

High-level Data Publication as a Mechanism for International Open Access Data Exchange

by D Carlson and H Pfeifferberger

Started during the International Polar Year 2007-2008, the Earth System Science Data journal (Copernicus) has gradually built a substantial collection of open access data sets and a corresponding network of open access data centres. Using a three-partner approach involving authors (data submitters), data centres (data repositories), and journal editors, ESSD conducts a thorough data accessibility and peer review process for each published data set, analogous in many ways to the science publication process. The ESSD publications now include a wide variety of data types and data sets, covering polar as well as non-polar topics. The ESSD publication process has attracted comprehensive multi-author submissions from large international research teams interested to gain formal accreditation for their substantial data preparation efforts and widespread visibility for their data products. Increasingly, ESSD supports joint special issues with science journals, to publish science papers side-by-side with associated data sets. The ESSD experience provides a valuable real-world working example of the processes and impacts of data publication