

Name of research institute or organization:

MeteoSwiss - Federal Office of Meteorology and Climatology

Title of project:

Operation of an automatic weather station - infrastructure renewal

Project leader and team:

Mr. Gilles Durieux, project leader

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Project description:

The Jungfrauoch station of MeteoSwiss enjoys a special climate situation. It is exposed to harsh weather conditions. It is therefore necessary that its construction is robust and that the station elements (interfaces, connections, instruments) are easy to access for our technicians.

Also the wiring of instruments is no longer news. Cables hang out and are therefore subject to frost. The cabinet location is not suited to the weather conditions and does not allow carrying out work in bad conditions. An overloading of the bridge does not allow us to install additional sensors whether for a calibration or for a comparison. The instruments are tight against each other and they are not placed in optimal ways for a troubleshooting.

We took the advantage of the new bridge relocation to remove the outer casing connections and now all cables are connected to the inside of the dome. With this we can troubleshoot the electrical level without specific disadvantages and even in bad weather conditions.

Here are some pictures of the renewing...

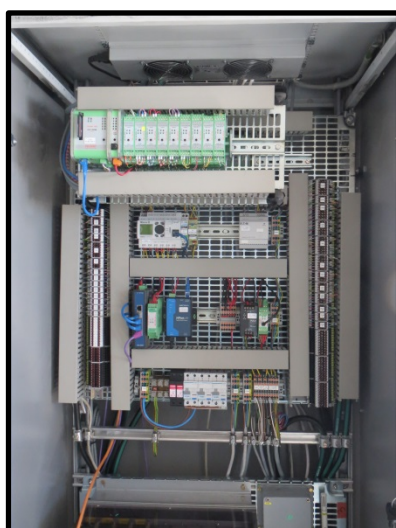


Figure 1. Acquisition system



Figure 2. New bridge arrival



Figure 3: Solar tracker



Figure 4: New acquisition for the instruments solar tracker



Figure 5: Jungfrauoch station - final state

Scientific publications and public outreach 2015:

Radio and television

“La Suisse en train”, France 5, Echappées Belles, Interview with the technicians who made the renewal and Yves-Alain Roulet, November 23, 2015. <https://youtu.be/CgAO5ADDR2I>

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