

Dr. Jack's BLIPMAP Forecast Model

BLIPMAP™ = Boundary Layer Information Prediction MAP
Created by Dr. John W. (Jack) Glendening, Meteorologist
<http://www.drjack.info>

This is FREE SERVICE for sailplane pilots to see soaring parameters over a geographic region. To access all of these resources you'll need to first setup and register an account at http://www.drjack.info/cgi-bin/FORECAST/auth_register.pl Be sure to configure your computer to store your Dr. Jack logon parameters in a local browser cookie. Here's more registration information <http://www.drjack.info/INFO/registration.html>

Two BLIPMAP Forecasting Models

NAM (North American Mesoscale Forecast System) and RAP (Rapid Refresh) are two different models run by NOAA's NCEP (National Center for Environmental Prediction) and intended for slightly different purposes. BLIPMAPs post-process the output from each to forecast parameters which are more useful to gliding pilots than the standard meteorological parameters.

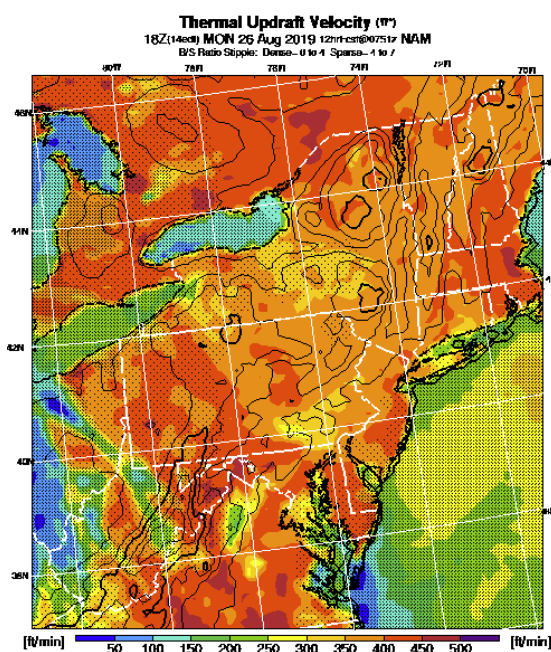
The principal differences between these models are described at <http://www.drjack.info/BLIP/>, the most salient being that if you are looking for a forecast for other than the "current day" then you must choose the NAM model. Although the models use the same basic methodology there are differences, notably in the simplifications used when processes are too complex to be treated exactly, so differences between the NAM and RAP forecasts do occur. This is exacerbated by the sensitivity of such models to uncertainties in our knowledge of the full 3D state of the atmosphere at any time.

How to Access Predicted Soaring Weather

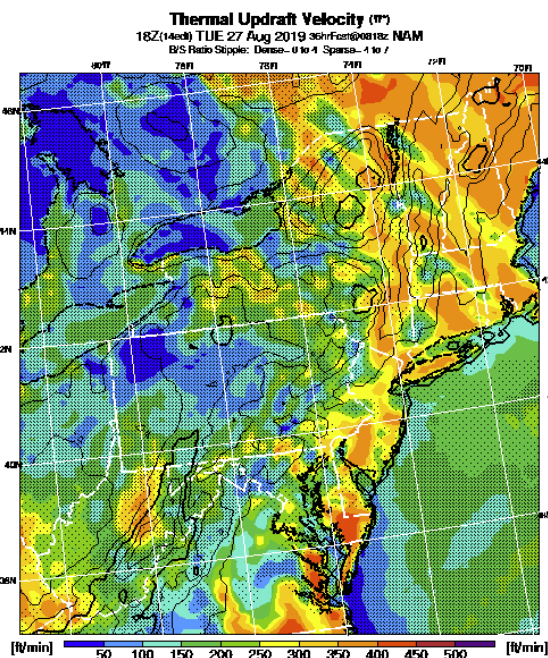
STEP 1: We recommend that for soaring in NJ and PA that you use NAM forecasts
<http://www.drjack.info/BLIP/NAM/index.html> for NorthEast NAM Region
<http://www.drjack.info/BLIP/NAM/NE/index.html>.

STEP 2: Scroll down to THERMAL PARAMETER FORECASTS:

STEP 3: Select "COMPOSITE: Thermal Updraft Velocity & Buoyancy/Shear Ratio", Classic Coloring, and either Current Day or Current+1.



A good predicted lift forecast



A poor predicted lift forecast

Please also explore many of the other very helpful prediction maps on this page <http://www.drjack.info/BLIP/NAM/NE/index.html> to find out forecasts for such things as:

THERMAL PARAMETER FORECASTS

WIND PARAMETER FORECASTS

CLOUD PARAMETER FORECASTS

How Another Member Users Dr. Jack

Using the Dr. Jack application Soaring Tigers member Phil Marks advises that he looks at the following parameters:

- thermal updraft velocity (i.e., thermal strength)
- critical updraft height (height at which thermal strength diminishes to 200ft/min – i.e., the subjective “top of the thermals”)
- boundary layer wind direction and velocity
- Buoyancy/shear ratio
- Cumulus cloud base for cumulus potential > 0
- Overdevelopment cloud base for overdevelopment potential > 0 (I don't really care about the actual cloud base here, but simply whether or not there will be overdevelopment)
- Total cloud cover

With Dr. Jack's NAM forecasts (1-3 days) I just look at the charts for 18Z; with his RAP forecasts (only cover the current day) I look at the charts for 15-21Z which come in three 3-hour increments.

Marty Schneiderman – August 2019