

# CONVERSION MODEL OF COORDINATES

There are several applications or pages for system conversion, it can also be done manually, as follows:

We will take as an example the position determined at **S 34° 23' 53'' - O 58° 39' 35''**

## From sexagesimal degrees to decimal degrees

Decimal degrees = degrees + (minutes/60) + (seconds/3600), where:

1. The latitude part will be equal to  $34 + (23/60) + (53/3600)$  being **- 34.398055°** (negative value for be sure)
2. The longitude part will be equal to  $58 + (39/60) + (35/3600)$  being **-58.659722°** (negative value for be west).

## From sexagesimal degrees to decimal degrees

We take the previous example - **58.659722**

1. The whole part of the decimal degrees will also be the sexagesimal degrees (58°).
2. Multiply the decimals of the original value by 60 ( $0.659722 * 60 = 39.58332$ ).
3. The whole part of the previous result will be the minutes (39').
4. Multiply the decimals from step 2 by 60 ( $0.58332 * 60 = 34.999$ ).
5. The result of the previous step will be the seconds, in this case an approximation is established to integer (35").
6. Finally take the results of steps 1, 3 and 5 to form the final result (**58°39'35"O**).