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## Plan Overview

*A Data Management Plan created using DMPTool*

**Title:** mPING HMT Proposal

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**Template:** NOAA Data Sharing Template

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# mPING HMT Proposal

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## Type of data and information created

### Describe the types of environmental data and information created during the course of the project

Model output from the RAP, HRRR, NAM, and GFS forecast models at 1-3 h intervals in the native model resolution  
mPING Observations  
Profiles of Tw, T, U, V, p, geopotential, height  
Predictors derived from the NWP model output

## Expected schedule for data sharing

### Tentative date by which the data will be shared

mPING data are available immediately based in the procedures outlined in <https://mping.ou.edu/>  
Data archived in the 200 TB database, and the predictors associated with each mPING observation will be made available July 2020.

## Standards for format and content

### Describe the standards to be used for data/metadata format and content

mPING data are available in JSON, GeoJSON, XML and ASCII formats  
Predictors matched to mPING observations will be available in ASCII format  
Archived NWP output data will be available in GRIB2 (native) format

## Policies for stewardship and preservation

### Describe your programs policies that address data stewardship and preservation

Data will be made available from NSSL and kept at NSSL on a 200 TB RAID system  
NWP model data will be preserved for at least 5 y beyond the life of the project  
All associated details about data format and any associated metadata will be kept in concert with the data itself

## Procedures for providing access

### Describe the procedures for providing access, sharing and security

Articles will be published in archive journals  
Data will be made available via direct request to the project PIs  
Data access will likely be through an API similar to that for mPING (<http://mping.ou.edu>)  
*These environmental data have not been formally disseminated by NOAA, and do not represent and should not be construed to represent any agency determination, view, or policy.*

## Previous published data

### Describe your prior experience in publishing research data

Elmore, K. L., H. M. Grams, D. Apps, H. D. Reeves, 2015: Verifying forecast precipitation type with mPING. *Wea. and Forecasting*, **30**, 656–667.  
Reeves, H. D., K. L. Elmore, A. Ryzhkon, T. Schuur, J. Krause, 2014: Sources of uncertainty in precipitation-type forecasting. *Wea. and Forecasting*, **29**, 936–953.  
Elmore, K. L., Z. L. Flamig, V. Laksmanan, B. T. Kaney, V. Farmer, H. D. Reeves, L. P. Rothfus, 2014: mPING: Crowd-sourcing weatherreports for research. *Bull. Amer. Meteor. Soc.*, **95**, 1335–1342.