

KIC 002282763

Q1-17 DR25 TCE Parameters

TCE	Run Type	KOI?	Period (Days)	Epoch (BKJD)	Depth (ppm)	Duration (Hours)	MES	SNR	R _★ (R _☉)	T _★ (K)	R _p (R _⊕)	S _p (S _⊕)
002282763-01	OBS	No	0.688275	131.710260	55.1	2.383	9.3	8.7	3.27	8014	2.84	105356.57

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
002282763-01	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.

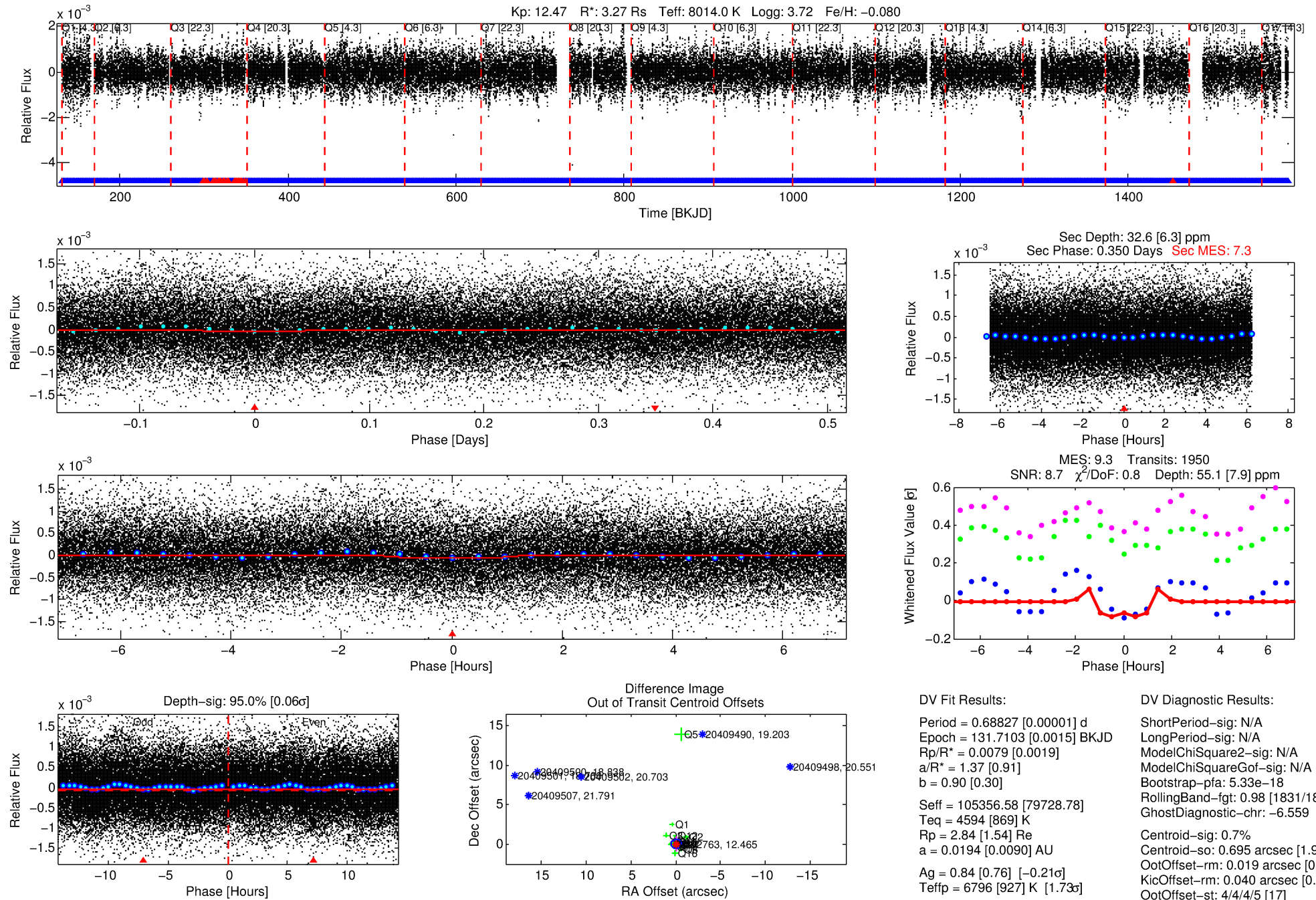
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 002282763-01

No Significant Match Found

DV One-Page Summary

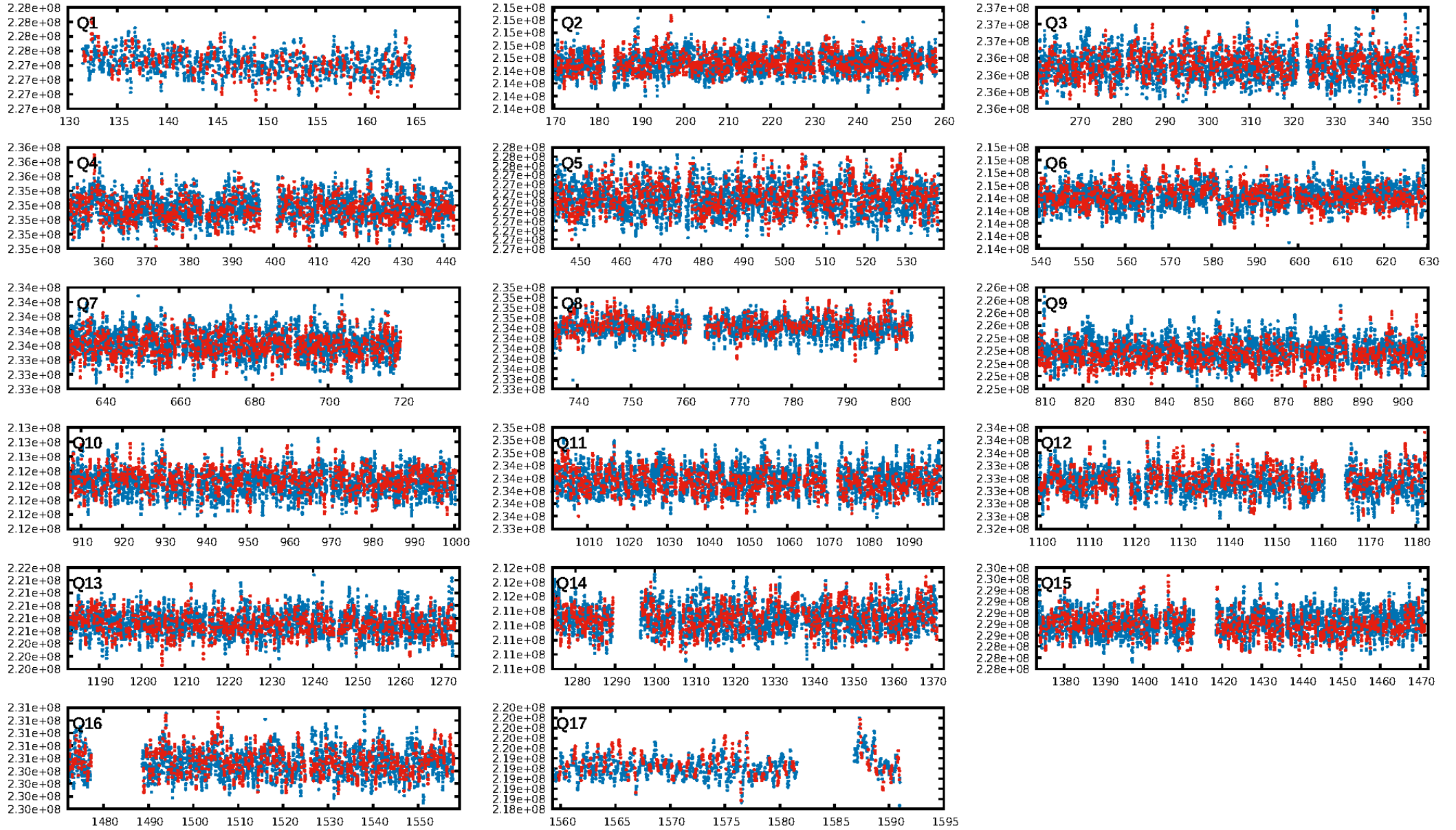
KIC: 2282763 Candidate: 1 of 1 Period: 0.688 d



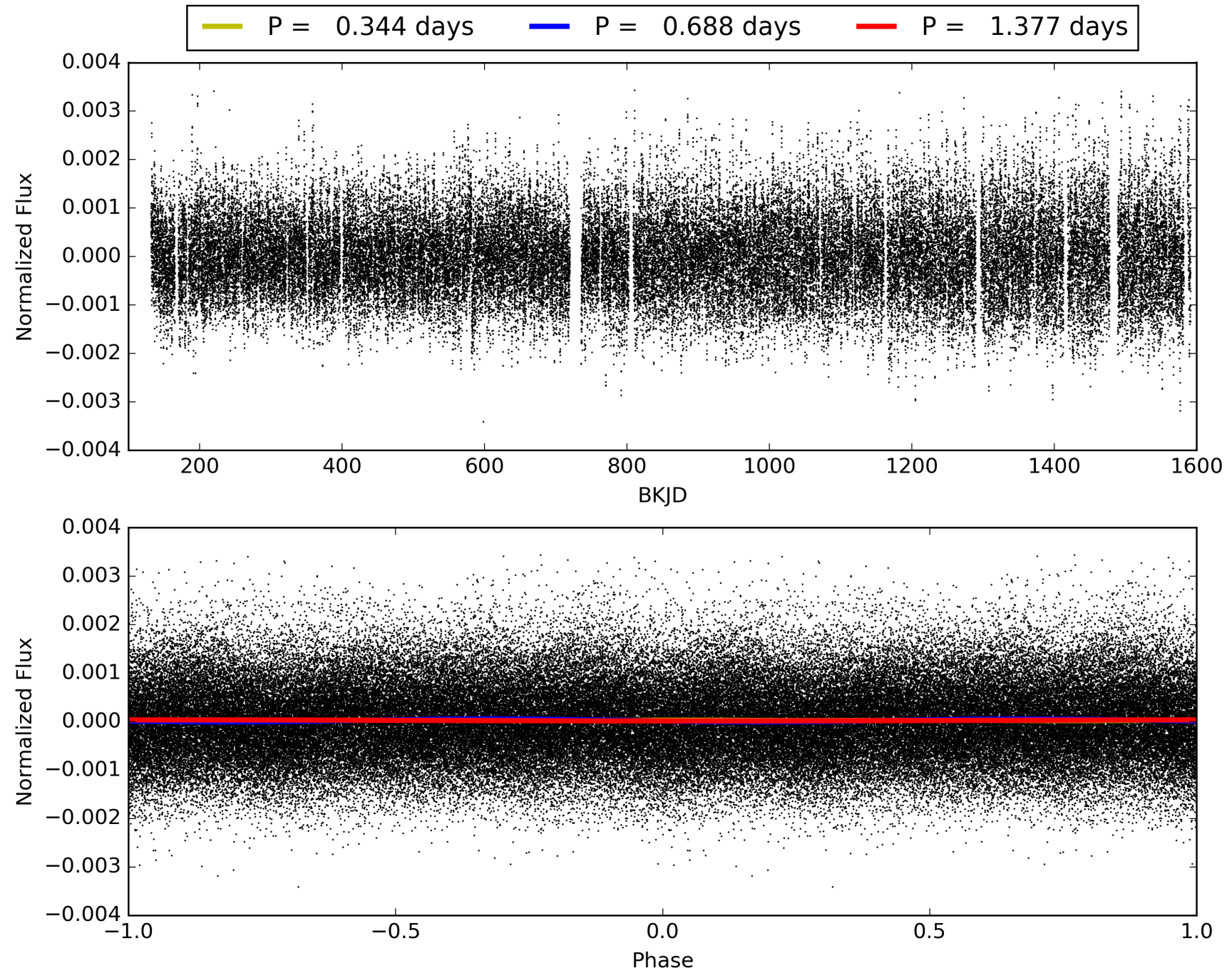
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 31-Jan-2016 21:43:13 Z

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

TCE 002282763-01, PDC Light Curves

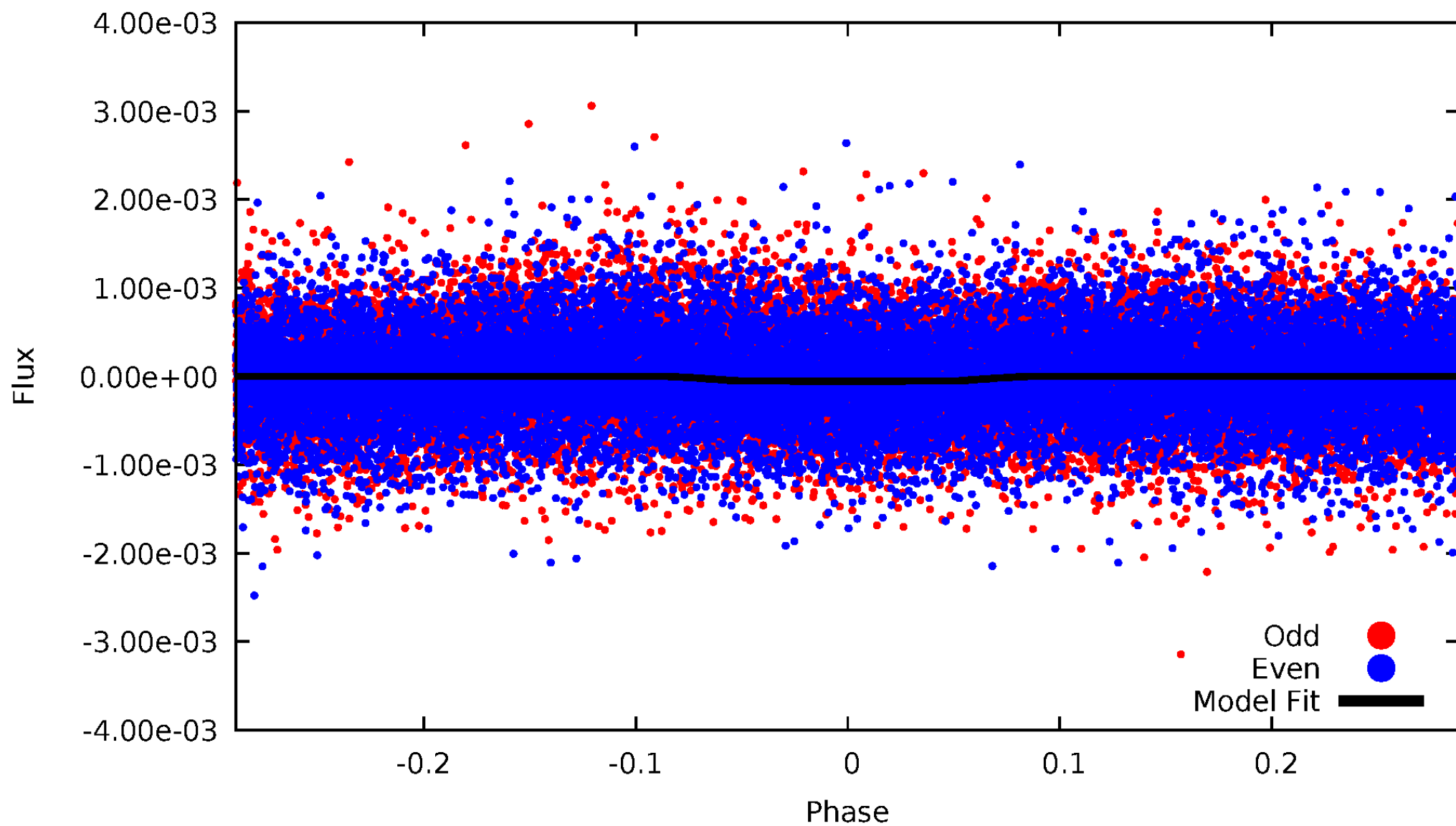


TCE 002282763-01



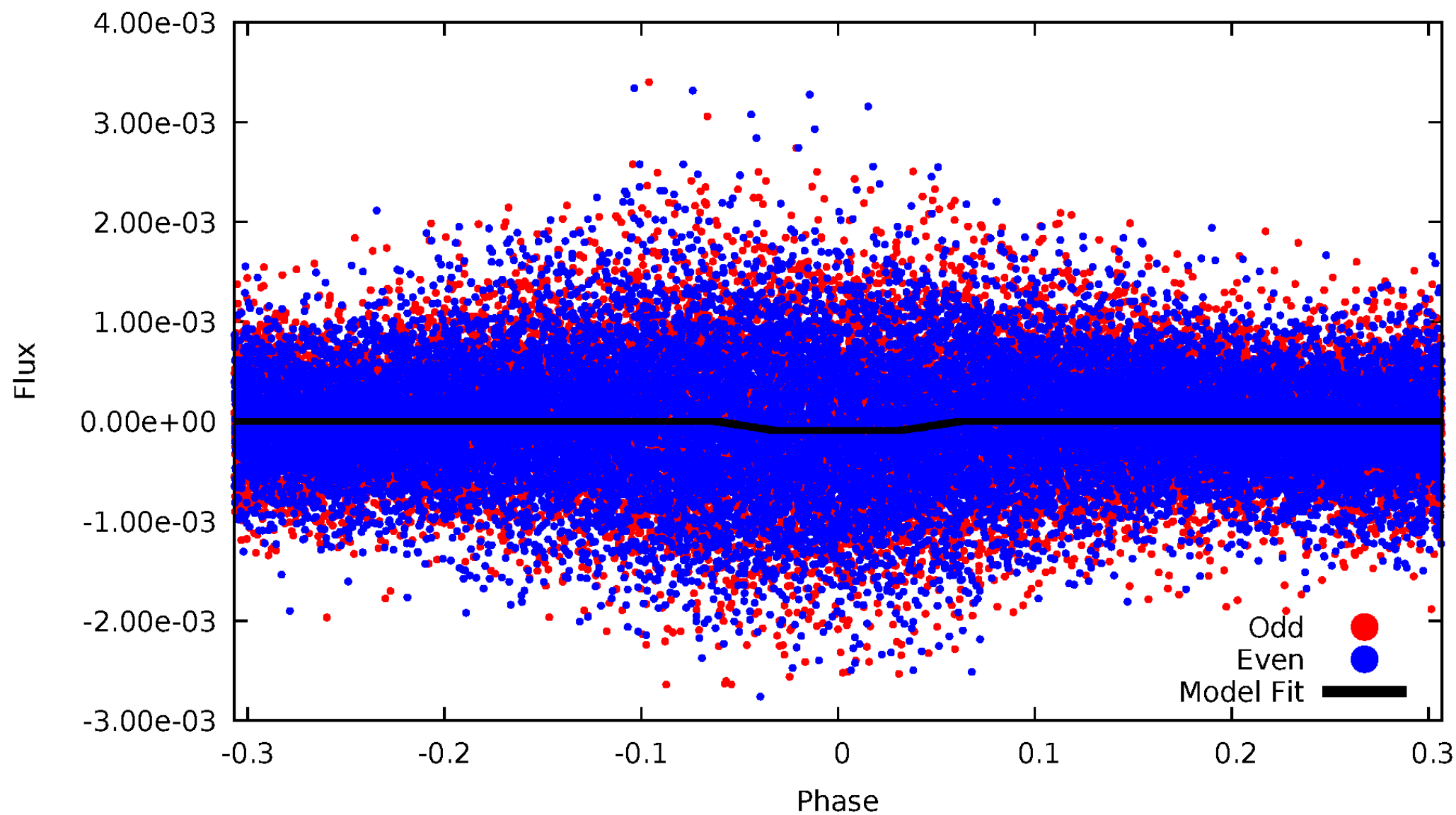
DV Odd/Even

TCE 002282763-01

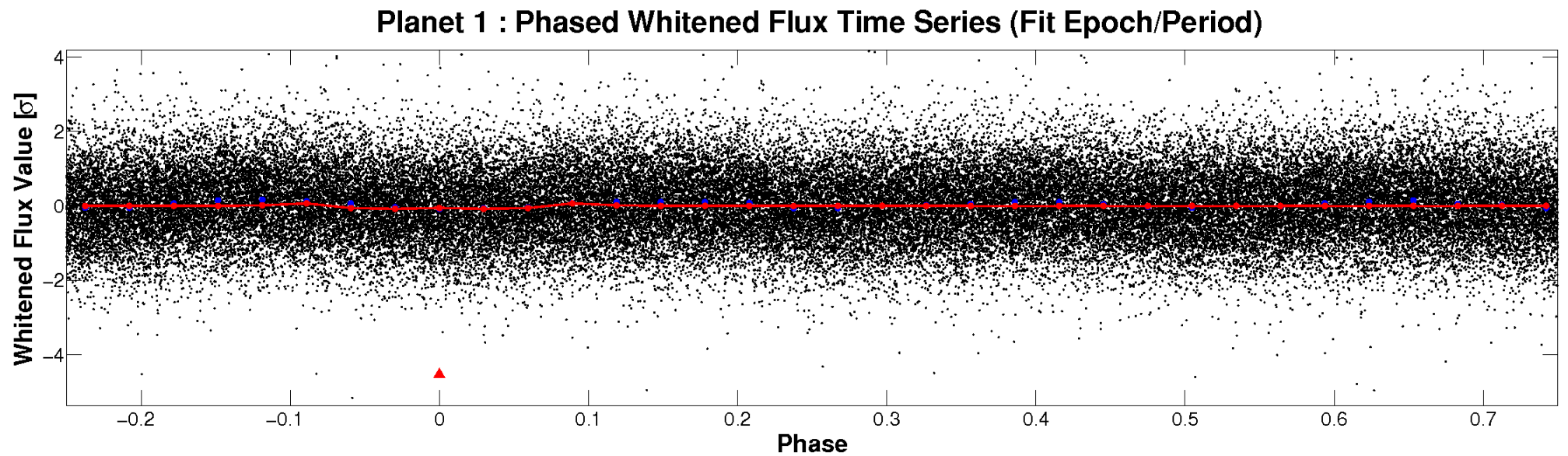
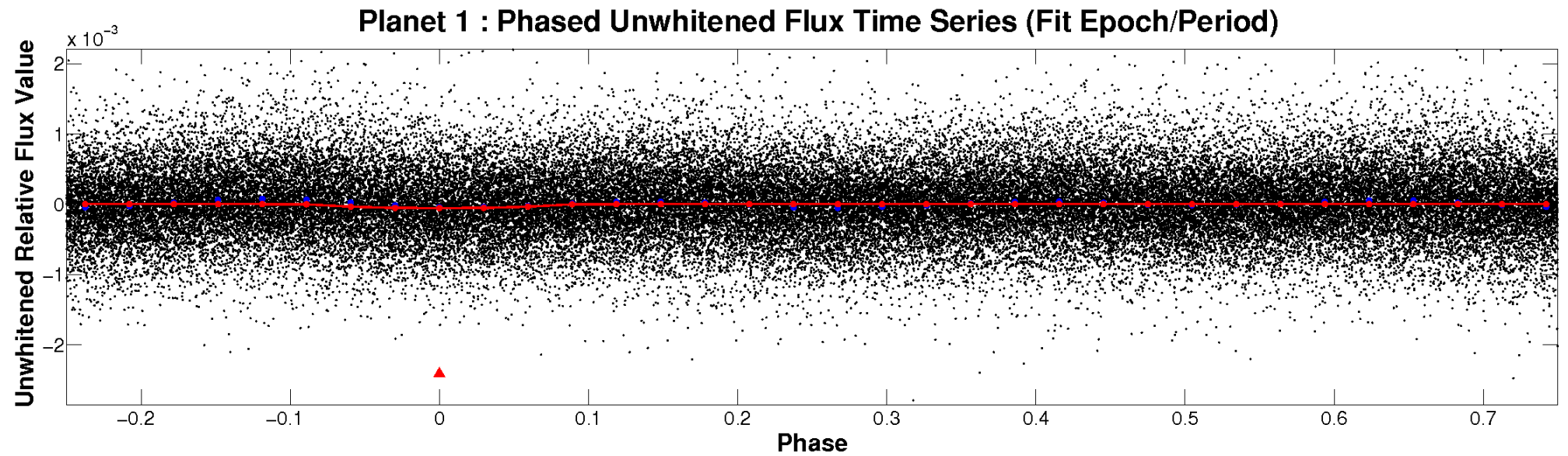


ALT Odd/Even

TCE 002282763-01

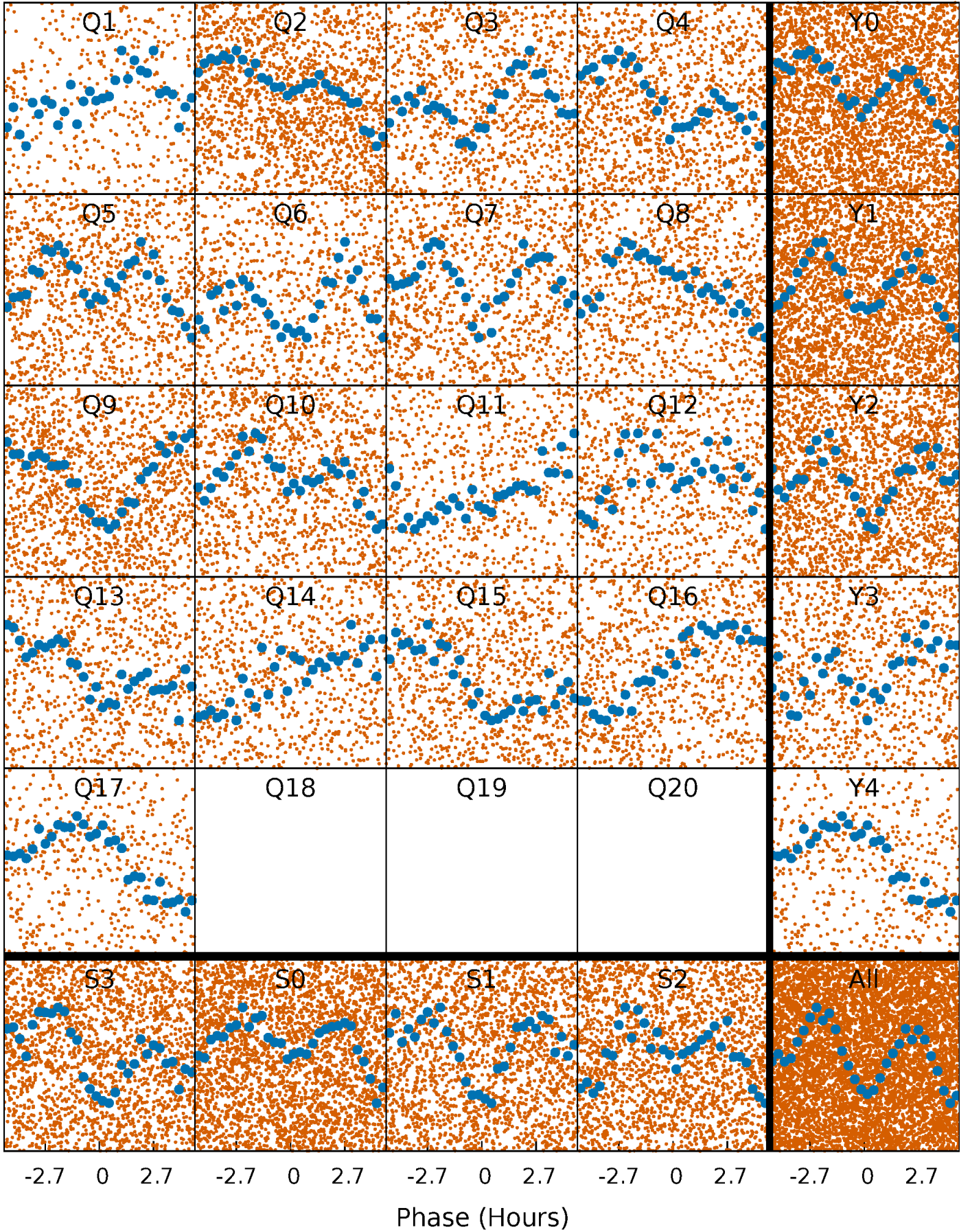


Non-Whitened Vs. Whitened Light Curve



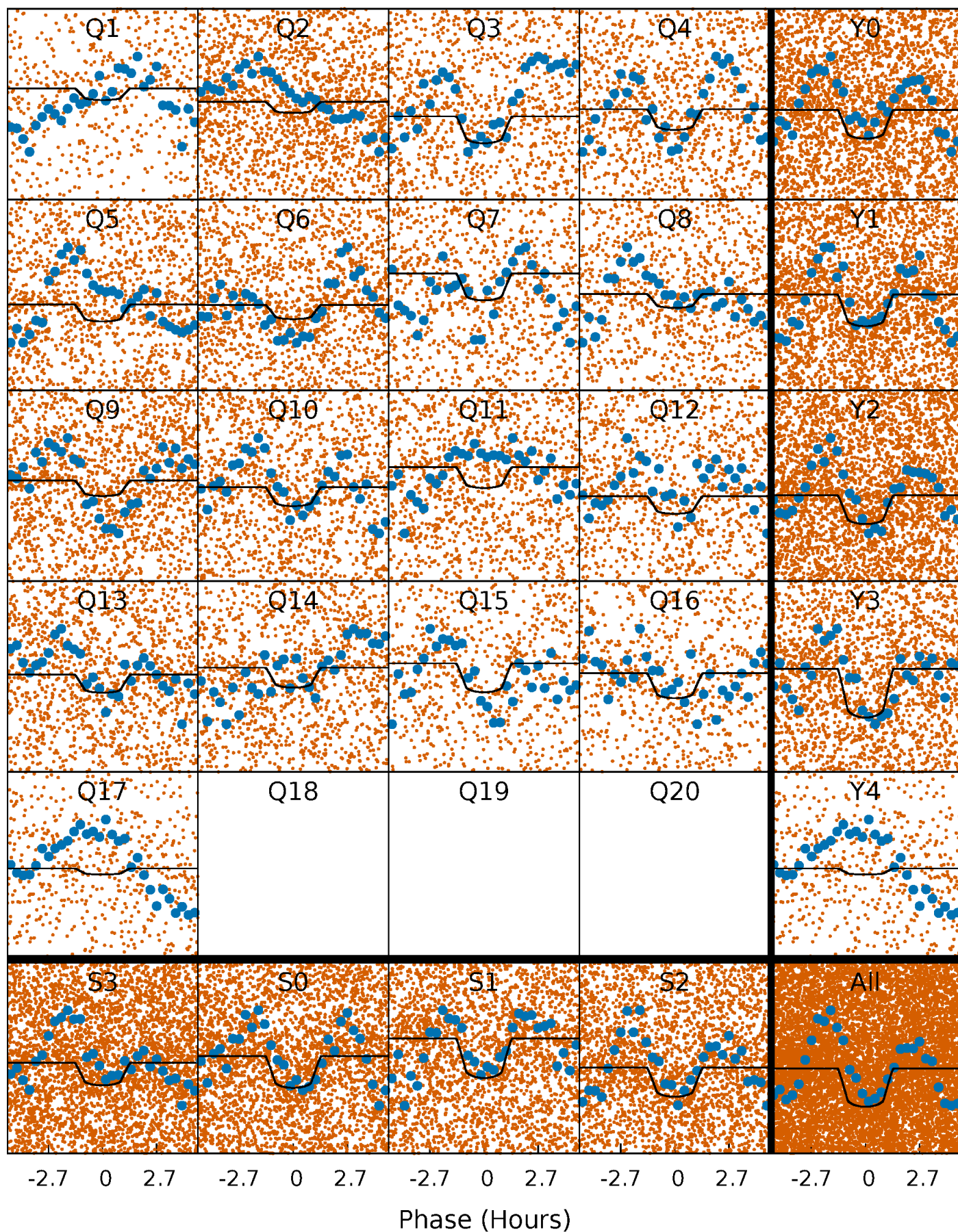
PDC Quarter-Phased Transit Curves

TCE 002282763-01 P= 0.688275 Days $T_0=131.710260$ (BKJD)



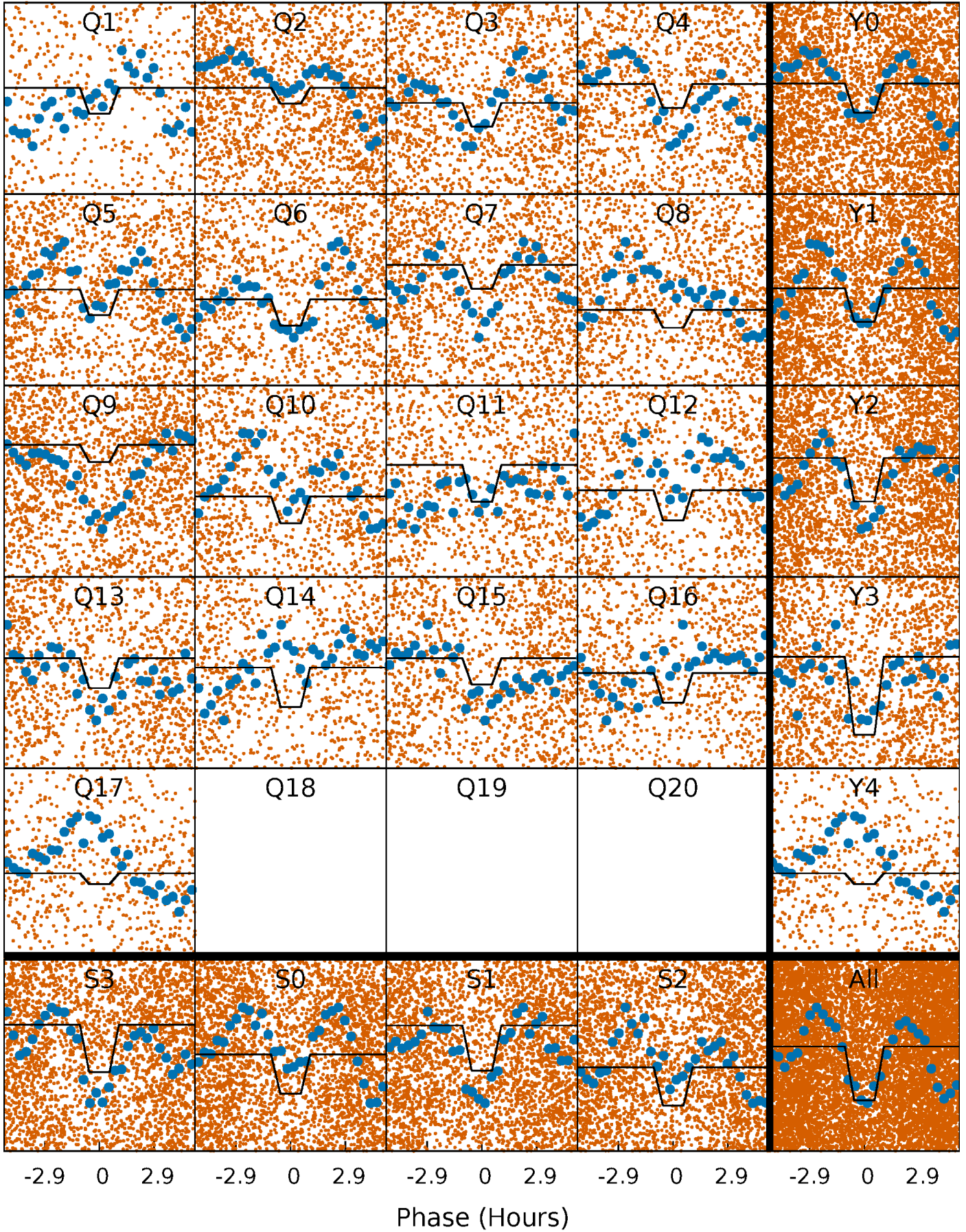
DV Quarter-Phased Transit Curves

TCE 002282763-01 P= 0.688275 Days $T_0=131.710260$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

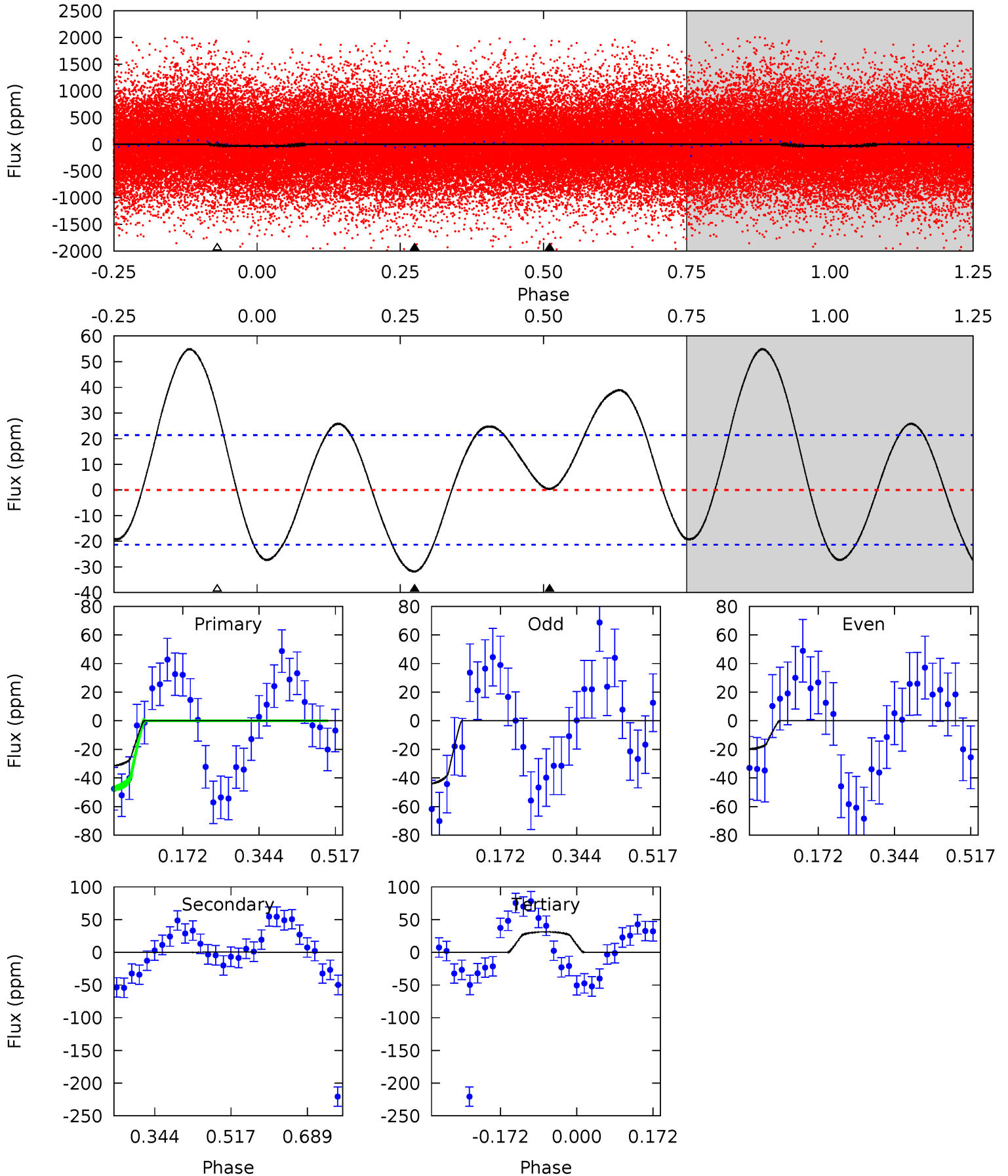
TCE 002282763-01 P= 0.688282 Days $T_0=131.709332$ (BKJD)



DV Model-Shift Uniqueness Test

002282763-01, P = 0.688275 Days, E = 131.021985 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
6.62	-0.07	-6.51	0	4.45	1.37	5.38	13.1	6.62	6.43	-0.07	2.55	0.75	0.63	3.30



Alt Model-Shift Uniqueness Test

This plot does not exist for this TCE.

Stellar Parameters For KIC 002282763

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	8014^{+223}_{-335}	$3.720^{+0.432}_{-0.108}$	$-0.080^{+0.200}_{-0.350}$	$3.274^{+0.682}_{-1.591}$	$2.054^{+0.292}_{-0.501}$	$0.082^{+0.350}_{-0.028}$
	+3%/-4%	+12%/-3%	+250%/-438%	+21%/-49%	+14%/-24%	+425%/-34%
Source	KIC0	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 002282763-01 / KOI

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	0 ± 5	$2.57^{+0.86}_{-0.83}$	6192^{+479}_{-683}	-5029^{+943}_{-609}	$-0.010^{+0.184}_{-0.167}$
Alt.	-80 ± 6	$3.13^{+0.89}_{-0.98}$	6200^{+501}_{-722}	7268^{+1266}_{-983}	$1.695^{+1.718}_{-0.673}$

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 $A_{obs} \gg 1.0$

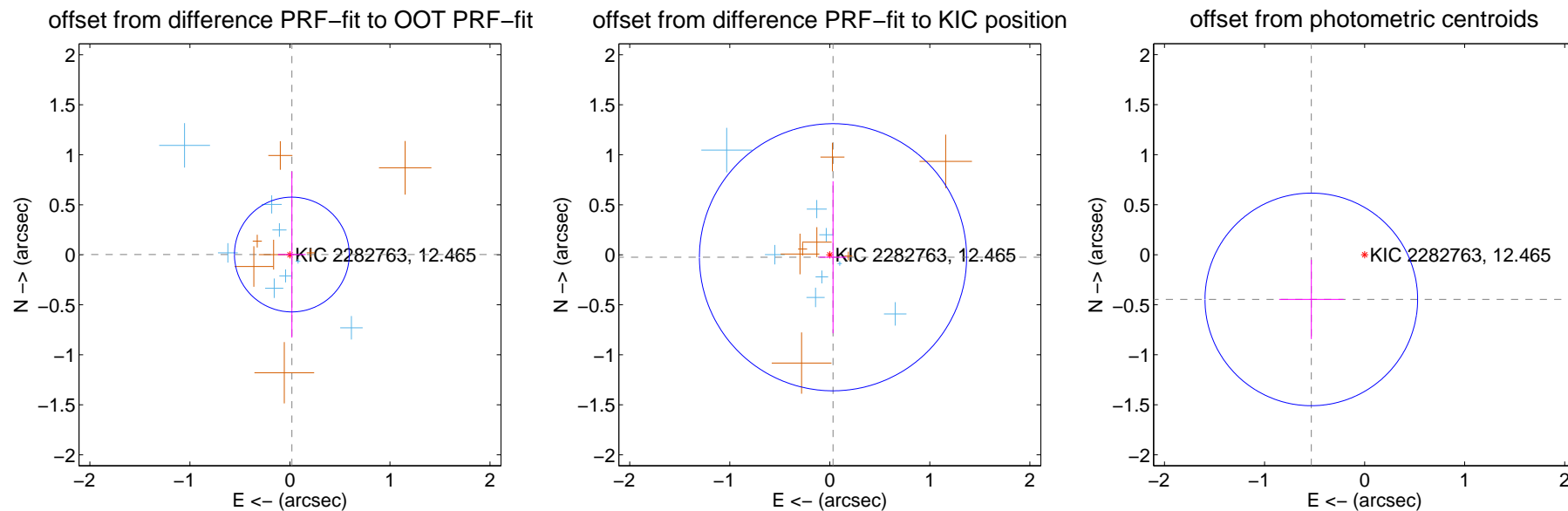
DV Centroid Data

Supplemental centroid analysis for 002282763-01. Kepler magnitude: 12.46. Transit SNR 8.73

There are 8 quarters with good PRF difference image offsets

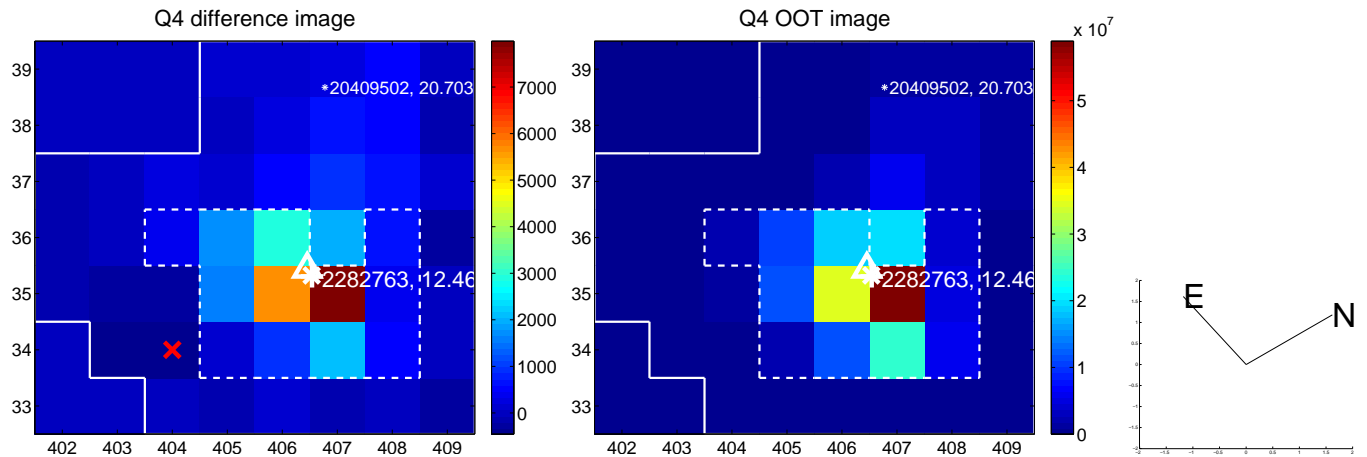
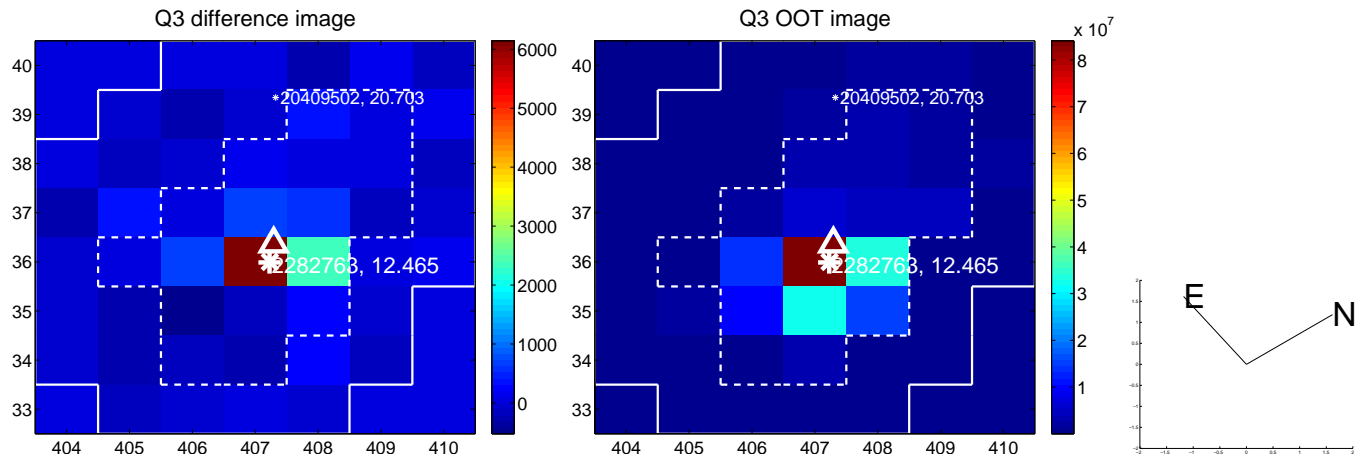
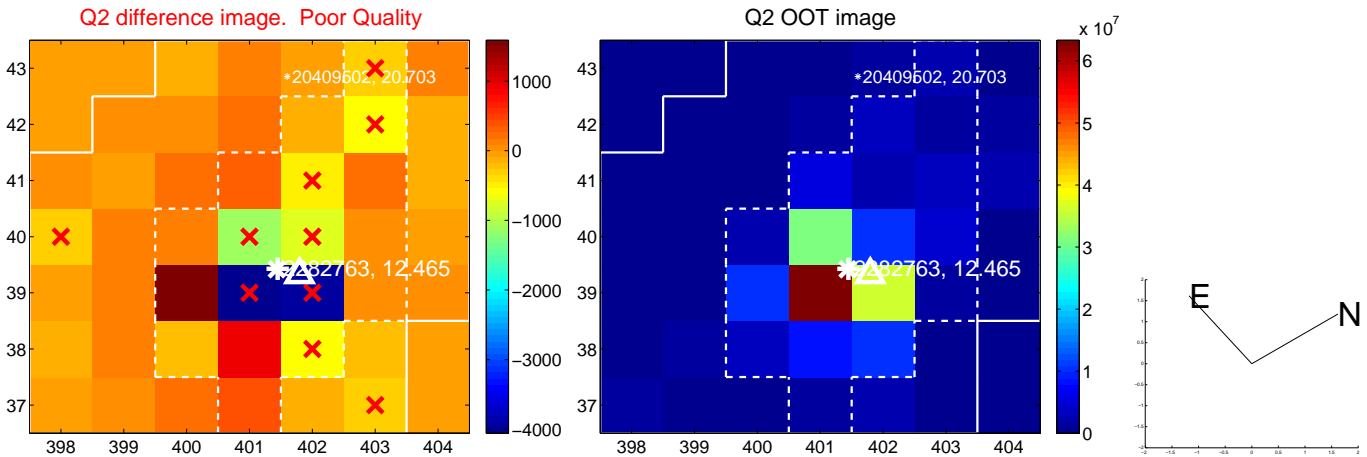
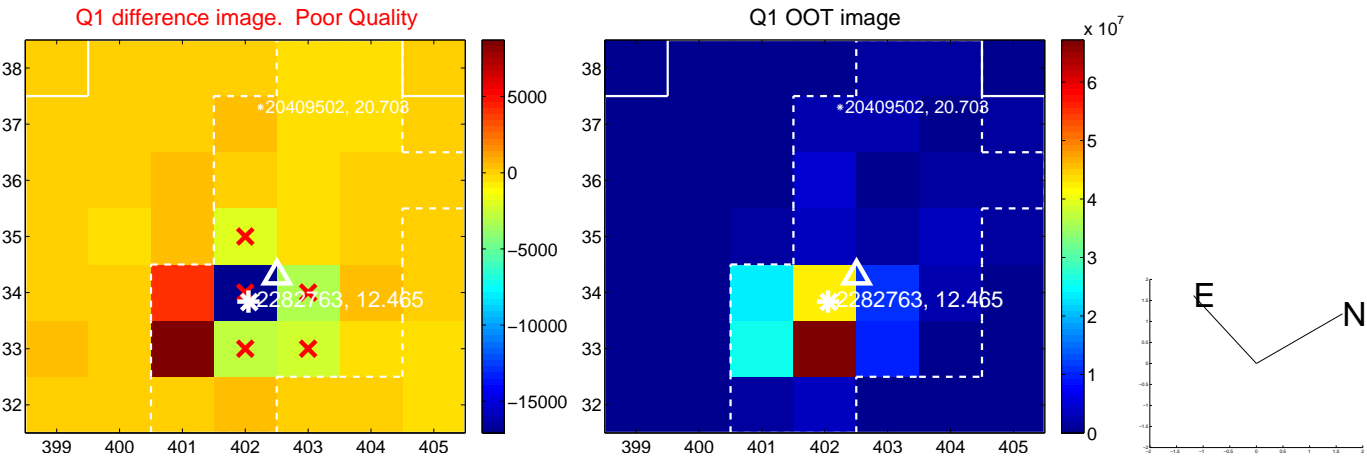
The direct PRF centroid is offset from the target star catalog position by about 0.04 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.019 ± 0.191	0.10	-0.019 ± 0.138	0.002 ± 0.831
PRF-fit source offset from KIC position	0.040 ± 0.445	0.09	-0.032 ± 0.135	-0.025 ± 0.760
photometric centroid source offset	0.70 ± 0.35	1.96	0.53 ± 0.32	-0.45 ± 0.40

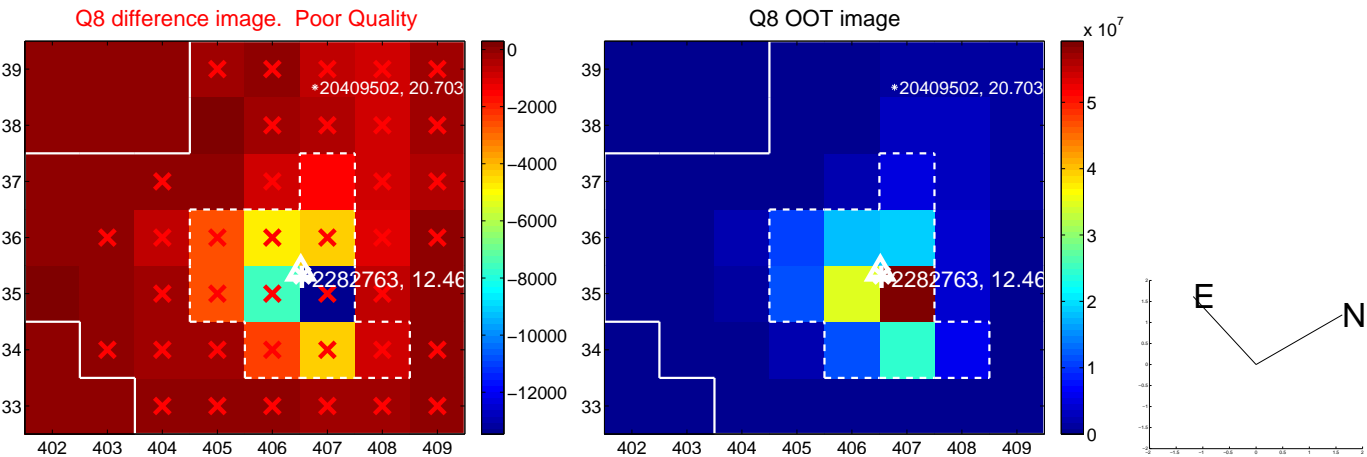
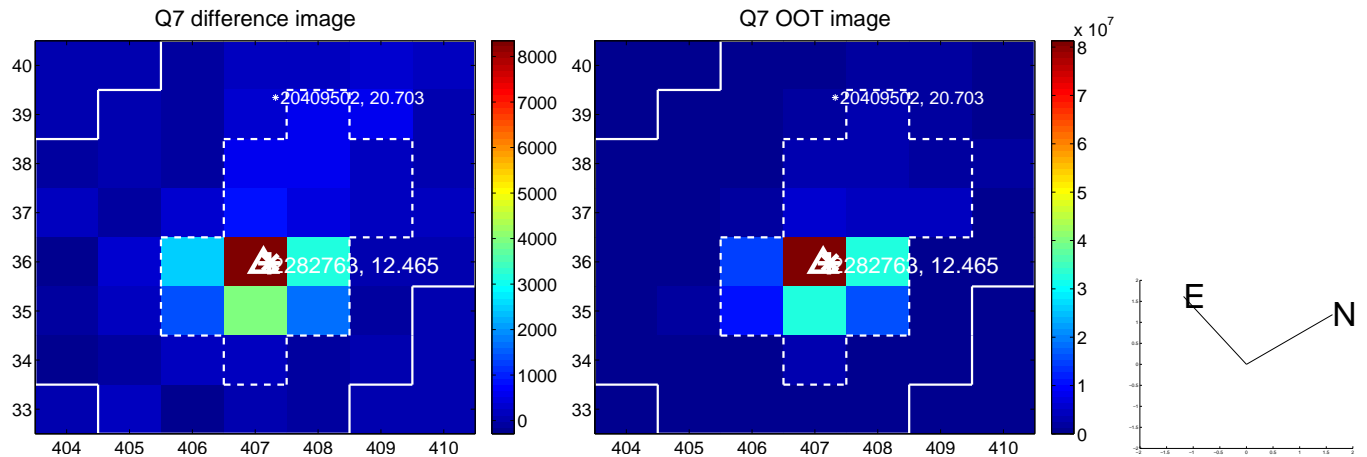
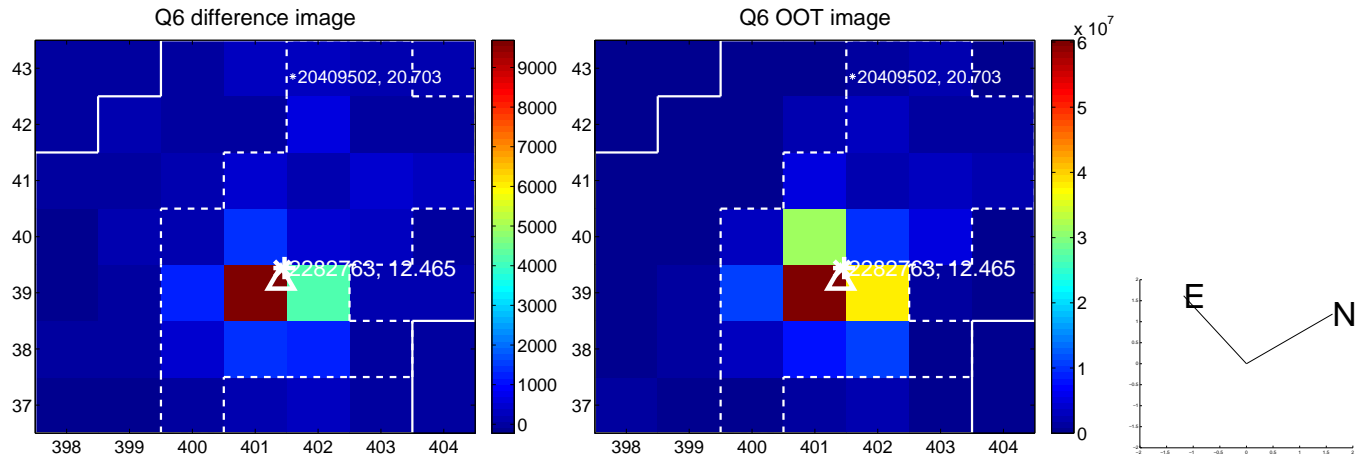
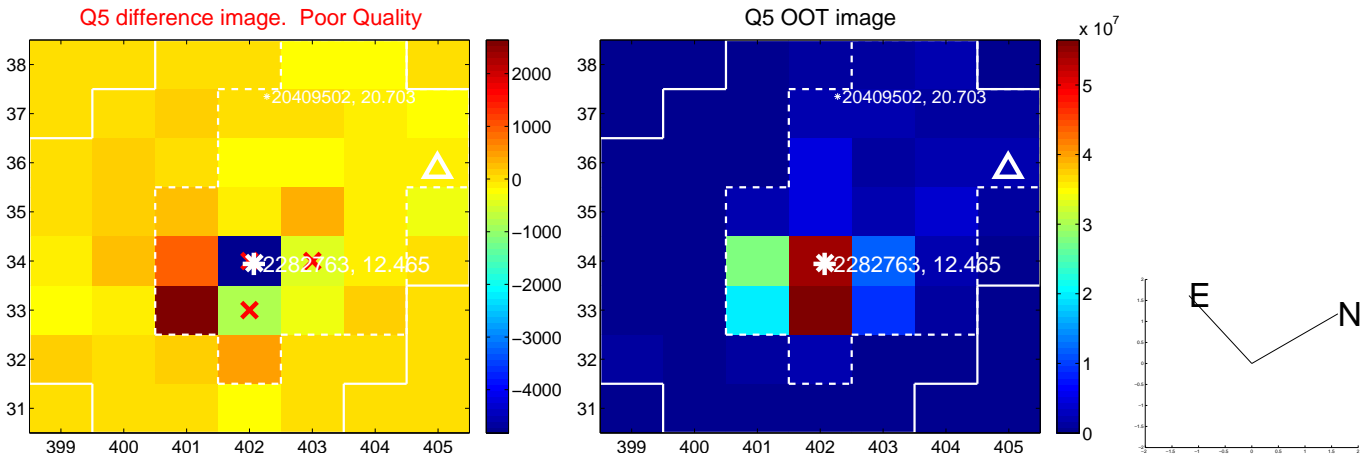


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets**; **Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

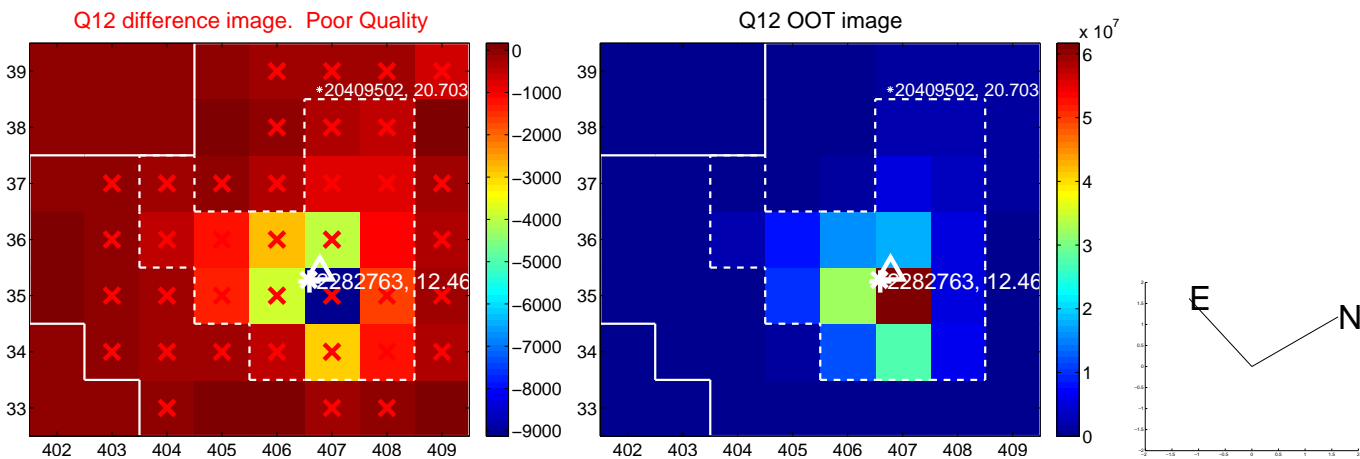
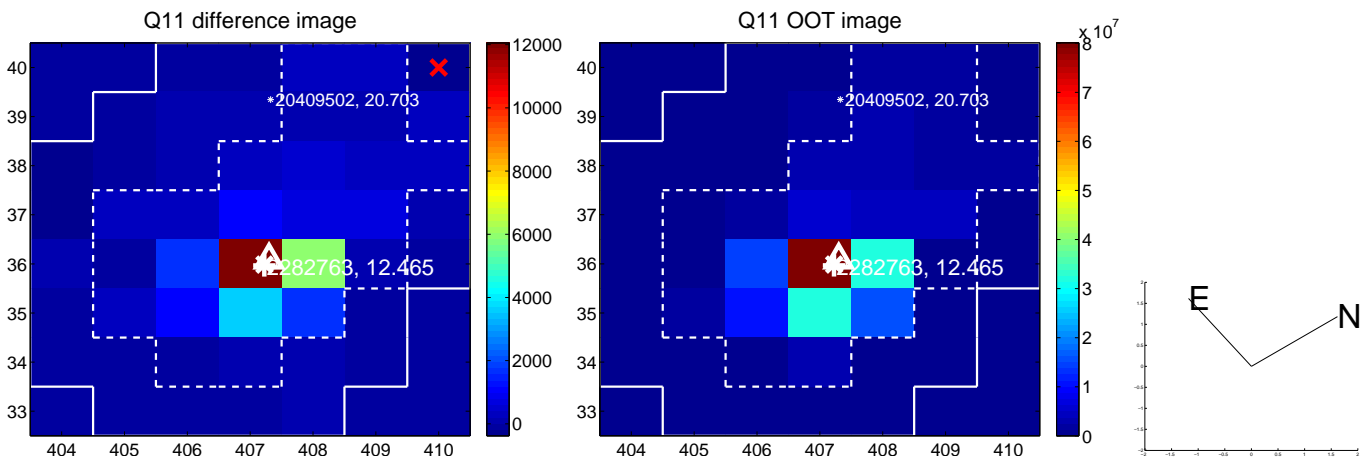
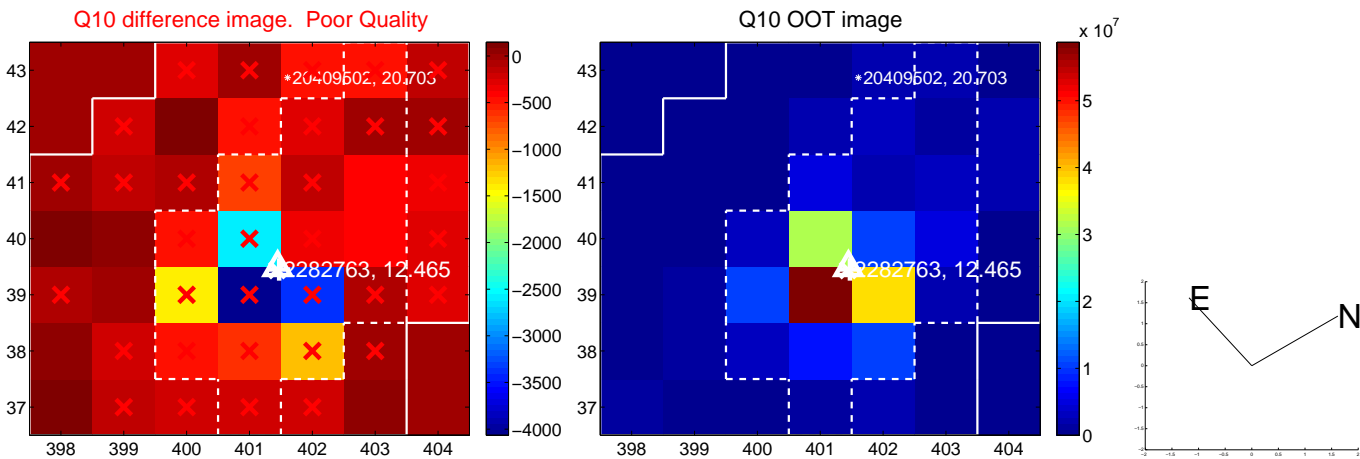
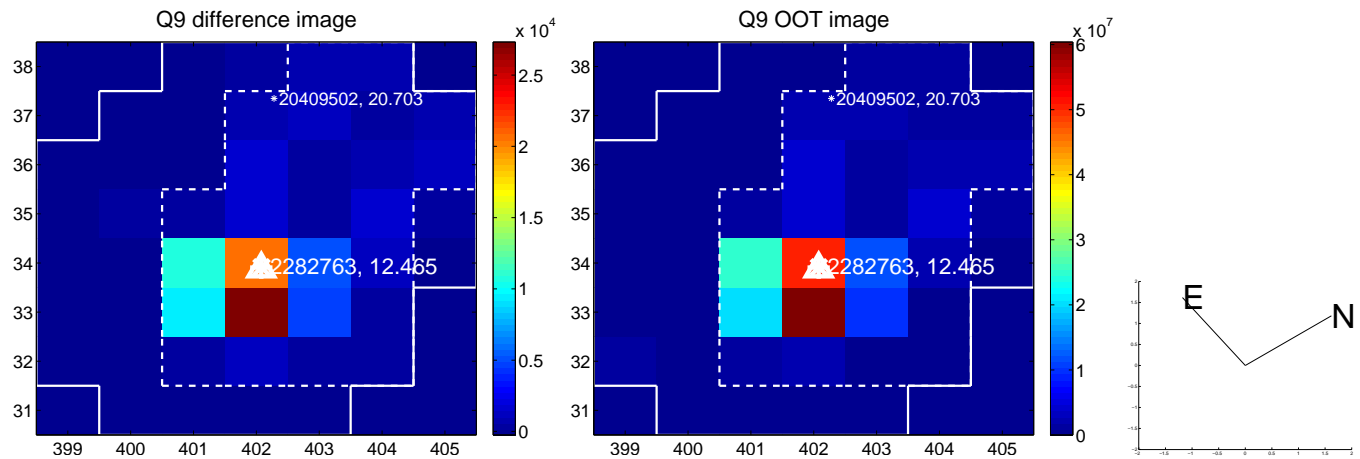
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



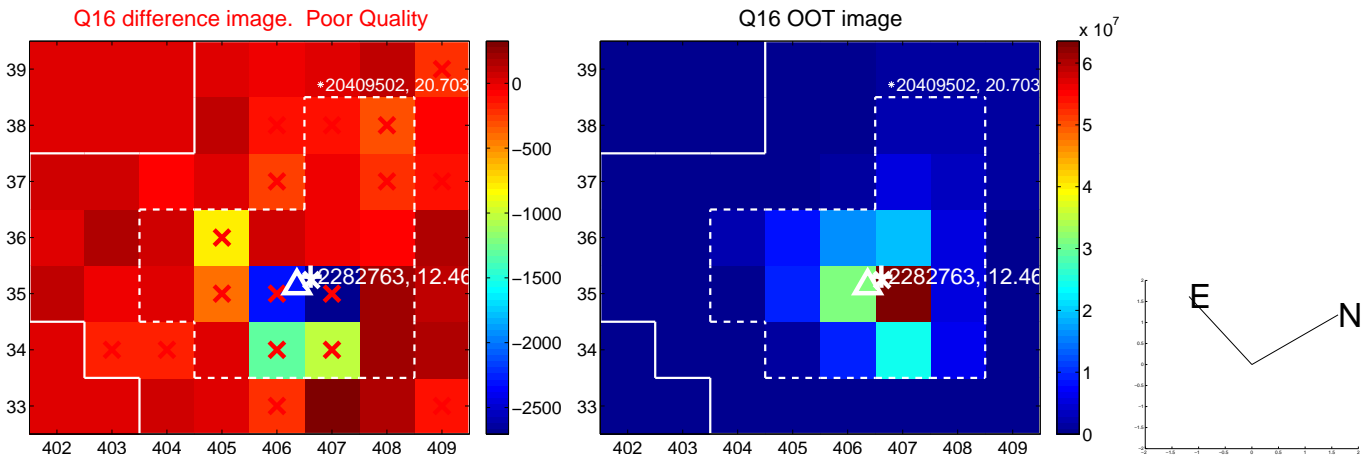
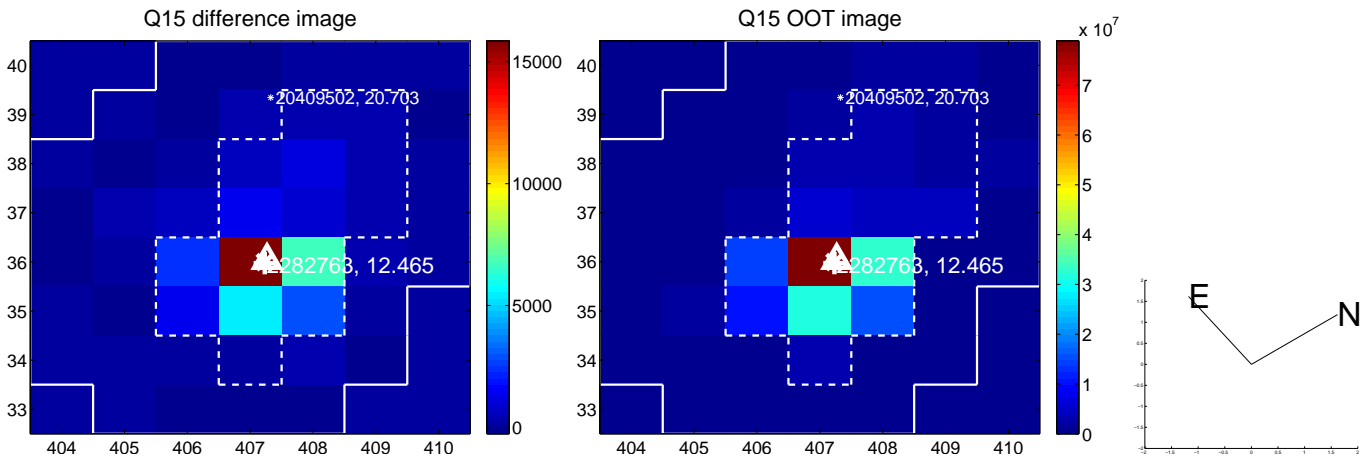
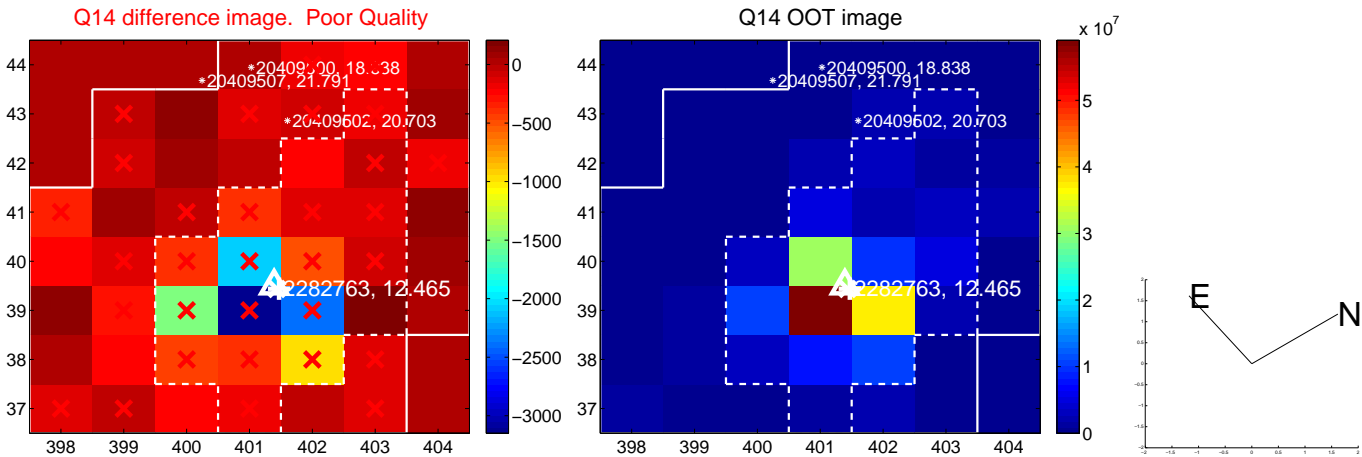
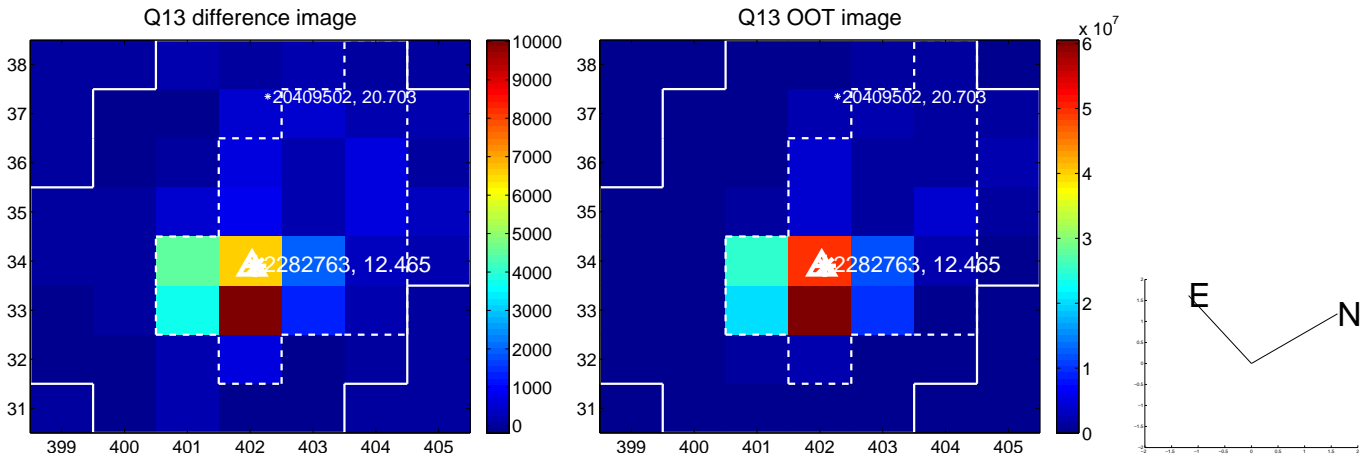
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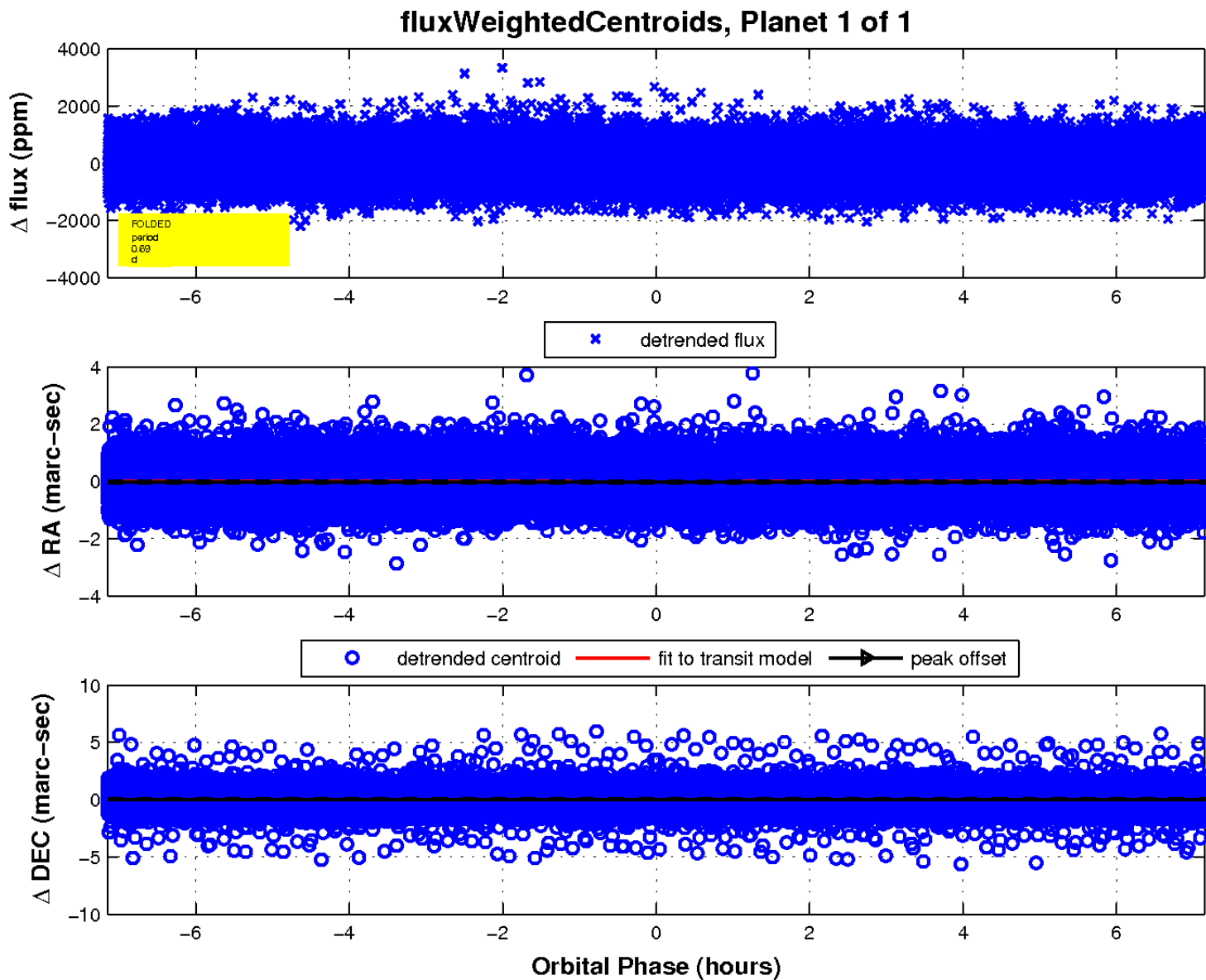
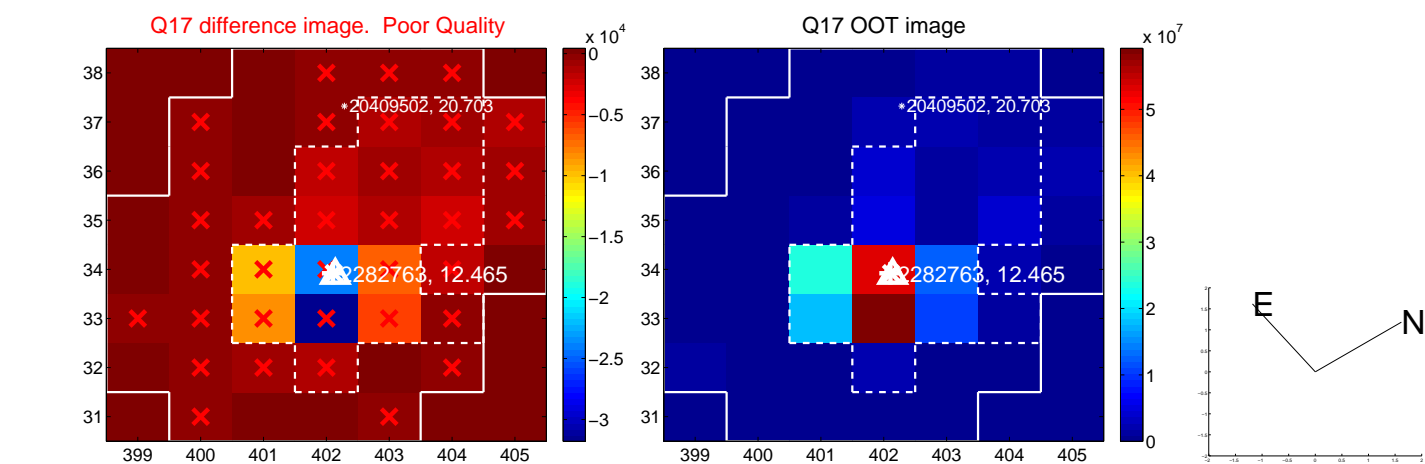
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UKIRT Image

Declination

