

Video highlights research on Aboriginal rock art

October 2 2015

Principal Research scientist David Fink in the Institute for Environmental Research is one of a number of scientists featured in a new video released by the Kimberley Foundation of Australia that highlights an exciting project to date Aboriginal rock art using new sample preparation methods in radiocarbon dating of rock art accretions.

The approach involves applying cosmogenic exposure dating with long-lived radioactive beryllium-10 to measure the edibility or preservation lifetime of the rock surfaces upon which the art resides.

The project is funded through an ARC-Linkage grant, the Kimberley Foundation of Australia and Dunkeld Pastoral Company.

The multi-disciplinary team of scientists include [rock art](#) specialties from University of Western Australia, geochemists and geochronologists from University of Melbourne, geomorphologist from University of Wollongong and ANSTO scientists.

The project aims to elevate the importance of the world-wide unique collection of Kimberley rock art by enhancing an understanding of the geo-biochemical character of rock art pigment, a more accurate dating of the rock art using advanced analytical techniques and to provide the first comprehensive study of landscape and climate change of the region over the past 100,000 years.

Fink and University of Wollongong (UoW) PhD student Gael Cazes

undertook a 3 week field trip to the Kimberley in July of this year to collect rock surface samples for beryllium-10 dating from various rock art shelters where the Melbourne Uni team were collecting rock art fragments for U-series and radiocarbon dating.

"We were very successful in collecting an excellent variety of bedrock samples for beryllium-10 exposure dating that will help us to better quantify the long term denudation of the plateau surfaces.

"Together with the other samples from the rock art shelters we can then work out how fast they are breaking down, and thus place some age limits to the oldest rock art sites.

"We can then match the new radiocarbon ages with the exposure ages to confirm the new techniques. We have also applied for a second ARC-L grant for paleo environmental studies using both radiocarbon and cosmogenics from lake sediment cores in the Kimberley in collaboration with ANU," said Fink.

Provided by Australian Nuclear Science and Technology Organisation (ANSTO)

Citation: Video highlights research on Aboriginal rock art (2015, October 2) retrieved 10 May 2024 from <https://phys.org/news/2015-10-video-highlights-aboriginal-art.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.