

**NEC Display Solutions Client Installation Education / Control Room** 

# **The University of Reading**



# MULTI-TOUCH VIDEOWALL FACILITATES THE ANALYSIS OF BIG DATA

Big Data is a data revolution affecting a wide range of industries today. With a vast mass of data now being generated, the key issue is how best to analyse it in order to gain actionable results. The Department of Meteorology at the University of Reading operates a touchscreen NEC video wall facility for the visualization, exploration and presentation of scientific data.



The Reading e-Science Centre (ReSC) is part of the Department of Meteorology at the University of Reading. Through research, development and application of advanced computing techniques, the purpose of the ReSC is to make environmental data more useful and accessible.

#### THE CHALLENGE

The ability to compare different sources of environmental data is at the heart of environmental science. The sheer scale and accessibility of data and the super-efficient speeds at which data can now be computed has lead to a modern phenomenon widely referred to as Big Data; an all-encompassing term for any collection of large data sets.

Dr Jon Blower, Technical Director at the Reading e-Science Centre, recognised video wall technology as an ideal interface for work at his research facility at the University of Reading, helping to draw meaningful insight and value from complex datasets. 'Video wall technology allows us to view images in

amazing detail with very high resolution and offers the ideal medium for us to visualise and explore environmental data. A touch interface enables more efficient and intuitive interaction with the data.'

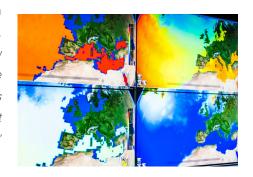
## THE SOLUTION

Dr Blower applied for and won funding for a touch enabled video wall installation at the University of Reading for scientific data visualisation and exploration under the Big Data Capital Fund sponsored by the Natural Environment Research Council (NERC).

The ultra-narrow bezel of the eight 46" NEC video wall modules form a barely discernible gap between content creating a vast homogeneous panorama. 'The NEC displays have excellent clarity and low power consumption. Heat build-up can potentially be an issue in multiple screen installations but NEC's heat management handles this efficiently without noisy fans, so the video wall is silent in operation,' comments Dr Blower.

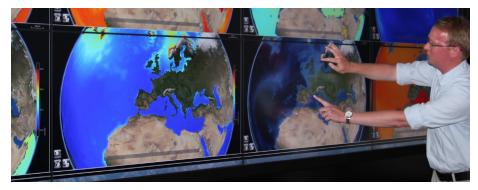
The 4 by 2 configuration allows interaction in all corners of the video wall surface through a 6mm glass Infra-Red Touch overlay integrated by U-Touch. A special anti-reflective low friction surface coating is applied to the toughened glass to improve viewing and touch interaction. An established NEC Solution Partner, U-Touch recommended the use of NEC display technology, a partnership which has vast experience in the deployment of touch media wall solutions.

Integration was managed by Harp Visual Communications including the configuration of the control systems to manage the input of external data sources.



The facility is available for use, free of charge to the scientific community. The multi-touch interface allows users to explore high-resolution imagery, 3D landscapes and cityscapes and multiple datasets simultaneously, using a variety of off-the-shelf and custom-developed software.

"The video wall is used regularly for scientific meetings and I am keen to ensure that it is as easy to use as possible, avoiding some of the complexities with which video walls are sometimes associated," says Dr Blower. "It is positioned in a meeting room, rather than an auditorium, and designed for collaborative research as well as presentation. The video wall has certainly enhanced the profile of the



University, giving external stakeholders a view of the innovation that goes on here."

Research is an important aspect in attracting funding and grants for universities, as well as enhancing the prestige and attractiveness of a university to students. Technology has a major part to play in keeping establishments at the forefront of science and learning.

The BBC and other film companies have selected the university as a filming location specifying the large video wall as an impressive backdrop for interviews.

Taking collaboration to the next level, Dr Blower is currently evaluating the use of DisplayNote NEC Edition software enabling multiple participants to share data, connecting via tablet device to create the ultimate collaborative meeting room tool.

## SITE INFORMATION

## **SECTOR**

Education / Control Room

#### **CLIENT INFORMATION**

Reading e-Science Centre

Department of Meteorology

University of Reading

## **INTEGRATION PARTNERS**

Harp Visual Communications www.harpvisual.com

U-Touch www.u-touch.co.uk

#### **INSTALLATION DATE**

Spring 2014

Images courtesy of S Burt

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# **DISPLAY EQUIPMENT**

8 x NEC 46" Multisync X462UNV with touch overlay

NEC's range of Ultra Narrow bezel video wall displays deliver a professional solution for media walls of up to 10 x 10 (100 displays)

Empowered by Innovation

