BSC dust and sand storm forecast system to be used to increase safety of business aviation flights

Rockwell Collins to incorporate the system into its flight planning tools.

BSC signs agreement for temporary transfer of its technology providing real-time forecasts of particular interest to Europe, the Middle East and North Africa

The Barcelona Supercomputing Center's dust storm forecast system will be used to improve the safety of business aviation flights. The forecasts made by the system will be incorporated into the ARINCDirect flight planning tools offered by United States-based company Rockwell Collins, whose systems and electronic devices are used by aviation companies and flight departments across the world.

"Over the past 15 years, a number of factors have resulted in an increase in the frequency, intensity, and operational impact of sand and dust storms in the Middle East and surrounding areas," said Bob Richard, vice president, ARINCDirect for Rockwell Collins. "Integrating high-resolution forecast information into our flight and international trip support services will provide safety and performance benefits for business aviation operators in the region." The company announced its use of the BSC system during the Middle East and North Africa Business Aviation Association (MEBAA) Show, which takes place in Dubai, UAE 6-8 December 2016. (Read Rockwell Collins' PR).

Rockwell Collins will make use of information generated by NMMB/BSC-Dust, an atmospheric dust model designed by BSC to understand, model and forecast the lifecycle of atmospheric mineral dust produced by the planet's driest regions. The system is made available by the World Meteorological Organization's Barcelona Dust Forecast Center, which is run by BSC and the Spanish Meteorological Agency.

BSC and Rockwell Collins have signed a transfer agreement for use of the forecast system, which is licensed exclusively by BSC. "Dust storms are phenomena that significantly impact the environment and human health, as well as transport operations and other economic sectors," said Carlos Pérez García-Pando, leader of the Atmospheric Composition research team and AXA Chair on Sand and Dust Storms at BSC. "In recent years, we made significant progress on our understanding of the mechanisms triggering dust storms, which has led to a substantial improvement in our ability to predict the phenomenon using numerical models. Alongside improving these forecasts, our objective is to promote their use to mitigate the negative effects of dust on various economic sectors. Our agreement with Rockwell Collins is a very good step towards this

goal," he added.

(Caption: Rockwell Collins. Using ARINCDirect, business aviation operators can identify in advance areas where visibility is forecast to be limited by blowing dust/sand, which could impact go/no-go flight decisions.)

Nota de prensa en castellano (pdf) Nota de premsa en català (pdf)
Barcelona Supercomputing Center - Centro Nacional de Supercomputación

---