Statistical methods and scientific induction
Statistical inference is inference of a conclusion using data that are subject to random variation, for example, observational errors or sampling variation.\[1\] More substantially, the terms statistical inference, statistical induction and inferential statistics are used to describe systems of procedures which can be used to draw conclusions from every dataset arising from every system affected by random variation.\[2\] The requirements of such a system of procedures for inference and induction are, initially, that it should produce reasonable answers when applied to simple well-defined situations.