

170 Years of Observational Astronomy in Greece: Telescopes and Instrumentation

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Abstract

The most important milestones in the history of observational astronomy in Greece during the last 170 years are presented. In particular, the telescopes and observation instruments that have been used or are in use in various observatories in Greece are mentioned, and their contribution to the development of research in astronomy and astrophysics is underlined.

The Cosmology of the Pre-Socratic Greek Philosophers

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Abstract

The views of the ancient Greek pre-Socratic philosophers from Ionia opened new paths for the study of nature by using human logic. Starting from the worship of the Earth as a goddess, they proceeded to examine its position in the Cosmos (Universe), proposing a spherical shape for our planet. They pioneered the unifying approach for the physical world, assuming one element as the basis for everything in the Universe (this was the water for Thales, the air for Anaximenes, the infinity for Anaximander, the fire for Heraclitus) The genesis and the decay of worlds succeed one another eternally. Anaximenes believed, like Anaximander, that our world was not the only one that existed. Heraclitus believed that, of the vast richness of the natural creation with its unpredictable changes, nothing remains stable, motionless and granted. There is not constancy, but only an eternal flow, a perpetual motion. This is exactly what we accept today for the world of quantum physics; the apparent stability and immobility is an illusion and is due to our limited senses. According to Heraclitus, matter is constantly transformed. All the natural philosophers of Ionia distanced God the Creator from nature and history, keeping always a respect for the beliefs of their fellow people; most probably they, too, kept a form of God in an area of their minds, in his spiritual and moral dimension.