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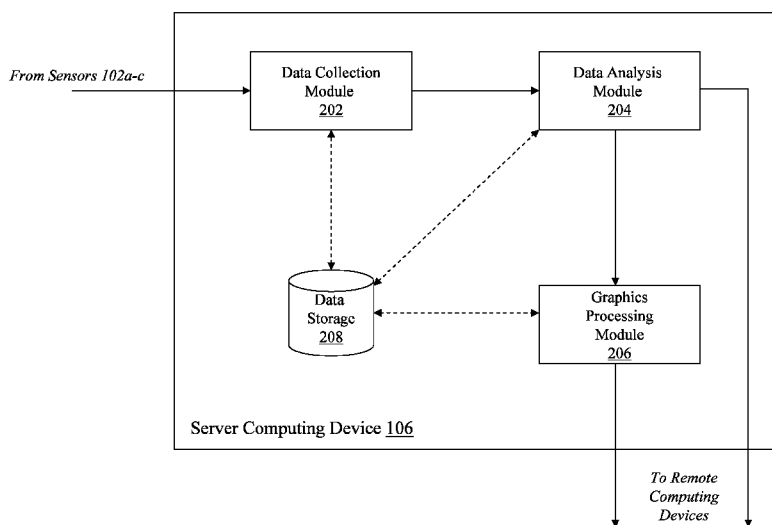


FIG. 2

(57) Abstract: Methods, systems, and computer program products are described herein for generating proxy reflectivity data associated with lightning activity. A computing device receives data associated with lightning activity for one or more geographical areas. The computing device determines the logarithmic scale of the combined in-cloud and cloud-to-ground flash rate (dBR) for one or more grids of lightning activity based on the received data. The computing device generates proxy reflectivity data based on the dBR of the grids.