A SUNKEN WORLD

PHOTO: ÓSCAR SOLIS TORRES
Humanity's origins lie in Africa. From there, *Homo sapiens* spread all over the world: from Europe and Asia to Australia and the islands of the Pacific. During this period of unprecedented hominin migration, the Americas were the last continental land-masses to be occupied in the Late Pleistocene. Around 20,000 to 30,000 years ago, humans migrated from Asia to the Americas through an ice-free land corridor in the Bering Strait region and expanded southwards from there.

At that time, the Americas were home to many large mammals, including elephants, rhinoceroses, and horses, but also giant ground sloths – more than six meters long and several tons in weight. Together they are known as the North American mega-fauna. However, at the end of the Late Pleistocene, around 10,000 to 12,000 years ago, most of these animals became extinct at the same time as humans spread throughout the continents. Is this a mere coincidence or could these events be linked? Are humans partly responsible for the extinction of the megafauna? Or, in the case of the sloths, maybe even the primary cause? Perhaps they hunted these large, very slow-moving animals to extinction?

Óscar Solis Torres from the Max Planck Institute of Geoanthropology is investigating these questions. He is exploring tropical caves on Mexico’s Yucatan Peninsula, where some of the earliest known traces of human presence on the American continents have been found. Solis Torres is looking for evidence of human presence and the remains of megafauna – in this case in the Sac Actun cave system on the northeastern coast of Yucatan. The challenge: the stalactite caves of the Sistema Sac Actun have been under water for around 9000 years. With 347 kilometers discovered to date, Sac Actun is one of the largest underwater cave systems in the world. It is also one of the most important sites of underwater archaeology.