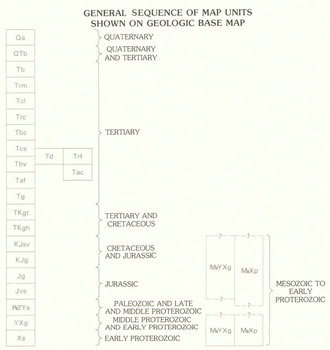



## LIST OF MAP UNITS

- **Qa** Alluvium (Quaternary)
- **QTb** Basalt of Sentinel Plain and Pinacate Volcanic Field (Quaternary and Tertiary)
- **Tb** Basalt and basaltic andesite (Tertiary)
- **Trm** Rhyolite, rhyodacite, and minor dacite flows and plugs (Tertiary)
- **Tcl** Childs Latite flows and flow breccia (Tertiary)
- **Trc** Rhyolite complex (Tertiary)
- **Tbc** Basaltic complex (Tertiary)—Primarily coarse, porphyritic basalt and basaltic andesite
- **Tcs** Conglomerate and minor sandstone (Tertiary)—Includes Daniel's Conglomerate
- **Td** Dacitic to rhyolitic flows, flow breccia dikes, and sills (Tertiary)—Includes minor latite and andesitic tuffaceous rock
- **Trf** Rhyolite flows, rhyodacite, ash-flow tuffs, minor andesite (Tertiary)
- **Tbv** Basal volcanic sequences (Tertiary)
- **Tac** Andesite of Castle Dome Mountains (Tertiary)
- **Taf** Andesite and fanglomerate (Tertiary)—Includes minor coarse arkosic sandstone
- **Tg** Biotite hornblende granite (Tertiary)
- **TKgt** Two-mica granite, biotite granite (Tertiary and Cretaceous)
- **TKgh** Hornblende-biotite series granitoids (Tertiary and Cretaceous)
- **KJsv** Sedimentary and volcanic rocks (Cretaceous and Jurassic)
- **KJg** Granitic rocks (Cretaceous and Jurassic)
- **Jg** Granitic and syenitic rocks (Jurassic)
- **Jvs** Volcanic and minor sedimentary rocks (Jurassic)
- **PzYs** Sedimentary rocks (Paleozoic and Late and Middle Proterozoic)—Includes Apache Group (Middle Proterozoic) and diabase (Middle Proterozoic)
- **YXg** Granite (Middle and Early Proterozoic)
- **Xs** Undifferentiated schist (Early Proterozoic)
- **MyYXg** Gneiss and schist (Mesozoic and(or) Middle and(or) Early Proterozoic)
- **MxKp** Paragneiss (Mesozoic or Paleozoic or Middle or Early Proterozoic)

Contact

Fault—Dashed where approximately located; dotted where inferred

INDEX MAP

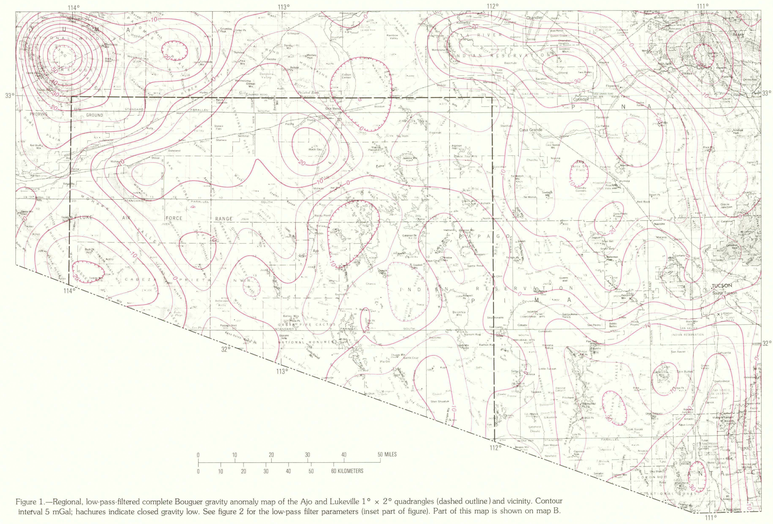
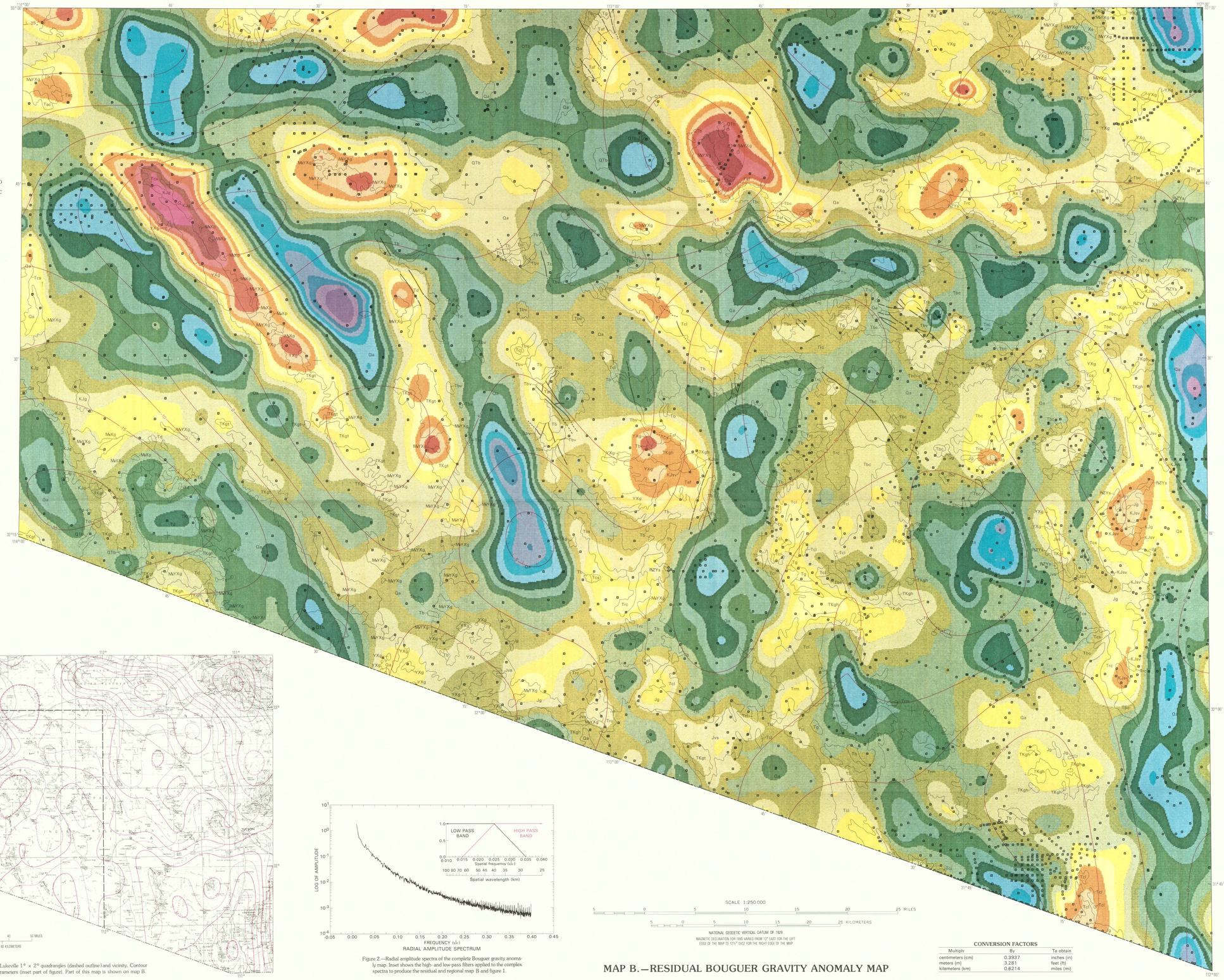



Figure 1.—Regional, low-pass-filtered complete Bouguer gravity anomaly map of the Ajo and Lukeville 1° × 2° quadrangles (dashed outline) and vicinity. Contour interval 5 mGal; hachures indicate closed gravity low. See figure 2 for the low-pass filter parameters (inset part of figure). Part of this map is shown on map B.




Figure 2.—Radial amplitude spectra of the complete Bouguer gravity anomaly map. Inset shows the high- and low-pass filters applied to the complex spectra to produce the residual and regional map B and figure 1.




## MAP B.—RESIDUAL BOUGUER GRAVITY ANOMALY MAP

### CONVERSION FACTORS

| Multiply | By | To obtain |
|---|---|---|
| centimeters (cm) | 0.3937 | inches (in) |
| meters (m) | 3.281 | feet (ft) |
| kilometers (km) | 0.6214 | miles (mi) |

### EXPLANATION

**Residual gravity contours**—Defined by high-pass wavelength filtering

MILLIGALS: 22.5, 20.0, 17.5, 15.0, 12.5, 10.0, 7.5, 5.0, 2.5, 0.0, -2.5, -5.0, -7.5, -10.0, -12.5, -15.0, -17.5, -20.0, -22.5, -28.0

**Regional gravity contour**—Contour interval 5 mGal; hachures indicate closed gravity low. Defined by low-pass wavelength filtering

**Gravity station location**

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1991

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# GRAVITY AND AEROMAGNETIC ANOMALY MAPS OF THE AJO AND LUKEVILLE 1° × 2° QUADRANGLES, SOUTHWESTERN ARIZONA

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1991