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## **Development of the stochastic approach to groundwater hydrology: a personal account of G. de Marsily contributions.**

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I review early developments of the stochastic modeling approach. It is generally believed that it is an American contribution. Indeed, North-Americans (notably Lynn Gelhar and Allan Freeze, but also Eduardo Alonso) pointed to the importance of spatial variability of hydraulic conductivity in controlling large scale water flow and solute transport in the mid 1970's (Matheron's much earlier 1967 solution did not become broadly known until much later). However, the formulation of an approach to solve the problem was the result of work by French mining engineers at Fontainebleau. They had developed the field of Geostatistics, initially for the assessment of mineral reserves. It was natural to apply these concepts to groundwater. It was Ghislain de Marsily who framed the basic concepts of the geostatistical approach to address spatial variability, which remains essentially unchanged to this day.