International Session (Oral) | Symbol S (Solid Earth Sciences) | S-EM Earth's Electromagnetism

[S-EM05]Full vector geomagnetic and paleomagnetic secular variation: direction, intensity and dynamo simulations

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One of the most important connections between the true behavior of the geomagnetic field and the results of numerical dynamo simulations is the characterization of paleomagnetic secular variation. Recent developments in paleointensity and directional studies using archeological objects, volcanic rocks, as well as sediment cores, have enabled the construction of several temporally continuous global paleosecular variation models. However, the spatial and temporal distribution of data is uneven, and the relationship between sedimentary DRM/pDRM data and volcanic or archeological TRM data is not well understood. We solicit contributions on secular variation studies of both direction and intensity, novel methods for their determination, and analyses comparing secular variation from different regions. Numerical dynamo simulation studies exploring the connection between paleomagnetic secular variation and output from dynamo models are also greatly welcome.

10:25 AM - 10:30 AM [Discussion]Discussion