

LAND USE 2D MAPS

The 20m Region Planner is a medium resolution database for use in Radio Frequency Planning in urban and rural environments. Data layers include a Digital Terrain Model, Clutter, Linear Vectors and Ortho-imagery. The Region Planner database is derived from Landsat 5, Landsat 7 SLC-Off, and/or ASTER satellite imagery (15m to 28.5m nominal resolution).

- Maximum cloud cover between 0 to 25%
- Output resolution: 20m

DIGITAL TERRAIN MODEL

A raster database of ground surface elevation for the area of interest, derived from contours, stream lines and spot heights captured from 1:50,000 to 1:200,000 scale topographic maps and/or Shuttle Radar Topography Mission (SRTM) elevation points and/or ASTER GDEM.

Output resolution (x,y) 20m

Absolute planimetric accuracy (x, y) 20m - 25m (RMSE)

Absolute altimetric accuracy (z) 7m to 12m (RMSE)

Derivation:

„h Edited and validated SRTM elevation points and/or ASTER GDEM

„h Optional (on demand) : contour lines derived from 1/50 000 or 1/200 000 Topographic maps.

LINEAR VECTOR FEATURES

A vector database of the transportation corridors (road width > 10m) and water features in the area of interest derived from satellite imagery and large scale topographic maps.

2D LINEAR VECTOR FEATURES

Absolute planimetric accuracy (x, y) 15m - 20m (RMSE)

Standard Classes (10):

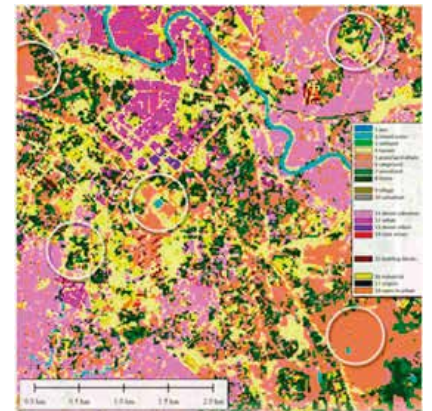
Coastline, Double rivers, Single rivers, Inland water, Highways, Main roads, Secondary roads, Railways, Runways, Major streets

Derivation:

„h ASTER, Landsat 7 SLC-Off and/or Landsat 5 satellite imagery

„h 1:50,000 to 1:200,000 scale topographic maps.

Output resolution (x,y) 20m Absolute planimetric accuracy (x, y) 15m - 20m (RMSE) Standard Classes (18): Sea, Inland water, Wetland, Barren, Grass/Agriculture, Rangeland, Woodland, Forest, Village, Suburban, Dense suburban, Urban, Dense urban, Core urban, Open-urban, Building blocks, Industrial, Airport



CLUTTER CLASSIFICATION

Raster data layer encoding natural and man-made land cover or land use classes.

DERIVATION:

- ASTER, Landsat 5 and/or Landsat 7 SLC-Off satellite imagery
- Minimum mapping unit: 80m x 80m

Geometrically corrected color satellite imagery

ORTHO-IMAGE

Output resolution (x,y) 10m - 20m Absolute Planimetric Accuracy (x, y) 15m - 20m (RMSE)

DERIVATION:

- ASTER, Landsat 7 SLC-Off and/or Landsat 5 satellite imagery.
- Ortho-images when derived from Landsat 7 SLC-Off may appear with SLC-off striping. These stripes do not alter the clutter classification.