

## COSTEȘTI SUNDIAL, ROMANIA

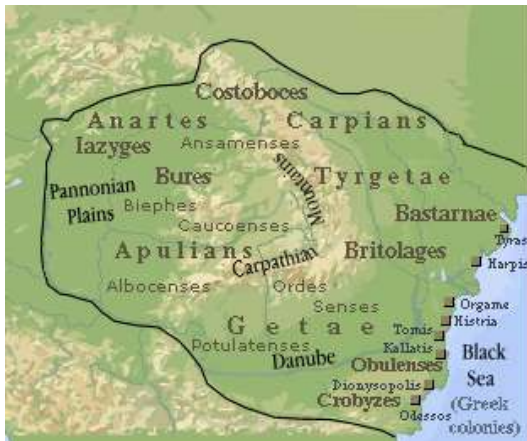
Paula Chis – NASE Romania

### Introducción

Probably the most important and the oldest sundial close to Cluj is at Costesti, about 150 km from the city.

### “Discus in planitia”

Sarmizegetusa Regia, near Costesti, was the capital and the most important military, religious and political centre of the Dacians prior to the wars with the Roman Empire. Erected on top of a 1200 m high mountain, the fortress, comprising six citadels, was the core of a strategic defensive system in the Orăștie Mountains (Dacia which in present day, Romania). In the capital of Dacian Kingdom, until the Roman conquest in AD 106, Sarmizegetusa, located in Sureanu Mountains, near Orastie, there is the oldest sundial in our country.



On the sacra platform, you can find a disc made of andezit with a diameter of 7 meters. In the middle of it there is a central monolith with a diameter of 1.46 m, from there 11 radius are splitting the rest of the sundial into 10 equal areas like a Sun. Never the less, this sun has an extension like an arrow/ray made of stones long about 9,55 m, precisely on North-South direction. In the center of the disc, there was a gnomon about 4 m might overlap its shadow over that stone made extension in the middle of the day. So, you can find the local meridian and of course the local noon. More than that, at the summer solstice the shadow is at the bottom of that arrow, while at the winter solstice at the end of it. Some of the astroarcheologists consider this sundial also an astrolabe according to Hipparch model.



View of the sanctuary from [Dacians'](#) capital- Sarizegetusa



On the right side there is a circular astronomical calendar and on the left side is the miraculously andezit sun.



The Andezit Sun with its arrow



The compass shows the North-South direction of that stonemade arrow/extension. This picture shows the shadow on that extension of the sundial at real noon in October.