## True integration: moving from just finding archives to interpreting archaeological documentation utilising CRMarchaeo

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This integration study considers how the body of archaeological excavation databases of The Archaeologists (a department within the National Historical Museums of Sweden) were prepared for integration utilising the CRMarchaeo extension of the CIDOC Conceptual Reference Model (CRM). The Archaeologists create about 250 new Intrasis-databases each year (one for each new site) and currently have 1200 active and 1100 archived databases. Traditional GIS based gazetteers allow the discovery of which archives/databases are about the correct type of site or that are in the right geographic area. However, the researcher still needs to immerse themself in the details of the individual archive to see if the research questions, excavation/recording methodology, and pragmatic responses to circumstances are compatible with the goals of the researchers' study. In comparison, with the CRMarchaeo ontology applied to the archives/databases, the work required to check if the data is fit for the study's purposes is possible at the integration layer. This means more opportunities for innovative intra- and inter-site research as the effort required to discover appropriate material is reduced.

The presentation will showcase the work undertaken by Intrasis and Paveprime to prepare this approach and the benefits that have accrued from it: in particular the improved reusability when the databases are accessible through Swedigarch and also the greater clarity in the approach to future documentation practice.

CRMarchaeo, an extension of CIDOC CRM, is a way to link a wide range of existing documentation from archaeological excavations. The CRMarchaeo extension has been created to promote a shared understanding of how to formalise the knowledge extracted from the observations made by archaeologists. It provides a set of concepts and properties that allow clear explanation (and separation) of the observations and interpretations made, both in the field and in post-excavation.

https://www.cidoc-crm.org/crmarchaeo/