Cluster Science Archive: the ESA long term archive of the Cluster mission

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The science data archive of the Cluster mission is a major contribution of the European Space Agency (ESA) to the International Living With a Star program. Known as the Cluster Active Archive (CAA), its availability since 2006 has resulted in a significant increase of the scientific return of this on-going mission. The Cluster science archive (CSA) has been developed in parallel to CAA over the last few years at the European Space Astronomy Center of ESA in Madrid, Spain. It is the long-term science archive of the Cluster mission developed and managed along with all the other ESA science missions data archives. CSA design and data services are based on the CAA interface and its user-friendly services. Publicly opened in November 2013, CSA is available in parallel to CAA during a transition period until CAA will be closed in spring 2014. It is the purpose of this presentation to first provide an overview of the various services offered by the Cluster Science Archive, including: data visualisation, VO support and command line capabilities (which enables data access via Matlab or IDL softwares). Upcoming services will then be presented (e.g. data streaming, particle distribution plot visualisation...). Support data related to on-going FP7 projects such as ECLAT and MAARBLE will be soon available on the CSA and will be briefly presented. Possible new services such as data mining will finally be evoked. This last point will hopefully lead to an open and lively debate about which services shall be offered to the scientific community by a space agency for a specific type of mission and what should be left to the community to develop.