



APPENDIX I. Aeromagnetic Maps of South- Central China

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Appendix I. Aeromagnetic maps of south-central China

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Folder I-*mag_maps*. Individual were 4° high by 6° long, 1:1,000,000-scale, aeromagnetic maps [11 sheets].

Map history and processing

The Tianjin Geological Academy of the People's Republic of China provided 11 paper maps of colored aeromagnetic contour data. The maps included localities in south and central China where sedimentary rock-hosted Au deposits are present, such as the Dian-Qian-Gui (Chapter 3) Qinling fold belt (Chapter 4), and the Middle-Lower Yangtze River (Chapter 5). Figure I-A is an index of the aeromagnetic maps. The original maps were 4° high by 6° long and had a map scale of 1:1,000,000, and were in Lambert Conic Orthomorphic projection. The projection information for each is as follows:

Projection:	Lambert Conic Orthomorphic
Central Meridian:	= (Westernmost Longitude + Easternmost Longitude) / 2
Reference Latitude:	= Southernmost Latitude (<i>i.e.</i> base)
Standard Parallels:	1 st = Base + 1 degree 2 nd = Base + 3 degrees
Spheroid:	Krasovsky (1940)

The projection information indicates that each map is the center of its own projection, with its base as the reference latitude and the central meridian as the middle longitudinal line. This singular projection caused difficulty in fitting the maps together.

The original maps were individually scanned and saved as *.tiff and then converted to *.jpeg files. The scans were then imported into Adobe Photoshop v. 6.0 and the collars were removed using the clipping tool. The new images were then imported into a geographic information system (GIS) ArcView 3.2 where they were georeferenced and mosaiced using the ArcView Image Analyst v. 2.0 extension. Because the central meridian is the center of each map, the edges of the maps (meridians) converge toward the middle of each map with increasing latitude. The unique projection parameters of the individual maps cause the edges of the images to misalign. This is represented by small triangular-shaped gaps between each adjacent map as illustrated in figures I-A, I-B and I-C.

Individual aeromagnetic mosaic maps of the Qinling fold belt, Dian-Qian-Gui, and Middle-Lower Yangtze River areas are located on figure I-D and separate mosaics were cut and overlaid with geology and sedimentary rock-hosted Au deposit occurrence

locations (figs. I-D, I-E, I-F, and I-G). Images of the individual aeromagnetic maps images also are provided (folder I-mag_maps).

36	BAO JI I-48	XIAN I-49	NAN JING I-50
32	CHENG DU H-48	CHANG SHA H-49	WU HAN H-50
28	KUN MING G-48	HENG YANG G-49	FU ZHOU G-50
24	HE NEI F-48	GUANG ZHOU F-49	120
20	102	108	114

Figure I-A. General index of map name and numbers of aeromagnetic maps.

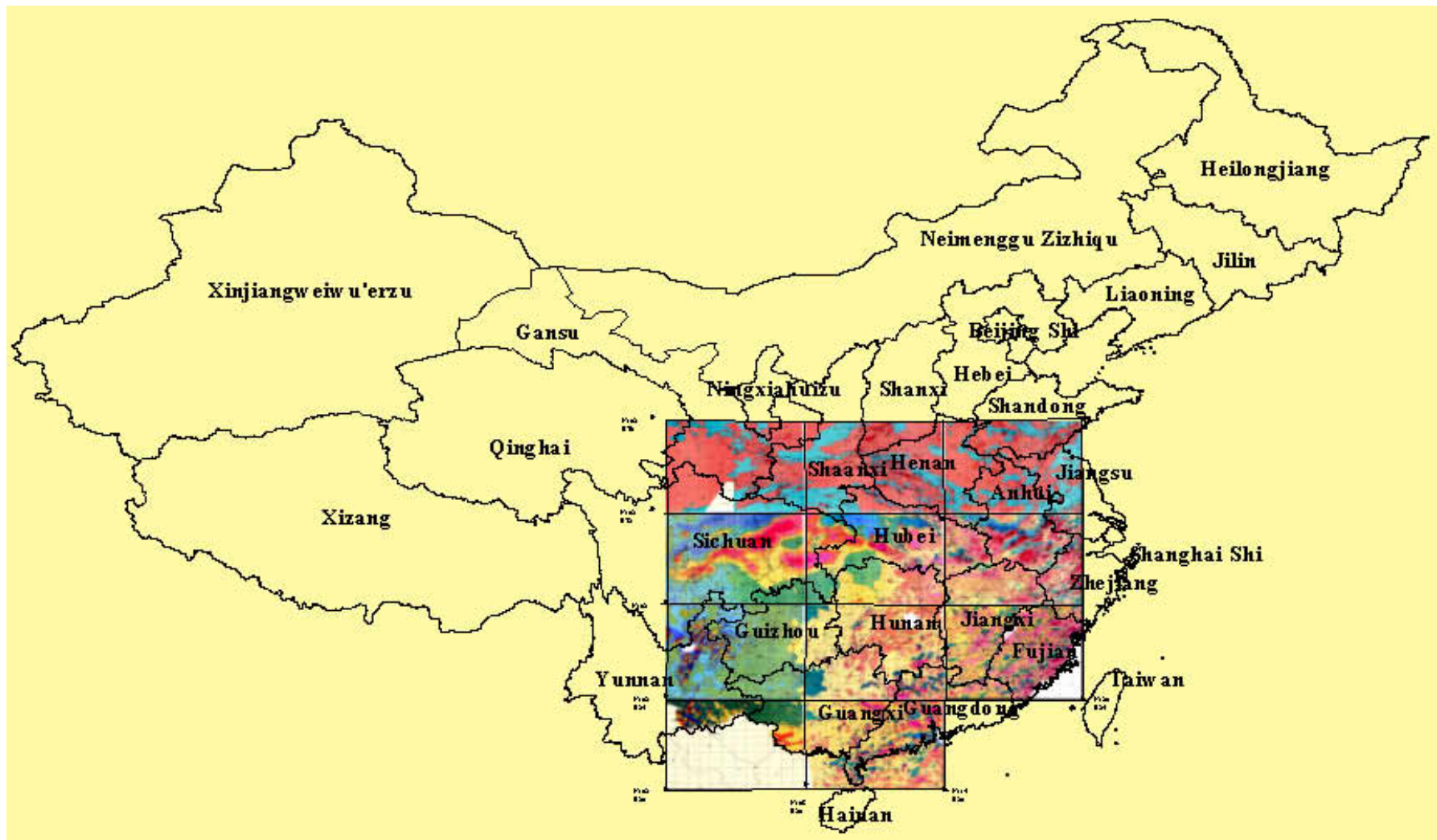


Figure I-B. Mosaic and index as inset, showing location of aeromagnetic map coverage in Appendix I in China.

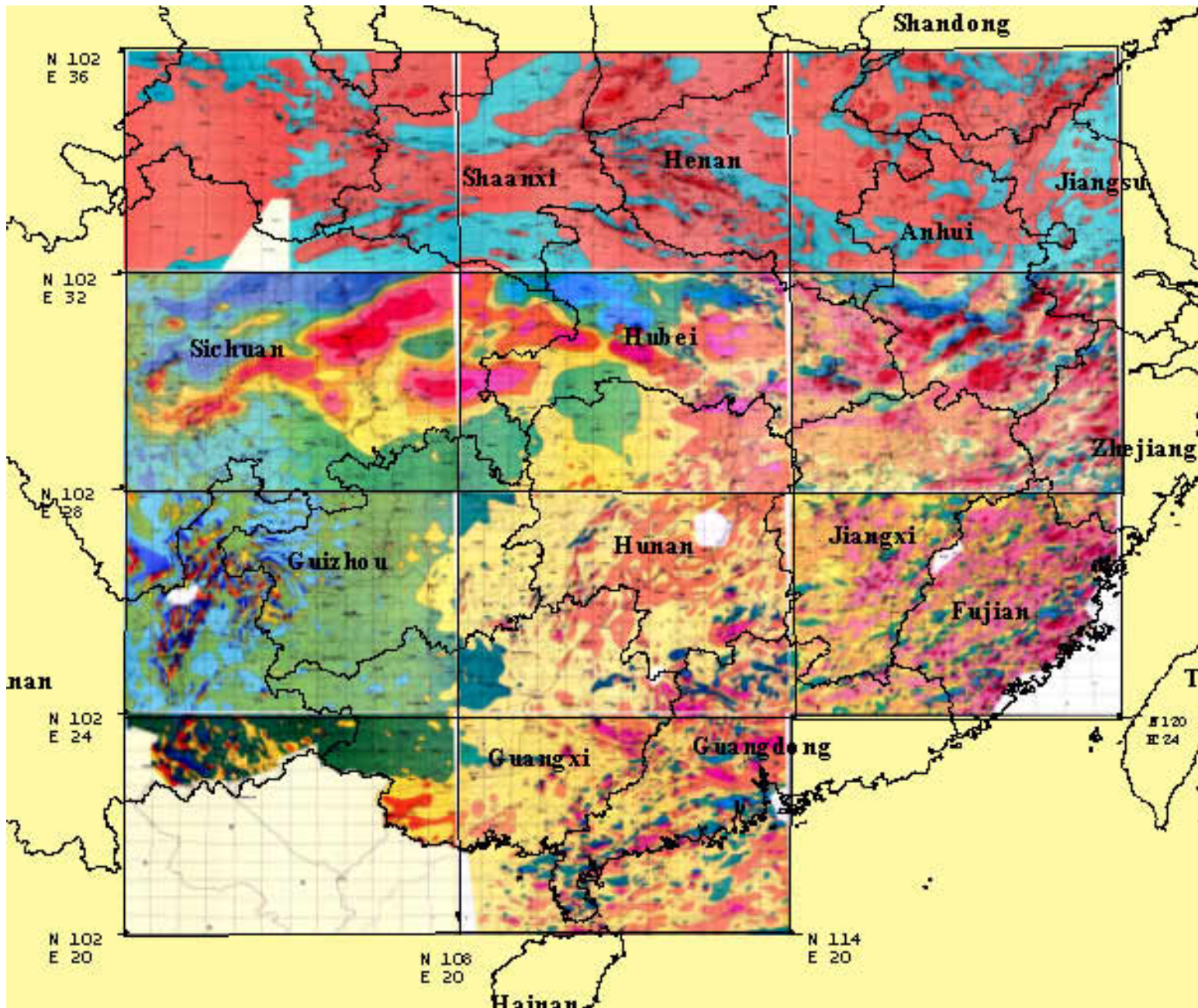


Figure I-C. Mosaic and index (see also, figs. I-A and I-B).

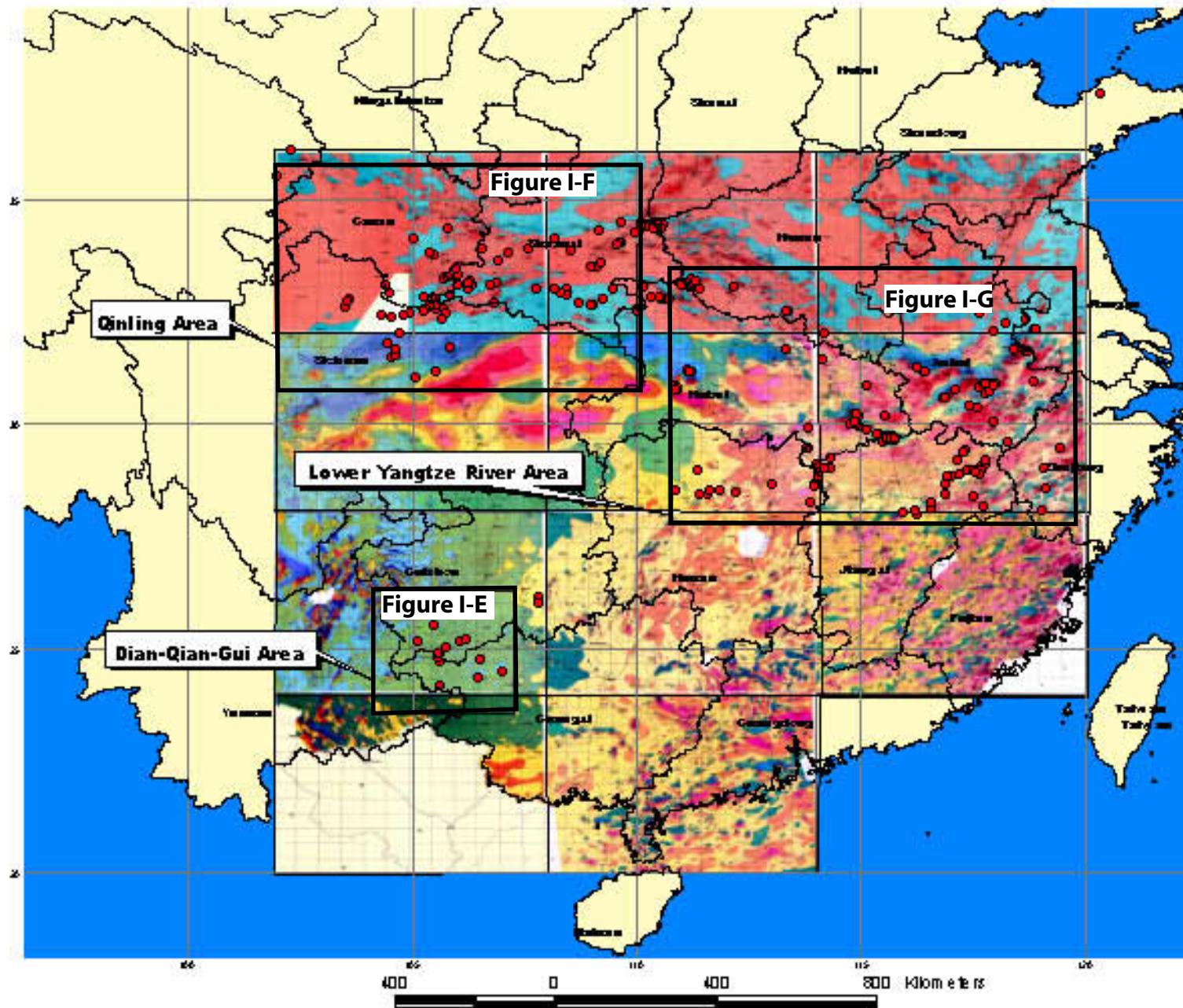


Figure I-D. Mosaic showing outline of Dian-Qian-Gui, Qinling fold belt and Middle-Lower Yangtze river areas and locations of figures I-E, I-G, and I-F.

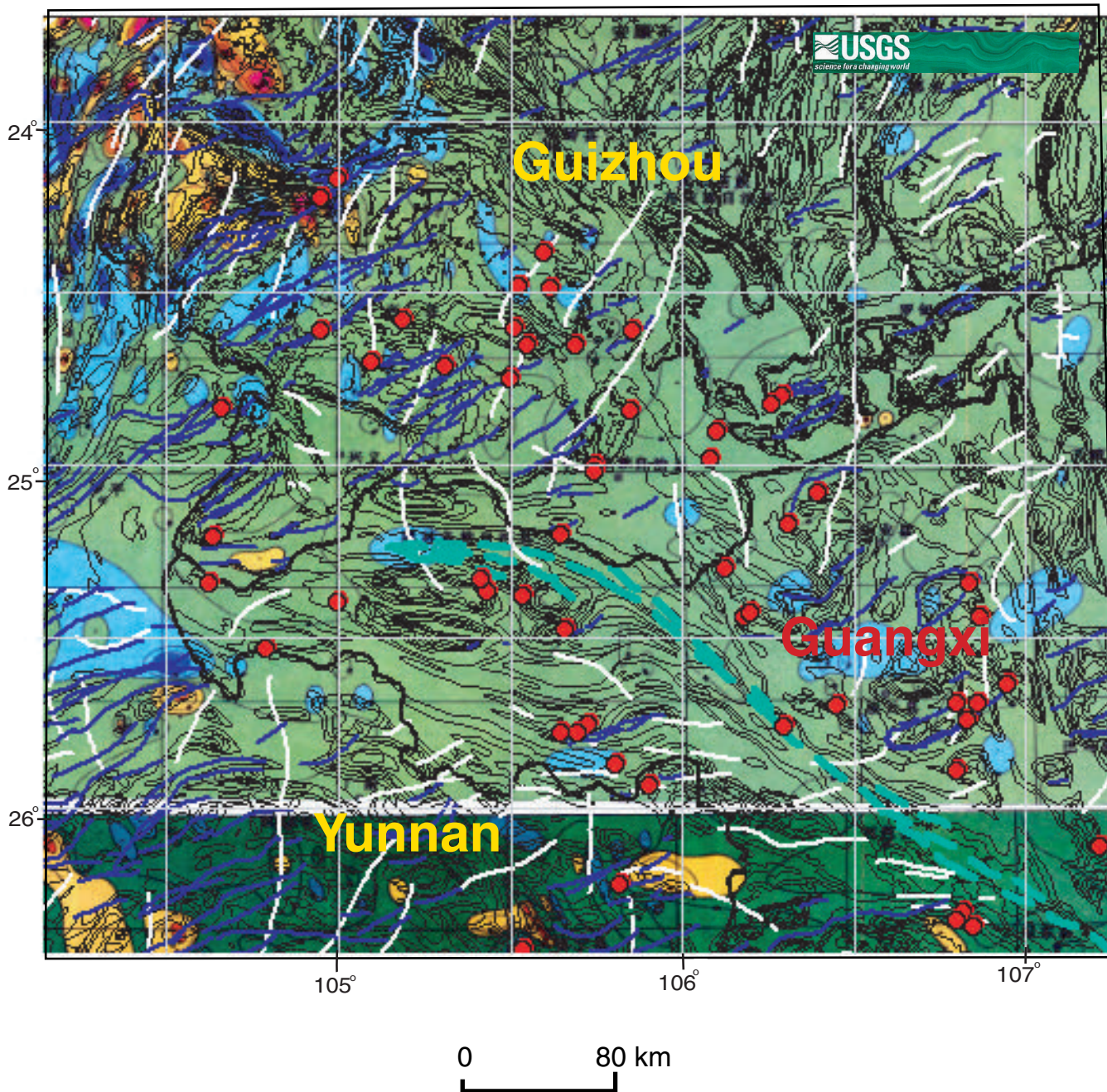


Figure I-E. Areomagnetic maps of the Dian-Qian-Gui area with sedimentary rock-hosted Au deposits (red, northeast-striking faults (dark blue), and Axial planes (white). Light blue dashed lines in the Youjiang Fault zone. Dark fine lines are geology lines. Dark black lines are Province boundaries. For discussion and descriptions of deposits, see Chapter 3.

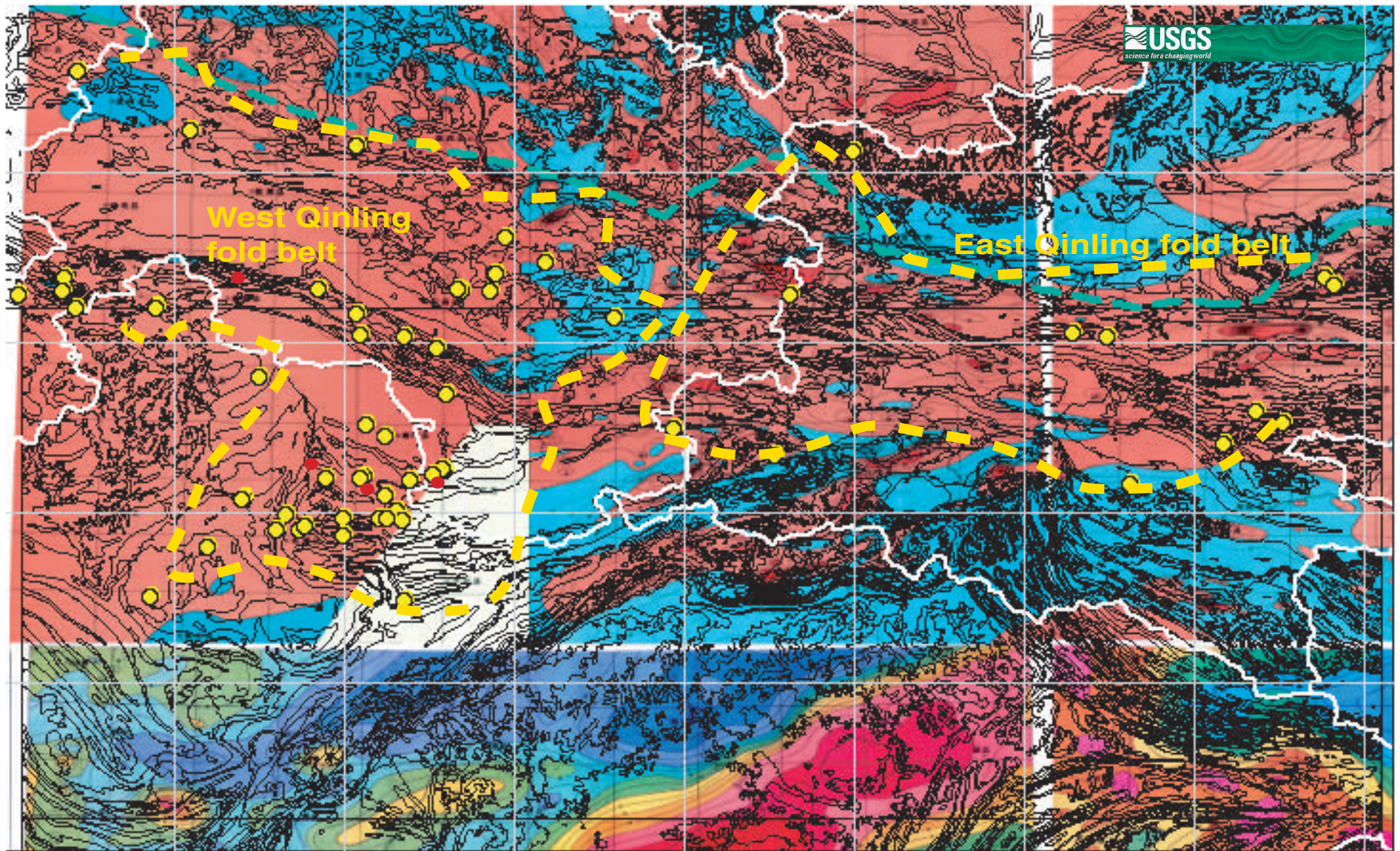


Figure I-F. Areomagnetic mosaic map of the Qinling fold belt area showing distribution of deposits (yellow), and location of major shear zone (light-blue, dashed), underlay of major geologic unit contacts (black), and east and west parts of belt (yellow dashed). For description of deposits and discussion, see Chapter 4.

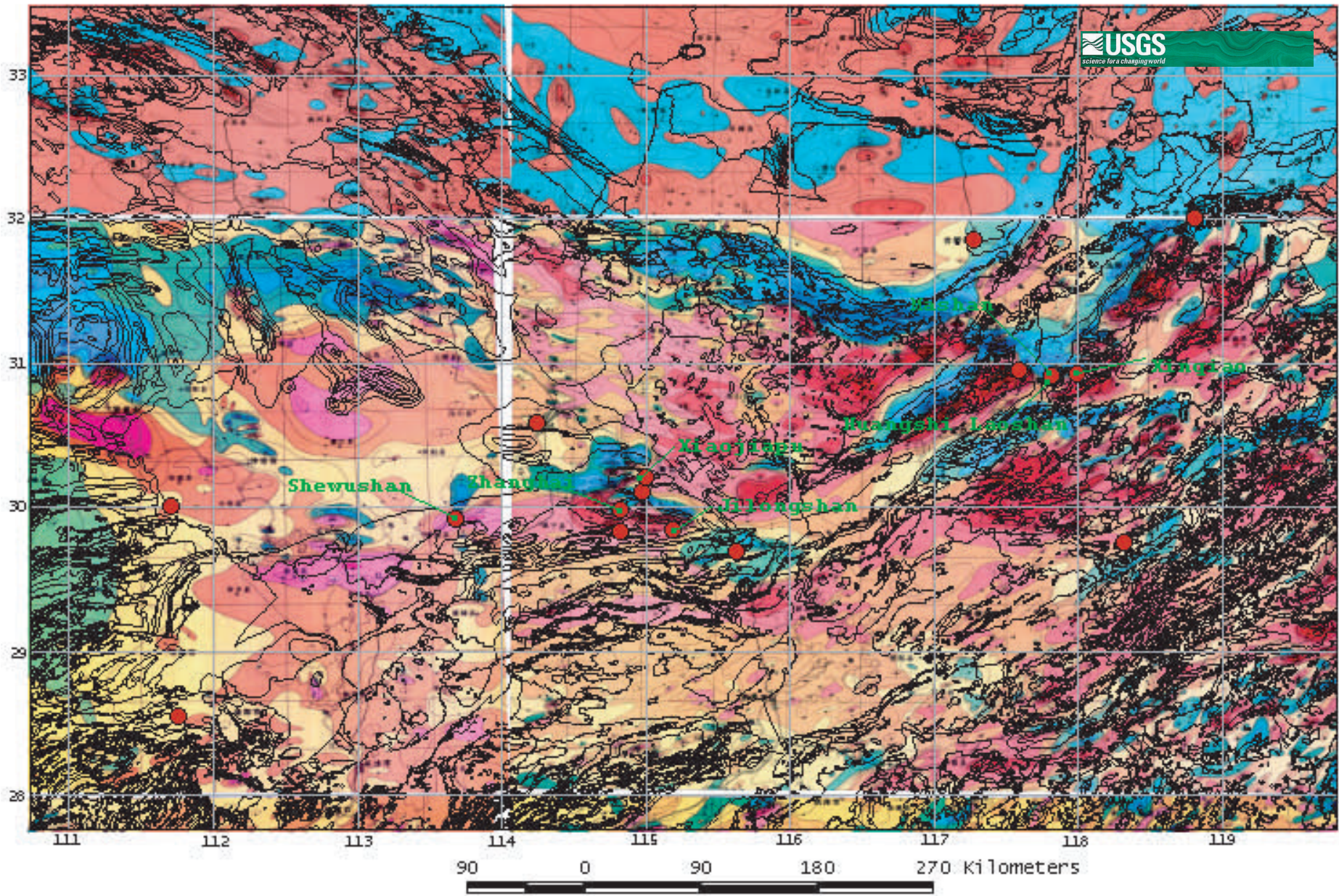


Figure I-G. Aeromagnetic mosaic map of the Middle-Lower Yangtze River area with sedimentary rock-hosted Au deposits discussed in Chapter 5 labeled.