

## A New Chronostratigraphic Subdivision of Cambrian for China

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A newly proposed Cambrian Chronostratigraphy for South China with 4 series and 8 stages defined by boundary stratotypes has been accepted by AllChina Committee on Stratigraphy at its 3rd National Congress recently. Standing side by side with the existing North China chronostratigraphy for Cambrian, it will appear on the revised Chronostratigraphic Chart of China, the official chart of the Committee, which will be published in the Stratigraphic Guide of China and Its Explanation (newly edited by the All-China Committee on Stratigraphy).

The chronostratigraphic subdivision of Cambrian in South China, proposed by Peng *et al.* (1998, 1999, 2000a, b) and Peng (2000), is shown in Figure 1. The stage correlation between South and North (plus East Yunnan) China is shown in Figure 2. The South China chronostratigraphy is suggested by Peng *et al.*, 2000a) as the standard of China.

The lower boundaries of Jinning and Meishucunian (in the narrow sense) Stages are based on Meishucun section in eastern Yunnan, those of the Nangaoan, Duyunian, and Taijiangian stages on sections in eastern Guizhou, and those of the Wangcunian, Youshuian, Waergangian, and Taoyuanian Stages on sections in western Hunan. The lower boundary for most of stages are international tie-point being widely correlated.

### References.

Peng, S., Zhou, Z. and Lin, T., 1998. Late Middle-Late Upper Cambrian chronostratigraphy of China. p. 20 In Ahlberg, P, Eriksson M., and Olsson, I. (eds), Abstract for *the IV Field*

Figure 1. CAMBRIAN SUBDIVISION OF SOUTH CHINA

Series	Stage	ZONES INCLUDED	Age (Ma)		
HUNANIAN	TAOYUANIAN	FAD of <i>Iapetognathus fluctivagus</i>	490		
		<i>Leiostracina constrictum</i> - <i>Shenjiawania brevicornis</i> Zone			
		<i>Mictosaukia striata</i> - <i>Fatocephalus</i> Zone			
		<i>Achaetuloma taoyuanense</i> - <i>Leiagnostus</i> cf. <i>bexelli</i> Zone			
		<i>Lotagnostus punctuosus</i> - <i>Hedinaspis regalis</i> Zone			
		<i>Probinacunaspis nasalis</i> - <i>Peichiaspina hunanensis</i> Zone			
		<i>Eolotagnostus decorus</i> - <i>Kaolishaniella</i> Zone			
		<i>Rhaptagnostus ciliensis</i> - <i>Onchonotellus</i> cf. <i>kuruktagnensis</i> Zone			
		<i>Agnostotes clavata</i> - <i>Irvingella angustilimbata</i> Zone			
		FAD of <i>I. angustilimbata</i>			
HUNANIAN	WAERGANIAN	<i>Corynexochus plumula</i> - <i>Sinoproceratopyge</i> cf. <i>kiangshanensis</i> Zone	500		
		<i>Innitagnostus inexpertans</i> - <i>Proceratopyge protracta</i> Zone			
		<i>Glyptagnostus reticulatus</i> Zone			
WULINGIAN	YOSHUIAN	FAD of <i>G. reticulatus</i>	510		
		<i>Glyptagnostus stolidotus</i> Zone			
	<i>Linguagnostus reconditus</i> Zone				
	WANGCUNIAN	TALIANGIAN		FAD of <i>L. reconditus</i>	519
				<i>Proagnostus bulbosus</i> Zone	
				<i>Lejopyge laevigata</i> Zone	
				<i>Goniagnostus nathorsti</i> Zone	
	DIANDONGIAN	DUYUNIAN		<i>Ptychagnostus punctuosus</i> Zone	543
				FAD of <i>P. punctuosus</i>	
				<i>Ptychagnostus atavus</i> Zone	
<i>(Ptychagnostus gibbus)</i> Zone					
DIANDONGIAN	NANGAOAN	<i>Oryctocephalus indicus</i> Zone	510		
		FAD of <i>O. indicus</i>			
		<i>Bathynotus</i> Zone			
		<i>Protoryctocephalus</i> Zone			
DIANDONGIAN	MEISHUCUNIAN	<i>Arthricocephalites</i> - <i>Changaspis</i> Zone	519		
		<i>Arthricocephalus</i> Zone			
		FAD of <i>A. duyunensis</i>			
		<i>Sichuanolenus</i> - <i>Chengkouia</i> Zone			
DIANDONGIAN	JINNINGIAN	<i>Hupediscus</i> - <i>Sinodiscus</i> Zone	519		
		FAD of trilobite			
		<i>Sinosachites</i> - <i>Lapworthella</i> Zone			
		<i>Paragloborilus</i> - <i>Siphonocheloniceras</i> Zone			
DIANDONGIAN	JINNINGIAN	FAD of <i>P. subglobus</i>	519		
		<i>Annabites</i> - <i>Circotheca</i> Zone			
		FAD of <i>Tricophycus pedum</i>	543		

Figure 1. Cambrian Subdivision of South China

SOUTH CHINA		NORTH CHINA	
HUNANIAN	TAOYUANIAN	U. CAMBRIAN	FENGSHANIAN
	WAERGANGIAN		CHANGSHANIAN
WULINGIAN	YOUSHUAN		KUSHANIAN
	WANGCUNIAN	M. CAMBRIAN	CHANGHSIAN
	TAIJIANGIAN		HSUCHUANGIAN
			MAOCHUANGIAN
QIANGDONGIAN	DUYUNIAN	LOWER CAMBRIAN	LUNGWANGMIAOAN
	NANGAOAN		TSANGLANGPUAN
DIANGDONGIAN	MEISHUCUNIAN		CHIUNGCHUSSUAN
	JINNINGIAN	MEISHUCUNIAN	

Figure 2. Cambrian Chronostratigraphic correlation between South and North China Stratigraphic Provinces

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Peng, S., Zhou, Z. and Lin, T., 1999. A proposal of the Cambrian chronostratigraphic scale in China. *Geoscience*, 13 (2): 242.

Peng, S., Zhou, Z., Lin, T. and Yuan J., 2000. Cambrian chronostratigraphy research: present and tendency. *Journal of Stratigraphy*, 24 (1) 8-17 (in Chinese with English abstract).

Peng, S., Yuan, J. and Zhao, Y. 2000. Taijiangian Stage: a new chronostratigraphical Unit for the traditional lower Middle Cambrian in South China. *Journal of Stratigraphy*, 24 (1) 53-54 (in Chinese with English abstract).

Peng, S., 2000. Cambrian of Slope facies. p. 23-38 in Nanjing Institute of Geology and Palaeontology, the Chinese Academy of Sciences (ed.), *Stratigraphical Studies in China (1979-1999)*, China University of Technology and Sciences, Hefei (in Chinese).