

KIC 006066379

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})
006066379-01	OBS	3649.01	1.303855	131.609057	118369.5	4.061	3417.3	1767.4	1.34	6282	68.39	4436.40

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
006066379-01	OBS	FP	0.00	0	1	0	0	SWEET_EB—MOD_ODDEVEN_DV—DEEP_V_SHAPED—CENT_KIC_POS

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.

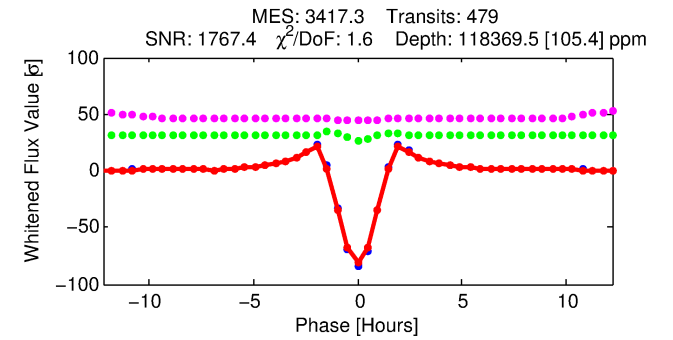
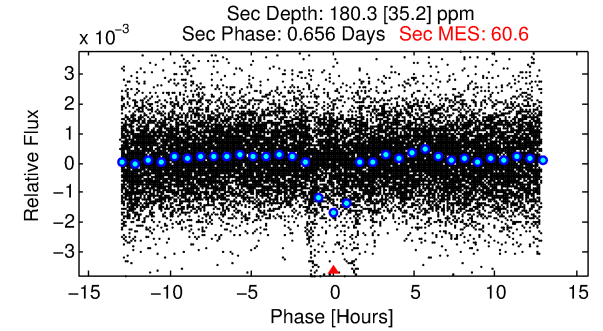
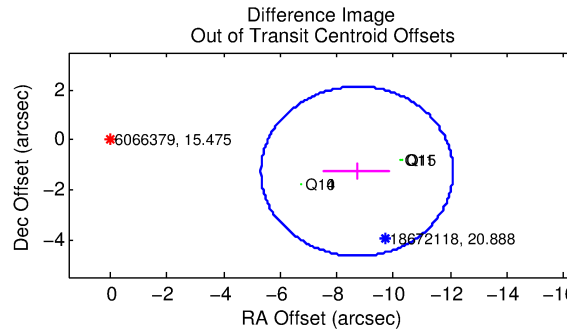
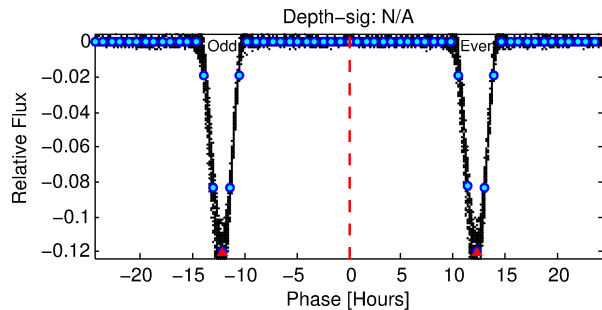
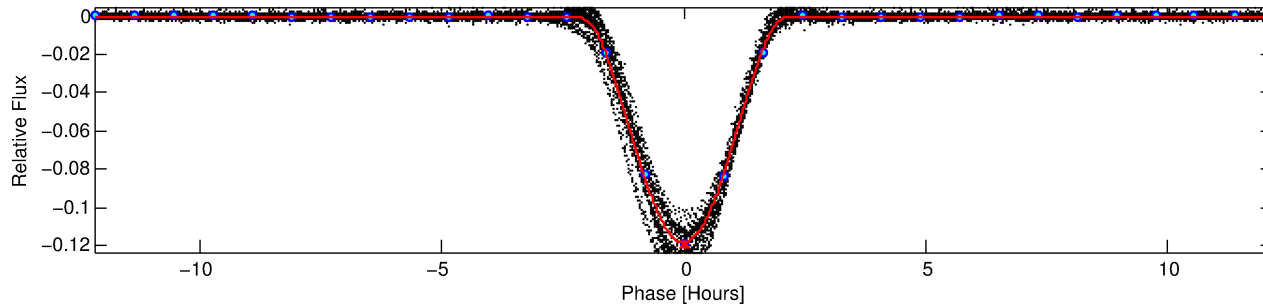
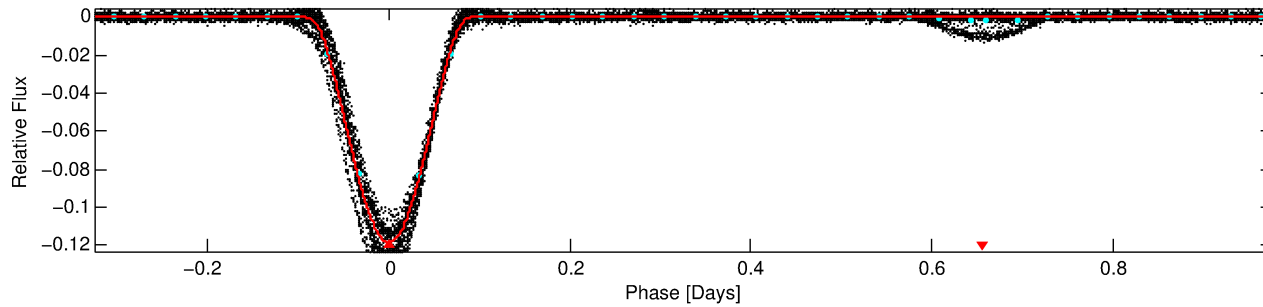
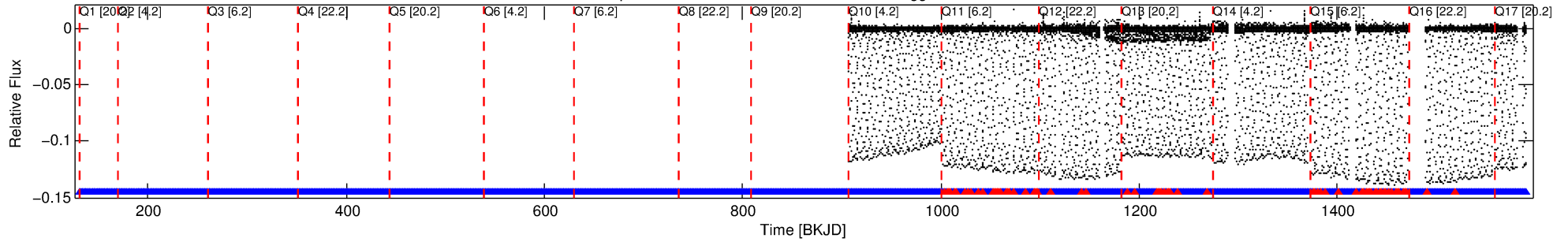
Ephemeris Match Information For 006066379-01

No Significant Match Found

DV One-Page Summary

KIC: 6066379 Candidate: 1 of 1 Period: 1.304 d
KOI: K03649.01 Corr: 0.968

Kp: 15.48 R*: 1.34 Rs Teff: 6282.0 K Logg: 4.21 Fe/H: -0.240



DV Fit Results:

Period = 1.30385 [0.00000] d
Epoch = 131.6091 [0.0000] BKJD
Rp/R* = 0.4667 [0.0243]
a/R* = 3.05 [0.02]
b = 0.91 [0.03]
Seff = 4436.40 [1715.26]
Teq = 2081 [201] K
Rp = 68.39 [19.88] Re
a = 0.0238 [0.0058] AU
Ag = 0.01 [0.01] [-196.35σ]
Teffp = 1066 [72] K [-4.75σ]

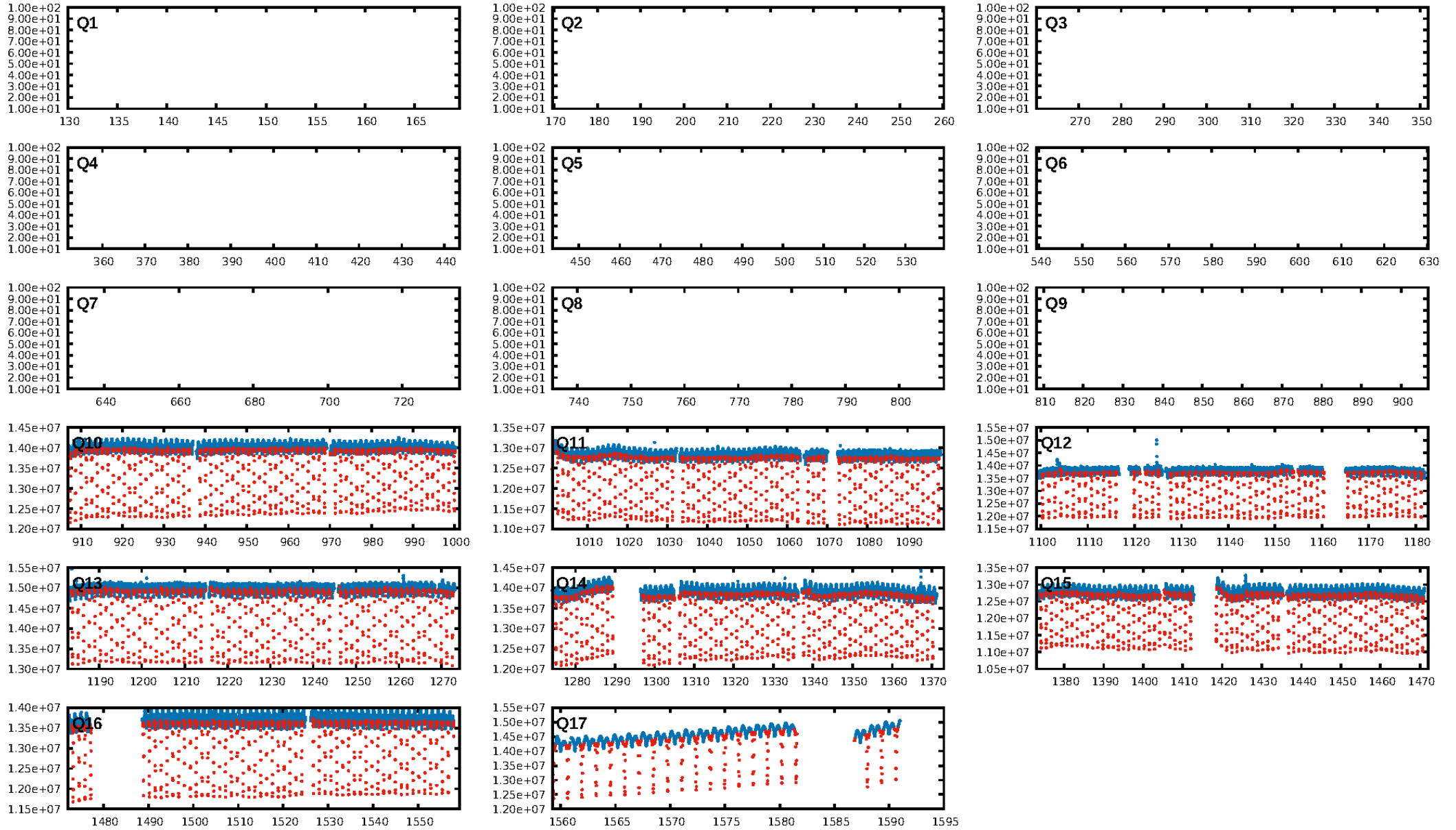
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 0.84 [386/458]
GhostDiagnostic-chr: 2.48
Centroid-sig: N/A
Centroid-so: 2.676 arcsec [1130.92σ]
OotOffset-rm: 8.801 arcsec [7.77σ]
KicOffset-rm: 0.193 arcsec [2.86σ]
OotOffset-st: 2/2/0/0 [4]
KicOffset-st: 2/2/2/2 [8]
DiffImageQuality-fgm: 1.00 [8/8]
DiffImageOverlap-fno: 1.00 [8/8]

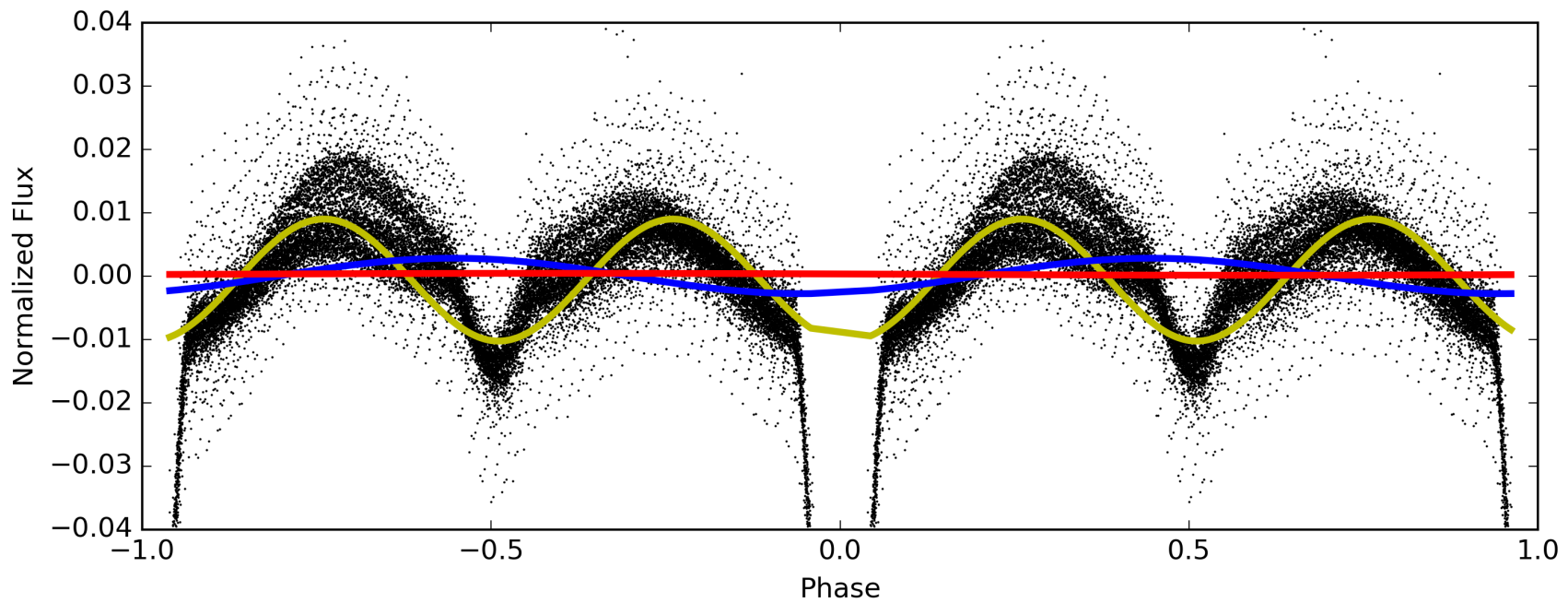
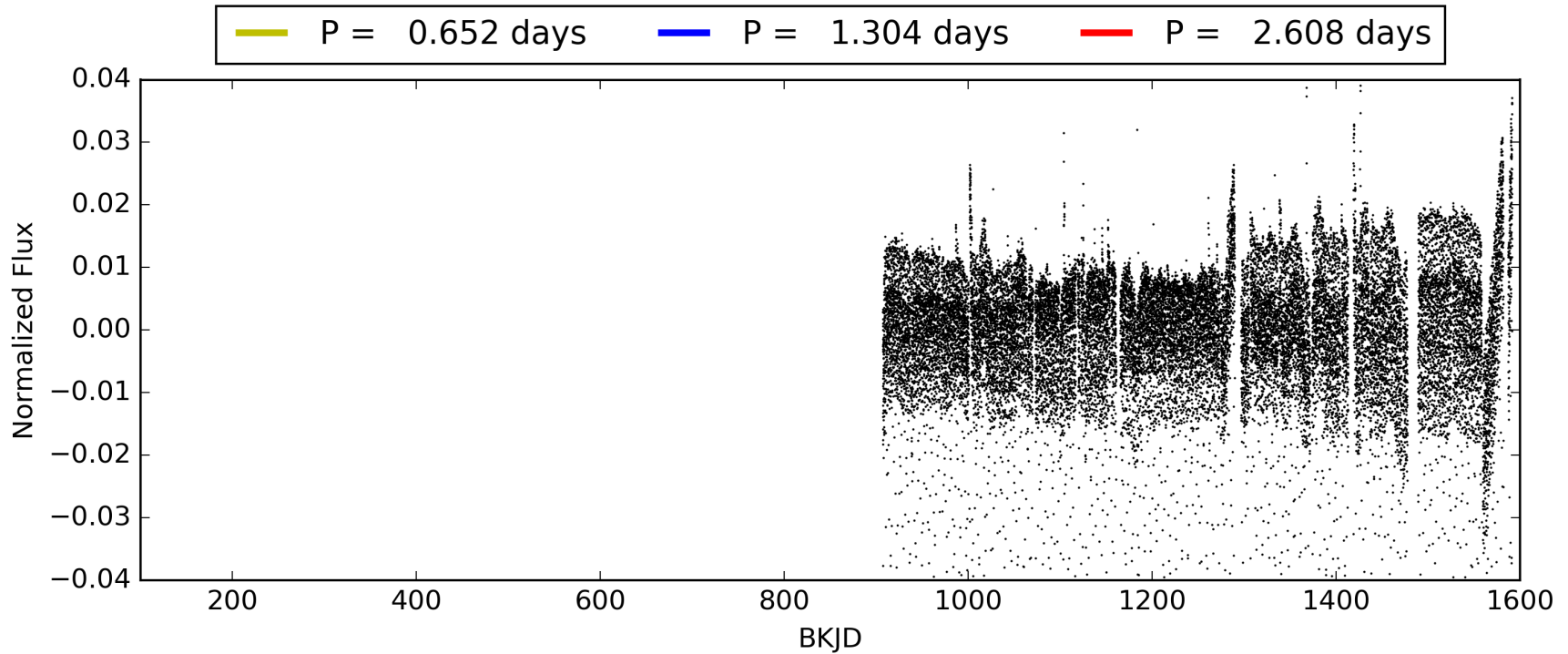
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 07:09:35 Z

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

TCE 006066379-01, PDC Light Curves

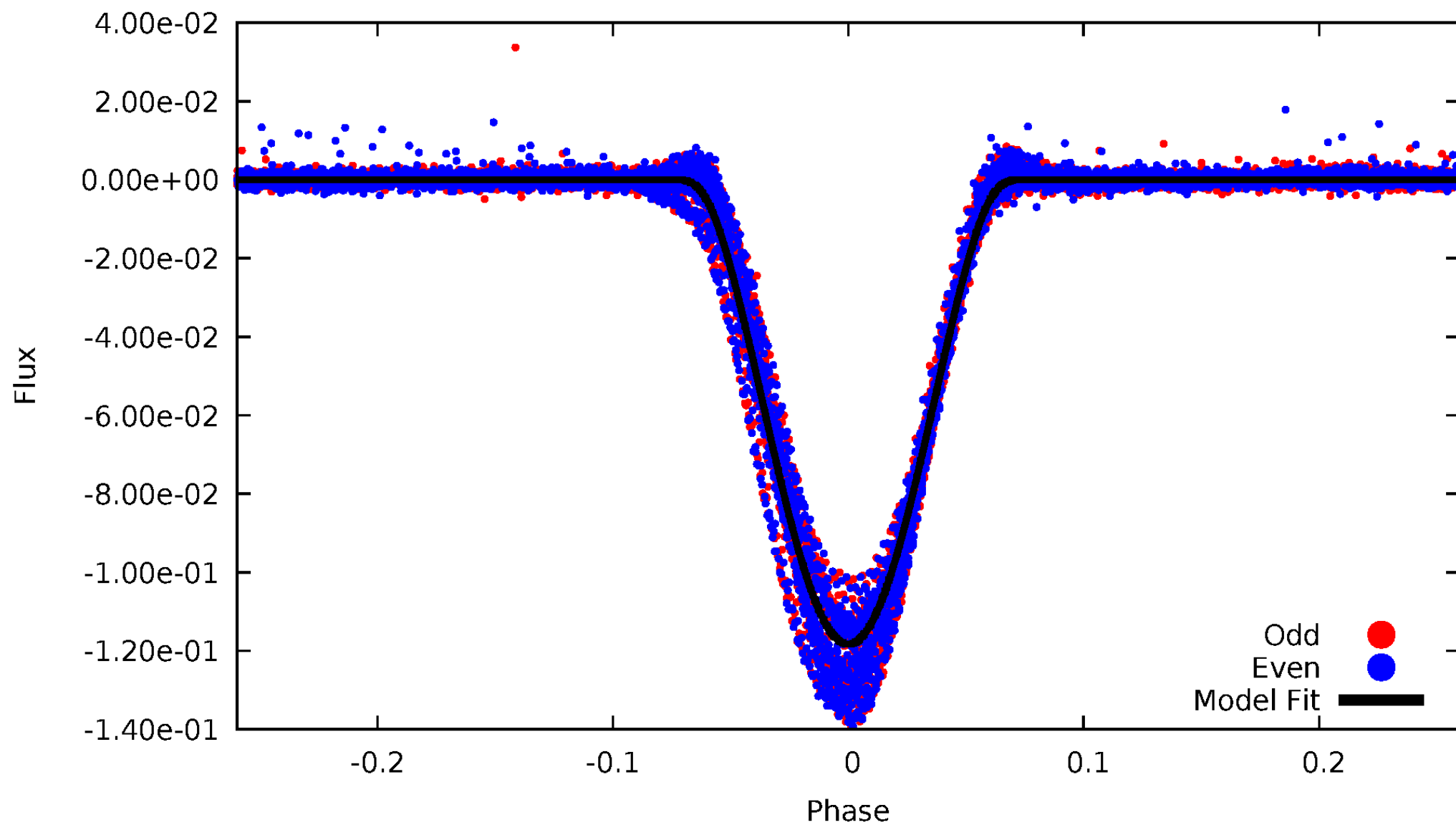


TCE 006066379-01



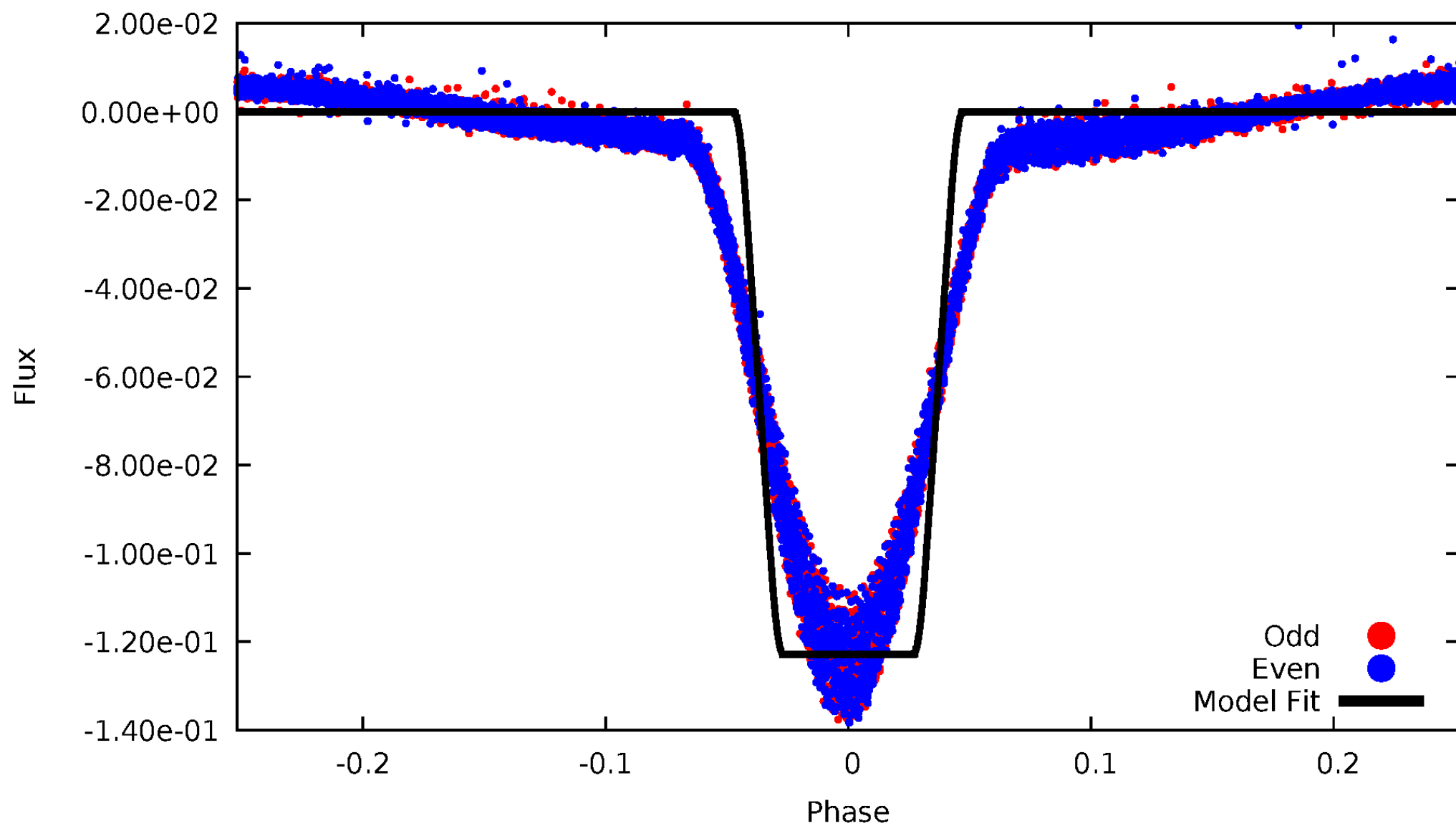
DV Odd/Even

TCE 006066379-01



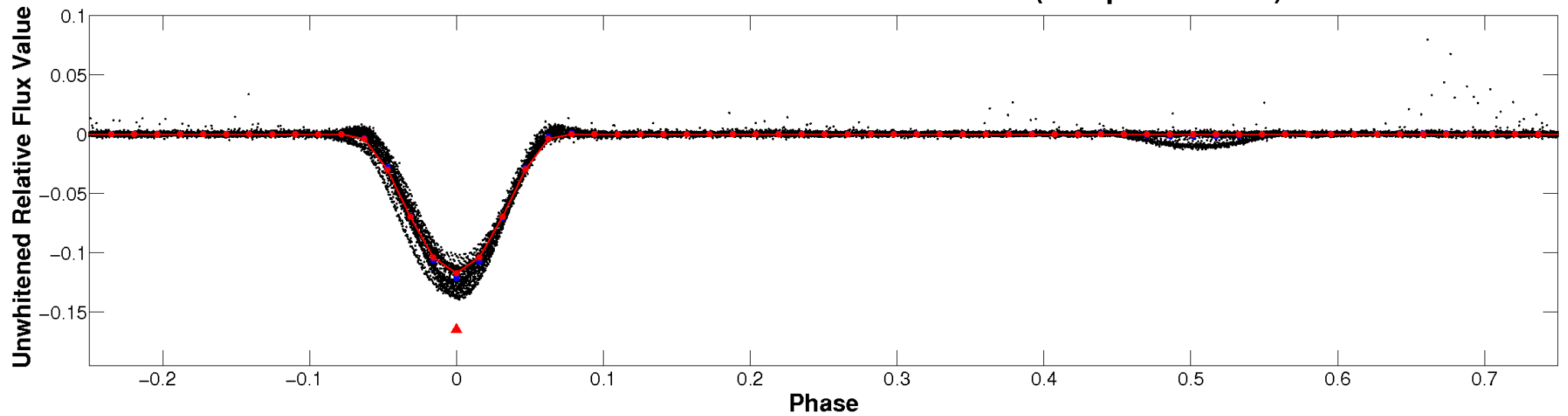
ALT Odd/Even

TCE 006066379-01

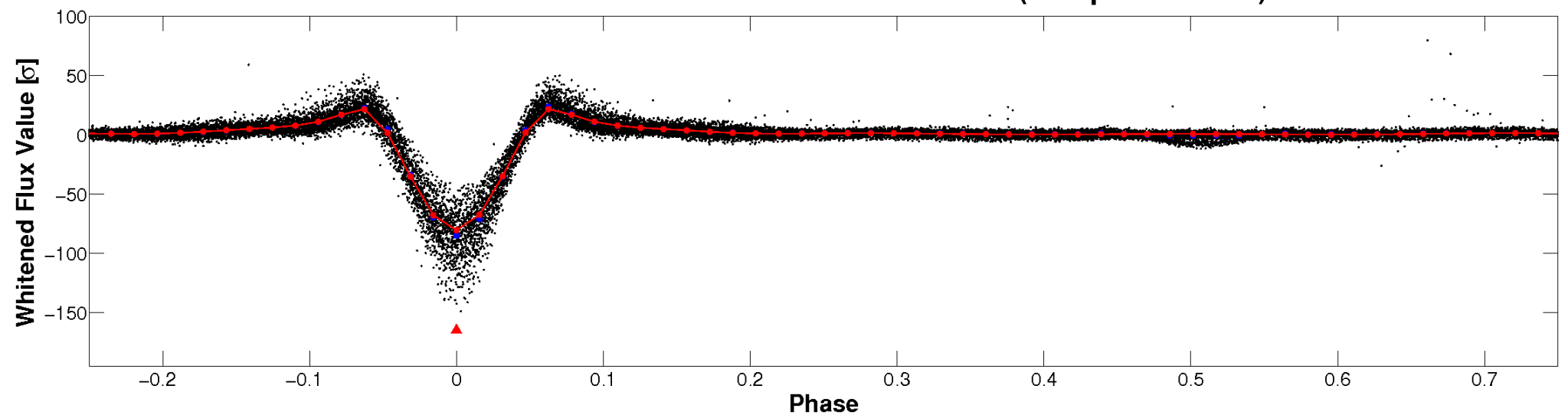


Non-Whitened Vs. Whitened Light Curve

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

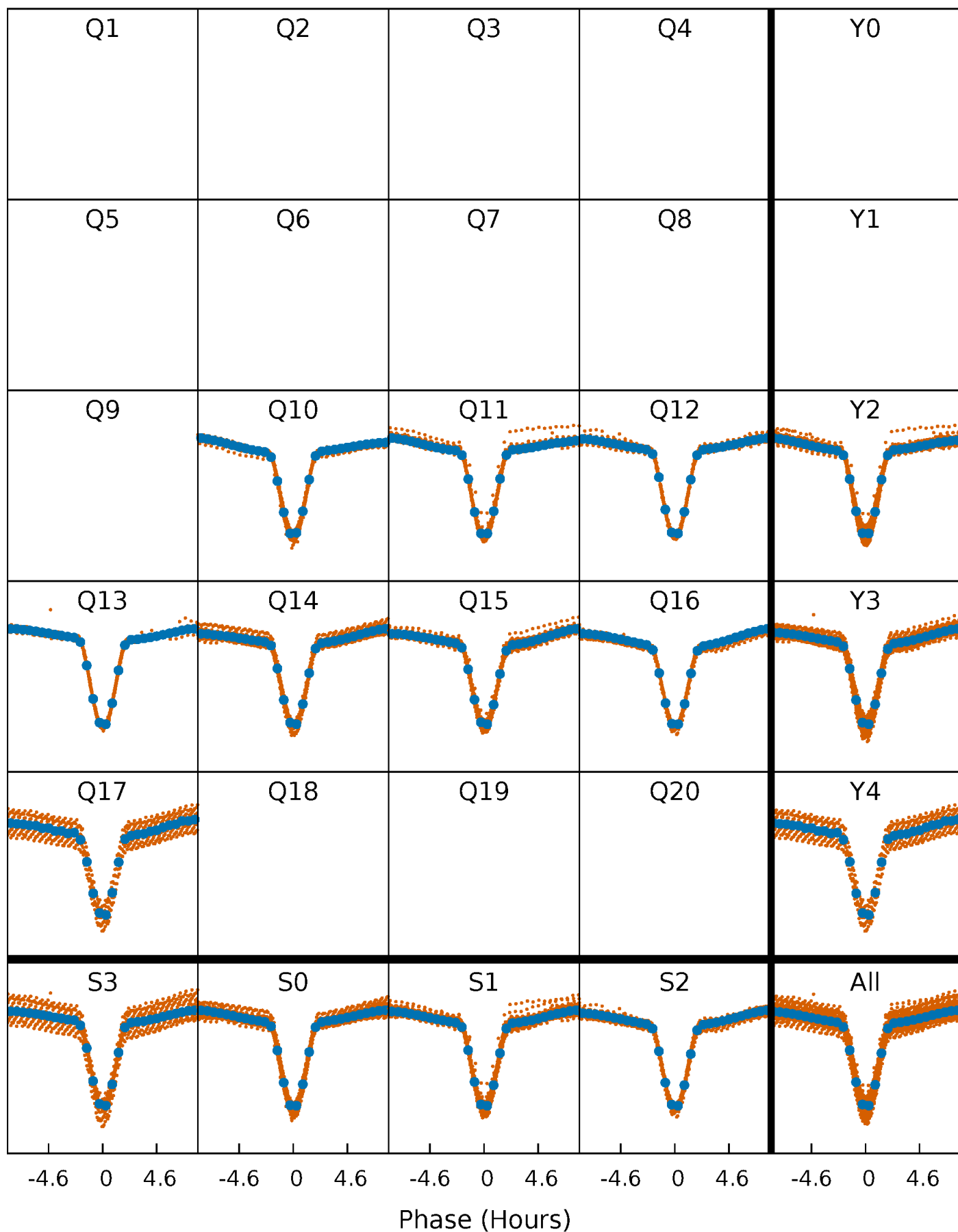


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



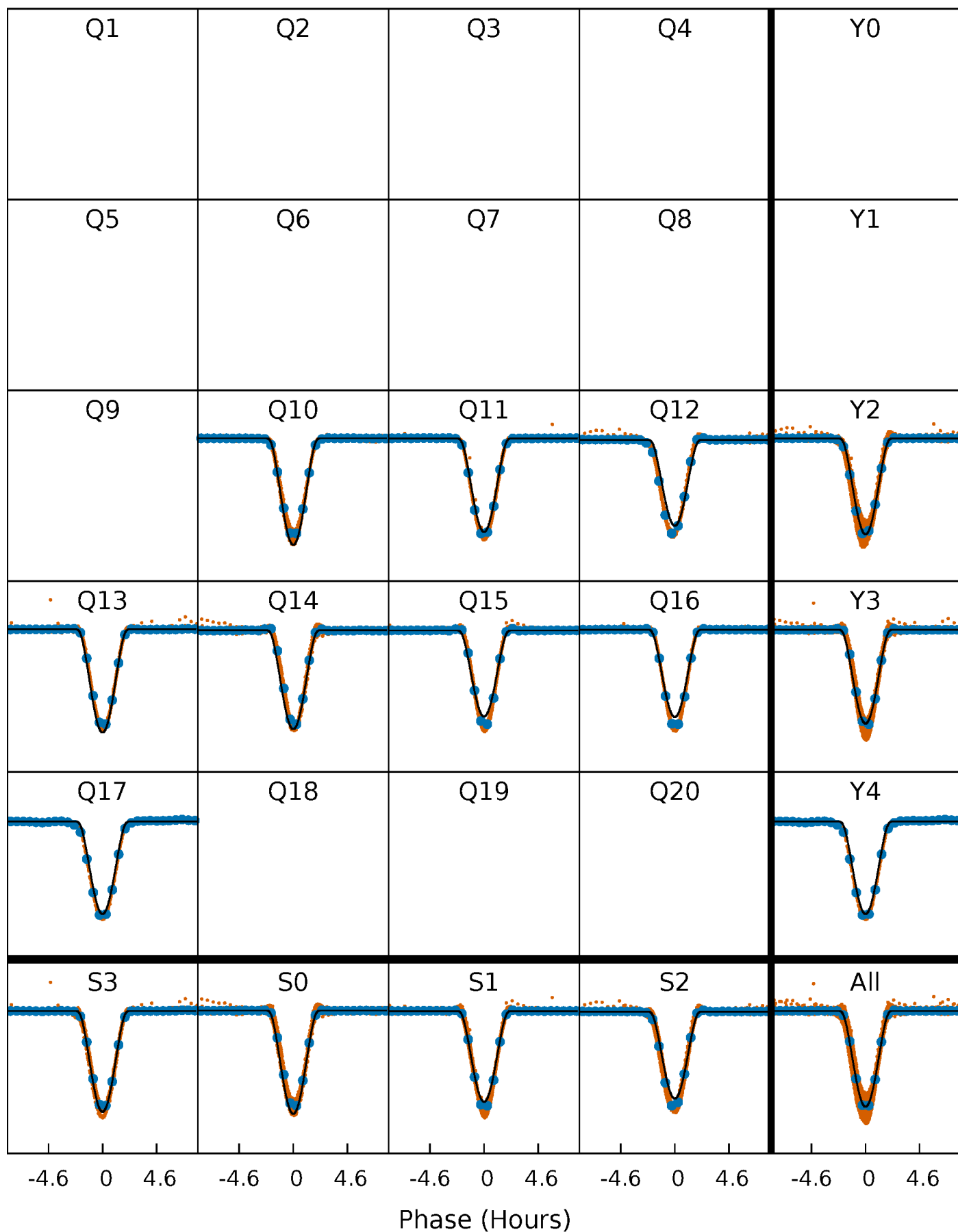
PDC Quarter-Phased Transit Curves

TCE 006066379-01 P= 1.303855 Days $T_0=131.609057$ (BKJD)



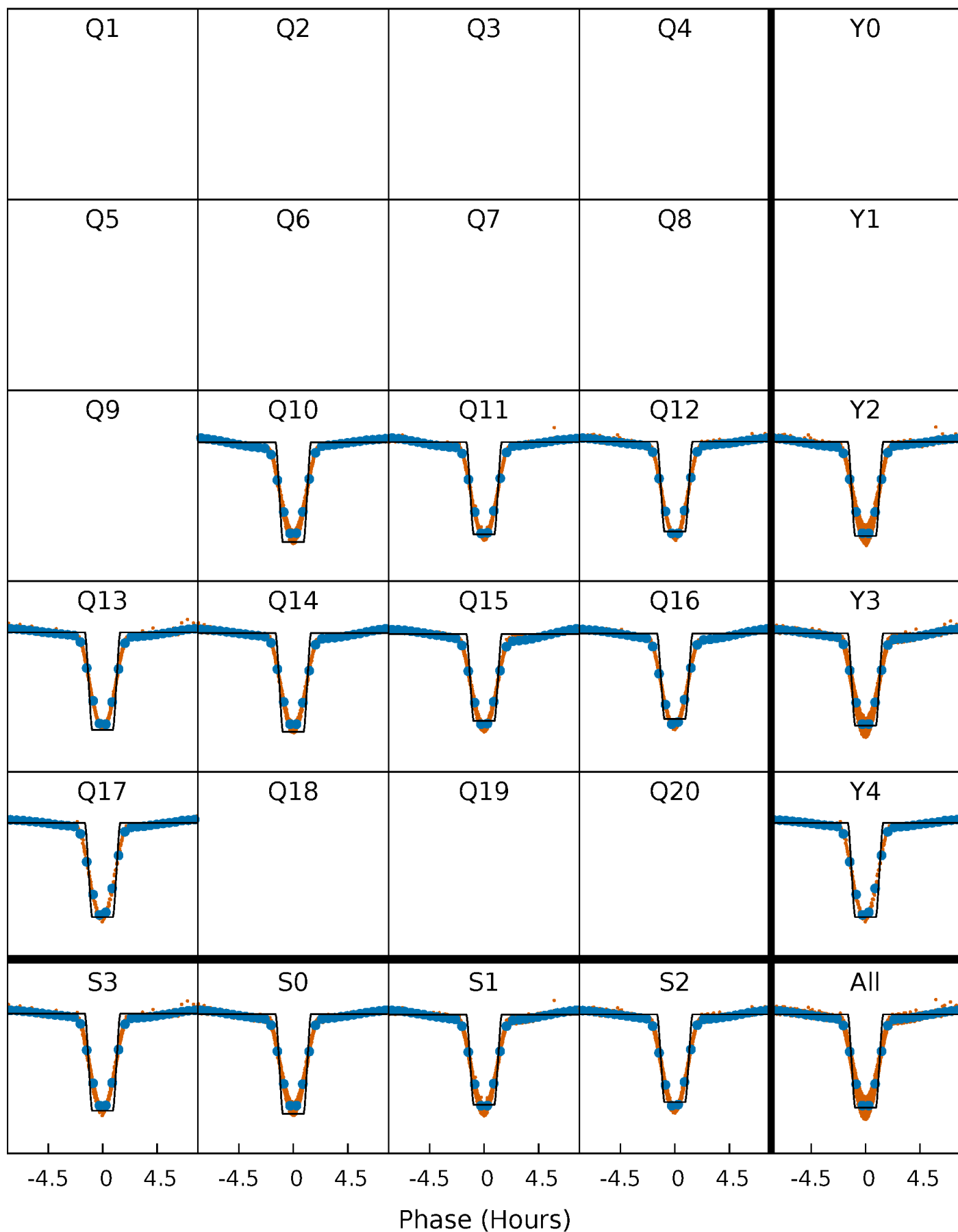
DV Quarter-Phased Transit Curves

TCE 006066379-01 P= 1.303855 Days $T_0=131.609057$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

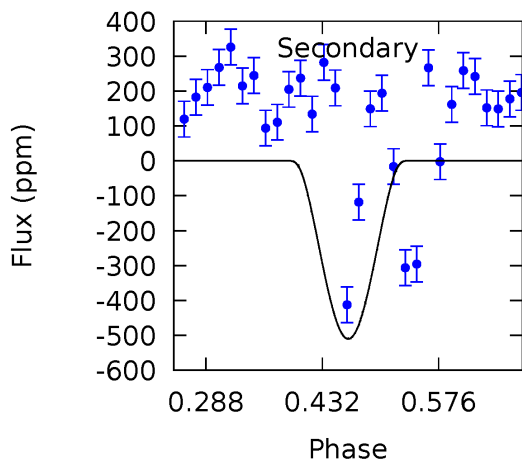
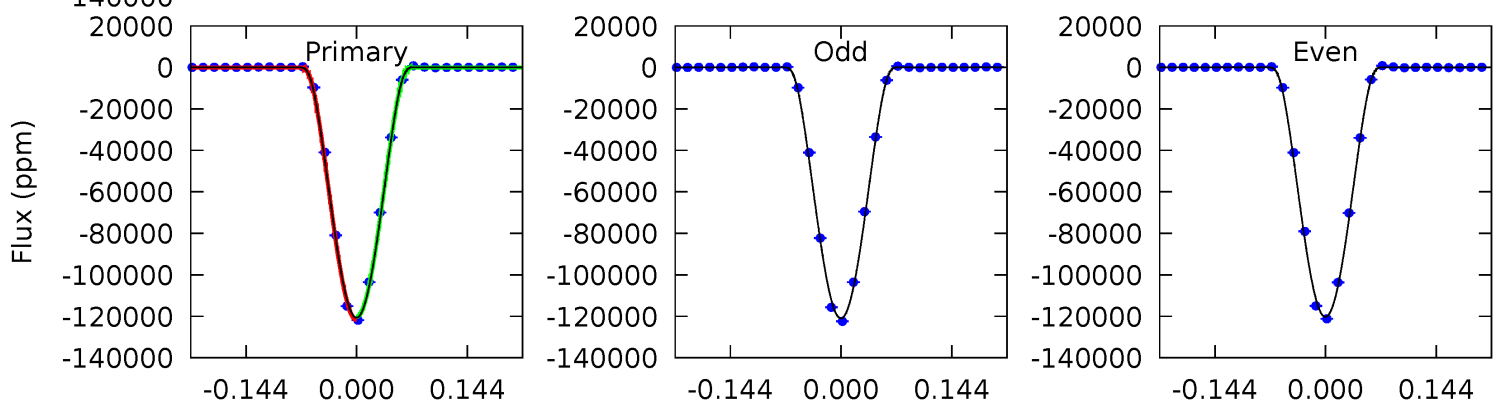
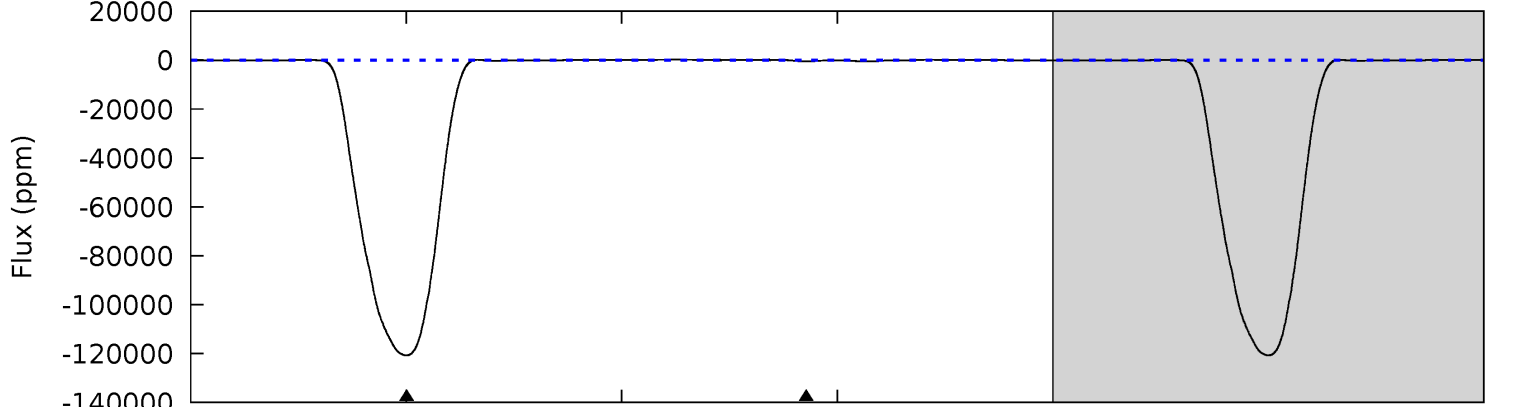
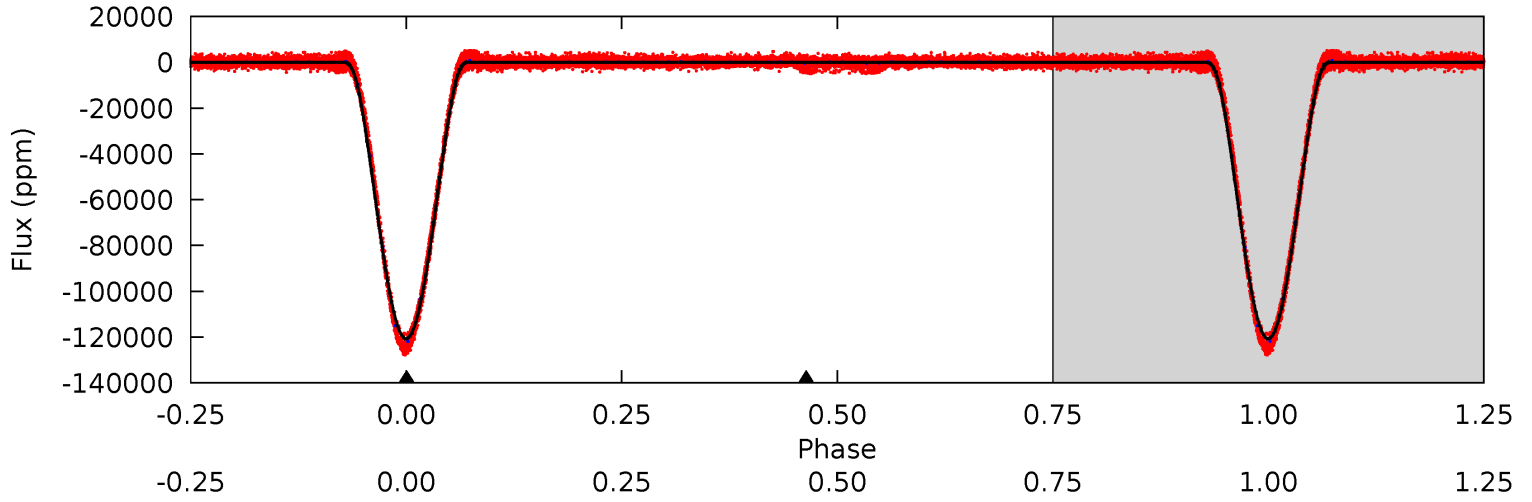
TCE 006066379-01 P= 1.303862 Days $T_0=131.604100$ (BKJD)



DV Model-Shift Uniqueness Test

006066379-01, P = 1.303855 Days, E = 131.609057 Days

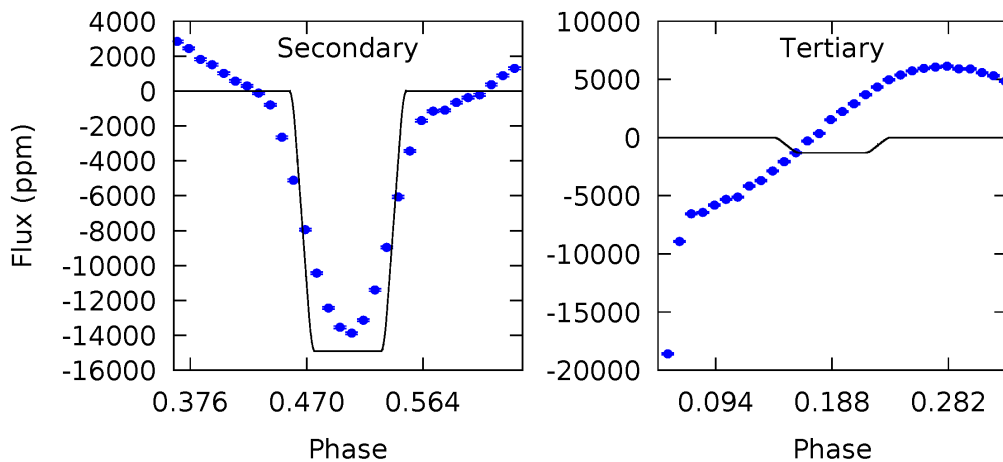
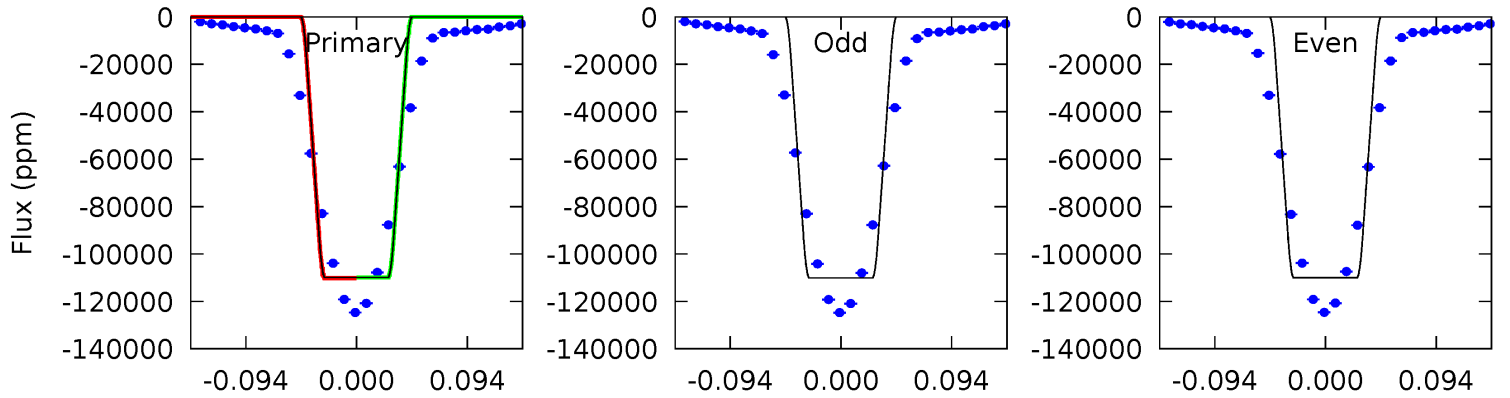
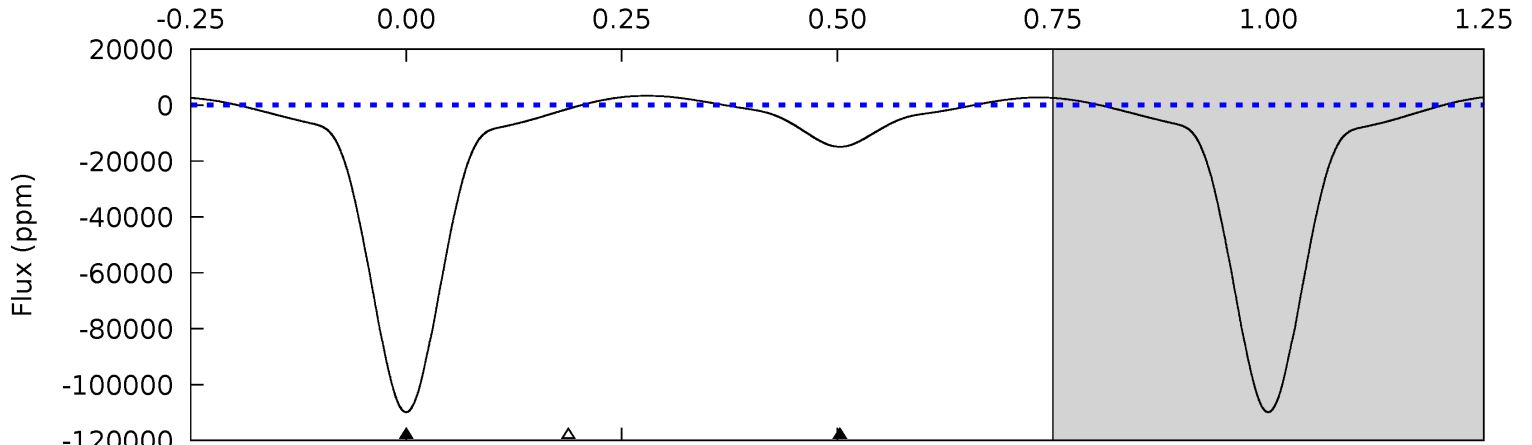
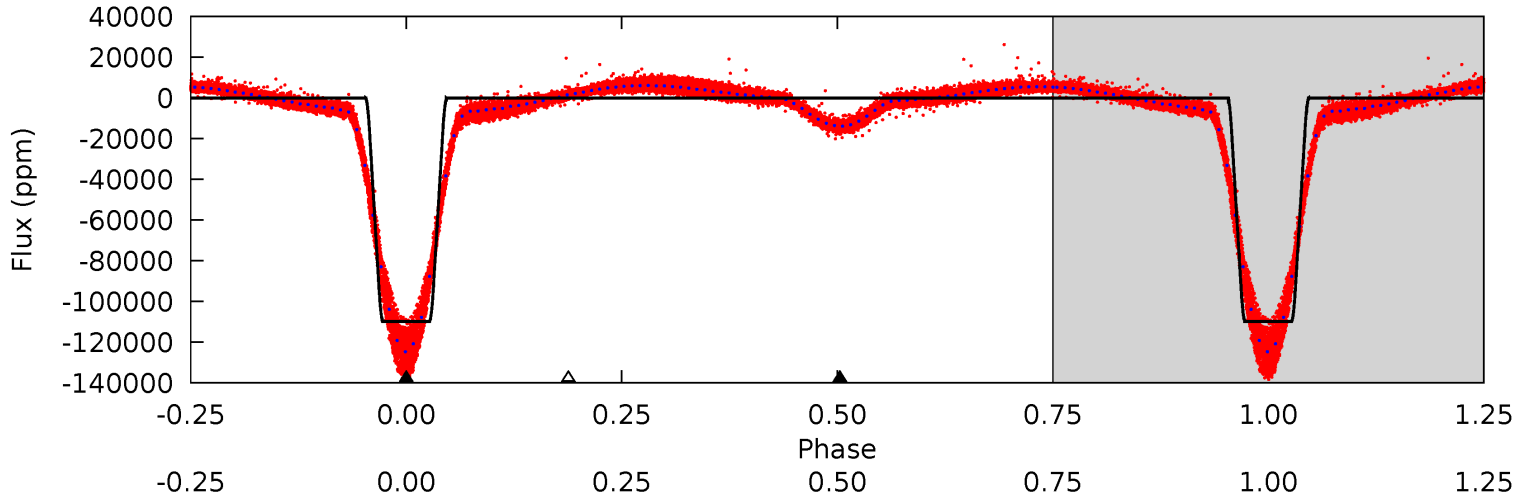
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5612	23.7	0	0	4.49	1.46	4.71	5612	5612	23.7	23.7	16.2	0.98	0.00	0



Alt Model-Shift Uniqueness Test

006066379-01, P = 1.303862 Days, E = 131.604100 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
1381	187.5	16.4	0	4.58	1.68	41.5	1365	1381	171.0	187.5	0.24	1.00	0.03	1.69



Stellar Parameters For KIC 006066379

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6282^{+197}_{-241}	$4.207^{+0.195}_{-0.175}$	$-0.240^{+0.250}_{-0.300}$	$1.343^{+0.384}_{-0.314}$	$1.057^{+0.185}_{-0.139}$	$0.615^{+0.717}_{-0.285}$
	+3%/-4%	+5%/-4%	+104%/-125%	+29%/-23%	+18%/-13%	+117%/-46%
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 006066379-01 / KOI 3649.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-510 ± 22	$68.50^{+11.14}_{-9.75}$	2894^{+246}_{-206}	-2978^{+130}_{-156}	$0.034^{+0.011}_{-0.009}$
Alt.	-14911 ± 80	$51.63^{+9.78}_{-8.05}$	2895^{+236}_{-211}	3894^{+152}_{-148}	$1.780^{+0.659}_{-0.471}$

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

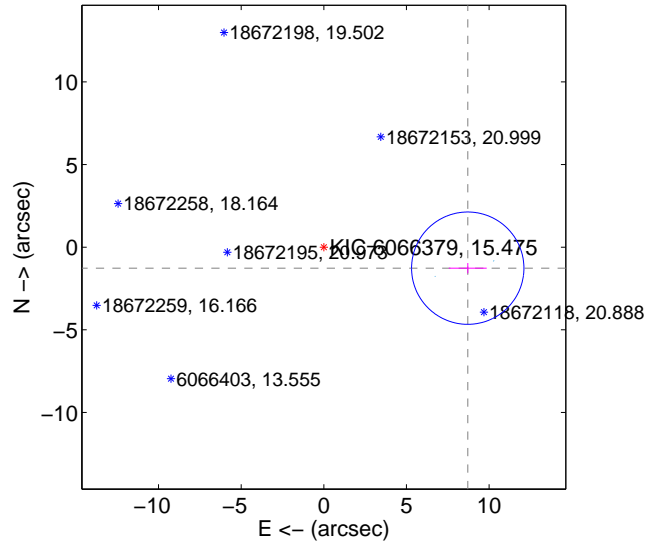
Supplemental centroid analysis for 006066379-01. Kepler magnitude: 15.47. Transit SNR 1767.38

There are 8 quarters with good PRF difference image offsets

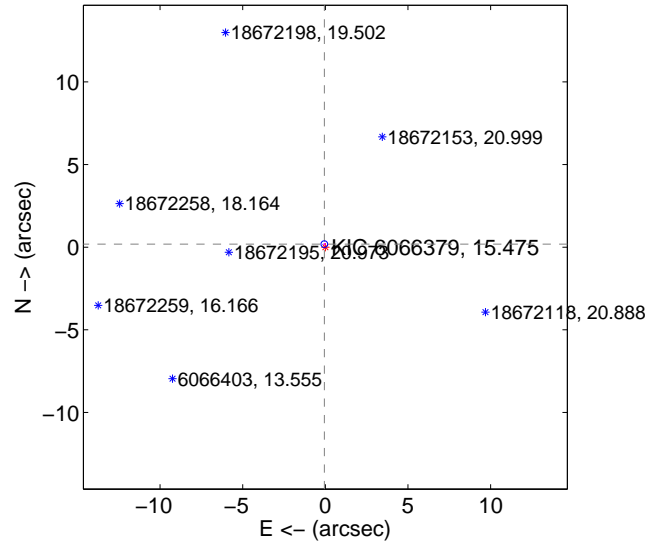
The OOT PRF centroid is offset from the target star catalog position by about 10.41 arcsec so the offset from difference PRF-fit to OOT-fit may be invalid.

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	8.801 ± 1.133	7.77	-8.709 ± 1.144	-1.271 ± 0.309
PRF-fit source offset from KIC position	0.193 ± 0.068	2.86	0.061 ± 0.069	0.183 ± 0.067
photometric centroid source offset	2.68 ± 0.00	1130.92	2.63 ± 0.00	-0.51 ± 0.00

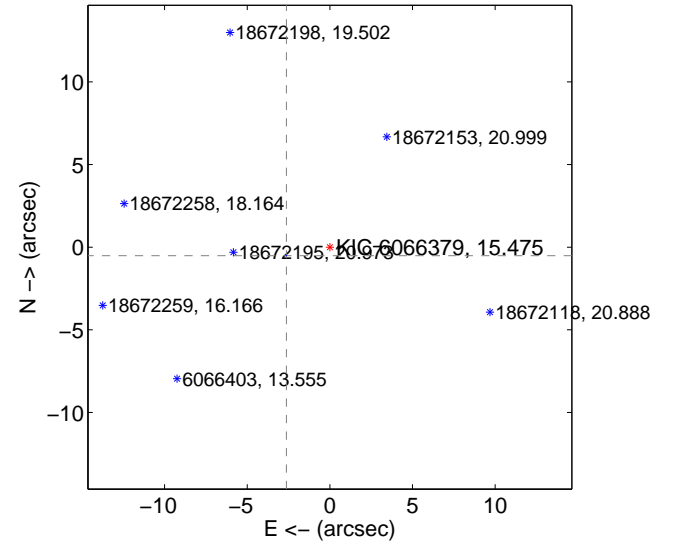
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position



offset from photometric centroids



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

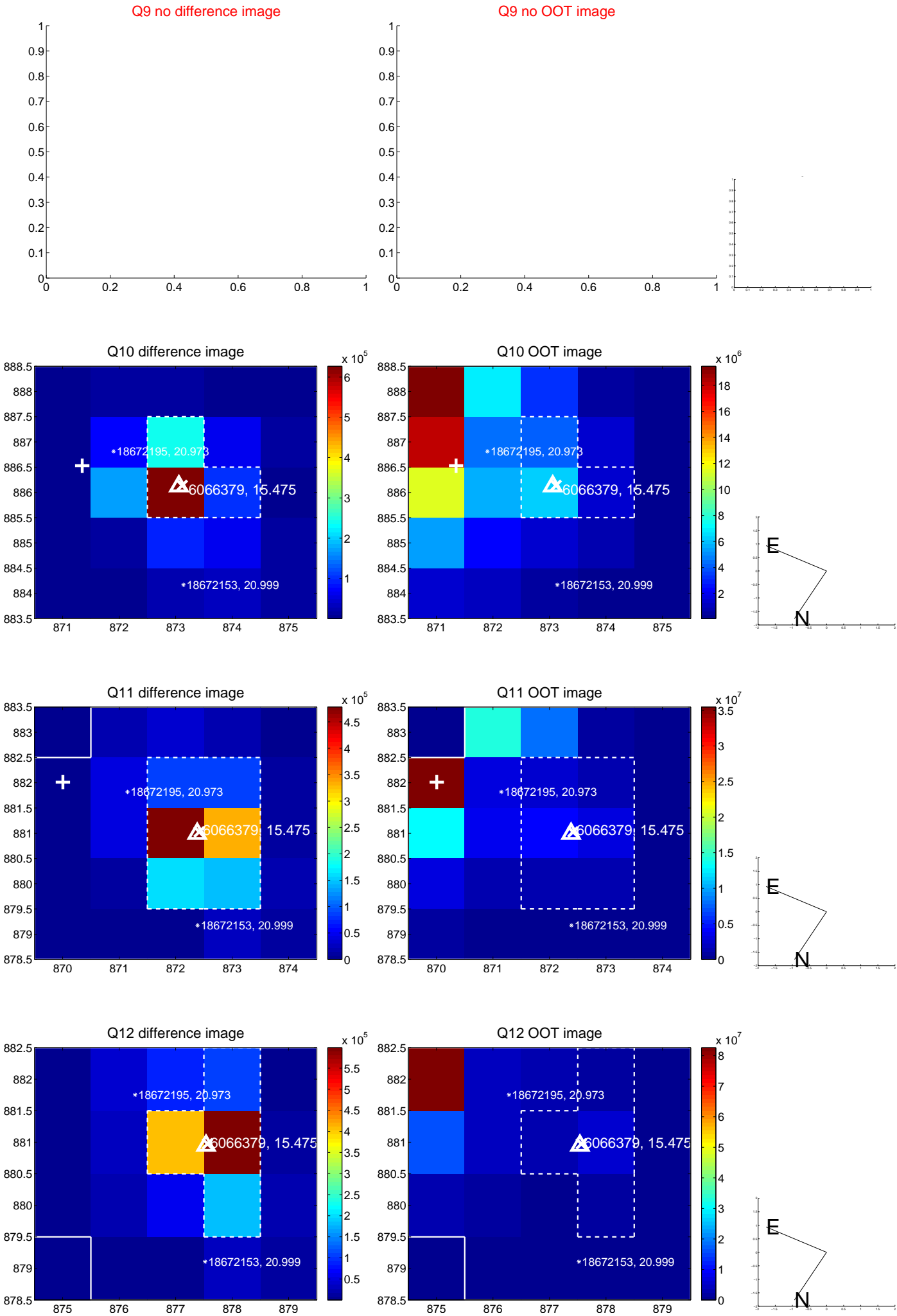
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



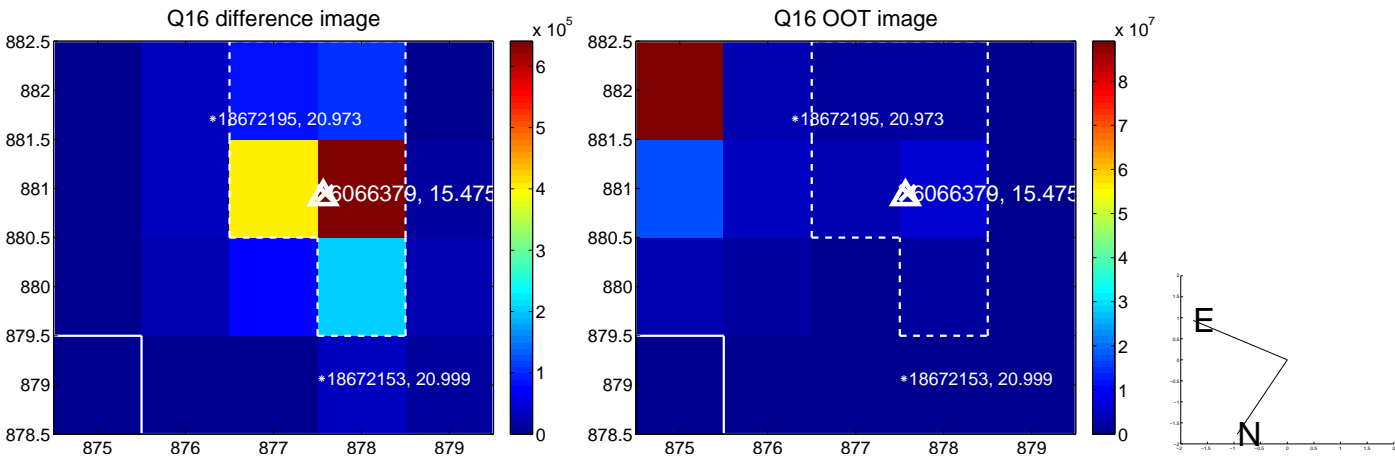
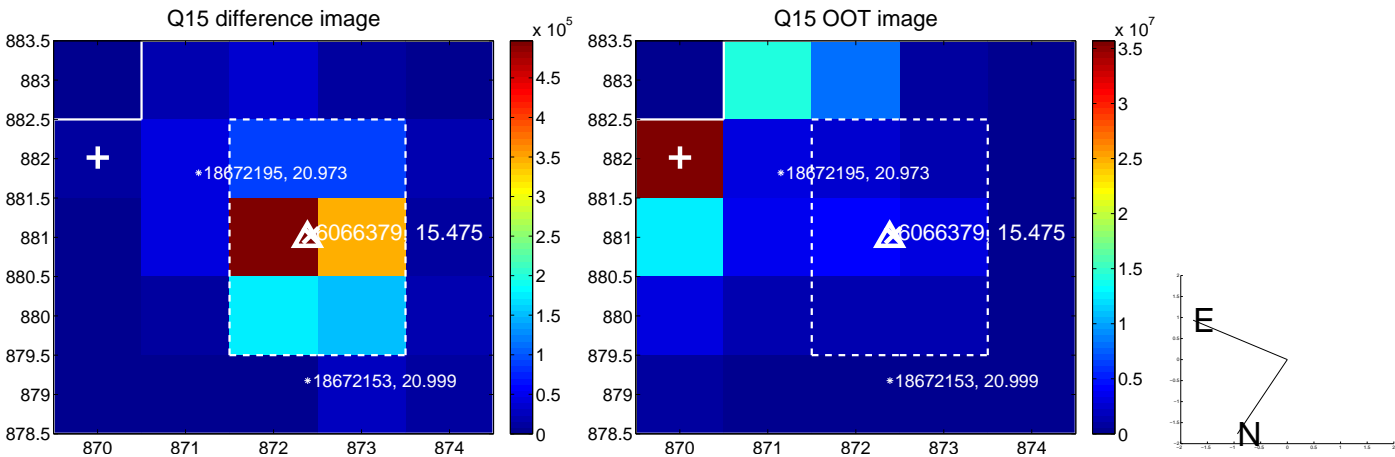
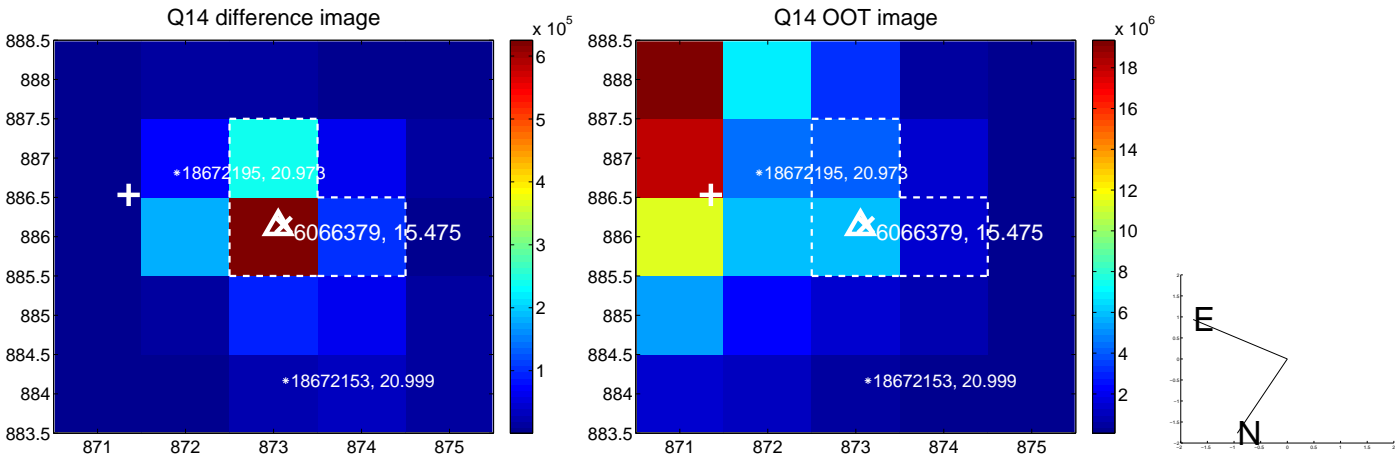
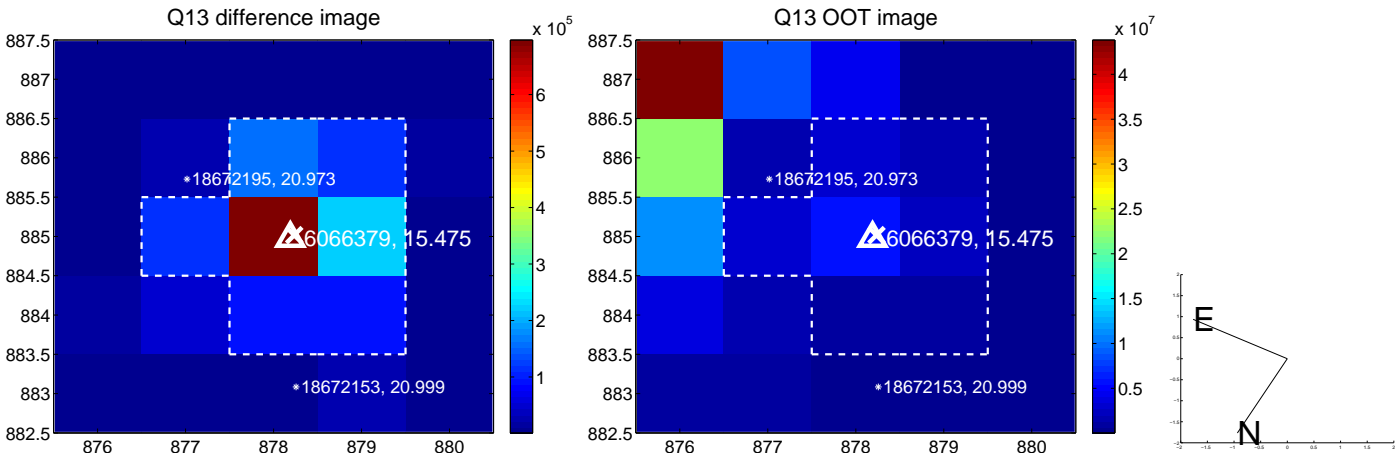
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



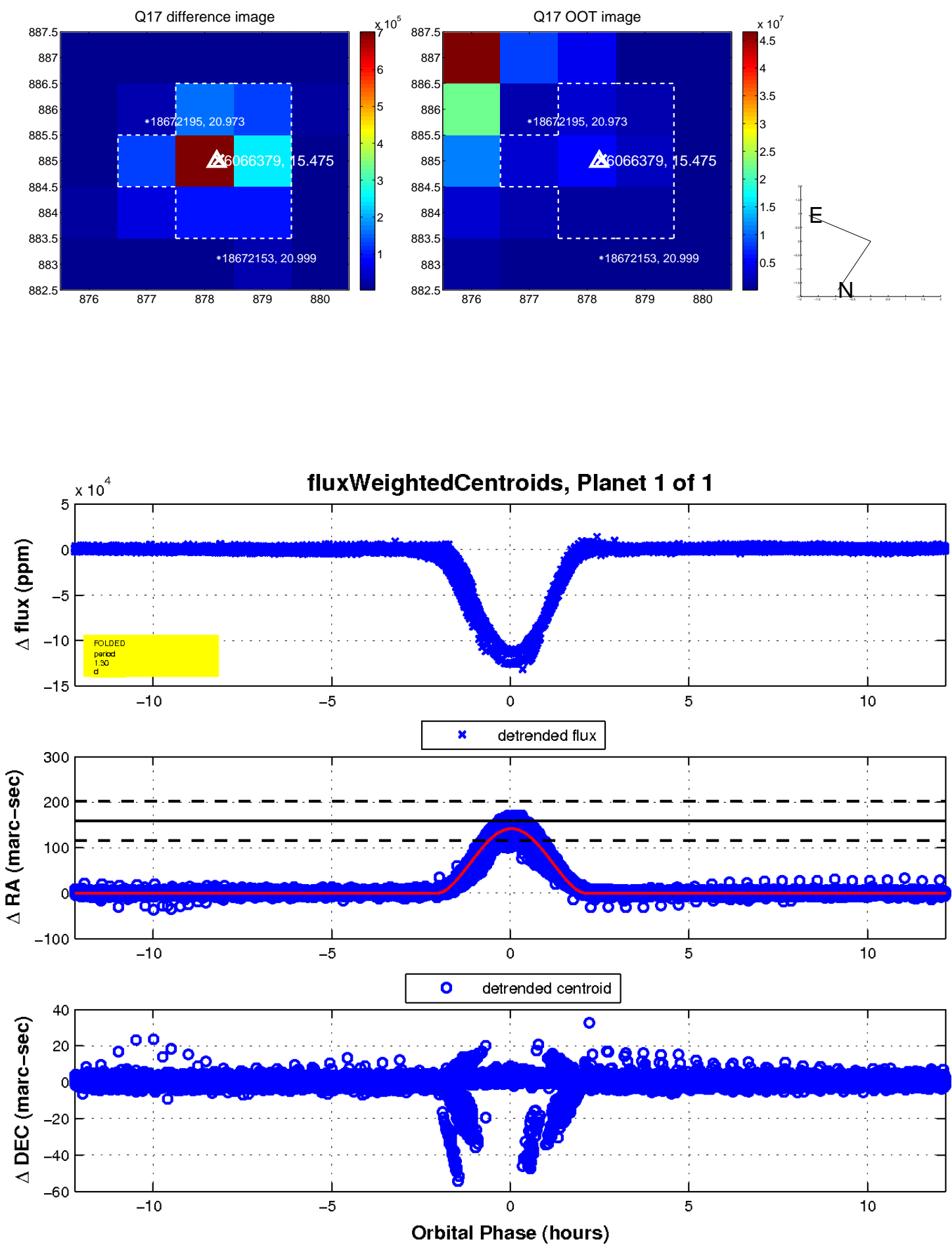
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

