



Building on the CMIP5 effort to prepare next steps : integrate community related effort in the every day workflow to lower the data distribution and data management burden

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The Pierre Simon Laplace Institute (IPSL), like many other climate modeling groups, is involved in the development of a comprehensive Earth System Model (ESM) to study the interactions between chemical, physical, and biological processes. This work entails the coupling of different components (land, ocean, atmosphere, chemistry...etc) and requires an execution environment platform that can tackle the entire range of interdependent model configurations. Furthermore, the ever-increasing number of simulations, executed against model configurations within scientific computing centres, is generating a huge volume of data and meta-data that must be made available to researchers, modelers, students and general users.

Each user group has a different set of information demands related to climate simulation data and meta-data, and thus fulfilling the requirements of the entire community is highly challenging. This talk will focus upon the strategy adopted by IPSL to simultaneously fulfill the needs of the community and to lower the data distribution and data management burdens upon the climate modeling group due to the growing interest related to climate simulations data and information.

To achieve these objectives we decided to integrate the efforts of international and European projects such as Earth System Grid, METAFOR and IS-ENES, within our execution environment platform. We will present the emerging workflow that will be in place to run CMIP5 simulations and that we will extend to manage the "every day" simulations that are intended not only for participation within a large model intercomparison project such as CMIP5.