## IPF SCIENCE EXPERT FEATURED ON COLUMBIAN TV



The International Polar Foundation's Science Liaison officer, Henri Robert, was recently featured on the TV show Click Verde, on the NTN24 network based in Columbia.

Henri Robert, a biologist who also works with the Royal Museum of Natural Sciences in Brussels and has spent a few seasons at the Princess Elisabeth Antarctica station, was asked by the show producers to give an expert explanation of the changes taking place on the planet as a result of climate change.

In the interview, Henri Robert explains how sea level rise (which is happening as a result of land ice in the Polar Regions and mountain glaciers melting due to a warmer climate, as well as thermal expansion of the water as it becomes warmer) is creating changes to ecosystems in coastal areas of the planet. These changes are having a profound impact on flora and fauna, many of which humans depend on for food an other resources.

"Ocean warming and acidification is a consequence of climate change. Not only will both thermal expansion and the melting of the polar ice sheets and mountain glaciers significantly contribute to sea level rise, warmer water temperatures cause dramatic changes in the marine environment, in coastal ecosystems, and on land," Henri Robert explained.

"Ocean acidification triggered by an excess of atmospheric carbon dioxide (CO2) concentrations will alter the chemistry of the water. Carbonate ions (CO3- produced by the reaction of dissolved CO2 in water) will be less available for phytoplankton (tiny createres in the ocean that produce a great deal of the oxygen that we breathe) and for organisms like shellfish, bivalves, sea urchins, and other species at the base of the ocean's food chain. Less carbonate ions also means the formation of coral reefs (which support at least 25% of all marine life) is disrupted."

"Global oceanic currents are also closely linked to the climate on Earth (the colder Polar Regions, the presence of ice in the Arctic and Antarctic, and the warmer tropical zone). Global temperature rise is already altering the climate locally. However, together with shifts in ocean currents, the current climatic zones as we know them now will be affected on a large scale."

"All these effects taken together will affect us all - both humans as a species and all the biodiversity around us, on which we depend for food and resources. Ecosystems unable to cope with the changes are already seeing mass extinctions of certian species."

The interview was translated into Spanish for a Latin American TV audience.