**Least squares means….**

(1) more rounds

(2) wizard magic

(3) sum((observations – calculations)2)

**y = a + bx is a geochemical model...**

(1) true, because I can fit this with 3 data points

(2) false, this is just a function

(3) maybe ?

**An objective function is….**

(1) a function that treats all numbers the same way

(2) at the core of an optimization problem

(3) different from a subjective function

**Levenberg-Marquardt refers to…**

(1) an algorithm

(2) the name of a famous painter

(3) a famous geoscientist

**Propagation of uncertainties…**

(1) is not very critical

(2) can be uncertain

(3) is always accurate

**It is impossible to take into account errors in model fitting...**

(1) Not true

(2) Not always false

(3) False

**Machine learning is a fancy word meaning fitting flexible model to data**

(1) True

(2) True but…

(3) The machines will take over anyway.

**A machine learning model can be adjusted to data using traditional fitting methods like least square regression**

(1) True

(2) No, it is a very complex field that has nothing to do with model optimization

(3) ML models do not necessarily need data, so… ?