

Web analytics to improvement of data dissemination websites

Kazuyo Fukuda^{1*}, Hideaki Saito¹, Tomoaki Kitayama¹, Shin Miyagi², Ruri Funakoshi¹, Makoto Nakamura², Akira Sonoda¹

¹JAMSTEC, ²Marine Works Japan Ltd.

The Data Research Center for Marine-Earth Sciences (DrC), Japan Agency for Marine-Earth Science and Technology (JAMSTEC) publishes information of data and samples obtained by JAMSTEC's research cruises to the internet through multiple data dissemination websites¹). In order to improve usability of our websites, it is important to understand user's behaviors and needs. We promote the use of web server logs and application logs to understand them.

The web server logs about data dissemination websites operated by DrC are routinely collected and preprocessed. The preprocessed data are used as input data to a web analytics tool AWstats²), and the output data such as page views and number of visit is daily monitored. For web accesses from outside of JAMSTEC network, a monthly report is produced by using monthly data calculated from the AWStats. When outstanding changes of page views or search phrases are detected, additional information such as trend of search engine keywords or contents of referred pages is also described in the report. Furthermore, characteristics of visitor are also investigated based on organization name referred from domain name or IP address. It becomes possible to extract differences of visitor's business type among websites from the number of page views by each domain. This information is also used to consider target user group for hearing survey and usability survey about our websites.

For some website, the systems have been developed after considering utilization of application logs at the design phase. Consequently, application logs for data search and download have been able to be stored. Search logs make available for research metadata, keywords and number of matching results when searching data or samples. Download logs are used to discover frequent patterns downloaded type of data or sample and combination of them. Furthermore, a fusion of application logs and user information such as user's profile or comment entered on user registration page or questionnaire page makes understandings of user's needs in more detail.

In our presentation, we will show examples of analysis results and report our future issues of web analytics.

References

- 1) <http://www.jamstec.go.jp/drc/e/datasites/>
- 2) <http://awstats.sourceforge.net/>

Keywords: Data dissemination, web analytics, user's behaviors, user's needs, web server log, application log