Edinburgh University developing technology to warn of extreme weather

University of Edinburgh research will improve warnings and forecasts of extreme weather and natural disasters worldwide.

In a new partnership with Orbital Micro Systems (OMS) the Univeristy will process information to analyse weather for public and commercial bodies across the globe.The International Centre for Earth Data will use small satellite technology from OMS, taking data from 40 satellites each the size of a shoebox. Using updates on worldwide conditions every fifteen minutes they will use temperature, humidity and atmospheric pressure to produce more accurate forecasts.

Professor Mark Parsons of University of Edinburgh (left) and

William Hosack of Orbital Micro Systems after signing the deal
Picture by Stewart Attwood

OMS will have space in the Bayes Centre, the hub for expertise in data science and technology which is about to open. Working with researchers in computing, geosciences and informatics they will design data and analytics technology. The researchers will also work with The University of Colorado Boulder.

This will allow researchers to provide forecasts in near real-time assisting those working in insurance, agriculture, aviation and shipping.

Professor Mark Parsons, Associate Dean for e-Research at the University of Edinburgh, said: “Our expertise in data science means we are perfectly placed to support the sophisticated production of regular and reliable weather information for recipients around the world.”

William Hosack, Chief Executive Officer of Orbital Micro Systems, said: “Output from the International Center for Earth Data will impact the lives of hundreds of millions of people around the world through applications relevant to everyday life – such as improved crop yields, safer route planning for flights and shipping, and better land management where forest fires, landslides, and other natural disasters are prevalent. We’re delighted to join forces with the University of Edinburgh and our partners at the University of Colorado to deliver solutions that will have a profound impact on all aspects of humanity.”