

Contents of ZON & TIJD 2025.4 (nr. 155, December)

Editors

Hint for the digital version: a mouse click on an entry brings you to the page where the article starts

- 3 **Editorial: Towards a new sunny year** - *Editors*
The winter solstice sunrise can be experienced in Newgrange mound. Best wishes for the holiday season and a sunny and peaceful New Year.
- 4 **From the NL Board - Secretary**
The next meeting (24 January) will host a talk by Theo Jurriens on chasing solar eclipses around the world. In the morning workshop we will assemble paper sundial models.
- 5 **From the Sundial Society of Flanders - ZKV Board**
The dissolution of the Society has just been finalized. The contents of the *Zonnetijdingen* magazine has been made available on the website of the Netherlands' Sundial Society.
- 6 **New sundial in Leidsche Rijn - Hendrik Hollander**
A group of painters that makes large murals contacted Hendrik to cooperate in a project to include a sundial in a mural in Leidsche Rijn, a new residential area in Utrecht.
- 8 **Méridien or méridienne - Eric Daled**
Eric explains the difference between these French terms: a meridian or a meridian line.
- 9 **Follow your shadow - Willy Leenders**
Willy found two streets accidentally running exactly north-south in his home town Hasselt. In Brussels, the street north of the former Royal Observatory was laid out so on purpose. He then discusses several meridian lines in Belgium.
- 12 **The pocket sundial with moon dial by Gerardus Brand - Siebren van der Werf**
The 'Museum at the A' in Groningen has a pocket dial from 1634. A rare element is a disc with a vertical east or west dial. The layout of this dial is not very accurate. René Descartes valued Gerardus Brand highly as a clockmaker.
- 16 **Mysterious sundial in Dinkelsbühl - Janny Wijchman & Frans Maes**
An east-facing sundial on St. George Minster in Dinkelsbühl (Southern Germany) consists of two quadrants, the left one delineated as a mass dial, the right one showing a line at 45° with numbers 7-11. It should have indicated summer and winter work hours for the workers, but its functioning remains unclear.
- 19 **The Sundial tourist visited Alphen aan den Rijn - Hans Schipper**
Hans saw a nice equatorial sundial in a city park, not yet registered in our database, although it dates from 1936.

- 20 **Sundial blues in Paris - Hans Wilschut**
Hans visited Paris. Using *Cadrans Solaires de Paris* by A. Gotteland & G. Camus as a guide, he searched sundials in the 4th and 5th district.
- 22 **Calculating solar azimuth without latitude - André Reekmans**
In addition to analytical and spherical trigonometry methods published earlier, André gives a solution using classical planar geometry to prove that $\cos(\delta) \sin(t) = \cos(h) \sin(Z)$ [δ = declination, t =hour angle, h = altitude, Z = azimuth].
- 23 **The old puzzle: Tintin - Hans Wilschut**
Tintin is in trouble at the Inca's: what is wrong with their sundial? Most notable: hour number direction and pole-style angle.
- 25 **Sundial photos from AI not yet satisfactory - Willy Leenders**
ChatGPT can presently generate pictures. Willy asked for a sundial with a person whose shadow indicates the time, and also specifically for an analemmatic dial. The results are not satisfactory.
- 26 **The new puzzle: Sundial safari - Janny Wijchman**
Find the places where sundials described briefly can be found, in The Netherlands or Flanders. Use the registries of Dutch and Flemish sundials if necessary.
- 28 **Report of the meeting of 20 September in Tricht - Secretary**
In the morning workshop, Hendrik Hollander taught us how to use an astrolabe.
In the afternoon session, Siebren van der Werf gave a talk on '3000 years of astronavigation' (also the title of a book he wrote).
In the 'Open Table' section, Hans Wilschut demonstrated Zwexcel, an Excel program for calculating sundials, based on the procedures of Fer de Vries. Jan Hogendijk is involved in the Institute for the History of the Arabic-Islamic Sciences in Frankfurt. It fosters the work of Turkish professor Fuat Segzin and houses many old Islamic instruments and replicas. Peter de Groot experiments with transparent rods as gnomon for an equatorial sundial, yielding a caustic (light arrow) which indicates the time. Jan ten Böhmer is involved in the reconstruction of an old sundial on the church of Borculo, a village that was heavily damaged by a tornado 100 years ago. Hendrik Hollander designs sundial cards. Among these is an equatorial sundial with 12 hours in a circle, as on a clock face.