

**SnowPilot:
A “new school” tool for collecting, graphing, and databasing snowpit
and avalanche occurrence data with a PDA**

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ABSTRACT: SnowPilot (www.snowpilot.org) is a *free* software program that allows users to collect snowpit and avalanche occurrence data onto a Personal Digital Assistant (PDA or Palm Pilot). This data is then stored on a PC where it can be viewed in a graphical snowpit format. The data is also uploaded to a database on the web where it can be viewed and accessed.

Keywords: snowpilot, data collection, pit profiles, PDA

SnowPilot is a *free* software program that allows avalanche forecasters and snow scientists to collect snowpit and avalanche occurrence data onto a Personal Digital Assistant (PDA or Palm Pilot). This data is then stored on a PC and uploaded to a database on the web. Snow Pilot will provide an easy, fast, and standardized way to collect snowpit data. Additionally, it will have the advantage of providing researchers a way to seamlessly share this information. SnowPilot will bring the recording of field observations, snowpits and stability tests into the digital age.

SnowPilot has five parts.

- 1) In the field a forecaster can collect and input all snowpit measurements (layers, temps and tests) onto a PDA. Drop down menus and “point and click” entries will allow for rapid data collection and field validation.
- 2) Once at home or in the office, the data will be seamlessly synched to the user’s PC. and compiled into a snowpit profile. A separate screen capture program can print the profile, or it can be saved as a bitmap. These

profiles can also be posted on websites to provide the public with additional snowpack information.

- 3) The real beauty of this program is that all the data can be uploaded to a centralized database. Once in the database, these records will be instantly available to researchers and forecasters via the SnowPilot website. From here any uploaded pits can be viewed and printed. The database can also be searched by state, mountain range or pit site. Furthermore, qualified researchers can perform advanced queries to the data.

- 4) Besides entering snowpit data, the program also has a detailed Avalanche Occurrence section. All pertinent data from an avalanche incident can be recorded with convenient drop down menus.

- 5) Lastly, pit data can be entered straight onto the web. This bypasses the PDA. For example, data recorded in a notebook could be copied onto the “Enter Pit” page of the website. This way the data is saved and a snowpit profile is generated and easily printed.