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Benjamin Renard, Chloé Le Bescond

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The Music of Water

B. Renard^{1,2} Chloé Le Bescond²

¹INRAE, RiverLy Research Unit, Lyon, France

²INRAE, RECOVER Research Unit, Aix-en-Provence, France

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INRAE



Making music from hydrological data

Step 1: data sonification

- Data values → note properties (pitch, volume)
- Very similar to data visualization

Step 2: musical arrangement

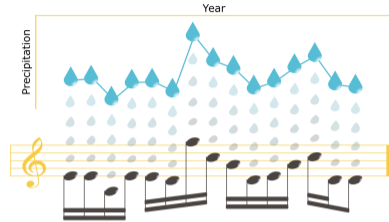
- Move from sound to music
- Play with tempo, rhythm, harmony, etc.

Step 3: music video

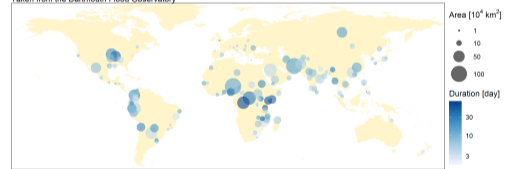
- Data animation

Objective: science communication

- Engaging starting point to present scientific concepts or results
- Add emotional content to the story told by the data



Major flood events in 2019
Taken from the Dartmouth Flood Observatory

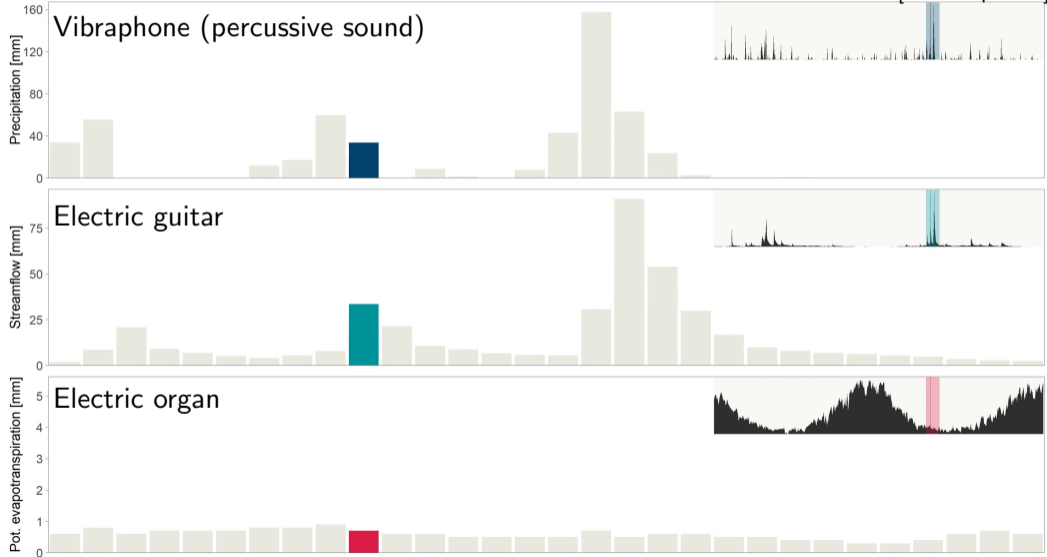


G.R.Brakenridge, "Global Active Archive of Large Flood Events", Dartmouth Flood Observatory, University of Colorado.
<http://floodobservatory.colorado.edu/Archives/index.html>, accessed 06 June 2020

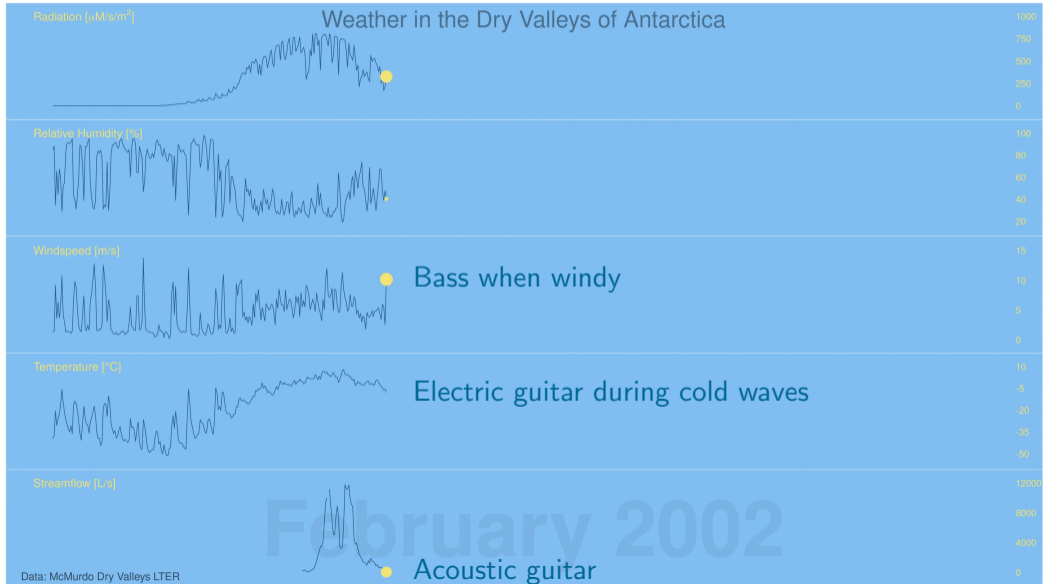
1. The Basics of Hydrology

24/11/2003

[click on picture]



2. Antarctica



3. El Niño

The effect of El Niño on Eastern Australian Rainfall 2018 Dec



Thank you!



More videos at:

<https://globxblog.inrae.fr/>

<https://vimeo.com/user113807574>



Interactive apps:

<https://hydrosoundscapes.recover.inrae.fr>

<https://hydroapps.recover.inrae.fr/au-son-des-rivieres>



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