

KIC 005865766

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})
005865766-01	OBS	No	3.675423	135.080179	19.4	19.945	8.4	8.0	2.15	6749	1.02	3310.31
005865766-02	OBS	No	185.314220	146.644745	206.9	7.473	10.7	6.5	2.15	6749	3.66	17.77
005865766-03	OBS	No	89.238471	191.105809	203.2	4.787	8.0	8.7	2.15	6749	3.39	47.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005865766-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005865766-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
005865766-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

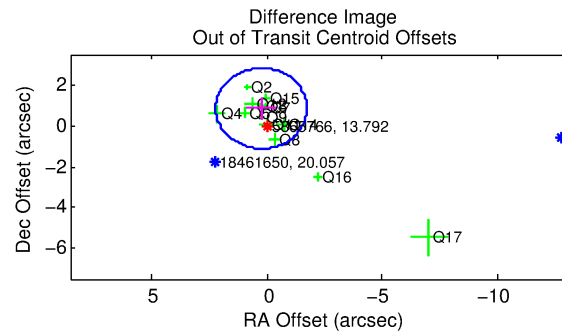
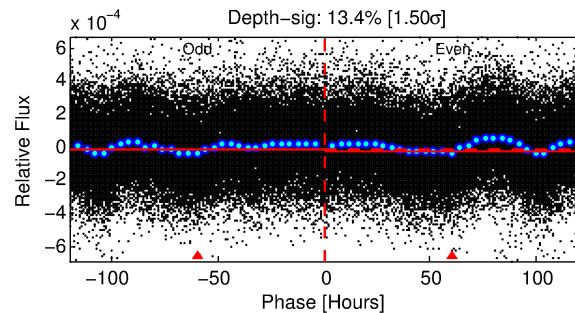
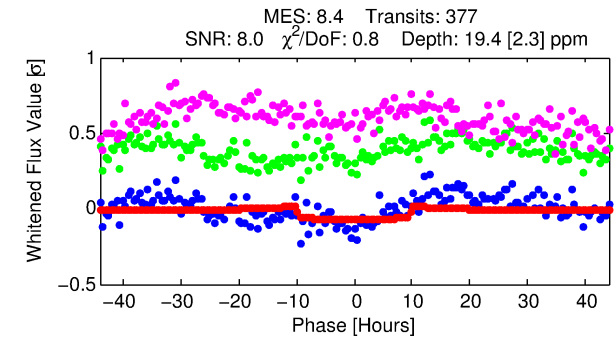
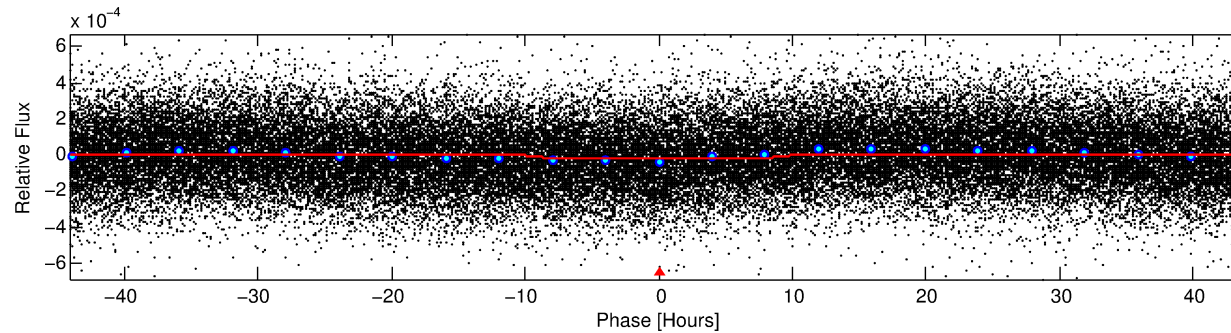
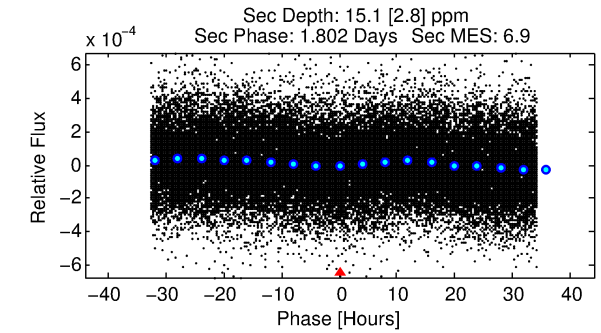
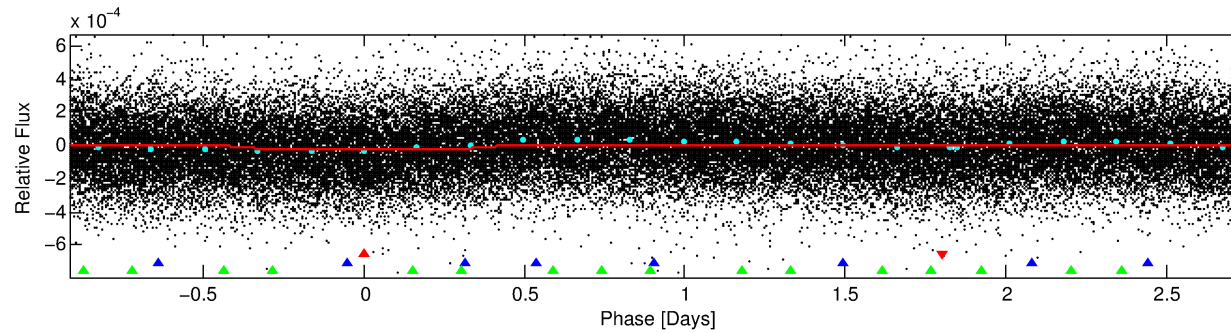
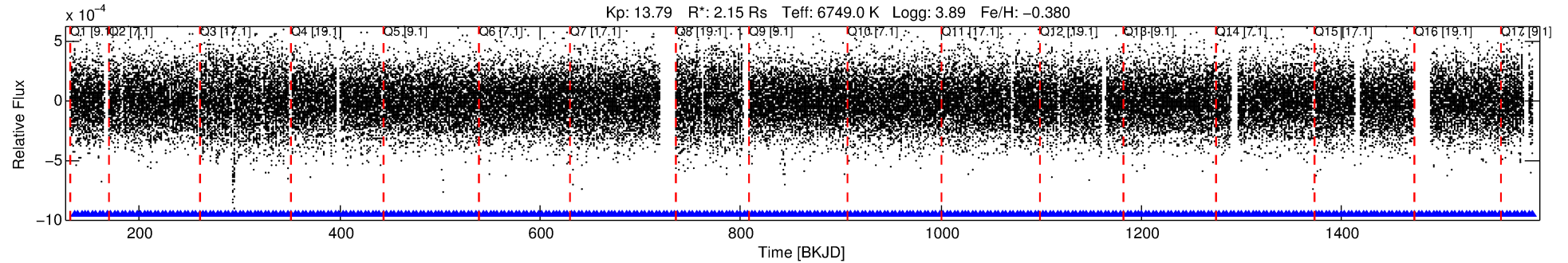
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005865766-01

No Significant Match Found

DV One-Page Summary

KIC: 5865766 Candidate: 1 of 3 Period: 3.675 d



DV Fit Results:

Period = 3.67542 [0.00008] d
Epoch = 135.0802 [0.0146] BKJD
Rp/R* = 0.0044 [0.0014]
a/R* = 1.28 [0.95]
b = 0.73 [1.19]
Seff = 3310.31 [2289.64]
Teq = 1934 [334] K
Rp = 1.02 [0.55] Re
a = 0.0510 [0.0214] AU
Ag = 20.54 [19.64] [0.99σ]
Teffp = 6366 [1107] K [3.83σ]

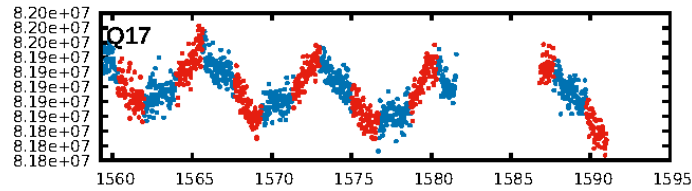
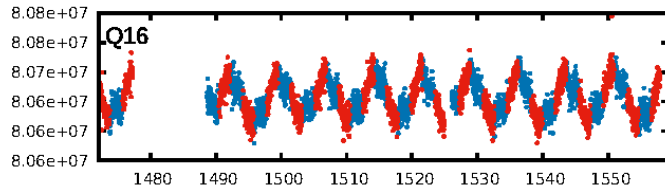
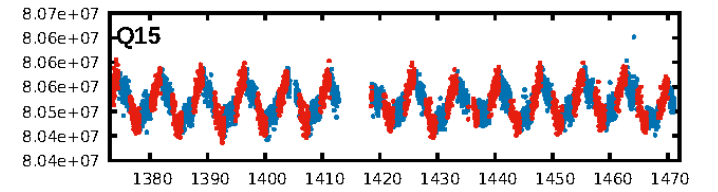
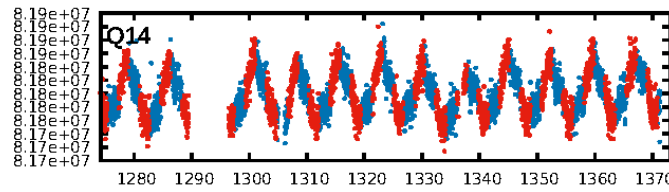
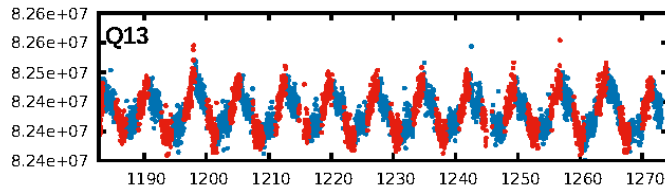
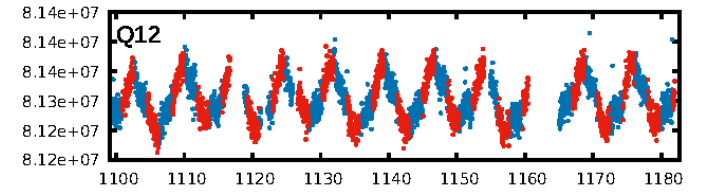
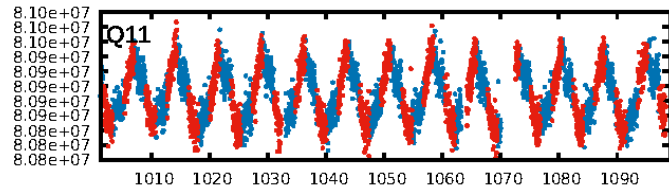
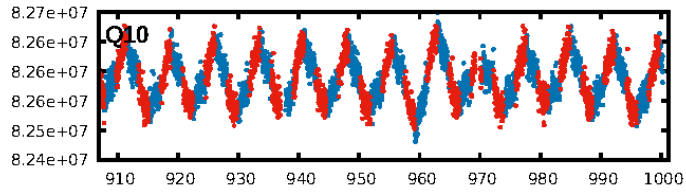
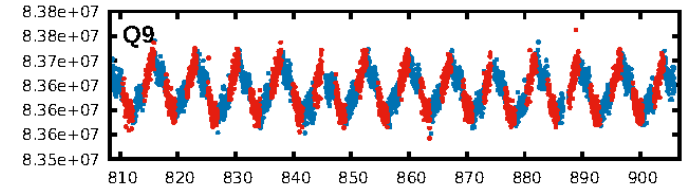
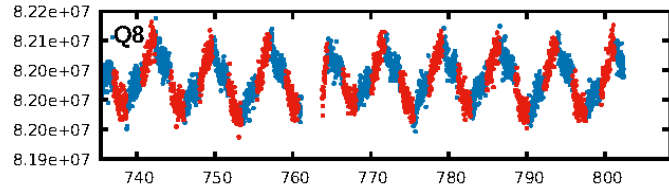
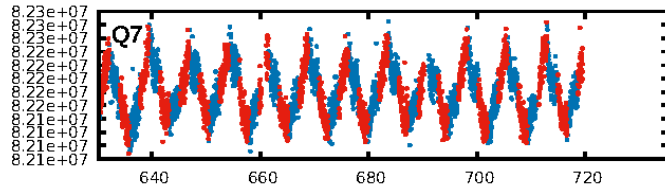
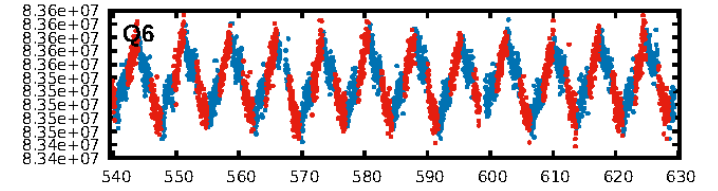
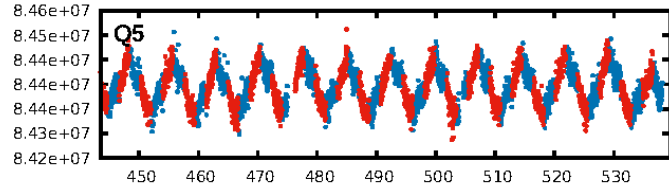
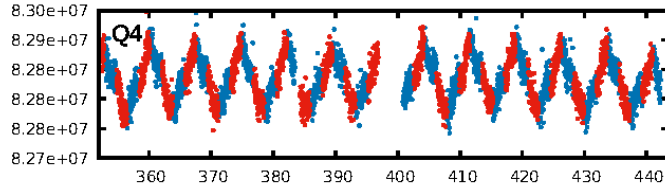
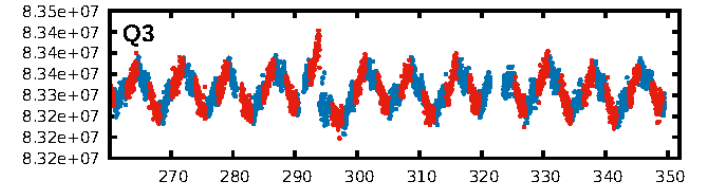
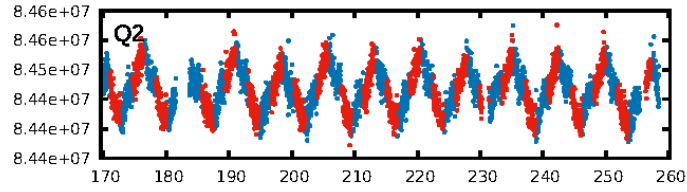
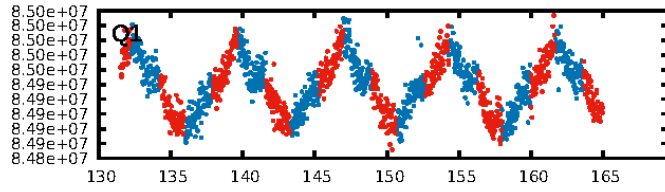
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [100.12σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.93e-09
RollingBand-fgt: 1.00 [359/359]
GhostDiagnostic-chr: 0.6895
Centroid-sig: 17.7%
Centroid-so: 0.979 arcsec [0.90σ]
OotOffset-rm: 0.888 arcsec [1.35σ]
OotOffset-st: 2/4/4/3 [13]
KicOffset-rm: 0.804 arcsec [1.25σ]
KicOffset-st: 2/4/4/3 [13]
DiffImageQuality-fgm: 0.85 [11/13]
DiffImageOverlap-fno: 1.00 [17/17]

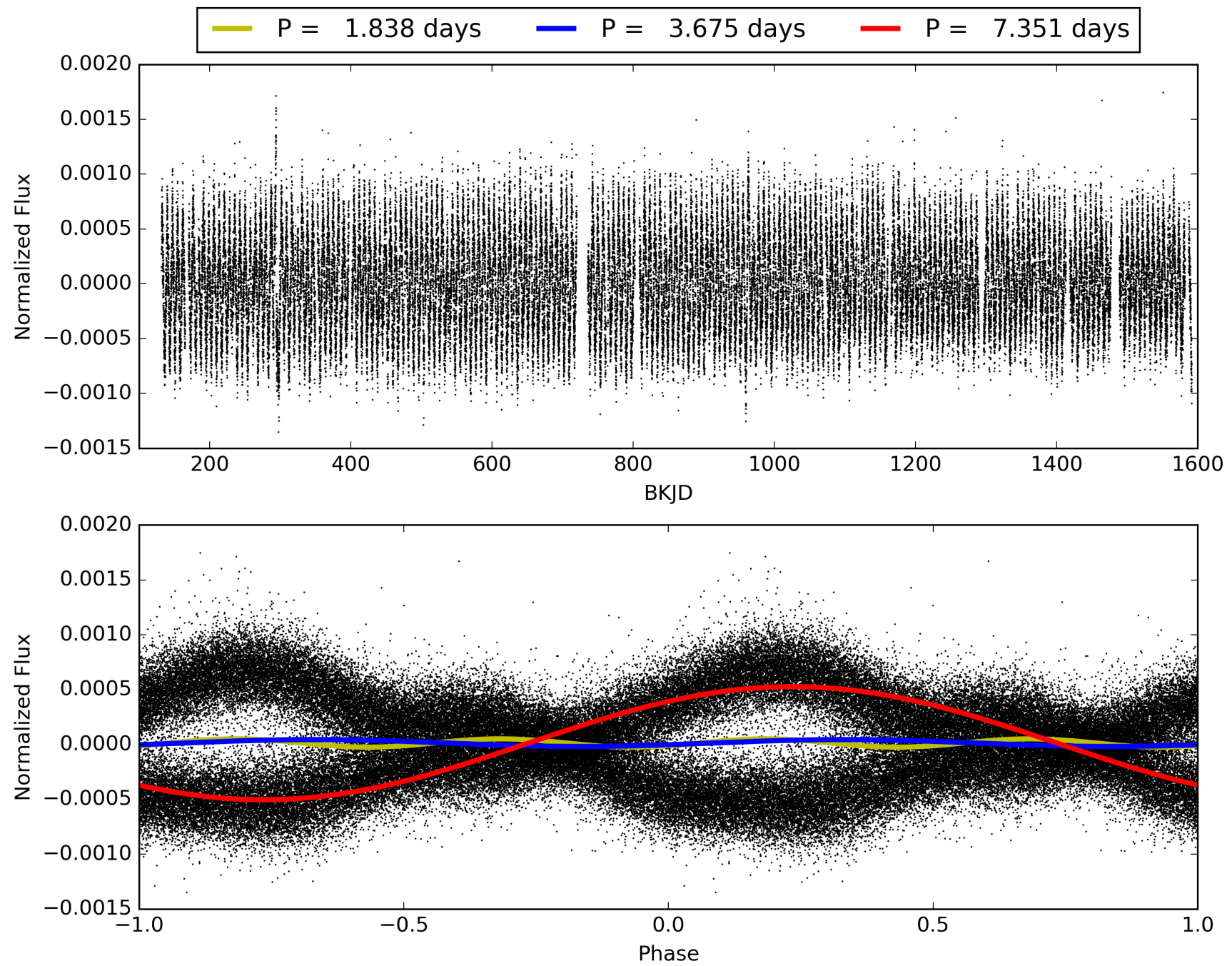
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:49:10 Z

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

TCE 005865766-01, PDC Light Curves

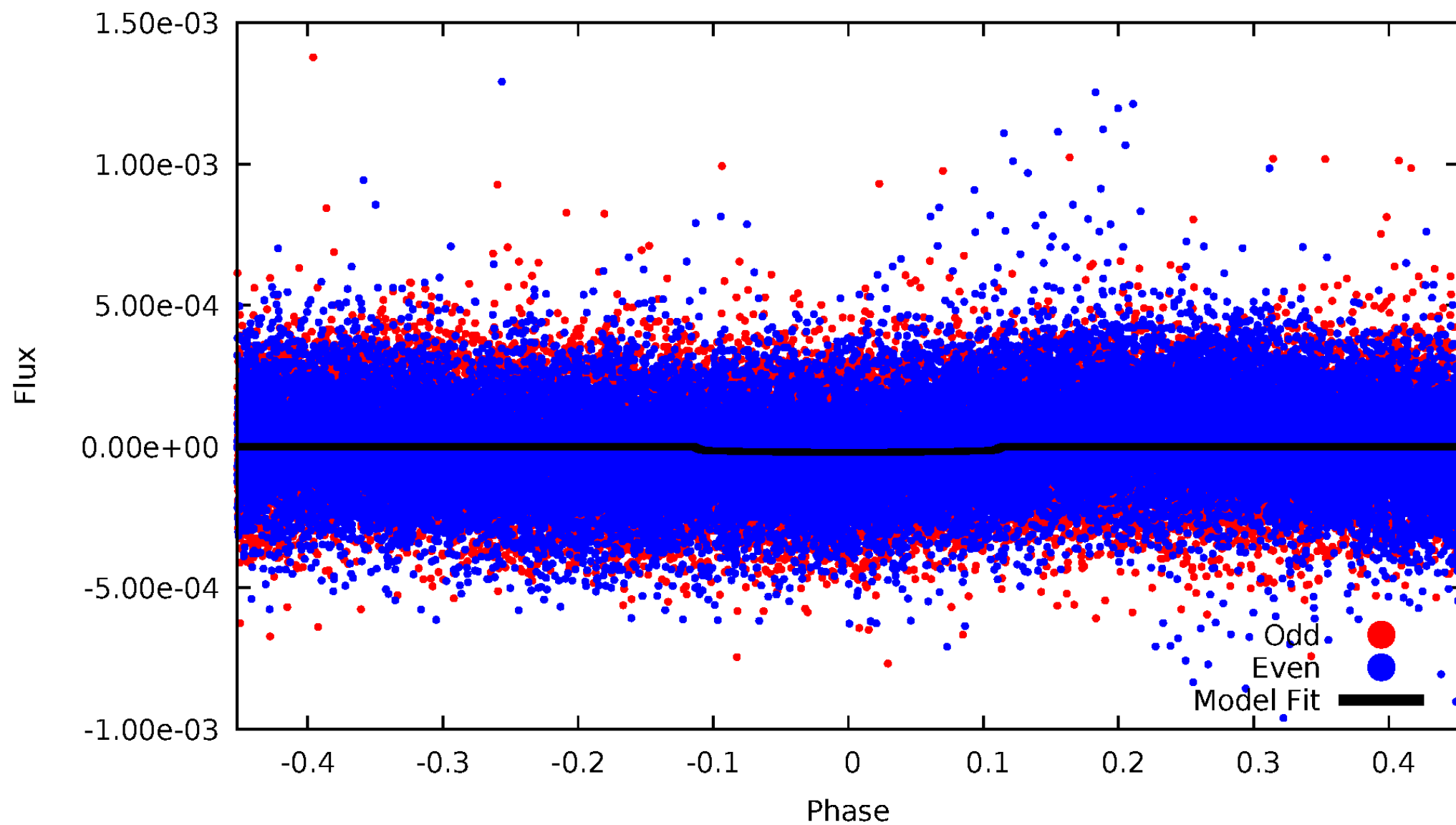


TCE 005865766-01



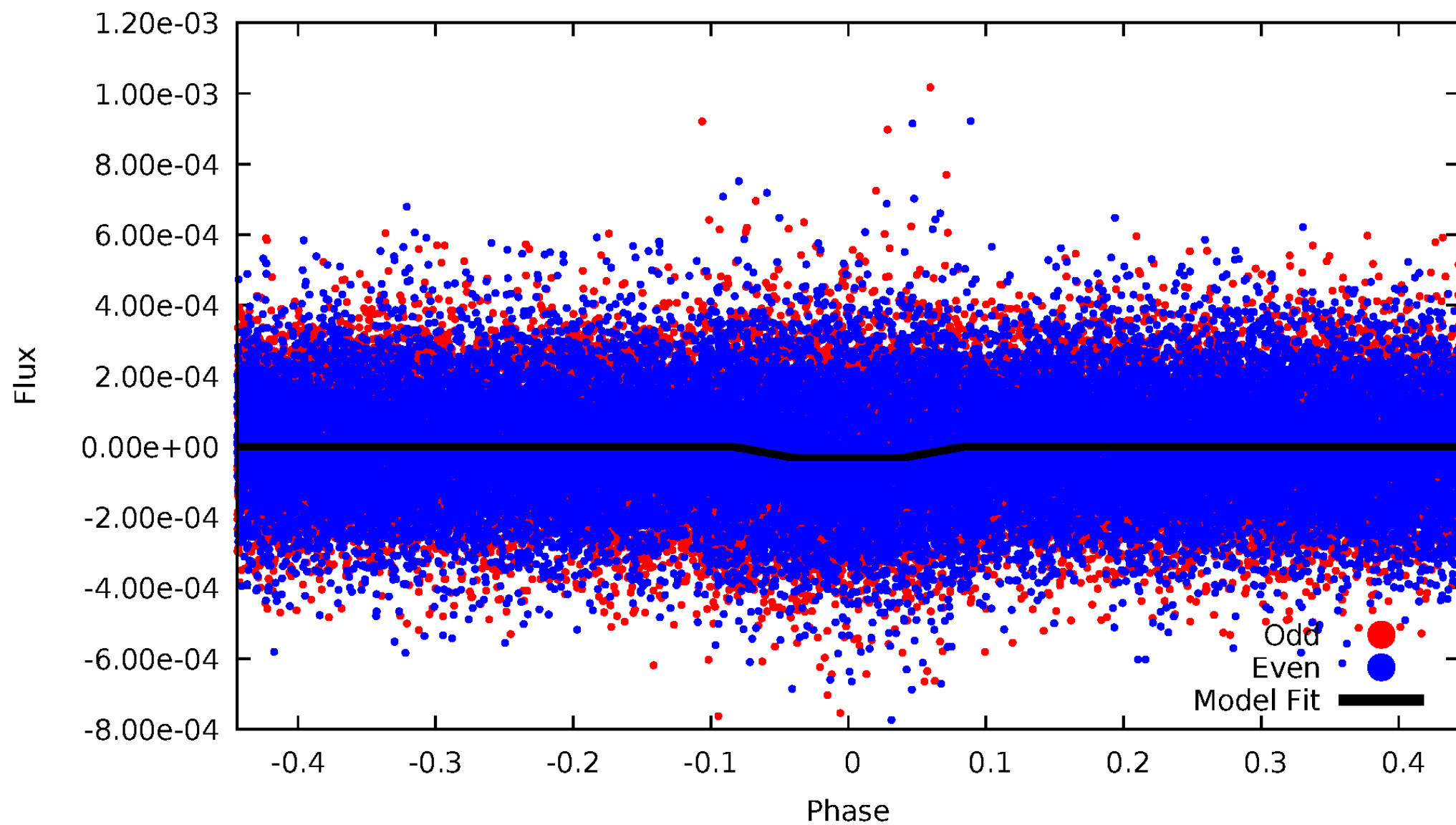
DV Odd/Even

TCE 005865766-01



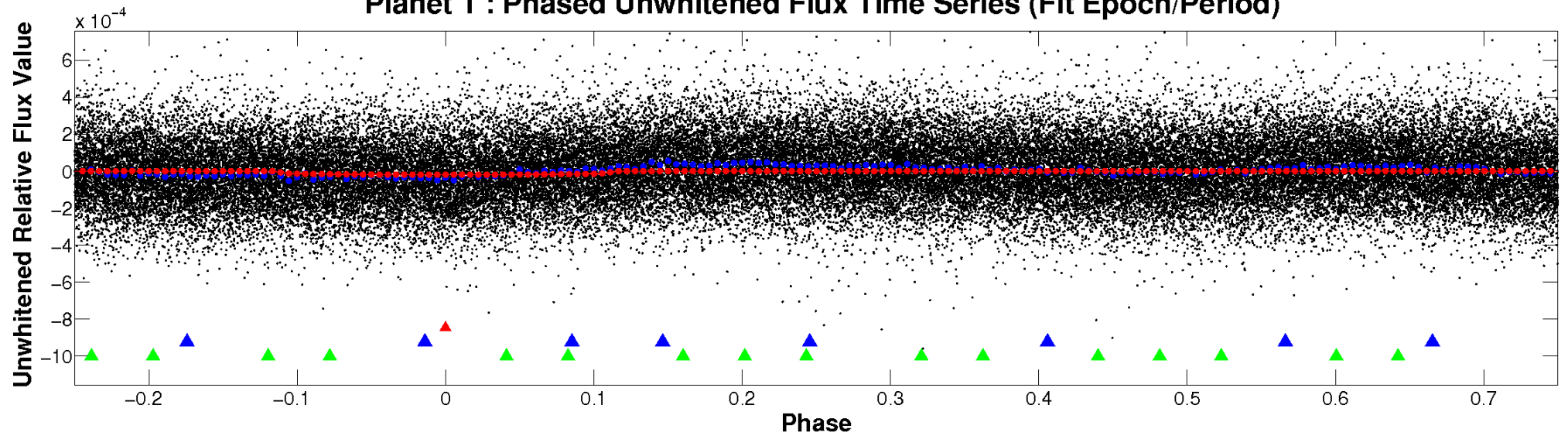
ALT Odd/Even

TCE 005865766-01

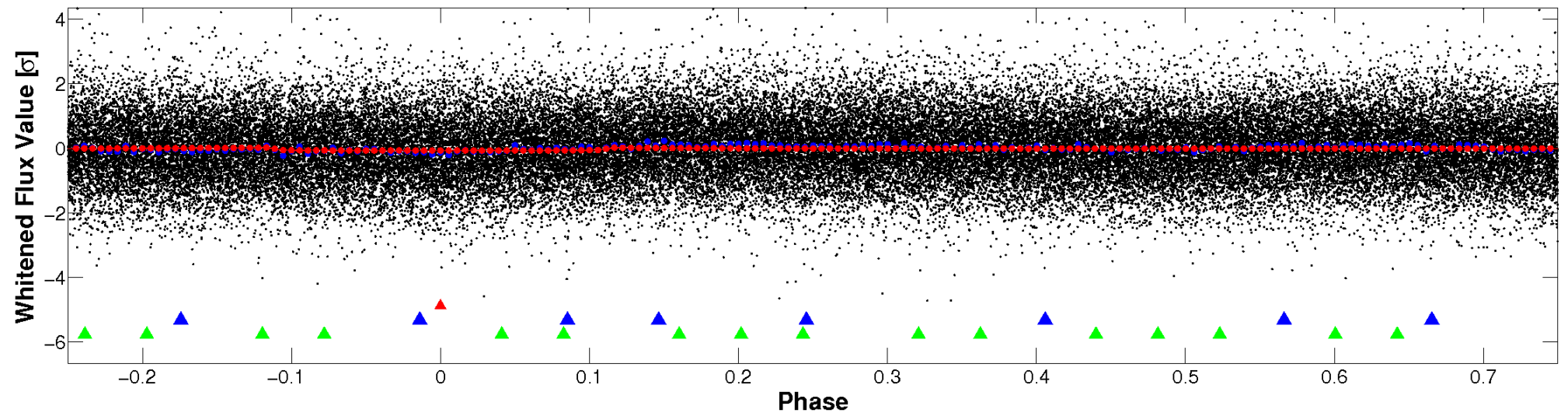


Non-Whitened Vs. Whitened Light Curve

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

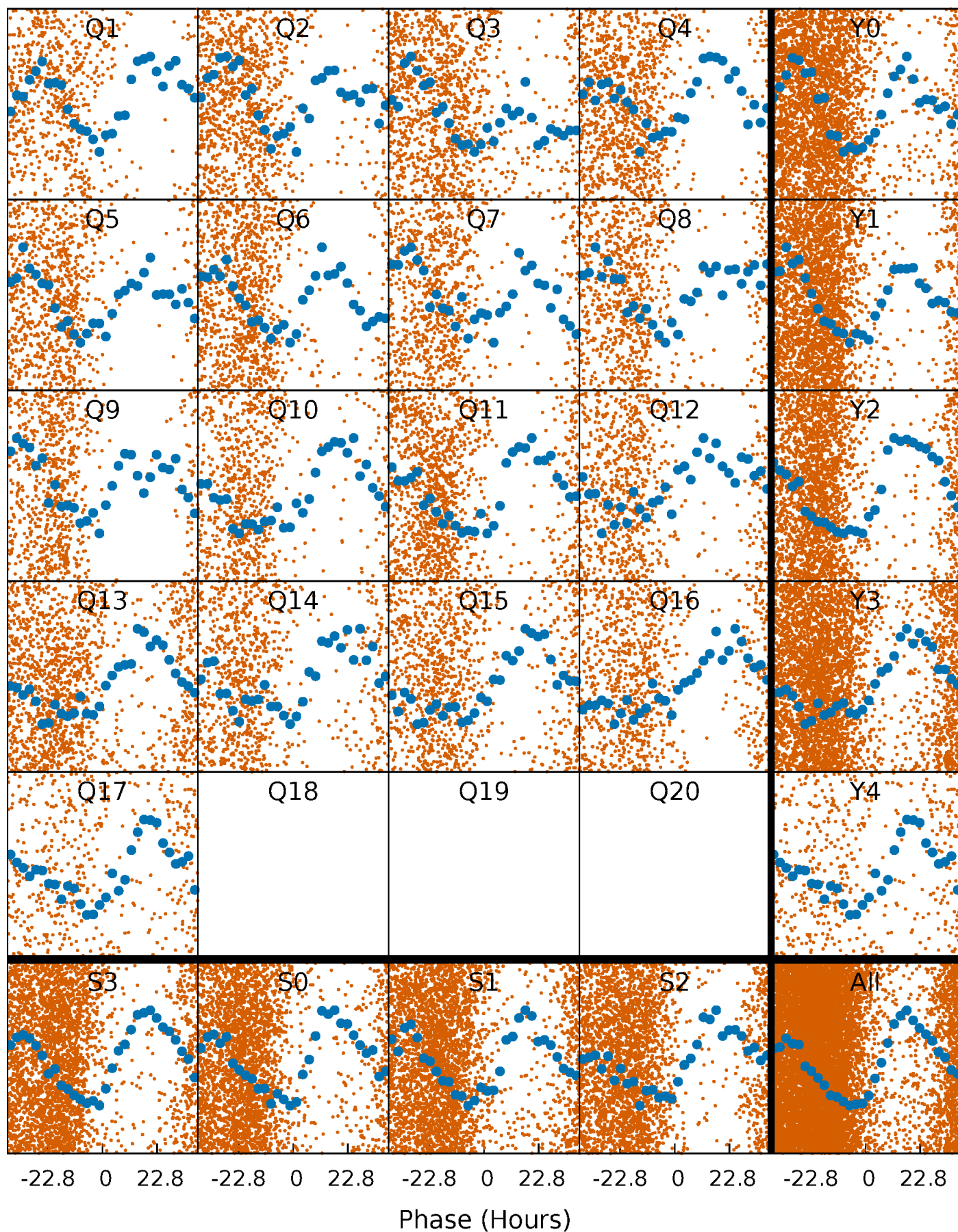


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



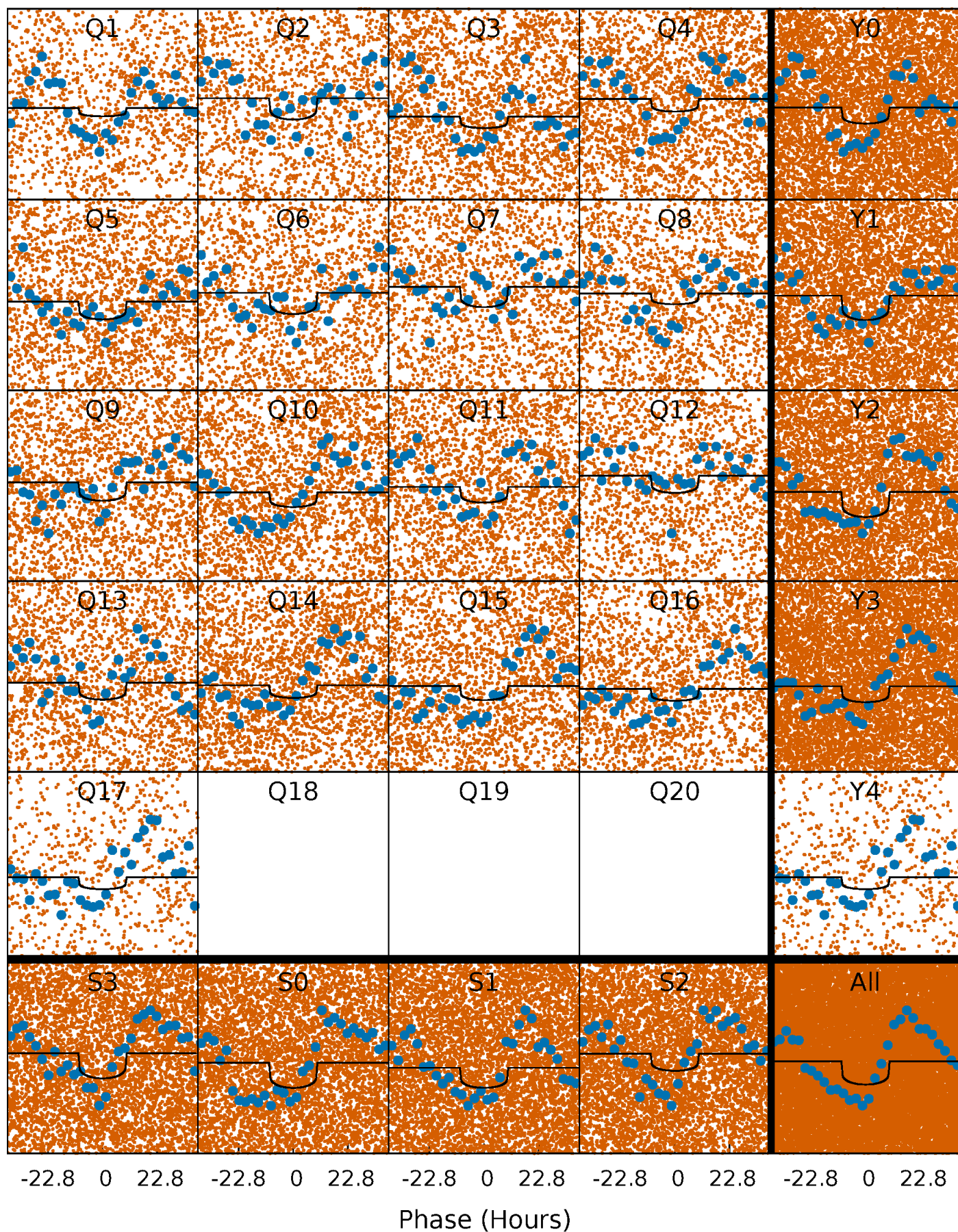
PDC Quarter-Phased Transit Curves

TCE 005865766-01 P= 3.675423 Days $T_0=135.080179$ (BKJD)



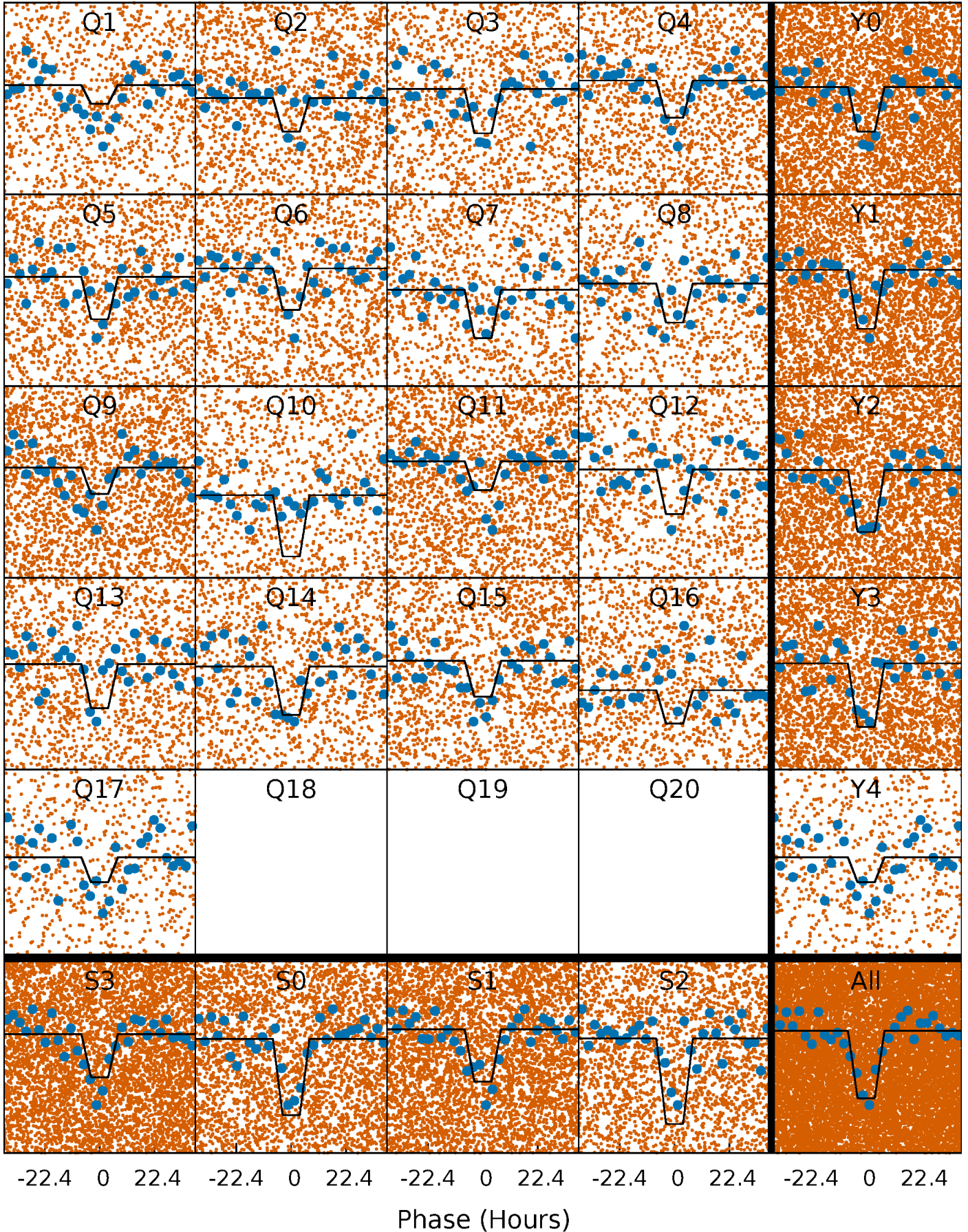
DV Quarter-Phased Transit Curves

TCE 005865766-01 P= 3.675423 Days $T_0=135.080179$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

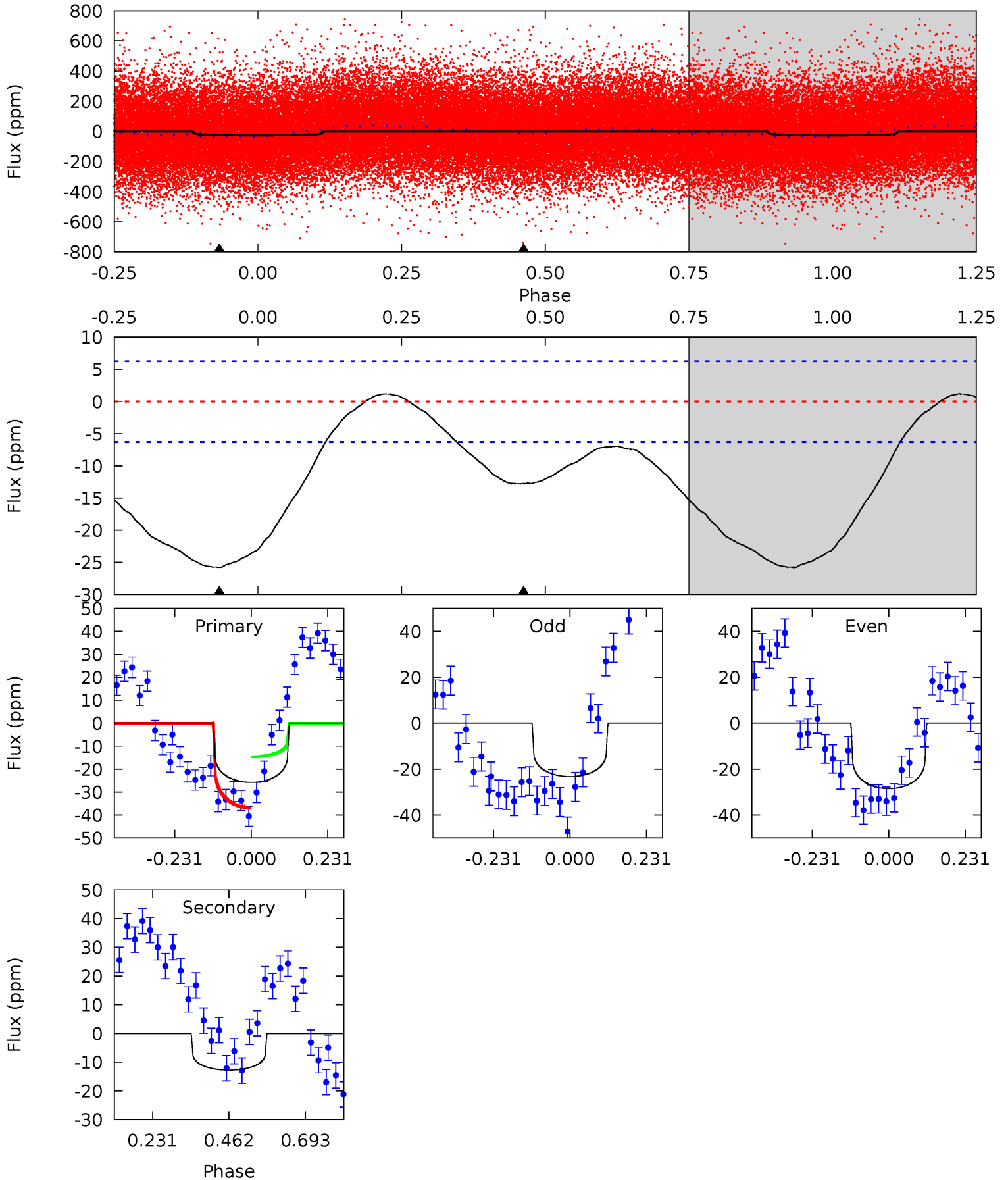
TCE 005865766-01 P= 3.675008 Days $T_0=135.180981$ (BKJD)



DV Model-Shift Uniqueness Test

005865766-01, P = 3.675423 Days, E = 131.404756 Days

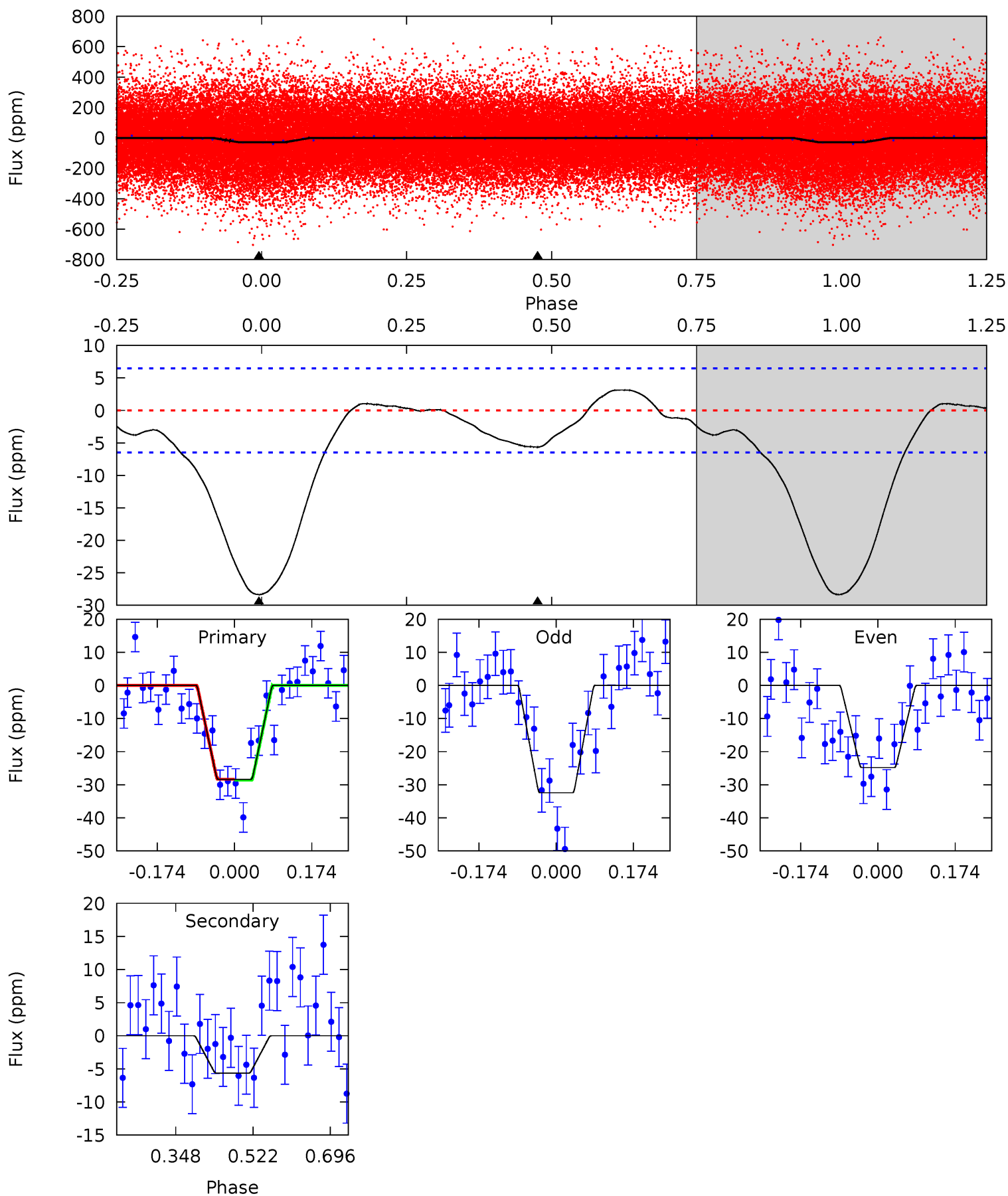
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.0	8.92	0	0	4.39	1.20	3.09	18.0	18.0	8.92	8.92	1.83	0.99	0.04	7.93



Alt Model-Shift Uniqueness Test

005865766-01, P = 3.675008 Days, E = 131.505973 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
19.5	3.87	0	0	4.45	1.36	1.20	19.5	19.5	3.87	3.87	2.62	1.11	0.10	0.11



Stellar Parameters For KIC 005865766

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6749^{+190}_{-262}	$3.889^{+0.397}_{-0.132}$	$-0.380^{+0.300}_{-0.300}$	$2.151^{+0.500}_{-0.929}$	$1.307^{+0.184}_{-0.253}$	$0.185^{+0.655}_{-0.075}$
	+3%/-4%	+10%/-3%	+79%/-79%	+23%/-43%	+14%/-19%	+354%/-40%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005865766-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-13 ± 1	$0.97^{+0.37}_{-0.38}$	2640^{+196}_{-282}	6024^{+1557}_{-806}	20^{+31}_{-10}
Alt.	-6 ± 1	$1.19^{+0.43}_{-0.40}$	2638^{+218}_{-315}	4525^{+692}_{-470}	$5.718^{+6.644}_{-2.935}$

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

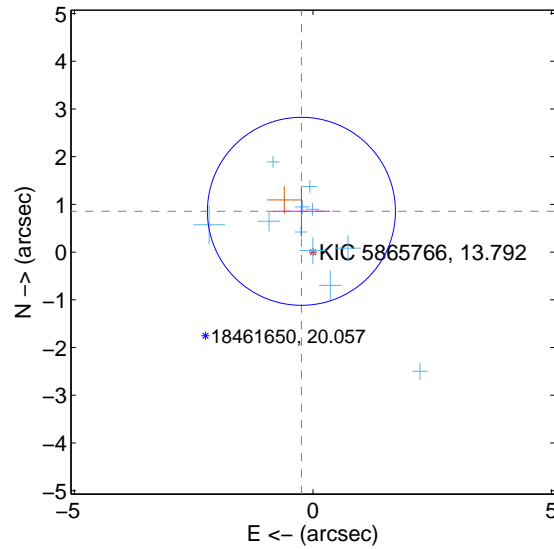
Supplemental centroid analysis for 005865766-01. Kepler magnitude: 13.79. Transit SNR 8.03

There are 11 quarters with good PRF difference image offsets

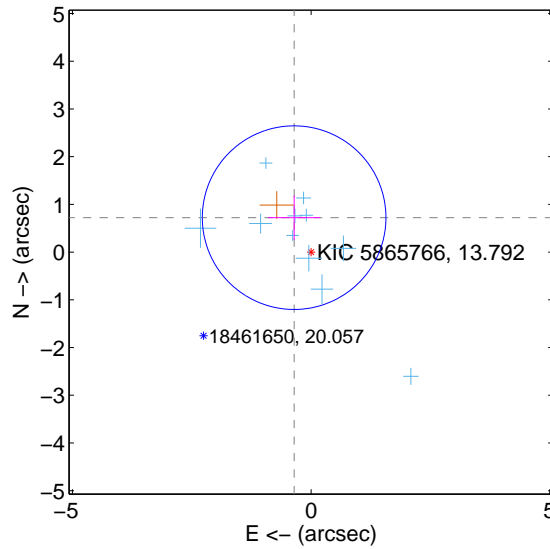
The direct PRF centroid is offset from the target star catalog position by about 0.13 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.888 ± 0.657	1.35	0.242 ± 0.602	0.855 ± 0.523
PRF-fit source offset from KIC position	0.804 ± 0.641	1.25	0.355 ± 0.546	0.722 ± 0.463
photometric centroid source offset	0.98 ± 1.08	0.90	0.35 ± 1.09	0.92 ± 1.08

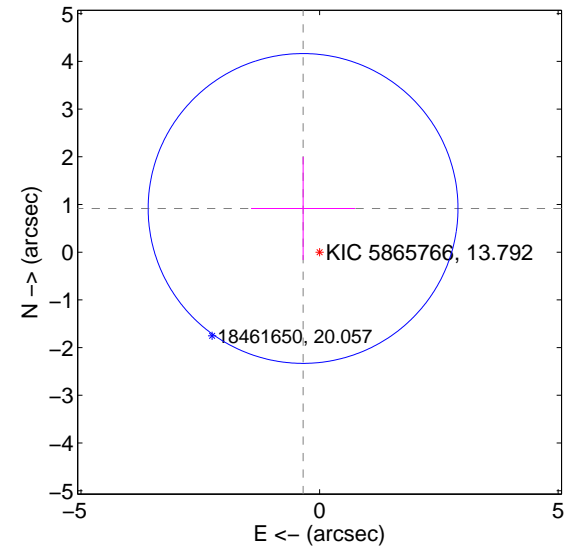
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

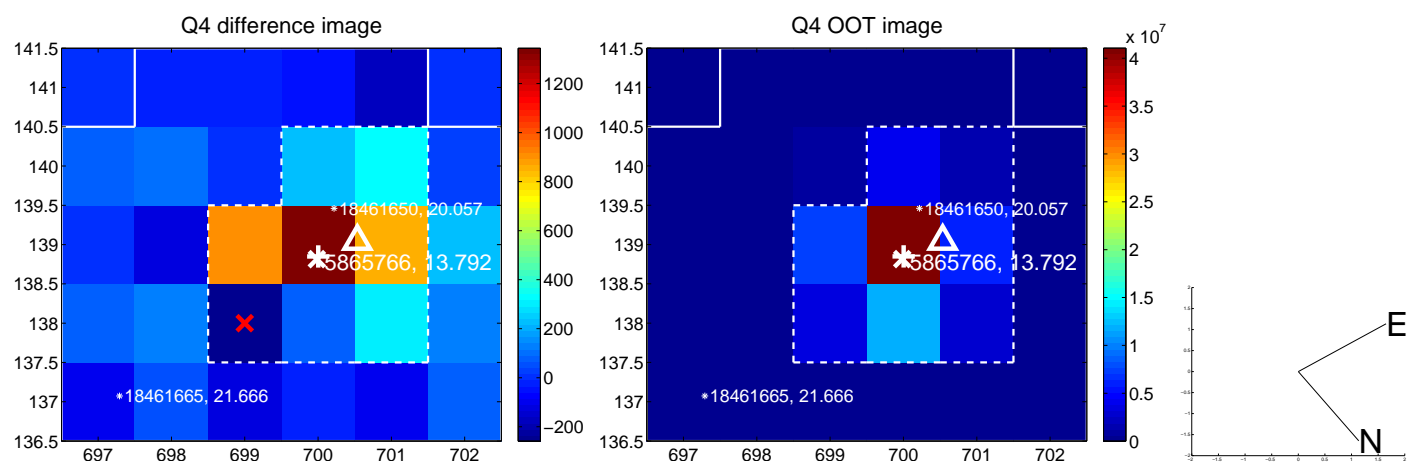
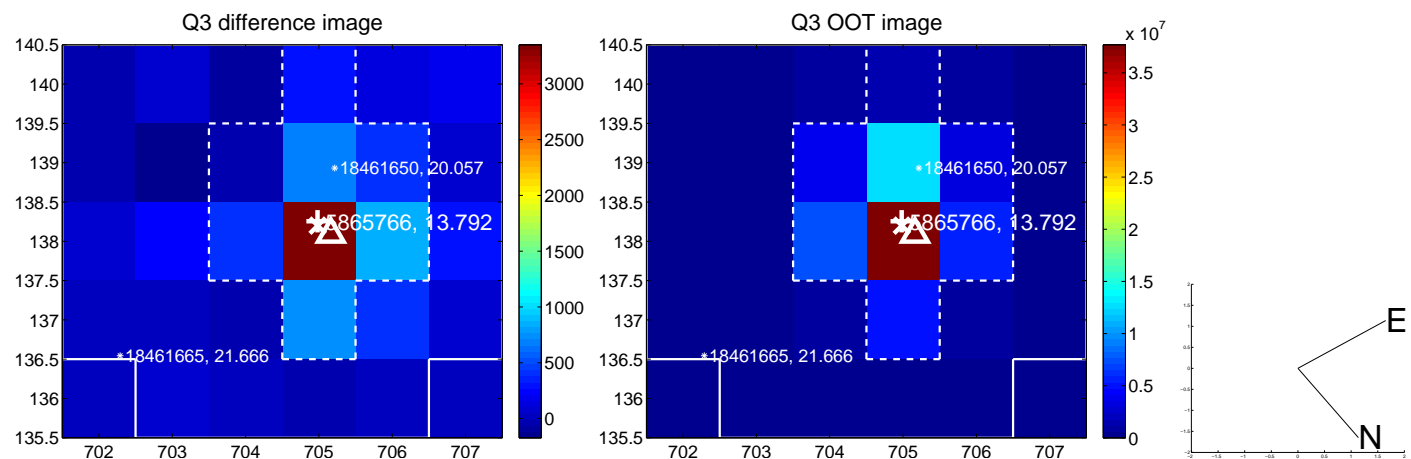
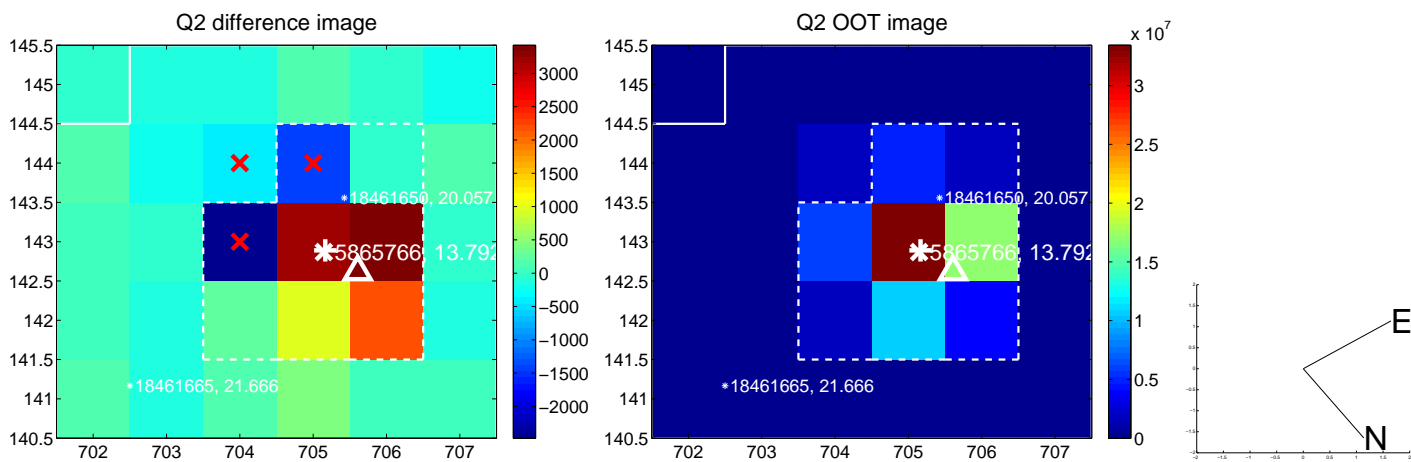
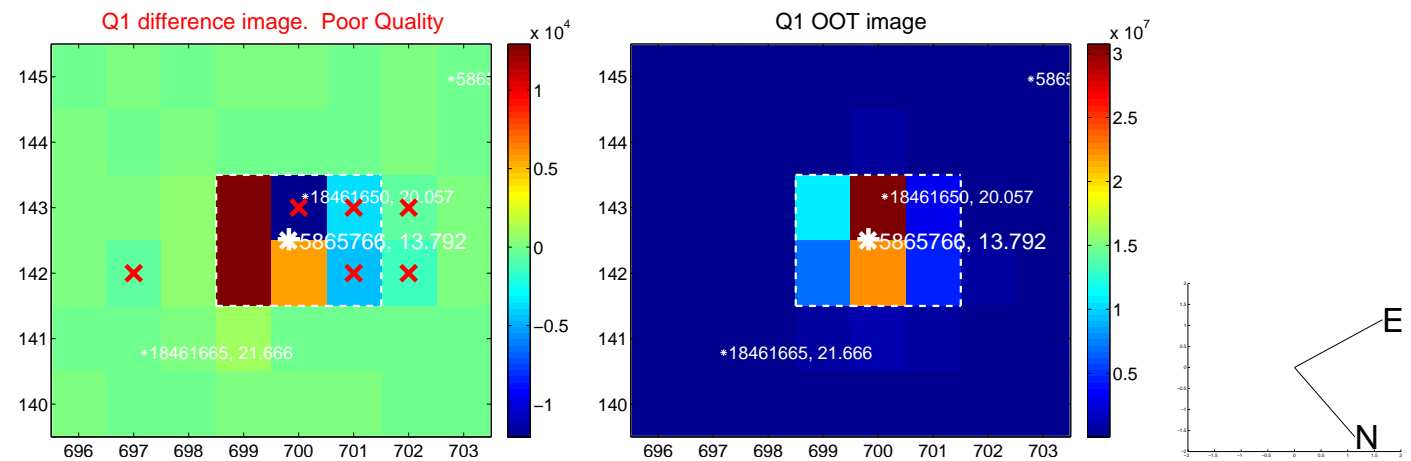


offset from photometric centroids

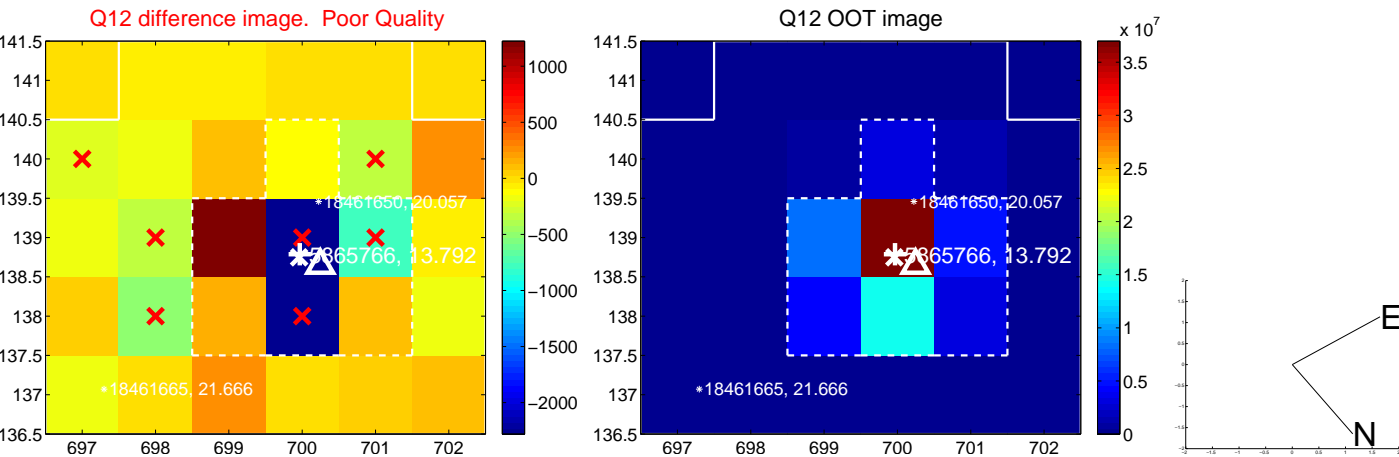
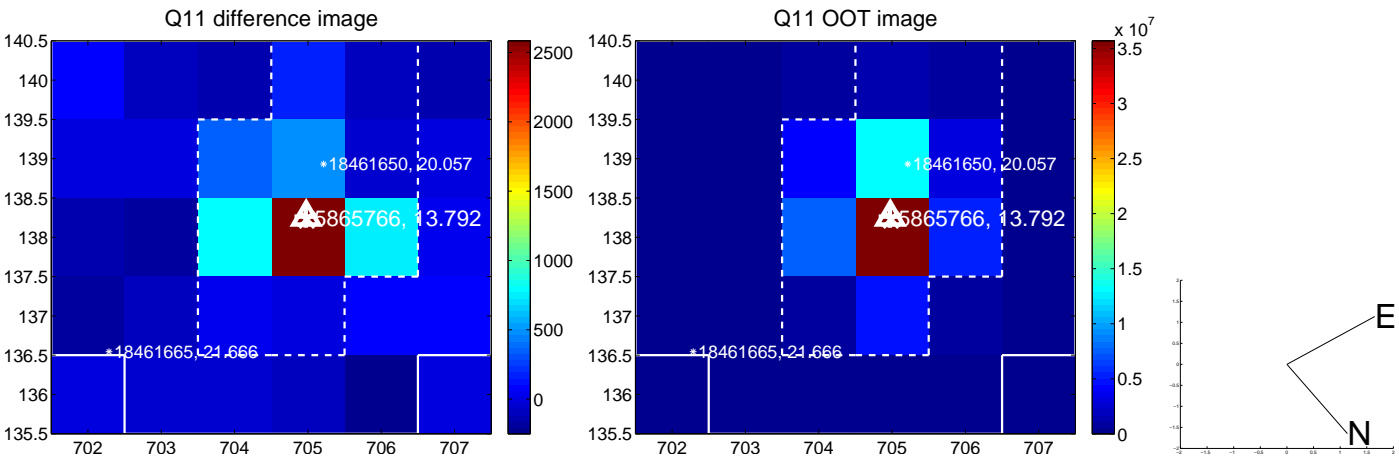
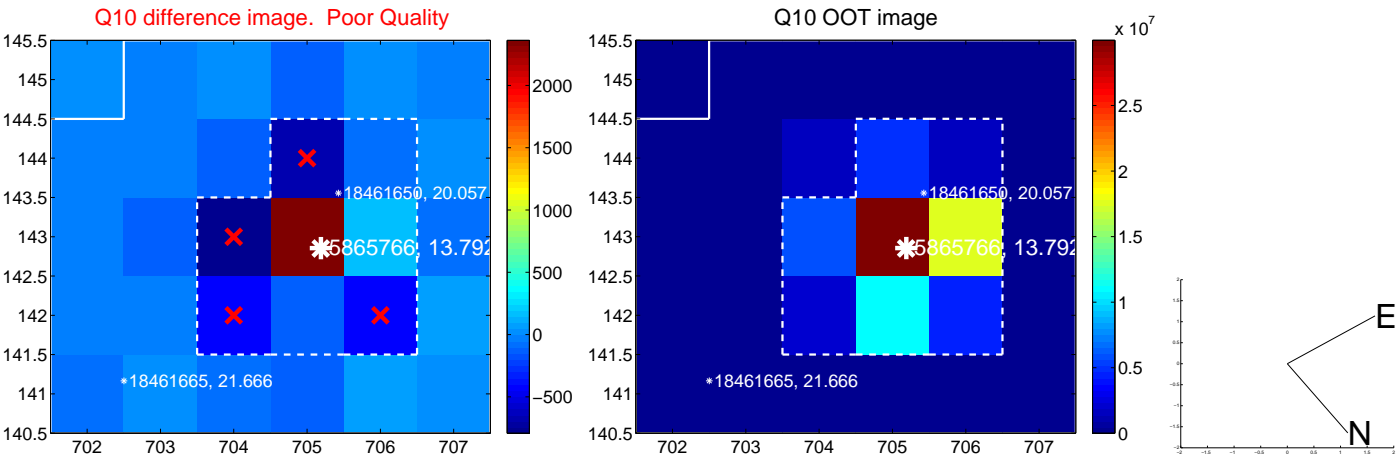
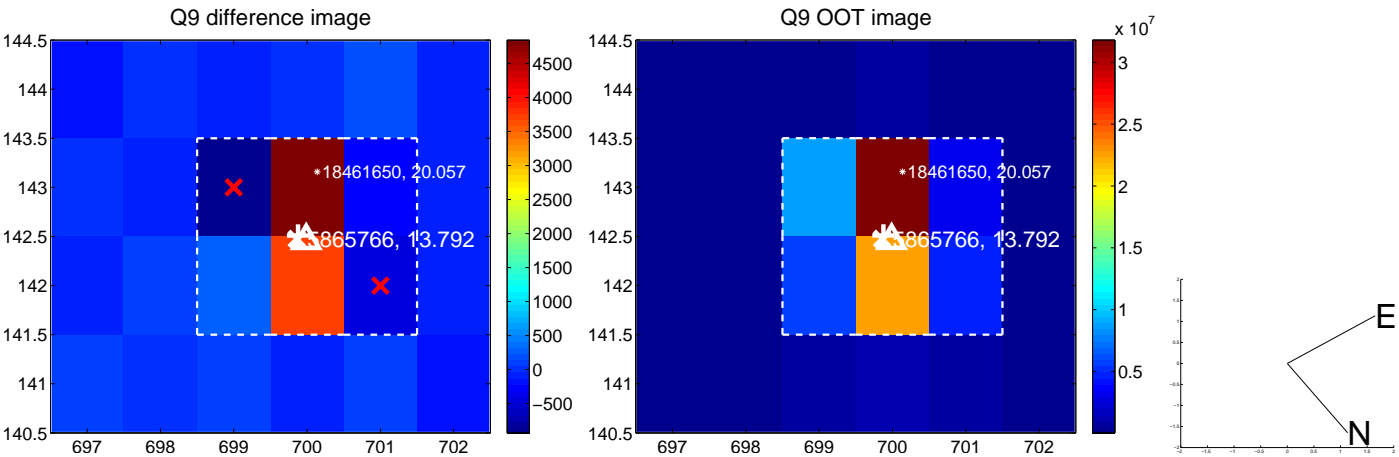


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

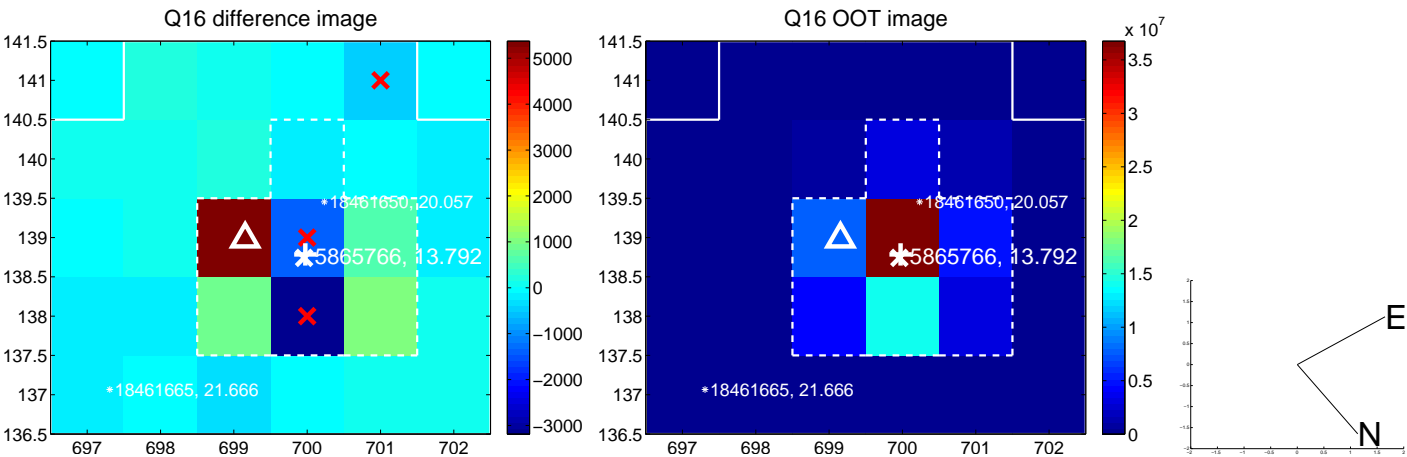
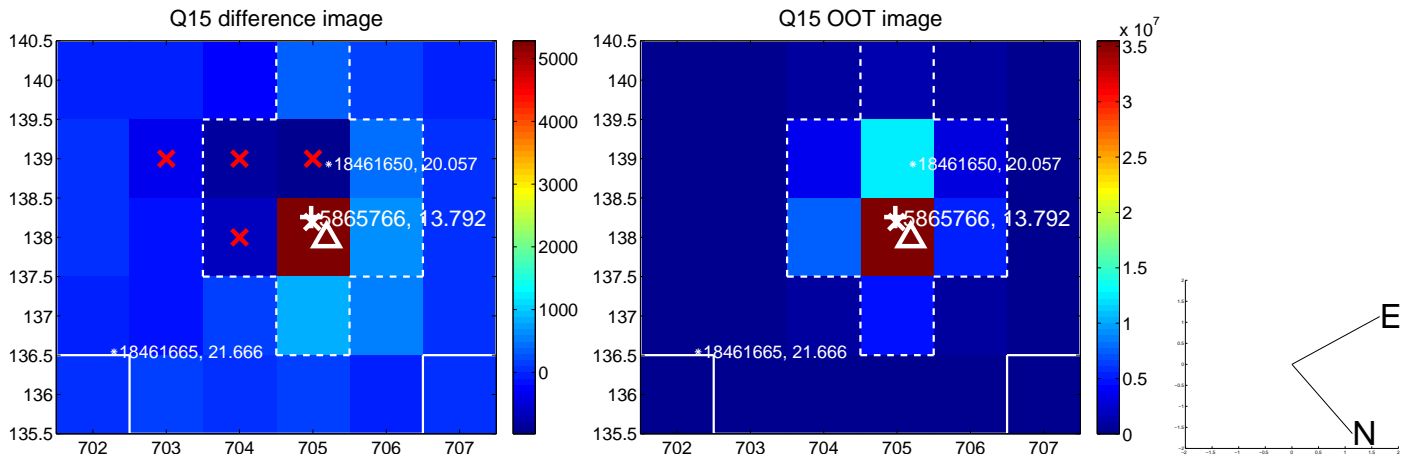
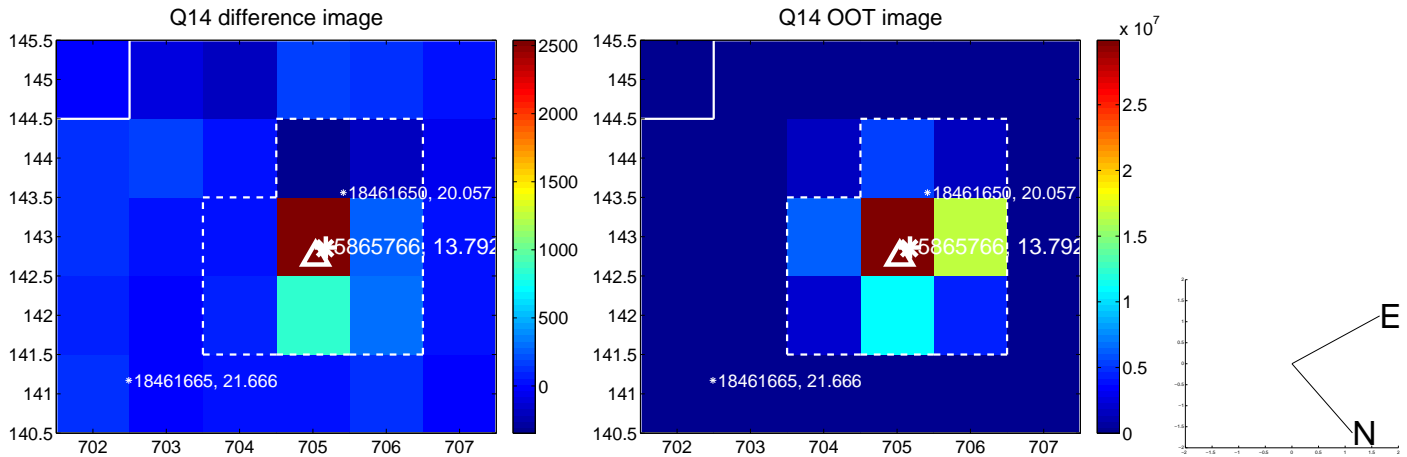
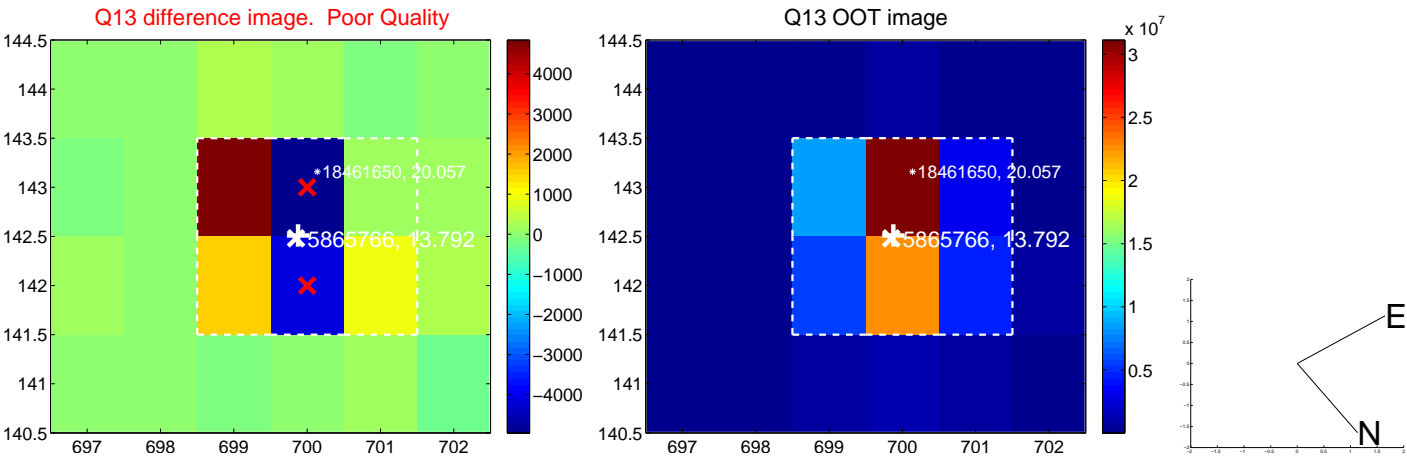
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



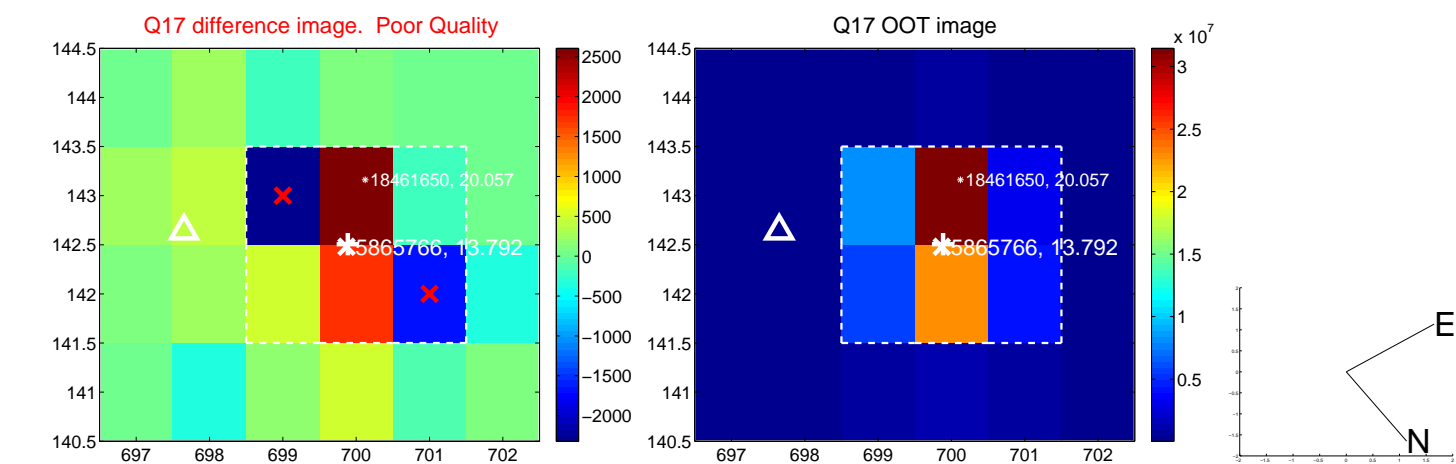
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



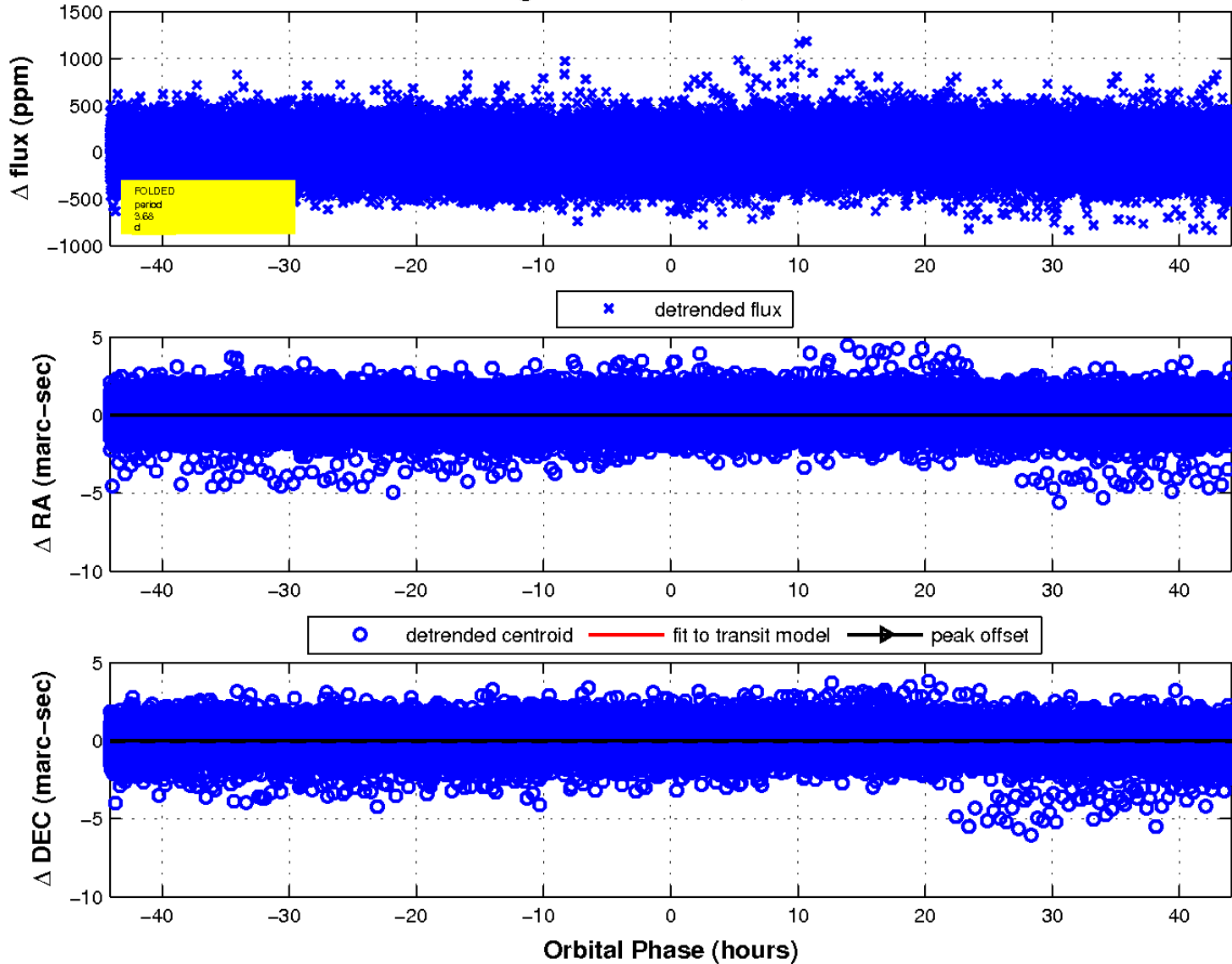
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

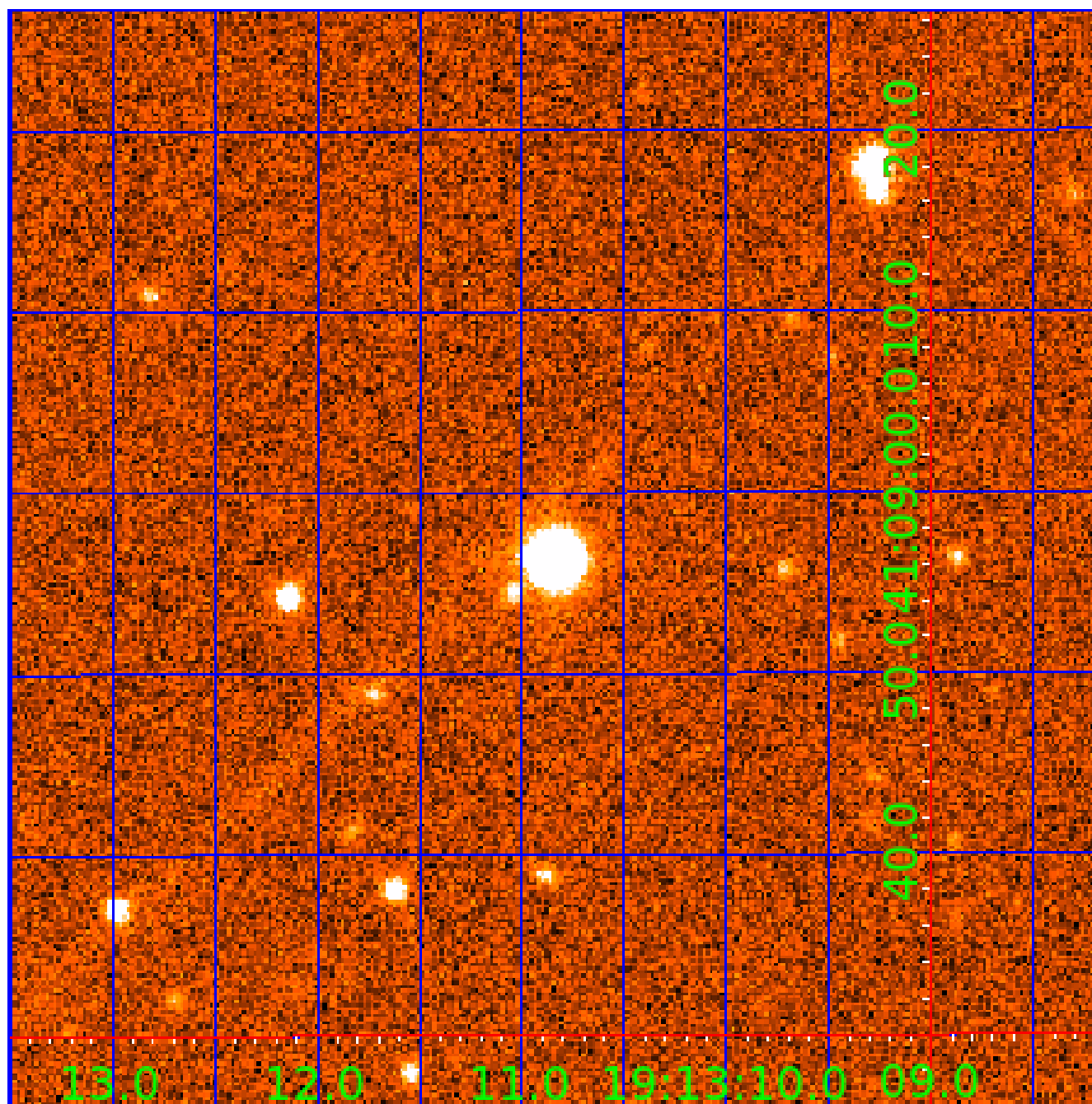


fluxWeightedCentroids, Planet 1 of 3



UKIRT Image

Declination



KIC 005865766

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R_{\star} (R_{\odot})	T_{\star} (K)	R_p (R_{\oplus})	S_p (S_{\oplus})
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005865766-02	OBS	No	185.314220	146.644745	206.9	7.473	10.7	6.5	2.15	6749	3.66	17.77
005865766-03	OBS	No	89.238471	191.105809	203.2	4.787	8.0	8.7	2.15	6749	3.39	47.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005865766-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005865766-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT— INCONSISTENT_TRANS—CENT_FEW_DIFFS
005865766-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

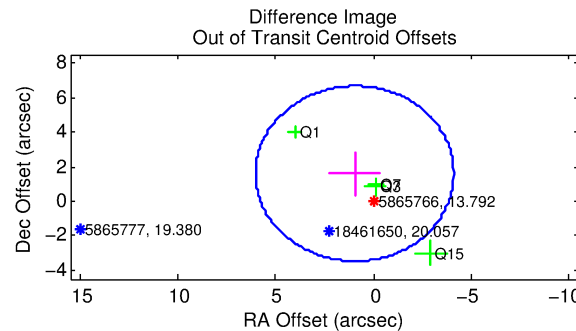
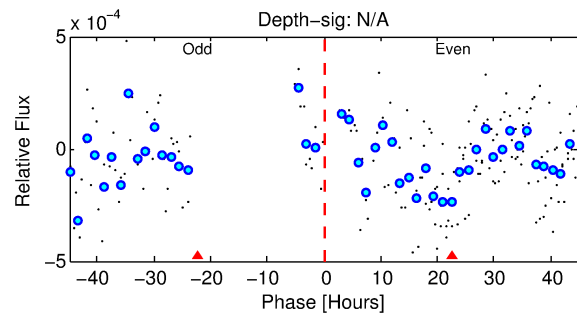
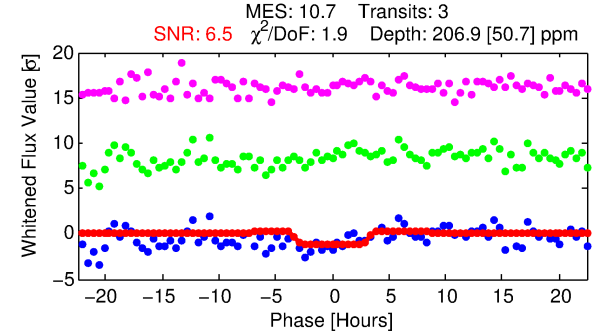
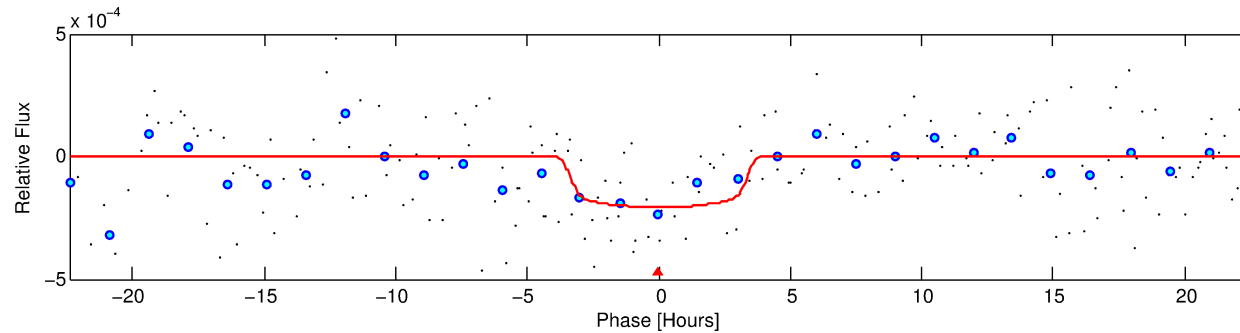
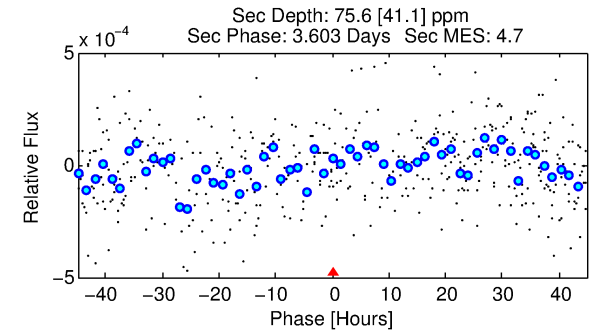
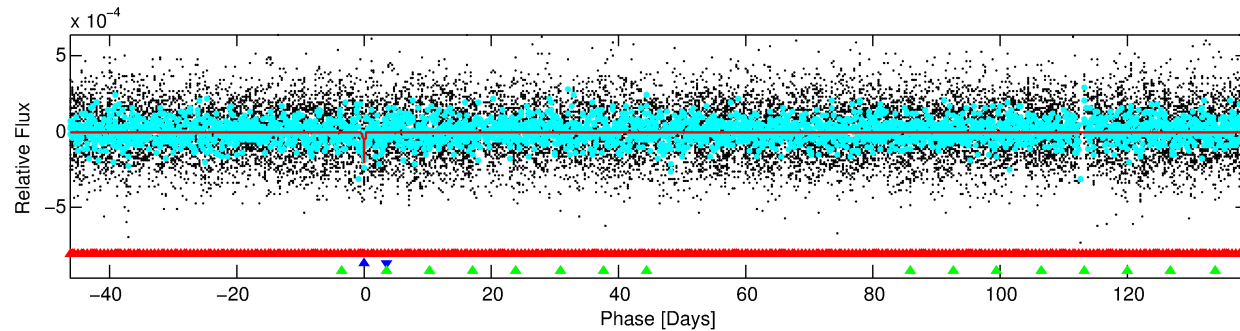
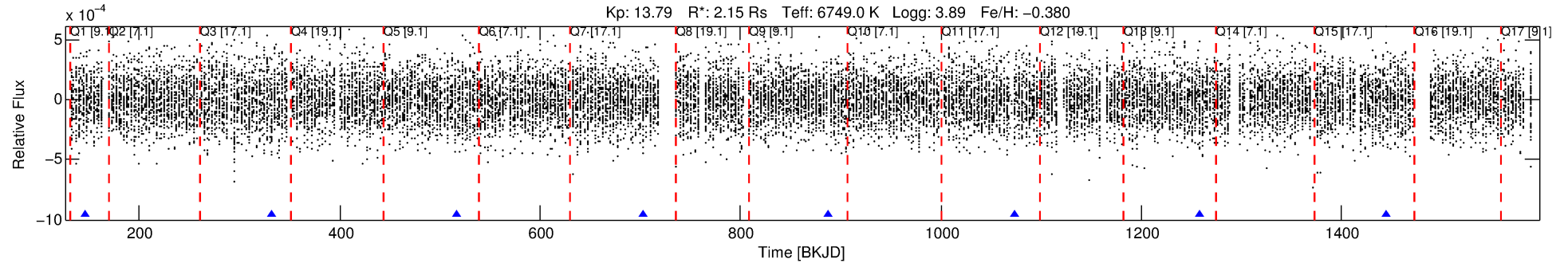
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005865766-02

No Significant Match Found

DV One-Page Summary

KIC: 5865766 Candidate: 2 of 3 Period: 185.314 d



DV Fit Results:

Period = 185.31422 [0.00920] d
Epoch = 146.6447 [0.0304] BKJD
Rp/R* = 0.0156 [0.0060]
a/R* = 81.93 [169.44]
b = 0.92 [0.36]
Seff = 17.77 [12.29]
Teq = 524 [91] K
Rp = 3.66 [2.11] Re
a = 0.6957 [0.2916] AU
Ag = 1501.87 [1736.95] [0.86σ]
Teffp = 5039 [1200] K [3.75σ]

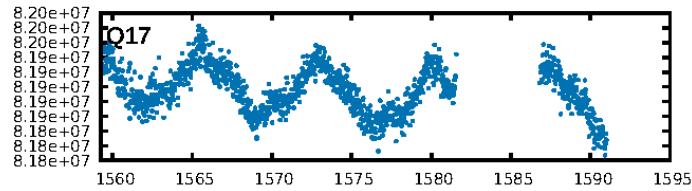
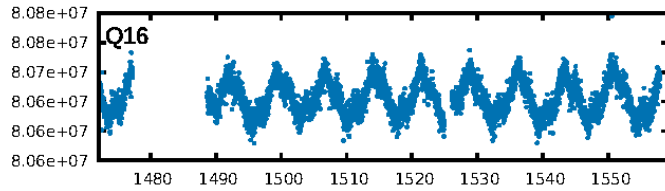
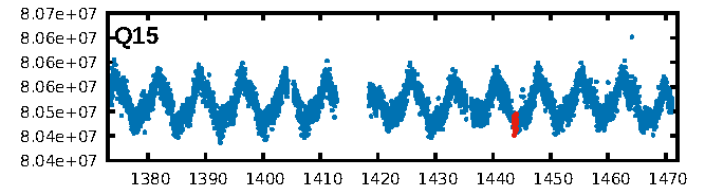
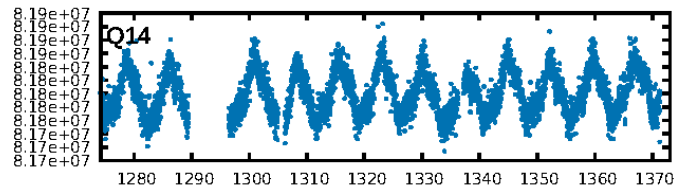
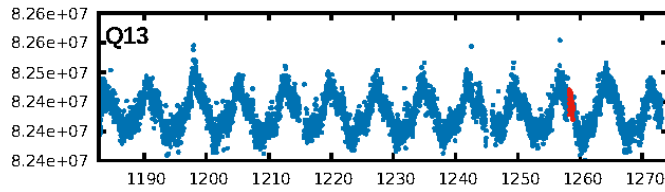
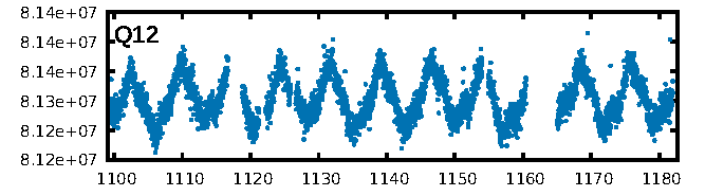
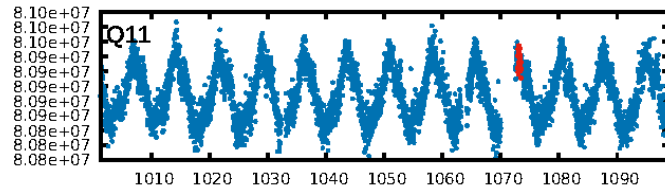
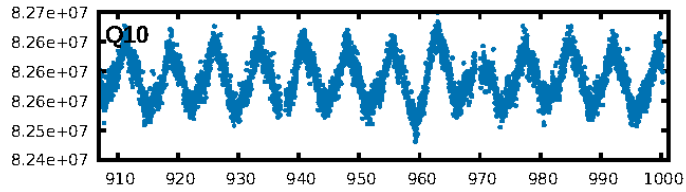
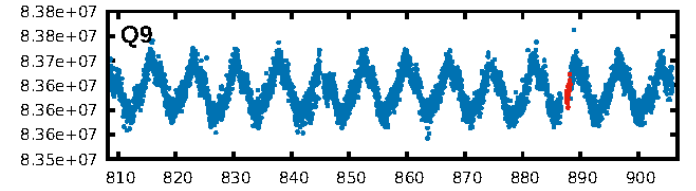
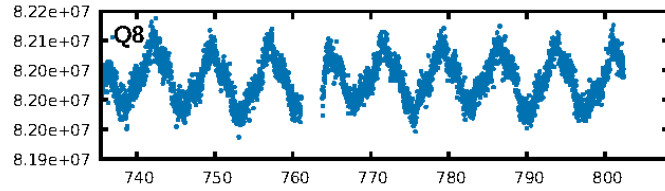
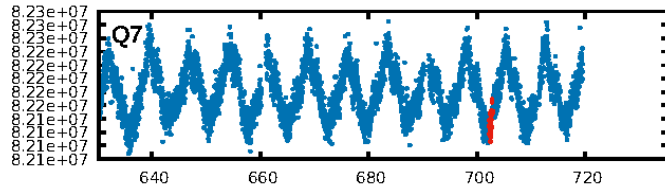
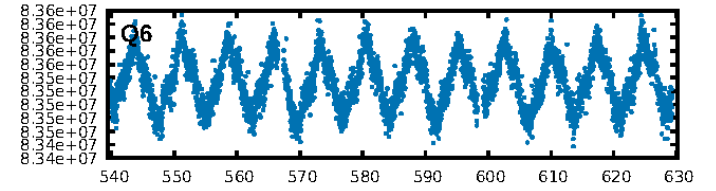
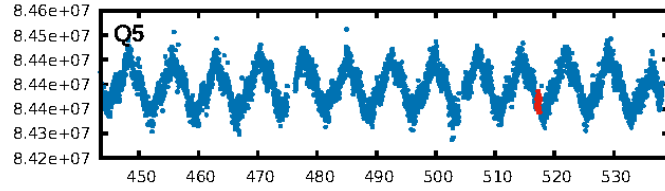
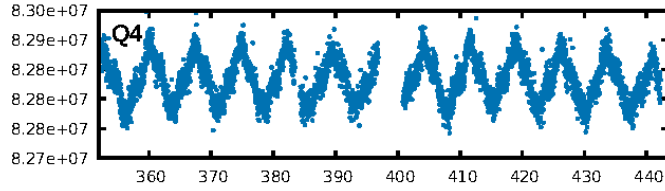
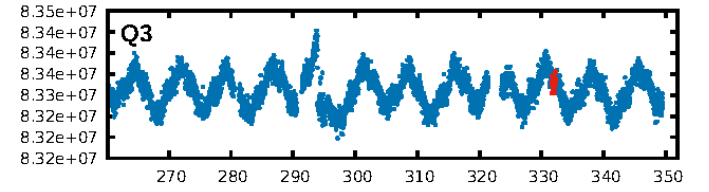
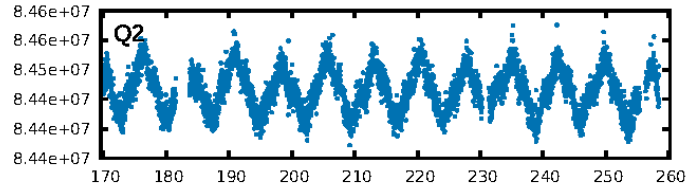
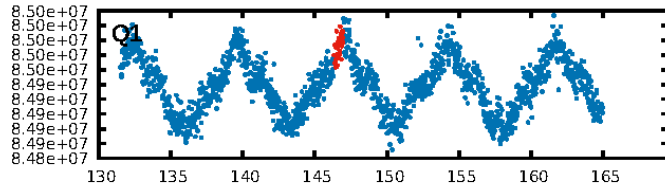
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [259.81σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 1.1%
ModelChiSquareGof-sig: 73.9%
Bootstrap-pfa: 4.74e-13
RollingBand-fgt: 1.00 [3/3]
GhostDiagnostic-chr: -2.997
Centroid-sig: 85.6%
Centroid-so: 0.403 arcsec [0.39σ]
OotOffset-rm: 1.866 arcsec [1.10σ]
OotOffset-st: 0/3/0/1 [4]
KicOffset-rm: 1.827 arcsec [1.04σ]
KicOffset-st: 0/3/0/1 [4]
DiffImageQuality-fgm: 0.75 [3/4]
DiffImageOverlap-fno: 0.50 [3/6]

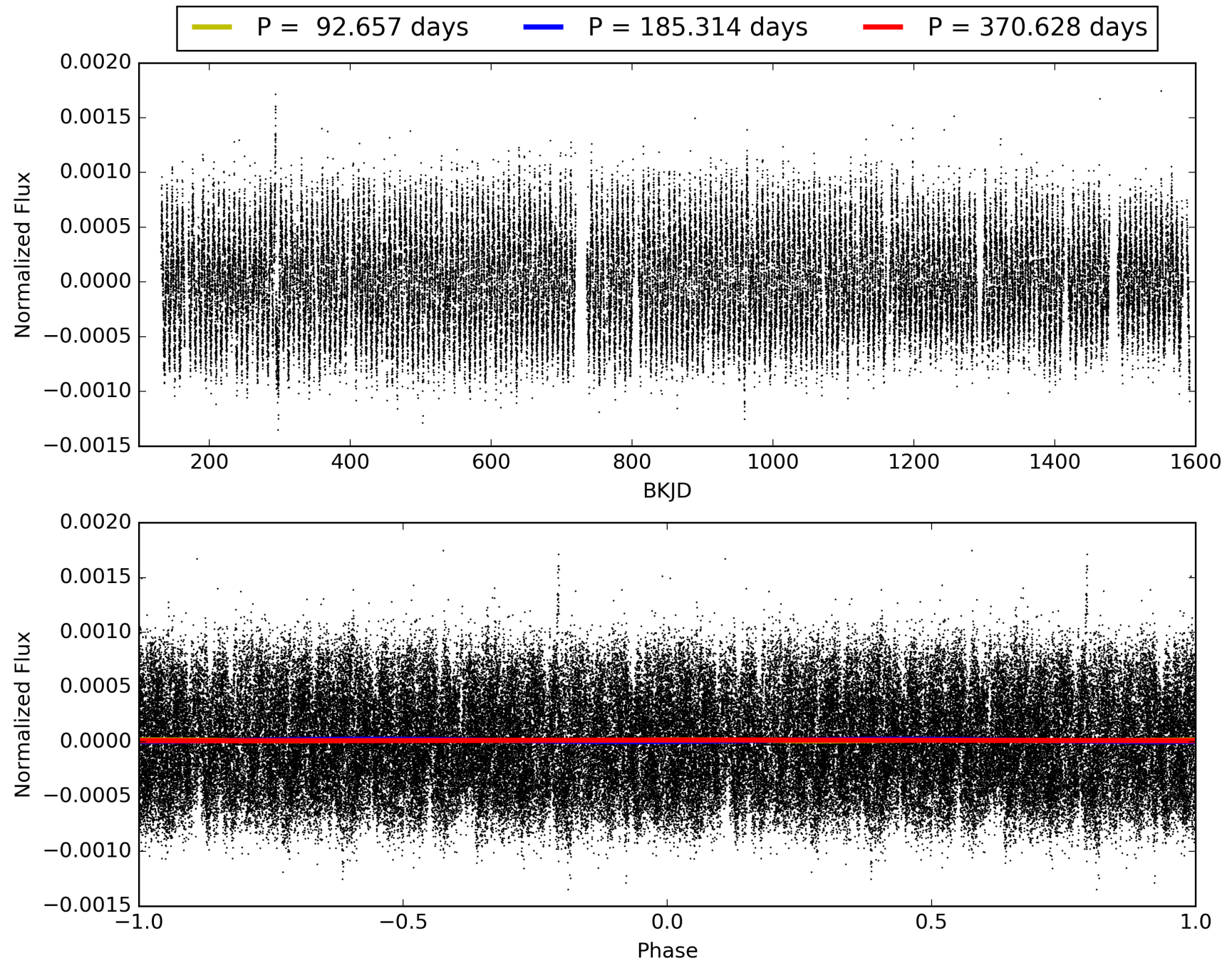
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:49:21 Z

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

TCE 005865766-02, PDC Light Curves

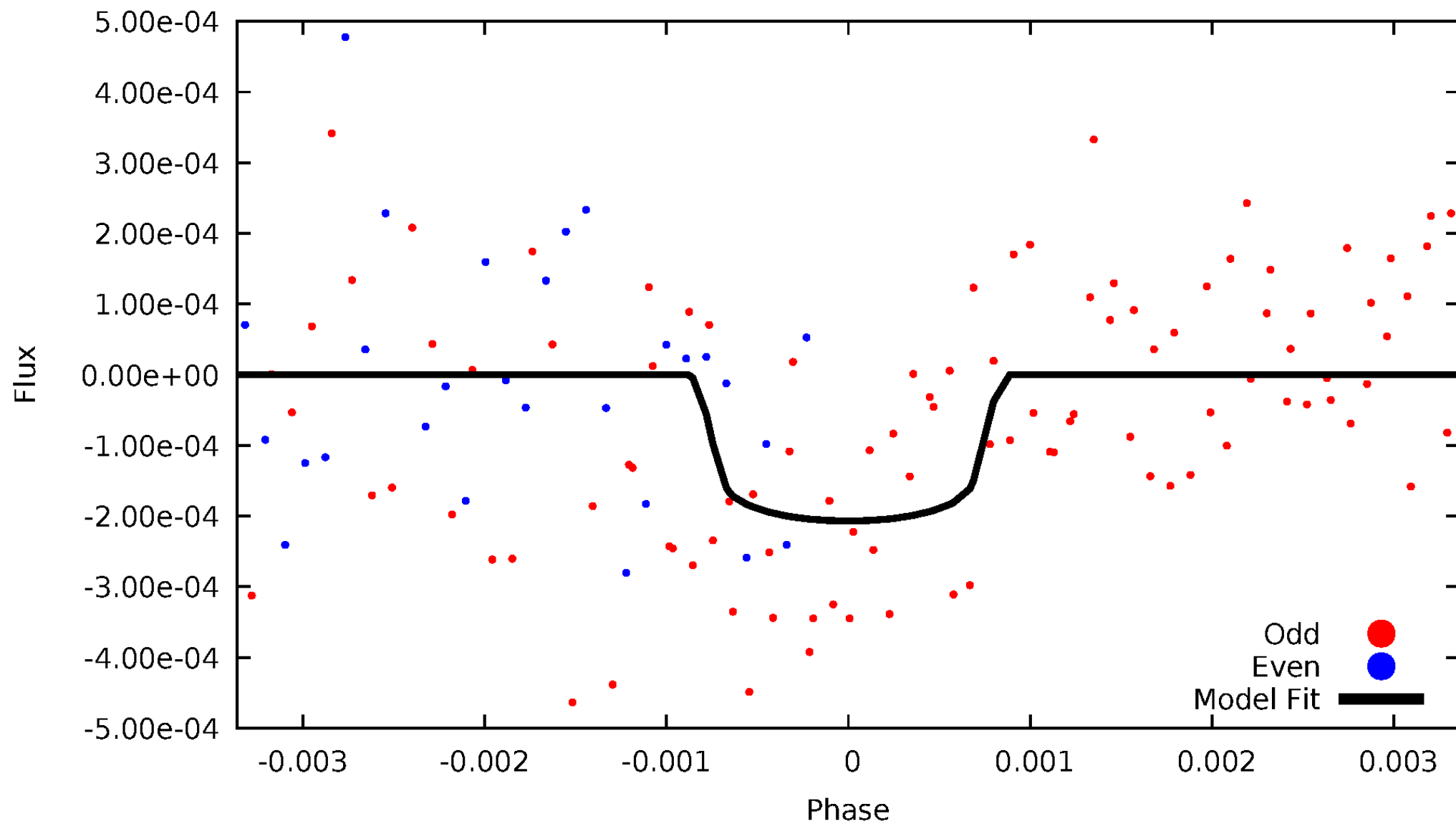


TCE 005865766-02



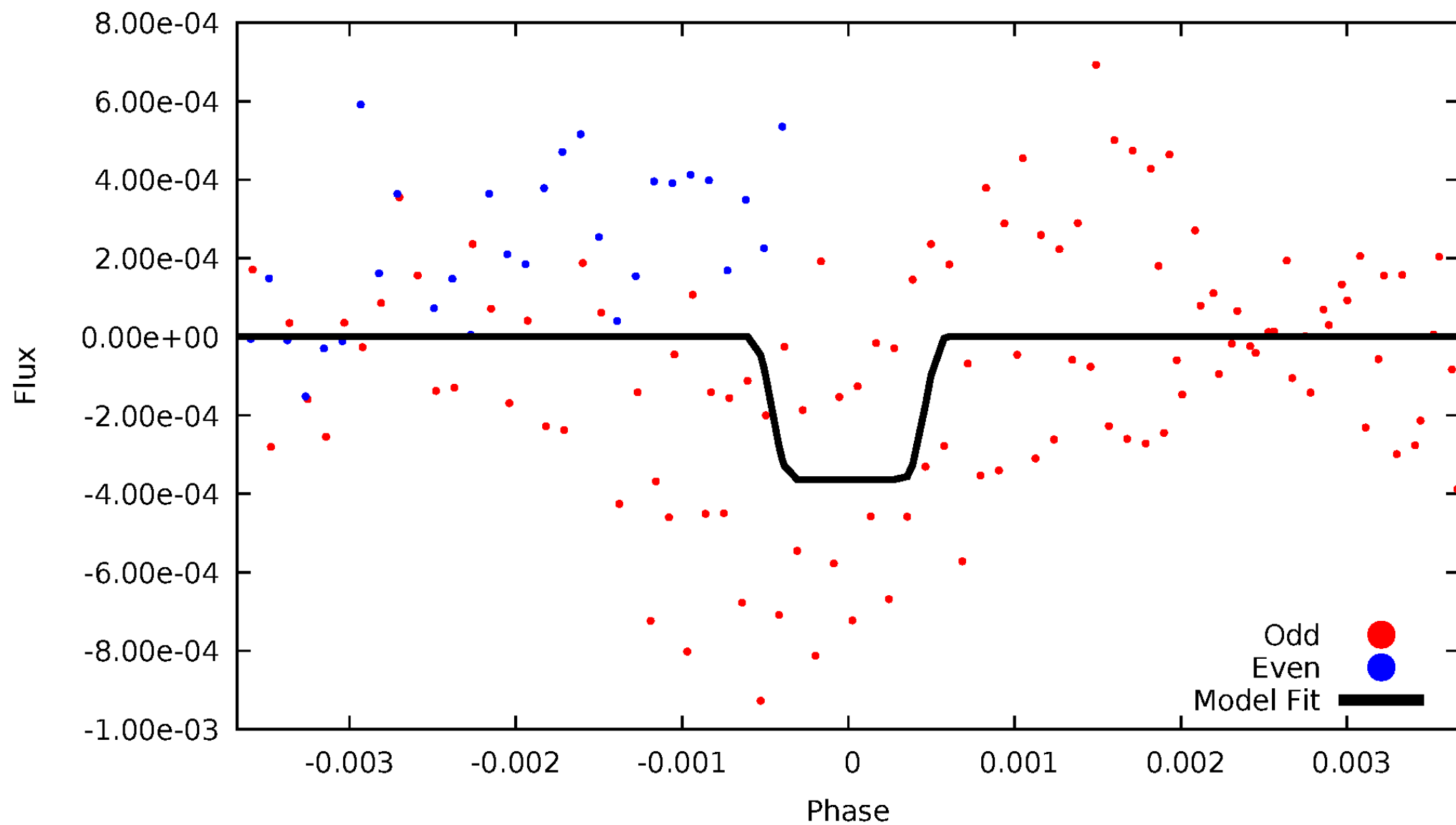
DV Odd/Even

TCE 005865766-02



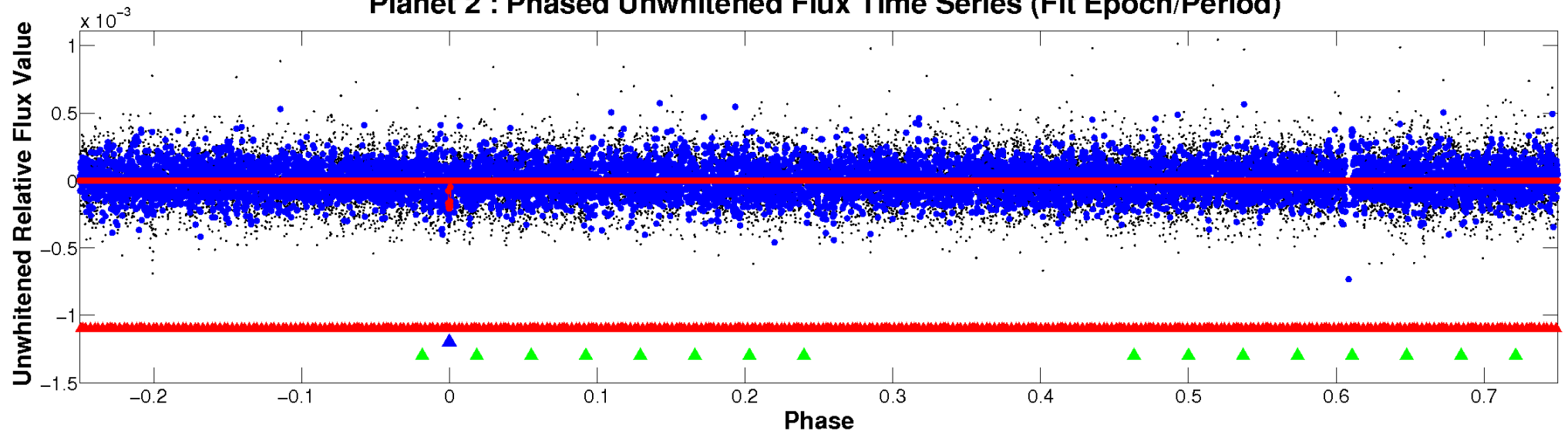
ALT Odd/Even

TCE 005865766-02

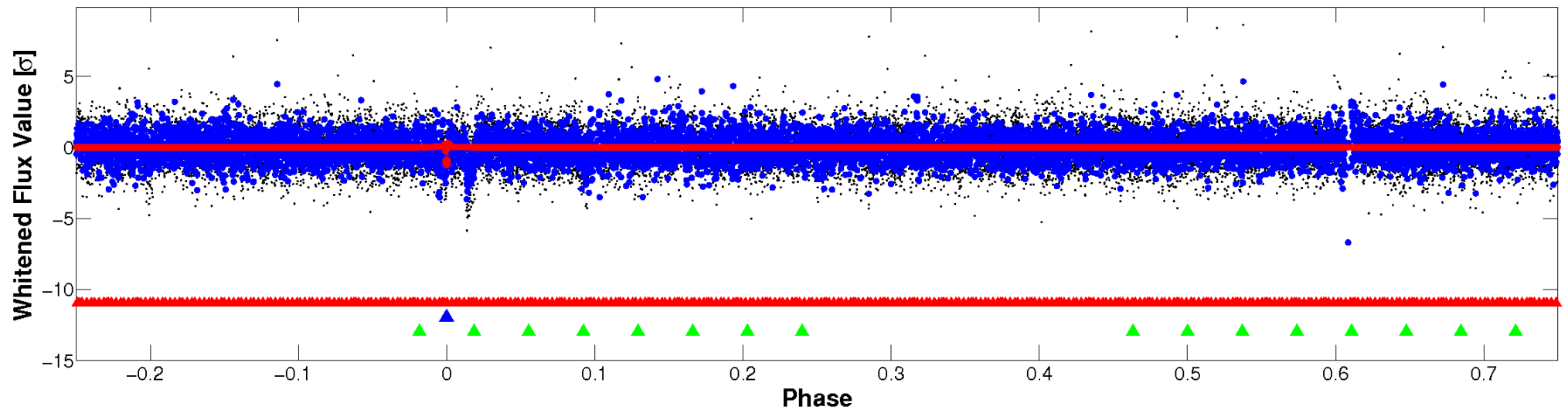


Non-Whitened Vs. Whitened Light Curve

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

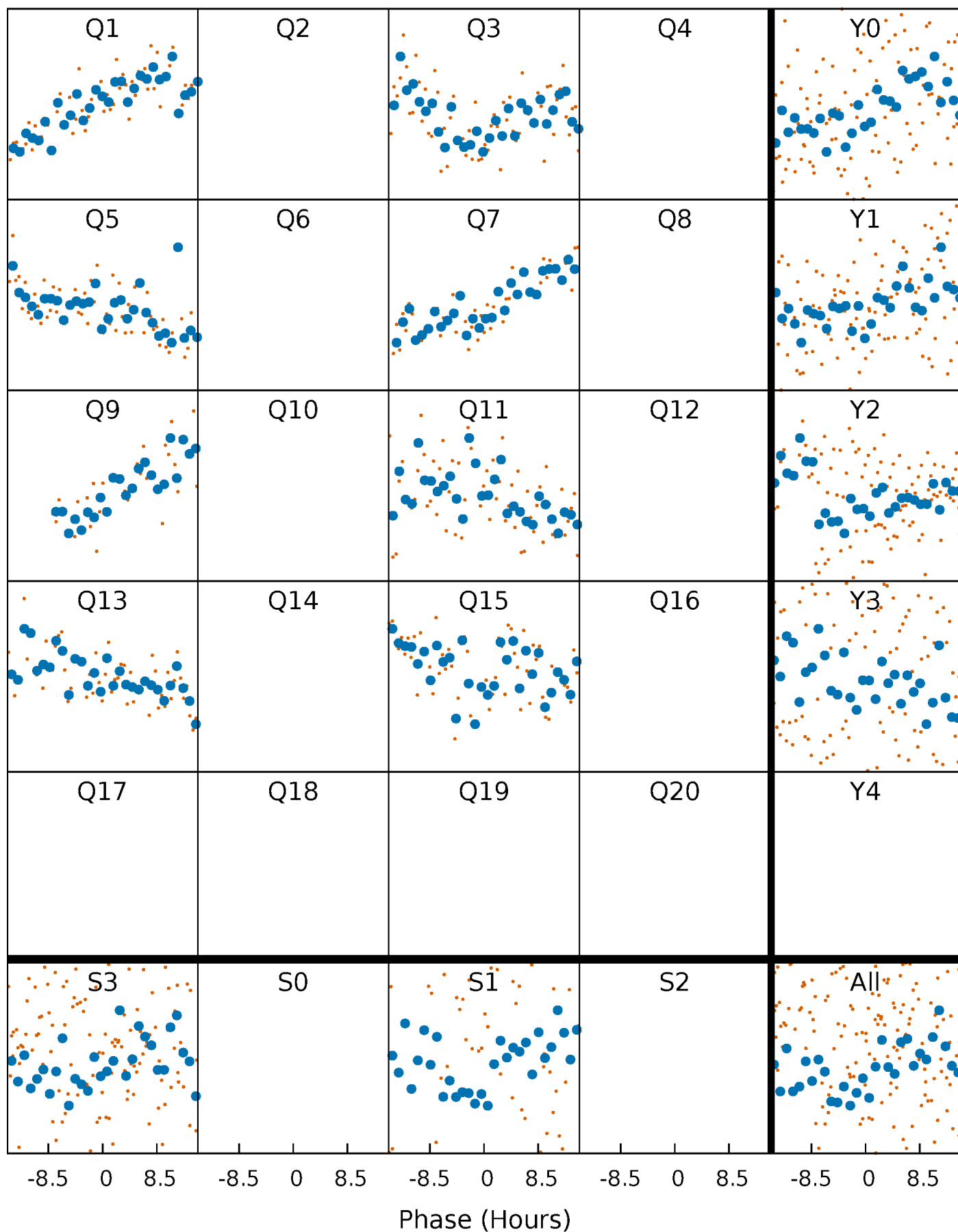


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



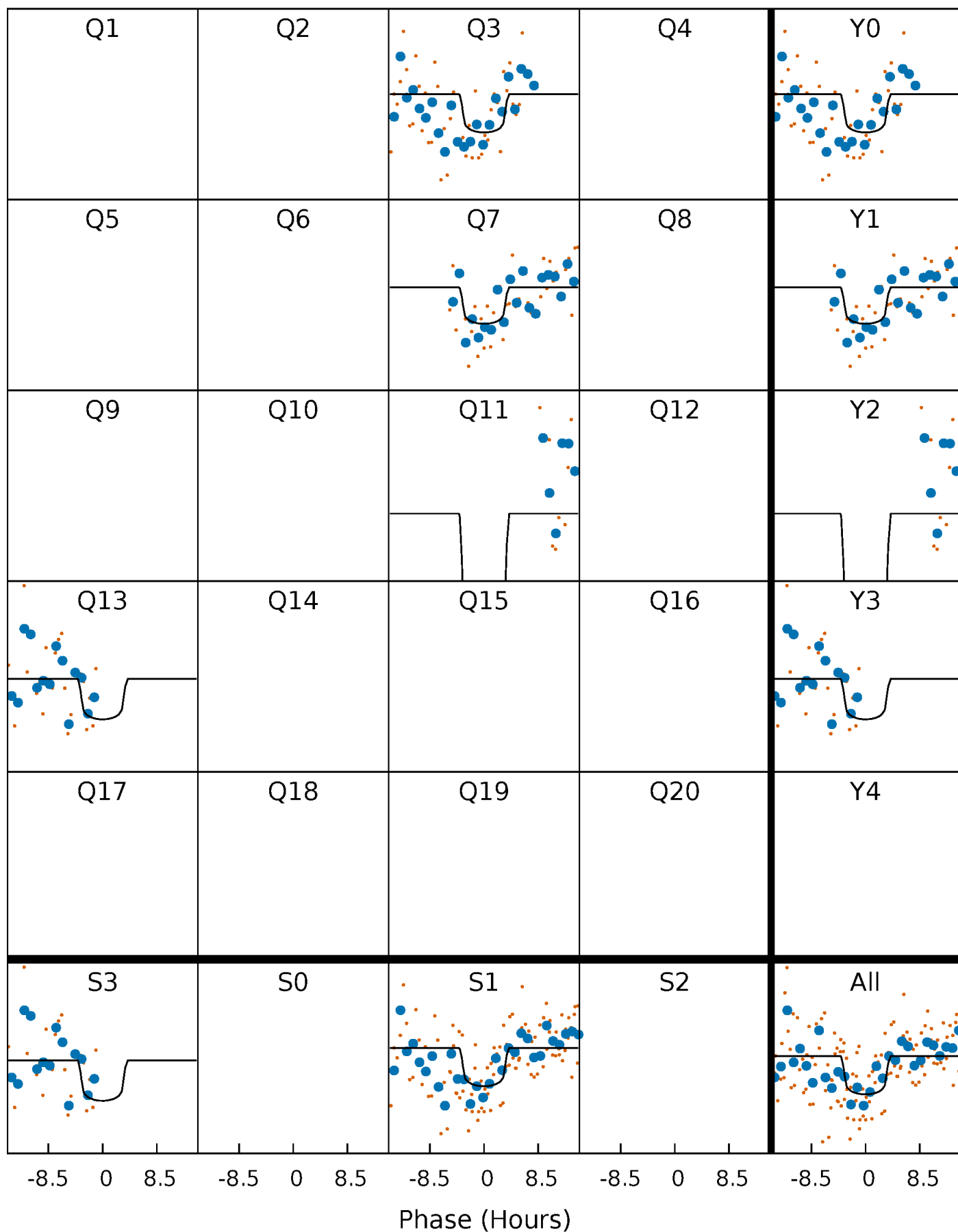
PDC Quarter-Phased Transit Curves

TCE 005865766-02 P=185.314220 Days $T_0=146.644745$ (BKJD)



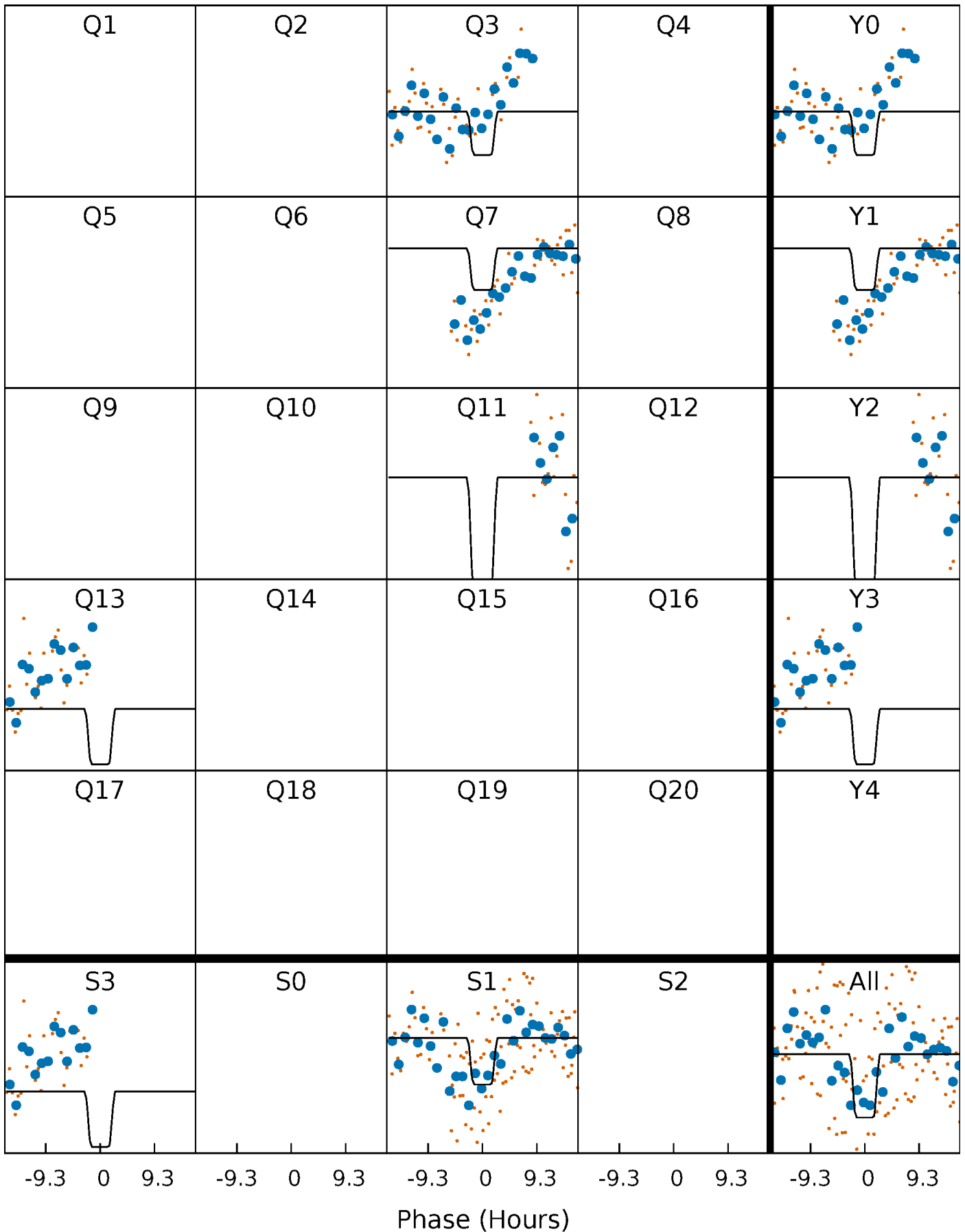
DV Quarter-Phased Transit Curves

TCE 005865766-02 $P=185.314220$ Days $T_0=146.644745$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

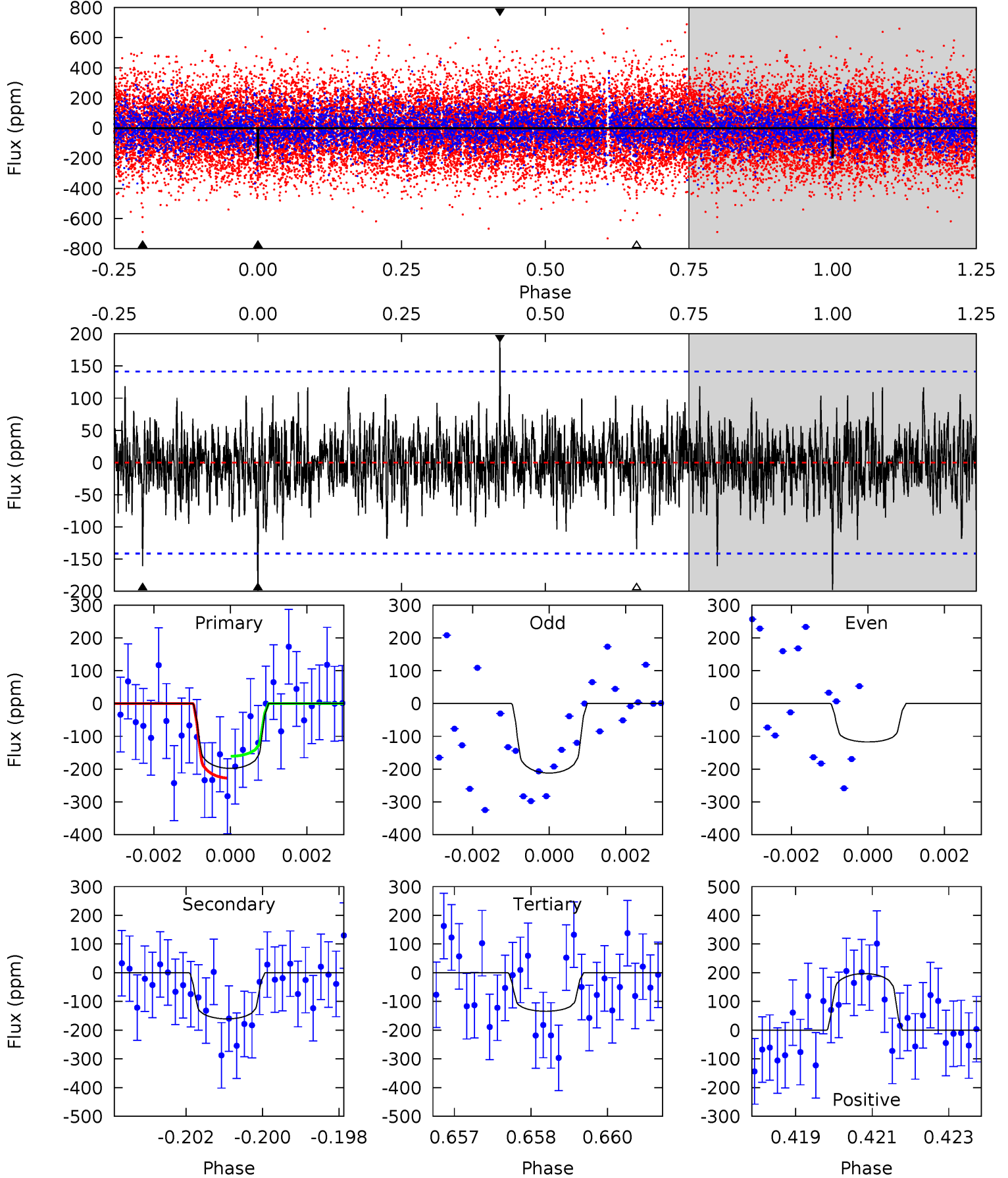
TCE 005865766-02 P=185.325578 Days $T_0=146.607532$ (BKJD)



DV Model-Shift Uniqueness Test

005865766-02, P = 185.314220 Days, E = 146.644745 Days

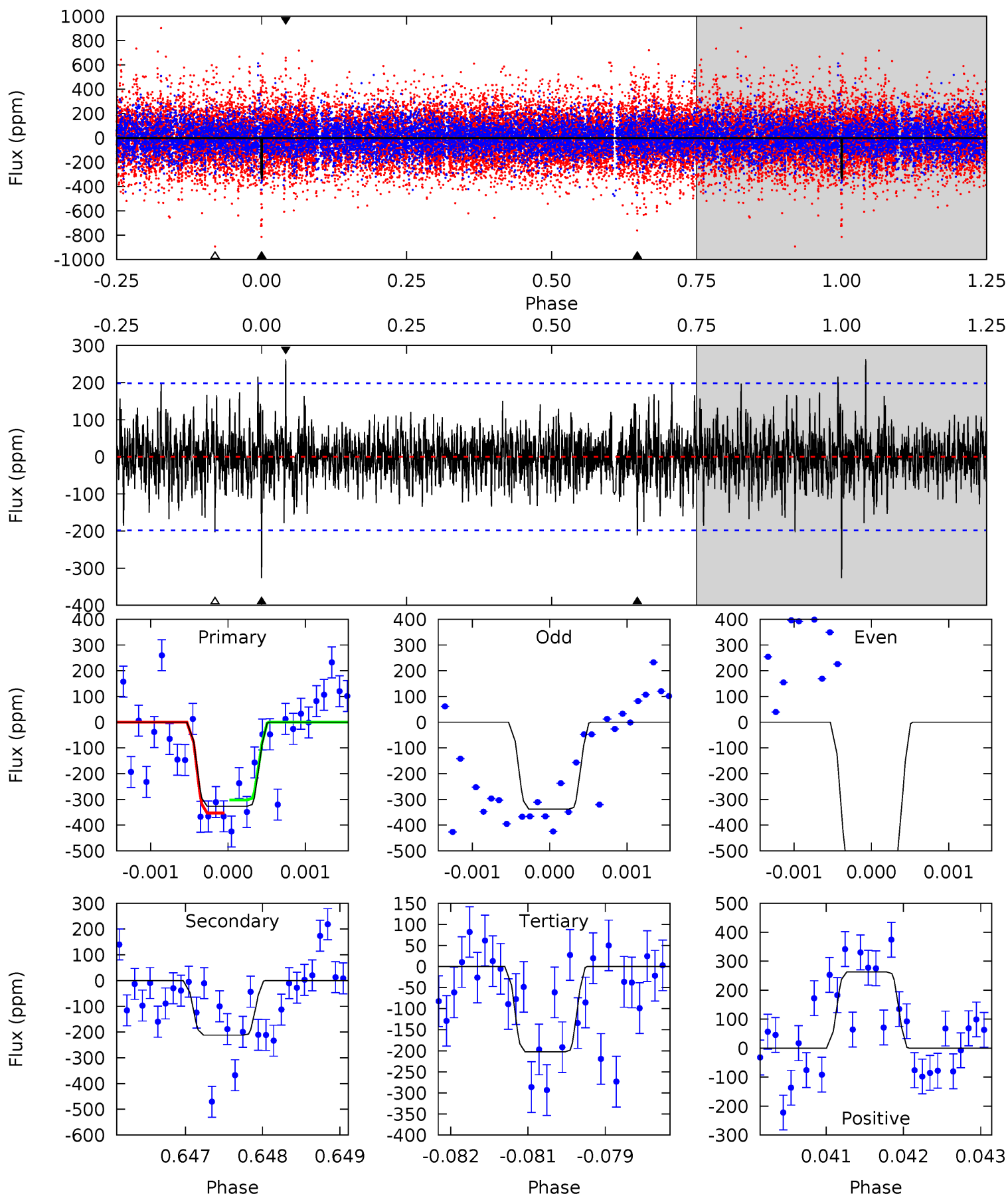
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.48	6.07	5.07	7.45	5.35	3.12	1.41	2.41	0.03	1.00	-1.38	1.33	0.92	0.50	1.26



Alt Model-Shift Uniqueness Test

005865766-02, P = 185.325578 Days, E = 146.607532 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
8.94	5.80	5.55	7.20	5.43	3.25	1.39	3.39	1.74	0.25	-1.40	1.84	0.37	0.45	0.69



Stellar Parameters For KIC 005865766

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	6749^{+190}_{-262}	$3.889^{+0.397}_{-0.132}$	$-0.380^{+0.300}_{-0.300}$	$2.151^{+0.500}_{-0.929}$	$1.307^{+0.184}_{-0.253}$	$0.185^{+0.655}_{-0.075}$
	+3%/-4%	+10%/-3%	+79%/-79%	+23%/-43%	+14%/-19%	+354%/-40%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005865766-02 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-161 ± 26	$3.34^{+1.52}_{-1.33}$	714^{+56}_{-73}	6081^{+1742}_{-909}	3835^{+6692}_{-2051}
Alt.	-212 ± 37	$3.99^{+1.70}_{-1.37}$	713^{+54}_{-88}	5933^{+1224}_{-801}	3492^{+4714}_{-1771}

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

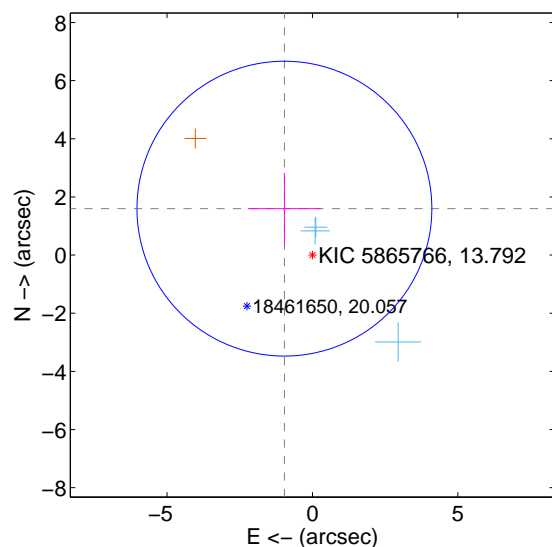
Supplemental centroid analysis for 005865766-02. Kepler magnitude: 13.79. Transit SNR 6.48

There are 3 quarters with good PRF difference image offsets

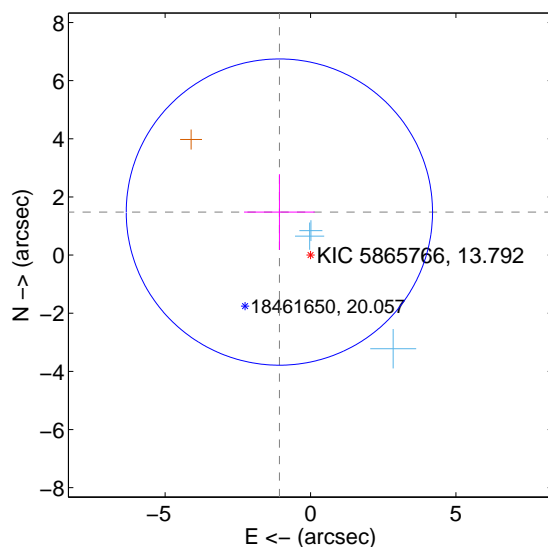
The direct PRF centroid is offset from the target star catalog position by about 0.26 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.866 ± 1.690	1.10	0.964 ± 1.255	1.598 ± 1.228
PRF-fit source offset from KIC position	1.827 ± 1.755	1.04	1.071 ± 1.215	1.480 ± 1.304
photometric centroid source offset	0.40 ± 1.02	0.39	0.03 ± 1.09	-0.40 ± 1.02

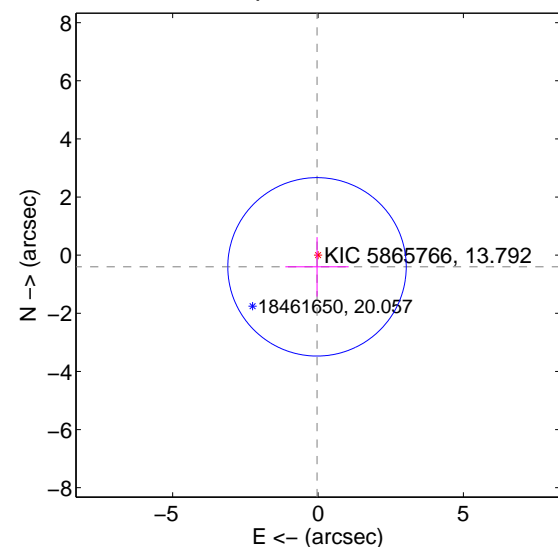
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

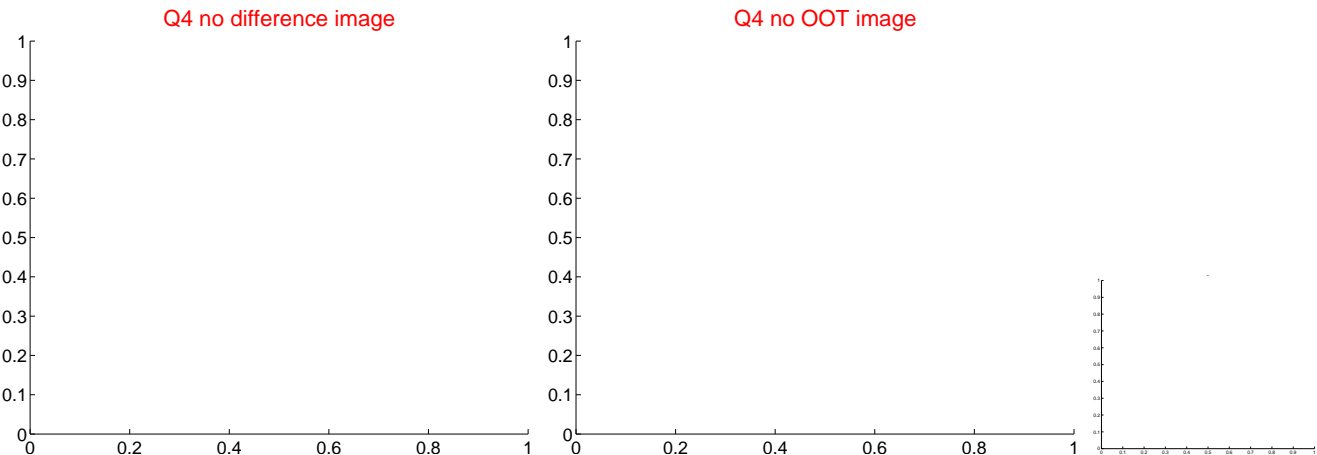
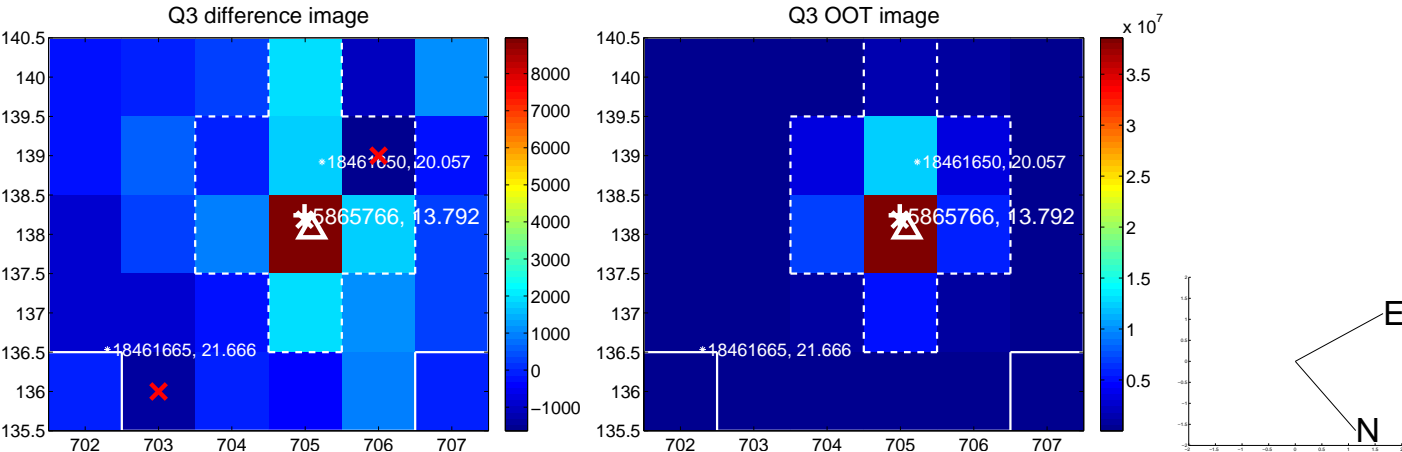
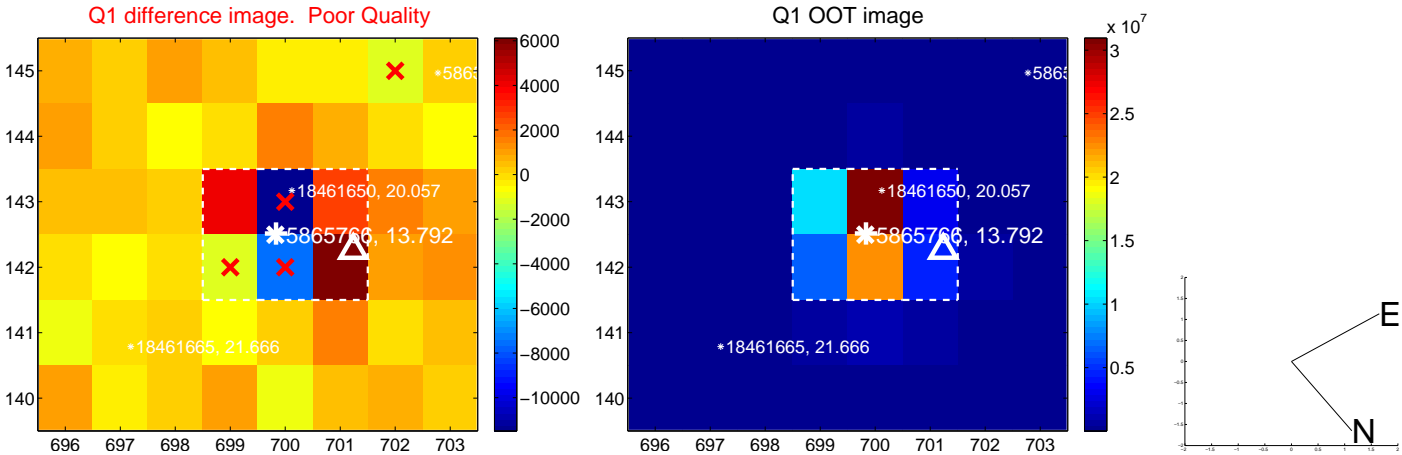


offset from photometric centroids

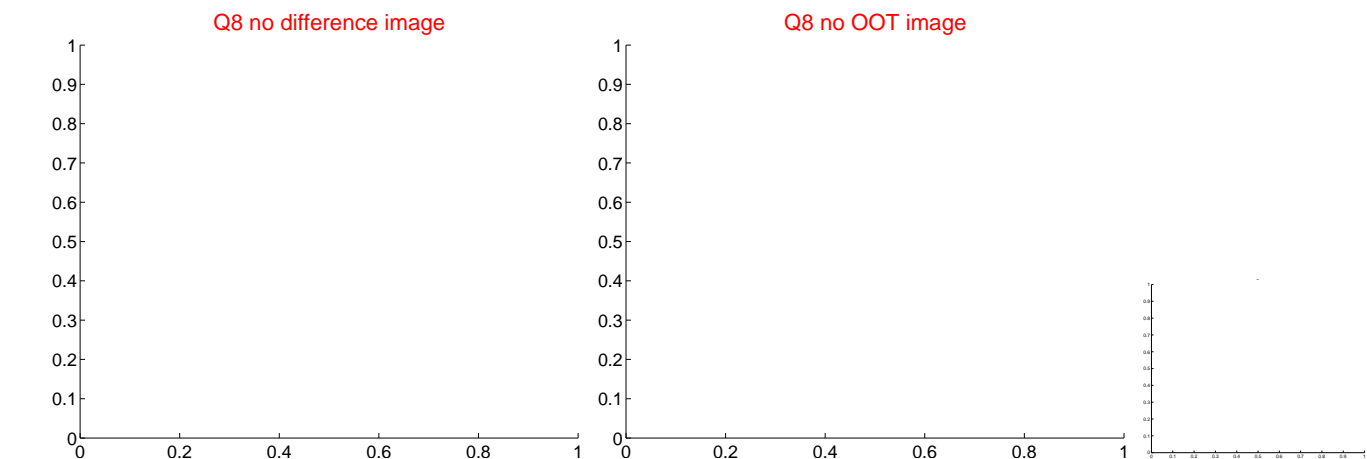
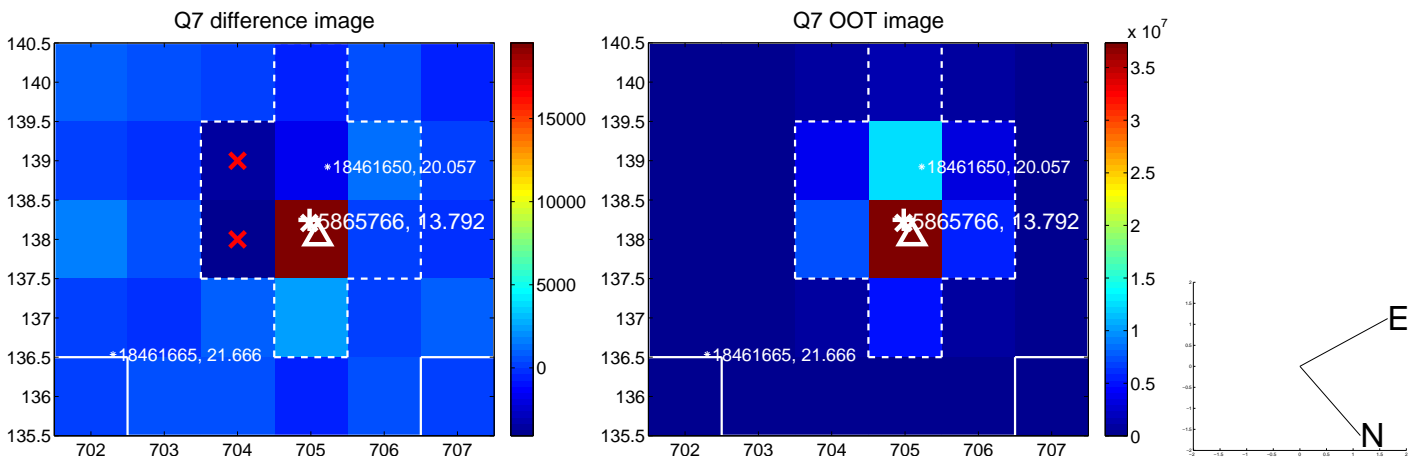
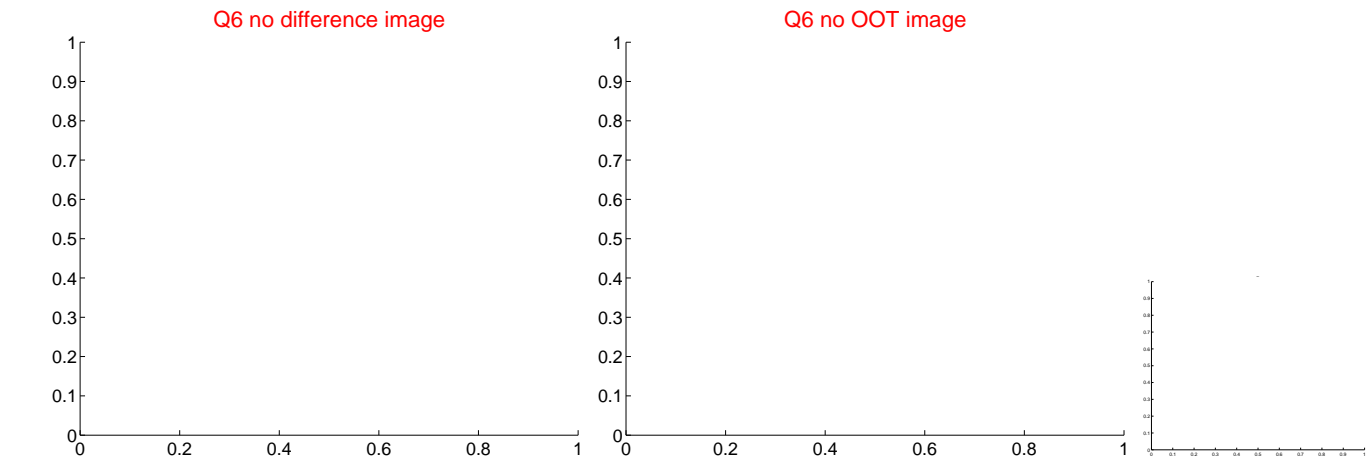
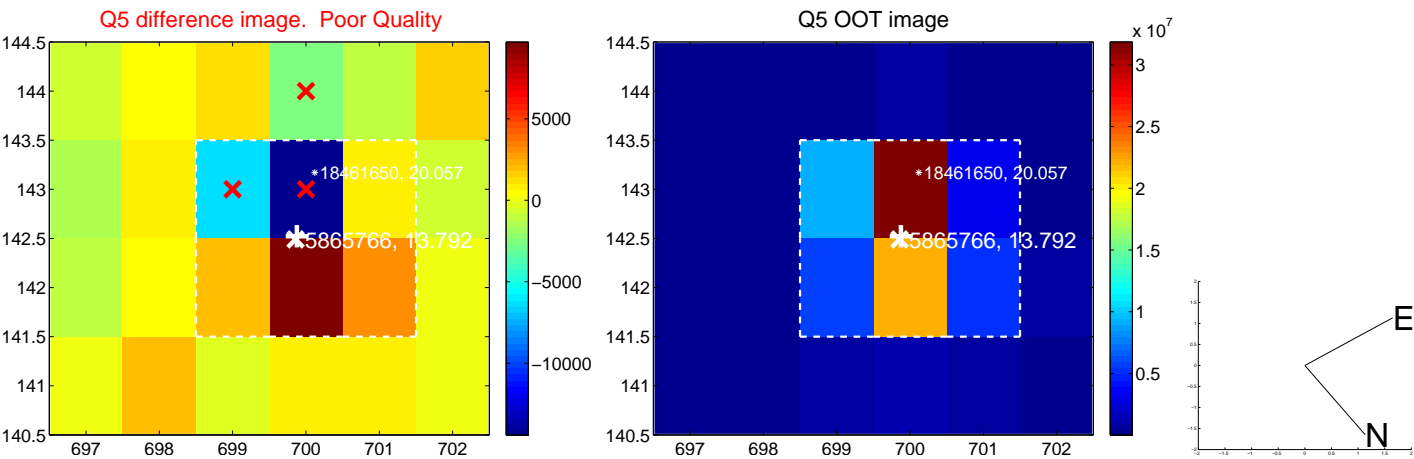


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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



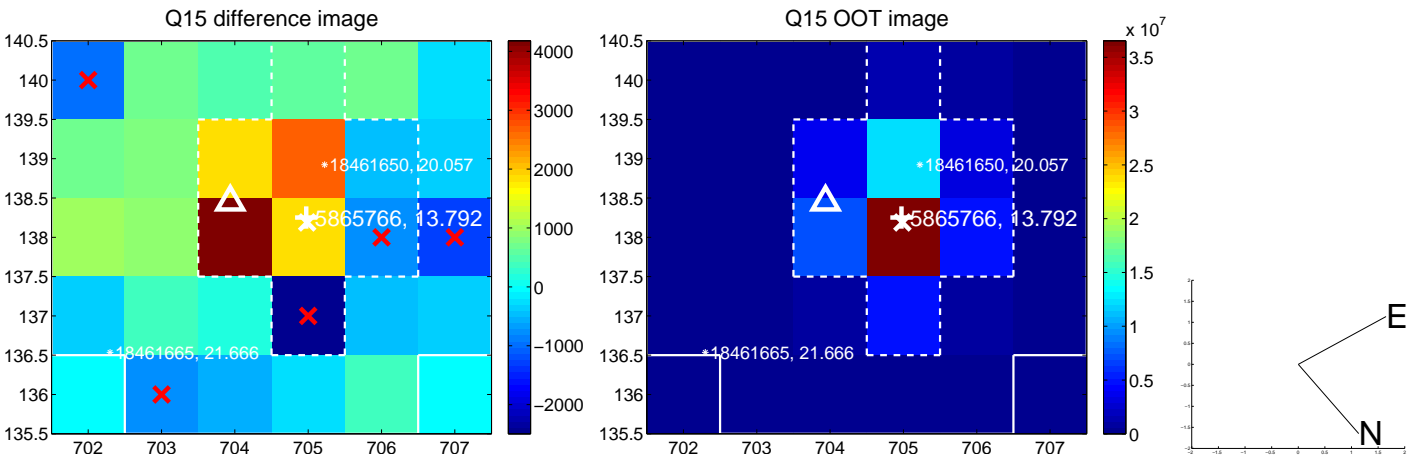
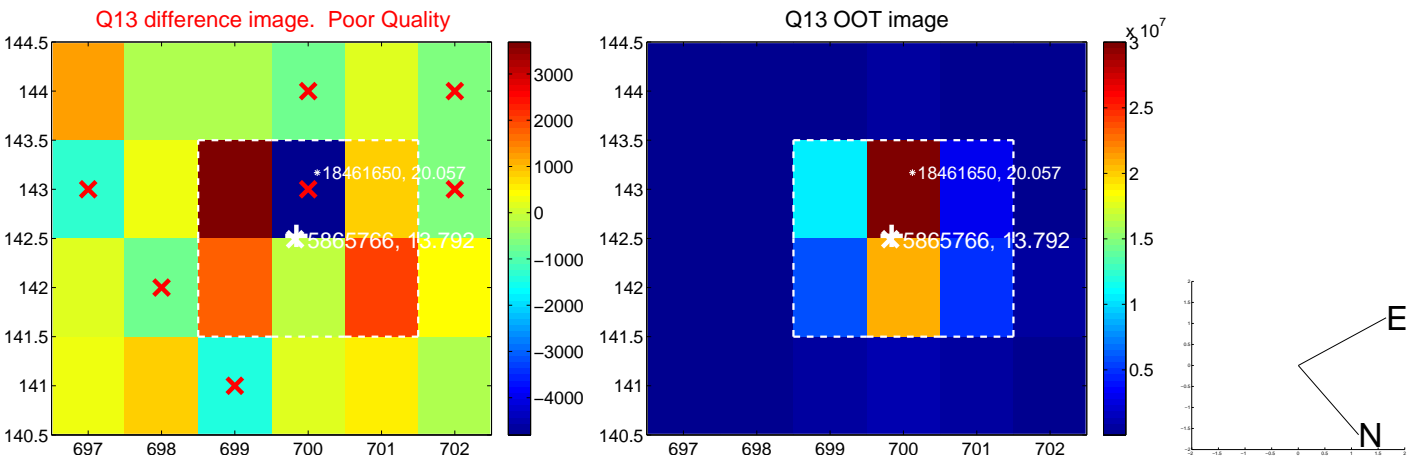
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



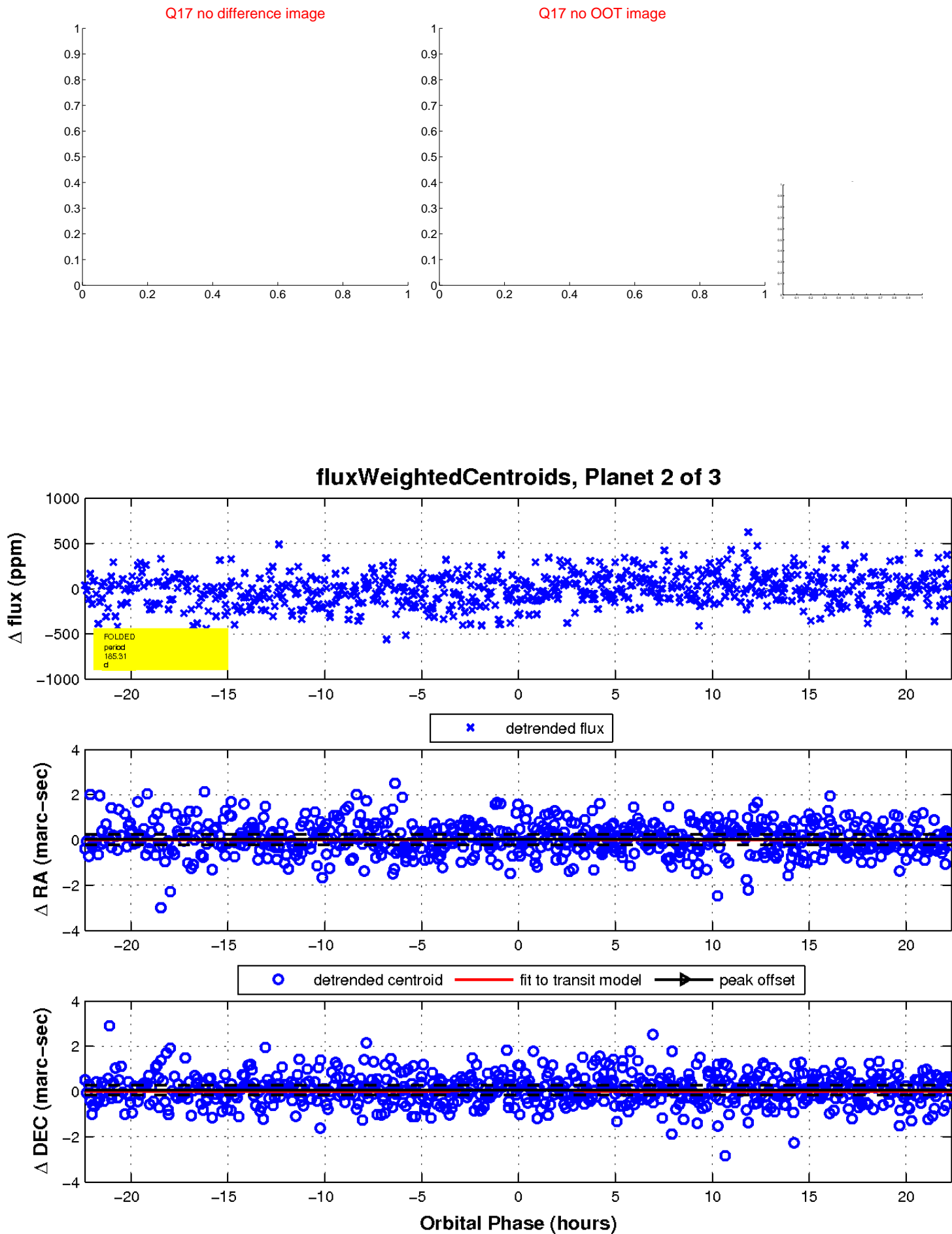
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

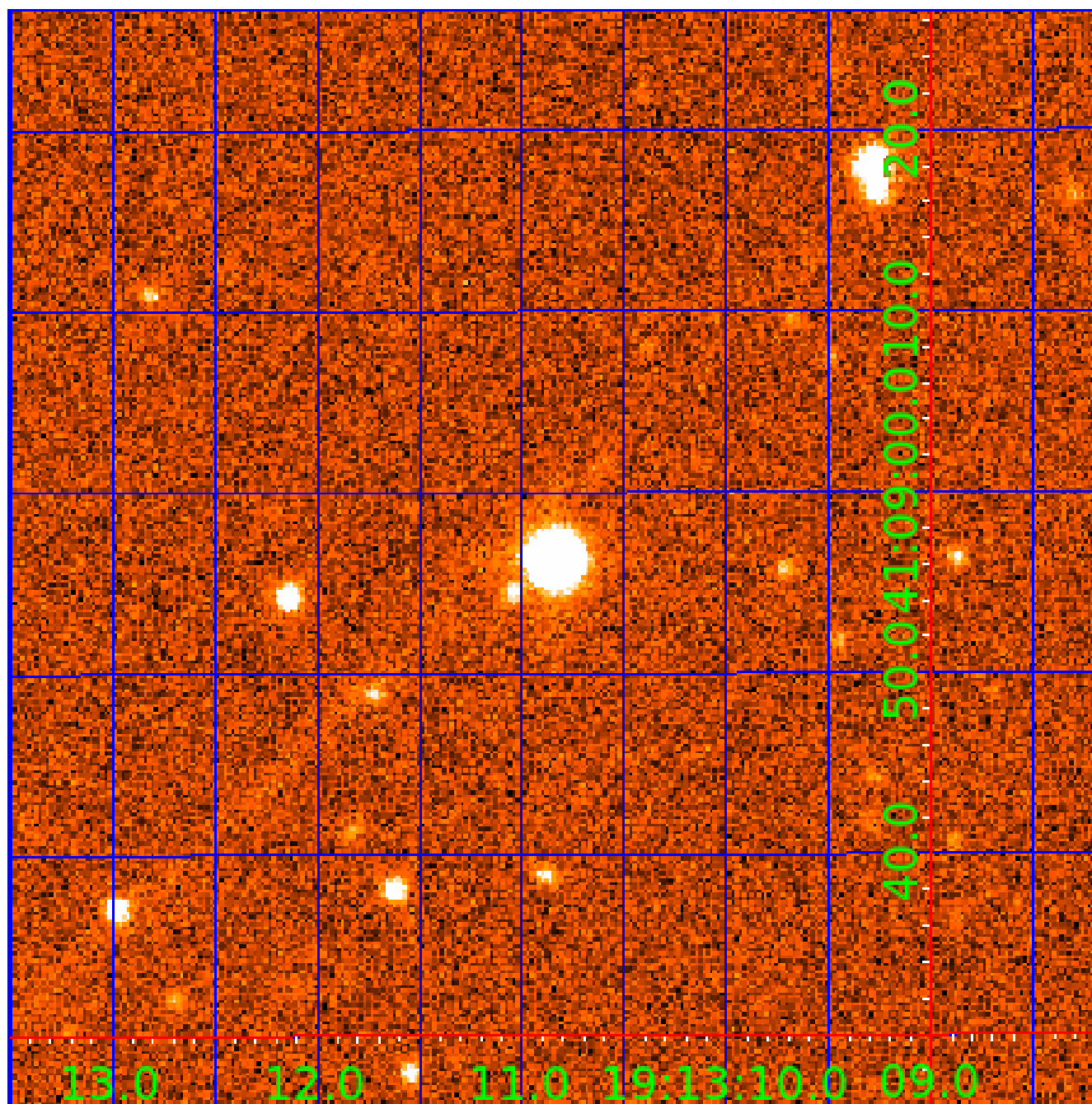


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 005865766

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})
005865766-01	OBS	No	3.675423	135.080179	19.4	19.945	8.4	8.0	2.15	6749	1.02	3310.31
005865766-02	OBS	No	185.314220	146.644745	206.9	7.473	10.7	6.5	2.15	6749	3.66	17.77
005865766-03	OBS	No	89.238471	191.105809	203.2	4.787	8.0	8.7	2.15	6749	3.39	47.08

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
005865766-01	OBS	FP	0.00	1	0	0	0	SWEET_NTL—LPP_DV
005865766-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—LPP_ALT—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—MOD_POS_ALT—INCONSISTENT_TRANS—CENT_FEW_DIFFS
005865766-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE—TRANS_GAPPED—LPP_DV—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

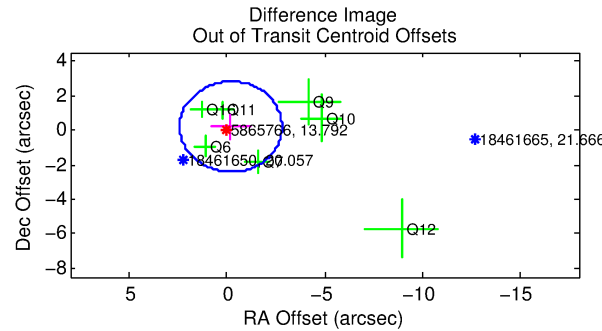
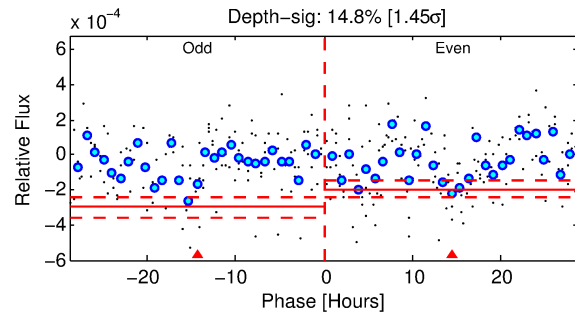
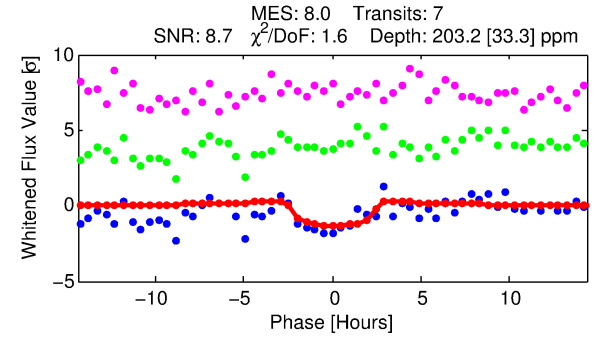
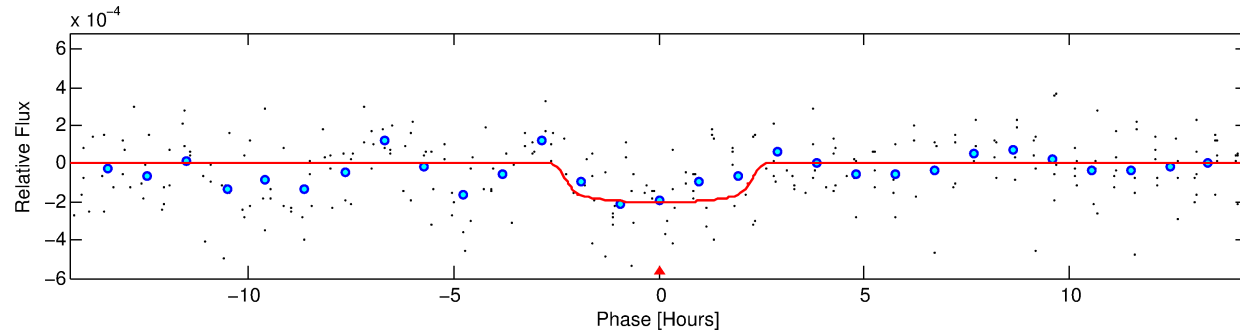
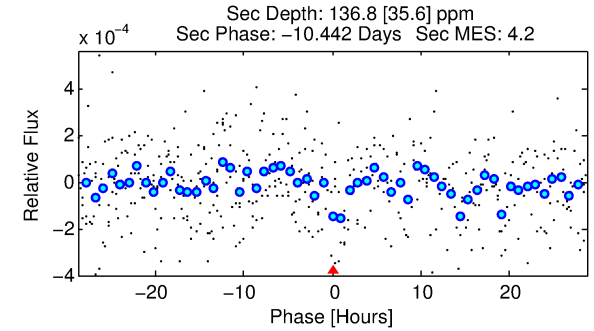
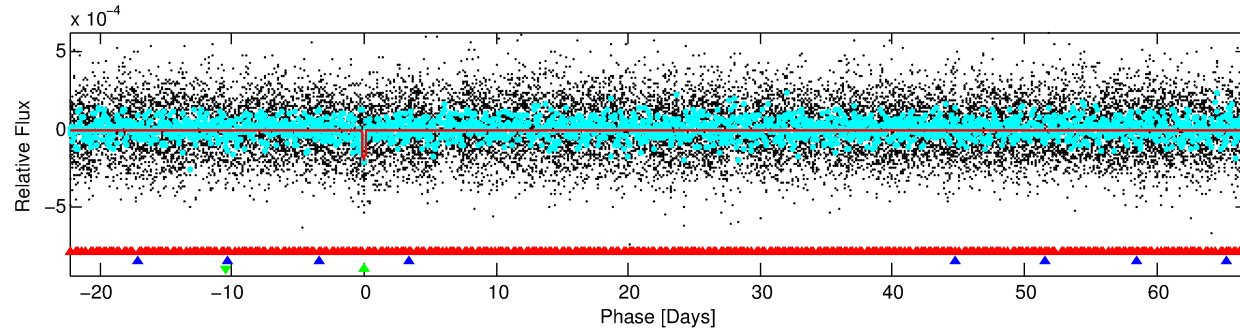
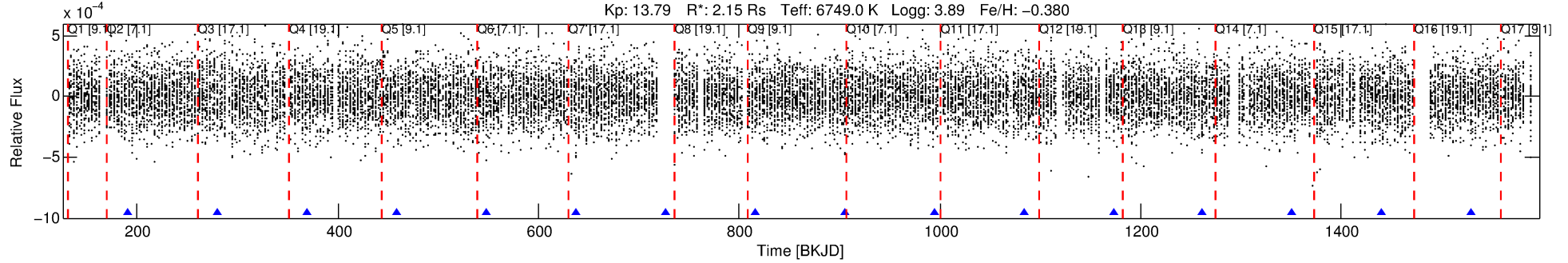
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 005865766-03

No Significant Match Found

DV One-Page Summary

KIC: 5865766 Candidate: 3 of 3 Period: 89.238 d



DV Fit Results:

Period = 89.23847 [0.00172] d
Epoch = 191.1058 [0.0166] BKJD
Rp/R* = 0.0144 [0.0135]
a/R* = 87.97 [483.45]
b = 0.80 [2.42]
Seff = 47.08 [32.57]
Teq = 668 [116] K
Rp = 3.39 [3.50] Re
a = 0.4274 [0.1792] AU
Ag = 1196.11 [2401.14] [0.50σ]
Teffp = 6073 [2881] K [1.87σ]

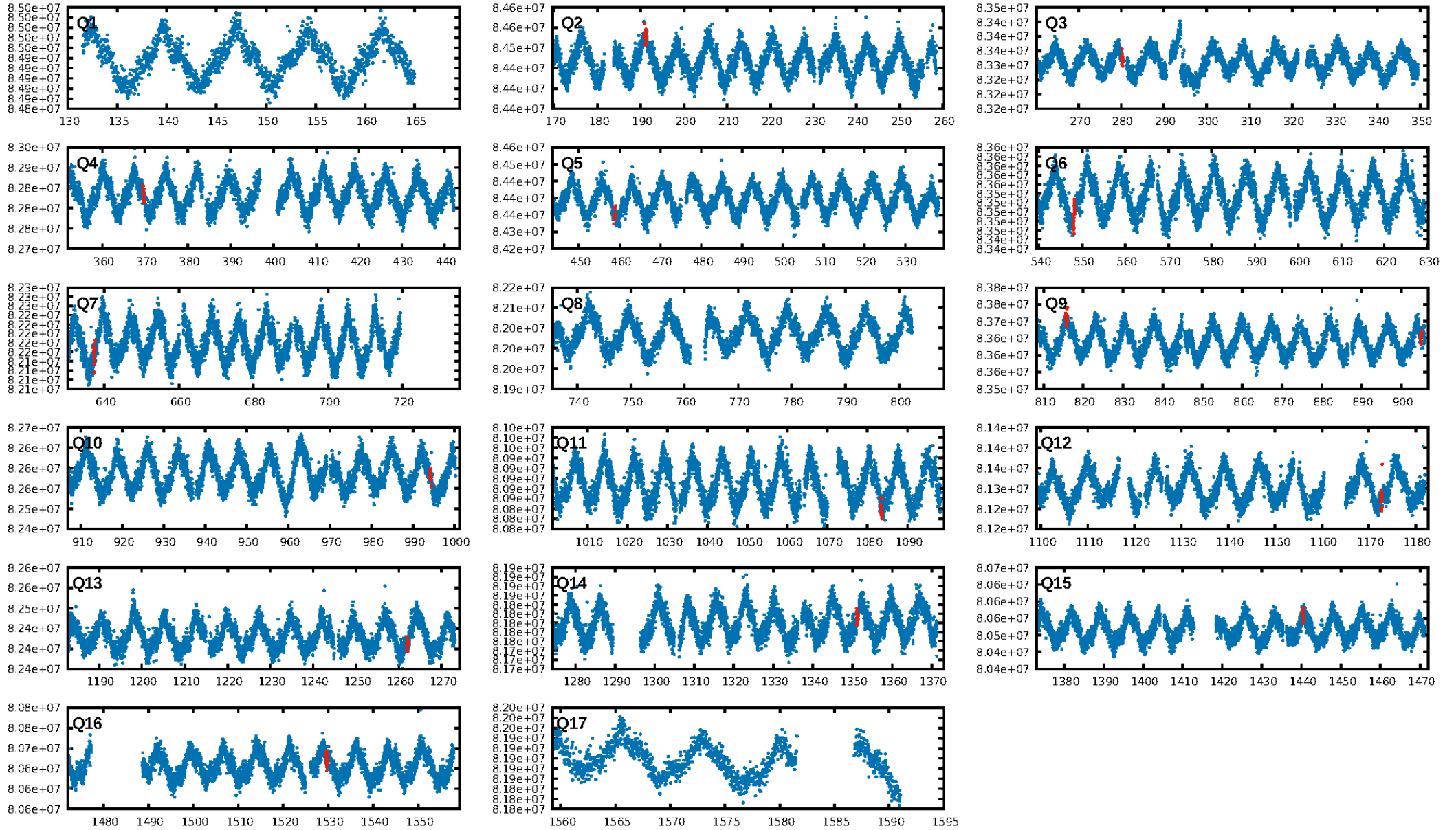
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [100.12σ]
LongPeriod-sig: 100.0% [259.81σ]
ModelChiSquare2-sig: 31.0%
ModelChiSquareGof-sig: 97.2%
Bootstrap-pfa: 1.84e-09
RollingBand-fgt: 1.00 [7/7]
GhostDiagnostic-chr: 2.21
Centroid-sig: 66.6%
Centroid-so: 0.617 arcsec [0.64σ]
OotOffset-rm: 0.284 arcsec [0.33σ]
KicOffset-rm: 0.160 arcsec [0.17σ]
OotOffset-st: 2/2/2/1 [7]
KicOffset-st: 2/2/2/1 [7]
DiffImageQuality-fgm: 0.57 [4/7]
DiffImageOverlap-fno: 0.62 [8/13]

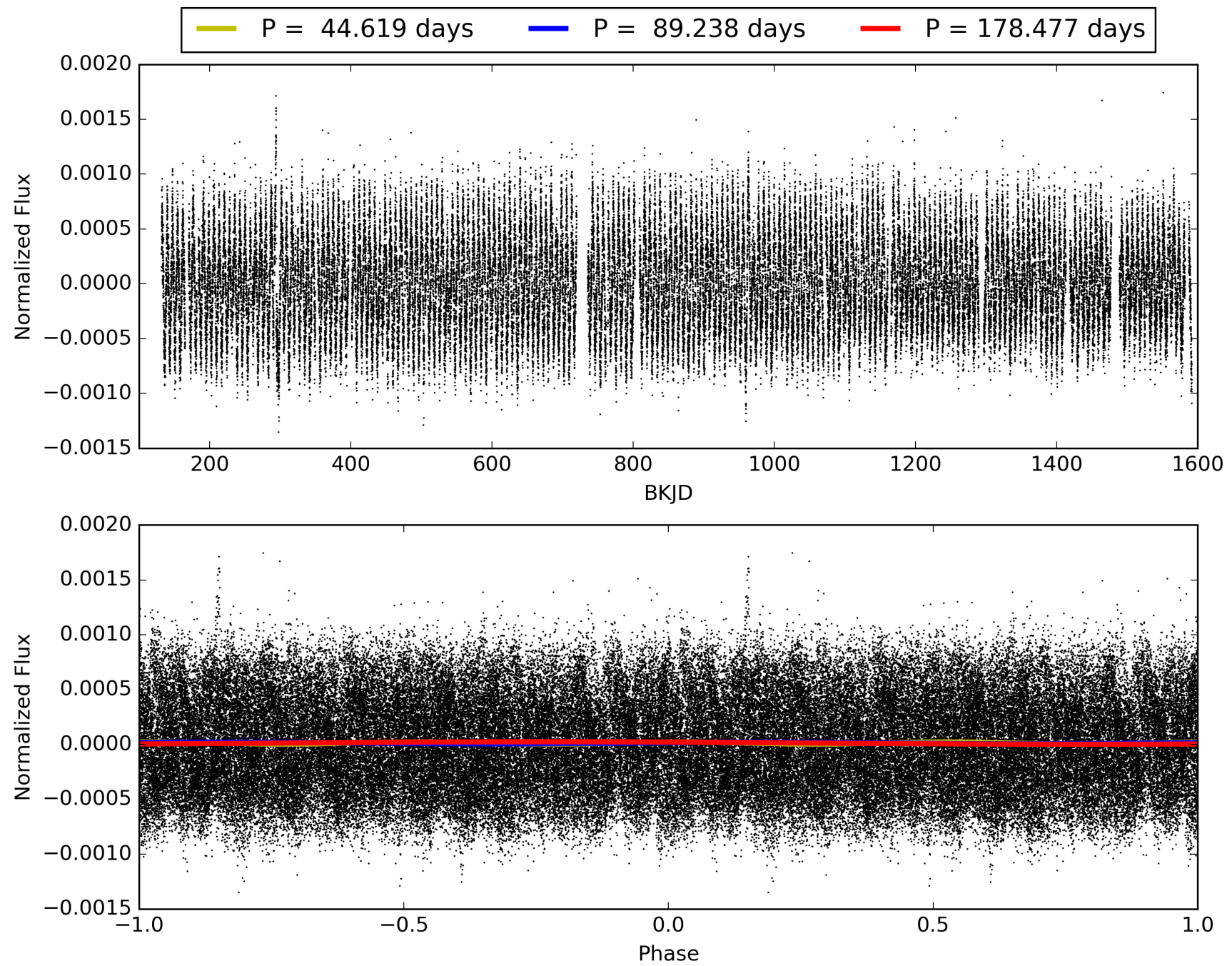
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:49:26 Z

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

TCE 005865766-03, PDC Light Curves

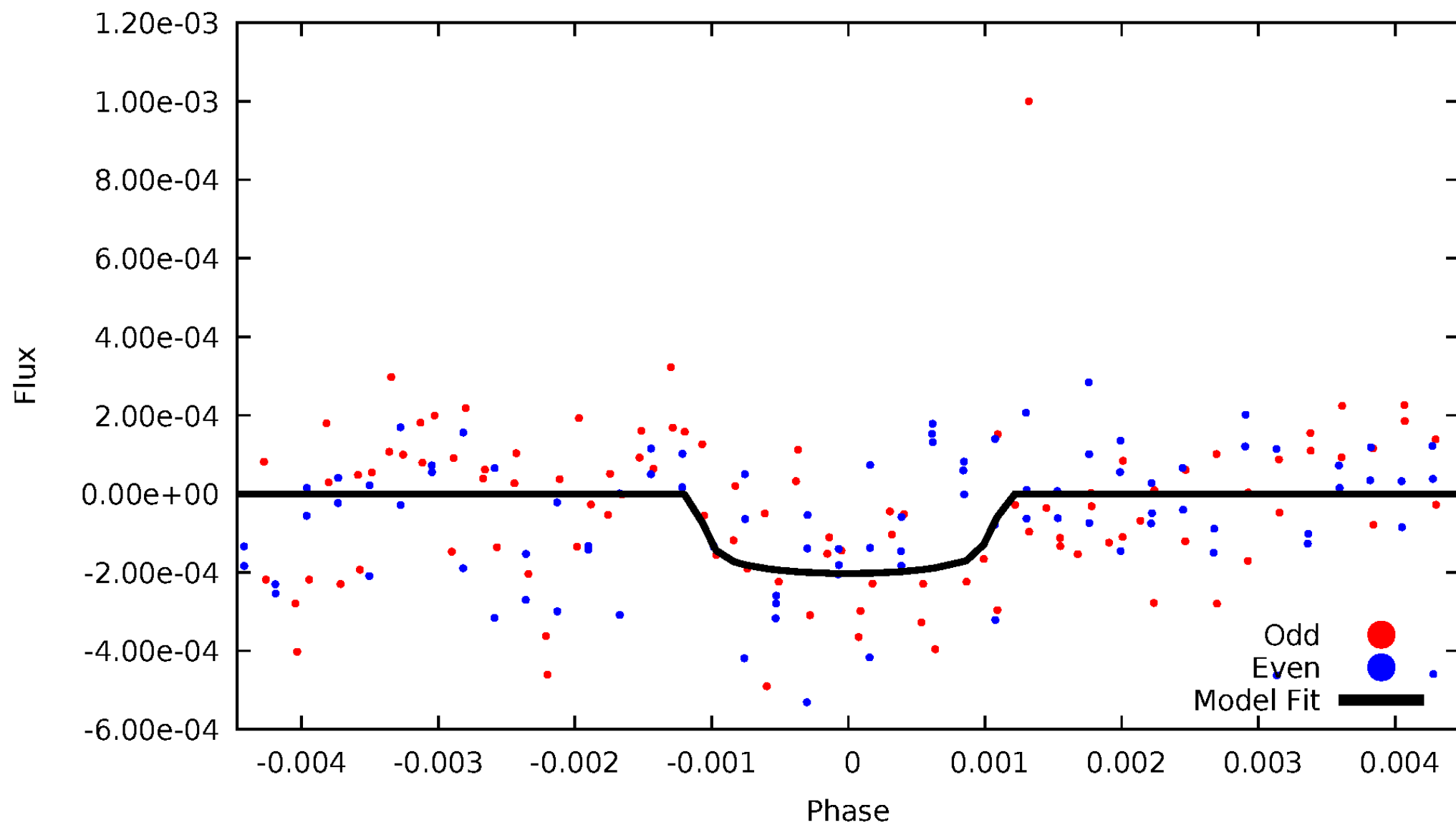


TCE 005865766-03



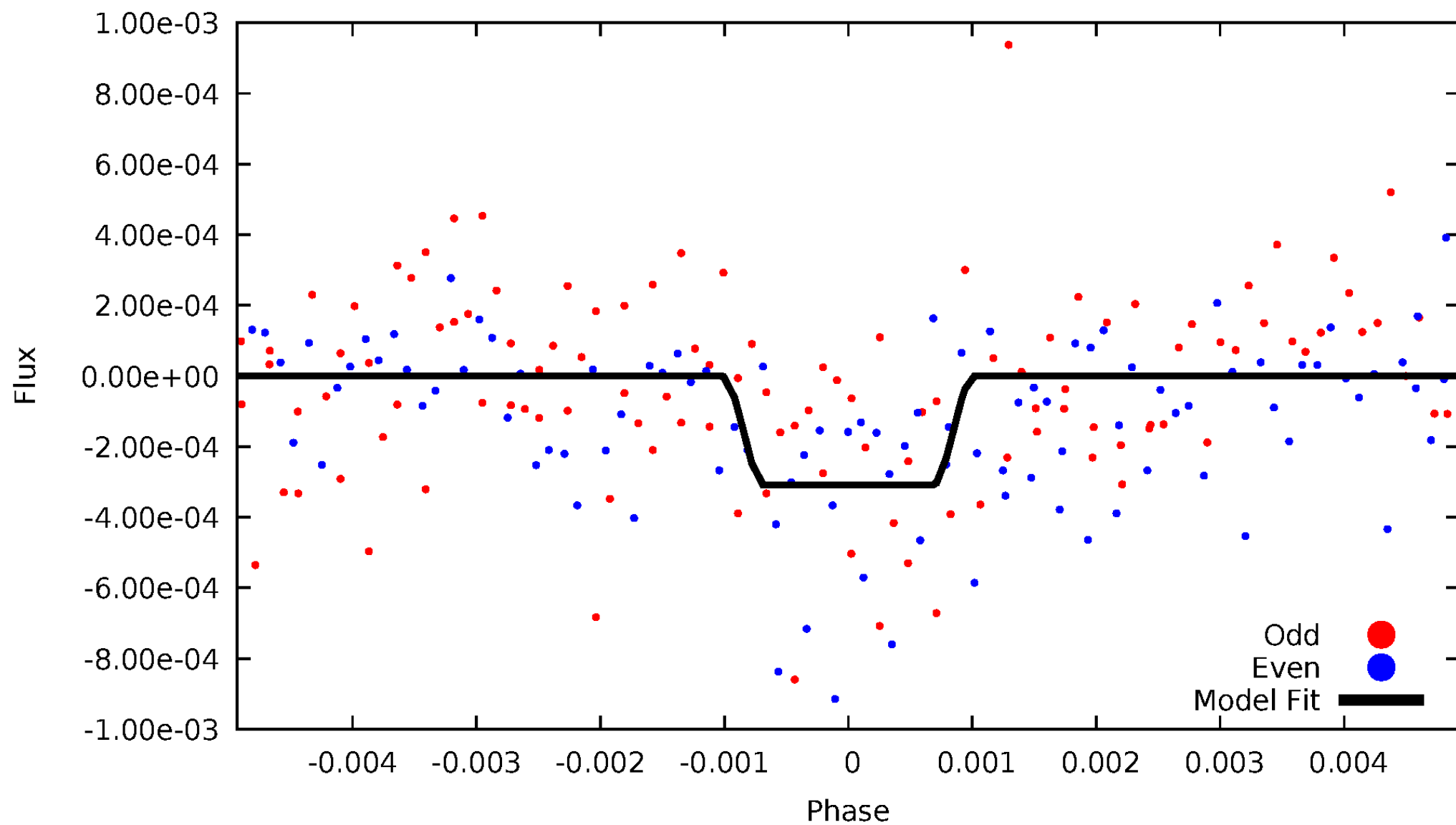
DV Odd/Even

TCE 005865766-03



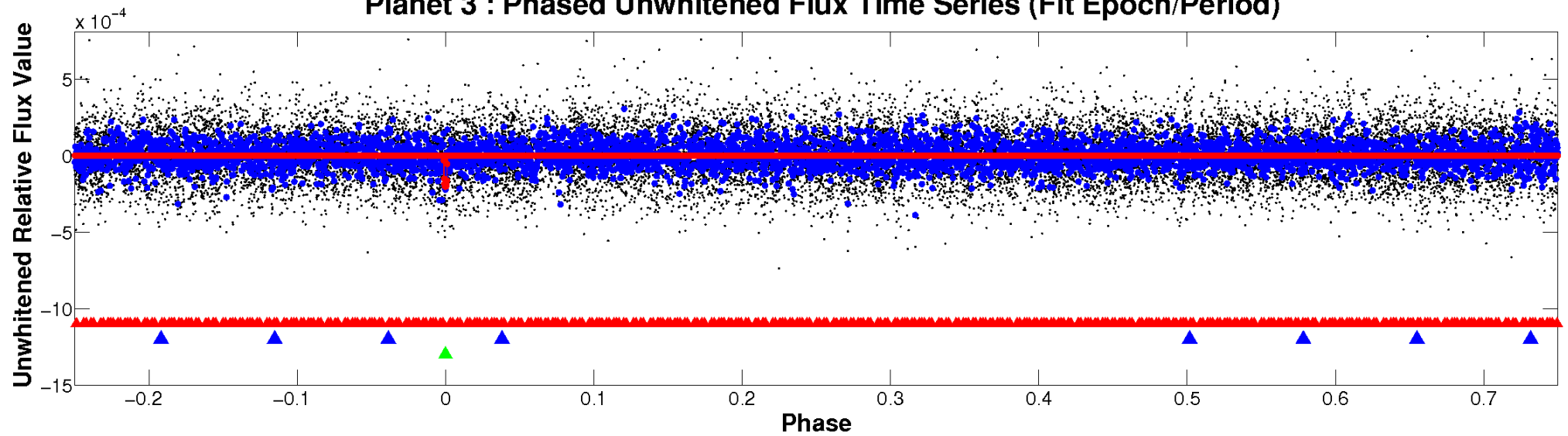
ALT Odd/Even

TCE 005865766-03

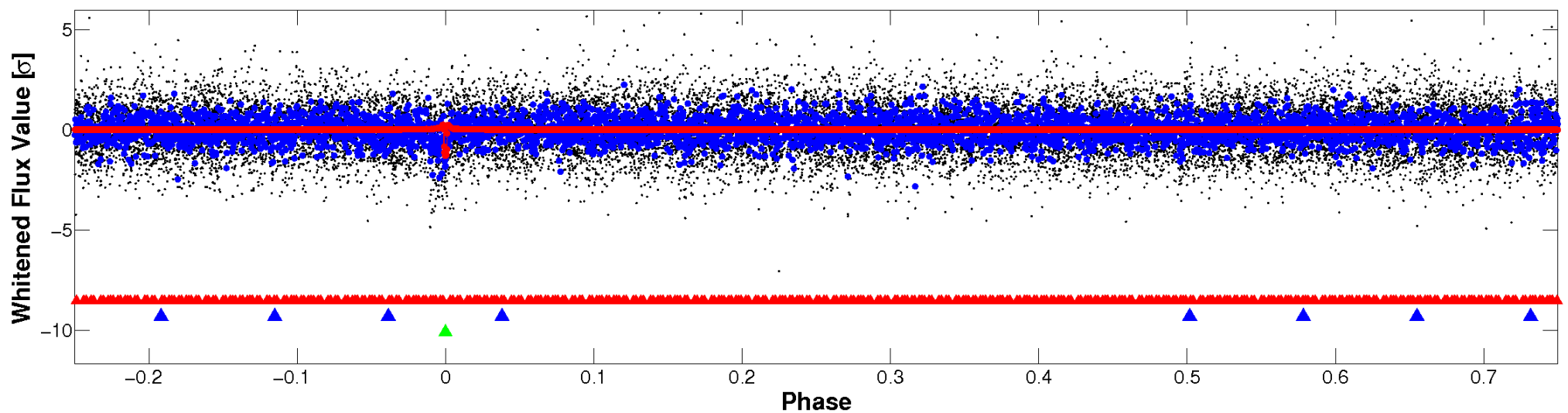


Non-Whitened Vs. Whitened Light Curve

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

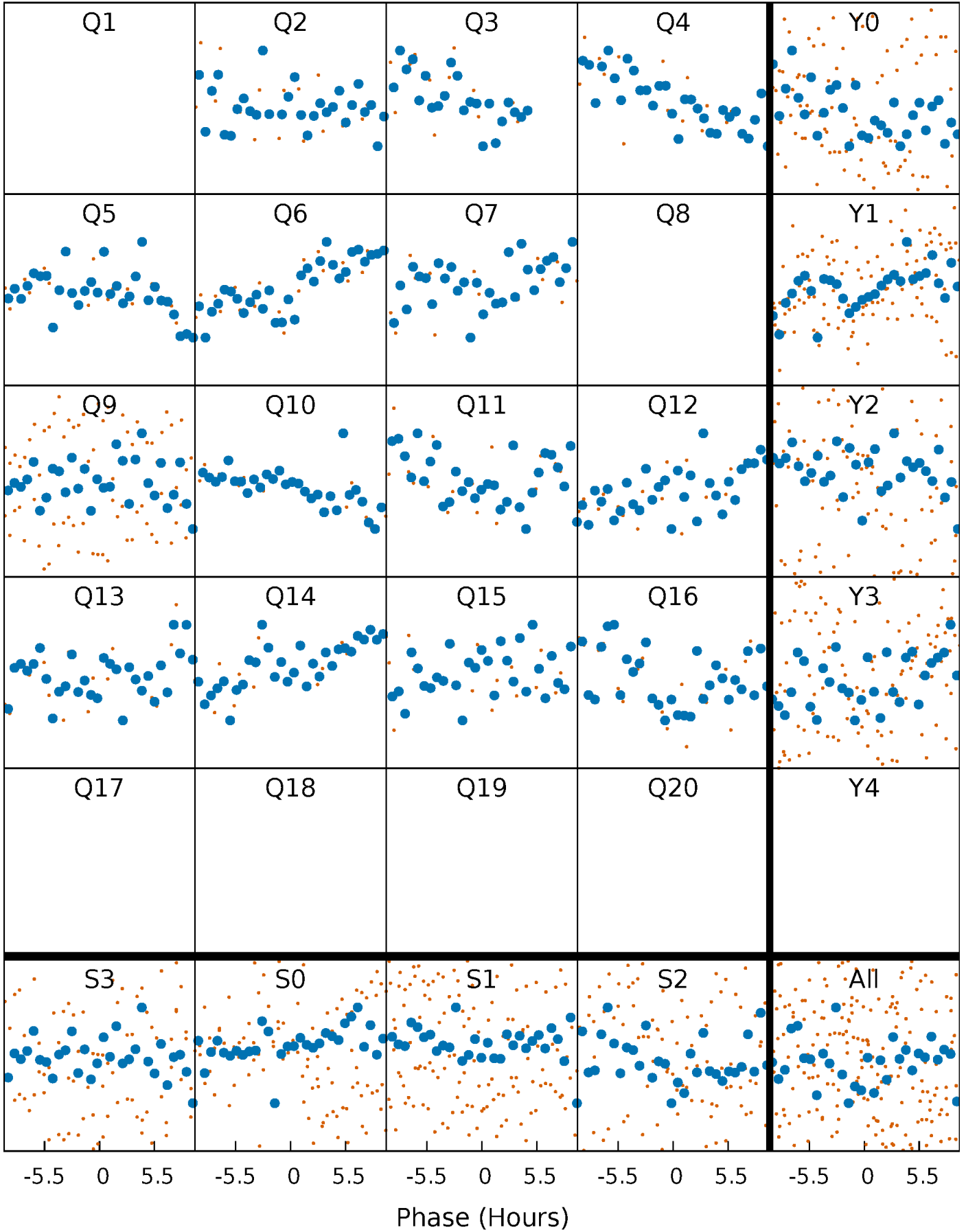


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



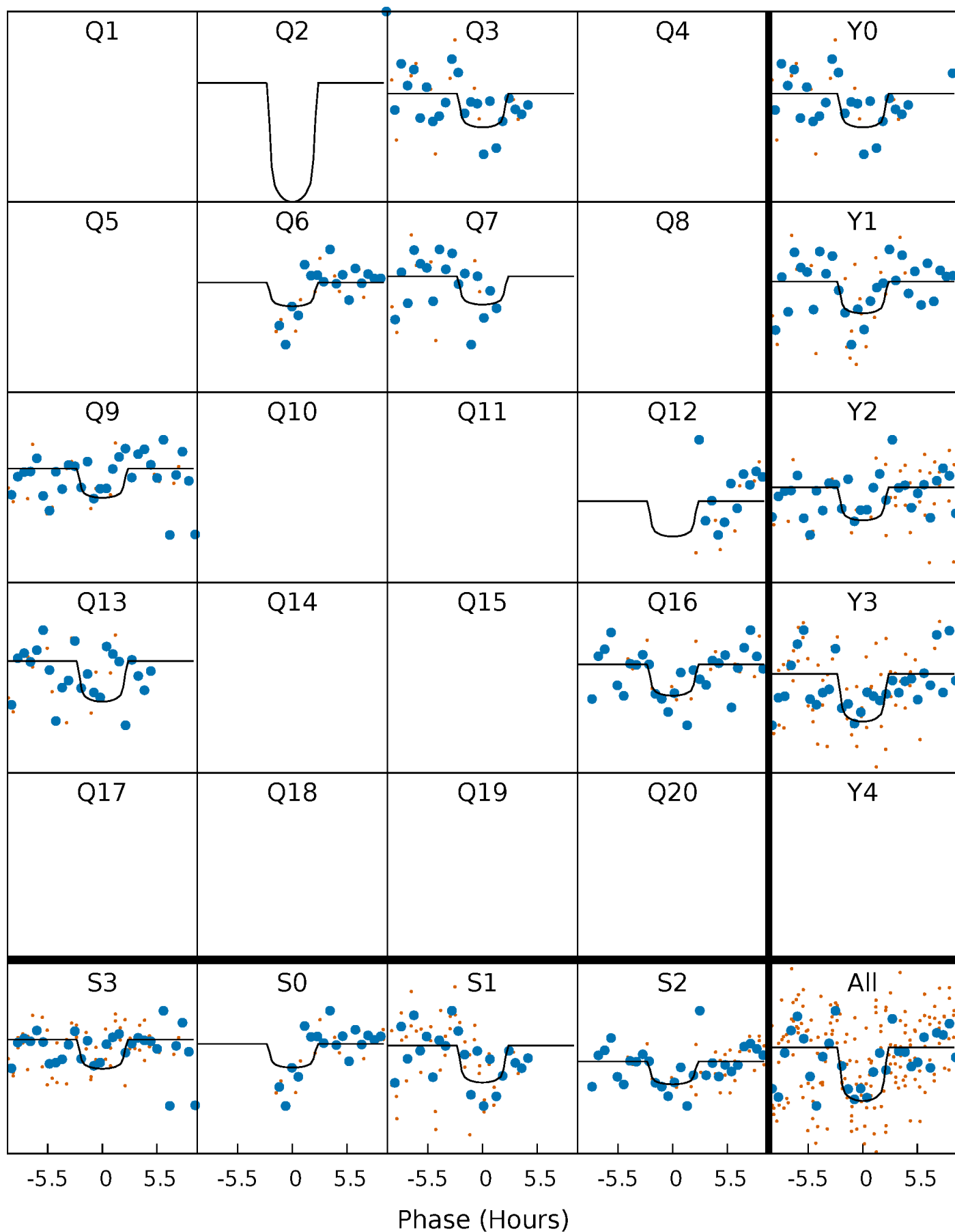
PDC Quarter-Phased Transit Curves

TCE 005865766-03 P= 89.238471 Days $T_0=191.105809$ (BKJD)



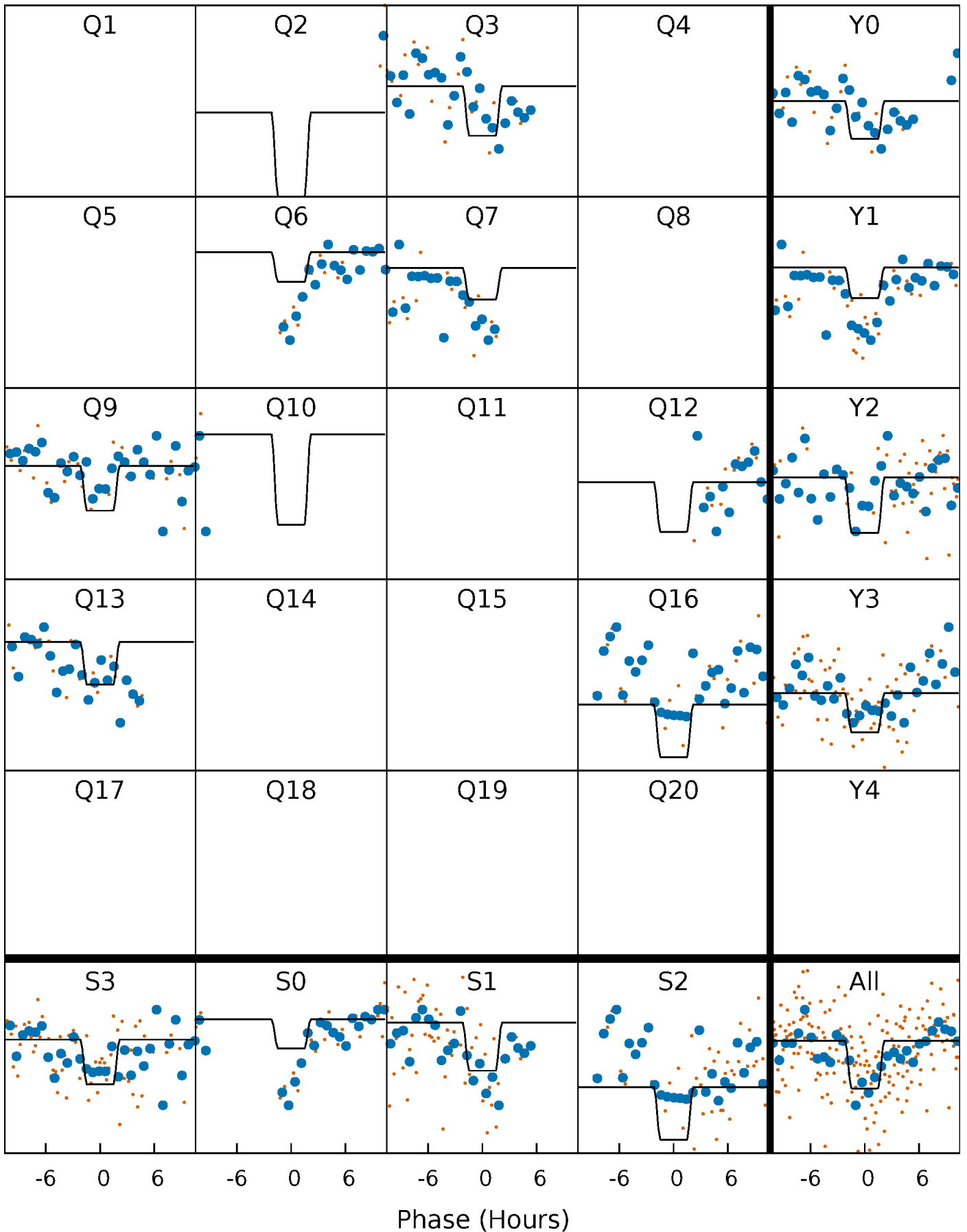
DV Quarter-Phased Transit Curves

TCE 005865766-03 P= 89.238471 Days $T_0=191.105809$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

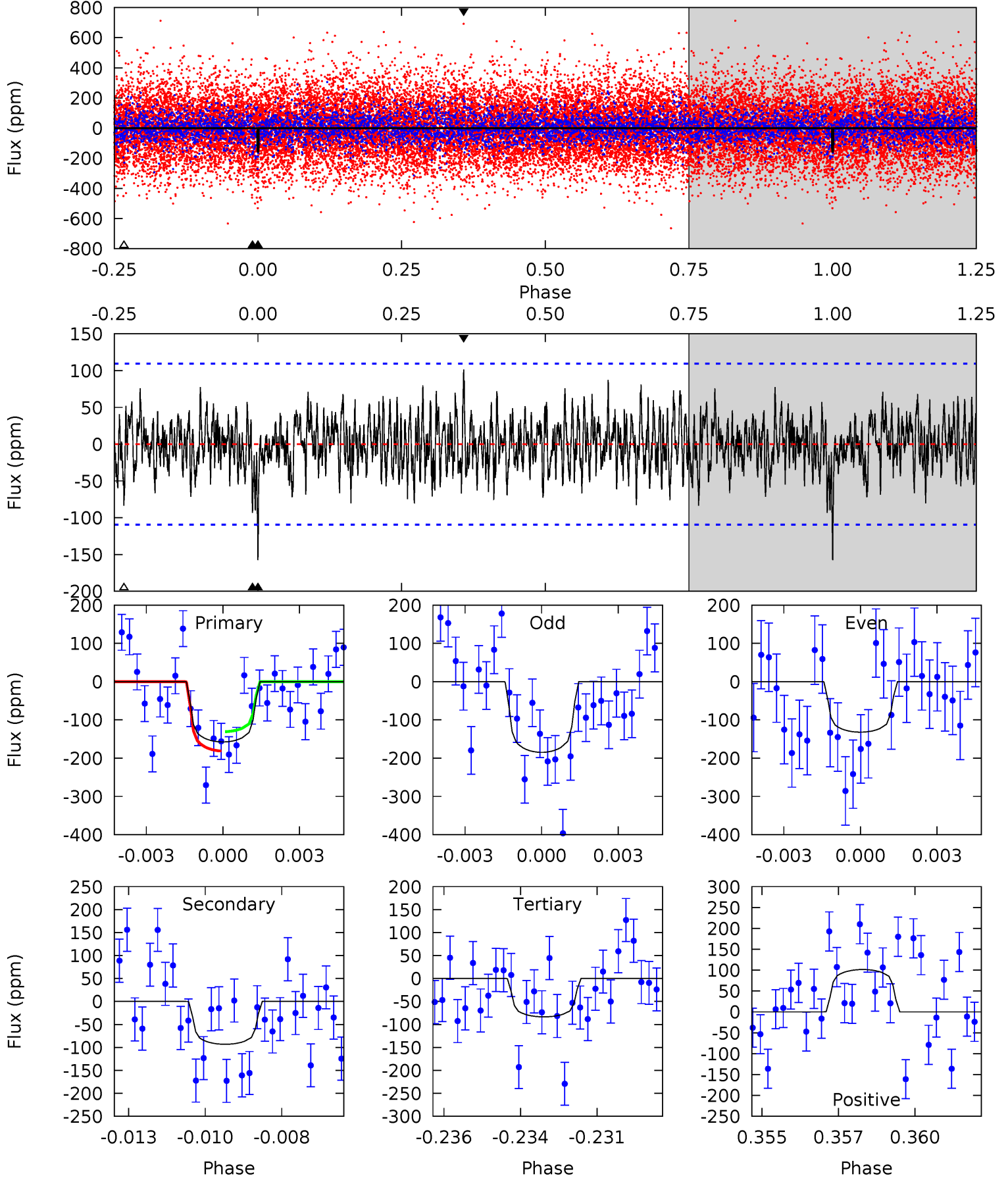
TCE 005865766-03 P= 89.241298 Days $T_0=191.077020$ (BKJD)



DV Model-Shift Uniqueness Test

005865766-03, P = 89.238471 Days, E = 101.867338 Days

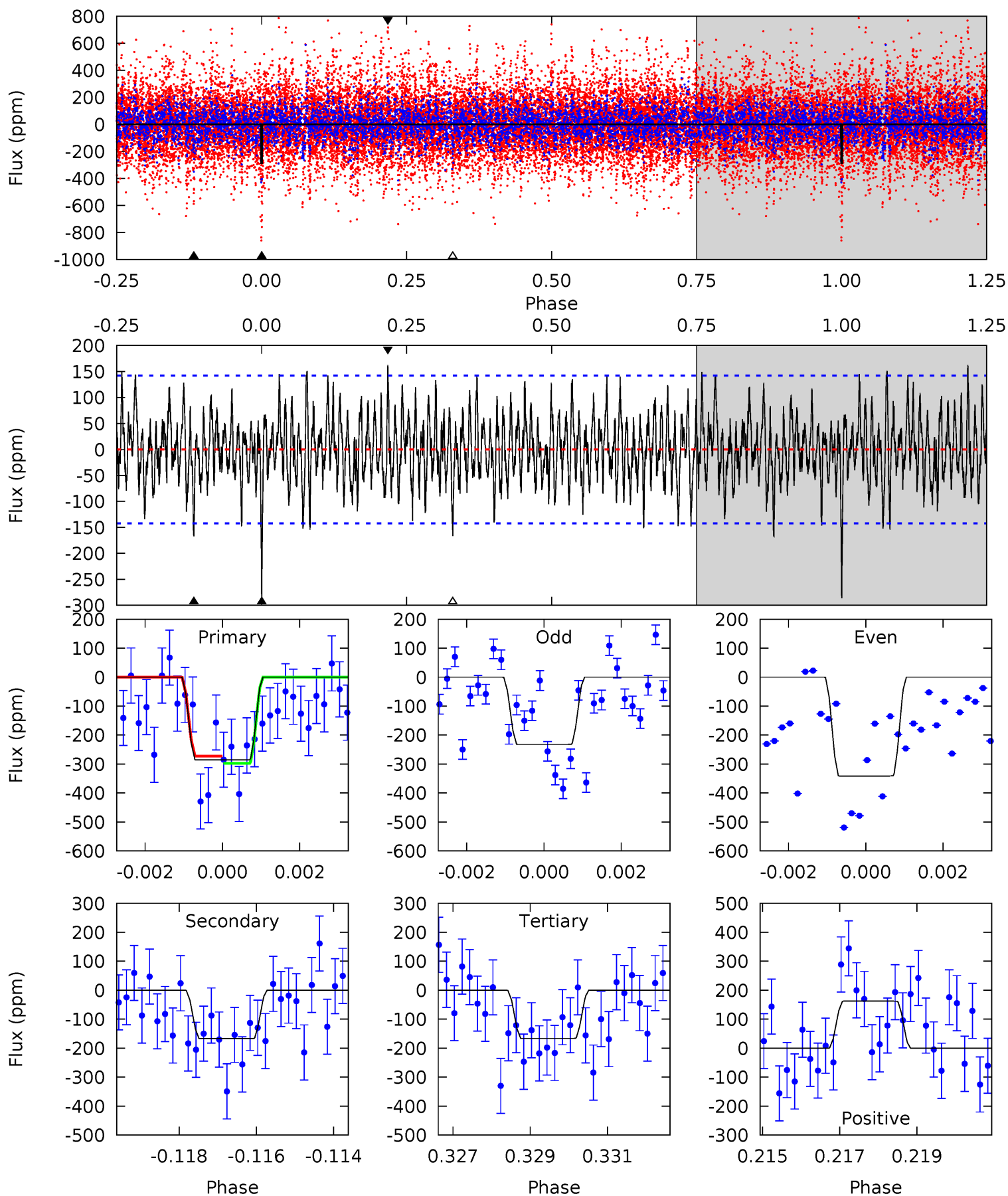
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.61	4.50	4.03	4.90	5.28	3.02	1.43	3.58	2.71	0.47	-0.40	1.27	0.99	0.39	1.22



Alt Model-Shift Uniqueness Test

005865766-03, P = 89.241298 Days, E = 101.835722 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.7	6.28	6.25	6.08	5.33	3.10	2.06	4.48	4.65	0.03	0.20	2.05	1.43	0.36	0.47



Stellar Parameters For KIC 005865766

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6749^{+190}_{-262}	$3.889^{+0.397}_{-0.132}$	$-0.380^{+0.300}_{-0.300}$	$2.151^{+0.500}_{-0.929}$	$1.307^{+0.184}_{-0.253}$	$0.185^{+0.655}_{-0.075}$
	+3%/-4%	+10%/-3%	+79%/-79%	+23%/-43%	+14%/-19%	+354%/-40%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 005865766-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-93 ± 21	$3.58^{+2.82}_{-2.19}$	911^{+73}_{-84}	5111^{+3169}_{-1014}	682^{+3522}_{-472}
Alt.	-167 ± 27	$4.10^{+3.16}_{-2.31}$	912^{+66}_{-102}	5461^{+3314}_{-1032}	966^{+4345}_{-643}

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 $A_{obs} \gg 1.0$

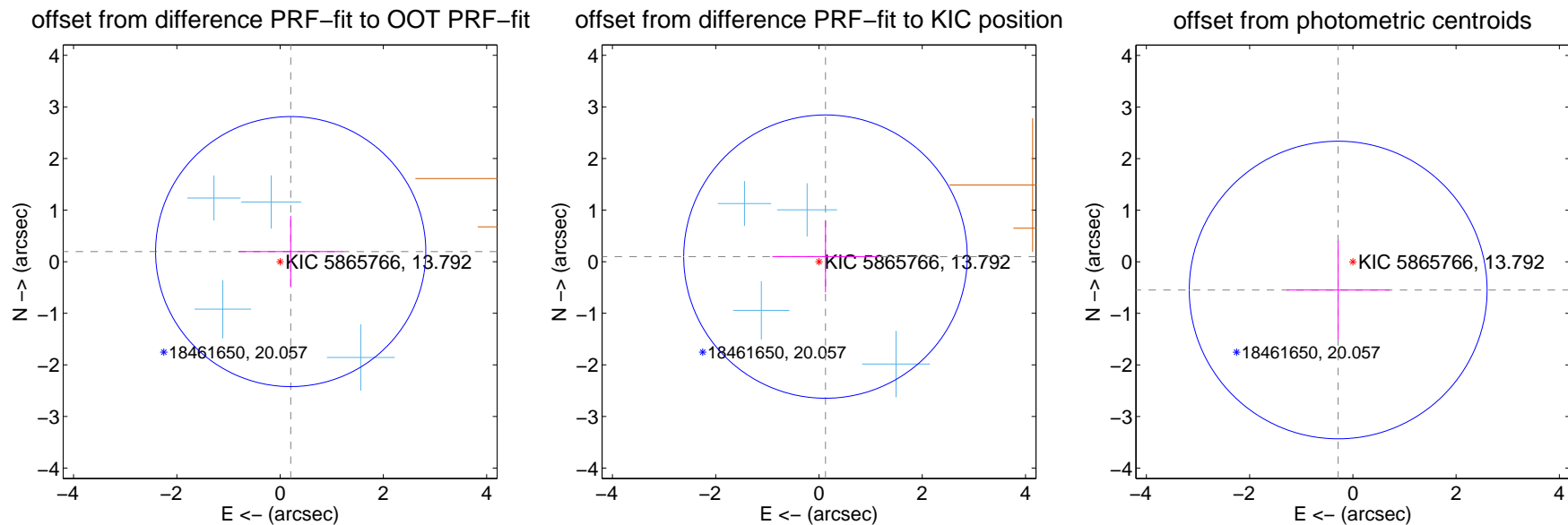
DV Centroid Data

Supplemental centroid analysis for 005865766-03. Kepler magnitude: 13.79. Transit SNR 8.70

There are 4 quarters with good PRF difference image offsets

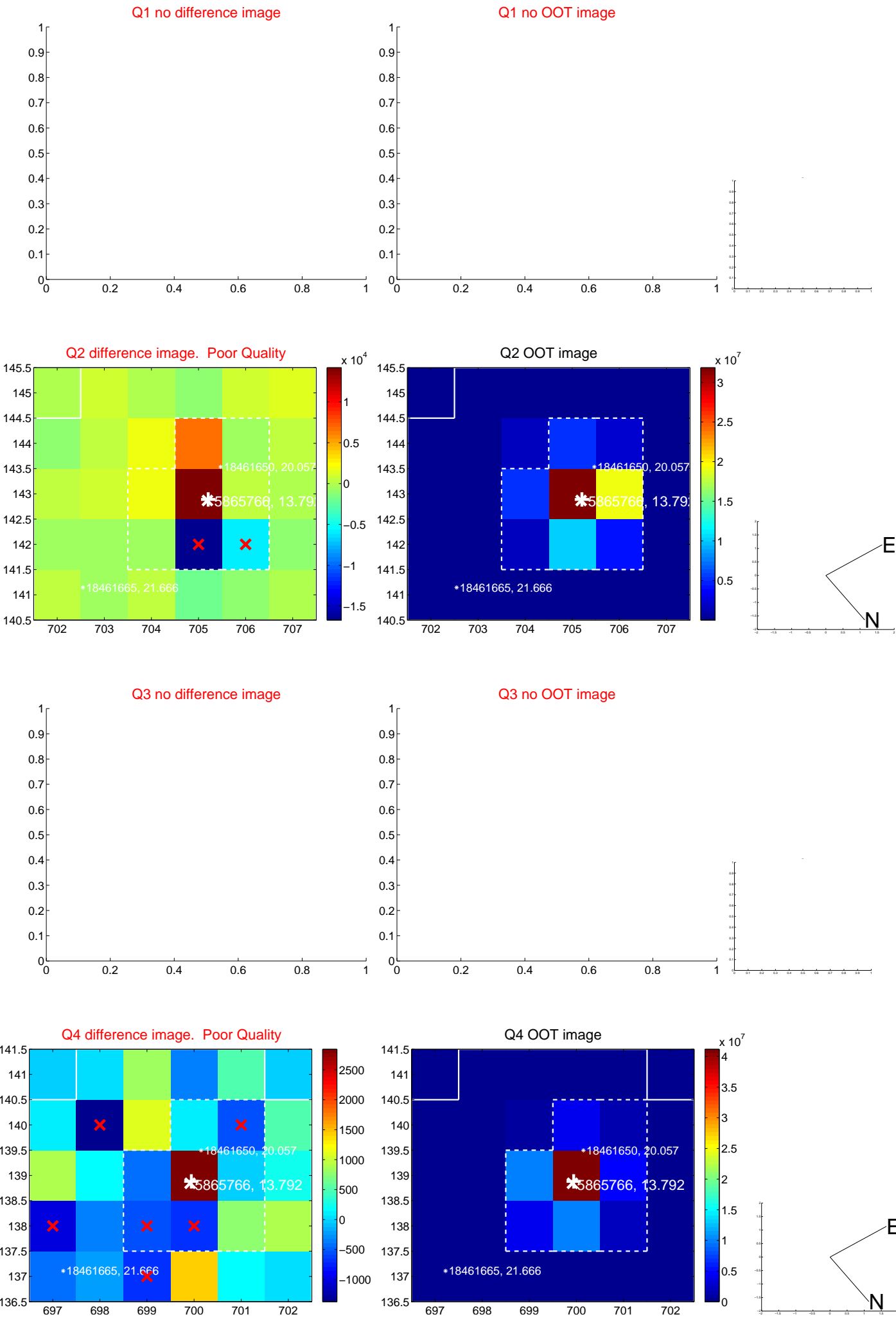
The direct PRF centroid is offset from the target star catalog position by about 0.19 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.284 ± 0.872	0.33	-0.205 ± 1.010	0.196 ± 0.690
PRF-fit source offset from KIC position	0.160 ± 0.915	0.17	-0.126 ± 1.029	0.099 ± 0.692
photometric centroid source offset	0.62 ± 0.96	0.64	0.28 ± 1.00	-0.55 ± 0.95

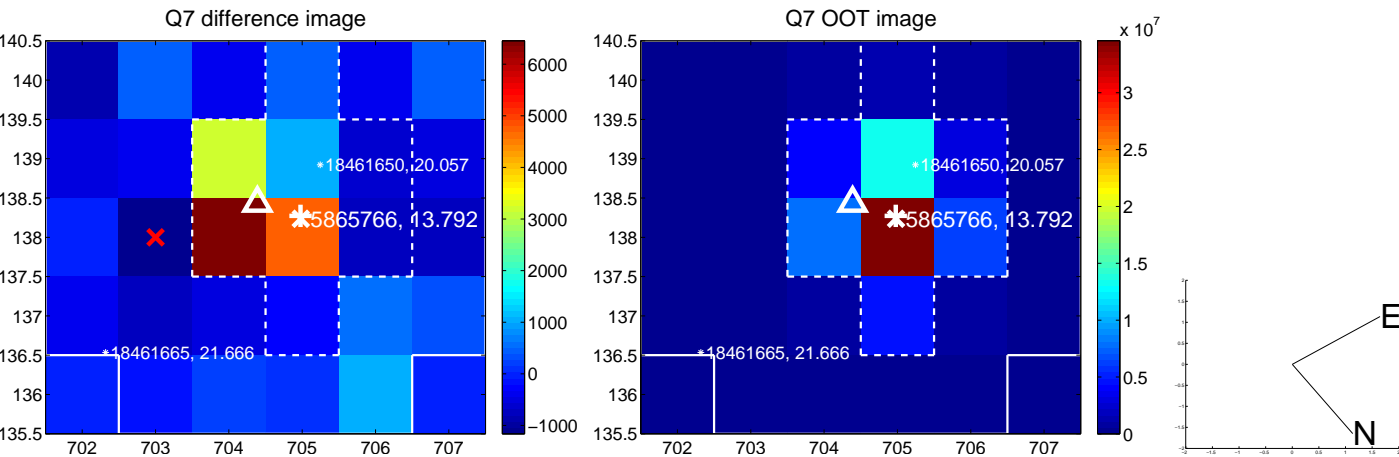
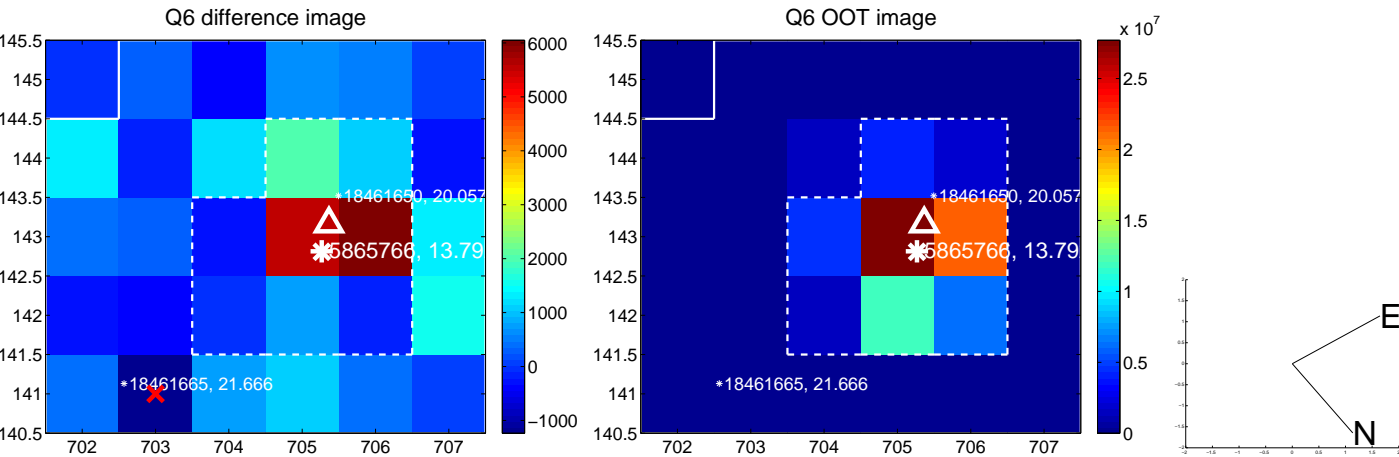
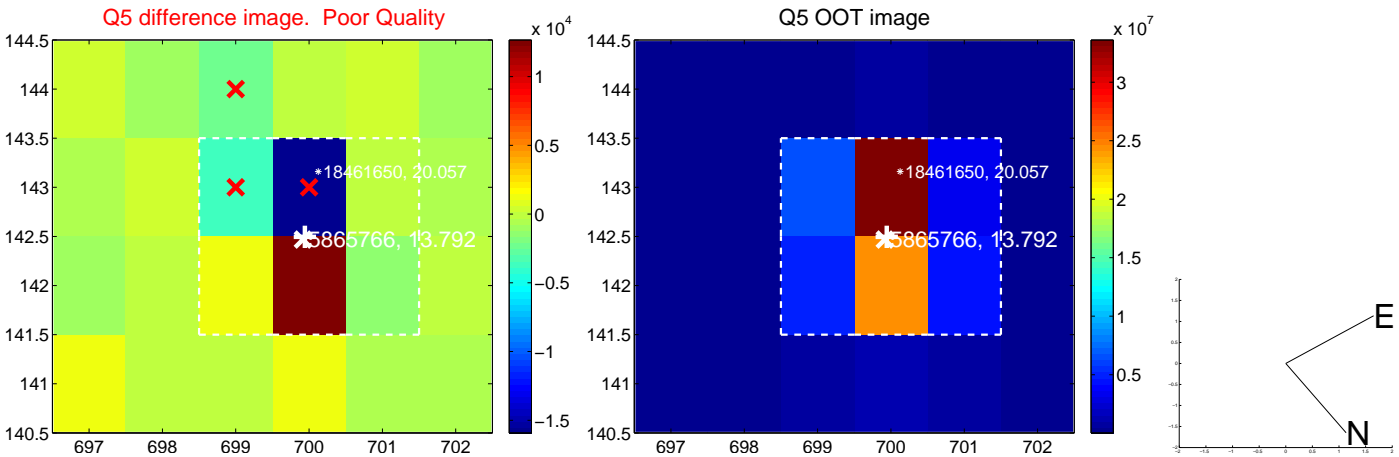


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

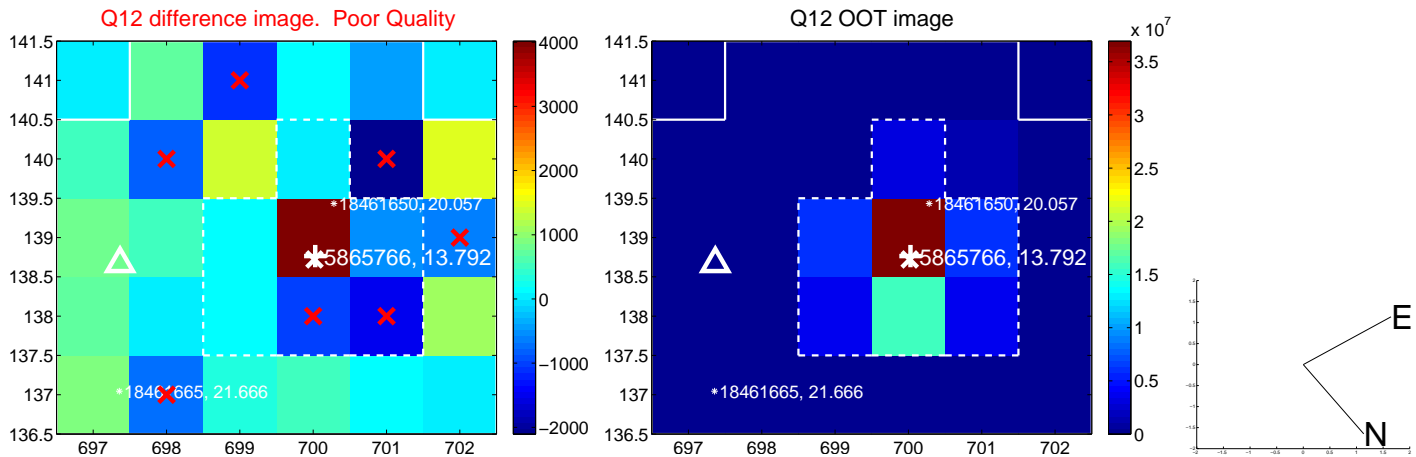
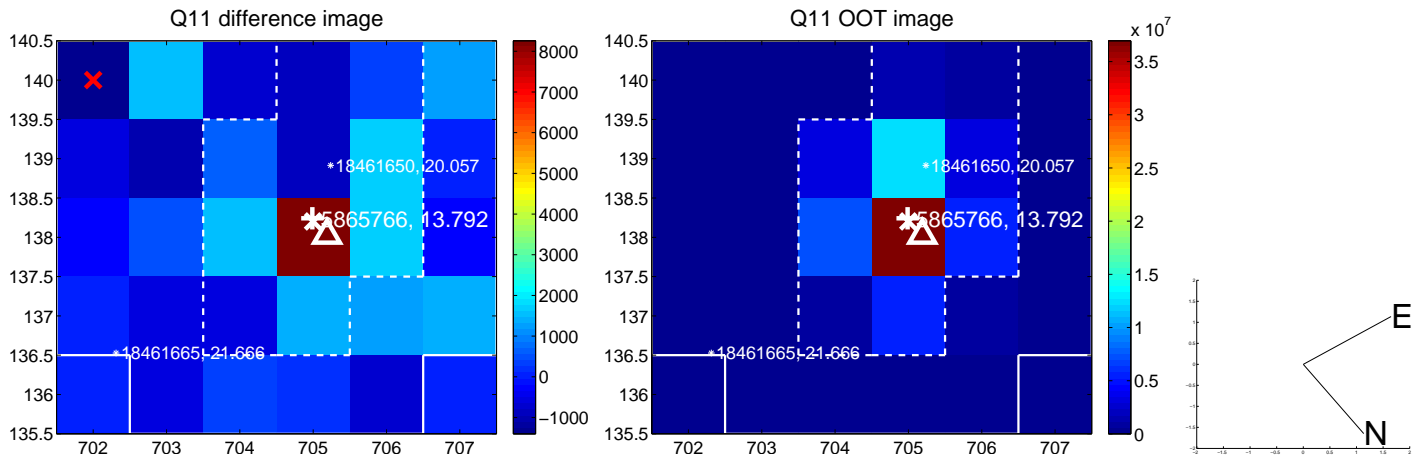
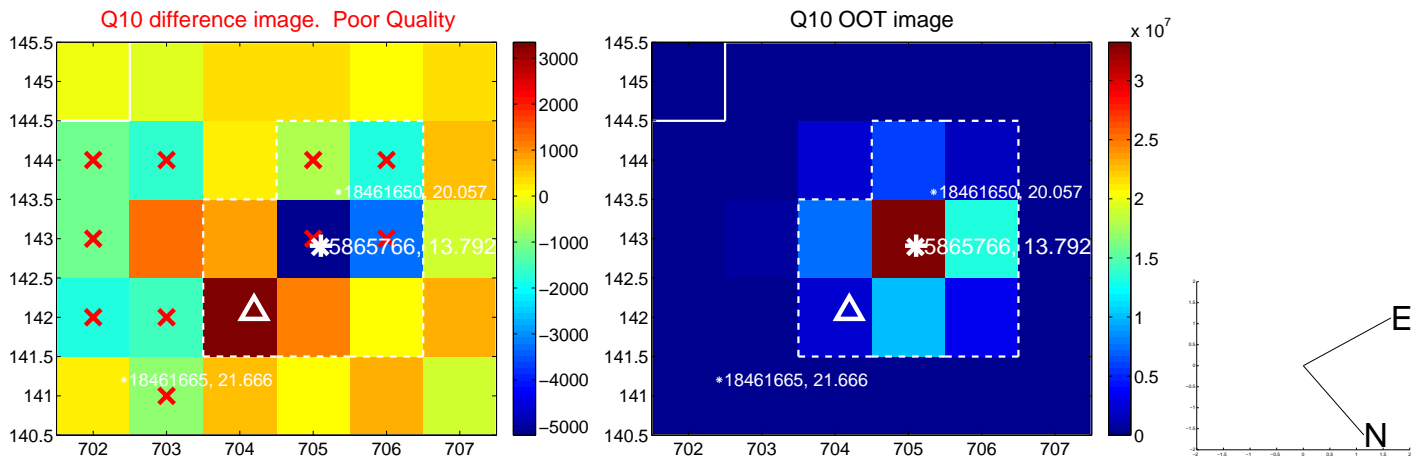
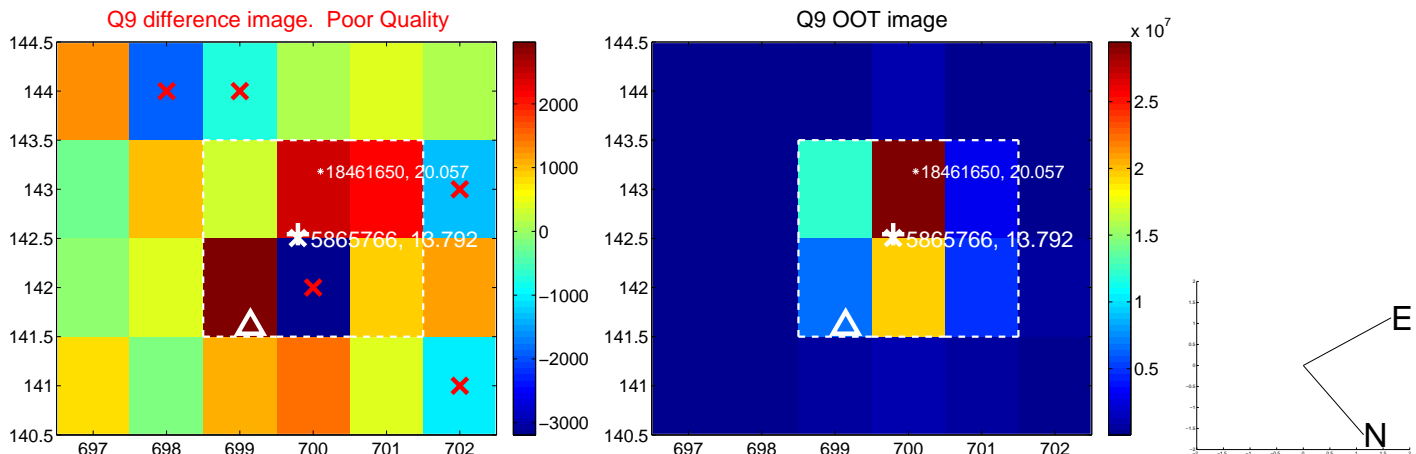
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



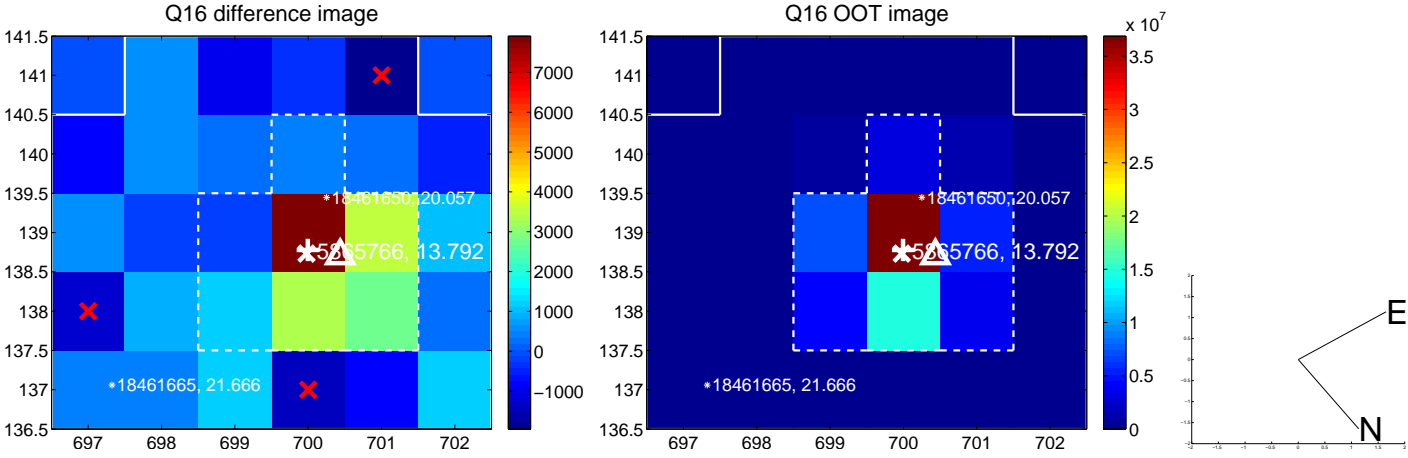
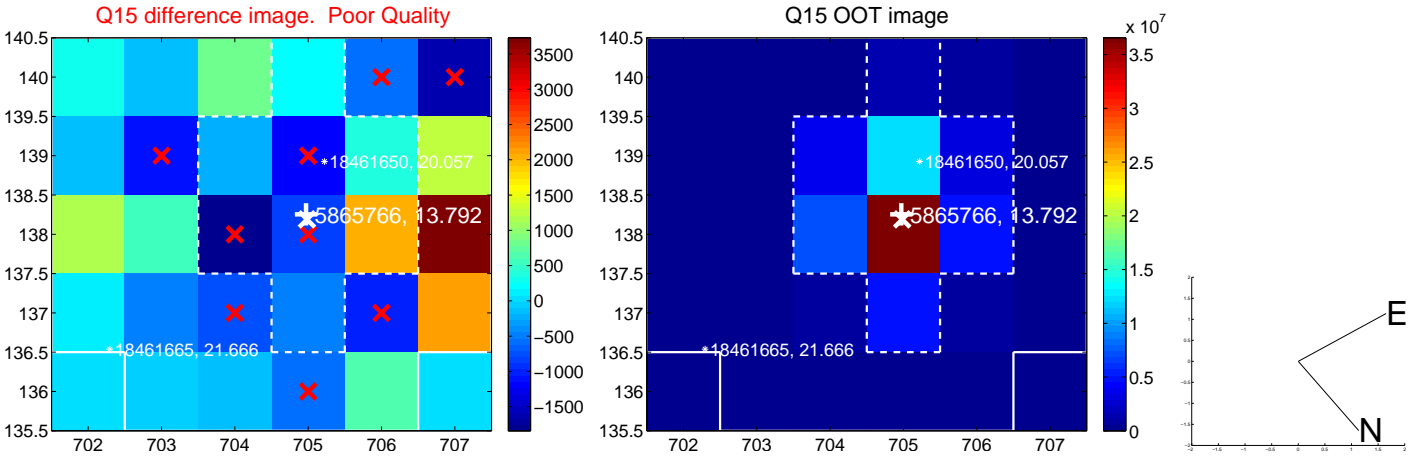
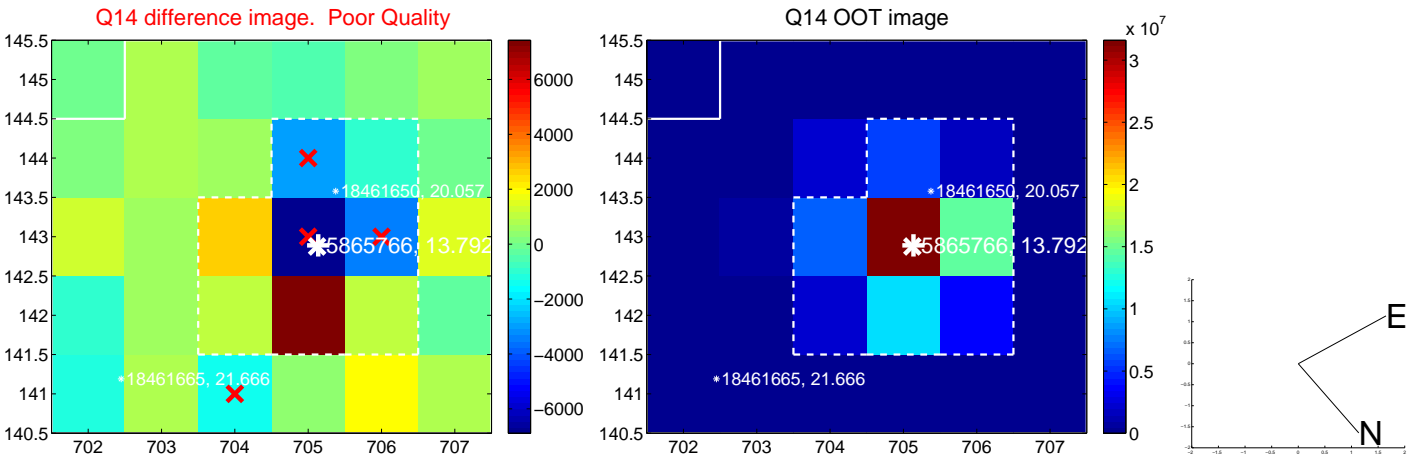
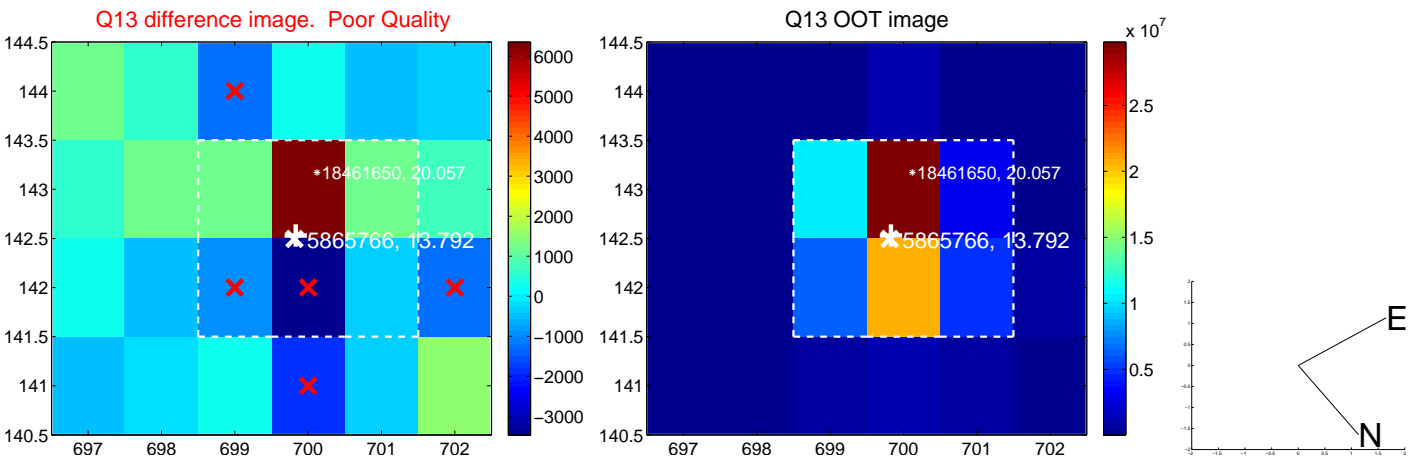
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



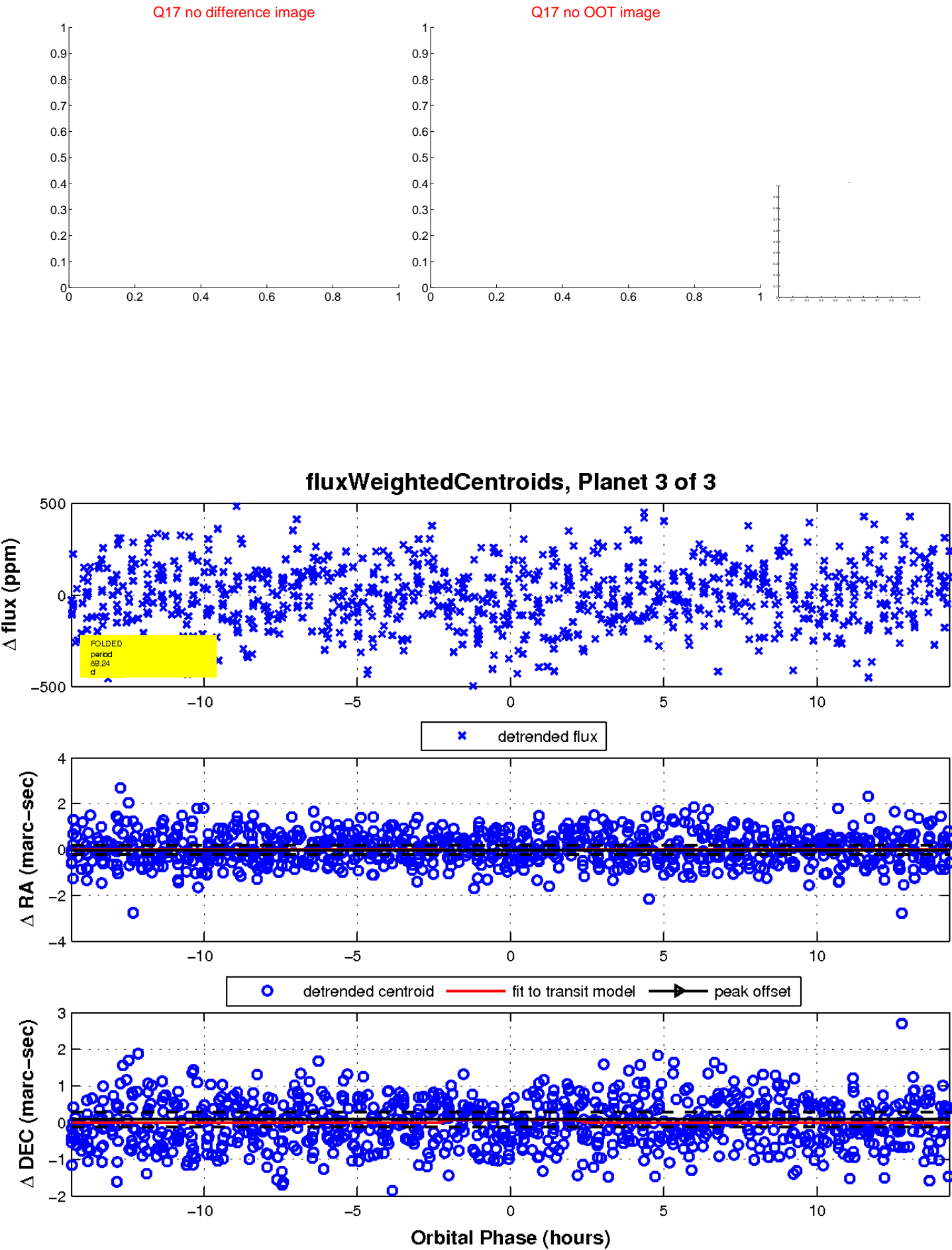
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

