

## HELP FILE : MESSIER PROGRAM

Messier V2.60 May 2006  
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The geographical coordinates of the observer are memorized in Messier.ini which is in the same repertory as Messier.exe.

The program automatically detects the time zone of the PC: Time zone in Properties of Date and Hour under Windows.

**The user works EXCLUSIVELY in LOCAL DATE-TIME:**

thus the passages to the meridian line are given in local time for the selected date.

In the status bar to the bottom of the window we have:

LOC: Local date-time.

GMT: GMT date-time = Universal Time Coordinates.

TSidéral: Local Sideral Time = Right Ascension with the local meridian line.

Infos of azimuth and height for the selected object, and which evolve automatically in real time with the local time of the PC.

The azimuth by default is the astronomical azimuth: it is the angle counted starting from the South, and clockwise:

[0° and 360° are the same azimuth = SOUTH, 90° = WEST, 180° = NORTH, 270° = EAST].

One can also choose the azimuth compared to NORTH, in this case:

[0° and 360° are the same azimuth = NORTH, 90° = EAST, 180° = SOUTH, 270° = WEST].

The columns of the table are:

**Objet** = Messier Number.

**Const** = Constellation in Latin abbreviation.

**AsDr** = Right Ascension.

**Dec** = Declination.

**Mag** = Magnitude.

**Taille** = Size of the object in minutes of arc.

**Type** = Cluster, Galaxy, Nebula:

[ Ag = Globular Cluster, Ao = Open Cluster, Ga = Galaxy, Nd = Diffuse Nebula,  
Np = Planetary Nebula ]

**Azimet** = Azimuth of the object, in decimal degrees.

**Hauteur** = Height of the object compared to the horizon, in decimal degrees :

[> 0 visible, < 0 no visible].

**Méridien** = Local time of the passage to the meridian line for the selected date.

**Hmax** = maximum Height that the object can reach at the time of the passage to the meridian line, in decimal degrees.

**Dopt** = Date for which the object is closest to the local meridian line with 0h00 Local time.

A click on the selected column -> positive/negative sort.

The type of sorting is indicated to the top of the table.

During the changes of date and hour, the program is based on the selected sorting.

A click in the table -> selection of an object.

A filter for the display of objects that are over the horizon, with indication of their number.

Possibility of changing the colors of table [bottom and text].

Possibility of printing the selected objects: multi-selection with the mouse and the keys <Ctrl>, <Shift>.

Button with icon calendar: current date-time.

Button with icon glasses: allows to find the selected object.

An indicator of the lunar phase for the selected local date-time.