

Supplementary Material 3: vowel F0

Despite the non-significant results for F0 of utterances, we investigated vowel F0 to be able to directly address the use of these recording methods for the investigation of vowel F0. The analysis of vowel F0, however, shows the same results as reported for the utterances: there is no evidence that the F0 from the three comparison methods is significantly different from that of H6. Once again, there are no significant differences in parametric coefficients, nor smooth terms (Table 1), and the average contours (Figure 1) can be seen to be very similar across methods. The difference plots (Figure 2) and edf values in the smooth terms suggest that the relationship of the comparison method contours to the H6 is close to linear.

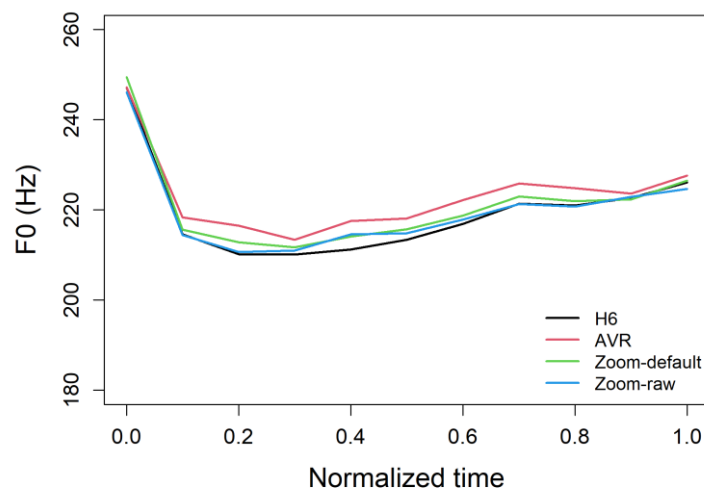


Figure 1: Average F0 (Hz) contours for vowels by method, across all speakers, vowels, and repetitions.

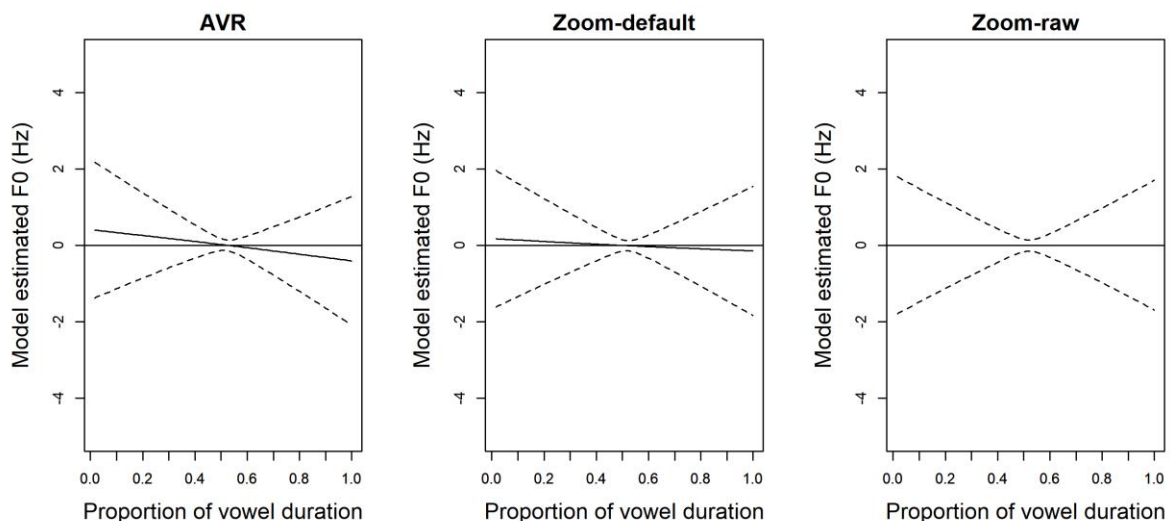


Figure 2: Difference plots for F0 over vowels (AVR difference curve left; Zoom-default difference curve center; Zoom-raw difference curve right)

Table 1: Summary table of vowel F0 QGAMM. Final model: $f_0 \sim \text{gender} + \text{method} + s(\text{measurement.no}) + s(\text{measurement.no}, \text{by} = \text{methodOrd}) + s(\text{measurement.no}, \text{speaker}, \text{bs} = \text{"fs"}, \text{m} = 1) + s(\text{measurement.no}, \text{vw}, \text{bs} = \text{"fs"}, \text{m} = 1)$

Parametric coefficients:				
	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	269.0501	9.8255	27.383	< 2e-16
genderM	-140.1424	6.9730	-20.098	< 2e-16
methodAVR	0.1735	0.4856	0.357	0.721
methodZoom-default	-0.6617	0.4908	-1.348	0.178
methodZoom-raw	-0.4513	0.4887	-0.923	0.356
Approximate significance of smooth terms:				
	edf	Ref.df	Chi.sq	p-value
s(measurement.no)	1.039	1.046	3.141	0.0793
s(measurement.no):methodOrdAVR	1.024	1.047	0.236	0.6614
s(measurement.no):methodOrdZoom-default	1.021	1.042	0.029	0.9053
s(measurement.no):methodOrdZoom-raw	1.026	1.051	0.000	0.9997
s(measurement.no,speaker)	35.421	70.000	2228.741	< 2e-16
s(measurement.no,vw)	152.262	233.000	45260.489	< 2e-16