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Podium Presentation, Session 0, day 00:00-00:00

## The hominin footprints from the Late Pleistocene site of Larache (Morocco)

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In the last decades, the study of hominin footprints has grown exponentially with the discoveries of many important sites. The discoveries and analyses of these footprints provides complementary information to the more common skeletal remains or archaeological artifacts. Indeed, by representing snapshots of life, footprints give direct access not only to the biological and biomechanical characteristics of individuals but also to their behaviours. Despite the increase in the number of discoveries in recent years, footprints remain relatively rare and have a very heterogeneous geographical distribution. Indeed, no footprints have been discovered in certain regions such as North Africa, which is well known for its numerous archaeological or paleoanthropological discoveries.

It is in this context that we report the discovery and the first study of human footprints left during the Late Pleistocene at the Larache site in Morocco.

The Larache site is located in a coastal environment between Rabat and Tangier. It is on this site devoid of human skeletal remains or archaeological artifacts that 85 human footprints have been discovered since July 2022. These footprints are distributed within a surface of 4,000 m<sup>2</sup> composed of fine to medium sand dated to MIS 5c. The Larache ichnological assemblage includes trackways and isolated footprints that are preferentially oriented in the WNW-ESE direction, which is perpendicular to the current shoreline. Their morphology is variable but clearly shows the anatomical characteristics of the human foot: a rounded heel, a plantar vault, relatively short toes including an adducted hallux.

The statures and age classes of the individuals who left these footprints were estimated from their length and experimental regressions. The Larache footprints whose length varies from 12.7 to 30.0 cm (mean: 22.7 cm) correspond to statures between 120.8 and 189.0 cm (average: 160.0 cm) and to the different age classes: children, adolescents and adults.

The discovery of the footprints in Larache is important. Indeed, no other site has yielded footprints in North Africa and the Larache footprints are among the oldest attributed to *Homo sapiens* in the world. Their study provided new information on human occupations in North Africa during the Late Pleistocene and will give the opportunity to learn more about the behaviours of the individuals who left them.