



**USGS**  
 science for a changing world

**Douglas**  
 ARIZONA-NEW MEXICO-SONORA  
 1:100 000-scale metric  
 topographic map

30 X 60 MINUTE QUADRANGLE  
 SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

**GEOLOGICAL SURVEY**  
 1994

Produced by the United States Geological Survey  
 U.S. portion compiled from USGS 1:24 000-scale topographic maps dated 1957-1985. Planimetry revised from aerial photographs taken 1991 and other source data. Revised information not field checked.  
 Mexico portion derived from DGC 1:50 000-scale topographic map dated 1975-1982. Names H12B34, Agua Prieta H12B35, San Bernardino H12B36, Cuahatlan H12B44, El Progreso H12B45, Dieciocho De Agosto H12B46.  
 Map edited 1994.

North American Datum of 1927 (NAD 27). Projection and 10 000-meter-grid: Universal Transverse Mercator, zone 12. 25 000-foot tick: Arizona coordinate system, east zone and New Mexico coordinate system, west zone.  
 The values of the shift between NAD 27 and North American Datum of 1983 (NAD 83) for 7.5-minute intersections are obtainable from National Geographic Survey NADCON software. Metric portions in NAD 27. There may be private inholdings within the boundaries of the National or State reservations in the U.S. portion shown on this map.

CONTOUR INTERVAL 50 METERS IN THE UNITED STATES  
 SUPPLEMENTARY CONTOUR INTERVAL 25 METERS  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929  
 ELEVATIONS SHOWN TO NEAREST METER  
 CONTOUR INTERVAL 20 METERS IN MEXICO  
 DATUM IS MEAN SEA LEVEL

THE U.S. PORTION OF THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	Magnetic Declination		1	2	3
1	3.2808	0° 44'		1	2	3
2	6.5617	11'		4	5	
3	9.8425	13 MILS		6	7	8
4	13.1234	13 MILS		1	2	3
5	16.4042	13 MILS		4	5	6
6	19.6850	13 MILS		7	8	
7	22.9659	13 MILS		1	2	3
8	26.2467	13 MILS		4	5	6
9	29.5275	13 MILS		7	8	
10	32.8084	13 MILS		1	2	3

To convert meters to feet multiply by 3.2808  
 To convert feet to meters multiply by 0.3048

UTM grid convergence (GN and 1984 magnetic declination) at center of map. Diagram is approximate.

1 Fort Huachuca  
 2 Chiricahua Peak  
 3 Nogales  
 4 Nogales  
 5 Nogales  
 6 Nogales  
 7 Nogales  
 8 Nogales

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USGS NHD  
 HISTORICAL MAP ARCHIVES  
 20% TOTAL RECOVERED FIBER

**Topographic Map Symbols**

Primary highway, hard surface	Secondary highway, hard surface	Light duty road, principal street, hard or improved surface	Other road or street; trail	Route marker: Interstate; U. S. State	Railroad: standard gauge; narrow gauge	Bridge: overpass; underpass	Tunnel: road; railroad	Built up area; locality; elevation	Airport: landing field; landing strip	National boundary	State boundary	County boundary	National or State reservation boundary	Land grant boundary	U. S. public lands survey: range, township, section	Range township; section line, prominent	Power transmission line; pipeline	Dam; dam with lock	Cemetery; building	Wellhead; water well; spring	Mine shaft; pit or cave; mine, quarry, gravel pit	Campground; picnic area; U. S. location monument	Ruin; cliff dwelling	Distorted surface: strip mine, lava, sand	Contour: index; intermediate; supplementary	Bathymetric contour: index; intermediate	Stream: lake; perennial; intermittent	Rapids, large and small; falls, large and small	Area to be submerged; marsh, swamp	Land subject to controlled inundation; woodland	Scrub; mangrove	Orchard; vineyard
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