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Item 6.2

Instrument manufacturer's response to specifications for a reference radiosonde for GRUAN observations

(Submitted by GCOS Secretariat)

Summary and Purpose of Document

This document is to inform about the Jan 2009 announcement from an instrument manufacturer to support the development of a reference radiosonde for GRUAN observations, in response to the specifications developed by the WG ARO in doc. 6.2a.

WMO Press Release, February 2009

For use of the information media

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NEW RADIOSONDE TO SHED LIGHT ON CLIMATE CHANGE

Geneva – February 2009 (WMO)- Radiosondes are critically important to measure climate. The positive response of the private sector to a call by scientists to develop a new radiosonde will help promote the establishment by the Global Climate Observing System (GCOS) of a Reference Upper-air Network (GRUAN). This new generation of radiosondes will allow more accurate measurements of temperature and humidity trends in the atmosphere, leading to better understanding and prediction of climate change.

GCOS, sponsored by the World Meteorological Organization (WMO) jointly with the Intergovernmental Oceanographic Commission of UNESCO, the United Nations Environment Programme (UNEP) and the International Council for Science (ICSU), is establishing a reference network for upper-air climate observations (GRUAN). GRUAN is expected to provide long-term, highly accurate measurements of the atmospheric profiles, complemented by ground-based state of the art instrumentation.

In order to fully characterize the properties of the atmospheric column and their changes, GRUAN scientists defined stringent requirements of accuracy and recommended the development of a new radiosonde for that purpose. A radiosonde is a small, expendable measuring device for use on weather balloons that measures vertical profiles of key atmospheric parameters, such as air pressure, temperature, and humidity. The new generation of radiosondes will be reference high-quality instruments for climate information.

Vaisala Press Release, Phoenix, AZ, 12 Jan. 2009:

Vaisala launches the development of a reference radiosonde for climate change observations

Phoenix AZ, January 12 - Vaisala is investing in the development of an operational reference radiosonde. When complete, this instrument will provide superior-quality climatological data on the upper parts of the atmosphere, and shed light on the dynamics of climate change.

"The international scientific community has clearly expressed a need for a high-precision instrument to enable long-term research on climate change. As the global leader in environmental measurement, we feel it is our duty to respond to this need. This development project is a significant investment towards a better future — we do not expect commercial gains. Rather, the project is part of Vaisala's Corporate Responsibility program. We are committed to supporting the research on climate change and want to provide the best possible tools for scientists," Kjell Forsén, Vaisala's CEO explains.

Vaisala plans to carry out the project in close cooperation with the international scientific community. Scientific evaluation has already begun. After piloting, the instrument will be further developed according to the experiences gained. The project requires long-term work and commitment. Vaisala has a history of more than 70 years of experience in the development of operational radiosondes.

Further information:

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