

KIC 011802875

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})
011802875-01	OBS	No	0.687162	132.048369	32.1	6.641	9.5	6.8	0.90	5794	0.52	3539.09

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
011802875-01	OBS	FP	0.00	1	0	1	0	LPP_DV—LPP_ALT—CENT_FEW_DIFFS—HALO_GHOST

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

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

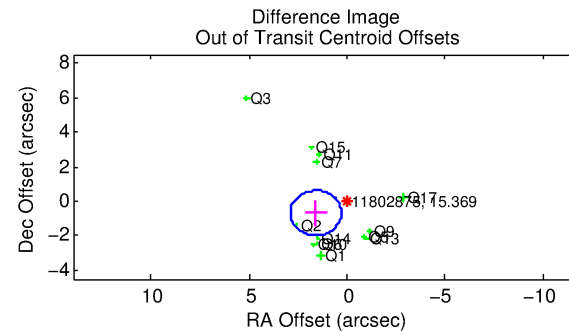
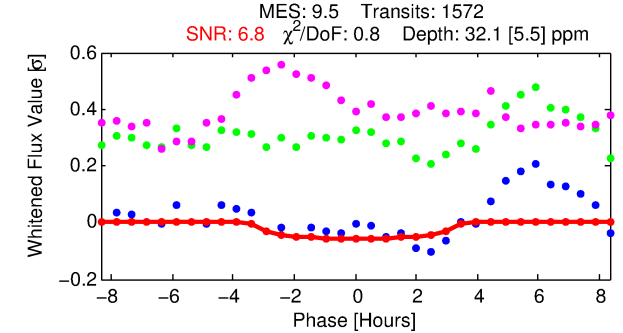
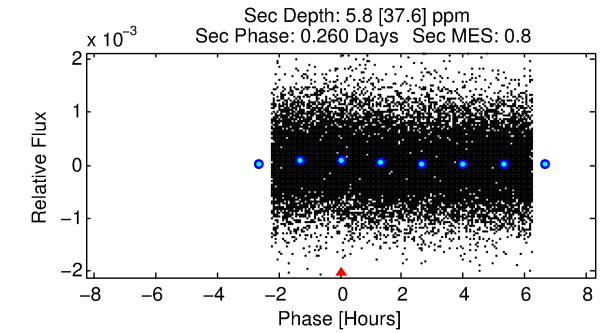
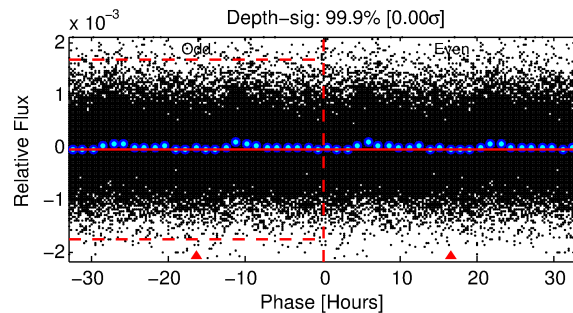
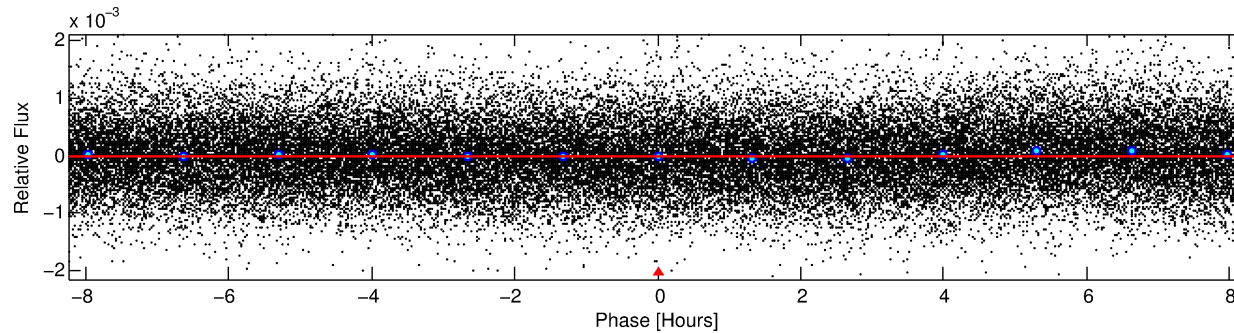
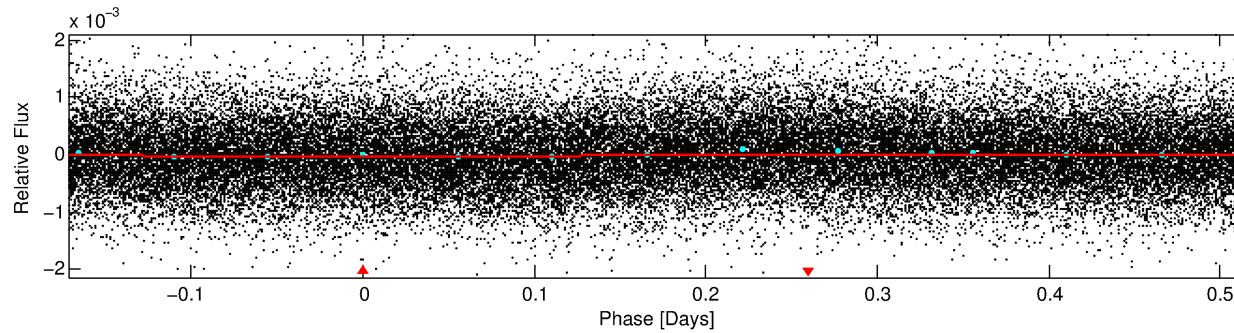
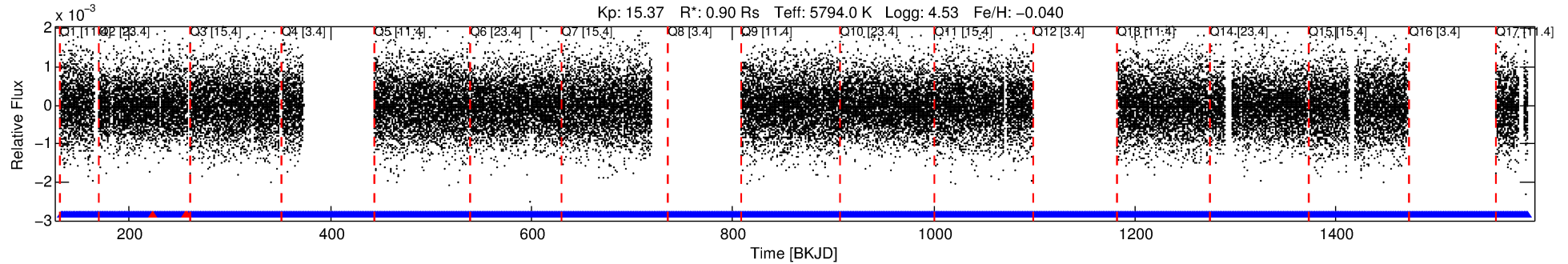
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 011802875-01

No Significant Match Found

DV One-Page Summary

KIC: 11802875 Candidate: 1 of 1 Period: 0.687 d



DV Fit Results:

Period = 0.68716 [0.00002] d
Epoch = 132.0484 [0.0113] BKJD
Rp/R* = 0.0052 [0.0094]
a/R* = 1.05 [0.69]
b = 0.42 [16.09]
Seff = 3539.09 [1365.43]
Teff = 1967 [190] K
Rp = 0.52 [0.93] Re
a = 0.0152 [0.0038] AU
Ag = 2.80 [20.63] [0.09σ]
Teffp = 3933 [7241] K [0.27σ]

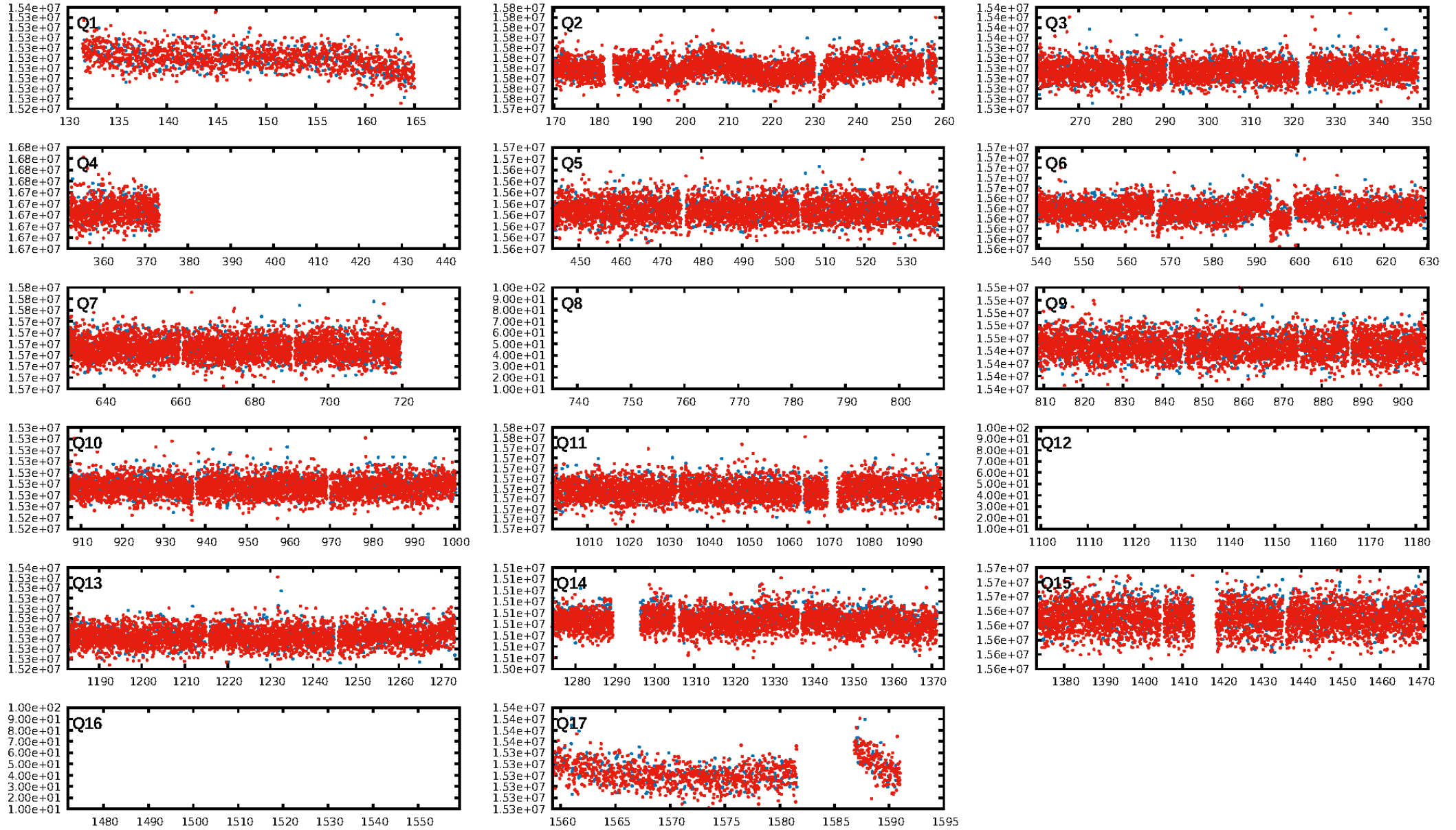
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1449/1452]
GhostDiagnostic-chr: -0.1608
Centroid-sig: 0.0%
Centroid-so: 12.916 arcsec [6.05σ]
OotOffset-rm: 1.740 arcsec [4.02σ]
KicOffset-rm: 1.736 arcsec [4.23σ]
OotOffset-st: 4/4/0/5 [13]
KicOffset-st: 4/4/0/5 [13]
DiffImageQuality-fgm: 0.38 [5/13]
DiffImageOverlap-fno: 1.00 [14/14]

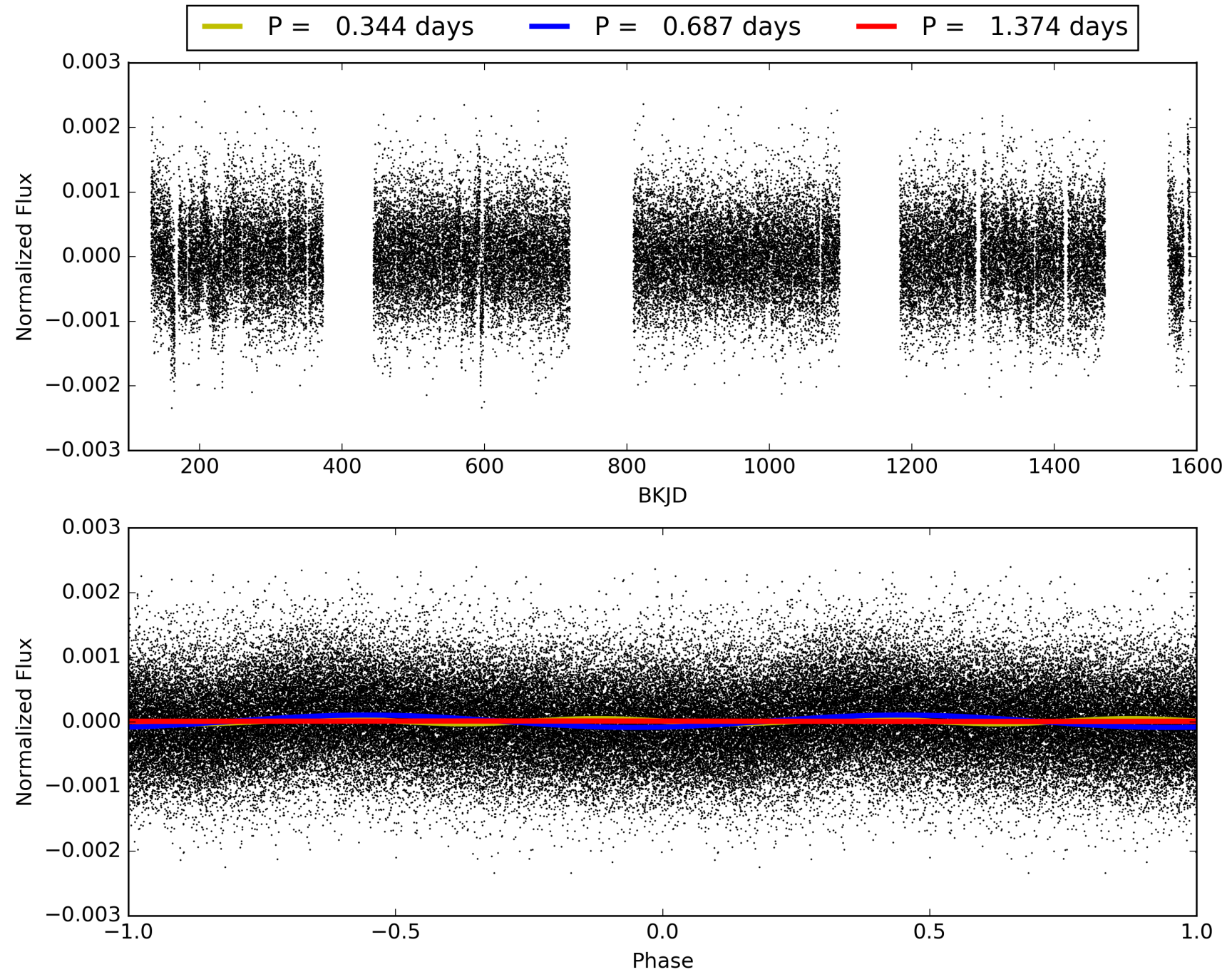
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 01-Feb-2016 01:52:09 Z

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

TCE 011802875-01, PDC Light Curves

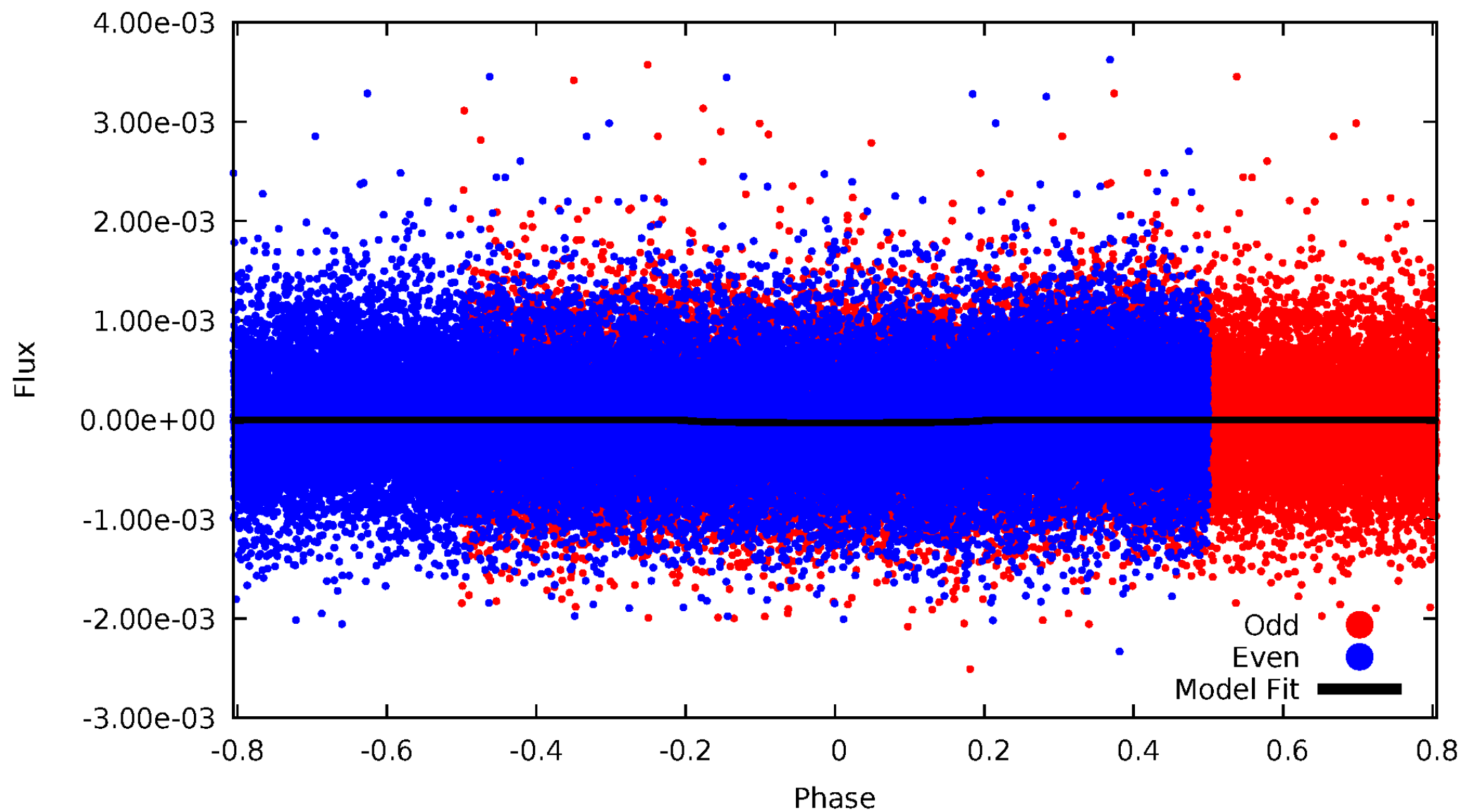


TCE 011802875-01



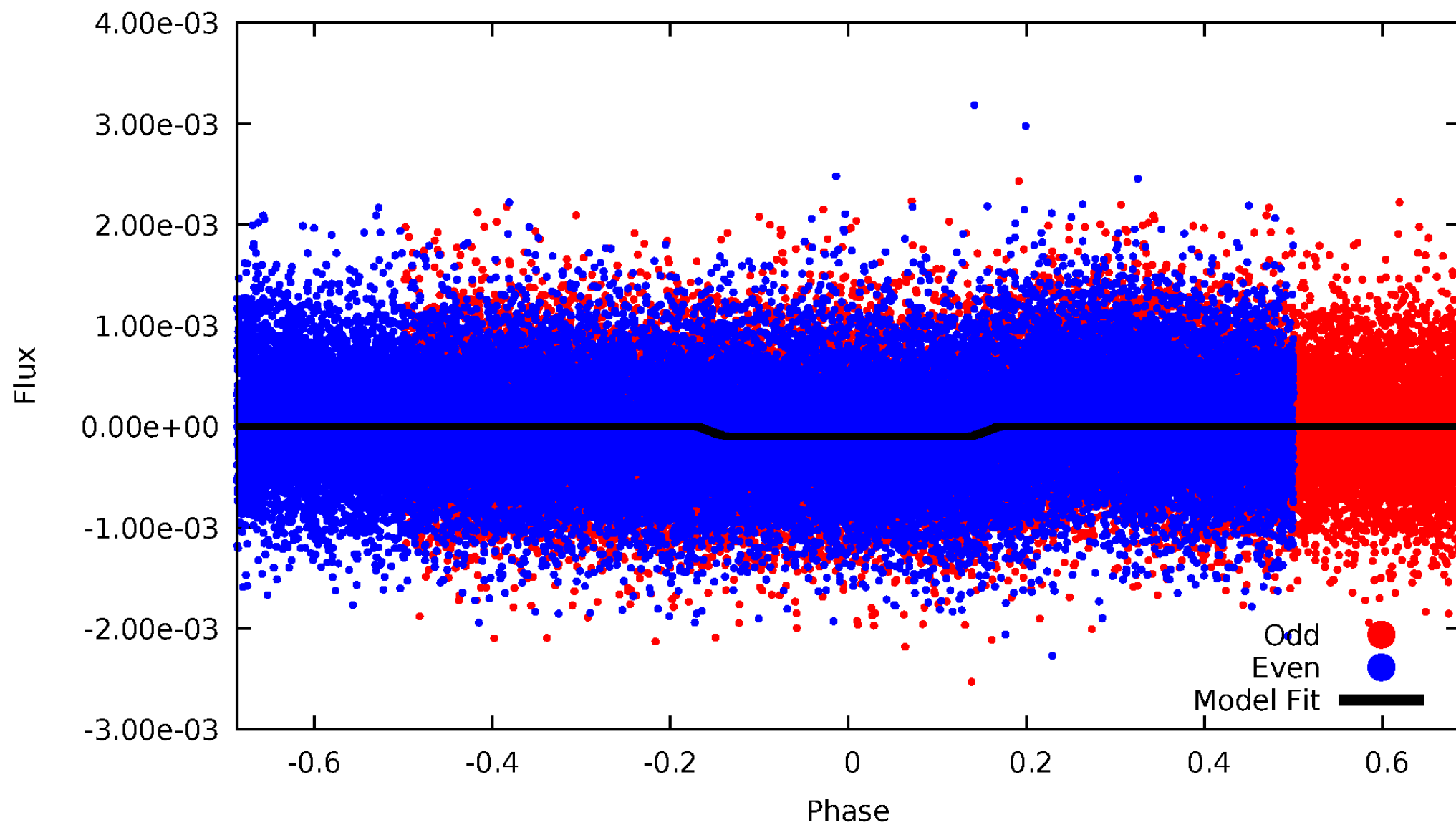
DV Odd/Even

TCE 011802875-01

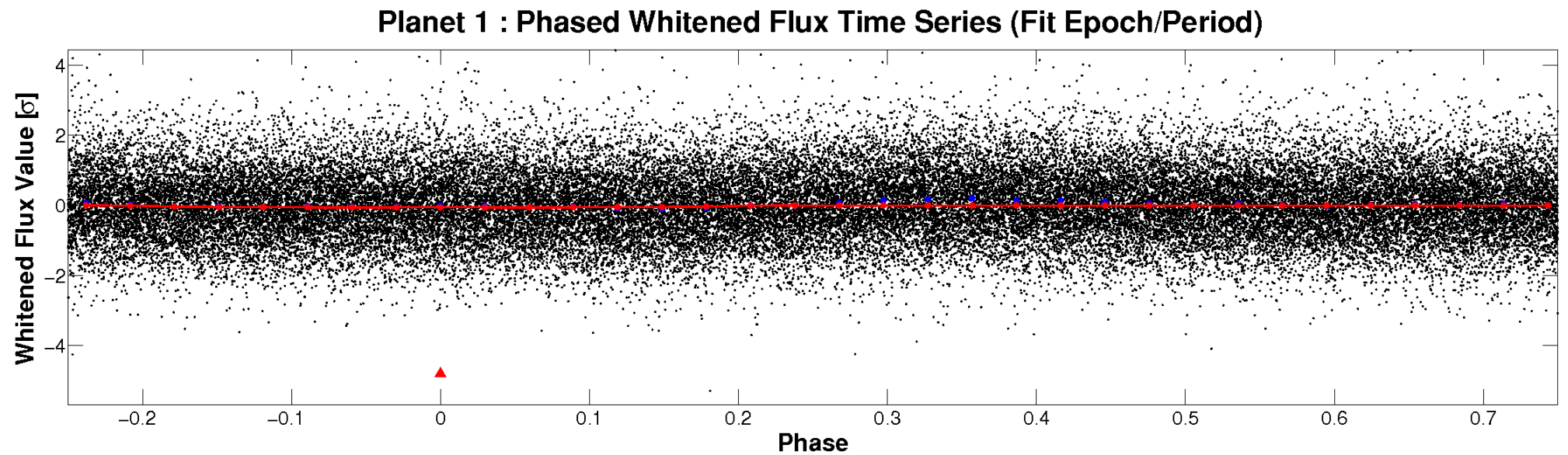
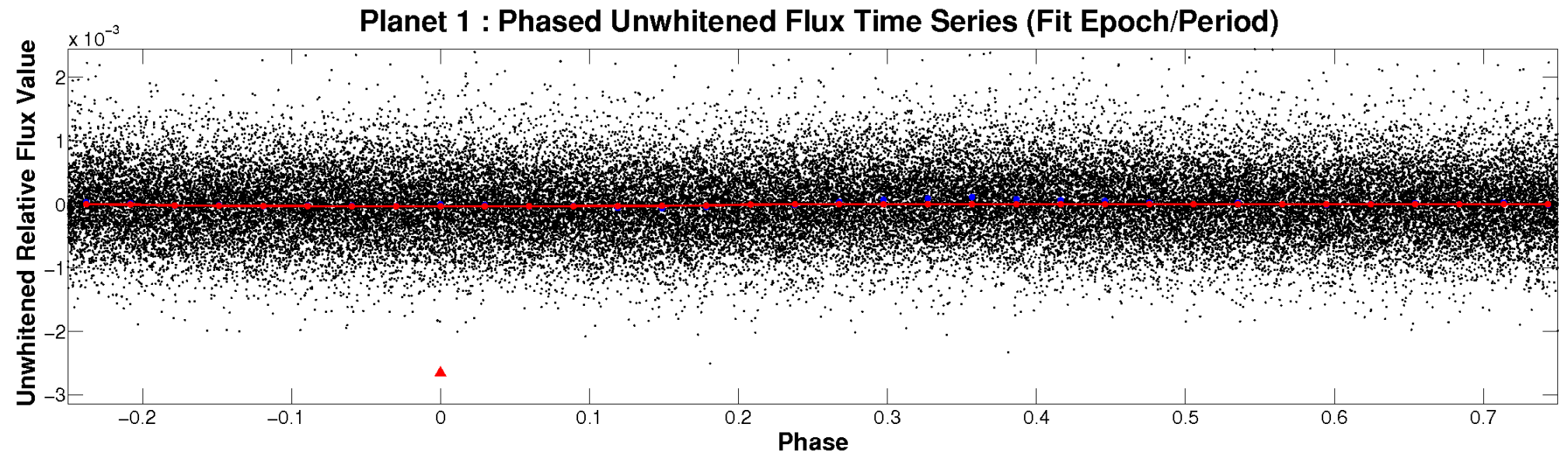


ALT Odd/Even

TCE 011802875-01

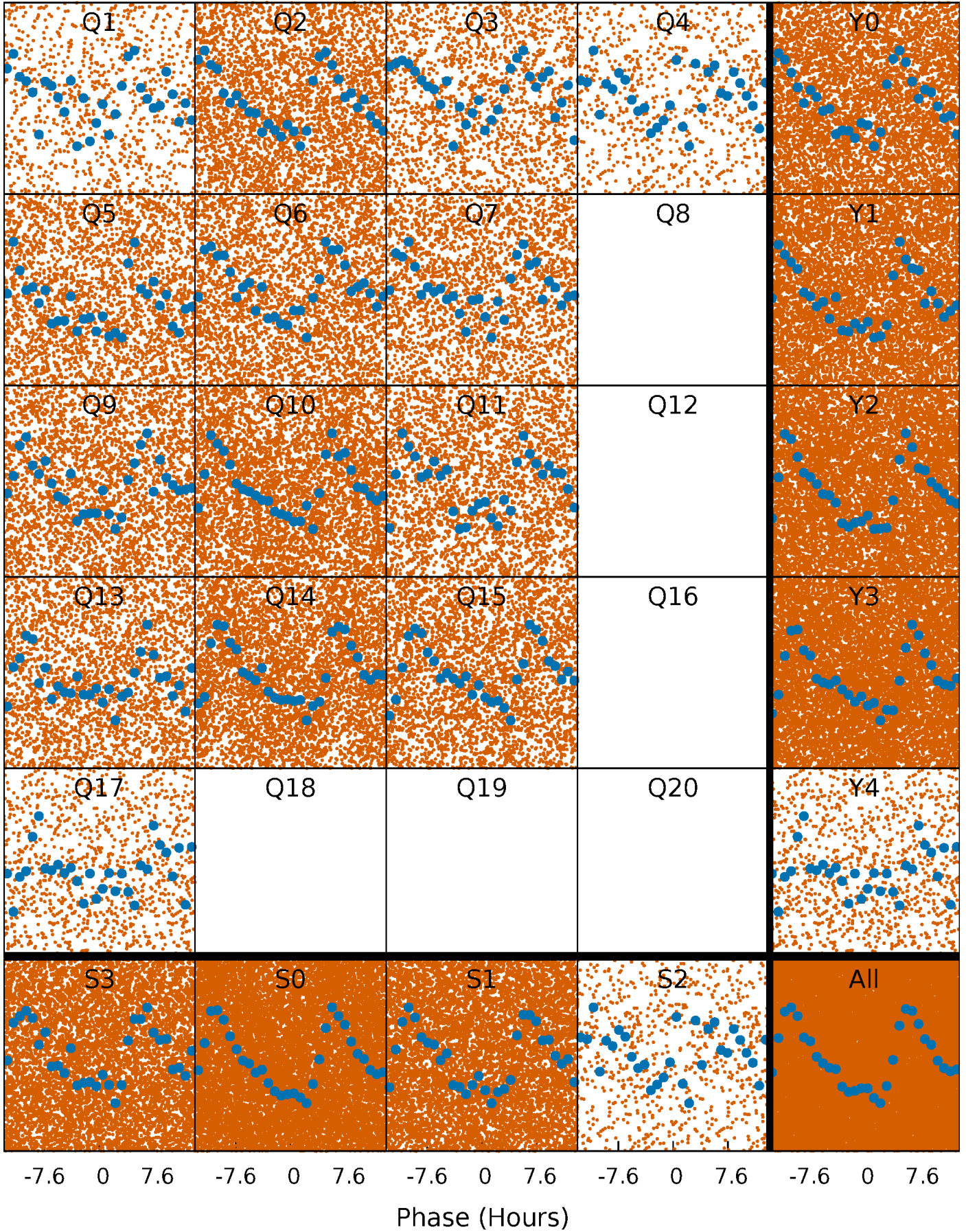


Non-Whitened Vs. Whitened Light Curve



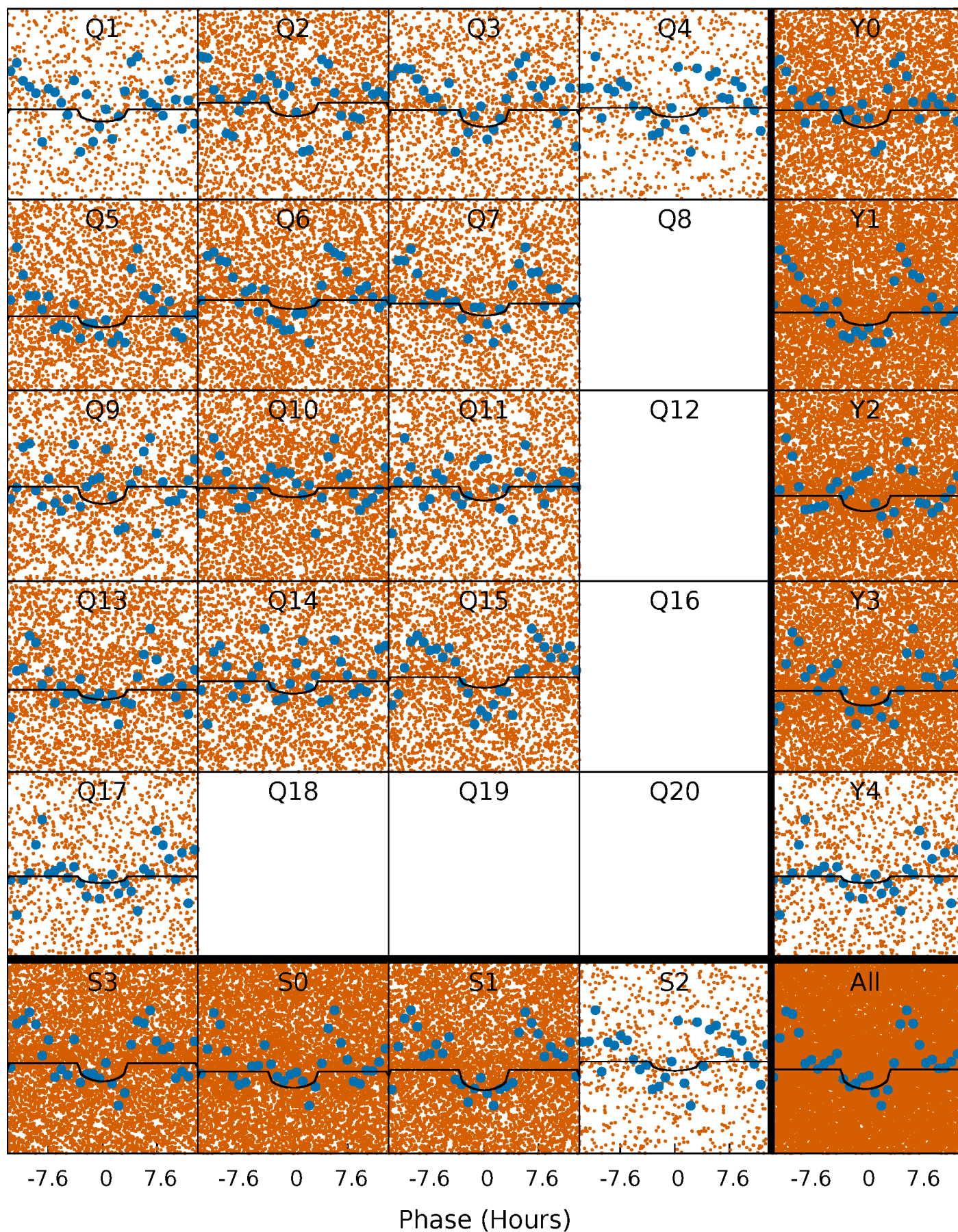
PDC Quarter-Phased Transit Curves

TCE 011802875-01 P= 0.687162 Days $T_0=132.048369$ (BKJD)



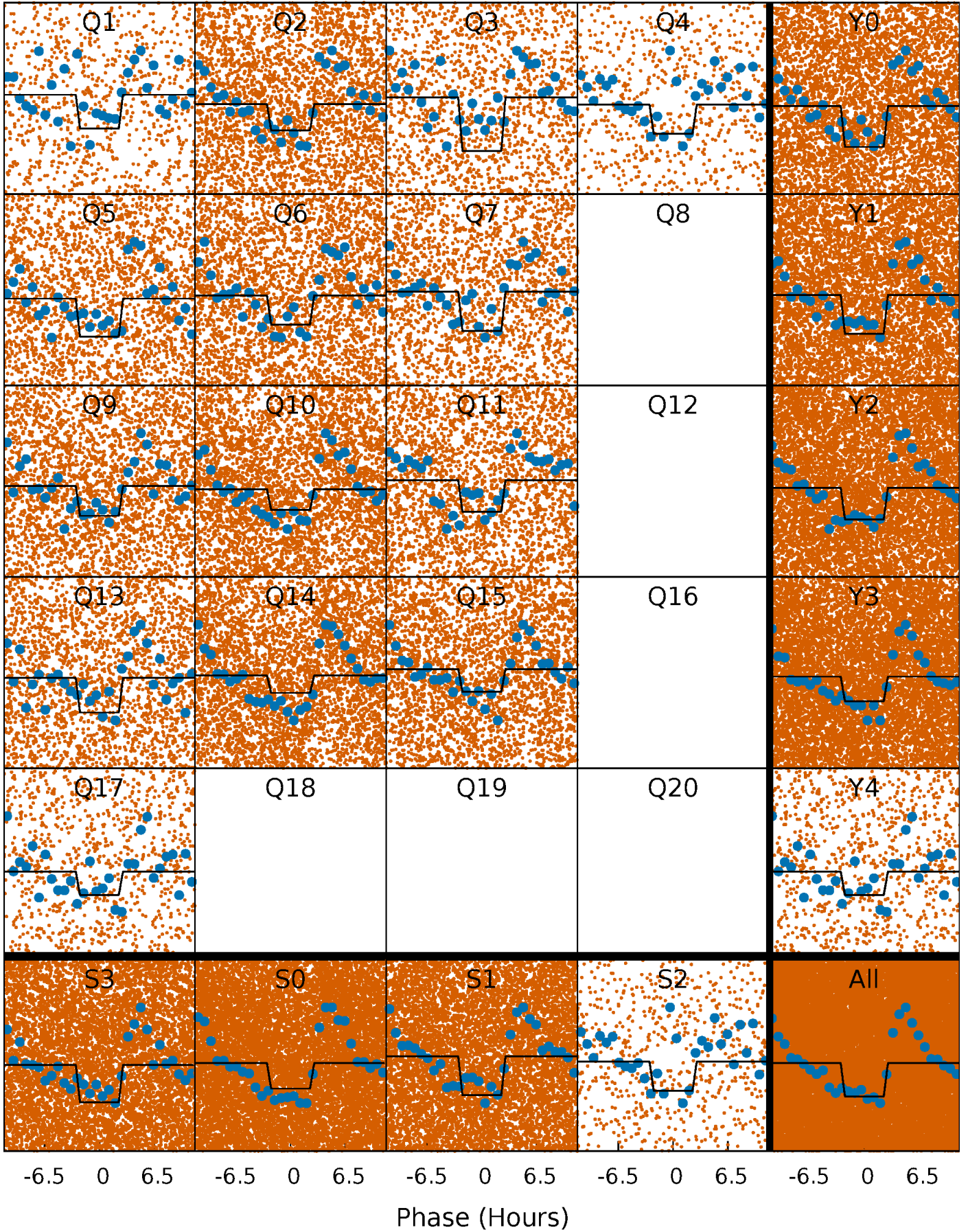
DV Quarter-Phased Transit Curves

TCE 011802875-01 P= 0.687162 Days $T_0=132.048369$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

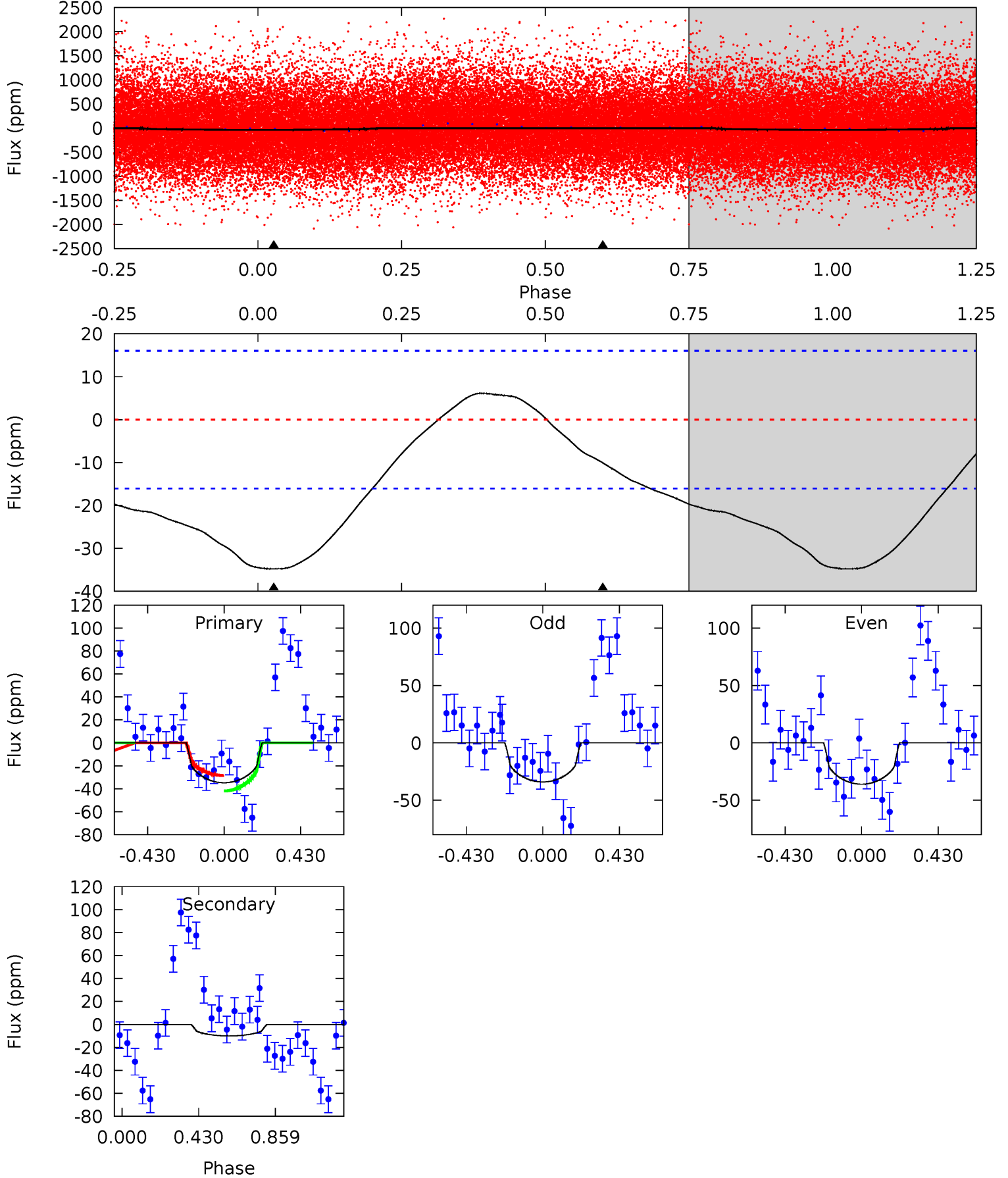
TCE 011802875-01 P= 0.687214 Days $T_0=132.042267$ (BKJD)



DV Model-Shift Uniqueness Test

011802875-01, P = 0.687162 Days, E = 131.361207 Days

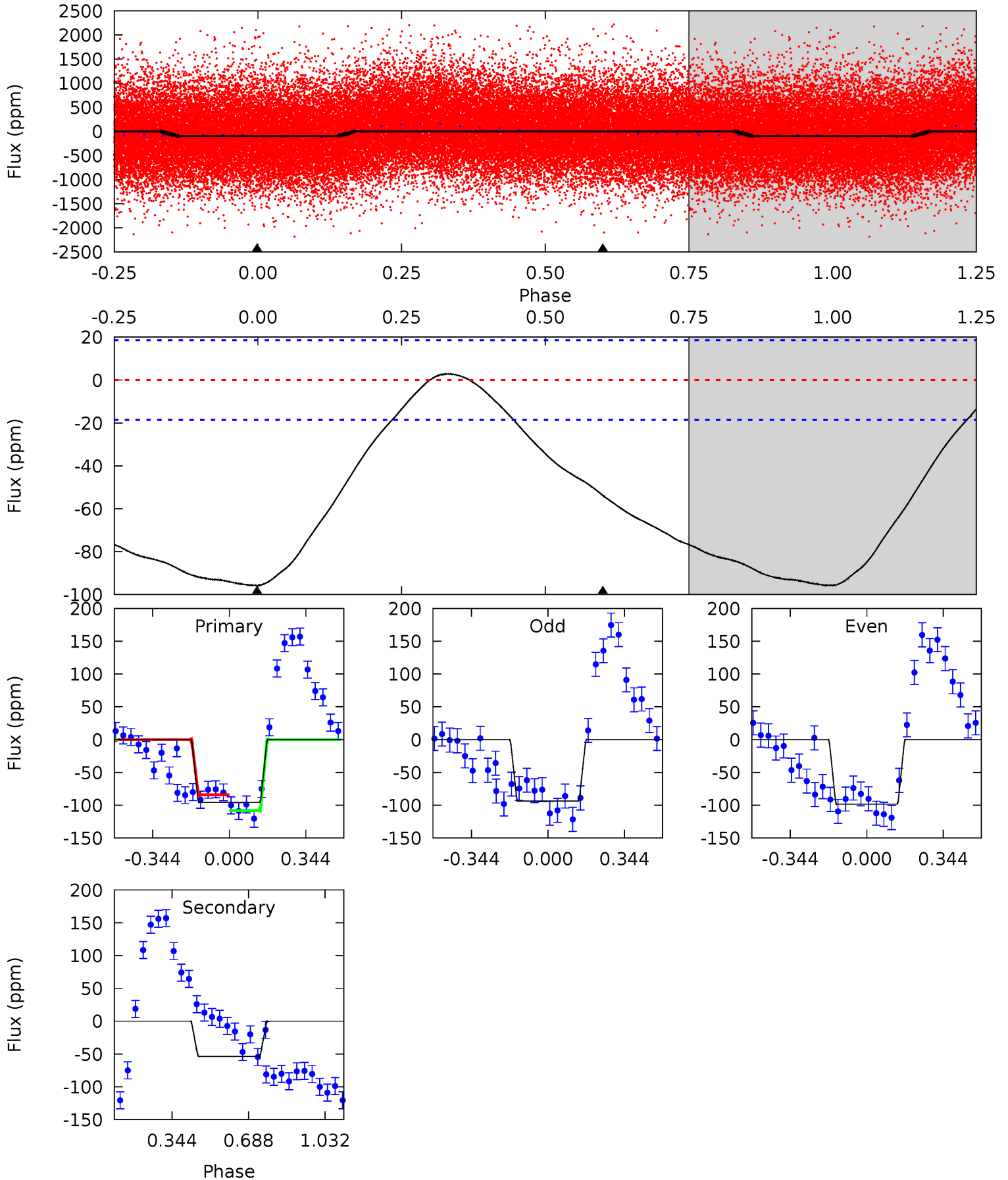
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.21	2.66	0	0	4.25	0.79	0.89	9.21	9.21	2.66	2.66	0.26	1.15	0.15	1.81



Alt Model-Shift Uniqueness Test

011802875-01, P = 0.687214 Days, E = 131.355053 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.1	12.4	0	0	4.30	0.95	1.23	22.1	22.1	12.4	12.4	0.56	1.04	0.03	2.90



Stellar Parameters For KIC 011802875

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5794^{+156}_{-173}	$4.526^{+0.048}_{-0.204}$	$-0.040^{+0.250}_{-0.300}$	$0.900^{+0.258}_{-0.086}$	$0.991^{+0.102}_{-0.125}$	$1.915^{+0.374}_{-0.974}$
	+3%/-3%	+1%/-5%	+625%/-750%	+29%/-10%	+10%/-13%	+20%/-51%
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 011802875-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	-10 ± 4	$0.88^{+0.85}_{-0.56}$	2807^{+193}_{-128}	3662^{+2045}_{-1285}	$1.478^{+10.449}_{-1.124}$
Alt.	-54 ± 4	$1.19^{+0.94}_{-0.73}$	2811^{+185}_{-131}	4659^{+2671}_{-961}	$4.631^{+25.046}_{-3.118}$

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

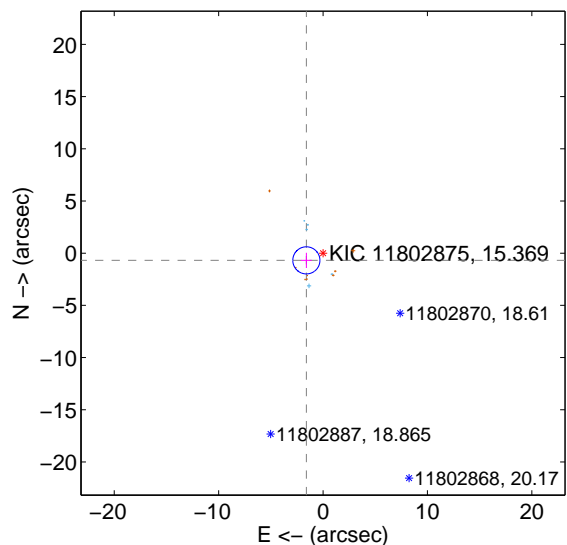
Supplemental centroid analysis for 011802875-01. Kepler magnitude: 15.37. Transit SNR 6.84

There are 5 quarters with good PRF difference image offsets

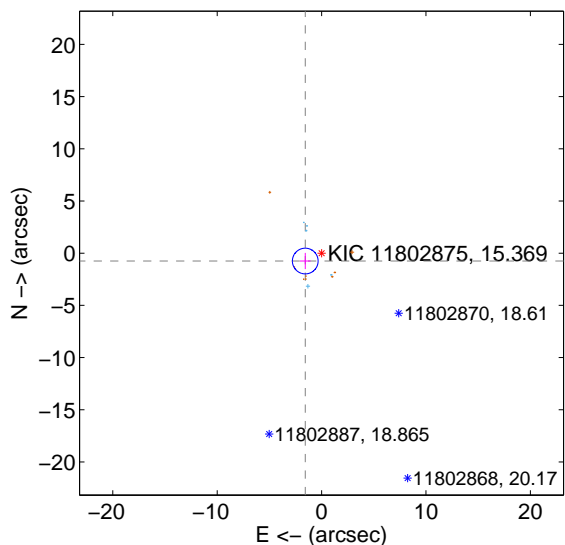
The direct PRF centroid is offset from the target star catalog position by about 0.14 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	1.740 ± 0.433	4.02	1.597 ± 0.517	-0.689 ± 0.728
PRF-fit source offset from KIC position	1.736 ± 0.411	4.23	1.564 ± 0.510	-0.754 ± 0.779
photometric centroid source offset	12.92 ± 2.13	6.05	7.57 ± 2.27	10.46 ± 2.06

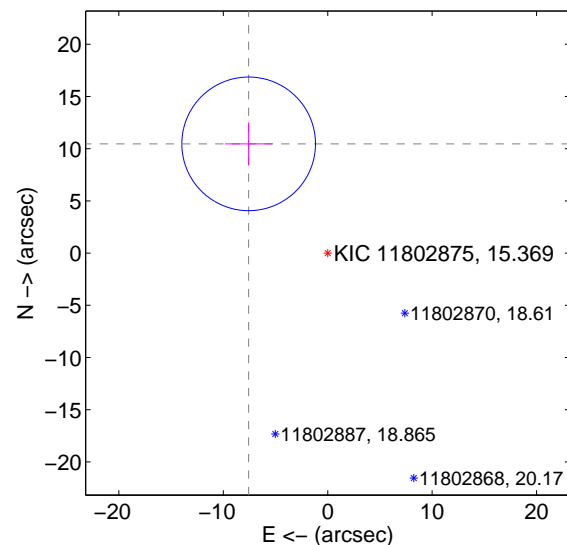
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

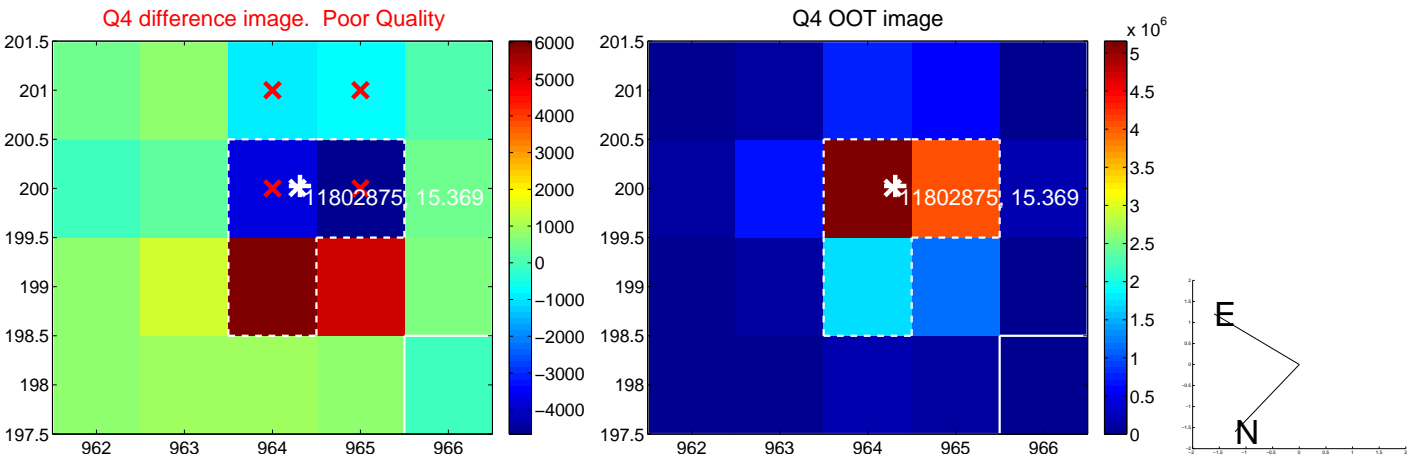
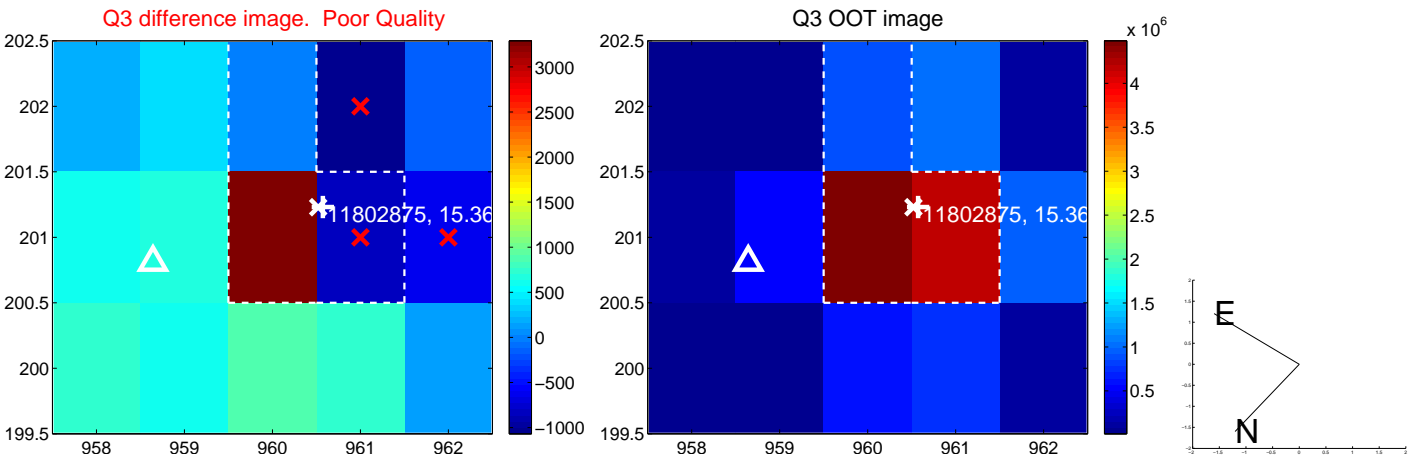
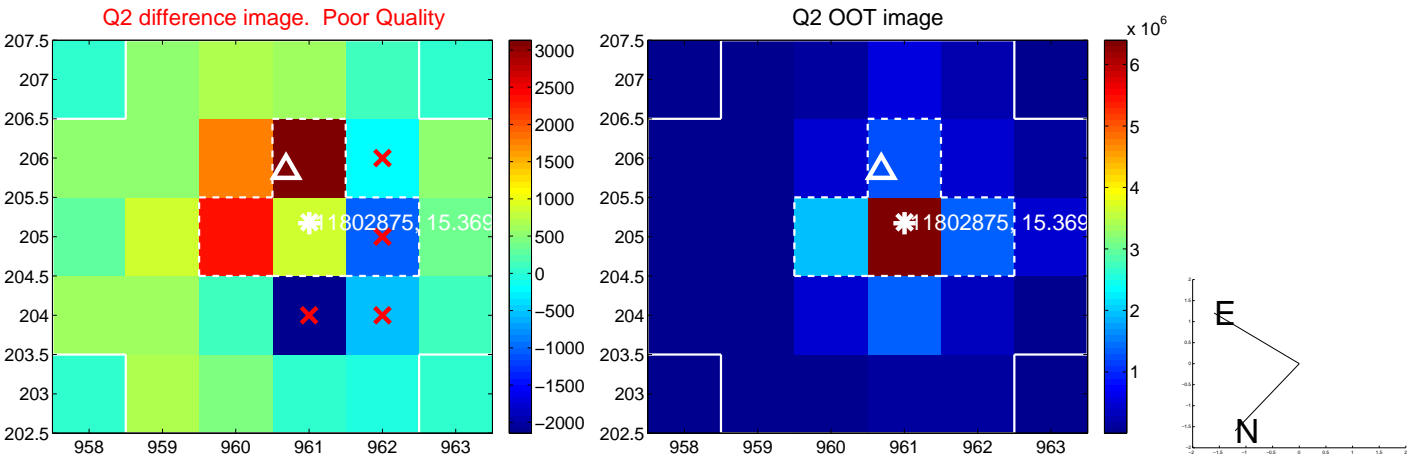
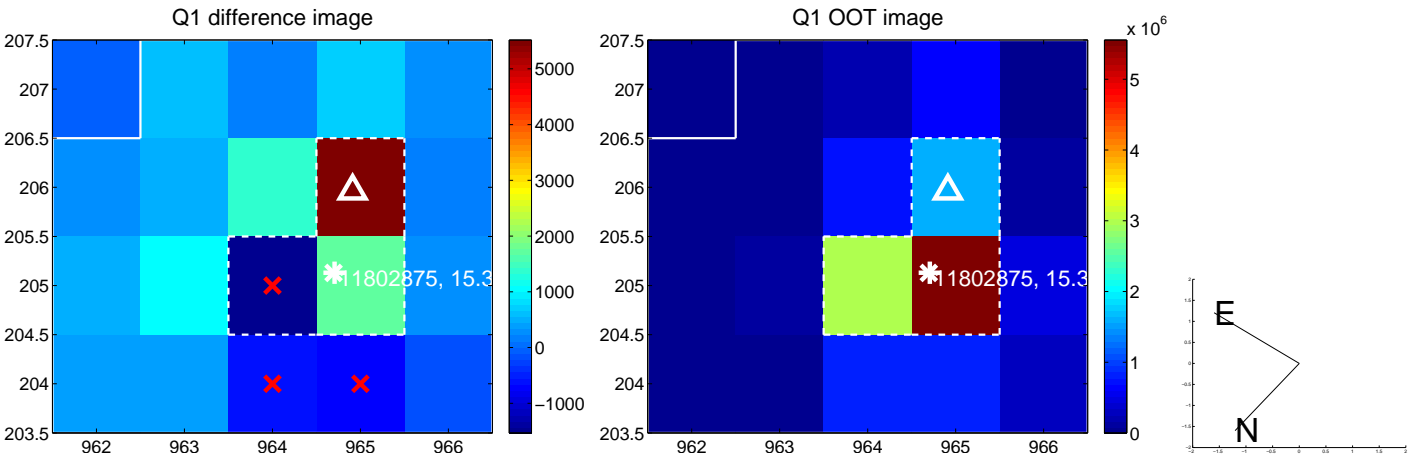


offset from photometric centroids

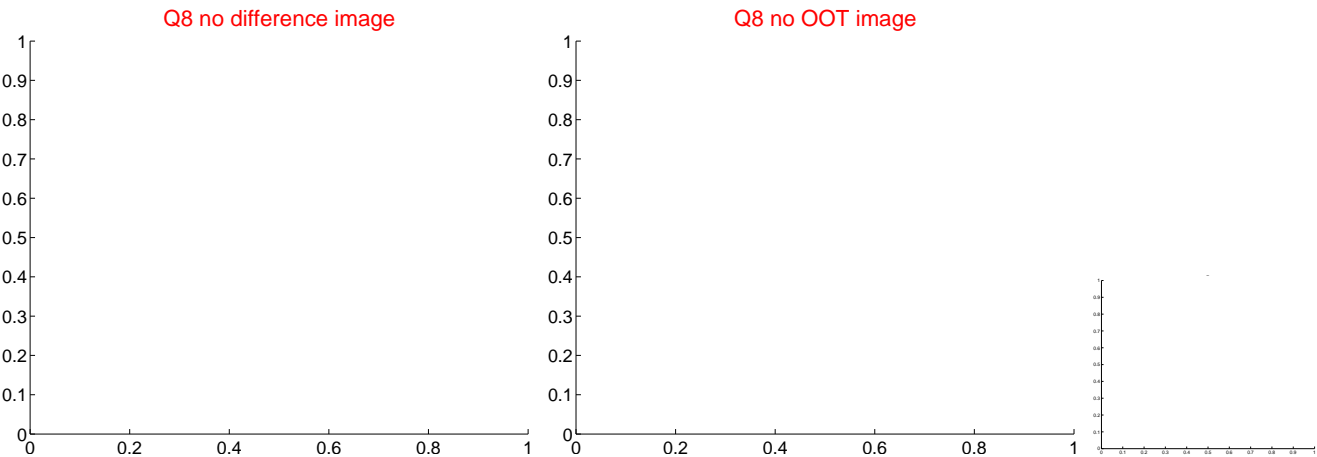
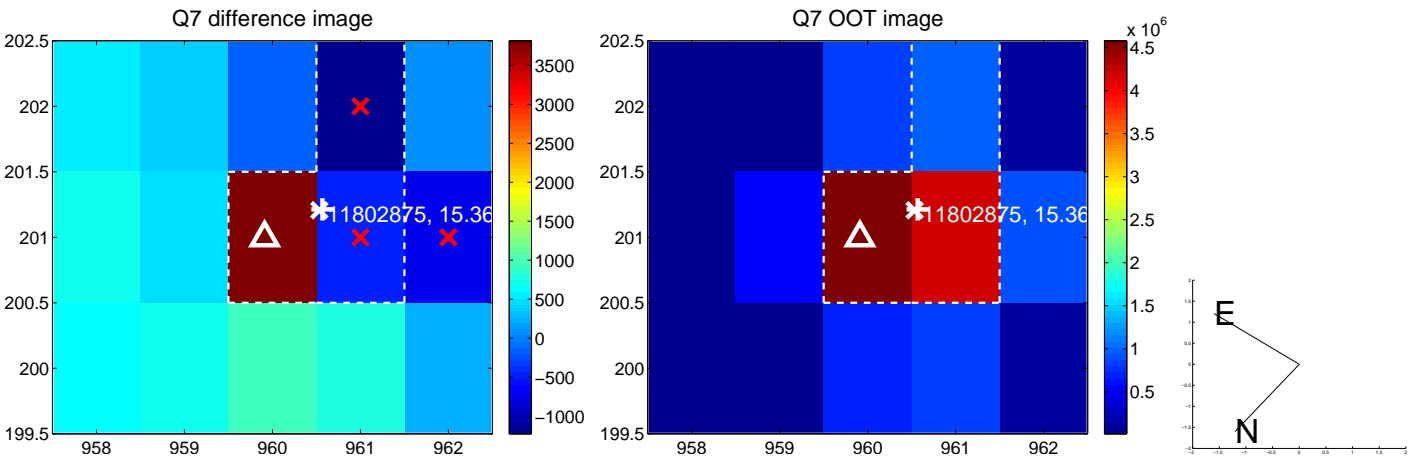
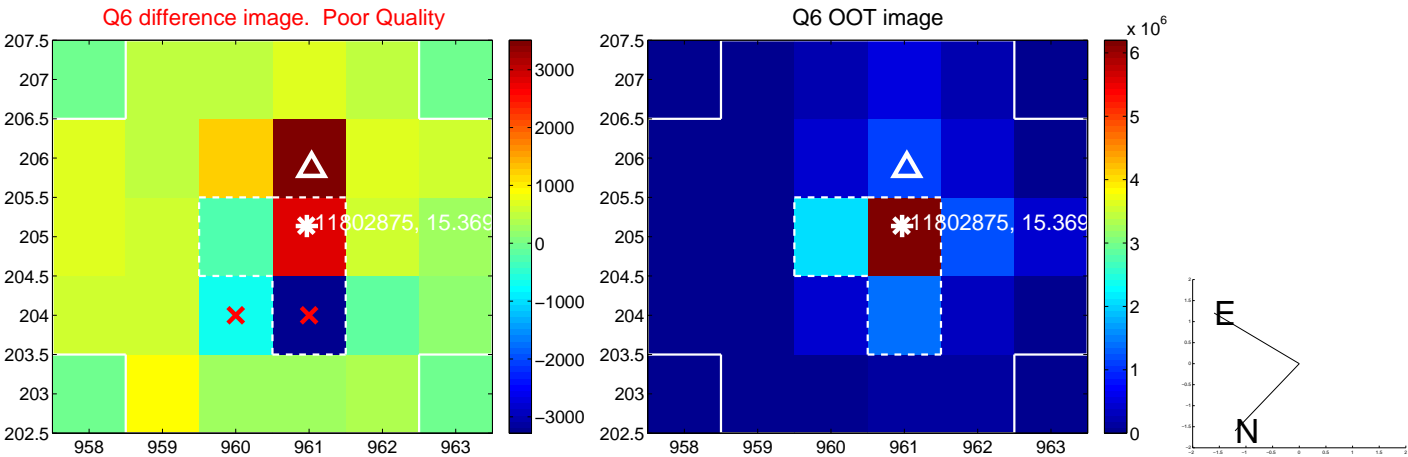
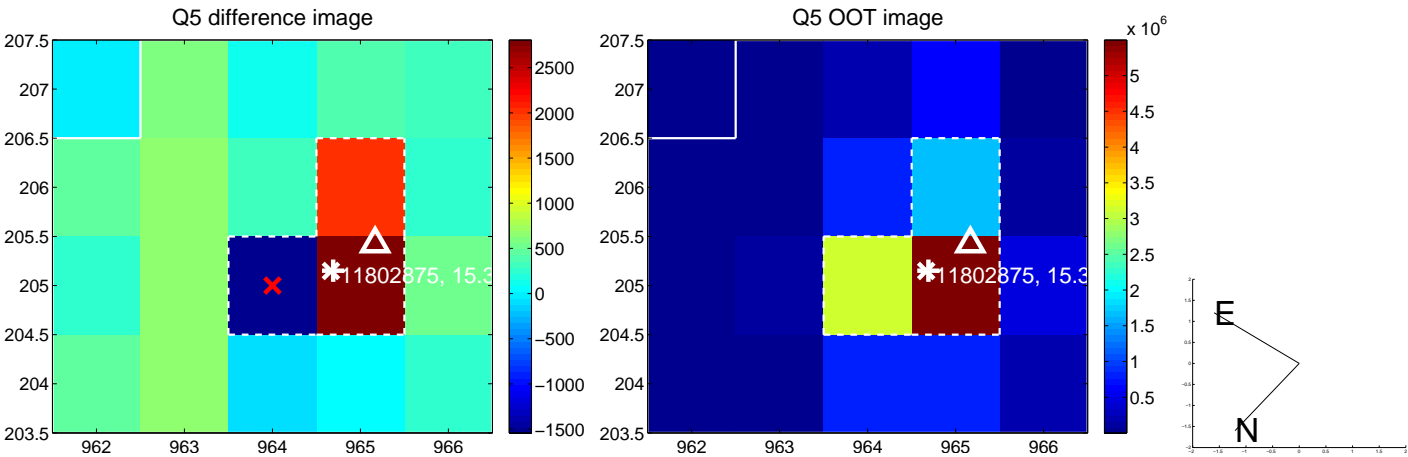


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

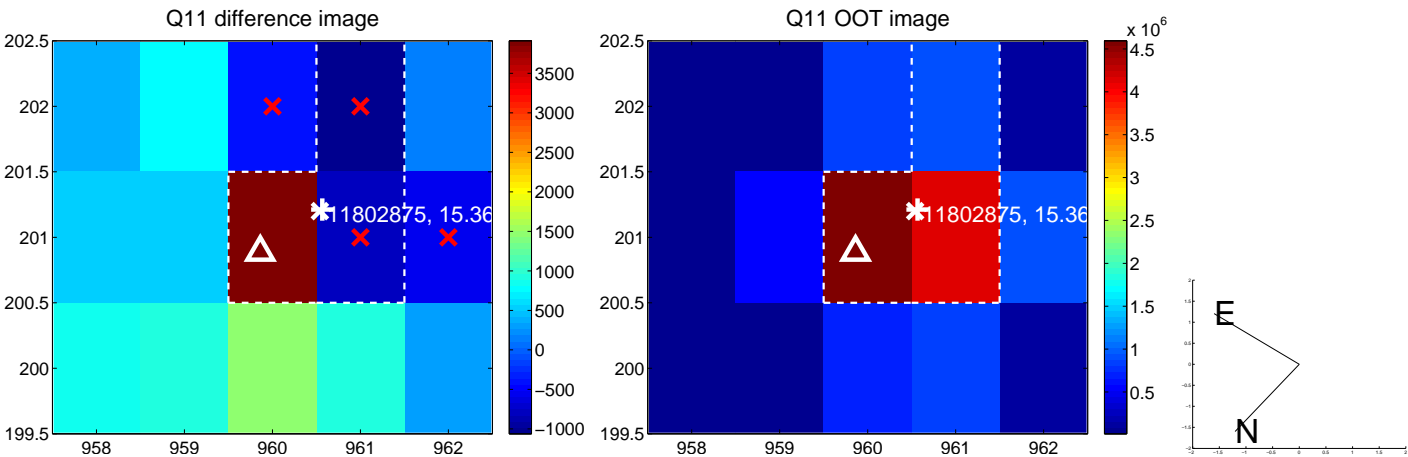
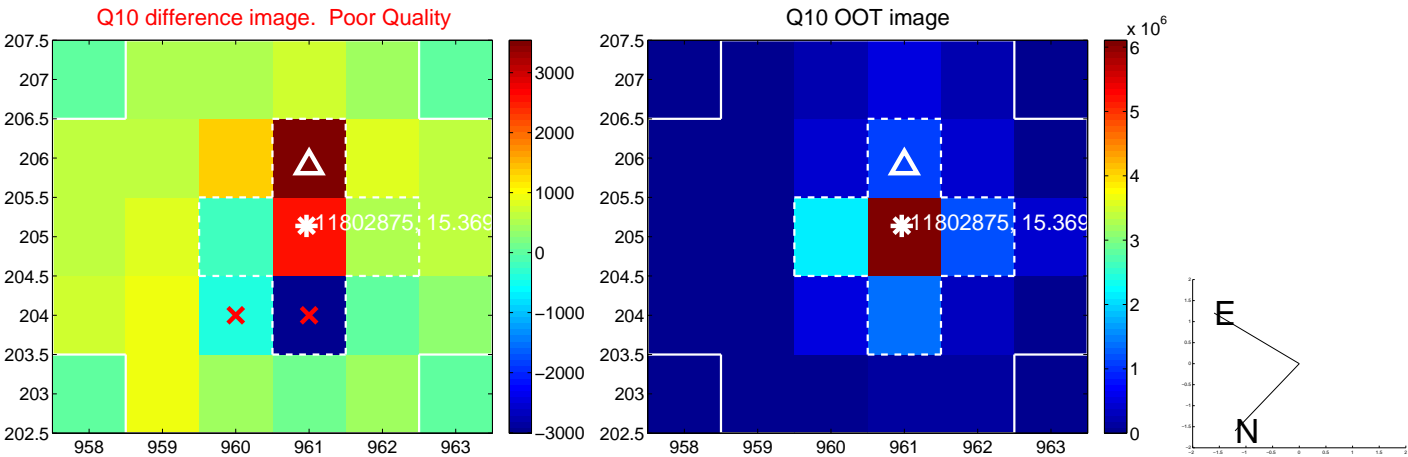
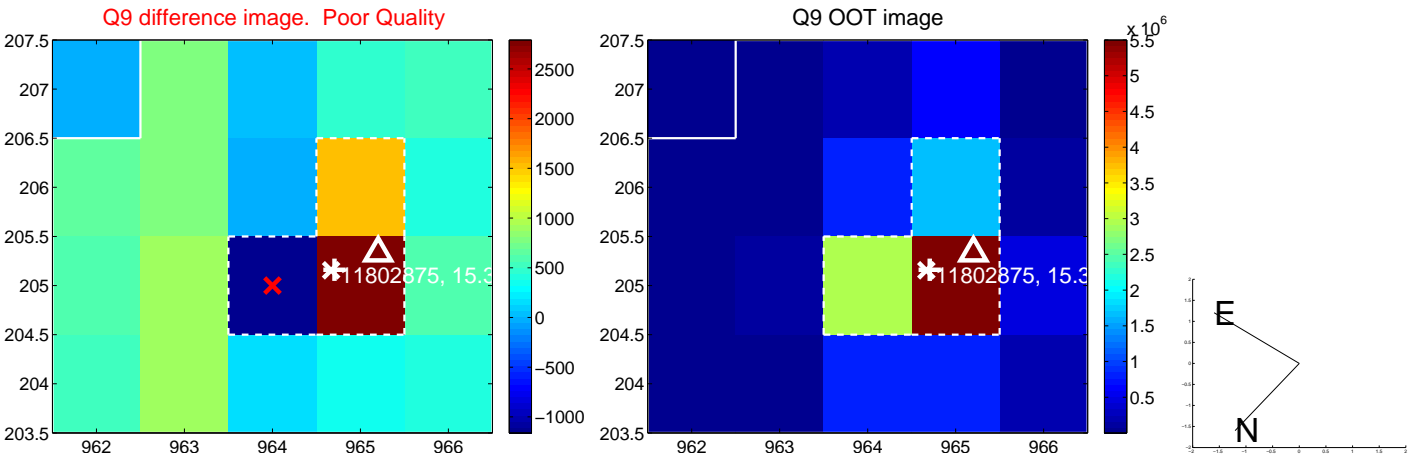
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



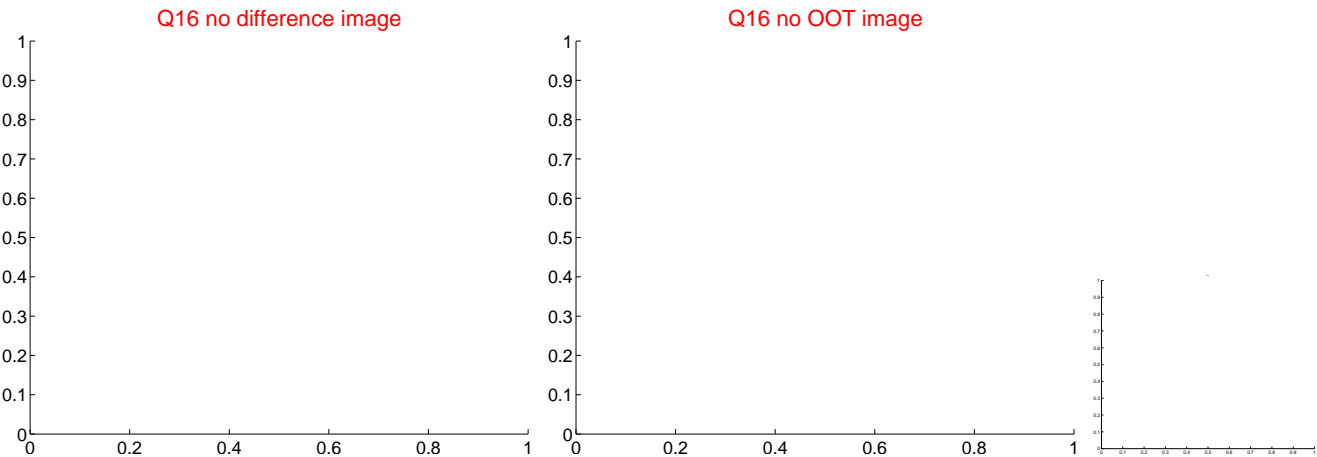
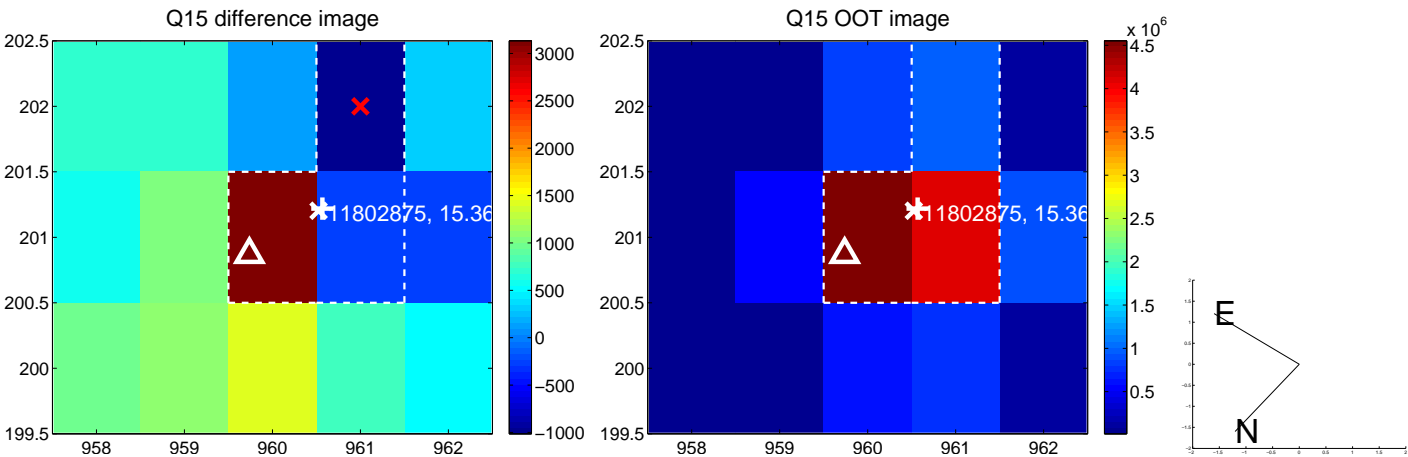
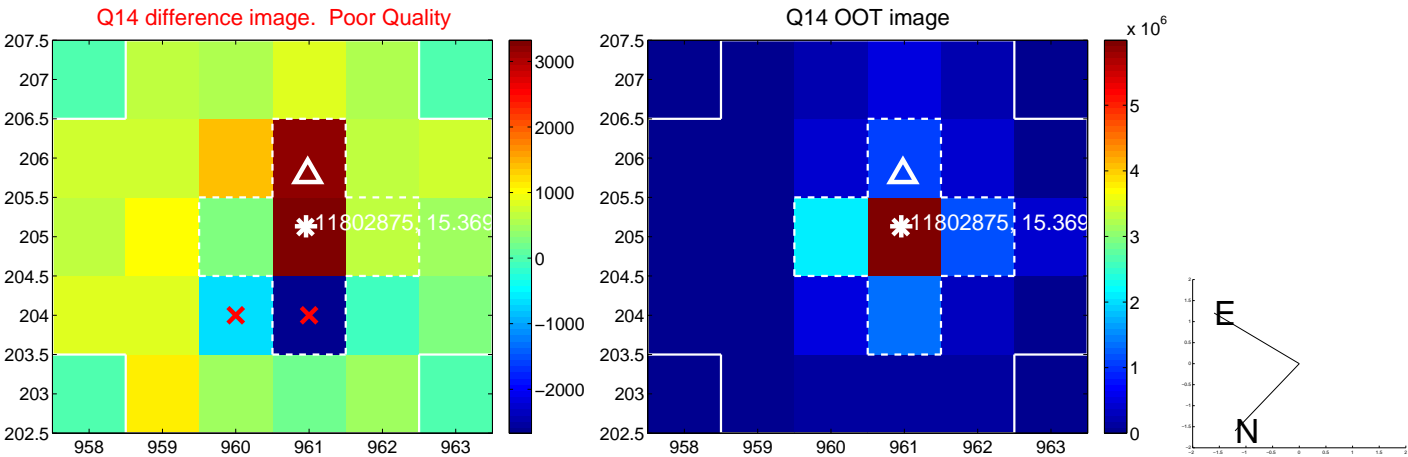
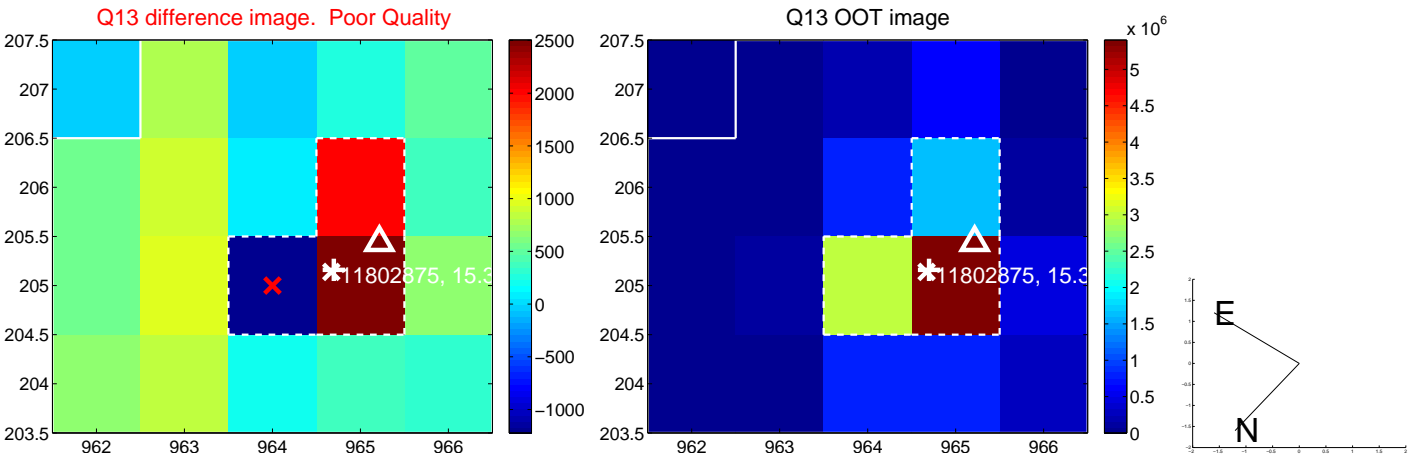
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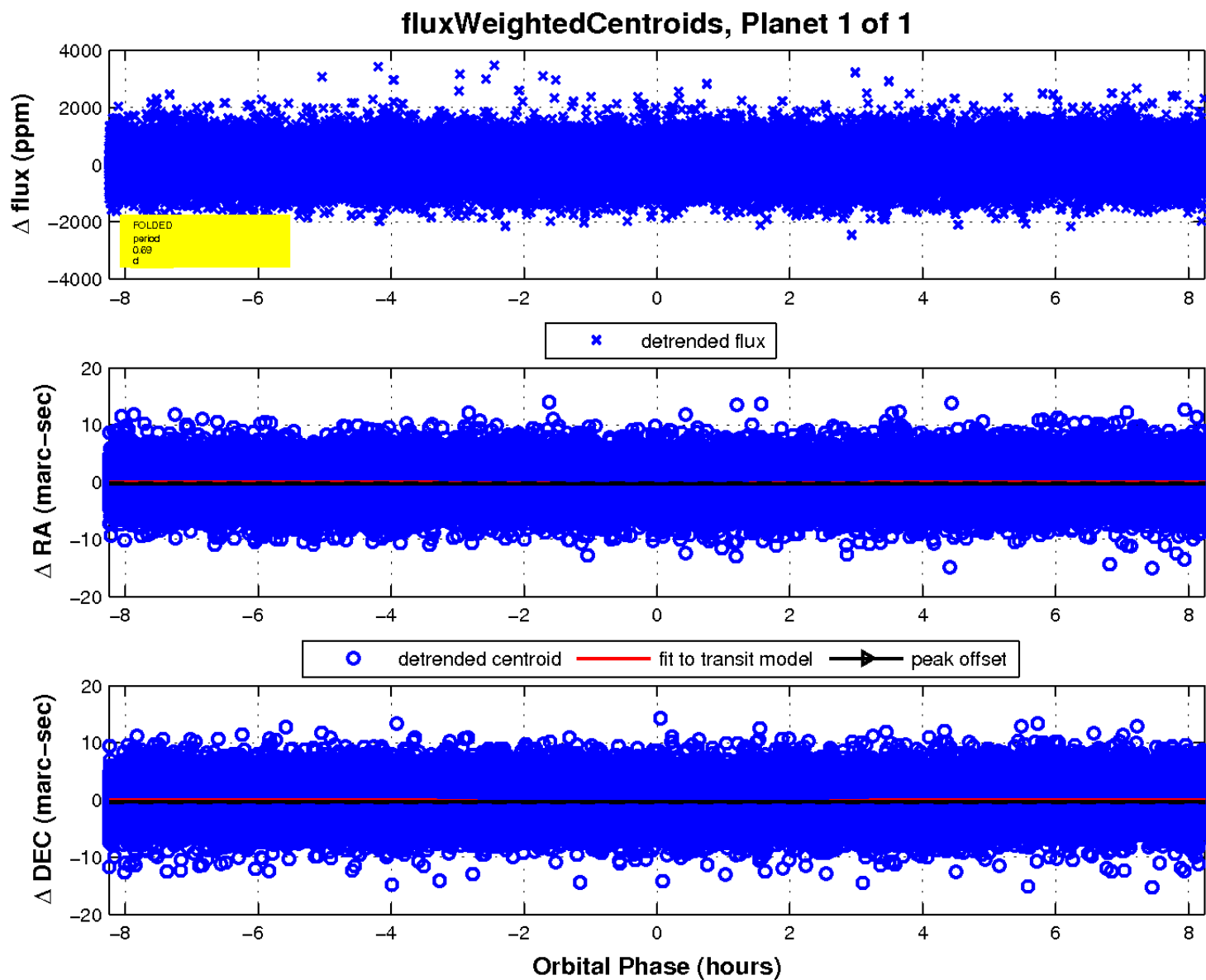
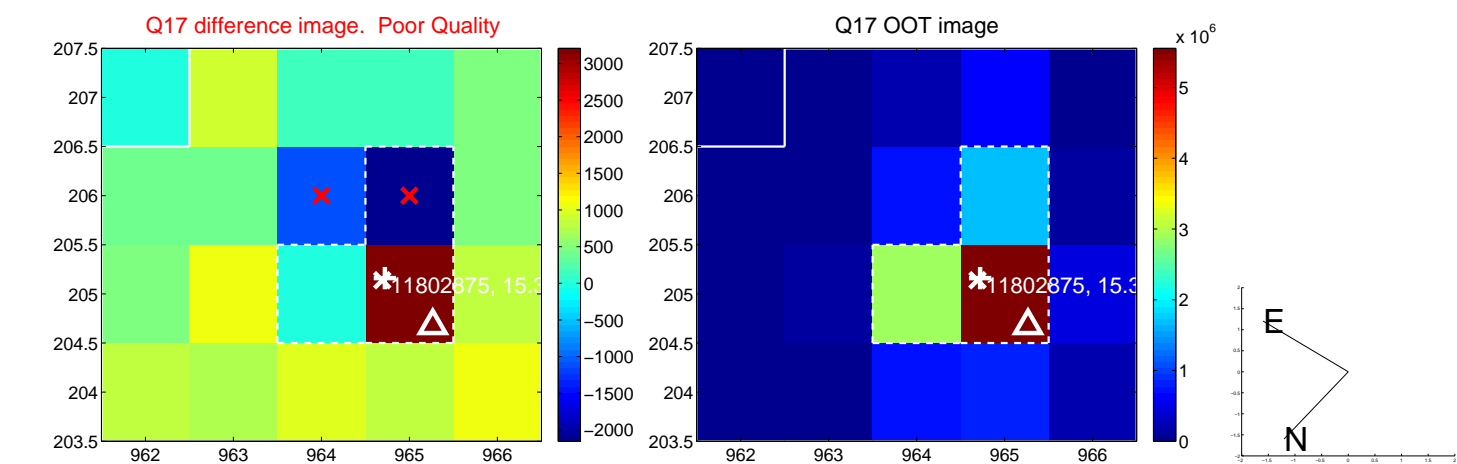
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



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



UKIRT Image

Declination

