

Translations:Four solaire (cuisneur type boîte)/11/en

The solar oven is a box hermetically isolated with a transparent cover and reflective faces inside: the sun rays enter by the glass and reflect on the borders of the box to hit the dark surface of the pot. The energy of those rays is so transformed into heat, heat that is stuck in the box. To increase the received solar flux, two ears covered by aluminium are fixed on each side of the box. This permits to reflect the light on the glass which should be as perpendicular as possible to the sun rays. With the metropolitan France's latitudes, the right tilt of sun regarding to the horizon is around 60° in summer and 30° in winter. Thereby, the optimal tilt of the glass is 30° in winter and 60° in summer. The solar oven only runs thanks to the sun rays: clouds, fog and dust reduce the the radiation and thereby, therefore increase the cooking time.