



General Section – 2005

D55 Predictive Interdiction Analysis on the Southwest Border of the United States

Daniel J. Krall, MFS, 1052 Dennery Road, Apartment #202, San Diego, CA 92154*

After attending this presentation, attendees will have an understanding of the current methods and techniques used by the United States Border Patrol in their mission to safeguard America's frontline. Attendees will also be introduced to innovative computer programs that enable agents to do their job more efficiently.

This presentation will impact the forensic community and/or humanity by demonstrating the use of geospatial technology to predict interdiction points and routes used by alien smugglers after a border incursion.

The International Border that separates the United States from Mexico has long been a conduit of illegal activity into the United States. In the wake of 9/11, directors and decision makers have explored ways to control the daily influx of undocumented aliens seeking passage into the United States. This research study examines the operational use of Geographic Information Systems and computer-aided tracking systems to thwart future incursions through our borders. This study develops a terrain analysis model, which is integrated with the Border Patrol's Sensor System. The Geographic Information System then predicts the travel times and routes used by alien smugglers based on the terrain analysis model and preexisting trail structure.

Undocumented Aliens, GIS, U.S. Border Patrol