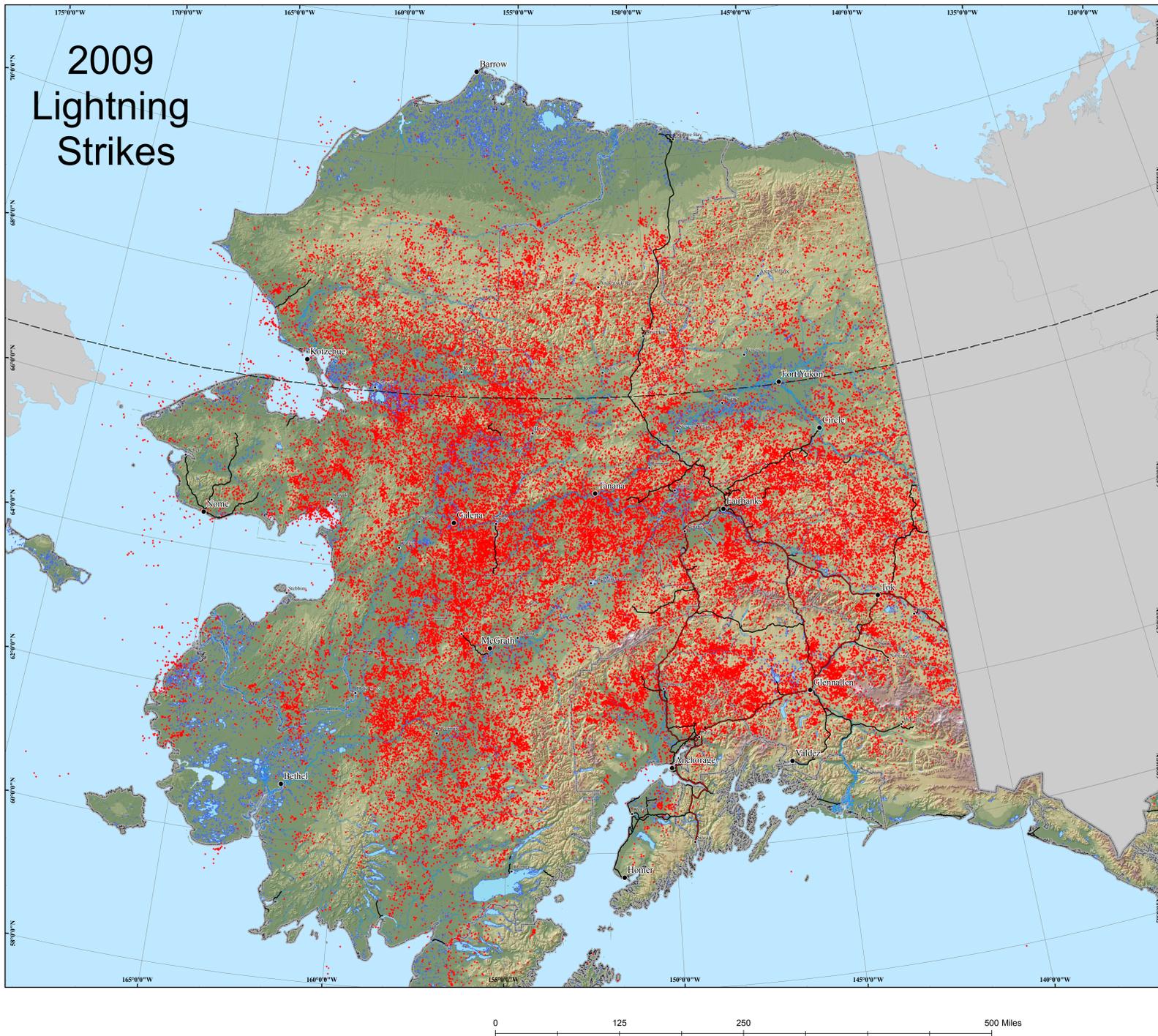


Alaska Lightning Detection Network

Alaska Fire Service owns and maintains the Alaska Lightning Detection network (ALDN). Working with the scientific community the prototype was installed in 1976. Currently, nine ALDN sensors are located throughout the state with two additional sensors implemented in the Spring of 2007. Each sensor time stamps the flash report with a clock synchronized to the GPS satellite system. Data collected from the sensors is transmitted via landline and the wide area network to the Position Analyzer (APA) located at the Alaska Fire Service. The APA groups flash reports from Alaska and Canada based upon the time stamp and produces lightning strike locations. This data is correlated and stored in a database.

AFS and Environment Canada (EC) have entered into an agreement for the exchange of lightning strike data from sensors along the Alaska/Canadian border. Utilizing this combined data produced the most accurate lightning strike locations for both Alaska and Canada.

The AFS IMS Website utilizes the lightning database along with other spatial data in the creation of real time lightning displays used to determine fire detection flights and resource pre-positioning. These lightning maps are used by the Interagency Fire Community at large. AFS also provides lightning strike locations to the National Weather Service to use for their fire weather forecasts.



Thus far in 2009 from April 30th to July 30th, there have been 117, 290 strikes within range of the Alaska Lightning Detection Network.

Below are some images of the current lightning detection sensors.



In 2004, the most intense fire season in recent history, between April 30 and July 31 there were 154, 245 strikes. Over 6 million acres burned within Alaska during the 2004 fire season.

By the end of the fire season, Alaska saw over 215, 000 strikes.

