



# **Geochemical and Mineralogical Maps for Soils of the Conterminous United States**

By David B. Smith, William F. Cannon, Laurel G. Woodruff, Federico Solano, and Karl J. Ellefsen

Open-File Report 2014–1082

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U.S. Geological Survey**

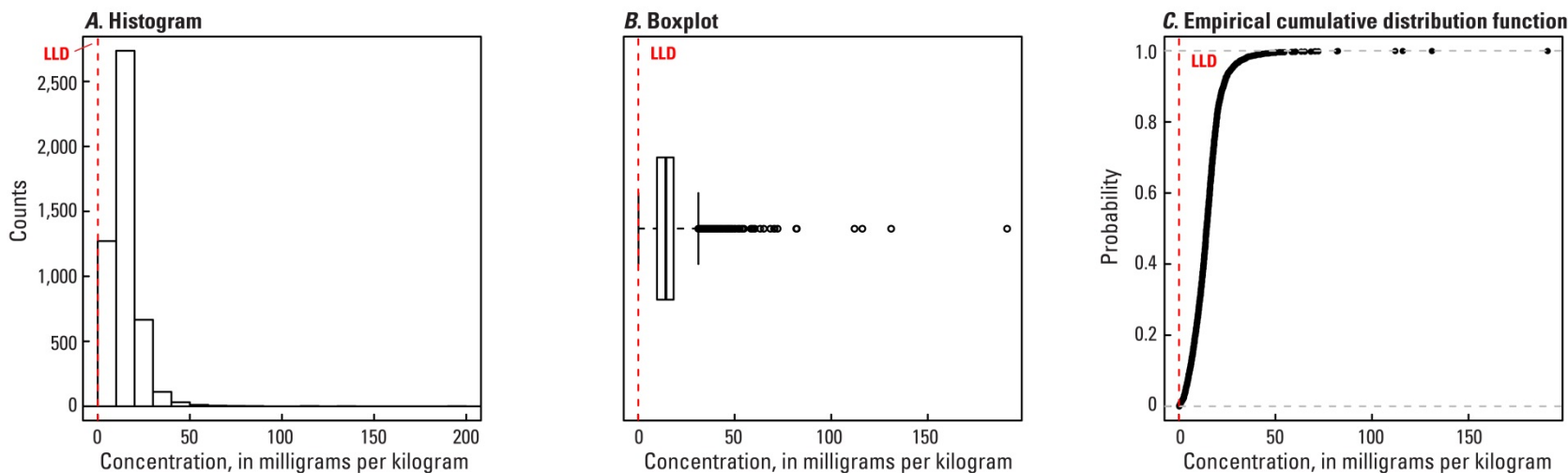
**This is an excerpt from the original document.**

It was downloaded from [mrddata.usgs.gov/soilgeochemistry](http://mrddata.usgs.gov/soilgeochemistry);

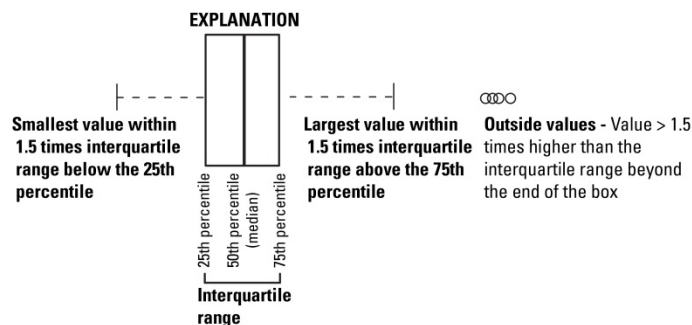
A link to download the full document (U.S. Geological Survey Open-File Report 2014-1082, 400 pages, 170 MB) can be found there or at <http://pubs.usgs.gov/of/2014/1082>.

These maps and statistical graphics were derived from data published in U.S. Geological Survey Data Series 801, downloadable from <http://pubs.usgs.gov/ds/801>.

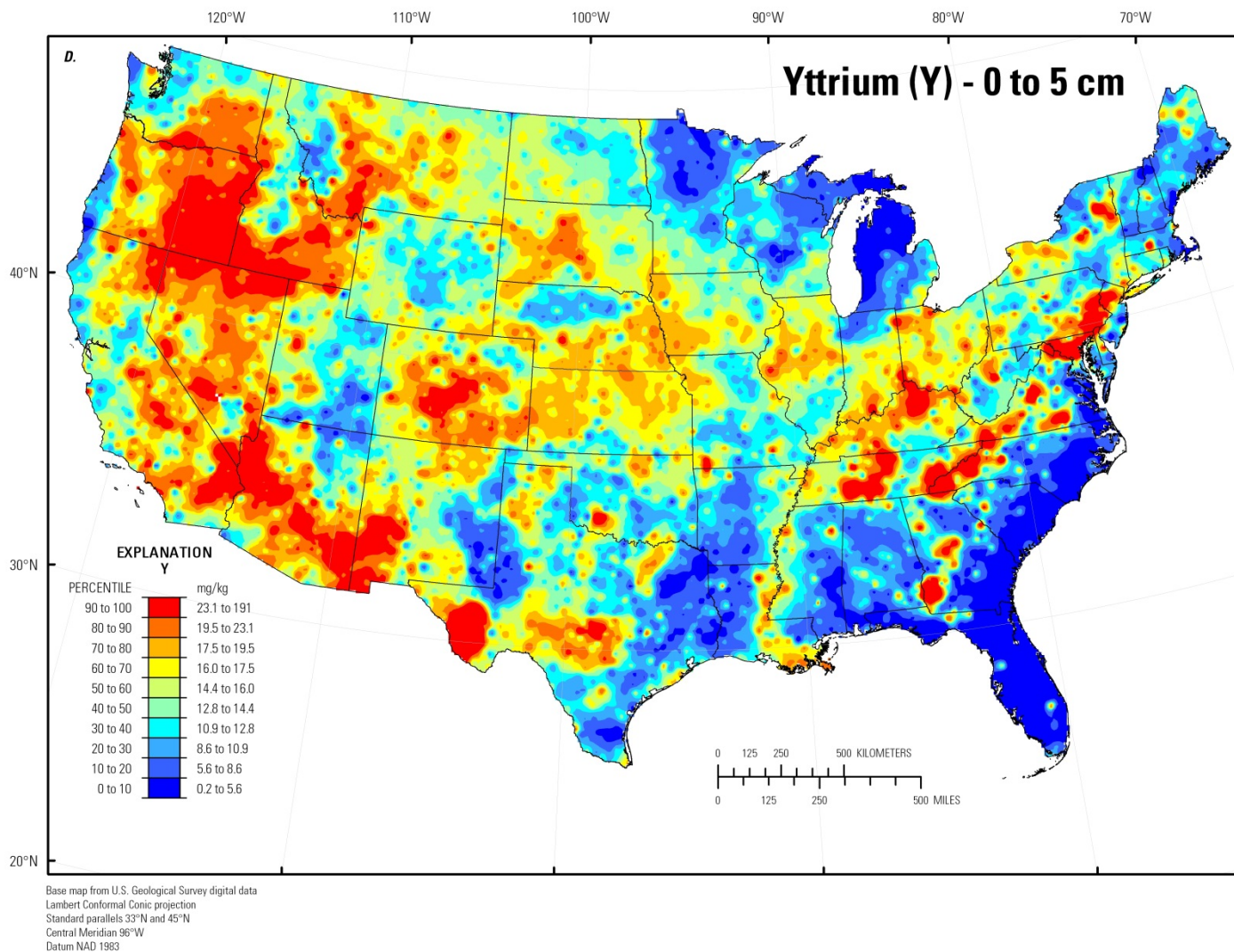
### Yttrium (Y) in soil collected from a depth of 0 to 5 centimeters



Number of samples = 4,841  
 LLD = 0.1 milligrams per kilogram  
 Number below LLD = 0  
 Minimum = 0.2 milligrams per kilogram  
 5 percentile = 3.7 milligrams per kilogram  
 25 percentile = 9.8 milligrams per kilogram  
 50 percentile = 14.4 milligrams per kilogram  
 75 percentile = 18.4 milligrams per kilogram  
 95 percentile = 27.5 milligrams per kilogram  
 Maximum = 191 milligrams per kilogram  
 MAD = 6.38 milligrams per kilogram  
 Robust CV = 44.3 %

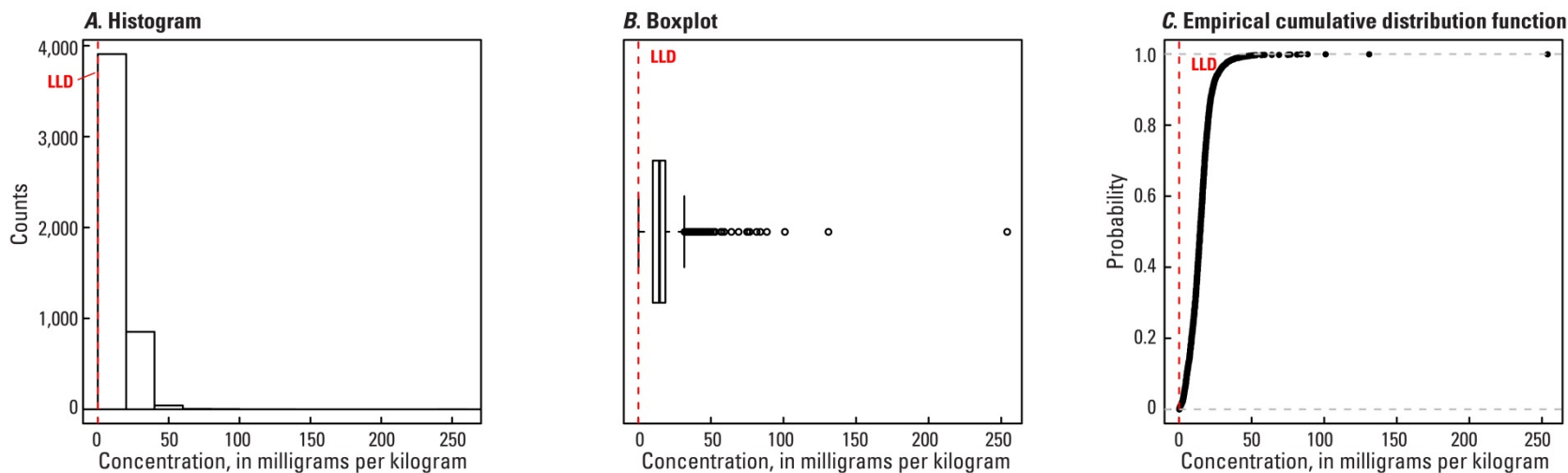


**Figure 134.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in surface soils collected from a depth of 0 to 5 centimeters, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram; cm, centimeters).



**Figure 134.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in surface soils collected from a depth of 0 to 5 centimeters, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram; cm, centimeters).—Continued

## Yttrium (Y) in soil A horizon



Number of samples = 4813

LLD = 0.1 milligrams per kilogram

Number below LLD = 0

Minimum = 0.2 milligrams per kilogram

5 percentile = 3.7 milligrams per kilogram

25 percentile = 10.0 milligrams per kilogram

50 percentile = 14.6 milligrams per kilogram

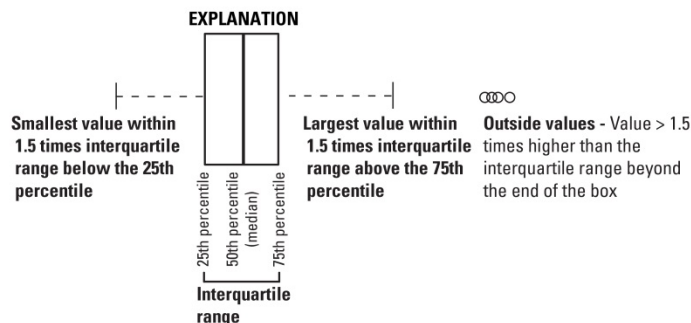
75 percentile = 18.7 milligrams per kilogram

95 percentile = 27.5 milligrams per kilogram

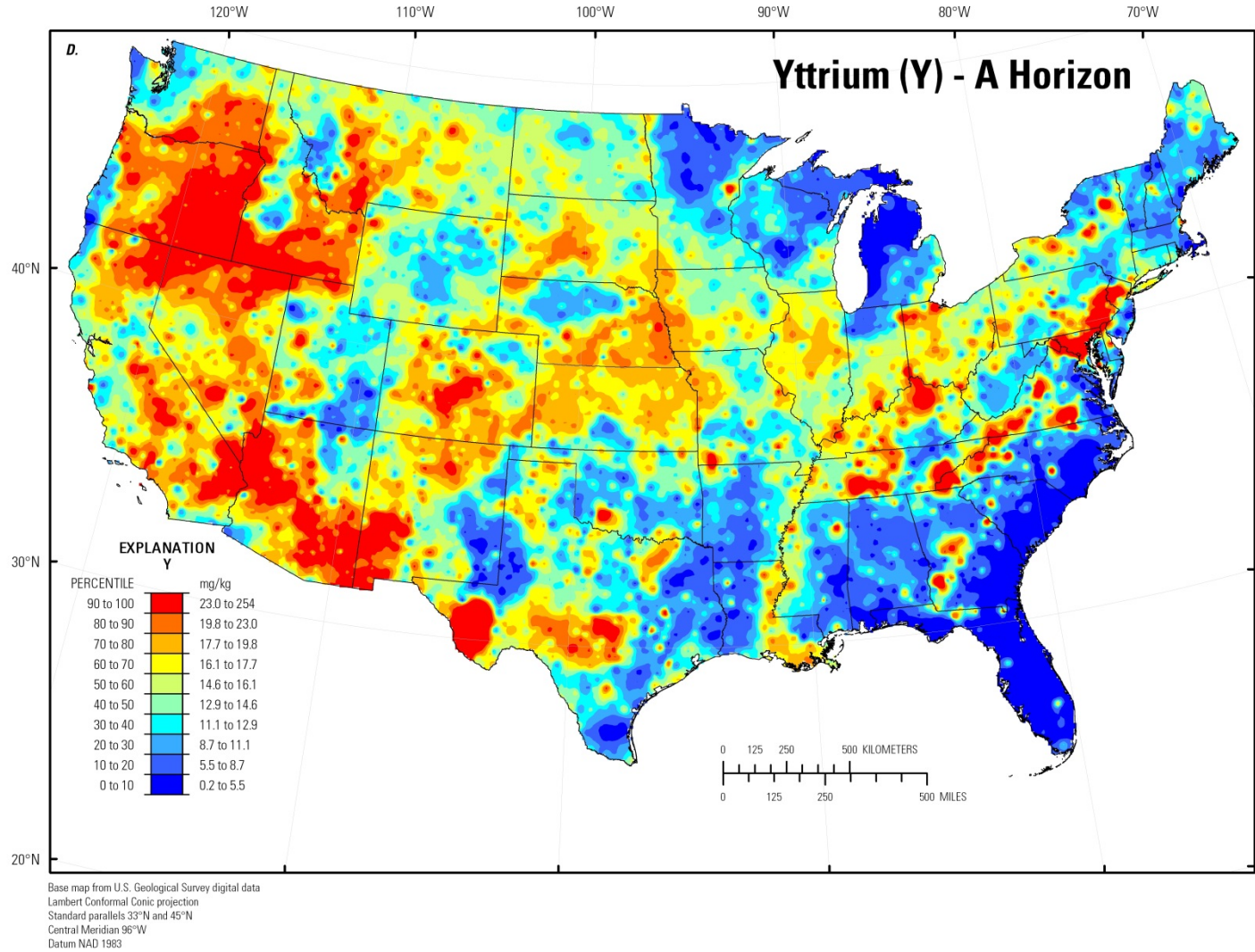
Maximum = 254 milligrams per kilogram

MAD = 6.38 milligrams per kilogram

Robust CV = 43.7 %

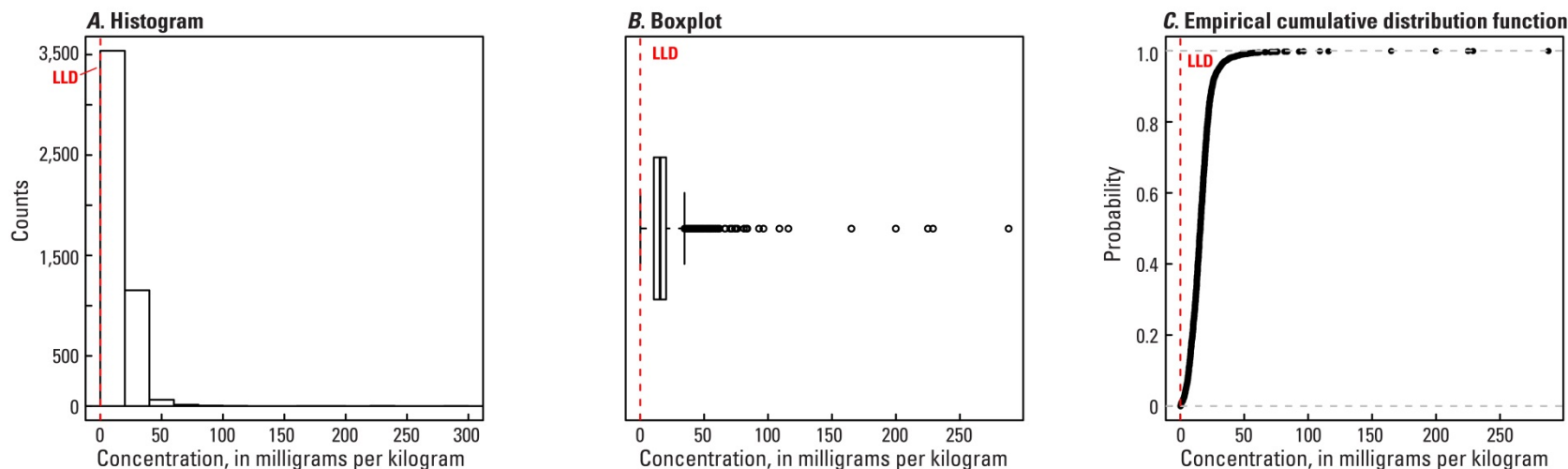


**Figure 135.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in the soil A horizon, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram).

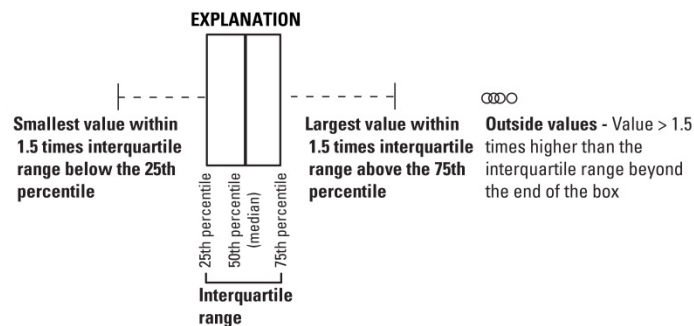


**Figure 135.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in the soil A horizon, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram).—Continued

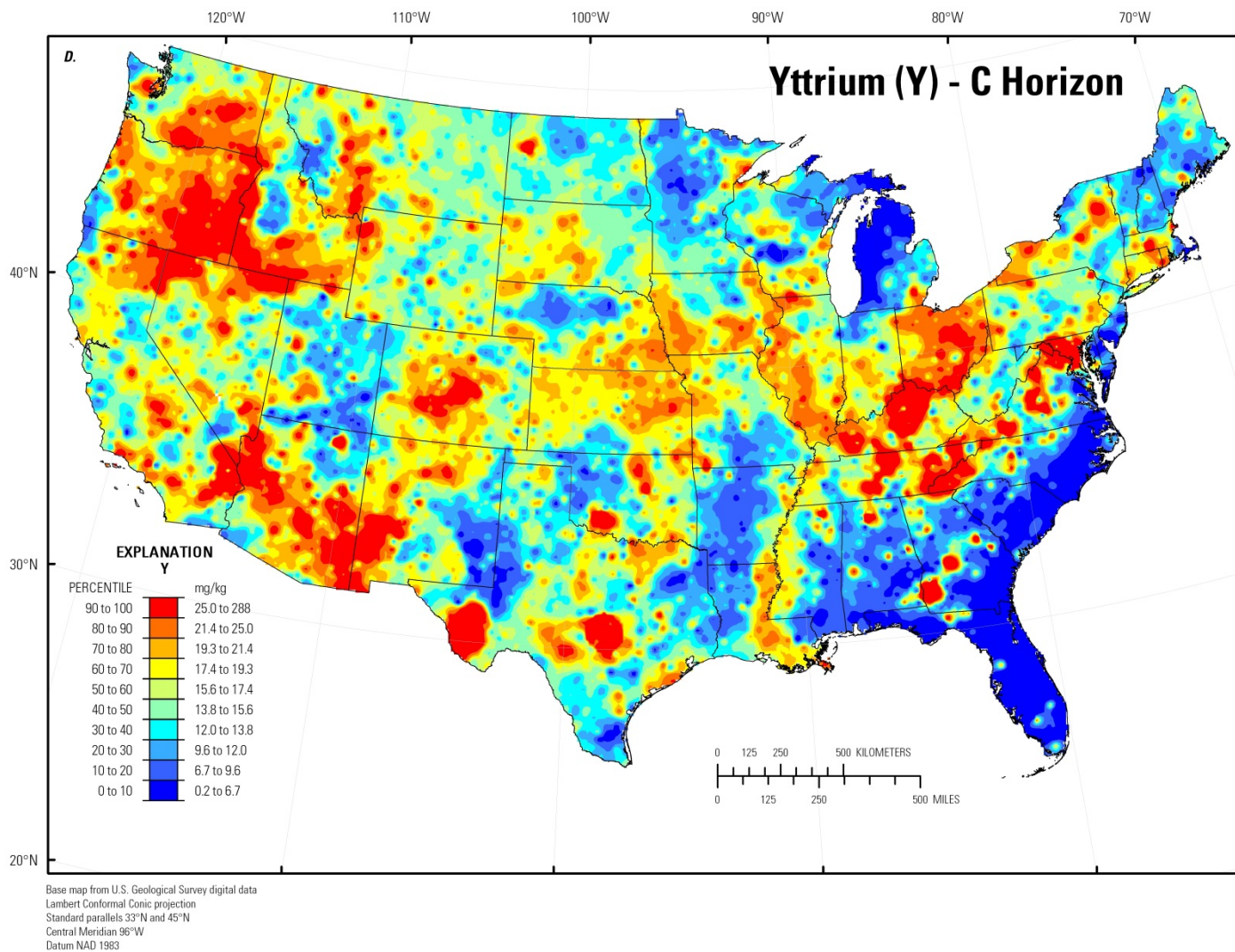
## Yttrium (Y) in soil C horizon



Number of samples = 4,780  
 LLD = 0.1 milligrams per kilogram  
 Number below LLD = 0  
 Minimum = 0.2 milligrams per kilogram  
 5 percentile = 4.5 milligrams per kilogram  
 25 percentile = 10.7 milligrams per kilogram  
 50 percentile = 15.6 milligrams per kilogram  
 75 percentile = 20.3 milligrams per kilogram  
 95 percentile = 30.2 milligrams per kilogram  
 Maximum = 288 milligrams per kilogram  
 MAD = 6.97 milligrams per kilogram  
 Robust CV = 44.7 %



**Figure 136.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in the soil C horizon, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram).



**Figure 136.** A, Histogram and summary statistics; B, Boxplot; C, Empirical cumulative distribution function; and D, Distribution of yttrium (Y) in the soil C horizon, conterminous United States (LLD, lower limit of determination; MAD, median absolute deviation; CV, coefficient of variation; mg/kg, milligrams per kilogram).—Continued