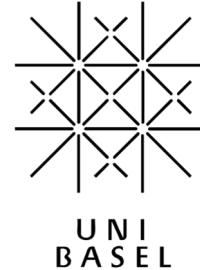


AST1.3 Equatorial system

Rita Gautschi, University of Basel

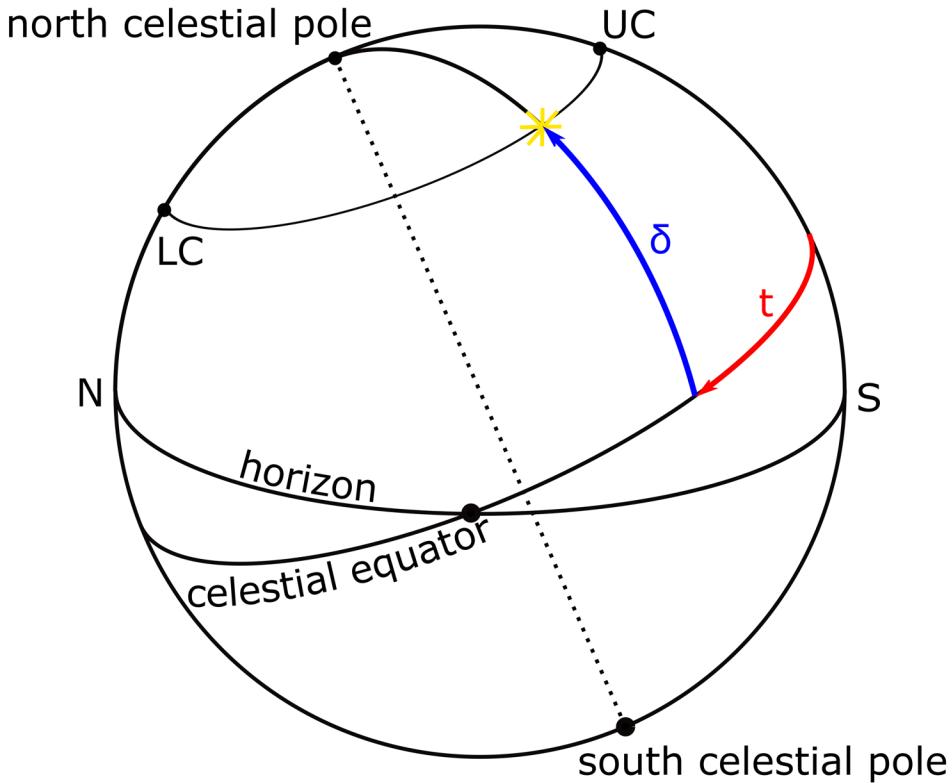


Swiss National Data and
Service Center for the
Humanities

Equatorial coordinate system(s)

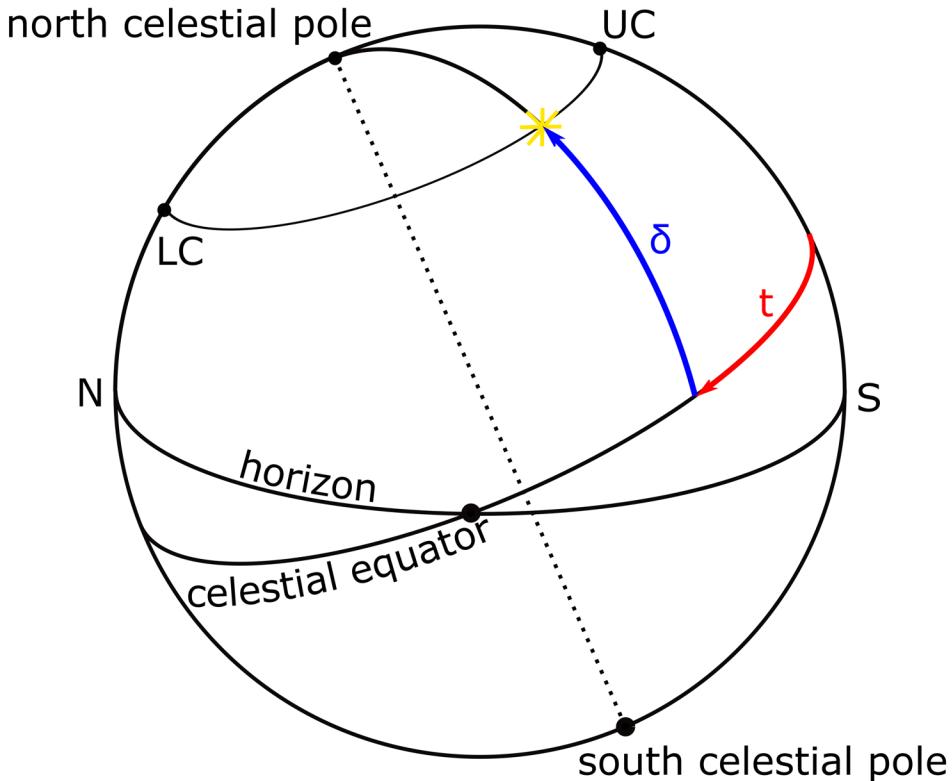
- base circle: celestial equator
 - declination δ
 - two possibilities to define the second coordinate
1. Fixed equatorial system
 - hour angle t – counted in time
(hours h, minutes m, seconds s)

$$24h = 360^\circ, 1h = 15^\circ, 1m = 15', 1s = 15''$$



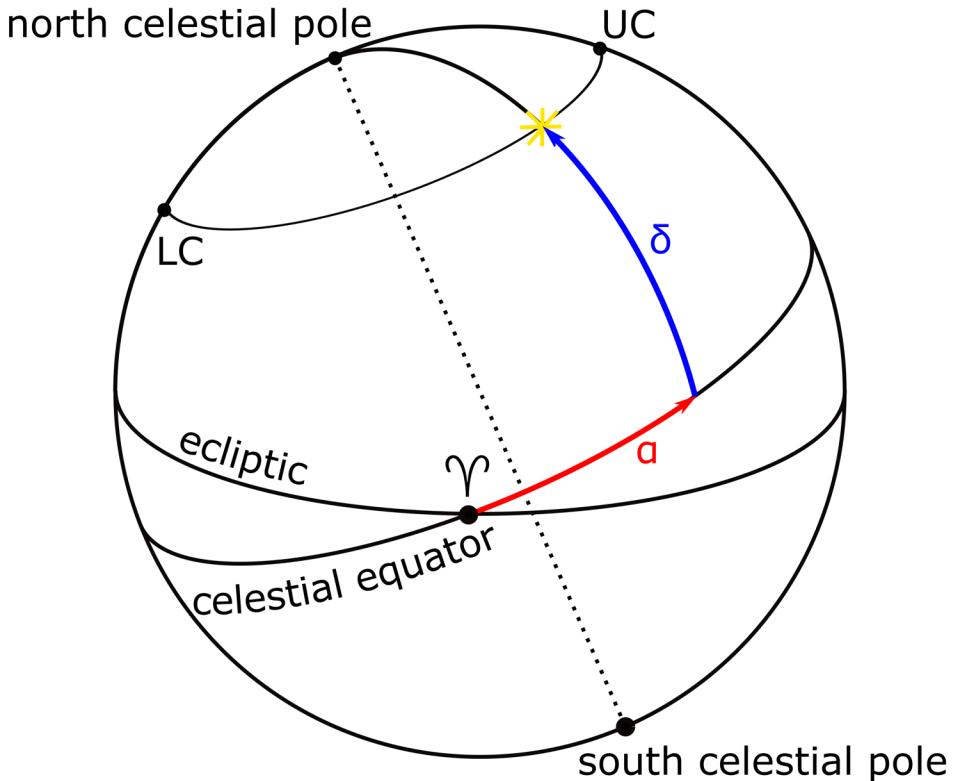
Equatorial coordinate system(s)

- UC ... upper culmination point
 $t = 0^h = 24^h$
- LC ... lower culmination point
 $t = 12^h$
- dependency on time and place



Equatorial coordinate system(s)

2. Moving equatorial system
 - right ascension α
 - counted from the vernal equinox or Aries point (γ)
 - measured in h, m and s
 - declination δ and right ascension α used in star catalogues



Credits



Author

- Rita Gautschy, University of Basel (2022)

Concept SEACTeach

- Rita Gautschy, Stanisław Iwaniszewski, Alejandro Martín López, Frank Prendergast (2021)

Design

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