



NOAA

**NATIONAL** 

**WEATHER** 

**SERVICE** 











**NCEP Web Services** 

December 8, 2020















## Today's Webinar Agenda

- Welcome and logistics
- Overview of NCEP web services and issues and mitigation options
- Open discussion
- Wrap-up



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Director
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National Weather Service



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#### Webinar Logistics: How to join the discussion!

 If using the phone for audio, please be sure to enter your audio pin. If you did not do it when you called in, type #PIN# into your phone now.



We are recording the webinar for posting later.





#### **Welcome to our Presenters**













**Brian Gross**Director (acting)
National Centers for Environmental Prediction
National Weather Service



Ben Kyger
Director
NCEP Central Operations
National Weather Service





# **NWS National Centers for Environmental Prediction Specialized Services – Common Mission**



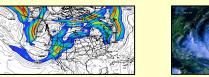
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Aviation Weather Center Kansas City, MO

Climate Prediction Center College Park, MD

Environmental Modeling Center College Park, MD

National Hurricane Center Miami, FL











NCEP Central Operations
College Park, MD
(Supercomputers in
Reston & Orlando)

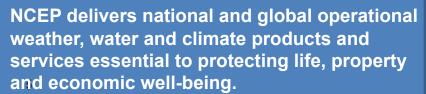
Ocean Prediction Center College Park, MD

Space Weather Prediction Center Boulder, CO

Storm Prediction Center Norman, OK

Weather Prediction Center College Park, MD

#### **Mission**



#### **Vision**

The trusted source for environmental predictions from the sun to the sea, when it matters most.









- Provide 24x7 support for NWS Operational IT Infrastructure
- Run the wide area network that connects all NWS offices
- Operate and maintain:
  - The NOAA operational supercomputers, the environmental models that run there, and the dissemination of the guidance to the world (FTPPRD, NOMADS, MADIS, MRMS)
  - All NWS enterprise level dissemination systems (watches and warnings)
  - The NWS web presence (weather.gov)
- Develop software and web applications
- Provide helpdesk & logistical support for the NCEP Centers and NCWCP tenants











#### **NCEP Web Services and Issues**

- Network bandwidth is insufficient to meet public Web dissemination demands within 1 data center
- <u>NWS websites</u>\* must be deployed across both the primary and backup sites simultaneously in order to meet customer demand
  - Consequently, there is no full backup capability for these services
- The impact of this situation today is that NOMADS, a heavy user of network bandwidth, is taken down in order to perform maintenance or during operation issues. <u>Availability will decrease as demand for</u> <u>NOMADS data increases</u>.
- We are here to discuss mitigating this issue with you.



\*https://www.weather.gov/media/notification/pdf2/pns20-85ncep\_web\_access.pdf















## **Mitigation Options**

NCEP is recommending that we limit the rate of user access requests to prevent the situation from getting worse

- Analysis was done of the average usage pattern across several websites
- Based on the data, our suggestion would be to lower the threshold for all websites to 60 hits/minute
  - The data indicates the new limit would impact heavy usage, but wouldn't have any effect on 75% of our users

Other options considered





# **Open Discussion**

Please use the question box or hand-raise option.



If we don't get to you, enter your comment in the "Questions" box or email NCO Implementation and Data Services Branch Chief Carissa Klemmer at <a href="mailto:idp.feedback@noaa.gov">idp.feedback@noaa.gov</a>

Comments being accepted through December 18, 2020





# Wrap Up - What's coming

- Academia Roundtable Discussion: Weather-Ready Nation [Winter 2021]
- Partner calls with NWS Deputy Director [Ongoing]

#### THANK YOU!!

weather.gov/wrn/calendar

