

KIC 008695628

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})
008695628-01	OBS	No	1.265128	132.051407	67.6	12.624	13.6	16.0	2.42	6911	2.00	16059.42

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008695628-01	OBS	FP	0.00	1	0	0	0	LPP_DV—CENT_FEW_DIFFS

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

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

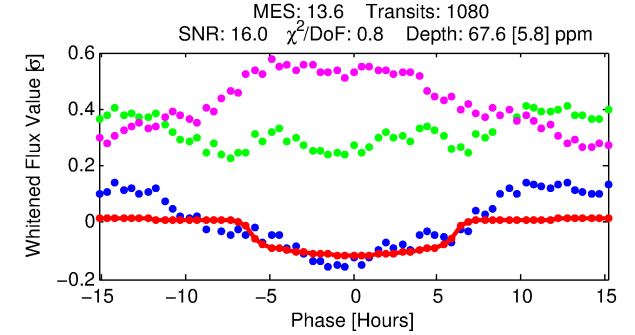
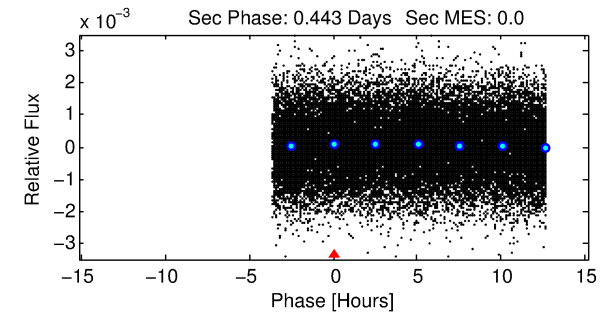
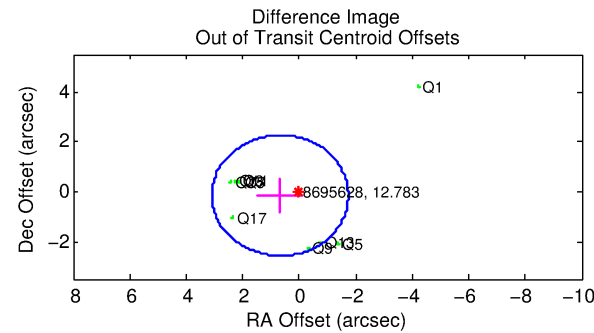
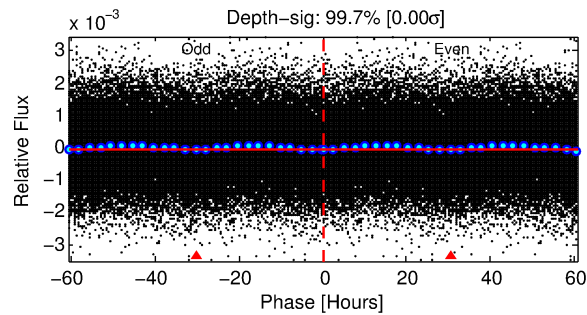
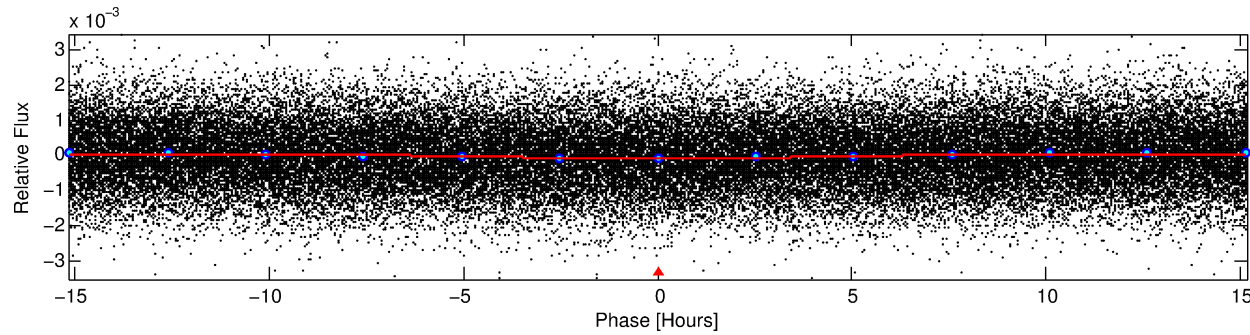
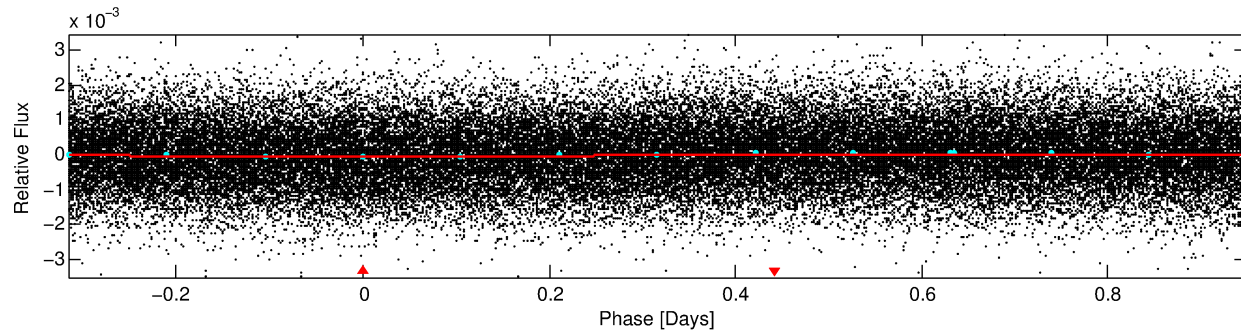
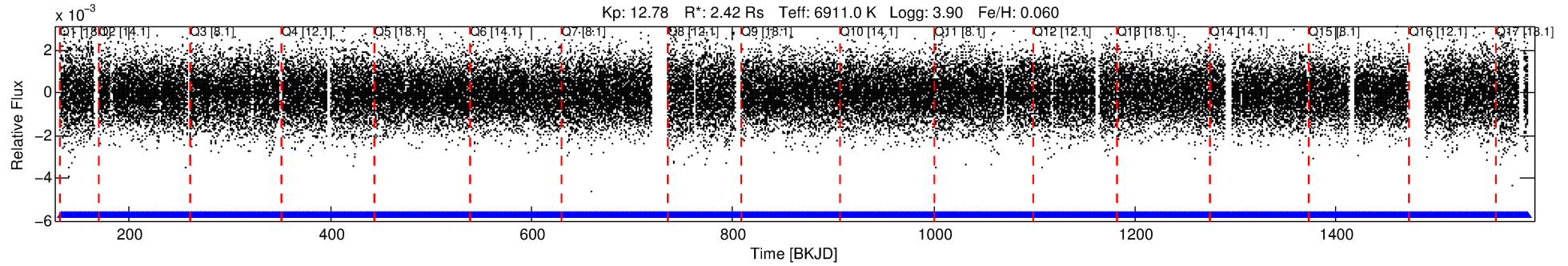
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008695628-01

No Significant Match Found

DV One-Page Summary

KIC: 8695628 Candidate: 1 of 1 Period: 1.265 d



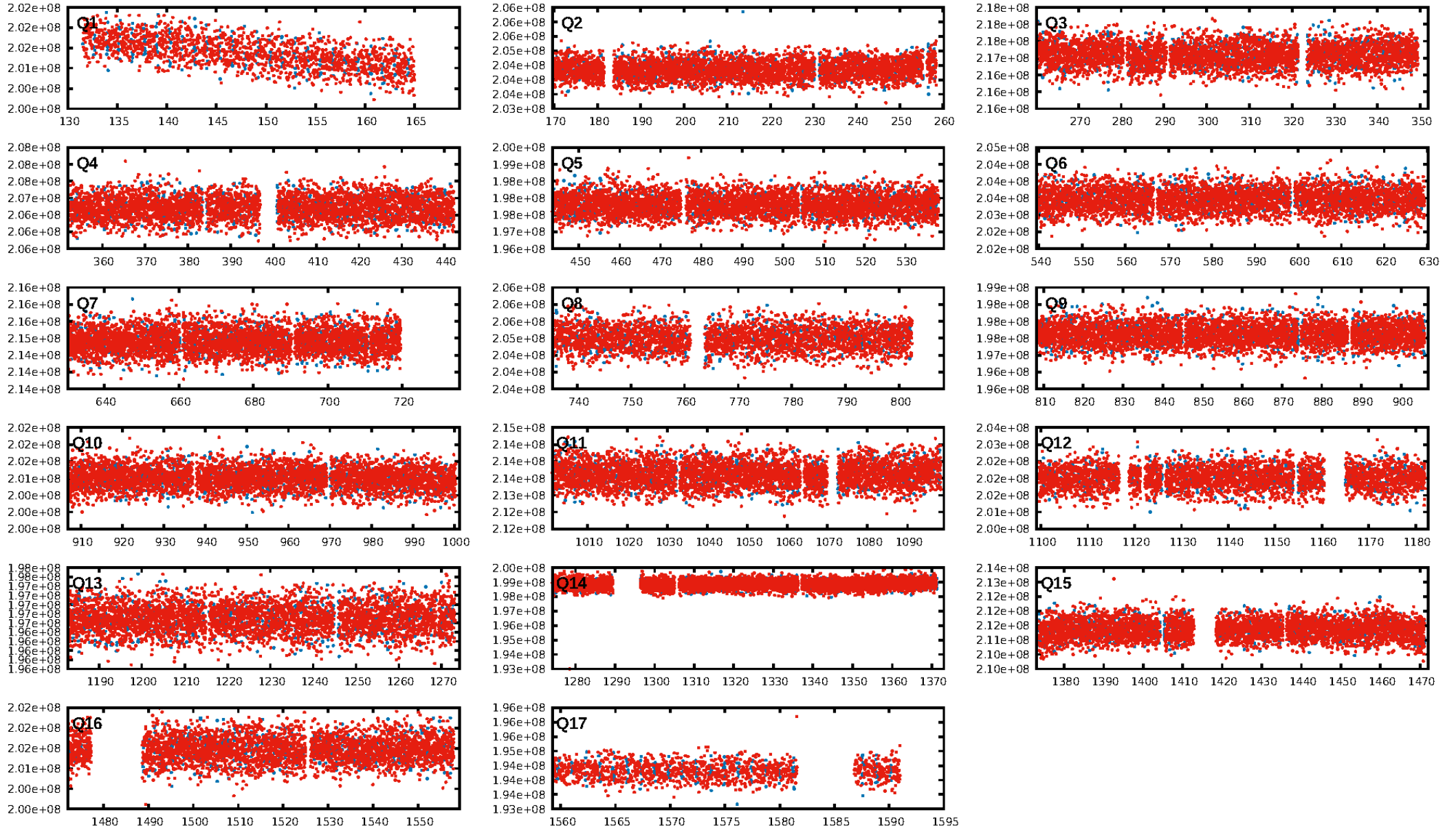
DV Fit Results:

Period = 1.26513 [0.00002] d
Epoch = 132.0514 [0.0096] BKJD
Rp/R* = 0.0076 [0.0059]
a/R* = 1.04 [0.36]
b = 0.01 [559.41]
Seff = 16059.42 [8692.43]
Teq = 2871 [388] K
Rp = 2.01 [1.71] Re
a = 0.0273 [0.0089] AU
Ag = N/A
Teffp = N/A

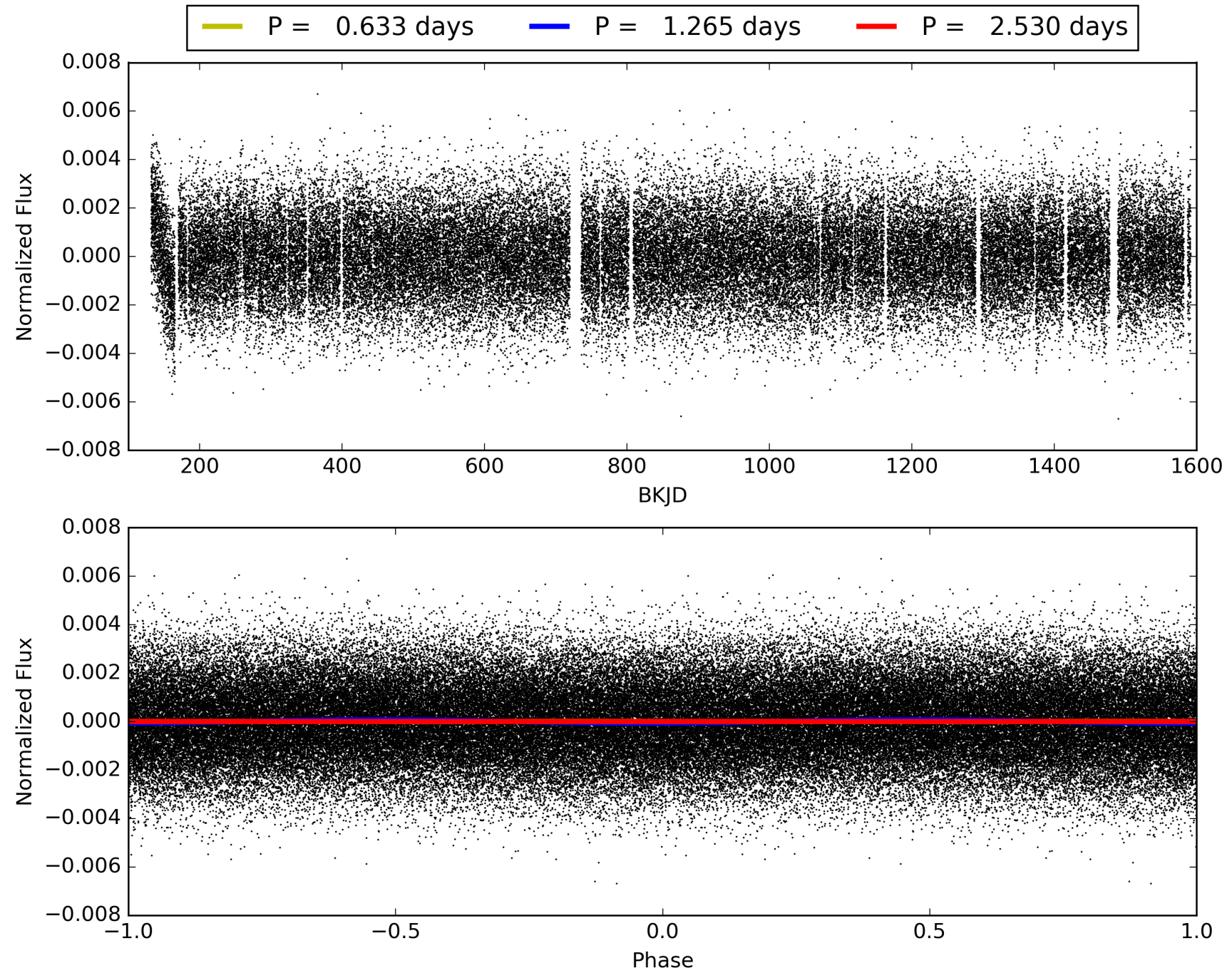
DV Diagnostic Results:

ShortPeriod-sig: N/A
LongPeriod-sig: N/A
ModelChiSquare2-sig: N/A
ModelChiSquareGof-sig: N/A
Bootstrap-pfa: N/A
RollingBand-fgt: 1.00 [1031/1031]
GhostDiagnostic-chr: 1.846
Centroid-sig: 3.7%
Centroid-so: 0.220 arcsec [1.71σ]
OotOffset-rm: 0.695 arcsec [0.86σ]
KicOffset-rm: 0.652 arcsec [0.80σ]
OotOffset-st: 0/4/0/5 [9]
KicOffset-st: 0/4/0/5 [9]
DiffImageQuality-fgm: 0.56 [5/9]
DiffImageOverlap-fno: 1.00 [17/17]

TCE 008695628-01, PDC Light Curves

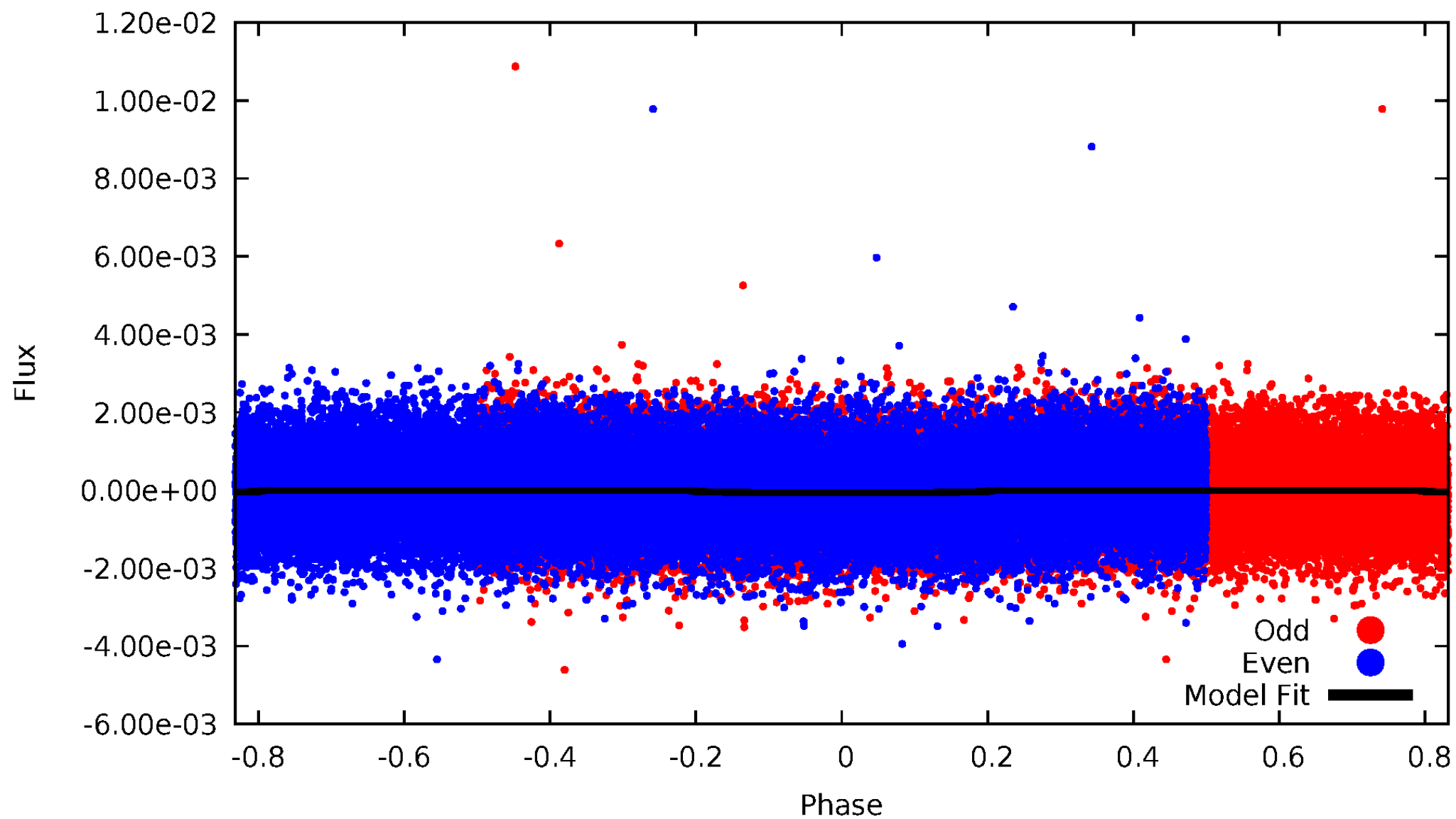


TCE 008695628-01



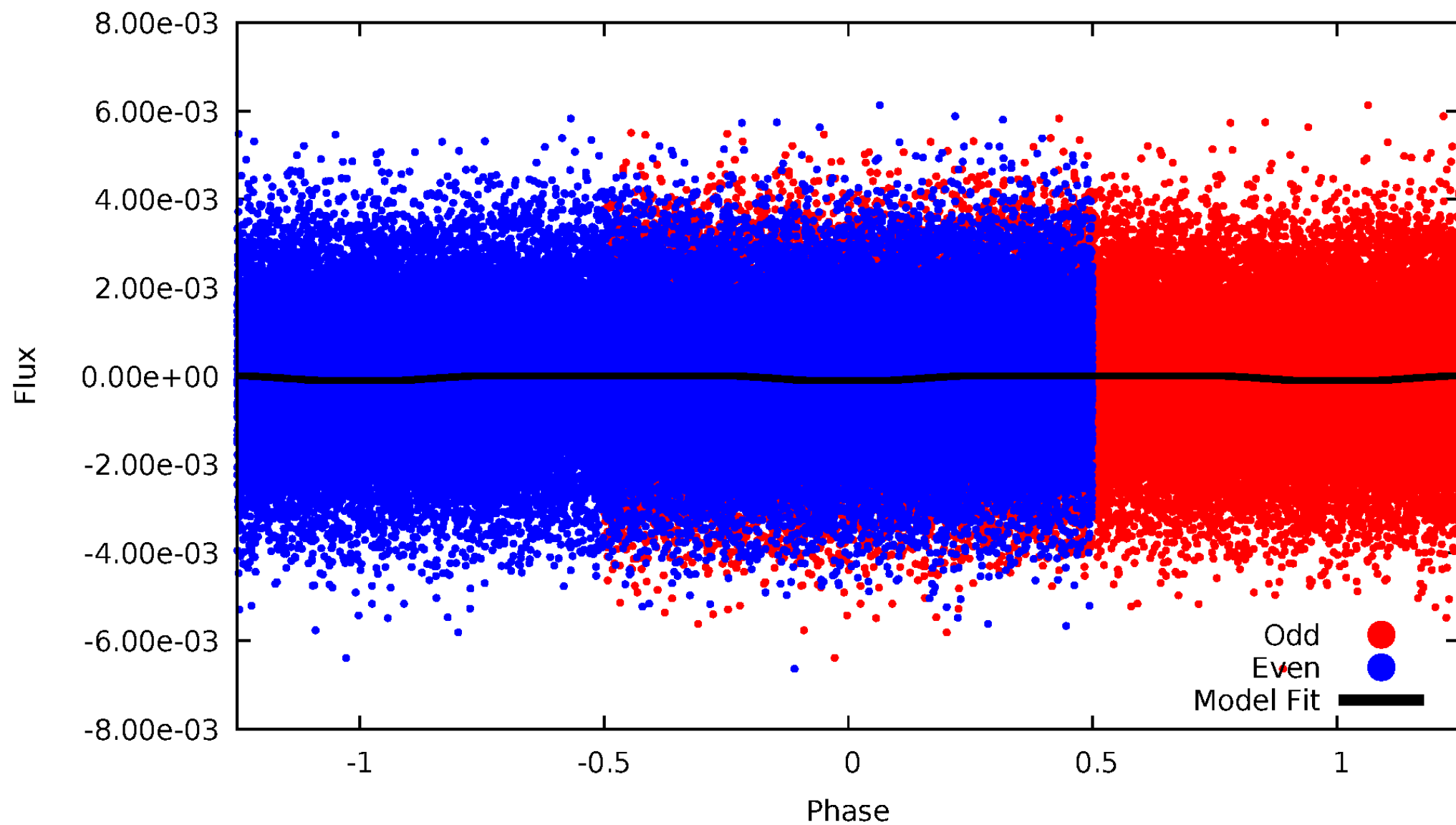
DV Odd/Even

TCE 008695628-01

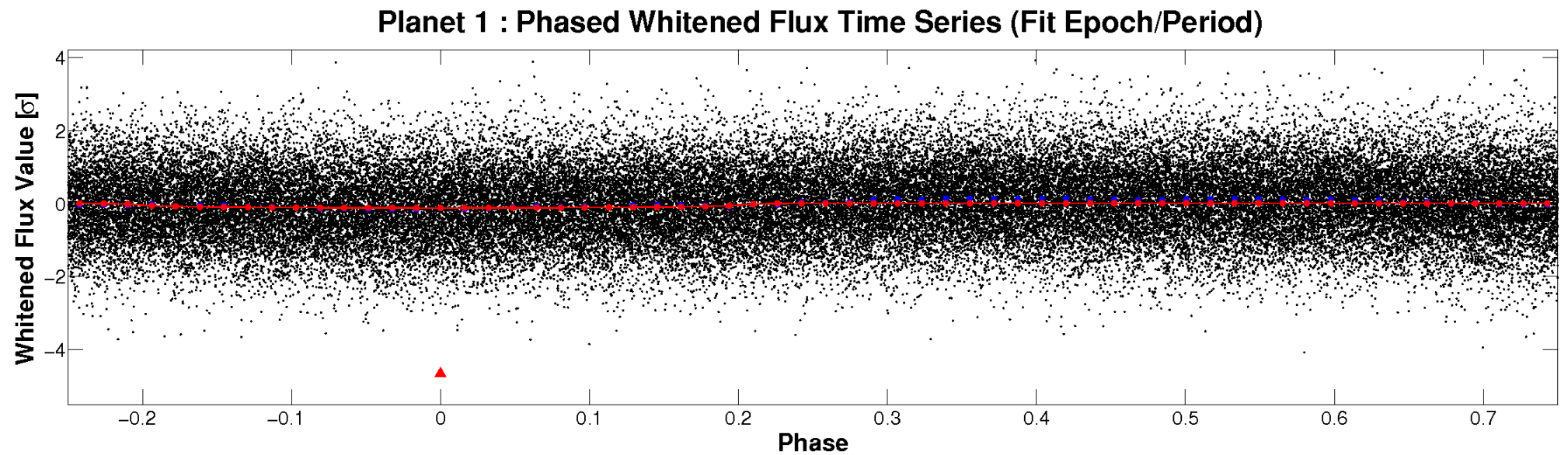
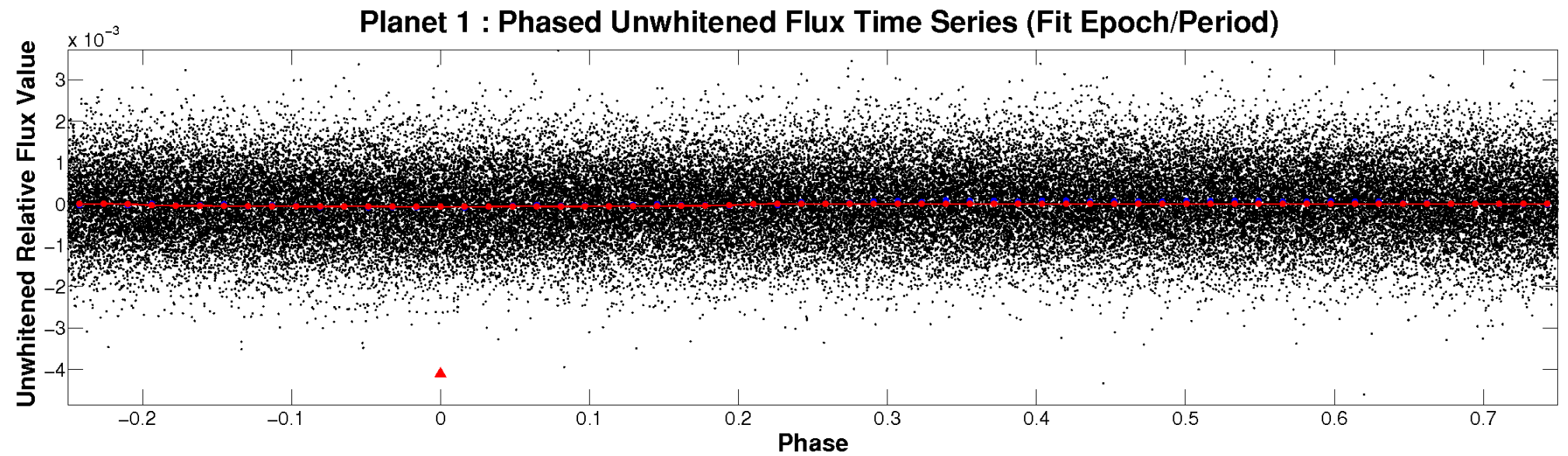


ALT Odd/Even

TCE 008695628-01

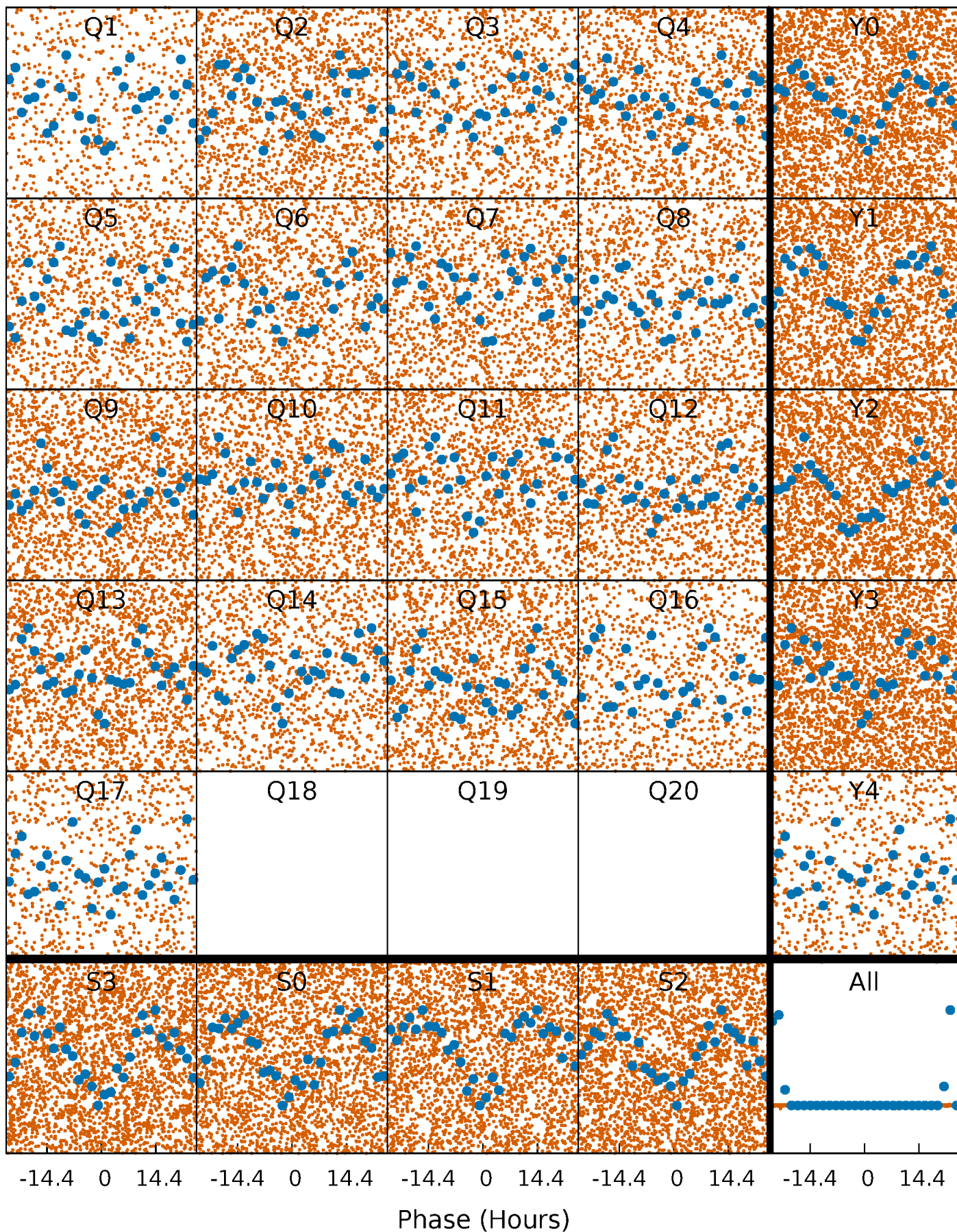


Non-Whitened Vs. Whitened Light Curve



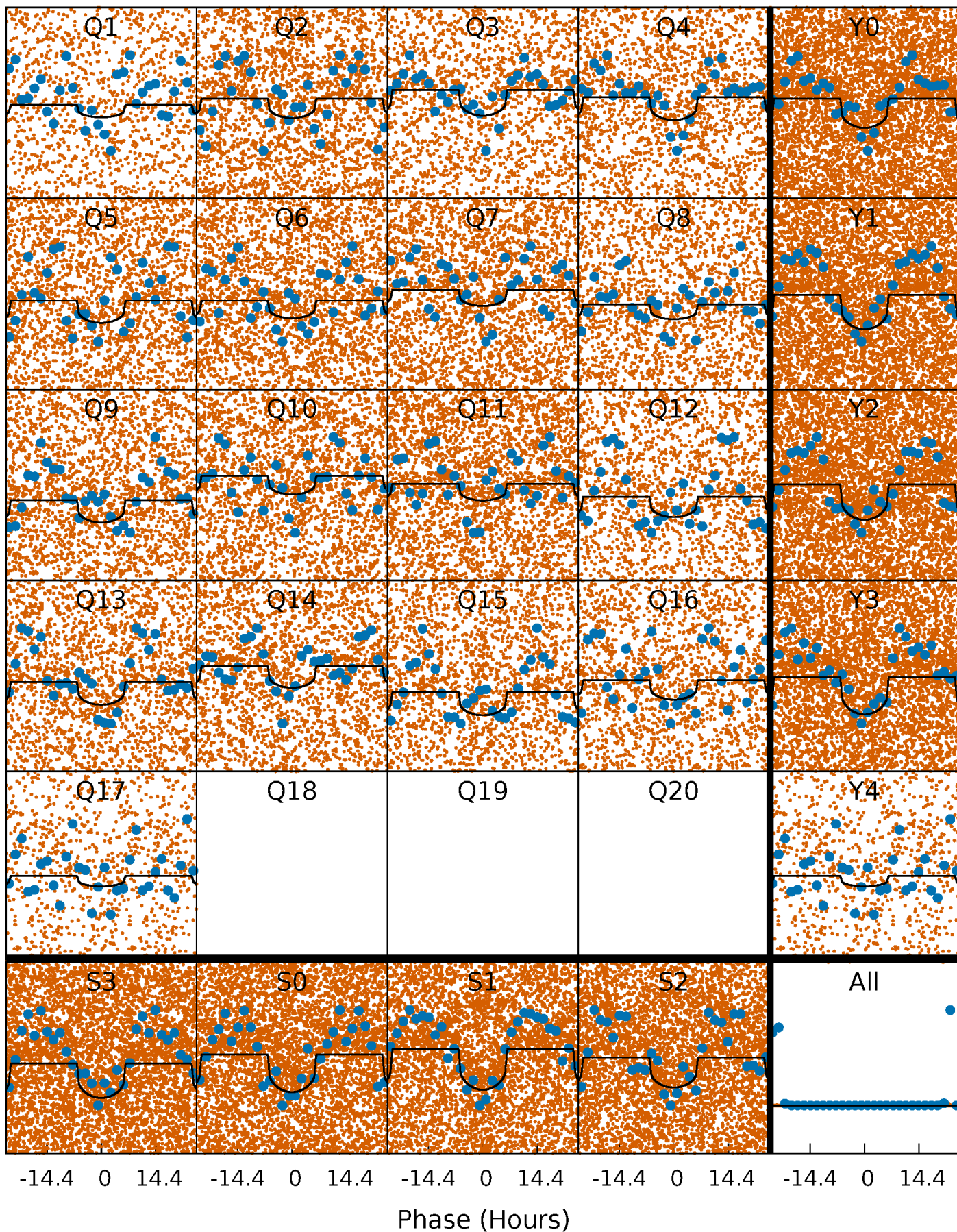
PDC Quarter-Phased Transit Curves

TCE 008695628-01 P= 1.265128 Days $T_0=132.051407$ (BKJD)



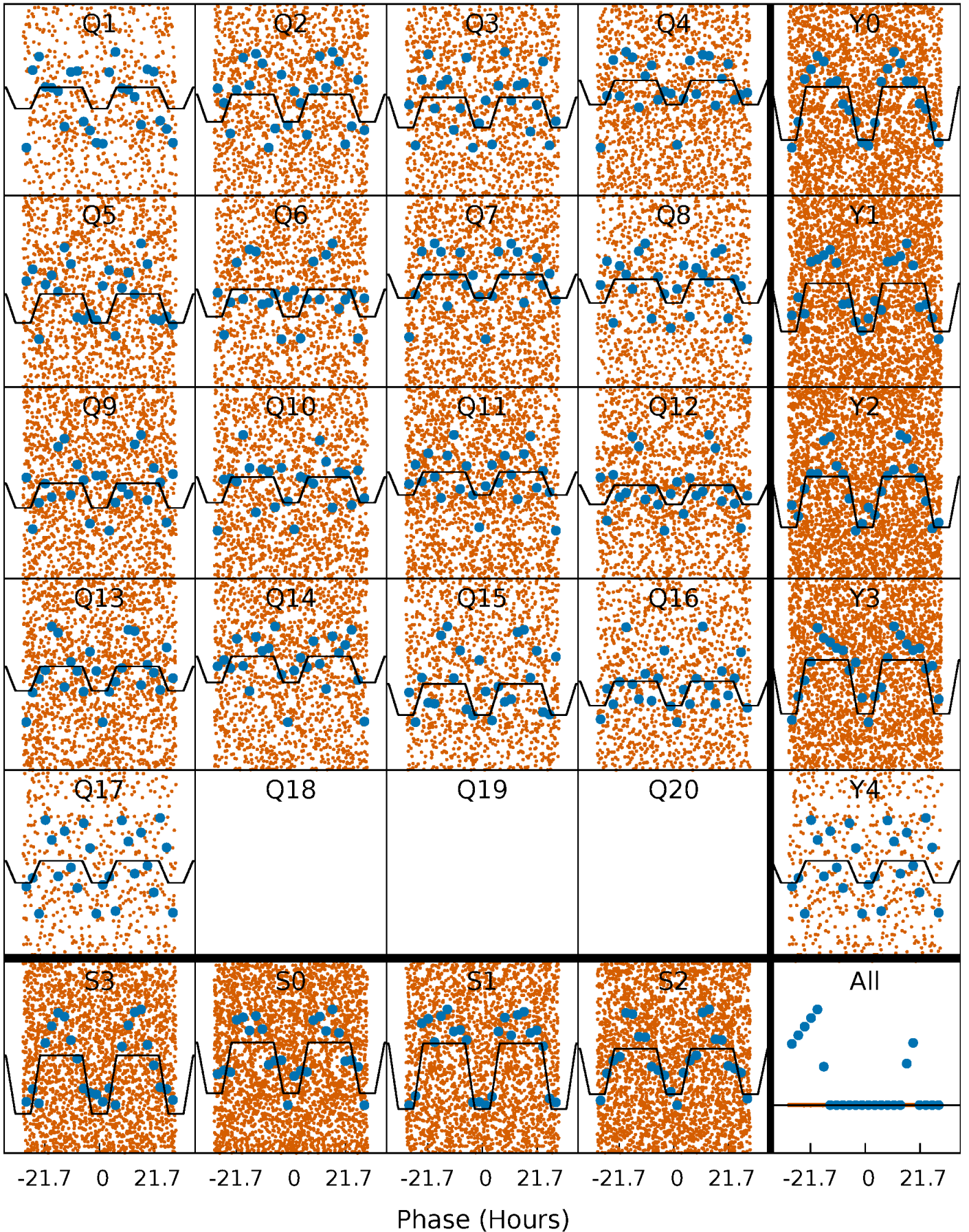
DV Quarter-Phased Transit Curves

TCE 008695628-01 P= 1.265128 Days $T_0=132.051407$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

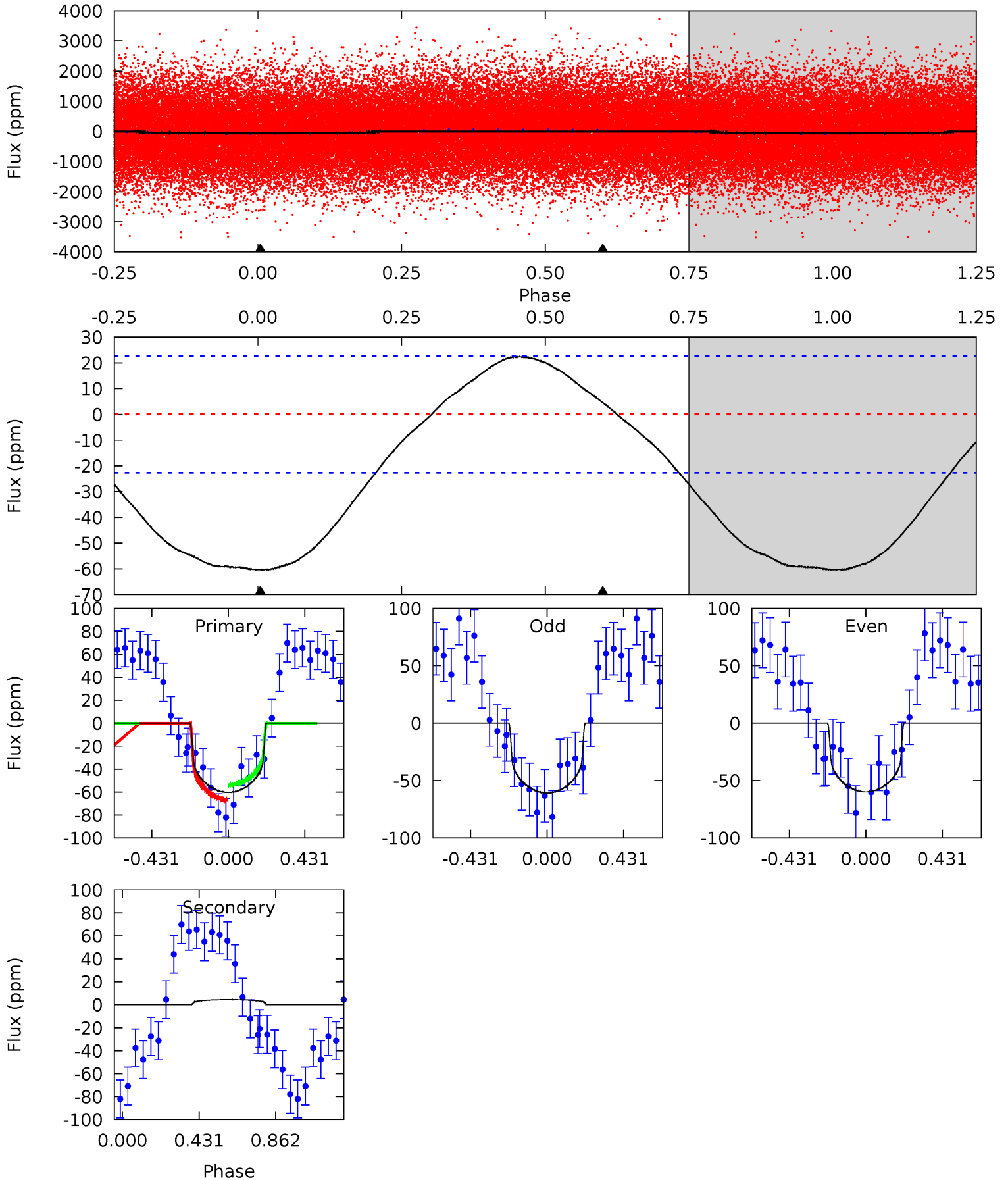
TCE 008695628-01 P= 1.265020 Days $T_0=132.093395$ (BKJD)



DV Model-Shift Uniqueness Test

008695628-01, P = 1.265128 Days, E = 130.786279 Days

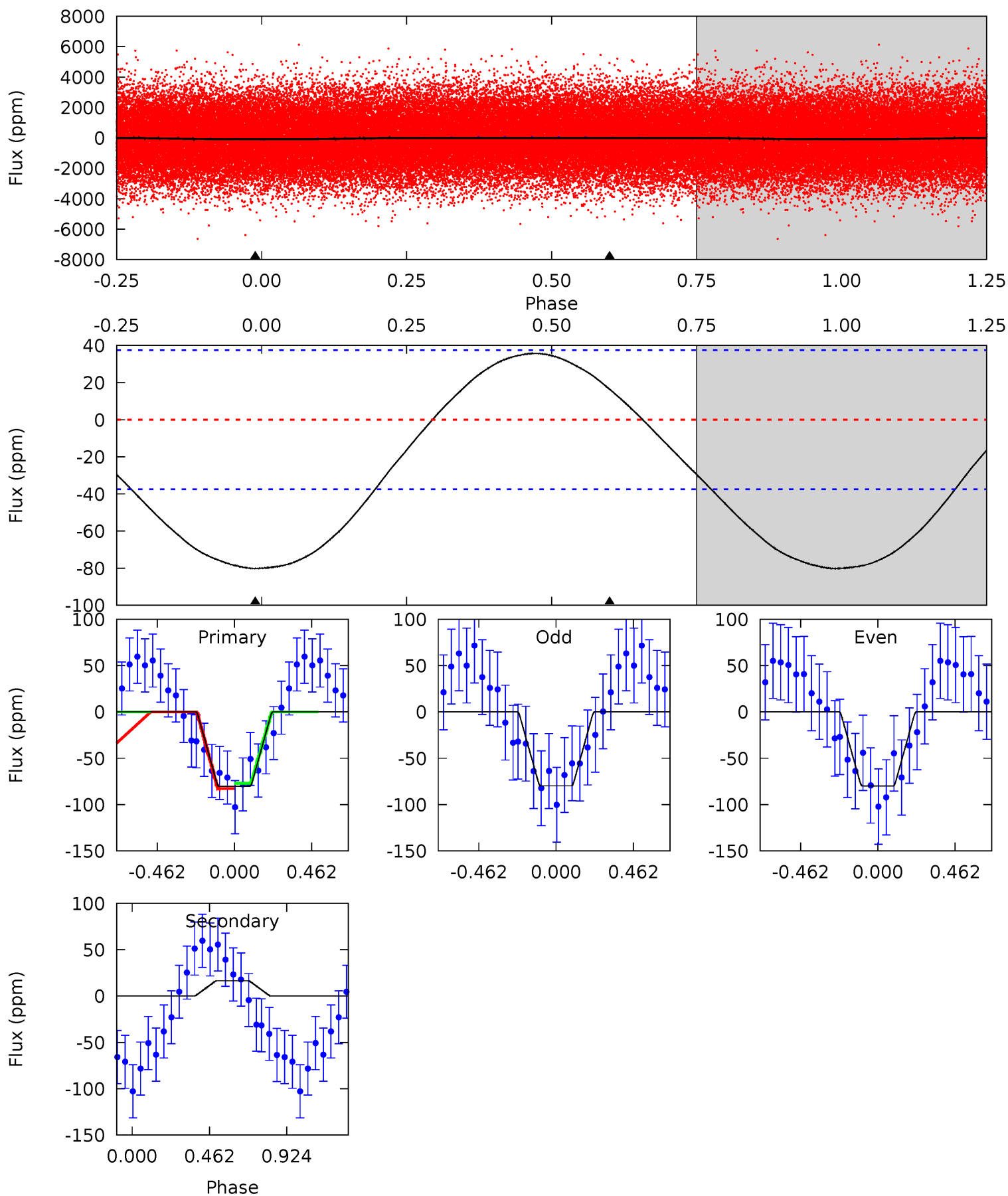
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
11.3	-0.85	0	0	4.25	0.79	1.11	11.3	11.3	-0.85	-0.85	0.09	1.10	0.27	1.25



Alt Model-Shift Uniqueness Test

008695628-01, P = 1.265020 Days, E = 130.828375 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
9.06	-1.85	0	0	4.23	0.74	1.17	9.06	9.06	-1.85	-1.85	0.01	0.97	0.31	0.31



Stellar Parameters For KIC 008695628

	$T_{\text{eff}}(K)$	$\log(g)$	[Fe/H]	$R (R_{\odot})$	$M(M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	6911^{+218}_{-291}	$3.899^{+0.299}_{-0.161}$	$0.060^{+0.200}_{-0.350}$	$2.417^{+0.612}_{-0.842}$	$1.689^{+0.192}_{-0.383}$	$0.169^{+0.350}_{-0.067}$
	+3%/-4%	+8%/-4%	+333%/-583%	+25%/-35%	+11%/-23%	+208%/-40%
Source	PHO54	PHO54	PHO54	DSEP		

KIC = Kepler Input Catalog; PHO = Photometry; SPE = Spectroscopy; AST = Asteroseismology
 TRA = Transits; DESP = Dartmouth Models; MULT = Multiple Models

Secondary Eclipse Parameters for KIC 008695628-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{max} (K)$	$T_{obs} (K)$	A_{obs}
DV	5 ± 5	$2.10^{+1.53}_{-1.28}$	3952^{+298}_{-380}	-4170^{+664}_{-1320}	$-0.345^{+0.403}_{-2.305}$
Alt.	16 ± 9	$2.48^{+1.53}_{-1.44}$	3943^{+365}_{-347}	-4796^{+677}_{-2247}	$-1.079^{+0.788}_{-5.769}$

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

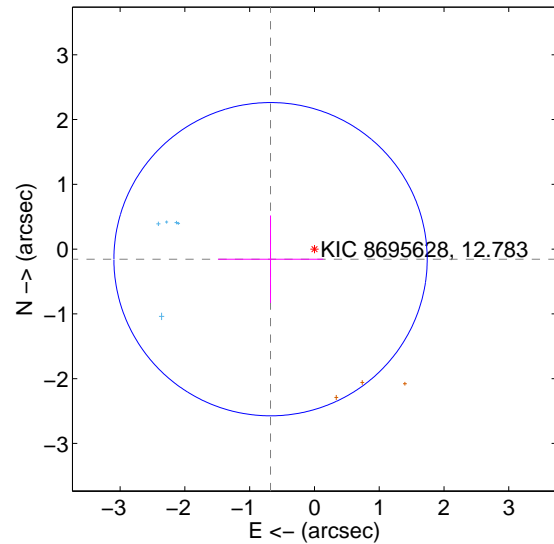
Supplemental centroid analysis for 008695628-01. Kepler magnitude: 12.78. Transit SNR 16.04

There are 5 quarters with good PRF difference image offsets

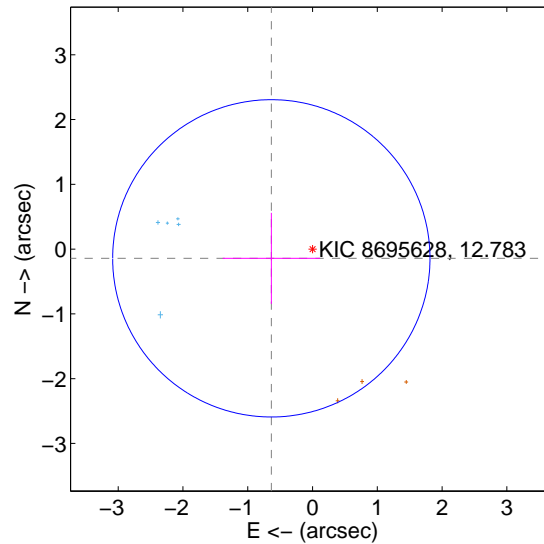
The direct PRF centroid is offset from the target star catalog position by about 0.03 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	0.695 ± 0.806	0.86	0.678 ± 0.812	-0.156 ± 0.675
PRF-fit source offset from KIC position	0.652 ± 0.817	0.80	0.636 ± 0.752	-0.143 ± 0.703
photometric centroid source offset	0.22 ± 0.13	1.71	-0.20 ± 0.13	0.09 ± 0.14

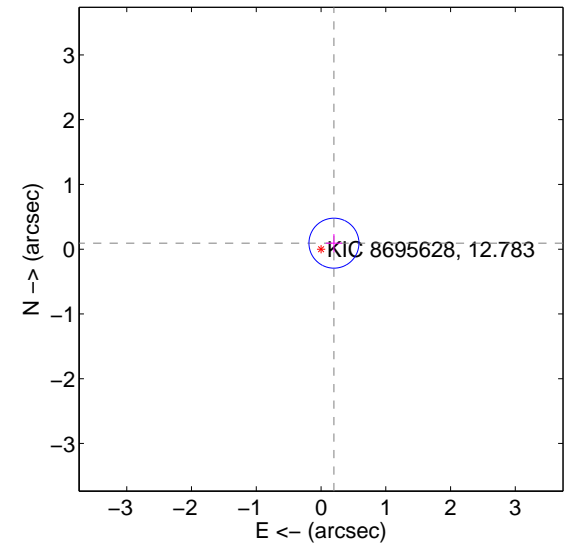
offset from difference PRF-fit to OOT PRF-fit



offset from difference PRF-fit to KIC position

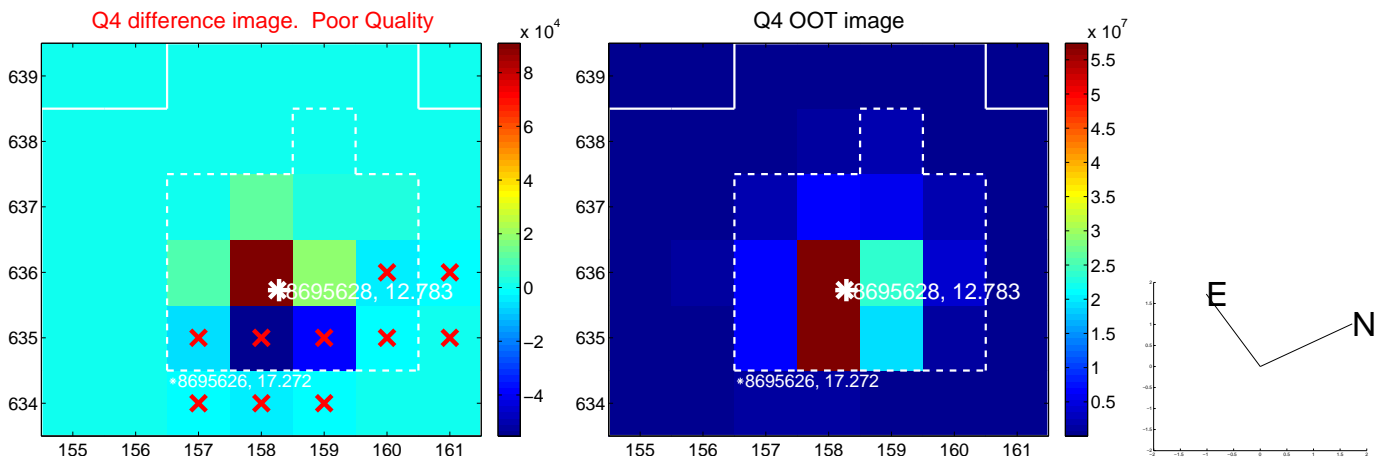
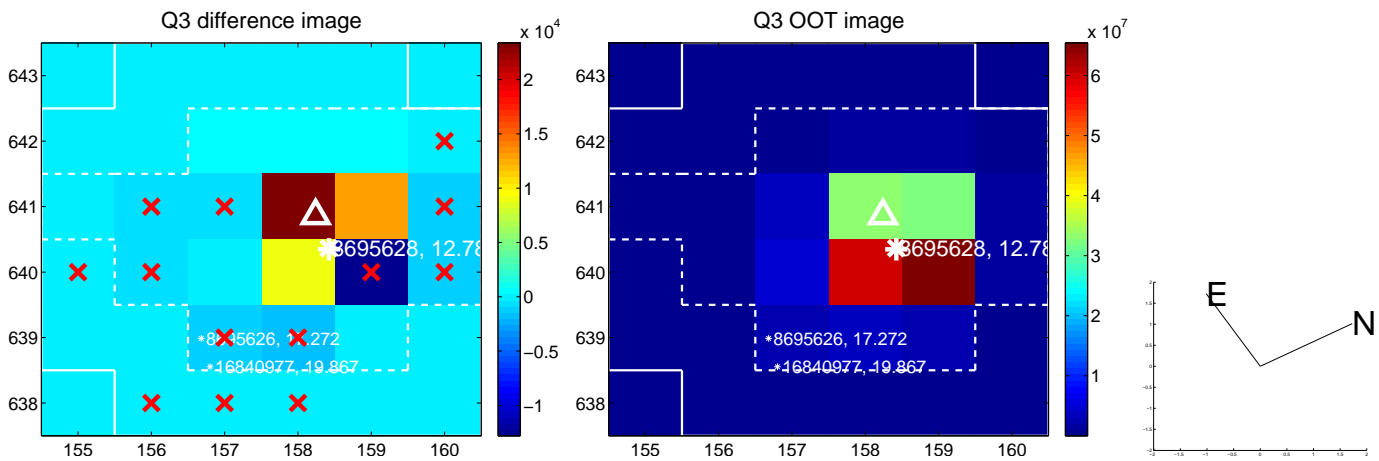
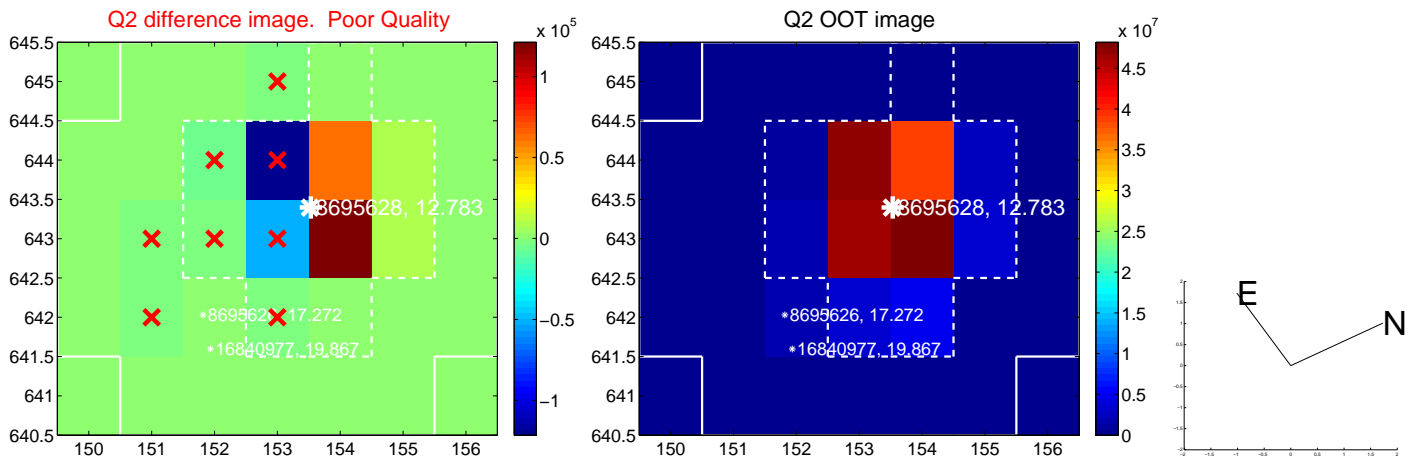
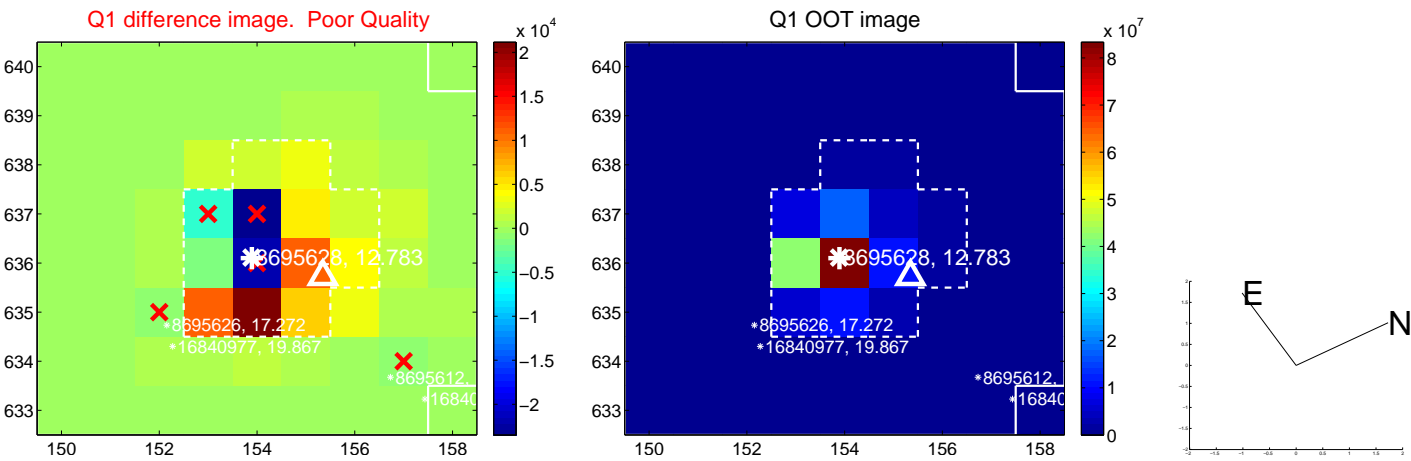


offset from photometric centroids

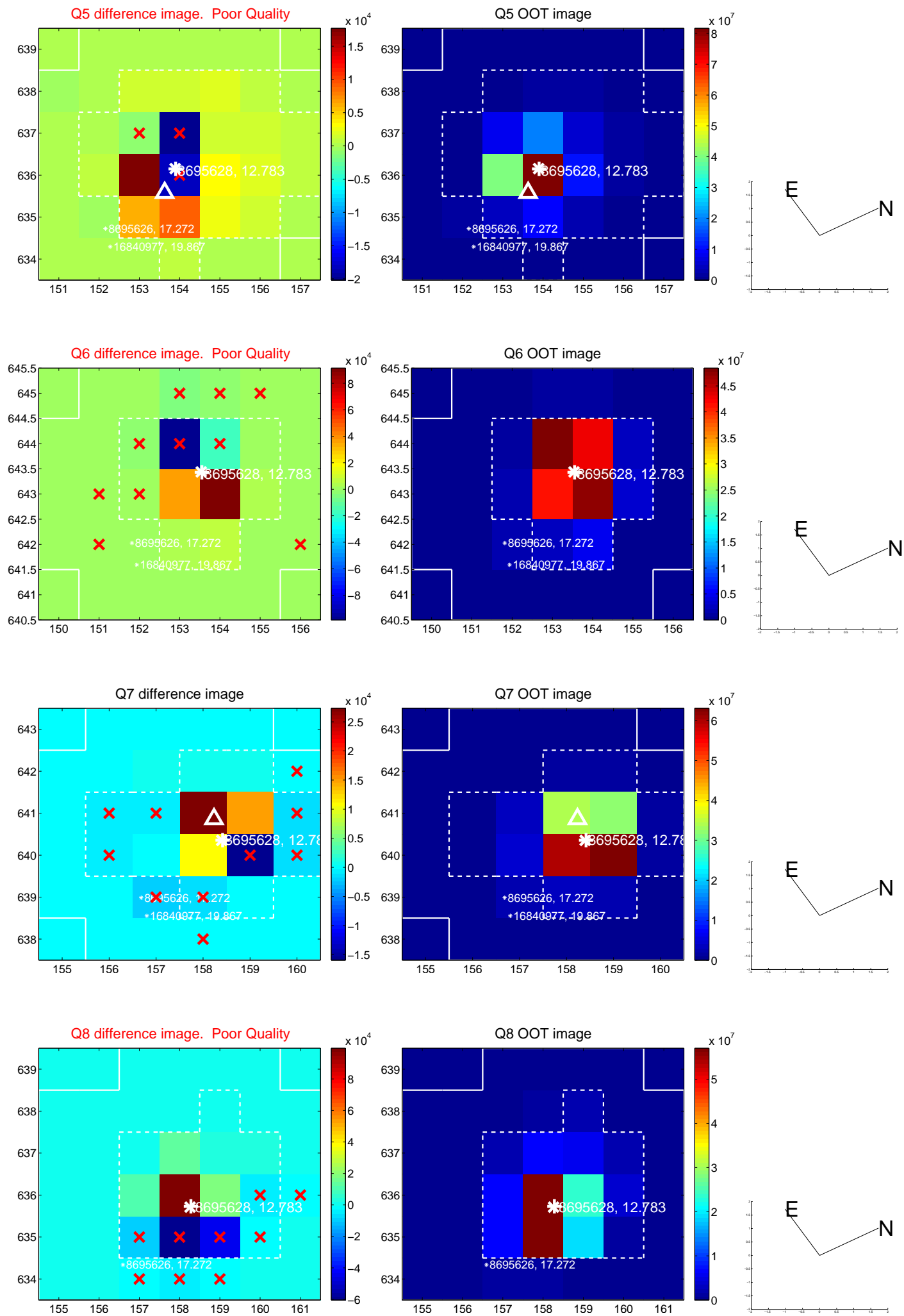


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses:** good quarterly centroid offsets; **Vermillion crosses:** bad quarterly centroid offsets; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

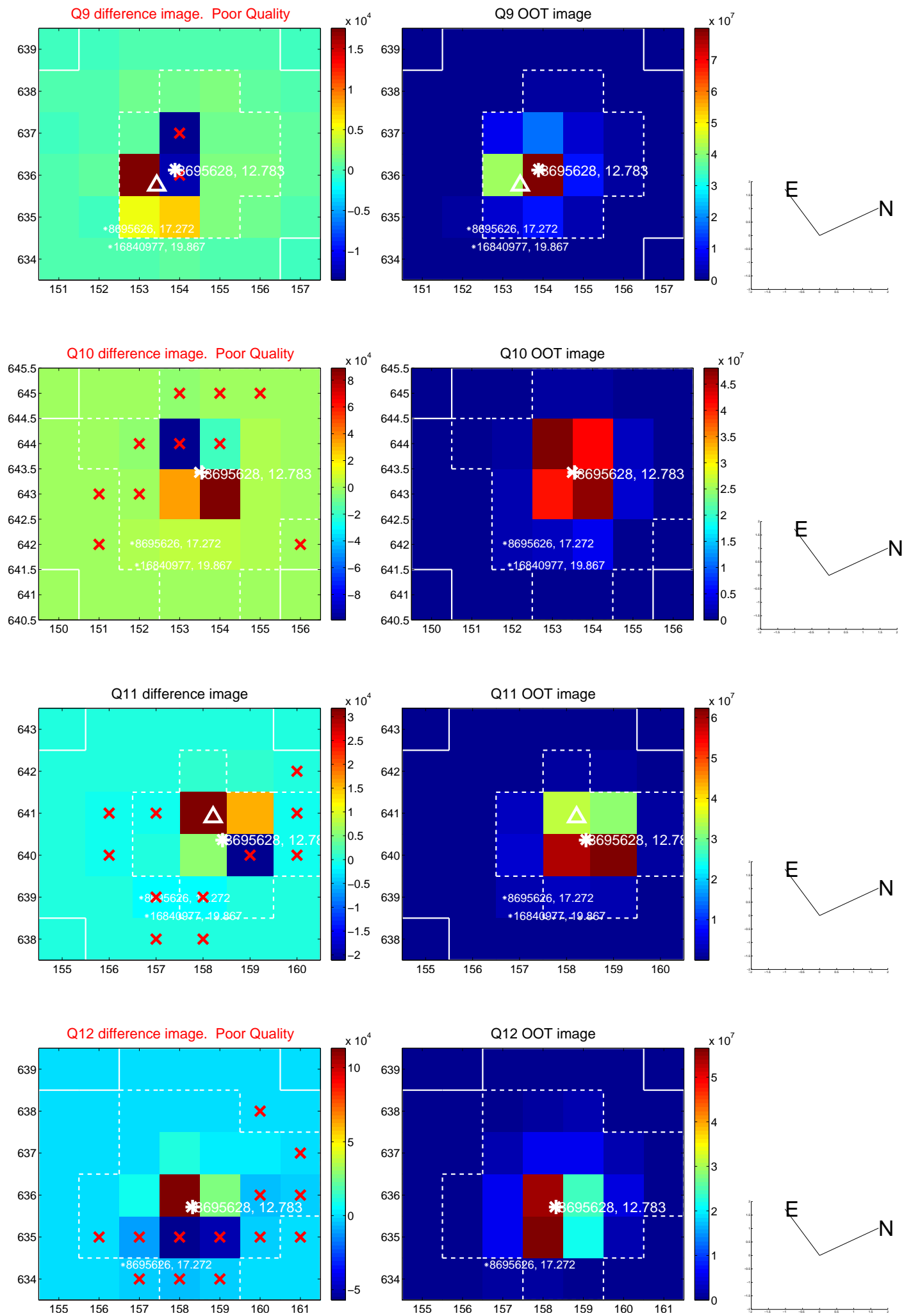
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



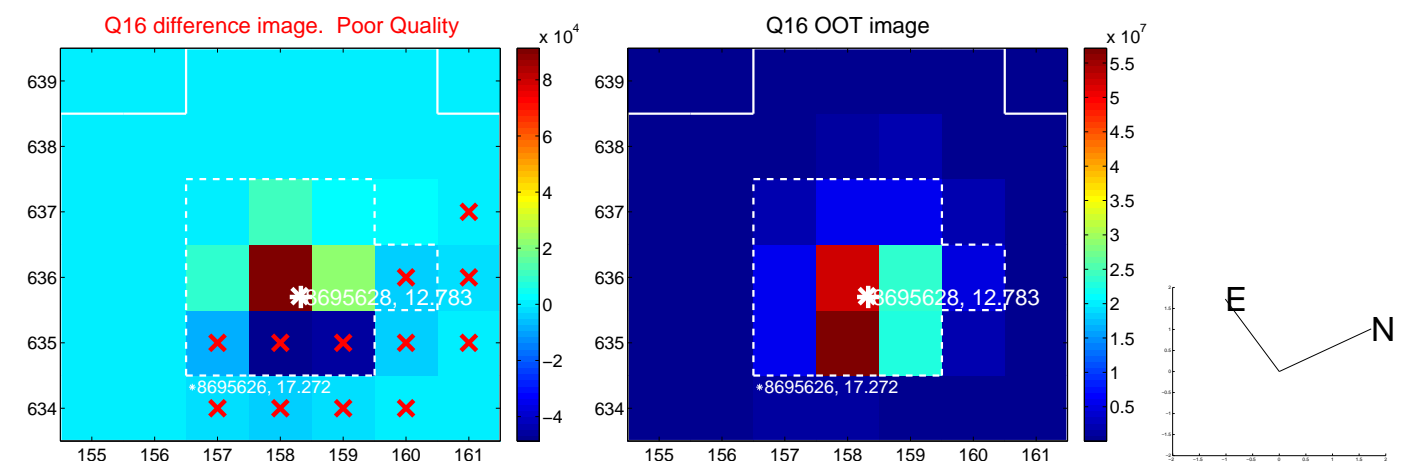
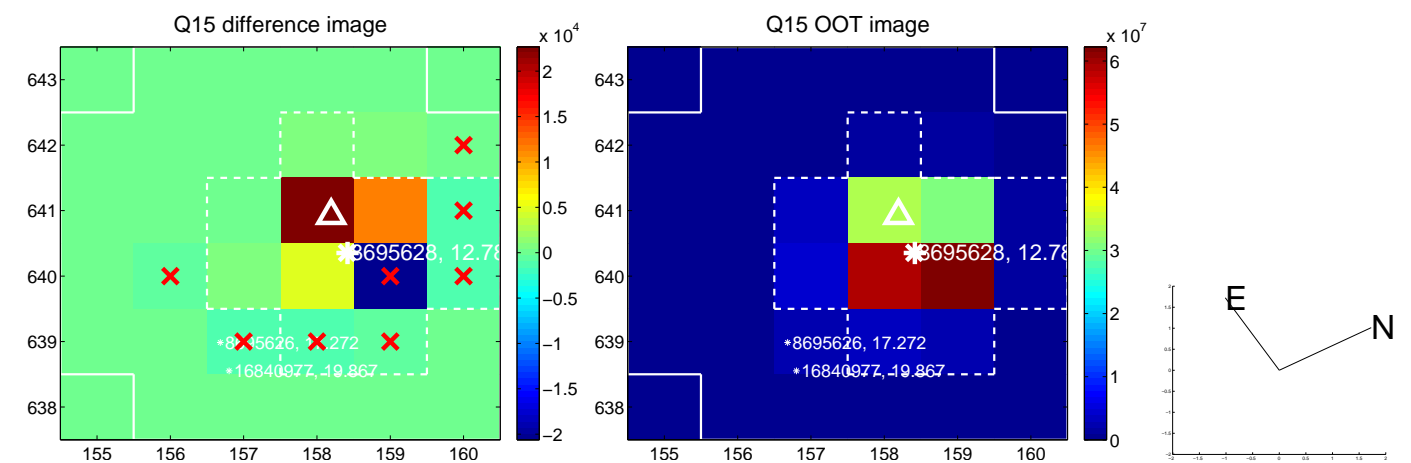
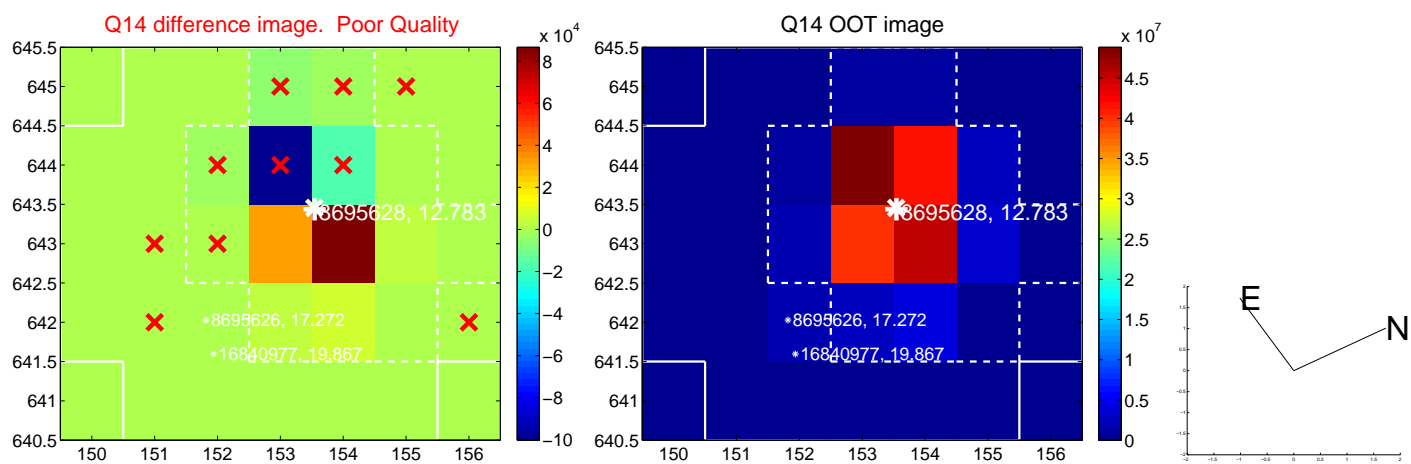
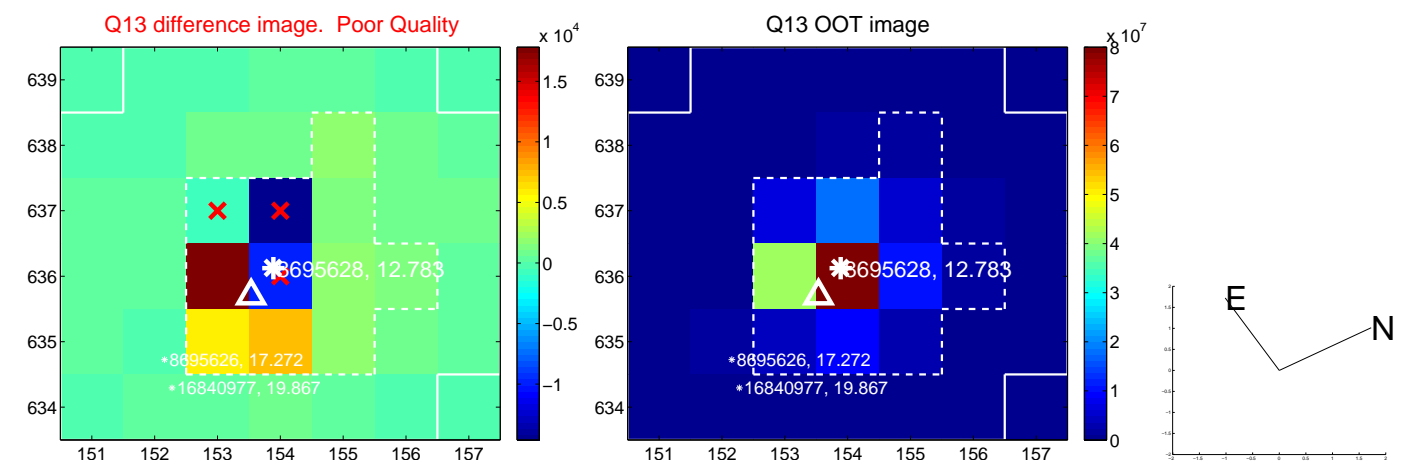
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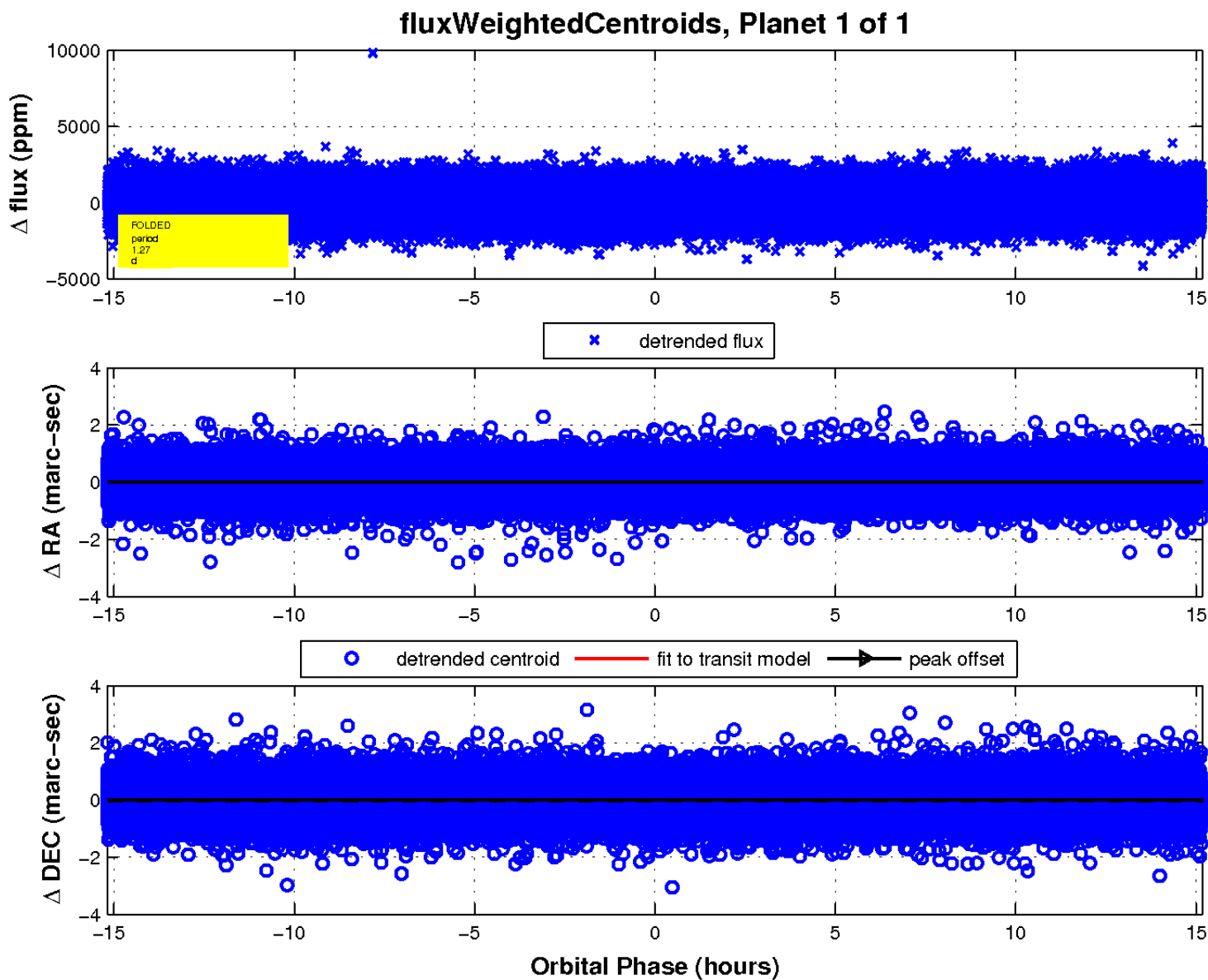
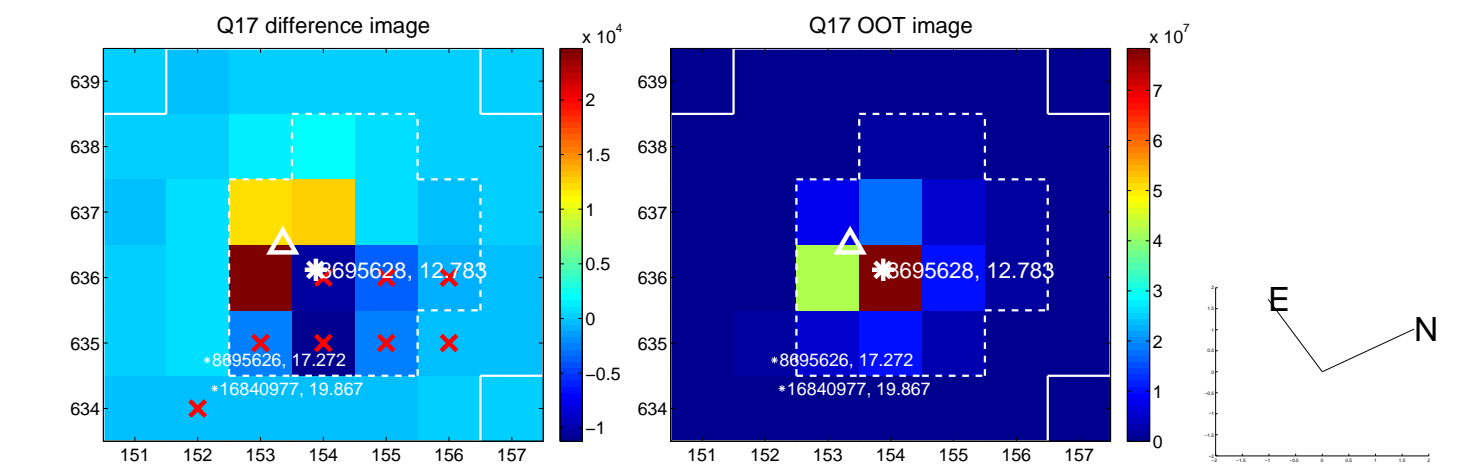
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UKIRT Image

Declination

