1035-Z1-664   **Michael S Marion*** (`msmarion@earthlink.net`), 140 BPW Club Road, Apartment B24, Carrboro, NC 27510. *Explaining Standard Deviation Geometrically.* Preliminary report.

Students in introductory Statistics courses often find standard deviation one of the more perplexing topics. While they generally understand the concept of standard deviation as a measure of variability, they frequently have difficulty with two other important issues: namely, why do we average squared deviations, and why do we calculate standard deviation for a sample differently than for a population? By reinvestigating geometric interpretations for data, we can describe standard deviation in a manner that both instructors and students can better conceptualize. (Received September 13, 2007)