



EUSO Subsystem 10 “Scientific Data Analysis”

Pre-Phase A Activities



Previous meeting: Palermo, 3-4 May 2001

(in conjunction with the EUSO meeting on
“Simulation, Ground Segment, Outreach”)

Next meeting: Annecy, 4 October 2001

(in the framework of
“Software environment for simulations and data analysis”)



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Pre-Phase A Activities

Palermo, 3-4 May 2001

Specific items of interest for Scientific Data Analysis and Data Handling:

- ❖ Data content: scientific, housekeeping, ancillary, ISS
- ❖ Data size and telemetry: EECR, atmosphere sounding, atmospheric phenomena
- ❖ Data analysis system:
 - ❖ algorithms for event reconstruction (geometry, energy)
 - ❖ background estimation
 - ❖ atmosphere sounding
 - ❖ software environment
- ❖ Instrumental response study: from simulated data
- ❖ Documentation



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Pre-Phase A Activities

An overview of “critical points” in the definition of the
EUSO Scientific Data Analysis has been given at the

27th ICRC, Hamburg, Germany, August 2001

“EUSO: Ground Data Handling and Outreach”

M.C. Maccarone and T. Mineo

Proc. ICRC 2001, Vol. HE, pp.852-855



EUSO Subsystem 10

“Scientific Data Analysis”

Phase A Activities

Anncny, Tuesday, 4 October 2001

“Software environment for simulations and data analysis”

What we have to do for EUSO-Phase A “Scientific Data Analysis”?

Introduction on:

- ❖ **data content, size, and telemetry**
- ❖ **data analysis package (and environment)**
 - **to reconstruct simulated data,**
 - **to study the EUSO instrumental response, and then**
 - **to help the optimisation of the instrument design itself**
- ❖ **participant people**
- ❖ **time schedule in accordance with the rest of EUSO Phase A**



EUSO Subsystem 10

“Scientific Data Analysis”

Phase A Activities

Strict correlation with the other EUSO Subsystems, mainly:

- **“Trigger & OBDH”**
- **“Atmosphere Sounding”**
- **“Simulations”**
- **“Ground Segment”**