

KIC 004950232

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})
004950232-01	OBS	1753.01	0.979438	132.424764	419.4	1.161	22.0	25.1	0.74	5532	1.85	1427.44

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
004950232-01	OBS	FP	0.00	0	0	1	0	CENT_RESOLVED_OFFSET

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 004950232-01

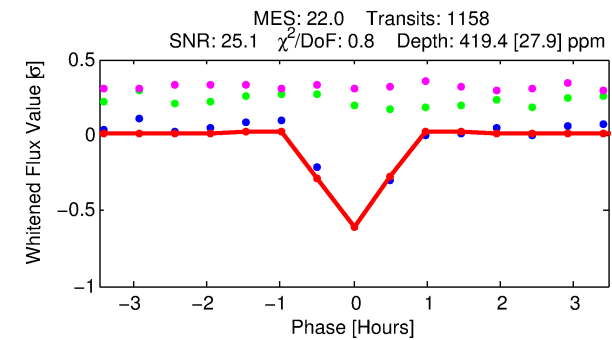
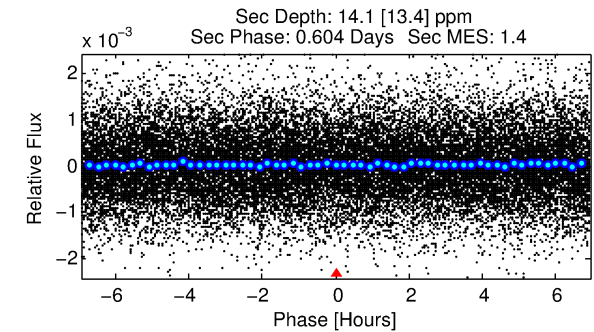
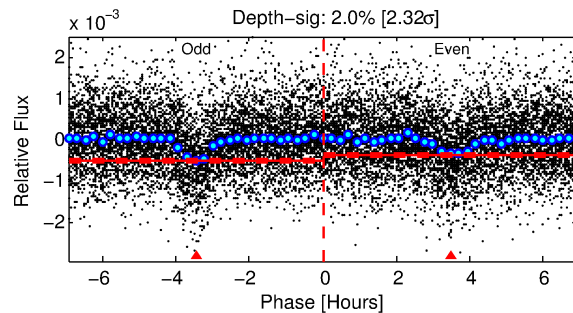
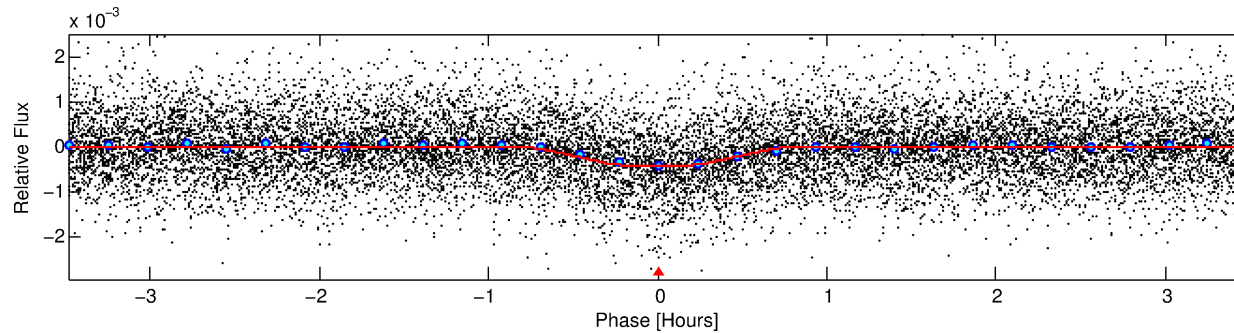
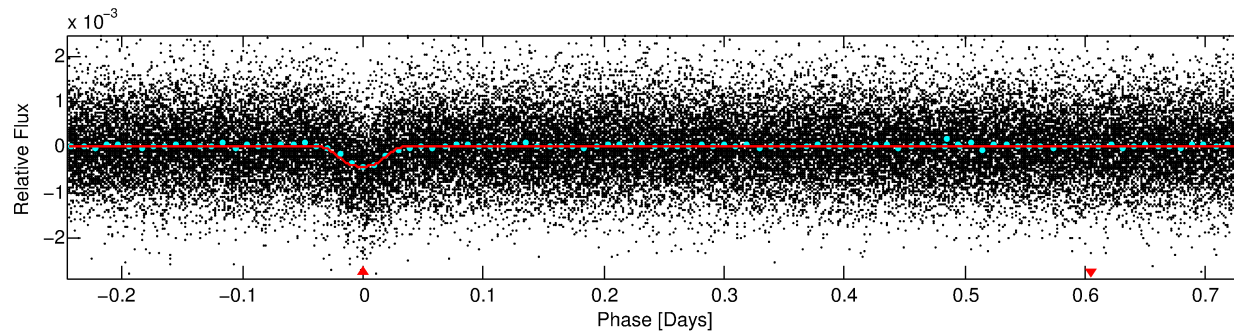
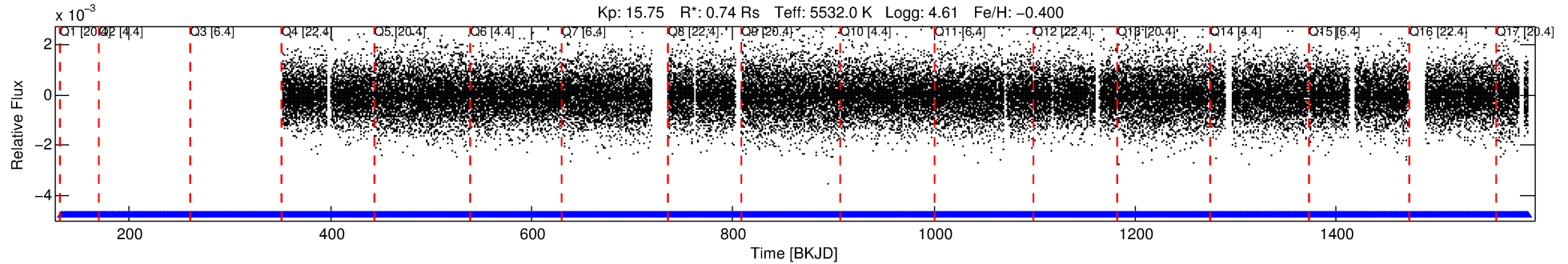
No Significant Match Found

DV One-Page Summary

KIC: 4950232 Candidate: 1 of 1 Period: 0.979 d

KOI: K01753.01 Corr: 0.911

Kp: 15.75 R*: 0.74 Rs Teff: 5532.0 K Logg: 4.61 Fe/H: -0.400



DV Fit Results:

Period = 0.97944 [0.00000] d
Epoch = 132.4248 [0.0007] BKJD
Rp/R* = 0.0227 [0.0060]
a/R* = 3.18 [3.45]
b = 0.91 [0.24]
Seff = 1427.44 [374.63]
Teq = 1567 [103] K
Rp = 1.85 [0.60] Re
a = 0.0181 [0.0028] AU
Ag = 0.74 [0.83] [-0.31σ]
Teffp = 2249 [619] K [1.09σ]

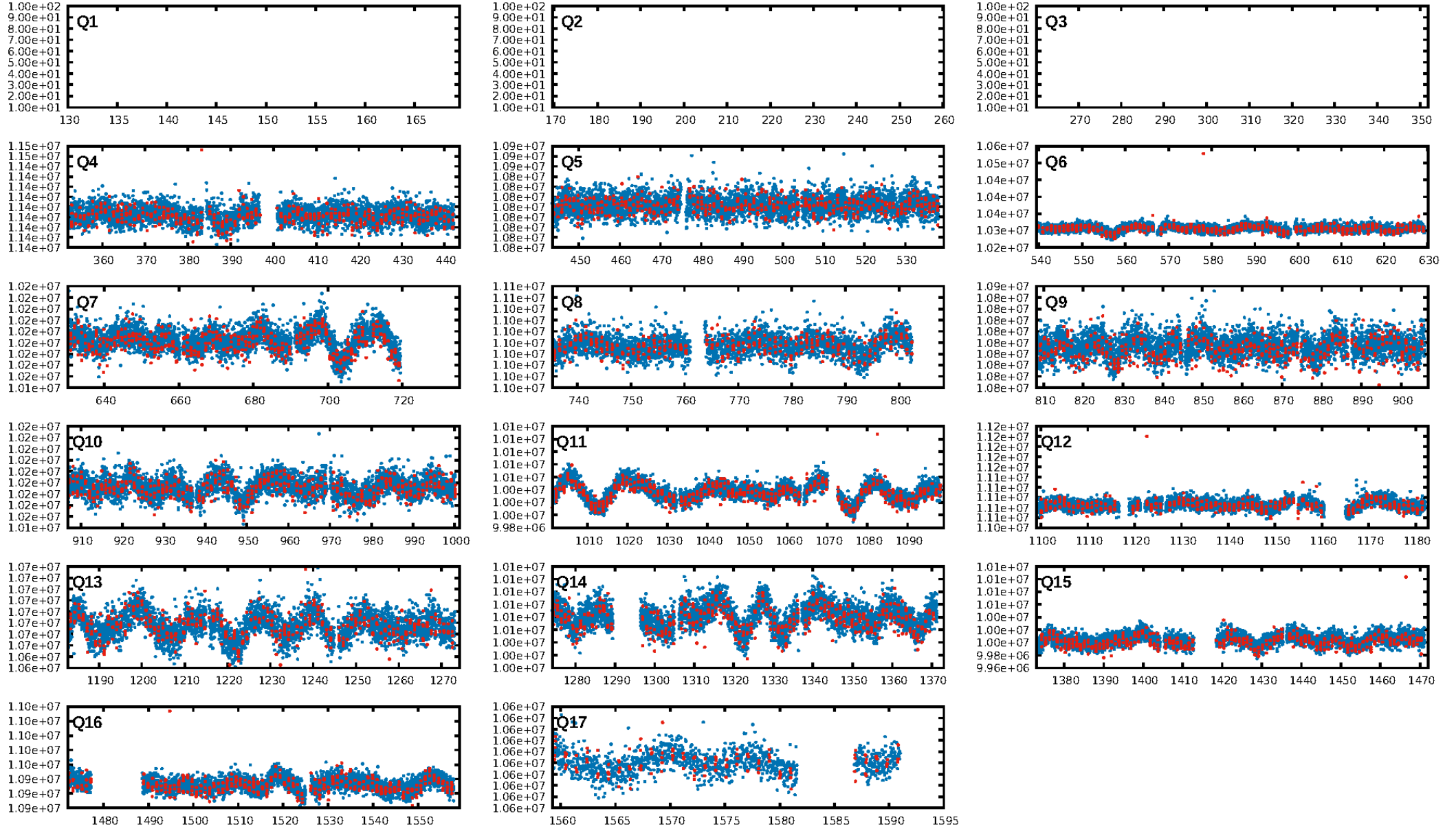
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: 1.03e-101
RollingBand-fgt: 1.00 [1130/1130]
GhostDiagnostic-chr: -0.5955
Centroid-sig: 0.0%
Centroid-so: 32.089 arcsec [101.89σ]
OotOffset-rm: N/A
KicOffset-rm: N/A
OotOffset-st: 0/0/0/0 [0]
KicOffset-st: 0/0/0/0 [0]
DiffImageQuality-fgm: N/A
DiffImageOverlap-fno: 1.00 [14/14]

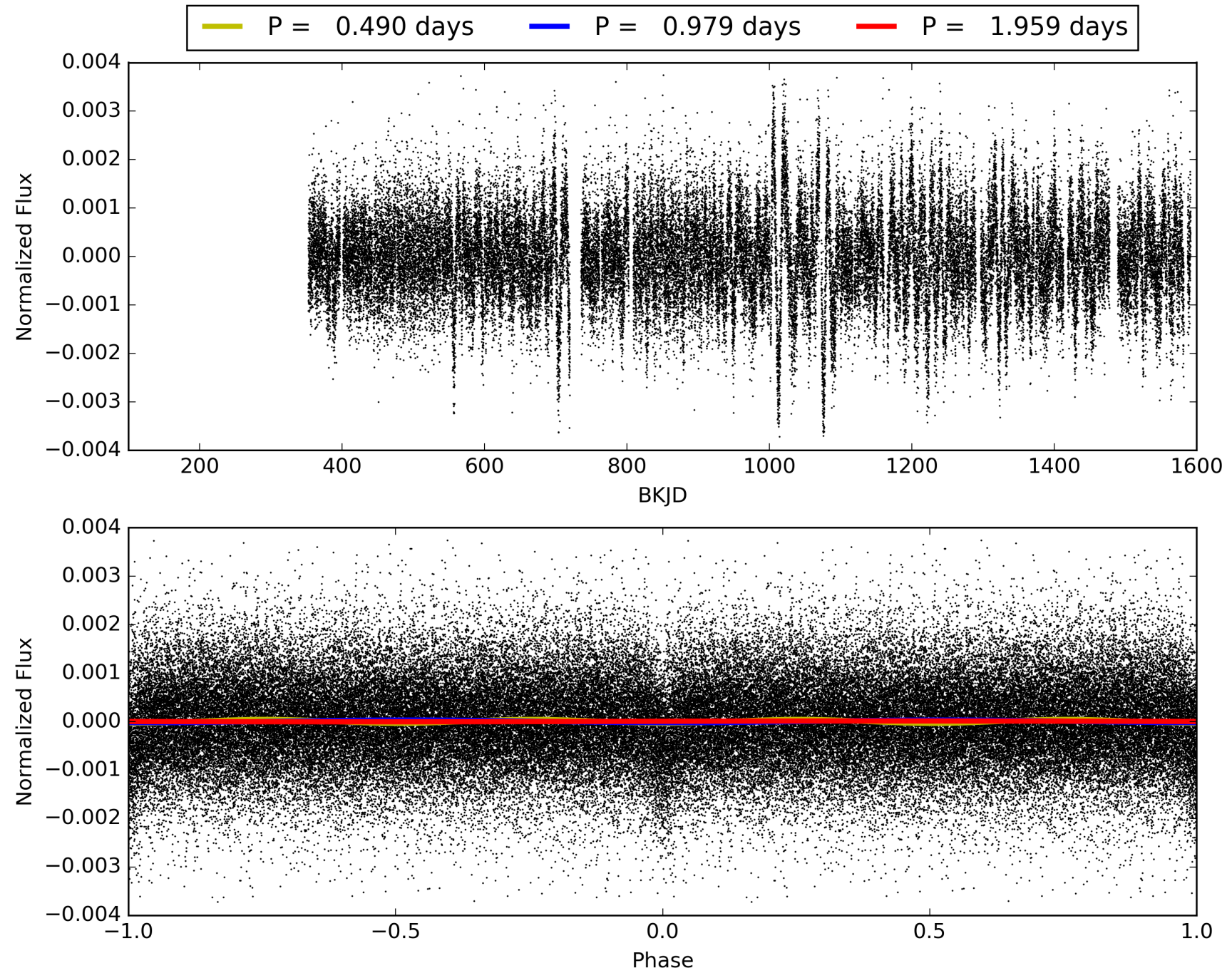
Software Revision: svn+ssh://murzim/repo/soc/tags/release/9.3.42@60958 -- Date Generated: 29-Jan-2016 20:12:00 Z

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

TCE 004950232-01, PDC Light Curves

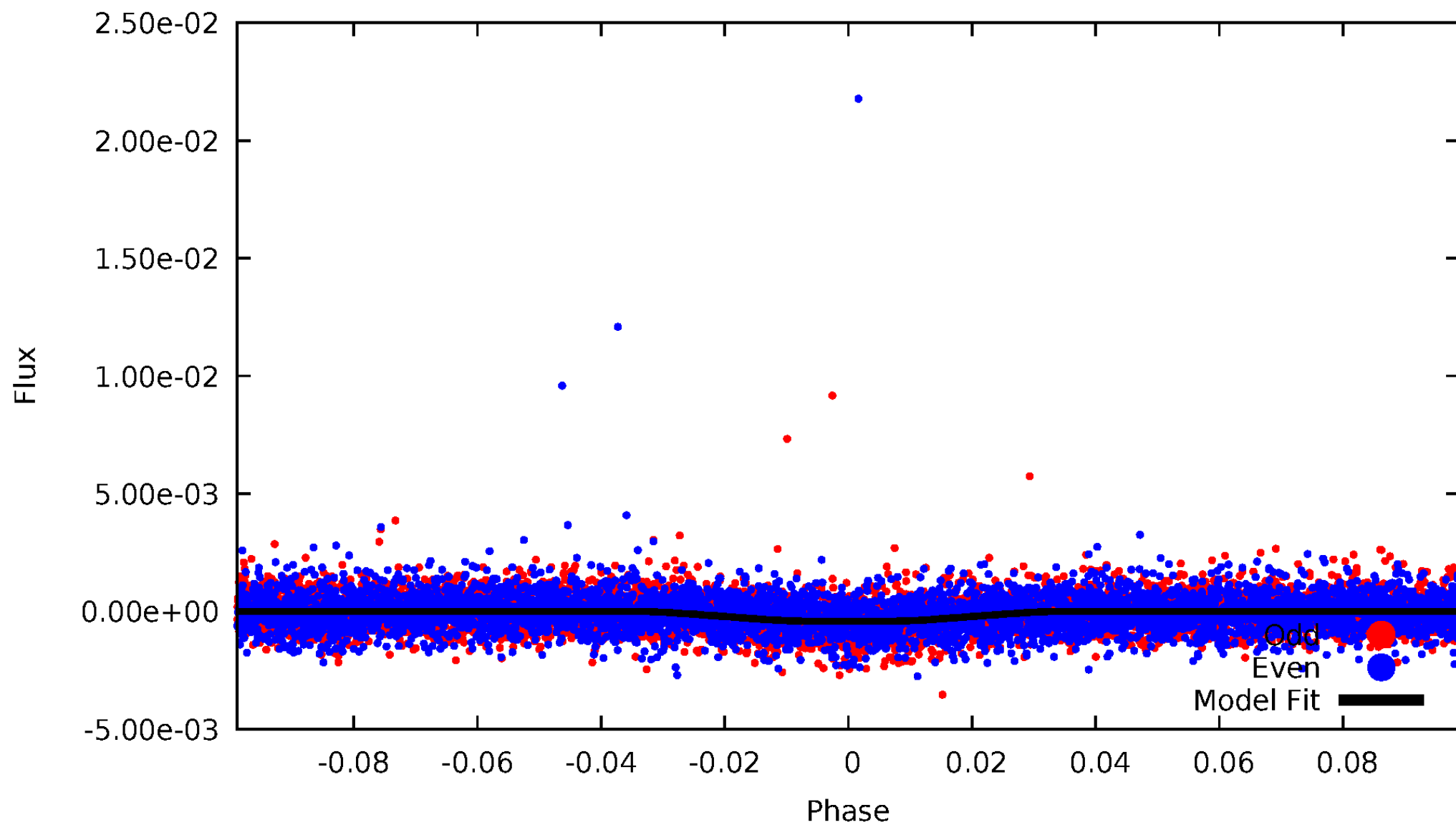


TCE 004950232-01



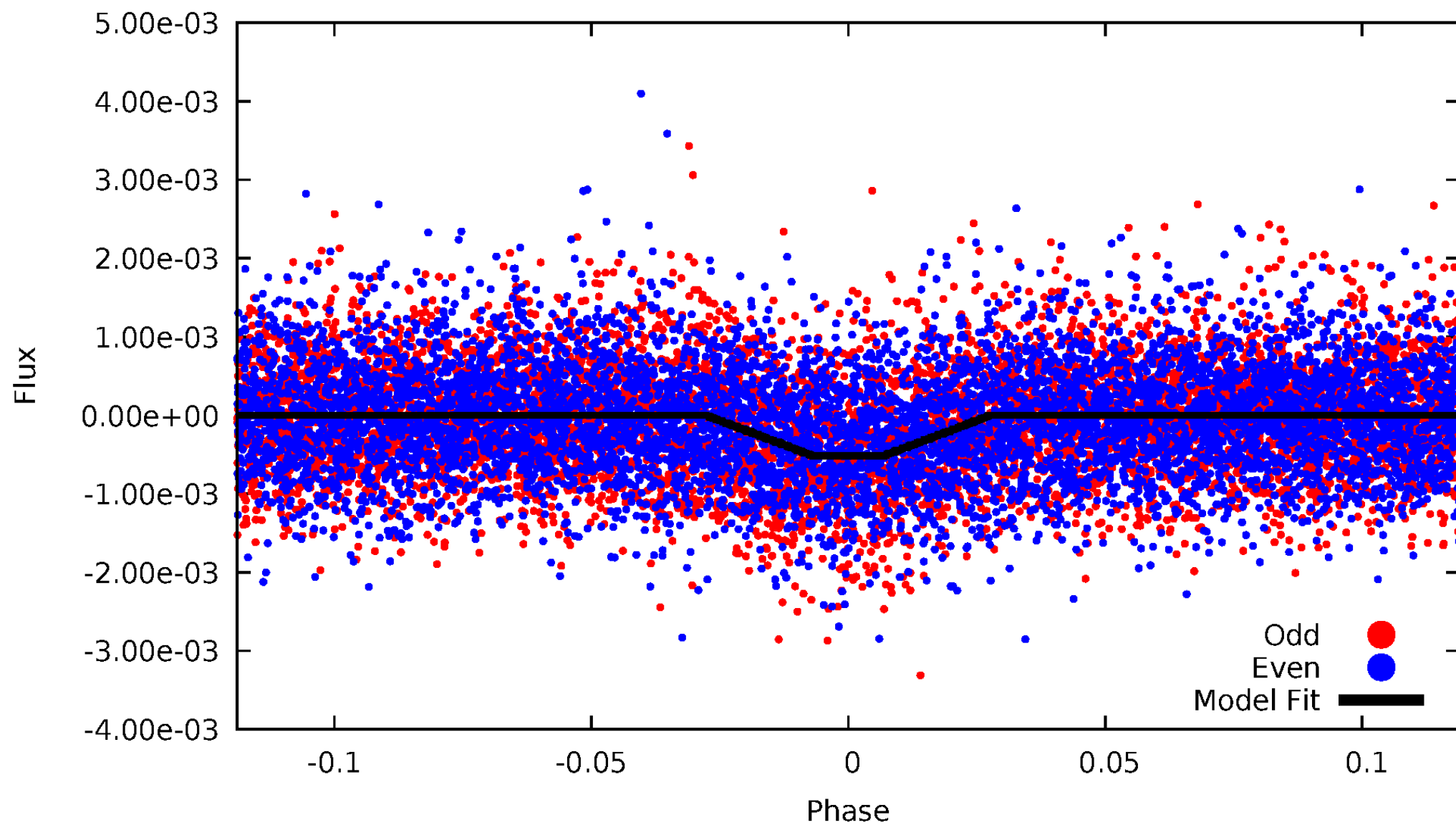
DV Odd/Even

TCE 004950232-01

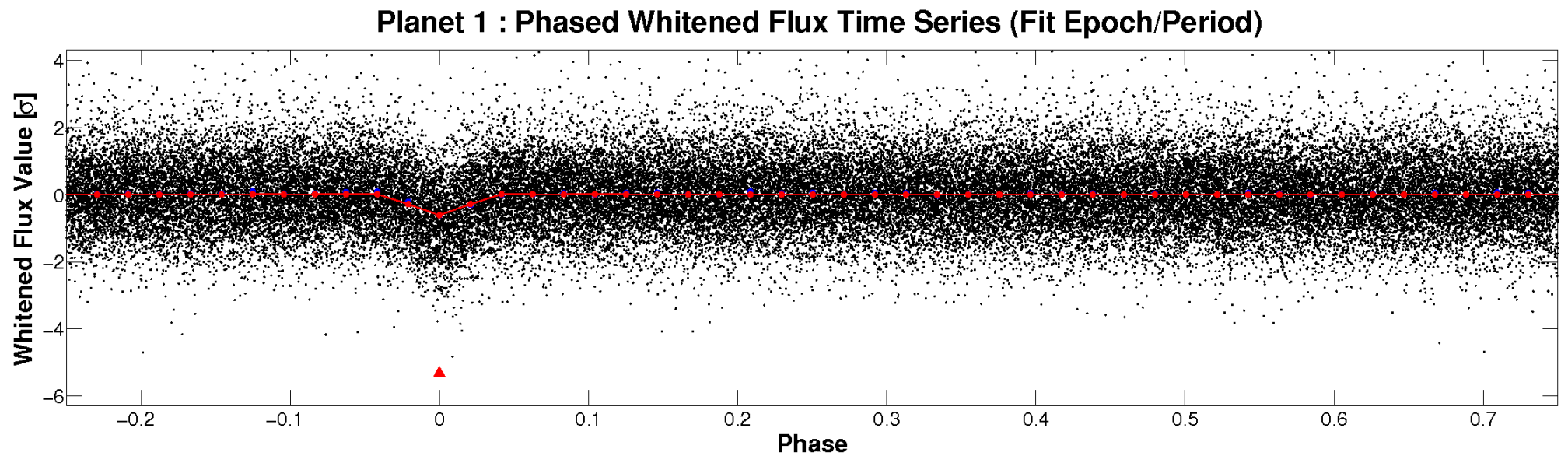
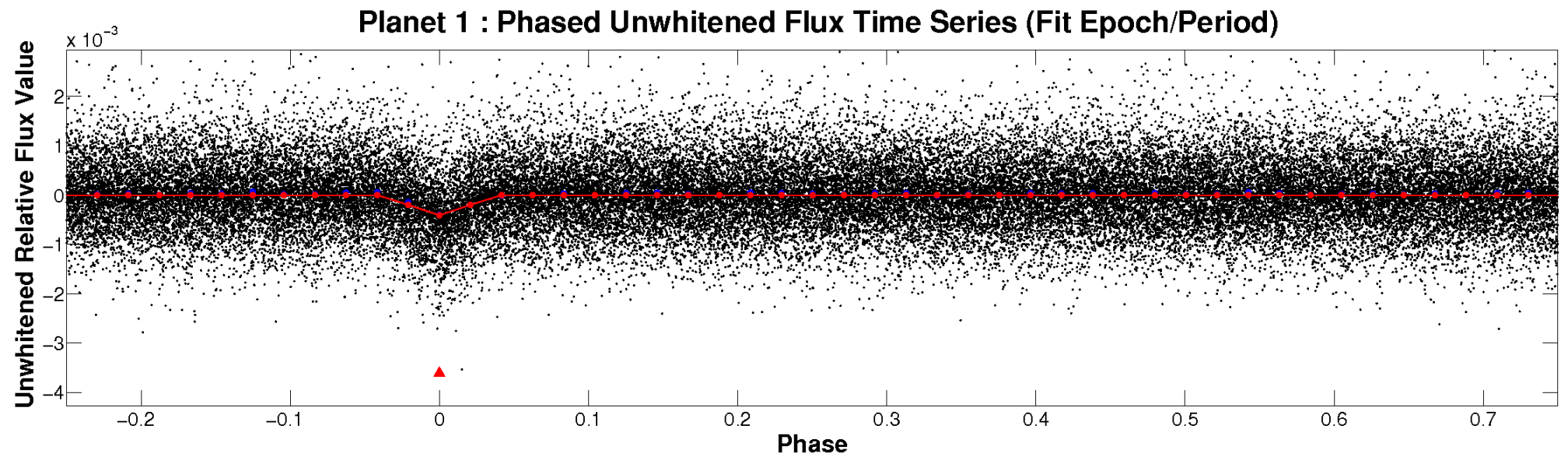


ALT Odd/Even

TCE 004950232-01

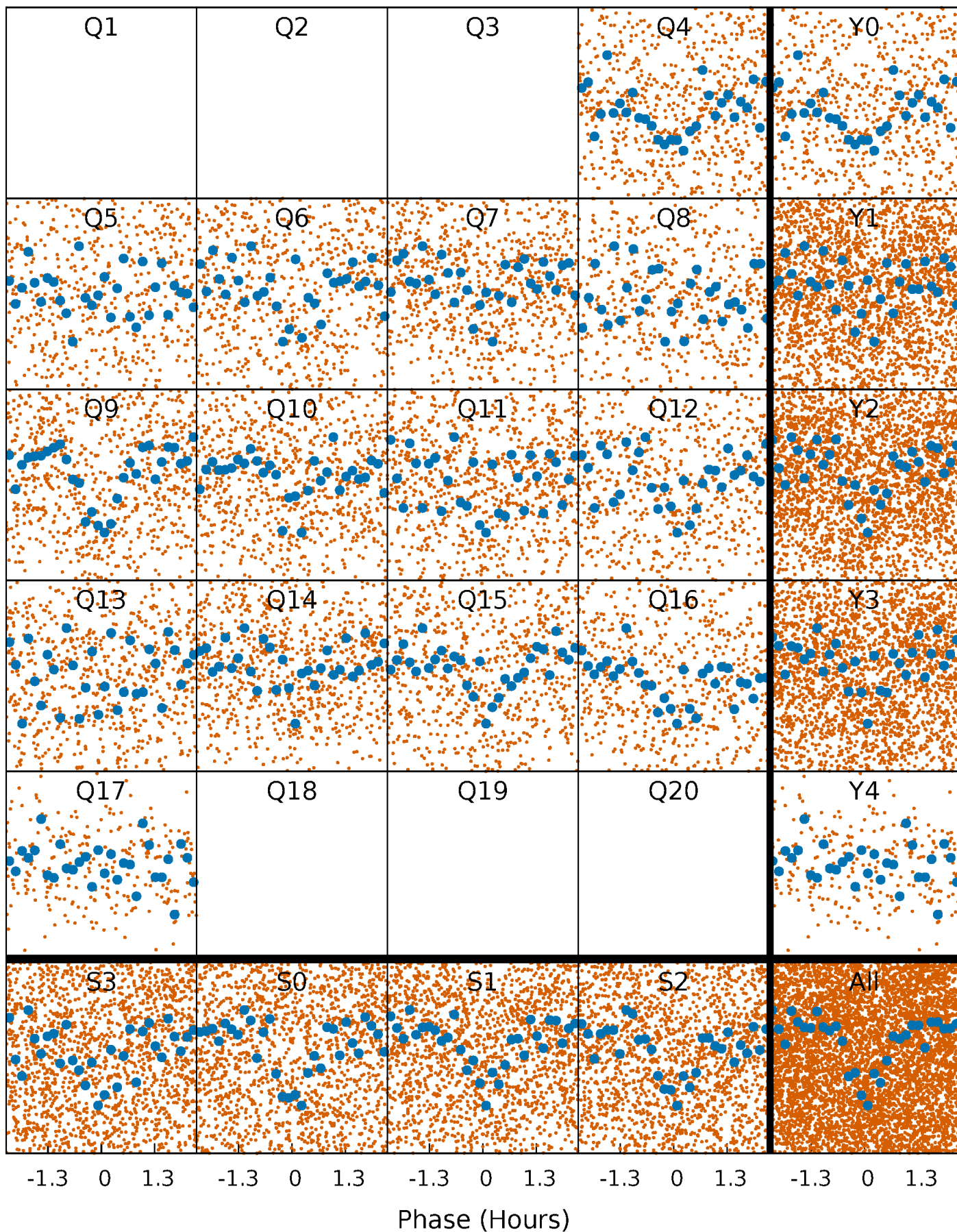


Non-Whitened Vs. Whitened Light Curve



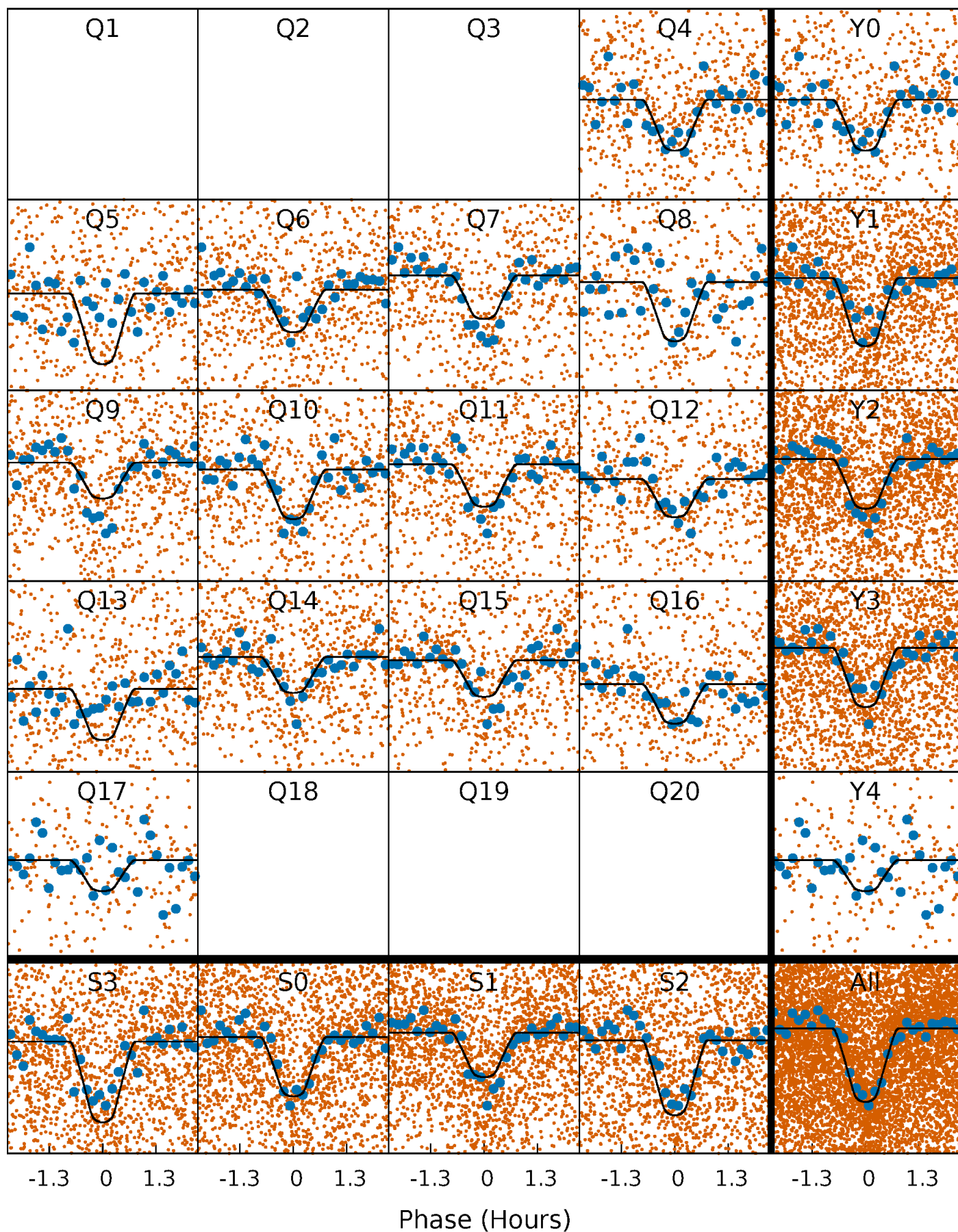
PDC Quarter-Phased Transit Curves

TCE 004950232-01 P= 0.979438 Days $T_0=132.424764$ (BKJD)



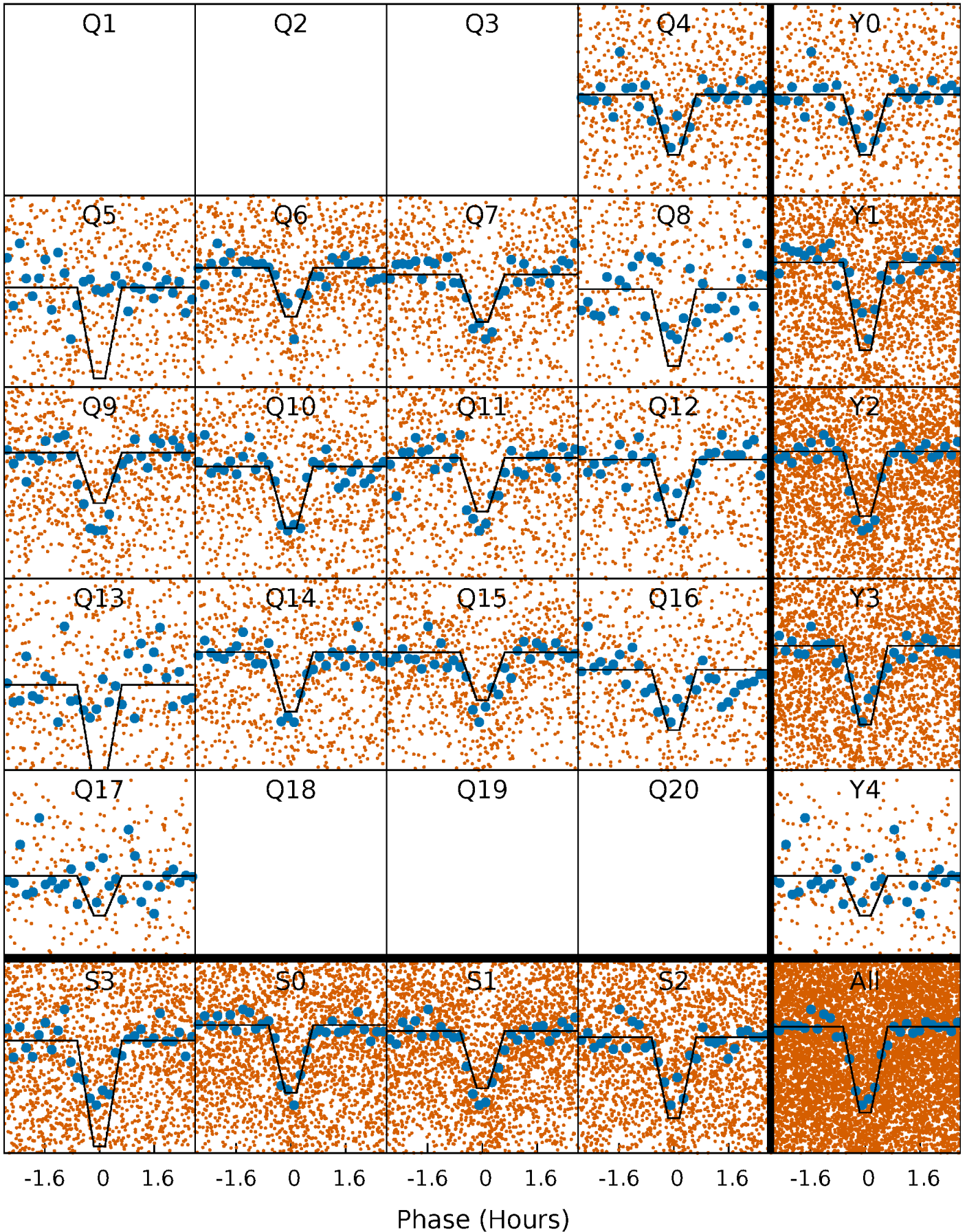
DV Quarter-Phased Transit Curves

TCE 004950232-01 P= 0.979438 Days $T_0=132.424764$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

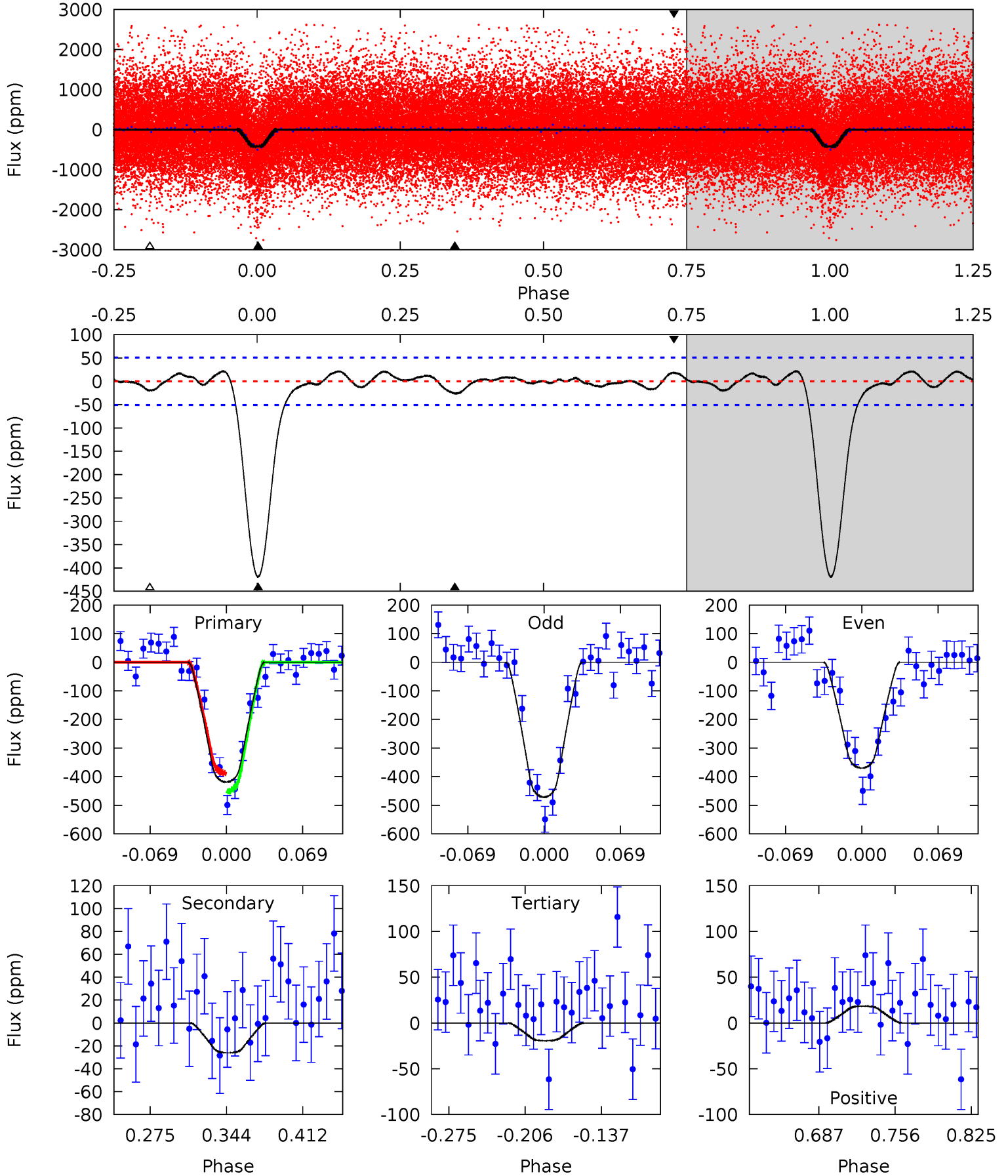
TCE 004950232-01 P= 0.979447 Days $T_0=132.418915$ (BKJD)



DV Model-Shift Uniqueness Test

004950232-01, P = 0.979438 Days, E = 132.424764 Days

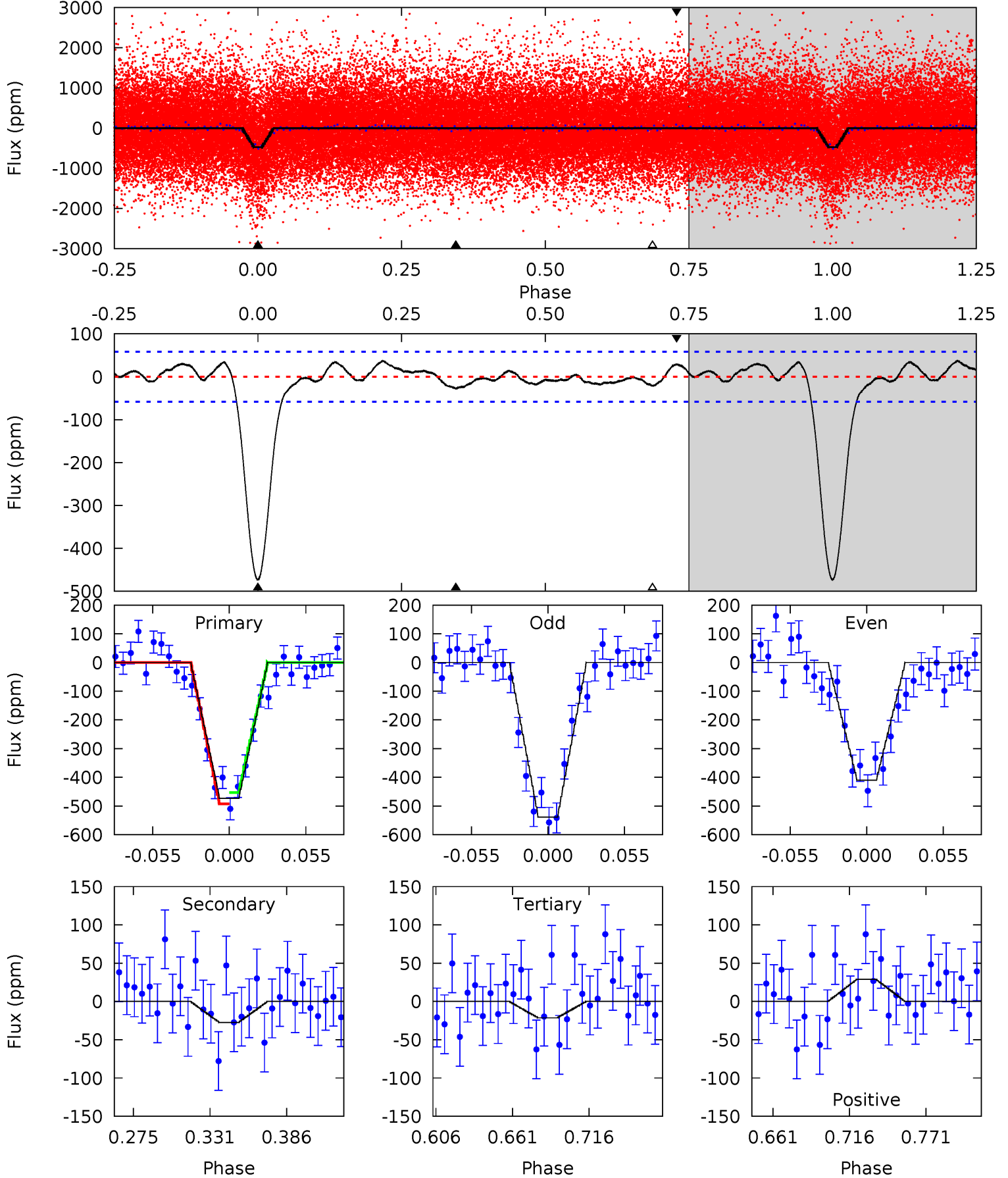
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.3	2.39	1.78	1.68	4.64	1.82	0.86	36.5	36.6	0.61	0.71	4.65	0.93	0.05	2.96



Alt Model-Shift Uniqueness Test

004950232-01, P = 0.979447 Days, E = 132.418915 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
38.0	2.20	1.71	2.31	4.69	1.92	1.21	36.2	35.6	0.49	-0.11	5.15	1.01	0.07	1.56



Stellar Parameters For KIC 004950232

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	R (R_{\odot})	$M(M_{\odot})$	p_{\star} ($\text{g}\cdot\text{cm}^{-3}$)
	5532^{+193}_{-193}	$4.607^{+0.040}_{-0.120}$	$-0.400^{+0.300}_{-0.300}$	$0.745^{+0.139}_{-0.060}$	$0.833^{+0.079}_{-0.097}$	$2.838^{+0.470}_{-1.042}$
	+3%/-3%	+1%/-3%	+75%/-75%	+19%/-8%	+9%/-12%	+17%/-37%
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 004950232-01 / KOI 1753.01

Detrend	Depth (ppm)	R_p (R_{\oplus})	T_{max} (K)	T_{obs} (K)	A_{obs}
DV	-26 ± 11	$1.89^{+0.54}_{-0.54}$	2230^{+101}_{-98}	3074^{+485}_{-446}	$1.291^{+1.487}_{-0.702}$
Alt.	-27 ± 12	$1.88^{+0.54}_{-0.53}$	2217^{+106}_{-93}	3114^{+478}_{-469}	$1.367^{+1.578}_{-0.744}$

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 $A_{obs} \gg 1.0$

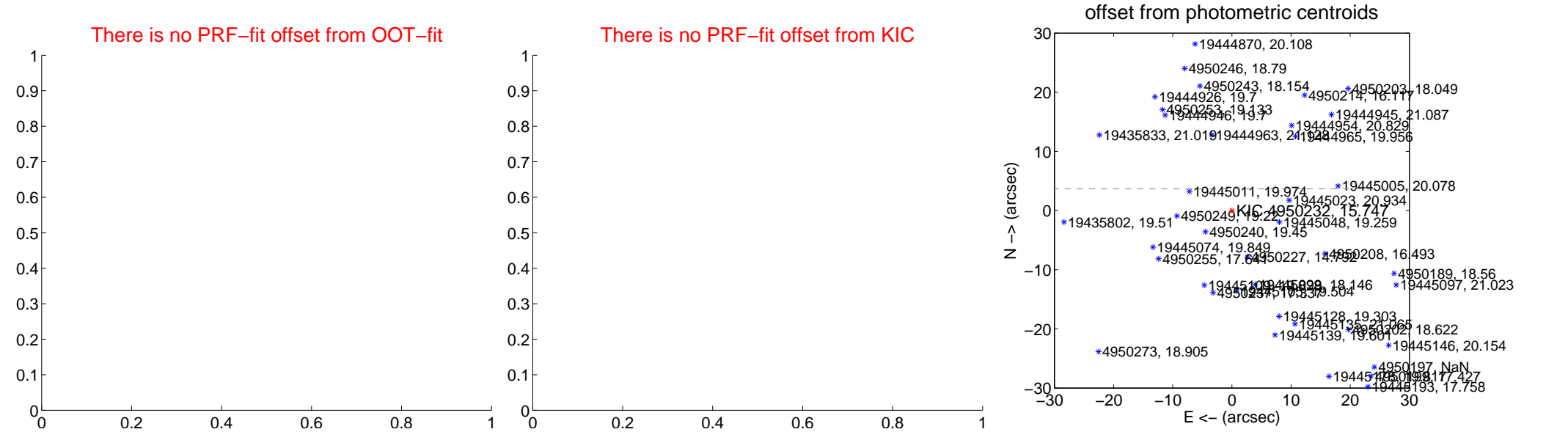
DV Centroid Data

Supplemental centroid analysis for 004950232-01. Kepler magnitude: 15.75. Transit SNR 25.14

There are 0 quarters with good PRF difference image offsets

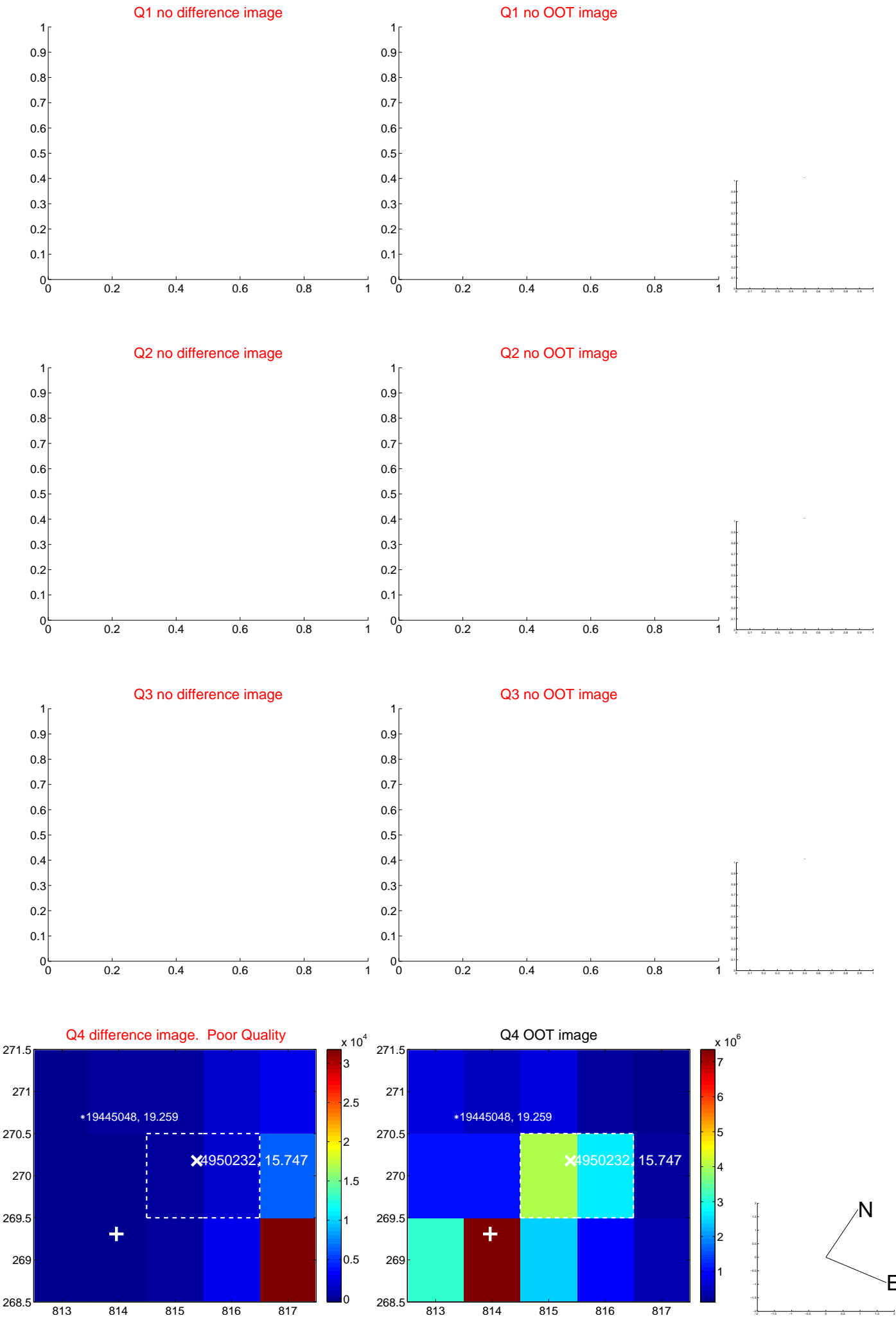
The direct PRF centroid is offset from the target star catalog position by about NaN arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	—	—	—	—
PRF-fit source offset from KIC position	—	—	—	—
photometric centroid source offset	32.09 ± 0.31	101.89	31.88 ± 0.31	3.68 ± 0.37

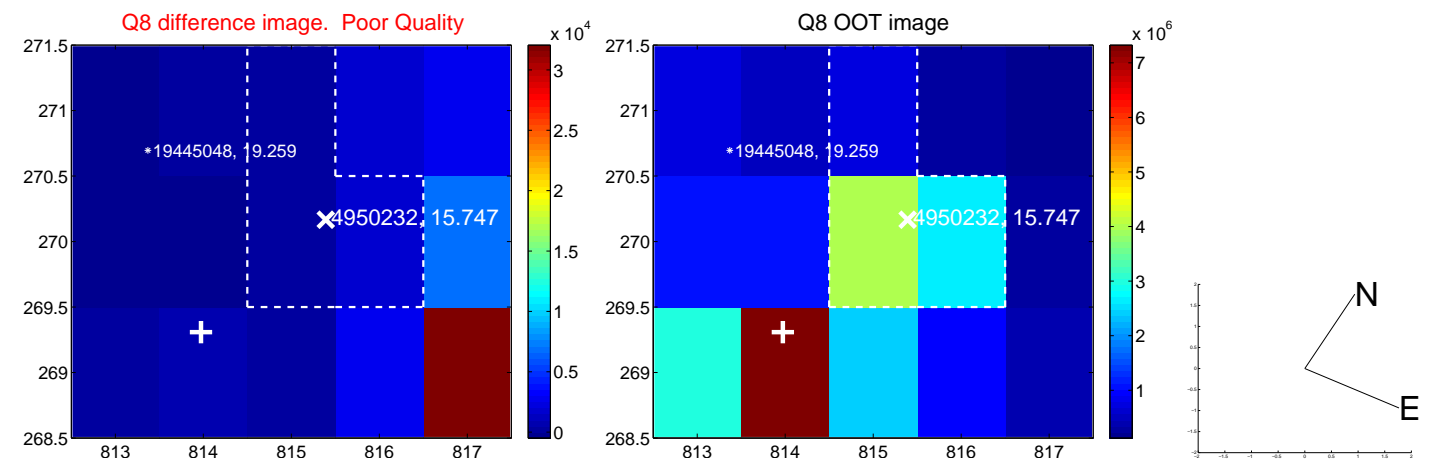
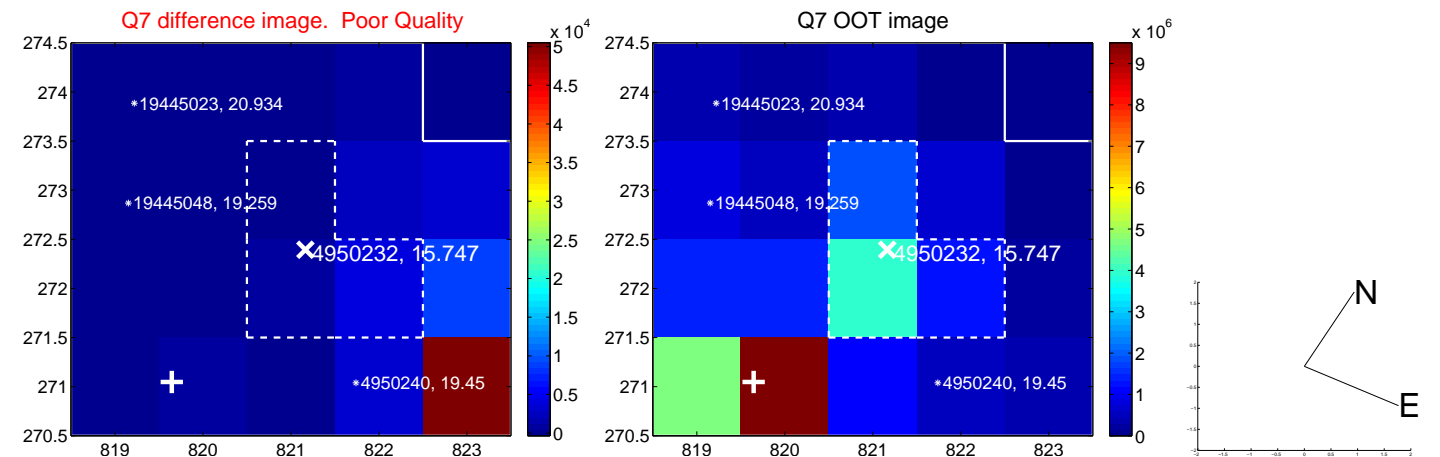
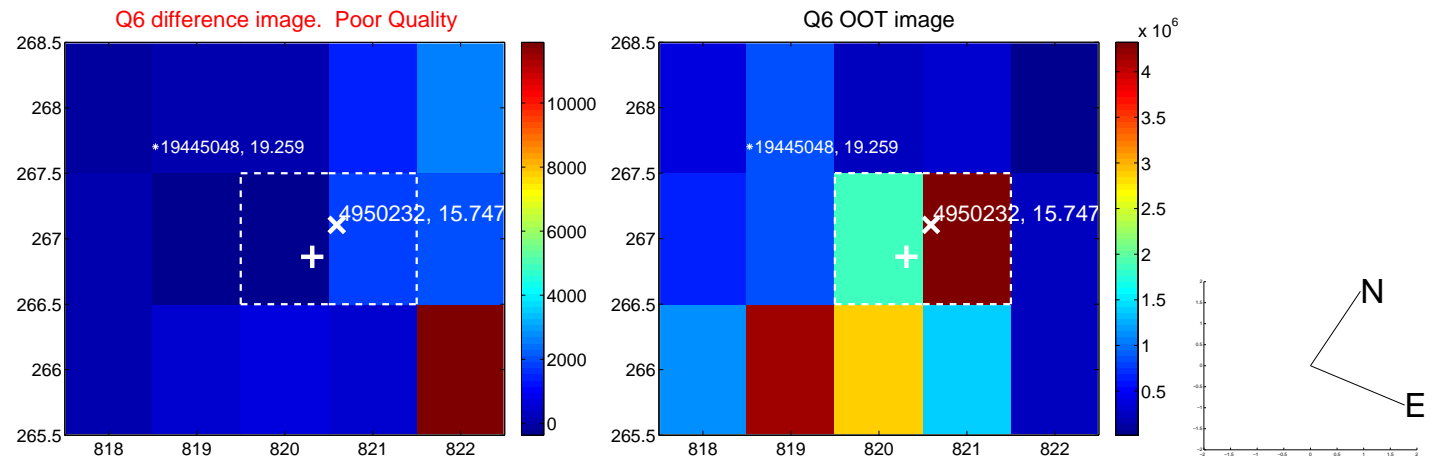
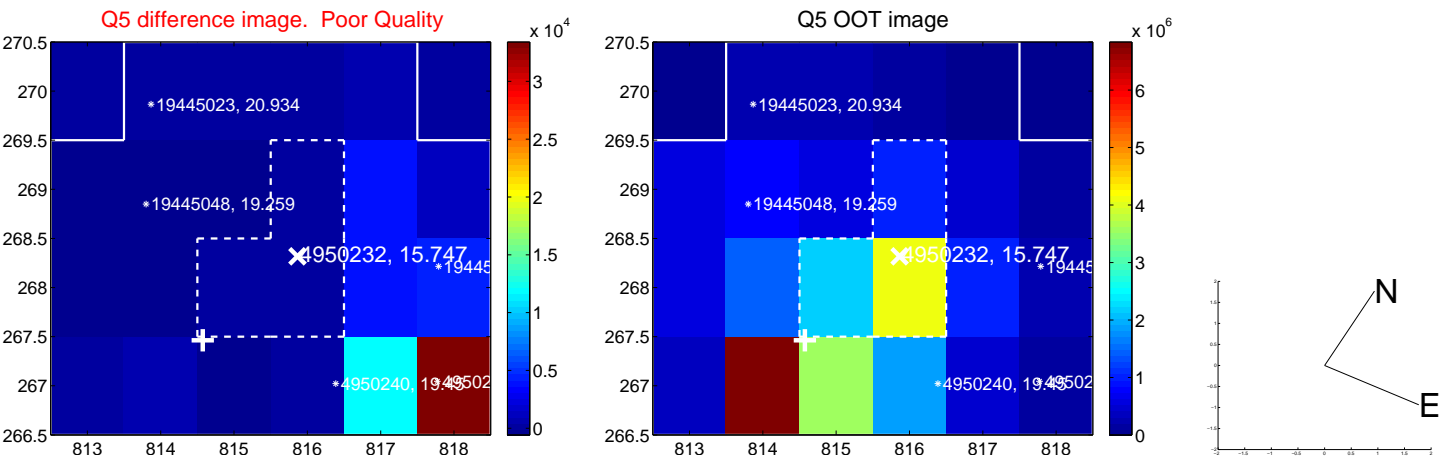


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three- σ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

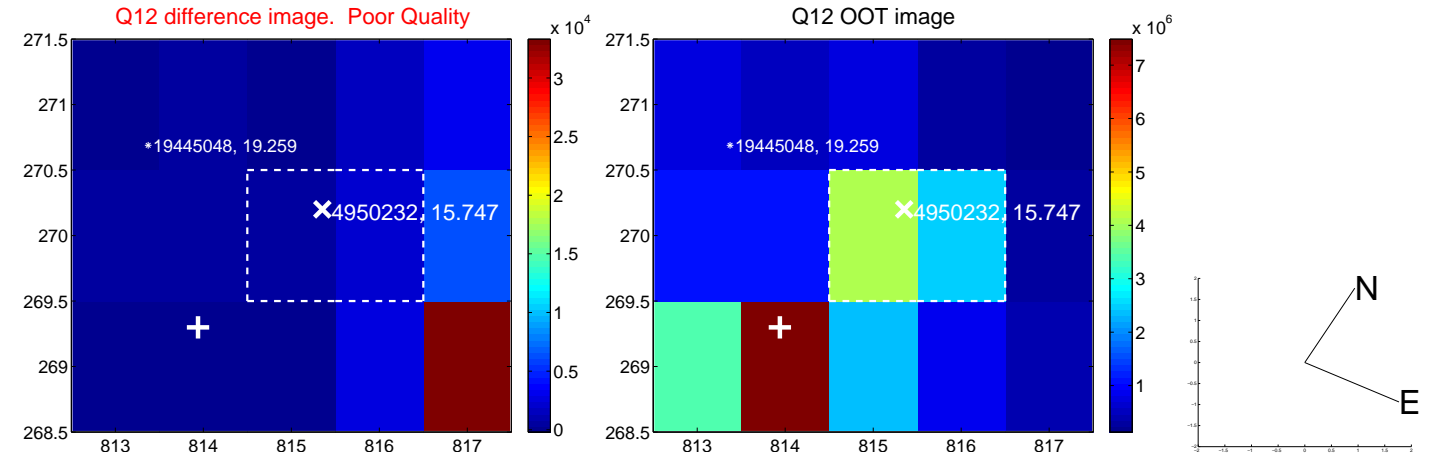
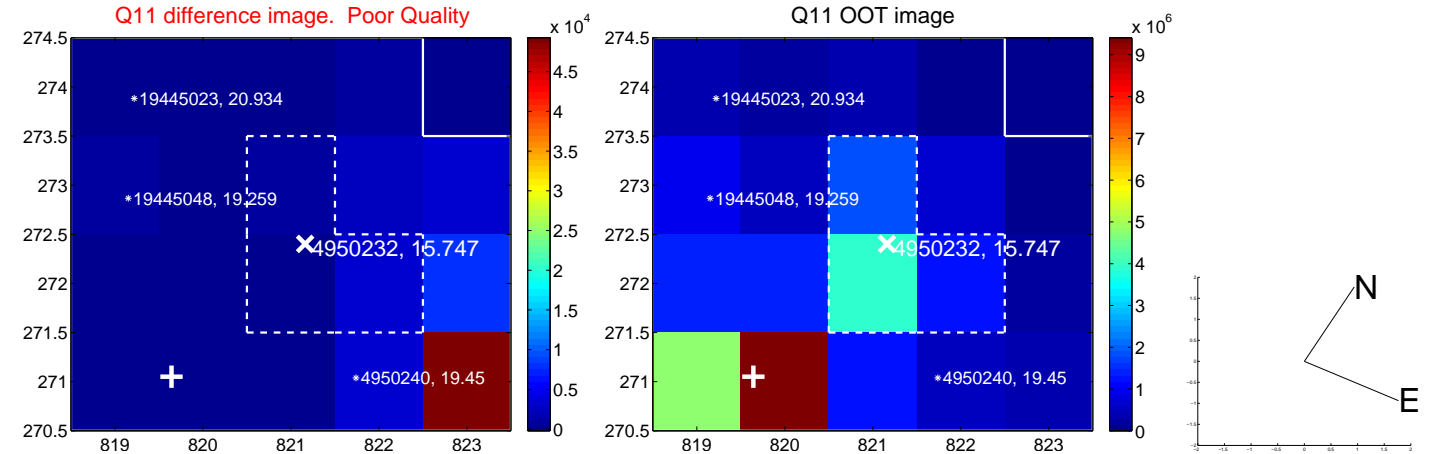
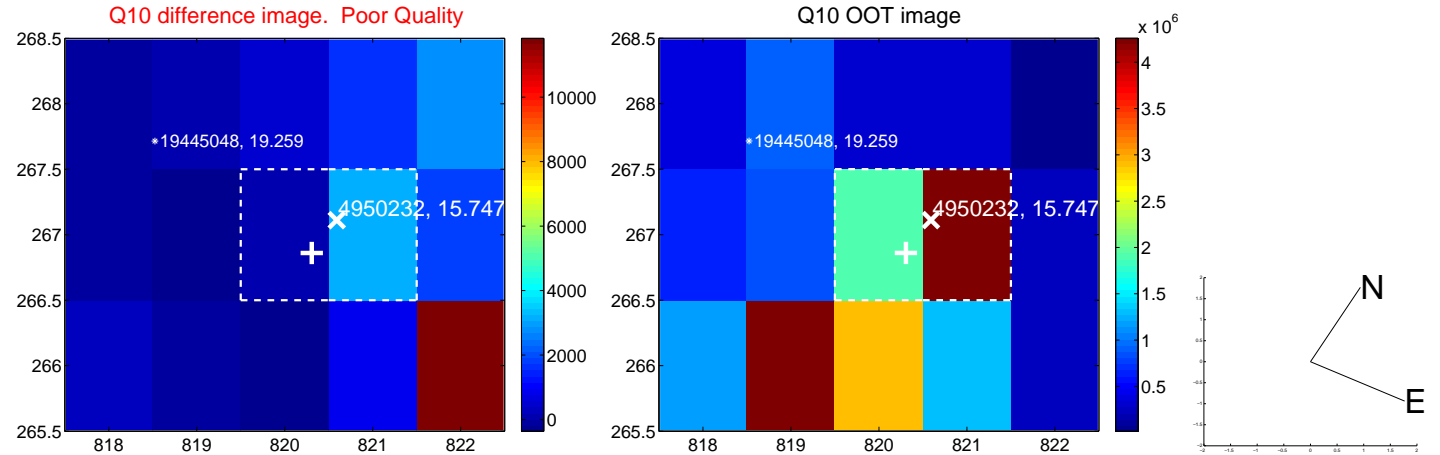
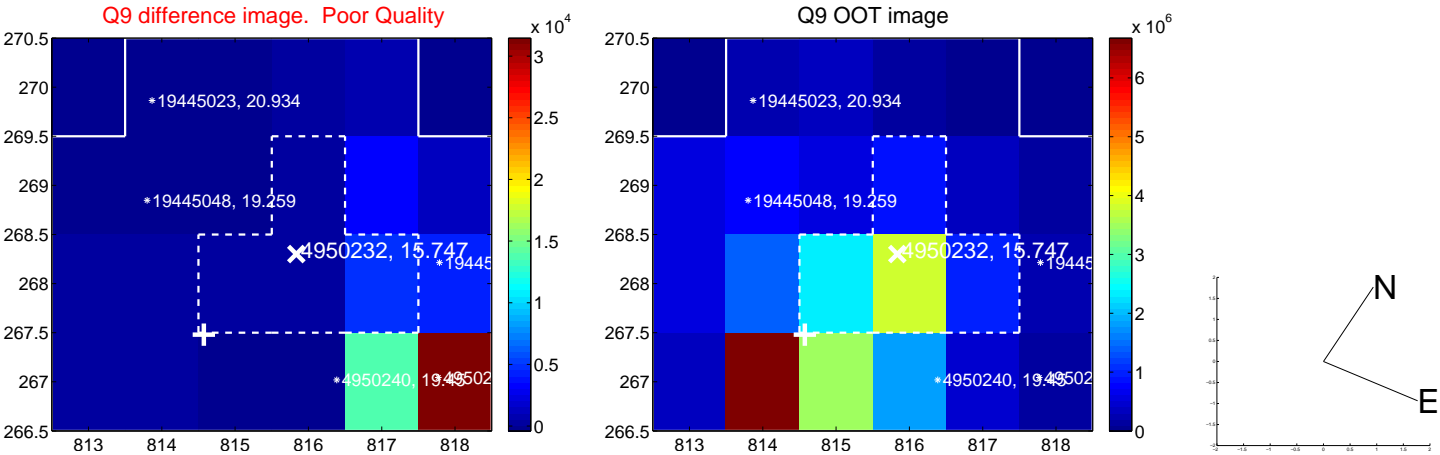
white \times : KIC target position; $+$: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



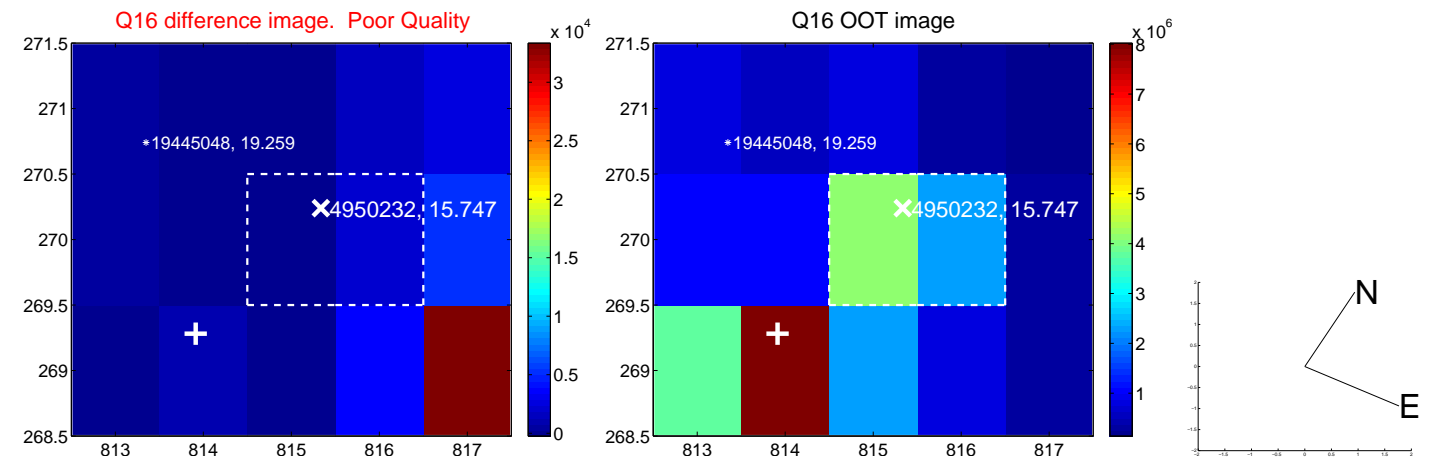
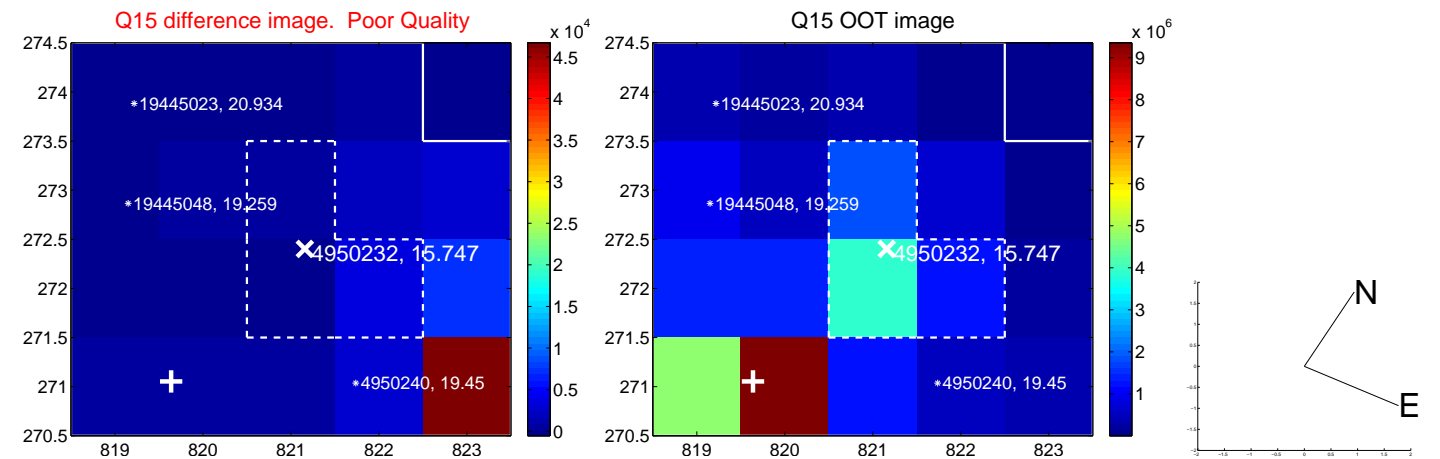
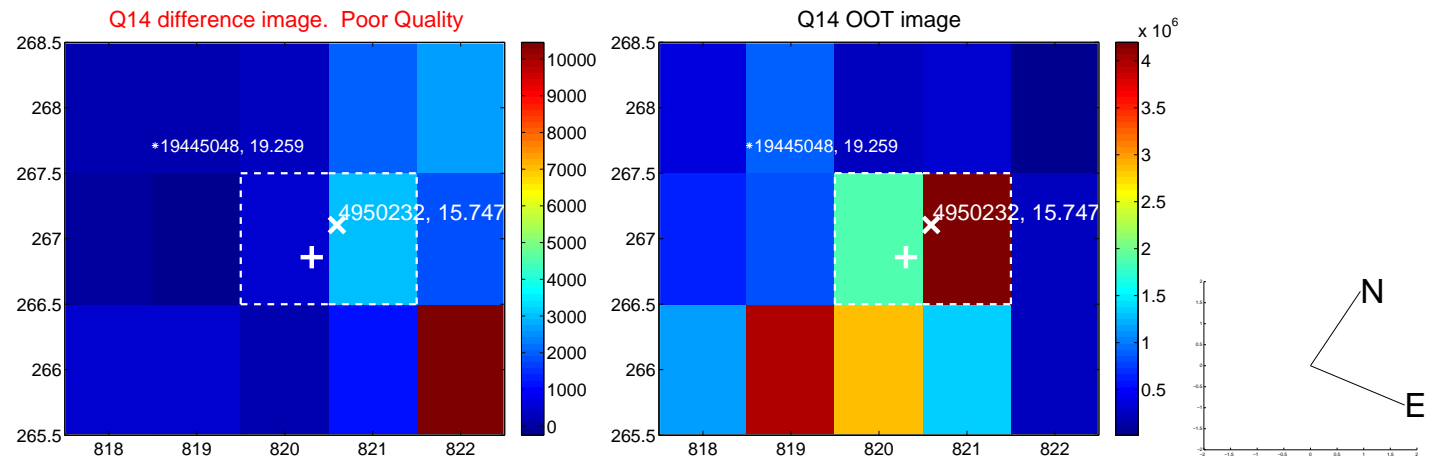
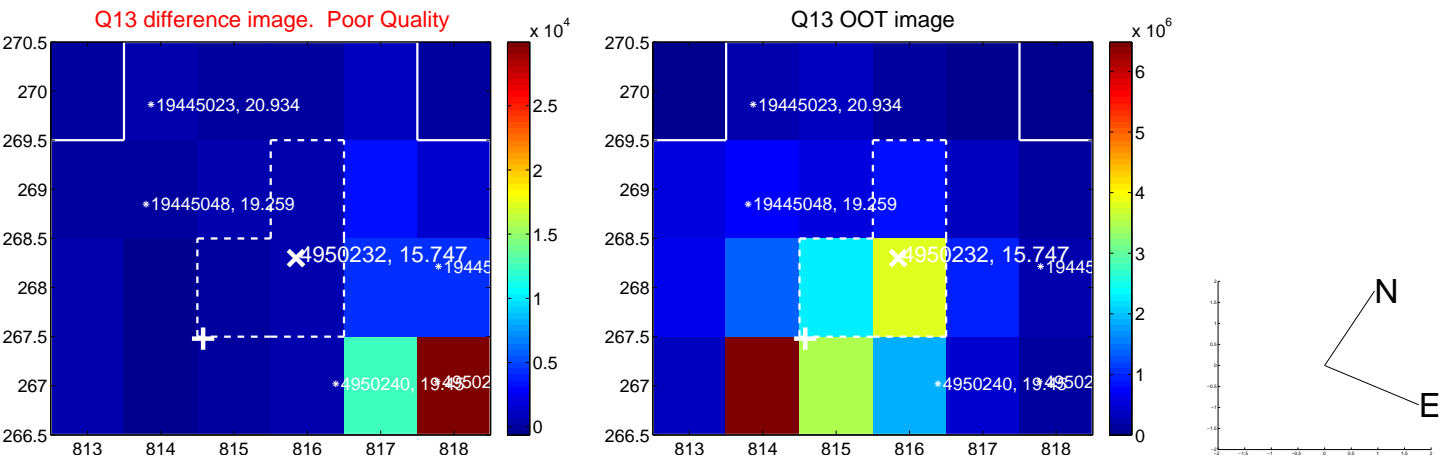
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



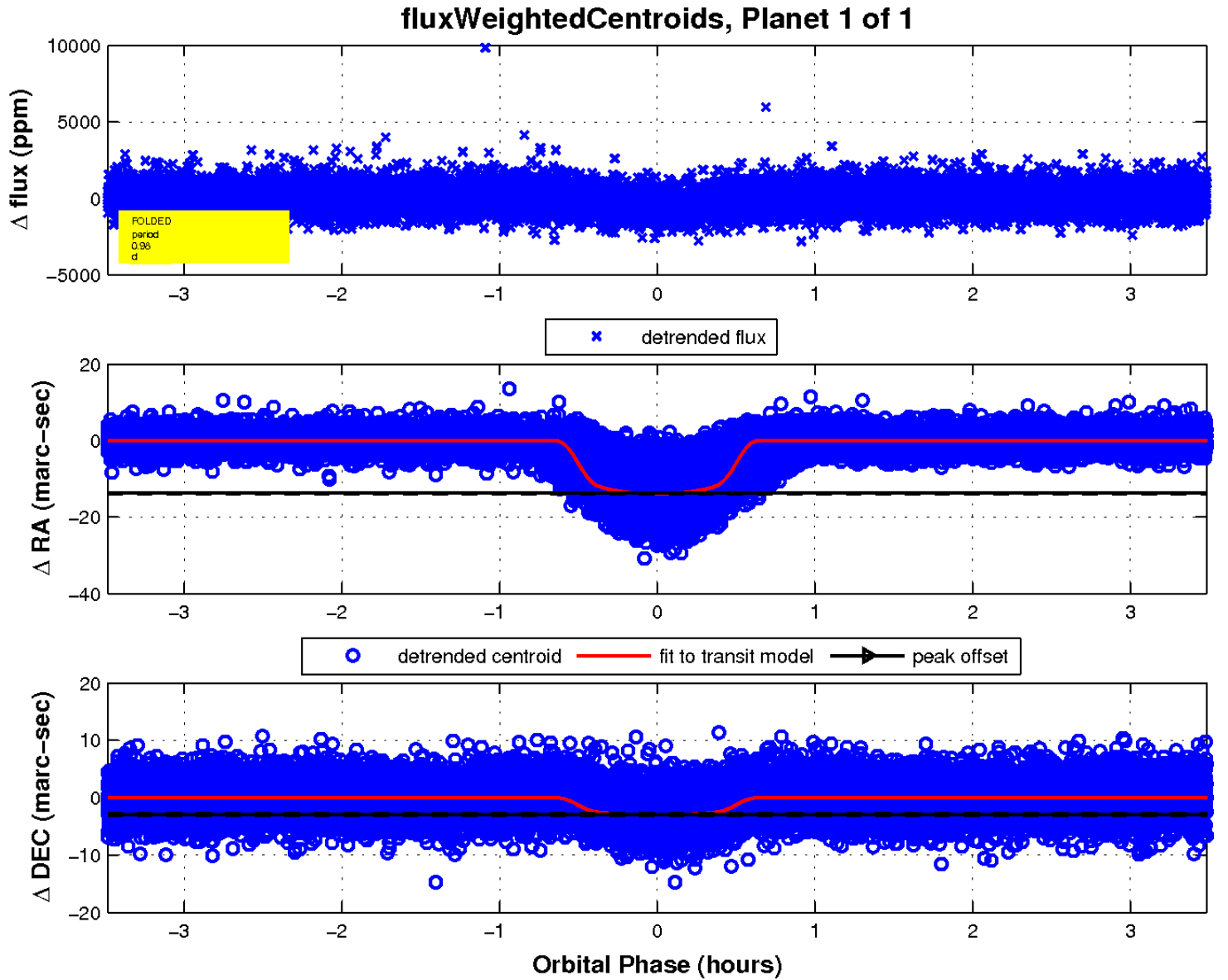
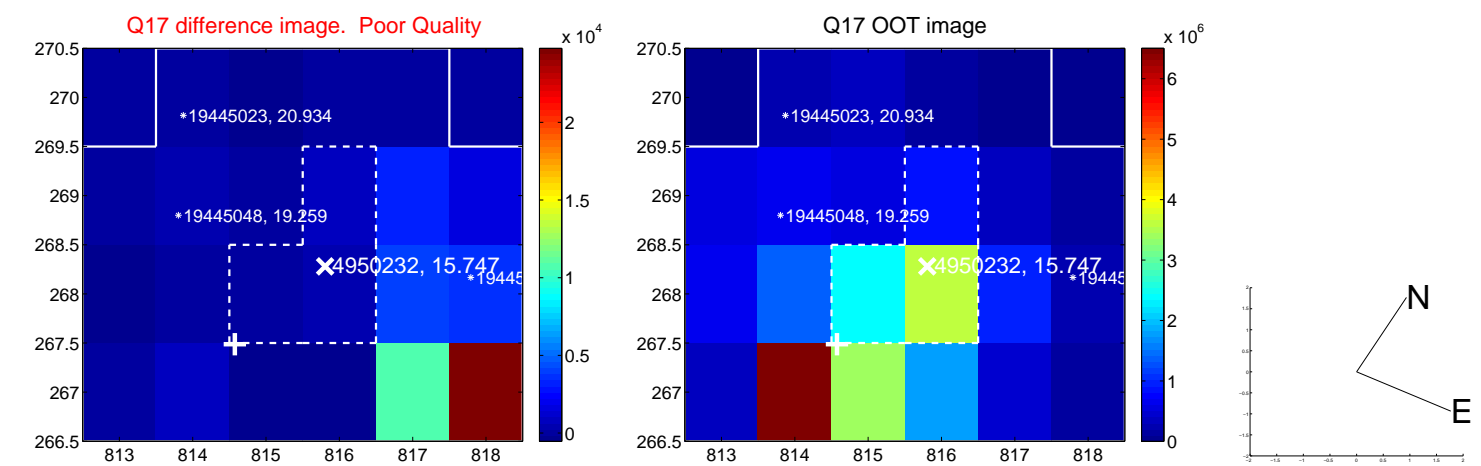
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UKIRT Image

Declination

