

KIC 008211889

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})
008211889-01	OBS	No	391.272051	397.379378	153.4	13.834	7.2	6.5	2.84	5936	3.96	6.38

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008211889-01	OBS	FP	0.00	1	0	0	0	INDIV_TRANS_MARSHALL_SKYE—INCONSISTENT_TRANS—CENT_FEW_DIFFS

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

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

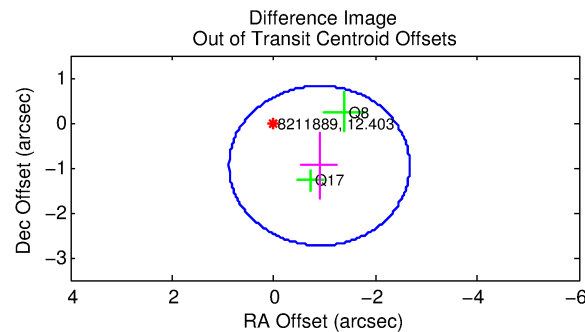
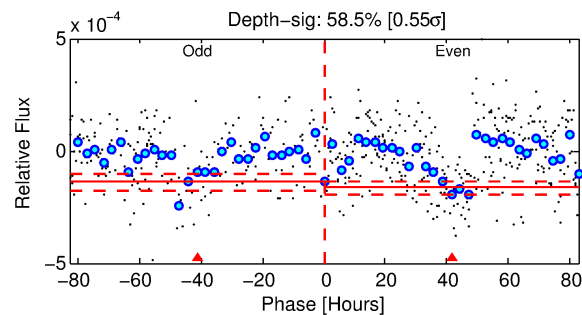
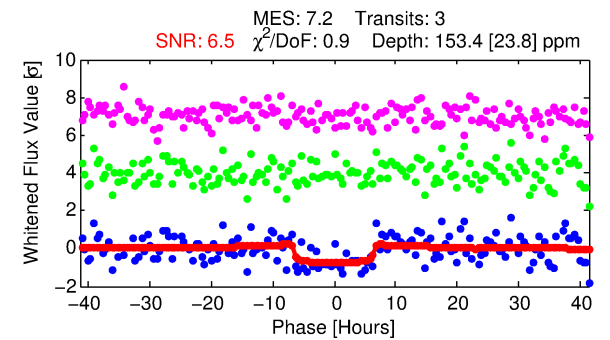
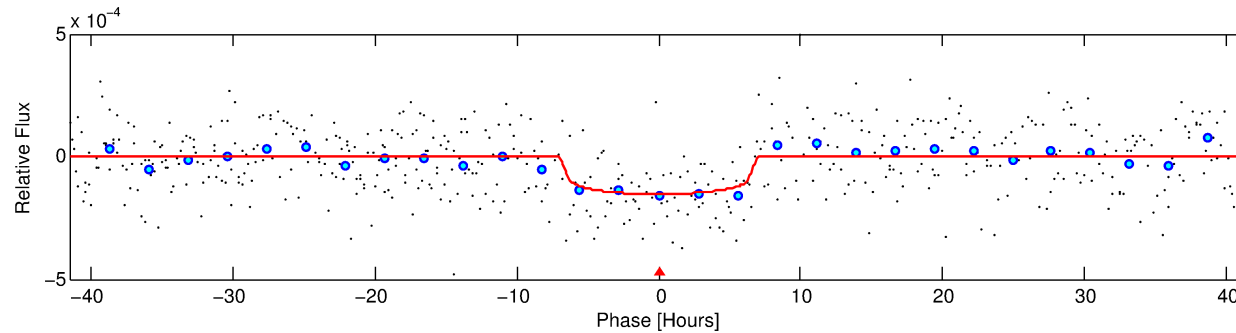
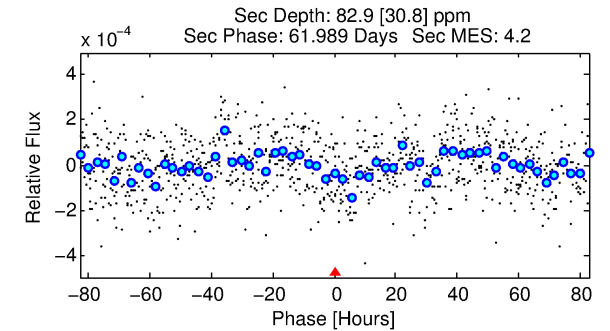
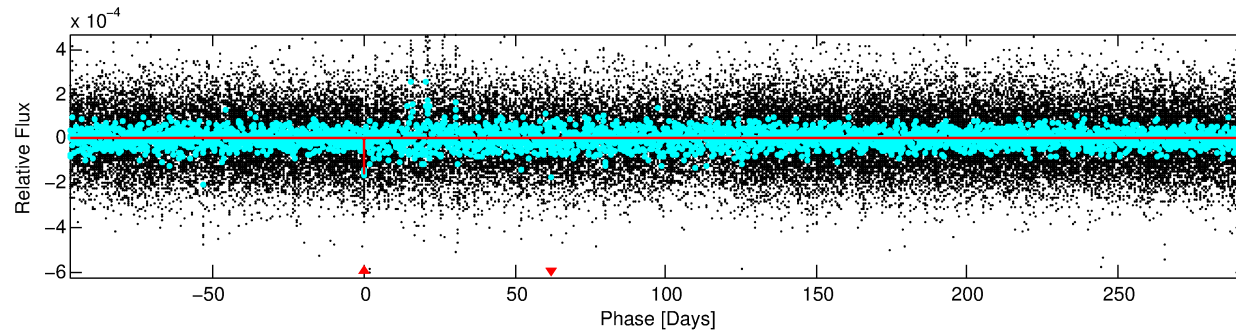
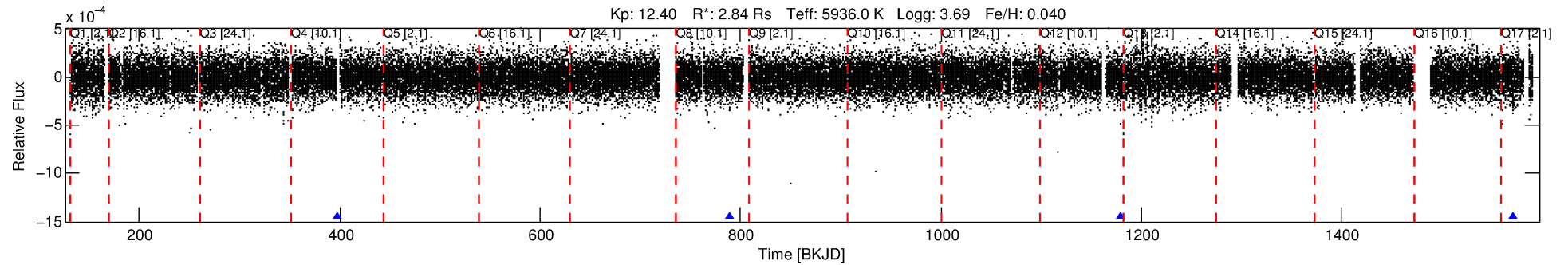
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008211889-01

No Significant Match Found

DV One-Page Summary

KIC: 8211889 Candidate: 1 of 1 Period: 391.272 d



DV Fit Results:

Period = 391.27205 [0.01633] d
Epoch = 397.3794 [0.0350] BKJD
Rp/R* = 0.0128 [0.0037]
a/R* = 125.98 [168.43]
b = 0.83 [0.51]
Seff = 6.38 [3.74]
Teq = 405 [59] K
Rp = 3.96 [1.95] Re
a = 1.1872 [0.4378] AU
Ag = 4107.11 [3664.13] [1.12 σ]
Teffp = 5016 [871] K [5.28 σ]

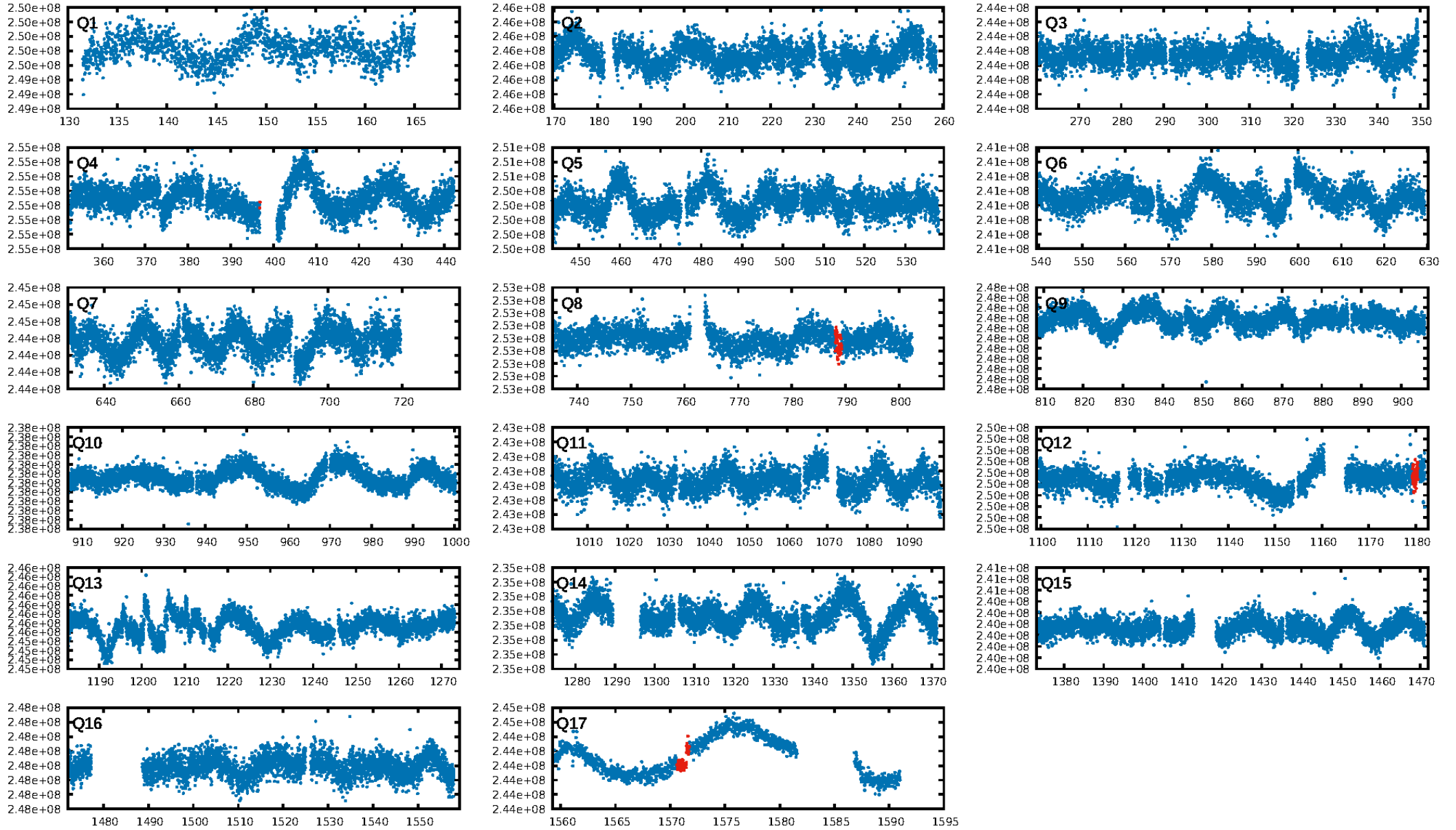
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: 5.5%
ModelChiSquareGof-sig: 99.9%
Bootstrap-pfa: 2.86e-11
RollingBand-fgt: 1.00 [2/2]
GhostDiagnostic-chr: -1.684
Centroid-sig: 41.6%
Centroid-so: 0.705 arcsec [0.72 σ]
OotOffset-rm: 1.311 arcsec [2.22 σ]
OotOffset-st: 0/0/1/1 [2]
KicOffset-rm: 1.329 arcsec [2.13 σ]
KicOffset-st: 0/0/1/1 [2]
DiffImageQuality-fgm: 1.00 [2/2]
DiffImageOverlap-fno: 1.00 [3/3]

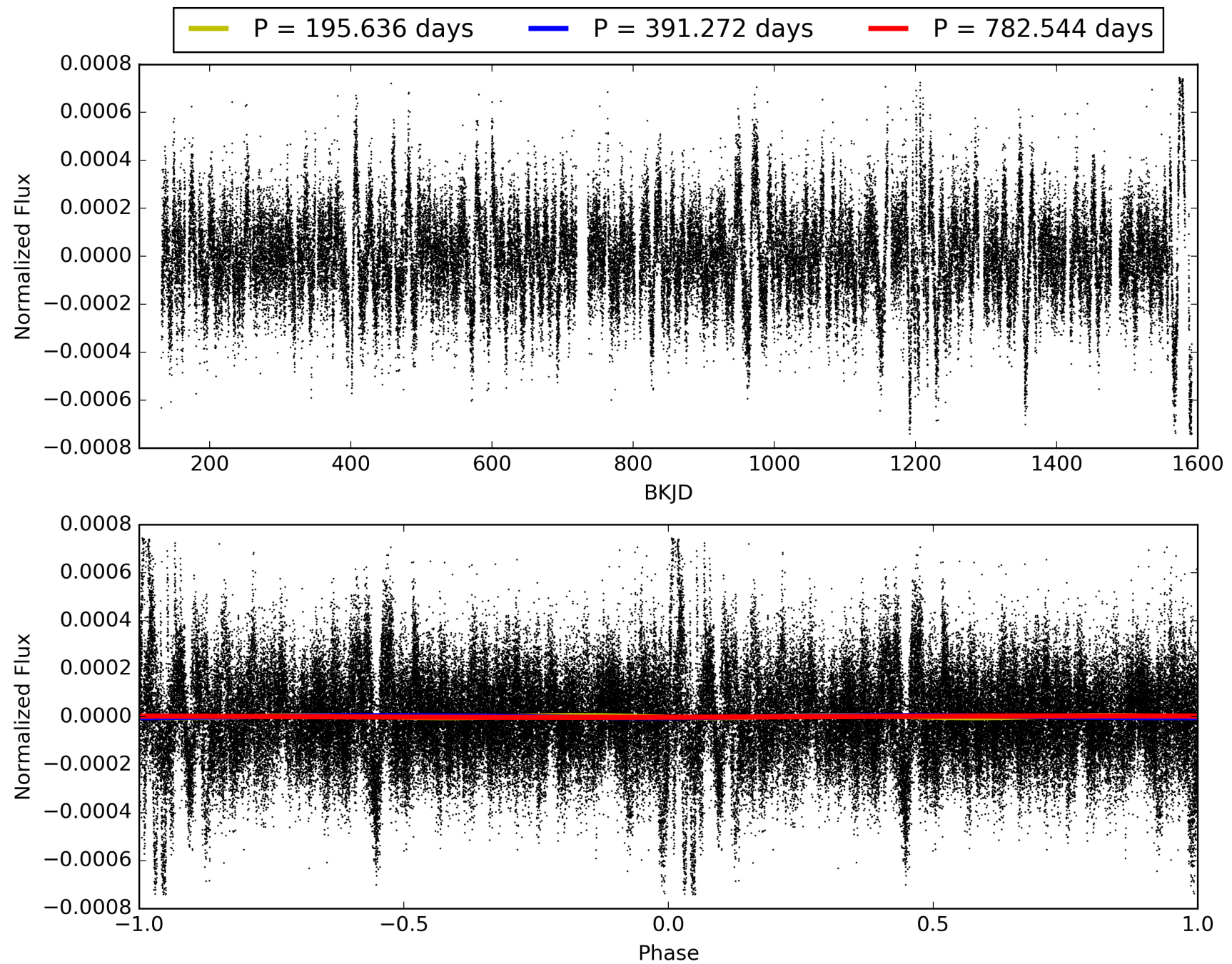
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 22:24:40 Z

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

TCE 008211889-01, PDC Light Curves

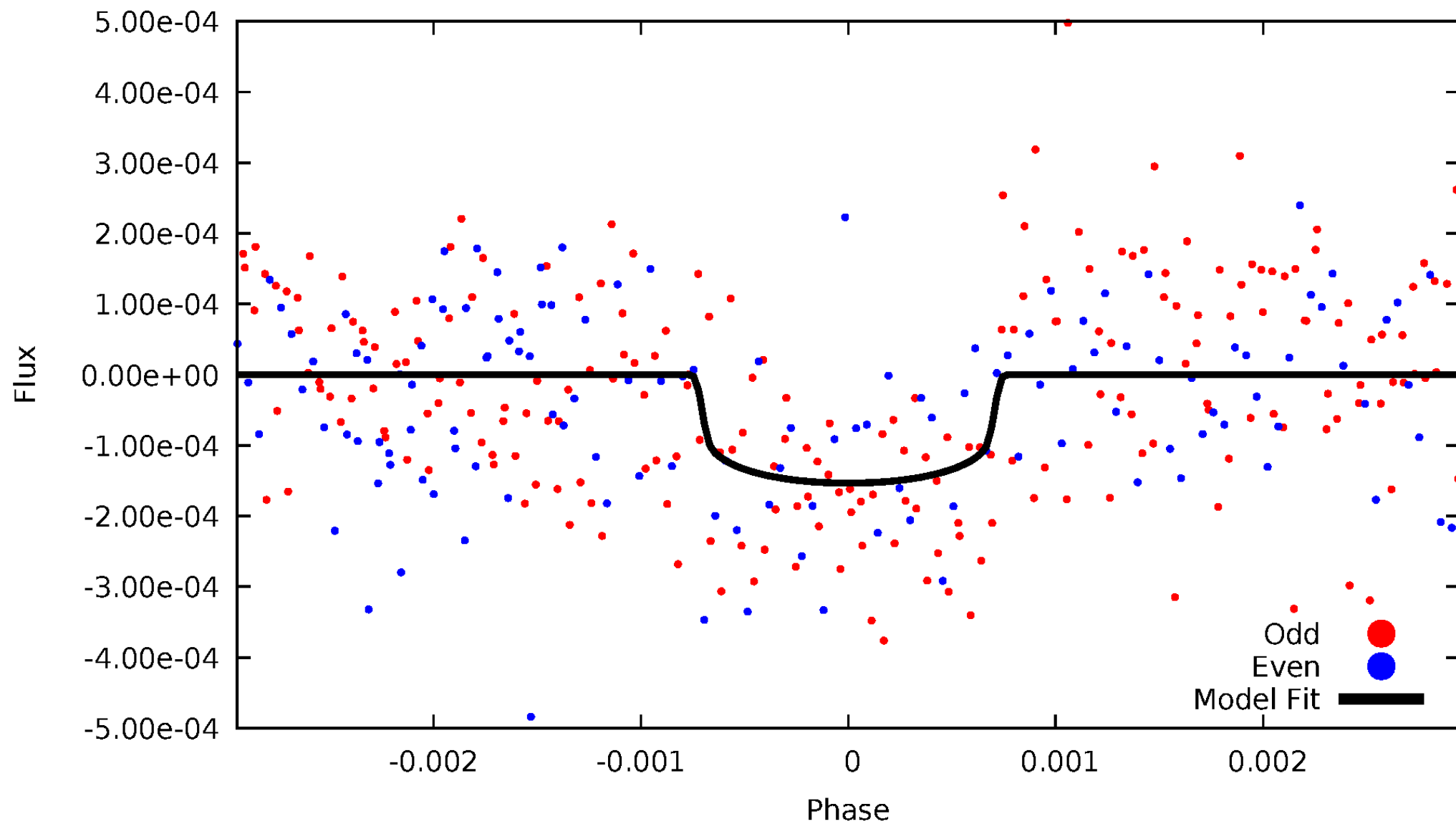


TCE 008211889-01



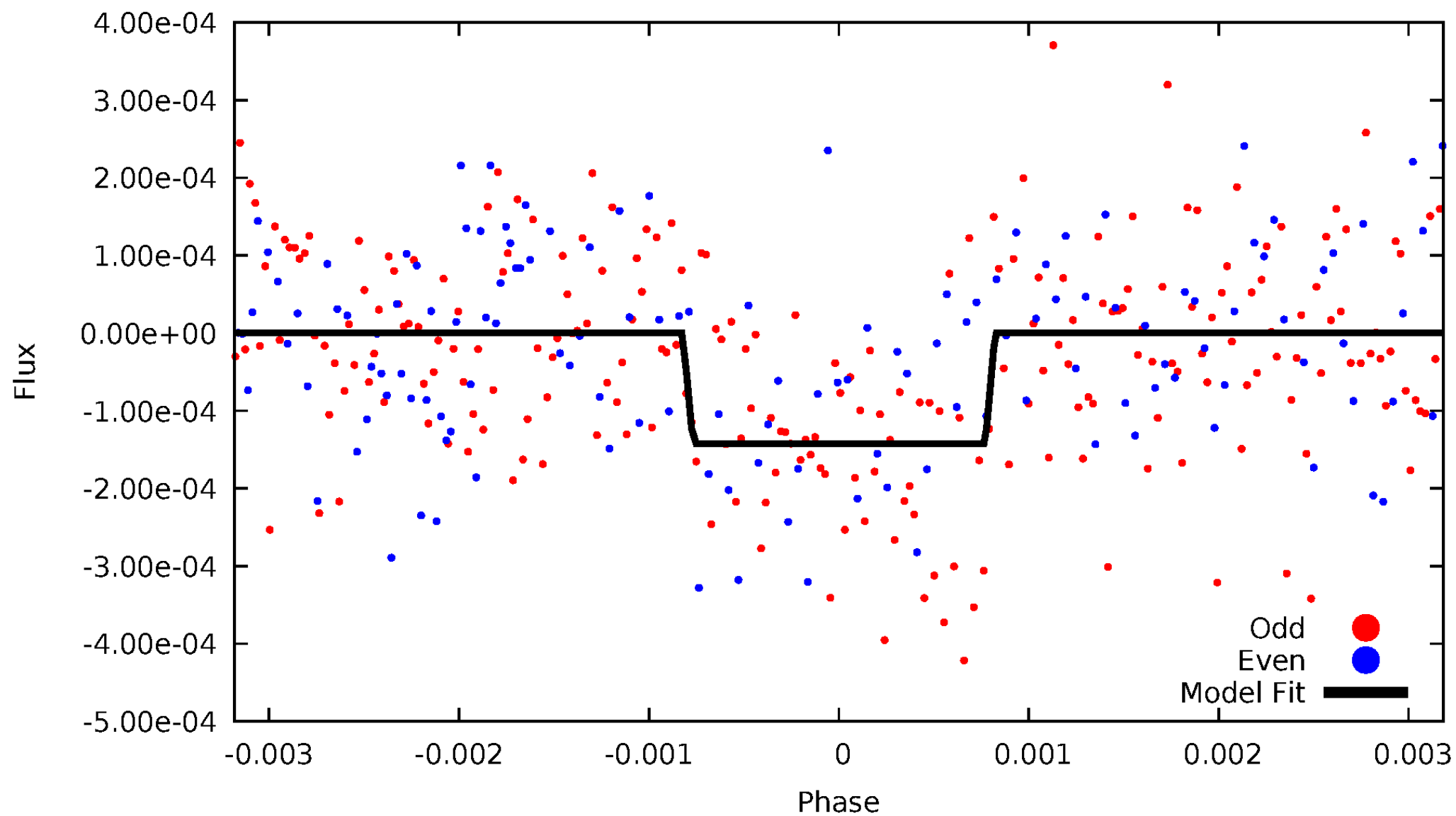
DV Odd/Even

TCE 008211889-01



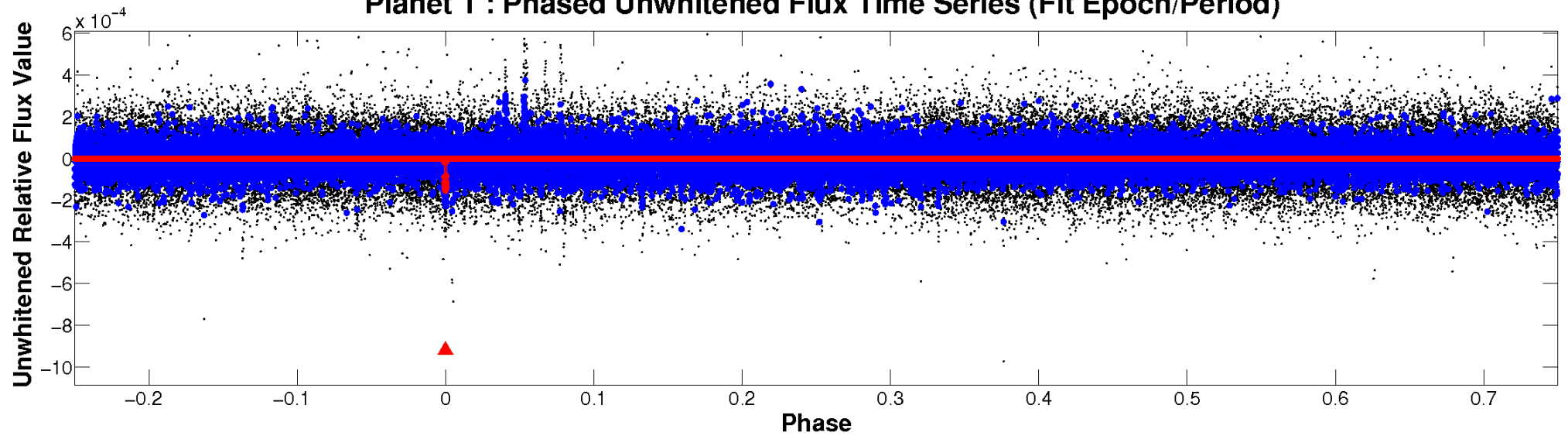
ALT Odd/Even

TCE 008211889-01

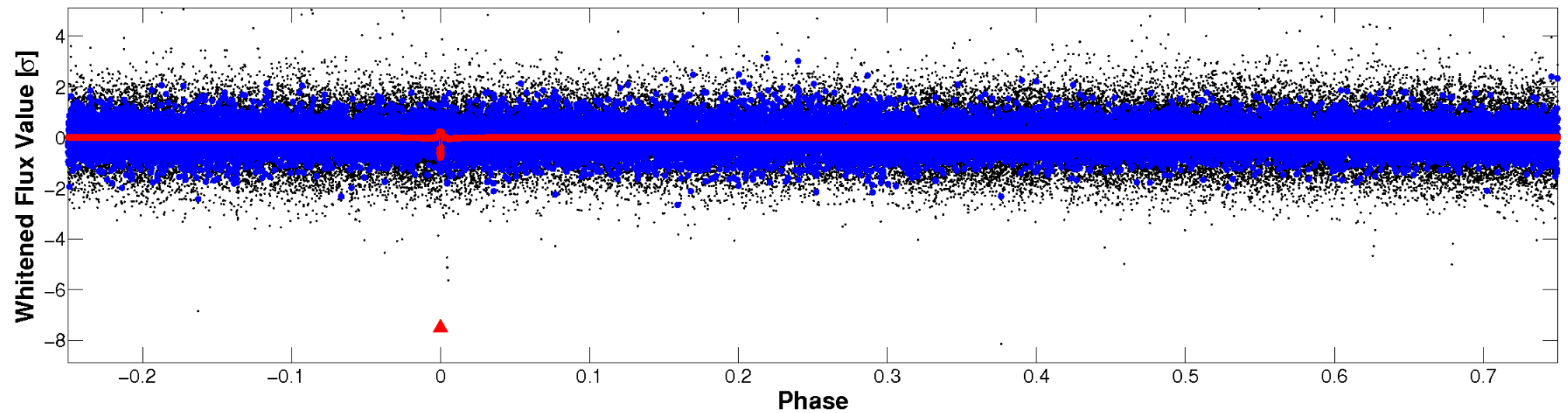


Non-Whitened Vs. Whitened Light Curve

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



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



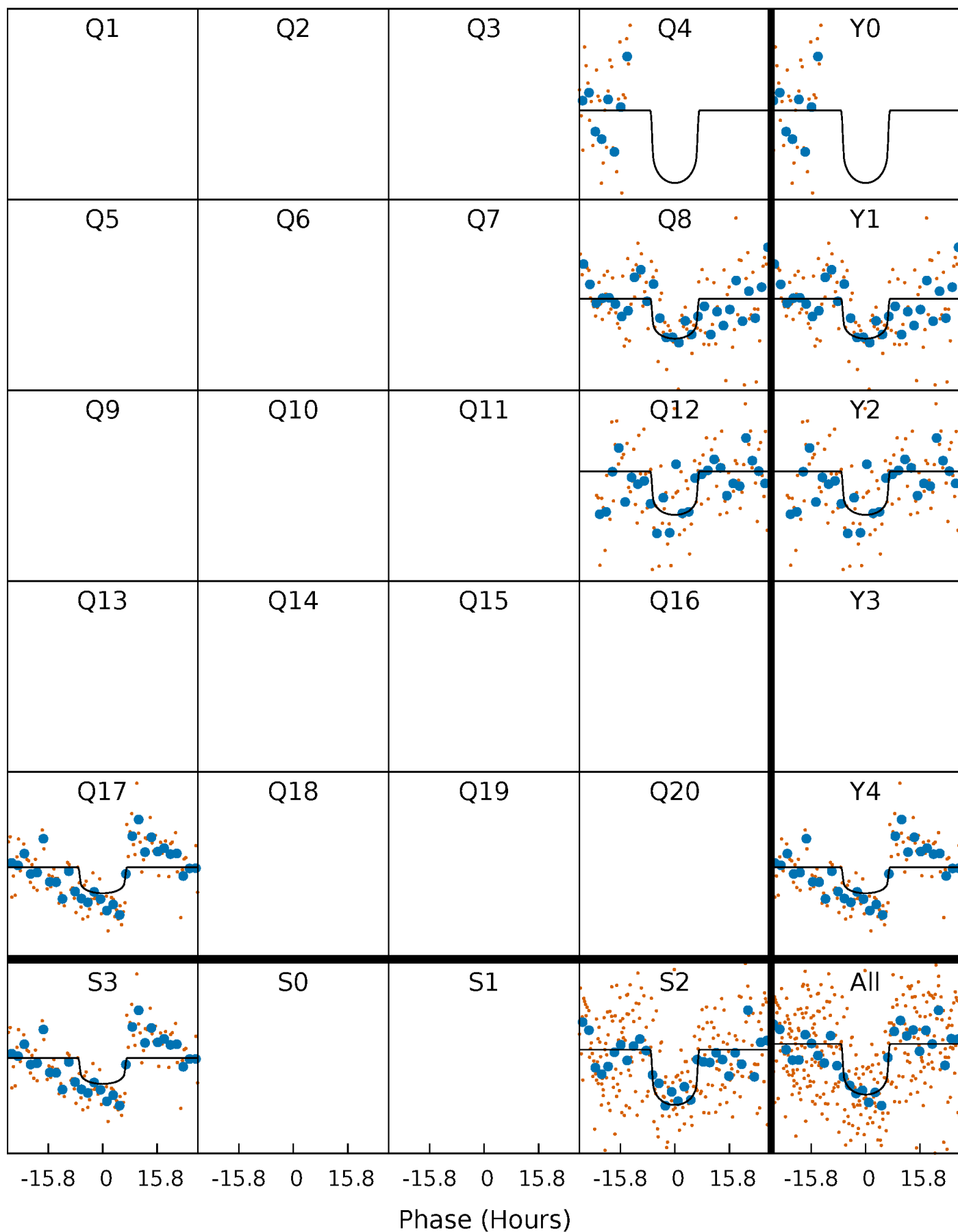
PDC Quarter-Phased Transit Curves

TCE 008211889-01 P=391.272051 Days $T_0=397.379378$ (BKJD)



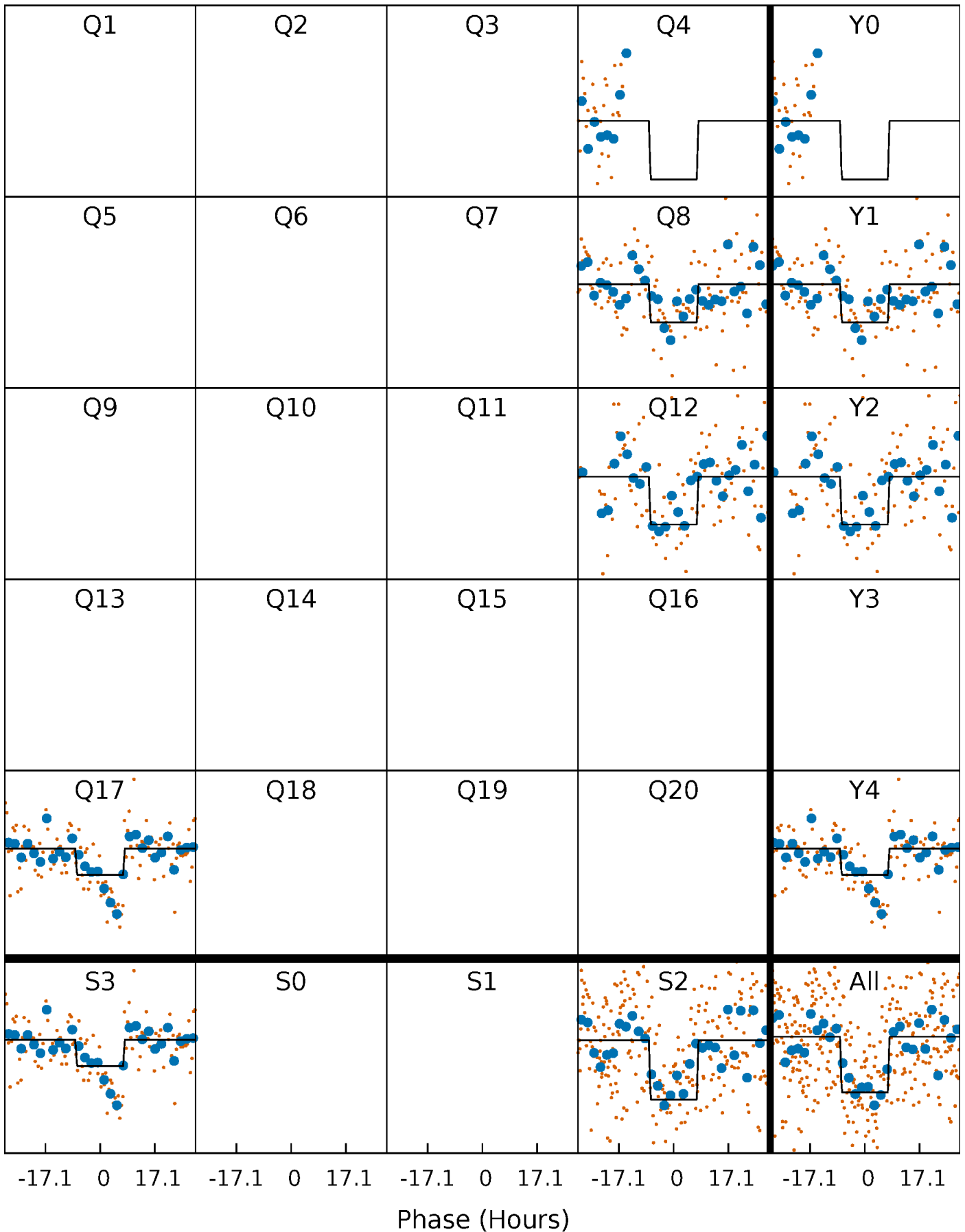
DV Quarter-Phased Transit Curves

TCE 008211889-01 $P=391.272051$ Days $T_0=397.379378$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

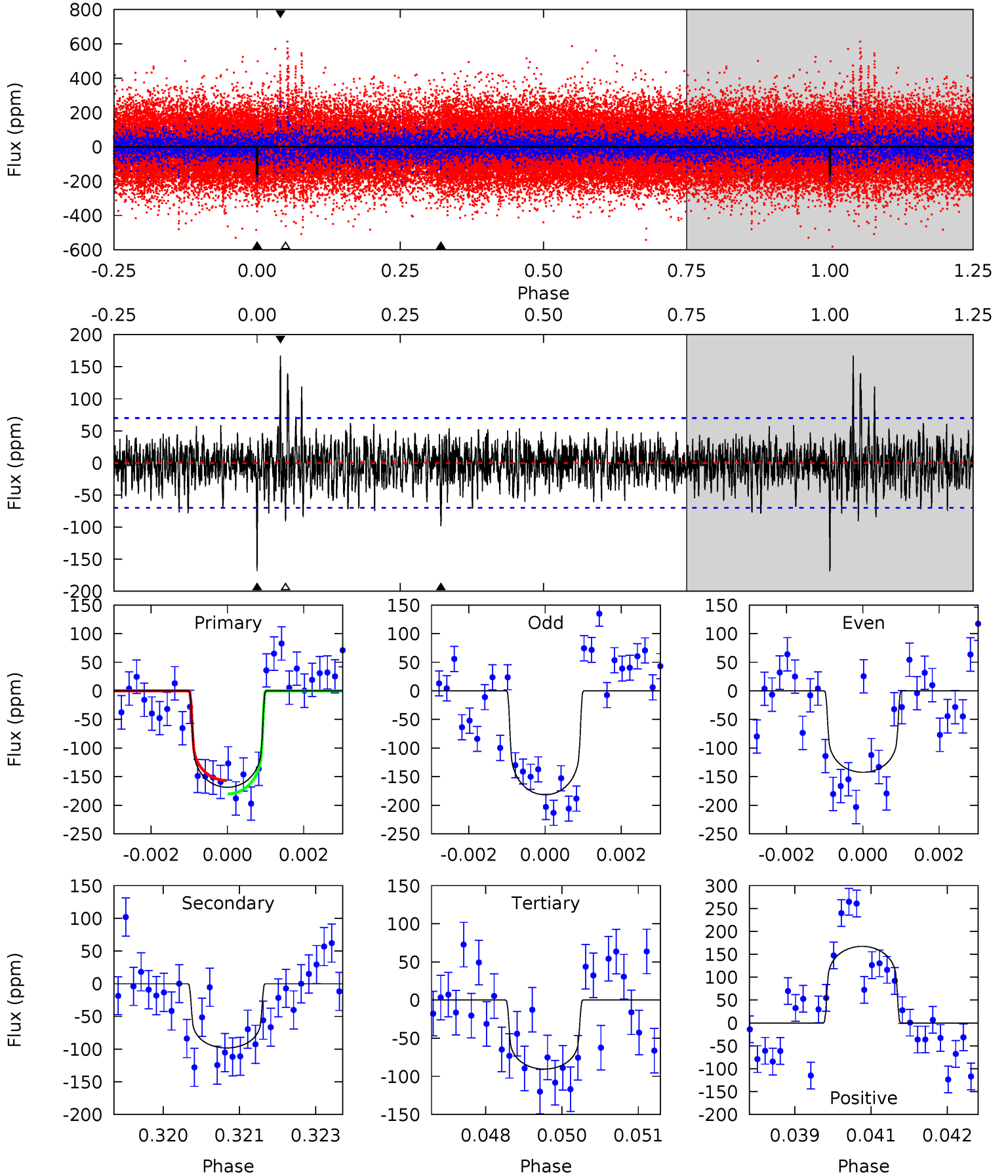
TCE 008211889-01 P=391.227751 Days $T_0=397.484899$ (BKJD)



DV Model-Shift Uniqueness Test

008211889-01, P = 391.272051 Days, E = 6.107327 Days

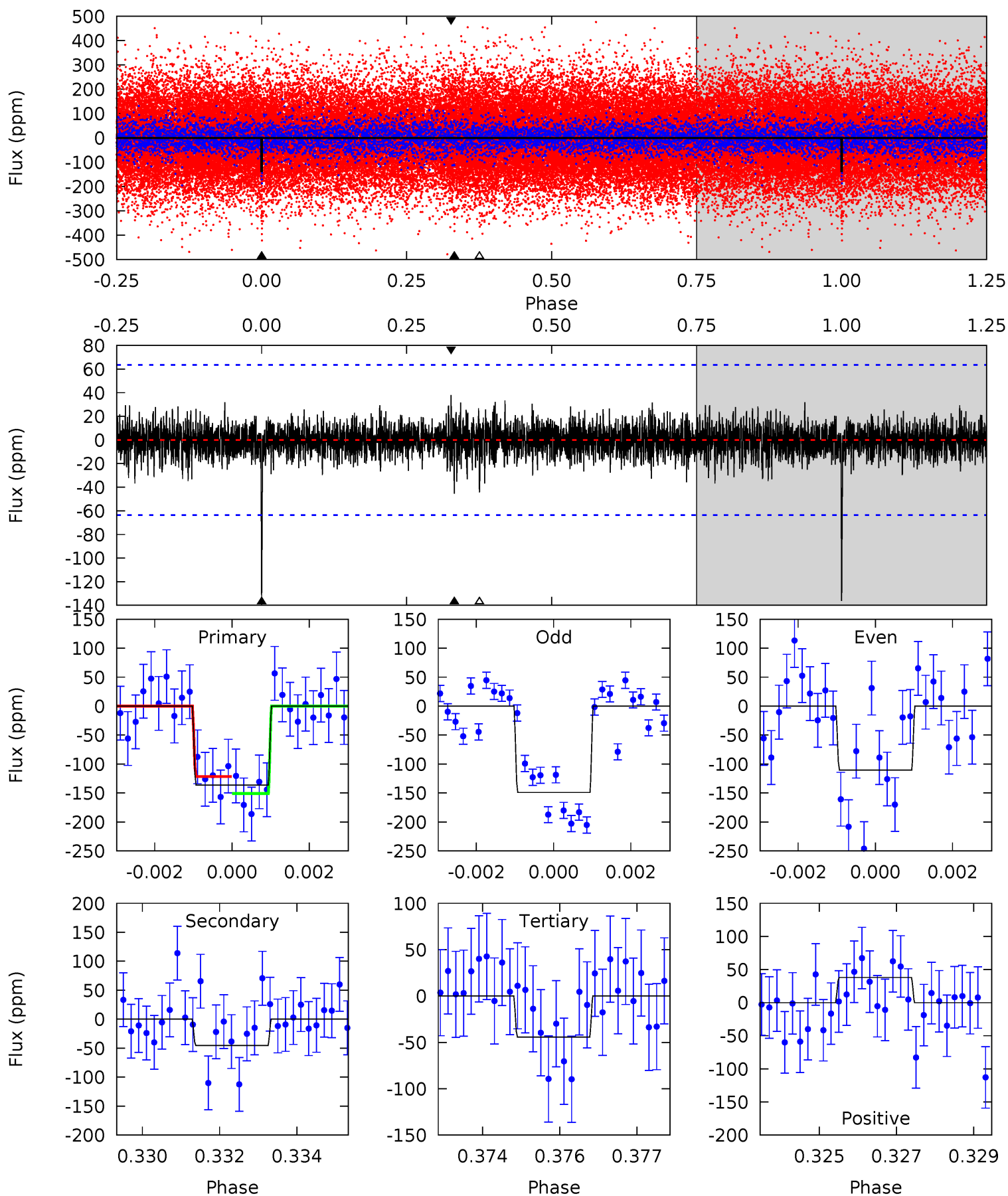
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
13.0	7.57	6.97	12.9	5.38	3.17	1.82	6.02	0.10	0.60	-5.31	1.43	1.18	0.50	0.90



Alt Model-Shift Uniqueness Test

008211889-01, $P = 391.227751$ Days, $E = 6.257148$ Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.5	3.84	3.74	3.20	5.36	3.15	0.82	7.76	8.29	0.10	0.64	1.54	1.23	0.22	1.24



Stellar Parameters For KIC 008211889

	$T_{\text{eff}} (K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5936^{+180}_{-162}	$3.694^{+0.330}_{-0.110}$	$0.040^{+0.250}_{-0.300}$	$2.843^{+0.490}_{-1.143}$	$1.457^{+0.182}_{-0.337}$	$0.089^{+0.230}_{-0.031}$
	+3%/-3%	+9%/-3%	+625%/-750%	+17%/-40%	+12%/-23%	+257%/-34%
Source	PHO1	FLK73	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 008211889-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-98 ± 13	$3.64^{+1.47}_{-1.25}$	557^{+36}_{-59}	5294^{+977}_{-611}	5646^{+7131}_{-2644}
Alt.	-46 ± 12	$3.47^{+1.33}_{-1.24}$	559^{+36}_{-49}	4629^{+829}_{-544}	2843^{+3976}_{-1428}

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 $A_{obs} \gg 1.0$

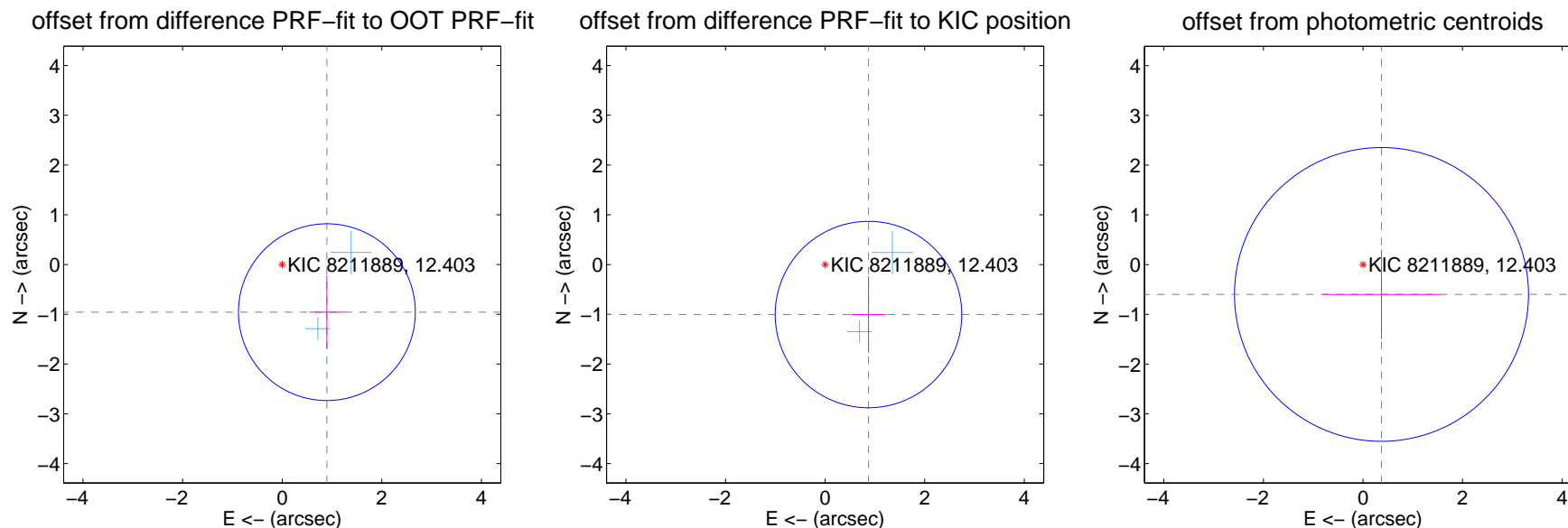
DV Centroid Data

Supplemental centroid analysis for 008211889-01. Kepler magnitude: 12.40. Transit SNR 6.48

There are 2 quarters with good PRF difference image offsets

The direct PRF centroid is offset from the target star catalog position by about 0.07 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.311 ± 0.592	2.22	-0.897 ± 0.353	-0.957 ± 0.741
PRF-fit source offset from KIC position	1.329 ± 0.624	2.13	-0.870 ± 0.349	-1.005 ± 0.769
photometric centroid source offset	0.71 ± 0.98	0.72	-0.37 ± 1.18	-0.60 ± 0.90

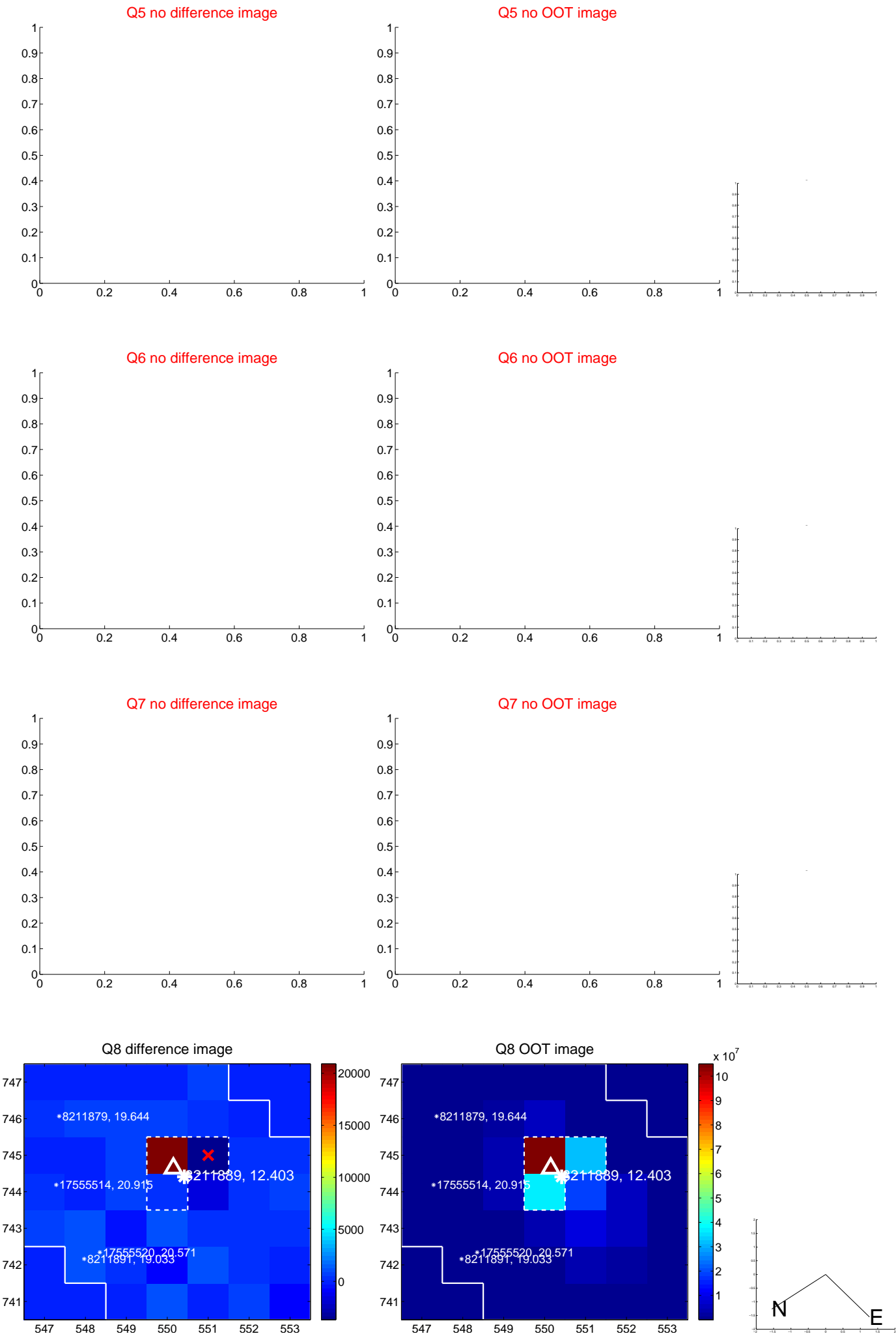


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

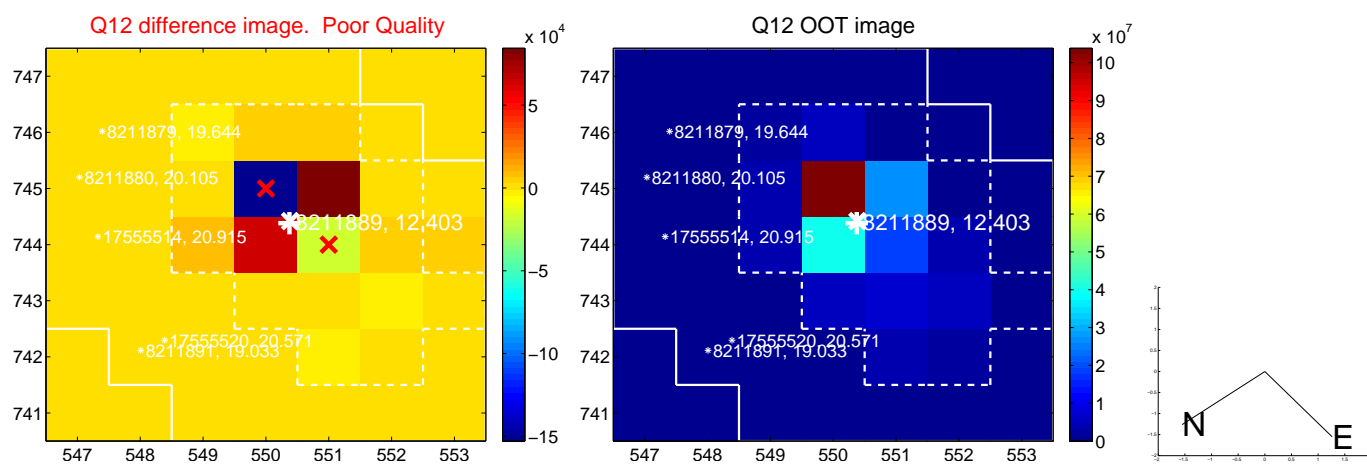
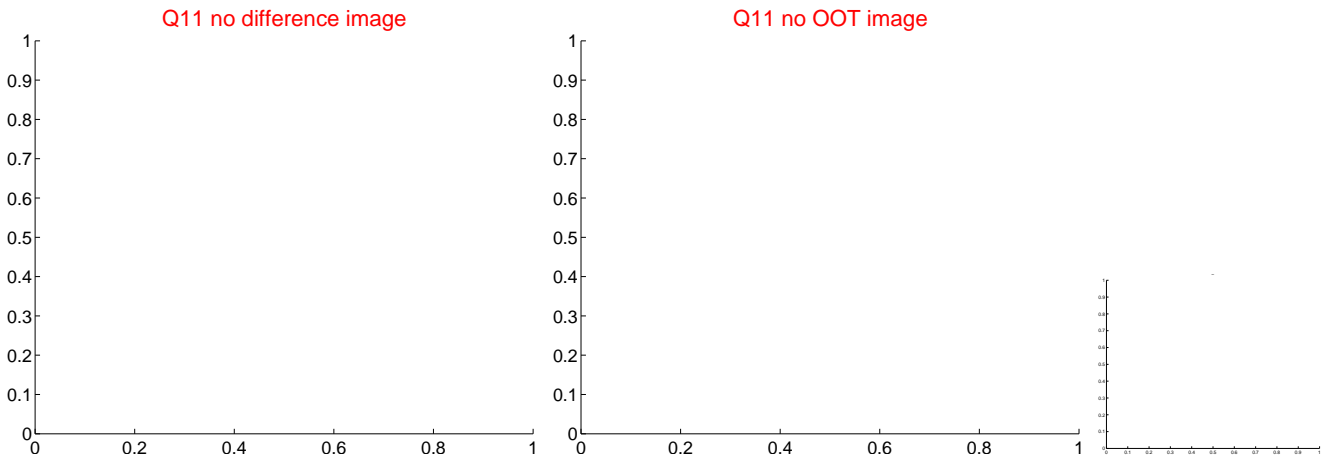
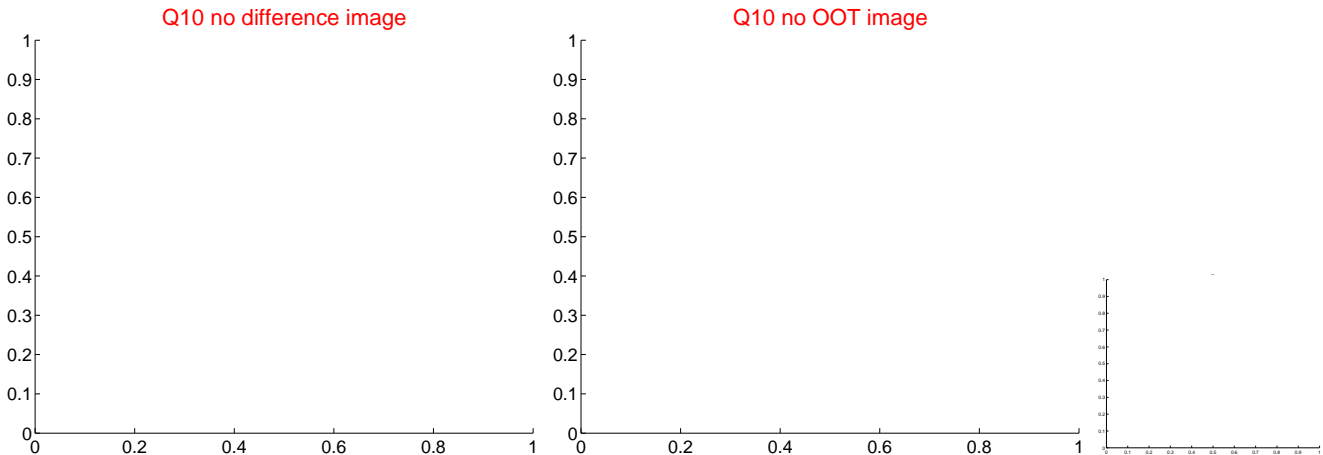
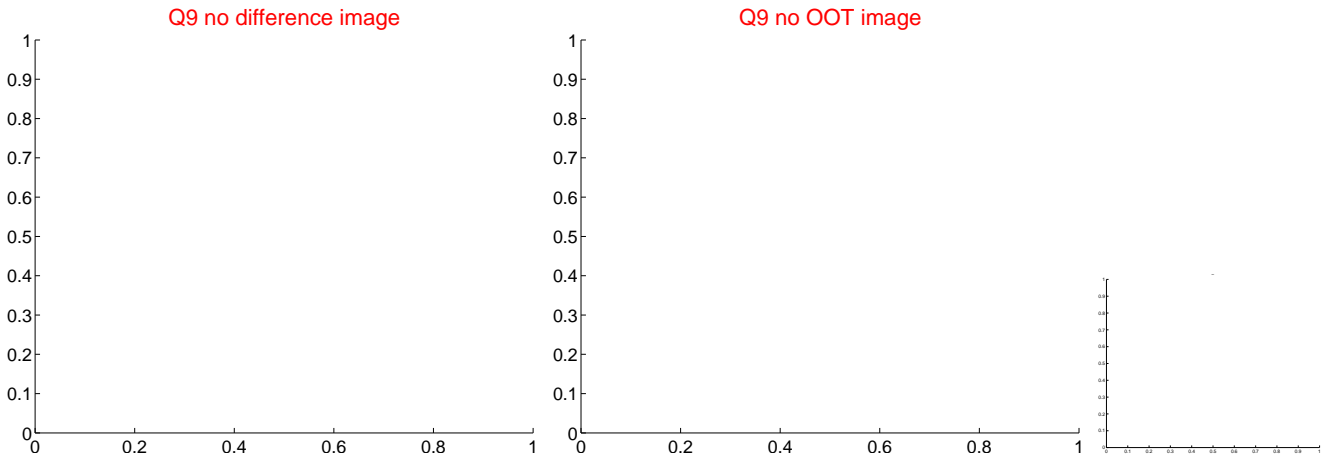
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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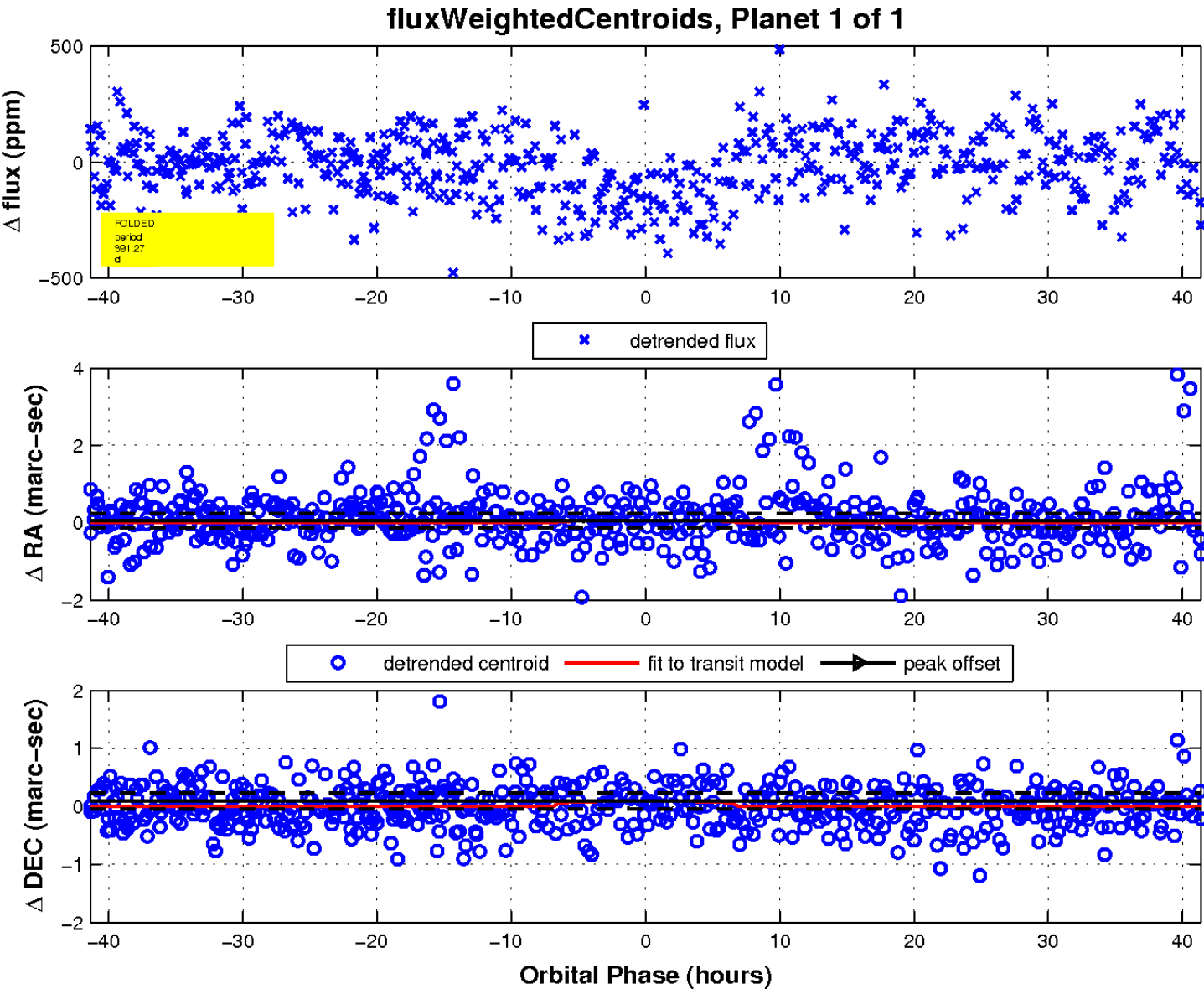
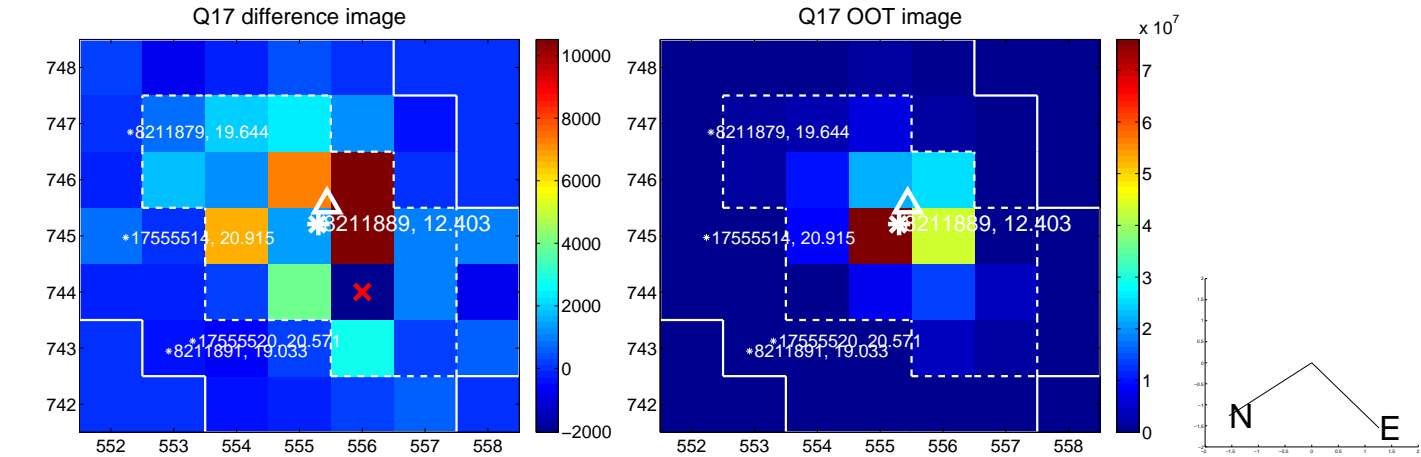
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value



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UKIRT Image

Declination

