

International Considerations when using HelioScope

HelioScope is built for global use from the start. A standard license grants access to the application from anywhere in the world – and HelioScope can be used for projects in all geographies.

This note reviews the common factors when using HelioScope in different geographies:

| Factor | Comments |
|--------------------------------|--|
| Units | <ul style="list-style-type: none"> • HelioScope supports both metric and imperial units. • Units can be changed under Profile > Preferences > Units |
| Components | <ul style="list-style-type: none"> • Module and inverter databases are global libraries, with products from all geographies. • HelioScope includes both metric conductor sizes (mm²) and American Wire Gauge (AWG). • Default conductor choice can be modified under Profile > Preferences > Units |
| Codes | <ul style="list-style-type: none"> • HelioScope does not verify or certify code compatibility. • There are no voltage limits to the systems designed in HelioScope – the user is required to confirm that their system voltage is compatible with the local codes. |
| Azimuth angle | <ul style="list-style-type: none"> • HelioScope has a single orientation for azimuth angles, with 0° for North, 90° for East, 180° for South, and 270° for West. Note that this is different from PVsyst, where 0° is always oriented towards the equator. • The default HelioScope azimuth is 180°, so projects in the Southern Hemisphere need to update the azimuth (0° is True North). |
| Map (Google Map) | <ul style="list-style-type: none"> • The HelioScope Designer is based on Google Maps, which are available worldwide (though the satellite images quality can sometimes vary). |
| Weather files | <ul style="list-style-type: none"> • HelioScope draws from a variety of hourly weather sources for worldwide weather data. <ul style="list-style-type: none"> ○ Most international weather files are from Energy Plus Worldwide: http://apps1.eere.energy.gov/buildings/energyplus/weatherdata_about.cfm ○ These files are also supplemented by monthly data from SWERA: http://maps.nrel.gov/SWERA |
| Energy simulation calculations | <ul style="list-style-type: none"> • While sun angles are certainly different from location to location, all of the core energy simulation mathematics are identical regardless of the project location. Physics is universal! |