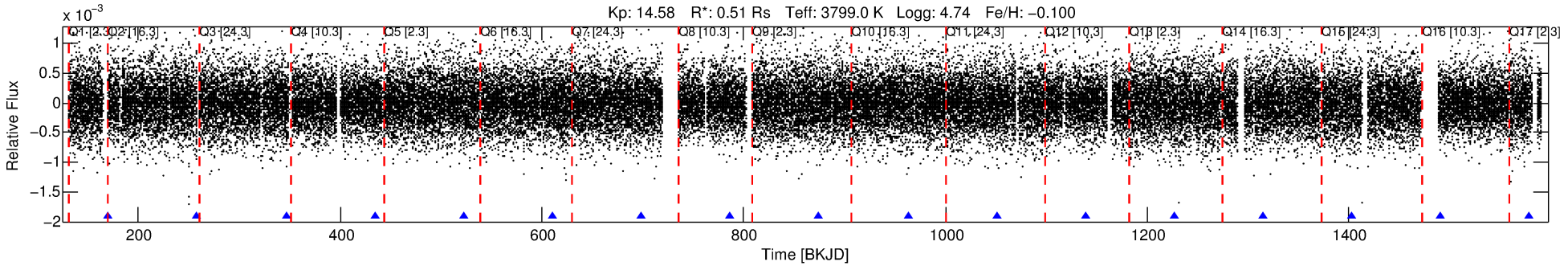
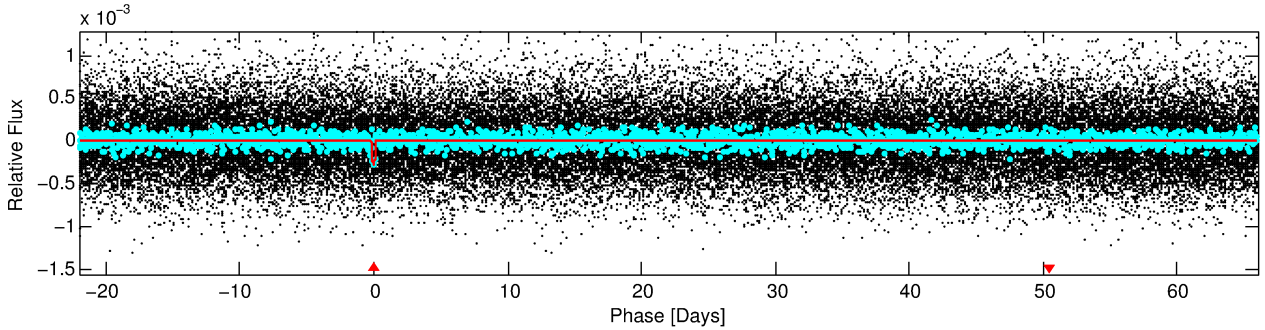
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

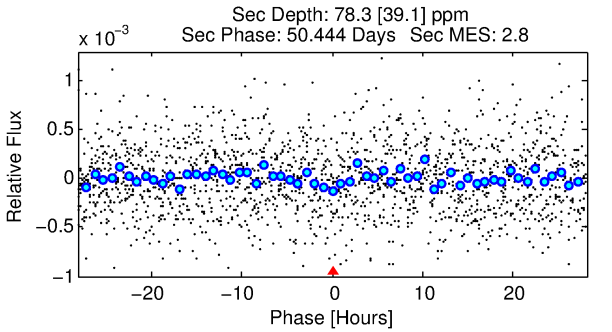
DV One-Page Summary

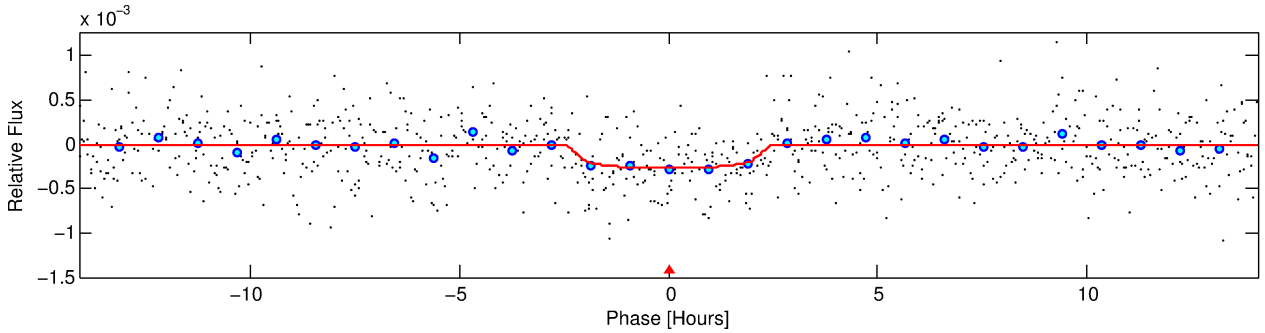
KIC: 7584332 Candidate: 1 of 1 Period: 88.042 d

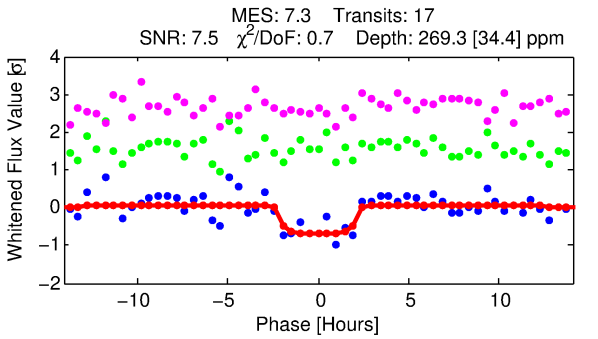
WARNING: THIS DATA IS SIMULATED, NOT OBSERVED

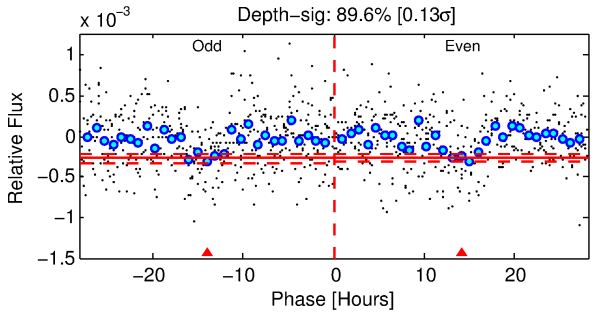


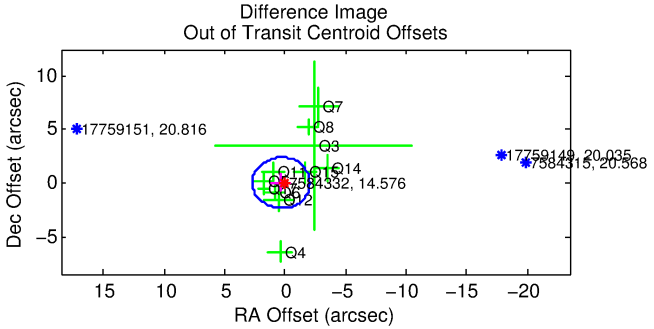












DV Fit Results:

Period = 88.04231 [0.00116] d
Epoch = 170.4135 [0.0116] BKJD
Rp/R* = 0.0166 [0.0164]
a/R* = 90.46 [401.90]
b = 0.80 [2.05]

Seff = 0.50 [0.05]
Teq = 215 [5] K
Rp = 0.93 [0.92] Re
a = 0.3113 [0.0159] AU

Ag = 4867.23 [9919.58] [0.49σ]
Teffp = 2770 [1411] K [1.81σ]

DV Diagnostic Results:

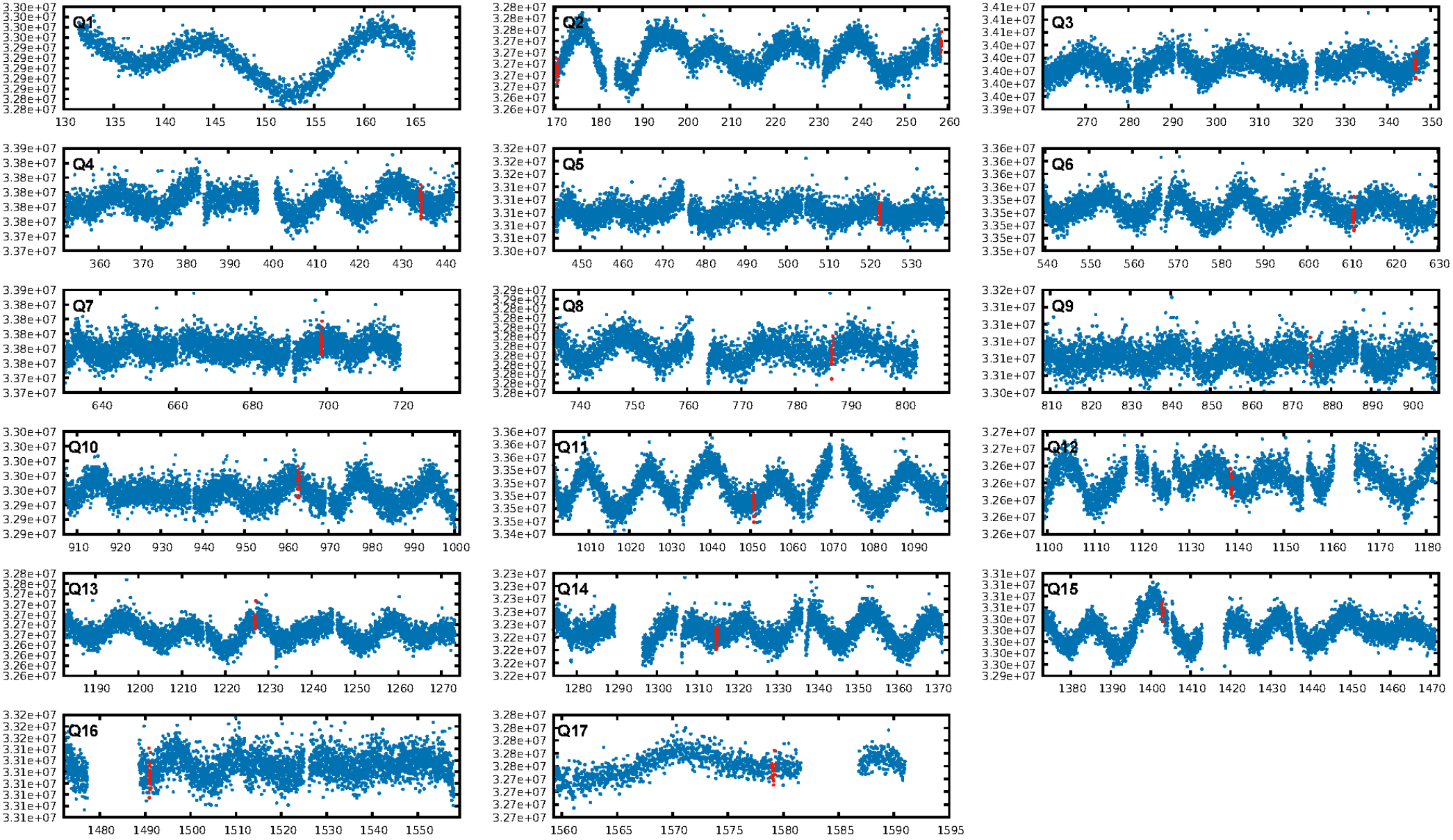
ShortPeriod−sig: N/A
LongPeriod−sig: N/A
ModelChiSquare2−sig: 97.2%
ModelChiSquareGof−sig: 100.0%
Bootstrap−pfa: 4.39e−13
RollingBand−fgt: 1.00 [16/16]
GhostDiagnostic−chr: 1.664

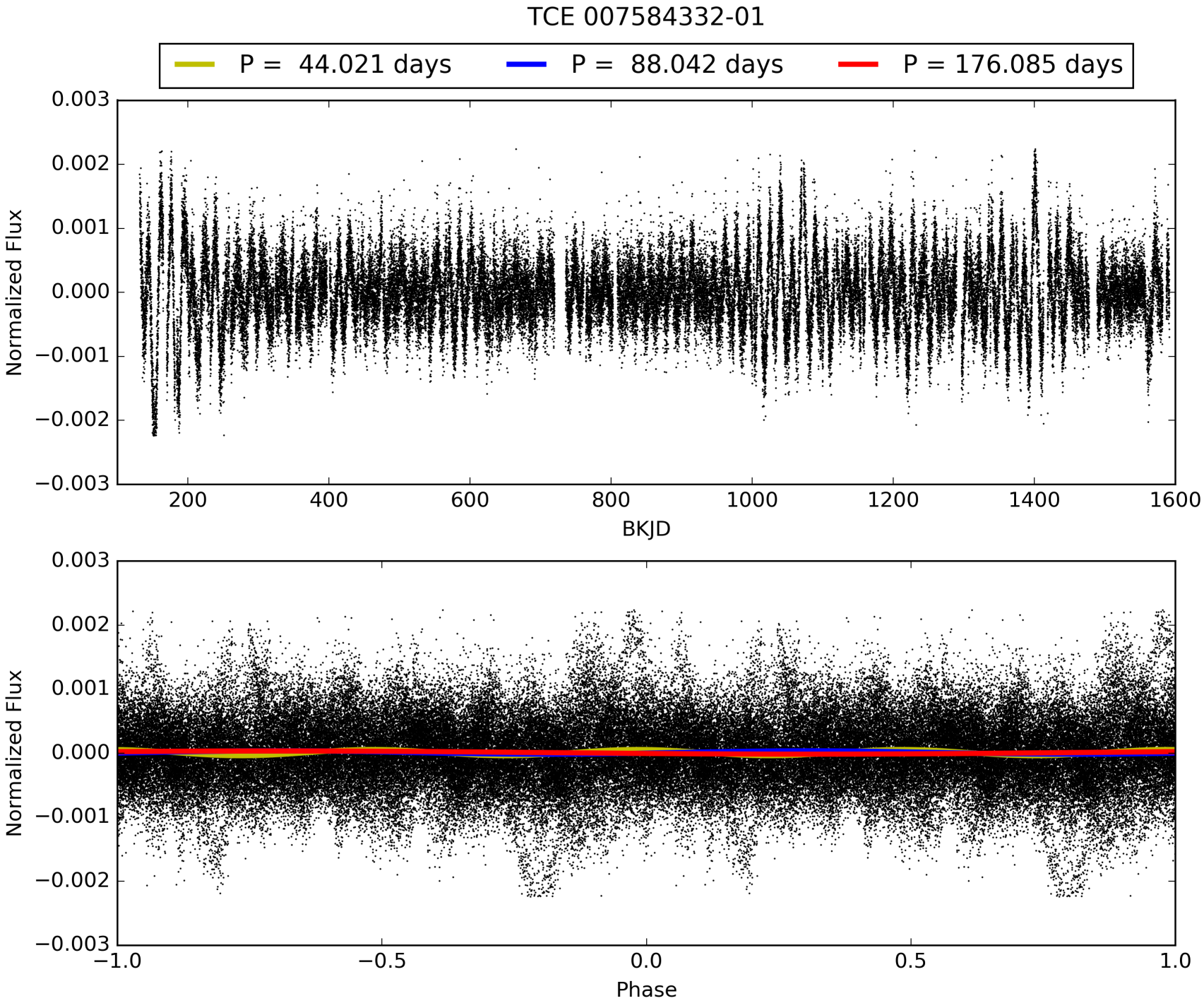
Centroid−sig: 32.3%
Centroid−so: 2.063 arcsec [1.00σ]
OotOffset−rm: 0.340 arcsec [0.43σ]
KicOffset−rm: 0.661 arcsec [0.76σ]
OotOffset−st: 2/4/3/2 [11]
KicOffset−st: 2/4/3/2 [11]
DiffImageQuality−fgm: 0.36 [4/11]
DiffImageOverlap−fno: 1.00 [13/13]

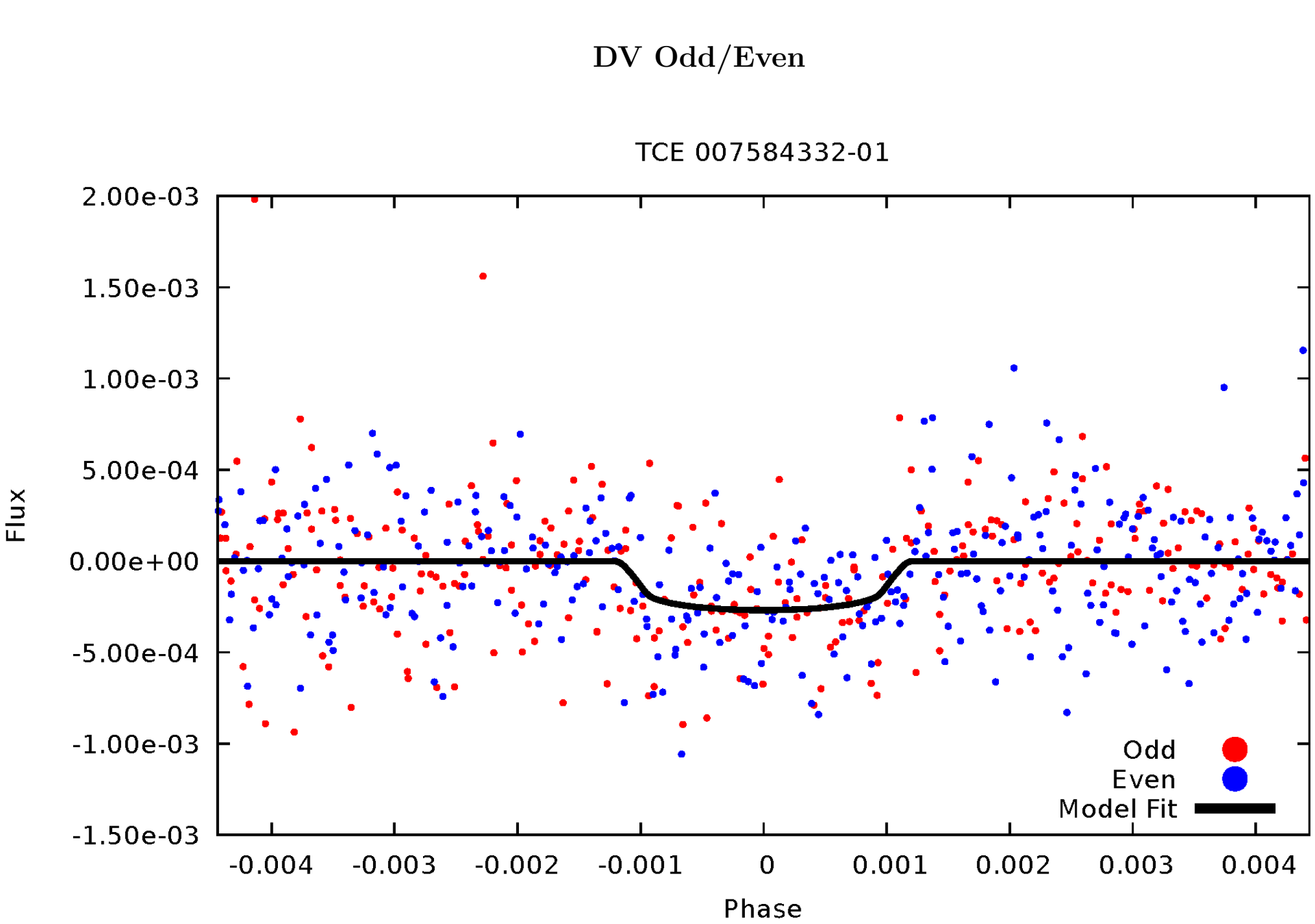
Software Revision: svn+ssh://murzim/repo/soc/branches/integ/ksop−2174@60968 −− Date Generated: 14−Feb−2016 01:13:00 Z

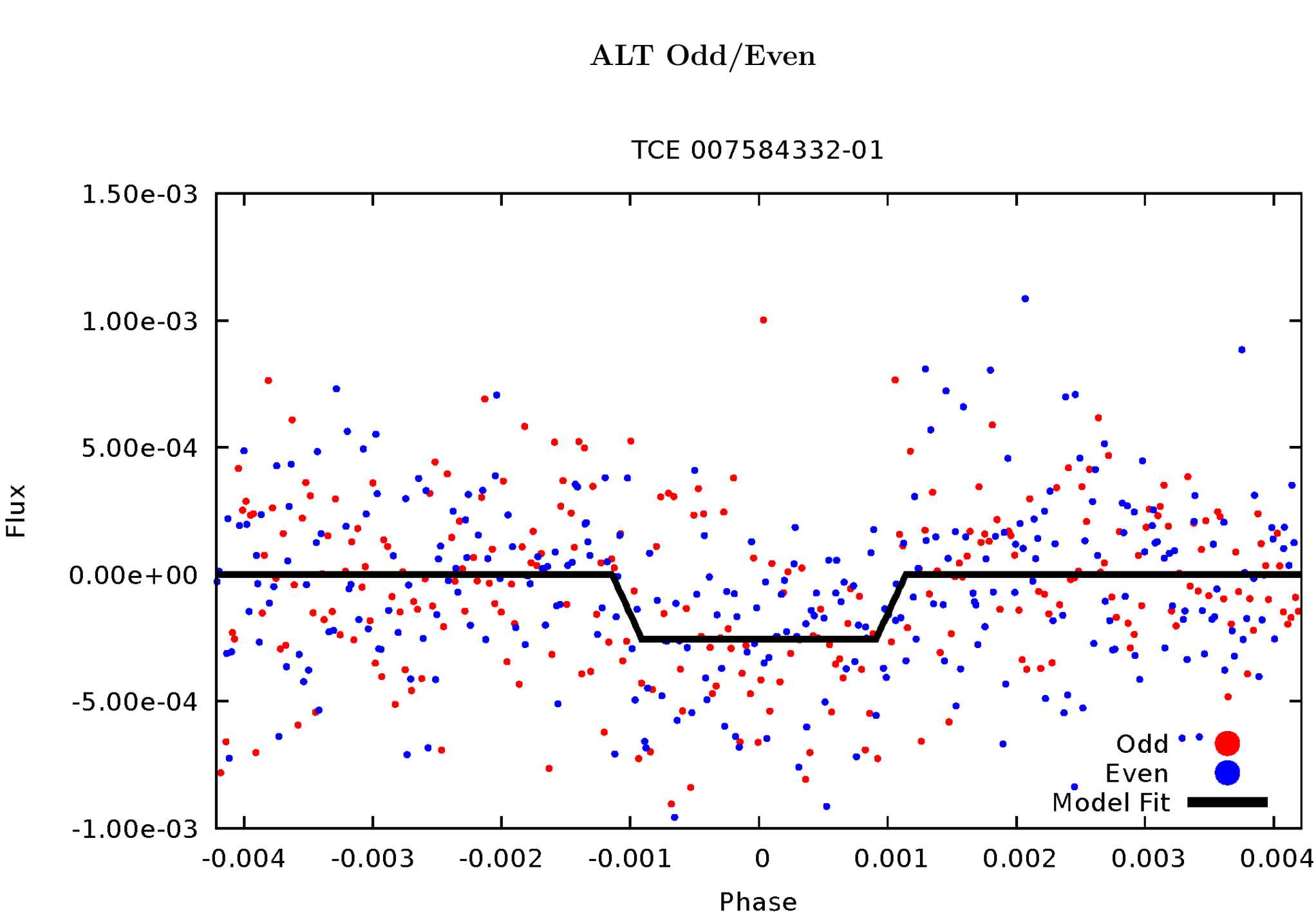
This Data Validation Report Summary was produced in the Kepler Science Operations Center Pipeline at NASA Ames Research Center

TCE 007584332-01, PDC Light Curves

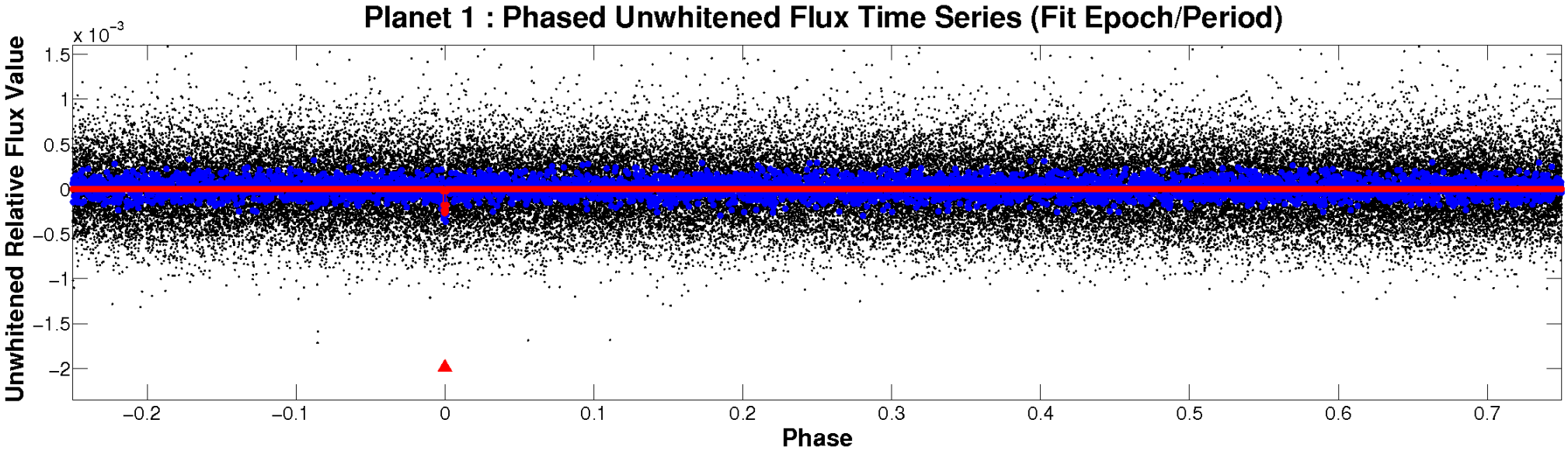


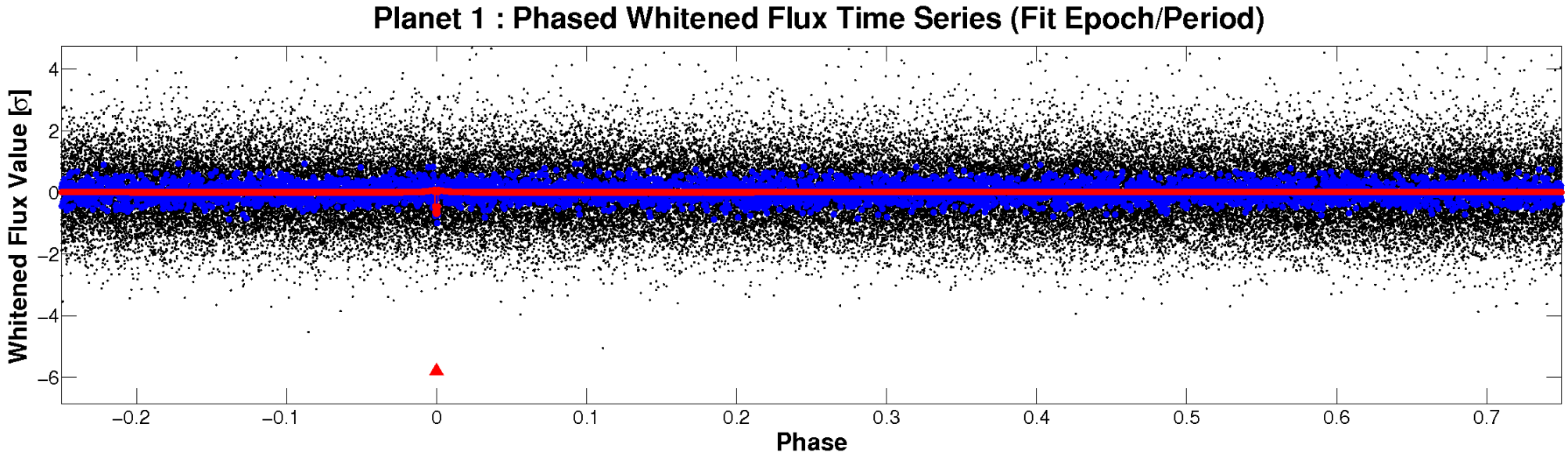

TCE 007584332-01
P = 44.021 days
P = 88.042 days
P = 176.085 days
Normalized Flux
BKJD
Normalized Flux
Phase


DV Odd/Even
TCE 007584332-01
2.00e-03
1.50e-03
1.00e-03
5.00e-04
0.00e+00
-5.00e-04
-1.00e-03
-1.50e-03
Flux
-0.004
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
0.004
Phase
Odd
Even
Model Fit


ALT Odd/Even
TCE 007584332-01
1.50e-03
1.00e-03
5.00e-04
0.00e+00
-5.00e-04
-1.00e-03
Flux
-0.004
-0.003
-0.002
-0.001
0
0.001
0.002
0.003
0.004
Phase
Odd
Even
Model Fit

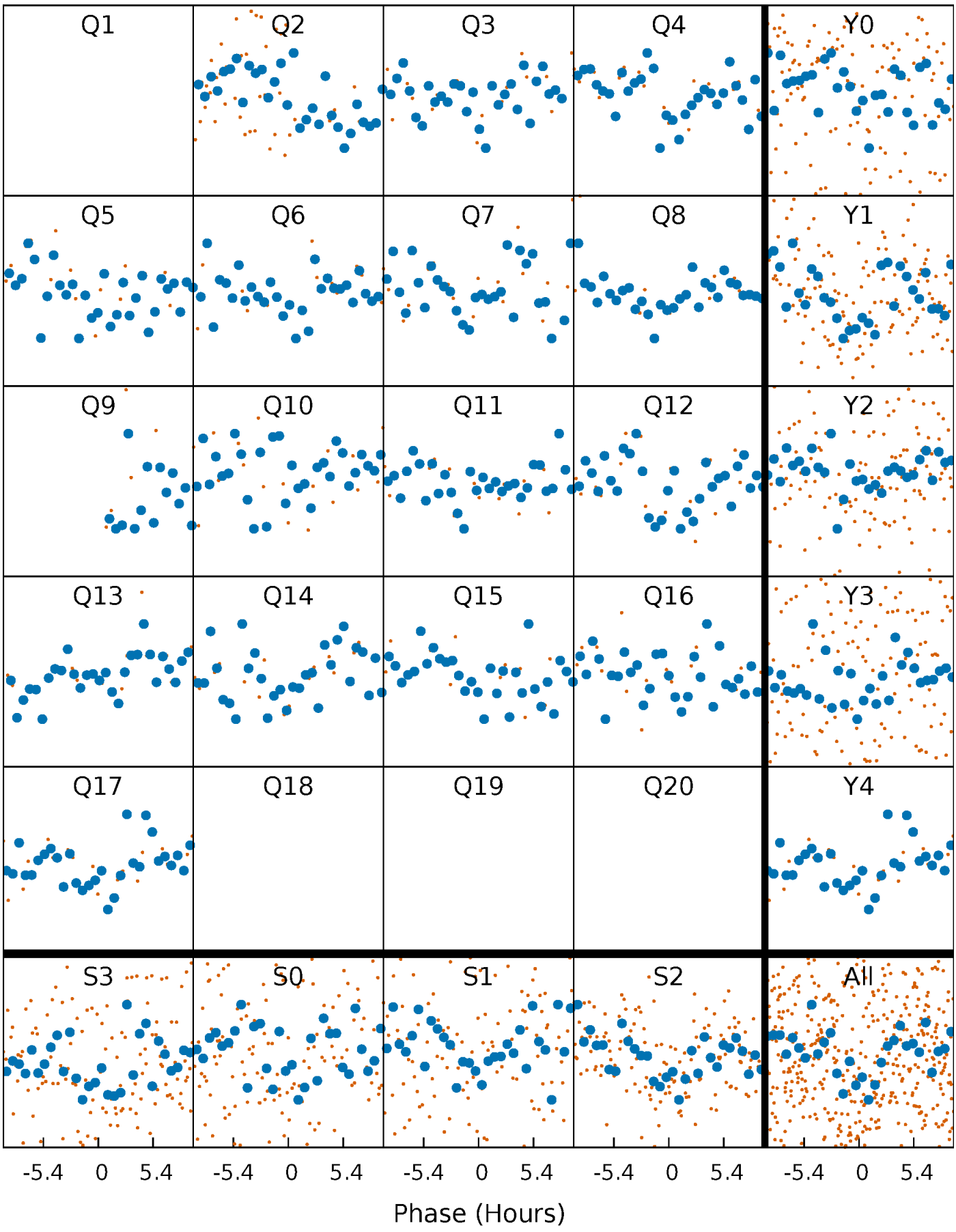
Non-Whitened Vs. Whitened Light Curve





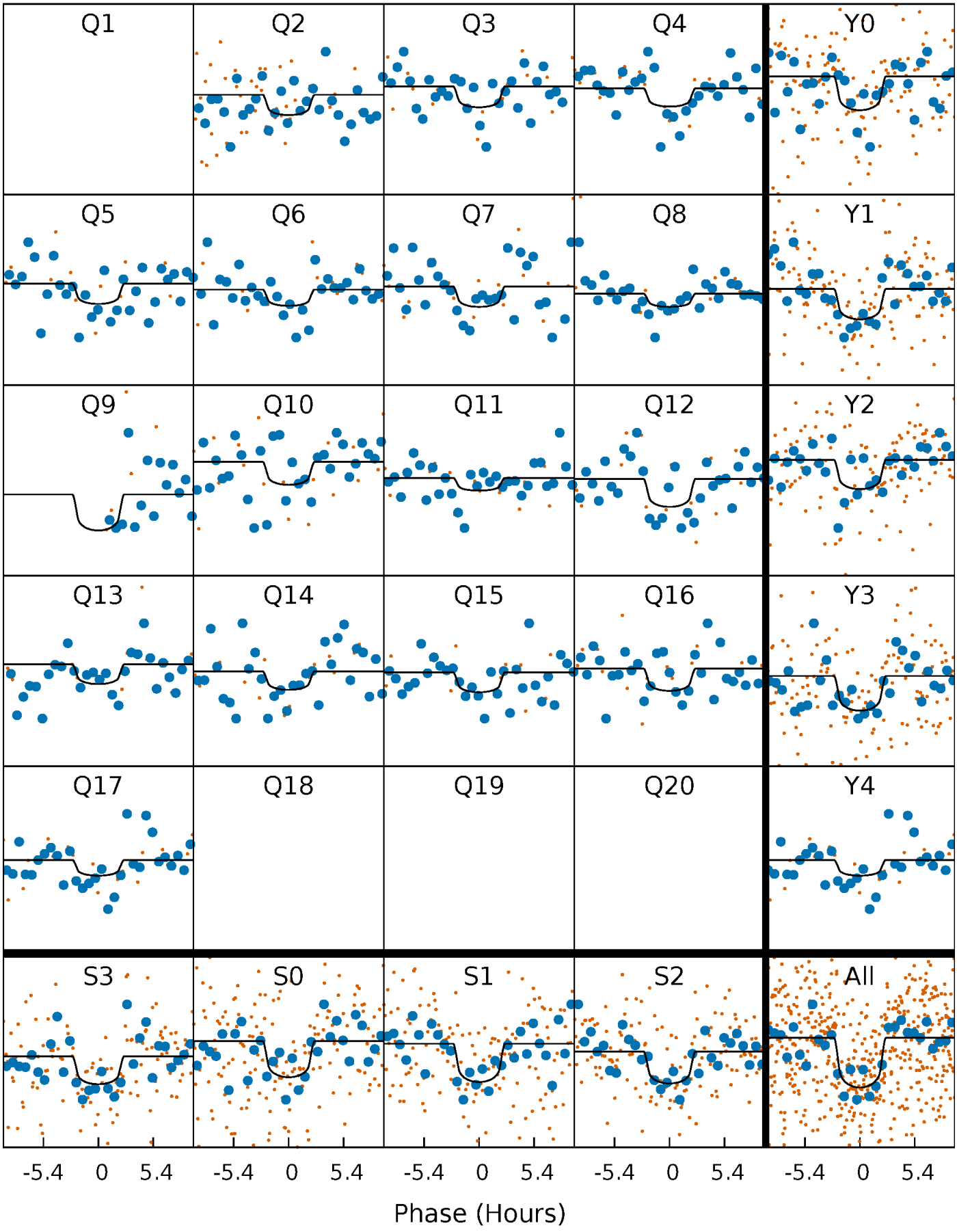
PDC Quarter-Phased Transit Curves

TCE 007584332-01 P= 88.042311 Days T_0=170.413488 (BKJD)



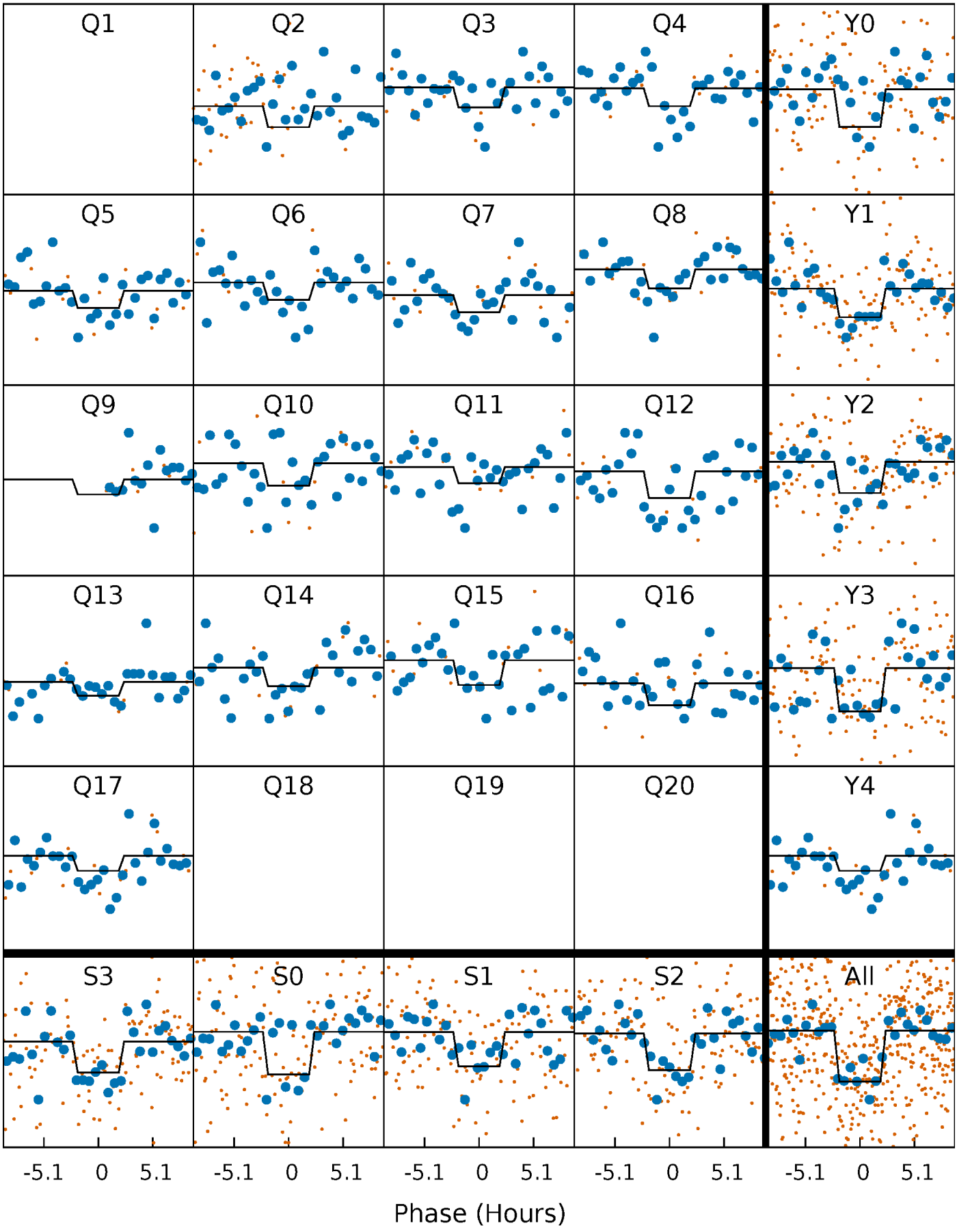
DV Quarter-Phased Transit Curves

TCE 007584332-01 P= 88.042311 Days T_0=170.413488 (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

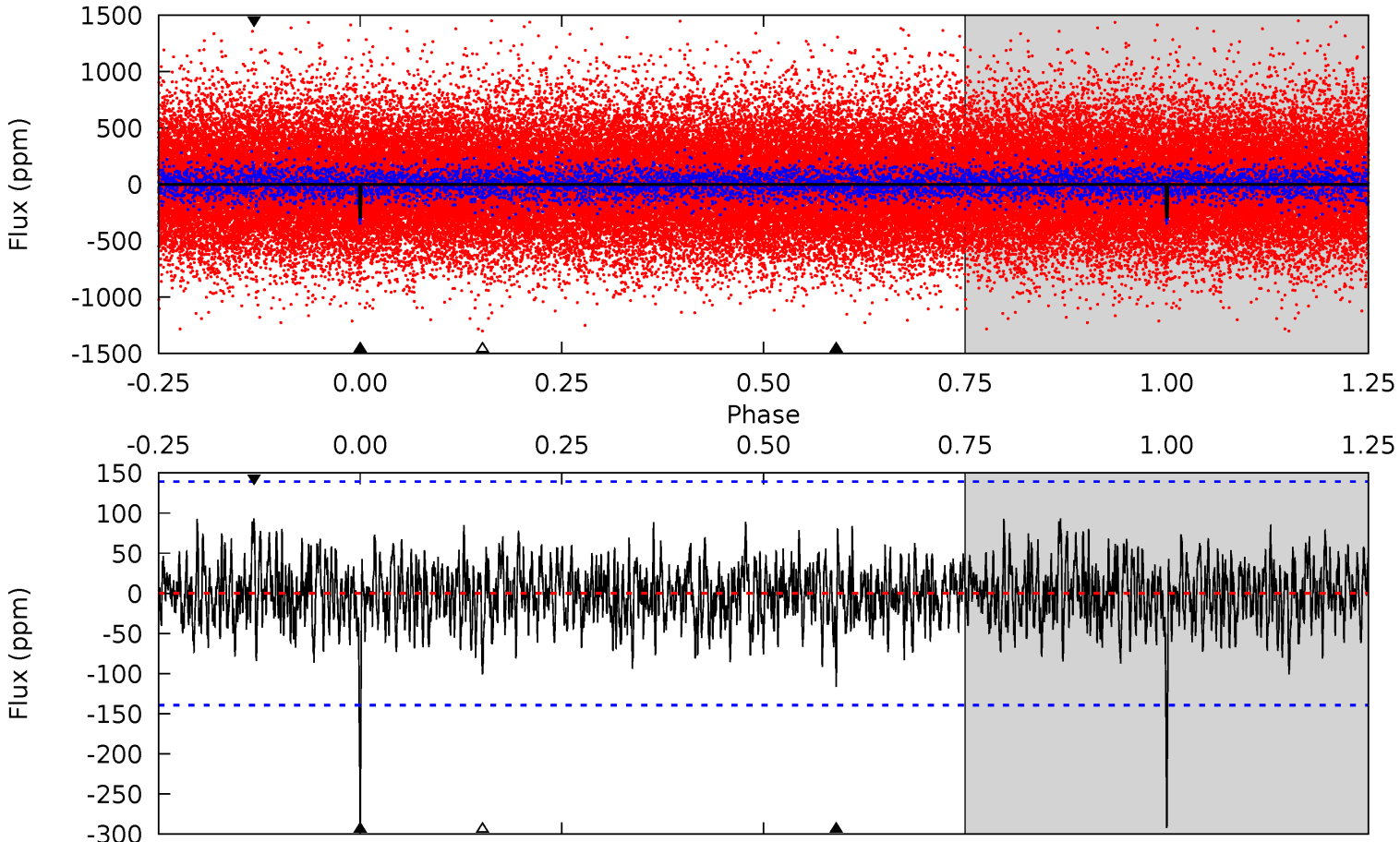
TCE 007584332-01 P= 88.041298 Days T_0=170.422655 (BKJD)

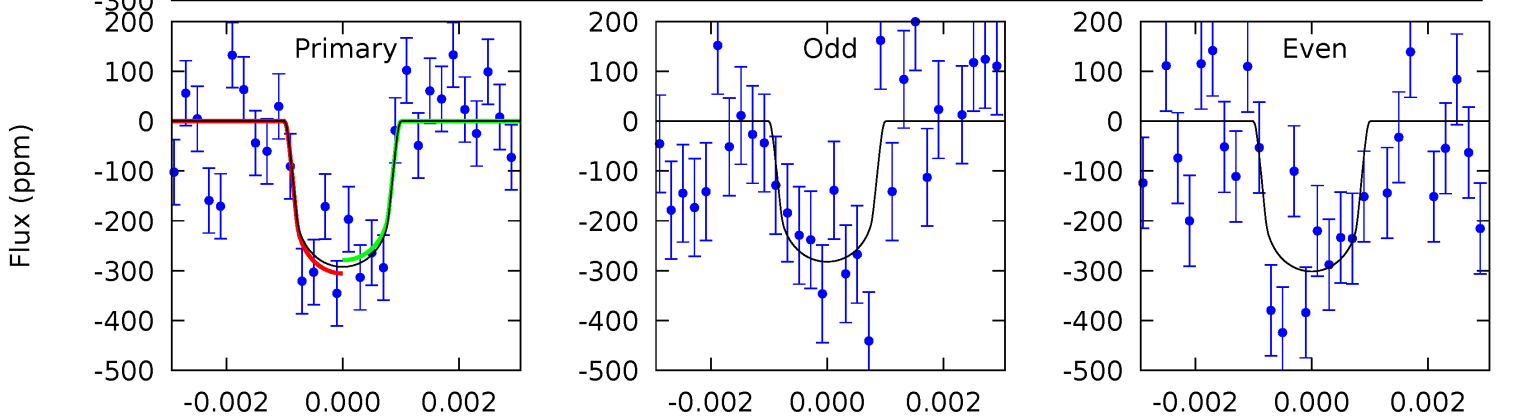


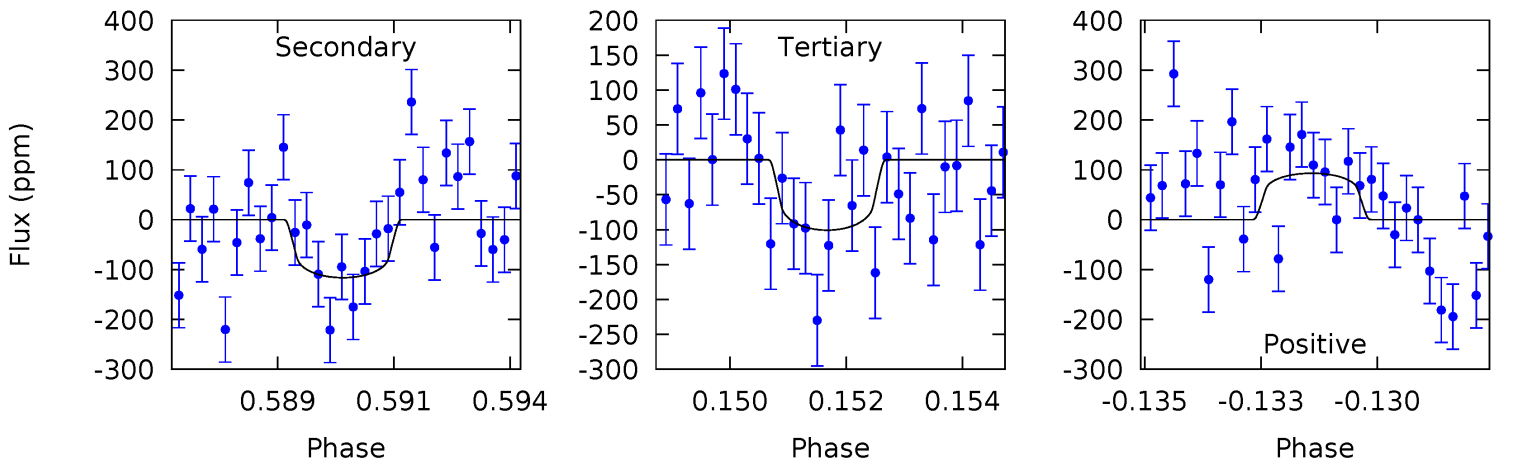
DV Model-Shift Uniqueness Test

007584332-01, P = 88.042311 Days, E = 82.371177 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.1	4.42	3.83	3.54	5.29	3.03	1.19	7.28	7.57	0.59	0.89	0.37	1.02	0.24	0.50



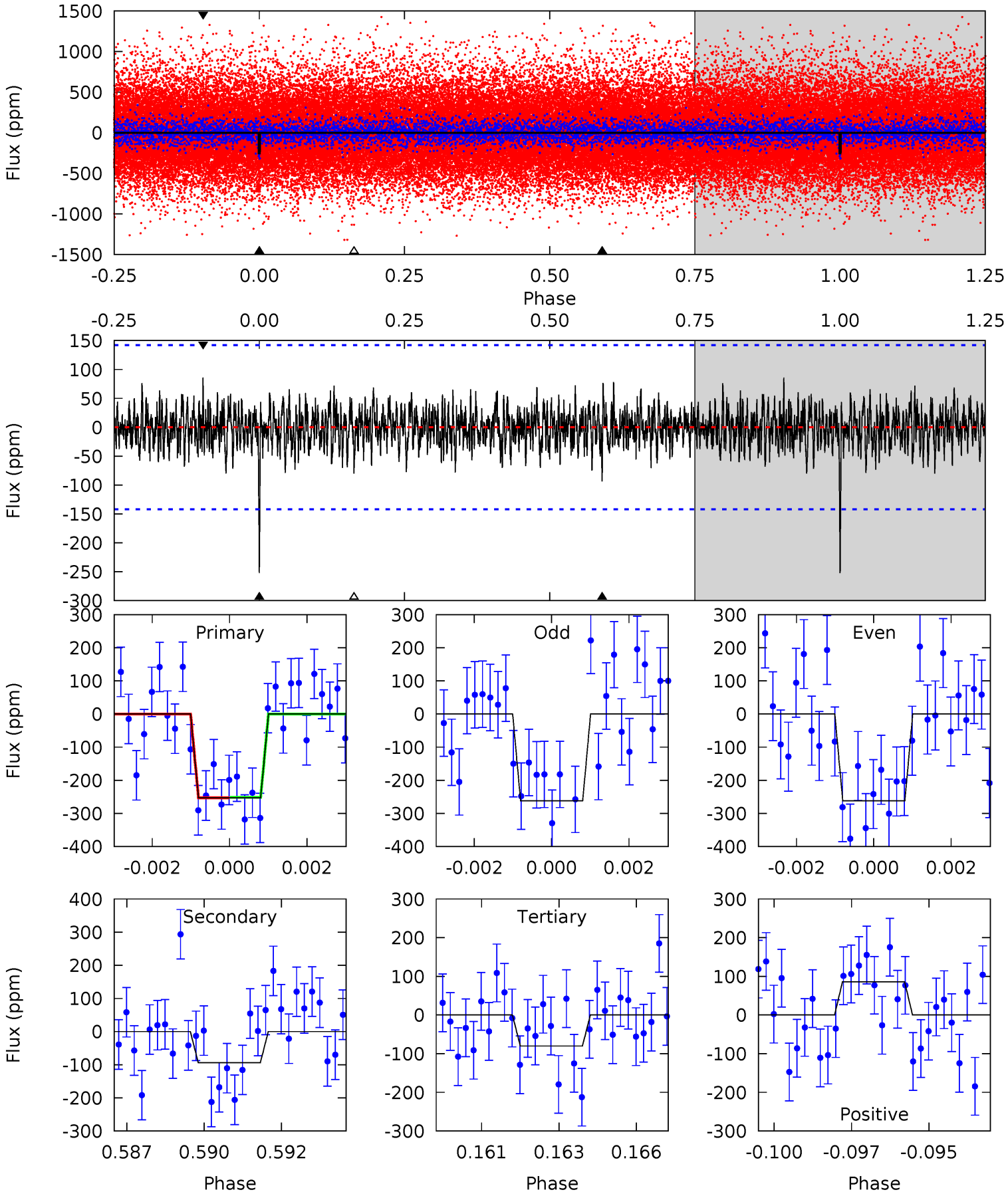




Alt Model-Shift Uniqueness Test

007584332-01, P = 88.041298 Days, E = 82.381357 Days

Pri	Sec	Ter	Pos	FA_1	FA_2	F_{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.43	3.50	2.99	3.21	5.30	3.05	0.98	6.44	6.22	0.50	0.29	0.00	0.89	0.25	0.02



Stellar Parameters For KIC 007584332

	$T_{\rm eff}(K)$	$\log(g)$	[Fe/H]	R ($R_\odot$)	$M(M_\odot)$	$p_\star$ (g·cm^{-3})
	3799^{+68}_{-68}	$4.738^{+0.036}_{-0.021}$	$-0.100^{+0.100}_{-0.100}$	$0.510^{+0.024}_{-0.033}$	$0.518^{+0.029}_{-0.029}$	$5.508^{+0.906}_{-0.468}$
	+2%/-2%	+1%/-0%	+100%/-100%	+5%/-6%	+6%/-6%	+16%/-9%
Source	PHO2	PHO2	PHO2	DSEP		

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

Secondary Eclipse Parameters for KIC 007584332-01 / KOI

Detrend	Depth (ppm)	R_p ($R_\oplus$)	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-116±26	$1.13^{+0.79}_{-0.74}$	299^{+6}_{-7}	3123^{+1277}_{-455}	4877^{+35195}_{-3274}
Alt.	-94±27	$1.10^{+0.82}_{-0.71}$	299^{+6}_{-7}	3028^{+1171}_{-438}	4089^{+27082}_{-2802}

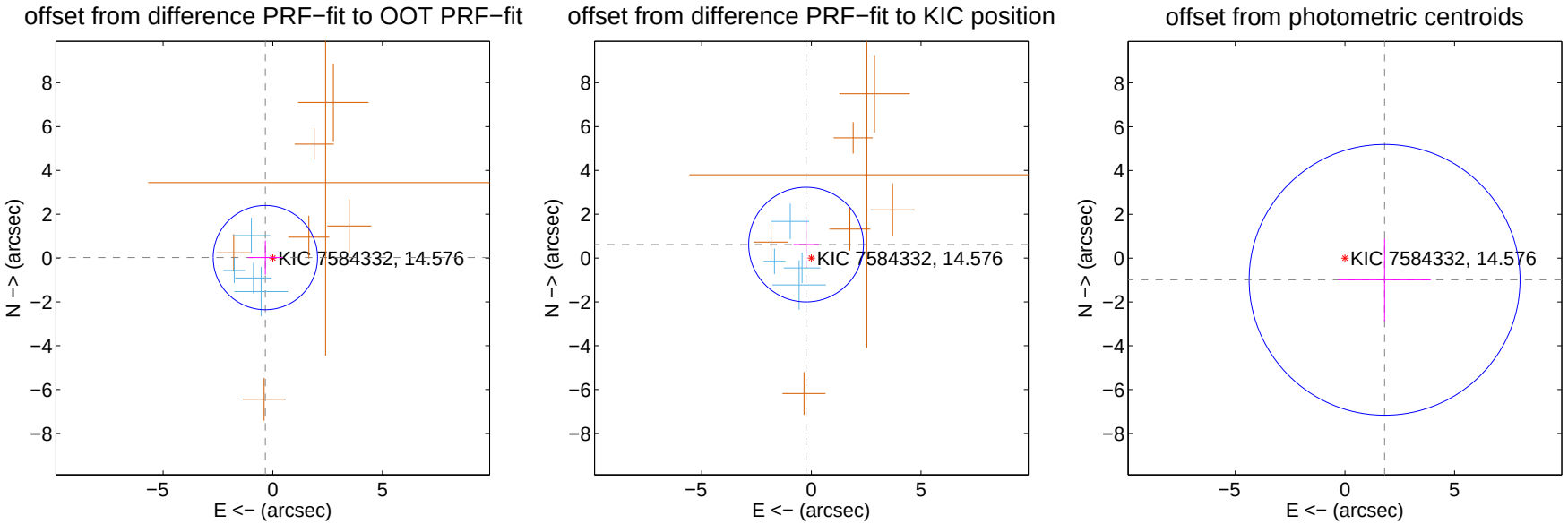
T_{max} = Theoretical Maximum Planetary Temperature
T_{obs} = Observed Planetary Temperature (Assuming A=0.3)
A_{obs} = Observed Albedo (Assuming T=0)

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

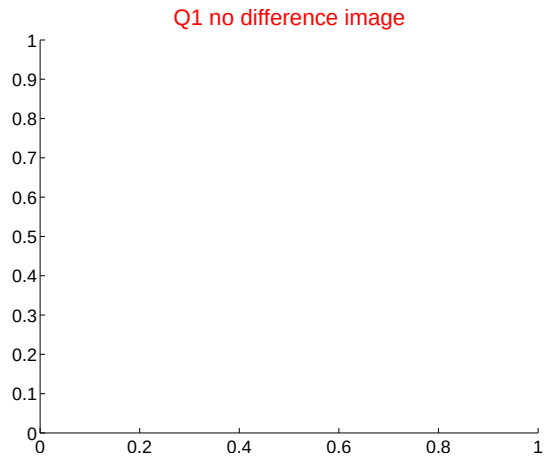
Supplemental centroid analysis for 007584332-01. Kepler magnitude: 14.58. Transit SNR 7.48
There are 4 quarters with good PRF difference image offsets
The direct PRF centroid is offset from the target star catalog position by about 0.42 arcsec

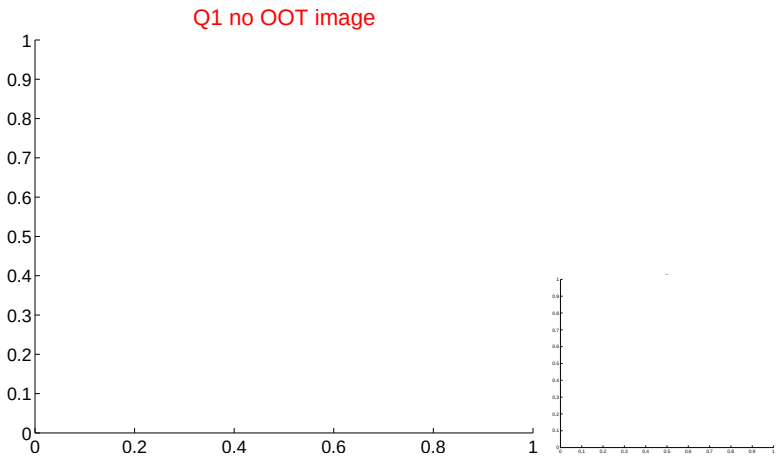
	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.340 ± 0.793	0.43	0.339 ± 0.793	0.021 ± 0.778
PRF-fit source offset from KIC position	0.661 ± 0.872	0.76	0.241 ± 0.575	0.615 ± 1.064
photometric centroid source offset	2.06 ± 2.06	1.00	-1.81 ± 2.11	-0.99 ± 1.89

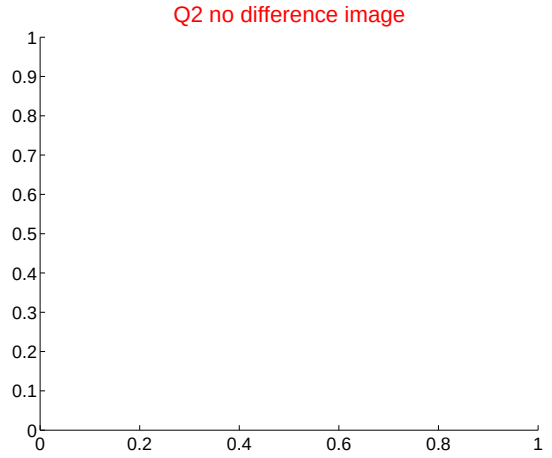


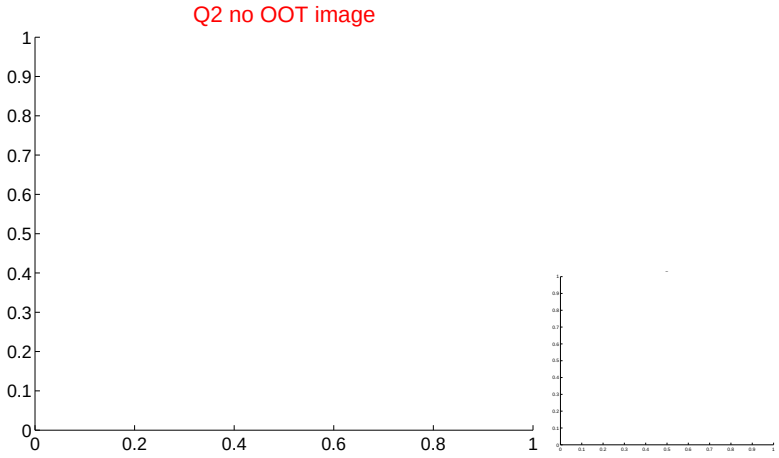
Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one-σ uncertainty. Blue circle: three-σ. Red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

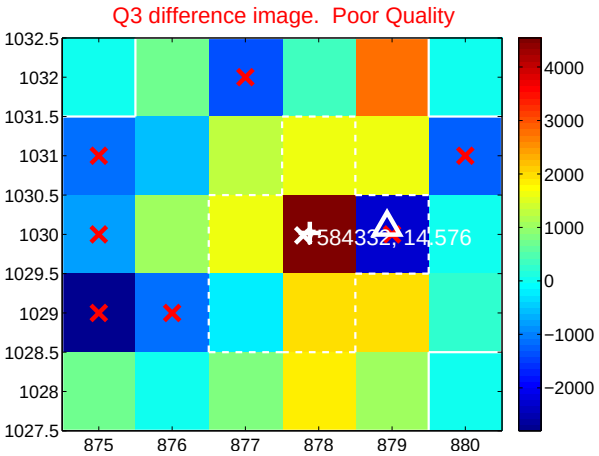
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

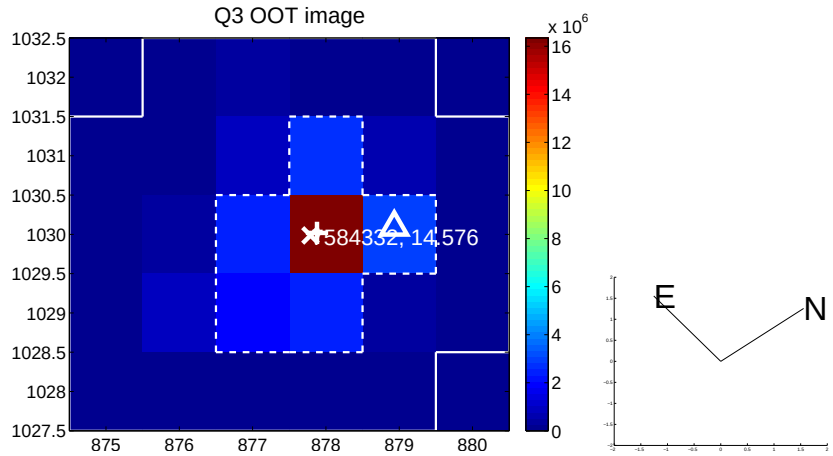


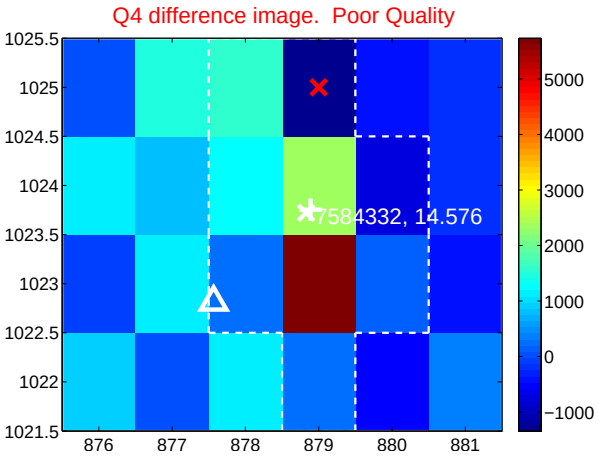


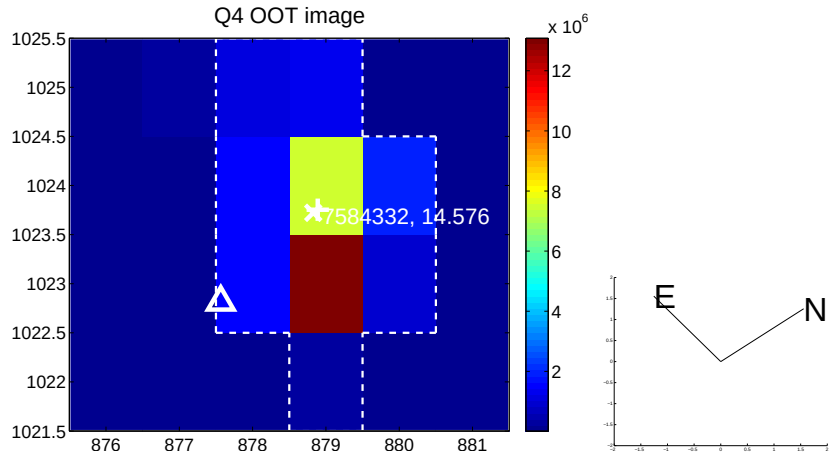




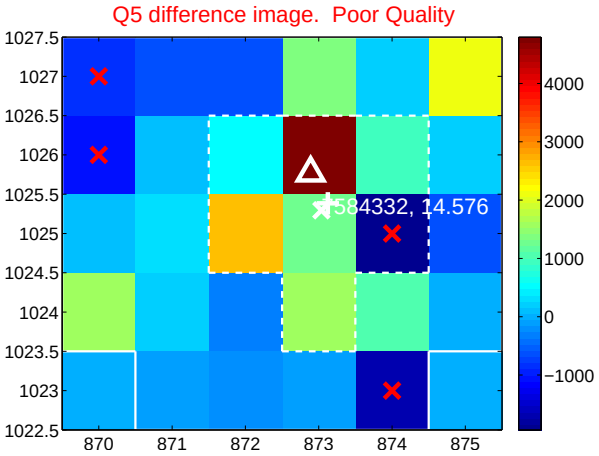


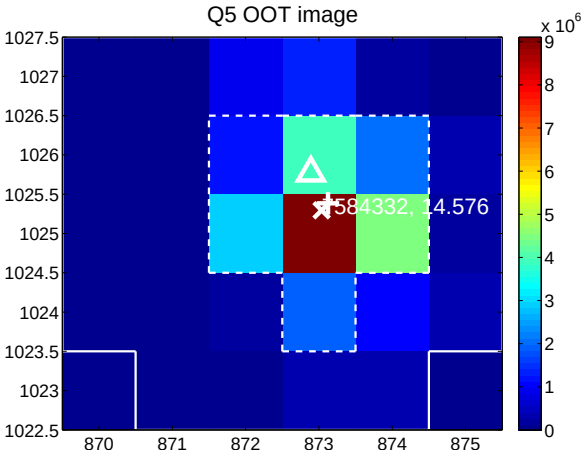


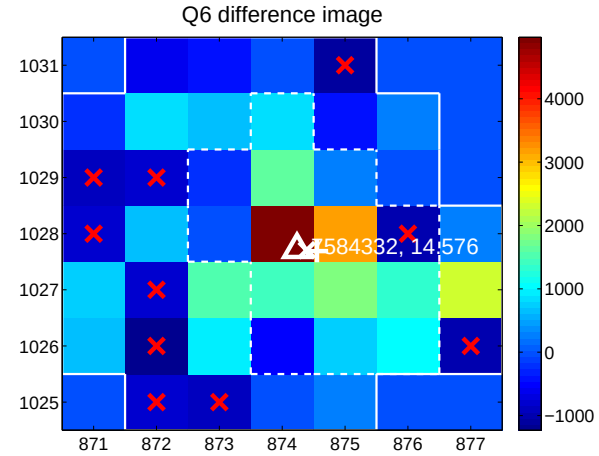


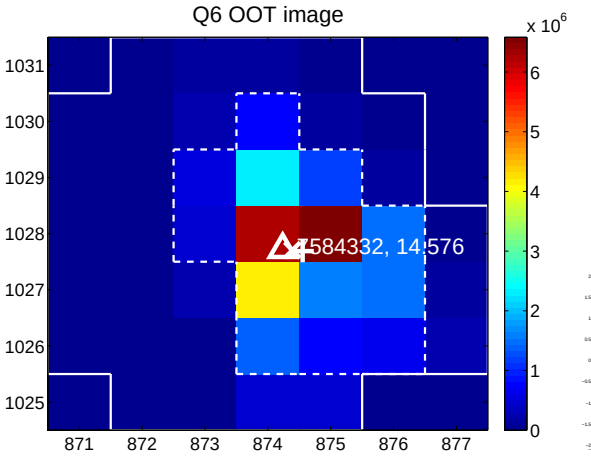


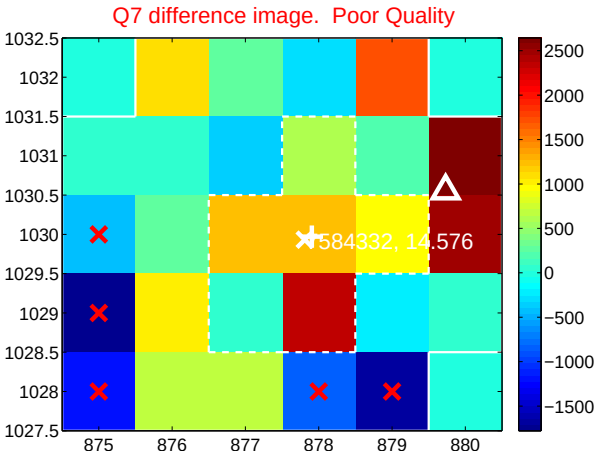
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

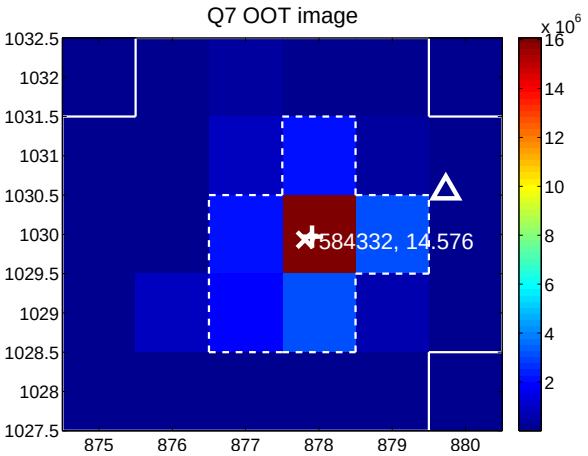


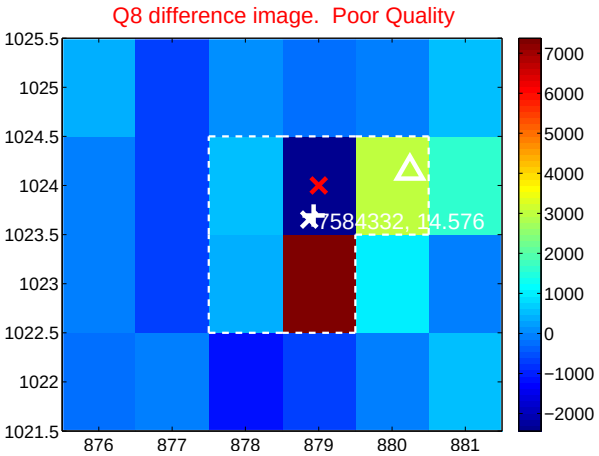


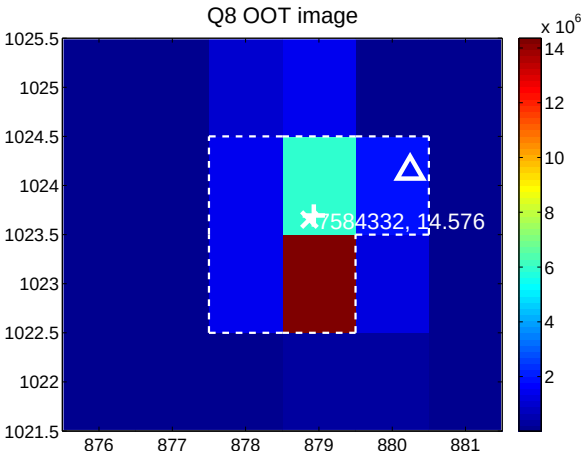




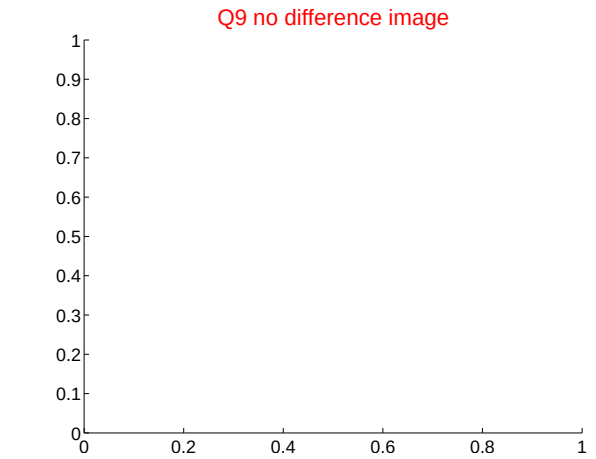


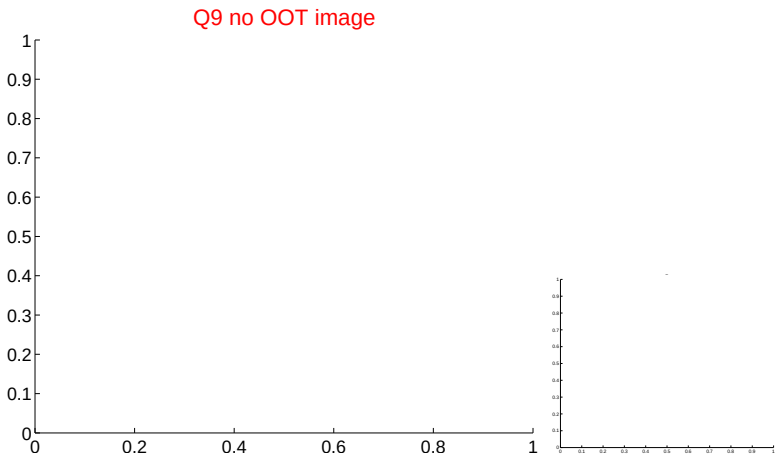


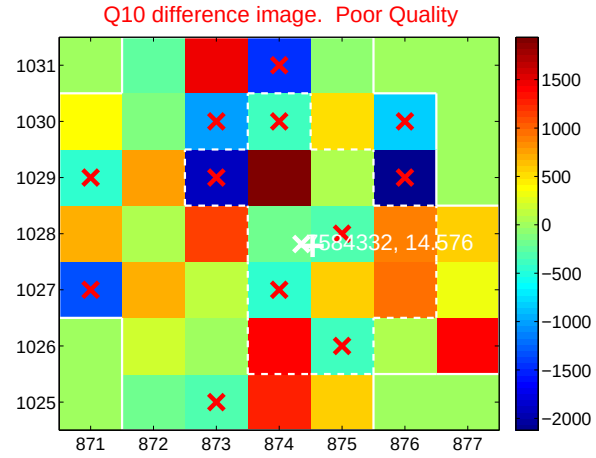


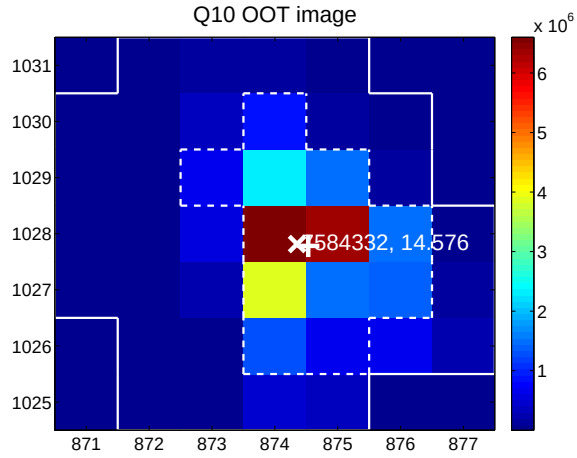


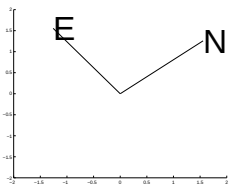
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

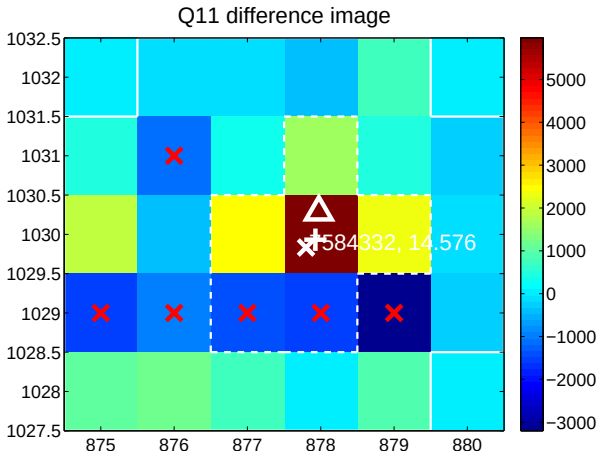


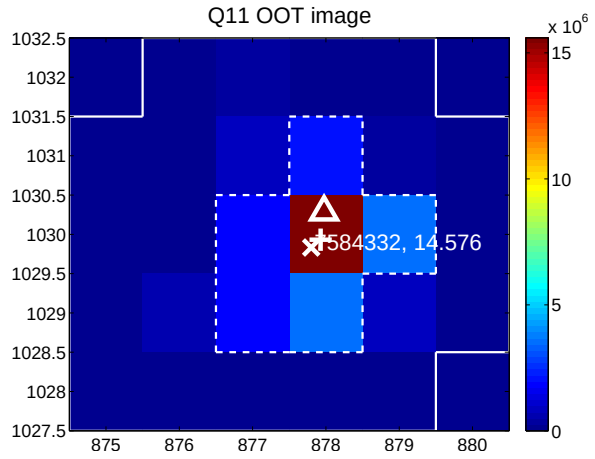


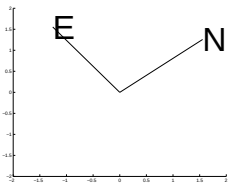


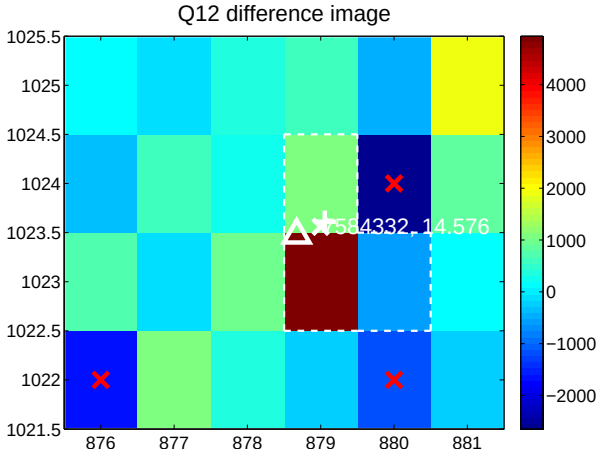


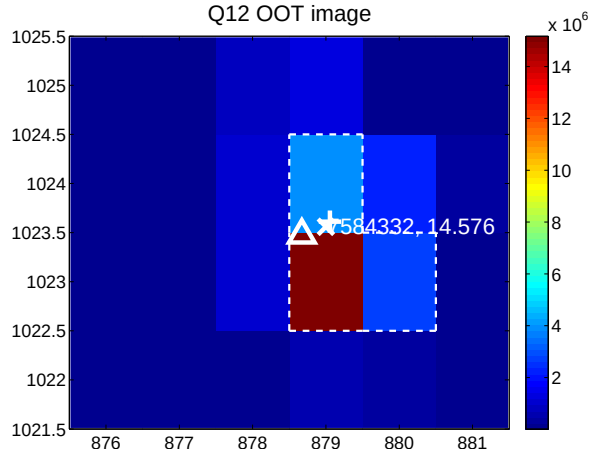


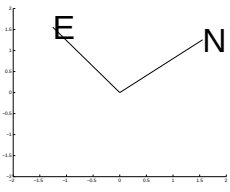




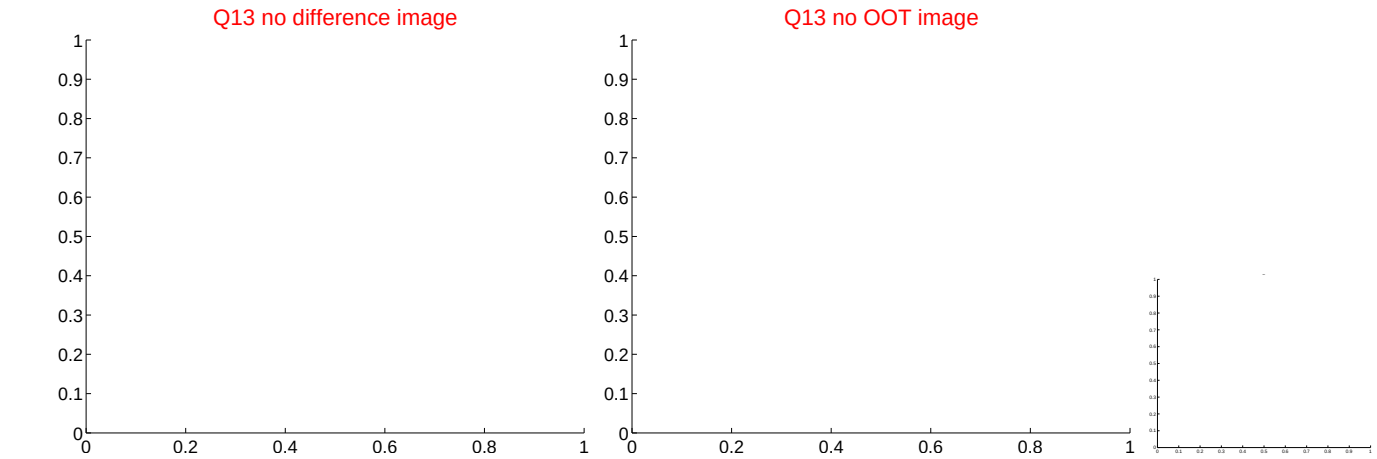


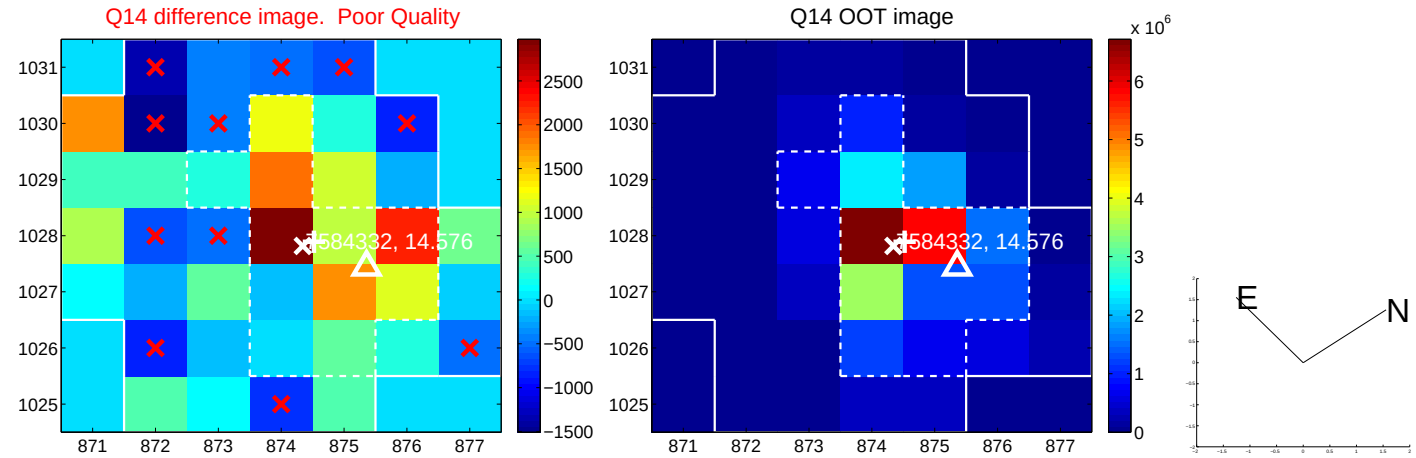


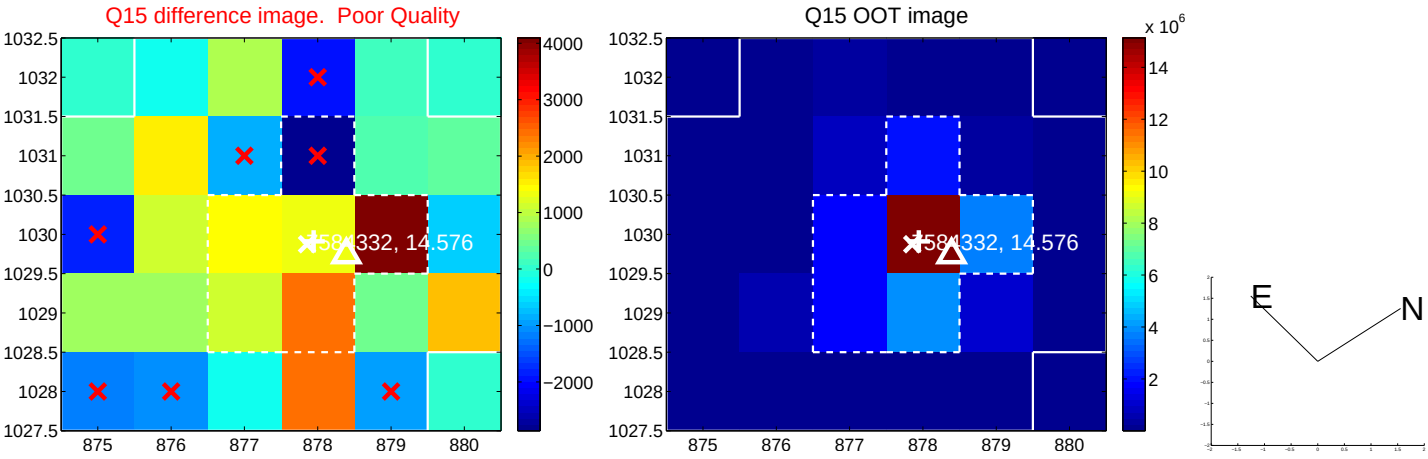


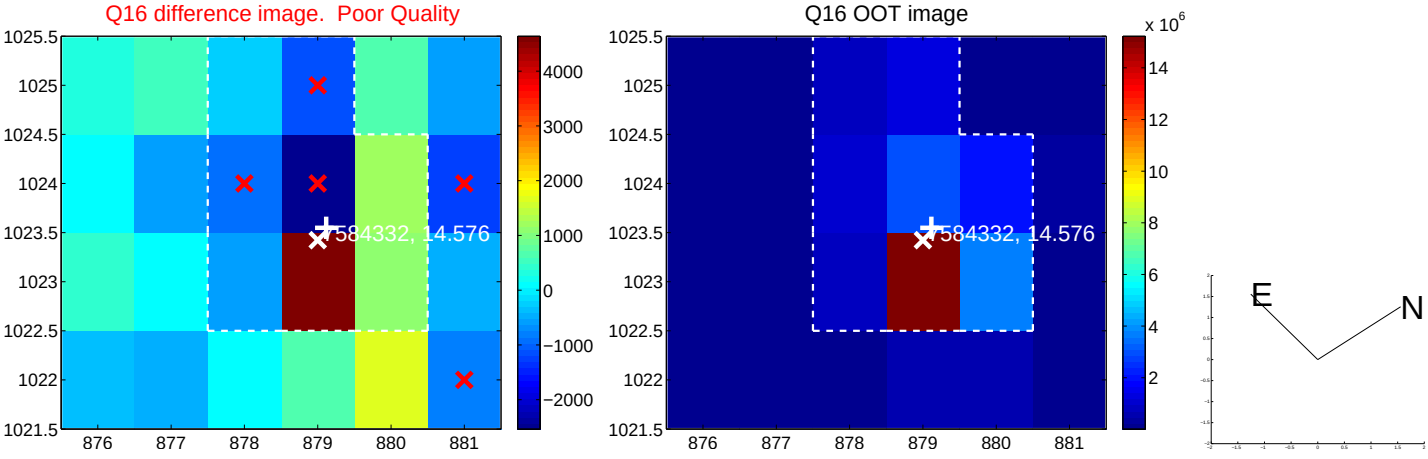


white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.

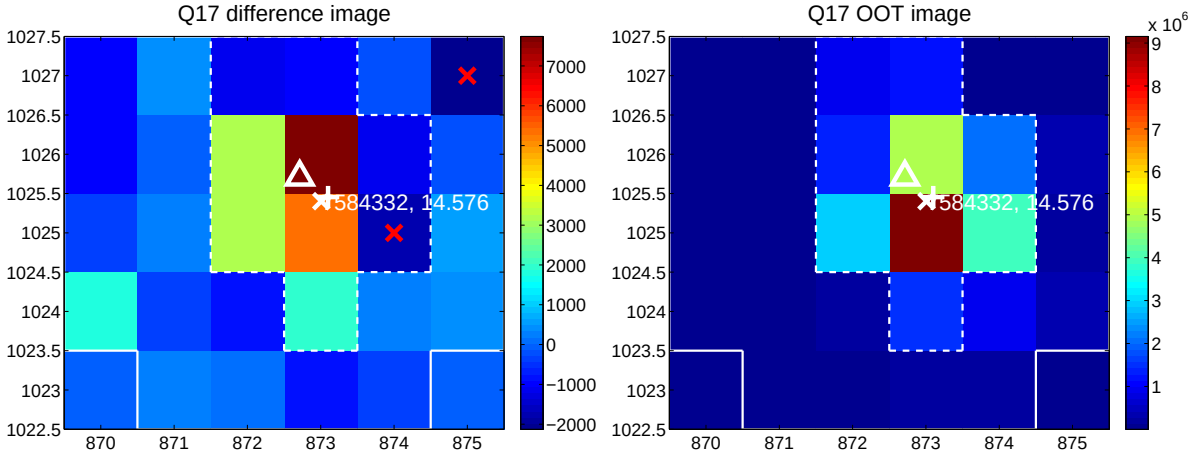


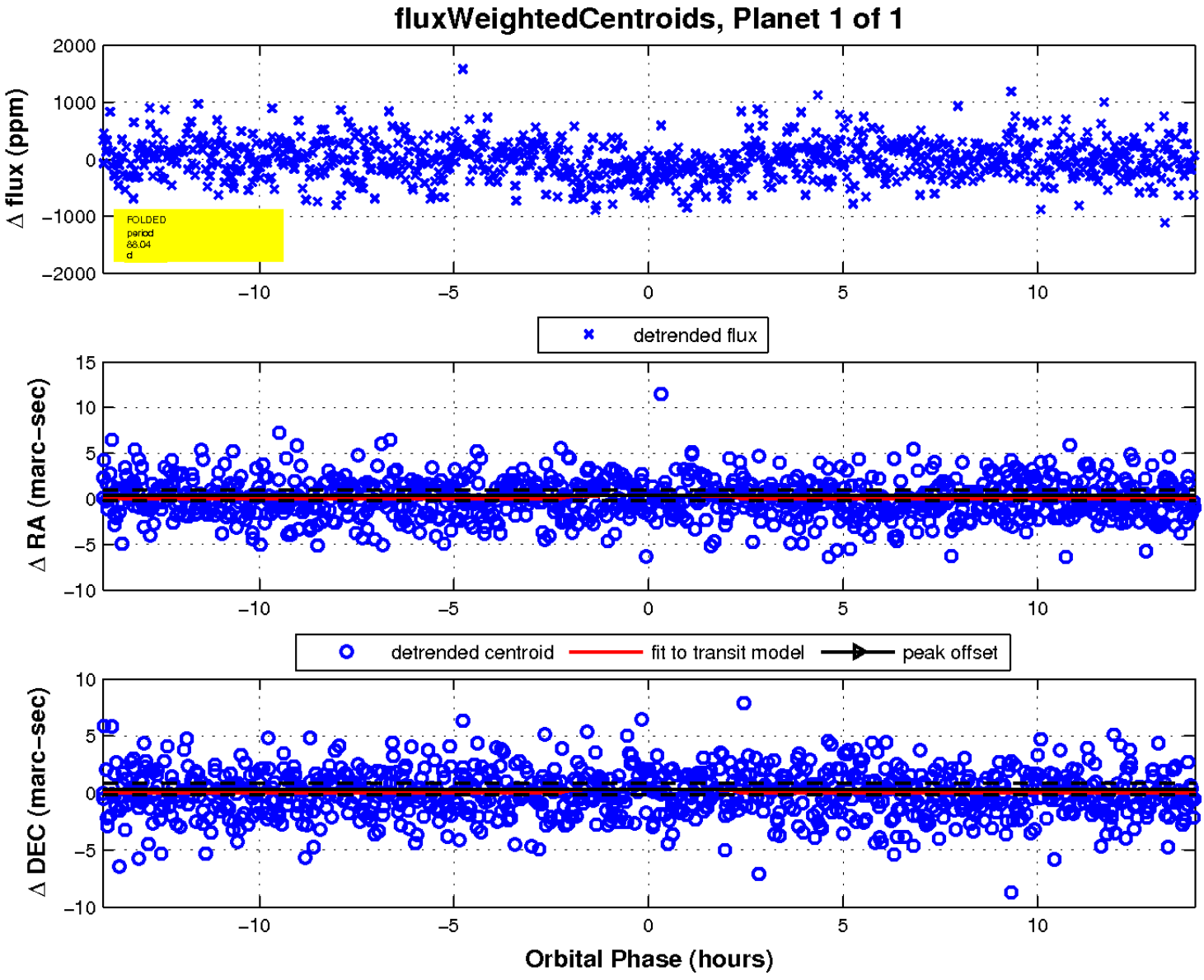


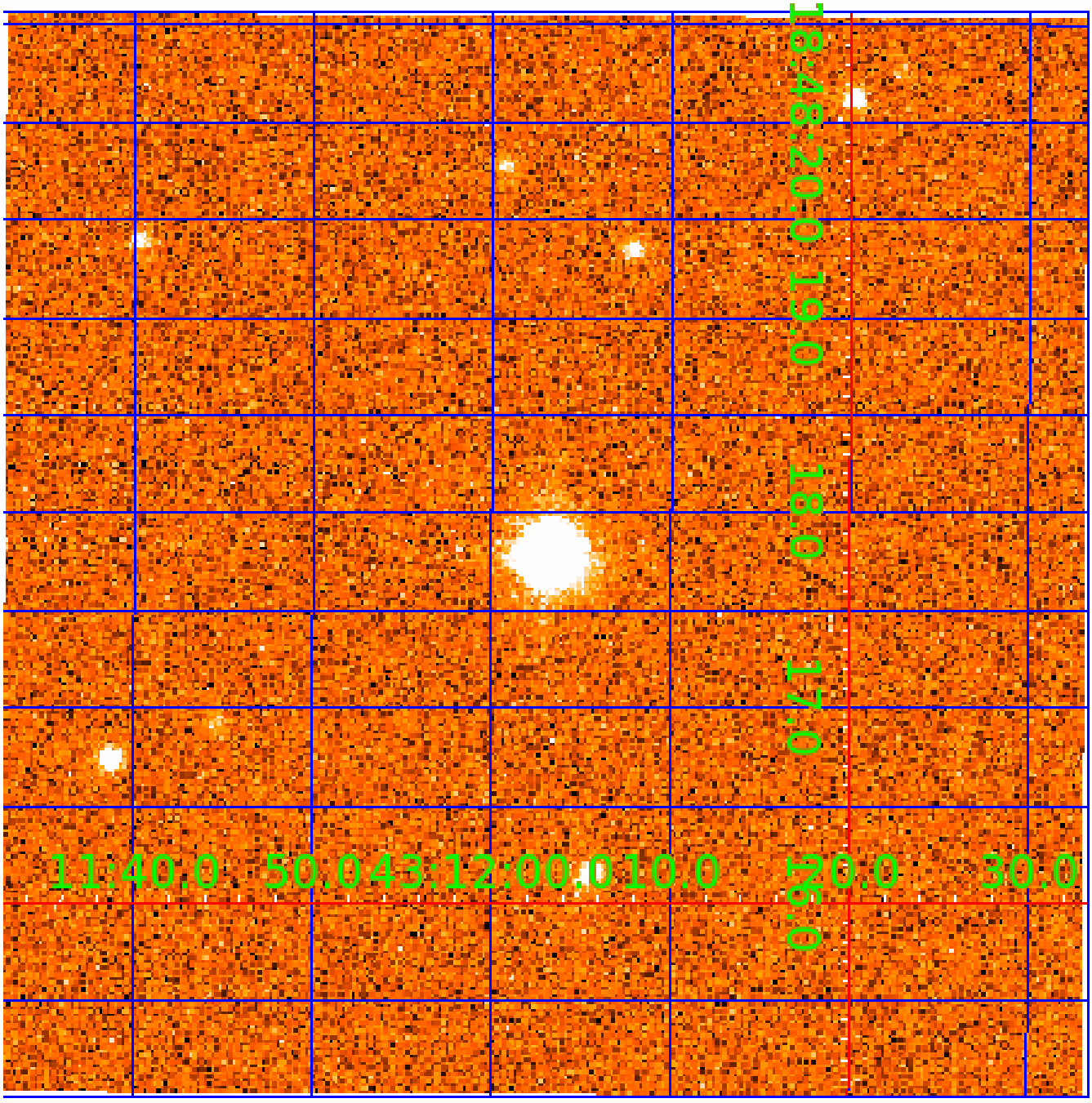




white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.






Declination
18:48:20.0
19.0
18.0
17.0
16.0
11:40.0
50.0
43:12:00.0
10.0
20.0
30.0
UKIRT Image