

EGU2020-10627

<https://doi.org/10.5194/egusphere-egu2020-10627>

EGU General Assembly 2020

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## Towards data interchangeability in paleomagnetism

**Christian Zeeden**<sup>1</sup>, Christian Laag<sup>1,2</sup>, Pierre Camps<sup>3</sup>, Yohan Guyodo<sup>2</sup>, Ulrich Hambach<sup>4</sup>, Janna Just<sup>5</sup>, Pontus Lurcock<sup>6</sup>, Christian Rolf<sup>1</sup>, Sara Satolli<sup>7,8</sup>, Stephanie Scheidt<sup>9</sup>, and Sebastien Wouters<sup>10,11</sup>

<sup>1</sup>LIAG, Leibniz Institute for Applied Geophysics, S5, Hannover, Germany (christian.zeeden@leibniz-liag.de)

<sup>2</sup>Palaeomagnetism Research Group, Institut de Physique du Globe de Paris, Paris, France

<sup>3</sup>Géosciences Montpellier, Université de Montpellier, Montpellier, France

<sup>4</sup>BayCEER & Chair of Geomorphology, University of Bayreuth, Bayreuth, Germany

<sup>5</sup>Fachbereich Geowissenschaften, Universität Bremen, Bremen, Germany

<sup>6</sup>Istituto Nazionale di Geofisica e Vulcanologia, Rome, Italy

<sup>7</sup>Dipartimento di Ingegneria e Geologia, Università "G. d'Annunzio" di Chieti-Pescara, Chieti, Italy

<sup>8</sup>CIMaN-ALP – Alpine Laboratory of Paleomagnetism, Peveragno, Italy

<sup>9</sup>Institut für Geologie und Mineralogie, University of Cologne, Cologne, Germany

<sup>10</sup>Sedimentary Petrology, Liege University, Liège, Belgium

<sup>11</sup>O.D. Earth and History of Life, Royal Belgian Institute of Natural Sciences, Brussels, Belgium

Paleomagnetic data are used in different data formats, adapted to data output of a variety of devices and specific analysis software. This includes widely used openly available software, e.g. PMag.py/MagIC, AGICO/.jrg & .ged, and PuffinPlot/.ppl. Besides these, individual software and data formats have been established by individual laboratories.

Here we compare different data formats, identify similarities and create a common and interchangeable data basis. We introduce the idea of a paleomagnetic object (pmob), a simple data table that can include any and all data that would be relevant to the user. We propose a basic nomenclature of abbreviations for the most common paleomagnetic data to merge different data formats. For this purpose, we introduce a set of automatization routines for paleomagnetic data conversion. Our routines bring several data formats into a common data format (pmob), and also allow reversion into selected formats. We propose creating similar routines for all existing paleomagnetic data formats; our suite of computation tools will provide the basis to facilitate the inclusion of further data formats. Furthermore, automatized data processing allows quality assessment of data.