

QUADRANT 象限儀



The Quadrant was completed in 1673, the 12th year of the Kangxi Emperor's reign in the Qing Dynasty. It is one of the instruments designed by Ferdinand Verbiest. It is six feet in radius and was used for measuring altitudes or zenith distances of celestial bodies. The main part of the quadrant is a graduated quarter of a circle frame which is called the quadratic ring. A dragon design was carved inside the ring for balance. The vertical frame can revolve on the axis. The quadrant is modeled on the Tyconic version but with traditional Chinese design characteristics.

象限儀：

象限儀又叫地平緯儀，用以測量天体的地平高度。其主体部件为全圆四分之一的扇形，即一个象限，称象限环。在象限环的中间铸有一条腾云戏珠的苍龙，造型优雅，同时具有平衡重心的妙用，使整个象限环的重心落在中心的立轴上，立轴可以使象限环垂直于地面自由旋转。

在象限环的圆心，立有一个与环面垂直的横表，长三寸一分。在横表上有一个长与半径相齐的窥衡，可绕圆心在环面上上下移动。在窥衡的下端有一个立耳，旁有游表，今已遗失。在测量时，移动窥衡，使立耳看横表与待测的天体位于一条直线上，这时把窥衡定位，则游表所指的环弧上的刻度，就是该天体的地平高度或天顶距。