

ROAD CONDITIONS

There is an ever increasing requirement to ensure the safety of those who travel by car. This naturally has increased the demand for exact and precise information about road conditions. Data such as this can literally be a life saver, particularly in cold climates or where roads may become slippery. Also the data will help to reduce road maintenance, as work will only be done when it is needed.

Variable parameters such as wind, rain, humidity, temperature, road wetness, fog and, of course, radiation, are gathered by meteorological stations. Dangerous situations are then predicted by analysing all the data, the results of which are passed on to road travelers and road maintenance crews.

A vital part of this information is the radiation measurement, especially the scale of loss of far infra red radiation, which can be used to predict the freezing of water on road surfaces. To achieve this type of monitoring, a typical set up would consist of a CMP 11 Pyranometer and a CGR 3 Pyrgeometer. The elegance of radiation measurement is that it can give a prediction of road temperature before the actual road temperature has decreased.

Published: 28/07/2008 14:28

