face the invisibility

with AMS02

AMS-02

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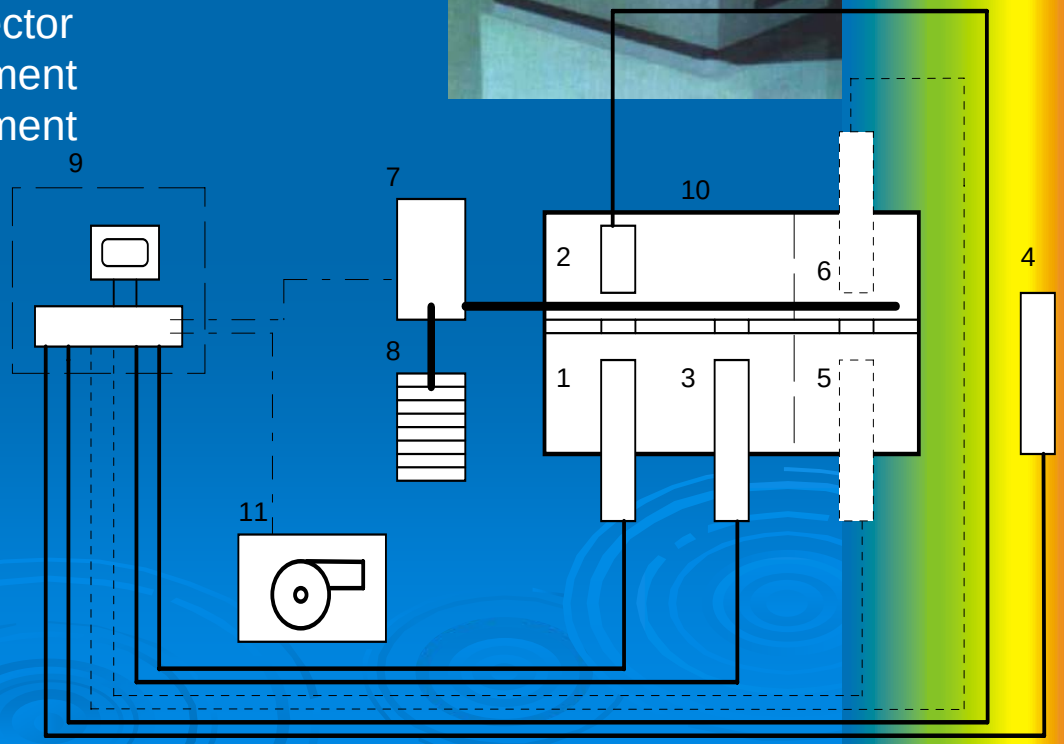
AMS 02

components

The equipment consists of the following units (fig.):

A. Unit for continuous sampling:

1. Aerosol filter + NaI(Tl) detector
2. Aerosol filter + PIPS-detector
3. Iodine filter (molecular) +NaI(TI)-detector
4. Iodine filter (organic) + NaI(TI)-detector
5. Optional, Special measuring equipment
6. Optional, Special measuring equipment
7. Filter manipulator
8. Racks for filters (filter stock)
9. Computer and control unit
10. Lead shielding
11. Maintenance-free air flow pump



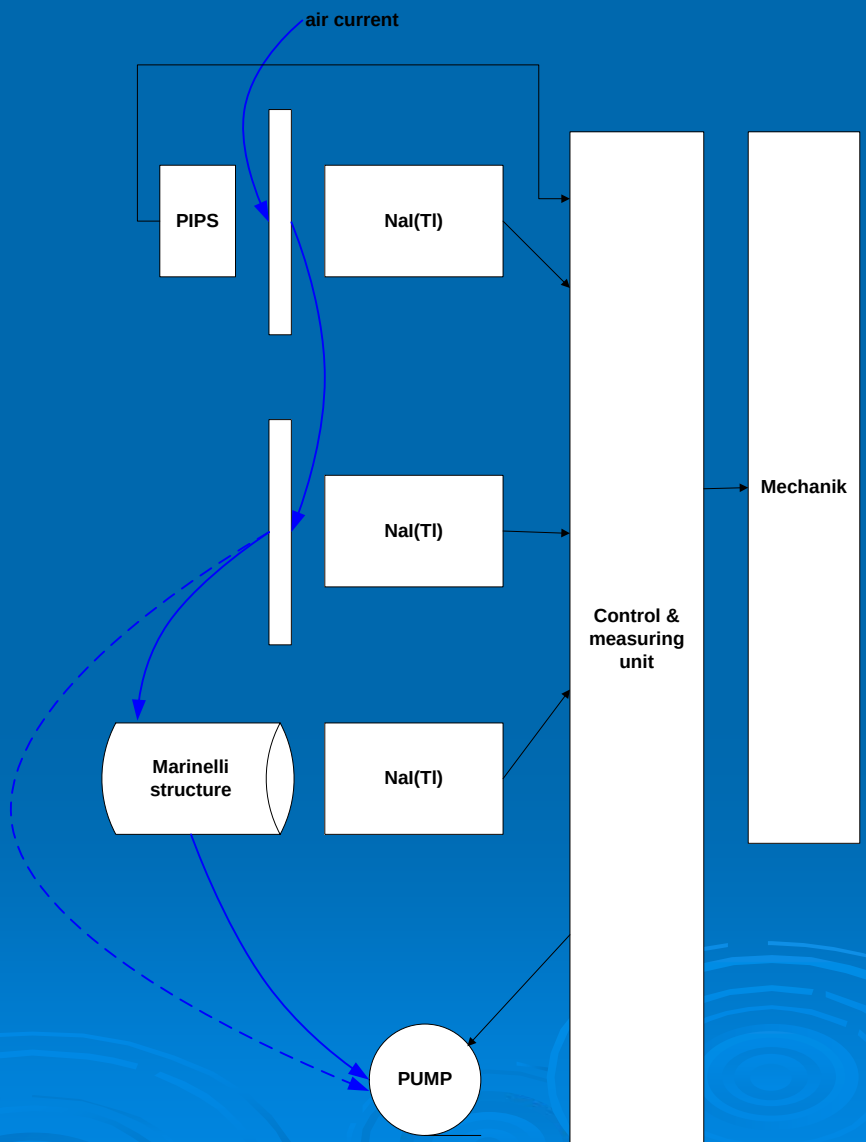
Complete measuring station

Include:

- AMS02
- RS03/X
- Weather station with temperature, wind speed, wind direction, rain perception

AMS-02

Scheme of sampling, measuring and control units

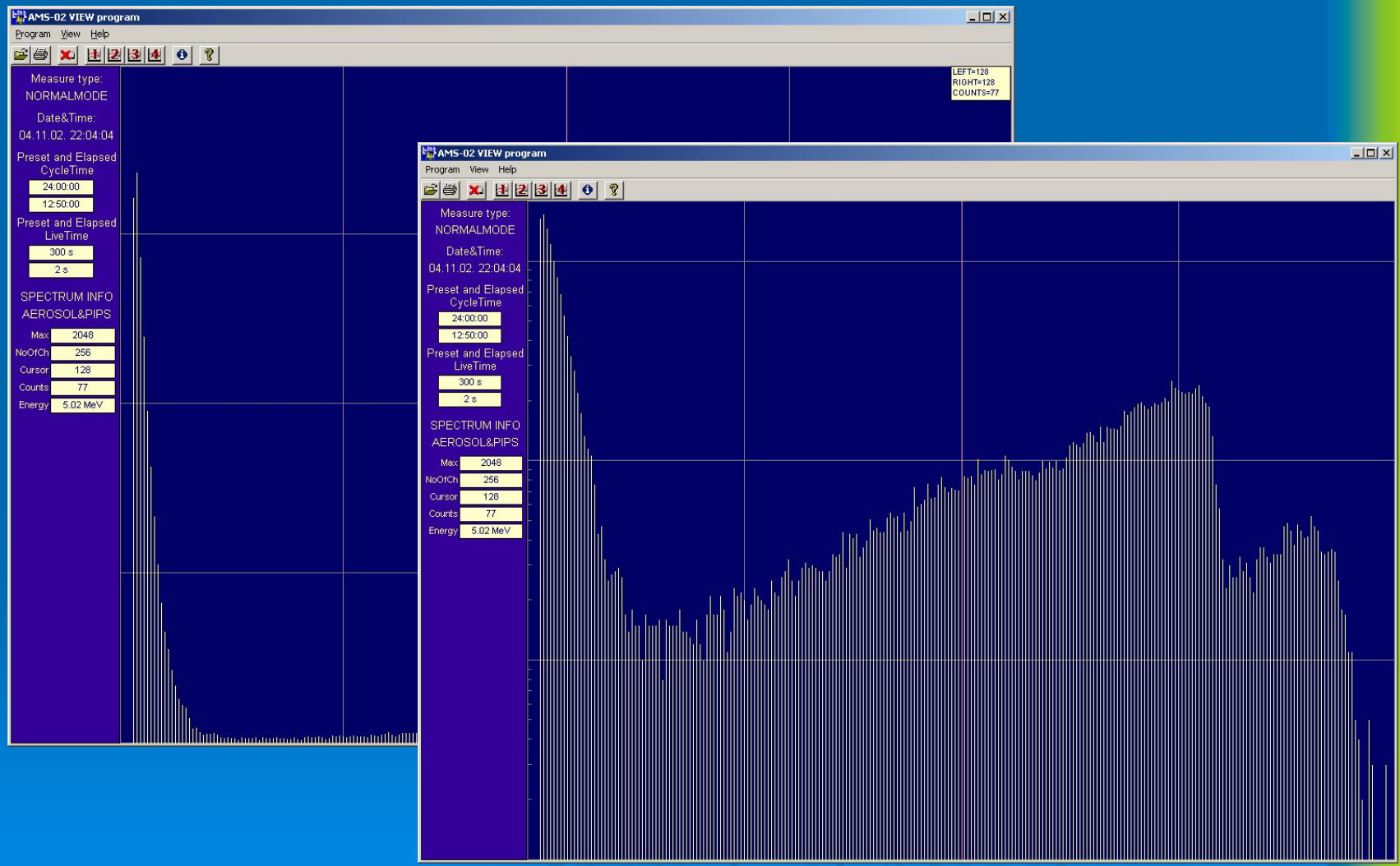


PIPS Detector

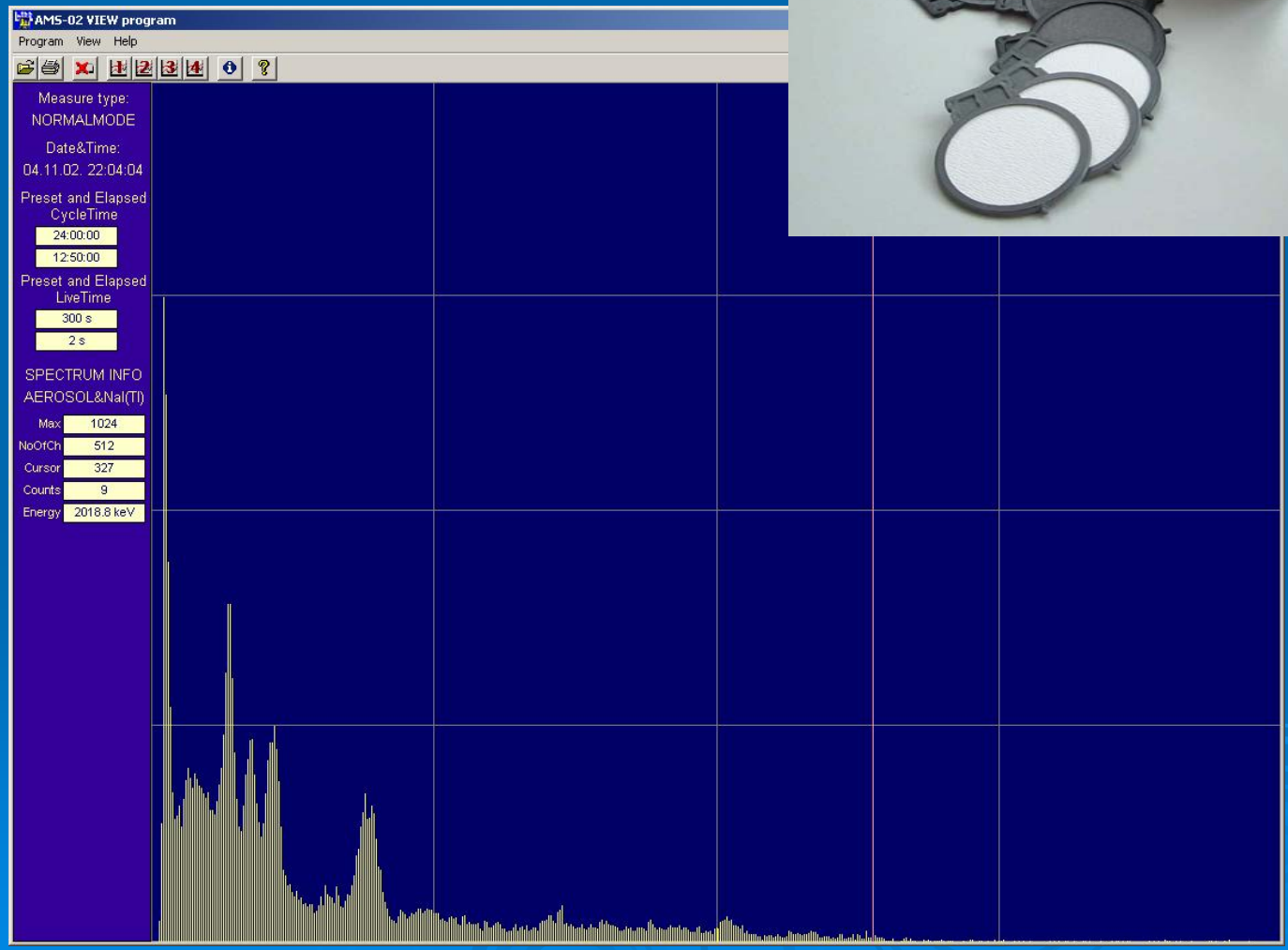
- Passivated Implanted Planar Silicon detector

resolution
α 55 keV (^{241}Am)
β 30 keV (continuous spectrum)

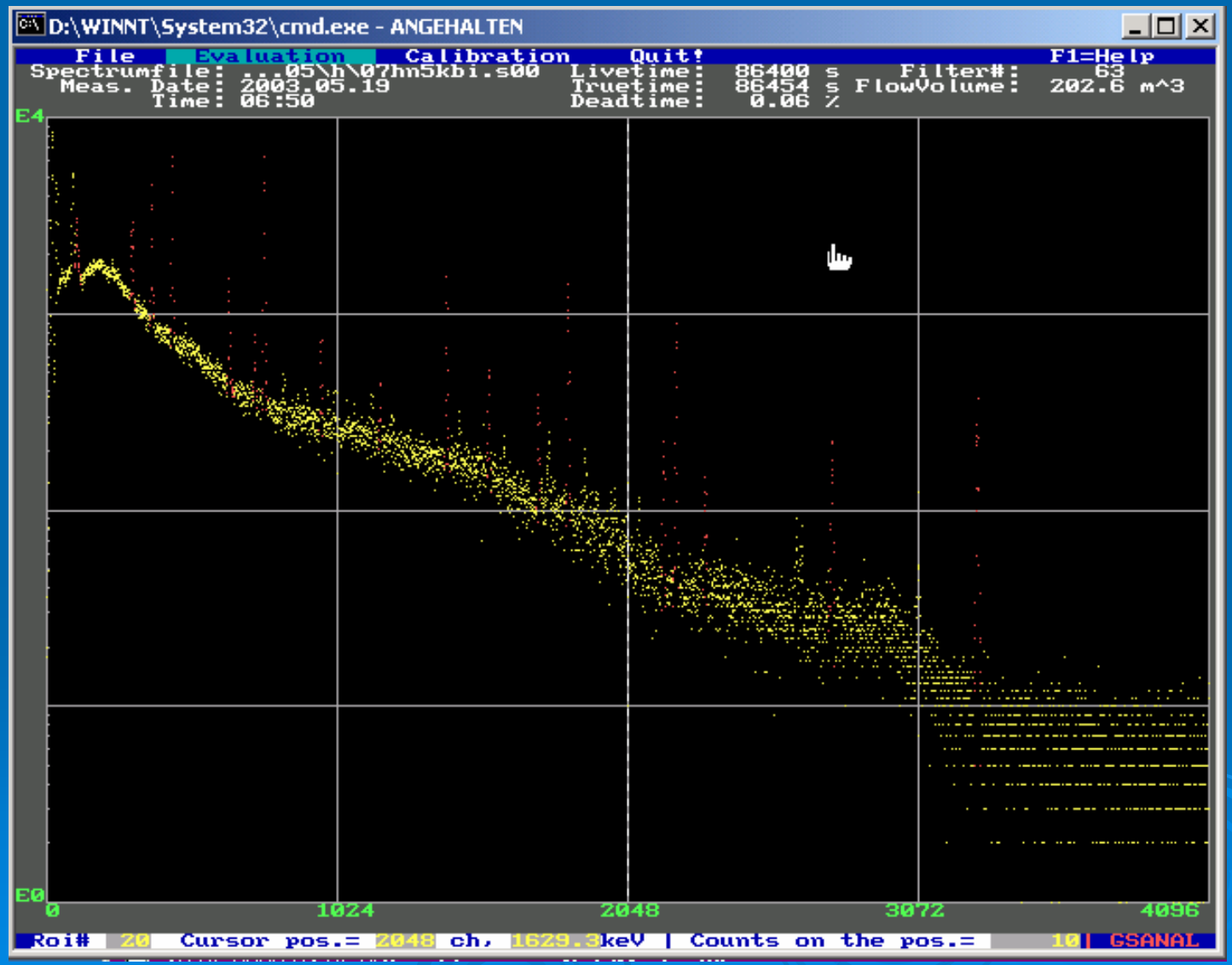
PIPS Spectra (^{222}Rn- and ^{220}Rn-descendants – alpha- and beta-regions)



NaI(Tl) gamma detector

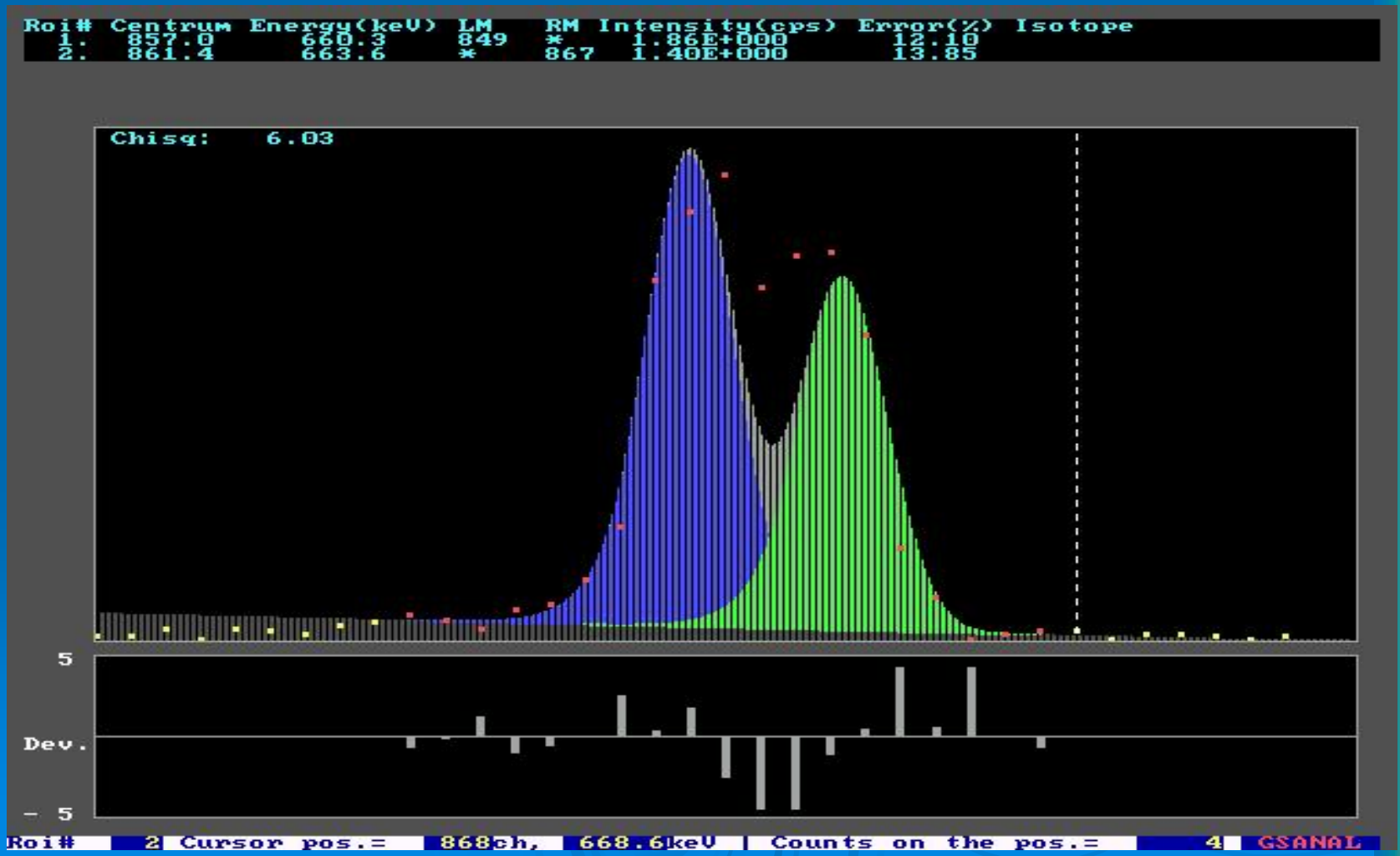


HP Ge gamma detector

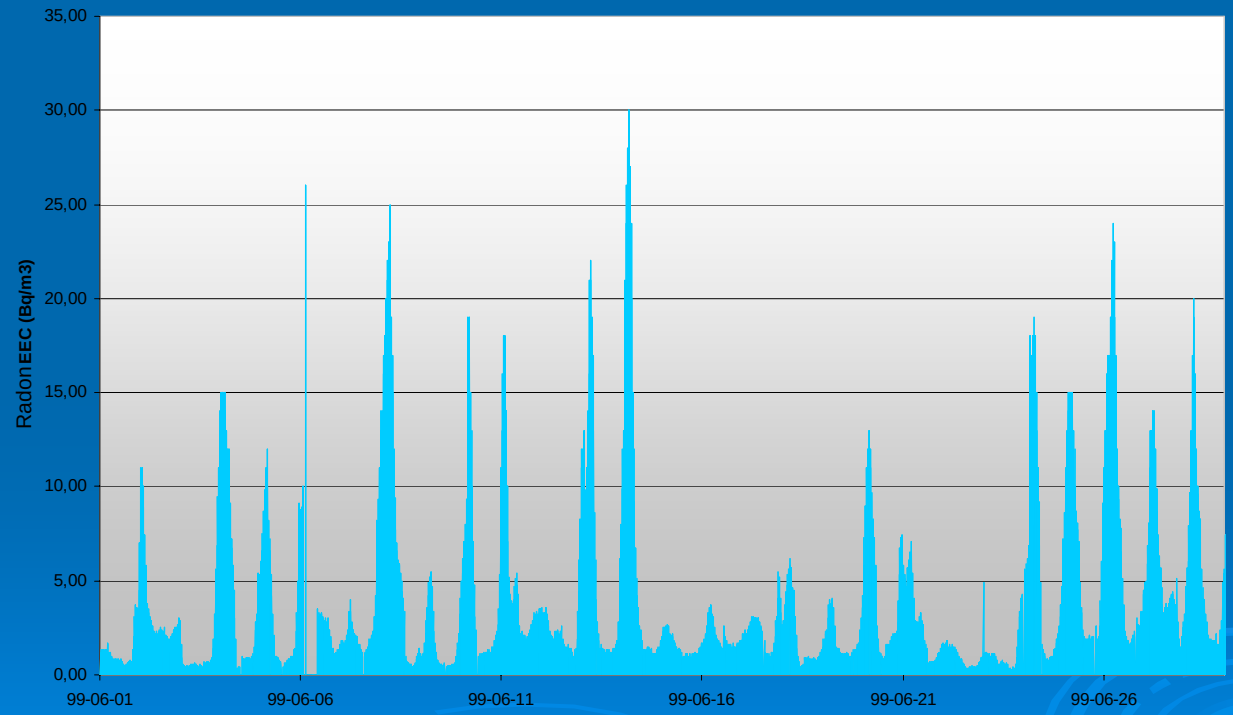


Evaluation of gamma spectrum [GSANAL]

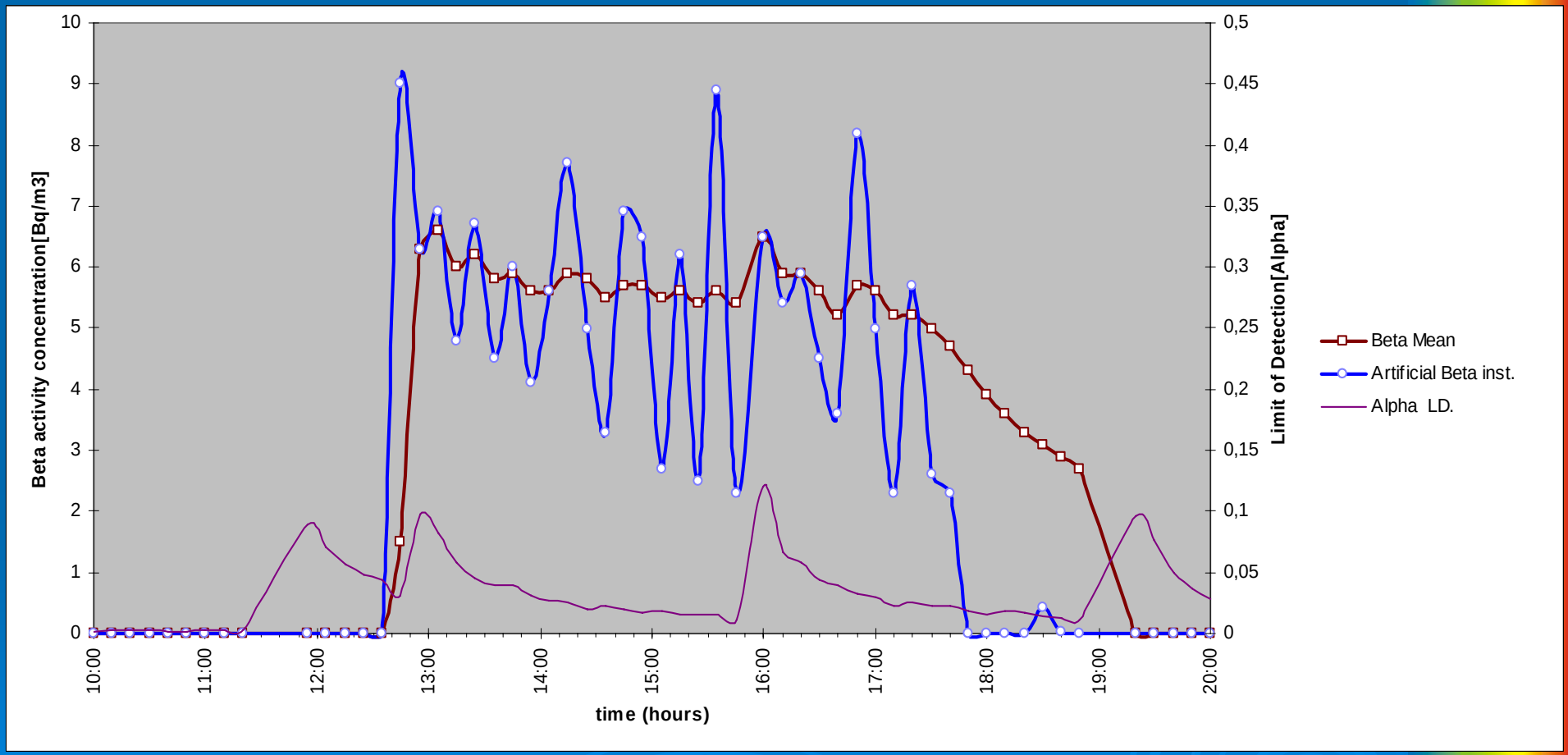
Resolution of overlapping peaks of ^{137}Cs and ^{214}Bi



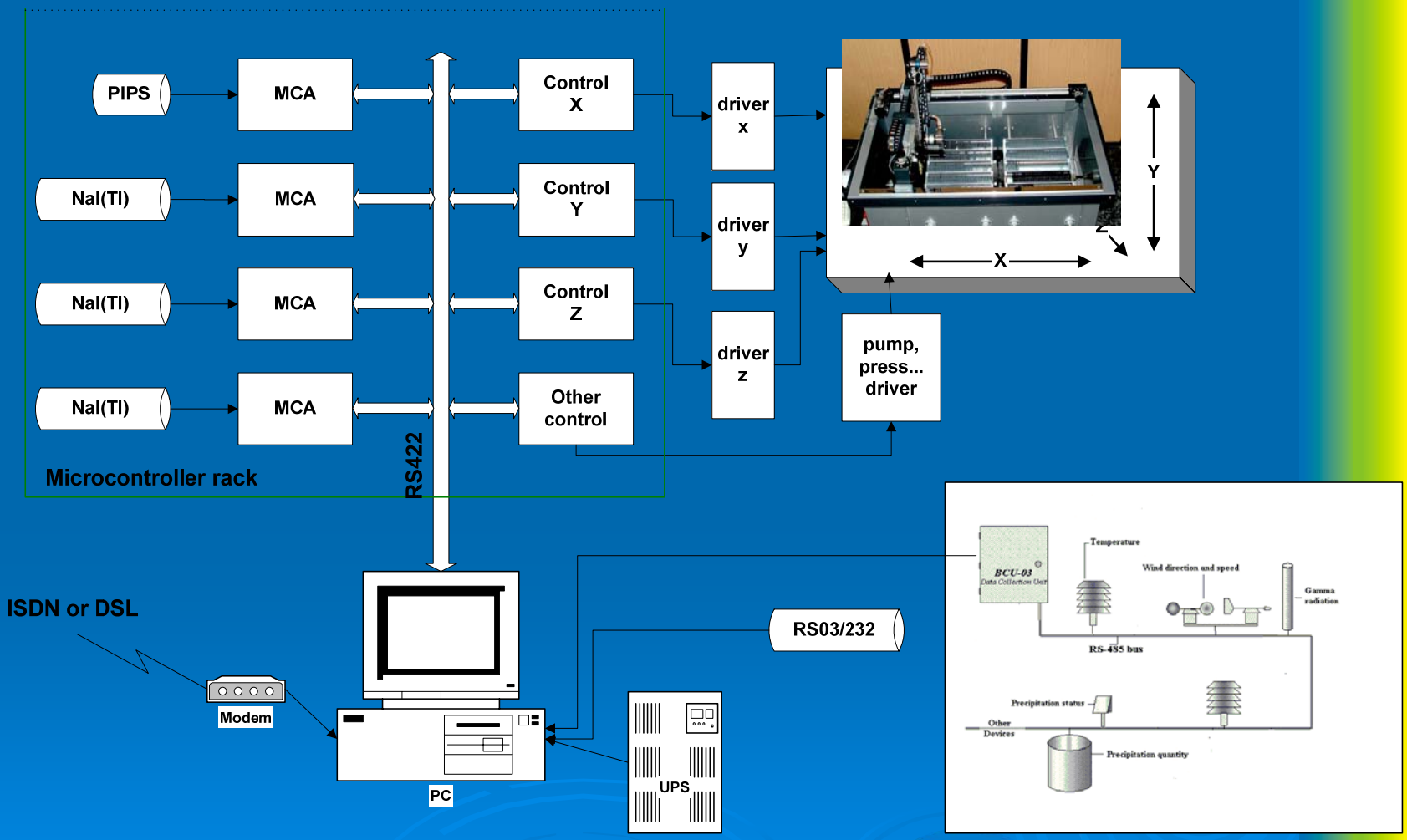
Radon EEC values recorded for a longer period



Results of test run with radioaerosol generator



Flow chart of AMS operation



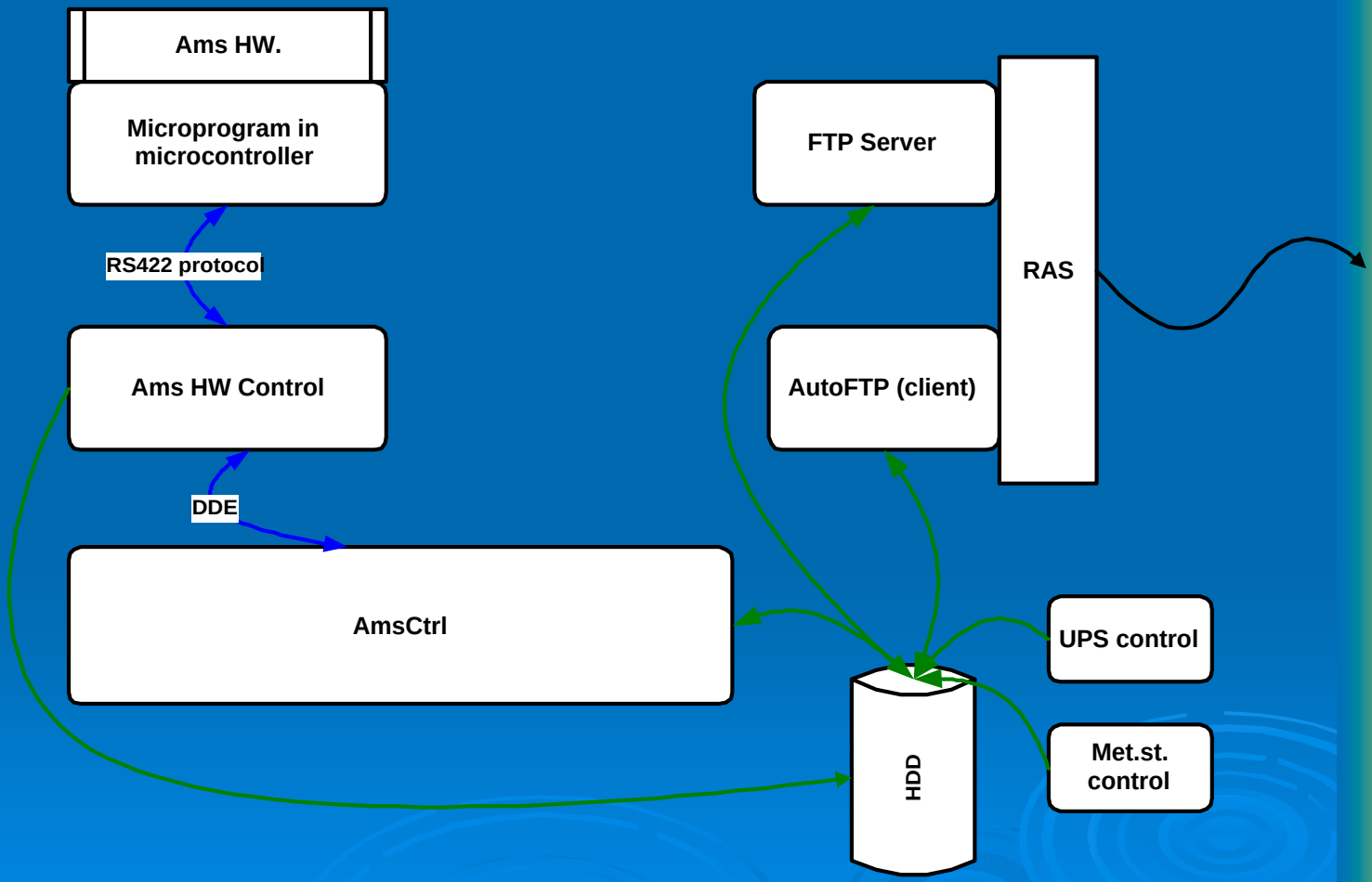
AMS-02 equipment

Driver rack

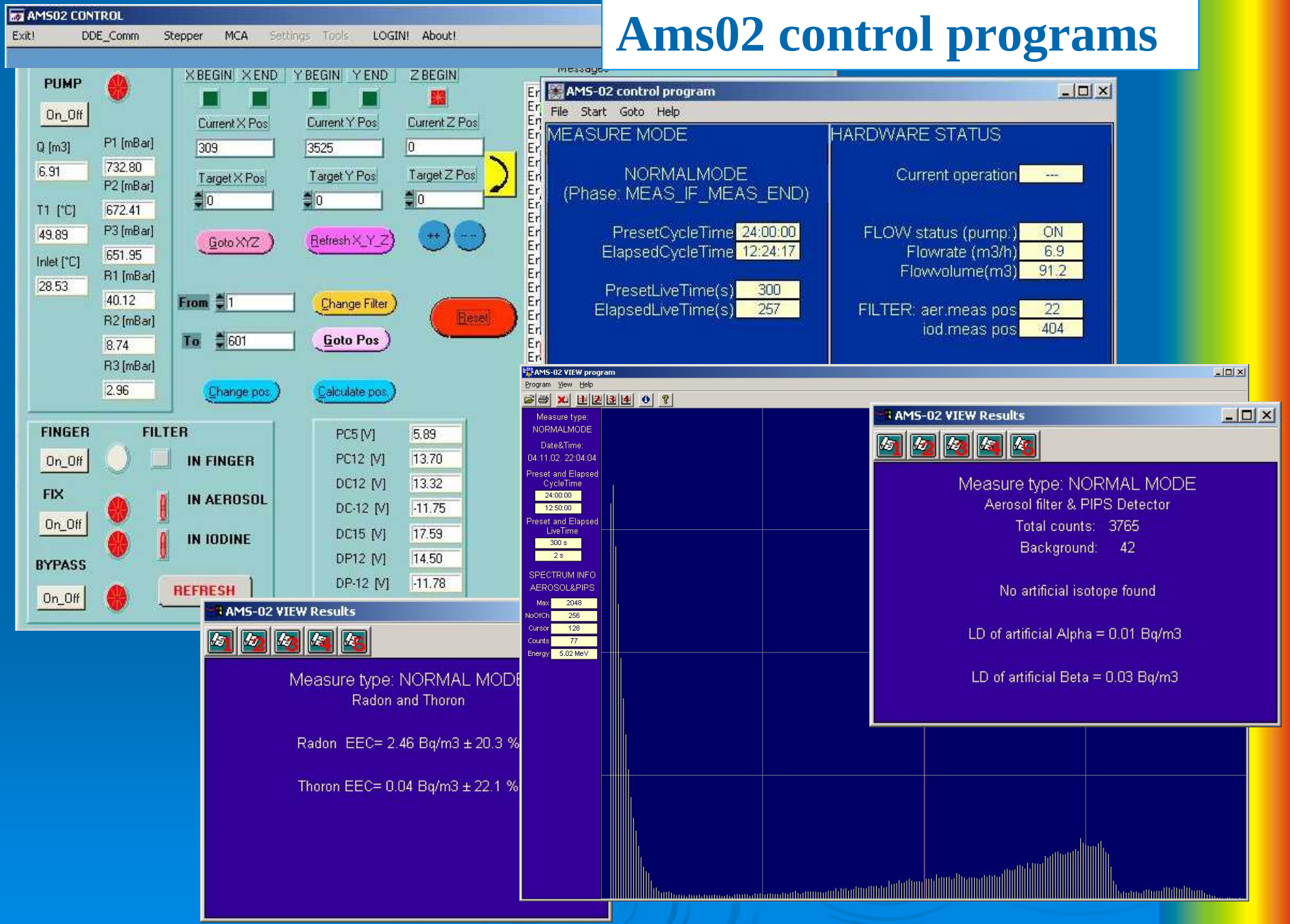
Microcontroller rack

Computer

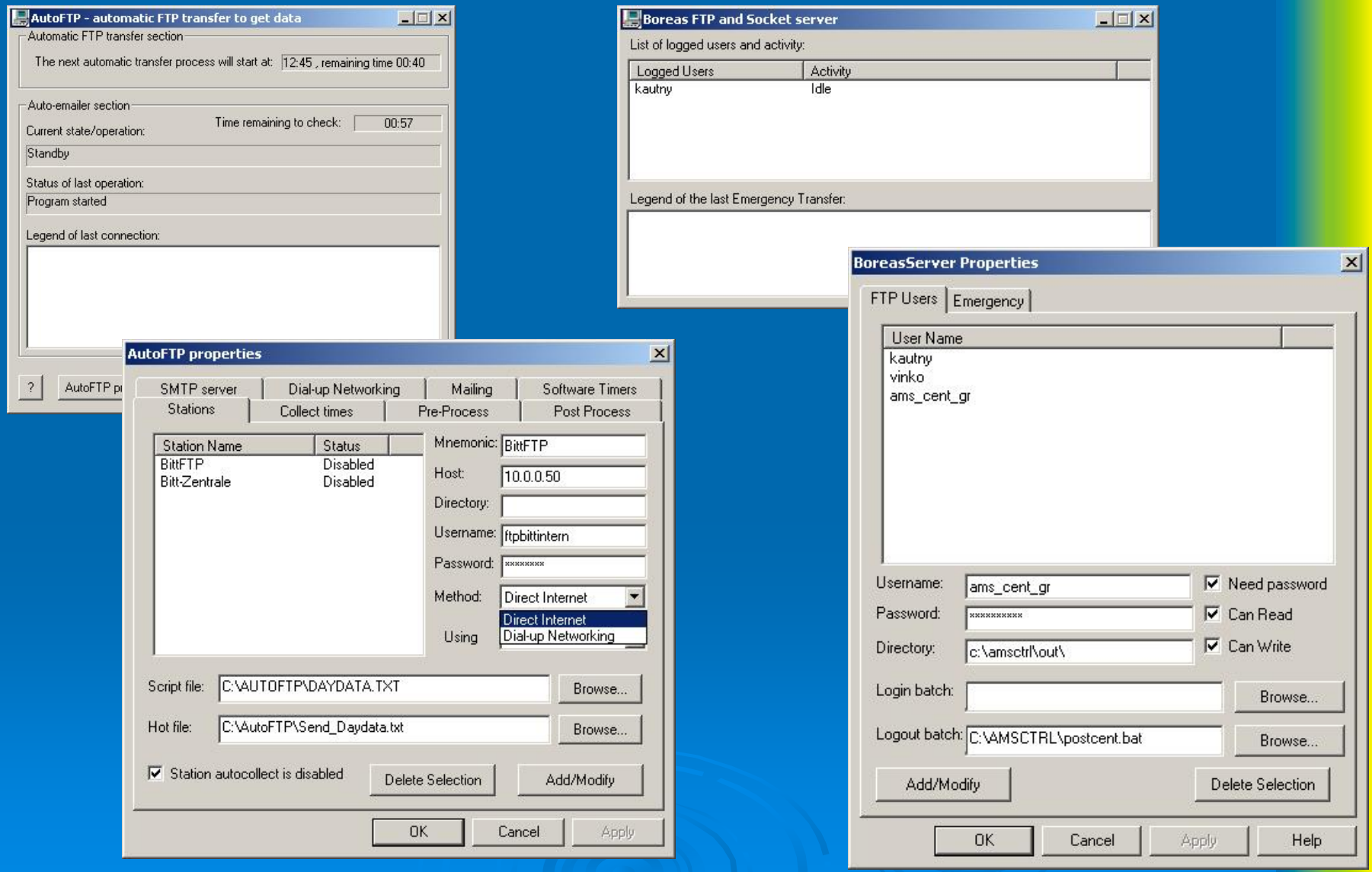
Software structure



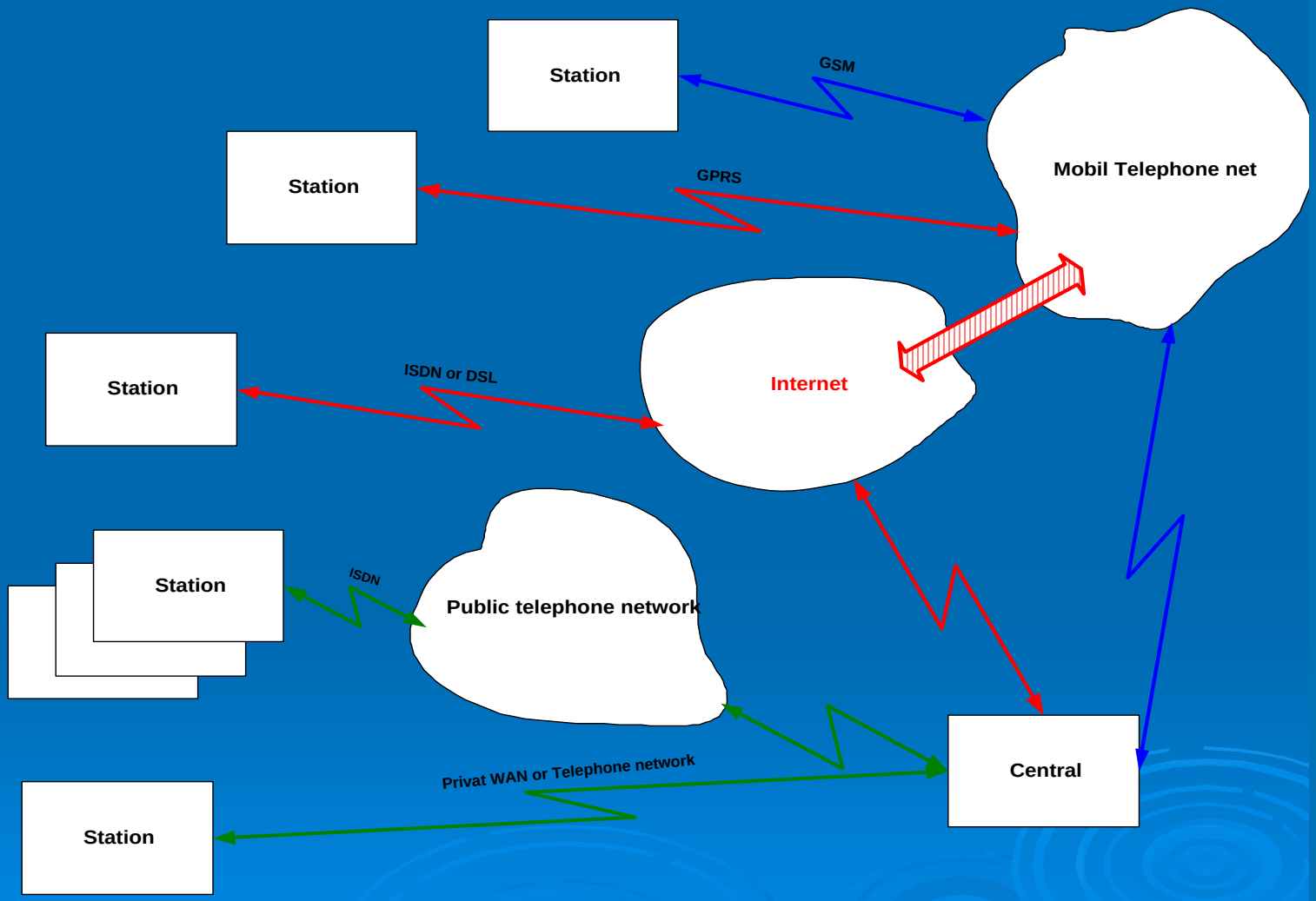
Ams02 control programs



Communication programs



Measuring network

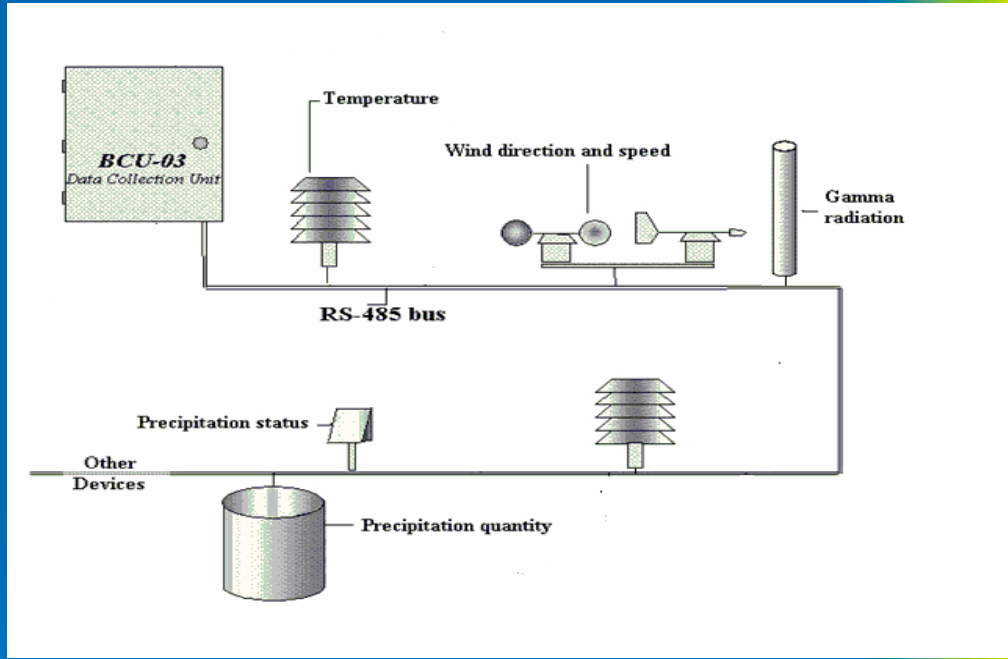


Meteorological Station

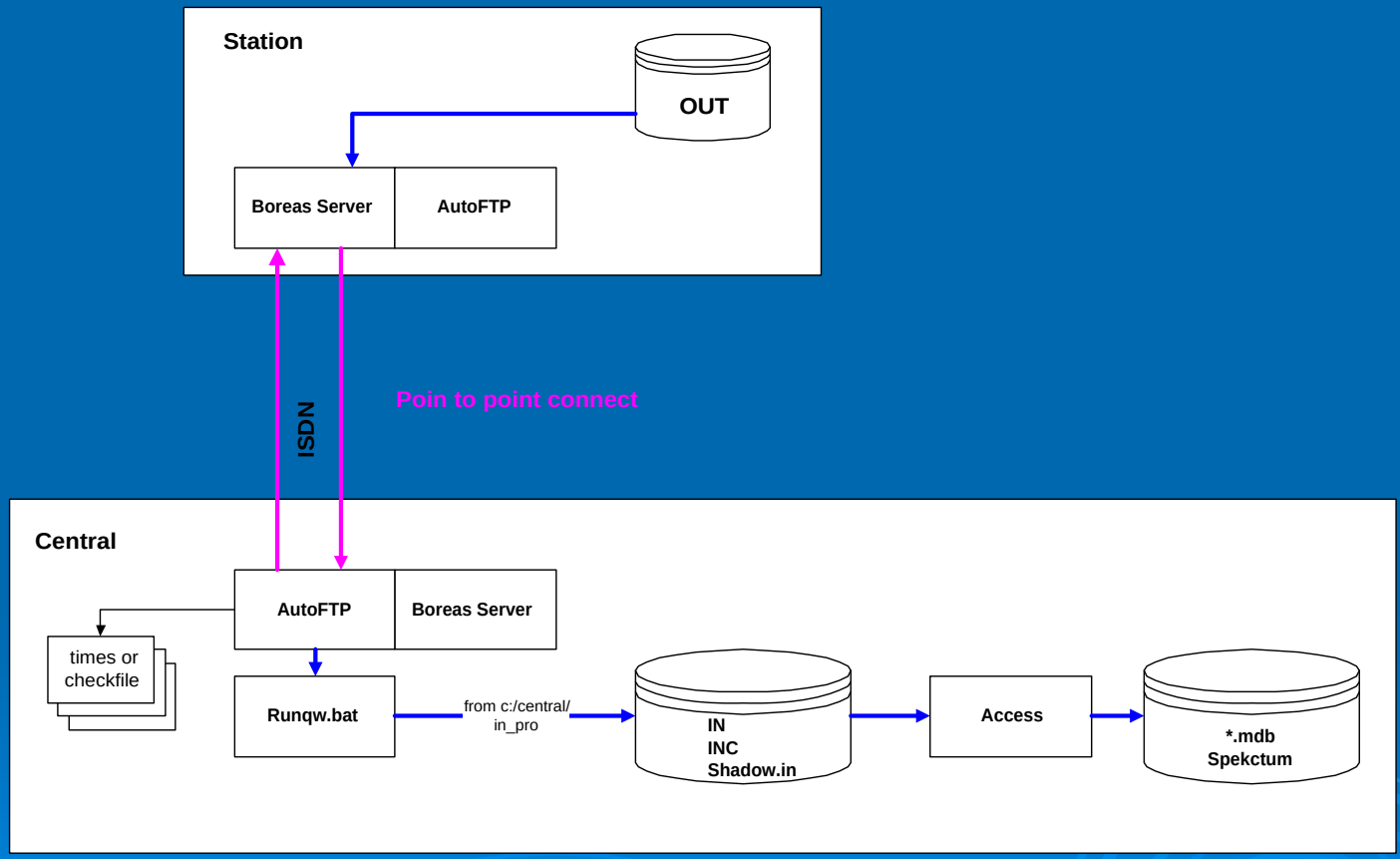
Temperature sensors
Temperature sensor element, temperature and moisture sensor, soil temperature sensors *0.2°C* precision, *measure range from -50°C to +70°C.*

Wind direction and -speed sensor
The classical build-up spoon anemometer and wind flag takes place in an individual container. Precision 3% over 5 m/s.

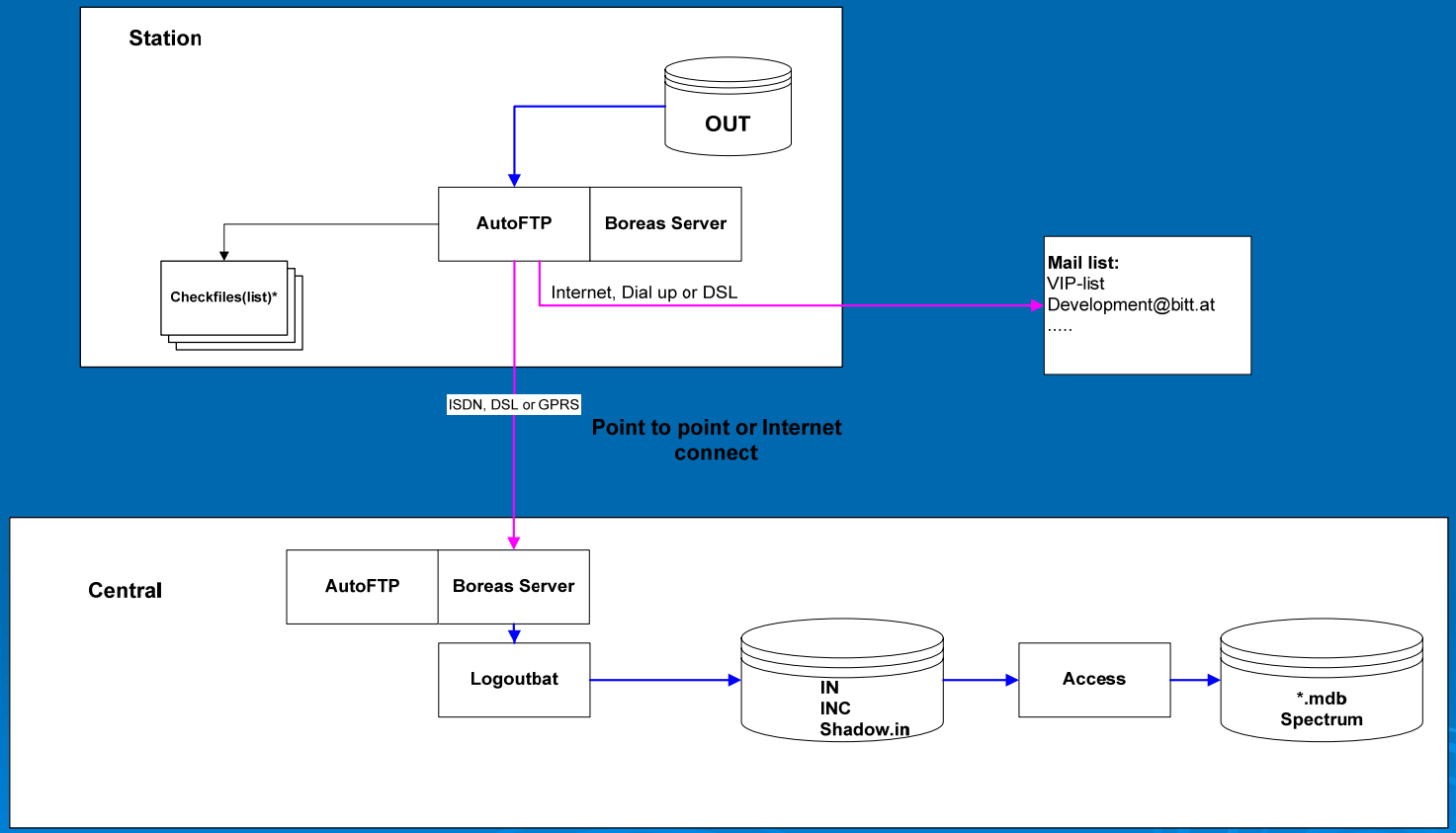
Precipitation sensors
The precipitation quantity sensor measures the quantity of the fallen precipitation with precision 0.1 mm. The precipitation status detector and the leaf moisture sensors are used to



Normal polling for data Aquistion, communicaton is started by the Central



Alarm-Warning: communicaton is started by the Station



BITT Technology offers

Planning, construction and maintenance of systems for monitoring of external radioactive radiation, as well as training of the technical staff of our customers.

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