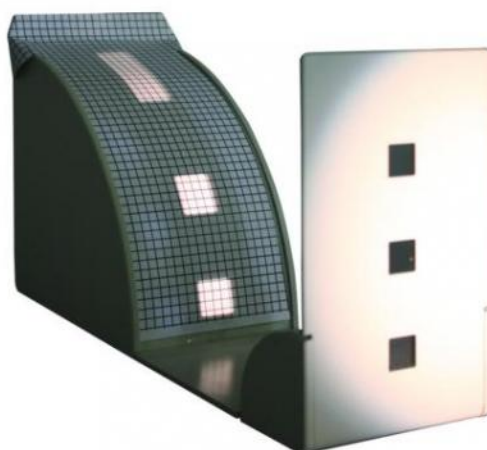


ENERGY RECEIVED ACCORDING TO LATITUDE

Reference : NRJLAT



Model only

Reconstituer et comprendre les variations climatiques passées

This model makes it possible to illustrate and demonstrate a concept that is often very difficult for students to understand.

On planet Earth, depending on the latitude, the solar energy received is not the same. This is not due to the distance but mainly to the angle of inclination. A ray of sunshine at a latitude like France applies to a surface larger than a ray of sunshine that reaches the equator. The further one moves away from the equator, the more the energy of the solar rays is diffused when it arrives on the Earth's surface. The same amount of energy applies over a larger area.

This model makes it possible to simply illustrate this phenomenon; it is composed of a wall comprising 3 square orifices and a rounded surface depicting the surface of the Earth. By placing a light source at a good distance from the model (1.50m) it is considered that the rays arrive in a parallel way (like the light rays of the sun with respect to the Earth), the light which passes through the orifices illuminating the surface of the Earth. By placing a sheet of chequered paper of the right size on the rounded wall it is easy to visualize and accurately measure the surface illuminated by the same amount of light.

Students can draw the outline of the illuminated surface in pencil and measure the loss of energy when moving away from the equator.

Dimensions (H x W x L mm): 170 x 100 x 250