The Russia portion of the new Raster Circumpolar Arctic Vegetation Map (CAVM)

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Introduction

The Raster Circumpolar Arctic Vegetation Map (CAVM) shows the dominant physiognomy of the vegetation of the Arctic, with 16 vegetation types. It was created to improve on the original vector (polygon) CAVM. The raster format matches satellite data, and is commonly used by modelers and other researchers. The Raster CAVM has 1-km pixels, compared to the minimum mapping unit of 14 km for researchers. The Raster CAVM has 1-km pixels, compared to the minimum mapping unit of 14 km for the original CAVM. This poster presents the Russian portion of the Raster CAVM.

Methods

Unsupervised classification of 18 regions of the Arctic used seven data layers: AVHRR Band 1, Band 2 and NDVI (Markon 1995), MODIS Band 1, Band 2 and NDVI (Trishchenko et al. 2009), and elevation (ESRI 1993). The resulting units were then modelled to the CAVM types using a variety of ancillary layers: climate data, substrate maps, regional vegetation maps, and ground studies.

Map extent and projection are the same as the original CAVM. The spatial resolution of the raster CAVM is 1 km.

The map was reviewed by experts (see list in citation below) with experience mapping the vegetation of their particular regions, including many of the original authors of the CAVM. This expert input was used to revise and improve the map.

Raster CAVM data available at www.geobotany.uaf.edu

Citation for Raster CAVM


References


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