Country Profile: Argentina

Country Profile (PDF)

Country Resources

Topographic

Series	Publisher	Scale	Years	Sheets
Paraguay 1:250,000 Scale Topographic Maps	DSGM	1:250,000	1982 – 2004	27
Chile 1:250,000 Scale Topographic Maps	IGMC	1:250,000	1985 – 1995	96
Argentina 1:50,000 Scale Topographic Maps	IGMA	1:50,000	1941 – 1988	1,702
Argentina 1:100,000 Scale Topographic Maps	IGMA	1:100,000	1933 – 2012	1,132
Argentina 1:250,000 Scale Topographic Maps	IGMA	1:250,000	1953 – 2005	227
Argentina 1:500,000 Scale Topographic Maps	IGMA	1:500,000	1940 – 1991	92

Nautical

Series	Publisher	Scale	Years	Sheets
Uruguay Nautical Charts (All Scales)	SOMHA	Varies	2010 – 2025	42

Aeronautical

Series	Publisher	Scale	Years	Sheets
Chile 1:250,000 Scale Aeronautical Charts	SAF	1:250,000	2010	2

Geoscientific

Series	Publisher	Scale	Years	Sheets
Argentina 1:250,000 Scale Geological Vector Data	EVG	1:250,000	2011	5
Argentina Geological Maps by Province	IGRM	Varies	1993 – 2014	24
Argentina 1:100,000 Scale Geological Maps	IGRM	1:100,000	1997 – 2020	49
Argentina 1:250,000 Scale Geological Maps	IGRM	1:250,000	1994 – 2024	225
Antarctica VSEGI Series 1:5,000,000 Scale Geological Maps	VSEGEI	1:5,000,000	1979	1
Argentina 1:100,000 Scale Metallogenic Maps	SEGEMAR	1:100,000	1997	19
Argentina 1:500,000 Scale Geological Province Maps	SEGEMAR	1:500,000	1995 – 2014	12
Chile 1:250,000 Scale Geological Maps	SERNAGEOMI	1:250,000	1977 – 1998	55

Thematic

Series	Publisher	Scale	Years	Sheets
The World 1:30,000,000 Scale Topographic Map Series 1145 (NGA)	DMA	1:30,000,000		2

Global Census Archive: GIS Census Data

Year	Questions / Answers	ADM Level	Polygons at ADM	Data Points
1991	27 / 162	4	40,093	6,495,066
2001	40 / 538	3	512	275,456
2010	42 / 233	4	52,400	12,209,200

Global Resources

Topographic

Series	Publisher	Scale	Years	Sheets
Soviet Military City Plans	VTU GSh	Varies	1944 – 2003	3,021
Soviet Military 1:100,000 Scale Topographic Maps	VTU GSh	1:100,000	1947 – 1999	24,897
Soviet Military 1:200,000 Scale Topographic Maps	VTU GSh	1:200,000	1949 – 2009	17,799
Soviet Military 1:500,000 Scale Topographic Maps	VTU GSh	1:500,000	1953 – 1998	3,093
Soviet Military 1:1,000,000 Scale Topographic Maps	VTU GSh	1:1,000,000	1948 – 1994	1,089

Nautical

Series	Publisher	Scale	Years	Sheets
NGA Nautical Charts POD Certified (All Scales)	NGA	Varies	1943 – 2013	4,517

Aeronautical

Series	Publisher	Scale	Years	Sheets
Joint Operations Graphic (JOG 1501A) 1:250,000 – Aeronautical	DMA	1:250,000	1958 – 2007	6,380
Tactical Pilotage Chart (TPC) 1:500,000 Scale – Aeronautical	DMA	1:500,000	1967 – 2006	618
Operational Navigation Chart (ONC) 1:1,000,000 Scale – Aeronautical	DMA	1:1,000,000	1969 – 2001	248
Jet Navigation Chart (JNC) 1:2,000,000 Scale – Aeronautical	DMA	1:2,000,000	1971 – 1999	117
Global Navigation and Planning Chart (GNC) 1:5,000,000 Scale – Aeronautical	DMA	1:5,000,000	1981 – 1999	27

Note: East View Geospatial is continuously sourcing new resources that may not yet be listed in Global Explorer. Please contact us if you have geodata needs beyond what is listed above and we will be happy to discuss available off-the-shelf and custom solutions.

Shop all products in Global Explorer

Historical Country Mapping Information

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Country Profile (PDF)

Topographic

The official topographic mapping authority in Argentina is the **Instituto Geográfico Militar** (**IGMA**), Buenos Aires, which is a technical branch of the Argentine Army. It has its origins in the Military Topographic Bureau created in 1879. The principal tasks of **IGMA** are to undertake the geodetic and topographic survey of the national territory and to coordinate all geo-topographic work required by the state. **IGMA** has also carried out mapping of areas claimed by Argentina in the Antarctic and South Atlantic.

There are four official topographic map series. The 1:500,000 scale series is complete in 70 sheets for the whole country, and 1:250,000 scale mapping is almost complete; about 60 percent of the country has been covered at 1:100,000 scale; while 1:50,000 scale mapping is 26 percent complete, covering principally Buenos Aires province and adjacent areas to the north. A Gauss-Krüger projection, International ellipsoid, is used for all these series, and the country is divided into seven zones, each 3 degrees of longitude wide.

The sheet system of these series is graticule-based, with the sheet lines of the larger series nesting within those of the smaller. The 1:500,000 scale sheets each cover 3 degrees of longitude and 2 degrees of latitude. 1:250,000 scale sheets each cover one-quarter of this area, while the 1:100,000 scale sheets fit nine to a 1:250,000 sheet.

The 1:500,000 scale sheets vary in quality. Relief is layer-colored or shaded, and a graticule and grid is printed on the maps. The current series of 1:250,000 scale sheets was initiated in 1952. Sheets are in six or more colors with a contour interval varying from mountain to plain, and there is a 10 km grid. A few sheets were issued in the **PAIGH Hemispheric Mapping Program**. The 1:100,000 scale series is

in three to five colors with a contour interval varying from 2.5 m to 100 m, and a 4 km grid, while the 1:50,000 series has a 1 km grid spacing and the more modern sheets are in five colors. The contour interval again varies, and may be as close as 1.25 m in areas of low relief.

Soviet military topographic mapping of Argentina is available at the following scales: 1:1,000,000 (26 sheets, complete coverage, published 1962-1990); 1:500,000 (79 sheets, complete coverage, published 1965-1991); 1:200,000 (362 sheets, western country coverage, published 1980-1985) and city (1:10,000 to 1:25,000) topographic mapping of 9 major cities from Bahia Blanca to Tucuman published between 1978 and 1985. These products are available in print, digital raster and digital vector GIS formats from **East View Geospatial**.

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Nautical

The **Servicio de Hidrografía Naval** (**SHNA**) was founded in 1879 as the **Oficina Central de Hidrografía** and published the first chart in 1883. Today it publishes over 140 nautical charts of Argentine coastal areas, and of the seas adjacent to Argentina's territorial claims in Antarctica. The **Centro Argentino de Datos Oceanográficos** (**CEADO**) holds and disseminates data files on the South Atlantic and Southern Ocean, including physical-chemical data, bathy-thermographic data and the IGOSS data file of the Southern Ocean.

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Aeronautical

Aeronautical charting is undertaken by the **Dirección de Transporte Aéreo** (**DTA**) of the Argentine Air Force. In the 1980s, a series of 1:1,000,000 and 1:500,000 charts were produced, respectively, the *Carta aeronáutica Argentina* (13 sheets) and the *Carta aeronáutica Argentina táctica* (25 sheets).

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Geological/Scientific

Earth science mapping is the responsibility of the **Servicio Geológico Minero Argentino** (**SEGEMAR**), Buenos Aires, which was restructured under this name in 1996. An extensive series of 1:200,000 scale maps and monographs have been published, though, they are being replaced by a new series at the scale of 1:250,000, on the same sheet lines as the corresponding topographic series. The maps in this *Programa Nacional de Cartas Geológicas* are accompanied by a series of bulletins for each department. About six bulletins have so far been issued. In 1993, a new series of provincial geological maps was also initiated at the scale of 1:500,000 or 1:750,000. By the end of 1996, 12 of these provincial maps had been published. There is also a series of mineral maps of the provinces at 1:750,000 scale. A new geological map of the whole country at 1:5,000,000 scale was published in 1996.

A major cooperative geoscientific mapping project has been carried out in the Sierras Pameanas of Argentina by the **Australian Geological Survey Organisation** (**AGSO**) with **SEGEMAR**. Conventional mapping was combined with acquisition of airborne geophysical data, and products include second generation geological maps at 1:100,000 and 1:250,000 scales, geophysical image maps and mineral deposit maps. The **Institut Cartogràfic Catalunya** has also been involved in new 1:100,000 scale geological mapping by creating orthophoto images from SPOT imagery and combining fieldwork with image interpretation to provide a geological synthesis.

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Imagery

In recent years there has been a major program in satellite image mapping, carried out in collaboration with the **Institut Cartogràfic Catalunya**, Spain. Image maps (SIMs) are published at scales of 1:250,000; 1:100,000 and 1:50,000 in pseudo-true color and on the standard topographic sheet lines. They are based on LANDSAT TM and SPOT HRV imagery, some cartographic enhancement is added, such as place names, improved road delineation and grid. The 1:250,000 SIMs have been produced very rapidly and cover most of the country; 1:50,000 SIMs are so far mainly confined to a large area of Buenos Aires province, while 1:100,000 scale SIMs cover a larger area of the northeast. The intention is to use these larger scale SIMs as a means of updating the mapping of the more rapidly developing areas.

A major digital mapping program is also in progress. It is intended to complete and convert the whole 1:250,000 scale series to digital format. Progress with the 1:100,000 series is being focused on the areas close to the national borders, and there is also a program of digitizing this series, with 265 sheets already converted.

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Soil

Soil, land use and land capability mapping is the responsibility of the **Centra de Investigaciones de Recursos Naturales** within the **Instituto Nacional de Tecnología Agropecuaria** (**INTA**). In the 1970s, the center embarked on a program of soil mapping at 1:100,000 scale, the maps being published on a photomap base. In addition, the center has published a number of monographic soil and resource maps of small areas or of individual provinces. In 1985, an *Atlas de suelos de la República Argentina* was published, and in 1995 a digital version was released on CD-ROM, following a project to digitize and update the 1:500,000 and 1:1,000,000 scale soil mapping. This work was done in association with the company **Aeroterra SA**, Buenos Aires. Soil classification is in accordance with the **USDA Comprehensive Soil Taxonomy**. The CD-ROM also contains photographs of landscapes associated with different soil types, and soil profiles. Maps of relief, drainage, subterranean groundwater basins and climate are also included, and there is a file of LANDSAT 5 and LANDSAT TM data. The CD-ROM is packaged with ArcView Version 1.0, but the data can be imported for use with higher versions of ArcView.

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Atlas

The **Servicio Meteorológico Nacional**, of the Argentine Air Force issues weather forecast maps and statistical data on climate. It produced atlases of agro-meterological and climatic data in the 1960s.

The **Instituto Nacional de Estadística y Censos** (**INDEC**) has published a CD-ROM *Atlas estadístico República Argentina* also in association with **Aeroterra S.A.**, and packaged with ArcView Version 1.0 software. The atlas presents general, economic and socio-demographic information about the country, and is accompanied by a book of printed maps. The CD-ROM however contains additional data which may be used for constructing further maps, and there are also eight LANDSAT and NOAA images. In 1997, the first of a series of provincial statistical CD-ROMs was issued covering the municipalities of the Province of Santa Fé. These include MapObject software permitting users to create their own thematic maps from the data.

The *Atlas total de la República Argentina*, published in 9 volumes in the period 1981-83. A smaller atlas, published by **IGMA** in 1999, has a text, maps and graphics for each of the provinces. A multi-media atlas on CD-ROM was also launched in 1999 by **IGMA**.

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Tourist/Reference

Commercial companies include **Automapa**, which has published plans of Buenos Aires and other cities, as well as provincial and national

road maps, and **Automovil Club Argentino** (**ACA**), which also publishes a range of motorist and tourist maps and atlases, including provincial maps showing primary and secondary roads, road distances and various tourist information, and incorporating street maps of major cities. **Editorial Filcar** publishes excellent street maps and atlases of Buenos Aires, and has issued digital versions of street maps of the capital and of San Isidro.

Zagier y Urruty, Buenos Aires, have published a number of interesting and unusual maps, including 'ecomaps' of Tierra del Fuego, the Valdes Peninsula and the Antarctic Peninsula, and mountaineering and trekking maps of Monte Fitz Roy and Cerro Torre.

Overseas publishers of general maps of the country include **International Travel Maps** (**ITM**) and **Reise- und Verkehrsverlag** (**RV**).

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