



The Sundial Cities When Astronomy and Surveying meet together ...

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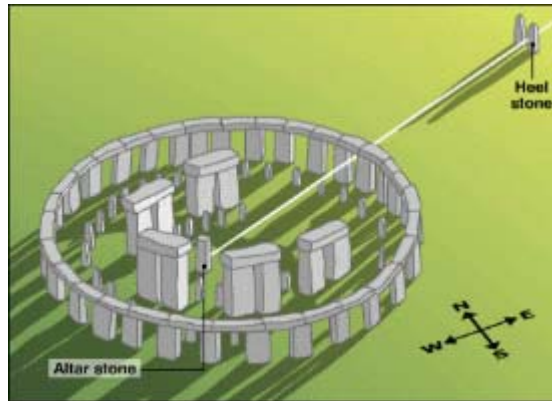


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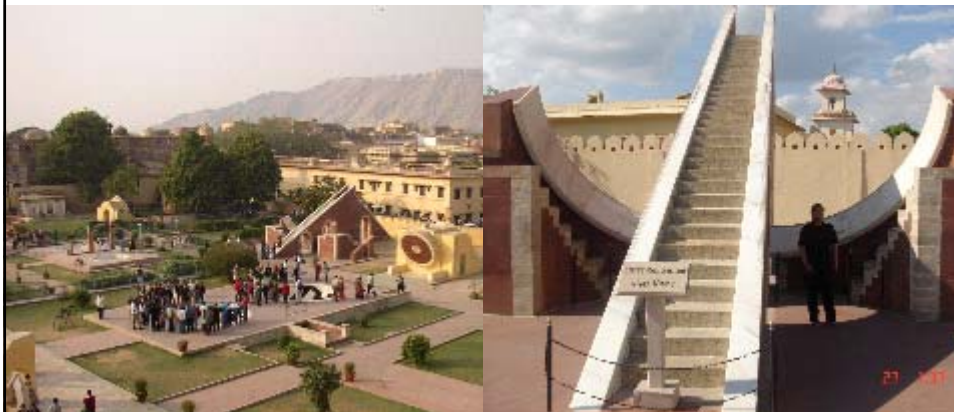
Stonehenge is an astronomical calendar and a sundial to forecast the season's ...



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Jaipur city in India has many Sundials and even they claims the biggest in the world ...



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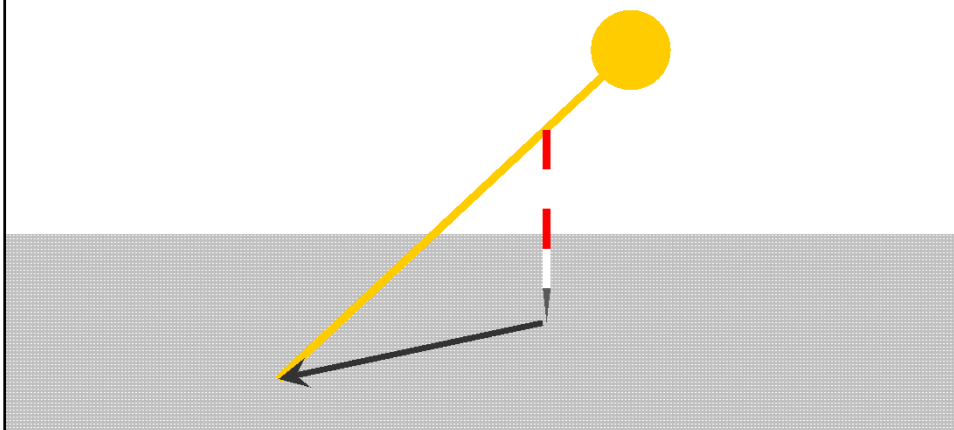
Design 500 years ago with an outstanding accuracy ... Still working ! Only need sun ...



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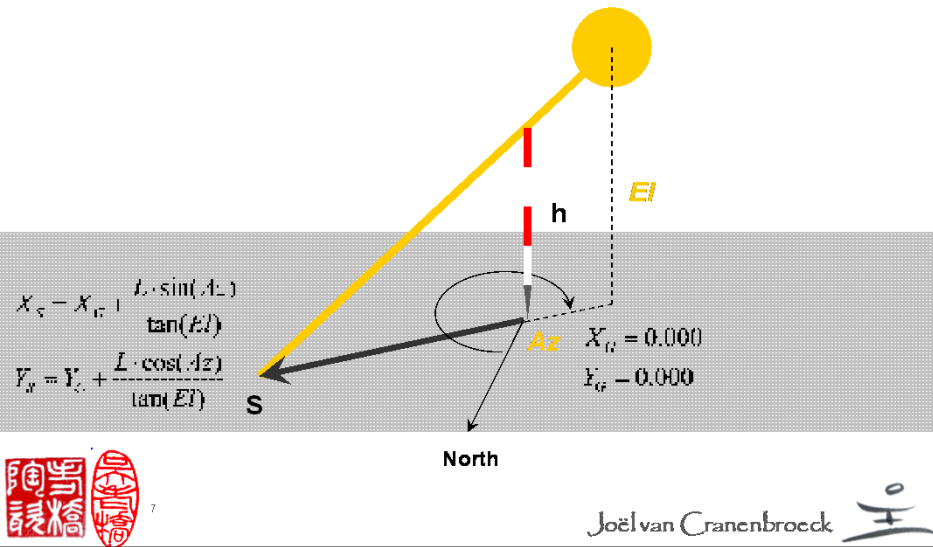
**It's all about the sun and the shadow ...
What can we do with ?**



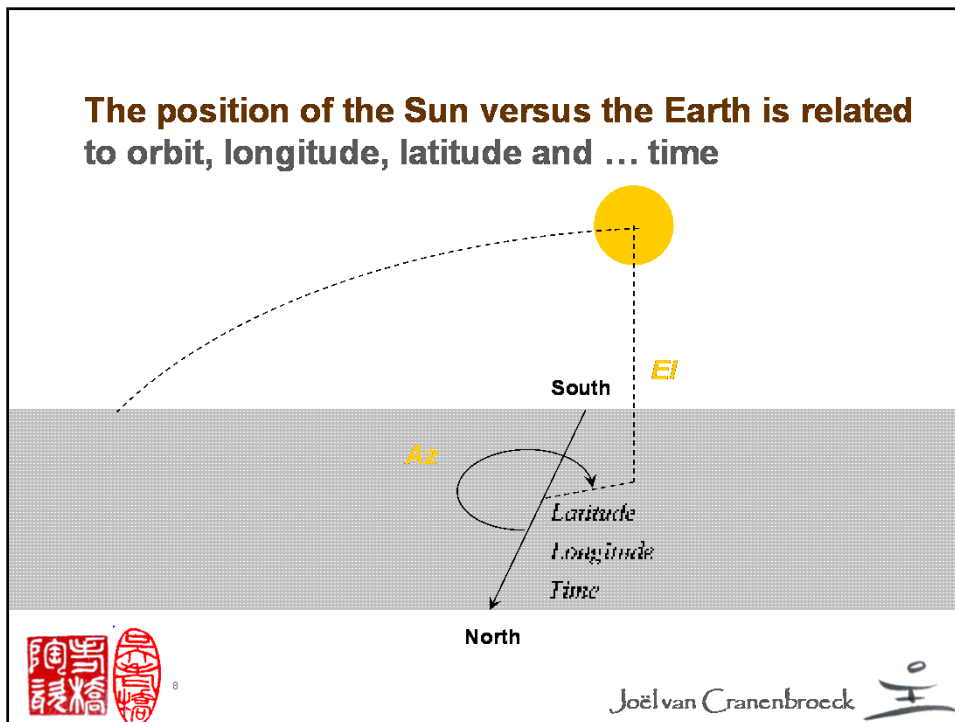
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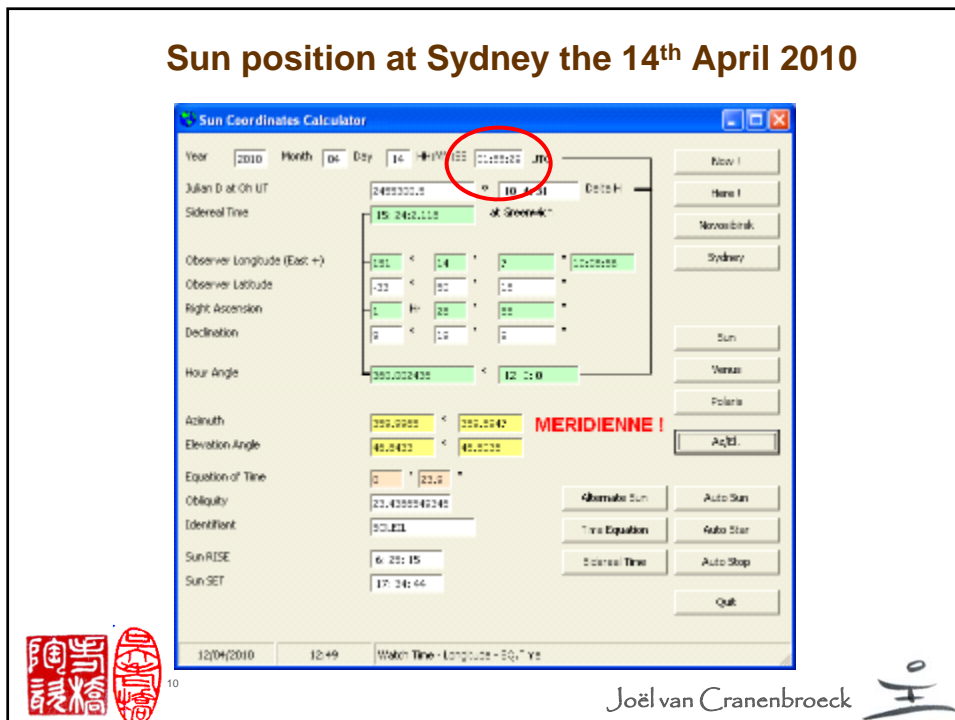
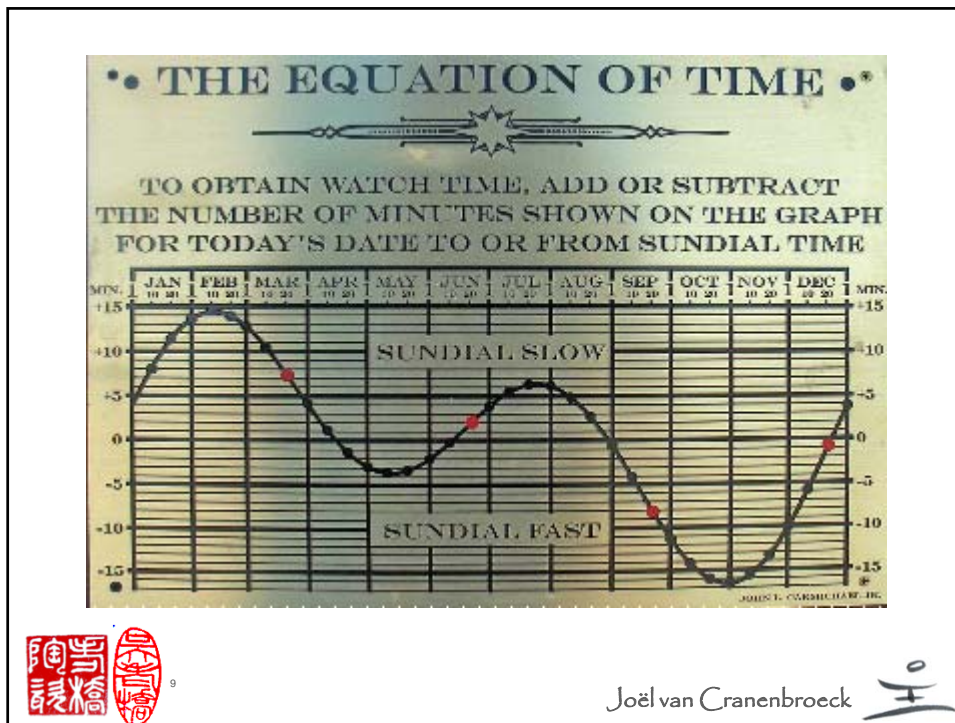


**If we know the orientation of the sun ...
We can calculate the position of shadows**

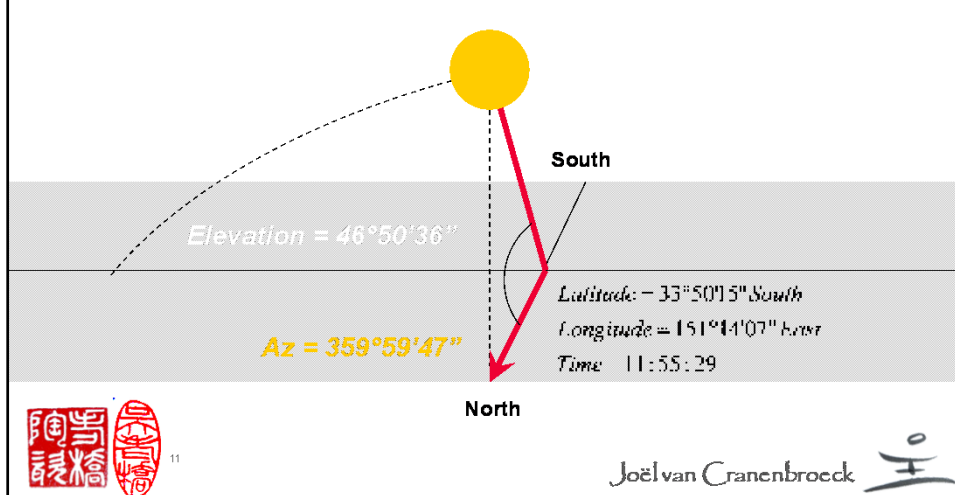


**The position of the Sun versus the Earth is related
to orbit, longitude, latitude and ... time**

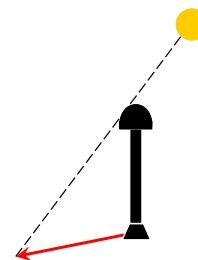




Today in Sydney Harbour at 11:55:29 the Sun was culminating, passing through the **North** meridian ...



To use the Sun to orient the GNSS Antenna to the North – Reference Station installation

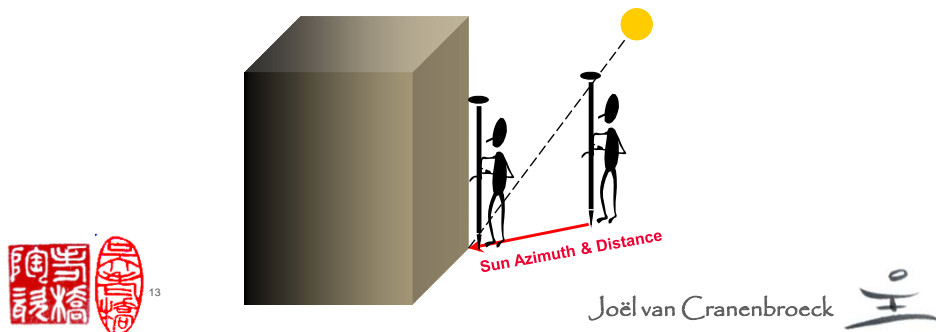


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RTK GNSS pole shadow for radiations !

One of the features on board GNSS RTK !

When you can't get enough satellites eg corner of building or under a tree, you can take GPS observations out in the open area then you can use the shadow of the pole.

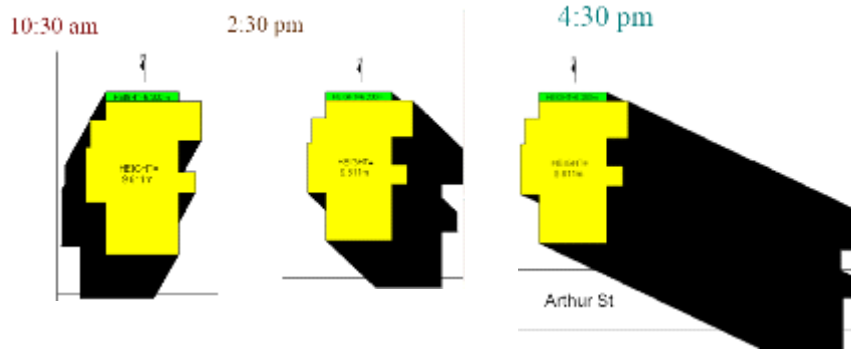


The University of Athens released a thesis about the use of Total Station and GPS ...

The University of Athens released a thesis about using a Total Station and a PC synchronised in time with GPS to evaluate the accuracy of astronomical methods of determination Azimuth of directions ...



Urban planners and architects are using the Sun Ephemeric to design new buildings ...



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In Hong Kong, penalties and indemnities are paid when a new building is shading existing ones ...



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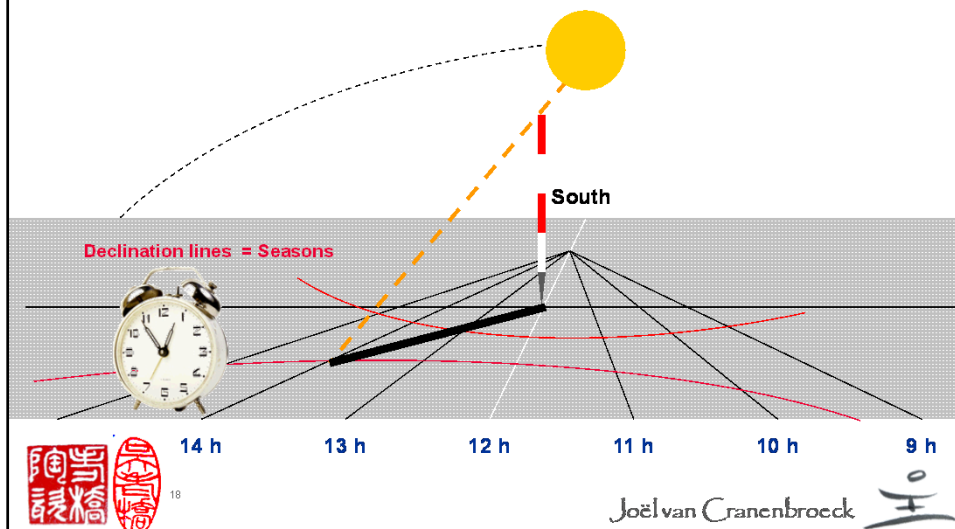


From Sun Azimuth and Elevation to design Sundial Let's reverse the process ...



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When the Sun's shade is crossing "Hour" lines The observer can "read" the time ...

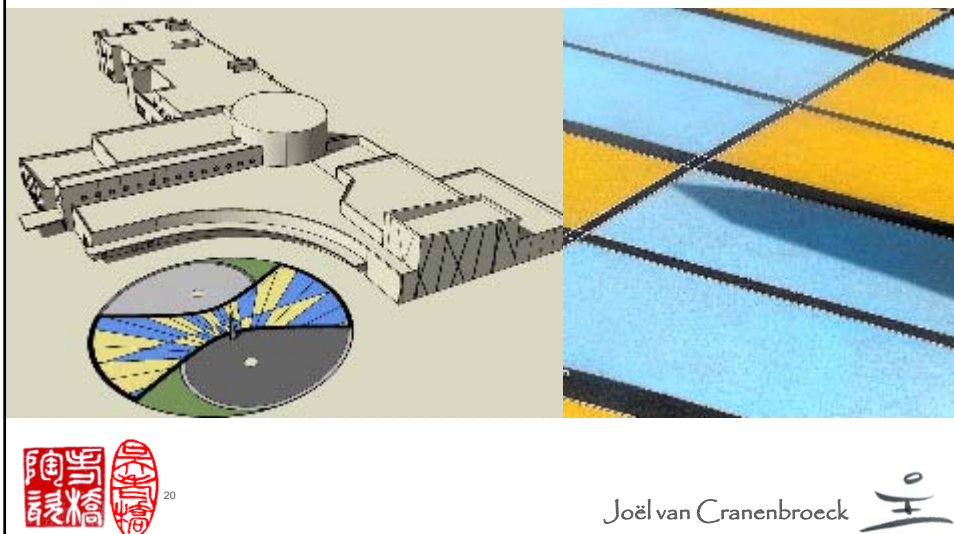


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Building's shade at the University of New South Wales in Sydney, Australia ...



Sundial can be part of an architectural project ...





**Why not create a new urban concept ?
The Sundial Cities ... Time and Space ...**



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**The Burj Khalifa (Dubai) is not only the highest
building in the world up to 850 meters and 160
floors ...but the largest Sundial !**



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