Instructions for MM and DC

8 août 2006

1 Micromegas and DC HV slow control

N.B : MM and DC are not in PVSS, except for temperature probes and gaz system control.

On **pccorc03** :
first check if the Saclay HV control windows are open on the rightmost screen on the shelf.
if not, type `saclayHVcontrol`

2 windows should pop up, one for MM, one for DC (see Figure 1 and Figure 2). All *Status* should be *ON* (don't worry about buttons, just check *Status* column). If instead of buttons you see white squares, **CALL EXPERT (16 0731)** ; the system needs to be rebooted.

There are several channels per plane (*Mesh* and *Drift* for MM ; *Wires*, *Planes* and *B killer* for DC)

In case of trip (*TRIP* appears in the *Status* column for one of the channels, usually other channels turn out to be *OFF*) :
- click the *OFF* button on the channel that has tripped
- then click the *ON* buttons on the channels that are OFF or TRIP (for MM, start with the Mesh)

If it trips again, redo the procedure ; in case of 3rd trip, **CALL EXPERT (16 0731)**

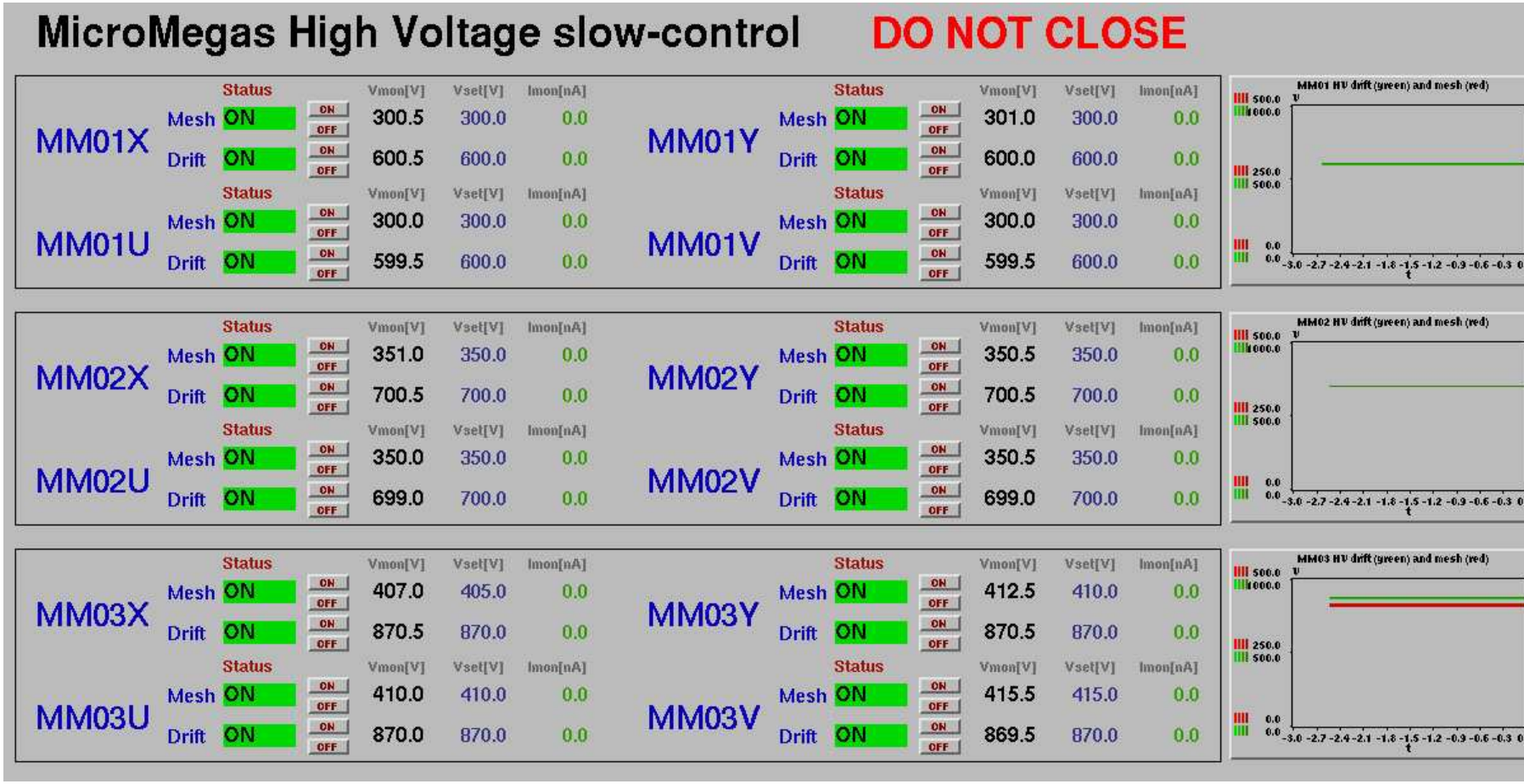

Fig. 1: Window of the MM HV slow control.

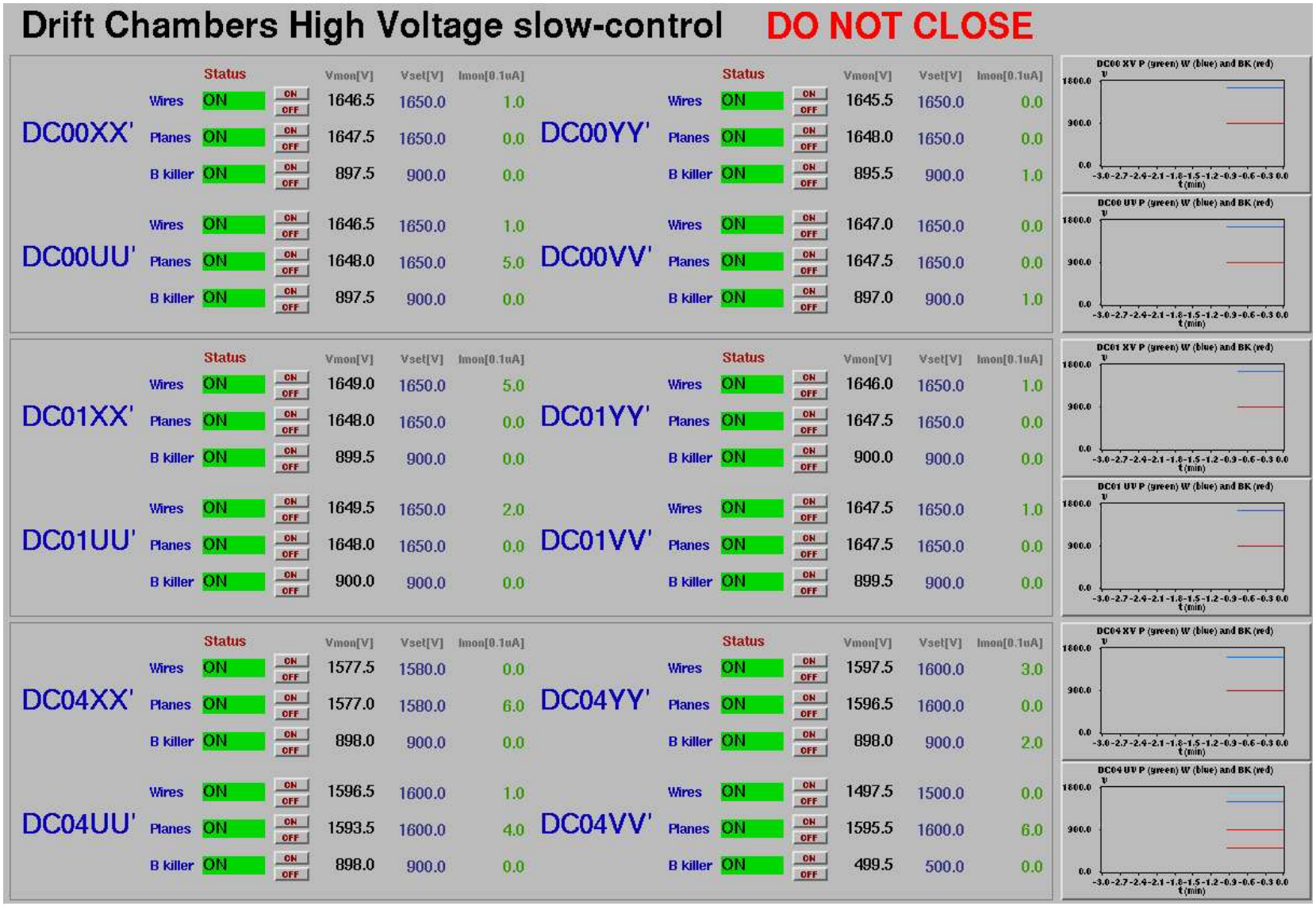

FIG. 2: Window of the DC HV slow control.

2 Gaz system on HPSS

Nominal conditions for MM gaz mixture :

	Ne	C_2H_6	CF_4
%	80	10	10

Nominal conditions for DC gaz mixture :

	Ar	C_2H_6	CF_4
%	45	45	10

In case of alarms, **CALL EXPERT (16 0731)**.

3 MM and changing magnetic fields

As MM are closed to solenoid and SM1, the HV should be lowered when the fields are changed (in particular during alignment procedure and repolarization of target). When this happens, type :
`protectMicroMegas SM1` before change of SM1 field ;
`protectMicroMegas TARGET` before change of target field.

When the change is finished, HV should be increased to their nominal values :
`unprotectMicroMegas SM1` after change of SM1 field ;
`unprotectMicroMegas TARGET` after change of target field.

In case of problems or doubt, **CALL EXPERT (16 0731)**.

4 DC central areas

To activate them :
- BE SURE THE BEAM INTENSITY IS LOW !
- On any **pccorb** machine, type `activateCentralDCs`
- Check on the DC HV slow control (see first section) that all the *B killers* are at the same voltage as the corresponding *wires* and *planes*.

To deactivate them :
- On any **pccorb** machine, type `deactivateCentralDCs`
- Check on the DC HV slow control that the *B killers* are at 900V.

N.B : these scripts ONLY change the voltage of the beam killers ; all other voltages ARE NOT TO BE CHANGED.

In case of problems or doubt, **CALL EXPERT (16 0731)**.