



Cyclostratigraphy Newsletter, Nov 2024

Hello and welcome to Cyclostratigraphy Newsletter number 12,

This newsletter includes several requests to participate in cyclostratigraphic initiatives, as well as news on research opportunities, conferences and publications. You are very much invited to get in touch if you have news, publications, job opportunities or events that you would like to see included in the next newsletter. Best wishes,

Sietske Batenburg, s.j.batenburg@uu.nl

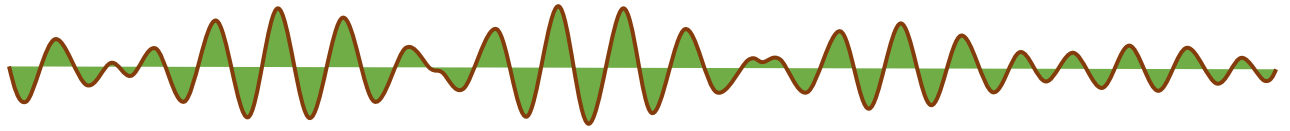
1.1 Cyclostratigraphy Intercomparison Project 2 workshop

Fig. 1: Group picture of the 2024 CIP2 workshop participants in the Belgian Royal Academy of Sciences.



The Cyclostratigraphy Intercomparison Project aims to investigate and quantify reproducibility of, and uncertainties related to, cyclostratigraphic studies and to provide a platform to discuss the merits and pitfalls of different methodologies, and their applicability.

After a successful first CIP workshop in 2018 ([Sinnesael et al., 2019](#)), a second in-person workshop was organised at the Belgian Royal Academy of Sciences in Brussels, 8-10 July 2024. The group consisted of about 30 participants representing over 20 institutions from over 10 different countries. Participants were asked to analyse cyclostratigraphic data before the workshop. The compiled results were presented and discussed during the workshop, as well as a series of state-of-the-art keynote lectures and topical debates. We thank IAS, the Science Foundation Flanders (FWO), Le Fonds de la Recherche Scientifique (FNRS) and the International Commission of Stratigraphy for support.



1.2 Cyclonet meeting

A new meeting will be organised through the [Cyclonet](#) European Cyclostratigraphy Network, in Utrecht, the Netherlands. The meeting will have workshops and seminars during two days, followed by a field excursion to the Belgian Ardennes. The exact dates have to be decided soon, please indicate your preferences [here](#) if you are interested in joining.



1.3 Special issue

From discussions at the workshop, the need for a special issue arose, which will be spearheaded by Nina Wichern:

Dear cyclostratigraphy community,

During last summer's 2024 CIP 2.0 workshop, an idea was proposed to publish a special issue on non-conventional cyclostratigraphic studies and results. It was initially pitched as a 'negative results' issue to normalise the publication of records that don't contain a clear astronomical signal, but we would like to broaden it to encompass a range of studies, such as:

- records where an astronomical signal is only recorded by certain proxies
- records where non-alloccyclic processes obscure/interact with the astronomical signal
- records where diagenesis obscures/interacts with the astronomical signal
- records where the astronomical signal behaves in an unexpected way for any other reason
- studies where a range of different cyclostratigraphic interpretations are given
- etc...

As there seems to be a continued interest for such a special publication, I would like to gather ideas for potential manuscripts that could be included in this special publication. If you are interested in submitting a manuscript, please send me the following before the end of January: **Author(s), preliminary title, brief description on why this study would fit the theme.**

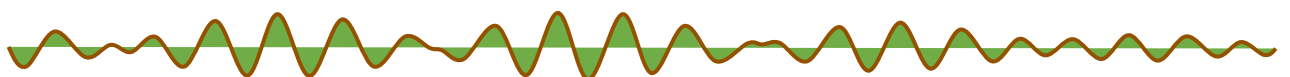
Other suggestions are also more than welcome, including:

- potential journals to approach
- a good overarching title; 'negative/non-conventional results in cyclostratigraphy' is not the most enticing way to phrase this, probably.

I look forward to hearing from all of you! Also feel free to contact me regarding any questions.

All the best,

Nina Wichern (Münster, Germany)
nwichern@uni-muenster.de





1.4 Aptian Time Scale initiative

At the meeting, Mathieu Martinez suggested to join forces to address the Aptian time scale:

Dear colleagues,

The timescale of the Aptian Stage is a hot topic of debate. Over the last years very diverging timescales have been published, coming to a point that the cyclostratigraphic community has been [criticized](#).

After the Cyclostratigraphy Intercomparison Project 2.0 workshop in Brussels (July 2024) the suggestion was made to join forces as a community to try to address this problem. Also stratigraphic expert from other disciplines, like biostratigraphy or chemostratigraphy, with experience with the Aptian context are invited to join this initiative.

If you are interested to work on the Aptian case, could you please contact me by December 31th? When you contact me, I'll share with you a link with the folder containing the raw data and figures showing the correlations based primarily on biostratigraphy and secondarily on chemostratigraphy. The reason for this is I find that the carbon isotope stages of the Aptian seem to be differently defined from one section to another. Especially in the early Aptian, I find the biostratigraphy more reliable for correlations.

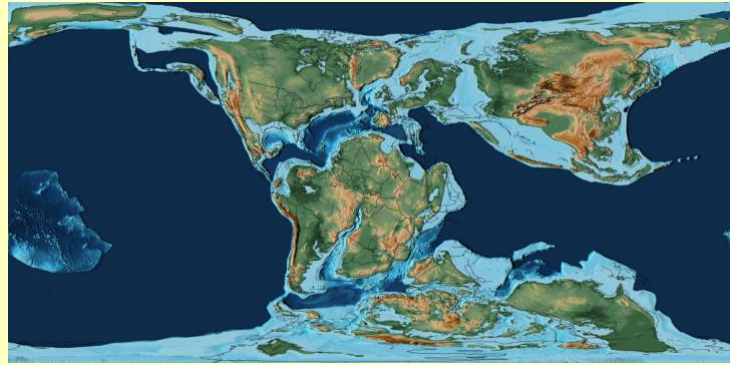


Fig. 2: Map of the early Aptian, 121.8 Ma (Scotese, 2013)

The expected output would be total duration estimates, as well as depth-age models for the various sections and cores studied (i.e. locations of the boundaries of the 405-kyr eccentricity cycles whatever they are based on minima or maxima of the signals considered).

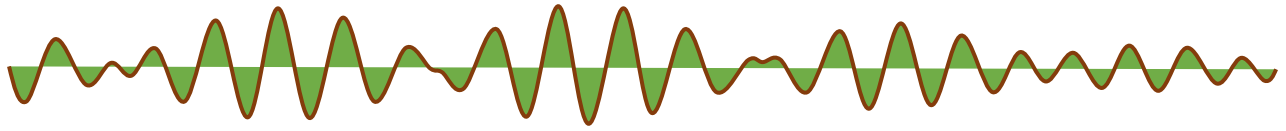
If you decide to work on the case study, I suggest we meet in January to share our interpretations of timescales. You can decide to work on the whole Aptian or on one or two of the following intervals: (1) the Barremian-Aptian transition, (2) the OAE1a interval, (3) post-OAE1a. At this occasion, we will see if we obtain converging timescales for those intervals or if diverging opinions exist. If the meeting does not solve the divergences, I suggest we meet a second time in February.

When we converge, I suggest we write a synthesis manuscript that would gather, in addition to us, other stratigraphers specialists in the Aptian that we would identify during the meetings who would contribute in biostratigraphy, chemostratigraphy or sequence stratigraphy. I'm happy to welcome other specialties.

Could you please tell me by 31 December if you want to work on this case?

All the best,

Mathieu Martinez (mathieu.martinez@univ-rennes.fr)



2. Hilgen-Milankovitch Symposium



On Friday 22 November, a symposium was held in honour of the retirement of Frits Hilgen at Utrecht University, the Netherlands. Several former and current PhD students of Frits discussed their shared research experiences, spanning from the Mediterranean Neogene to the continental Cenozoic and all the way back into the Precambrian. The symposium was concluded with a well-attended talk by Frits on “40 years of Milankovitch, a personal story and a way of life” followed by food, drinks and dancing.

Fig 3. Frits Hilgen at the symposium, foto by H. Abels

3. Conferences and workshops

“Towards a process-based understanding of the Mediterranean Neogene”

is an [interim colloquium](#) organised by the Regional Committee on Mediterranean Neogene Stratigraphy in honour of the retirement of Frits Hilgen. The meeting will be in Catania, Italy from 29 Sep. to 4 Oct. 2025, including a two-day excursion to key sites on Sicily.



A message from the organisers:

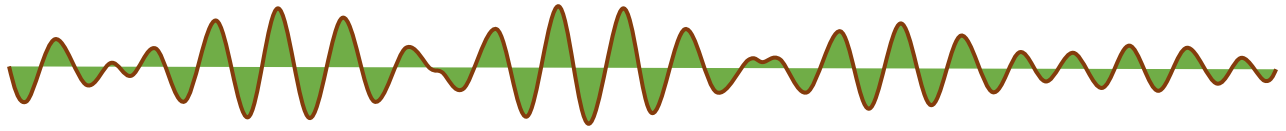
Dear Colleagues,

We are very happy to announce the RCMNS interim colloquium – “Towards a process-based understanding of the Mediterranean Neogene”, which will be organized between September 29th - October 4th 2025 in honor of the retirement of Frits Hilgen at the University of Catania by Agata Di Stefano and her colleagues with help of Isabella Raffi (SNS) and Fabrizio Lirer (Rome, La Sapienza). It will include a three-day conference and a two-day excursion (lead by Frits himself and Antonio Caruso).

Preliminary details on the scientific meeting are reported in the attached [form](#) that anyone interested to attend can compile and send to Isabella Raffi (isabella.raffi@unich.it). This announcement will be followed by the 1st circular with more details on the meeting.

Wout Krijgsman (University of Utrecht; RCMNS)
Agata di Stefano (University of Catania; RCMNS)
Fabrizio Lirer (University "La Sapienza" of Rome; RCMNS)
Isabella Raffi (SNS)





AGU24

Washington, D.C. | 9–13 December 2024

[AGU24](#), the annual meeting of the American Geophysical Union, will take place on 9–13 December in Washington, D.C., USA. There will be a [poster](#) and an [oral](#) session on Astronomical Forcing of Earth's Paleoclimate System. [Registration](#) is open.

The [EGU General Assembly 2025](#) will be from 27 April to 2 May 2025 in Vienna, Austria, and features a [session](#) on “Orbital forcing of global and regional events throughout Earth history”. [Abstract submission](#) is open until 15 January.



The International Association of Sedimentologists (IAS) will hold the [38th International Meeting of Sedimentology](#) in Huelva, Spain, from 26th - 28th June 2025. Early-bird [registration](#) runs until 16th April 2025.

The Asia Oceania Geosciences Society organises [AOGS 2025](#) from 27 July – 1 August 2025 in Singapore. Once the program is finalised, abstracts can be submitted until 18 February 2025.

AOGS2025 22nd Annual Meeting
27 Jul - 1 Aug 2025
Sands Expo & Convention Centre, Marina Bay Sands Singapore

12th International Cretaceous Symposium

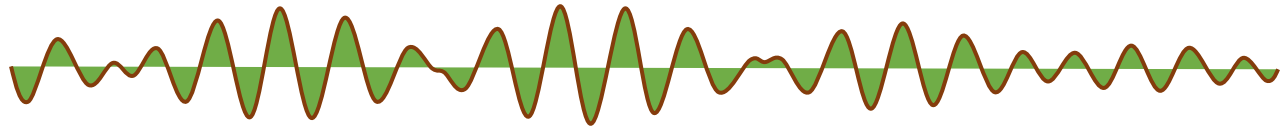
31 August – 5 September 2025

Leibniz University Hannover | Germany

The [12th International Cretaceous Symposium](#) will take place from 31 August to 5 September 2025 in Hannover, Germany. The session programme is being finalised.

The Geological Society of America [Connects 2025](#) meeting is scheduled for 19–22 October 2025 in San Antonio, Texas, USA, and [proposals](#) for sessions, field trips and workshops are invited before 31 January 2025.





3. Research opportunities



A [PhD studentship](#) on the origin of animals is advertised at the University of Durham, UK. The project is focussed on improving the time scale for the Ediacarian–Cambrian transition. Interested candidates are invited to contact the main supervisor as soon as possible.

An [Assistant Professorship](#) in Sedimentary Geology is advertised at the University of Ottawa, Canada. The application deadline is 10 December 2024.



The University of North Carolina Wilmington in the USA is looking for an [Assistant Professor](#) of Sedimentology and Stratigraphy. The application deadline is 4 February 2025.

4. Publications

A selection of recent papers in the field of cyclostratigraphy and orbital forcing:

Liebrand, D., Wade, B. S., Beddow, H. M., King, D. J., Harrison, A. D., Johnstone, H. J. H., Drury A. J., Pälike, H., Sluijs, A., Lourens, L. J., Oceanography of the eastern equatorial Pacific Ocean across the Oligocene–Miocene Transition, *Paleoceanography and Paleoclimatology*, 39, 2024.

Wang, M., Li, M., Hajek, E.A., Kemp, D.B., Wu, Y., Zhu, H., Huang, C., Zhang, H., Ji, K., Zhang, R. and Wei, R., 2024. Assessing the preservation of orbital signals across different sedimentary environments: Insights from stochastic sedimentation modeling. *Earth and Planetary Science Letters*, 642, p.118866.

Zeebe, R.E. and Kocken, I.J., 2024. Applying astronomical solutions and Milanković forcing in the Earth sciences. *Earth-Science Reviews*, p.104959.

A selection of articles will be included in the next newsletter. If you would you like to see your work included in a future newsletter, or if you want to share other news, get in touch.

Feel free and encouraged to distribute this newsletter further. If you know of conferences, workshops, job opportunities, or if you would like to share other news related to cyclostratigraphy, please do not hesitate to email. Subscribe or unsubscribe from this newsletter by writing to s.j.batenburg@uu.nl. The newsletter will be available for download on www.cyclostratigraphy.org.

