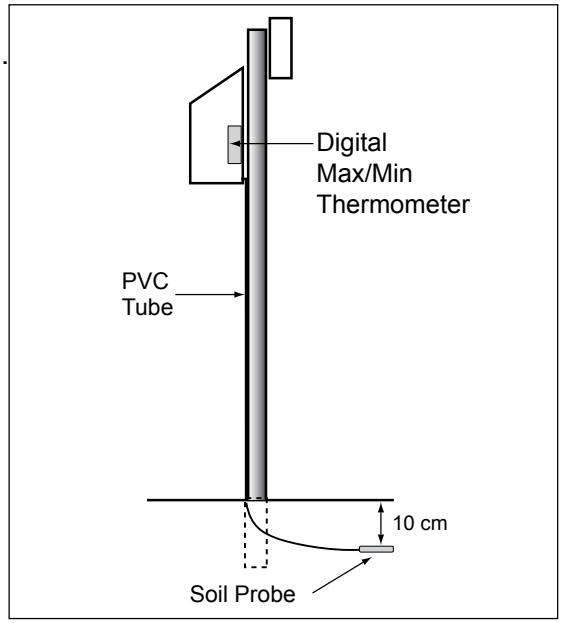
Digital Max/Min Thermometer Installation

Field Guide

Task

Install the digital thermometer at your Atmosphere Study Site.



What You Need

- ❑ GLOBE instrument shelter (specifications are given in the *GLOBE Instrument List* in the *Toolkit* section)
- ❑ Drill with 12 mm spade bit (if doing soil measurements)
- ❑ String or wire ties
- ❑ 120 cm X 2.5 cm PVC pipe (optional)
- ❑ Digging tools (if doing soil measurements)

In the Field

1. Mount the digital thermometer housing to the rear wall of your instrument shelter. The housing should be placed so that the digital display may be easily read.
2. If you are not going to be taking soil temperature measurements, store the soil sensor (if your thermometer has one) and it's cable neatly in a corner of the shelter where it will be out of the way and skip the following steps. Otherwise, proceed to step 3.
3. If necessary, drill a 12 mm hole, using a drill with a spade bit, in the bottom of the instrument shelter, near the back. Feed the soil sensor probe through the hole, leaving as much cable as possible inside the shelter. You may wish to feed the sensor and wire through a thin PVC pipe that will serve to protect the wire.
4. Choose a site to place the soil temperature probe nearby on the equatorward side (sunny-side) of the mounting post for the instrument shelter. Data collected from soil in unshaded locations are preferred. Comments in your site definition should include the amount of shade that the soil surface above the probe will experience during a year.
5. Dig a hole to a depth of a little over 10 cm in depth at the chosen location.
6. Push the probe horizontally into the side of the hole at a depth of 10 cm. Use a nail or steel pin, with a slightly smaller diameter than the probe, to pilot an opening for the probe if needed.
7. Refill the hole with the soil that you removed.
8. Neatly secure all extra cable for the soil sensor using string or wire ties. Keep as much of the excess cable as possible within the shelter.