Subject: [railML3] Order of geometricCoordinate attributes
Posted by Thomas Nygreen on Fri, 04 Sep 2026 17:37:05 GMT
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Dear community!

I have found that the current documentation of the x, y and z attributes of geometricCoordinate are not in line with positioning examples in the wiki nor with how they are interpreted by railVIVID. Therefore I would like to ask for feedback from the community about your interpretation and use of these attributes. These attributes are not documented in railML 3.1, but in 3.2 since SR2 and in 3.3 since its first release, they are documented as x = longitude, y = latitude and z = altitude.

The order of axes differs between coordinate reference systems (CRSs), and the very common WGS 84, in the way it is defined by EPSG, has latitude as the first coordinate. This is an unending source of confusion when it comes to storing and communicating coordinates, and is not a railML-specific issue. The question is how we deal with it in railML. Mainly there are two approaches: use a fixed order or follow the order given by the referenced CRS. For more information I refer to [1], and I ask: How do you currently use the x and y attributes of geometricCoordinate, and which approach do you prefer for their definition in railML?

[1] https://development.railml.org/railml/version3/-/work_items/ 788

Best regards,
Thomas