

## **An international standard for the exchange of snow profile information an example for a domain specific application of CAAML 5**

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With the growing use of the Internet for the exchange of information among avalanche professionals and its dissemination to the public, standard file formats are becoming increasingly important. In this poster, we present CAAML as an international standard for the encoding of information commonly exchanged among avalanche safety operations, avalanche researchers and the public. CAAML is an XML (Extensible Markup Language) grammar modelled after GML (Geographic Markup Language), the current XML standard for expressing geographic features defined by the Open Geospatial Consortium (OGC). To facilitate the exchange among a wide range of different applications, CAAML provides a flexible and extensible framework that supports the effective encoding of the full richness of avalanche related information.

In this poster, we will briefly describe the philosophy underlying CAAML, provide an overview of its core components and their functionality, and discuss how CAAML can be expanded to meet the specific needs of individual segments of the avalanche community. Since the first presentation of CAAML (Atkins and Haegeli, 2004), the use of CAAML has continuously grown within the avalanche community. Examples of current applications include the industrial information exchange (InfoEx) of the Canadian Avalanche Association, the avalanche accident database of the Canadian Avalanche Centre, the public bulletins of the Tyrolean Avalanche Warning Service and numerous snow profile applications. While CAAML was initially an initiative of the Canadian Avalanche Association, it is now also being supported by the Canadian Avalanche Centre (CAC), the European Avalanche Warning Services (EAWS) and the International Association of Cryospheric Sciences (IACS).