

Supplementary Files

This file contains plots supplementary to the article [1].

- The vertical axis is sound pressure level in dB(C) at 0.3 m.
- The horizontal axis is fundamental frequency f_0 in semitones on the MIDI scale, where $60=261.6$ Hz (“middle C”).
- Each ‘pixel’ or cell in the maps is 1 semitone wide and 1 dB tall.

Acoustic metrics are labelled as

“Crest” = crest factor

“SpecBal” = spectrum balance (dB)

“CPPs” = cepstral peak prominence smoothed (dB)

EKG metrics are labelled as

“Entropy” = cycle-rate sample entropy (CSE) (arbitrary units)

“dEKGmax” = Q_{Δ} (normalized maximum EKG slope)

“Qcontact” = Q_{ci} (quotient of contact by integration)

The data were originally collected for the study of Patel and Ternström [2].

Reference

1. Cai, H.; Ternström, S. Mapping Phonation Types by Clustering of Multiple Metrics. *Appl. Sci.* 2022, 12, 12092. <https://doi.org/10.3390/app122312092>
2. Patel, R.R.; Ternstrom, S. Quantitative and Qualitative Electroglottographic Wave Shape Differences in Children and Adults Using Voice Map-Based Analysis. *J. Speech Lang. Hear. Res.* 2021, 64, 2977–2995. https://doi.org/10.1044/2021_JSLHR-20-00717.

Figure S1: Classification voice maps for participant M01

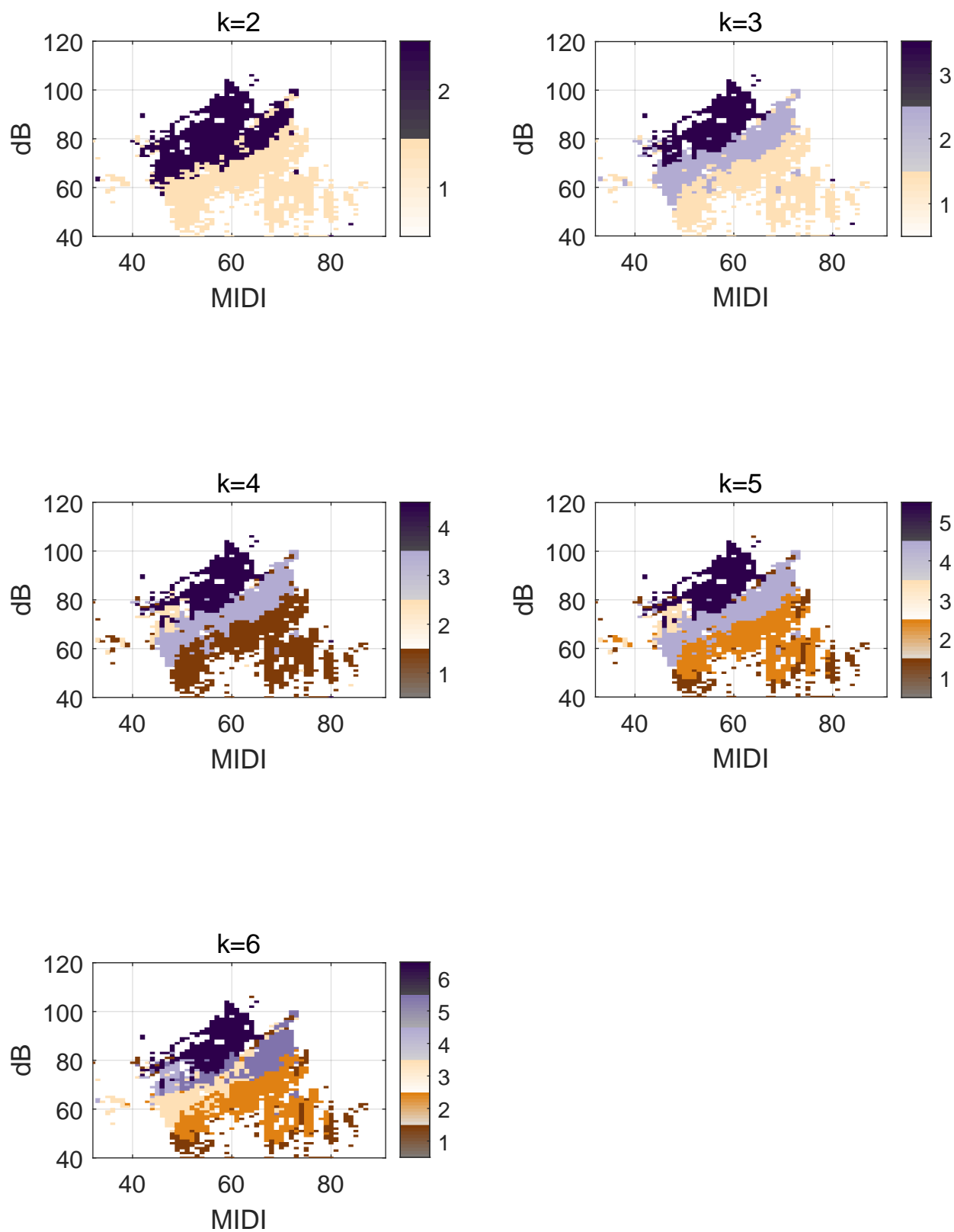


Figure S2: Acoustic and EGG Metric maps for participant M01

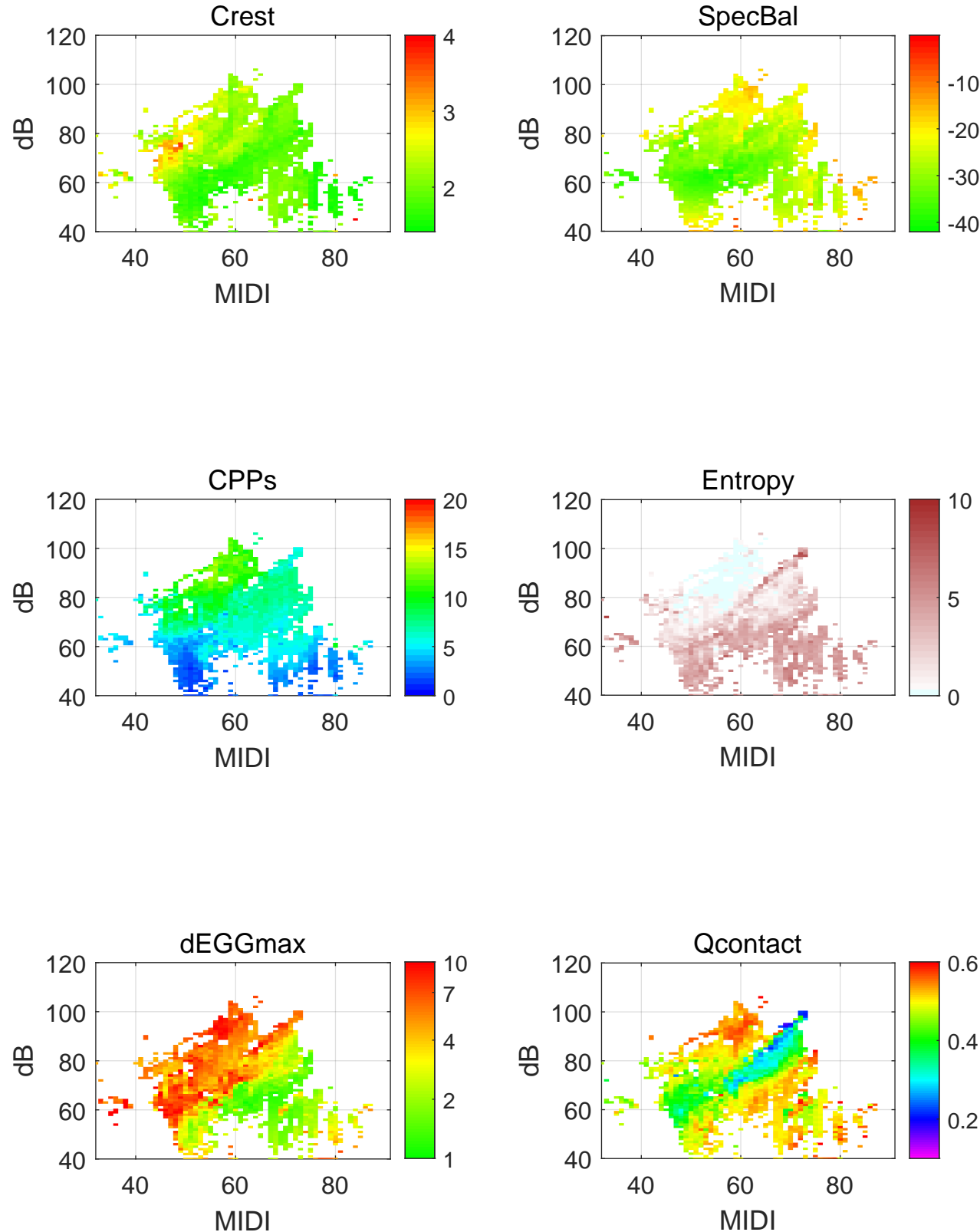


Figure S3: Classification voice maps for participant M02

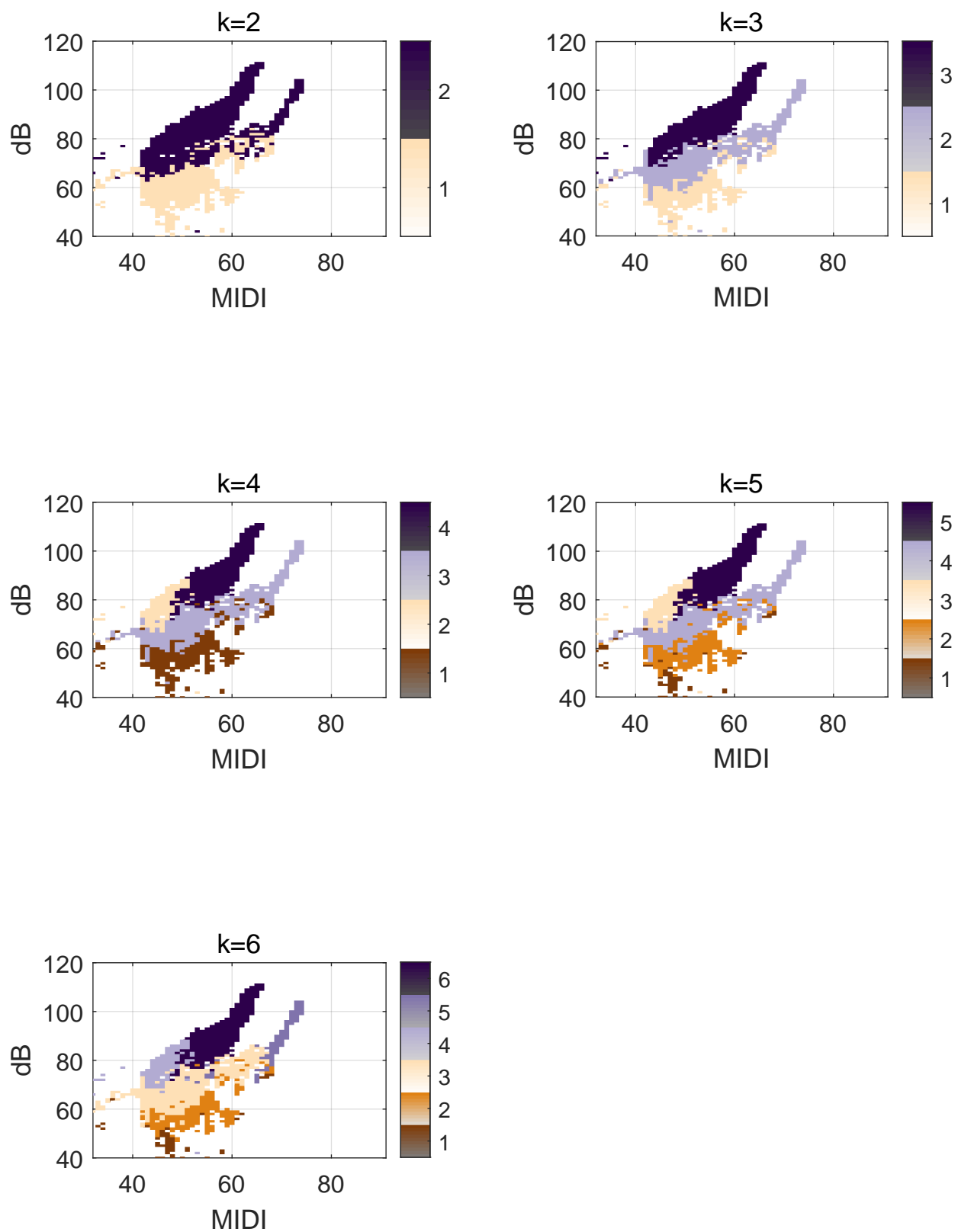


Figure S4: Acoustic and EGG Metric maps for participant M02

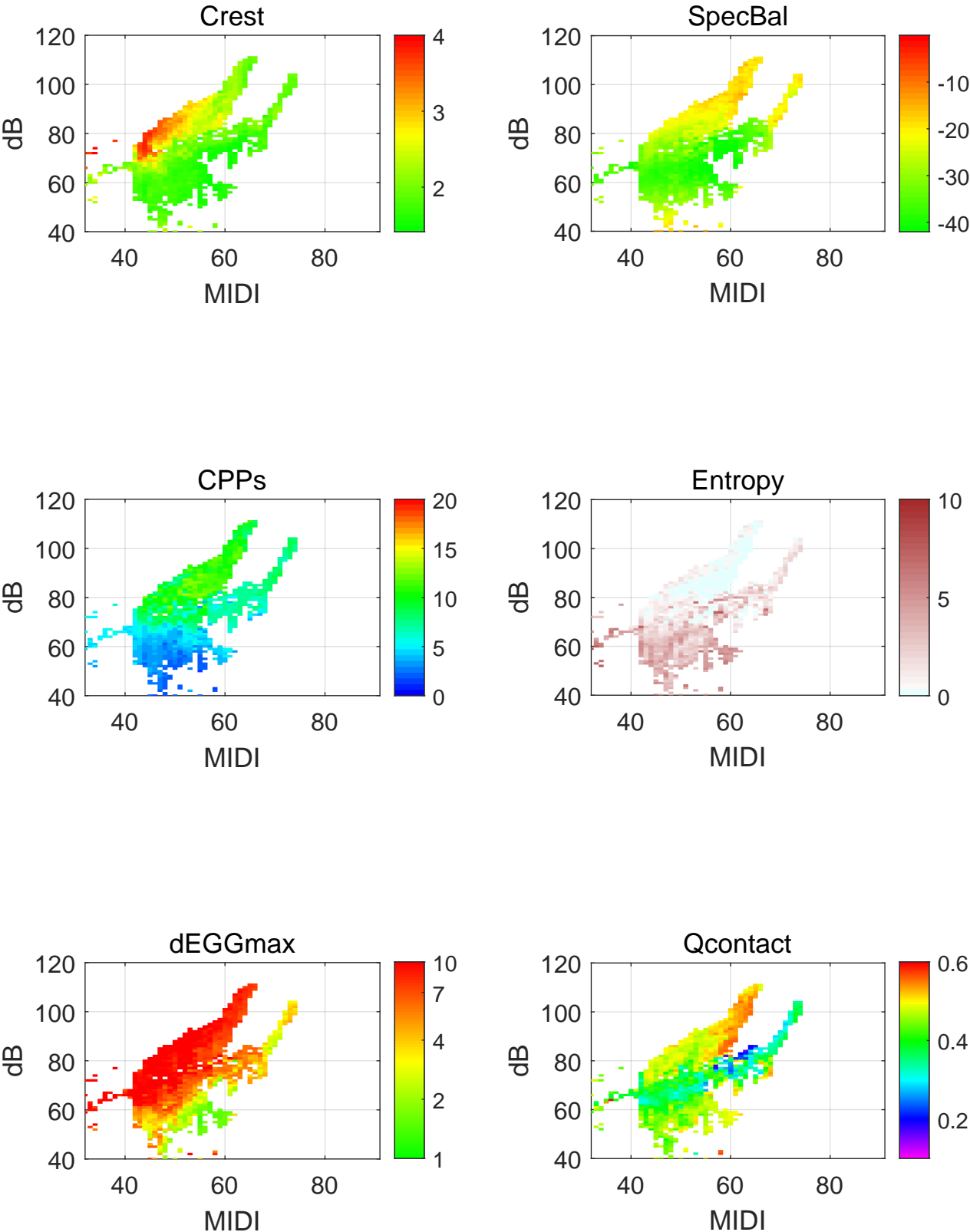


Figure S5: Classification voice maps for participant M03

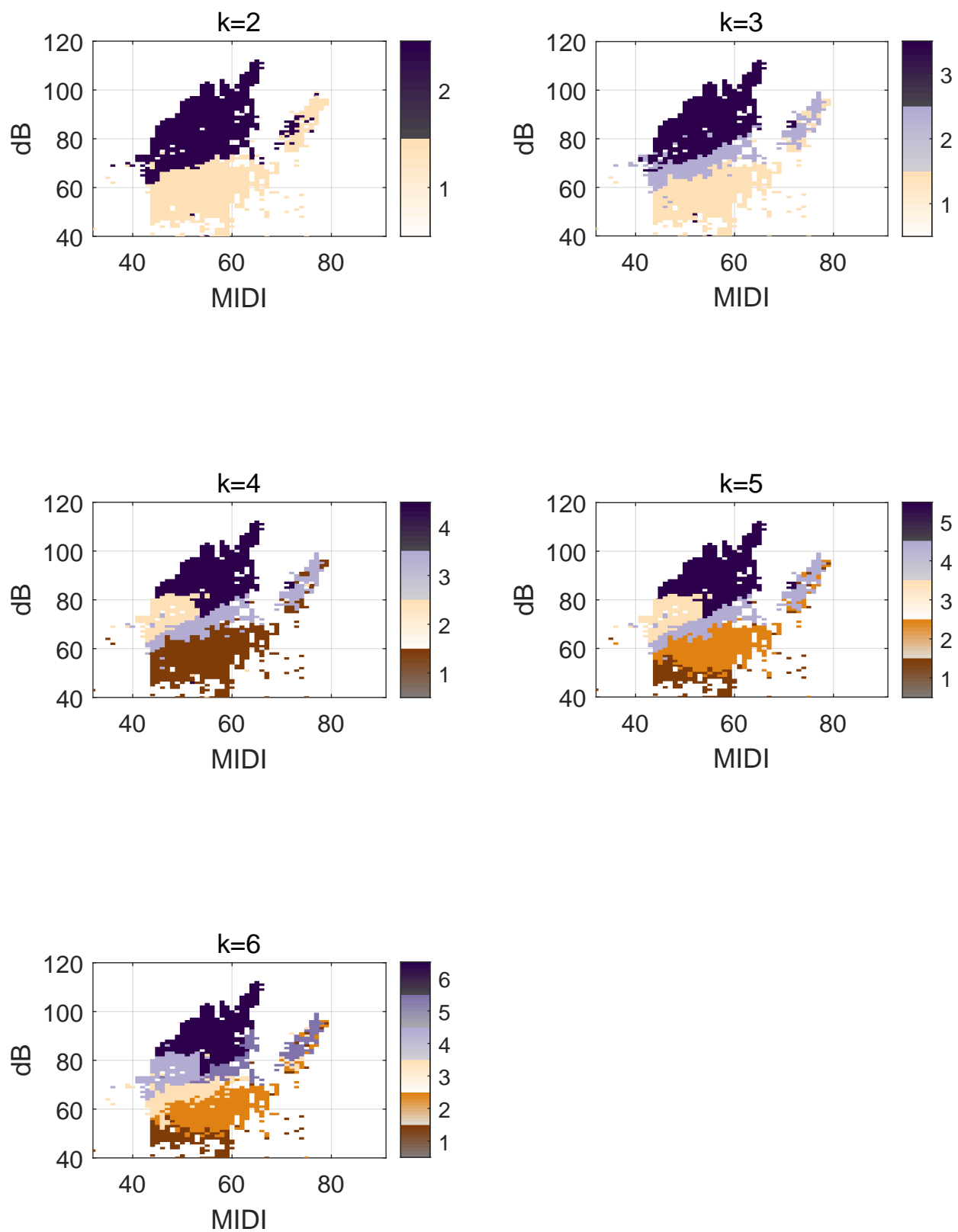


Figure S6: Acoustic and EGG Metric maps for participant M03

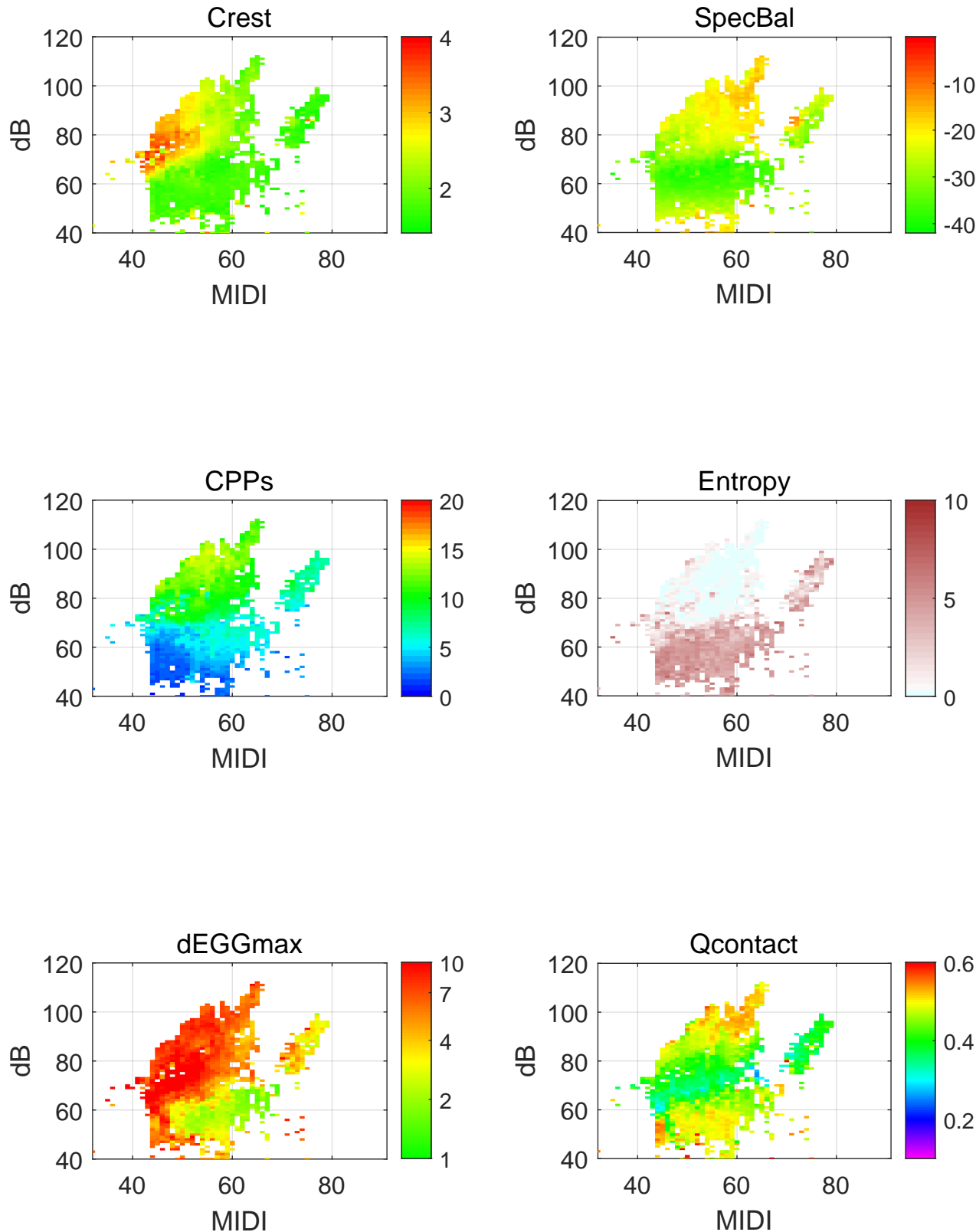


Figure S7: Classification voice maps for participant M04

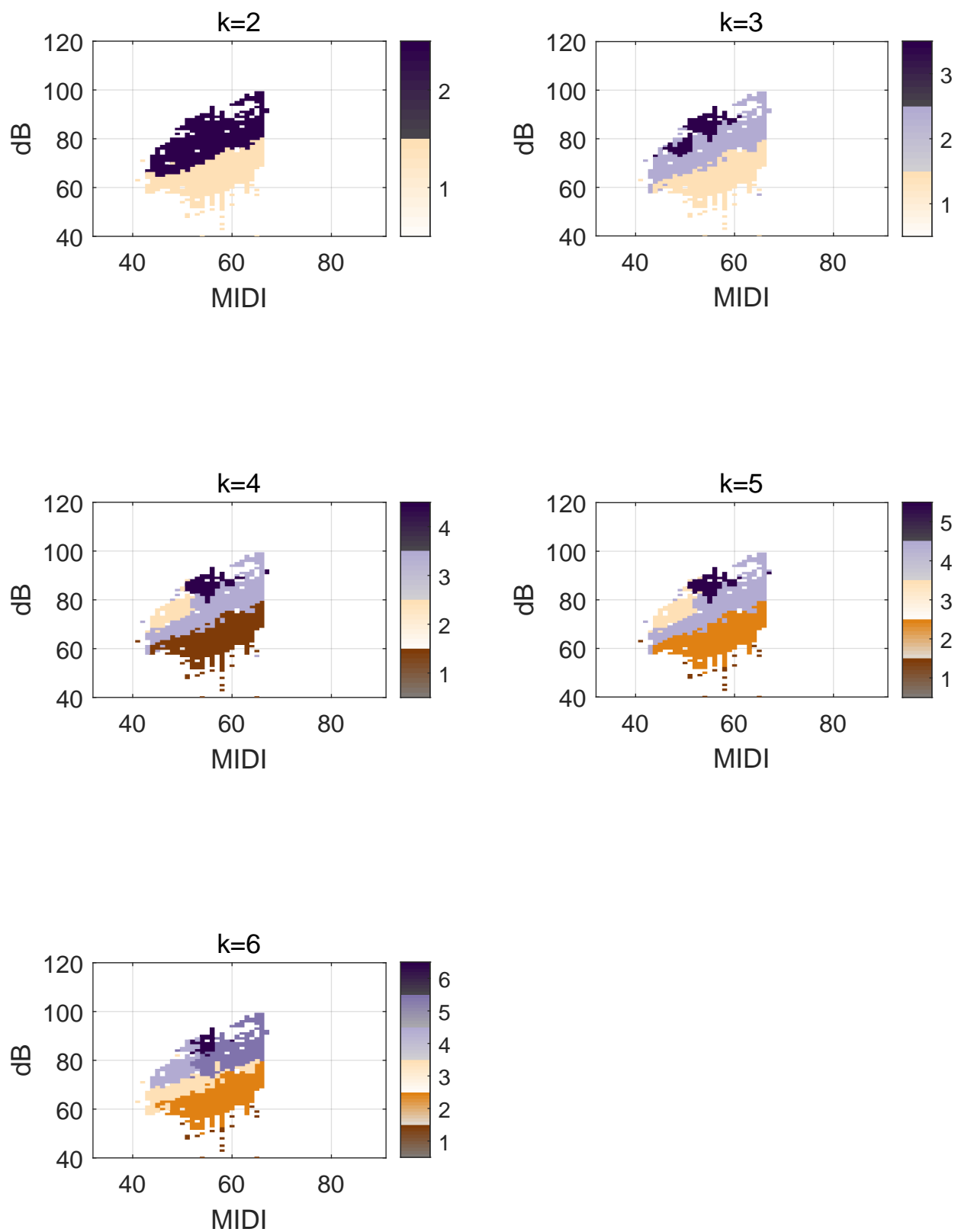


Figure S8: Acoustic and EGG Metric maps for participant M04

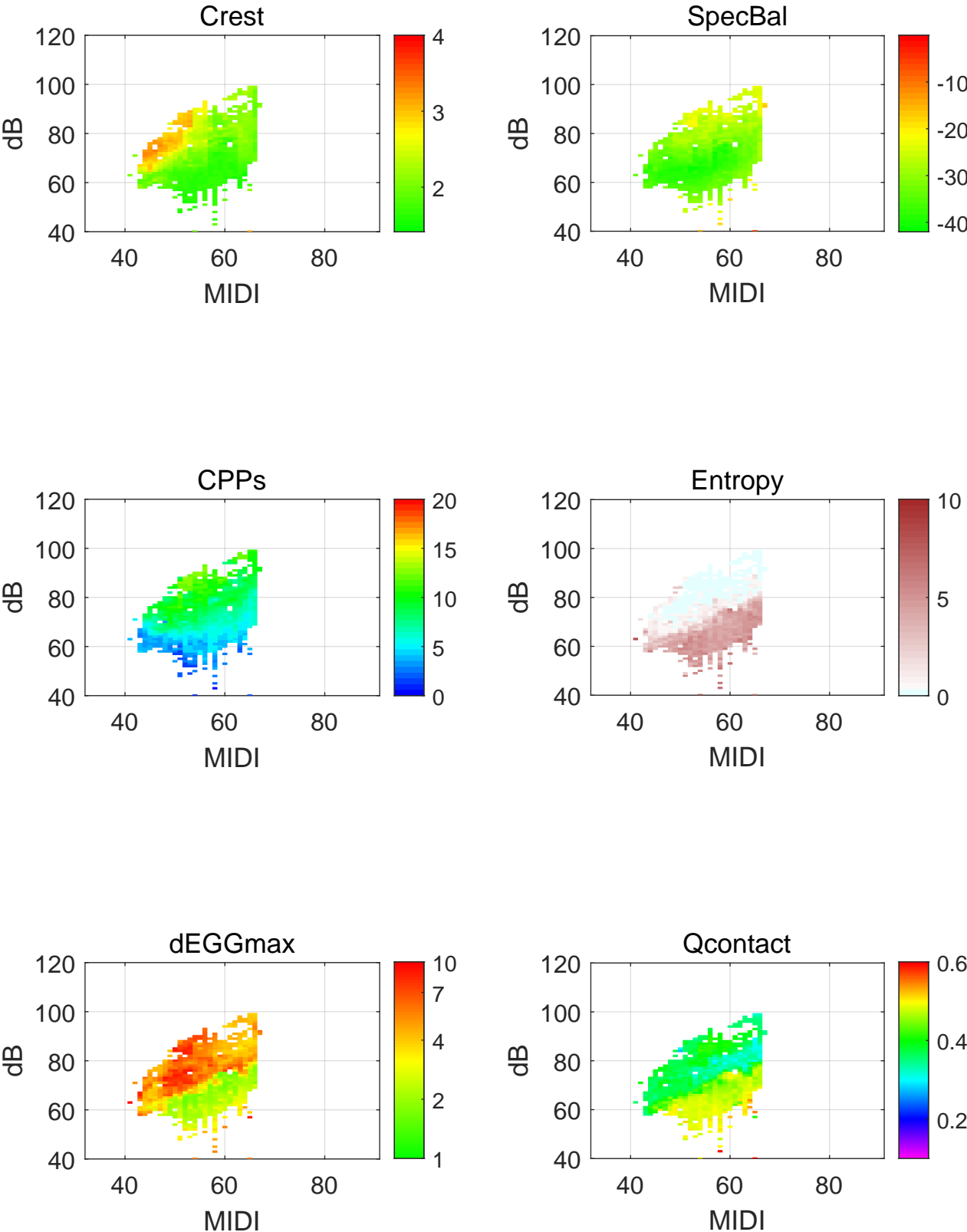


Figure S9: Classification voice maps for participant M05

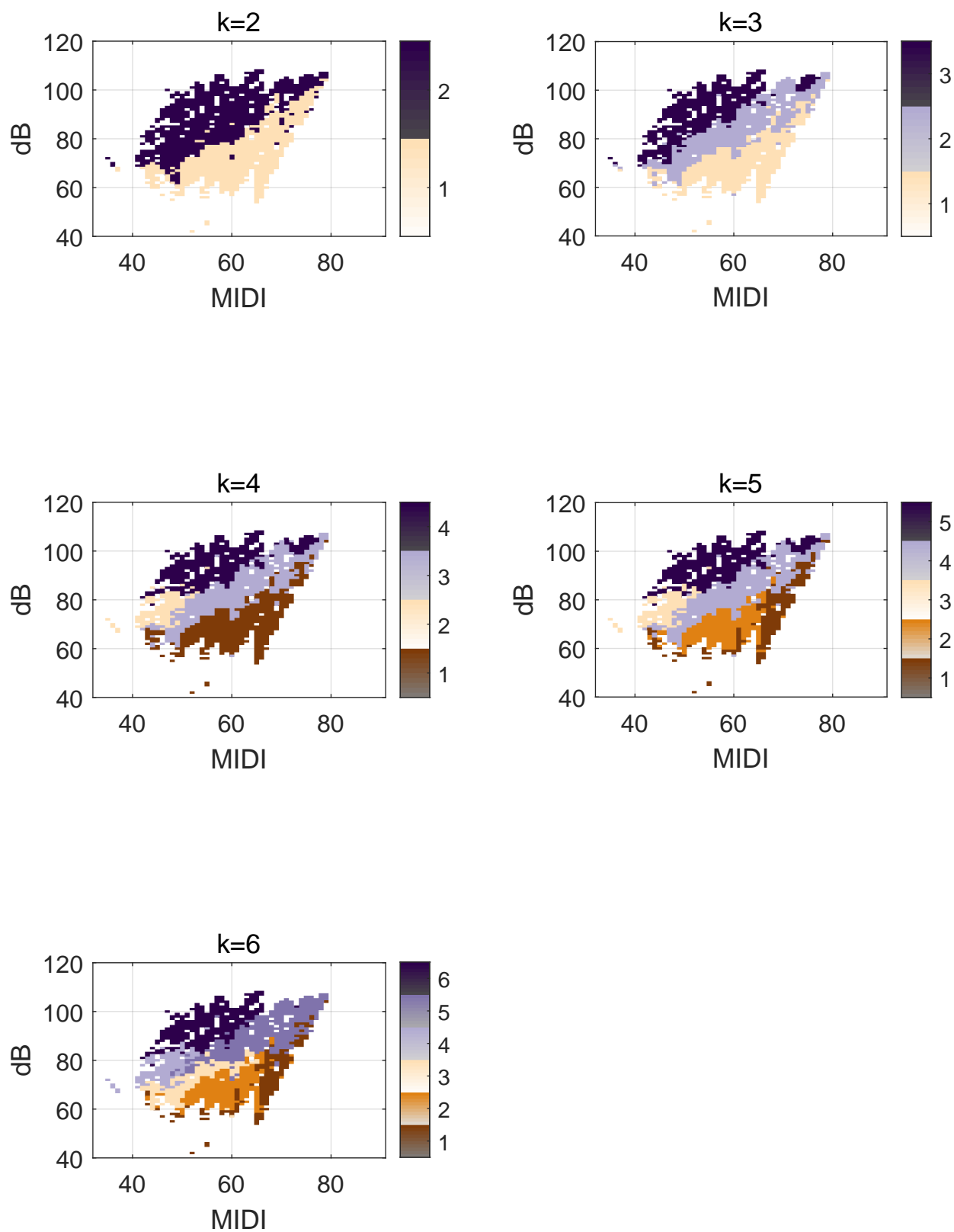


Figure S10: Acoustic and EGG Metric maps for participant M05

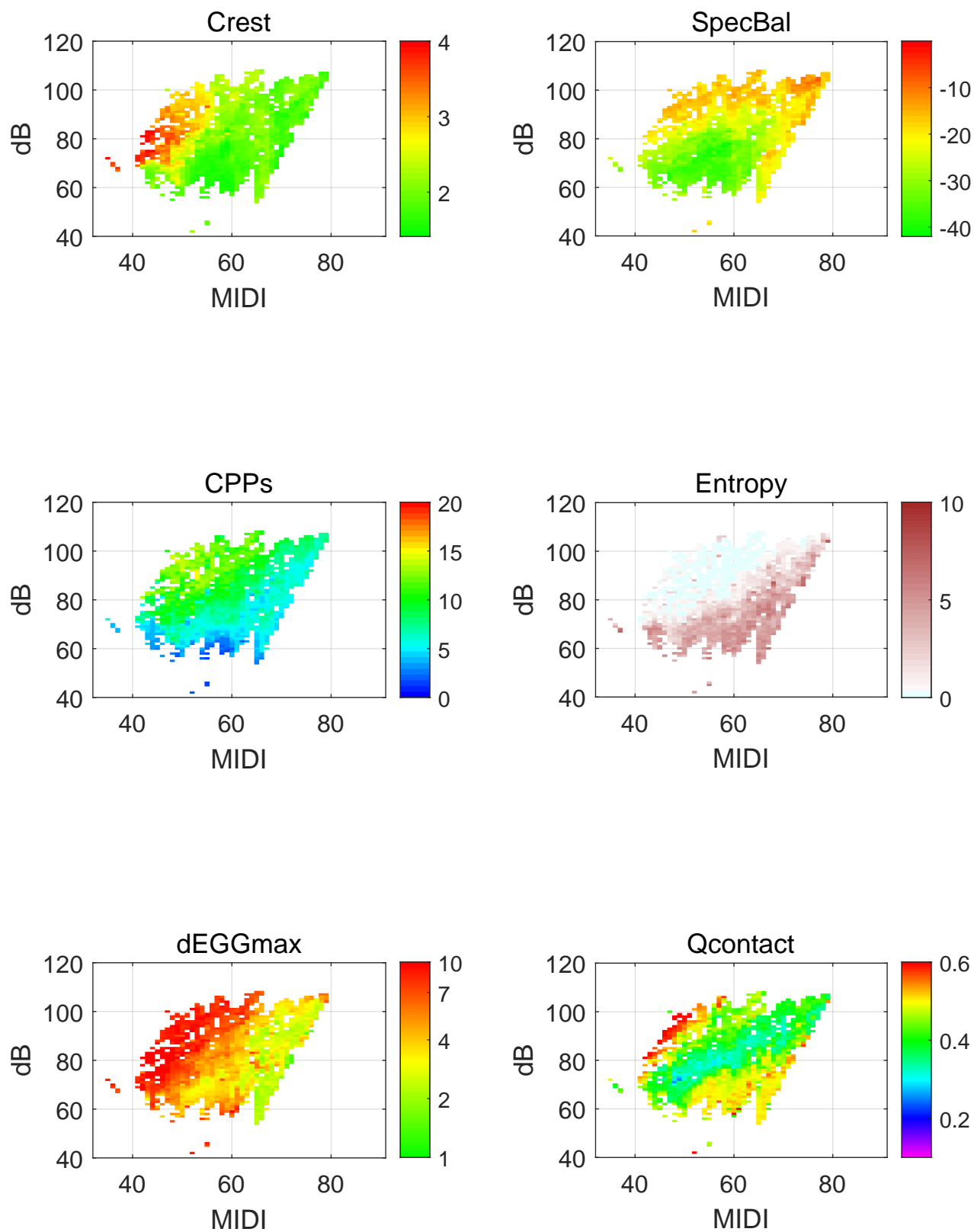


Figure S11: Classification voice maps for participant M06

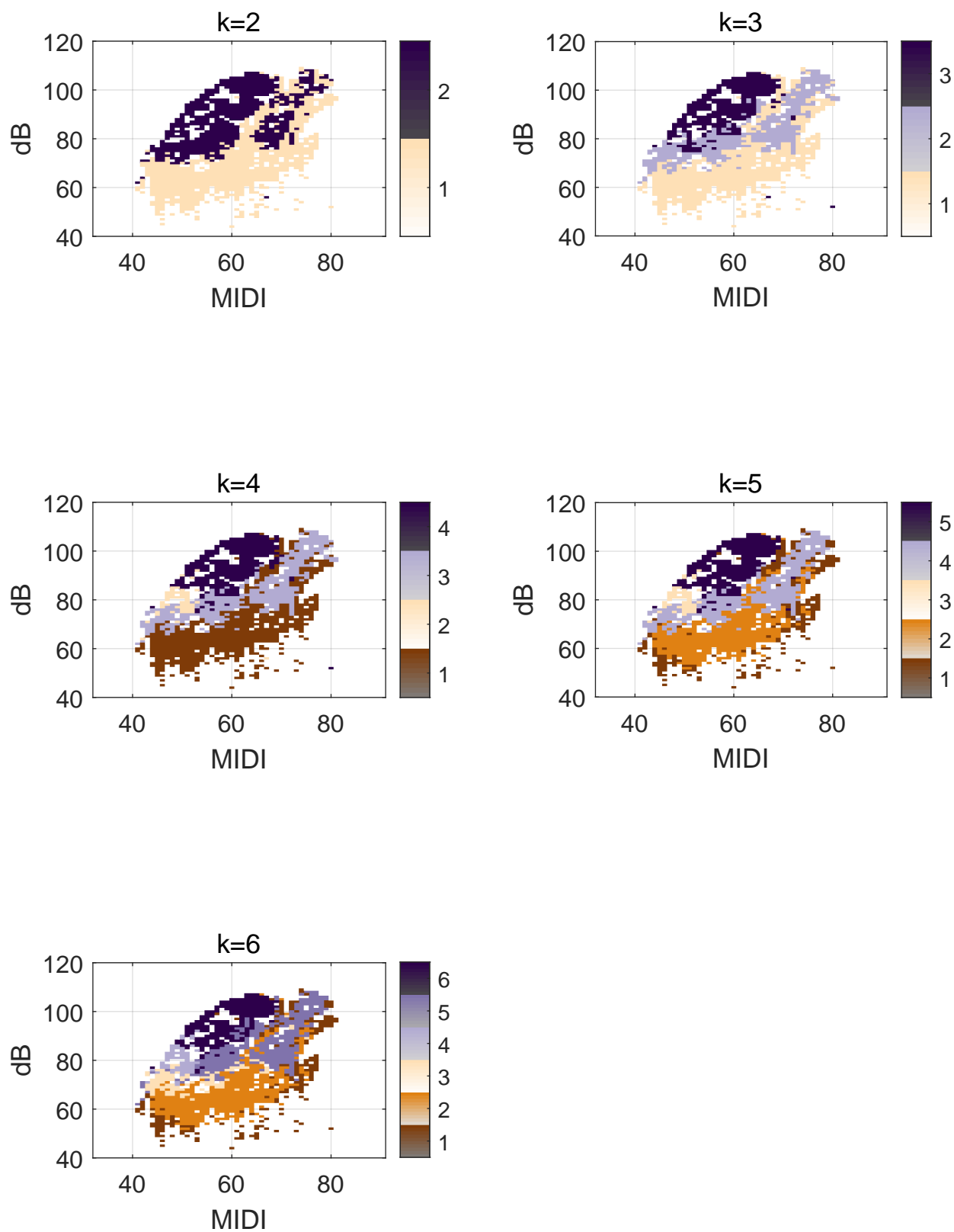


Figure S12: Acoustic and EGG Metric maps for participant M06

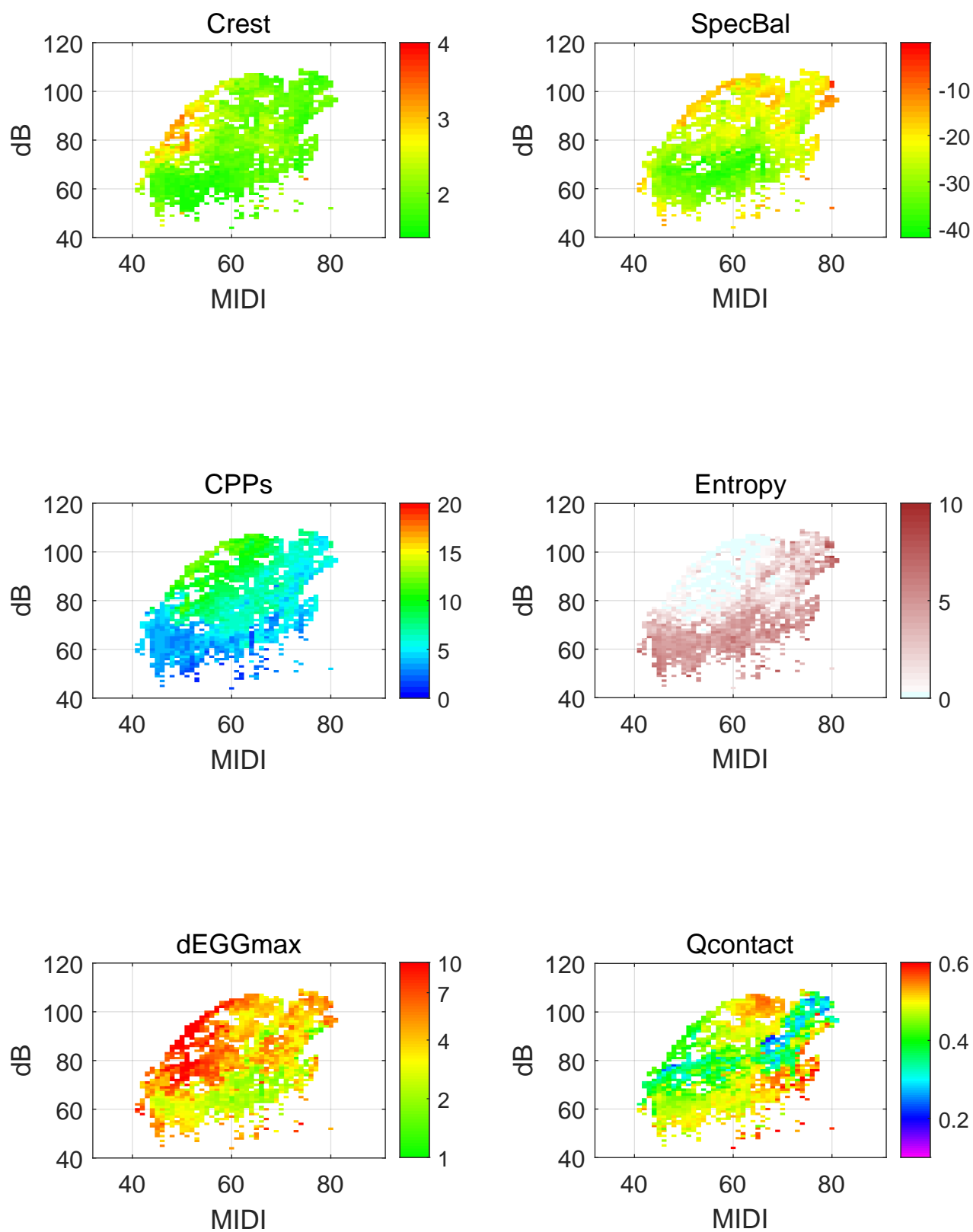


Figure S13: Classification voice maps for participant M07

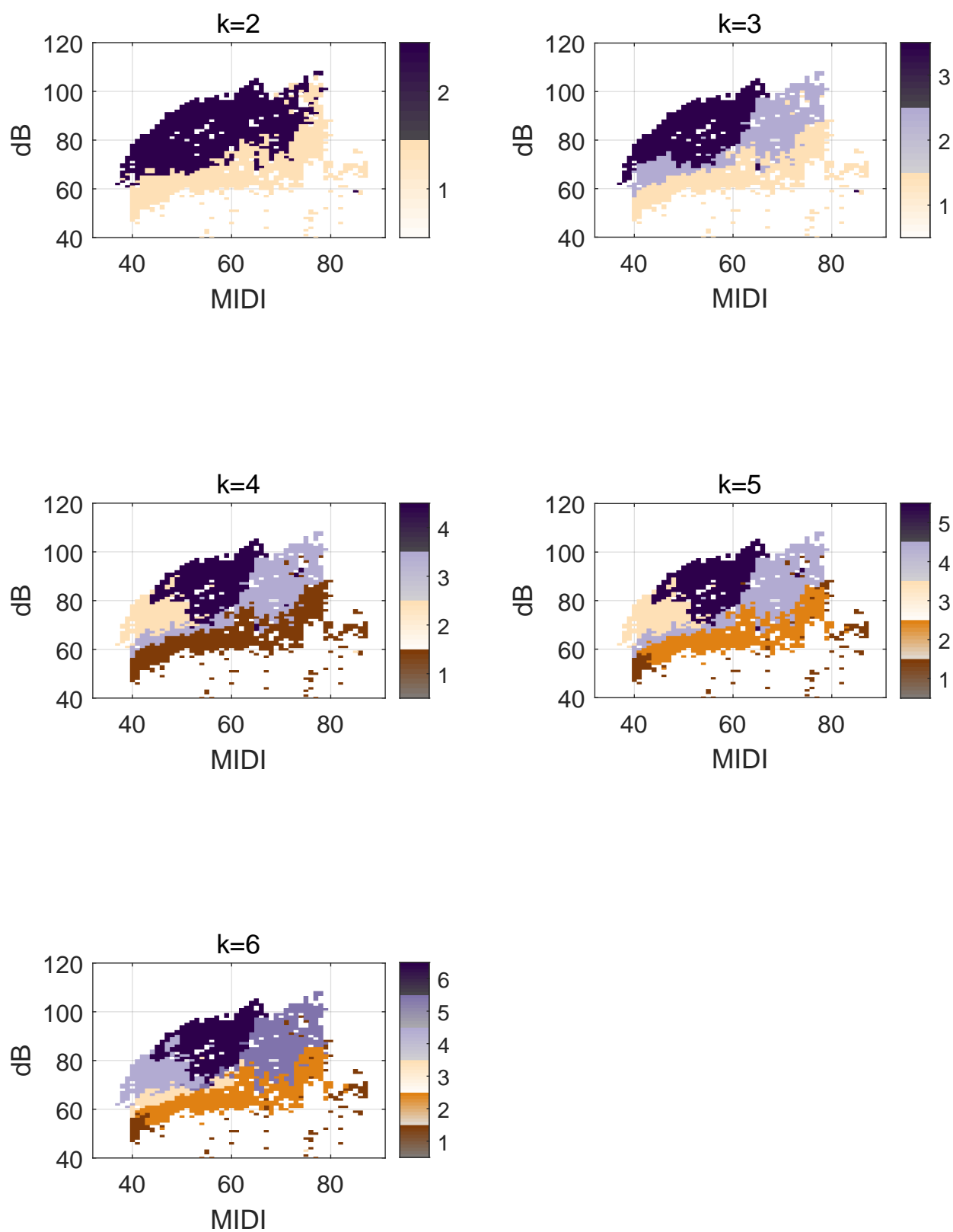


Figure S14: Acoustic and EGG Metric maps for participant M07

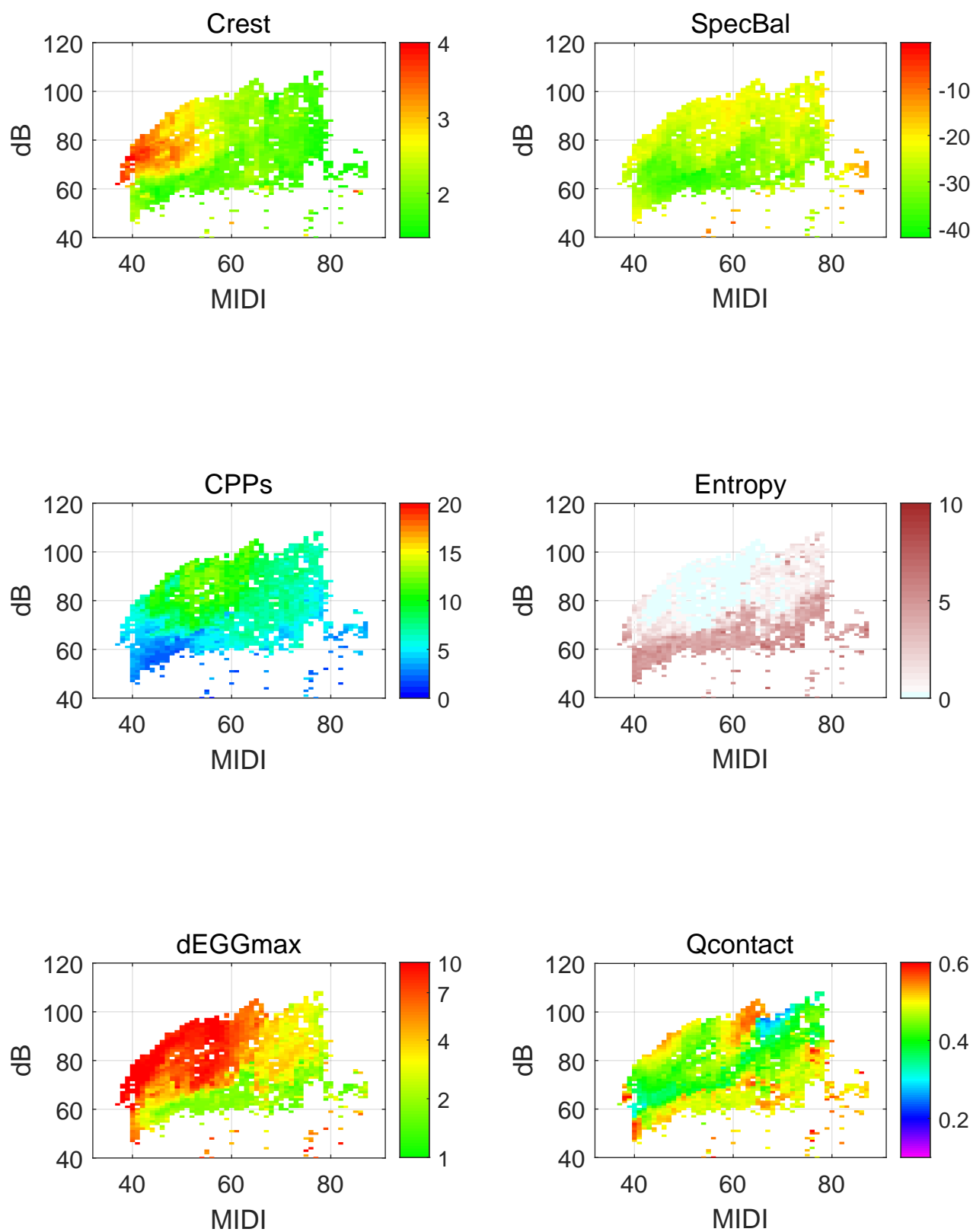


Figure S15: Classification voice maps for participant M08

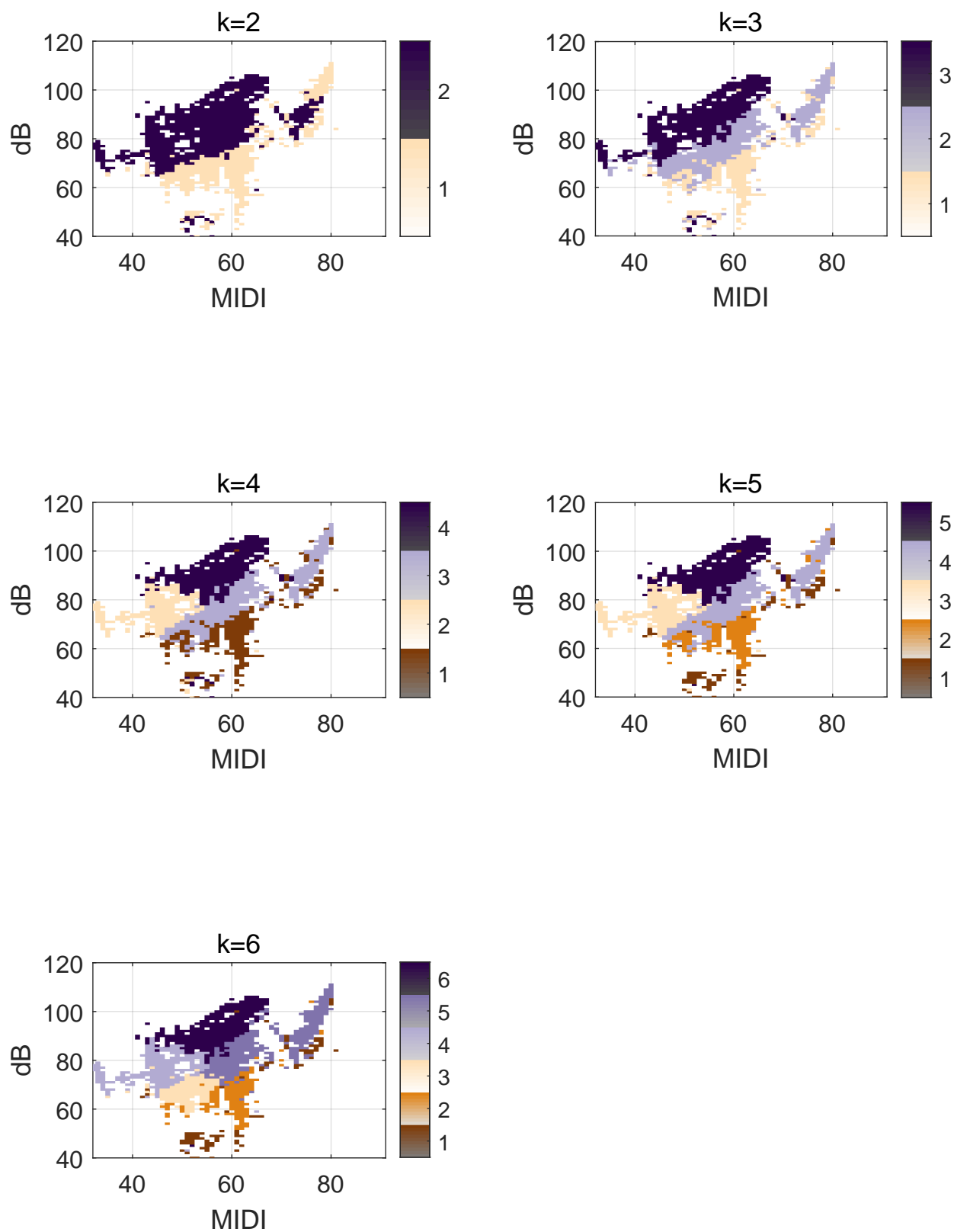


Figure S16: Acoustic and EGG Metric maps for participant M08

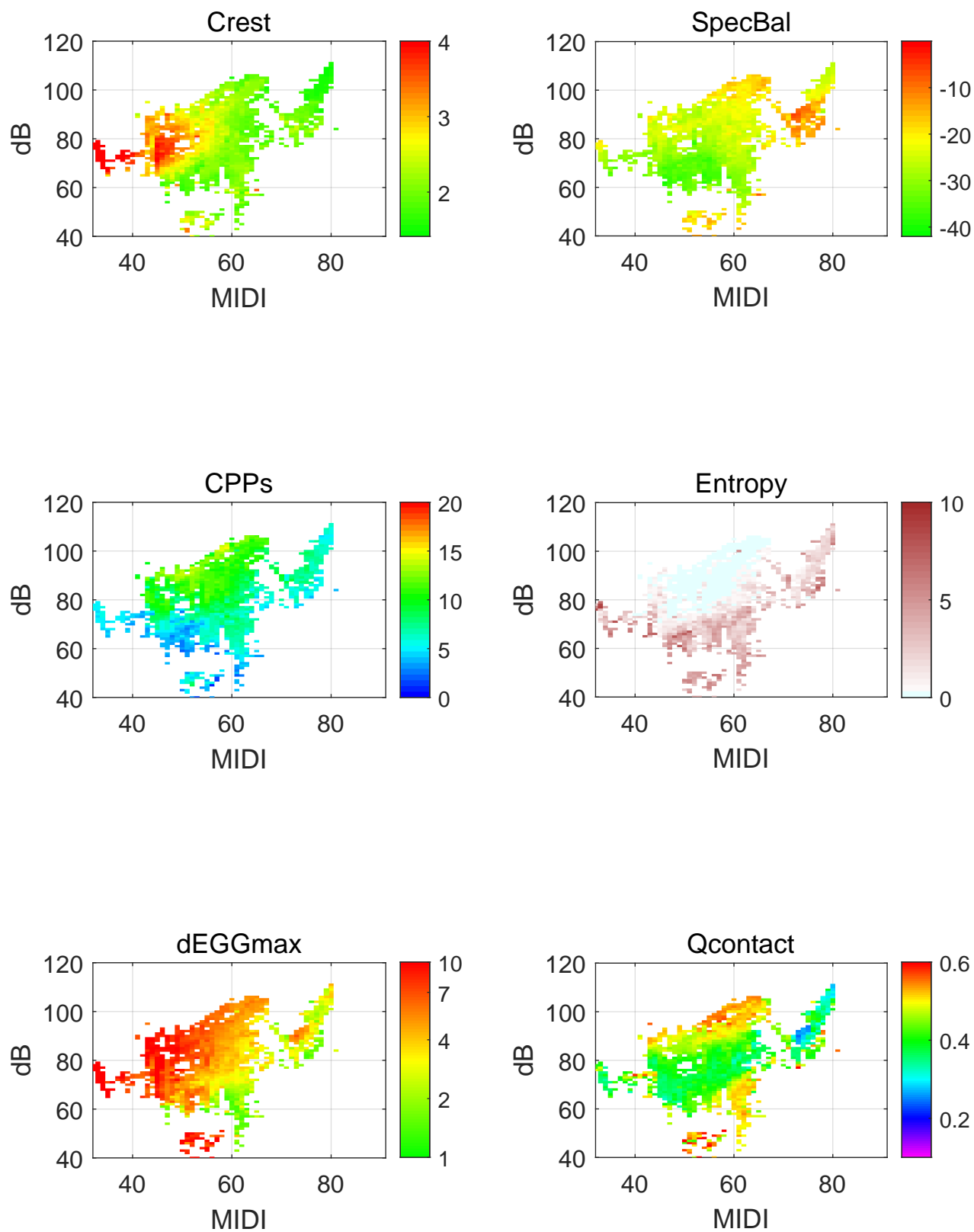


Figure S17: Classification voice maps for participant M09

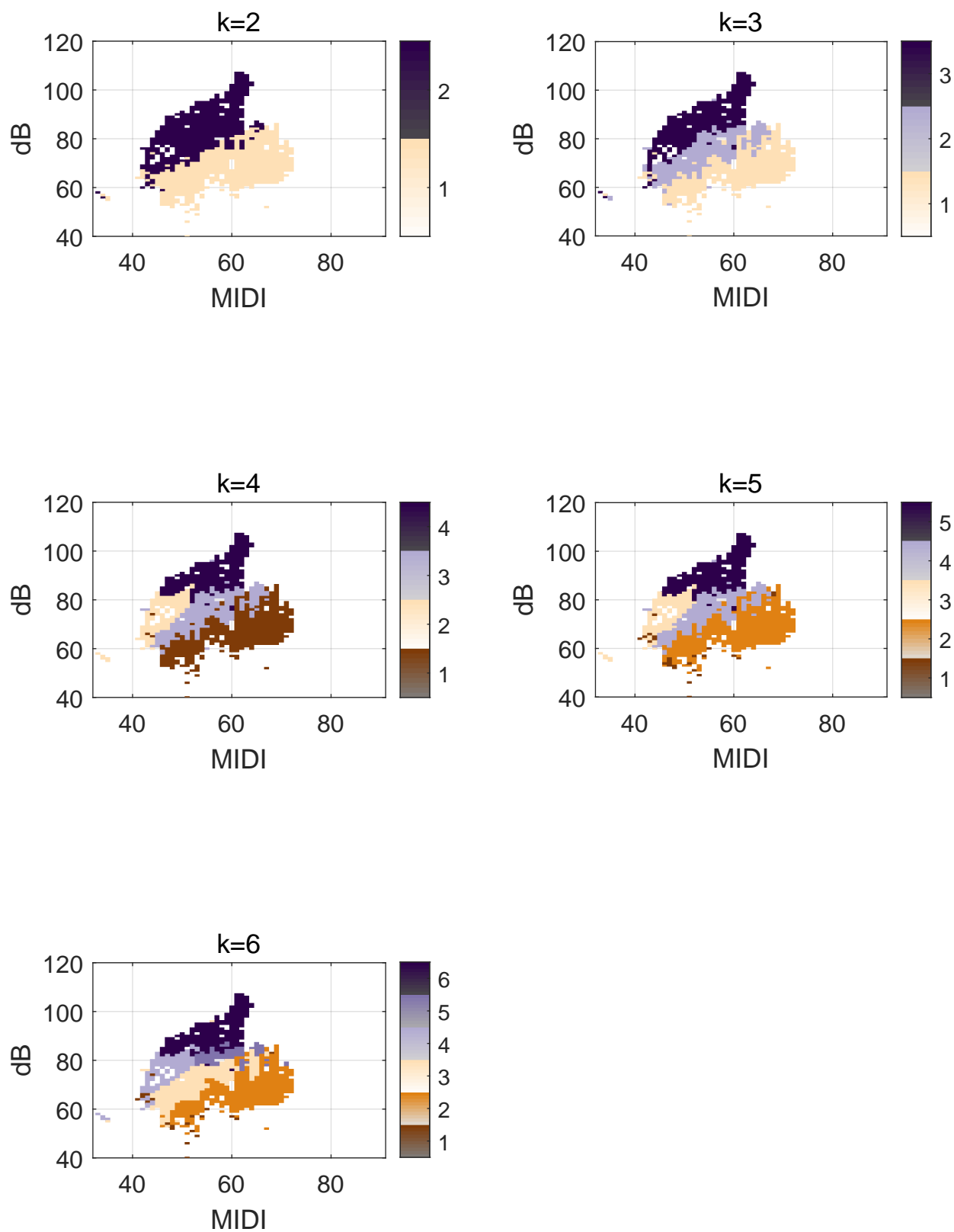


Figure S18: Acoustic and EGG Metric maps for participant M09

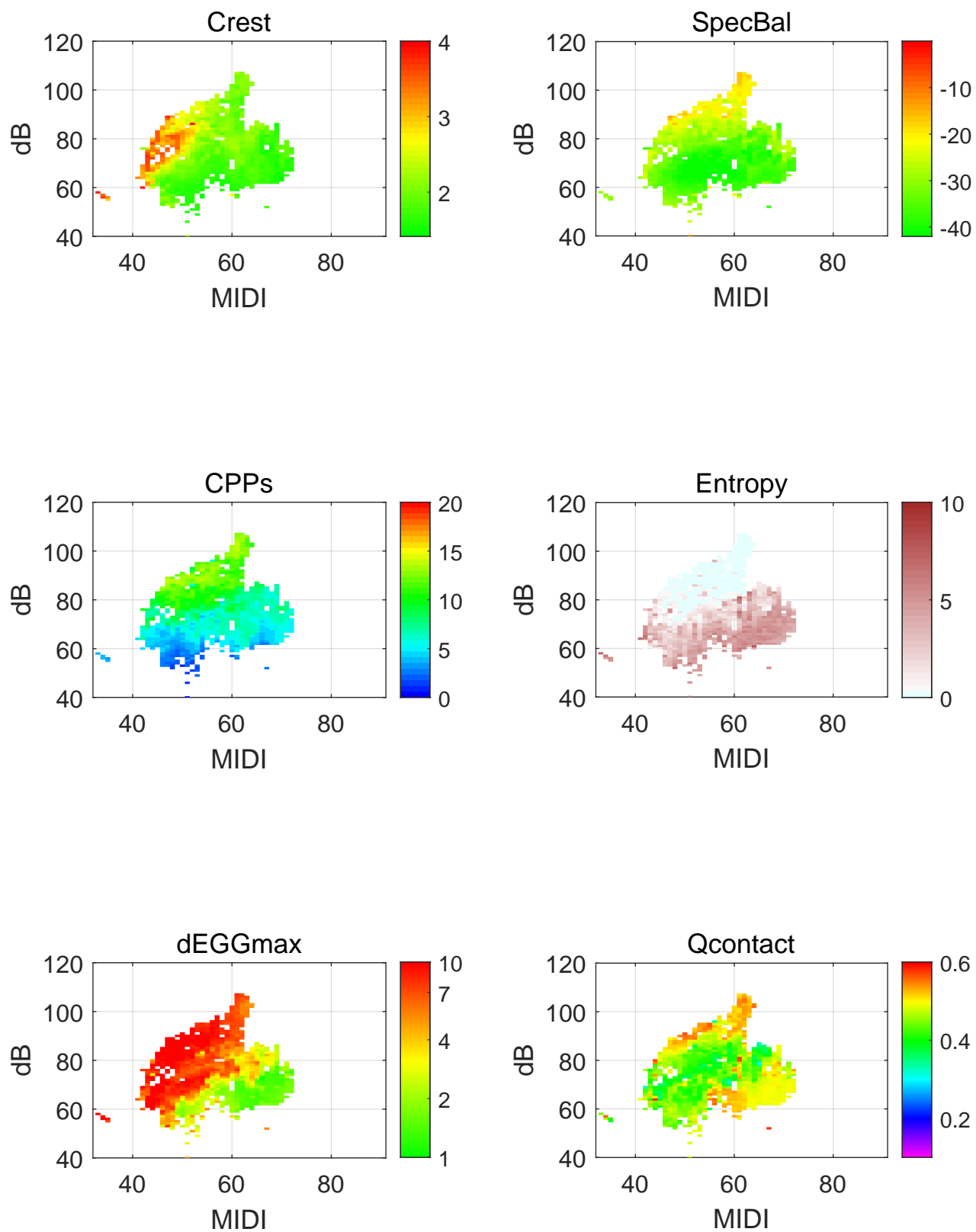


Figure S19: Classification voice maps for participant M10

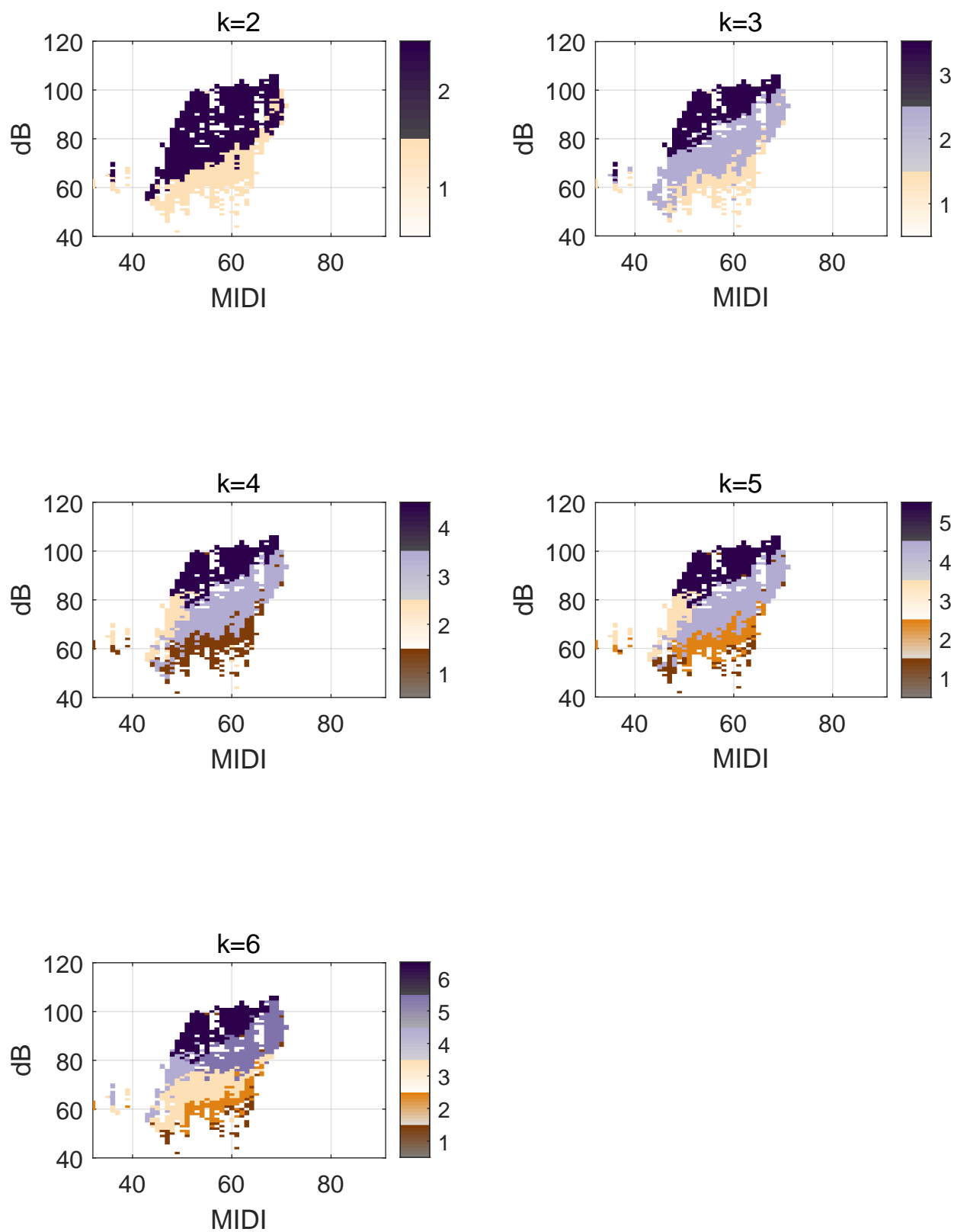


Figure S20: Acoustic and EGG Metric maps for participant M10

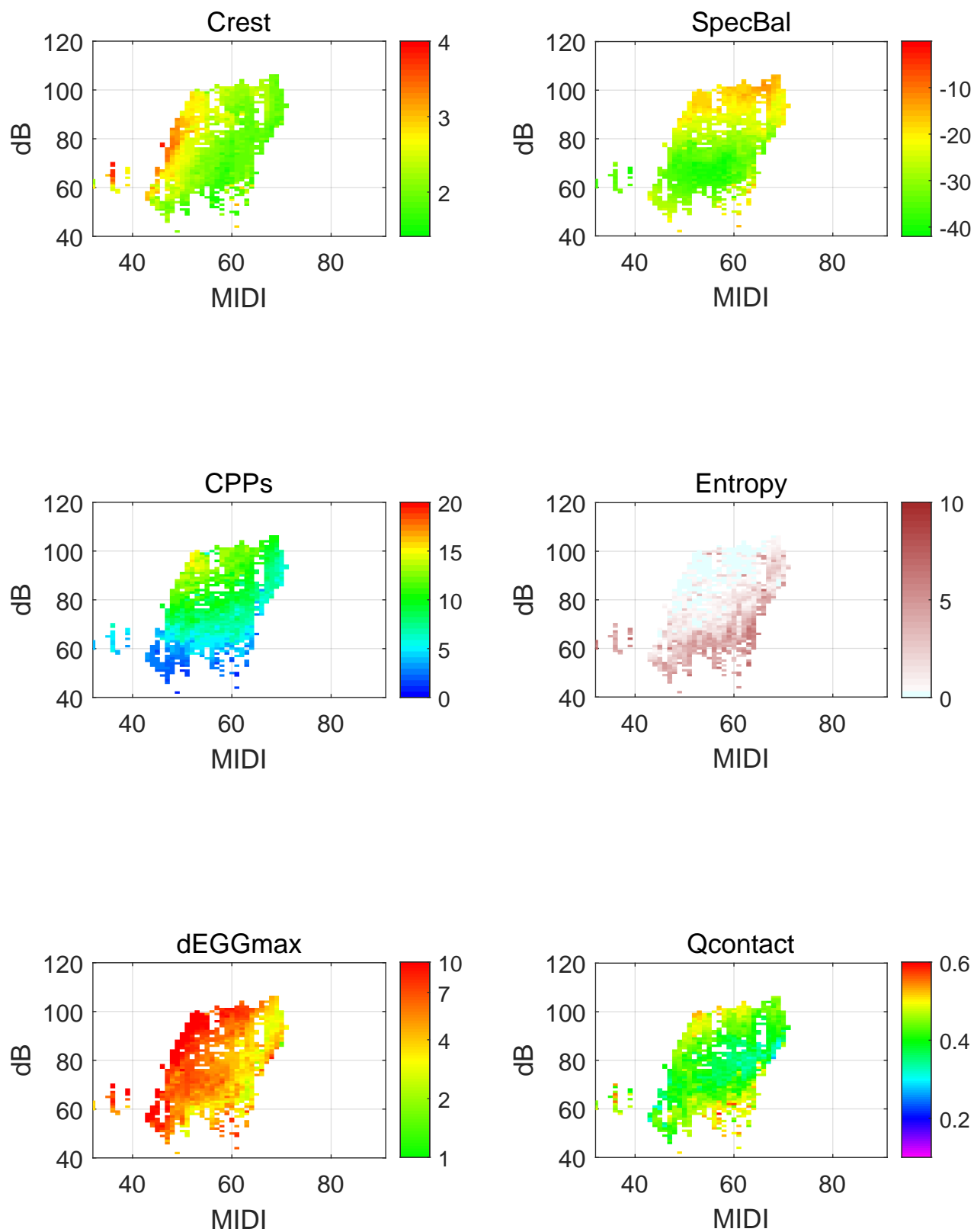


Figure S21: Classification voice maps for participant M11

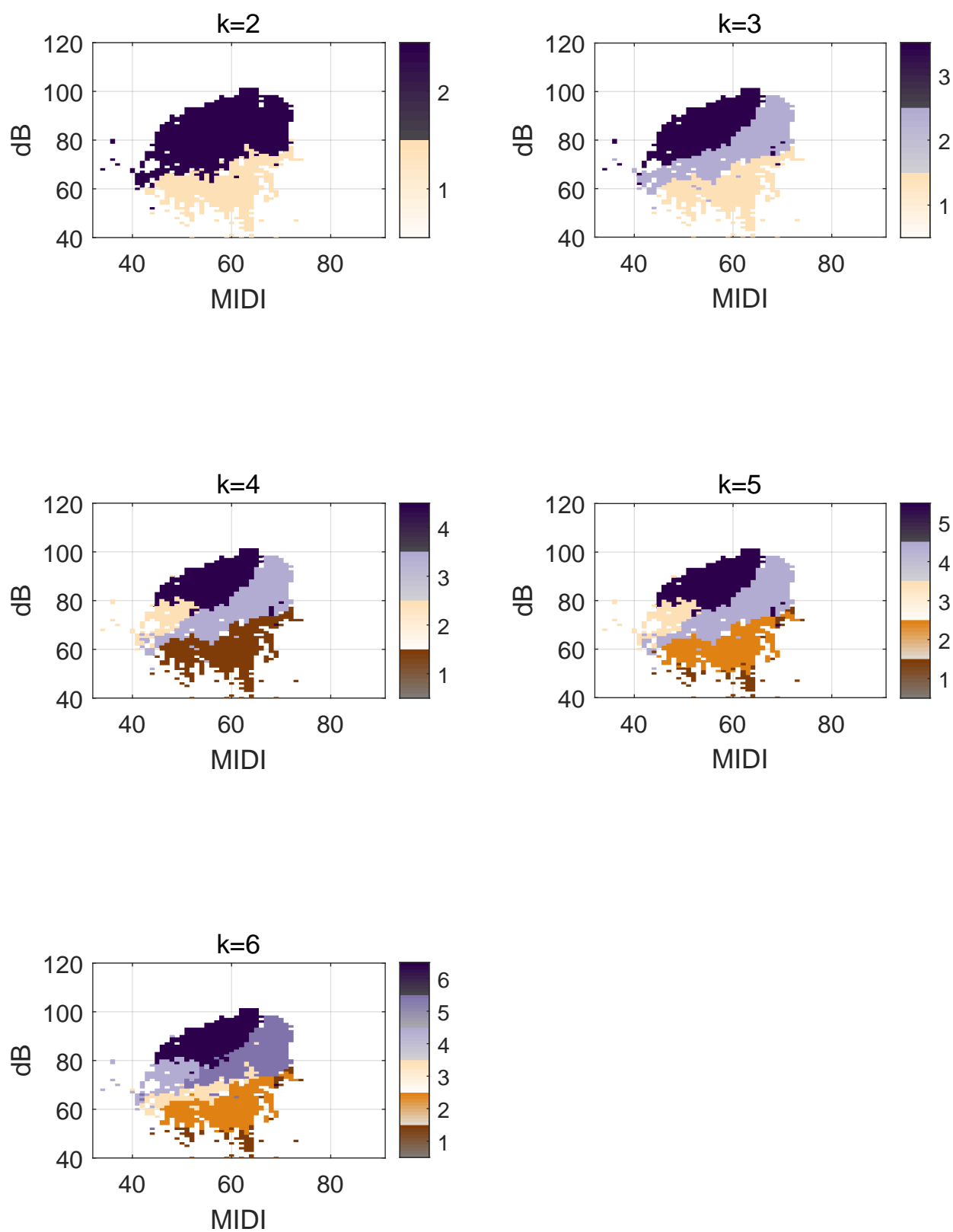


Figure S22: Acoustic and EGG Metric maps for participant M11

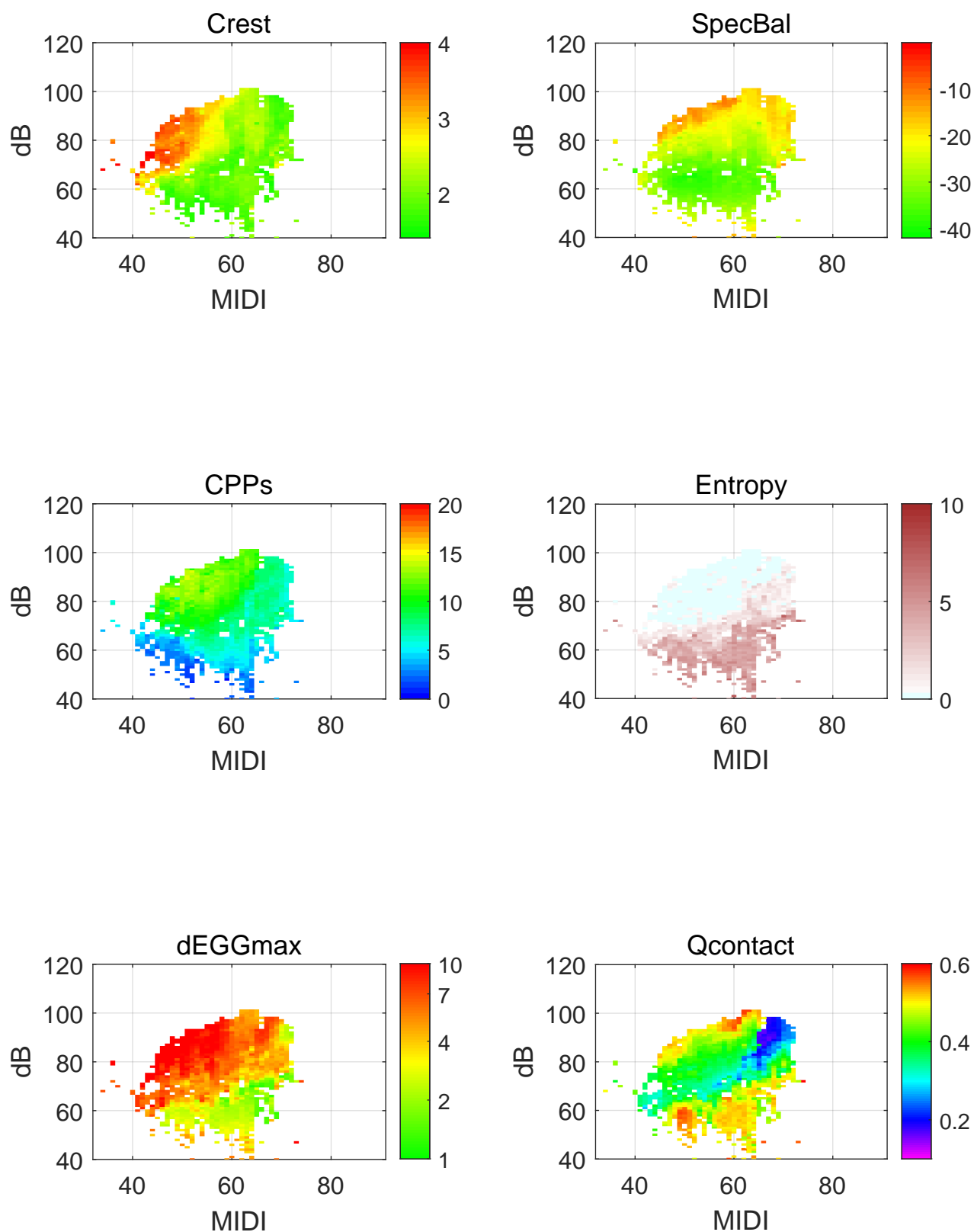


Figure S23: Classification voice maps for participant M12

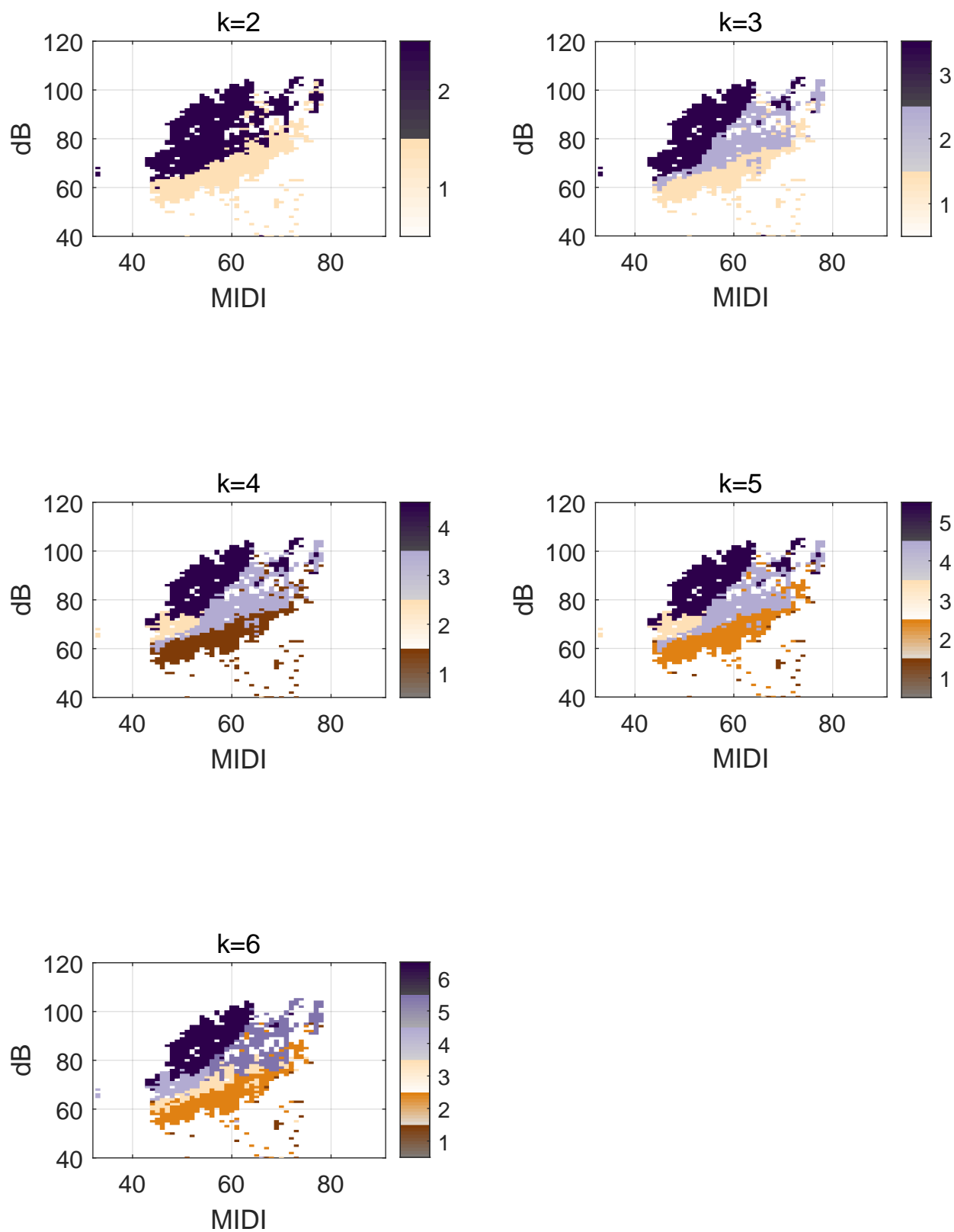


Figure S24: Acoustic and EGG Metric maps for participant M12

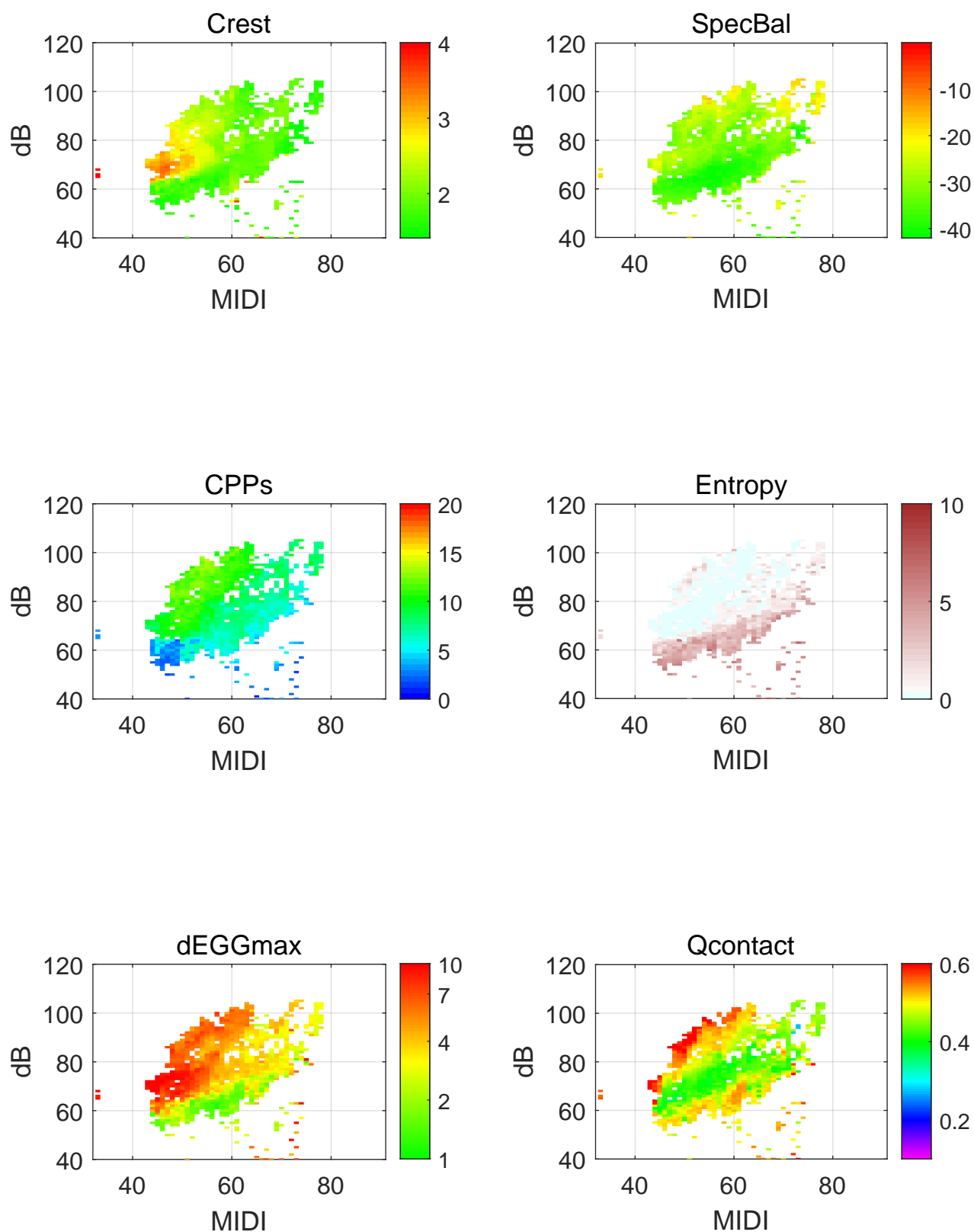


Figure S25: Classification voice maps for participant M13

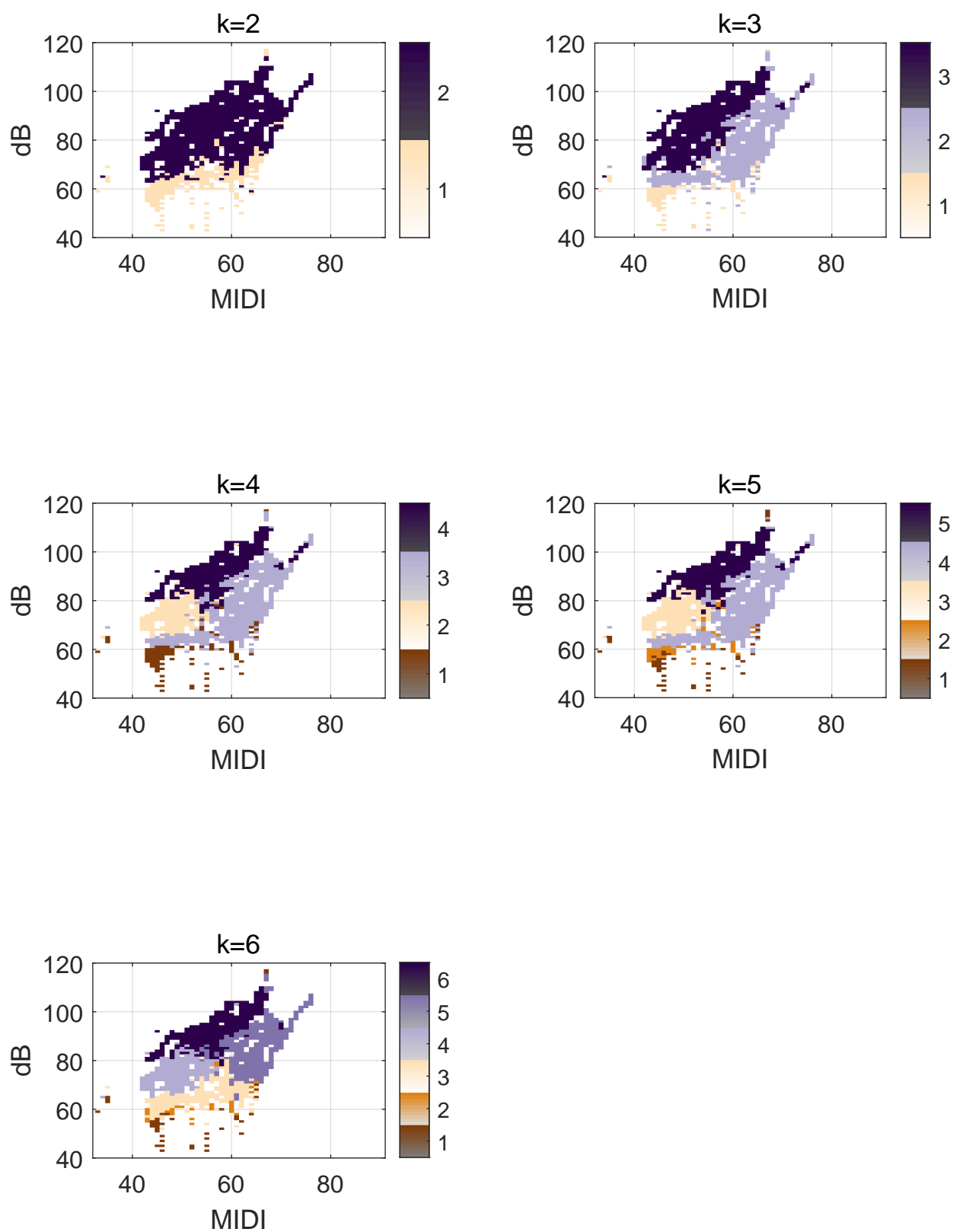


Figure S26: Acoustic and EGG Metric maps for participant M13

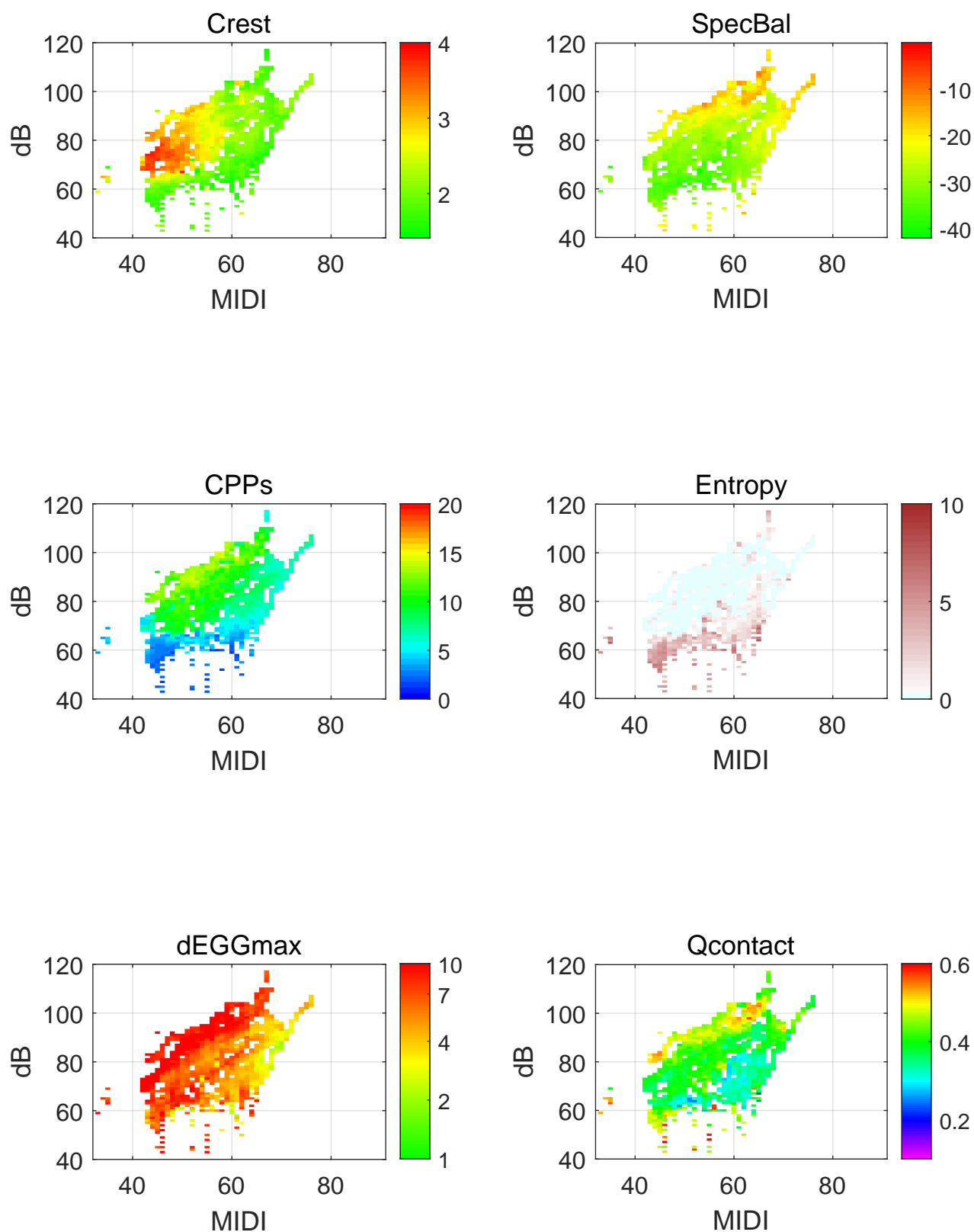


Figure S27: Centroid polar in percentage for Males group

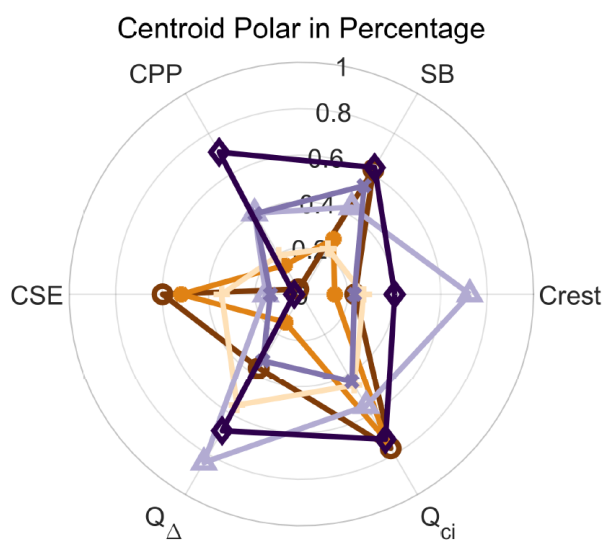
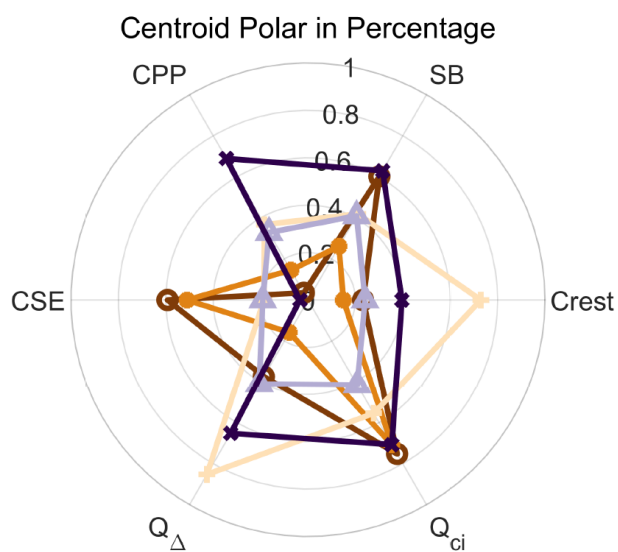
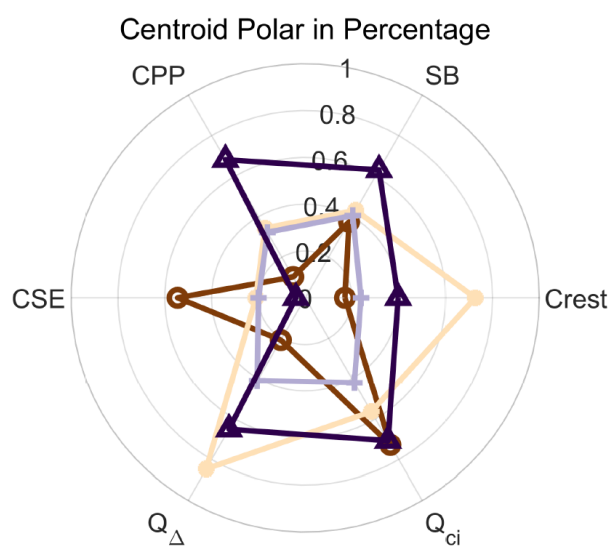
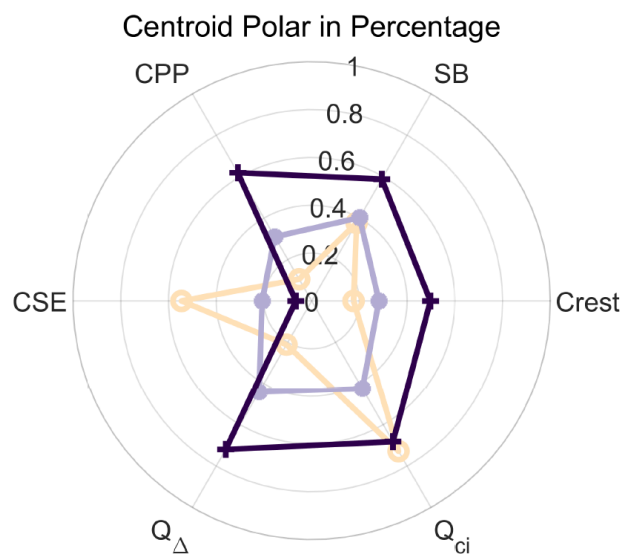
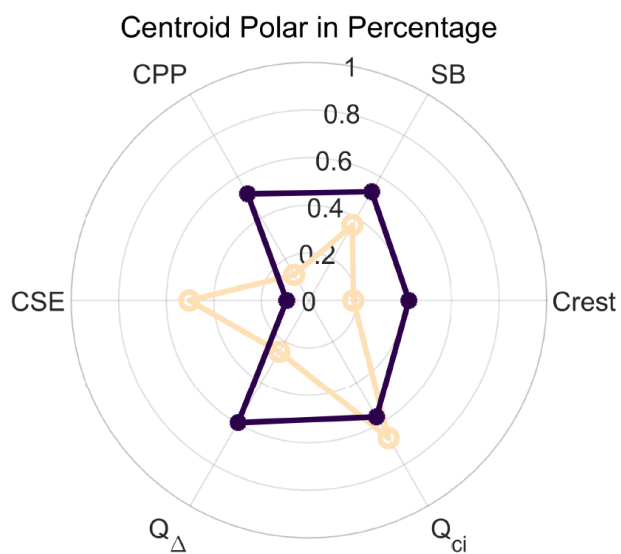


Figure S28: Classification voice maps for participant F01

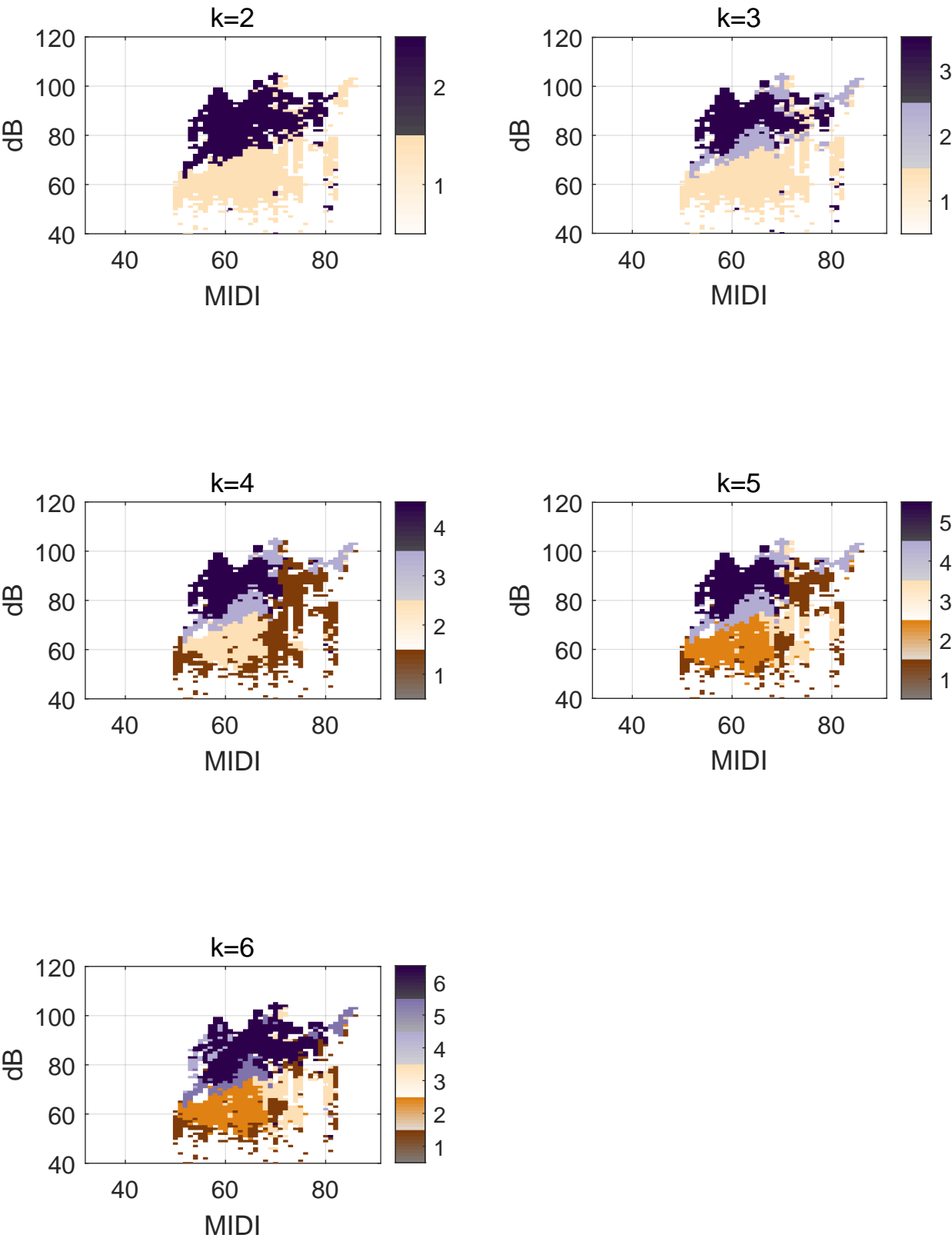


Figure S29: Acoustic and EGG Metric maps for participant F01

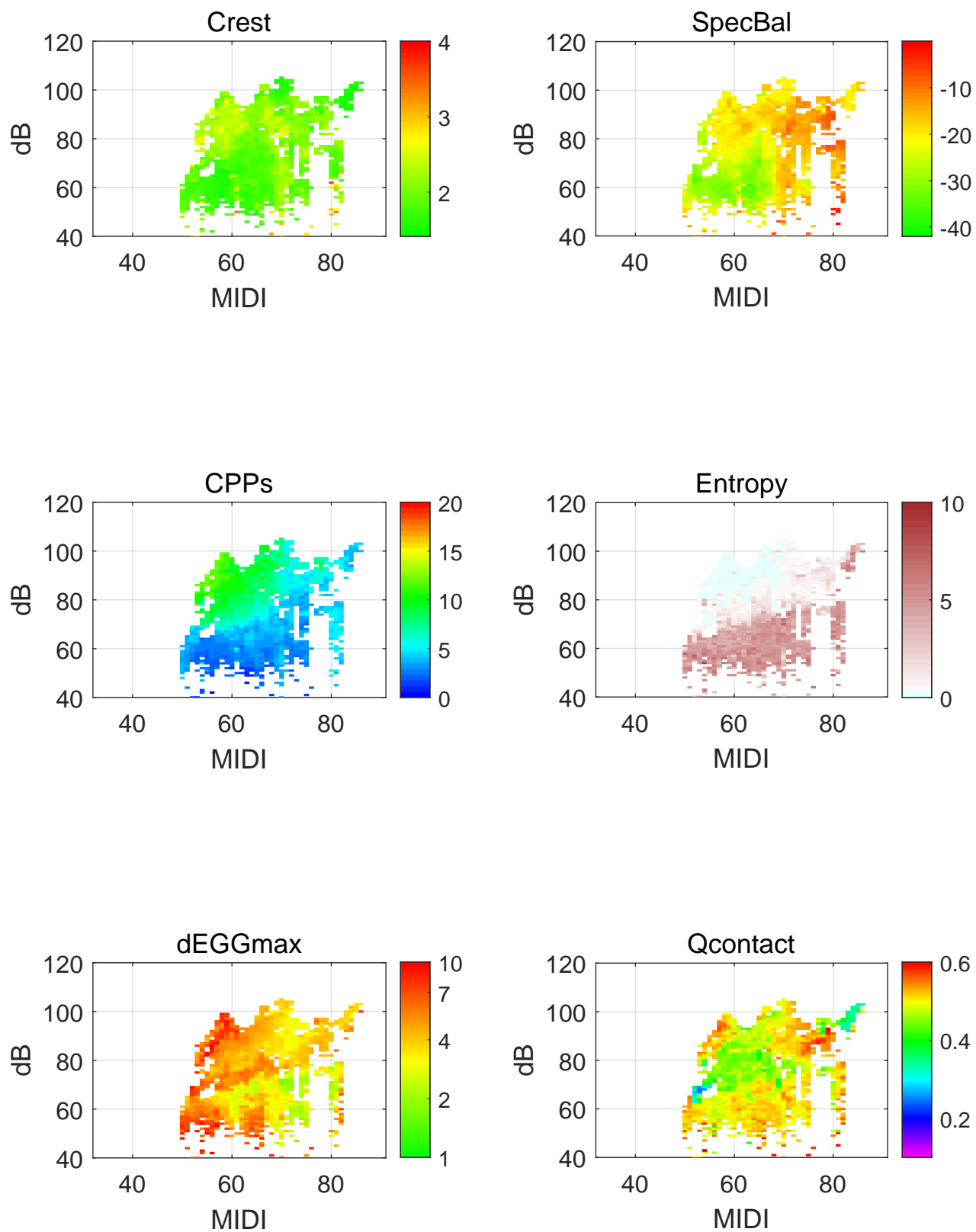


Figure S30: Classification voice maps for participant F02

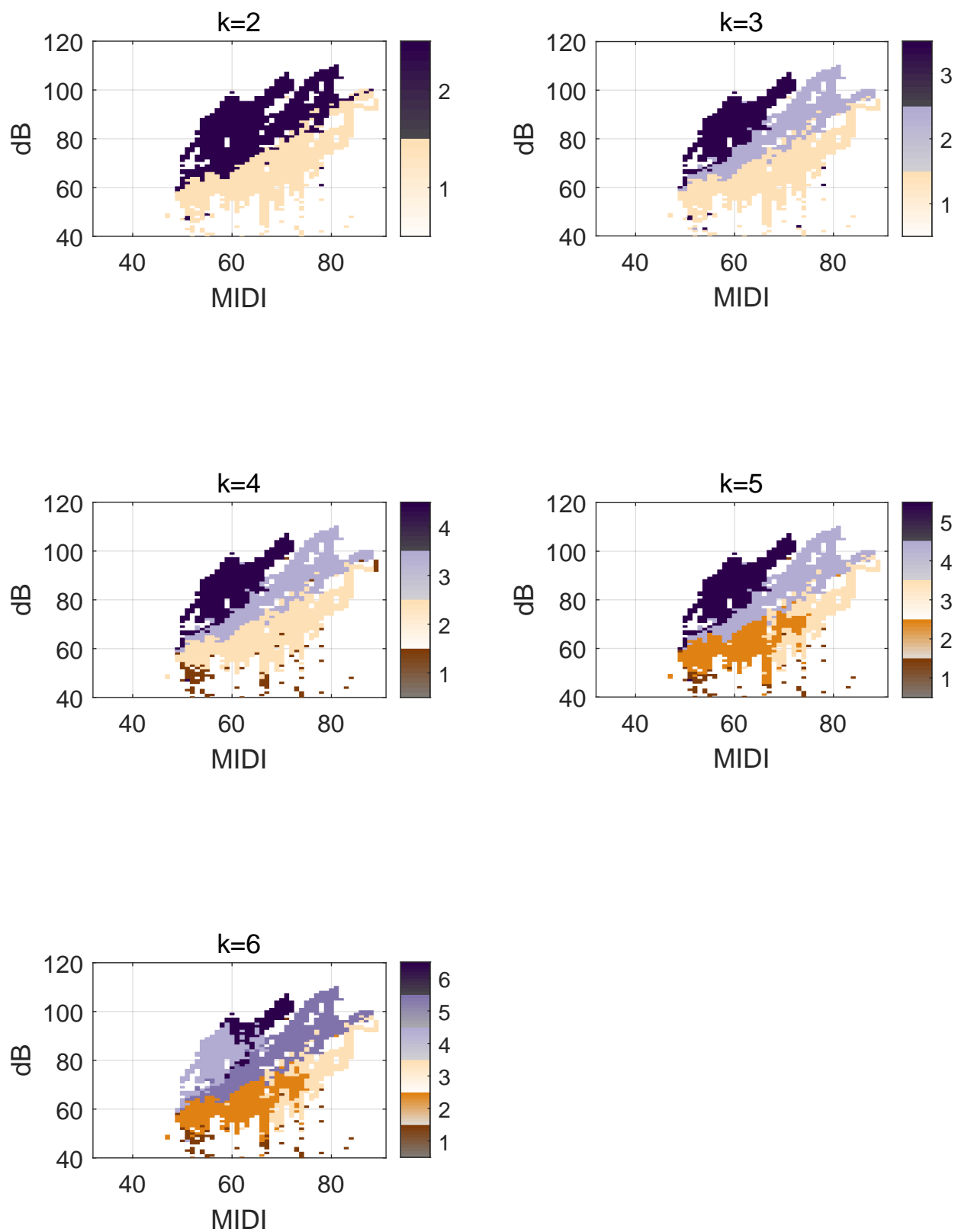


Figure S31: Acoustic and EGG Metric maps for participant F02

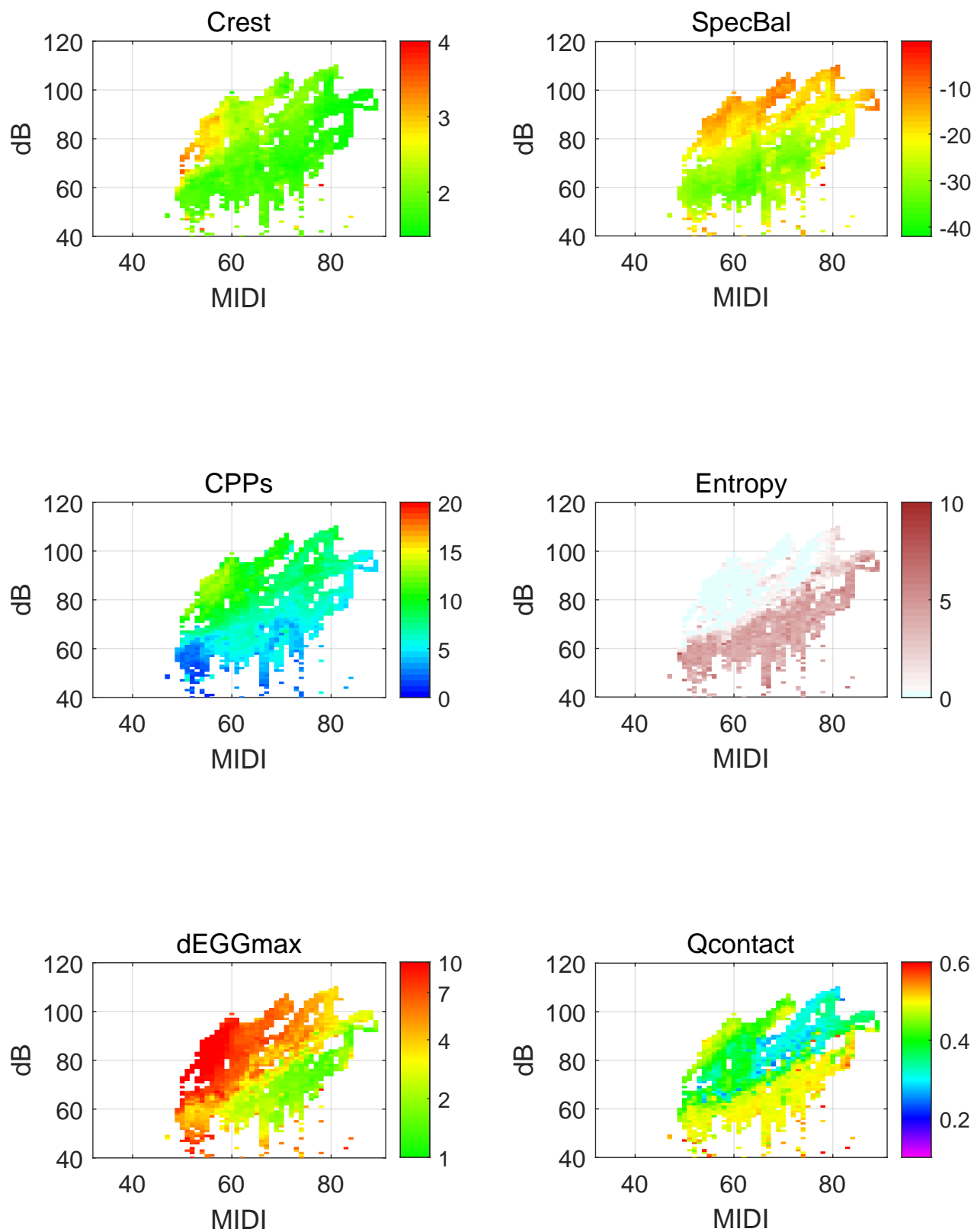


Figure S32: Classification voice maps for participant F03

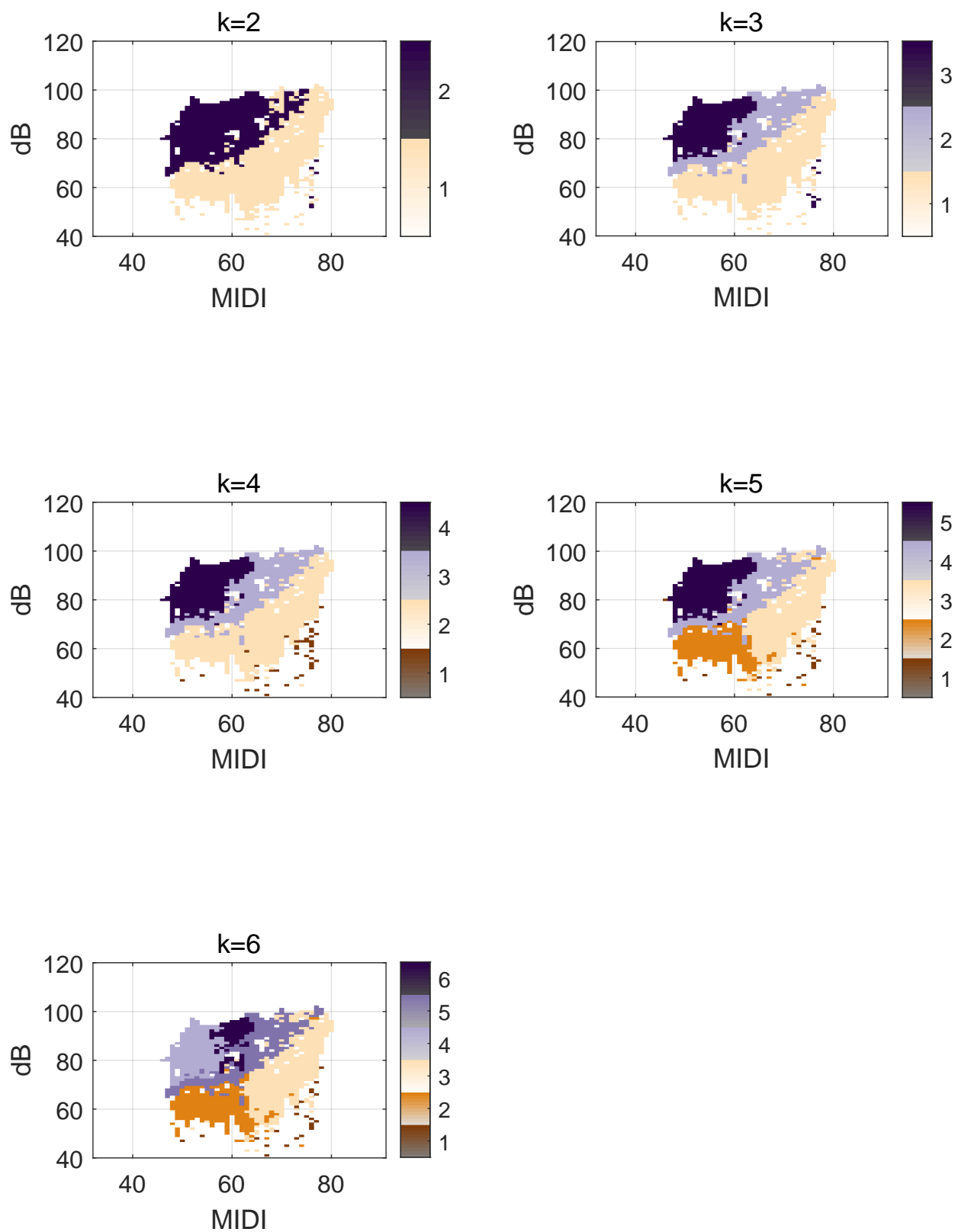


Figure S33: Acoustic and EGG Metric maps for participant F03

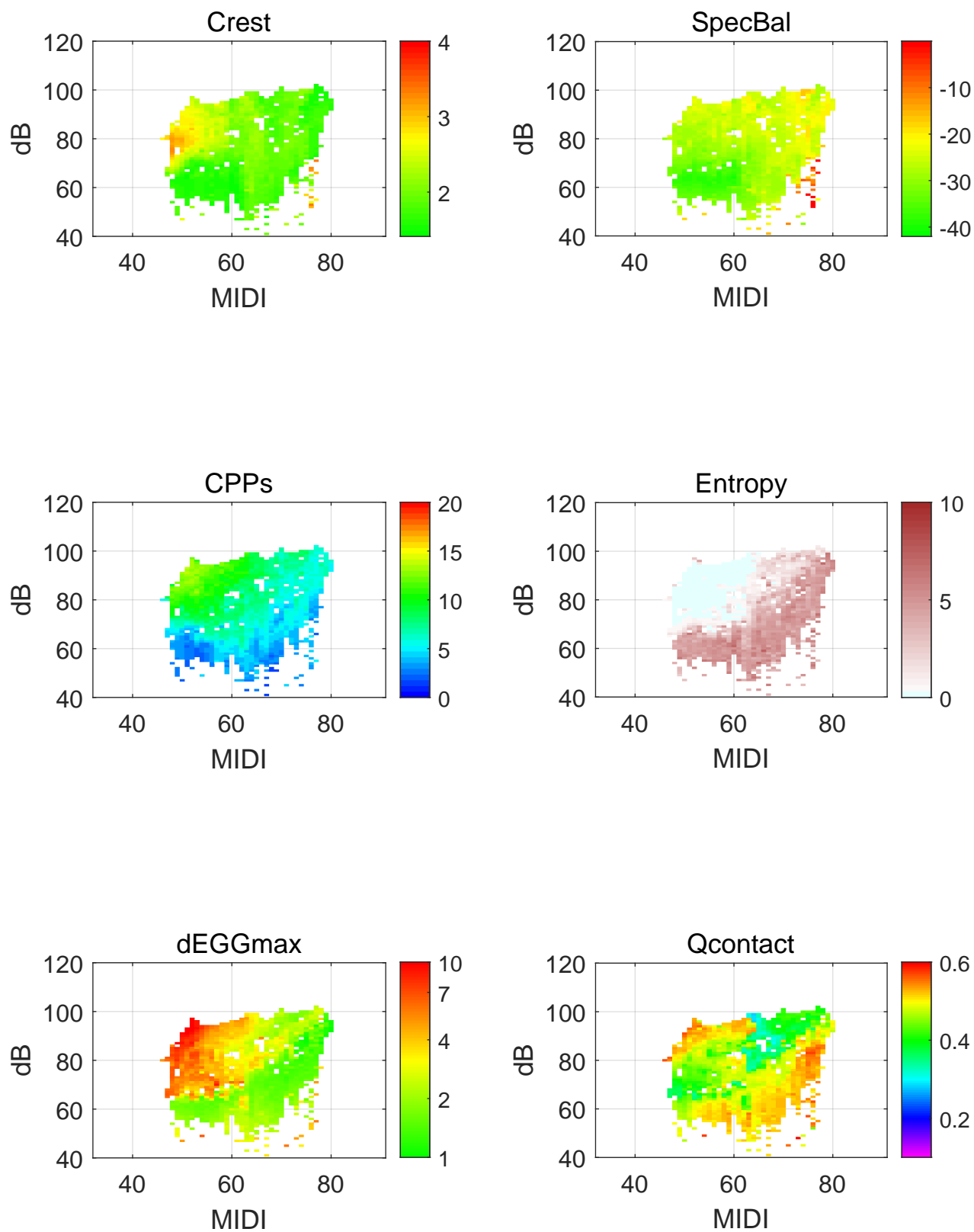


Figure S34: Classification voice maps for participant F05

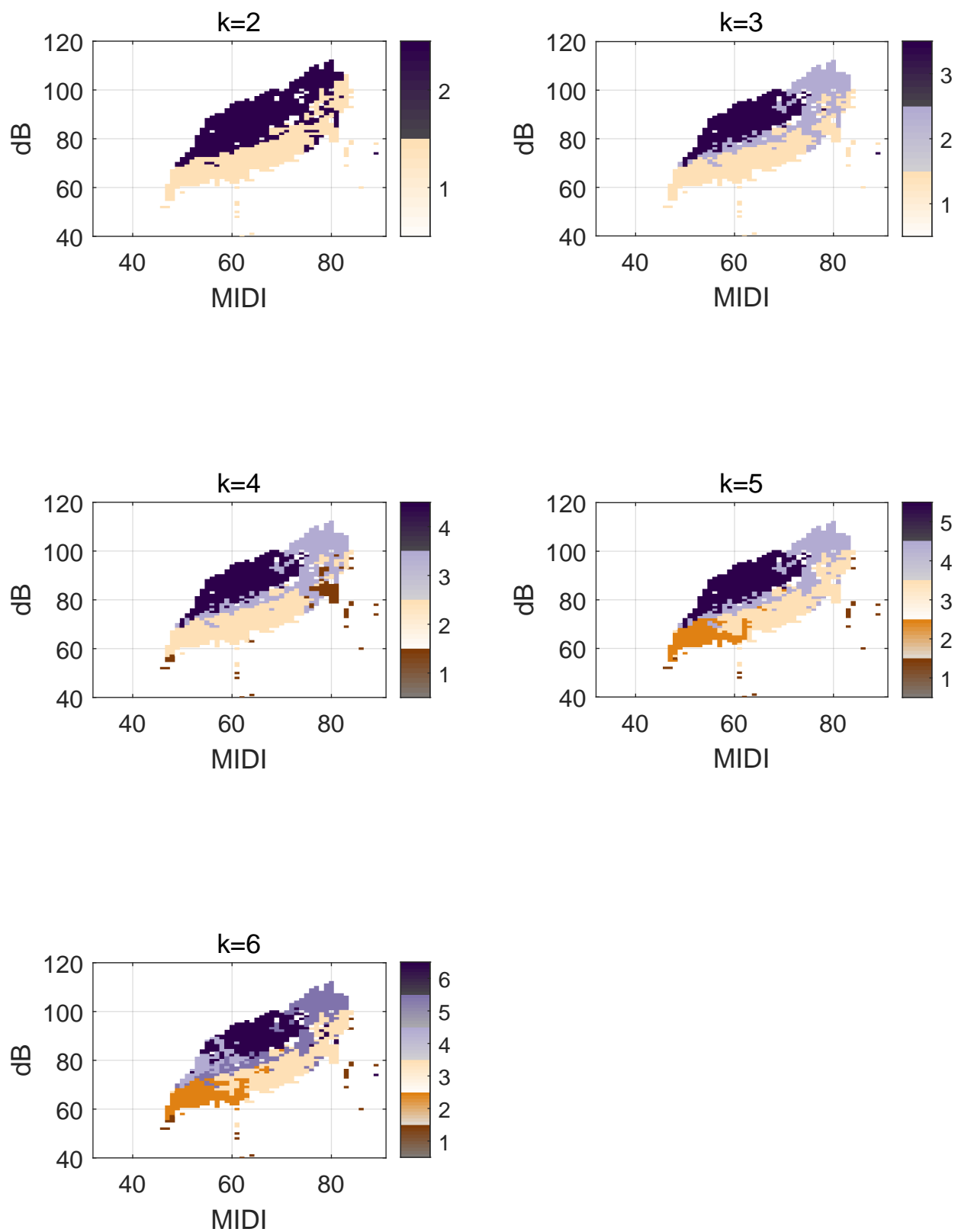


Figure S35: Acoustic and EGG Metric maps for participant F05

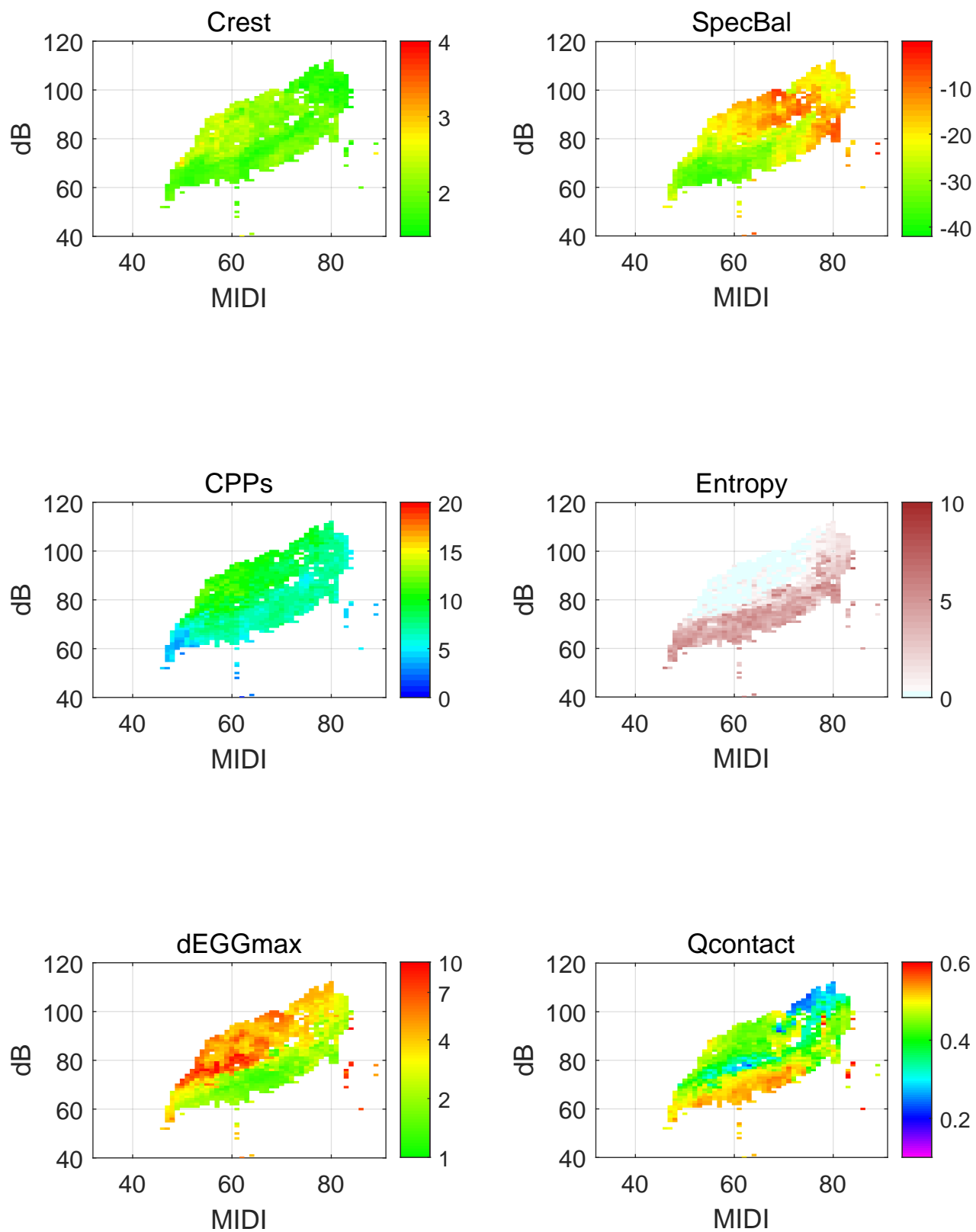


Figure S36: Classification voice maps for participant F06

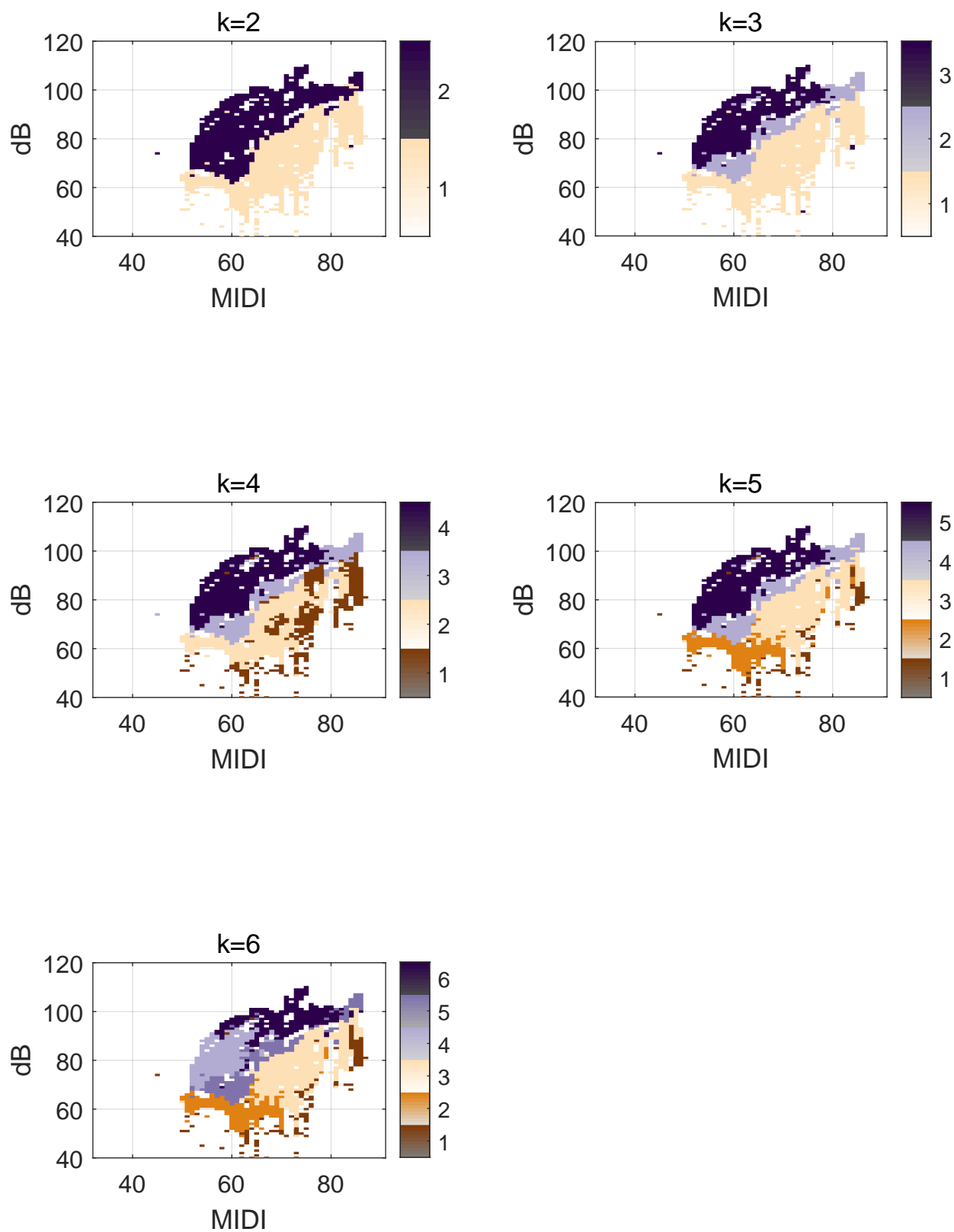


Figure S37: Acoustic and EGG Metric maps for participant F06

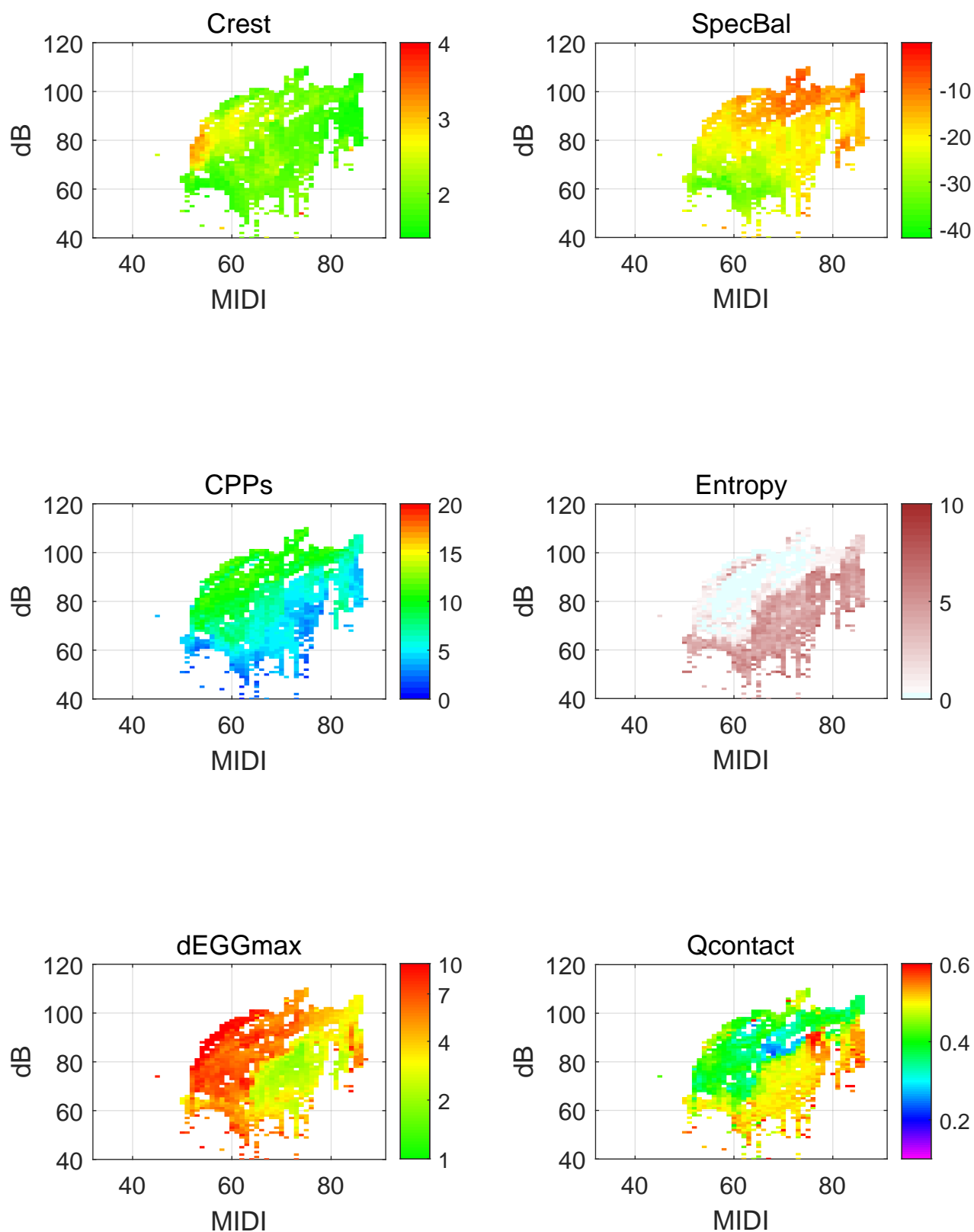


Figure S38: Classification voice maps for participant F07

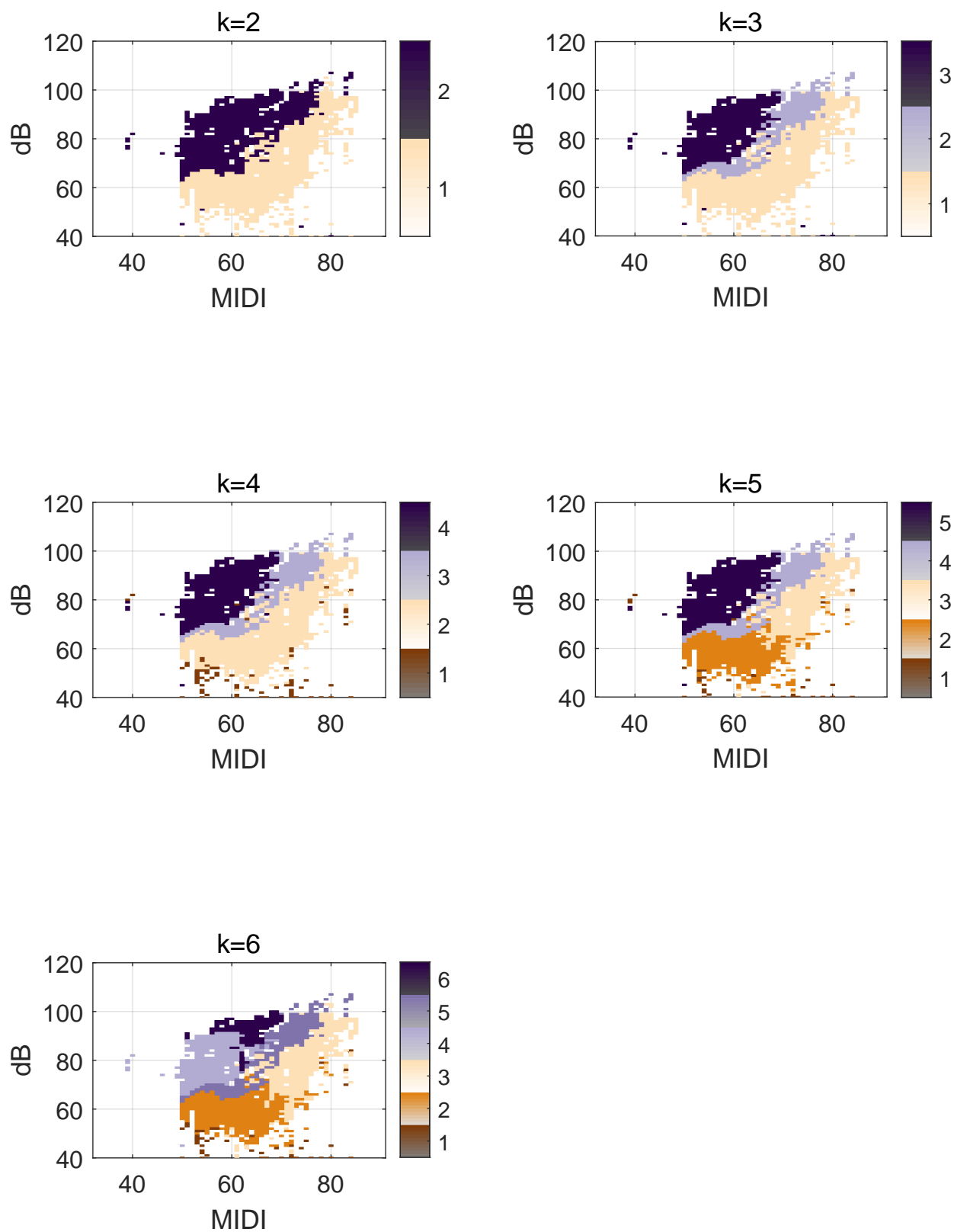


Figure S39: Acoustic and EGG Metric maps for participant F07

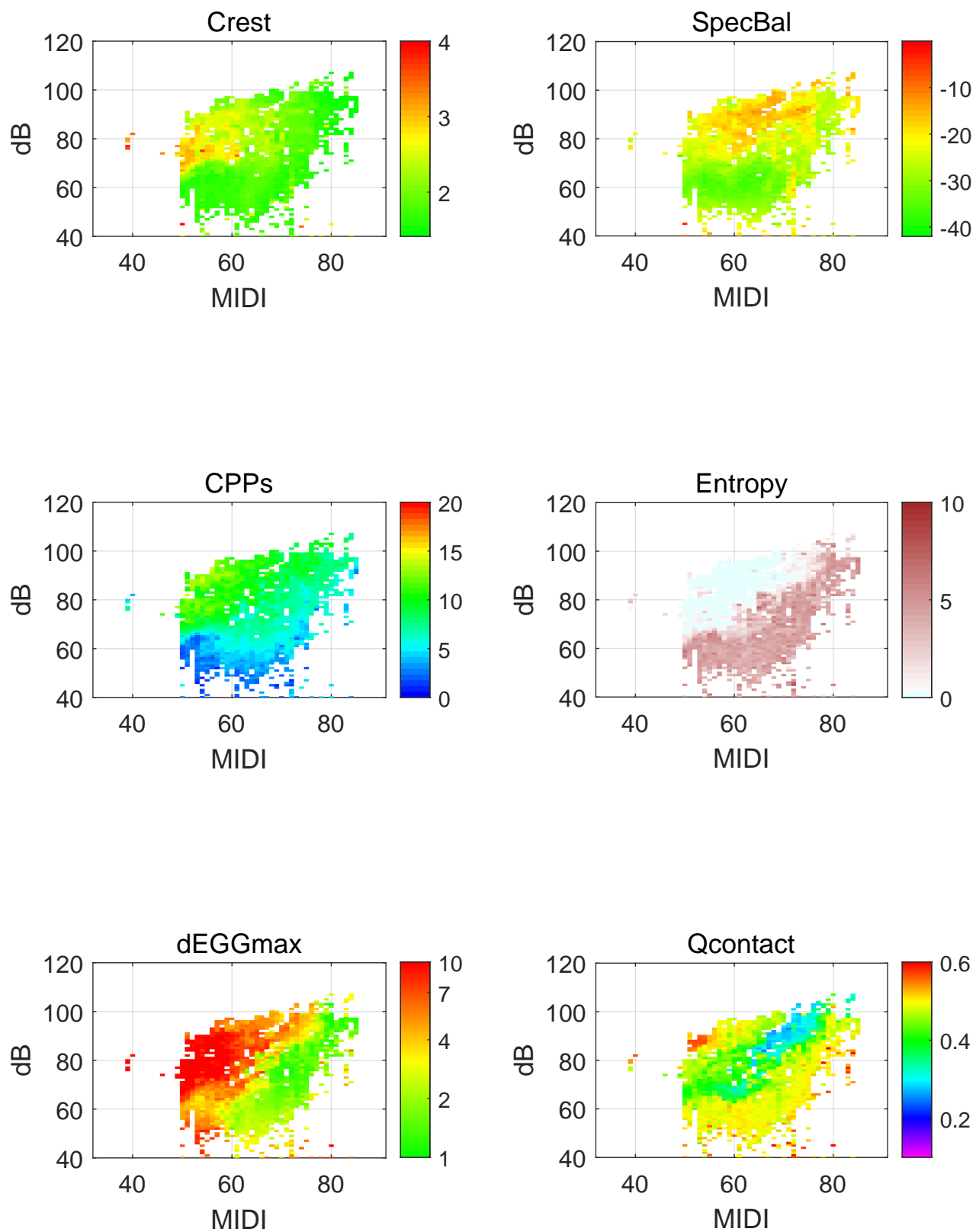


Figure S40: Classification voice maps for participant F08

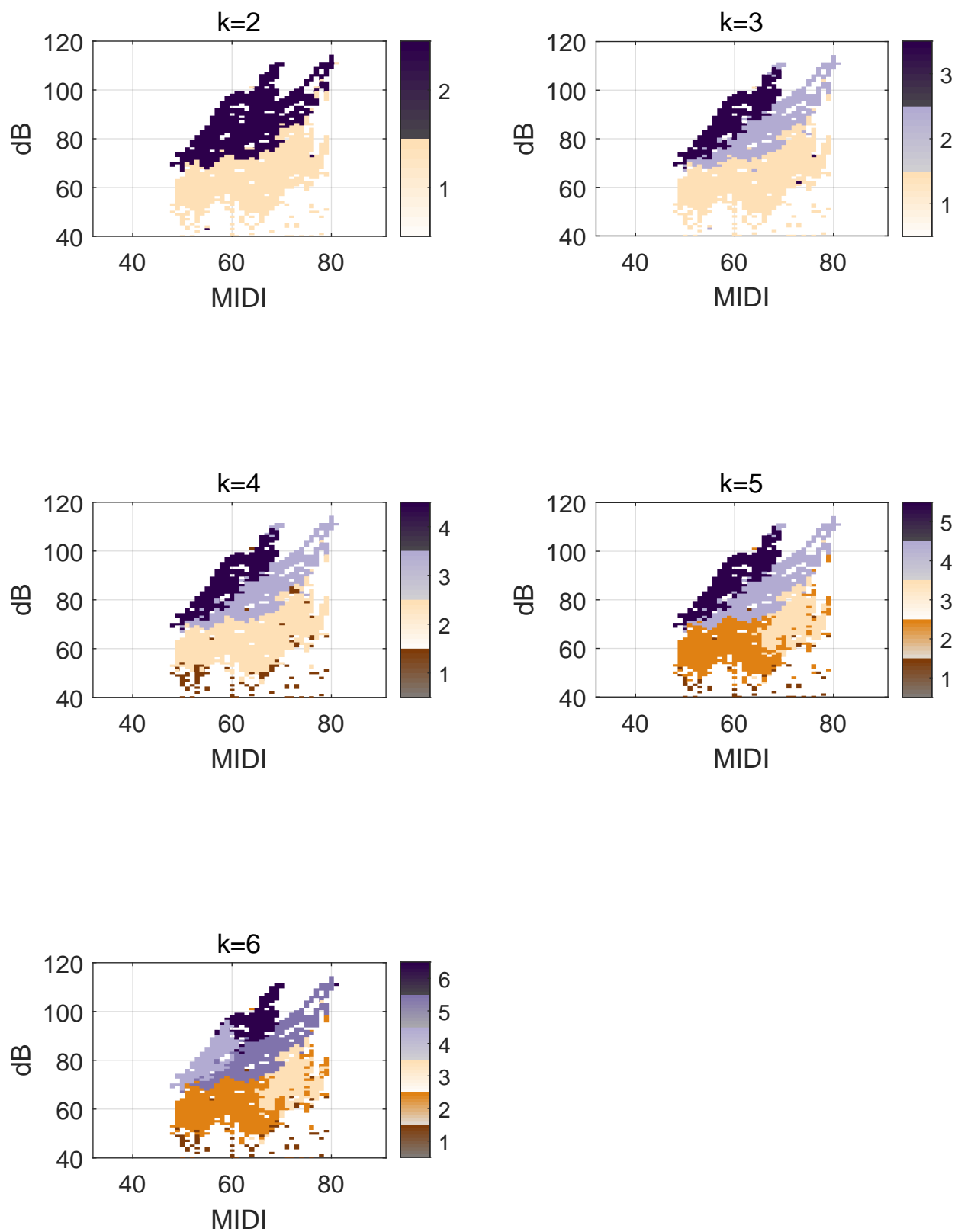


Figure S41: Acoustic and EGG Metric maps for participant F08

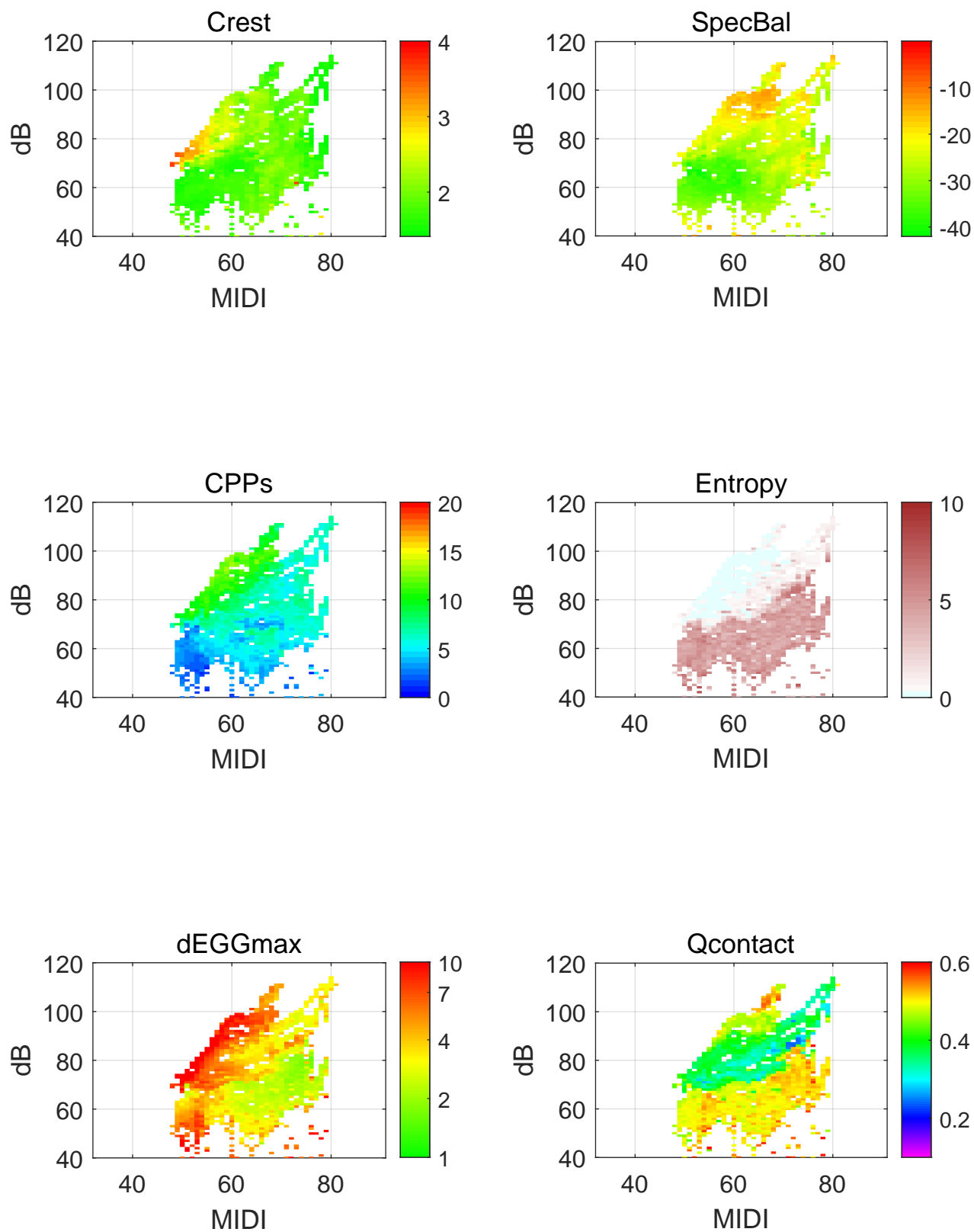


Figure S42: Classification voice maps for participant F09

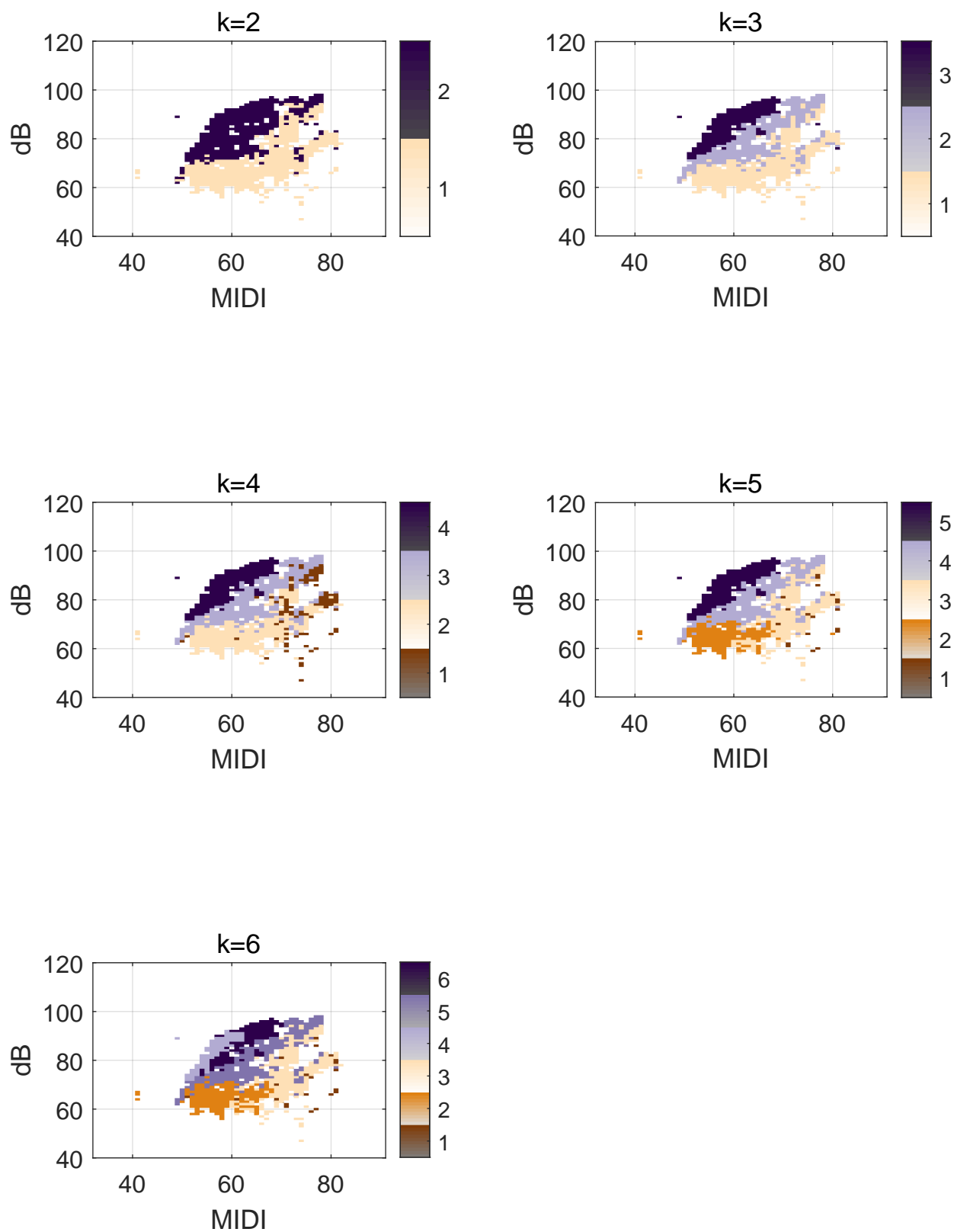


Figure S43: Acoustic and EGG Metric maps for participant F09

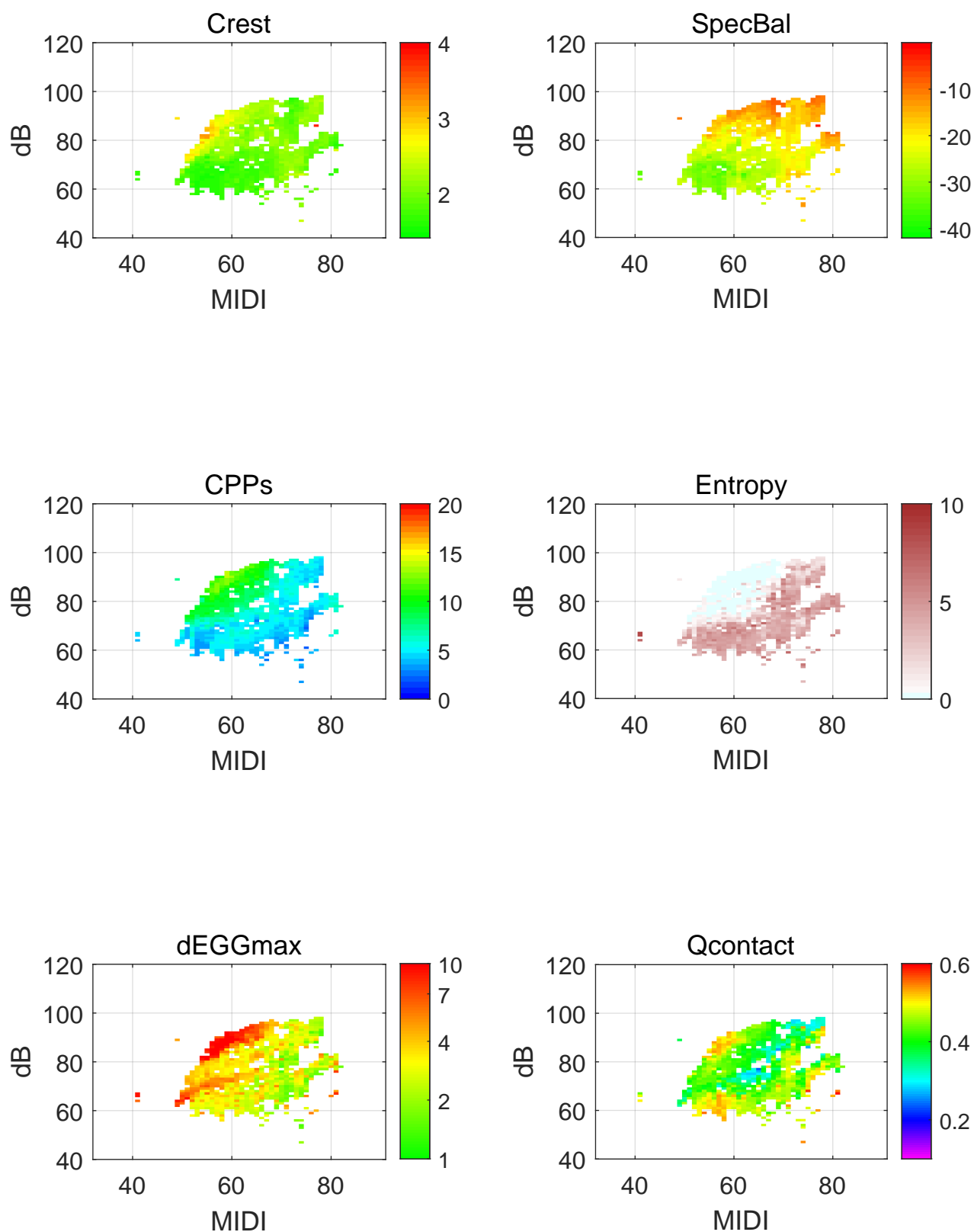


Figure S44: Classification voice maps for participant F10

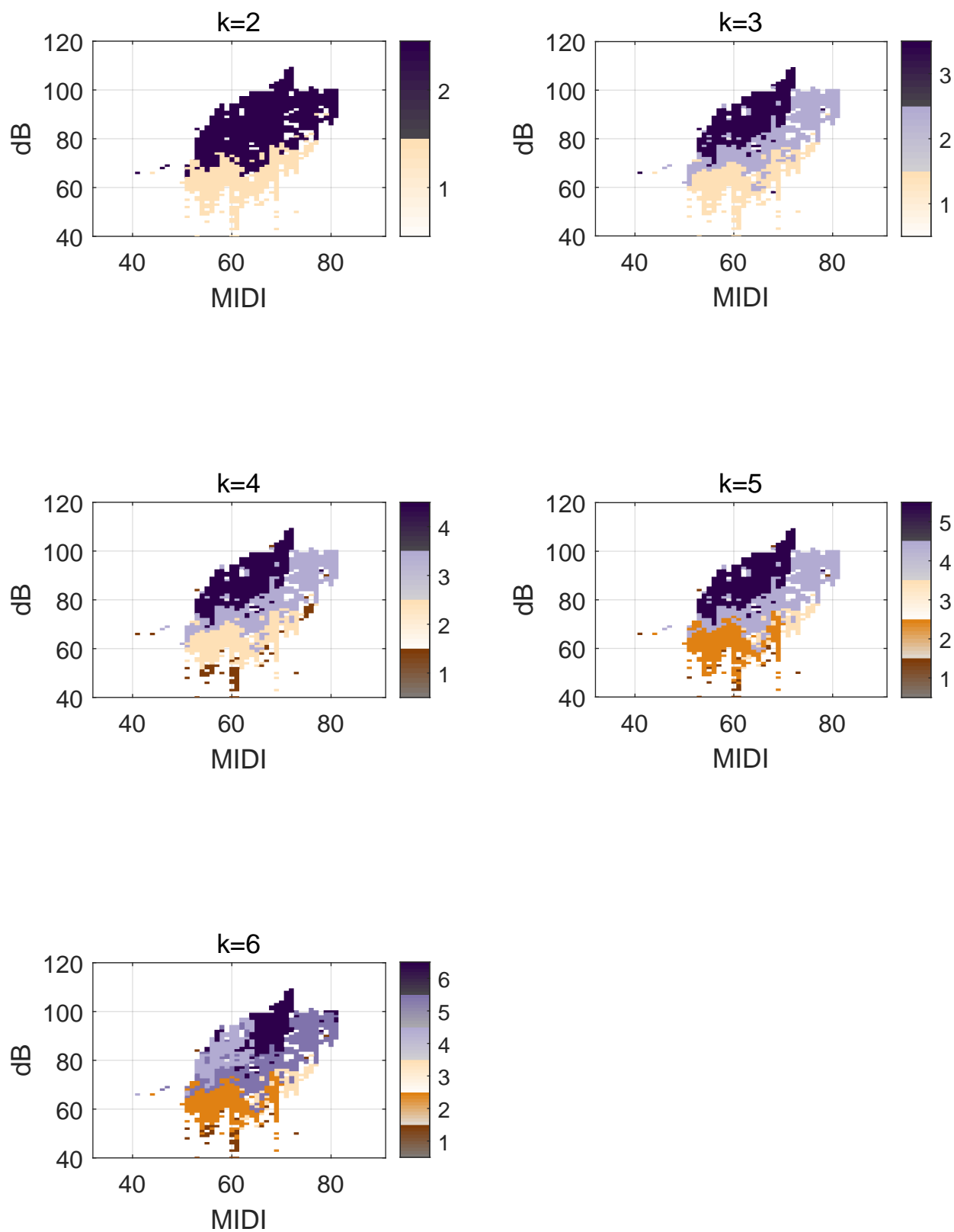


Figure S45: Acoustic and EGG Metric maps for participant F10

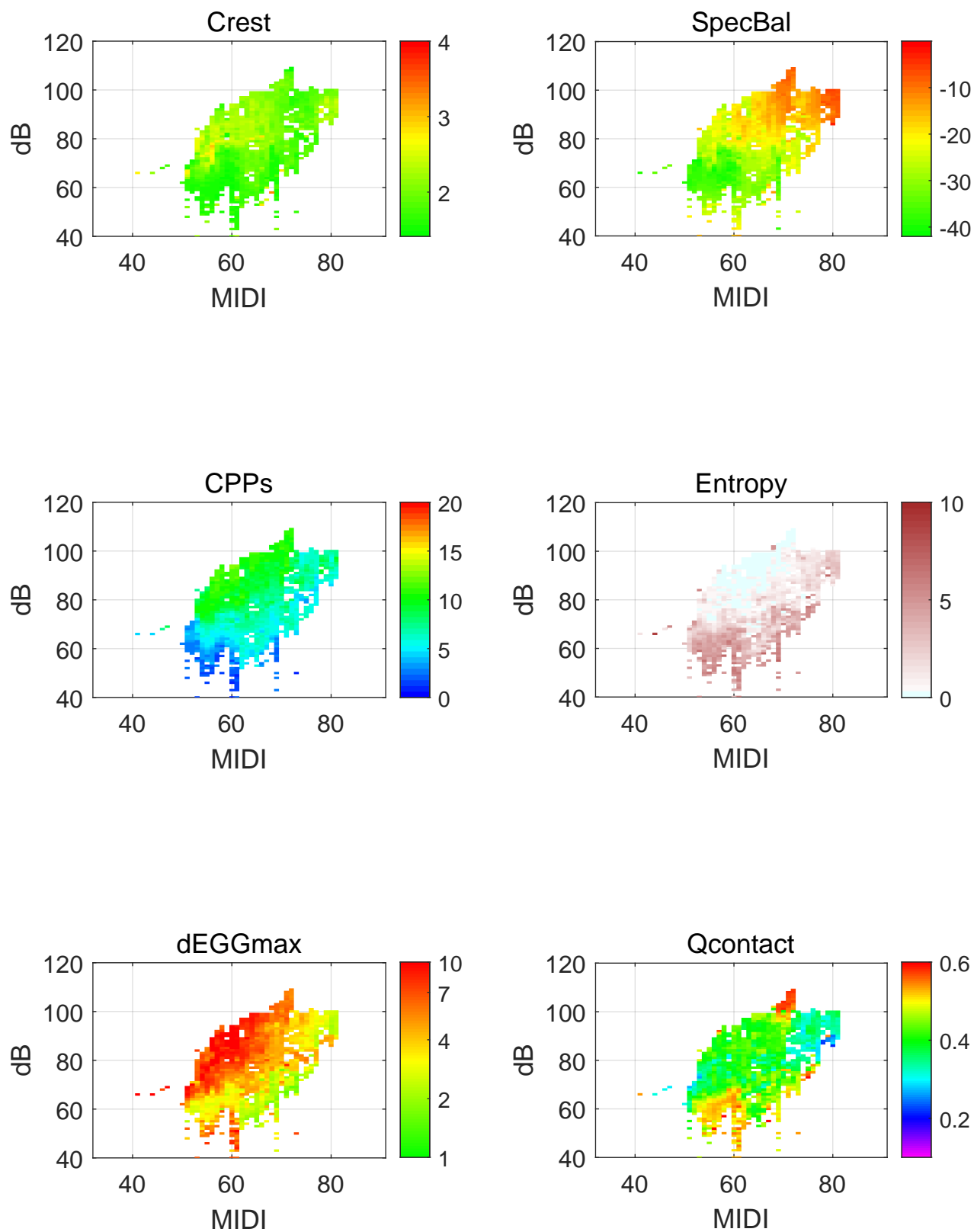


Figure S46: Classification voice maps for participant F11

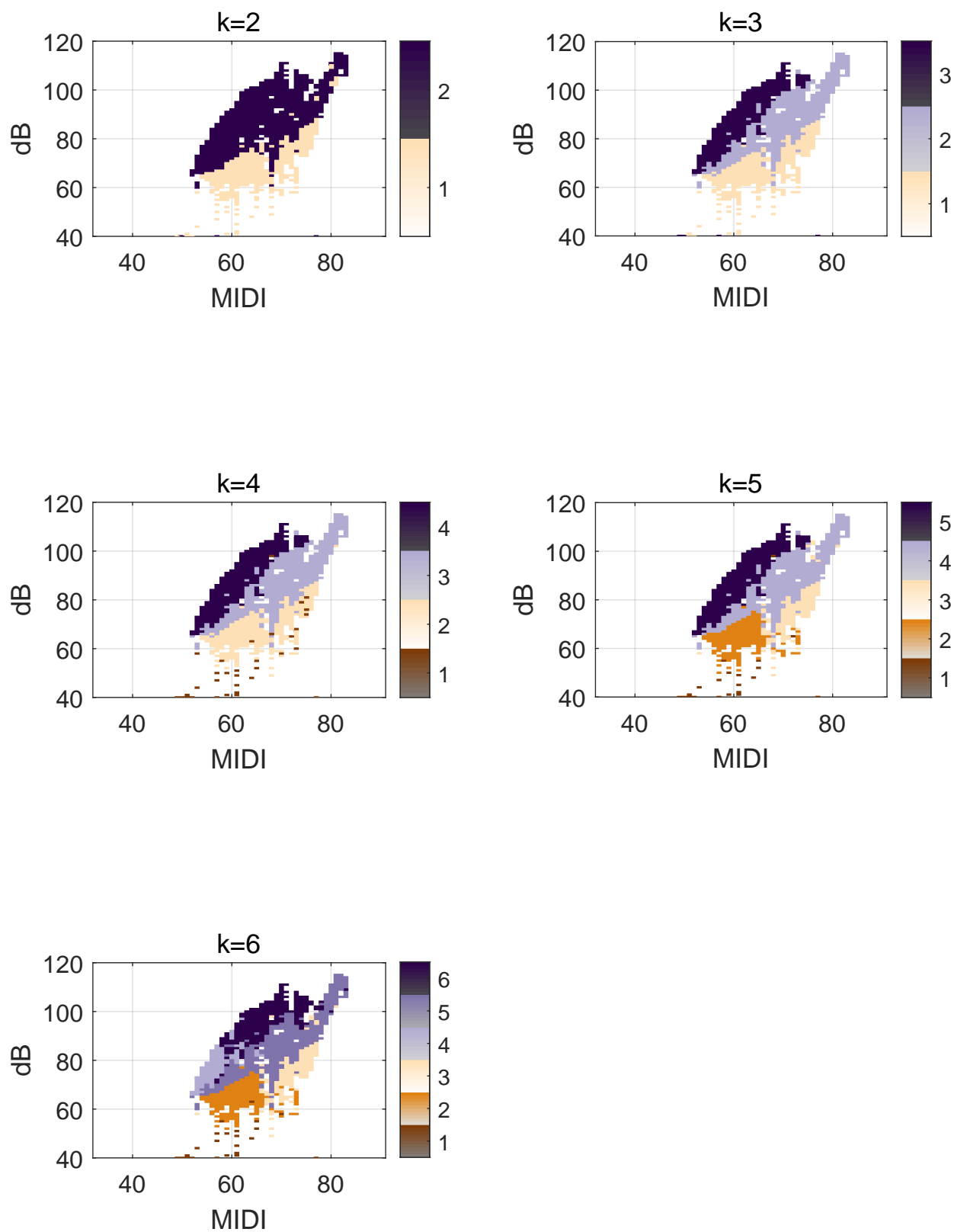


Figure S47: Acoustic and EGG Metric maps for participant F11

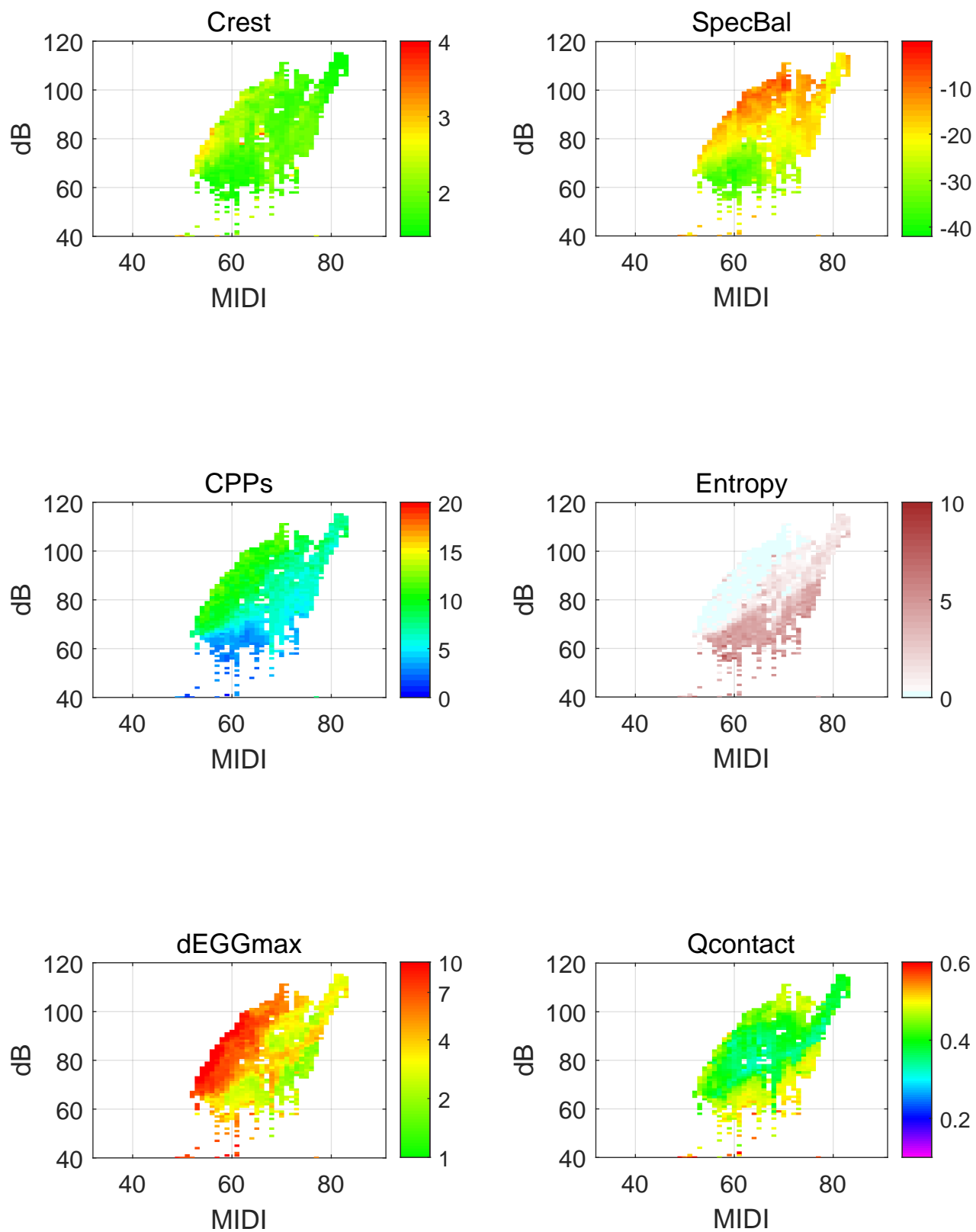


Figure S48: Classification voice maps for participant F12

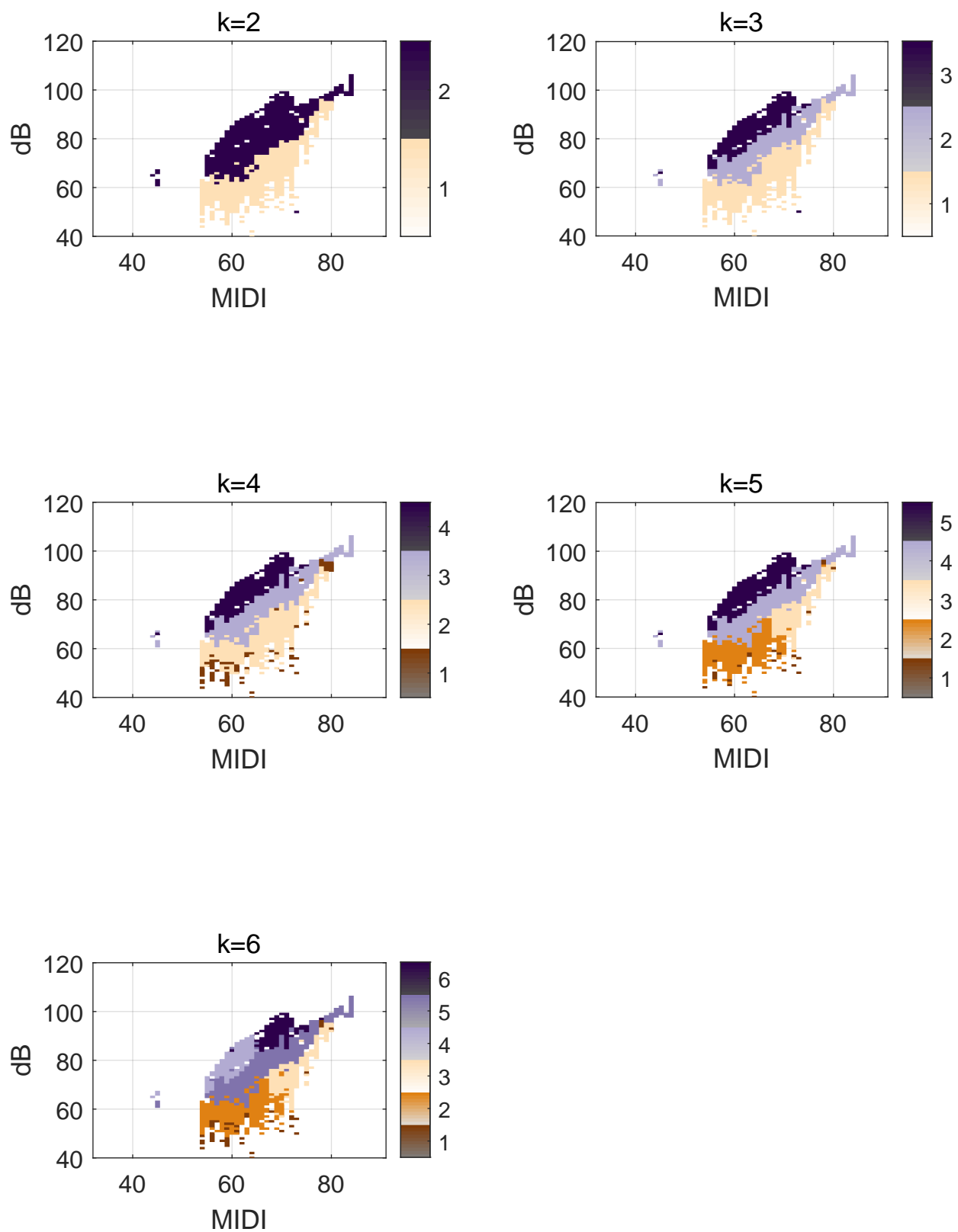


Figure S49: Acoustic and EGG Metric maps for participant F12

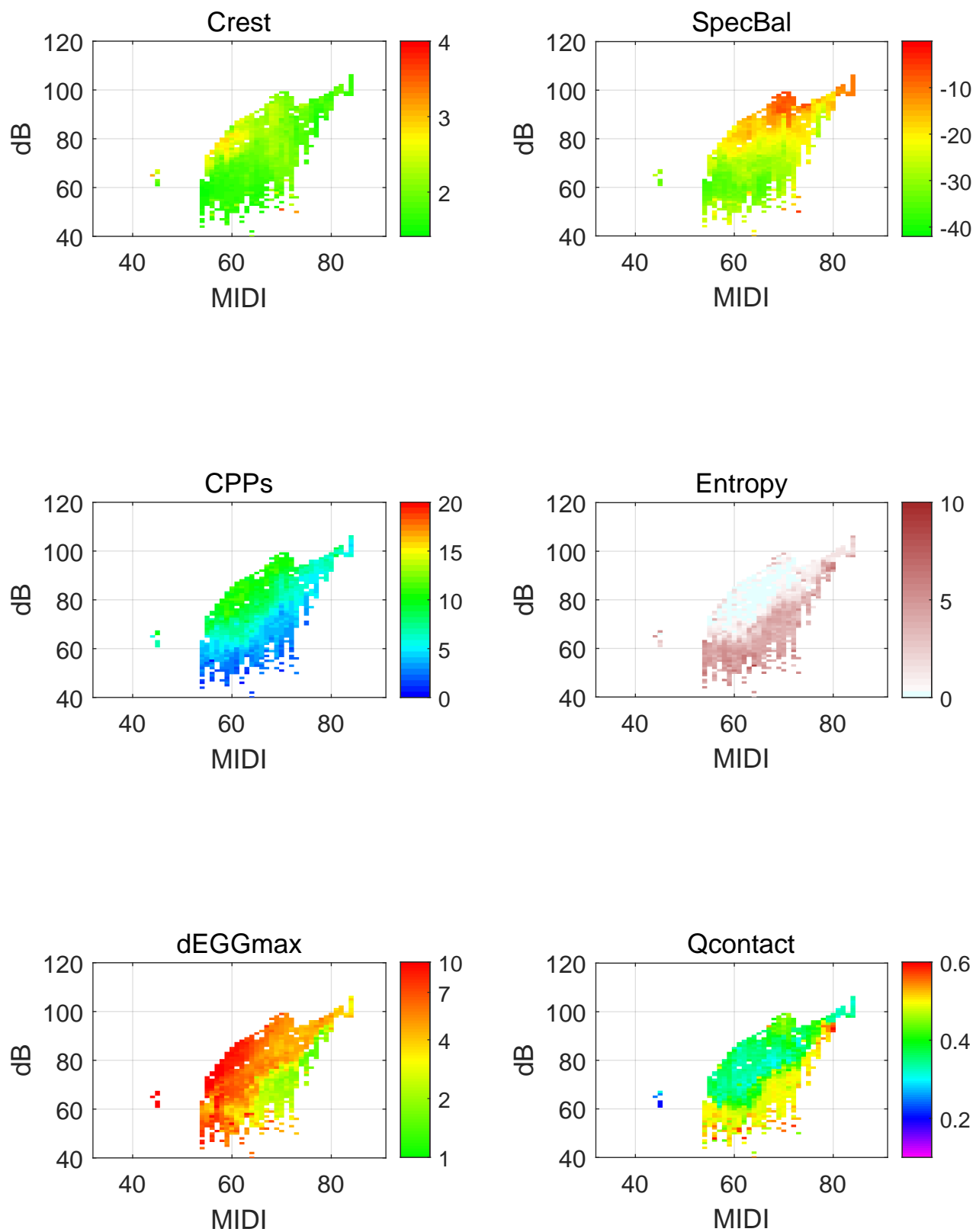


Figure S50: Classification voice maps for participant F13

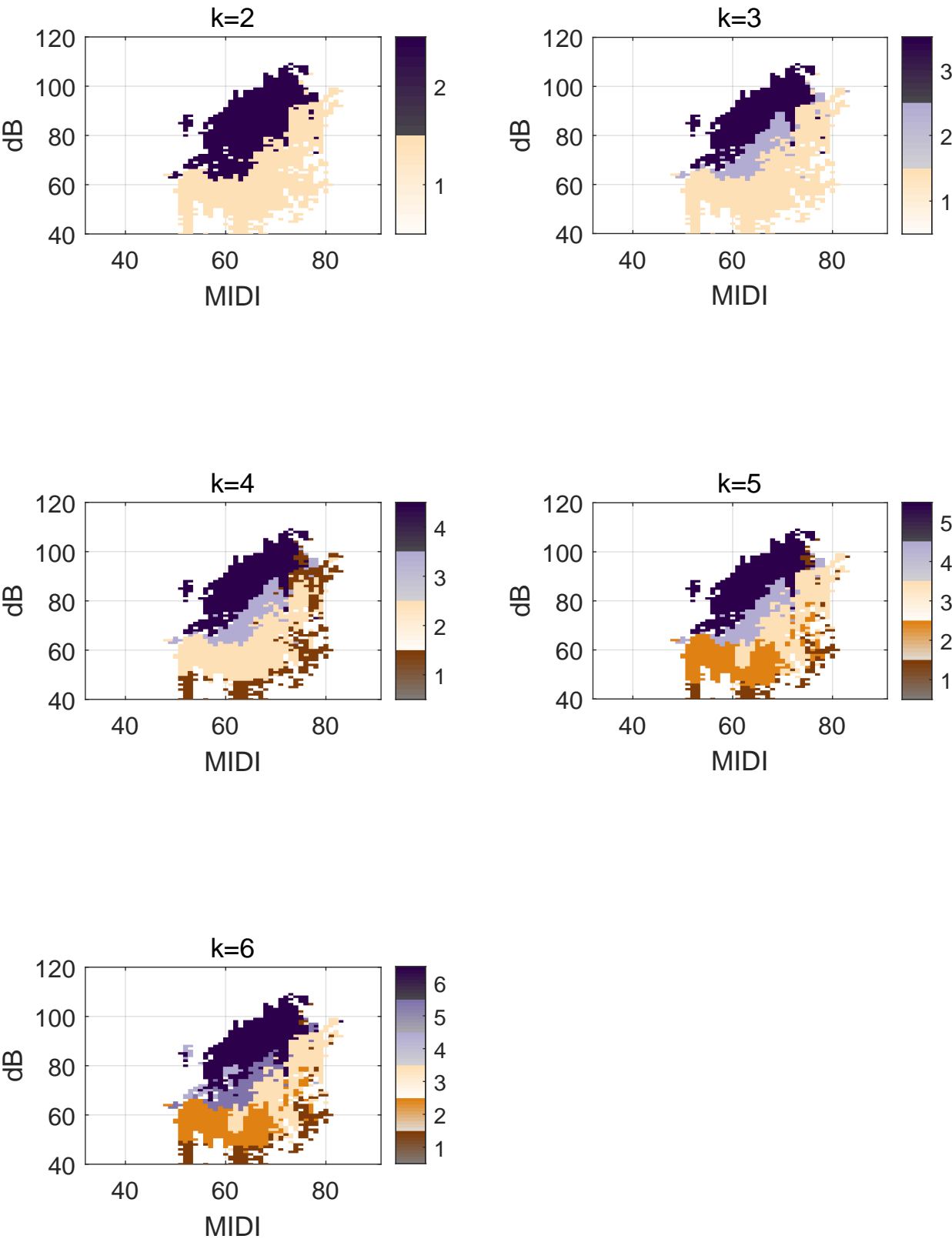


Figure S51: Acoustic and EGG Metric maps for participant F13

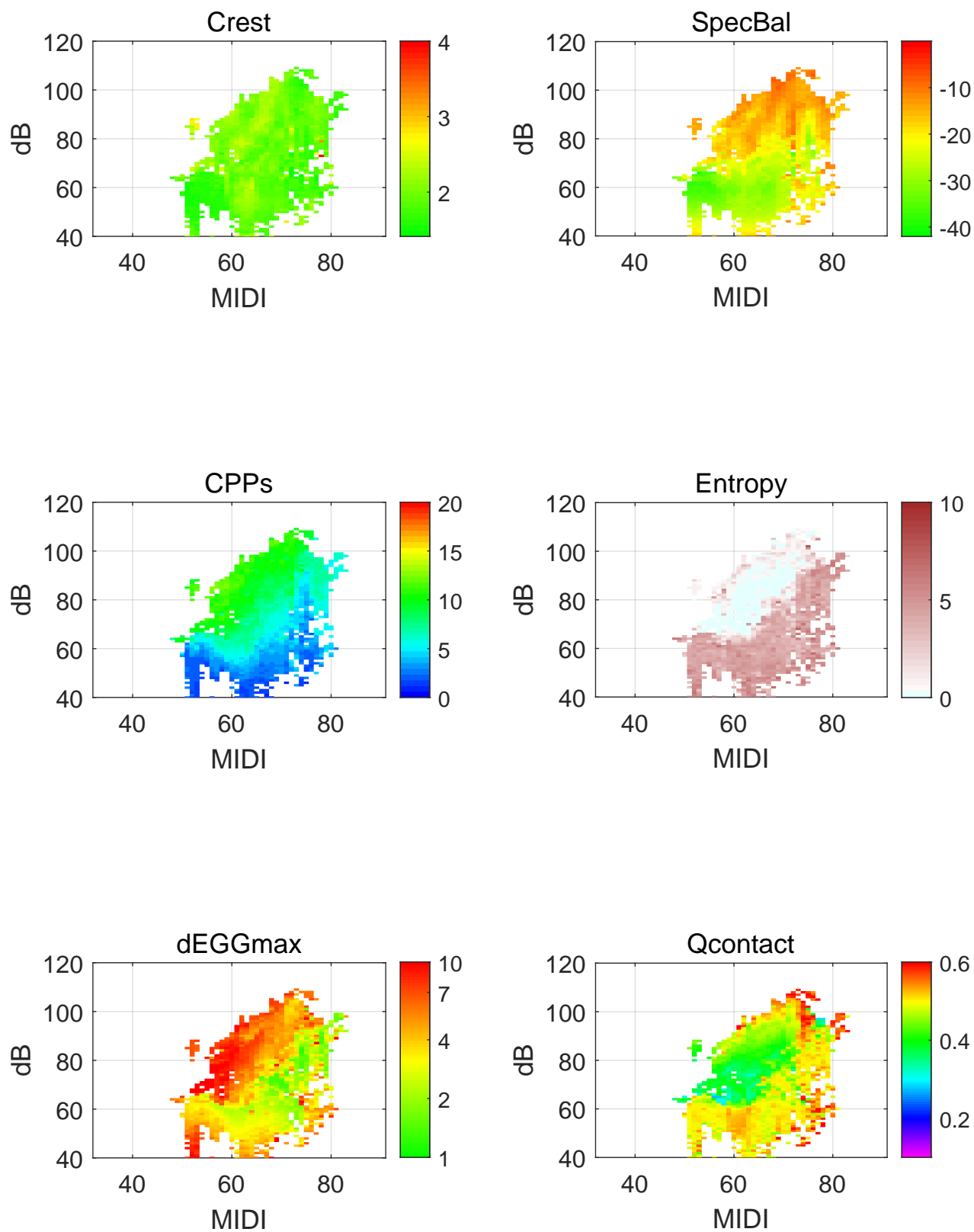


Figure S52: Centroid polar in percentage for Females group

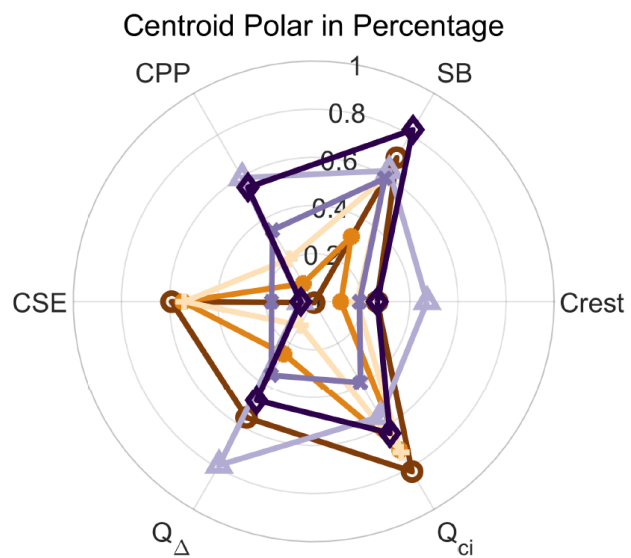
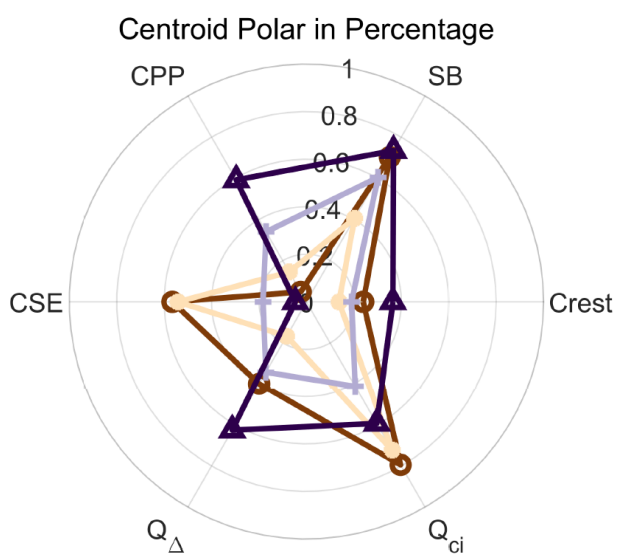
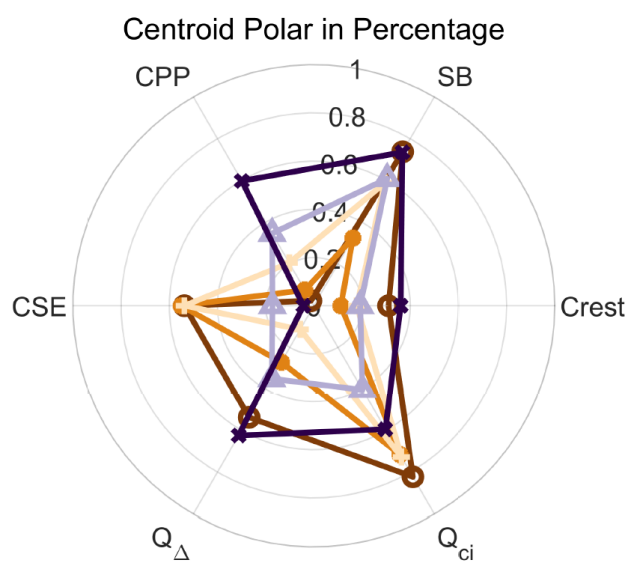
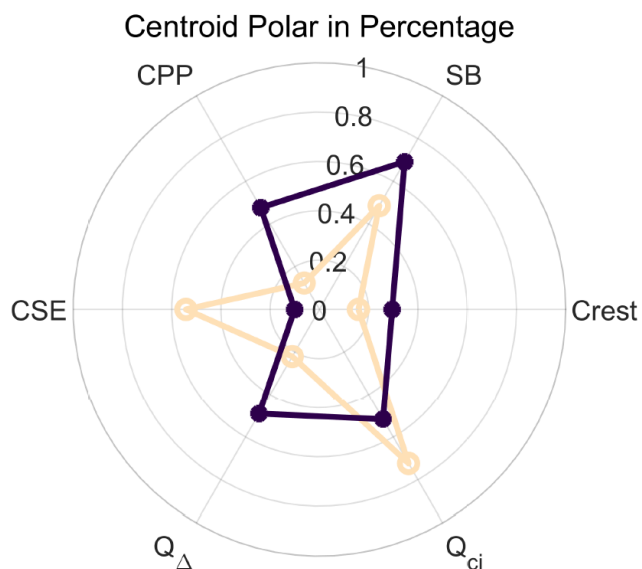
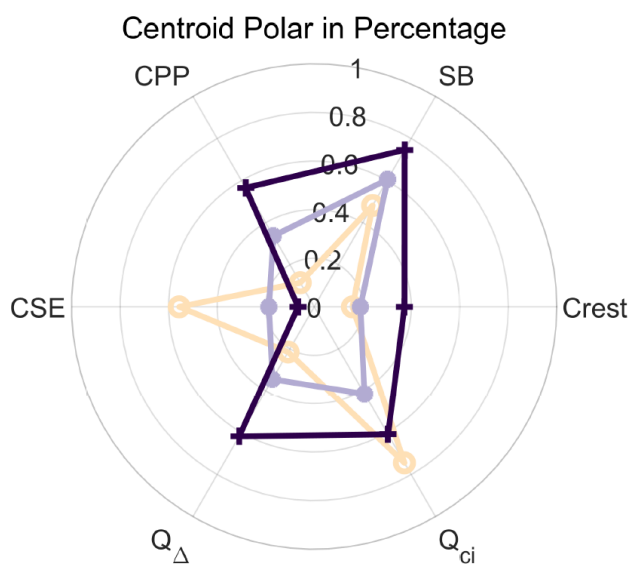


Figure S53: Classification voice maps for participant B01

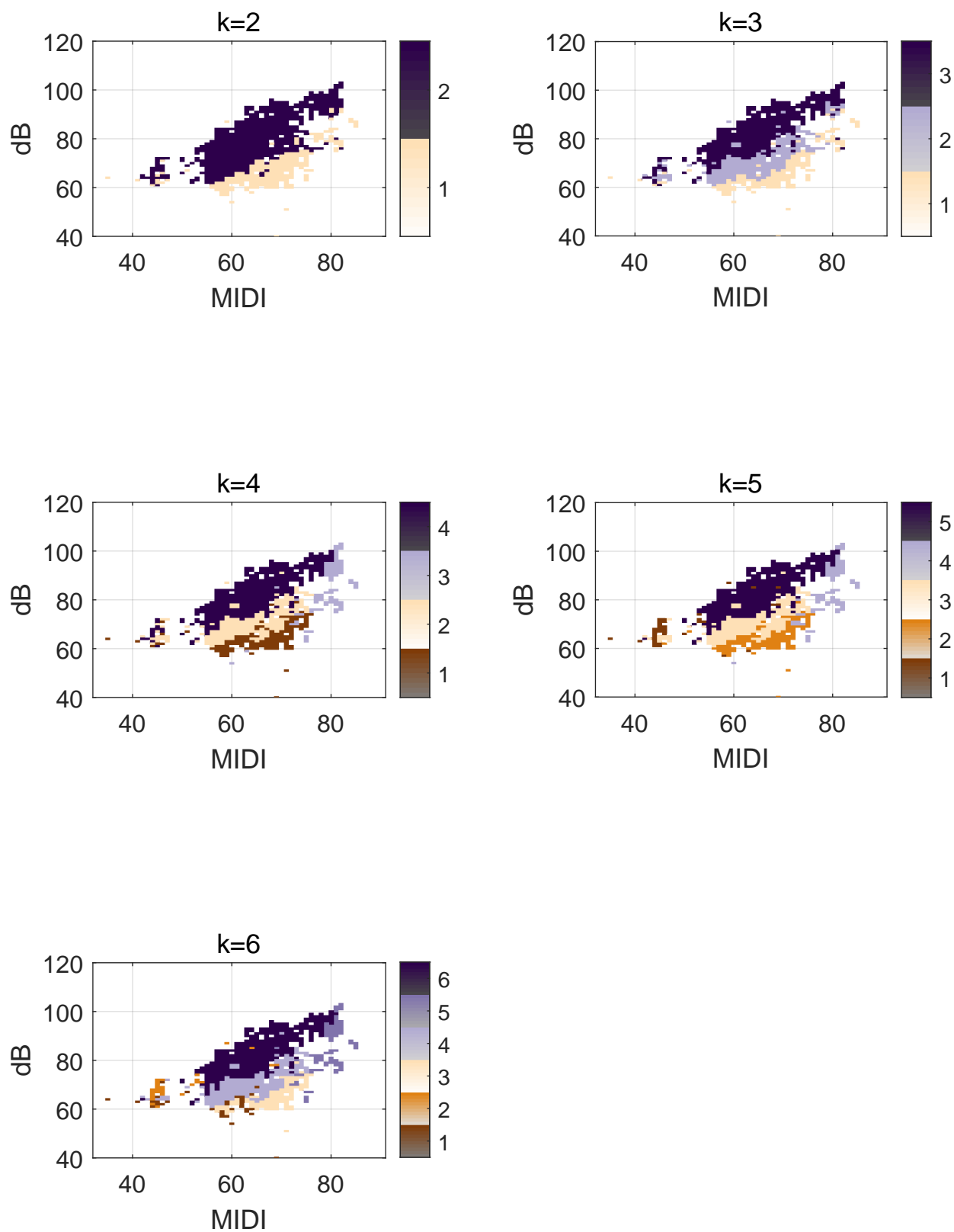


Figure S54: Acoustic and EGG Metric maps for participant B01

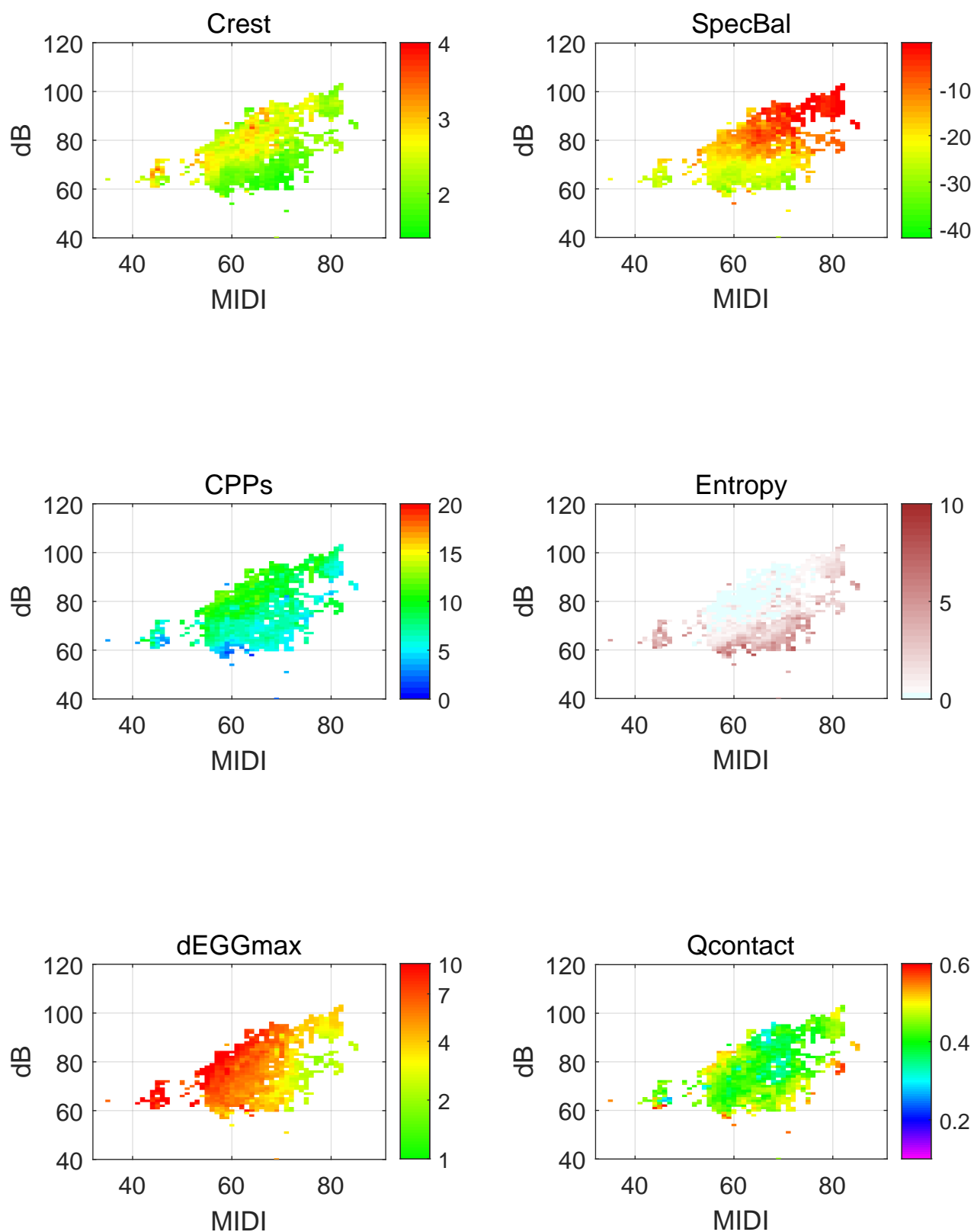


Figure S55: Classification voice maps for participant B02

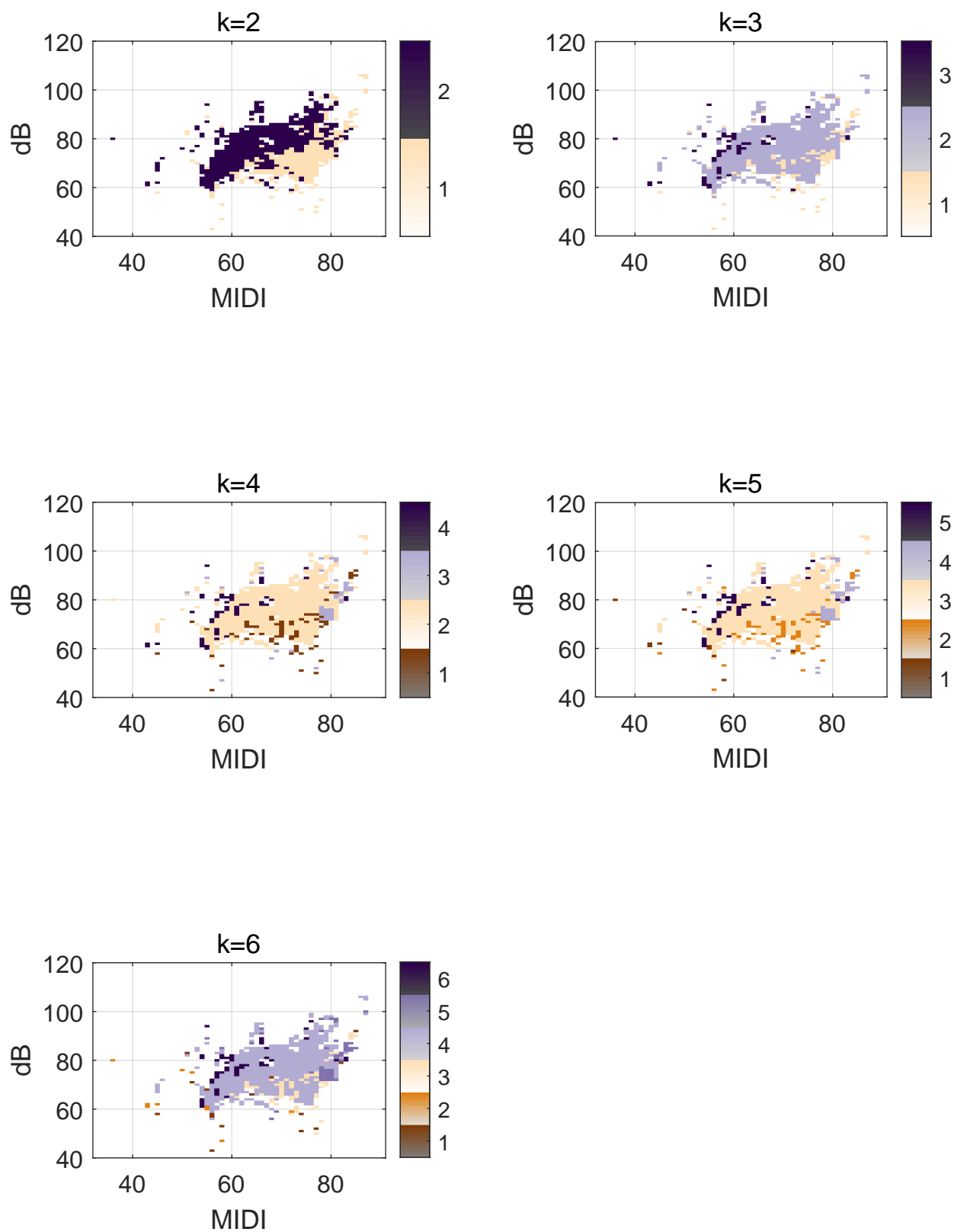


Figure S56: Acoustic and EGG Metric maps for participant B02

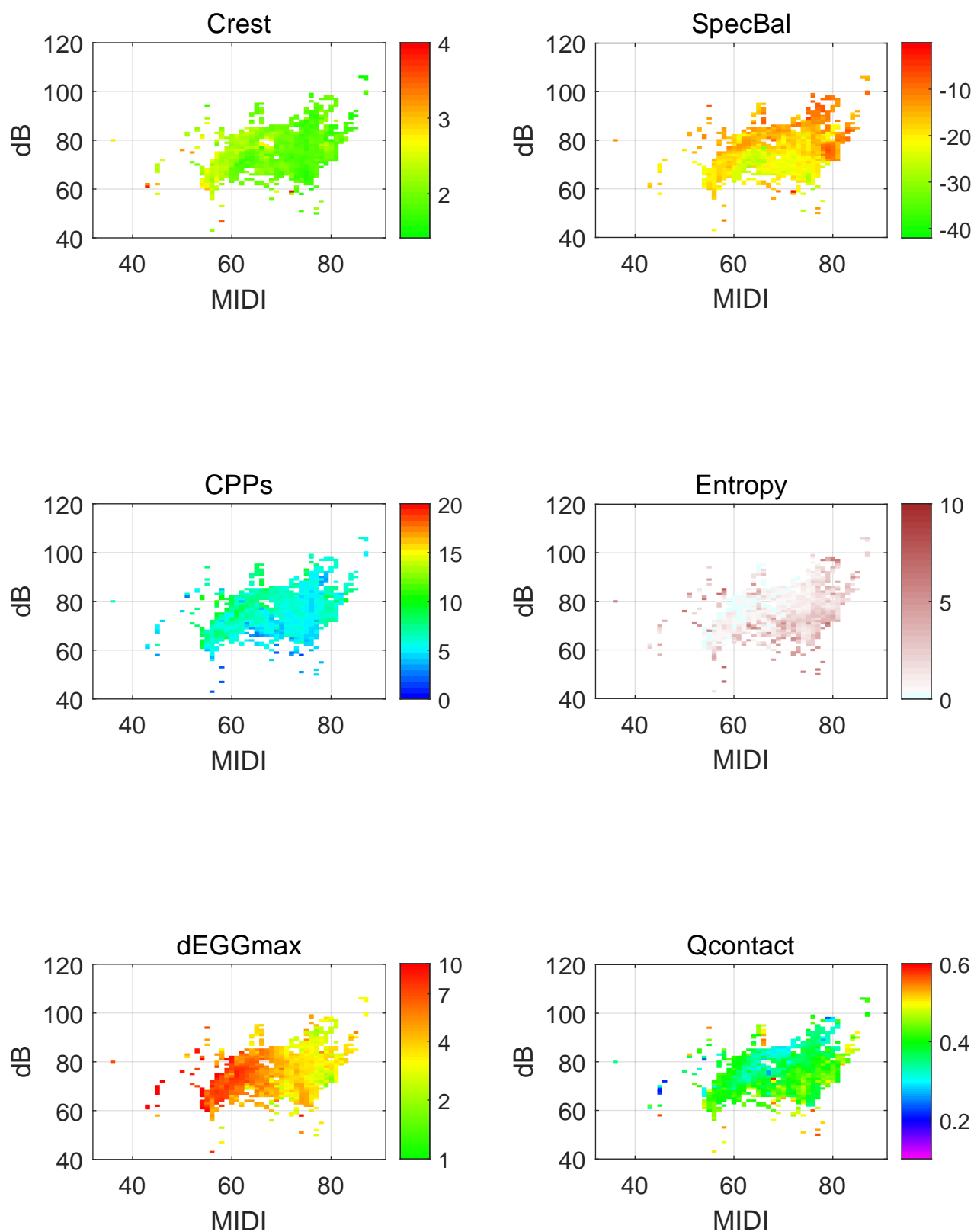


Figure S57: Classification voice maps for participant B03

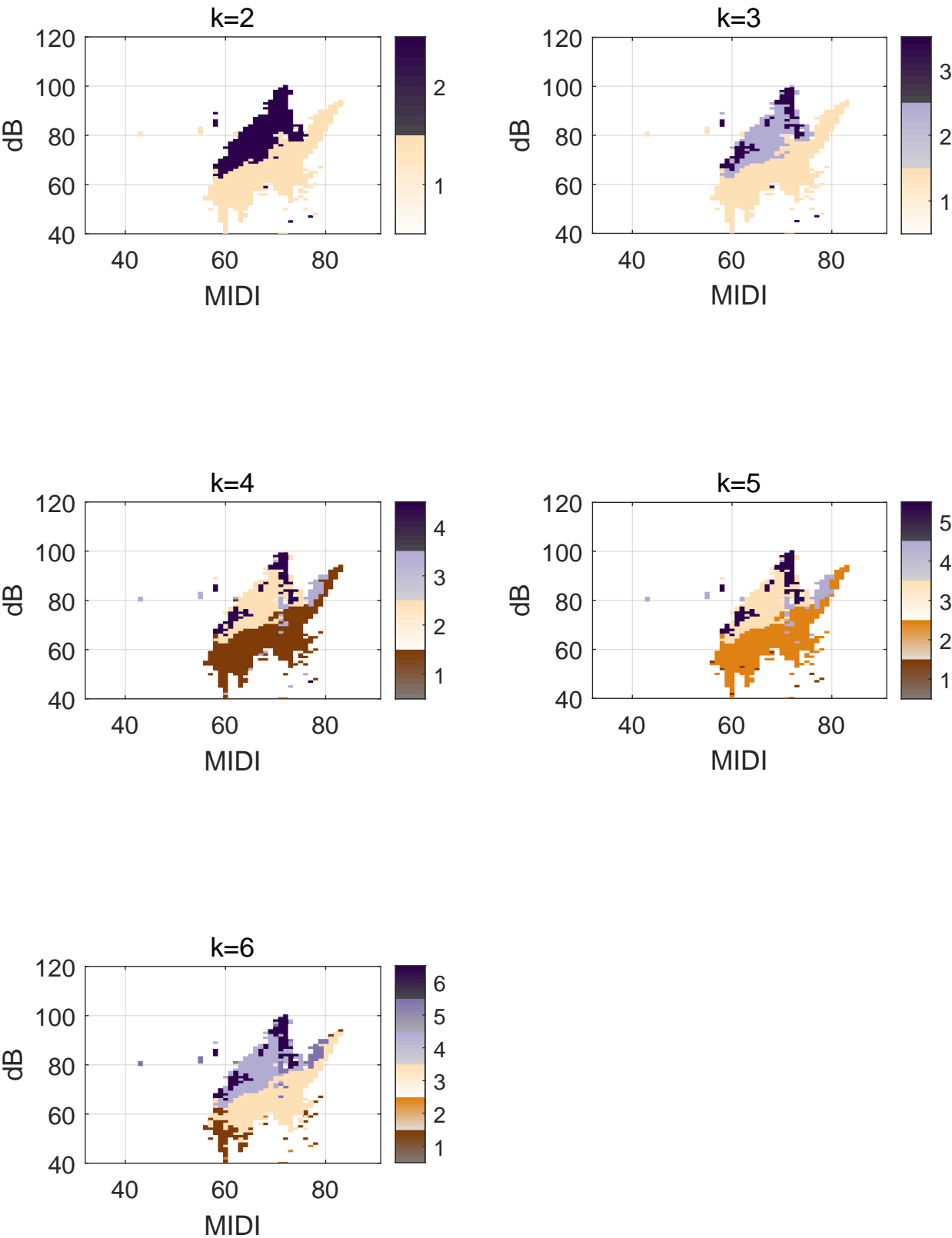


Figure S58: Acoustic and EGG Metric maps for participant B03

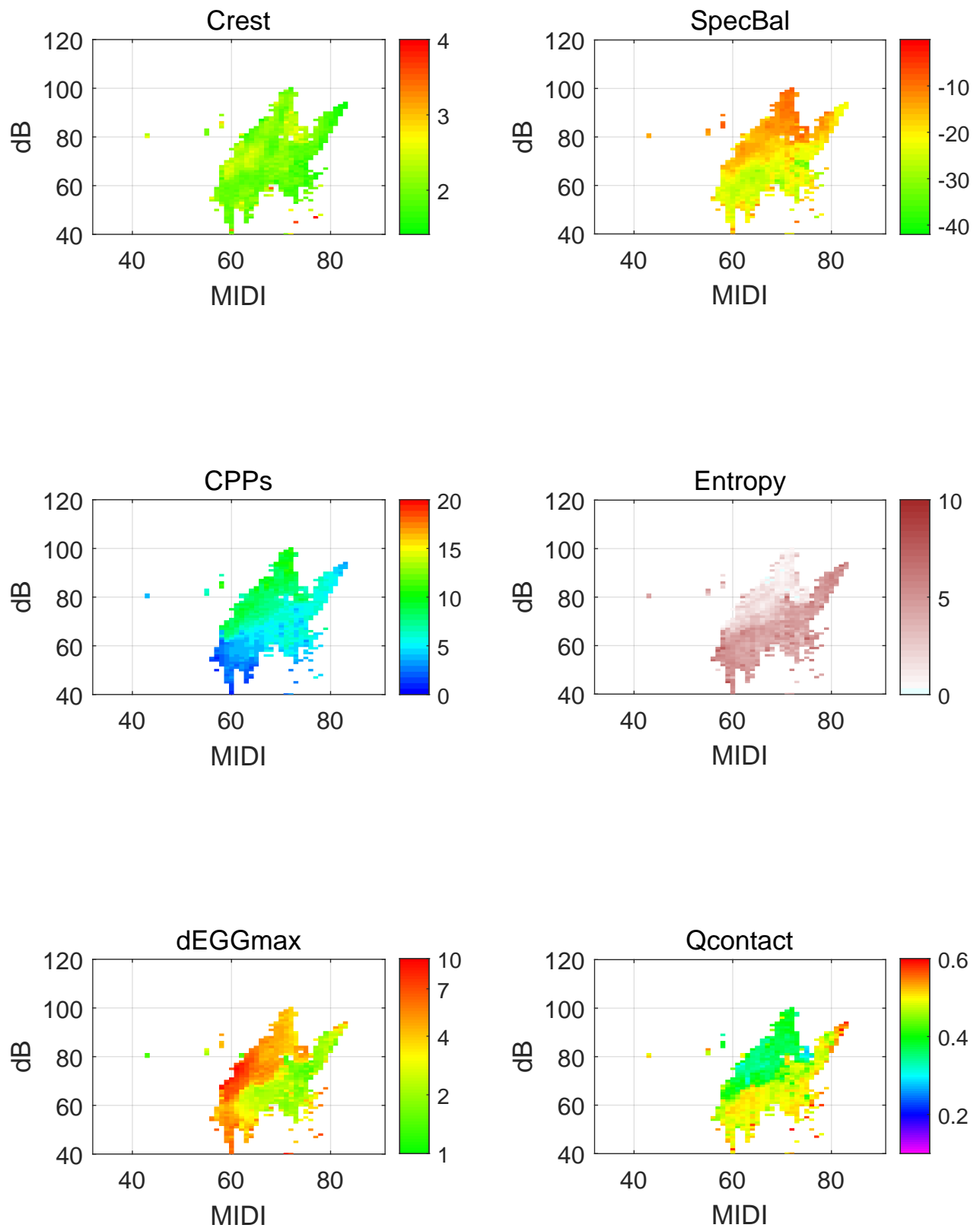


Figure S59: Classification voice maps for participant B04

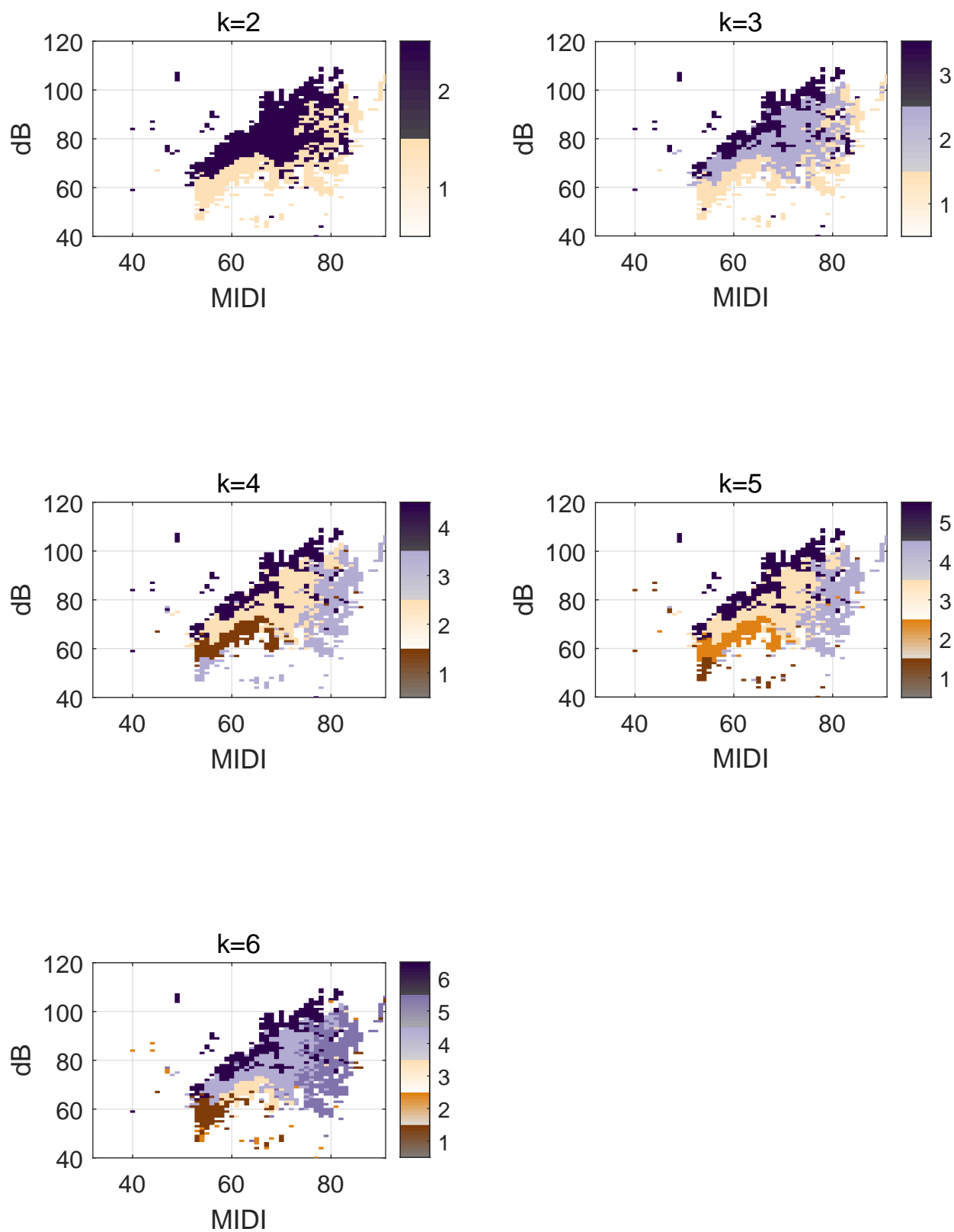


Figure S60: Acoustic and EGG Metric maps for participant B04

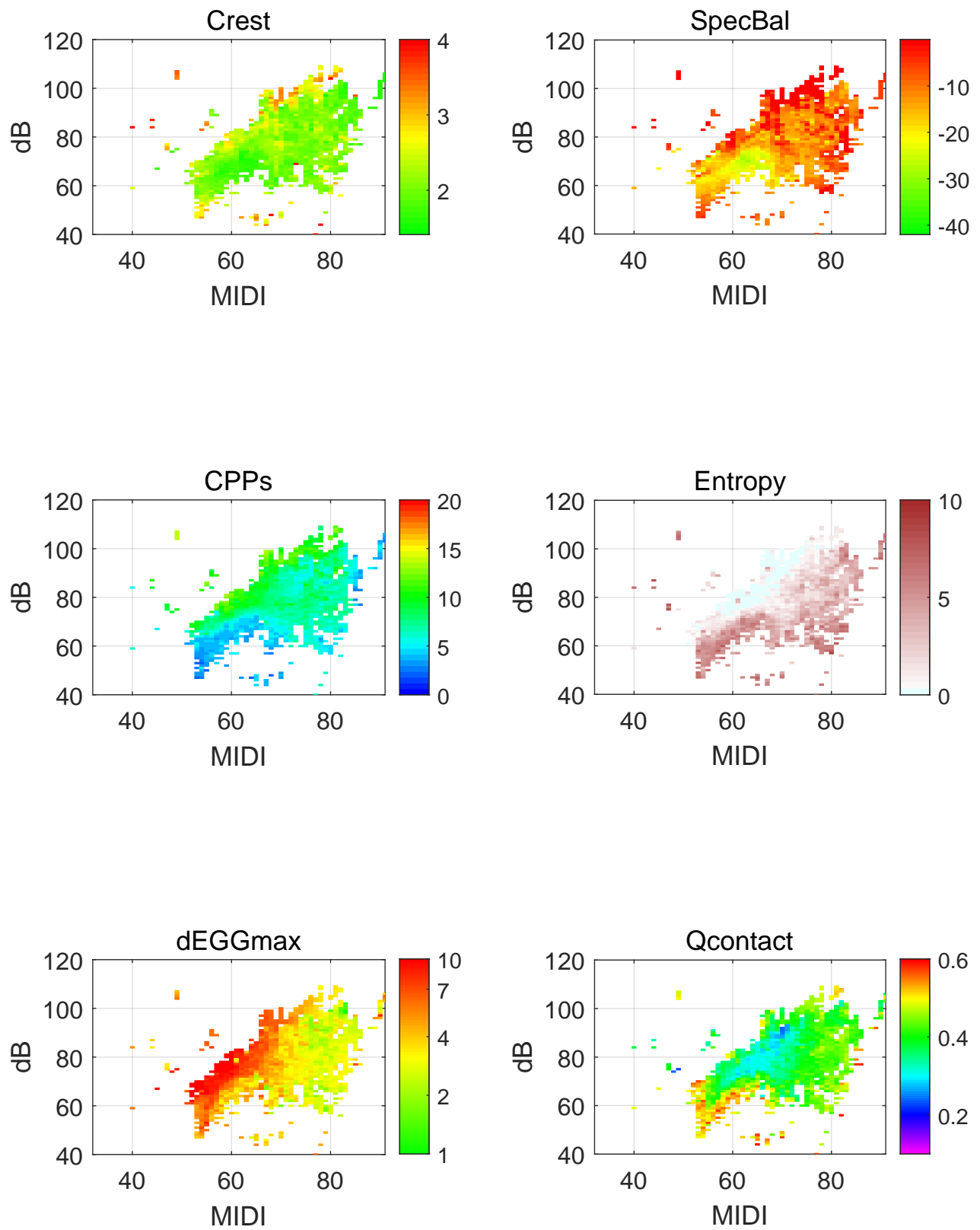


Figure S61: Classification voice maps for participant B05

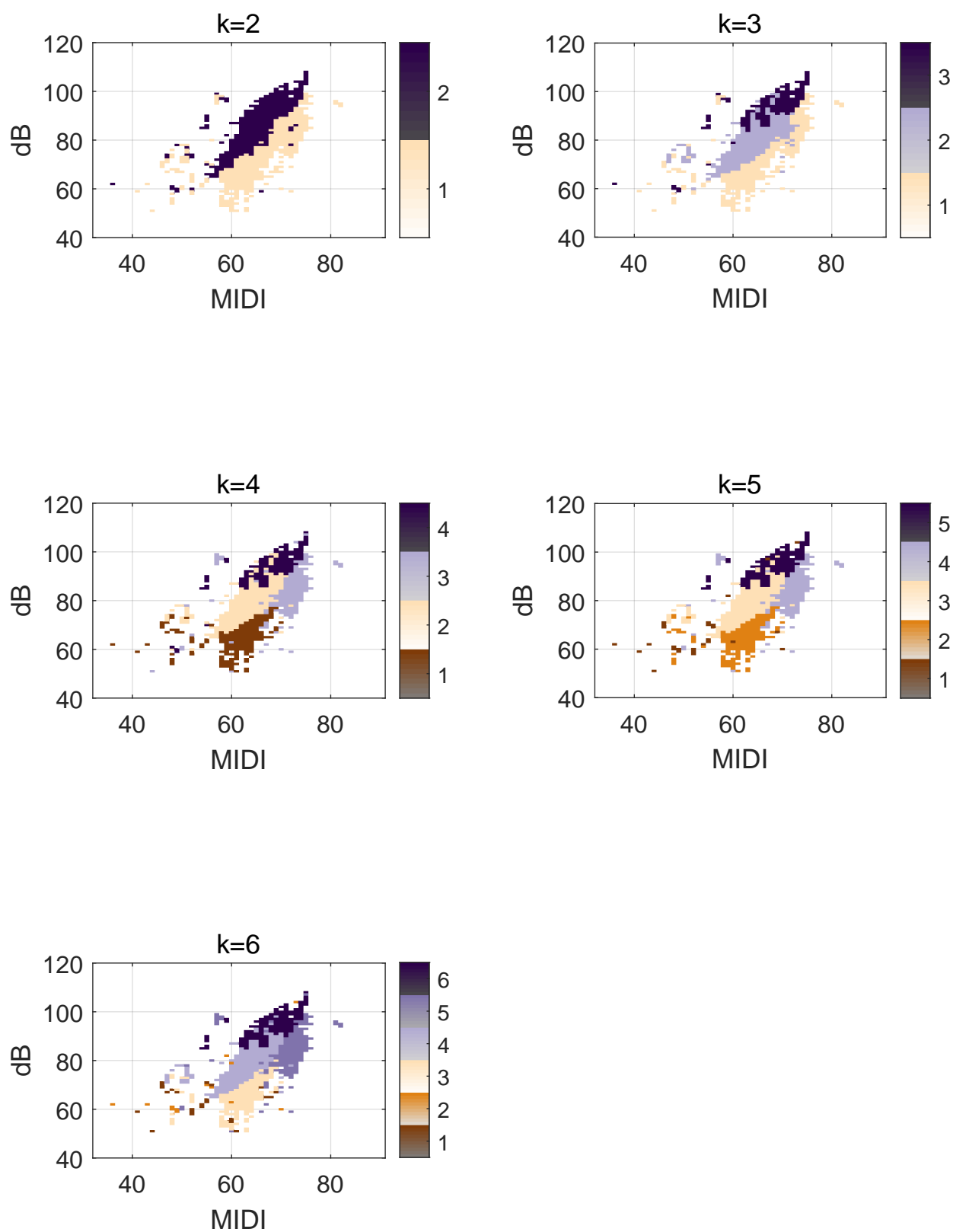


Figure S62: Acoustic and EGG Metric maps for participant B05

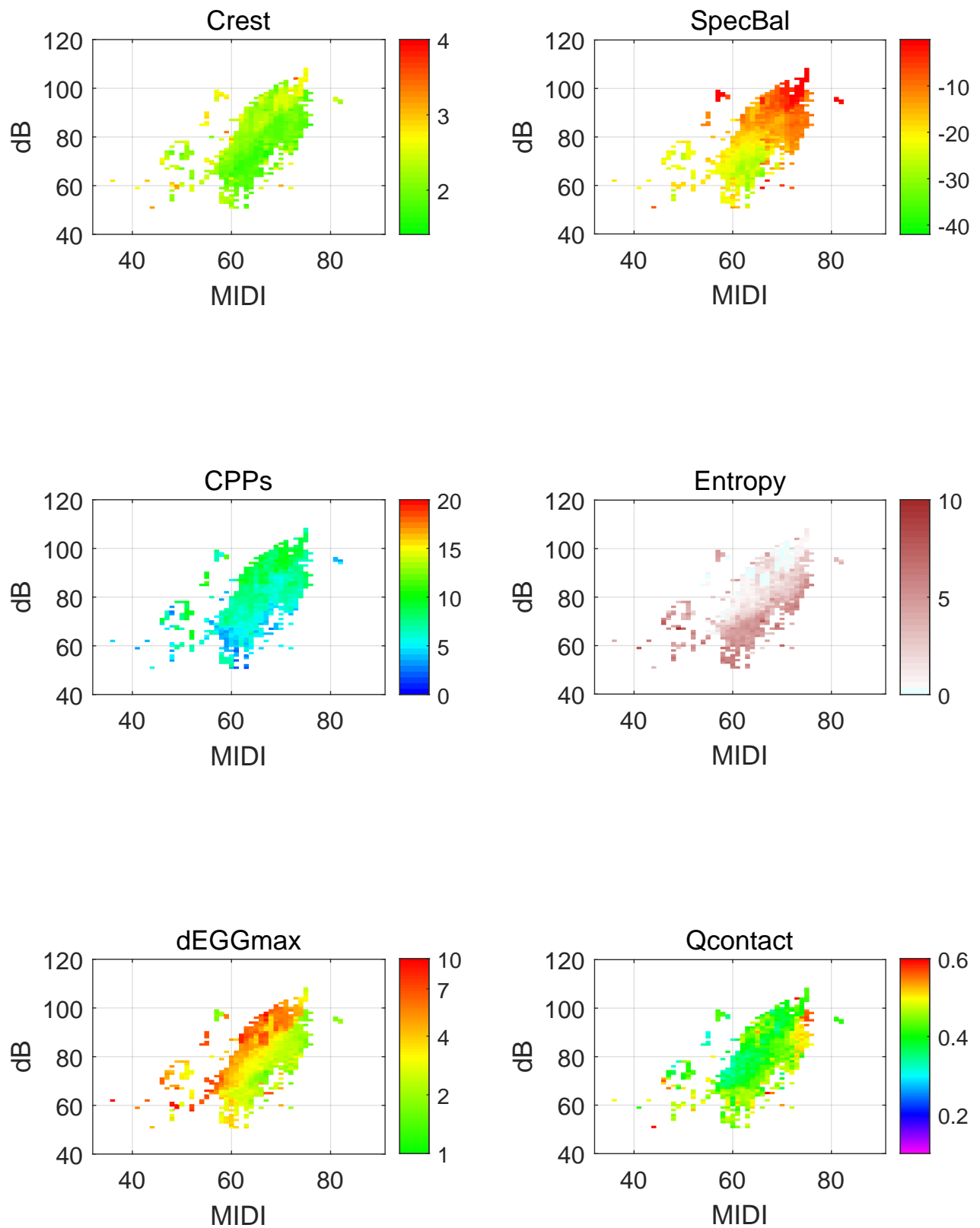


Figure S63: Classification voice maps for participant B06

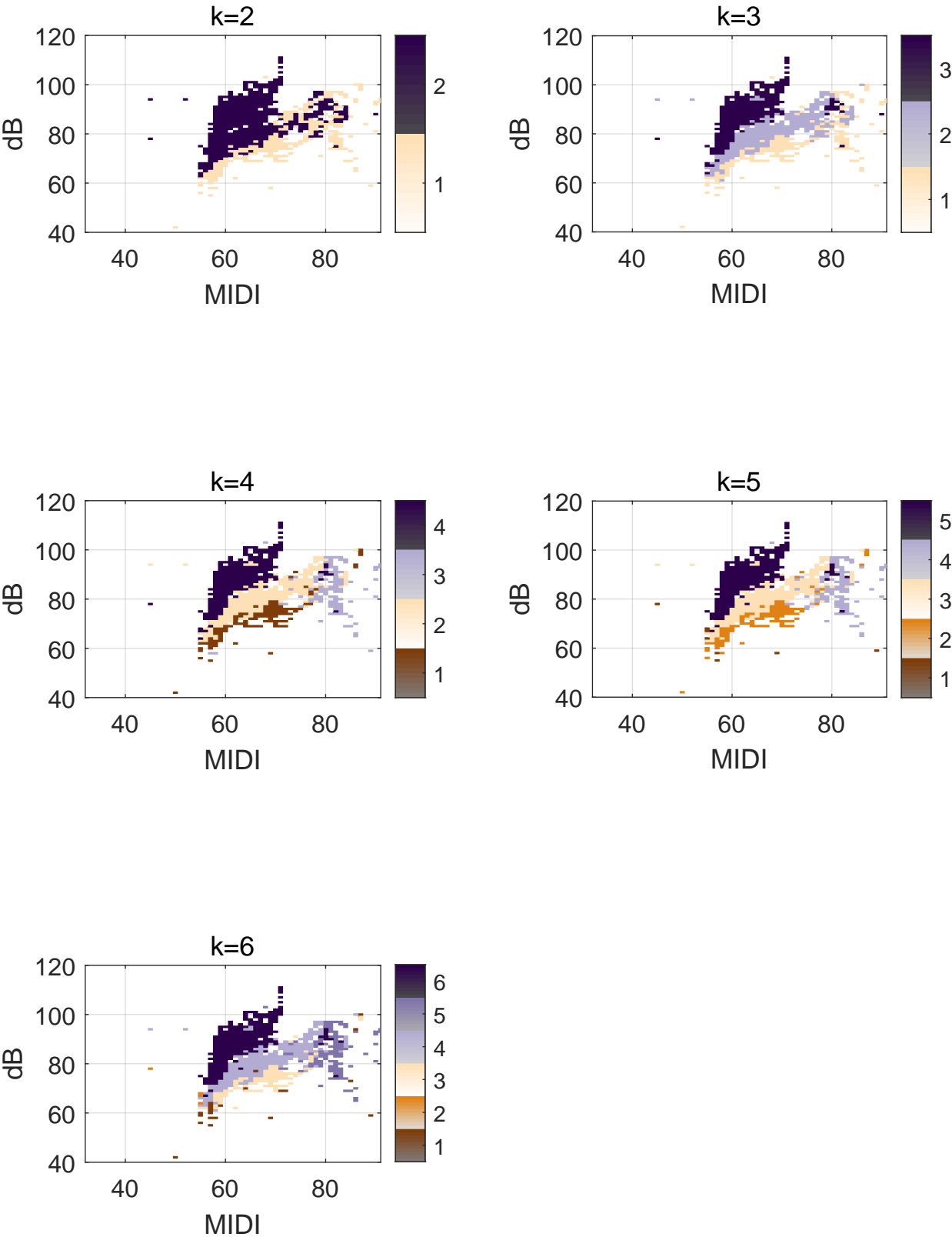


Figure S64: Acoustic and EGG Metric maps for participant B06

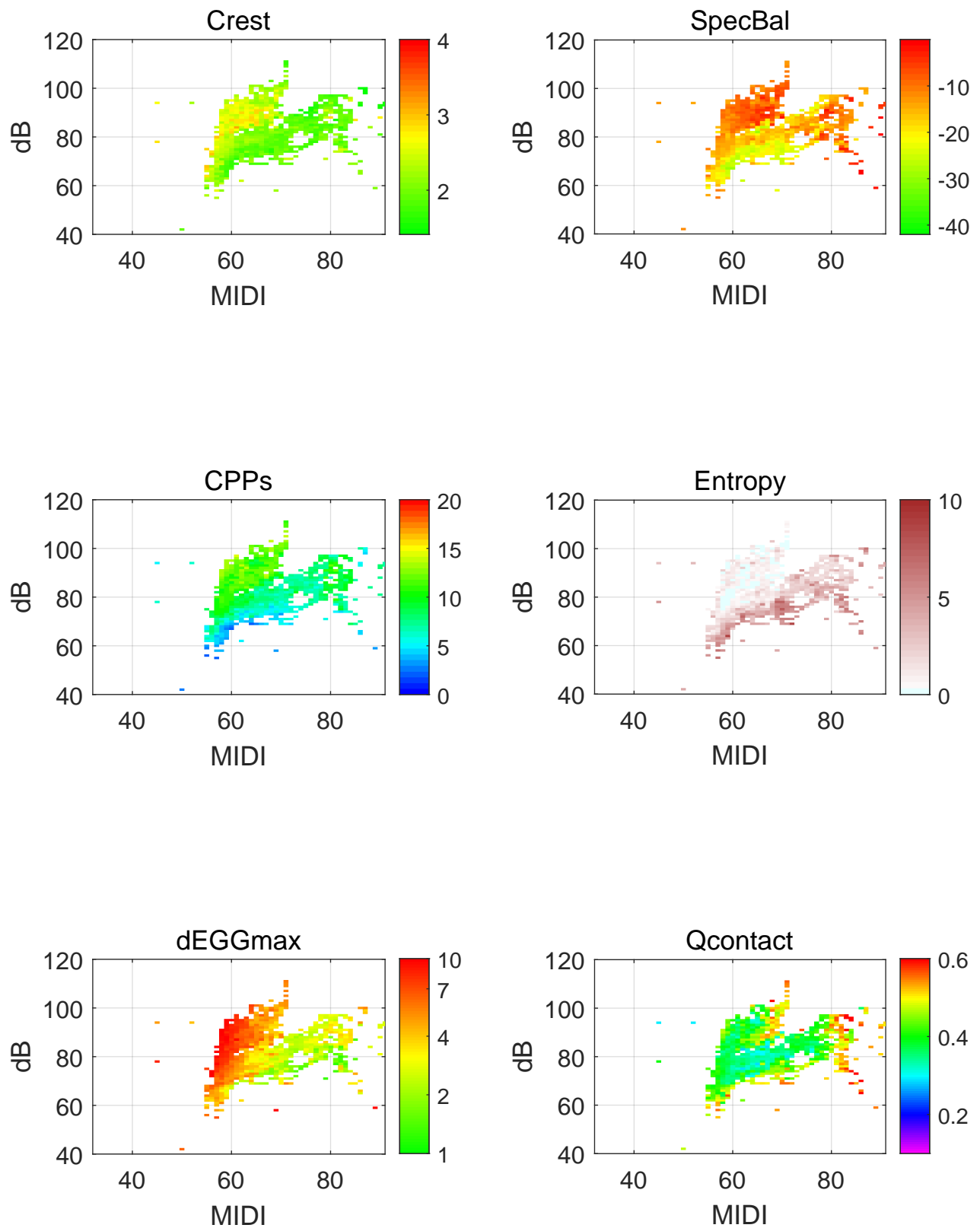


Figure S65: Classification voice maps for participant B07

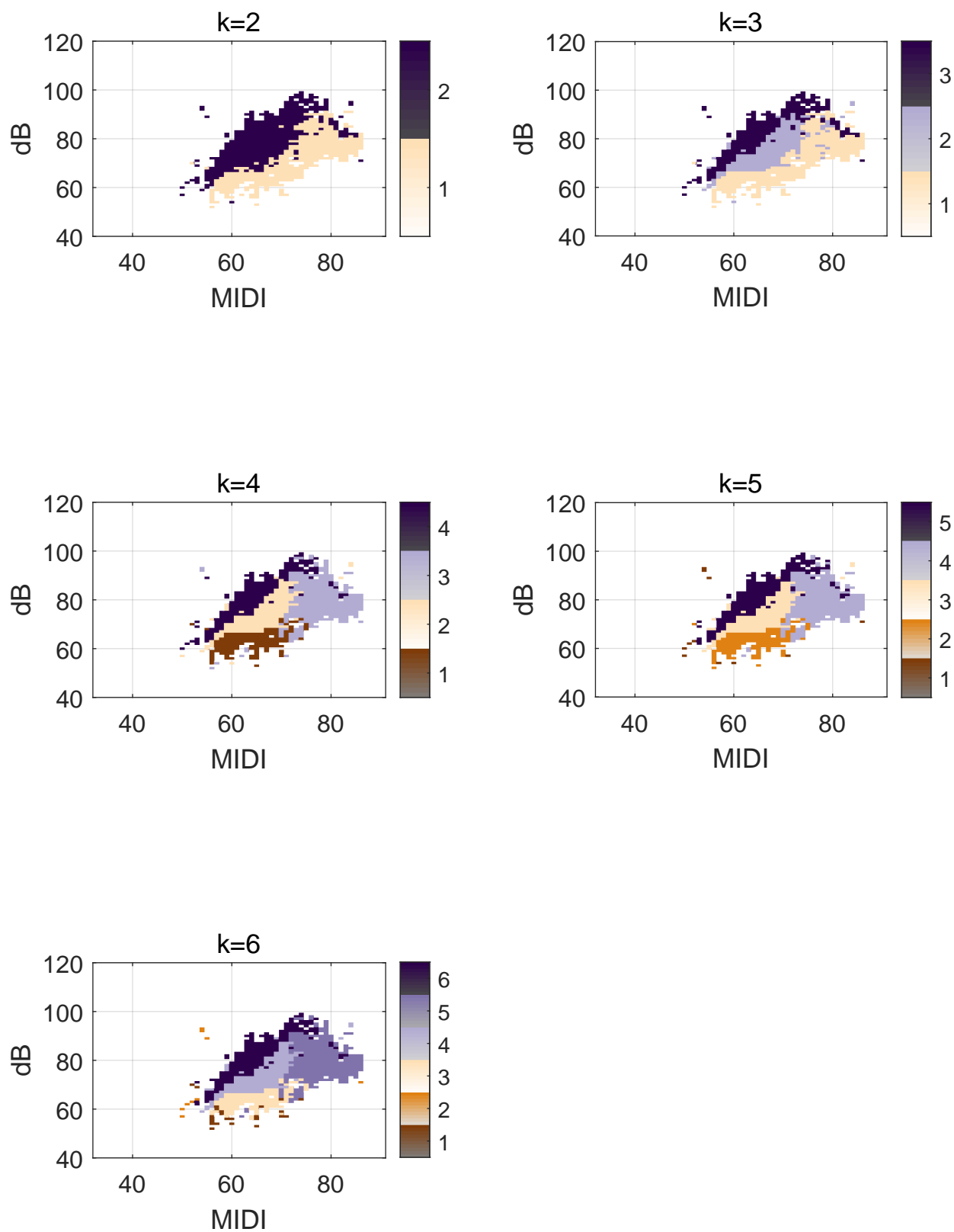


Figure S66: Acoustic and EGG Metric maps for participant B07

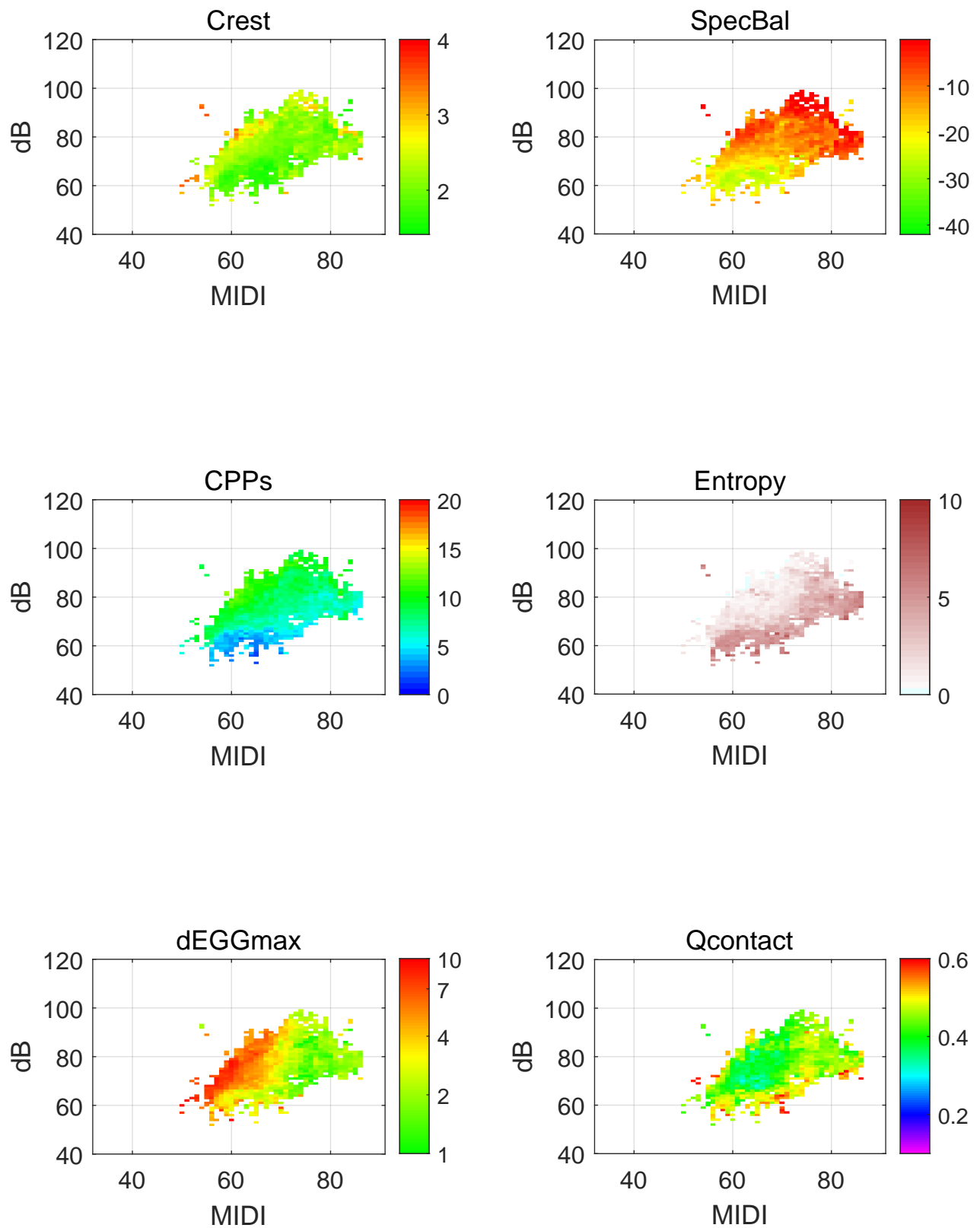


Figure S67: Classification voice maps for participant B08

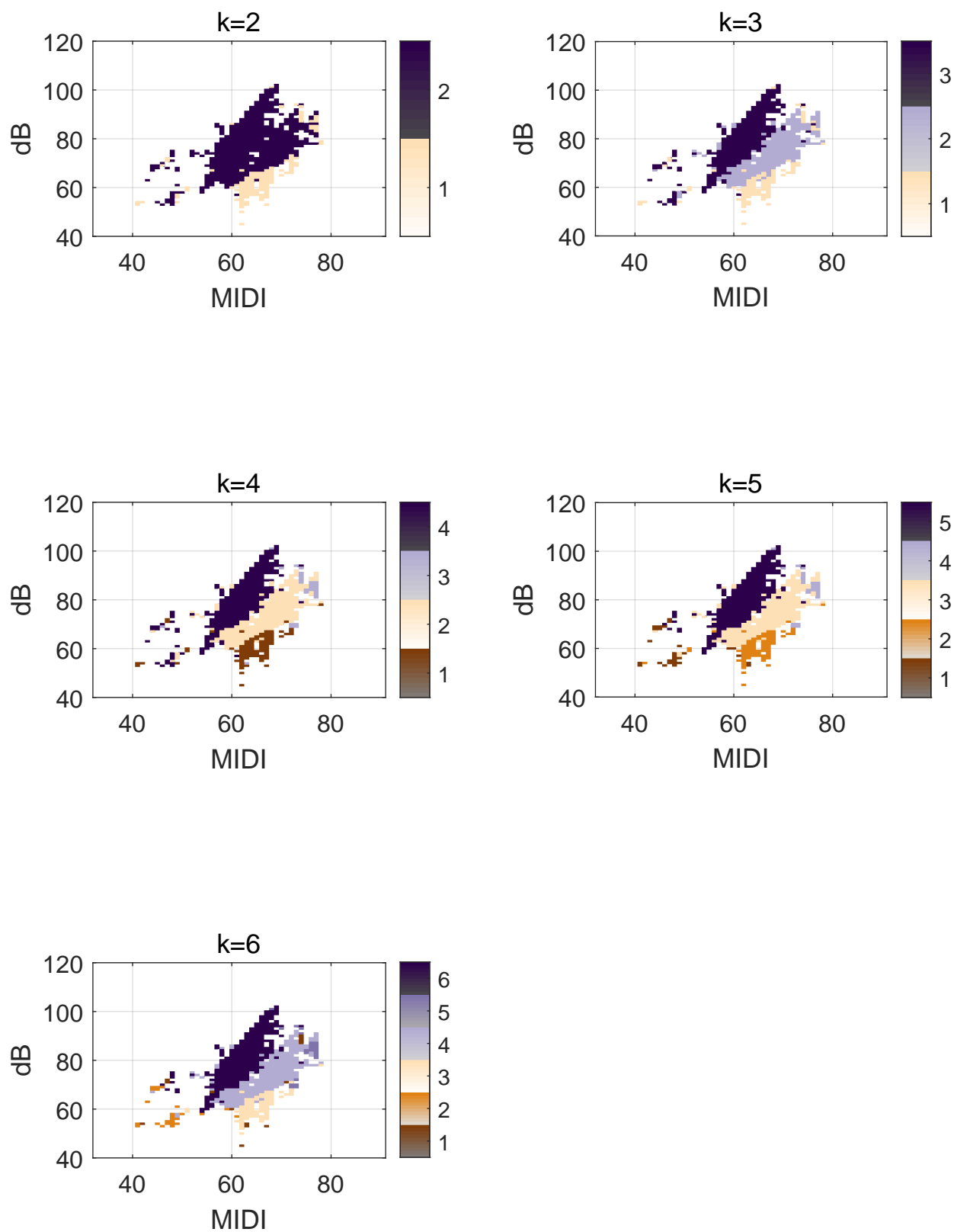


Figure S68: Acoustic and EGG Metric maps for participant B08

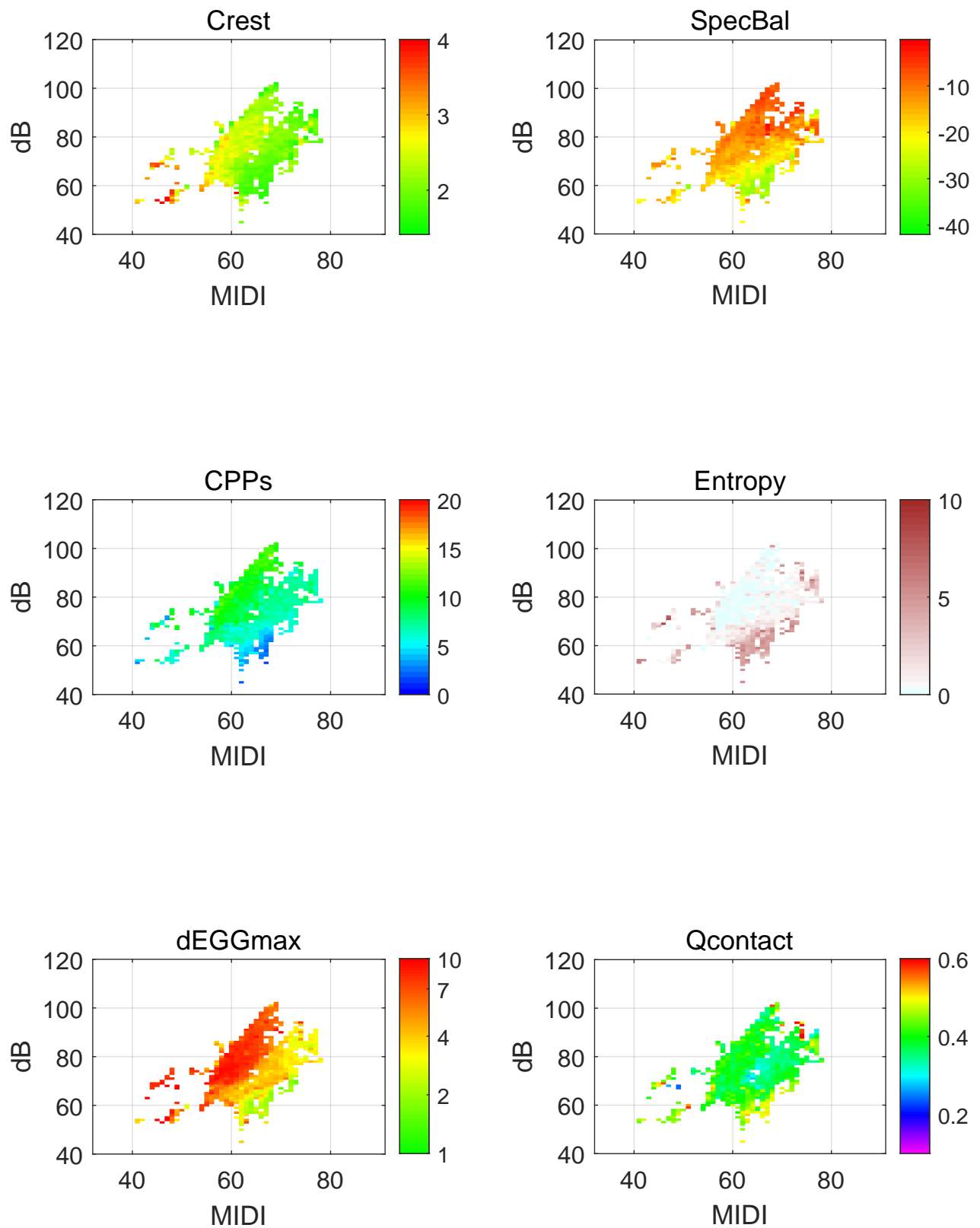


Figure S69: Classification voice maps for participant B09

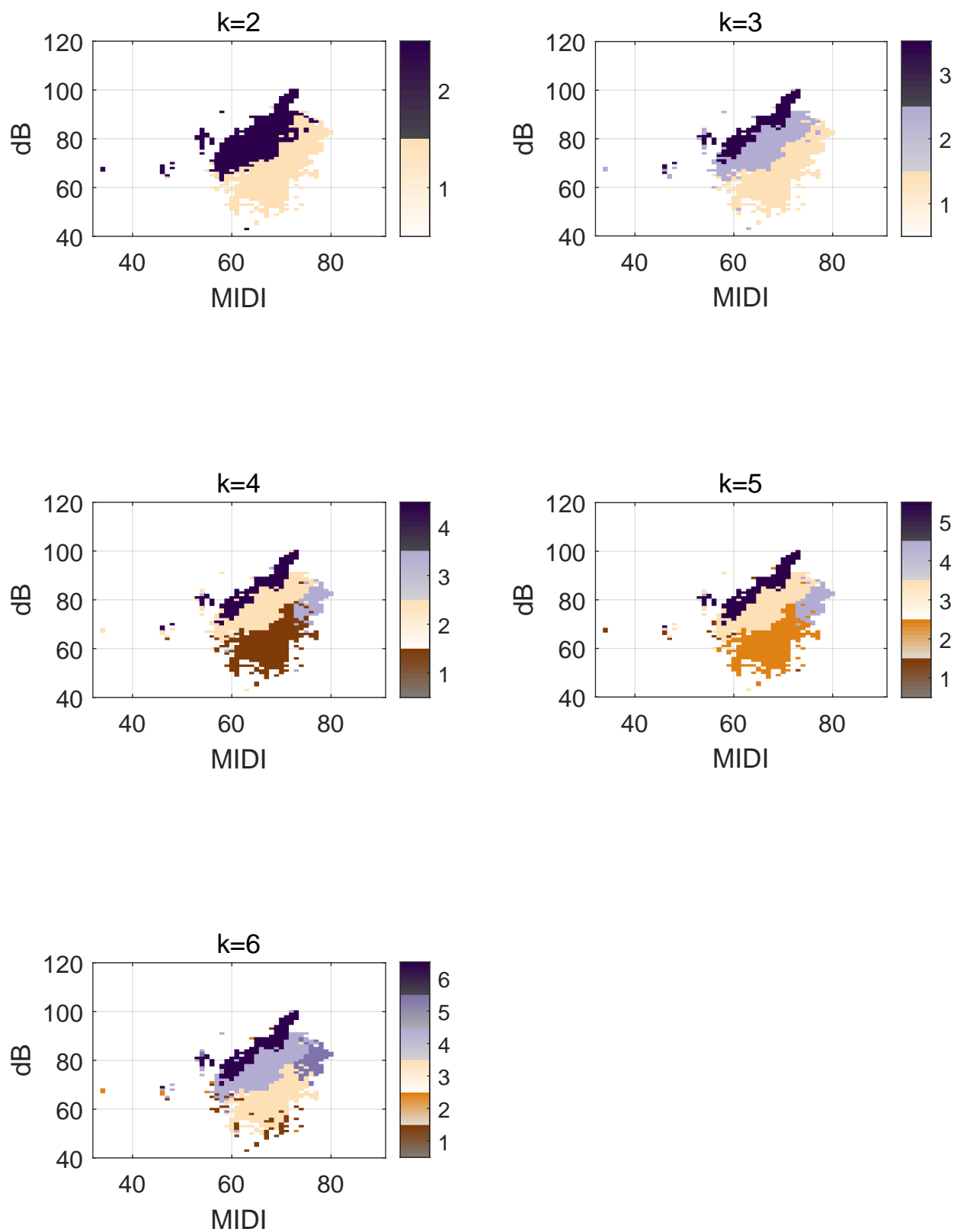


Figure S70: Acoustic and EGG Metric maps for participant B09

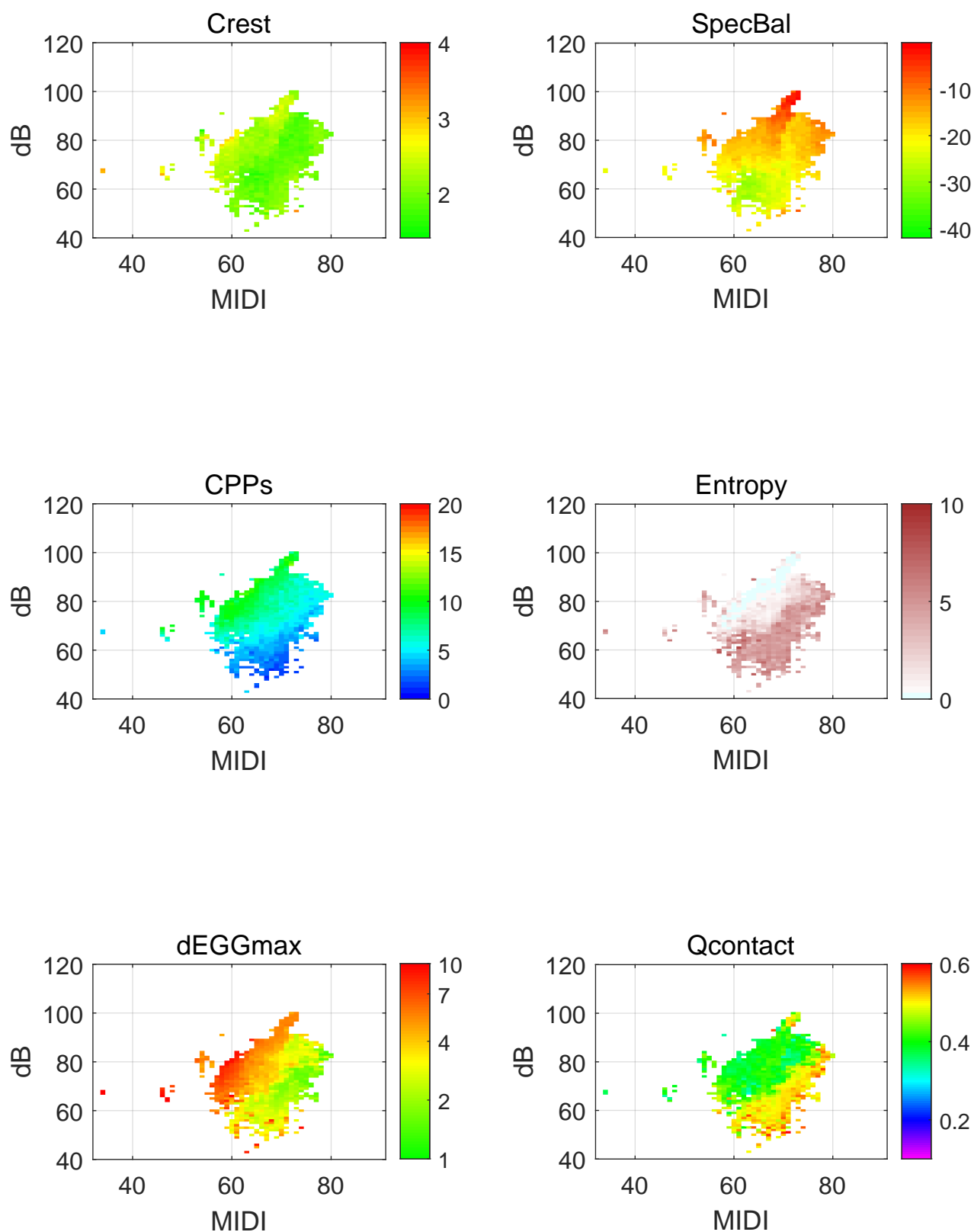


Figure S71: Classification voice maps for participant G02

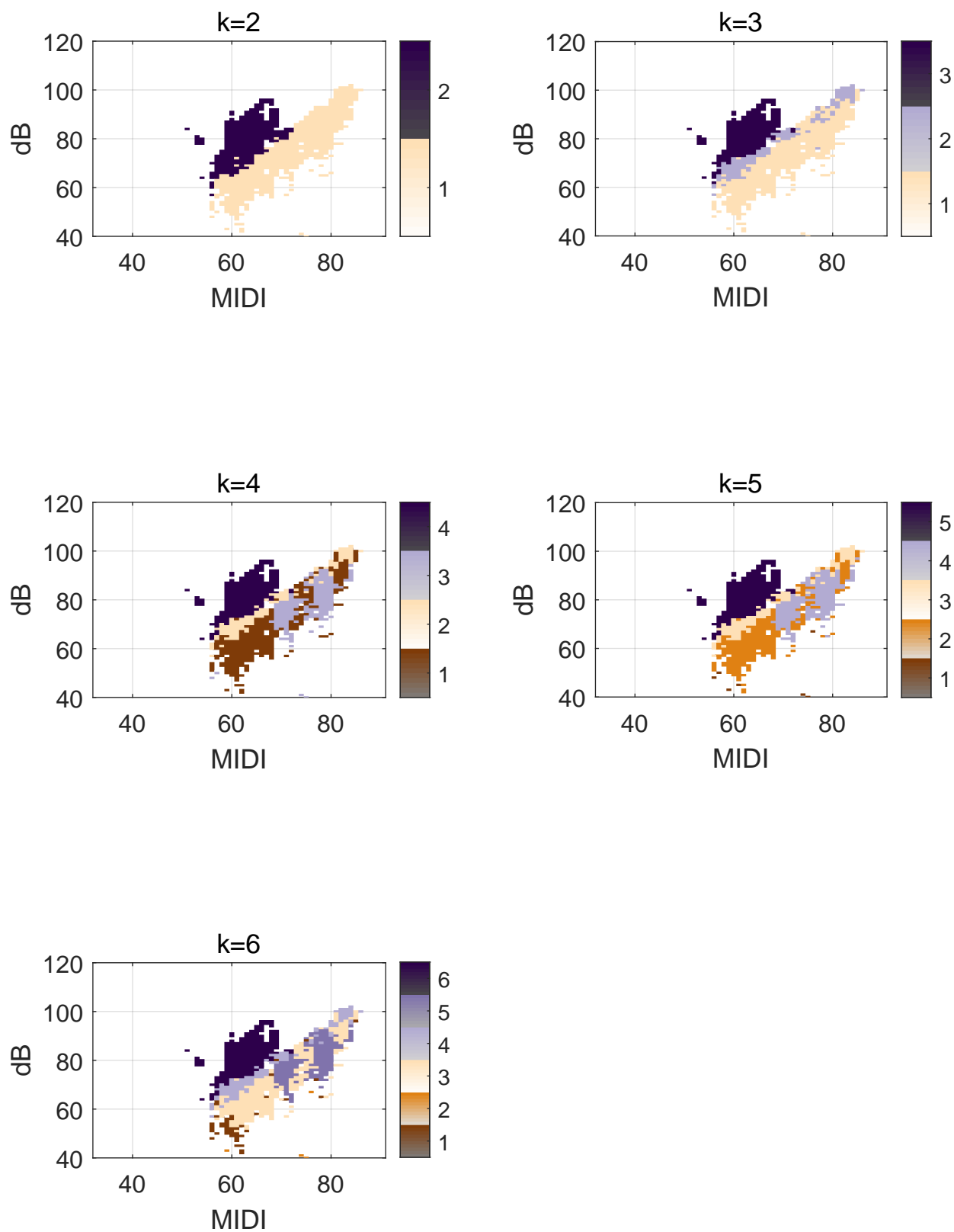


Figure S72: Acoustic and EGG Metric maps for participant G02

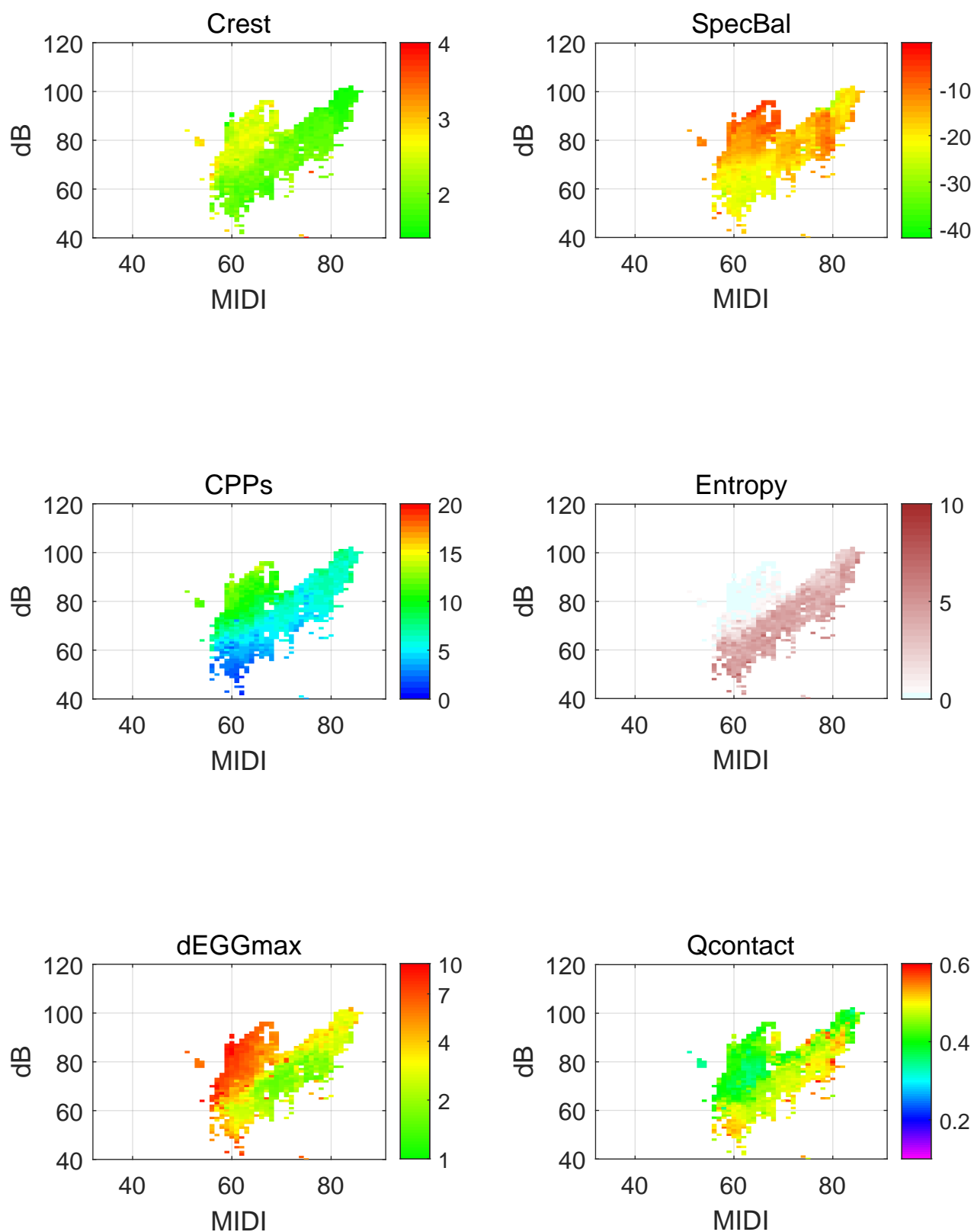


Figure S73: Classification voice maps for participant G03

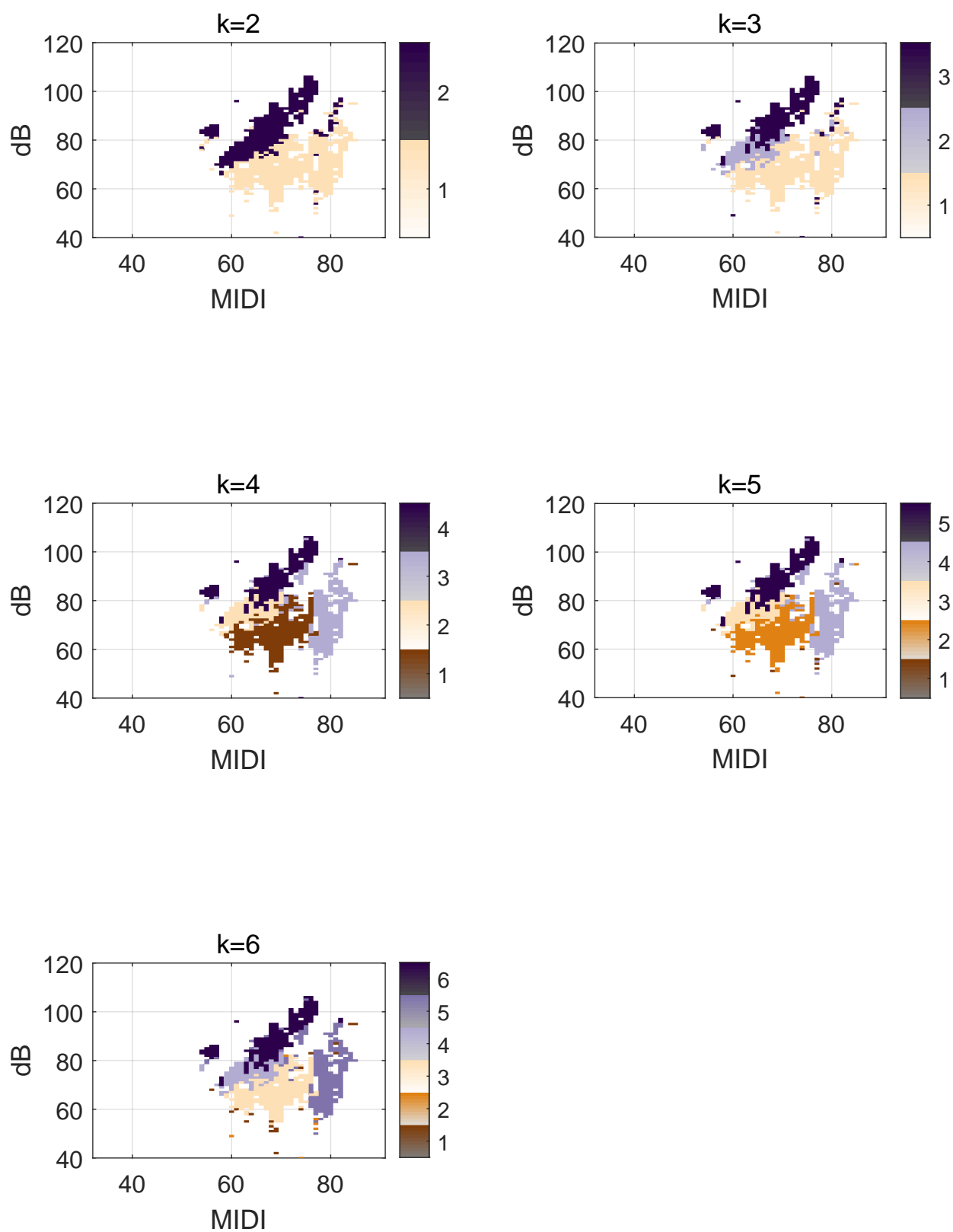


Figure S74: Acoustic and EGG Metric maps for participant G03

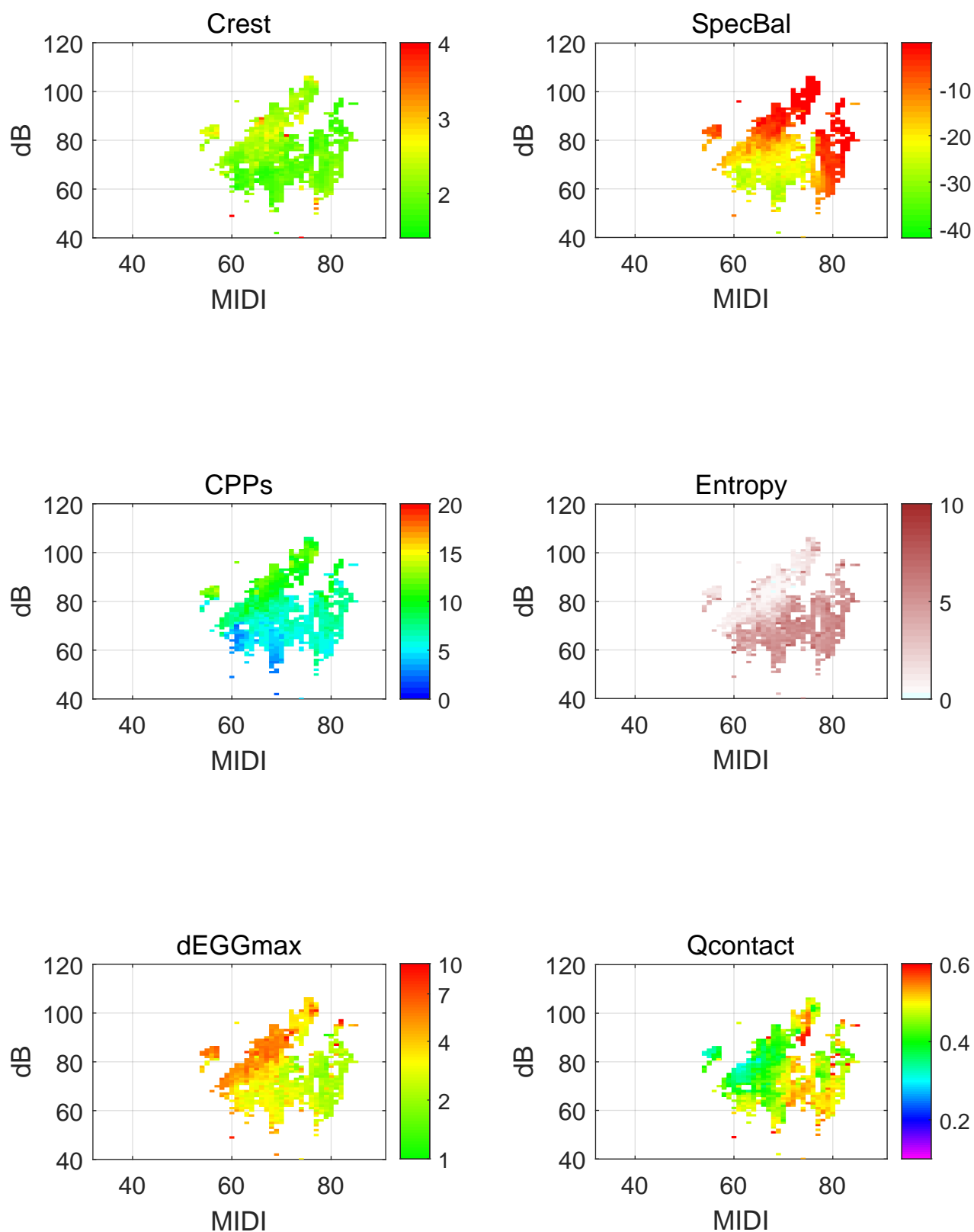


Figure S75: Classification voice maps for participant G04

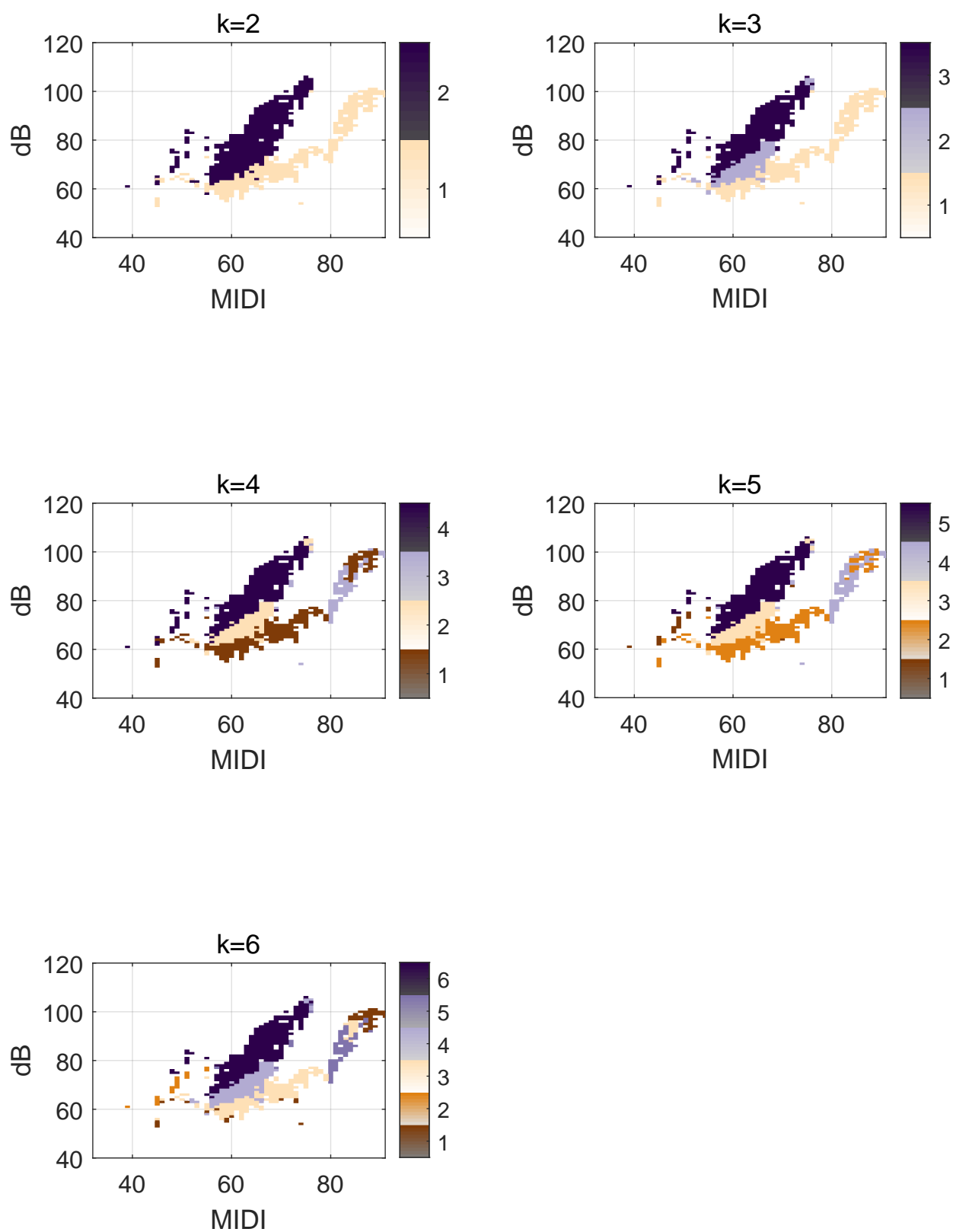


Figure S76: Acoustic and EGG Metric maps for participant G04

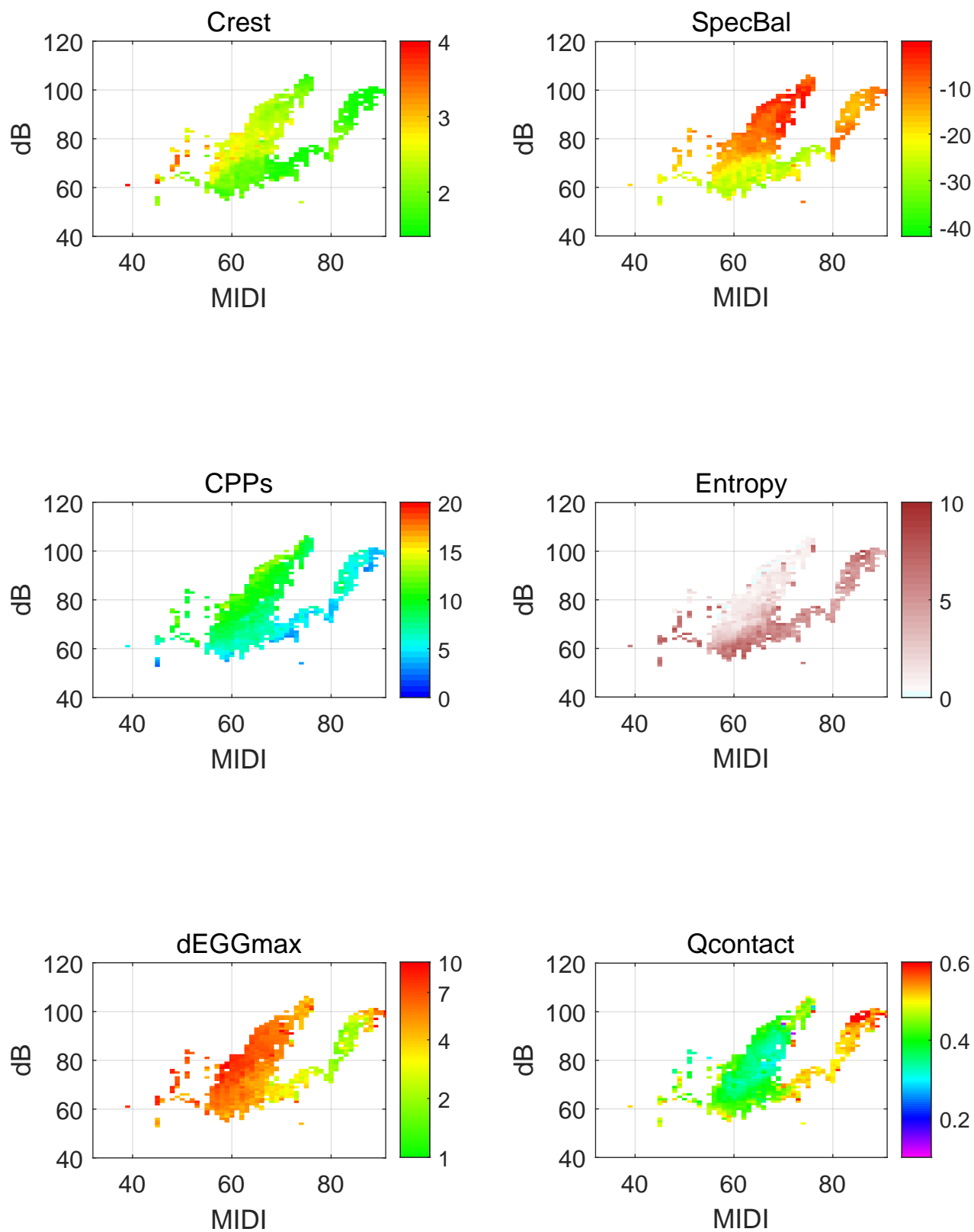


Figure S77: Classification voice maps for participant G05

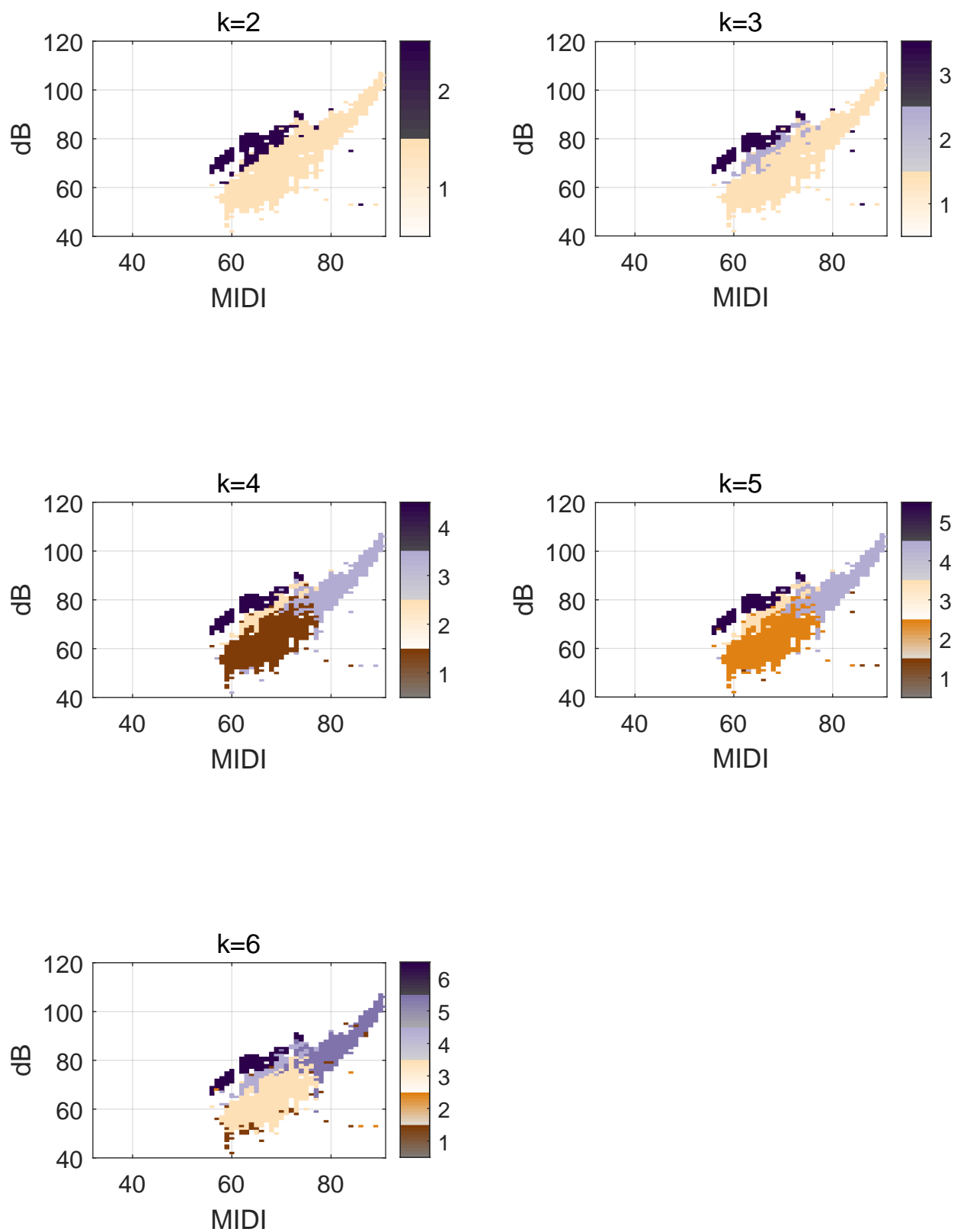


Figure S78: Acoustic and EGG Metric maps for participant G05

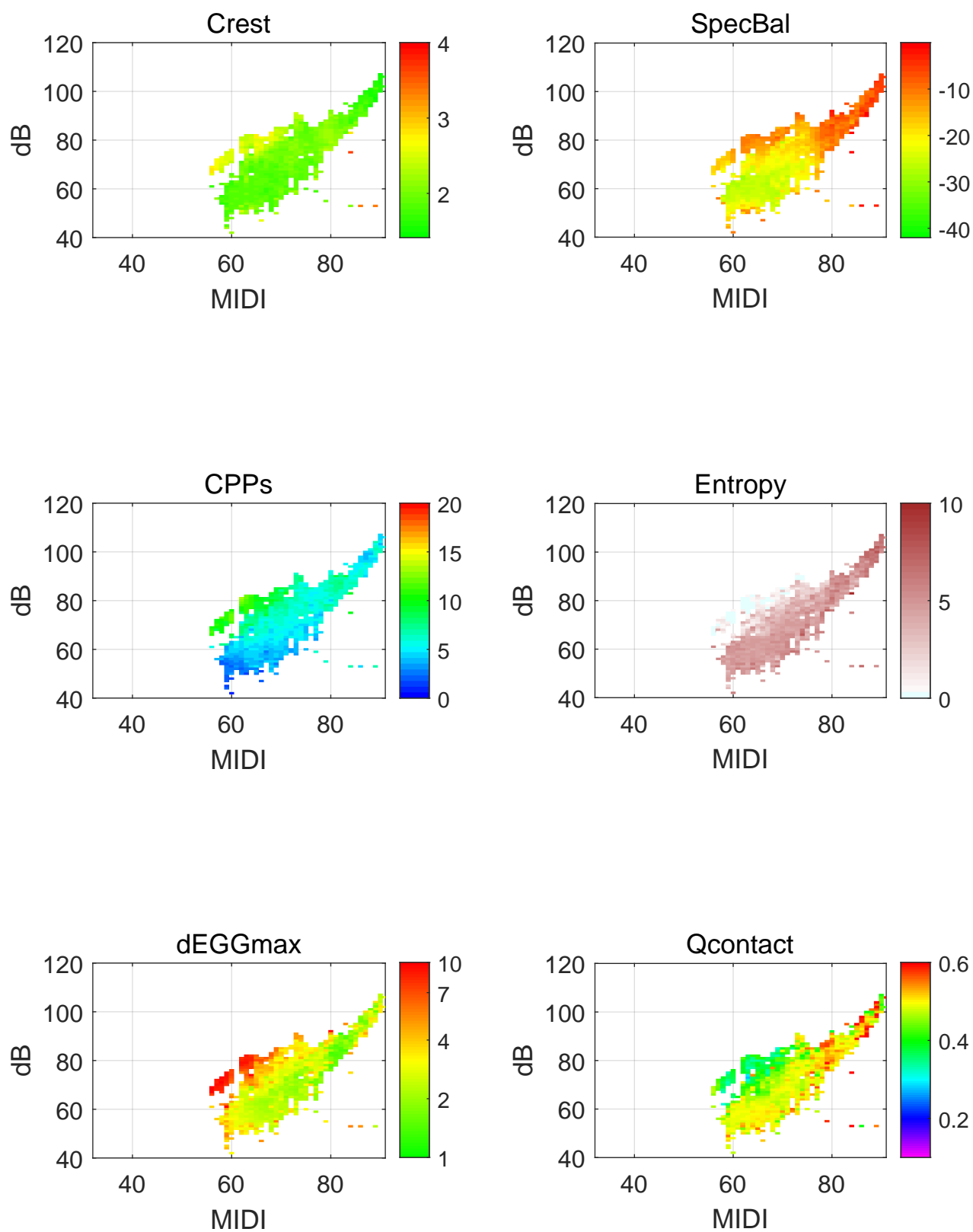


Figure S79: Classification voice maps for participant G06

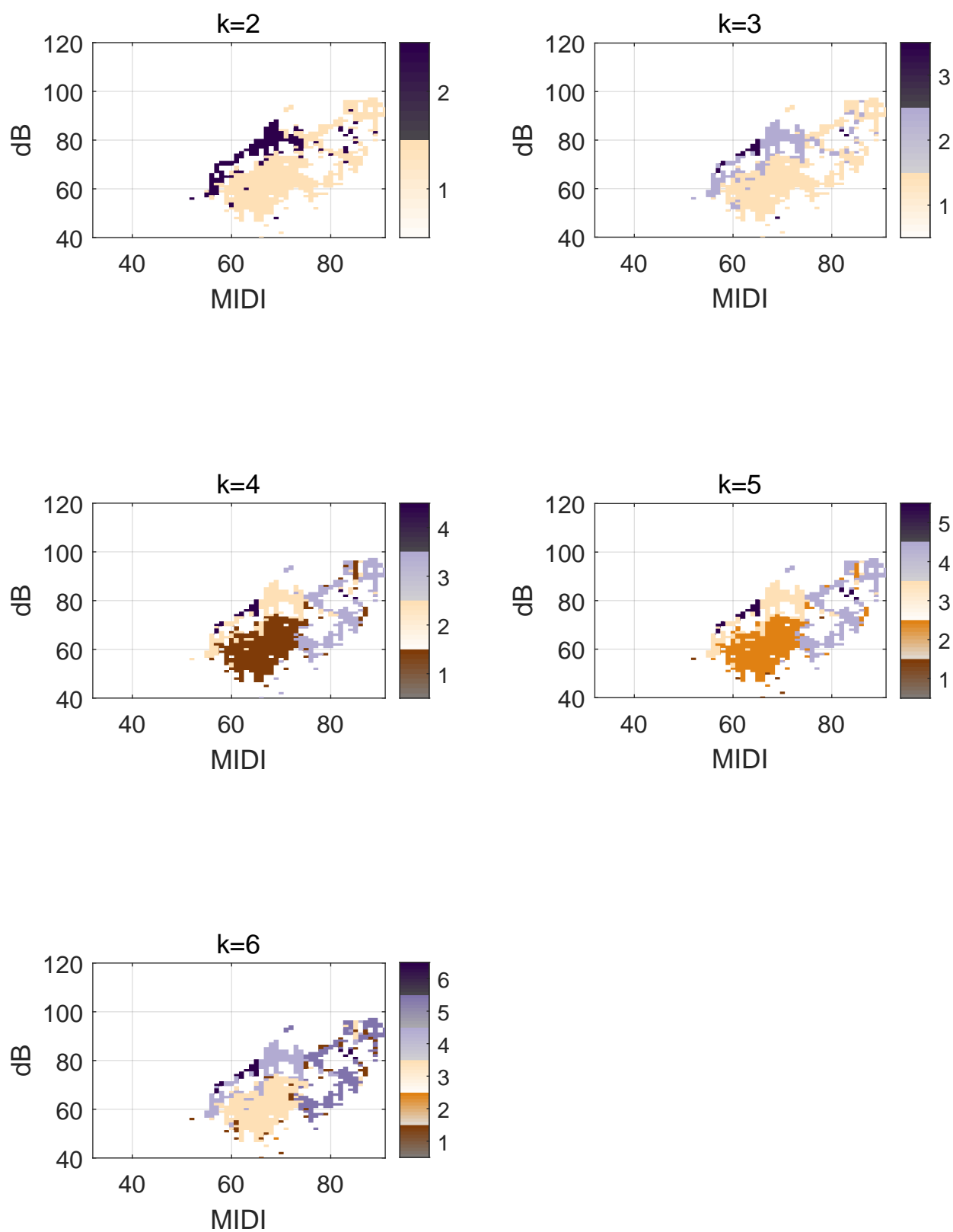


Figure S80: Acoustic and EGG Metric maps for participant G06

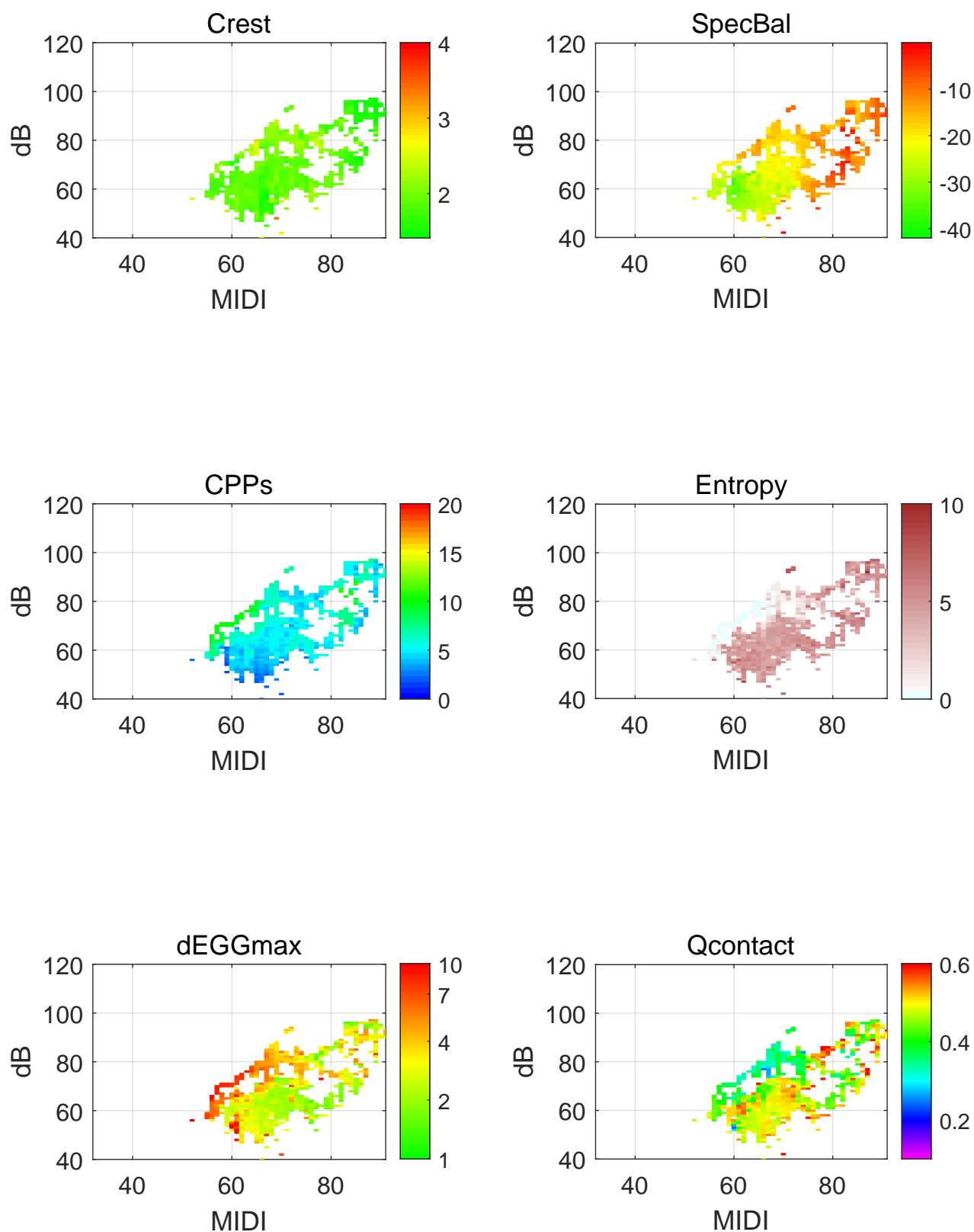


Figure S81: Classification voice maps for participant G07

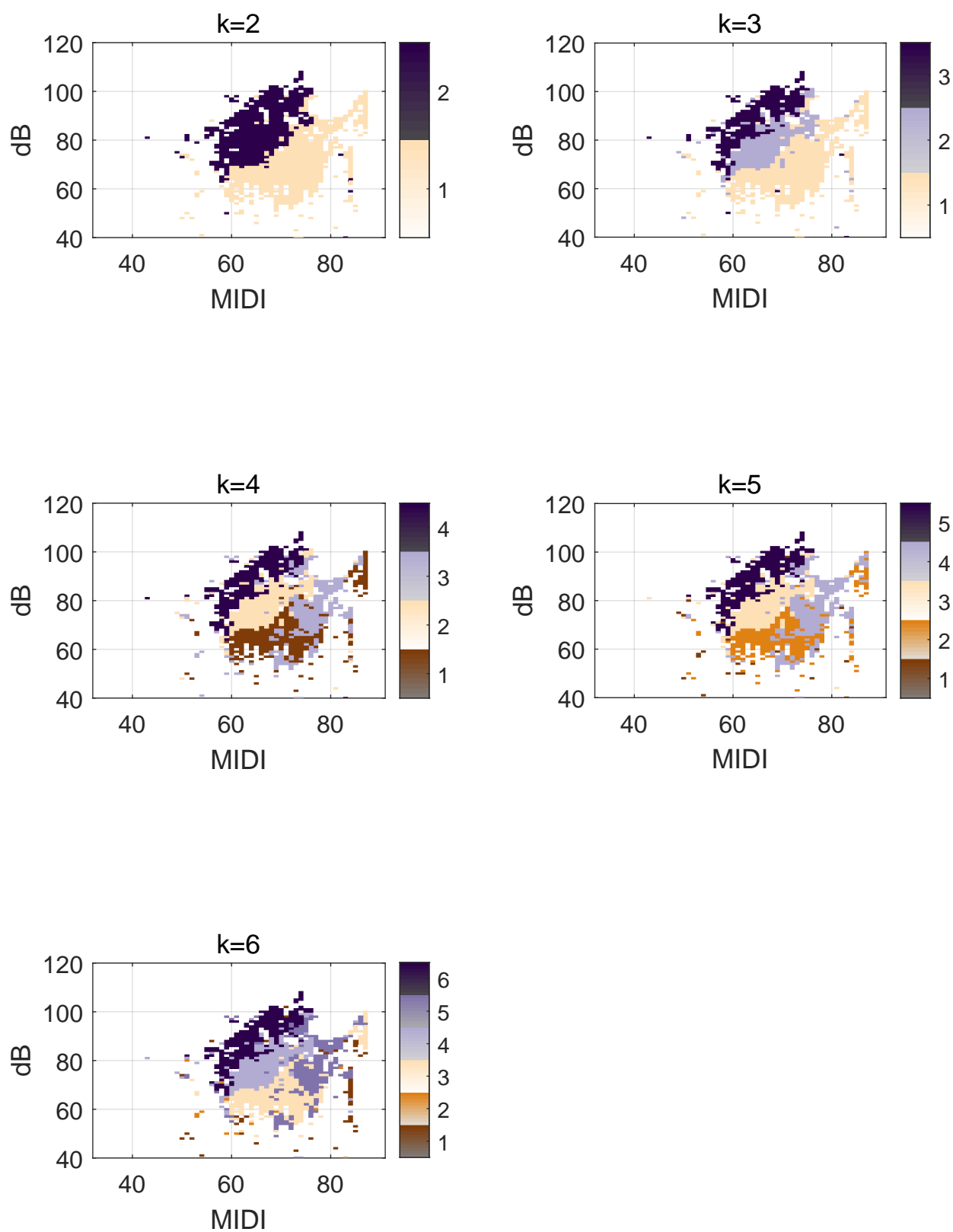


Figure S82: Acoustic and EGG Metric maps for participant G07

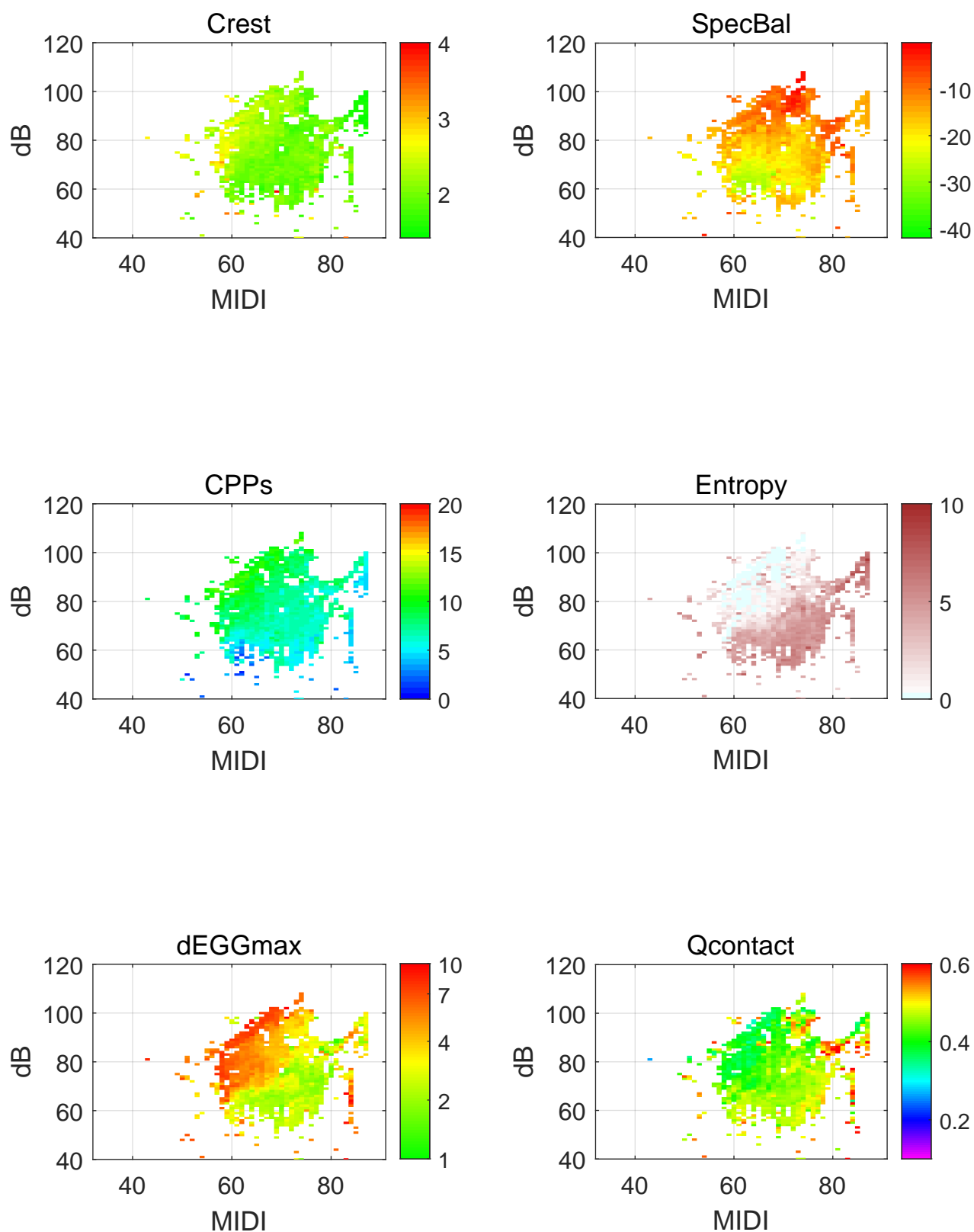


Figure S83: Classification voice maps for participant G08

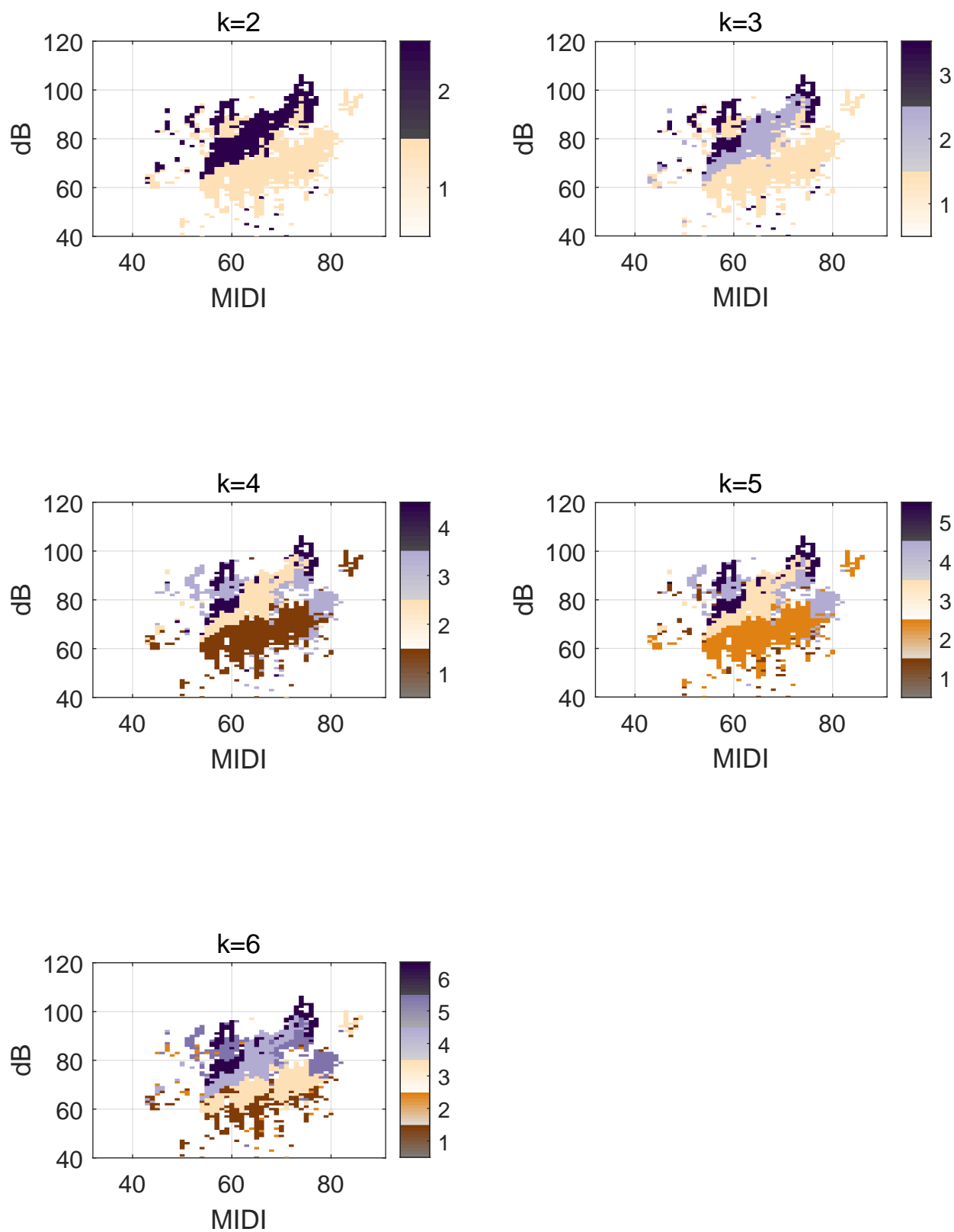


Figure S84: Acoustic and EGG Metric maps for participant G08

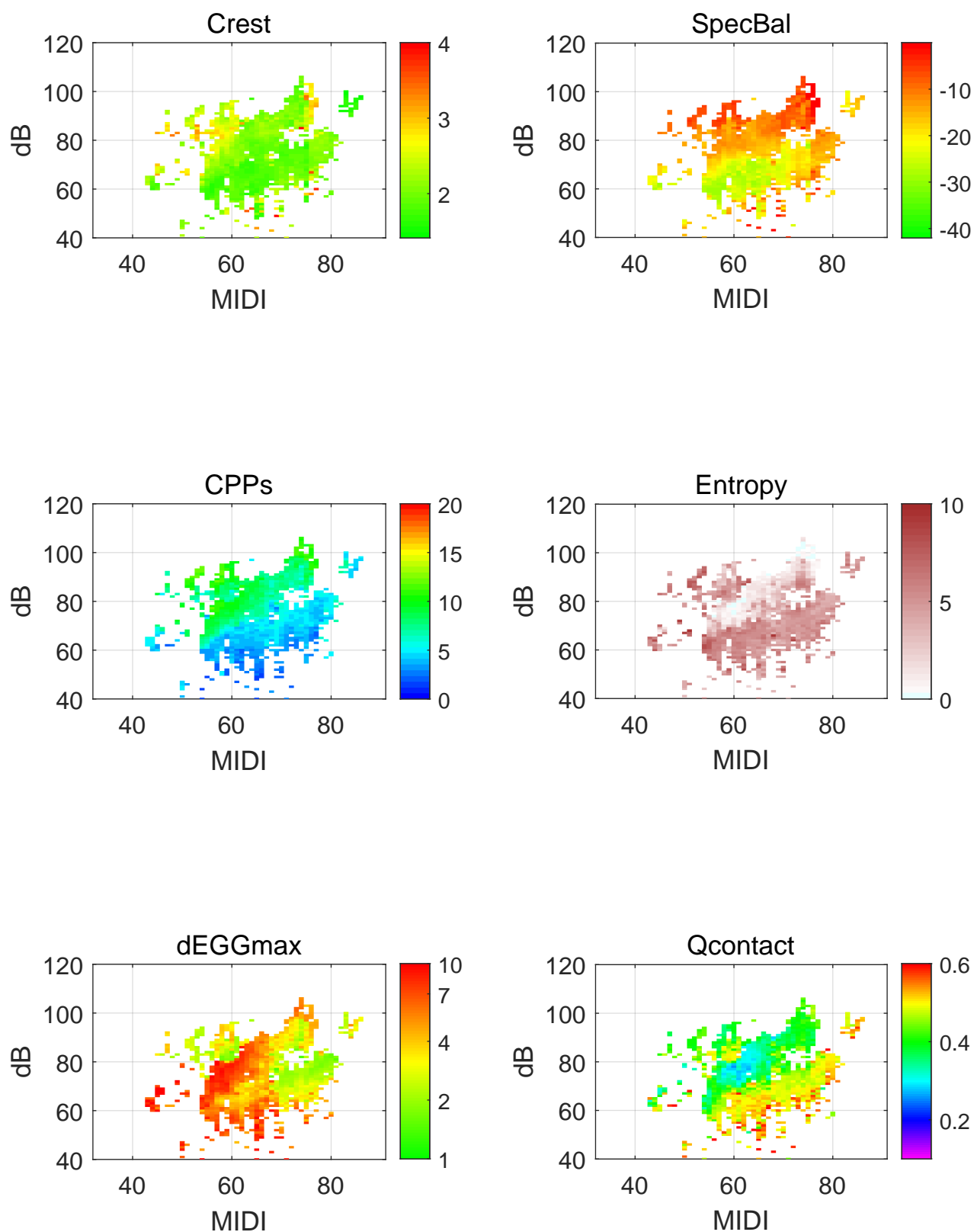


Figure S85: Classification voice maps for participant G09

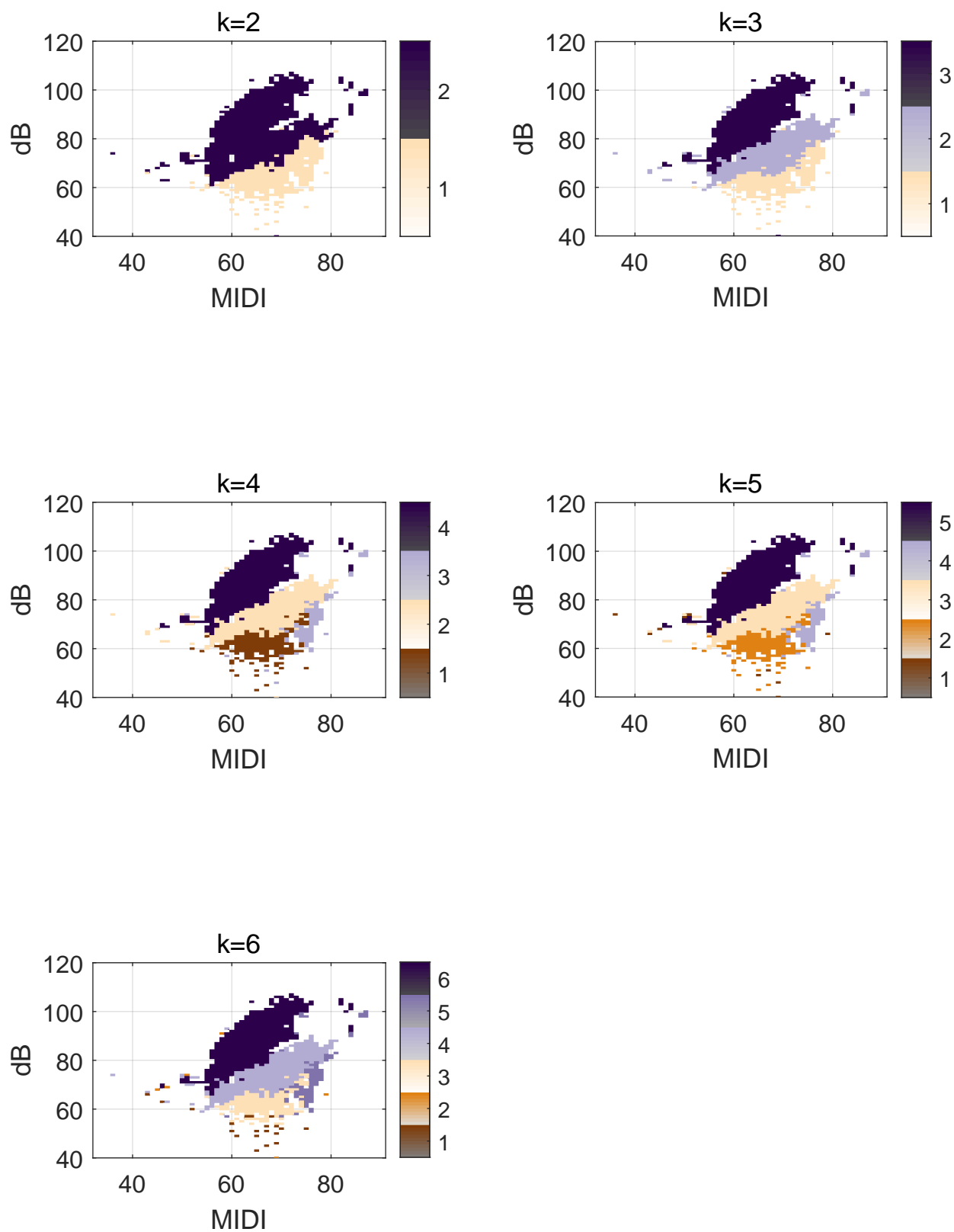


Figure S86: Acoustic and EGG Metric maps for participant G09

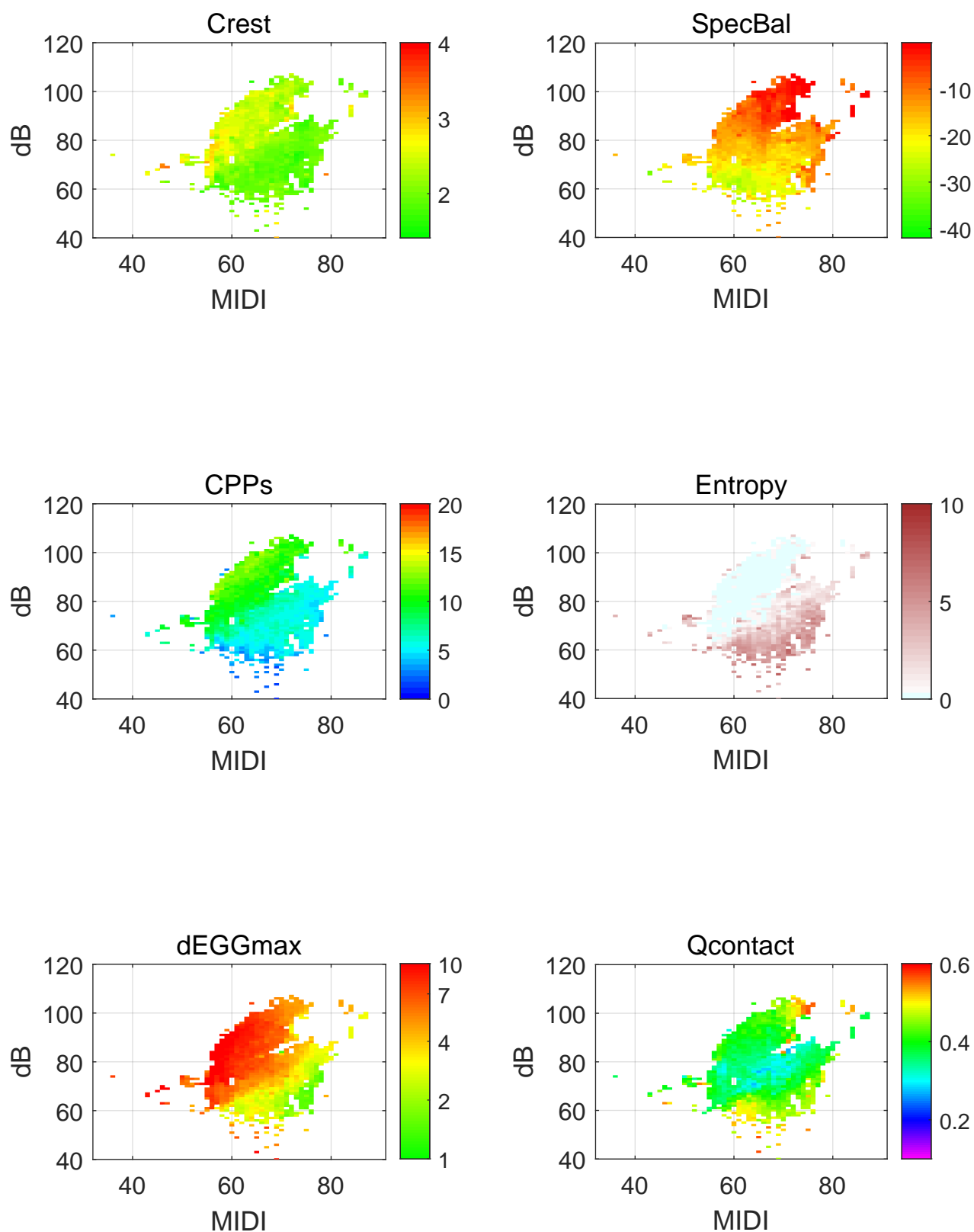


Figure S87: Classification voice maps for participant G10

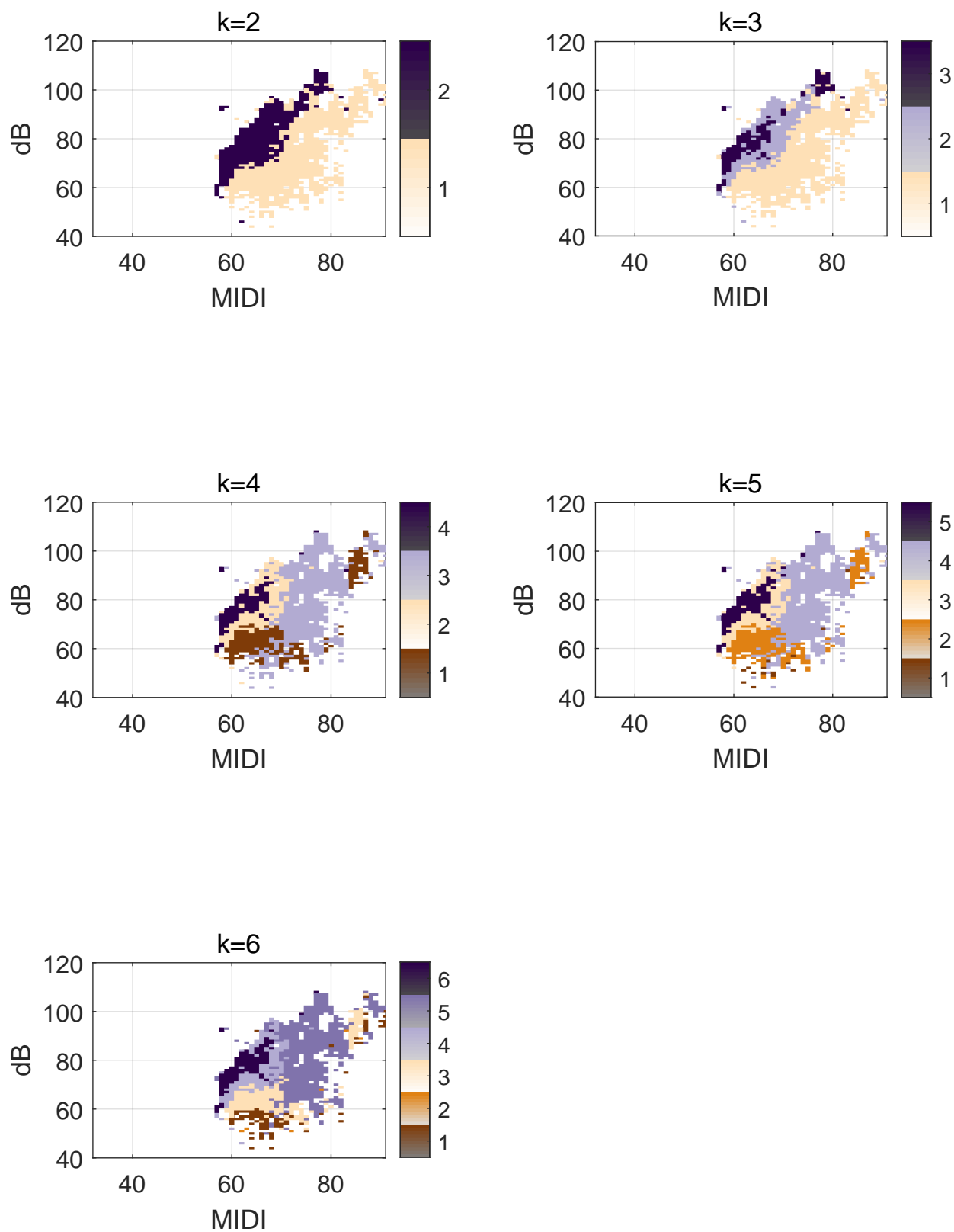


Figure S88: Acoustic and EGG Metric maps for participant G10

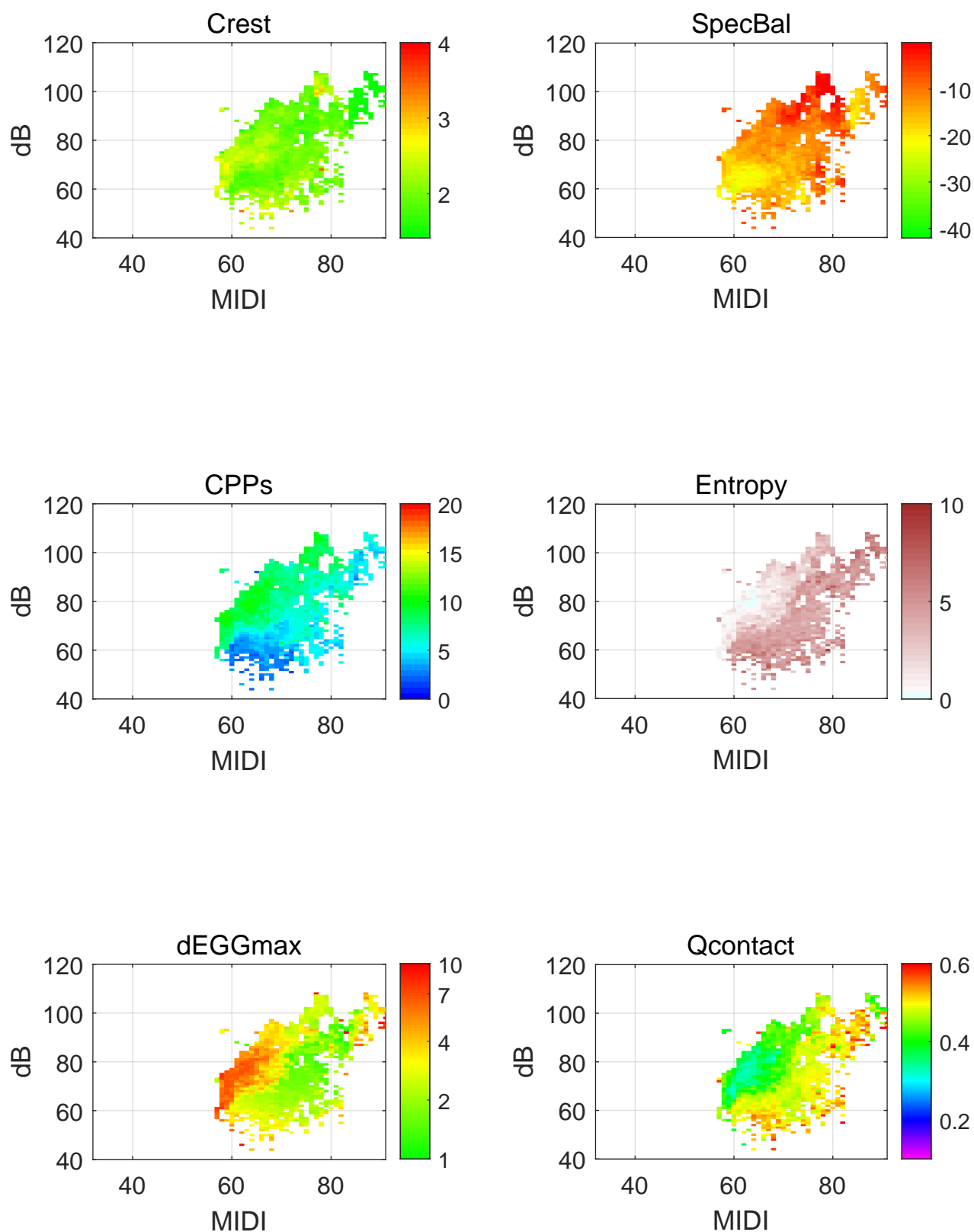


Figure S89: Classification voice maps for participant G11

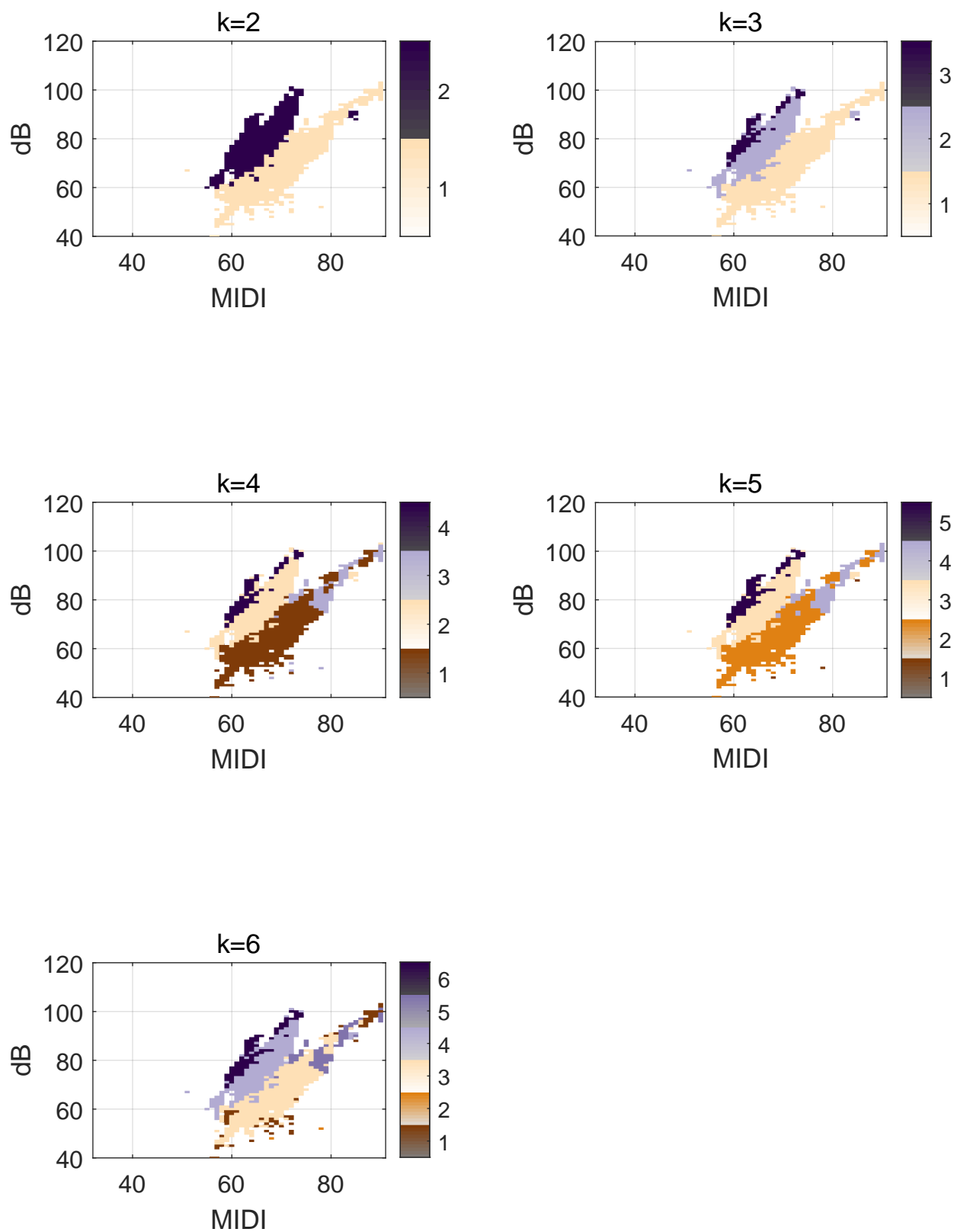


Figure S90: Acoustic and EGG Metric maps for participant G11

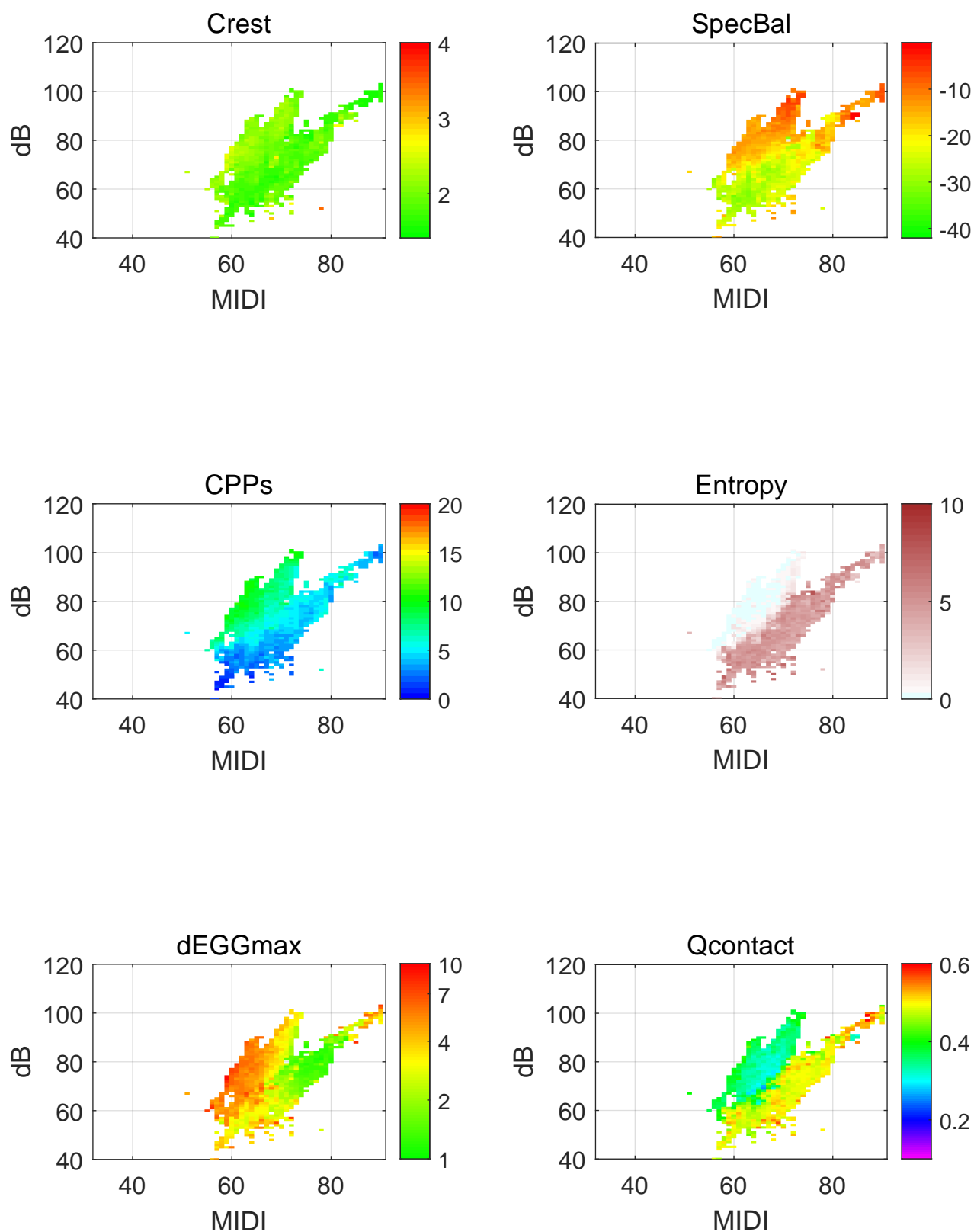


Figure S91: Classification voice maps for participant G12

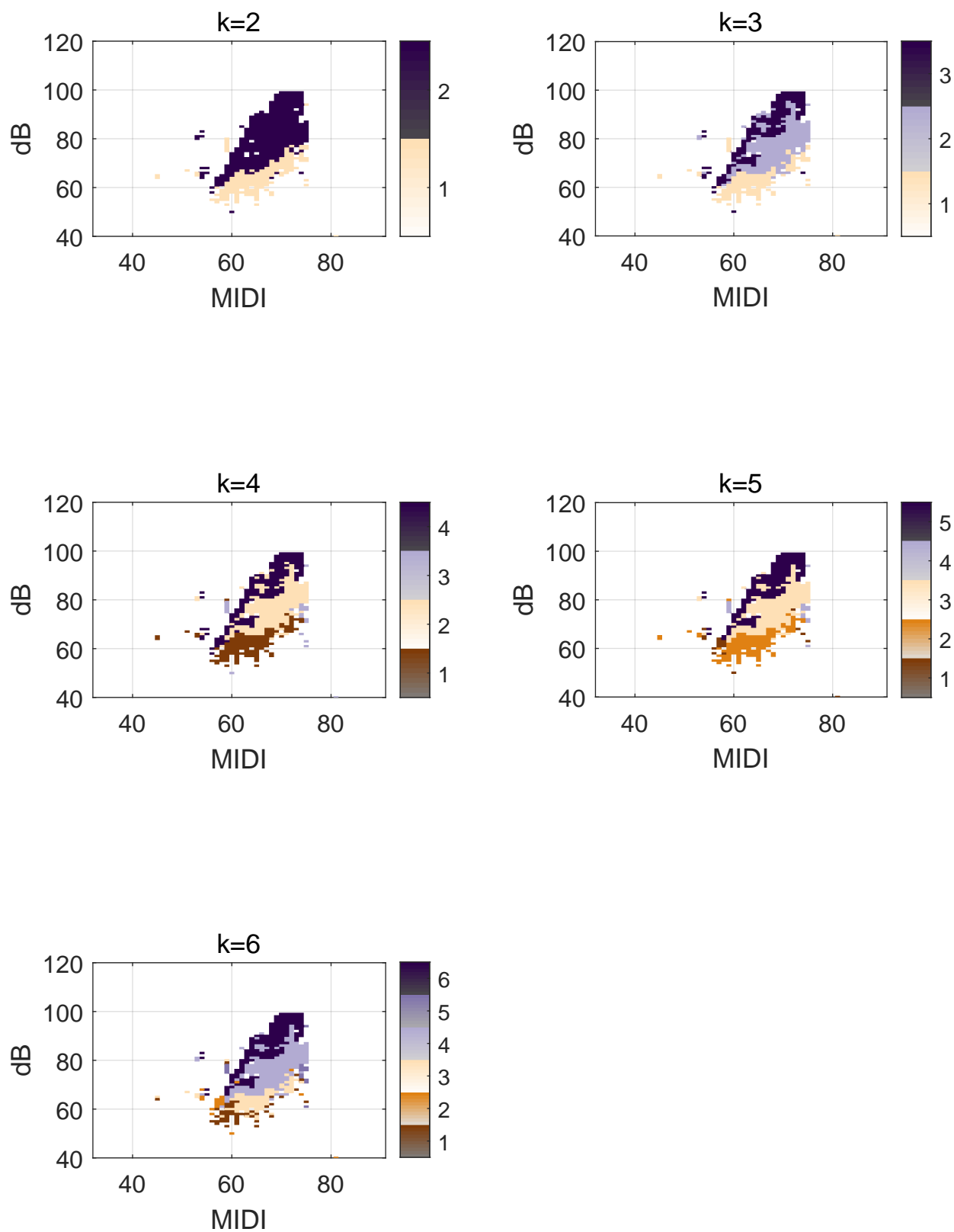


Figure S92: Acoustic and EGG Metric maps for participant G12

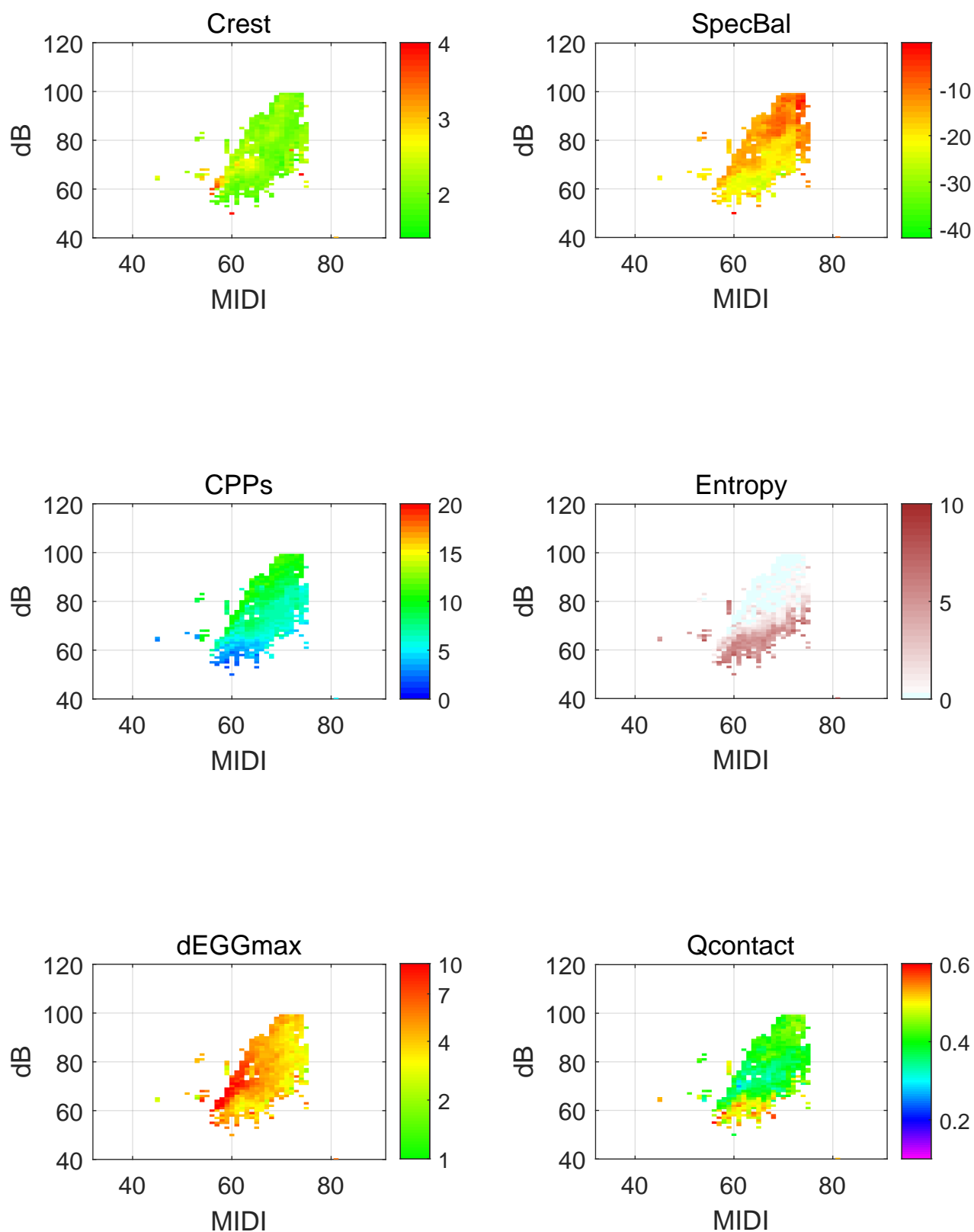


Figure S93: Classification voice maps for participant G13

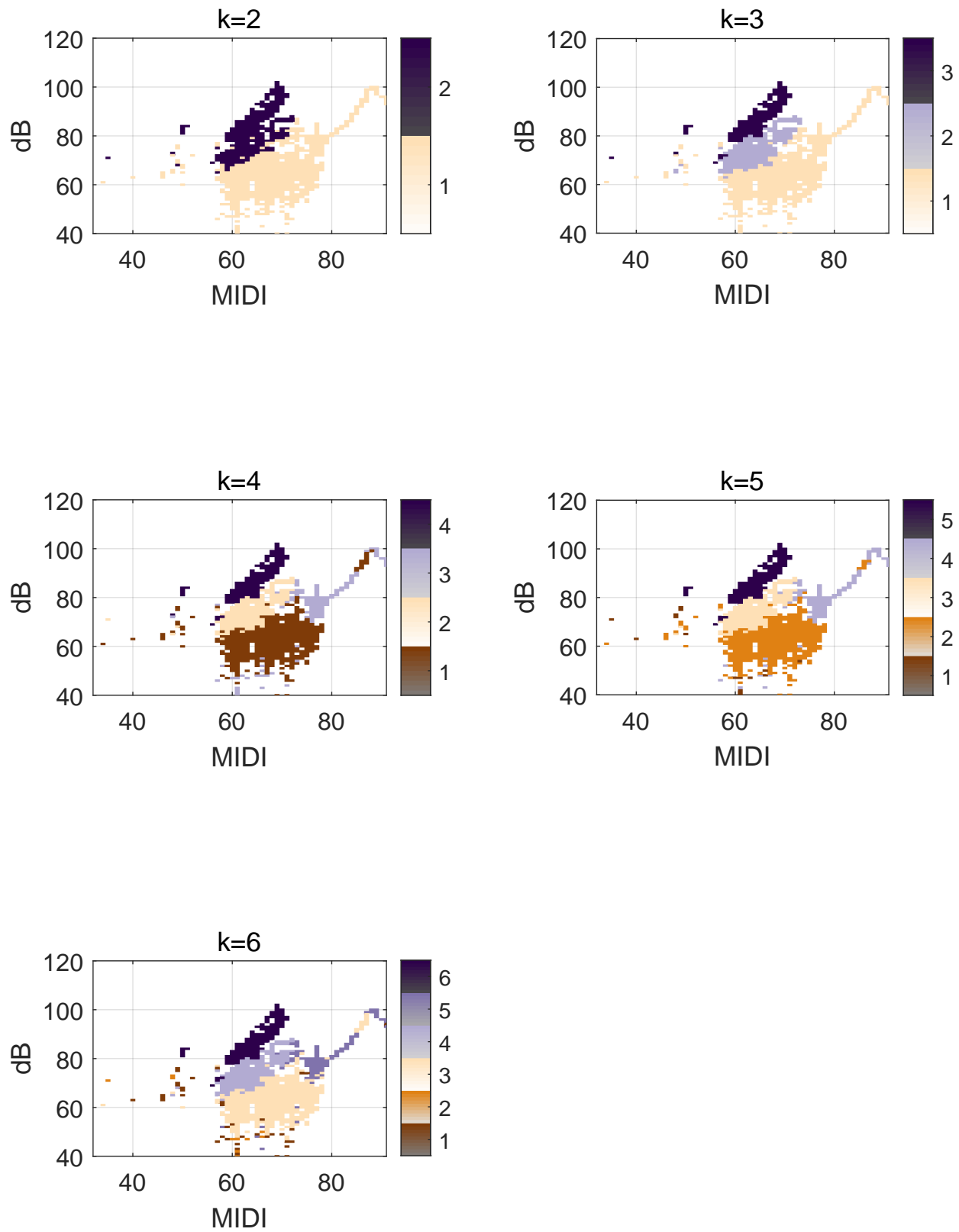


Figure S94: Acoustic and EGG Metric maps for participant G13

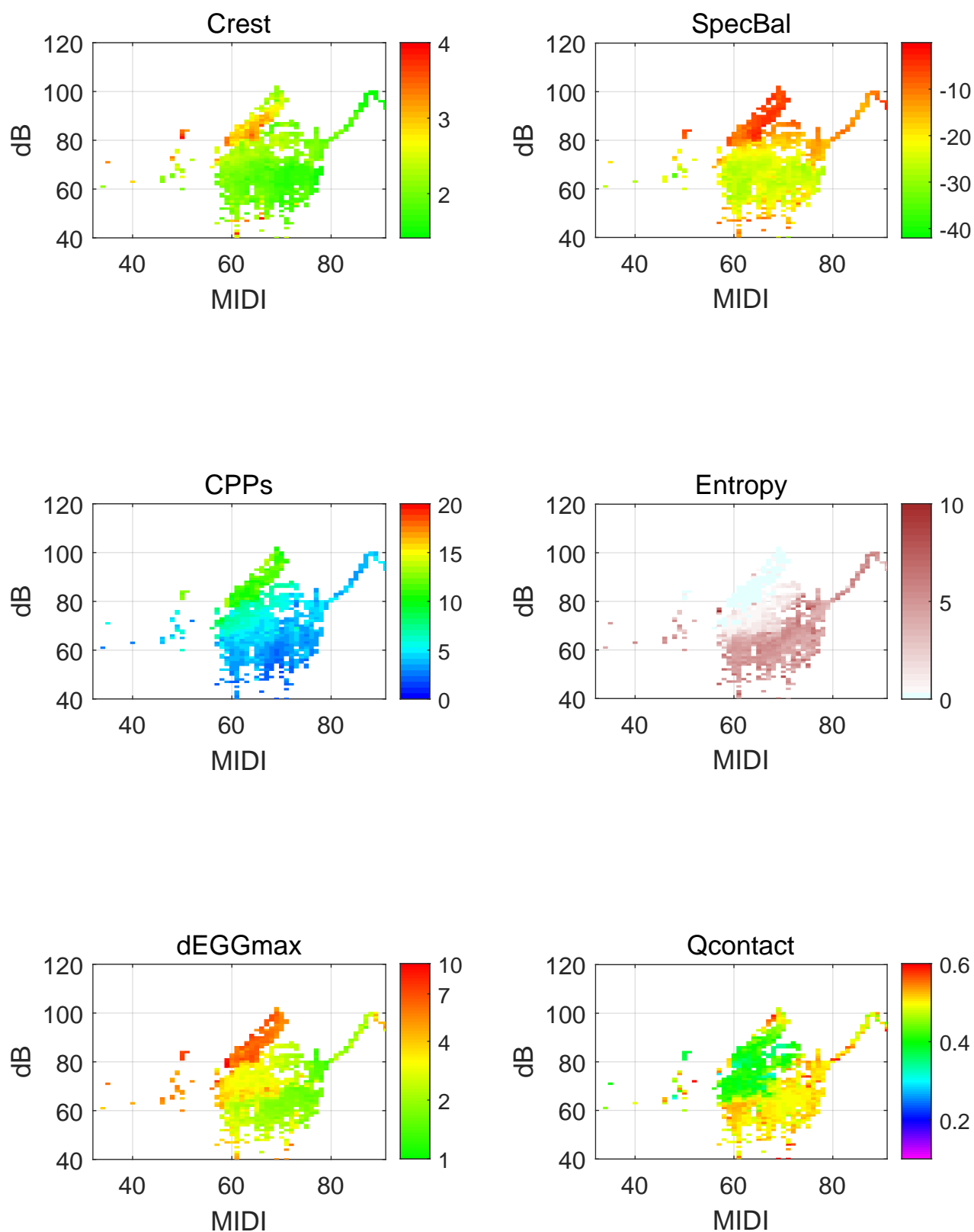


Figure S95: Classification voice maps for participant G14

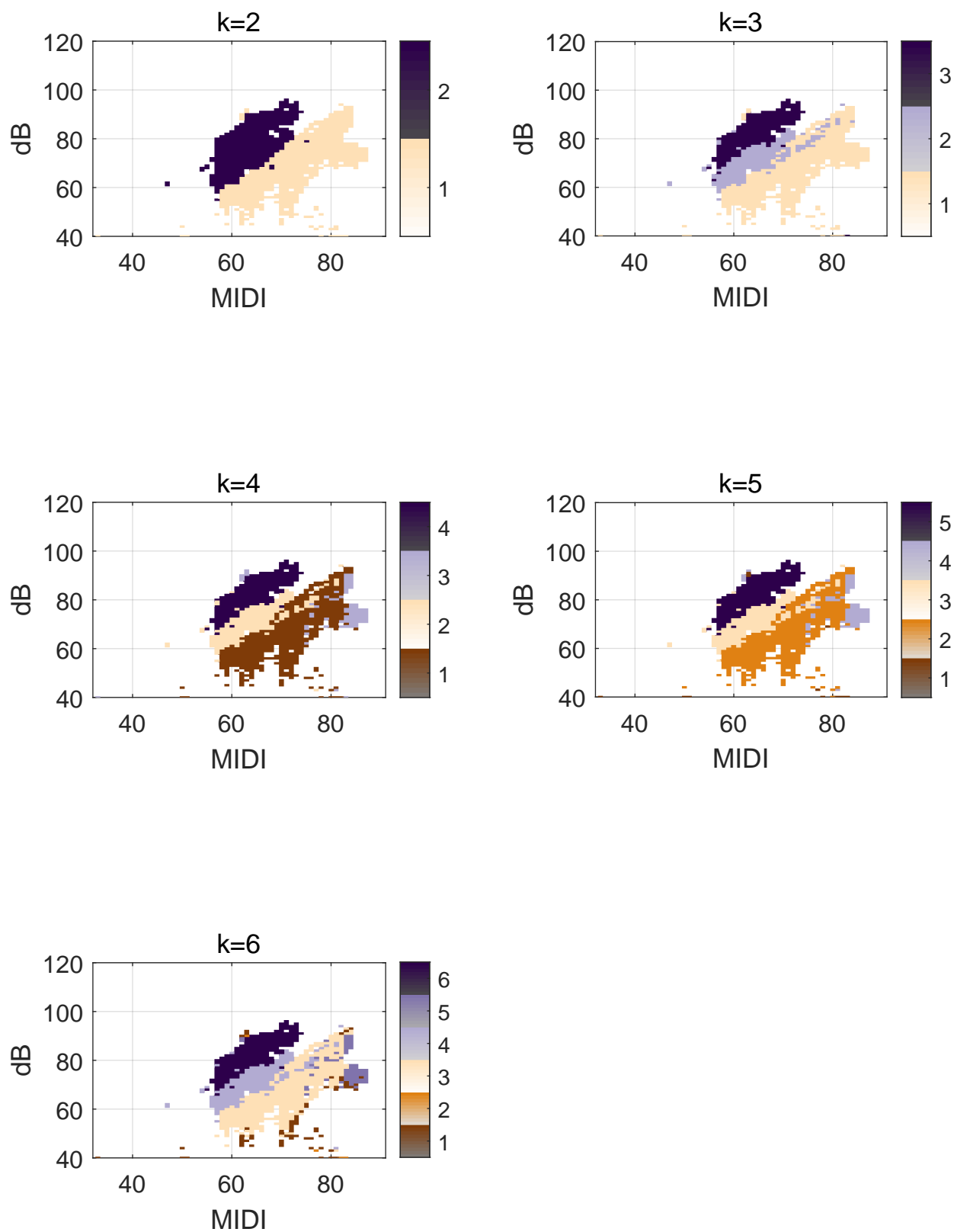


Figure S96: Acoustic and EGG Metric maps for participant G14

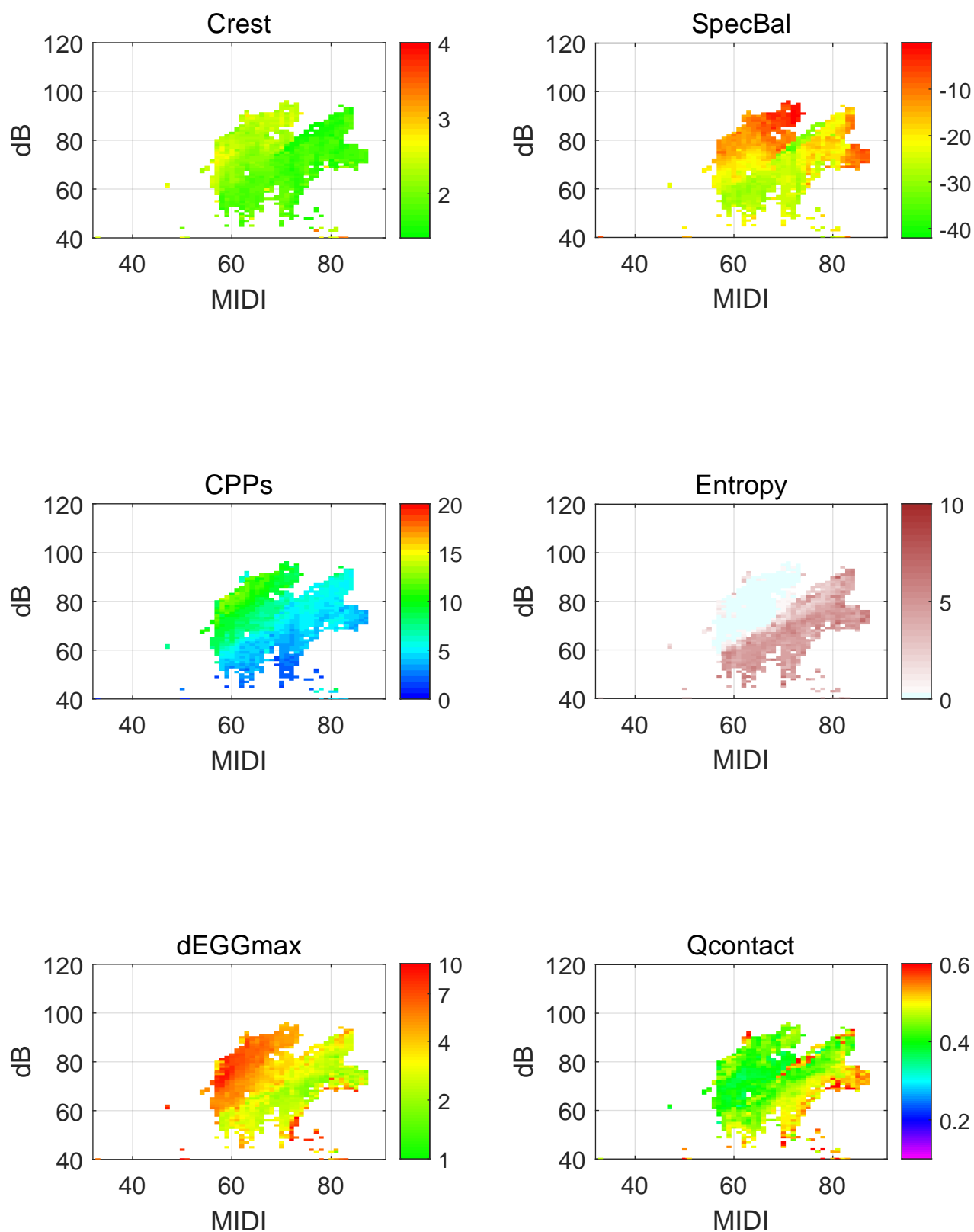


Figure S97: Centroid polar in percentage for Children group

