



GMES Fast Track Service Land
<G2 - AGRIENV- Soil Erosion>

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17-18 Nov 2008



geoland





■ Concise product description

- Development of soil erosion risk assessment methodology and services at local and regional scale
 - Production of seasonal soil erosion maps based on Earth Observation (EO) data & GIS modeling

■ State of the art / overview of the methodology

- Review and potential update of the GEOLAND's proposed methodology
- Review of both existing services and scientific papers

■ Related projects

- GEOLAND
- GSE-Land
- PESERA (Pan-European Soil Erosion Risk Assessment)
- RUSLE (Revised Universal Soil Loss Equation)



■ Test sites on which the product will be produced

- EU-15 Strymonas river basin



■ Status on national / regional user interest (*for test site leaders only*)

- NAGREF
- ETC- LUSI
- ...



■ Needs of CMS products

■ BioPar

- ?

■ Euroland

- Land cover maps; possibility of including Mediterranean classes

■ SATChMo

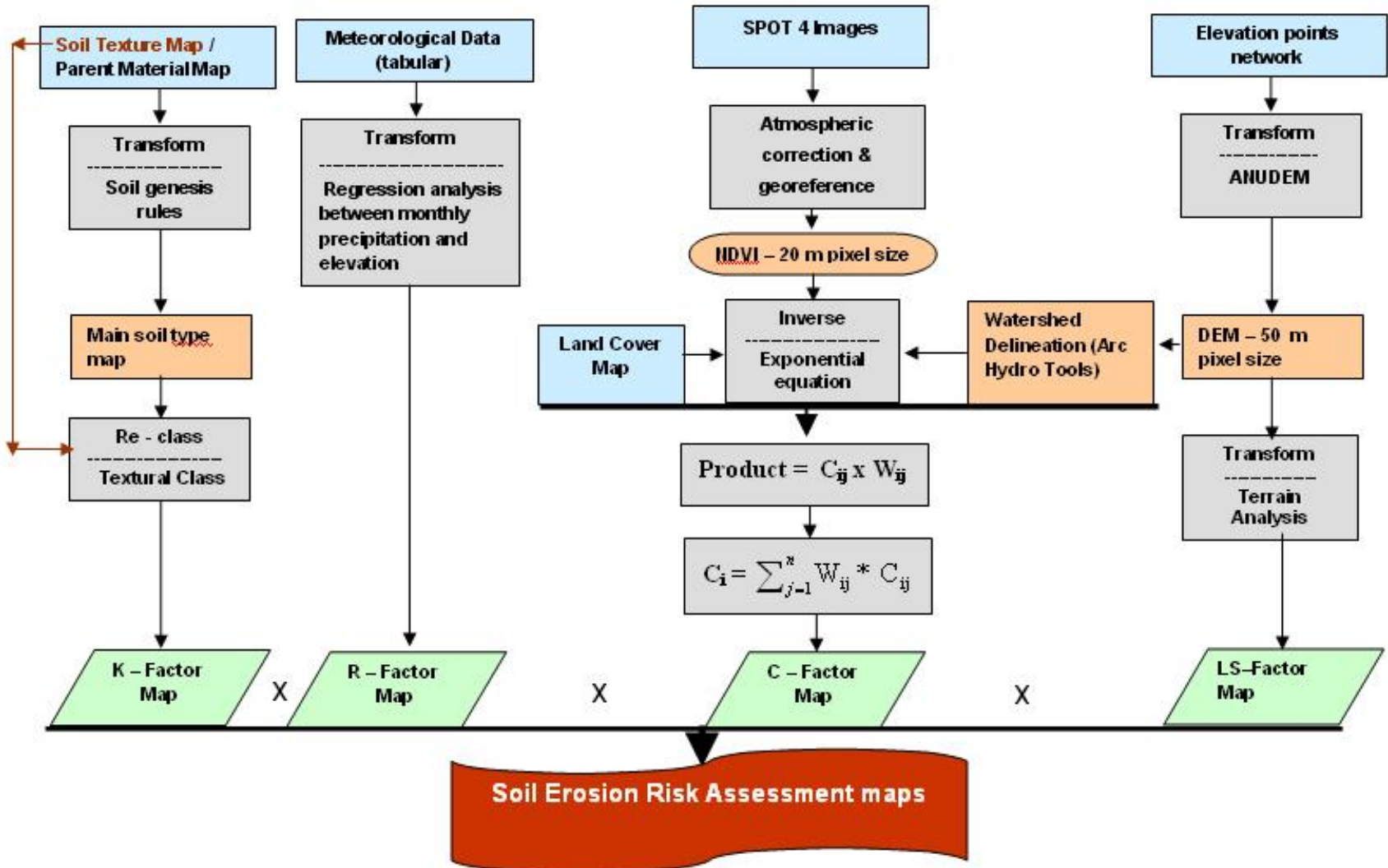
- Existence of vegetation
- Density of vegetation
- Definition of minimum mapping unit

■ Needs of in situ data

- meteorological data
- Soil Data
- Geological data
- land cover maps
- DEMs
- Further needs will be identified following the selection of the specific methodology to be used



■ GEOLAND1 - methodology flowchart





■ Concise product description

- Bare soil rate: indicator quantifying the area of arable land seen as bare soil

■ State of the art / overview of the methodology

- Use of the soil cover fraction biophysical parameter over arable lands
- Indicator extent: regional or local depending on test sites
- Indicator scale: to be defined with users:
 - Administrative scale: NUTS2/NUTS3
 - Hydrographical scale

■ Related projects

- AGRIMOD (French GMES project)



- **Test sites on which the product will delivered, starting April 2010**
 - Seine-Normandie catchment (regional and local extent)
 - Guadalquivir catchment (regional and local extent)
 - Struma – Strymonas catchment (regional and local extent) – in collaboration with ReSAC

- **Status on national / regional user interest (*for test site leaders only*)**
 - Interest of French users confirmed (CORPEN, IFEN, AESN)



■ Needs of CMS products

■ BioPar

- Monthly BP-11 (Januray 2010 to December 2010), monthly BP-10 (Januray 2010 to December 2010)
- NRT production
- BP-11: same local areas as for AE-01
- BP-10: ~whole Seine-Normandie, Guadalquivir and Struma-Strymonas catchments

■ SATChMo

- no new production effort – included in AE-01
- SM-15 on each test site in 2010

■ Needs of in situ data

- No data needed for the production
- Validation implicit through the validation of CMS products