Supporting information for

Pipes to Earth's subsurface: The role of atmospheric conditions in controlling air transport through boreholes and shafts

Elad Levintal[1], Nadav G Lensky[2], Amit Mushkin[3], Noam Weisbrod[1]

[1]Environmental Hydrology and Microbiology, The Zuckerberg Institute for Water Research, The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, Midreshet Ben-Gurion 8499000, Israel.

[2]Geological Survey of Israel, Jerusalem 9550161, Israel.

[3]Department of Earth & Space Sciences, University of Washington, Seattle WA 98105, USA.

Corresponding author: Noam Weisbrod (weisbrod@bgu.ac.il)
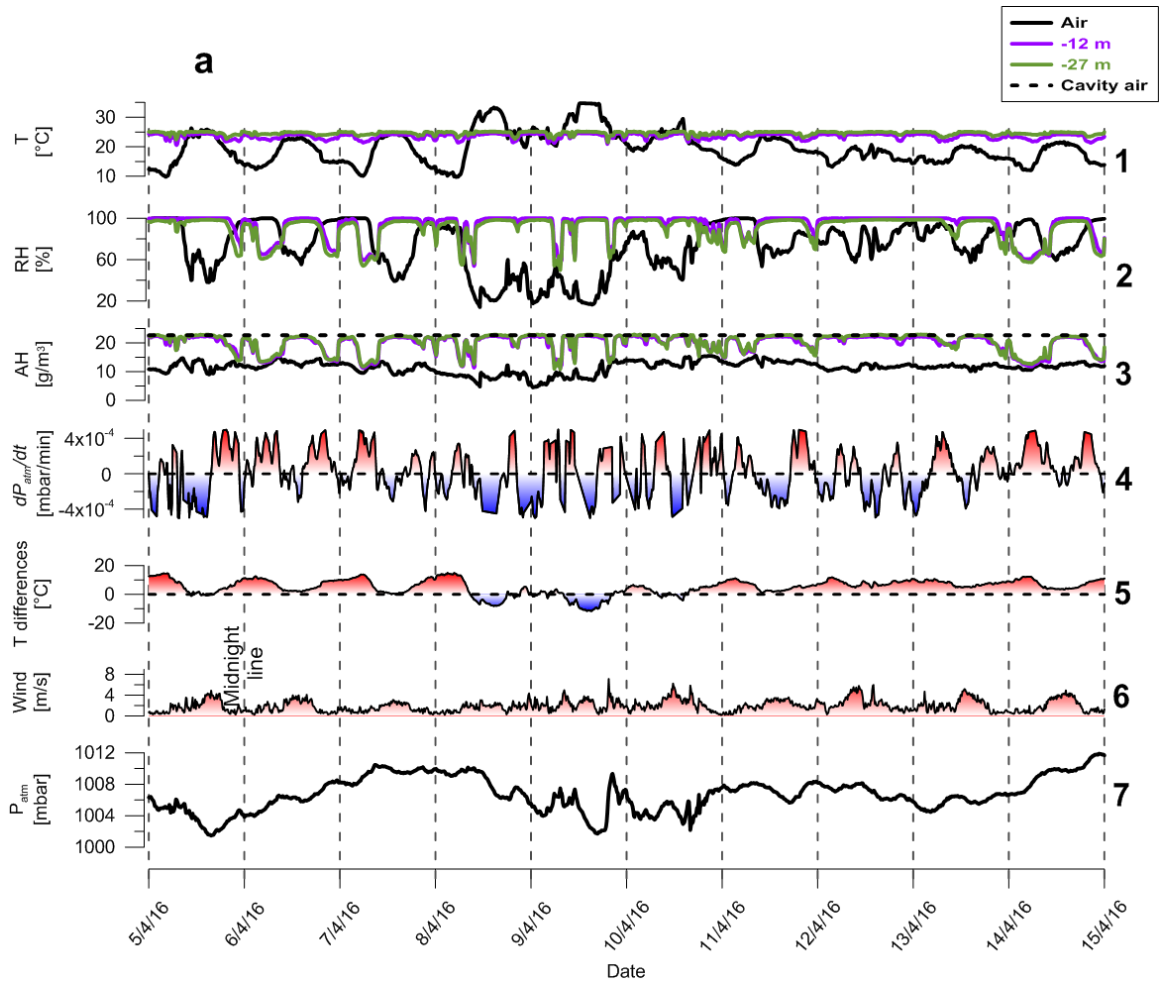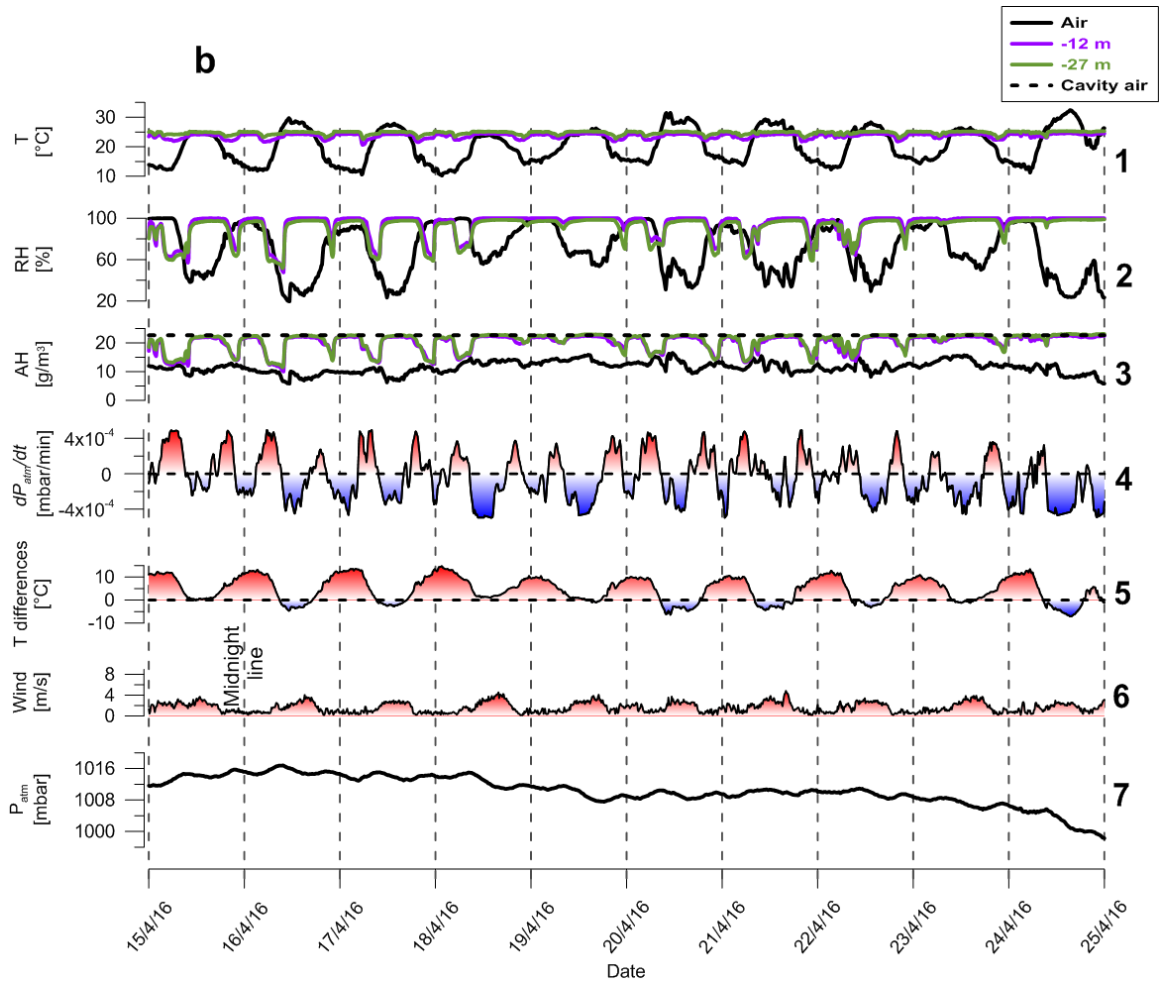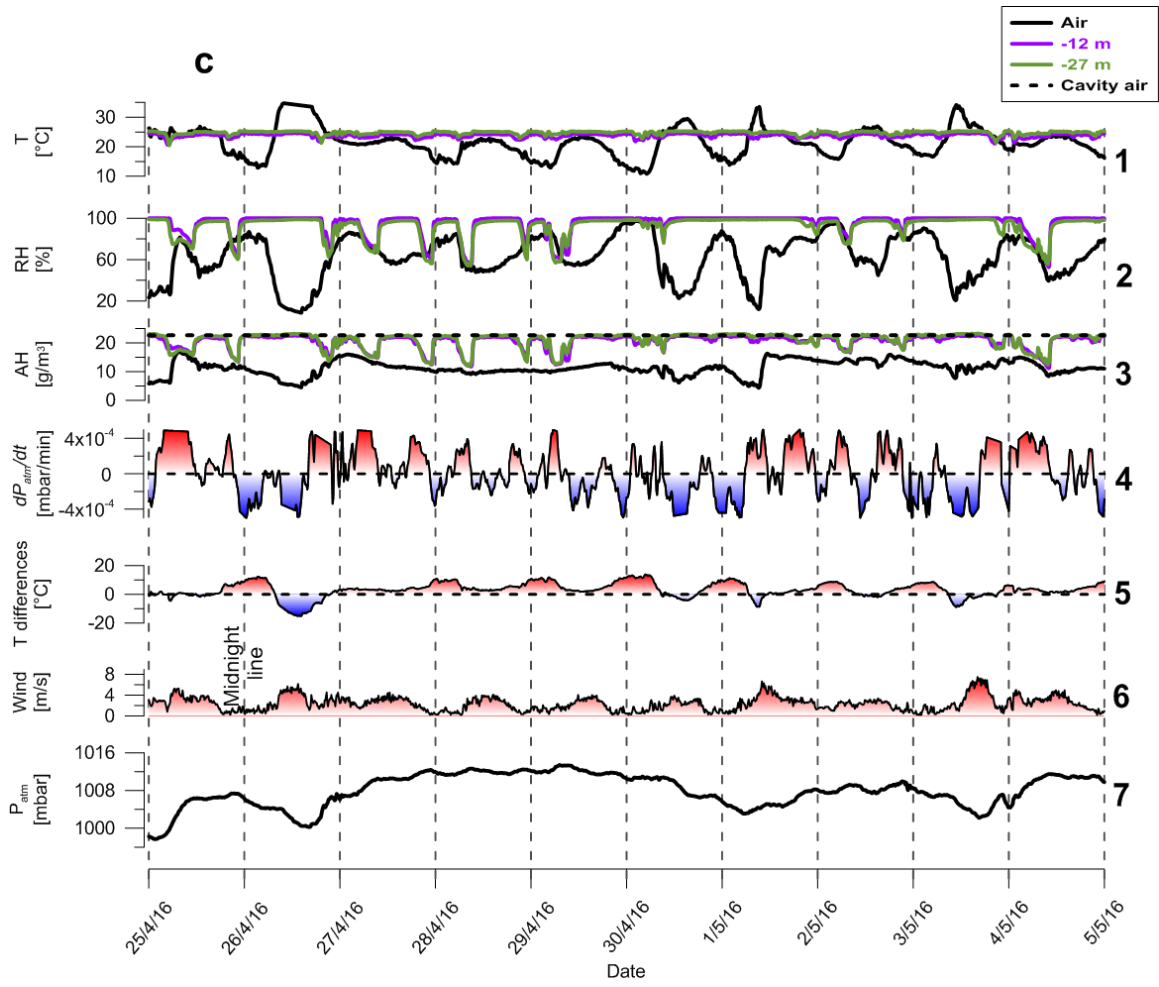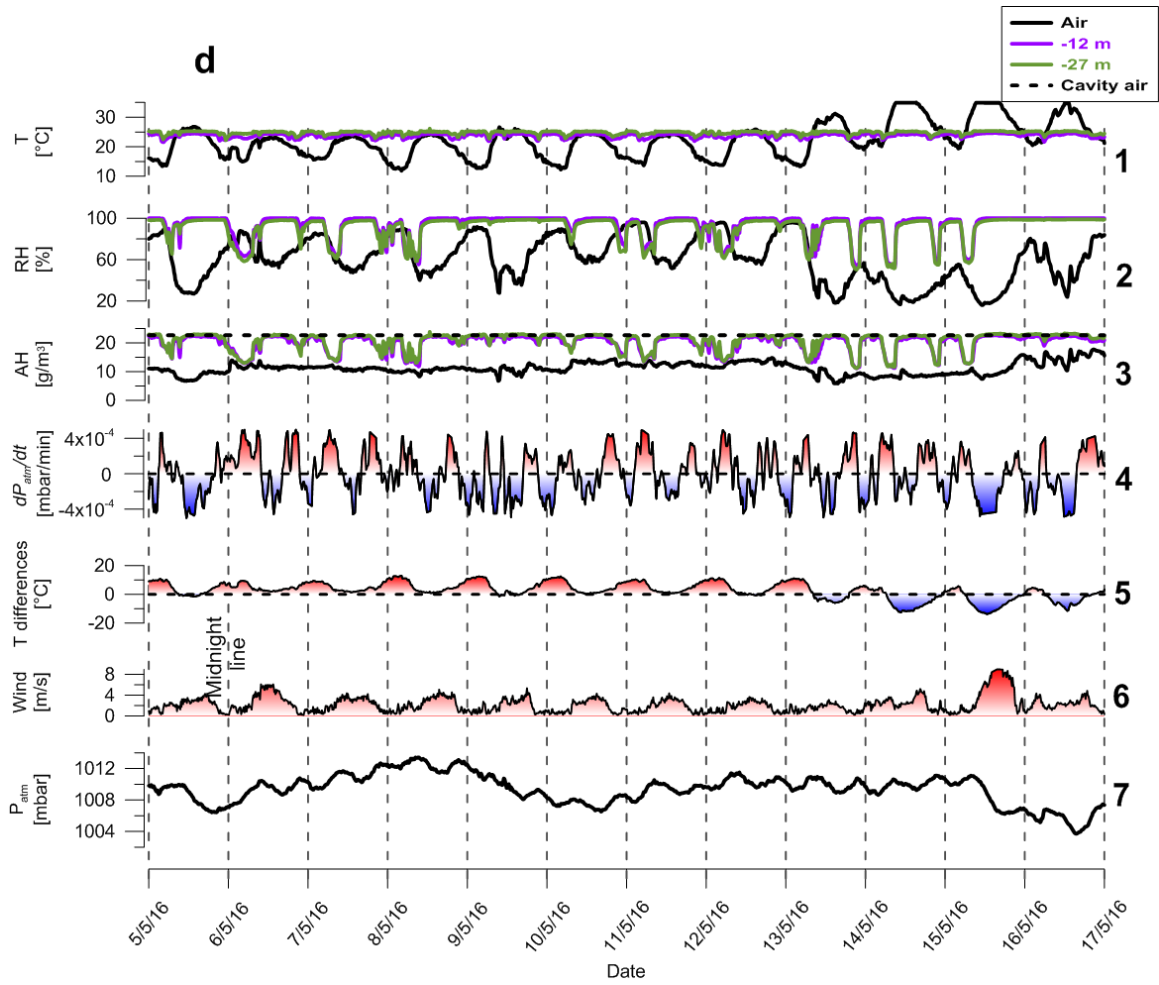
Figure. S1. Time series results from the full 42-day *shaft* **observations. Absolute humidity (AH) values were calculated using Eq. (1). The lower boundary (black dashed line in 3) was approximated as constant with T = 24.7 ºC and RH = 100 %. T differences values (5) represent the temperature differences between the sensor at 12 m depth and the sensor above ground.**