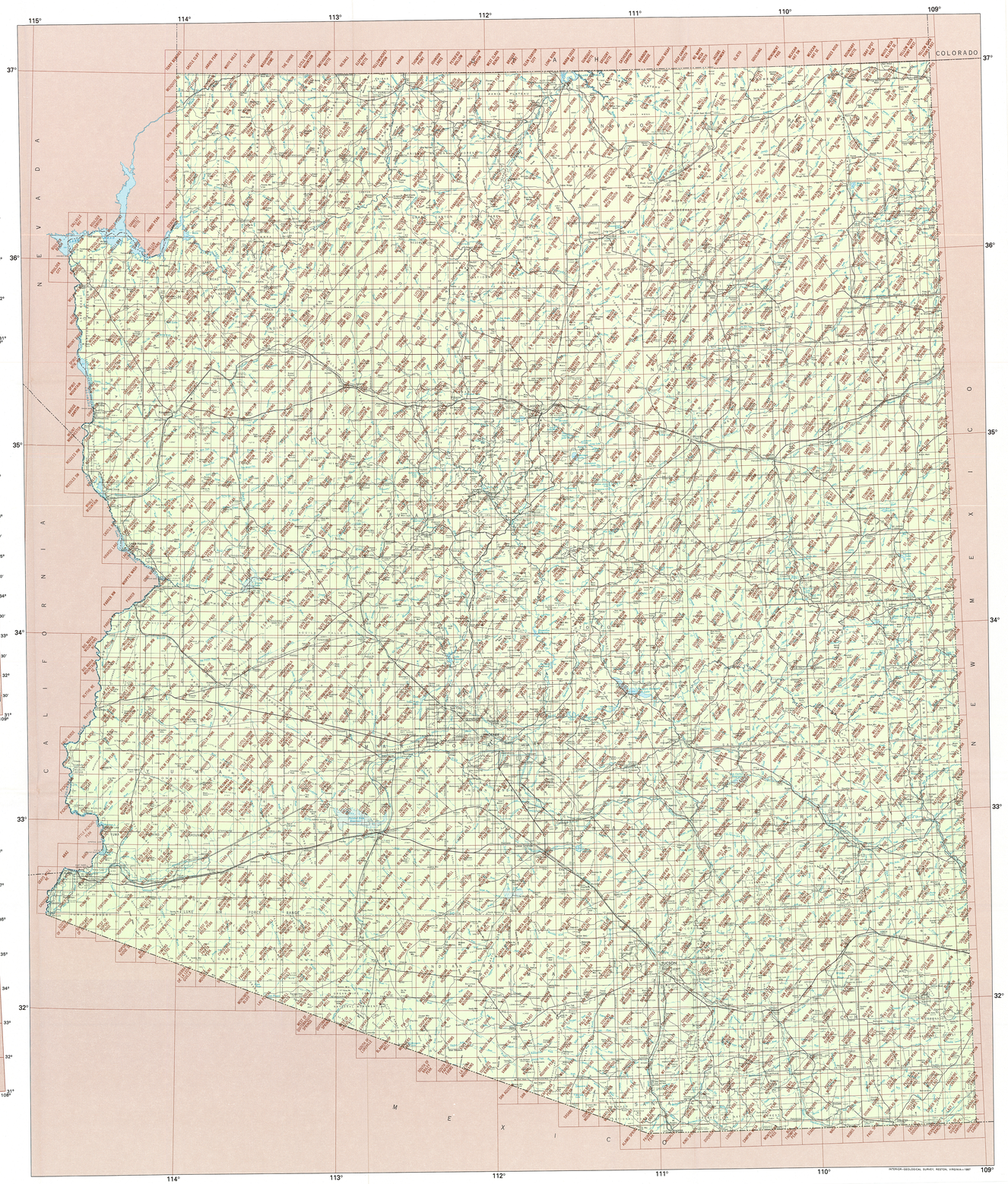
PRIMARY MAP SERIES, 1:24 000 SCALE



HE NATIONAL MAPPING PROGRAM

The National Mapping Program publishes a variety of multipurpose maps to serve all map users. In addition to published maps, basic map data and open-file map byproducts are available. These include aerial photographs, satellite images, advance and reproducible map materials, geodetic control data, geographic-names data, status maps, microfilm map copies, and map data in digital form.

n Index to topographic and other Map Coverage nd to comparison *Catalog of topographic and other ublished Maps* is available for each State.

TYPES OF MAPS:

Topographic Maps

A topographic map accurately represents the natural and manmade features of the land. USGS topographic maps are compiled to National Map Accuracy Standards using modern mapping techniques. The shape and elevation of the terrain are portrayed by contour lines and specific features such as roads, towns, water areas, and vegetation are portrayed by map symbols and colors. Standard quadrangle series maps are produced at the scale and formats shown.

Topographic-Bathymetric Maps

A topographic-bathymetric map provides topographic and planimetric detail of the land areas and bathymetric metric contours and depth gradients in the coastal water areas. These maps, covering selected coastal zone areas, are cooperatively produced by the U. S. Geological Survey and the National Ocean Service at scales of 1:24,000, 1:100,000, and 1:250,000. Offshore protraction survey data compiled by the Bureau of Land Management are shown on 1:100,000- and 1:250,000-scale maps.

Land Use and Land Cover Maps

Standard land use and land cover maps at 1:250,000 or 1:100,000 scale are available for the entire United States. These maps depict the 9 level I and 37 Level II USGS categories of data. Five associated overlays show political units, hydrologic units, Census county subdivisions, and Federal land ownership and state land ownership overlays for a limited number of states. Associated maps are made available in the form of diaxo or photographic prints or film copies. Most of these products have to be ordered.

Orthophotoquads

An orthophotoquad portrays planimetric data by photoimage, but does not contain contours and has little or no symbolization or lettering within the mapped area. Most orthophotoquads are prepared in monocolor from black-and-white film, and are made available, upon request, in the form of diaxo or photographic prints. There are a limited number printed in color, and available as published maps. Most of these products have to be ordered.

Orthophotomaps

An Orthophotomap is a multicolor orthophotoquad having extensive cartographic treatment including contours, lettering, and some symbols. Where conventional topographic line maps are ineffective in portraying terrain features, colored orthophotoimagery accentuates subtle detail. For some areas–predominately marshlands and coastal zones–the orthophotomap is the standard 1:24,000-scale map.

State Maps

State-format maps are generally available in three editions–base, topographic, and shaded relief–usually at a scale of 1:500,000. Some state base maps are also available at 1:750,000 and 1:1,000,000. The maps show urban areas, major communication routes, hydrographic features, and political boundaries.

County Maps

Produced at 1:50,000 or 1:100,000 scale, county maps show selected natural and cultural features. At the present time, county maps are available for a limited number of areas.

Special Maps

Special-purpose maps are usually derived from standard topographic maps. These include maps of specific cultural or geographic regions, satellite image maps, shaded relief maps, metropolitan area maps, and sets of maps illustrating special phytiographic features.

United States Maps

There are several different U.S. Maps available in a variety of formats and scales. For this information see the matrix on "United States Maps."

National Park and Monument Maps

Maps of national parks, battlefields, and historic sites are prepared at various scales from standard topographic maps. Many are available with shaded-relief overprint which gives a three dimensional impression of the terrain.

National Atlas Maps

Separate sheets of selected thematic and general reference National Atlas maps are available. The content ranges from phytiographic information to environmental and population trends. A set of maps (also available singly) covers the United States in 21 sections at 1:2,000,000 scale.

INFORMATION PAMPHLET

The U.S. Geological Survey has available a pamphlet titled "Topographic Maps", which includes symbols, to assist map users in selecting the kind and scale of map best suited to their needs. This pamphlet can be obtained without cost from Map Distribution, U.S. Geological Survey.

SMALL-SCALE ARIZONA AND VICINITY MAPS

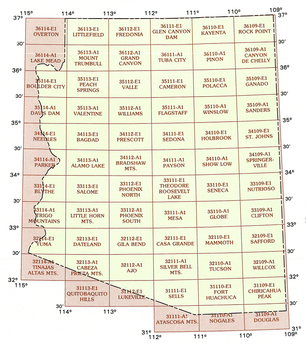
REFERENCE CODE	MAP NAME	MAP SCALE	MAP COLORS	MAP CONTENT: ROADS	RAILROADS	CONTOURS	WATER FEATURES	TOWNS, CITIES	COUNTIES	NATIONAL PARKS, MONUMENTS	NATIONAL FORESTS, RESERVATIONS	PAPER SIZE
33112-D1-SP-500	State of Arizona (Base)	1:500 000	2		•		•	•	•			47x57 inches
33112-D1-SP-01M	State of Arizona (Base)	1:1 000 000	1		•		•	•	•			24x29 inches
33112-D1-ST-500	State of Arizona (Topographic)	1:500 000	7	•	•	•	•	•	•	•	•	47x57 inches
33112-D1-SR-500	State of Arizona (Shaded Relief)	1:500 000	7	•	•	•	•	•	•			47x57 inches
31103-A1-NA-02M SHEET 28-29	Arizona and New Mexico (National Atlas)	1:2 000 000	6	•	•		•	•	•	•	•	19x28 inches

UNITED STATES MAPS

REFERENCE CODE	DESCRIPTION	MAP SCALE	MAP COLOR	MAP CONTENT: ROADS, RAILROADS	WATER FEATURES	TOWNS, CITIES	COUNTIES	NATIONAL PARKS, MONUMENTS	NATIONAL FORESTS, RESERVATIONS	PAPER SIZE
38072-101-US-020-01 (Map 1-A)	Two sheet wall map with buff land tint, Insets show Alaska, Hawaii, and other outlying areas of the United States	1:2 500 000	5		•	•	•			41x54 inches (each)
38072-101-US-020-02 (Map 2-B)	Same as Map 2-A without land tint	1:2 500 000	4		•	•	•			41x54 inches (each)
38072-101-US-020-03 (Map 3-C)	One sheet wall map, Insets show Alaska, Hawaii, and other outlying areas of the United States	1:3 168 000	4		•	•		•	•	42x65 inches
38072-101-US-020-04 (Map 3-B)	Same as Map 3-A, showing historical boundaries and public land surveys	1:3 168 000	7		•	•		•	•	42x65 inches
38072-101-US-020-05 (Map 3-S)	One sheet, Insets show Alaska, Hawaii, and other outlying areas of the United States	1:5 000 000	2		•		•			27x41 inches
38072-101-US-020-06 (Map 3-O)	One sheet outline map, Insets show Alaska, Hawaii, and other outlying areas of the United States	1:5 000 000	1							27x41 inches
38072-101-US-020-07 (Map 3-G)	Same as above except without state name	1:5 000 000	1							27x41 inches
38072-101-US-020-08 (Map 6-A)	One sheet wall map, Alaska and Hawaii shown in their proper size and position relative to the conterminous 48 States	1:6 000 000	4	•	•	•	•	•	•	39x58 inches
38072-101-US-0196-09 (Map 7-A)	One sheet showing the conterminous 48 States only	1:7 000 000	2		•	•	•			20x30 inches
38072-101-US-0196-10 (Map 7-B)	Same as Map 7-A with contours in feet at varying intervals	1:7 000 000	3		•	•	•			20x30 inches
38072-101-UG-0196-13 (Map 7-C)	One sheet physical division map. Physical divisions outlined in red with explanations in the margin	1:7 000 000	3		•	•	•			20x32 inches
38072-101-US-0196-11 (Map 8-A)	Map of conterminous U. S. showing routes of transcontinental railroads 1901 to 1904. State boundaries are shown	1:8 000 000	6		•	•	•			25x18 inches
38072-101-US-1096-15 (Map 10-A)	One sheet, Alaska and Hawaii shown in their proper size and position relative to the conterminous 48 States	1:10 000 000	4	•	•	•	•			24x36 inches
38072-101-UB-1096-14 (Map 10-B)	One sheet, North American continent showing State and national boundaries	1:10 000 000	2		•	•	•			37x36 inches
38072-101-UB-1196-15 (Map 11-A)	One sheet showing the conterminous 48 States only	1:11 875 000	2		•	•	•			13½x20 inches
38072-101-UB-1606-16 (Map 16-A)	One sheet showing the conterminous 48 States only	1:16 500 000	2		•	•	•			9½x13 inches
38072-101-UG-6200-17 (Map 17)	Same as 38072-101-UB-020-03 plus National system of Interstate and defense highways, and Federal-aid primary highway system	1:3 168 000	5	•	•	•	•	•	•	63x40 inches

COUNTY MAP SERIES
1:100 000 SCALE

30 X 60 MINUTE SERIES
1:100 000 SCALE



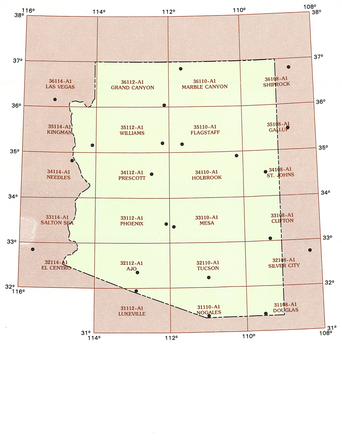
SECTIONAL MAP SERIES
1:2 000 000 SCALE

National Atlas Sheet 28-29: Arizona and New Mexico

STATE MAP SERIES
1:500 000 AND 1:1 000 000 SCALE

ARIZONA

1 X 2 DEGREE SERIES
1:250 000 SCALE



PHYSIOGRAPHIC FEATURES MAPS (SET OF 100): These maps were selected to illustrate a wide variety of physiographic features within most of the 86 subdivisions shown on the Physical Divisions Map of the United States (Map 7-C). Size and scale of the maps vary.

PHYSIOGRAPHIC FEATURES MAPS (SET OF 25): Selected from the set of 100 maps. These maps show physiographic features within most of the major physical division provinces.

NATIONAL PARK AND MONUMENT MAPS:

Glen Canyon National Recreation Area, Utah-Ariz.: This map shows the recreation area and adjacent area. Limiting parallels, 36°45' and 38°23'. Limiting meridians, 109°45' and 111°45'. Scale, 1:250,000 or about 4 miles to 1 inch. Contour interval, 200 feet with supplemental contours at 100-foot intervals. Size, 32 by 36 inches. 1969. 36111-H4-PF

Grand Canyon National Monument, Ariz.: This map shows the monument and adjacent area. Limiting parallels, 36°09' and 36°28'. Limiting meridians, 112°09' and 113°11'. Scale, 1:48,000, or 4,000 feet to 1 inch. Contour interval, 50 feet. Size, 33 by 42 inches. 1936. 36112-A1-PF

Grand Canyon National Park and vicinity, Ariz.: This map shows the park and adjacent area. Limiting parallels, 36° and 36°28'. Limiting meridians, 111°45' and 112°45'. Scale, 1:62,500, or about 1 mile to 1 inch. Contour interval 80 feet with 40 foot supplemental contours. Size, 38 by 60 inches. 1962. 36112-A1-PF. Also published in a shaded-relief edition. 36112-A1-PR

Petrified Forest National Park, Ariz.: This map shows the park and adjacent area. Limiting parallels, 34°46' and 35°11'. Limiting meridians, 109°40' and 109°55'. Scale, 1:50,000, or about 3/4 mile to 1 inch. Contour Interval, 10 meters. Size, 24 by 40 inches. 1981. 35109-A2-PM.

SPECIAL MAPS AND SHEETS:

Bright Angel, Ariz.: This map shows part of the Grand Canyon. A brief geologic history of the area is given on the back of the map. Limiting parallels, 36° and 36°15'. Limiting meridians, 112° and 112°15'. Scale, 1:62,500, or about one mile to 1 inch. Contour interval, 80 feet. Size, 17 by 21 inches. 1962. 36112-A1-PF. Also published in a shaded-relief edition. 36112-A1-PR

United States – Mexico Border Color Image Maps (47 maps showing parts of Arizona available): In cooperation with the U.S. Customs Service, USGS has produced a series of 1:25,000-scale simulated natural color image maps of the United States – Mexico border. These image maps were produced from 1:80,000-scale color infrared photography taken between 1979 and 1983. Major cultural and physical features are named. The International Boundary and the U.S. State and County boundaries are depicted and named.

Mexico – United States Border 15-Minute Maps (6 maps showing parts of Arizona available): Published by Instituto Nacional de Estadistica, Geographia e Informatica (INEGI). Scale, 1:50,000, or about 3/4 mile to 1 inch.

SATELLITE IMAGE MAPS:

Apollo 6 Photomaps (set of 4 sheets; parts of Arizona are shown on sheets 1 and 2): This set of maps has been produced by the U.S. Geological Survey to assess the usefulness of space photography for national resource mapping studies. Scale, 1:500,000, or about 8 miles to 1 inch. Size, folded, 7 by 10 inches. 1968. 25080-A1-SI.

Arizona: State Landsat Image map with a full line map. Scale, 1:500,000, or about 8 miles to 1 inch. Size, 48 by 60 inches. 1973. 33112-D1-SI.

Landsat and SPOT Image Display, Phoenix, Arizona Area: On April 5, 1986, Landsat recorded the Phoenix, Arizona area. Two days prior SPOT covered the same area within one hour of the same time of day, thus providing a near-ideal data base for image presentation in a wide variety of scales and forms including combinations of Landsat and SPOT data. Scale, 1:24,000, or 2000 feet to 1 inch. Size, folded, 8 1/2 by 10 inches. 1986. 33112-D1-SI.

Las Vegas, Nev.-Ariz.-Calif.: Landsat image map; a full line map is printed on the reverse side. Scale, 1:250,000, or about 4 miles to 1 inch. Size, 23 by 32 inches. 1981. 36114-A1-SI.

Phoenix, Ariz.: Landsat image map with a full line map. Scale, 1:250,000, or about 4 miles to 1 inch. Size, 25 by 33 inches. 1972. 33112-A1-SI.

Shiprock, N. Mex.-Ariz.-Colo.-Utah: Landsat image map; a full line map is printed on the reverse side. Scale, 1:250,000, or about 4 miles to 1 inch. Size, 22 by 32 inches. 1980. 36108-A1-SI.

STANDARD SERIES MAPS

Standard quadrangle maps cover systematically subdivided areas of latitude and longitude, and are the most widely used maps depending on the area or size area mapped.

Standard quadrangle formats: area of 49 x 71 square miles in 7.5 x 7.5 degrees covering area of 1:24,000 scale maps.

Standard quadrangle formats: area of 69 x 70 square miles in 1° x 2 degrees covering area of 1:250,000 scale maps.

Standard quadrangle scales range from 1:24,000 scale for 7.5 x 7.5 degrees quadrangles, scale 1:250,000 for 1° x 2 degrees quadrangles, and scale 1:1,000,000 for 4° x 6° quadrangles.

Special area maps are 30 x 60 minutes in size. 1:100,000 Plastic Base is 1:63,360 (Modified Metric) and 1:100,000 (Combined Imperial and Metric). Special area maps are 1:50,000 (Modified National Park Maps), and 1:500,000 State Base Maps.

MAP SERIES COMPARISON

The following illustrates comparison of the size of the area covered by the various map series. Each square represents the area covered by one sheet of a 1 degree latitude by 2 degrees longitude lines.

- 1° x 2 degree maps
- 30 x 60 minute maps
- 15 x 15 minute maps
- 7.5 x 7.5 degree maps

The amount of detail shown on a map is proportional to the size of the area covered by the map. Generally more detail is shown on the larger scale maps, whereas only landmark buildings are shown on 1:1,000,000-scale 39 x 60 minute maps.

7.5 MINUTE SERIES

Map scale	1:24,000
Map to ground ratio	1 inch represents 2000 feet
Area covered	49–71 square miles
Contours and elevations	20 feet
	shown in feet

7.5 x 15 MINUTE SERIES

Map scale	1:25,000
Map to ground ratio	1 inch represents 2083 feet
Area covered	100–140 square miles
Contours and elevations	20 meters
	shown in meters

15 MINUTE SERIES

Map scale	1:62,500
Map to ground ratio	1 inch represents 5208 feet
Area covered	197–282 square miles
Contours and elevations	40 feet
	shown in feet

30 x 60 MINUTE SERIES

Map scale	1:100,000
Map to ground ratio	1 inch represents 1.58 miles
Area covered	1,578–2,067 square miles
Contours and elevations	200 meters
	shown in meters

1 - 2 DEGREE SERIES

Map scale	1:250,000
Map to ground ratio	1 inch represents 3.95 miles
Area covered	4580–6609 square miles
Contours and elevations	200 feet
	shown in feet

Paper size (approximate): 1:250,000-scale on selected maps: 36 x 48 inches; 1:2,000,000-scale on selected maps: 24 x 36 inches; 1:5,000,000-scale on selected maps: 20 x 28 inches; 1:6,000,000-scale: 20 x 30 inches; 1:10,000,000-scale: 20 x 30 inches; 1:1,000,000-scale 39 x 60 minute maps: 24 x 36 inches; 1:1,000,000-scale 4° x 6° maps: 20 x 28 inches; 1:2,500,000-scale on selected maps: 20 x 28 inches; 1:3,434 Alaska and 1:5,000,000-scale on selected maps: 20 x 28 inches.

To Purchase Maps

Refer to the components Catalog of topographic and other Map Coverage for names, dates, and prices of maps currently available.

Order by mail or in person from the appropriate sales office listed below. Prepare your order from the catalog. When ordering maps from USGS by mail, include the full name and description of the map, subject to change. A handling charge of $3.50 is added to each domestic mail order. Make remittance payable to Department of the Interior—U.S.G.S.

- USGS Information Services
  Box 25286, Federal Center
  Denver, Colorado 80225
- Over-the-counter sales are conducted in the Denver, Colorado, and Reston, Virginia, offices listed above.

This Index is designed to inform map users of the various map series, special maps and map byproducts produced and distributed by the U.S. Geological Survey. It shows the location of quadrangle areas by map name and scale. A map is usually named after the most prominent city, town, or natural landmark shown on it

ARIZONA
Index to topographic and other MAP COVERAGE

USGS
SCIENCE FOR A CHANGING WORLD

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY