



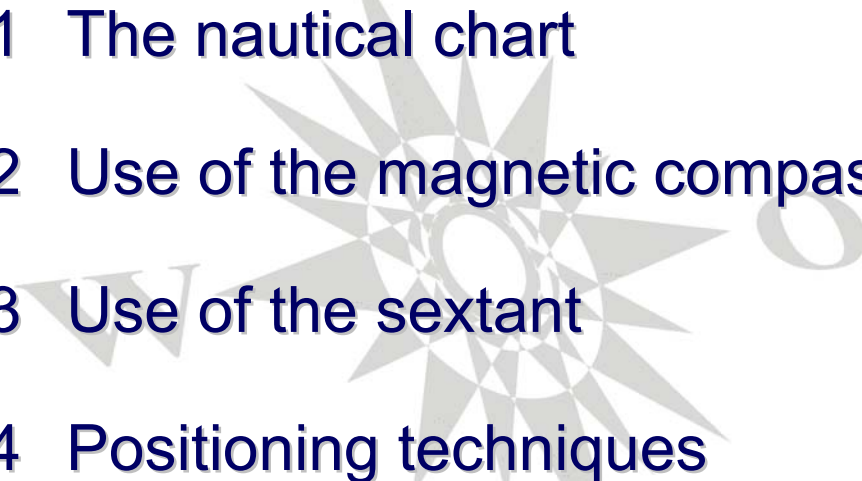
# Navigation

SS-2004

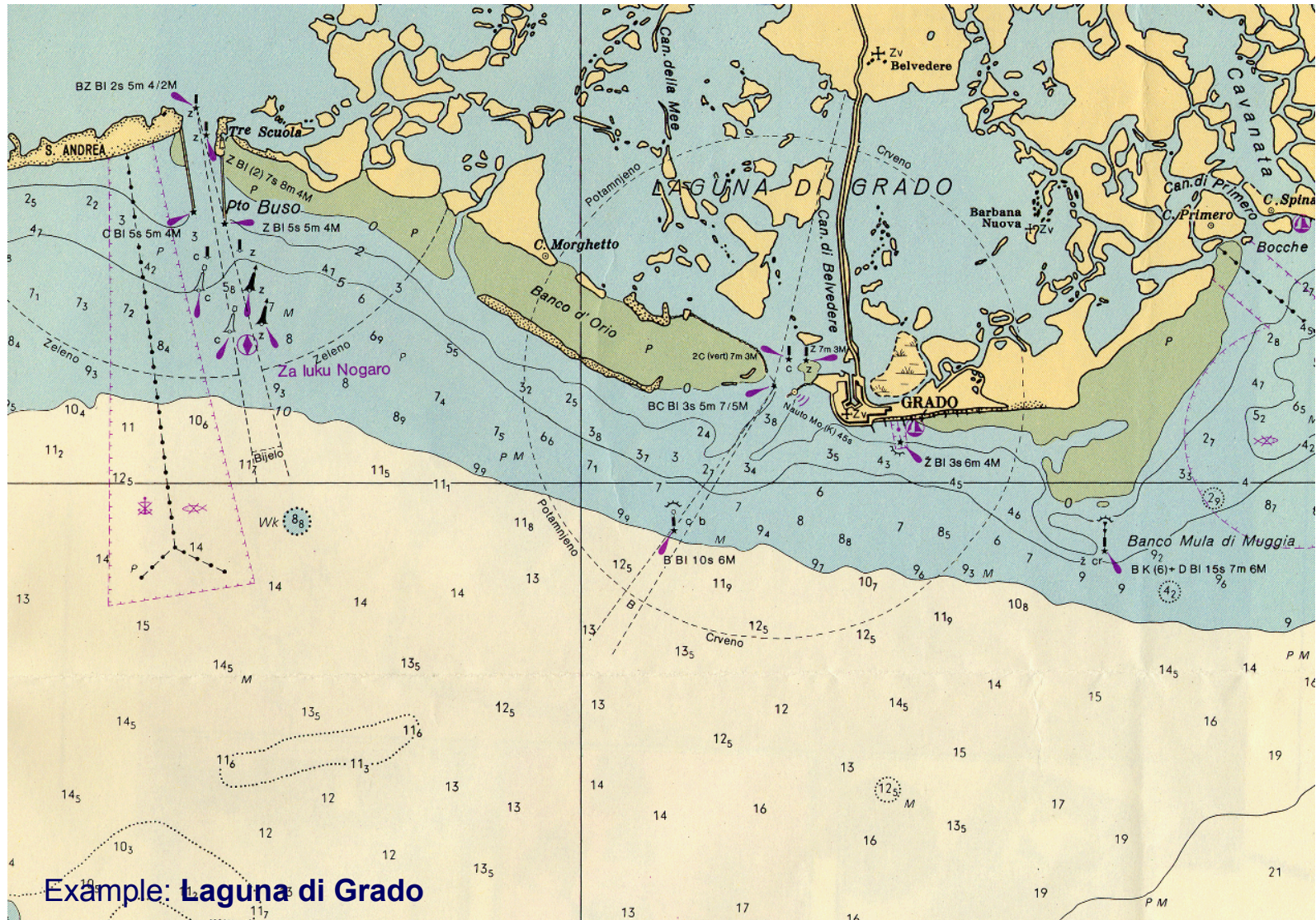


# Chapter 6 – Terrestrial navigation / Labs

# 6 Terrestrial navigation / Labs – Contents

- 
- A large, faint, grey compass rose is centered in the background of the slide. It has eight main points and several smaller points in between, creating a star-like pattern. The letters 'N', 'S', 'E', and 'W' are placed at the cardinal directions, though they are partially obscured by the rose's points.
- 1 The nautical chart
  - 2 Use of the magnetic compass
  - 3 Use of the sextant
  - 4 Positioning techniques

# 6 Terrestrial navigation / Labs (1)





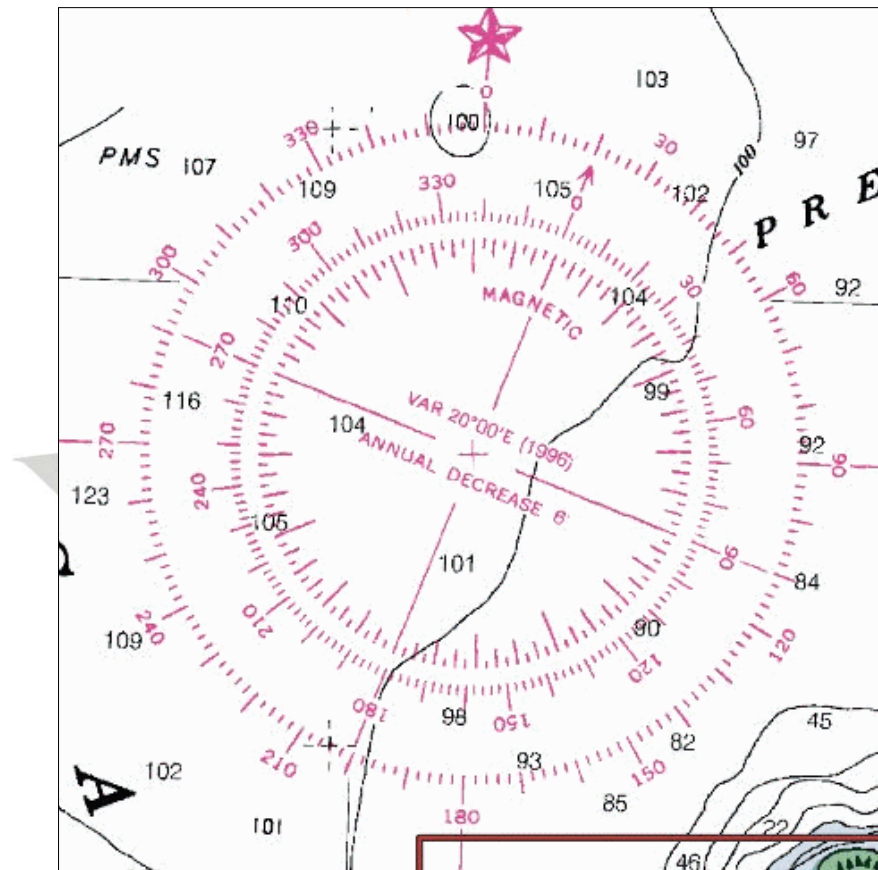
## 6 Terrestrial navigation / Labs (2)

### Example: „Besteck“



## 6 Terrestrial navigation / Labs (3)

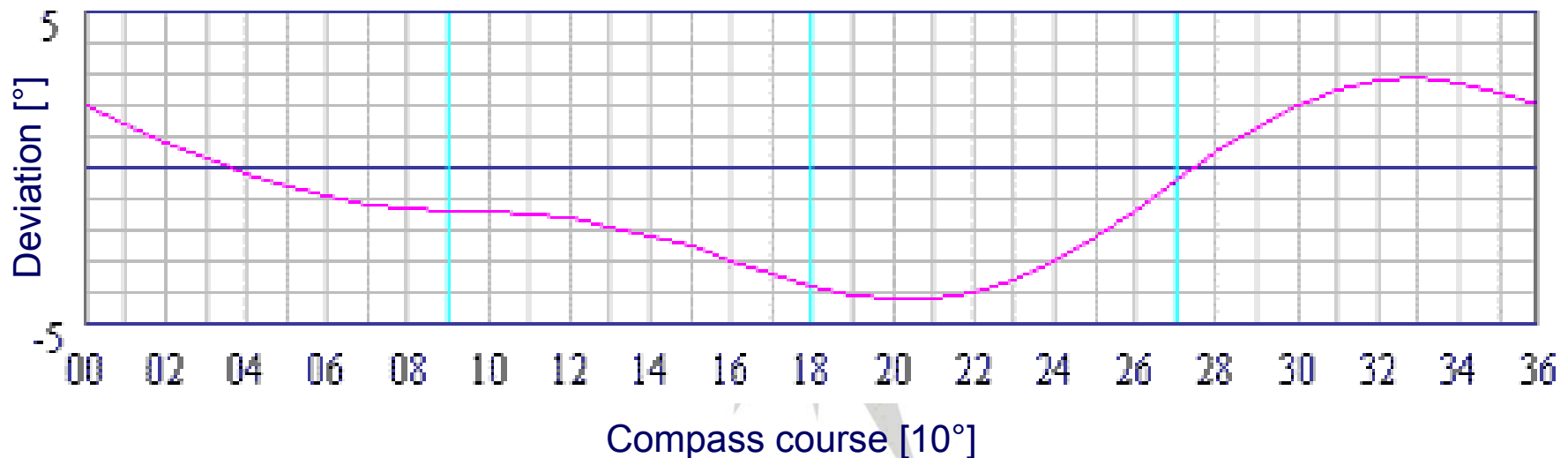
### Example: **Compass rose** in a nautical chart



**Note:** This compass rose does not belong to the previous chart. It is only used for visualization due to the large value of variation.

Main use: Transfer of courses, correction of variation

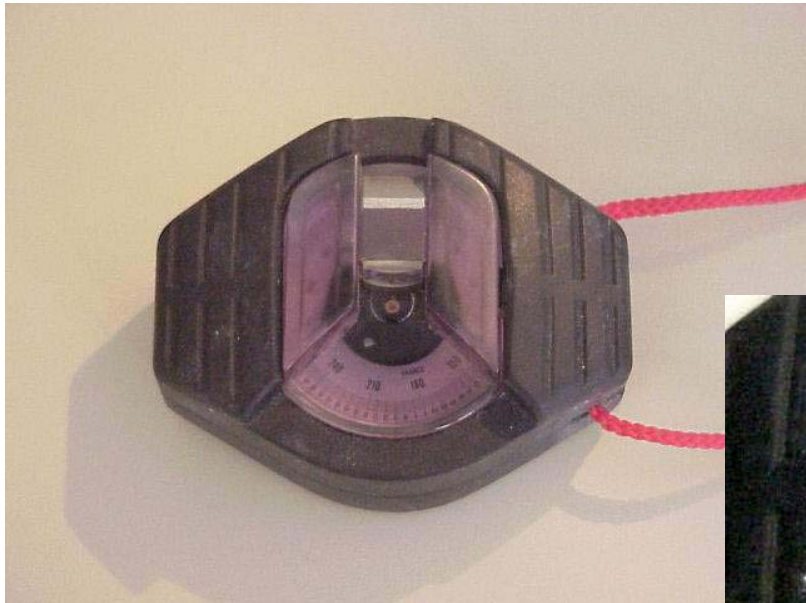
### Example: **Compass deviation table**



<http://www.sailingissues.com/navcourse3.html>

## 6 Terrestrial navigation / Labs (5)

Example: **Analog marine bearing compass**





## 6 Terrestrial navigation / Labs (6)

Example: **Digital marine bearing compass**



## 6 Terrestrial navigation / Labs (7)

### Example: Terrestrial bearing compass



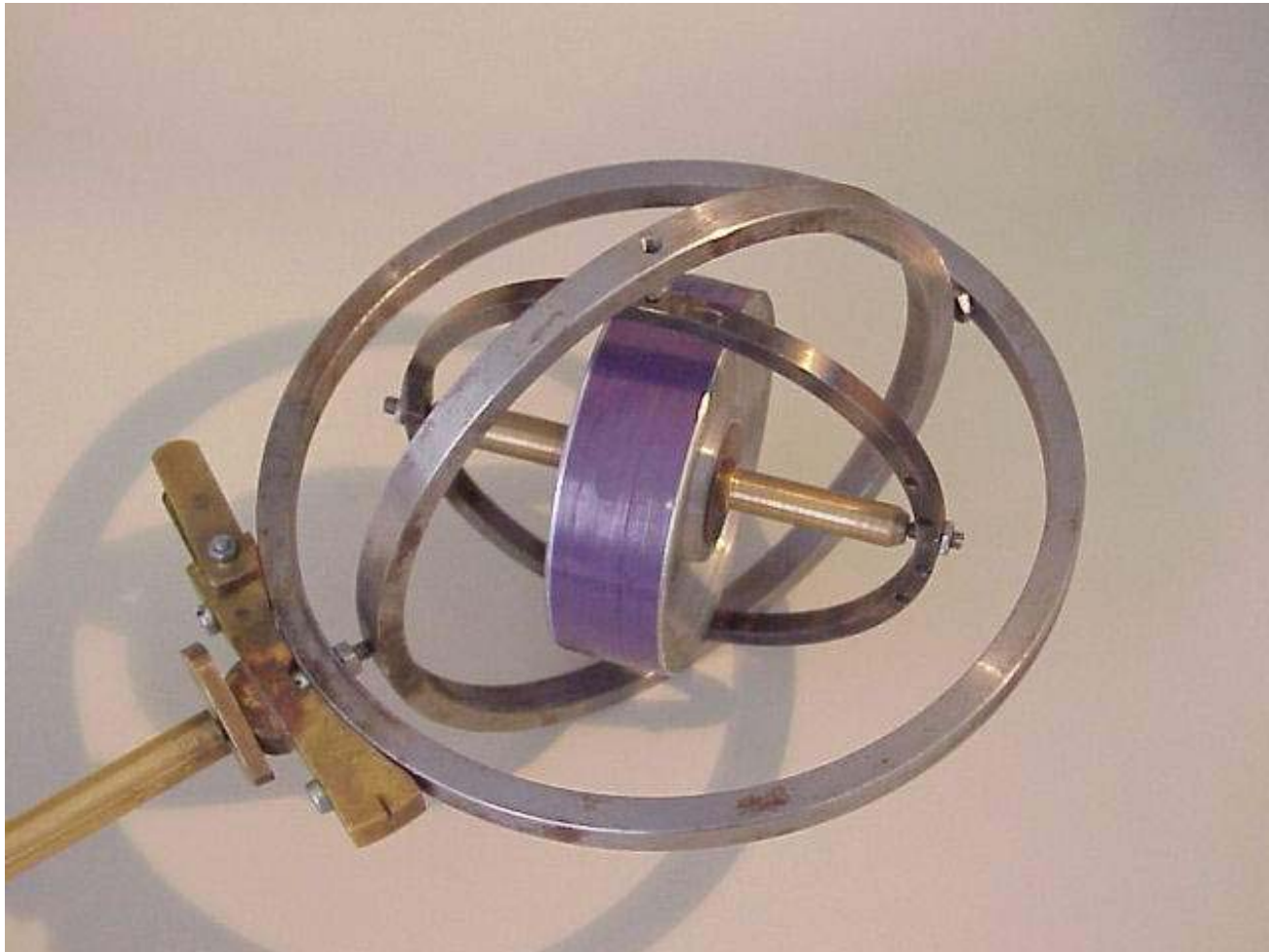
## 6 Terrestrial navigation / Labs (8)

### Example: Orienteering compass



## 6 Terrestrial navigation / Labs (9)

### Example: Free gyroscope



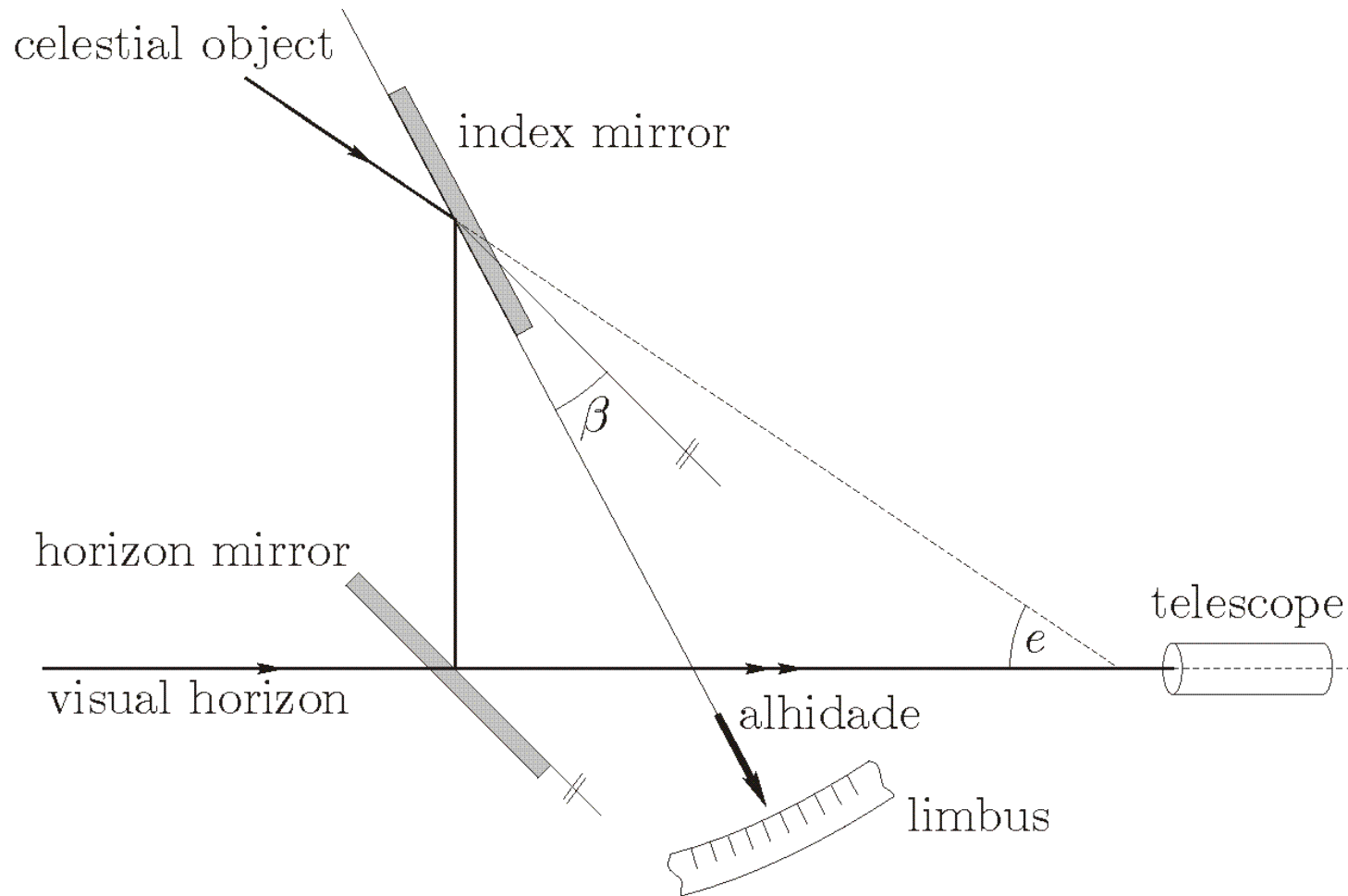


## 6 Terrestrial navigation / Labs (10)

### Example: **Forced gyroscope**

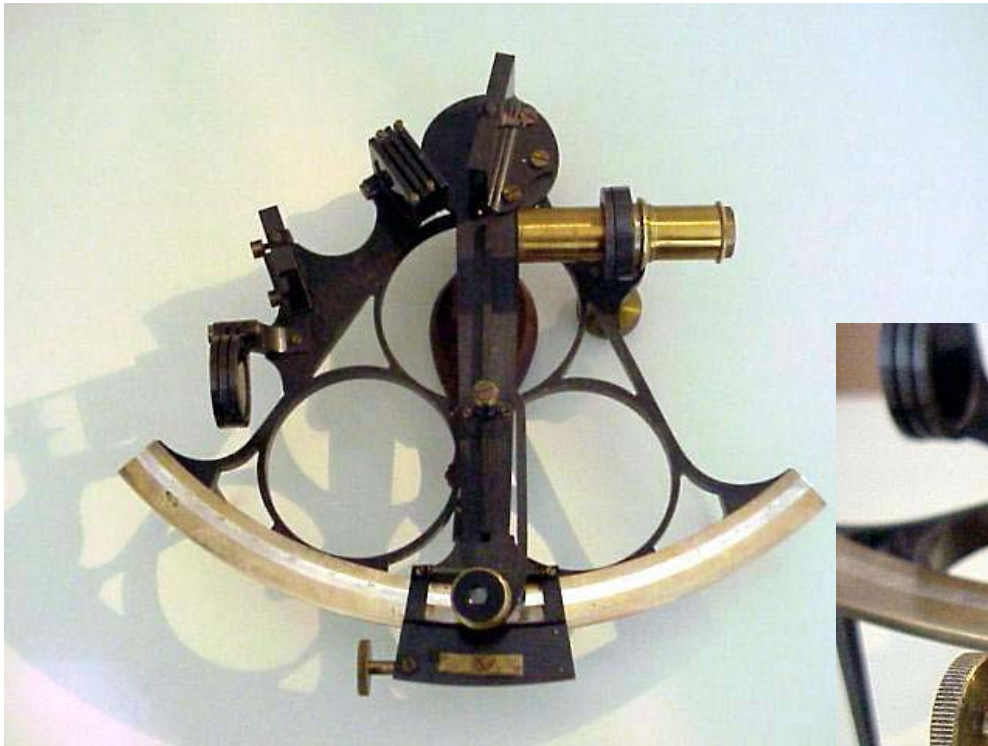


### Principle of the sextant



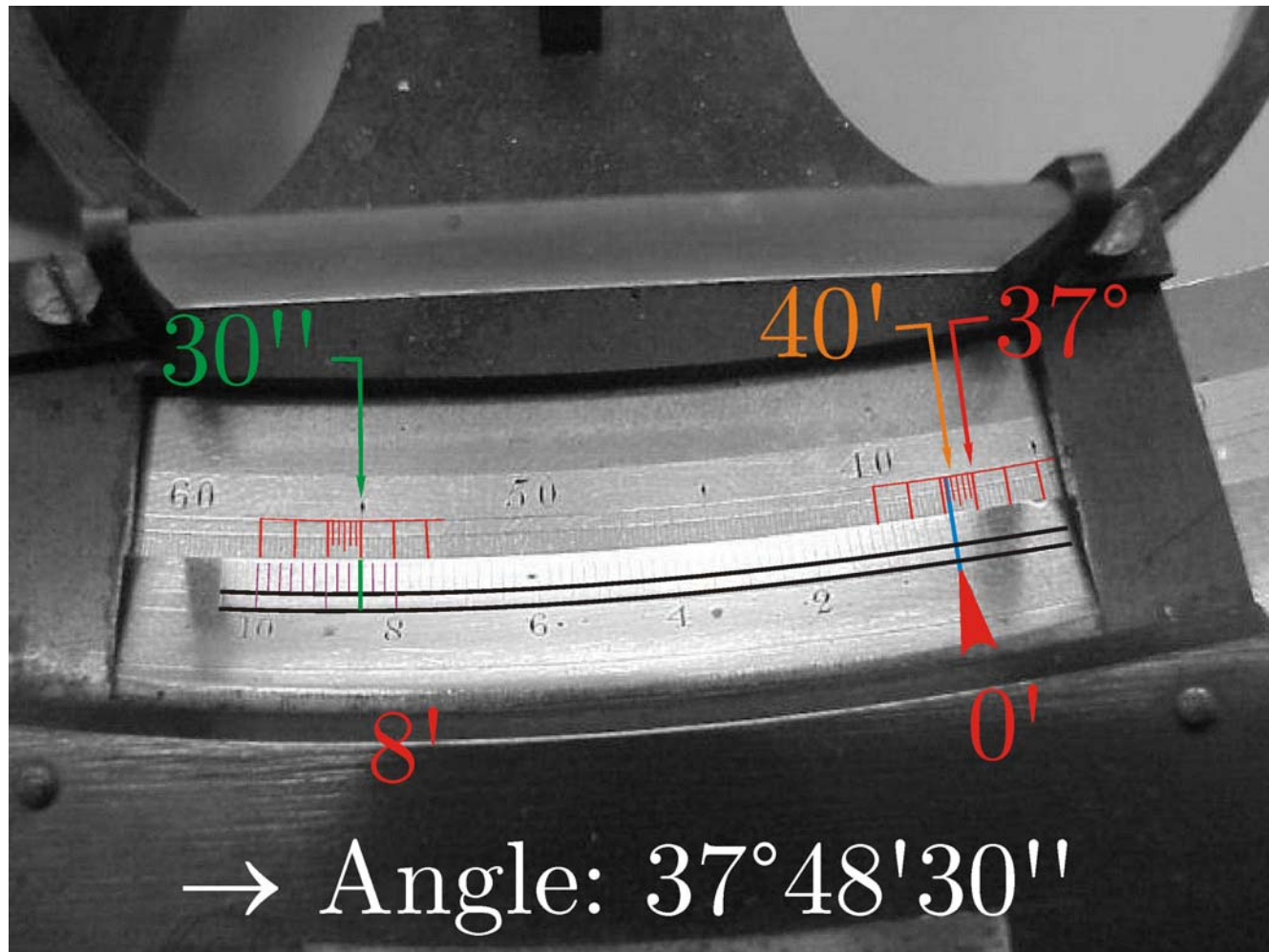
## 6 Terrestrial navigation / Labs (12a)

### Example: Traditional sextant (a)



## 6 Terrestrial navigation / Labs (12b)

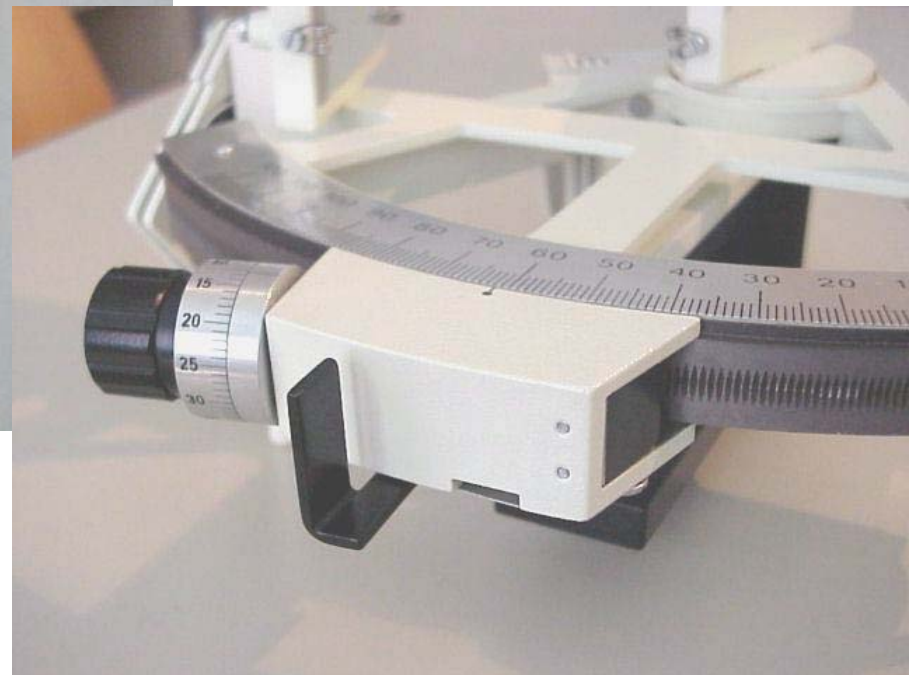
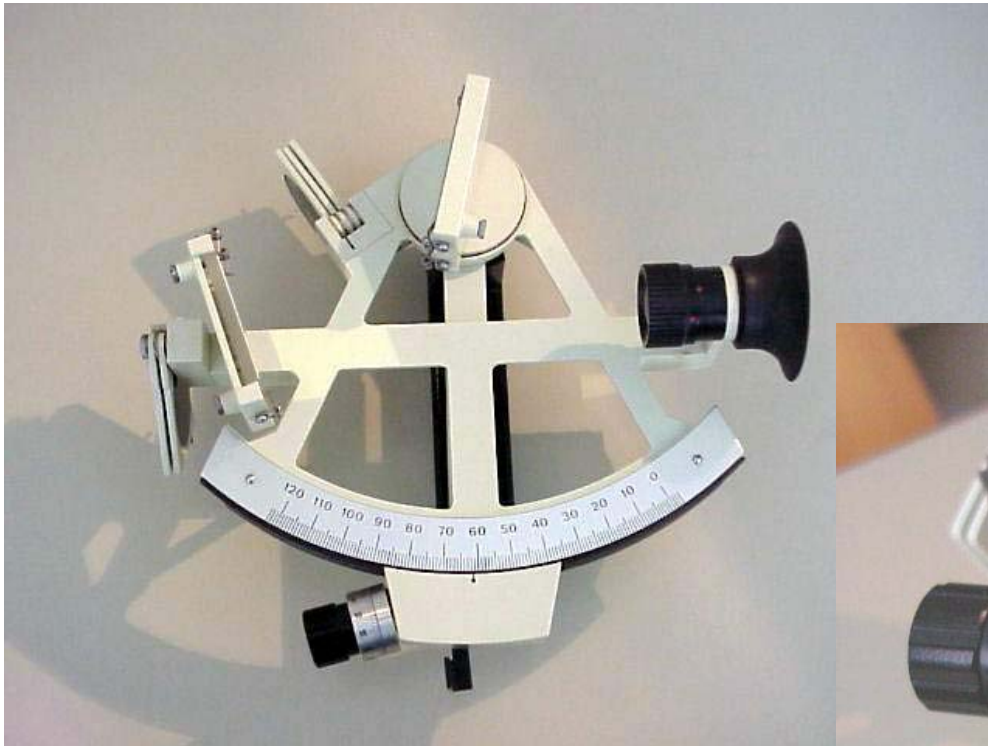
### Example: Traditional sextant (b)





## 6 Terrestrial navigation / Labs (13)

### Example: Modern sextant



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## 6 Terrestrial navigation / Labs (24)

Examples: **Chronometer / Radio-controlled clock**

