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Foreword

Tribute to Jean Dercourt

A tribute to Jean Dercourt (1935–2019) — Editorial

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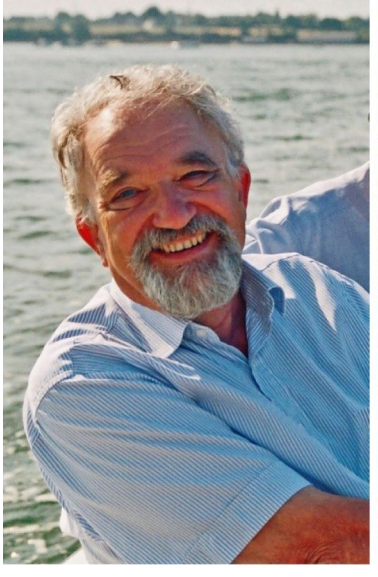

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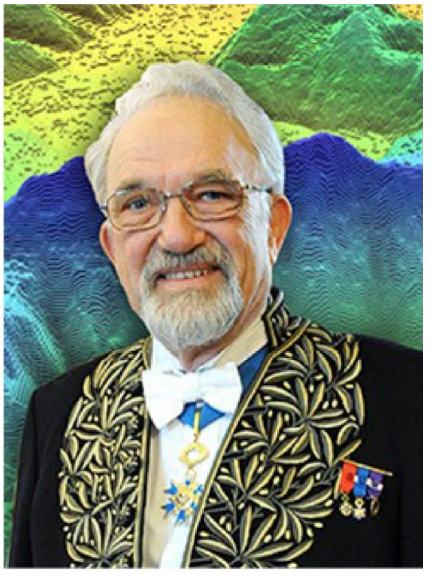

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Jean Dercourt was born in Boulogne-Billancourt on March 11th 1935[1]. Pressed by his mother to take over the family pharmacy, he began higher studies in pharmacy, and at the same time studied natural sciences, which he found more appealing. He successfully completed this dual training before finally choosing geology. At university, he met Anne-Marie, who became his wife and they had four children.

He began his career in 1957 as a "stagiaire de recherche" (research fellow) at the National Centre for Scientific Research (CNRS) and he came out first at the "Agrégation de Sciences Naturelles" (the diploma to teach in secondary schools) in 1958. Under the supervision of Jean Aubouin, he worked in Greece to draw up a cross-section of the northern Peloponnese and a 1:200,000 map, while he was an associate professor at Sorbonne from 1959 to 1965.

[1] Some elements of Jean Dercourt's biography summarized here have been translated—with the authors' agreement—from an article by De Wever and Cadet (2019) published in Géochronique, n°150, June 2019, p. 17.

He defended his "Thèse d'Etat" (professoral thesis) in 1964 [Dercourt, 1964].

He was appointed professor of geology at Lille University when he was 29, and was there from 1964 to 1979. This period was interrupted by a sabbatical year in Canada in 1969 where he was a visiting researcher at the University of Edmonton (Alberta). On his return he taught the new revolutionary theory of plate tectonics, being one of the first in France to do so. With his friend Jacques Paquet, he wrote a textbook [Dercourt and Paquet, 1974] which, 50 years later and in its 12th edition, is still a reference for undergraduates. In 1979 Jean Dercourt returned to Paris to teach at Pierre and Marie Curie University (UPMC), where he remained to the end of his career. His dynamic and charismatic personality attracted many students. His qualities as an enthusiastic teacher have left their mark on generations of students training for teaching or research.

Jean Dercourt's scientific work is marked by the study of sedimentary basins and mountain ranges built over the last 250 million years in the ancient ocean that opened up in Pangea during the Permian and disappeared when the Alps collided. Jean Dercourt directed several international scientific programmes (Tethys and Peri-Tethys) from 1985 to 2004, focusing on the paleodynamics and paleoenvironments of the Tethyan region. Convinced that the paleogeographic map is the ultimate synthesis of an area's geological knowledge, he set out to map the periods from the opening to the closing of the Tethys Ocean, thereby identifying the marine and terrestrial environments of this important region on a global scale. The programmes have mobilised hundreds of researchers from dozens of countries, generating more than a thousand scientific articles.

Jean Dercourt held many important positions, in the academic world (such as Lille University Vice-President), at the ministry of universities, at the French Geological Society (SGF, as president in 1984–1985) and, of course, at the French Academy of Sciences, where he was a correspondent in 1987, a member in 1991 and then Perpetual Secretary from 1996 to 2010. As Perpetual Secretary, Jean Dercourt was constantly concerned with the transmission of knowledge and the quality of scientific teaching. He was responsible for overseeing the publication of the Comptes Rendus de l'Académie des sciences. He supported the development of the Nobel prize and academician Georges Charpak's "La main à la pâte" educational activities initiated in 1995. In 2005, he supported the creation of an education and training delegation within the academy. He made the Château-observatory of Abbadie, near Biarritz, owned by the academy, a place open to the public and to teachers.

I have lost count of the number of positions he held on boards of directors and scientific councils in a wide variety of fields, including ocean exploration and exploitation (IFREMER), the French geological survey (BRGM), the French petroleum institute (IFP), radioactive waste (ANDRA), environment and energy management (ADEME), and even Sea fisheries. At international level, his involvement and responsibilities were just as numerous and important. Let me only mention his chairmanship of the Tectonics Commission of the International Union of Geological Sciences (IUGS) and the Commission for the Geological Map of the World (CGMW).

The Society acknowledged the quality of Jean Dercourt's commitments, as demonstrated the awards he has received: several national and international scientific prizes, membership of six academies in different countries, four honoris causa doctorates, as well as national distinctions (Légion d'honneur, Ordre national du Mérite).

Very much diminished after a stroke, he had retired to his family setting. He closed his eyes on this world on 22th March 2019, aged 84.

Here, we mean to praise him as a colleague and with this special volume of articles as a tribute. But it is the man, the friend, whose lessons and memory we will always remember. Many are aware that it they have been very lucky to cross his path.

I will now briefly introduce the content of the articles of this volume, situating them as regards Jean Dercourt's research and scientific interests.

"The lost Tethys Ocean was the favourite topic of Jean Dercourt's research" said Jolivet [2023] as incipit of his paper. Indeed, Jean Dercourt's first attempts at reconstructing the evolution of the Tethys were carried out with Bernard Biju-Duval and Xavier Le Pichon and presented at the international symposium on the structural history of the Mediterranean basins in 1976 [Biju-Duval et al., 1977]. The series of maps, limited to the Mediterranean domain, caused quite a stir. This attempt was then detailed and completed in the form of 9 maps ex-

tending from Atlantic to Pamir and covering the period from Triassic to the present-day [Dercourt et al., 1985, 1986b]. On the basis of these maps Jean Dercourt built the Tethys programme and its successors (Peri-Tethys, MEBE/Middle-East Basin Evolution), a series of projects organised around large consortia bringing together more than a hundred scientists from academia and industry. The initial paleogeographic maps were extended to all the remains of the Tethys Ocean, from the Caribbean to Indonesia [Rangin et al., 1990, Stéphan et al., 1990], with details to the northern margins of the Tethys [Rakus et al., 1988, 1989, 1990, Dercourt et al., 1990]. Based on these paleogeographic data, depositional paleoenvironments were then reported for the Tethyan realm [Dercourt et al., 1993] and finally for the Peri-Tethyan realm [Dercourt et al., 2000]. Thanks to Jean Dercourt, Tethys joined the collection of books published by Plenum on ocean basins and their margins, as the first to be devoted to an extinct ocean [Nairn et al., 1996]. In addition, this volume introduced the concept of *seuils lithospheriques*, physiographic cratonic barriers that influenced Tethyan ocean dynamics [Vrielynck et al., 1994]. The Apulia, a micro-continent that drifted away from Africa and then shortened to form a part of the Alpine chains, was one of these "*seuils*".

In his article, entitled "*Tethys and Apulia (Adria), 100 years of reconstructions*", Jolivet [2023] reviews the main reconstructions of the Mediterranean Tethys published since 1924, following the evolution of concepts and methods. He also discusses the importance of this type of synthesis for understanding large-scale geodynamic processes.

Five years after defending his professoral thesis on the Hellenides, Jean Dercourt spent a sabbatical year in Canada where he travelled through the Rocky Mountains. He went there to study a different orogen model from that of the Mediterranean Alpine ranges. Familiar with the new theory of plate tectonics, proposed the previous year, he quickly understood how this new vision of the dynamics at the surface of Earth accounted for the formation of these two types of orogens. He then wrote two articles, one in French [Dercourt, 1970] and the other in English [Dercourt, 1972], comparing the formation of these two orogens within the framework of plate tectonics. Both articles were successful and won him an international audience. This is probably why he was elected Member and then Chairman of the Tectonics Commission of the International Union of Geological Sciences (IUGS) from 1980 to 1992, and subsequently Chairman of the Commission for the Geological Map of the World (CGMW) from 1992 to 2000.

In their article, entitled "*Rifting and seafloor spreading in the South China Sea: a subduction related-extension on the down-going plate?*" Chang and Pubellier [2023], the latter being currently Chairman of CGMW, examined the stages of rifting, spreading and termination of activity in the South China Sea basin during the Cenozoic. The rifting-to-drifting history of the South China Sea, which took place between 45 Ma and 16 Ma, may be correlated in terms of stratigraphic boundaries with the subduction-collision history of the Proto South China Sea observed in the NW Borneo and Palawan Island. This evolution illustrates how the process of subduction can have an impact on regional tectonics.

Micropaleontology is particularly useful for establishing a precise biostratigraphic framework in sedimentary basins and for dating geodynamic events. Jean Dercourt quickly realised the value of bringing together tectonicians, geodynamicians and micropaleontologists to propose a timetable for the opening of oceanic domains that are now integrated into mountain ranges. Among microfossils, radiolarians are particularly useful for dating siliceous sediments that are often associated with submarine lavas. In his quest for geodynamic reconstructions of the Tethys, Jean Dercourt led research in this area, in particular with Patrick De Wever [De Wever and Dercourt, 1985] and Luc-Emmanuel Ricou [Knipper et al., 1986]. Such approaches were subsequently pursued and expanded by Jean Dercourt's disciples, providing valuable information on the geodynamics of complex areas such as the Canadian Rocky Mountains and several parts of the Alpine chain *sensu lato*, from Caribbean to Indonesia.

In their paper, entitled "*Synthesis of micropaleontological age constraints for the reconstruction of the Tethyan realm in the Lesser Caucasus (Armenia, Karabagh)*", Danelian et al. [2023] provide new biostratigraphic results from two ophiolite outcrops in Armenia. The discovery of the upper Tithonian–lower Berriasian radiolarian allows to date submarine lava eruptions and block sliding from a nearby shallow-water carbonate platform more accurately. Moreover, the discovery of the Upper Coniacian–

Santonian calcareous nannofossils refine the timing of ophiolite obduction in the Lesser Caucasus.

Jean Dercourt was convinced that the geological map is an irreplaceable document that summarises the data acquired on a given study area. Together with Jean Aubouin and Bernard Labesse, they published a handbook for students to introduce them to the geological mapping [Aubouin et al., 1970]. When he became a member of the Academy of Sciences, Jean Dercourt gave up the traditional presentation of a sword by his students and friends to dedicate this fund to the creation of a prize for geological cartography. Jean Dercourt was also convinced that, in sedimentary environments, the stratigraphy of the studied succession should be as detailed as possible. As Chairman of the Committee of the Geological Map of France from 1986 to 1992, then Chairman of the Earth Sciences Council at the Geological Survey of France (BRGM), he met the geologists from this geological survey who were producing the geological maps of the western edge of the Saudi Arabian platform. He convinced them and their supervisors that their work deserved to be widely broadcast and could lead to a doctoral thesis. Thanks to their work, the stratigraphy of the Lower Paleozoic to Upper Jurassic of the Arabian Platform made enormous progress in the late 1980s and early 1990s.

Work has continued since and in their complementary articles, entitled "*The Middle to Late Triassic of Central Saudi Arabia with emphasis on the Jilh Formation. Parts I and II*", Le Nindre et al. [2023a,b] provide a magnificent stratigraphic and paleoenvironmental synthesis of this formation and discuss both its sequence stratigraphic interpretation and its paleogeographic significance.

Although Jean Dercourt himself did not study much geology of the French territory, with the exception of his postgraduate dissertation ("Diplôme d'Etudes Supérieures") on the Seine fault in Normandy, he was always keen on French geology. As Chairman of the Scientific Committee for the 6th edition of the geological map of mainland France at 1:1,000,000 scale (published in 1996), he was eager to include the most recent results and innovative concepts, along with Jean Chantraine and the BRGM colleagues involved in the project. Drawing on this experience and the knowledge he has acquired of French geology, he produced an educational book [Dercourt, 1997] in which, following his guiding principle, he takes the reader on a search for the oceans that have disappeared in mainland France and overseas.

In their paper, entitled "*Insights on the Permian tuff beds from the Saint-Affrique Basin (Massif Central, France): an integrated geochemical and geochronological study*", Poujol et al. [2023] study several volcanic ash beds of this basin using an integrated petrological, geochemical and geochronological approach. Their results highlight the existence of two different groups of felsic volcanoclastic rocks. Although the first cannot be dated due to the absence of zircon, the second is of late Early Permian age (Cisuralian), demonstrating that the sedimentary filling of the Saint-Affrique Basin is younger than previously assumed.

In their paper, entitled "*The Brécy depocenter as part of a new reference late Variscan basin (northern Massif Central, France)*" Beccaletto and Bourquin [2023] re-interpret 115 km of seismic lines and several deep wells in this Carboniferous-Permian basin covered by Mesozoic deposits in the SW Paris Basin. The geometry, depositional environments and tectonic evolution of the Brécy basin are considerably updated compared with previous work. The alluvial to lacustrine environments, characterising the sedimentary filling, show a transgressive–regressive–transgressive pattern. The current geometry of the Brécy basin is controlled by several east-dipping normal faults, some of which being connected to deep detachment levels active during the late Carboniferous and Permian times.

After returning to Paris as a professor in the early 1980s, Jean Dercourt, together with Eric Fourcade, set up a laboratory devoted to Stratigraphy associating UPMC with the CNRS and the Museum national d'Histoire Naturelle (MNHN). With this new team, they developed integrated stratigraphy combining the most modern approaches of sedimentology, (micro)paleontology, chemostratigraphy, magnetostratigraphy, geochronology and the emerging sequential stratigraphy. Their researches were focused on the Tethyan region, from Turkey [Fourcade et al., 1991] to Spain [Rasplus et al., 1997]. Their results have provided an opportunity to decipher the traces of geodynamic, oceanic or climatic events in the sedimentary series [Dercourt et al., 1986a], in particular the oceanic anoxic events of the Mesozoic. The Toarcian anoxic event that Jean Dercourt spotted

in Greece was clarified [Baudin et al., 1988, 1990].

In their paper, entitled "*Molecular fossils of Aptian–Albian blue marls of the Vocontian Basin (France), depositional conditions and connections to the Tethys Ocean*", Riboulleau et al. [2023] examine the lipid biomarkers of six organic-rich levels of global or regional extension and discuss their depositional controlling factors. This study demonstrates that, in the Aptian–Albian succession from SE France, organic-matter deposition resulted mostly from local factors and that each level has its own peculiarities. Nevertheless, connections with the Tethys Ocean were critical for the recording of global oceanic anoxic events.

In their paper, entitled "*The contrasting origins of glauconite in the shallow marine environment highlight this mineral as a marker of paleoenvironmental conditions*", Tribovillard et al. [2023] challenge the paradigm of a constantly slow formation of the authigenic mineral "glauconite" in outer shelf domain. Comparing glauconites formed in contrasting environments from the Jurassic and Cretaceous succession of Boulonnais (NW France), the authors hypothesise that isolated oyster reefs harboured anoxic micro-environments favouring the authigenic formation of glauconite in shallow waters. These results support the idea that the "glauconite factory" is not restricted to outer shelf but may also be formed in very shallow areas of the shelf.

Jean Dercourt himself had never worked on the origin of Man, but he was fascinated by the question. Several major waves of *Homo sapiens* migration from Africa to the Arabian Peninsula and the Levant took place between 59,000 and 29,000 years ago, in the general glacial context of Marine Isotope Stage 3 (MIS 3). However, the environmental conditions at the origin of these migrations are poorly known, and the scarcity of continental data covering this period has been interpreted as reflecting arid conditions. This conclusion has been challenged, as the intense aeolian deflation that occurred during the last glacial maximum (20,000 years ago) could have destroyed or seriously damaged lake or river sediments, which could have reflected humid climatic conditions conducive to the migration of human populations. Another difficulty in studying this period is the methodological limitation of ^{14}C radiocarbon dating, which reaches its limit of use around 50,000 years ago.

In their paper "*Data and models reveal humid environmental conditions during MIS 3 in two of the world's largest deserts*", Lézine et al. [2023] compare 245 continental discrete records and 11 long-term continental and marine core records, dated using ^{14}C, U/Th or luminescence methods. These data are compared with results from the Institut Pierre-Simon Laplace (IPSL) general circulation model to discuss hydrological changes between 59,000 and 29,000 years in Northern Tropical Africa, North Africa and the Arabian Peninsula. Despite a general glacial context, wet conditions were widely, creating numerous lakes, rivers and wetlands. This study shows that humid conditions appeared much earlier and were more prevalent in the Arabian Peninsula than in Africa, due to the combination of monsoon rains in summer and Mediterranean rains in winter.

This collection of articles, published as a tribute to Jean Dercourt, includes many useful contributions, which I hope will be of interest to readers. I would like to thank the colleagues who agreed to submit these choice pieces to C. R. Géoscience—Sciences de la Planète, and François Chabaux for supporting and encouraging me in my mission as guest editor of this special issue. Some of these contributions were presented at conferences organised by the Academy of Sciences and the French Geological Society on December 7th and 8th, 2021. Our warmest thanks go to Philippe Taquet, Patrick De Wever and Jean-Paul Cadet, who organised the December 7th event. Special thanks to Françoise Cadet for her careful proofreading of the English of this editorial.

Declaration of interests

The authors do not work for, advise, own shares in, or receive funds from any organization that could benefit from this article, and have declared no affiliations other than their research organizations.

References

Aubouin, J., Dercourt, J., and Labesse, B. (1970). *Manuel de travaux pratiques de cartographie*. Dunod, Paris.

Baudin, F., Dercourt, J., Herbin, J.-P., and Lachkar, G. (1988). Le Lias supérieur de la zone ionienne (Grèce) : une sédimentation riche en carbone organique. *C. R. Acad. Sci. Paris*, 307(II), 985–990.

Baudin, F., Herbin, J.-P., Bassoullet, J.-P., Dercourt, J., Lachkar, G., Manivit, H., and Renard, M. (1990). Distribution of organic matter during the Toarcian in Mediterranean Tethys and Middle East. In Huc, A.-Y., editor, *Deposition of Organic Facies*, volume 30, pages 73–91. American Association of Petroleum Geologists Studies in Geology, Tulsa.

Beccaletto, L. and Bourquin, S. (2023). The Brécy depocenter as part of a new northern Massif Central Carboniferous-Permian Basin (France). *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Biju-Duval, B., Dercourt, J., and Le Pichon, X. (1977). From the Tethys Ocean to the Mediterranean Sea: a plate tectonic model of the evolution of the western alpine system. In *International Symposium on the Structural History of the Mediterranean Basins, (Split, Yugoslavia)*, pages 143–164. Technip, Paris. 8 maps. https://archimer.ifremer.fr/doc/00000/5197/.

Chang, S.-P. and Pubellier, M. (2023). Rifting and seafloor spreading in the South China Sea: a subduction-related extension on the down-going plate? *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Danelian, T., Triantaphyllou, M., Seyler, M., Galoyan, G., Grigoryan, A., and Sosson, M. (2023). Synthesis of micropaleontological age constraints for the reconstruction of the Tethyan realm in the Lesser Caucasus (Armenia, Karabagh). *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

De Wever, P. and Dercourt, J. (1985). Les radiolaires triasiques-jurassiques comme marqueurs stratigraphiques et paléogéographiques dans les chaînes alpins périméditerranéennes : une revue. *Bull. Soc. Géol. Fr.*, 1(5), 653–662.

Dercourt, J. (1964). *Contribution à l'étude géologique d'un secteur du Péloponnèse septentrional (Grèce)*, volume 15. Annales géologiques des Pays Helléniques, Athènes.

Dercourt, J. (1970). L'expansion océanique actuelle et fossile ; ses implications géotectoniques. *Bull. Soc. Géol. Fr.*, 7, 261–317.

Dercourt, J. (1972). The Canadian Cordillera, the Hellenides and the sea-floor spreading theory. *Can. J. Earth Sci.*, 6, 709–743.

Dercourt, J. (1997). *Géologie et géodynamique de la France (outremer et européenne)*. Dunod, Paris.

Dercourt, J., Foucault, A., and Renard, M. (1986a). Liaisons entre les phénomènes globaux, les changements du milieu et les grandes crises du monde vivant. *Bull. Cent. Rech. Explor.-Prod. Elf Aquitaine*, 10(2), 285–311.

Dercourt, J., Gaetani, M., Vrielynck, B., Barrier, E., Biju-Duval, B., Brunet, M.-F., Cadet, J.-P., Crasquin, S., and Sandulescu, M. (2000). *Atlas Peri-Tethys and Explanatory Notes*. CCGM, Paris. 24 maps.

Dercourt, J. and Paquet, J. (1974). *Géologie. Objets et méthodes*. Dunod, Paris.

Dercourt, J., Ricou, L.-E., Adamia, S., Csaszar, G., Funk, H., Lefeld, J., Rakus, M., Sandulescu, M., Tollman, A., and Tchoumachenko, P. (1990). *Evolution of the northern margin of the Tethys. Paleogeographic maps 1:10,000,000*, volume 154. Mém. Soc. Géol. France, Paris. 11 maps.

Dercourt, J., Ricou, L.-E., and Vrielynck, B. (1993). *Atlas Tethys Palaeoenvironmental Maps. Atlas and Explanatory Notes*. Gauthier Villars, CGMW, Paris. 14 maps.

Dercourt, J., Zonenshain, L. P., Ricou, L. E., Kazmin, V. G., Le Pichon, X., Knipper, A. L., Grandjacquet, C., Sborshchikov, I. M., Boulin, J., Sorokhtin, O., Geyssant, J., Lepvrier, C., Biju-Duval, B., Sibuet, J. C., Savostin, L. A., Westphal, M., and Lauer, J.-P. (1985). Présentation de 9 cartes paléogéographiques au 1/20.000.000ème s'étendant de l'Atlantique au Pamir pour la période du Lias à l'Actuel. *Bull. Soc. Géol. Fr.*, 1(5), 637–652.

Dercourt, J., Zonenshain, L. P., Ricou, L.-E., Kazmin, V. G., Le Pichon, X., Knipper, A. L., Grandjacquet, C., Sbortshikov, I. M., Geyssant, J., Lepvrier, C., Pechersky, D. H., Boulin, J., Sibuet, J.-C., Savostin, L. A., Sorokhtin, O., Westphal, M., Bazhenov, M. L., Lauer, J.-P., and Biju-Duval, B. (1986b). Geological evolution of the Tethyan belts from the Atlantic to the Pamir since the Lias. *Tectonophysics*, 123, 241–315.

Fourcade, E., Dercourt, J., Gunay, Y., Azéma, J., Kozlu, H., Bellier, J.-P., Cordey, F., Cros, P., De Wever, P., Enay, R., Hernandez, J., Lauer, J.-P., and Vrielynck, B. (1991). Stratigraphie et paléogéographie de la marge septentrionale de la plate-forme arabe au Mésozoïque (Turquie du Sud-Est). *Bull. Soc. Géol. Fr.*, 162(1), 27–41.

Jolivet, L. (2023). Tethys and Apulia (Adria), 100 years of reconstructions. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Knipper, A. L., Ricou, L.-E., and Dercourt, J. (1986).

Ophiolites as indicators of the geodynamic evolution of the Tethyan Ocean. *Tectonophysics*, 123(1–4), 213–240.

Le Nindre, Y.-M., Davies, R. B., Issautier, B., Krystyn, L., Vaslet, D., Vrielynck, B., and Memesh, A. (2023a). The middle to late triassic of central Saudi Arabia with emphasis on the Jilh Formation. Part II: sequence stratigraphy, depositional and structural history, correlations and paleogeography. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Le Nindre, Y.-M., Vaslet, D., Vrielynck, B., Krystyn, L., Manivit, J., Memesh, A., and Davies, R. B. (2023b). The middle to late triassic of central Saudi Arabia with emphasis on the Jilh Formation. Part I: lithostratigraphy, facies and paleoenvironments, paleontology and biostratigraphic age calibration from outcrop studies. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Lézine, A. M., Masa, K., and Bassinot, F. (2023). Data and models reveal humid environmental conditions during MIS 3 in two of the world's largest deserts. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Nairn, A. E. M., Ricou, L.-E., Vrielynck, B., and Dercourt, J. (1996). *The Ocean Basins and Margins. The Tethys Ocean*, volume 8. Plenum Press, New York.

Poujol, M., Mercuzot, M., Lopez, M., Bourquin, S., Bruguier, O., Hallot, E., and Beccaletto, L. (2023). Insights on the Permian tuff beds from the Saint-Affrique Basin (Massif Central, France): an integrated geochemical and geochronological study. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Rakus, M., Dercourt, J., and Nairn, A. E. M. (1988). *Evolution of the Northern Margin of Tethys, Vol. I.* Nouvelle Série No. 154. Mém. Soc. Géol. France, Paris.

Rakus, M., Dercourt, J., and Nairn, A. E. M. (1989). *Evolution of the Northern Margin of Tethys, Vol. II.* Nouvelle Série No. 154 (II). Mém. Soc. Géol. France, Paris.

Rakus, M., Dercourt, J., and Nairn, A. E. M. (1990). *Evolution of the Northern Margin of Tethys, Vol. III.* Nouvelle Série No. 154 (III, pt. 1–2). Mém. Soc. Géol. France, Paris. 13 maps.

Rangin, C., Pubellier, M., Azéma, J., Briais, A., Chotin, P., Fontaine, H., Huchon, P., Jolivet, L., Maury, R., Muller, C., Rampnoux, J.-P., Stephan, J.-F., Tournon, J., Cottereau, N., Dercourt, J., and Ricou, L.-E. (1990). The quest for Tethys in the Western Pacific - 8 paleogeodynamic maps for Cenozoic time. *Bull. Soc. Géol. Fr.*, VI(6), 907–913. 8 maps.

Rasplus, L., Fourcade, E., Ambroise, D., Andéol, B., Azéma, J., Blanc, P., Busnardo, R., Clerc-Renaud, T., Damotte, R., Dercourt, J., Foucault, A., Galbrun, B., Granier, B., Lachkar, G., Le Hégarat, G., Magné, J., Manivit, H., Mangin, A. M., Masure, E., Mazaud, A., Michaud, F., Morand, F., Renard, M., Schuber, N., and Taugourdeau, J. (1997). Stratigraphie intégrée du sillon citrabétique (Sierra de Fontcalent, province d'Alicante, Espagne). *Geobios*, 20, 337–387.

Riboulleau, A., Quijada, M., Caillaud, A., Baudin, F., Ferry, J.-N., and Tribovillard, N. (2023). Molecular fossils of Aptian–Albian blue marls of the Vocontian Basin (France), depositional conditions and connections to the Tethys Ocean. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Stéphan, J.-F., Mercier de Lepinay, B., Calais, E., Tardy, M., Beck, C., Carfantan, J.-C., Olivet, J.-L., Vila, J.-M., Bouysse, P., Mauffret, A., Bourgois, J., Théry, J.-M., Tournon, J., Blanchet, R., and Dercourt, J. (1990). Paleogeodynamic maps of the Caribbean: 14 steps from Lias to Present. *Bull. Soc. Géol. Fr.*, VI(6), 915–919. 14 maps.

Tribovillard, N., Bout-Roumazeilles, V., Abraham, R., Ventalon, S., Delattre, M., and Baudin, F. (2023). The contrasting origins of glauconite in the shallow marine environment highlight this mineral as a marker of paleoenvironmental conditions. *C. R. Géosci.*, xx, 000–000. Special issue Tribute to Jean Dercourt.

Vrielynck, B., Dercourt, J., and Cottereau, N. (1994). Des seuils lithosphériques dans la Téthys. *C. R. Acad. Sci. II*, 318(12), 1677–1685.