Resistivity Measurements at Fort Stanton Cave New Mexico

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Earth resistivity measurements near Fort Stanton Cave were begun shortly after the discovery of the Snowy River passage in 2001. Resistive anomalies were frequently detected ahead of the progress of underground exploration and survey of the cave passages, and later shown to represent cave passages when the survey lines passed through the anomalies. Many other anomalies are present between and adjacent to the passages currently known.

The presence of anomalies aligned approximately parallel to major passages in the cave suggest that there are significant passages or passage segments yet to be discovered. Many of these segments may be isolated by collapse and infilling by allogenic sediment, allowing only the air-filled sections to be resolved.

Some of the aligned anomalies may represent passages developed before Snowy River, providing earlier discharge paths to the Rio Bonito or Salado Creek. Others may be local infeeders which have been underdrained, abandoned and partly filled. The abundance of anomalies indicates that cave development and filling is far more extensive than indicated by the passages currently mapped.


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