

The Envi-Ham Project

Stefano Badessi, Luigi Accica ESRIN - Frascati 24/09/2010

European Space Agency

The Envi-Ham Project



- ESA has detected the interest of some categories of non-professional users (e.g. Education, Radio Listening, E.O. Enthusiast) to receive near-real time Envisat data via the satellite Data Dissemination System (DDS)
- 2. To satisfy the demand, ESA has initiated in 2009 a dedicated Category 1 (i.e. research, no-profit) project called Envi-Ham.
- 3. The objective of the Envi-Ham project is to widen the knowledge of ESA E.O. missions among non-professionals, to retrieve possible observations done by users and to coordinate in a single noncommercial project a whole groups of users, which otherwise would be applicant for individuals ESA-approved scientific (CAT-1) projects.



- The Envi-Ham project principal investigator (P.I.) is within ESA (S. Badessi) while all the users shall appear as co-investigators and will share the same obligations about use of data, as the standard P.I.'s.
- 2. As condition to participate, every co-investigator is declaring that he has all the means to carry out autonomously the activity. In particular the cost of the commercial dish (1.2m dish for DDS Kuband users in continental Europe), of the LNB, of the installation and of the PC will be borne by the "Envi-Ham" users.
- 3. The only ESA undertaking for the project is the provision of a limited number of free licences of the DDS reception SW and associated decryption keys.

Envisat Products



- 1. At the moment ESA is using an allottment on Eutelsat W2A at 10 E.
- 2. DDS is disseminating for the EnviHam users the global Envisat data from the multi-spectral instruments (MERIS RR, AATSR) and the MERIS full resolution (300m) sensed over the European Continent
- 3. Envisat distributed data are from instruments which may easily converted into a viewable image.
- 4. ESA is making available also a scientific application software to handle Envisat's products called BEAM.

How to become a Co-Investigator



- Every non-professional user of Earth Observation data, interested in joining the "Envi-Ham" project should first send by fax or email, an application to the P.I. of the project, by accepting the "Envi-Ham specific Terms and Conditions" contained in the document TIA-ESRIN-0906-007 at its latest revision.
- This document may be obtained either downloading it from the DDS web site http://dwlinkdvb.esrin.esa.it/DDS/, or asking it directly to the P.I. by email to <u>tta@esa.int</u>.
- 3. The original signed copy must be sent in parallel to the P.I. via postal mail.

How to become a Co-Investigator



- The user shall be informed by email once the registration as coprincipal investigator is be finalised (normally in 1-2 working days). With the notification the user will receive a comprehensive "Information Package" describing the technical requirements and the options to receive the DDS data.
- In case the user decides to opt for the free "Envi-Ham" Software, he is required to send back to the P.I. email (<u>tta@esa.int</u>) a questionnaire with some technical information.
- 3. This information will be used to assess intended station compatibility with the DDS satellite signal, and to prepare the decryption key required to decode the DDS data stream (station dependent).

How many Co-PI's



- The EnviHam project has been first discussed during the AMSAT-I meeting of 2008.
- From the beginning of the project in June 2009, we have received so far 89 requests to join the project as Co-PI
- A big support has been received by Roberto Fontana, who has dedicated a full section on his website to the reception of Envisat <u>http://www.roy1.com/</u> (in Italian).
- 4. For this reason, at the moment the big represented nationality is Italian, but we have recently brought EnviHam to the attention of other European Groups interested in the reception of satellite imagery (mostly meteorological images).

How many Co-PI's



