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THE IMPORTANCE OF KNOWLEDGE OF THE ENERGY BALANCE IN THE TROPICAL GLACIERS OF PERU

WILSON SUAREZ ALAYZA ^(1,2) & SANDRO ARIAS LOAYZA⁽¹⁾

Servicio Nacional de Meteorología e Hidrología del Perú – SENAMHI, Lima, Perú.
Universidad Nacional Agraria La Molina, Lima, Perú,

e-mail wsuarez@senamhi.gob.pe

ABSTRACT

Currently, Peru has approximately to 72% of all tropical glaciers in the world, these glaciers are distributed from the center (White Mountain range or Cordillera Blanca) of Peru and borders with Bolivia's southern, the most studied and the central part were (White Mountain range or Cordillera Blanca, Central Mountain range or Cordillera Central and Huaytapallana), since 2010, the National Service of Meteorology and Hydrology of Peru (SENAMHI) with the support of a donation from the World Bank and different institutions began to monitor the climatic conditions in the glaciers by installing weather stations on the same ice; in 2011 the Quisoquipina glacier (Cusco region) at 5180 meters high and in 2013 the west face of the Coropuna snowy (Arequipa region) at 5800 meters high were chosen, these glaciers responded to different climatic conditions on the cryosphere environment of southern Peru, as well as the relationship between the different climatic variables and the important role about shortwave radiation within the energy balance together with the albedo in the regular fusion of these, also shows the periods where theoretically the contributions of ice melting are more important for the management of water resources.

Palabras Claves: Vilcanota, Coropuna, energy balance, glaciers.