

# SKOPE I - Served data

The SKOPE I prototype serves two types of data:

## 1. Four raster data sets.

- Represent PaleoCAR-**retrodicted** environmental **conditions** at **30"x30" resolution** over a **13° x 12°** geographic **region** of the Southwest US for each of **2000 years**.
- Graphed as a function of time for a single selected point on the map.
- **Each data set** is stored on the server as a **single 8.4 GB file** (in GeoTIFF format).
- The GDAL program [gdallocationinfo](#) is used to **extract values from these four files** as needed by the web application.

## 2. Color map tile representations of two of the PaleoCAR retrodictions described above.

- Overlaid on the map in the web application.
- Completely **precomputed at 13 different zoom levels**.
- Requires **34,410 PNG files per year** (average ~2 KB per PNG file).
- For 2000 years the total is **68,820,000 files per data set** (137,640,000 files for two data sets).
- The map tile images for each of these data sets require **~140 GB** of storage (estimated).
- **Precomputing** these map tiles from the raster data sets took **3 weeks to complete** on ROGER.