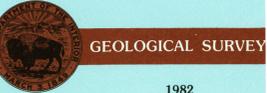




30 X 60 MINUTE QUADRANGLE SHOWING

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



Produced by the United States Geological Survey
 Compiled from USGS 1:24 000 and 1:62 500-scale topographic maps dated 1955-1969. Planimetry revised from aerial photographs taken 1972, 1979 and other source data. Revised information not field checked. Map edited 1982.

Projection and 10 000-meter grid, zone 12, Universal Transverse Mercator
 25 000-foot grid ticks based on Arizona coordinate system, central zone, 1927 North American Datum
 To place on the predicted North American Datum 1983 move the projection lines 4 meters north and 65 meters east
 There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 50 METERS
 NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U.S. GEOLOGICAL SURVEY,
 P.O. BOX 25286, DENVER, COLORADO, 80225

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	GN	MN	1	2	3
2	6.5617	0° 15'	137° 15'	1	2	3
4	13.1234	0° 30'	137° 30'	4	5	6
6	19.6851	0° 45'	137° 45'	7	8	9
8	26.2468	1° 00'	138° 00'	10	11	12
10	32.8085	1° 15'	138° 15'			

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

UTM grid convergence (GN) and 1983 magnetic declination (MN) at center of map. Diagram is approximate.

1 Grand Canyon
 2 Tuba City
 3 Pinal
 4 Williams
 5 Pinalosa
 6 Flagstaff
 7 Winslow

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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 gage; narrow gage	
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 lines: uncontracted	
Power transmission line, pipeline	
Dam; dam with lock	
Cemetery; building	
Windmill; water well; spring	
Mine shaft; adit or ore mine; quarry; gravel pit	
Campground; picnic area; U. S. location monument	
Ruin; cliff dwelling	
Distorted surface: strip mine, lava, sand	
Contours: index; intermediate; supplementary	
Bathymetric contours: 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	

