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on the lighter side

No snow job

One actuary adds it all up

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About this time of year, the winter holidays' romantic notions about snow — walking in a winter wonderland — are being rapidly cast aside for thoughts of warmer and sunnier days.

For skiers, however, snow can be a year-round passion. And for skier Tony Crocker, an assistant actuary with Transamerica Life & Annuity in Los Angeles, snow has taken an even bigger role, becoming an off-hours subject for his actuarial skills.

Crocker, a skier since the '70s, maintains a Web site (<http://members.aol.com/crockeraf>) giving current snowfall information for more than 60 locations, historic data for 85 sites going back an average of 18 years, and a summary of each ski season since 1968. He also provides a snow quality analysis (water content and temperature) for 11 popular areas to help answer the truly devoted skier's vital question: Where will I find not just adequate snow but that drier, highly satisfying type called powder?

It should come as no surprise to non-skiers that a magazine by the name of *Powder* exists and even thrives. A little over a year ago, Crocker and his work were the subjects of *Powder's* cover. The publication ran 10 pages of Crocker's statistical analysis, calling it

"the most complete, comprehensive, and objective guide to snowfall — and both prevailing and expected snow conditions — in major North American ski regions ever published."

A regular skier of Mammoth Mountain in California, Crocker kept tabs on the snowfall there until 1991. Then in 1992, Crocker learned about Knox Williams, who had a government grant to maintain the Avalanche Network — measures of snowfall in Colorado and five areas in other states.

This was a goldmine of information. So in 1992, Crocker bought a home computer and began his work, using information from Williams and his network. "I used APL because that's what I knew best," he said. "The calculations were the ones I always use to model both incomplete data and complete data." Much of the work was done late at night and into the wee hours of the morning, long after his family had drifted off to sleep.

Not all the information came from the Avalanche Network. "In some cases, I had to dig into an area to find out what the numbers were," Crocker said. What he discovered is that some ski areas vastly overstate — "and

surprisingly, even understate" — the numbers. "The most conspicuous understatement is Mount Bachelor in Oregon," Crocker said. "They measure at 6,300 feet [elevation] while the skiing ranges from 5,900 to 9,000 feet. Their brochures only claim 300 inches a year, while the measurements at 6,300 feet have averaged 366 inches since 1974."

Early snowfalls have predictive value. Snow storms in November and December will provide a base for March and April — popular ski vacation times. Watching the early snowfall "is how I plan my ski trips, so I'm sure others do, too," Crocker said.

Crocker's Web site was getting 30 hits a day in November and December. But what's in its future? Gathering the data and pulling it into shape has been a labor of love and some expense, mostly for long-distance phone calls. And the extra hours of work are wearing, even for one as committed as Crocker.

Still, his Web site and the 1995 issue of *Powder* remain an encyclopedia of numbers that adventuresome skiers can use far into the future.



Tony Crocker surrounds himself with snowfall data. No armchair amateur, he's shown here with son Adam and the real thing on the slopes in Brighton, Utah.