

Photobase prepared by the United States Geological Survey for the Kingdom of Saudi Arabia from computer-enhanced Landsat MSS band 7 imagery. Imagery controlled to photoidentified ground positions. The root-mean-square error in position of well-defined features in relation to the graticule is approximately 162 m. Horizontal datum: International Spheroid (Hayford). Transverse Mercator Projection, 1924 International Datum.

TOTAL-INTENSITY RESIDUAL AEROMAGNETIC MAP OF THE JABAL IBRĀHĪM QUADRANGLE, SHEET 20 E, KINGDOM OF SAUDI ARABIA
UPWARD CONTINUED TO 800 M ABOVE GROUND LEVEL

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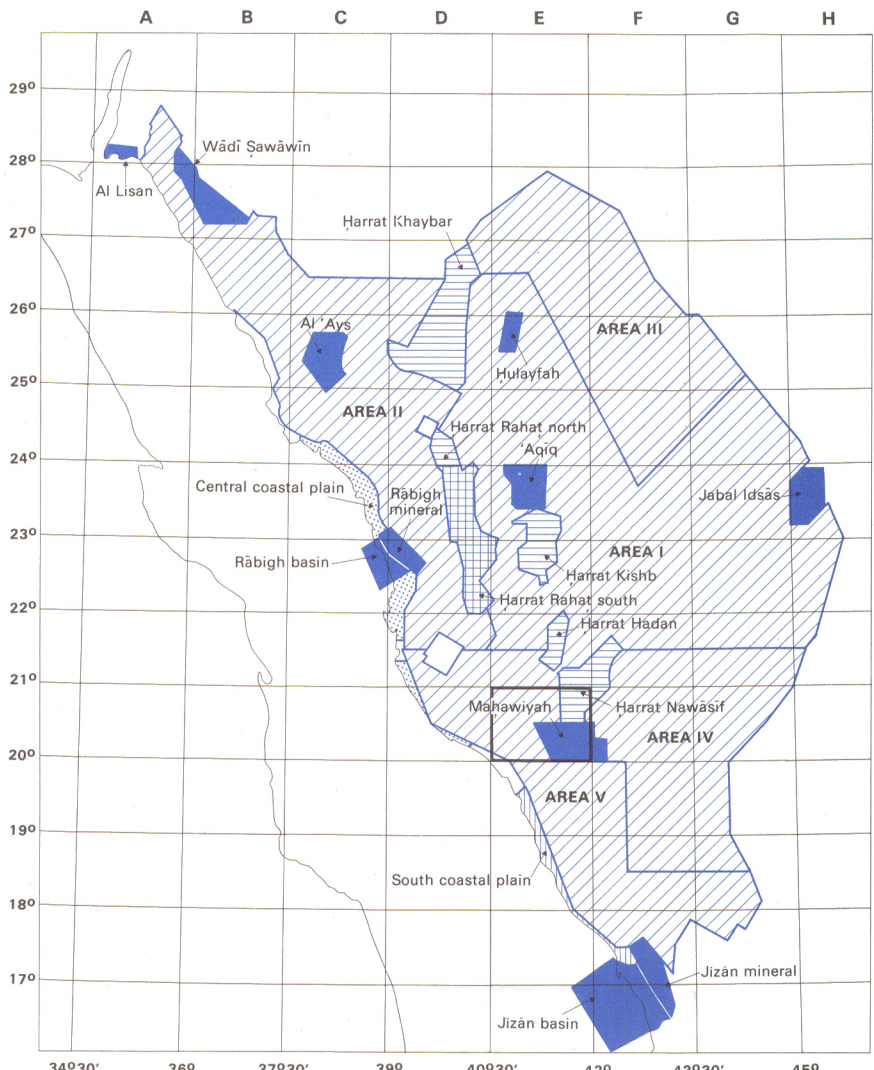
1985

Aeromagnetic data computer processed in 1984.

Arabic names on this map do not necessarily conform to those officially established by the Kingdom of Saudi Arabia.

Declination Inclination
Magnetic declination and inclination of the sheet center computed from IGRF 65 model for 1966.

SOURCES OF MAGNETIC DATA



- Areas flown in 1962 by Hunting Geology and Geophysics Ltd.
- Areas I, II, III, IV, V flown in 1965-1967 by a consortium
- Basalt plateau flown in 1976 by ARGAS
- Central coastal plain flown in 1976 by ARGAS
- Basalt plateaux flown in 1981 by ARGAS
- South coastal plain flown in 1983 by Geosurvey International Ltd.
- Areas not surveyed
- Boundary of the JABAL IBRĀHĪM quadrangle

Area	Survey date	Terrain clearance (m)	Traverse direction	Traverse spacing (m)
AL 'AYS	1962	150	N. 30° E	500
AL LISAN	1962	300	N. 60° W.	2000
AQIŌ	1962	150	N. 45° W.	500
JABAL IDSĀS	1962	150	N. 45° E	500
JIZAN BASIN	1962	300	N. 55° E	1250
JIZAN MINERAL	1962	150	N. 55° E	1000
HULAYFAH	1962	150	N. 60° W.	500
MAHAWIYAH	1962	150	N. 90° W.	500 and 2500
RĀBIGH BASIN	1962	300	N. 60° E	2000
RĀBIGH MINERAL	1962	150	N. 45° W.	500
WĀDĪ SAWĀWĪN	1962	150	N. 45° E	1000
AREA I	1965-1966	150	N. 45° E	800
AREA II	1965-1966	300	N. 30° E	800
AREAS III, IV	1966-1967	150	N. 45° E	800
AREA V	1966-1967	300	N. 30° E.	800
CENTRAL COASTAL PLAIN	1976	300	N. 60° E	2500
HARRAT RAHĀT SOUTH	1976	300	N. 30° W.	2500
HARRAT HADAN	1981	500	N. 45° E	2000
HARRAT KISHB	1981	500	N. 45° E	2000
HARRAT NAWĀSIF	1981	500	N. 45° E	2000
HARRAT KHAYBAR	1981	500	N. 45° E	2000
HARRAT RAHĀT NORTH	1981	500	N. 45° E	2000
SOUTH COASTAL PLAIN	1983	300	N. 30° E.	2000

Total-intensity aeromagnetic data for the Precambrian shield were collected in :

1962 - Several small areas flown by Hunting Geology and Geophysics Ltd. under the supervision of the USGS (U.S. Geological Survey).

1965-1967 - Most of the shield area (Areas I to V) flown by a consortium comprising Aero Service Corp., Hunting Geology and Geophysics Ltd., Lockwood Survey Corp. Ltd. and ARGAS (Arabian Geophysical and Surveying Co.) under the supervision of BRGM (Bureau de Recherches Géologiques et Minières).

1976 - South part of the Harrat Rahat basalt plateau and central part of the coastal plain flown by ARGAS under the joint supervision of BRGM, USGS, and the Red Sea Commission.

1981 - Remainder of the basalt plateaux flown by ARGAS under the supervision of BRGM.

1983 - South part of the coastal plain flown by Geosurvey International Ltd. under the supervision of USGS.

The 1962 and 1965-1967 surveys were flown using Fluxgate Gull Mark III magnetometers with analog recording. The data were later digitized and processed at the computer center of the University of Petroleum and Minerals in Dhahran by BRGM (J. Bobillier, M. Bourlier, J. Delom, N. Al Tamimi under the supervision of J.-M. Georgel).

The 1976 and 1981 surveys were flown using a CSF cesium-vapor magnetometer with digital recording. The 1983 survey was flown using a Geometrics G 813 proton-precession magnetometer with digital recording.

EXPLANATION

- Village
- Ruins
- Paved road
- Dirt road or track
- Ancient working, mine, or prospect; named where known
- Airfield
- Landing strip
- Spot elevation (approximate)
- Horizontal and vertical control point
- 100 nanoteslas contour
- 20 nanoteslas contour
- Magnetic low

INDEX TO ADJOINING SHEETS

