

KIC 010801951

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})
010801951-01	OBS	8032.01	1.105105	132.522436	26.2	3.013	9.7	8.1	0.96	5883	0.58	2248.87

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010801951-01	OBS	FP	0.00	1	0	0	1	LPP_DV—EPHEM_MATCH

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.

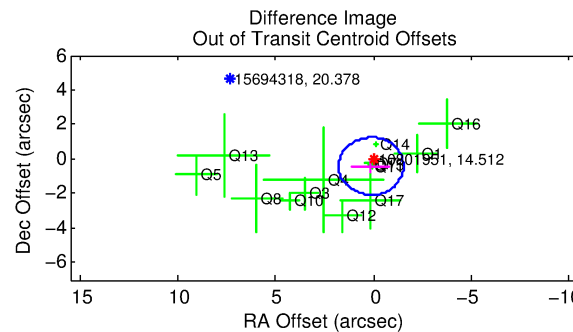
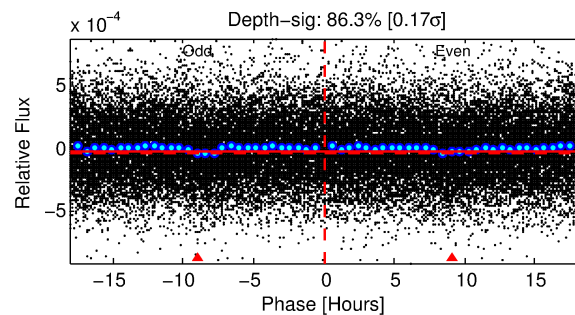
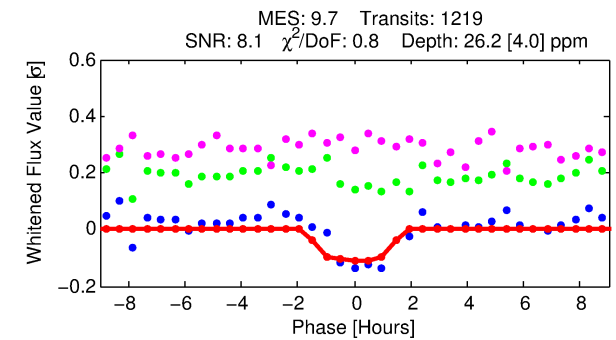
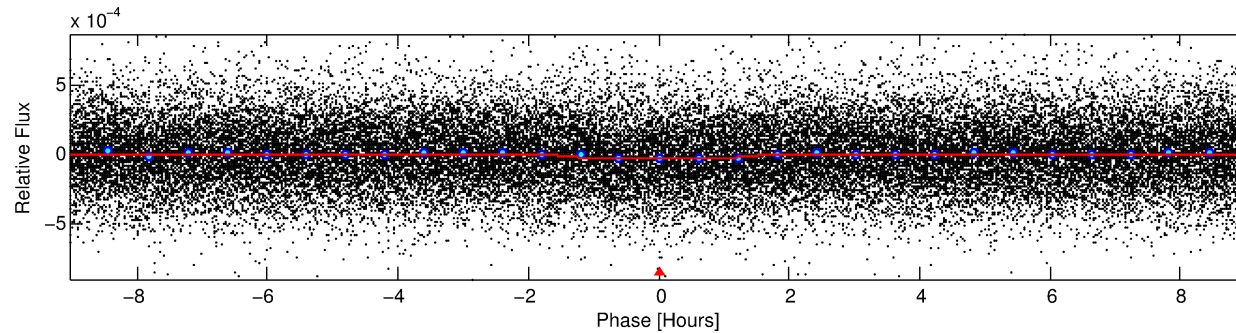
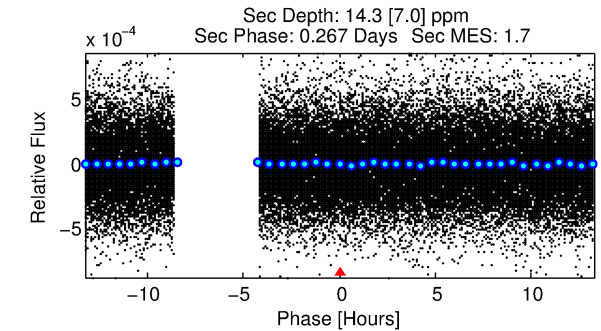
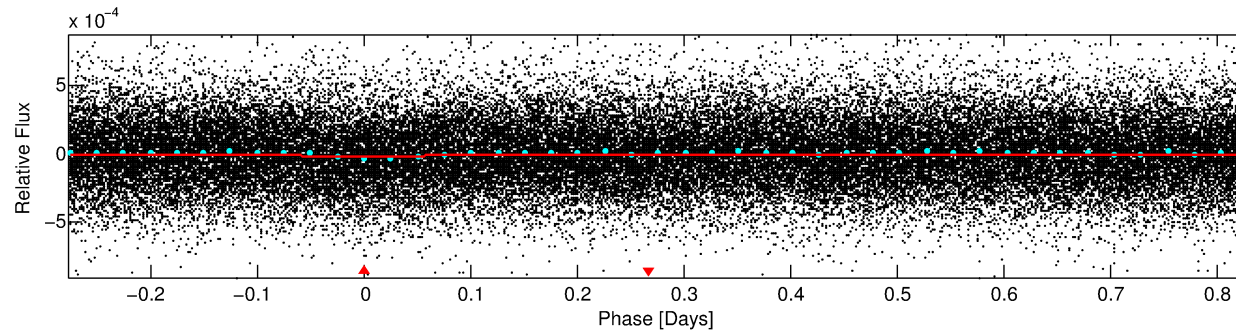
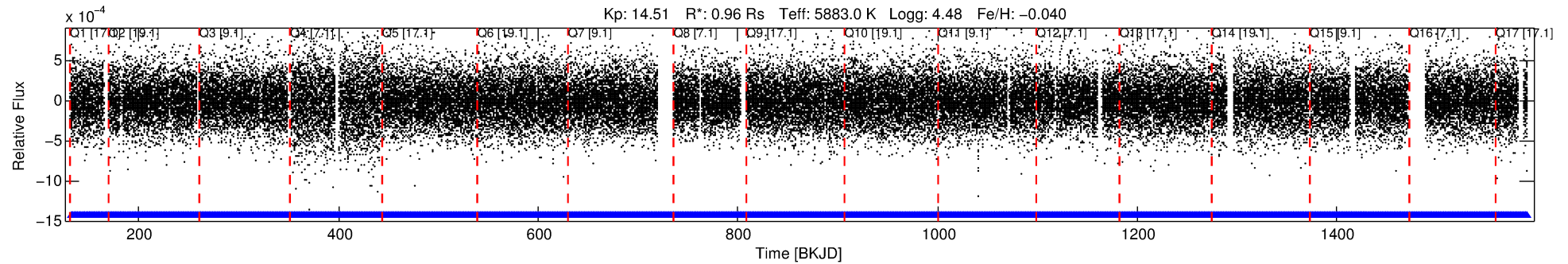
Ephemeris Match Information For 010801951-01

TCE (1)	KIC	Parent (2)	Parent KIC	$P_1:P_2$	Dist (μ)	Δ Row	Δ Col	m_2	m_1	D_2/D_1	Mechanism	Flag	σ_P	σ_T
010801951-01	10801951	V2290-Cyg-pri	10736223	1:1	399.6	101	0	13.65	14.51	29891.00	Col-Anomaly	0	1.00	1.68

Notes: $P_1:P_2$ is the period ratio. Dist is the distance in arcseconds. Δ Row and Δ Col are the number of pixels apart in row and column. m_2 and m_1 are the magnitudes of the parent and child. D_2/D_1 is the parent's transit depth divided by the child's. σ_P and σ_T are the significance of the match in period and epoch. For a match to be considered significant $\sigma_P < 5.0$ and $\sigma_T < 5.0$. Matches which have σ_P and σ_T very close to this cutoff should receive extra scrutiny, especially if the period ratio is very large.

DV One-Page Summary

KIC: 10801951 Candidate: 1 of 1 Period: 1.105 d



DV Fit Results:

Period = 1.10510 [0.00001] d
Epoch = 132.5224 [0.0049] BKJD
Rp/R* = 0.0056 [0.0037]
a/R* = 1.54 [3.03]
b = 0.91 [0.68]
Seff = 2248.87 [888.23]
Teff = 1756 [173] K
Rp = 0.59 [0.43] Re
a = 0.0209 [0.0054] AU
Ag = 10.04 [14.80] [0.61σ]
Teffp = 4833 [1731] K [1.77σ]

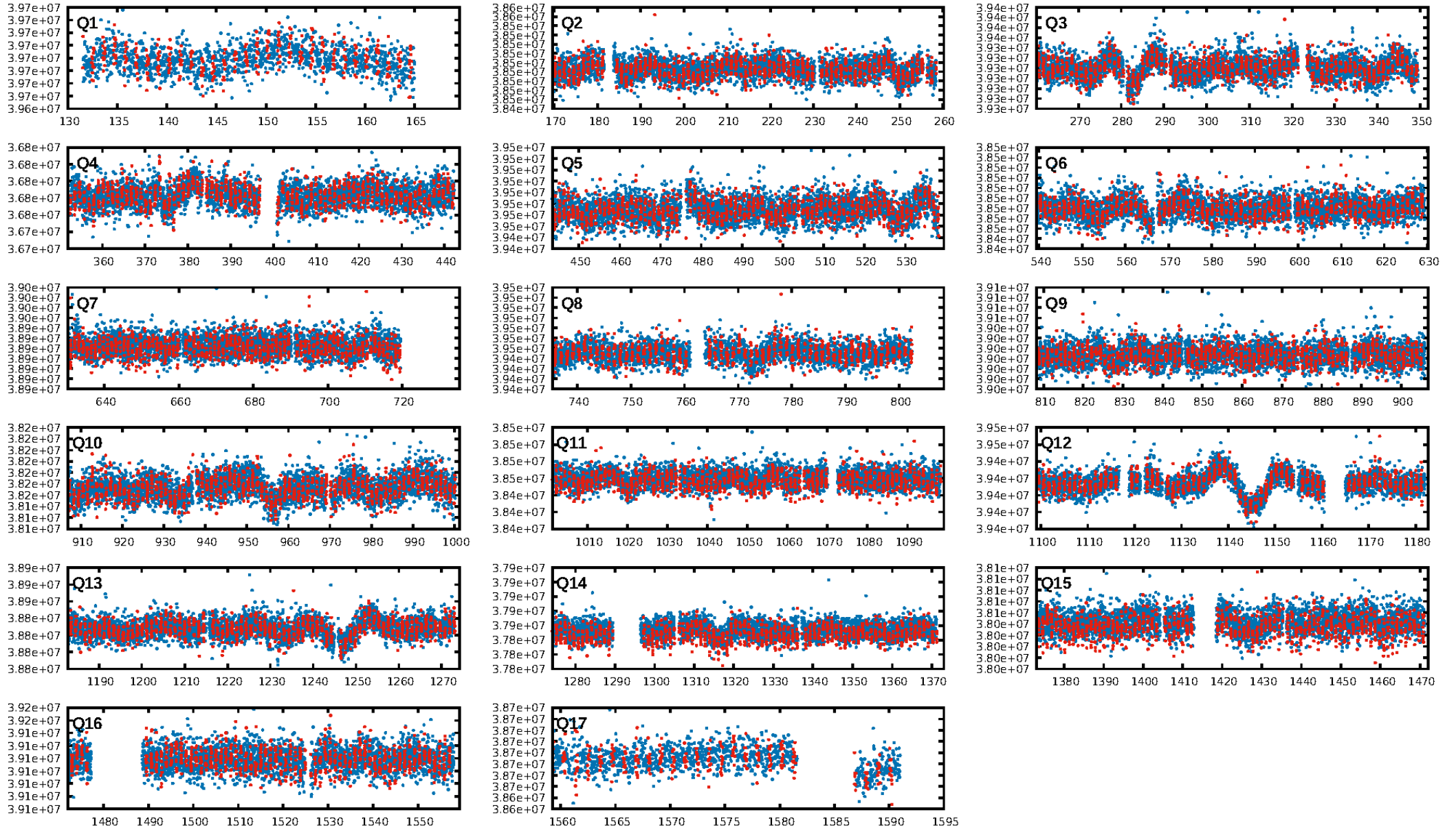
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.15e-23
RollingBand-fgt: 1.00 [1164/1164]
GhostDiagnostic-chr: -19.2
Centroid-sig: 11.6%
Centroid-so: 2.695 arcsec [1.63σ]
OotOffset-rm: 0.429 arcsec [0.78σ]
OotOffset-st: 2/4/4/4 [14]
KicOffset-rm: 0.238 arcsec [0.26σ]
KicOffset-st: 2/4/4/4 [14]
DiffImageQuality-fgm: 0.36 [5/14]
DiffImageOverlap-fno: 1.00 [17/17]

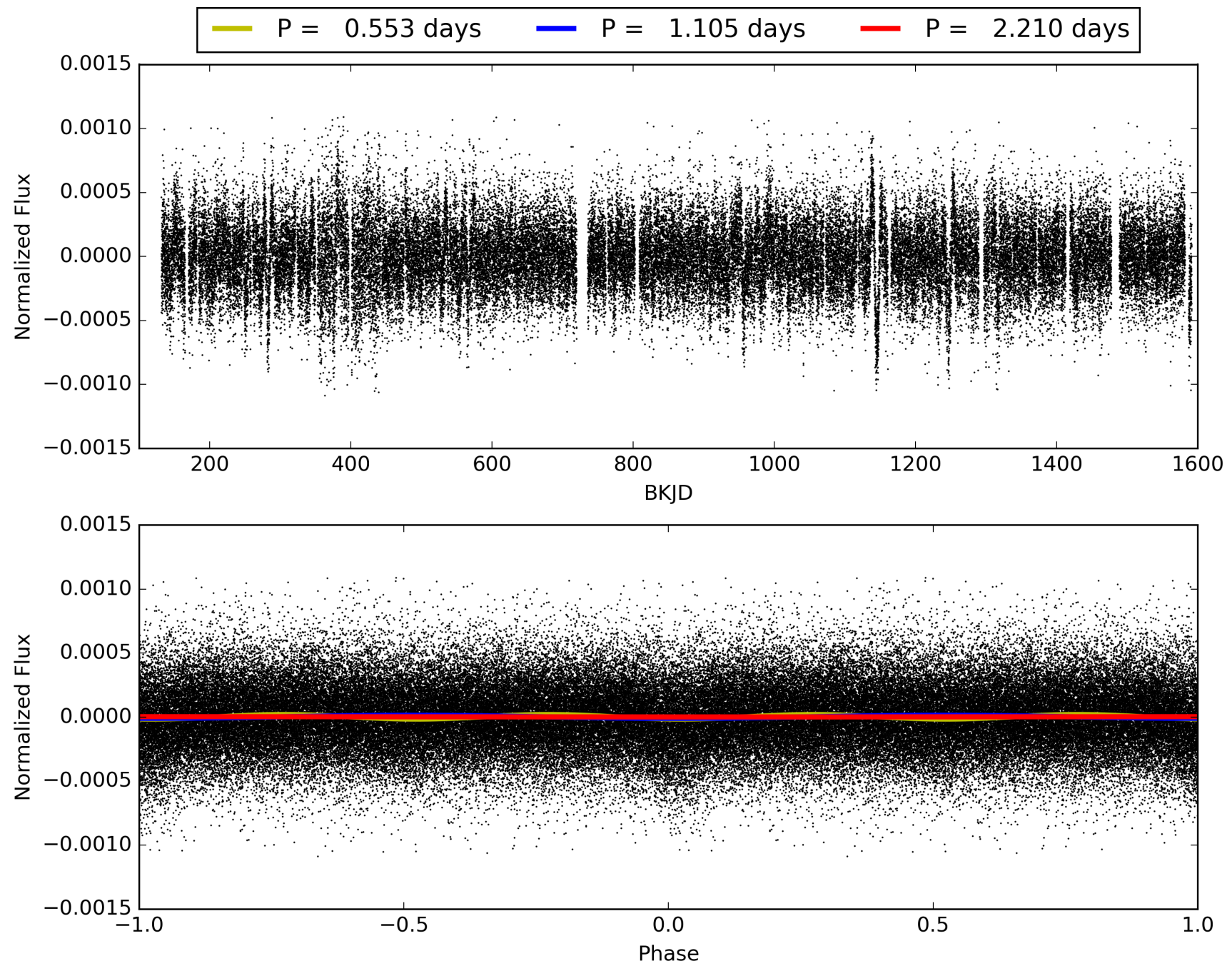
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 28-Jan-2016 22:33:45 Z

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

TCE 010801951-01, PDC Light Curves

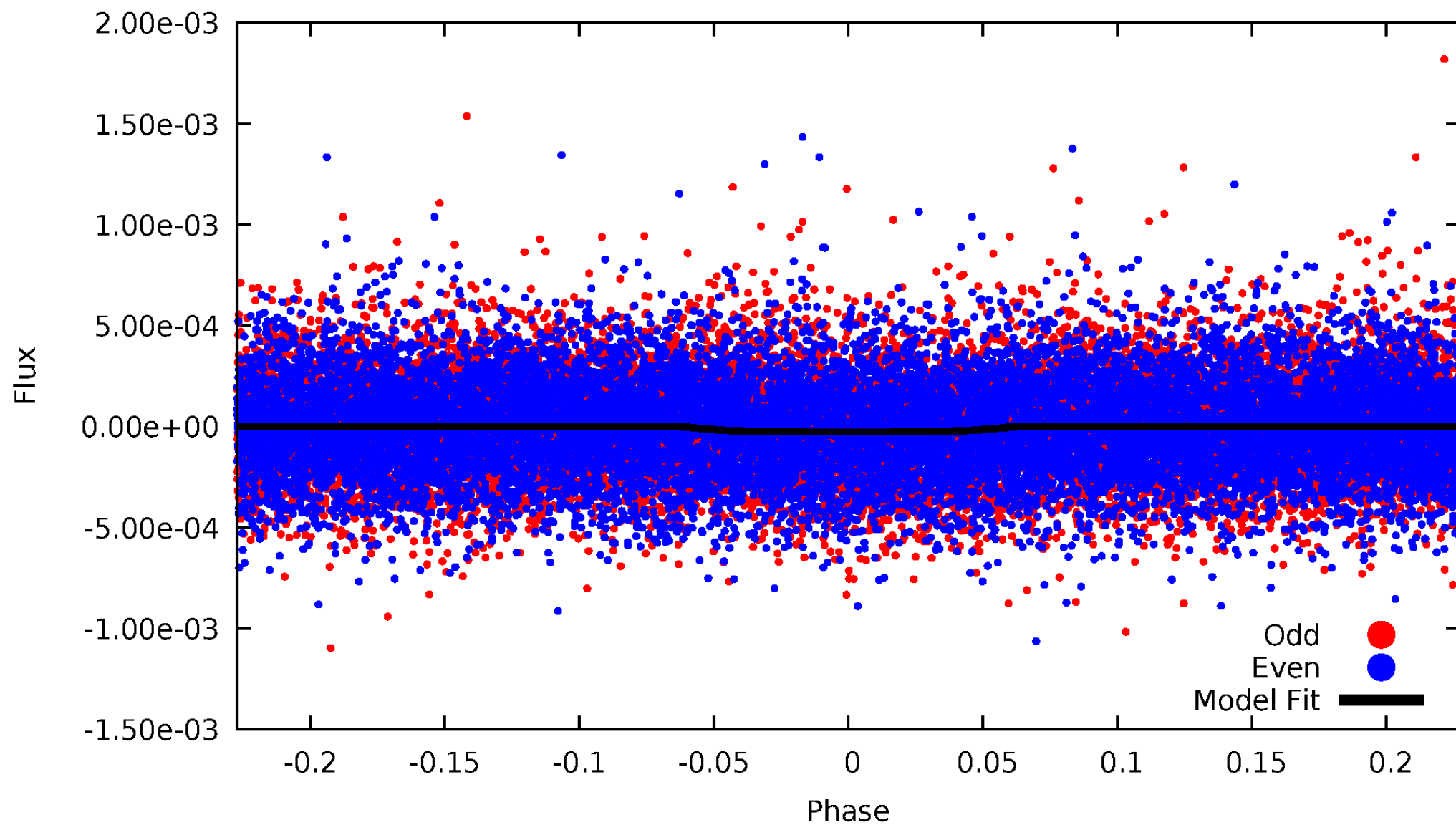


TCE 010801951-01



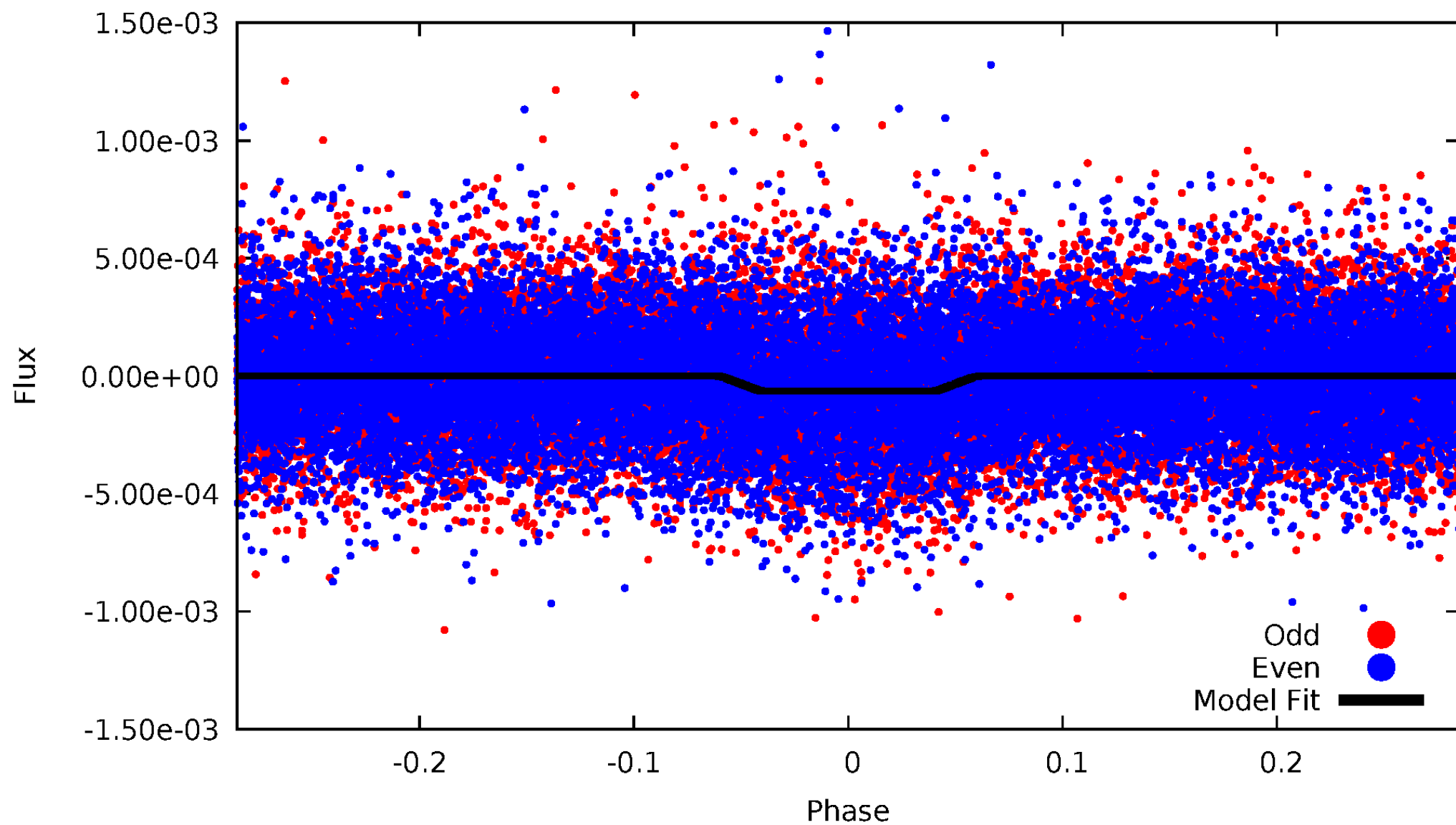
DV Odd/Even

TCE 010801951-01



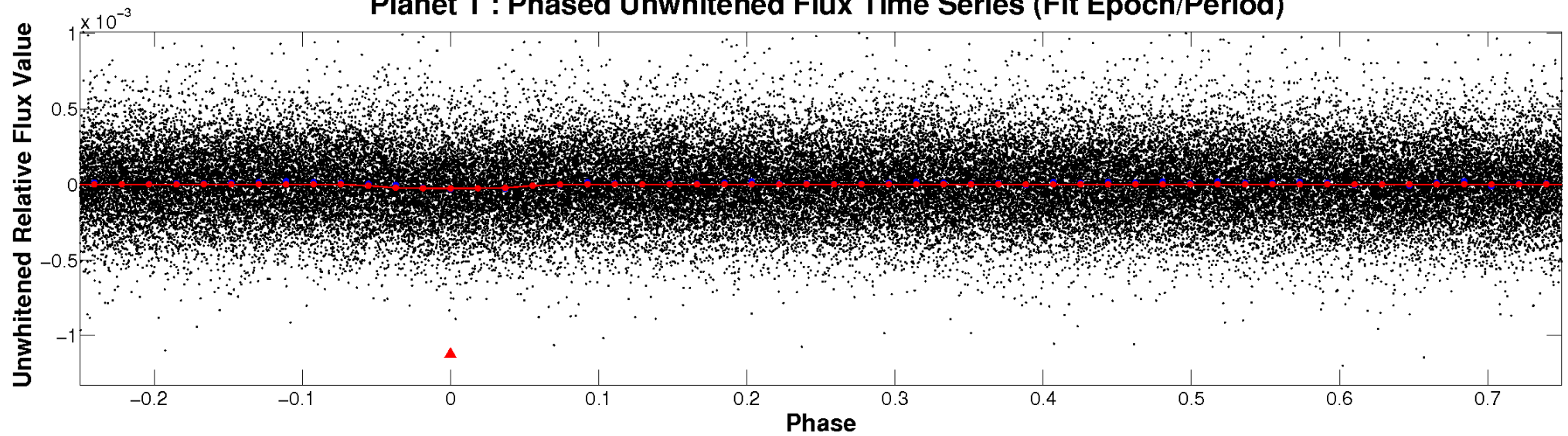
ALT Odd/Even

TCE 010801951-01

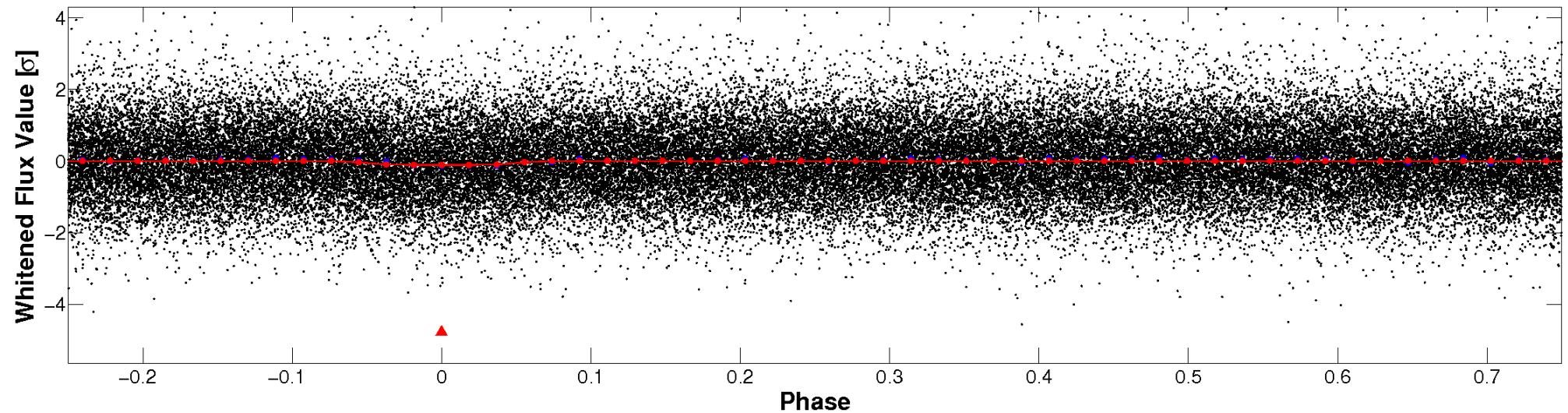


Non-Whitened Vs. Whitened Light Curve

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

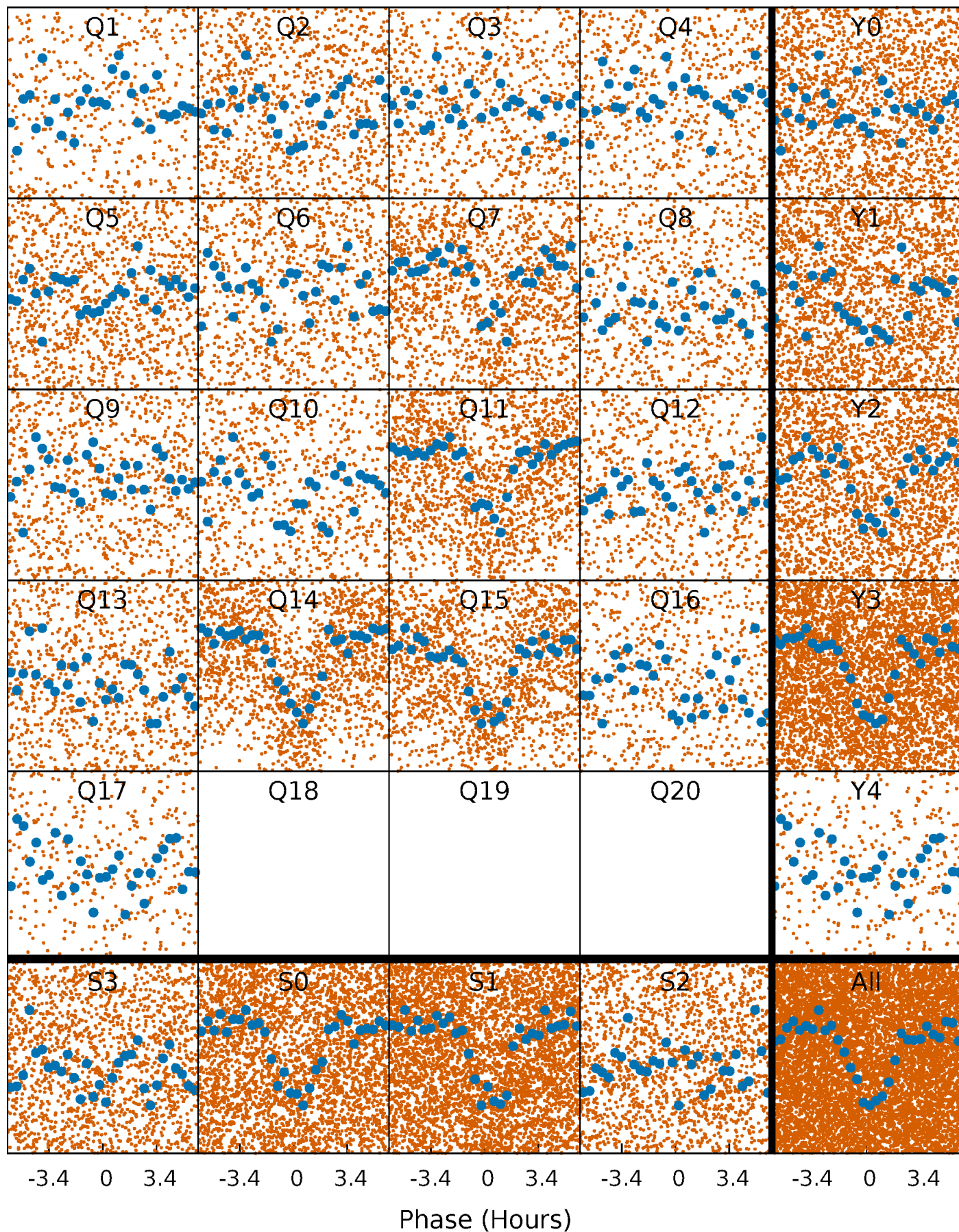


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



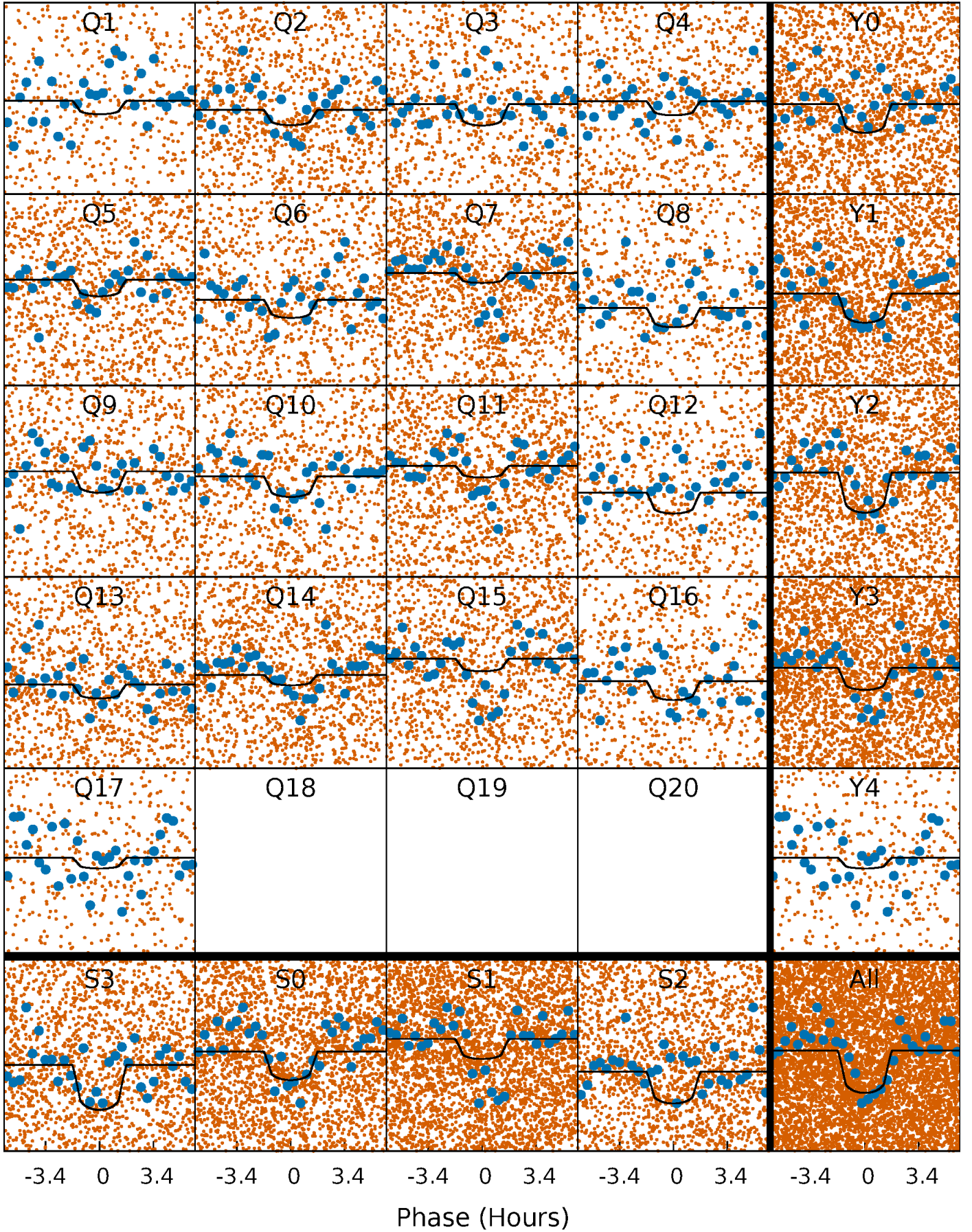
PDC Quarter-Phased Transit Curves

TCE 010801951-01 P= 1.105105 Days $T_0=132.522436$ (BKJD)



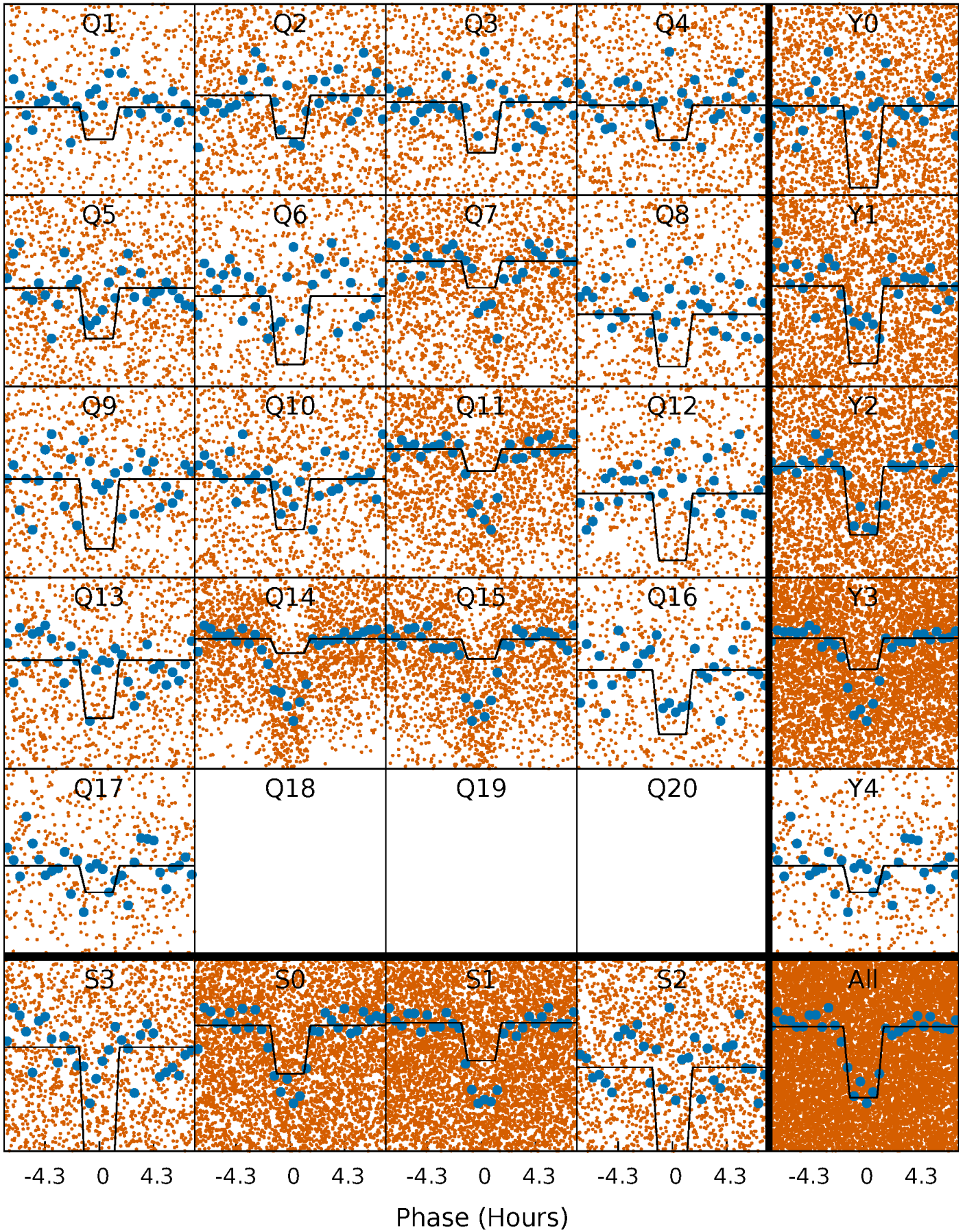
DV Quarter-Phased Transit Curves

TCE 010801951-01 P= 1.105105 Days $T_0=132.522436$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

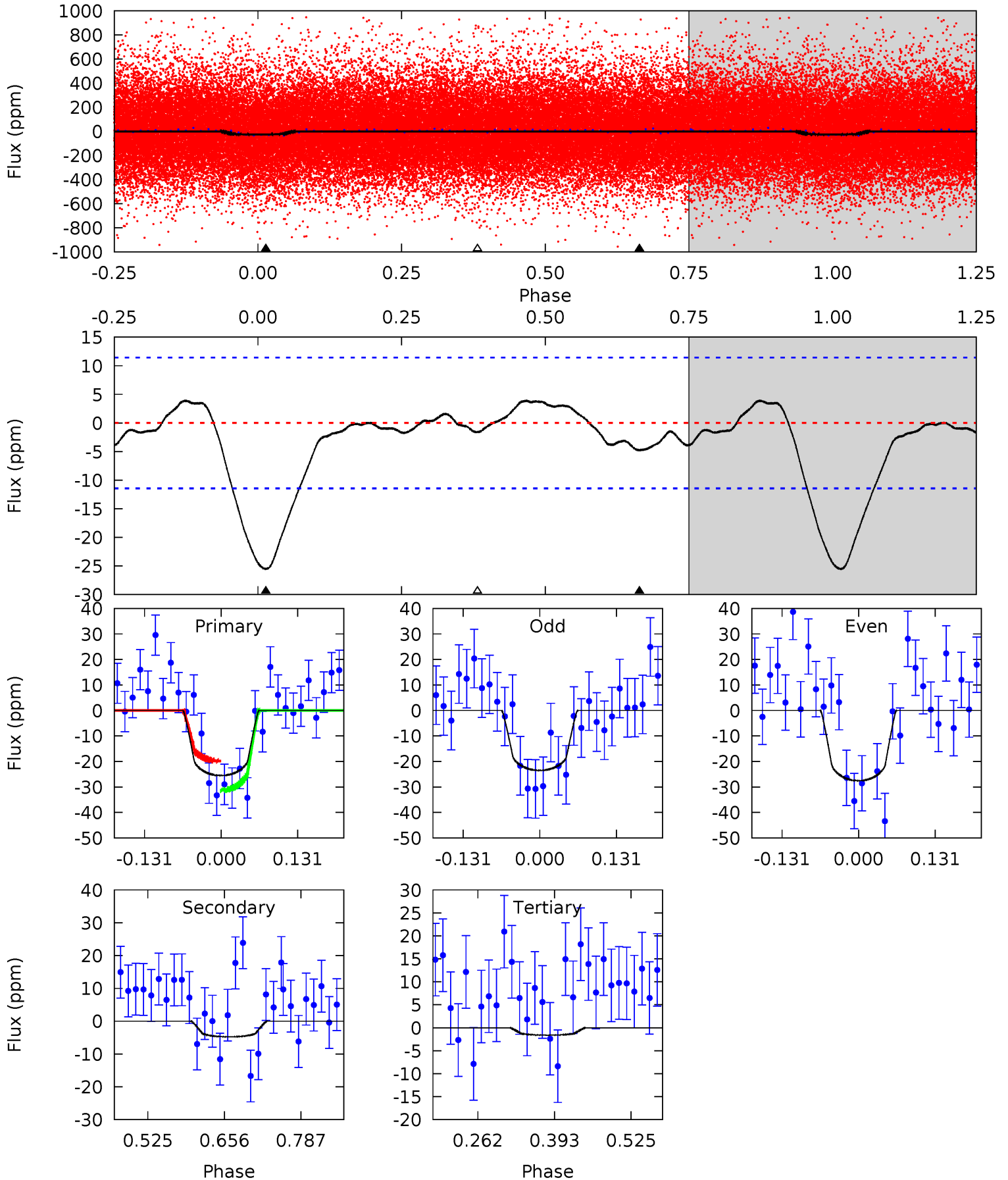
TCE 010801951-01 P= 1.105128 Days $T_0=132.513213$ (BKJD)



DV Model-Shift Uniqueness Test

010801951-01, P = 1.105105 Days, E = 131.417331 Days

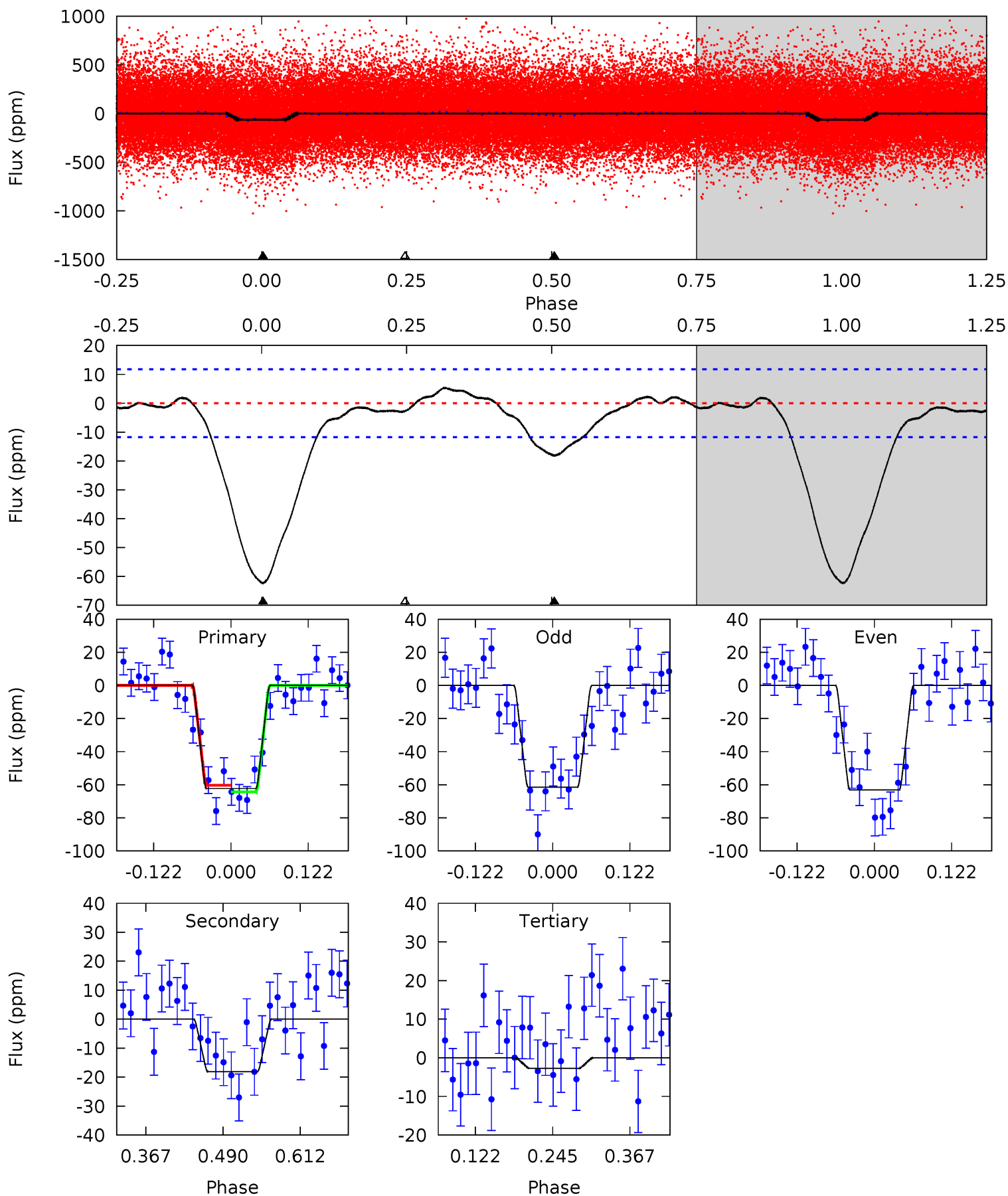
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
10.1	1.88	0.64	0	4.51	1.51	0.71	9.43	10.1	1.25	1.88	0.80	0.85	0.13	2.27



Alt Model-Shift Uniqueness Test

010801951-01, P = 1.105128 Days, E = 131.408085 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
24.0	6.98	1.04	0	4.52	1.54	0.92	22.9	24.0	5.94	6.98	0.31	1.27	0.08	0.79



Stellar Parameters For KIC 010801951

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5883^{+158}_{-193}	$4.476^{+0.067}_{-0.202}$	$-0.040^{+0.250}_{-0.300}$	$0.959^{+0.297}_{-0.099}$	$1.005^{+0.127}_{-0.127}$	$1.602^{+0.446}_{-0.833}$
	+3%/-3%	+1%/-5%	+625%/-750%	+31%/-10%	+13%/-13%	+28%/-52%
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 010801951-01 / KOI 8032.01

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-5 ± 3	$0.65^{+0.39}_{-0.36}$	2489^{+185}_{-126}	3763^{+1606}_{-876}	$2.636^{+11.356}_{-1.968}$
Alt.	-18 ± 3	$0.89^{+0.41}_{-0.41}$	2475^{+173}_{-112}	4398^{+1284}_{-626}	$5.481^{+12.169}_{-3.065}$

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

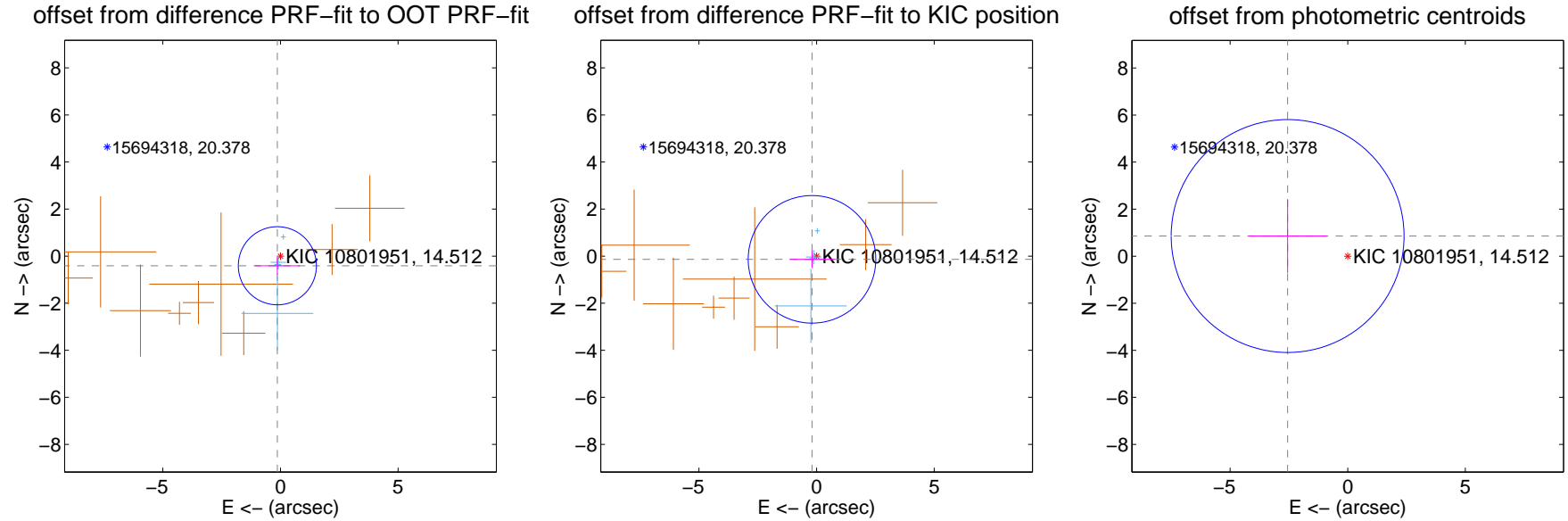
DV Centroid Data

Supplemental centroid analysis for 010801951-01. Kepler magnitude: 14.51. Transit SNR 8.05

There are 5 quarters with good PRF difference image offsets

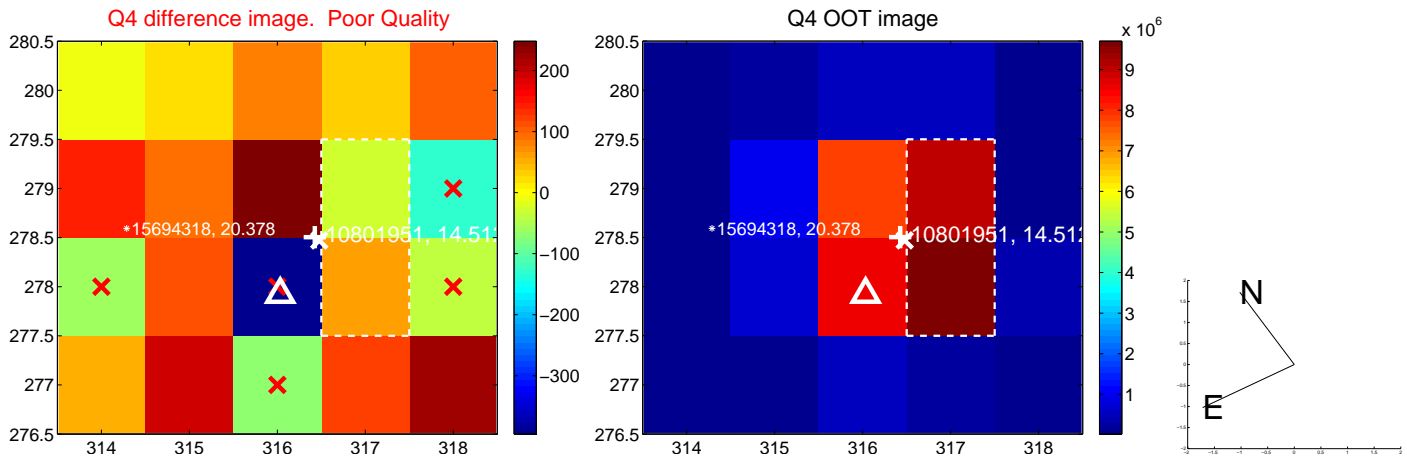
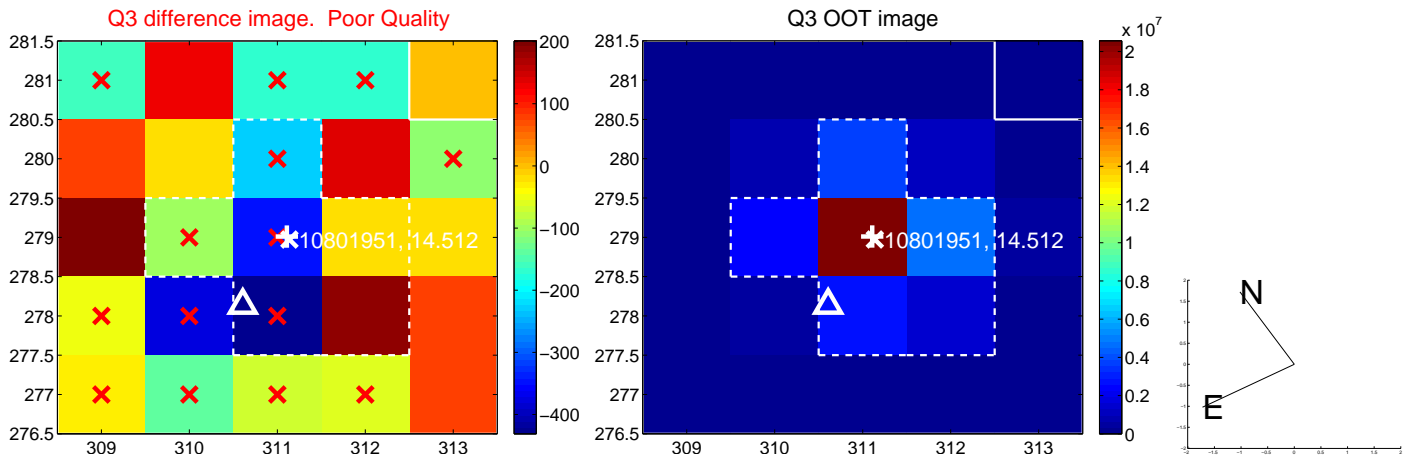
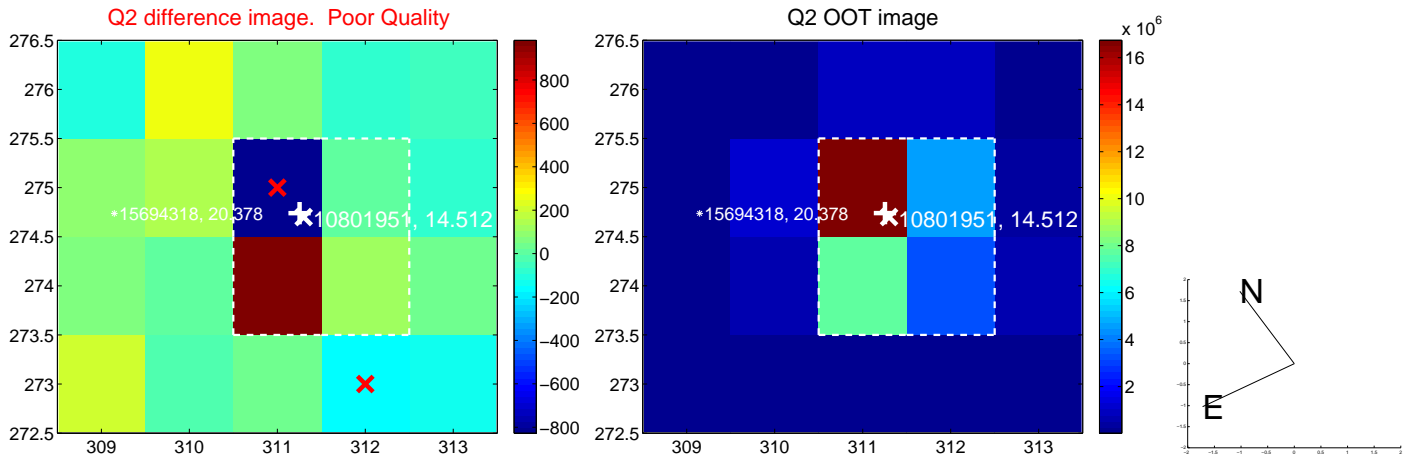
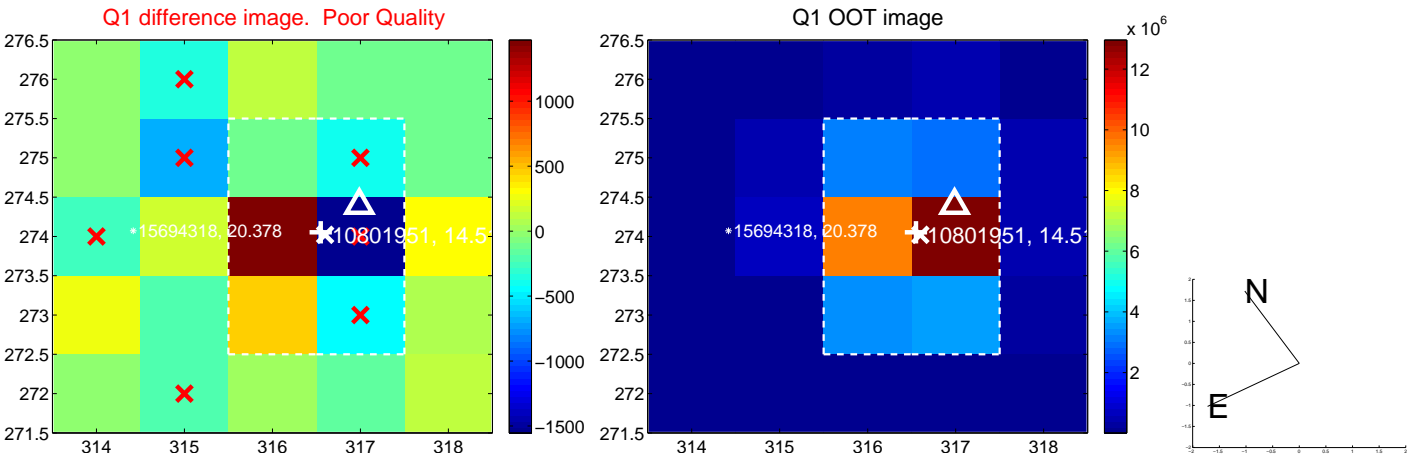
The direct PRF centroid is offset from the target star catalog position by about 0.34 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.429 ± 0.553	0.78	0.131 ± 0.960	-0.409 ± 0.378
PRF-fit source offset from KIC position	0.238 ± 0.903	0.26	0.195 ± 0.954	-0.136 ± 0.377
photometric centroid source offset	2.70 ± 1.65	1.63	2.55 ± 1.66	0.86 ± 1.57

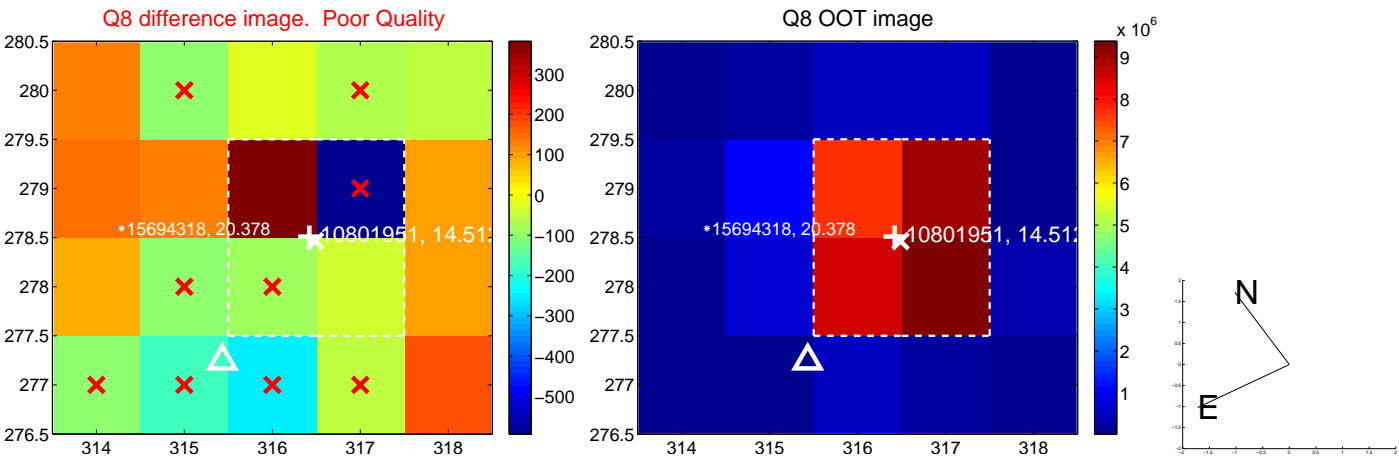
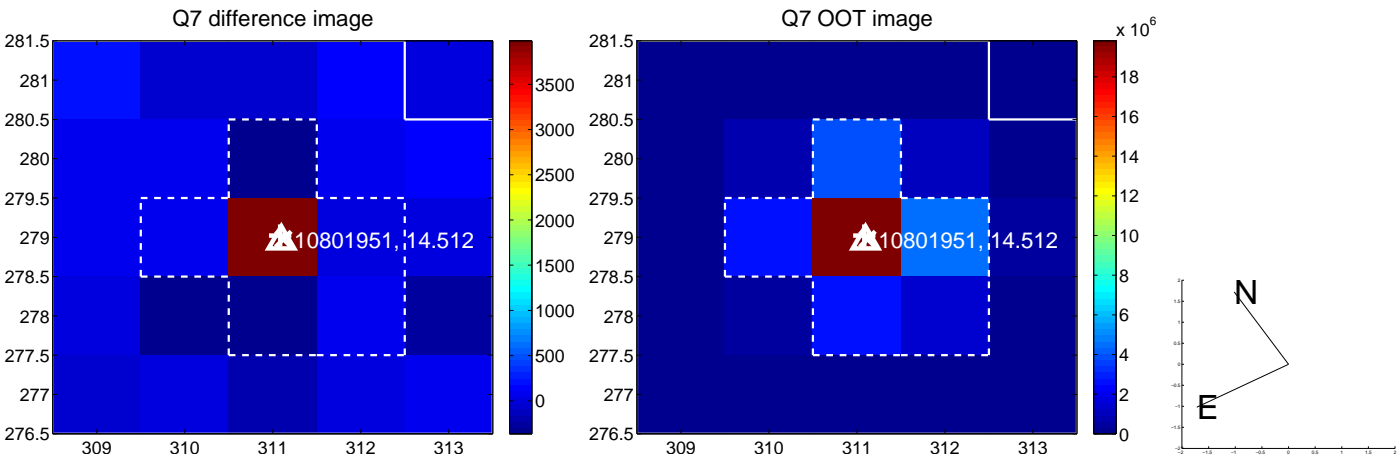
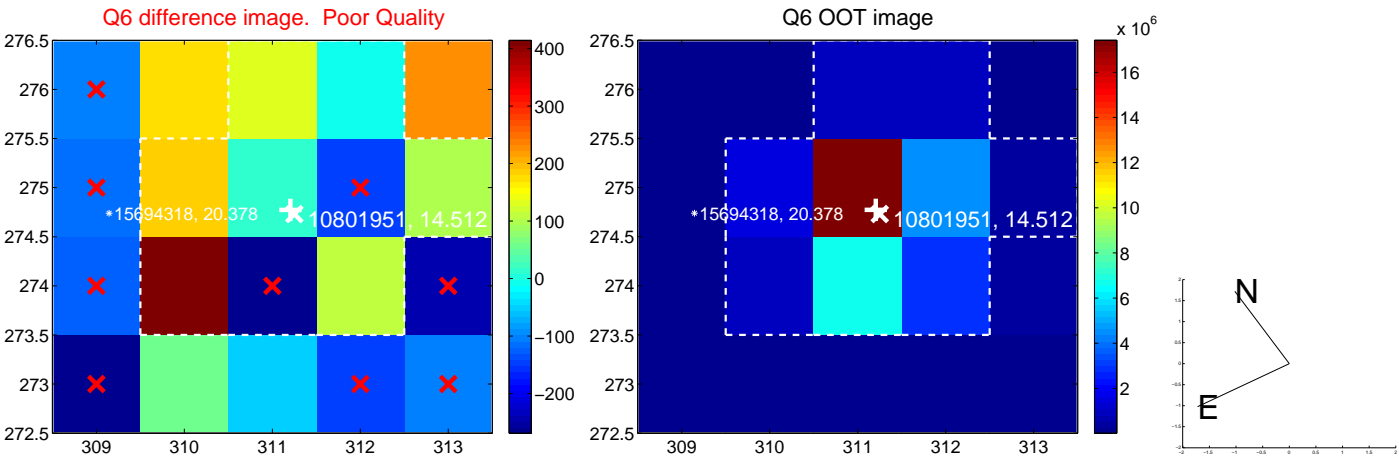
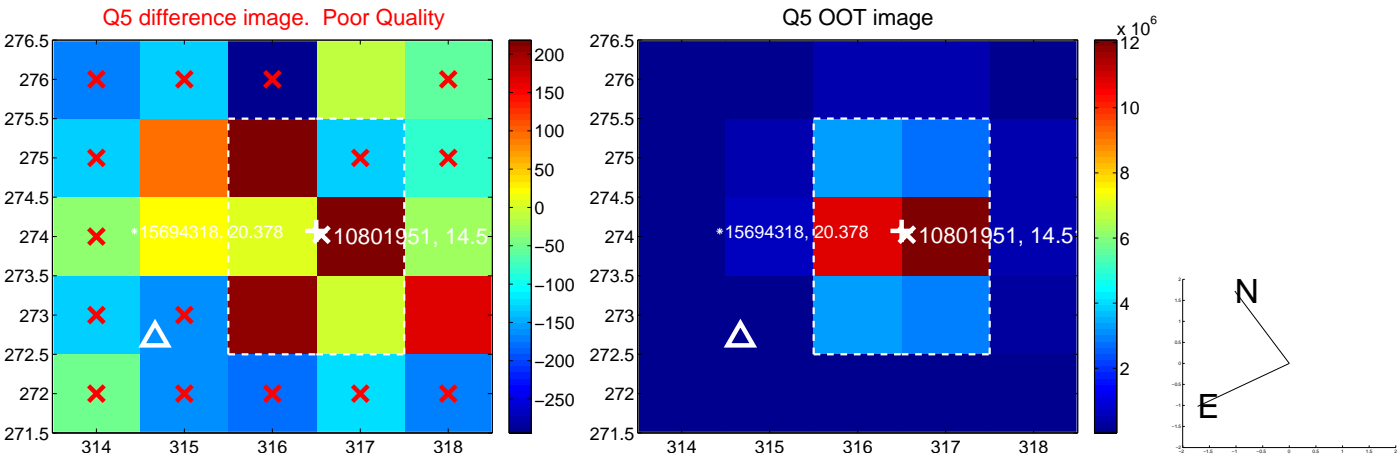


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

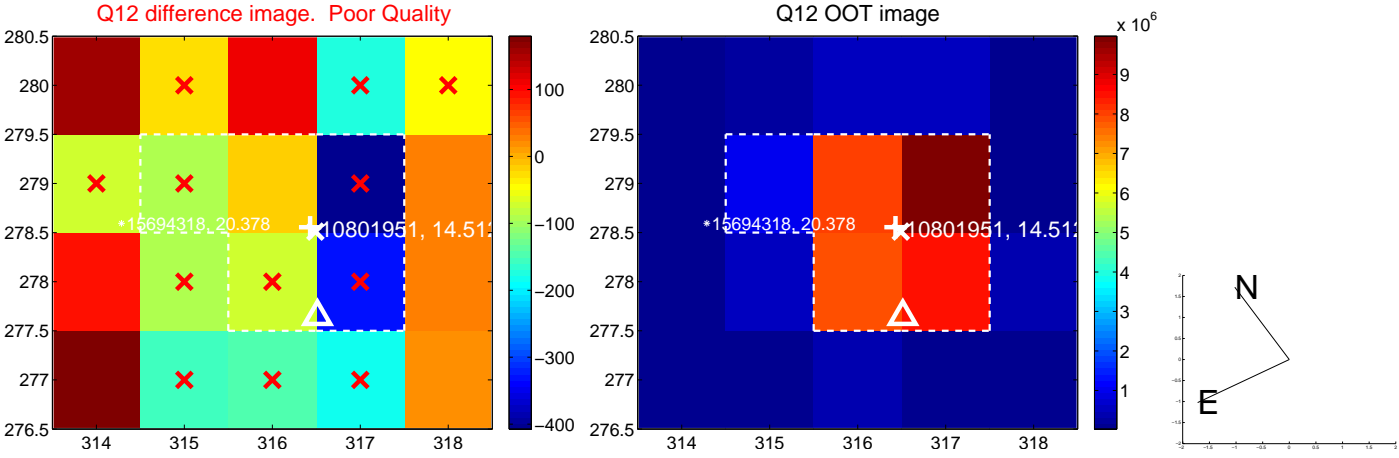
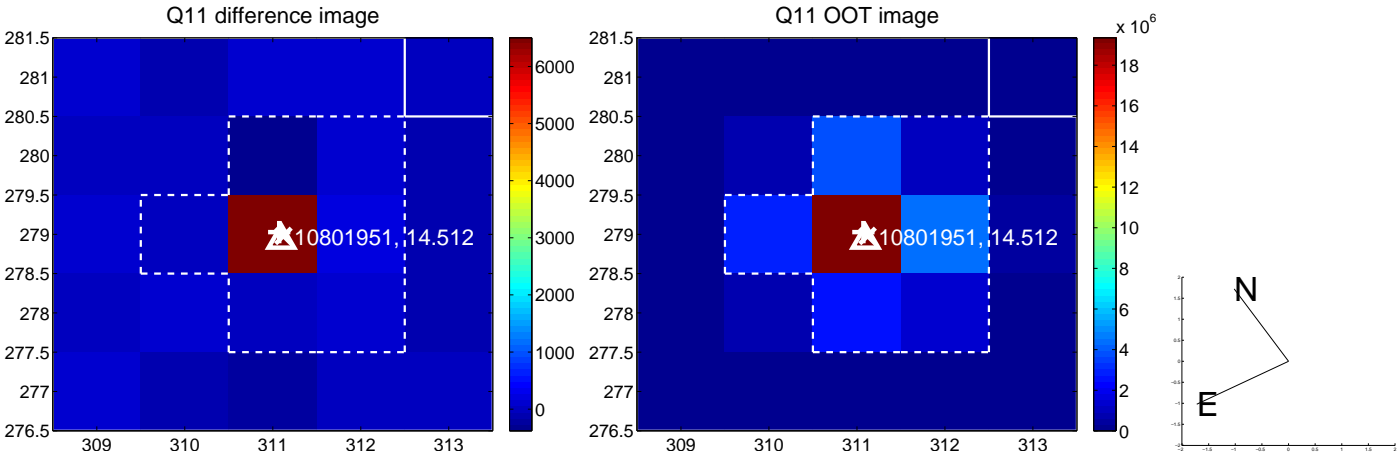
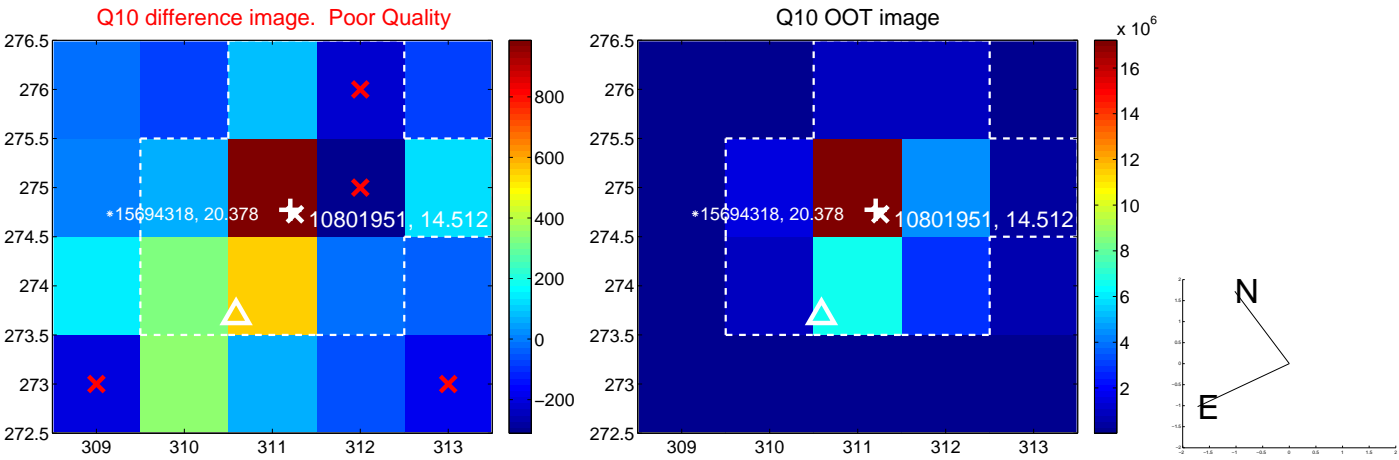
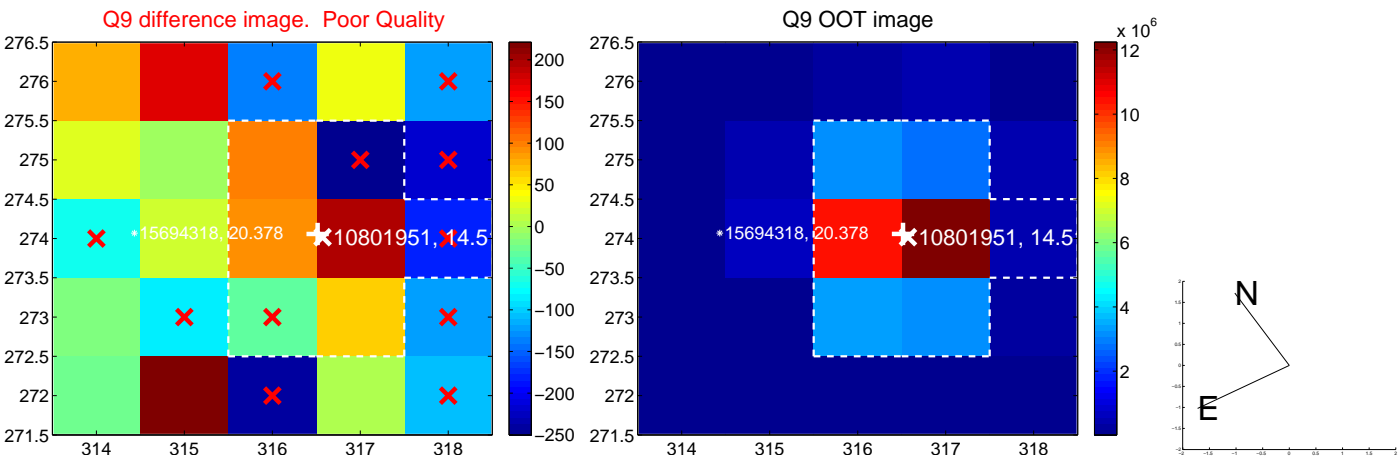
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



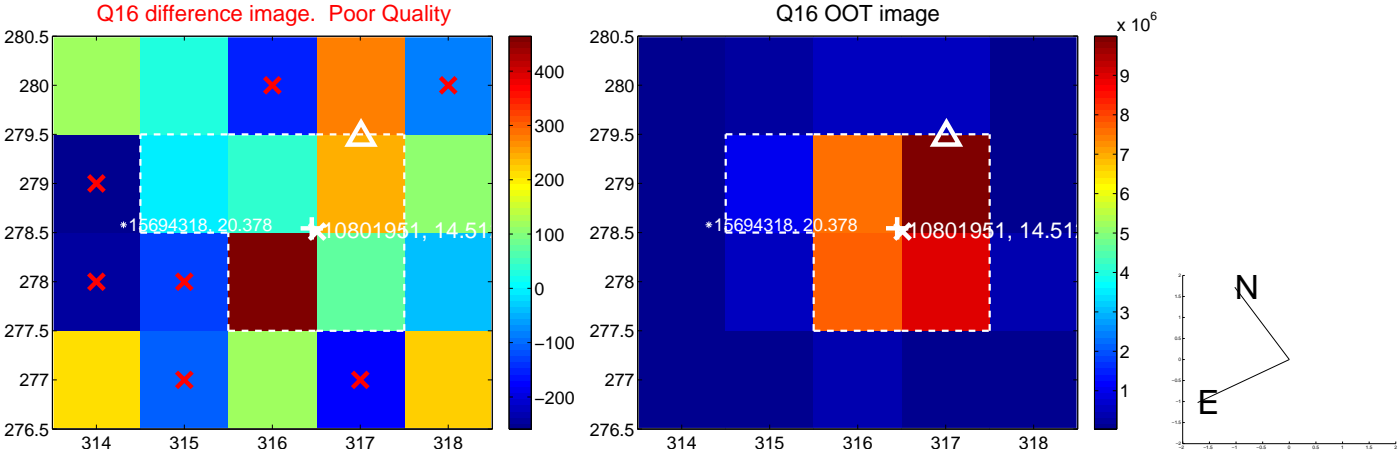
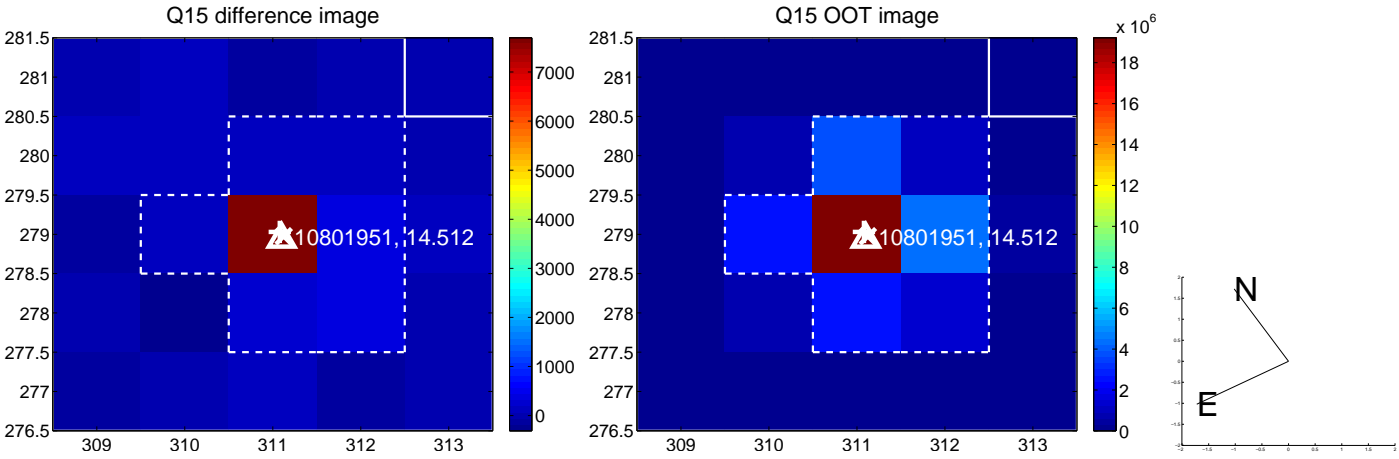
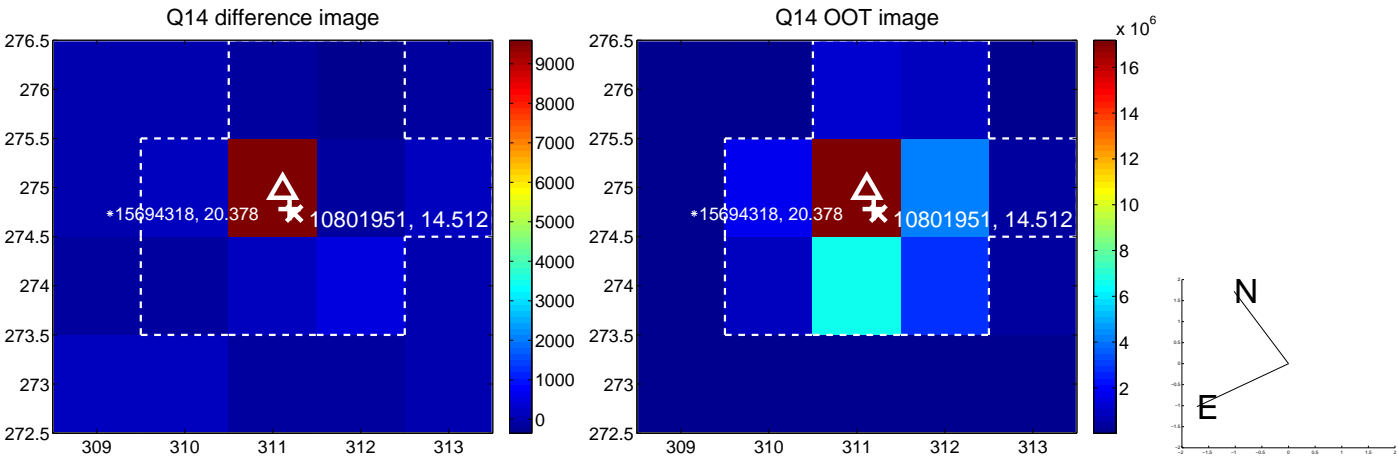
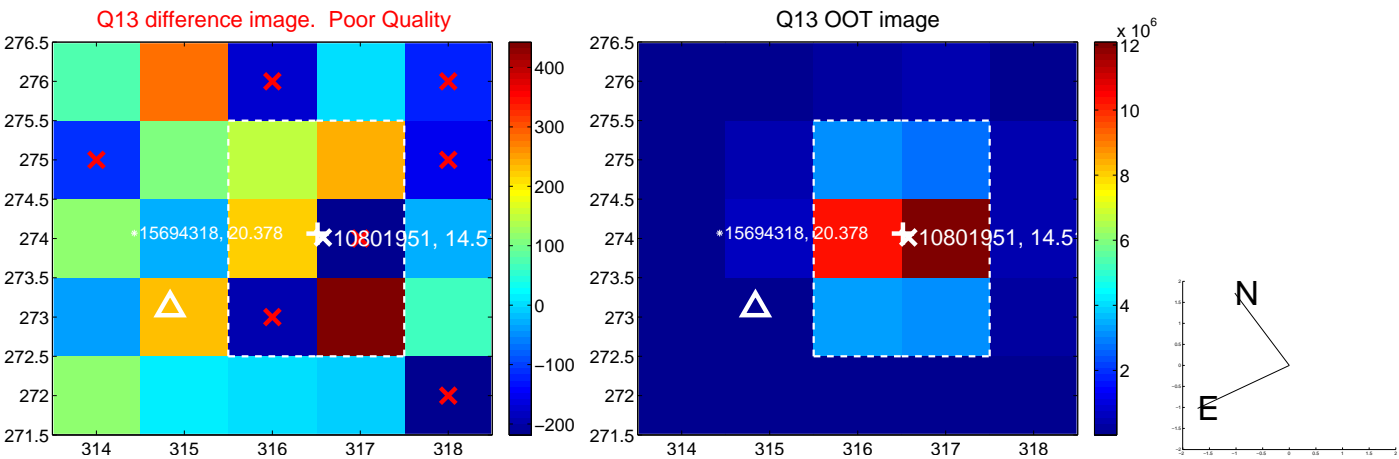
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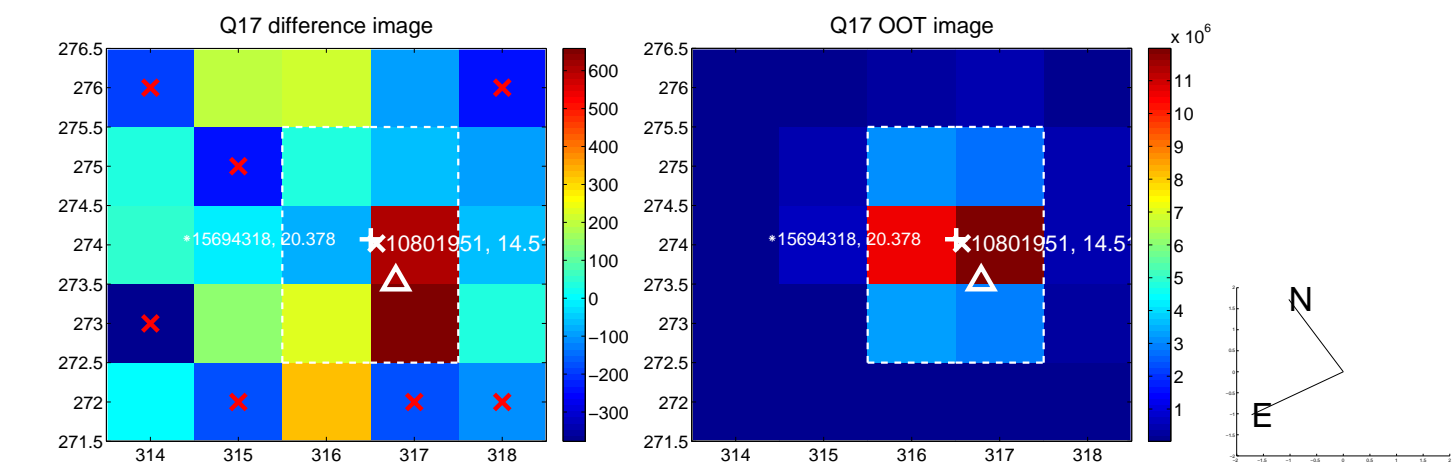
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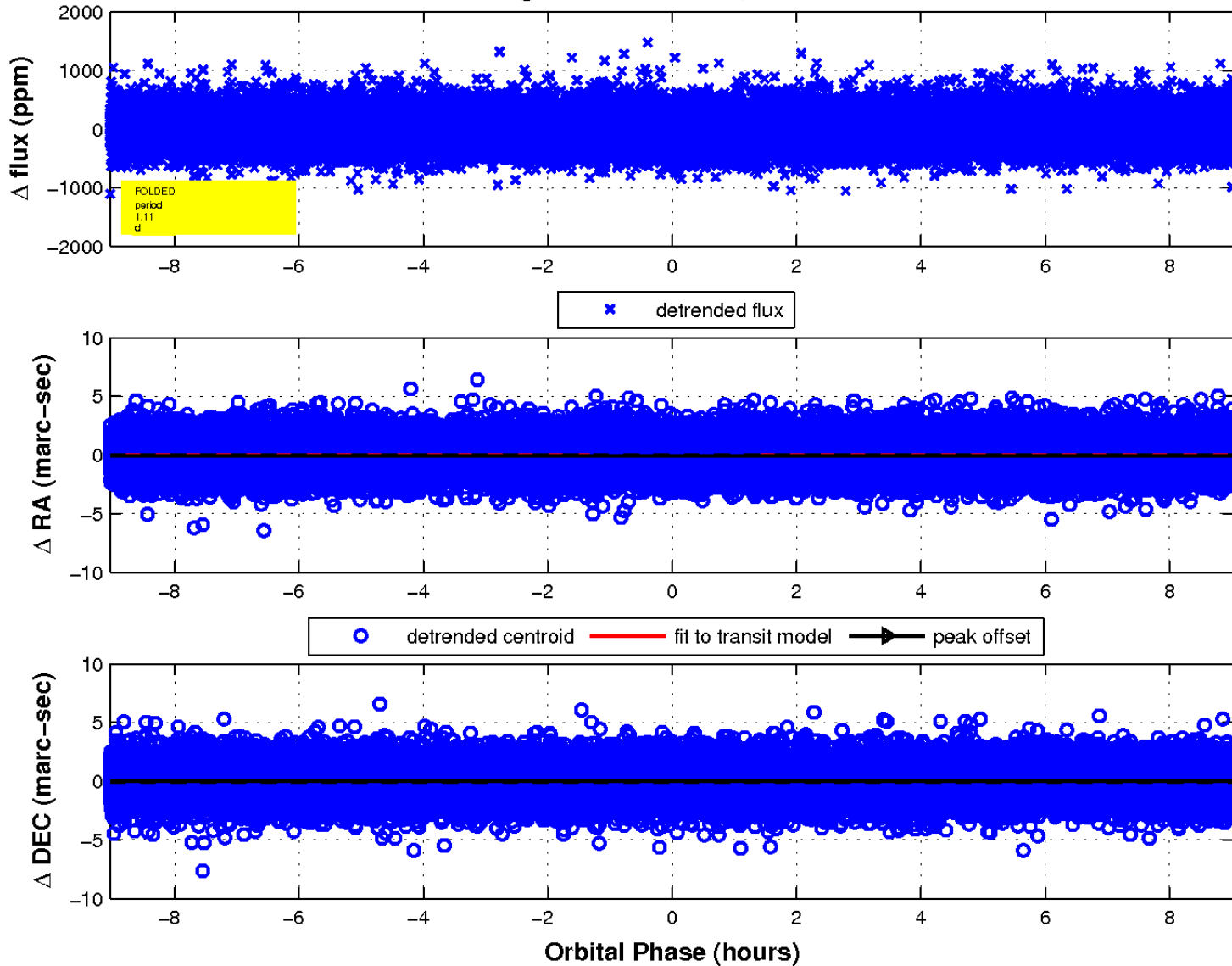
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fluxWeightedCentroids, Planet 1 of 1



UKIRT Image

Declination

