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Opportunities

Attribution of Extreme Weather and Climate Events and their Impacts





insights from risk communication and social science

Extreme Event & Impact Attribution: Challenges, Opportunities and Applications

April 2, 2025

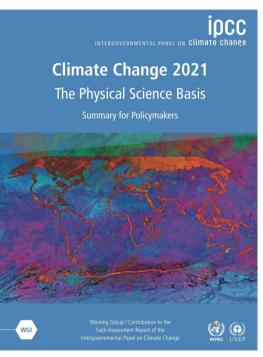
Max Boykoff

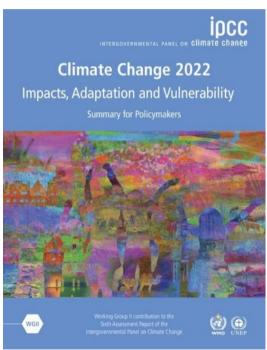
Professor, Environmental Studies department
Fellow, Cooperative Institute for Research in Environmental Sciences

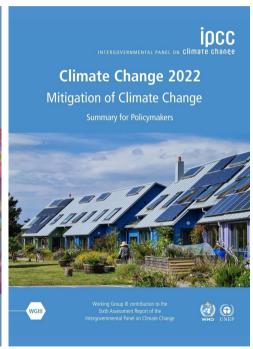
University of Colorado Boulder

Environmental Studies
UNIVERSITY OF COLORADO BOULDER

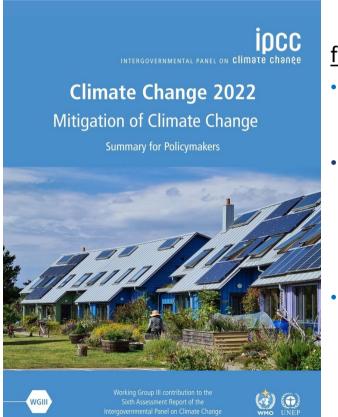
The United Nations Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Reports







The United Nations Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Reports



findings relating to media representations:

- "media shape public discourse about climate mitigation ...global media coverage has been growing {TS 6.2, 13.4}"
- "media professionals have at times drawn on the norm of representing both sides of a controversy, bearing the risk of the disproportionate representation of scepticism of anthropogenic climate change despite the convergent agreement in climate science that humans contribute to climate change {13.4}"
- "accurate transference of the climate sciences has been undermined significantly by climate change countermovements, in both legacy and new/social media environments through misinformation {TS 6.2}"

what kinds of (news-based) communications work where, when, why, and under what conditions in the twenty-first century communication environment?

Media & Climate Change Observatory (MeCCO)

14 languages:

Arabic: "الاحتباس الحراري" or "الاحتباس الحراري"

Danish: 'klimaforandringer' or 'global opvarmning'

English: 'climate change' or 'global warming'

Finnish: 'ilmastonmuutos' or 'ilmaston lämpeneminen'

French: 'changement climatique' or 'réchauffement climatique' German: 'klimawandel' or 'globale erwärmung'

Italian: 'cambiamenti climatici' or 'riscaldamento globale'

Japanese: '温暖化' or '気候変動' Korean: '기후변화' or '온난화'

Norwegian: 'global oppvarming' or 'klimaendring'

Portuguese: 'mudanças climáticas' or 'aquecimento global' Russian: 'изменение климата' or 'глобальное потепление'

Spanish: 'cambio climático' or 'calentamiento global' **Swedish:** 'global uppvärmning' or 'klimatförändring'



Media and Climate Change Observatory











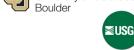
























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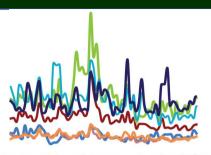
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media portrayals: bridging formal science & policy with our everyday



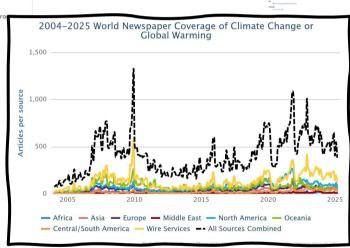
MeCCO

Media and Climate Change

We monitor 131 sources (across newspapers, radio and TV) in 59 countries in seven different regions around the world. We assemble the data by accessing archives through Factiva, Infomedia, ProQuest, Nifty and NexisUni databases for our work acrour various institutions. These sources are selected through a decision process involving the weighting of three main factors:

- 1. geographical diversity (favoring a greater geographical range)
- 2. circulation (favoring higher circulating publications)
- 3. reliable access to archives over time (favoring those accessible consistently for longer periods of time)

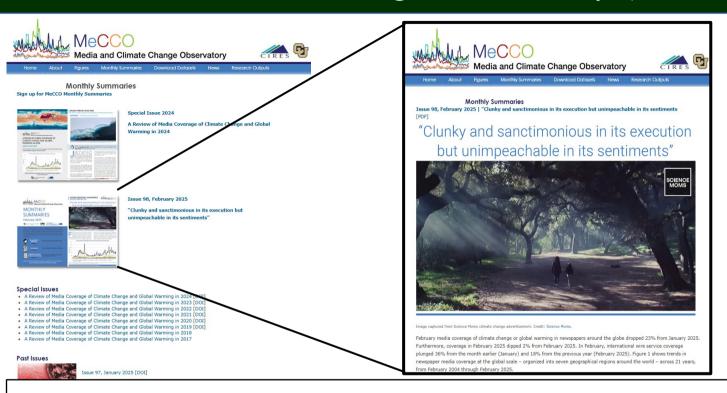




monthly updates currently include:

- 3 international, 7 regional, 16 country-level assessments
- 25 open-source datasets
- 50 interactive & downloadable figures (jpeg, png, pdf, SVG vector images)
- Factiva, Infomedia, ProQuest, Nifty, BigKind and NexisUni databases

Media & Climate Change Observatory (MeCCO)



news story themes:

political scientific economic

cultural

ecological/meteorological (severe weather events)

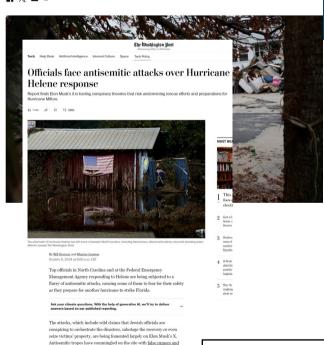
media coverage: navigating conflict & extreme events with climate impact attribution...going forward



Monster storms Milton and Helene prove climate

change is a national security issue





conspiracy theories amid the chaos of the recovery effort, according to a report released Tuesday by the nonprofit Institute for Strategic Dialogue





As Florida reels from Hurricane Milton, DeSantis again dismisses the role of climate change

DeSantis seemed to equate hurricane-related conspiracy theories which authorities say are causing real harm - with scientists pointing out that human activity drives climate change



By Clarices, Ian Lim

With the severity of damage from Hurricane Milton in Florida becoming more clear, Gov. Ron DeSantis once again dismissed the impact of climate change.

"It is hurricane season. You are going to have tropical weather," the Republican said at a news conference Thursday in St. Lucie County, which was hit hard by deadly tornadoes.

DeSantis also seemed to equate hurricane-related conspiracy theories - which authorities say are causing real harm - with scientists pointing out that human activity drives climate change. When asked for his response to the disinformation swirling around the hurricanes, the governor joked: "Look, if I could control the weather, I would do, you know, 78 and sunny year-round." He then



short-lived

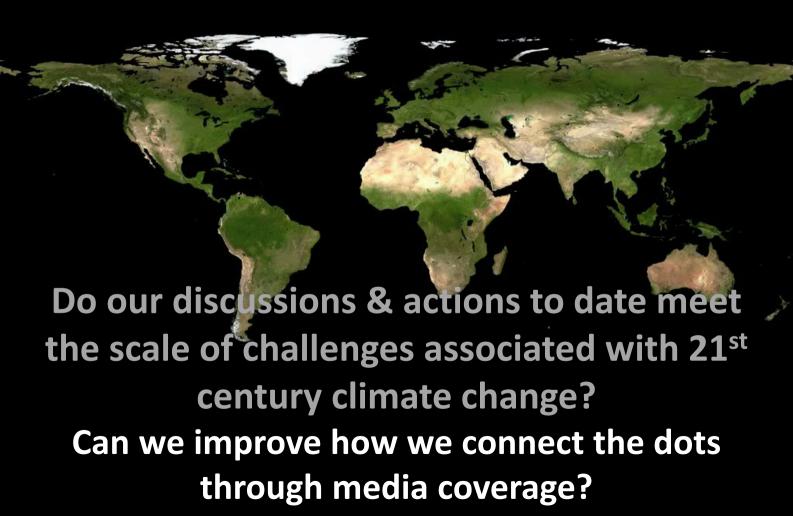


Even amid what seems like a never-ending series of deadly and destructive climate extremes across the country, including heat waves in the Southwest, wildfires in California and hurricanes and flooding in the Southeast, social and political scientists say climate is still not a major issue for U.S. voters. Despite the deaths and destruction that Hurricanes Milton and Helene inflicted on North Carolina and Florida just a month before

October 2024 examples

ecological/meteorological (severe weather events)

conclusions (for the moment)



questions/comments?

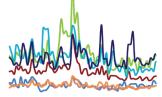
thank you

Max Boykoff









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