

## Mean Time Sundial with Conical Gnomon

### Preparation

Fold the shim together and cut the ellipse from the face of the sundial. Cut the cone and fold it in the 3-dimensional shape. Put it together with glue (see figure 1 to 3). Cut the shim to the right latitude (Cut over the place where you want to use the sundial). Align the sundial to North as indicated on the face of the sundial.

### The face of the sundial

The date lines (which are related to the zodiac signs) are drawn on the sundial. See the table and some examples in figure 4. The interval between the date lines is about 10 days.

On the left side of the cone you will see a set of dates. These are the dates for which you have to look at the shadow of the left side of the cone. On the right side of the cone, you will find the dates for which the right shadow is valid.

### The manual

Look at the valid shadow of the cone and find the intersection of this shadow with the date line of today. This intersection point indicates the mean time.

### Example

See the shadow in figure 4. This shadow indicates:  
 10:30 on February 19th  
 9:30 on October 23rd  
 10:10 on January 30th  
 9:50 on November 12th

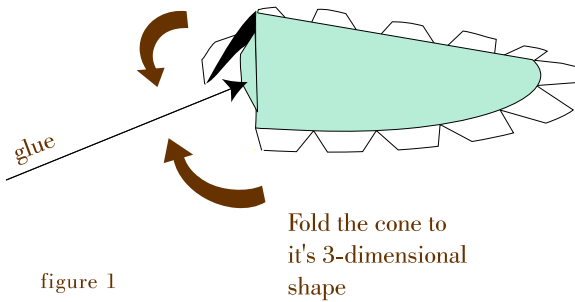


figure 1

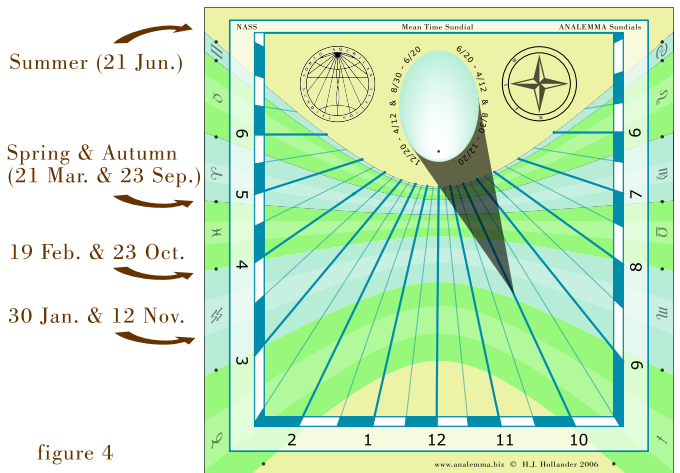
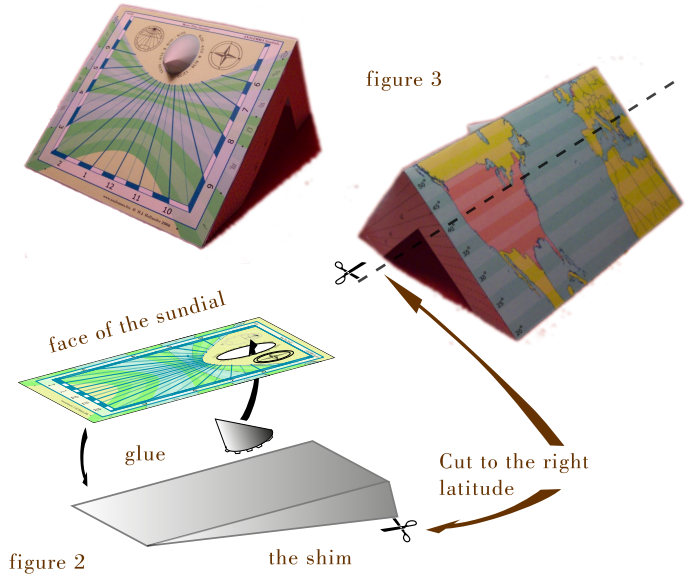


figure 4

TABLE					
♏	22 DEC - 31 DEC	- 10 JAN -	20 JAN	CAPRICORN	
♐	20 JAN - 30 JAN	- 9 FEB -	19 FEB	AQUARIUS	
♑	19 FEB - 28 FEB	- 10 MAR -	21 MAR	PISCES	
♈	21 MAR - 31 MAR	- 10 APR -	20 APR	ARIES	
♉	20 APR - 30 APR	- 11 MAY -	21 MAY	TAURUS	
♊	21 MAY - 31 MAY	- 11 JUN -	21 JUN	GEMINI	
♋	21 JUN - 2 JUL	- 12 JUL -	23 JUL	CANCER	
♌	23 JUL - 2 AUG	- 13 AUG -	23 AUG	LEO	
♍	23 AUG - 2 SEP	- 13 SEP -	23 SEP	VIRGO	
♎	23 SEP - 3 OCT	- 13 OCT -	23 OCT	LIBRA	
♏	23 OCT - 2 NOV	- 12 NOV -	22 NOV	SCORPIO	
♐	22 NOV - 2 DEC	- 12 DEC -	22 DEC	SAGITTARIUS	