He also drops in on renowned hail scientist Charles Knight in his lab in Boulder, Colorado to discover that there is far more to hail than meets the eye. In a scientific first, and with the help of Jim Stratton and Craig Zehrung from Purdue University, Richard sets about using ice and hail as bullets to find out which does the most damage.

Finally, in conjunction with the WSL Institute for Snow and Avalanche Research SLF in Davos, Richard joins Walter Steinkogler as he starts an avalanche in an attempt to find out how something as delicate and fragile as a snowflake can travel at extraordinary speeds of up to 250 mph on the ground.

## TEMPERATURE: THE DRIVING FORCE

In the third episode Richard investigates the crucial role temperature plays in all weather. Without heat—or lack of it there would be no weather: no clouds, no rain, no snow, no dust storms, no thunder hot plate, and discovers just why it is so

Along the way, he finds out how evaporation keeps beer cold and by building his own massive dust storm, with the help of a few friends and dust specialist Dr. Nigel Tapp, he discovers just how sand from the Sahara bounces its way to the UK.

He also drops in on Dan Morgan who creates a lightning bolt in his lab and where Richard is able to see thunder and hear lightening with the aid of some special cameras, light bulbs and a few candles.

Finally he visits the Florida Everglades, the most lightening prone area in all the northern hemisphere, where with the help of storm chaser, Jason Weingart, he tries to capture lightning in a box to find out just how powerful it is.

'Wild Weather with Richard Hammond' is a weather series unlike any other and it will completely change our understanding of the extraordinary natural forces at play in our weather. Only by properly understanding our weather, we can better learn





3 x 50 min., 3 x 58 min. + 1×52 min. science special

HD, 5.1 and Stereo Executive producers: Sabine Holzer, Martin Mészáros



We all feel qualified to talk about the weather. But despite it going on around us all the time, the secrets of how weather works remain hidden from view.

Because all weather, even the everyday stuff, is riddled with mystery and wonder. The hidden mechanics at work are often amazing and sometimes downright magical. Yet despite scientists studying weather phenomena for thousands of years, we know far less about how weather actually works than you might expect.

n this series, Richard Hammond gets right in amongst real weather—or, at least, weather as real as he can possibly make it—to discover the unexplained and the unexpected, the unbelievable and the just plain unlikely, in an attempt to unravel those secrets.

## **EPISODE 1** WIND: THE INVISIBLE FORCE

First Richard investigates how wind actually starts; visits the windiest place on the planet; walks into the centre of the world's only man-made tornado; and creates a 10-metre high whirlwind ... made of fire!

Along the way he also accomplishes a world scientific first. With the aid of American meteorologist Reed Timmer, and a bizarre vehicle known as The Dominator III, 'Wild Weather' succeeds in doing what no other person has ever been able to do before—measure the speed of a tornado where it is at its fastest ... right next to the ground. As Reed explains; "near the base of the tornado is one of the biggest mysteries of tornado science and it's also the most important to understand because those are the wind speeds ... that cause all the destruction." To put that right, Reed and his team agree to take The Dominator into the middle of a real live tornado and attempt to fire a probe into the very heart of it.

We were also the first people ever to film at the only place on the planet capable of duplicating a real-life tornado. The Wind Engineering, Ecology and Environment Research Institute (or WindEEE for short) in London, Ontario, Canada hadn't even opened its doors when Richard asked them to take part in an experiment. The \$30 million facility uses one hundred and six giant computer-controlled fans hidden behind

the floor and walls of the world's first hexagonal wind tunnel. As Richard says, "I've got goosebumps. And that's not just because it's cold in here!"

Mount Washington in New Hampshire, USA is the site of America's oldest surviving weather station. And on April 12th, 1934 that station measured the highest wind speed ever measured on land—231 mph! And bear in mind that 20 mph constitutes 'a strong wind' and 80 mph is enough to knock you off your feet! Nevertheless Richard braves the winds (and temperatures of -50 degrees F) to take a trip outside.

## **EPISODE 2**

WATER: THE SHAPE SHIFTER

In the second episode Richard investigates the crucial role water plays. Without water there would be almost no weather: no rain, no snow, no hail, no clouds or fog, no frost or dew. And Richard goes in pursuit of water in all its forms. He tries to weigh a cloud, find out how rain could crush a car and gets involved in starting an avalanche.

Along the way he tries to find out why clouds float, by building his own cloud with the aid of a cattle trough, some humidifiers and Atmospheric Scientist Jim McQuaid. "I may have bought the bits from a garden centre but secretly they are cloud-making devices!" But will their cloud float in the air like a real cloud?

The state-of-the-art Smart Road in Virginia, USA is remarkable for two reasons. Firstly, it goes nowhere, just suddenly ending abruptly. And two, it can create its own weather. Richard sets the dials to 'fog' in an attempt to understand why clouds are white.

