

KIC 006606653

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})
006606653-01	OBS	1224.01	2.698004	132.289797	13356.6	6.466	2053.0	1596.6	1.21	6568	14.43	1483.65
006606653-02	OBS	No	2.697970	133.560744	138.0	1.112	19.5	15.3	1.21	6568	1.67	1483.68
006606653-03	OBS	No	1.349000	132.284529	197.5	6.049	19.9	21.2	1.21	6568	1.98	3738.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006606653-01	OBS	FP	0.28	0	1	0	0	SWEET_EB—MOD_SEC_ALT—HAS_SEC_TCE
006606653-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006606653-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE

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.

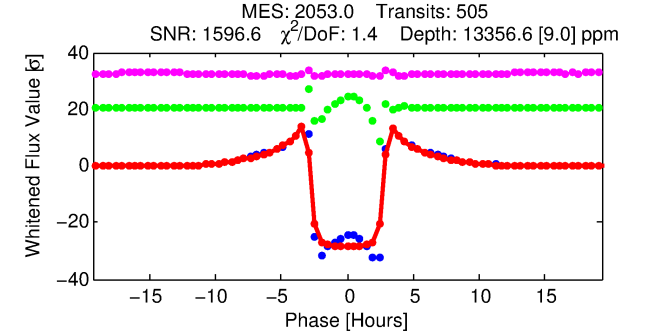
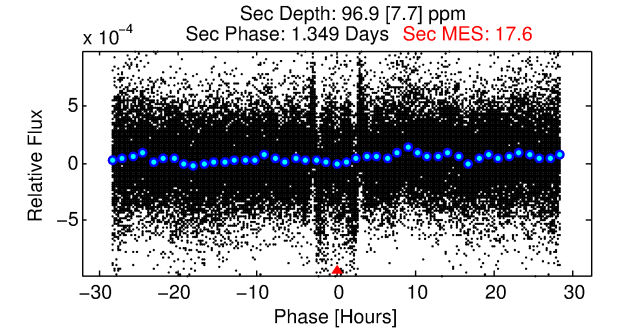
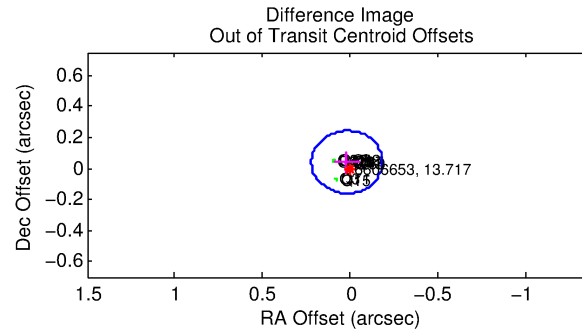
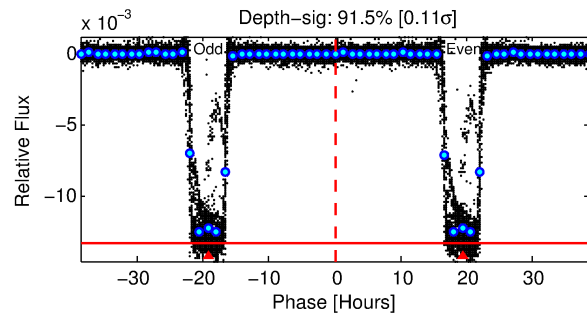
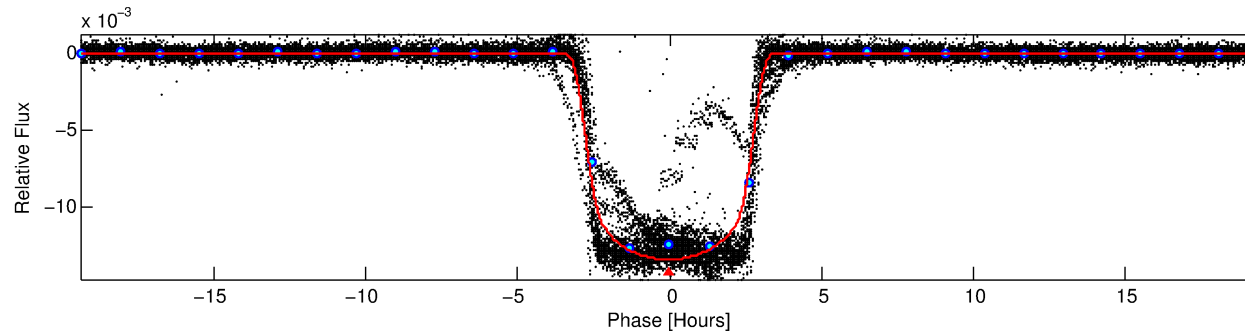
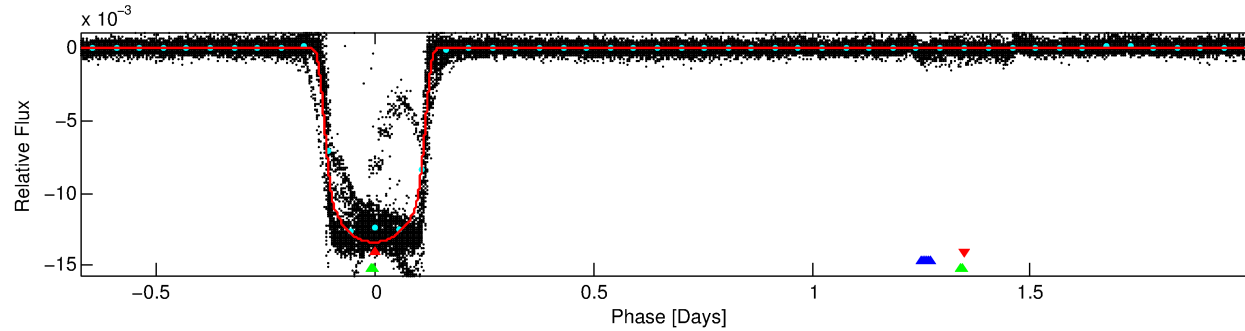
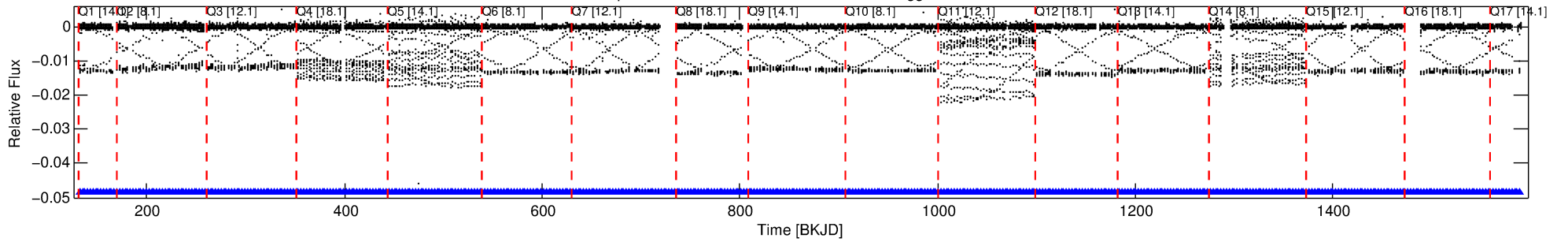
Ephemeris Match Information For 006606653-01

No Significant Match Found

DV One-Page Summary

KIC: 6606653 Candidate: 1 of 3 Period: 2.698 d
KOI: K01224 Corr: No Ephemeris Match

Kp: 13.72 R*: 1.21 Rs Teff: 6568.0 K Logg: 4.36 Fe/H: -0.060



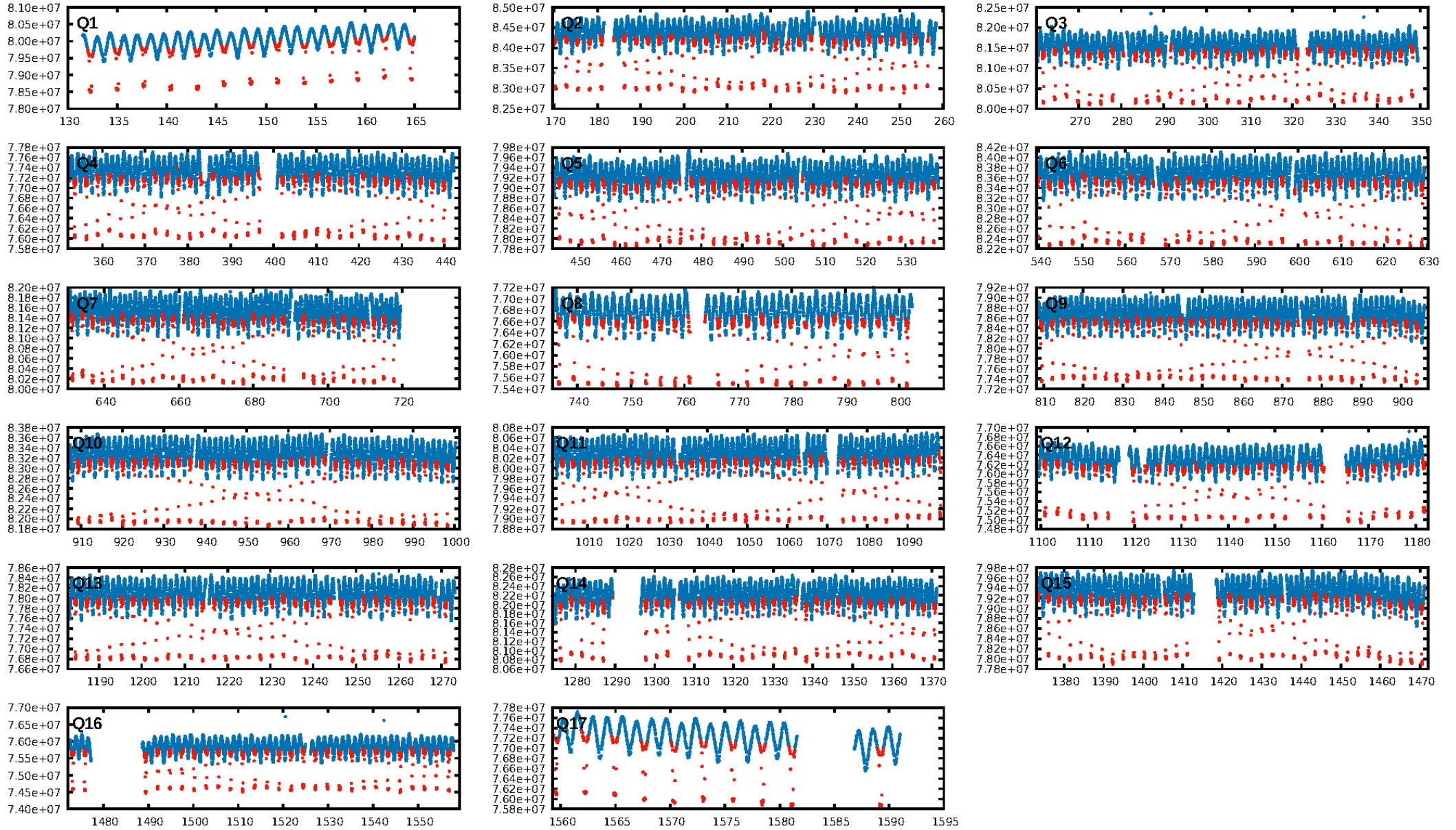
DV Fit Results:

Period = 2.69800 [0.00000] d
Epoch = 132.2898 [0.0000] BKJD
Rp/R* = 0.1092 [0.0001]
a/R* = 3.28 [0.01]
b = 0.48 [0.00]
Seff = 1483.65 [599.48]
Teq = 1583 [160] K
Rp = 14.43 [4.66] Re
a = 0.0406 [0.0109] AU
Ag = 0.42 [0.17] [-3.49σ]
Teffp = 1972 [72] K [2.22σ]

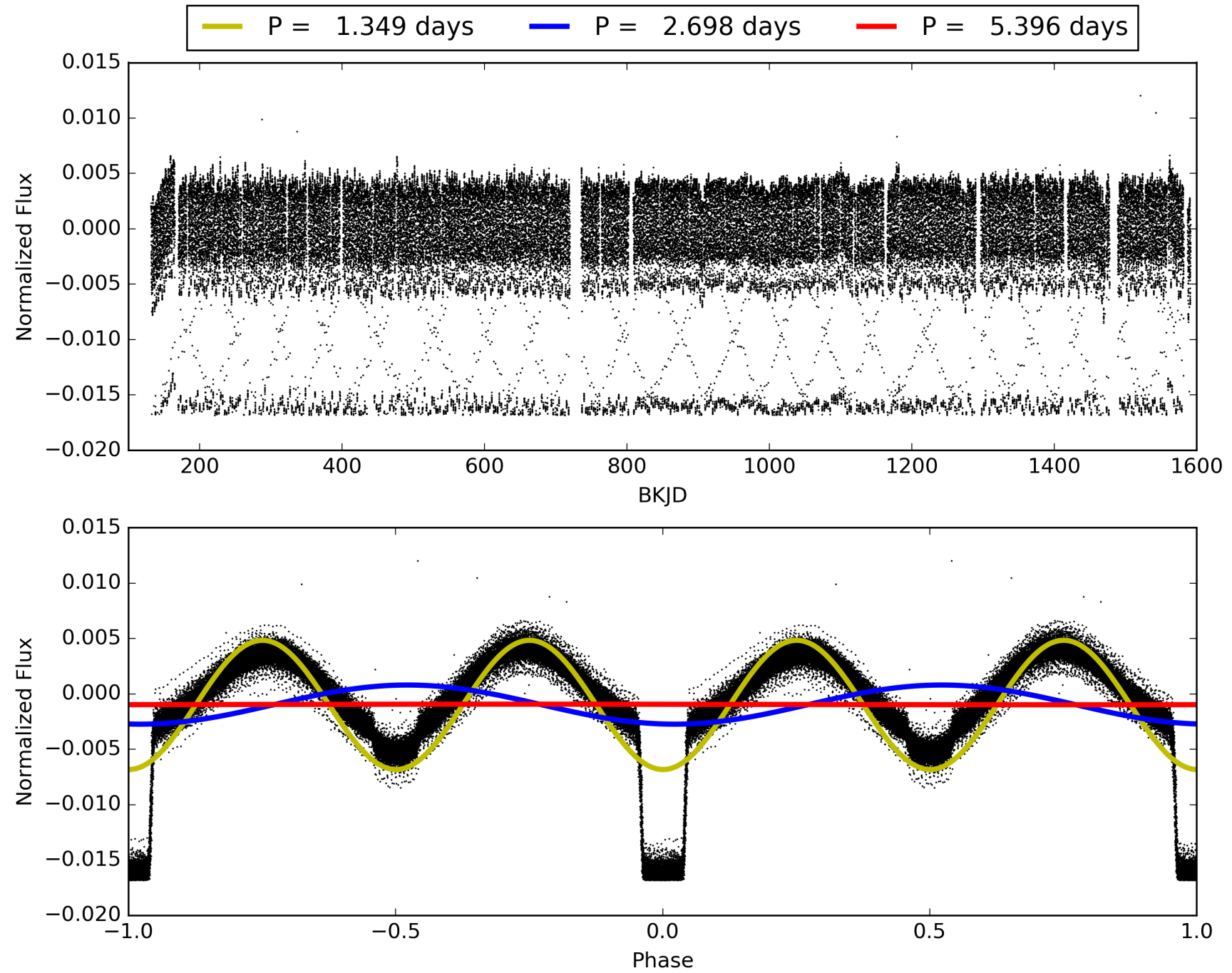
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 0.00e+00
RollingBand-fgt: 1.00 [482/482]
GhostDiagnostic-chr: 2.84
Centroid-sig: 0.0%
Centroid-so: 0.132 arcsec [35.32σ]
OotOffset-rm: 0.046 arcsec [0.68σ]
KicOffset-rm: 0.051 arcsec [0.74σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

TCE 006606653-01, PDC Light Curves

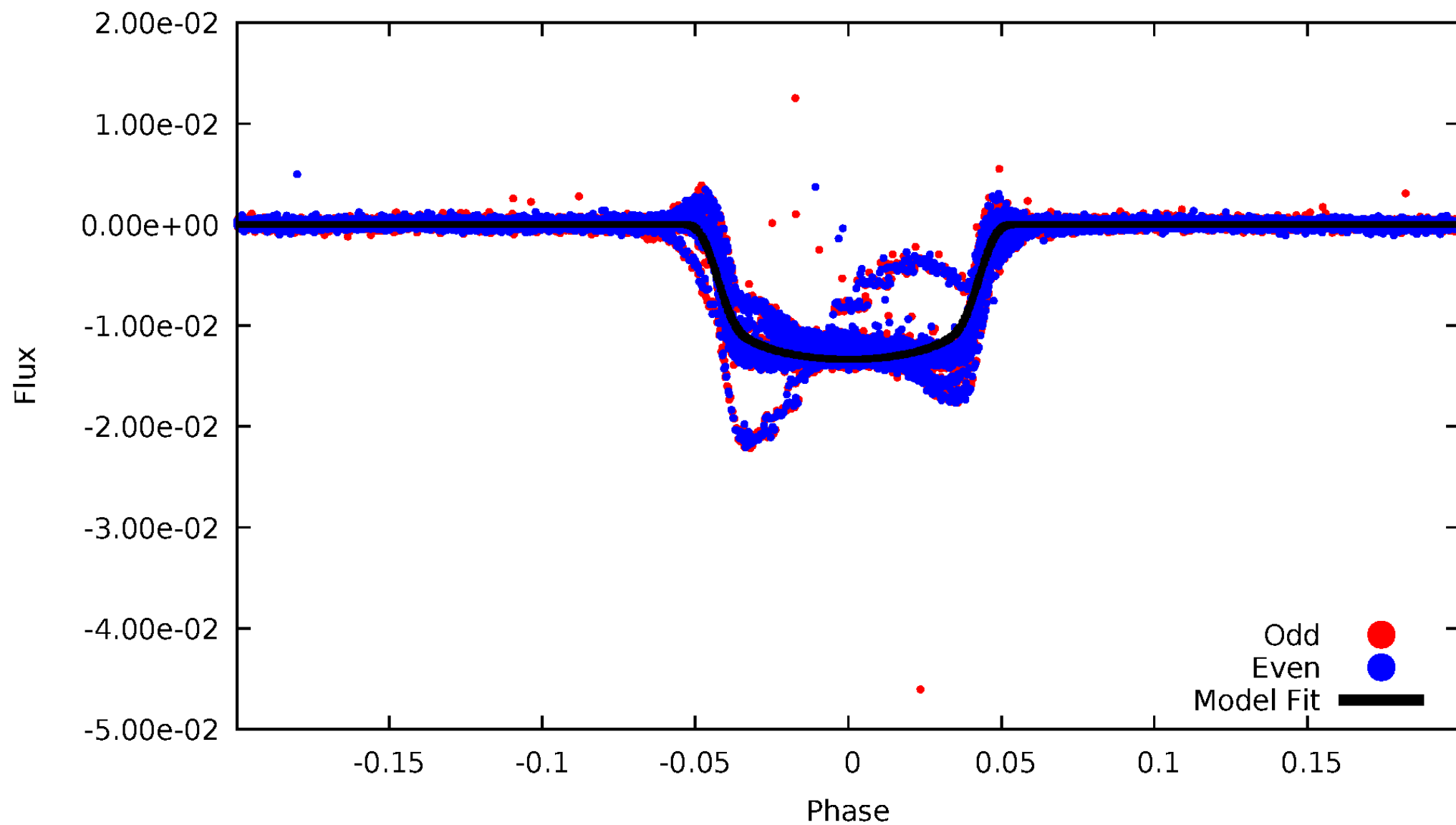


TCE 006606653-01



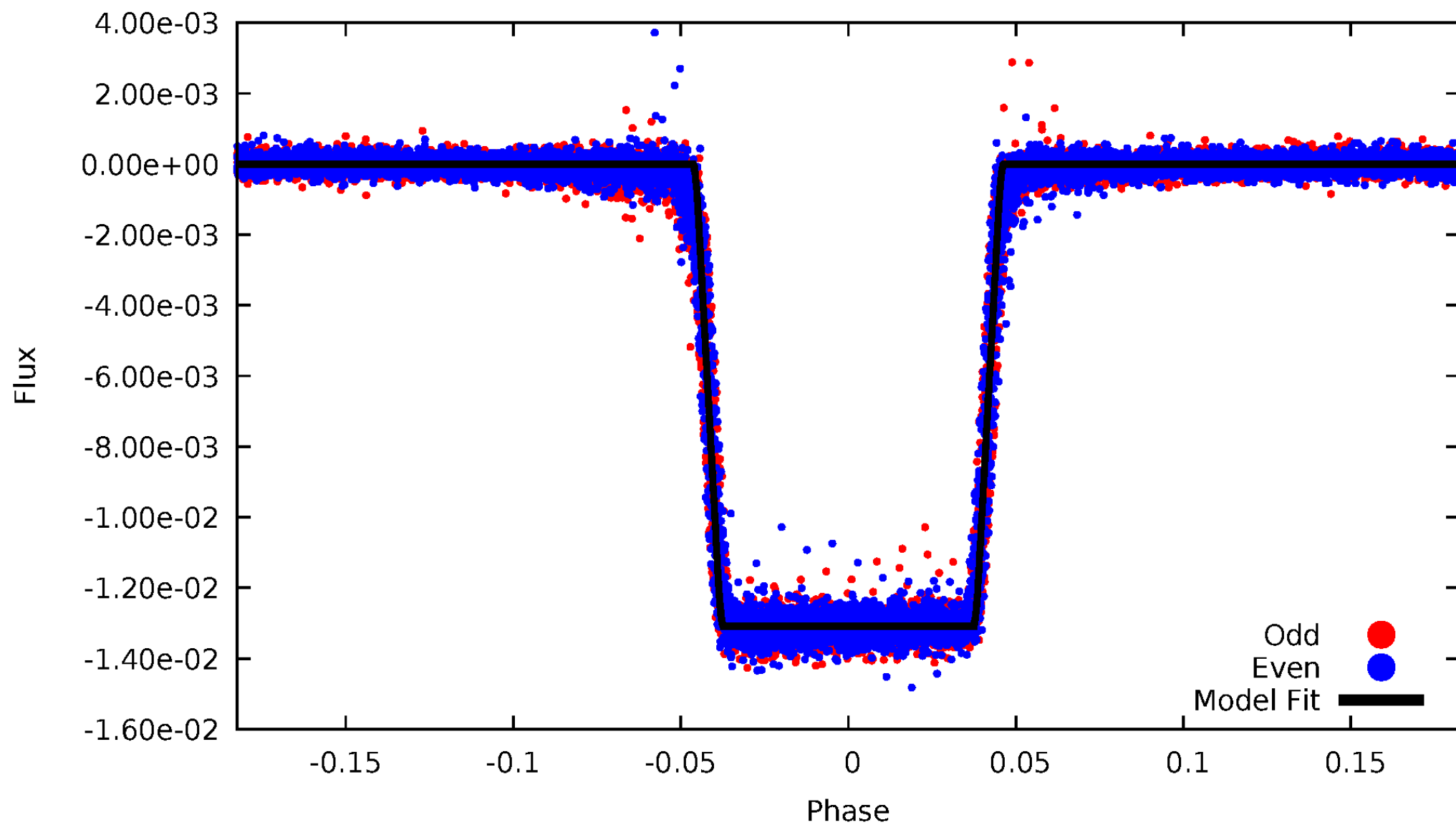
DV Odd/Even

TCE 006606653-01



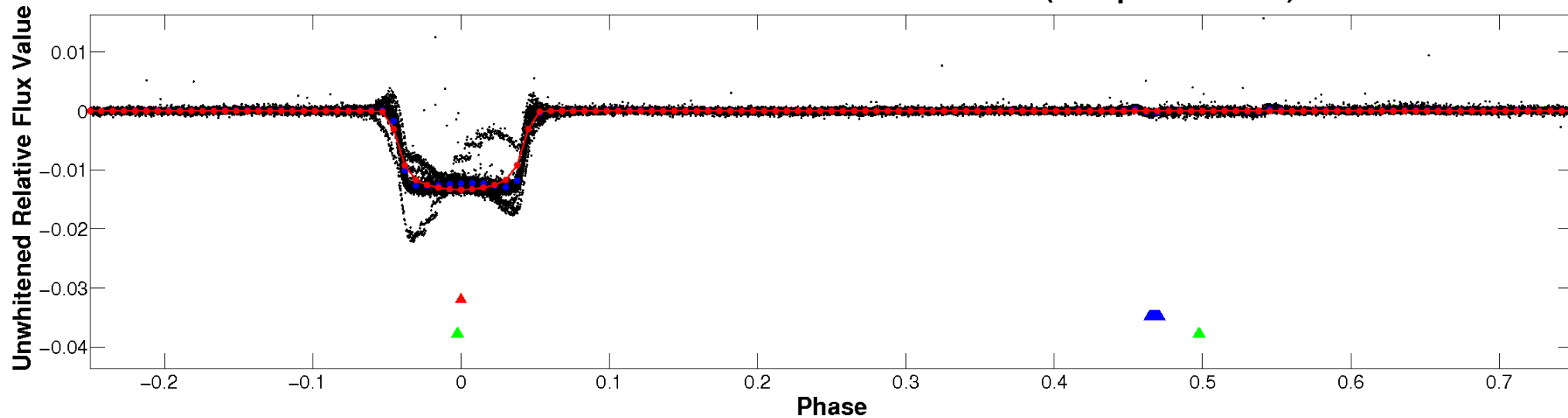
ALT Odd/Even

TCE 006606653-01

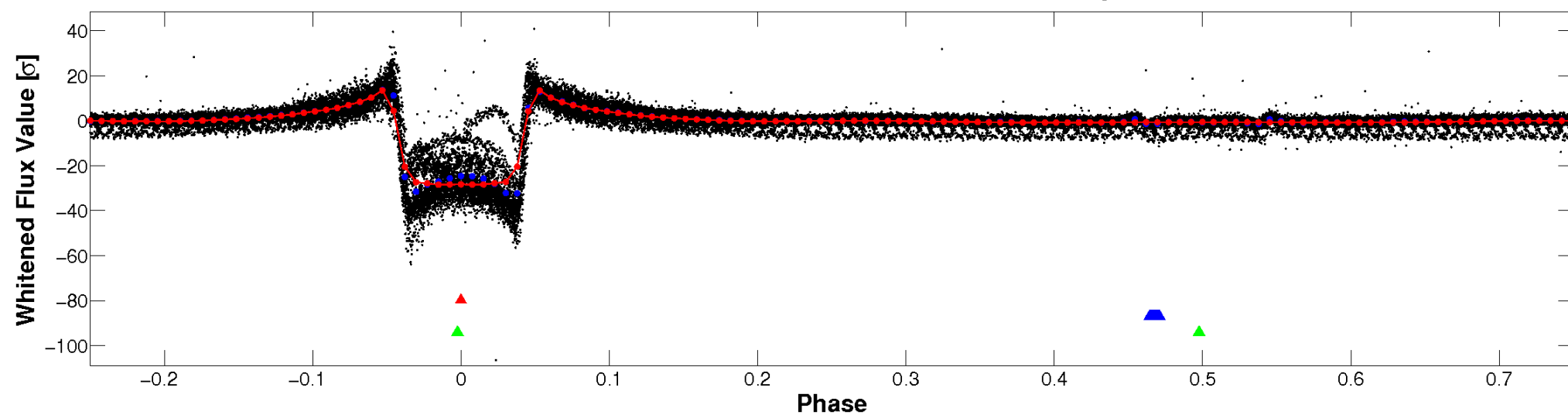


Non-Whitened Vs. Whitened Light Curve

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

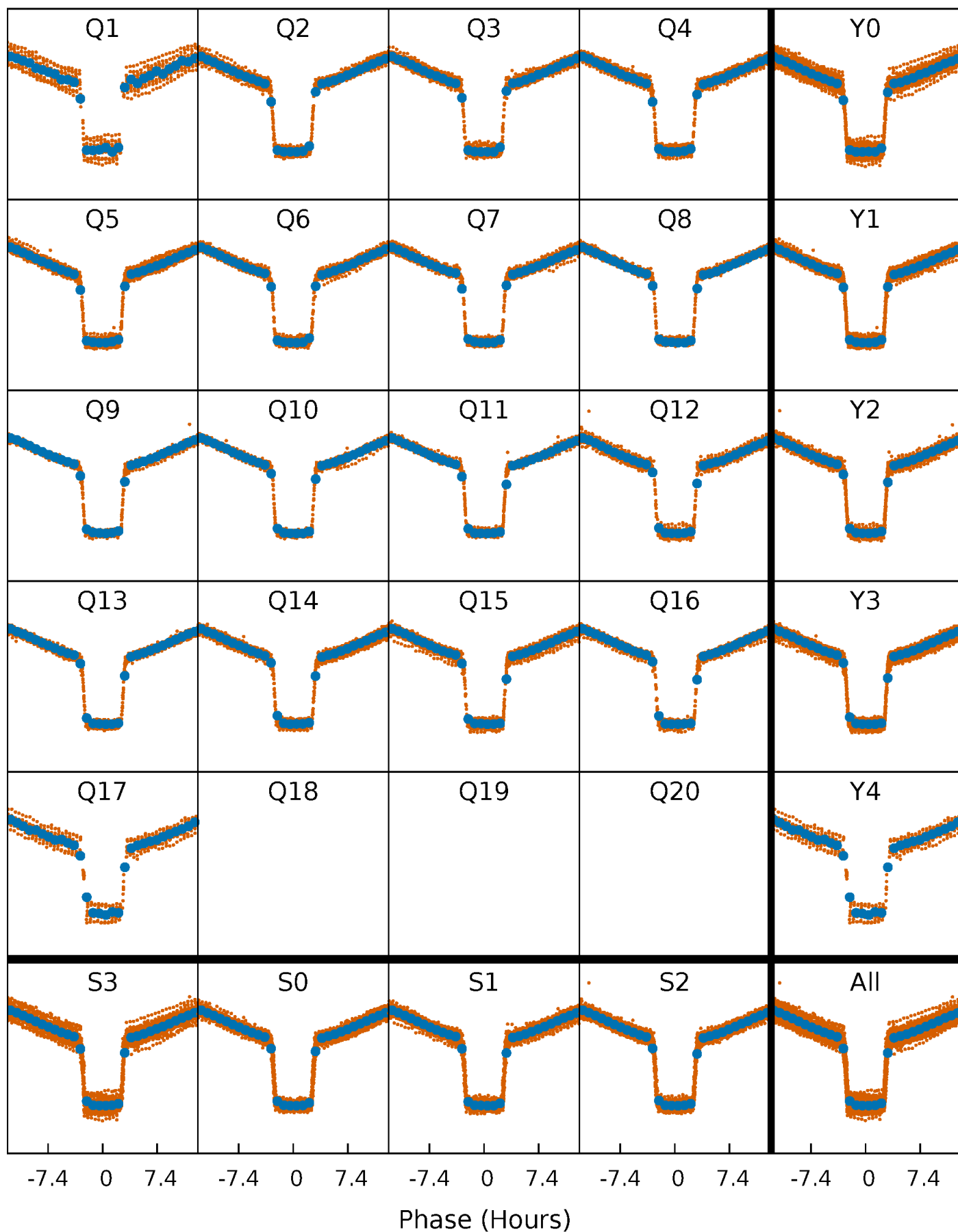


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



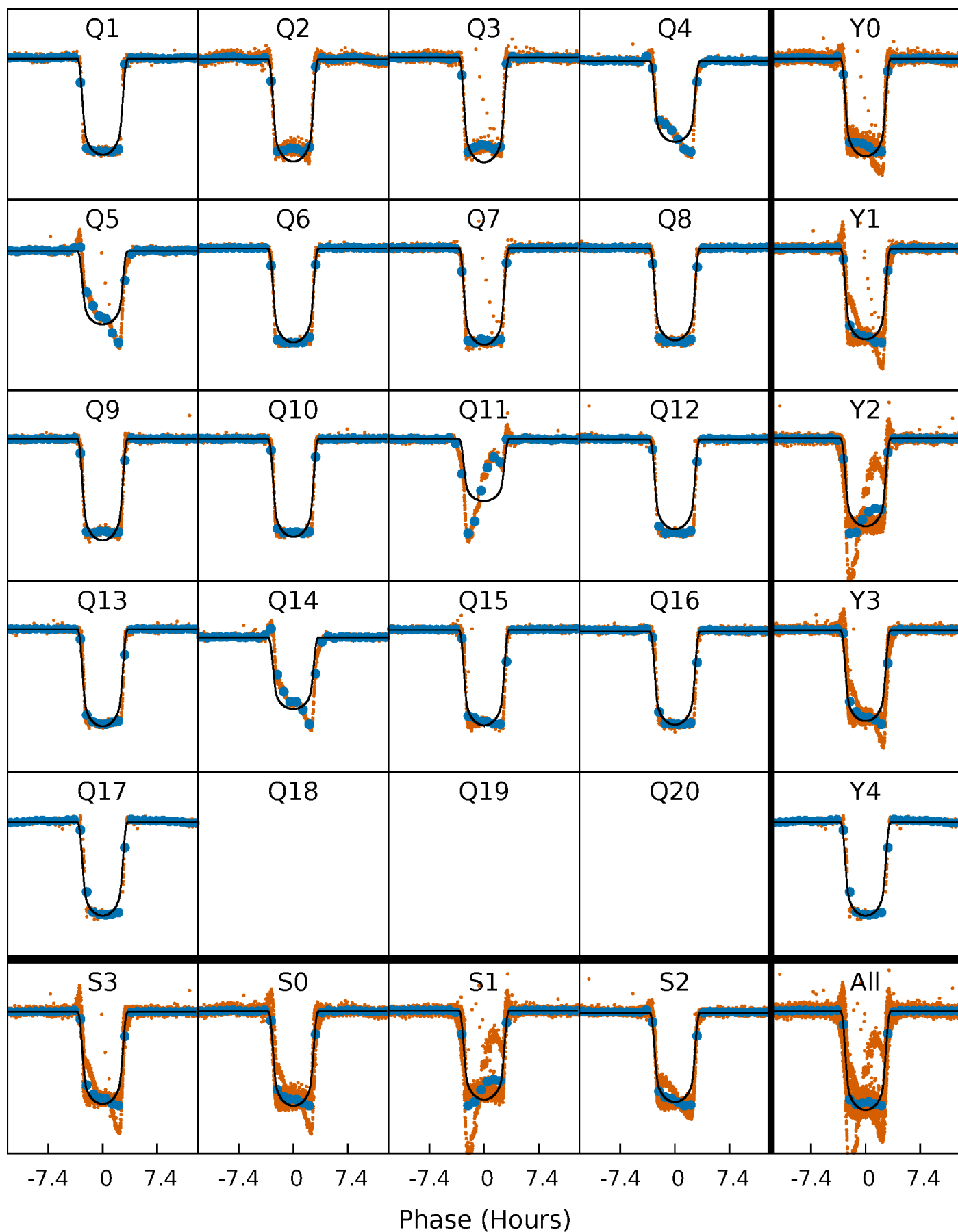
PDC Quarter-Phased Transit Curves

TCE 006606653-01 P= 2.698004 Days $T_0=132.289797$ (BKJD)



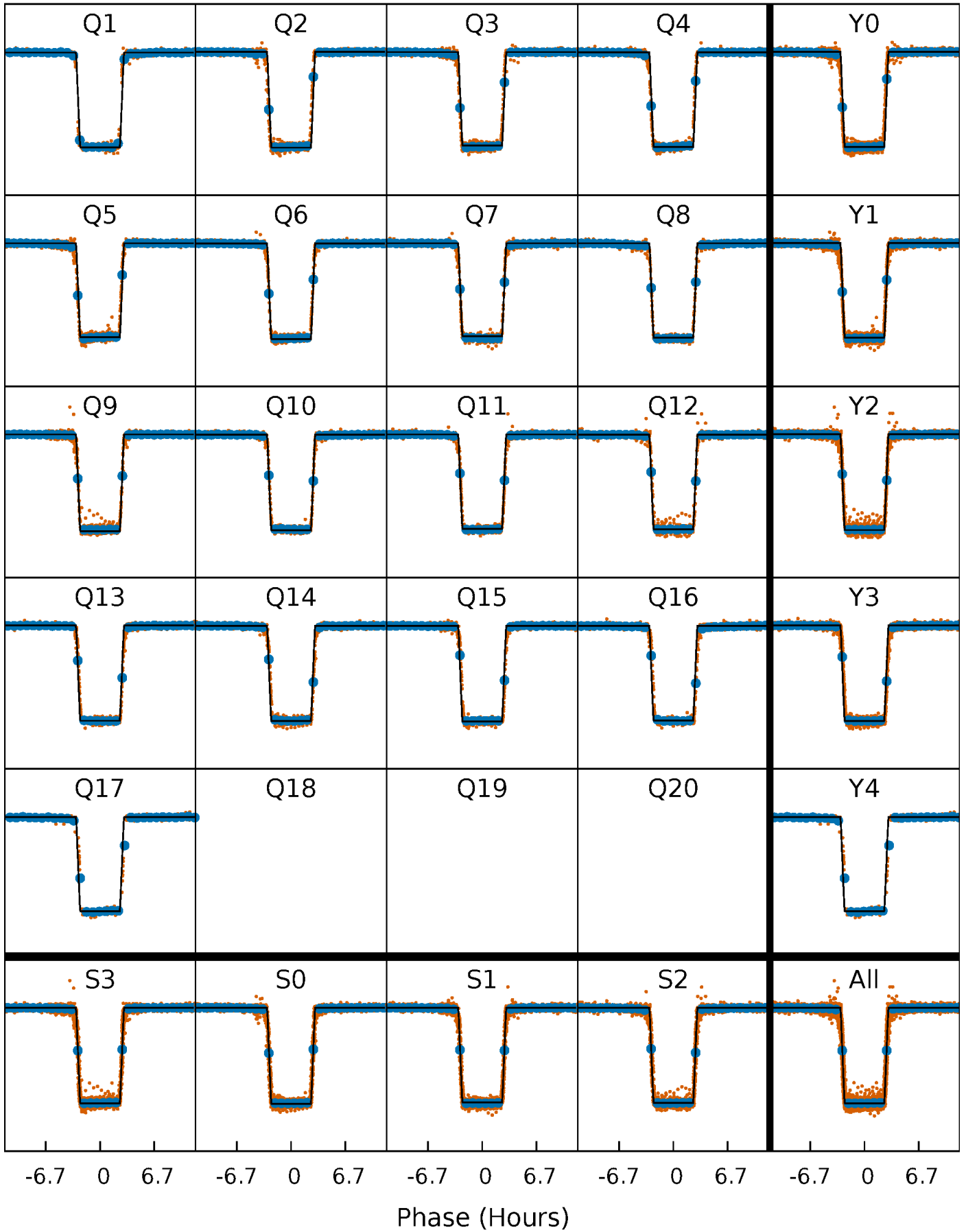
DV Quarter-Phased Transit Curves

TCE 006606653-01 P= 2.698004 Days $T_0=132.289797$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

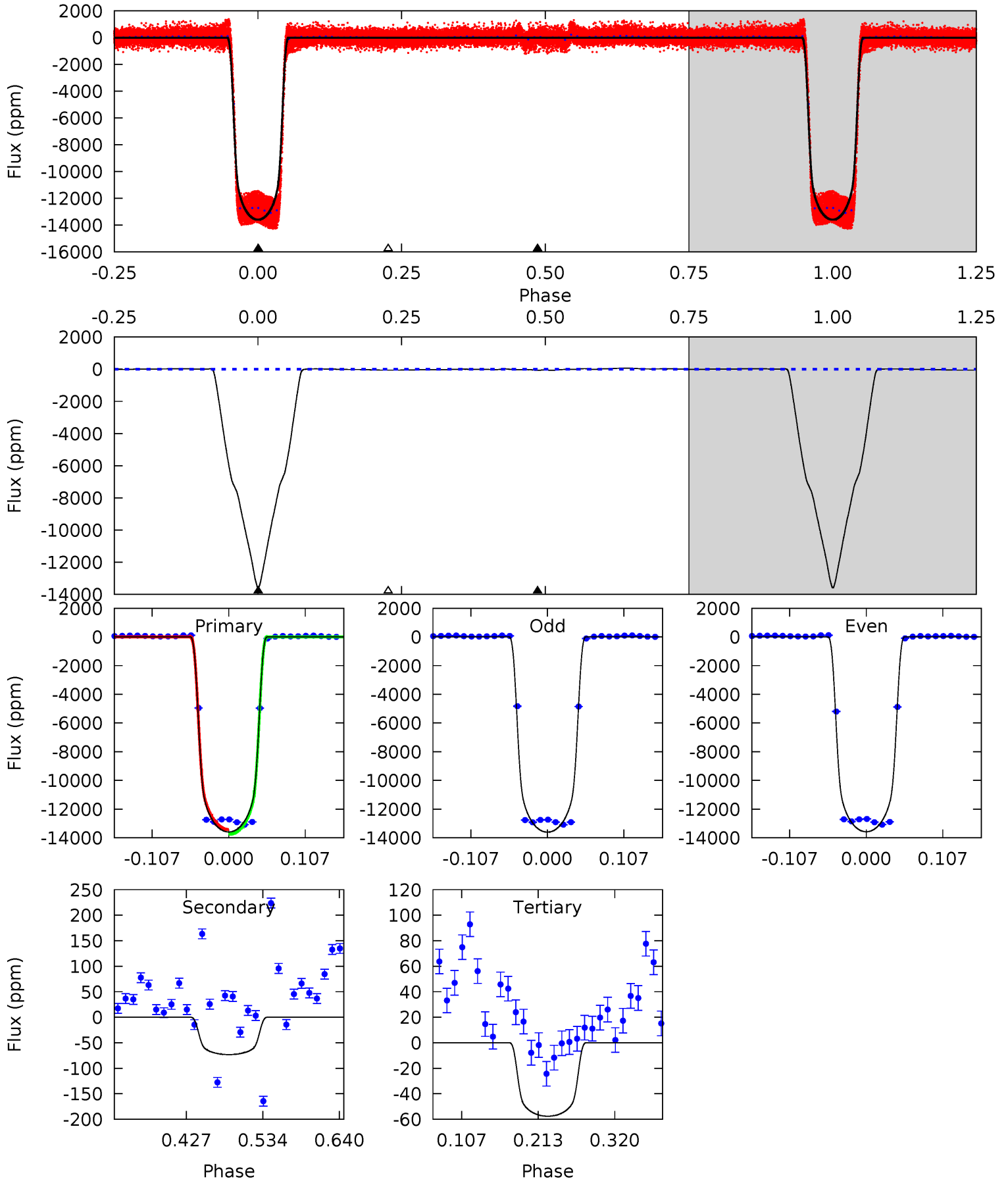
TCE 006606653-01 P= 2.698001 Days $T_0=132.292104$ (BKJD)



DV Model-Shift Uniqueness Test

006606653-01, P = 2.698004 Days, E = 129.591793 Days

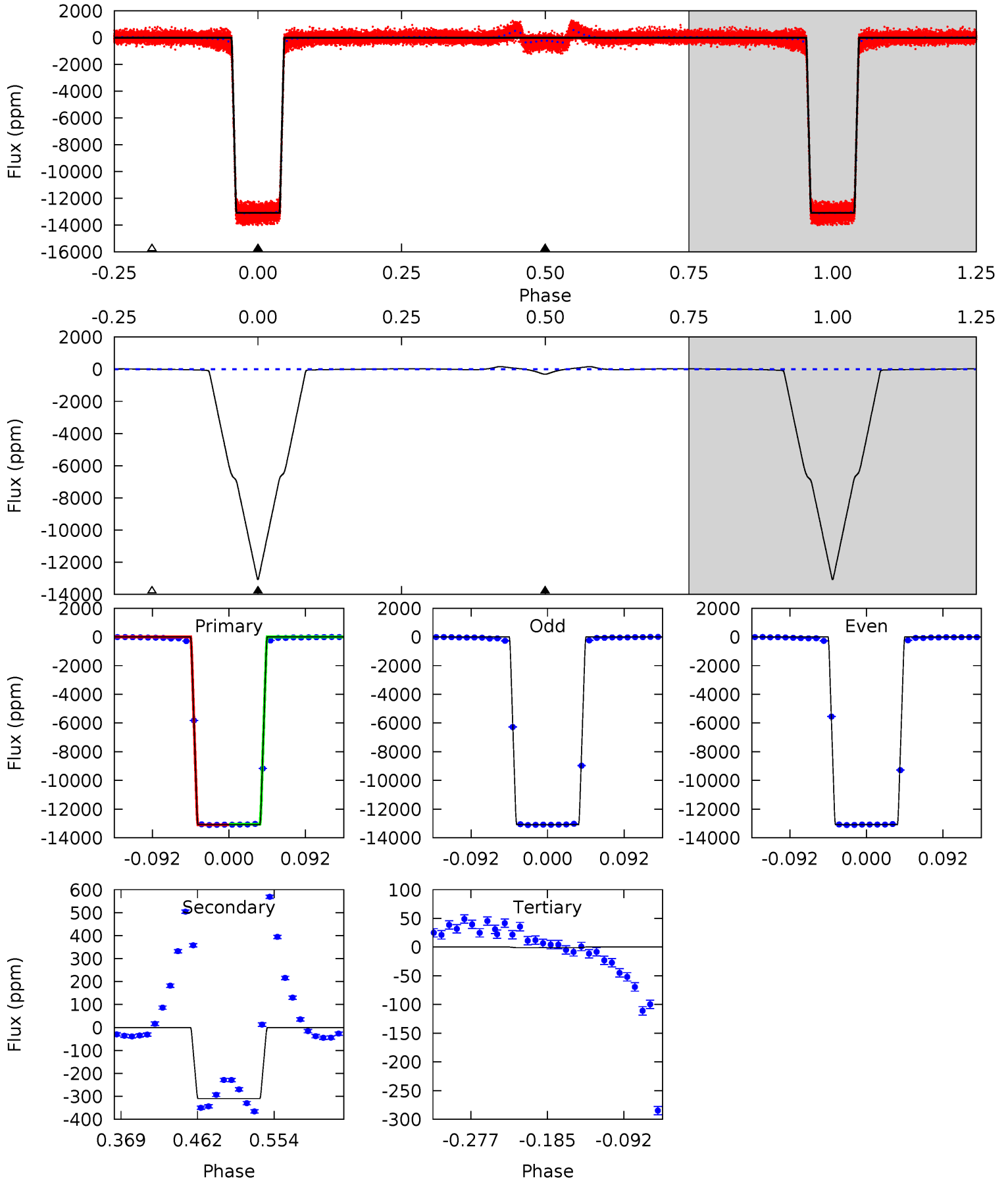
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
3544	19.1	15.0	0	4.55	1.61	7.88	3529	3544	4.07	19.1	3.90	0.98	0.00	0



Alt Model-Shift Uniqueness Test

006606653-01, P = 2.698001 Days, E = 129.594103 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5289	125.3	0.44	0	4.58	1.68	9.39	5288	5289	124.8	125.3	0.22	1.00	0.01	7.06



Stellar Parameters For KIC 006606653

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6568^{+161}_{-201}	$4.360^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.211^{+0.391}_{-0.140}$	$1.229^{+0.174}_{-0.174}$	$0.975^{+0.274}_{-0.510}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-12%	+14%/-14%	+28%/-52%
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 006606653-01 / KOI 1224.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-73 ± 4	$14.77^{+2.48}_{-1.27}$	2247^{+161}_{-107}	-1613^{+3718}_{-692}	$0.297^{+0.052}_{-0.072}$
Alt.	-310 ± 2	$15.35^{+2.74}_{-1.13}$	2248^{+171}_{-105}	3031^{+50}_{-65}	$1.159^{+0.174}_{-0.291}$

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 $A_{obs} \gg 1.0$

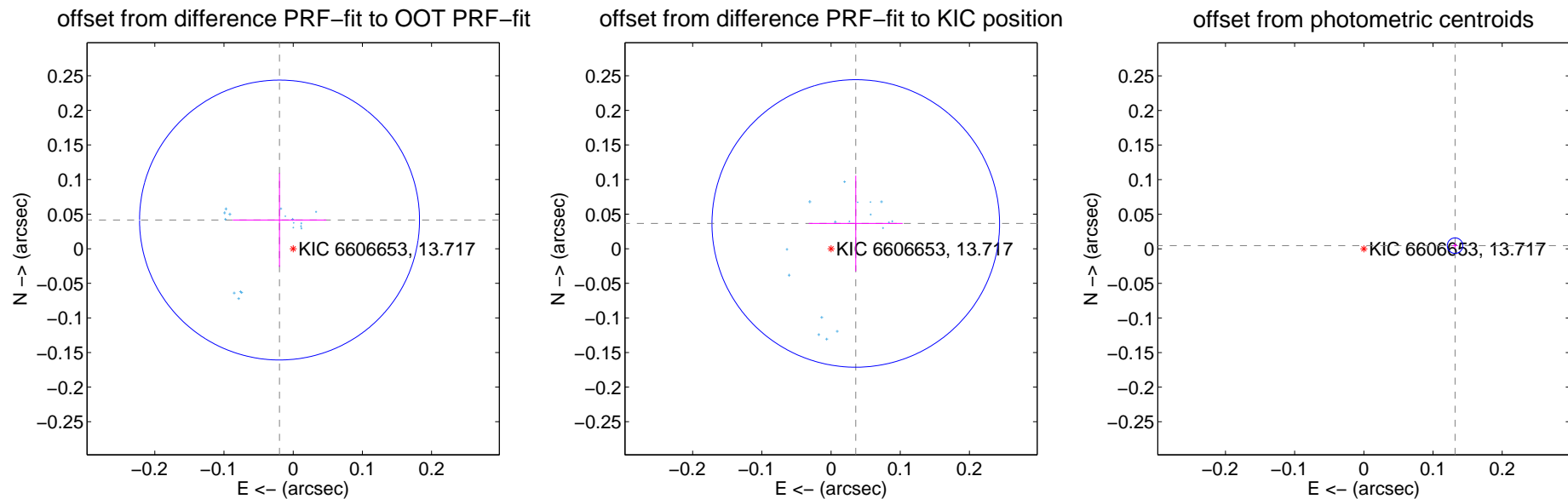
DV Centroid Data

Supplemental centroid analysis for 006606653-01. Kepler magnitude: 13.72. Transit SNR 1596.62

There are 17 quarters with good PRF difference image offsets

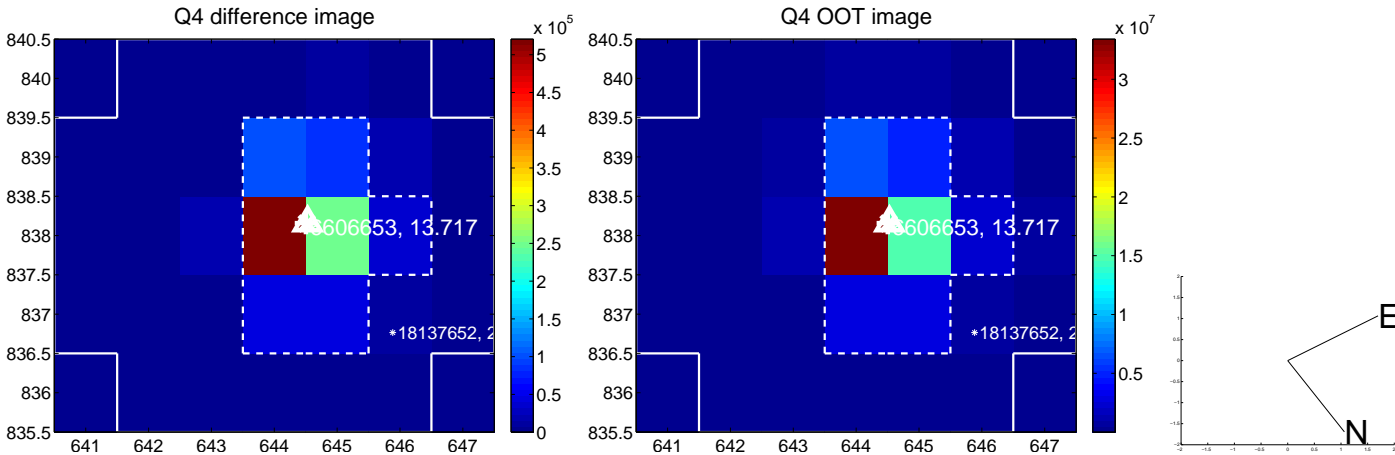
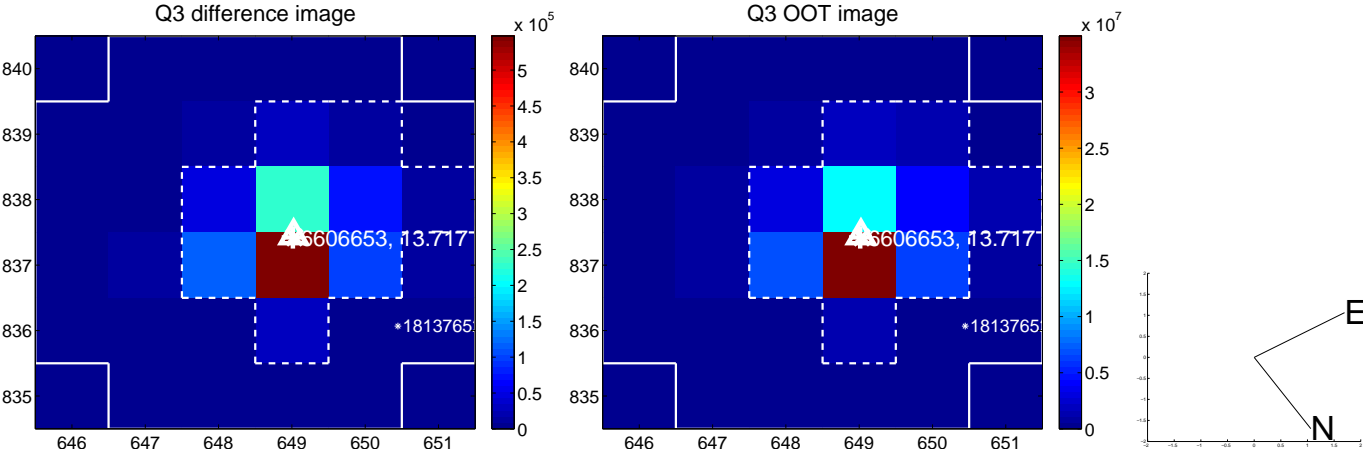
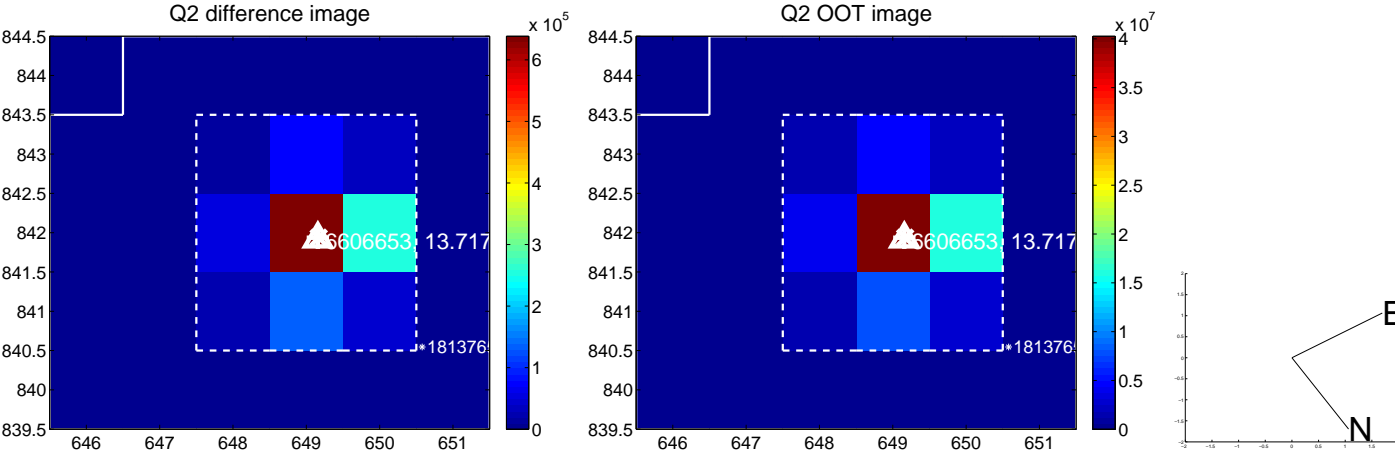
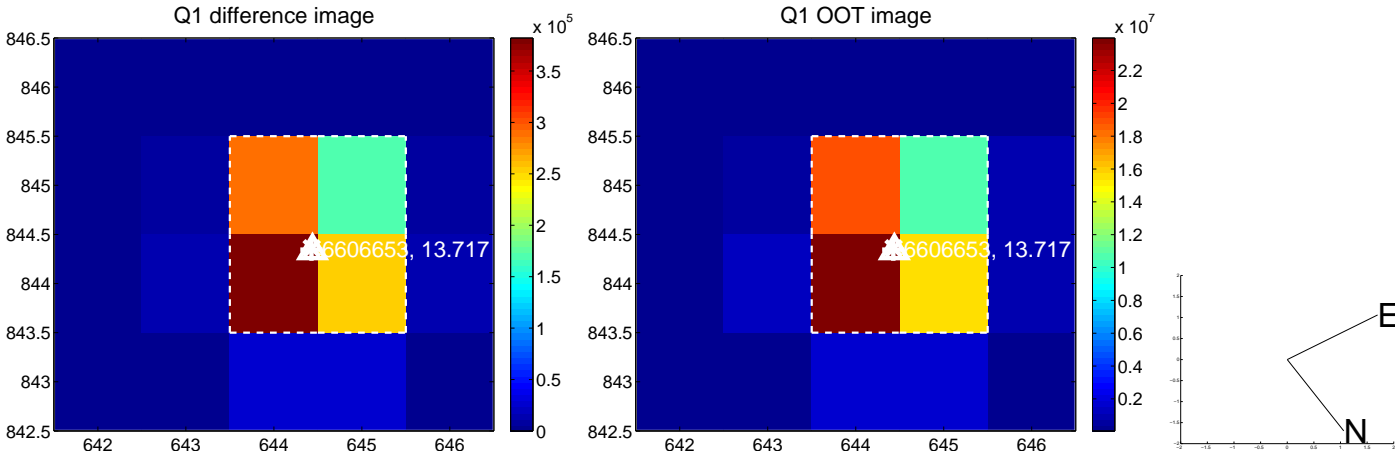
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.046 ± 0.067	0.68	0.020 ± 0.068	0.041 ± 0.068
PRF-fit source offset from KIC position	0.051 ± 0.069	0.74	-0.036 ± 0.068	0.037 ± 0.069
photometric centroid source offset	0.13 ± 0.00	35.32	-0.13 ± 0.00	0.00 ± 0.00

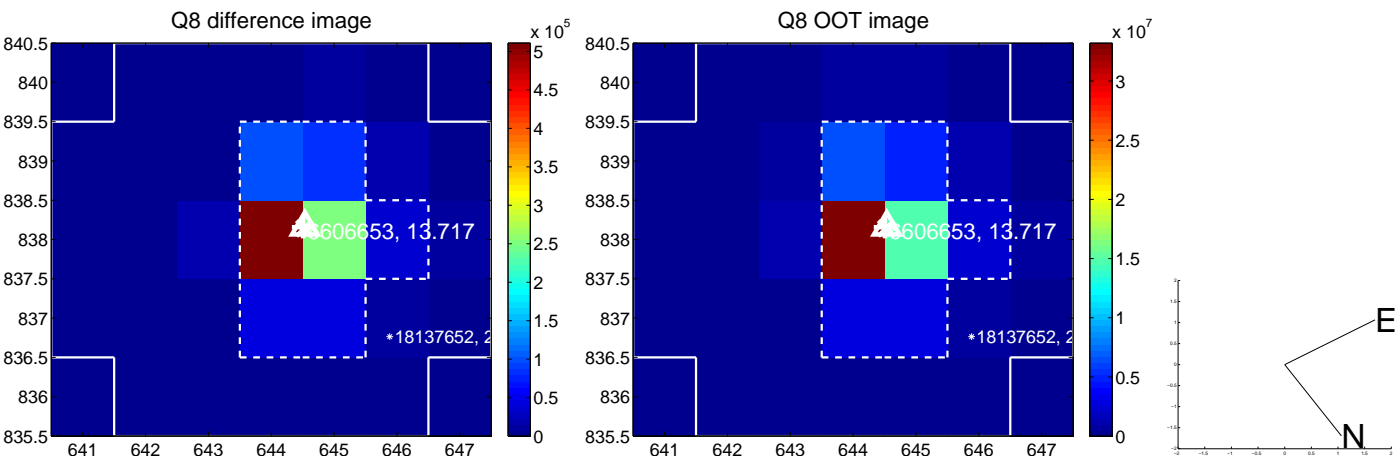
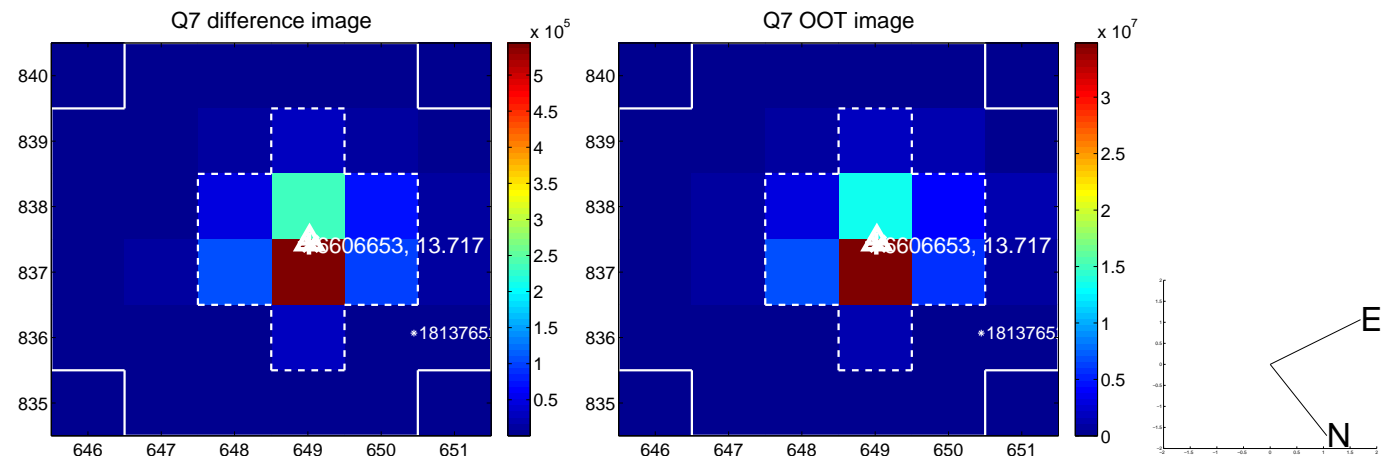
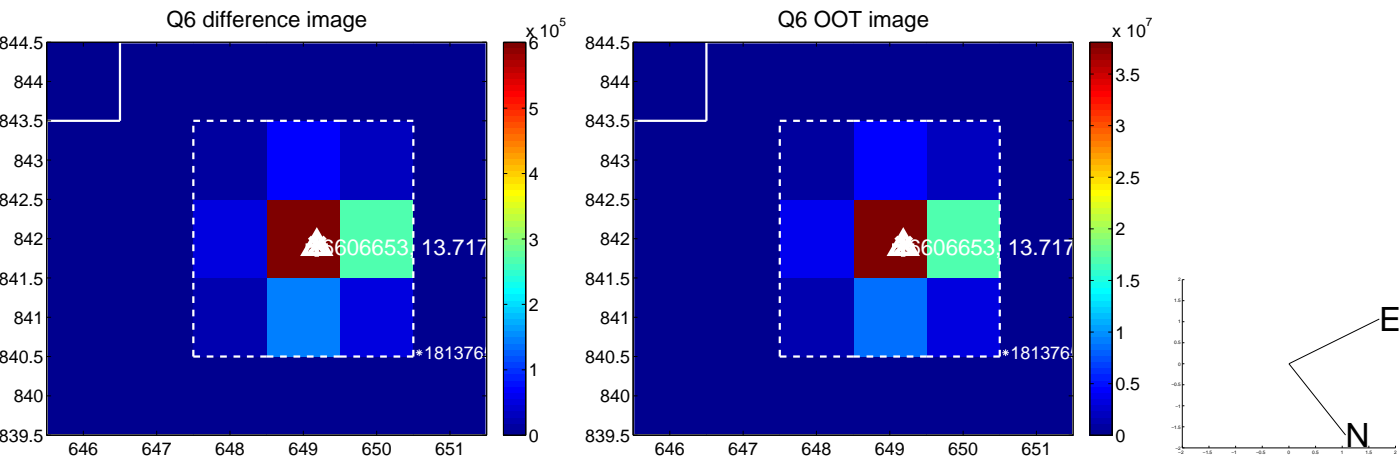
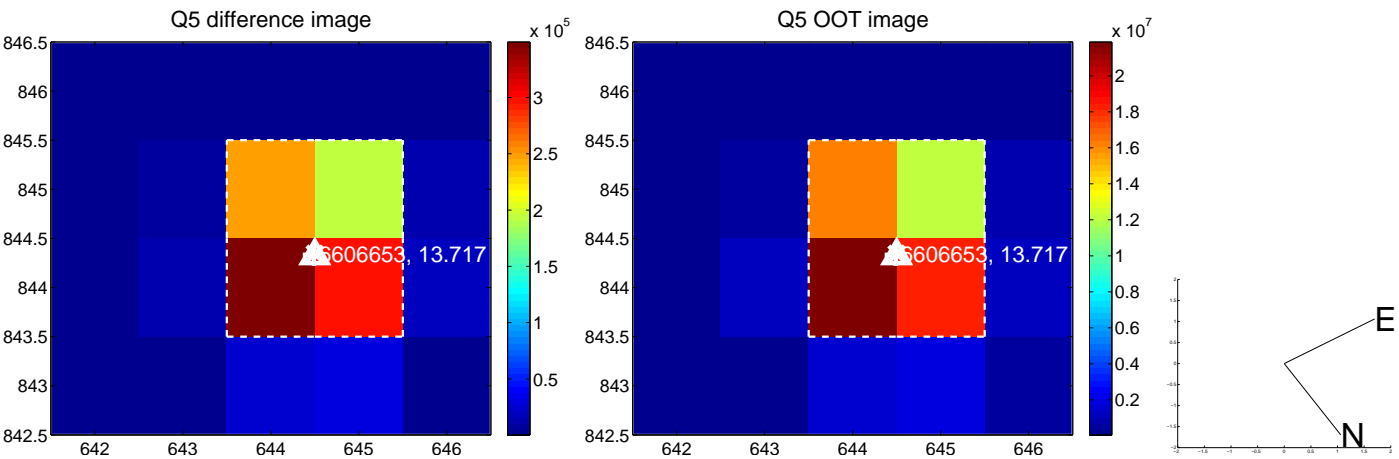


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

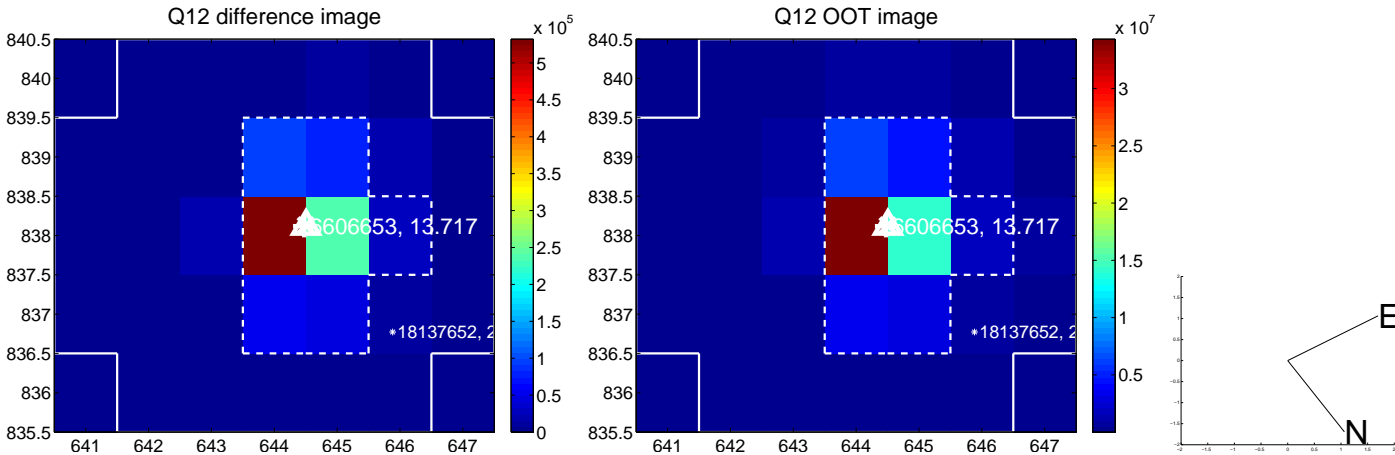
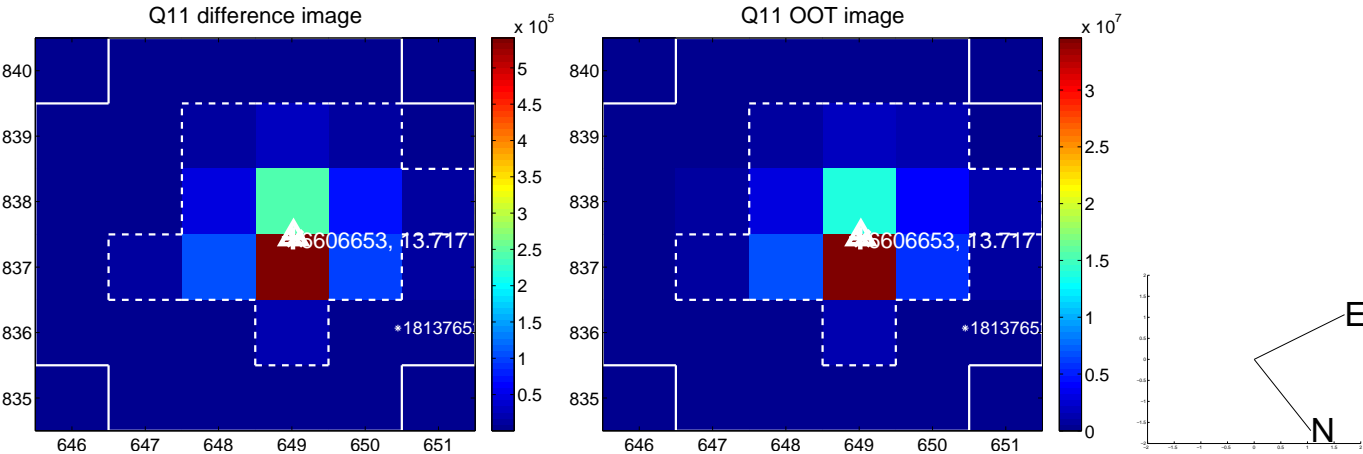
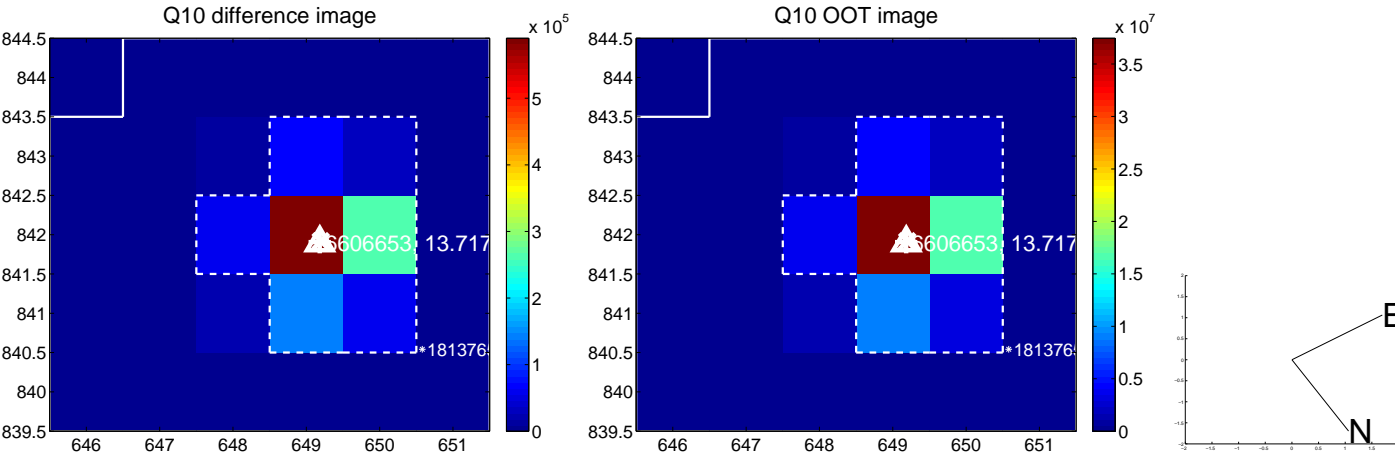
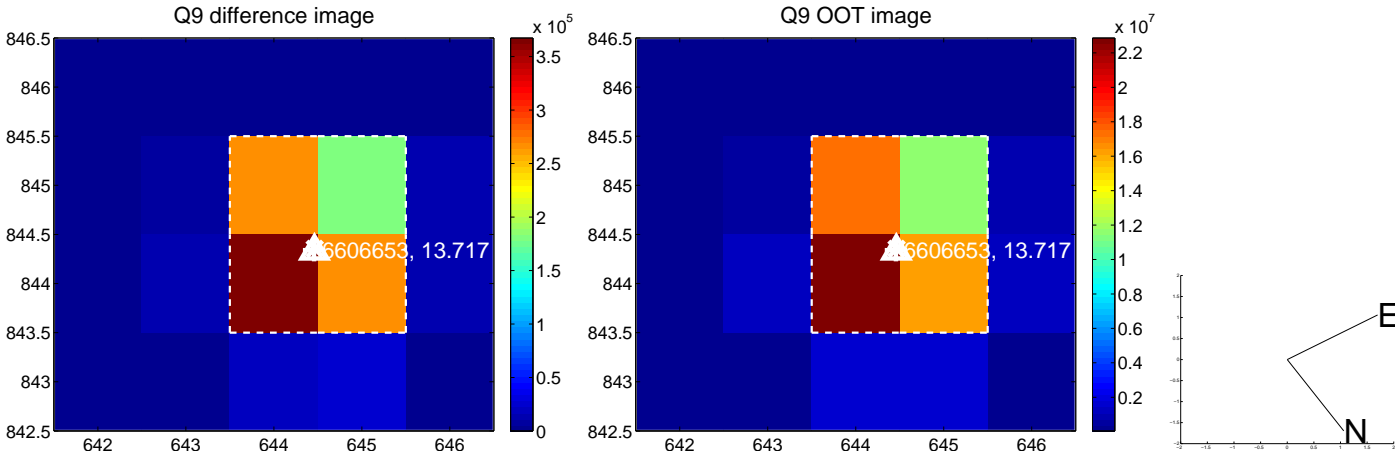
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



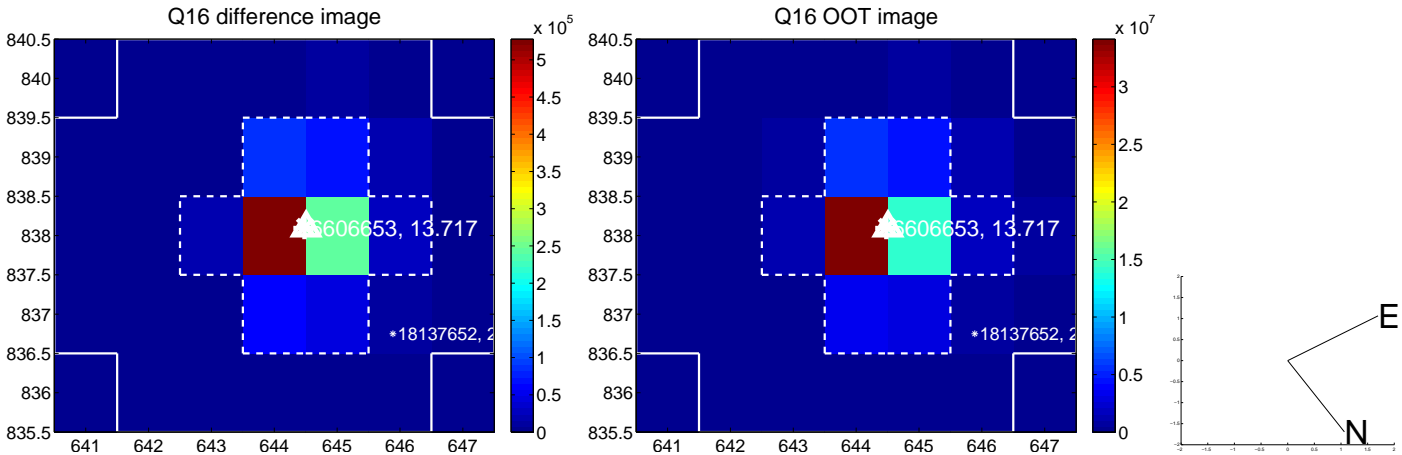
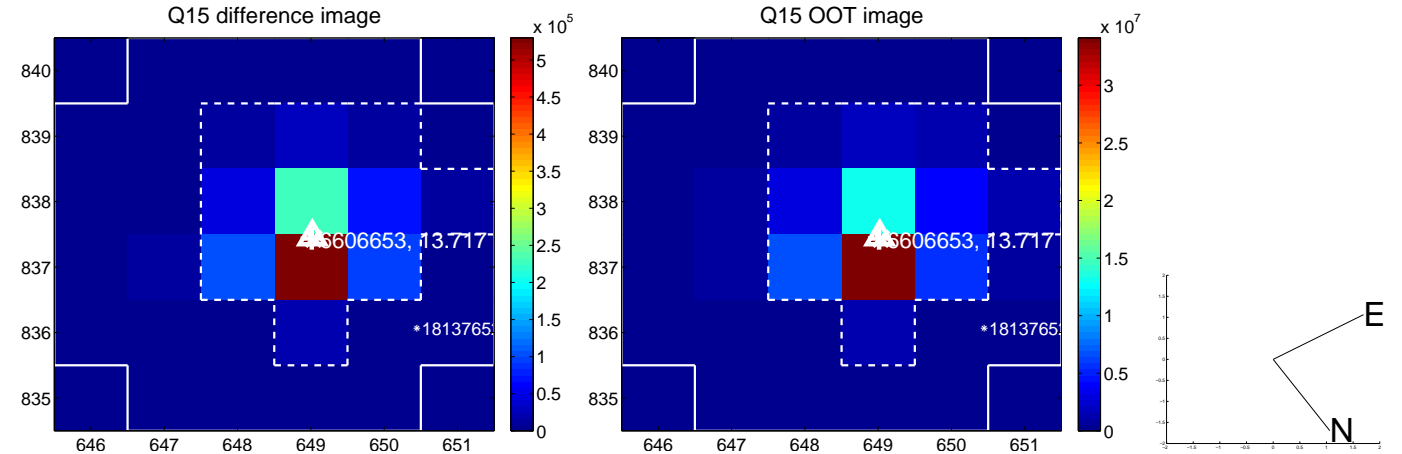
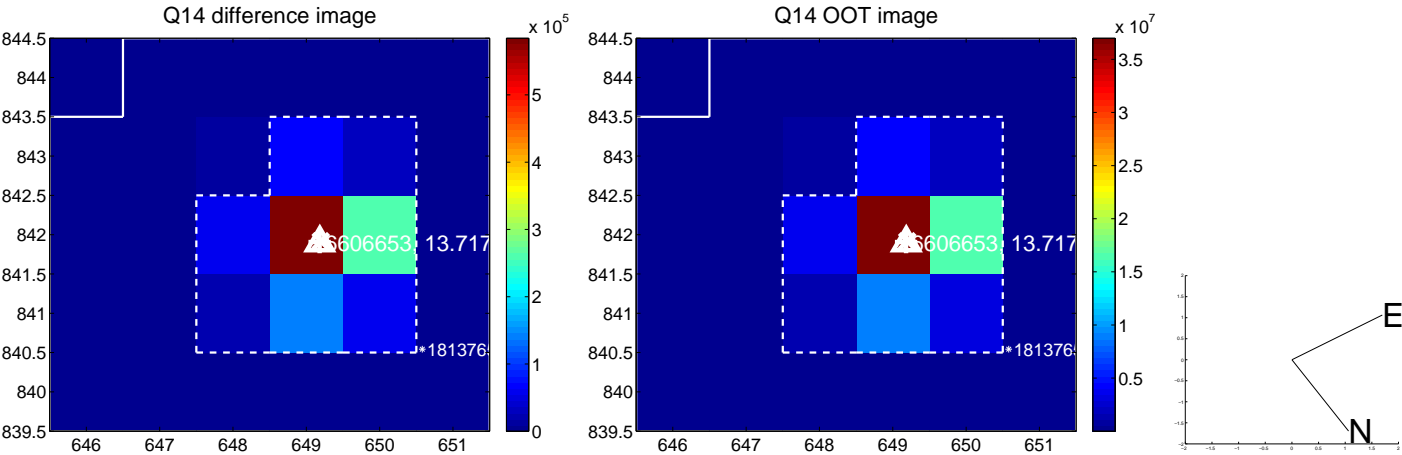
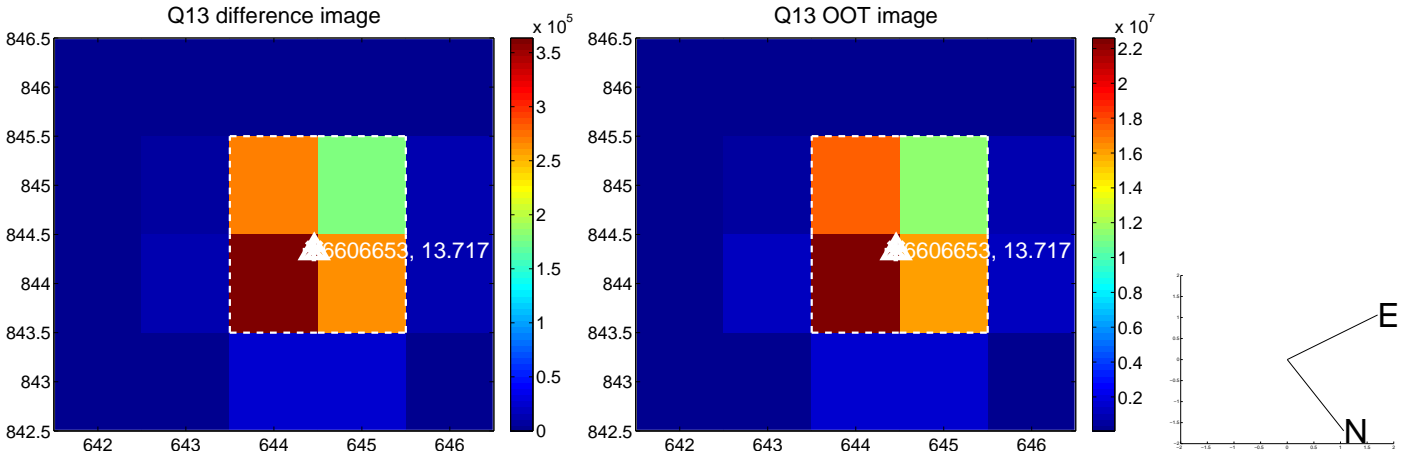
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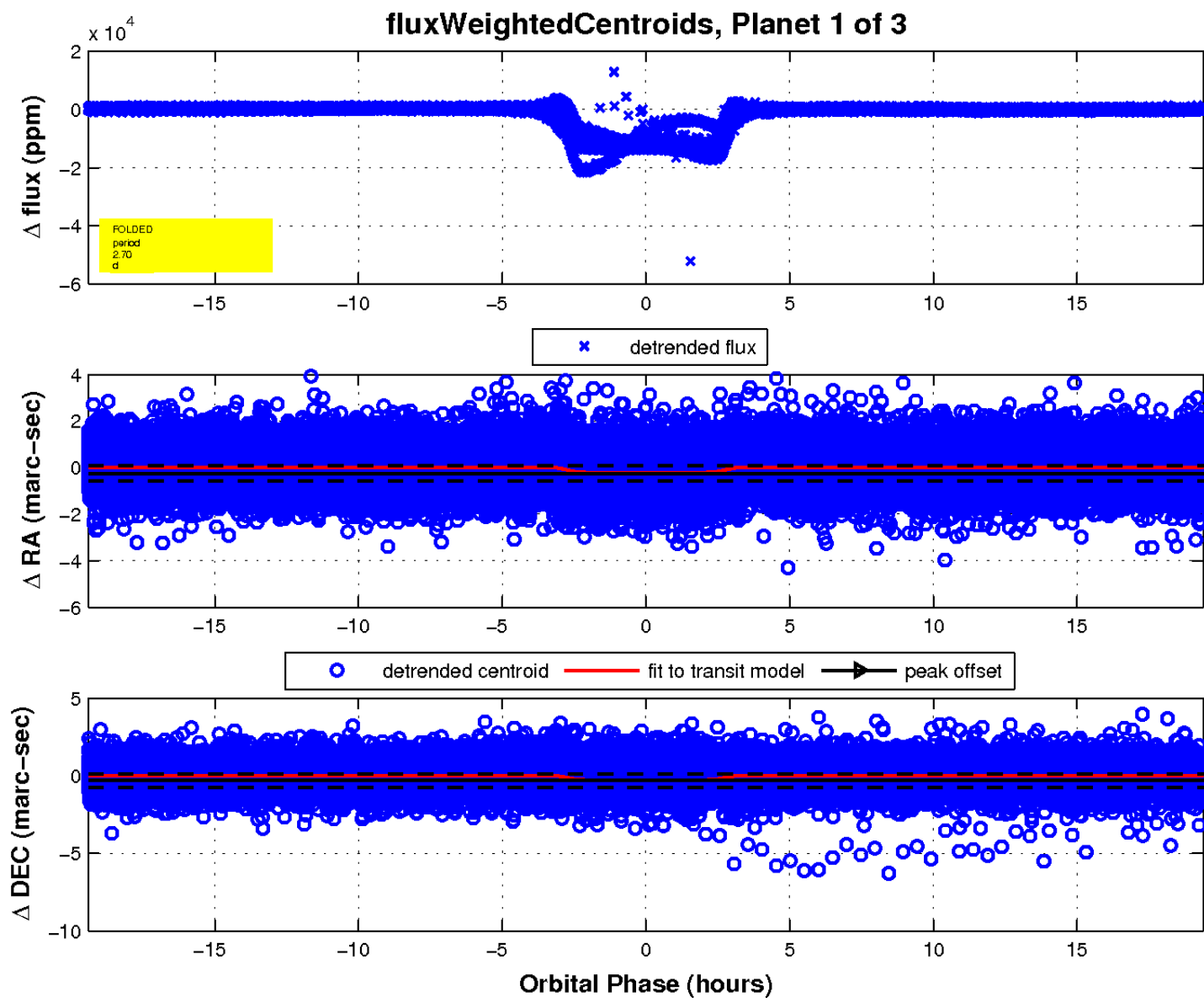
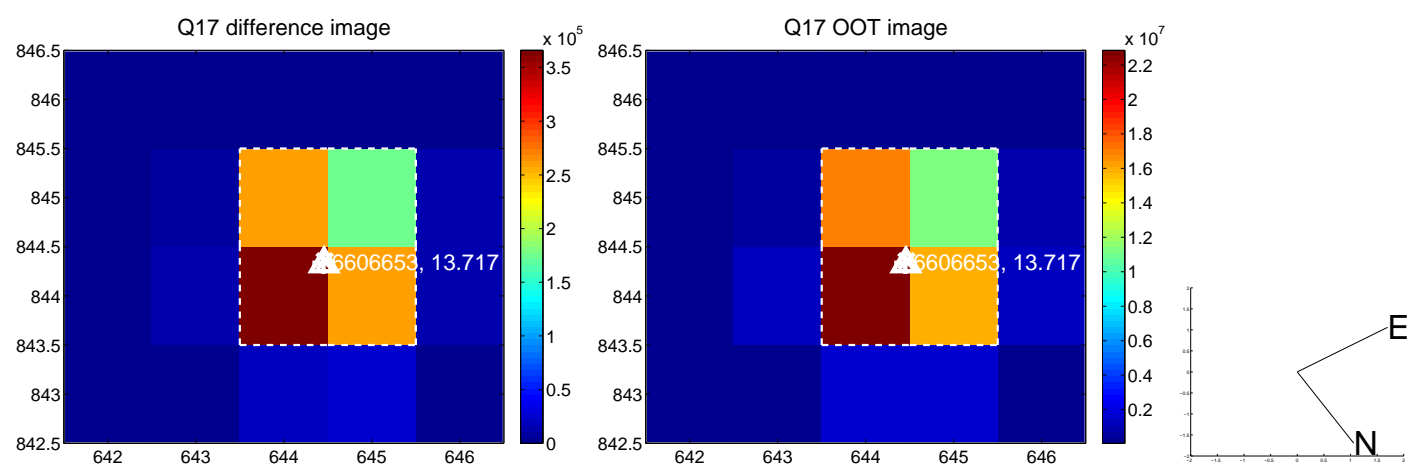
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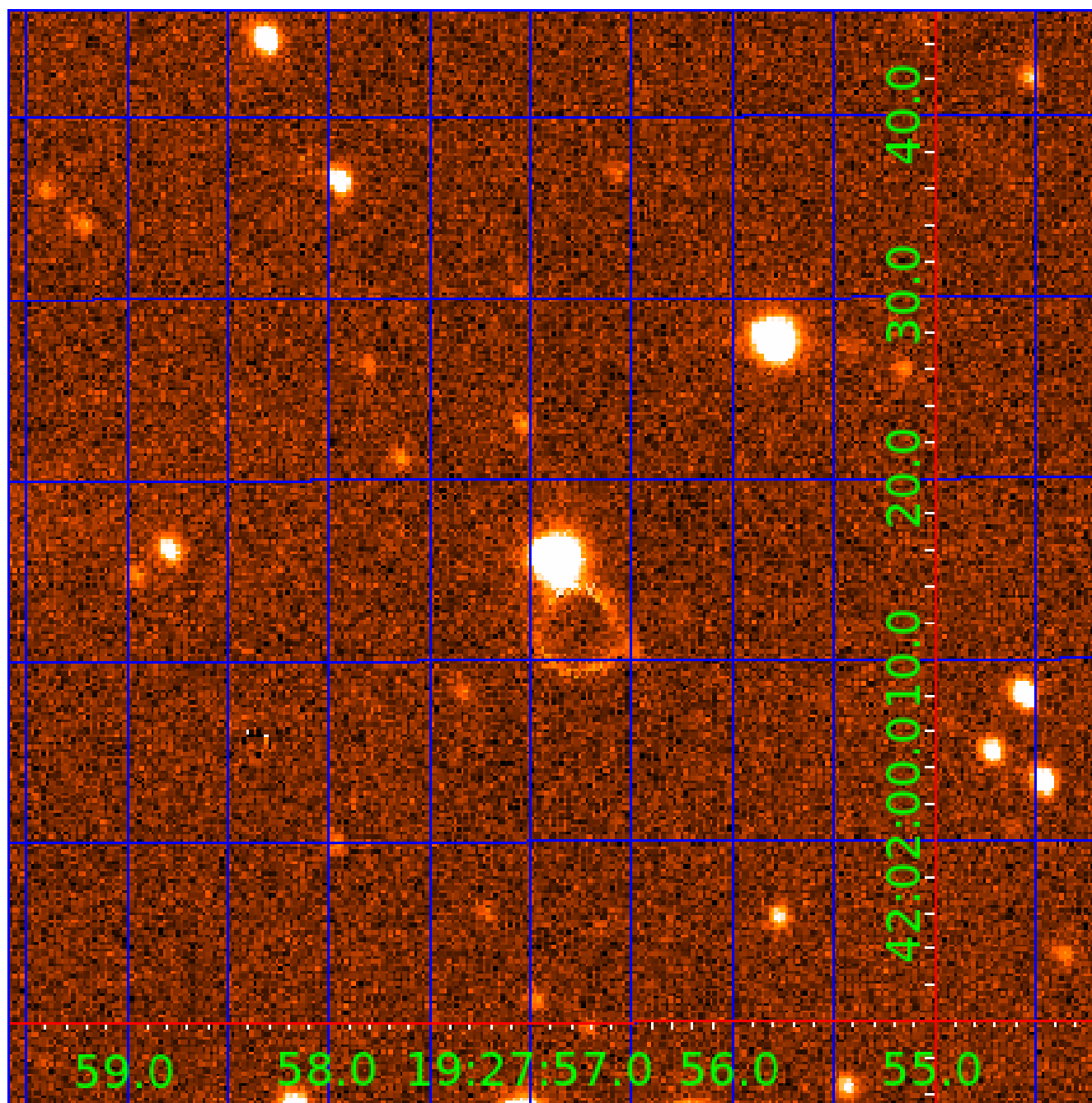


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006606653

Q1-17 DR25 TCE Parameters

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TCE	Run Type	Disp	Score	N	S	C	E	Comments
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006606653-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006606653-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE

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.

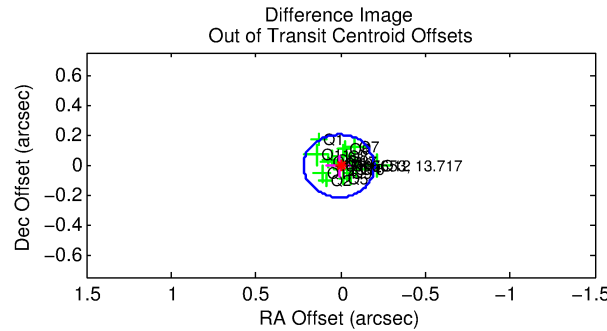
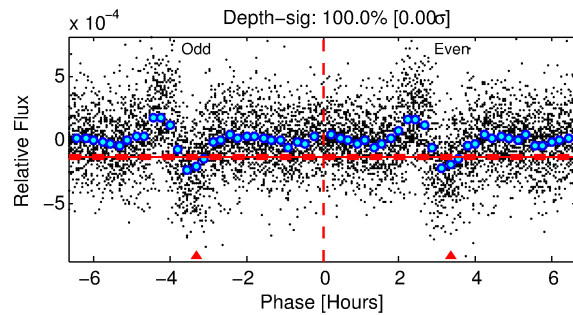
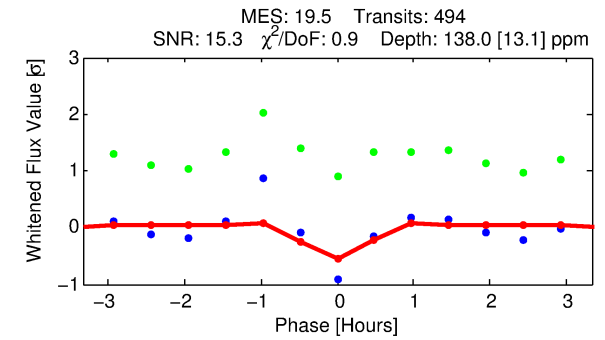
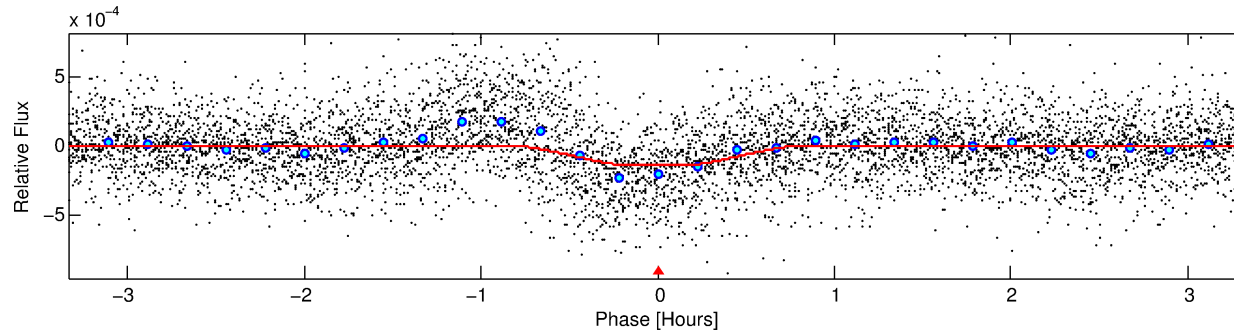
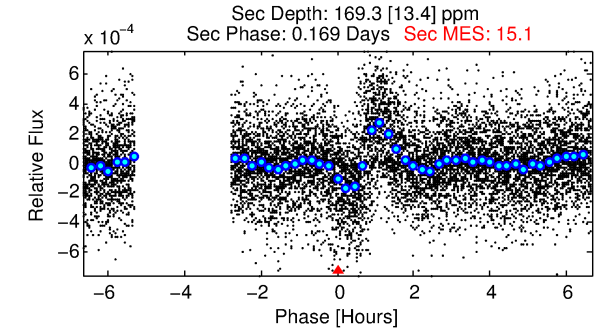
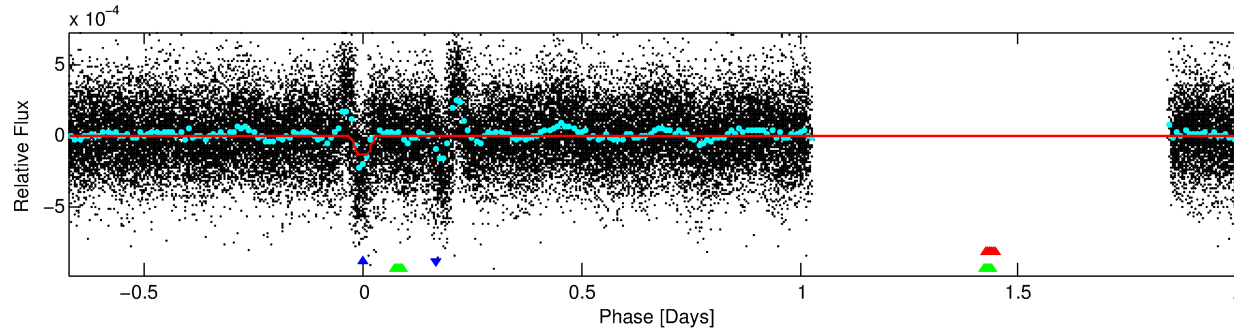
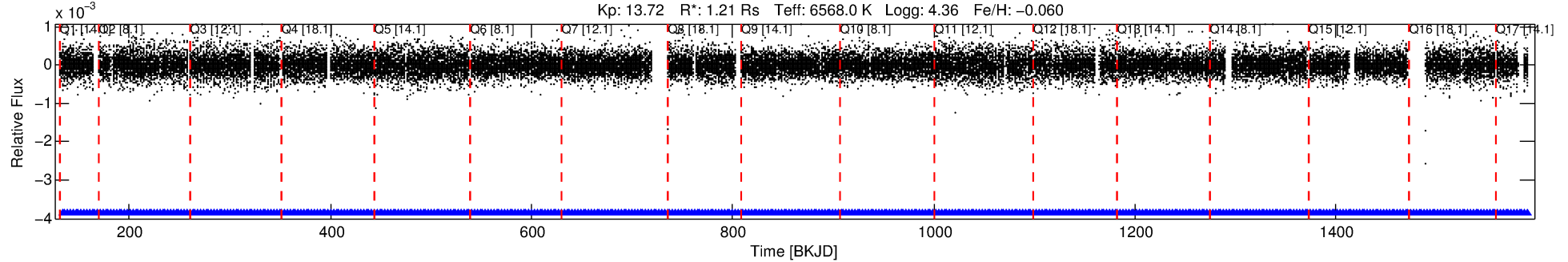
Ephemeris Match Information For 006606653-02

No Significant Match Found

DV One-Page Summary

KIC: 6606653 Candidate: 2 of 3 Period: 2.698 d
KOI: K01224 Corr: No Ephemeris Match

Kp: 13.72 R*: 1.21 Rs Teff: 6568.0 K Logg: 4.36 Fe/H: -0.060



DV Fit Results:

Period = 2.69797 [0.00001] d
Epoch = 133.5607 [0.0012] BKJD
Rp/R* = 0.0127 [0.0053]
a/R* = 8.65 [20.44]
b = 0.90 [0.51]
Seff = 1483.68 [599.49]
Teq = 1583 [160] K
Rp = 1.67 [0.88] Re
a = 0.0406 [0.0109] AU
Ag = 54.91 [50.77] [1.06σ]
Teffp = 6661 [1414] K [3.57σ]

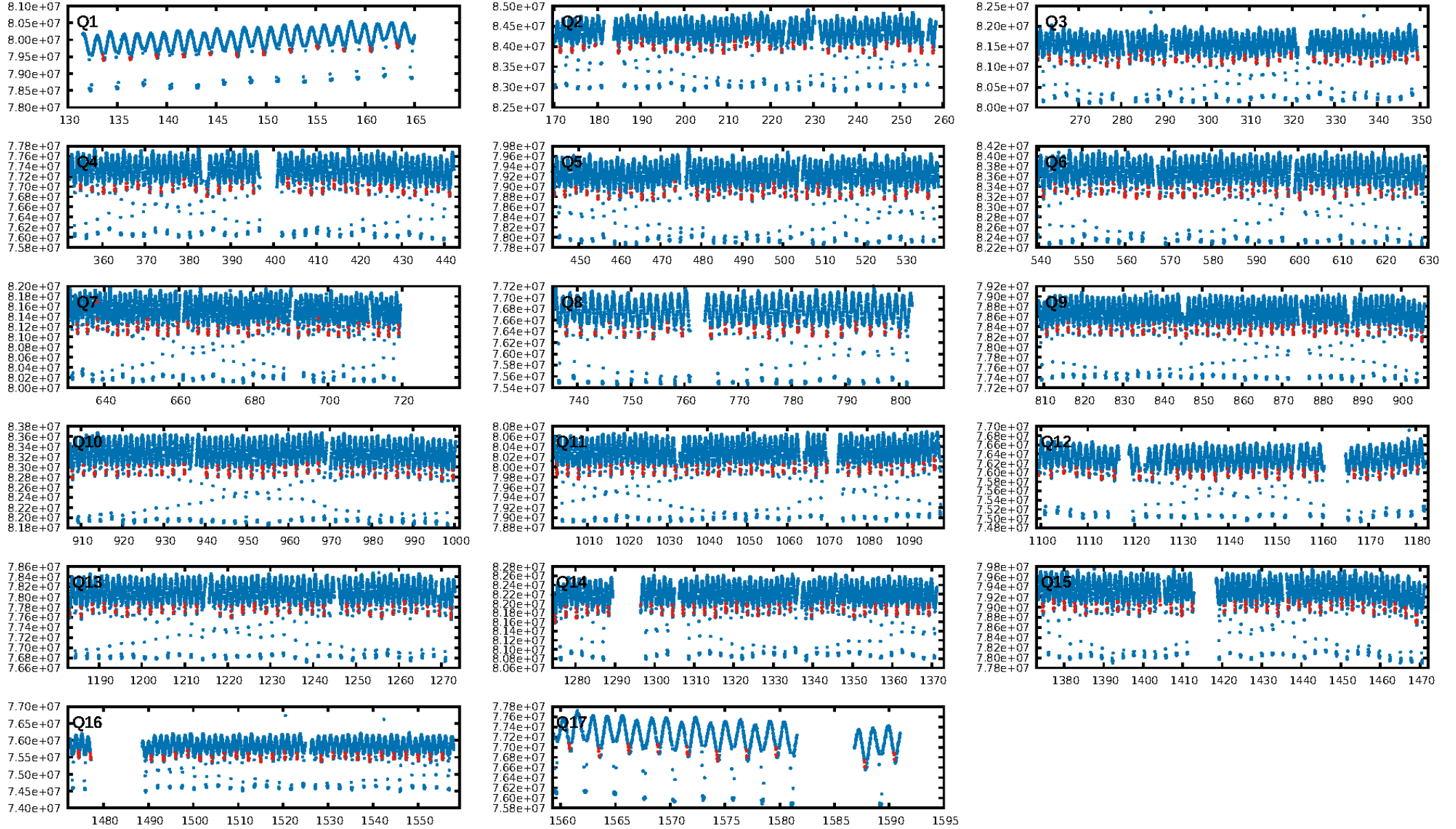
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [5.26σ]
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 4.01e-65
RollingBand-fgt: 1.00 [472/472]
GhostDiagnostic-chr: -55.09
Centroid-sig: 27.4%
Centroid-so: 0.738 arcsec [1.26σ]
OotOffset-rm: 0.013 arcsec [0.19σ]
KicOffset-rm: 0.050 arcsec [0.69σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
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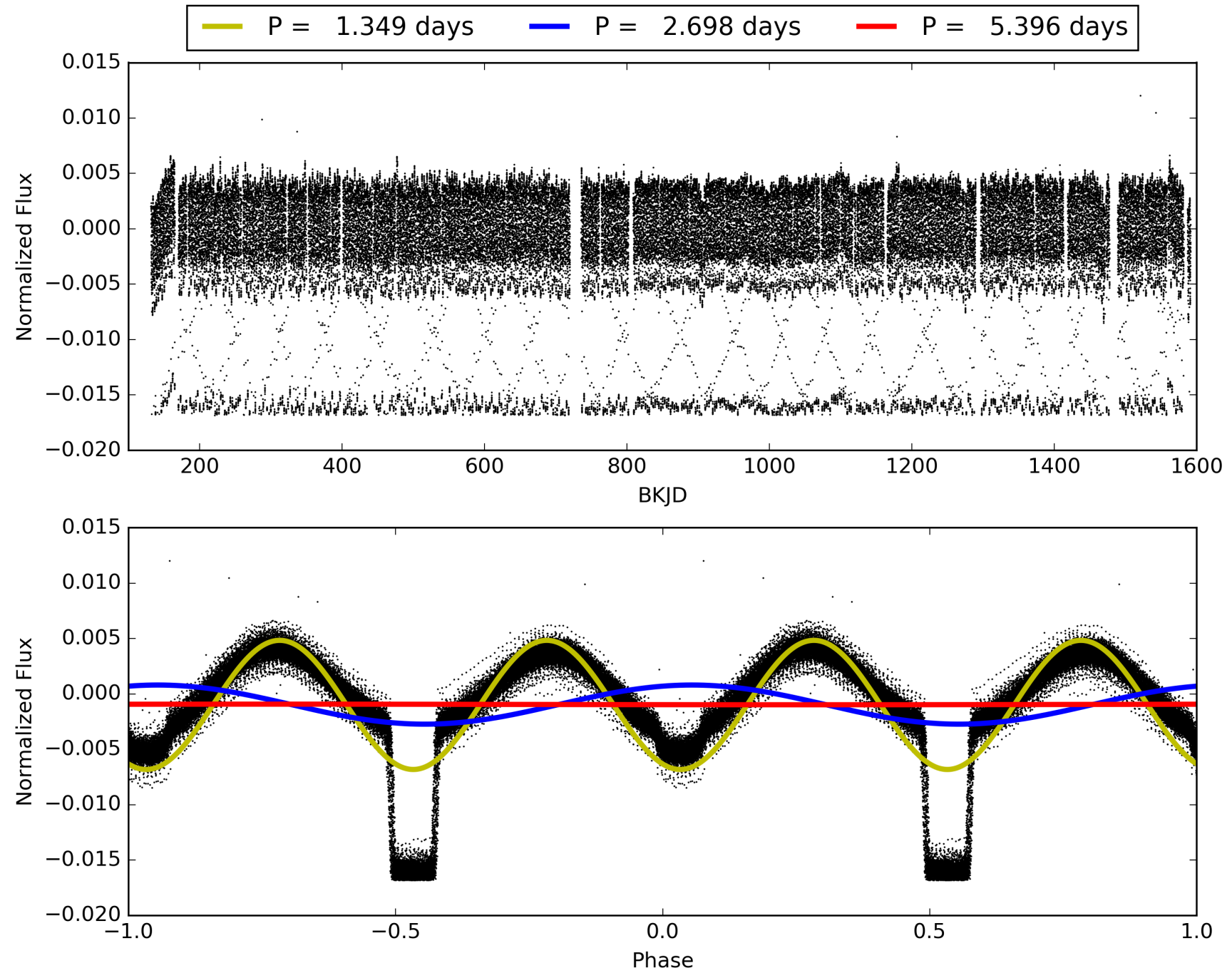
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 08:05:39 Z

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

TCE 006606653-02, PDC Light Curves

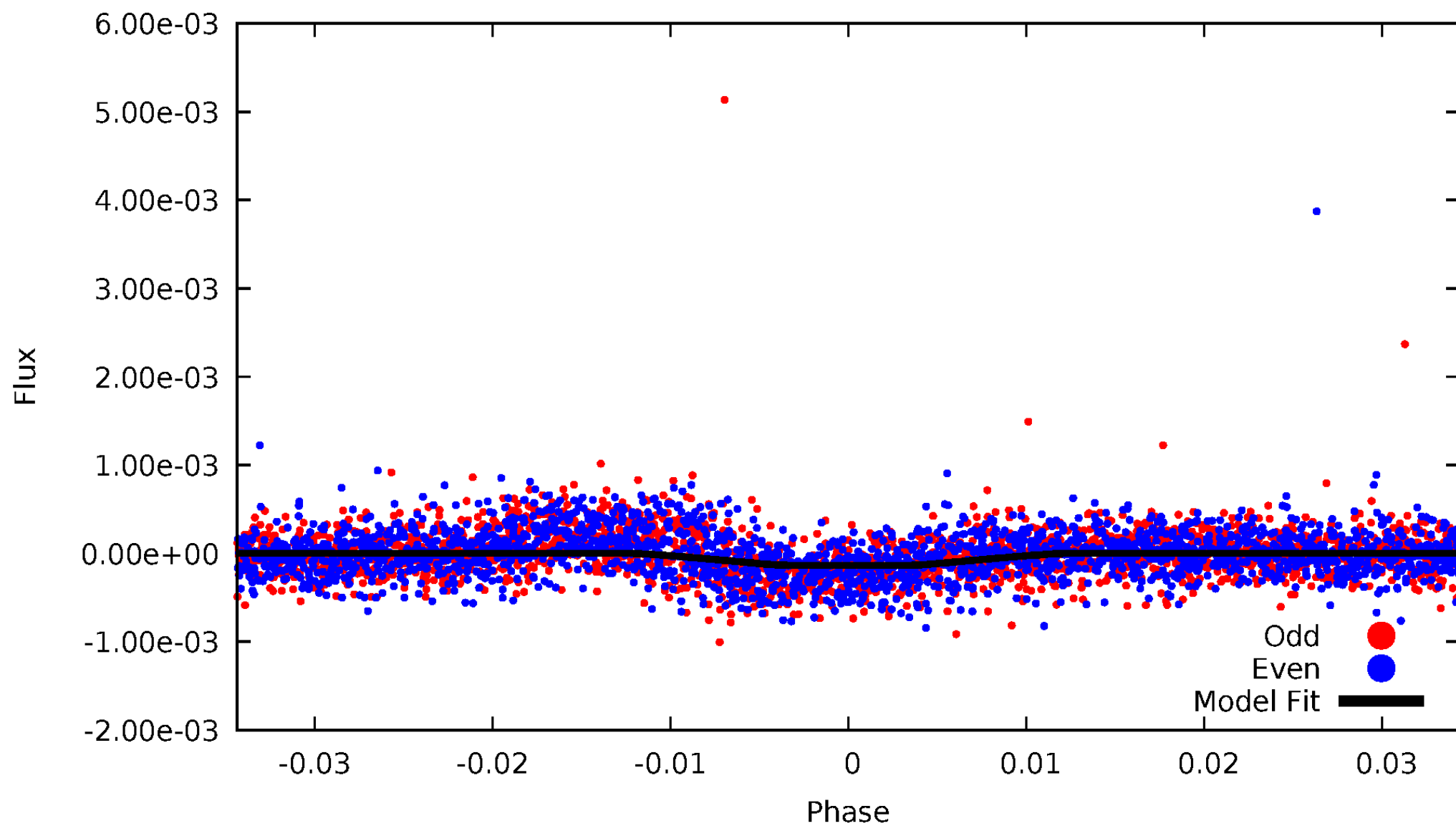


TCE 006606653-02



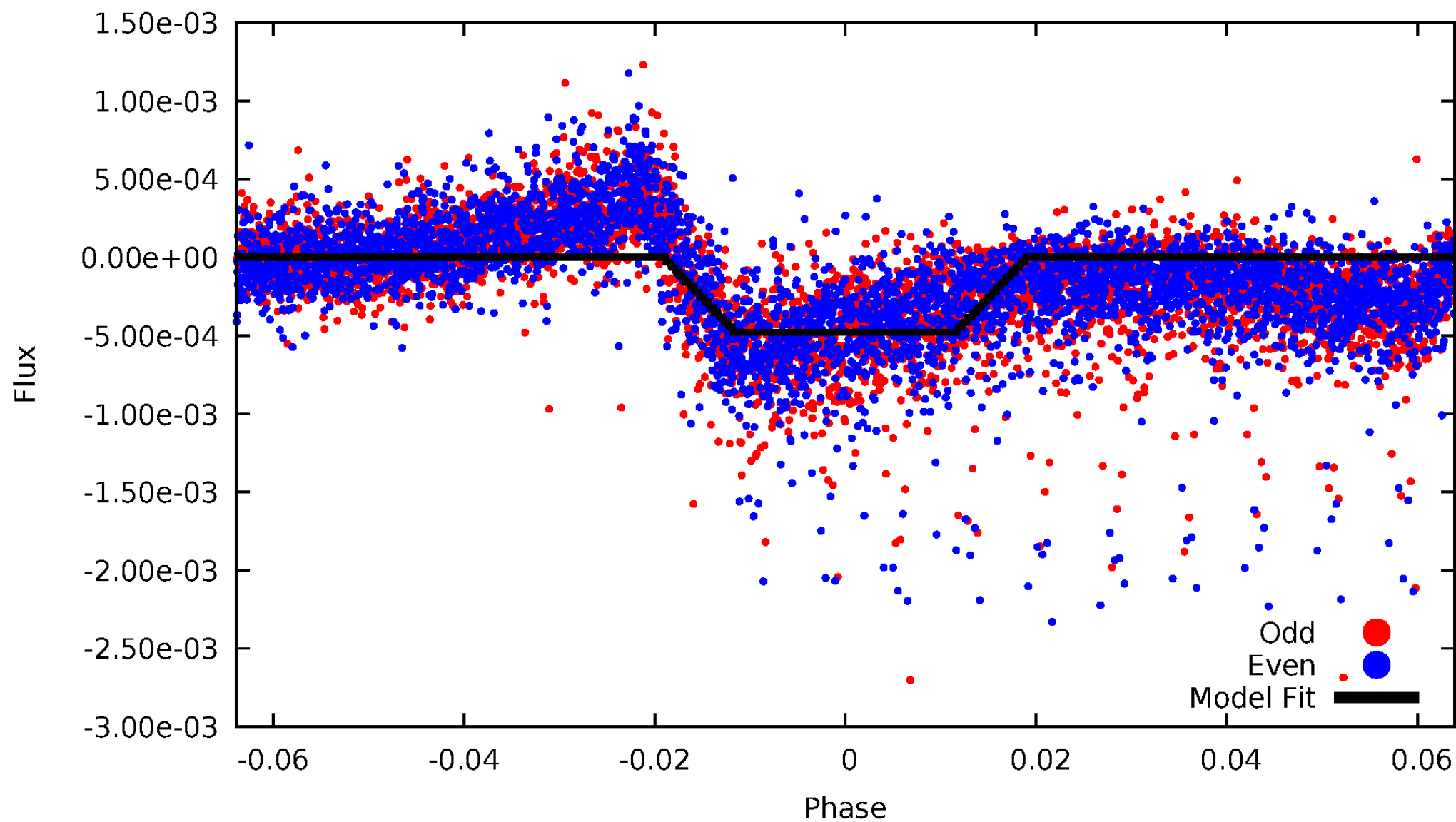
DV Odd/Even

TCE 006606653-02



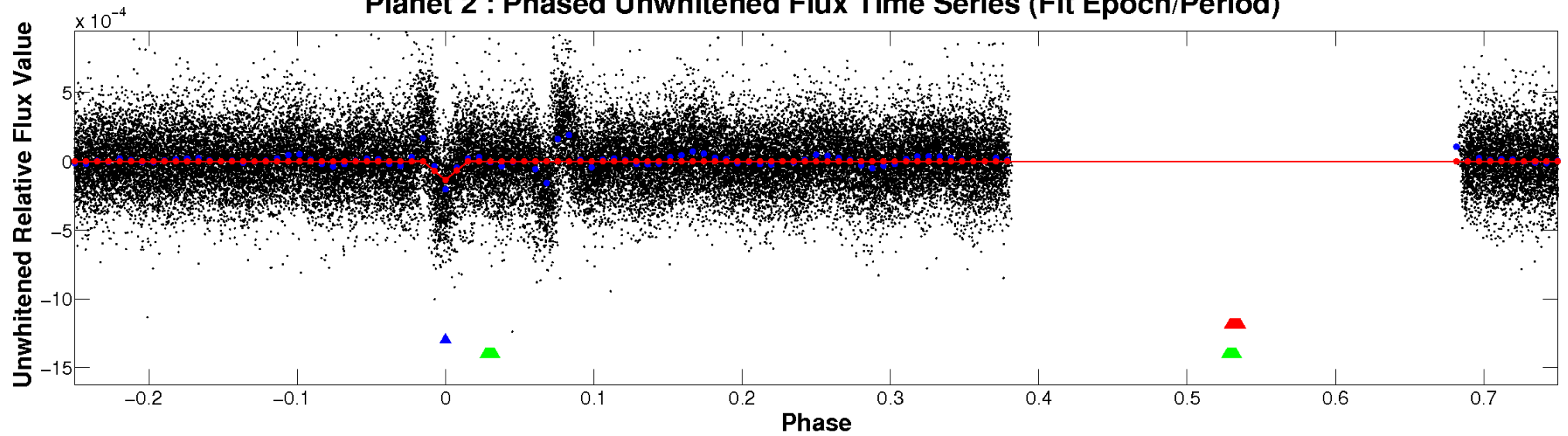
ALT Odd/Even

TCE 006606653-02

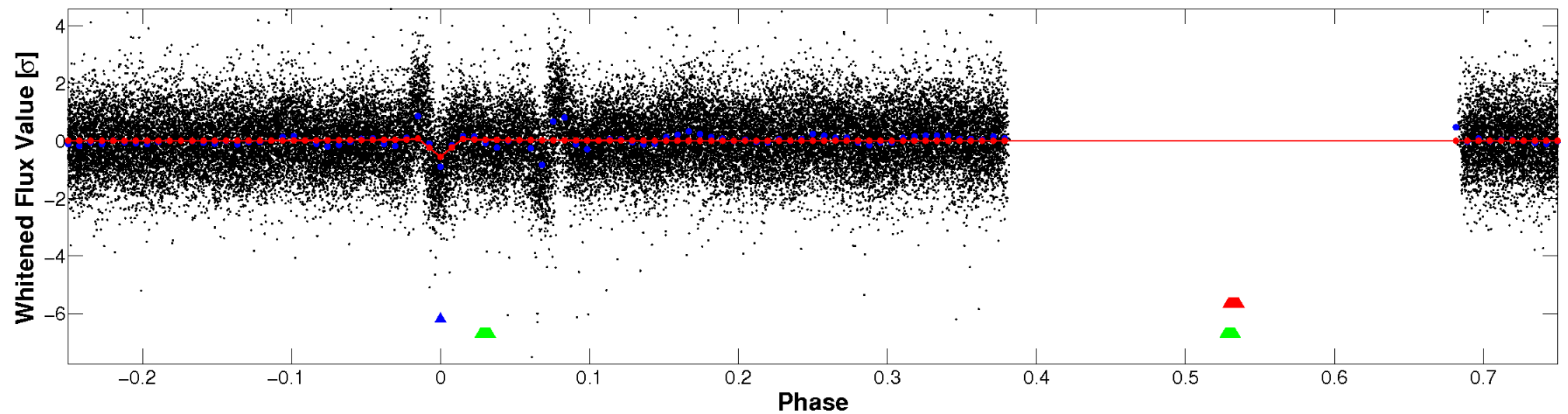


Non-Whitened Vs. Whitened Light Curve

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

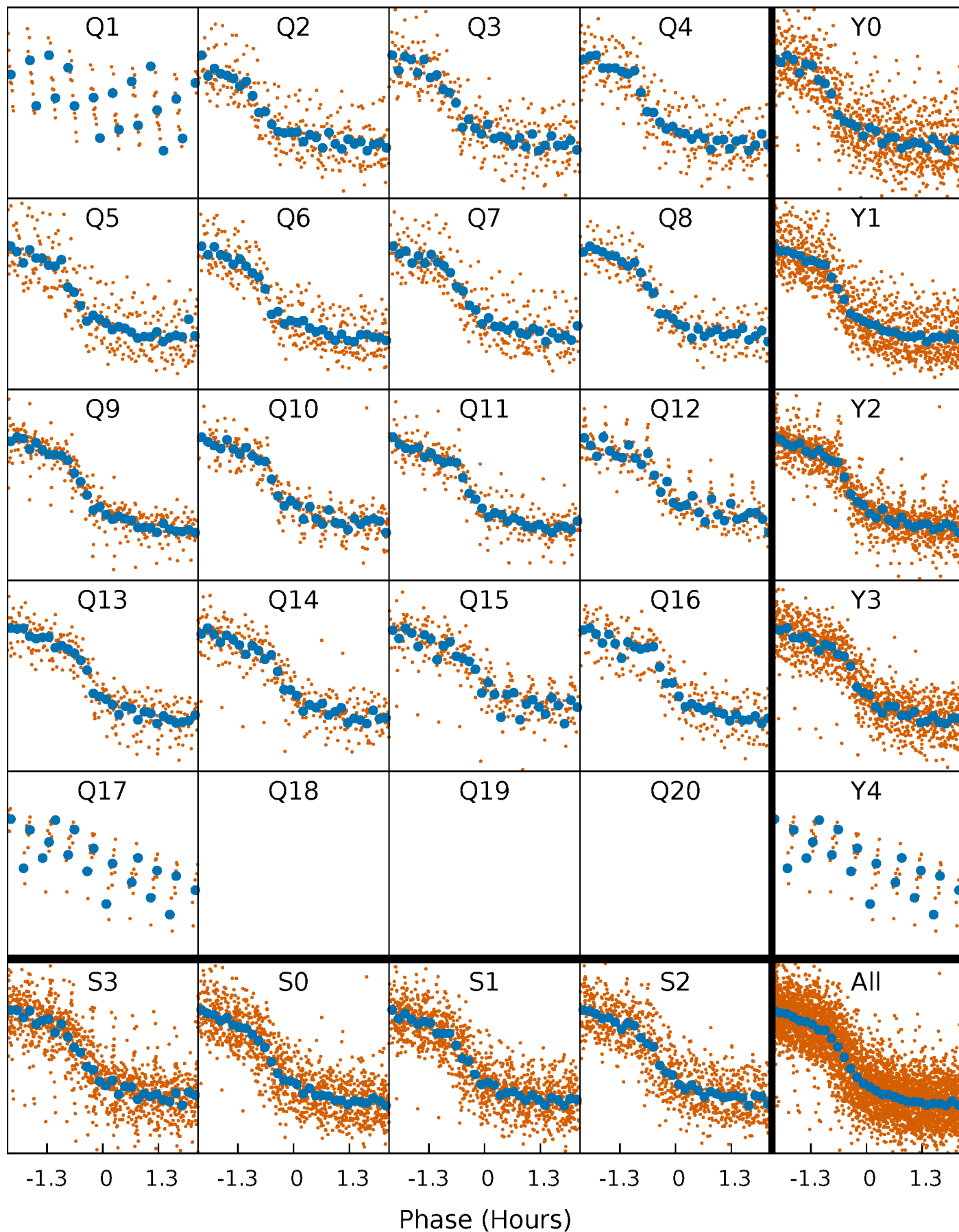


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



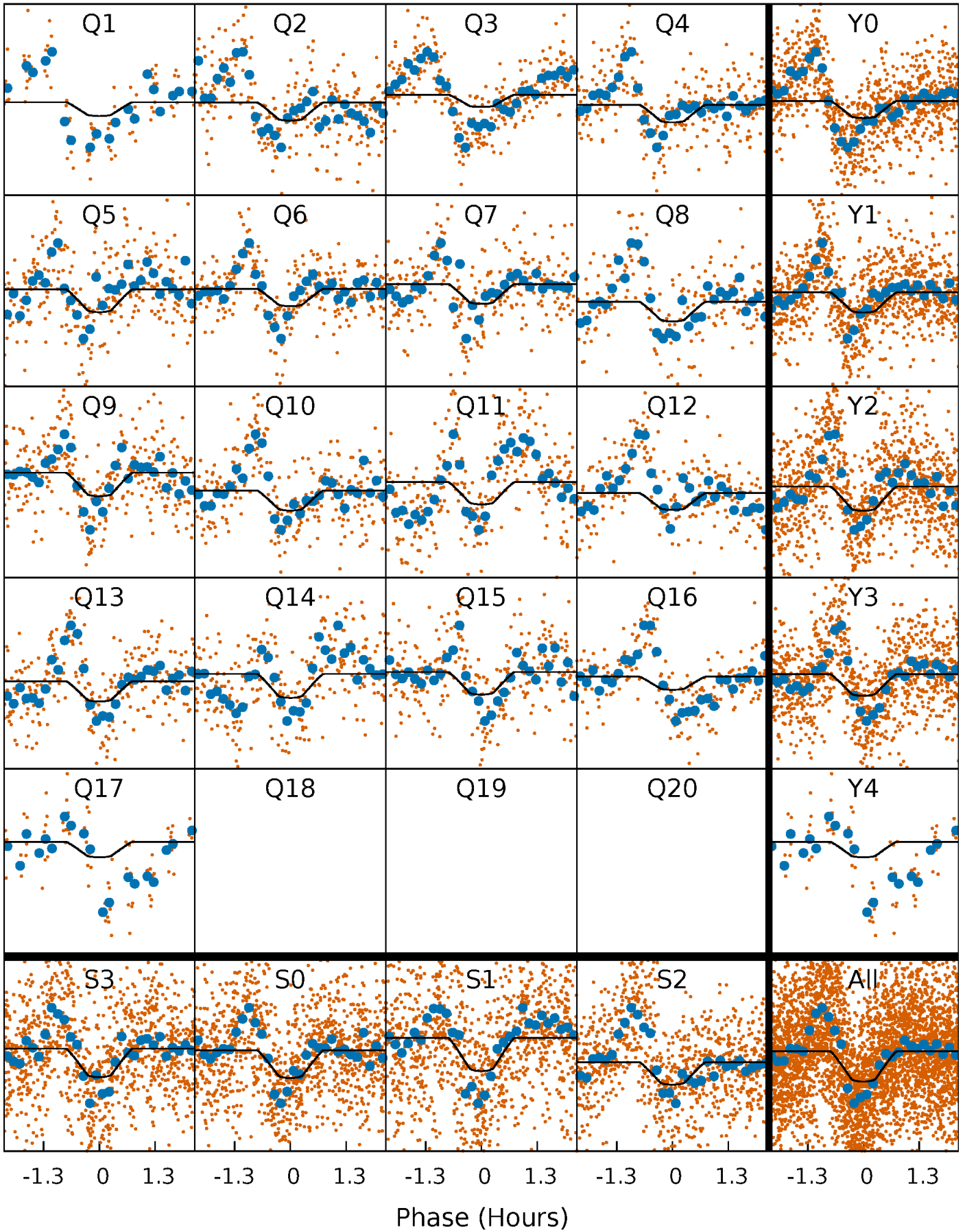
PDC Quarter-Phased Transit Curves

TCE 006606653-02 P= 2.697970 Days $T_0=133.560744$ (BKJD)



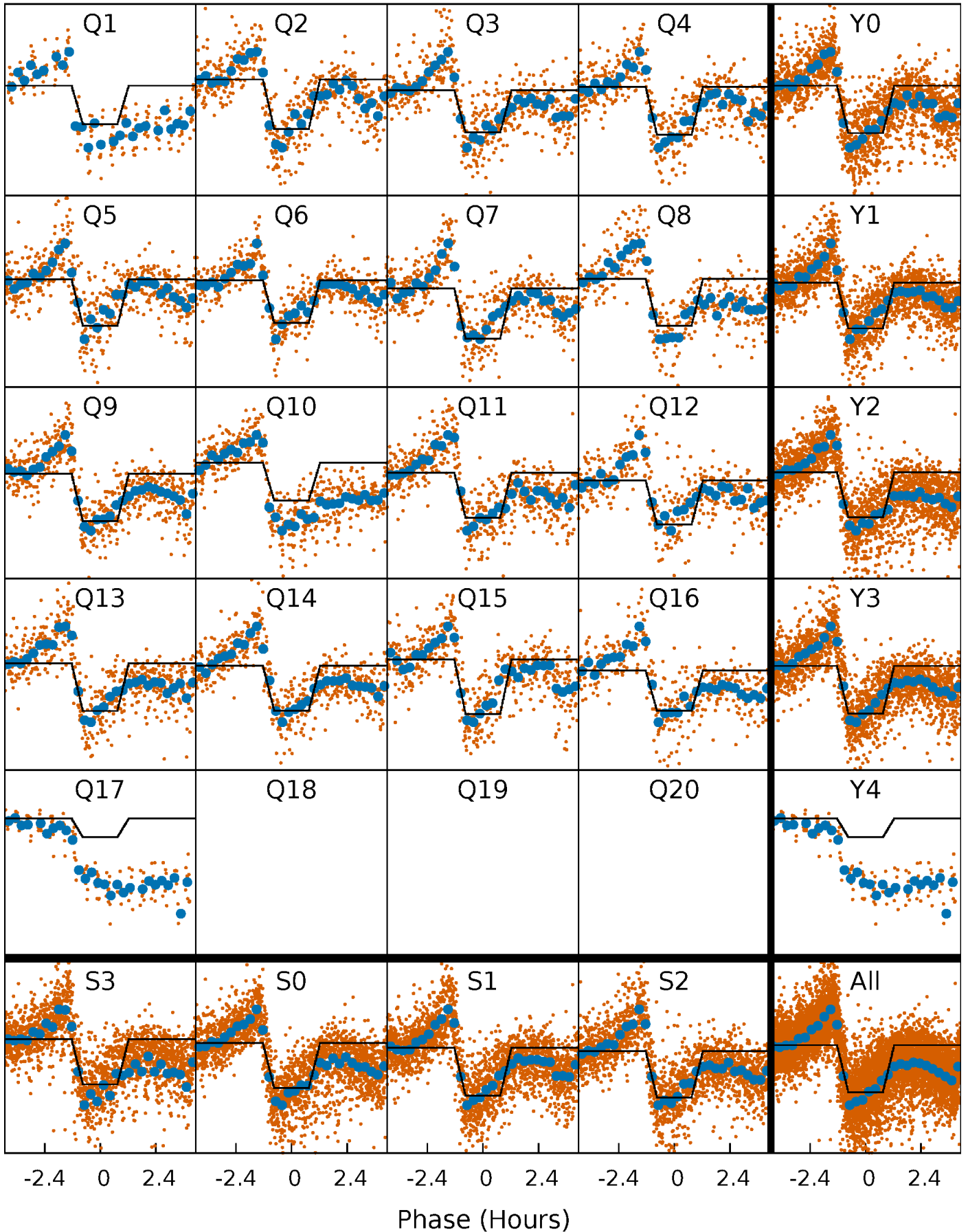
DV Quarter-Phased Transit Curves

TCE 006606653-02 P= 2.697970 Days $T_0=133.560744$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

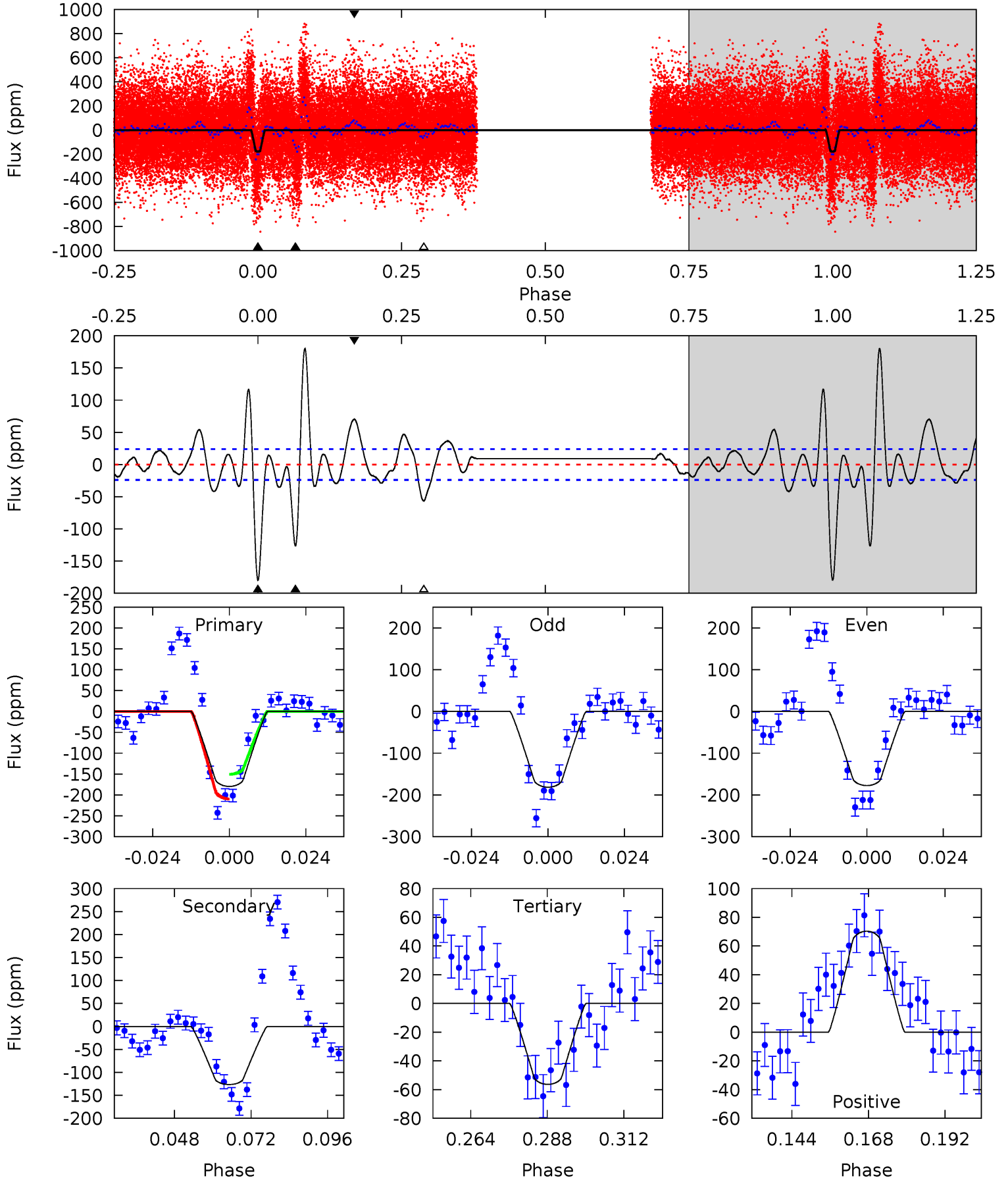
TCE 006606653-02 P= 2.698018 Days $T_0=133.570492$ (BKJD)



DV Model-Shift Uniqueness Test

006606653-02, P = 2.697970 Days, E = 130.862774 Days

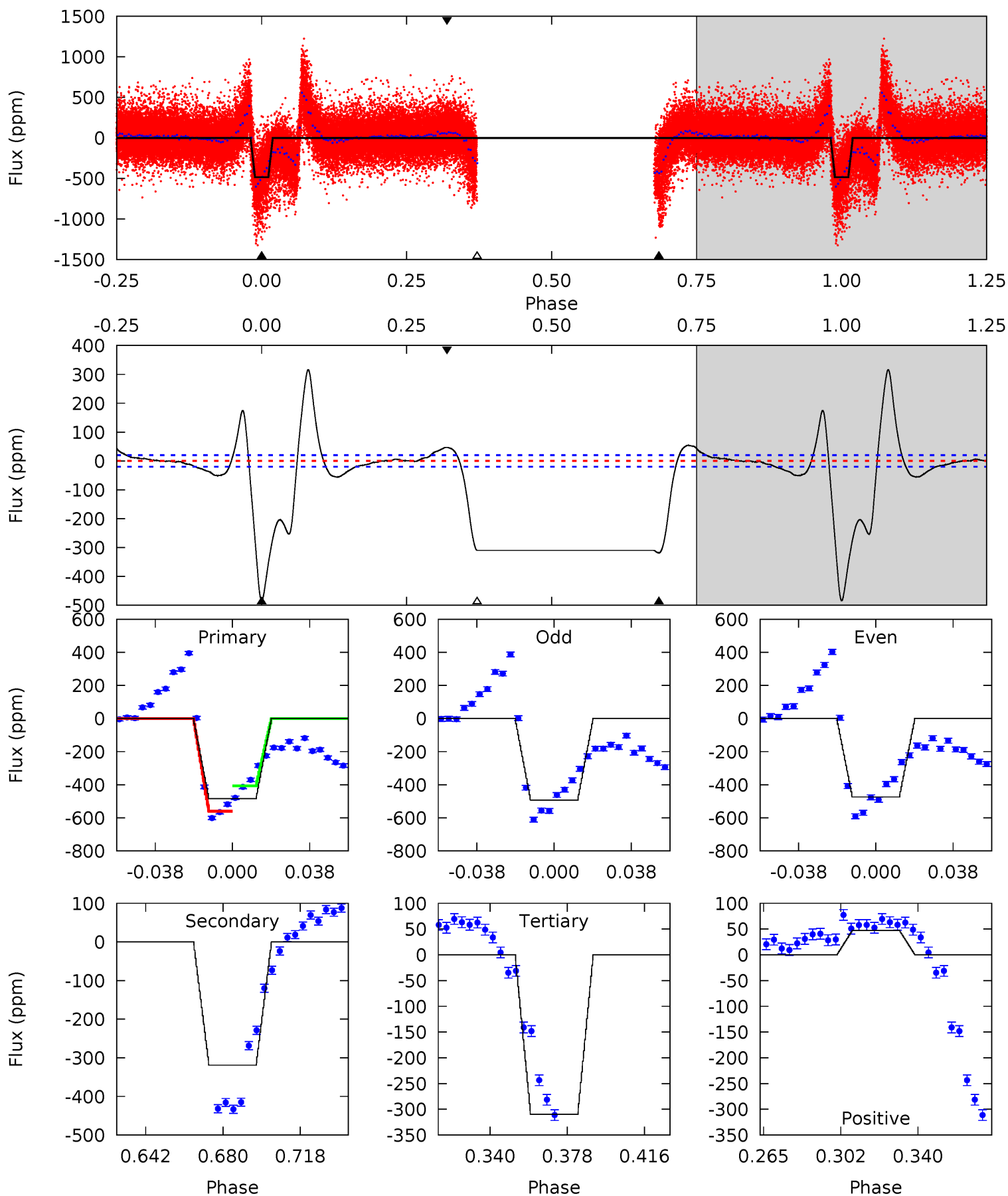
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
36.3	25.6	11.4	14.2	4.86	2.26	4.99	24.9	22.1	14.2	11.4	0.40	1.05	0.50	5.95



Alt Model-Shift Uniqueness Test

006606653-02, P = 2.698018 Days, E = 130.872474 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
114.9	75.7	73.5	11.2	4.76	2.08	19.8	41.4	103.7	2.21	64.5	2.21	1.08	0.39	18.7



Stellar Parameters For KIC 006606653

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6568^{+161}_{-201}	$4.360^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.211^{+0.391}_{-0.140}$	$1.229^{+0.174}_{-0.174}$	$0.975^{+0.274}_{-0.510}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-12%	+14%/-14%	+28%/-52%
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 006606653-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-127 ± 5	$1.74^{+0.77}_{-0.69}$	2255^{+165}_{-114}	6203^{+1968}_{-948}	38^{+66}_{-20}
Alt.	-319 ± 4	$2.97^{+0.88}_{-0.73}$	2259^{+149}_{-116}	5901^{+951}_{-551}	32^{+25}_{-13}

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

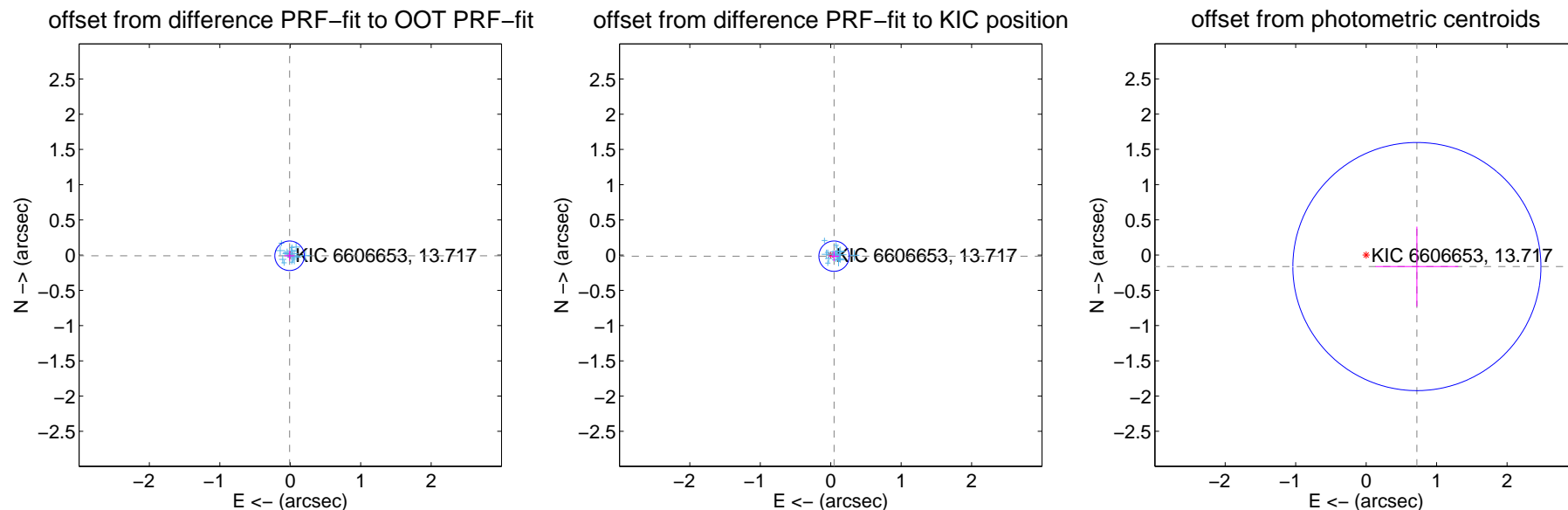
DV Centroid Data

Supplemental centroid analysis for 006606653-02. Kepler magnitude: 13.72. Transit SNR 15.30

There are 17 quarters with good PRF difference image offsets

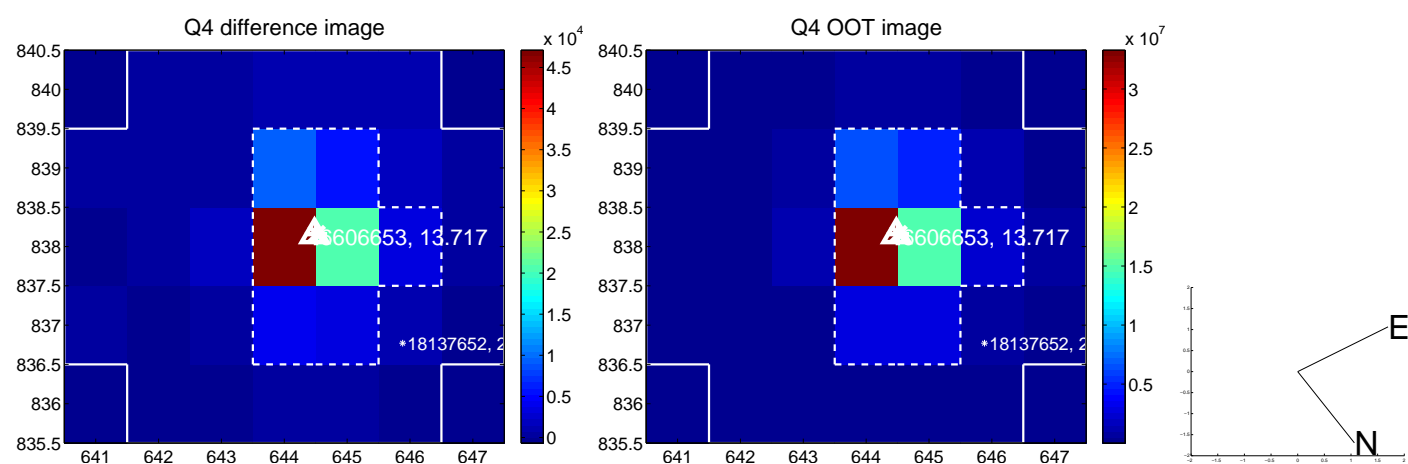
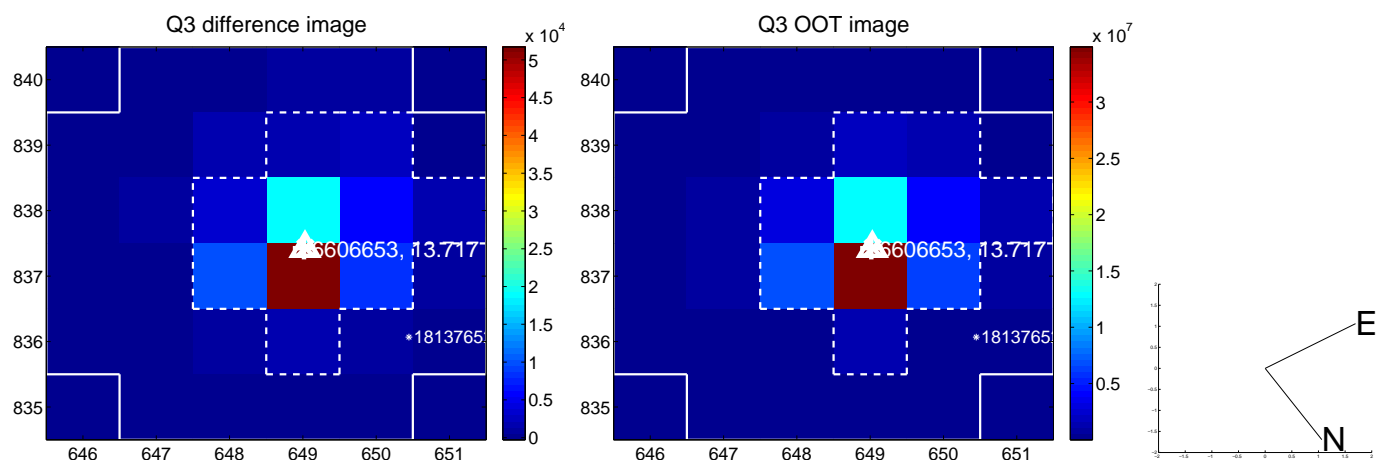
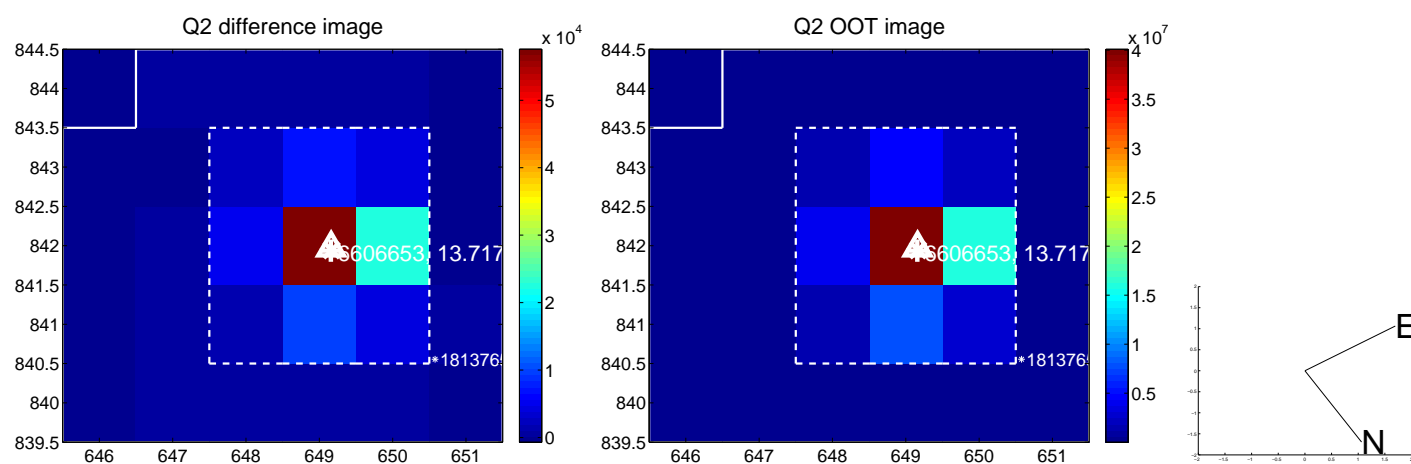
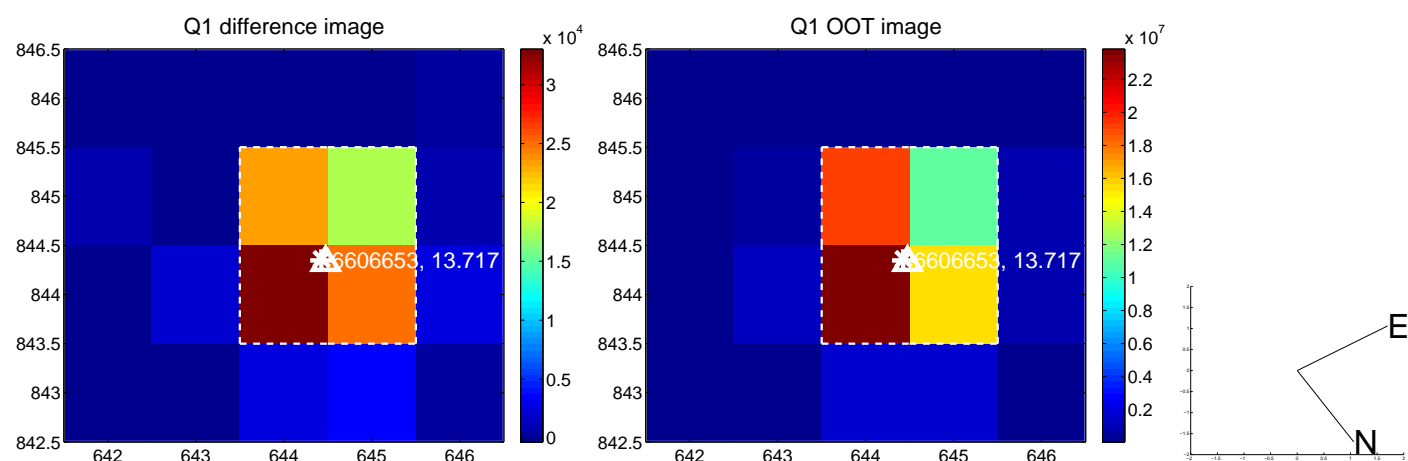
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.013 ± 0.070	0.19	0.010 ± 0.070	-0.009 ± 0.070
PRF-fit source offset from KIC position	0.050 ± 0.072	0.69	-0.047 ± 0.072	-0.014 ± 0.069
photometric centroid source offset	0.74 ± 0.59	1.26	-0.72 ± 0.59	-0.16 ± 0.57

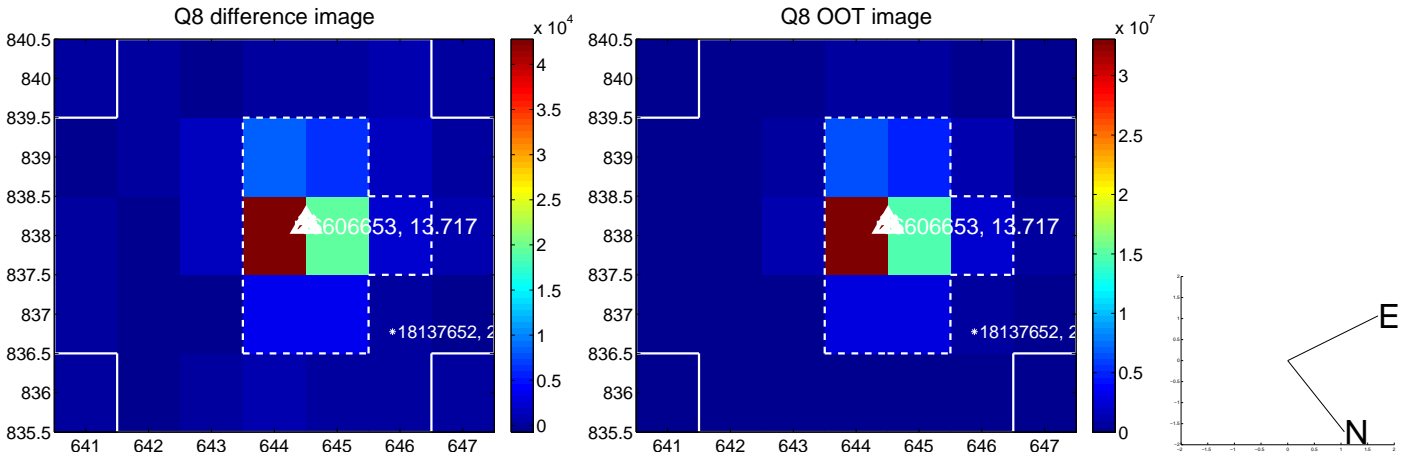
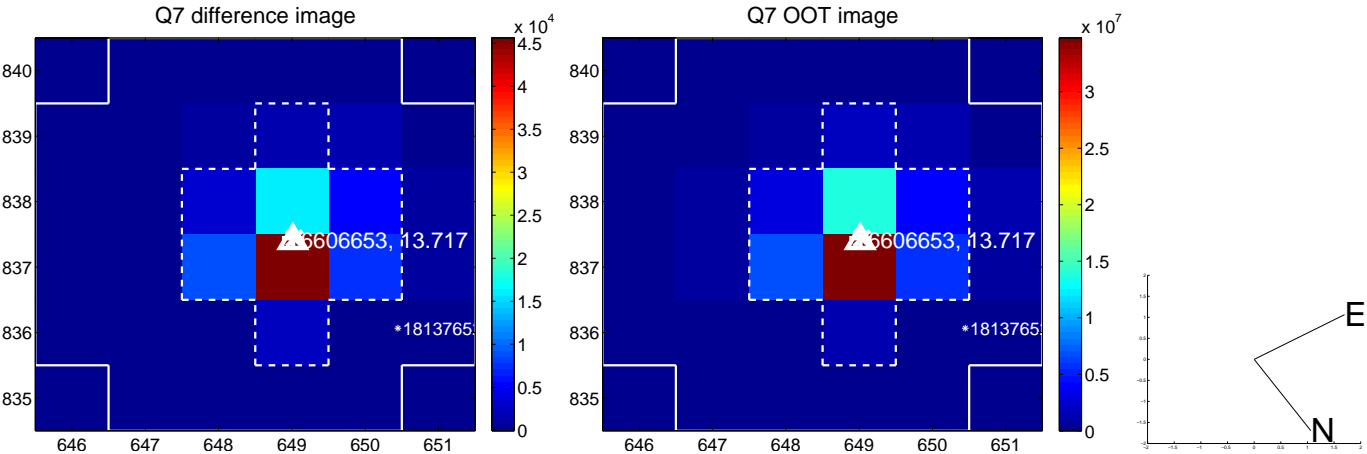
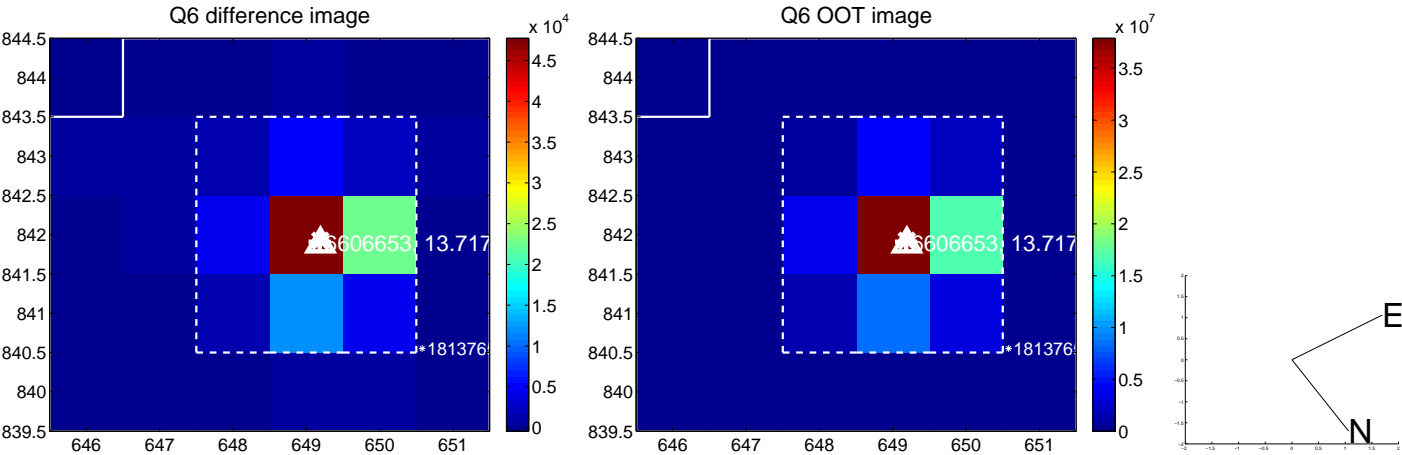
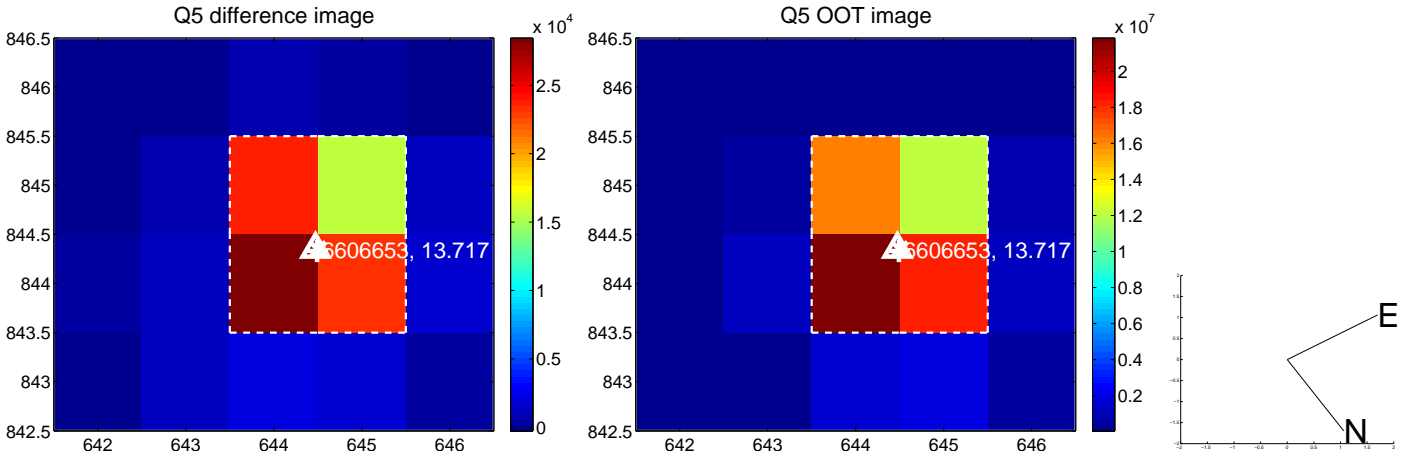


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

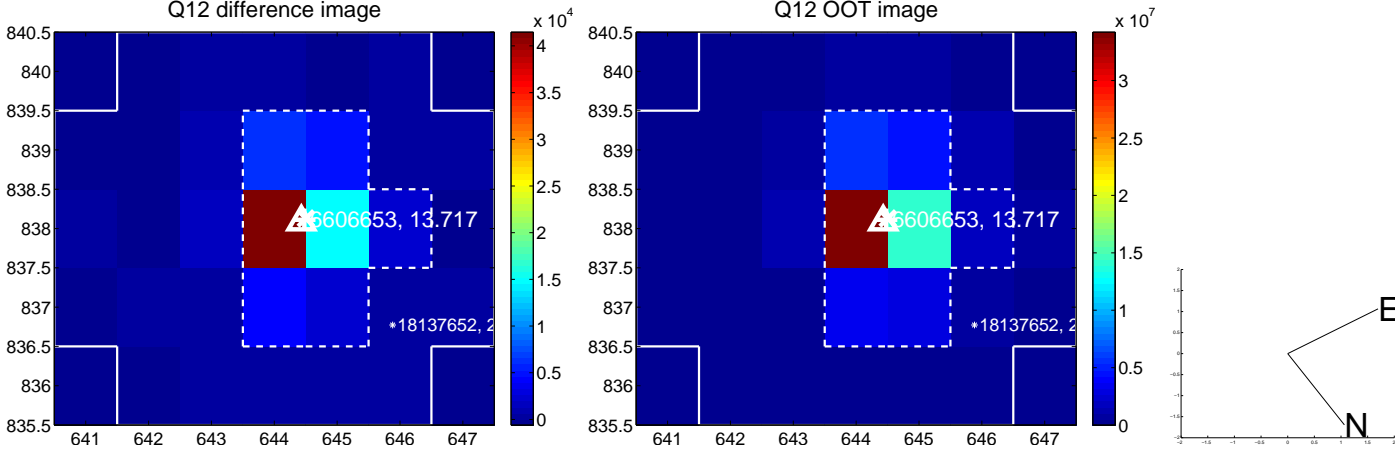
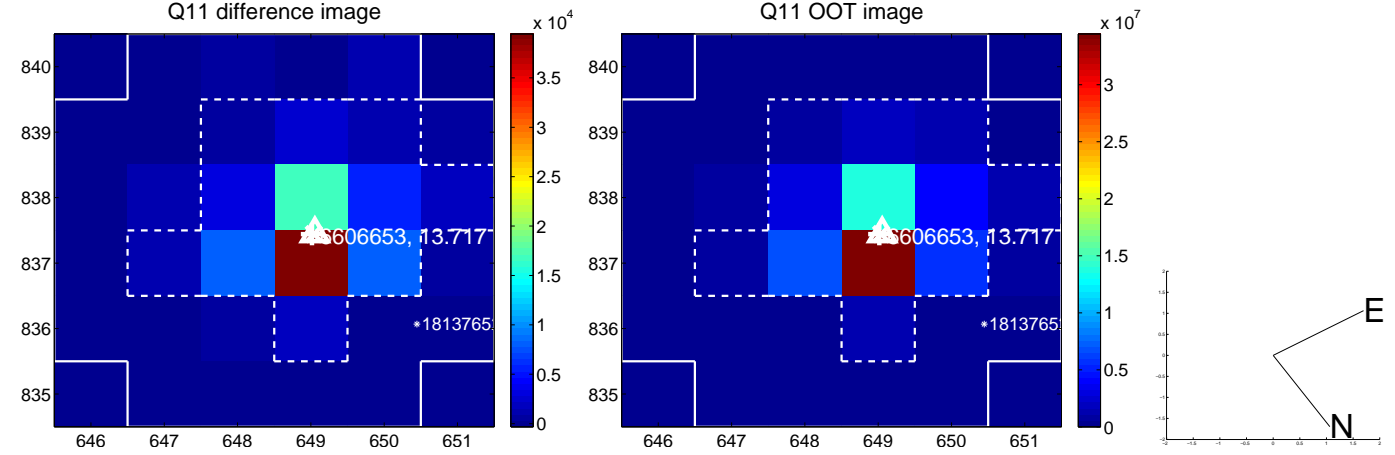
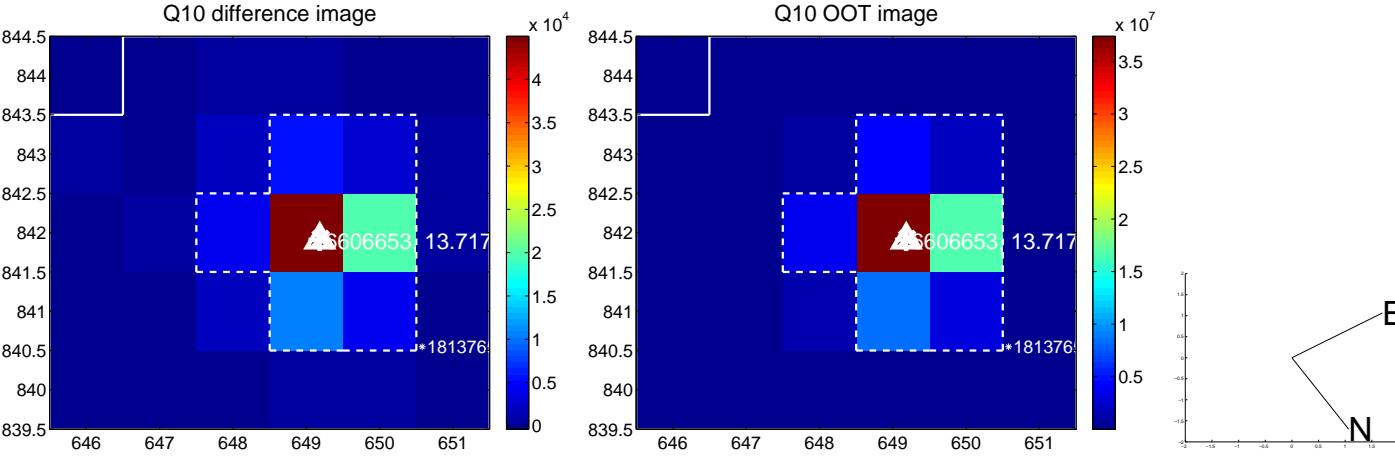
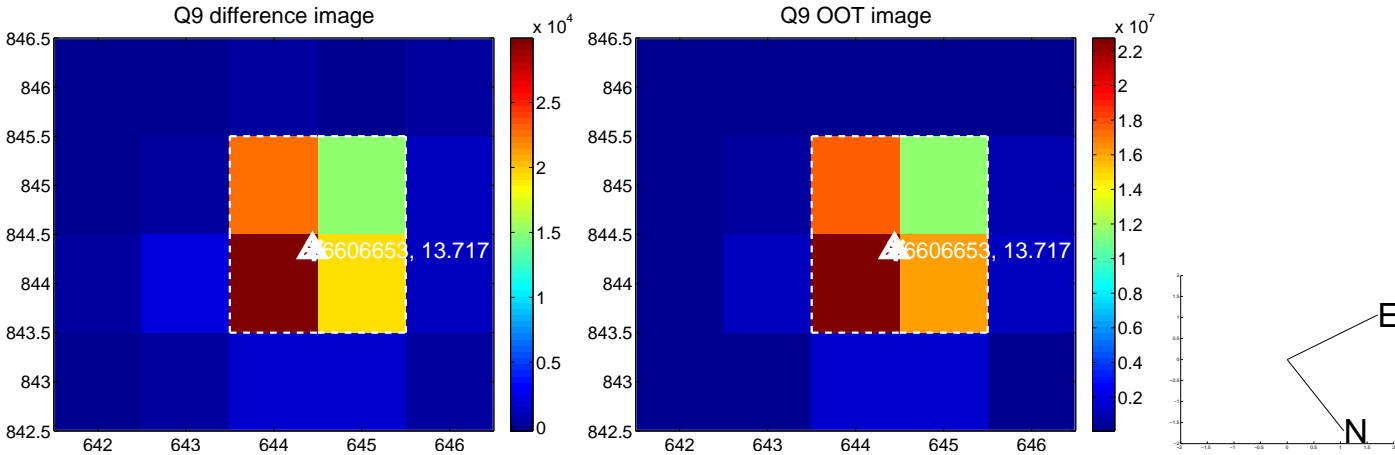
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



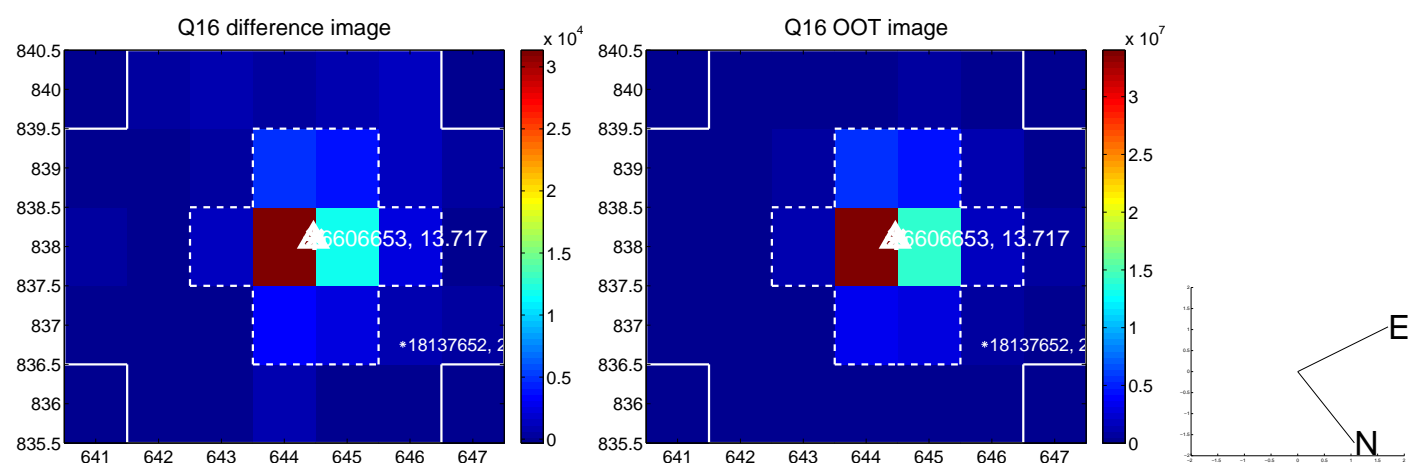
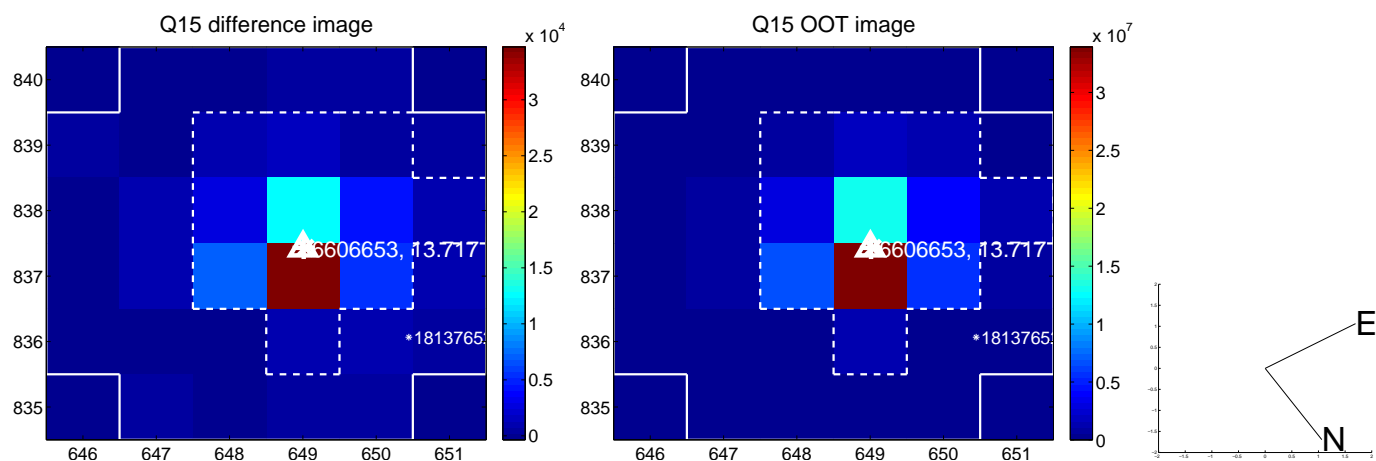
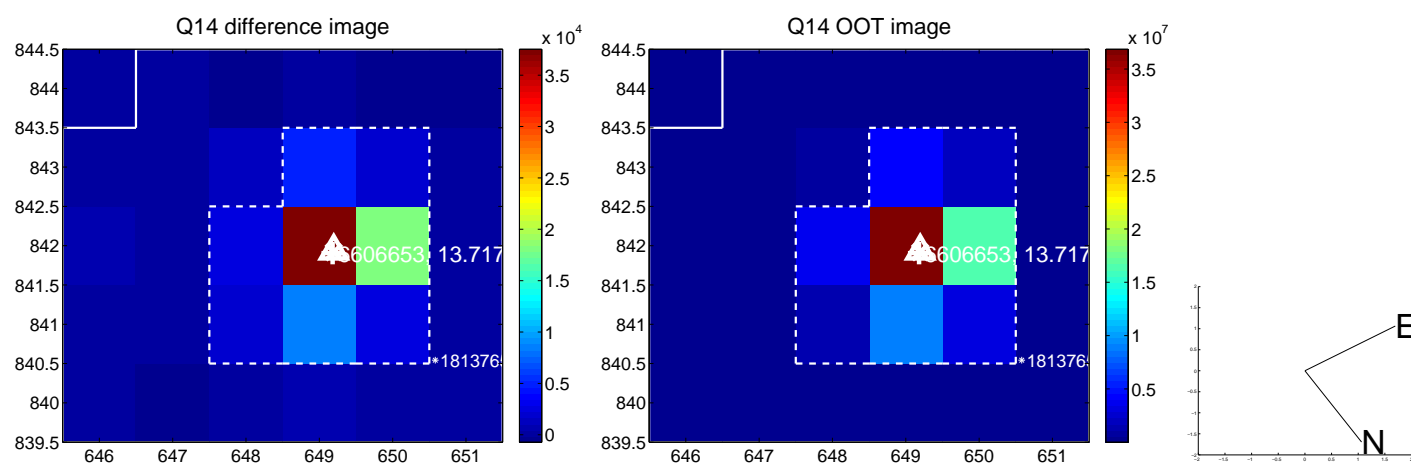
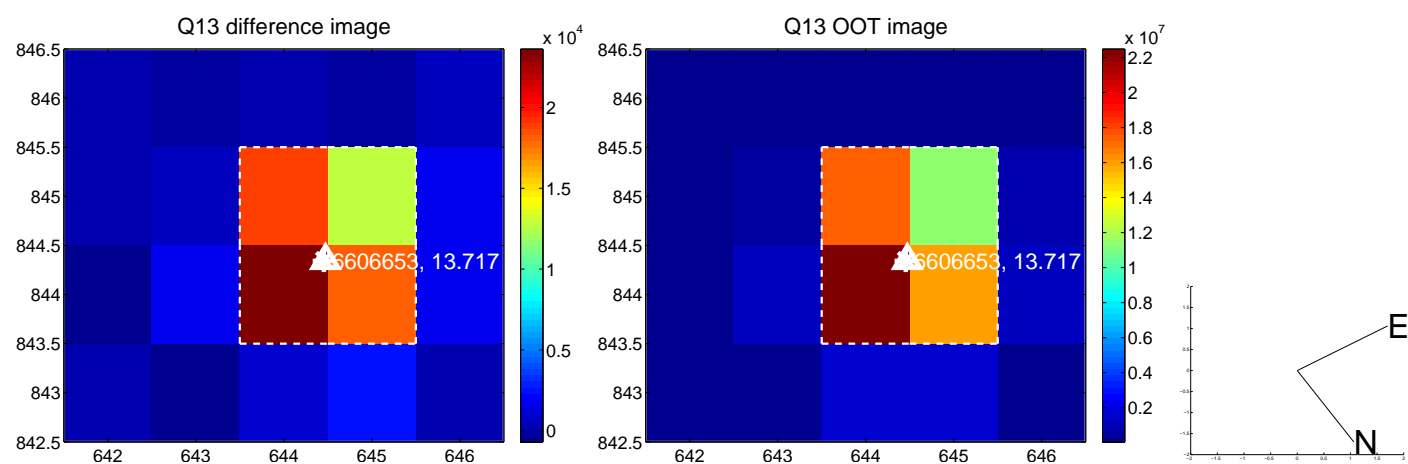
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



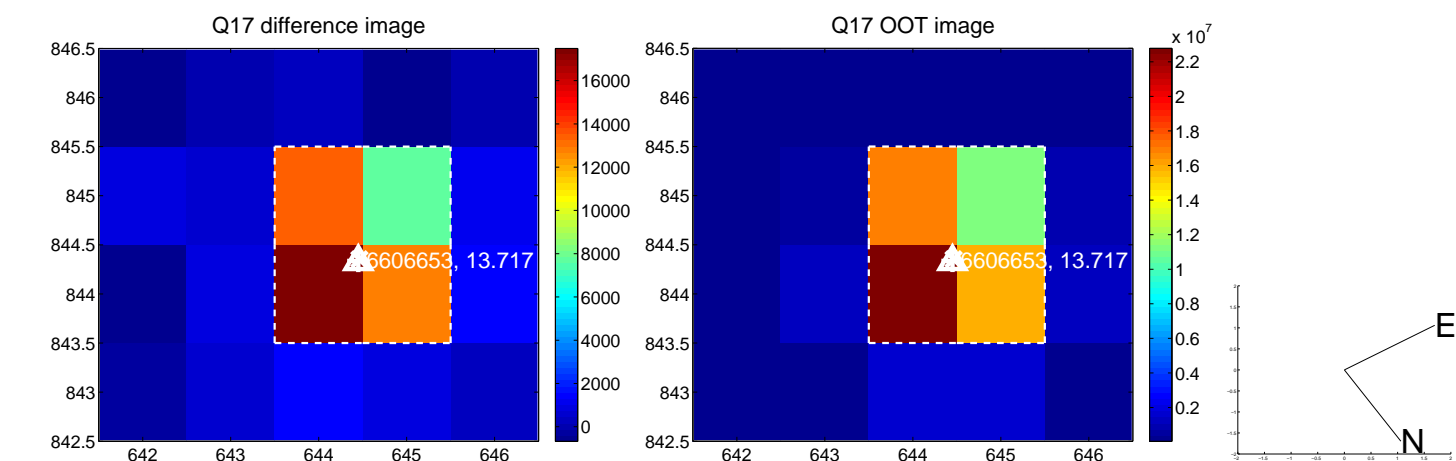
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



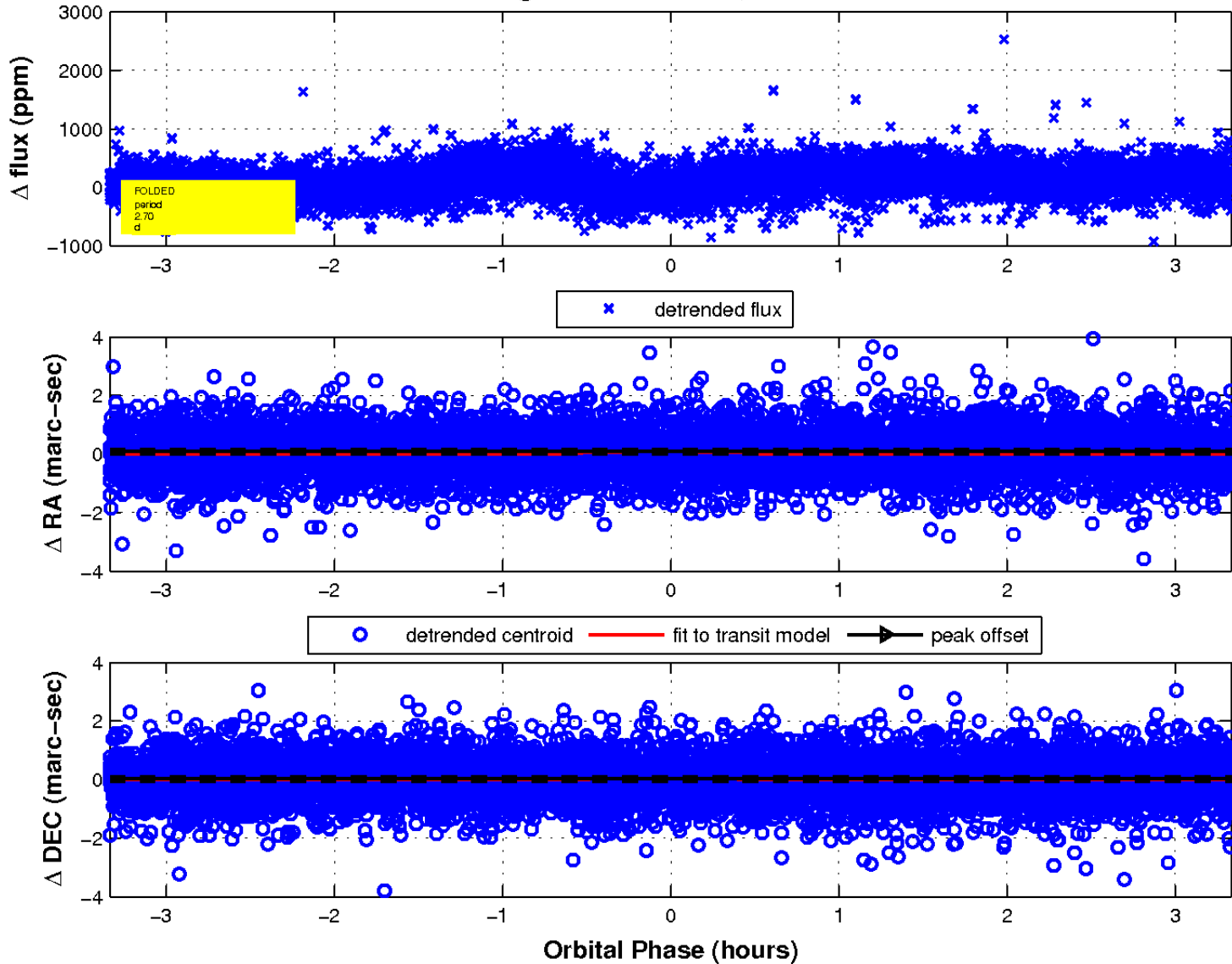
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

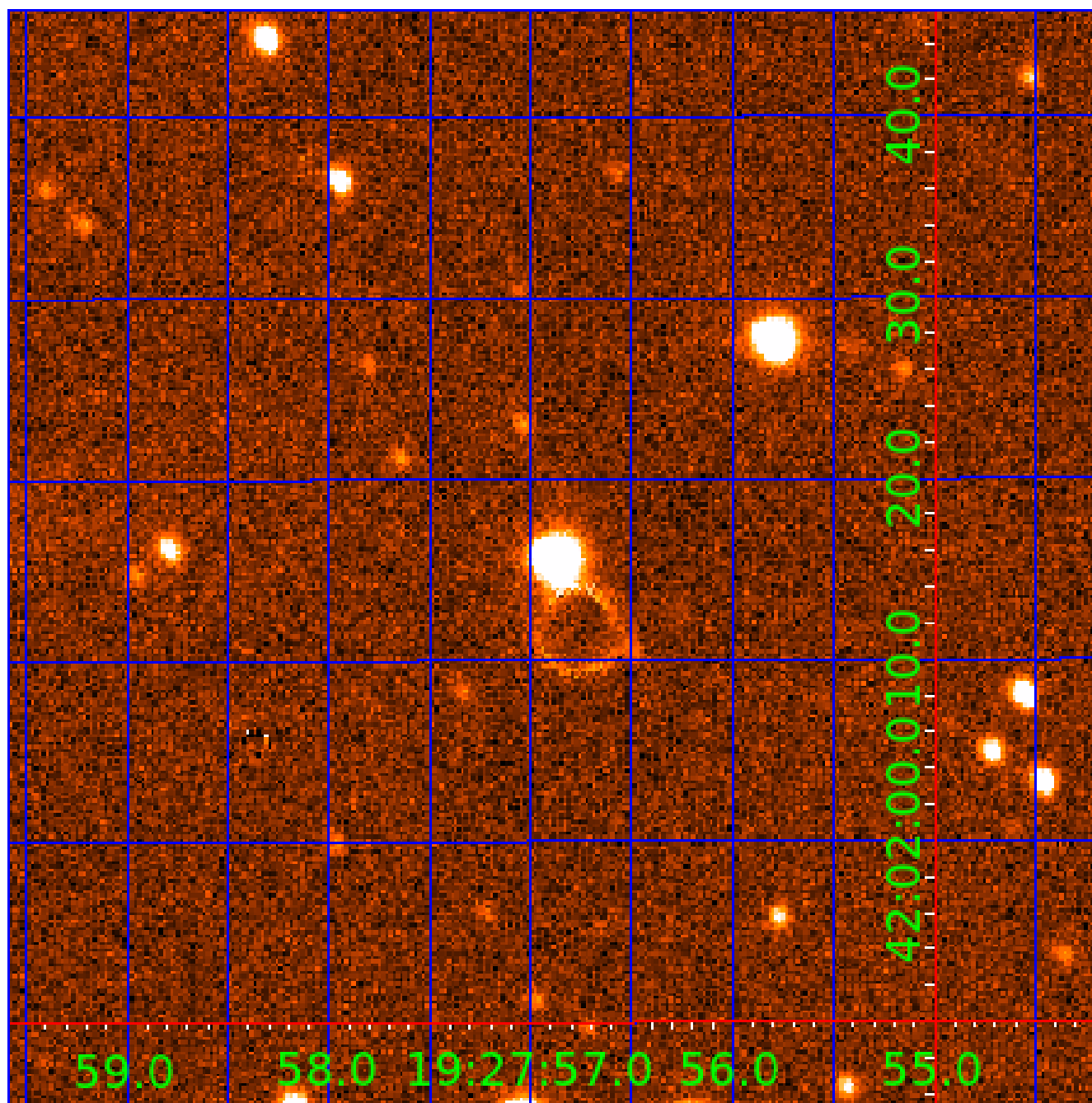


fluxWeightedCentroids, Planet 2 of 3



UKIRT Image

Declination



KIC 006606653

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})
006606653-01	OBS	1224.01	2.698004	132.289797	13356.6	6.466	2053.0	1596.6	1.21	6568	14.43	1483.65
006606653-02	OBS	No	2.697970	133.560744	138.0	1.112	19.5	15.3	1.21	6568	1.67	1483.68
006606653-03	OBS	No	1.349000	132.284529	197.5	6.049	19.9	21.2	1.21	6568	1.98	3738.58

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006606653-01	OBS	FP	0.28	0	1	0	0	SWEET_EB—MOD_SEC_ALT—HAS_SEC_TCE
006606653-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE
006606653-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_SKYE_ZUMA—TRANS_GAPPED—SWEET_NTL—LPP_DV—MOD_NONUNIQ_DV—RESIDUAL_TCE

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 006606653-03

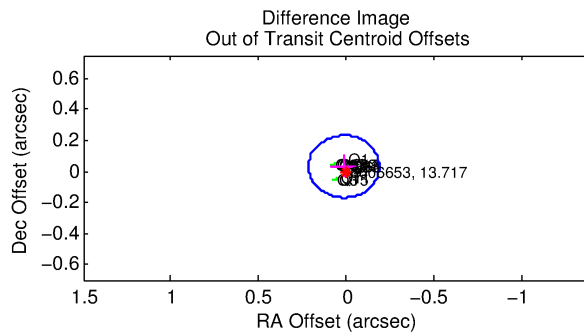
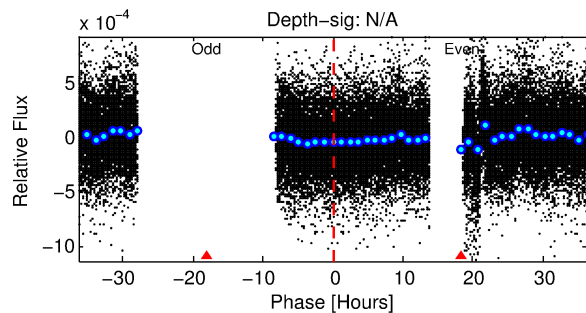
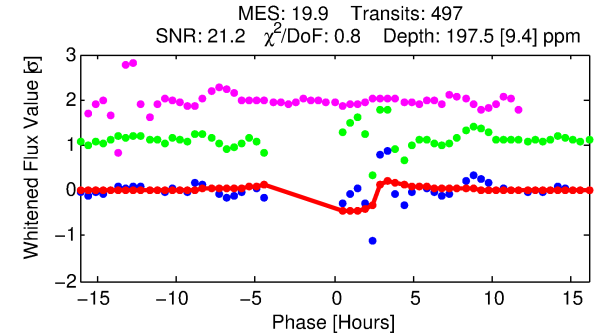
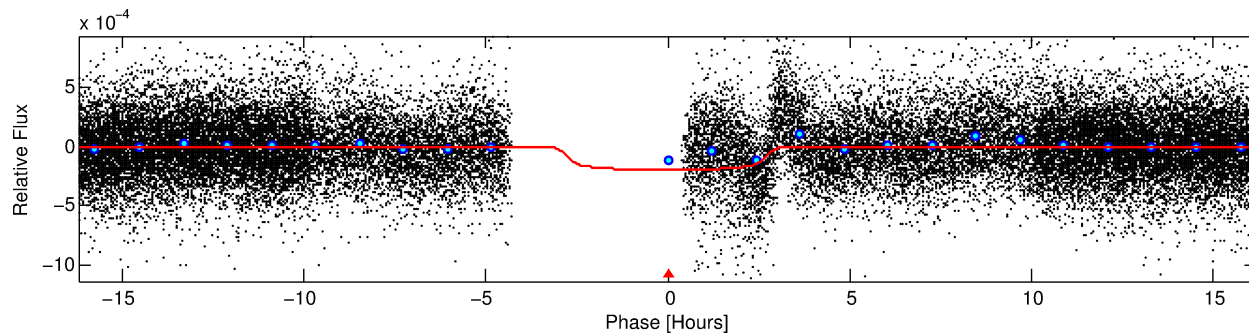
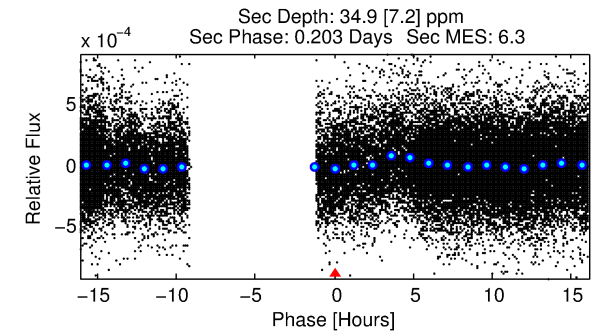
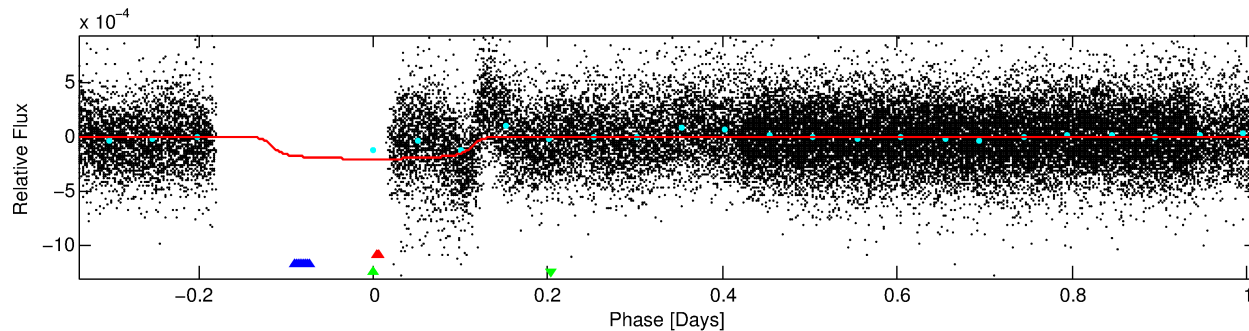
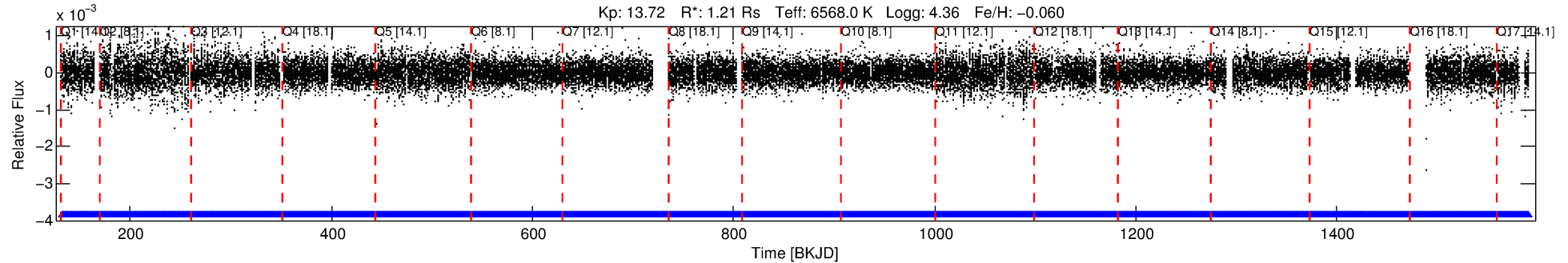
No Significant Match Found

DV One-Page Summary

KIC: 6606653 Candidate: 3 of 3 Period: 1.349 d

KOI: K01224 Corr: No Ephemeris Match

Kp: 13.72 R*: 1.21 Rs Teff: 6568.0 K Logg: 4.36 Fe/H: -0.060



DV Fit Results:

Period = 1.34900 [0.00001] d
Epoch = 132.2845 [0.0066] BKJD
Rp/R* = 0.0150 [0.0010]
a/R* = 1.24 [0.16]
b = 0.90 [0.07]
Seff = 3738.58 [1510.61]
Teff = 1994 [201] K
Rp = 1.98 [0.65] Re
a = 0.0256 [0.0069] AU
Ag = 3.20 [1.46] [1.50σ]
Teffp = 4122 [283] K [6.12σ]

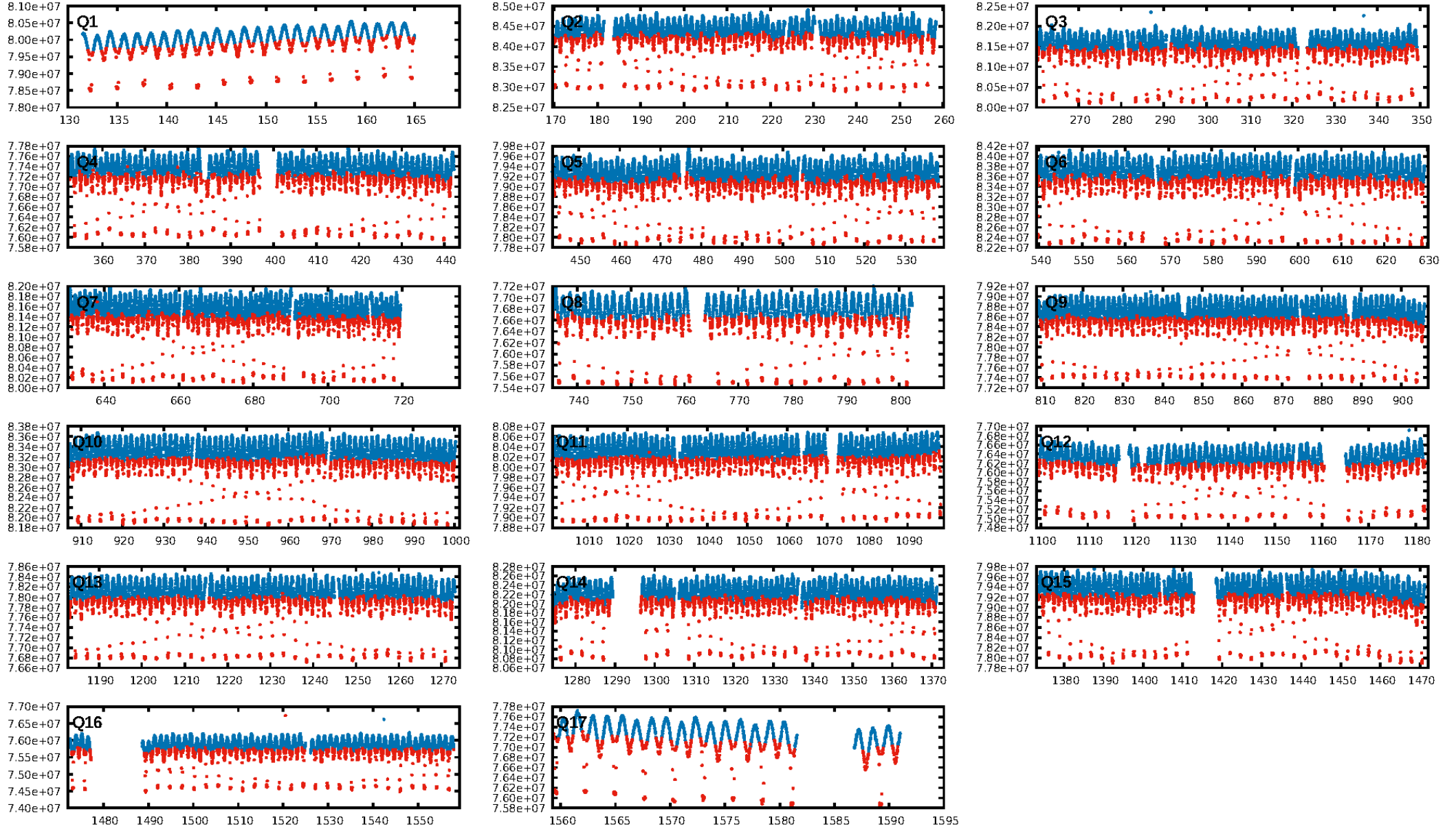
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 100.0% [5.26σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 2.23e-68
RollingBand-fgt: 1.00 [475/475]
GhostDiagnostic-chr: 0.9274
Centroid-sig: 0.0%
Centroid-so: 0.353 arcsec [1.97σ]
OotOffset-rm: 0.036 arcsec [0.53σ]
KicOffset-rm: 0.048 arcsec [0.70σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 0.00 [0/17]

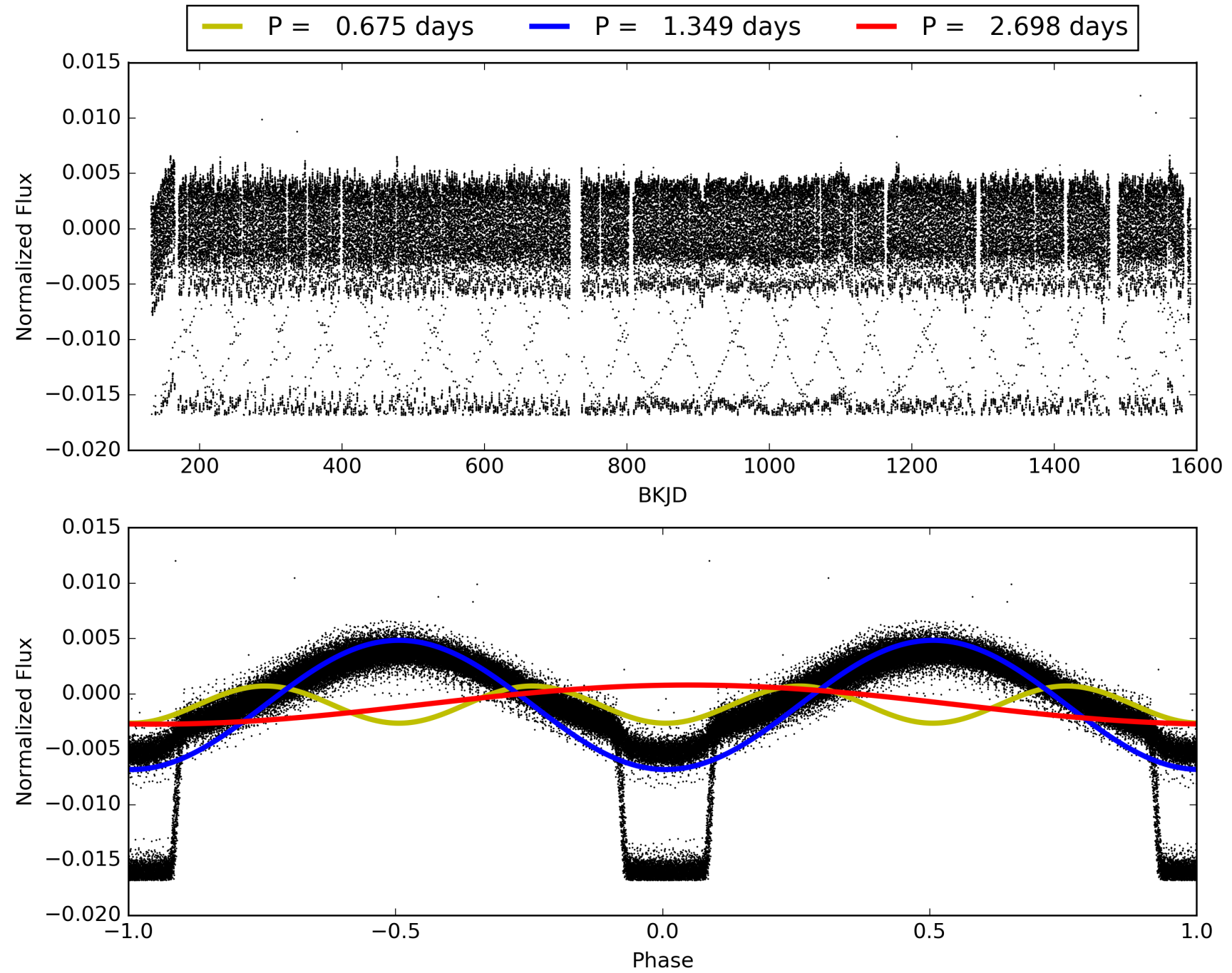
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 30-Jan-2016 08:05:52 Z

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

TCE 006606653-03, PDC Light Curves

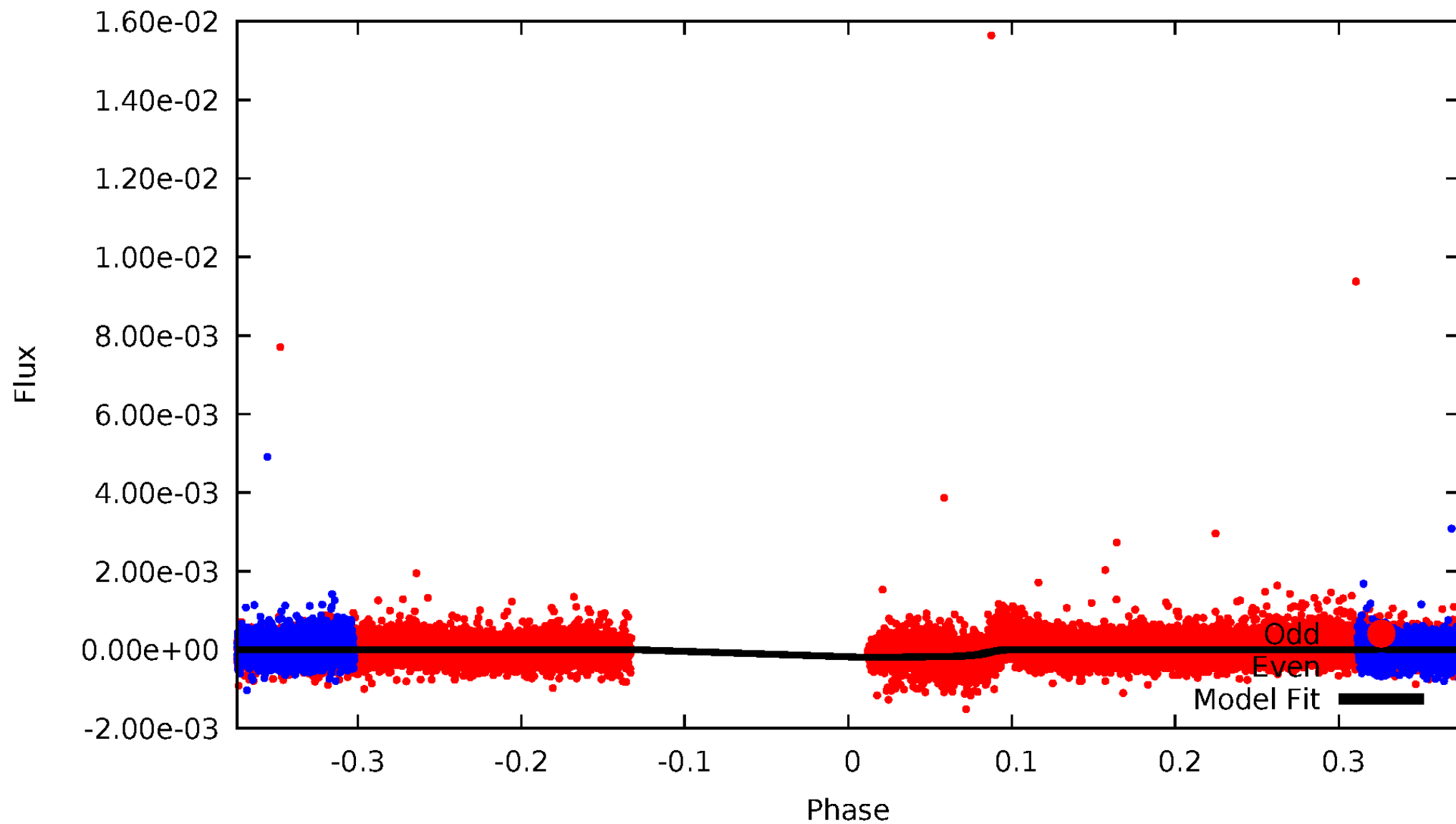


TCE 006606653-03



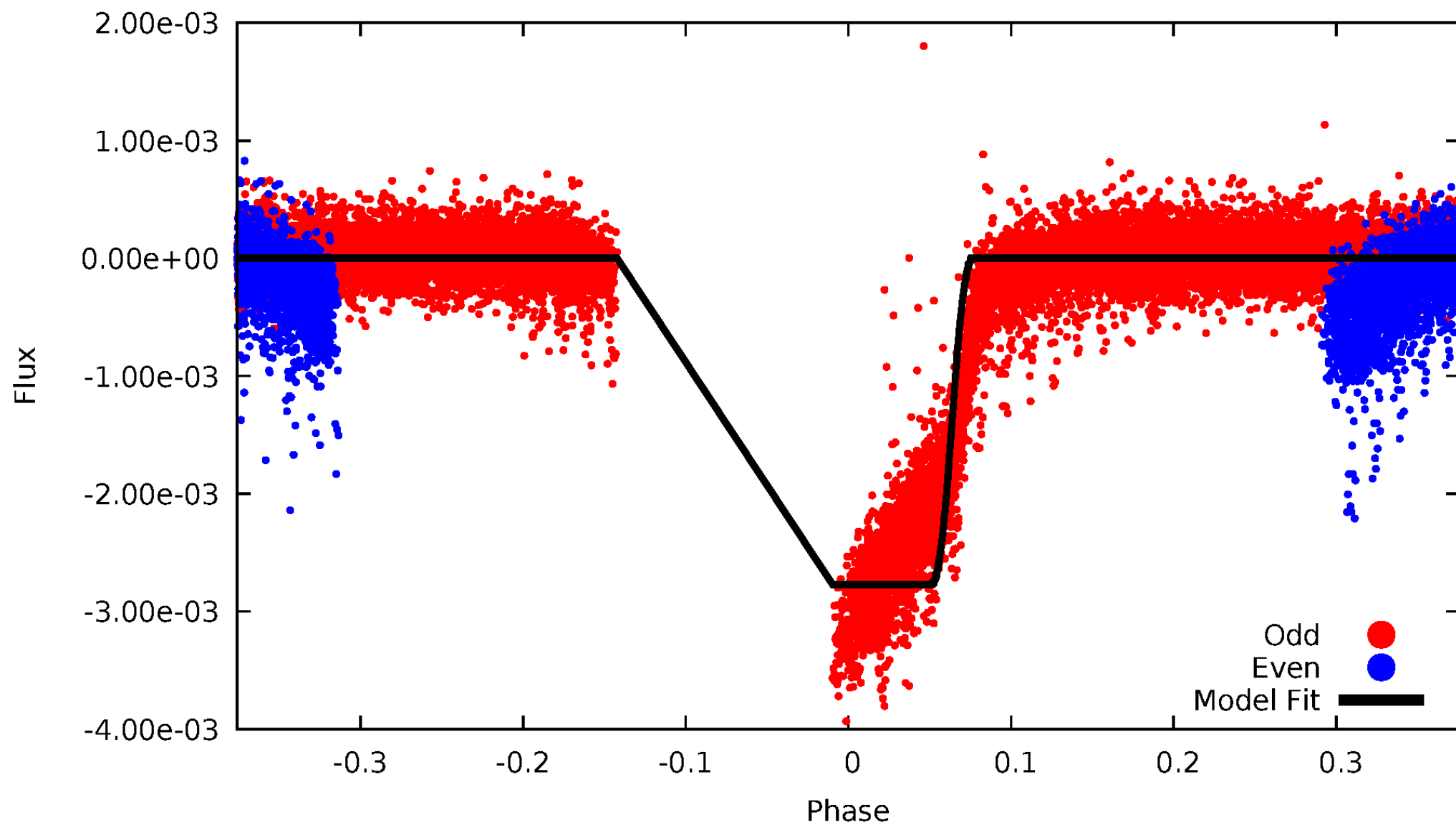
DV Odd/Even

TCE 006606653-03



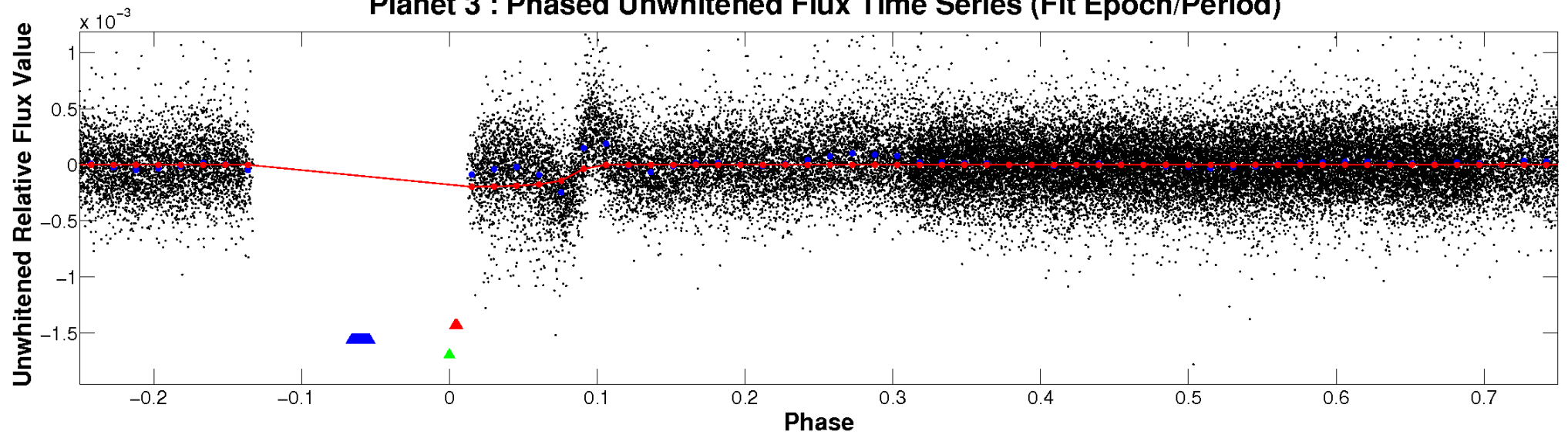
ALT Odd/Even

TCE 006606653-03

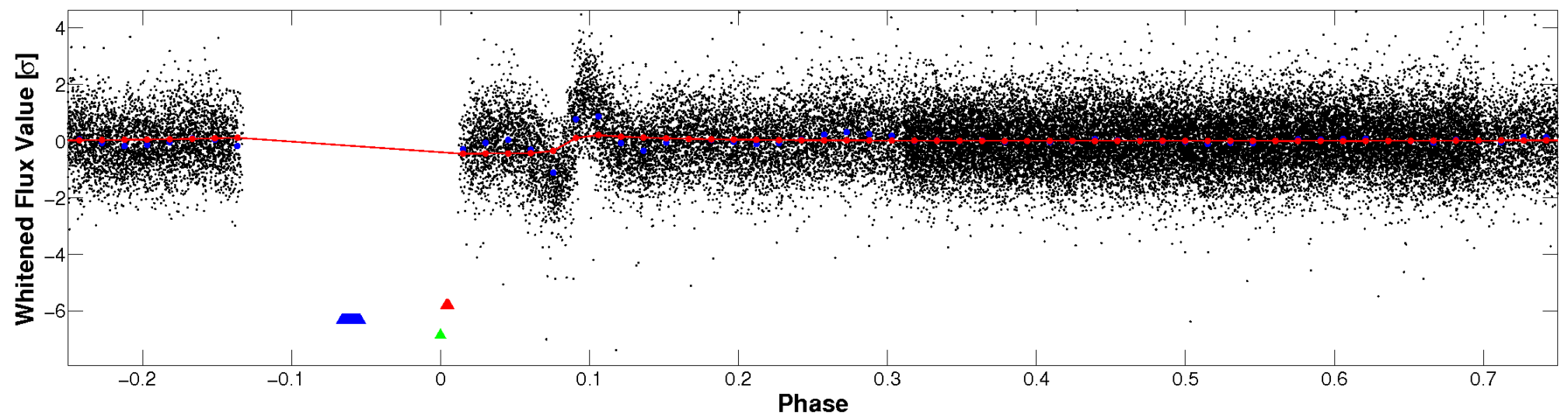


Non-Whitened Vs. Whitened Light Curve

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

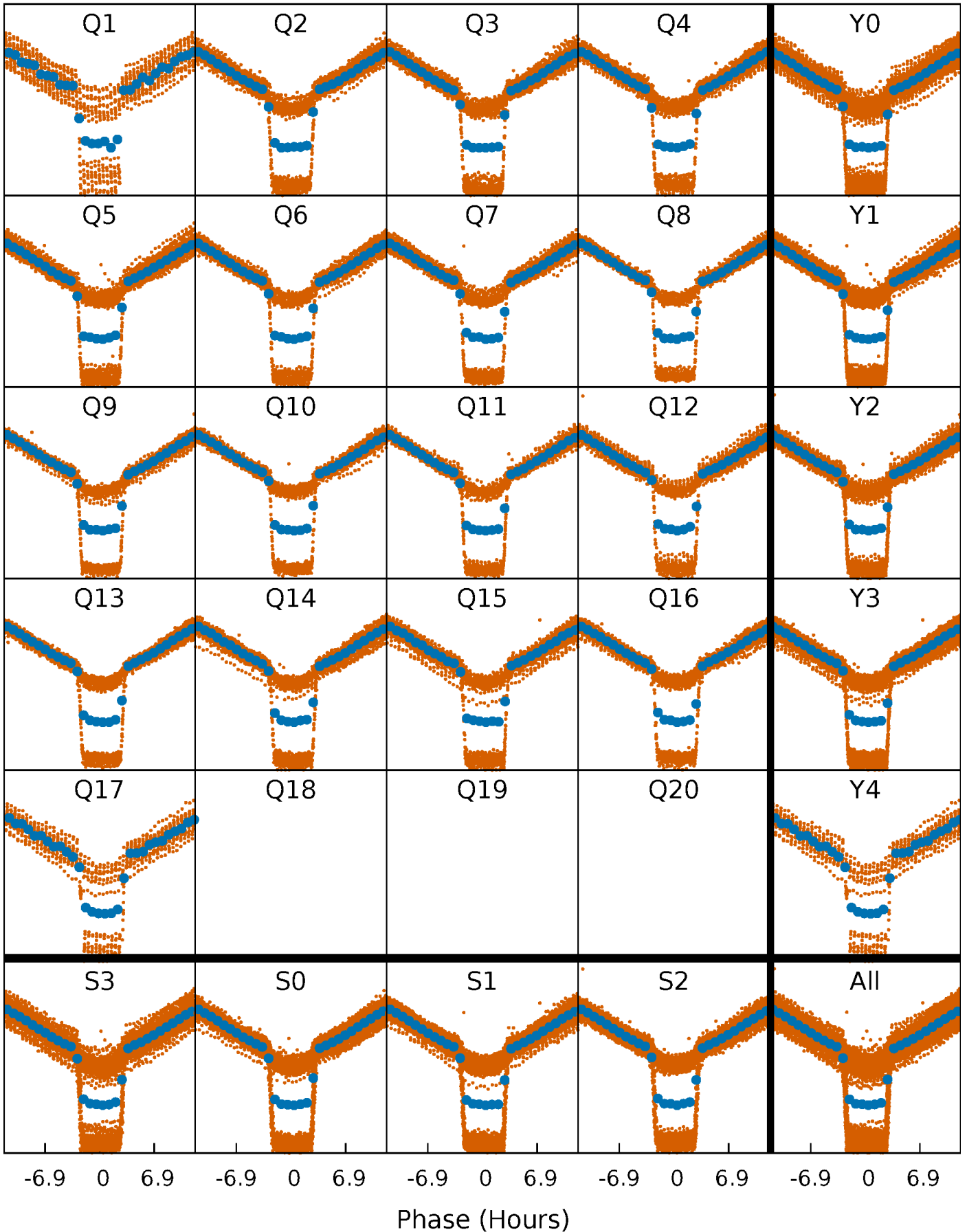


Planet 3 : Phased Whitened Flux Time Series (Fit Epoch/Period)



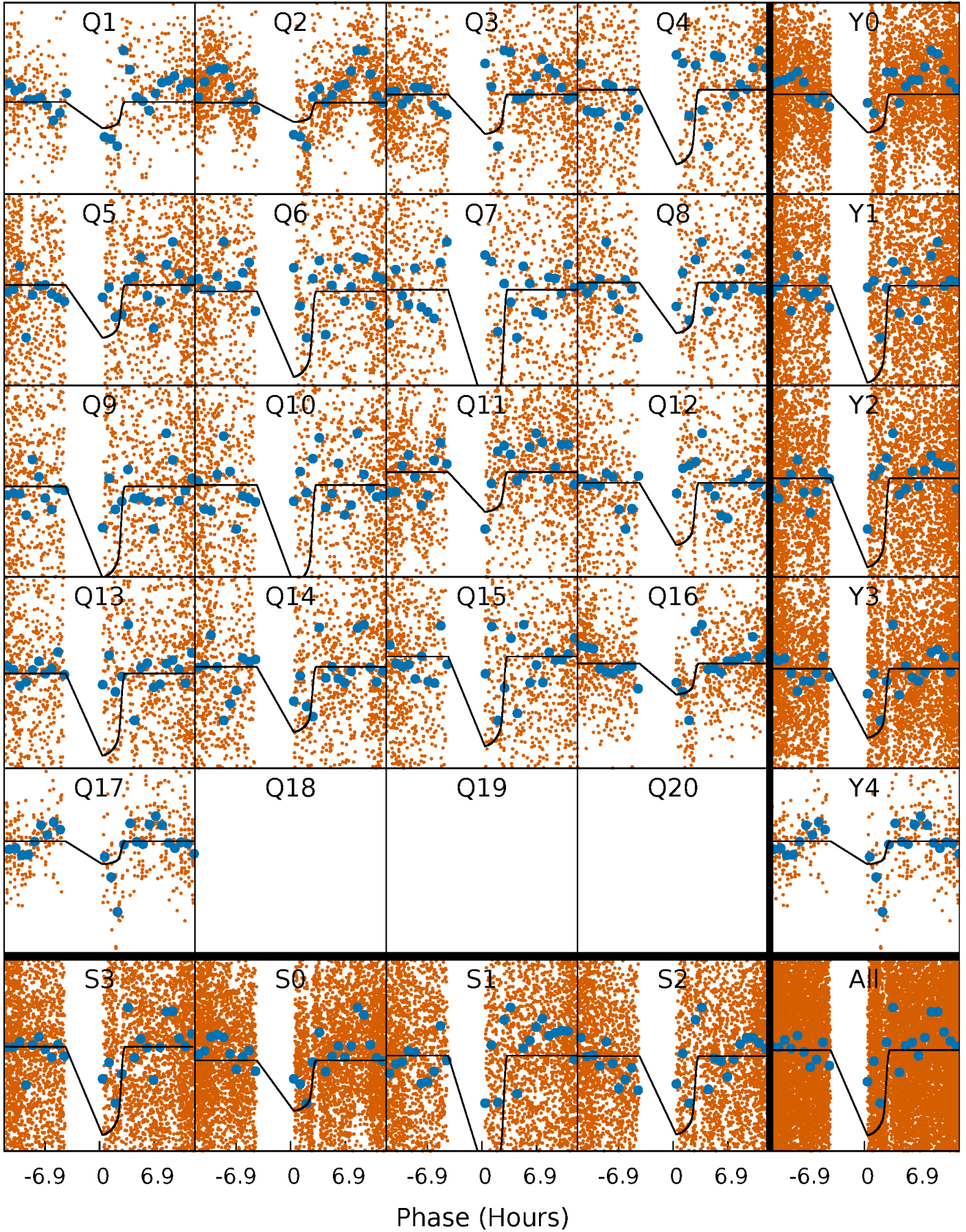
PDC Quarter-Phased Transit Curves

TCE 006606653-03 P= 1.349000 Days $T_0=132.284529$ (BKJD)



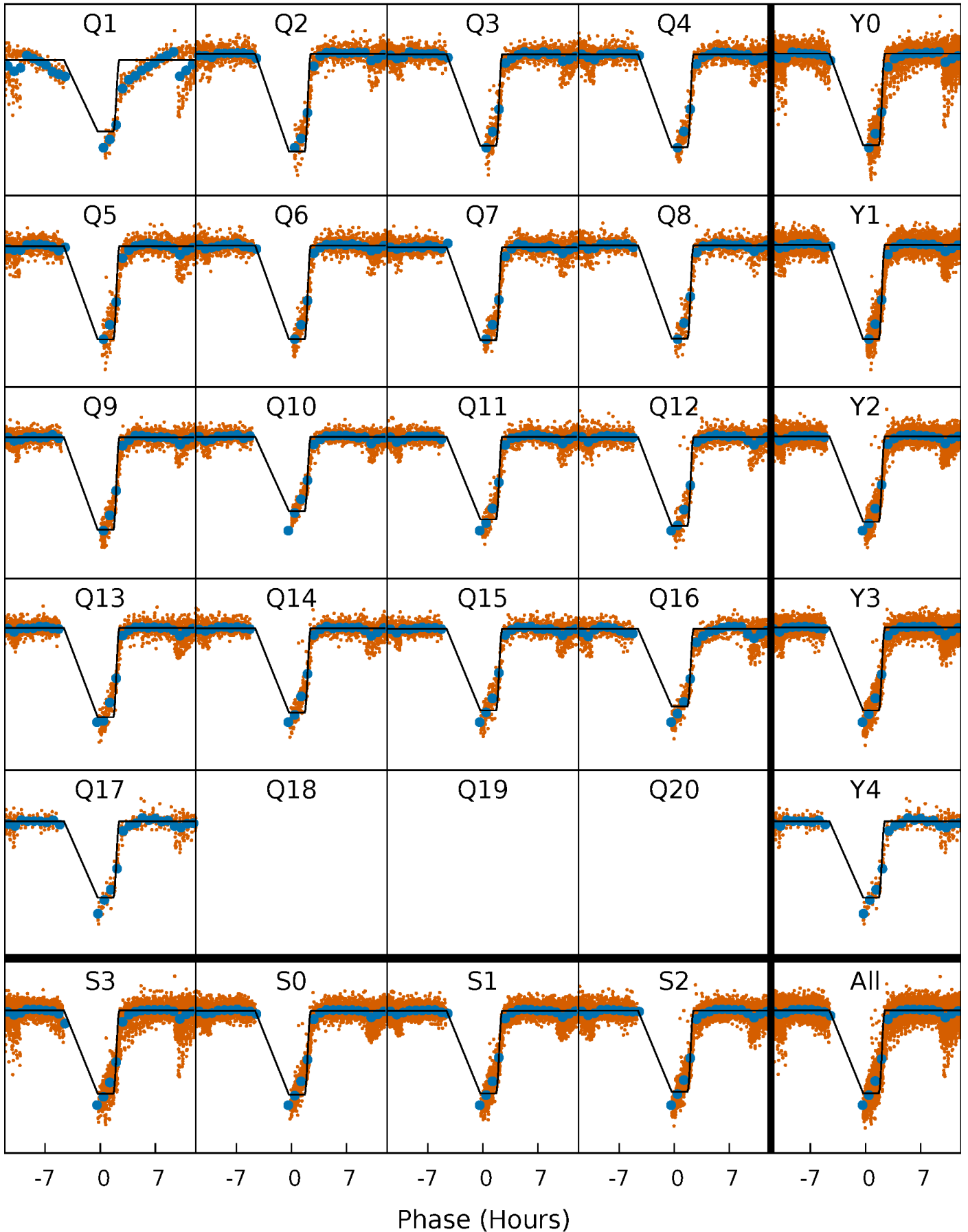
DV Quarter-Phased Transit Curves

TCE 006606653-03 P= 1.349000 Days $T_0=132.284529$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

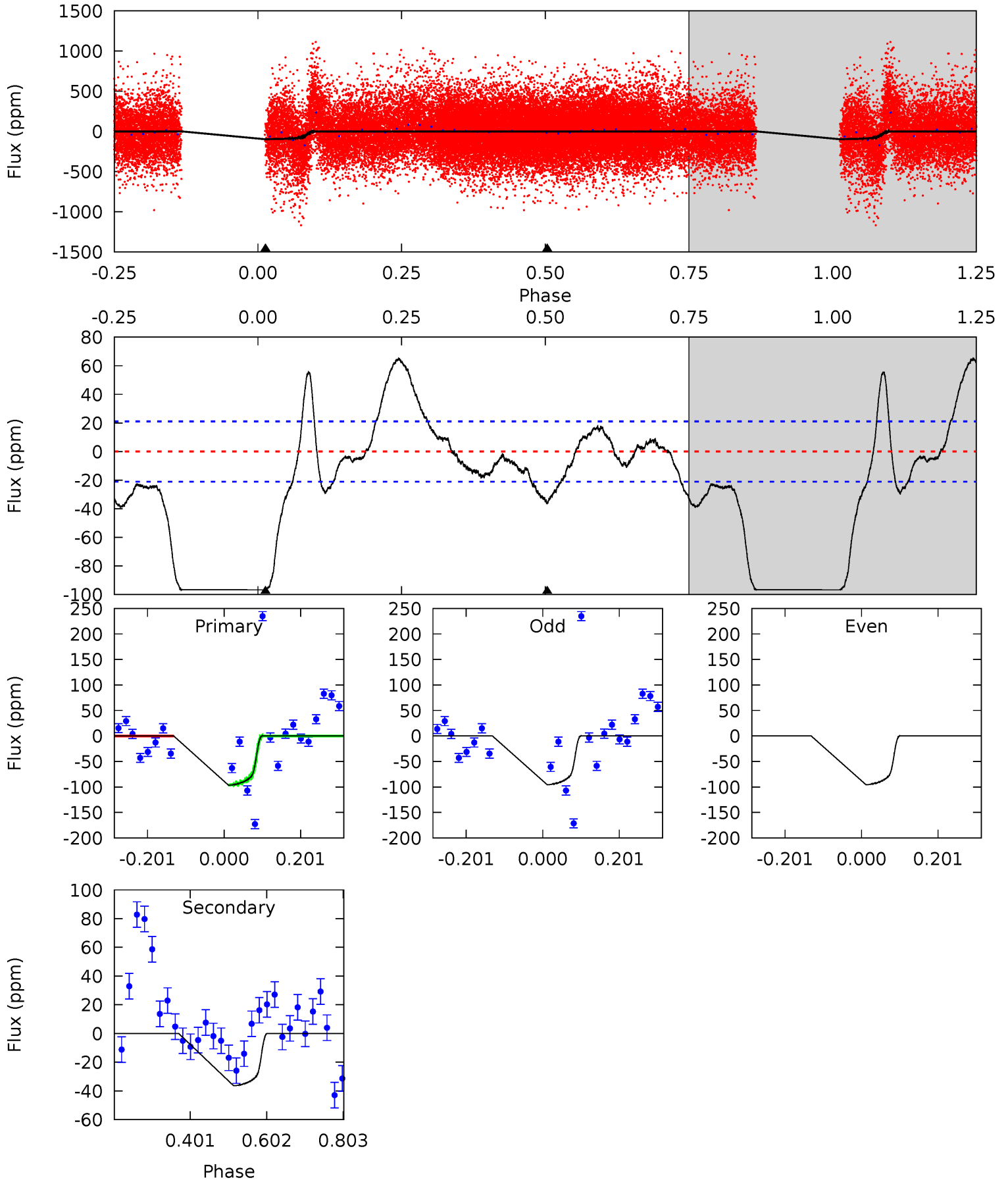
TCE 006606653-03 P= 1.349016 Days $T_0=132.297426$ (BKJD)



DV Model-Shift Uniqueness Test

006606653-03, P = 1.349000 Days, E = 130.935529 Days

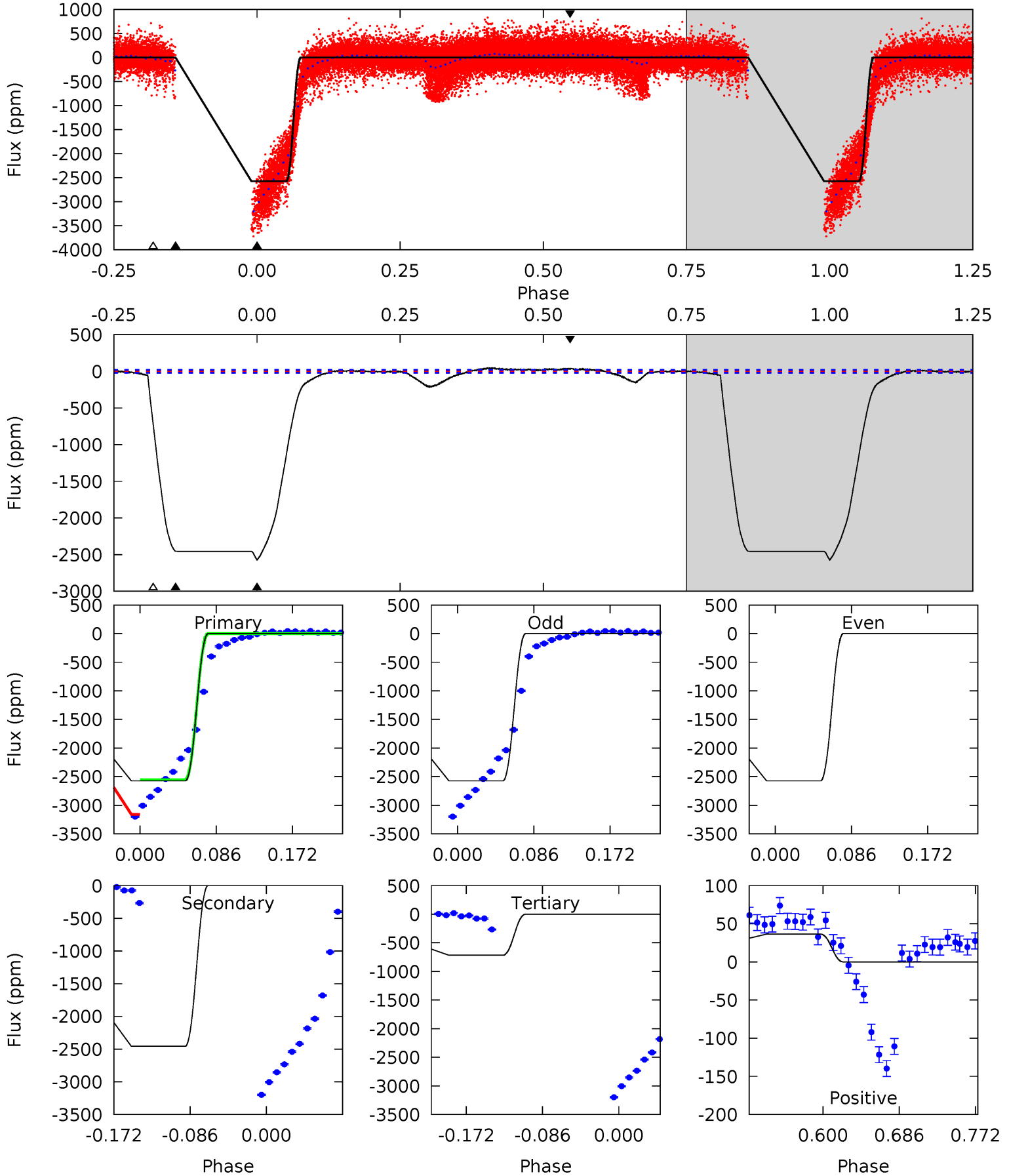
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
20.3	7.66	0	0	4.42	1.28	7.65	20.3	20.3	7.66	7.66	0	1.21	0.40	0



Alt Model-Shift Uniqueness Test

006606653-03, P = 1.349016 Days, E = 130.948410 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
594.7	567.2	165.6	8.40	4.60	1.72	45.4	429.1	586.3	401.6	558.8	0	1.00	0.02	24.8



Stellar Parameters For KIC 006606653

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6568^{+161}_{-201}	$4.360^{+0.065}_{-0.208}$	$-0.060^{+0.250}_{-0.300}$	$1.211^{+0.391}_{-0.140}$	$1.229^{+0.174}_{-0.174}$	$0.975^{+0.274}_{-0.510}$
	+2%/-3%	+1%/-5%	+417%/-500%	+32%/-12%	+14%/-14%	+28%/-52%
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 006606653-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-36 ± 5	$2.05^{+0.35}_{-0.24}$	2835^{+213}_{-132}	4286^{+173}_{-194}	$3.000^{+0.958}_{-0.817}$
Alt.	-2455 ± 4	$7.16^{+1.24}_{-0.67}$	2849^{+199}_{-139}	6341^{+179}_{-204}	17^{+3}_{-4}

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

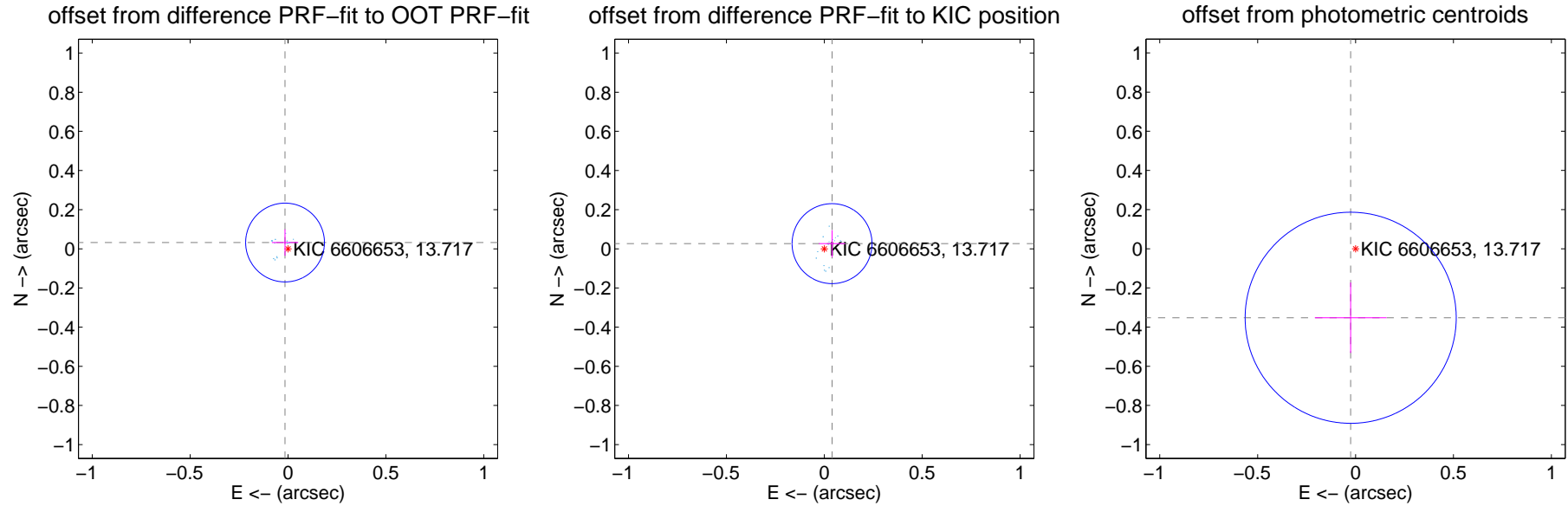
DV Centroid Data

Supplemental centroid analysis for 006606653-03. Kepler magnitude: 13.72. Transit SNR 21.18

There are 17 quarters with good PRF difference image offsets

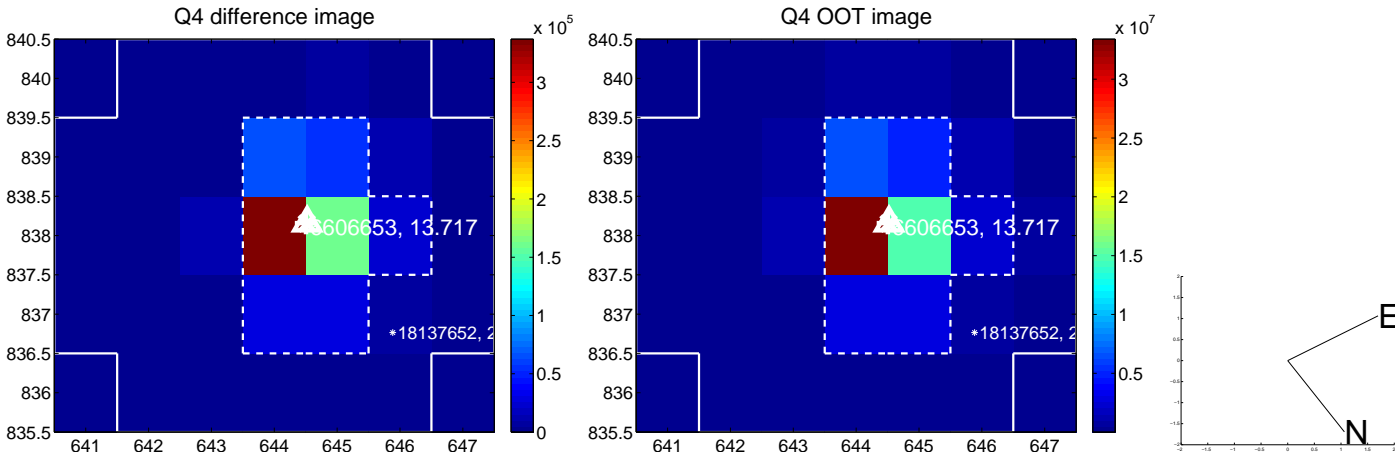
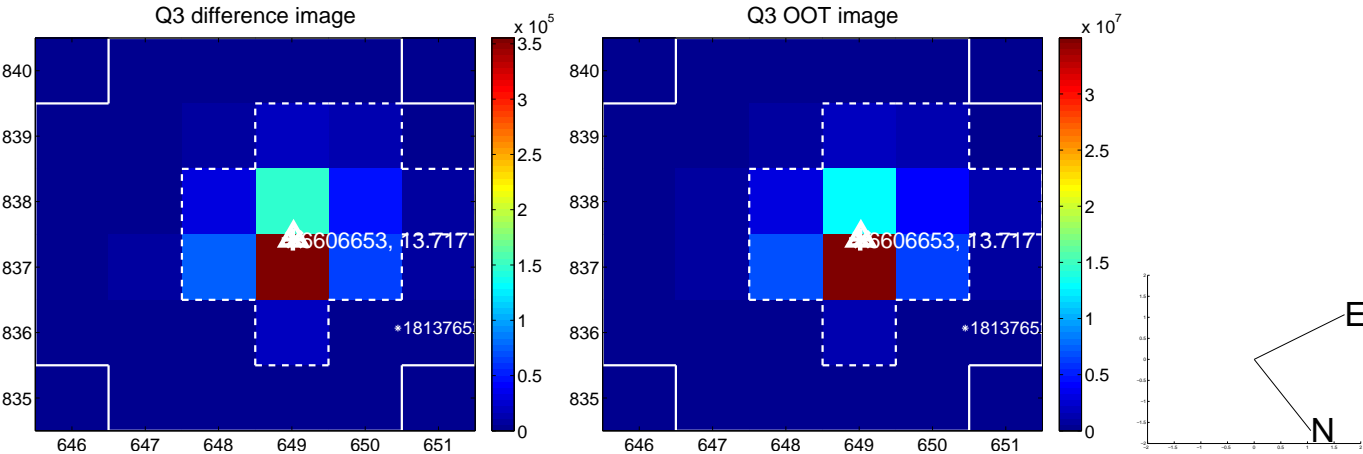
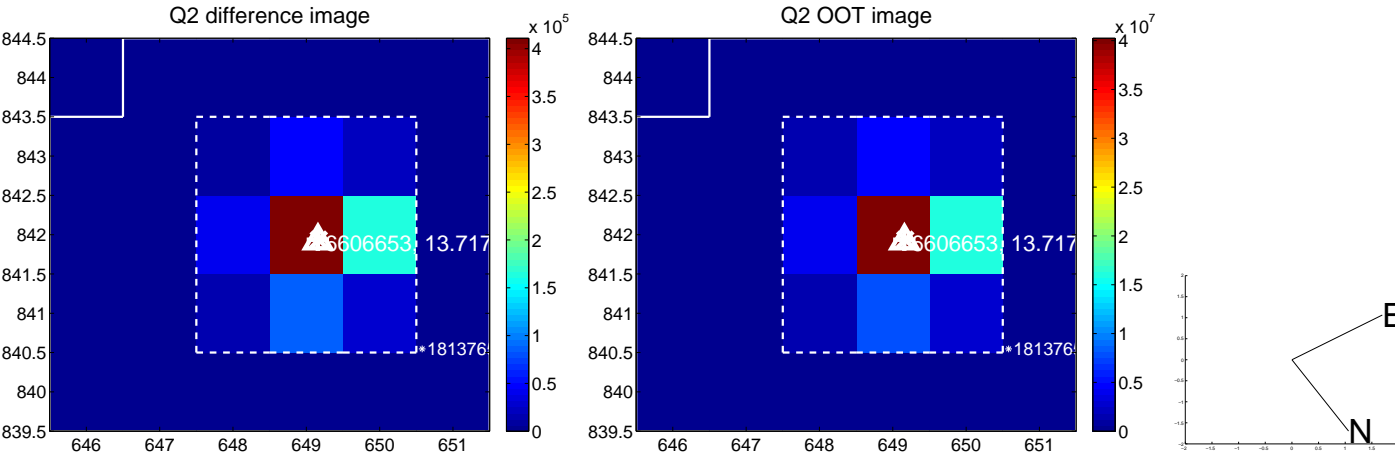
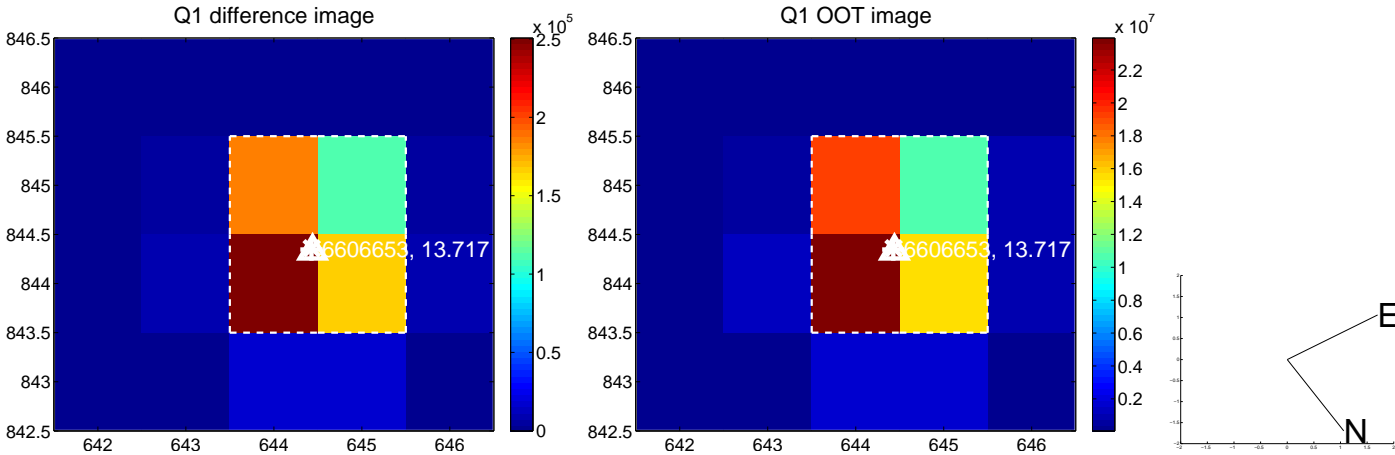
The direct PRF centroid is offset from the target star catalog position by about 0.08 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.036 ± 0.067	0.53	0.015 ± 0.067	0.032 ± 0.067
PRF-fit source offset from KIC position	0.048 ± 0.068	0.70	-0.040 ± 0.067	0.026 ± 0.069
photometric centroid source offset	0.35 ± 0.18	1.97	0.02 ± 0.18	-0.35 ± 0.18

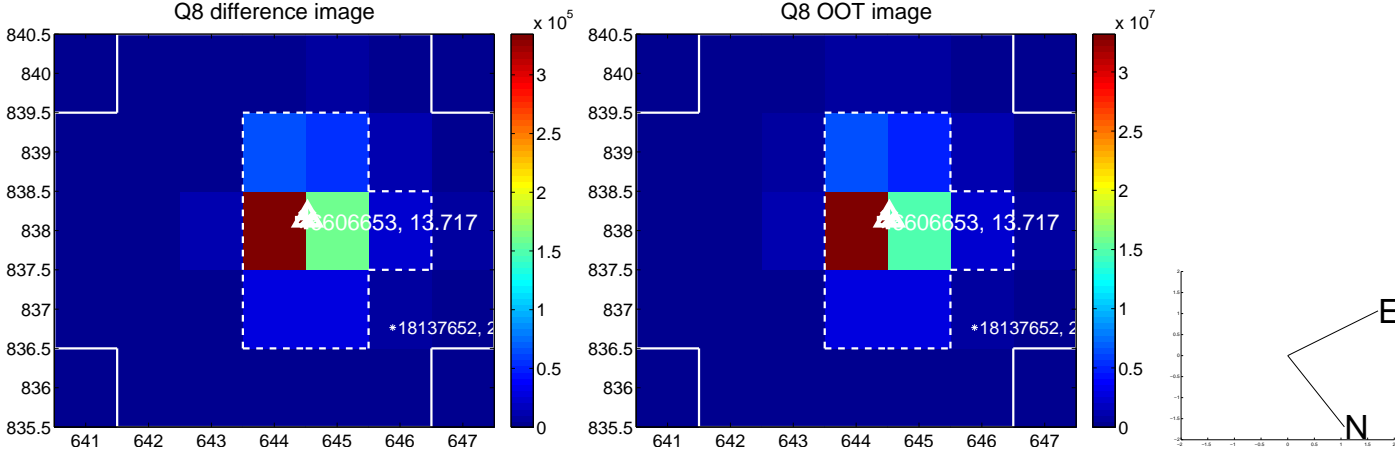
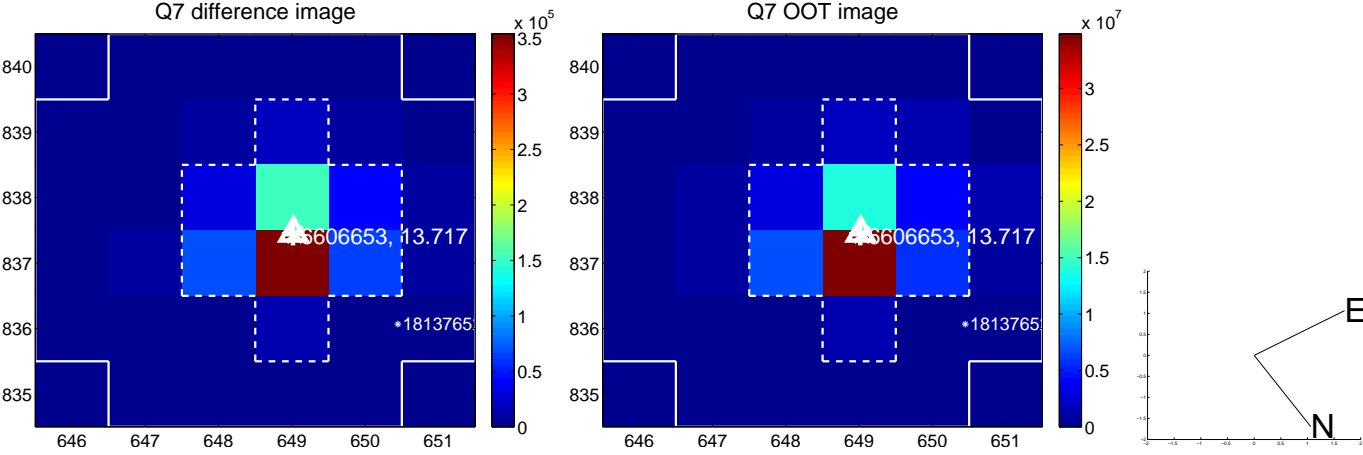
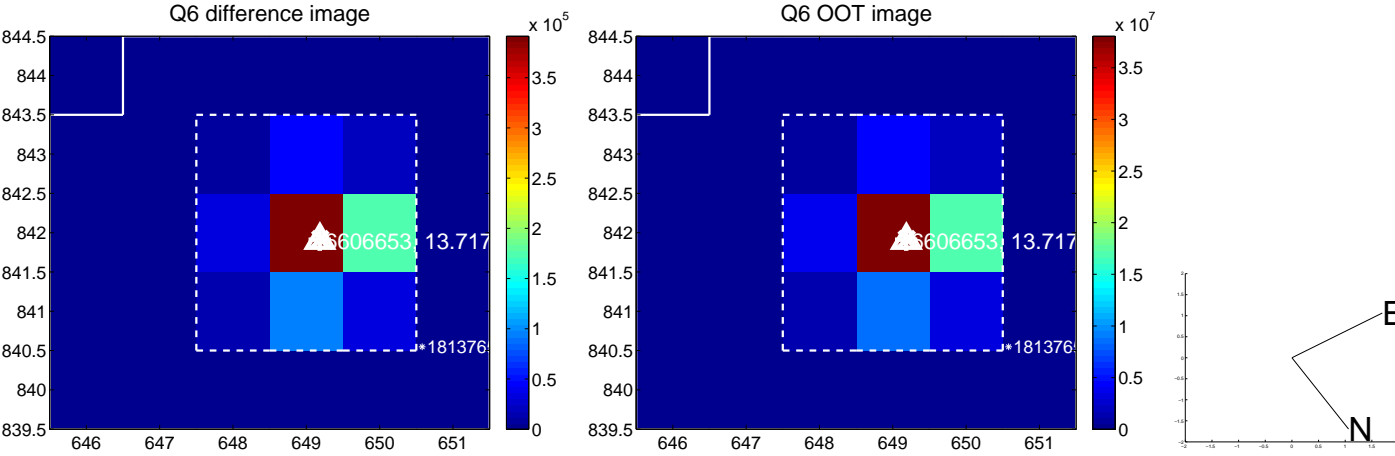
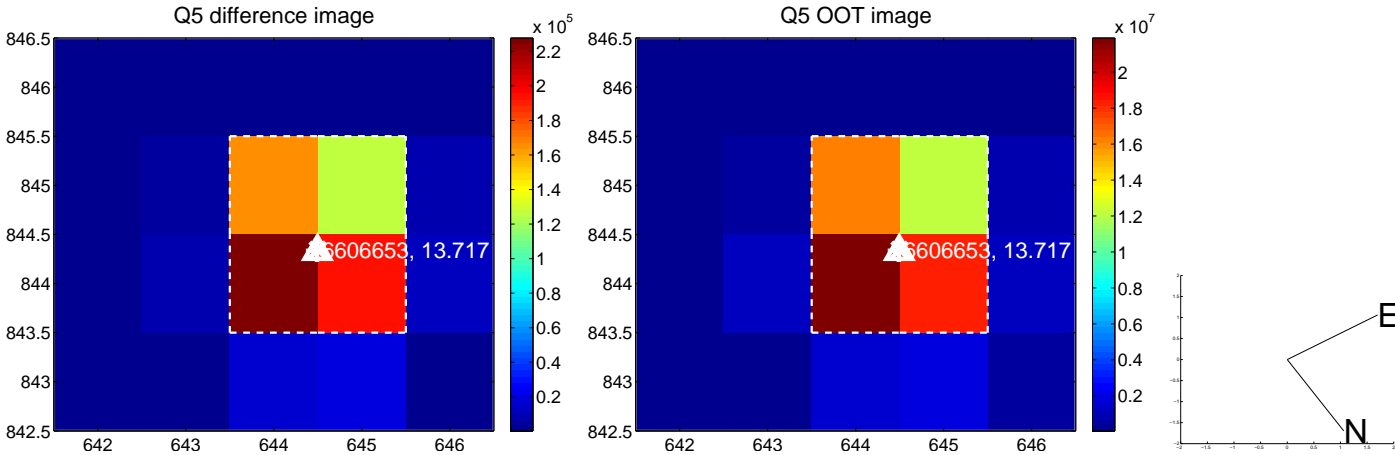


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

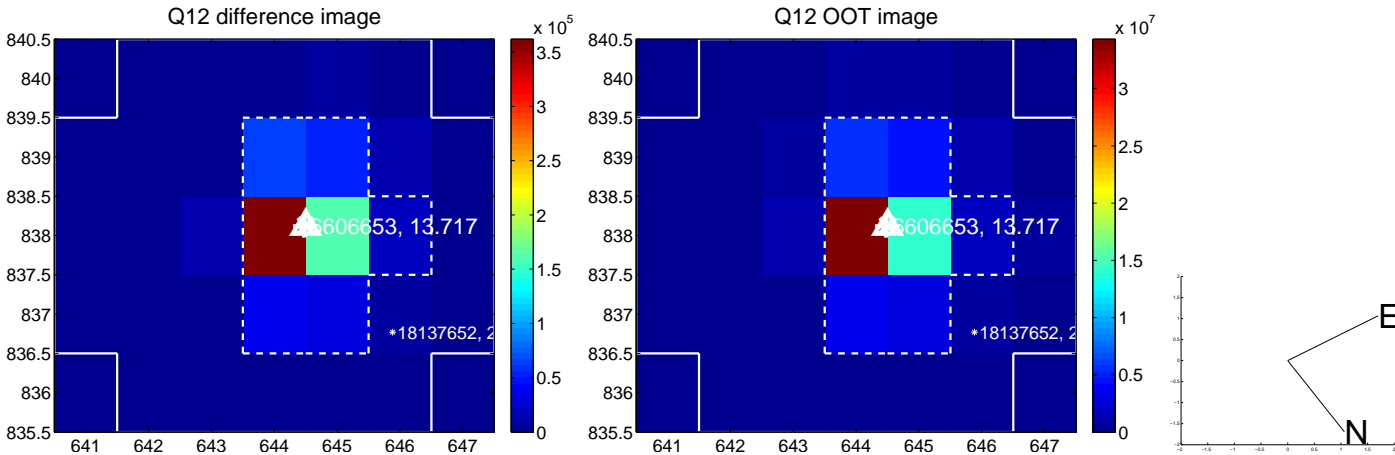
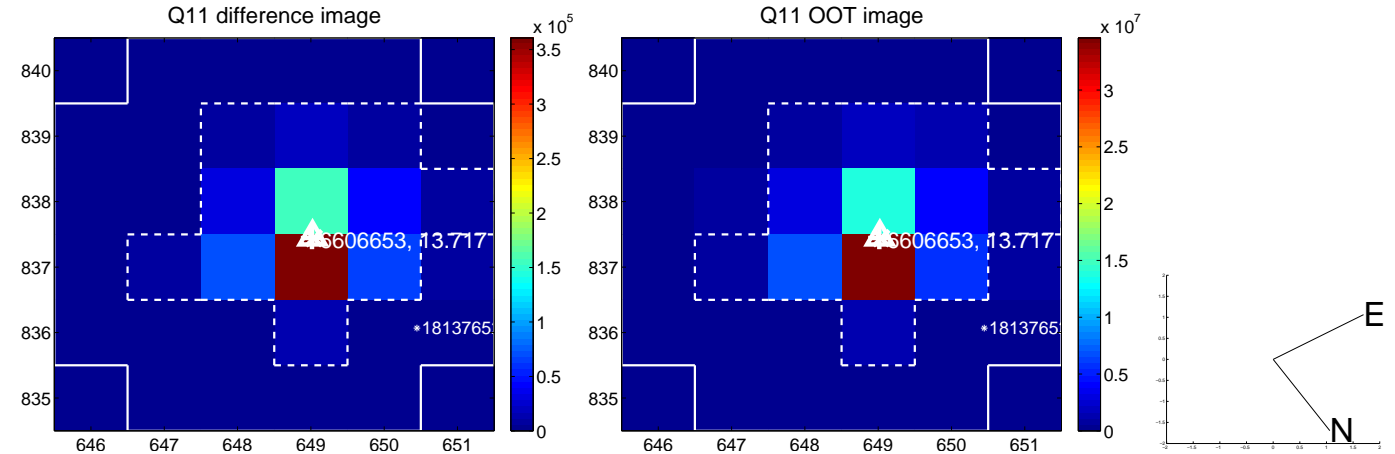
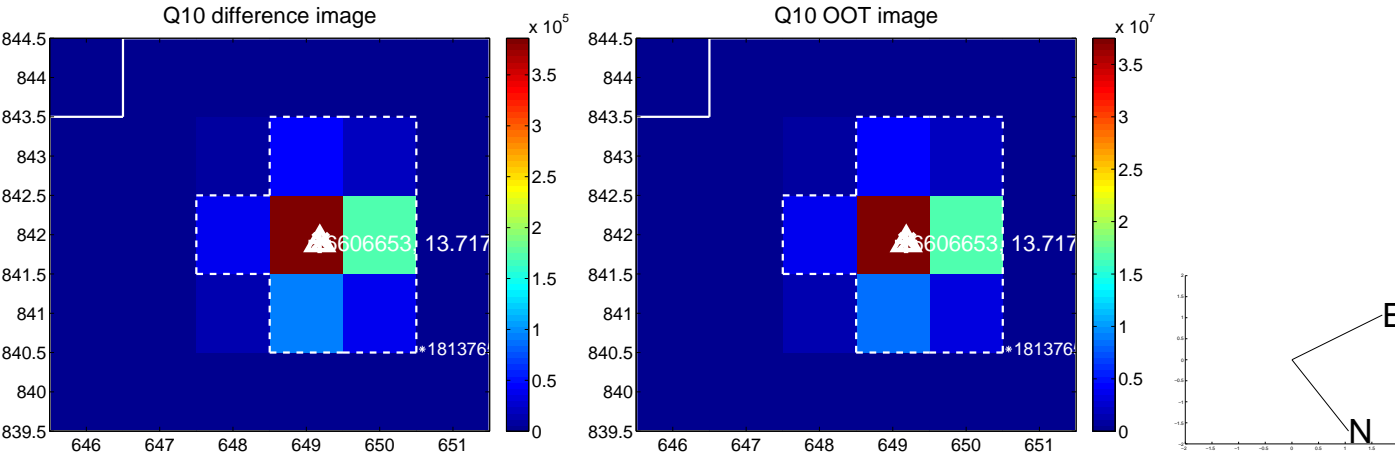
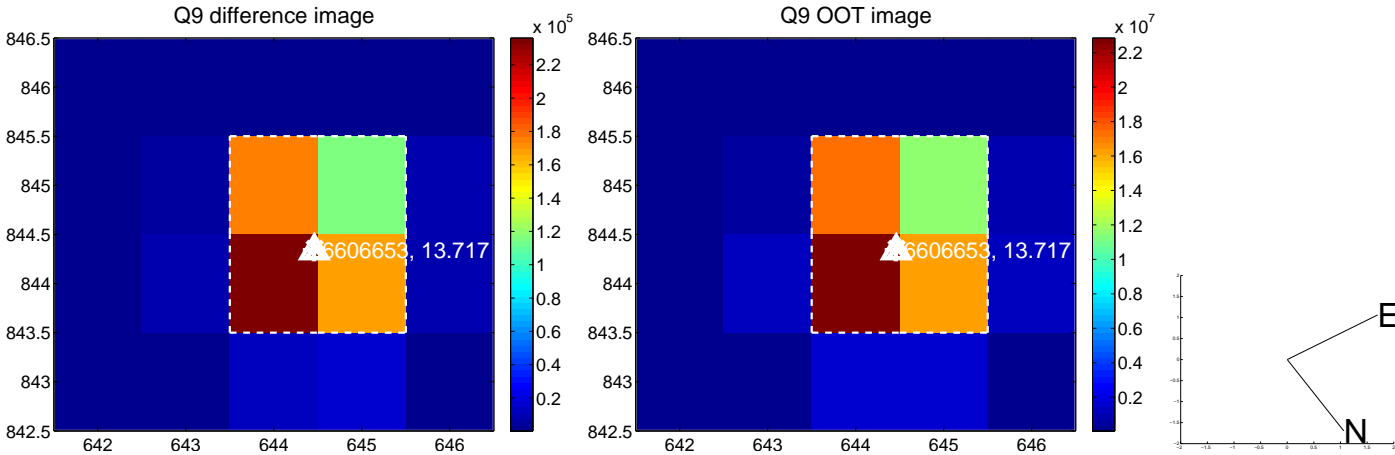
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



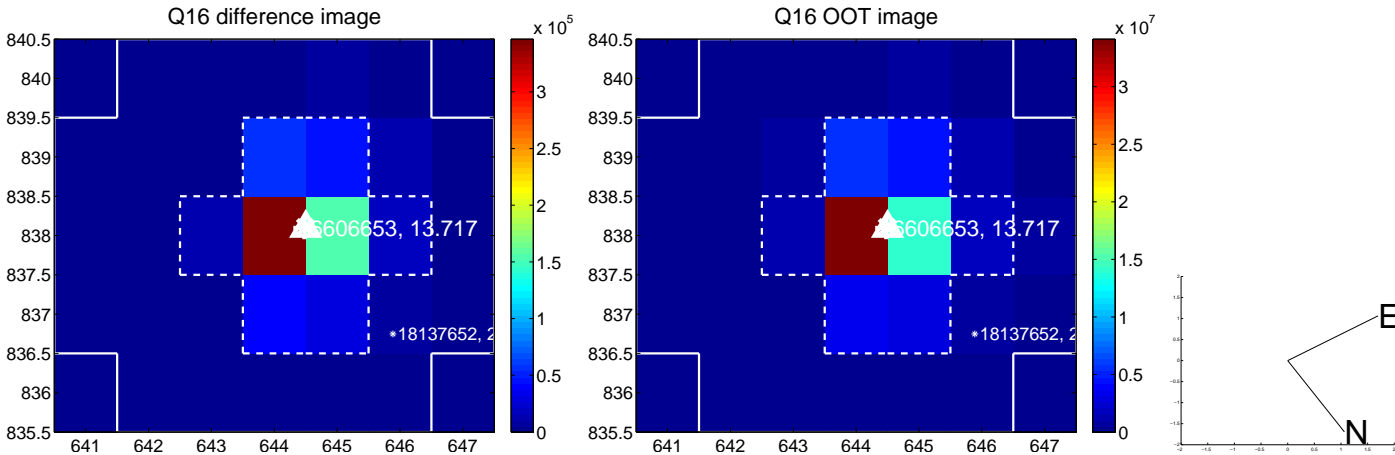
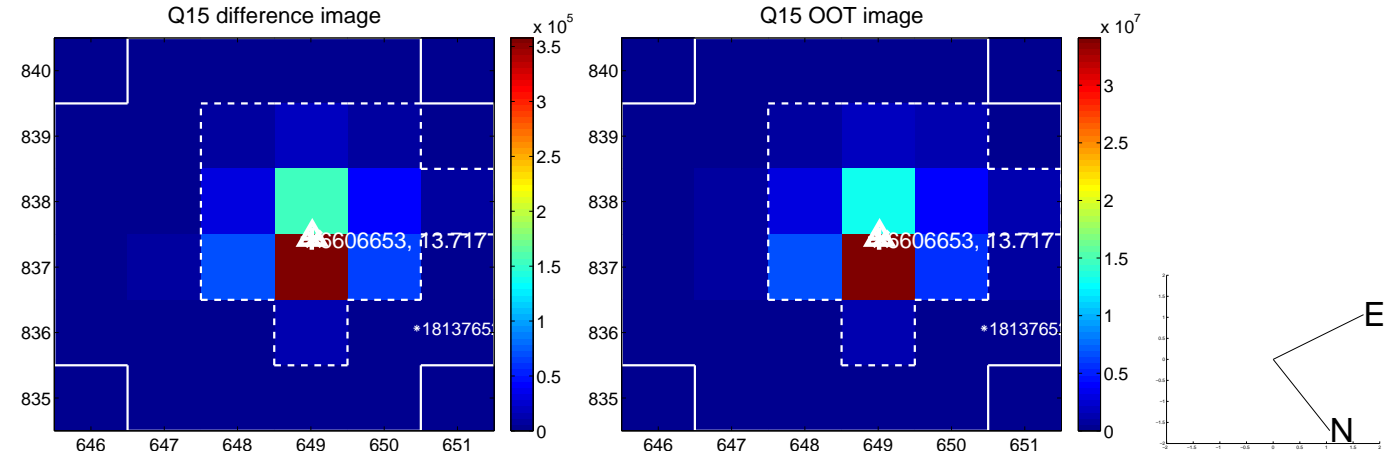
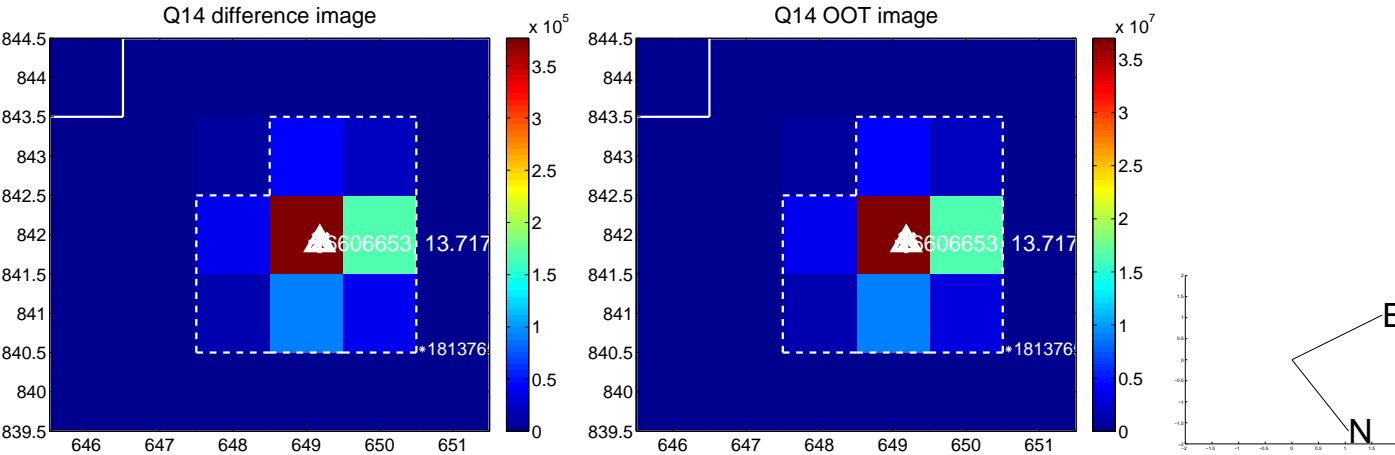
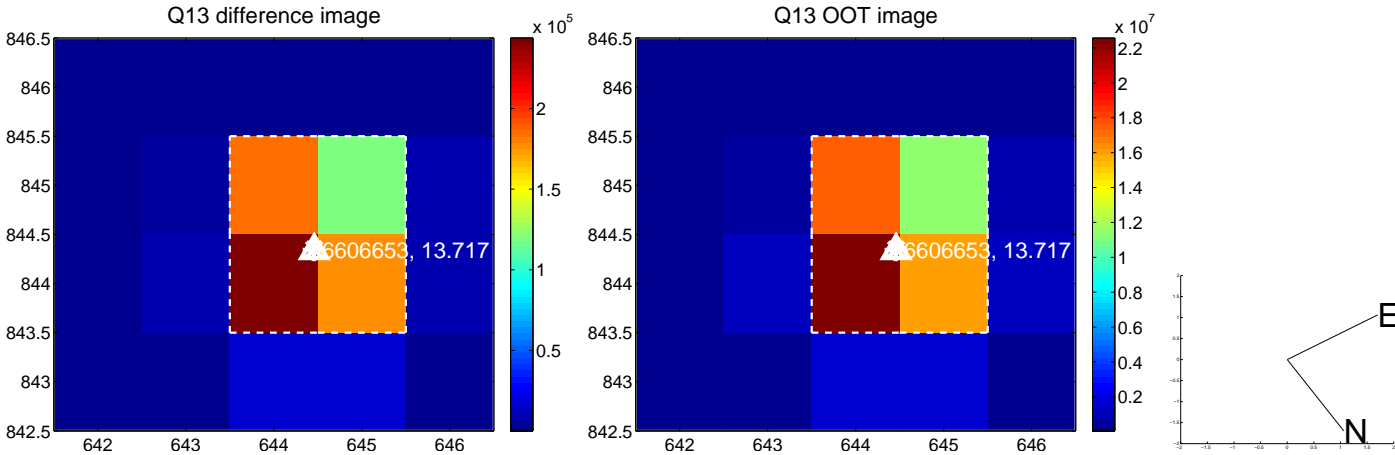
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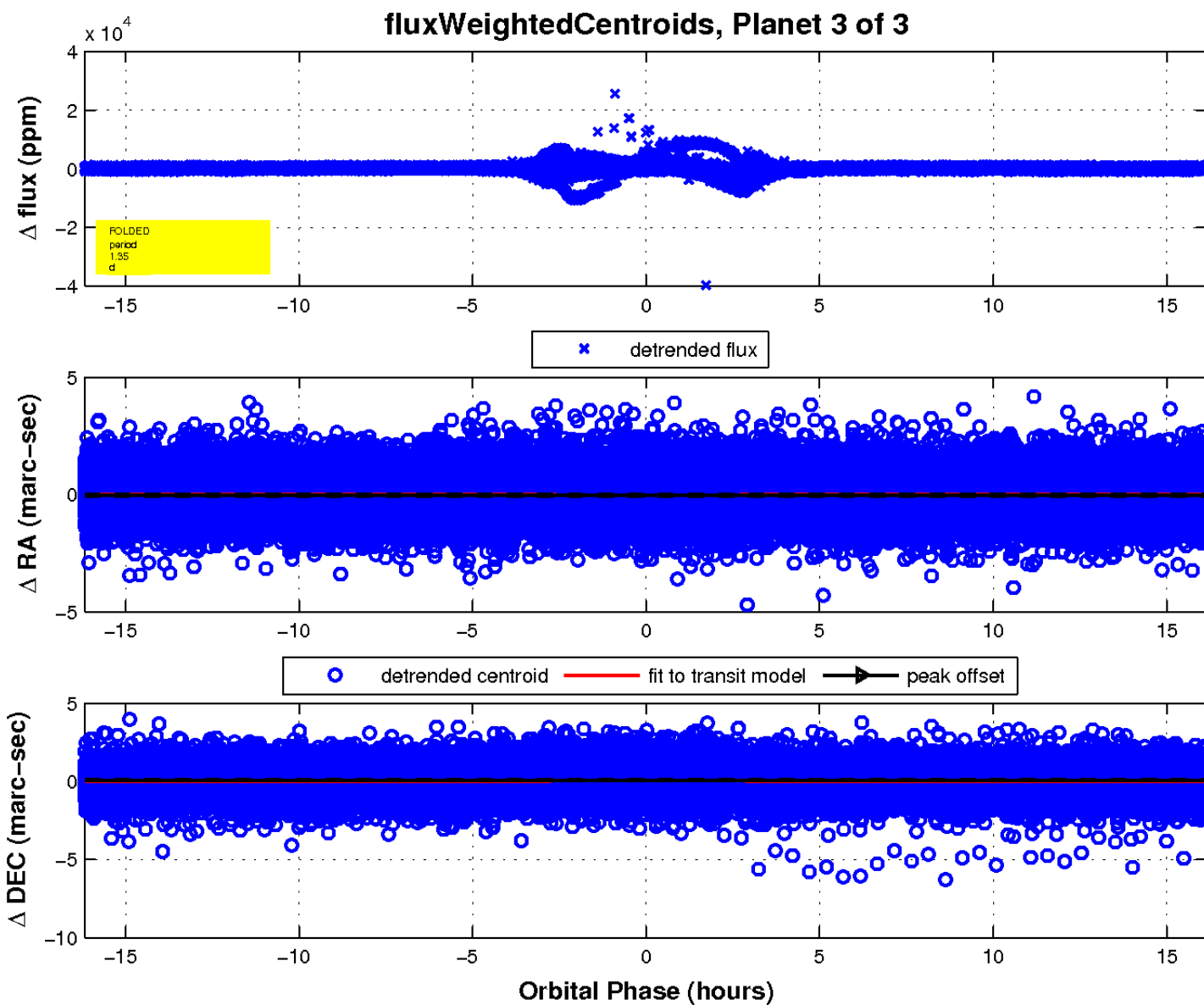
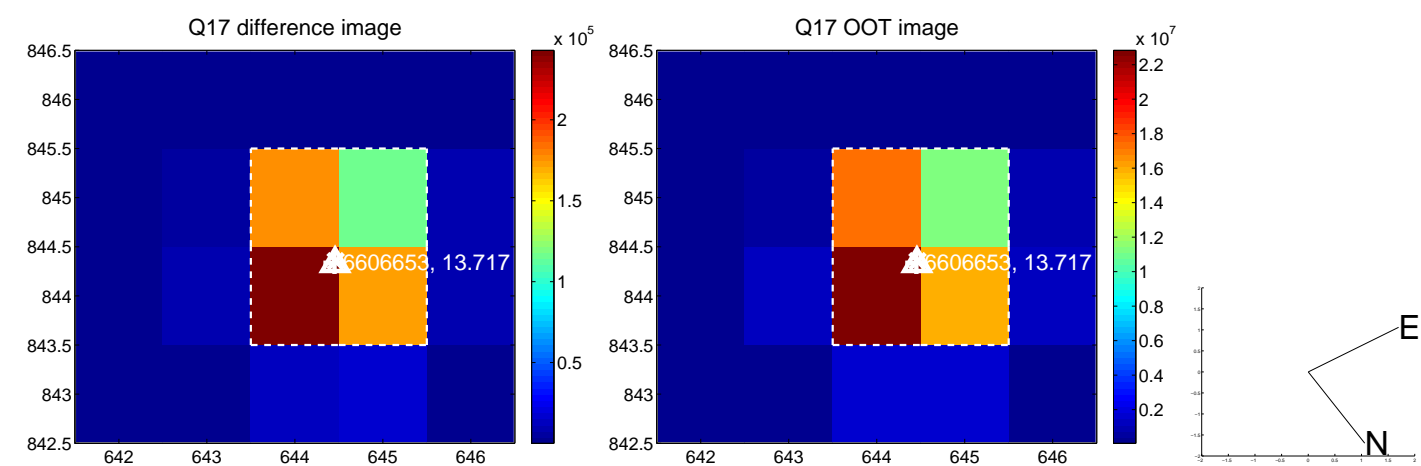
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



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



UKIRT Image

Declination

