Metadata

Title	The Response of extratropical cyclone propagation in the Northern Hemisphere to global warming
	Abstract
Publication general type	journal article
Project Name	['4d4cbb98-ee92-4bb0-8765-31c68b4e96e0']
Keyword Vocabulary	
Keyword Vocabulary URL	
Theme	
Version	1.0
Publisher	Journal of Climate
Date Published	2023
DOI	10.1175/jcli-d-23-0082.1
Authors	
Authors 1	
Author Name	Crawford, Alex
Type of Name	Personal
Email	
Affiliation	
ORCID ID	
Authors 2	
Author Name	McCrystall, Michelle
Type of Name	Personal
Email	
Affiliation	
ORCID ID	

Authors 3	
Author Name	Lukovich, Jennifer
Type of Name	Personal
Email	
Affiliation	
ORCID ID	
Authors 4	
Author Name	Stroeve, Julienne
Type of Name	Personal
Email	
Affiliation	
ORCID ID	
License Name Licence Type	
Licence Schema Name	SPDX
Licence URL	https://spdx.org/licenses
Awards	
Awards 1	
Funded by	
Website	
Funder Name	
Funder Identifier Code	
Fundar Idantifian Tura	
Funder Identifier Type	
Funder Identifier Funder Identifier Scheme	

Related Reso	ources
Related Resource	ces 1
Related Resou	rce Name
Identifier Code	
Identifier Type	
Relationship to publication	this
	Online Resource
Туре	
Series Name	
Language	
Data and	d Resources
URL	https://canwin-datahub.ad.umanitoba.ca/data/dataset/d44acc5d-ecab-4eab-bd8a- a4bd5669d212/resource/c376c79f-6893-414b-9c6a-1698ad264cb4/download/crawford-the- response-of-extratropical-cyclone-propagation-in-the-northern-hemisphere-to-globalpdf
Name	The Response of extratropical cyclone propagation in the Northern Hemisphere to global warming
Description	Extratropical storms are common sources of natural hazards like heavy rain and high winds. In our analysis of projections from 18 climate models, we find that winter storms tend to move more slowly over midlatitude North America and the Arctic as the world warms but move faster over the North Pacific Ocean and part of Europe. Slight slowing of summer storms is projected throughout much of the midlatitudes. When storms move slower, their attendant hazards (like heavy precipitation) last longer for the areas they impact. Further, Atlantic winter storms travel more west to east instead of southwest to northeast, so they impact Iceland less often and the British Isles more often. Changes become more dramatic with each additional degree of global warming.

Resource documents

Format

Related Datasets

PDF

 Title
 Northern Hemisphere Extratropical Cyclone Tracks from ERA-5

 URL
 https://canwin-datahub.ad.umanitoba.ca/data/dataset/nsidc-extratropical-cyclone-tracking-cnect