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CONFIDENCE BANDS FOR QUANTILE FUNCTION UNDER RANDOM CENSORSHIP

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Abstract. Some new confidence bands are established for the quantile function from randomly censored data. The method does not require estimation of the density function. As an application, we construct bands for the quantile function of the length of fractures in the granitic plutons near Lac du Bonnet, Manitoba, where an Underground Research Laboratory is being built for the nuclear waste disposal program in Canada.

Key words and phrases: Censored data, quantile function, confidence band, Wiener process, granitic pluton.