

EXPLANATION

- Joint direction measured on the ground
- Lineaments mapped from the analysis of aerial photography. Solid line indicates high level of confidence and dashed line indicates a moderate level of confidence in the interpretation.
- Lineaments mapped from the analysis of Earth Resources Technology Satellite (ERTS) multispectral imagery.
- Areas of coal strip mining. Disturbance of the surface obscures most of the surface evidence of fractures. Outlines of mine areas were obtained from ERTS imagery and Misc. Map 15, Indiana Geological Survey.
- Thick unconsolidated deposits. Mostly alluvium at the surface; includes colluvial, paludal, lacustrine, and valley train deposits. Recent reworking of these materials has obscured surface evidence of fractures in underlying rocks.
- Eastern limit of coal-producing areas.
- Fault mapped from field and subsurface data. U, upthrown side; D, downthrown side.

GEOLOGICAL LINEAMENT MAP

OF THE

1°x2° DANVILLE QUADRANGLE, INDIANA AND ILLINOIS

Scale 1:250,000



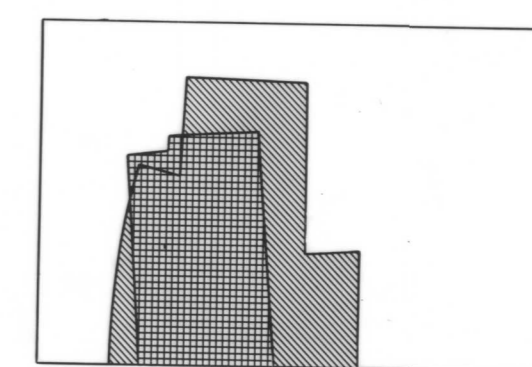
NOTE: The preparation of this map was supported by the National Aeronautics and Space Administration under Contract NAS 5-47295, Charles E. Wier, Principal Investigator.

Lineaments were derived from an integrated analysis of ERTS imagery and small scale aerial color infrared photography. Identification was based upon subtle soil tone variations, vegetational patterns, and/or straight stream or ridge segments. Pending further investigations, most of the lineaments are believed to represent fractures in bedrock. Field verification of fracture data is difficult because most of the mapped area is covered by as much as 150 feet of glacial drift, loess, and soil. Bedrock observations are limited to small areas in stream beds, road cuts, and surface and underground mines. The orientation of joints measured agrees closely with orientation of lineaments mapped on the imagery.

Prepared by C. E. Wier, Indiana Geological Survey,
F. J. Wobber, O. R. Russell, R. V. Amato and
T. V. Leshendok, Earth Satellite Corporation

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INDEX TO SOURCES OF DATA



- Color and color infrared photography (1:30,000) acquired March 27, 1973
- Color infrared photography (1:130,000) acquired 24 Jan 1973
- Color infrared photography (1:120,000) acquired 14 May 1971
- Earth Resources Technology Satellite (ERTS) imagery (1:1,000,000) Aug 1972 - 1973