

Supplementary information for:

Climate of a cave laboratory representative for rock art caves in the Vézère area (south-west France)

Delphine Lacanette¹, Léna Bassel^{2,3}, Fabien Salmon¹, Jean-Christophe Portais⁴, Bruno Bousquet⁵, Rémy Chapoulie², Faten Ammari^{2,6}, Philippe Malaurent¹, and Catherine Ferrier⁷

¹Univ. Bordeaux, CNRS, Bordeaux INP, I2M, UMR 5295, F-33400, Talence, France

²Archéosciences Bordeaux, Maison de l'archéologie, University Bordeaux Montaigne, F-33607 Pessac cedex, France

³International Atomic Energy Agency, Vienna International Centre, PO Box 100, A-1400 Vienna, Austria,

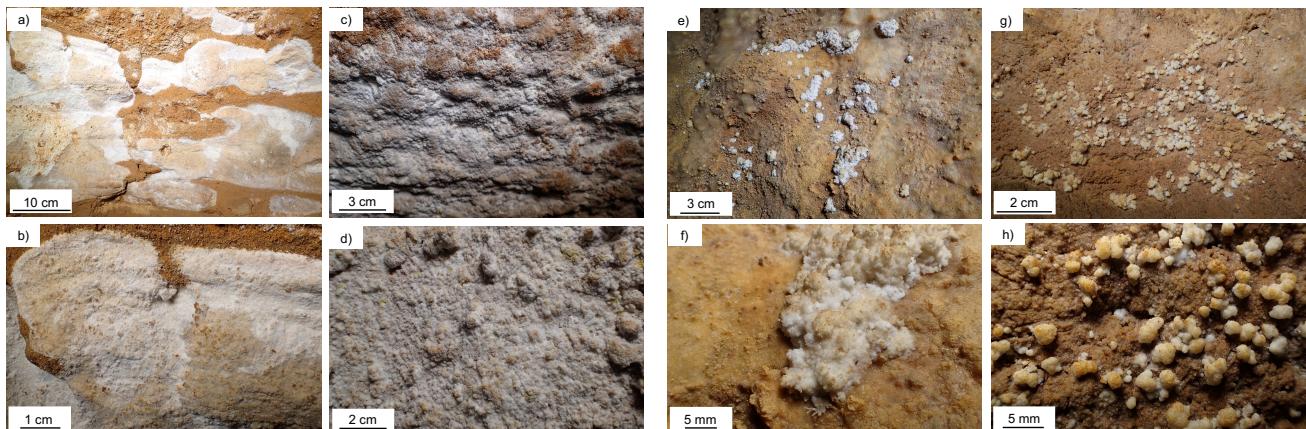
⁴French Ministry of Culture, Regional Direction of Cultural Affairs of Nouvelle-Aquitaine, Regional Conservation of historic monuments, 54 rue Magendie 33074 Bordeaux cedex, France

⁵CELIA, UMR CNRS 5107, Université de Bordeaux, 351 Cours de la Libération, F-33405 Talence Cedex, France

⁶ARVALIS Institut du végétal, Pôle Analytique, Station Expérimentale - 91720 Boigneville, France

⁷UMR CNRS 5199 PACEA, University of Bordeaux, Allée Geoffroy Saint Hilaire, 33600, Pessac, France

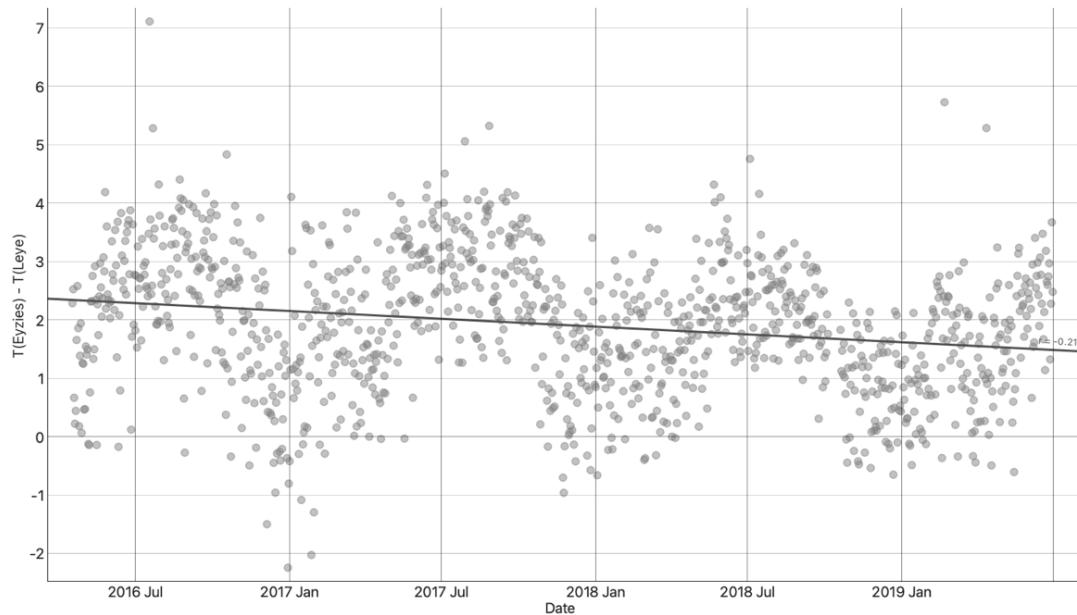
*Corresponding author: delphine.lacanette@u-bordeaux.fr



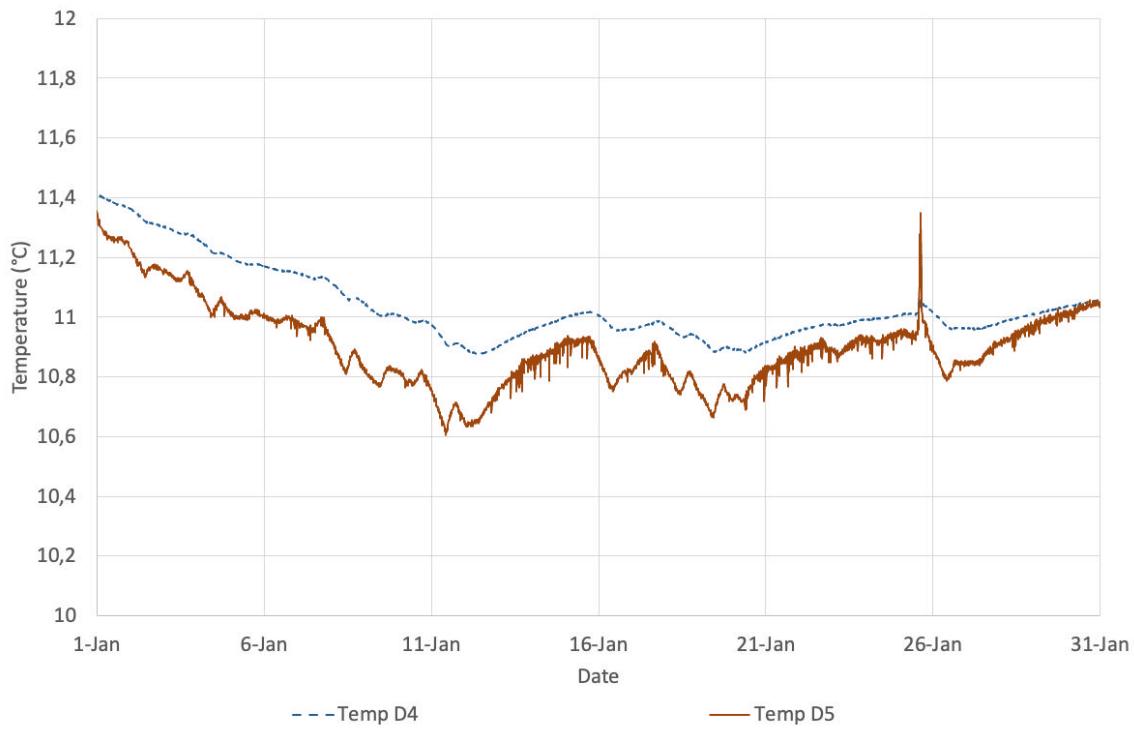
Supplementary Fig. S1. Detailed overview of moonmilk and coralloids in Leye Cave. **a-b:** Moonmilk on sediments; **c-d:** Moonmilk on calcite veil; **e-h:** Coralloids on calcite veil.



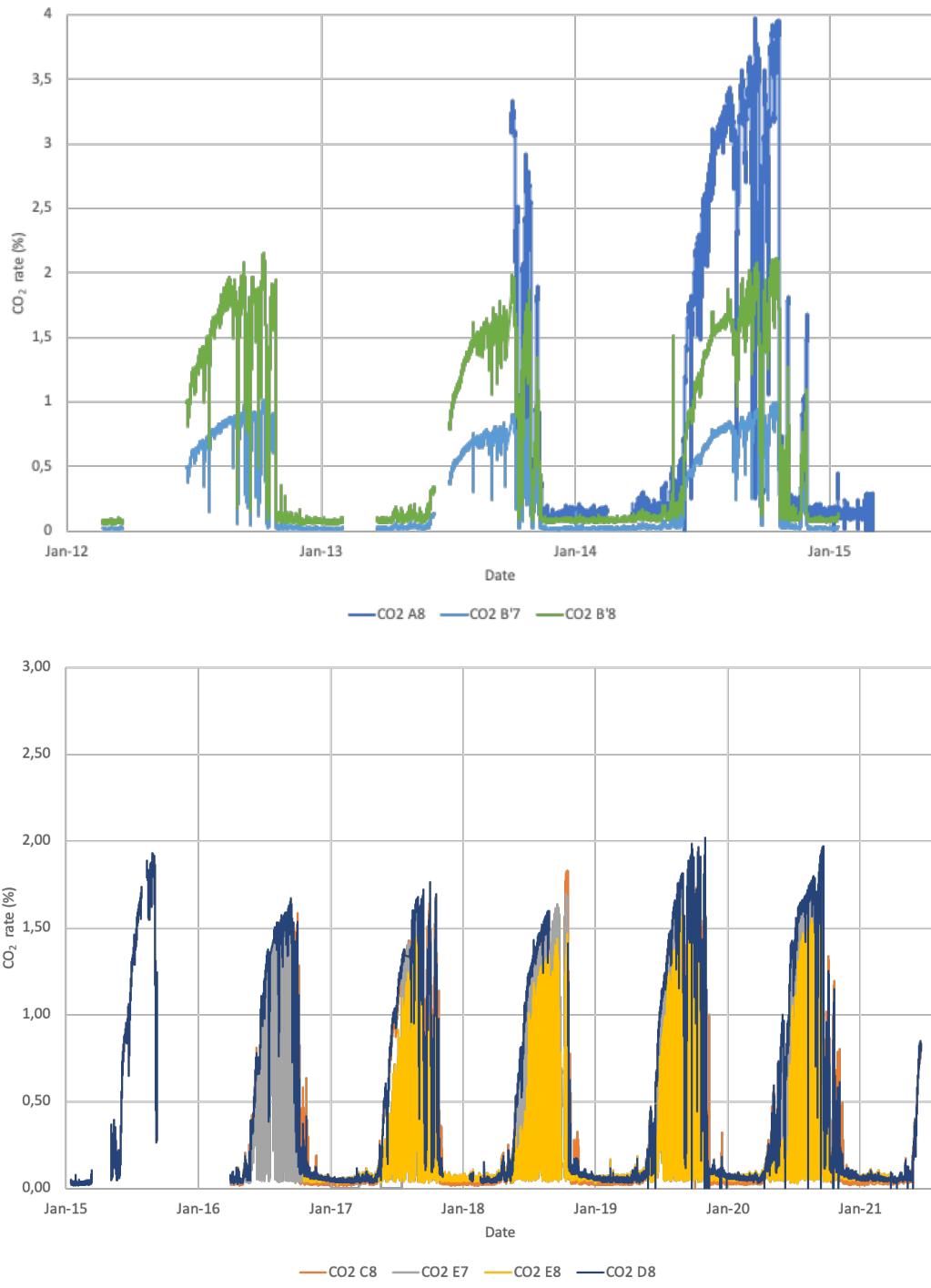
Supplementary Fig. S2. Overview of the Throne Chamber with moonmilk (left/north wall) and coraloids (right/south wall). Credit: S. Konik.



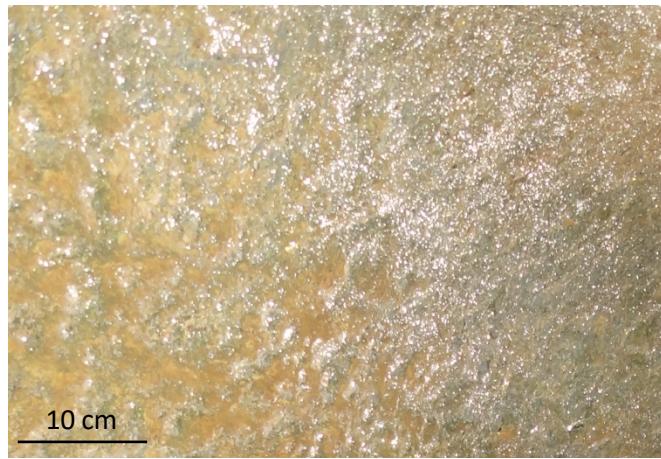
Supplementary Fig. S3. Comparison of daily mean temperature at the Meteo France monitoring system (Les Eyzies) and in front of the cave (Leye).



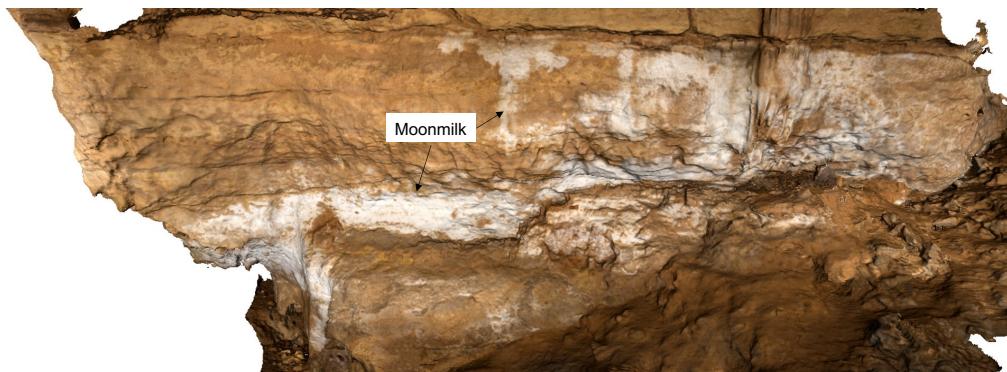
Supplementary Fig. S4. Temperature variations in the rock (D4, dotted line) and in the air (D5, solid line) for the year 2021.



Supplementary Fig. S5. Variation in carbon dioxide rates in different areas of the cave from January 2012 to June 2021 – E7 and E8 are located in the entrance zone, C8 and D8 further inside the cave.



Supplementary Fig. S6. Visualization of condensation in the vault of the entrance zone (P. Malaurent) – each white point represents a condensation drop.



Supplementary Fig. S7. Photogrammetry of the left (north) wall of the Throne Chamber (Archeovision Production).