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Multiple Etching of CR-39 Nuclear Track Detectors used in SPAWAR Co-Dep Experiment PAMELA MOSIER-BOSS, Space Warfare Systems Center, San Diego, LAWRENCE P.G. FORSLEY, JWK Technologies Corporation, 7617 Little River Turnpike Suite 1050, Annandale, VA 22003 — Previously published results involving the use of the solid state track detectors, CR -39, have brought into question whether or not purported tracks are of nuclear origin. One method of determining this is to serially etch and scan these track detectors so as to determine the approximate depth of the tracks. This method, coupled with a computer code incorporating bulk and track etching rates in CR-39 for alpha particles, gives good agreement with tracks seen in SPAWAR co-deposition experiments as compared to known alpha sources.

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