# Monitoring soil moisture and chemical composition using cosmic ray neutrons

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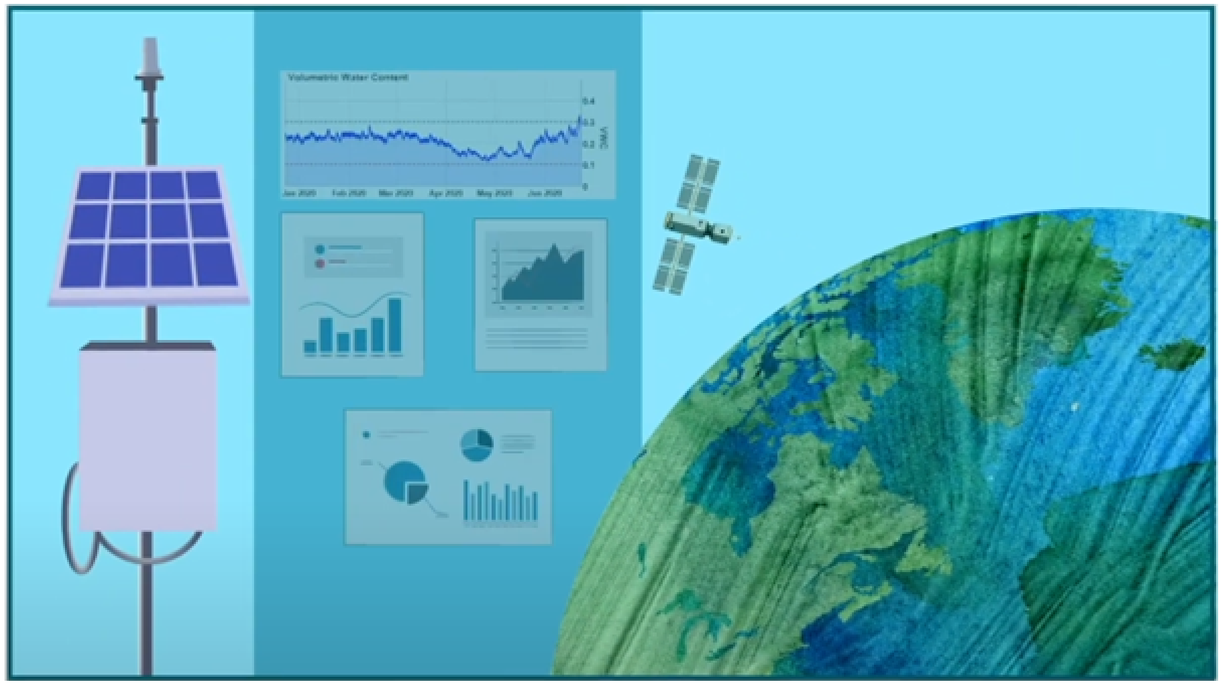
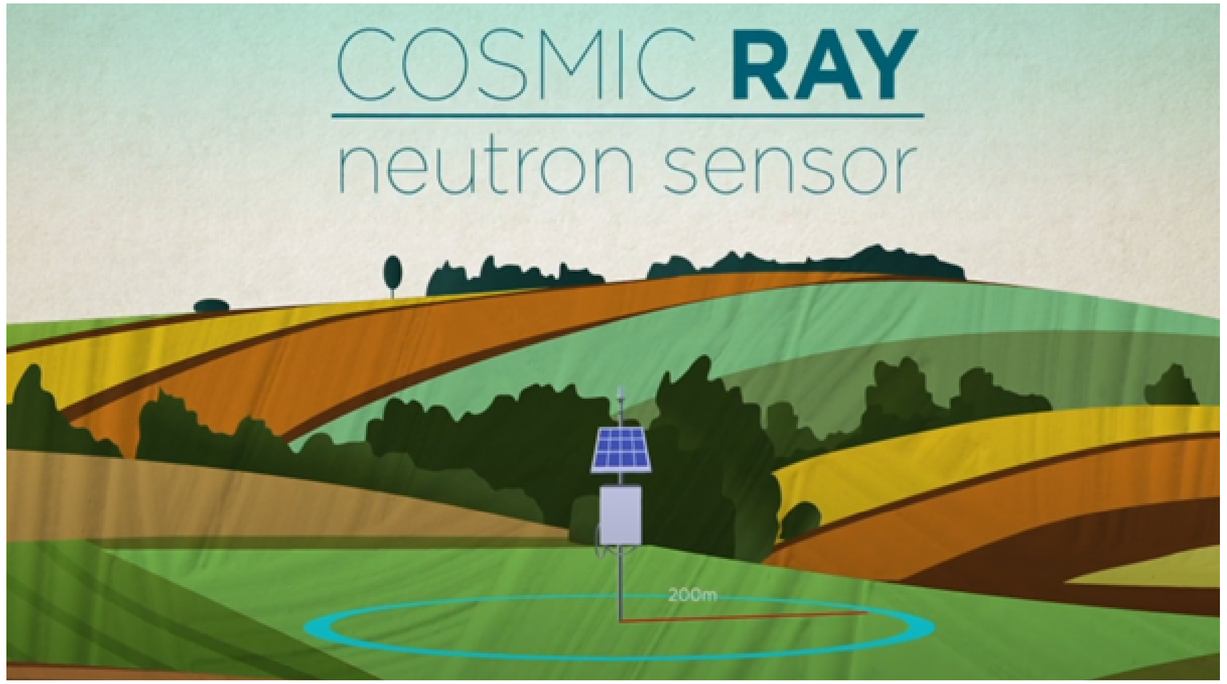
# Climate change

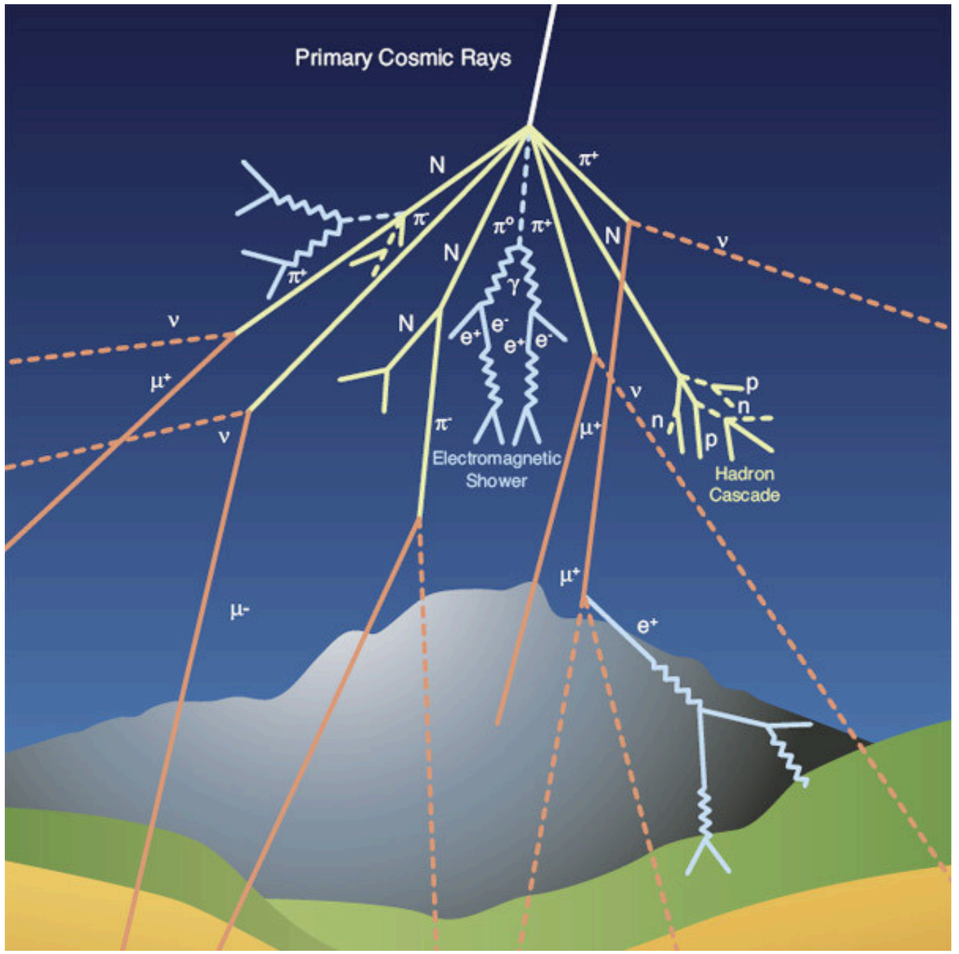
# Precision agriculture

The basic principle of precision agriculture is to apply agricultural inputs in the right place at the right time to optimize the use of resources.



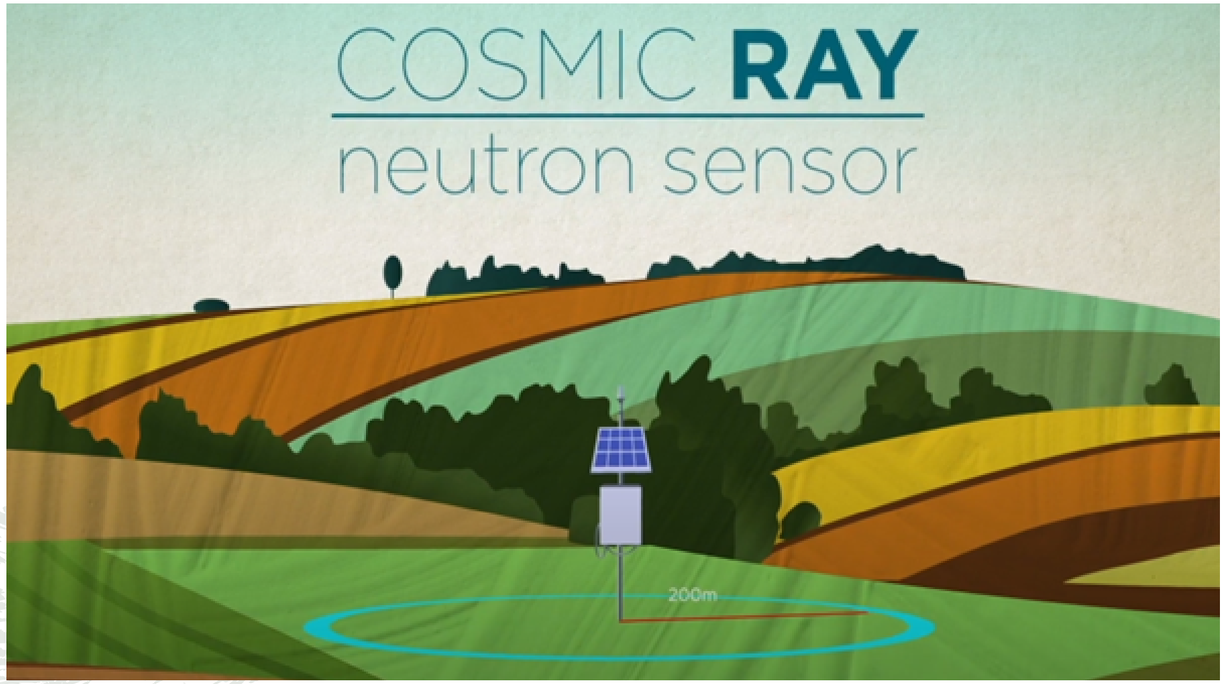
# The CRNS

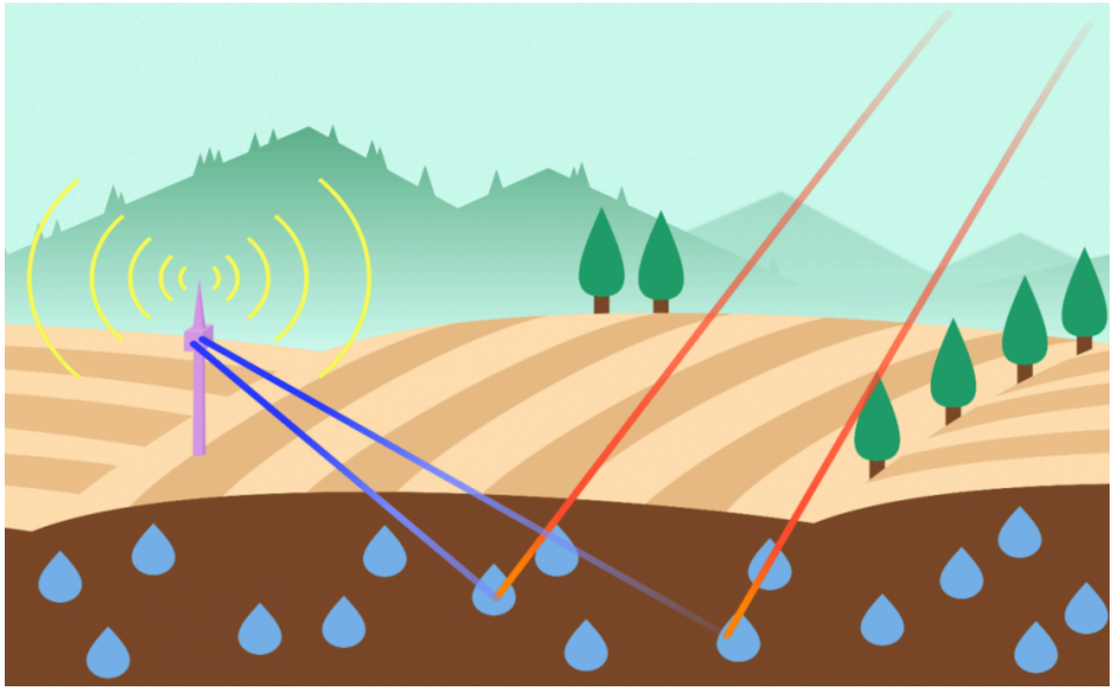



CERN

# The CRNS



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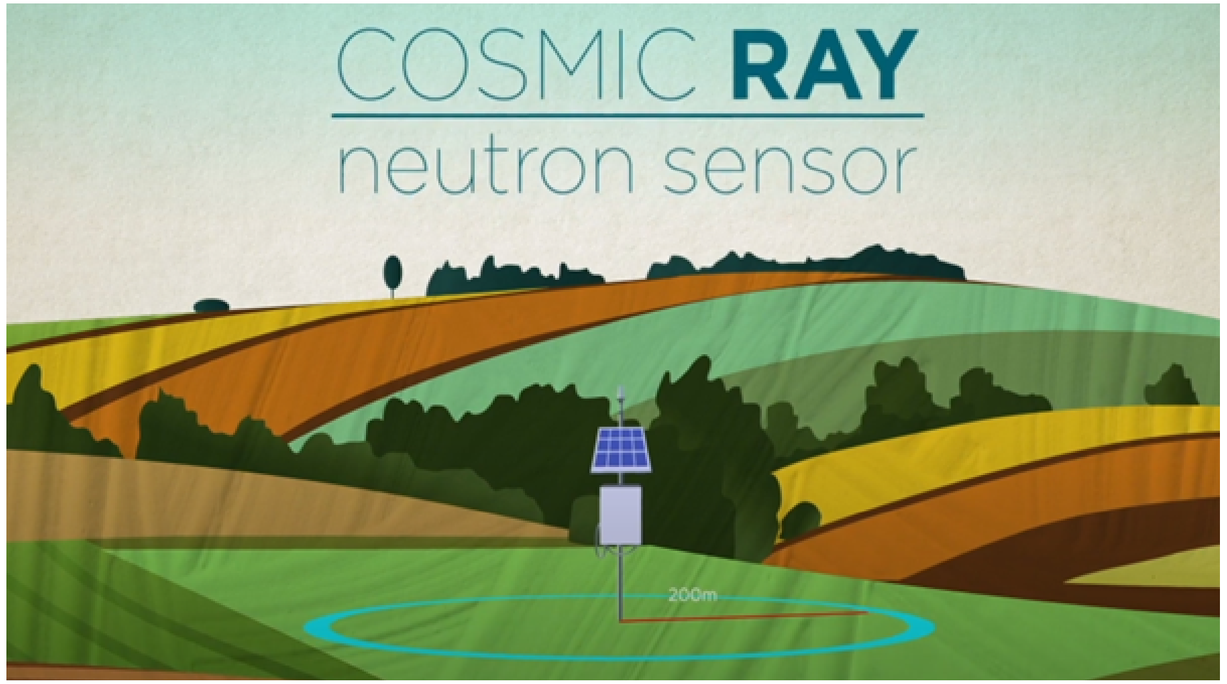


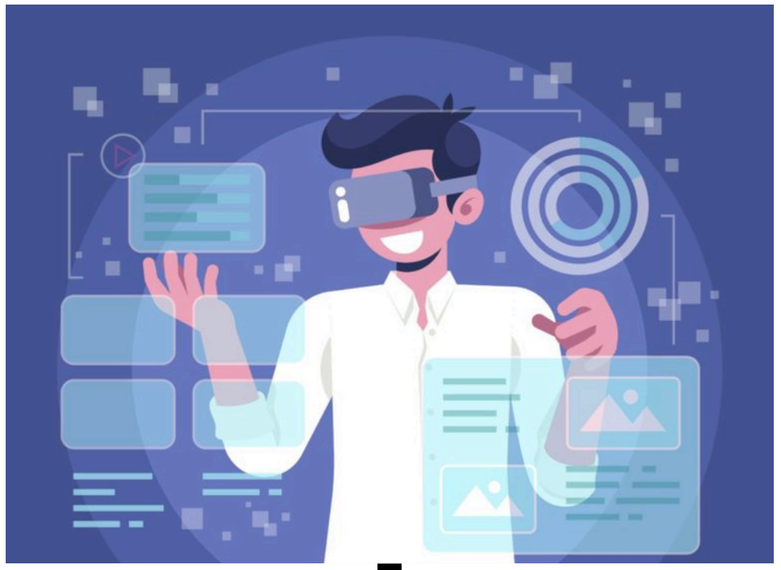

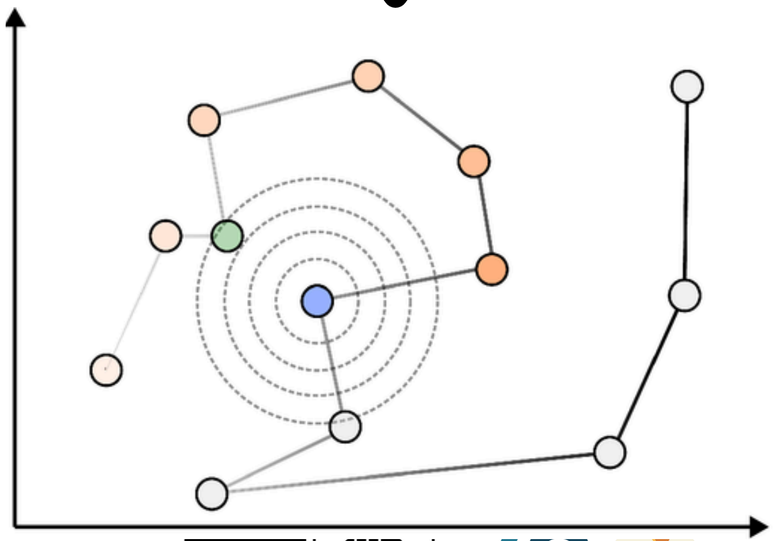

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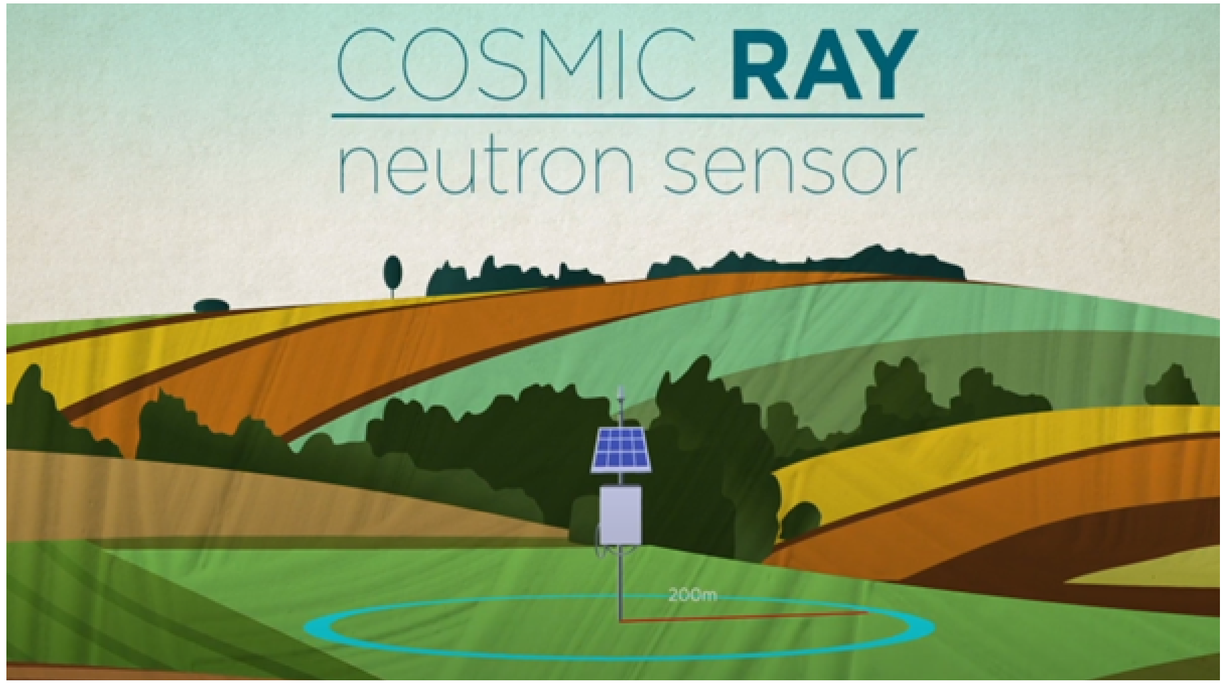
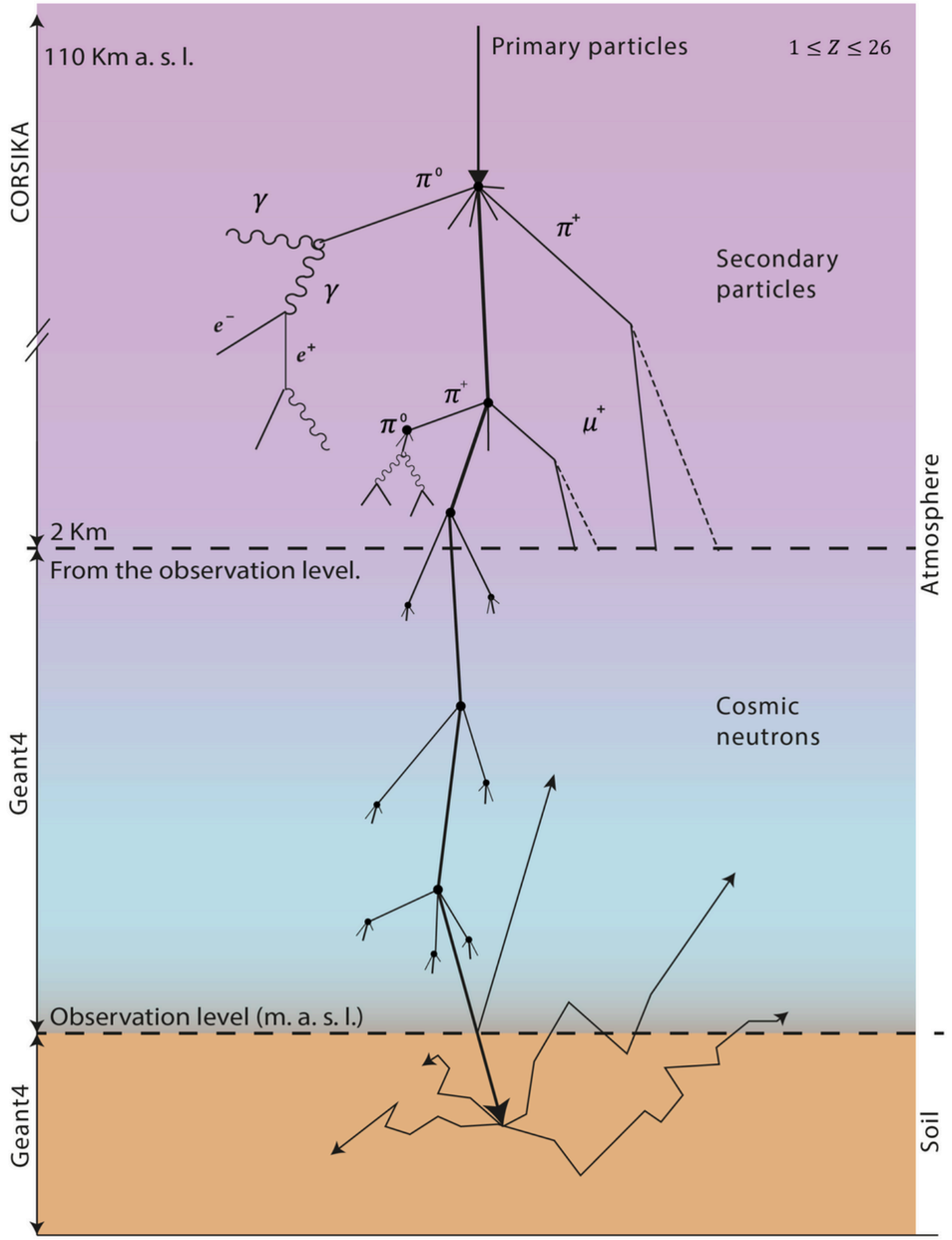

COSMIC RAY
neutron sensor
200m


GEOLOGIC MAP
of
SOUTH AMERICA

# MEIGA



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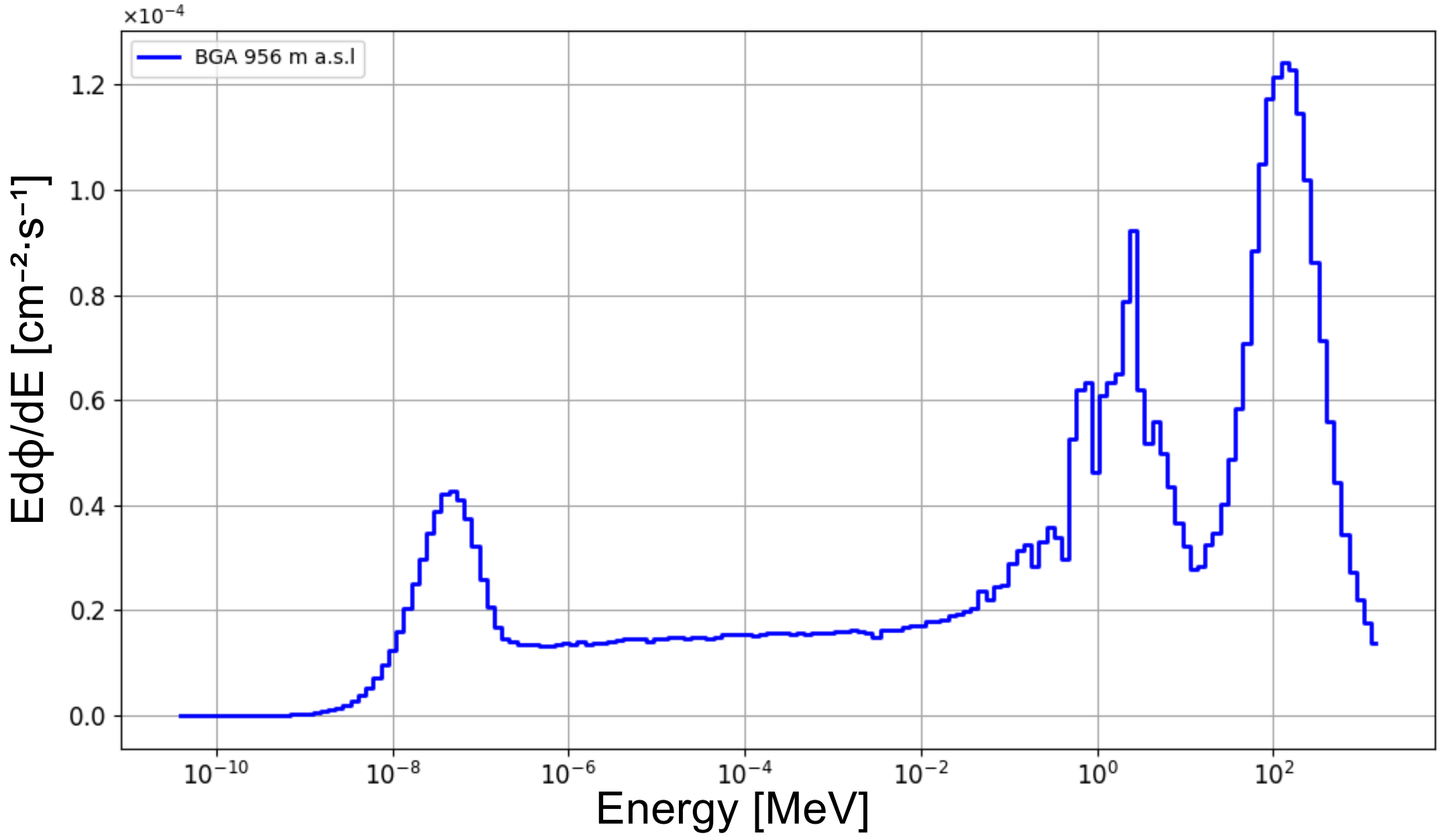
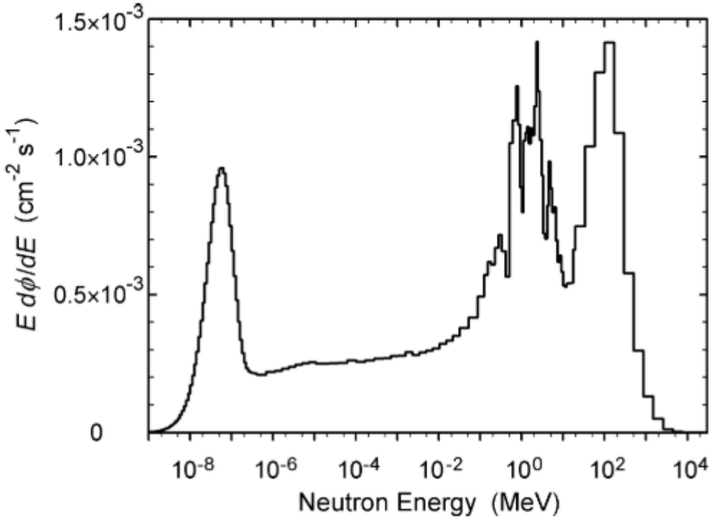
40 AÑOS GRUPO HALLEY

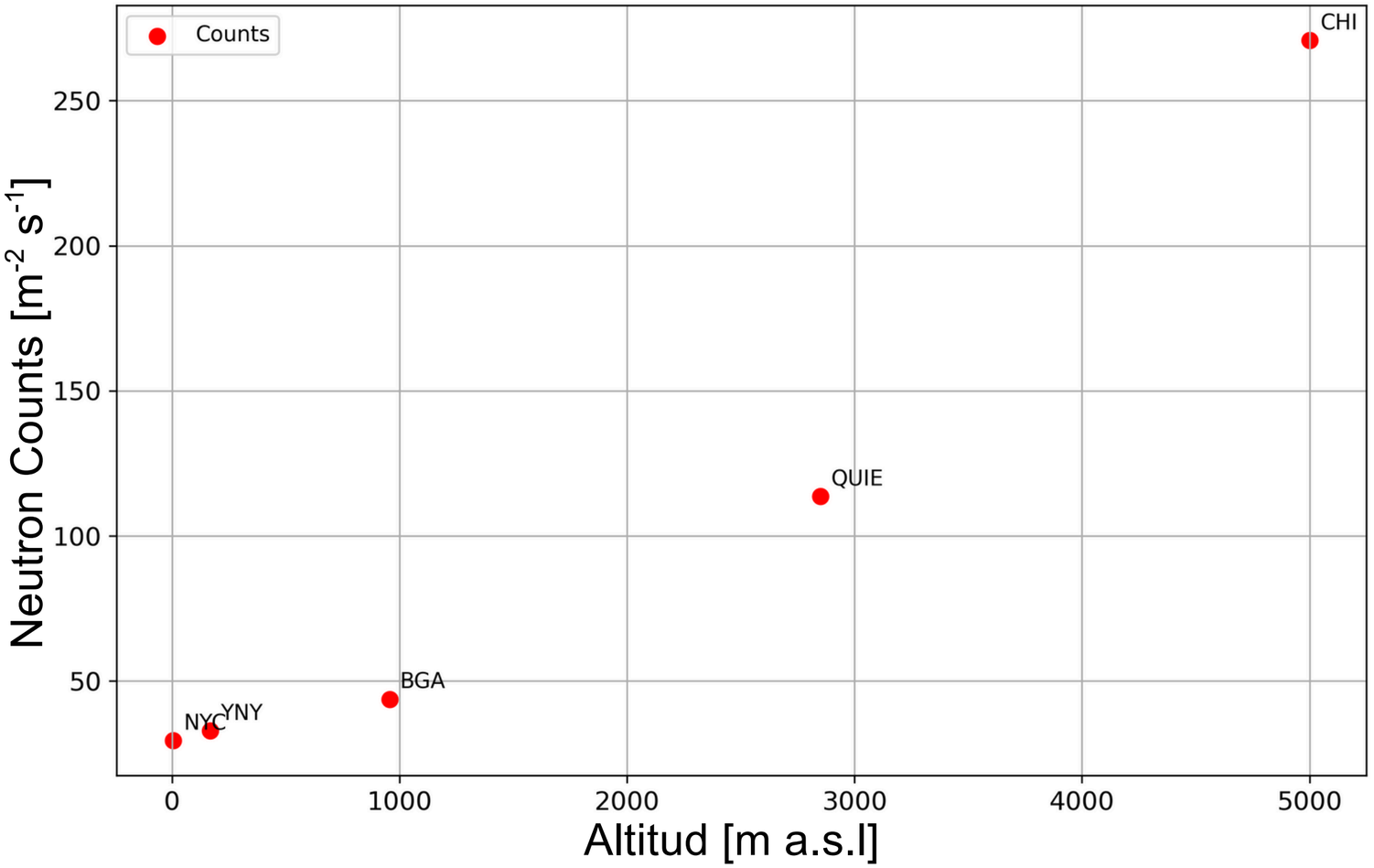
# Cosmic neutron flux



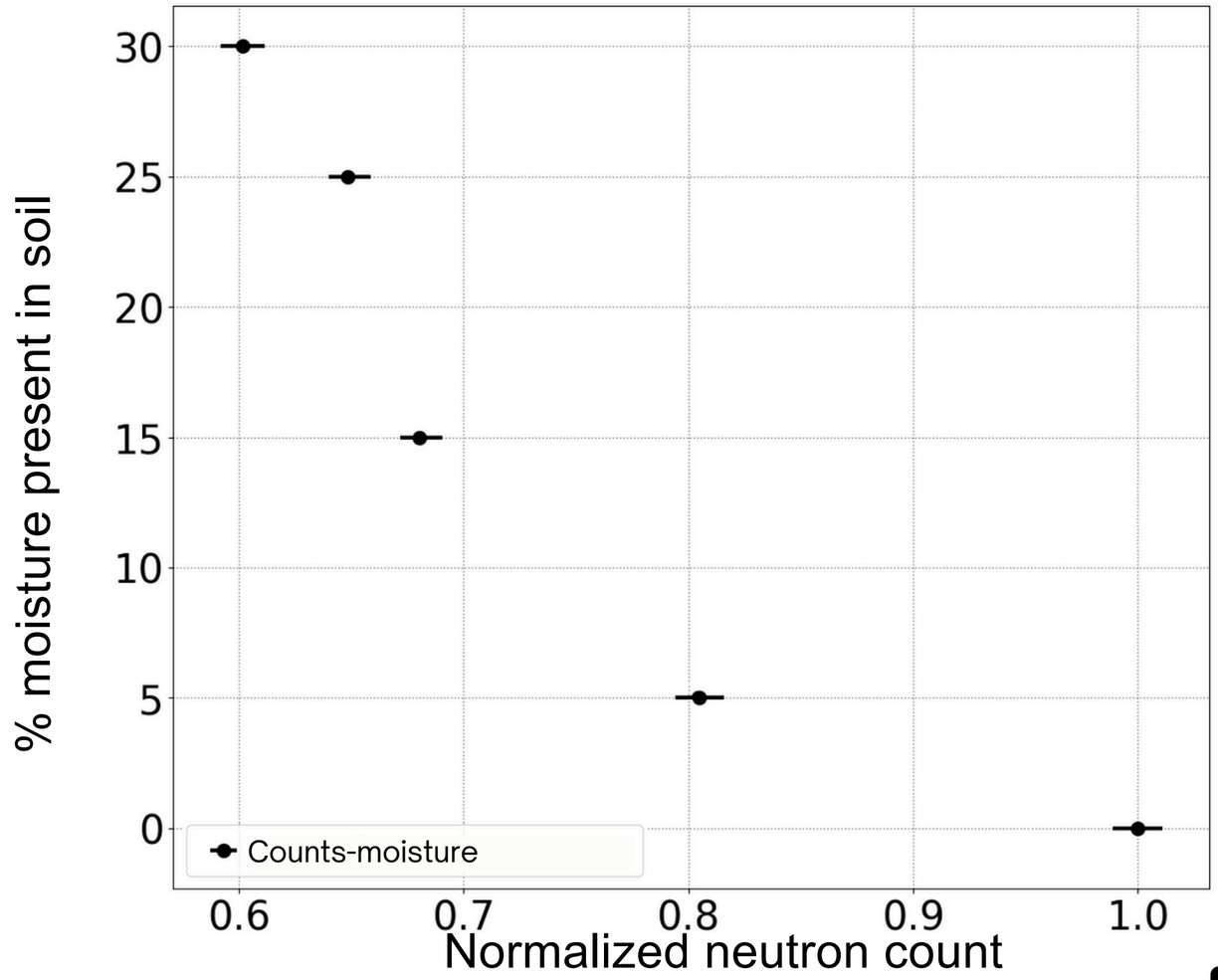




[Gordon et al., IEEE Transactions on Nuclear Science, 51(6), 3427-3434 2004.]

# Neutron counts vs. altitud



# Neutron counts vs. moisture



# Thank you for your attention.

More information about this project:

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