New GIS Interfaces in GrADS

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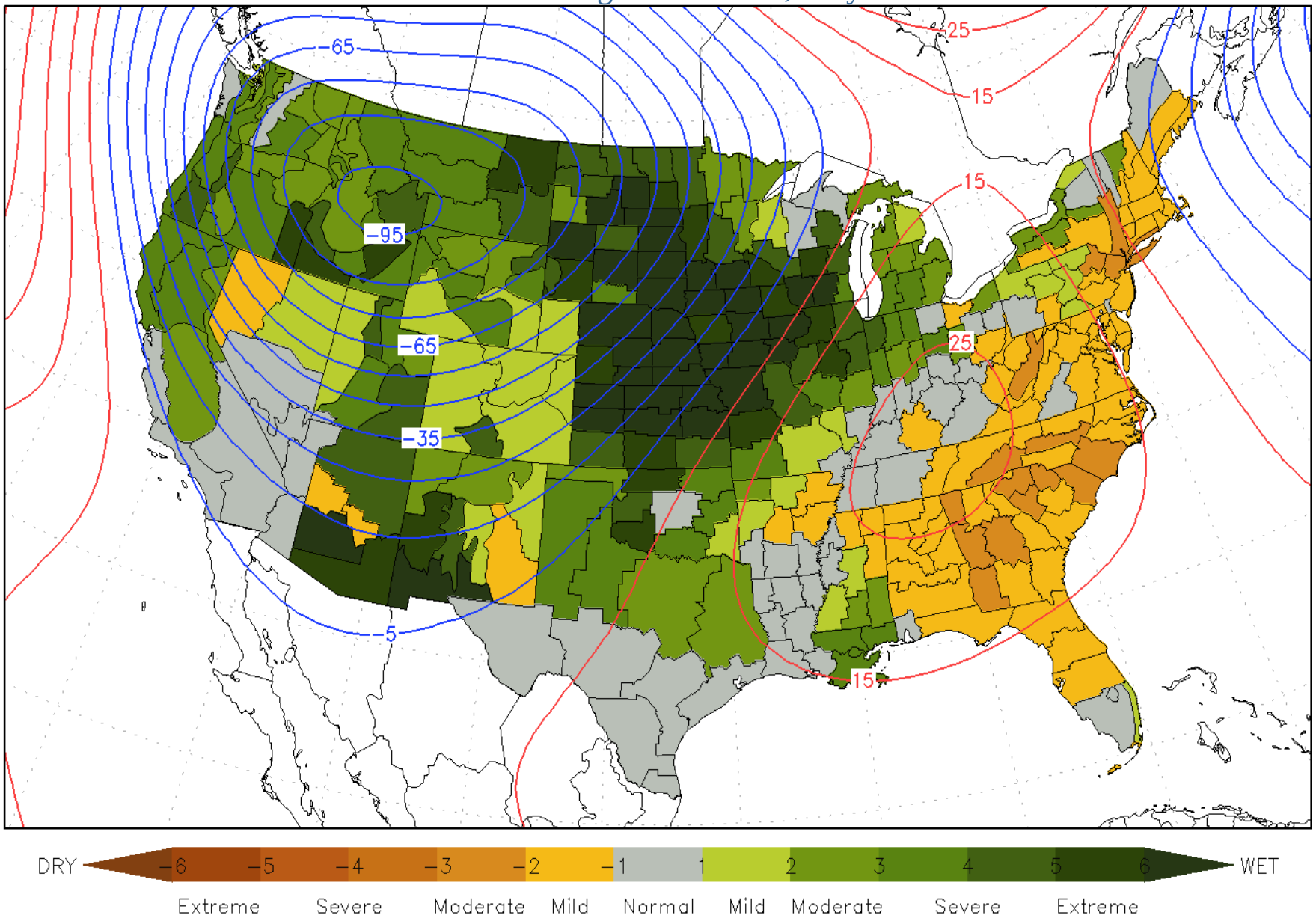
Access Shapefiles with GrADS

- Query the contents of a shapefile
  - get #vertices and boundaries of each element
  - list all attributes
- Draw the contents of a shapefile
  - control mark type, color, and size for points
  - control fill and outline colors for lines/polygons

GrADS Integrates GIS and Gridded Data Formats

Palmer Drought Severity Index in U.S. Climate Zones with 500mb Height Anomalies, July 1993



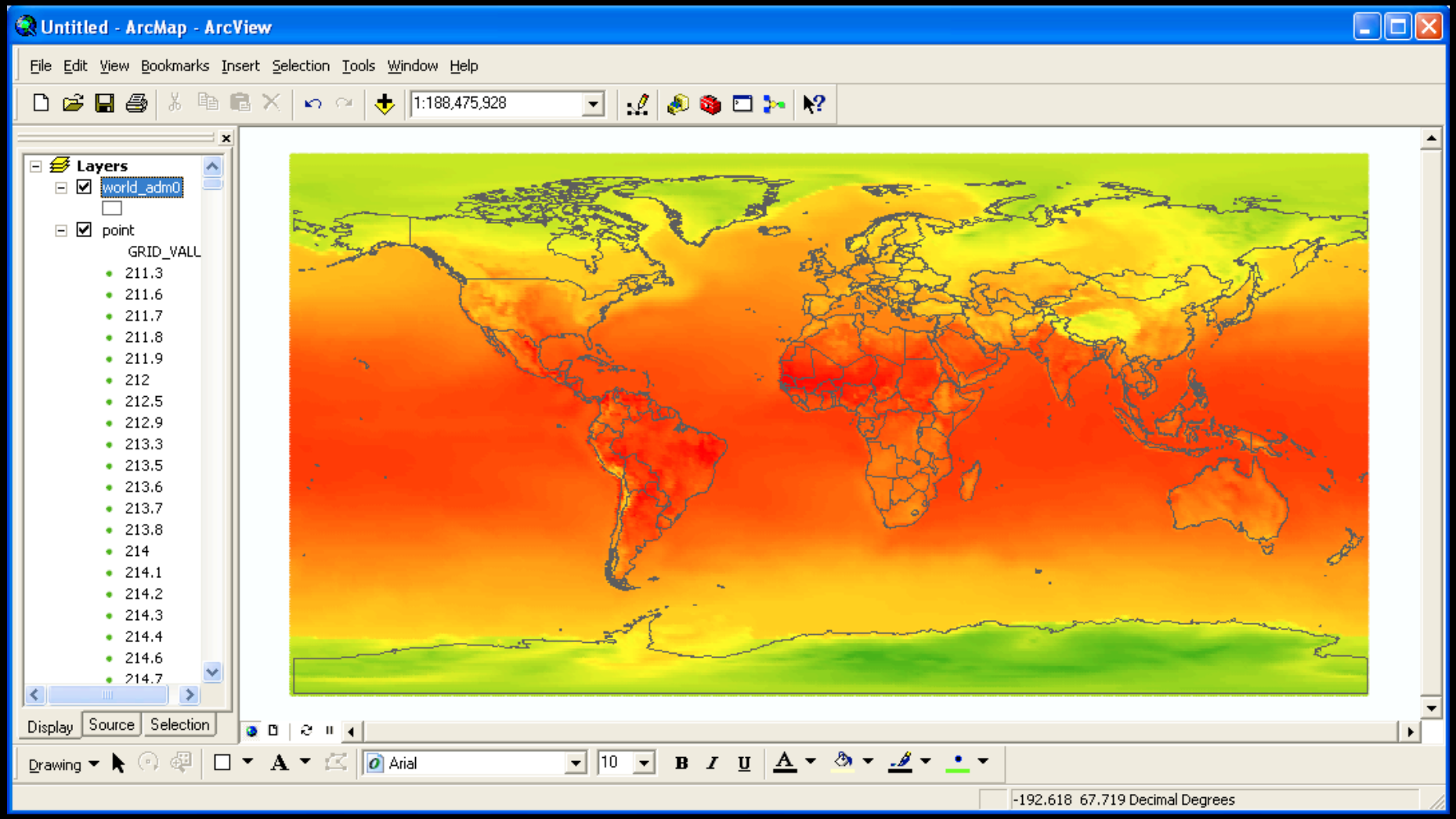
Create GeoTIFF with GrADS

- Write any gridded GrADS expression as a GeoTIFF file
  - georegistered raster image
  - control colors, levels, precision, missing value
  - for display in GIS tools (e.g. ArcMap, Qgis)

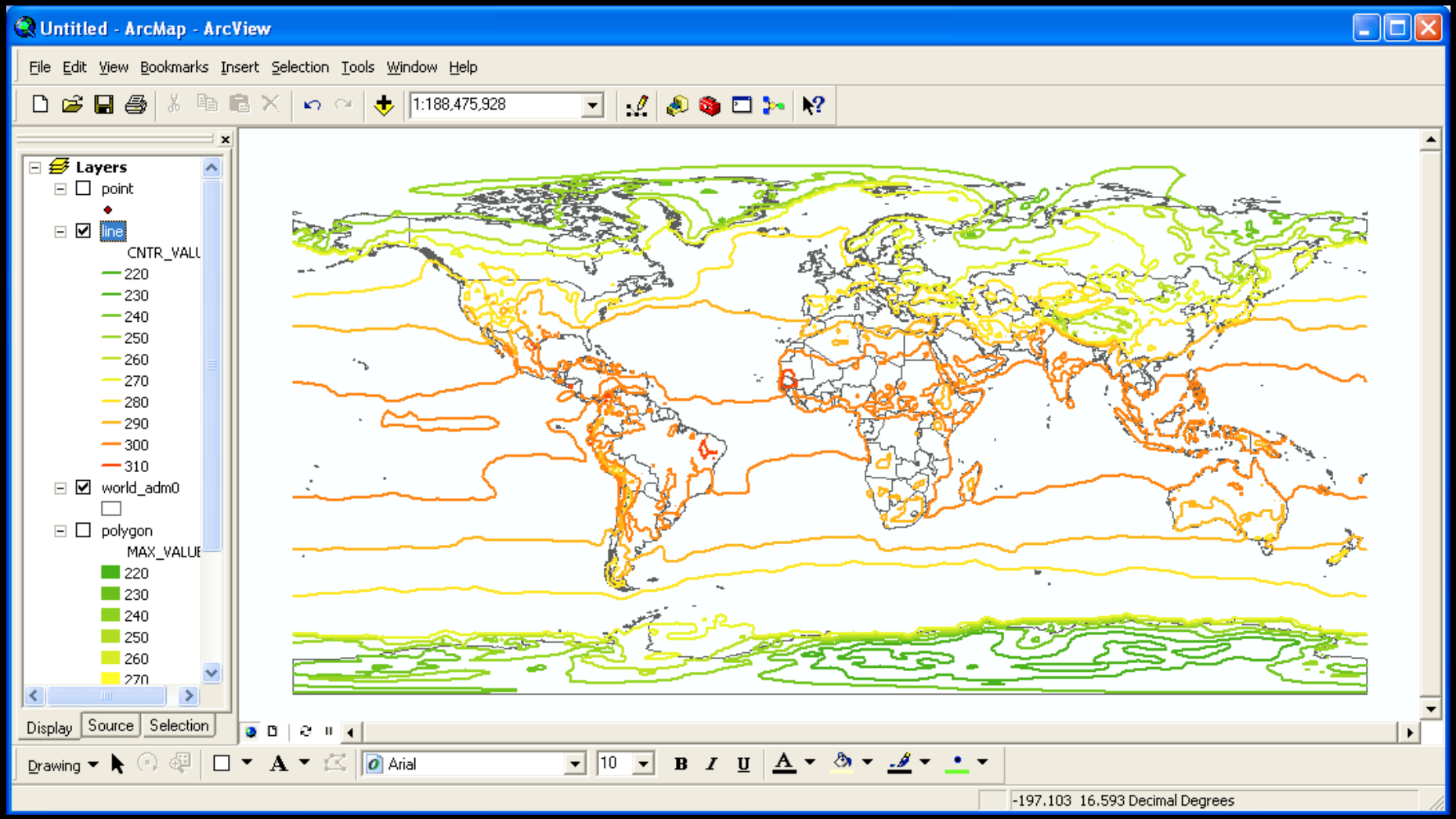
Create Shapefiles with GrADS

- Write any GrADS expression to a shapefile
  - gridded or station data
- Control shapefile type
  - Point – grid point or station location
  - Line – contours
  - Polygon – shaded contours
- Add attribute metadata
  - Numeric values or character strings

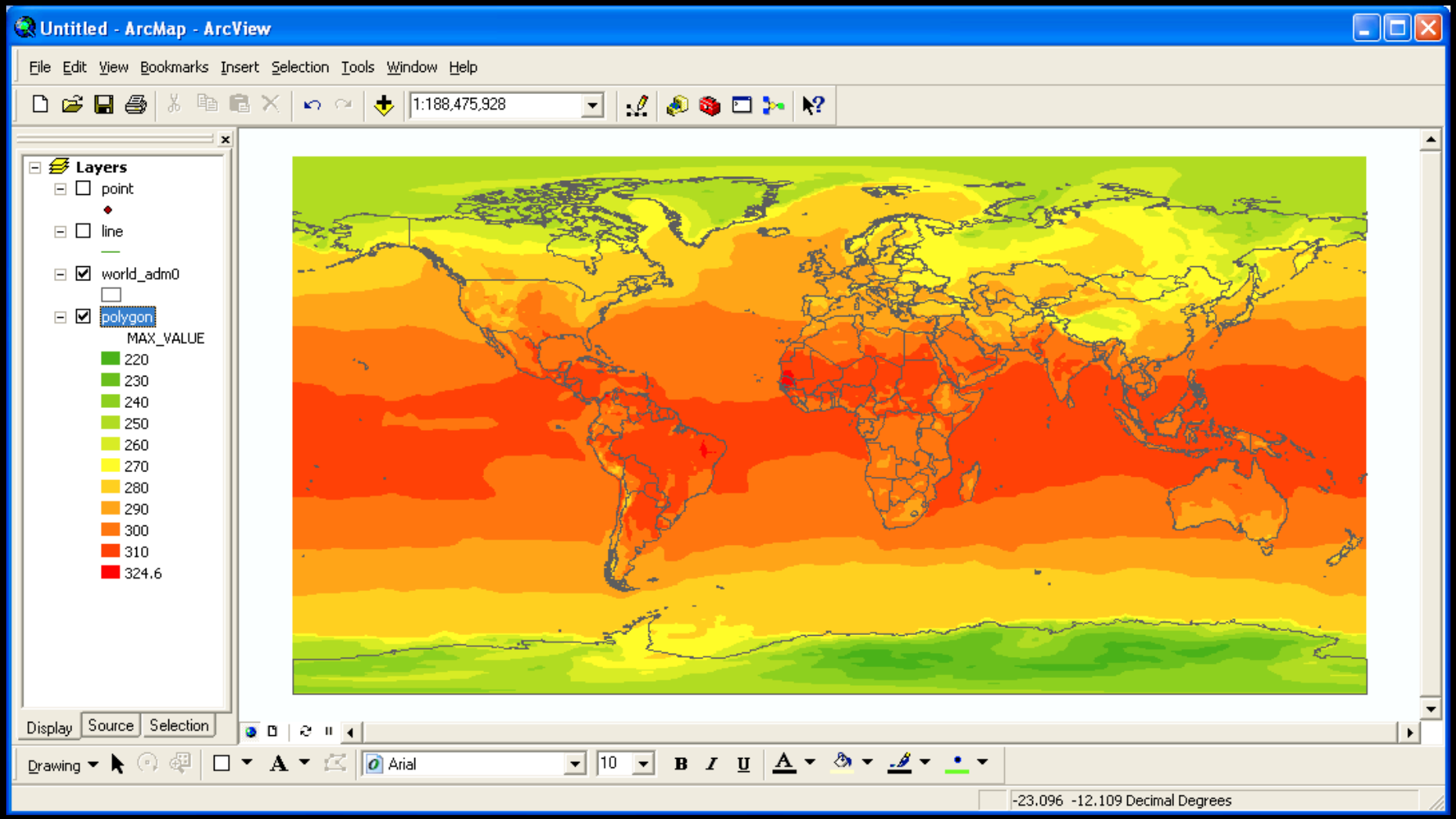
Shapefiles from GrADS in ArcMap
Grid Points



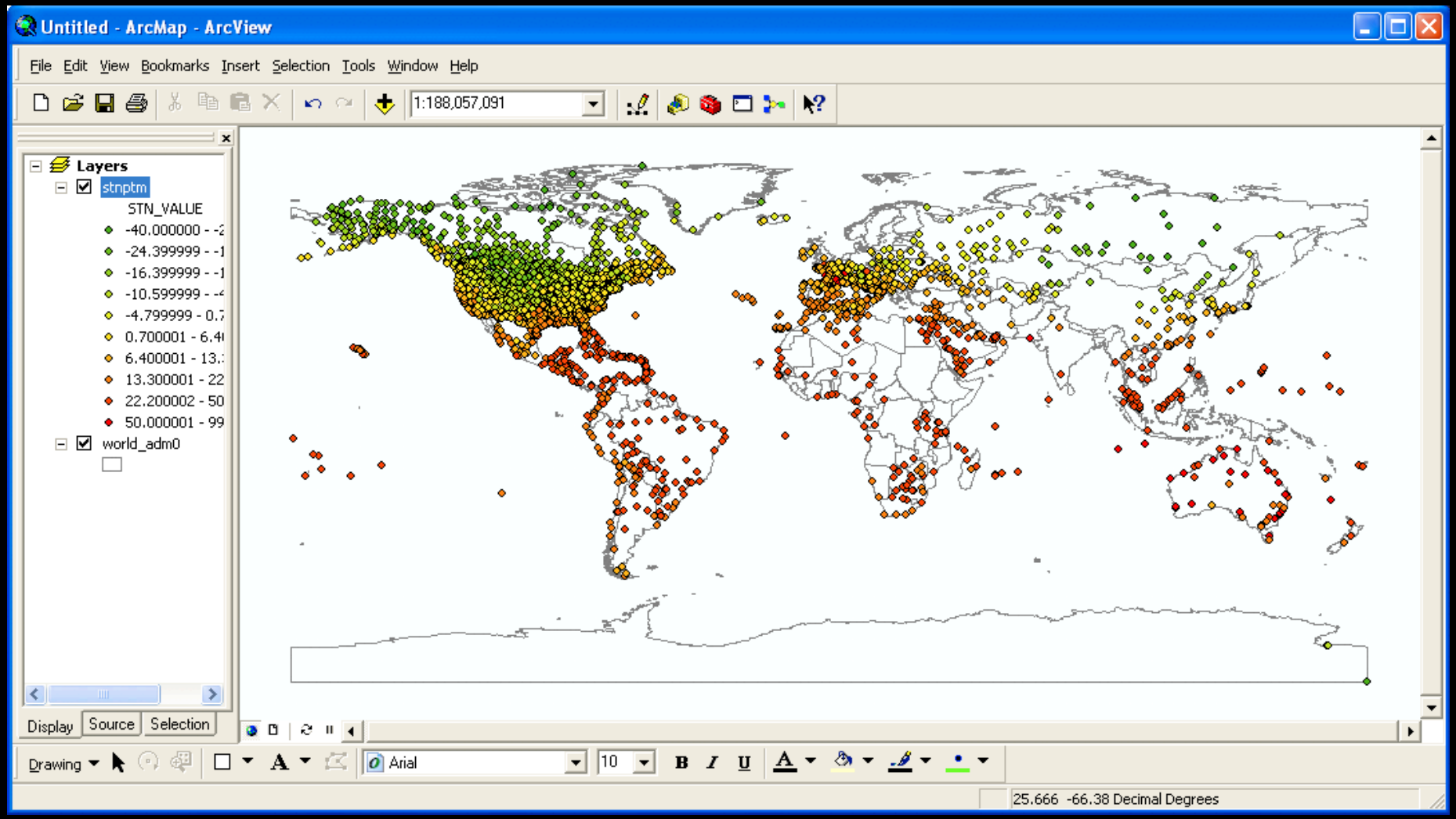
Shapefiles from GrADS in ArcMap
Contour Lines



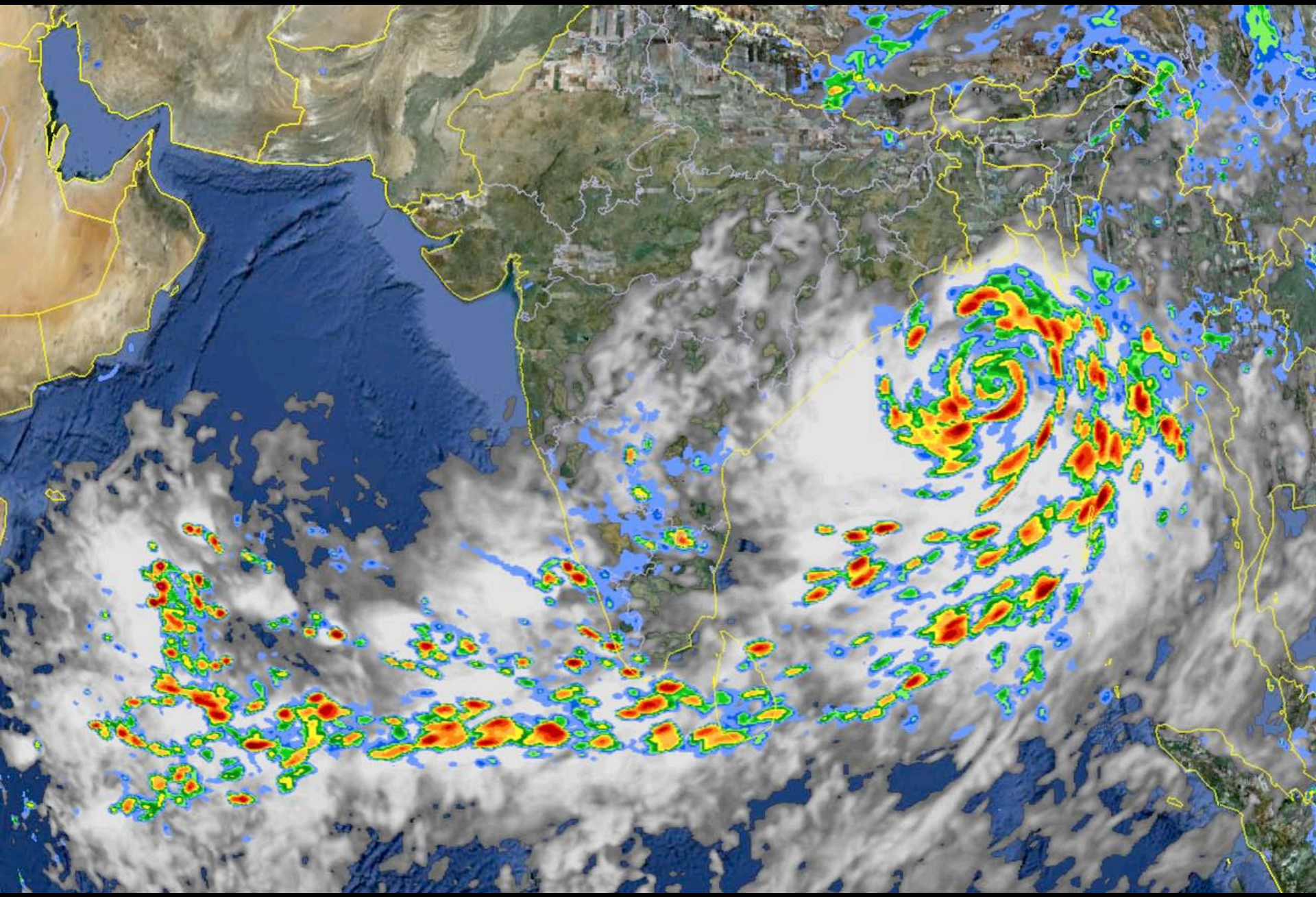
Shapefiles from GrADS in ArcMap
Shaded Contours



Shapefiles from GrADS in ArcMap
Station Data



Create KMLwith GrADS

- Write any gridded GrADS expression to a KML
  - Intended for display in Google Earth
- Control KML type
  - Image – creates embedded raster image file
  - Line – contours
  - Polygon – shaded contours

OLR and Precip Data from GrADS in Google Earth