

The Land Use Information System (LUIS) Database which has been developed under the GRENE-ei biodiversity area

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We, the Office for Global Environmental Database, at the Center for Global Environmental Research (CGER), in National Institute for Environmental Studies (NIES), has been developing a new database called the Land User Information System (LUIS). LUIS is a database which was provided from NIES as one of the databases of GRID-Tsukuba before. LUIS is a database to visualize the land use in Japan which was extracted from the topographical maps of the Geospatial Information Authority of Japan in three different eras, i.e., Meiji-to-Taisyo era (around 1900s), early Syowa era (around 1950s), and late Syowa era (around 1985). The land use information was extracted in each 2x2 km mesh of 1:50,000 topographical map for the upper left corner, the maximum land use, and existing land use. We have developed a program to plot the land use, on a simple Japanese map and on Google Earth view screen. The figure shows the distribution of broadleaf trees in 1900s and 1985. Red area represents the existence in both era, blue represents the extinction, and yellow represents the appearance. We are thinking of distributing the map from the CGER's Database Web server in future. Current status and future plan of the LUIS database will be presented.

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