Coimisiún na Meán / DCU workshop

Basics of climate science for media professionals

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Coimisiún na Meán

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Coimisiún na Meán climate series

Date	Topic	Host
Sept 30	The Basics of Climate Science for Journalists	Dr. Darren Clarke
Oct 7	The Role of Communications and Media in Societal Change	Dr. Declan Fahy
Oct 14	The Role of the Media in the Climate Crisis	Dr. Dave Robbins
Oct 21	UN, EU, and National Climate Policy Explained for Journalists	Dr. Darren Clarke
Oct 28	How to Cover Corporate Sustainability	Dr. Aideen O'Dochartaigh
Nov 4	The Role of Storytelling and Solutions-Oriented Journalism	Prof. Pat Brereton

Register here for upcoming sessions

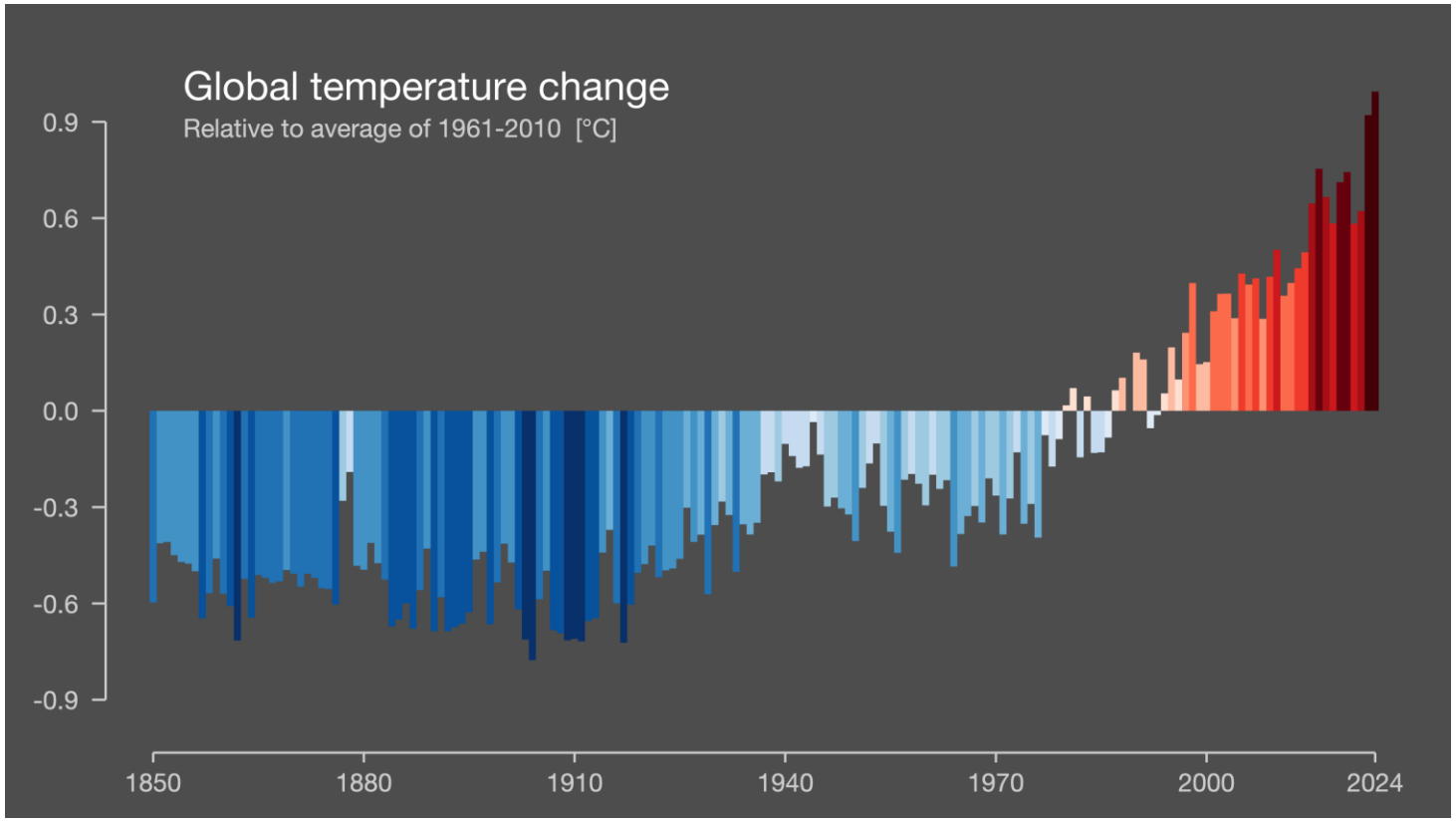
Workshop outline

1. Why climate reporting matters
2. Three things to remember
3. Anatomy of a scientific report or academic publication
4. Climate science language
5. Climate attribution studies
6. Translate without oversimplifying
7. Localising the story
8. Trusted sources & quick references
9. Quick checklist
10. Wrap-up

Why climate reporting matters?

Source: Carbon Brief (n.d.)

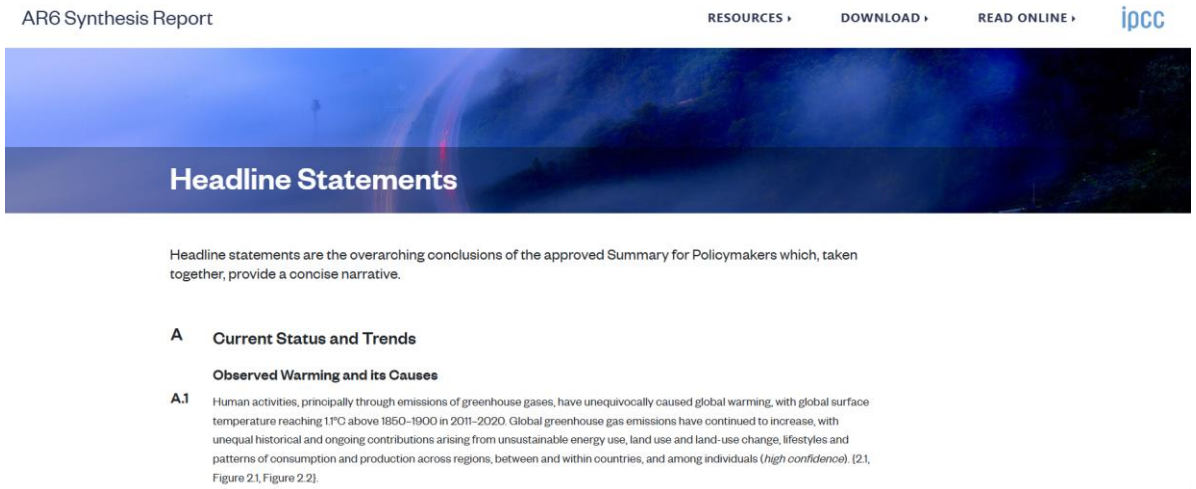
Three things to remember



Source: Show your stripes (n.d.)

Anatomy of a scientific report or academic publication

- Start with the Summary → headline statements
- Find numbers and convert to audience understanding → temperature, probability, timeframes
- Note confidence & likelihood→ calibrated, not fluff
- Look at figures/captions → quickest way to the message
- Check regional focus → Europe / Ireland relevance



Source: Intergovernmental Panel on Climate Change (2023)

IPCC language

Confidence (qualitative)	Likelihood (quantitative)
Very low confidence	Virtually certain: 99–100%
Low confidence	Extremely likely: 95–100%
Medium confidence	Very likely: 90–100%
High confidence	Likely: 66–100%
Very high confidence	About as likely as not: 33–66%
	Unlikely: 0–33% Very unlikely: 0–10%

Source: Mastrandrea et al. (2010)

- **Confidence** = Trust in the evidence
  - Based on quality + agreement of studies
  - *High*: strong, consistent evidence
  - *Low*: weaker or conflicting evidence
  - *Example*: Vulnerable communities disproportionately affected by climate change (**high confidence**)

- **Likelihood** = Probability of occurrence
  - Describes chance of climate outcomes (e.g. sea-level rise, heatwaves)
  - *Very likely* = ≥90% probability
  - *Example*: Human influence **very likely** main driver of sea-level rise since 1971

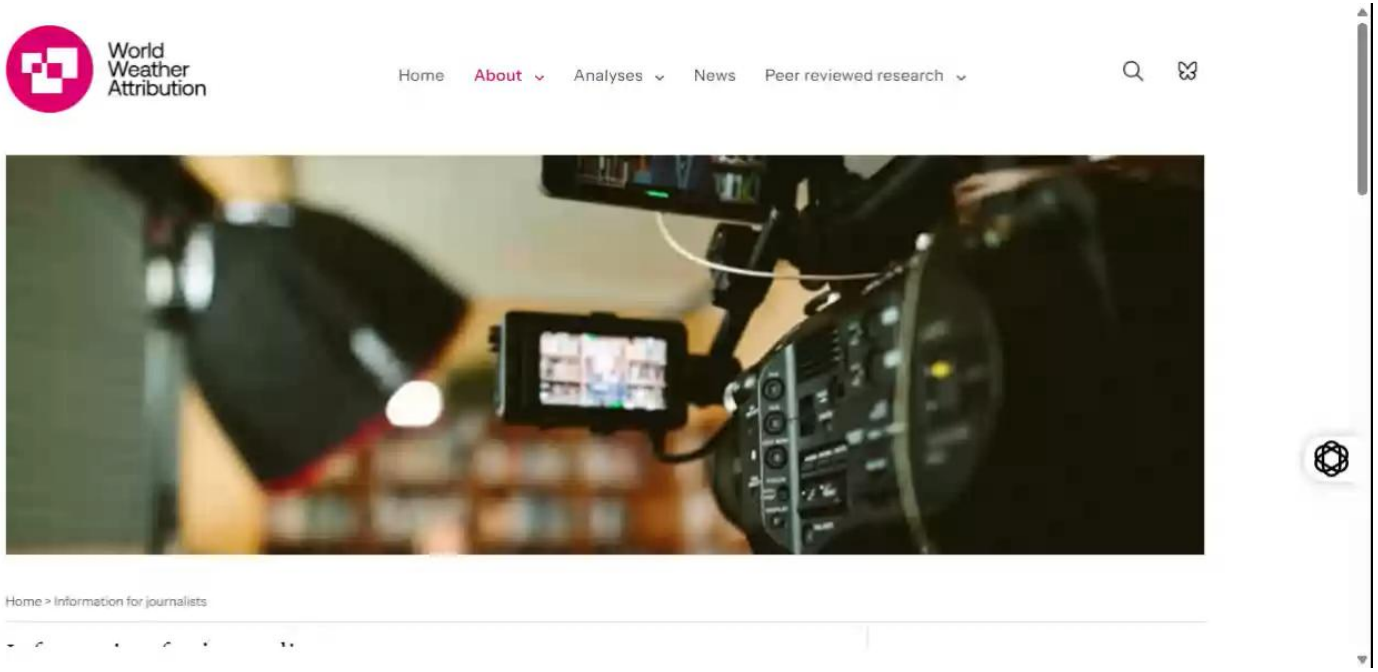
- **Confidence** = How much trust do we place in the evidence?
- **Likelihood** = What's the probability it will actually happen?

Making sense of jargon

- **Anomaly** → Difference from average (usually 30 years)
- **Confidence** → How sure scientists are
- **Likelihood** → Probability of something happening (e.g., heatwave, rainfall)
- **1.3°C warming** → Global average, varies locally

Climate attribution studies

- Attribution = human fingerprint on extremes
- Compares “with vs without human influence.”
- Rapid studies (days–weeks) inform policy & recovery
- Focus: event intensity, likelihood, exposure and vulnerability
- Methods are robust; peer review confirms results



Source: World Weather Attribution (n.d.)

Translate without oversimplifying

IPCC AR6 SPM

- *"The frequency and intensity of heavy precipitation events have increased since the 1950s over most land area for which observational data are sufficient for trend analysis (high confidence), and human-induced climate change is likely the main driver"*

Source: Intergovernmental Panel on Climate Change (2023)

Accurate translation:

- *"Scientists find climate change is driving heavier rainfall worldwide" or*
- *"Climate change already making extreme rain more common, say experts"*

Misinformation (false or inaccurate information):

- *"Scientists warn storms will intensify as planet heats."*

Disinformation (deliberate intention to deceive):

- *"Scientists unsure if climate change affects rainfall."*

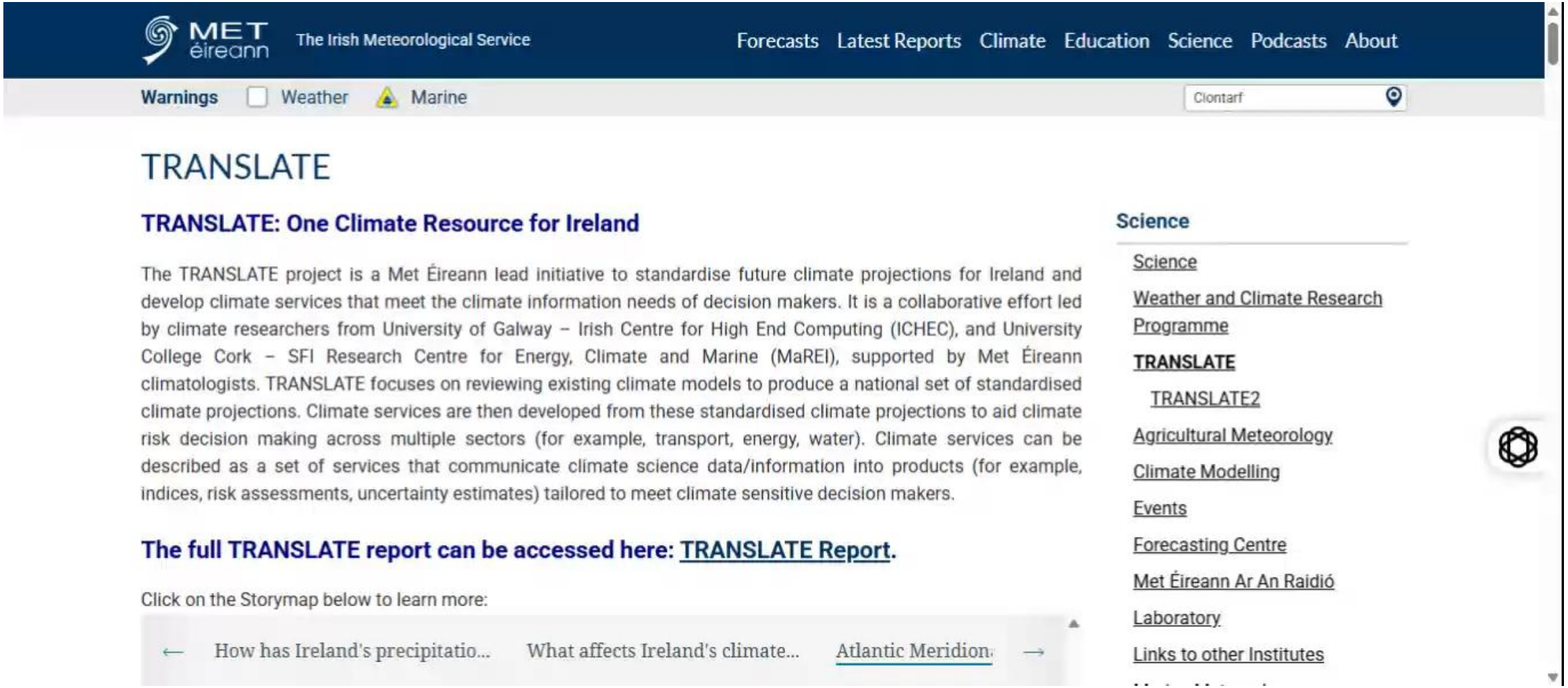
Localising the story

- Regular climate reporting essential
- Connect global climate stories to Irish impacts
  - Agriculture, floods, coasts, energy
- Use trusted local academic experts to verify reporting

Trusted sources and quick references

- **Global:** IPCC Summaries for Policymakers – global consensus science
- **Global:** World Weather Attribution – rapid studies on climate's role in extreme events
- **EU:** Copernicus Climate Dashboards – EU climate data
- **National/Regional:** Met Éireann Translate, Environmental Protection Agency and Irish Climate Change Advisory Council – Irish climate change research
- **Individual expertise**: DCU Institute for Climate & Society, Maynooth University ICARUS, UCD Earth Institute, TCD, UCC MaREI
- **Global reporting:** Carbon Brief – accessible, up-to-date reporting on climate science

Met Éireann Translate



Source: Met Éireann (n.d.)

Quick checklist

- What does the report/study say?
- Is there an Executive Summary/Headline Statement/Lay Abstract?
- How can I communicate the findings for my audience?
- Why is the study important?
- What’s the Irish or local angle?

Wrap-up

- Simplify without distortion
- Focus on 2-3 key messages from study
- Bridge science with Irish audience

References

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Thank you

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