

KIC 008184075

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})
008184075-01	OBS	No	0.796322	131.656071	13.5	4.443	8.0	7.4	0.73	5119	0.32	1467.37
008184075-03	OBS	No	129.570427	149.560250	295.6	7.888	11.7	8.6	0.73	5119	1.27	1.65
008184075-04	OBS	No	149.625683	229.796290	267.6	9.021	8.4	7.1	0.73	5119	1.30	1.36
008184075-05	OBS	No	69.845227	197.013332	112.0	3.073	7.6	3.8	0.73	5119	0.93	3.77
008184075-06	OBS	No	74.500443	169.768347	276.0	2.275	7.6	7.9	0.73	5119	1.39	3.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008184075-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_KIC_POS
008184075-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008184075-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

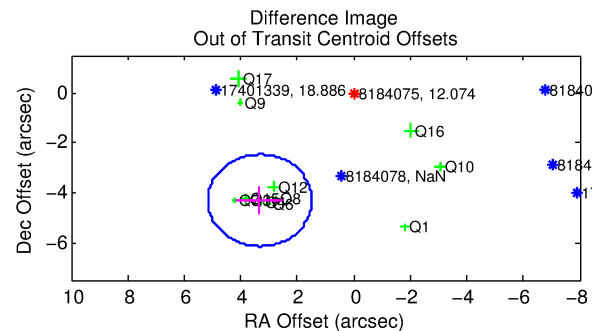
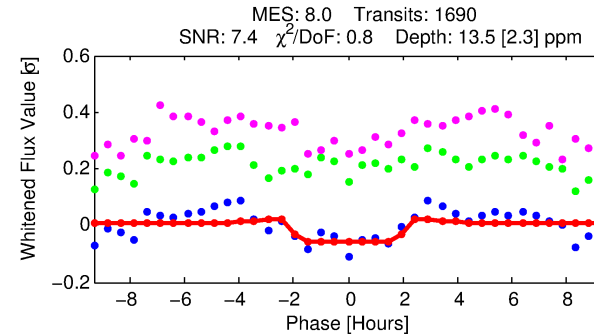
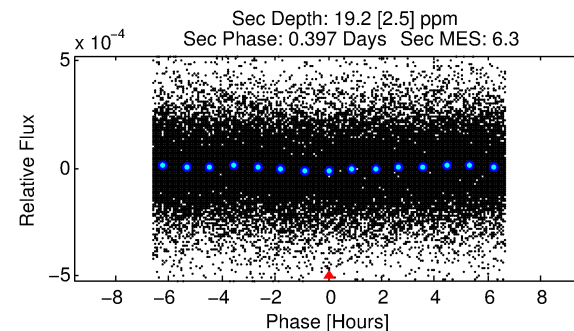
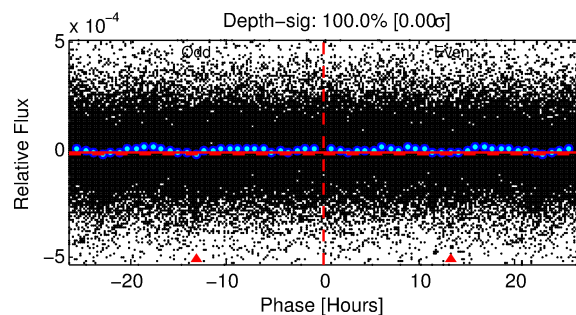
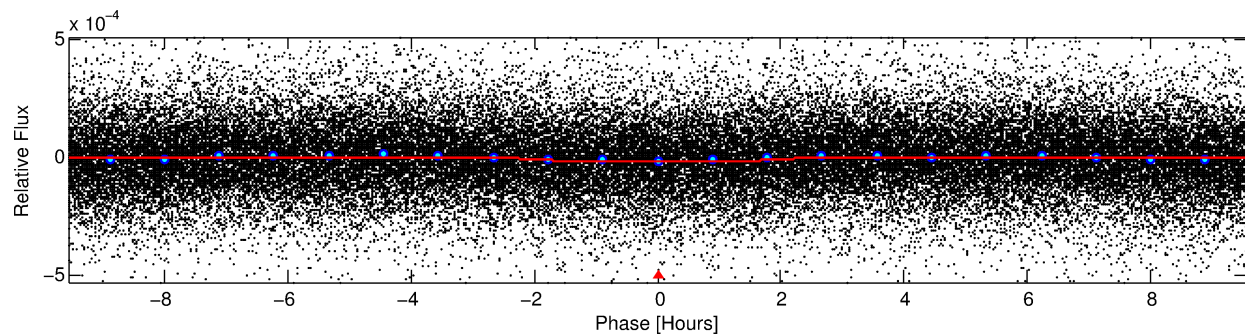
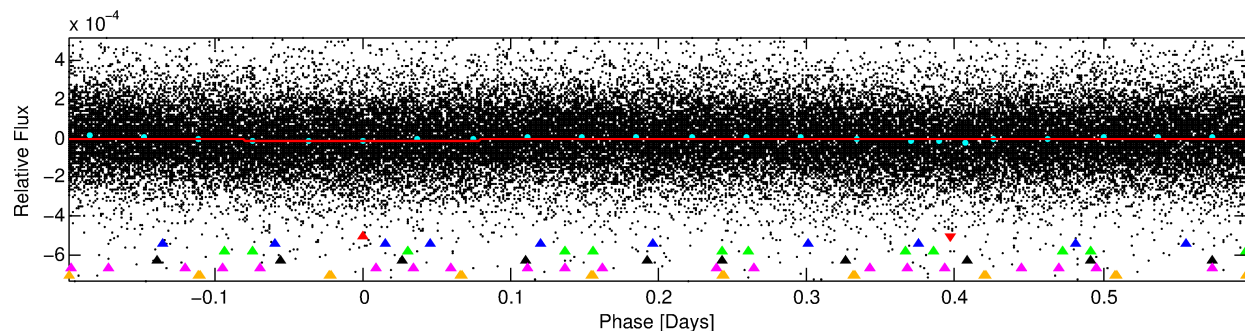
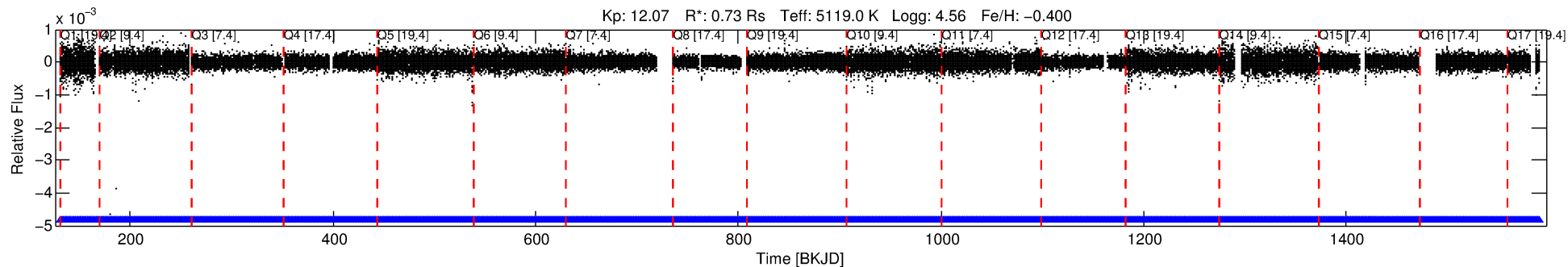
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008184075-01

No Significant Match Found

DV One-Page Summary

KIC: 8184075 Candidate: 1 of 6 Period: 0.796 d



DV Fit Results:

Period = 0.79632 [0.00001] d
Epoch = 131.6561 [0.0044] BKJD
Rp/R* = 0.0041 [0.0021]
a/R* = 1.12 [0.51]
b = 0.90 [0.49]
Seff = 1467.37 [269.70]
Teq = 1578 [73] K
Rp = 0.32 [0.17] Re
a = 0.0149 [0.0014] AU
Ag = 22.53 [23.53] [0.91 σ]
Teffp = 5316 [1385] K [2.70 σ]

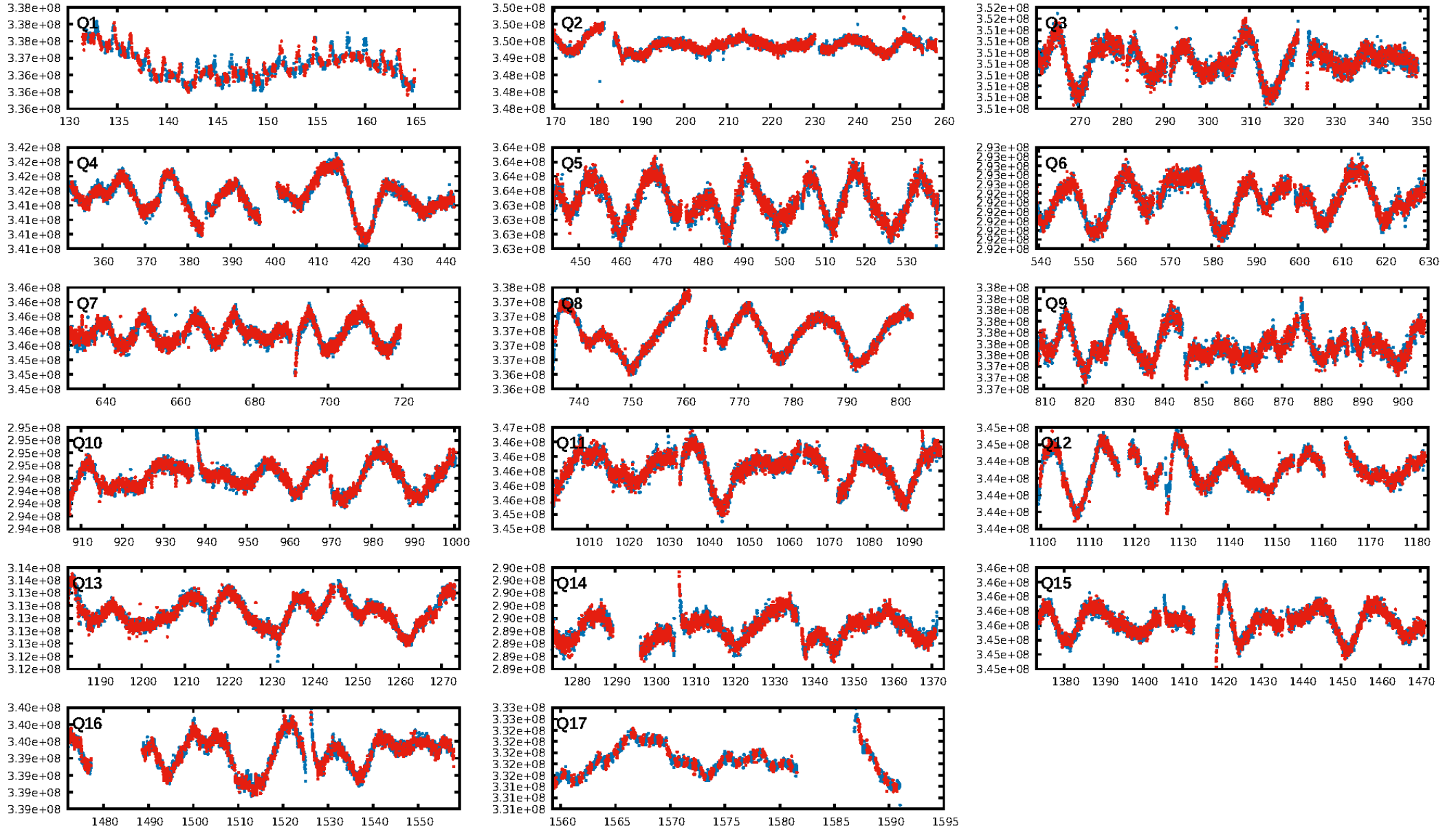
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [306.76 σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 8.59e-11
RollingBand-fgt: 1.00 [1615/1615]
GhostDiagnostic-chr: 2.52
Centroid-sig: 0.0%
Centroid-so: 1.550 arcsec [3.27 σ]
OotOffset-rm: 5.446 arcsec [8.88 σ]
KicOffset-rm: 5.021 arcsec [7.35 σ]
OotOffset-st: 2/3/4/3 [12]
KicOffset-st: 2/3/4/3 [12]
DiffImageQuality-fgm: 0.58 [7/12]
DiffImageOverlap-fno: 1.00 [17/17]

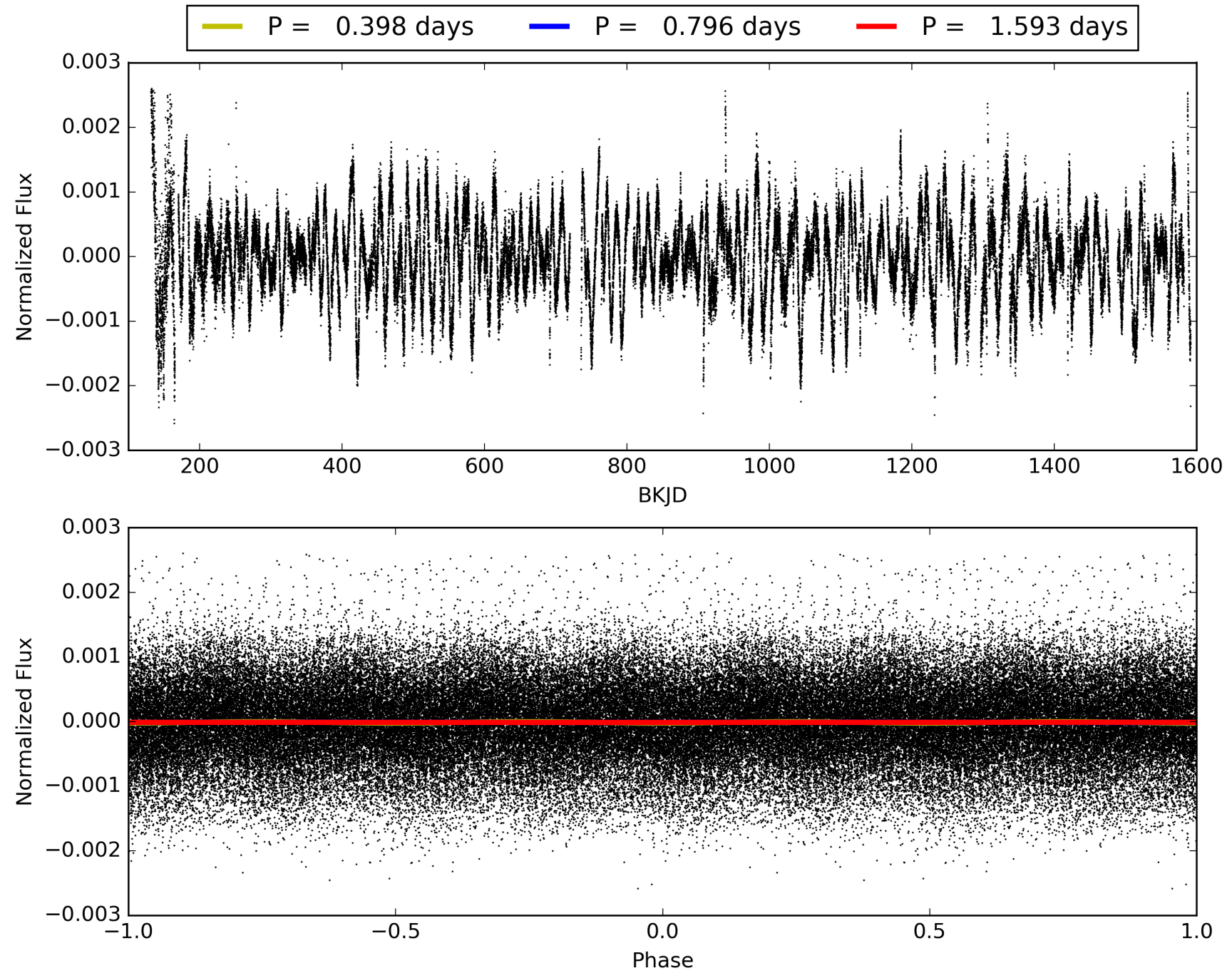
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:59:14 Z

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

TCE 008184075-01, PDC Light Curves

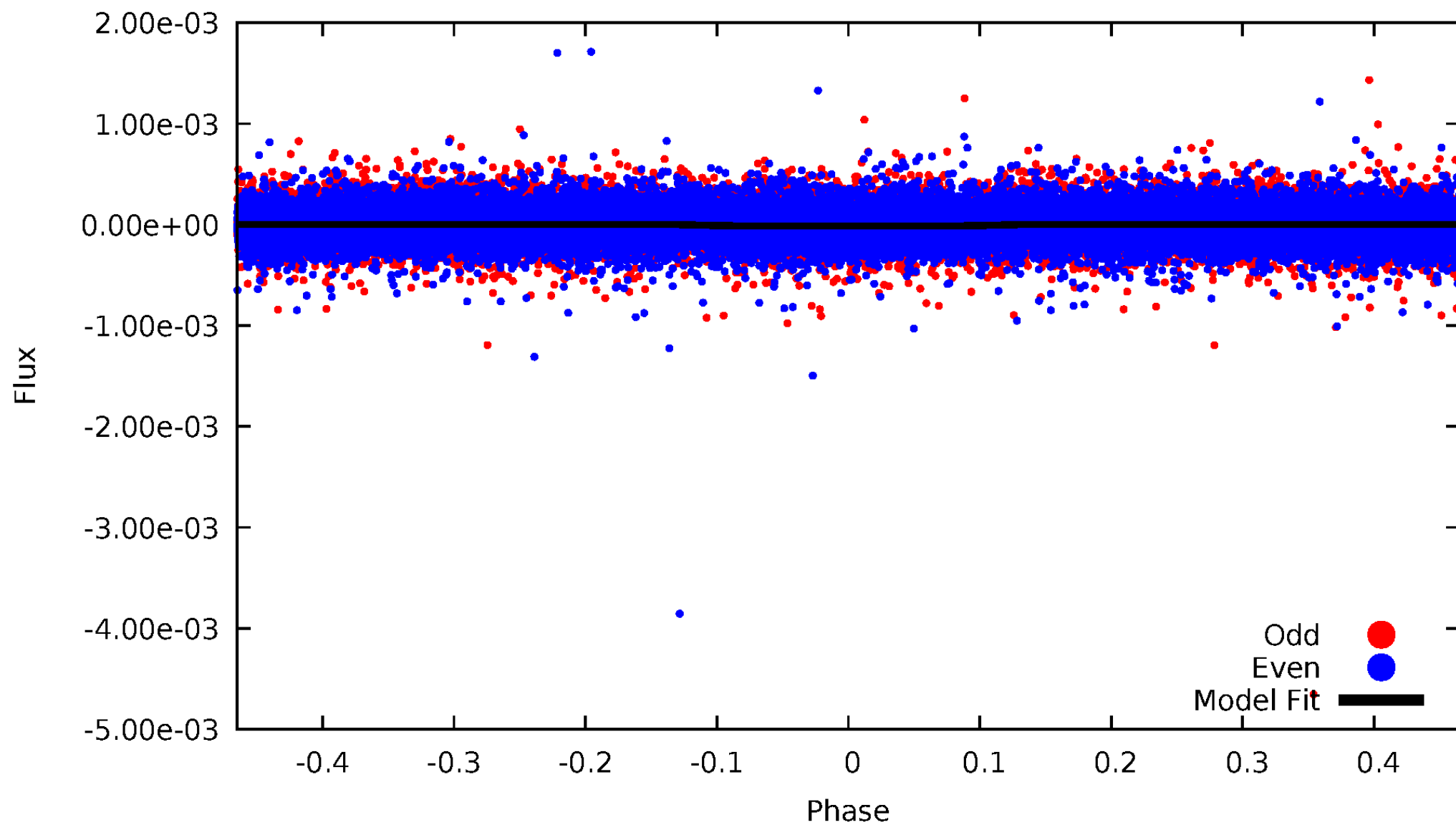


TCE 008184075-01



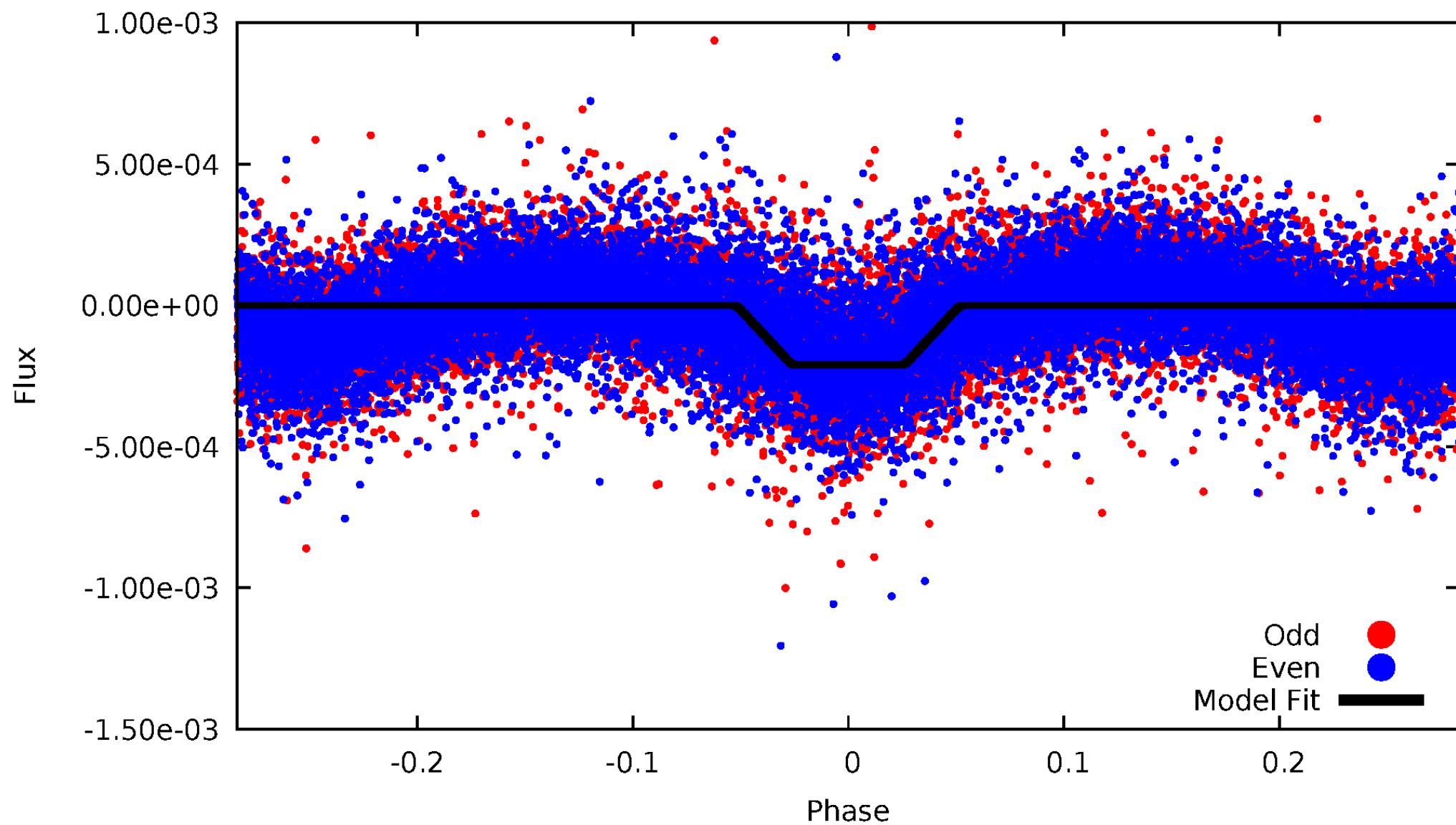
DV Odd/Even

TCE 008184075-01



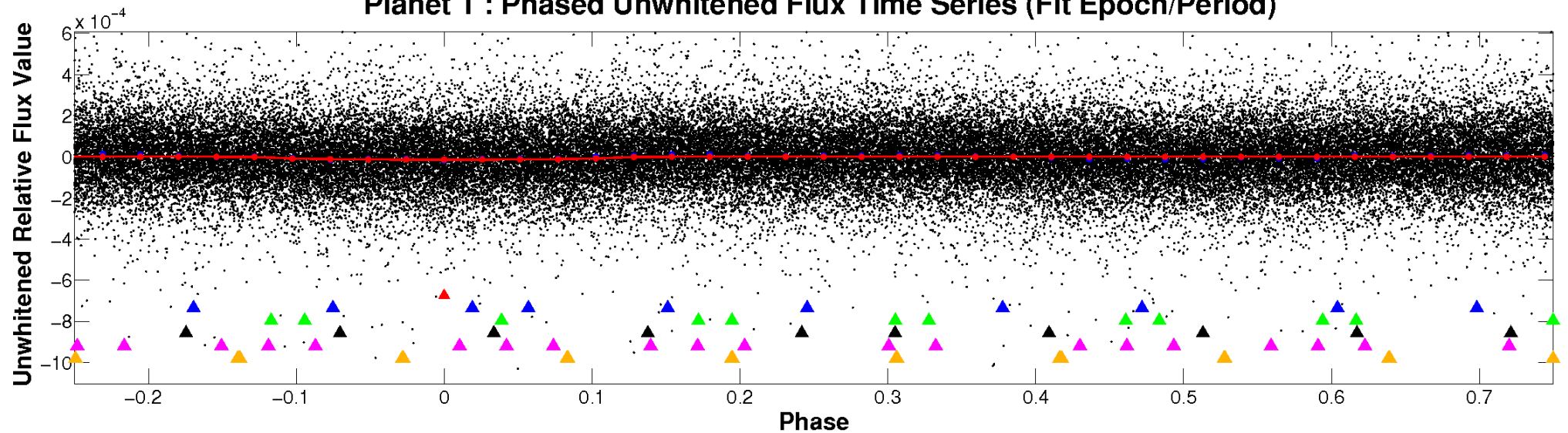
ALT Odd/Even

TCE 008184075-01

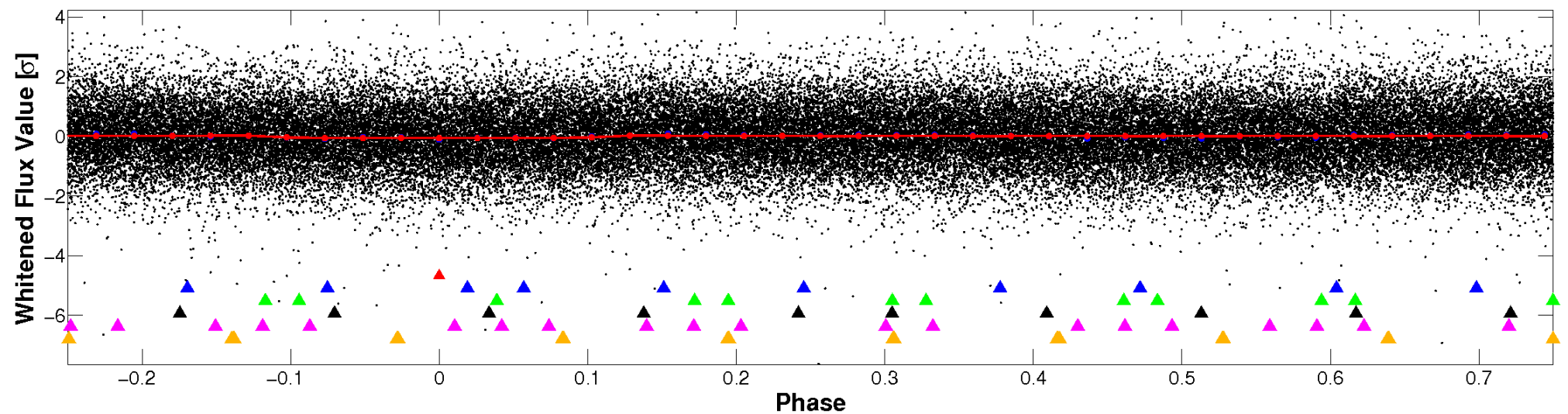


Non-Whitened Vs. Whitened Light Curve

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

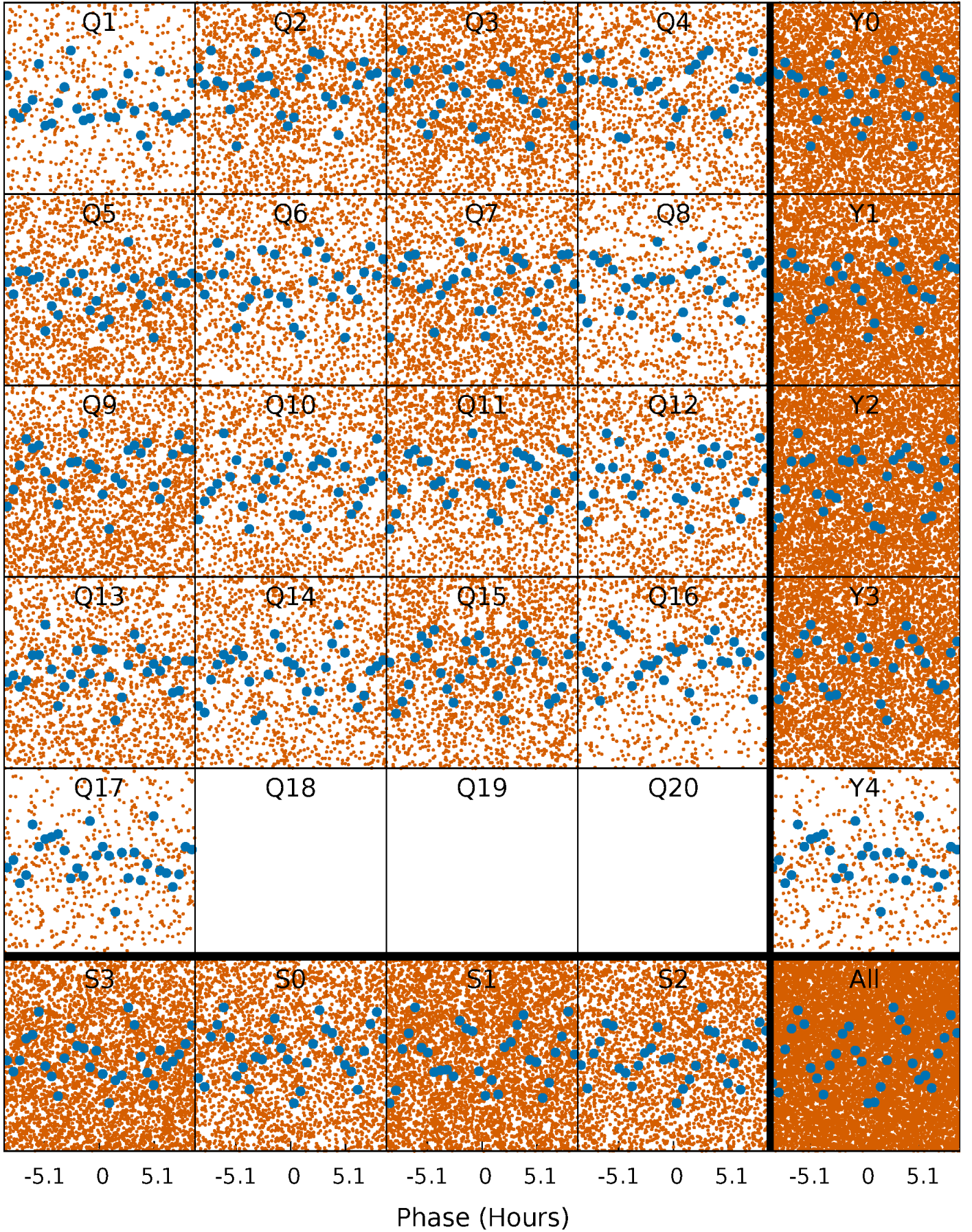


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



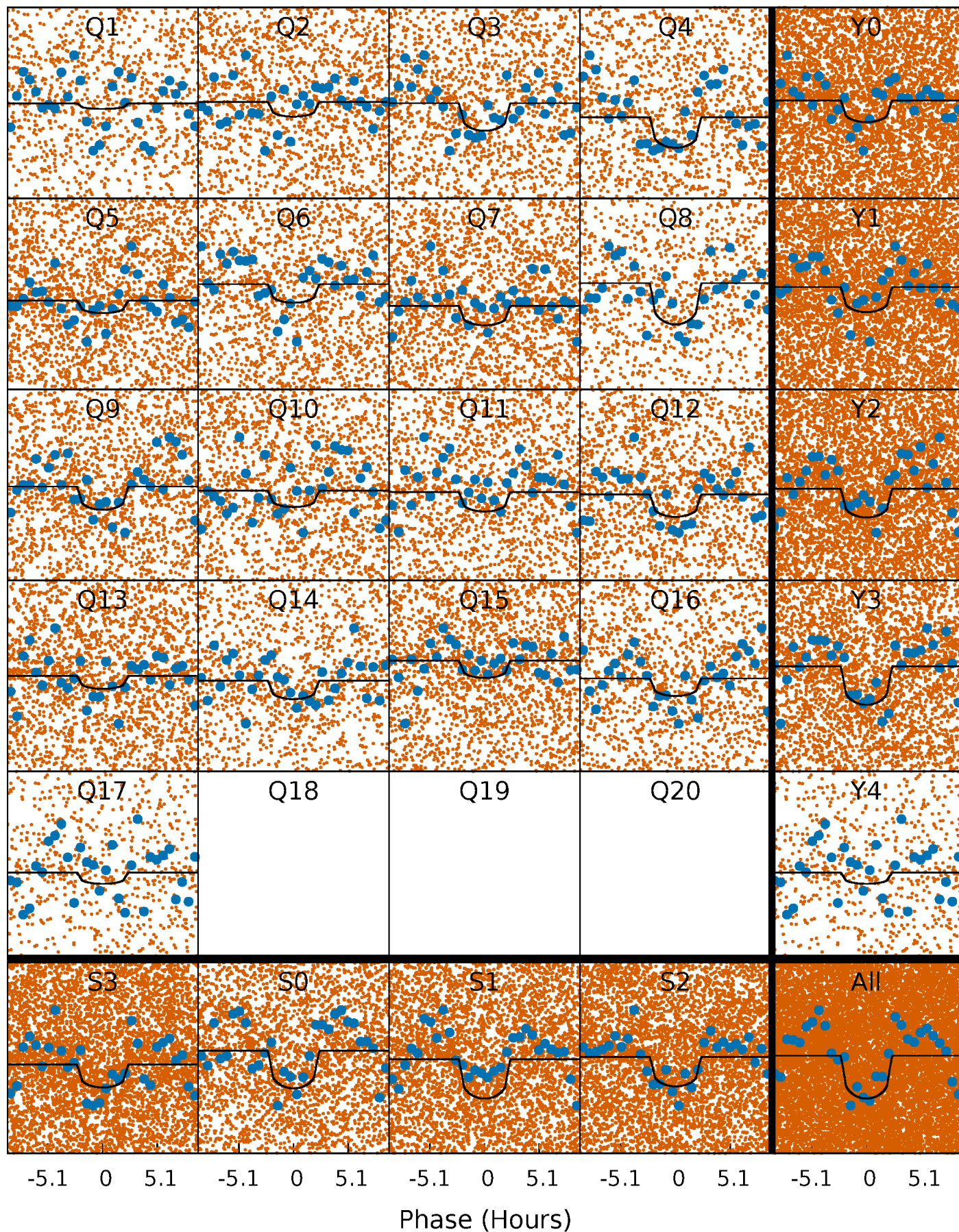
PDC Quarter-Phased Transit Curves

TCE 008184075-01 P= 0.796322 Days $T_0=131.656071$ (BKJD)



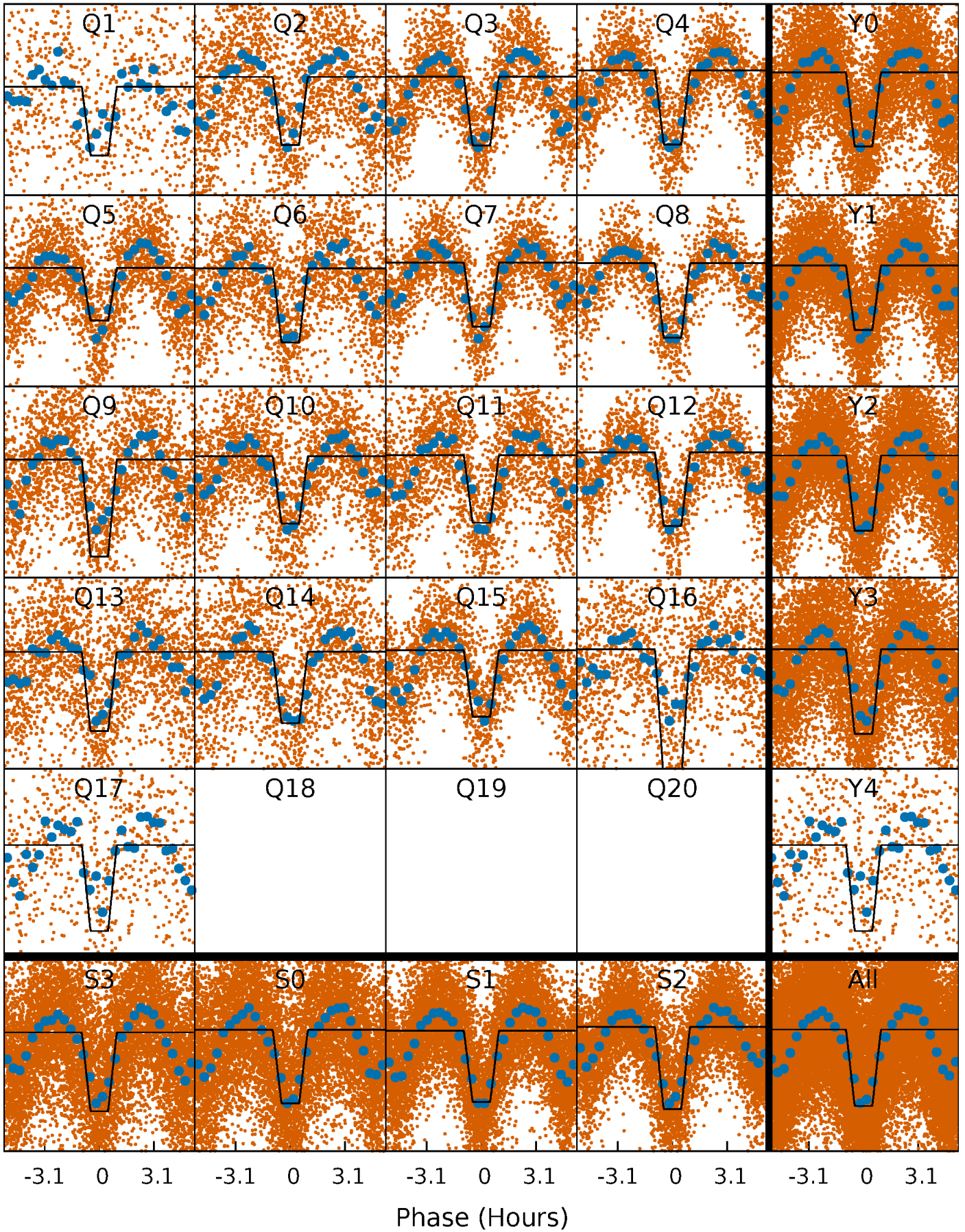
DV Quarter-Phased Transit Curves

TCE 008184075-01 P= 0.796322 Days $T_0=131.656071$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

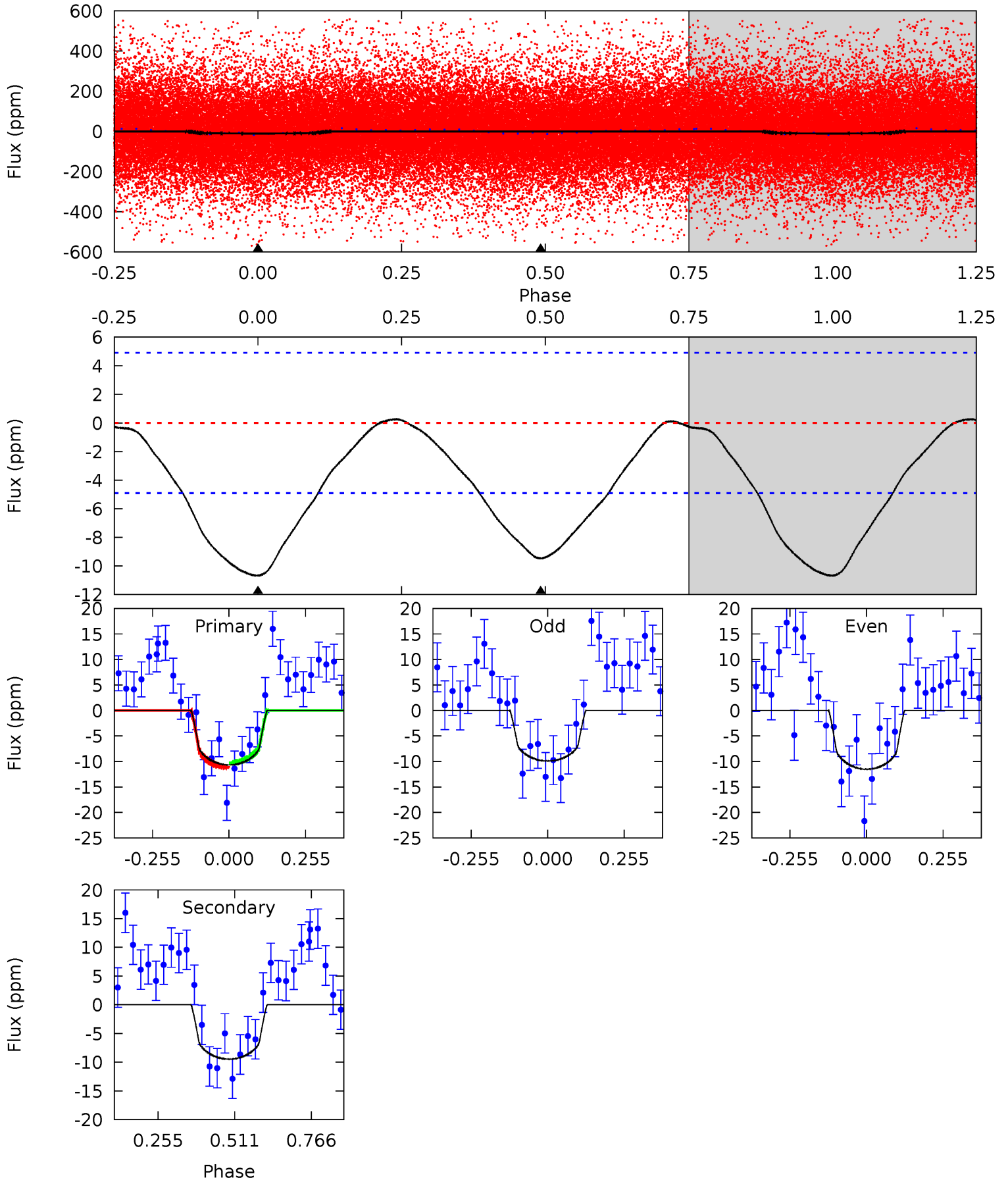
TCE 008184075-01 P= 0.796377 Days $T_0=131.640060$ (BKJD)



DV Model-Shift Uniqueness Test

008184075-01, P = 0.796322 Days, E = 130.859749 Days

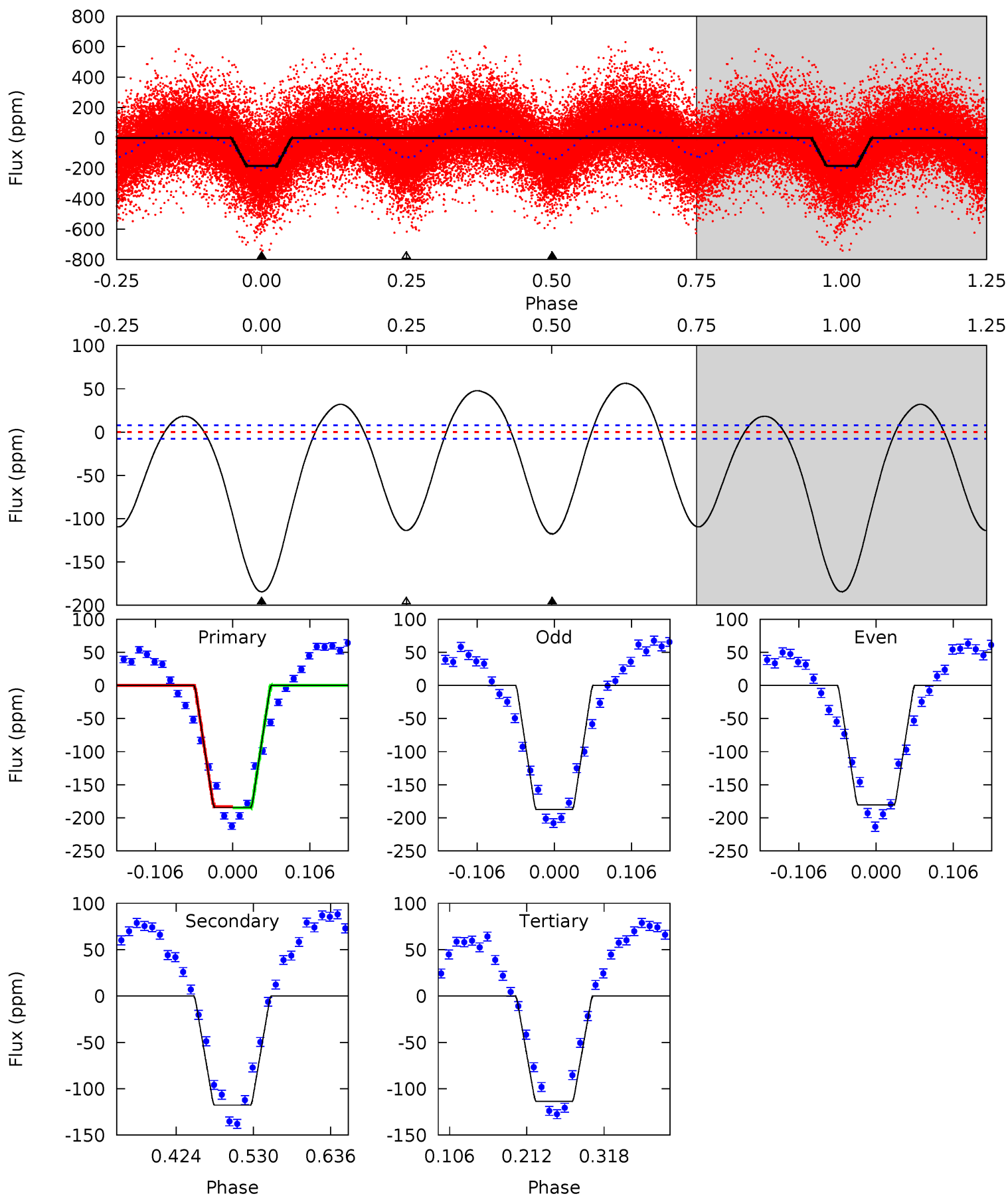
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.49	8.42	0	0	4.36	1.14	0.20	9.49	9.49	8.42	8.42	0.72	0.88	0.02	0.40



Alt Model-Shift Uniqueness Test

008184075-01, P = 0.796377 Days, E = 130.843683 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
107.3	68.5	66.2	0	4.55	1.62	32.0	41.1	107.3	2.33	68.5	1.99	0.97	0.23	0.46



Stellar Parameters For KIC 008184075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5119^{+153}_{-138}	$4.556^{+0.077}_{-0.063}$	$-0.400^{+0.350}_{-0.300}$	$0.727^{+0.081}_{-0.073}$	$0.693^{+0.103}_{-0.044}$	$2.544^{+0.870}_{-0.546}$
	+3%/-3%	+2%/-1%	+87%/-75%	+11%/-10%	+15%/-6%	+34%/-21%
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 008184075-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-9 ± 1	$0.33^{+0.17}_{-0.16}$	2207^{+82}_{-96}	4494^{+1568}_{-666}	11^{+31}_{-6}
Alt.	-118 ± 2	$1.15^{+0.19}_{-0.17}$	2203^{+87}_{-78}	4521^{+340}_{-257}	11^{+4}_{-3}

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

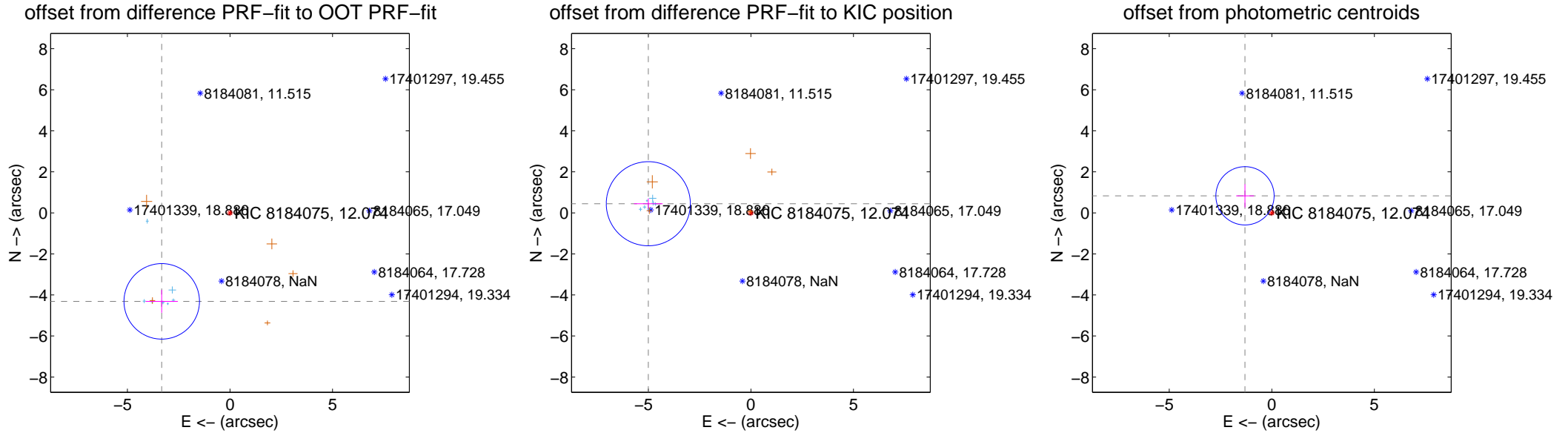
DV Centroid Data

Supplemental centroid analysis for 008184075-01. Kepler magnitude: 12.07. Transit SNR 7.37

There are 7 quarters with good PRF difference image offsets

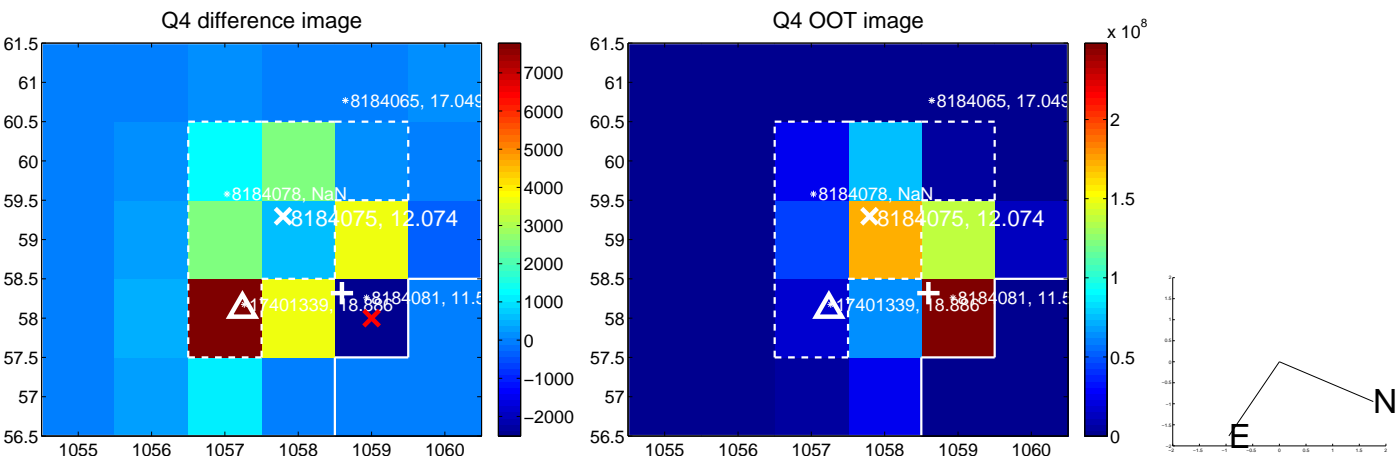
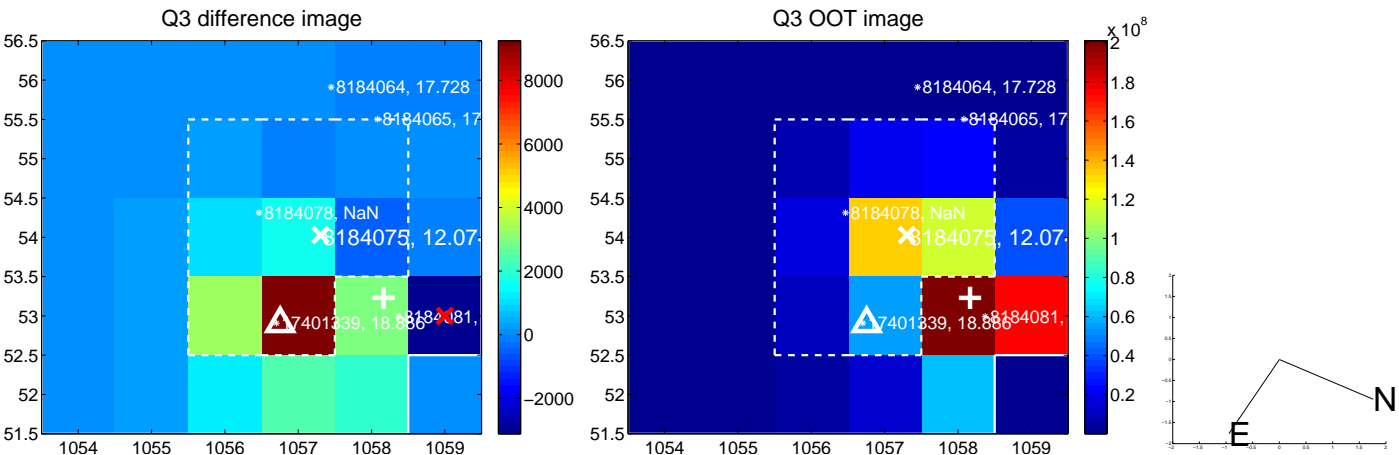
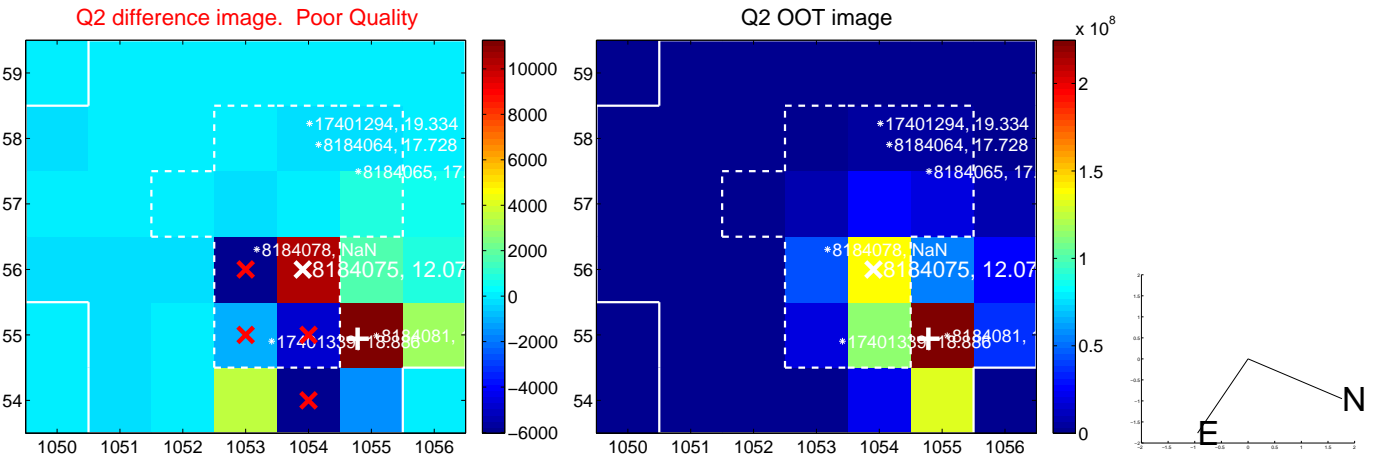
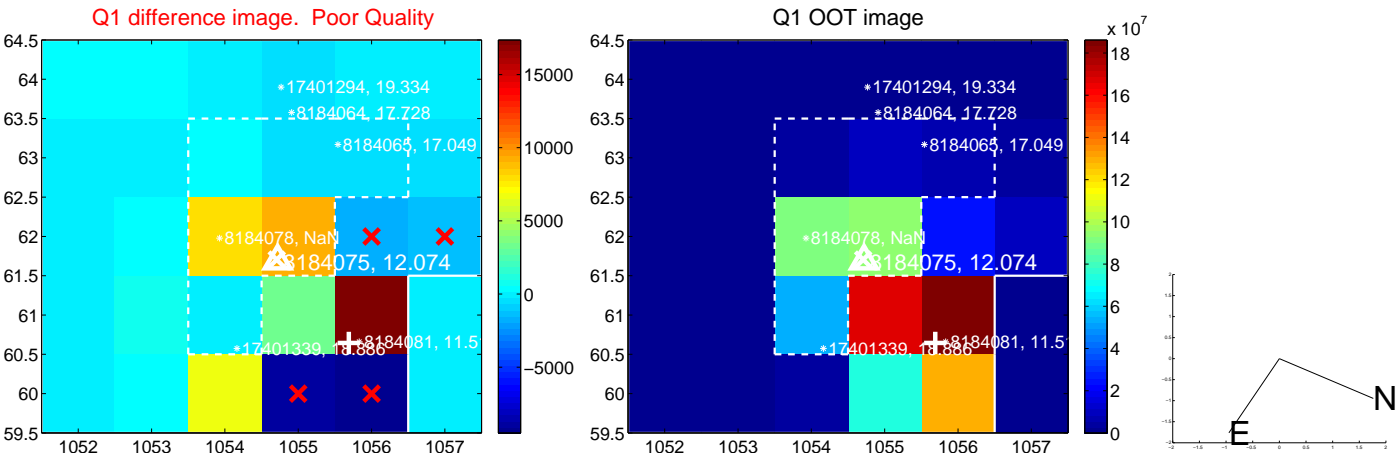
The direct PRF centroid is offset from the target star catalog position by about 1.21 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.446 ± 0.613	8.88	3.327 ± 0.784	-4.312 ± 0.557
PRF-fit source offset from KIC position	5.021 ± 0.683	7.35	5.002 ± 0.700	0.445 ± 0.254
photometric centroid source offset	1.55 ± 0.47	3.27	1.31 ± 0.43	0.83 ± 0.57

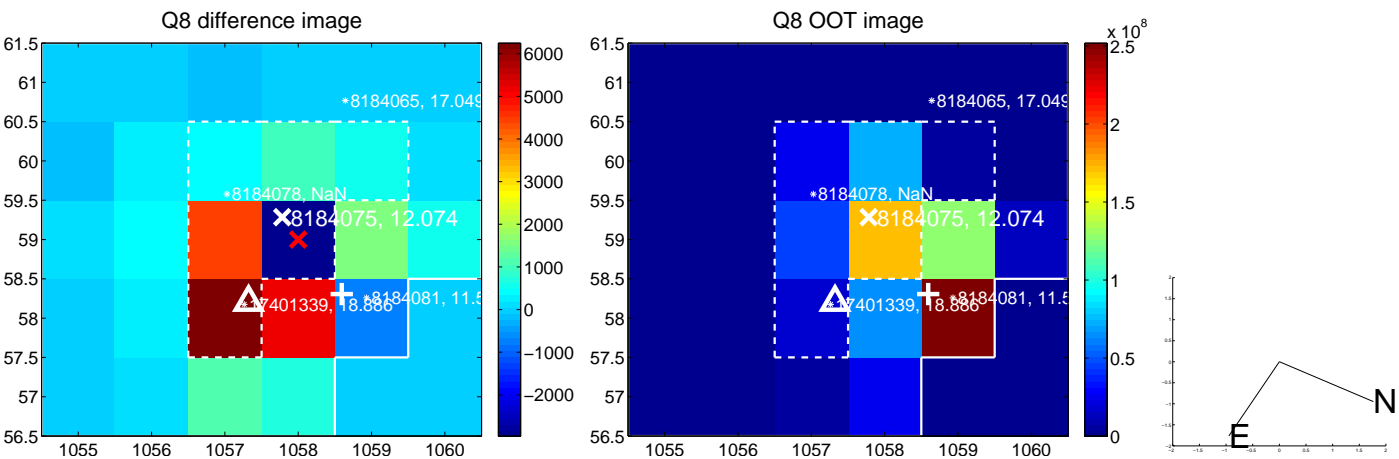
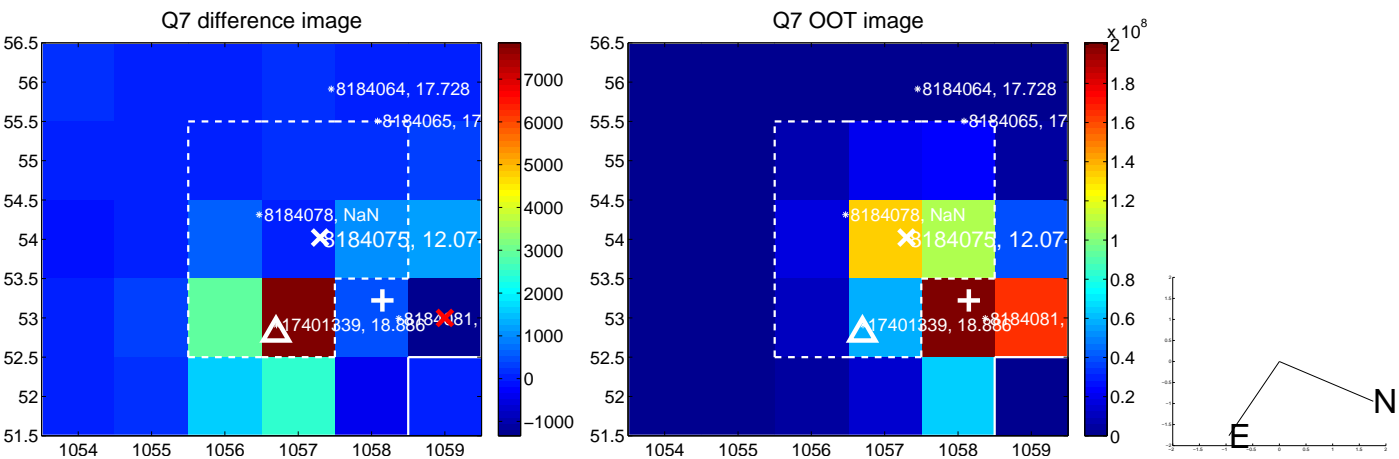
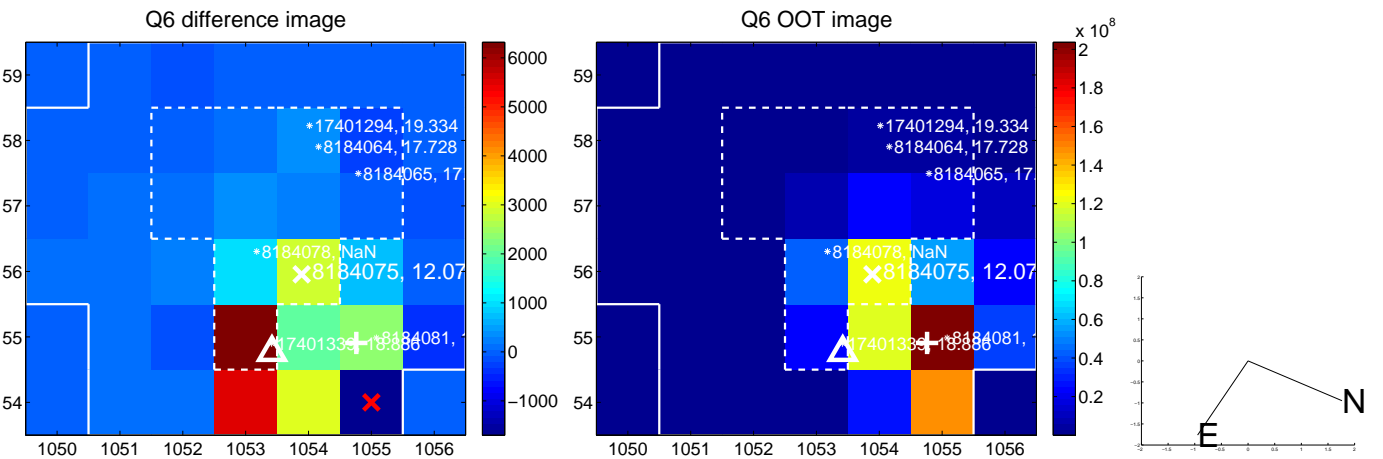
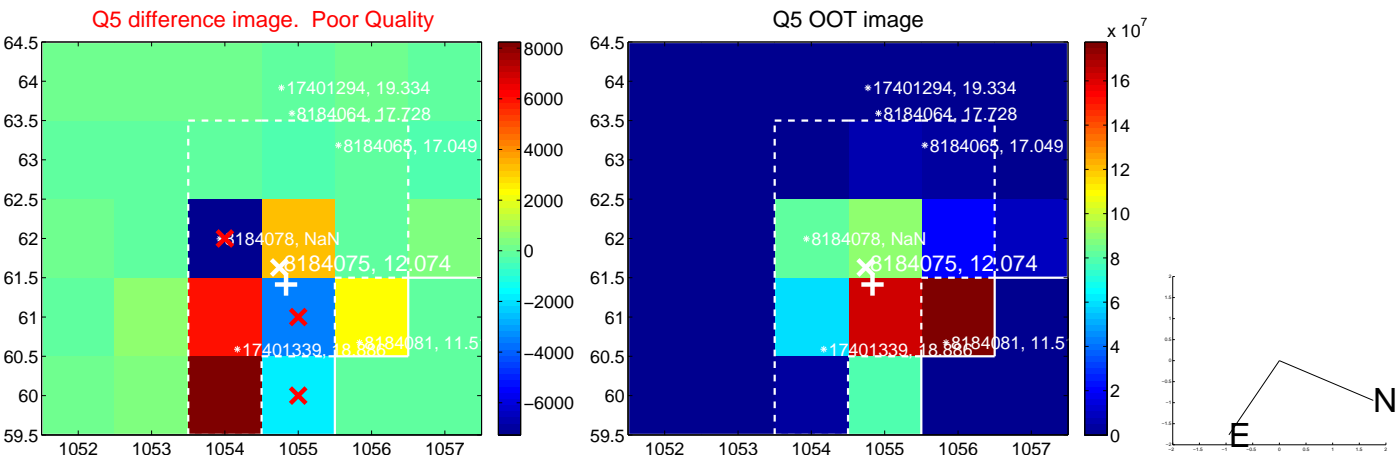


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

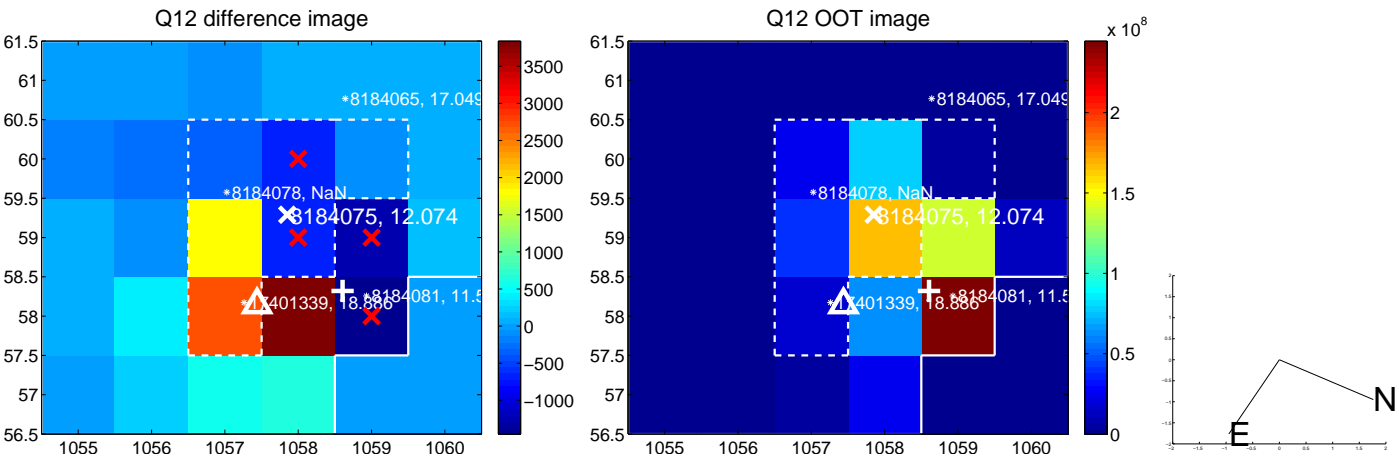
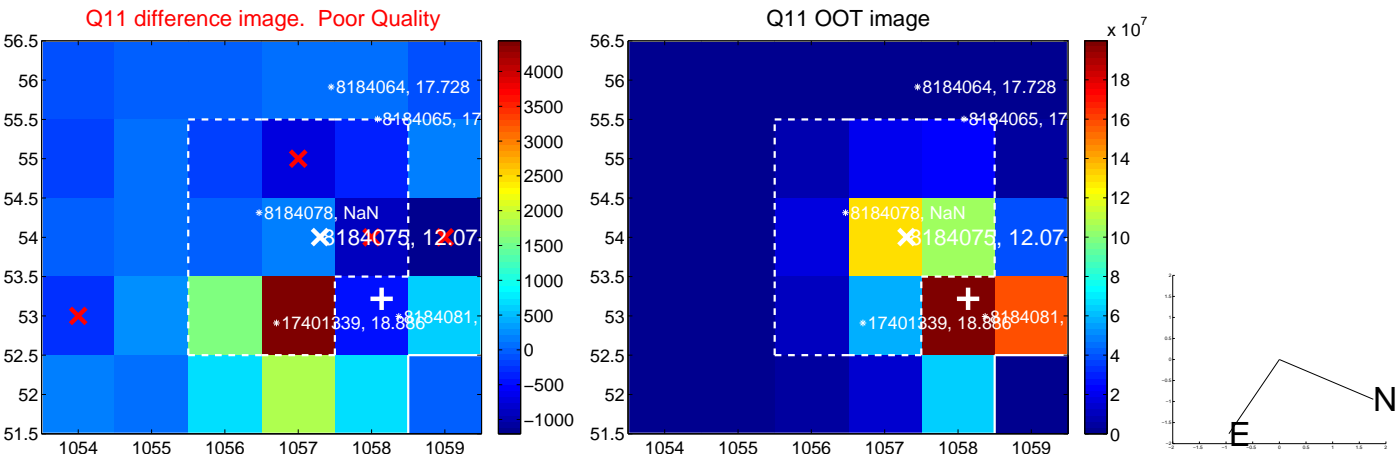
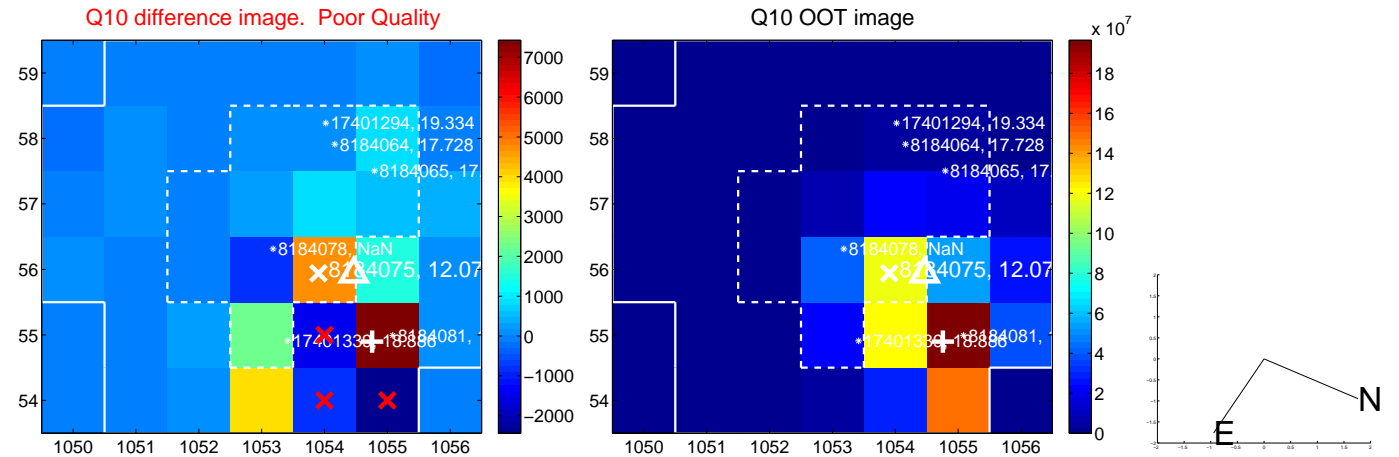
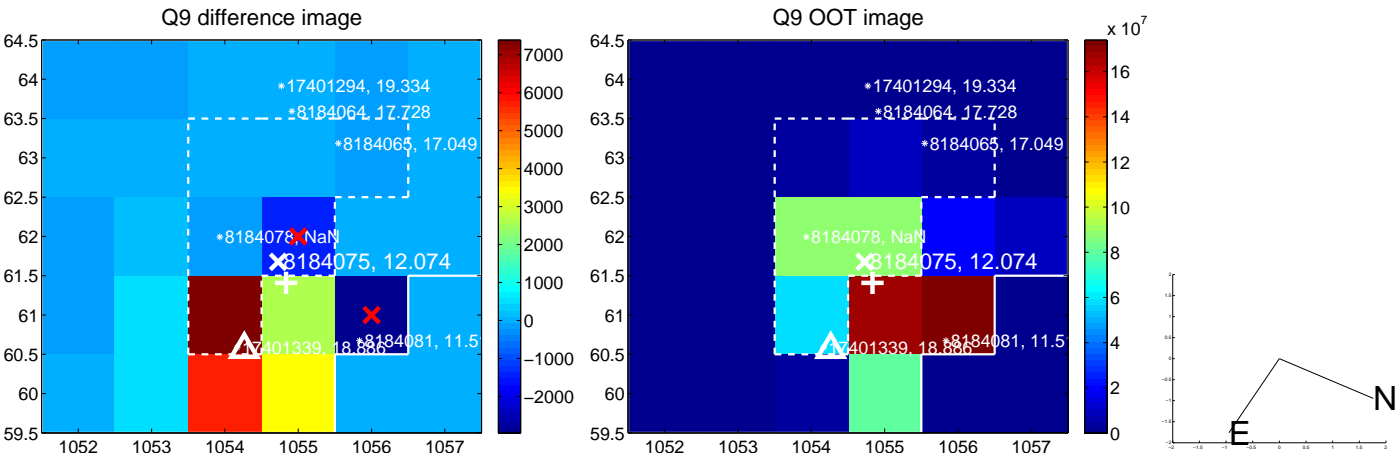
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



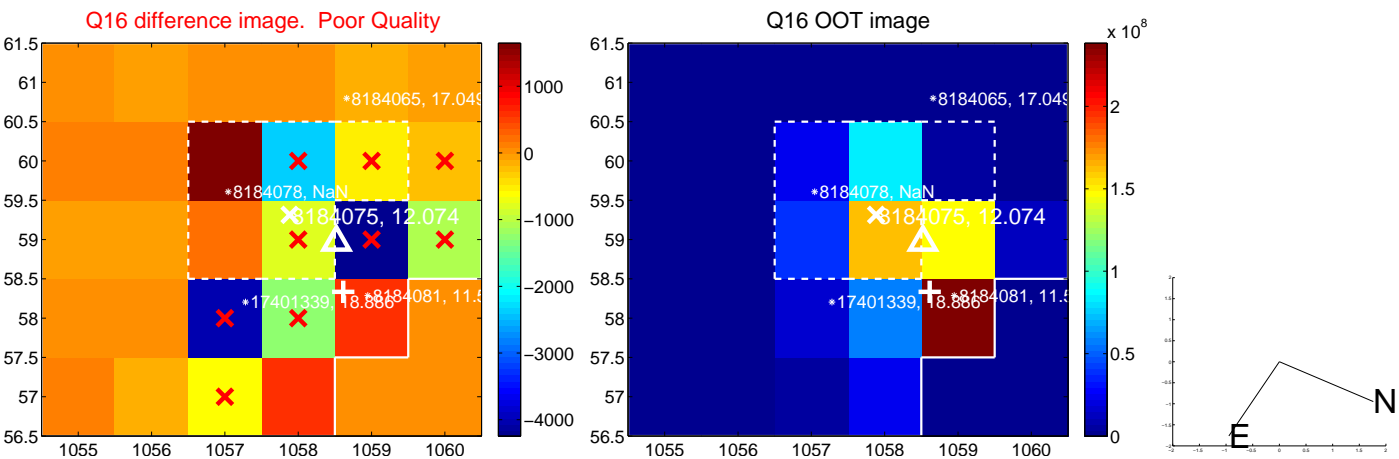
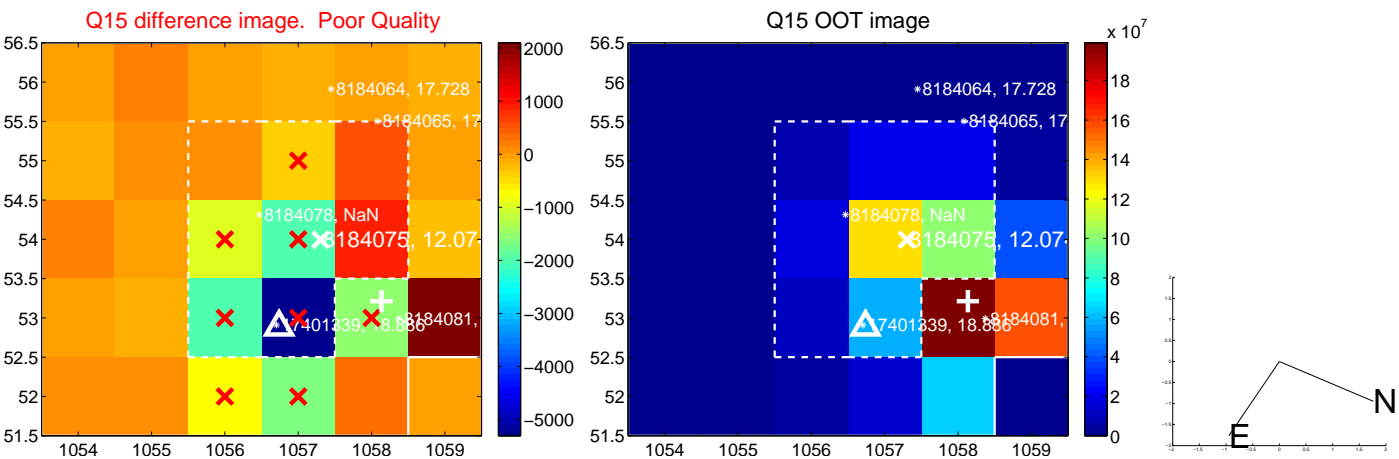
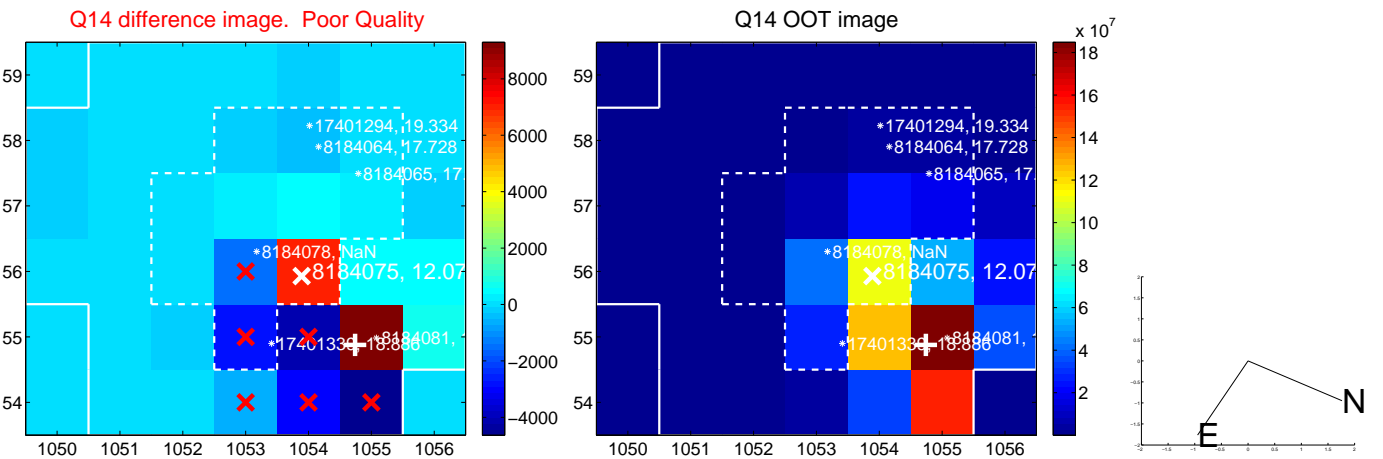
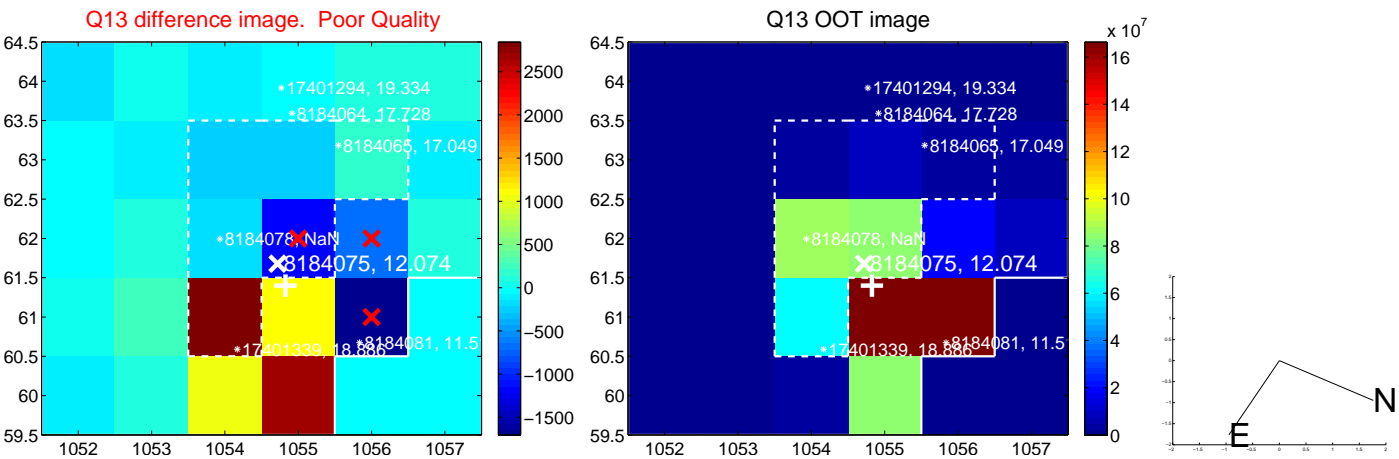
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



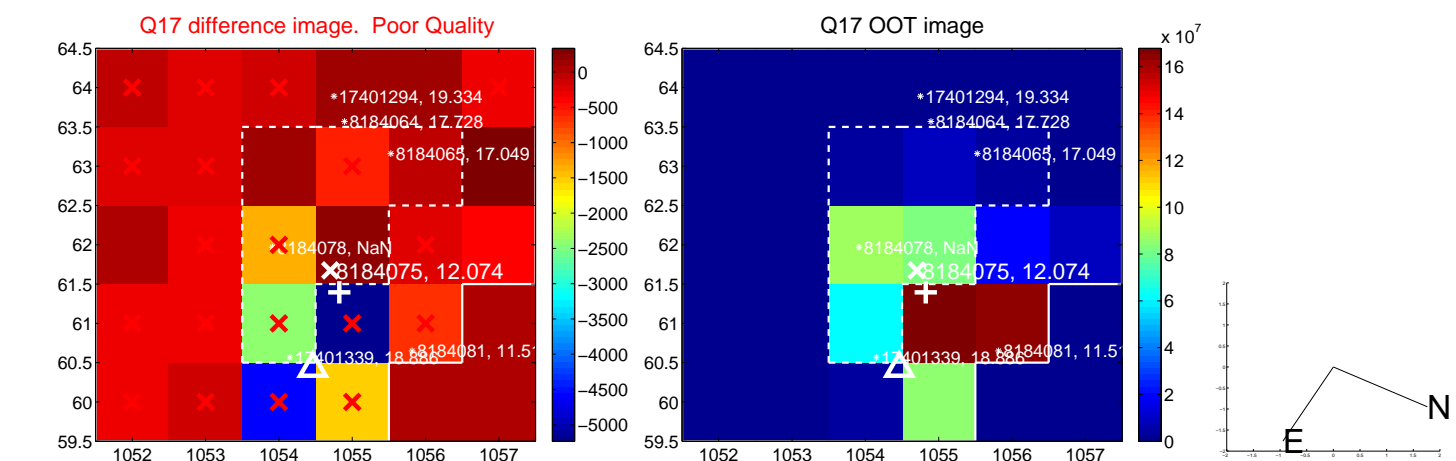
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



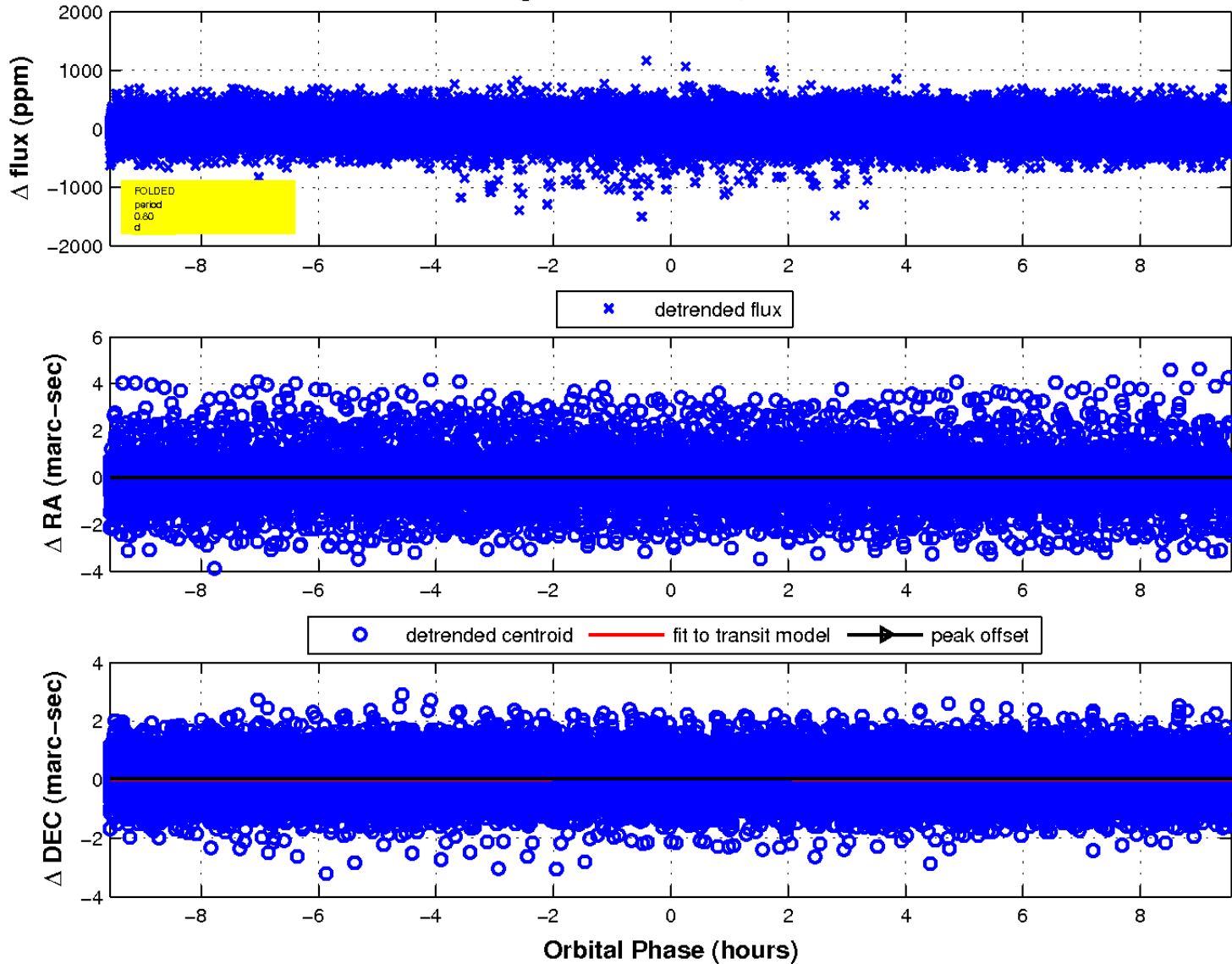
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

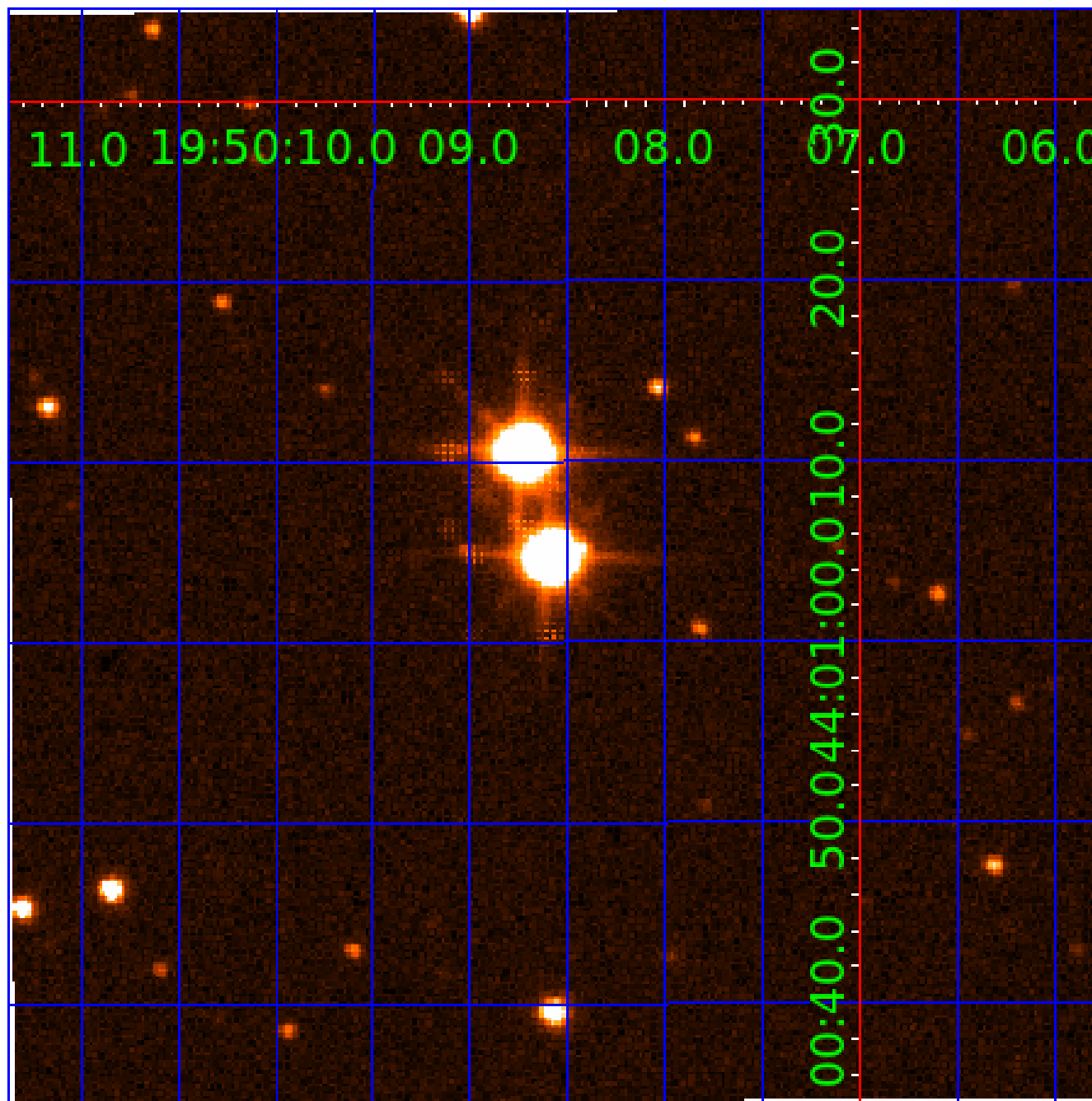


fluxWeightedCentroids, Planet 1 of 6



UKIRT Image

Declination



KIC 008184075

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})
008184075-01	OBS	No	0.796322	131.656071	13.5	4.443	8.0	7.4	0.73	5119	0.32	1467.37
008184075-03	OBS	No	129.570427	149.560250	295.6	7.888	11.7	8.6	0.73	5119	1.27	1.65
008184075-04	OBS	No	149.625683	229.796290	267.6	9.021	8.4	7.1	0.73	5119	1.30	1.36
008184075-05	OBS	No	69.845227	197.013332	112.0	3.073	7.6	3.8	0.73	5119	0.93	3.77
008184075-06	OBS	No	74.500443	169.768347	276.0	2.275	7.6	7.9	0.73	5119	1.39	3.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008184075-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_KIC_POS
008184075-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008184075-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

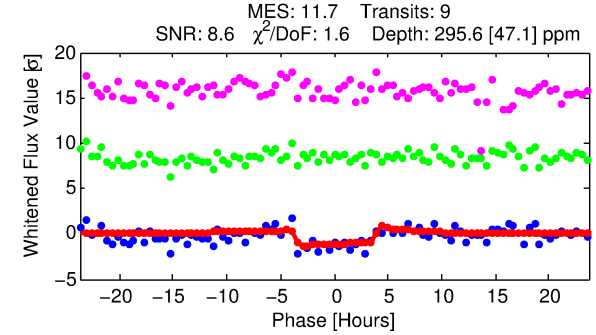
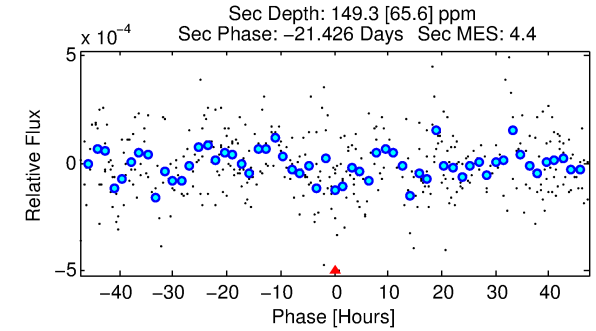
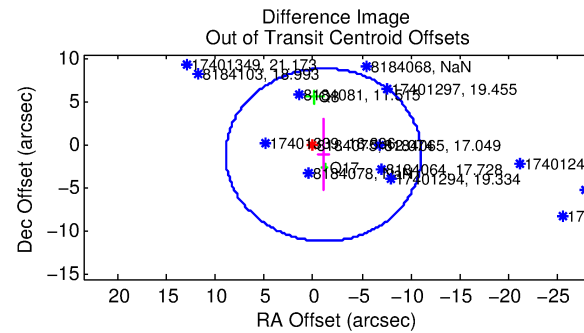
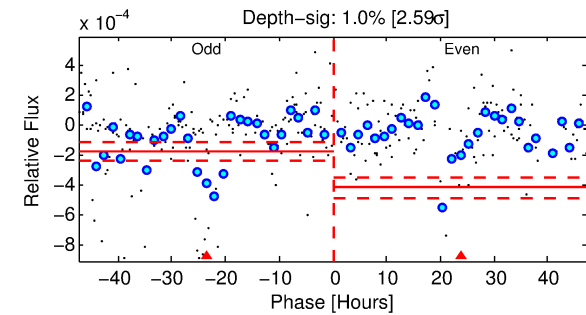
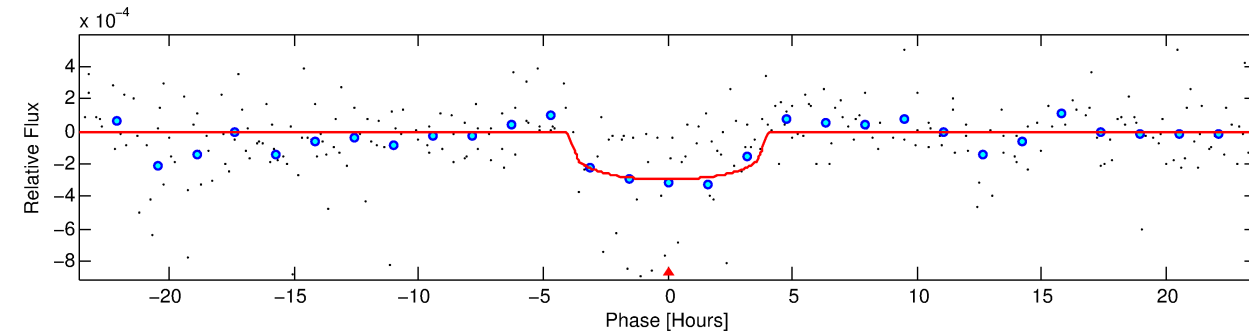
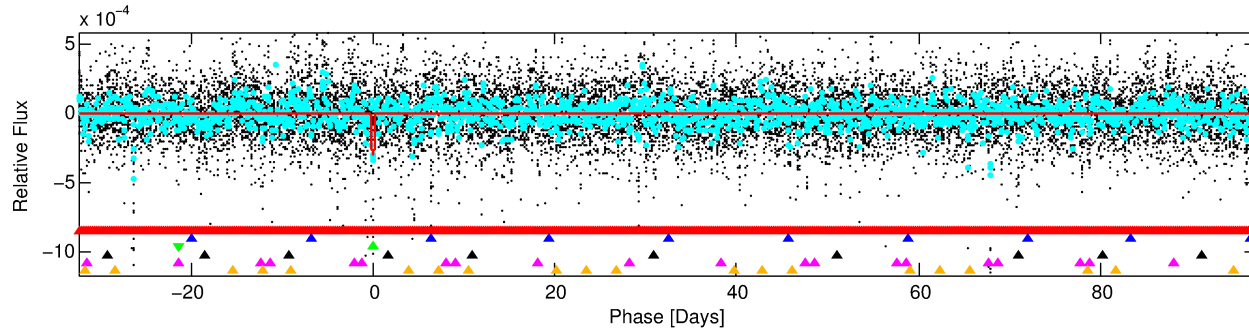
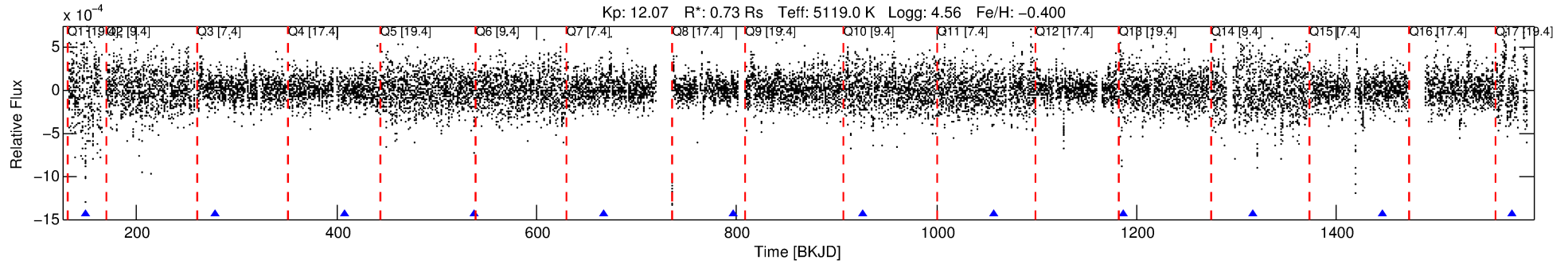
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008184075-03

No Significant Match Found

DV One-Page Summary

KIC: 8184075 Candidate: 3 of 6 Period: 129.570 d



DV Fit Results:

Period = 129.57043 [0.00197] d
Epoch = 149.5602 [0.0139] BKJD
Rp/R* = 0.0160 [0.0257]
a/R* = 110.67 [671.52]
b = 0.50 [9.08]
Self = 1.65 [0.30]
Teff = 289 [13] K
Rp = 1.27 [2.04] Re
a = 0.4437 [0.0421] AU
Ag = 10066.10 [32727.28] [0.31σ]
Teffp = 4477 [3638] K [1.15σ]

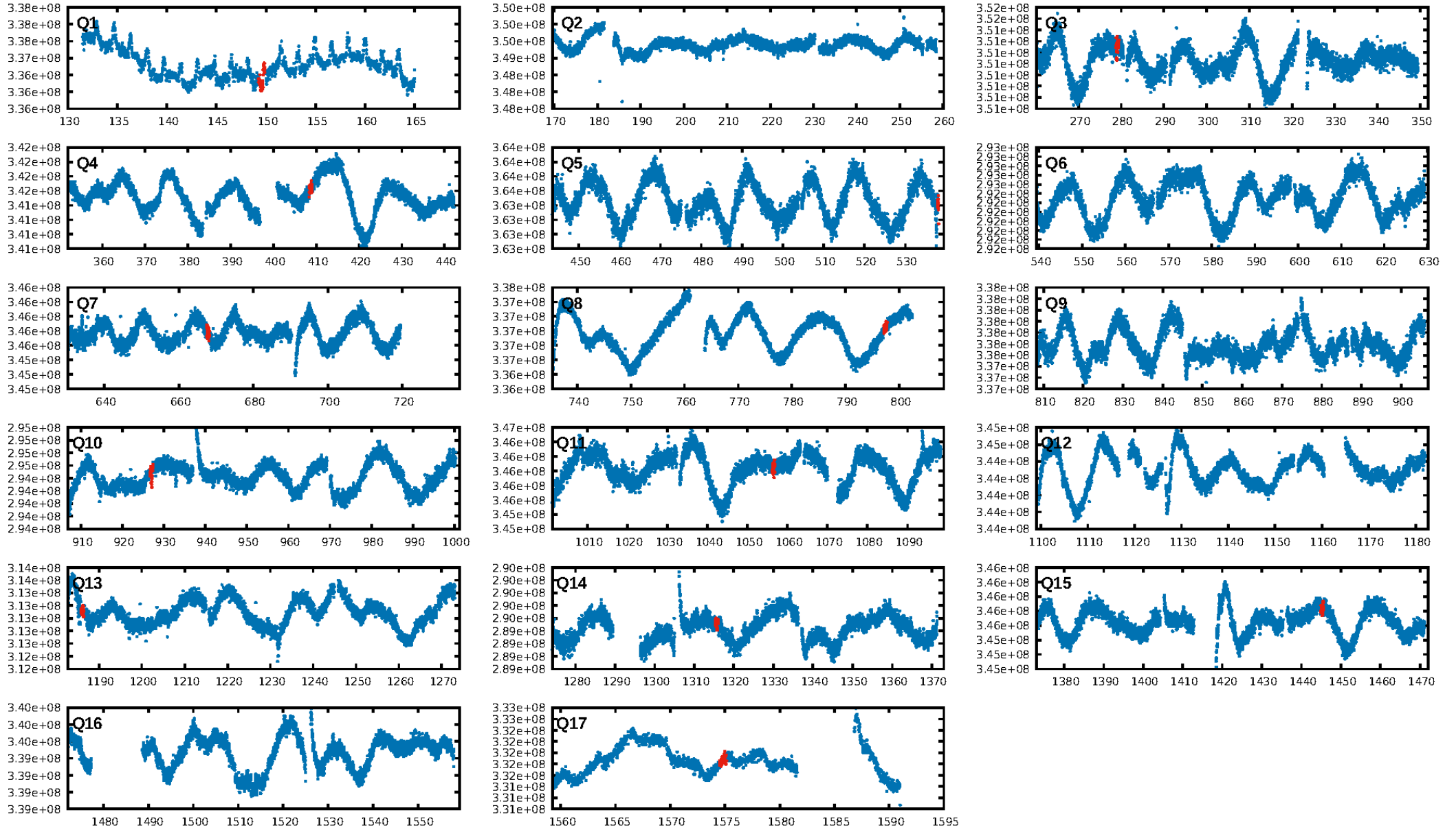
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [160.98σ]
LongPeriod-sig: 100.0% [30.84σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 1.04e-15
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: -2.982
Centroid-sig: 72.2%
Centroid-so: 2.946 arcsec [10.61σ]
OotOffset-rm: 1.558 arcsec [0.47σ]
KicOffset-rm: 0.512 arcsec [0.10σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/11]

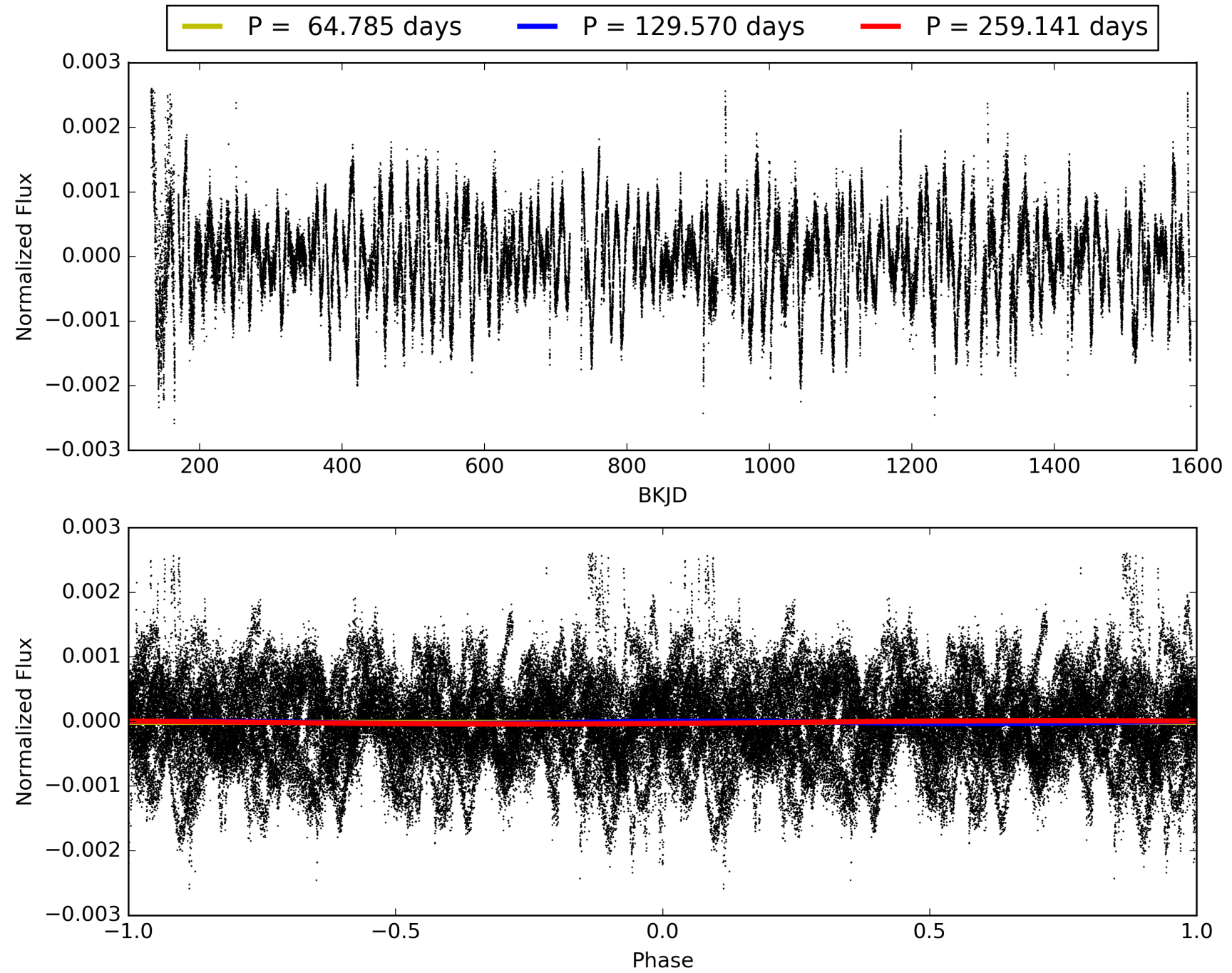
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:59:30 Z

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

TCE 008184075-03, PDC Light Curves

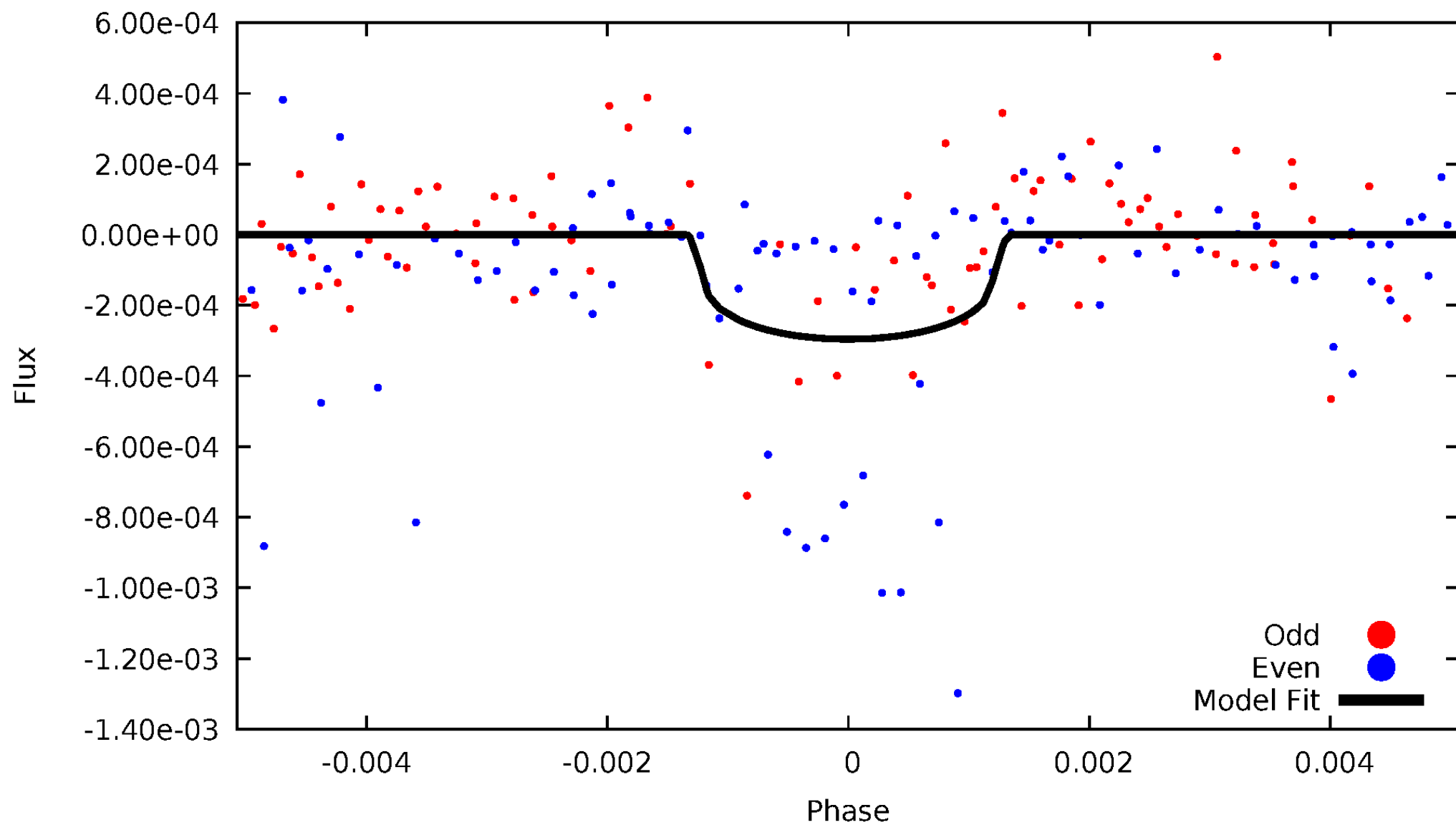


TCE 008184075-03



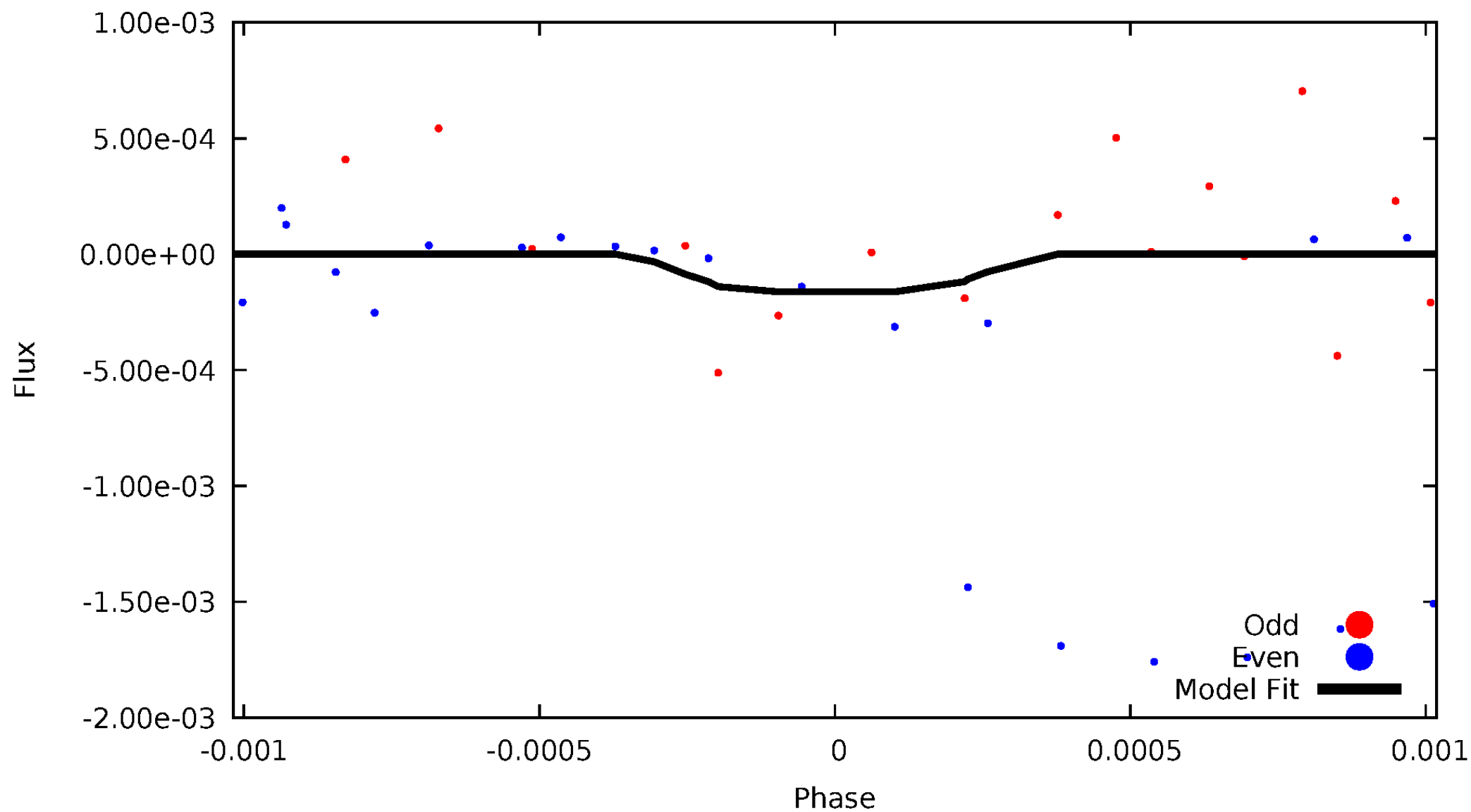
DV Odd/Even

TCE 008184075-03



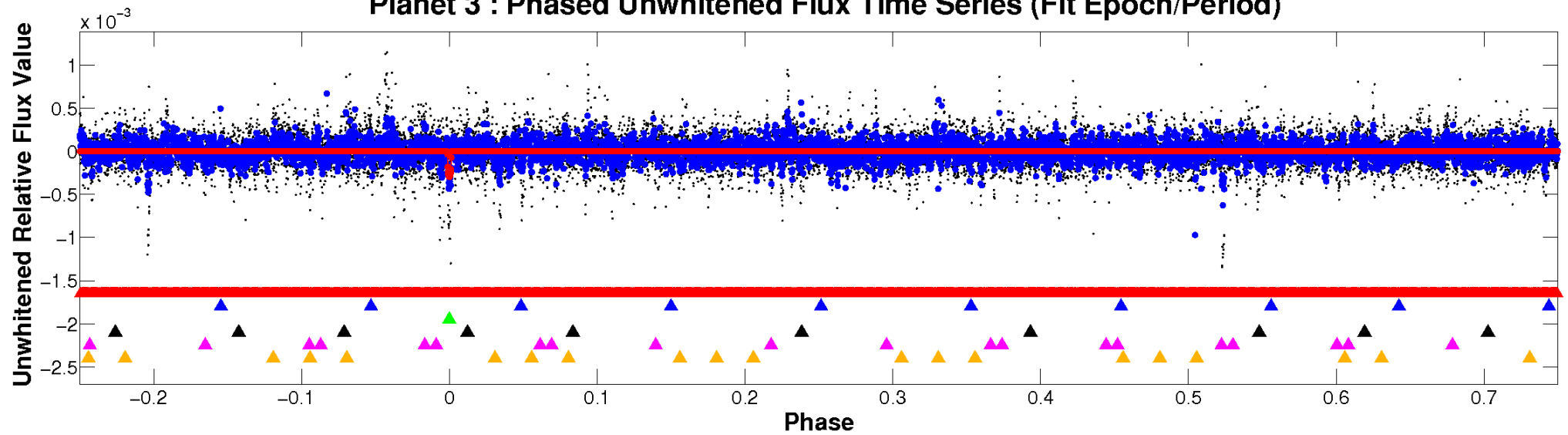
ALT Odd/Even

TCE 008184075-03

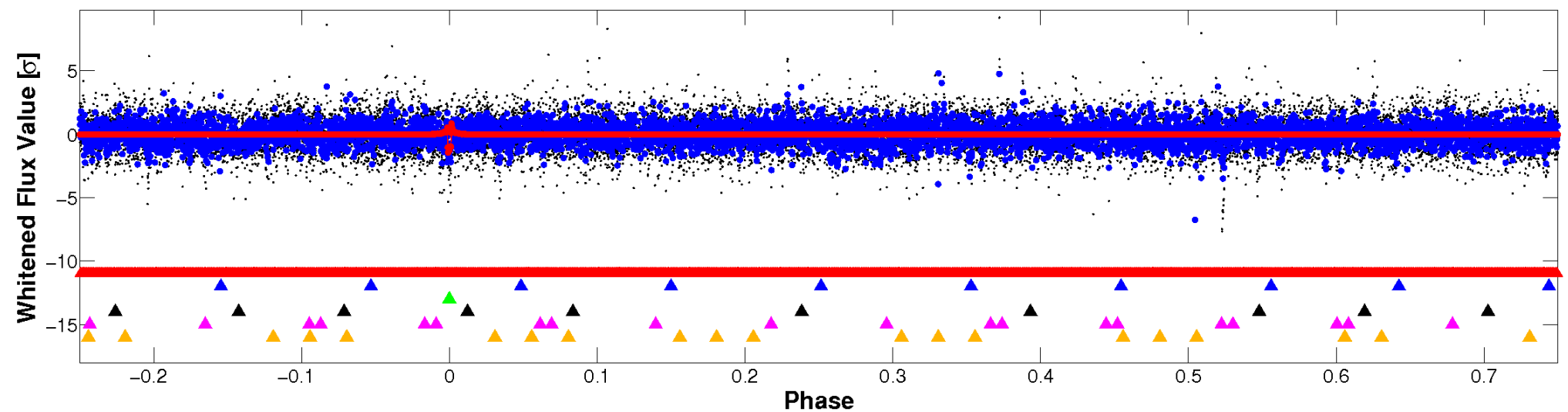


Non-Whitened Vs. Whitened Light Curve

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

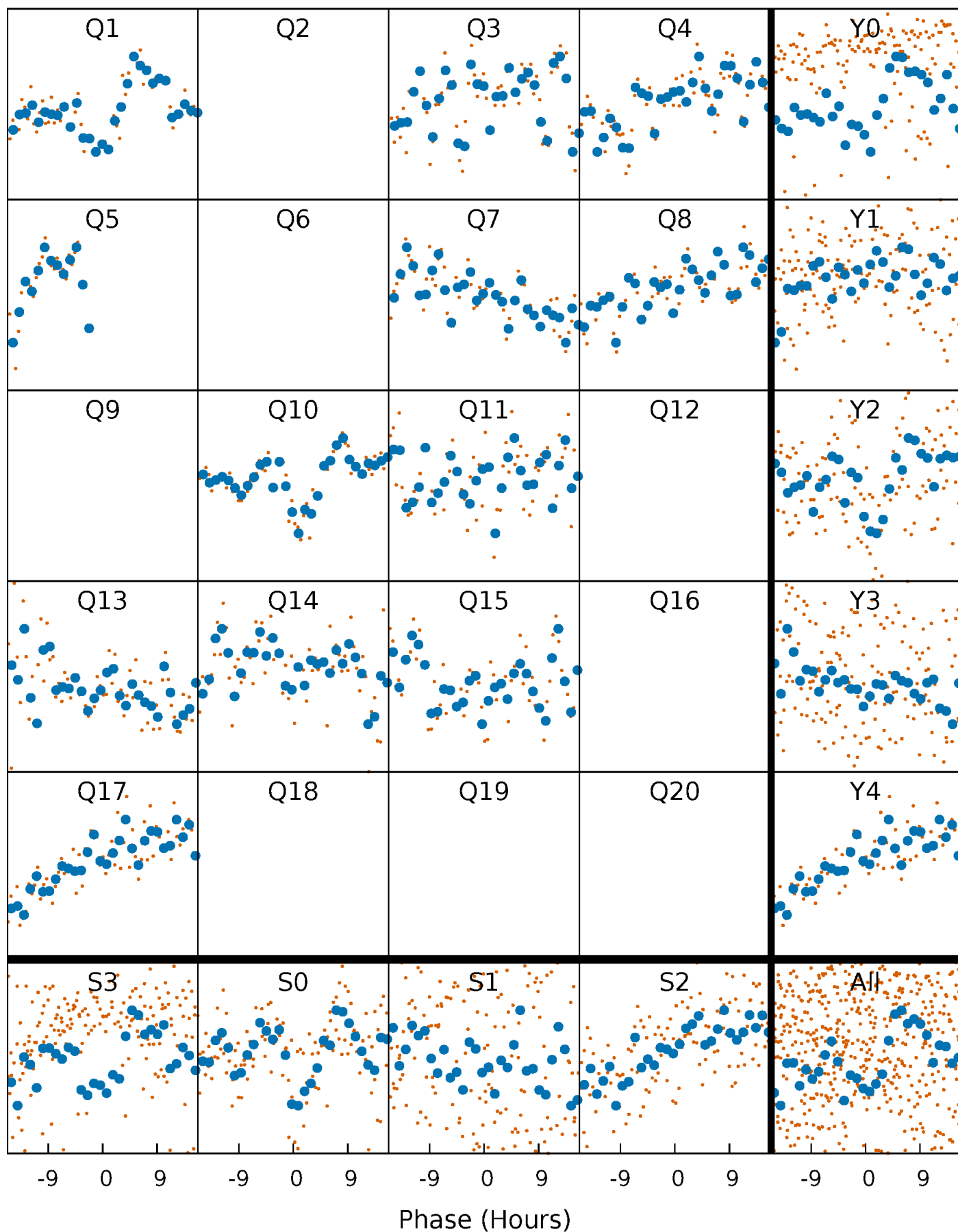


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



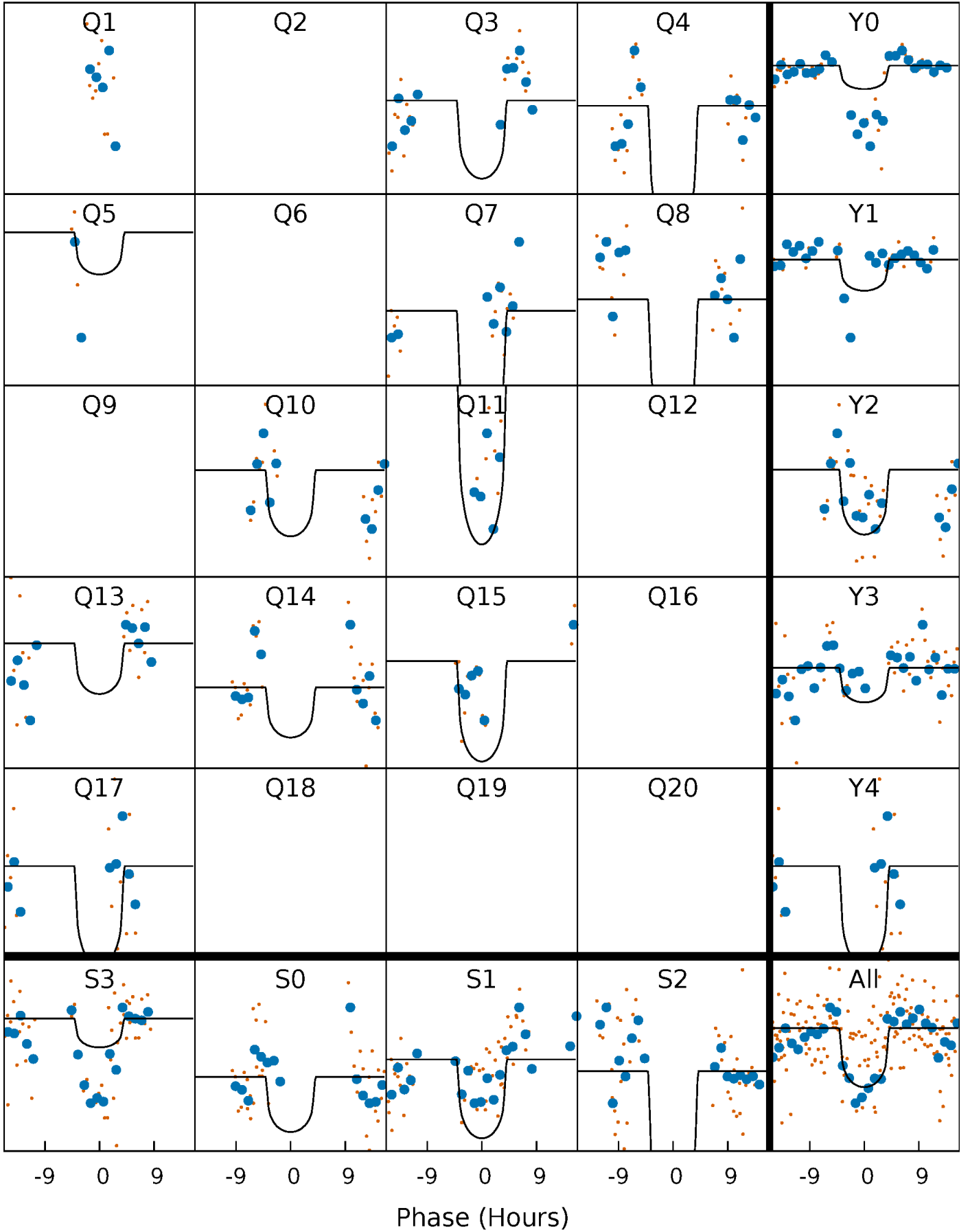
PDC Quarter-Phased Transit Curves

TCE 008184075-03 P=129.570427 Days $T_0=149.560249$ (BKJD)



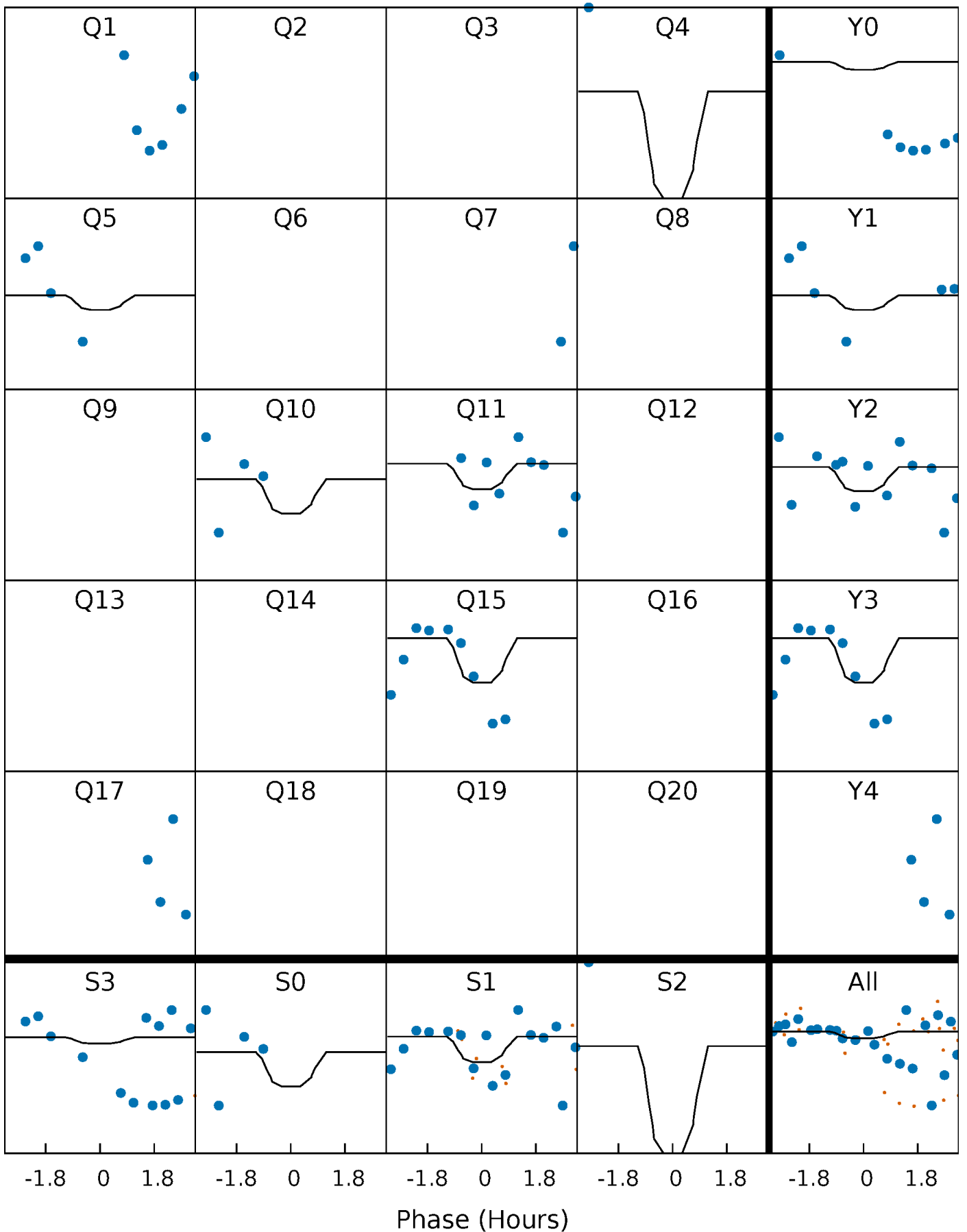
DV Quarter-Phased Transit Curves

TCE 008184075-03 P=129.570427 Days $T_0=149.560249$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

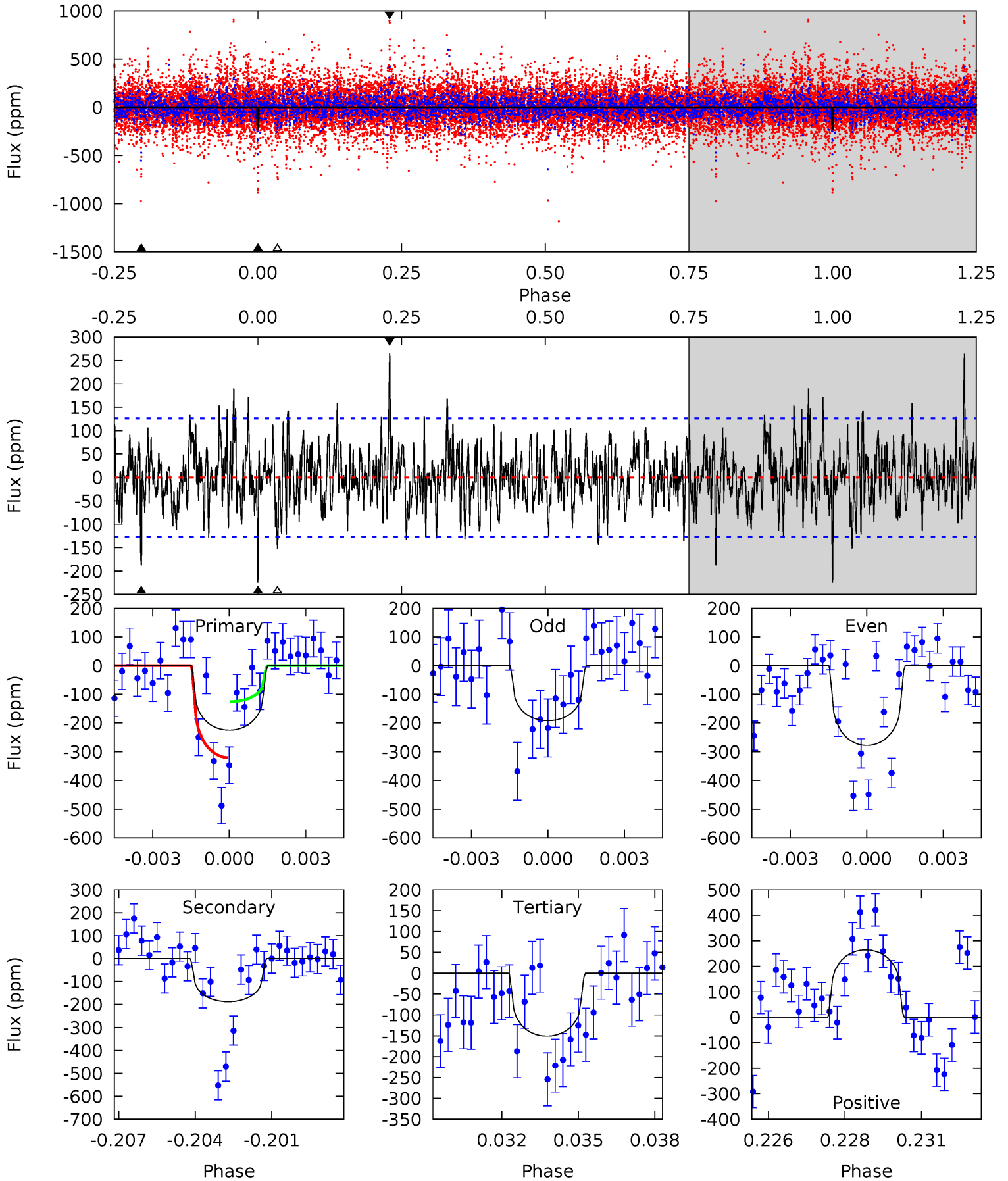
TCE 008184075-03 P=129.581119 Days $T_0=149.444658$ (BKJD)



DV Model-Shift Uniqueness Test

008184075-03, P = 129.570427 Days, E = 19.989822 Days

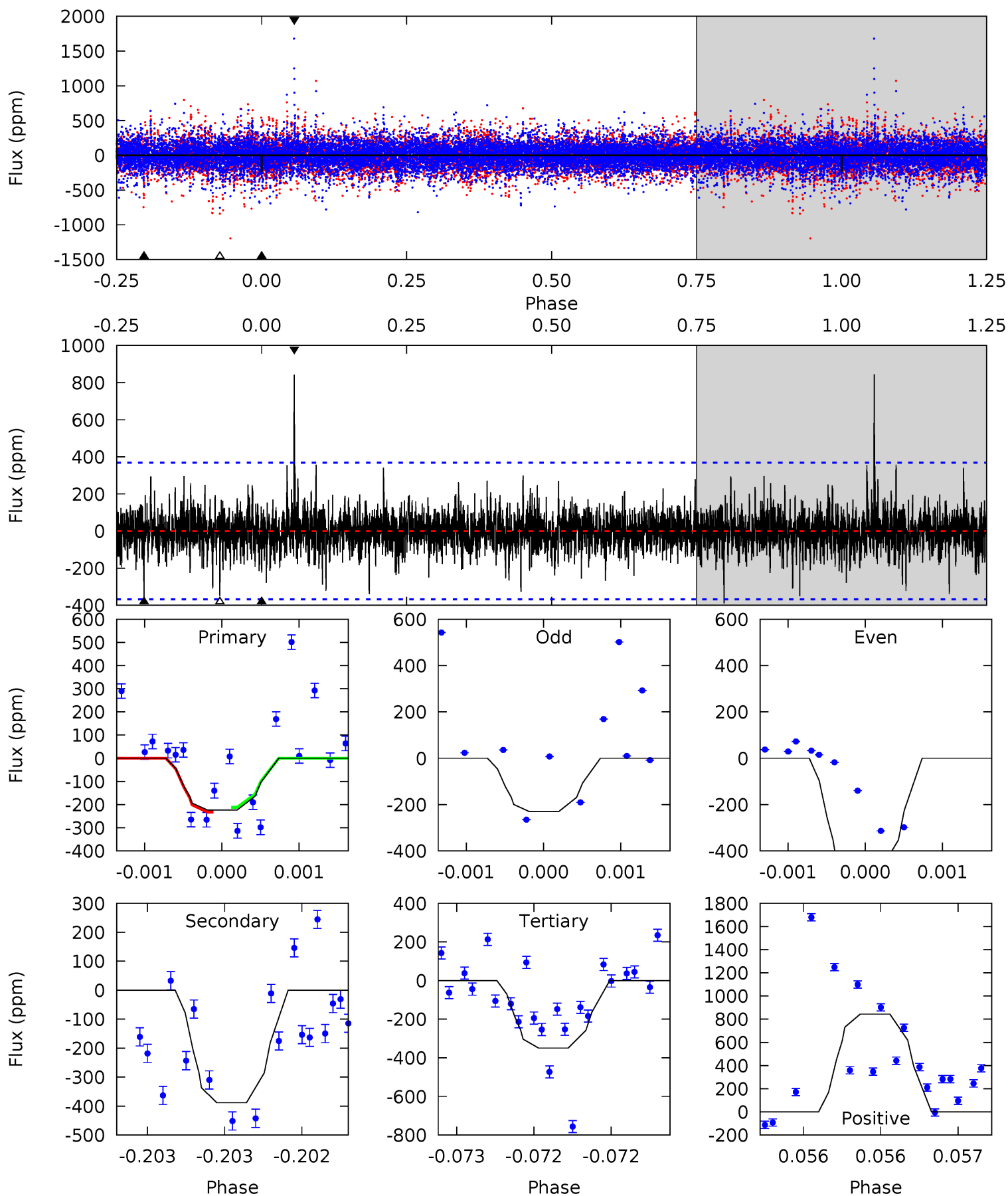
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.38	7.83	6.29	11.0	5.27	3.00	2.20	3.10	-1.64	1.55	-3.19	1.77	3.03	0.54	4.03



Alt Model-Shift Uniqueness Test

008184075-03, P = 129.581119 Days, E = 19.863539 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3.38	5.87	5.29	12.8	5.57	3.47	1.22	-1.91	-9.38	0.59	-6.88	1.86	1.00	0.68	0.15



Stellar Parameters For KIC 008184075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5119^{+153}_{-138}	$4.556^{+0.077}_{-0.063}$	$-0.400^{+0.350}_{-0.300}$	$0.727^{+0.081}_{-0.073}$	$0.693^{+0.103}_{-0.044}$	$2.544^{+0.870}_{-0.546}$
	+3%/-3%	+2%/-1%	+87%/-75%	+11%/-10%	+15%/-6%	+34%/-21%
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 008184075-03 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-188 ± 24	$1.97^{+1.69}_{-1.33}$	403^{+17}_{-17}	4069^{+2517}_{-768}	5343^{+43305}_{-3863}
Alt.	-388 ± 66	$1.83^{+1.58}_{-1.17}$	404^{+16}_{-17}	4787^{+3304}_{-1020}	12757^{+87800}_{-9204}

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

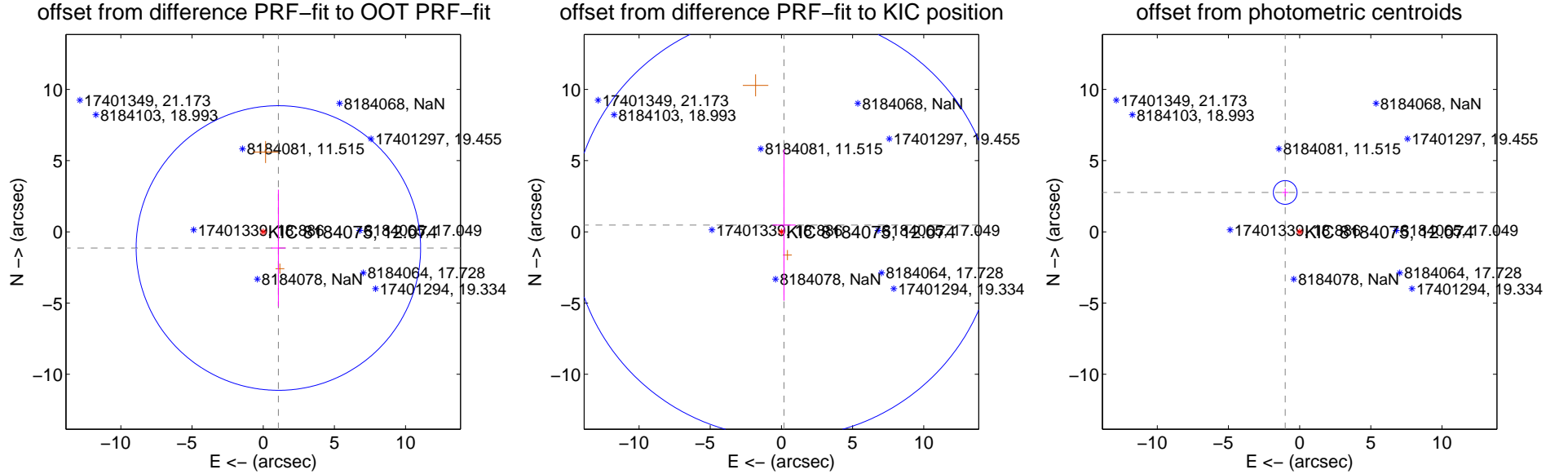
DV Centroid Data

Supplemental centroid analysis for 008184075-03. Kepler magnitude: 12.07. Transit SNR 8.63

There are 0 quarters with good PRF difference image offsets

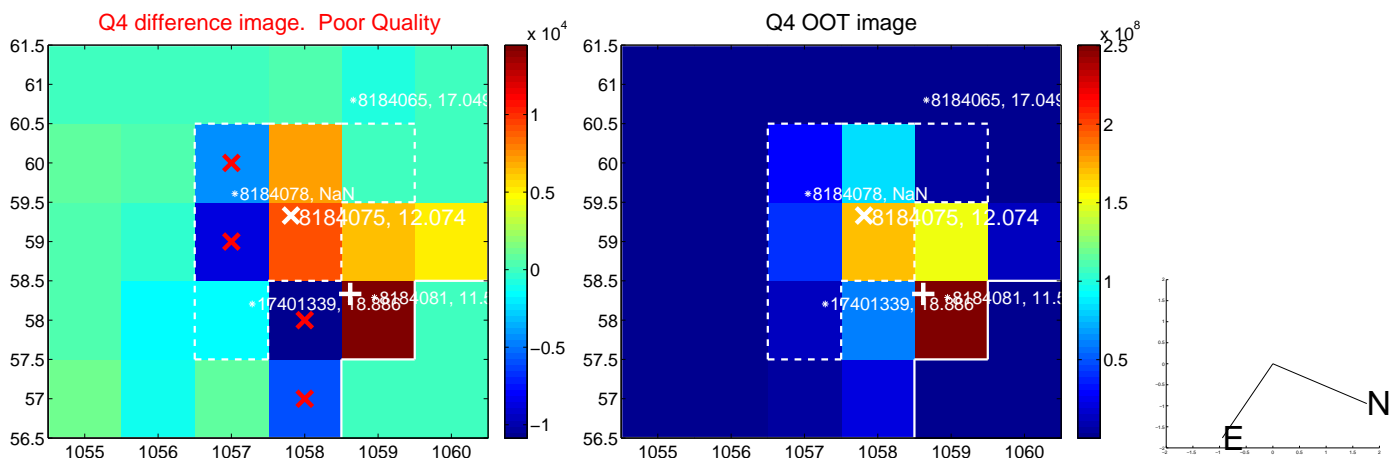
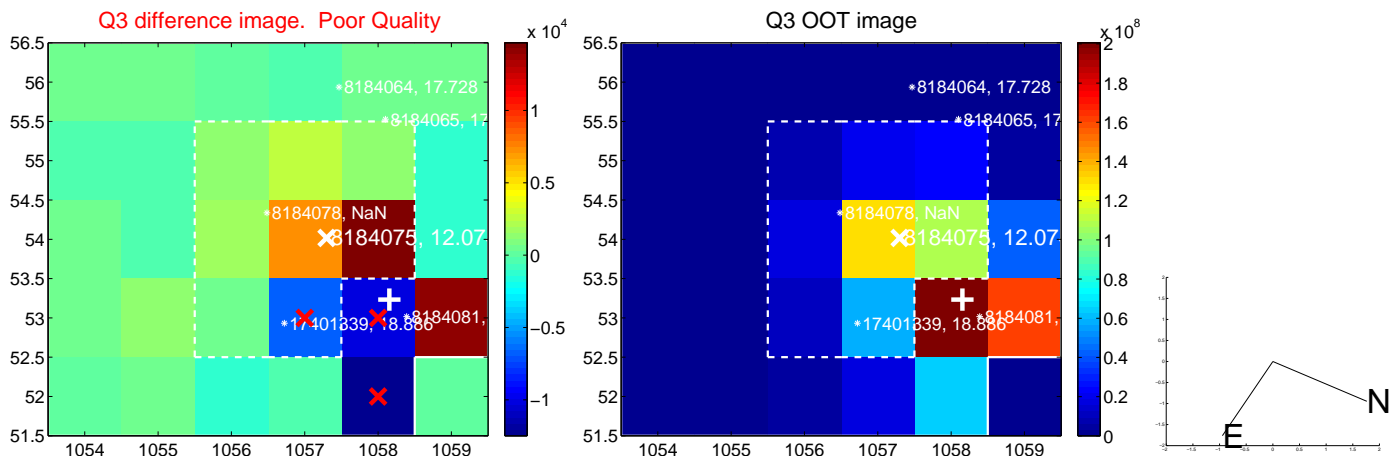
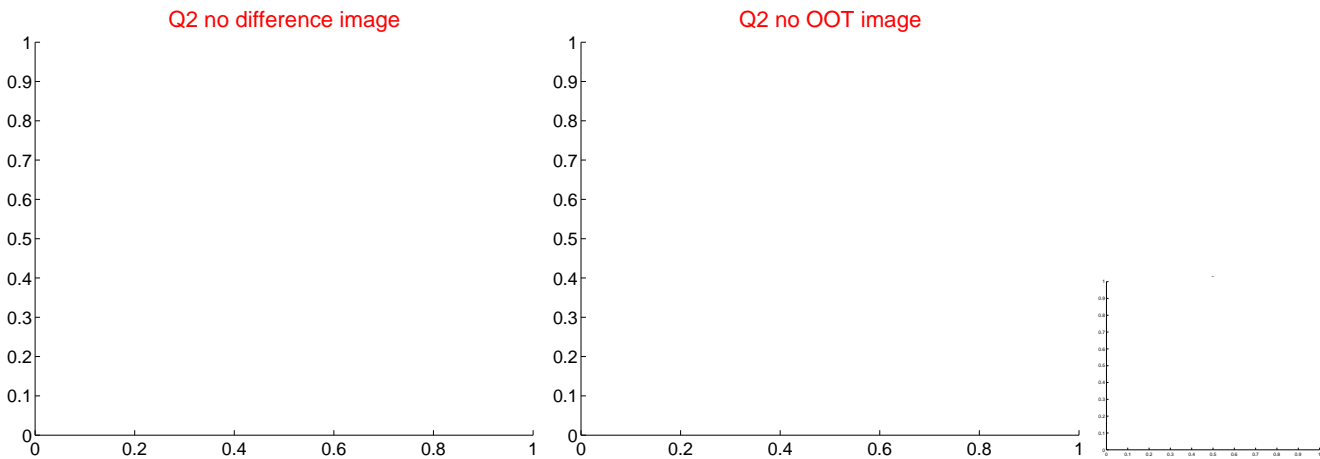
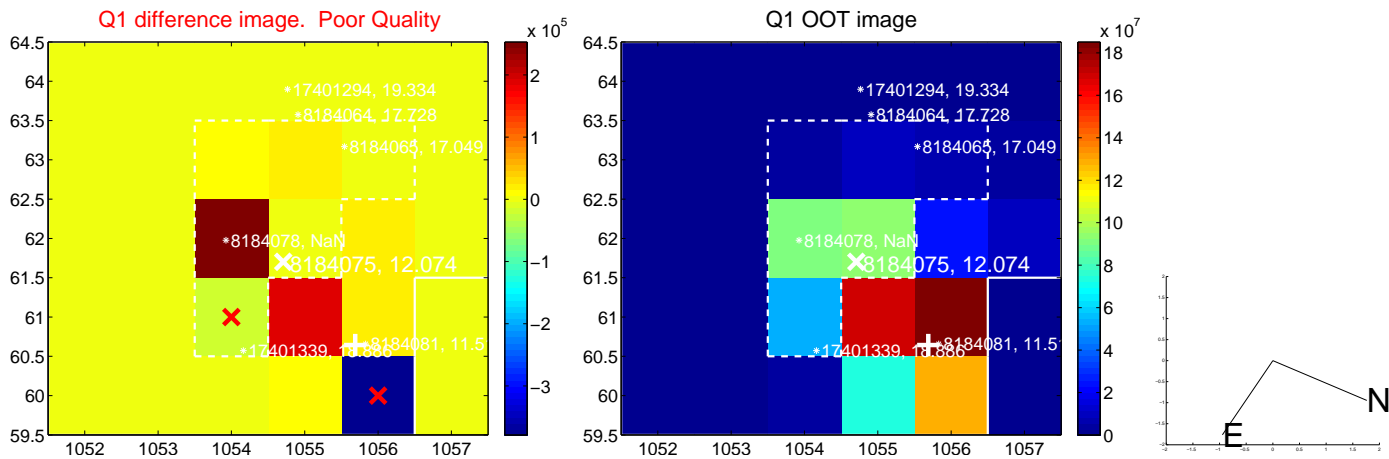
The direct PRF centroid is offset from the target star catalog position by about 1.22 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.558 ± 3.331	0.47	-1.066 ± 0.507	-1.136 ± 4.097
PRF-fit source offset from KIC position	0.512 ± 4.975	0.10	-0.183 ± 0.811	0.478 ± 5.316
photometric centroid source offset	2.95 ± 0.28	10.61	1.02 ± 0.21	2.77 ± 0.28

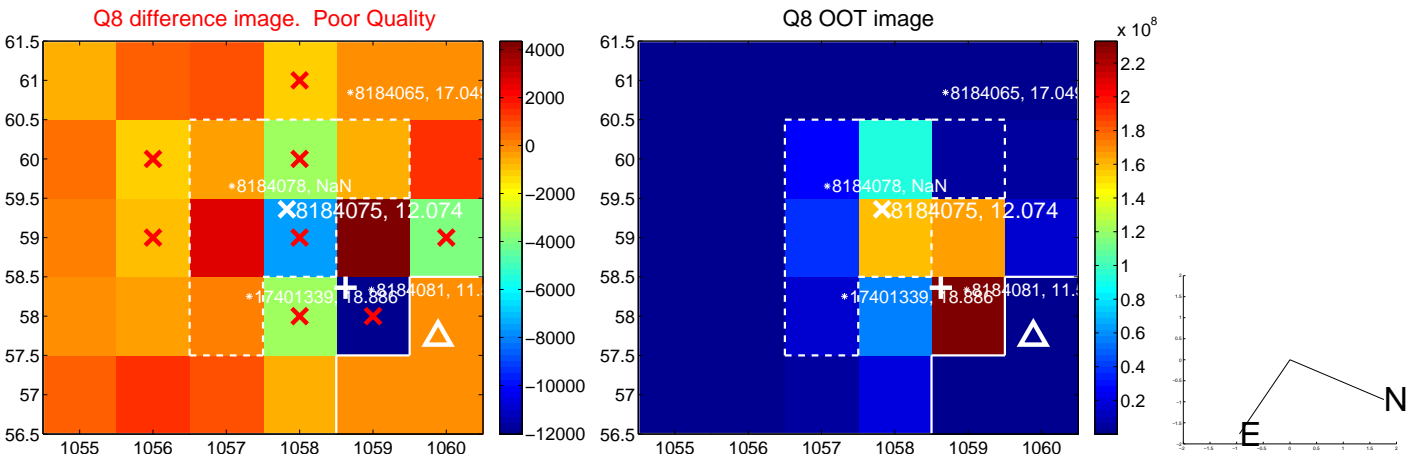
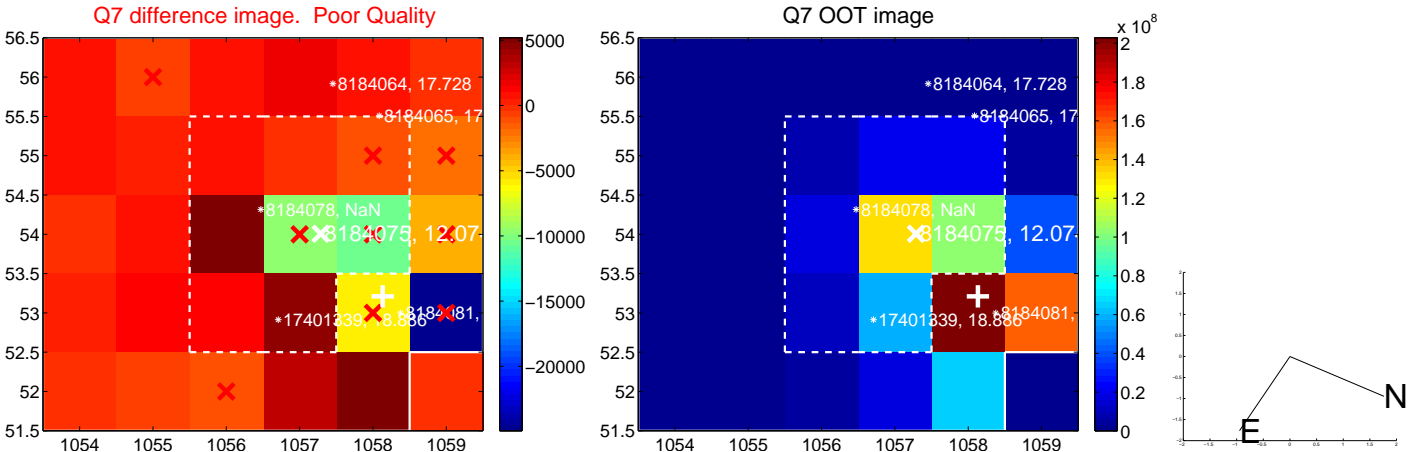


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

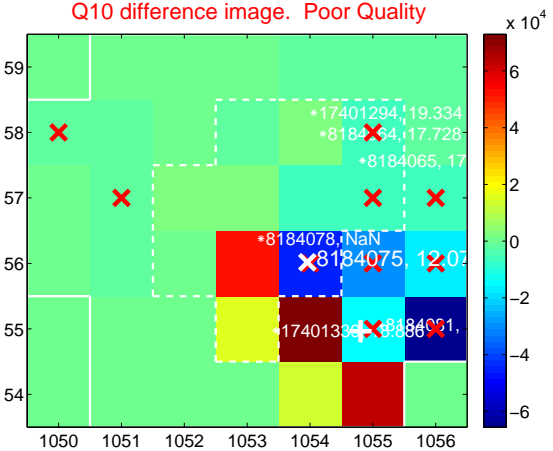
Q9 no difference image



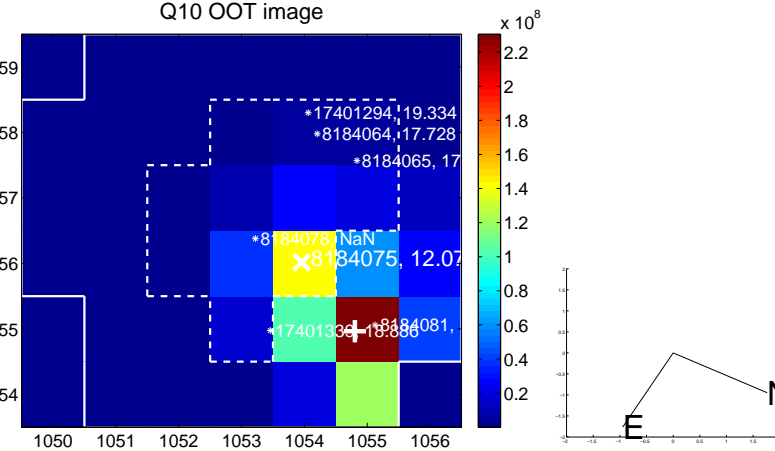
Q9 no OOT image



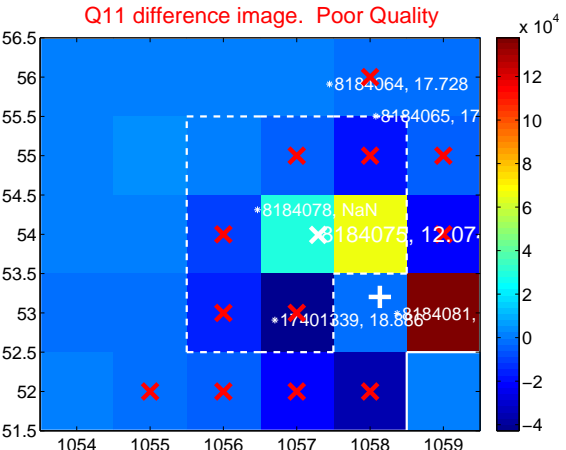
Q10 difference image. Poor Quality



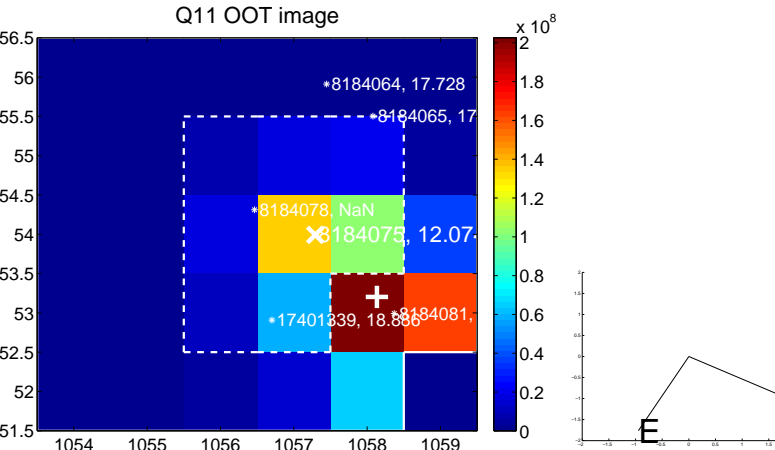
Q10 OOT image



Q11 difference image. Poor Quality



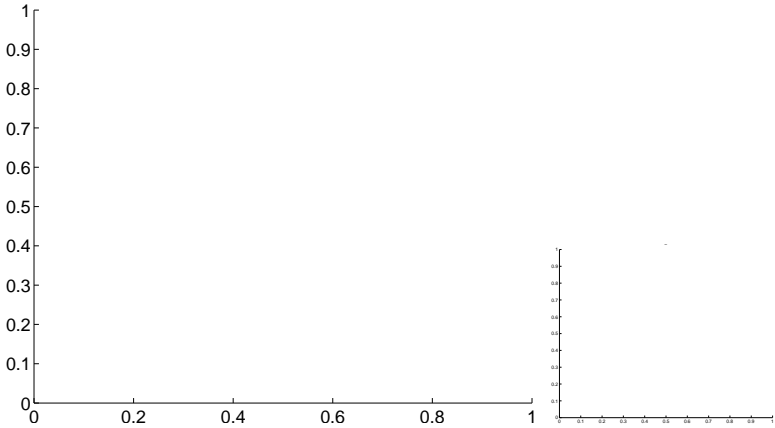
Q11 OOT image



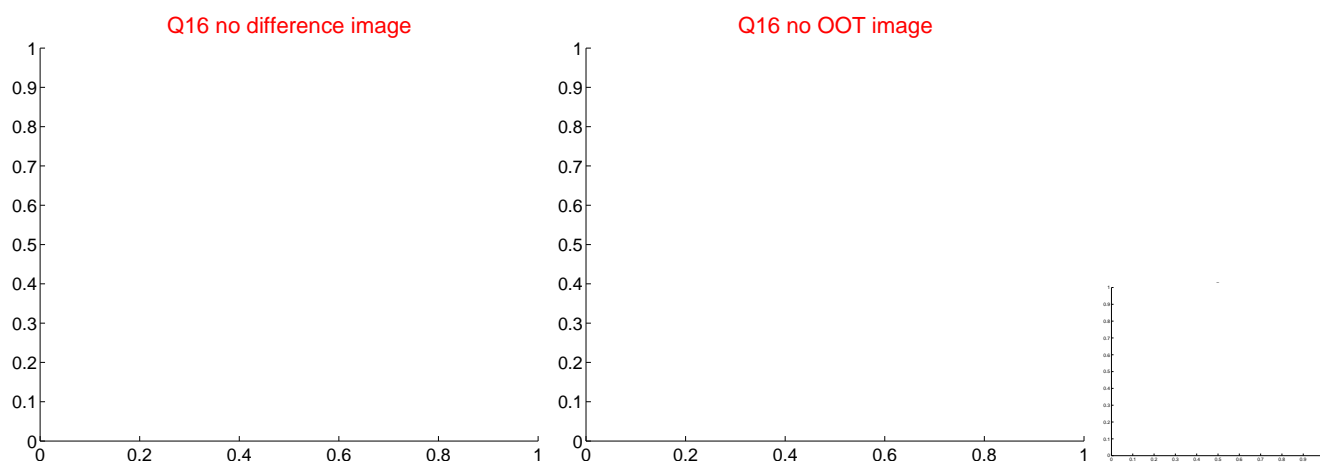
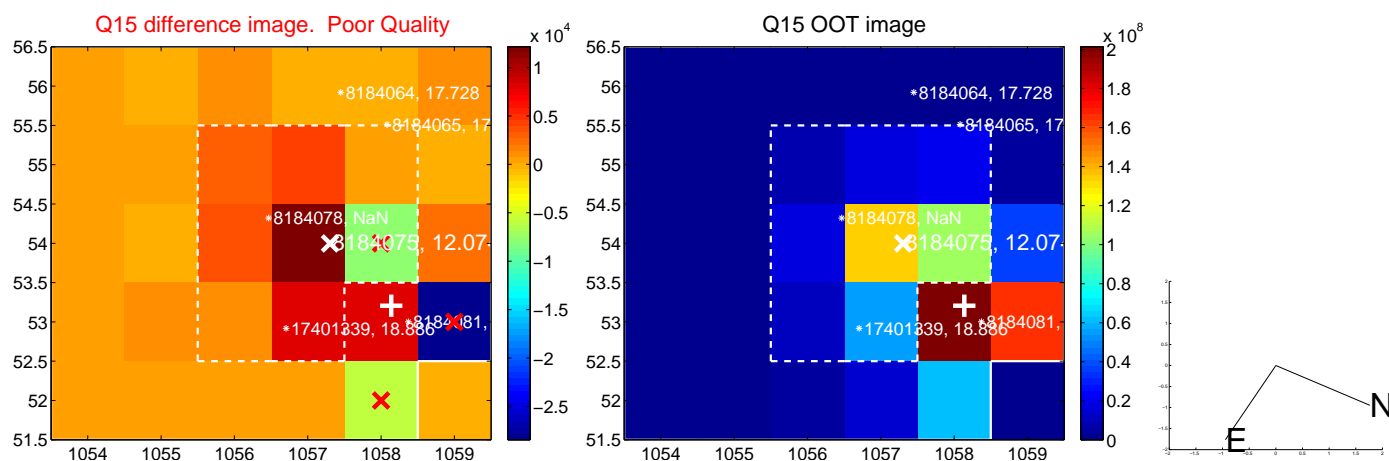
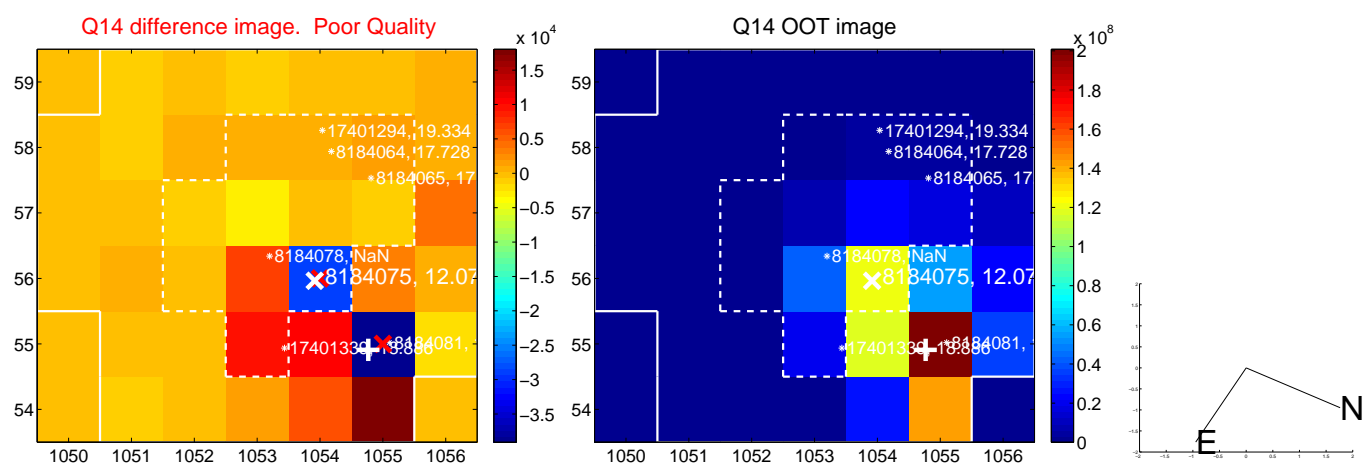
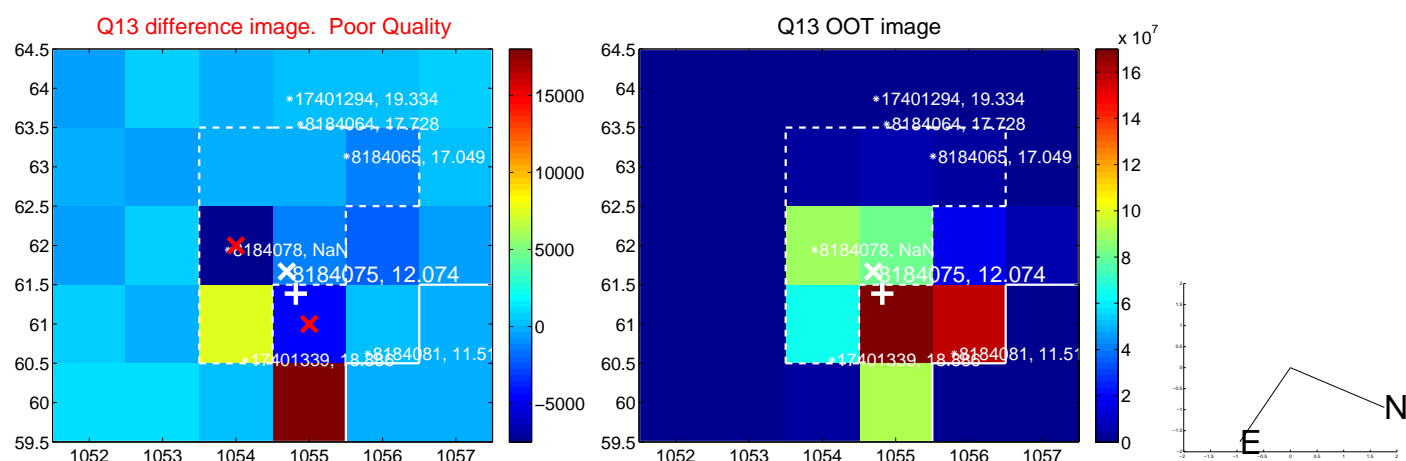
Q12 no difference image



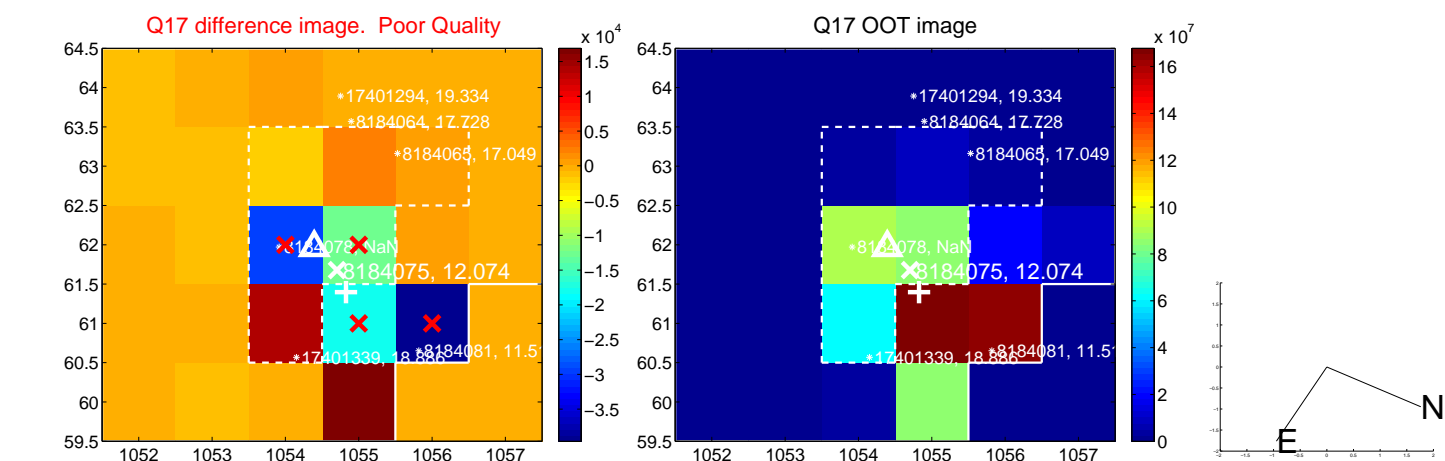
Q12 no OOT image



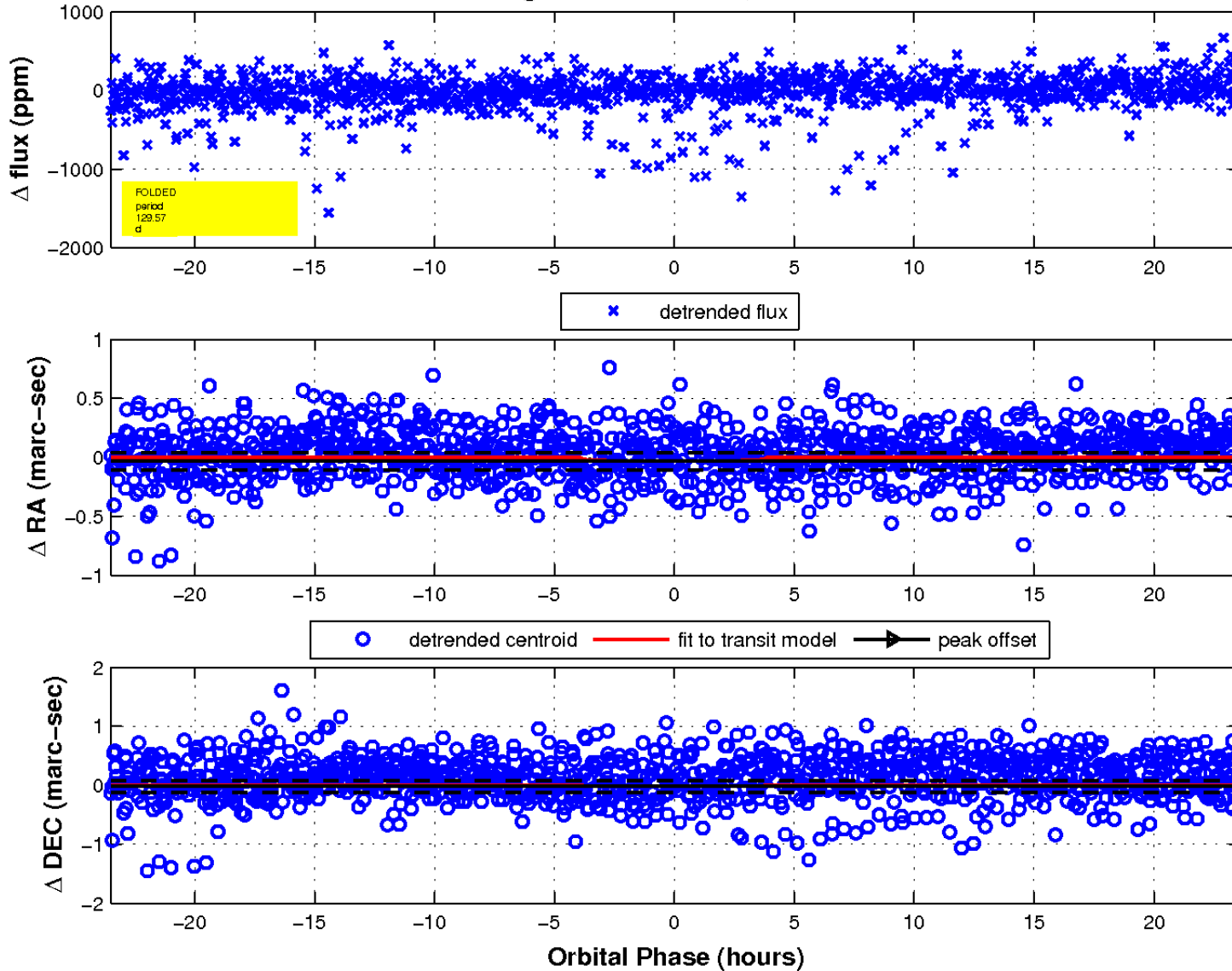
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

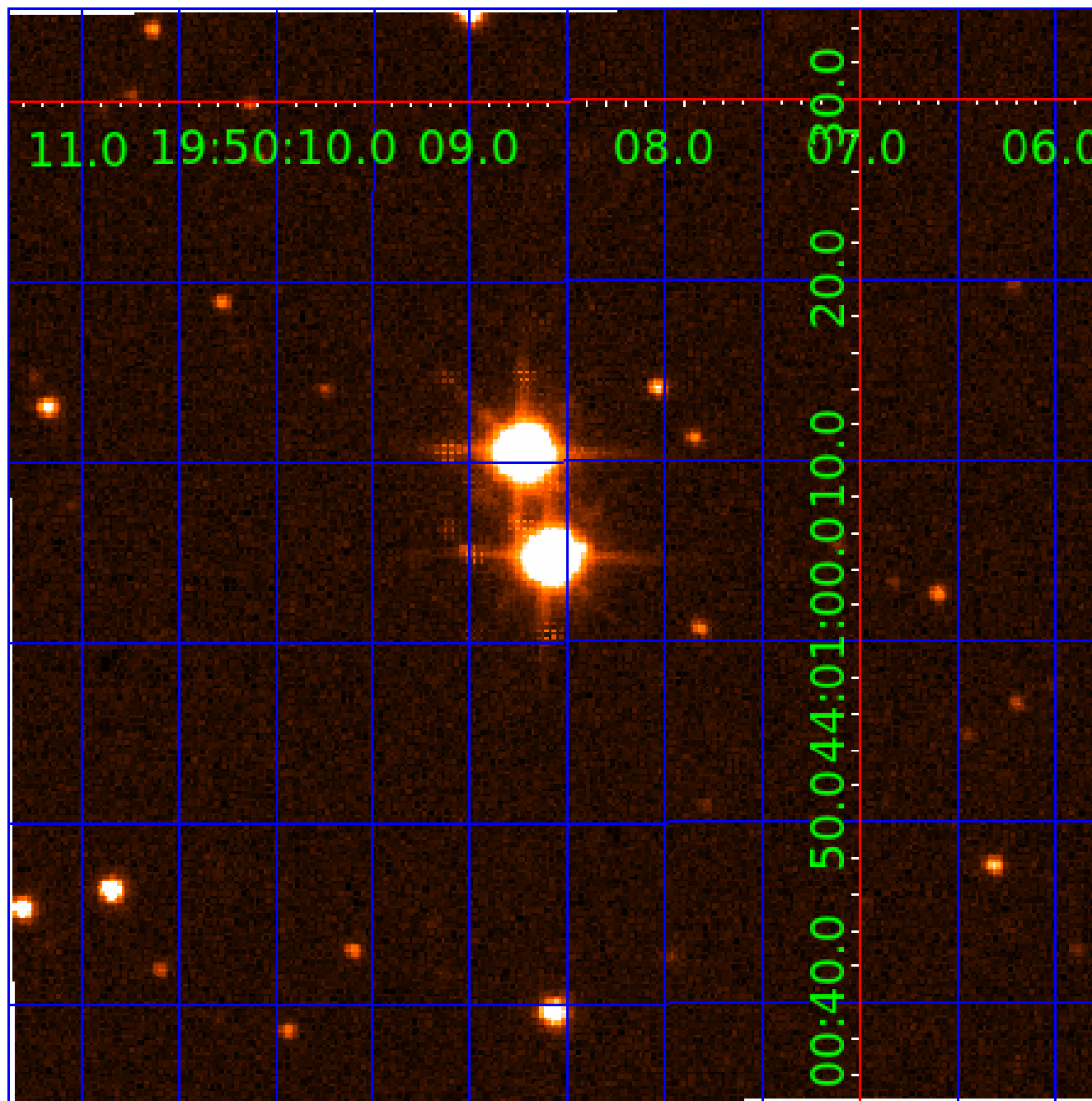


fluxWeightedCentroids, Planet 3 of 6



UKIRT Image

Declination



KIC 008184075

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})
008184075-01	OBS	No	0.796322	131.656071	13.5	4.443	8.0	7.4	0.73	5119	0.32	1467.37
008184075-03	OBS	No	129.570427	149.560250	295.6	7.888	11.7	8.6	0.73	5119	1.27	1.65
008184075-04	OBS	No	149.625683	229.796290	267.6	9.021	8.4	7.1	0.73	5119	1.30	1.36
008184075-05	OBS	No	69.845227	197.013332	112.0	3.073	7.6	3.8	0.73	5119	0.93	3.77
008184075-06	OBS	No	74.500443	169.768347	276.0	2.275	7.6	7.9	0.73	5119	1.39	3.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008184075-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_KIC_POS
008184075-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008184075-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

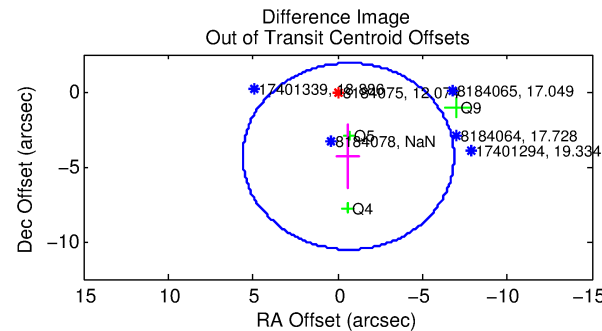
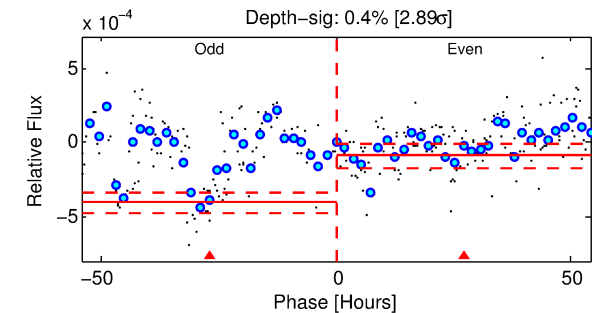
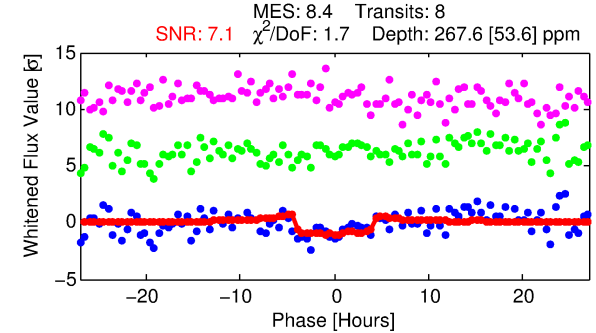
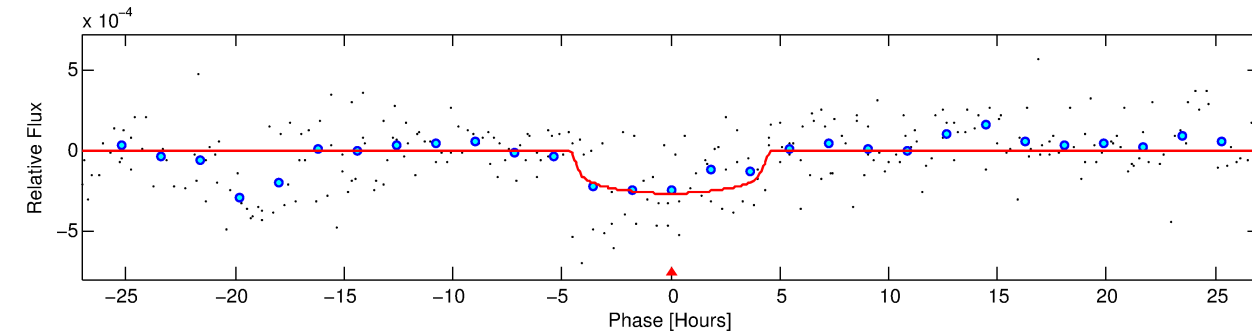
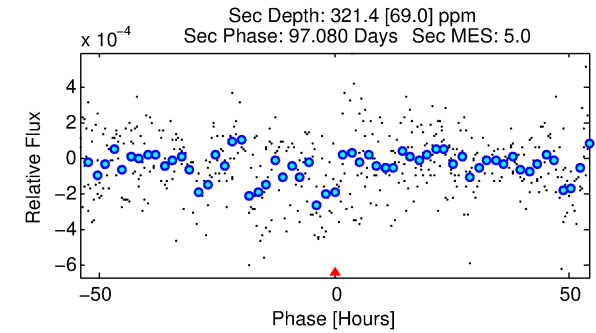
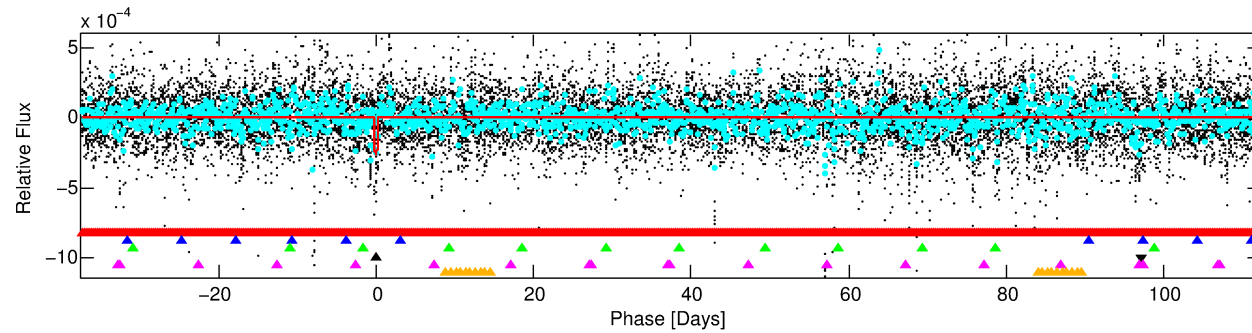
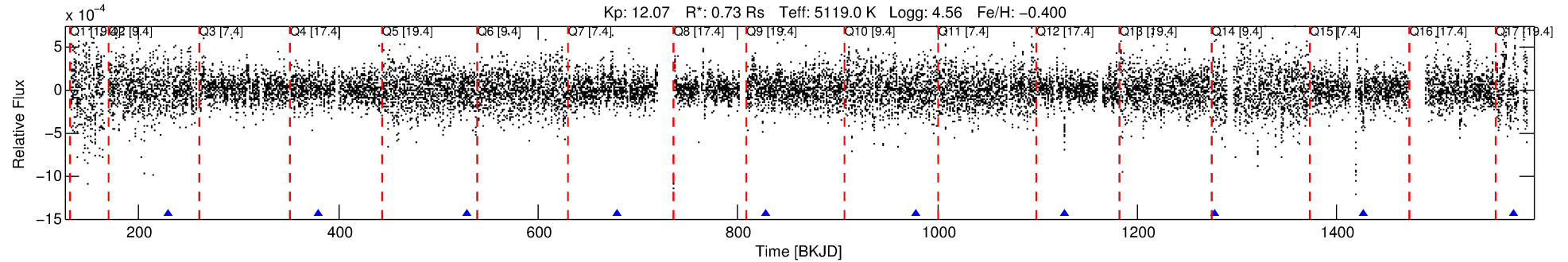
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008184075-04

No Significant Match Found

DV One-Page Summary

KIC: 8184075 Candidate: 4 of 6 Period: 149.626 d



DV Fit Results:

Period = 149.62568 [0.00380] d
Epoch = 229.7963 [0.0237] BKJD
Rp/R* = 0.0164 [0.0119]
a/R* = 85.57 [233.97]
b = 0.76 [1.55]
Seff = 1.36 [0.25]
Teq = 276 [13] K
Rp = 1.30 [0.95] Re
a = 0.4883 [0.0464] AU
Ag = 24989.78 [36766.92] [0.68σ]
Teffp = 5356 [1968] K [2.58σ]

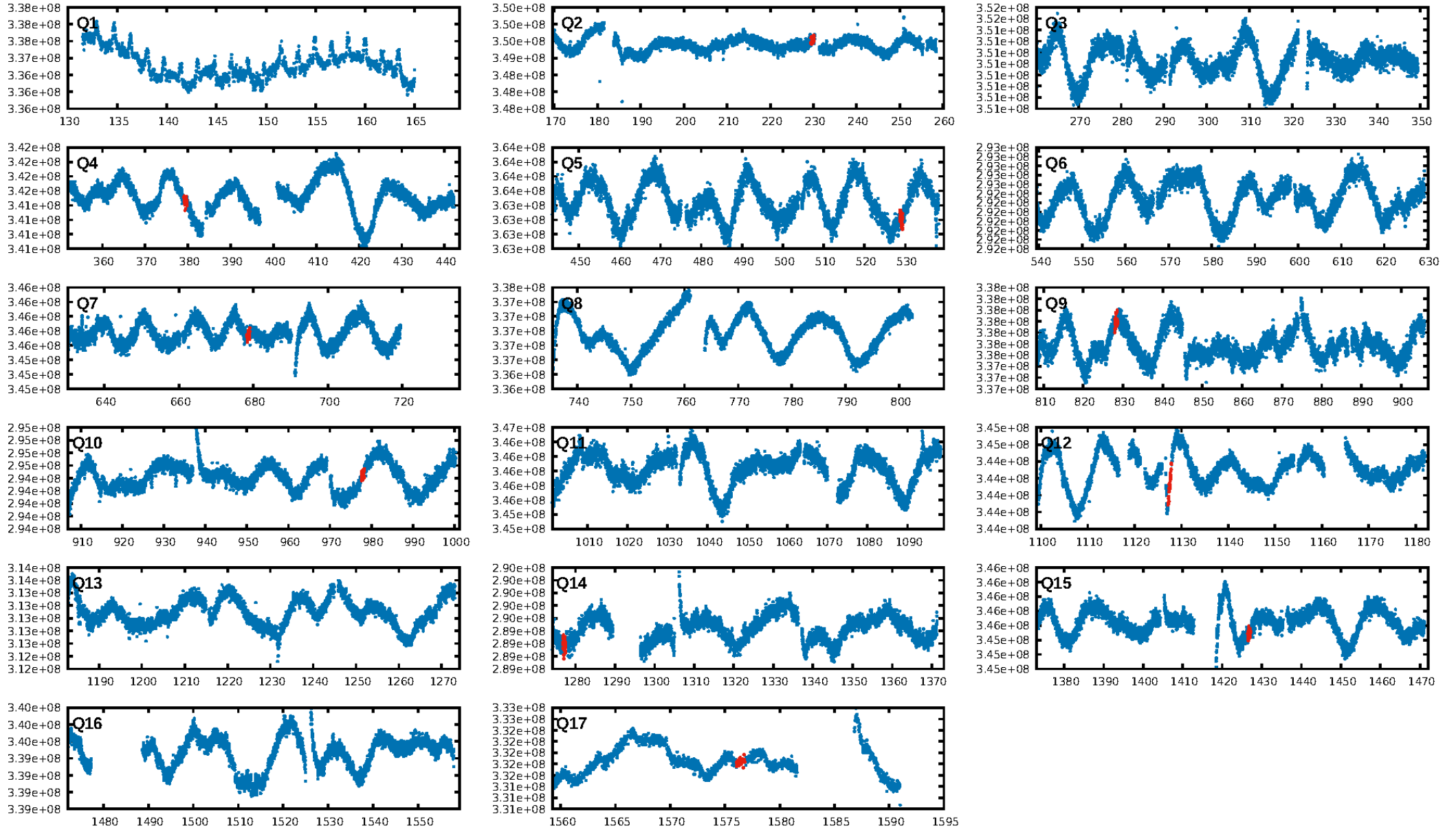
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [14.88σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.87e-10
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 1.947
Centroid-sig: 0.0%
Centroid-so: 3.655 arcsec [11.07σ]
OotOffset-rm: 4.356 arcsec [2.10σ]
KicOffset-rm: 2.315 arcsec [3.52σ]
OotOffset-st: 0/0/1/2 [3]
KicOffset-st: 0/0/1/2 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.00 [0/8]

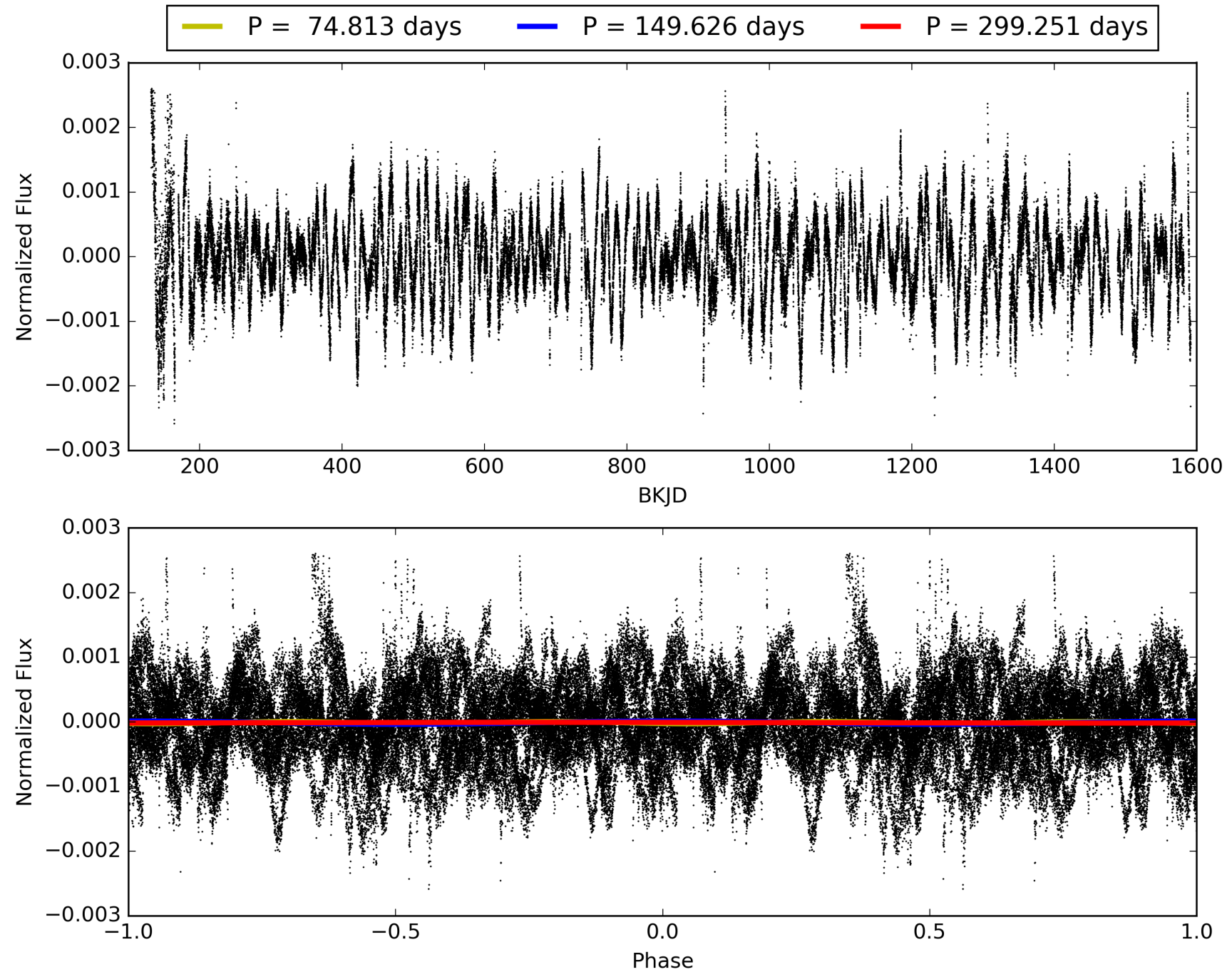
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:59:34 Z

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

TCE 008184075-04, PDC Light Curves

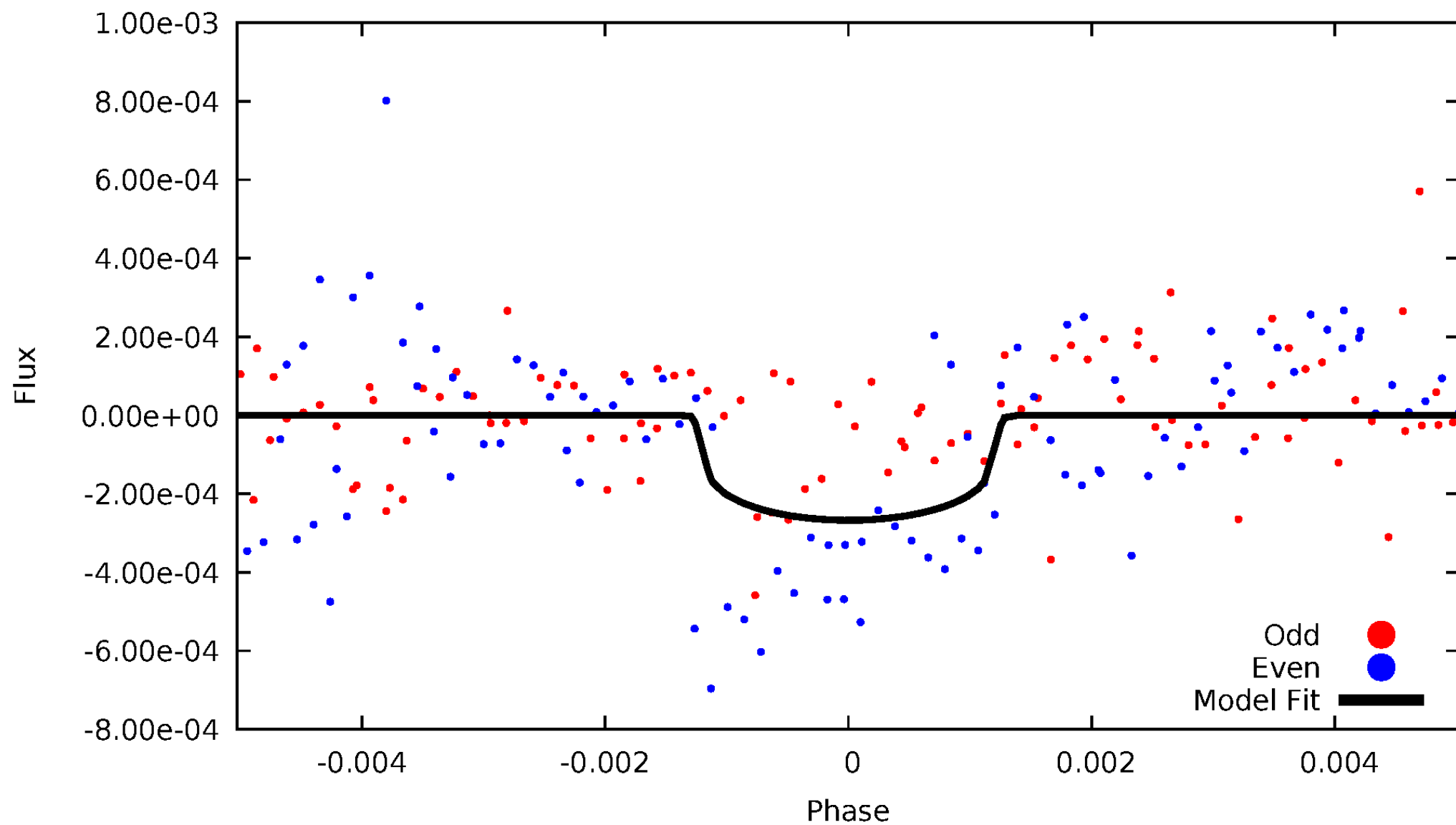


TCE 008184075-04



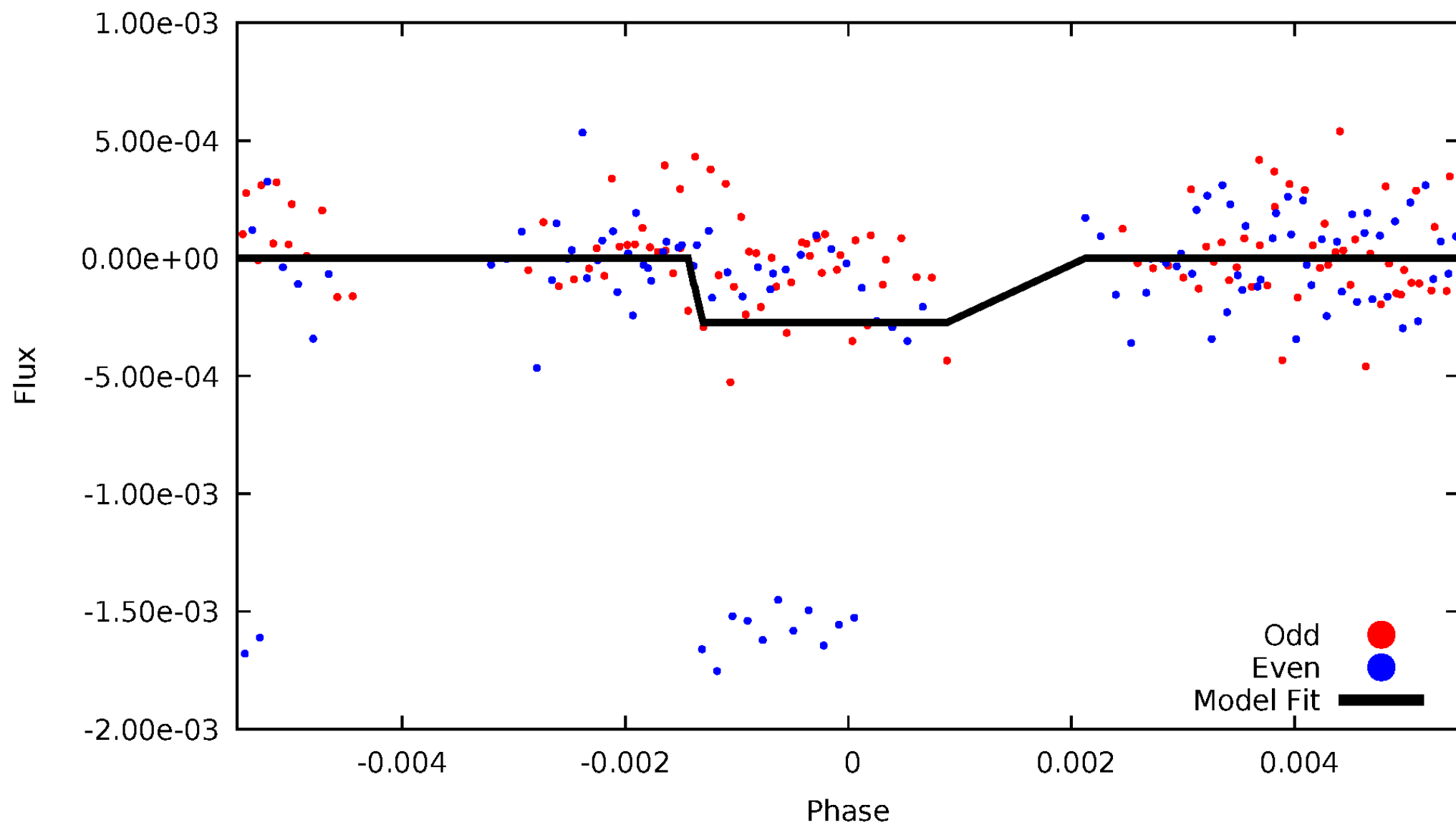
DV Odd/Even

TCE 008184075-04



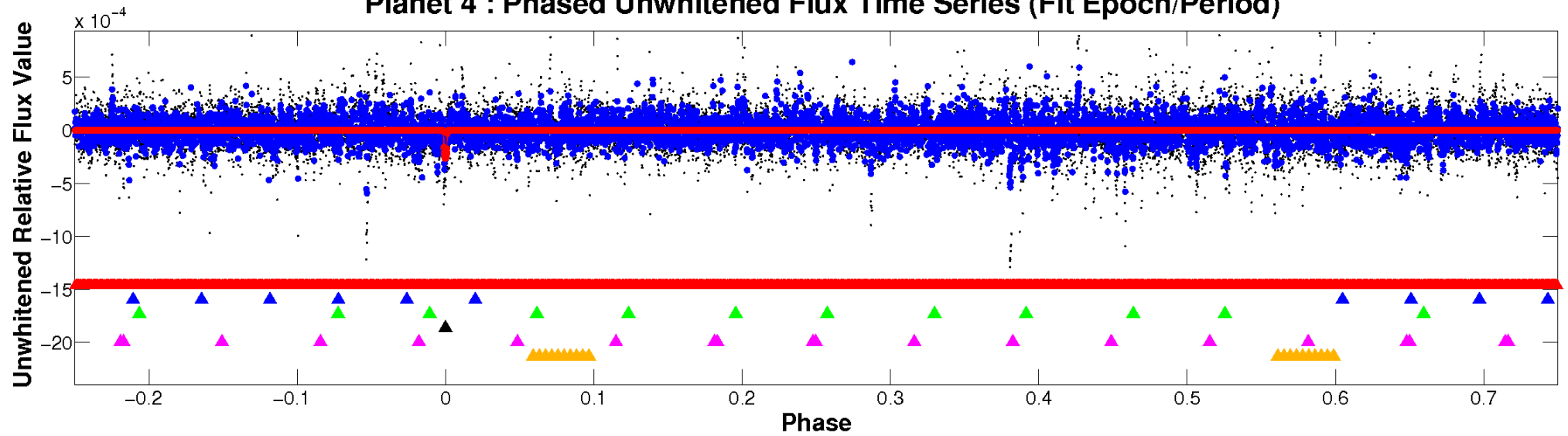
ALT Odd/Even

TCE 008184075-04

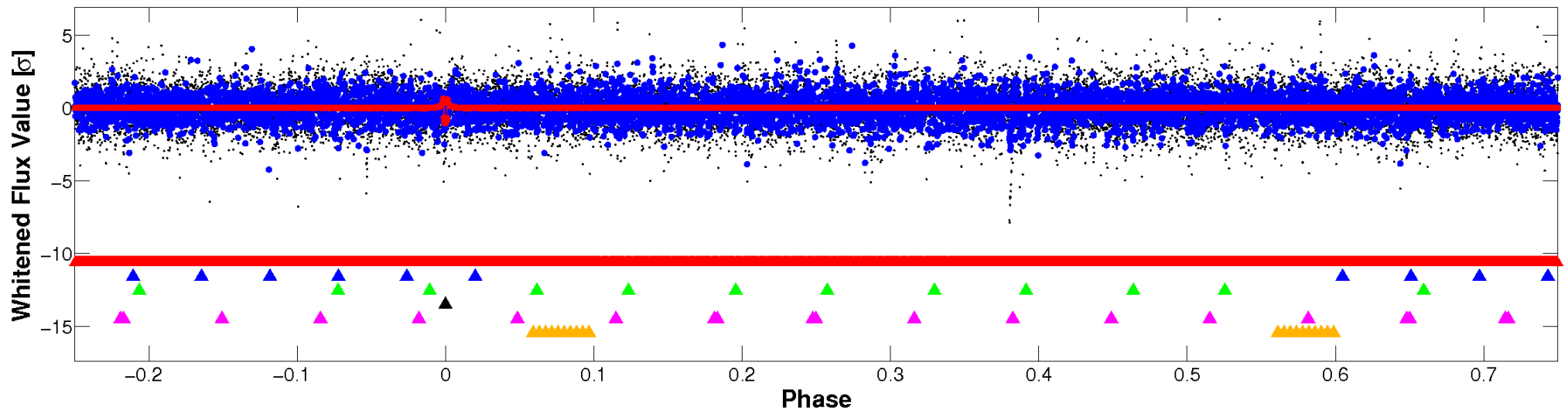


Non-Whitened Vs. Whitened Light Curve

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

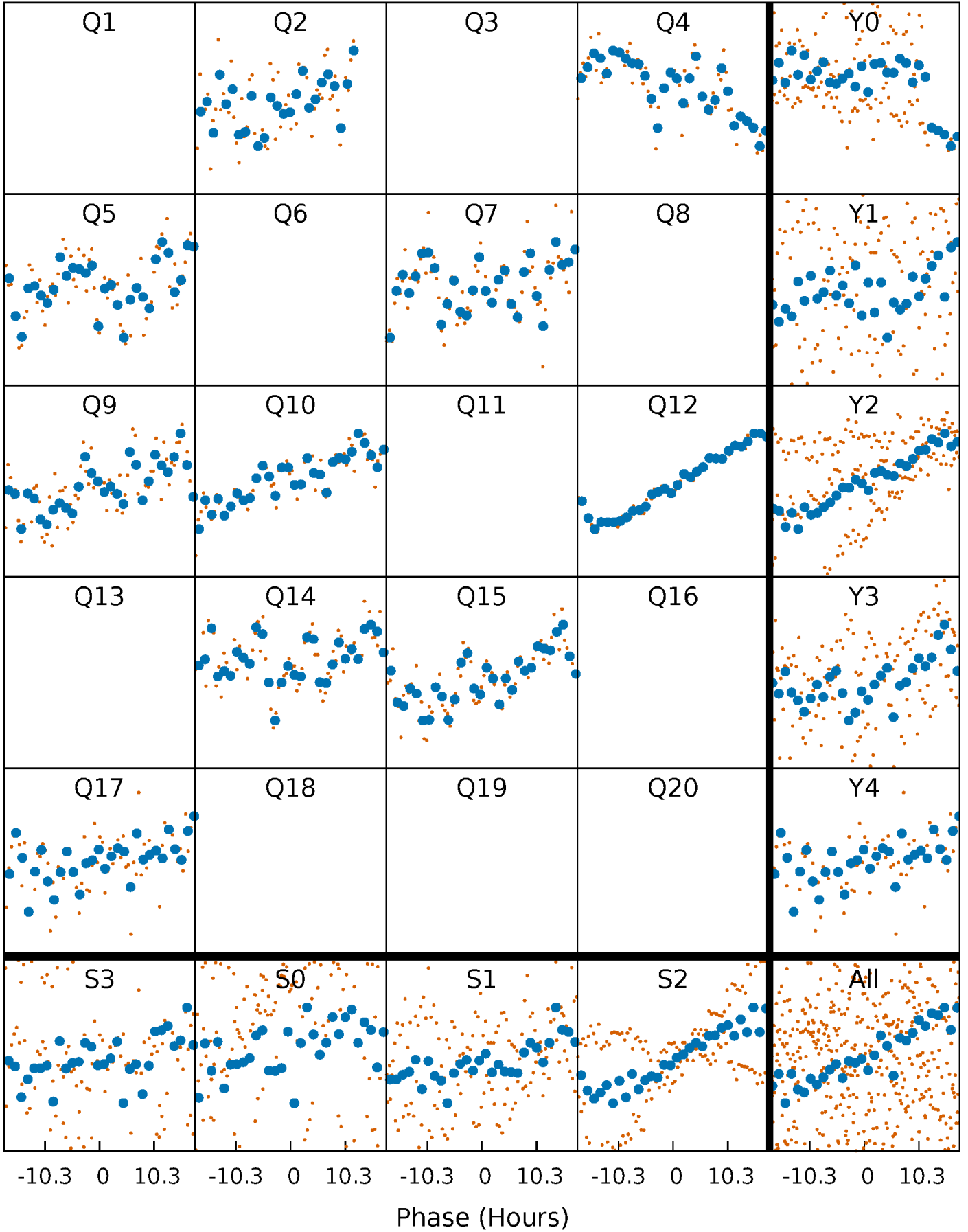


Planet 4 : Phased Whitened Flux Time Series (Fit Epoch/Period)



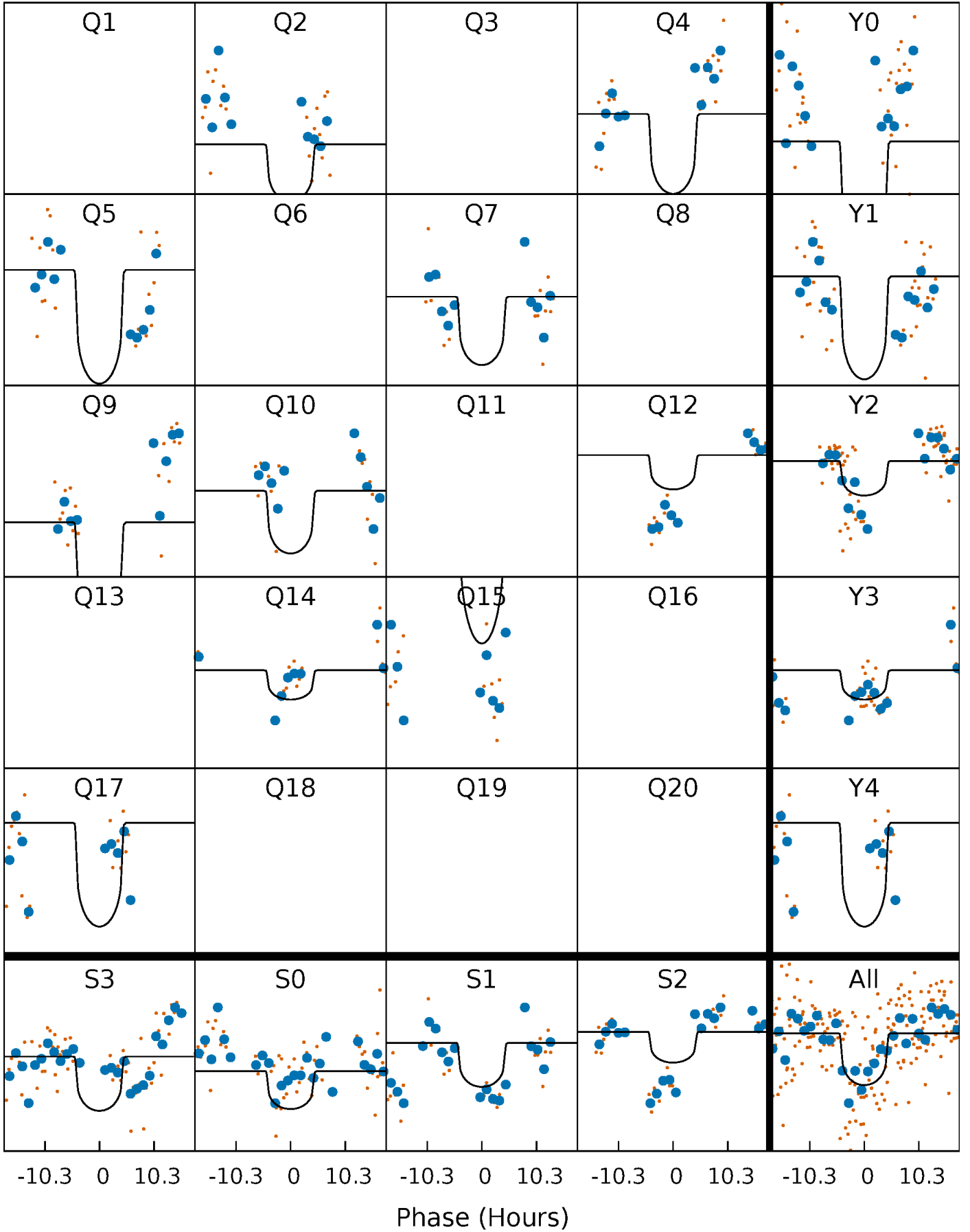
PDC Quarter-Phased Transit Curves

TCE 008184075-04 $P=149.625683$ Days $T_0=229.796290$ (BKJD)



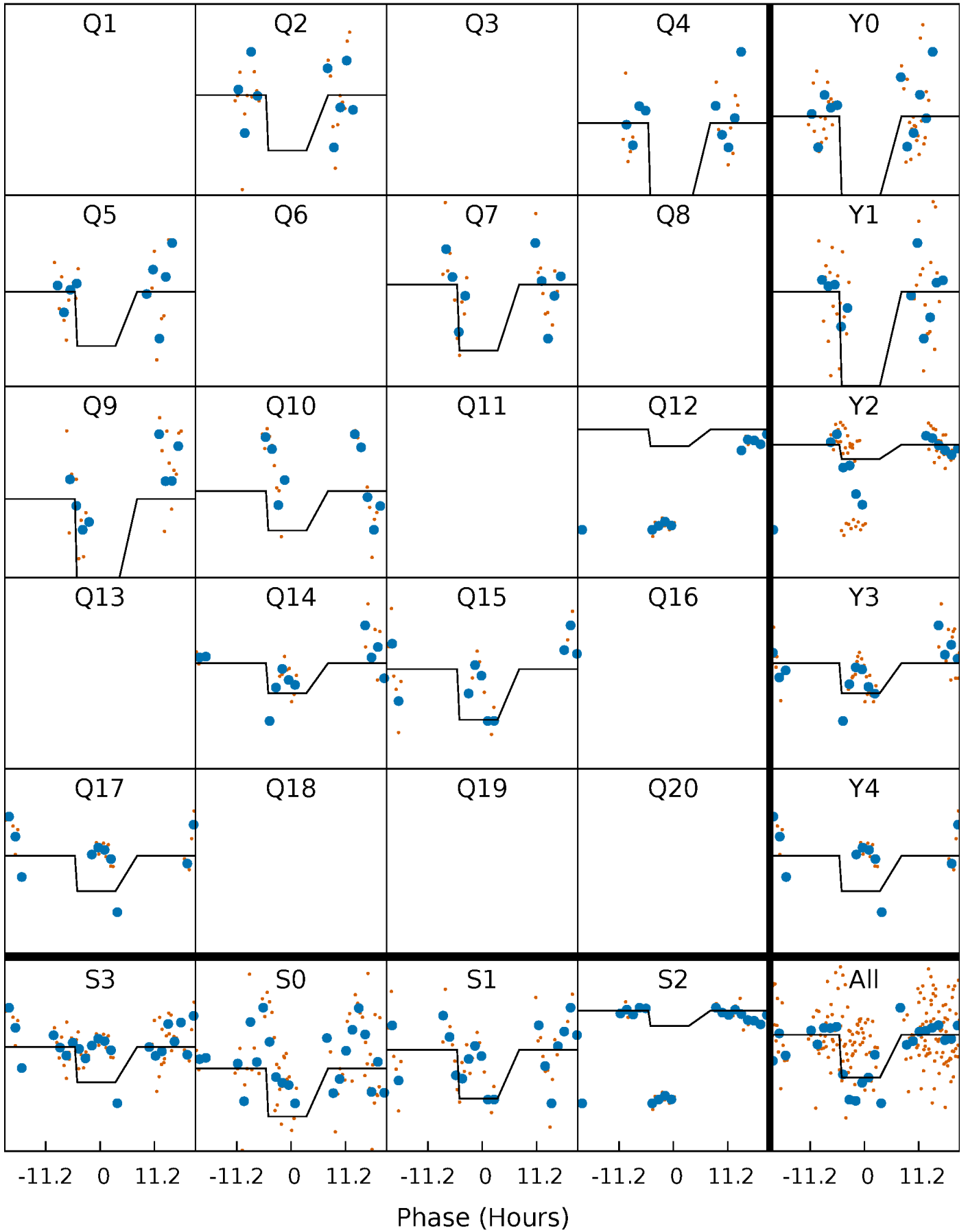
DV Quarter-Phased Transit Curves

TCE 008184075-04 $P=149.625683$ Days $T_0=229.796290$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

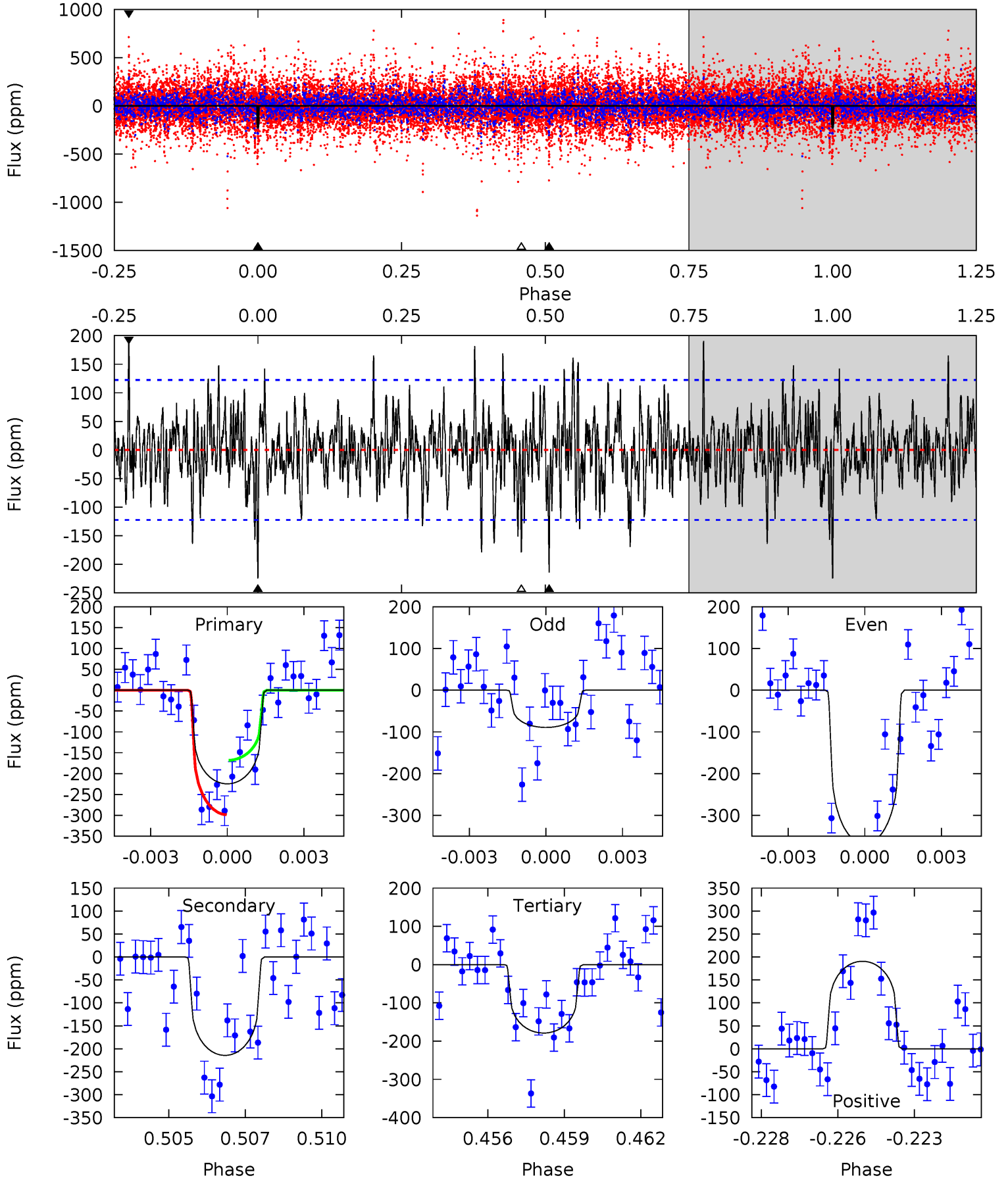
TCE 008184075-04 P=149.662205 Days $T_0=229.584320$ (BKJD)



DV Model-Shift Uniqueness Test

008184075-04, P = 149.625683 Days, E = 80.170607 Days

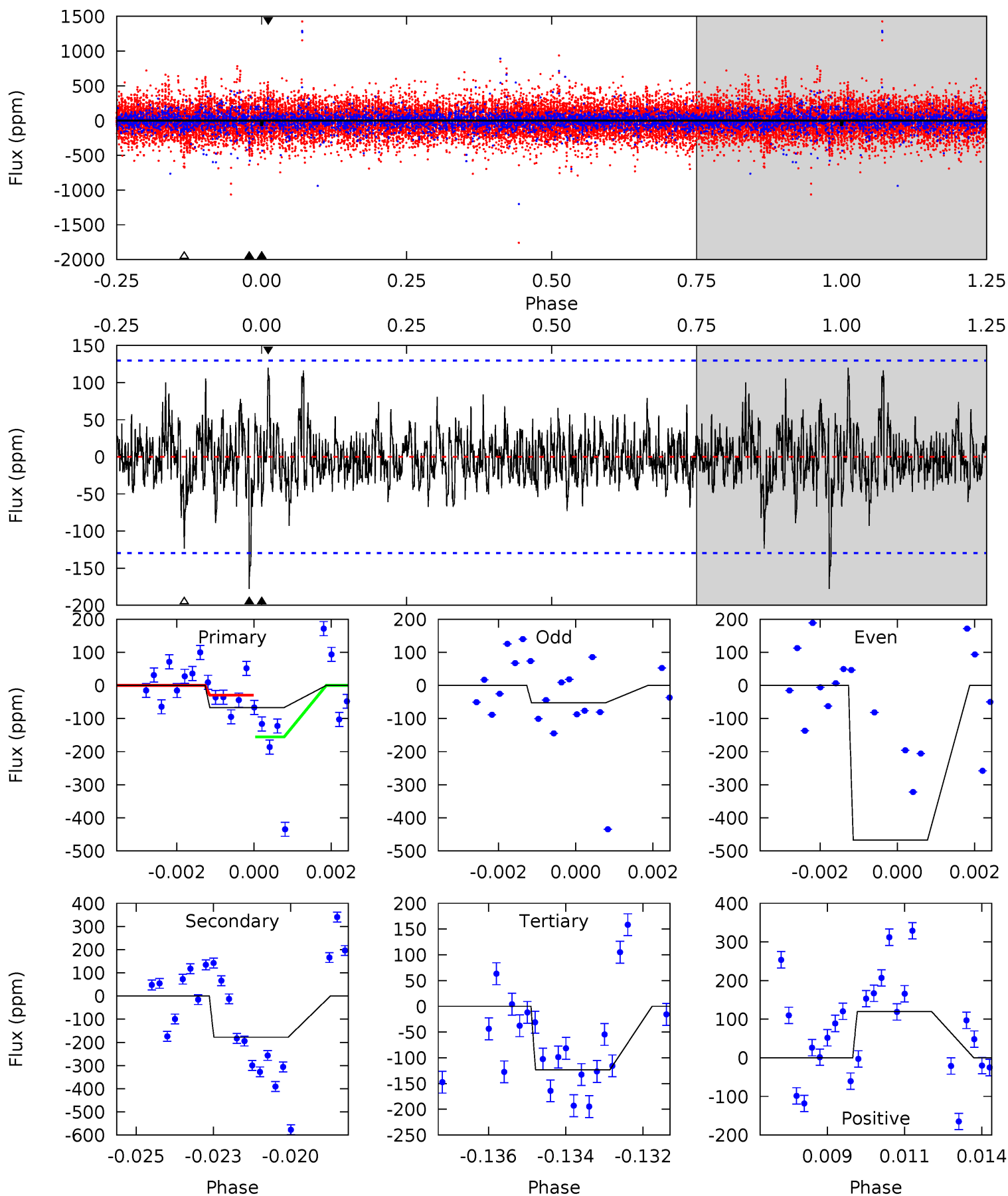
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.67	9.23	7.70	8.21	5.27	3.00	2.22	1.96	1.46	1.53	1.02	5.90	2.00	0.46	2.84



Alt Model-Shift Uniqueness Test

008184075-04, P = 149.662205 Days, E = 79.922115 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
2.73	7.27	5.05	4.90	5.30	3.05	1.14	-2.32	-2.17	2.22	2.37	8.50	2.38	0.40	2.31



Stellar Parameters For KIC 008184075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5119^{+153}_{-138}	$4.556^{+0.077}_{-0.063}$	$-0.400^{+0.350}_{-0.300}$	$0.727^{+0.081}_{-0.073}$	$0.693^{+0.103}_{-0.044}$	$2.544^{+0.870}_{-0.546}$
	+3%/-3%	+2%/-1%	+87%/-75%	+11%/-10%	+15%/-6%	+34%/-21%
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 008184075-04 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-214 ± 23	$1.43^{+0.85}_{-0.85}$	386^{+15}_{-15}	4693^{+2481}_{-735}	14081^{+67757}_{-8658}
Alt.	-178 ± 24	$1.40^{+0.94}_{-0.78}$	385^{+16}_{-15}	4568^{+2042}_{-779}	11877^{+48815}_{-7604}

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

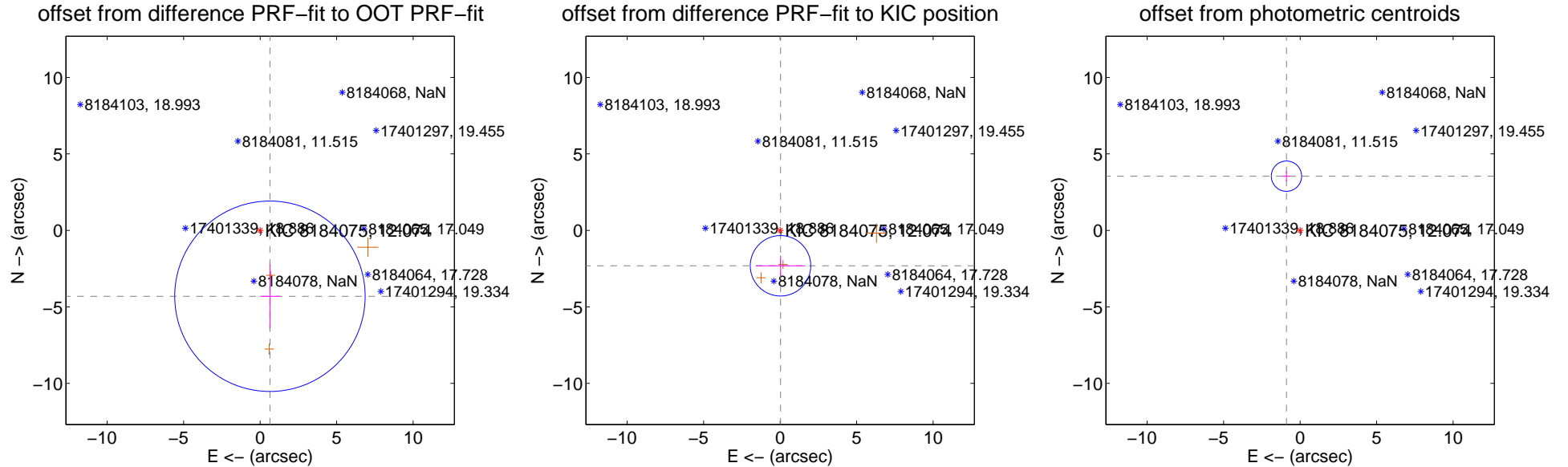
DV Centroid Data

Supplemental centroid analysis for 008184075-04. Kepler magnitude: 12.07. Transit SNR 7.06

There are 0 quarters with good PRF difference image offsets

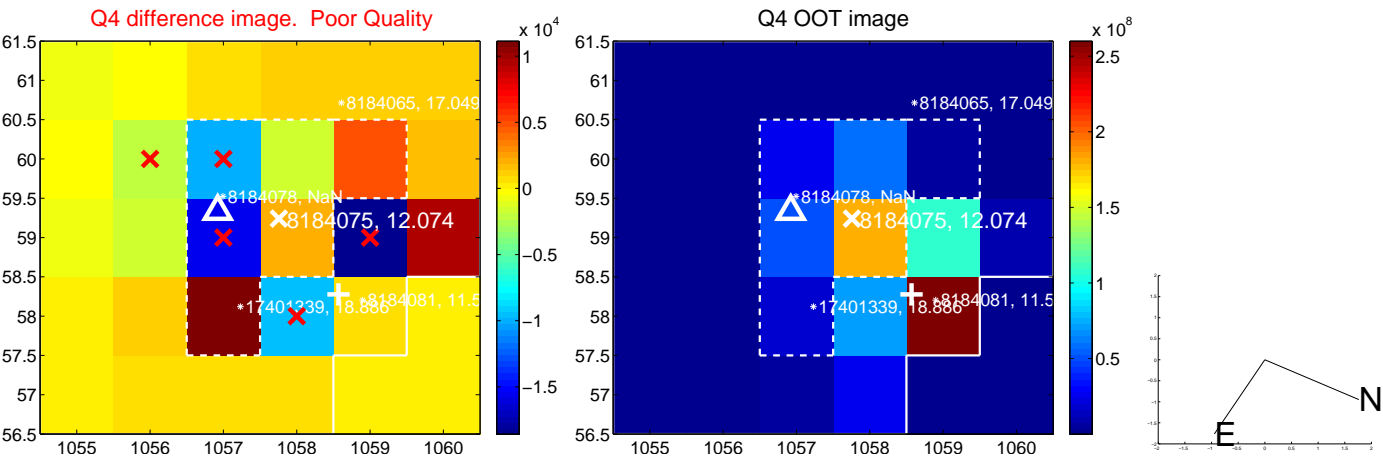
The direct PRF centroid is offset from the target star catalog position by about 1.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	4.356 ± 2.075	2.10	-0.640 ± 0.640	-4.308 ± 2.095
PRF-fit source offset from KIC position	2.315 ± 0.659	3.52	-0.025 ± 1.617	-2.315 ± 0.658
photometric centroid source offset	3.66 ± 0.33	11.07	0.89 ± 0.27	3.54 ± 0.33

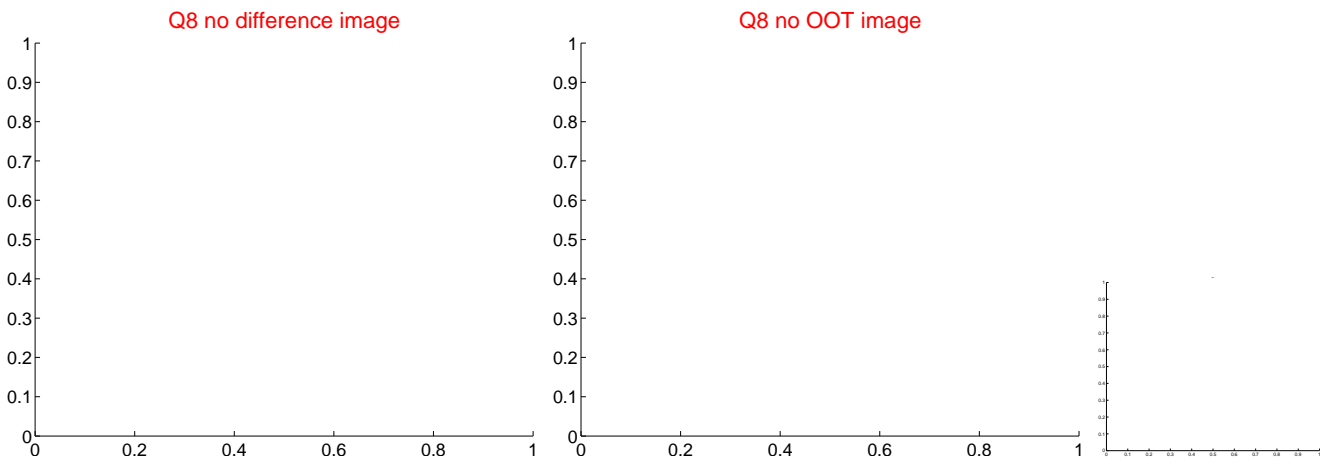
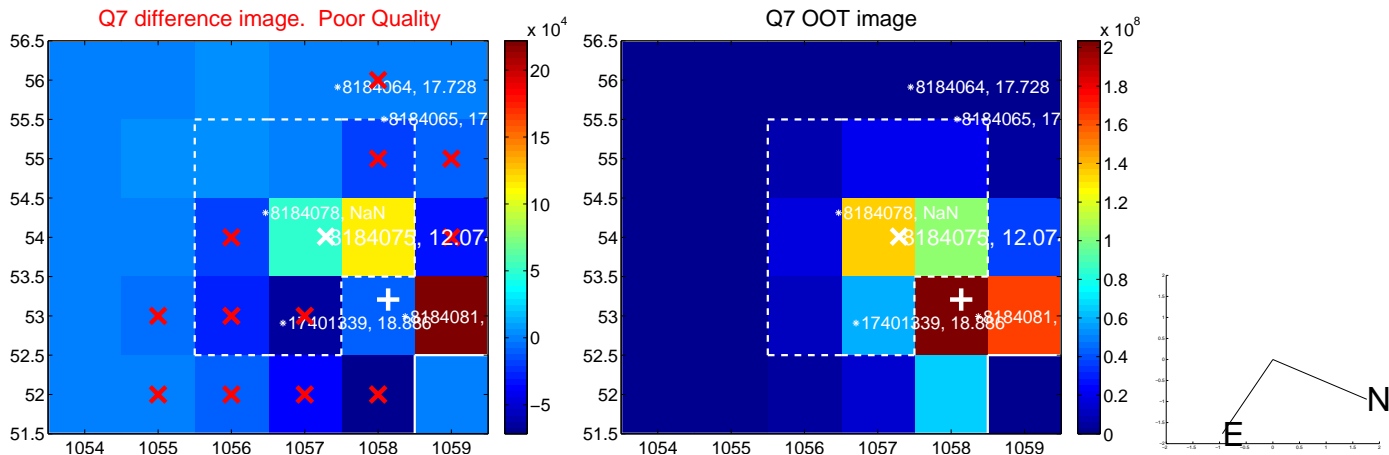
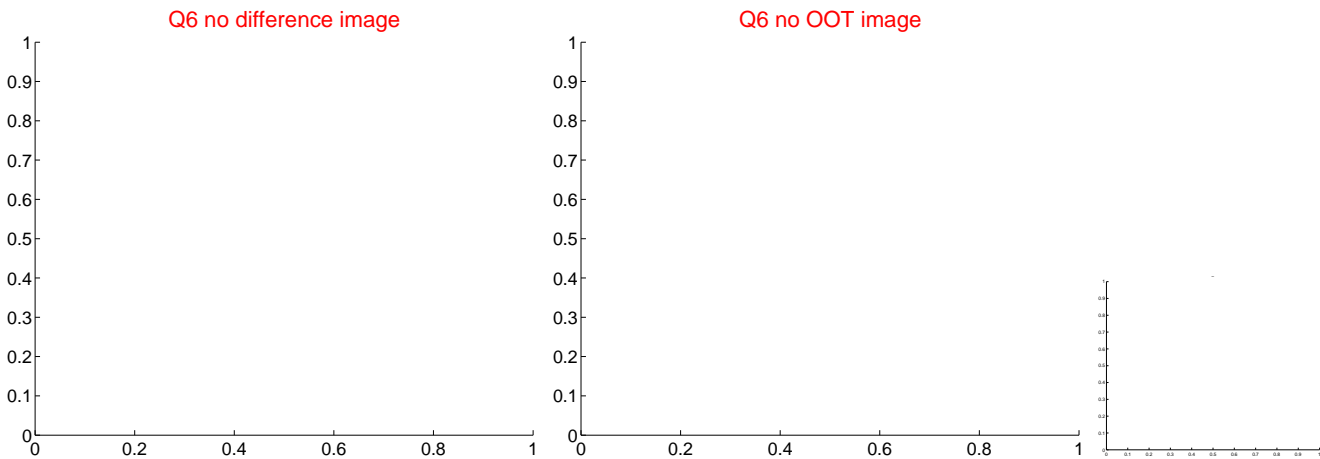
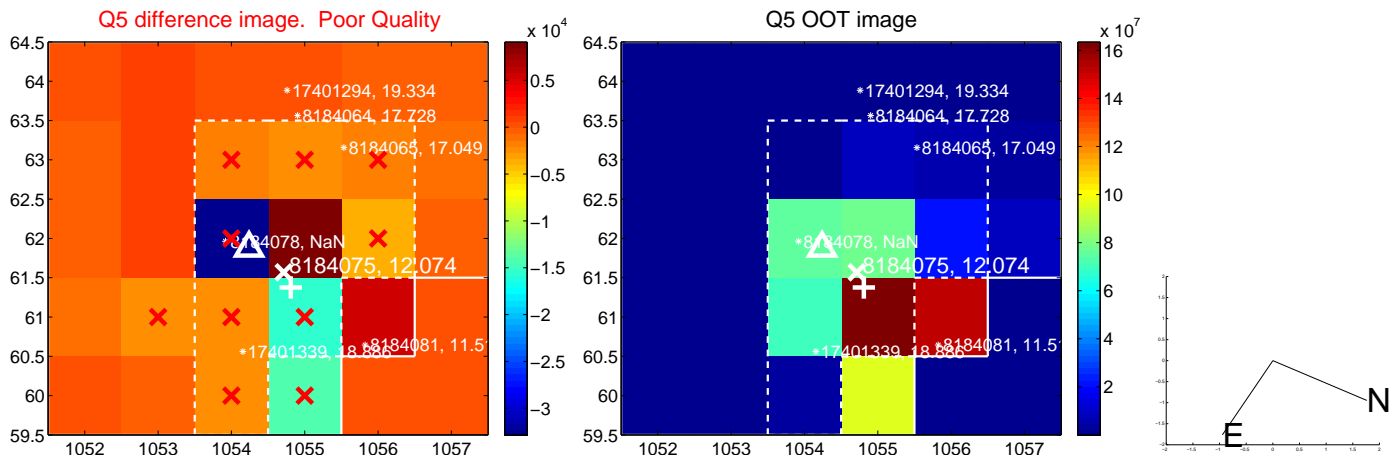


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

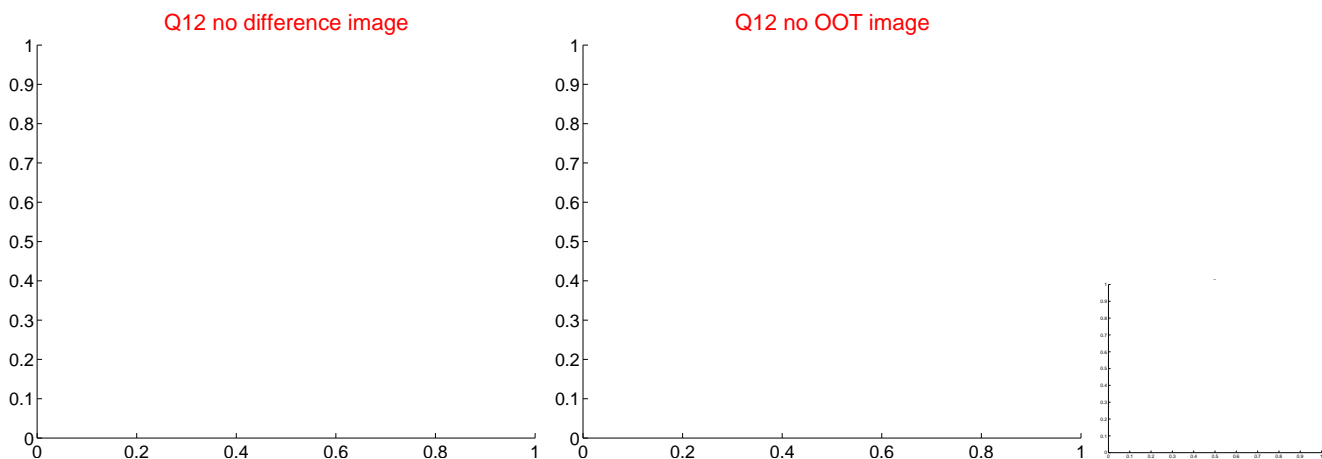
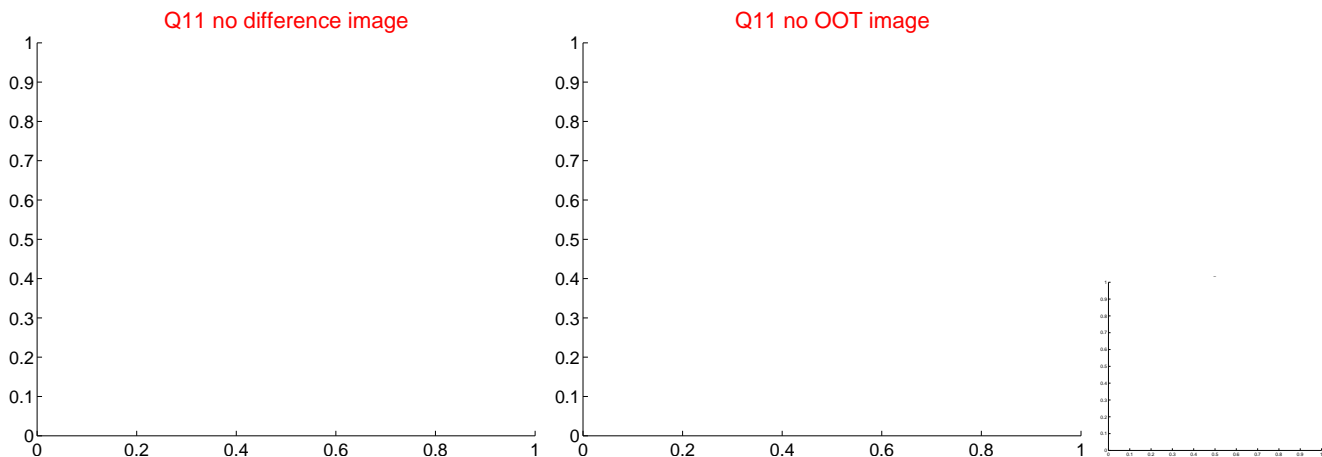
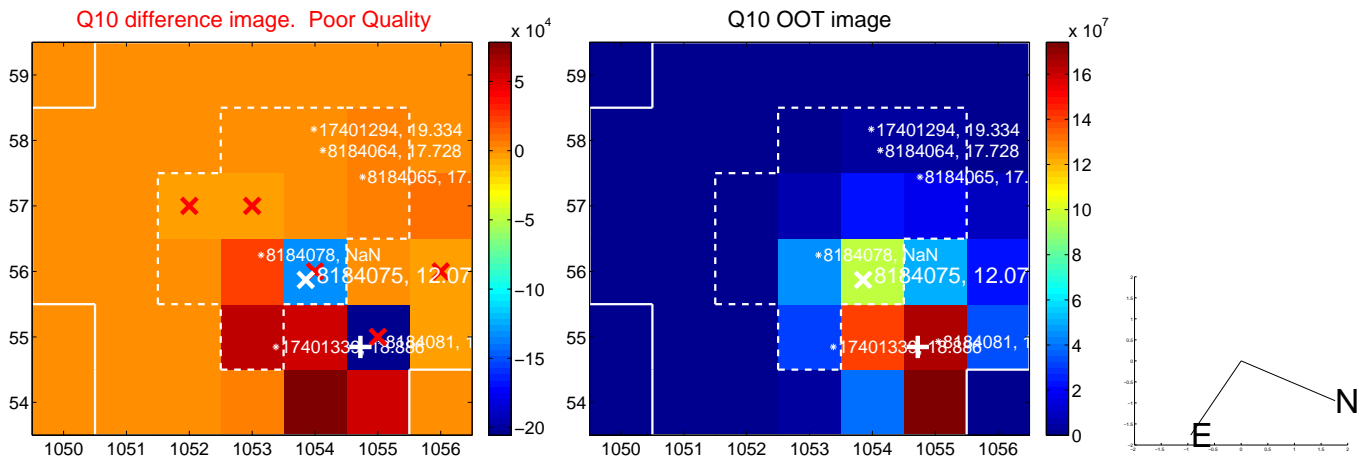
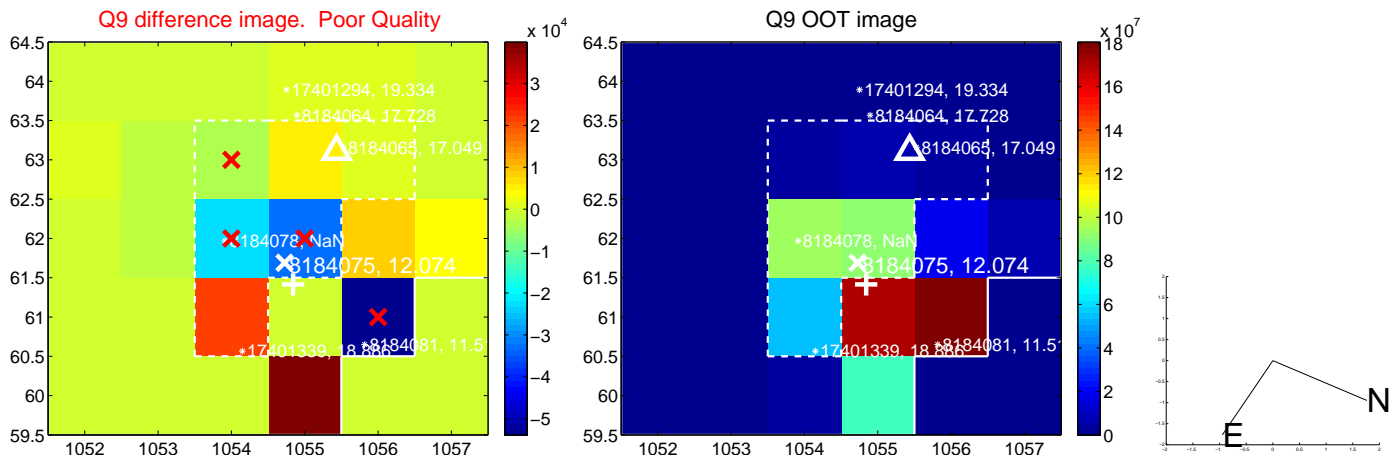
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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.

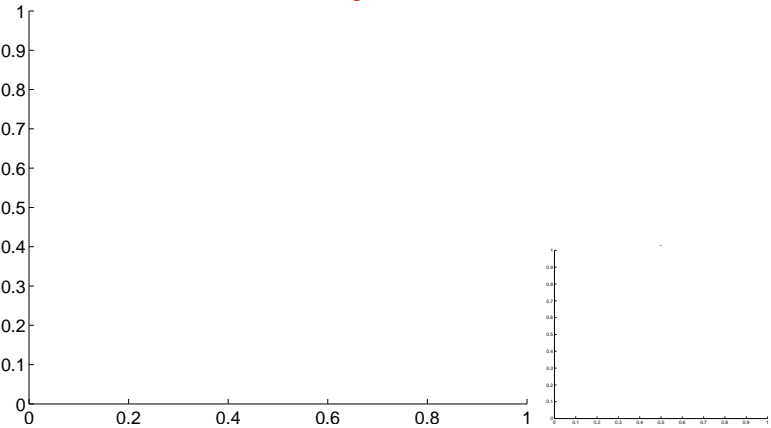


white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.

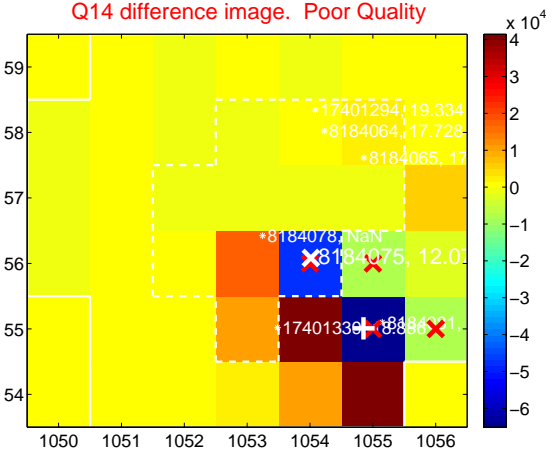
Q13 no difference image



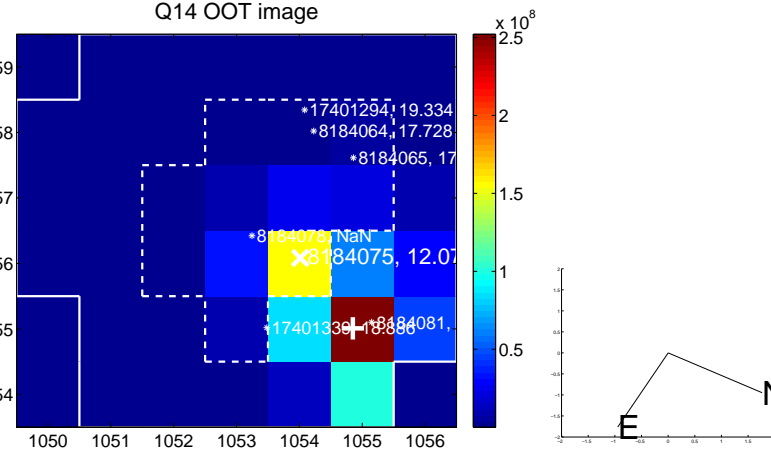
Q13 no OOT image



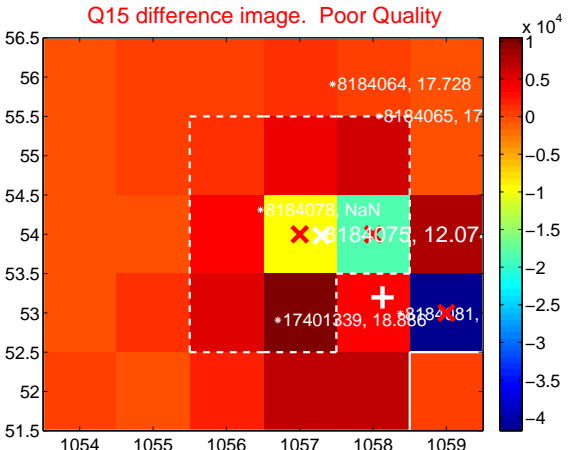
Q14 difference image. Poor Quality



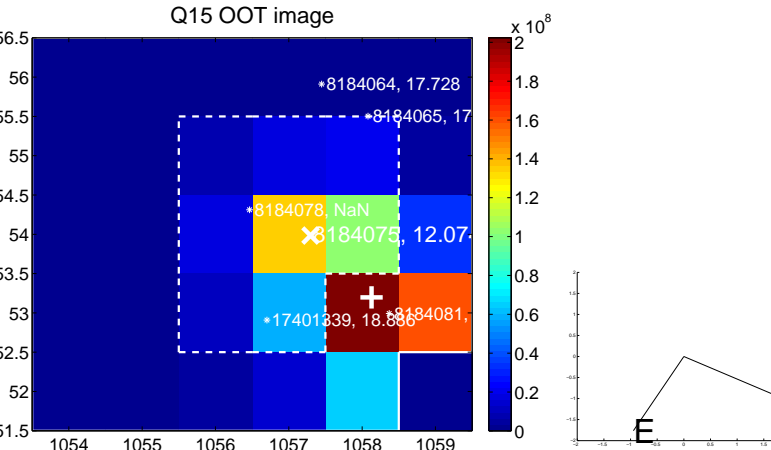
Q14 OOT image



Q15 difference image. Poor Quality



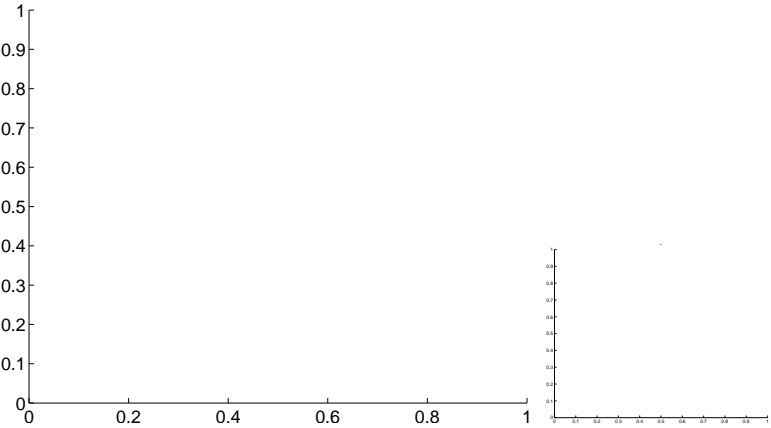
Q15 OOT image



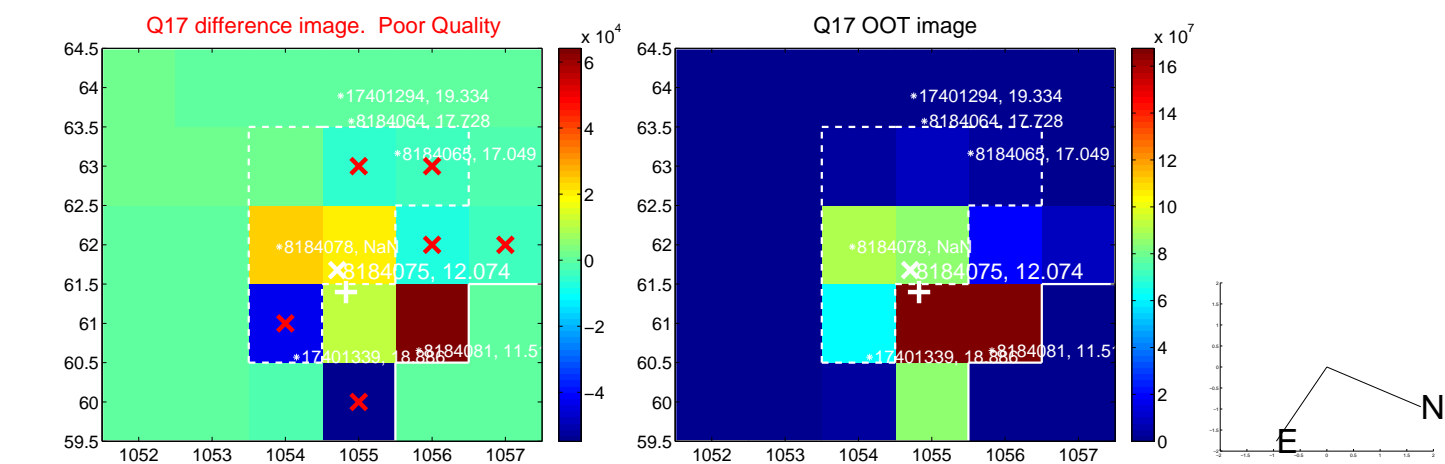
Q16 no difference image



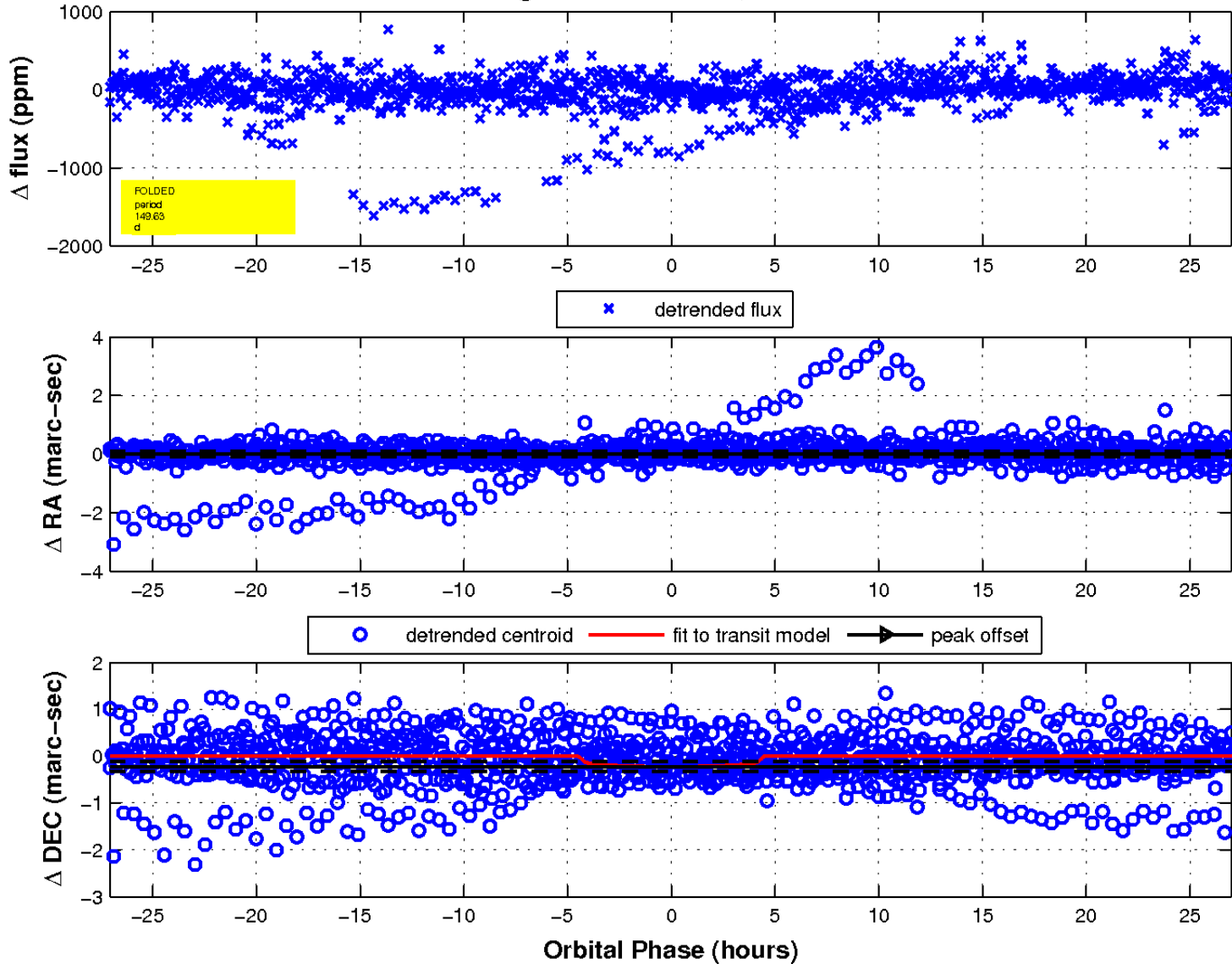
Q16 no OOT image



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

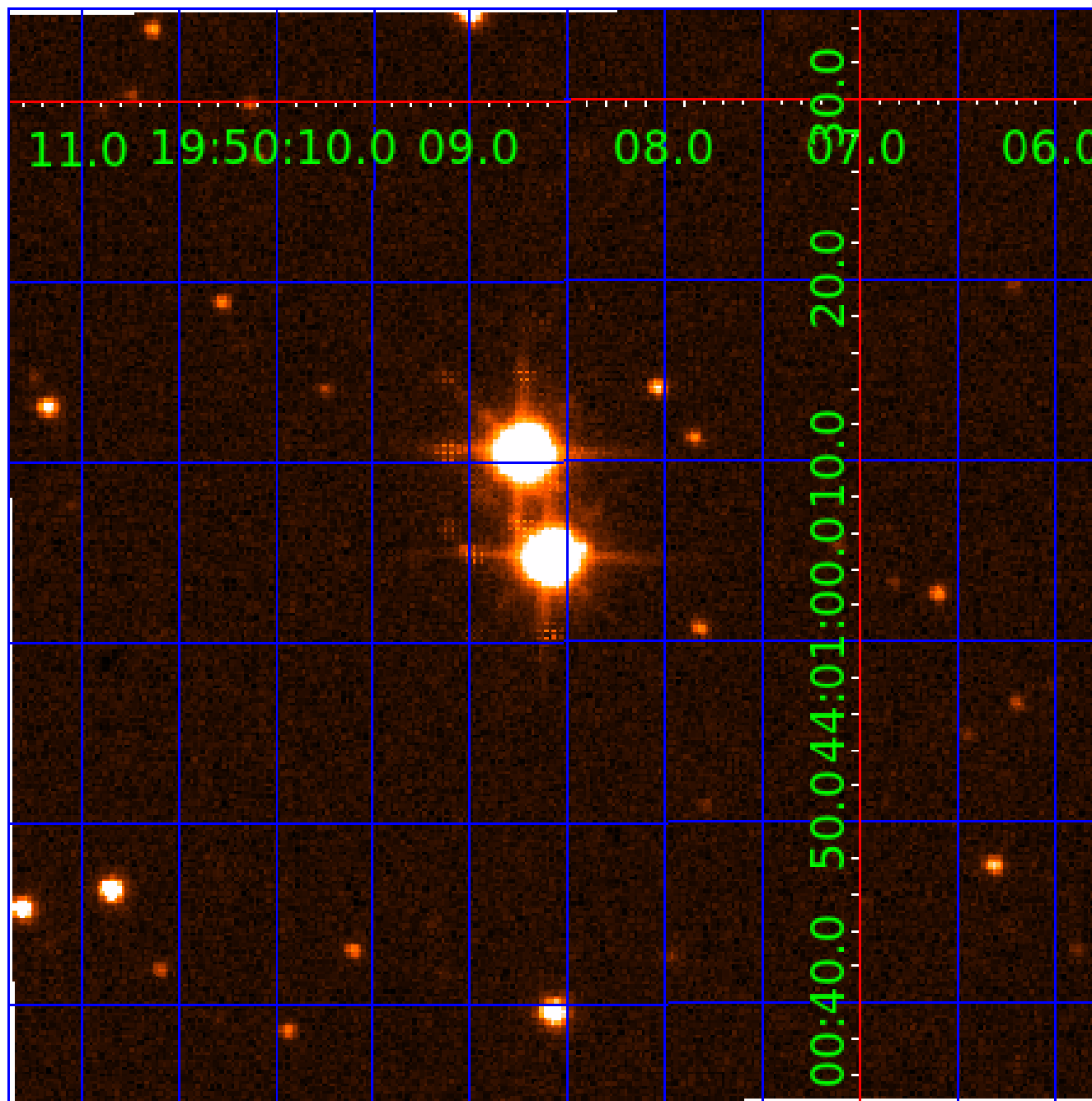


fluxWeightedCentroids, Planet 4 of 6



UKIRT Image

Declination



KIC 008184075

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})
008184075-01	OBS	No	0.796322	131.656071	13.5	4.443	8.0	7.4	0.73	5119	0.32	1467.37
008184075-03	OBS	No	129.570427	149.560250	295.6	7.888	11.7	8.6	0.73	5119	1.27	1.65
008184075-04	OBS	No	149.625683	229.796290	267.6	9.021	8.4	7.1	0.73	5119	1.30	1.36
008184075-05	OBS	No	69.845227	197.013332	112.0	3.073	7.6	3.8	0.73	5119	0.93	3.77
008184075-06	OBS	No	74.500443	169.768347	276.0	2.275	7.6	7.9	0.73	5119	1.39	3.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008184075-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_KIC_POS
008184075-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008184075-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

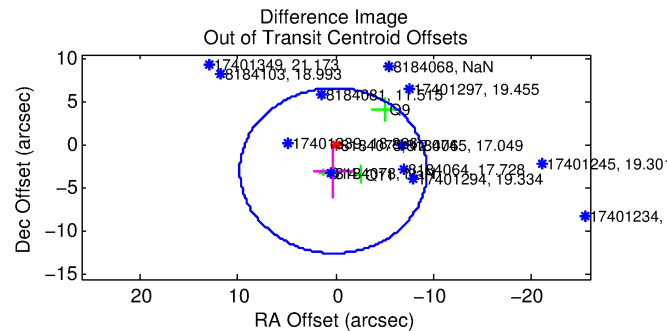
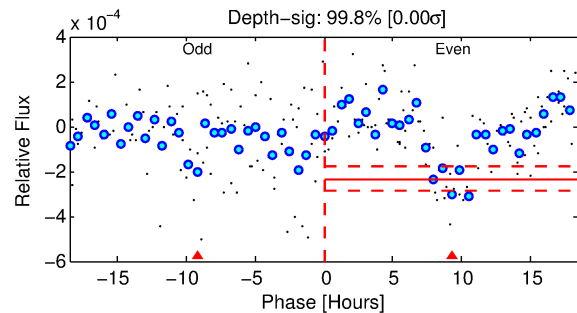
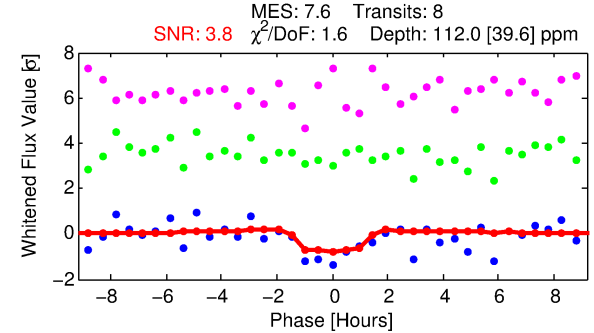
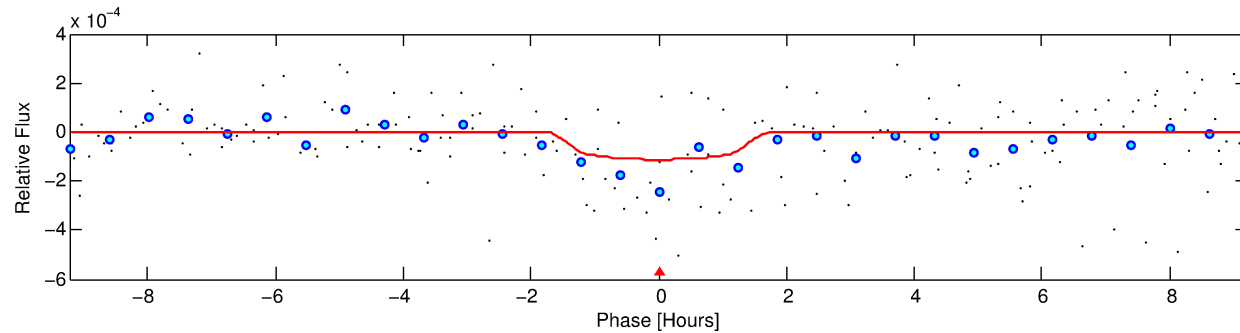
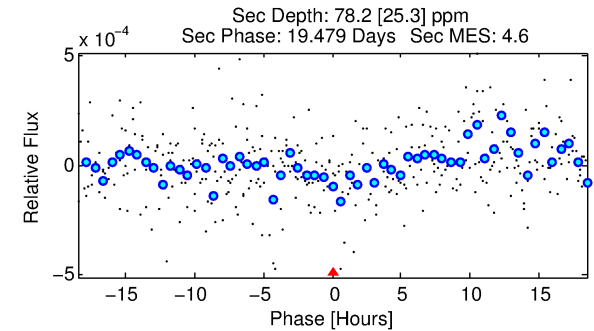
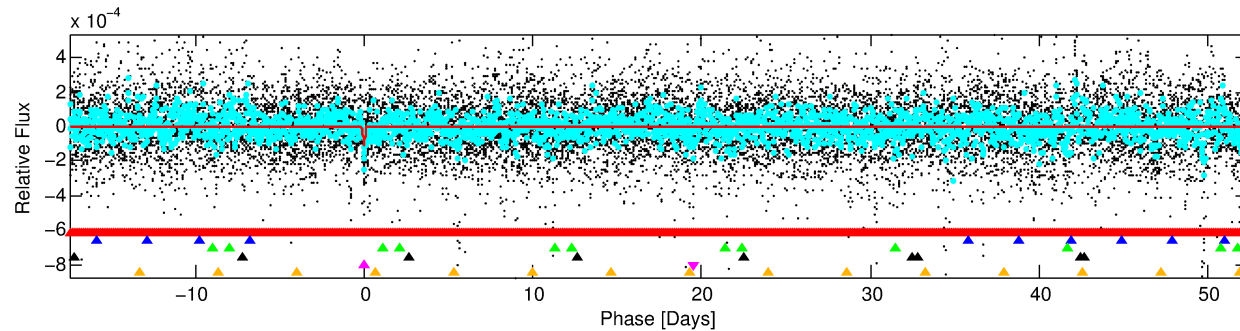
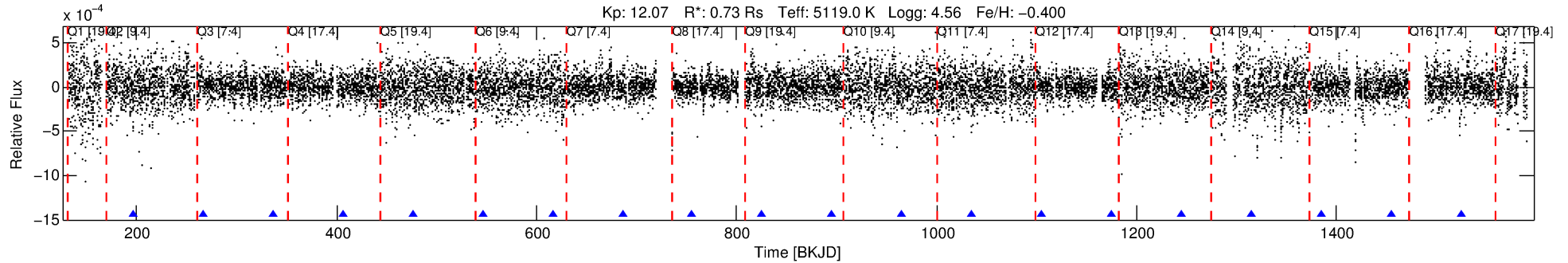
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008184075-05

No Significant Match Found

DV One-Page Summary

KIC: 8184075 Candidate: 5 of 6 Period: 69.845 d



DV Fit Results:

Period = 69.84523 [0.00185] d
Epoch = 197.0133 [0.0201] BKJD
Rp/R* = 0.0117 [0.0294]
a/R* = 80.09 [861.98]
b = 0.90 [2.33]
Seff = 3.77 [0.69]
Teff = 5119.0 [16] K
Rp = 0.93 [2.34] Re
a = 0.2939 [0.0279] AU
Ag = 4304.92 [21687.83] [0.20σ]
Teffp = 4448 [5602] K [0.73σ]

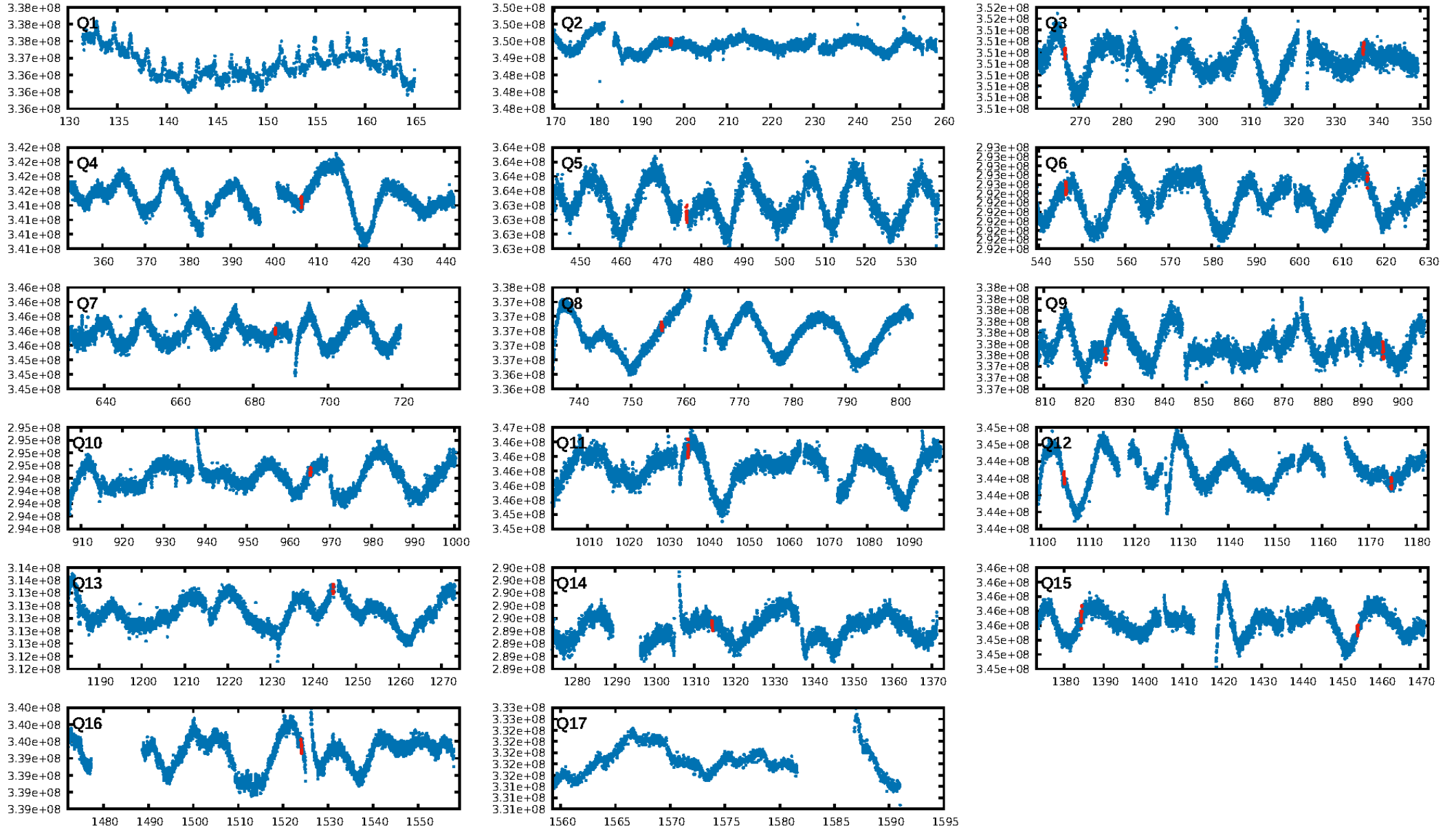
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [306.76σ]
LongPeriod-sig: 100.0% [29.22σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 88.7%
Bootstrap-pfa: 1.67e-08
RollingBand-fgt: 1.00 [8/8]
GhostDiagnostic-chr: -10.83
Centroid-sig: 49.5%
Centroid-so: 3.065 arcsec [4.55σ]
OotOffset-rm: 2.983 arcsec [0.94σ]
KicOffset-rm: 2.696 arcsec [1.80σ]
OotOffset-st: 1/1/0/1 [3]
KicOffset-st: 1/1/0/1 [3]
DiffImageQuality-fgm: 0.00 [0/3]
DiffImageOverlap-fno: 0.00 [0/13]

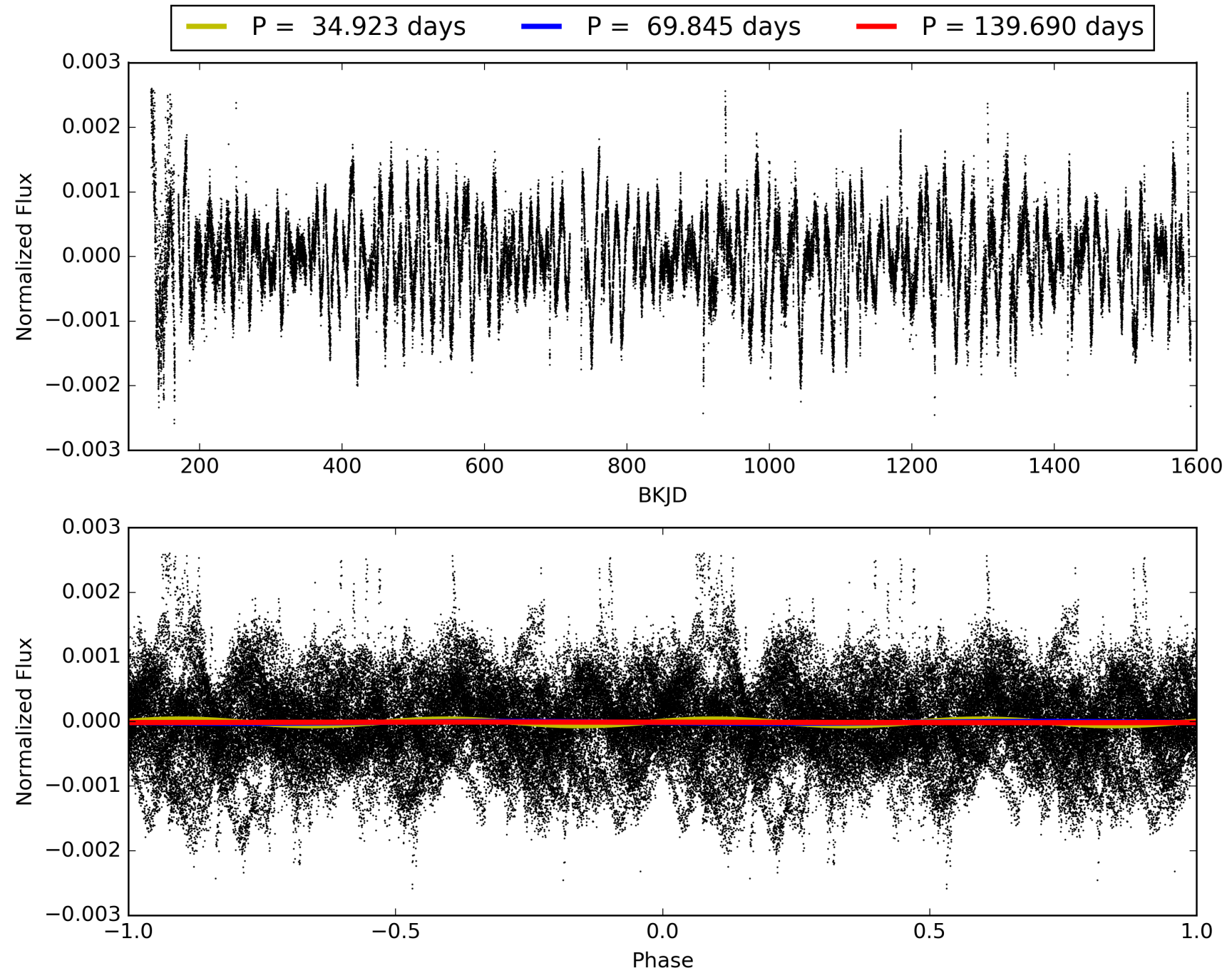
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:59:38 Z

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

TCE 008184075-05, PDC Light Curves

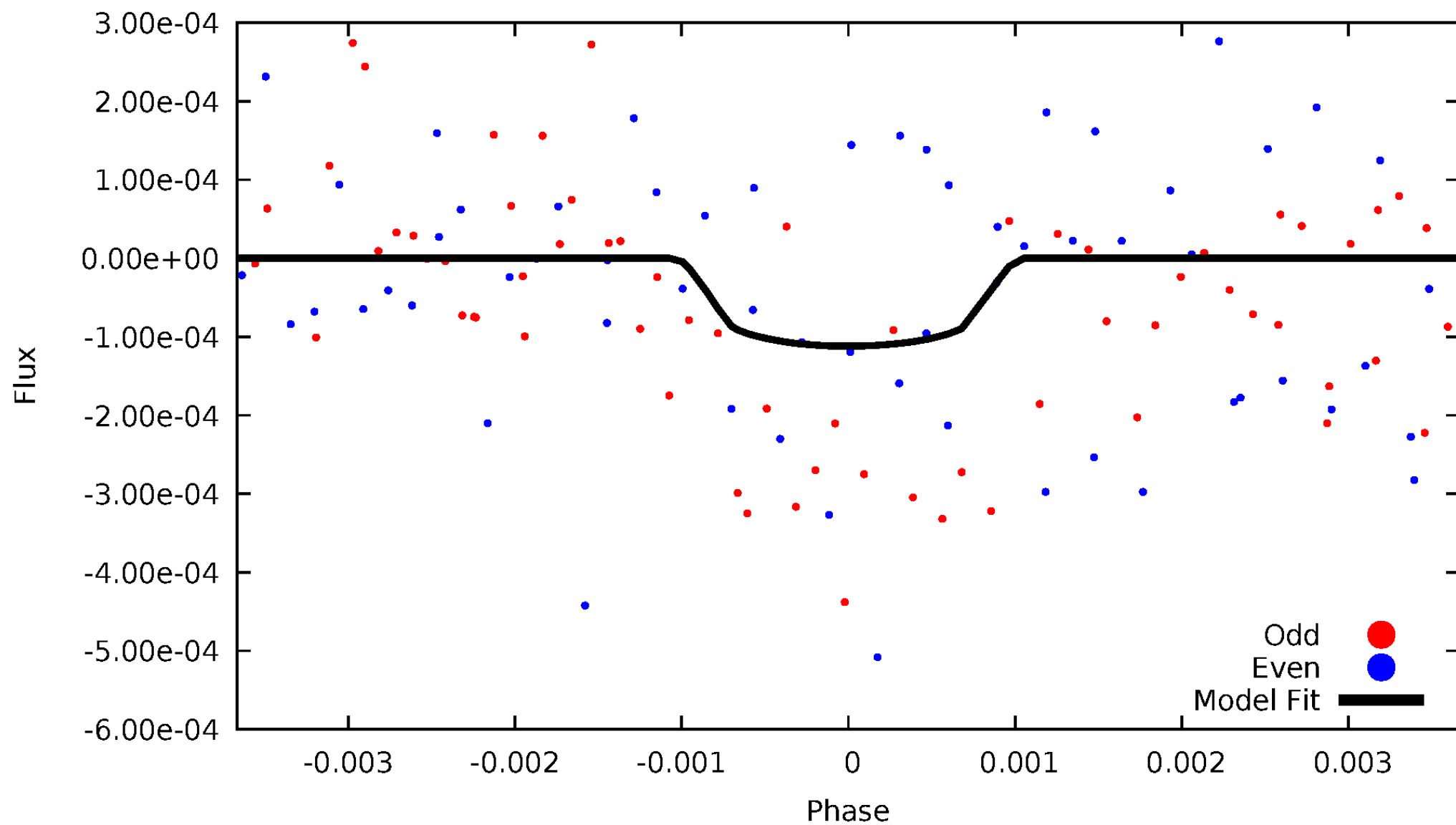


TCE 008184075-05



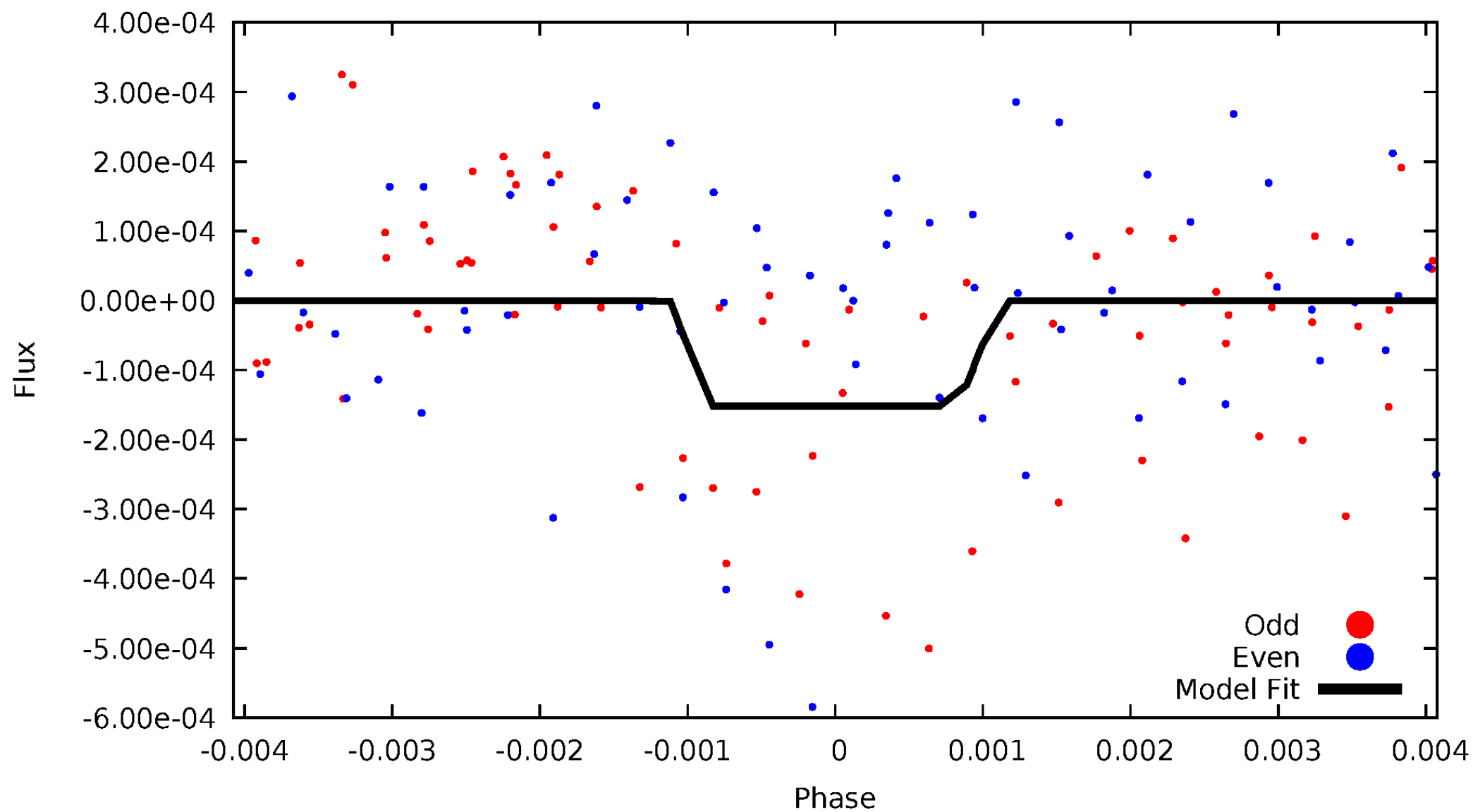
DV Odd/Even

TCE 008184075-05



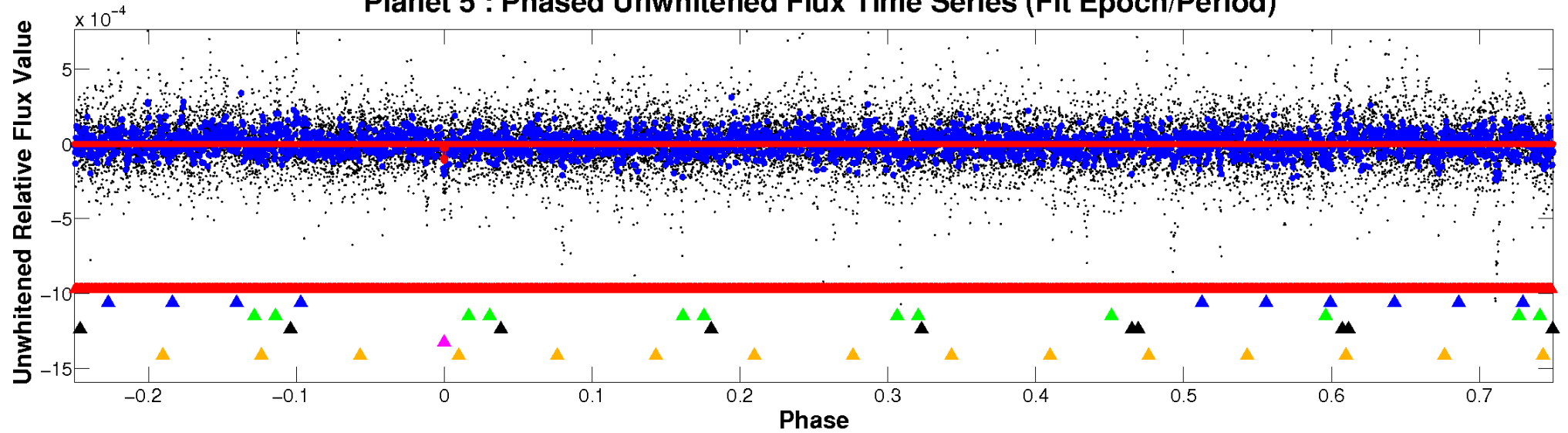
ALT Odd/Even

TCE 008184075-05

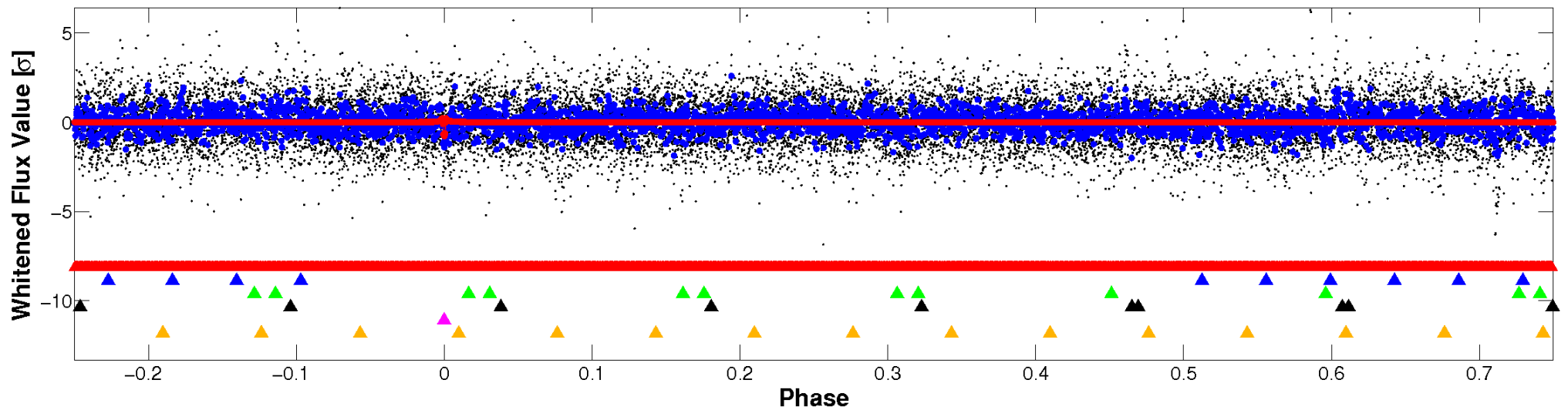


Non-Whitened Vs. Whitened Light Curve

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

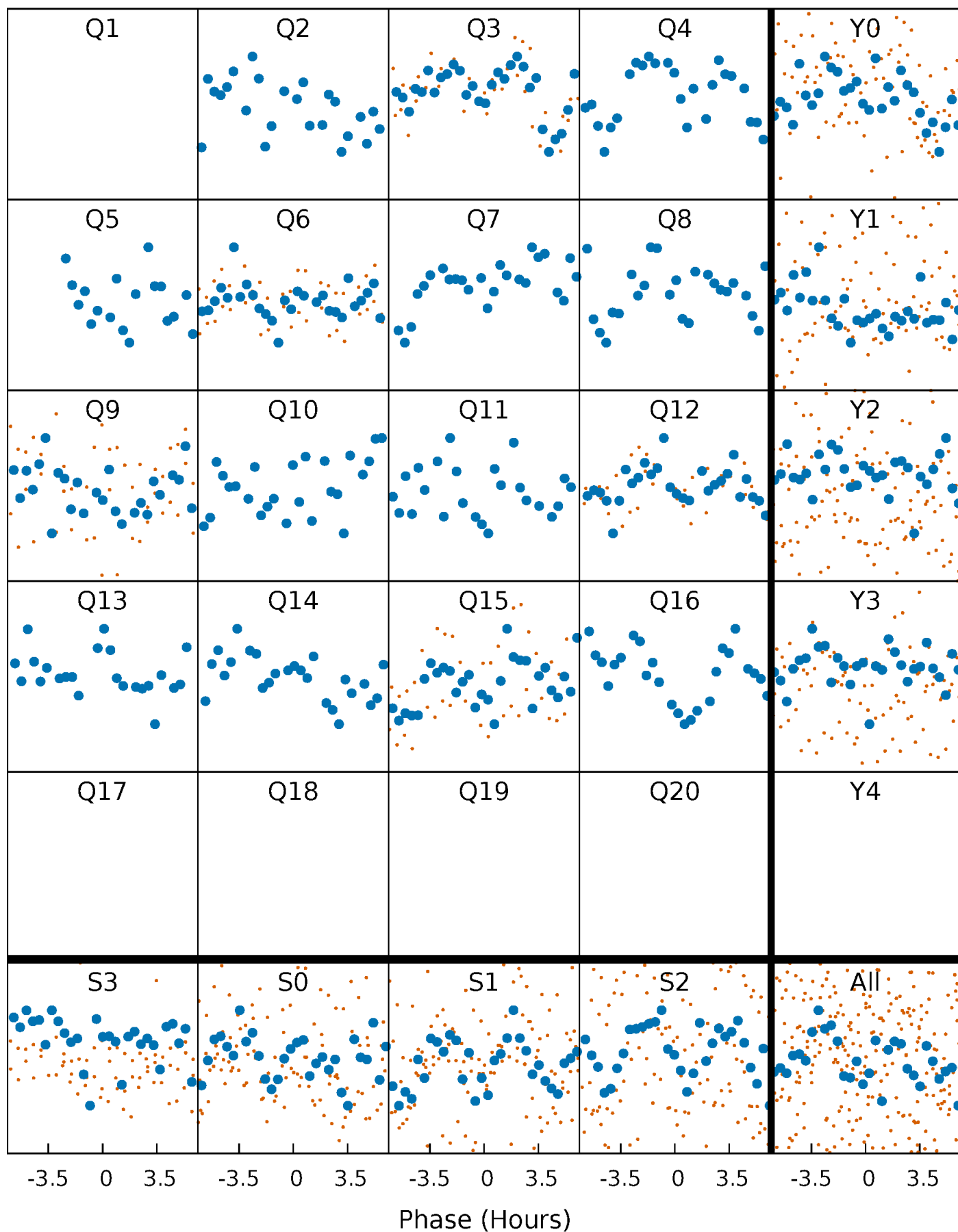


Planet 5 : Phased Whitened Flux Time Series (Fit Epoch/Period)



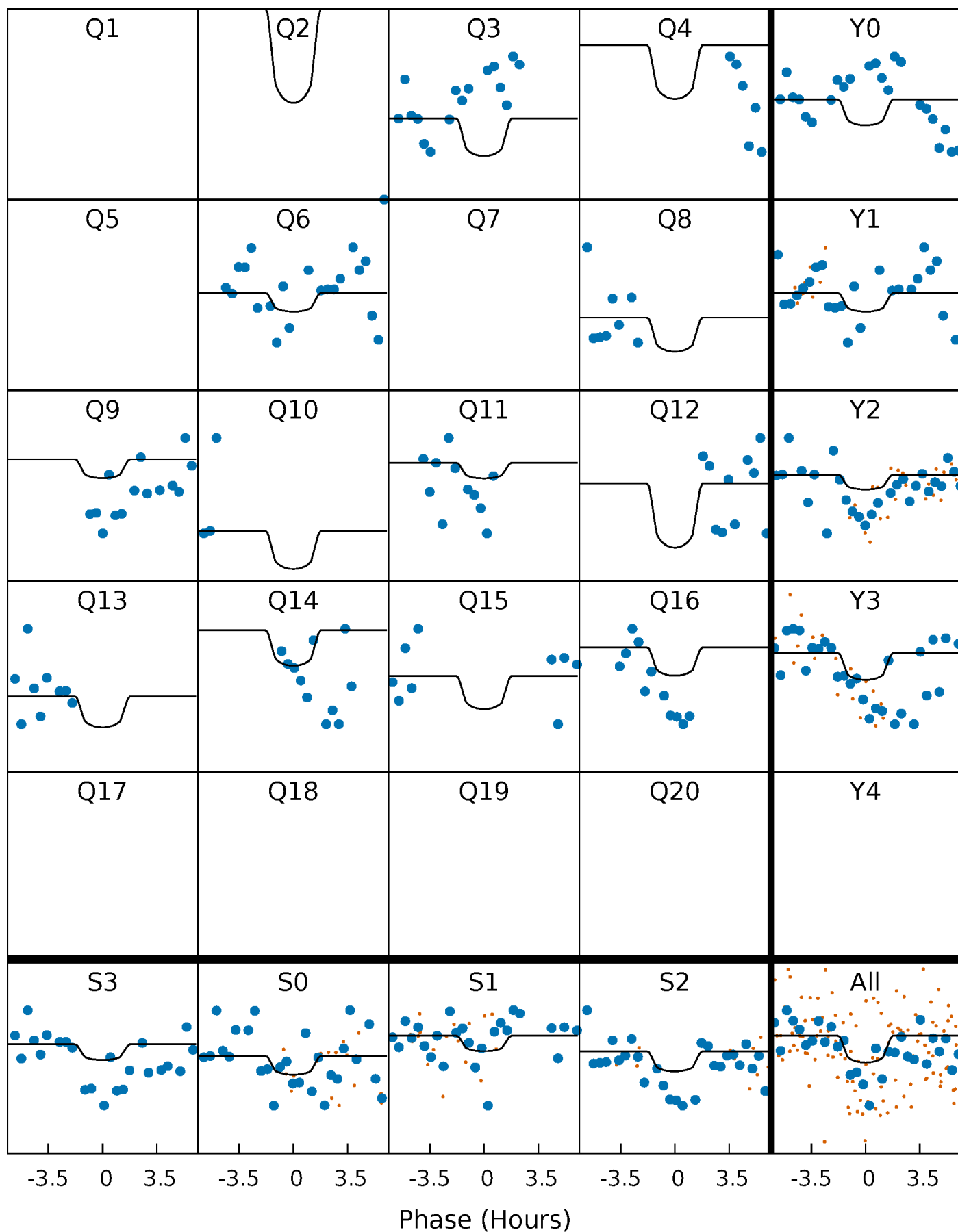
PDC Quarter-Phased Transit Curves

TCE 008184075-05 P= 69.845227 Days $T_0=197.013332$ (BKJD)



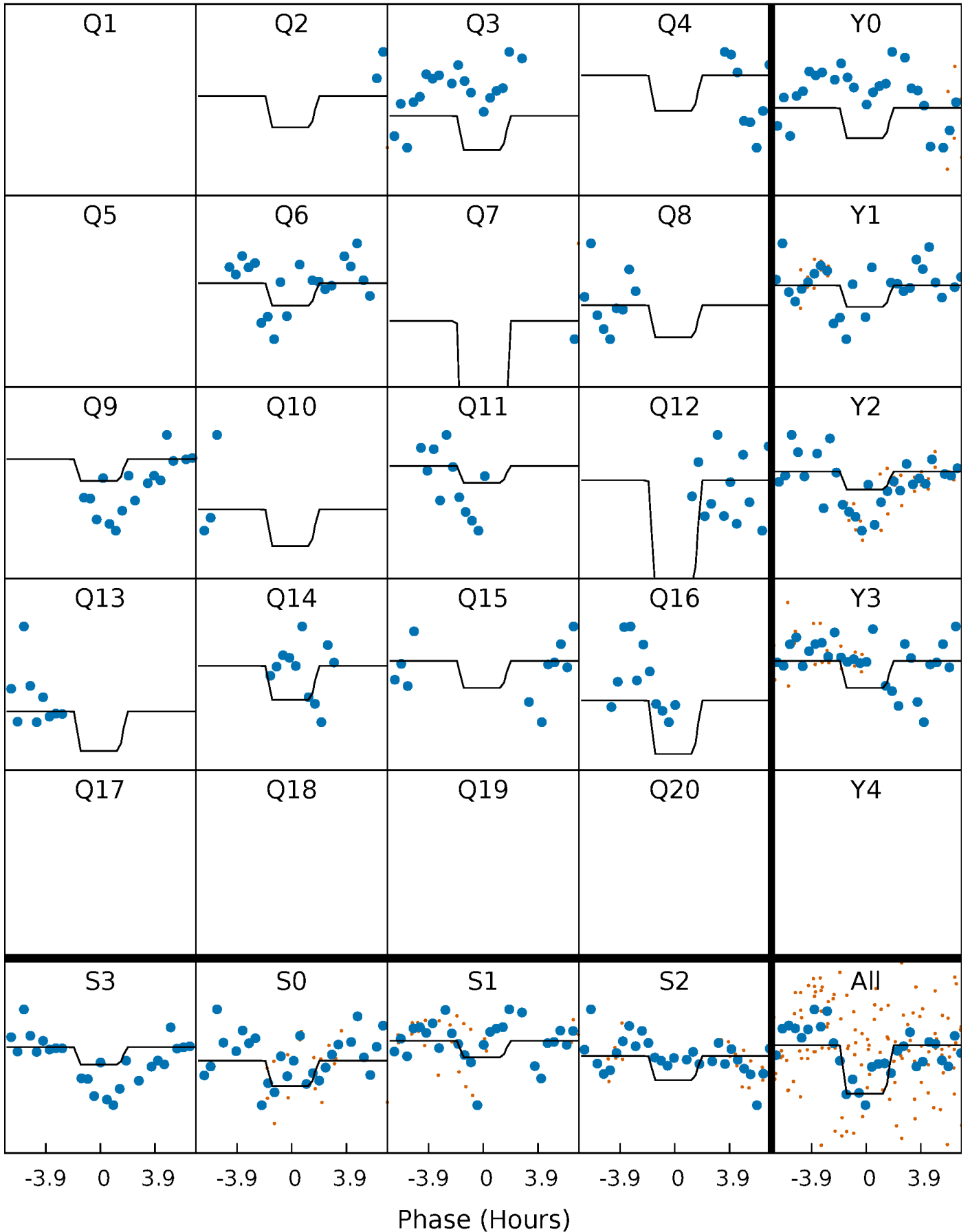
DV Quarter-Phased Transit Curves

TCE 008184075-05 P= 69.845227 Days $T_0=197.013332$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

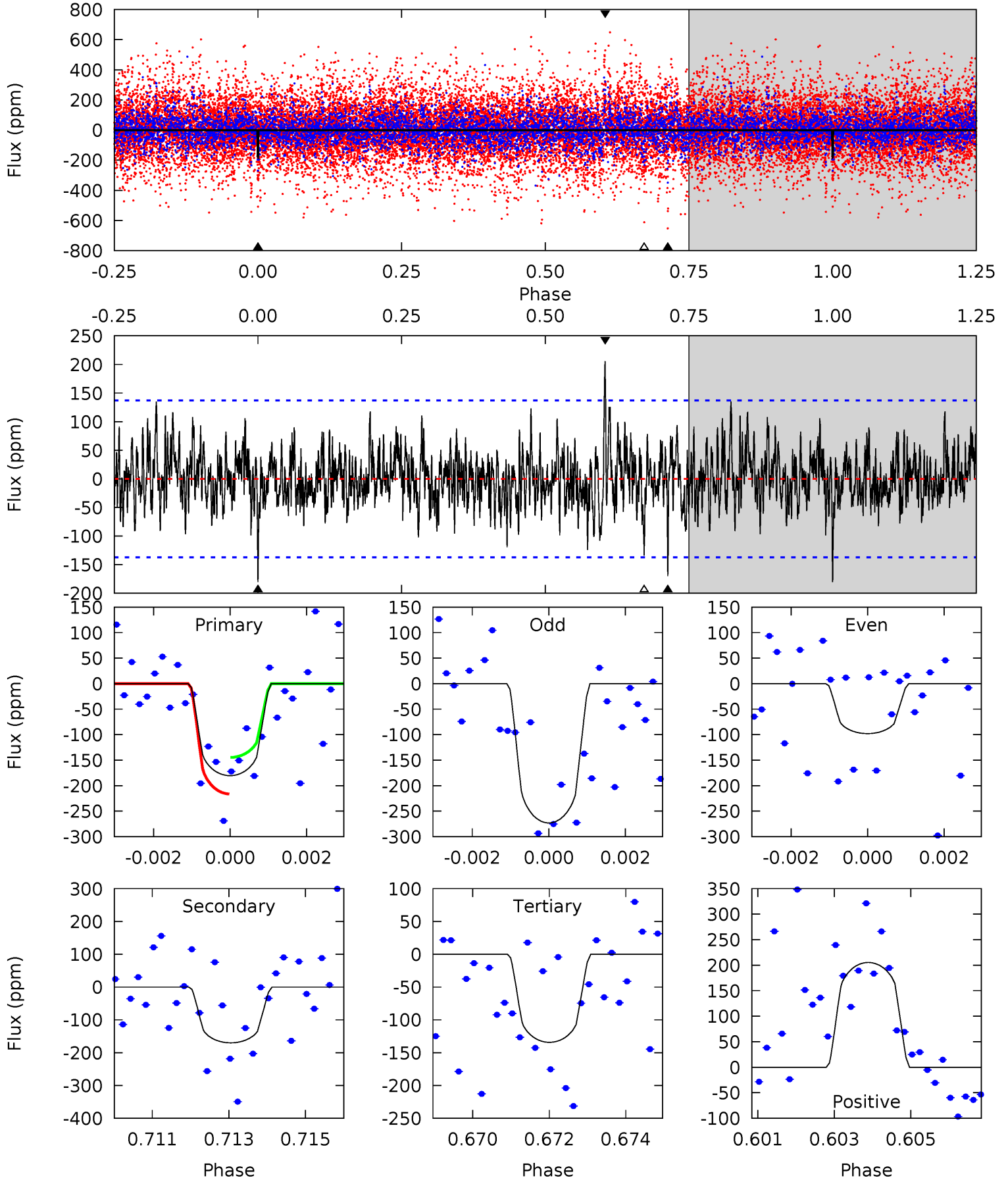
TCE 008184075-05 $P = 69.847784$ Days $T_0 = 197.005715$ (BKJD)



DV Model-Shift Uniqueness Test

008184075-05, P = 69.845227 Days, E = 127.168105 Days

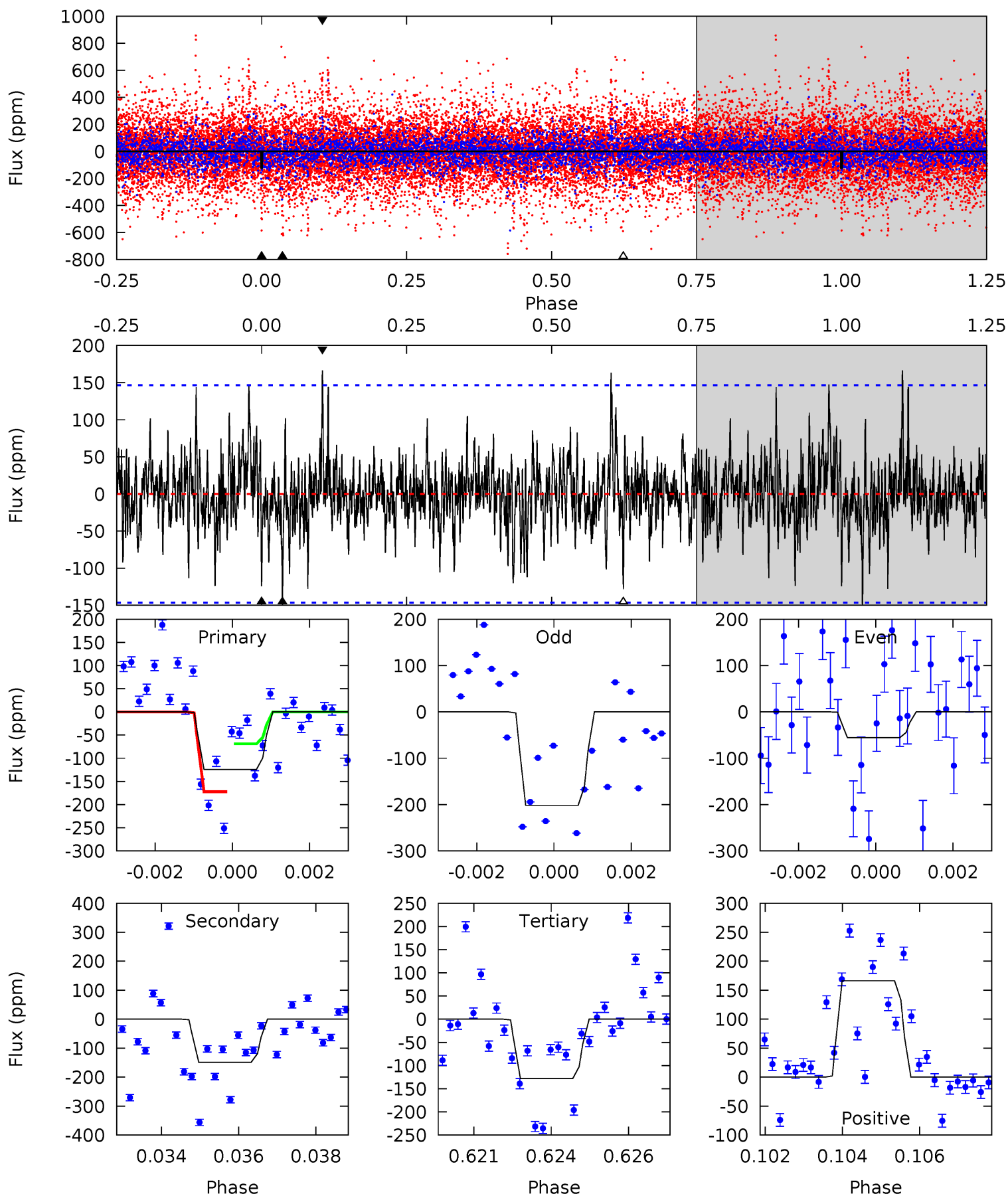
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.01	6.61	5.22	7.98	5.33	3.10	1.59	1.79	-0.97	1.39	-1.37	3.38	0.82	0.53	1.40



Alt Model-Shift Uniqueness Test

008184075-05, P = 69.847784 Days, E = 127.157931 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
4.49	5.38	4.64	6.02	5.30	3.05	1.36	-0.14	-1.53	0.75	-0.64	2.61	7.40	0.53	1.87



Stellar Parameters For KIC 008184075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5119^{+153}_{-138}	$4.556^{+0.077}_{-0.063}$	$-0.400^{+0.350}_{-0.300}$	$0.727^{+0.081}_{-0.073}$	$0.693^{+0.103}_{-0.044}$	$2.544^{+0.870}_{-0.546}$
	+3%/-3%	+2%/-1%	+87%/-75%	+11%/-10%	+15%/-6%	+34%/-21%
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 008184075-05 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-170 ± 26	$1.93^{+1.94}_{-1.29}$	495^{+19}_{-18}	4029^{+2455}_{-825}	2243^{+19345}_{-1700}
Alt.	-149 ± 28	$1.95^{+2.01}_{-1.34}$	496^{+19}_{-20}	3932^{+2374}_{-828}	1916^{+16719}_{-1487}

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 $A_{obs} \gg 1.0$

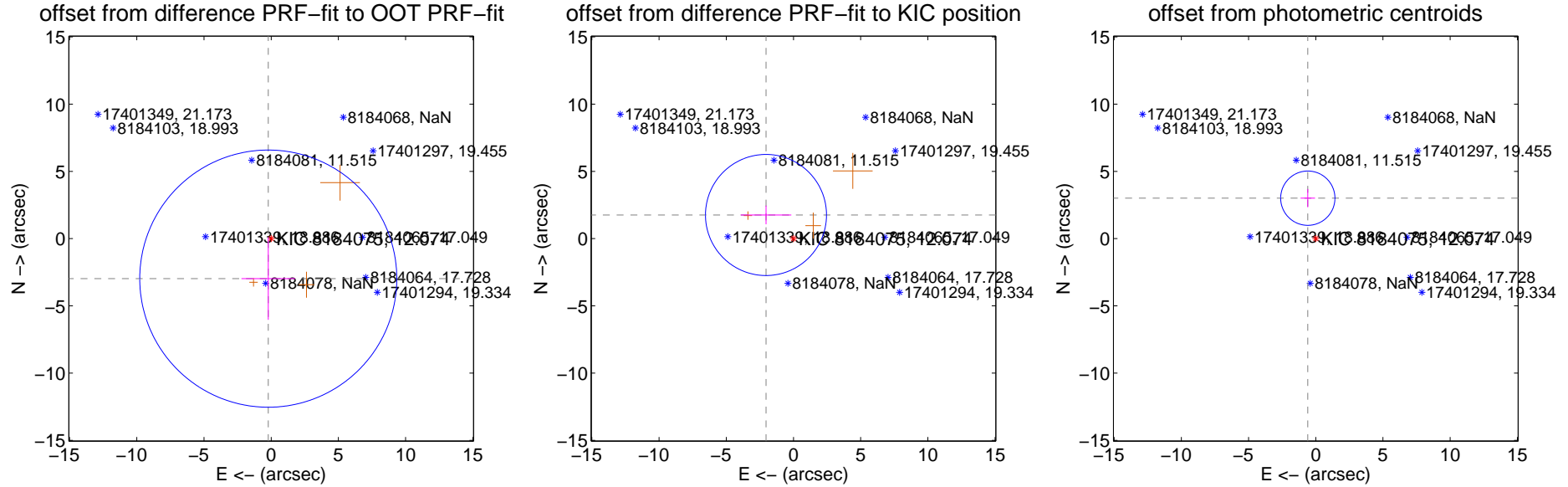
DV Centroid Data

Supplemental centroid analysis for 008184075-05. Kepler magnitude: 12.07. Transit SNR 3.79

There are 0 quarters with good PRF difference image offsets

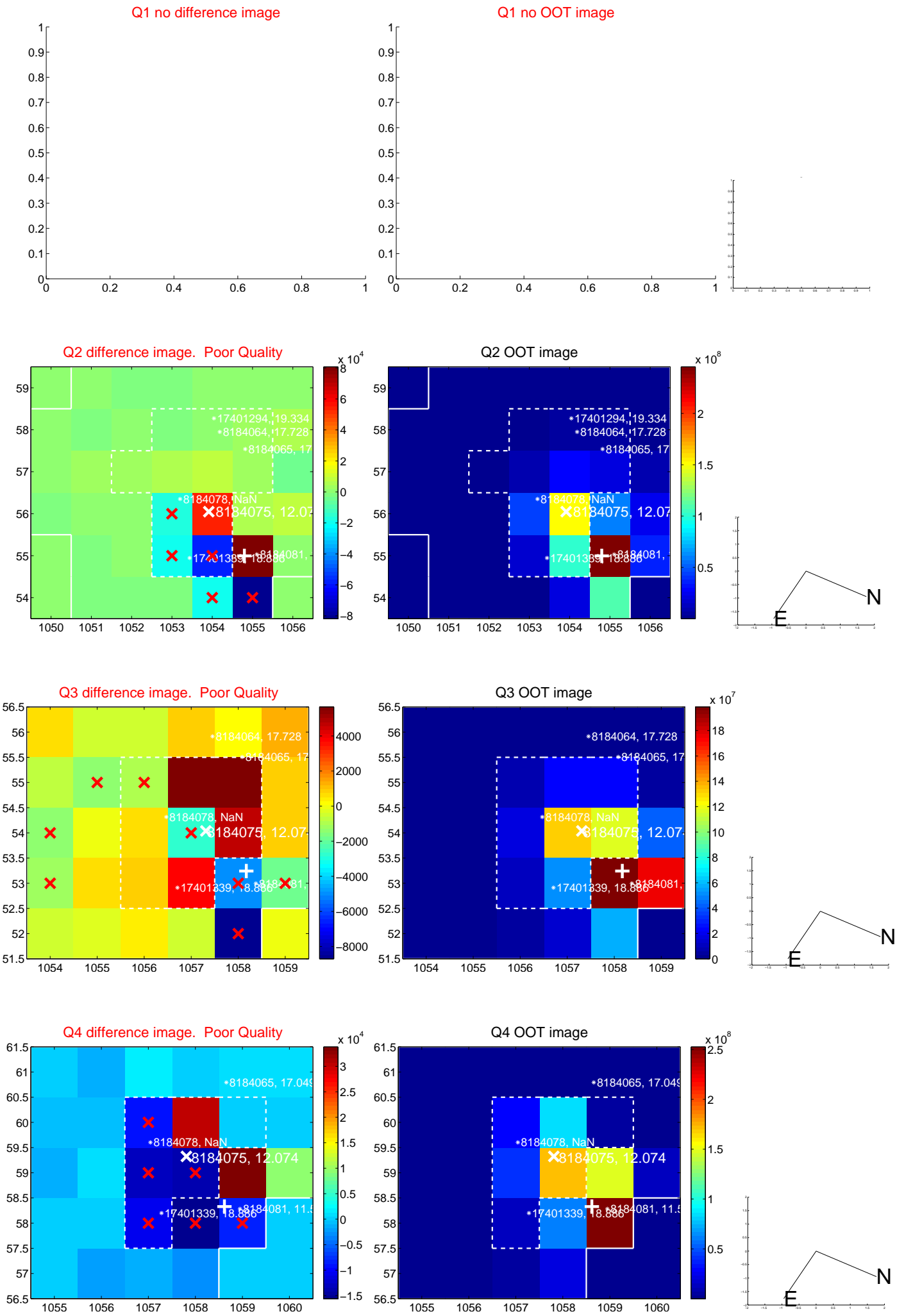
The OOT PRF centroid is offset from the target star catalog position by about 5.38 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.983 ± 3.187	0.94	0.217 ± 1.995	-2.975 ± 3.062
PRF-fit source offset from KIC position	2.696 ± 1.500	1.80	2.044 ± 1.887	1.757 ± 0.693
photometric centroid source offset	3.06 ± 0.67	4.55	0.59 ± 0.54	3.01 ± 0.68

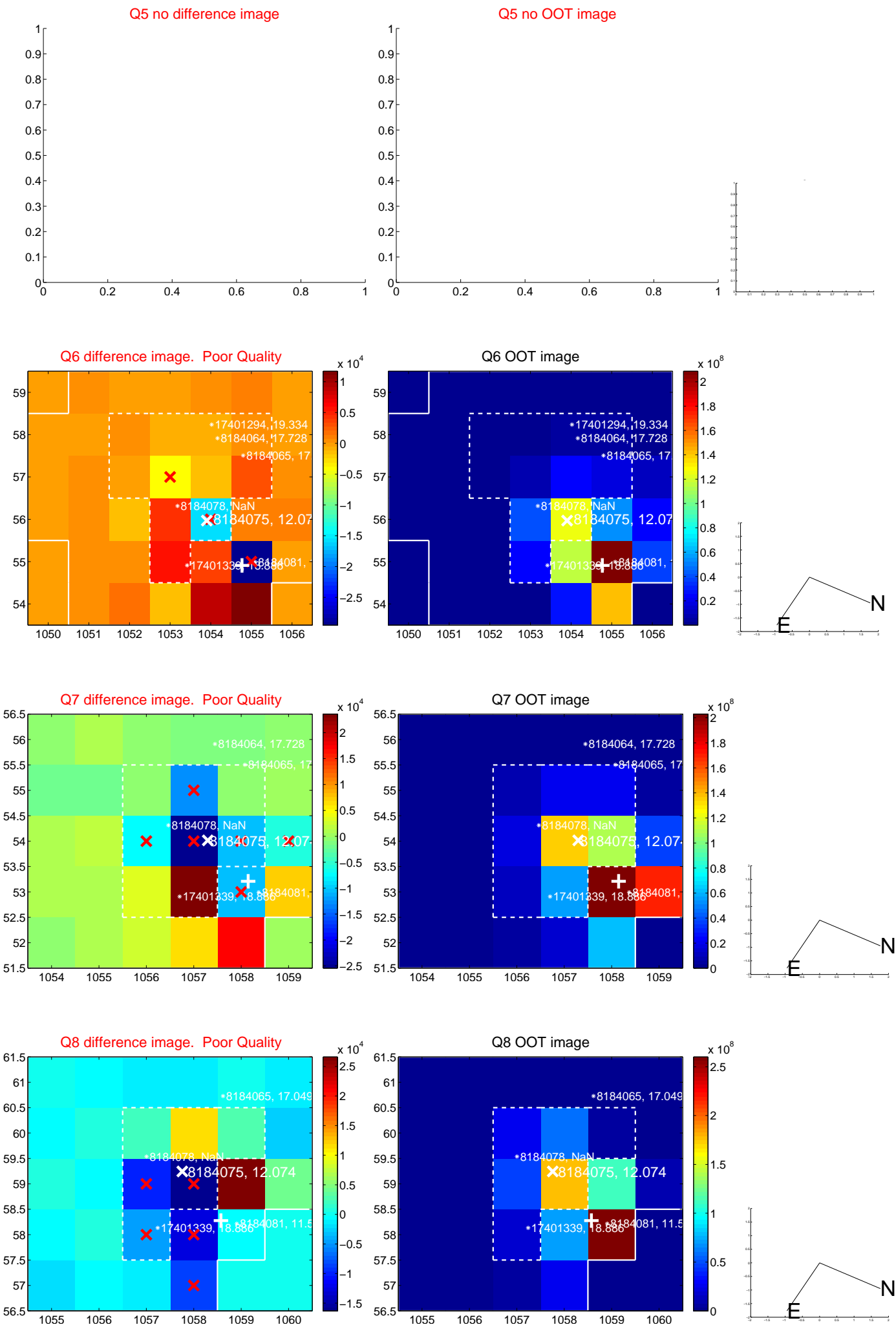


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

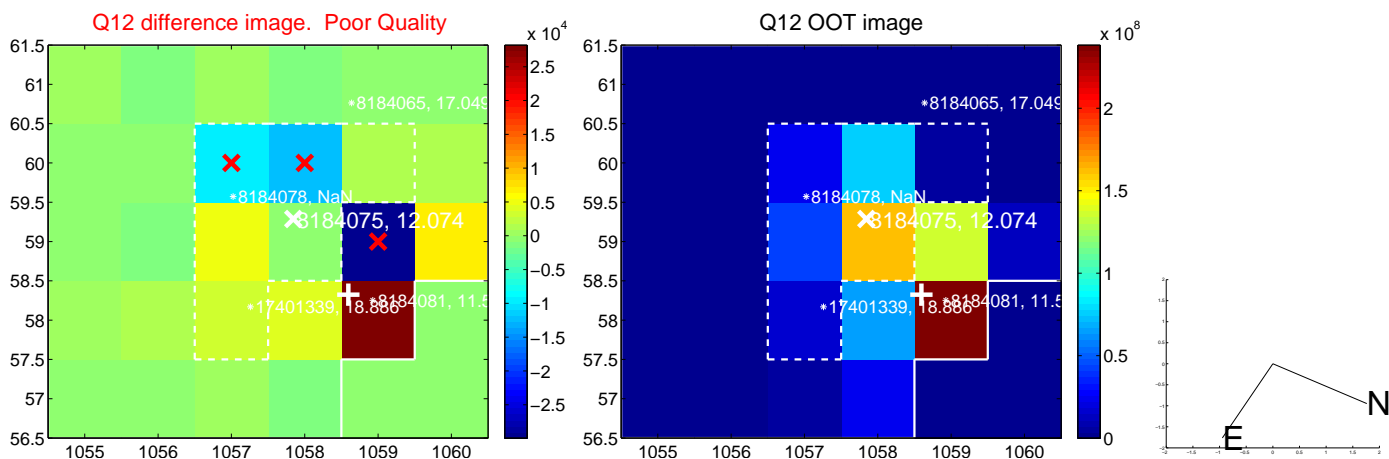
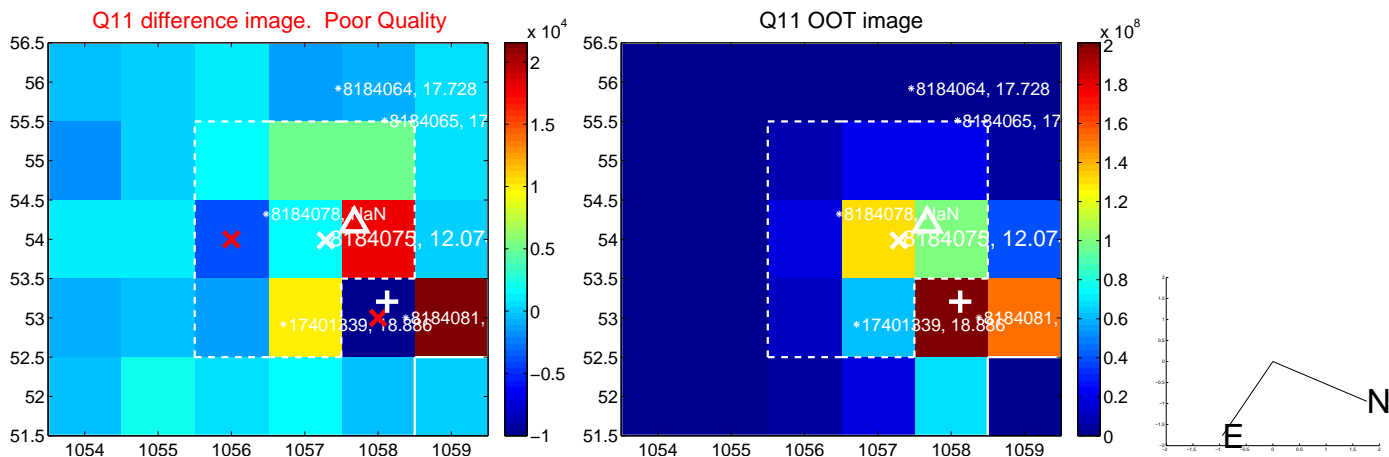
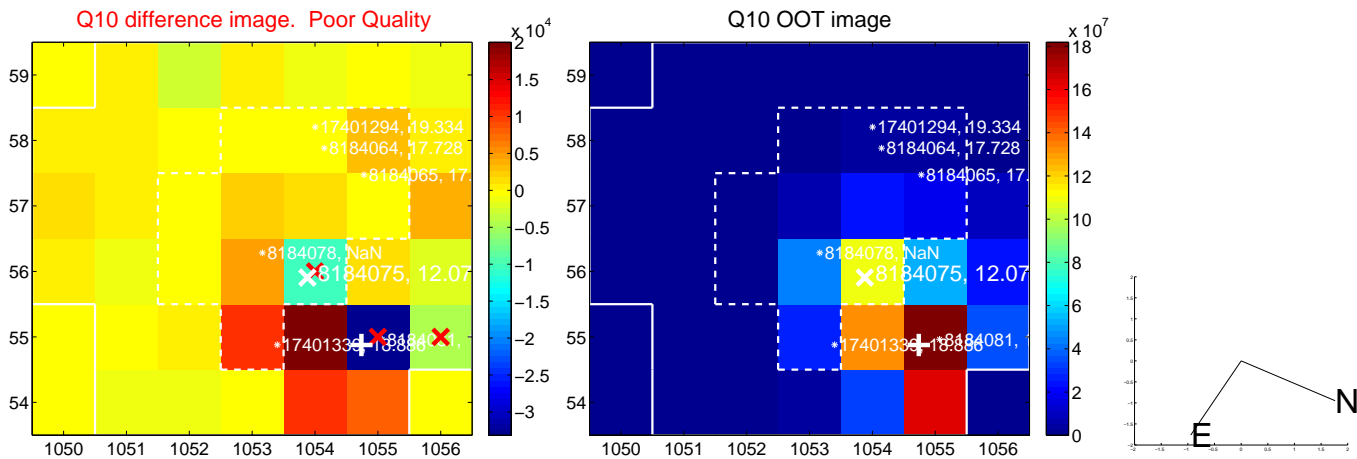
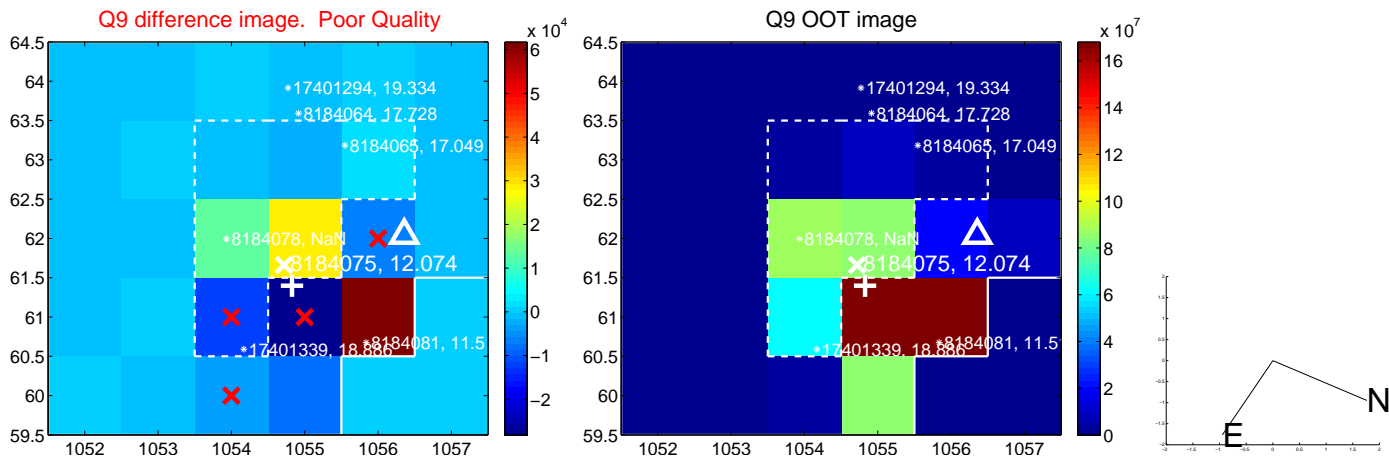
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



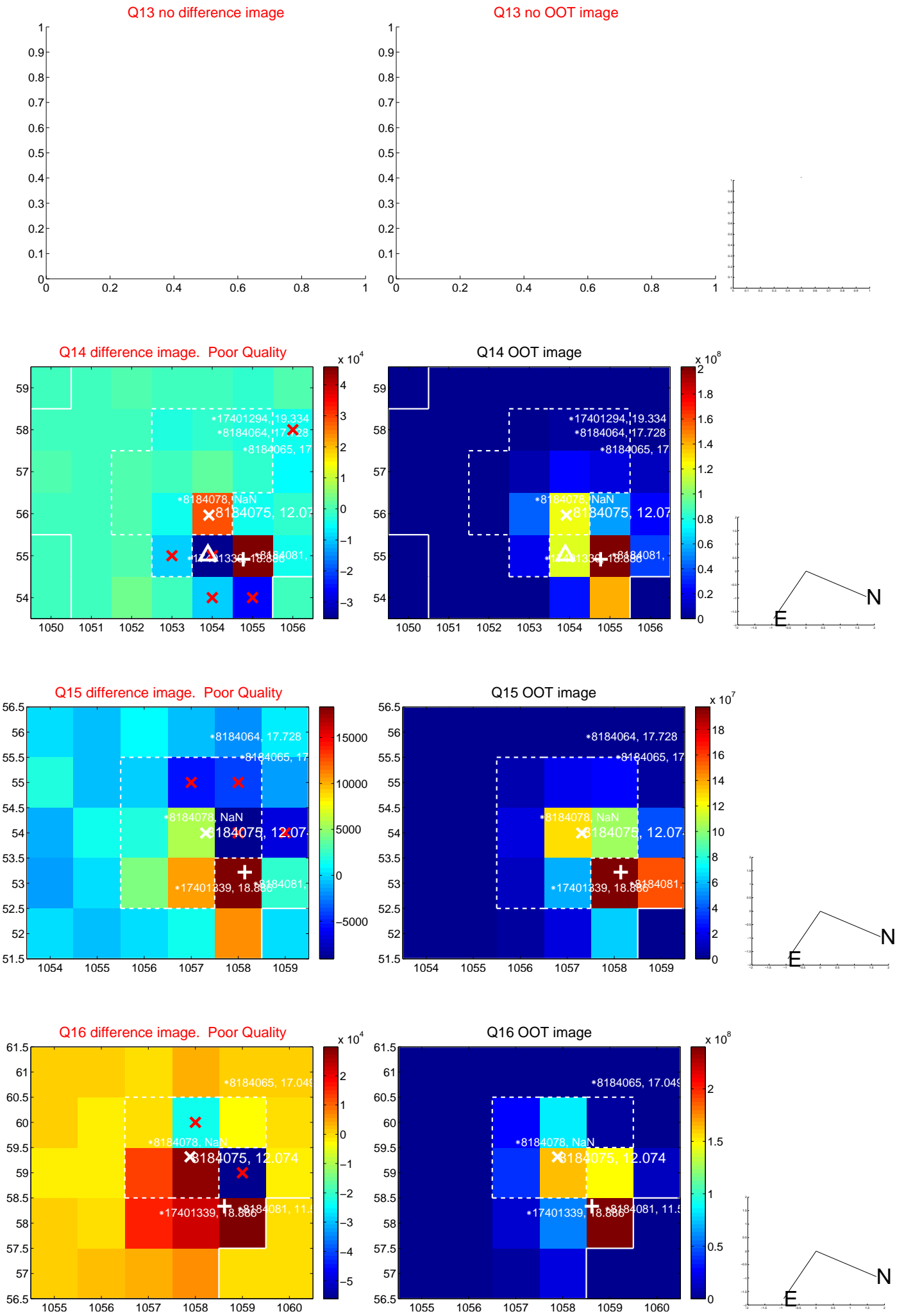
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



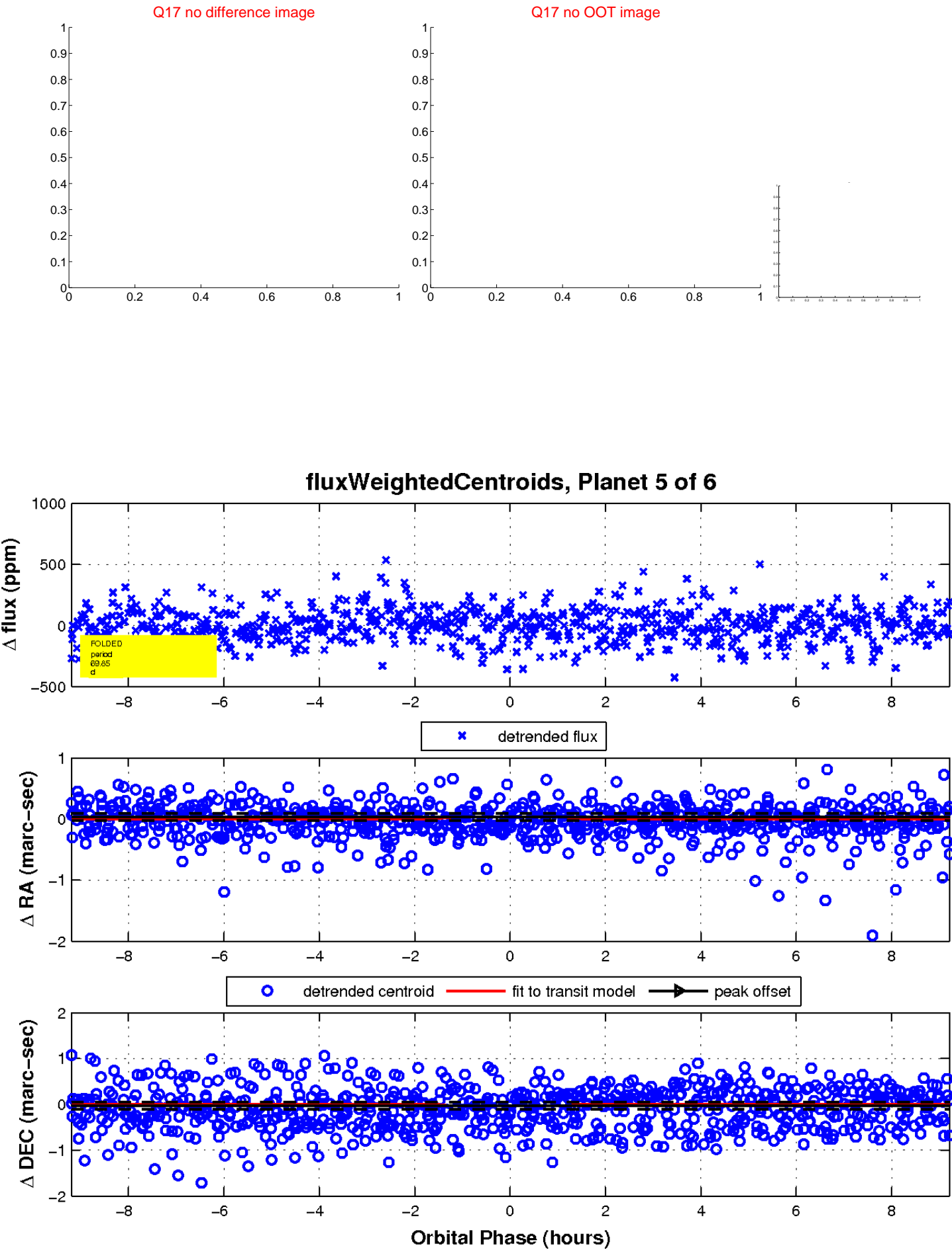
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

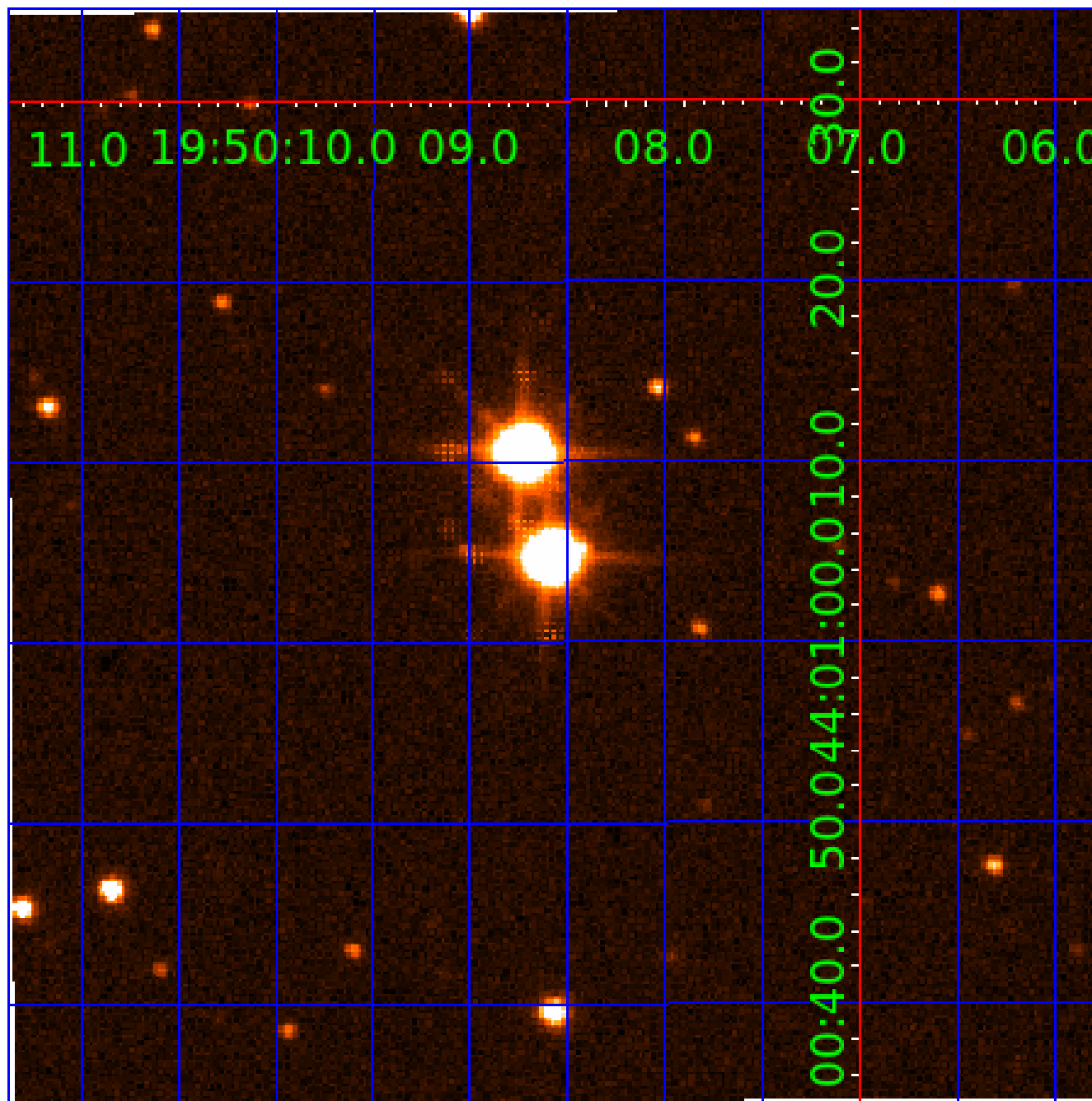


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 008184075

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})
008184075-01	OBS	No	0.796322	131.656071	13.5	4.443	8.0	7.4	0.73	5119	0.32	1467.37
008184075-03	OBS	No	129.570427	149.560250	295.6	7.888	11.7	8.6	0.73	5119	1.27	1.65
008184075-04	OBS	No	149.625683	229.796290	267.6	9.021	8.4	7.1	0.73	5119	1.30	1.36
008184075-05	OBS	No	69.845227	197.013332	112.0	3.073	7.6	3.8	0.73	5119	0.93	3.77
008184075-06	OBS	No	74.500443	169.768347	276.0	2.275	7.6	7.9	0.73	5119	1.39	3.46

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008184075-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_ALT—CENT_KIC_POS
008184075-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-04	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
008184075-05	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE—TRANS_GAPPED—LPP_ALT—MOD_NONUNIQ_DV—MOD_POS_DV—MOD_NONUNIQ_ALT—MOD_TER_ALT—MOD_POS_ALT—CENT_FEW_DIFFS
008184075-06	OBS	FP	0.00	1	0	1	0	INDIV_TRANS_SKYE—TRANS_GAPPED—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_TER_DV—MOD_NONUNIQ_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

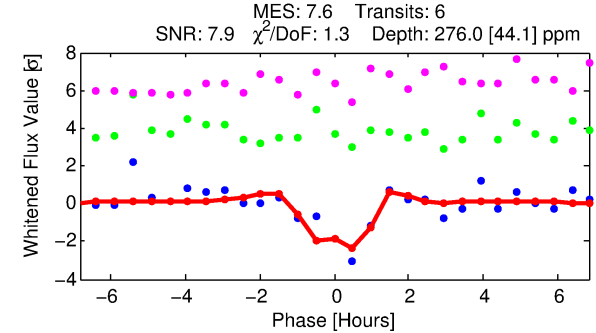
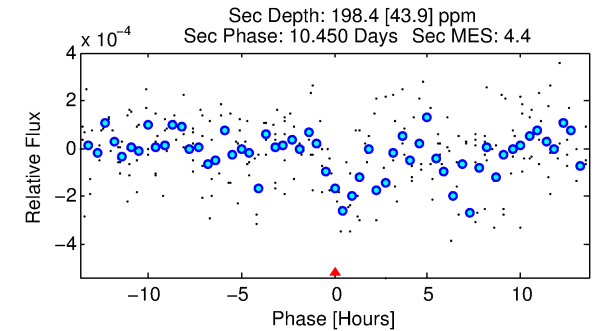
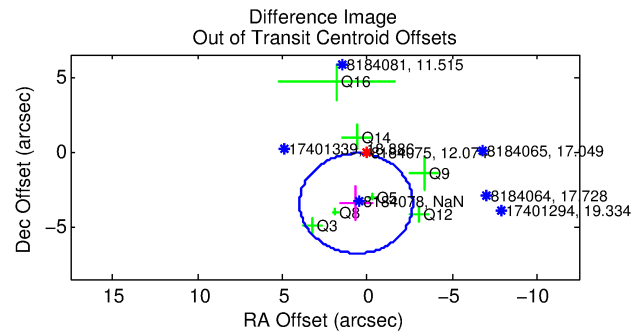
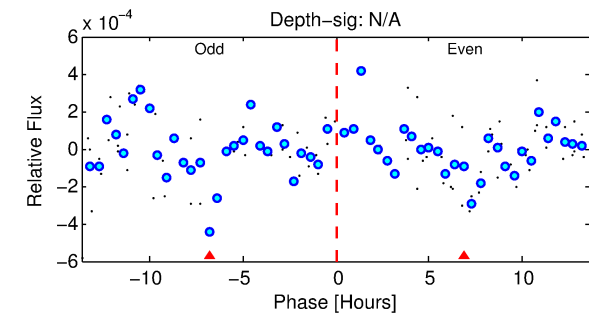
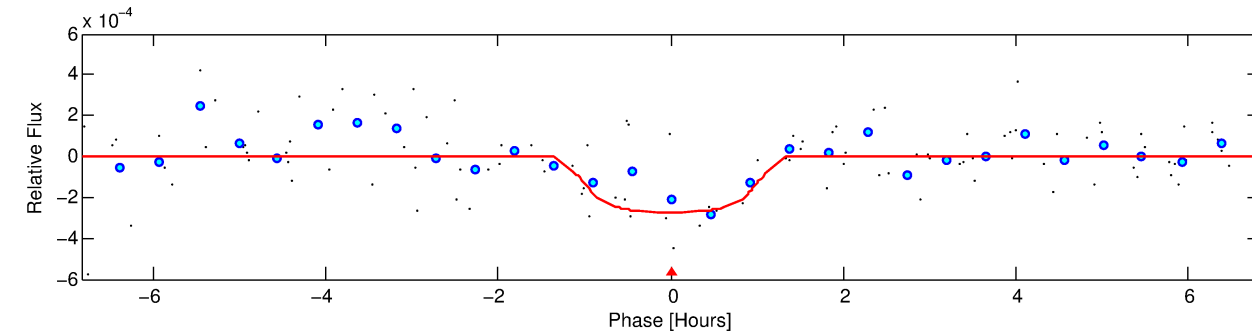
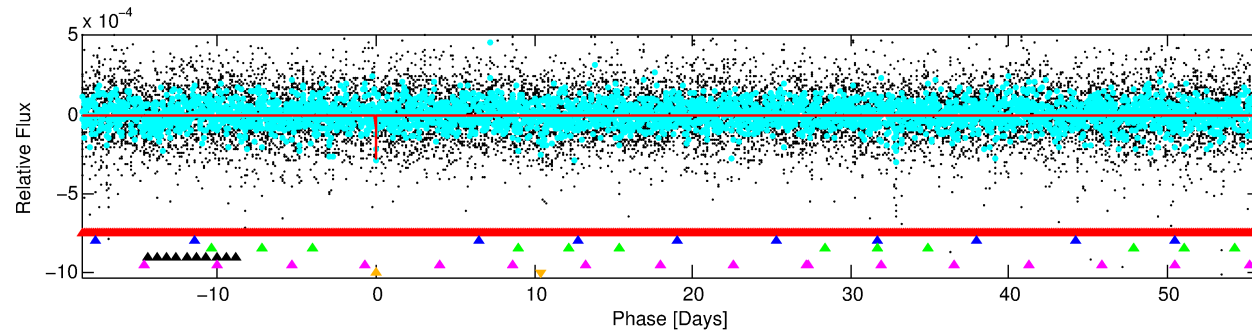
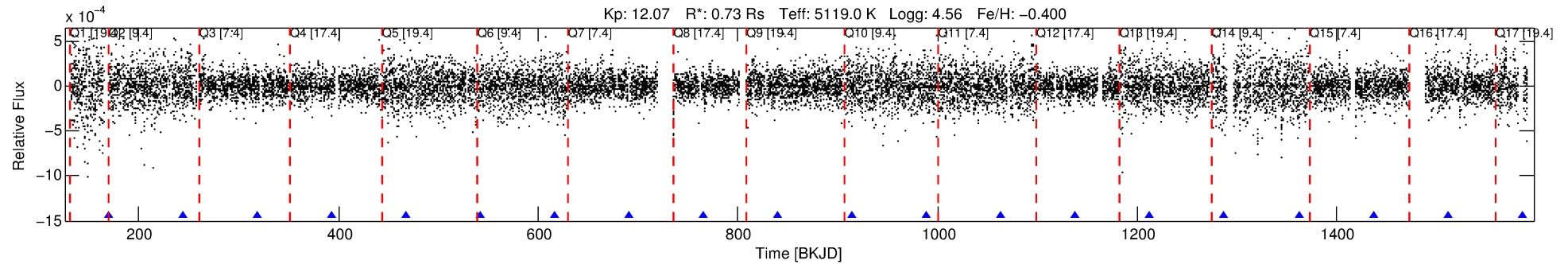
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008184075-06

No Significant Match Found

DV One-Page Summary

KIC: 8184075 Candidate: 6 of 6 Period: 74.500 d



DV Fit Results:

Period = 74.50044 [0.00093] d
Epoch = 169.7683 [0.0059] BKJD
Rp/R* = 0.0176 [0.0228]
a/R* = 140.32 [719.10]
b = 0.85 [1.73]
Seff = 3.45 [0.64]
Teq = 348 [16] K
Rp = 1.39 [1.81] Re
a = 0.3068 [0.0291] AU
Ag = 5291.51 [13781.72] [0.38σ]
Teffp = 4584 [2984] K [1.42σ]

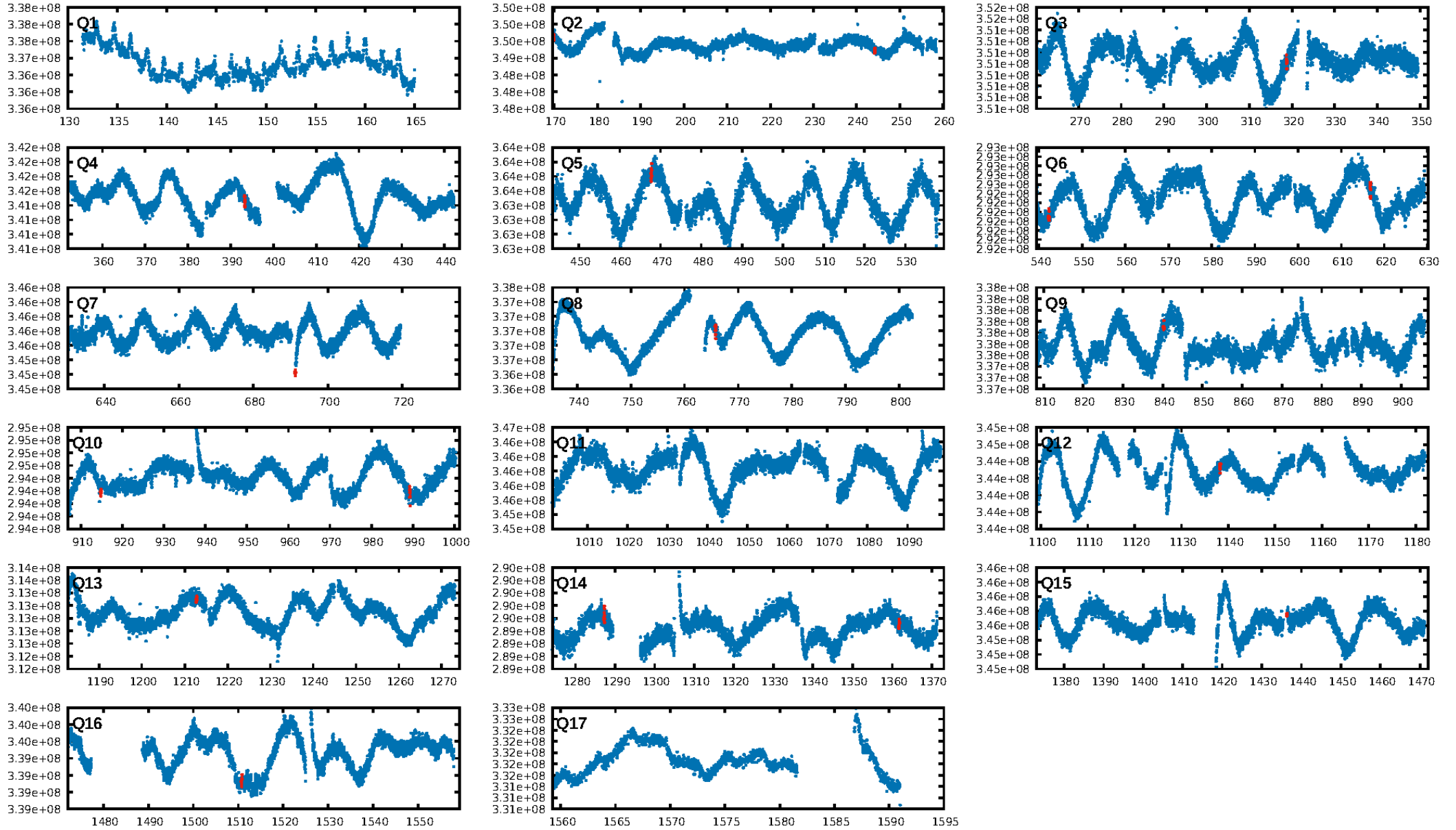
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [29.22σ]
LongPeriod-sig: 100.0% [160.98σ]
ModelChiSquare2-sig: 0.4%
ModelChiSquareGof-sig: 91.7%
Bootstrap-pfa: 4.21e-09
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: 0.1645
Centroid-sig: 3.7%
Centroid-so: 2.653 arcsec [8.33σ]
OotOffset-rm: 3.509 arcsec [3.15σ]
KicOffset-rm: 1.965 arcsec [2.20σ]
OotOffset-st: 1/1/3/2 [7]
KicOffset-st: 1/1/3/2 [7]
DiffImageQuality-fgm: 0.00 [0/7]
DiffImageOverlap-fno: 0.08 [1/12]

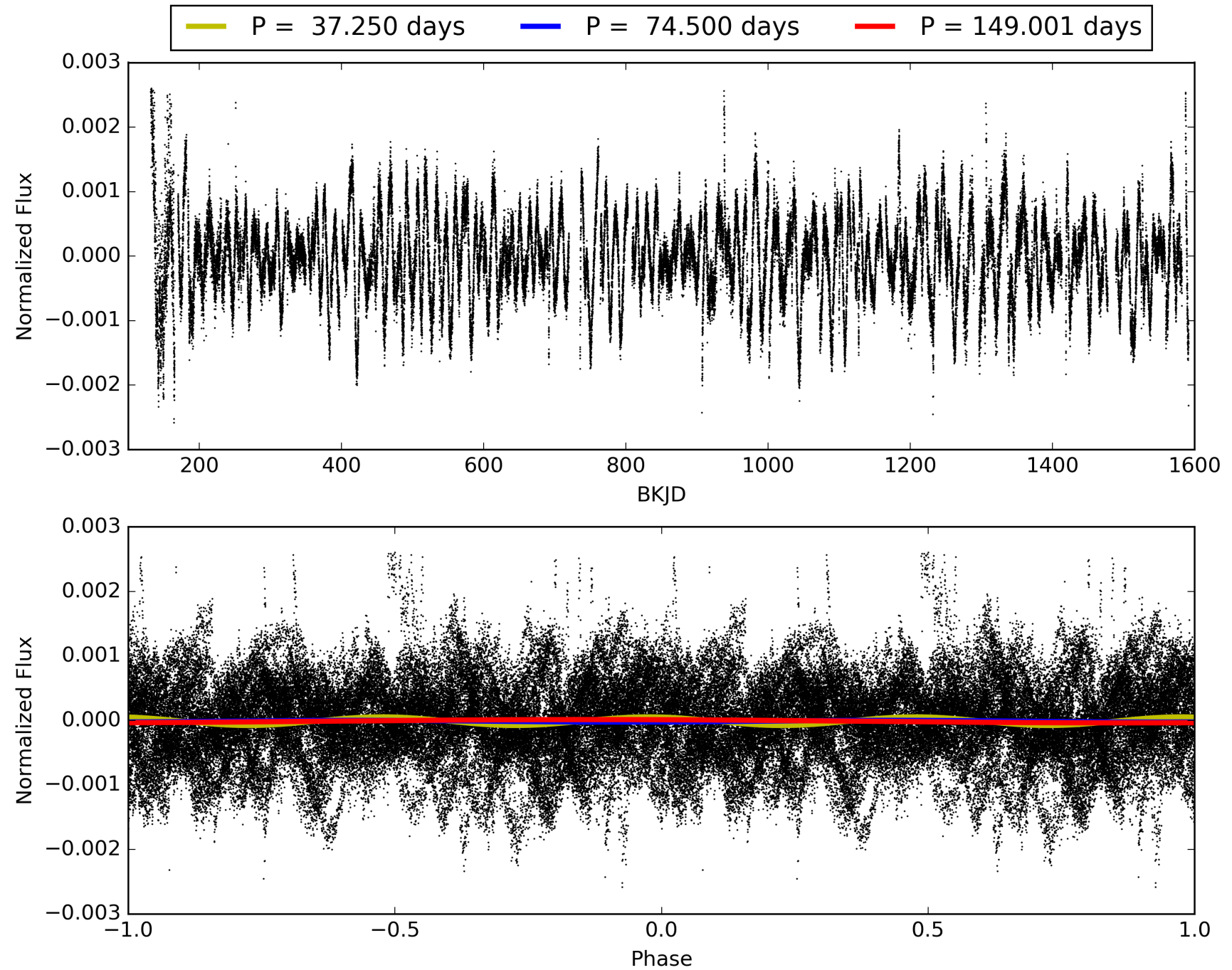
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 14:59:43 Z

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

TCE 008184075-06, PDC Light Curves

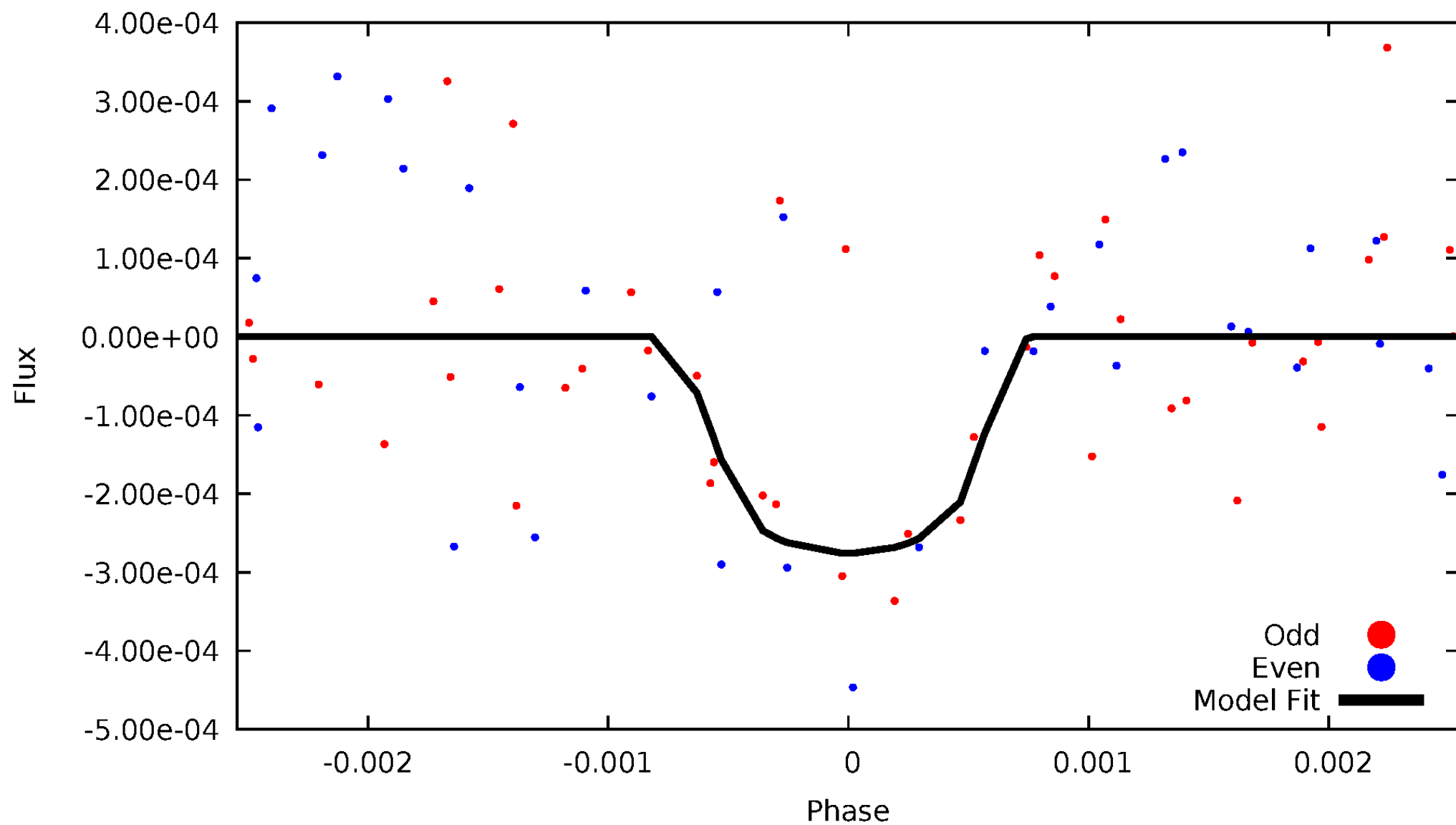


TCE 008184075-06



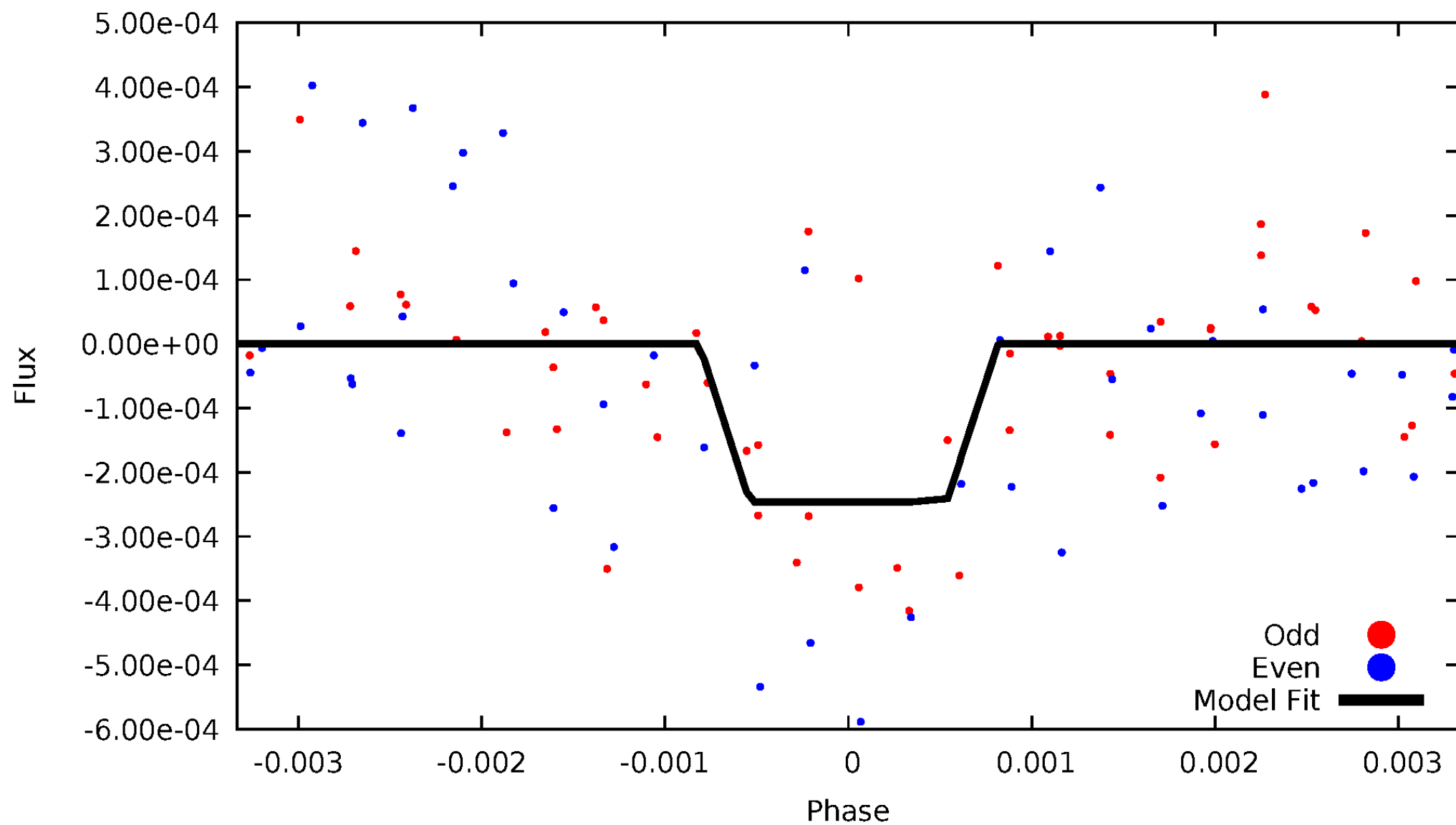
DV Odd/Even

TCE 008184075-06



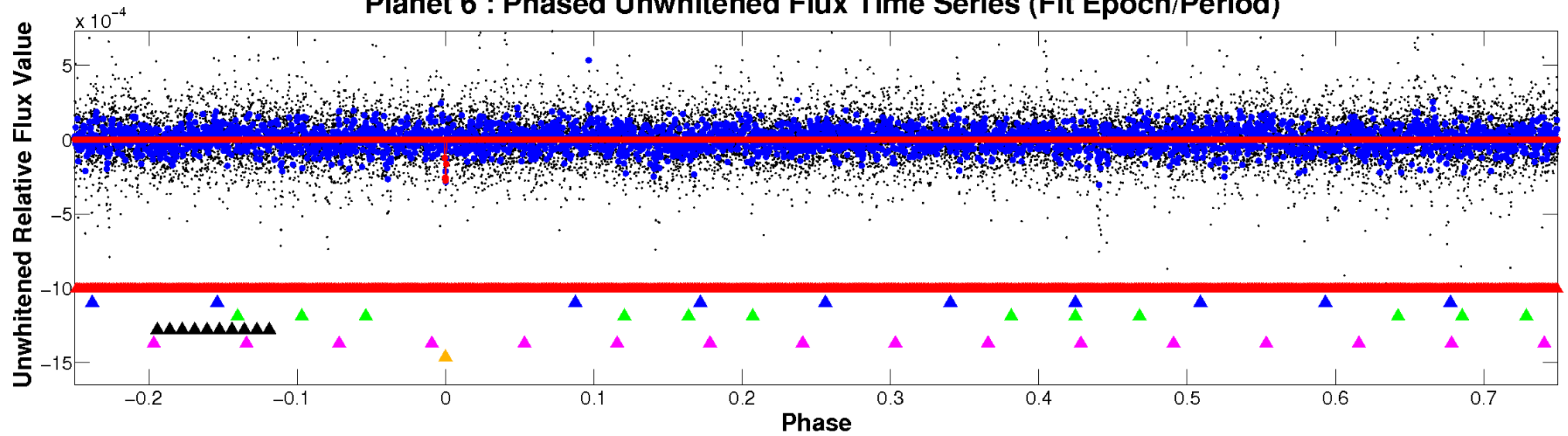
ALT Odd/Even

TCE 008184075-06

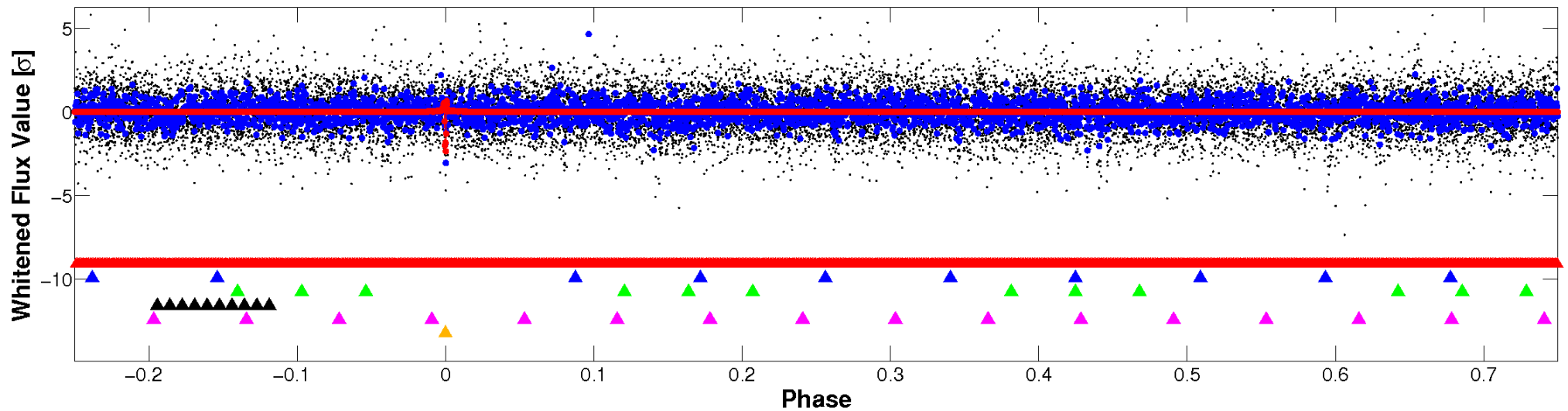


Non-Whitened Vs. Whitened Light Curve

Planet 6 : Phased Unwhitened Flux Time Series (Fit Epoch/Period)

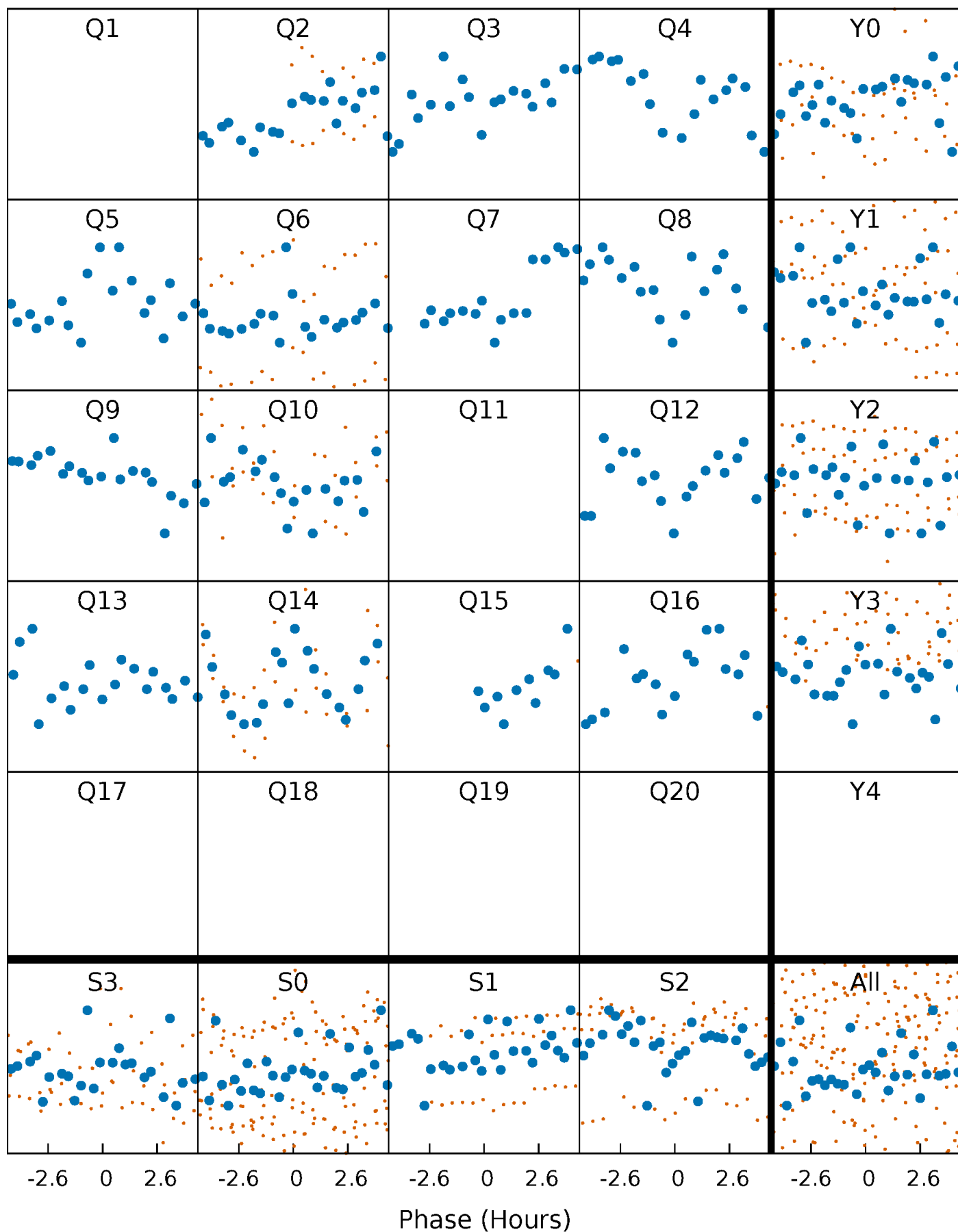


Planet 6 : Phased Whitened Flux Time Series (Fit Epoch/Period)



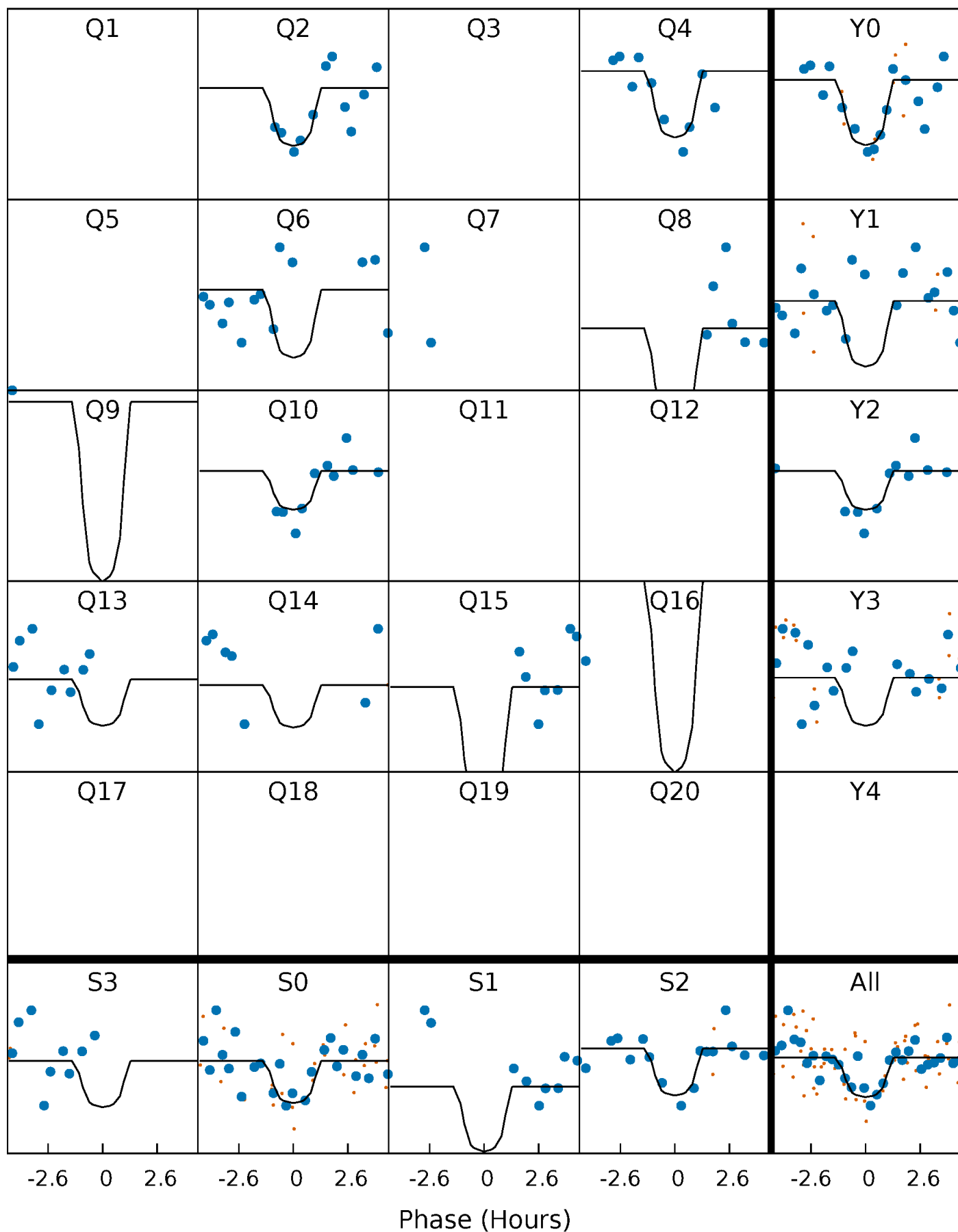
PDC Quarter-Phased Transit Curves

TCE 008184075-06 P= 74.500443 Days $T_0=169.768347$ (BKJD)



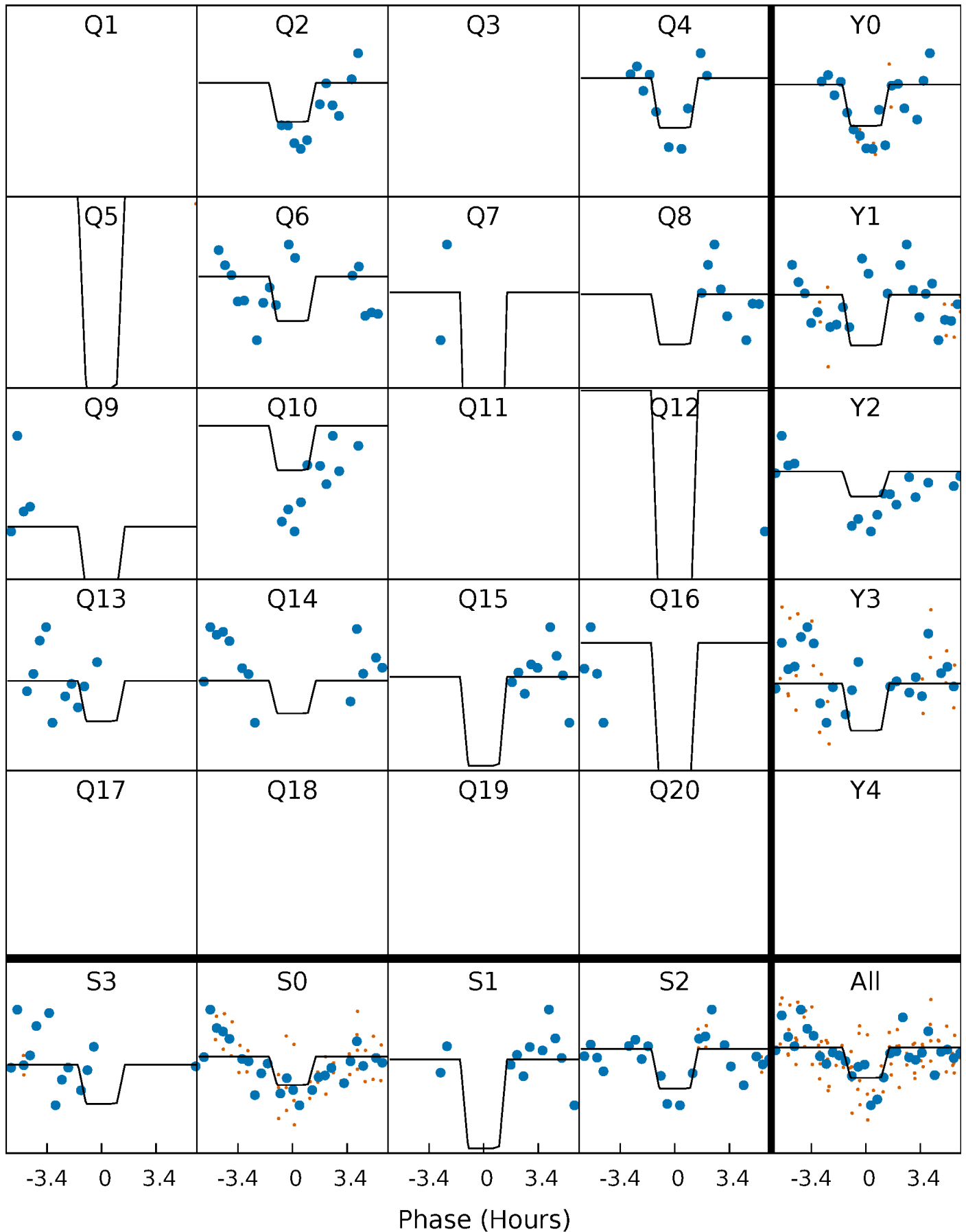
DV Quarter-Phased Transit Curves

TCE 008184075-06 P= 74.500443 Days $T_0=169.768347$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

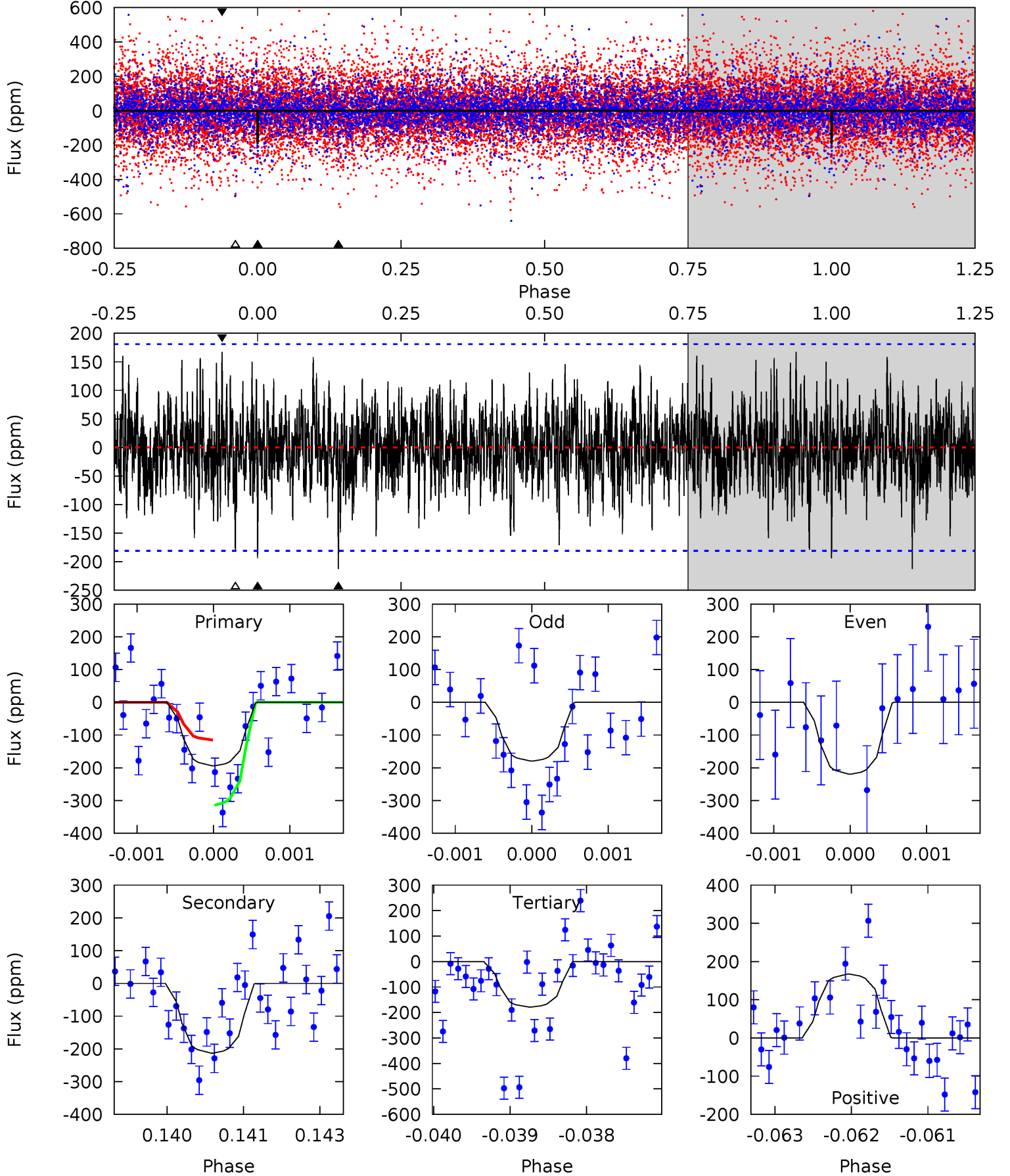
TCE 008184075-06 P= 74.500726 Days $T_0=169.761916$ (BKJD)



DV Model-Shift Uniqueness Test

008184075-06, P = 74.500443 Days, E = 95.267904 Days

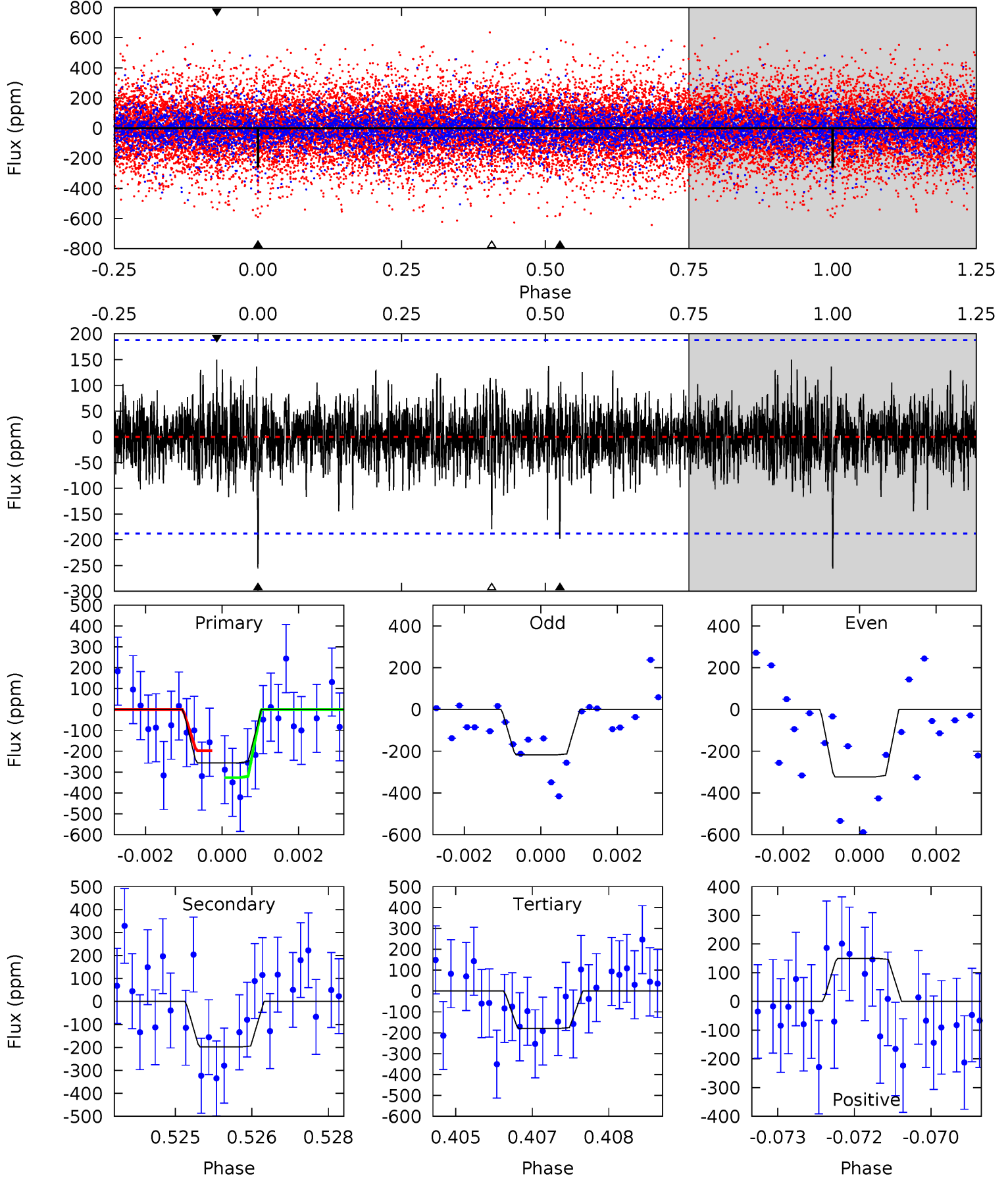
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.79	6.35	5.33	4.98	5.40	3.21	1.47	0.46	0.80	1.02	1.36	0.57	0.49	0.44	2.99



Alt Model-Shift Uniqueness Test

008184075-06, P = 74.500726 Days, E = 95.261190 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.30	5.65	5.11	4.27	5.37	3.16	1.13	2.19	3.03	0.54	1.38	1.42	0.79	0.37	1.86



Stellar Parameters For KIC 008184075

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5119^{+153}_{-138}	$4.556^{+0.077}_{-0.063}$	$-0.400^{+0.350}_{-0.300}$	$0.727^{+0.081}_{-0.073}$	$0.693^{+0.103}_{-0.044}$	$2.544^{+0.870}_{-0.546}$
	+3%/-3%	+2%/-1%	+87%/-75%	+11%/-10%	+15%/-6%	+34%/-21%
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 008184075-06 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-213 ± 34	$1.79^{+1.67}_{-1.19}$	485^{+19}_{-17}	4293^{+2857}_{-886}	3399^{+28292}_{-2517}
Alt.	-198 ± 35	$1.82^{+1.57}_{-1.20}$	485^{+17}_{-19}	4170^{+2602}_{-750}	3099^{+23803}_{-2192}

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

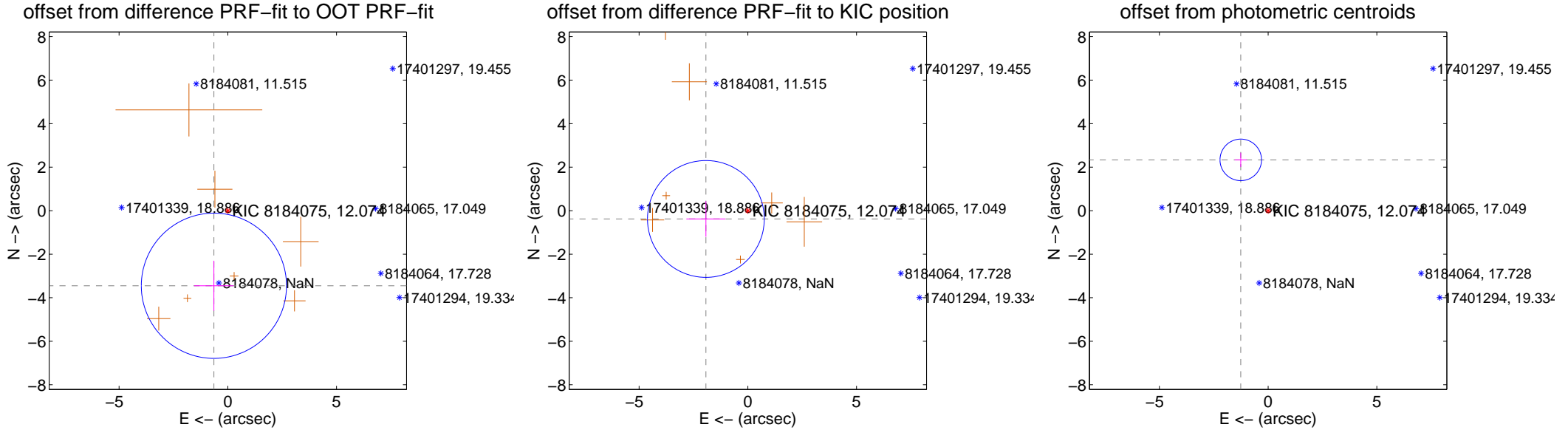
DV Centroid Data

Supplemental centroid analysis for 008184075-06. Kepler magnitude: 12.07. Transit SNR 7.87

There are 0 quarters with good PRF difference image offsets

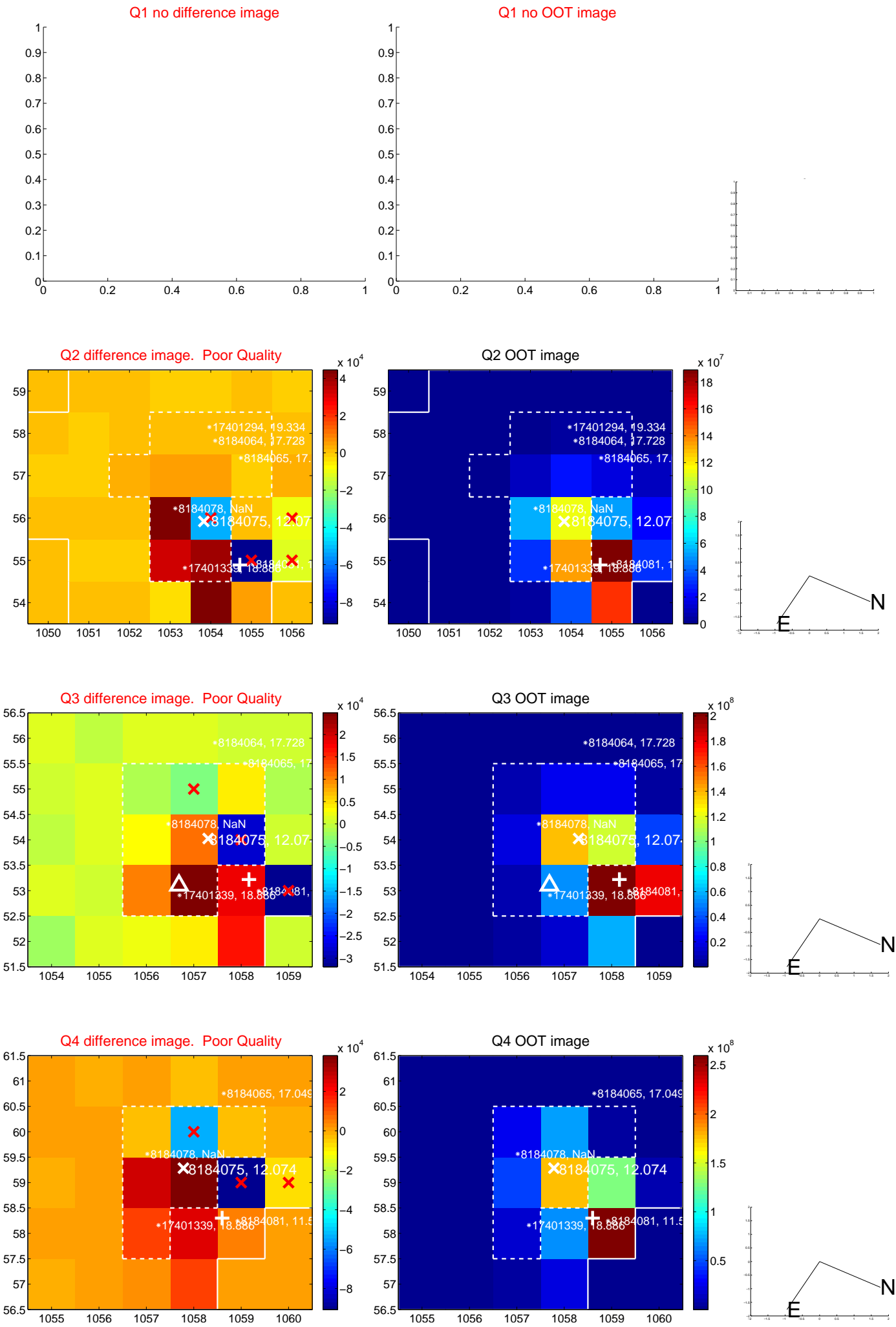
The OOT PRF centroid is offset from the target star catalog position by about 4.87 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	3.509 ± 1.113	3.15	0.639 ± 0.906	-3.450 ± 1.150
PRF-fit source offset from KIC position	1.965 ± 0.895	2.20	1.928 ± 0.898	-0.380 ± 0.818
photometric centroid source offset	2.65 ± 0.32	8.33	1.26 ± 0.28	2.34 ± 0.33

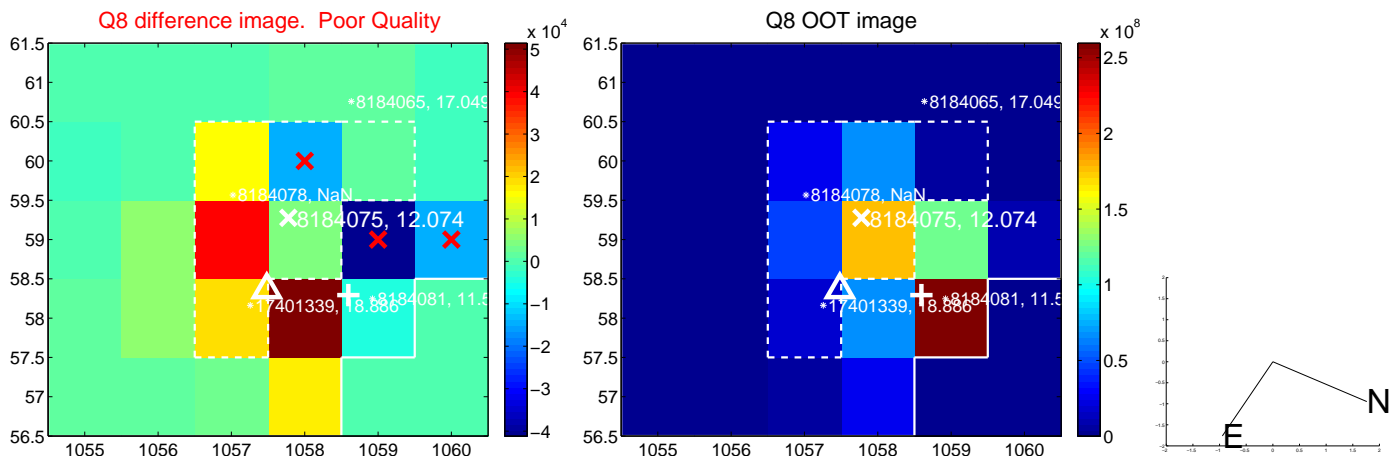
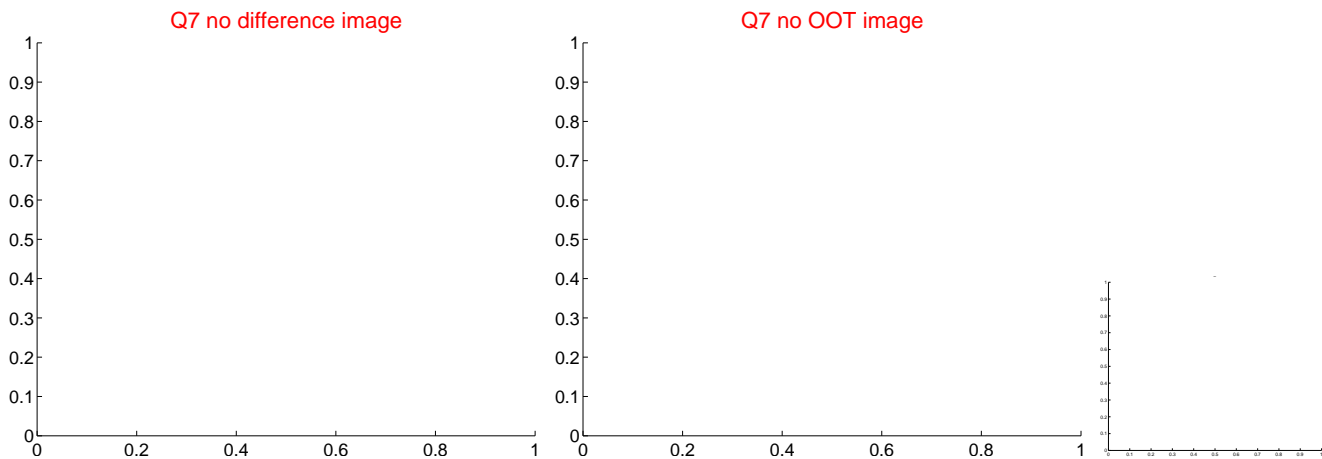
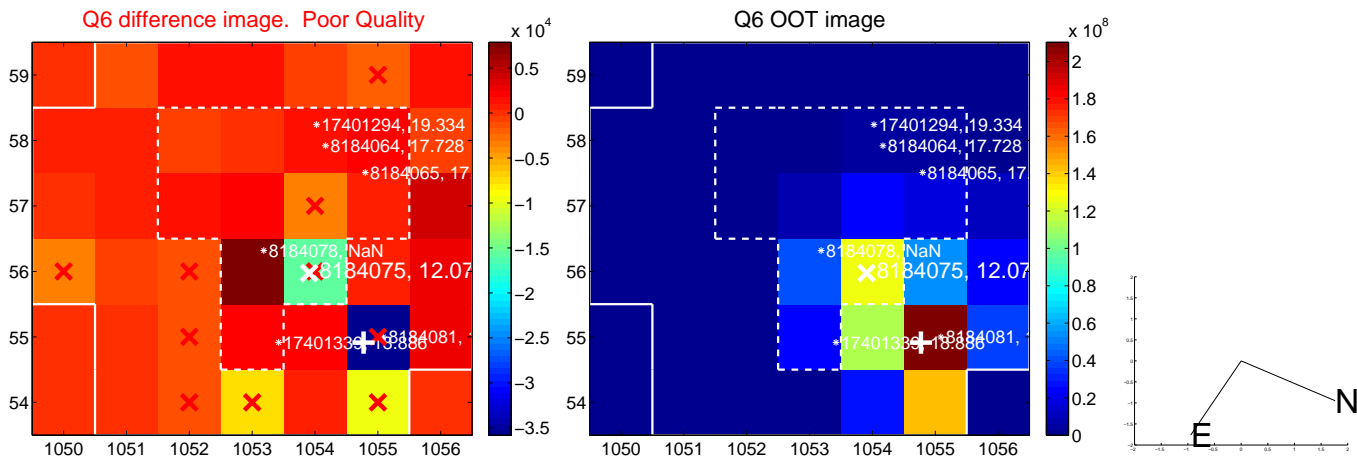
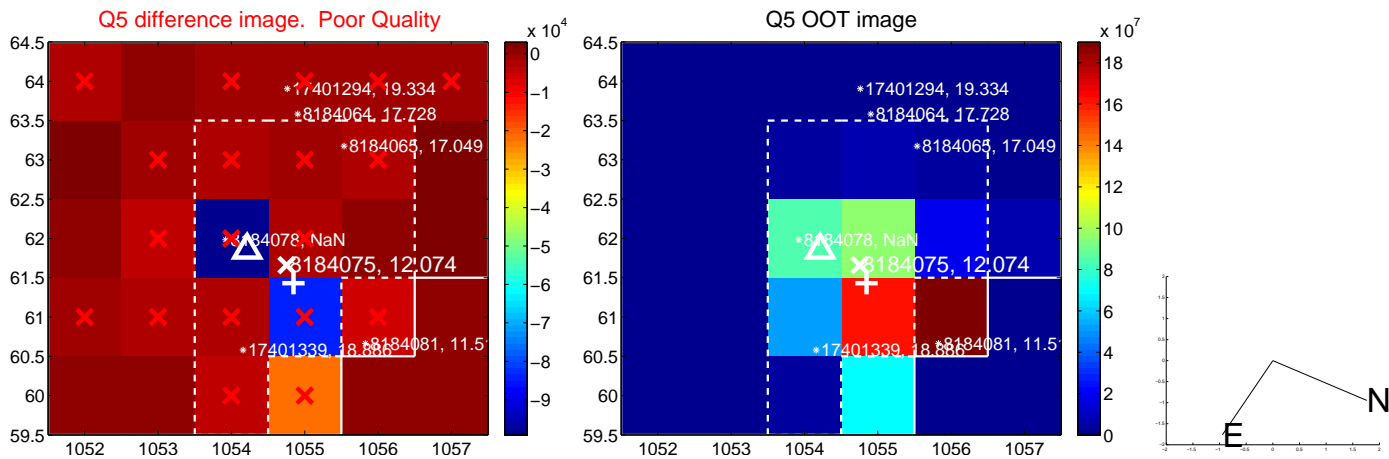


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

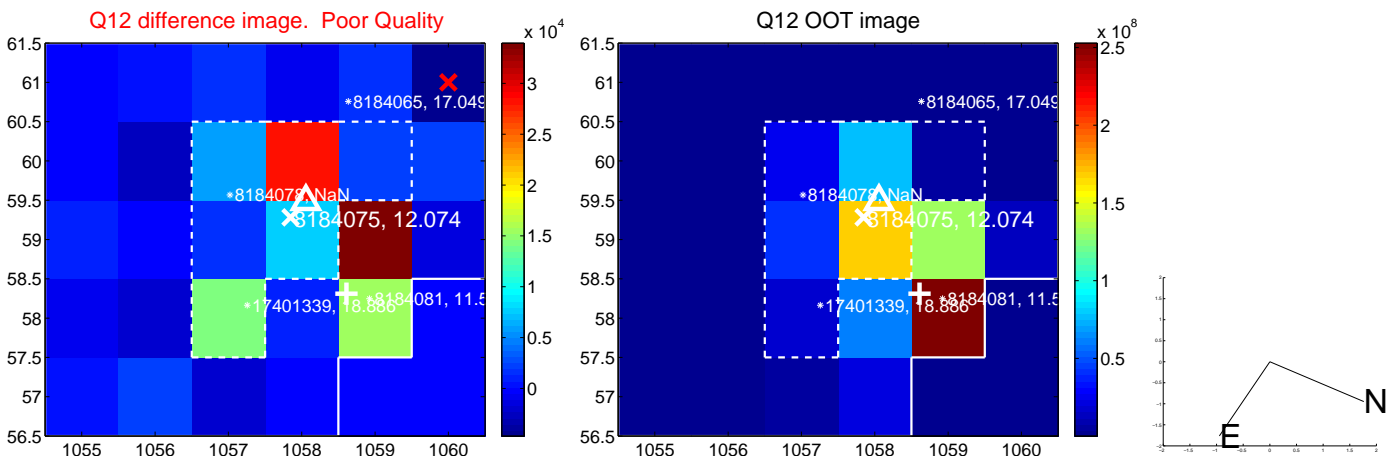
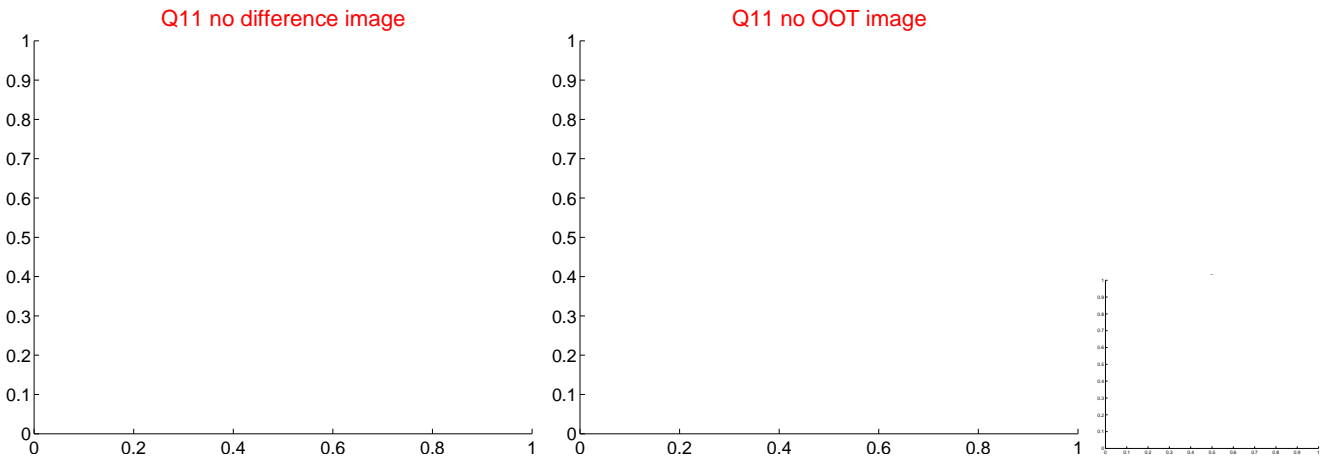
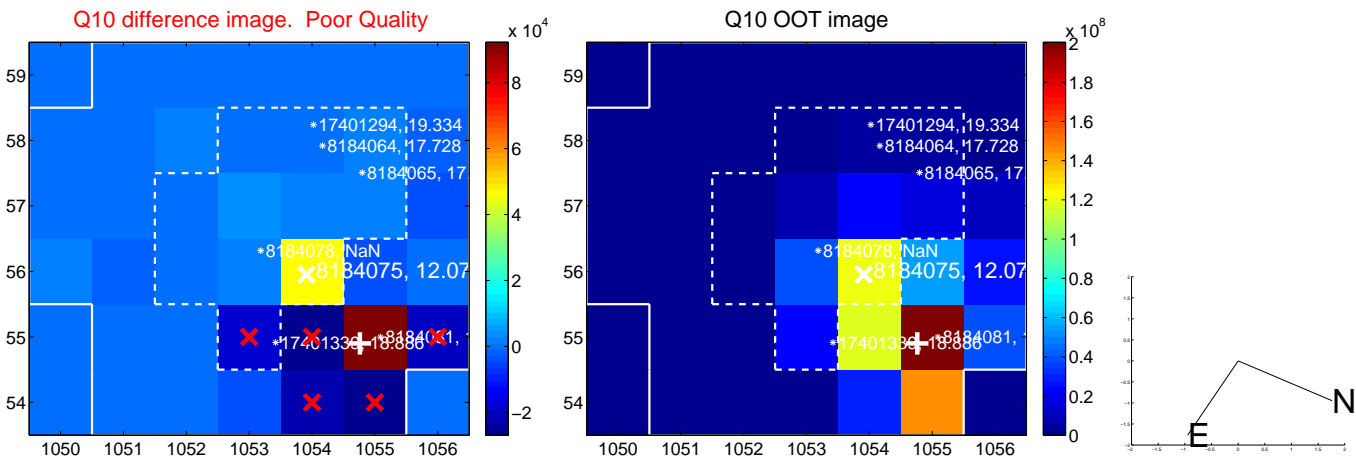
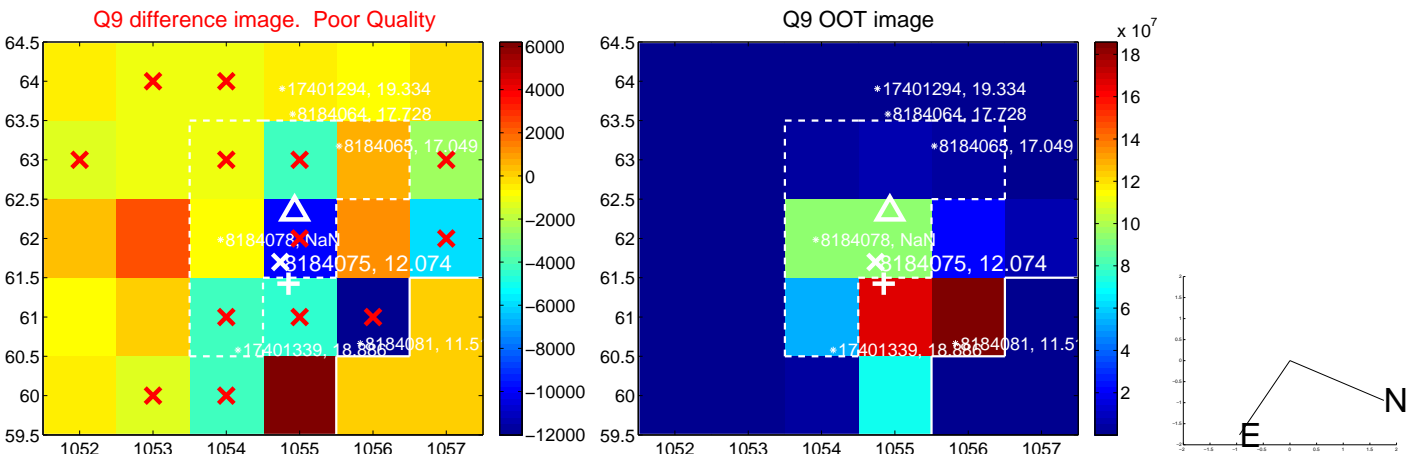
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



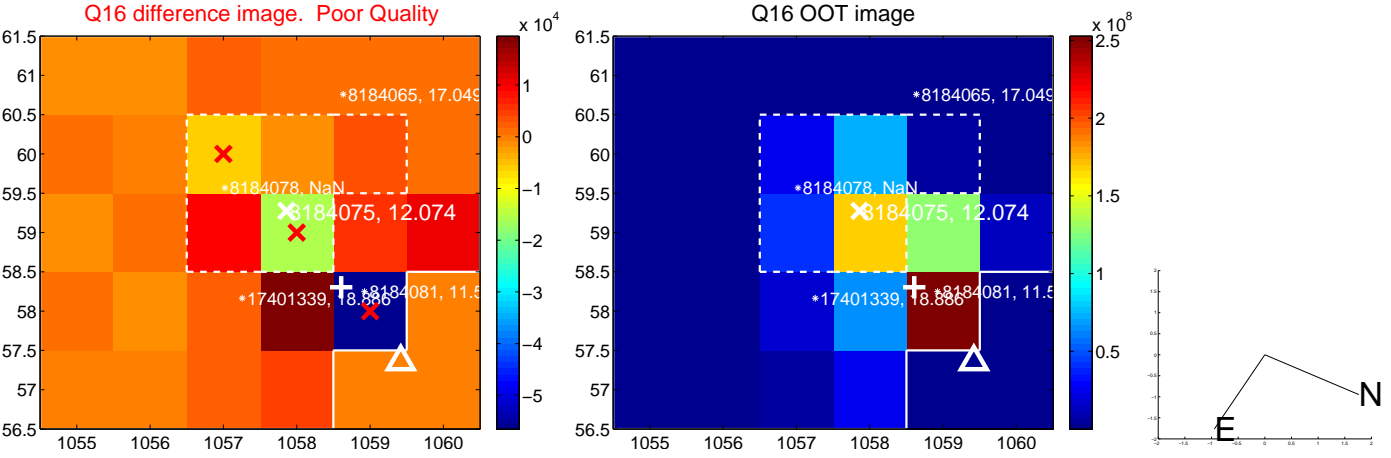
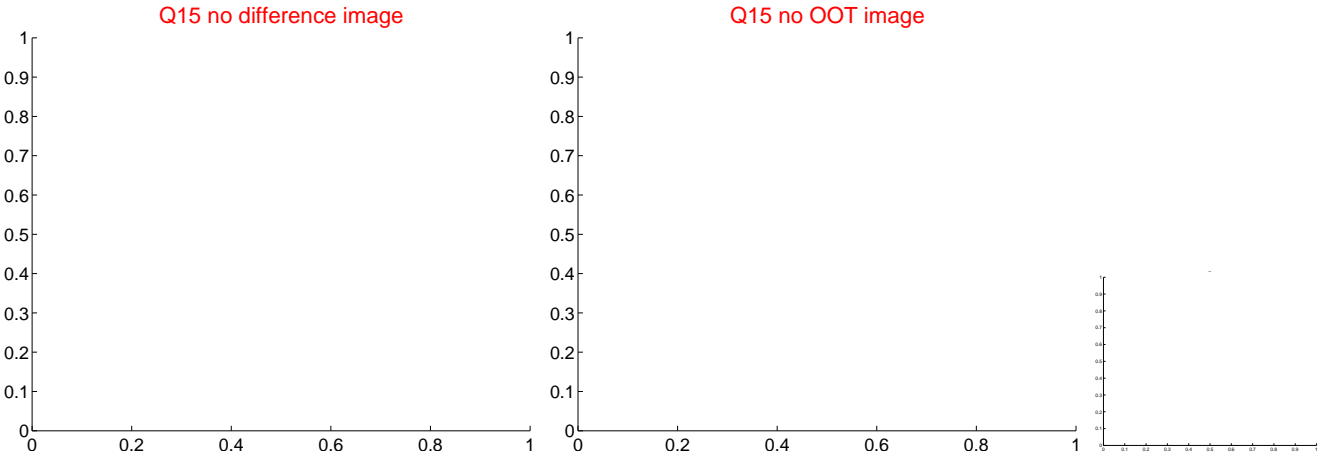
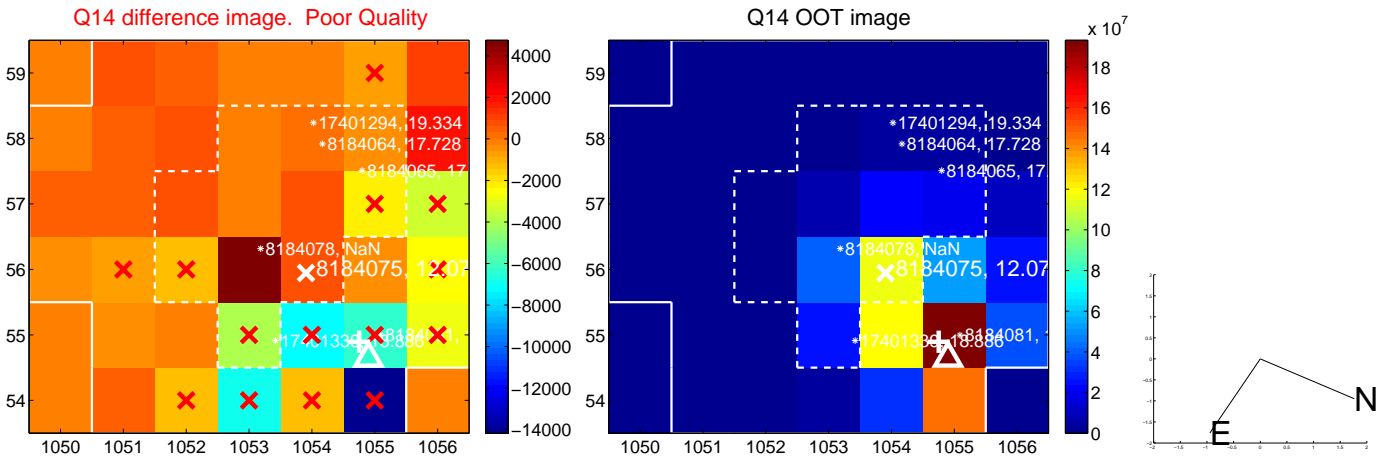
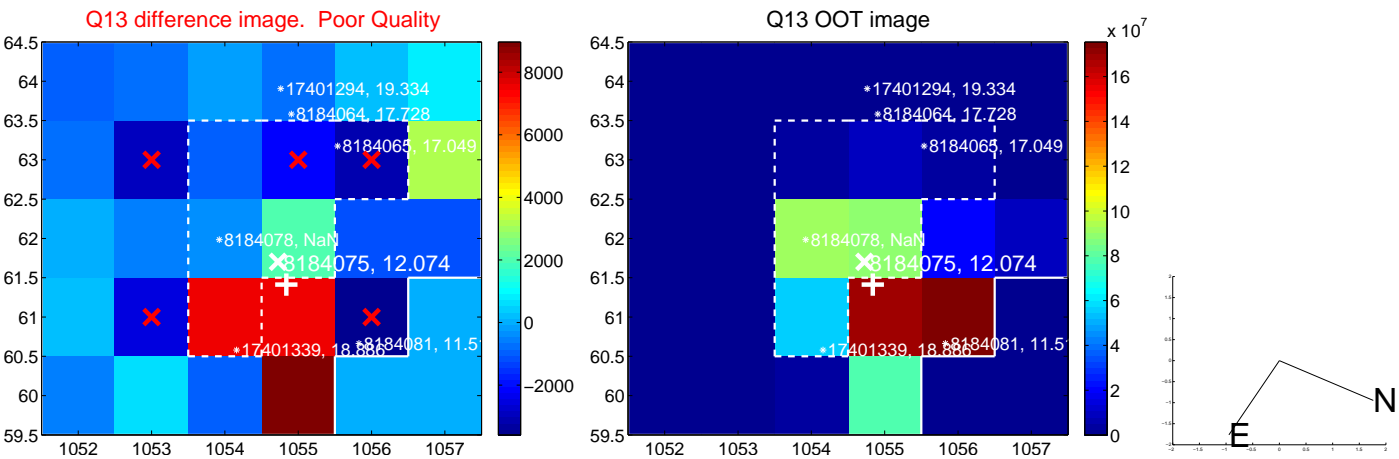
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



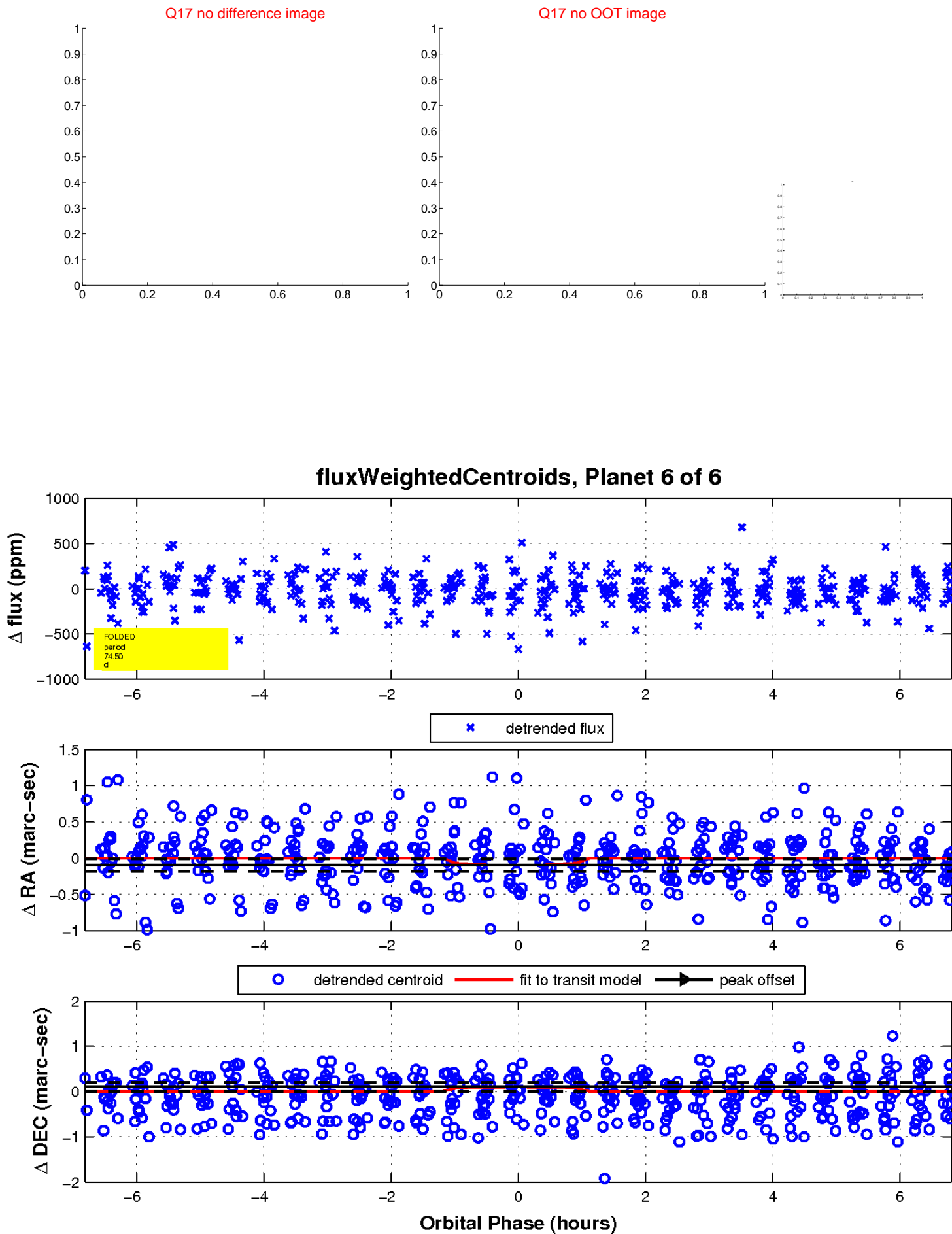
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

