Internet Weather Resources for PPG Pilots

In the past few years, the Internet has had a huge impact on everything we do, and especially on sport aviation. It's probably safe to say that paramotoring, in particular, would not have developed to the level it's at today without the flow of information (and, admittedly, *mis*information!) the internet provides. One area where the availability of up to date information is especially useful is weather. There is a wide variety of weather related websites on the Internet, although some are more useful than others.

Commercial Weather Sites

Most people are familiar with one or more of the commercial weather related sites. These include Yahoo, Weather.com, and Weather Underground (all web URL links are given at the end of this article). From the main page(s), you can navigate down to your local area, and view a variety of weather information. Often, however, the information available is too general to be of much use, and as these services are advertising supported, you need to wade through the banner ads and popups to get to what you want.

Many of the commercial sites simply repackage information from the National Weather Service. Why not go right to the source? Their main weather page allows you to select a state, then choose a variety of weather information including current conditions as well as forecasts. Often the text of the forecast is word for word identical with what you'll see on the commercial sites, but without all the snazzy graphics and advertisements. From here you can also access aviation and marine weather information, as well as radar graphics and weather maps. For aviation weather, you will need to know the ICAO identifier for the location. You can look up the identifier for a location, but often you will be able to guess at the identifier, adding a "K" at the beginning; for example JFK airport in New York is KJFK, etc. Be warned that the aviation weather data is rather cryptic, as it is encoded in meteorological code. There are links to documents describing this code, but there are easier ways to get the information you need.

FAA's DUAT: "Official" aviation weather

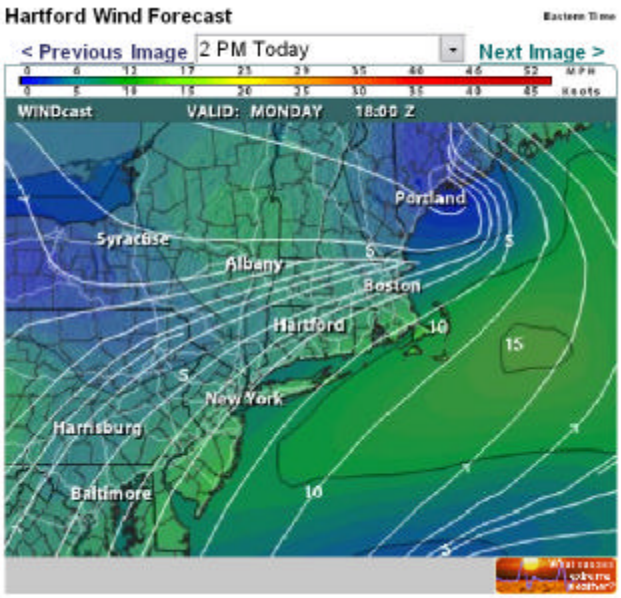
Another, better, way to get the aviation forecasts is to use the FAA's DUAT (Direct User Access Terminal) system. You'll need to register to use DUAT. The registration form asks for your pilot certificate number. If you don't have a license, don't worry, as an ultralight pilot you are eligible to use

the system, but you need to call the toll free help number first to be granted access (you only need to do this once). You'll need to know the identifier for your local or nearby airport, but a lookup facility is provided, and you specify your time of departure. (Note that all times are "zulu", or Greenwich Mean Time, so you'll need to know the time difference for your local area.)

There is a lot of information available from DUAT, not only weather, but airport information, notices to airmen (NOTAMS), and information on temporary flight restrictions (TFR's). There is a lot of weather information that is aviation specific and useful, such as winds and temperatures aloft, cloud heights, visibility, etc. Generally you will want the "abbreviated weather briefing". Two of the most useful reports are TAF's (Terminal Aerodrome Forecasts) and METAR's (a French acronym with a loose English translation to "routine aviation weather observation"; these are current surface conditions). The way it works is you select from a menu to add items to your "pending requests", then you edit, if necessary, then submit them. You can save your frequently used requests, for example, I have a stored request for the standard briefing for my local airport for 2200Z (5 p.m EST) making it easy to check what it'll be like when I get out of work.

DUAT provides a lot of information and is the "official" source for pilots, but in reality I rarely use it, except for information unavailable elsewhere. If you're just looking for aviation weather and not NOTAMS or other information, the Aviation Digital Data Service (ADDS) is also a good source, and easier to navigate and interpret. For a general picture of the weather I'll generally go to the National Weather Service as described above. The most important thing for PPG flying, though, is usually the wind, and there are some excellent places for this.

WINDcast: Graphical wind information

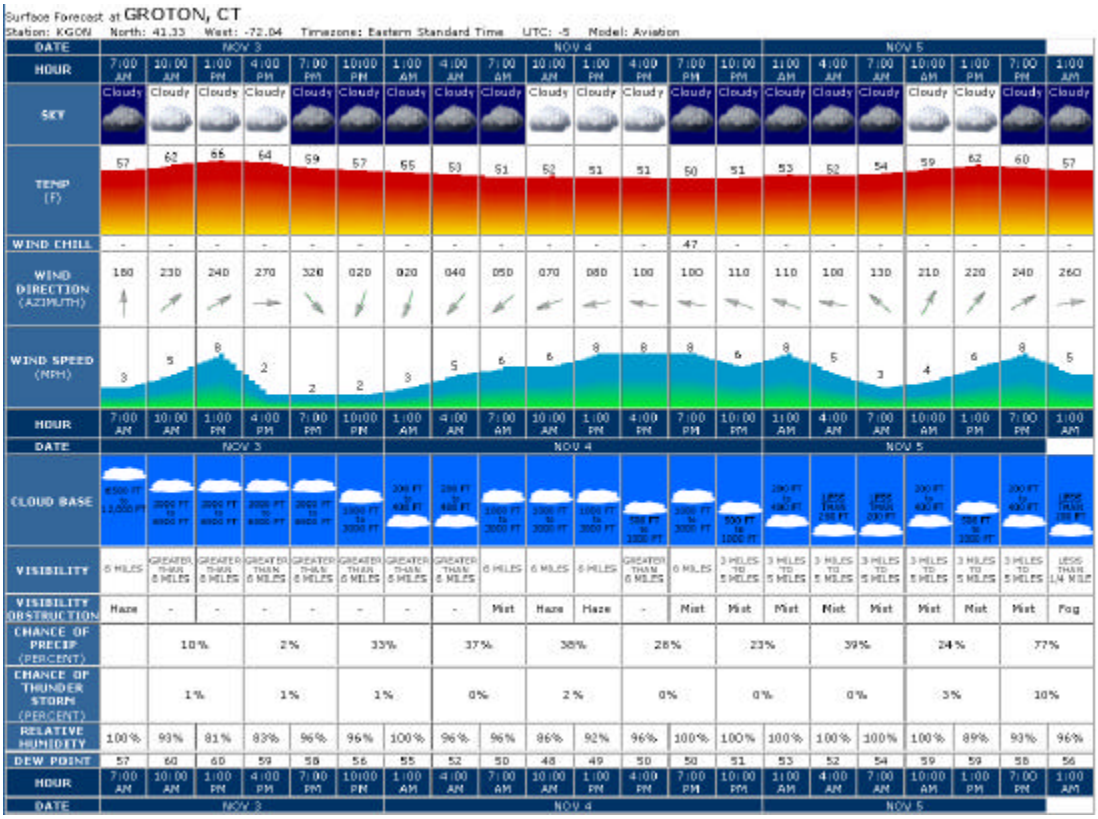


The first one is the Windcast from Intellicast. From their start page, pick US Weather-Forecasts (Windcast doesn't seem to be available for areas outside the U.S.), then from the Forecast pulldown menu, pick "Winds". You'll see a wind map for the entire U.S.; now you can click on the map to zoom in on your local area. What you get is a map that's color coded according to wind strength, with streamlines

indicating the wind direction. You can select the time of the forecast in six hour intervals for today, tomorrow, and sometimes part of the next day. By paging through the images for before, during, and after the time you'll be flying, you can get a good picture of the overall weather trend. Note that the Windcast is occasionally flaky, displaying information for the wrong day, or messed up color coding, but it's generally obvious when that happens.

Launch Code: Surface Condition Forecasting for Airsports Aviators

Another excellent source for wind as well as other weather information is the Airsports Net Launch Code Forecast. Again, you browse to your location, and are rewarded with a large chart showing the overall weather



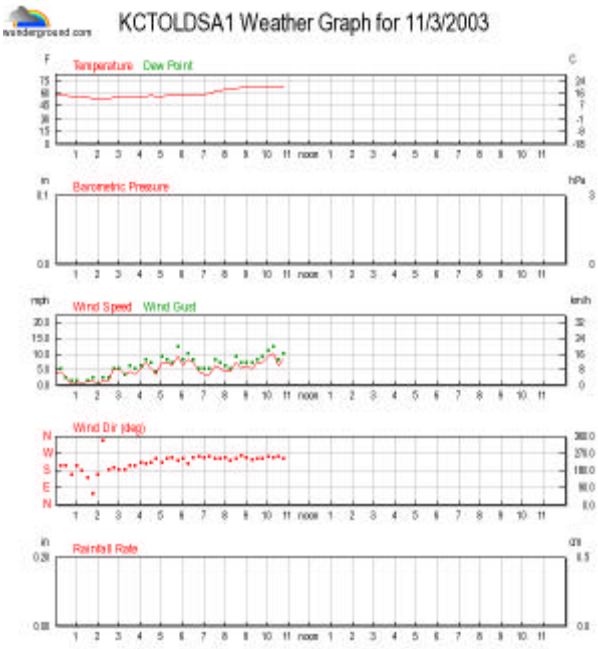
for the next couple of days. Here you can see cloud cover, temperatures, wind speed and direction, etc., for the next couple of days in an easy to interpret format.

Is the weather *really* going as forecast?

All the forecasts are useless if the weather doesn't behave as predicted. Often, of course, the weather *does* do what it's forecast to do, but sooner or later. To get an idea of whether the wind at the field is *really* diminishing to flyable levels as forecast, you need a report of current conditions. Besides the six hour forecasts, Windcast also displays the

current winds. However, local areas frequently have their own peculiar weather and wind patterns that differ from the overall forecast. For this you need local information. There are a number of sources for local information; some paragliding or hang gliding clubs have put weather stations at launch sites, sometimes local TV or radio stations show current weather data, and there are many others as well… you'll need to ask or look around for local information. There are, however, some national sites that collect information from many individual local stations. METAR's (described above) are a source of current conditions from many local stations (usually airports).

Weather Underground local stations



Weather Underground, besides the general information described above, also collects data from many small amateur operated weather reporting stations. Because these are amateur stations, the quality of data varies widely, some presumably being in better locations than others, and some update every few minutes while others only report every half hour, or may be offline. A good one can be very useful. Some also have links to the station owner's home website, and sometimes telecams as well (want to see what the wind and waves are doing at your favorite beach launch right now?) Since these are 24 hour reports, you can also go back *after* flying if you're trying to understand just what the weather was doing when the winds shifted in the middle of your flight.

Iwindsurf.com—not just for windsurfers

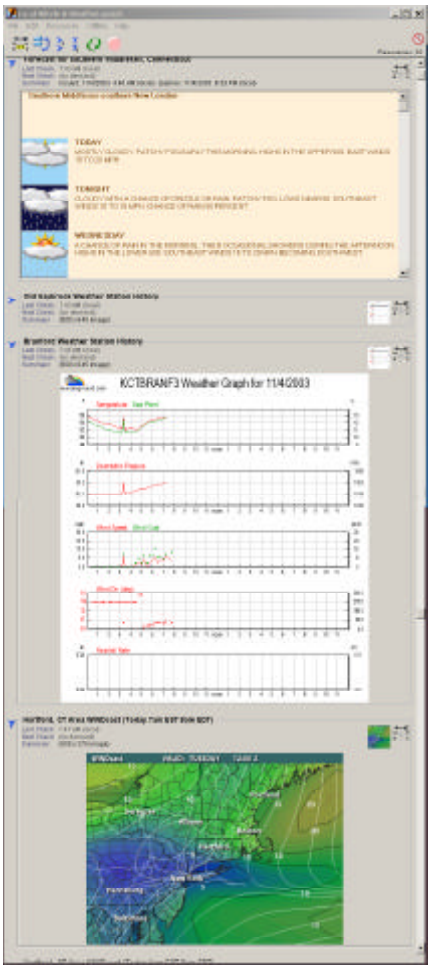
Iwindsurf also maintains a network of forecasts and wind reporting stations. Obviously these are primarily in coastal locations, but for you beach flyers it can be a valuable resource, and there are reports from some inland locations as well, including some PG/HG launch sites. Many stations display free information;

the “FX” stations are “premium” meaning you have to pay for a subscription (although there is a free trial period).

Putting it all together

When you find a weather resource you find useful, be sure to save a bookmark for it. This applies especially to the individual pages you navigate to within a web site; for example, you may well want a bookmark for the main page of Intellicast.com, but you’ll also want to save a link for the winds, say, in your local area for 8 a.m. and 2 p.m. tomorrow. I keep bookmarks to NWS forecasts for not only my local area, but also for other locations I frequently travel to. Another option is to use a program that collects and displays “weather sets”.

Fly Aware



The most useful tool I’ve found for collecting internet weather data is a shareware program called Fly Aware from Adeptool. It’s inexpensive ($20), is available for Windows and Macintosh, and you can download a fully functional 30 day demo version. Fly Aware lets you create “weather sets”, and then download them on demand or on a specified schedule. For example, you can choose to view the Windcast images for several times, all on the same page, without any of the advertisements. Fly Aware handles METAR’s and TAF’s, formatted so they’re easier to understand, and for information that it can’t handle, you can link to your browser. For example, I use a weather set that shows the NWS forecast for my area, Windcast maps throughout the day, the nearest Weather Underground station graphs, and a link to Launch Code. The easiest way to use Fly Aware is to start with one of the sample sets and modify it to your liking.

There are many other weather resources available online; please don’t feel slighted if I’ve left out your favorite one. Many provided the same information in different formats, so what you choose depends on your personal preferences. If you’re away from your computer, though, up to date information is also available from a weather band radio (a good thing to

have if you're flying away from home), and you can always (and should!) call Flight Service (1-800-WX-BRIEF) for the latest conditions anywhere in the country. It's also a good idea to check the weather reports even when you *know* conditions will be good; by doing so you will get a feel for how various reports jive with reality in your location. Finally, all the online weather information in the world is no substitute for a basic knowledge of meteorology, awareness of current and local conditions, and good judgment when you're standing on the field getting ready to take off.

Internet weather links

Yahoo weather:	http://weather.yahoo.com/
Weather.com:	http://www.weather.com/
Weather Underground:	http://www.wunderground.com/
National Weather Service:	http://weather.noaa.gov/
ICAO identifier lookup:	http://www.nws.noaa.gov/tg/siteloc.shtml
DUAT:	http://www.duat.com
Aviation Digital Data Service:	http://adds.aviationweather.gov/
Intellicast:	http://www.intellicast.com/
Launch Code:	http://www.usairnet.com/cgi-bin/launch/code.cgi
Weather Underground local stations:	http://www.wunderground.com/weatherstation/ListStations.asp
Iwindsurf:	http://www.iwindsurf.com/
Fly Aware:	http://www.adeptool.com/news.html