

Enhancing Climate Data Sharing Through Creative Commons: Best Practices for the Digital Age



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CREATIVE COMMONS FOR OPEN CLIMATE DATA



<https://bit.ly/ccisociety>

FACILITATING BETTER SHARING OF CLIMATE RESEARCH AND DATA

Supporting better licensing and metadata practices, so more people everywhere can find solutions to the climate crisis.

FACILITAR UN MEJOR INTERCAMBIO
DE INVESTIGACIONES Y DATOS SOBRE
EL CLIMA

Apoyar mejores prácticas de licencias
y metadatos, para que más personas
en todas partes puedan encontrar
soluciones a la crisis climática.



التوصيات متوفرة باللغة العربية

提供中文版推荐

Recommendations available in English

Recommandations disponibles en français

Recomendaciones disponibles en español

<https://creativecommons.org/2024/01/29/recommended-best-practices-for-better-sharing-of-climate-data/>



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URGENCY OF OPEN CLIMATE DATA

- **Immediate Global Impact**

- Climate change affects ecosystems, weather patterns, and sea levels. Immediate access to data is crucial for understanding and mitigating these impacts.

- **Informed Policy and Action**

- Policymakers need accurate data to make informed decisions quickly, develop effective climate policies, and implement action plans.

- **Disaster Preparedness**

- Open data improves the ability to predict, prepare for, and respond to extreme weather events, potentially saving lives and reducing economic losses.



IMPORTANCE OF OPEN CLIMATE DATA

- **Empowers Research and Innovation**
 - Access to comprehensive data is crucial for validating climate models and developing innovative solutions to mitigate and adapt to climate change.
- **Informs Policy and Public Awareness**
 - Policymakers rely on accurate data to create effective climate strategies. Open data also educates the public, fostering a culture of environmental stewardship.
- **Enhances Global Collaboration**
 - Open data enables countries and organizations to share insights and strategies, ensuring a coordinated global response to climate challenges.



BENEFICIARIES OF OPEN CLIMATE DATA

- **Public and NGOs**

- Open data allows individuals and non-governmental organizations to understand climate impacts, advocate for change, and hold authorities accountable.

- **Private Sector and Innovators**

- Businesses can leverage data to create climate-resilient products and services, while entrepreneurs can drive innovation in sustainability.

- **Local and Global Decision-Makers**

- Local governments can tailor climate strategies to their regions, and global entities can coordinate efforts to address climate change effectively.



FOUR CONDITIONS



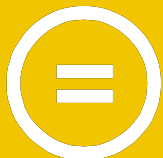
Attribution (BY): Credit must be given to you, the creator.



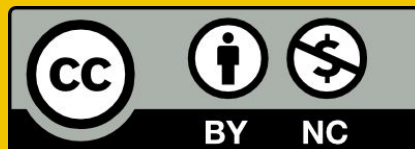
ShareAlike (SA): Adaptations must be shared under the same terms.



NonCommercial (NC): Only noncommercial use of your work is permitted, not primarily intended for monetary compensation.



NoDerivatives (ND): No derivatives or adaptations of your work are permitted.



CREATIVE COMMONS LICENSE LAYERS



CC BY 4.0 LANGUAGES AVAILABLE

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Consultation and collaboration

These recommendations for better sharing of climate data have been drafted by Creative Commons to provide guidance that maximizes access, sharing, and reuse of open climate data, with practical steps that can be implemented today. We developed these recommendations in consultation and collaboration with key members of **government agencies and intergovernmental organizations** that have taken a strong interest in open practices to produce and publish climate datasets (including observation records), data catalogs, and/or data products (including interpretations and analyses), including:

- European Centre for Medium-Range Weather Forecasts (ECMWF)
- International Organization for Standardization (ISO)
- U.S. National Aeronautics and Space Administration (NASA)
- U.S. National Oceanic and Atmospheric Administration (NOAA)
- World Meteorological Organization (WMO)
- World Resources Institute (WRI)





**Recommended
Licensing and Legal
Terms** that
maximize free and
unrestricted sharing



**Recommended
Metadata Values**
that center licensing,
attribution, and
provenance





**Recommended
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**Recommended
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most
freedom



least
freedom

1.



2.



3.



4.



5.



6.



7.



CC RECOMMENDED LEGAL TERMS

Option A: CC0 + Attribution Request

“This work is dedicated to the public domain, marked by [CC0 1.0](#). Attribution is requested.”

Recommended for: Organizations developing new data policies; Those willing to share their data freely to maximally reduce the friction in use.

What it is: CC0 is not a license; It dedicates climate data to the global public domain; We add attribution requests by default even though they are not legally required.

Benefits: Enables data distribution, remixing, and adaptation without legal restrictions; Encourages professional attribution; Eliminates legal complexities, releasing any burden on users.

Considerations: Address sensitive data proactively before sharing; Manage the use of name trademarks if necessary.



CC RECOMMENDED LEGAL TERMS

Option B: CC BY 4.0

“This work is licensed under [CC BY 4.0](#).”

Recommended for: Producers and publishers that want to share and still own their copyrightable data, where allowed.

What it is: CC BY 4.0 is a highly permissive license that allows unrestricted reuse as long as proper attribution is given.

Benefits: Retains data ownership in permitting jurisdictions; Offers a legal mechanism for enforcing attribution and proper data use; Could provide a way to track data use via attributions.

Considerations: Sharing can become complex when users want to merge with other licensed data; May not apply in all jurisdictions or on non-copyrightable material.



ATTRIBUTIONS: USE TASL

Title

Author or Publisher

Source Link

License or Legal Terms

*E.g., “Suggested Attribution: [Creative Commons for Open Climate Data](#) by Taylor Campbell.
Licensed [CC BY 4.0](#).”*





**Recommended
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Terms** that
maximize free and
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**Recommended
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RECOMMENDED METADATA VALUES

<u>Metadata Value Label</u>	<u>Example Value</u>	<u>Structured data on Commons</u>
Title	Korean Land and Water Levels 2003	title (P1476)
Publisher (Author)	Korea Meteorological Administration	publisher (P123)
Identifier (Source Link)	doi:XXXXXXX/kma.domain	DOI (P356)
License	http://creativecommons.org/publicdomain/zero/1.0/	copyright license (P275)
Rights Statement	CC0 + Attribution Request. This work is dedicated to the public domain, marked by CC0, which allows users worldwide to distribute, remix, adapt, and build upon the material in any medium or format, with no legal conditions on reuse. Attribution is requested in a standard format to allow reusers to include this information easily.	
Bibliographical Citation	Korea Meteorological Administration, Korean Land and Water Levels 2003, Issued 2004-01-01, Modified 2004-03-01, doi:XXXXXXX/kma.domain, http://creativecommons.org/publicdomain/zero/1.0/ , CC0 + Attribution Request	



RECOMMENDED METADATA VALUES

<u>Metadata Value Label</u>	<u>Example Value</u>
Title	Korean Land and Water Levels 2003
Publisher (Author)	Korea Meteorological Administration
Identifier (Source Link)	doi:XXXXXXX/kma.domain
License	http://creativecommons.org/publicdomain/zero/1.0
Rights Statement	CC0 + Attribution Request. This work is dedicated to the public domain, marked by CC0, which allows users worldwide to distribute, remix, adapt, and build upon the material in any medium or format, with no legal conditions on reuse. Attribution is requested in a standard format to allow reusers to include this information easily.
Bibliographical Citation	Korea Meteorological Administration, Korean Land and Water Levels 2003, Issued 2004-01-01, Modified 2004-03-01, doi:XXXXXXX/kma.domain, http://creativecommons.org/publicdomain/zero/1.0 , CC0 + Attribution Request



EXAMPLE: 100 YEARS OF OPEN ACCESS METEOROLOGICAL DATA

Environment and Climate Change Canada and Wikimedia Canada

[ECCC Project, 100 Years of Open Access Meteorological Data](#)



Source: Weather stations of the Meteorological Service of Canada, [via Wikidata](#). Licensed [CC 0](#).



Q&A + DISCUSSION

[Read the Report: Recommended Best Practices For Better Sharing Of Climate Data](#)

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