Introduction to data analysis with Matlab / Introduction à l’analyse de données avec Matlab

Enseignant(s) : Simpson G.

Cet enseignement est proposé dans les orientations suivantes :
- Géologie sédimentaire, environnementale et des réservoirs / Sedimentary, Environmental, and Reservoir Geology
- Géochimie, Tectonique alpine, Gîtes métallifères / Geochemistry-Alpine Tectonics-Ore Deposits Risques géologiques / Geological Risks

Module Fundamentals of numerical modelling and data analysis

Cours donné à l’ UNIGE

Type d'évaluation
- Pratique (Rapport, Travaux pratiques, Exercices, Séminaire, Exposé oral, Travail personnel...)

1. Objectifs et contenu de l'enseignement

The aim of this course is to familiarize students with several common techniques used to analyze numerical data sets commonly encountered in Earth Science. The course is based entirely around two one-day projects that the students will undertake independently. The first project involves multivariate data analysis with spatial data, while the second involves analysis of a time series and data modeling.

The techniques treated in this course include basic graphics, principal component and cluster analysis, autocorrelation, Fourier analysis and basic programming, all done with MATLAB.

Evaluation will be based on independent written reports based on the two projects, handed in after course has finished.

The number of participants is limited to 20 people.

2. Pré-requis :

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