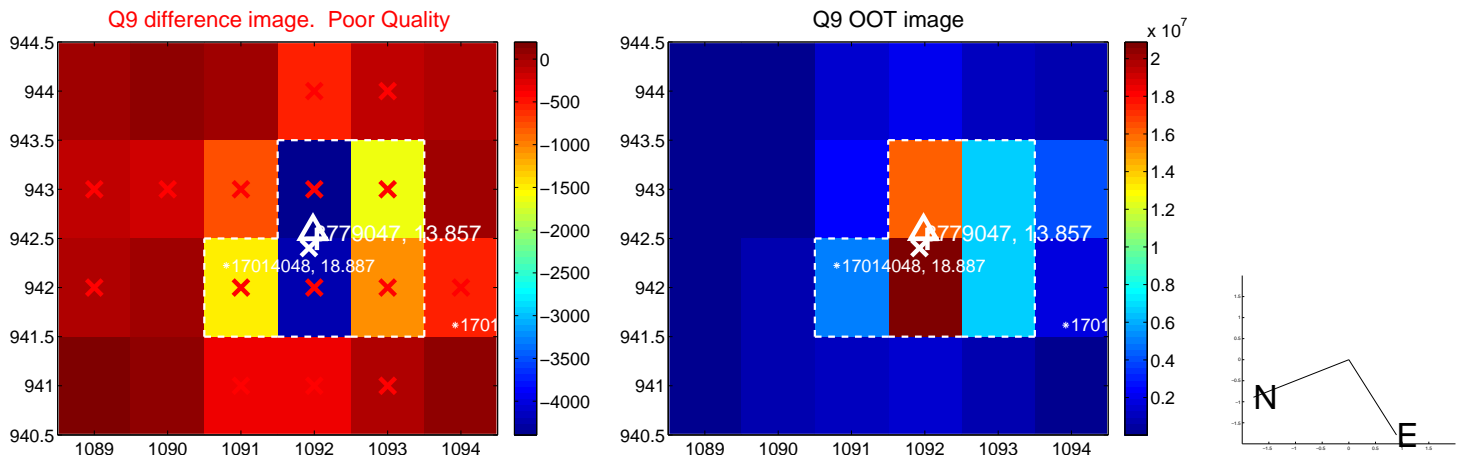
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



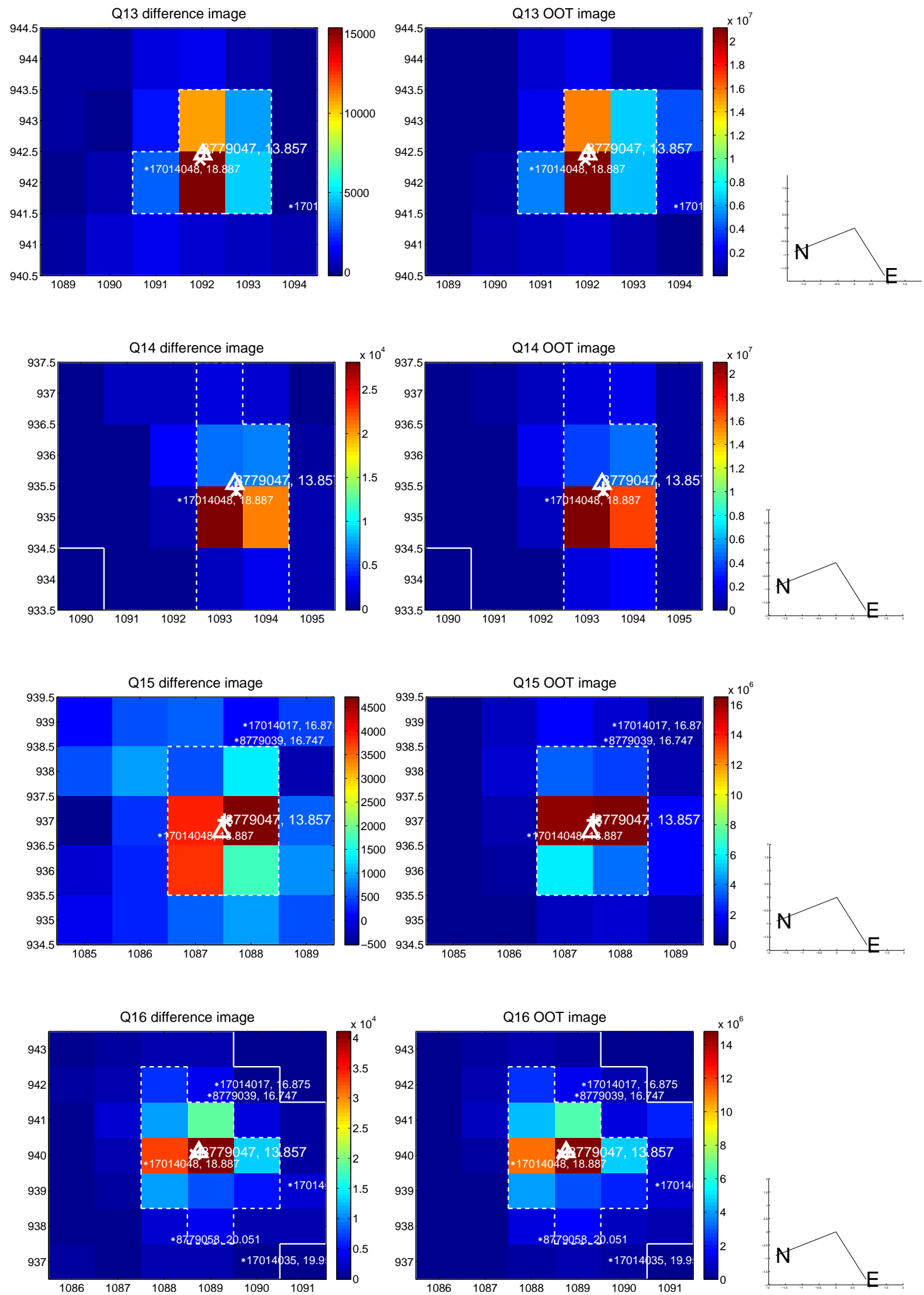
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



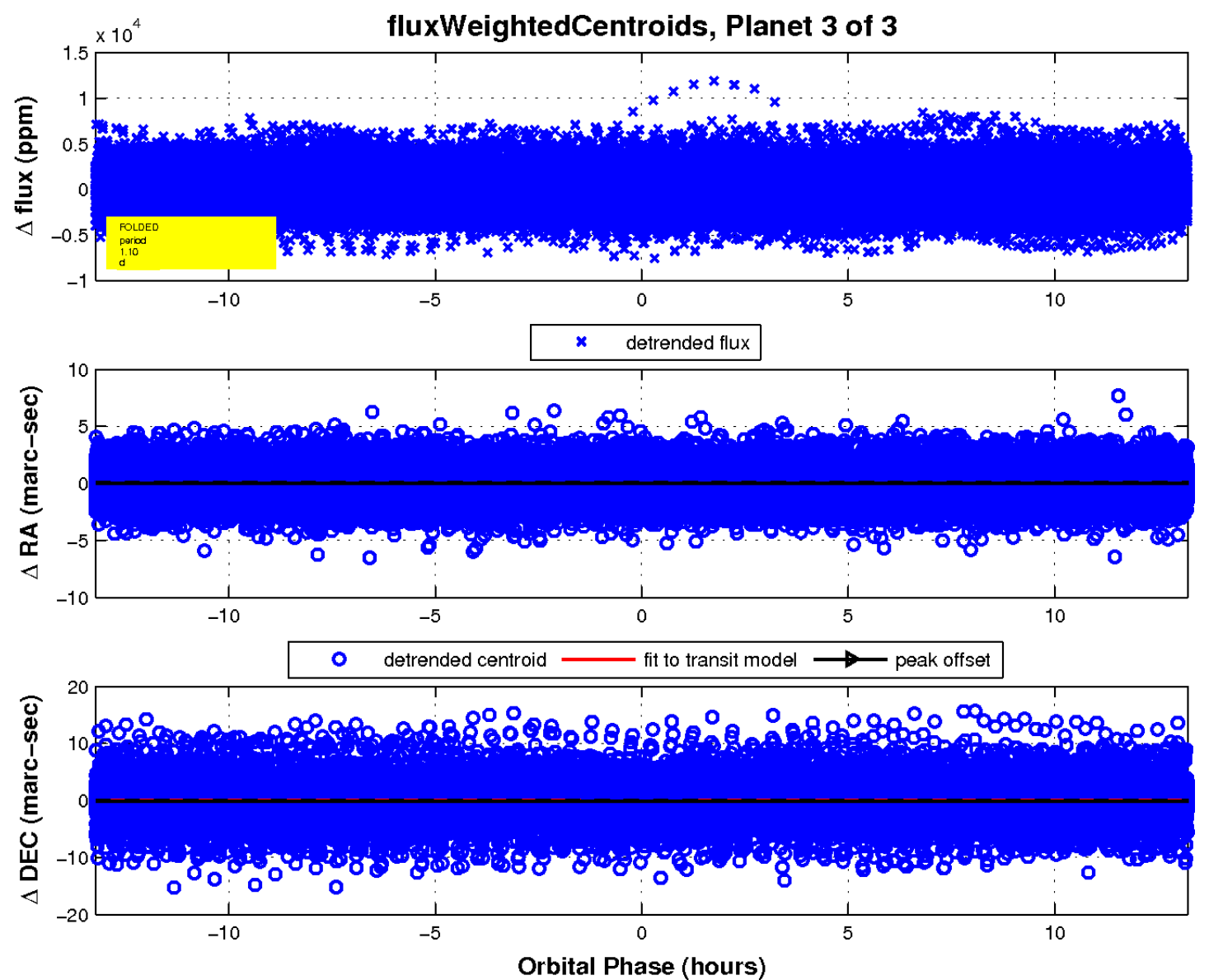
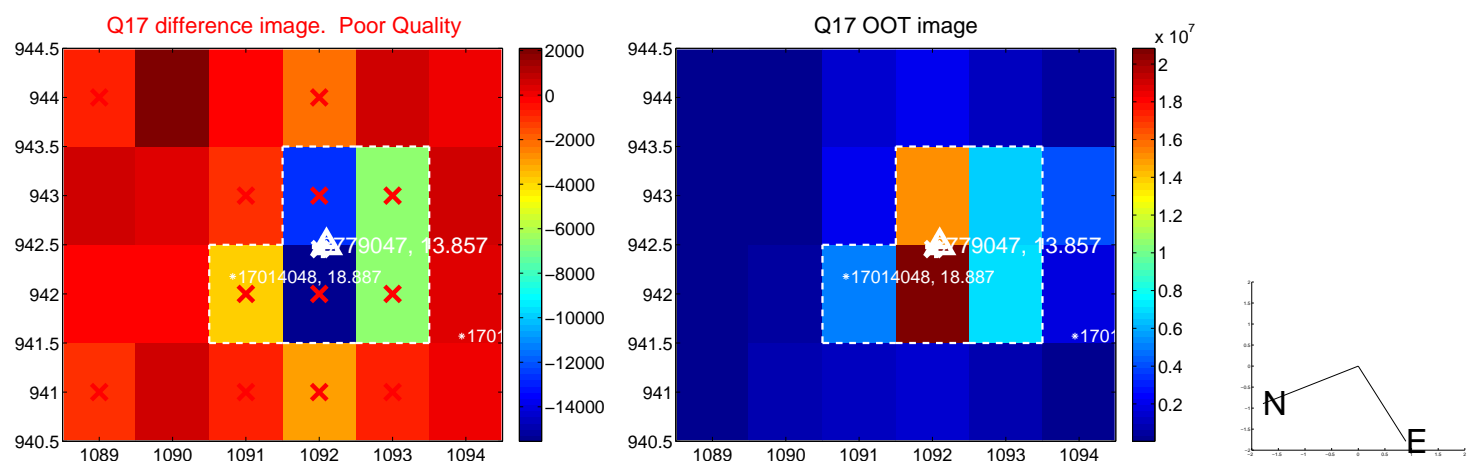
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white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination

