

# Appendices

## The web site

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Over the last few years the KNMI web site ([www.knmi.nl](http://www.knmi.nl)) has grown into an important communication channel, also for Climate Research and Seismology. In fact, as the World-Wide Web was conceived at a science laboratory (CERN), it is ideally suited to the needs of the research groups at KNMI: large amounts of information can be made available to a wide audience using simple tools.

**Audience** • The target audience of the Climate Research and Seismology Department part of KNMI web site can be roughly divided into three groups with very different requirements. First there is the need to reach fellow scientists, to share the results of research undertaken at KNMI, show our publications and related (multimedia) material and make data sets available. Often scientists also post and discuss preliminary results within an international collaboration using the project or private home pages on the KNMI web site. The language of these web pages is invariably English and the amount of material quite large. They attract a relatively small number of highly interested visitors, who may transfer large amounts of data.

A second group that frequently searches the web site for information consists of pupils and students at all levels, from elementary school to university, looking for information for projects and papers. Other

interested members of the public also expect KNMI to provide accessible and authoritative information about climate and seismology. For these target groups we try to provide well-organised web pages in the Dutch language at a popular-science level, hyperlinked to the more advanced material discussed above. Colourful graphics are often highly appreciated.

Finally, certain topics suddenly have news value to a much wider audience. Examples are earthquakes, the ozone hole, climate change reports (IPCC), El Niño. In close collaboration with the public relations department a web page giving background information and links to the general information is then put on the research web site in conjunction with a news item on the front page.

**Site layout** • The departmental web pages can be reached via the KNMI home page, which prominently features 'Research'. This then forks into Applied Research, Climate Research, Policy Advice and Seismology. At the lower levels the divisions run parallel with the organisational structure: each division is responsible for presenting its own research. Some divisions have even delegated this further to individual projects. This scheme implies that the web site is maintained by a large number of web masters, each motivated to present her or his research to as wide an audience as possible and enabled by the simplicity of the web to do so. There is a policy that each page must be signed by its author, so that she/he can be contacted if questions arise about the content.

A downside of the distributed maintenance system is that the pages are made by design amateurs who normally stress content over form. Another problem is that key elements like the publication area (indices, abstract and content) and contact information are also decentralised. There are plans to improve upon this situation.

The site consists of approximately 2500 HTML pages (of which about 1000 have been automatically generated) and 100 postscript and PDF files. It is illustrated by 7500 images (many also automatically generated from measurements) and 10 movies. There are also about 100 CGI scripts, consisting of the publication search engine, a discussion board and one web application.

**Visitor statistics** • The web site of the Department serves about 100 000 pages per month, 3% of the total number transmitted by the KNMI web server (which has the weather forecast). In kilobytes the fraction is much higher, about one-quarter. The vast majority of visitors do not enter via the 'front door', but immediately access one of the informative pages deeper down in the hierarchy. The most popular section is seismology, which is responsible for 30-40% of the hits, 99% of which are the Dutch popular pages. (Note that these statistics exclude the traffic from the European seismology data exchange project ORFEUS, which operates its own server.) The number of visitors

fluctuates strongly with the number of earthquakes. Atmospheric Composition Research generates a lot of traffic on international collaborative projects (e.g., Sciamachy). Apart from that, the most-viewed pages are the publication areas of the different divisions. Another popular destination for visitors is the Climate Explorer, a web application that allows access to monthly historical climate data and allows for quick exploration of correlations among these data.

**Future plans** • The web site of the Climate Research and Seismology Department seems to fulfil its purposes quite well: to a large extent the main target groups seem to be served with the information they want. The navigation possibilities of the site can be improved. The main weak point is the scattered and sometimes incomplete publication service. Plans are being made to centralise this at the KNMI Library. An investigation is also being made into the possibility to separate form and content to improve upon the visual design while leaving the content under the responsibility of the authors.