

KIC 008285667

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})
008285667-01	OBS	No	5.517038	132.232360	37.4	30.868	7.4	7.2	0.84	5648	0.57	180.60

Robovetter Results

TCE	Run Type	Disp	Score	N	S	C	E	Comments
008285667-01	OBS	FP	0.00	1	0	1	0	LPP_DV—CENT_UNRESOLVED_OFFSET

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

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

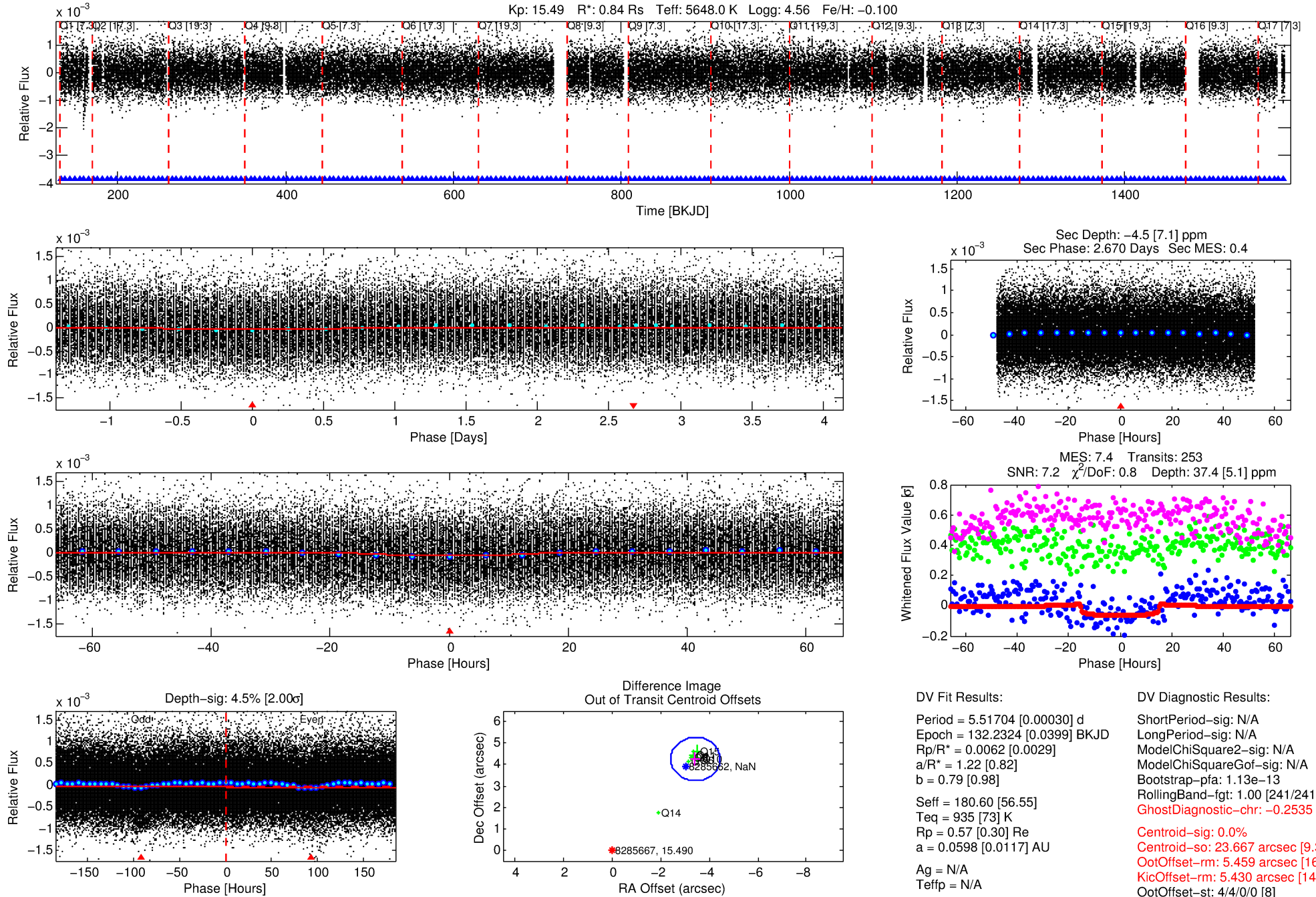
See http://exoplanetarchive.ipac.caltech.edu/docs/API_kepcandidate_columns.html#proj_disp_col for comment definitions.

Ephemeris Match Information For 008285667-01

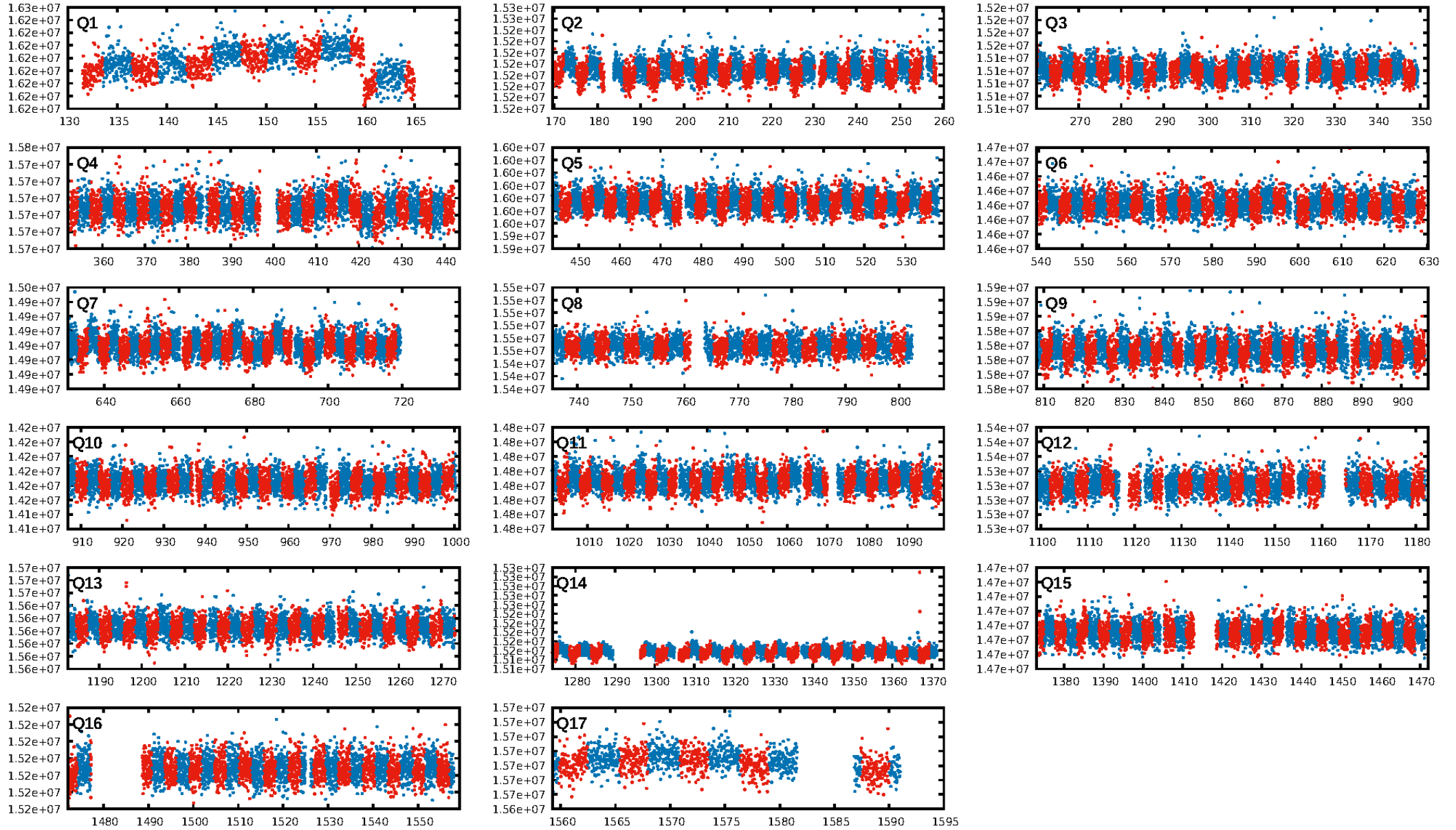
No Significant Match Found

DV One-Page Summary

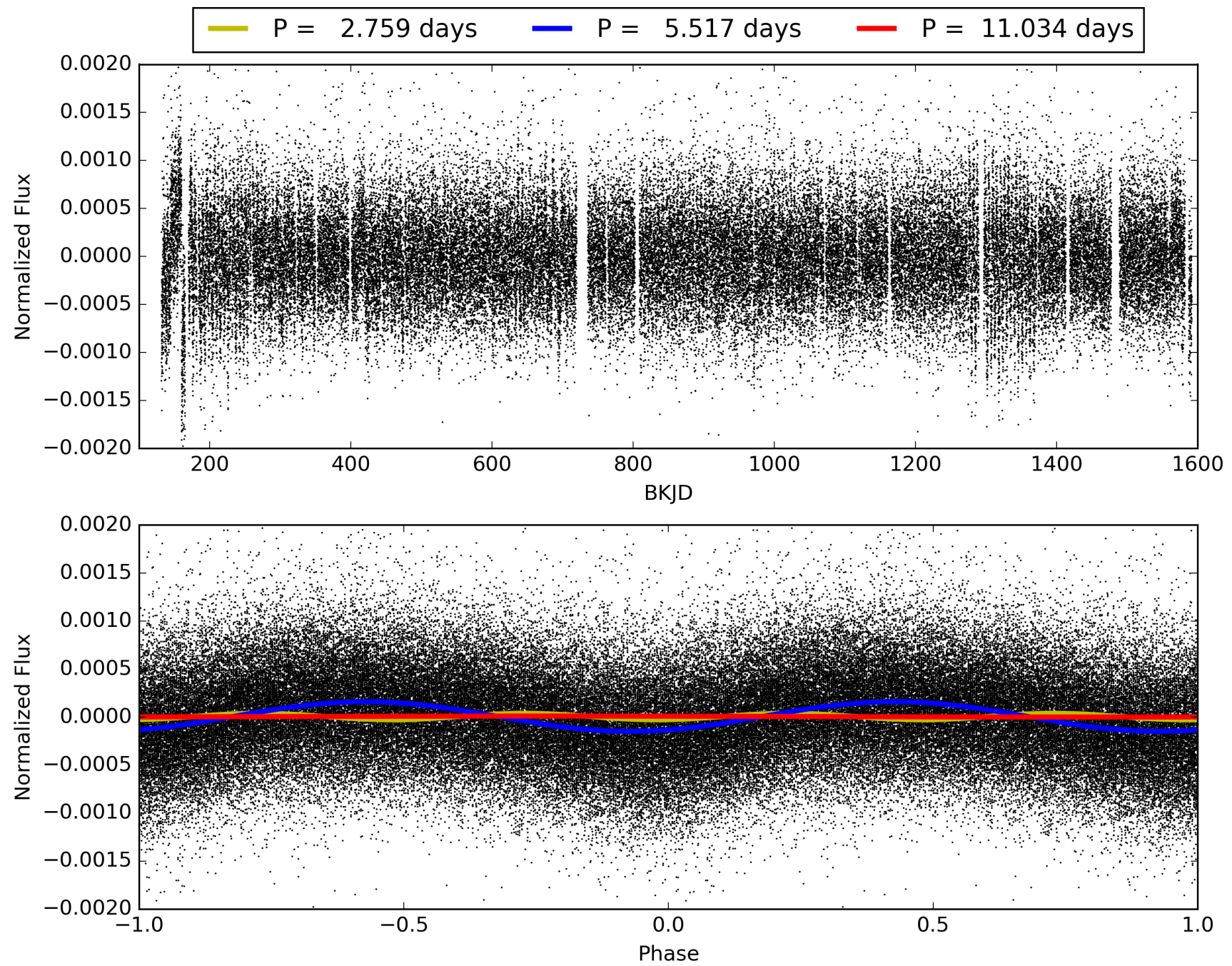
KIC: 8285667 Candidate: 1 of 1 Period: 5.517 d



TCE 008285667-01, PDC Light Curves

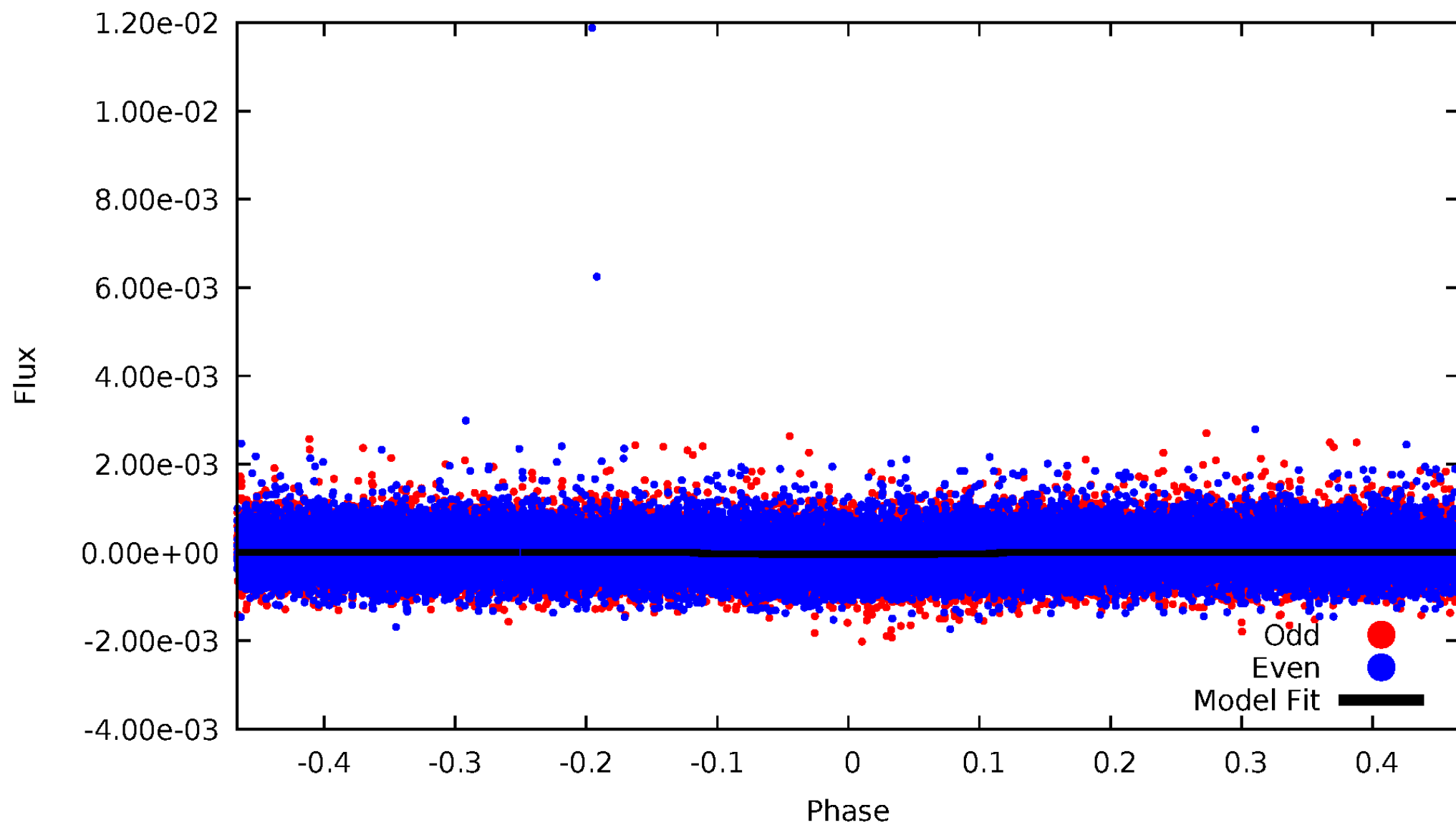


TCE 008285667-01



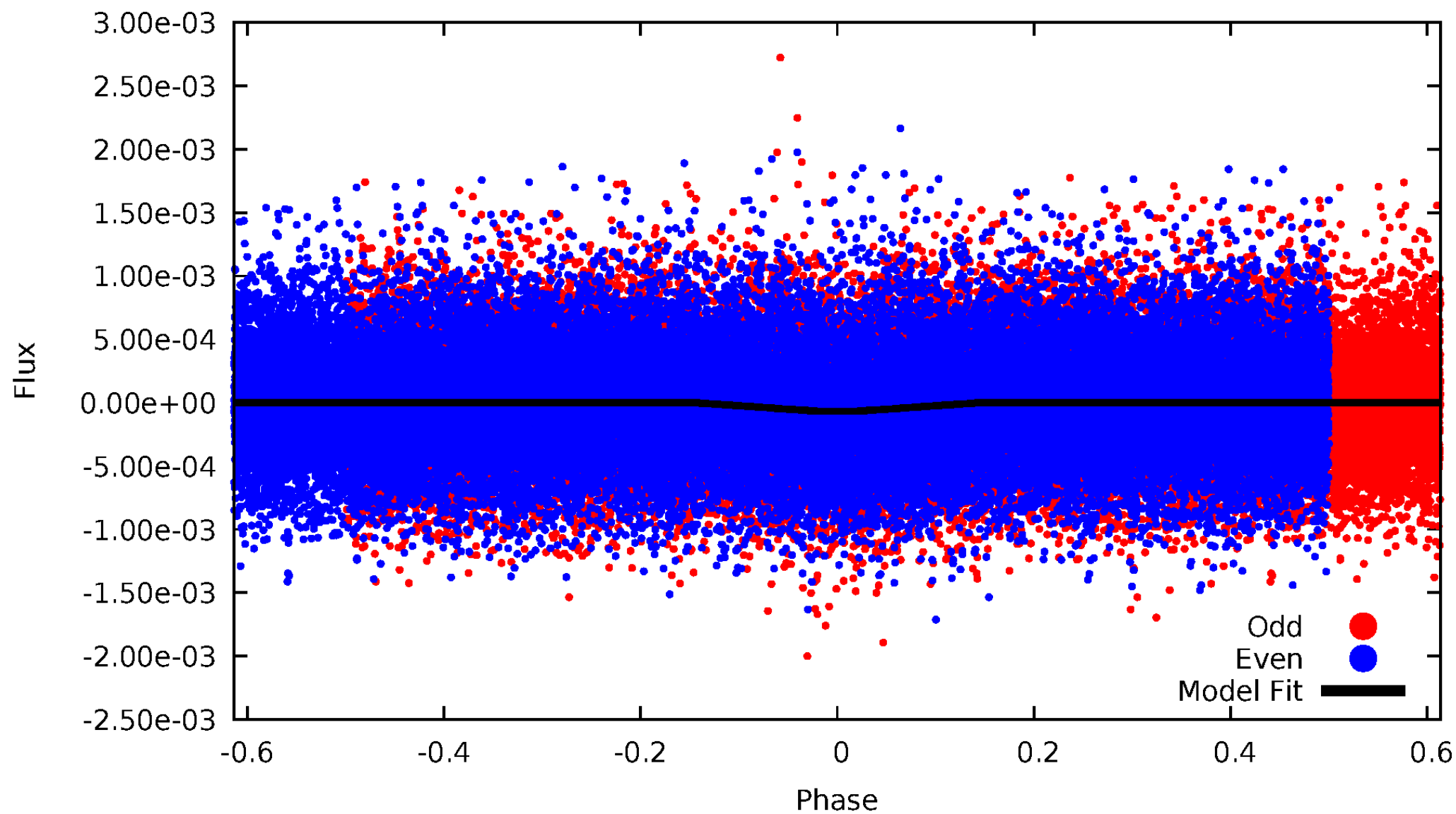
DV Odd/Even

TCE 008285667-01



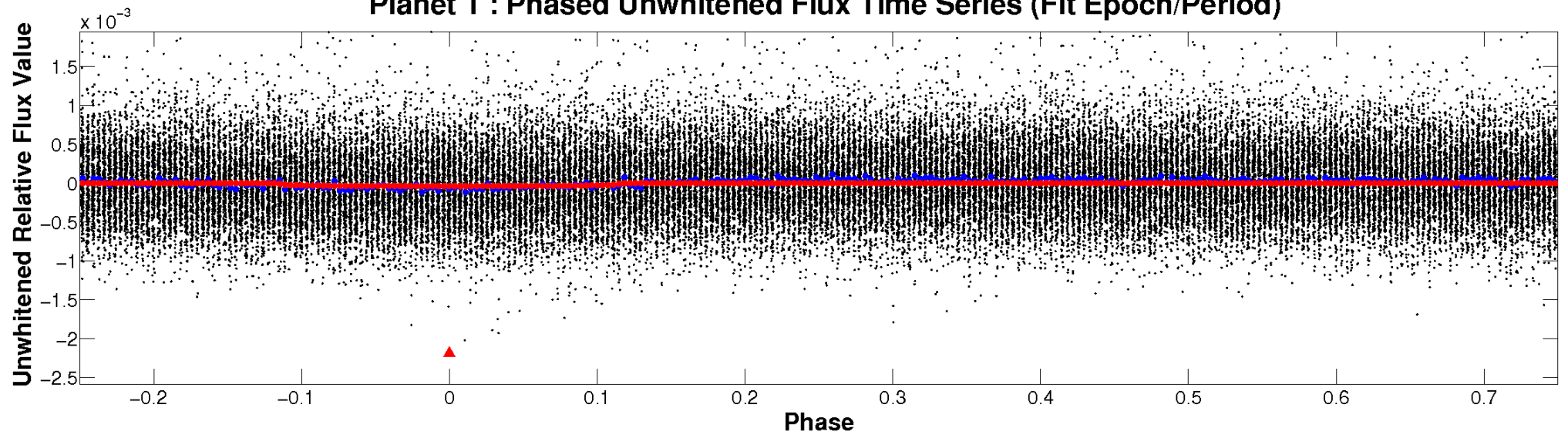
ALT Odd/Even

TCE 008285667-01

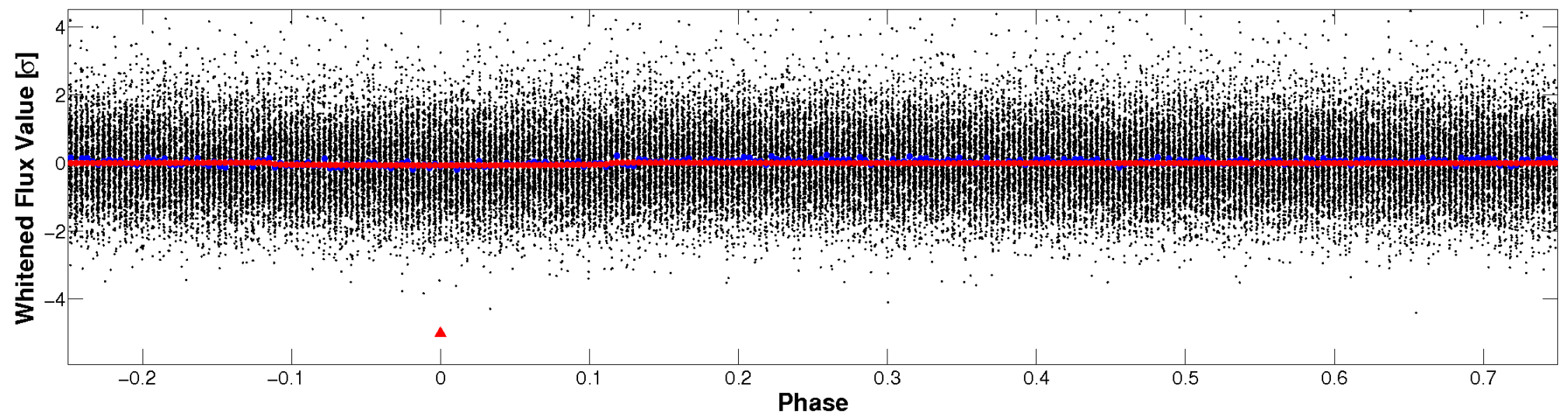


Non-Whitened Vs. Whitened Light Curve

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

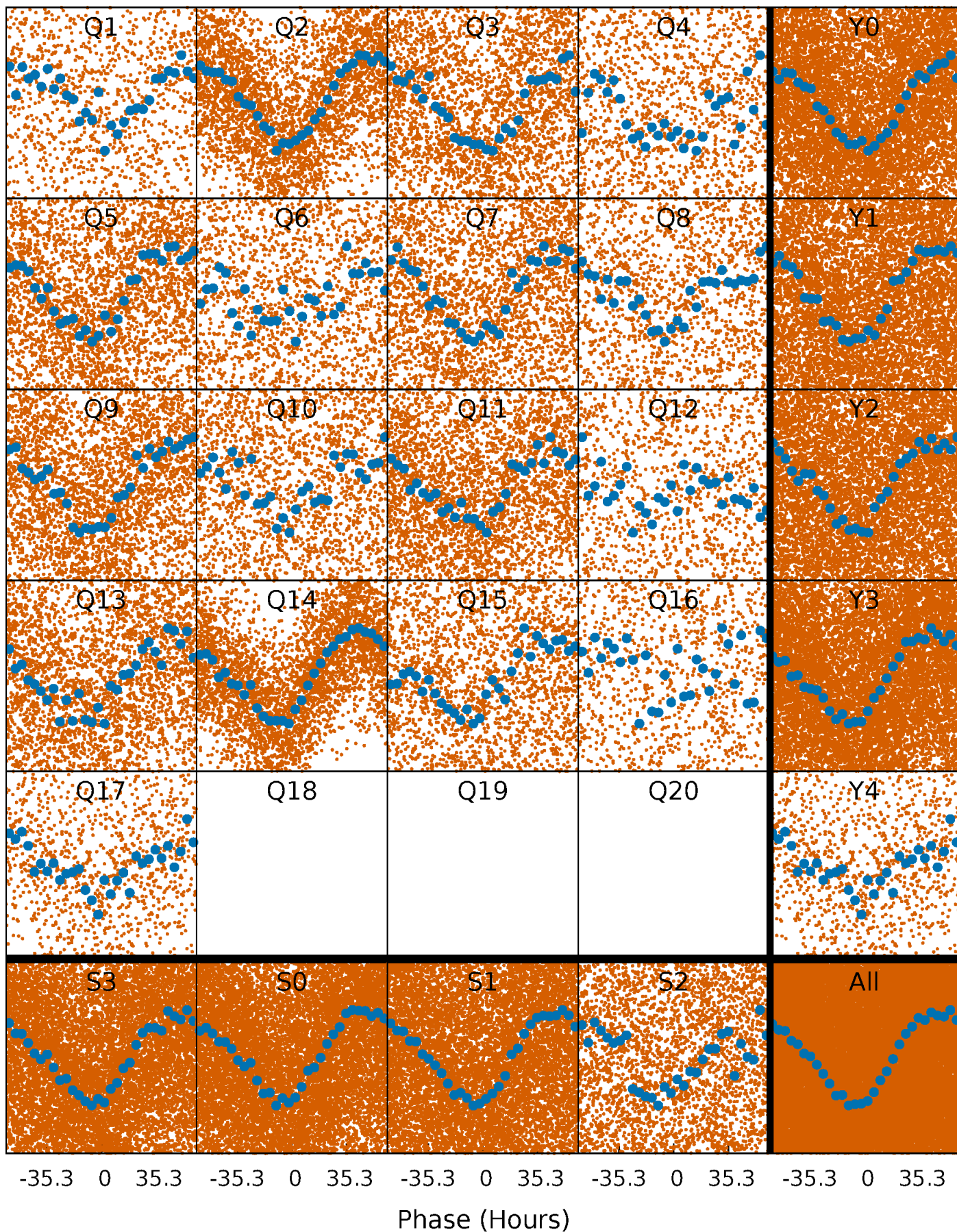


Planet 1 : Phased Whitened Flux Time Series (Fit Epoch/Period)



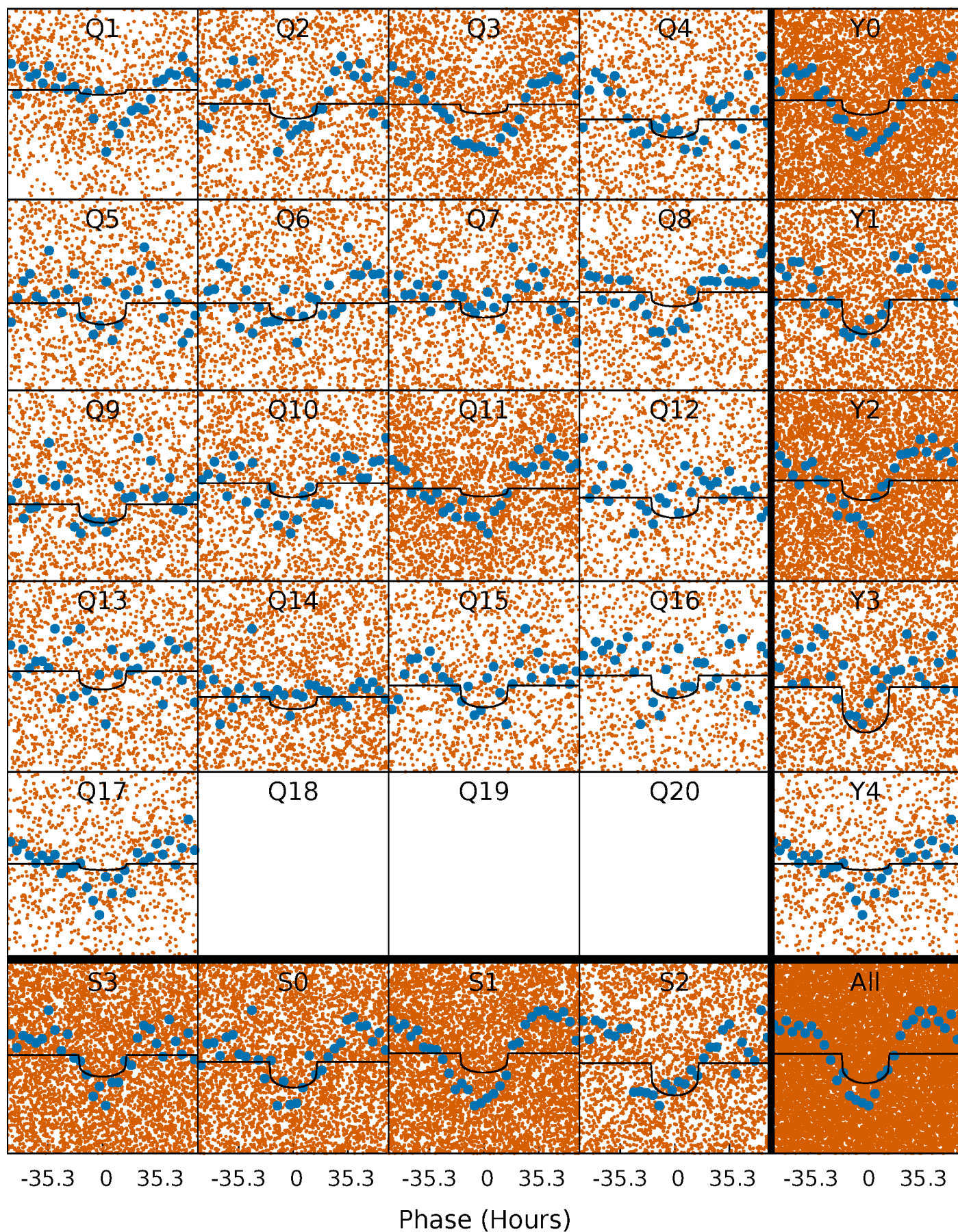
PDC Quarter-Phased Transit Curves

TCE 008285667-01 P= 5.517038 Days $T_0=132.232360$ (BKJD)



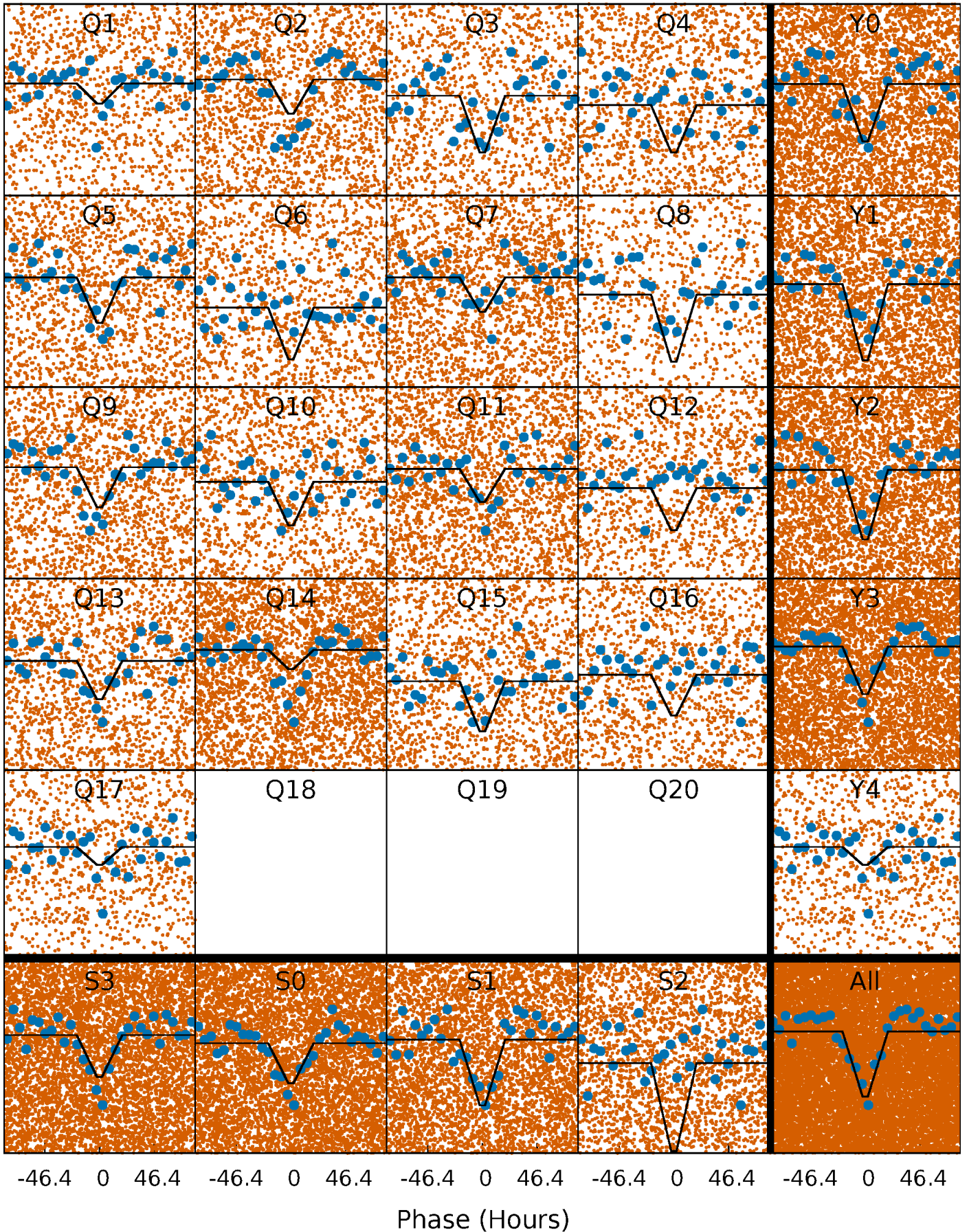
DV Quarter-Phased Transit Curves

TCE 008285667-01 P= 5.517038 Days $T_0=132.232360$ (BKJD)



Alt. Detrend Quarter-Phased Transit Curves

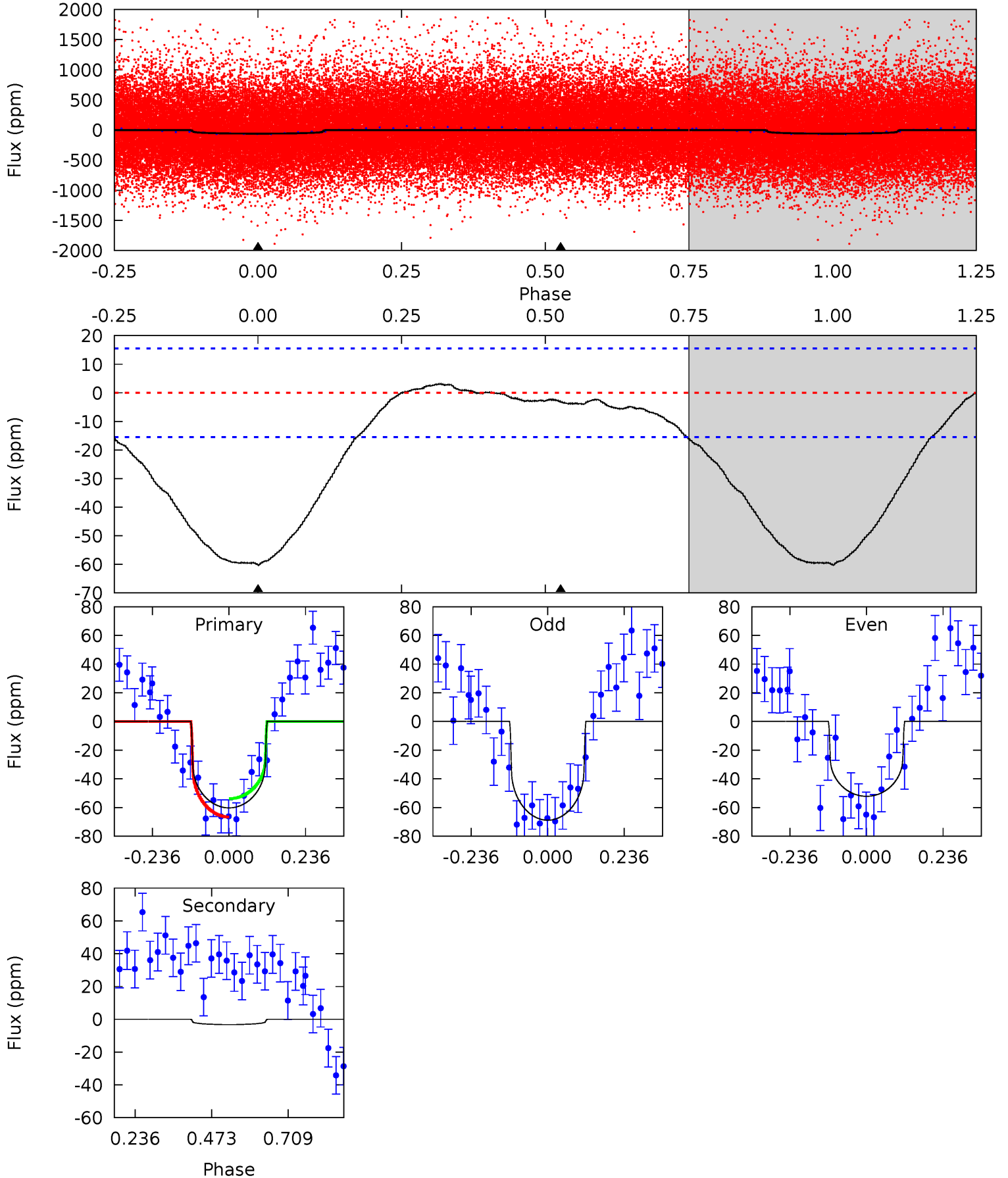
TCE 008285667-01 P= 5.515185 Days $T_0=132.467173$ (BKJD)



DV Model-Shift Uniqueness Test

008285667-01, P = 5.517038 Days, E = 126.715322 Days

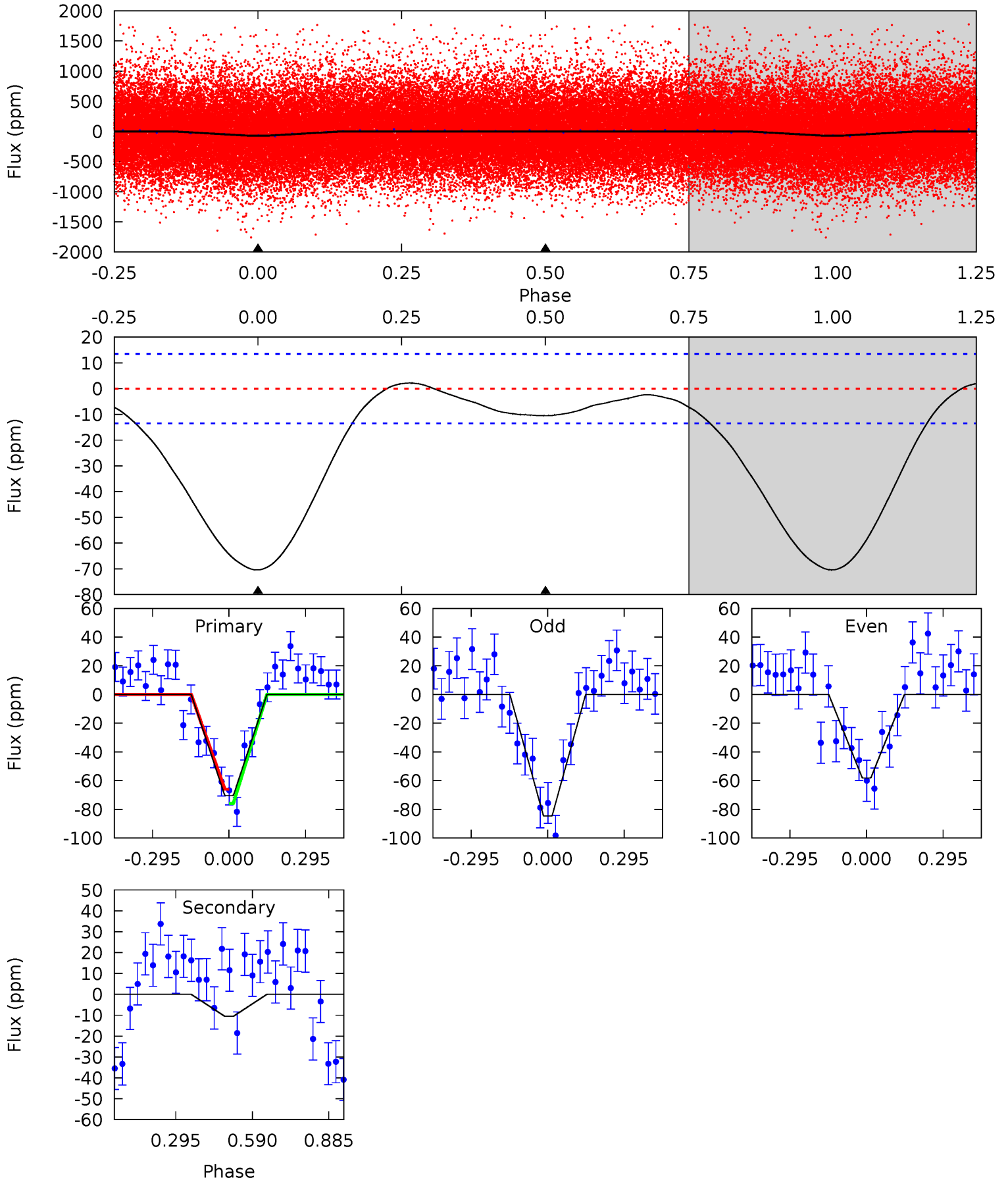
Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
17.0	0.92	0	0	4.38	1.18	2.26	17.0	17.0	0.92	0.92	2.35	1.15	0.05	1.80



Alt Model-Shift Uniqueness Test

008285667-01, P = 5.515185 Days, E = 126.951988 Days

Pri	Sec	Ter	Pos	FA ₁	FA ₂	F _{Red}	Pri-Ter	Pri-Pos	Sec-Ter	Sec-Pos	Odd-Evn	DMM	Shape	TAT
22.6	3.39	0	0	4.33	1.05	1.52	22.6	22.6	3.39	3.39	4.29	1.03	0.03	1.59



Stellar Parameters For KIC 008285667

	$T_{\text{eff}} (K)$	$\log(g)$	$[\text{Fe}/\text{H}]$	$R (R_{\odot})$	$M (M_{\odot})$	$p_{\star} (\text{g}\cdot\text{cm}^{-3})$
	5648^{+152}_{-169}	$4.559^{+0.040}_{-0.160}$	$-0.100^{+0.300}_{-0.300}$	$0.841^{+0.193}_{-0.069}$	$0.939^{+0.085}_{-0.114}$	$2.221^{+0.449}_{-0.942}$
	+3%/-3%	+1%/-4%	+300%/-300%	+23%/-8%	+9%/-12%	+20%/-42%
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 008285667-01 / KOI

Detrend	Depth (ppm)	$R_p (R_{\oplus})$	$T_{\text{max}} (K)$	$T_{\text{obs}} (K)$	A_{obs}
DV	-3 ± 4	$0.60^{+0.29}_{-0.26}$	1331^{+79}_{-57}	3434^{+974}_{-5835}	16^{+52}_{-17}
Alt.	-11 ± 3	$0.79^{+0.29}_{-0.28}$	1329^{+78}_{-54}	3851^{+696}_{-404}	32^{+46}_{-16}

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

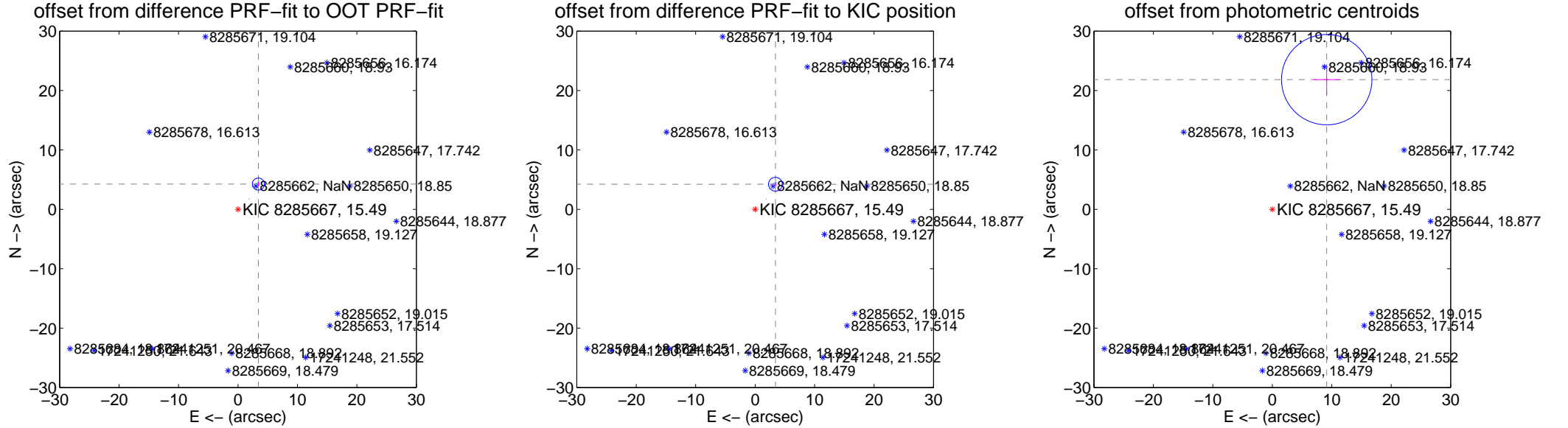
DV Centroid Data

Supplemental centroid analysis for 008285667-01. Kepler magnitude: 15.49. Transit SNR 7.24

There are 8 quarters with good PRF difference image offsets

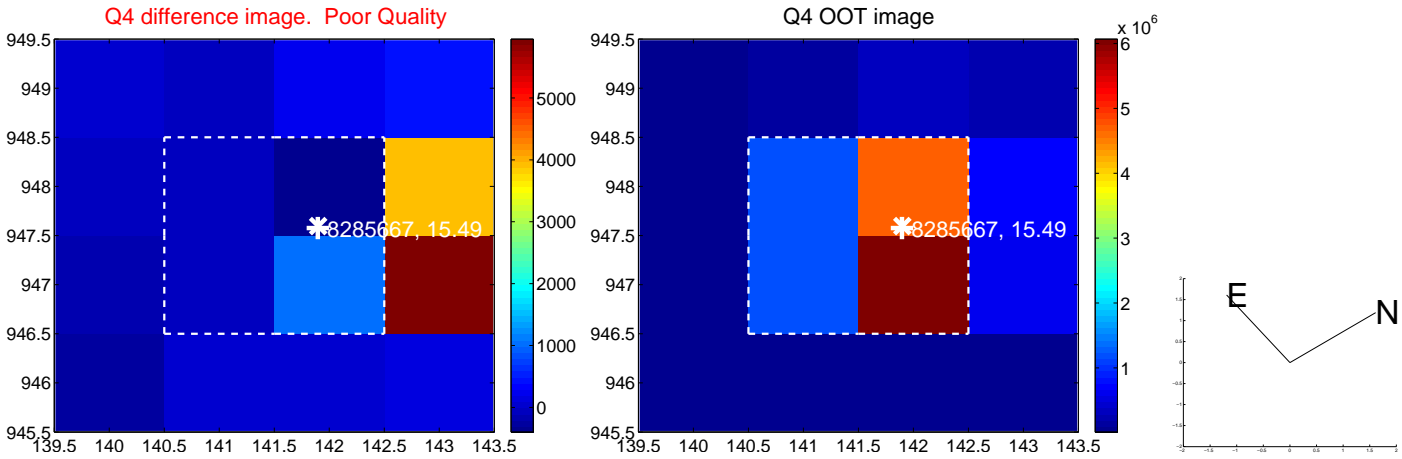
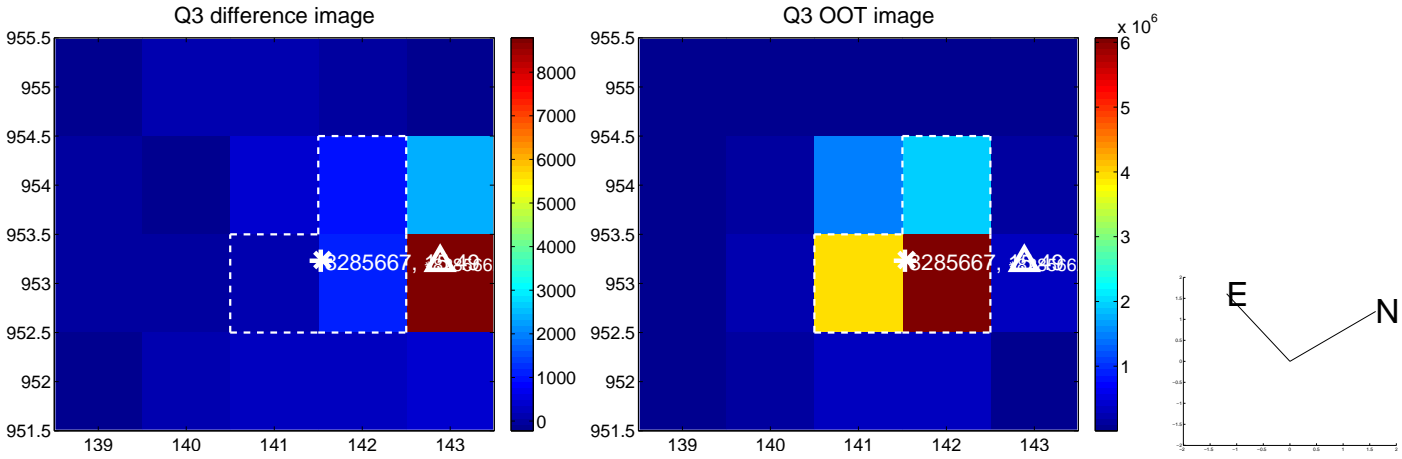
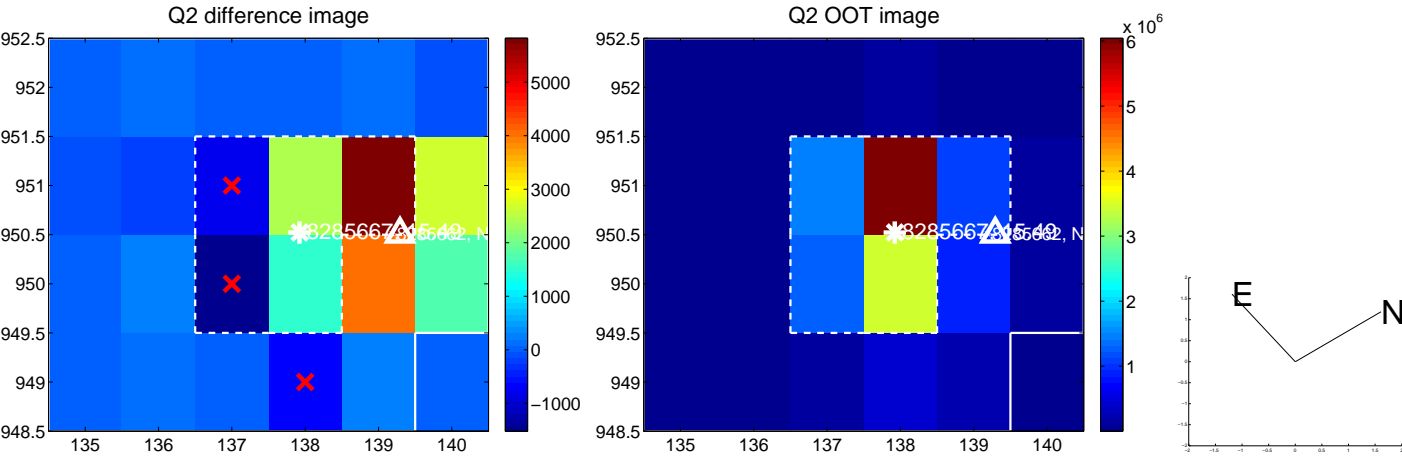
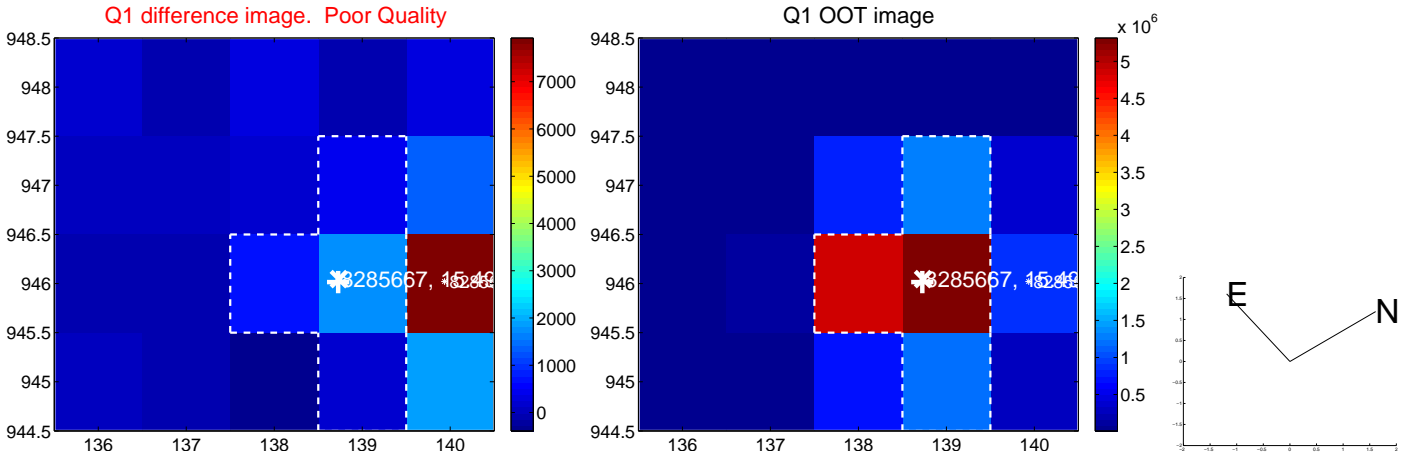
The direct PRF centroid is offset from the target star catalog position by about 0.10 arcsec

	Distance in arcsec	Distance / σ	Δ RA	Δ Dec
PRF-fit source offset from OOT	5.459 ± 0.338	16.13	-3.424 ± 0.183	4.251 ± 0.300
PRF-fit source offset from KIC position	5.430 ± 0.387	14.03	-3.412 ± 0.205	4.225 ± 0.342
photometric centroid source offset	23.67 ± 2.53	9.34	-9.15 ± 2.24	21.83 ± 2.58

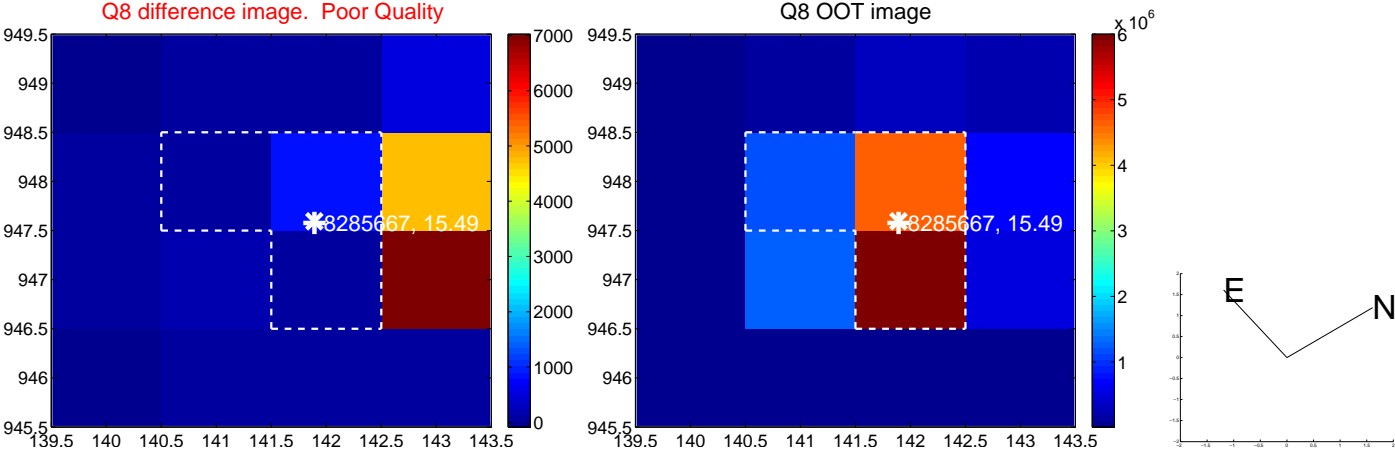
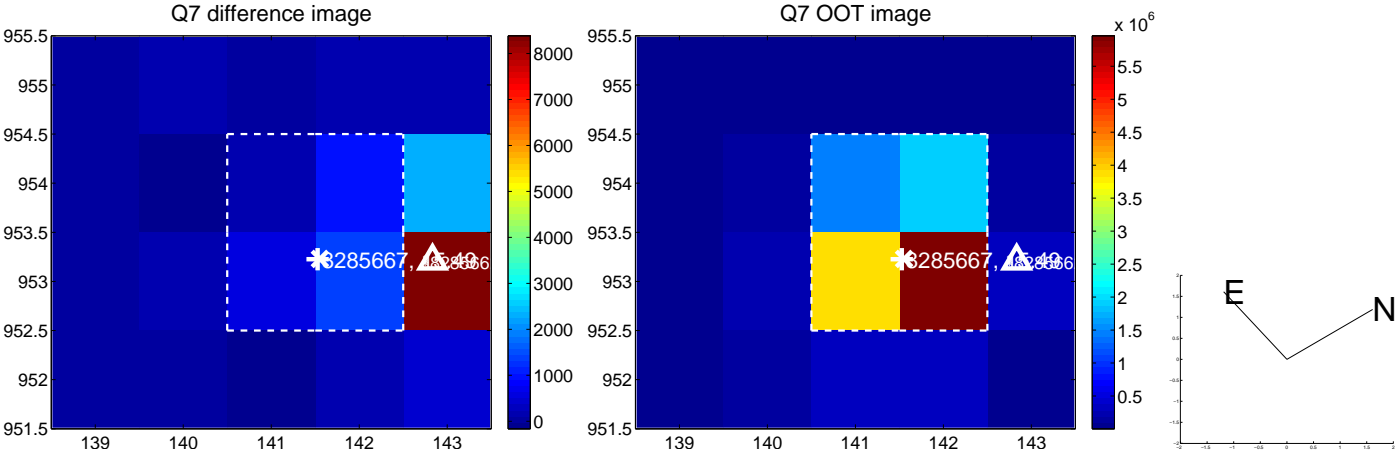
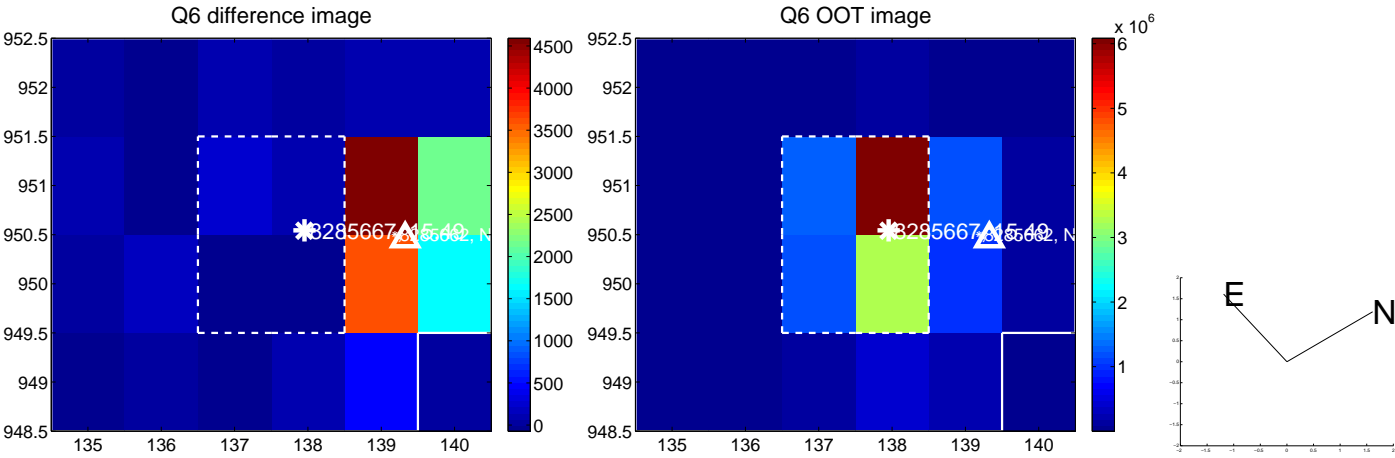
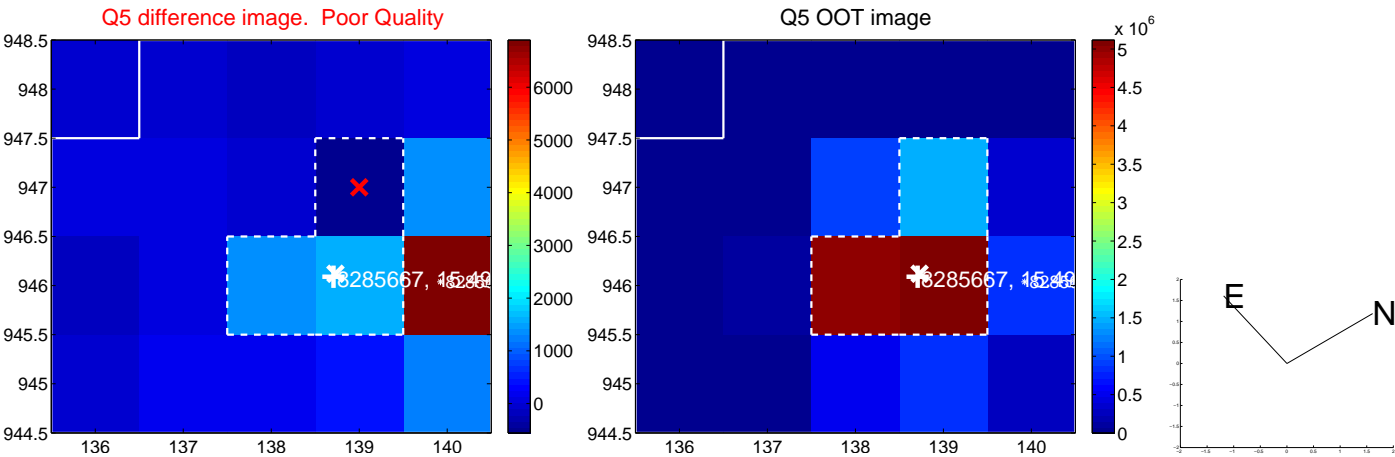


Centroid source offsets from the target star reconstructed from PRF and photometric centroids. **Sky blue crosses: good quarterly centroid offsets; Vermillion crosses: bad quarterly centroid offsets**; magenta cross: average over quarters. Length of the crosses: one- σ uncertainty. Blue circle: three-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

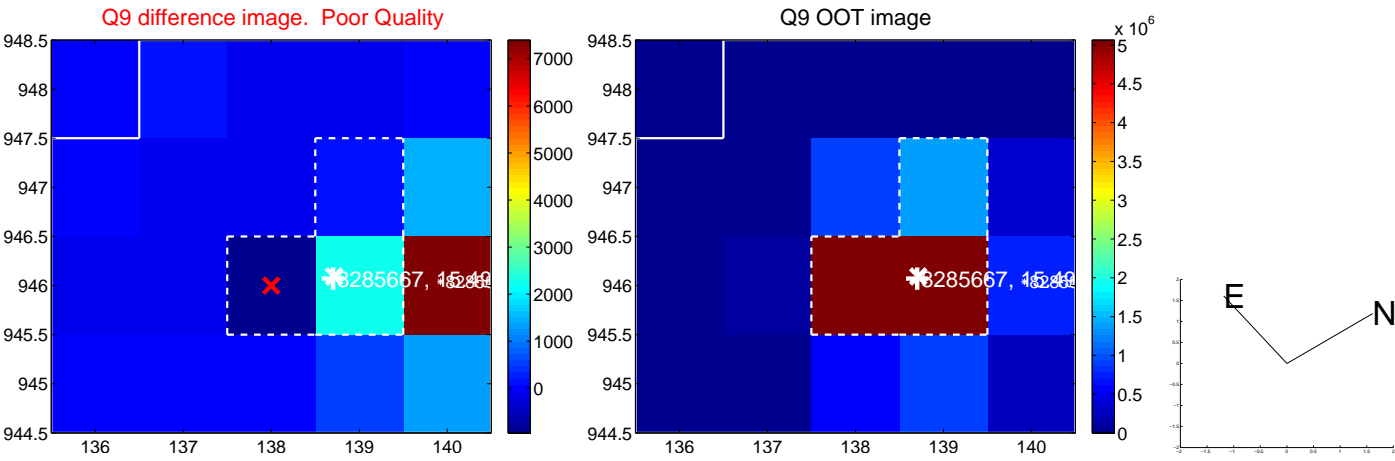
white ×: KIC target position; +: OOT centroid; △: difference centroid. red ×: large negative pixel value.



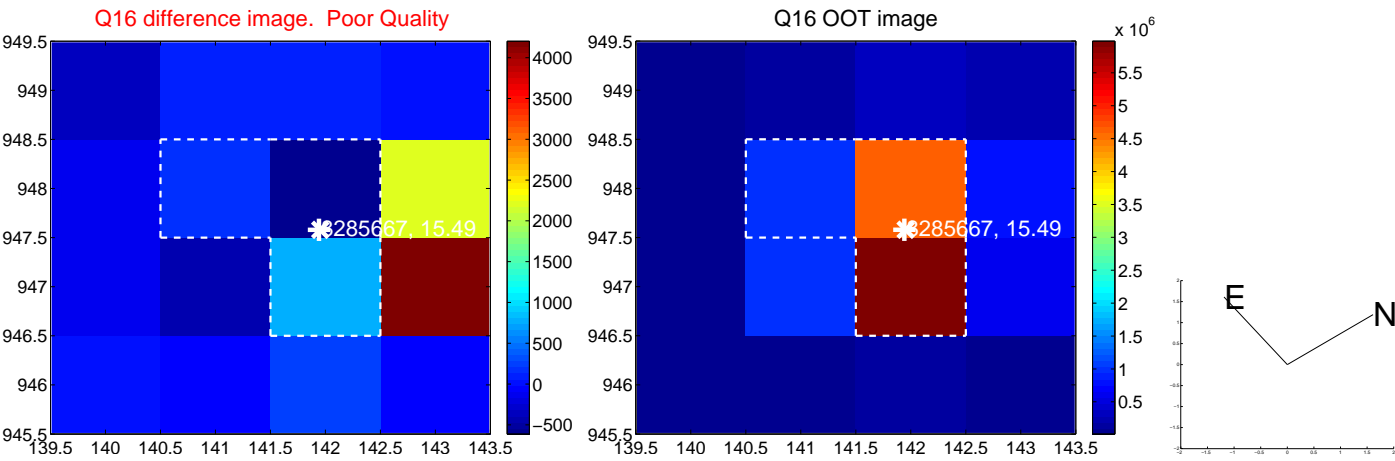
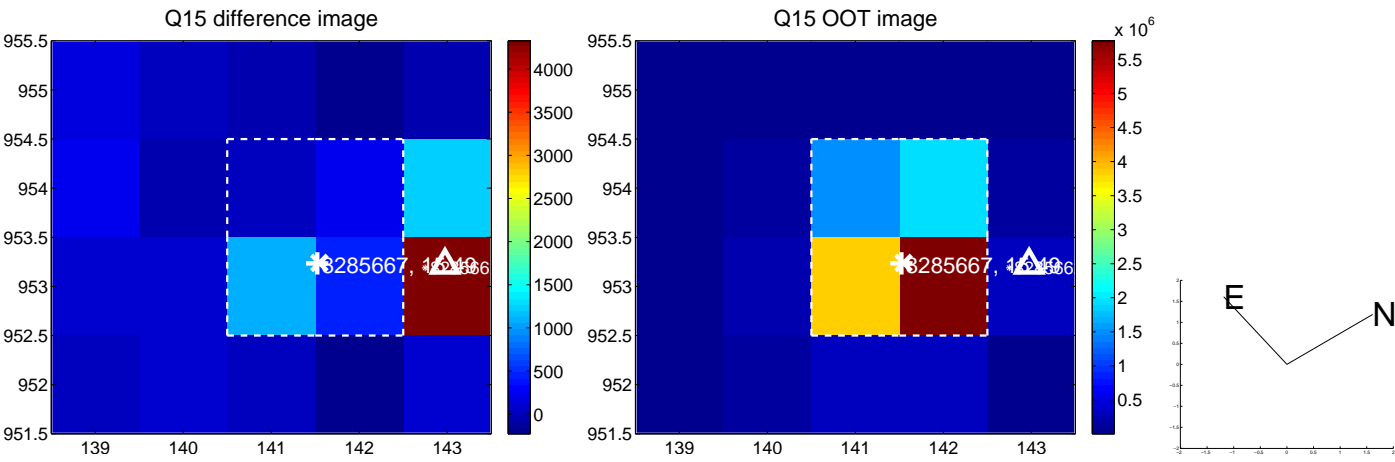
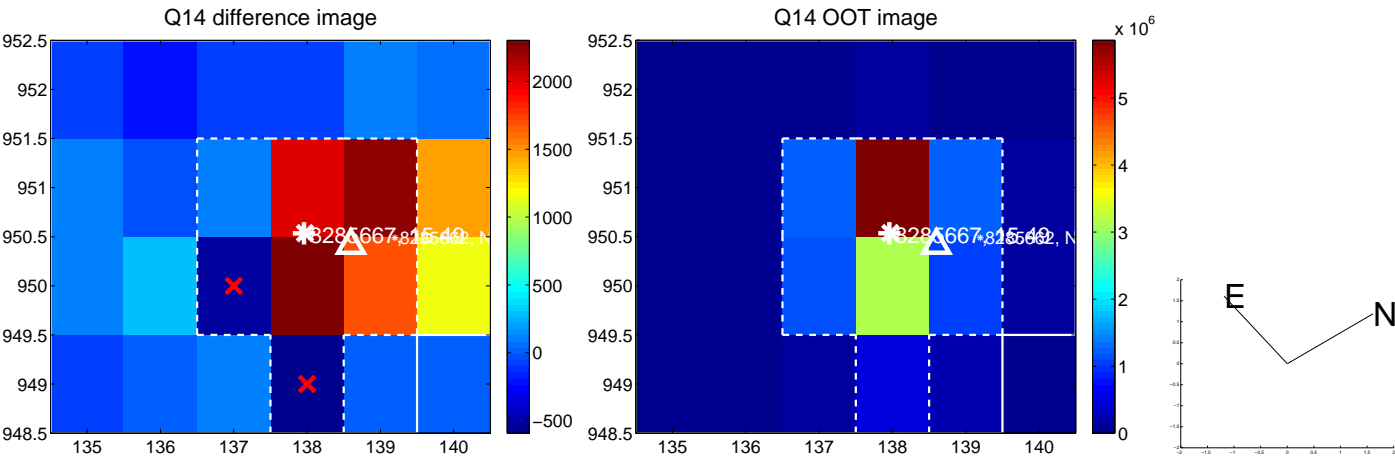
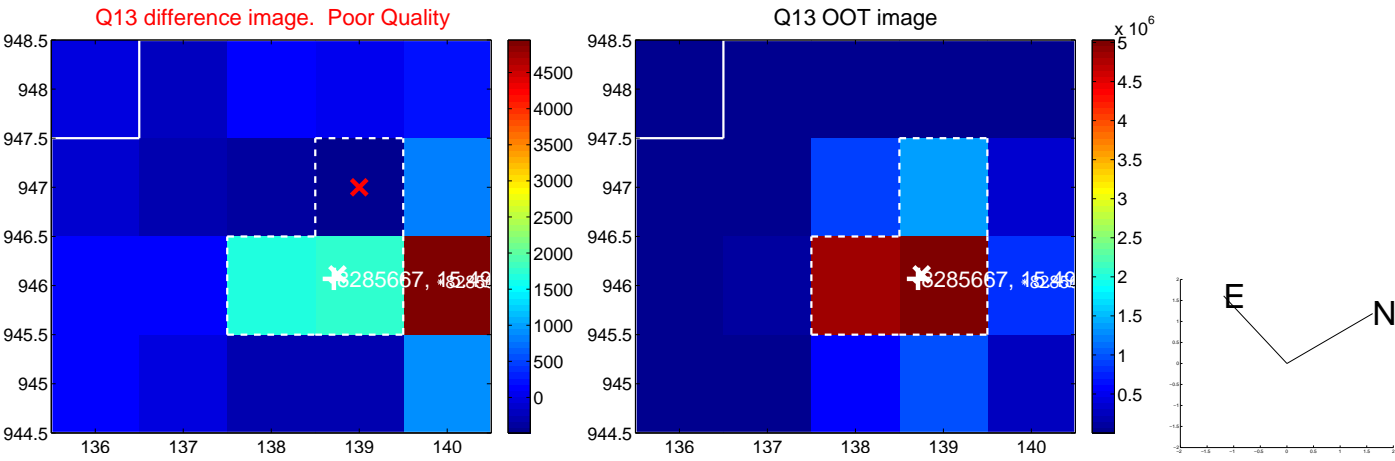
white \times : KIC target position; +: OOT centroid; \triangle : difference centroid. red \times : large negative pixel value.



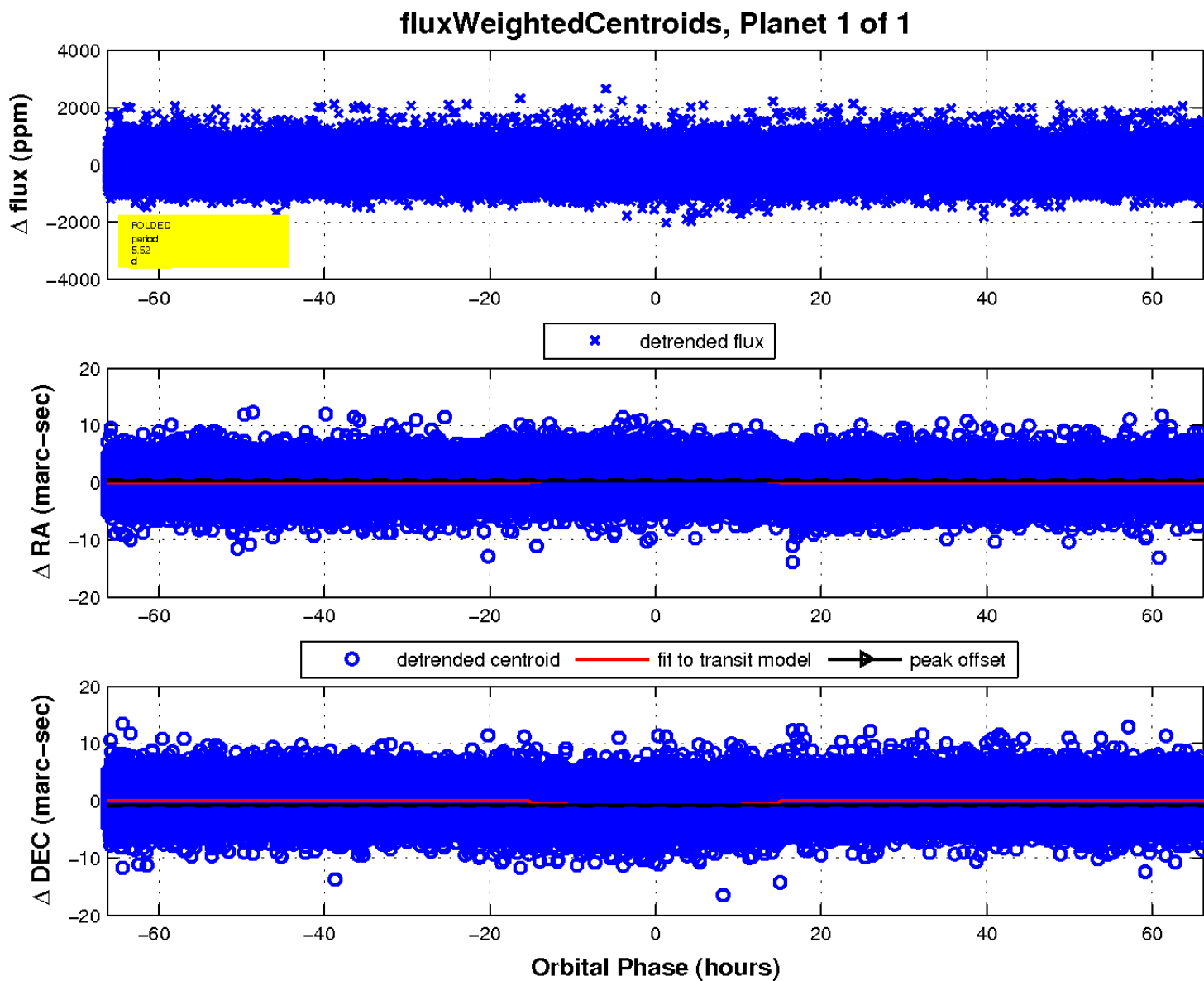
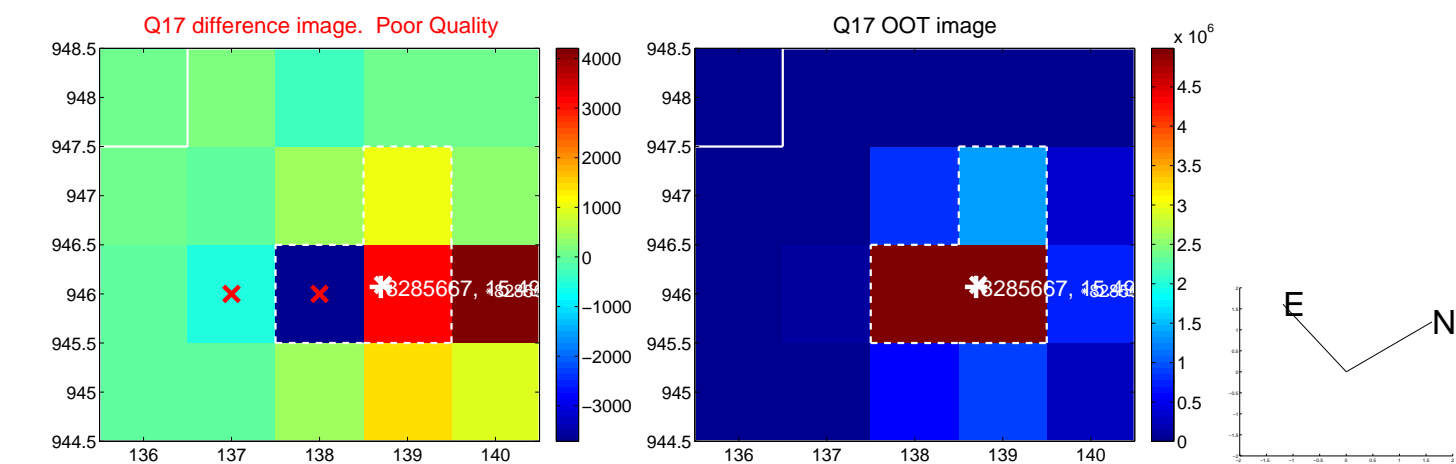
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UKIRT Image

Declination

