



## How to choose between Service (SM), Visitor (VM) and designated Visitor (dVM) Mode?

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### How to choose between Service (SM), Visitor (VM) and designated Visitor (dVM) Mode?

When writing your proposal you need to decide in which mode you would like to execute your observations. ESO offers three observing modes:

- Service Mode (SM)
- Visitor Mode (VM)
- designated Visitor Mode (dVM)

The choice of the observing mode should be dictated by the nature of your observation.

The philosophy of the Service Mode is to guarantee high flexibility and efficiency in the execution of the telescope schedule. In SM, an observation is scheduled only when the atmospheric conditions are respecting the user requests specified in the proposal and can be rescheduled and repeated if such conditions degrade during the observation. This guarantees the highest probability of completing a program during the ESO semester. However, the observations will be executed as specified in the OB and according to the user instructions and no changes are possible.

In Visitor Mode and designated Visitor Mode, a specific time slot during one or more defined nights is allocated to the program. The only difference between the two modes is that the designated Visitor Mode allows the user to execute the observation in remote by connecting to the Paranal operation system. This involves some more interaction with the astronomers at Paranal than in the standard VM. In both modes, the users will execute the observation by themselves with high flexibility and with the possibility to adapt on the spot the strategy to assure the achievement of the program scientific goal. However, if the atmospheric conditions does not allow observing or are not as good as desired by the user, the time slot will be lost and no possibility of rescheduling and reobserving is possible.

Thus, if you have a standard and simple observation, very easy to explain in the readme of your run, choosing the SM will ensures the highest probability of observing your program. If, instead, you have a very tricky observation, with instructions

difficult to clearly explain to the observer astronomer at the telescope, and whose success depends on a tailored strategy that should be adapted on the fly, VM or dVM are likely the best option.

For Instance, if you intend to observe with FORS2 Long Slit Spectroscopy (LSS) a target in relatively good atmospheric conditions without any particular limitation or request, surely SM is the best option. The observation can be easily codified into the OB and its templates, and any additional instruction can be given in the readme. You can also specify if there is any time constraint by providing time intervals in the OB.

On the contrary, let's assume you want to observe with FORS2 LSS two different regions of an extended object, but you do not know with the required accuracy where they are located. How to adapt the position angle to capture the regions of interest and defining the best target is a decision that can be taken only by looking at the acquisition image and you are the only person able to take it. In this case, VM or dVM are surely the best options for you.

#### Tags

designated

dVM

service

SM

visitor

VM