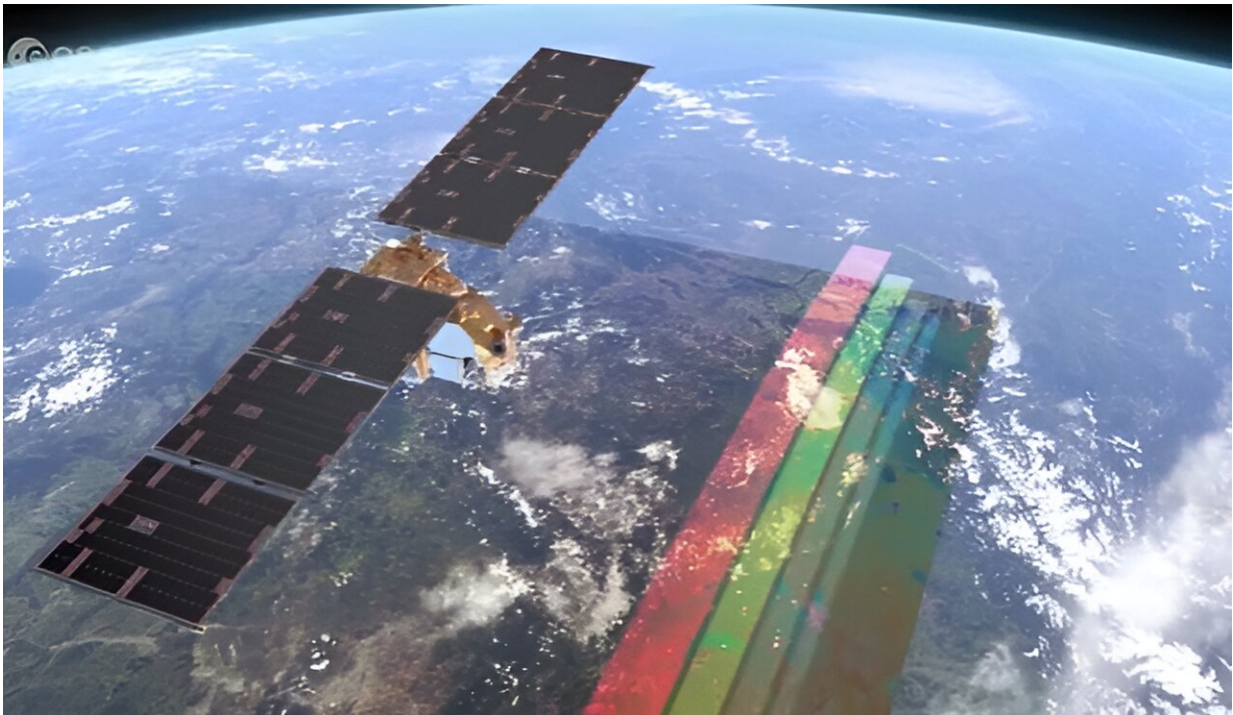


Video: Arctic Weather Satellite advancing weather forecasting in a changing climate

August 13 2024



Credit: European Space Agency

The effects of the climate crisis are felt more acutely in the Arctic than anywhere else on the planet. The weather in the Arctic is not only severe, but it changes extremely quickly. More frequent data are urgently needed to improve weather forecasts for this susceptible polar region.

Enter ESA's Arctic Weather Satellite: a brand new prototype mission to show exactly how this can be achieved. The [satellite](#) will provide precise, short-term [weather forecasts](#) for the Arctic region. It is equipped with a 19-channel cross-track scanning microwave radiometer which will provide high-resolution humidity and temperature soundings of the atmosphere in all weather conditions.

The Arctic Weather Satellite is the forerunner of a potential constellation of satellites, called EPS-Sterna, that ESA would build for Eumetsat if this first prototype Arctic Weather Satellite performs well.

Provided by European Space Agency

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