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**Sandra R. Kingan\*** ([skingan@brooklyn.cuny.edu](mailto:skingan@brooklyn.cuny.edu)). *Pressure Networks in Climate*. Preliminary report.

Abstract: In the early 20th century statistician Gilbert Walker became interested in meteorology and published a series of papers in which he analyzed time series of sea level pressure at various locations. He published large tables of correlations and auto-correlations and highlighted those that were statistically significant. Using this data, Walker and E. W. Bliss identified large-scale oscillations in climate, such as the Southern Oscillation, which is the atmospheric companion to El Niño. Although Walker does mention or use any concepts from graph theory, a careful analysis of his work reveals he was thinking in terms of graphs. Following Walker's example we construct and analyze pressure networks using modern data sources. This is joint work with M. Tomkiewicz and R. J. Kingan. (Received March 13, 2017)