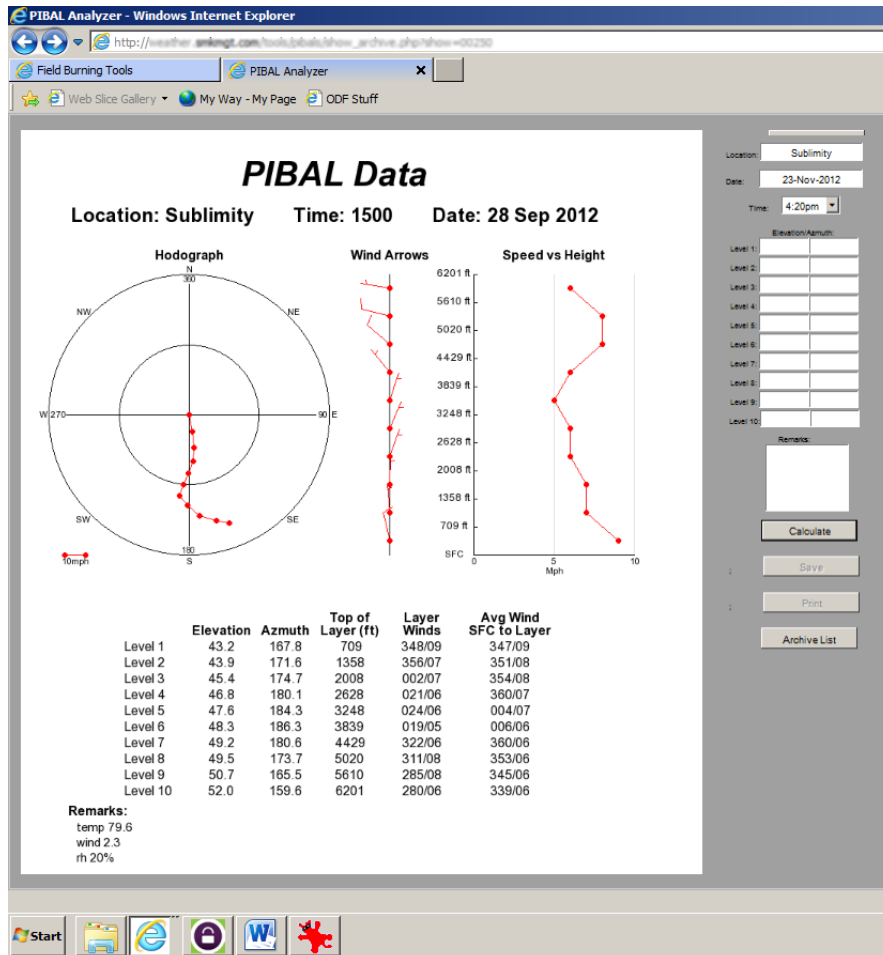




PIBAL Analyzer

The Need: The Oregon Department of Agriculture manages field burning in the Willamette Valley. An important tool for deciding whether or not to allow burning is pilot balloon (PIBAL) soundings. A helium-filled balloon is tracked with a theodolite and the azimuth and elevation of the balloon is measured at regular intervals as it rises. Previously, these readings were radioed to ODA headquarters in Salem where they were entered into a spreadsheet, layer average winds were computed and the results radioed back to burn coordinators in the field. The system was cumbersome and slow.

The Solution: Weather NorthWest developed a web-based application which allows the PIBAL operator to enter the azimuth and elevation information into a cell-modem-equipped laptop computer in the field. With one click of a button the layer-averaged winds are immediately available on the internet to everyone involved in making burning decisions. In addition to a text listing of the winds, meteorologists, managers and burn coordinators have a hodograph, a plot of wind arrows vs. height and a height-speed diagram at their fingertips.



Need specialized weather information? Let Weather NorthWest provide a solution for you!