

# Vaisala enables high-resolution BUFR codes in upper air soundings

Are you ready for the code transition in 2010?



In keeping with its mandate to promote the standardization of meteorological observations, the World Meteorological Organization (WMO) maintains numerous code forms for the representation and exchange of meteorological, oceanographic, and hydrological data.

The traditional code forms, such as TEMP and PILOT, have been found inflexible and too limited for today's data needs. The new WMO code form, BUFR, is designed for portability, extensibility and universality. Transition to BUFR is currently under way. The WMO is encouraging national meteorological services to move from traditional alphanumeric codes to BUFR as quickly as possible, and no later than the year 2010 (applies to category 1).

## No data lost when using BUFR

The traditional codes cannot be used for reporting radiosonde position data. Radiosondes can travel hundreds of kilometers away from the launch site. If the position is not reported, the weather forecast models assume it is the launch position. This can be a severely wrong

assumption. BUFR is free of such limitations as each measurement is reported with position data.

When using the traditional code forms, the very details of the upper air profile are lost. With BUFR, the code form is no longer limiting the data resolution.

## Vaisala offers a flexible transition tool

Vaisala has offered the DigiCORA<sup>®</sup> software tool, which enables easy transition from traditional alphanumeric codes to BUFR, for some time. The next, and improved, version, expected to be launched in the summer of 2008, will enable reporting upper air data in high resolution. It will let the user decide whether to include all data or just the traditional data levels in a BUFR message. Traditional codes will still be available for those who cannot use BUFR. ■

### Further information:

[metsaleshel@vaisala.com](mailto:metsaleshel@vaisala.com)  
<http://www.wmo.int/pages/prog/www/WMOCodes/Guides/BUFRCREX/Layer1-2-English.pdf>

Vaisala DigiCORA<sup>®</sup> is a tool for observing the weather in the upper atmosphere. It receives, processes and forwards meteorological information measured by radiosondes.