Q139-002 Room: 301B Time: May 28 14:00-14:15

Geological features around the Tokyo International Airport D runway under construction (Preliminary report 1)

Shigeto Osato[1]; Takatoshi Noguchi[2]; Naoto Kanazawa[3]; Takashi Hosoya[3]; Masanori Tanaka[4]

[1] Doshitsu R; [2] Haneda, Ktr, Milt; [3] CKC; [4] PHRI

Stratigraphy and sedimentary environment in the D runway, under construction, of Tokyo International Airport (Haneda Airport) was investigated.

D runway: New runway D is located along just west side of the present airport, facing Tokyo Bay near Tama River mouth. The northern part is constructed in reclamation method, and the southern part in jacket method in the sea about 20m deep.

Drillings:84 drilling cores were taken, which are longer than 80m and 3 of which longer than 100m, and were used for laboratory soil test, the sonic prospecting etc.

Geology:Geological sequences consist of Kazusa Group, Edogawa Formation, Tokyo Formation, buried terrace deposit, Nanagouchi Formation, Yurakucho Formation and mound of sand.

a) Kazusa Group: Early to middle Pleistocene deposit, more than 50 m in thickness. BM boundary is confirmed around AP-220m, Pollen of Metasequoia are included.

b)Edogawa Formation:Middle Pleistocene deposit, about 80 m in thickness. Near J4 tephra, AP-155 m, a lot of Quercus subgen cyclobalanopsis pollen are dominated, which is relevant to MIS11. Deposits of MIS10, 9, 8, and 7 are overlying.

- c) Tokyo Formation: This Formation, relevant to MIS5, is distributed from AP-90m to AP-65m. Pollen of Hemiptelea are included, and concentrated zone of diatoms are characteristics. Tokyo Gravel at the base and KIP tephras from Hakone in the middle to upper are identified.
 - d) Buried terrace deposit: Latest Pleistocene gravel, forming buried terrace, corresponding to MIS2, only in airport island.
 - e) Nanagouchi Formation: Latest Pleistocene (MIS2) deposit, composed of sand and mud alternations.
- f) Yurakucho Formation: Holocene deposit (MIS1). Oyster reef of 9000yBP is found out about AP-40m. Around this zone, the sea-water became deeper rapidly from AP -41.5 to 39.6m, along with the big change in environment. This is only 20m in thickness, much thinner than the surrounding area.