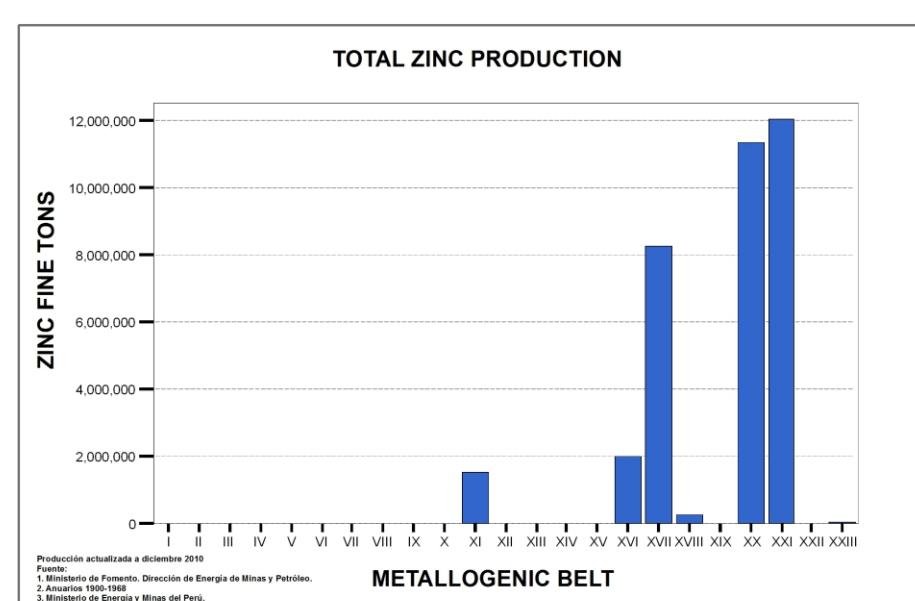
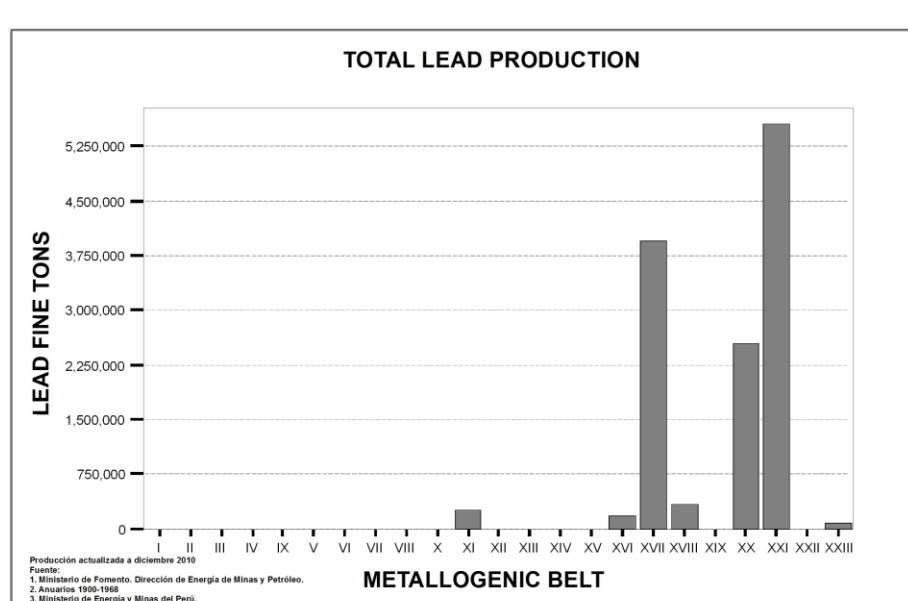
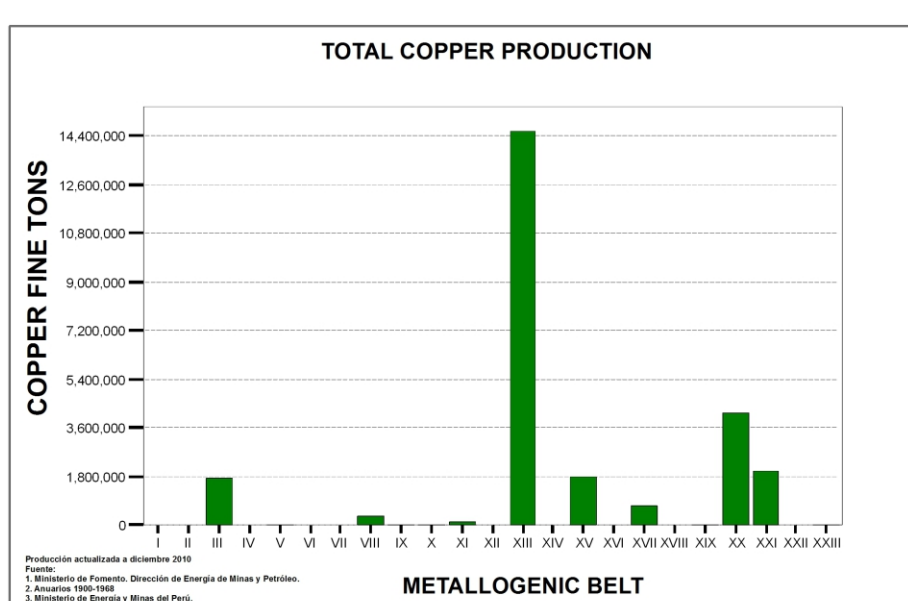
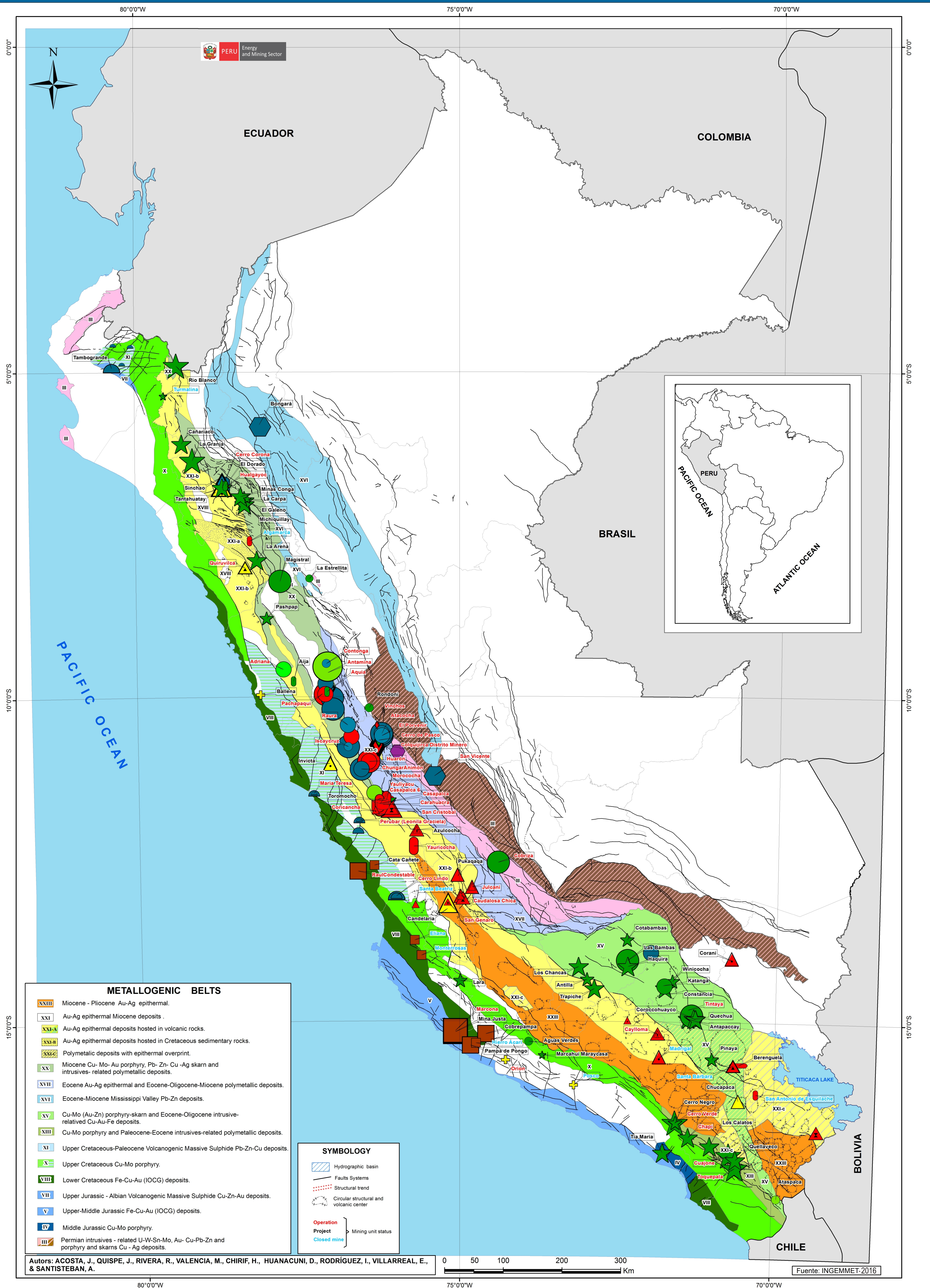




SYMBOLOLOGY OF TYPE OF DEPOSITS

I. Magmatic

- ☐ Ni-Cu / Cr-Ni-Cu-Alpine and/or
- ☐ Porphyry
- ☐ Vero

II. Hydrothermal

- ☐ Epithermal deposits not differentiated
- ☐ High Sulfidation epithermal
- ☐ Low Sulfidation epithermal
- ☐ Intermediate Sulfidation epithermal
- ☐ Porphyritic deposit with epithermal overprint
- ☐ Skarn
- ☐ Iron-Steel-Copper-Deposit (IOCG)
- ☐ Subvolcanic
- ☐ Orogenic Au-Pb-Zn-Cu deposits
- ☐ Intrusions related Au-Pb-Zn-Cu deposits

III. Metasulfidated Hydrothermal

- ☐ Intrusions related Au-Pb-Zn-Cu deposits

V. Extratelluric Metals

- ☐ Sedex

VI. Extratelluric Deposits

- ☐ Metamorphic Vein Type (MVT)
- ☐ Red bed

VII. Metasomatic

- ☐ Metamorphogenic Deposits

IX. Other

- ☐ Alluvial

X. Unconformity deposits without general classification

- ☐ Placer
- ☐ In situ / Biotry / Disseminated

XI. Unconformity deposits

- ☐ Upland

METALS

● Au-Pb-Zn	● Pb-Ag
● Cu-Pb-Zn	● Fe-Cu
● Pb-Cu-Au	● Pb-Cu
● Cu-Mo-Au	● Fe-Zn
● Cu-Pb-Zn	● Sn-Cu
● Cu-Zn-Ag	● Ag
● Cu-Pb-Ag	● U
● Cu-Pb-Ag	● Li
● Cu-Pb-Ag	● Ni
● Cu-Pb-Ag	● Zn-Au

SIZE MINERAL DEPOSITS (TONS)

Element	Project	Small	Medium	Large	Very Large	Giant
Cu	< 50 000	50 000 - 1 000 000	1 000 000 - 5 000 000	5 000 000 - 10 000 000	> 10 000 000	> 5 000 000
Pb	< 50 000	50 000 - 1 000 000	1 000 000 - 5 000 000	5 000 000 - 10 000 000	10 000 000 - 50 000 000	> 50 000 000
Zn	< 50 000	50 000 - 1 000 000	1 000 000 - 5 000 000	5 000 000 - 10 000 000	10 000 000 - 50 000 000	> 50 000 000

**Metallogenic Map of
Copper – Lead – Zinc of Peru
1:3 000 000**

Metallogenic Map of Copper – Lead – Zinc of Peru displays: (1) 14 mineralized belts of base metals (2) location of major mines and mining exploration projects shown by a symbol (3) size of ore mineral deposit (4) main metal content by association.

This map portrays 14 metallogenic belts with a known metal endowment by accumulated fine metal production for Cu, Pb and Zn, where it shows major producer belts.

Ore mineral deposits generally occur in clusters or districts that reflect a common geological setting, source, age and origin. Some areas contain primary deposits formed by fundamentally different mineralizing processes. These have been differentiated into separate with each being represented by symbol according to ore deposit type.

Name of the Important mines and mining projects within a metallogenic belt are shown in the map.

For more information on the development of this map please see: Acosta et al 2009. Memoria del Mapa Metalogenético del Perú. Development of the 1:3,000,000 scale. INGEMMET.

Credits

Bibliographical reference: Acosta, J., Quispe, J., River, R., Valencia, M., Chirif, H., Huanacuni, D., Rodríguez, I., Villarreal, E., Paico, D. and Santisteban, A. (2009) Memoria del Mapa metalogénico del Perú. INGEMMET.

Metallogenetic belts and mineral deposits data base can be accessed online via <http://geocatminapp.ingemmet.gob.pe/apps/geocatmin/>

The information in this publication is based on knowledge and understanding at time of writing (2009). However because of advances in knowledge, users are reminded of the need to insure that information upon which they rely is up to date.

No warranty about the accuracy, currency or completeness of any information contained in this document is inferred (including, without limitation, any information in the document provided by third parties). While all reasonable care has been taken in the compilation, to the extent permitted,

INGEMMET exclude all liability for the accuracy or completeness of the information, or for any injury, loss, or damage whatsoever (including without limitation liability for negligence and consequential losses) suffered by any person acting or purporting to act, in reliance upon anything contained herein. User should rely upon their own advice, skills, interpretation and experience in applying information contained in this publication.

This map can be downloaded from
<http://www.ingemet.gob.pe/metalogenicos>

Main Office:
Av. Canadá 1470, San Borja - Lima 41, Perú.
Central Phone: 0051-1-6189800
Email: webmaster@ingemmet.gob.pe
Internet: <http://www.ingemmet.gob.pe/>

GEOCATMIN
RACCOMANDA

Geological and Mining Cadastre Information System

Geological and mining Cadastre information system

GEOCATIN is an upgraded version of the multi-source geo-spatial data management and cadastre information (multiple – targeting version) system. It is developed by the Geological Information Science Center (GISC), INGMETI. With the technical support of the ArcGIS Server by ESRI, it is a professional GIS software system integrating the processing, analysis, transformation and drafting of the information on geology, geology, cadastre mining, restricted areas to mining activities, geophysics, geochemistry, hydrogeology, ore deposit types, technical reports and etc. (more than 130 layers of information). The research and development of GEOCATIN has not only improved the original system's ability of solving the geological problems and mining cadastre location, upgraded and perfected the software function, but also has the research and development of a multifunctional software version realized, built an international platform for geo-data processing, and met the users demand.

- It has the function of managing, processing and analyzing the multi-source geological data and mining cadastre.
- It can produce the reports of mining records and mining rights.
- It supports a variety of data formats at home and abroad (MAPGIS/ArcGIS/AutoCAD/MapInfo/Bmp/TIFF) and transformations of map projection globally.
- It covers geochemical exploration data processing and the geo-scientific GIS spatial analysis and application.
- It can produces a variety of thematic maps including contour maps, profile in plan, profile charts, symbol maps and maps recording the degree of geological works.
- It supports the switches of multitasking user interface.

Viewed in more than 200 countries over the 5 continent
It can be used in smartphones and tablets off line edition
Free access from this URL: <http://geocatmin.ingemmet.gob.pe>
Downloading information enabled

**METALLOGENIC MAP OF PERU:
COPPER - LEAD- ZINC 1:3 000 000**

