[JJ] Evening Poster | H (Human Geosciences) | H-QR Quaternary research

## [H-QR04]Quaternary, Diachronic dynamics of human-environment interactions

convener:Mamoru Koarai(Earth Science course, College of Science, Ibaraki University), Toshihiko Sugai(Department of Natural Environmental Studies, Institute of Environmental Studies, Graduate School of Frontier Science, The University of Tokyo), Kiyohide Mizuno(国立研究開発法人產業技術総合研究所地質情報研究部門, 共同), Minoru YONEDA(The University Museum, The University of Tokyo) Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe) Humans have attained their specific development by indigenous cultures and evolved through environmental adaptation. The session raises issues of human-environmental interactions, views from diverse changes of climate, ocean, land and biota having made striking influence on humans. It welcomes various fields from human-environment change and their chronometric dating among Quaternary disciplines.

## [HQR04-P02]Magnetostratigraphic chronology of Borehole HLL01, south coast of Laizhou Bay.

\*xingyu Jiang<sup>1,2,3</sup> (1.Asian marginal seas have played an important role in modulating regional energy and material exchanges and in deriving climatic and environmental evolutions. , 2.As an effective method, magnetostratigraphy establishes reliable geochronological framework, which is critical for reconstructing long-term history of climatic and environmental changes in the past. , 3.Due to that the previous long-term records were mainly located in the west and north Bohai Sea, thus a new Borehole HLLO1, drilled in the Laizhou Bay with a length 450 m, was studied. )

Keywords:Laizhou Bay; magnetostratigraphy; sediment; Pliocene; Pleistocene

Asian marginal seas have played an important role in modulating regional energy and material exchanges and in deriving climatic and environmental evolutions. As an effective method, magnetostratigraphy establishes reliable geochronological framework, which is critical for reconstructing long-term history of climatic and environmental changes in the past. Due to that the previous long-term records were mainly located in the west and north Bohai Sea, thus a new Borehole HLLO1, drilled in the Laizhou Bay with a length 450 m, was studied. The main results are as follows: (1) The HLLO1 magnetostratigraphy, containing 272 samples with reliable ChRMs and 10 normal and 9 reverse magnetozones, were identified. (2) Comparing with the ATNTS2012, the HLLO1 magnetostratigraphy recorded C3An.2n to C1nchrons, and its bottom age was about 6.6 Ma. (3) Boundaries between the Miocene and Pliocene and between the Pliocene and Pleistocene were located at 340 m and 140 m depth, respectively. (4) Through comparison with the previous results from the west and north Bohai Sea, it is inferred that the period since the late Miocene around the Bohai Basin was predominated by thermal subsidence, but their environmental history in various subunits were different.