



An International Standard for the Exchange of Snow Profile Information

Charles Fierz (1), Pascal Haegeli (2), Roger Atkins (3), Matthias Gerber (1), Johannes Hörtnagl (4), John Kelly (5), Samuel Morin (6), Patrick Nairz (4), and Ian Tomm (7)

(1) WSL Institute for Snow and Avalanche Research SLF Davos, Snow and Permafrost, Davos Dorf, Switzerland (fierz@slf.ch, +41 81 417 01 10), (2) Avisualanche Consulting, Vancouver BC, Canada, (3) Canadian Mountain Holidays, Johnson's Landing BC, Canada, (4) Tyrolean Avalanche Warning Service, Innsbruck, Austria, (5) Canadian Avalanche Centre, Revelstoke BC, Canada, (6) Centre d'Etudes de la Neige, Météo France, Saint Martin d'Hères, France, (7) Canadian Avalanche Association, Revelstoke BC, Canada

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. CAAML is an international standard for the encoding of information commonly exchanged among avalanche safety operations, snow scientists 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. While CAAML was initially an initiative of the Canadian Avalanche Association, it is now also being supported by the European Avalanche Warning Services (EAWS) and the International Association of Cryospheric Sciences (IACS).

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 snow science and snow practitioner community. Since the first presentation of CAAML 2004 by Roger Atkins and Pascal Haegeli, 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, and the public bulletins of the Tyrolean Avalanche Warning Service. This poster will particularly emphasize the encoding of snow profiles.