

PACKAGING SPECIFICATIONS FOR DRG PRODUCTS ON CD-ROM

Digital Raster Graphic (DRG) images of USGS standard series quadrangles cover systematically subdivided areas of latitude and longitude with formats ranging from 7.5- by 7.5-minutes to 1- by 2-degrees. DRG's of standard quadrangles range in scale from 1:20,000 to 1:250,000. DRG coverages include the conterminous United States, Alaska, Hawaii, Puerto Rico and the Virgin Islands, and the Pacific Islands.

Optimal Packaging Scheme

Each CD-ROM in this series normally contain DRG's covering a 1- by 1-degree geographic area (secondary cell). These cells are further subdivided into 7.5- by 7.5-minute quadrangle grids (primary cells) which represent the location of individual maps covering the geographic area of each secondary cell. The number, series, scale, and class of the DRG products contained in each secondary cell may vary depending on the type of map coverage available for any particular geographic location, although the standard distributable compact disc contains the following number and types of DRG's:

- 64 - 1:24,000-scale, 7.5- by 7.5-minute quadrangle maps.
- 2 - 1:100,000-scale, 30- by 60-minute quadrangle maps.
- 1 - 1:250,000-scale, 1- by 2-degree quadrangle map.

Packaging Variations

To maximize the data storage capabilities of CD-ROM media, variances to the optimal packaging scheme of one secondary cell containing 67 DRG's per disc occur throughout this series. Adjacent cells along the shorelines of the Great Lakes, coastal margins of the conterminous United States and Alaska, and island groups may contain large areas of water with limited amounts of mapped surface area. In such instances, additional adjacent cells of DRG data may be included on one disc. Conversely, cells of DRG's covering areas of extensive urbanization may exceed the 650 Mb data storage capacity of the CD-ROM, necessitating multiple discs to store a single cell of DRG data.

Secondary cells in Alaska are normally configured in 1- by 2-degree and 1- by 3-degree converges and are identified by the general area of interest, such as Fairbanks. Undersize, oversize, and shifted cells occur throughout the Alaska 1:63,360-scale series. The number of quadrangles per cell vary along coastal areas and the position of each cell along the north longitudinal axis. Because of the relatively small file size of each 1:63,360-scale DRG, several cells of data are included on each distributable CD-ROM depending on the northerly trend of the cell.
