

1086-H5-1927 **William C Bauldry*** (bauldrywc@appstate.edu), Dept of Math. Sciences, Appalachian State University, Boone, NC 28608. *Arctic Sea Ice Extent: A Qualitative Literacy Project and an Entry Point for Environmental Mathematics.*

We present a group project based on Arctic Sea Ice Extent data for 1979 to the present obtained from the National Snow and Ice Data Center. This project offers an easy entry for integrating environmental mathematical modeling into lower division courses in a significant way. The topical nature of Arctic Sea Ice Extent, especially given the current historically low September minimum value, ties current events, the environment, and mathematical modeling together in powerful ways. Student teams use their simple models to predict the first ice-free summer for the Arctic Ocean. Our students' project reports were also used as a quantitative literacy assessment for precalculus students and for the course; results of the project's use in class will be discussed. (Received September 24, 2012)