



IS-ENES data: present and future of the data infrastructure for climate modeling

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IS-ENES is the Infrastructure project of the European Network for Earth System Modelling bringing together the climate modeling community working on the understanding and prediction of climate. The infrastructure faces presently challenges related to its consolidation, at the same time continuously evolving. IS-ENES encompasses an advanced and multifaceted data infrastructure dimension, besides largely covering aspects related to models and tools development and sharing and to the establishment and maintenance of the interface with High Performance Computing to perform high-end simulations. IS-ENES embodies at technical and decision-making level the European component of the Earth System Grid Federation (ESGF) that offers storage, maintenance, access, and analysis of climate simulation results. Managing results of World Climate Research Program internationally coordinated model experiments (CMIP, CORDEX) implies for IS-ENES in first place a considerable effort in format standardization and thorough experiment documentation, successfully achieved in the frame of the international ES-DOC initiative. ESGF data are accessible to several user communities. Via climate4impact platform services, climate impact scientists also benefit from model results and, thanks to the interface established with Copernicus C3S, climate service providers are granted as well dedicated access to the data. IS-ENES also participates in several initiatives related to the European Open Science Cloud, striving towards interoperability with other, heterogeneous infrastructures. This contribution will present IS-ENES current status, including new developments, and offer prospective on the medium-term future of the infrastructure.