



Geosoft Technical Note **Working with AMMP/SAMMP Data**

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This technical note relates to users who are working with data from the African Magnetic Mapping Project (AMMP) and South America Magnetic Mapping Project (SAMMP). The note specifically refers to coordinates and datums for these datasets, and the way they are treated in Oasis montaj.

AMMP and SAMMP coordinate systems use a spherical Transverse Mercator projection on a sphere that uses an earth radius of 6378249.145 metres. All data sets that make up these compilations used coordinate systems from the geoid-based datums that were local to the specific surveys. In order to derive coordinates on the AMMP/SAMMP "datum", the local coordinates were directly converted from the local datum ellipsoid to the AMMP/SAMMP spherical datum without any local datum transformations at all. As a result, the survey compilations are made up of many local datum transformations that can only be implied by the location of the original survey.

In Oasis montaj, the AMMP/SAMMP based coordinates should only be converted directly to local geoid-based datums for specific areas of interest. They should NOT be converted to geocentric datums, such as WGS 84. If coordinates on a geocentric datum like WGS 84 are required, data should first be converted to the appropriate local datum then converted to WGS 84.