

Application of Kriging on Geochemical Mapping Method with Discrete Data: Illustrated by the Ultra-low Density Geochemical Mapping in Zimbabwe

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Abstract: There are obvious defects and uncertainty on the geochemical mapping with free meshing and discrete data by grid interpolation. It will lead that the geochemical characteristics are changed or distorted. Kriging method provides a more scientific and reasonable interpolation method for estimating the data. We discuss the application of the Kriging method on the geochemical mapping method with discrete data by spatial analysis and geochemical mapping of ultra-low density geochemical data in Zimbabwe, and assessed the effect of application about the Kriging method in the geochemical mapping.

Key Words: mapping; Kriging; variation function; Zimbabwe; geochemical map

Mineral Resources Evaluation of Comprehensive Information by Weights of Evidence Method in North Daxinganling Area

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Abstract: The weights of evidence model is an important method for the metallogenetic prognosis. It is a statistical method of geoscience based on two valued image. The metallogenetic prognosis based on GIS using the weights of evidence model can be done through overlaying the informations of geoscience related with the mineral resources. The metallogenetic prognosis based on GIS using the weights of evidence model is based on the data, and realized easily. Using datum in North Daxinganling, weights of evidence prediction model of gold show preferred precision for predicting minerals resources. Information to create new preferable compositive variables was integrated using the ARCGIS system.

Key words: GIS; weight of evidencemethod; metallogenetic prediction; evidence layer

更正

本人及合作者在本刊2012年第2期发表的《华北克拉通南缘洛峪群—汝阳群属于中元古界长城系—河南汝州洛峪口组层凝灰岩锆石LA-MC-ICPMS U-Pb年龄的直接约束》一文中,由于我们的测年材料为左景勋等(1997)文章所报道汝州阳坡村附近洛峪口组内的夹层状层凝灰岩,并误以为我们所观察剖面就是他们文章报道的“阳坡剖面”,因此在拙文中直接引用了他们的剖面图,并根据我们的观察和区域资料,将其上覆层位的时代归属由原来的“寒武系”修改为“震旦系”。最近,经与左景勋先生交流并再次观察后确认,我们这一修改其实有欠妥之处。实际上,拙文所报道的测年剖面是近年新开劈的通往阳坡村的乡村公路,位于左景勋等(1997)“阳坡剖面”的东侧。虽然两者相隔不足千米且完全平行,但由于两条剖面的起点及终点位置毕竟不同等原因,拙文的剖面顶部及附近地层为“震旦系”,与左景勋等(1997)所报道“寒武系”应有所不同。特此更正并向左先生及其合作者、向广大读者以及《地质调查与研究》编辑部致歉!

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