Configuration of the Barrel Sector Prototype for Thermal and Mechanical Tests.
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Here we present a description of the ATLAS barrel sector prototype used for a series of tests. There will be one such document produced each time the BSP configuration changes in any substantial way. It is up to the user to make sure he/she understands which configuration is being used when looking at a series of data.

Evaporative Rig

- Baseline design as delivered from CERN (see external write up).
- Exhaust line inner diameter (4mm). Will be increased in future configurations.
- Mass flow measurement on exhaust line using unit borrow from CERN
- RAL Water Chiller.

Environmental Chamber

- Aluminum foil clad insulated box.
- Atmosphere cycled by dehumidifier. Able to control the dew point to -10^{o}C.
- No Nitrogen flow

Sector Prototype

- Standard configuration
- 10 degree tilt angle
- Mixture of 4 and 5 layer brackets.

Cooling Loop

- First pre-production cooling loop.
- Incorrect step height and pitch. Poor block alignment.
- No shunt shields
- 2 complete rows of Geneva clips
- 2 rows of heavy duty clips.

Modules

- 47 Dummies
  - Electrical contact via soldered copper tabs clipped to surface.
- 1 Thermo-Mechanical

Capillaries

- 1.2 m in length
- 0.8mm Inner diameter.
- Copper construction

Power Supplies

- 2 x single output Thurley-Thandar 35 Volts at 10Amps (rows 2,3 and 4)
- 1 Thurley-Thandar single output 18 Volts at 20Amps (Thermo-Mechanical Module)
- 1 Thurley-Thandar double output 75 Volts at 2Amps (row 1)

Software

- Evaporative Monitoring
  - Version E
- PT-100 DAQ
  - Version A (out of the box)
- Thermal Imaging Software
  - See Mike Curtis Rouse.

Capacitive Sensor System

- No details yet.