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## Simulated Sea Surface Salinity Data from a 1/48° Ocean Model

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In order to study the validation process for sea surface salinity (SSS) we have generated a year (November 2011- October 2012) of simulated satellite and in situ “ground truth” data. This was done using the ECCO (Estimating the Circulation and Climate of the Oceans) 1/48° simulation, the highest resolution ocean model currently available. The ground tracks of three satellites, Aquarius, SMAP (Soil Moisture Active Passive) and SMOS (Soil Moisture and Ocean Salinity) were extracted and used to sample the model with a gaussian weighting similar to that of the satellites. This produced simulated level 2 (L2) data. Simulated level 3 (L3) data were then produced by averaging L2 data onto a regular grid. The model was sampled to produce simulated Argo and tropical mooring SSS datasets. The Argo data were combined into a simulated gridded monthly 1° Argo product. The simulated data produced from this effort have been used to study sampling errors, matchups, subfootprint variability and the validation process for SSS at L2 and L3.