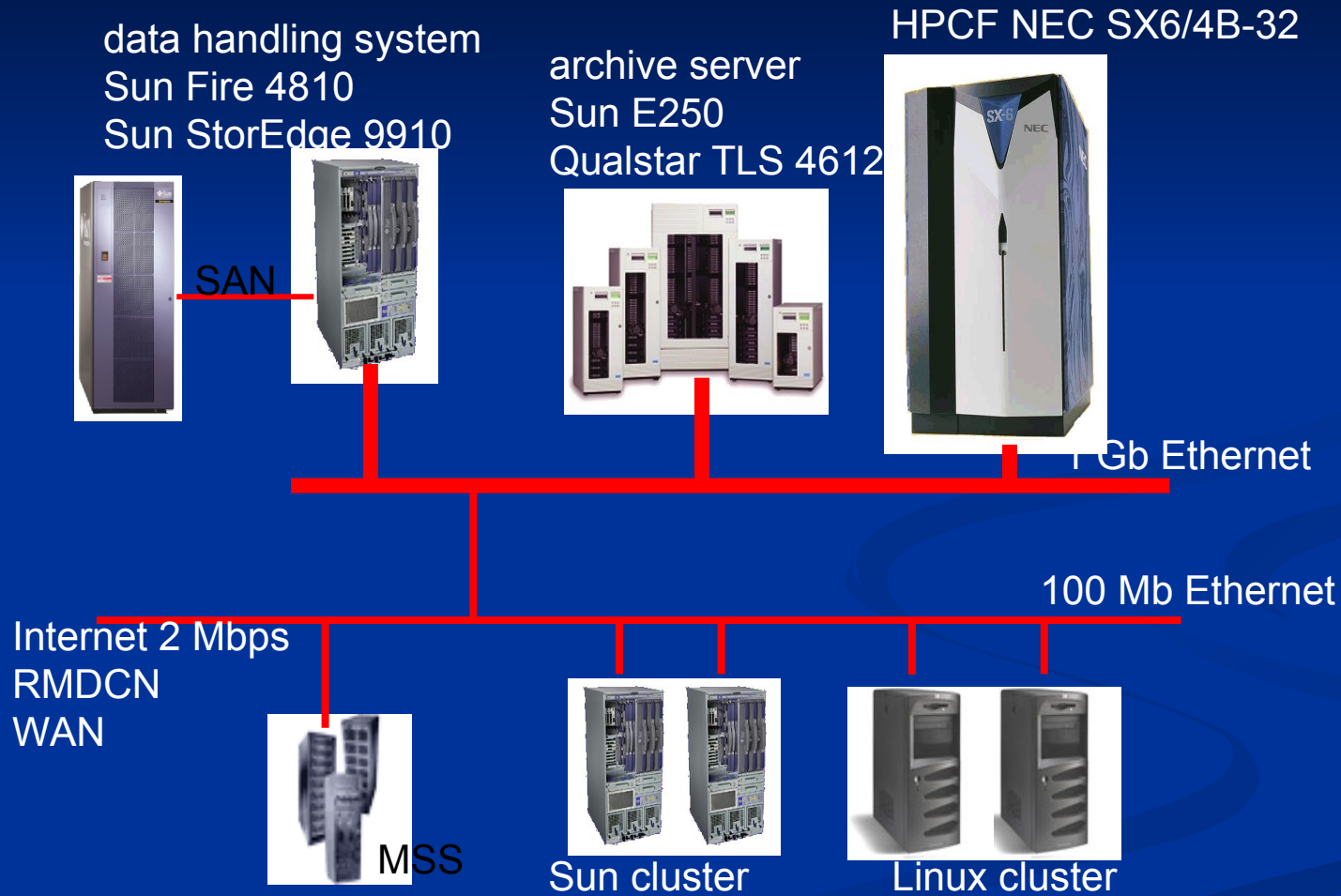# Status report of ALADIN at CHMI

Martin Janoušek

Highlights

- resolution upgrade of ALADIN/CE
- ALADIN/MFSTEP operational
- verification scores available from July 2002
- products for RODOS

- SLHD / drag & lift / no envelope combination testing
- low-level cloudiness improvement
- PBL height diagnostics

Computing environment

data handling system
Sun Fire 4810
Sun StorEdge 9910

SAN

archive server
Sun E250
Qualstar TLS 4612

HPCF NEC SX6/4B-32

1 Gb Ethernet

100 Mb Ethernet

Internet 2 Mbps
RMDCN
WAN

MSS

Sun cluster

Linux cluster

Operational suite

- ALADIN/LACE domain
- 309x277 grid points, 159x143 truncation (linear)
- 9 km resolution, 43 vertical levels
- time step 360 s
- CY25T1_op4
- COCONUT tuning + modified Xu-Randal scheme
- DF blending cycle
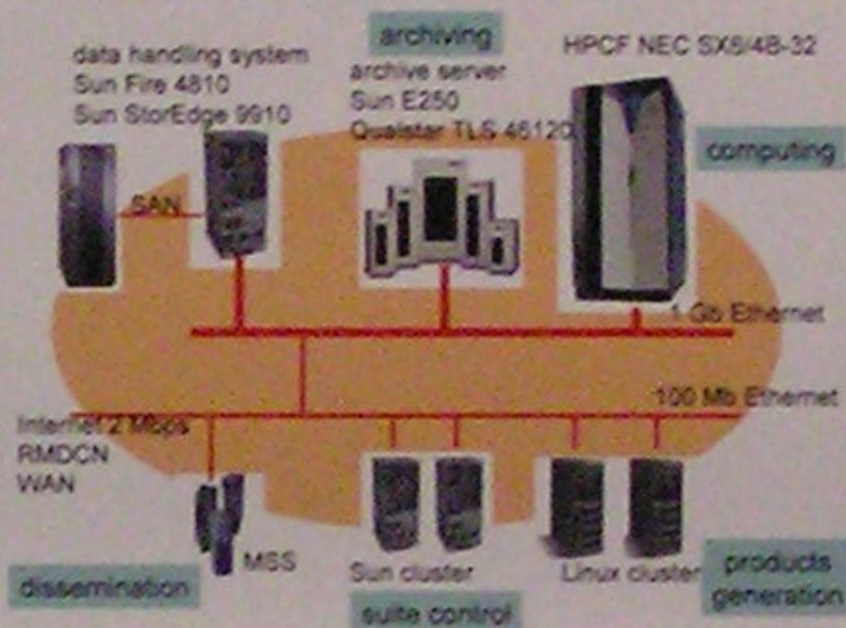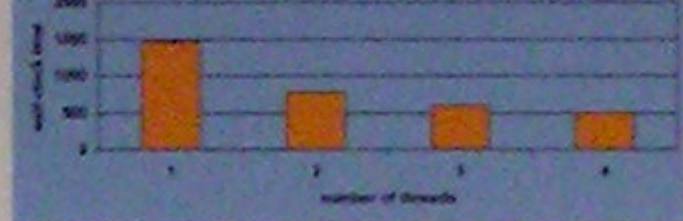- DF blending + incremental DFI on short cut-off

- hourly DIAGPACK

MFSTEP

Mediterranean Forecasting System Toward Environmental Predictions

- **589x309 grid points**
- **299x159 truncation (linear)**
- **9.5 km resolution**
- **37 levels**
- **coupled to ARPEGE, 3h coupling period**

- **continuous long cut-off blending cycle**

- **retuned on case studies over sea (Black Sea case)**
  - **modified thermal roughness length over sea**
  - **moist gustiness parameterization**
  - **cloud parameterization scheme tuning**

- **production forecast 1x week to +120h**
- **OpenMP version in the preparation**

domain (309x277 grid points, linear truncation E159x143, Δx=9km)
...ical levels, envelope orography
...ep 360 s
...filter spectral blending long cut-off cycle (6h cycle, filtering
...ation E47x42, no DFI in the next +6h guess integration)
...filter blending + incremental DFI initialization of short cut-off
...tion analysis
...GE/ALADIN cycle 25T1_op4
...and physical parameterization scheme COCONUT with modified parameters
...u-Randal cloudiness scheme
...pling interval
...0 12 UTC forecast to +48h
...on-line fullpos
...rocessing of near-surface parameters into selected localities using obs-
...rs of CANARI
...oducts for RODOS MATCH and LSMC modules

...EP (Mediterranean Forecasting System Toward Environmental Predictions):
...ding cycle + 120h forecasts once per week (9.5 km, 589x309 grid)

...DIAGPACK analysis of T_{2m}, RH_{2m}, v_{10m}, KO-index, CAPE, MOCON (Czech
...observations only)
...FPACK on cycle AL12, port to ODB cycles (AL25) nearly ready

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Sun StorEdge 9910

archiving
archive server
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Qualstar TLS 46120

HPCF NEC SX6/48-32

computing

SAN

1 Gb Ethernet

100 Mb Ethernet

Internet 2 Mbps
RMDCN
WAN

MSS

dissemination

Sun cluster

suite control

Linux cluster

products
generation

G suite: testing options for new operational v...