Estimation of cuttings lag depth error in deep water riser drilling hole: A case study of NanTroSEIZE Site C0002.

*Takamitsu Sugihara¹

1.Center for deep earth exploration, Japan Agency for Marine-Science and Technology

Drilling cutting is a unique tool to directly evaluate geological information in drilling hole, and precision and accuracy of cuttings lag depth are important for the geological evaluation to . During an actual operation, it is considered that mud water lag depth is the same as cuttings lag depth. However, since the cuttings lag depth obviously depends on size of cuttings, error of the cuttings lag depth should be independently evaluated as compared with the mud water lag depth. In this presentation, basic concept of the cuttings lag calculation is reviewed, and error of the cuttings lag depth is conceptually defined. As the result, potential of the cuttings evaluation is discussed showing quantitative result of the cuttings lag depth error.

Keywords: Deep water drilling, Cuttings, Mud logging, Lag depth