

Selected Programme Group: <input type="text" value="Geodynamics"/>	Search: <input type="text"/>	<input type="button" value="Submit"/>
--	------------------------------	---------------------------------------

GD – Geodynamics

[Programme Committee Login](#)


GD1 – Geodynamics General Sessions
 GD2 – Crust, Lithosphere, and Asthenosphere: Observations and models
 GD3 – Mantle Dynamics: Linking deep and shallow processes
 GD4 – Core Dynamics
 GD5 – Plate Tectonics and Geodynamics
 GD6 – Regional Geodynamics
 GD7 – Experimental/Theoretical Studies on Earth Materials Relevant to Geodynamics
 GD8 – Integrated Geophysical Observations and Modeling in Geodynamics
 GD9 – Co-Listed Sessions

GD1 – Geodynamics General Sessions

[Programme Committee Login](#)

GD1.1





Open Session in Geodynamics

Convener: Irina Artemieva  | Co-Convener: Paul Tackley 

[Abstract Submission](#) [Convener Login](#)

US1





Lithosphere dynamics, intraplate deformation, and sedimentary basins (by invitation only) (co-listed)

Convener: Sierd Cloetingh  | Co-Conveners: Stefan Schmid , Francois Roure , Hans Thybo 

[Abstract Submission](#) [Convener Login](#)

GD1.2/SM6.1/SSP3.2.1/TS6.6






Lithosphere dynamics, intraplate deformation, and sedimentary basins - in memory of P. Ziegler (co-organized)

Convener: Sierd Cloetingh  | Co-Conveners: Stefan Schmid , Francois Roure , Hans Thybo 

[Abstract Submission](#) [Convener Login](#)

GMPV9/GD1.3








The deep carbon geodynamic cycles (co-sponsored by AGU-VGP) (co-organized)

Convener: Fabrizio Nestola  | Co-Conveners: Michael Burton , Michael Walter , G. Chiodini , Fabrice Gaillard 

[Abstract Submission](#) [Convener Login](#)

GM3.1/GD1.4/TS4.5

Climate, Tectonics and Earth Surface processes (co-organized)

Convener: Jean-Daniel Champagnac  | Co-Conveners: Peter van der Beek , Liran Goren , Pierre Valla , Vivi Kathrine Pedersen , Frédéric Mouthereau , Carole Petit 

[Abstract Submission](#) [Convener Login](#)

SSS1.7/EOS4/BG1.11/ESS11.7/GD1.5/GI1.10/GMPV58/PS9.1/SSP1.6



Teaching Natural Science and Mathematics: New Opportunities and Challenges for In-class and Online Instruction (co-organized)

Convener: Joseph Liddicoat  | Co-Conveners: Nikolaus J. Kuhn , Karen Pearson 

[Abstract Submission](#) [Convener Login](#)

SSS1.4/SC13/GD1.6/GMPV59/OS4.8/SM1.9/SSP1.4/ST6.3/TS1.4

Teaching Geosciences: New Challenges and Opportunities. (co-organized)

Convener: Joseph Liddicoat  | Co-Convener: Karen Pearson 



[Convener Login](#)

GD2 – Crust, Lithosphere, and Asthenosphere: Observations and models

[Programme Committee Login](#)

GD2.1/GMPV46/PS8.3/SM6.15/TS8.6




Geodynamics of cratonic crust and upper mantle: from the early Earth to present (co-organized)

Convener: Irina Artemieva  | Co-Convener: Sonja Aulbach 

[Abstract Submission](#) [Convener Login](#)

GD2.2/GMPV49/SM4.3




Structure and evolution of the oceanic crust and upper mantle (co-organized)

Convener: R. Dietmar Müller  | Co-Conveners: Jason Phipps-Morgan , Catherine A. Rychert 

[Abstract Submission](#) [Convener Login](#)

GD2.3/GMPV52/SM4.2


Nature of upper mantle discontinuities (co-organized)

Convener: Hans Thybo  | Co-Conveners: Catherine A. Rychert , Alan G. Jones 

[Abstract Submission](#) [Convener Login](#)

GMPV5/GD2.4




Earth's early crust: geodynamical and geochemical perspectives on its origin, evolution and interplay with the mantle (co-sponsored by AGU-VGP) (co-organized)

Convener: Bruno Dhuime  | Co-Convener: Pierre Bouilhol 

[Abstract Submission](#) [Convener Login](#)



GMP31/GD2.5/SM5.6

Seismicity, metamorphism and geophysical properties of the lithosphere (co-organized)

Convener: Håkon Austrheim  | Co-Conveners: Francois Renard , Stéphane Rondenay 

[Abstract Submission](#) [Convener Login](#)





SM4.1/GD2.6/GMPV45/TS9.10

Structure of the continental upper mantle (co-organized) ⓘConvener: Ulrich Achauer  | Co-Conveners: Jaroslava Plomerova [Abstract Submission](#) [Convener Login](#)**GD3 – Mantle Dynamics: Linking deep and shallow processes**[Programme Committee Login](#)

GD3.1/GMPV53/PS2.8/SM6.17

Mantle dynamics in the Earth and other planetary bodies (co-sponsored by AGU-SEDI) (co-organized) ⓘConvener: Paul Tackley  | Co-Conveners: Stephanie C. Werner [Abstract Submission](#) [Convener Login](#)




GD3.2/TS9.7

Recent advances in computational geodynamics (co-organized) ⓘConvener: Dave May  | Co-Conveners: Boris Kaus , Duretz Thibault , M. Dabrowski [Abstract Submission](#) [Convener Login](#)


GD3.3/GM3.4/SSS0.15

Topography linked to mantle dynamics and tectonics (co-organized) ⓘConvener: Nicolas Flament  | Co-Conveners: Jean Braun , Laurent Husson [Abstract Submission](#) [Convener Login](#)



GD3.4/GMPV27/SM6.16

Plumes and hotspots: paradigms, models, and implications (co-organized) ⓘConvener: Carole Cordier  | Co-Conveners: Nicholas T. Arndt , Anne Davaille [Abstract Submission](#) [Convener Login](#)





GD3.5/GMPV29/SM6.14

Mid-ocean ridge processes and their consequences: Fast vs slow spreading ridges (co-organized) ⓘConvener: L. Ruepke [Abstract Submission](#) [Convener Login](#)



GMPV3/GD3.6

The DUPAL isotope anomaly: A 30-year retrospective - what have we learnt? (co-organized) ⓘConvener: Tiffany Barry  | Co-Conveners: Cornelia Class [Abstract Submission](#) [Convener Login](#)




TS4.2/GD3.8/GM3.5

Predicting and Modelling the Coupling between the Deep Earth Dynamics and the Earth's Surface Topography (co-sponsored by AGU-Tectonophysics) (co-organized) ⓘConvener: Sean Willett  | Co-Conveners: Claudio Faccenna , Tasca Santimano , Melody Philippon [Abstract Submission](#) [Convener Login](#)**GD4 – Core Dynamics**[Programme Committee Login](#)





GD4.1/EMRP4.1/PS2.7

Earth's core structure and dynamics: observations, models, experiments (co-organized) ⓘConvener: Chris Davies  | Co-Conveners: Ingo Wardinsky [Abstract Submission](#) [Convener Login](#)








GD4.2/EMRP4.2

Mantle control on the geodynamo (co-organized) ⓘConvener: Andy Biggin  | Co-Conveners: Takashi Nakagawa , Hagay Amit [Abstract Submission](#) [Convener Login](#)

EMRP2.5/ESS11.13/G6.10/GD4.3/PS1.4/ST2.5

Swarm – the first constellation to survey the Earth's magnetic field (co-organized) ⓘConvener: Eigil Friis-Christensen  | Co-Conveners: Georgios Balasis , Hermann Lühr , Gauthier Hulot [Abstract Submission](#) [Convener Login](#)**GD5 – Plate Tectonics and Geodynamics**[Programme Committee Login](#)





GD5.1/GMPV64/SM6.11/TS6.7

The first step of the Wilson Cycle: Rifting to post-breakup processes of passive continental margins with special emphasis on the Atlantic Ocean (co-organized) ⓘConvener: Ulrich Anton Glasmacher  | Co-Conveners: Hans-Peter Bunge , Magdalena Scheck-Wenderoth , Francois GUILLOCHEAU , Peter C. Hackspacher , Delphine Rouby , Peter Japsen [Abstract Submission](#) [Convener Login](#)






GD5.2/GMPV65/TS6.5

Geodynamics of Rift Basins and Passive Margins from Surface to Depth: Observations and Modelling (co-organized) ⓘConvener: Ritske S. Huismans  | Co-Conveners: Delphine Rouby , Magdalena Scheck-Wenderoth , Sylvie Leroy [Abstract Submission](#) [Convener Login](#)






TS6.1/GD5.3/GMPV68/SM6.12/SSP3.2.9

Rifted continental margins: The offshore sedimentary, volcanic and crustal architecture (co-organized) ⓘConvener: Gwenn Peron-Pinvidic  | Co-Conveners: Susanne Buiter , Timothy Reston , Nick Kusznir [Abstract Submission](#) [Convener Login](#)




GD5.4/GMPV23/SM6.9

Subduction dynamics from surface to deep mantle (co-organized) Convener: Valentina Magni  | Co-Conveners: Oguz Gogus , Taras Gerya , Wim Spakman [Abstract Submission](#) [Convener Login](#)





GMPV2/GD5.5/TS7.11

Across- and along-arc chemical trends in arc volcanism (co-organized) Convener: Sebastian Watt  | Co-Conveners: Heidi Wehrmann , T. Mather , David Pyle , Weidong Sun [Abstract Submission](#) [Convener Login](#)




TS7.2/GD5.6/GMPV24/SM6.8

On and through the plate interface: zooming into subduction zone processes (co-sponsored by AGU-Tectonophysics) (co-organized) Convener: Philippe Agard  | Co-Conveners: Peter E. van Keken , Andreas Rietbrock , Marco Scambelluri , Paola Vannucchi [Abstract Submission](#) [Convener Login](#)





GD5.7/GMPV26/SM6.10/TS7.13

Orogenesis and geodynamics related to the continental collision of macro- and micro-plates (co-organized) Convener: Hans-Joachim Massonne  | Co-Conveners: Bernhard Grasemann , Uwe Ring [Abstract Submission](#) [Convener Login](#)









GD5.8/EMRP4.8/TS8.5

Slowly deforming plate boundaries and intraplate regions: similarities and differences (co-organized) Convener: David Hindle  | Co-Conveners: Seth Stein , Simon Kuebler [Abstract Submission](#) [Convener Login](#)






TS4.3/GD5.9/GM3.8/SSP3.2.7

Sedimentary basins and the geodynamic record (co-organized) Convener: Christian Heine  | Co-Conveners: Judith Sippel , Kenni Dinesen Petersen , Yanina Najman [Abstract Submission](#) [Convener Login](#)




GM3.2/GD5.10/TS4.6

Intermontane basins: key sites for multidisciplinary approaches to decrypt tectonically active landscapes (co-organized) Convener: Monique Fort  | Co-Conveners: Marta Della Seta , Jose miguel Azanon , Paola Fredi , Giandomenico Fubelli , Francesco Troiani , Stefano Gori [Abstract Submission](#) [Convener Login](#)**GD6 – Regional Geodynamics**[Programme Committee Login](#)





GD6.1/GMPV54/SM6.5/TS8.4

The African continent - Large-scale crust and mantle geodynamic processes (co-organized) Convener: Manel Fernandez  | Co-Conveners: Susan Webb , Jörg Ebbing , Dominique Frizon De Lamotte [Abstract Submission](#) [Convener Login](#)




TS7.7/GD6.2

The Pan African Orogeny: The World's Largest Mountain Building Event(s) In Earth History (co-organized) Convener: L. Ashwal  | Co-Conveners: Trond Torsvik [Abstract Submission](#) [Convener Login](#)

GD6.3/CR1.8/SM6.7

The Antarctic region - Lithosphere structure and geodynamic evolution (co-organized) Convener: Fausto Ferraccioli  | Co-Conveners: Douglas Wiens , Joachim Jacobs [Abstract Submission](#) [Convener Login](#)




GD6.4/CR1.6/SM6.6

The Arctic connection - plate tectonics and mantle dynamics in the North Atlantic, North Pacific and the High Arctic (co-organized) Convener: Carmen Gaina  | Co-Conveners: Sergey Drachev [Abstract Submission](#) [Convener Login](#)


TS8.3/GD6.5/GMPV57

Basement-cover relationships in Orogenic Belts from Greenland to Svalbard: The Arctic gateway (co-organized) Convener: Pierpaolo Guarnieri  | Co-Conveners: Jaroslaw Majka [Abstract Submission](#) [Convener Login](#)

GD6.6/GMPV25/TS7.12

The Antilles Subduction Zone: Internal and External Geodynamics (co-organized) Convener: Mendy Bengoubou-Valerius  | Co-Conveners: Marie-Lise Bernard , Frederick Massin [Abstract Submission](#) [Convener Login](#)




TS7.4/G6.4/GD6.7/SM6.2

Dynamics and Structure of the Mediterranean Alpine Collision and Back-arcs (including the Stephan Mueller Medal lecture by Claudio Faccenna) (co-organized) Convener: Laetitia Le Pourhiet  | Co-Conveners: György Hetényi , Carlos Garrido [Abstract Submission](#) [Convener Login](#)

TS7.5/G6.5/GD6.8/SM6.3

Present-day kinematics and tectonics of the Mediterranean Region: Implications for geodynamics and earthquake potential (co-organized) Convener: Philippe Vernant  | Co-Conveners: Giorgi Khazaradze , Haluk Ozener , Paolo Marco De Martini [Abstract Submission](#) [Convener Login](#)

TS8.1/GD6.9

Plate tectonics of Asia: India-Asia collision, SE Asia and Australia-Oceania (co-organized) Convener: Jonny Wu  | Co-Conveners: Sabin Zahirovic , Douwe J. J. van Hinsbergen 

[Abstract Submission](#) [Convener Login](#)



GD7 – Experimental/Theoretical Studies on Earth Materials Relevant to Geodynamics

[Programme Committee Login](#)

GD7.1/EMRP4.13/GMPV50/SM5.5

Anisotropy from crust to core: Observations, models and implications (co-organized)

Convener: Stéphane Rondenay | Co-Conveners: Sergei Lebedev , Andrea Tommasi

[Abstract Submission](#) [Convener Login](#)

GD7.2/EMRP4.12/GMPV51/SM5.7/SSS7.17

Linking geophysical observations to geodynamics through mineral physics (co-organized)

Convener: Shun-ichiro Karato | Co-Conveners: Saskia Goes , Shijie Zhong

[Abstract Submission](#) [Convener Login](#)

GMPV13/GD7.3/SM5.4

Water-rock Interactions in the mantle: integration of experiments, theory and field studies (co-organized)

Convener: Isabelle Daniel | Co-Conveners: Craig Manning , Dimitri Sverjensky

[Abstract Submission](#) [Convener Login](#)

GD7.4/GMPV47/TS9.8

Long-term rheological behavior of the crust and mantle inferred from observations and models at laboratory and geological time and spatial scales (co-organized)

Convener: Evgueni Burov | Co-Conveners: Anthony Watts , Yury Podladchikov , Laurent Jolivet

[Abstract Submission](#) [Convener Login](#)

GD7.5/G6.9/TS9.9

Linking Deformation to Geodynamics (co-organized)

Convener: Rob Govers | Co-Convener: Tim Wright

[Abstract Submission](#) [Convener Login](#)

TS3.1/EMRP4.3/GD7.6

Ductile deformation: fabrics, fluid-rock interaction and metamorphic conditions (co-sponsored by AGU-Tectonophysics) (co-organized)

Convener: Luca Menegon | Co-Conveners: Michael Stipp , Richard Law , Giorgio Pennacchioni

[Abstract Submission](#) [Convener Login](#)

TS3.2/EMRP4.4/GD7.7

Mechanical properties of the middle to lower crust: strain localization and the interplay between brittle and ductile behaviour (co-organized)

Convener: Neil Mancktelow | Co-Convener: Giorgio Pennacchioni

[Abstract Submission](#) [Convener Login](#)

TS9.3/ESS1.11/G6.7/GD7.8/GMPV67/NH4.11

Crustal faulting and deformation processes observed by InSAR, GPS and photogrammetry: From observations and monitoring to numerical and physical modeling (co-organized)

Convener: Thomas R. Walter | Co-Conveners: Francesco Zucca , Rocco Malservisi , Riccardo Lanari , Hannes Bathke

[Abstract Submission](#) [Convener Login](#)

TS1.2/GD7.9

Transpressional/Transtensional deformation at oblique tectonic settings (co-organized)

Convener: Manuel Diaz-Azpiroz | Co-Conveners: Dyanna Czeck , Carlos Fernández , Karen Leever

[Abstract Submission](#) [Convener Login](#)

GMPV12/GD7.10/TS3.8

Fluid-rock interaction processes in the oceanic lithosphere and their significance for elemental cycling in subduction zones and the deep Earth (co-organized)

Convener: Bernard Grobéty | Co-Conveners: Cees-Jan De Hoog , Ralf Halama , Stéphane Guillot

[Abstract Submission](#) [Convener Login](#)



GD8 – Integrated Geophysical Observations and Modeling in Geodynamics

[Programme Committee Login](#)

GD8.1/CL2.4/GMPV63

Heat flow, crustal and mantle temperatures from geophysical and geochemical data (co-organized)

Convener: Andrea Förster | Co-Convener: Alan Vaughan

[Abstract Submission](#) [Convener Login](#)

GD8.2/SM4.9

Lithosphere structure and mantle dynamics based on EM studies (co-organized)

Convener: Juanjo Ledo | Co-Conveners: Alan Jones , M. Moorkamp

[Abstract Submission](#) [Convener Login](#)

GD8.3/EMRP4.9/G6.8/TS9.11

Modelling of crust and upper mantle using land-based and satellite-derived gravity and magnetic data (co-organized)

Convener: Jörg Ebbing | Co-Conveners: Rune Floberghagen , Roger Haagmans

[Abstract Submission](#) [Convener Login](#)

G3.1/CL2.15/CR1.7/GD8.4/GM9.7/TS4.7







Observations and modelling of Glacial Isostatic Adjustment and related processes (co-organized)

Convener: Holger Steffen | Co-Conveners: Markku Poutanen , Willy Fjeldskaar , Wouter van der Wal

[Abstract Submission](#) [Convener Login](#)




SM4.4/GD8.5/TS9.12

Seismic imaging (co-organized)


Convener: Edi Kissling  | Co-Conveners: Stefan Buske , Alireza Malehmir , Cedric Schmelzbach , Ivan Koulakov ,
CharLotte Krawczyk 
[Abstract Submission](#) [Convener Login](#)






TS9.1/GD8.6

Advances in analogue and numerical modeling of geologic processes (co-organized) 

Convener: Marcel Frehner  | Co-Conveners: Matthias Rosenau , Dion Weatherley 
[Abstract Submission](#) [Convener Login](#)

SM1.3/ESS12.14/GD8.7/GI1.6/GMPV56/TS1.5

Integrated Research Infrastructures and Services to users: supporting excellence in a science for society (co-organized) 



Convener: Massimo Cocco  | Co-Conveners: Walter Schmidt , Stefano Nativi , Torild Eck Van , Keith Jeffery 
[Abstract Submission](#) [Convener Login](#)

GD9 – Co-Listed Sessions


[Programme Committee Login](#)




SM1.1

Open Session on Seismology (including Beno Gutenberg Medal Lecture) (co-listed) 

Convener: CharLotte Krawczyk  | Co-Conveners: Massimo Cocco 
[Abstract Submission](#) [Convener Login](#)





TS2.2/EMRP4.11

Deformation of Earth and Planetary Materials between Fracture and Creep (co-listed) 


Convener: Renee Heilbronner  | Co-Conveners: Holger Stunitz , M.R. Drury 
[Abstract Submission](#) [Convener Login](#)







PS7.1

Experimental and theoretical simulations (co-listed) 

Conveners: Luigi Colangeli , Javier Martin-Torres  | Co-Conveners: Ruth Ziethe , Erika Kaufmann 
[Abstract Submission](#) [Convener Login](#)


TS7.1/GM3.7

Fold-and-thrust belts & accretionary wedges: mechanics, models, large earthquakes, fluids, growth, erosion, structures, tectonics and lithospheric links (co-listed) 

Convener: John Suppe  | Co-Conveners: Jaume Vergés , Fabien Gravelleau , Nadaya Cubas , Judith Hubbard , Dengfa He 
[Abstract Submission](#) [Convener Login](#)




TS1.1

Open Session on Tectonics and Structural Geology (Posters only) (co-listed) 


Convener: Susanne Buitert 
[Abstract Submission](#) [Convener Login](#)

CR2.3/SM4.6

Applied Geophysics in Cryosphere Sciences (co-listed) 


Convener: Reinhard Drews  | Co-Conveners: Olaf Eisen , Michael Krautblatter 
[Abstract Submission](#) [Convener Login](#)












TS4.4/OS2.7/SSP3.2.8

Capturing a Salt Giant: causes, processes and impacts of the Messinian Salinity Crisis in the Mediterranean realm (co-sponsored by IAS) (co-listed) 


Convener: Daniel Garcia-Castellanos  | Co-Conveners: Rachel Flecker , Angelo Camerlenghi , Christian Huebscher , Judith McKenzie , LOFI Johanna , Sean Willett 
[Abstract Submission](#) [Convener Login](#)




PS8.1/BG8.2

Evolution of planetary habitability: conditions for the origin of life on Earth and beyond Earth (co-listed) 

Convener: Emmanuelle J. Javaux  | Co-Conveners: Doris Breuer , Agustin Chicarro , Veronique Dehant , Özgür Karatekin , Helmut Lammer , Lena Noack , Tilman Spohn , Frances Westall , Doris Breuer , Ann Carine Vandaele 
[Abstract Submission](#) [Convener Login](#)









PS7.2

Planetary magnetic fields and interior dynamics (co-listed) 

Convener: Johannes Wicht  | Co-Conveners: Nadine Nettelmann , Jerome Noir 
[Abstract Submission](#) [Convener Login](#)

PS2.6

Volcanism, tectonics, impacts and other geological processes across the Solar System (co-listed) 

Convener: Thomas Platz  | Co-Conveners: Alexander Deutsch , Harald Hiesinger , Fred Jourdan , Matteo Massironi , Pascal Allemand , Stephanie C. Werner , Paul Byrne 
[Abstract Submission](#) [Convener Login](#)