

KIC 010932440

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})
010932440-01	OBS	No	0.548769	131.709175	61.8	1.941	8.1	5.1	0.71	5227	0.67	2537.95

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
010932440-01	OBS	FP	0.00	1	0	0	0	LPP_DV—LPP_ALT—MOD_NONUNIQ_DV—MOD_NONUNIQ_ALT

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

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

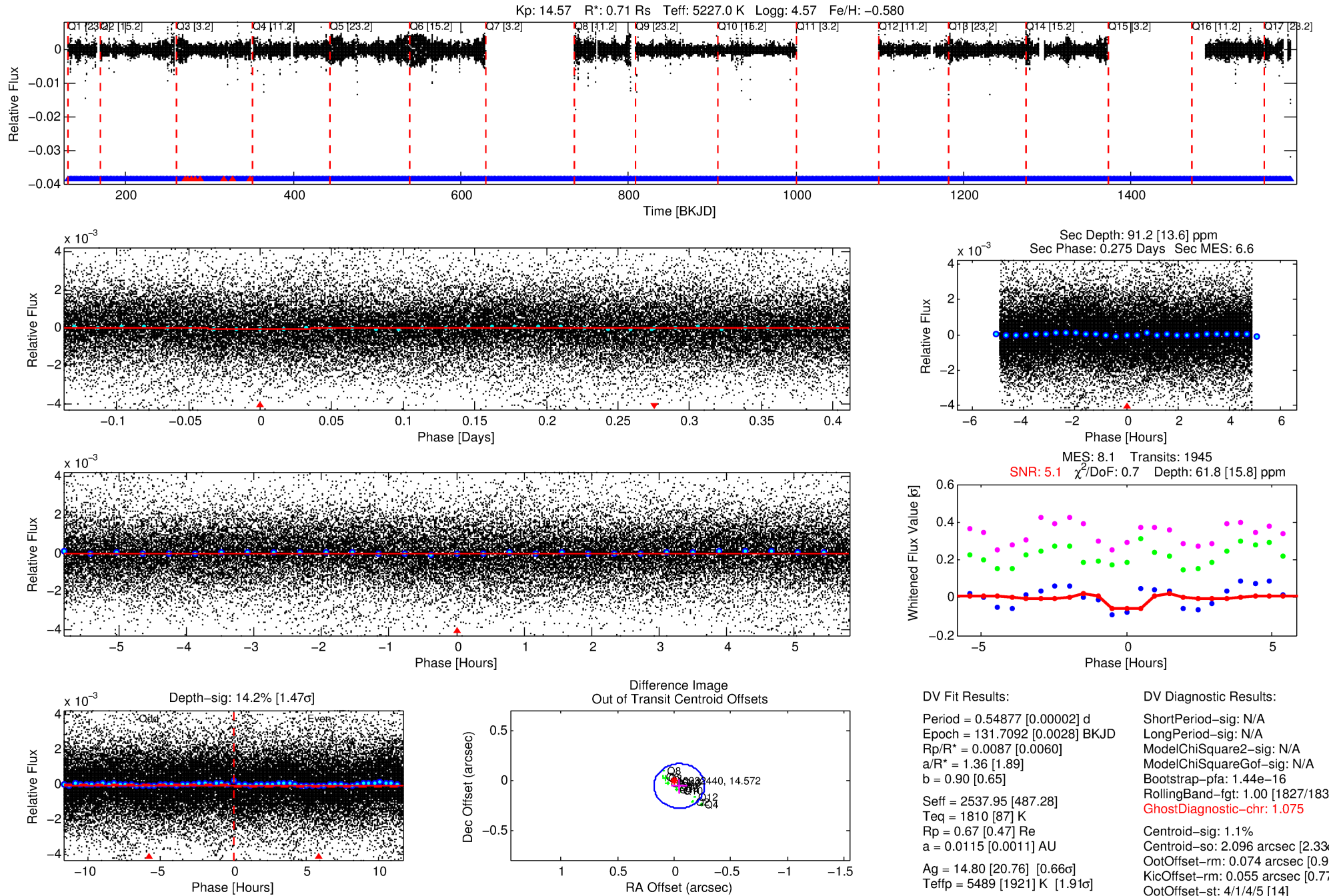
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 010932440-01

No Significant Match Found

DV One-Page Summary

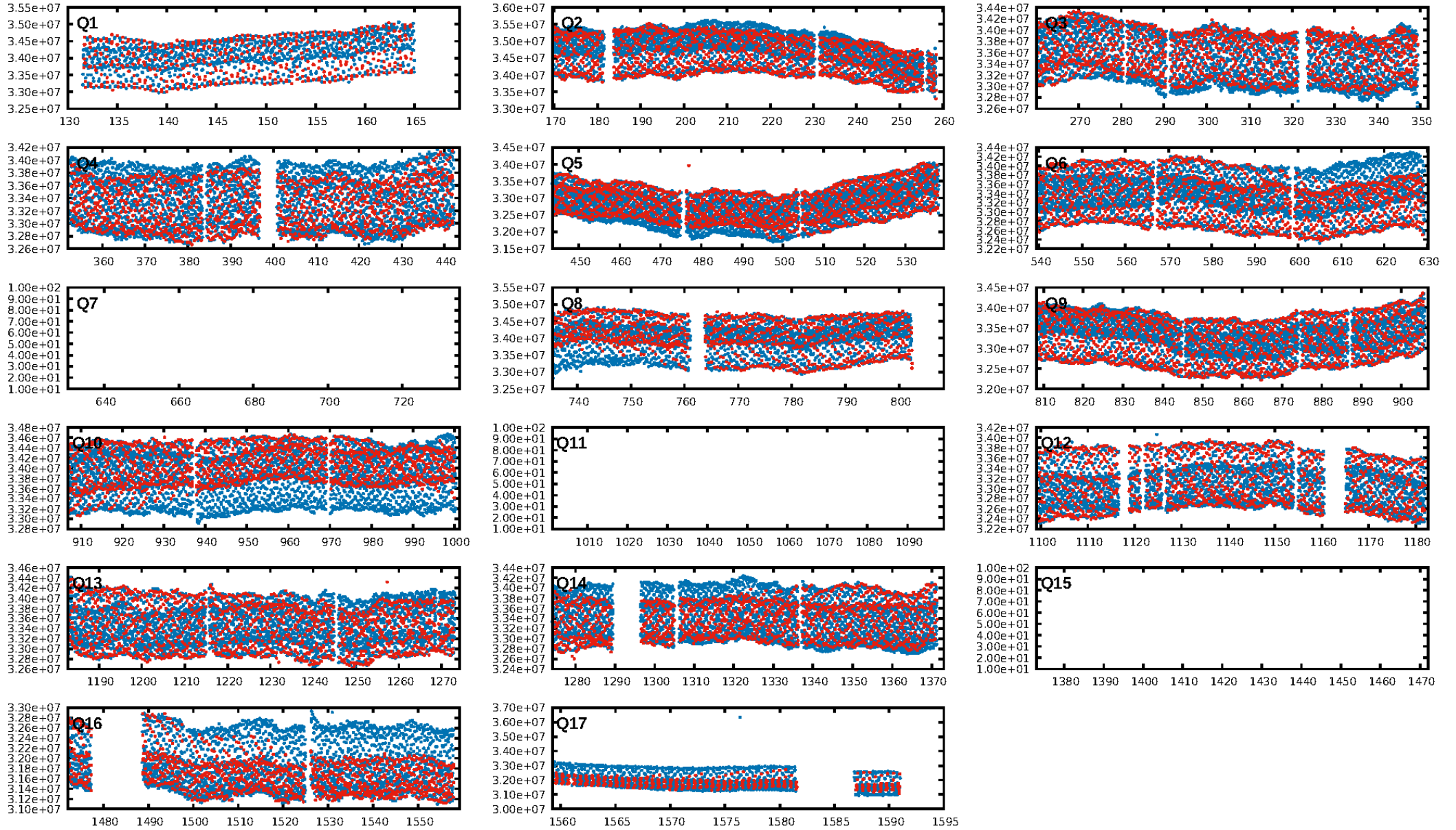
KIC: 10932440 Candidate: 1 of 1 Period: 0.549 d



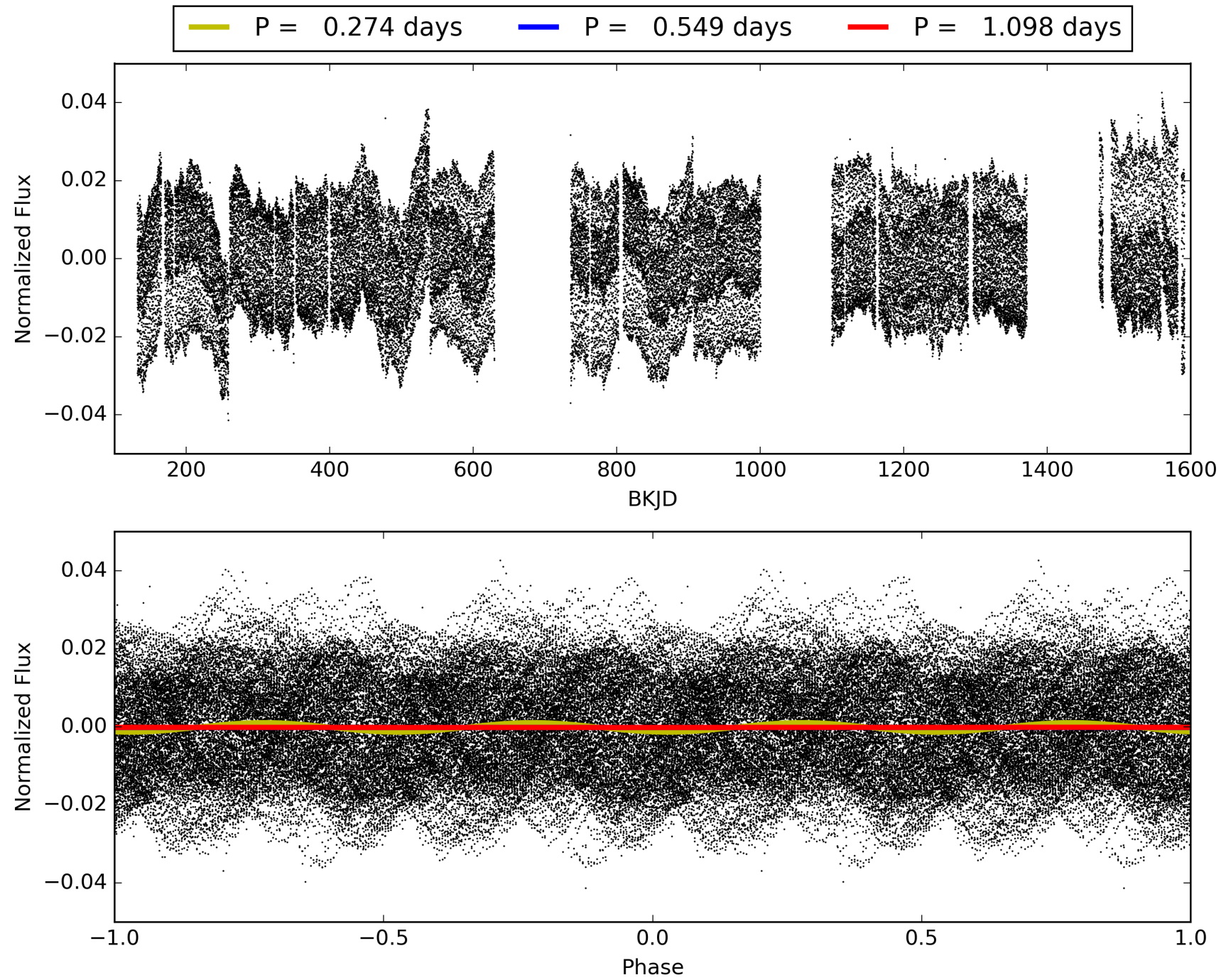
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 15:52:08 Z

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

TCE 010932440-01, PDC Light Curves

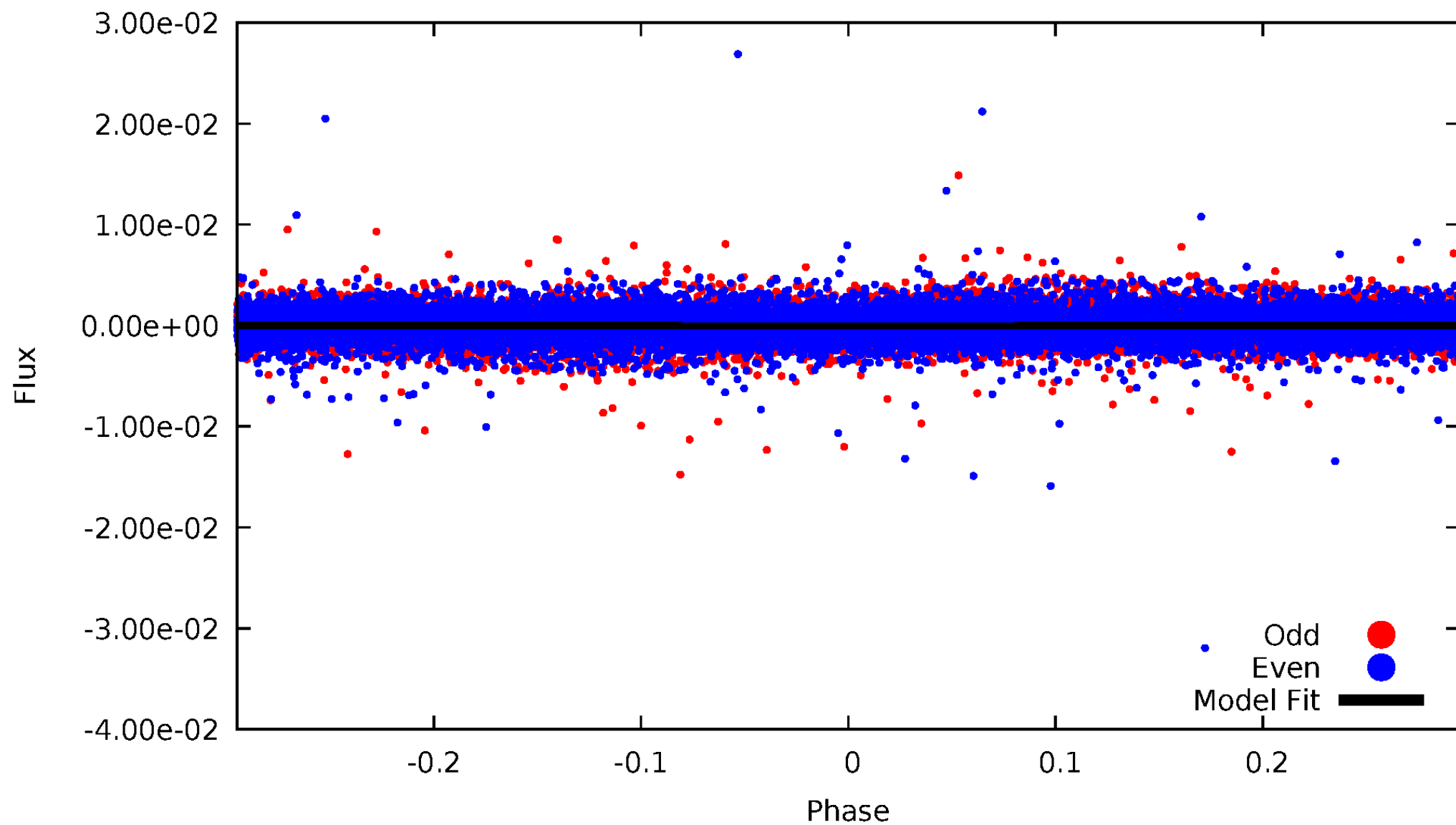


TCE 010932440-01



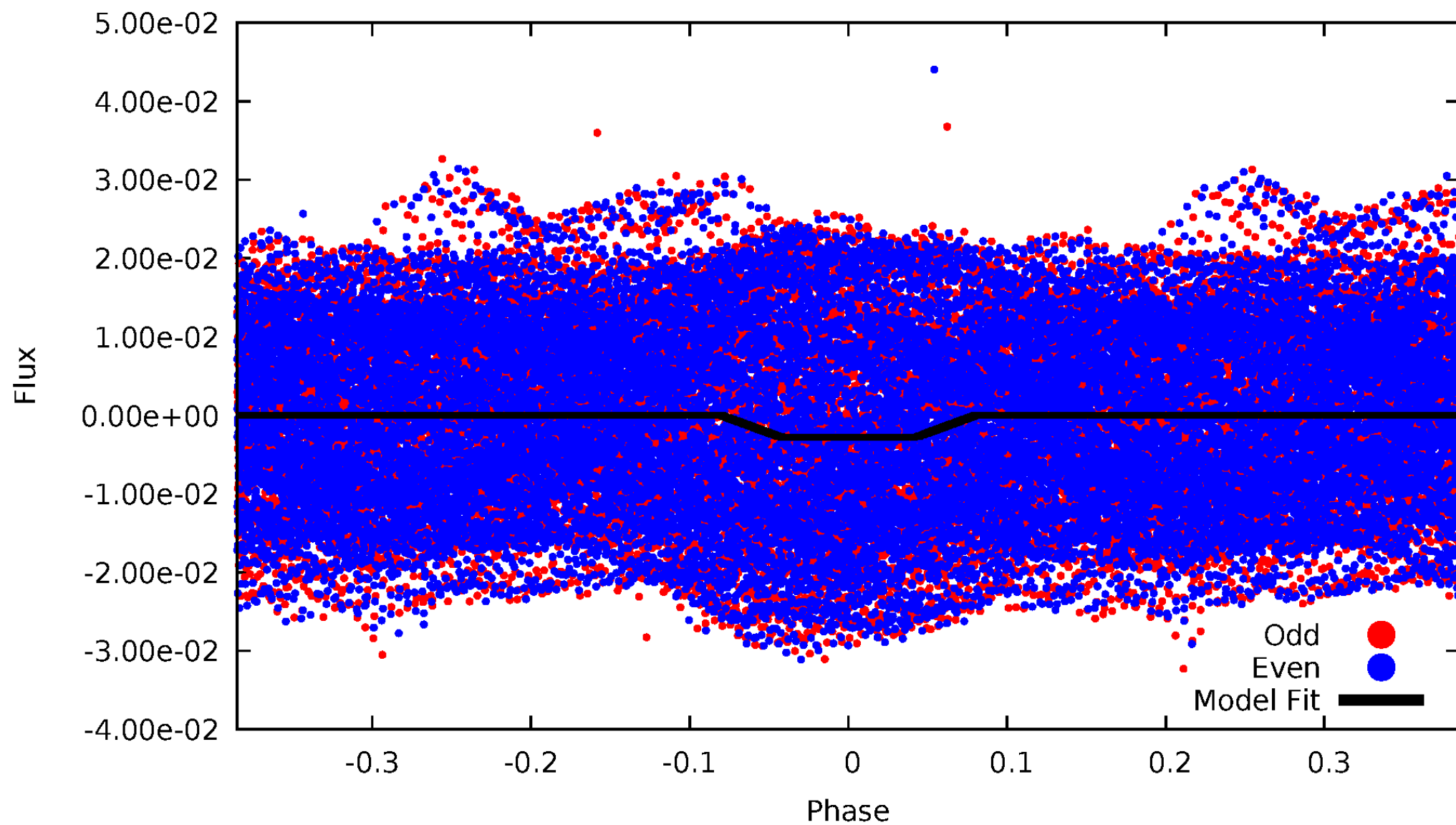
DV Odd/Even

TCE 010932440-01

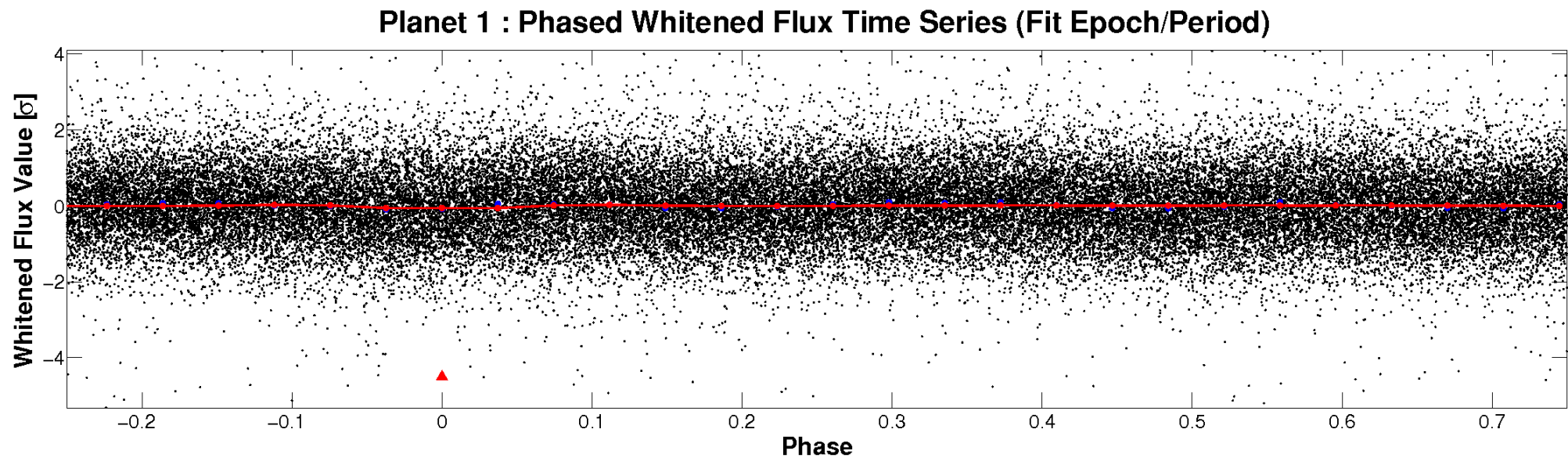
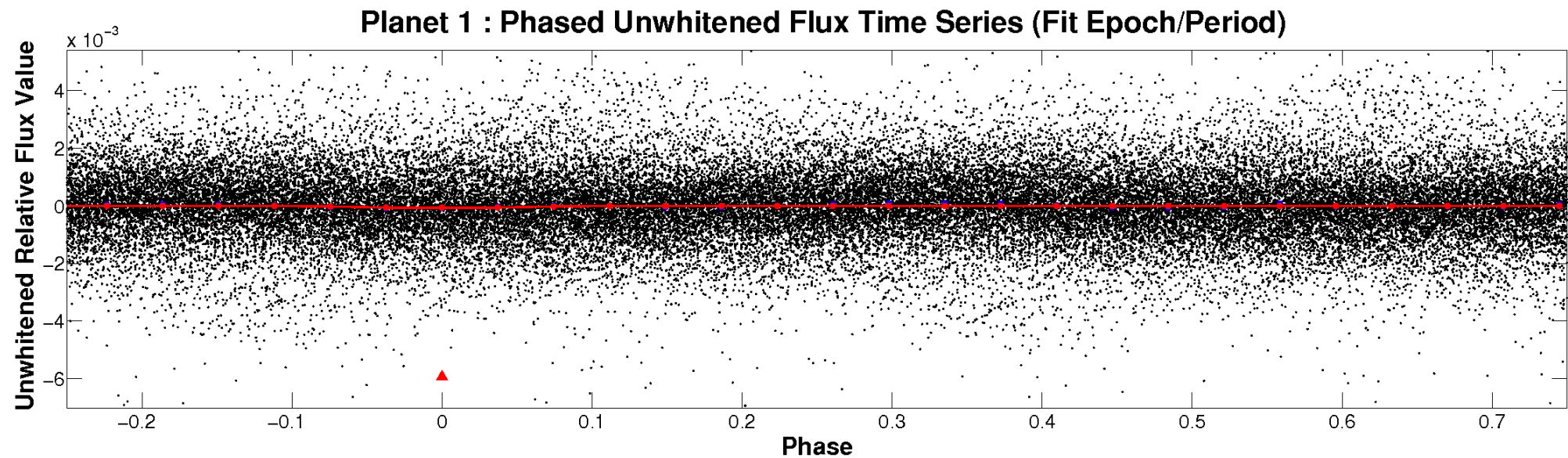


ALT Odd/Even

TCE 010932440-01

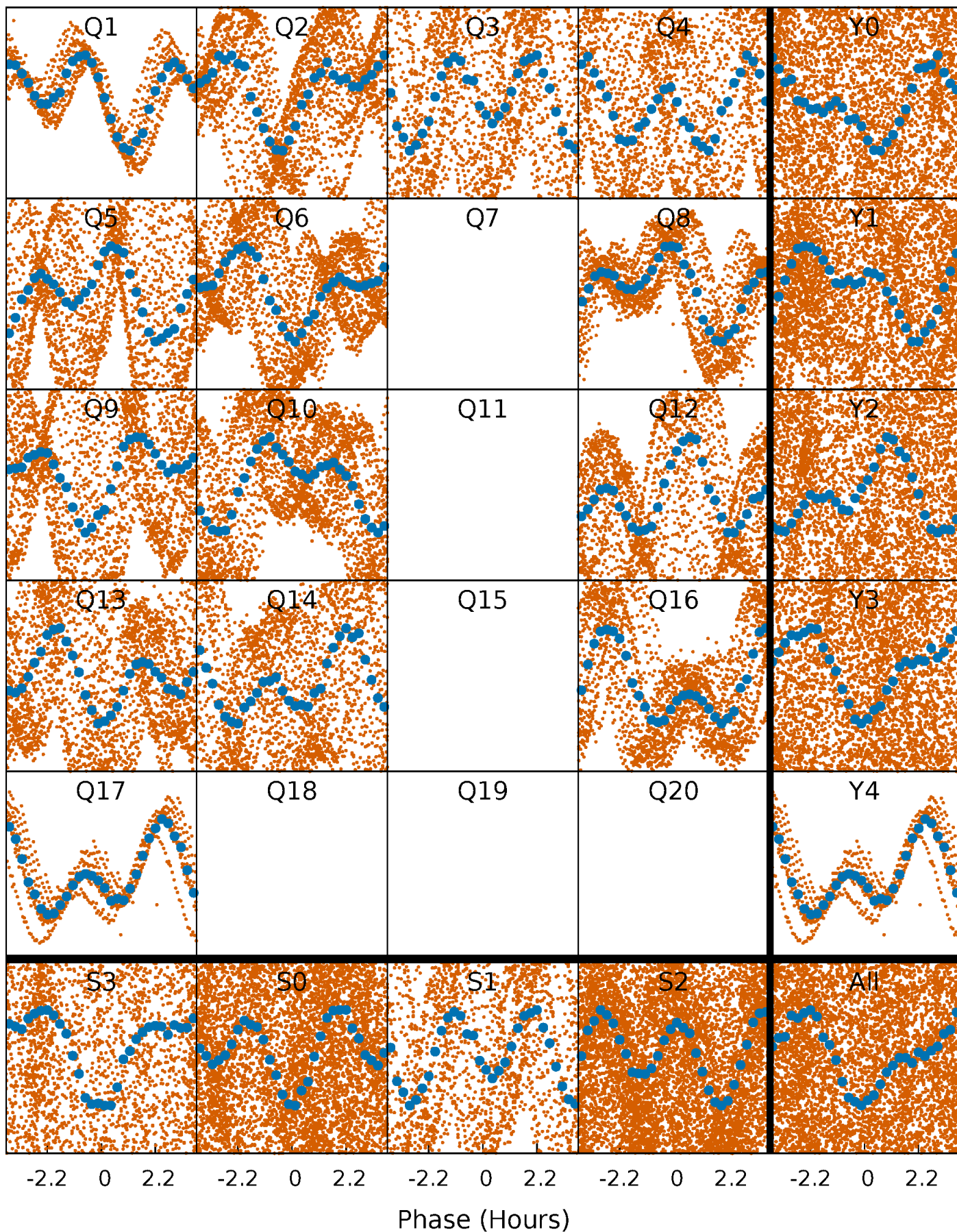


Non-Whitened Vs. Whitened Light Curve



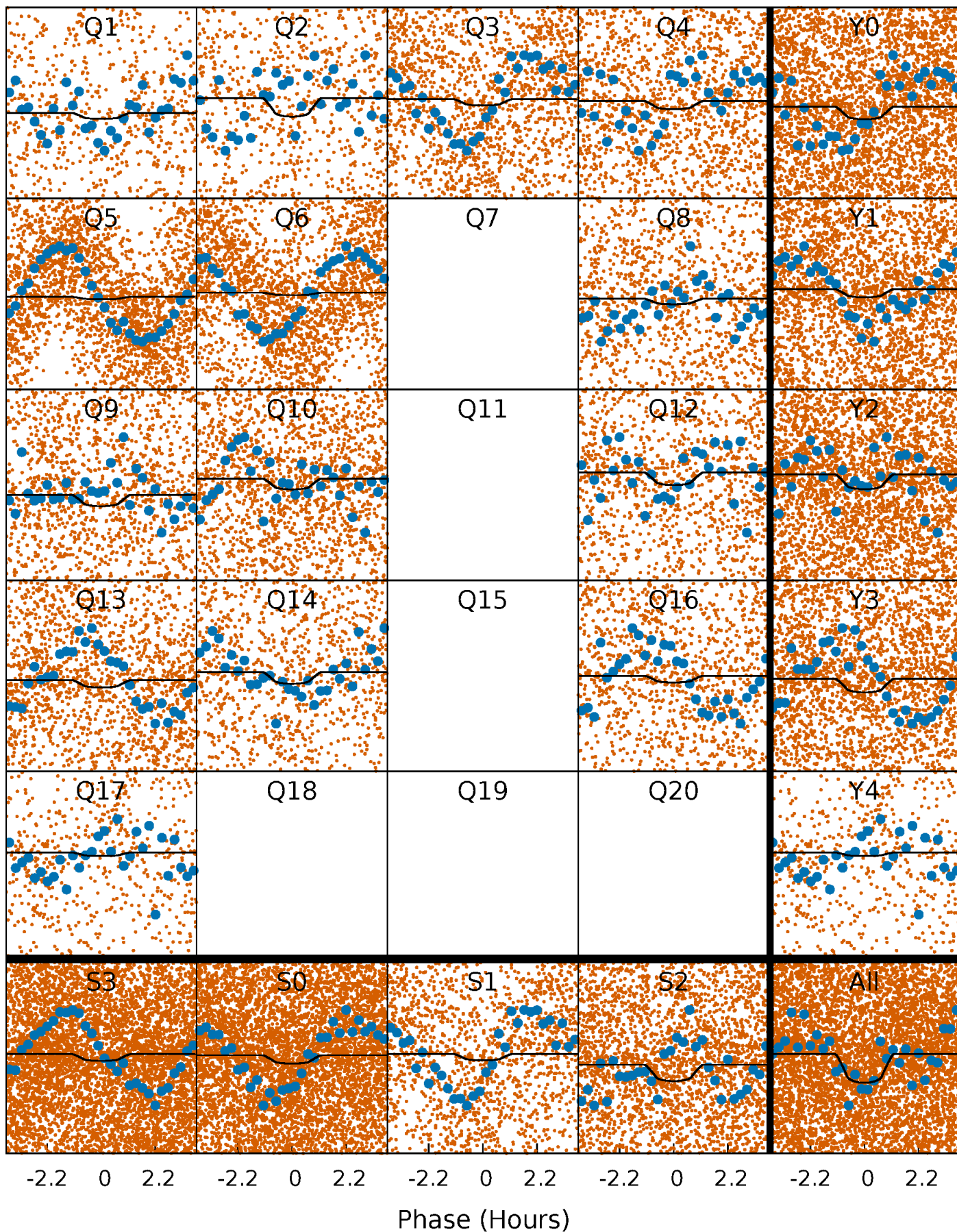
PDC Quarter-Phased Transit Curves

TCE 010932440-01 P= 0.548769 Days $T_0=131.709175$ (BKJD)



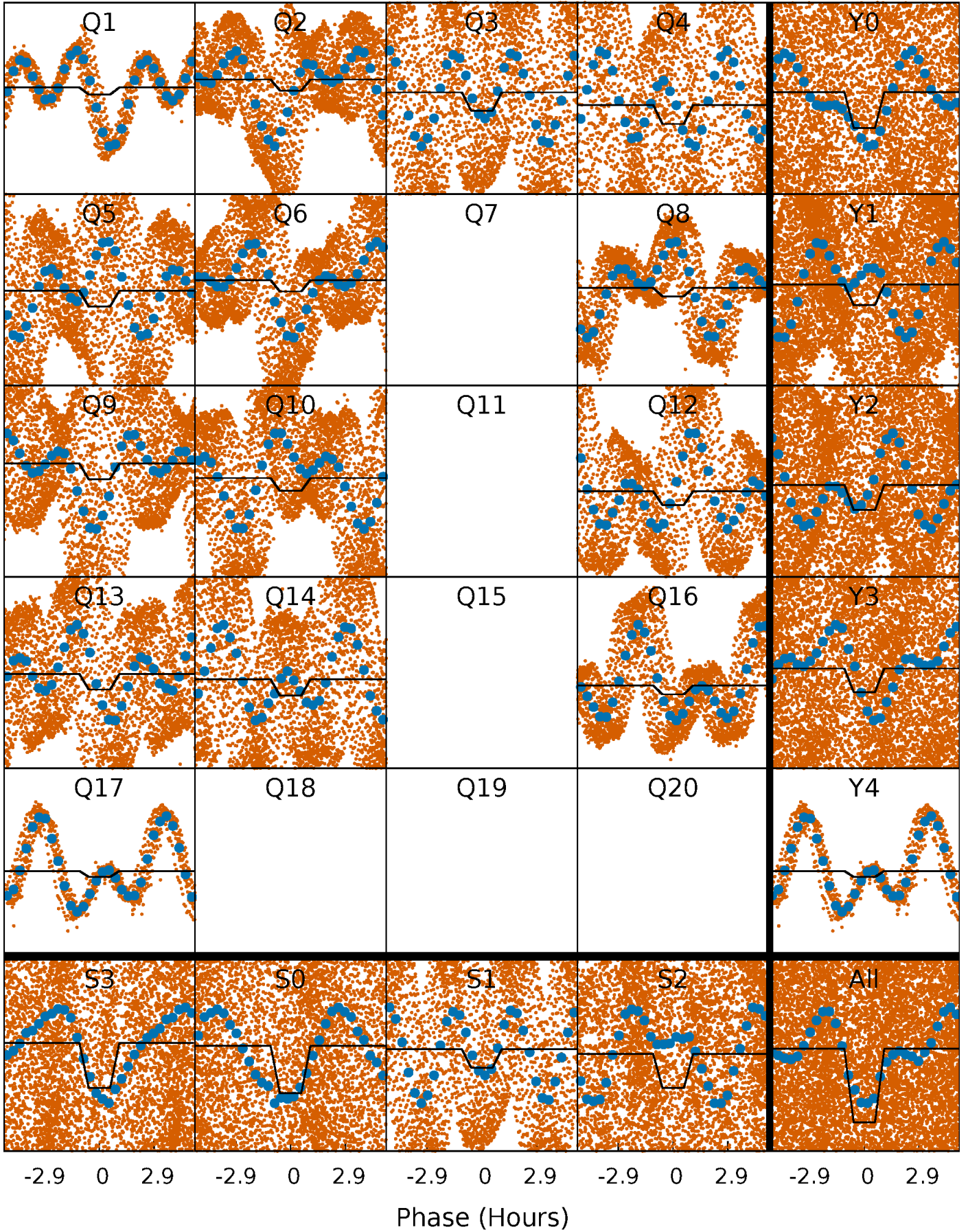
DV Quarter-Phased Transit Curves

TCE 010932440-01 P= 0.548769 Days $T_0=131.709175$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

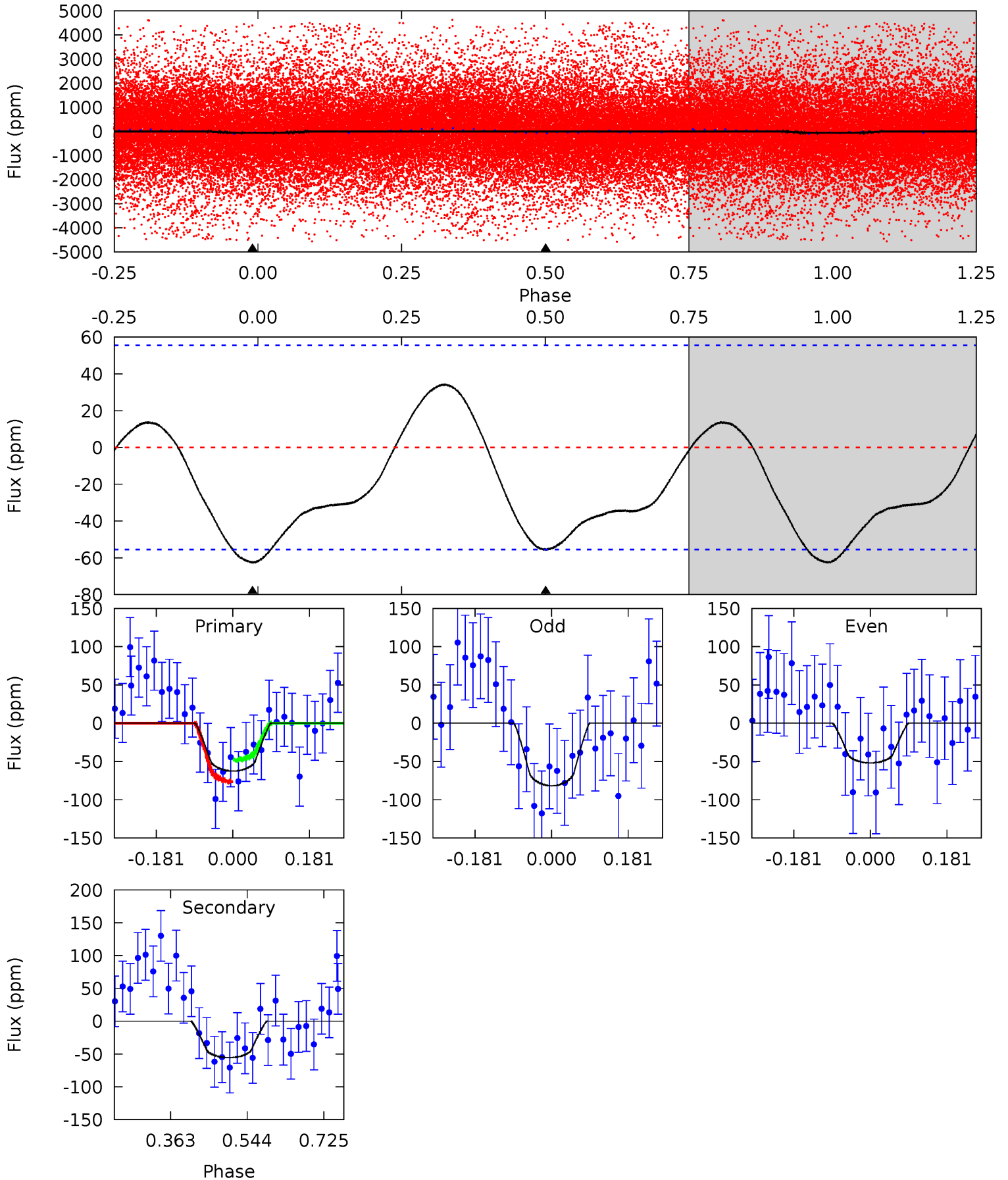
TCE 010932440-01 P= 0.548746 Days $T_0=131.729282$ (BKJD)



DV Model-Shift Uniqueness Test

010932440-01, P = 0.548769 Days, E = 131.160406 Days

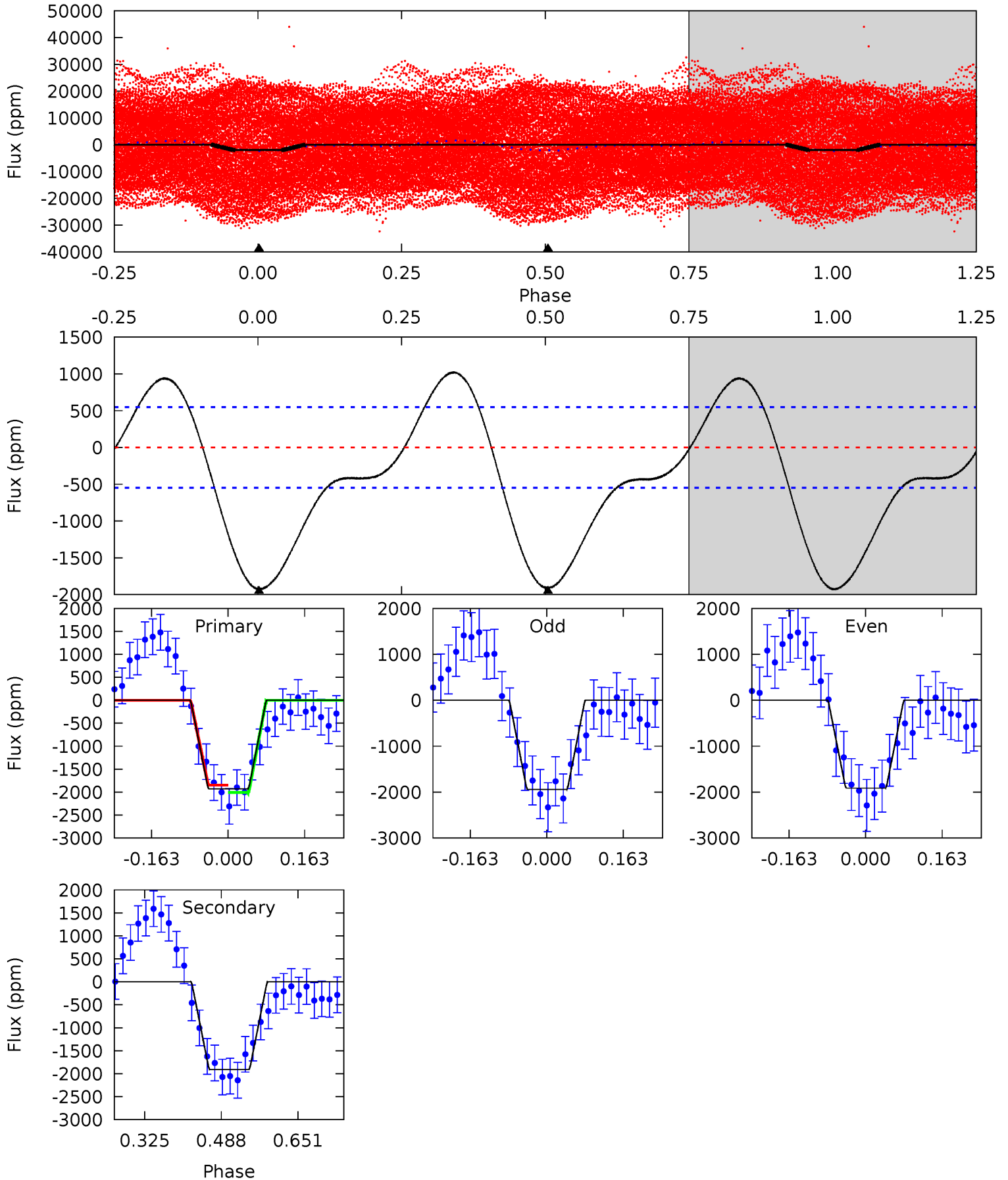
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
5.00	4.44	0	0	4.44	1.34	1.54	5.00	5.00	4.44	4.44	1.20	0.57	0.35	1.15



Alt Model-Shift Uniqueness Test

010932440-01, P = 0.548746 Days, E = 131.180536 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
15.7	15.5	0	0	4.46	1.40	4.18	15.7	15.7	15.5	15.5	0.13	0.68	0.35	0.64



Stellar Parameters For KIC 010932440

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	M (M_{\odot})	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5227^{+157}_{-157}	$4.566^{+0.084}_{-0.056}$	$-0.580^{+0.350}_{-0.300}$	$0.709^{+0.081}_{-0.074}$	$0.676^{+0.089}_{-0.038}$	$2.665^{+0.912}_{-0.572}$
	+3%/-3%	+2%/-1%	+60%/-52%	+11%/-10%	+13%/-6%	+34%/-21%
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 010932440-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-56 ± 13	$0.71^{+0.45}_{-0.40}$	2522^{+100}_{-101}	4703^{+2251}_{-841}	$7.682^{+31.999}_{-4.873}$
Alt.	-1911 ± 123	$4.04^{+0.56}_{-0.48}$	2518^{+114}_{-107}	4805^{+303}_{-255}	$8.686^{+2.624}_{-1.982}$

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

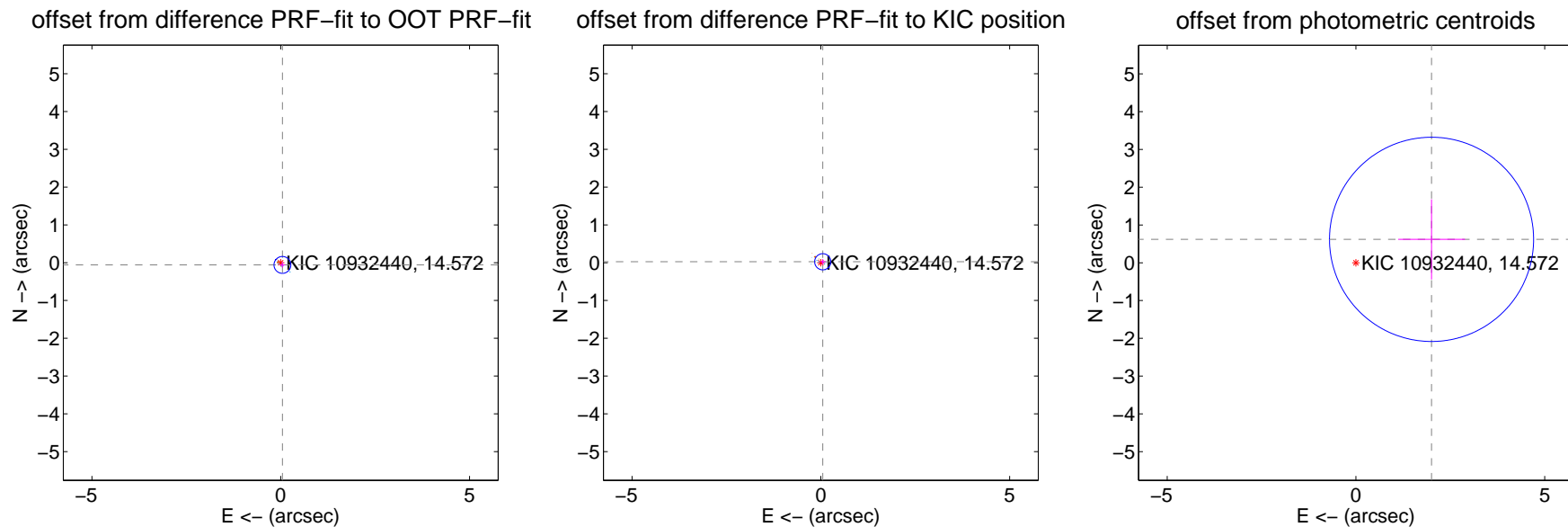
DV Centroid Data

Supplemental centroid analysis for 010932440-01. Kepler magnitude: 14.57. Transit SNR 5.12

There are 9 quarters with good PRF difference image offsets

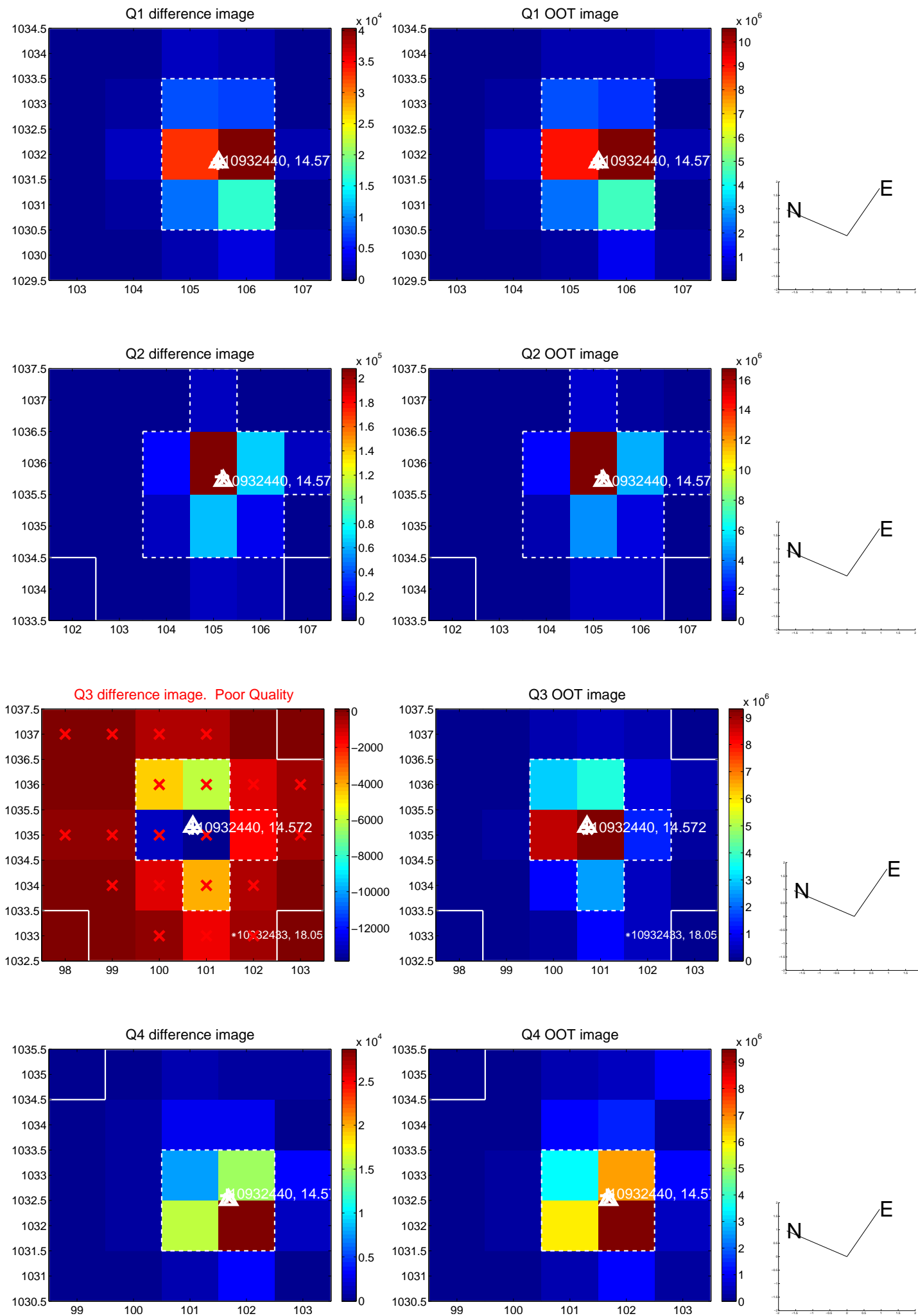
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.074 ± 0.074	0.99	-0.044 ± 0.071	-0.059 ± 0.071
PRF-fit source offset from KIC position	0.055 ± 0.071	0.77	-0.049 ± 0.076	0.025 ± 0.072
photometric centroid source offset	2.10 ± 0.90	2.33	-2.00 ± 0.88	0.62 ± 1.06

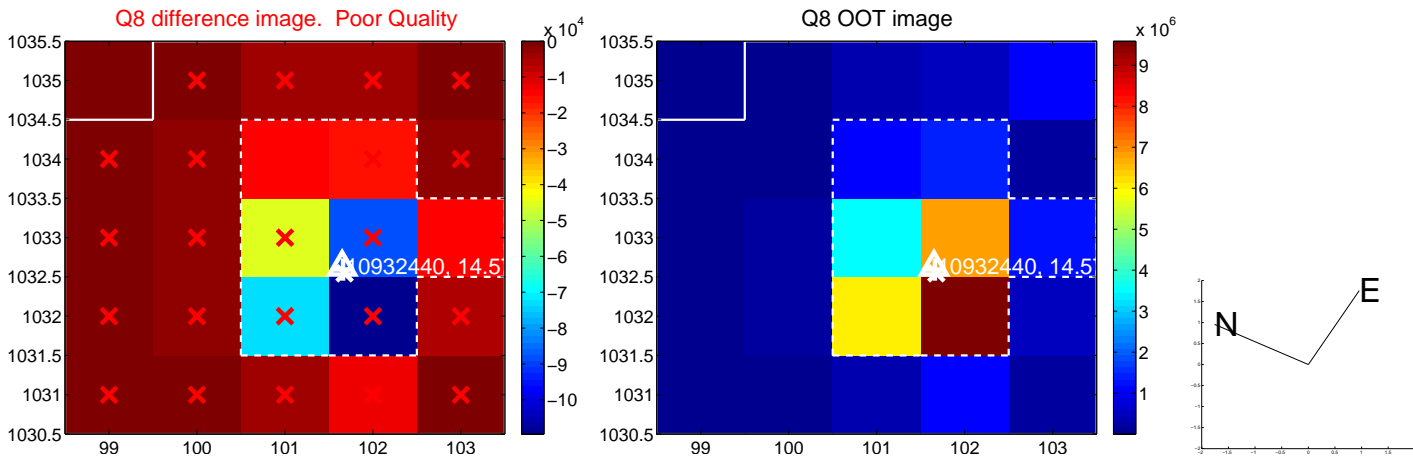
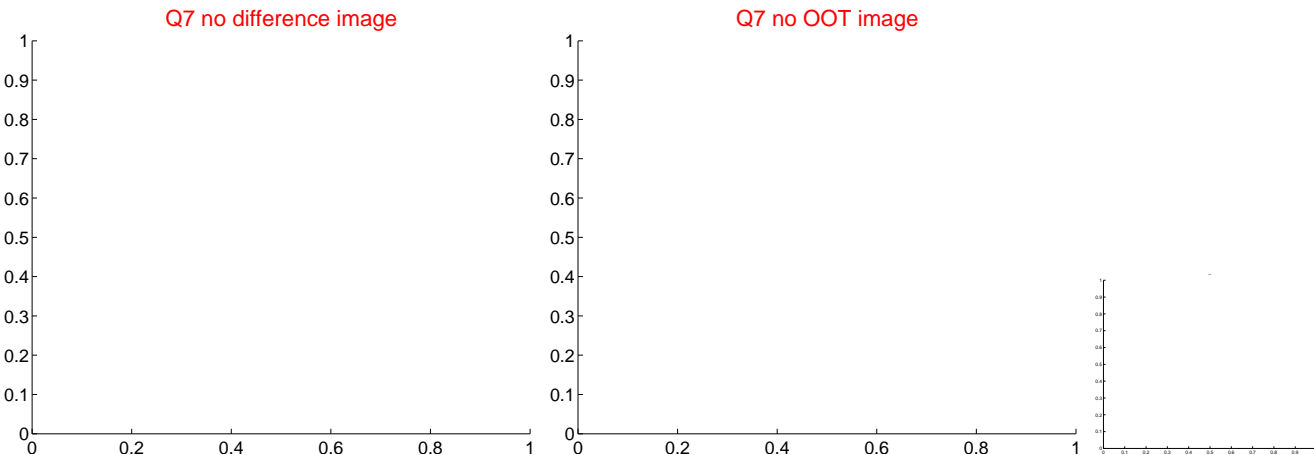
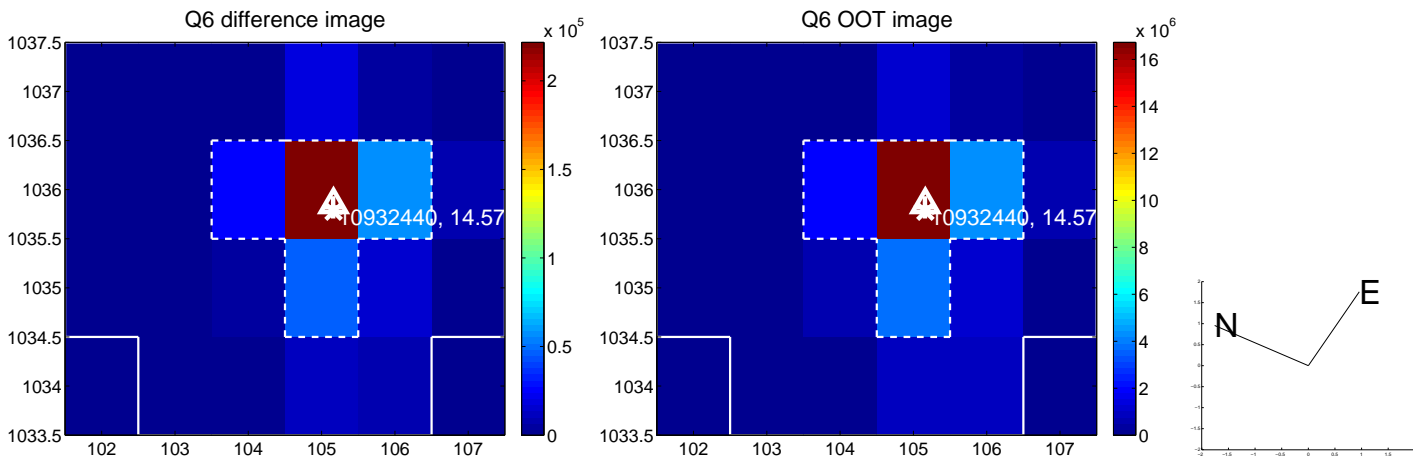
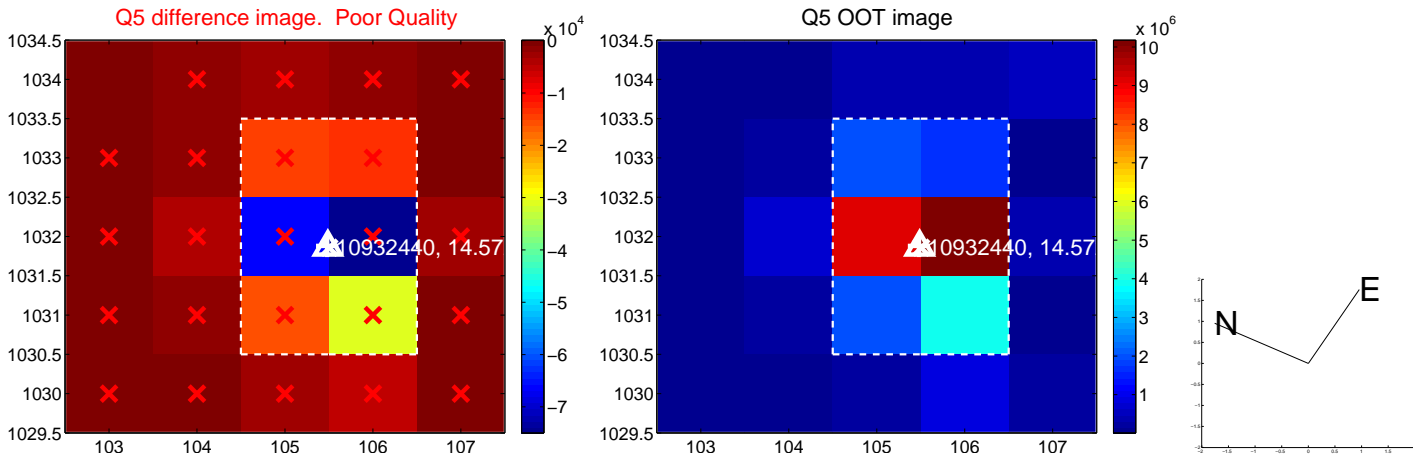


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

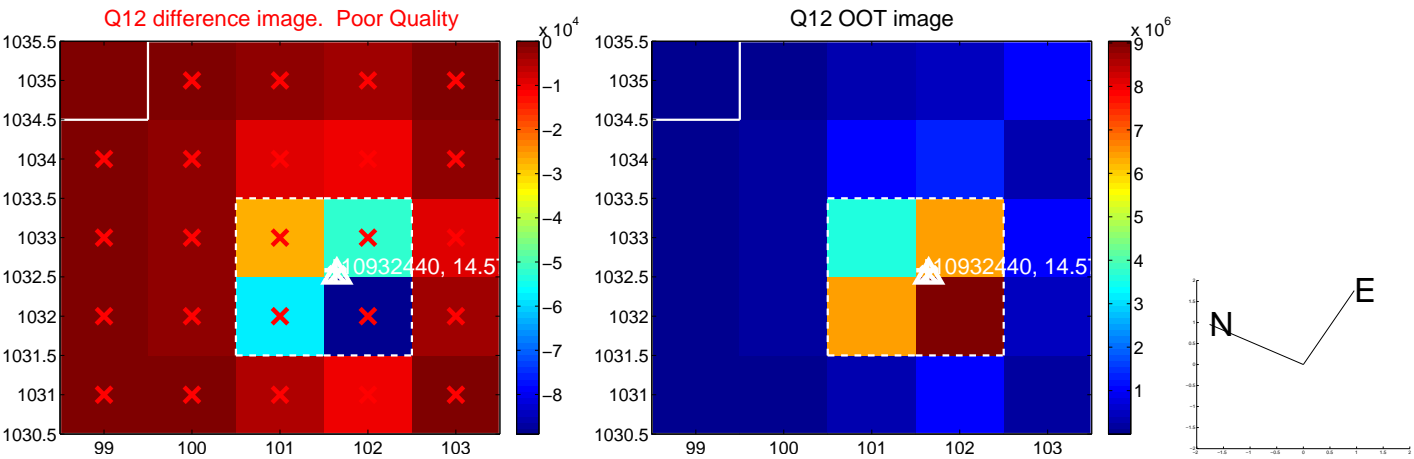
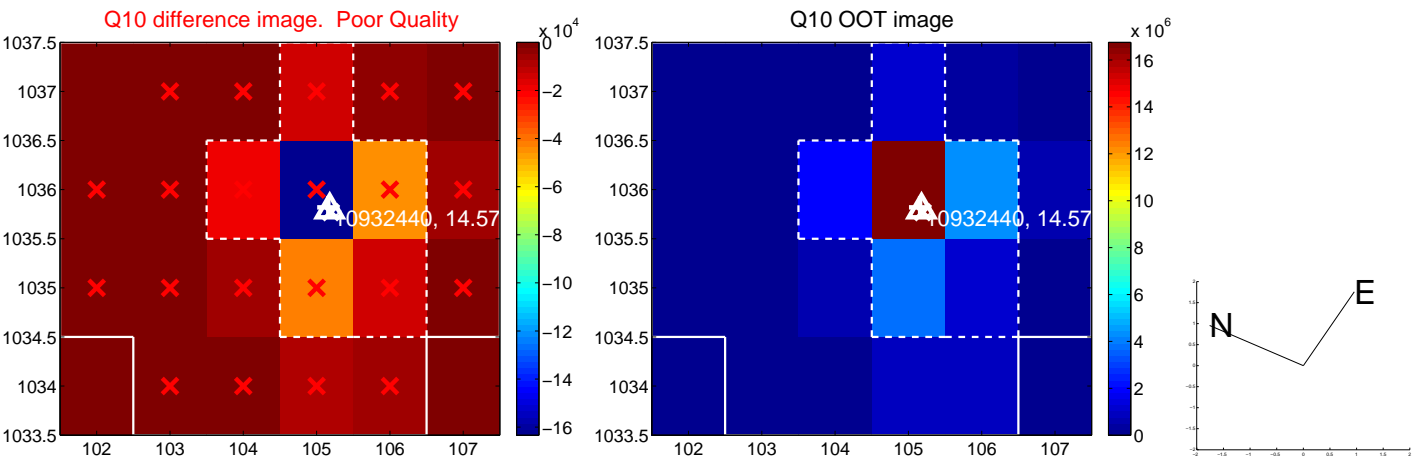
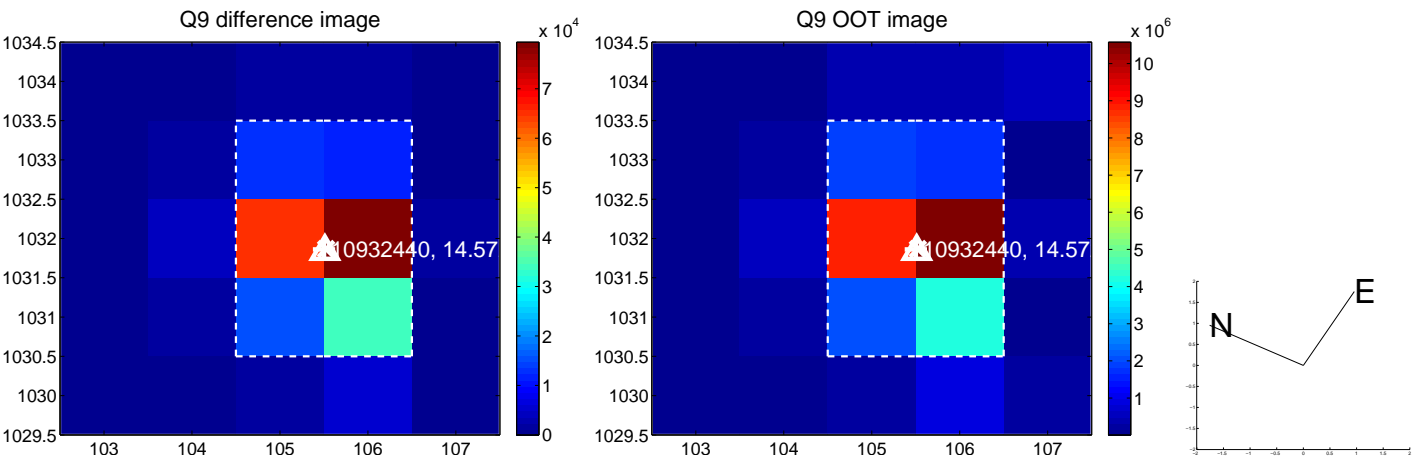
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



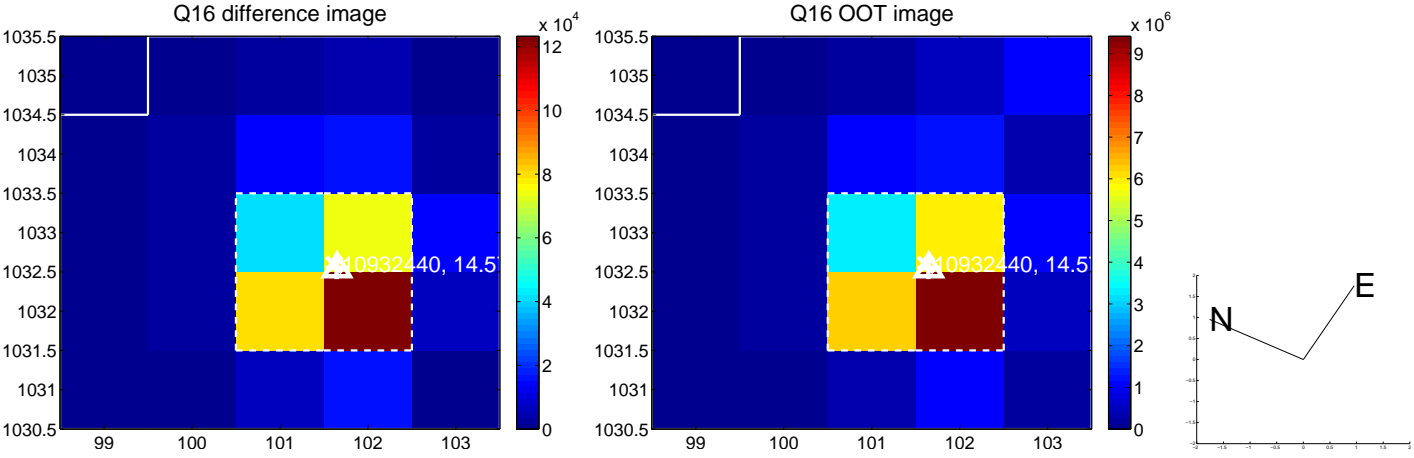
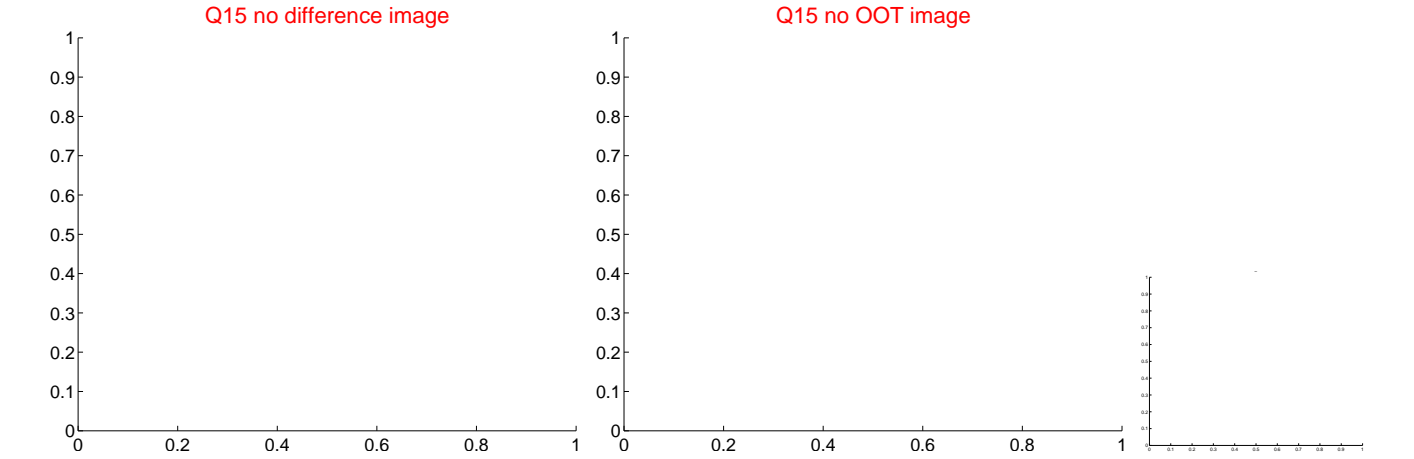
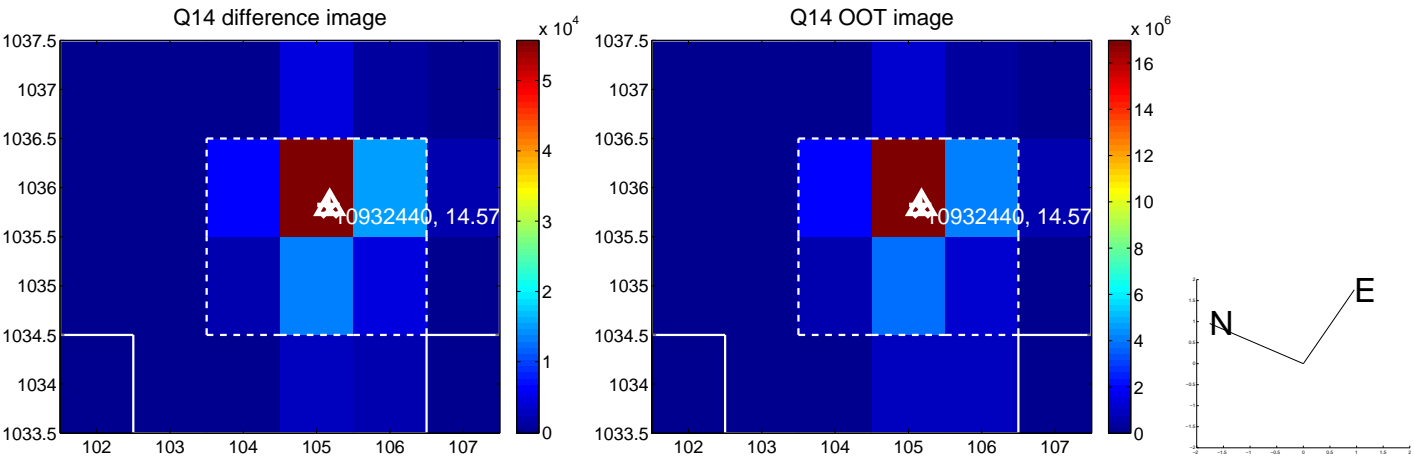
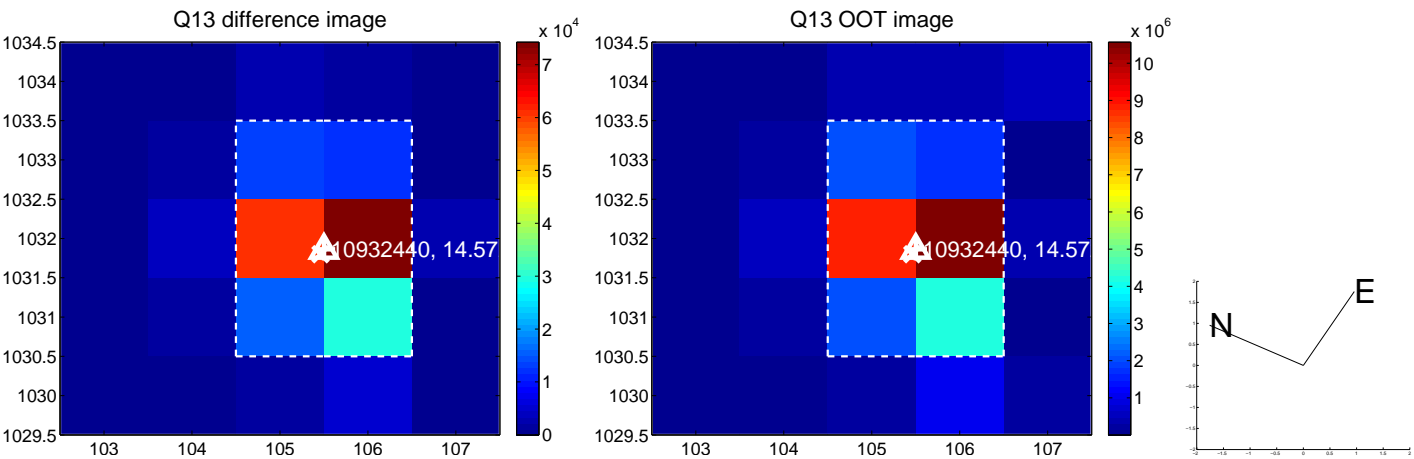
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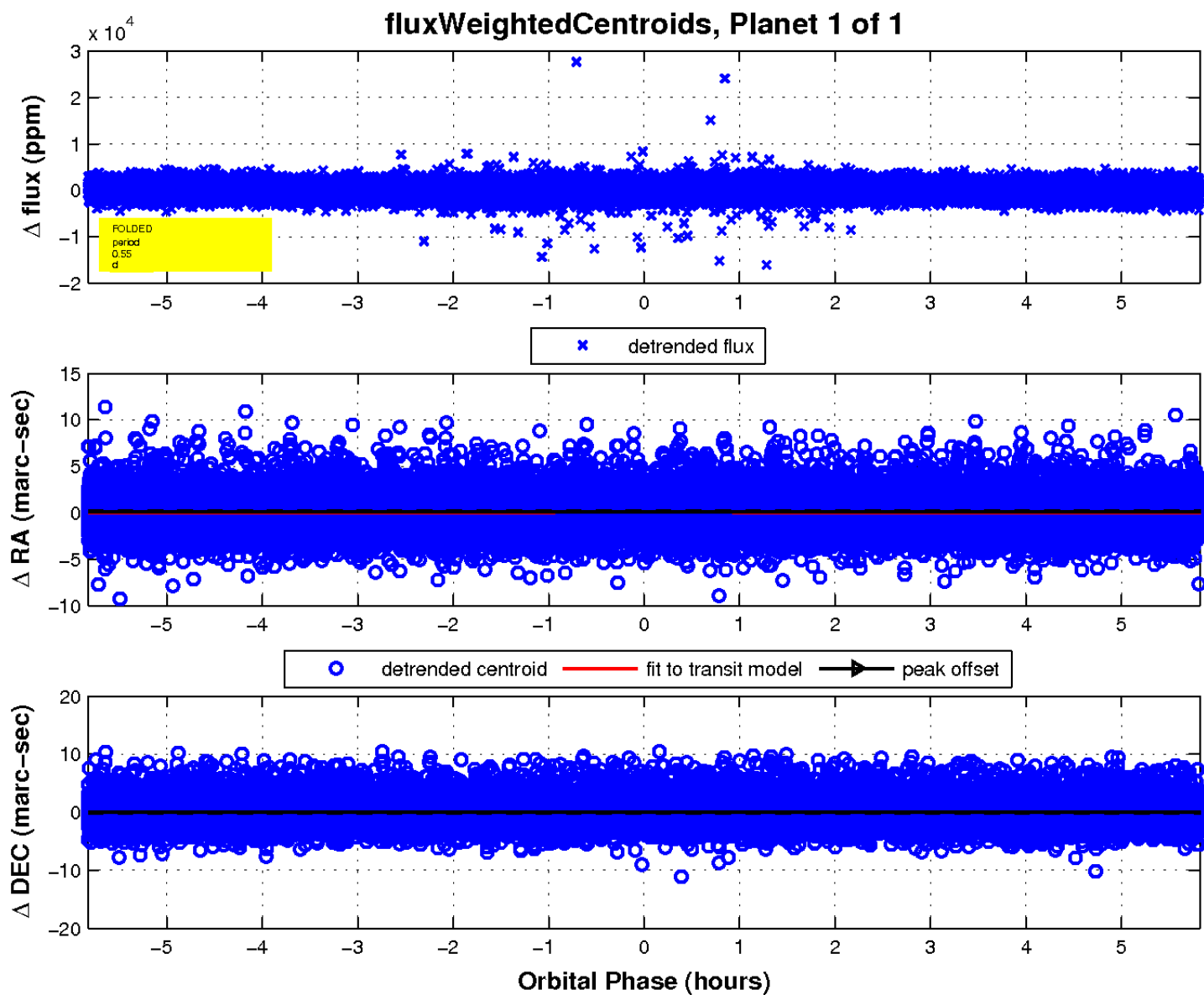
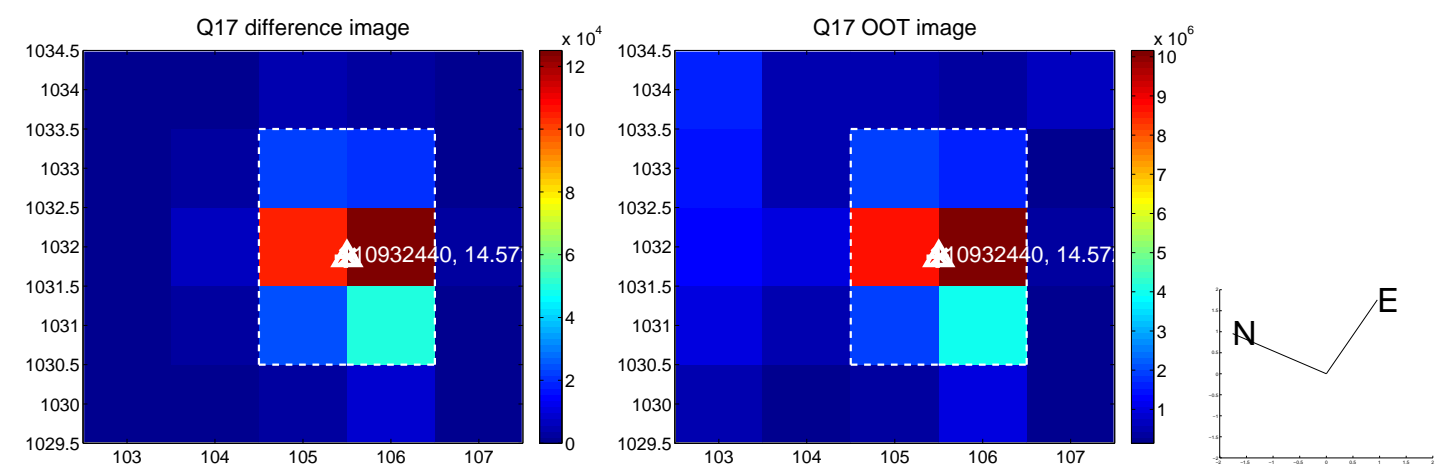
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UKIRT Image

Declination

