The development of remote sensing over the past 20 years has increased our capacity to monitor the environment, understand & forecast its variability, manage natural resources, support humanitarian aid and emergencies management. Remote sensing is no longer a specialist technology, but simply a powerful tool. The interpretation of satellite information is a skill of strategic and economic importance, which should be developed widely and distributed globally.

The LearnEO! project supported by ESA aims to "stimulate the understanding and application of ESA EO data sets by implementing and maintaining an educational framework for teachers and students in the 18-25+ age group (upper high school to university level)"

LearnEO!: a user-driven project

LearnEO! has two main aspects. One is the development of online learning resources, peer-reviewed, concerning all Earth observation techniques, including hands-on lessons (using the Bilko UNESCO software), and a collection of data, available on the web site for educational purposes.

The other is to develop and foster a community of LearnEO! "users and producers": support this community throughout the duration of the project; and develop plans for continuing such support beyond the lifetime of LearnEO!

Including the wider Education and EO community

The LearnEO! web portal is designed to support the EO education community by offering easy access to all resources provided in the project. This includes:
- Easy access to data sets and description through keyword search, geographical location or selective browse tool,
- Overview of lessons, with links to more information and lesson downloads
- Software descriptions, with links to downloads and tutorial for image processing and display
- Searchable Resource Library with background information and extra tools
- Author area offering advice, support and a forum for registered lesson authors

On-line resources

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Bilko

LearnEO! builds on training resources developed over 25 years in UNESCO's Bilko project, and extends these to include new application areas and data types.

Bilko was conceived as free educational software for use on low-cost computers. Its core user community is still found in academic education. The software is suitable for teaching common image processing techniques, and in a way that encourages understanding.

Bilko supports most of the data types and analysis activities used in LearnEO! In some advanced lessons, more expert software tools may be needed; if so, the LearnEO! website explains how to obtain these.

LearnEO! Lesson Writing Competition started!

Prizes: €5000, €3000 and €2000

Register on the LearnEO! web site for updates on the competition and resources for lesson authors.