Teaching Satellite Oceanography with Bilko Software

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Bilko Components



The software: PC-based, easy to use, compact, and surprisingly powerful.

The introductory tutorial: A step by step approach to image analysis techniques.







The applied modules: Remote sensing used to tackle specific problems



The Bilko network: A thriving global community of users and producers.

The story so far...

Started with UNESCO support in 1987.

7 teaching modules produced by volunteers around the world and supplied to over 500 marine science laboratories and education establishments in 70 countries.



Software features

Supported image formats: Binary flat files (8,16,32-bit), HDF and USGS Mapgen formats, with plans for HDF 5, NetCDF and Geo-Tiff.

Connecting images: Up to 16 images may be linked to apply stretches, palettes, and transects to all the images with a single operation. This feature may also be used to create animations and colour composites. Subject to funding future versions will be capable of linking 256 images, using this to create Hovmoller plots.

Over 600 individual users are registered to download Bilko materials from the Internet. Many early users are now producing their own remote sensing lessons.

Bilko v.3 is currently under beta-testing at Southampton and Newcastle. New tutorials will take advantage of the increased functionality and support for a wider range of image formats.

Geometric correction: Images resampled to a geographical coordinate system using an existing 'master' image and tables of ground control points.

Image arithmetic: Mathematical formula appled to linked images allow the use of simple algorithms.



UNESCO-Bilko in the Future



Bilko v.3 relase: Software and introductory tutorial scheduled for release early 2004.



Revision of old material: Existing lessons expanded to include new software features.





New web-site: New, interactive site reflecting recent developments in the Bilko community.





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