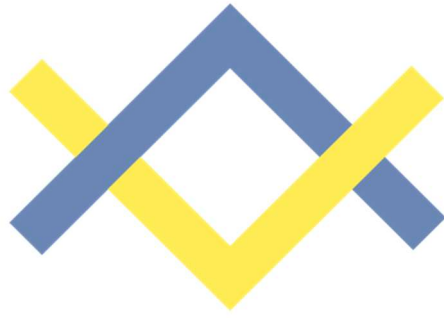




The HuT

Exploring the use of weather, climate, and natural hazard information in decision making

‘The HuT for Me and You’
Narrative

DEMONSTRATOR 9
Dorset
(UK)

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The Human-Tech Nexus: in a few words

Dorset, on England's stunning south coast, is famous for its fossils and the Jurassic Coast – a UNESCO World Heritage Site that tells 185 million years of Earth's history. Now, it's also a focus of a large European project tackling the growing threat of extreme weather. The Human-Tech Nexus (The HuT) is a Horizon Europe project, funded by the European Union, designed to integrate disaster reduction strategies for extreme climate events focusing on early warnings, and strengthening resilience. The HuT is a 4-year project running until September 2026.

In the UK, the Met Office and British Geological Survey are teaming up with experts across Europe. The Met Office is the UK's national meteorological service, who are responsible for public weather services including the National Severe Weather Warning Service. BGS is the UK's premier provider of objective and authoritative geoscientific data, using knowledge of geology to address societal challenges associated with geological hazards. By combining weather forecasting, geological monitoring and climate data, the two organisations aim to improve early warnings and make sure vital information reaches people and decision-makers quickly and clearly.

Dorset: Building resilience through knowledge

Dorset is well known for its rich fossil heritage, beautiful beaches, historic sites and natural landscapes. With a population of 380,000 and tourism playing a significant role in the local economy, it is essential to better understand extreme events—such as storms, landslides (rockfalls), heatwaves, and wildfires—to support resilience within the community. As part of The HuT initiative, we aim to explore how data, information and tools are currently accessed and used in decision-making processes. Lessons will support and enhance community resilience across Europe.

Voices of Dorset

The Local Resilience Forum; Multi-Agency cooperation during extreme events

In England and Wales, The Local Resilience Forum (LRF) is the principal mechanism for multi-agency cooperation under the Civil Contingencies Act 2004. The group comes together to plan and prepare for localised incidents and catastrophic emergencies. They bring together representatives from various local public services, which may include the emergency services, local authorities and the NHS, to identify potential risks and develop emergency plans. LRFs aim to reduce risks in the community, help people prepare for emergencies and develop emergency plans and procedures.

The group recognise that with the diversity of landscapes, comes a diversity of livelihoods which are also affected in different ways by different hazardous events. This also produces an “economically diverse profile across the region” and “seasonal changes in the number of exposed and potentially ‘vulnerable’ people across the region”. It can also be challenging to engage with non-local members of the public i.e. tourists.



The group highlight the importance of building on existing relationships to foster successful collaboration. In Dorset the LRF is an expansion of a good network built upon the planning and coordination of the 2012 Olympics.



Members of the Local Resilience Forum and the HuT project

Dorset Council – project engineer: Building Resilience Through Collaboration and Shared Experiences

A project engineer for the local authority recognises value in collaboration and shared experiences. Information needs to be captured and accessible to learn for future incidents, especially when managing risks from extreme events; such as weather events or landslides. It's crucial that we capture and share information so we can learn and improve our understanding over time. The combination of expert opinion lived experience, and data-driven modelling gives us the best chance at making effective decisions.

Working with national warning organisations can strengthen the value of local alerts, but “we still need a clearer understanding of the processes at play and how different systems interact”. Timely and well-communicated information is key - without it, the right actions may not be triggered. Sustaining relationships and retaining expertise remains a challenge, but it's a challenge worth meeting if we're serious about building long-term resilience.

The Jurassic Coast – Managing the UNESCO site; Shared messaging for consistent communication

As an independent charity responsible for protecting and conserving the UNESCO World Heritage status of the Jurassic Coast, officers know how important consistent and clear messaging is - especially around complex issues like landslides. They recognise an “opportunity to educate the public on the dangers but also that events like rockfalls aren't only destructive; they're part of natural, sometimes even constructive, landscape processes”.

At the same time, there has to be a careful balance, “we need to inform without causing unnecessary alarm or deterring visitors - especially in areas that rely on tourism”. Thoughtful messaging can build understanding while still supporting local economies.



Visitors and tourists; Effective communication for non-locals

Visitors are a key part of life and economy in Dorset. It's sometimes hard for people to understand the risks if they don't see the issues. For example talking to some visitors about rockfalls comments of “Nothing ever happens when I'm around” are common. Information and warning signs are out there but people need it in a way that makes sense to them. If too technical or unclear, people tune it out or ignore them. “I want to stay safe and make the right decisions”, but the messaging must reach people in a way everyone can really understand.

Decision makers (e.g. footpath owners, event organisers); Every decision counts

As a decision-maker, one of the biggest challenges we face is navigating the sheer volume of information spread across different platforms. Access to accurate and timely data is essential—not just for immediate response and planning, but also for long-term strategies like climate adaptation and resilience.

Understanding who is responsible for what, especially when dealing with different timescales—from short-term emergency responses to long-term climate planning—is critical. And when multiple stakeholders (e.g. landowners, local authorities, utility companies) are involved, it adds another layer of complexity that can slow down decision-making. We need clearer structures and better coordination to make informed, timely choices.

Providers of information – (e.g. Met Office and BGS); What If We're Wrong? Navigating uncertainty

As providers of warnings and information on extreme events and hazards, we face an ongoing challenge: effectively communicating the anticipated severity of events despite uncertainties at the local scale. To improve this, we need to deepen our understanding of local working practices—such as those within Local Resilience Forums (LRFs) and local authorities—through continued, active engagement with these expert networks. Stronger engagement has a ripple effect, often connecting us with new stakeholders, who can further strengthen understanding. One practical way we can support this is through sharing data and delivering value-added communications with key partners—for example, by developing landslide monitoring trials in our demonstrator area with new technologies such as the Internet of Things. This will help local authorities better understand local landslide conditions and dynamics.

Climate communication adds another layer of complexity—it remains a challenge, often marked by uncertainty over who should communicate and how information is being accessed; what, when, how, and for what purpose. It's also an area that can still be contentious. However, by refining and targeting our messaging more effectively, there's real potential to increase clarity and build greater trust and engagement.



Strengthening Resilience

The overarching goal of the HuT is clear, tackling the growing threat of extreme weather. In DEM9 we are aiming to achieve this goal by supporting stakeholders in their drive to make Dorset more resilient by reviewing data access and needs. This will build a culture of collaboration and cooperation between Dorset residents, local authorities and scientific experts.



Sharing knowledge on natural-hazard events in Dorset

Information for decision making

How can decision making be supported by the organisations that are providing information? Different mechanisms are being trialled for engagement with local communities and visitors to the area; modelling capabilities and the research-to-operations pathways are being reviewed (e.g. using the Warning Value Chain) and the project is building foundations for learning and future collaboration.

Building a stronger stakeholder engagement network

Stakeholders have discussed the need for consistent messaging when it comes to addressing climate-related issues. With The HuT project's support, we seek to enhance Dorset's capacity for climate adaptation by focusing on strengthening the relationships with and between stakeholders. This will allow outputs to be better coordinated and improve data understanding for decision making.

As was aptly quoted at the Dorset Coast Forum in 2025, 'A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty.' – Winston Churchill

Connecting with organisational networks

A knowledge-exchange workshop was organised in June 2023. This aimed to understand how weather, hazard and impact-based information is currently received by different users to identify how this provision could be improved.



Since then, we have been fostering relationships with key stakeholders to identify emerging needs and areas for improvement, while also offering access to value-added information through collaboration with partner organisations. For example, the project installed a weather station at West Bay and the data are shared with the local authority, the landowner, the Met Office and researchers at Leeds University. We also published an engagement piece in an article in *Resort Dorset* magazine on cliff safety, with Dorset Coast Forum; this is a specific communication to tourists that promotes understanding with scientific processes as well as providing access to science experts.

As we progress on the path toward greater climate resilience, The HuT is demonstrating that, with collaboration and active participation, resilience is improving. While challenges lie ahead, our commitment to protecting the future has never been stronger.

References

The Warning Value Chain <http://hiweather.net/Lists/130.html>

