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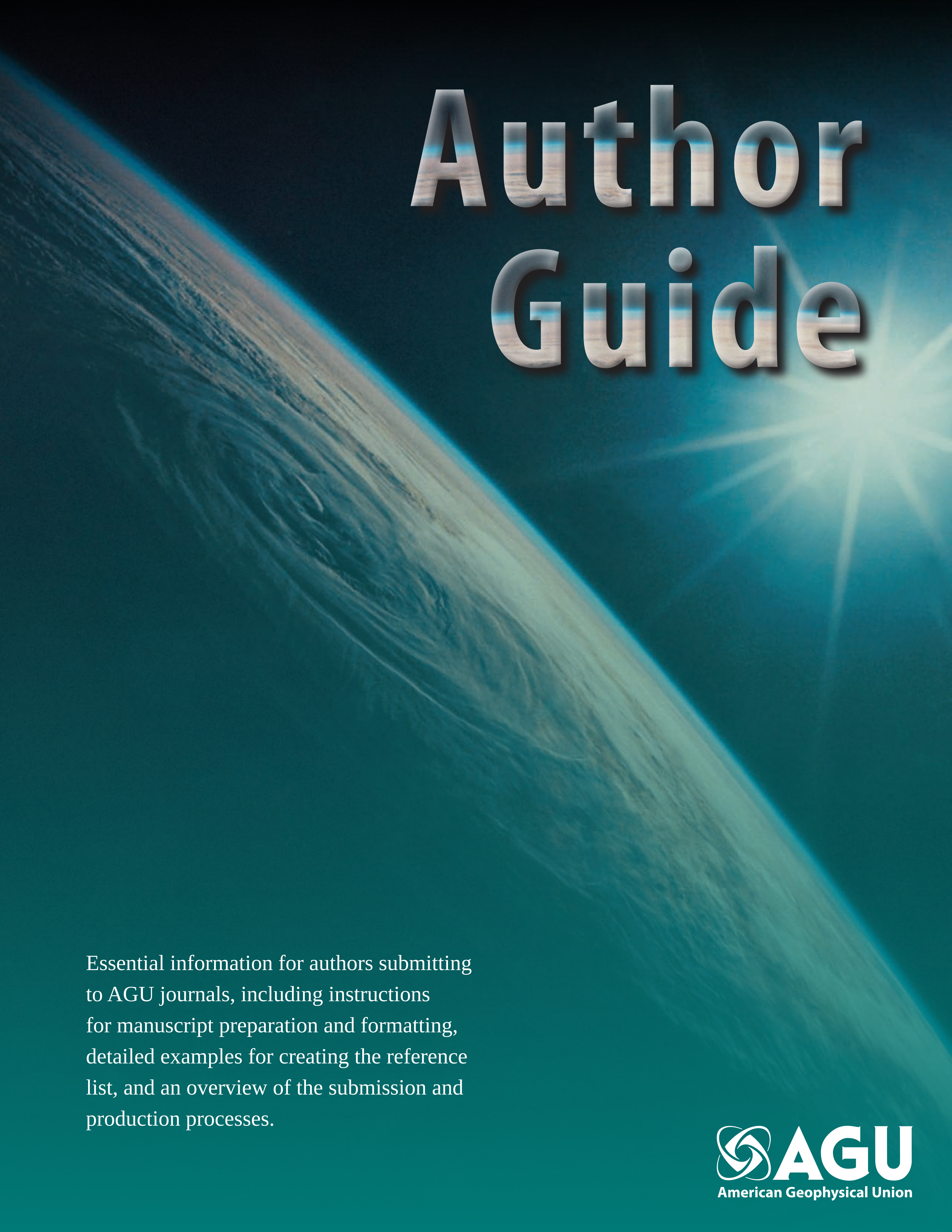

Author Guide

Essential information for authors submitting to AGU journals, including instructions for manuscript preparation and formatting, detailed examples for creating the reference list, and an overview of the submission and production processes.

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The manuscript file should be arranged in the following order:

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Abstract
Text (including appendices and notation)
Acknowledgments
Reference list
Figure captions
Dynamic content captions
Tables

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c rate of soil accumulation, m/yr.
d median grain size of water-deposited material, μm.
D distance of the locus of points, m.
h elevation of the rock stream channel at a particular time t_i, m.

Acknowledgments
Acknowledgments should be limited to collegial and financial assistance. Acknowledgments are not meant to recognize personal or manuscript production support.

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All sources cited in text, tables, and figures must appear in the reference list, and all entries in the reference list

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Smith, R. (2000b), ...
Smith, R. (2003), ...
Smith, R., and F. A. Allen (2001), ...
Smith, R., and L. A. Frank (1998), ...
Smith, R., and L. A. Frank (2001), ...
Smith, R., and Scientific Shipboard Party (2005)
Smith, R., D. H. Roberts, and J. Jones (1998), ...
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Fang, X., M. W. Liemohn, A. F. Nagy, J. G. Luhmann, and Y. Ma (2009), On the effect of the Martian crustal magnetic field on atmospheric erosion, *Icarus*, doi:10.1016/j.icarus.2009.01.012, in press.
Wang, C. (2005), A modeling study of the response of tropical deep convection to the increase of cloud condensational nuclei concentration: 1. Dynamics and microphysics, *J. Geophys. Res.*, *110*, D21211, doi:10.1029/2004JD005720.
Yum, S. S., and J. G. Hudson (2002), Maritime/continental microphysical contrasts in stratus, *Tellus*, *Ser*. *B*, *54*, 61–73.

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de Marsily, G. (1986), *Quantitative Hydrogeology: Groundwater Hydrology for Engineers*, Academic, San Diego, Calif.
Klotz, S., and N. L. Johnson (Eds.) (1983), *Encyclopedia of Statistical Sciences*, John Wiley, Hoboken, N. J.
Tape, W. (1994), *Atmospheric Halos, Antarctic Res. Ser*., vol. 64, AGU, Washington, D. C.

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Langmuir, C. H., E. M. Klein, and T. Plank (1992), Petrological systematics of mid-ocean ridge basalts: Constraints on melt generation beneath ocean ridges, in *Mantle Flow and Melt Generation at Mid-Ocean Ridges*, *Geophys. Monogr. Ser*., vol. 71, edited by J. Phipps Morgan et al., pp. 183–280, AGU, Washington, D. C.
Tapley, B. D., and M.-C. Kim (2001), Applications to geodesy, in *Satellite Altimetry and Earth Sciences: A Handbook of Techniques and Applications*, edited by L.-L. Fu and A. Cazenave, pp. 371–406, Academic, San Diego, Calif.

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Bentor, Y., and A. Vroman (1960), Arava Valley, with explanatory text, in *The Geological Map of the Negev*, rev. ed., sheet 19, scale 1:1,000,000, Isr. Geol. Surv., Jerusalem.
Brown, R. J. E. (1967), Permafrost in Canada, *Map 1246A*, Geol. Surv. of Can., Ottawa, Ont.
Moridis, G. J. (1998), A set of semianalytical solutions for parameter estimation in diffusion cell experiments, *Rep. LBNL-41857*, Lawrence Berkeley Natl. Lab., Berkeley, Calif.
Trask, N. J. (1986), Size and spatial distribution of craters estimated from Ranger photographs, in *Ranger 8 and 9 Analyses and Interpretation*, *Tech. Rep. 32-800*, pp. 251–260, Jet Propul. Lab., Pasadena, Calif.

Thesis. Authors, publication date, thesis title, thesis designator (including degree), institution, and institution's location must be included.

Brittle, K. F. (2001), Vibroseis deconvolution: Frequency-domain methods, M.S. thesis, Dep. of Geol. and Geophys., Univ. of Calgary, Calgary, Alberta, Canada.

Conference paper. Authors, meeting date, title of paper presented, name of meeting (preceded by "paper presented at"), meeting sponsor, and location of meeting are required. Conference proceedings published as books or in journals should be formatted as those types. When possible, avoid citing conference papers older than 2 years; instead, cite published book or journal articles that resulted from the research presented at the conference.

Khain, A., A. Pokrovsky, U. Blahak, and D. Rosenfeld (2008), Is the dependence of warm and ice precipitation on the aerosol concentration monotonic?, paper presented at 15th International Conference on Clouds and Precipitation, Int. Comm. on Clouds and Precip., Cancun, Mexico.

Smith, E. A., Z. S. Haddad, S. Tanelli, and G. J. Tripoli (2008), Advancements in NEXRAD in Space (NIS), paper presented at 28th Conference on Hurricanes and Tropical Meteorology, Am. Meteorol. Soc., Orlando, Fla.

***Eos*.** Use *Eos Trans. AGU* as the publication title. Note format for meeting abstracts published in supplements to *Eos*.

Faustini, J. M., P. R. Kaufmann, A. T. Herlihy, and S. G. Paulsen (2009), Assessing stream ecosystem condition in the United States, *Eos Trans. AGU*, *90*(36), 309–310.

Nagle, A. N., R. C. Pickle, A. E. Saal, E. H. Hauri, and D. W. Forsyth (2007), Volatiles in basalts from intra-transform spreading centers: Implications for melt migration models, *Eos Trans. AGU*, *88*(52), Fall Meet. Suppl., Abstract DI43A-05.

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Integrated with text:
B. L. Smith (unpublished data, 2008)
available from the U.S. Geological Survey (http://www.usgs.gov/)

Parenthetical:
(D. B. G. Collins and R. L. Bras, Climatic and ecological controls of equilibrium drainage density, relief, and channel concavity in drylands, submitted to *Water Resources Research*, 2009)
(J. G. Jones, manuscript in preparation, 2009)

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Column heads. All columns (except the first one) must have headings. Column headings must be arranged so that their relation to the data is clear and they refer to column below.
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Article Preparation

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The following checklist covers the changes made most frequently to AGU manuscripts. Following this checklist will help speed the processing of your manuscript.

- List all authors on title page and provide complete addresses for all authors
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- Define abbreviations/acronyms at first use
- Change dates to international date format: 25 January 2003 (in tables, months may be abbreviated)
- Change bulleted lists to numbered lists
- Add space between numeral and unit of measure; do not use a dot
- Number text equations consecutively throughout; do not number by section, except appendix equations, which must be numbered separately from main text equations
- Provide equations that are editable, not formatted as pictures
- Format reference citations to AGU style: use name-date format, not numbered references, and enclose citations in brackets: …[*Smith et al.*, 2009]… or *Smith et al.* [2009] show…
- Provide complete information for each reference, as outlined above
- Cite all references in the text and provide a reference for each unique text citation
- Provide tables that are editable, not formatted as pictures (note that tables may be submitted in Excel)
- Include at least two points of latitude and longitude on figures containing maps
- LaTeX: Do not use \newcommands, particularly ones with # (using \ref and \label and \cite commands for reference citations is acceptable)

Sample Tables

Table 1. Fitted Parameters of the Waxman and Smits Equation Relating Soil Electrical Conductivity and Water Saturation for the Three Soils Investigated in This Study[a]

	F_{sat}	n	σ_s (S/m)
Avignon silty clay loam	5.48	5.96	0.359
Collias loam	4.54	1.88	0.109
Fontainebleau sand	4.62	2.58	0.036

[a]See equation (3).

Table 2. Coefficients of Determination for Both Seasons When x Is the Topographic Index Using Total Periods[a]

Regression Equations	6–22 Nov 2003		2–22 May 2004	
	10 cm	30 cm	10 cm	30 cm
	MD8 Surface			
Linear	0.13 (0.08)	0.35 (0.38)	0.00 (0.01)	0.03 (0.02)
Logarithm	0.07 (0.07)	0.40 (0.39)	0.00 (0.02)	0.03 (0.02)
Exponential	0.12 (0.07)	0.34 (0.41)	0.00 (0.02)	0.03 (0.02)
Power	0.07 (0.14)	0.42 (0.39)	0.00 (0.04)	0.02 (0.02)
	MD8 Bedrock			
Linear	0.20 (0.10)	0.49 (0.48)	0.00 (0.01)	0.05 (0.03)
Logarithm	0.11 (0.11)	0.50 (0.50)	0.00 (0.00)	0.04 (0.04)
Exponential	0.18 (0.11)	0.45 (0.55)	0.00 (0.01)	0.05 (0.02)
Power	0.09 (0.20)	0.52 (0.50)	0.00 (0.03)	0.03 (0.04)
	$MD\infty$ Surface			
Linear	0.04 (0.02)	0.43 (0.57)	0.05 (0.00)	0.03 (0.01)
Logarithm	0.01 (0.02)	0.55 (0.56)	0.02 (0.00)	0.01 (0.01)
Exponential	0.03 (0.10)	0.42 (0.58)	0.05 (0.03)	0.02 (0.00)
Power	0.01 (0.03)	0.56 (0.57)	0.01 (0.10)	0.00 (0.02)
	$MD\infty$ Bedrock			
Linear	0.24 (0.14)	0.53 (0.76)	0.04 (0.00)	0.07 (0.02)
Logarithm	0.11 (0.09)	0.73 (0.75)	0.01 (0.00)	0.02 (0.02)
Exponential	0.22 (0.10)	0.50 (0.75)	0.03 (0.00)	0.05 (0.02)
Power	0.09 (0.23)	0.73 (0.74)	0.01 (0.00)	0.01 (0.05)

[a]Here r^2 represents explained variation divided by total variation between averages of measured and estimated soil moisture using contributing areas for several regression analysis conditions such as computing algorithm, used topography, date, soil depth, and regression models. Linear equation is $y = ax + b$, logarithm equation is $y = a \ln(x) + b$, exponential equation is $y = a\exp(bx)$, and power equation is $y = ax^b$, where y and x are mean soil moistures and modeled contributing areas and a and b are constants for regression models, respectively. Numbers in parentheses are regression analysis.

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Geophysical Research Letters (GRL) publishes short, concise research letters that present scientific advances that are likely to have immediate influence on the research of other investigators. GRL letters can focus on a specific discipline or apply broadly to the geophysical science community.

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Journal of Geophysical Research (JGR) publishes original scientific research on the physical, chemical, and biological processes that contribute to the understanding of the Earth, Sun, and solar system and all of their environments and components. JGR is currently organized into seven disciplinary sections (Atmospheres, Biogeosciences, Earth Surface, Oceans, Planets, Solid Earth, Space Physics). Sections may be added or combined in response to changes in the science.

- ***JGR-Atmospheres*** includes physics and chemistry of the atmosphere, as well as the atmospheric-biospheric, lithospheric, and hydrospheric interface.
- ***JGR-Biogeosciences*** focuses on biogeosciences of the Earth system in the past, present, and future and the extension of this research to planetary studies. The emerging field of biogeosciences spans the intellectual interface between biology and the geosciences and attempts to understand the functions of the Earth system across multiple spatial and temporal scales. Studies in biogeosciences may use multiple lines of evidence drawn from diverse fields to gain a holistic understanding of terrestrial, freshwater, and marine ecosystems and extreme environments. Specific topics within the scope of the section include process-based theoretical, experimental, and field studies of biogeochemistry, biogeophysics; atmosphere-, land-, and ocean-ecosystem interactions; biomineralization; life in extreme environments; astrobiology; microbial processes; geomicrobiology; and evolutionary geobiology.
- ***JGR-Earth Surface*** focuses on the physical, chemical, and biological processes that affect the form and function of the surface of the solid Earth over all temporal and spatial scales, including fluvial, eolian, and coastal sediment transport; hillslope mass movements; glacial and periglacial activity; weathering and pedogenesis; and surface manifestations of volcanism and tectonism.
- ***JGR-Oceans*** covers physical, biological, and chemical oceanography.
- ***JGR-Planets*** covers the geology, geophysics, geochemistry, atmospheres, biology, and dynamics of the planets, satellites, asteroids, rings, comets, and meteorites; planetary origins; and planetary detection. Studies of the Earth are included when they concern exogenic effects or the comparison of the Earth to other planets.
- ***JGR-Solid Earth*** focuses on the physics and chemistry of the solid Earth and the liquid core of the Earth, geomagnetism, paleomagnetism, marine geology/geophysics, chemistry and physics of minerals, rocks, volcanology, seismology, geodesy, gravity, and tectonophysics.
- ***JGR-Space Physics*** covers aeronomy and magnetospheric physics, planetary atmospheres and magnetospheres, interplanetary and external solar physics, cosmic rays, and heliospheric physics.

Paleoceanography focuses on original contributions dealing with reconstructions of past conditions and processes of change as recorded in sediments deposited in water. This especially includes marine sediments but may extend to sediments from freshwater environments. Approaches to past reconstruction might include sedimentology, geochemistry, paleontology, oceanography, geophysics, and modeling. Contributions will emphasize global and regional aspects, rather than purely local interests, and can cover all ages (Precambrian to the Quaternary, including modern analogs).

Radio Science carries original scientific contributions on all aspects of electromagnetic phenomena related to physical problems. This journal covers the propagation through and interaction of electromagnetic waves with geophysical media, biological media, plasmas, and man-made structures. Coverage includes, but is not limited to, the application of electromagnetic techniques to remote sensing of the Earth and its environment, telecommunications, signals and systems, the ionosphere, and radio astronomy. All frequencies (including optical) are considered.

Reviews of Geophysics provides an overview of geophysics and the directions in which it is going and serves as an integrating force in geophysics. Authorship is by invitation, but suggestions from readers and potential authors are welcome. *Reviews of Geophysics* distills and places in perspective previous scientific work in currently active subject areas of geophysics. Contributions evaluate overall progress in the field and cover all disciplines embraced by AGU.

Space Weather: The International Journal of Research and Applications is an online publication devoted to the emerging field of space weather and its impact on technical systems, including telecommunications, electric power, and satellite navigation. The goal is to be a research as well as news and information resource for space weather professionals. *Space Weather* publishes peer-reviewed articles presenting the latest engineering and science research in the field, including studies of the response of technical systems to specific space weather events, predictions of detrimental space weather impacts, and effects of natural radiation on aerospace systems; news and feature articles providing up-to-date coverage of government agency initiatives worldwide and space weather activities of the commercial sector; letters and opinion articles offering an exchange of ideas; and editorial comments on current issues facing the community.

Tectonics contains original scientific contributions in analytical, synthetic, and integrative tectonics. Papers are restricted to the structure and evolution of the terrestrial lithosphere with dominant emphasis on the continents. *Tectonics* is joint publication of AGU and the European Geosciences Union.

Water Resources Research is an interdisciplinary journal integrating research in the social and natural sciences of water. It contains original contributions in hydrology; in the physical, chemical, and biological sciences; and in the social and policy sciences, including economics, systems analysis, sociology, and law.

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