

The Amsterdam Sundial Trail



by Frans W. Maes
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Scope

The Amsterdam Sundal Trail is intended for sundial friends who visit Amsterdam as a tourist, and would like to see some interesting dials, or dials in interesting locations, together with classified highlights such as the Rijksmuseum and the Anne Frank House, or other hot spots of their choice. Although I describe a complete trail, starting and ending at the Central Station, you are of course free to include selected sites into a trail of your own. Amsterdam has so much to enjoy for everyone!

Overview

The complete trail is about 8 km (5 miles) long. It visits 8 sundials visible from public walkways, and another 8 dials hidden behind Amsterdam's famous canal house façades. The latter can be visited during office hours (workdays 9-17 hr) - and most are free!

The route is divided into 12 steps, with an early stop option after step 9. The description below details for each step how to get at the target and what can be seen and done there.

Getting around

There are several ways to get around in Amsterdam's city center: by foot, bicycle, tram, metro, minibus and/or boat. The description limits itself to moving by foot, bicycle and/or tram.

Amsterdam is a dynamic city, in which several major works are going on. The construction of the new north-south metro-line is accompanied by closure or obstruction of several major streets. Extensive restorations of the Rijksmuseum (National Museum) and renovation of the Stedelijk Museum (Municipal Museum of Modern Art) lead to less art works on display.

Preparation

My favorite street map of the city center is the one from Carto Studio, available in the AKO bookshop in the hall of the Central Station and elsewhere, for only € 2.95. It shows all attractions, museums, tram lines and stops. Also the Tourist Information sells a map. Not as good, but cheaper, at € 2.00.

If you plan to do part of the trail by tram, you need to buy a 'strippenkaart' in advance. A ride costs 2 'strippen'; changing lines is allowed. You can buy a 'strippenkaart' at the GVB (municipal transport agency) booth in Stationsplein. They also sell transportation passes for one or more days.

- A foot/bicycle bridge leads from NEMO to the temporary exhibition space of the Stedelijk Museum (SMCS) on the 2nd and 3rd floor of the former post office building at Oosterdokskade (open daily). There is a cafeteria on the top floor, which offers an even wider view of Amsterdam and the region.
- Go left along Oosterdokskade to return to the Central Station. The Station was built by architect P.J.H. Cuypers in the 1880's. He also built the Rijksmuseum. The two towers resemble the towers of town gates, which a station actually is. Note the wind vane dial on the left-hand tower, controlled by the wind vane on the central pinnacle.

Notes

brackets). Date lines are provided for the beginnings of the calendar months (dates on the left) as well as the zodiacal months (symbols on the right). Successive zodiacal months are distinguished by alternating colors of the dial face (green patina and bronze).

The two scales share the pole-style, which ends in a small sphere for the lower scale. When I visited, the pole-style was missing, however.

Further inscriptions give the geographical coordinates, the inauguration date and the logo of the maker, artist Joep Coppens. The gnomonics are from Thibaud Taudin Chabot. The sundial was donated by the contractor who built the Planetarium. The motto on the winter/spring plate reads: "From which we derive light and warmth", the summer/autumn plate: "There's a time to come and a time to leave". Don't take this personally...

Step 12: return to the Central Station (ca. 1500 m)

- By tram: return to Plantage Middenlaan and take line 9 or 14 to Central Station.
- By foot or bicycle: on leaving Artis, turn right, climb the drawbridge and turn left (Entrepotdok). Pass the gate at the end on the right, turn left (Laagte Kadijk) and cross the bridge. Turn right (Schippergracht) and cross the busy Prins Hendrikkade.
- Set in the water in front of you is NEMO, the science and technology center. It was designed by Renzo Piano and opened in 1997. The building resembles the bow of a ship and caps the entrance of the IJ-tunnel. You can climb the steps to the upper platform and enjoy the free view and a drink, or visit the center itself (open daily; closed on Monday off-season). Ships are on display along the piers on both sides of the center. Among these is the replica of the Amsterdam, an 18th century merchant ship that was wrecked in 1749 in a raging storm. It can be visited separately or together with the center.
- In front of the entrance is a vertical wheel with a number of buckets along the rim and a tap above them which drips water into the uppermost buckets. If you are familiar with chaos theory, you will recognize a Lorenz Waterwheel, exhibiting chaotic rotatory behavior.
- The museum's shop is located in the entrance hall. They have a very fine selection of science-related gadgets.

A bicycle can be rented at the bicycle park in the east wing of the station. Ask for an extra chain lock. And be careful when crossing tram tracks obliquely!

Maintenance

The trail description is believed to be accurate at the time of writing (October 2007). However, I live some 200 km from Amsterdam and cannot check the route frequently. I therefore appreciate to be informed about changes, ambiguities and errors: sundials@fransmaes.nl.

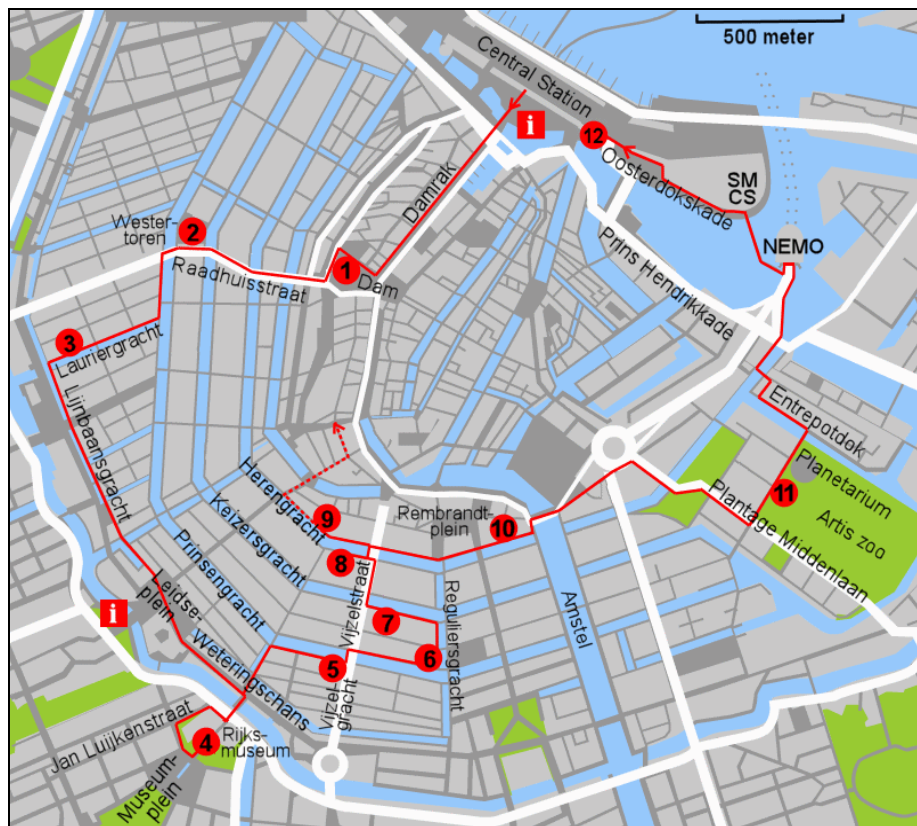
I hope you will enjoy the trip. I enjoyed composing it!

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Rembrandtsplein, a popular entertainment spot. From the tram stop on the left, take line 9 (direction Diemen Sniep) or line 14 (direction Flevopark) and get off at the third stop, in Plantage Middenlaan. Continue along the street and take the first street on the left, Plantage Kerklaan.

- By foot: continue eastward along Herengracht and turn left, or from the rear fence, continue Amstelstraat eastward.

By bicycle: continue westward along Herengracht, take the first right (Utrechtsestraat) and right again (Amstelstraat).

Cross the Amstel, the river that gave Amsterdam its name. On the right you note the most famous bridge, Magere Brug (Lean Bridge).

On the left you see the Stopera (Opera Theatre/City Hall) and the Waterlooplein flea market, at the foot of the Moses and Aaron Church.

Keep slightly right into Nieuwe Amstelstraat, past the Jewish Historical Museum. Then straight ahead to Muiderstraat. Follow the tram tracks to the right. On the right, past the bridge, is the somewhat concealed entrance of the Hortus (Botanical Garden). Proceed into Plantage Middenlaan. Take the second left, Plantage Kerklaan.

- The entrance to Artis Zoo and Planetarium (open daily) is after 100 m on the right. If you just want to visit the sundial at the entrance of the planetarium, ask the ticket salesperson to write the entrance time on your ticket. If you return within 20 minutes, your ticket will be refunded. This will give you even time to have a quick look around the Planetarium shop. Their selection of merchandise is limited, though.

- Directly on the left after the entrance gate, in front of the Planetarium entrance, is a modern vertical sundial. It was unveiled at the official opening of the Planetarium by Queen Beatrix in 1988, which marked the 150th anniversary of the Zoo.

- The sundial is mounted in a circular frame, topped by a rising phoenix. A sun and a (crescent) moon adorn the upper half of the circle, spanned by a rainbow. The bronze, semicircular sundial face has two scales. The small scale above indicates local time from 6 a.m. to 6 p.m., in roman numbers.

- The large scale below reads clock time as well as the date. There are actually two semicircular plates, which should be exchanged semiannually (I doubt whether they do). This should avoid the ambiguity of full analemmas.

The half-hour lines each show a half analemma and are labeled from 8 to 18 hr Central European Time, as well as by summertime in small font (some in

- By foot: on leaving the building, turn right and again right (Leidsestraat). Walk straight ahead through Leidsestraat, Koningsplein, Heiligeweg and turn left into Kalverstraat (mostly shopping streets). Cross the Dam square and follow Damrak to the Central Station.
- By bicycle: on leaving the building, turn right, return along the other side of the canal and turn left across the next bridge (Vijzelstraat). Go straight ahead, across Muntplein, Rokin, Dam and Damrak to the Central Station.

Step 10: to Museum Willet-Holthuysen, Herengracht 605 (ca. 600 m)

- By foot: on leaving the Herengracht building, turn left; from the restaurant: continue Reguliersdwarstraat, turn right after the underpass (Vijzelstraat) and turn left before the bridge. Follow Herengracht to Museum Willet-Holthuysen.
- By bicycle: continue westward along the canal and return along the opposite side. Follow Herengracht all the way to the Amstel river and return along the other side of the canal to Museum Willet-Holthuysen.
- Like Van Loon, this museum features a fully furnished mansion of a distinguished Amsterdam family. The museum is open daily. At the reception desk, you may ask to see only the well-maintained formal garden. If they like you, the admission is free.
- Alternatively, you can see the garden from the street behind the museum. In that case, walking along Herengracht, turn left into Utrechtsestraat and take the first right, Amstelstraat. After 80 meter, the fence on the right gives a nice view of the garden.
- In the center of the baroque garden is a pretty armillary sphere. The gilded equatorial hour ring is an uncommon spherical section; most hour rings are cylindrical. The other rings do not model the tropics and polar circles, as they are horizontal. The gilded pole-style has a sphere in the center and is adorned with a fleur-de-lys and a ball at the ends. A simple wind vane, also gilded, tops the dial.

Step 11: to Artis Zoo, Plantage Kerklaan (ca. 1000 m)

- By tram: on leaving the museum, turn right, and right again (Utrechtsestraat). From the rear fence in Amstelstraat, return. You arrive at

Trail description

Step 1: from the Central Station to Dam (ca. 800 meter)

- The trail starts at the Central Railway Station. On leaving the station, you find the GVB and Tourist Information booths directly in front in Stationsplein (Station square). Behind them is a big construction site for the new north-south metro line.
- By tram: take line 4, 9 16, 24 or 25 and get off at the next stop.
- By foot or bicycle: cross Stationsplein straight ahead and go along Damrak, which leads to Dam square.
- The big building about half-way along Damrak on the left is the 'Beurs van Berlage', built around 1900 by H.P. Berlage, famous architect of the Amsterdam School. The building once housed the stock and commodity exchanges. It now houses exhibition space and catering.
- The Dam square is the heart of the city - and the country. In the left-hand (eastern) part of the square is the National Memorial, 22 meter high. It was dedicated in 1956 to the memory of the Dutch victims of the Second World War and peace-keeping missions worldwide, and is thereby a symbol of national unity.
- On the opposite side of the square is the Koninklijk Paleis (Royal Palace), temporarily closed for renovation. It was built by Jacob van Campen in the 1660's as the city hall, then the largest secular building in the world. Amsterdam was at the time one of the world's wealthiest and most powerful cities.
- Tucked away in the north-west corner of the Dam is the Nieuwe Kerk (New Church). Construction of the gothic building was started in the 14th century. Now it houses large exhibitions (open daily during exhibitions). The façade of the southern aisle, which declines 18° east, has two sundials.
- In the very top is a vertical dial with a circular, marble dial face. Hours from 5:30 a.m. to 4 p.m. Gilded arabic hour numbers with short arrows, half hours indicated by dashes and dots. Gilded pole-style. The sundial was renovated in 1722 by the instrument maker C. Metz. Previous copper numerals have caused greenish colorations of the marble.

- Half-way up the east pillar of the aisle is a triple sundial on a nicely decorated sandstone block, topped by a pediment. The block is rotated out of the wall, so as to face directly south. The south dial has roman and arabic hour numbers from 6 a.m. to 6 p.m., with hour lines and half-hour dots. Gilded, supported pole-style, slightly bent.

The west dial has hour lines from 3 to 6 p.m. Thereafter the sun is blocked by the aisle wall, if not earlier by the Palace. The east dial has hour lines from 3 to 6 a.m. Behind it, only partly visible from street level, is a skull, a vanity symbol, wearing a cap. The pole styles of both east and west dials probably were forgotten to be replaced at the last restoration.

Step 2: to the Westertoren (ca. 500 m)

- By tram: from the tram stop between Palace and Church, take line 14, or from the stop behind the Palace in Nieuwezijds Voorburgwal, take line 13 or 17. Get off at the next stop.
- By foot or bicycle: proceed between Royal Palace and New Church, turn left on Nieuwezijds Voorburgwal. Look up to Atlas bearing the Globe, on top of the pediment at the Palace's rear. Take the first right, Raadhuisstraat. You cross four canals. The first one is Singel. It followed the walls of the medieval city from 1428 to 1585, when the city was slightly extended up to the present Herengracht (gracht = canal). Continue to the Westerkerk (West Church) with its colorful, recently restored tower.
- The Westertoren (West Church tower) is the highest of the city: 85 meter. It has always been owned by the city and not by the church, as it carried the clocks and served as lookout for the fire department. The tower can be climbed, according to the schedule posted at the tower's foot.
- From 1908 to 1937 the meridian through the Westertoren ruled the legal time in the Netherlands. The tower has longitude 4° 53' 01.95" E, so that clock time, or "Amsterdam time" was 19 min 32.13 sec ahead of Greenwich time. In 1937 this difference was for practical reasons changed to exactly 20 minutes. All these years, the Government could not decide between joining the nearer Greenwich time zone, or the time zone of the economically more important German neighbor. The German occupation in 1940 brought the decision, and since then legal time in the Netherlands is Central European Time.
- The Anne Frank House & Museum (open daily) is 100 meter past the tower on Prinsengracht.

Step 8: to Goethe Institute, Herengracht 470 (ca. 200 m)

- By foot: on leaving the museum, turn left, take the first right (Vijzelstraat) and turn left at the next canal (Herengracht).
By bicycle: continue eastward along the canal and return along the opposite side. Take the second street to the right (Nieuwe Spiegelstraat) and go right along the next canal (Herengracht).
- The Goethe Institut is the German cultural center in the Netherlands. Ring the lower chime (labeled 'Institut'). When the door opens, ask the receptionist (first room on the right) permission to visit the garden.
- High up the rear wall is a splended, round sundial. Gilded roman hour numbers. Hours from 7:30 a.m. to 6:30 p.m. Short hourly arrows pointing to the sun, wavy arrows for the half-hours. The pole-style is implanted in a golden sun. Declination 13° west.

Step 9: to Herengracht 479 (ca. 300 m)

- By foot or bicycle: on leaving the Institut, turn right and return along the opposite side of Herengracht.
- Ring the chime next to the door below the steps (nr. 479 sous). In the past, this was the personnel entrance. When somebody responds, ask permission to see the garden. If your call is not answered, you may try the neighbouring houses, nr. 481 or 483, as they share the backyard. In case this doesn't help, continue westward, turn right two times (Leidsestraat, Reguliersdwarsstraat) and see if you can get into the courtyard of restaurant Le Pêcheur at nr. 32.
- The restaurant is in the former coach house from 1761, a two-story building, its wall now painted black. A round sundial is set in a large stone ornament in the center of the roof railing. Hours from 8 a.m. to 6 p.m., half-hour dots. The pole-style is painted red. Declination 15° west.

Early stop option: return to the Central Station (ca. 1500 m)

You can end or suspend your tour here and return to the Central Station.

- By tram: on leaving the building, turn right and again right (Leidsestraat). From the tram stop on this side, take line 1, 2 or 5 to the Central Station.

Step 7: to Museum Van Loon, Keizersgracht 672 (ca. 300 m)

- By foot: go left along the Reguliersgracht and turn left along the next canal, Keizersgracht.

By bicycle: continue westward along Prinsengracht, turn right (Vijzelstraat) and right along the next canal, Keizersgracht.

- Museum Van Loon (open daily except Tuesday) is the only stop that has an entrance fee, which definitely is worth it. Throughout time, the interior and exterior of this mansion have remained practically intact. Today they form a fascinating historical monument, showing how a patrician, aristocratic family lived in this canal house. The house was built in 1672. Three sundials can be seen in the garden.
- At the reception desk, ask permission to enter the far end of the garden. This is private property, belonging to the former garden/coach house from 1758 with its classicist façade.

The elaborate, multiple sundial on its helically patterned column is dated 1578 and has been carved from a block of sandstone, hence the name 'block dial' for this type. It stood in front of a mansion in Oenkerk (province Friesland) and was brought here around 1972. Several edges serve as pole-styles. I counted 22 pole-styles, serving 28 sundials: horizontal, vertical, equatorial and polar. Can you surpass this count? And did you note that its present orientation is about 180° wrong?

A unique feature of this block dial is the pair of declination scales at east and west sides. A pin placed at noon on the crossing lines throws a shadow on the date scale, which bears the zodiac signs. The east side covers winter and spring, the west side summer and autumn.

Another unique feature is the stone sphere on top. Block dials often have a multi-pointed equatorial star on top, which gives the idea of a lectern; hence the name 'lectern dials'. I know of only one other sphere-topped block dial: in Bakkeveen (also Friesland), dated around 1750.

- The neighbouring house (Keizersgracht 670, to the left of the Museum as seen from the garden) has a beautiful round sundial up the rear wall, set in the center of the roof railing and crowned by a pretty wind vane. Hours from 7 a.m. to 6 p.m., short half-hour arrows. Declination 12° west.
- In the center of the hedge circle is a pretty armillary sphere, with a sail boat on top, which deserves restoration, however. It is dated 1818. The hour numbers have been incorrectly refreshed at some past occasion.

Step 3: to Lauriergracht 116 (ca. 500 m)

- By foot or bicycle: cross the Prinsengracht bridge and turn left, following Prinsengracht. Don't cross the next bridge, but turn right along the canal (Lauriergracht). Number 116 is a large building, almost at the end of the street.
- The neighborhood you are traversing is called Jordaan, from the French 'jardin' (garden). It was developed in the first half of the 17th century and became a working-class district in the 19th century.
- At the door of nr. 116, ring the topmost chime (labeled 'Spirit!'). Hopefully, someone will answer your call through the intercom. Ask permission to see the sundial in the courtyard.
- The modern sundial was made by sculptor Hein Mader in 1974. The pole-style is formed by the 8 mm wide slit between the cylindrical segments. Hour blobs from 9 a.m. to 3 p.m. local time; some are missing. As the building declines 22° east, the sundial apparently is not oriented correctly.

Step 4: to the Rijksmuseum (ca. 1500 m)

- By tram: on leaving the building, turn right. On Lijnbaansgracht, turn left. Cross the first bridge on the right, turn left (Marnixstraat), and from the tram stop across the street take line 7 (direction Flevopark) or line 10 (direction Azartplein). Get off at the third stop (Weteringschans), walk back and cross the bridge on the left.
- By foot or bicycle: on leaving the building, turn right. On Lijnbaansgracht, turn left. After 800 m you arrive at Leidseplein, a lively entertainment focus. Here are the Theatre Hall, the Ticket Shop for shows, concerts, plays, etc. (in the corner) and a Tourist Information booth (across the bridge on the right). Cross the square straight ahead and follow the tram tracks along Kleine Gartmanplantsoen and Weteringschans. Cross the first bridge on the right.
- From here you have the front of the Rijksmuseum in full sight. The Rijksmuseum has been built by the architect P.J.H. Cuypers in the 1880's, in a neo-style based on the Dutch gothic/renaissance heritage. Most of the Museum is closed for extensive restoration and renovation. The most beloved paintings are on display in the Philips wing, though. The temporary entrance is at the end of the right side of the building (Jan Luijkenstraat), open daily. Four sundials are found outside the Rijksmuseum.

- From the path to the temporary entrance, you can spot a little tower at the end of the library wing. An old man in a recess holds a sundial. He faces south-west, towards the evening sun. Hours from 11 a.m. to 6 p.m. in roman numbers; no hour lines. Although medieval examples (such as Chartres and Strasbourg) have a perpendicular gnomon, here a pole-style is present.
- To see his counterpart, walk out of the gate, turn left and walk around the south wing of the museum. From the southern access to the underpass (which will open in due time), you have a good view of the youngster holding the south-east dial, facing the daybreak. Roman hour numbers from 6 a.m. to 12 noon.
- The little park east from here has two sundials. Go through the (open) gate down the steps. A small garden house (actually, only the façade) has a sundial, dated 1731. Hours from 7 a.m. to 6 p.m., and short half-hour lines. The pole-style is implanted in a gilded sun. The façade was moved here when the canal house it belonged to was demolished. The orientation changed radically, from slightly west-declining to strongly east-declining, so don't mind the reading.
- Not far from here you see a nice armillary sphere. It has one ecliptic ring and lacks tropic and polar rings. The pole-style bears a small gilded sphere.
- Returning from the garden, you oversee the wide Museumplein. On the right side of the square is the Van Gogh Museum (open daily). The oval pavillion is part of it. The entrance is at the rear of the main building, in Paulus Potterstraat.
- The reddish building behind it is the Stedelijk Museum (Municipal Museum of Modern Art). It is closed for renovation. Important exhibitions are being held in a temporary housing on Oosterdokskade; see Step 12 below.
- In the far end is the Concertgebouw, famous for its acoustics and home to the famous orchestra with the same name.

General remark on canal house gardens

The southern, wealthy part of the ring of canals was developed in the 1660's. Hidden behind many of the distinguished canal houses/mansions along Herengracht, Keizersgracht and Prinsengracht are snippets of paradise: secluded gardens, where the bustle of the city seems far away and birds are at home in the green habitat. In the back of the garden one may find a garden house or coach house, which had an exit into the street behind. Some (perhaps many?) canal houses had a sundial in their garden. Either high up the rear wall,

for houses located on the south side of the canal, or on the garden/coach house, for houses on the other side. The next steps of the trail will enable you to visit a couple of these gardens and enjoy their atmosphere as well as their sundials.

Step 5: to Maison Descartes, Vijzelgracht 2A (ca. 600 m)

- By foot or bicycle: return to Weteringschans and continue straight ahead along Spiegelgracht. At the next canal (Prinsengracht), turn right. Take the second street on the right (Vijzelgracht). Nr. 2 houses the French consulat; nr. 2A is Maison Descartes, the French cultural center in the Netherlands. It was built around 1670 by Adriaan Dortsman as Hospice Wallon (Walloon orphanage).
- Go in and ask the receptionist (first room on the right) permission to enter the garden. On the other side of the meticulously maintained formal garden is the north wing, lining Prinsengracht, which was added in 1726. Just below the gutter is a round sundial, freshly restored (I hope; it was to be taken down for repair the day after I took the photo, early October 2007). Hour lines from 7 a.m. to 6 p.m.; a very long pole-style. The wall declines 12° west.

Step 6: to Reguliersgracht 92 (ca. 300 m)

- By foot: on leaving the building, turn left, cross the bridge and turn right along the other side of Prinsengracht.
By bicycle: on leaving the building, turn left and turn right along this side of Prinsengracht. Turn left twice at the next bridge.
- At the end of the block, a vertical sundial adorns a red wall, usually shaded by a large tree. It is a hilarious example of how sundial construction can go astray, in spite of expert advice. The employees of distinguished restoration architect Gerard Prins wanted to donate a sundial when the company moved into this house (named 'The Stork' and dating from 1675) in 1993. Marinus Hagen, founding father of the Dutch Sundial Society, was sent the drawing of the dial face. He calculated the hour lines, taking the wall declination (14° W) into account. The drawing did not reveal, however, that the rosette into which the pole-style was to be mounted, protruded considerably. Thus the pole-style is set much too high.