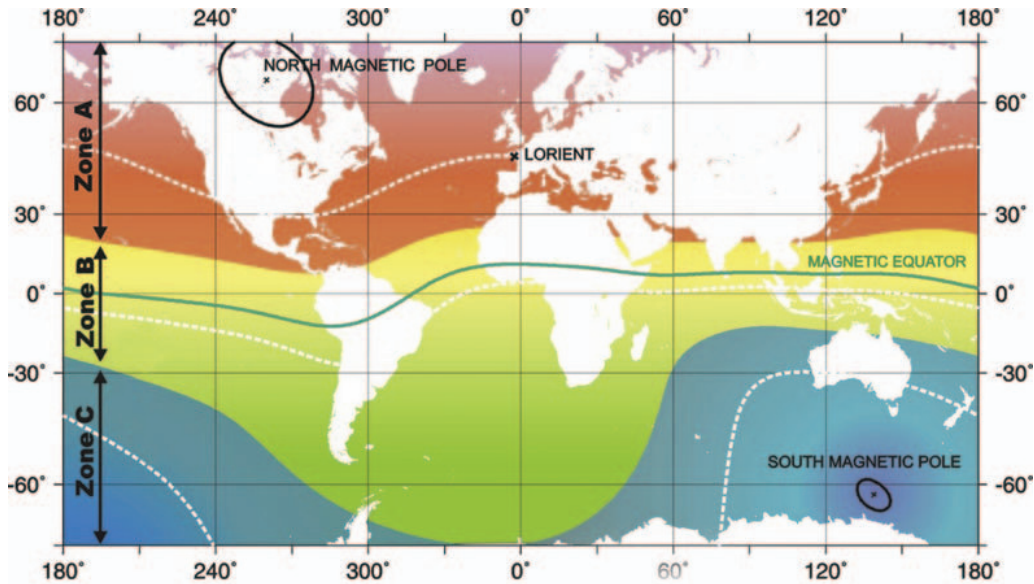


# Compass Magnetic Zones

Every Plastimo compass is available in 3 versions, to cover the whole world.



## Deviation & Compensation

The earth's magnetic field has two components: horizontal and vertical.

The vertical component affects the horizontal plane of the compass card and pulls it to dip towards North or South. This natural force varies according to geographical location - a compass balanced in New York is not horizontal in Sydney.

The horizontal component exercises an influence on the card's direction. The compass environment on board and the various sources of interference create a specific, local magnetic field, which is different from the earth's magnetic field. The compass does not point towards magnetic North.

## Deviation

The course discrepancy (in degrees) between compass north and magnetic north is called deviation. It can be negative or positive.

In order to minimize this error, your compass should be installed as far as possible from objects generating local magnetic fields, such as compasses, fire extinguishers, speakers, electrical wires and equipment, metallic parts of your steering system, cameras, tools, etc.

Once the deviation errors are determined and allowed for, the compass is a perfectly reliable navigation instrument. Deviation is recorded graphically on a deviation curve, kept handy for reference. Deviation should be checked and updated annually.

## Compensation

Most Plastimo compasses are supplied with built-in compensation, or can be equipped with optional compensation. Compensating a compass consists of adjusting the two magnets in order to affect the horizontal component of the card by modifying the North/South and East/West deviation. The compensation procedure is a delicate operation and should ideally be carried out by a professional compass adjuster.



FLAT CARD

CONICAL CARD

## CARD TYPES

A **flat card** is read at the back of the compass, where the lubberline is located. The fluid magnifies the numerals so they are easier to read. A flat card provides a global view of the card and its North point in relation to the boat's direction. In general, a flat card is easiest to read when your compass is installed substantially below eye level, so you are looking down at the card.

**Conical or cylindrical cards** read from the front of the card and from the top, so they are particularly suited for compasses installed at or near eye level, or when steering or piloting is done from both sitting and standing positions.