



Geomagnetics and Geomedical: A New View of Etruscan Settlements in Etruria

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The Etruscan land was full of geologic features which could produce magnetic anomalies. A positive magnetic anomaly is a reading that exceeds the average and is usually related to more strongly magnetic rocks, such as mafic rocks (the volcanic rocks in Etruria would fall into this category, i.e. basalt, scoria, rich in magnesium and iron) or magnetite bearing rocks. A negative magnetic anomaly is reflective of rocks which have low or no magnetite or iron. Scientists have been laboring for decades to find a correlation between magnetic fields and health and have discovered that external magnetic fields can affect the biological systems of both animals and humans. These fields can exert a positive or negative influence on organisms depending on their intensity, frequency, orientation, exposure time and origin. With this in mind, we can look at the geomagnetic nature of Etruria on a map of Italy's natural magnetic field. It provides an unprecedented view of the magnetic signature of the geologic features in their regional setting. The map shows the areas where the natural magnetic field is positive or negative, with the Apennine chain marking a distinct boundary between two magnetic domains. The magnetic field is primarily negative on the Tyrrhenian side, continuing north to the Po River plain, while on the Adriatic side, it is generally positive.

The map codifying magnetic variation on the Italian peninsula can now be combined with medical research data. Negative magnetic fields are now known to be calming and contribute to an overall sense of wellbeing, while positive magnetic fields have a stressful effect and can increase pain due to their interference with normal metabolic function.

Etruscans established their cities in areas of highest magnetic negativity: Orvieto (Velzna), Chiusi (Clevisin) Perugia (Perusna) Tarquinia (Tarchna), Volterra (Velathri) and Vulci (Velch). Was this accident, coincidence or was it somehow a conscious decision on the part of the Etruscans? Further research using GPS and statistical analysis as well as archeological research on settlement patterns will likely provide answers.