An acoustic analysis of West Frisian monophthongs

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Previous literature on Modern West Frisian reports a fairly large vowel inventory, including 18 monophthongs consisting of nine vowel pairs distinguished by length. Yet, this extensive vowel system has hardly been subject to phonetic investigation. Here, I report some preliminary findings of an ongoing investigation into some acoustic properties (F1, F2 and duration) of the 9 short and 9 long monophthongs of this minority language. Based on corpus data from 2017-2019 of native speakers from the former municipality Boarnsterhim, realisations of 6 older males are compared with 6 younger female speakers. Vowels were measured preceding [t] or [s] in closed, stressed syllables of content words in spontaneous speech. Besides providing a preliminary acoustic description of Frisian monophthongs in spontaneous speech, some sound changes are looked at in more detail. The first analyses reveal at least one obvious change in progress: younger speakers show the tendency to diphthongise the long high vowels [iː yː uː] to [iˑə yˑə uˑə]. This change could impact the Frisian vowel inventory, as these diphthongs hold phonemic value (see the minimal pair *wiid* [ʊiːt] ‘wide’ vs. *wiet* [ʊiˑət] ‘wet’). Tracking the origin and spread of this merger could provide new insights into how Frisian is changing, possibly under the influence of Dutch.