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COLOMBIANA DE CIENCIAS
EXACTAS, FÍSICAS Y NATURALES

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Supplementary material

**The Fúquene National Geomagnetic Observatory: A journey through its past,
present and future**

El Observatorio Geomagnético Nacional de Fúquene: Un recorrido por su pasado,
presente y futuro

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Figure 1S. Some of the instrumentation used at FUQ. a) Askania magnetometer. b) Terrestrial Inductor. c) Oscillation and deviation magnetometer. d) Quartz horizontal magnetometer (QHM).

Figure 2S. Instruments of the variometer's house until 2022 (in orange), and the new instrumentation (in blue), as labeled

Figure 3S. Technological upgrades at FUQ

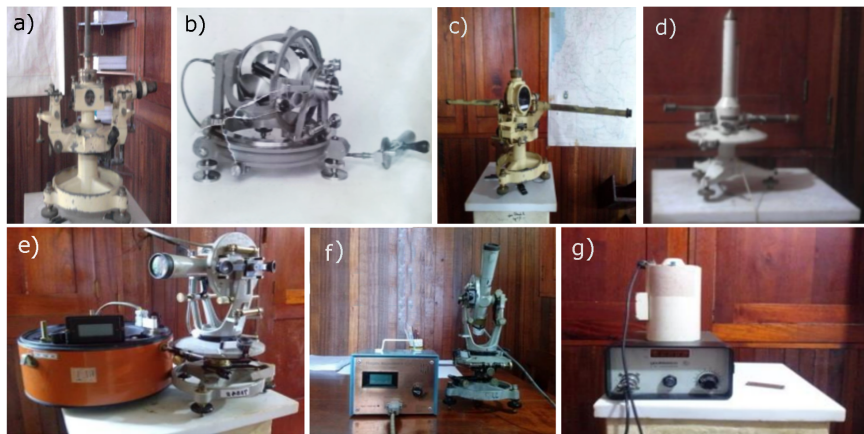


Figure 1S. Some of the instrumentation used at FUQ. a) Askania magnetometer. b) Terrestrial Inductor. c) Oscillation and deviation magnetometer. d) Quartz horizontal magnetometer (QHM). Absolute's house instruments (until 2022): f) DI Flux RL1 – DI Flux RL 2 for declination. f) DI Flux RL1 – DI Flux RL 2 for inclination. g) proton precision magnetometer GEOMETRICS 816.



Figure 2S. Instruments of the variometer’s house until 2022 (in orange), and the new instrumentation (in blue), as labeled. See the text for details.



Figure 3S. Technological upgrades at FUQ. A new boat enhances mobility for maintenance and data collection (left images), a lightning rod provides improved

protection against electrical storms (center image), and a photovoltaic system ensures sustainable and reliable energy supply (right images).

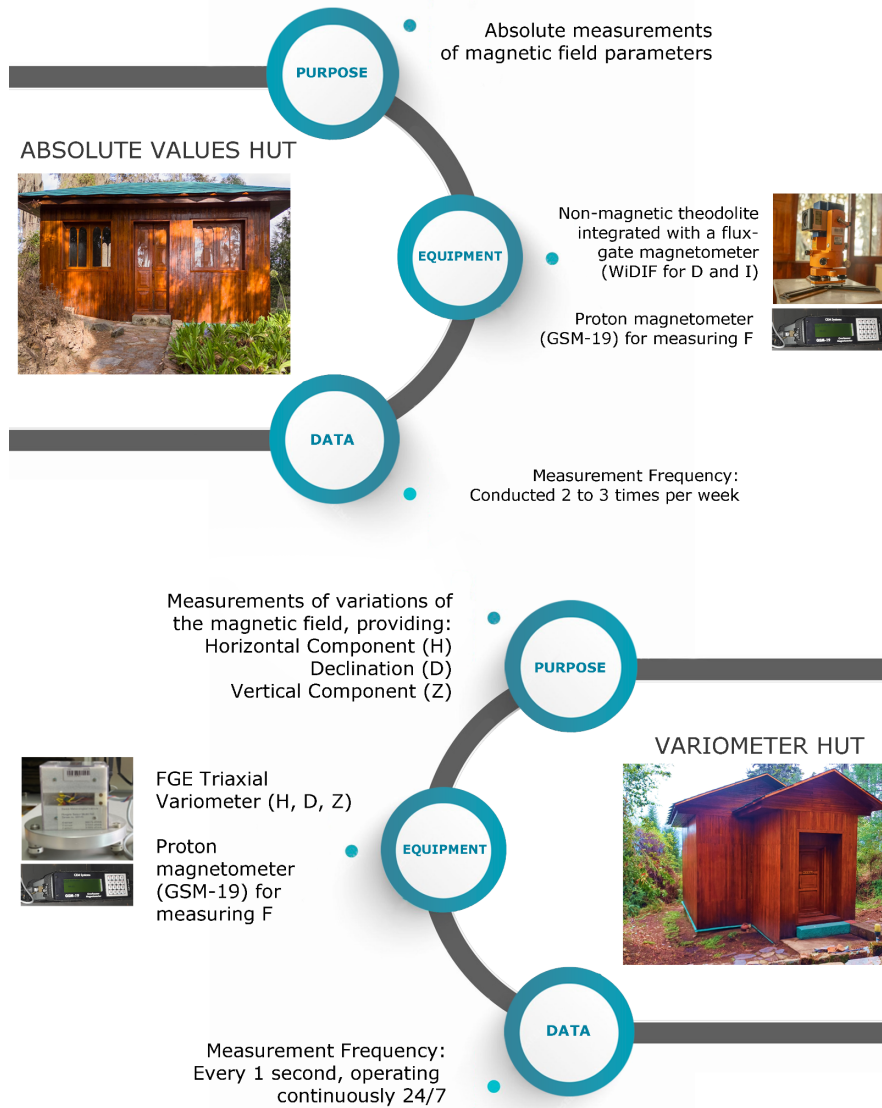


Figure 4S. Variometer and Absolute Measurement Huts at the Fúquene Observatory. The figure contrasts old and new equipment used for geomagnetic field measurements. The left column highlights the old equipment, including the analog variometer setup, Ruska Diflux fluxgate magnetometer theodolite for D and I measurements, and the Proton Precession Magnetometer (Geometrics 816) for F measurements. The right column showcases the new equipment: the FGE Triaxial Variometer and LEMI 025 for H, D, and Z components, the WiDIF RM fluxgate magnetometer theodolite for D and I, and the GSM-19 Overhauser Magnetometer for scalar F measurements.