

الندوة الدولية الثالثة لعلم الأحافير الفقارية في شمال أفريقيا

en partenariat avec



3rd International Symposium on North African Vertebrate Palaeontology (NAVEP3)

PROGRAM

THEMATICS

- Theme 1: Diversity, Phylogeny and Palaeobiogeography of Fossil Vertebrates
- Theme 2: Evolution, Palaeoecology and Functional Adaptations
- Theme 3: Fossil Sites, Geo-Chronology and Innovative Methods
- Theme 4: Palaeontological Heritage, Conservation and Promotion



Welcome Address - NAVEP3: Welcome to Oujda

Dear colleagues and fellow palaeontologists,

It is with immense honour and profound joy that we welcome you to the 3rd International Symposium on North African Vertebrate Palaeontology (NAVEP3), in the magnificent city of Oujda, set within a region renowned for its rich geological and palaeontological heritage.

This exceptional gathering testifies to the vitality of our scientific community and to the crucial importance of palaeontological research in North Africa, a region that preserves invaluable records of the evolution of life on Earth.

During these four days of intensive scientific exchange, you will have the opportunity to:

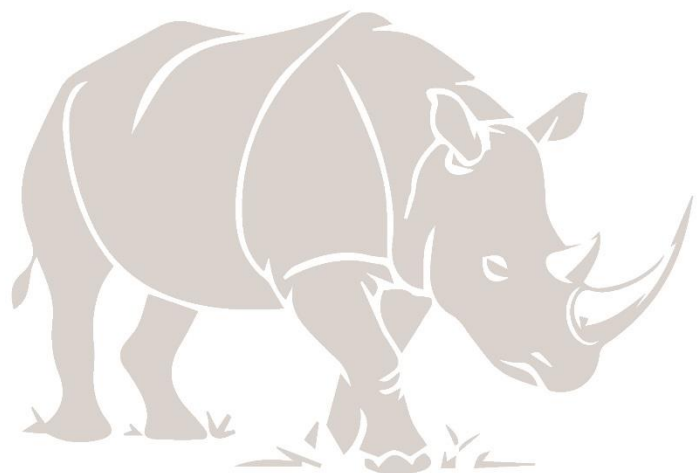
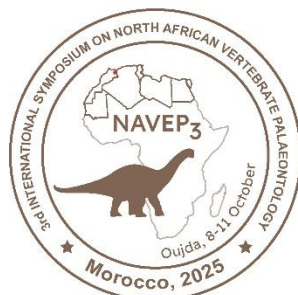
- Present your latest discoveries and methodological advances
- Debate contemporary issues in vertebrate palaeontology
- Forge new interdisciplinary and international collaborations
- Contribute to the collective advancement of our knowledge on African palaeobiodiversity

Each presentation, poster, and discussion will help shape a more precise vision of the evolutionary history of this fascinating region. We are convinced that the synergies born from these encounters will nurture tomorrow's projects and inspire the new generation of researchers.

We hope this symposium will be a source of lasting scientific inspiration and human enrichment for you all.

Welcome to NAVEP3!

*The Organising Committee
Aouraghe / Mhamdi
(FSO-UMP)*





08:30 09:30	Welcome and registration of participants	
09:30 10:00	Opening session: Address by: - The President of Mohammed First University of Oujda - The Dean of the Faculty of Sciences, Mohammed First University - The Director of INSAP (Institut National des Sciences de l’Archéologie et du Patrimoine) - The Organizing Committee	
10:00 10:30	Inaugural Conference: Pr. Hassan Aouraghe (FSO, Morocco) ✂ <i>Review of two decades of palaeontological research and new discoveries in eastern Morocco</i> Bilan de deux décennies de recherches paléontologiques et nouvelles découvertes au Maroc oriental Moderation: Pr. Robert Sala Ramos (30 min presentation + discussion)	
10:30 11:00	Inaugural coffee break / استراحة شاي 🕒☕	
11:00 11:30	Conference II : Pr. Emmanuel Gheerbrant (MNHN, France) <i>Earliest African placental mammals discovered in Morocco: significance and review</i> Moderation: Pr. Lionel Cavin (30 min presentation + discussion)	
Oral communications session		
Theme 1: Diversity, Phylogeny and Paleobiogeography of Fossil Vertebrates Moderation: Pr. Nouredine Jalil / Pr. Jordi Agusti		
11:30	1. Jeremy E. Martin , Rachid Chennouf, Hamid Haddoumi, Maxime Lasseron, Hicham Mhamdi, Emmanuel Gheerbrant, Hassan Aouraghe	A new neosuchian crocodylomorph from the Jurassic-Cretaceous boundary of Morocco
11:45	2. Jordi Agustí , Angel Galobart, Rodrigo Gaete, Salvador Moyà-Solà, Meike Kohler, Manel Llenas	Report on a palaeontological field-campaign at the site of As Sahabi (Eastern Libya)
12:00	3. Aniny Fadwa , Cyrille Demler, Philip D. Gingerich, Samir Zouhri	Présence de <i>Barytherium</i> sur la marge atlantique saharienne : apports du site d’El Breij à la paléobiogéographie des proboscidiens
12:15	4. Ayoub Amane , Bouziane Khalloufi, Philip D. Gingerich, Samir Zouhri	Basilosauridae whales from the Eocene of the Sahara Desert in southwestern Morocco provide new insights into the diversity and phylogeny of Archaeocetes.
12:30	5. Elbatoul M’hamdi , Bouziane Khalloufi, Fatima Khaldoune, Mohamed Ghamizi, Nour-Eddine Jalil	First description of a nearly complete Saurodontidae (Teleostei, Ichthyodectiformes) skull from the Late Cretaceous of the Moroccan Phosphates
12:45	6. Aniny Fadwa , Adnet Sylvain, Bourdon Estelle, Ayoub Amane, Pérez García Adán, Stephane Jouve, Cyrille Demler, Bouziane Khalloufi, Philip D. Gingerich, Samir Zouhri	New middle Eocene vertebrate fauna from the Sabkha of El Breij in the Sahara Desert of southeastern Morocco
13:00	7. Hiba Ezzahery , Mohamed Ghamizi, Nour-Eddine Jalil	Revealing Moroccan Permian and Triassic treasures: Comprehensive Insights into vertebrate assemblages of the Argana Basin (late Gadalupian to Carnian)

13:00 13:30	Discussion	
13:30 14:30	Lunch break / غداء 	
Moderation: Pr. Brahim Ouchaou / Pr. Omar Zafaty		
14:30	8. Nour-Eddine Jalil	Sur les traces des vertébrés permien terrestres d'Afrique du Nord, paleobiodiversité et paléobiogéographie
14:45	9. Maxime Lasseron, Ronan Allain, Hamid Haddoumi, Nour-Eddine Jalil, Samir Zouhri, Emmanuel Gheerbrant	Unexpected lepidosaur diversity at the Jurassic–Cretaceous transition: new insights from the Anoual Syncline (eastern Morocco)
15:00	10. Morgane Lois Perret Lévesque, Véronique Barriel, Didier B. Dutheil, Colas Bouillet, and Nour-Eddine Jalil	A new turtle (Bothremydidae, Pleurodira) from the Palaeogene (Thanetian-Ypresian) Phosphates of Morocco
15:15	11. Driss Ouahache, Susannah Maidment, Khadija Boumir, Richard Butler, Kawtar Ech-charay, Ahmed Oussou, Abdessalam El Khanchoufi	Les récentes découvertes de dinosaures dans le Jurassique moyen de la région de Boulmane (Moyen Atlas, Maroc) : implications paléobiologiques et phylogénétiques.
15:30	12. Pedro Piñero, Jordi Agustí, Hugues-Alexandre Blain, Ángel Blanco Lapaz, Eliseo Tesón, Antonio Teixell, Marc Furió	Small vertebrate fauna from the Late Miocene of the Ouarzazate Basin (High Atlas, Morocco): Biostratigraphical and paleoenvironmental insights
15:45	13. Lalla Khaddouj Benlamine, Djillali Hadjouis, Abdesslam Amarir, Abderrahim Lahrach, Pierre-Henri Giscard, Caroline Allard	Le monument funéraire Isfoula 1 (Moyen Atlas, Maroc) : étude préliminaire et premiers résultats
16:00	14. Saadani Jihène	Diversité faunique de Carthage et Avitta Bibba : entre métropole et ville intérieure
16:15	15. Mehdi Zouak, José Ramos-Munos, salvador Domingues-Belle, Eduardo Vijando-Billa, Juan Jesus Cantillo-Duarte, Ali Maate, Antonio Barrena-Tocino, Abdelaziz El Idrissi, José Maria Gutierrez-Lopez et Sergio Almisas-Cruz.	Les sociétés préhistoriques du Maroc septentrional, un patrimoine archéologique exceptionnel : Présentation des résultats du projet de carte archéologique du Maroc septentrional. Les sociétés préhistoriques du Maroc septentrional.
16:30	16. Iván Ramírez-Pedraza, Florent Rivals (pre-recorded video presentation)	Paleoecological reconstructions using dental wear and stable isotope analysis of mammal teeth: Case studies from Plio-Pleistocene sites in northern Africa
16:45	17. Nabiha Aouadi (Communication presented by Jihène Saadani)	La faune quaternaire au Maghreb Oriental : État des connaissances
16:45 17:15	Discussion (30 min discussion)	
17:15 17:45	Coffee break / استراحة شاي 	
En partenariat avec l'Institut Français d'Oujda (IFO), la Conférence N°3 aura lieu à l'IFO Adresse : 9-11, lotissement Chabab, Al Qods, Oujda 60000) Situé à 10 min à pied depuis la Faculté des Sciences, lieu de la tenue du colloque international		
18:30	Conference III: Pr. Addi Azza (SMBA University, Morocco) Cadre législatif et réglementaire de la protection du patrimoine géologique au Maroc Moderation: Pr. Hassan Aouraghe	
 Institut Français d'Oujda		

Second day الخميس Thursday, 9 October 2025

09:00 09:30	Conference IV: Pr. Abderrazak El Albani (Poitiers University, France) Trilogie de la vie sur Terre : Emergence, résilience et déclin Moderation : Dr. Hicham Mhamdi (30 min presentation + discussion)	
Theme 2: Evolution, Palaeoecology and Functional Adaptations Moderation: Pr. Anne Marie Moigne / Pr. Bouchra Bougariane		
09:30	18. Brahim Ouchaou, Hassan Aouraghe, Hicham Mhamdi, Hamid Haddoumi, Bouchra Bougariane, Siham Zahid	Les grands mammifères du Pléistocène terminal-Holocène de la grotte Guenfouda (Maroc oriental, Maroc).
09:45	19. Bouchra Bougariane, Abdeslam Mikdad	Évolution des associations fauniques entre la fin du Pléistocène et l’Holocène dans trois gisements du Rif oriental (Taghit Haddouch, Hassi Ouenzga et Ifri Ouzabour, Maroc)
10:00	20. Dominique Grimaud-Hervé	L’histoire des peuplements humains en Europe et en Afrique du Nord
10:15	21. Boula Sabah, Stoetzel Emmanuelle, Fernandez Philippe, Clark Amy, Kuhn Steve, Bouzouggar Abdeljalil	Nouvelles données sur les microvertébrés du sud-ouest marocain : exemple des sites de Jorf el Hamam et de Bizmoune (Essaouira, Maroc)
10:30 11:00	Coffee break / استراحة شاي 	
Moderation: Pr. Jeremy Martin / Pr. Bouziane Khalloufi		
11:00	22. Lionel Cavin	African Coelacanth
11:15	23. Abdelouahed Lagnaoui	Late Palaeozoic to Mesozoic vertebrate ichnofauna from Morocco
11:30	24. Paulo M. Brito, Manuel Alfredo Medeiros, Didier B. Dutheil, Ingrid M. Veiga	La faune du groupe Kem Kem en Amérique du Sud et son importance pour l'origine de la faune néotropicale
11:45	25. Abdessamad Amelieh, Mostafa Oukassou, Guillaume Guinot, Omar Zafaty, Hicham Si Mhamdi, Johan Yans, André Charrière, Rodolphe Tabuce	First record of marine and terrestrial vertebrate fauna from the Late Cretaceous–Paleogene series of the Moroccan Middle Atlas: biostratigraphic, paleoenvironmental, and paleogeographic implications
12:00	26. Brahim Ouchaou	Ostéométrie de l’aoudad (<i>Ammotragus lervia</i>) de la grotte Tamziydat (Ighzrane, Moyen Atlas, Maroc).
12:15	27. Karin Peyer, Lee Rozada, Vincent Reneleau, Benjamin Raynaud	Life and Death in a Jurassic Lagoon, Canjuers France: Exceptional Preservation and Horseshoe Crab Trackways
12:30 13:00	Discussion	
13:00 14:00	Lunch break / غداء 	
14:00 14:30	Conference V: Pr. Mohamed BOUTAKIOUT (Mohammed V University, Morocco) L’Unesco Global Géoparc M’Goun Moderation: Pr. Moussa Masrour (30 min presentation + discussion)	

Theme 3: Fossil Sites, Geo-Chronology and Innovative Methods

Moderation: Pr Abdelouahed Ben-Ncer / Dr. Maxime Lasseron

14:30	28. Aïcha Oujaa	Les occupations humaines néolithiques dans le Maroc oriental
14:45	29. Anne-Marie Moigne	Variabilité des comportements des chasseurs acheuléens de La Caune de l'Arago (France), au début du Pléistocène moyen.
15:00	30. Bouziane Khalloufi, Didier B. Dutheil, Paulo M. Brito	Exploring the "mid-Cretaceous" teleost fish diversification through the Moroccan fossil heritage
15:15	31. Anne S. Schulp, Ana Soraya Marques, Nair de Sousa, Colijn Dijkers, Hanneke Jacobs, Dylan Bastiaans, John W.M. Jagt, Michael J. Polcyn	Digital <i>Prognathodon</i> – from a digital skeletal reconstruction to a life-size 3D-printed museum display
15:30	32. Abdelkrim Moutmir	Les apports des méthodes de datation appliquées aux sciences de la terre et de l'archéologie au quaternaire
15:45	33. Imad Sefriti, Farah Guerraoui, Nour-Eddine Jalil	Les Crocodyliformes (Reptilia, Archosauria) des Kem Kem (Maroc, Cénomanien), état des lieux et présentation d'un fossile inédit d' <i>Elosuchus cherifiensis</i> (Lavocat, 1955), des collections du Musée d'Histoire naturelle de Marrakech
16:00	34. Mohamed Amine Nguidi, Denis Geraads, Samir Zouhri	New insight on the late Miocene vertebrate fauna of Tizi N'Taddert, Ouarzazate Basin, Morocco.
16:15	35. Elie Fosso Menke, Louis Jacobs, Ngong Roger Ngia, Romuald Saf, Jeremy E. Martin	Dinosaur Ichnology and Sedimentology in Equatorial Africa: An Understudied Perspective from the Lower Cretaceous of Cameroon.
16:30	36. Wahiba Bel Haouz, Abdelouahed Lagnaoui, Christian Klug, Lahssen Baïdier, Mehdi Maanan	Trace fossils as indicators of palaeobiology: <i>Undichna</i> from the Late Devonian of Morocco
16:45	Discussion	
17:00	Coffee break / استراحة شاي ☕	

Theme 4: Palaeontological Heritage, Conservation and Promotion

Moderation: Pr. Abdelouahed Lagnaoui / Pr. Aïcha Oujaa

17:15	37. Moussa Masrour, Noura Lkebir, Félix Pérez-Lorente	Les empreintes de dinosaures d'Anza (Agadir, Maroc) : Un patrimoine géologique sauvegardé et mis en valeur par une mobilisation collective.
17:30	38. Rhayth Benoutiq, Zineb Dayedaye, Fatima- Zahra Farhi, Marine Naviau, Maeline Perez, Paul Winkler et Abdelouahed Ben-Ncer	Monument 1 de Bennasriya 2 (province de Guercif, Maroc) : Architecture complexe et séquence funéraire inédite d'un monument à fosse centrale.
17:45	39. Abdelhadi Ewague	Pre- and protohistoric vertebrates of Southern Morocco: contributions of rock art
18:00	40. Ech-Charay Kawtar, Boumir Khadija, Maidment Susannah, Oussou Ahmed, Butler Richard, Ouarhache Driss	Palaeontological heritage between geoconservation, enhancement, and geotourism promotion in the Boulemane Region (Middle Atlas, Morocco)
18:15	41. Omar Zafaty, Mustapha Alilich, Mostafa Oukassou	New Occurrences and Diversity of Dinosaur Tracks from the Middle Jurassic "Red Beds" (Central High Atlas, Morocco)

18:30

Discussion, Closing with a round table and recommendations 



Poster Communications Session

1. Omar Ait Haddou , Abdelkbir Hminna, Abdelouahed Lagnaoui, Christian A. Meyer, Klein Hendrik, Mohamed Fergougui, Mohamed Arouch	New Middle Jurassic dinosaur tracksite from Moroccan Central High Atlas
2. Mourad Farkouch , Hicham Mhamdi, Hassan Aouraghe, Antonio Rodríguez Hidalgo, Diego Lombao, Mohamed Souhir, Robert Sala-Ramos, Juan Ignacio Morales, M. Gema Chacón	Faunal Records in Human Landscapes: The Aïn Beni Mathar – Guefaït regional Perspective
3. Hicham Mhamdi , Mourad Farkouch, Hassan Aouragh, Mohamed Souhir	Holocene Small Vertebrates from Guenfouda Cave (Eastern Morocco): Taphonomy, Palaeoecology and the First Fossil Record of <i>Gerbillus henleyi</i> in North Africa
4. Naima El Hazzazi	Apport de l'étude des rongeurs dans la connaissance du paléoenvironnement et de la biostratigraphie du site d'Orgnac 3 (Ardèche, France)

5. Mourad Farkouch , Mohamed Souhir, Hicham Mhamdi, Hassan Aouraghe	Tracing Human Journeys: Mobility Patterns of the Guenfouda Population during the Holocene
6. Elena Moreno-Ribas , Gema Chacón, Robert Sala, Hassan Aouraghe	Conservation and restoration in the palaeontological Pleistocene sites of Ain Beni Mathar-Guefait (Jerada, Morocco). The scientific studies and the musealization as guidelines
7. I. Ramírez-Pedraza , C. Tornero, F. Rivals, H. Aouraghe, A. Rodríguez-Hidalgo, J. van der Made, A. Oujaa, H. Haddoumi, A. M. Aissa, H. Mhamdi, M. G. Chacón and R. Sala-Ramos.	Paleoecological reconstruction of first human dispersals in Northwestern Africa during Plio-Pleistocene boundary based on stable isotope analysis of faunal remains: the case of Guefaït-4.2 site (Jerada, Eastern Morocco)
8. I. Ramírez-Pedraza , F. Rivals, H. Aouraghe, C. Tornero, A. Rodríguez-Hidalgo, J. Van Der Made, A. Oujaa, J.J. Ibáñez, H. Haddoumi, A. M. Aissa, H. Mhamdi, M.G. Chacón, R. Sala-Ramos.	Palaeoecological reconstruction from the Plio-Pleistocene site Guefaït-4.2 (Jerada, Eastern Morocco) based on dental wear analysis of fossil ungulates
9. Blain Hugues-Alexandre , Agustí Jordi, López-García Juan Manuel, Haddoumi Hamid, Aouraghe Hassan, Pérez-González Alfredo, Chacón María Gema & Sala Robert	Amphibians and squamate reptiles from the late Miocene (Vallesian) of eastern Morocco (Guefaït-1, Jerada Province).
10. Driss Khattach , Hassan Aouraghe, Hicham Mhamdi	Tomography (geophysical tool) Serving Palaeontology and Archaeology: examples of habitat structures in Eastern Morocco
11. Hafida Naim , Fethi Amani, Zohra Bejjaji, Asma Redouani	Les sites marocains à fossiles d'Hippopotames : Cas du gisement de Tiddas (Maroc central) paleoenvironnement et Chronostratigraphie
12. Pedro Piñero , Jordi Agustí, Hamid Haddoumi, M. Gema Chacón, and Robert Sala-Ramos	<i>Golunda aouraghei</i> (Muridae, Rodentia): the youngest <i>Golunda</i> species recorded in Africa



Post-Colloque Field-Excursion N°1



08:30

Departure

The post-congress excursion will begin with a visit to a **heritage interpretation centre in Oujda (CIP)**, continue to the famous **Tafoughalt Cave** (Cave of the Pigeons), and conclude with a visit to the **Camel Cave**, located near Berkane in eastern Morocco.

1. The Heritage Interpretation Center (Centre d'Interprétation du Patrimoine Archéologique et Naturel de l'Oriental) (Oujda city center)

The centre's mission is to promote and preserve the archaeological and natural heritage of the Oriental region, while also safeguarding its collective memory. Drawing on field research, it showcases the past across different eras, particularly by presenting the traces of ancient humans and their environment. The centre also plays a crucial role in spreading scientific knowledge to the general public, seeking to foster interest in cultural and natural heritage. It thus aims to make this heritage a lever for the region's cultural, social, and economic development.



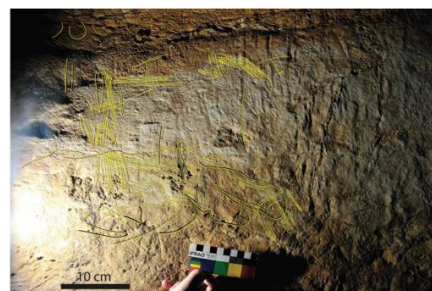
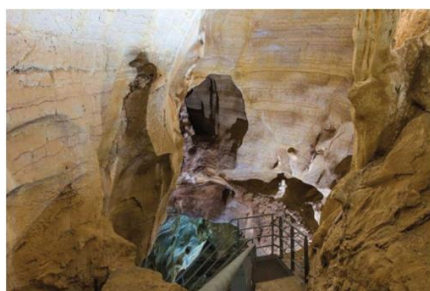
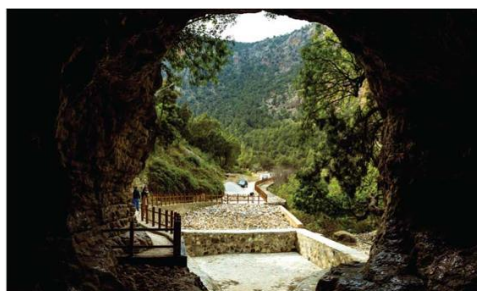
2. The Tafoughalt Cave / Grotte des Pigeons / Ifri Ou' Nzar / مغارة الحمام (50 km from Oujda)

This site is one of the most significant prehistoric necropolises in North Africa. During excavations carried out by Jean Roche in the 1950s, more than 180 fossilised skeletons of anatomically modern humans were unearthed there. The cave also provides evidence of the earliest known successful trepanations, testifying to the advanced surgical skills of the Iberomaurusians. As the first microlith producers in North Africa, they occupied this site continuously for millennia, making it a key reference for understanding the cultural and biological development of early modern humans in the region.



3. The Camel Cave / Grotte du Chameau / Ifri Tasserakout / مغارة الجمل (60 km from Oujda)

This natural cavern extends over three gallery levels, carved over millennia in limestone formations. The cave is renowned for its impressive speleothems (stalactites, stalagmites, and columns) that create a stunning underground landscape. Moreover, it houses some of the oldest rock engravings in North Africa, dated to approximately 12,000 years ago, highlighting the region's rich prehistoric cultural heritage. Named after a prominent stalagmite resembling a camel at its entrance, the site offers a remarkable glimpse into the ancient history of the Beni Znassen mountains and stands as a testament to the collaboration of researchers and local communities in preserving and showcasing this archaeological and natural treasure.



Field trip leader: Prof. Hassan Aouraghe & Hicham MHAMDI

14:00

16:00

16:00

lunch at Tafoughalt or Zegzel 🍴

Departure back to Oujda ↩



Post-Colloque Field-Excursion N°2



4. The Tandrara herbivorous and carnivorous dinosaur site with footprints (Late Cretaceous) (200 km from Oujda)

subject to sufficient enrolment numbers (minimum threshold required) and completion of road rehabilitation works providing access to the site.



08:00	Departure
The second post-congress excursion will take place at Chott Tigri, near the city of Tandrara in Eastern Morocco. This remarkable site preserves fossilised dinosaur footprints dating back approximately 85 million years (Late Cretaceous). The well-preserved trackways, imprinted on red sandstone slabs, provide evidence of the passage of both herbivorous and carnivorous dinosaurs. Visiting this locality offers a unique opportunity to discover an exceptional palaeontological heritage in its original natural setting. Field trip leader: Prof. Moussa Masrour & Nourredine kayboub	
	lunch at Tandrara
17:00	Departure back to Oujda

NB:

- ✓ This program is subject to change (time, speaker, order, etc.)
- ✓ Speakers will have 15 minutes to present their presentations
- ✓ The discussions will take place at the end of each session

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