

New ERS SAR High Rate Products and Formats

WHY are new ERS SAR new products and formats are needed?

Because users want an easy way to work with ENVISAT ASAR and ERS SAR data together.

WHICH formats and products and formats will be provided available?

ERS Products will be available in both in the established CEOS and the new in ENVISAT format.

HOW will the new products will be distributed?

They will be distributed on CD and via FTP as is current practice.

WHEN will the new products and formats will be available?

They will available from January 2005 onwards.

Since the start of the ERS mission in 1991, ERS-1 and ERS-2 SAR products have been generated using the ESA VMP SAR processor in CEOS format. The VMP processor has been progressively upgraded throughout the ERS mission, evolving with it and providing continuous improvements in product quality.

ENVISAT ASAR products have been generated since 2002 using the ESA PF-ASAR processor in ENVISAT format.

Since the launch of ENVISAT, many users have taken advantage of these simultaneous SAR missions. Therefore, in order to support the synergistic use of ERS and ENVISAT SAR data, and to increase the exploitation potential of the 13-years of ERS data, ESA has decided to use the same processor and formats for both ERS SAR and ENVISAT ASAR data.

With the new ERS SAR processor, the family of ERS SAR products will be enlarged to include the Medium Resolution Products, which are already part of the ASAR catalogue.

New ERS SAR products will be made available only in ENVISAT format. However, classical ERS products will be available in both ENVISAT and CEOS formats to ensure continuity.

The full list of ERS SAR products that will be available is provided below:

PRODUCT TYPE	FORMAT	PRODUCT NAME
Level 0	CEOS	RAW
	ENVISAT	ERS_IM__0P
Single Look Complex	CEOS	SLC
	ENVISAT	ERS_IMS_1P
Precision Image	CEOS	PRI
	ENVISAT	ERS_IMP_1P
Geocoded Image	ENVISAT	ERS_IMG_1P
Medium Resolution Image	ENVISAT	ERS_IMM_1P

The information content of all products will be the same whether they are in CEOS or ENVISAT format. Only the formatting will be different.

The new ERS SAR products in CEOS and ENVISAT format will be supported by BEST (<http://earth.esa.int/services/best/>) and, in addition, the products in ENVISAT format will also be supported by EnviView (<http://earth.esa.int/services/enviview/>).

The sample products provided on this CD have not been calibrated. The calibration constant is set to a default value of 1 for all products.

Operational processing of ERS SAR data using the ASAR core processor as will start from January 2005.