

# ACMUS-MIR: An annotated data set of Andean Colombian music

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## The ACMus project

ACMus is a research project that brings together (ethno) musicologists and MIR researchers to analyze **Colombian music from the Andes** region.

### Research Topics

1. Meter Analysis
2. Instrumental Format Recognition [1]
3. Musical Scales and Modes
4. Speech/Music Discrimination & Characterization

**Partners:** Fraunhofer IDMT (Germany), TU Ilmenau (Germany), Universidad de Antioquia (Colombia), Universidad Pontificia Bolivariana (Colombia).

## Andean Colombian Music

The **Colombian Andes** is one of the 5 major geographical and cultural regions of the country.



### Instrumentation

This notion of Colombian Andean music comprises an instrumental ensemble of plucked strings (tiple, bandola, guitar, bass) and occasionally small percussion.



Bandola



Guitar



Tiple

### Typical Rhythms

1. Waltz, Pasillo: derivations of the Hispanic ternary colonial Songbook [2].
2. Bambuco: considered one of the “national rhythms”, and contains sesquialtera elements [3-4].
3. Danza: comes from Habaneras connected to Hispanic Contradanzas.



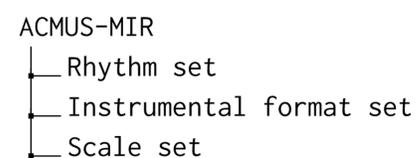
## ACMUS-MIR data set

### Original Sources

- Selection of music taken from the **Músicas Regionales Archive** in Medellín, Colombia.
- Includes digitized versions of analog tape recordings as well as more recent digital recordings.

### Goals of the data selection

The data set was compiled to support the development of computational methods for three main tasks: (1) Recognition of simple and compound meters, (2) Instrumental format recognition, and (3) Scale detection.



### Annotations

- **General Information:** File Name, Title, Genre, Composer, Collection, Original File, Sampling Rate (Hz), Bits, Duration (sec), Channels.
- **Rhythm Set:** Time Signature (2/4, 3/4, 4/4, 6/8), Meter (0=simple, 1=compound), Tempo (BPM).
- **Instrumental Format Set:** Number of instruments (bandolas, tiples, guitars, bass, percussion), Tempo (BMP).
- **Scale Set:** Mode (major, minor), Key (A#, Bb, C, etc), Number of instruments.

### Availability and Usage

The full ACMUS-MIR data set has been made available as a Zenodo repository.



<https://tinyurl.com/acmus-mir>



## References

- [1] Sascha Grollmisch, Estefanía Cano, Fernando Mora-Ángel, and Gustavo López Gil. 2019. Ensemble size classification in Colombian Andean string music recordings. In Proceedings of the 14th International Symposium of Computer Music Multidisciplinary Research. Marseille, France.
- [2] Isabel Aretz. 1984. Síntesis de la etnomúsica en América Latina. Monte Avila Editores
- [3] Carlos Miñana. 1989. La rítmica del bambuco en Popayán. A Contratiempo 1 (1989), 46–55.
- [4] Michael B. Collins. 1964. The Performance of Sesquialtera and Hemiolia in the 16th Century. Journal of the American Musicological Society 17, 1 (1964), 5–28

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