

# NORTH AMERICAN COMMISSION ON STRATIGRAPHIC NOMENCLATURE

## Report 14 – Revision of Articles 73, 81, 82 and Table 2 of the North American Stratigraphic Code to Formalize Subseries and Subepochs

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At the 75th Annual Meeting of the North American Commission on Stratigraphic Nomenclature, 22 October, 2020, in connection with GSA 2020 Connects Online, the Commission voted unanimously to accept the revision of Articles 73, 81 and 82 of the North American Stratigraphic Code (North American Commission on Stratigraphic Nomenclature, 2005 with subsequent updates), and concomitant changes to Table 2; specific revisions of the Code are indicated in red color. These replace all older versions of the specified Articles. An application for this revision (Aubry et al. 2019) was published in *Stratigraphy* more than one year prior to the meeting; thus, the vote on this application for revision follows Article 21 of the Code.

This revision explicitly recognizes subseries and subepochs as integral parts of formal chronostratigraphic and geochronologic nomenclature, respectively.

Article 73. — **Series.** Series is a conventional chronostratigraphic unit that ranks below a system and always is a division of a system. A series commonly constitutes a major unit of chronostratigraphic correlation within a province, between provinces, or between continents. Although many European series are being adopted increasingly for dividing systems on other continents, provincial series of regional scope continue to be useful. The temporal equivalent of a series is an *epoch*.

**Remark.** (a) **Subseries.** -Series may be, but need not be, divided completely into subseries. A series may comprise two subseries (using the capitalized adjectives Lower and Upper) or three subseries (using the capitalized adjectives Lower, Middle, and

Upper); a subseries may comprise one or several stages. The temporal equivalent of a subseries is a *subepoch*.

Article 81. — **Hierarchy.** The hierarchy of geochronologic units in order of decreasing rank is *eon, era, period, epoch, and age*. Intermediate ranks *superperiod, subperiod, subepoch, and subage* may be recognized and formalized. Chron is a non-hierarchical, but commonly brief, geochronologic unit. Ages in sum do not necessarily equal epochs and **subepochs** and need not form a continuum. An eon is the time represented by the rocks constituting an eonothem; era by an erathem; period by a system; epoch by a series; age by a stage; and chron by a chronozone.

Article 82. — **Nomenclature.** Names for periods and units of lower rank are identical with those of the corresponding chronostratigraphic units; the names of some eras and eons are independently formed. Rules of capitalization for chronostratigraphic units (Article 77) apply to geochronologic units. The adjectives Early, Middle, and Late are used for the geochronologic epochs and **subepochs where appropriate**, equivalent, **respectively**, to the corresponding chronostratigraphic Lower, Middle, and Upper series and **subseries**, where these are formally established.

### ACKNOWLEDGMENTS

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TABLE

Replacement for Table 2, page 1562, reflecting the insertion of Subseries between the ranks of Series and Stage, and Subepoch between the ranks of Epoch and Age (this report). The replacement Table also reflects the insertion of Submember between the ranks of Member and Bed (Brett et al. 2019).

Table 2. Categories and Ranks of Units Defined in This Code\*

I. MATERIAL CATEGORIES BASED ON CONTENT OR PHYSICAL LIMITS

LITHOSTRATIGRAPHIC	LITHODEMIC	MAGNETOPOLARITY	BIOSTRATIGRAPHIC	PEDOSTRATIGRAPHIC	ALLOSTRATIGRAPHIC
Supergroup	Supersuite	Polarity Superzone	Biozone (Interval, Assemblage or Abundance)	Geosol	Allogroup
Group	Suite				
<i>Formation</i>	<i>Lithodeme</i>	<i>Polarity Zone</i>	Subbiozone		<i>Alloformation</i>
Member (or Lens, or Tongue)		Polarity Subzone			Allomember
Submember					
Bed(s) or Flow(s)					

IIA. MATERIAL CATEGORIES USED TO DEFINE TEMPORAL SPANS

CHRONO-STRATIGRAPHIC	POLARITY CHRONO-STRATIGRAPHIC
Eonothem	Polarity Superchronozone
Erathem (Supersystem)	
<i>System (Subsystem)</i>	<i>Polarity Chronozone</i>
Series (Subseries)	
Stage (Substage)	Polarity Subchronozone
Chronozone	

IIB. NON-MATERIAL CATEGORIES RELATED TO GEOLOGIC AGE

GEOCHRONOLOGIC	POLARITY CHRONOLOGIC	DIACHRONIC	GEOCHRONOMETRIC
Eon	Polarity Superchron		Eon
Era (Superperiod)			Era (Superperiod)
<i>Period (Subperiod)</i>	<i>Polarity Chron</i>	<i>Episode</i>	<i>Period (Subperiod)</i>
Epoch (Subepoch)		Phase	Epoch (Subepoch)
Age (Subage)	Polarity Subchron	Span	Age (Subage)
Chron		Cline	Chron

\*Fundamental units are italicized.

REFERENCES

AUBRY, M.-P., FLUEGEMAN, R. H., EDWARDS, L., PRATT, B. R. and BRETT, C. E., 2019. NORTH AMERICAN COMMISSION ON STRATIGRAPHIC NOMENCLATURE. Note 69 - Application for Addition of Subseries/Subepochs to the North American Stratigraphic Code. *Stratigraphy*, 15(4): 261–263.

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