

## Acquisition Mechanism of Detrital Remanent Magnetism Revealing by Freezing Sediment Samples from Irrigation Pond

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We separated contribution of mobile grains of magnetic minerals to total remanent magnetization(RM) from that of settled grains by measuring natural RM of sediment samples taken from irrigation pond following freezing them with anti-parallel orientation under natural field. The settled component occupies 40% to 70% of total RM in top sediment. The component is roughly correlated with water content in the upper 10 to 20 cm. A negative correlation between the component and frequency dependencies of magnetic susceptibility is shown in the lower portion of a core. It is shown that the component does not show monotonous decrease versus depth in some cases, and that in those cases some parts of RM in lower sediment is possibly acquired after acquisition of RM in upper sediment.