

**Request to Archive  
With The National Centers for Environmental Information  
For Billion-dollar Weather and Climate Disasters  
Provided by NOAA/NCEI CWC**

**2020-02-14**

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

**1. Who is the primary point of contact for this request?**

Adam Smith  
NOAA/NCEI CWC  
physical scientist  
Adam.Smith@noaa.gov  
E-mail is preferred

**2. Name the organization or group responsible for creating the dataset.**

NOAA/NCEI CWC

**3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.**

Below is the operational CWC data product I am submitting for approval.

Given the proprietary private insurance data and FOUO public data sources used for input into this product, we will only archive the event-level output, which provides the 'total, direct costs (\$)' associated with a variety of U.S. extreme weather events over the last 40-years (1980-2019).

The output of the NCEI / CWC operational data product is already publicly available for download, and is updated (quarterly) every 3-months: <https://www.ncdc.noaa.gov/billions/events>

My primary purpose for archiving this dataset is to obtain a proper ISO.

**4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)**

From 1980-01-01  
Ongoing as continuous updates to the data record

**5. Edition or version number(s) of the dataset:**

N/A

**6. Approximate date when the dataset was or will be released to the public:**

1995-06-30

**7. Who are the expected users of the archived data? How will the archived data be used?**

The output of the NCEI / CWC operational data product is already publicly available for download, and is updated (quarterly) every 3-months: <https://www.ncdc.noaa.gov/billions/events>

**8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?**

In 2012, NCEI -- then known as National Climatic Data Center (NCDC) -- reviewed its methodology on how it develops Billion-dollar Disasters. NCEI held a workshop with economic experts (May, 2012) and worked with a consulting partner to examine possible inaccuracy and biases in the data sources and methodology used in developing the loss assessments (mid-2013). This ensures more consistency with the numbers NCEI provides on a yearly basis and give more confidence in the year-to-year comparison of information. Another outcome is a published peer-reviewed article "U.S. Billion-dollar Weather and Climate Disasters: Data Sources, Trends, Accuracy and Biases" (Smith and Katz, 2013). This research found the net effect of all biases appears to be an underestimation of average loss. In particular, it is shown that the factor approach can result in an underestimation of average loss of approximately 10-15%. This bias was corrected during a reanalysis of the loss data to reflect new loss totals.

**9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?**

N/A

**10. List the input datasets and ancillary information used to produce the data.**

Insurance Services Office/Property Claim Services  
Federal Emergency Management Agency  
U.S. Department of Agriculture  
National Interagency Fire Center  
Energy Information Administration  
U.S. Army Corps  
State agencies

**11. List web pages and other links that provide information on the data.**

ISO/PCS: <https://pcs.iso.com/>  
FEMA NFIP data: <https://www.fema.gov/media-library/assets/documents/180374>  
FEMA Public Assistance data: <https://www.fema.gov/openfema-dataset-public-assistance-applicants-v1>  
<https://www.fema.gov/openfema-dataset-public-assistance-funded-projects-details-v1>  
FEMA Individual Assistance data:  
<https://www.fema.gov/openfema-dataset-individual-assistance-housing-registrants-large-disasters-v1>  
USACE data:  
<https://navdata-test.ops.usace.army.mil/data/docs/>  
USDA NASS data:  
[https://www.nass.usda.gov/Publications/Ag\\_Statistics/index.php](https://www.nass.usda.gov/Publications/Ag_Statistics/index.php)  
USDA RMA data:  
<https://www.rma.usda.gov/SummaryOfBusiness/CauseOfLoss>  
USDA crop acreage (including failed to plant) data:  
<https://www.fsa.usda.gov/news-room/efoia/electronic-reading-room/frequently-requested-information/crop-acreage-data/index>

**12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.**

1. Smith, A., and R. Katz, 2013: U.S. Billion-dollar Weather and Climate Disasters: Data Sources, Trends, Accuracy and Biases. Natural Hazards.  
<https://www.ncdc.noaa.gov/monitoring-content/billions/docs/smith-and-katz-2013.pdf>

**13. Indicate the data file format(s).**

1. CSV

**14. Are the data files compressed?**

No

**15. Provide details on how the files are named and how they are organized (e.g., file\_name\_pattern\_YYYYMM.tar in monthly aggregations).**

"Name", "Disaster", "Begin Date", "End Date", "Total CPI-Adjusted Cost (Millions of Dollars)", "Deaths"

For example: "North Texas Hail Storm (March 2016)", "Severe Storm", 20160323, 20160324, 2250.6, 0

Cost data is located here: <https://www.ncdc.noaa.gov/billions/events-US-1980-2019.csv>

**16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?**

Cost data is located here: <https://www.ncdc.noaa.gov/billions/events-US-1980-2019.csv>

**17. What is the total data volume to be submitted?**

**Continuous Data: data volume rate for a continuous data production.**

Total Data Volume Rate: 100.0KB per Year

Data File Frequency: 4 per Year

Data Production Start: 2019-01-31

**18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.**

No additional updates, revisions or replacement data are anticipated.

**19. Describe the server that will connect to the ingest server at NCEI for submitting the data.**

Physical Location: Asheville, NC

System Name: cmb-us

System Owner: CWC Monitoring section

Additional Information:

**20. What are the possible methods for submitting the data to NCEI? Select all that apply.**

<https://www.ncdc.noaa.gov/billions/events-US-1980-2019.csv>

**21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.**

**22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?**

No known constraints apply to the data.

**23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.**

The primary purpose for archiving this already operational NCEI dataset is to obtain an ISO.

Given that this data set is already widely-used and referenced via the NCEI website, would be possible to get an ISO

in advance of archiving this data since there is a multi-month waiting period to get a newly submitted data product approved for archive?

**24. Are the data archived at another facility or are there plans to do so? Please explain.**

No

**25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?**

NOAA's National Hurricane Center (NHC) would also reference the ISO for this dataset since we have an agreement with the NHC to produce the hurricane loss totals.

**26. Do you have a data management plan for your data?**

No

**27. Have funds been allocated to archive the data at NCEI?**

Assume so since this is an operational and supported NCEI data product.

**28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.**

N/A

**29. Is there a desired deadline for NCEI to archive and provide access to the data?**

Archive by: 2020-03-31

Accessible by:

**30. Add any other pertinent information for this request.**

The primary purpose for archiving this already operational NCEI dataset is to obtain an ISO for it.