Grupo de Investigación en Técnicas de Huellas Nucleares GITHUNU - PUCP





Universidad Nacional de Ingeniería





ANALYSIS OF RADON TIME SERIES BY MEANS OF CONTINUOUS WAVELET TRANSFORM

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Introduction







Methodology





Results



Principal component analysis for radon, temperature and pressure (left well 1, right well 2)





Principal Component Analysis for Well One and Well Two.

- Series cycles are 15-minutes
- Time series are not periodic.
- Radon has a higher correlation with temperature.

Results





Conclusion

The CWT analysis in the time-frequency domain allowed the identification of patterns of variation in different periods for radon, temperature and pressure, as well as an existing relationship between the variations of radon in the soil pores, pressure and temperature. With PCA it can be observed that there is a greater correlation between radon and temperature.