Dr Y. Fukahata   Disaster Prevention Research Institute, Kyoto University
                   Professeur invité EOST – Université de Strasbourg

How much information do observed data have?: Importance of covariance components in inverting densely sampled observed data

Nominally continuous data in space and/or time is obtained in various observations in geophysics. Due to an enhanced technology of computers, we can now invert such observed data with a very high sampling rate. However, the problem is that densely sampled observed data are usually not completely independent of each other, which can lead to seriously biased results. In this talk, I will present essential importance of covariance components in dealing with this problem, by taking examples of geodetic and seismic data inversions.