

KIC 003941581

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})
003941581-01	OBS	No	0.961366	131.931244	6.4	3.212	8.1	9.0	2.21	7716	0.65	27963.99
003941581-02	OBS	No	212.680912	324.558990	301.2	25.838	28.6	22.8	2.21	7716	7.35	20.90
003941581-03	OBS	No	270.878247	337.116785	81.5	13.333	9.3	6.2	2.21	7716	2.33	15.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003941581-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003941581-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
003941581-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED

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

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

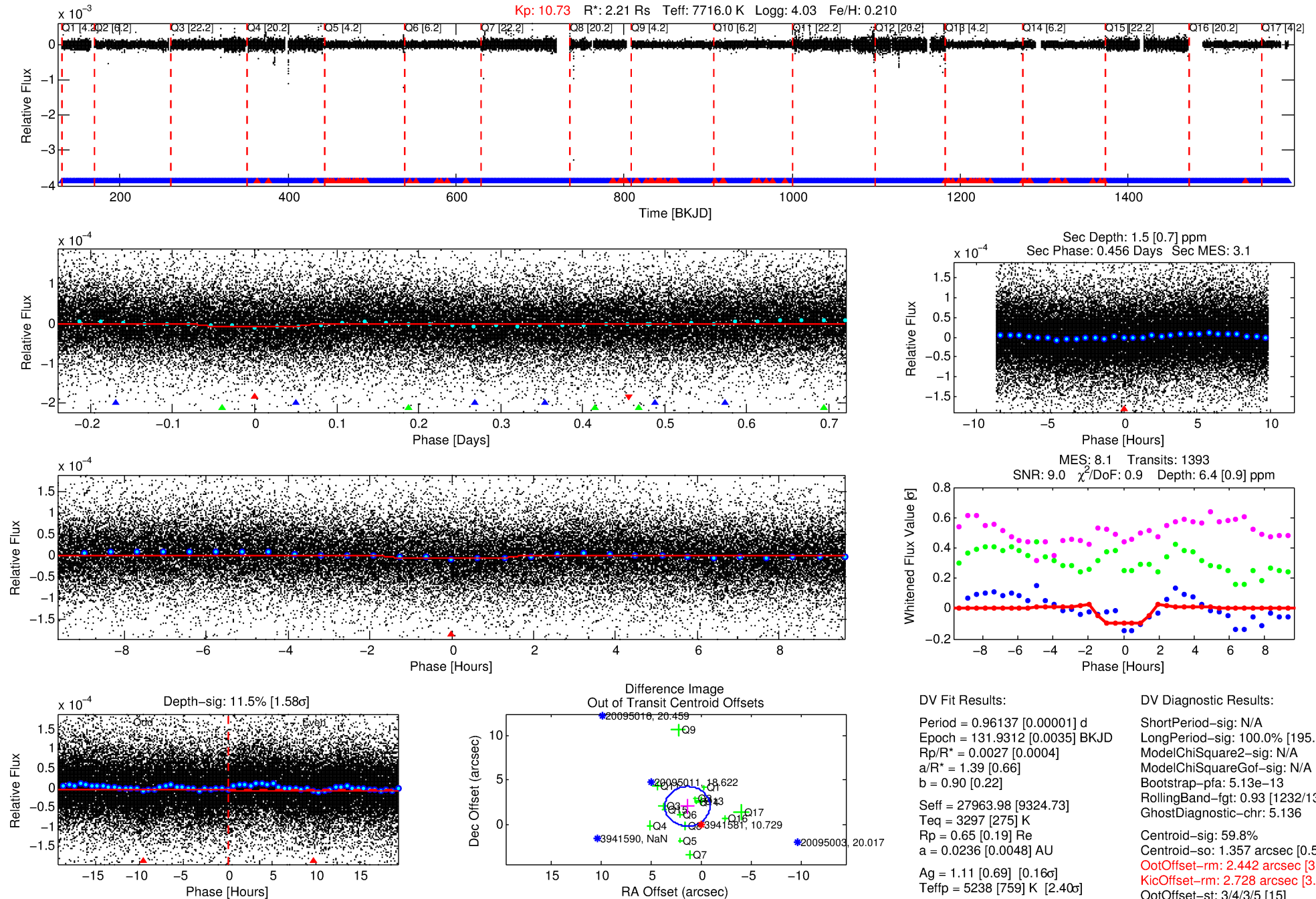
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003941581-01

No Significant Match Found

DV One-Page Summary

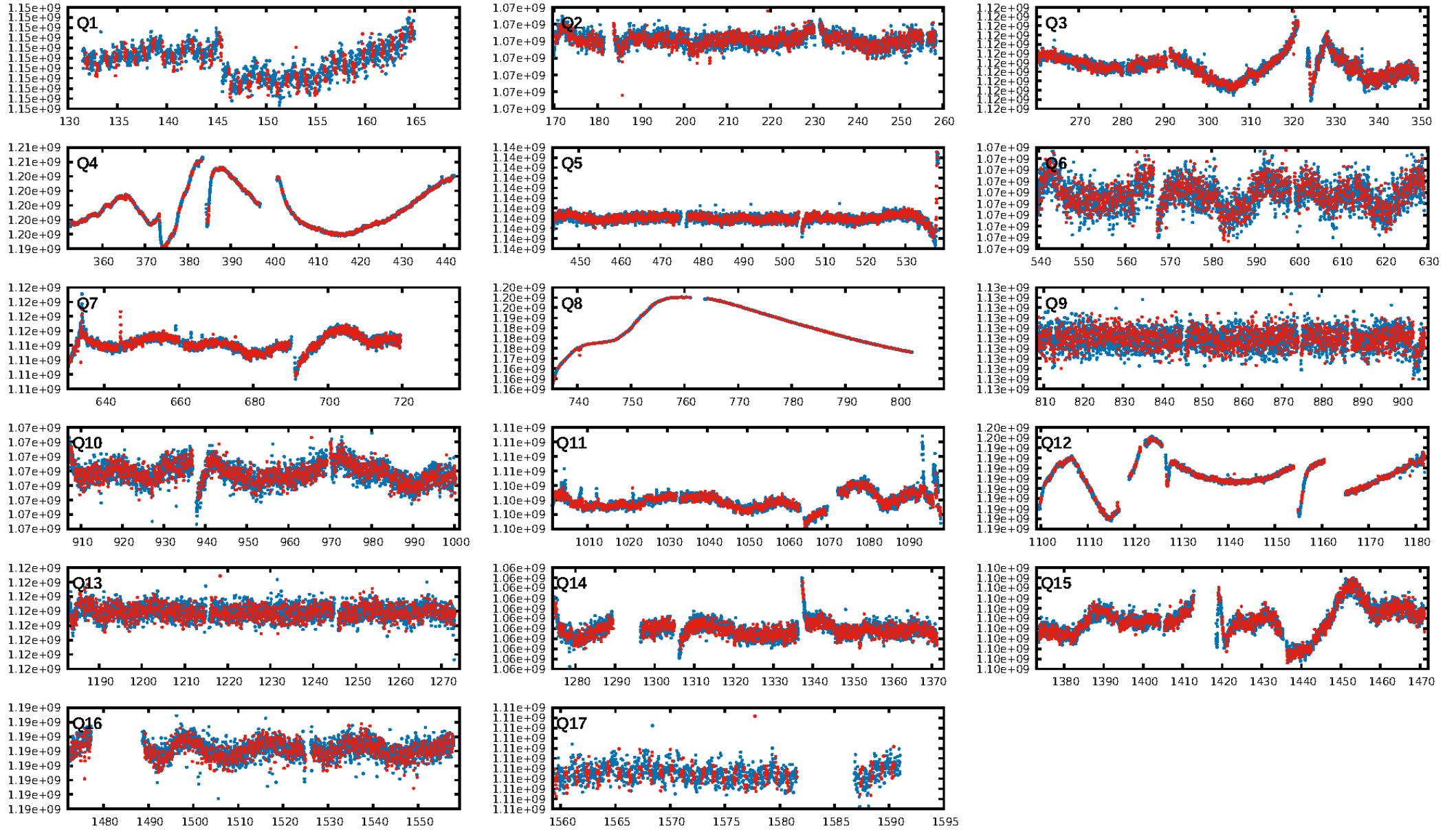
KIC: 3941581 Candidate: 1 of 3 Period: 0.961 d



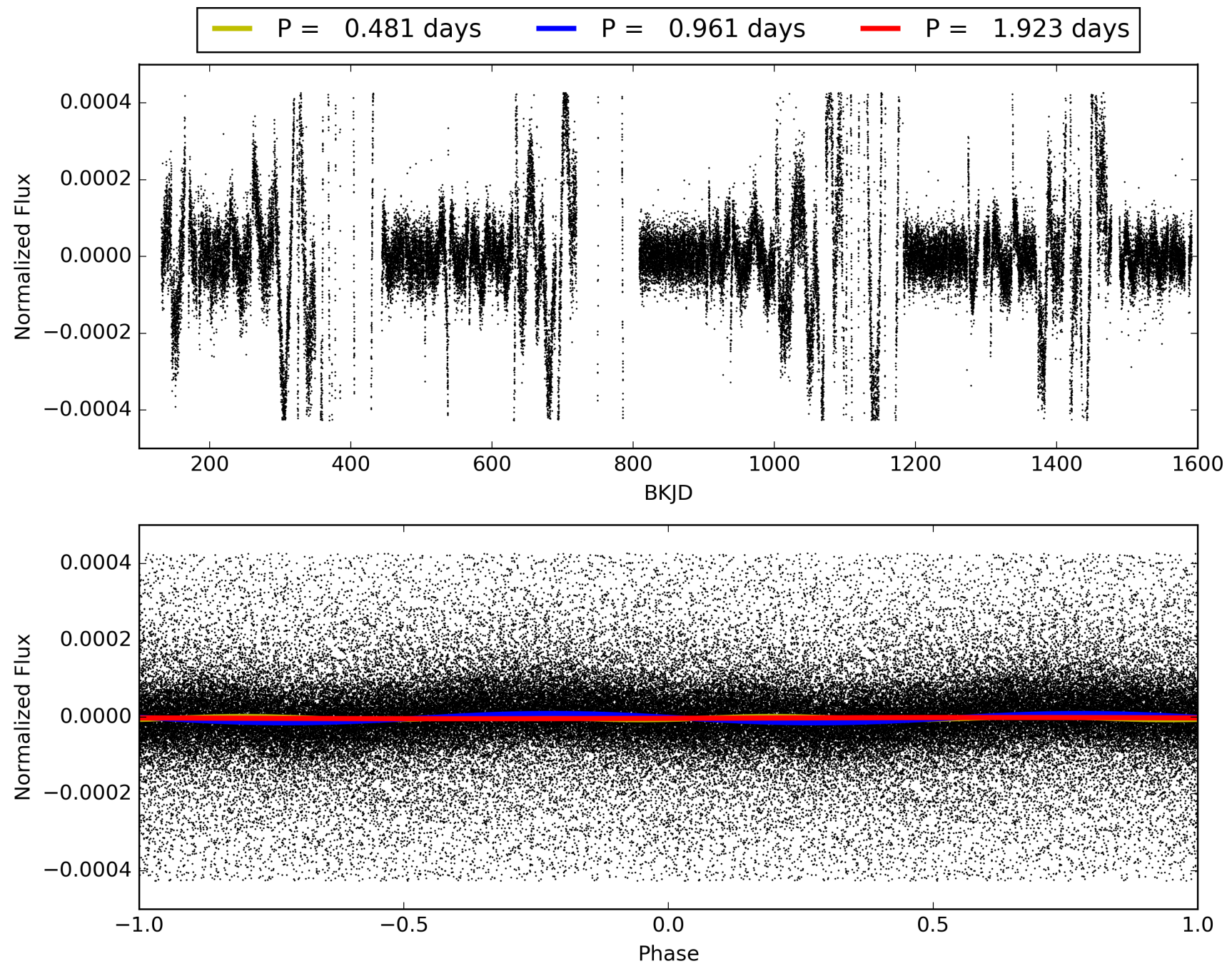
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:40:59 Z

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

TCE 003941581-01, PDC Light Curves

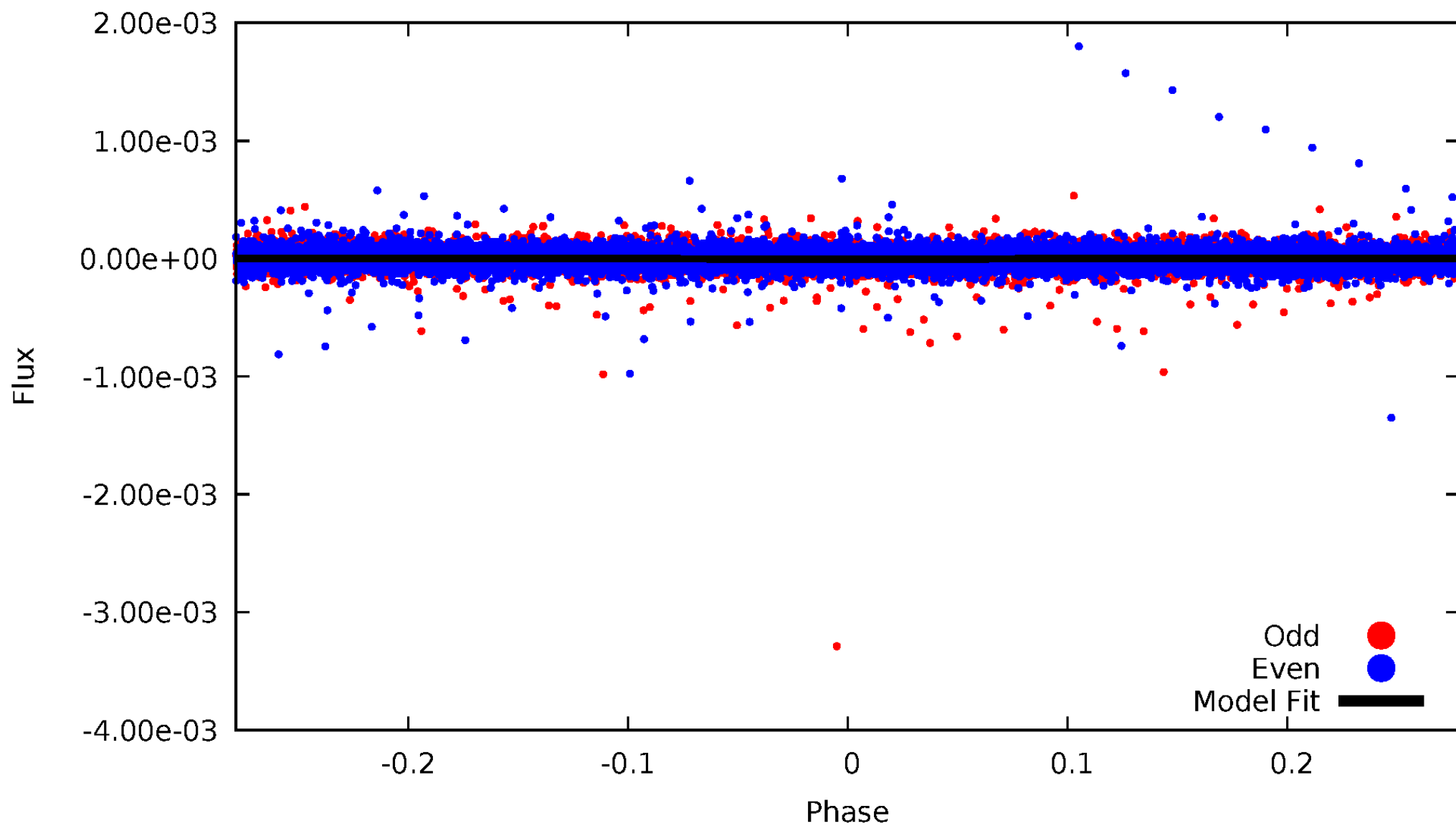


TCE 003941581-01



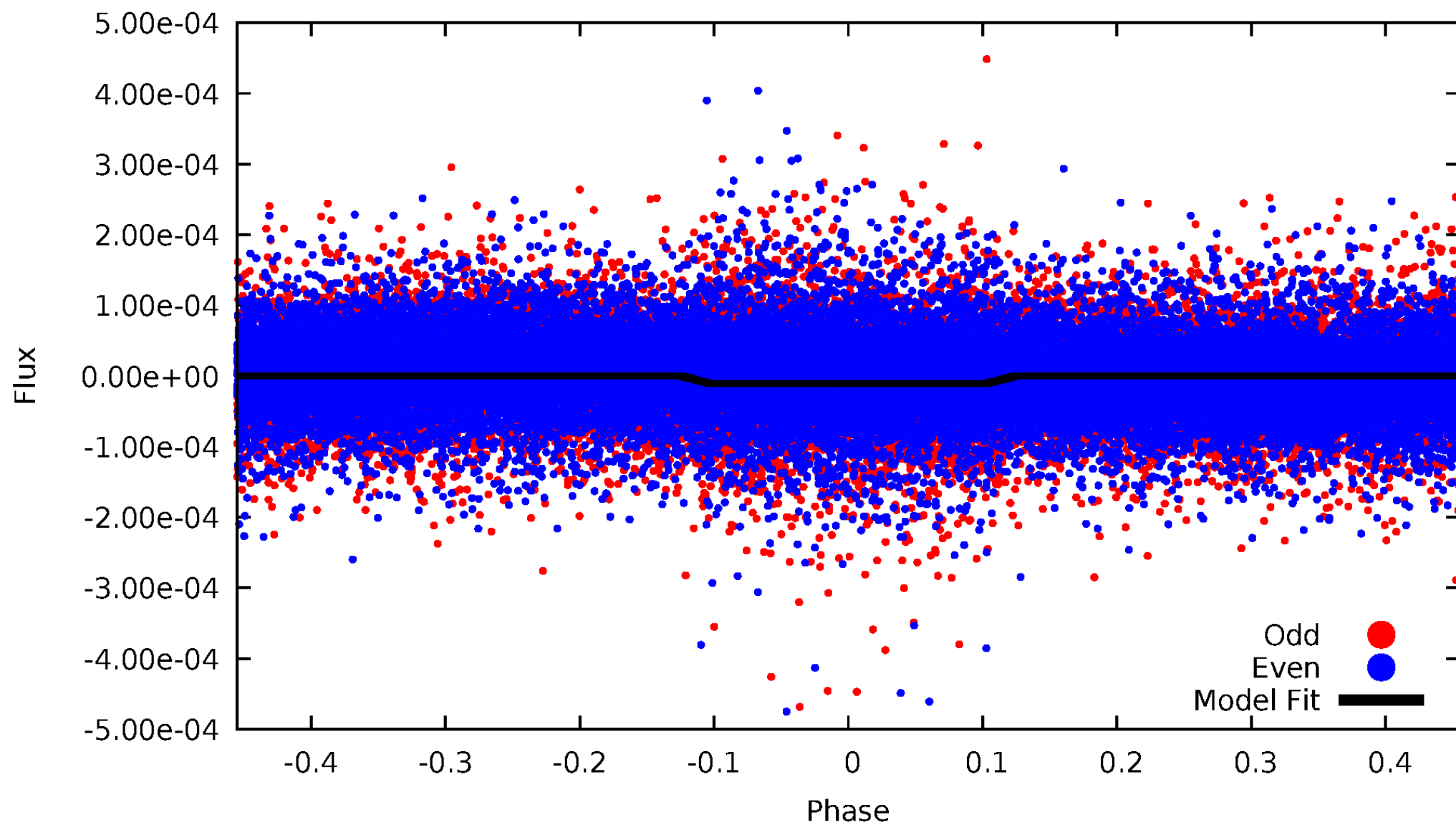
DV Odd/Even

TCE 003941581-01

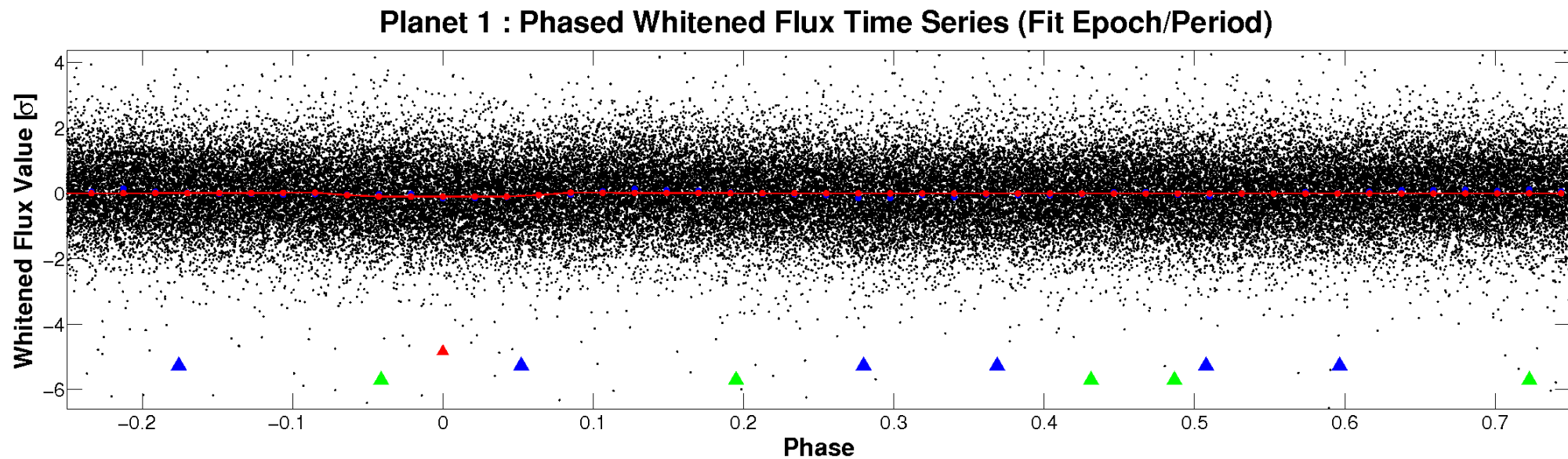
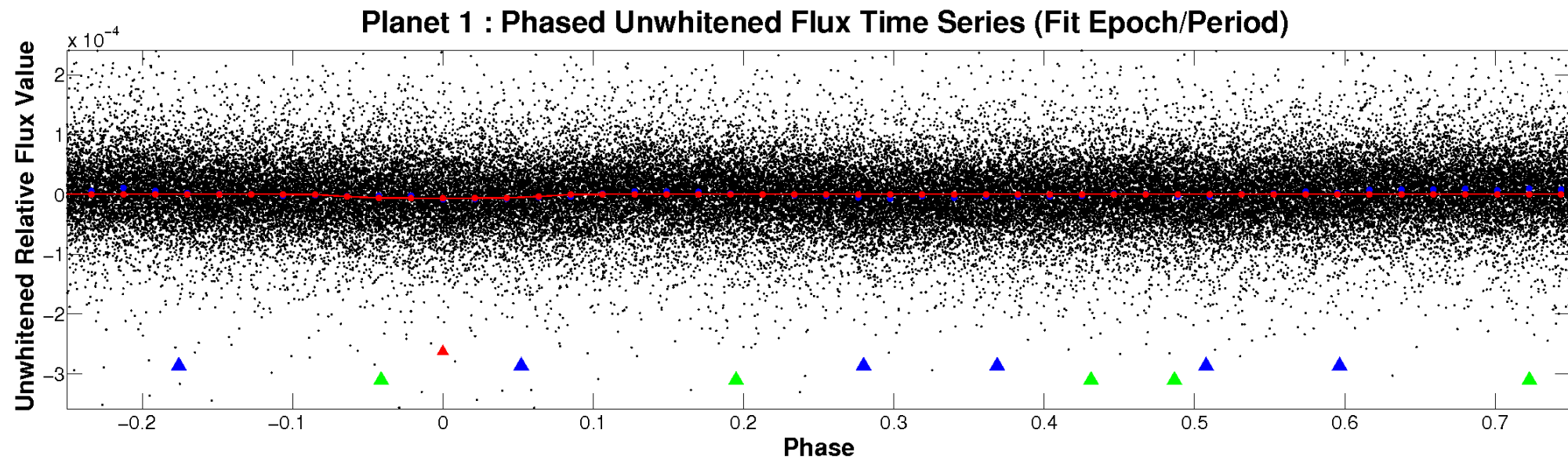


ALT Odd/Even

TCE 003941581-01

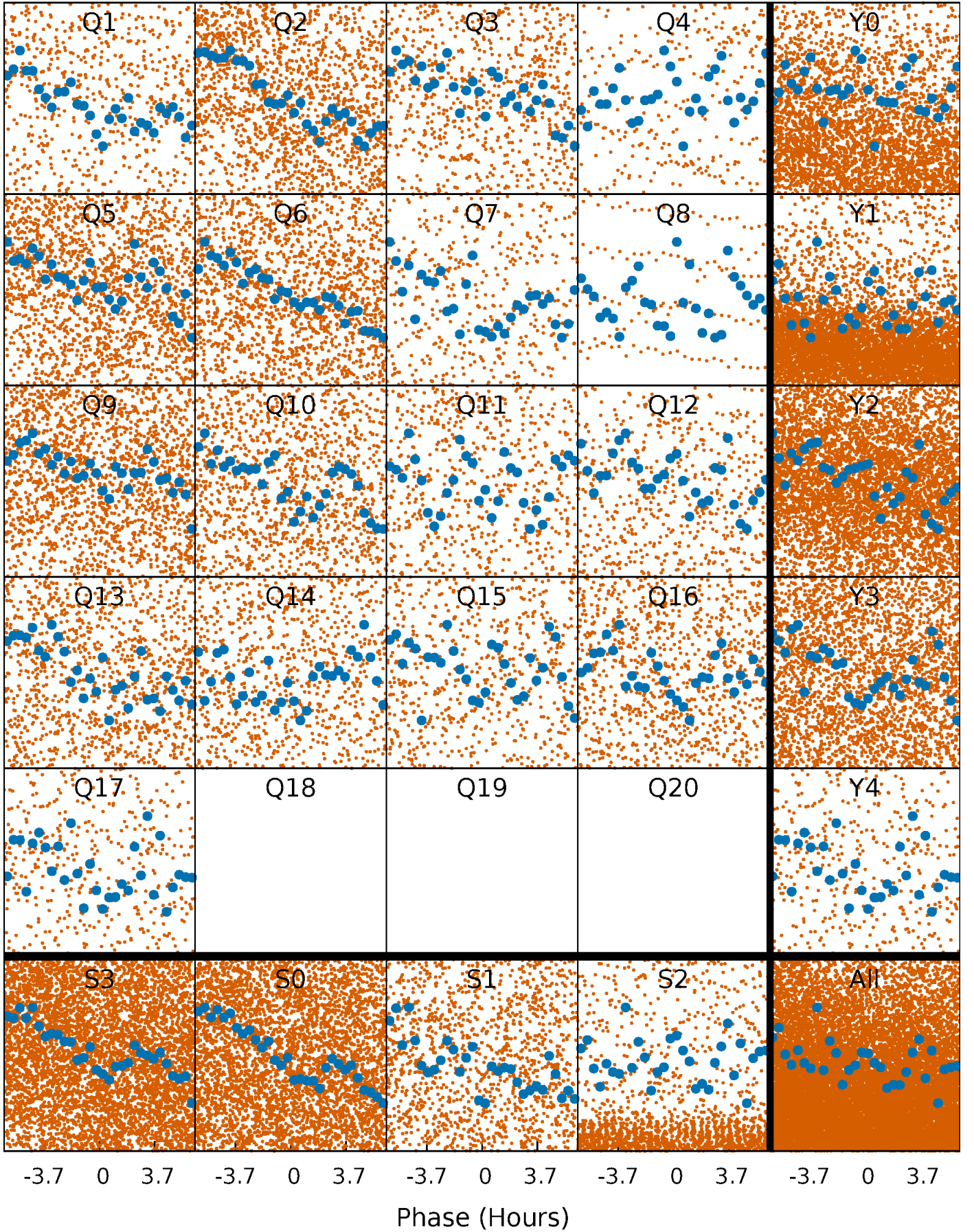


Non-Whitened Vs. Whitened Light Curve



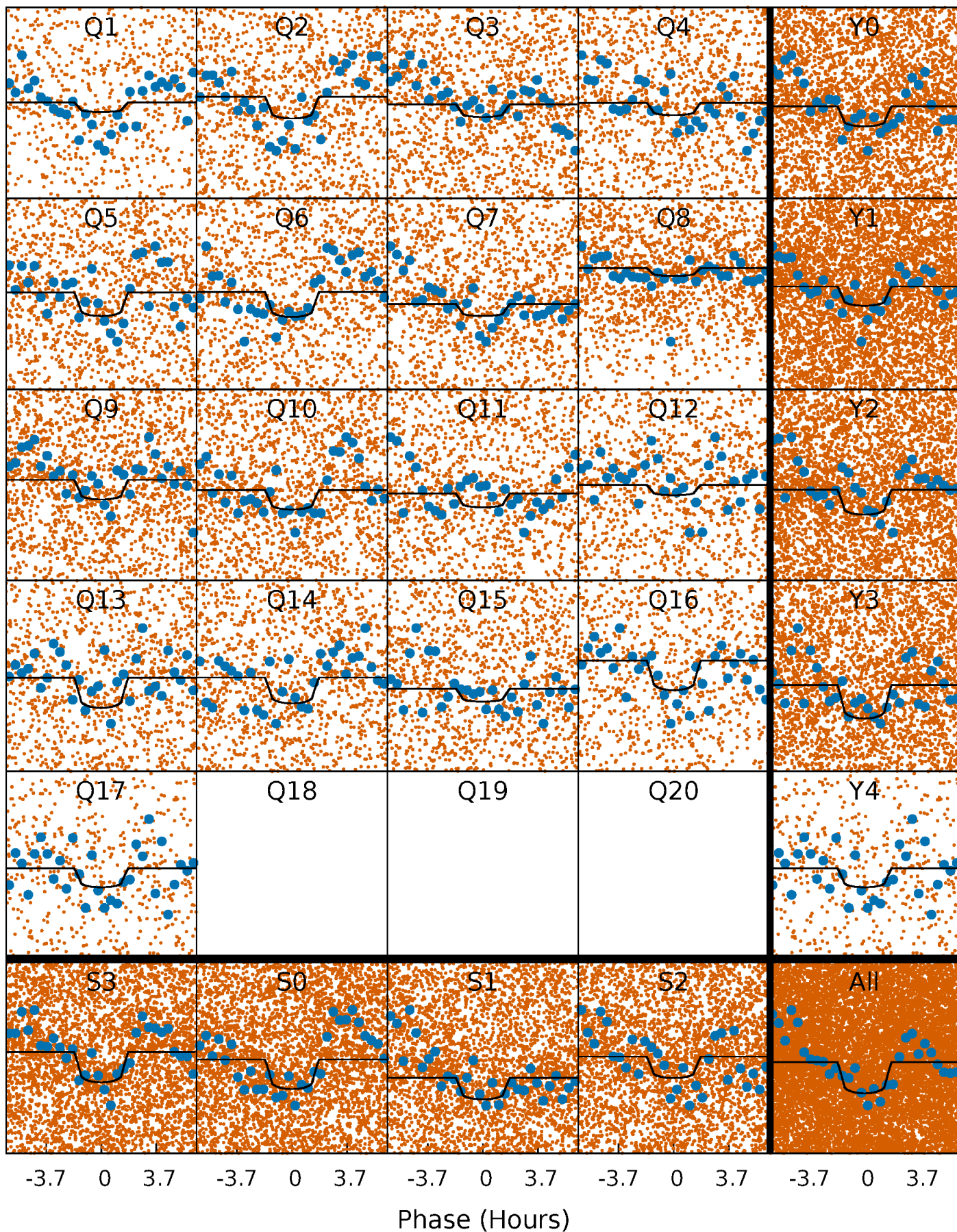
PDC Quarter-Phased Transit Curves

TCE 003941581-01 P= 0.961366 Days $T_0=131.931244$ (BKJD)



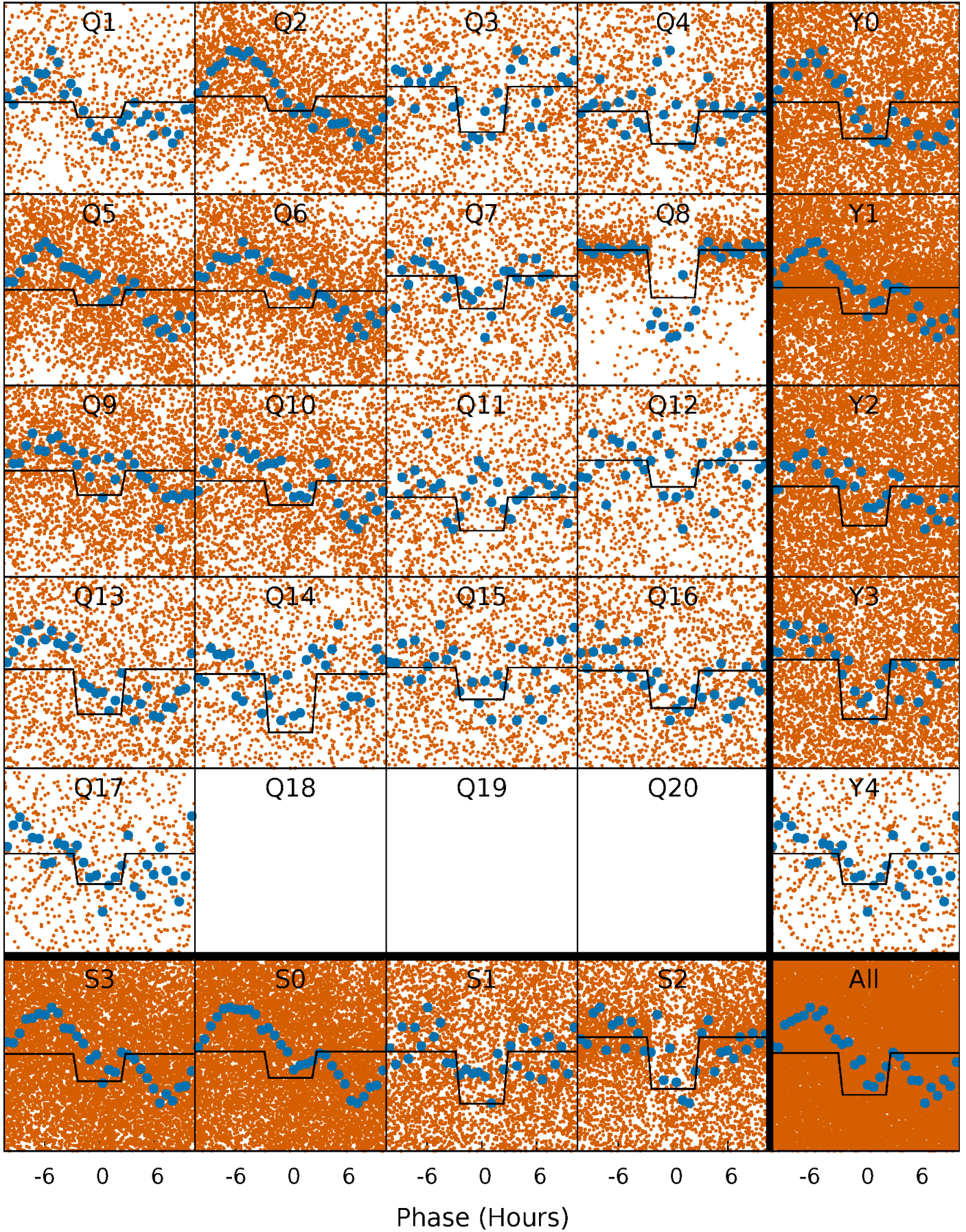
DV Quarter-Phased Transit Curves

TCE 003941581-01 P= 0.961366 Days $T_0=131.931244$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

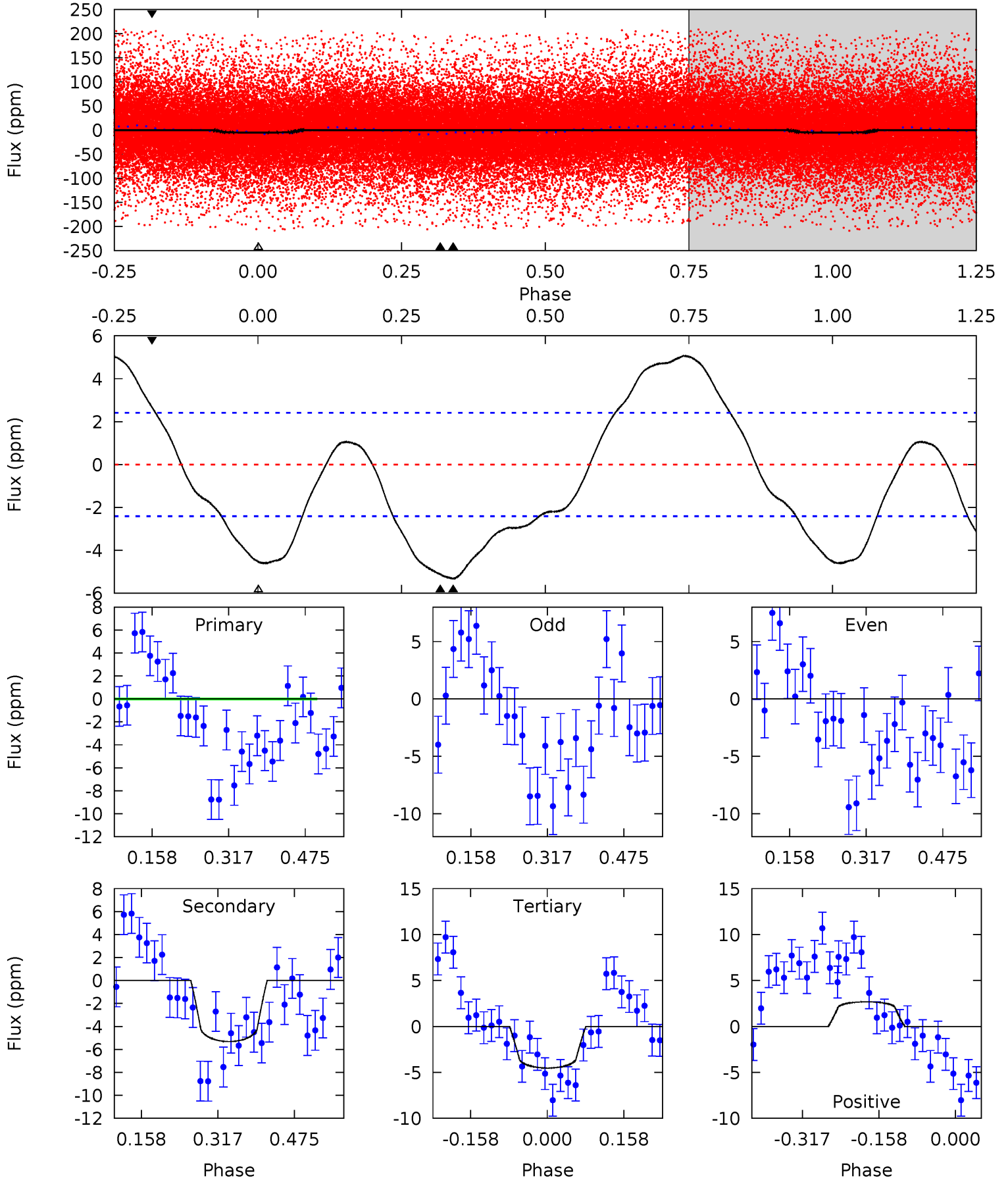
TCE 003941581-01 P= 0.961376 Days $T_0=131.922150$ (BKJD)



DV Model-Shift Uniqueness Test

003941581-01, P = 0.961366 Days, E = 130.969878 Days

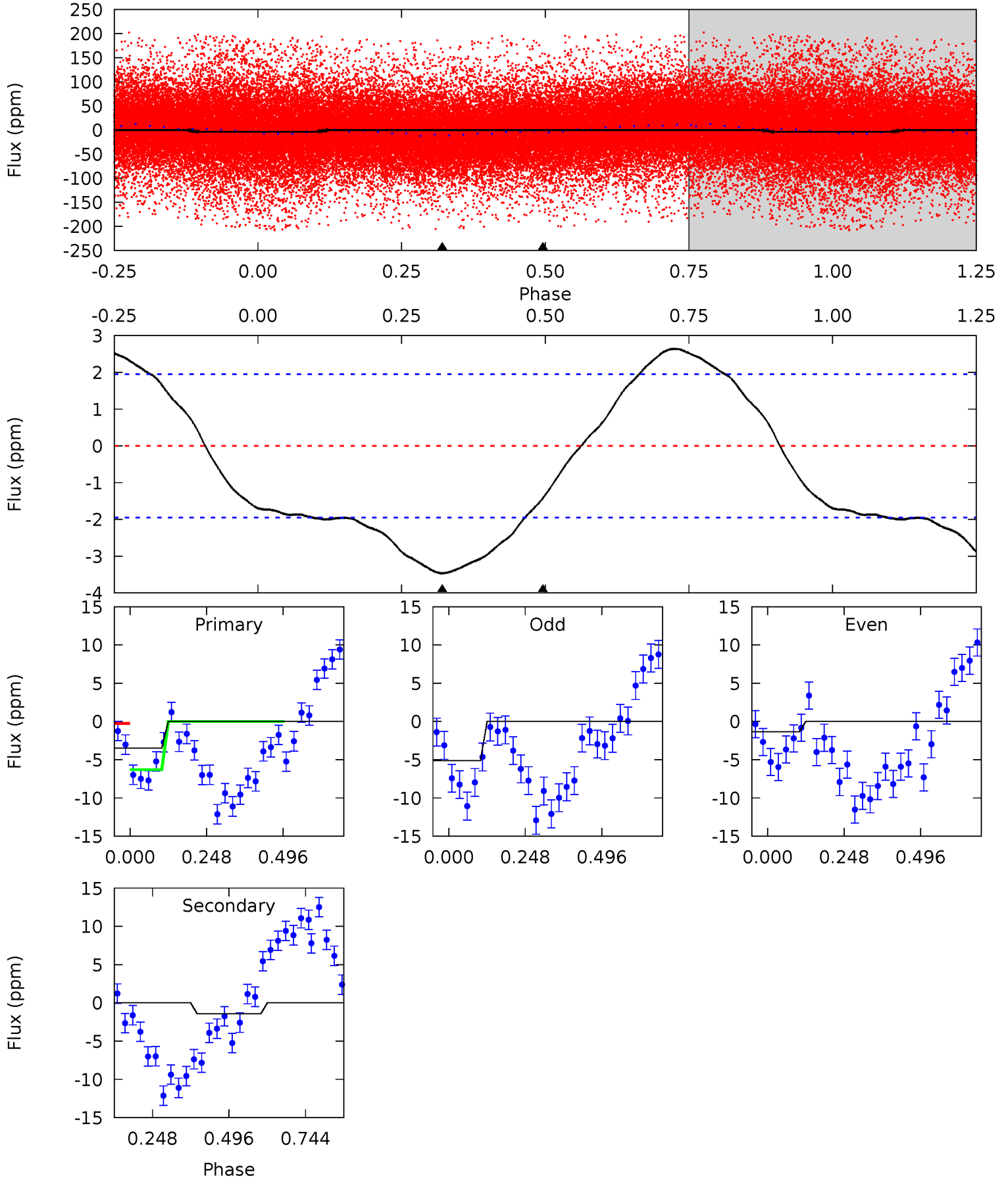
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.48	9.85	8.40	4.96	4.47	1.41	5.75	1.08	4.52	1.45	4.89	1.37	1.18	0.49	3.50



Alt Model-Shift Uniqueness Test

003941581-01, P = 0.961376 Days, E = 130.960774 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
7.77	3.19	0	0	4.37	1.16	3.61	7.77	7.77	3.19	3.19	4.26	0.96	0.43	6.61



Stellar Parameters For KIC 003941581

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$\rho_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7716^{+214}_{-337}	$4.025^{+0.150}_{-0.150}$	$0.210^{+0.100}_{-0.400}$	$2.213^{+0.552}_{-0.502}$	$1.891^{+0.170}_{-0.315}$	$0.246^{+0.198}_{-0.110}$
	+3%/-4%	+4%/-4%	+48%/-190%	+25%/-23%	+9%/-17%	+80%/-45%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003941581-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 1	$0.63^{+0.14}_{-0.13}$	4574^{+297}_{-306}	6897^{+959}_{-707}	$3.982^{+2.466}_{-1.314}$
Alt.	-1 ± 0	$0.78^{+0.15}_{-0.13}$	4586^{+330}_{-292}	4222^{+583}_{-781}	$0.696^{+0.443}_{-0.286}$

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

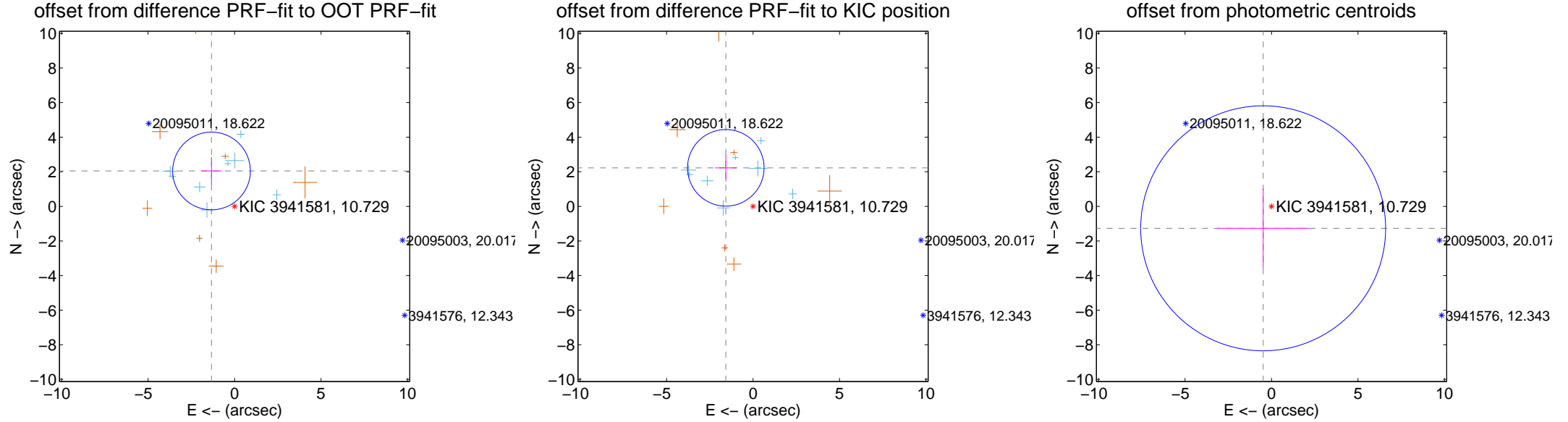
DV Centroid Data

Supplemental centroid analysis for 003941581-01. **Kepler magnitude: 10.73**. Transit SNR 9.03

There are 8 quarters with good PRF difference image offsets

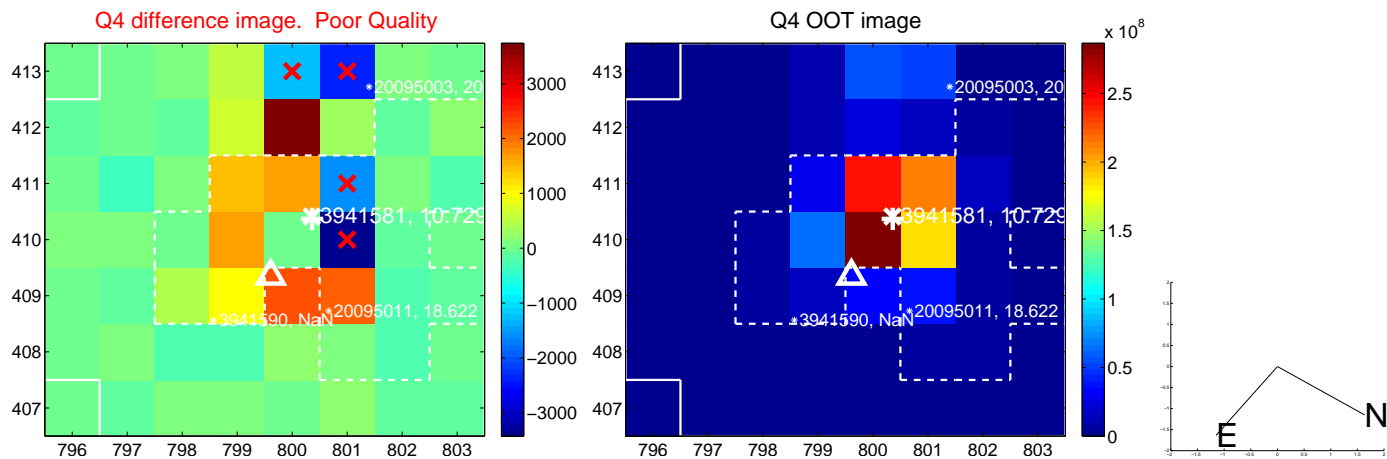
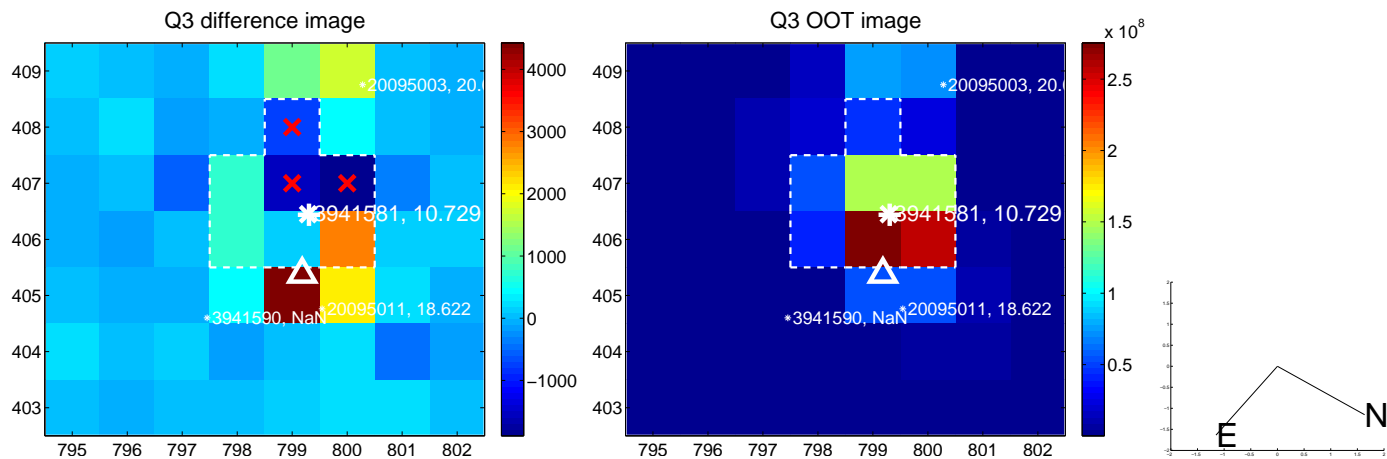
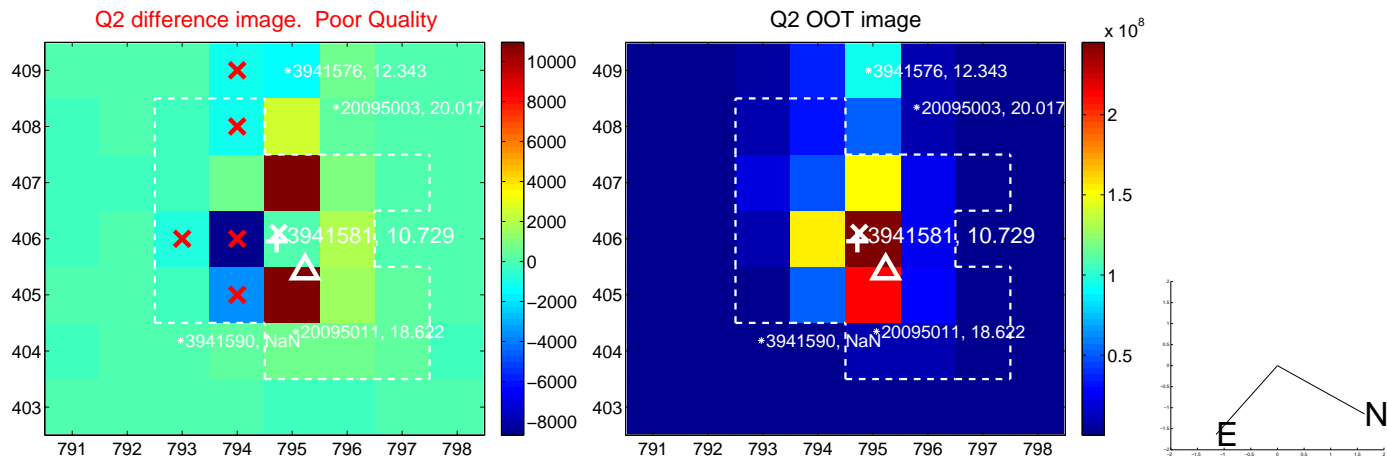
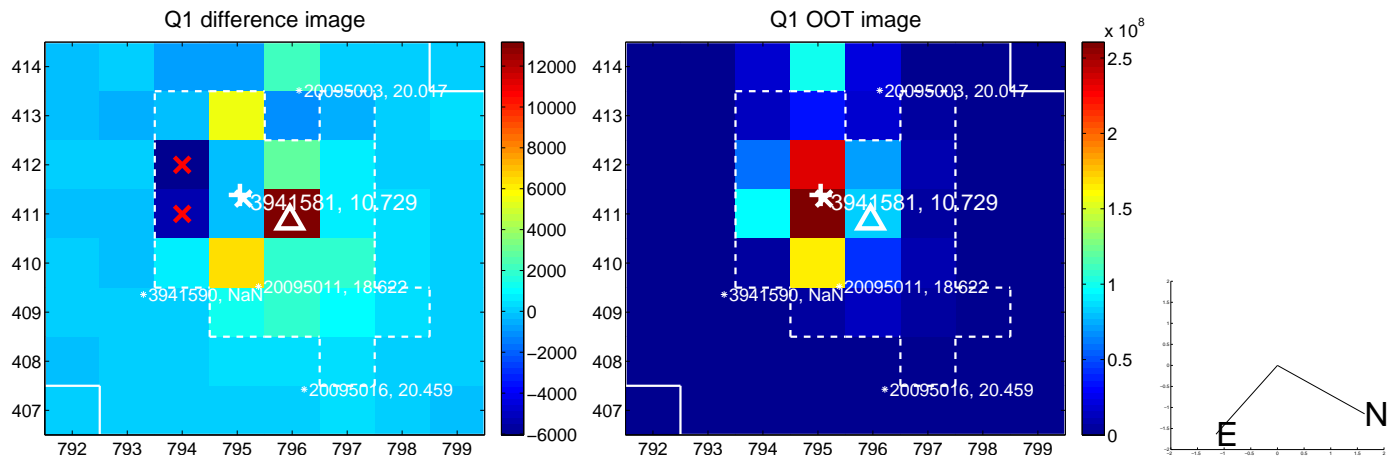
The direct PRF centroid is offset from the target star catalog position by about 0.61 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.442 ± 0.748	3.26	1.333 ± 0.593	2.046 ± 0.802
PRF-fit source offset from KIC position	2.728 ± 0.738	3.70	1.575 ± 0.617	2.227 ± 0.794
photometric centroid source offset	1.36 ± 2.36	0.57	0.48 ± 2.67	-1.27 ± 2.31

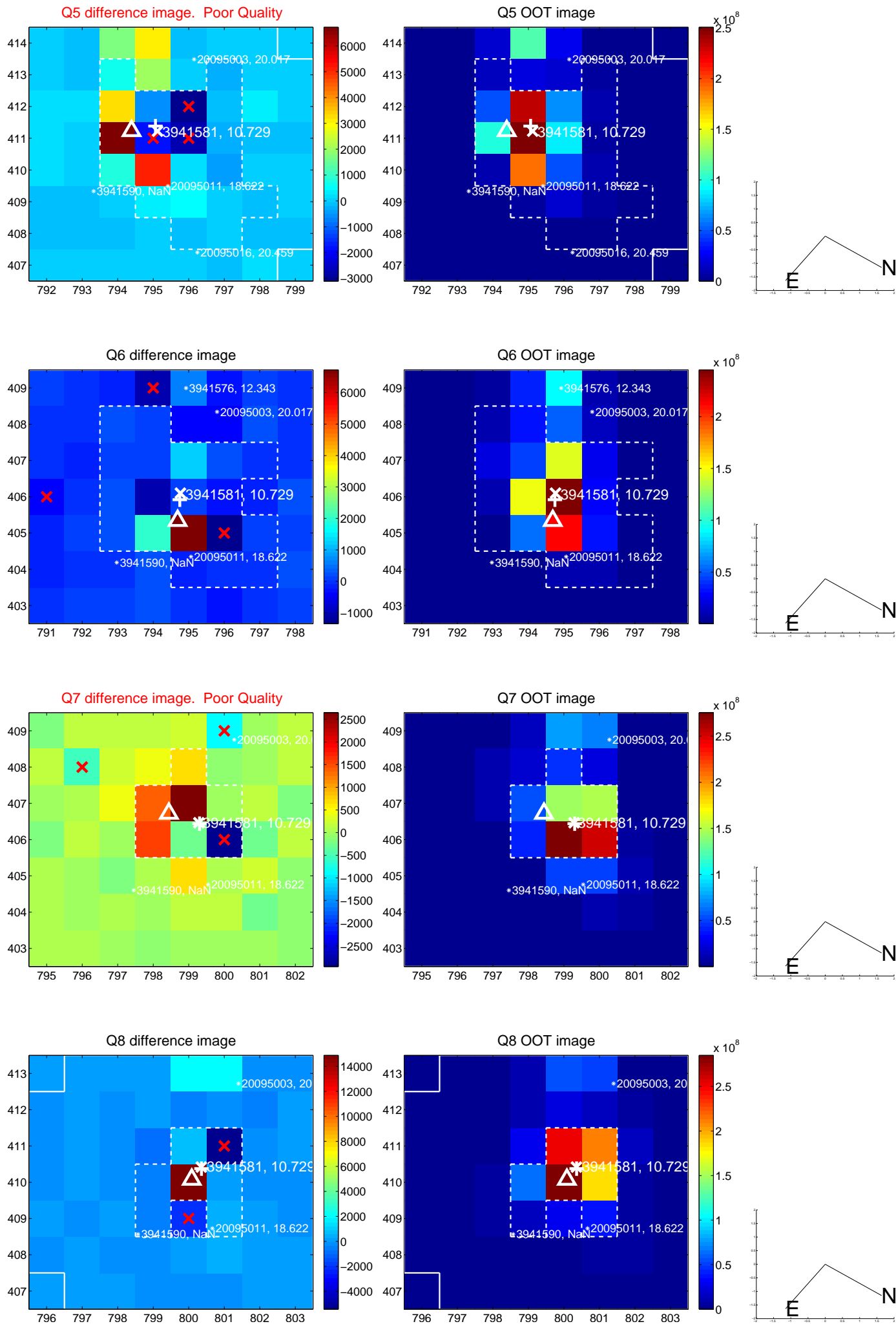


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

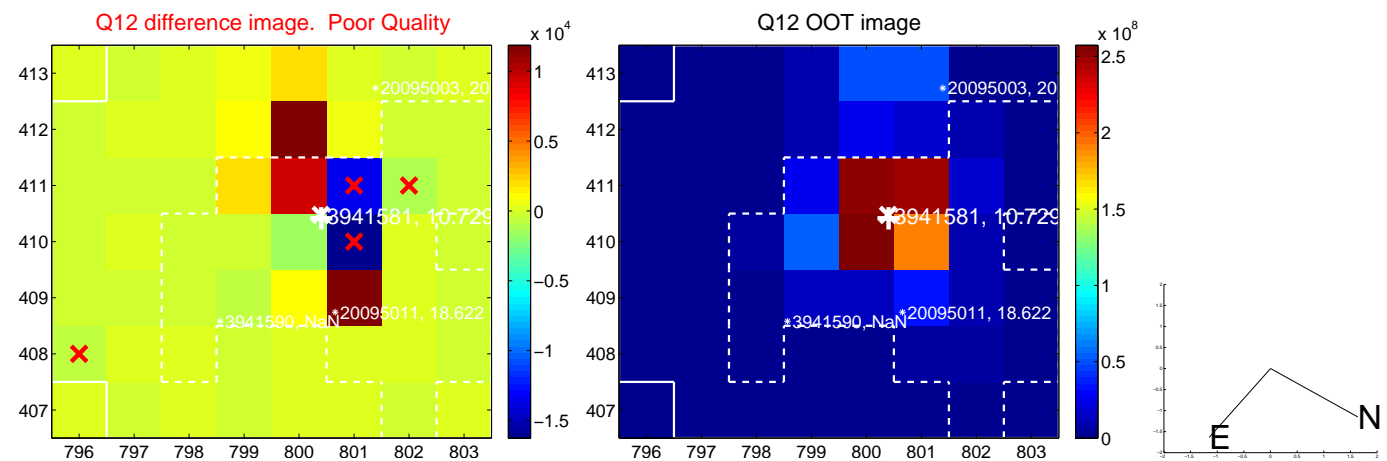
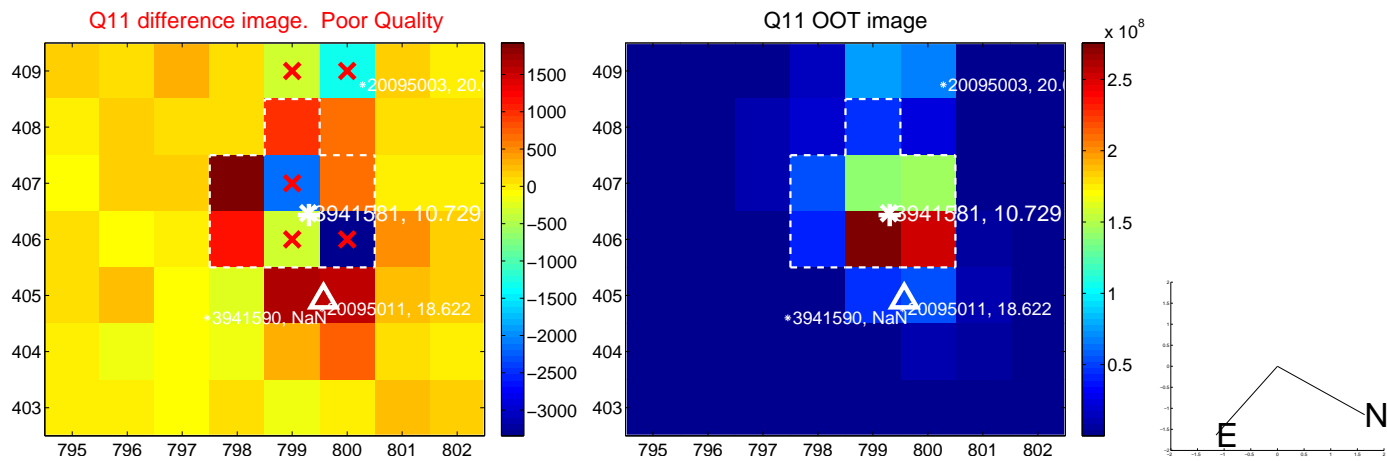
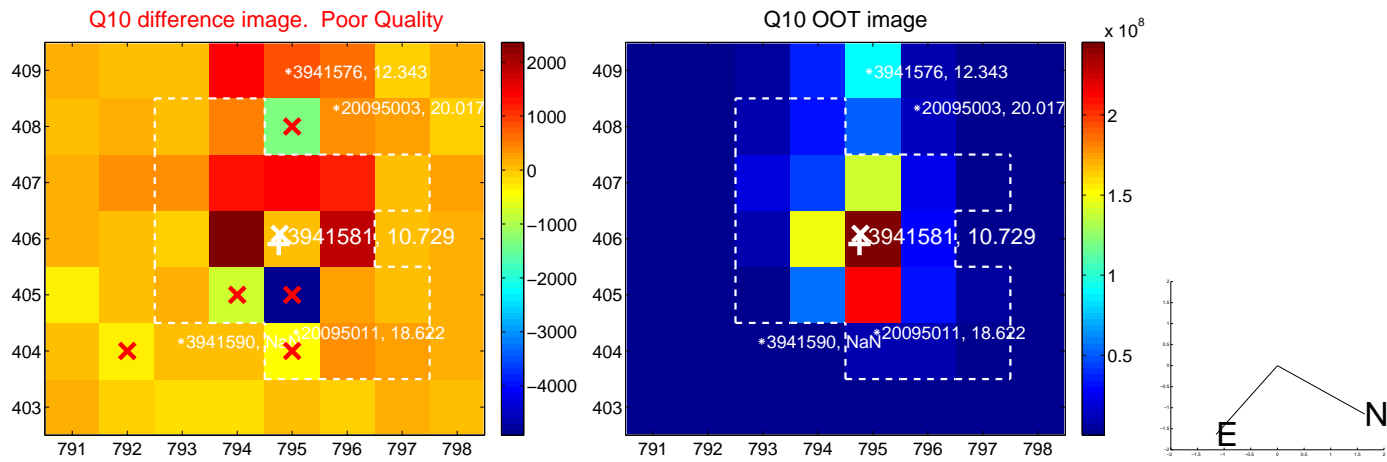
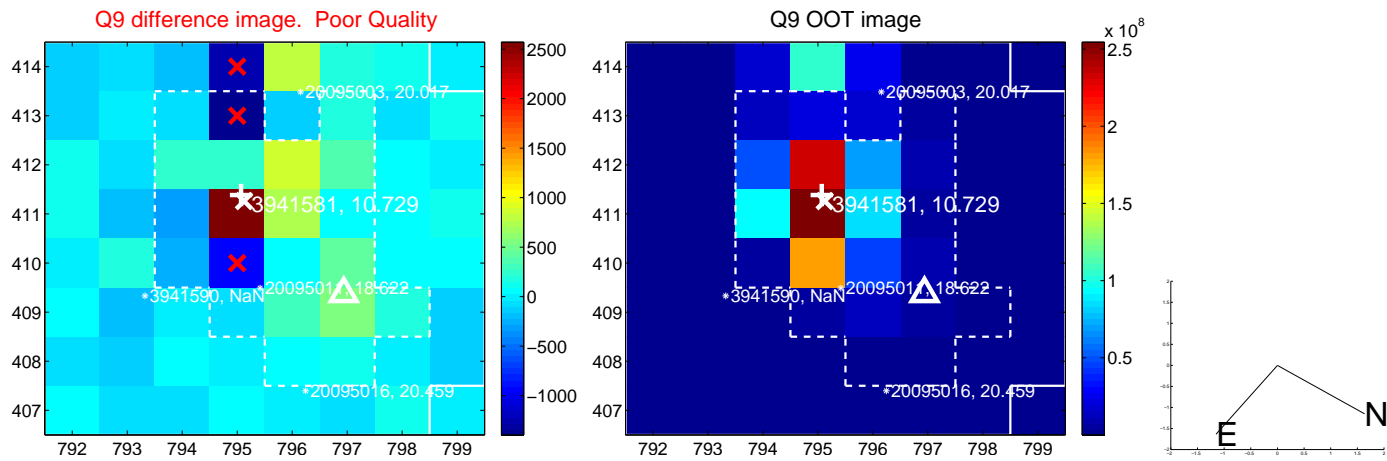
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



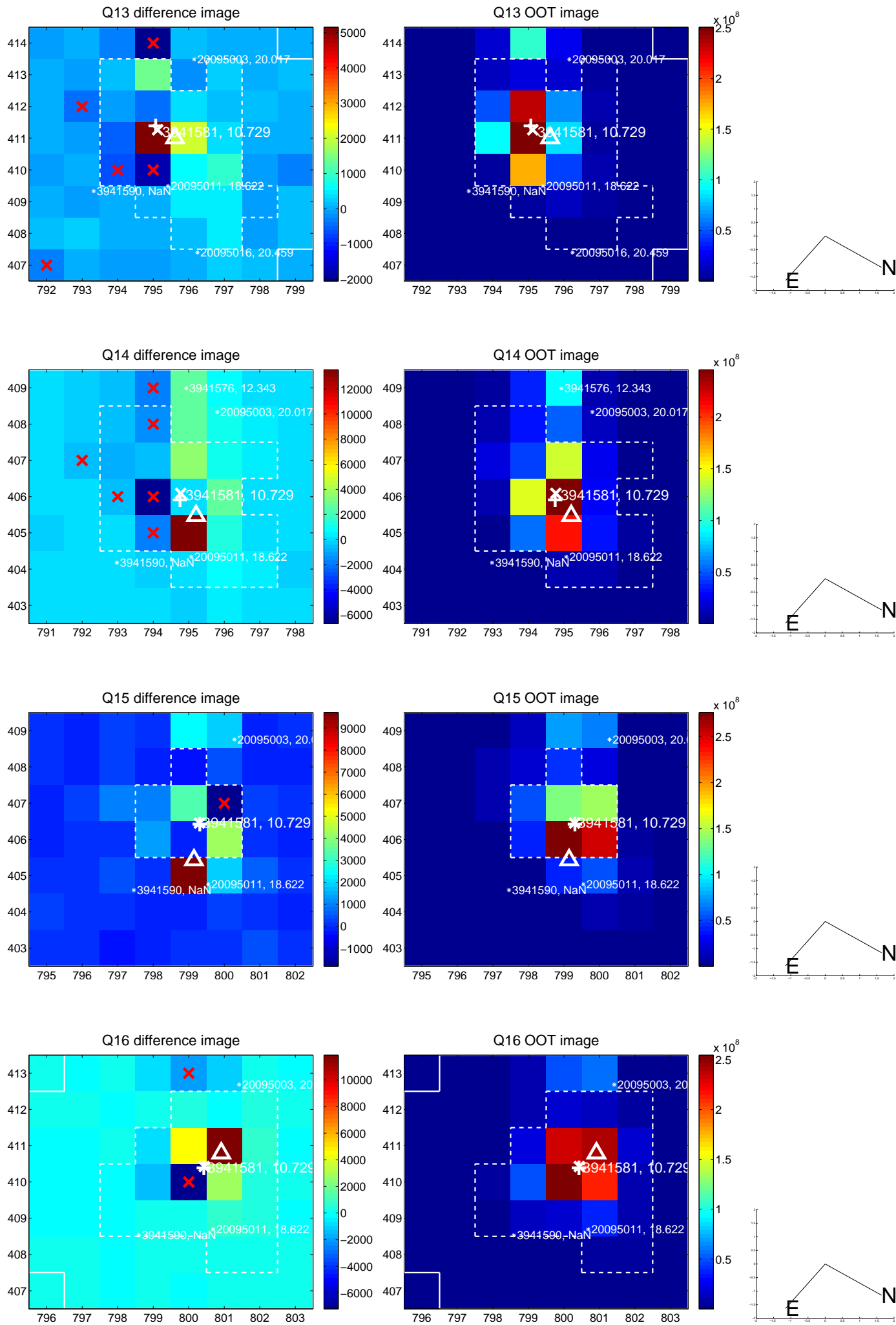
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



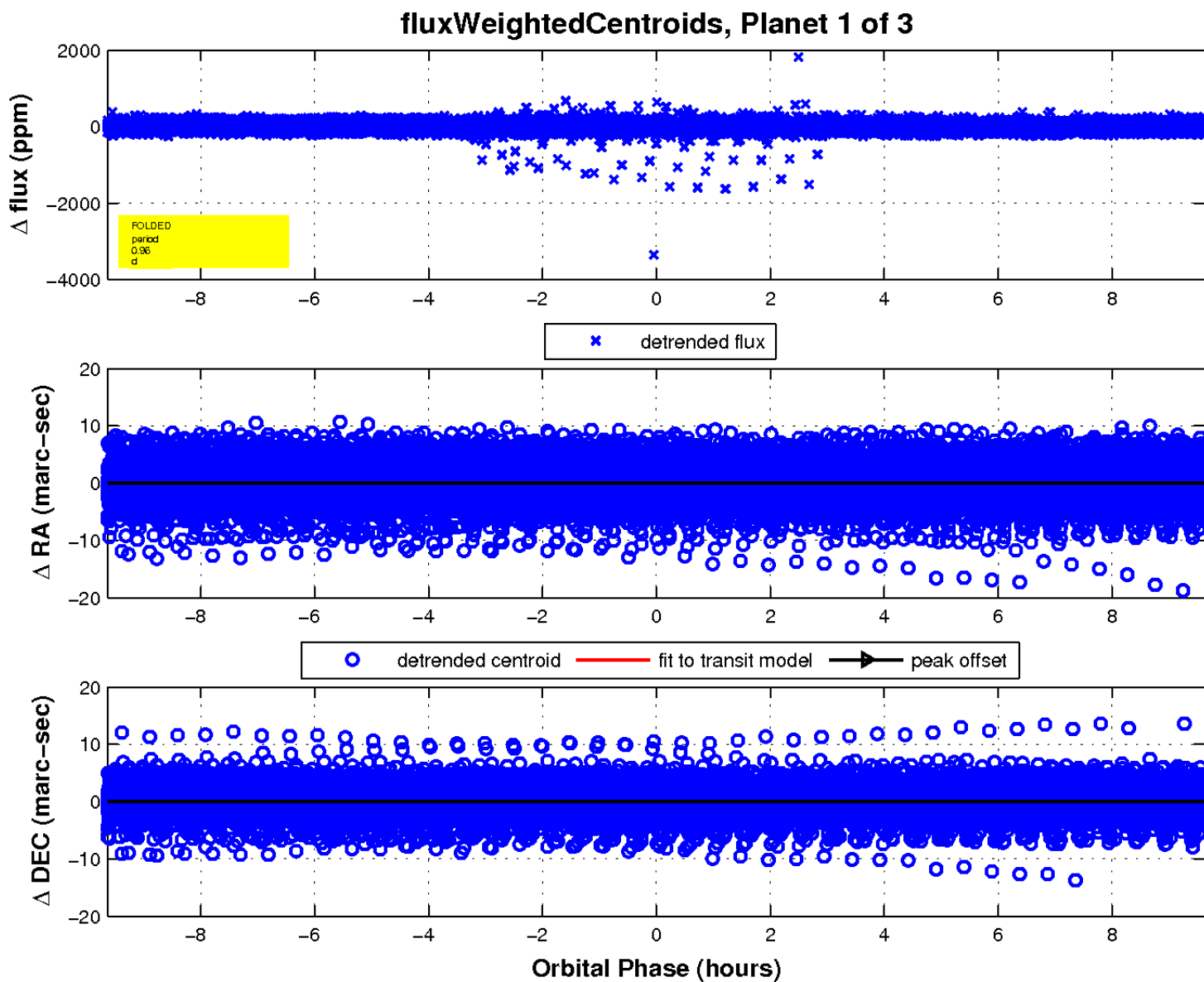
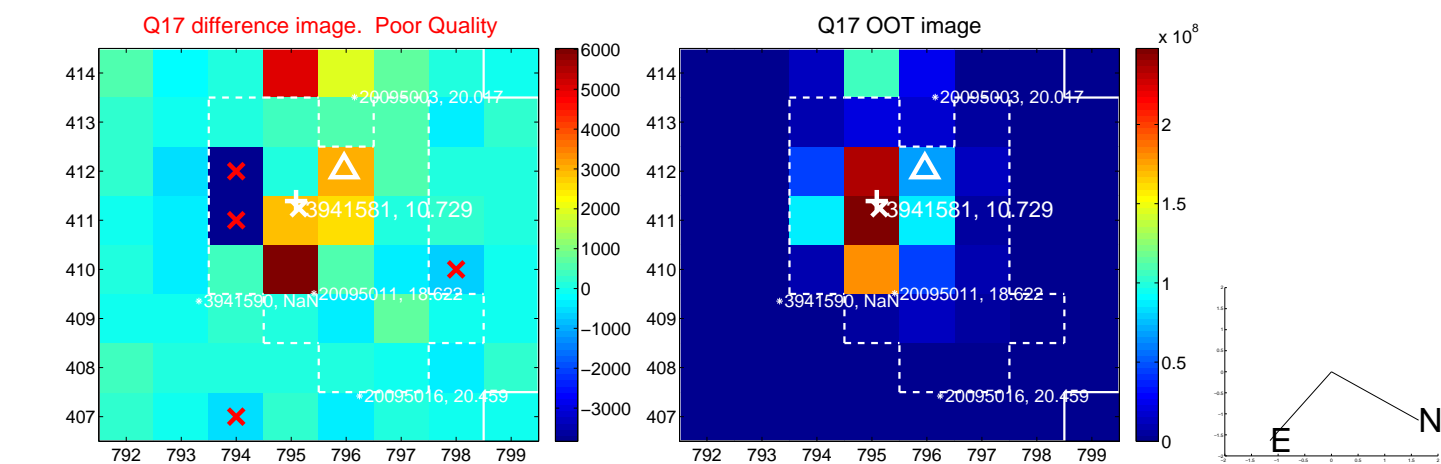
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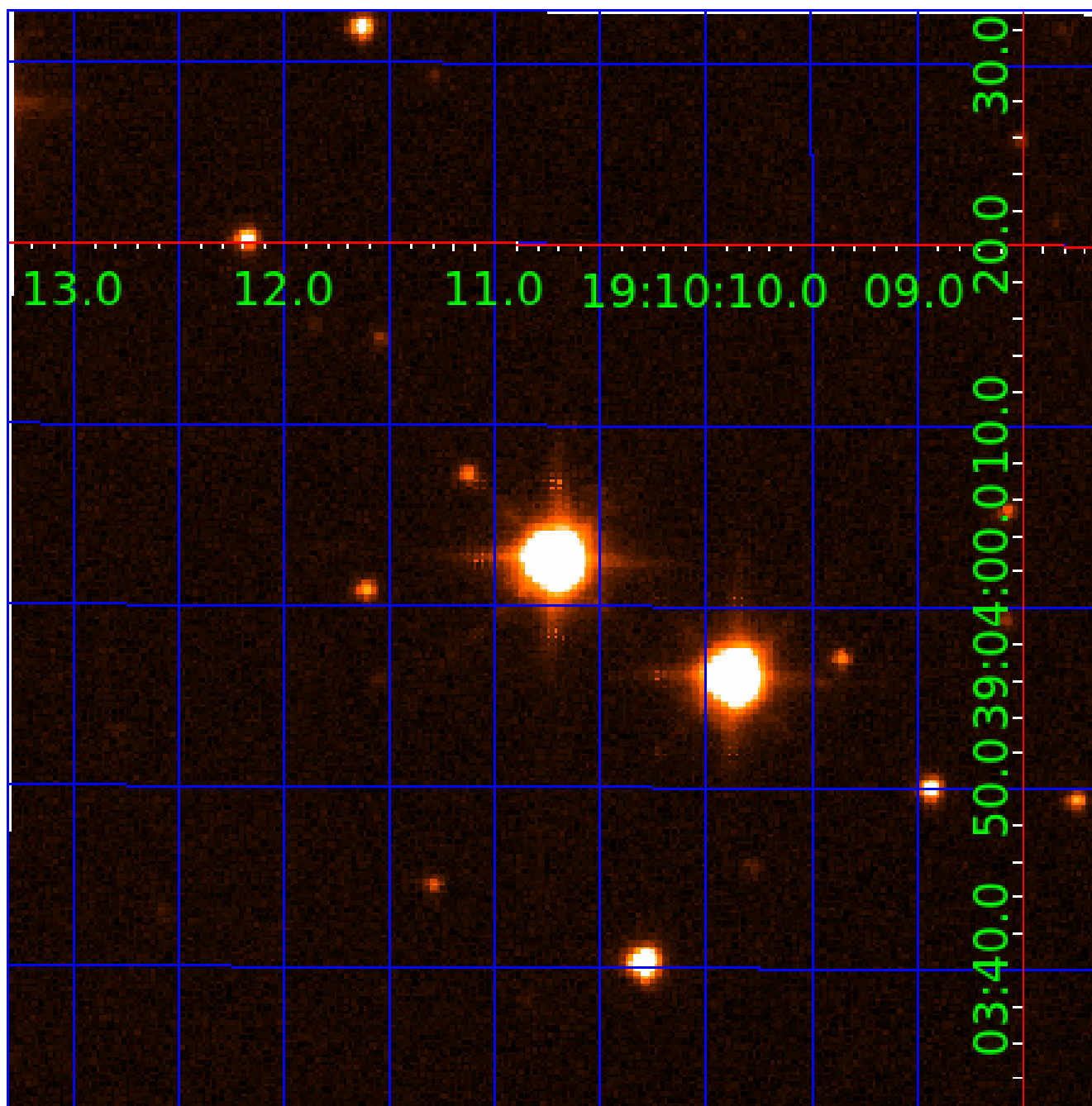


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003941581

Q1-17 DR25 TCE Parameters

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003941581-03	OBS	No	270.878247	337.116785	81.5	13.333	9.3	6.2	2.21	7716	2.33	15.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003941581-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003941581-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
003941581-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED

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

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

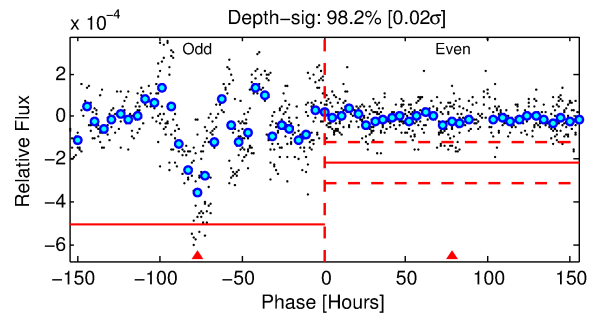
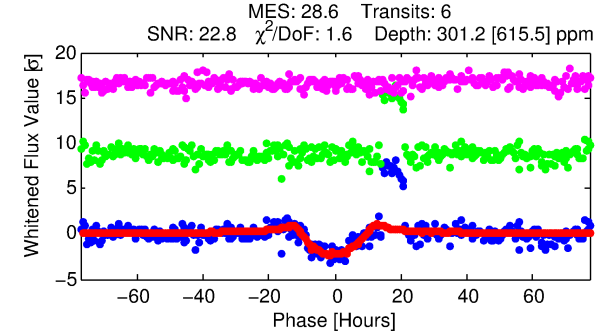
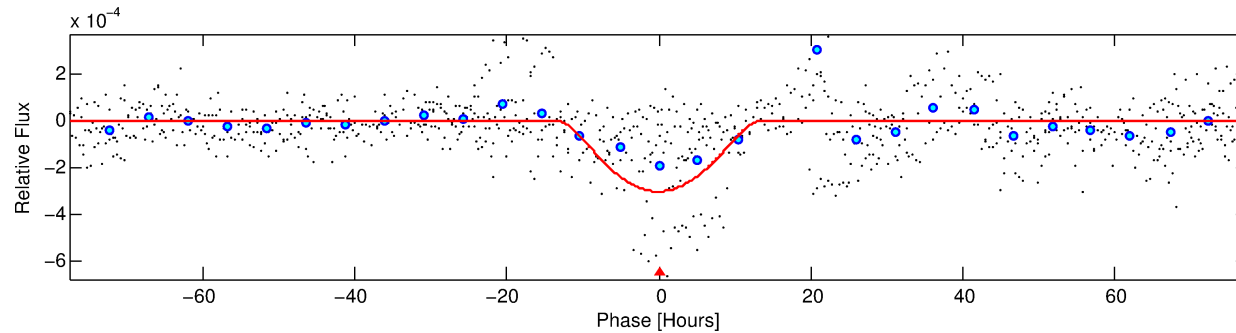
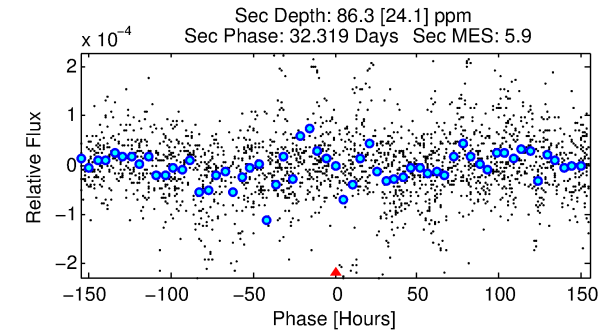
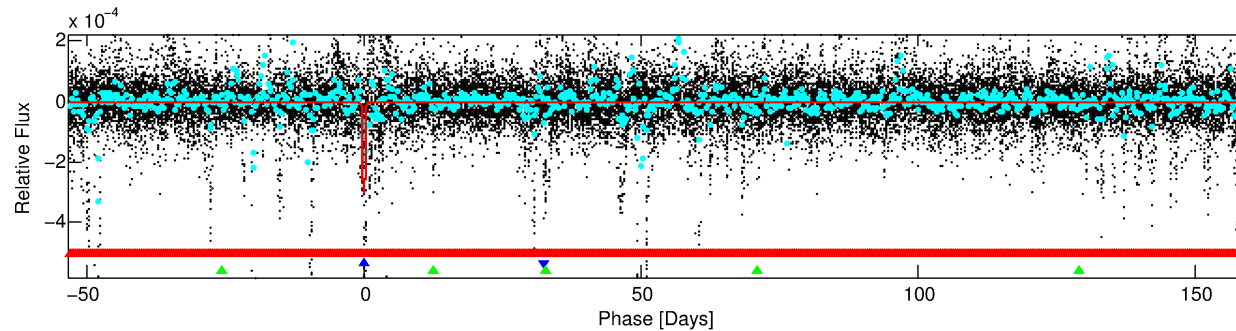
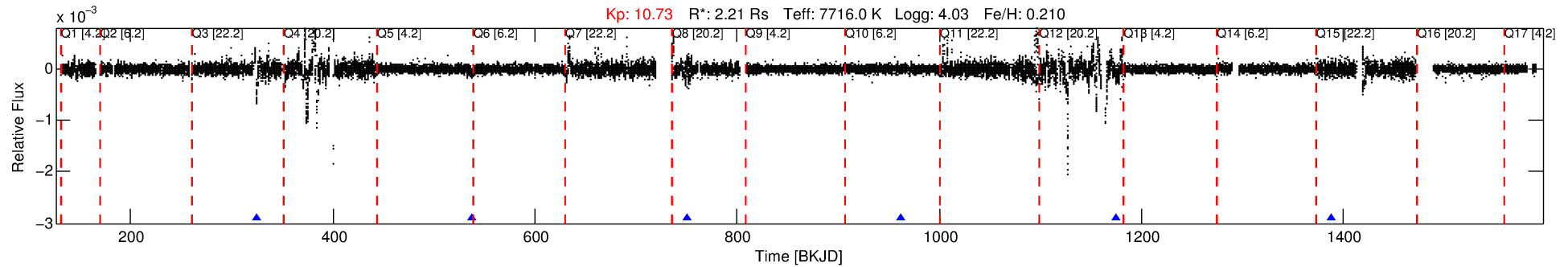
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003941581-02

No Significant Match Found

DV One-Page Summary

KIC: 3941581 Candidate: 2 of 3 Period: 212.681 d



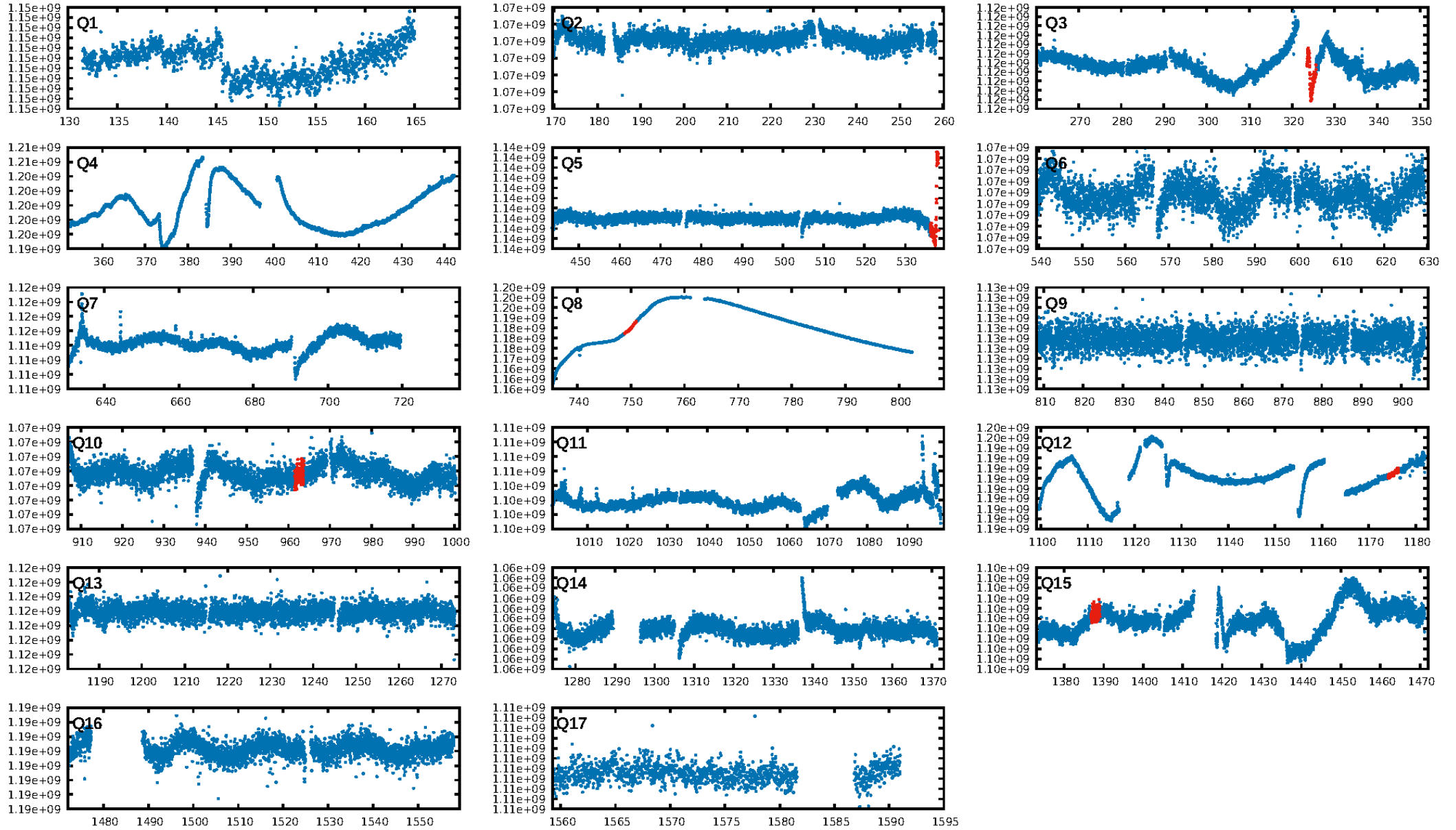
DV Fit Results:

Period = 212.68091 [0.01400] d
Epoch = 324.5590 [0.0373] BKJD
Rp/R* = 0.0304 [0.0440]
a/R* = 15.66 [5.99]
b = 1.00 [0.11]
Seff = 20.90 [6.97]
Teq = 545 [45] K
Rp = 7.35 [10.77] Re
a = 0.8627 [0.1745] AU
Ag = 654.56 [1910.16] [0.34σ]
Teffp = 4264 [3101] K [1.20σ]

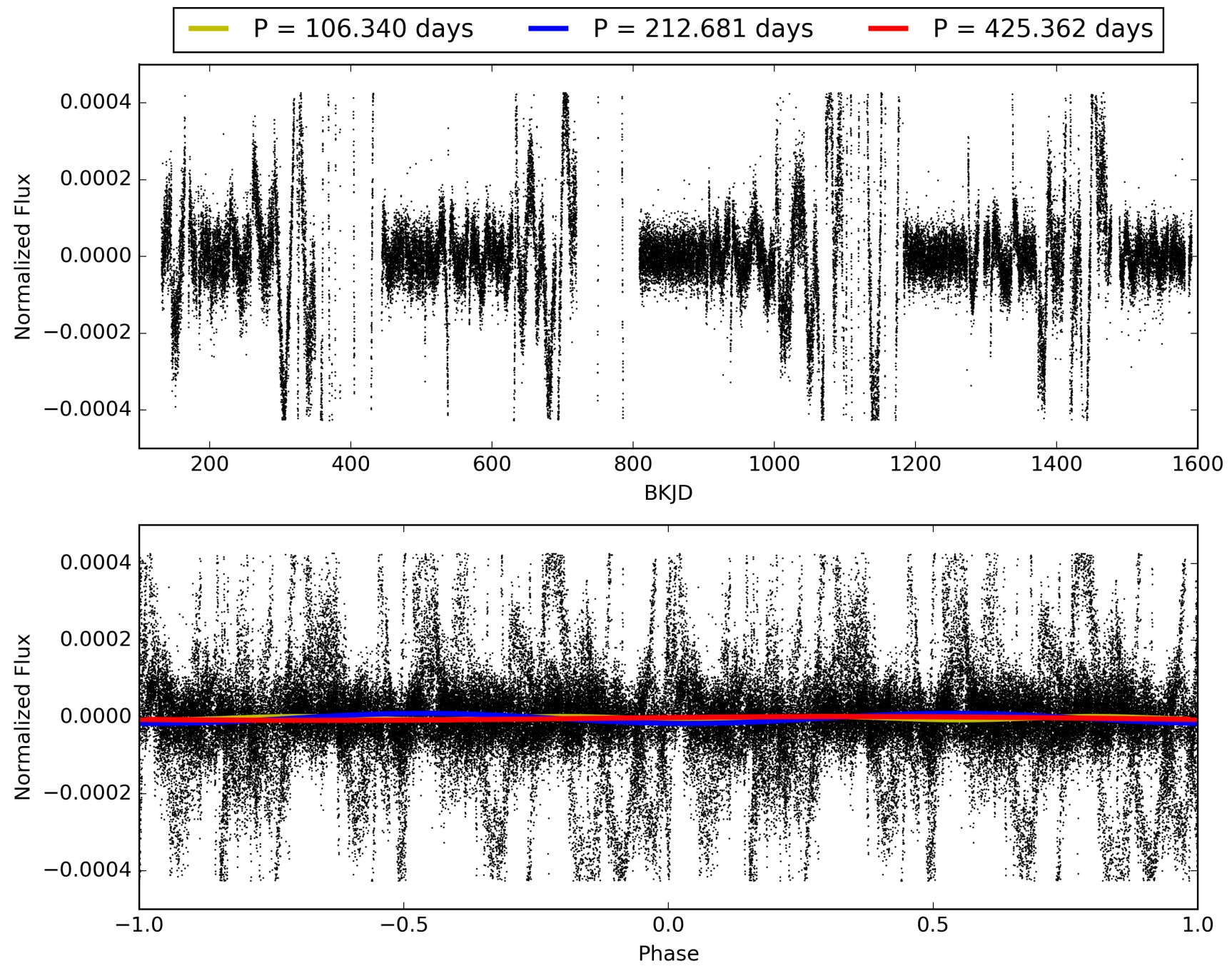
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [195.16σ]
LongPeriod-sig: 100.0% [48.04σ]
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 4.33e-33
RollingBand-fgt: 1.00 [6/6]
GhostDiagnostic-chr: -1.38
Centroid-sig: 9.9%
Centroid-so: 1.379 arcsec [1.42σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 0.00 [0/3]

TCE 003941581-02, PDC Light Curves

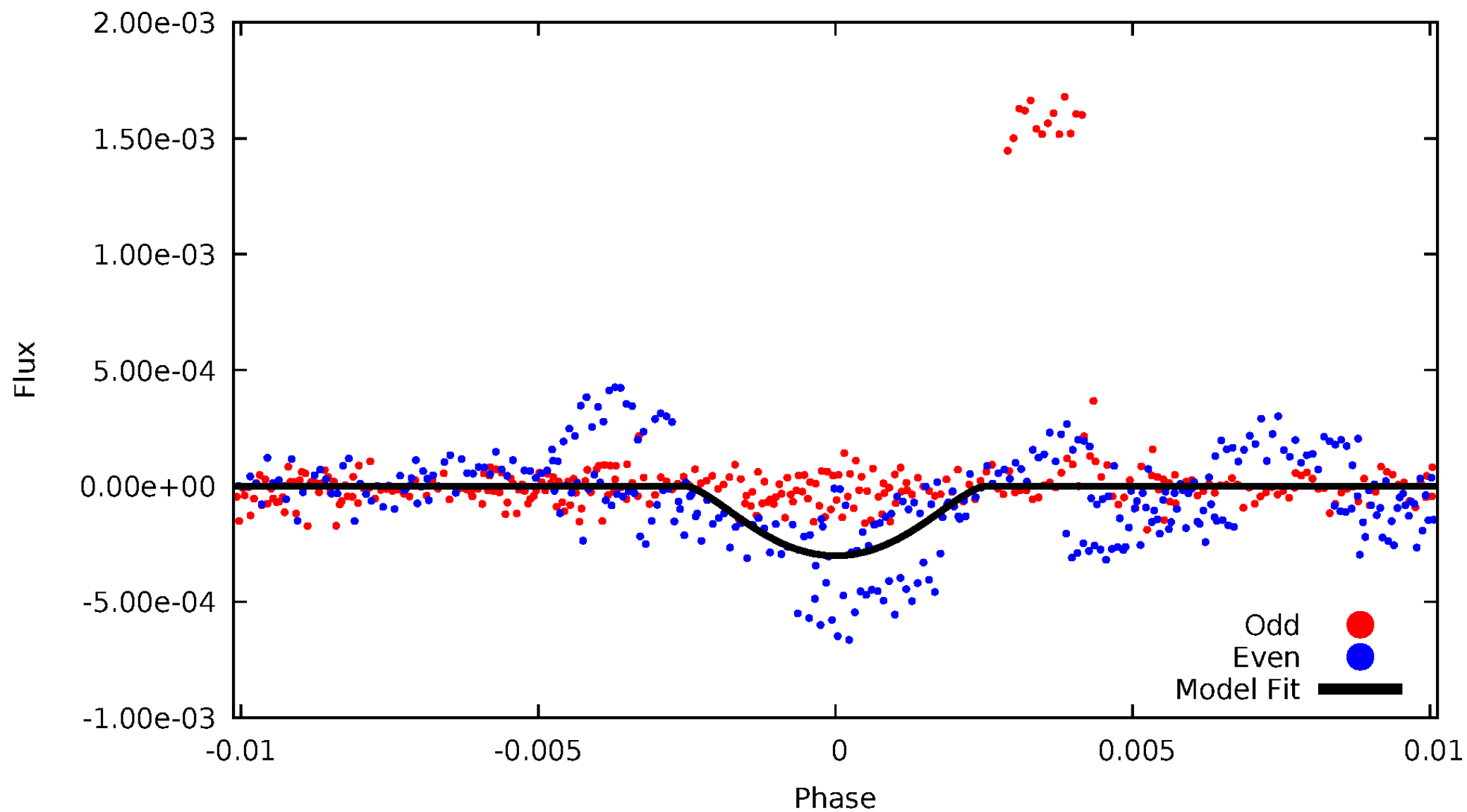


TCE 003941581-02



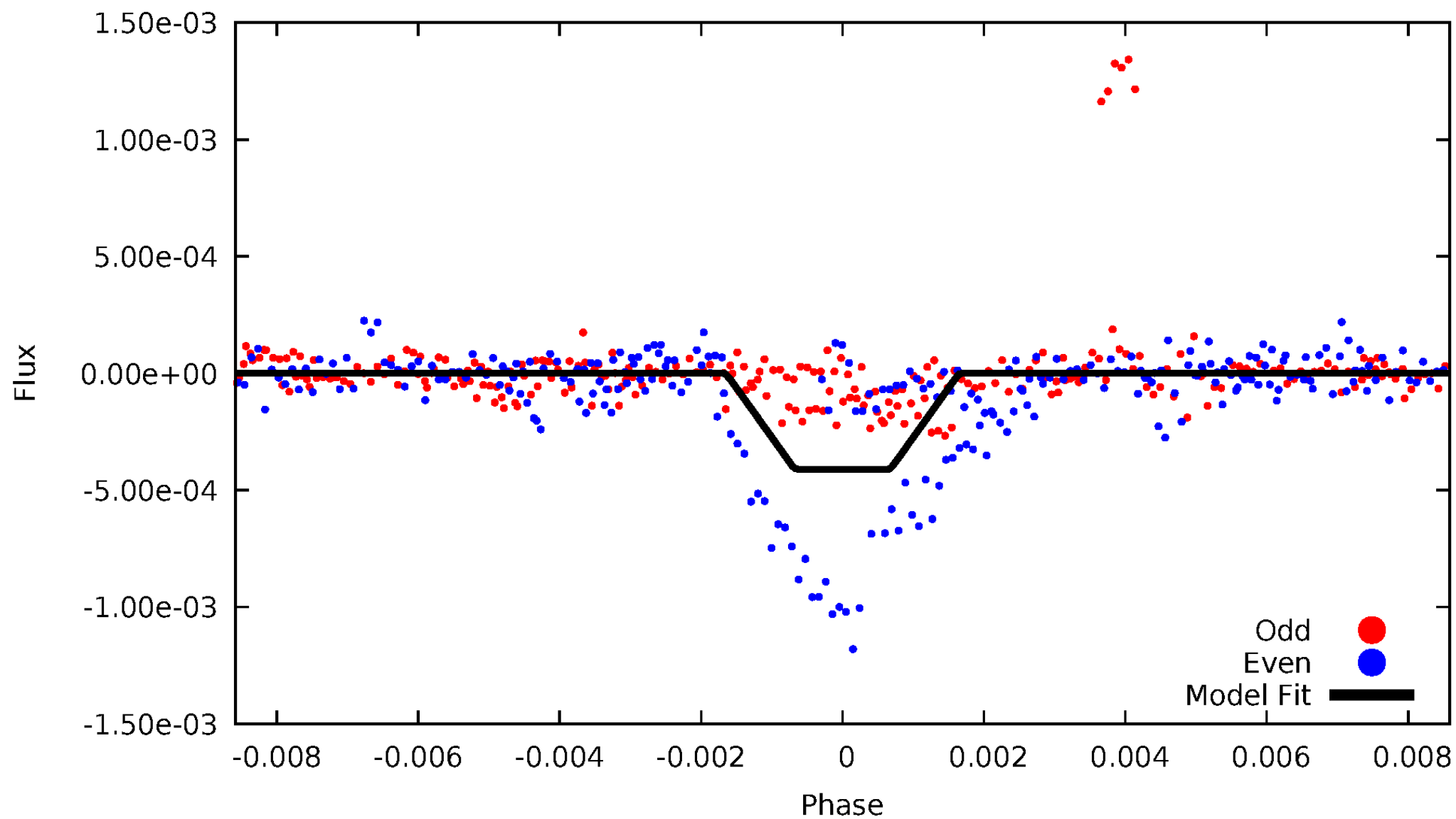
DV Odd/Even

TCE 003941581-02



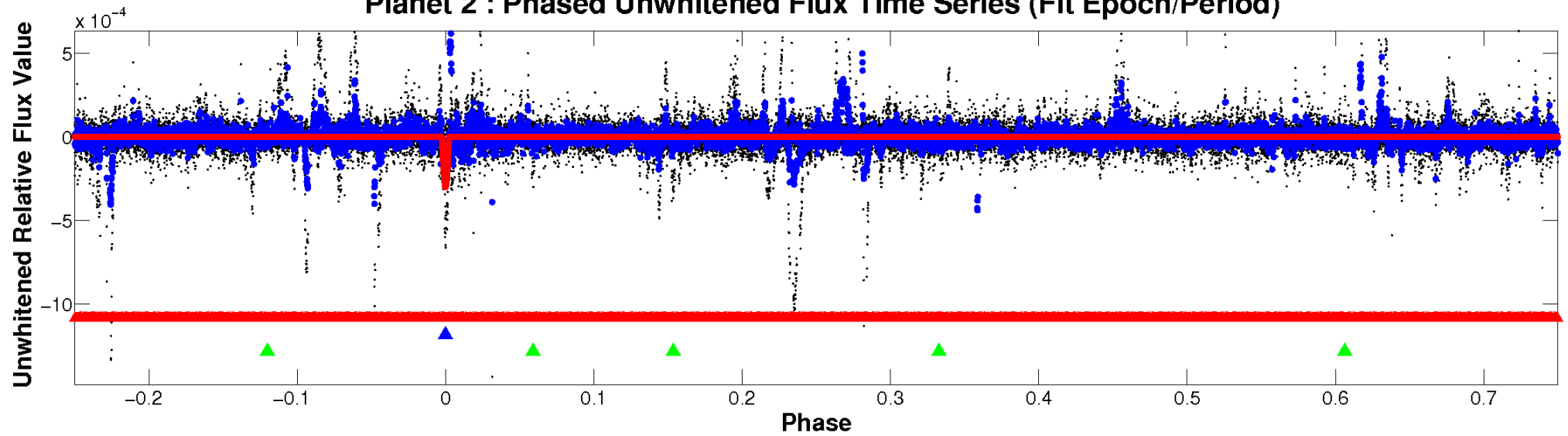
ALT Odd/Even

TCE 003941581-02

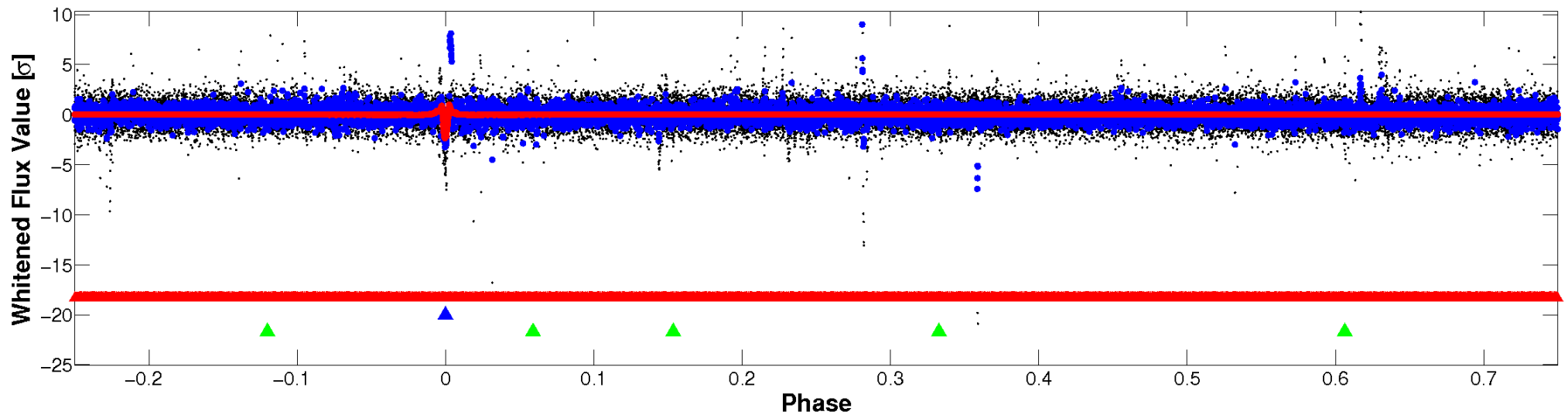


Non-Whitened Vs. Whitened Light Curve

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

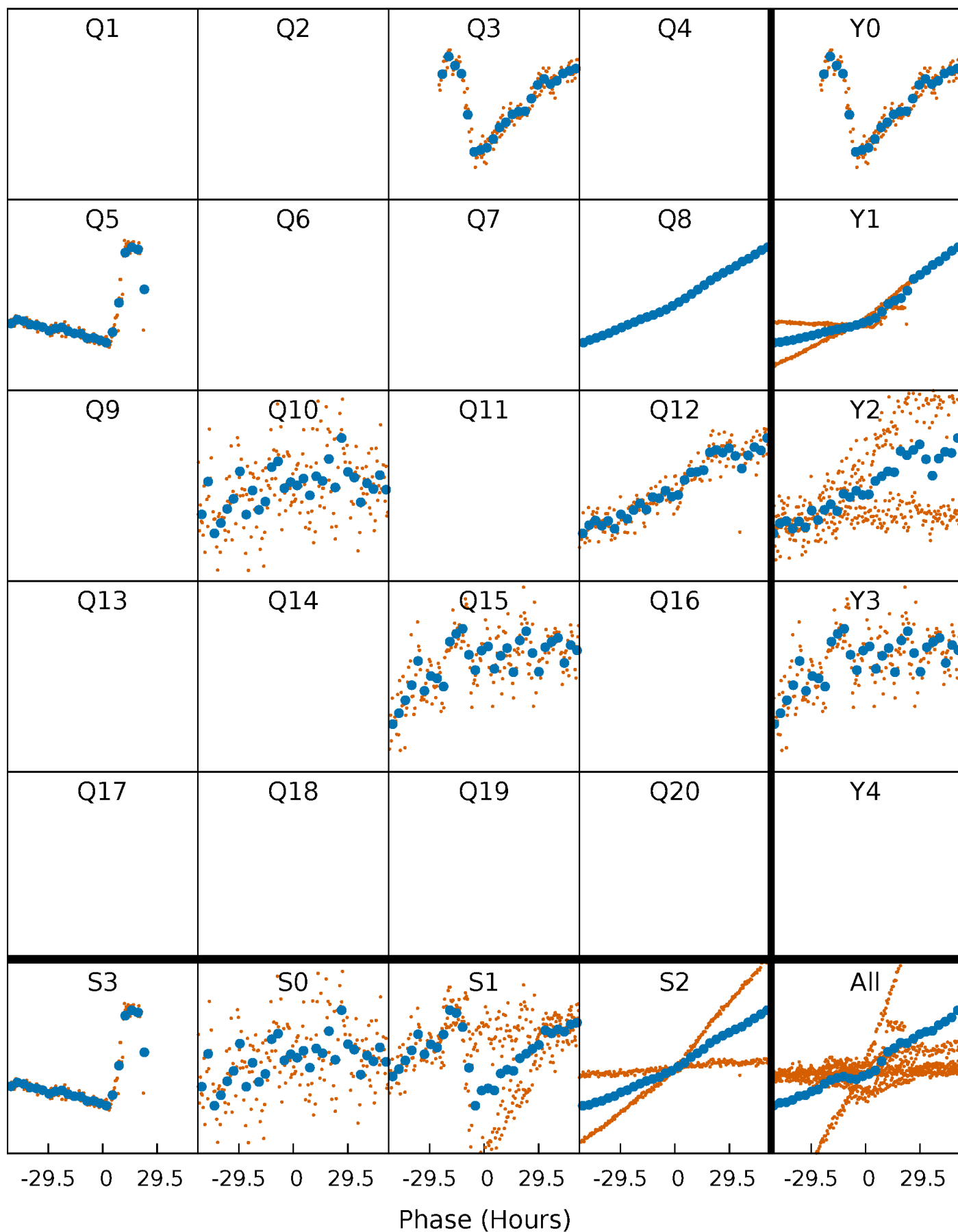


Planet 2 : Phased Whitened Flux Time Series (Fit Epoch/Period)



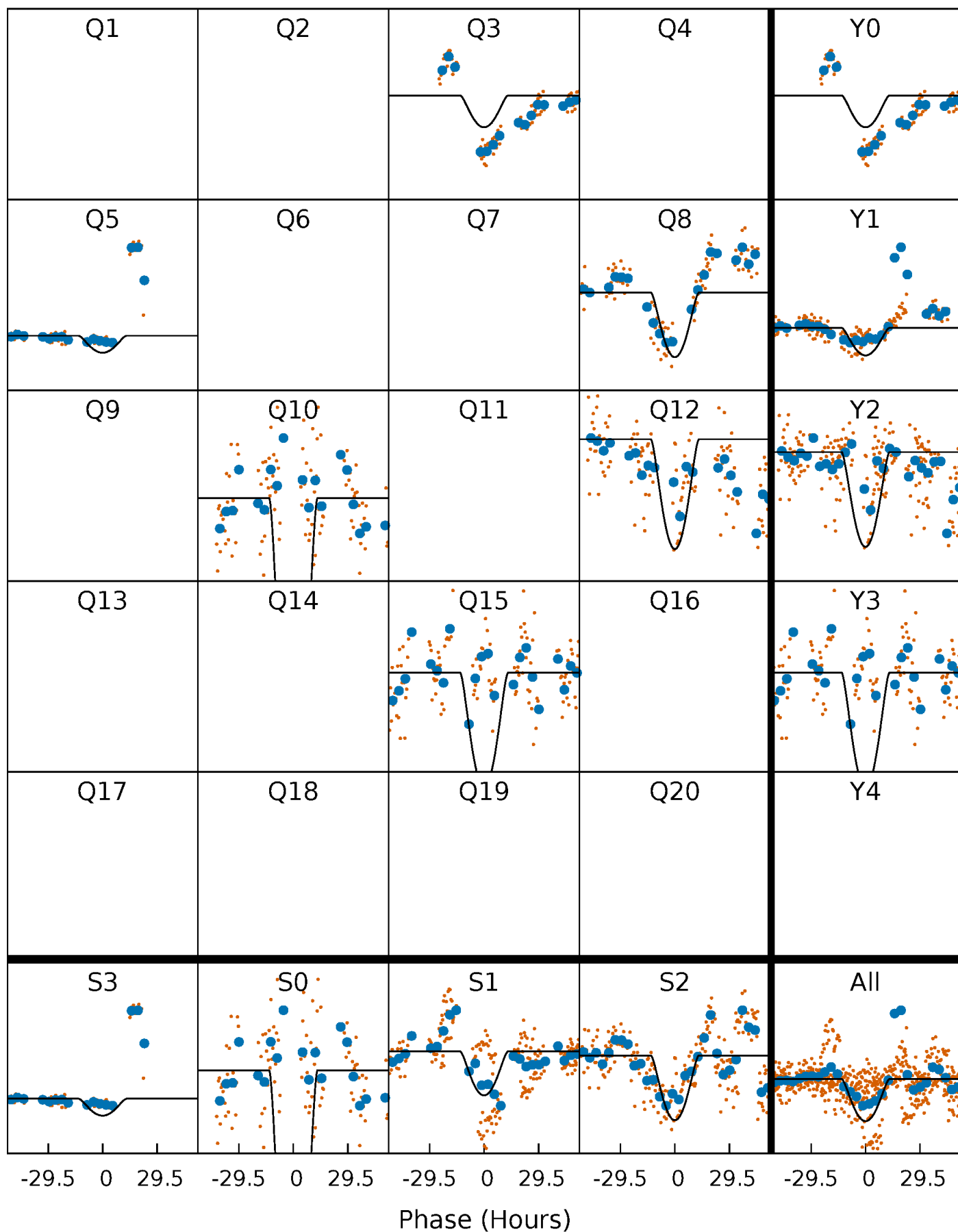
PDC Quarter-Phased Transit Curves

TCE 003941581-02 P=212.680912 Days $T_0=324.558990$ (BKJD)



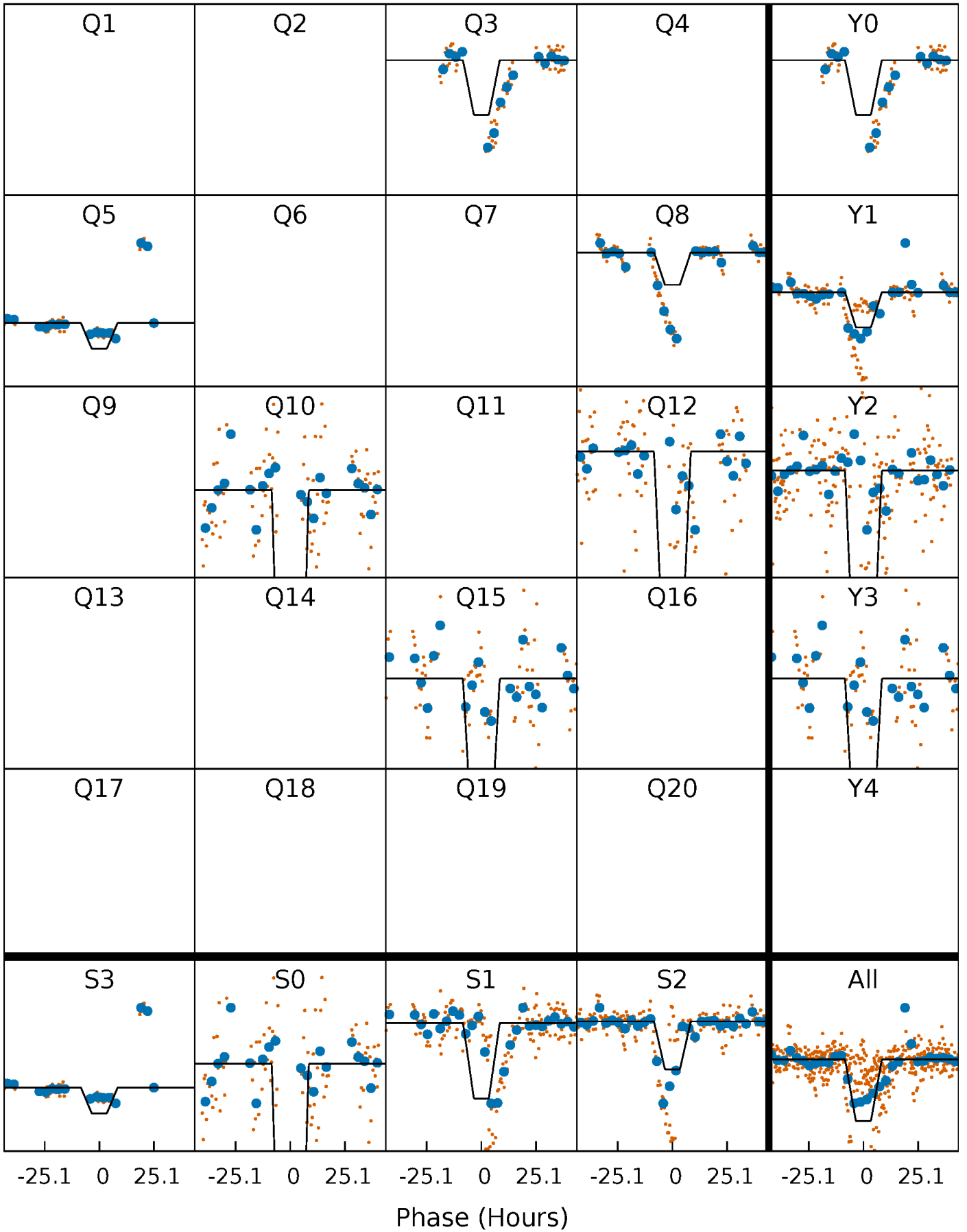
DV Quarter-Phased Transit Curves

TCE 003941581-02 P=212.680912 Days $T_0=324.558990$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

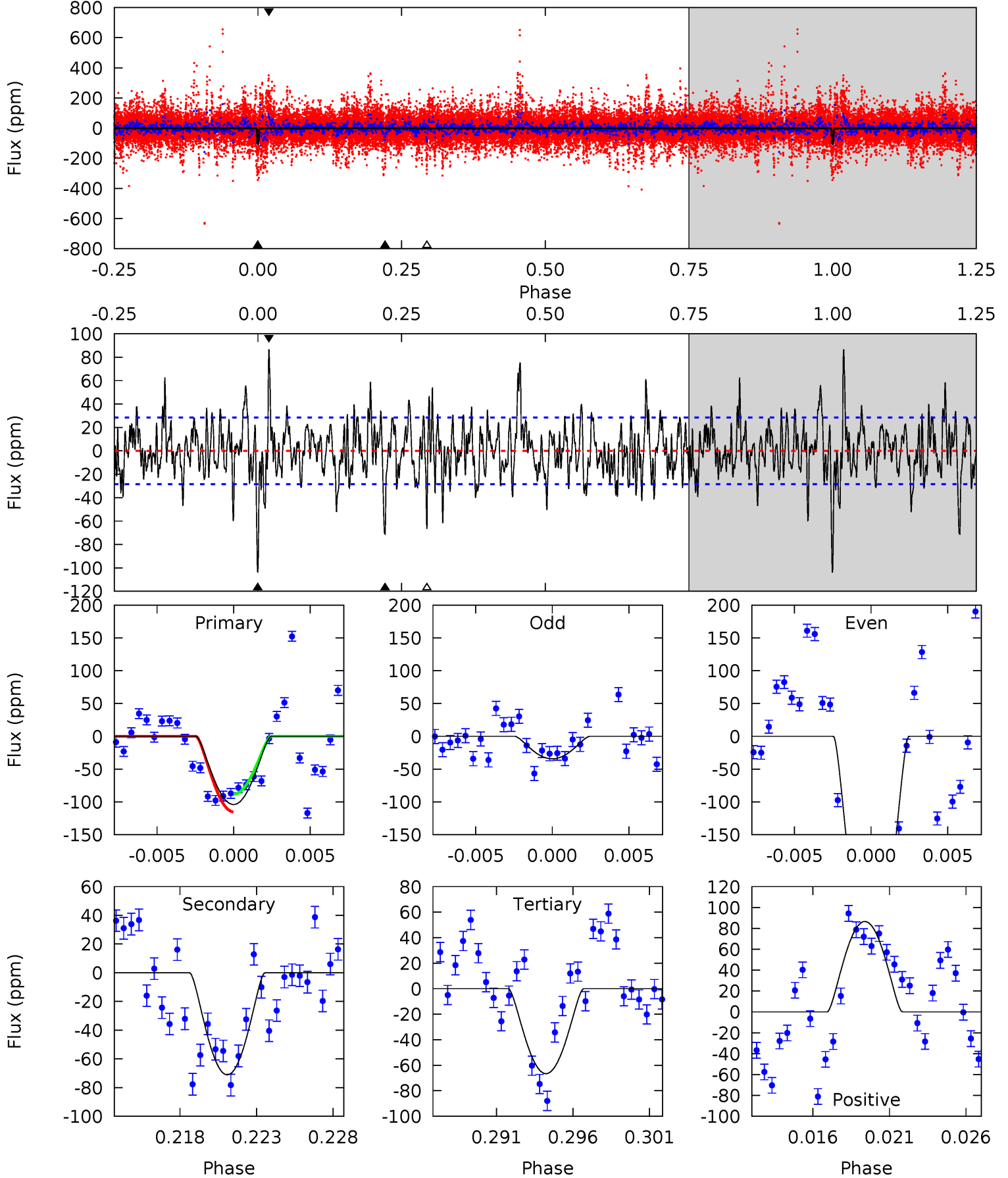
TCE 003941581-02 $P=212.740604$ Days $T_0=324.337565$ (BKJD)



DV Model-Shift Uniqueness Test

003941581-02, P = 212.680912 Days, E = 111.878078 Days

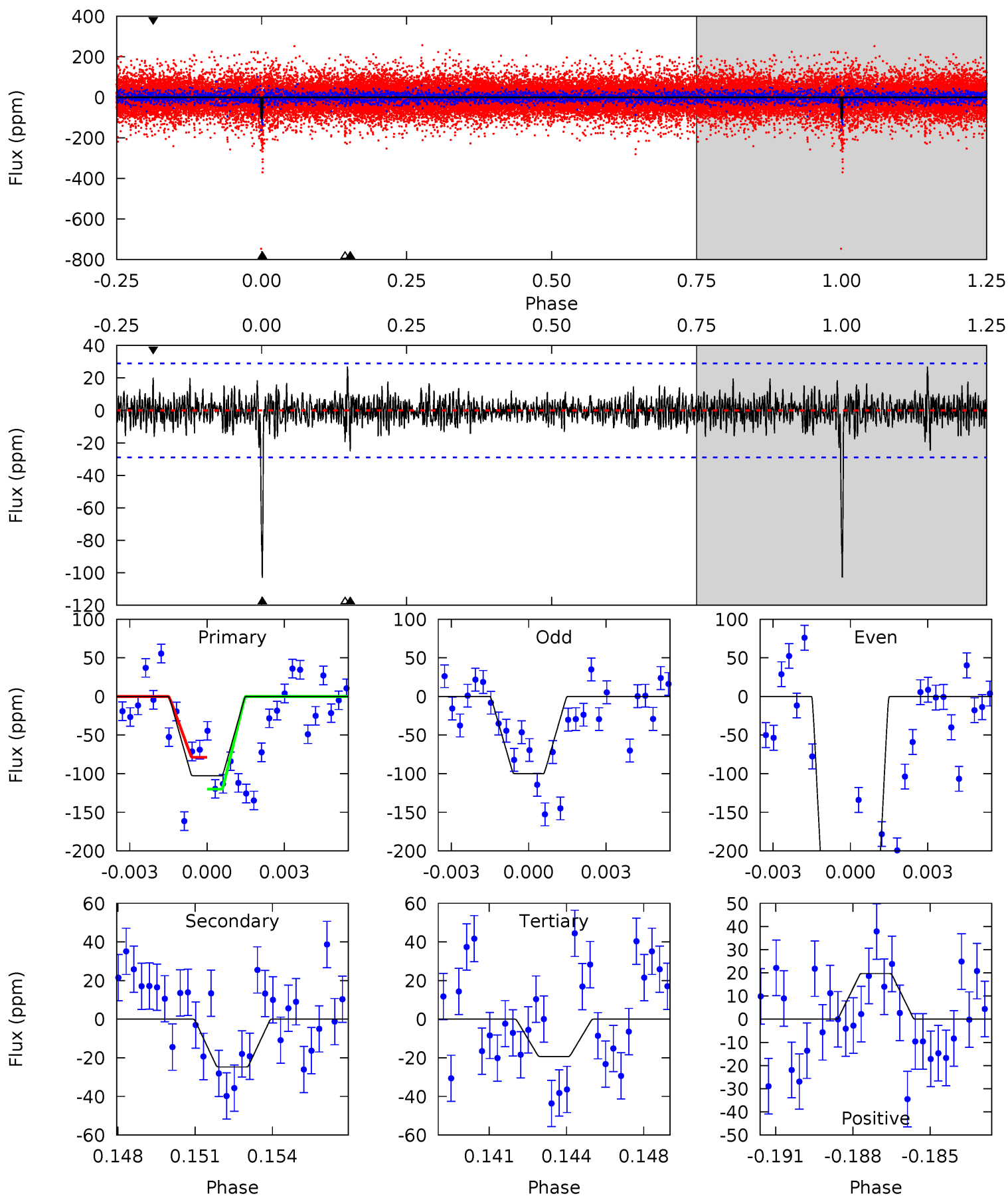
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.8	12.9	12.0	15.7	5.15	2.80	3.58	6.76	3.14	0.82	-2.80	24.8	1.36	0.45	2.44



Alt Model-Shift Uniqueness Test

003941581-02, P = 212.740604 Days, E = 111.596961 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
18.6	4.47	3.49	3.56	5.23	2.93	1.02	15.1	15.0	0.97	0.91	45.1	2.79	0.21	3.65



Stellar Parameters For KIC 003941581

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7716^{+214}_{-337}	$4.025^{+0.150}_{-0.150}$	$0.210^{+0.100}_{-0.400}$	$2.213^{+0.552}_{-0.502}$	$1.891^{+0.170}_{-0.315}$	$0.246^{+0.198}_{-0.110}$
	+3%/-4%	+4%/-4%	+48%/-190%	+25%/-23%	+9%/-17%	+80%/-45%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003941581-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-71 ± 6	$10.17^{+9.59}_{-6.87}$	761^{+49}_{-52}	3714^{+2078}_{-658}	266^{+2243}_{-191}
Alt.	-25 ± 6	$8.89^{+9.09}_{-5.84}$	757^{+51}_{-47}	3278^{+1442}_{-585}	122^{+868}_{-92}

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

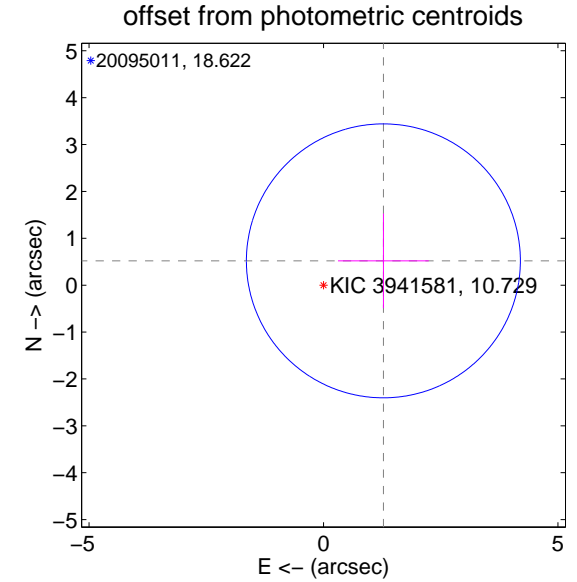
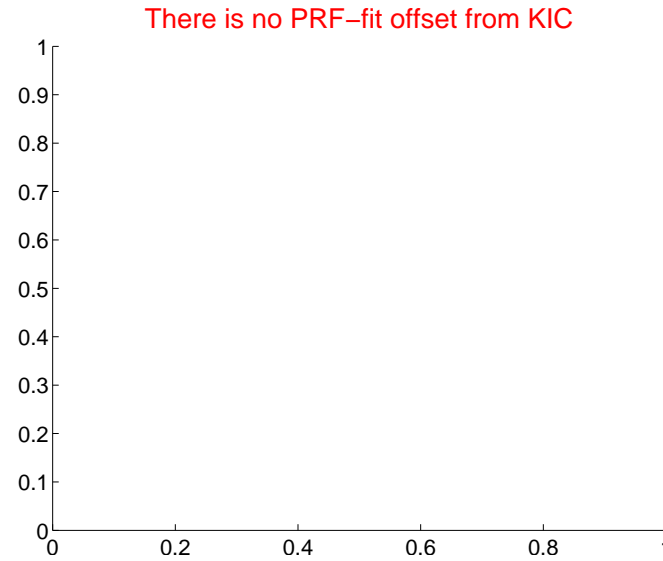
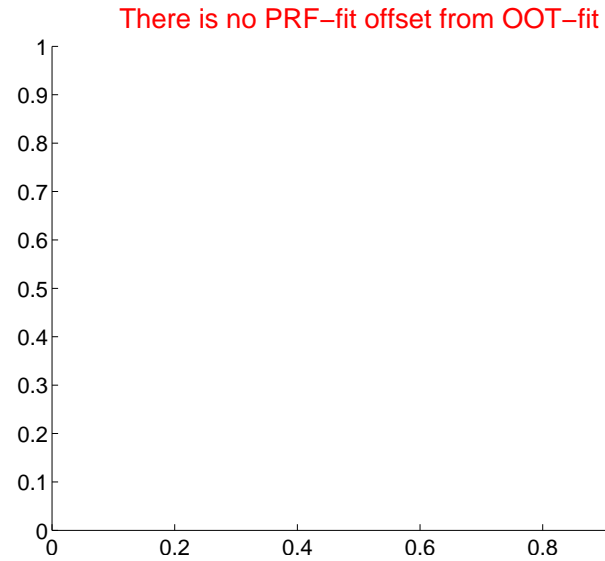
DV Centroid Data

Supplemental centroid analysis for 003941581-02. **Kepler magnitude: 10.73.** Transit SNR 22.82

There are 0 quarters with good PRF difference image offsets

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

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	1.38 ± 0.97	1.42	-1.28 ± 0.97	0.52 ± 1.01

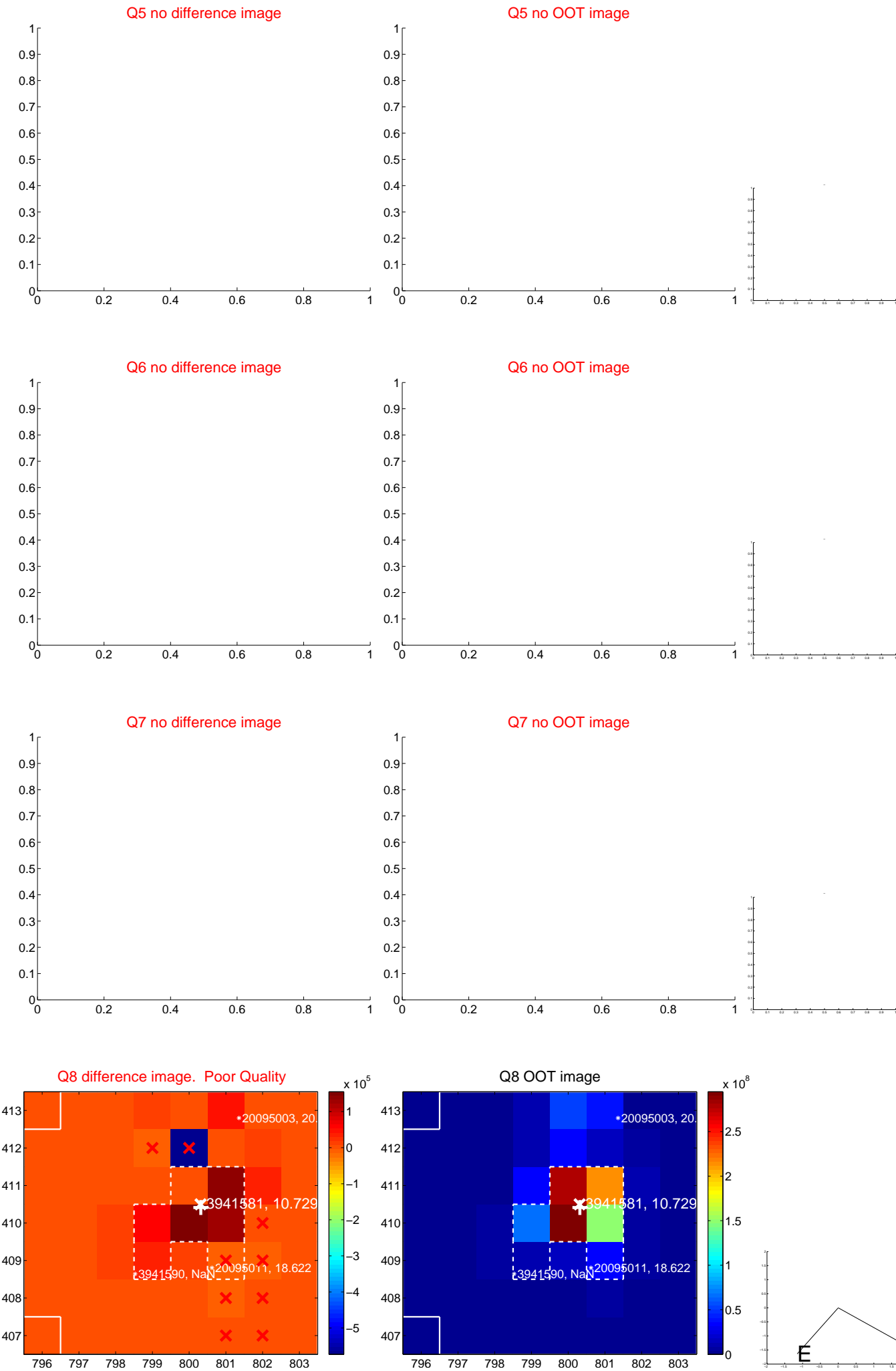


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

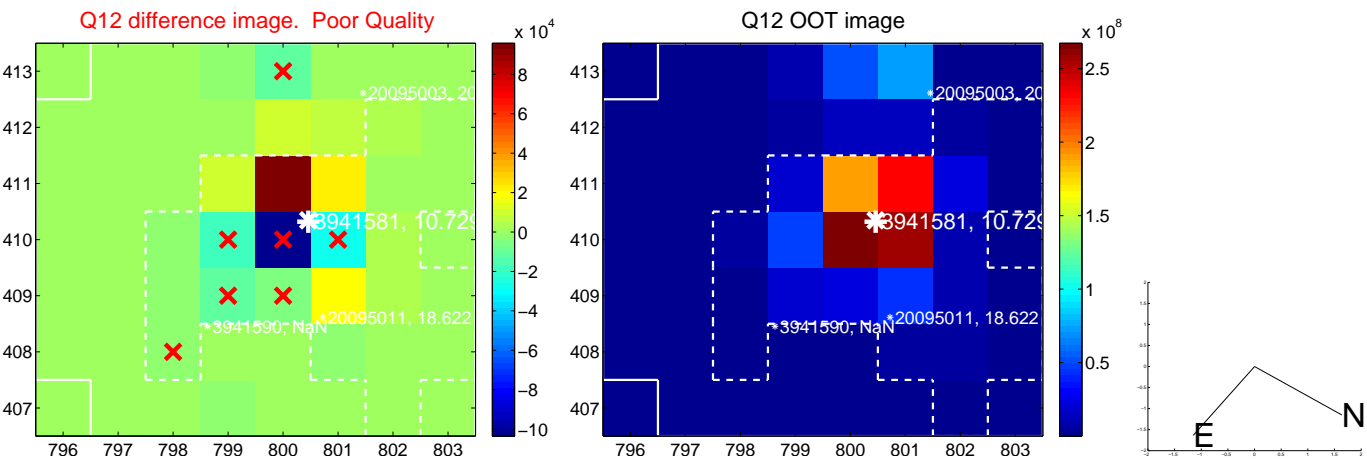
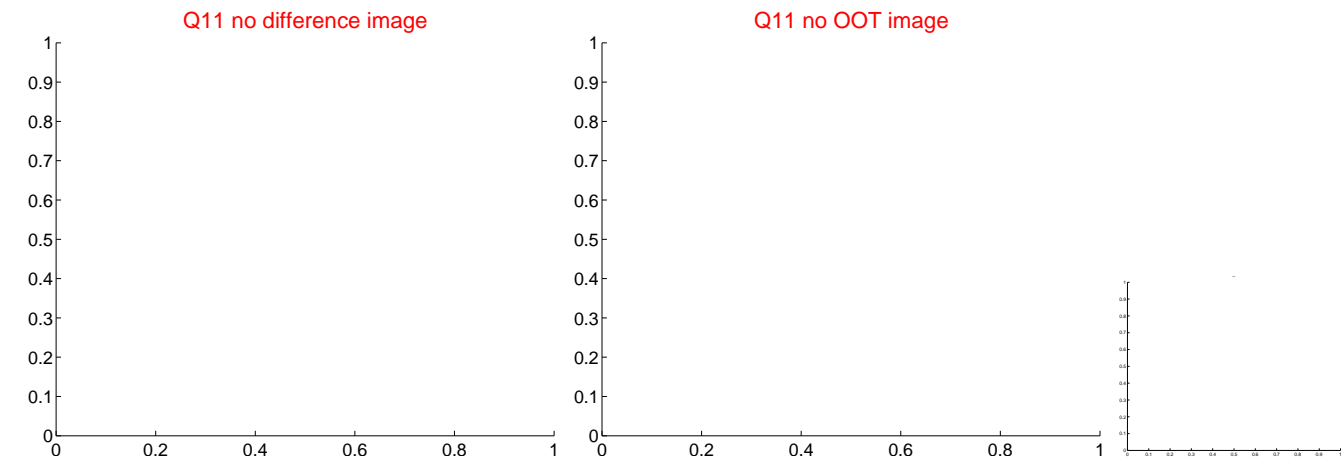
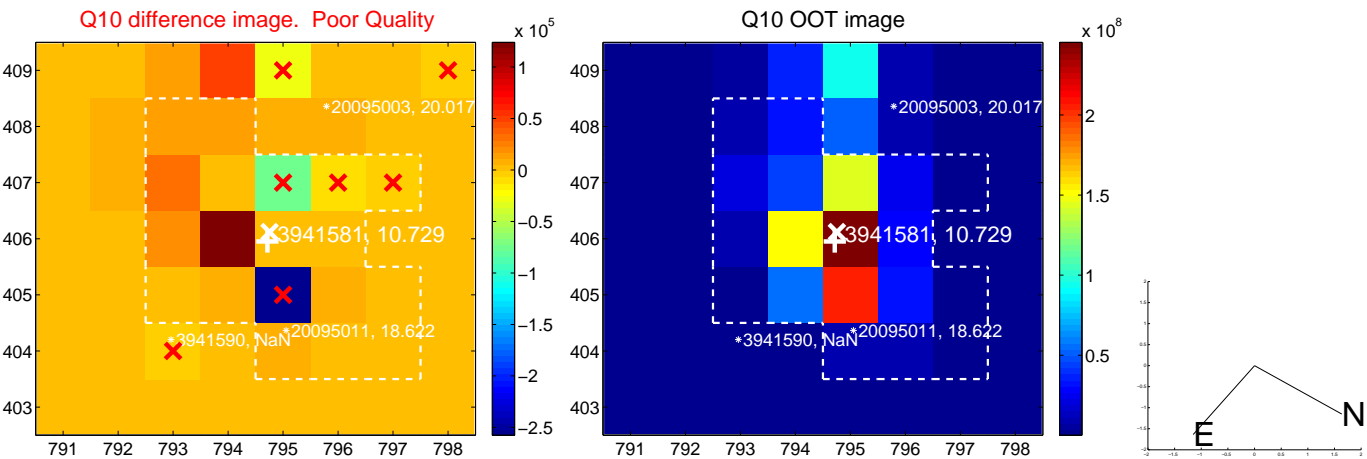
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



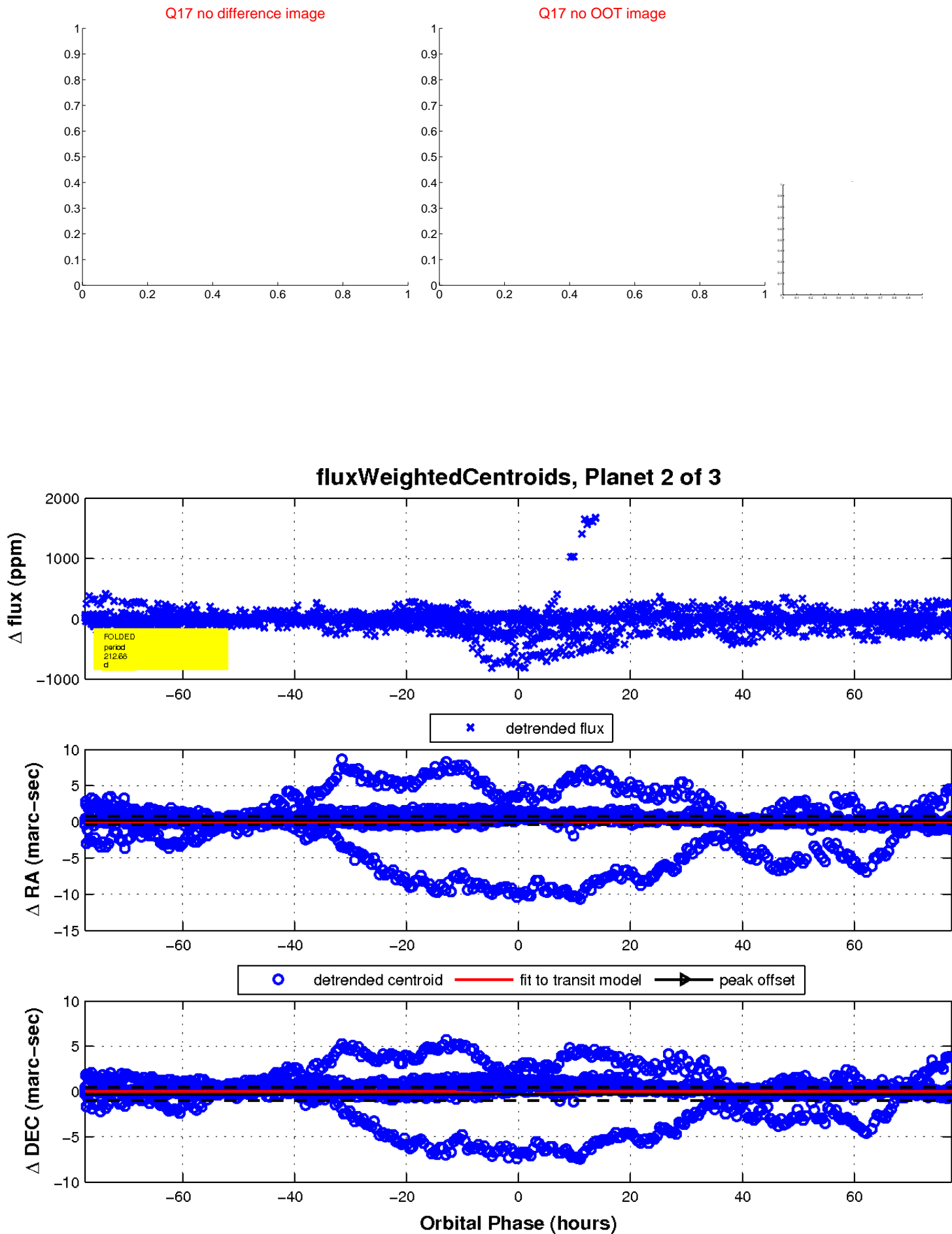
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

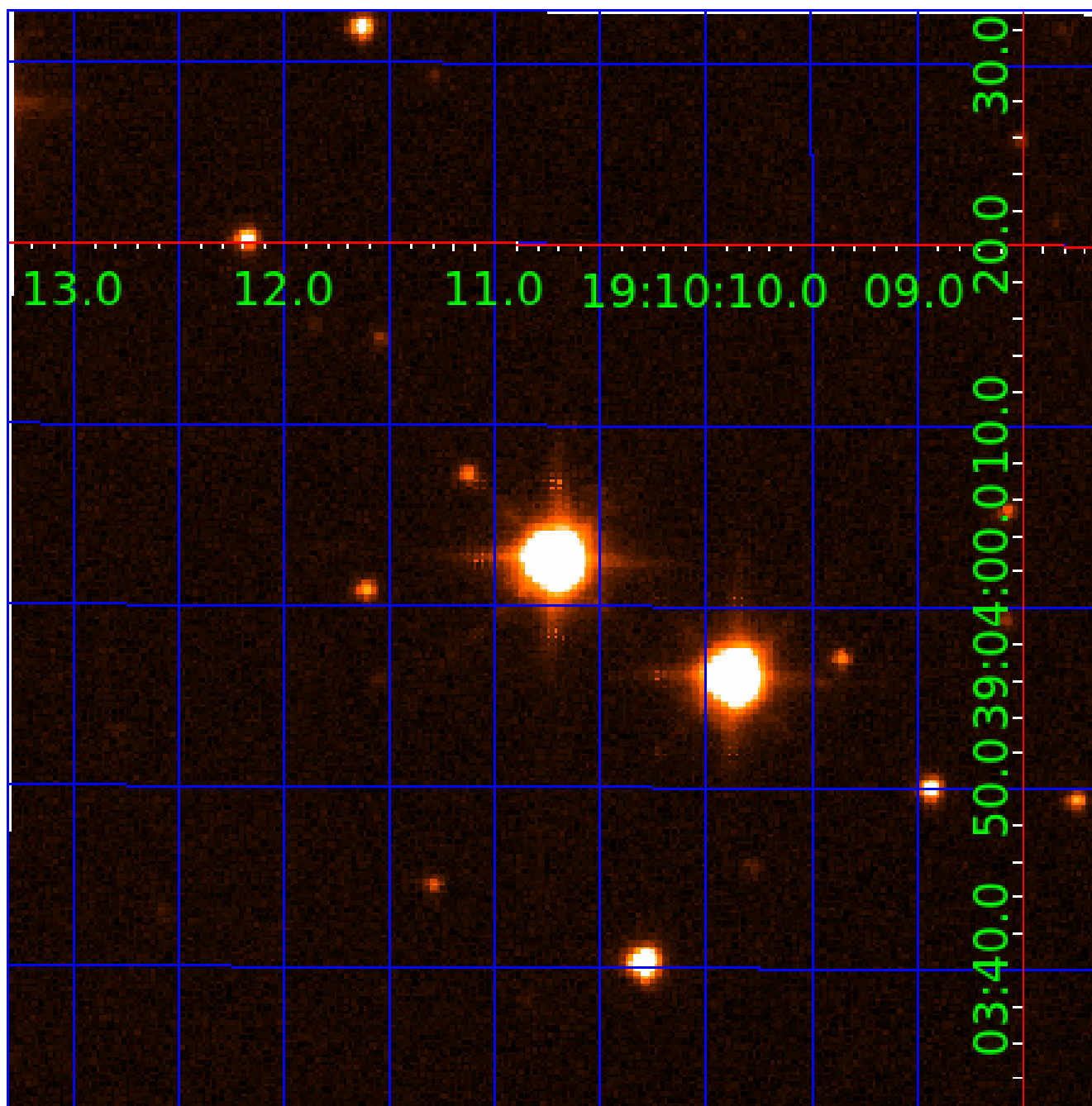


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 003941581

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})
003941581-01	OBS	No	0.961366	131.931244	6.4	3.212	8.1	9.0	2.21	7716	0.65	27963.99
003941581-02	OBS	No	212.680912	324.558990	301.2	25.838	28.6	22.8	2.21	7716	7.35	20.90
003941581-03	OBS	No	270.878247	337.116785	81.5	13.333	9.3	6.2	2.21	7716	2.33	15.14

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
003941581-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT—CENT_SATURATED
003941581-02	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL_SKYE_ZUMA—LPP_DV—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED
003941581-03	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_RUBBLE_MARSHALL—ALL_TRANS_CHASES—MOD_NONUNIQ_DV—INCONSISTENT_TRANS—CENT_SATURATED

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

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

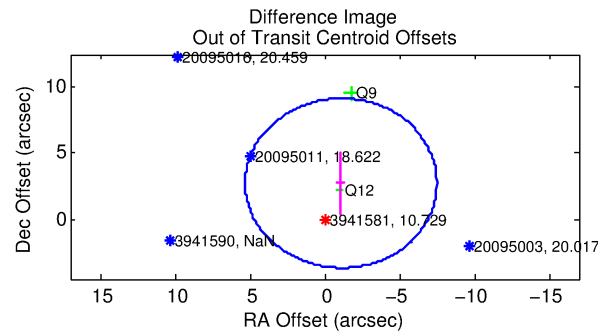
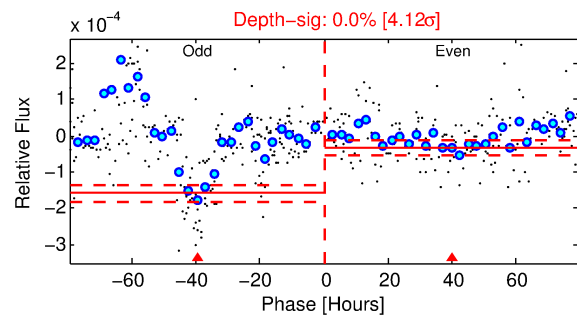
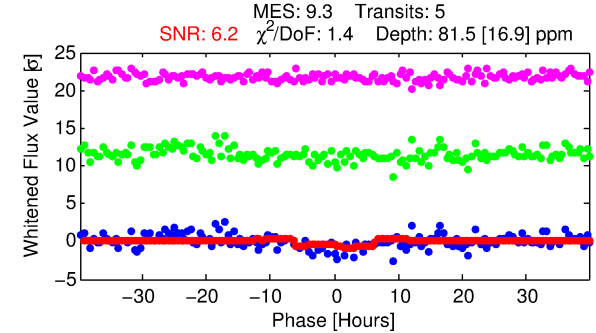
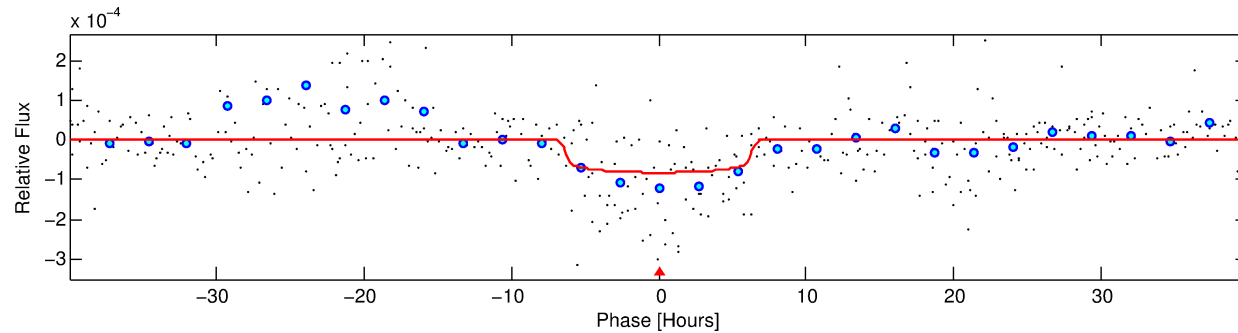
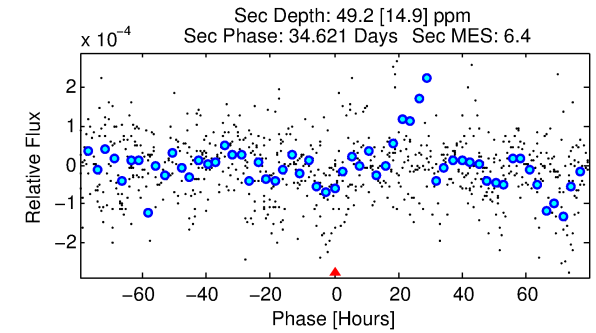
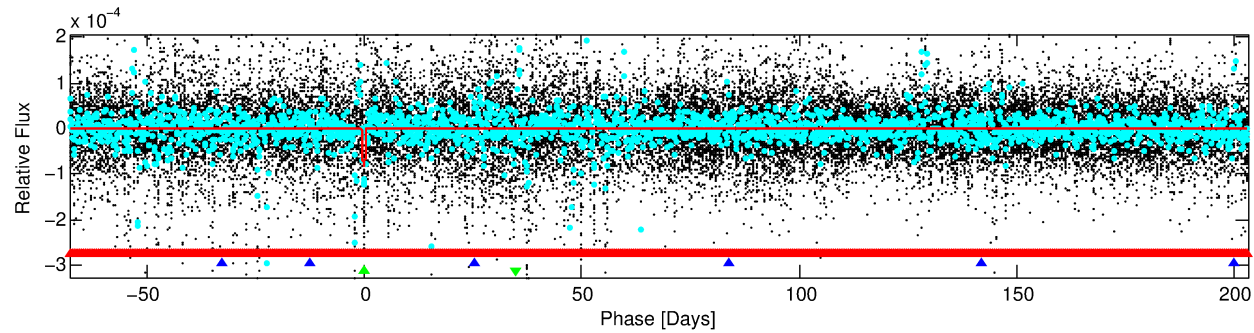
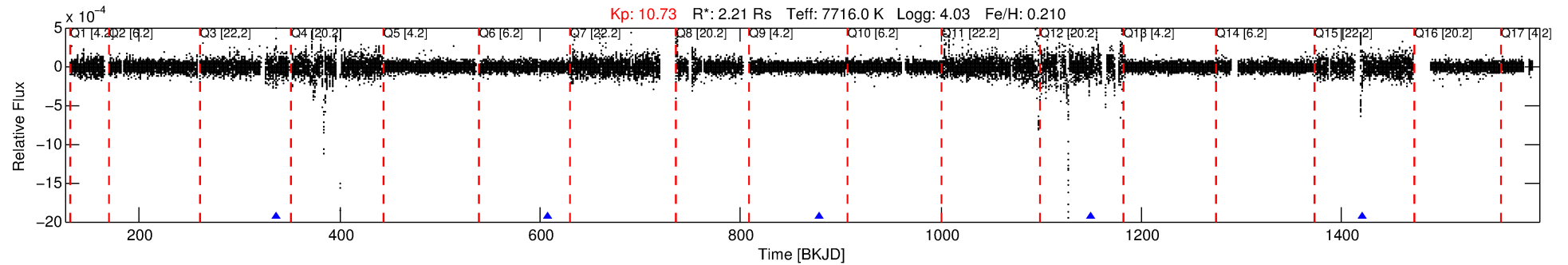
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 003941581-03

No Significant Match Found

DV One-Page Summary

KIC: 3941581 Candidate: 3 of 3 Period: 270.878 d



DV Fit Results:

Period = 270.87825 [0.01085] d
Epoch = 337.1168 [0.0250] BKJD
Rp/R* = 0.0096 [0.0018]
a/R* = 69.09 [62.87]
b = 0.91 [0.18]
Seff = 15.14 [5.05]
Teq = 503 [42] K
Rp = 2.33 [0.72] Re
a = 1.0136 [0.2050] AU
Ag = 5141.07 [2854.12] [1.80σ]
Teffp = 6585 [836] K [7.26σ]

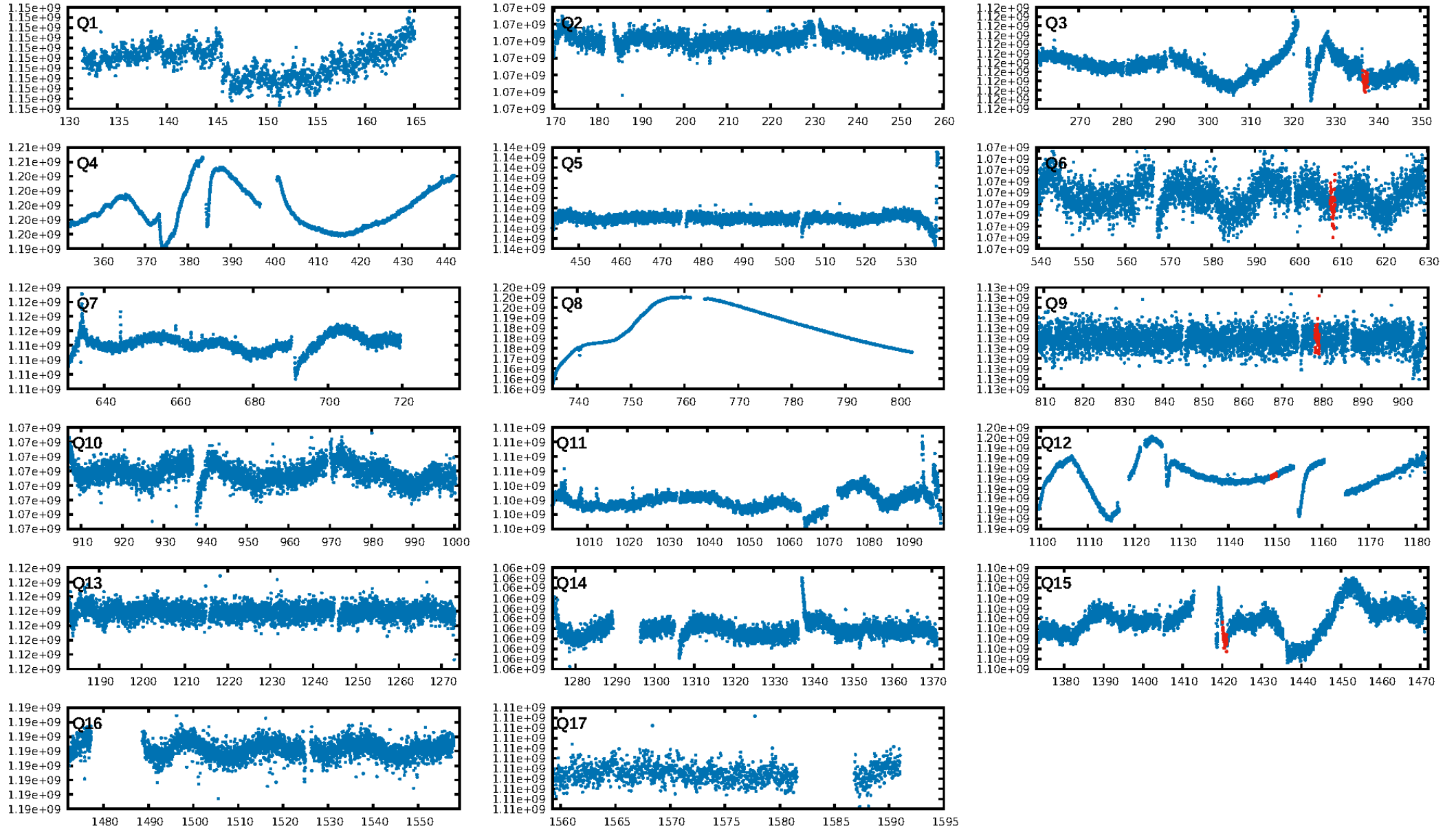
DV Diagnostic Results:

ShortPeriod-sig: 100.0% [48.04σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: 0.0%
ModelChiSquareGof-sig: 100.0%
Bootstrap-pfa: 5.07e-09
RollingBand-fgt: 1.00 [5/5]
GhostDiagnostic-chr: -0.4147
Centroid-sig: 1.1%
Centroid-so: 5.344 arcsec [1.83σ]
OotOffset-rm: 2.960 arcsec [1.39σ]
KicOffset-rm: 2.986 arcsec [0.88σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 0.00 [0/2]
DiffImageOverlap-fno: 0.00 [0/5]

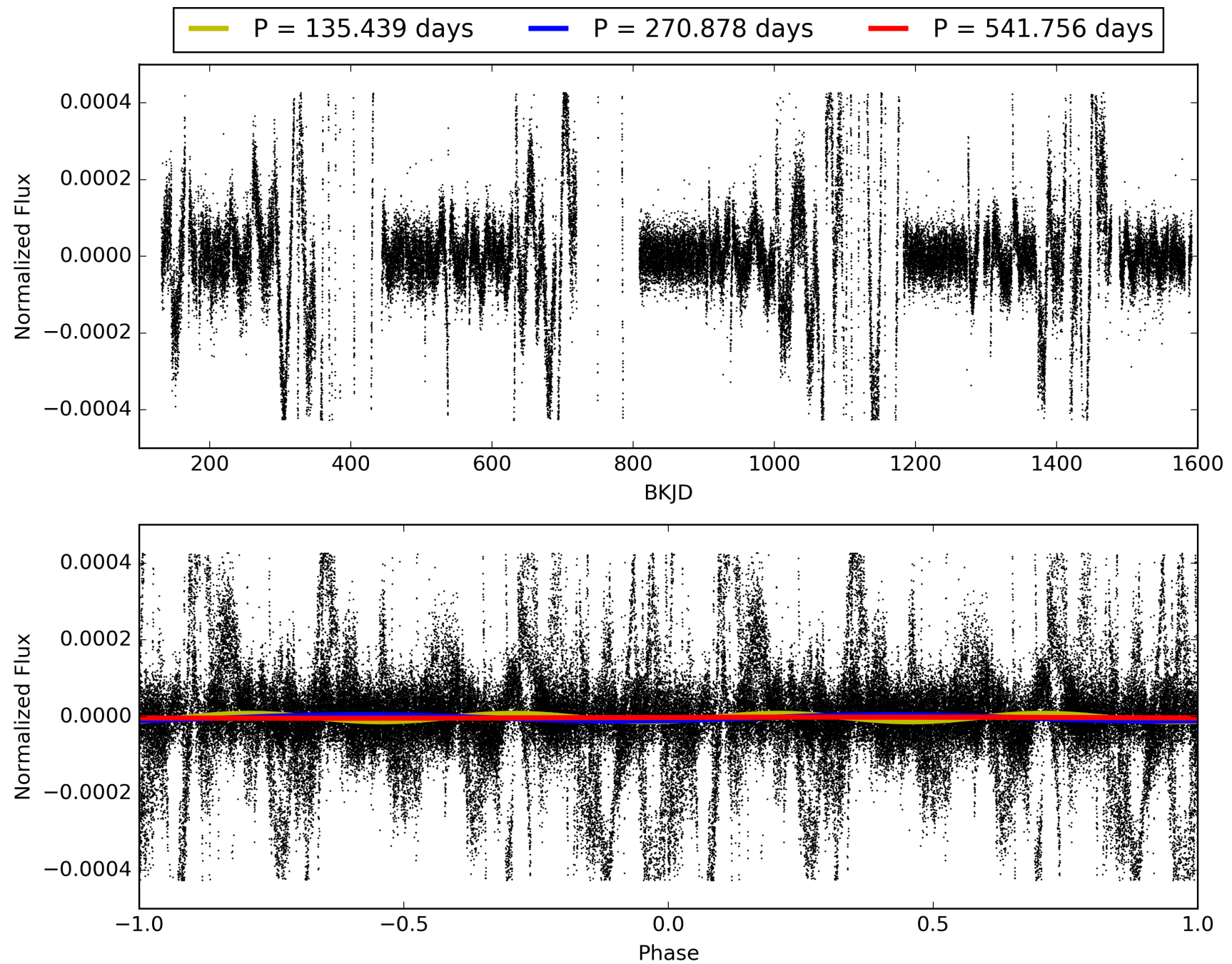
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 09:41:15 Z

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

TCE 003941581-03, PDC Light Curves

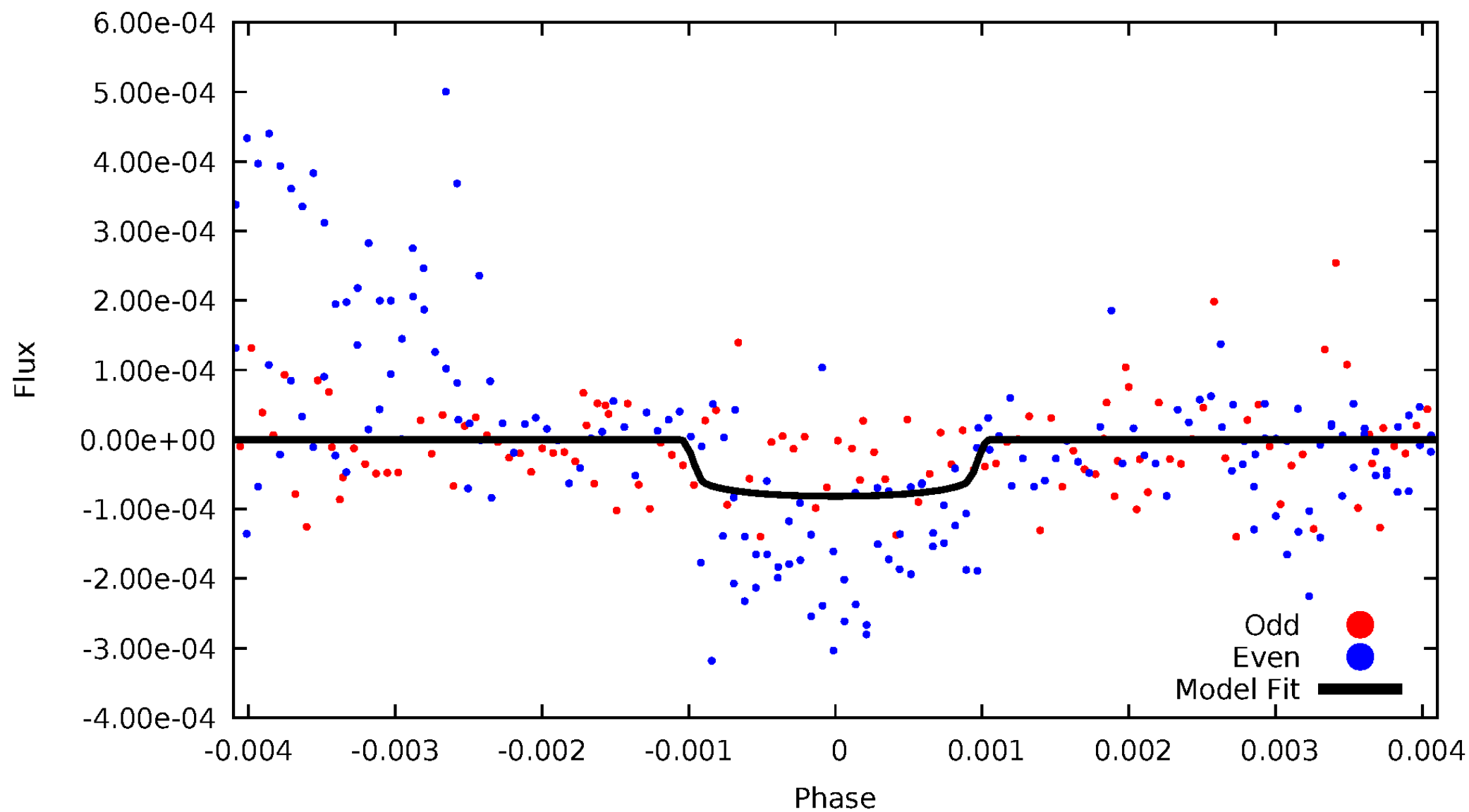


TCE 003941581-03



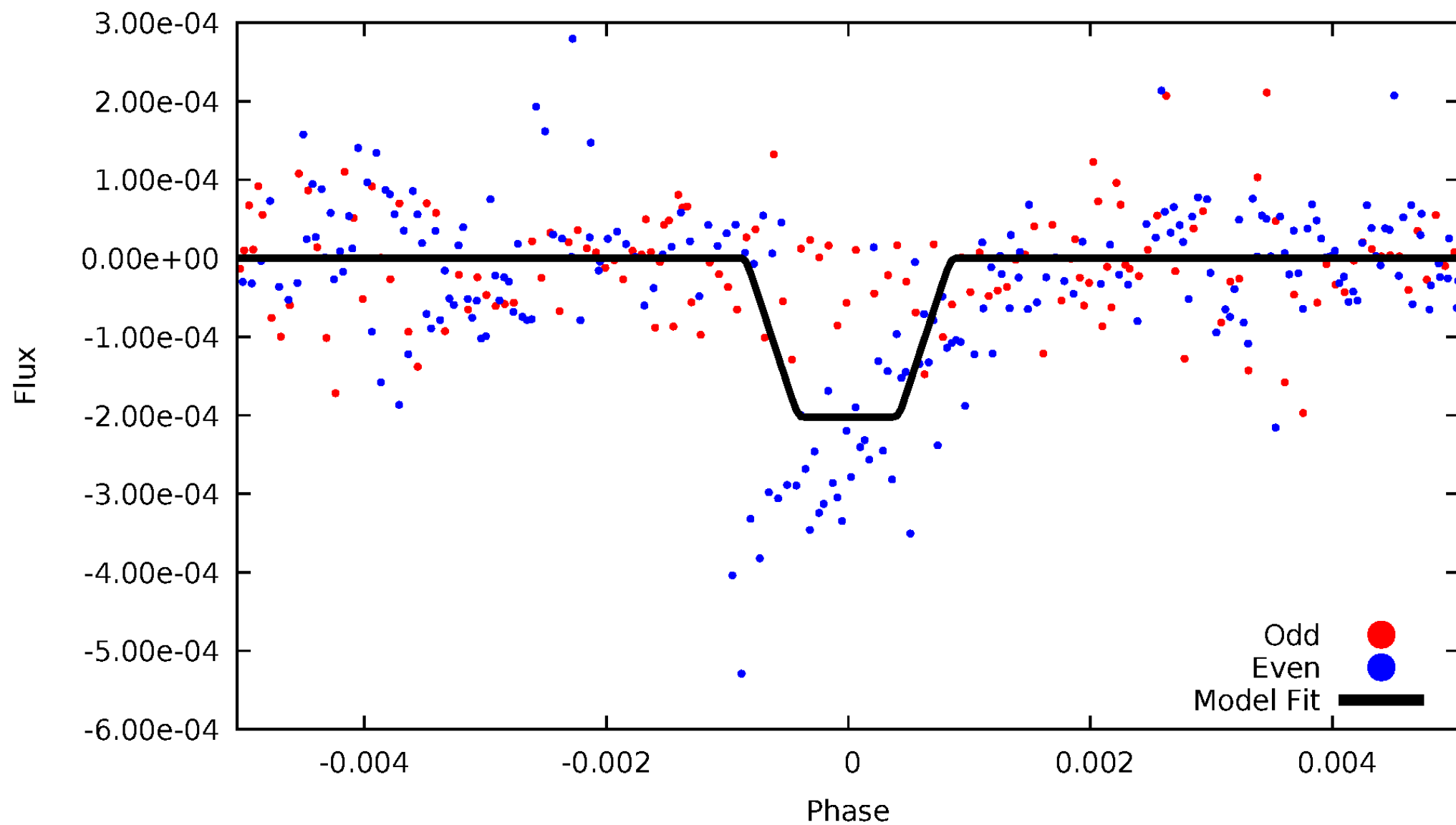
DV Odd/Even

TCE 003941581-03



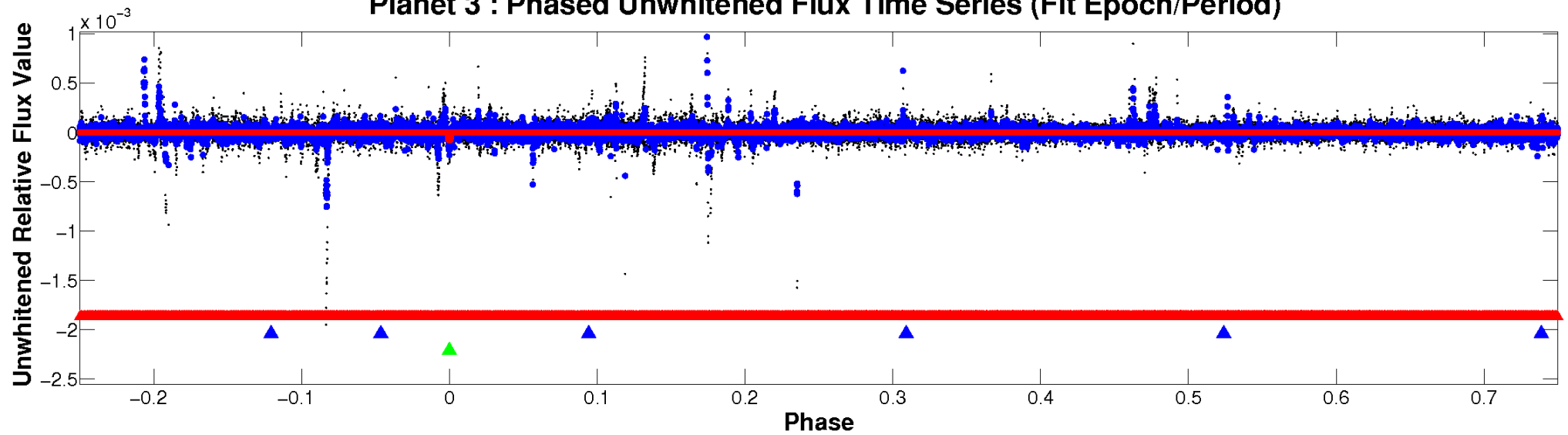
ALT Odd/Even

TCE 003941581-03

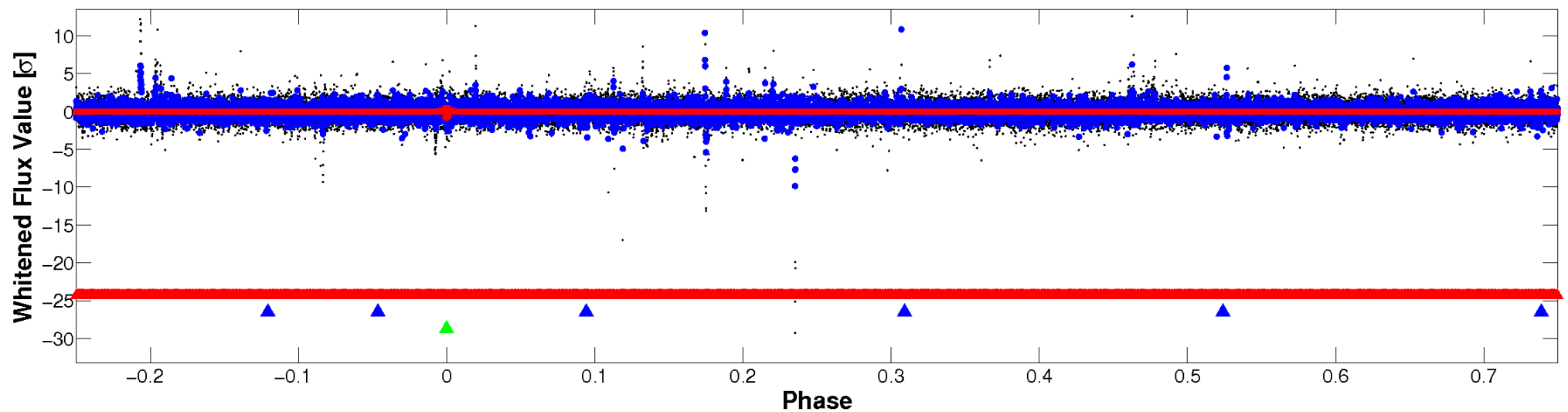


Non-Whitened Vs. Whitened Light Curve

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



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



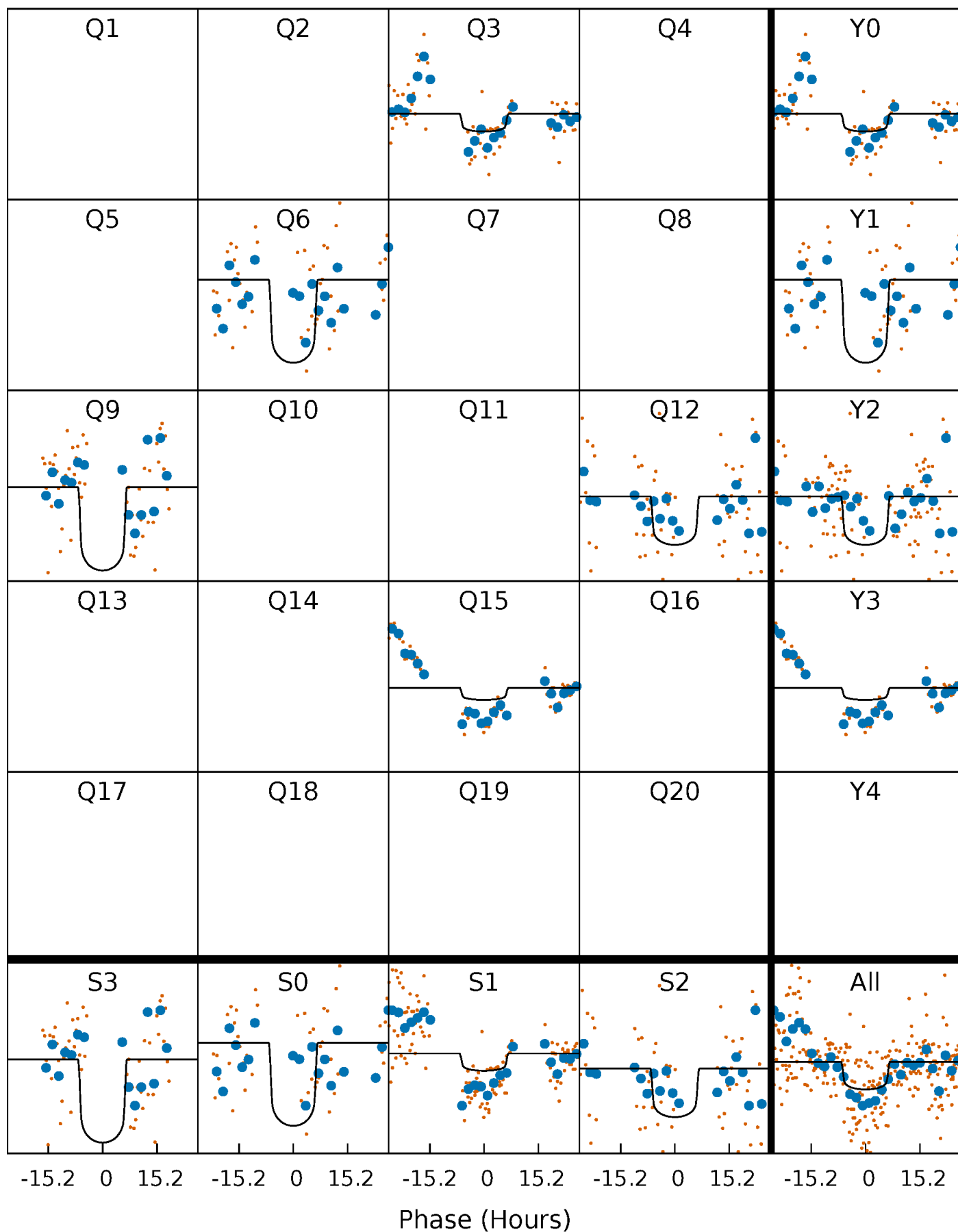
PDC Quarter-Phased Transit Curves

TCE 003941581-03 P=270.878247 Days $T_0=337.116785$ (BKJD)



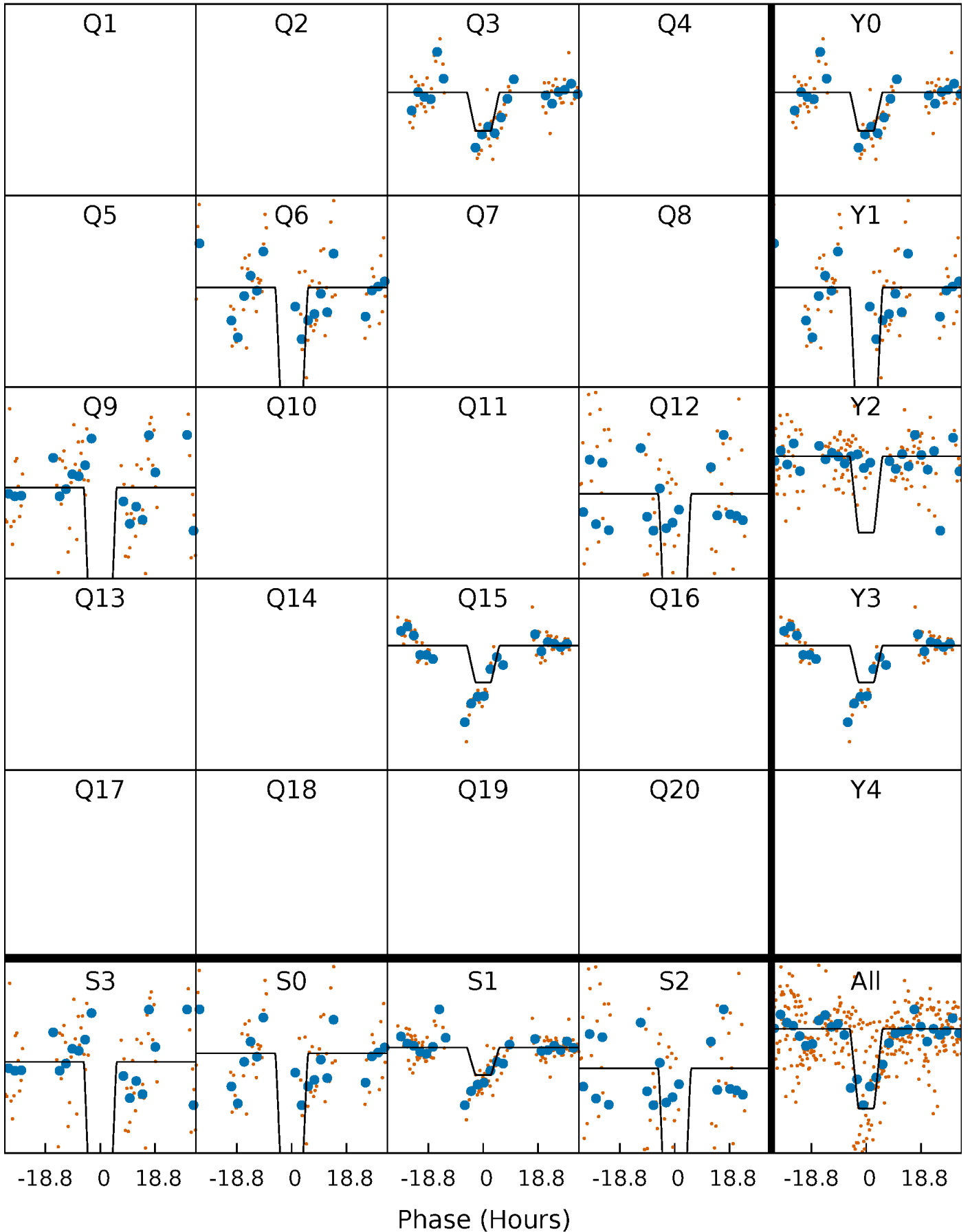
DV Quarter-Phased Transit Curves

TCE 003941581-03 $P=270.878247$ Days $T_0=337.116785$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

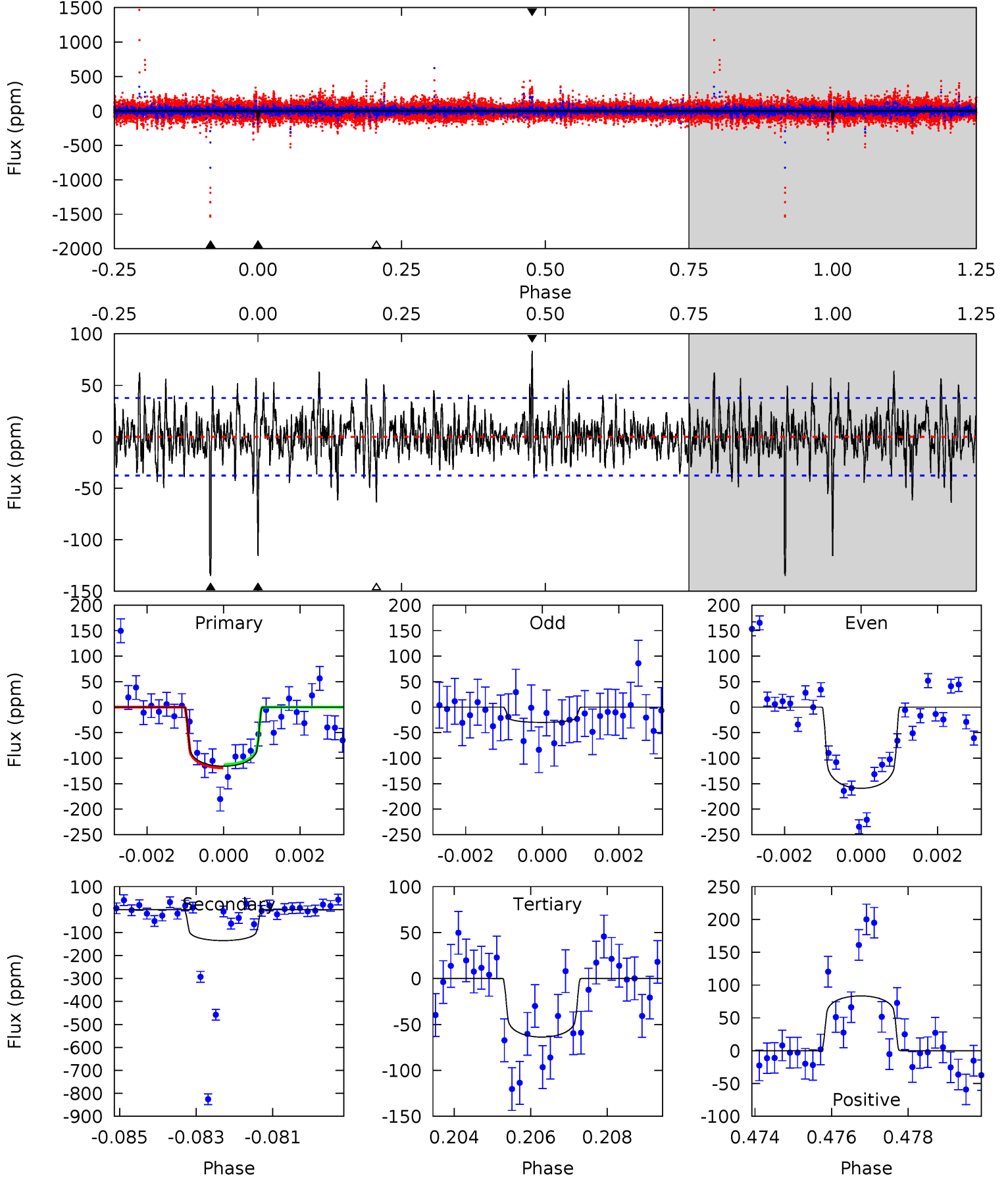
TCE 003941581-03 P=270.901327 Days $T_0=337.035313$ (BKJD)



DV Model-Shift Uniqueness Test

003941581-03, P = 270.878247 Days, E = 66.238538 Days

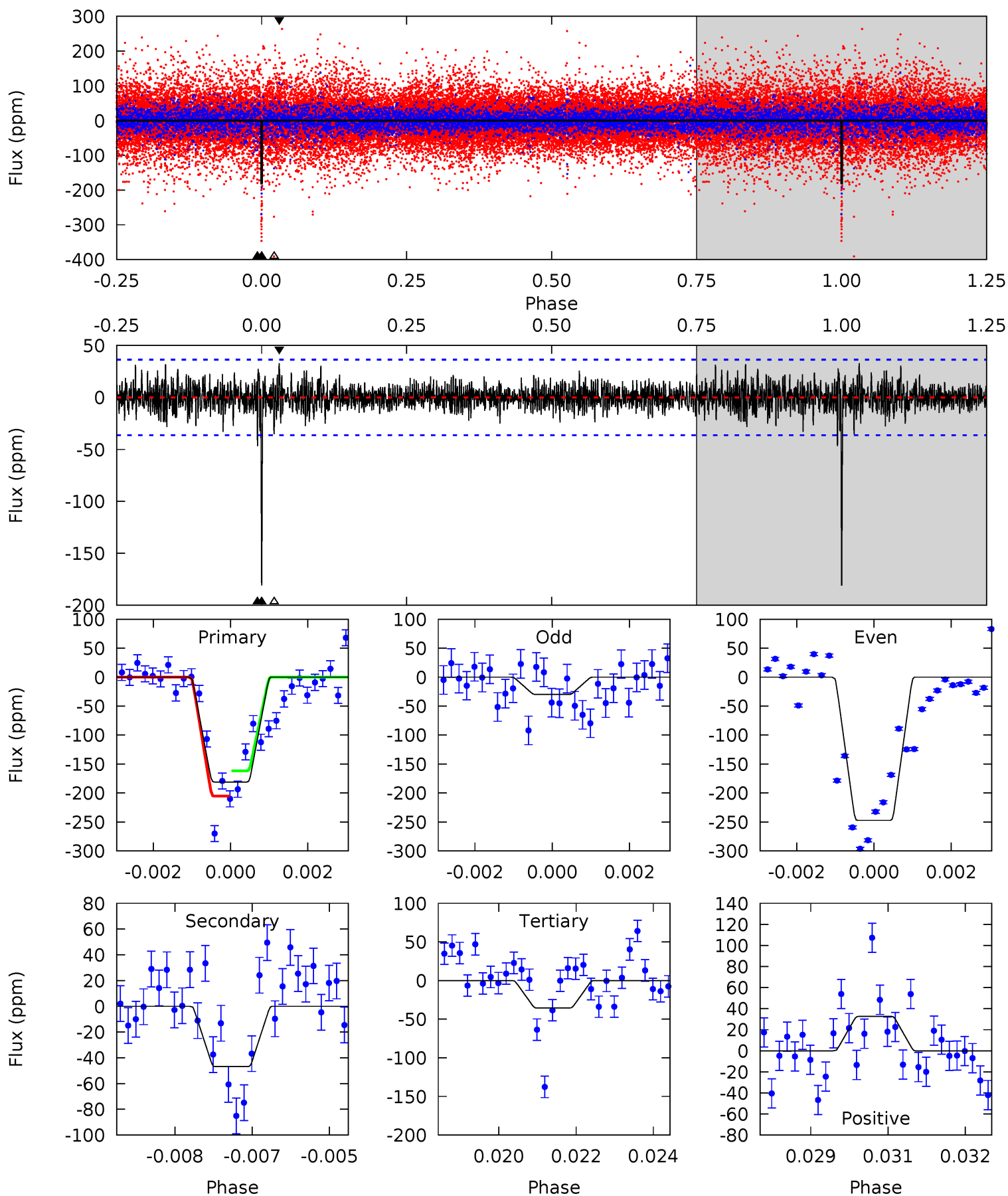
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
16.4	19.1	9.01	11.8	5.32	3.08	2.30	7.35	4.56	10.1	7.27	7.16	2.17	0.38	0.47



Alt Model-Shift Uniqueness Test

003941581-03, $P = 270.901327$ Days, $E = 66.133986$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
26.7	6.90	5.22	4.81	5.36	3.14	1.28	21.5	21.9	1.68	2.09	14.1	2.20	0.15	3.16



Stellar Parameters For KIC 003941581

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	7716^{+214}_{-337}	$4.025^{+0.150}_{-0.150}$	$0.210^{+0.100}_{-0.400}$	$2.213^{+0.552}_{-0.502}$	$1.891^{+0.170}_{-0.315}$	$0.246^{+0.198}_{-0.110}$
	+3%/-4%	+4%/-4%	+48%/-190%	+25%/-23%	+9%/-17%	+80%/-45%
Source	KIC0	KIC0	KIC0	DSEP		

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

Secondary Eclipse Parameters for KIC 003941581-03 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-135 ± 7	$2.29^{+0.52}_{-0.48}$	700^{+50}_{-49}	8697^{+1314}_{-993}	14377^{+8025}_{-4654}
Alt.	-47 ± 7	$3.41^{+0.59}_{-0.59}$	700^{+45}_{-44}	5254^{+452}_{-323}	2213^{+1061}_{-635}

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 $A_{obs} \gg 1.0$

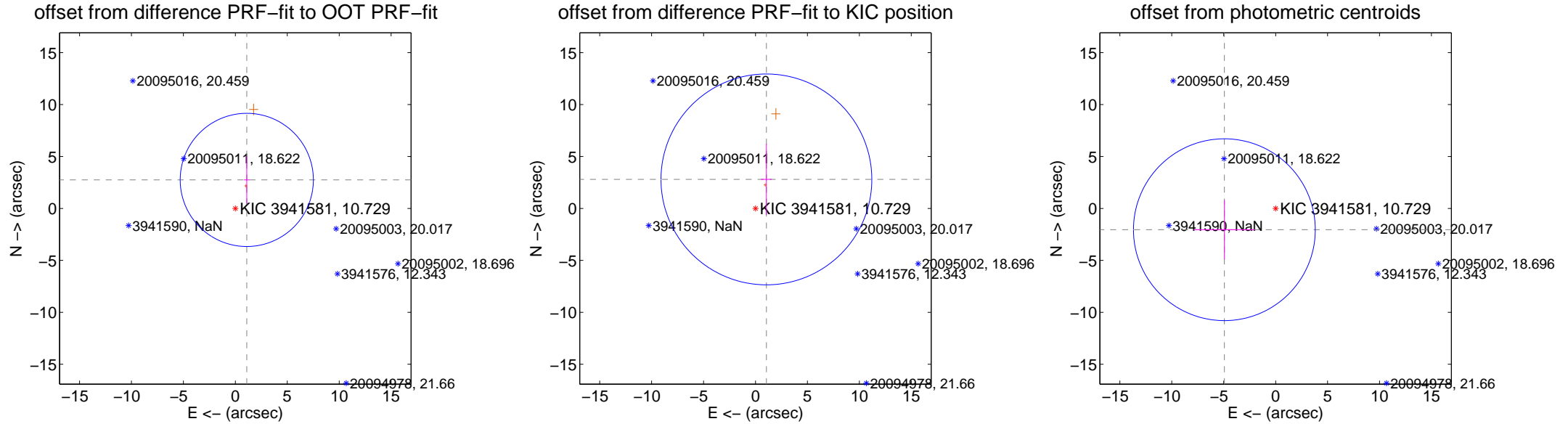
DV Centroid Data

Supplemental centroid analysis for 003941581-03. **Kepler magnitude: 10.73.** Transit SNR 6.24

There are 0 quarters with good PRF difference image offsets

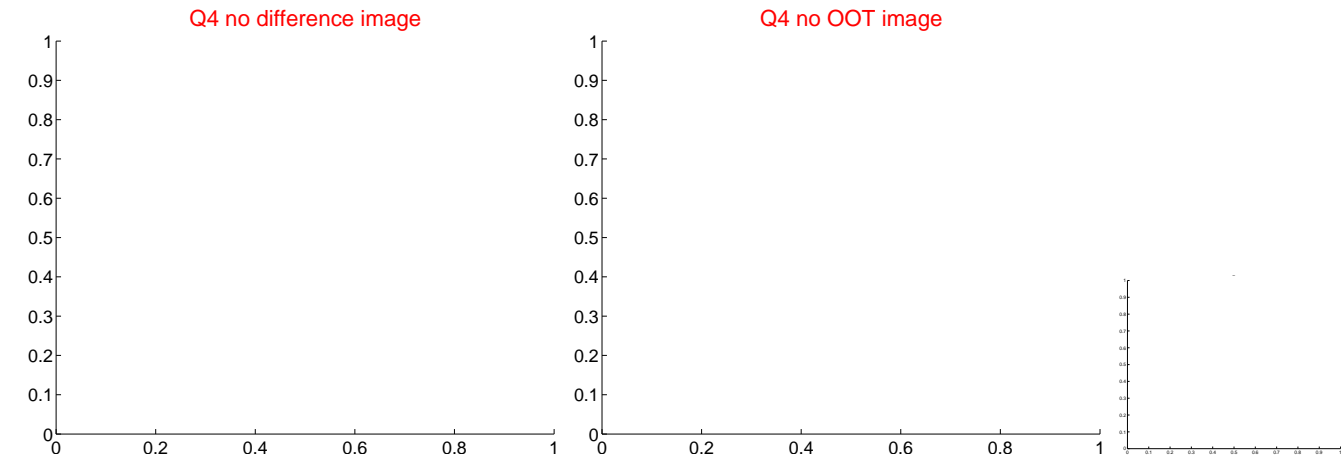
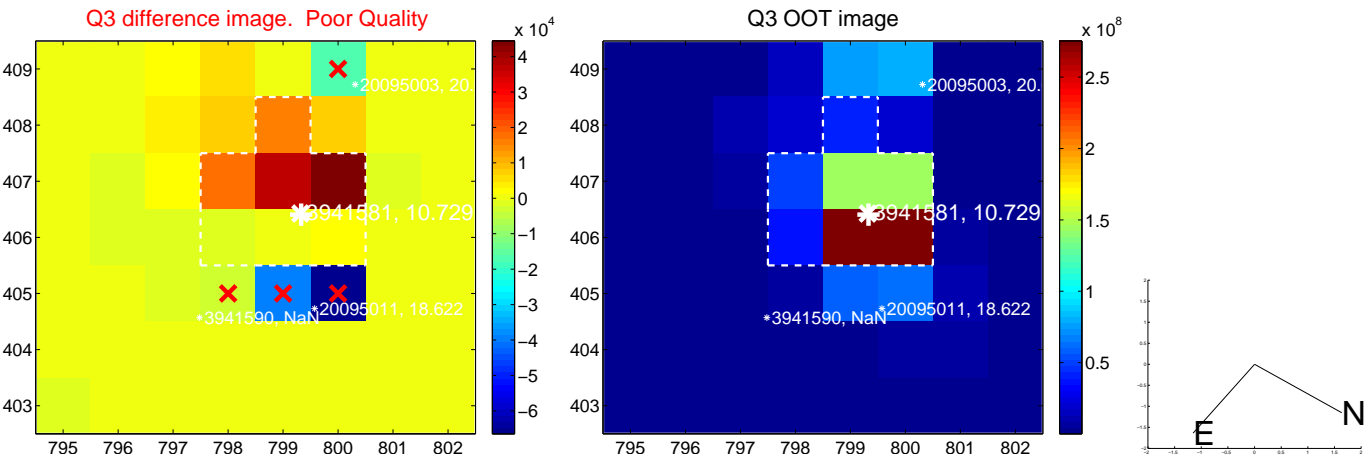
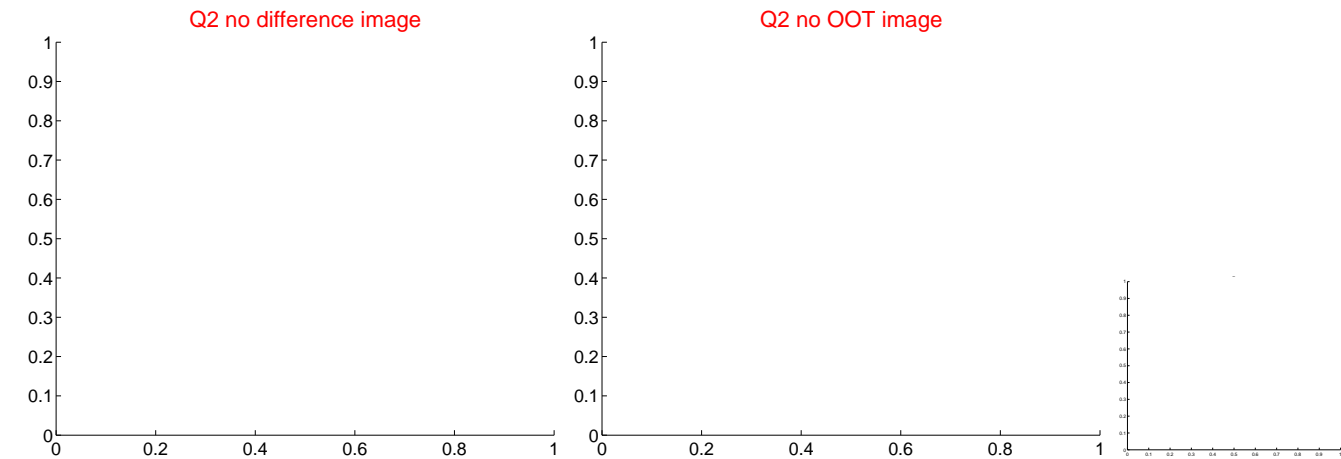
The direct PRF centroid is offset from the target star catalog position by about 0.12 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	2.960 ± 2.137	1.39	-1.102 ± 0.272	2.747 ± 2.300
PRF-fit source offset from KIC position	2.986 ± 3.383	0.88	-1.051 ± 0.515	2.795 ± 3.422
photometric centroid source offset	5.34 ± 2.92	1.83	4.94 ± 2.93	-2.05 ± 2.85

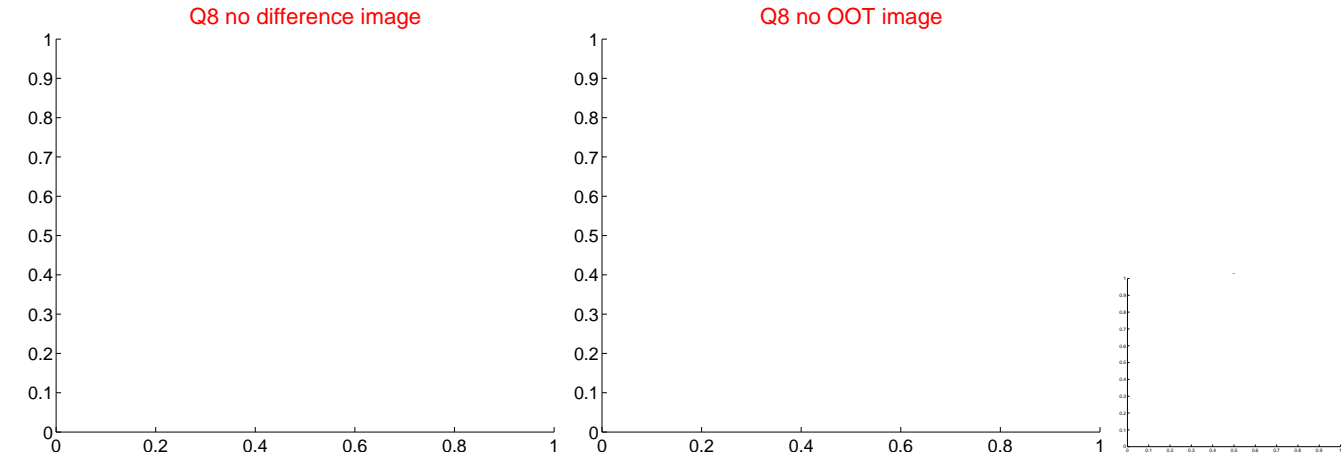
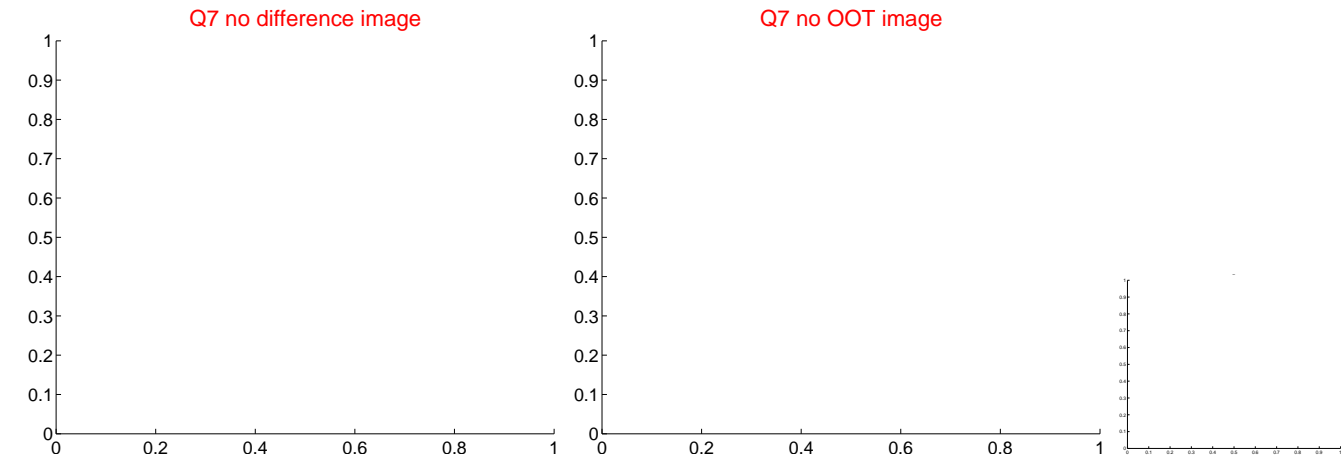
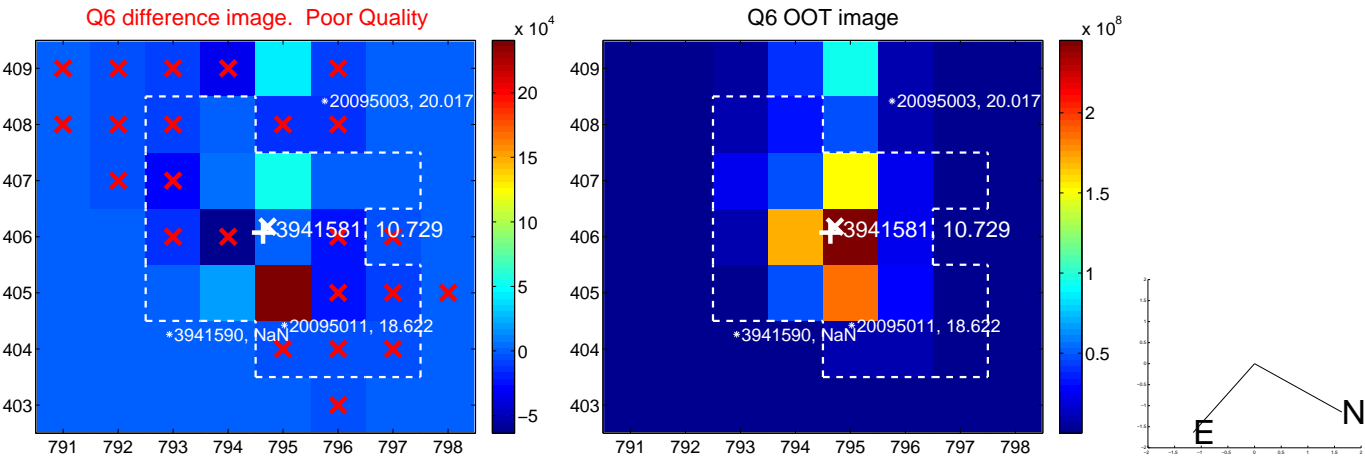
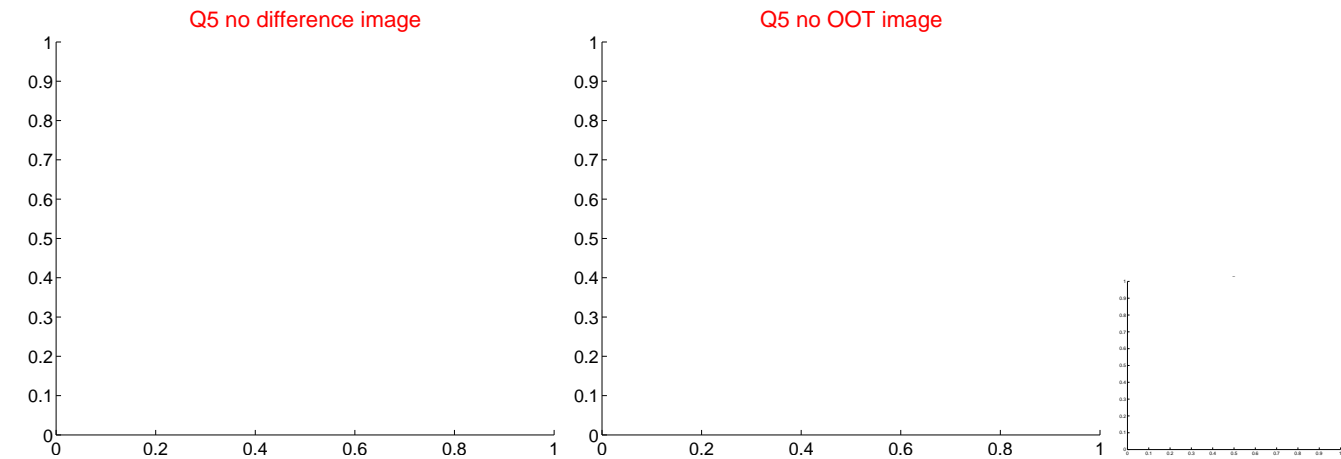


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets;** magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

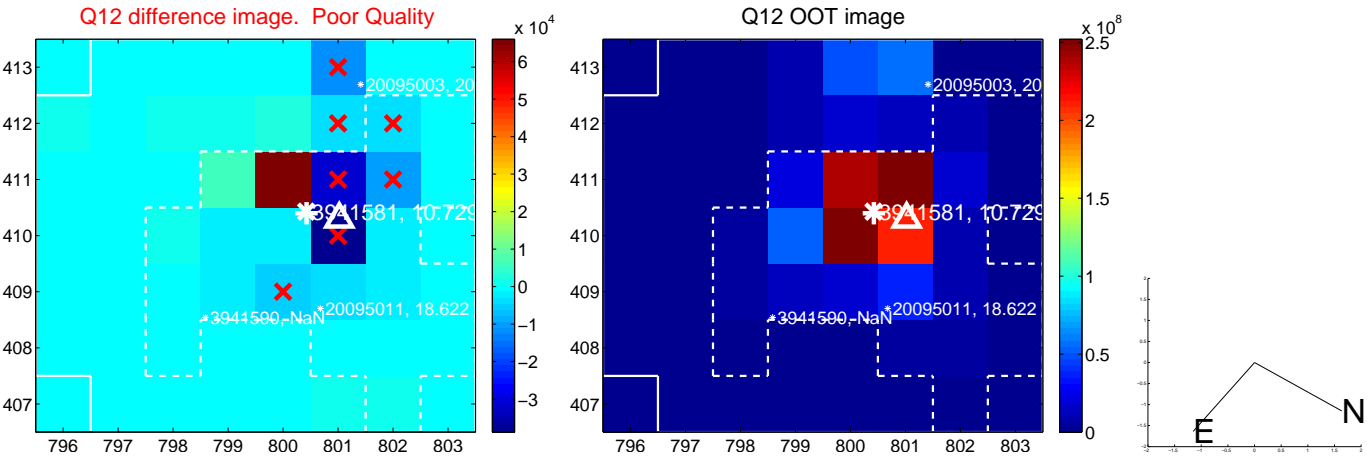
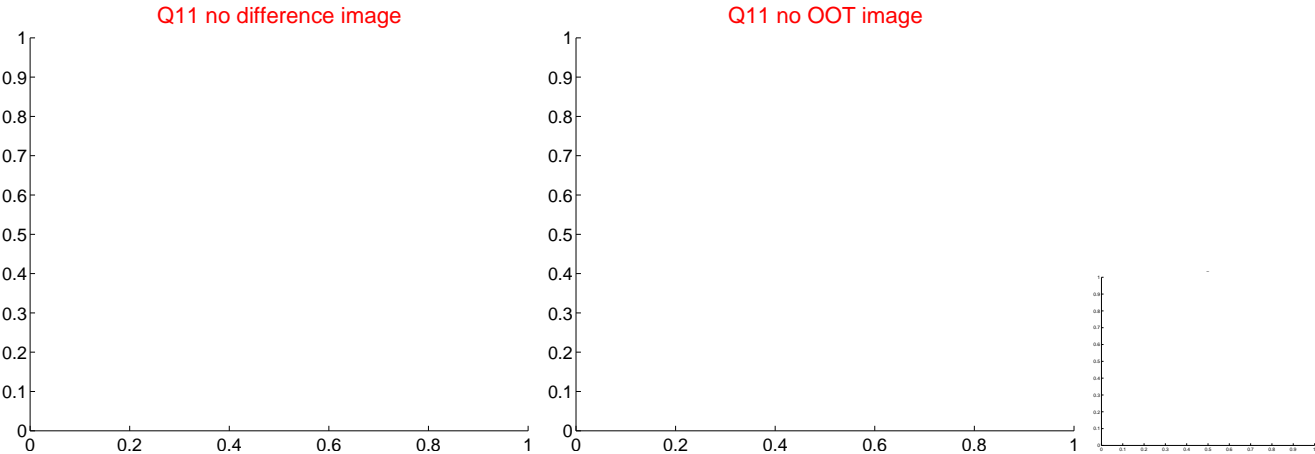
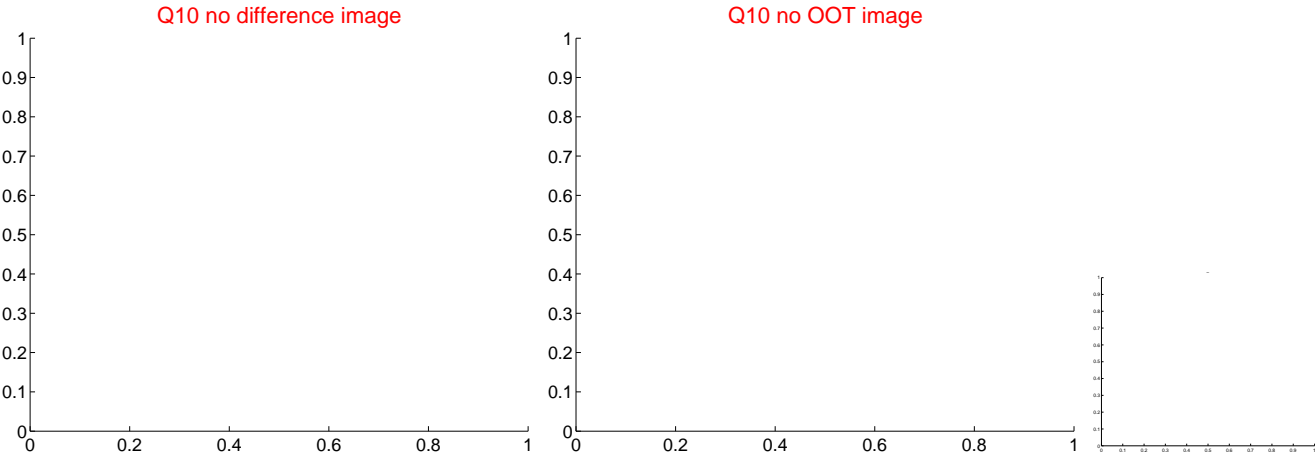
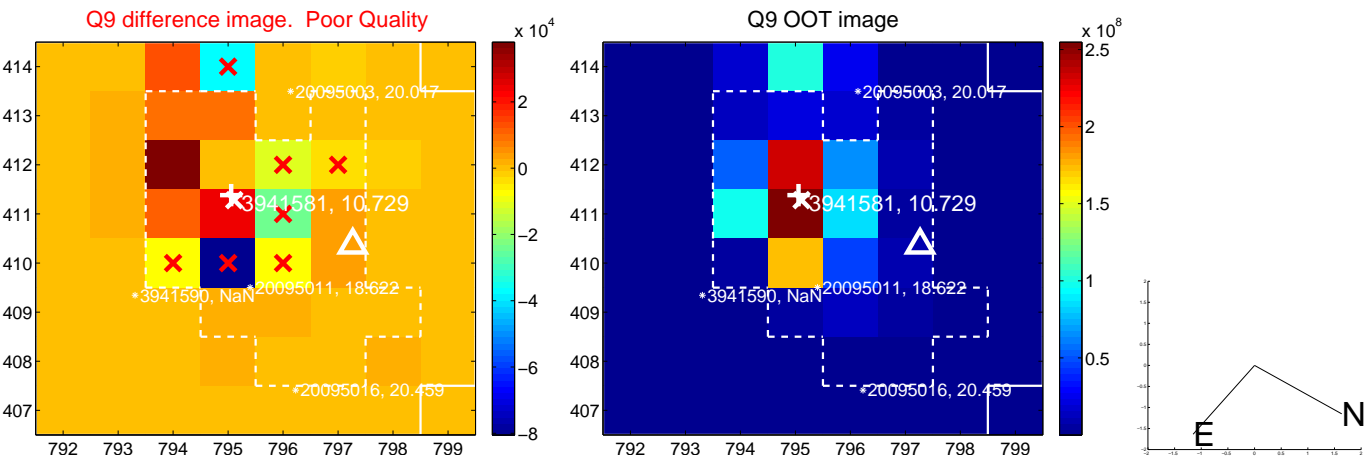
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



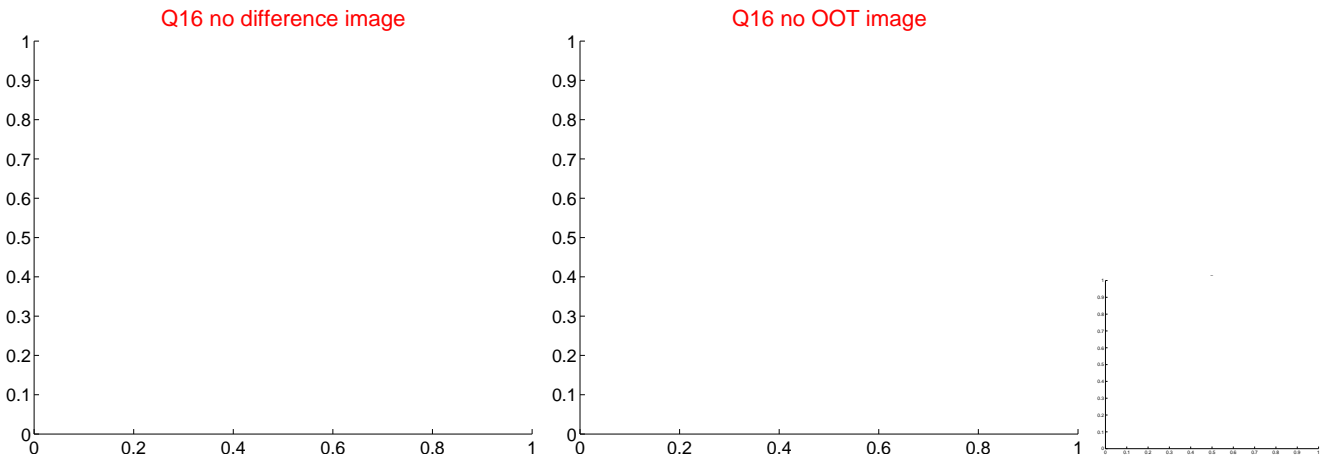
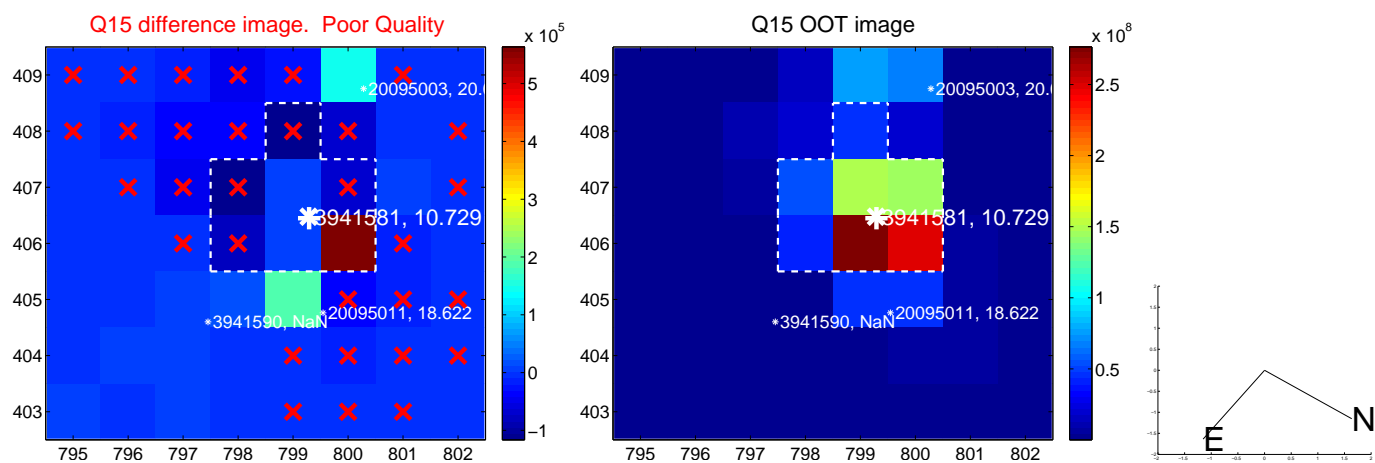
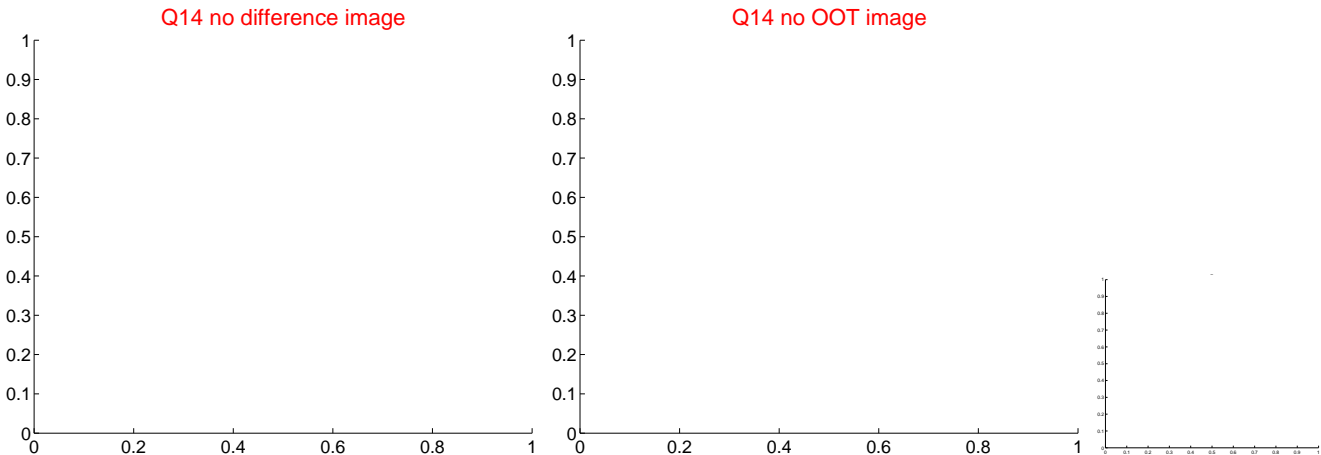
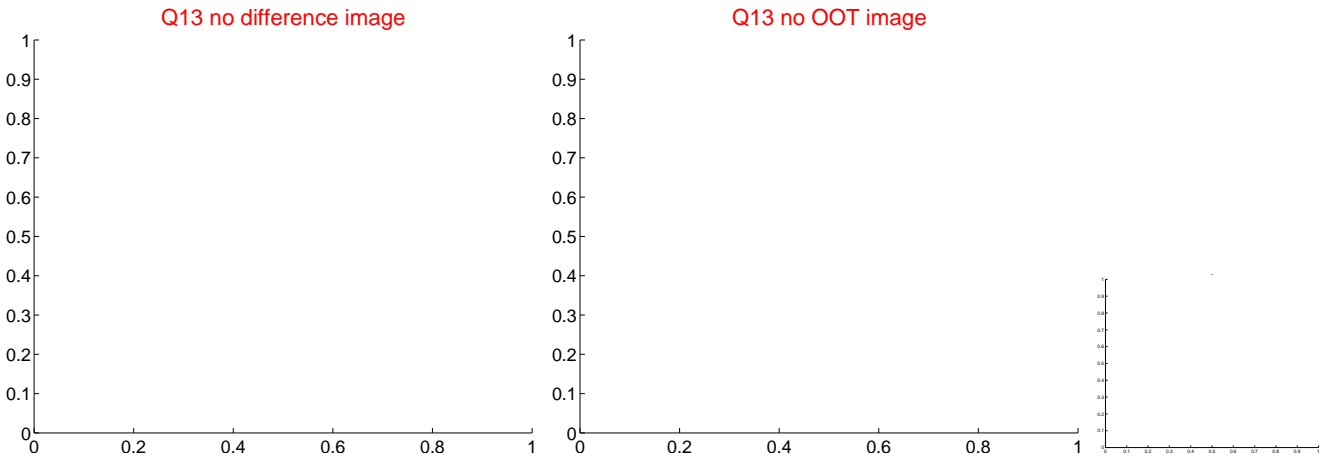
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



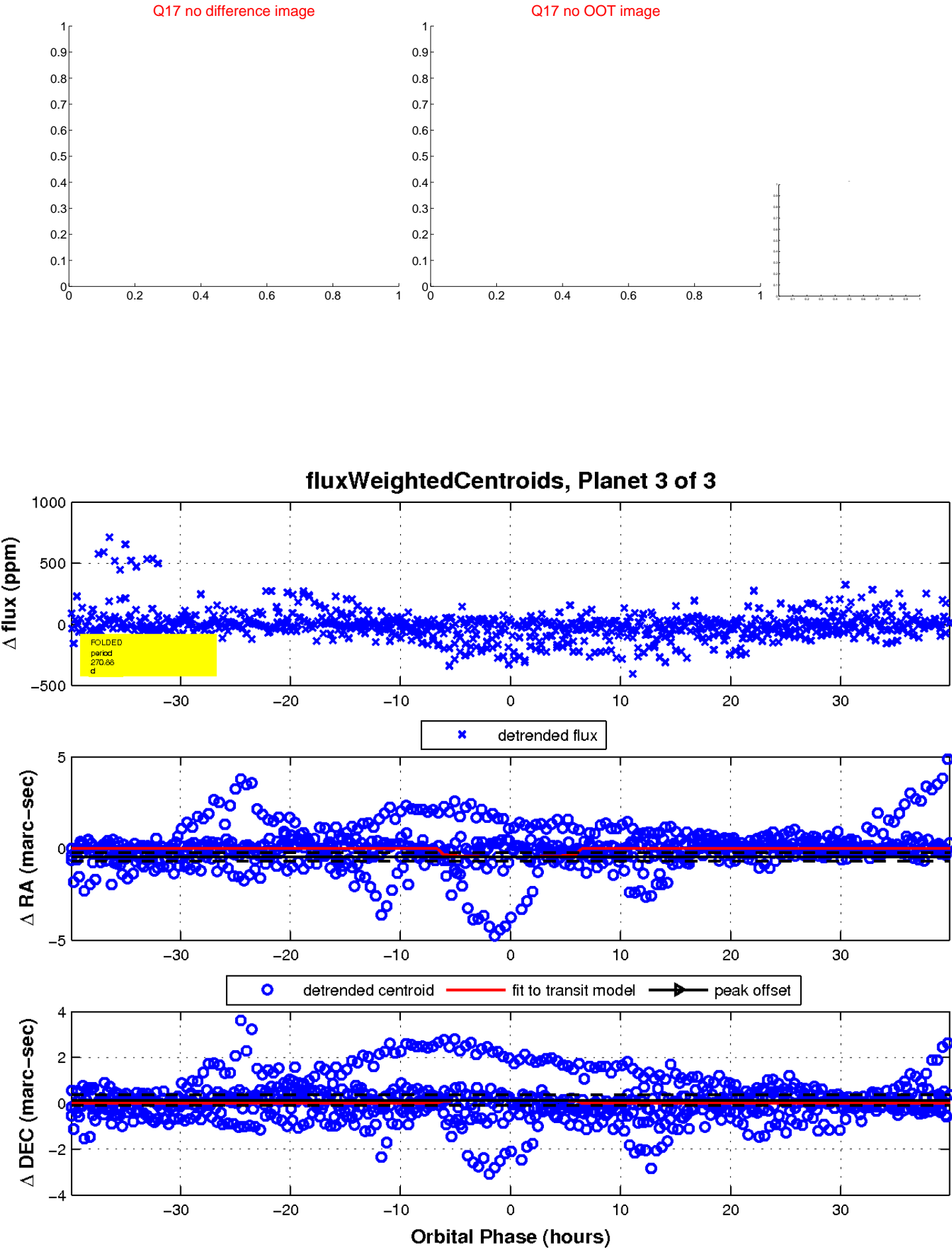
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

