

Matter-element space analysis in isotope hydrology

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Abstract The progress of matter-element analysis application in hydrology and hydraulic engineering is introduced, and the relatively weak part that lacks the research of the hydrological/isotope hydrological mechanism is pointed out. In order to solve this problem, the concept “matter-element space” is proposed after consulting the Extenics and General Structure theory. Then the expression and the operation of the elements in the matter-element space and the corresponding physical meaning are discussed. Matter-element space’s theoretical frame for the laws’ description and disclosure of multi-discipline is presented. Finally, an example of applying the matter element space analysis in isotope hydrology demonstrates their validity.

Key words isotope hydrology; law; matter elements space
