

# INTERNATIONAL STRATIGRAPHIC CHART

## International Union of Geological Sciences



Commission de la Carte Geologique  
du Monde  
Commission on the Geological Map  
of the World

International Commission on Stratigraphy

<http://www.micropress.org/stratigraphy/>



As Modified by **USGS**  
science for a changing world

EONOTHEM EON	ERATHEM ERA	SYSTEM PERIOD	SERIES EPOCH	STAGE AGE	Ma	AGE SERIES +/- (Ma) (GSSP)	STAGE NOTATION	SERIES NOTATION	SYSTEM NOTATION
PHANEROZOIC	CENOZOIC	Quaternary	HOLOCENE		0.01			Q	Q
			PLEISTOCENE	Calabrian	1.81	GSSP	19	Q	Q
				Gelasian	2.58	GSSP	18	N <sub>2</sub>	N
		PLIOCENE	Zanclean	3.60	GSSP	17			
			Messinian	5.32	GSSP	16			
			Tortonian	7.12	GSSP	15			
		MIOCENE	Serravallian	11.2		14	N <sub>1</sub>	N	
			Langhian	14.3		13			
			Burdigalian	16.4		12			
			Aquitanian	20.5		11			
			Chattian	23.8	GSSP	10			
		OLIGOCENE	Rupelian	28.5	GSSP	9	E <sub>3</sub>	E	
			Priabonian	33.7	GSSP	8			
		EOCENE	Bartonian	37.0		7	E <sub>2</sub>		
			Luettician	41.3		6	E <sub>1</sub>		
			Ypresian	49.0		5			
		PALEOCENE	Thanetian	55.0		4	E <sub>1</sub>		
			Selandian	57.9		3	E <sub>1</sub>		
			Danian	61.0		2	E <sub>1</sub>		
	Maastrichtian		65.5	GSSP	1	K <sub>2</sub>	K		
	CRETACEOUS	UPPER/LATE	Campanian	71.3	GSSP	6		K <sub>2</sub>	
			Santonian	83.5		5	K <sub>2</sub>		
			Comacian	88.8		4	K <sub>2</sub>		
			Turonian	89.0		3	K <sub>2</sub>		
			Cenomanian	93.5		2	K <sub>1</sub>		
		LOWER/EARLY	Albian	98.9	GSSP	1	K <sub>1</sub>		
			Aptian	112.2		6	K <sub>1</sub>		
			Barremian	121.0		5	K <sub>1</sub>		
			Hauterivian	127.0		4	K <sub>1</sub>		
			Valanginian	132.0		3	K <sub>1</sub>		
	JURASSIC	UPPER/LATE	Berriasian	136.5		2	J <sub>3</sub>	J	
			Tithonian	142.0		1	J <sub>3</sub>		
		MIDDLE	Kimmeridgian	150.7		6	J <sub>2</sub>		
			Oxfordian	154.1		5	J <sub>2</sub>		
			Callovian	159.4		4	J <sub>2</sub>		
			Bathonian	164.4		3	J <sub>2</sub>		
			Bajocian	169.2		2	J <sub>2</sub>		
		LOWER/EARLY	Aalenian	176.5	GSSP	1	J <sub>1</sub>		
			Toarcian	180.1	GSSP	6	J <sub>1</sub>		
			Phoenician	189.6		5	J <sub>1</sub>		
			Shinarumpian	195.3		4	J <sub>1</sub>		
	TRIASSIC	UPPER/LATE	Hettangian	201.9	GSSP	3	T <sub>3</sub>	T	
			Rhaetian	205.1		2	T <sub>3</sub>		
		MIDDLE	Norian	209.6		4	T <sub>2</sub>		
			Carnian	220.7		5	T <sub>2</sub>		
			Ladinian	227.4		6	T <sub>2</sub>		
		LOWER/EARLY	Anisian	234.3		7	T <sub>1</sub>		
Olenekian			241.7		8	T <sub>1</sub>			
Induan			244.8		9	T <sub>1</sub>			
				250	4.8	GSSP			

EONOTHEM EON	ERATHEM ERA	SYSTEM PERIOD	SERIES EPOCH	STAGE AGE	Ma	AGE SERIES +/- (Ma) (GSSP)	STAGE NOTATION	SERIES NOTATION	SYSTEM NOTATION		
										Ma	AGE SERIES +/- (Ma) (GSSP)
PHANEROZOIC	PALEOZOIC	PERMIAN	LOPINGIAN	Changhsingian	251.4		p <sub>9</sub>	P <sub>3</sub>	P		
				Wuchiapingian	253.4		p <sub>8</sub>				
			GUADALUPIAN	Capitanian	265	GSSP	p <sub>7</sub>	P <sub>2</sub>			
				Wordian		GSSP	p <sub>6</sub>				
				Roadian		GSSP	p <sub>5</sub>				
			CISURALIAN	Kungurian			p <sub>4</sub>	P <sub>1</sub>			
				Artinskian	283		p <sub>3</sub>				
				Sakmarian			p <sub>2</sub>				
				Asselian			p <sub>1</sub>				
		CARBONIFEROUS	PENNSYLVANIAN	Gzhelian	292	GSSP	c <sub>7</sub>	C <sub>2</sub>			
				Kaczmovian			c <sub>6</sub>				
				Moscovian			c <sub>5</sub>				
			Bashkirian				c <sub>4</sub>	C			
				Serpukhovian	320	GSSP	c <sub>3</sub>				
			MISSISSIPPIAN	Viséan	327		c <sub>2</sub>	C <sub>1</sub>			
				Toornaisian	342		c <sub>1</sub>				
				DEVONIAN	UPPER/LATE	Famennian	354		GSSP	d <sub>7</sub>	D <sub>3</sub>
						Frasnian	364		GSSP	d <sub>6</sub>	
		MIDDLE	Givetian		370	GSSP	d <sub>5</sub>	D <sub>2</sub>			
	Eifelian		380	GSSP	d <sub>4</sub>						
	LOWER/EARLY	Emsian		391	GSSP	d <sub>3</sub>	D <sub>1</sub>				
			Pragian	400	GSSP	d <sub>2</sub>					
		Lochkovian	412	GSSP	d <sub>1</sub>						
	SILURIAN	PRIDOLI	417		s <sub>6</sub>	S					
		LUDLOW	Ludfordian	419	GSSP		s <sub>7</sub>				
			Gorstian	423	GSSP		s <sub>8</sub>				
		WENLOCK	Homertian	423	GSSP		s <sub>4</sub>				
			Sheinwoodian	428	GSSP		s <sub>5</sub>				
		LLANDOVERY	Telychian	428	GSSP		s <sub>3</sub>				
			Aeronian	440	GSSP		s <sub>2</sub>				
			Rhuddanian	440	GSSP		s <sub>1</sub>				
		ORDOVICIAN	UPPER/LATE	"sixth stage"				O <sub>3</sub>			
	"fifth stage"										
	MIDDLE		Darriwillian	467.5	GSSP	O <sub>2</sub>	O				
		"third stage"			O <sub>2</sub>						
	LOWER/EARLY	Tremadocian	495	GSSP	O <sub>1</sub>						
		CAMBRIAN	UPPER/LATE		500		E <sub>3</sub>	Є			
	MIDDLE				520		E <sub>2</sub>				
	LOWER/EARLY			545		E <sub>1</sub>					
	PRECAMBRIAN	PROTEROZOIC	NEOPROTEROZOIC	NEOPROTEROZOIC III		540		NP <sub>3</sub>	NP		
					CRYOGENIAN	650	GSSA	NP <sub>2</sub>			
					TONIAN	850	GSSA	NP <sub>1</sub>			
			MESOPROTEROZOIC	STENIAN		1000		MP <sub>3</sub>	MP		
					ECTASIAN	1200	GSSA	MP <sub>2</sub>			
					CALYMMIAN	1400	GSSA	MP <sub>1</sub>			
			PALEOPROTEROZOIC	OROSIRIAN		1600	GSSA	PP <sub>4</sub>	PP		
						1800	GSSA	PP <sub>3</sub>			
RHAYACIAN					2050	GSSA	PP <sub>2</sub>				
		SIDERIAN		2300	GSSA	PP <sub>1</sub>					
ARCHEAN		NEOARCHEAN		2500		NA	EA				
				2800		MA					
		MESOARCHEAN		3200		PA					
			PALEOARCHEAN								
		EOARCHEAN		3600							