

1 October 2016

State of the NEXLAB address



To our loyal users:

Thanks for visiting our website and taking the time to read this “State of the NEXLAB” address. Since inception of NEXLAB in 1996, we have taken pride in serving the meteorological community with a vast selection of analysis, text, and numerical weather prediction data. Every day, we strive to make our site more user friendly and take pride in adding new features, model graphics, and miscellaneous gridded datasets. We have always offered our site as a free service, and will continue to do so in the future for all. In the spring of 2014, we opened our website to donations for three months. Thanks to your support, we were able to raise over \$10,000 to fund our efforts! In the months following the donation drive, we migrated many of our model graphics to GEMPAK, added the capability of point-click forecast soundings, overhauled our animation panes, added new models, and added the ability to easily save model and satellite animations. Currently, we are migrating to a new software package, adding a data readout feature to all of our models, and adding additional models/products. We have also launched an iPhone iOS app, with plans to expand to the Google Play store soon.

For a full list of donors (to date), please visit our donors page: <http://weather.cod.edu/donors>

That said, many of our users are likely aware of the growing size of weather and climate datasets due to their ever increasing spatio-temporal resolutions. These new datasets put additional strain on computational processing and limit our capacity to build and serve new products. In fact, data reliability has occasionally been hampered in the past due to these increased loads on our servers, and we know that is your number one concern based on our 2015 site survey. We have balanced load across our servers in an attempt to create the most stable web experience possible given our current hardware.

We are quickly approaching a turning point with our website. We want to continue to grow and add new datasets as they come online (e.g., new numerical weather models, GOES-R satellite data, 5-min ASOS, MRMS) but we simply do not have the current capacity to do so. College of DuPage has been incredibly supportive in terms of keeping our servers on a consistent replacement cycle, and we are currently in discussions with our IT department to free up additional services and make our workflow more efficient. We are in favor of keeping servers in-house instead of pursuing cloud-based services (for several reasons, but cost being the biggest factor).

Whether you are a relatively new visitor or historical donor, we need your help. Please consider a tax-deductible donation to aid in our efforts. We sincerely thank you for using our site and hope you will continue to support our mission in the future.

Secure donations can be made directly at: <https://foundation.cod.edu/meteorology>

Further details available at: <http://weather.cod.edu/donate/>

Regards,

The *NEXLAB* staff | <http://weather.cod.edu/staff>