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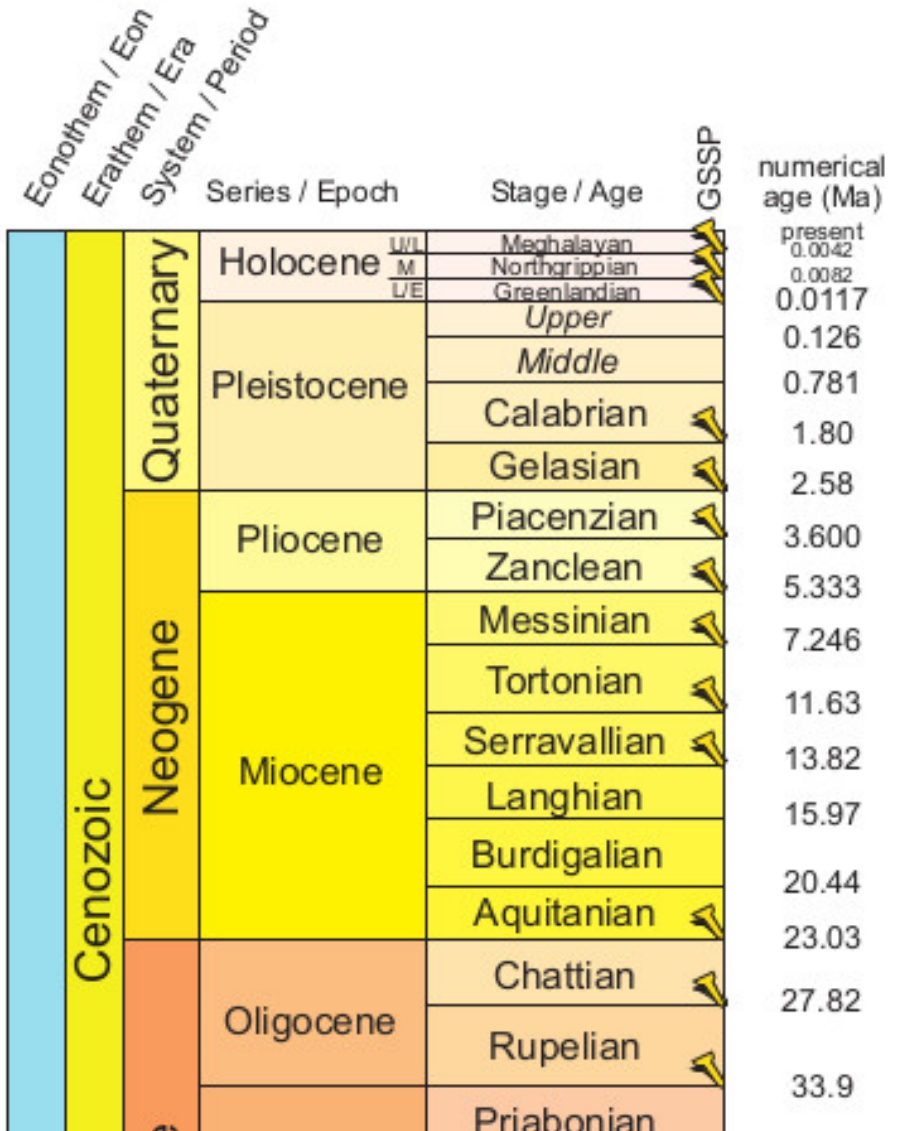
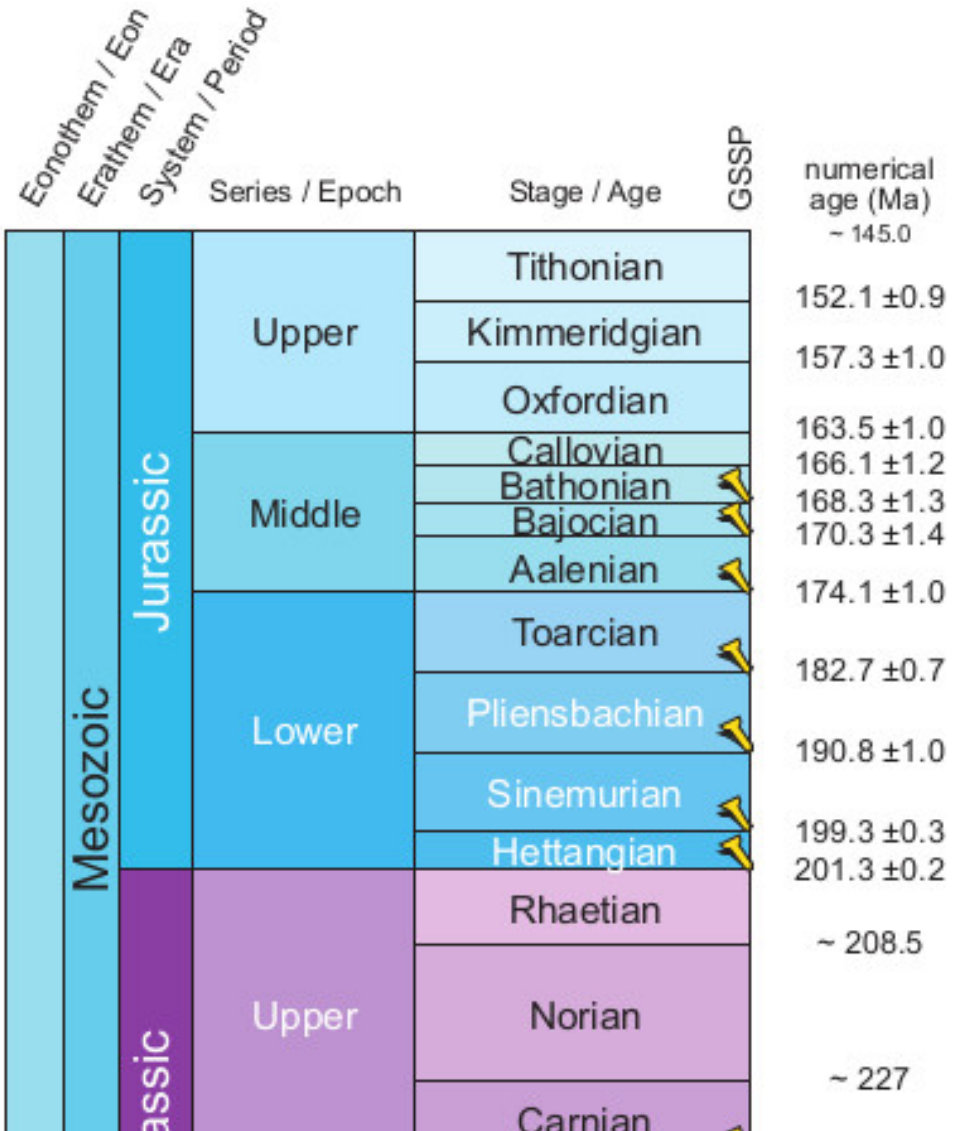
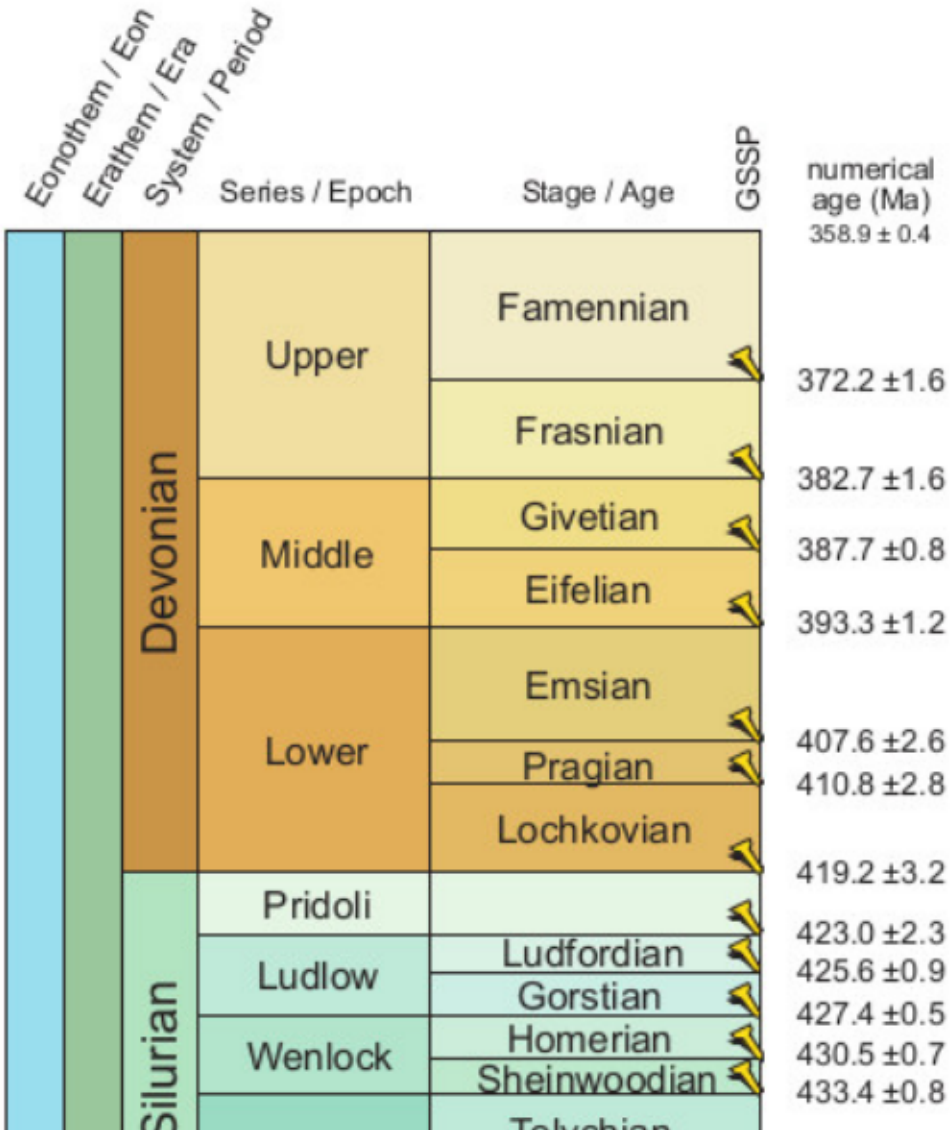
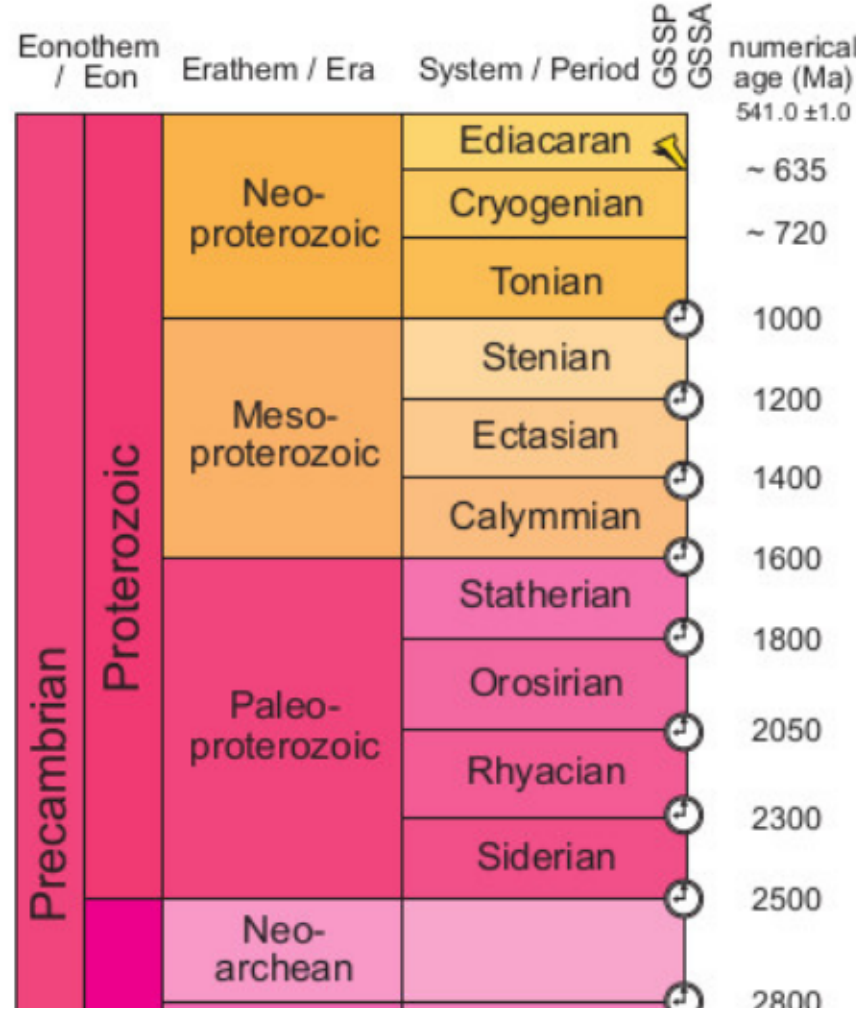


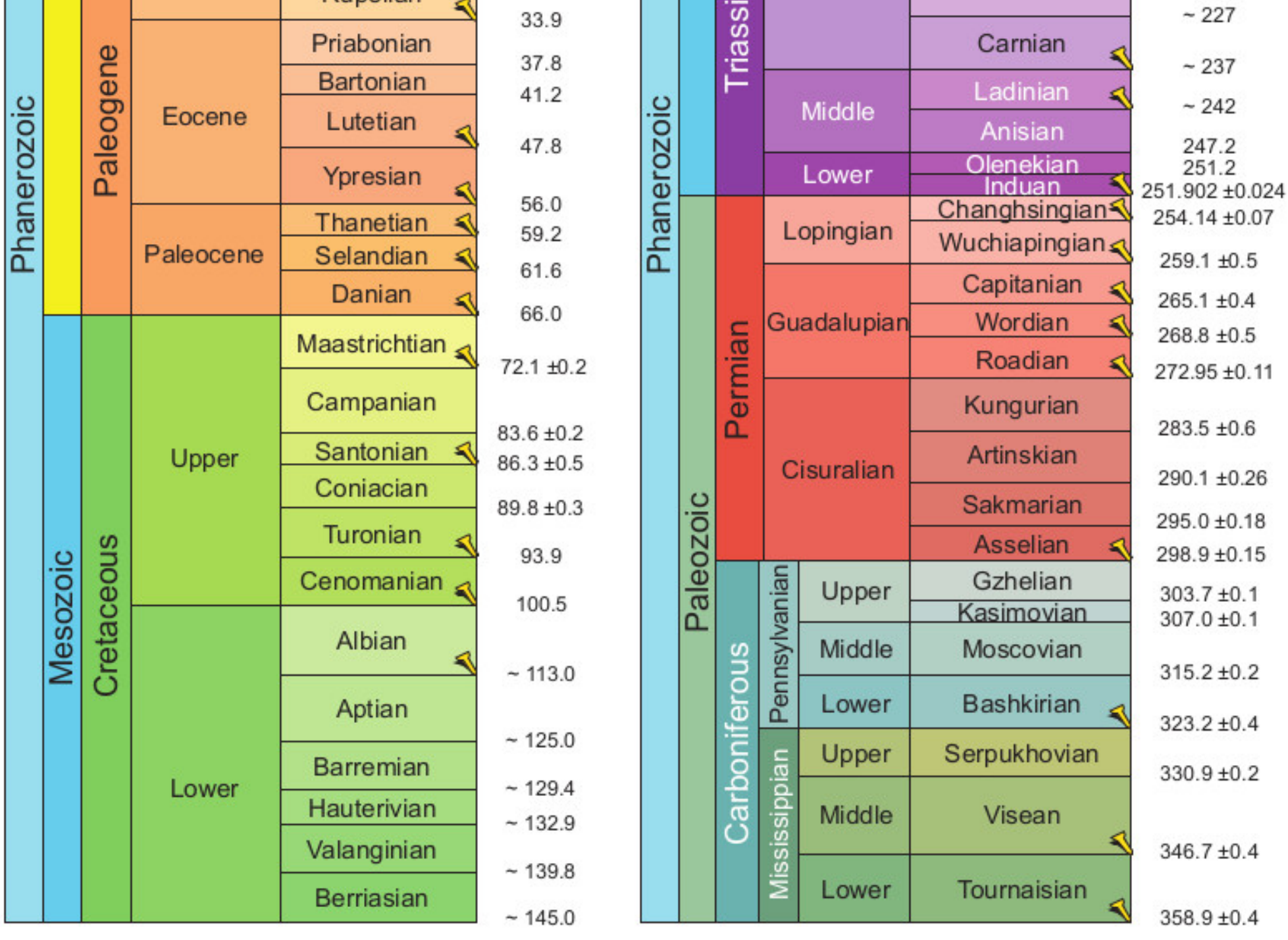


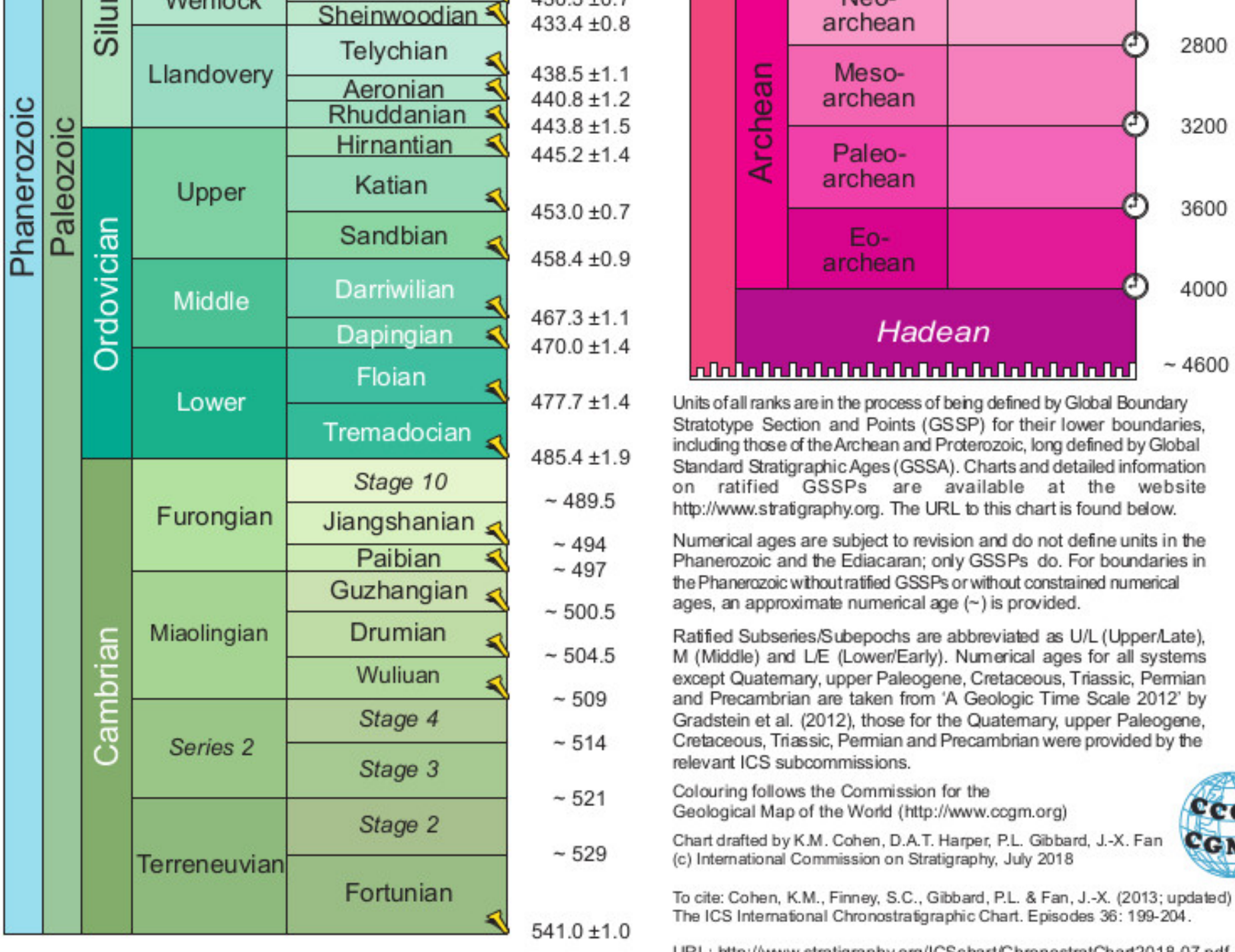
OSTRATIGRAPHIC CHART

al Commission on Stratigraphy v 2018/07






Phanerozoic
Paleogene
Eocene
Priabonian
33.9
Bartonian
37.8
Lutetian
41.2
Ypresian
47.8
Paleocene
Thanetian
56.0
Selandian
59.2
Danian
61.6
66.0
Mesozoic
Cretaceous
Upper
Maastrichtian
72.1 ±0.2
Campanian
Santonian
83.6 ±0.2
Coniacian
86.3 ±0.5
Turonian
89.8 ±0.3
Cenomanian
93.9
Lower
Albian
100.5
Aptian
~ 113.0
Barremian
~ 125.0
Hauterivian
~ 129.4
Valanginian
~ 132.9
Berriasian
~ 139.8
~ 145.0
Phanerozoic
Triassic
Middle
Carnian
~ 227
Ladinian
~ 237
Anisian
~ 242
Lower
Olenekian
247.2
Induan
251.2
251.902 ±0.024
Paleozoic
Permian
Lopingian
Changhsingian
254.14 ±0.07
Wuchiapingian
259.1 ±0.5
Guadalupian
Capitanian
265.1 ±0.4
Wordian
268.8 ±0.5
Roadian
272.95 ±0.11
Cisuralian
Kungurian
283.5 ±0.6
Artinskian
290.1 ±0.26
Sakmarian
295.0 ±0.18
Asselian
298.9 ±0.15
Carboniferous
Pennsylvanian
Upper
Gzhelian
303.7 ±0.1
Kasimovian
307.0 ±0.1
Middle
Moscovian
315.2 ±0.2
Lower
Bashkirian
323.2 ±0.4
Mississippian
Upper
Serpukhovian
330.9 ±0.2
Middle
Visean
346.7 ±0.4
Lower
Tournaisian
358.9 ±0.4



Units of all ranks are in the process of being defined by Global Boundary Stratotype Section and Points (GSSP) for their lower boundaries, including those of the Archean and Proterozoic, long defined by Global Standard Stratigraphic Ages (GSSA). Charts and detailed information on ratified GSSPs are available at the website http://www.stratigraphy.org. The URL to this chart is found below.

Numerical ages are subject to revision and do not define units in the Phanerozoic and the Ediacaran; only GSSPs do. For boundaries in the Phanerozoic without ratified GSSPs or without constrained numerical ages, an approximate numerical age (~) is provided.

Ratified Subseries/Subepochs are abbreviated as U/L (Upper/Late), M (Middle) and L/E (Lower/Early). Numerical ages for all systems except Quaternary, upper Paleogene, Cretaceous, Triassic, Permian and Precambrian are taken from 'A Geologic Time Scale 2012' by Gradstein et al. (2012), those for the Quaternary, upper Paleogene, Cretaceous, Triassic, Permian and Precambrian were provided by the relevant ICS subcommissions.

Colouring follows the Commission for the Geological Map of the World (http://www.ccgm.org)

Chart drafted by K.M. Cohen, D.A.T. Harper, P.L. Gibbard, J.-X. Fan

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URL: http://www.stratigraphy.org/ICSchart/ChronostratChart2018-07.pdf