1116-37-2084 **Nathan Averbeck*** (nathan_averbeck@baylor.edu), One Bear Place 97328, Waco, TX 76798, and **Brian E. Raines**. *Distributional Chaos in Dendritic and Circular Julia Sets.*

If x and y belong to a metric space X, we call (x, y) a DC1 scrambled pair for $f : X \to X$ if the following conditions hold:

1) For all $t > 0$, $\limsup_{n\to\infty} \frac{1}{n} \left|\{0 \le i < n : d(f^i(x), f^i(y)) < t\}\right| = 1$, and

2) For some $t > 0$, $\liminf_{n\to\infty} \frac{1}{n} \left|\{0 \le i < n : d(f^i(x), f^i(y)) < t\}\right| = 0$.

If $D \subset X$ is an uncountable set such that every $x, y \in D$ forms a DC1 scrambled pair for f, we say f exhibits *distributional chaos of type 1.* If there exists $t > 0$ such that condition 2) holds for any distinct points $x, y \in D$, then the chaos is said to be *uniform.*

A *dendrite* is a locally connected, uniquely arcwise connected, compact metric space. In this paper we show that a certain family of quadratic Julia sets (one that contains all of the quadratic Julia sets which are dendrites and many others which contain circles) has uniform DC1 chaos. (Received September 21, 2015)