

Expert Team on surface processes

Summary of planned actions



Modelling

- Implementation and validation of FLake (offline – coupled)
[COSMO/ALADIN/LACE/HIRLAM/MetOffice]
 - *collaboration on validation datasets*
 - Implementation and evaluation of SURFEX in
ALADIN/ALARO/HARMONIE
[ALADIN/LACE/HIRLAM]
 - Introduction of new features in SURFEX (snow- forest
canopy, desertic dust transport, snow/sea-ice)
[ALADIN/LACE/HIRLAM]
 - Diagnostics on 2m parameter diagnostic formulations (stable
conditions)
[ALADIN/LACE/HIRLAM/COSMO]
 - *collaboration on validation datasets*
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Data assimilation

- Use of CANARI analysis system for screen-level parameters, SST, sea-ice + OI soil analysis
[ALADIN/LACE/HIRLAM]
 - Evaluation of satellite derived albedos (from LandSAF)
[ALADIN/LACE/MetOffice]
 - Development of a snow analysis scheme using conventional and satellite observations
[ALADIN/HIRLAM/LACE/COSMO/MetOffice/ECMWF]
 - Development and validation of an EKF soil/vegetation analysis scheme (within SURFEX)
[ALADIN/LACE/HIRLAM/ECMWF]
 - *Use of improved forcing datasets for radiation and precipitation (LandSAF, OPERA) for LDAS : all of us ?*
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Towards concrete actions (1)

- Circulate documentation on surface processes for each consortium (modelling, data assimilation, databases)
 - Improve current physiographic land cover data bases for soil texture, vegetation, urban areas, lakes :
 - *lake depths : make the existing database compatible with land cover databases – extend the current database (data collection) – collaborate with ECMWF (variational approach)*
 - Local validation sites : observational datasets (soil moisture, fluxes, weather parameters) : **[ET on validation - physics]**
 - *SMOSMANIA (MF), Lindenberg, Payerne, Cabauw*
 - *Lakes (Alquevar, Balaton)*
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Towards concrete actions (2)

- Read workplans from the other ETs (when available) in order to establish contacts and collaborations
 - *Contribute to the ET on System Aspects regarding surface parameters*
 - Reconvene for a 1 day workshop (12 June 2009) in Toulouse after the 2nd “workshop on remote sensing and modeling of surface properties” (international TOVS working group)
 - Get involved in the organization of the next lake workshop (part of a more general workshop on surface ? 2011 ?)
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