フリーソフト「カシミール３Ｄ」を利用した汽水・沿岸域調査用ナビゲーションシステム

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Abstract

Surveys of brackish water in lagoons and coastal areas involve recording and displaying the geographical position. We have developed a convenient, low-cost navigation system that consists of map browser freeware "Kashmir 3D" and a DGPS (differential GPS) receiver. The navigation system has the following functions : (1) Setting of the navigation route. (2) Displaying the real-time position using DGPS receiver. (3) Recording the navigation data (position, ship speed, heading, etc.). (4) Generating event mark (waypoint) data. (5) Creating the track charts after the survey. "Kashmir 3D" is able to read various topographical maps, making it versatile and suitable for various survey purposes. The navigation system was successfully used in the survey of Miho Bay (Tottori Pref.), Lake Nakaumi (Shimane Pref.), Teshio River (Hokkaido), etc.