Large crustal earthquakes are the subject of extensive field surveys in order to better understand the rupture process and its tectonic consequences. After the earthquake, pictures of the rupture can easily viewed quite easily on the web. However, once the event gets old, pictures disappear and can no longer be viewed, a heavy loss for researchers looking for information. Even when available, there are linked to a given survey and comparison between different earthquakes of the same phenomenon can not be easily performed.

SHERPA, Sharing of Earthquake Rupture Pictures Archive, a web application developed at EMSC aims to fill this void. It aims at making available pictures of past earthquakes and sharing resources while strictly protecting the authors copyright and keeping the authors in charge of the diffusion to avoid unfair or inappropriate use of the photos.

Our application is targeted at scientists and scientists only. Pictures uploaded on SHERPA are marked by a watermark “NOT FOR PUBLICATION” spread all over, and state the author’s name. Authors and authors only have the possibility to remove this mark should they want their work to enter the public domain. If a user sees a picture he/she would like to use, he/she can put this picture in his/her cart. After the validation of this cart, a request (stating the name and purposes of the requestor) will be sent to the author(s) to ask to share the picture(s). If an author accepts this request, the requestor will be given the authorization to access a protected folder and download the unmarked picture. Without the author explicit consent, no picture will never be accessible to anyone. We want to state this point very clearly because ownership and copyright protection are essential to the SHERPA project.

Uploading pictures is quick and easy: once registered, you can very simply upload pictures that can then be geolocalised using a Google map plugged on the web site. If the camera is equipped with a GPS, the software will automatically retrieve the location from the exif file. Pictures can be linked to an earthquake and be described through a system of tags. This way, they are searchable in the database.

Once uploaded, pictures become available for browsing for any visitors. Using the tags, visitors can search the database for pictures of a same phenomenon in several events, or extract the ones from a given region, or a certain type of faulting. The selected pictures can be viewed on a map and on a carousel.

By providing such a service we hope to contribute to a better accessibility of the pictures taken during field survey and then improving earthquake documentation which remain a key element for our field of research.

http://sherpa.emsc-csem.org/