



I N T E G R A T E D S I N K E N H A N C E M E N T A S S E S S M E N T



I N S E A
P A R T N E R S

INSEA Data processing

for EU25 biophysical modelling

by

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Brussels 21.-22. June 2006

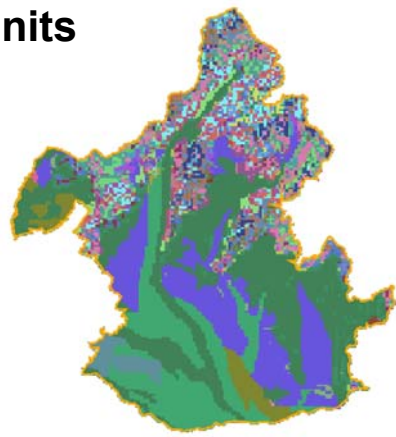
Goal and Main Questions

Concept of Homogeneous Response

Units – A way, how data of different quality, scales and aggregation levels could be passed to the EPIC-GIS workspace

Database Logic and Publishing the indicators – I/O interface

Homogeneous units (1:1,000,000)



GIS intersect

NUTS2: SK02

Elevation: < 300m, 300-600m, 600-1100m, > 1100m

Slope: < 3%, 3-6%, 6-10%, 10-15%, > 15%

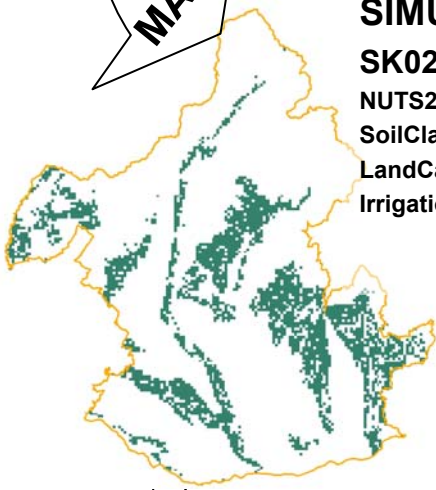
Texture: coarse, medium, medium-fine, fine, very fine, peat

Stoniness: low content, medium content, high content

Soil depth: shallow, medium, deep

Braking down statistical information (e.g. Crop shares)

MASK

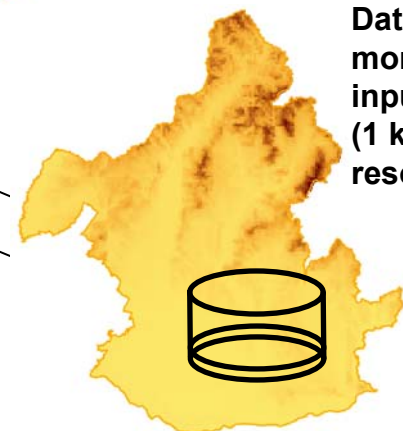
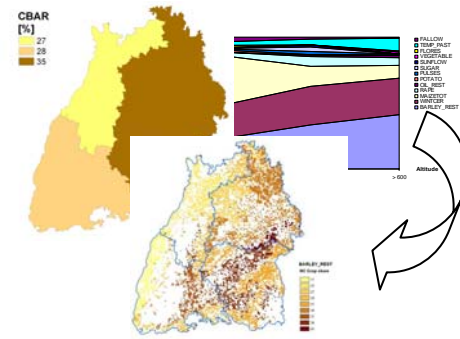


SIMULATED ENTITY:

SK02_33_21_0
NUTS2: SK02
SoilClass: 33
LandCat: 21
Irrigation: 0

Majority Mean

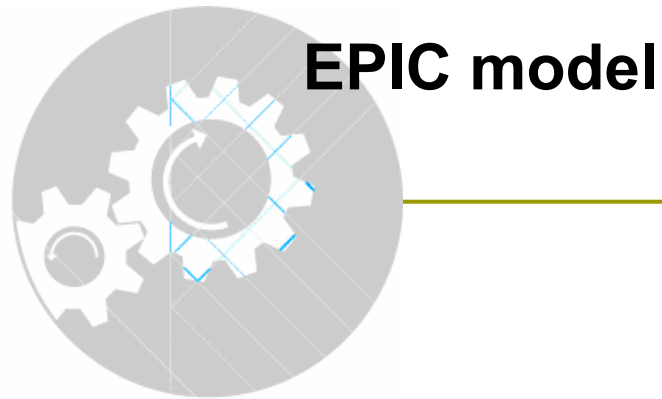
ID	UTM	UTM	UTM	UTM	UTM
UTM	UTM	UTM	UTM	UTM	UTM
AT11_22_179_0	AT11_22_179_0	AT11_22_179_0	022	0179	
AT11_22_222_0	AT11_22_222_0	AT11_22_222_0	022	0222	
AT11_22_223_0	AT11_22_223_0	AT11_22_223_0	022	0223	
AT11_22_267_0	AT11_22_267_0	AT11_22_267_0	022	0267	
AT11_22_278_0	AT11_22_278_0	AT11_22_278_0	022	0278	
AT11_22_283_0	AT11_22_283_0	AT11_22_283_0	022	0283	
AT11_22_284_0	AT11_22_284_0	AT11_22_284_0	022	0284	
AT11_22_312_0	AT11_22_312_0	AT11_22_312_0	022	0312	
AT11_22_312_1	AT11_22_312_1	AT11_22_312_1	022	0312	
AT11_22_342_0	AT11_22_342_0	AT11_22_342_0	022	0342	
AT11_22_402_0	AT11_22_402_0	AT11_22_402_0	022	0402	
AT11_22_403_0	AT11_22_403_0	AT11_22_403_0	022	0403	
AT11_22_414_0	AT11_22_414_0	AT11_22_414_0	022	0414	
AT11_22_441_0	AT11_22_441_0	AT11_22_441_0	022	0441	
AT11_22_586_0	AT11_22_586_0	AT11_22_586_0	022	0586	
AT11_23_120_0	AT11_23_120_0	AT11_23_120_0	023	0120	
AT11_23_177_0	AT11_23_177_0	AT11_23_177_0	023	0177	
AT11_23_223_0	AT11_23_223_0	AT11_23_223_0	023	0223	
AT11_24_289_0	AT11_24_289_0	AT11_24_289_0	024	0289	
AT11_24_284_0	AT11_24_284_0	AT11_24_284_0	024	0284	
AT11_24_312_0	AT11_24_312_0	AT11_24_312_0	024	0312	
AT11_24_342_0	AT11_24_342_0	AT11_24_342_0	024	0342	
AT11_24_343_0	AT11_24_343_0	AT11_24_343_0	024	0343	
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AT11_24_371_0	AT11_24_371_0	AT11_24_371_0	024	0371	
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AT11_24_436_0	AT11_24_436_0	AT11_24_436_0	024	0436	
AT11_24_438_0	AT11_24_438_0	AT11_24_438_0	024	0438	
AT11_24_441_0	AT11_24_441_0	AT11_24_441_0	024	0441	
AT11_24_461_0	AT11_24_461_0	AT11_24_461_0	024	0461	



Database of monoparametric input GIS grids (1 km resolution)

Expert-based pedo-transfer functions to complete the input list

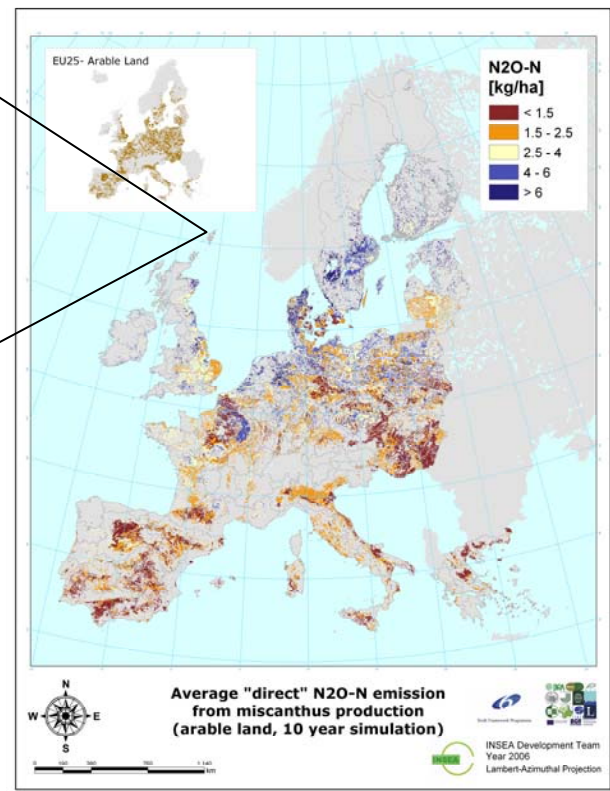
PTF
 WP = THR + (THS - THR) ...



Attributes of eu25

OBJECTID*	ID	ID2	ID3	NUTS2	LANDCAT	SOILCLASS	irrig	X	Y
1	AT12_312_444	AT12_312_444_0	660_312_444	AT12	312	444	0	436732.000628	129698.000896
2	AT12_31_444	AT12_31_444_0	660_31_444	AT12	31	444	0	437732.000117	129698.000896
3	AT12_24_444	AT12_24_444_0	660_24_444	AT12	24	444	0	438731.999606	129698.000896
4	AT12_24_382	AT12_24_382_0	660_24_382	AT12	24	382	0	439731.999095	129698.000896
5	AT12_31_382	AT12_31_382_0	660_31_382	AT12	31	382	0	440732.000632	129698.000896
6	AT12_24_444	AT12_24_444_0	660_24_444	AT12	24	444	0	441732.000121	129698.000896
7	AT12_31_382	AT12_31_382_0	660_31_382	AT12	31	382	0	437732.000117	128697.999359
8	AT12_31_382	AT12_31_382_0	660_31_382	AT12	31	382	0	438731.999606	128697.999359
9	AT12_31_282	AT12_31_282_0	660_31_282	AT12	31	282	0	439731.999095	128697.999359
10	AT12_24_284	AT12_24_284_0	660_24_284	AT12	24	284	0	440732.000632	128697.999359
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12	AT12_24_451	AT12_24_451_0	660_24_451	AT12	24	451	0	445732.000125	128697.999359
13	AT12_31_451	AT12_31_451_0	660_31_451	AT12	31	451	0	446731.999614	128697.999359
14	AT12_24_451	AT12_24_451_0	660_24_451	AT12	24	451	0	447731.999103	128697.999359
15	AT12_312_451	AT12_312_451_0	660_312_451	AT12	312	451	0	457732.000136	128697.999359
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18	AT12_31_282	AT12_31_282_0	660_31_282	AT12	31	282	0	439731.999095	127697.999870
19	AT12_31_282	AT12_31_282_0	660_31_282	AT12	31	282	0	440732.000632	127697.999870
20	AT12_24_282	AT12_24_282_0	660_24_282	AT12	24	282	0	441732.000121	127697.999870
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22	AT12_24_282	AT12_24_282_0	660_24_282	AT12	24	282	0	443731.999099	127697.999870
23	AT12_31_480	AT12_31_480_0	660_31_480	AT12	31	480	0	444732.000636	127697.999870
24	AT12_24_480	AT12_24_480_0	660_24_480	AT12	24	480	0	445732.000125	127697.999870
25	AT12_31_480	AT12_31_480_0	660_31_480	AT12	31	480	0	446731.999614	127697.999870
26	AT12_24_480	AT12_24_480_0	660_24_480	AT12	24	480	0	447731.999103	127697.999870
27	AT12_31_480	AT12_31_480_0	660_31_480	AT12	31	480	0	448732.000640	127697.999870

I/O interface
ESRI Geodatabase



INSEA Data processing for EU25 biophysical modelling

- Derive initial values for modelling**
- GIS workspace for EPIC model using concept of homogeneous response units**
- Database of inputs**
- Interface for publishing results**