Few remarks and propositions for the EUDET test plans for 2008

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Outline

- **Reminder of initial plans and specification for the telescope and DAQ**

- **DAQ modifications: "standard" analog sensors (plus non-sparsified binary) versus sparsified binary**

- **Conclusions: after discussion**

Initial plans for the DAQ (as far as I remember them: this may represent rather my expectation rather than the reality)
The first goal: fully exploit the demonstrator sensors capability

"Ideal" DAQ for the demonstrator (and after…)

• **Speed:** 20 MHz for MimoTEL (and Mimosa18), some sensors (Mimosa5) would allow more. Present EUDET DAQ implementation: 10 MHz

• **Flexibility:** easily programmable (through software parameters) set of few parameters to define:

 - event (array) size

- delay between START (RESET) and the first pixel

- clock frequency

- co-existence of boards (for example MimoTEL with Mimosa10)

Present implementation: hard-wired

• **Sparsification:** (for the reference sensors): implemented, but probably not in a "flawless" version (no reset between events)

My (personal) recommendation for 2008

- Work hard on present DAQ version ("the demonstrator"), it is still a lot to be done to fully exploit the sensor performance (and with increased flexibility, we may open the window for easy testing of number of existing and future sensors). In particular after (easy) implementation of a digital "daughter board"…

- Clearly define the goal for the Mimosa22+ DAQ:
shall we keep EUDRB working as a data buffer (the speed is a key issue) or we ask for some built-in intelligence (real clustering, track fitting → at least for the simplest single-track event topology…)