



An analysis of meteorological factors affecting user satisfaction

In-Gyum Kim, Hye-Min Kim, Ki-Jun Park, Jeong-Yun Kim, and Cheol-Hong Park

National Institute of Meteorological Research, Seogwipo-si, Jeju-do, Korea, Republic Of (kimig@korea.kr)

The KMA (Korea Meteorological Administration) is conducting a research on survey of user satisfaction annually since 2008 as well. However, researchers provided forecast information users with simple questionnaires using the Likert scale to review their satisfaction, and the respondents had to choose one answer among the seven options of satisfaction levels. For this reason, the survey result has low explanation power and is difficult to use in developing a strategy for meteorological service, because the answer has unidimensional implication and the space between each option cannot be equidistant. In this study we attempted to analyze which meteorological factors are affecting the user satisfaction.

We collected a survey results that had conducted during these 5 years (2010~2014) by KMA, hourly meteorological observation data and forecast data that was published four times a day. The meteorological factors and satisfaction level of users were analyzed by liner regression analysis. The area was limited to Seoul and the time was divided into work-go home, weekdays- holidays and day-night.

As for the results, precipitation and snowfall are effective to predict respondent ratio who answered dissatisfaction. However, for those who are satisfied with the forecast has not find a relationship between the meteorological factors. The meteorological communities such as KMA need to know the dissatisfaction of meteorological information users is influenced not only the accuracy of weather forecast but the weather phenomena.