

Contents of ZON & TIJD 2024.4 (nr. 151, December)

Editors

- 3 **Editorial: From old to new** - *Editors*
January, start of the New Year.
- 4 **From the NL Board** - *Secretariat*
Three new Board members were elected: Janny Wijchman, Hendrik Hollander and Hans Wilschut. Hendrik will be secretary.
- 5 **From the Sundial Society of Flanders** - *Eric Daled*
A majority of the membership has agreed with the proposal to dissolve the Society of Flanders in 2025.
- 6 **The new sundial registry** - *Gerard van den Braak*
Gerard explains the structure of the new database, how to report new or moved dials, and which outputs can be obtained.
- 8 **May I introduce myself** - *Janny Wijchman*
Janny explains what attracts her to sundials.
- 9 **Le Mont Solaire** - *Hans Schipper*
The island of Mont Saint-Michel (France) served as a gnomon for a huge sundial around the autumn equinox of 1988. A 'land art' project.
- 11 **The Binnenhof as a gold mine** - *Editors*
During excavations of the Binnenhof (seat of the Dutch parliament), the lower part of a dyptich sundial was found, made of horn by Kaspar Milner from Nürnberg.
- 12 **The polyhedral sundial of Alberda. Part 1: The individual dials considered** - *Frans Maes*
This baroque instrument, dating from early 18th century, features nine sundials. The hour lines are correctly delineated, except for the antique hours; the date lines appear less precise.
- 19 **A prophet with a sundial** - *Editors*
Janny Wijchman saw a statue holding a sundial on the pulpit of the convent church in St. Paul im Lavanttal (Austria). It depicts the prophet Isaiah and refers to the retrogradation of the shadow on Ahaz' sundial.
- 20 **Sundial made from bicycle rims** - *Hans Wilschut*
Hans made an armillary sundial from two bicycle rims and studied how accurate it could be, by adjusting the alignment in three directions, based on a mathematical model of the dial. With better mounting and correct adjustment, an accuracy of 18 seconds (s.d.) was obtained.
- 24 **A solar chronometer** - *Wim Geerts*
Wim was challenged to build a chronometer by using the sun, for a range of 20 min and an accuracy of 10 sec. He amplified the sun's movement with a 12x binoculars, projecting a lightspot on paper. At a velocity of 12.95 mm/min, an accuracy of 9 sec was obtained.
- 25 **The metadata of digital photos** - *Hans Wilschut*
Photos made with modern cameras and smartphones have a lot of metadata associated. These can be read with a suitable app. The data can be used to check the accuracy of a sundial, by combining the time stamp on photos with the gps info stored.
- 26 **Armillary sundial with EoT correction** - *Frans Maes*
A runner on the hour band has an EoT curve. Adjusting it so that the shadow of the pole-style hits the curve on the proper date enables direct reading of civil time.
- 27 **Noon analemma on Möbius strip** - *Frans Maes*
A student group designed a stainless steel Möbius strip, entitled 'Infinite Possibility'. It has been placed in front of the Engineering Research Center of Brown University (Providence, USA). Sunlight falls through a small hole, casting a bead of light on the lower surface. At 12 noon (11 AM in winter) it touches the analemma.
- 29 **Report of the meeting of 21 September in Tricht** - *Secretariat*
In the morning, the workshop on spherical trigonometry was continued. The afternoon started with an extra AGM, in which three board members were elected, completing the board after lengthy vacancies.
Rob van Gent addressed the perpetual calendar on the polyhedral Alberda sundial. Its importance at the time derived from the adoption of the Gregorian calendar by protestant regions around 1700.
Hendrik Hollander assisted in an art project of Katja Mater, turning numbers found in the Buda industrial area (Brussels) into single-hour sundials. Several members contributed interesting matters to the 'open table' section.
- 31 **The previous sundial on the Nieuwe Kerk in Amsterdam** - *Editors*
An etching by Frederik de Wit showed the sundial that adorned the south aisle of the church between 1648 and 1722.
- 32 **Puzzle: sunrise and word puzzle** - *Frans Maes/Willy Leenders*
The angle α of the sun's path at sunrise as a function of latitude φ and solar declination δ is:
 $\cos \alpha = \sin \varphi / \cos \delta$.
The traditional word puzzle for the holidays is from Willy Leenders.
- 34 **Contents of this issue** – *Editors*
- 35 **Information on the Netherlands' Sundial Society and the Sundial Society of Flanders**