The first global measurements of the Earth’s emitted thermal energy and the amount of solar energy it absorbs from the Sun were made from early satellites in the 1960s to the 1980s. They provided a much different Radiation Budget than had been thought in the pre-satellite era. Following the scientific method, two additional satellite missions were used to confirm the first measurements by Vonder Haar and Suomi (1969, 1971). The early instruments and satellites are discussed. The new scientific results and their implications for Earth’s weather and climate system are reviewed. Some lessons learned are noted and suggestions for today’s continuing research are provided.

Link to colloquia page: https://www.atmos.colostate.edu/colloquia/