

KIC 006962018

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})
006962018-01	OBS	6799.01	1.269904	132.068606	545914.8	2.399	7103.9	5620.8	0.74	4446	65.97	444.69
006962018-02	OBS	No	1.269888	132.710994	102394.2	1.500	7833.8	-1.0	0.74	4446	22.84	444.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006962018-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_SEC_DV—MOD_SEC_ALT—DEEP_V_SHAPED—HAS_SEC_TCE
006962018-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS

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.

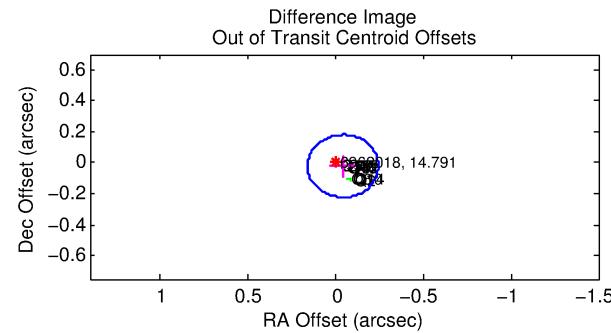
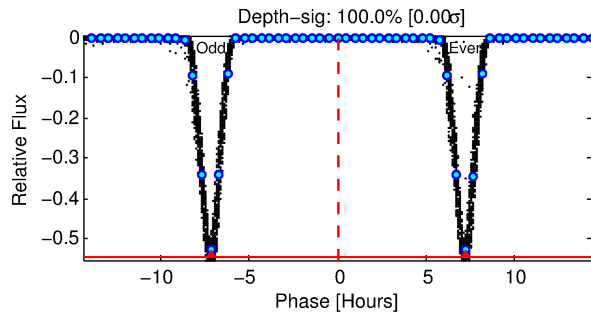
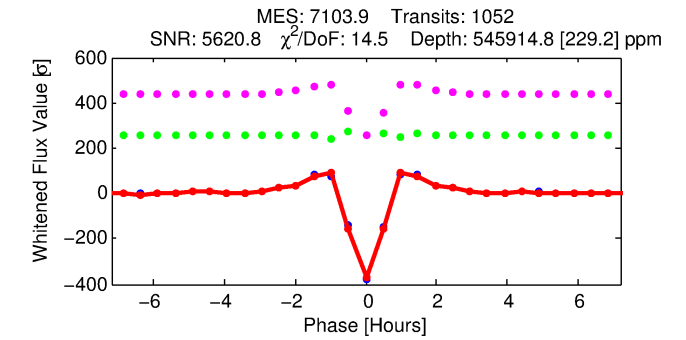
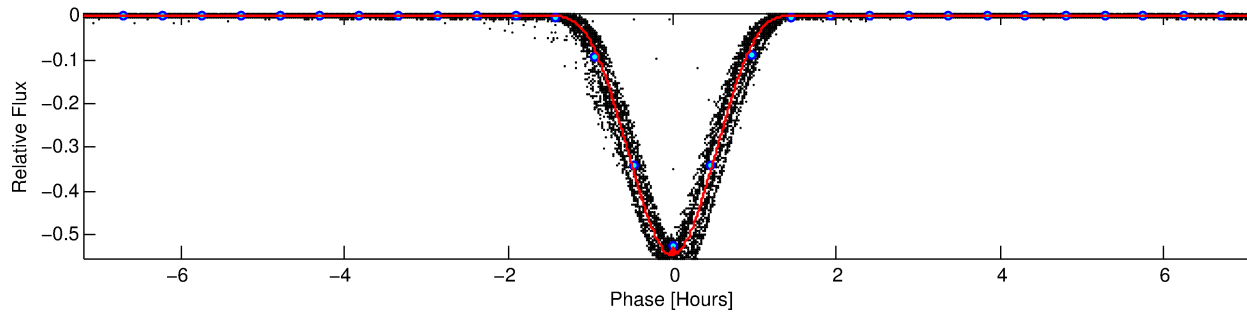
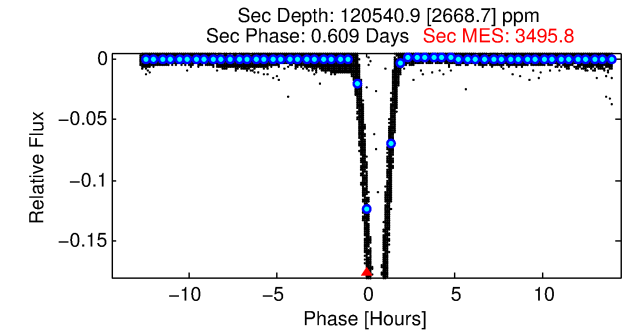
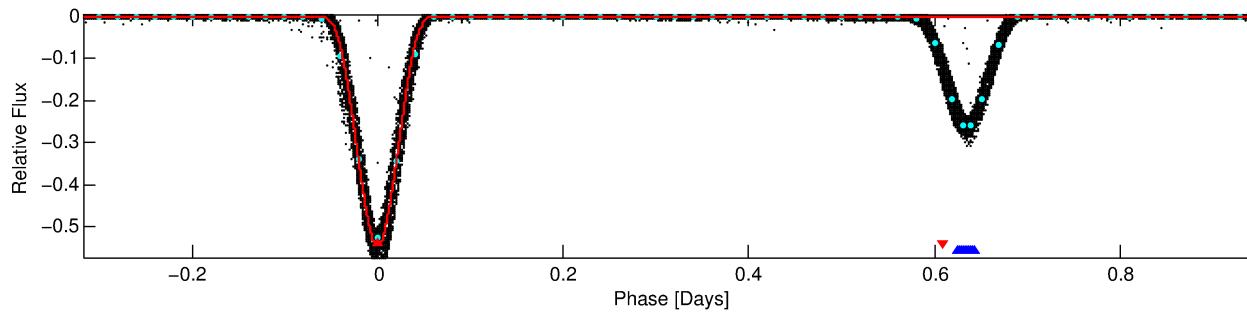
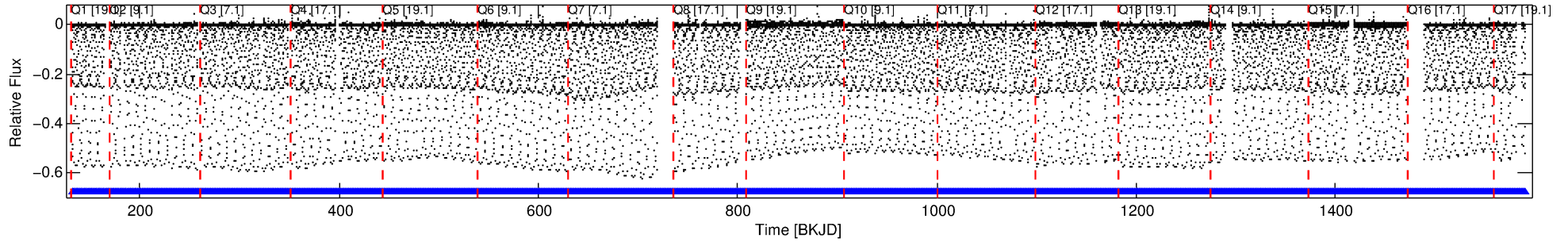
Ephemeris Match Information For 006962018-01

No Significant Match Found

DV One-Page Summary

KIC: 6962018 Candidate: 1 of 2 Period: 1.270 d
KOI: K06799 Corr: No Ephemeris Match

Kp: 14.79 R*: 0.74 Rs Teff: 4446.0 K Logg: 4.57 Fe/H: 0.360



DV Fit Results:

Period = 1.26990 [0.00000] d
Epoch = 132.0686 [0.0000] BKJD
Rp/R* = 0.8203 [0.0021]
a/R* = 7.17 [0.01]
b = 0.50 [0.00]
Seff = 444.69 [78.20]
Teff = 1171 [51] K
Rp = 65.97 [5.64] Re
a = 0.0207 [0.0015] AU
Ag = 6.52 [0.72] [7.65σ]
Teffp = 2892 [102] K [15.12σ]

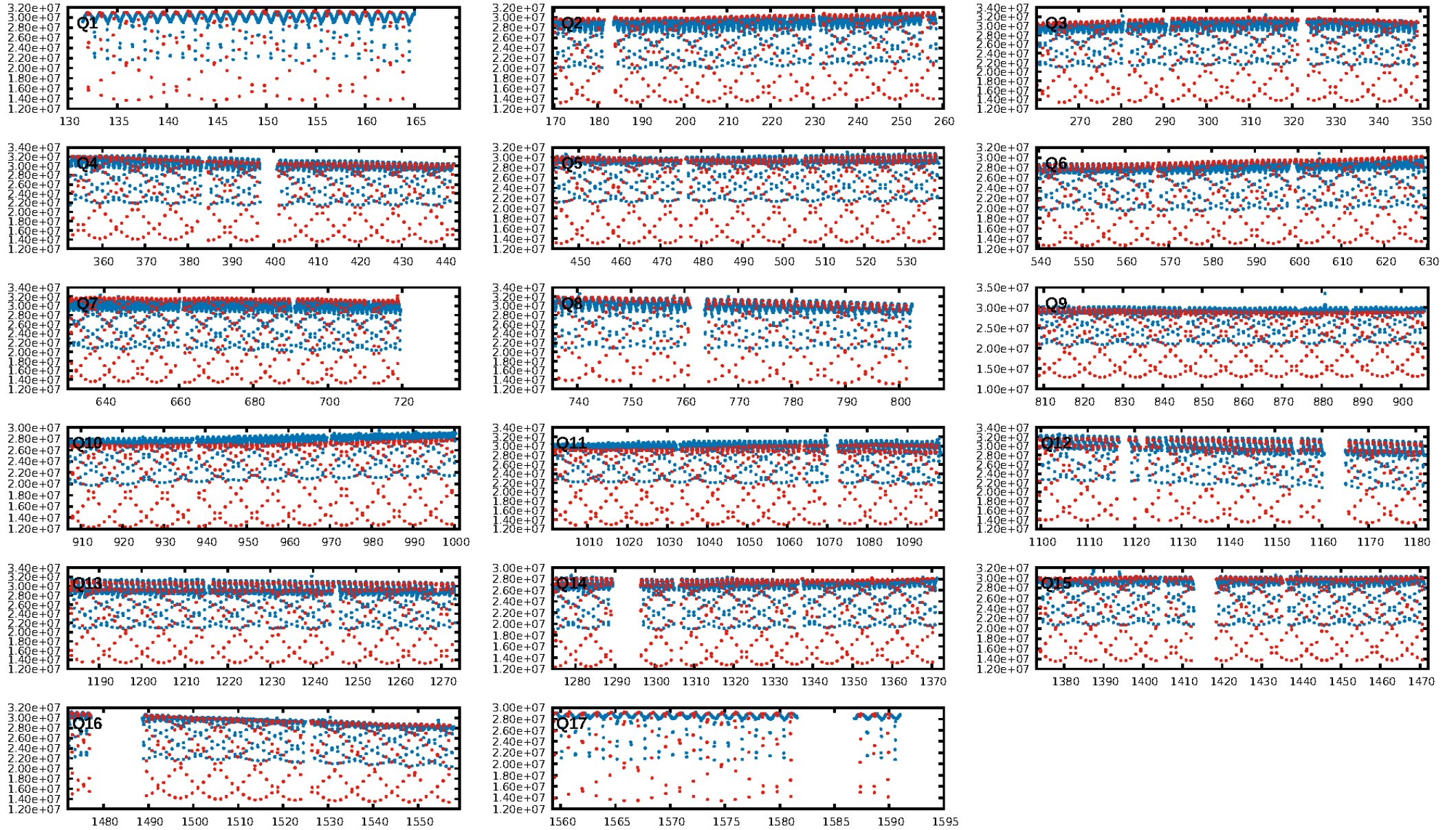
DV Diagnostic Results:

ShortPeriod-sig: 0.0% [0.00σ]
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1005/1005]
GhostDiagnostic-chr: 1.344
Centroid-sig: N/A
Centroid-so: 0.373 arcsec [914.41σ]
OotOffset-rm: 0.047 arcsec [0.70σ]
KicOffset-rm: 0.321 arcsec [4.74σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
DiffImageOverlap-fno: 1.00 [17/17]

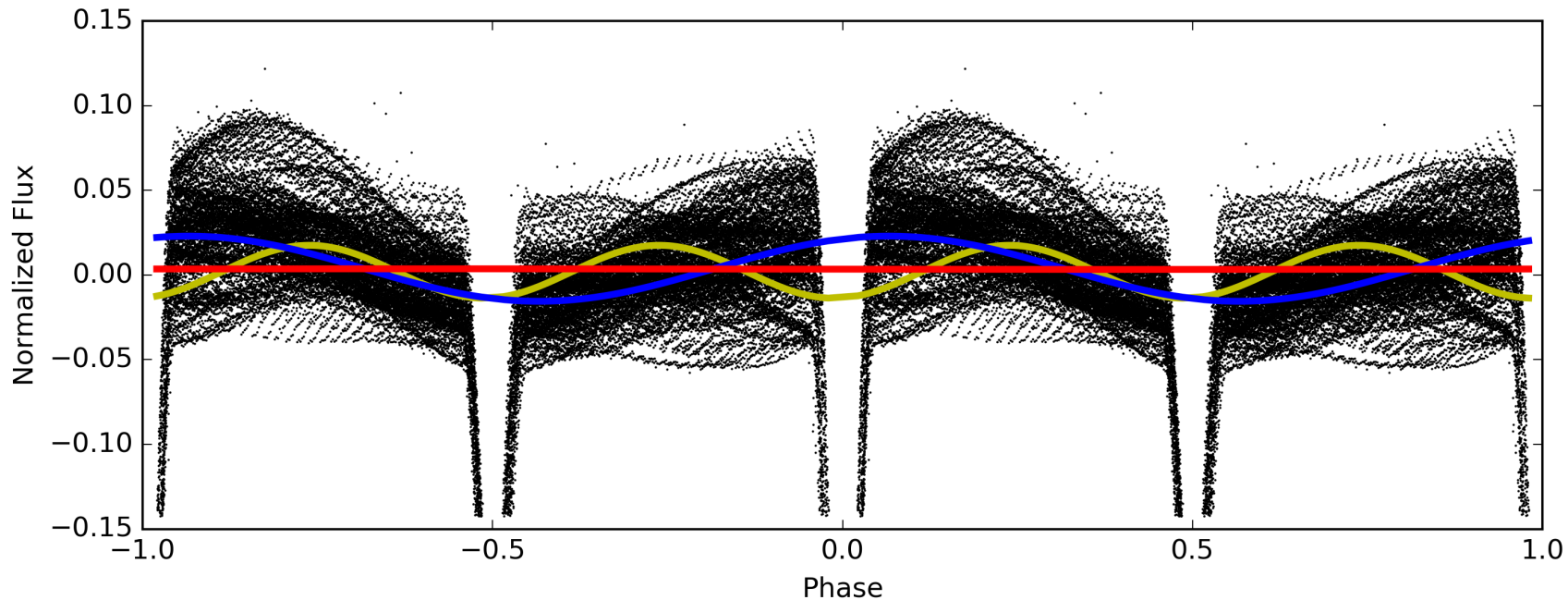
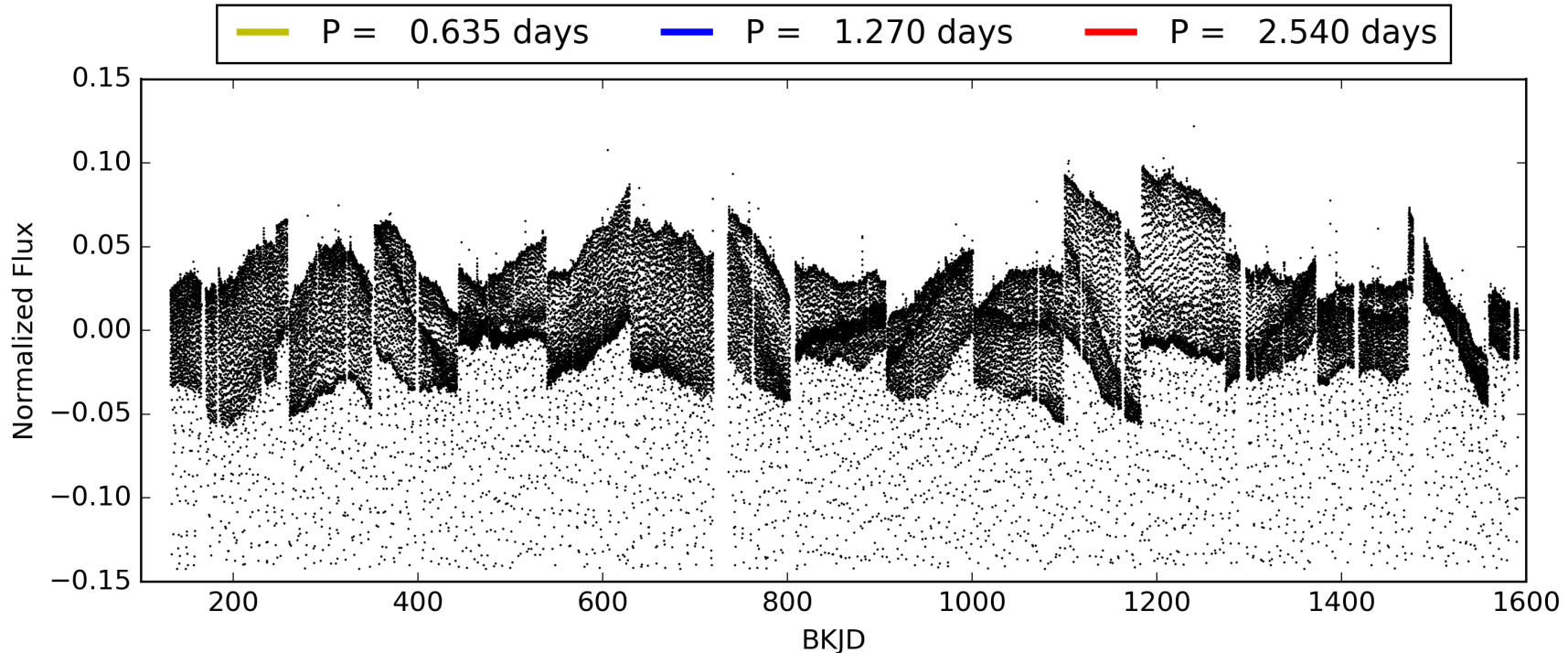
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 09:39:25 Z

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

TCE 006962018-01, PDC Light Curves

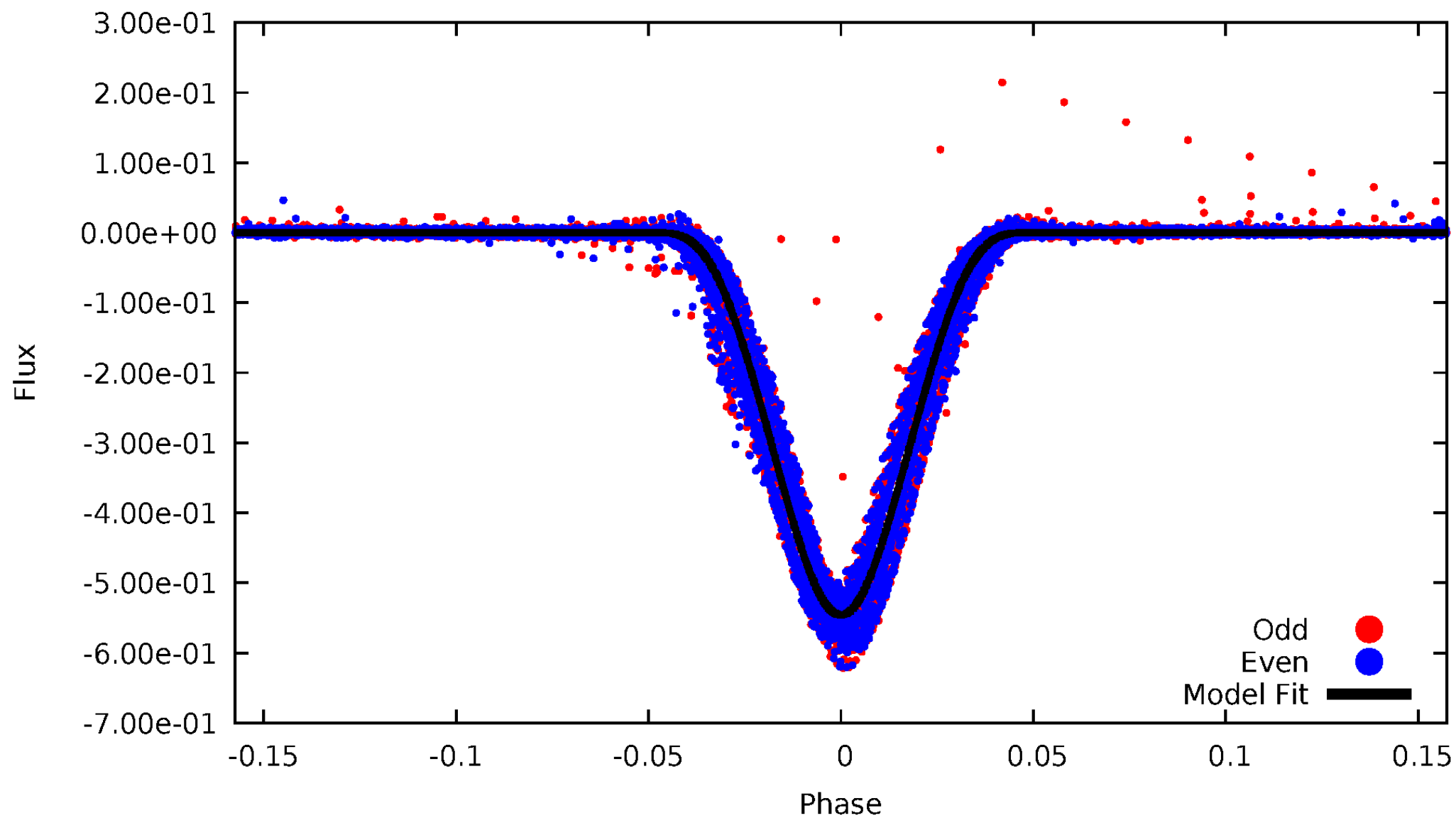


TCE 006962018-01



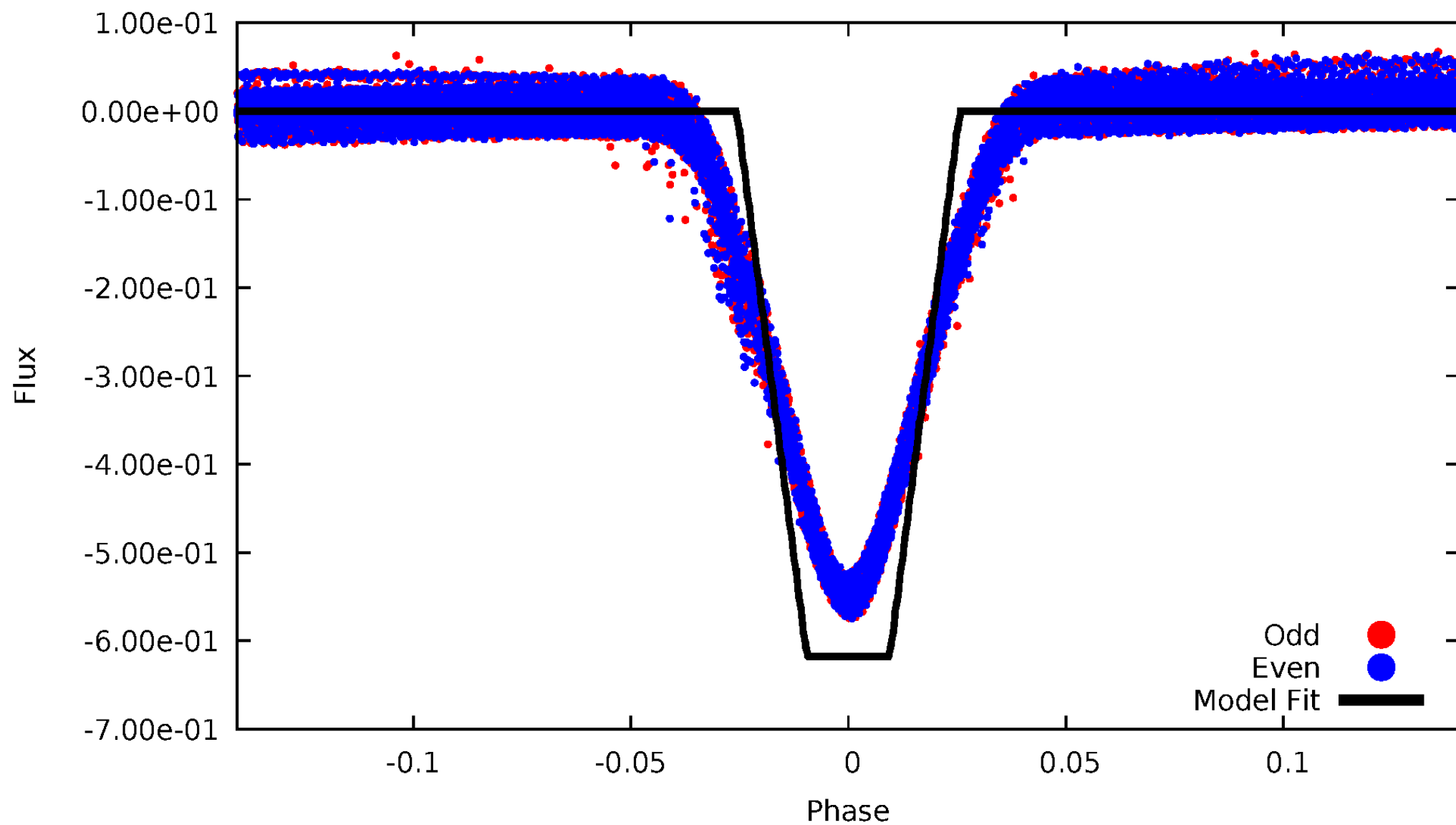
DV Odd/Even

TCE 006962018-01



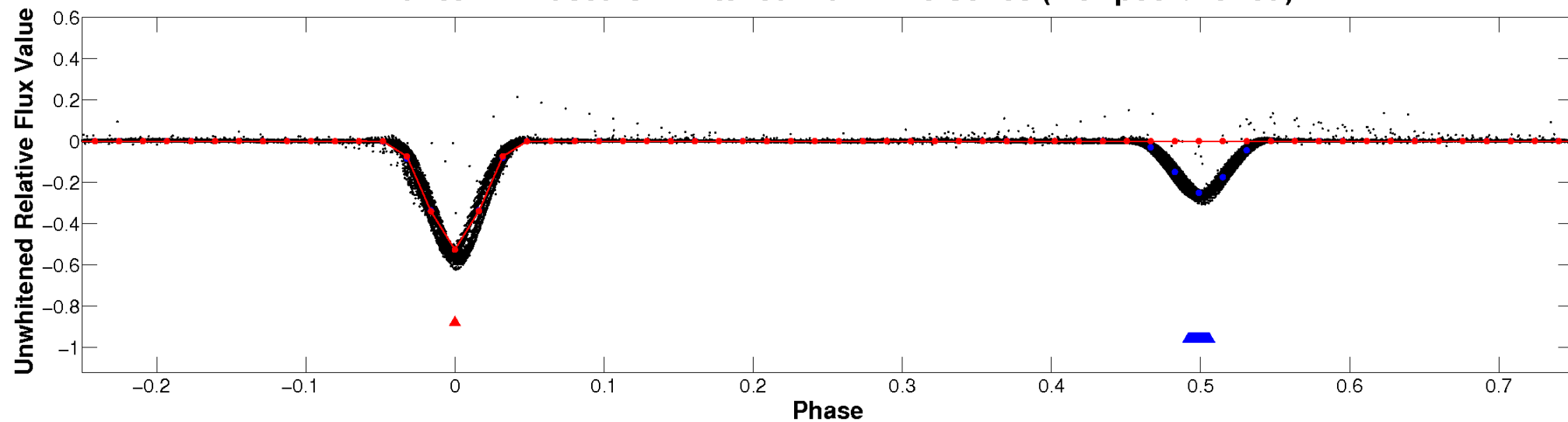
ALT Odd/Even

TCE 006962018-01

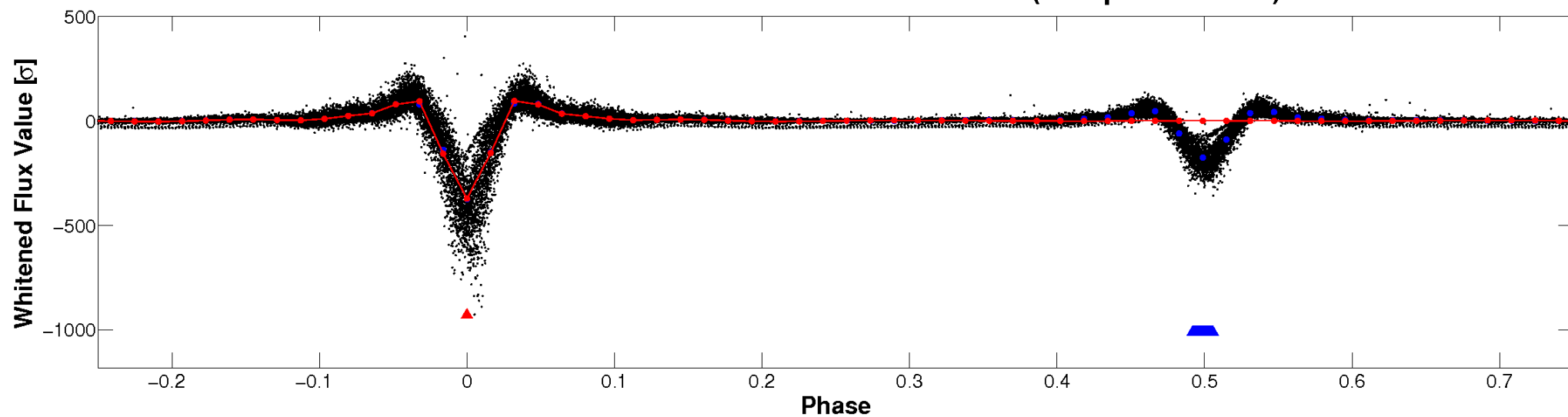


Non-Whitened Vs. Whitened Light Curve

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

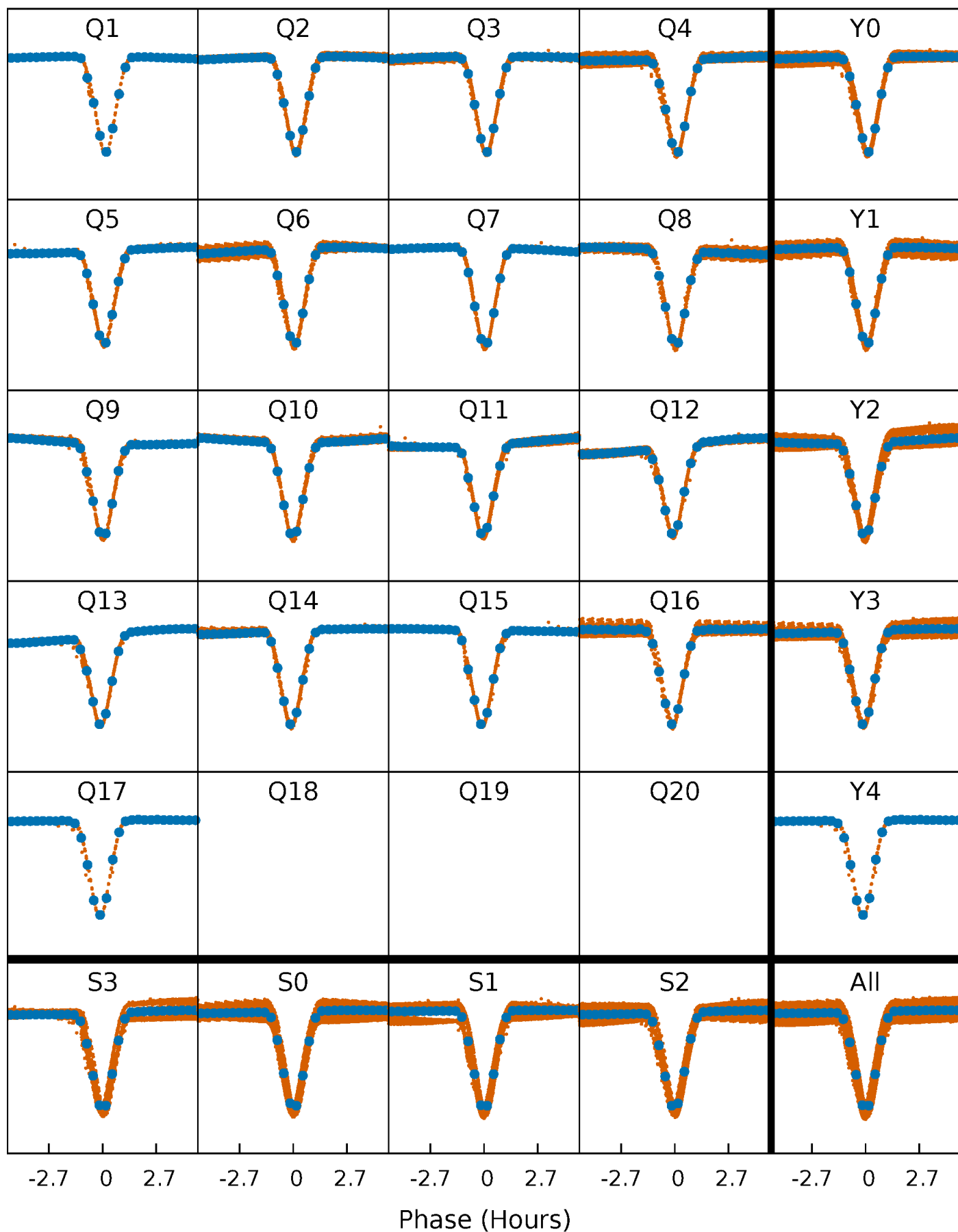


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



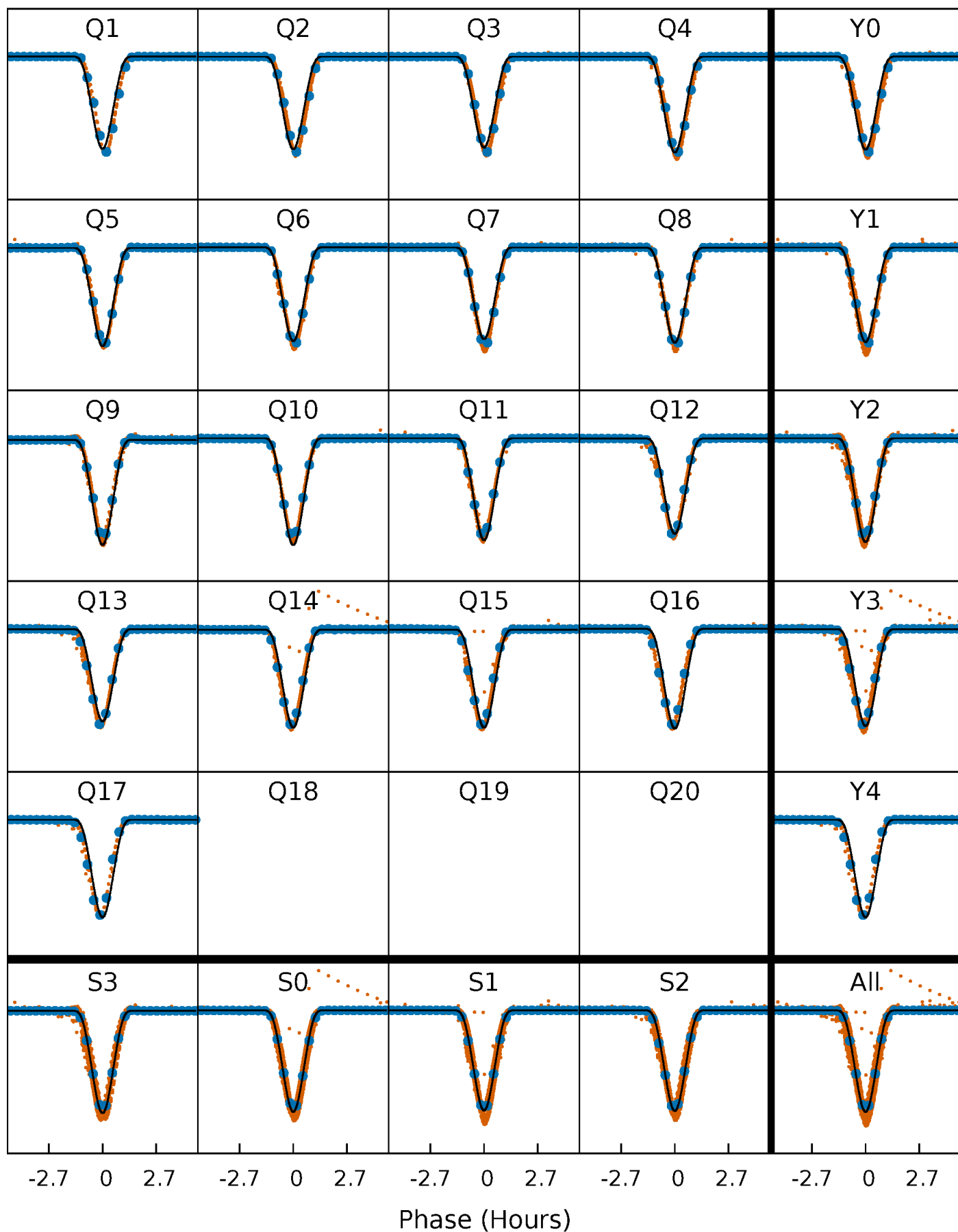
PDC Quarter-Phased Transit Curves

TCE 006962018-01 P= 1.269904 Days $T_0=132.068606$ (BKJD)



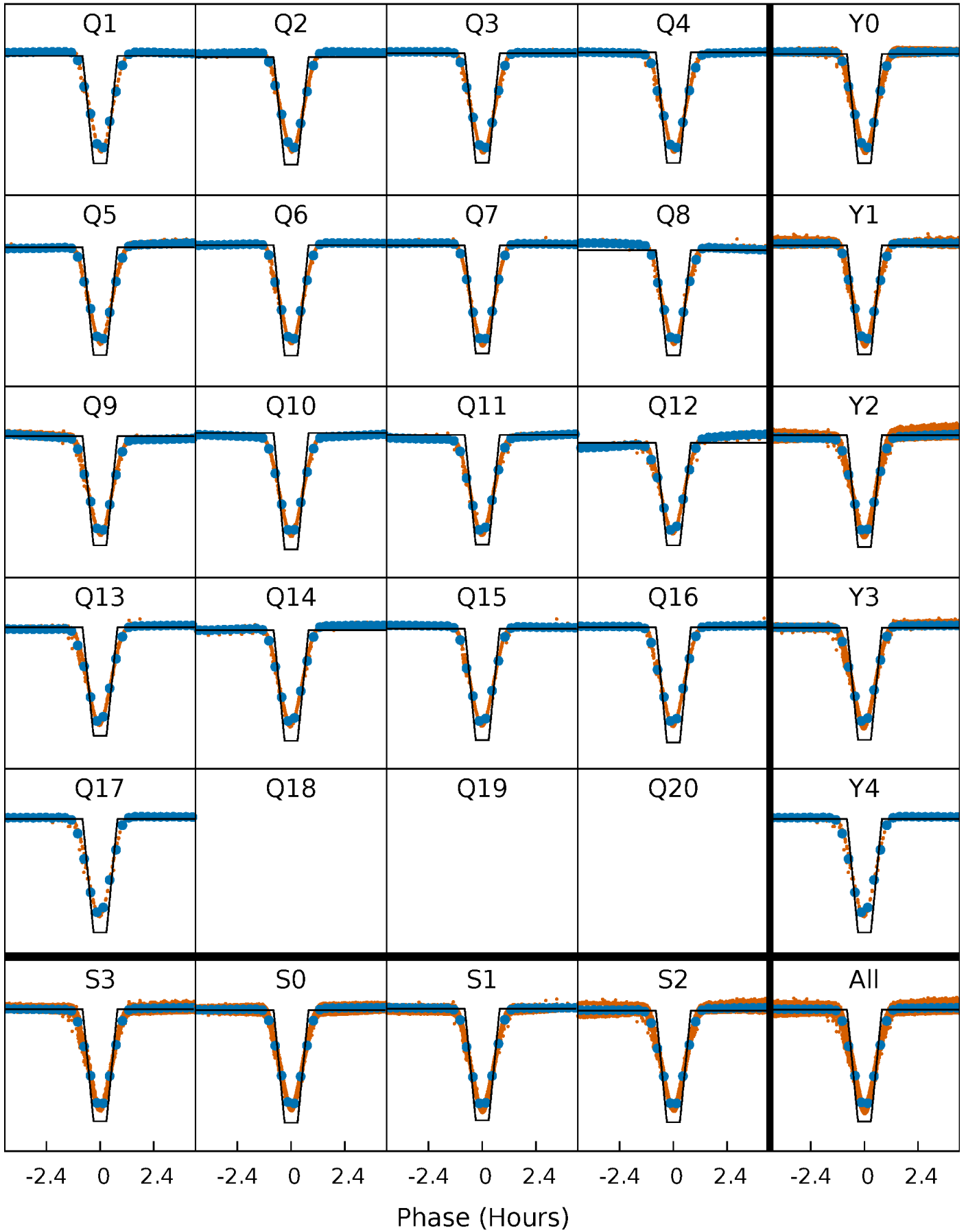
DV Quarter-Phased Transit Curves

TCE 006962018-01 P= 1.269904 Days $T_0=132.068606$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

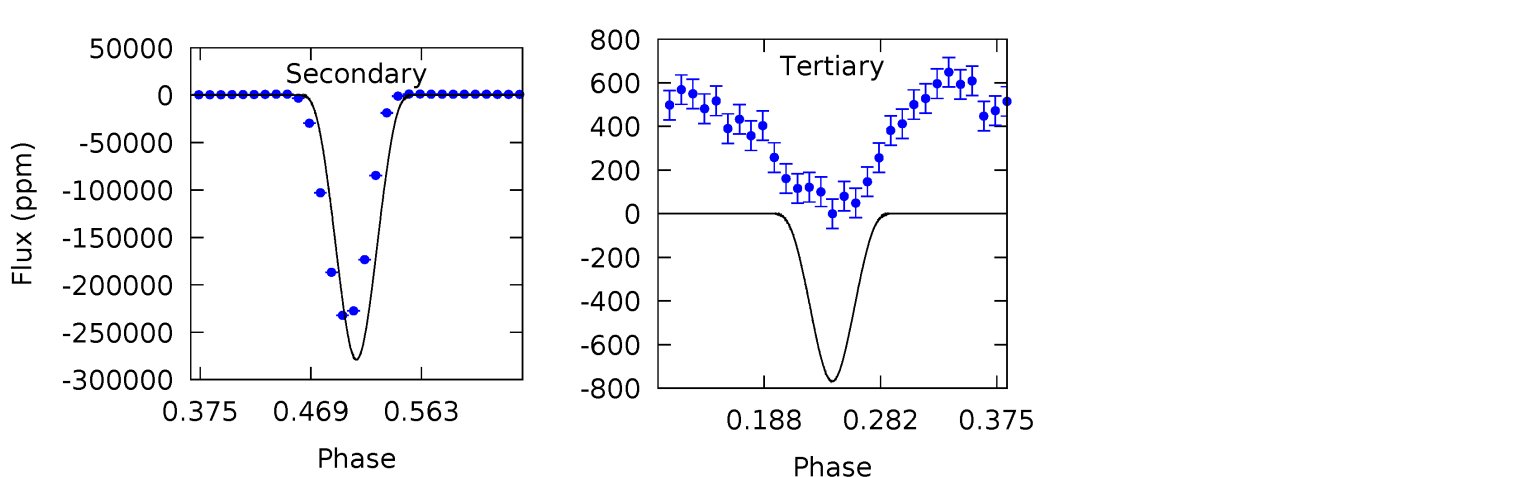
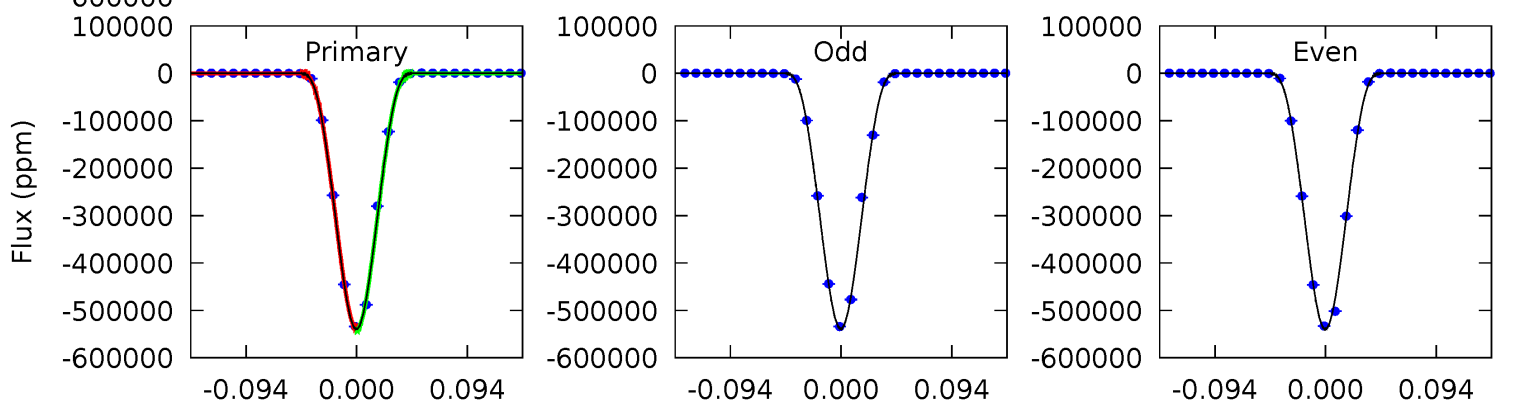
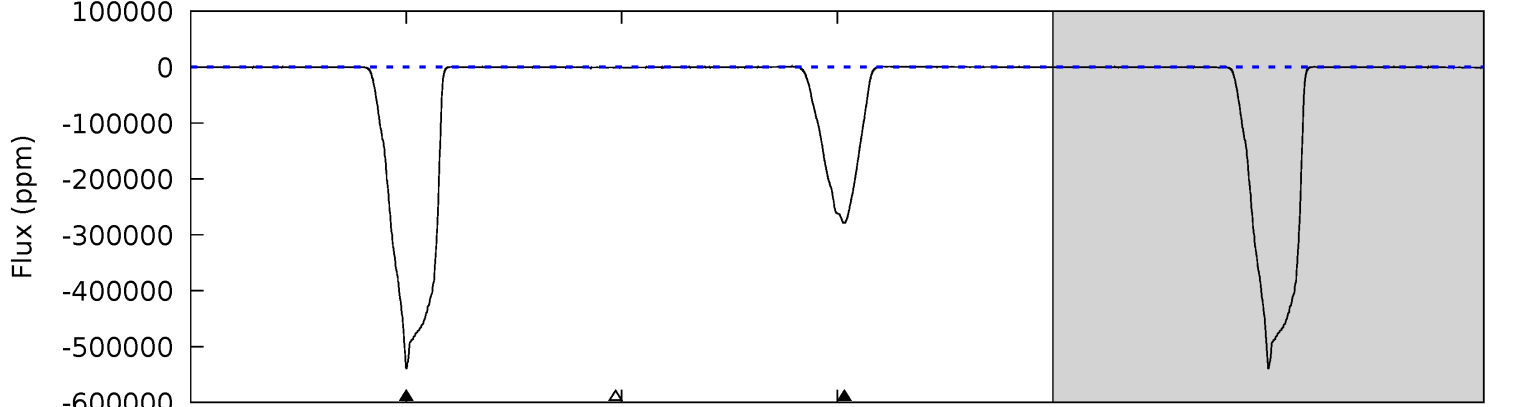
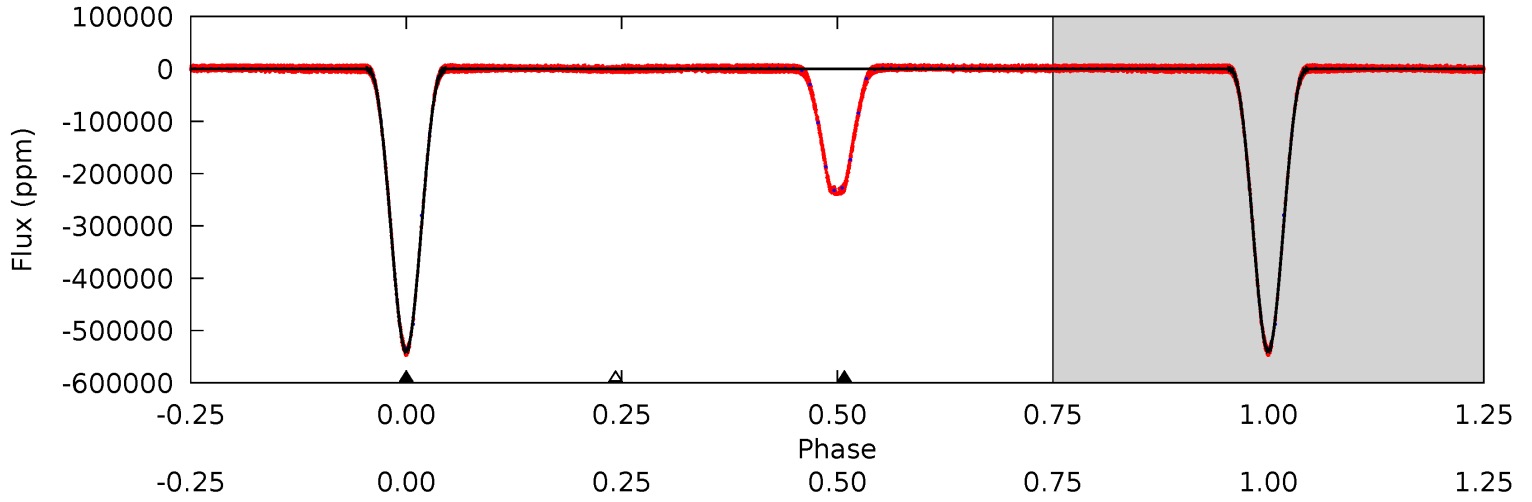
TCE 006962018-01 P= 1.269896 Days $T_0=132.072719$ (BKJD)



DV Model-Shift Uniqueness Test

006962018-01, P = 1.269904 Days, E = 130.798702 Days

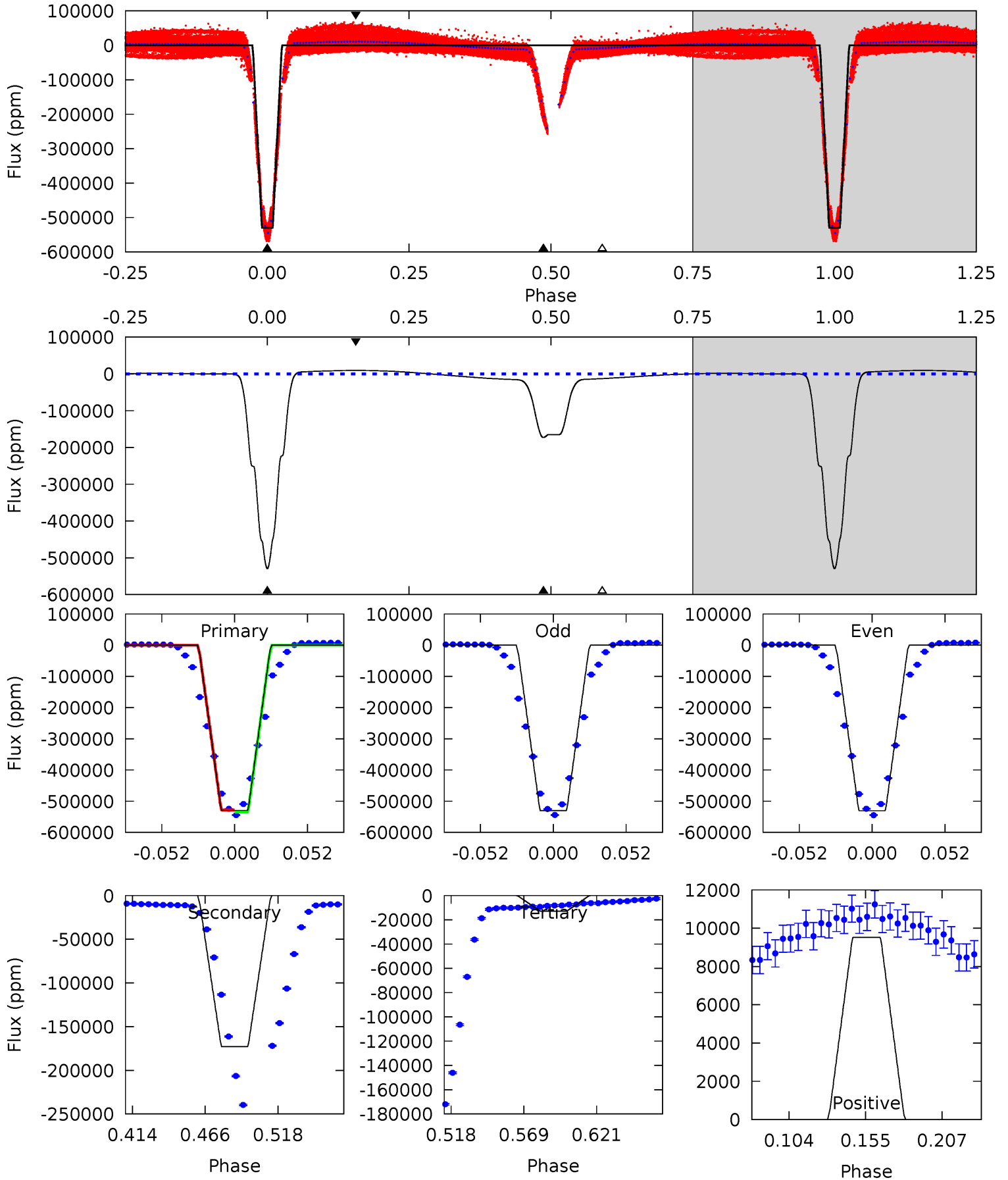
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10745	5552	15.3	0	4.58	1.68	5.79	10729	10745	5537	5552	8.67	1.00	0.00	43.0



Alt Model-Shift Uniqueness Test

006962018-01, P = 1.269896 Days, E = 130.802823 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1822	594.9	44.0	32.7	4.70	1.95	27.2	1778	1789	551.0	562.2	0.07	1.00	0.02	11.9



Stellar Parameters For KIC 006962018

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4446^{+154}_{-154}	$4.567^{+0.060}_{-0.016}$	$0.360^{+0.100}_{-0.300}$	$0.737^{+0.024}_{-0.063}$	$0.729^{+0.041}_{-0.050}$	$2.571^{+0.691}_{-0.184}$
	+3%/-3%	+1%/-0%	+28%/-83%	+3%/-9%	+6%/-7%	+27%/-7%
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 006962018-01 / KOI 6799.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-278842 ± 50	$65.57^{+1.82}_{-3.10}$	1622^{+62}_{-60}	4007^{+119}_{-132}	21^{+2}_{-1}
Alt.	-172954 ± 291	$62.98^{+1.48}_{-3.29}$	1623^{+60}_{-66}	3657^{+109}_{-121}	13^{+1}_{-1}

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

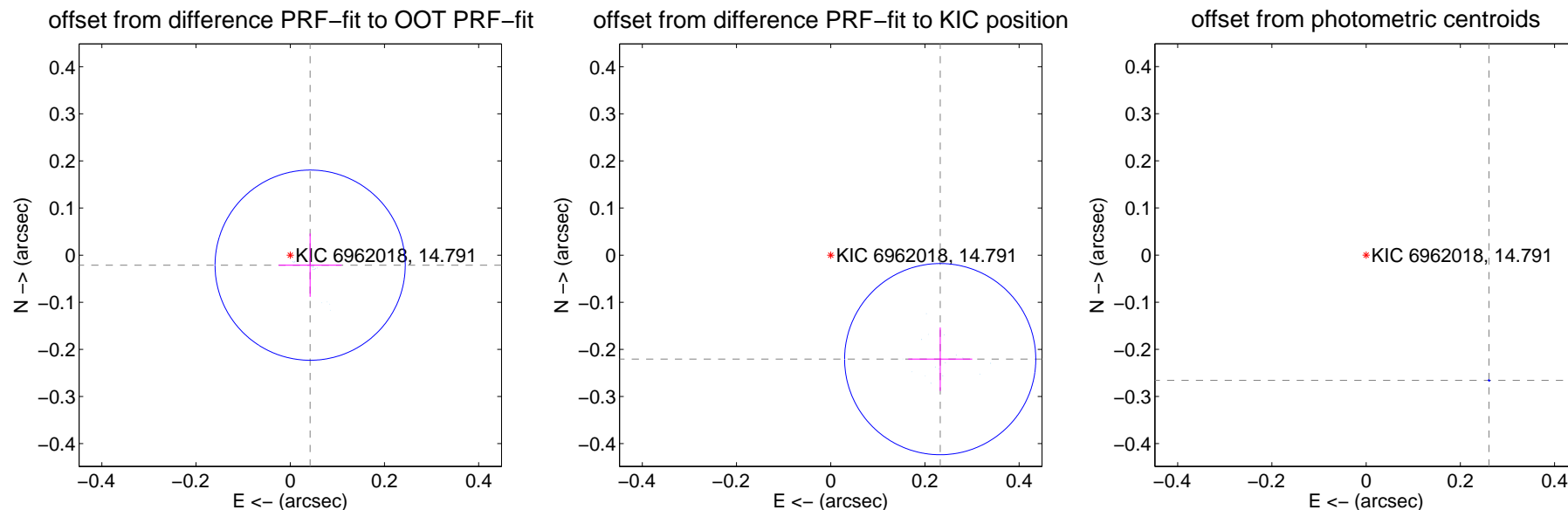
DV Centroid Data

Supplemental centroid analysis for 006962018-01. Kepler magnitude: 14.79. Transit SNR 5620.83

There are 17 quarters with good PRF difference image offsets

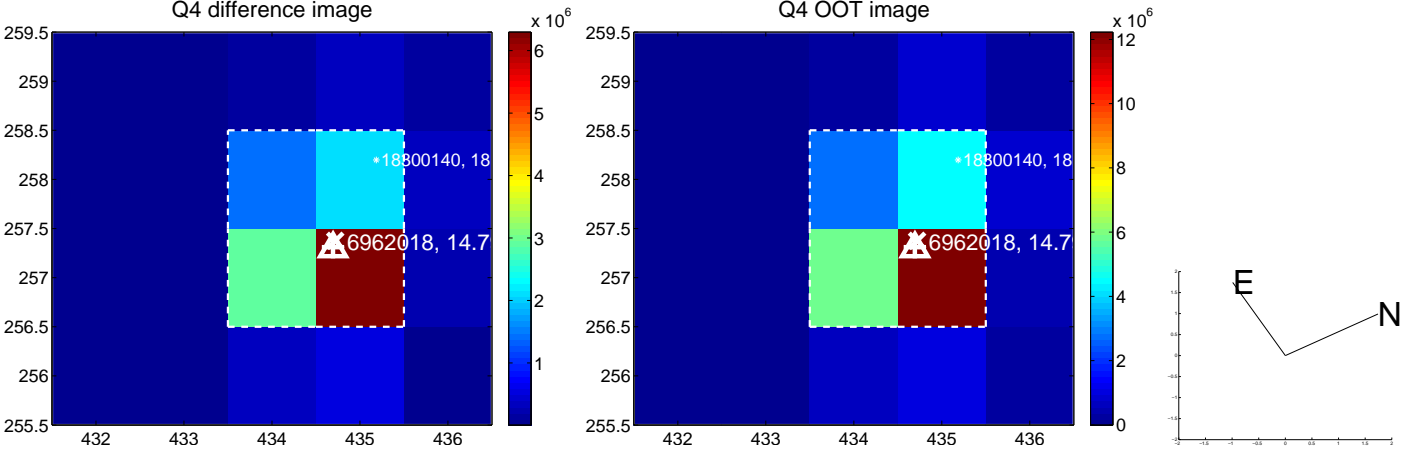
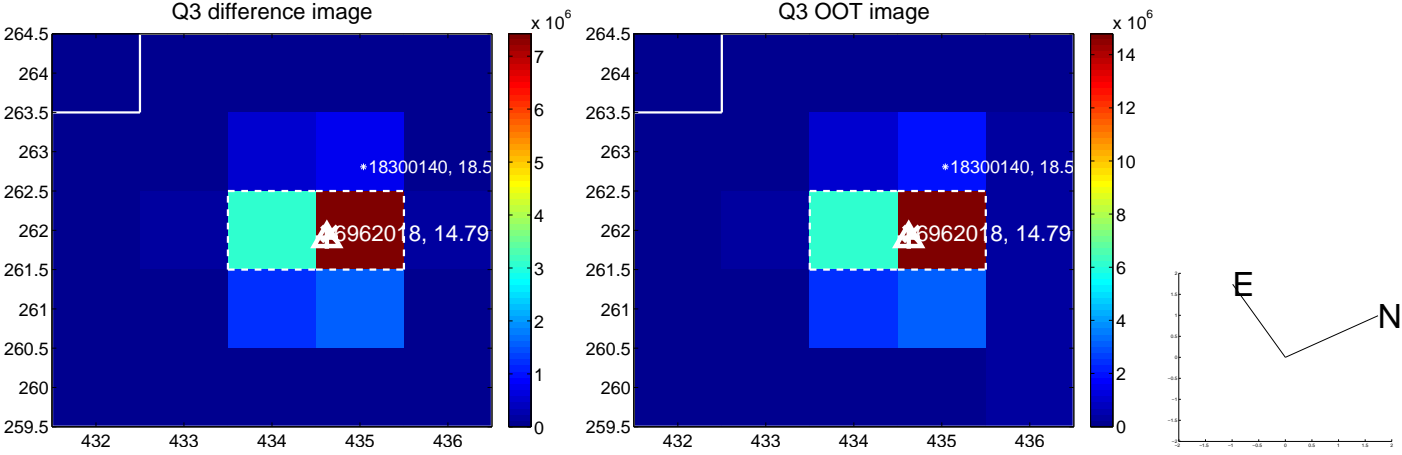
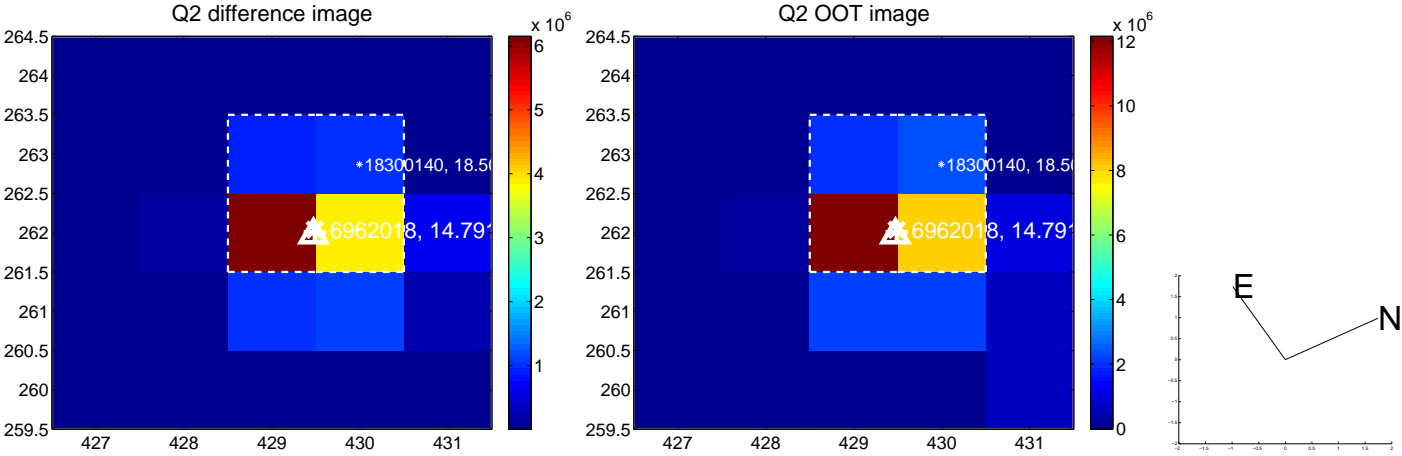
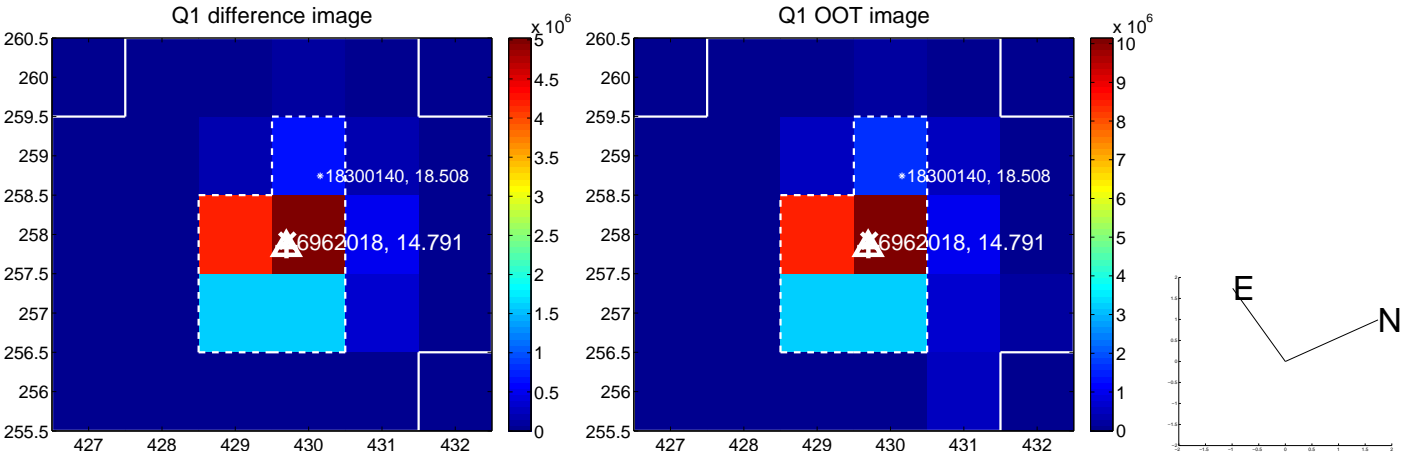
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.047 ± 0.067	0.70	-0.042 ± 0.067	-0.021 ± 0.067
PRF-fit source offset from KIC position	0.321 ± 0.068	4.74	-0.232 ± 0.068	-0.221 ± 0.067
photometric centroid source offset	0.37 ± 0.00	914.41	-0.26 ± 0.00	-0.27 ± 0.00

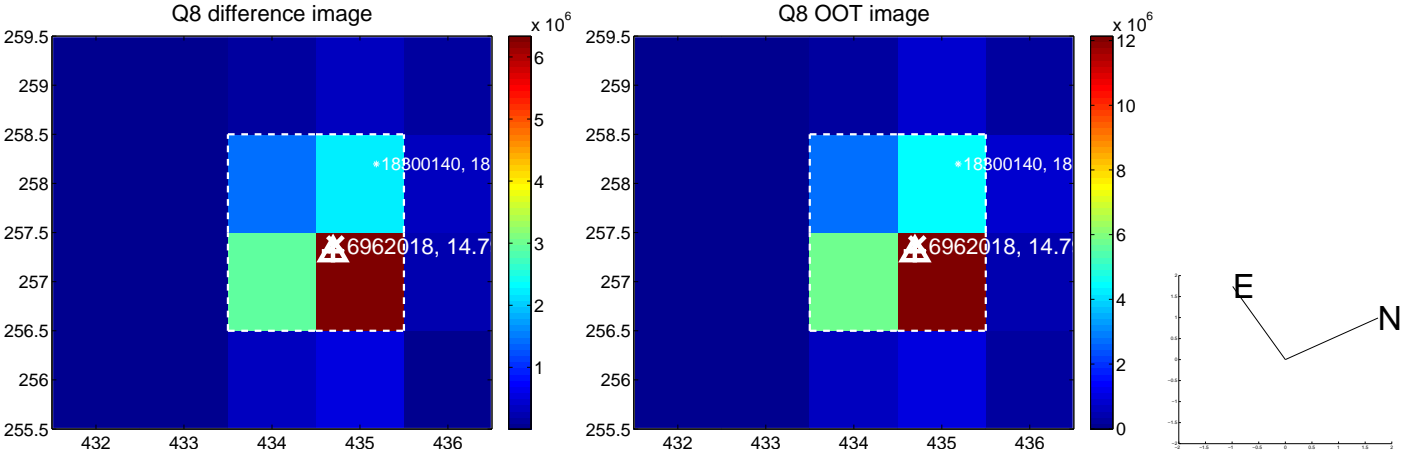
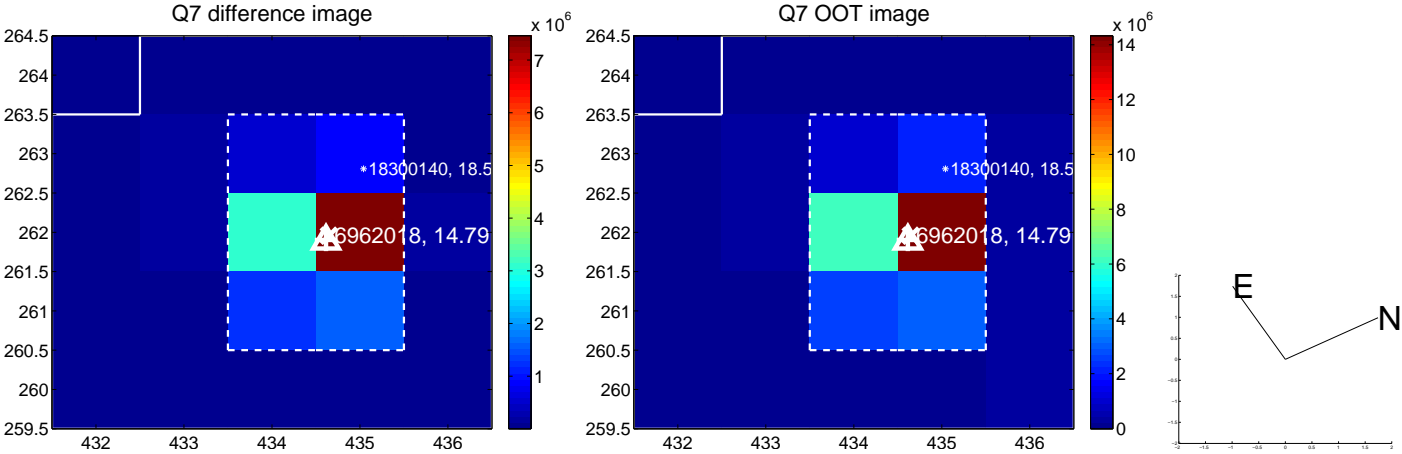
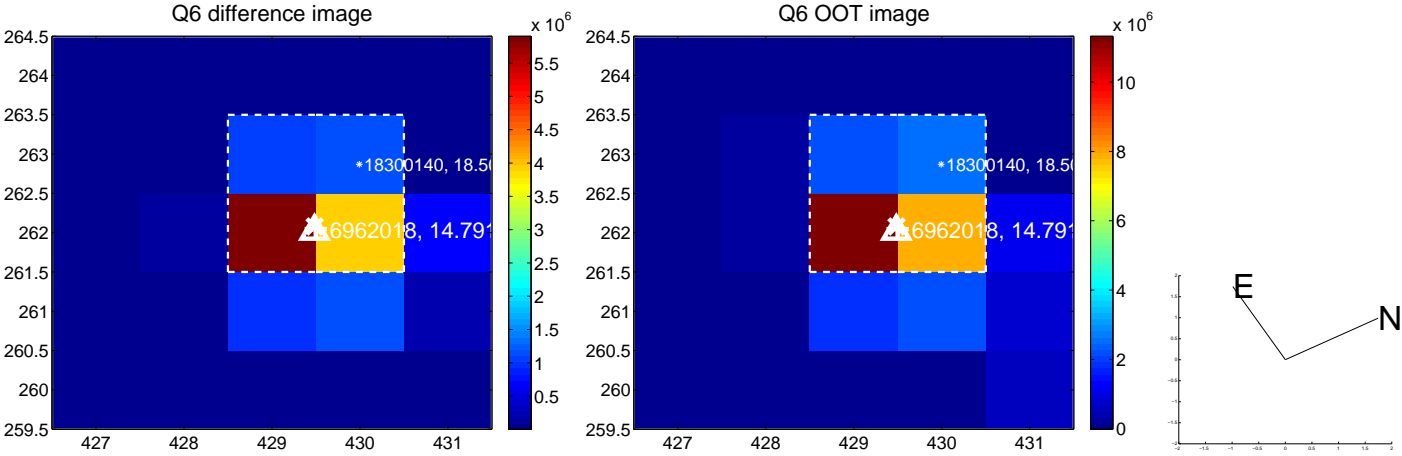
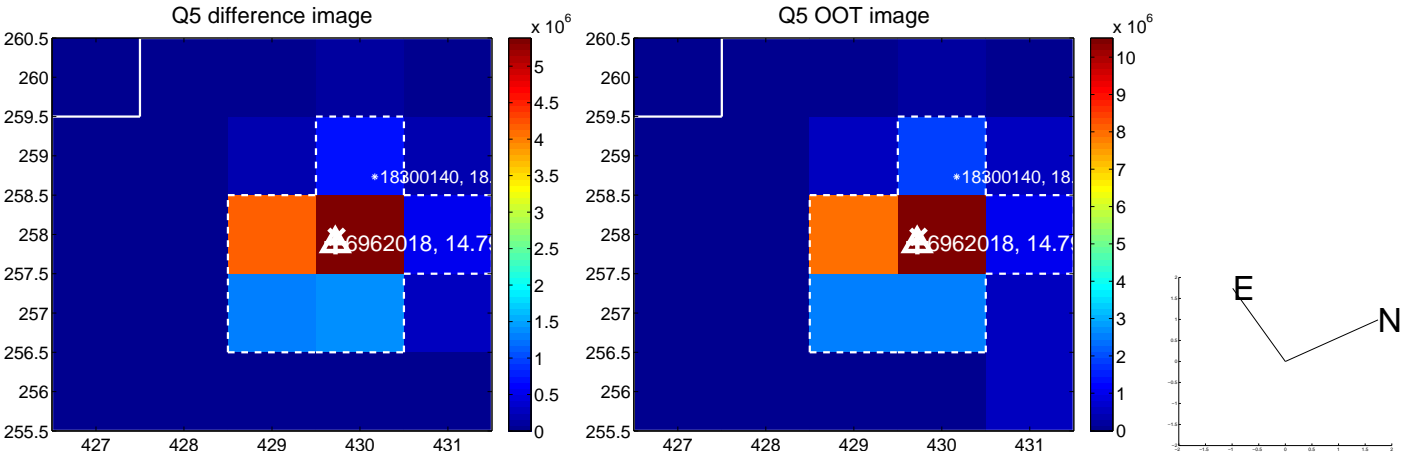


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

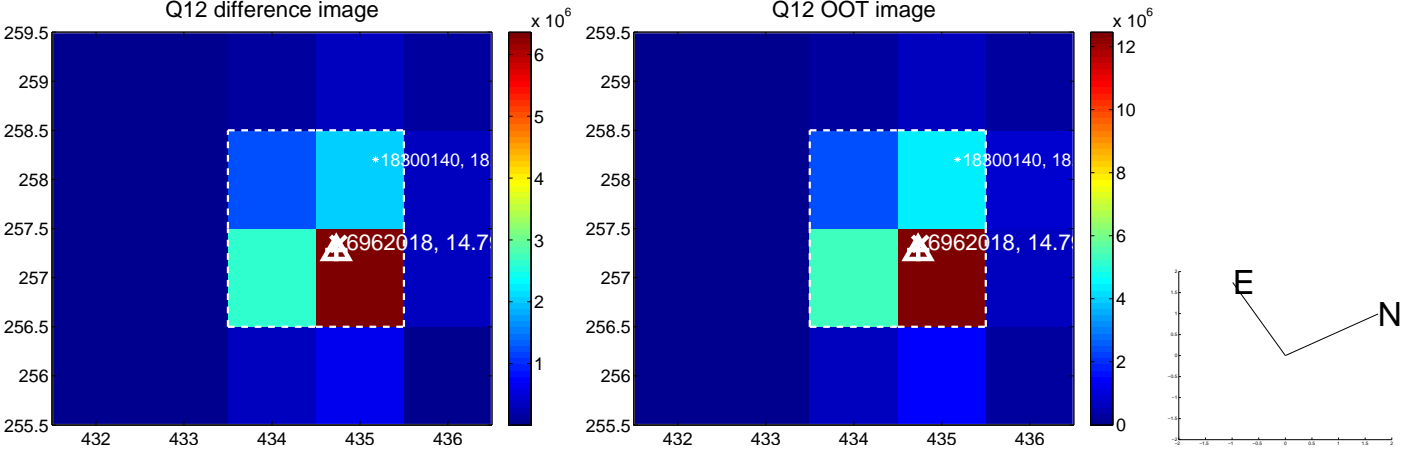
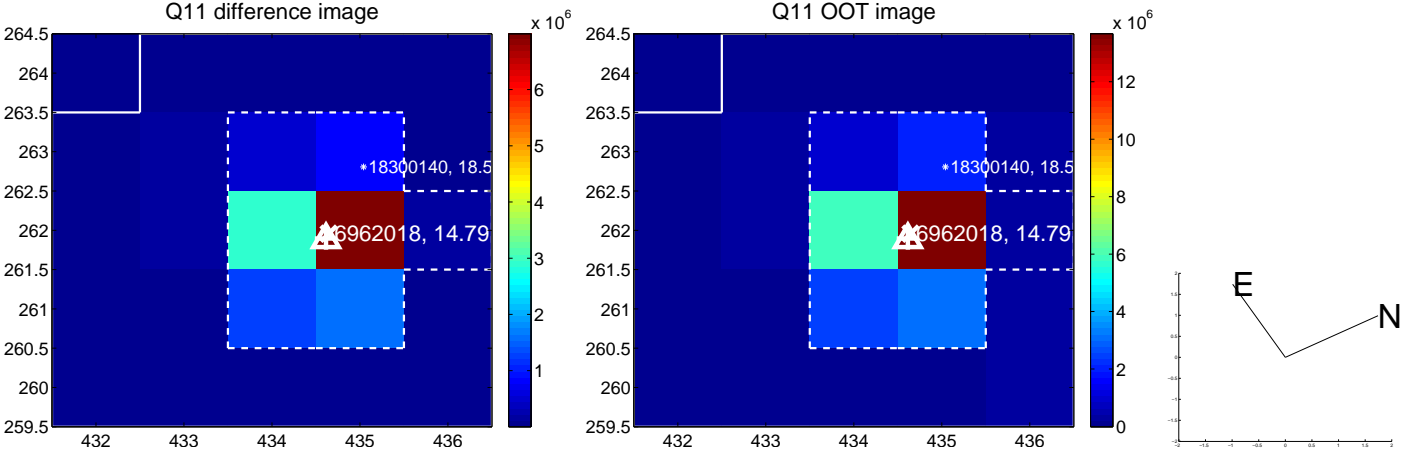
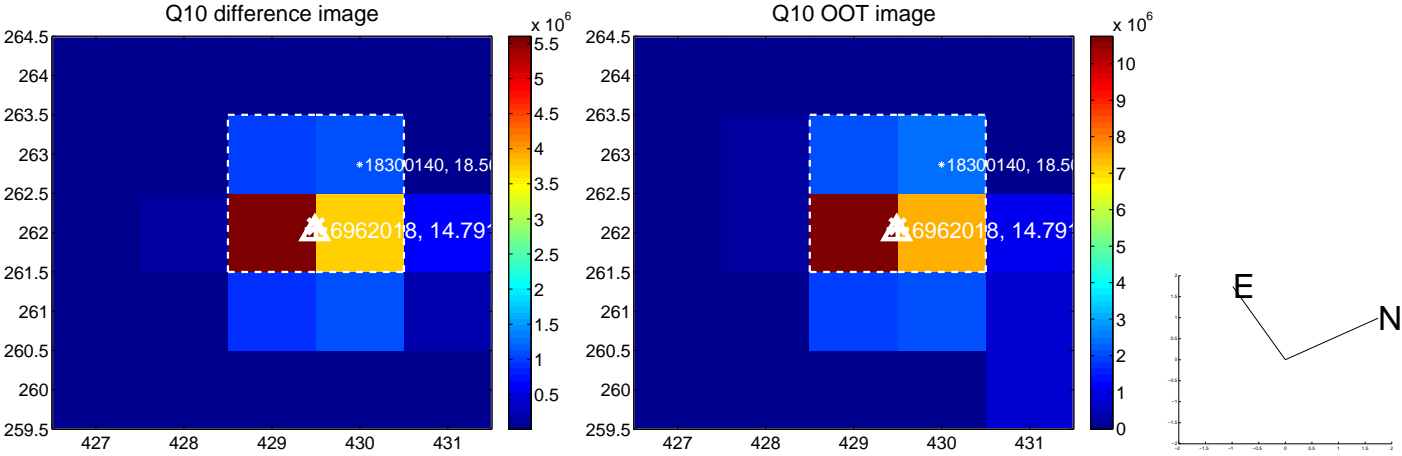
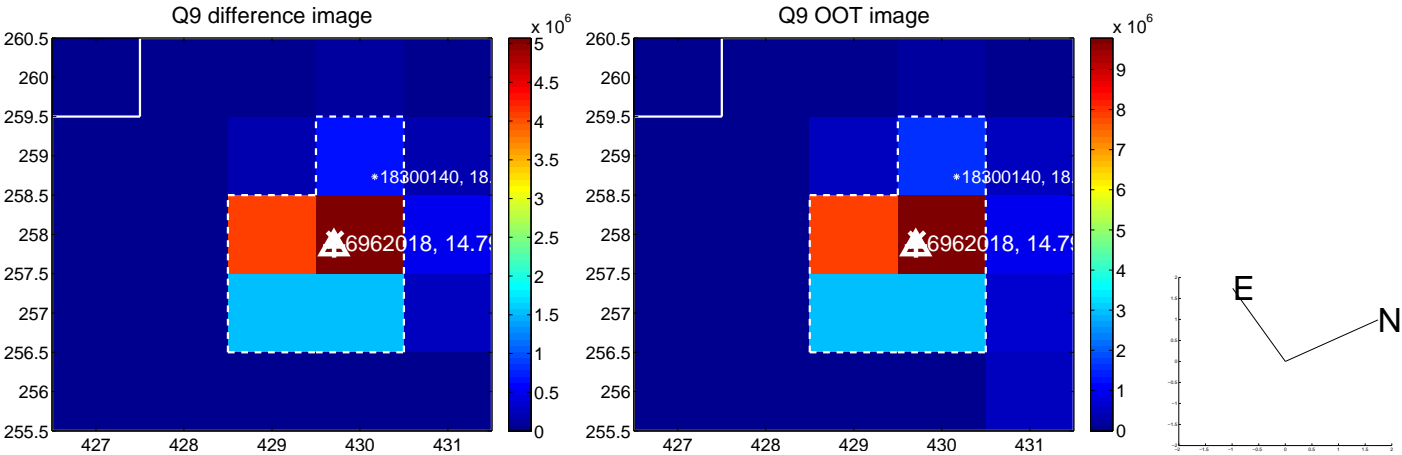
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



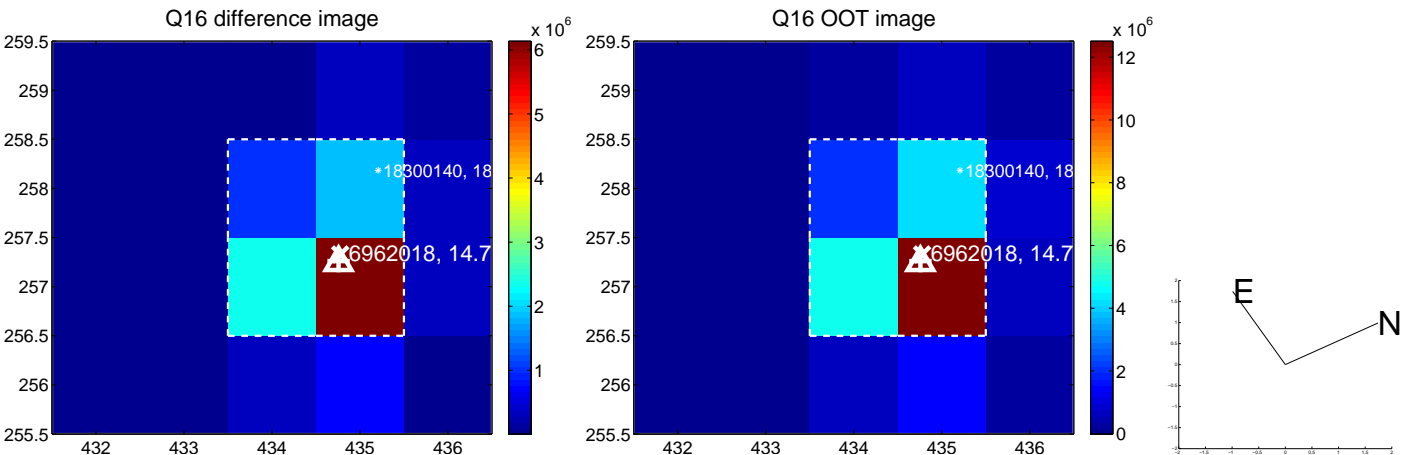
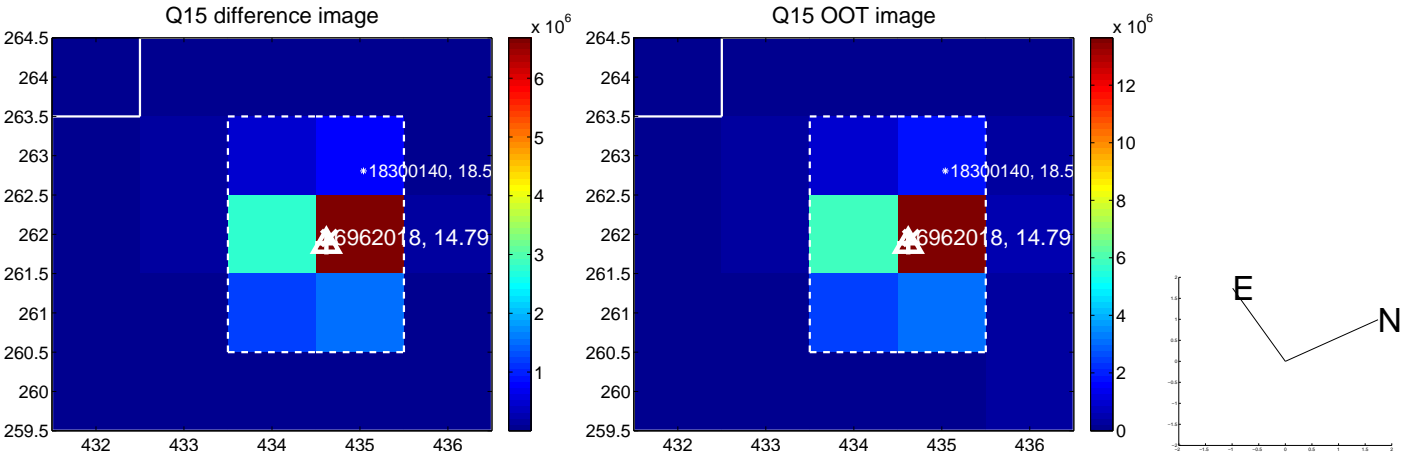
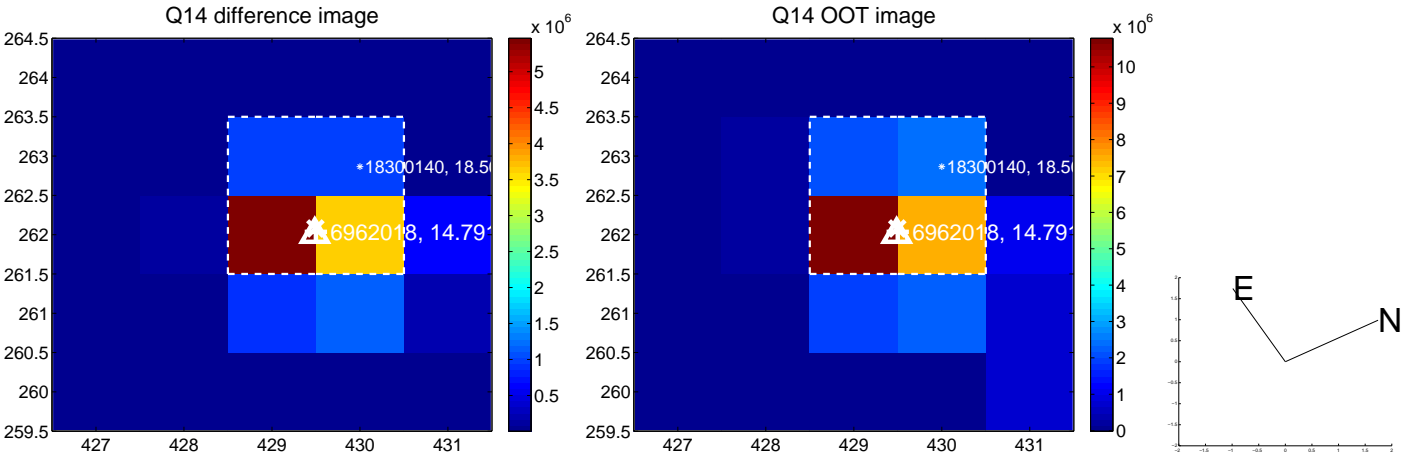
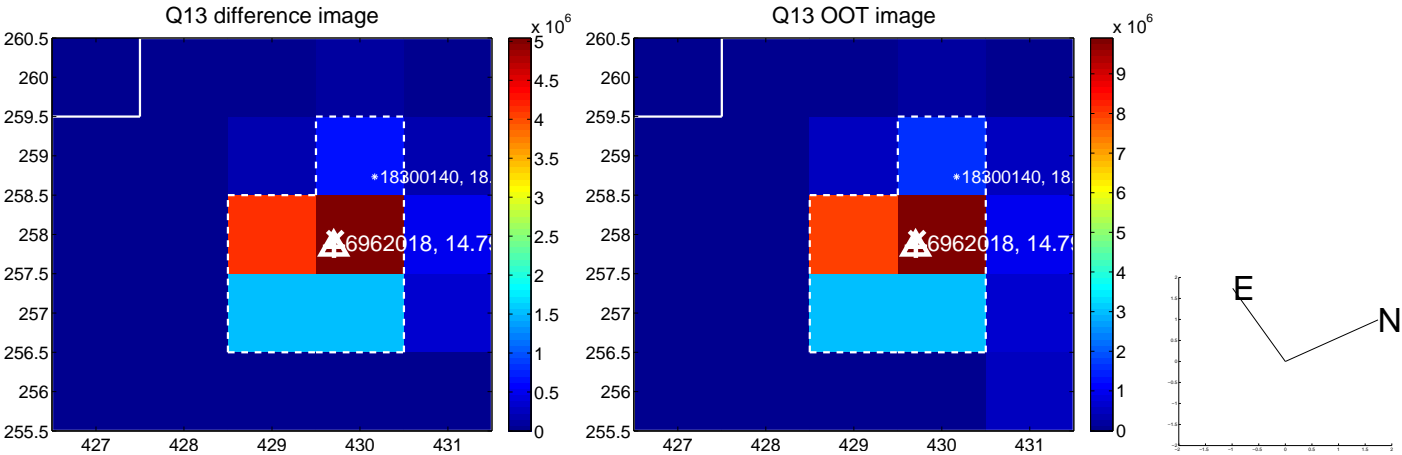
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



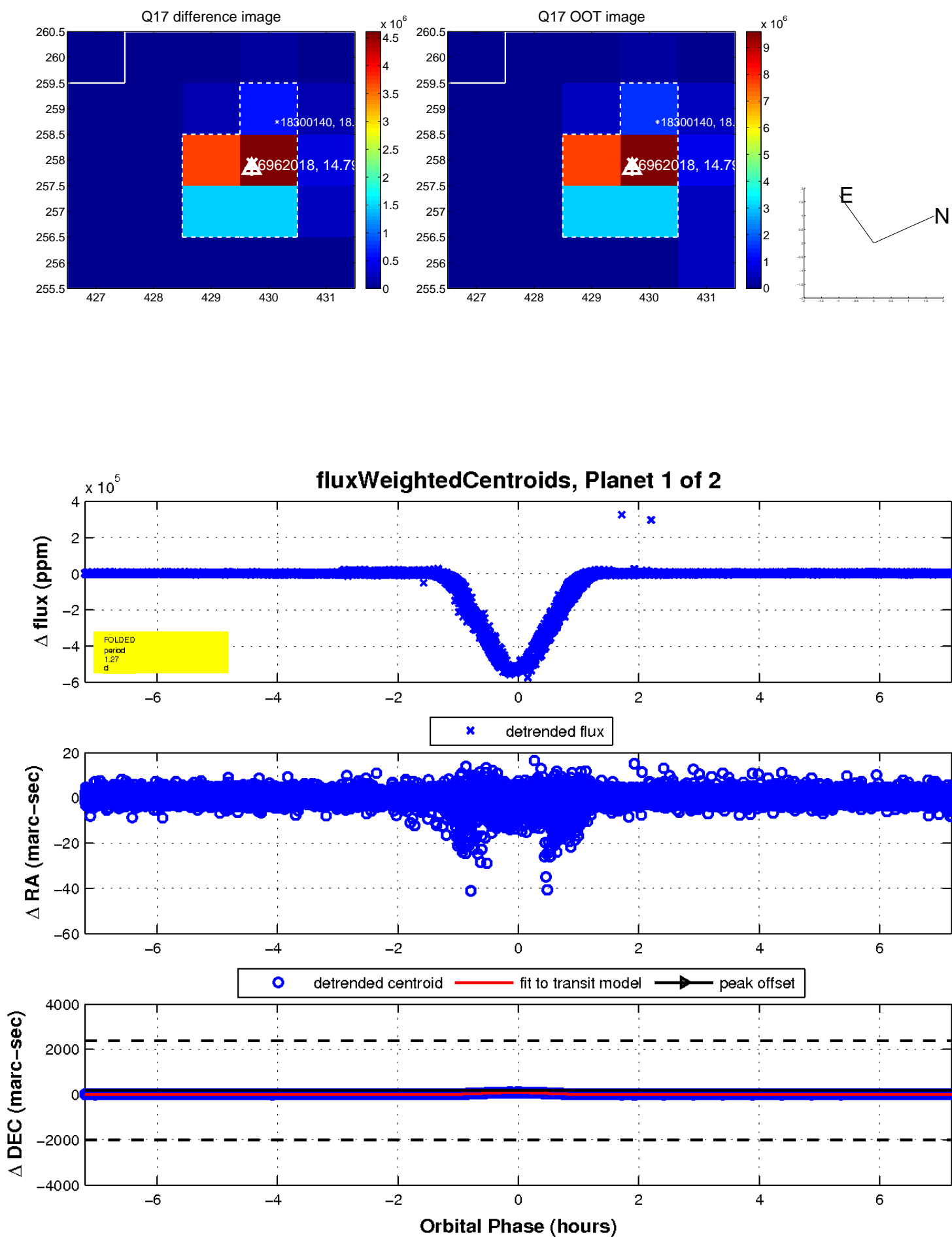
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

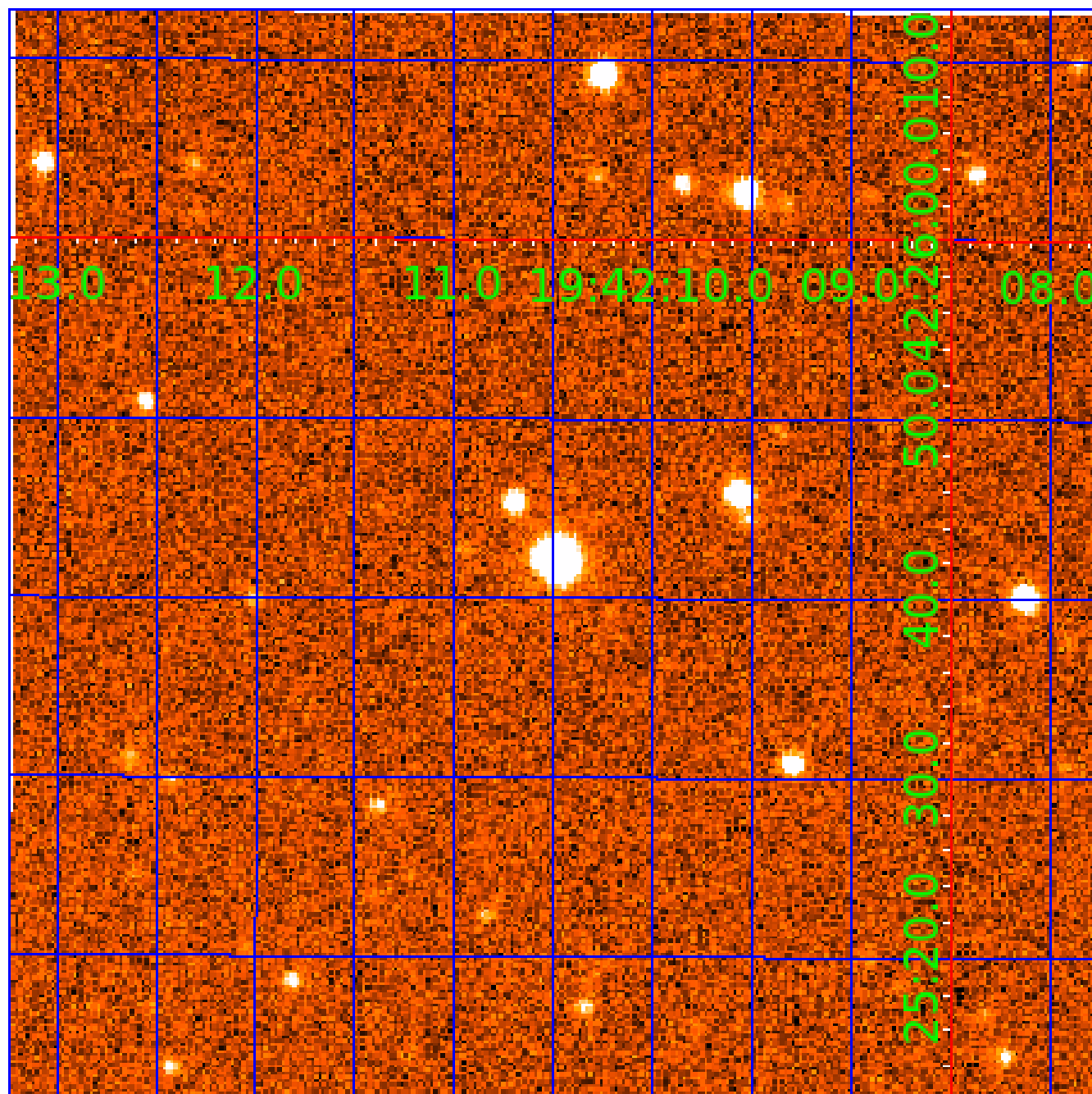


white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



UKIRT Image

Declination



KIC 006962018

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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006962018-02	OBS	No	1.269888	132.710994	102394.2	1.500	7833.8	-1.0	0.74	4446	22.84	444.70

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
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006962018-02	OBS	FP	0.00	1	1	0	0	IS_SEC_TCE—CENT_NOFITS

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.

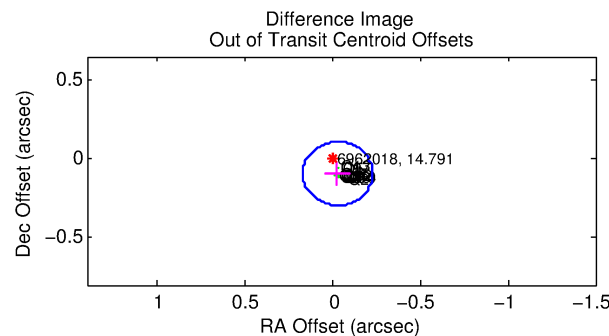
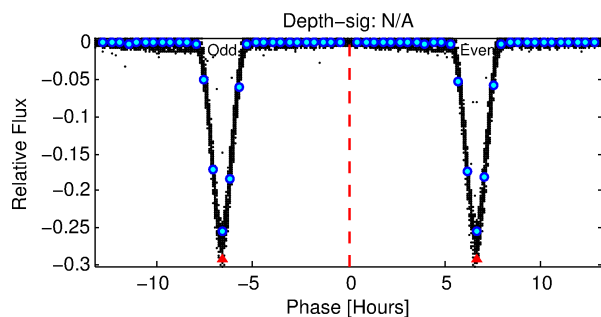
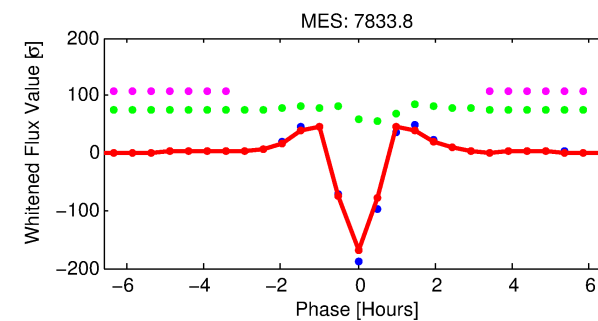
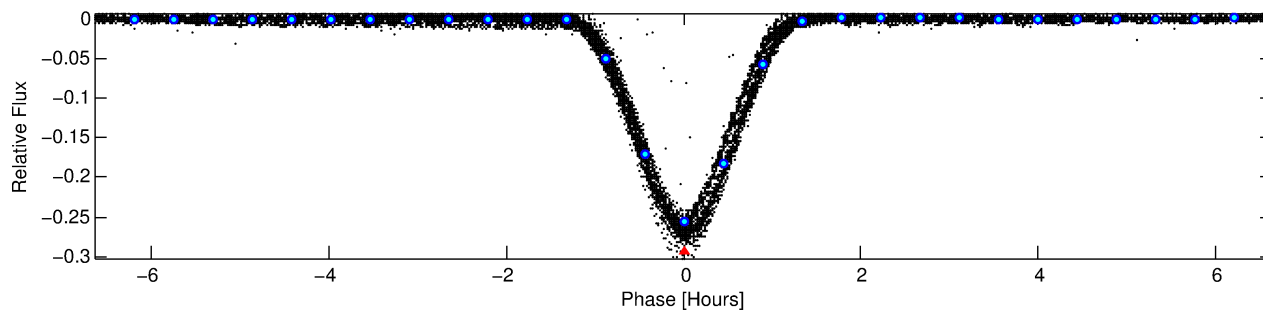
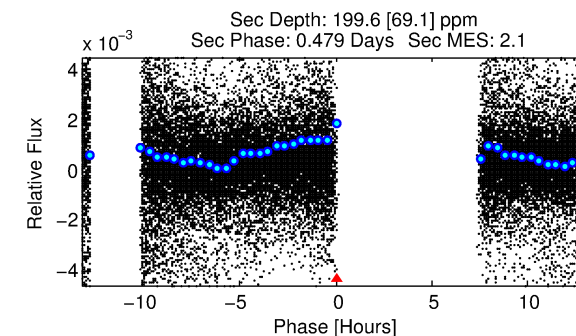
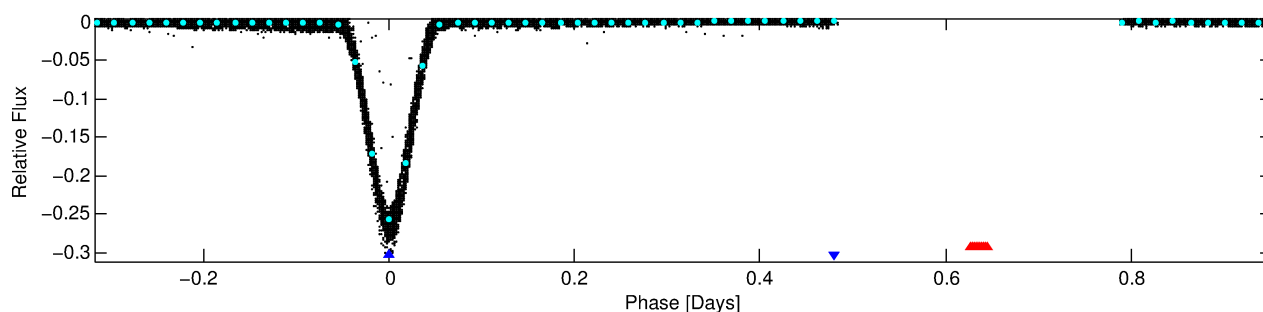
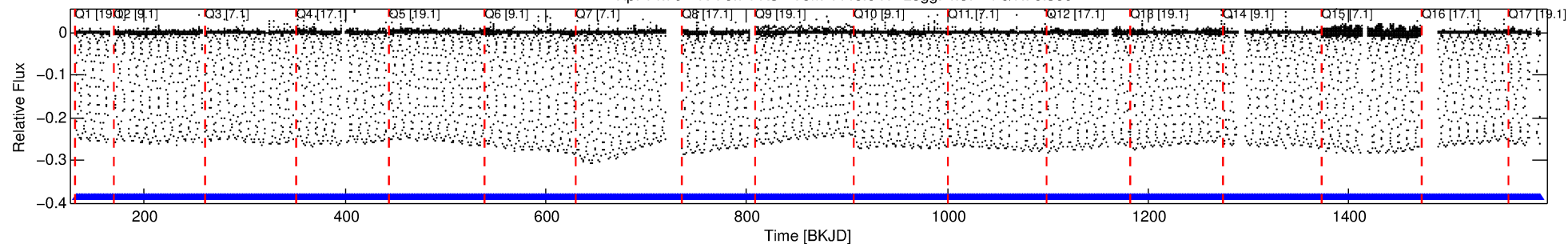
Ephemeris Match Information For 006962018-02

No Significant Match Found

DV One-Page Summary

KIC: 6962018 Candidate: 2 of 2 Period: 1.270 d
KOI: K06799 Corr: No Ephemeris Match

Kp: 14.79 R*: 0.74 Rs Teff: 4446.0 K Logg: 4.57 Fe/H: 0.360



TPS TCE Results:

Period = 1.26989 d
Epoch = 132.7110 BKJD

DV fit results are unavailable

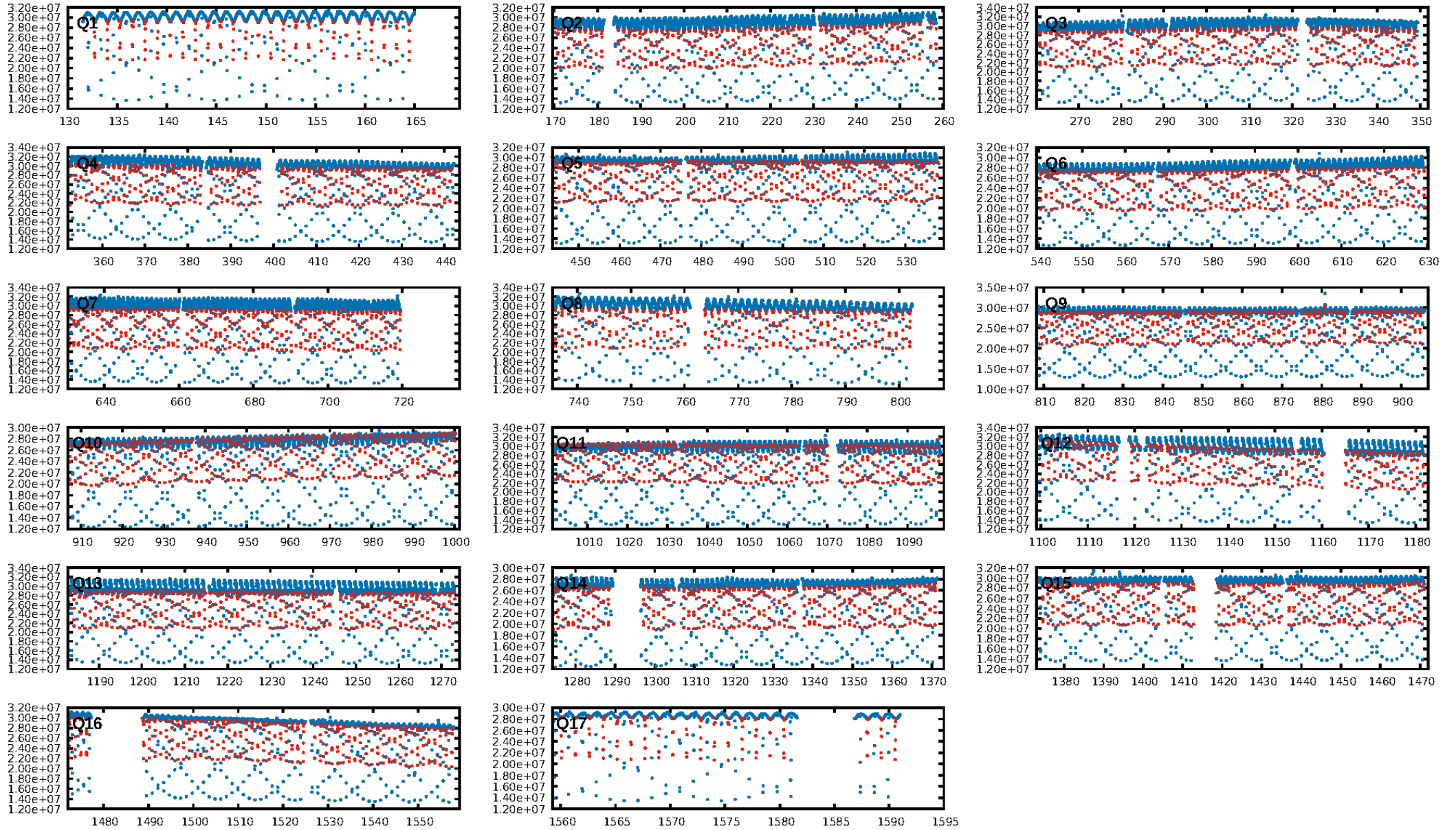
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: 0.0% [0.00σ]
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1008/1008]
GhostDiagnostic-chr: 1.207
Centroid-sig: N/A
Centroid-so: 0.352 arcsec [726.58σ]
OotOffset-rm: 0.097 arcsec [1.44σ]
KicOffset-rm: 0.345 arcsec [5.01σ]
OotOffset-st: 4/4/4/5 [17]
KicOffset-st: 4/4/4/5 [17]
DiffImageQuality-fgm: 1.00 [17/17]
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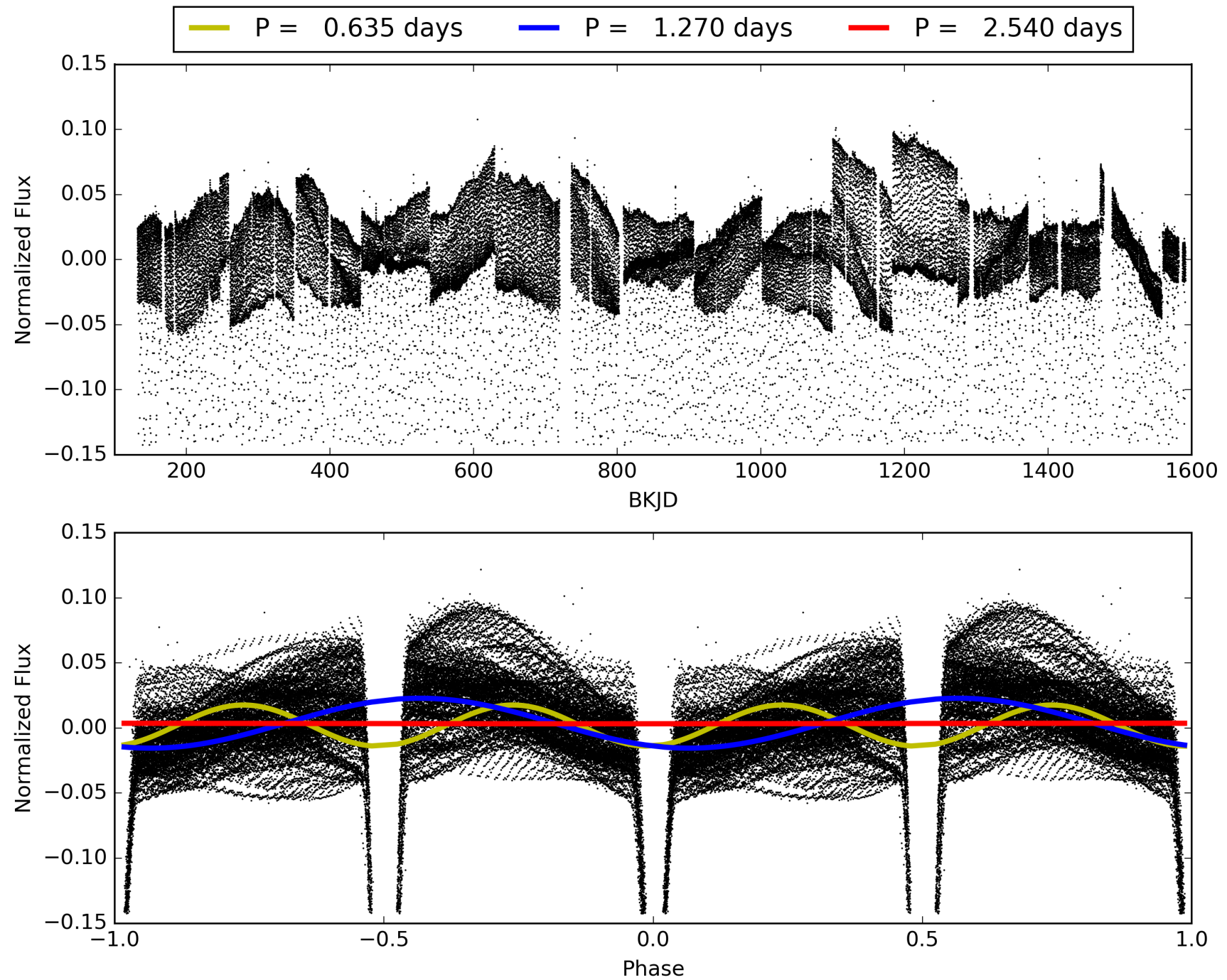
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 03-Feb-2016 09:39:31 Z

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

TCE 006962018-02, PDC Light Curves

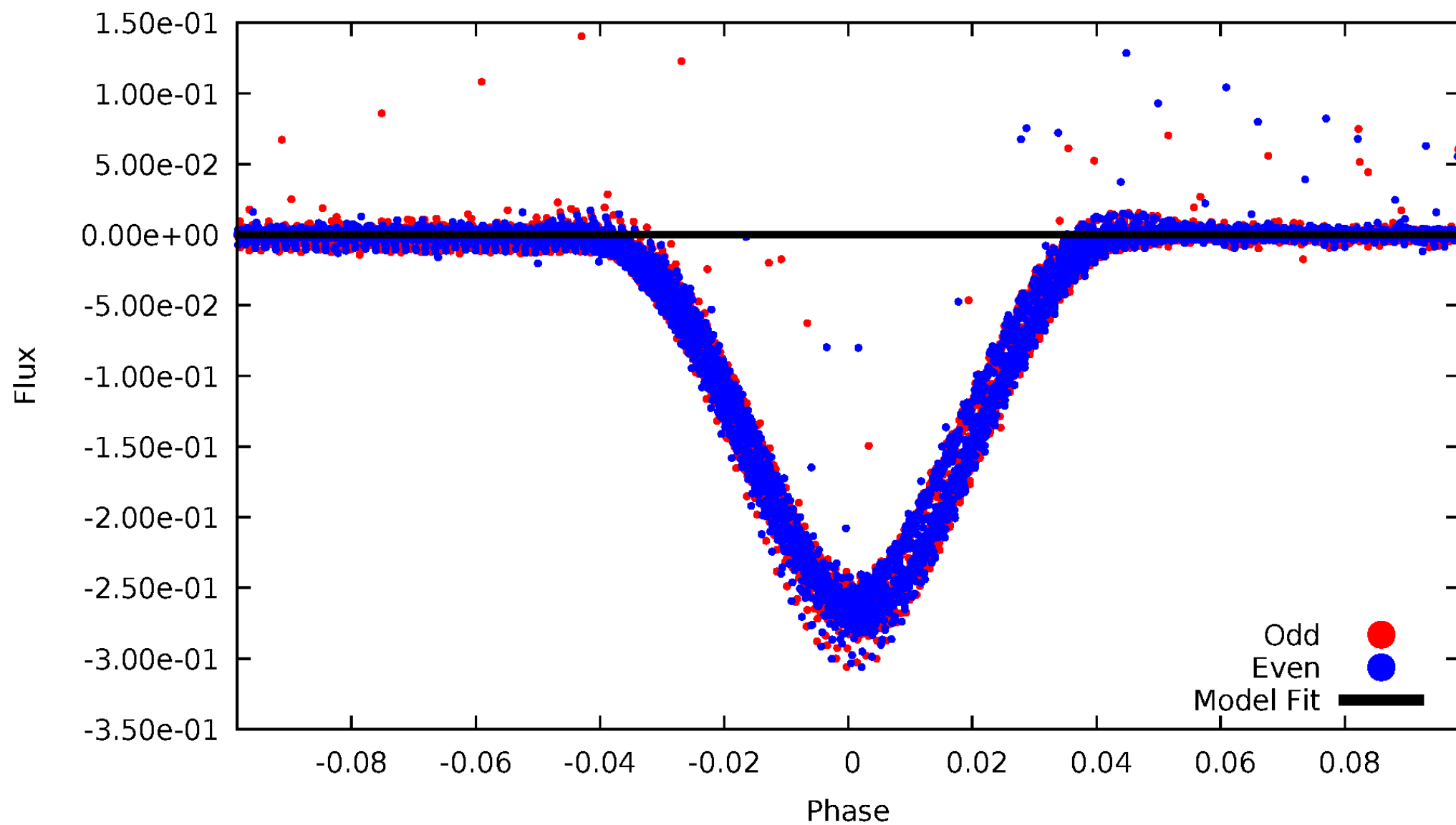


TCE 006962018-02



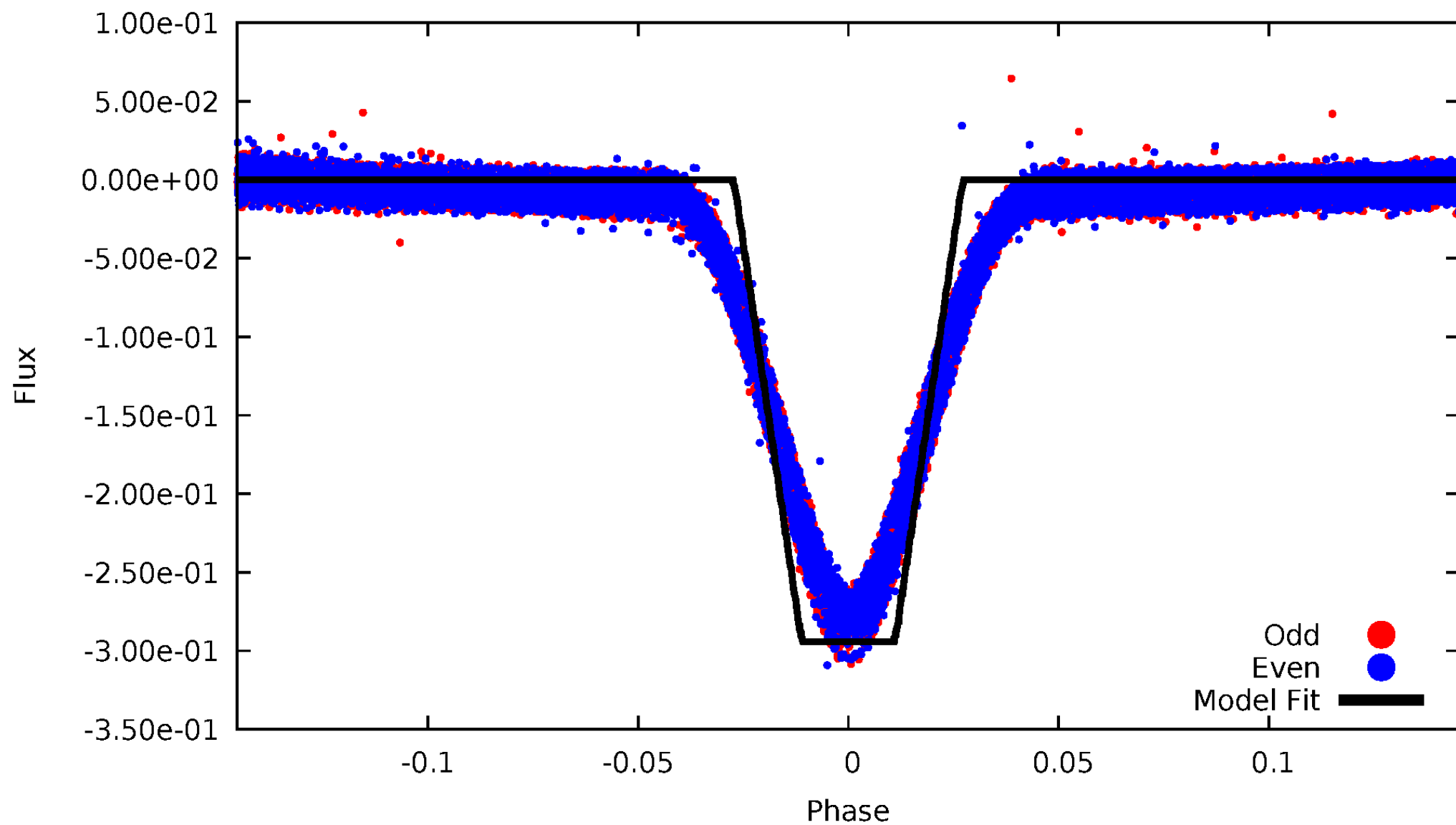
DV Odd/Even

TCE 006962018-02



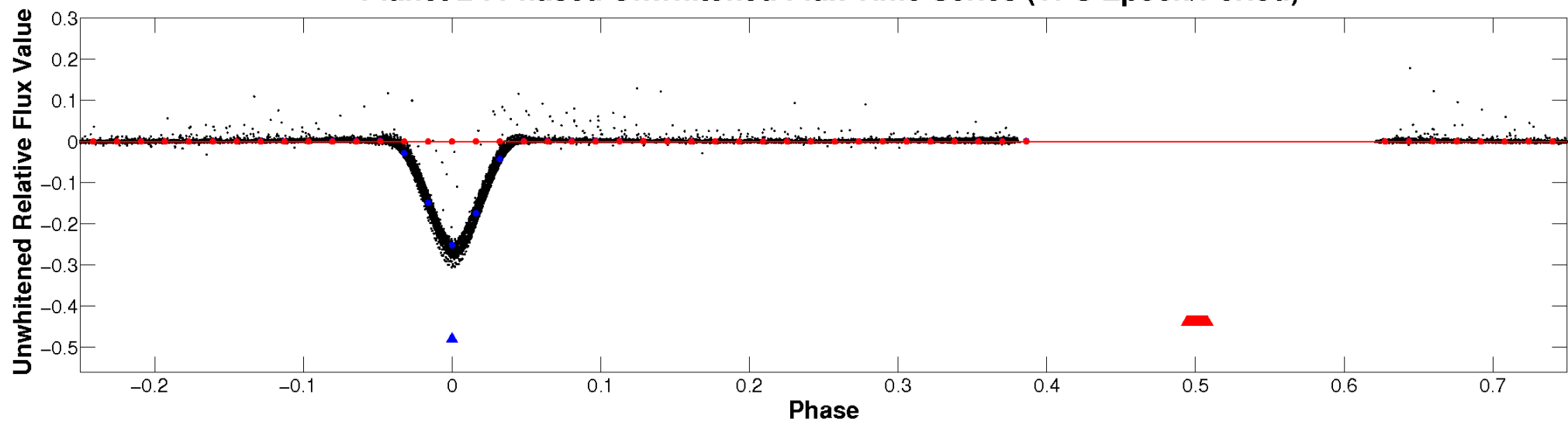
ALT Odd/Even

TCE 006962018-02

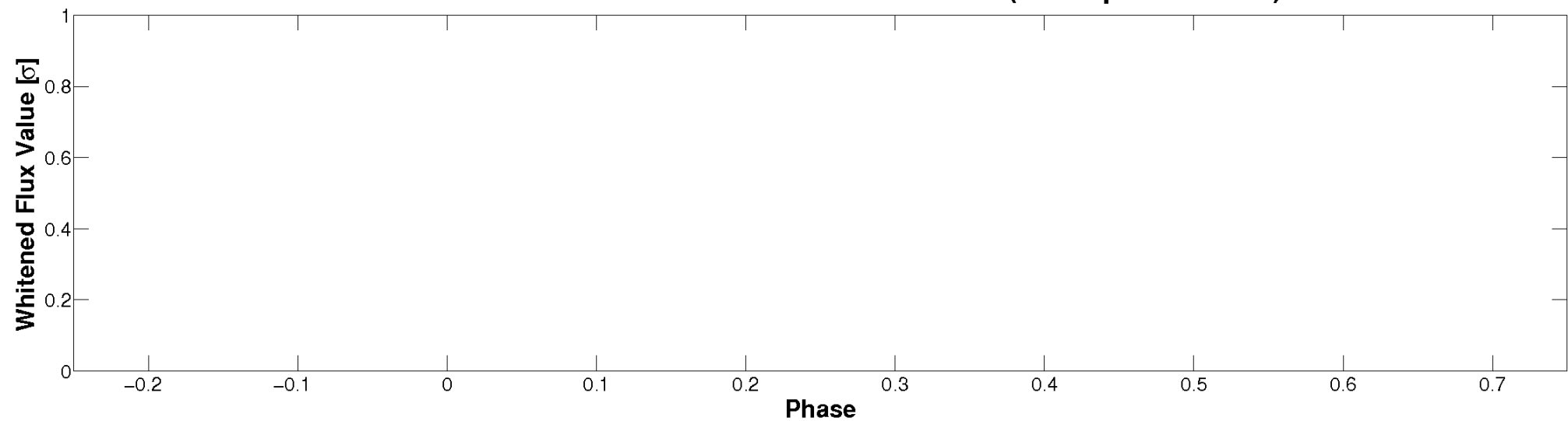


Non-Whitened Vs. Whitened Light Curve

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

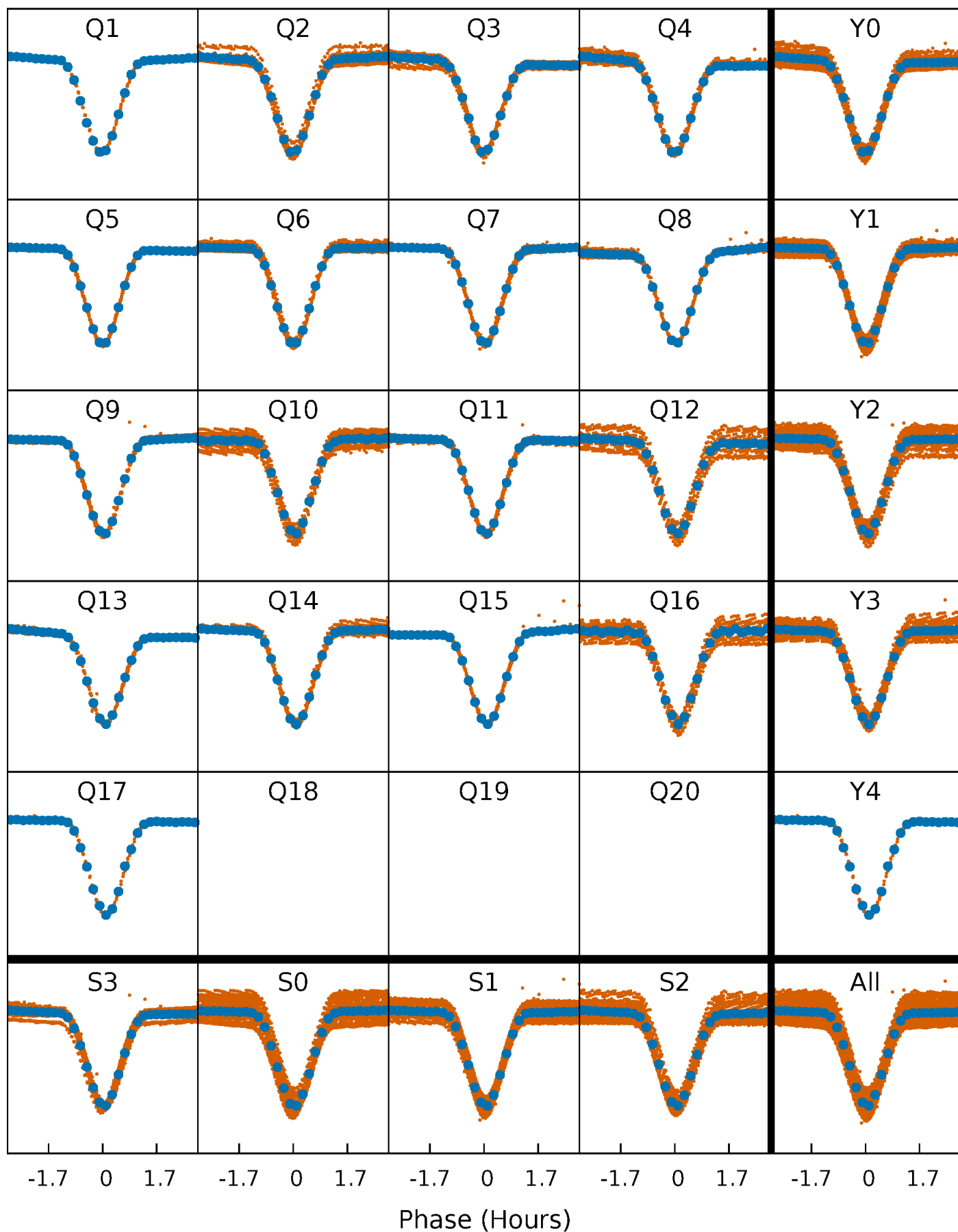


Planet 2 : Phased Whitened Flux Time Series (TPS Epoch/Period)



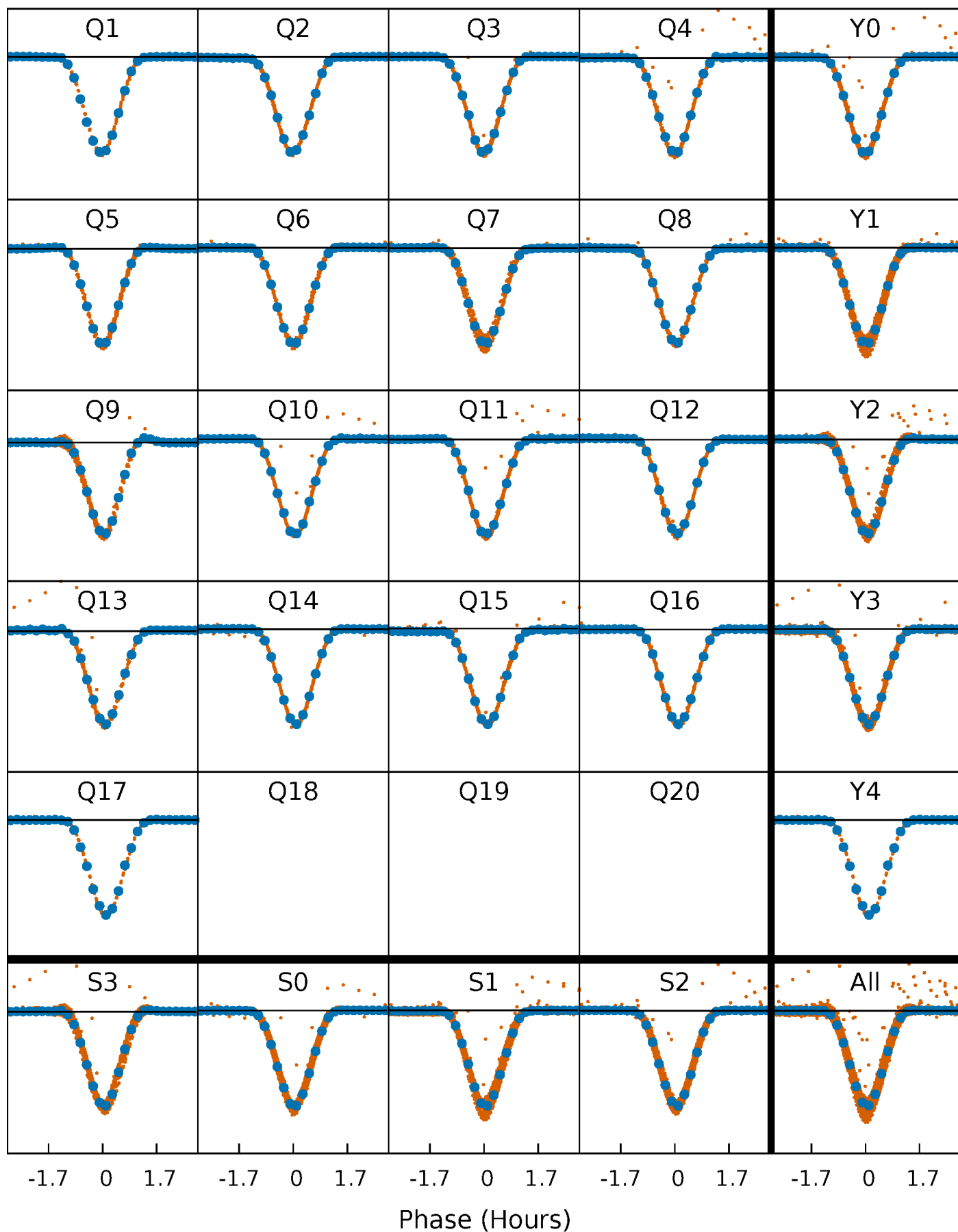
PDC Quarter-Phased Transit Curves

TCE 006962018-02 P= 1.269888 Days $T_0=132.710994$ (BKJD)



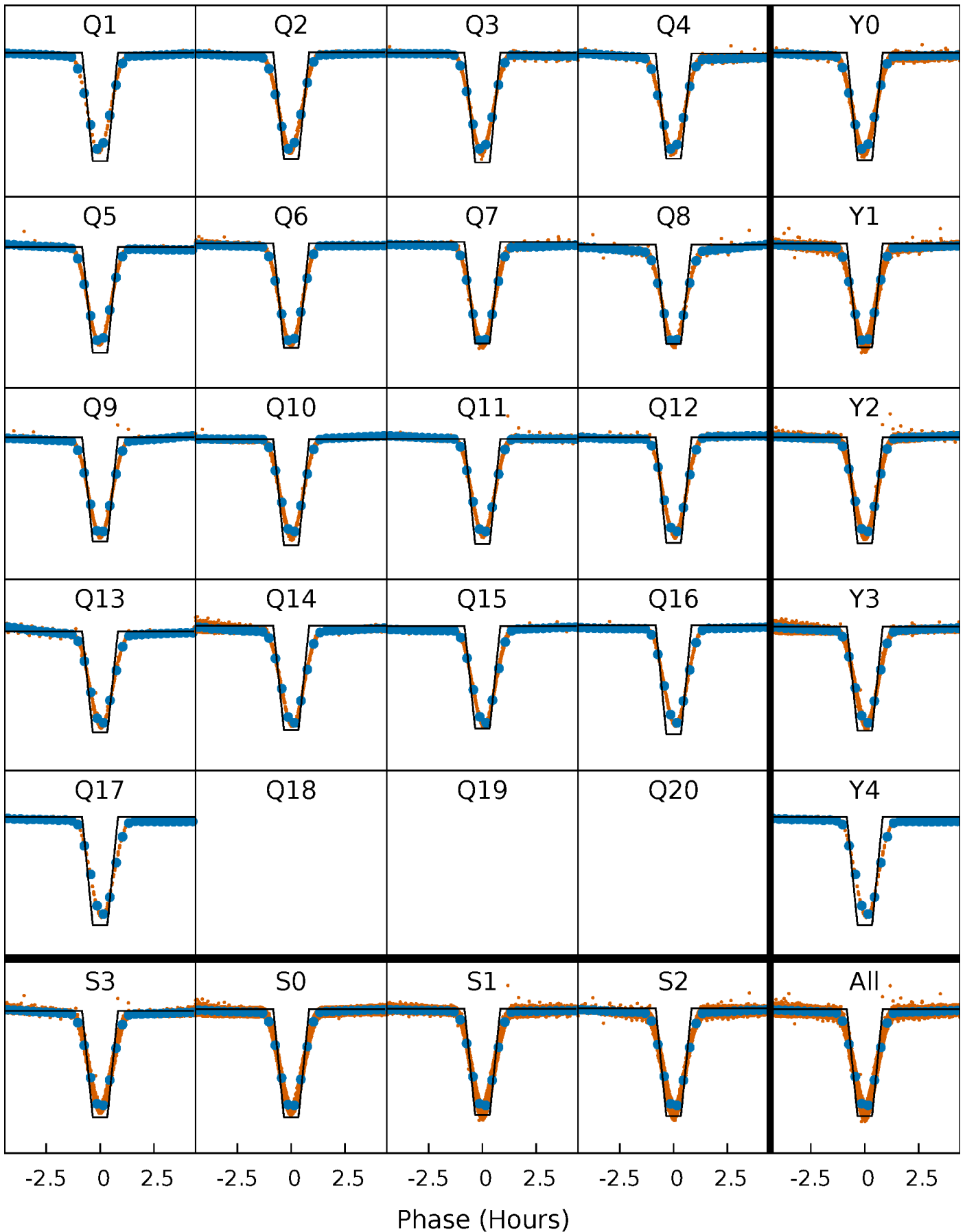
DV Quarter-Phased Transit Curves

TCE 006962018-02 P= 1.269888 Days $T_0=132.710994$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

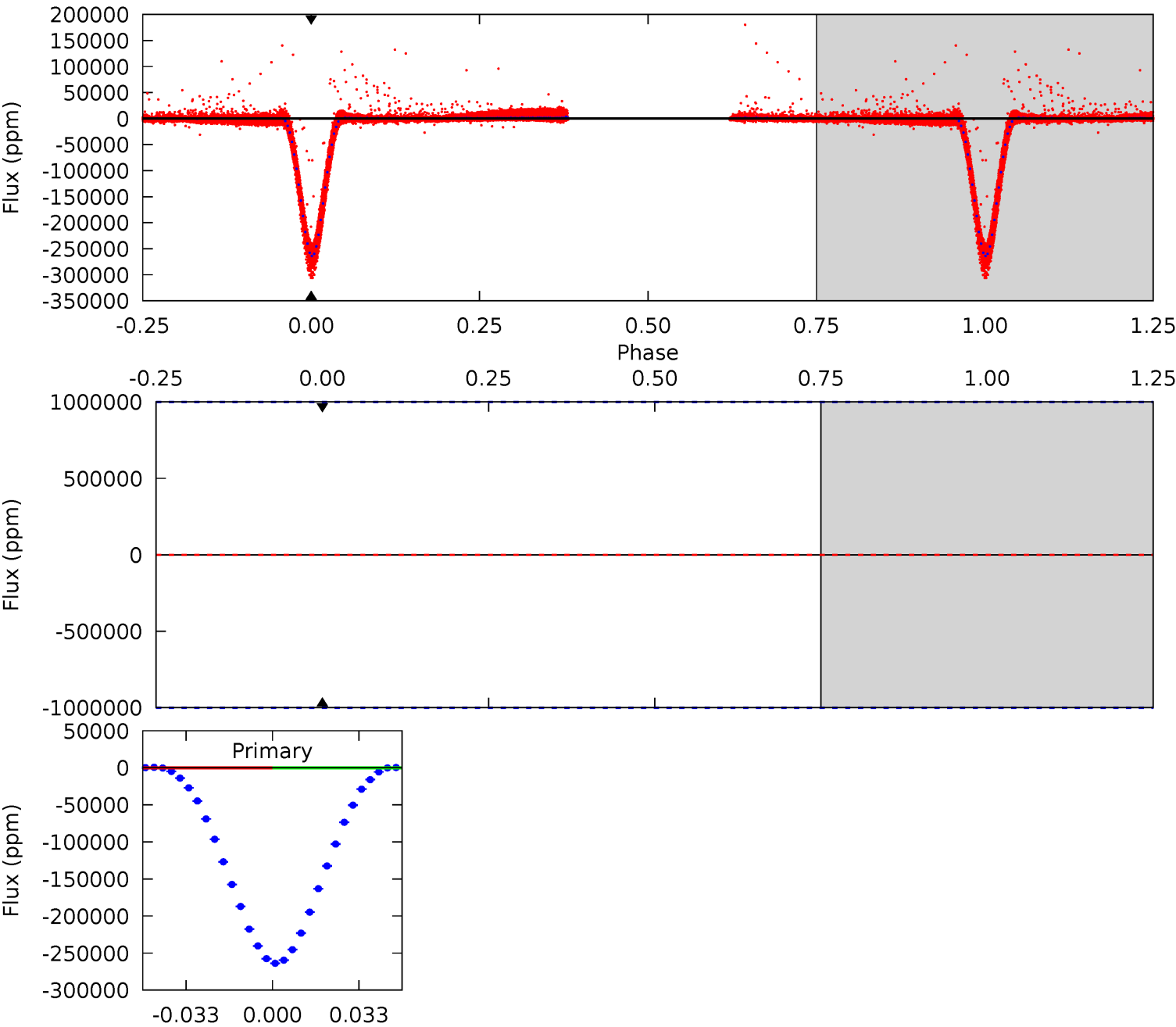
TCE 006962018-02 P= 1.269888 Days $T_0=132.712013$ (BKJD)



DV Model-Shift Uniqueness Test

006962018-02, P = 1.269888 Days, E = 131.441106 Days

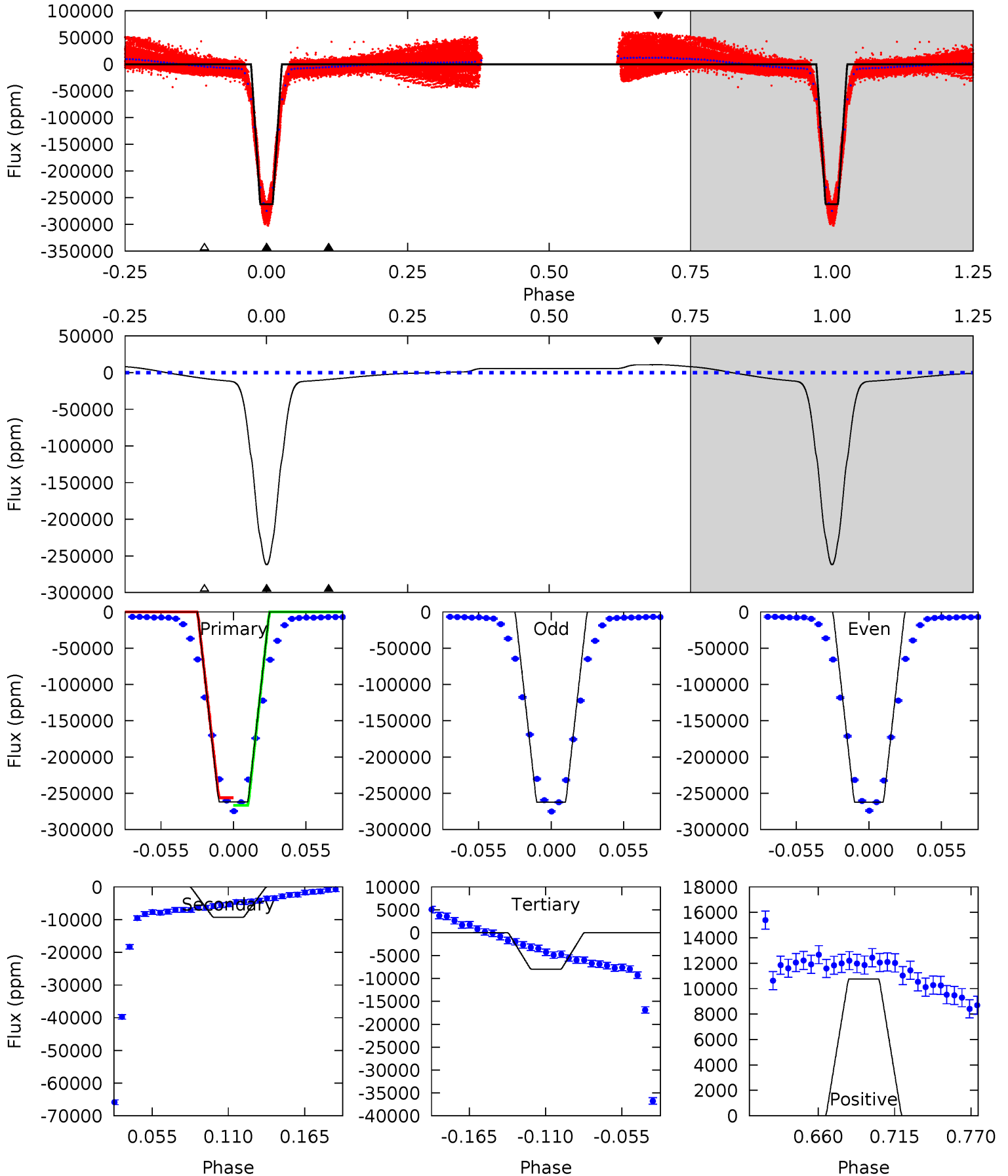
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
0	0	0	0	1.00	1.00	1.00	0	0	0	0	0	0	0	0



Alt Model-Shift Uniqueness Test

006962018-02, P = 1.269888 Days, E = 131.442125 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
996.0	35.2	30.2	40.9	4.69	1.92	24.5	965.8	955.1	5.00	-5.67	0.39	1.01	0.04	23.2



Stellar Parameters For KIC 006962018

	$T_{\text{eff}}(K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	4446^{+154}_{-154}	$4.567^{+0.060}_{-0.016}$	$0.360^{+0.100}_{-0.300}$	$0.737^{+0.024}_{-0.063}$	$0.729^{+0.041}_{-0.050}$	$2.571^{+0.691}_{-0.184}$
	+3%/-3%	+1%/-0%	+28%/-83%	+3%/-9%	+6%/-7%	+27%/-7%
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 006962018-02 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	0 ± 1000000	$22.45^{+7.54}_{-8.44}$	1622^{+64}_{-62}	-2446^{+7278}_{-2293}	$-0.457^{+57.644}_{-51.759}$
Alt.	-9270 ± 263	$43.39^{+8.03}_{-8.39}$	1624^{+62}_{-60}	2516^{+178}_{-156}	$1.180^{+0.624}_{-0.342}$

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

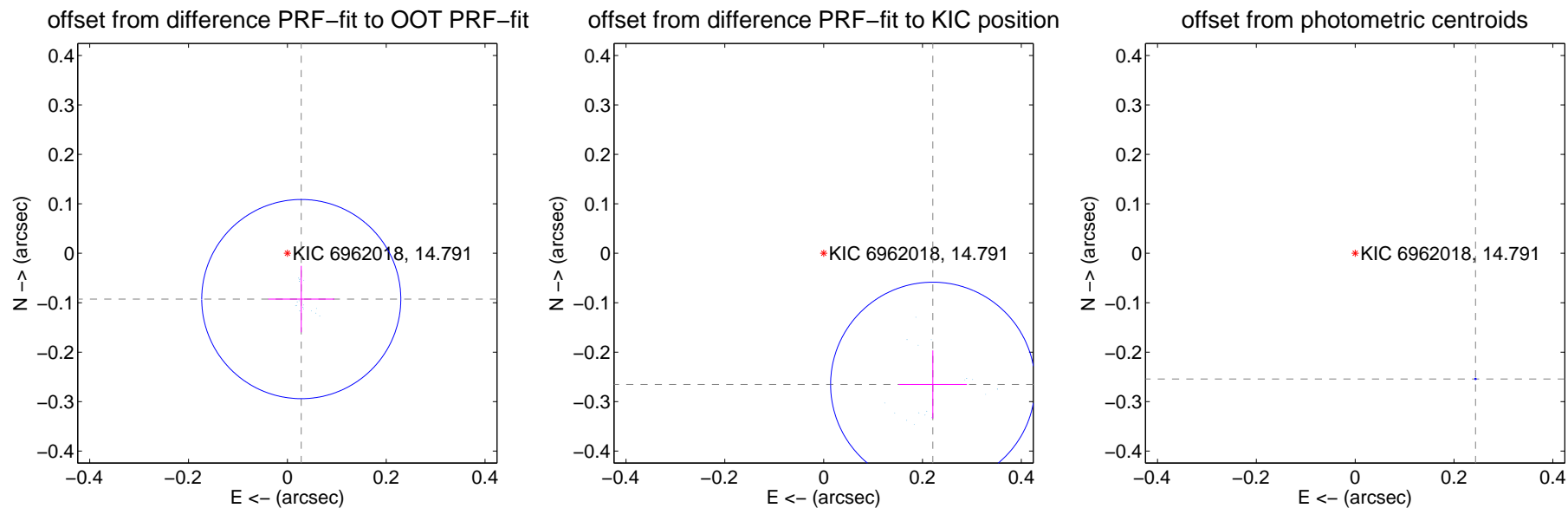
DV Centroid Data

Supplemental centroid analysis for 006962018-02. Kepler magnitude: 14.79. Transit SNR -1.00

There are 17 quarters with good PRF difference image offsets

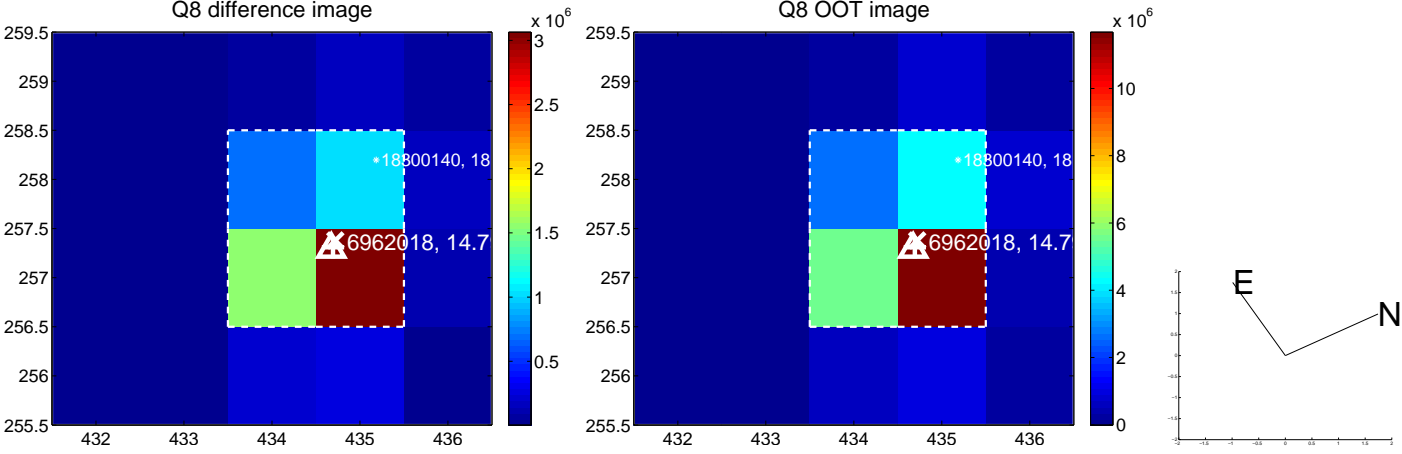
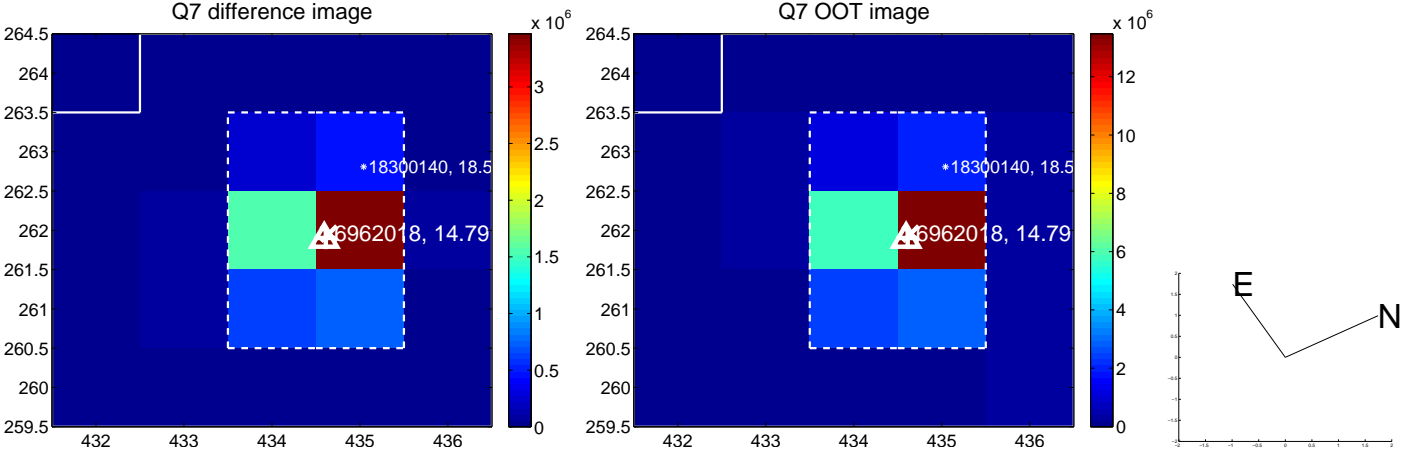
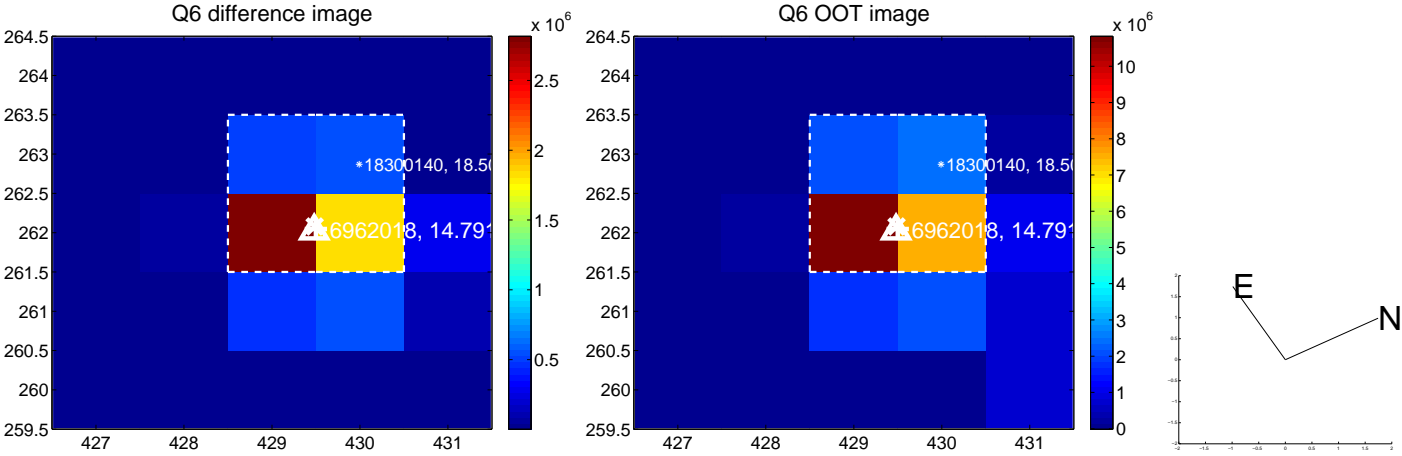
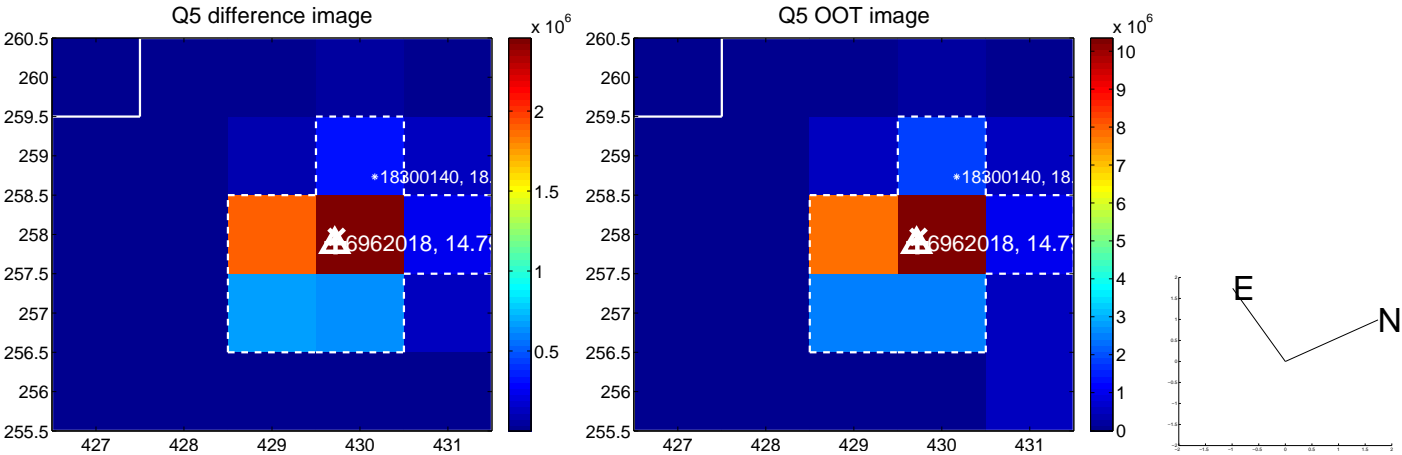
The direct PRF centroid is offset from the target star catalog position by about 0.39 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.097 ± 0.067	1.44	-0.028 ± 0.067	-0.093 ± 0.067
PRF-fit source offset from KIC position	0.345 ± 0.069	5.01	-0.221 ± 0.069	-0.265 ± 0.069
photometric centroid source offset	0.35 ± 0.00	726.58	-0.24 ± 0.00	-0.25 ± 0.00

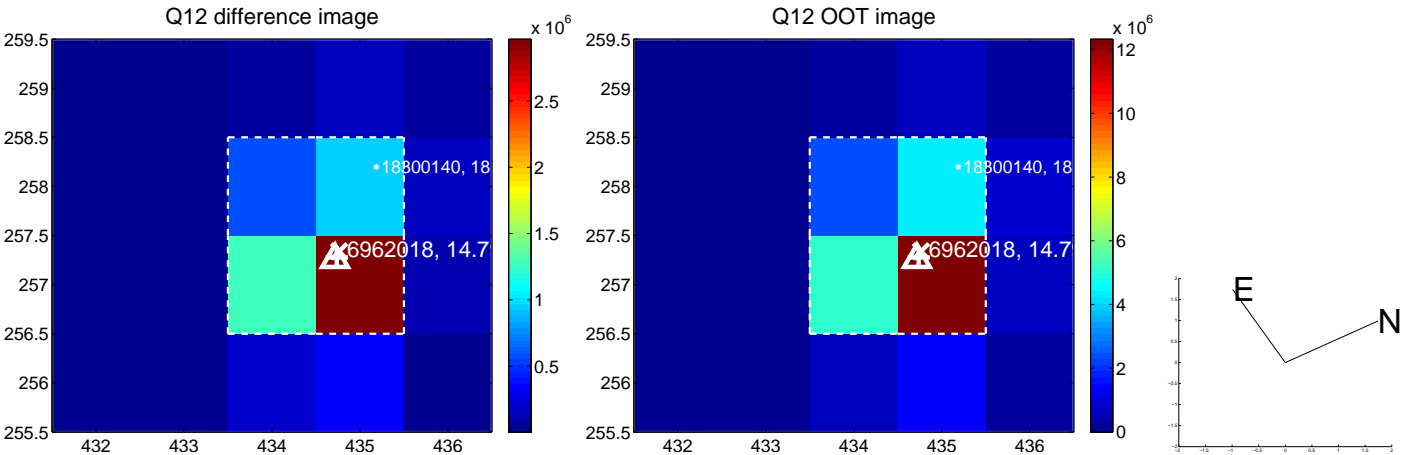
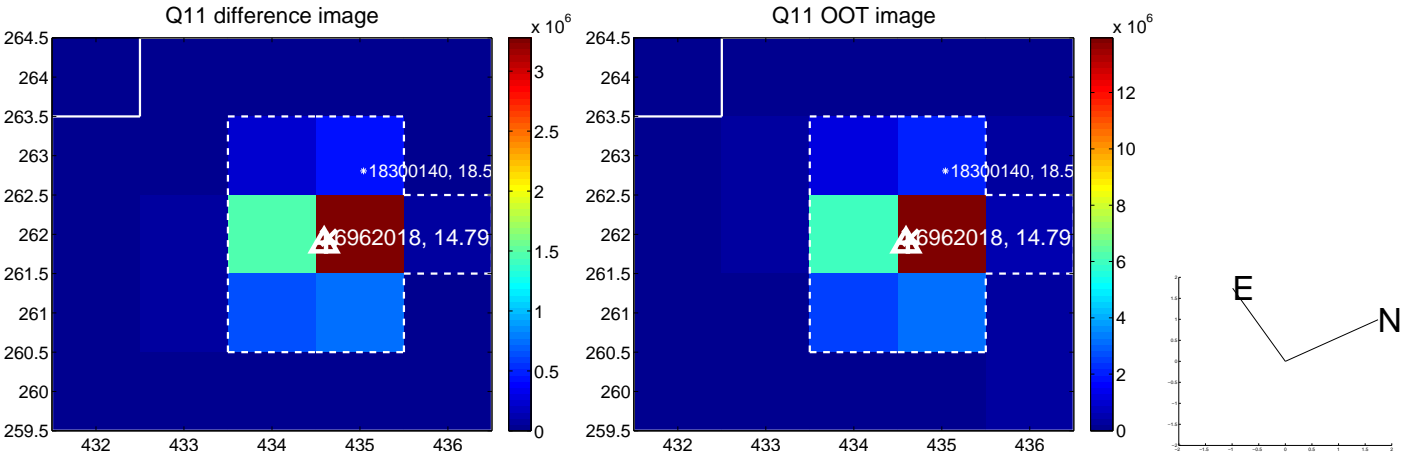
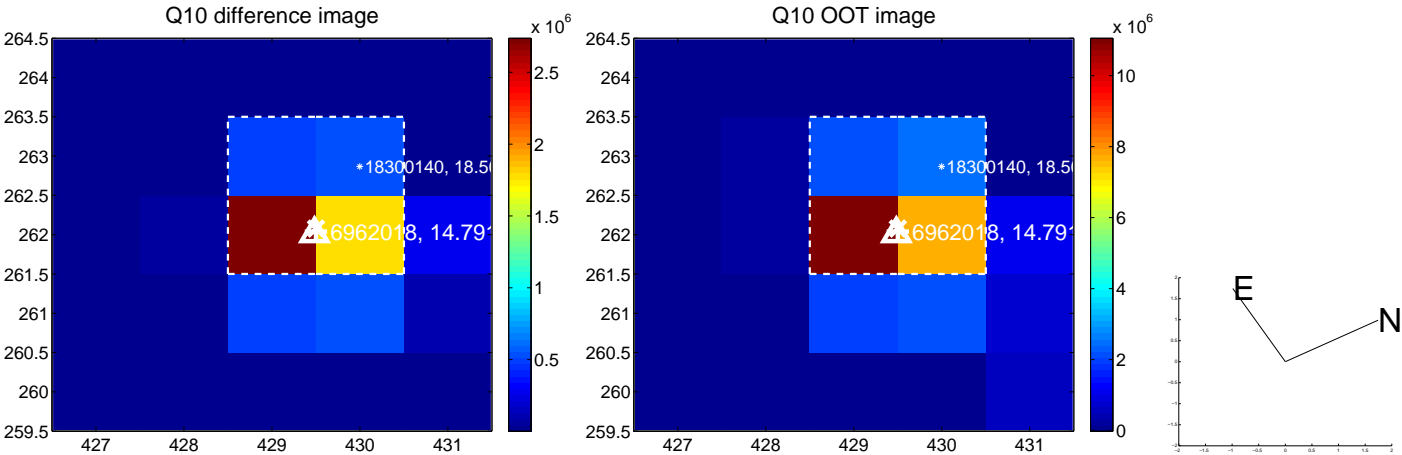
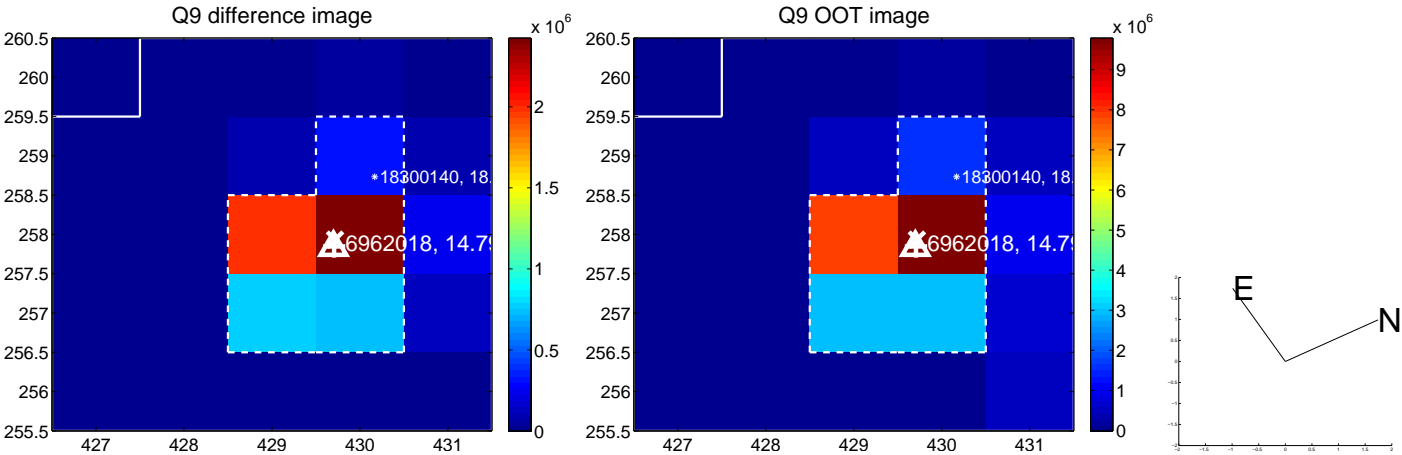


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

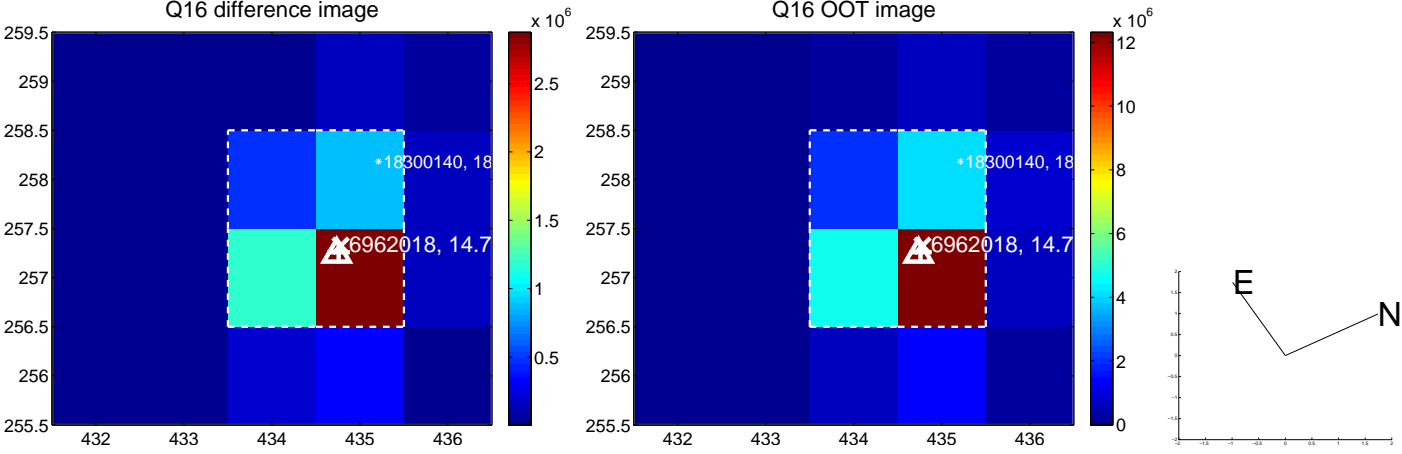
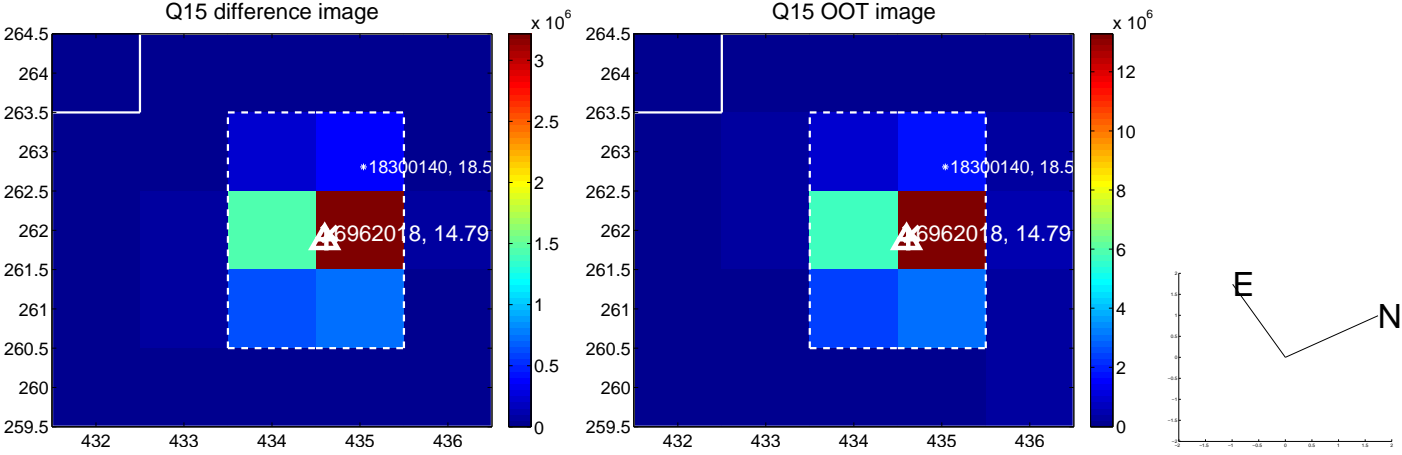
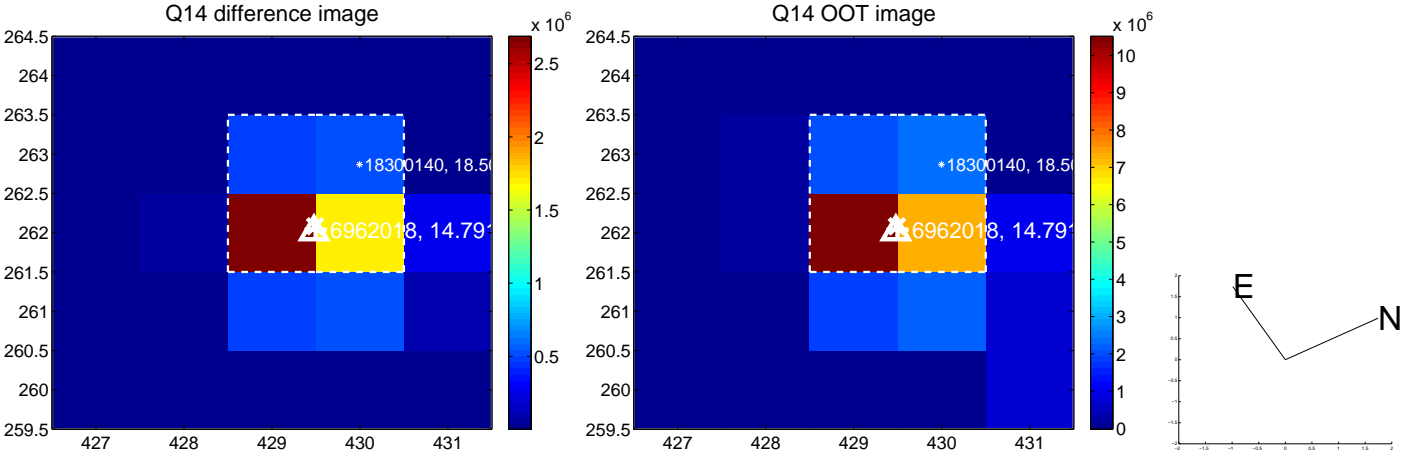
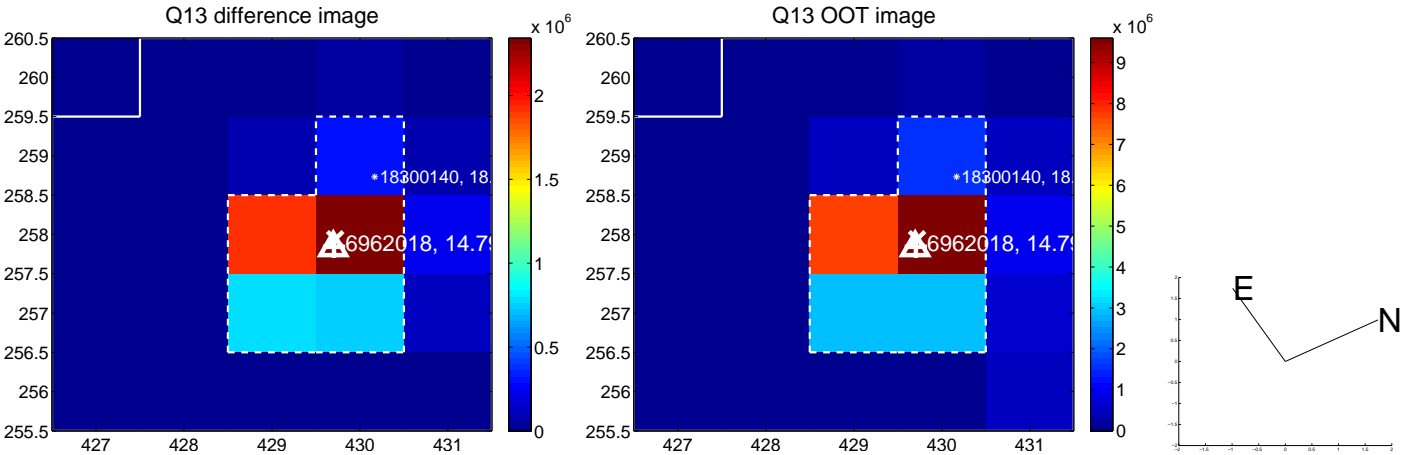
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



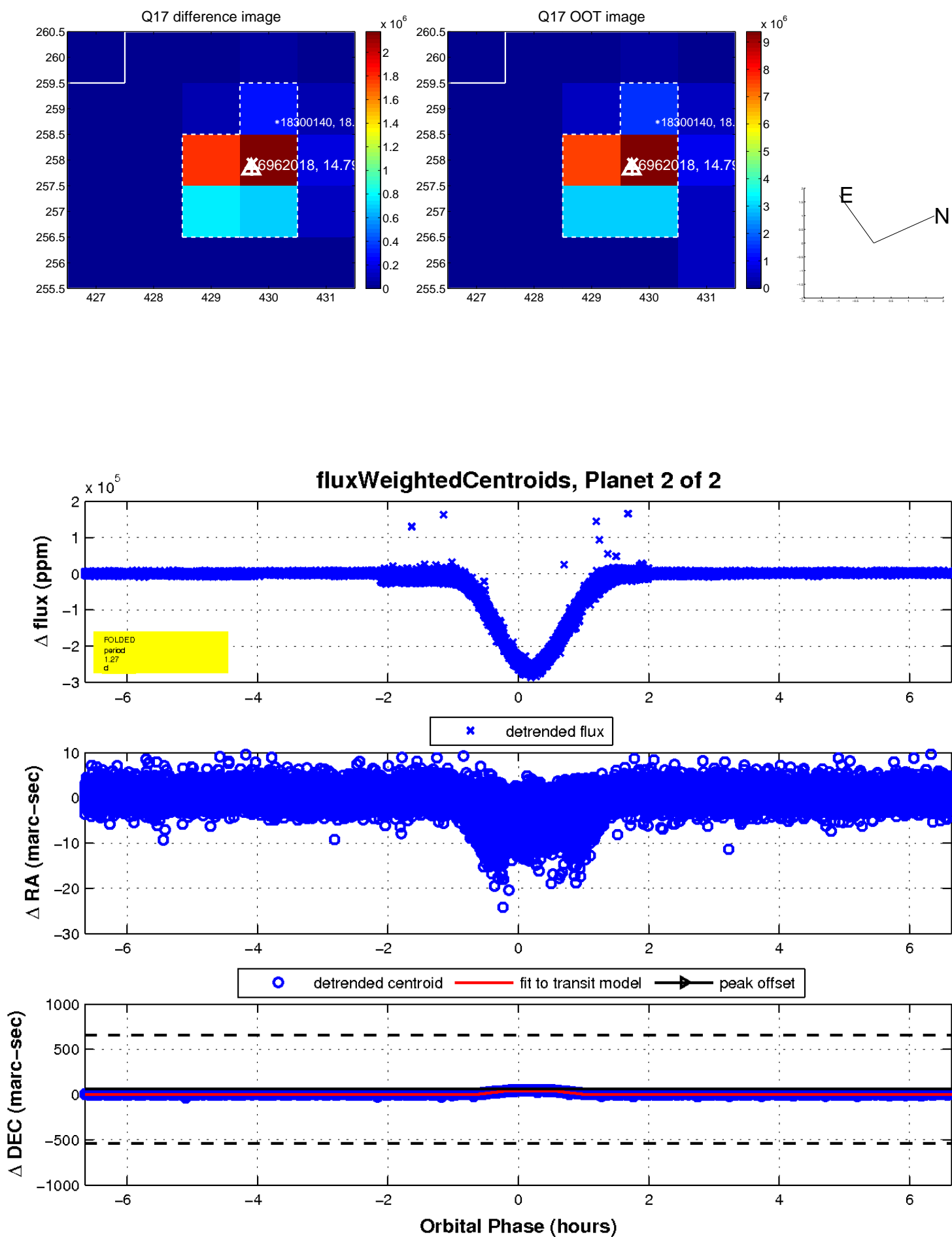
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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

