

- Co-ordinate transformer on the web J.G.T.M. Taudin-Chabot 25
Of Dutch national interest mainly, this web application calculates geographical co-ordinates to and from important reference frames.
- A single-day sundial Willy Ory 26
Jos Geusens designed this sundial for Open Monument day. He and Willy Ory built it on the grounds of Castle Nieuwenhoven near St. Truiden.
On the day for which the dial was designed, 11 September 2004, the shadows of the tops of the "matchsticks" passed through their respective hour points on the noon strip at the appropriate times. The design would also work on 2 April, but the dial did not live that long.
- Time is out Jan Degraeve 28
Seth Atwood has sold the remainder of his remarkable Time Inn collection at Sotheby's on 13 and 14 October 2004. His collection contained those pieces that represent important changes, improvements, evolution; many were unique or rare. Eventually, with his relatives showing little interest, Atwood entrusted an important part of the collection to the Adler Planetarium and made the remainder available to hundreds or thousands of collectors.
- Photos of the Eenrum-Groningen Twin Dial E.L.H. Roebroek 30
A well-proportioned, almost ideal, tower. Roebroek chose to make a modest sundial to the Southwest, the only direction enabling a view on the sundial from farther away. Photos show: the tower, the Mayor, model (paper, cardboard, wood), sundial, 1:10 model of Eenrum tower, mini-dial for this model, design sketch, inclination and easting of the tower, drawing of easting, alignment of south dial, tower (top is vertical, base is inclining), how to find Polaris (three photos). From the list of remarks: "the top style support of the West dial is designed so that no bicycle tyre – however well thrown – will hang off it."
- No-math, arbitrary plane, pole style dial H.W. van der Wyck 34
How to construct a pole style sundial on an arbitrarily oriented plane, without formulas, using plane geometry only plus some tools: a plumb line, square, a custom right-angled triangle one of the corners of which equals local latitude, and a rod for the pole style ("gnomon").
The construction: 1. Draw meridian M on the plane (see the figure). 2. Raise the pole style, vertically over the meridian and under the correct angle with the horizon, using triangle and square. 3. Project an arbitrarily chosen point of the pole style onto the plane, using the square. 4. Draw substyle OS from the projection to the gnomon foot. 5. Draw equator Eq square to the substyle. 6. Mark the distance a, between the intersection of equator and substyle and the style (square to the style), on the substyle, from the intersection. 7. Draw a line from the point on the substyle found in 6 to the intersection of equator and meridian. 8. Draw angles every fifteen degrees, either side of the line found in 7, through the point from 6, using compass or protractor. 9. Lines from the pole style foot to the intersections of the lines from 8 with the equator are the desired hour lines!
The author further describes a construction to find the declination.
- Oldie: Noon mark in Haren-Groningen E.L.H. Roebroek 36
If we can agree that "time" equals "place of the sun", then a noon mark is a device for determining mid-day in the most literal sense of the word. Along with a discussion of the difference between legal and apparent time, the noon mark is described. Its length is so chosen that the shadow of the gnomon just touches the top or bottom at noon at the solstices, or beginning of winter or summer. Near the soldier course in the wall, a small horizontal indicator marks the equinoxes, when spring or autumn starts.
- Did you know? Can you prove it? - part 4 F.J. de Vries 38
Fer found a more general theorem by Emerson, which states: "choose an hour line; intersect it with a line, parallel to the hour line for an hour angle 90 degrees different; the other hour lines divide the new line in symmetrically equal lengths". In particular, diagonal AC in Hans'

drawing is parallel to the 9-hour-line, and so its divisions are symmetric around its intersection of the 3-hour line. – The article then proves the 1770 Emerson theorem, and concludes with the original English text of the proposition.

- Dialing scales generalisation F.J. de Vries 41
The Emerson proposition also leads to a more general way to look at dialing scales. Instead of having symmetry around 45 degrees, other choices become possible. The article shows scales for $s=30$ and $s=60$. For a narrow range of latitudes, an optimum s exists for which the latitude scale spread is best. For $\phi=45$ we get optimum $s=45$ – the traditional value.
- A horizontal sundial on the South Pole H.W. van der Wyck 46
A description, taken from Southafrican newspaper clippings, of the "Proudly Southafrican" sundial on the SANAE base on Dronning Maud Land. A usual horizontal dial in design, the materials used are special, being specifically selected for the arctic climate.
- Literature 1512 ... 1520 D.L.J.M. Verschuuren 47