

## Calculation of Nutrient load (N and P) for Europe on the basis of HSMU's

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For these calculations the output of modelled CAPRI data is linked to the European HSMU map.

The results are three maps, one shape file and two rasters :

`\EU_nutr.shp`

`\eu_nit`

`\eu_pot`

The relevant columns in the shape file are:

- NTOTUAAR: applied kg N per hectare from fertilizer and manure (including grazing animals).
- PTOTUAAR: applied kg P (P2O5) per hectare from fertilizer and manure (including grazing animals)

The rasters contain exactly the same data, only for N and P separately. So the value field in the raster `eu_pot=PTOTUAAR` and the value field in `eu_nit=NTOTUAAR`.

$NTOTUAAR = (NMIN+NMAN)*UAAR$

$PTOTUAAR = (PMIN+PMAN)*UAAR$

NMIN = Mineral fertilization consumption, N (kg per hectare)

NMAN = N from Manure (kg per hectare)

PMIN = Mineral fertilization consumption, (kg per hectare)

PMAN = P from manure (kg per hectare)

UAAR = Utilizable agricultural area (share 0-1)

The maps cover EU 27 without larger inland water bodies or built-up areas

Projected Coordinate System: ETRS\_1989\_LAEA\_L52\_M10

Projection: Lambert\_Azimuthal\_Equal\_Area

False\_Easting: 4321000.00000000

False\_Northing: 3210000.00000000

Central\_Meridian: 10.00000000

Latitude\_Of\_Origin: 52.00000000

Linear Unit: Meter

Geographic Coordinate System: GCS\_ETRS\_1989  
Datum: D\_ETRS\_1989  
Prime Meridian: Greenwich  
Angular Unit: Degree

