



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SCIENCE @ DIRECT®

C. R. Geoscience 336 (2004) 1543–1549



COMPTES RENDUS

GEOSCIENCE

<http://france.elsevier.com/direct/CRAS2A/>

## Keyword index Vol. 336, 2004

$^{40}\text{Ar}/^{39}\text{Ar}$  – Maurel O., 1091  
**18th century** – Tarkowski R., 1227  
**3D** – Thomas Y., 579  
**5th-order cycles** – Minkovska V., 931  
 $\delta^{13}\text{C}$  – Vincent B., 29  
 $\delta^{18}\text{O}$  – Vincent B., 29

### A

**accretionary wedge** – Lacombe O., 815  
**acidification** – Moncoulon D., 1417  
**active faults** – Lyon-Caen H., 343  
**adsorption** – Domange N., 49  
**Aegean Sea** – Schuiling R.D., 1053  
**aerosol** – Pontikis C., 1409  
**AIG10** – Rettenmaier D., 415  
**AIG-10 well** – Naville C., 407  
**Aigion** – Rettenmaier D., 415 – Song I., 445 – Giurgea V., 467  
**Aigion Fault** – Pantosti D., 335 – Pizzino L., 367 – Naville C., 407 – Prioul R., 477  
**Aigion fault offset** – Cornet F.H., 395  
**Almyros** – Arfib B., 999  
**Alpine foreland** – Coromina G., 75  
**Alps** – Ganne J., 1219 – Zuppi G.-M., 1371  
**ammonites** – Bréhéret J.-G., 1355  
**anaerobic conditions** – Stemmler S.J., 1171  
**Anti-Atlas** – Benssaou M., 109 – Soulaïmani A., 1433  
**aquifer** – Larroque F., 1111  
**archaeocyathes** – Benssaou M., 109

**arsenic** – Cornu S., 1007  
**Aspe Valley** – Canérot J., 135  
**aspidolite (sodium phlogopite)** – Garnier V., 1245  
**assimilation** – Dautria J.-M., 971  
**astronomical theory** – Berger A., 701  
**asymmetric folds** – Carosi R., 939  
**atmosphere and vegetation** – Bracconot P., 711  
**atmospheric deposition** – Moncoulon D., 1417  
**Atterberg limits** – Proust C., 1233  
**axial zone of the Montagne Noire, U-Pb dating** – Roger F., 19  
**azimuthal anisotropy** – Prioul R., 477

### B

**back-arc basin** – Soumaila A., 1137  
**backstepping wedge** – Weber N., 1273  
**bacterial reduction** – Stemmler S.J., 1171  
**Barremian** – Minkovska V., 931  
**basalt** – Dautria J.-M., 971 – Soumaila A., 1137  
**basic rocks** – Villaseca C., 877  
**basins** – Chalbaoui M., 1191  
**bathymetry** – Weber N., 1273  
**benthic life** – Bréhéret J.-G., 1355  
**bias** – Domange N., 49  
**bidisperse structure** – Gauthier J.-P., 187

**bioavailability** – Perrier N., 567  
**bioengineering** – Rey F., 991  
**Birimian** – Soumaila A., 1137  
**black shales** – Bréhéret J.-G., 1355  
**block rotations** – Avallone A., 301  
**Bossòst dome** – Mezger J.E., 827  
**Bou-Dahar** – Adil S., 1265  
**Brazil** – Volland-Tuduri N., 1017  
**breccias** – Canérot J., 951  
**Bresse** – Rocher M., 1209  
**brines** – Adil S., 1265 – Zuppi G.-M., 1371  
**Bulgaria** – Minkovska V., 931  
**Burdigalian** – Loÿe-Pilot M.-D., 919  
**Burundi** – Villeneuve M., 807

### C

**Calabria** – Iannace A., 227  
**calc-alkaline orthogneiss** – Roger F., 19  
**calcareous nodules** – Bréhéret J.-G., 1355  
**calclutite** – Song I., 445  
**calcite twins** – Lacombe O., 815  
**calcite vein** – Labaume P., 375  
**Cameroon** – Bitom D., 1161 – Temdjim R., 1239  
**‘Cameroon Line’** – Montigny R., 1463  
**carbon capture and storage** – Prieur A., 1323  
**carbon dioxide** – Marchal O., 691  
**carbonate platform** – Carpentier C., 59

**carbonates** – Vincent B., 29 – Daniel J.-M., 435  
**catchment area** – Blavoux B., 523  
**cathodoluminescence** – Labaume P., 375  
**celadonite** – Bernard M., 789  
**Central Africa** – Villeneuve M., 807  
**Central Atlantic** – Sahabi M., 1041  
**Central Jebilet** – El Harti A., 1311  
**cerrados** – Volland-Tuduri N., 1017  
**Chaîne des Puys** – Aubert M., 869 – Miallier D., 1345  
**chemical composition** – Krimissa S., 1363  
**chloride** – Krimissa S., 1363  
**chronology** – Feybesse J.-L., 1255  
**cinematic** – Sahabi M., 1041  
**clathrate** – Beauchamp B., 751  
**clay smearing** – Cornet F.H., 395  
**clays** – Sulem J., 455 – Suzanne K., 1071 – Proust C., 1233  
**climate** – André J.-C., 491 – Duplessy J.-C., 657  
**climate change** – Beauchamp B., 751  
**climate feedbacks** – Braconnot P., 711  
**climate forcings** – Bertrand C., 741  
**climate model** – Bertrand C., 741  
**climate numerical modelling** – Ramstein G., 639  
**climate sensitivity** – Raynaud D., 647  
**climate variability** – Guiot J., 667  
**climate-carbon coupled model** – Ramstein G., 639  
**climatic change** – Duplessy J.-C., 657 – Paillard D., 733  
**climatic forcing** – Raynaud D., 647  
**climatic inertia** – Gaucherel C., 175  
**CO<sub>2</sub> inclusions** – Bilal A., 197  
**CO<sub>2</sub> production** – Schuiling R.D., 1053  
**coastal aquifer** – Krimissa S., 1363  
**coastal ecosystems** – Bensoussan N., 909  
**cohesion** – Gargani J., 561  
**cohesive sediment** – Waeles B., 1025  
**collapse** – Canérot J., 951  
**collision** – Lacombe O., 815  
**combined wood uses** – Prieur A., 1323  
**complexity** – Amitrano D., 505  
**conduit** – Arfib B., 999

**consolidation** – Song I., 445  
**constraints** – Feybesse J.-L., 1255  
**contact metamorphism** – Le Bayon B., 1079  
**contaminated soils** – Cornu S., 1007  
**continental tholeiites** – Soulaïmani A., 1433  
**convection** – Pontikis C., 1409  
**converted phase analysis** – Latorre D., 259  
**coral breccias** – Carpentier C., 59  
**Corbières** – Charrière A., 1199  
**cordierite** – Mezger J.E., 827  
**Corinth** – Naville C., 407 – Rettenmaier D., 415  
**Corinth Gulf** – Pantosti D., 335 – Pizzino L., 367  
**Corinth Lake** – Moretti I., 291  
**Corinth Rift** – Pi Alperin J.M., 251 – Causse C., 281 – Avallone A., 301 – Lyon-Caen H., 343 – Labaume P., 375  
**correlation and spectral analysis** – Amraoui F., 1099  
**CORSSA array** – Pitilakis K., 353  
**coupling between ocean** – Braconnot P., 711  
**crater field** – Paillou P., 1491  
**creep** – Bérest P., 1337  
**Crete** – Arfib B., 999  
**critical load** – Moncoulon D., 1417  
**critical velocity** – Gargani J., 561  
**crush-leach** – Adil S., 1265  
**crustal extension** – Soulaïmani A., 1433  
**crystalline rocks** – Zuppi G.-M., 1371  
**crystallochemistry** – Quéméneur J., 117

## D

**Dansgaard-Oeschger events** – Paillard D., 733 – Landais A., 963  
**decoulement** – Khomsi S., 1401  
**deformation** – Gargani J., 901 – Feybesse J.-L., 1255  
**detachment** – Pi Alperin J.M., 251 – Chikhaoui M., 1131  
**detrital continental formation** – Charrière A., 1199  
**devitrification** – Bernard M., 789

**diagenesis** – Vincent B., 29  
**diamond** – Pouclet A., 9  
**diapiric** – Khomsi S., 1293  
**diapirism** – Canérot J., 951  
**diapirs zone** – Chikhaoui M., 1131  
**diatreme** – Pouclet A., 9  
**diffraction** – Naville C., 407  
**dipole sonic** – Prioul R., 477  
**dislocation modelling** – De Martini P.M., 325  
**dissolved oxygen** – Bensoussan N., 909  
**distensive tectonic** – Attou A., 767  
**diurnal variability** – Bensoussan N., 909  
**DORIS** – Willis P., 839  
**downcutting** – Carozza J.-M., 217  
**drift** – Ardhuin F., 1121  
**drought** – Amraoui F., 1099  
**drying method** – Proust C., 1233

## E

**early diagenesis** – Bréhéret J.-G., 1355  
**eastern China** – Lefort J.-P., 159  
**eastern Corsica** – Loÿe-Pilot M.-D., 919  
**Eastern Mediterranean domain** – Over S., 93  
**eastern Pyrenees** – Carozza J.-M., 217 – Maurel O., 1091  
**eastern Tunisia** – Khomsi S., 1293 – Khomsi S., 1401  
**ecosystems** – Moncoulon D., 1417  
**Egypt** – Paillou P., 1491  
**El Niño** – Gaucherel C., 175  
**electrostatic quadrupole** – Chaplot V., 553  
**ELLAM** – Younes A., 547  
**emerald deposits** – Moine B., 513  
**emerald occurrences** – Zwaan J.C., 41  
**energy resource** – Beauchamp B., 751  
**environmental isotopes** – Zuppi G.-M., 1371  
**environmental scanning electron microscope** – Volland-Tuduri N., 1017  
**episodic deformation** – Castelltort S., 151  
**Erfault orthogneiss** – Le Bayon B., 1079

**erosion** – Gargani J., 561 – Gargani J., 901 – Rey F., 991  
**erratic boulder** – Bard E., 603  
**Essaouira Basin** – Mehdi K., 587  
**evaporites** – Garnier V., 1245  
**exhumation** – Ganne J., 1219  
**exhumation process** – Carozza J.-M., 217  
**extension** – Coromina G., 75 – Malartre F., 269 – Avallone A., 301 – Lyon-Caen H., 343

## F

**facies** – Blot A., 1473  
**fault** – Coromina G., 75 – Carozza J.-M., 217  
**fault breccia** – Labaume P., 375  
**fault displacement** – Gudmundsson A., 85  
**fault evolution** – Gudmundsson A., 85  
**fault gouge** – Sulem J., 455  
**fault hydraulic property** – Cornet F.H., 395  
**fault scaling** – Gudmundsson A., 85  
**fault strength** – Cornet F.H., 395  
**fault zone** – Labaume P., 375 – Rettenmaier D., 415 – Giurgea V., 467  
**faults** – Lacombe O., 815 – Montenat C., 1301  
**Ferralsol** – Volland-Tuduri N., 1017  
**field** – Tamoh K., 535  
**filtrage** – Khattach D., 1427  
**finite strain** – Carosi R., 939  
**firn, Daansgard-Oeschger events** – Landais A., 963  
**flexural dispersion** – Prioul R., 477  
**flexural isostasy** – Gargani J., 901  
**flood** – Bard E., 603  
**fluid circulation** – Giurgea V., 467  
**fluid escapes** – Nouzé H., 1181  
**fluid flow** – Daniel J.-M., 435  
**fluid geochemistry** – Pizzino L., 367  
**fluid inclusion** – Adil S., 1265  
**fluid-driven mass transfer** – Labaume P., 375  
**fluorine** – Moine B., 513  
**Fluvisol** – Chaplot V., 553  
**fold** – Bellot J.-P., 67  
**folding mechanism** – Carosi R., 939  
**folds** – Lacombe O., 815

**fontaine de Vaucluse** – Gilli É., 1481  
**Foraminifera** – Loÿe-Pilot M.-D., 919  
**Fore-Balkan** – Minkovska V., 931  
**foreland basins** – Fondecave-Wallez M.-J., 1391  
**fossil fuels** – Bard E., 603  
**fossil reserves** – Prieur A., 1323  
**fracture** – Daniel J.-M., 435  
**France** – Roger F., 19 – Vincent B., 29 – Carpentier C., 59 – Bellot J.-P., 67 – dos Reis A.T., 125 – dos Reis A.T., 143 – Carozza J.-M., 217 – Blavoux B., 523 – Cocherie A., 775 – Mezger J.E., 827 – Aubert M., 869 – Collon P., 889 – Gargani J., 901 – Dautria J.-M., 971 – Maurel O., 1091 – Larroque F., 1111 – Dumas D., 1149 – Rocher M., 1209 – Moncoulon D., 1417 – Gilli É., 1481  
**French Alps** – Dumas D., 1149  
**French coasts** – Abboud-Abi Saab M., 1379  
**French Pyrenees** – Fondecave-Wallez M.-J., 1391  
**friction law** – Cornet F.H., 395

## G

**garnet zonation** – Le Bayon B., 1079  
**Garoua** – Montigny R., 1463  
**Garumnian (Vitrollian)** – Charrière A., 1199  
**gas hydrates** – Beauchamp B., 751 – Nouzé H., 1181  
**gas trapping** – Suzanne K., 1071  
**geochemistry** – Villaseca C., 877 – Temdjim R., 1239 – Blot A., 1473  
**geodynamic model** – El Harti A., 1311  
**geological mapping** – El Harti A., 1311  
**geomorphology** – Bitom D., 1161  
**geophysical techniques** – Chaplot V., 553  
**geothermal anomaly** – Aubert M., 869  
**Gilbert-delta** – Malartre F., 269  
**Gilf Kebir** – Paillou P., 1491  
**glacial cycles** – Lambeck K., 677  
**glacial period** – Labeyrie L., 721

**glaciation** – Ramstein G., 639  
**global biogeochemical cycle** – Marchal O., 691  
**gossans** – Blot A., 1473  
**gouge** – Song I., 445  
**GPR** – Chaplot V., 553  
**GPS** – Avallone A., 301  
**grade-dating** – Loÿe-Pilot M.-D., 919  
**Gran Paradiso** – Le Bayon B., 1079  
**granitoids** – Baharifar A., 1443  
**gravimetry** – Khattach D., 1427  
**Greece** – Ghisetti F., 243 – Causse C., 281 – De Martini P.M., 325 – Pantosti D., 335 – Rettenmaier D., 415 – Lemeille F., 425 – Schuiling R.D., 1053  
**greenhouse effect** – Bard E., 603  
**greenhouse gases** – Raynaud D., 647  
**Greenland** – Landais A., 963  
**ground response analyses** – Pitilakis K., 353  
**groundwater** – Krimissa S., 1363 – Grünberger O., 1453  
**growth strata** – Castelltort S., 151  
**growth structures** – Castelltort S., 151  
**Guettard** – Tarkowski R., 1227  
**Gulf of Corinth** – Ghisetti F., 243 – Latorre D., 259 – Malartre F., 269 – Moretti I., 291 – De Martini P.M., 325 – Lemeille F., 425 – Daniel J.-M., 435  
**Gulf of Lions** – dos Reis A.T., 125 – dos Reis A.T., 143  
**gypsum** – Collon P., 889

## H

**halloysite** – Bernard M., 789  
**halokinesis** – Mehdi K., 587  
**Hamadan** – Baharifar A., 1443  
**heat transfer** – Schuiling R.D., 1053  
**heat transport** – Bard E., 603  
**heat wave** – André J.-C., 491  
**Heinrich events** – Labeyrie L., 721  
**helium** – Moreira M., 983  
**Hellenic thrust belt** – Ghisetti F., 243  
**Hercynian orogeny** – Maurel O., 1091  
**Hercynian structure** – García-Sansegundo J., 1035  
**hiatus** – Montenat C., 1301

**high resolution** – Thomas Y., 579  
**hill reservoir** – Grünberger O., 1453  
**Holocene climate** – Bertran P., 1501  
**HP metamorphism** – Ganne J., 1219  
**hurricanes** – Carpentier C., 59 – Bertran P., 1501  
**hydraulic characterisation** – Tamoh K., 535  
**hydraulic conductivity** – Tamoh K., 535  
**hydrogeological conceptual model** – Giurgea V., 467  
**hydrogeology** – Giurgea V., 467 – Larroque F., 1111 – Khattach D., 1427  
**hydrographs** – Amraoui F., 1099  
**hydrological measurement** – Léonardi V., 385  
**hydrology** – Rey F., 991  
**hydromorphic soils** – Stemmler S.J., 1171  
**hydrophon well sensor** – Naville C., 407

## I

**ICDP** – Rettenmaier D., 415  
**ice** – Boutron C., 847  
**ice age** – Bard E., 603  
**ice cores** – Raynaud D., 647 – Landais A., 963  
**imagery** – Thomas Y., 579  
**impact** – Paillou P., 1491  
**Indonesia** – Villeneuve M., 1511  
**infiltrometer** – Tamoh K., 535  
**insolation** – Berger A., 701  
**interface** – Sulem J., 455  
**intertidal flat** – Waeles B., 1025  
**inversion** – Over S., 93  
**iron mines** – Collon P., 889  
**iron oxides** – Stemmler S.J., 1171  
**Isère** – Feybesse J.-L., 1255  
**islands** – Pontikis C., 1409  
**isostasy** – Lambeck K., 677  
**isotopes** – Boutron C., 847  
**isotopic age** – Kister P., 205  
**Ivory Coast** – Pouclet A., 9

## J

**Jason** – Willis P., 839  
**Jura** – Rocher M., 1209

**Jurassic** – Chalbaoui M., 1191  
**Jurassic–Cretaceous** – Baharifar A., 1443

## K

**K–Ar ages** – Montigny R., 1463  
**kaolinite** – Proust C., 1233  
**karst** – Arfib B., 999 – Gilli É., 1481  
**karstic spring** – Amraoui F., 1099  
**Kerdous** – Soulaïmani A., 1433  
**Kibaran belt** – Villeneuve M., 807  
**kimberlite** – Pouclet A., 9  
**kinematics** – Feybesse J.-L., 1255  
**kinetic extractions** – Cornu S., 1007  
**kinetics** – Bohy M., 799  
**Kivu** – Villeneuve M., 807  
**Kokoumi pluton** – Montigny R., 1463

## L

**La Serre horst** – Coromina G., 75  
**lake sedimentation** – Bertran P., 1501  
**Langhian** – Loÿe-Pilot M.-D., 919  
**Late Carboniferous–Early Permian** – Coromina G., 75  
**Late Cretaceous tectonics** – Charrière A., 1199  
**Late Proterozoic** – Soulaïmani A., 1433  
**laterite** – Blot A., 1473  
**lateritic soils** – Perrier N., 567  
**Laves phases** – Gauthier J.-P., 187  
**lead** – Boutron C., 847 – Feybesse J.-L., 1255  
**lead mobility** – Kister P., 205  
**leaded gasoline** – Boutron C., 847  
**Lebanese coasts** – Abboud-Abi Saab M., 1379  
**Lesser Antilles** – Bertran P., 1501  
**lightning** – Pontikis C., 1409  
**Linguizzetta granite** – Loÿe-Pilot M.-D., 919  
**Liptako** – Soumaila A., 1137  
**liquefaction phenomena** – Pitolakis K., 353  
**listric fault** – Loÿe-Pilot M.-D., 919  
**litho-log** – Rettenmaier D., 415  
**lithophaga** – Gilli É., 1481

**Liuchiu Hsu island** – Lacombe O., 815  
**longitudinal profile** – Gargani J., 901  
**Lorraine** – Carpentier C., 59 – Collon P., 889  
**Lower Cambrian** – Benssaou M., 109  
**Lower Cretaceous** – Canérot J., 951 – Chalbaoui M., 1191  
**Lower-Provence karst** – Blavoux B., 523

## M

**Macdonald (seamount)** – Moreira M., 983  
**Madagascar** – Moine B., 513  
**magnetic anomaly** – Sahabi M., 1041  
**major faults** – Khomsi S., 1293  
**major shell beds** – Ouali Mehadjji A., 1283  
**mantle plumes** – Moreira M., 983  
**mantle viscosity** – Lambeck K., 677  
**marine seismic** – Thomas Y., 579  
**marine terraces** – De Martini P.M., 325  
**Marseilles and Grand-Rhone ridges** – dos Reis A.T., 143  
**Maures** – Bellot J.-P., 67  
**mechanical behaviour** – Amitrano D., 505  
**medium Isère watershed basin** – Dumas D., 1149  
**Medoc** – Larroque F., 1111  
**Mesoproterozoic** – Villeneuve M., 807  
**Messinian** – Gilli É., 1481  
**Messinian Rhone** – Gargani J., 901  
**metamorphism** – Baharifar A., 1443  
**metasomatism** – Moine B., 513 – Temdjim R., 1239  
**methane** – Marchal O., 691 – Beauchamp B., 751  
**mica** – Quéméneur J., 117  
**microbialites** – Benssaou M., 109  
**microped** – Volland-Tuduri N., 1017  
**microporosity** – Suzanne K., 1071  
**Mid-Cretaceous tectonics** – Montecat C., 1301  
**Middle Atlas** – Amraoui F., 1099  
**Middle Oxfordian** – Carpentier C., 59

**Middle–Upper Cretaceous** – Fondecave-Wallez M.-J., 1391  
**Milankovitch** – Berger A., 701  
**millennial variability of climate** – Labeyrie L., 721  
**Milos** – Schuiling R.D., 1053  
**mine archaeology** – Feybesse J.-L., 1255  
**mineral composition** – Mezger J.E., 827  
**mineral  $^{40}\text{K}$ – $^{40}\text{Ar}$  ages** – Baharifar A., 1443  
**mineralisation** – Feybesse J.-L., 1255  
**mineralogy** – Miallier D., 1 – Zwaan J.C., 41 – Blot A., 1473  
**mixing** – Adil S., 1265  
**model** – Berger A., 701  
**model testing** – Braconnot P., 711  
**modelling** – Amitrano D., 505 – Moine B., 513 – Marchal O., 691 – Collon P., 889 – Grünberger O., 1453  
**monitoring** – Bernard P., 313  
**Mont-Louis granite** – Maurel O., 1091  
**moraine** – Bard E., 603  
**Morocco** – Benssaou M., 109 – Tamoh K., 535 – Mehdi K., 587 – Attou A., 767 – Dekayir A., 1061 – Amraoui F., 1099 – Adil S., 1265 – El Harti A., 1311 – Krimissa S., 1363 – Khattach D., 1427 – Soulaïmani A., 1433  
**morphodynamical equilibrium** – Waeles B., 1025  
**mortar** – Dekayir A., 1061  
**mud diapir** – Lacombe O., 815  
**mylonite** – Coromina G., 75

## N

**Nangimali** – Garnier V., 1245  
**nannoplankton** – Loÿe-Pilot M.-D., 919  
**natural analogue** – Kister P., 205  
**natural hazard** – Beauchamp B., 751  
**natural sciences** – Tarkowski R., 1227  
**Neogene** – Chikhaoui M., 1131  
**Neogene palaeogeographic reconstructions** – Villeneuve M., 1511

**neotectonics** – Carozza J.-M., 217  
**neutral mine drainage** – Collon P., 889  
**New Caledonia** – Perrier N., 567  
**nickel** – Perrier N., 567  
**nickel hyperaccumulating plants** – Perrier N., 567  
**Niger** – Soumaila A., 1137  
**non-linear soil behaviour** – Pitilakis K., 353  
**nontronite** – Bernard M., 789  
**normal faulting** – Causse C., 281  
**normal faults** – Ghisetti F., 243 – Malartre F., 269 – Daniel J.-M., 435  
**North Africa** – Grünberger O., 1453  
**North-Pyrenean Fault** – Canérot J., 135  
**North-Pyrenean Front** – Charrière A., 1199  
**northern Tunisia** – Chikhaoui M., 1131  
**numerical model** – Waeles B., 1025  
**Nyos** – Temdjim R., 1239

## O

**observation** – Bensoussan N., 909  
**ocean–atmosphere interactions** – André J.-C., 491  
**oceanic plateau** – Soumaila A., 1137  
**oceanography** – Duplessy J.-C., 657  
**Oligocene** – Larroque F., 1111  
**Oligocene and mid-Pliocene collisions** – Villeneuve M., 1511  
**olistoliths** – Montenat C., 1301  
**Olonos Pindos** – Rettenmaier D., 415  
**open marine** – Canérot J., 951  
**ophites** – Canérot J., 135  
**orbit determination** – Willis P., 839  
**Ordovician** – Roger F., 19  
**organic matter** – Bréhéret J.-G., 1355  
**Oulad Abbou** – Attou A., 767  
**oxygen isotopes** – Zwaan J.C., 41

## P

**Pakistan** – Garnier V., 1245  
**palaeoceanography** – Duplessy J.-C., 657  
**palaeoclimates** – Duplessy J.-C., 657 – Guiot J., 667 – Marchal O., 691 – Berger A., 701 – Landais A., 963

**palaeoclimatology** – Paillard D., 733  
**palaeogeography** – Carpentier C., 59  
**palaeomagnetism** – Lefort J.-P., 159  
**palaeoseismology** – Pantosti D., 335  
**Palaeozoic basin** – El Harti A., 1311  
**paleoclimate modeling** – Braconnot P., 711  
**paleogeography** – Gilli É., 1481  
**paleostress** – Lacombe O., 815  
**Paleozoic** – Carosi R., 939  
**palynology** – Malartre F., 269  
**paragonite** – Garnier V., 1245  
**Paris Basin** – Vincent B., 29 – Carpentier C., 59  
**particule** – Gargani J., 561  
**partition coefficient** – Quéméneur J., 117  
**partitioning** – Bohy M., 799  
**partitioning tracer** – Bohy M., 799  
**passive margin** – Mehdi K., 587  
**Pays de Sault** – Fondecave-Wallez M.-J., 1391  
**pegmatites** – Quéméneur J., 117  
**pellets** – Bréhéret J.-G., 1355  
**Penninic domain** – Ganne J., 1219  
**peritidal sequences** – Attou A., 767  
**permeability** – Song I., 445  
**pesticide** – Domange N., 49  
**pH** – Bensoussan N., 909  
**phengite** – Garnier V., 1245  
**phlogopite** – Garnier V., 1245  
**phonolite** – Dautria J.-M., 971  
**physical model** – Arfib B., 999  
**piston coring** – Moretti I., 291  
**Poland** – Tarkowski R., 1227  
**pollen** – Guiot J., 667  
**pollution** – Boutron C., 847 – Ardhuin F., 1121  
**polymetamorphism** – Mezger J.E., 827  
**Polynesia** – Moreira M., 983  
**Pontet mine** – Feybesse J.-L., 1255  
**porous media** – Younes A., 547 – Bohy M., 799 – Suzanne K., 1071  
**Porquerolles island** – Bellot J.-P., 67  
**Port-Miou** – Blavoux B., 523  
**precious opal CT** – Gauthier J.-P., 187  
**progressive unconformities** – Chikhaoui M., 1131  
**propagating folds** – Chikhaoui M., 1131

**Proterozoic** – Ramstein G., 639  
**Provençal area** – Bellot J.-P., 67  
**Provençal platform** – Montenat C., 1301  
**Provence** – Gilli É., 1481  
**PS-transmitted waves** – Latorre D., 259  
**pseudosections** – Mezger J.E., 827  
**pull-apart** – Khomsi S., 1293  
**pumping tests** – Giurgea V., 467  
**Pyrenees** – García-Sansegundo J., 1035  
**Pyreneo-Languedocian fan** – dos Reis A.T., 125  
**pyrite** – Collon P., 889  
**pyroxene thermometry** – Bilal A., 197

## Q

**qualitative and quantitative facies analysis** – Minkovska V., 931  
**Quaternary** – Guiot J., 667  
**Quaternary stress distribution** – Over S., 93

## R

**radar** – Paillou P., 1491  
**radioactivity** – Miallier D., 1  
**radiocarbon dating** – Miallier D., 1345  
**radiogenic lead** – Kister P., 205  
**radio-MT** – Chaplot V., 553  
**rapid climatic variability** – Landais A., 963  
**reactive transport** – Younes A., 547  
**refraction** – Naville C., 407  
**refraction seismics** – Pi Alperin J.M., 251  
**refractive index** – Miallier D., 1  
**remote sensing** – El Harti A., 1311  
**reservoirs** – Chalbaoui M., 1191  
**residual gas saturation** – Suzanne K., 1071  
**Rhine Graben** – Cocherie A., 775  
**rhyolite** – Bernard M., 789  
**rift** – Mehdi K., 587  
**Rift Corinth Laboratory** – Léonardi V., 385  
**Rift of Corinth** – Bernard P., 313  
**rock salt** – Bérest P., 1337

**Rodinia** – Lefort J.-P., 159  
**Roman Empire** – Boutron C., 847  
**Roman mosaic** – Dekayir A., 1061  
**rubidium** – Quéméneur J., 117  
**ruby-bearing marble** – Garnier V., 1245  
**Rwanda** – Villeneuve M., 807

## S

**SAA** – Willis P., 839  
**Sahara** – Ouali Mehadji A., 1283  
**Saint Martin Island** – Bertran P., 1501  
**saline intrusion** – Arfib B., 999  
**salinity** – Blavoux B., 523  
**salt basin** – Sahabi M., 1041  
**salt tectonics** – dos Reis A.T., 125 – dos Reis A.T., 143  
**salt-sediment interaction** – dos Reis A.T., 125 – dos Reis A.T., 143  
**Sanandaj–Sirjan zone** – Baharifar A., 1443  
**Sandawana** – Zwaan J.C., 41  
**sandstone** – Suzanne K., 1071  
**Sardinia** – Carosi R., 939  
**satellite geodesy** – Willis P., 839  
**scaling invariance** – Amitrano D., 505  
**schists** – Krimissa S., 1363  
**screening** – Domange N., 49  
**SE France** – Montenat C., 1301  
**SE-Turkey** – Over S., 93  
**sea level** – Benssaou M., 109 – Lambek K., 677  
**seasonal forecasting** – André J.-C., 491  
**seasonal variability** – Bensoussan N., 909  
**seawater temperature** – Abboud-Abi Saab M., 1379  
**sediment** – Rey F., 991  
**sedimentary flow** – Dumas D., 1149  
**sedimentation** – Lemeille F., 425 – Gargani J., 561  
**segmentation** – Mehdi K., 587  
**seismic** – Naville C., 407  
**seismic reflection** – Larroque F., 1111 – Weber N., 1273  
**seismicity** – Lyon-Caen H., 343  
**sequential extraction** – Cornu S., 1007  
**shear** – Prioul R., 477  
**shear zones** – Iannace A., 227  
**shortening** – Feybesse J.-L., 1255  
**silent earthquake** – Bernard P., 313  
**silica** – Gauthier J.-P., 187  
**Silurian** – Attou A., 767  
**silver** – Feybesse J.-L., 1255  
**site effects** – Ptilakis K., 353  
**slip rates** – Castelltort S., 151 – De Martini P.M., 325  
**slope stability** – Nouzé H., 1181  
**slumping** – Canérot J., 951  
**small strain rates** – Bérest P., 1337  
**smectite** – Proust C., 1233  
**snow** – Boutron C., 847  
**snowball Earth** – Ramstein G., 639  
**softening behaviour** – Sulem J., 455  
**soil** – Younes A., 547  
**soil solution** – Domange N., 49  
**soil spatial distribution** – Chaplot V., 553  
**soil water content** – Stemmler S.J., 1171  
**soils** – Bitom D., 1161  
**solar constant** – Bard E., 603  
**Soultz-sous-Forêts** – Cocherie A., 775  
**source zone characterization** – Bohy M., 799  
**South Atlantic Anomaly** – Willis P., 839  
**Southern Apennines** – Iannace A., 227  
**southwestern Tunisia** – Chalbaoui M., 1191  
**Spanish Central System** – Villaseca C., 877  
**speciation** – Boutron C., 847 – Cornu S., 1007  
**spring** – Arfib B., 999  
**Sr–Nd isotopes** – Villaseca C., 877 – Dautria J.-M., 971  
**stable isotopes** – Krimissa S., 1363 – Grünberger O., 1453  
**staurolite** – Mezger J.E., 827  
**Storegga** – Nouzé H., 1181  
**strain** – Bernard P., 313  
**strain analysis** – Iannace A., 227  
**streamflow** – Gaucherel C., 175  
**stresses** – Prioul R., 477 – Rocher M., 1209  
**strike-slip fault** – Bellot J.-P., 67  
**stromatolites** – Lefort J.-P., 159  
**structural** – Feybesse J.-L., 1255

**structural inheritance** – Rocher M., 1209 – Khomsi S., 1401  
**structure** – Volland-Tuduri N., 1017 – Khattach D., 1427  
**stylolite** – Labaume P., 375  
**Sub-Pyrenean Zone** – Charrière A., 1199  
**subcontinental mantle** – Villaseca C., 877  
**subduction volcanism** – Schuiling R.D., 1053  
**submarine spring** – Blavoux B., 523  
**subsidence** – Lemeille F., 425 – Bitom D., 1161  
**subsidence rate** – Moretti I., 291  
**subsurface** – Khomsi S., 1293  
**suction cup** – Domange N., 49  
**Sulawesi** – Villeneuve M., 1511  
**Sumba** – Villeneuve M., 1511  
**superswell** – Moreira M., 983  
**SW Taiwan** – Lacombe O., 815  
**syn-rift deposits** – Lemeille F., 425  
**syntectonic deposits** – Ghisetti F., 243  
**Syria** – Bilal A., 197

## T

**taphonomic-feedback** – Ouali Mehadji A., 1283  
**tectonic** – Rettenmaier D., 415 – Chalbaoui M., 1191  
**tectonic inversion** – Mehdi K., 587  
**tephra** – Miallier D., 1  
**tephrochronology** – Miallier D., 1345  
**tesserae** – Dekayir A., 1061  
**Th/U dating** – Causse C., 281  
**the Kef** – Chikhaoui M., 1131  
**thermals** – Pontikis C., 1409  
**thermohaline circulation** – Paillard D., 733  
**thermoluminescence** – Miallier D., 1  
**thermo-mechanical testing** – Sulem J., 455  
**thrust front** – Khomsi S., 1401  
**thrust nappe** – Rettenmaier D., 415  
**thunderstorm** – Pontikis C., 1409  
**tidal facies** – Attou A., 767  
**tidal flow** – Waeles B., 1025  
**tilt** – Bernard P., 313  
**time-averaging** – Ouali Mehadji A., 1283

**time-frequency method** – Gaucherel C., 175  
**time series** – Bensoussan N., 909 – Abboud-Abi Saab M., 1379  
**Timor** – Villeneuve M., 1511  
**trace analysis** – Boutron C., 847  
**trace elements** – Bernard M., 789  
**trachyte** – Miallier D., 1  
**transient (strain)** – Bernard P., 313  
**transient climate simulation** – Bertrand C., 741  
**transpression/transension tectonics** – Over S., 93  
**Triassic** – Khomsi S., 1401  
**trichlorethene** – Bohy M., 799  
**Triffa** – Khattach D., 1427  
**tropical climate** – Blot A., 1473  
**tropical rainforest** – Bitom D., 1161  
**Tunisia** – Grünberger O., 1453  
**turbidites** – Fondécave-Wallez M.-J., 1391  
**turbidity gradients** – Dumas D., 1149

## U

**U–Pb** – Maurel O., 1091  
**U–Pb dating** – Roger F., 19 – Cocherie A., 775  
**ultramafic xenoliths** – Temdjim R., 1239  
**unconformities** – García-Sansegundo J., 1035 – Khomsi S., 1293  
**unsaturated flow** – Younes A., 547  
**updrafts** – Pontikis C., 1409  
**Upper Burundian** – Villeneuve M., 807  
**Upper Emsian** – Ouali Mehadji A., 1283  
**Upper Jurassic** – Vincent B., 29  
**Upper Ordovician** – García-Sansegundo J., 1035  
**uranium** – Kister P., 205

## V

**Van der Waals** – Gargani J., 561  
**Variscan basement** – Carosi R., 939  
**Variscan Belt** – Roger F., 19 – Bellot J.-P., 67  
**Variscan Pyrenees** – Mezger J.E., 827

**vegetation** – Guiot J., 667 – Rey F., 991  
**Velay** – Dautria J.-M., 971  
**vibrocure** – Weber N., 1273  
**Vocontian Basin** – Montenat C., 1301  
**volcanics** – Montigny R., 1463  
**volcanoes** – Miallier D., 1345  
**Volubilis** – Dekayir A., 1061  
**VSP** – Naville C., 407

## W

**warm rain** – Pontikis C., 1409  
**water budget** – Grünberger O., 1453  
**water circulation in fault zones** – Pizzino L., 367  
**water content** – Tamoh K., 535  
**water deep circulation** – Zuppi G.-M., 1371  
**water level change** – Léonardi V., 385  
**waves** – Waeles B., 1025 – Ardhuin F., 1121  
**weathering** – Bernard M., 789 – Dekayir A., 1061 – Krimissa S., 1363 – Moncoulon D., 1417  
**wells calibration** – Léonardi V., 385  
**West-African Craton** – Lefort J.-P., 159  
**western Iran** – Baharifar A., 1443  
**western Pyrenees** – Canérot J., 135 – Canérot J., 951  
**wood energy** – Prieur A., 1323  
**world forest resources** – Prieur A., 1323  
**wrench-faulting** – Canérot J., 135

## X

**xenoliths** – Bilal A., 197

## Y

**Young's modulus** – Gudmundsson A., 85

## Z

**Zimbabwe** – Zwaan J.C., 41  
**zircons** – Cocherie A., 775