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South African Weather Service Chooses Vaisala Thunderstorm Information System

The South African Weather Service has chosen the Vaisala Thunderstorm Information System to provide national lightning data to aid in nowcasting and forecasting, advance severe storm warning, and precipitation prediction. The system will consist of nineteen Vaisala lightning sensors providing lightning coverage of South Africa, Lesotho, and Swaziland.

The South African Weather Service (SAWS hereafter) is working to modernize its offering of meteorological services in a number of ways. With its acquisition of the Vaisala Thunderstorm Information System (TIS), SAWS will have the means to greatly improve its understanding of severe weather. With the advance warning provided by the Vaisala TIS, SAWS will be able to issue warnings of potentially dangerous lightning episodes so that the devastating effects of lightning strikes to vulnerable communities can be averted. Lightning is a great safety concern for the South African public as well as in airport ground operations (fueling and baggage handling), mining and construction, explosives and flammable materials handling, and any outdoor field work.

The lightning information supplied by the Vaisala TIS will also be used to analyze and improve electrical power delivery within South Africa. ESKOM, South Africa's largest generator and supplier of electrical power, is interested in using lightning data to analyze outages caused by lightning strikes, to improve power restoration operations, and to design better lightning protection schemes.

The Vaisala Thunderstorm CG Enhanced Lightning Sensor LS7000 will provide SAWS with detailed cloud-to-ground and survey-level cloud-to-cloud lightning information. The LS7000 is the ideal sensor for providing weather forecasters with early thunderstorm detection over wide areas. The Vaisala TIS will also track thunderstorms hundreds of kilometers outside of South Africa to give advance warning of approaching severe weather. The LTS2005 display will be used to give forecasters a powerful tool for looking at real-time thunderstorm information. In addition, the Vaisala FALLS® Fault Analysis and Lightning Location System™ software will be used for forensic analysis of thunderstorm data in order to identify geographic trends or specific events caused by lightning such as power outages, damage to man-made structures, and so on. ●

Vaisala Thunderstorm CG Enhanced Lightning Sensor LS7000.

Vaisala Thunderstorm

Vaisala is the world's largest lightning detection equipment manufacturer and lightning data services provider. Vaisala owns and operates the U.S. National Lightning Detection Network®. A wide customer base of lightning-sensitive industries – to whom early thunderstorm warning and post-storm analysis are crucial – use Vaisala lightning warning, tracking, mapping, and analysis systems and services to save lives, protect property and reduce economic losses caused by lightning. ●