



Geological Society of America (GSA) Style for References and In-Text Citations

General Guidelines

- GSA style is commonly used for pieces of work within the Geology discipline. The style provides citation formats for a variety of unconventional sources, such as comments, discussions & replies, abstracts, and computer programs.
- References should be in alphabetical order on a new page titled “References Cited”.
- You should not cite papers that are unpublished, in preparation, just submitted, in review, or in revision.

SWC [1]: This does not include in-press sources, which are manuscripts that have already been approved for publication. It also does not include open-file reports, which are a non-permanent form of publication for manuscripts, map, and other sources for public use.

In-Text Citations

- GSA does not use footnotes and tends to steer away from direct quotes. If you’re drawing information from another source, paraphrase the information with a narrative or parenthetical citation.
- In-text citations in GSA are similar to APA format; reference the author’s last name and the year of publication.
 - Narrative Citation: Ogasa (2024) found evidence that suggests that the Cascadia megathrust has the potential to wreck Washington state with severe earthquakes.
 - Parenthetical Citation: Evidence suggests that the Cascadia megathrust has the potential to wreck Washington state with severe earthquakes (Ogasa, 2024).
- For sources with multiple authors, the format varies based on how many authors there are.
 - Two authors: It has been suggested that the Ramapo Fault will cause a major earthquake (Brown and Matthews, 2015).
 - Three authors: It has been suggested that the Ramapo Fault will cause a major earthquake (Brown, Matthews, and Smith, 2015).
 - Six or more authors: It has been suggested that the Ramapo Fault will cause a major earthquake (Brown et al., 2015).

SWC [2]: Note that the year of publication in a narrative citation follows the author’s last name in parentheses.

SWC [3]: Note that the author’s last name and the year of publication are separated by a comma in a parenthetical citation.

SWC [4]: When citing a source with two authors, both names remain in the in-text citation both for the initial citation and any subsequent citations.

SWC [5]: This is the format you use for the initial in-text citation. For subsequent citations, you would use the first author’s name followed by ‘et al.’ as you would do for six or more authors.



Abstract

From a conference:

Reusch, D.B., Karmosky, C.C., Lampkin, D.J., and Schneider, D.P., 2013, Will a warmer west Antarctic also bring a wetter ice sheet?: Abstract C21E-07 presented at 2013 Fall Meeting, me, San Francisco, California, 9–13 December.

From sources other than conferences:

Sears, J.W., 2012, Making Nuna and breaking Rodinia: Implications of Siberia-Laurentia connections for supercontinent cycles: Geological Society of America Abstracts with Programs, v. 44, no. 7, p. 378.

SWC [6]: Here the authors are listed, using last names and both first and middle initials if both are known. Note that their names are separated by commas and the final name is preceded by 'and'.

SWC [7]: Year of conference, without parentheses.

SWC [8]: Title of abstract. Only the initial word and proper nouns are capitalized. The "Abstract C21E-07" is part of the title, and not necessarily something all abstract citations will have to include.

SWC [9]: presented at [conference name]

SWC [10]: Conference location (city, state)

SWC [11]: The date is formatted in the form the dates for the duration of the conference followed by the month. The year was mentioned earlier in the citation.

SWC [12]: Author surname and first initials

SWC [13]: Year of publication

SWC [14]: Both title and subtitle are written in sentence case. Sentence case is when the initial word and proper nouns within the title/subtitle are capitalized while all other words are lowercase.

SWC [15]: After the title of abstract, the second colon (between 'cycles' and 'Geological') separates the title of the abstract from the title of the publication. (The first colon indicates a subtitle in the abstract title.)

SWC [16]: Title of publication

SWC [17]: Volume #, number #, and page referenced in lowercase abbreviations with commas in between. Even if you are citing more than one page, you would still use p. as opposed to pp. (example: p. 298-302)



Book

Burchfiel, B.C., Chen Zhiliang, Hodges, K.V., Liu Yuping, Royden, L.H., Deng Changrong, and Xu Jiene, 1992, The South Tibetan Detachment System, Himalayan Orogen: Extension Contemporaneous with and Parallel to Shortening in a Collisional Mountain Belt: Geological Society of America Special Paper 269, 41 p., <https://doi.org/10.1130/SPE269>.

Coffin, M.F., Frey, F.A., Wallace, P.J., et al., 2000, Proceedings of the Ocean Drilling Program, Initial reports, Volume 183: College Station, Texas, Ocean Drilling Program, CD-ROM.

Vogt, P., and Tucholke, B., eds., 1986, The Western North Atlantic Region: Boulder, Colorado, Geological Society of America, Geology of North America, v. M, 696 p., 11 pl., <https://doi.org/10.1130/DNAG-GNA-M>.

SWC [18]: For countries where the last name comes before the first name, you don't invert the authors name or put a comma in the references

SWC [19]: In this citation, all authors associated with the source are co-chief scientists, so you would include every name in your reference. A co-chief scientist for the purposes of GSA is a person with a PhD or equivalent expertise in the specific discipline, who took a leadership role in the paper.

SWC [20]: Year of publication

SWC [21]: Title of book. The first colon separates the main title from the subtitle; the second colon serving to separate title from name of publisher. Note that the title of the book is in title case- all important words in the title are capitalized.

SWC [22]: Name of publisher

SWC [23]: Title of series (in this case the book is part of a series called Special Papers) and volume number

SWC [24]: This is the total number of pages in the source, not the specific page number you sourced the information from. Note that the number of pages comes before "p." This differs from the formatting from other types of sources in GSA style.

SWC [25]: This is the DOI of the book; note that there is a period after the link.

SWC [26]: This citation is an exception for GSA style because it uses "et. al" for authors who aren't co-chief scientists; authors who are co-chief scientists are the first authors listed, whose names are separated from other authors who are listed in a new paragraph.

SWC [27]: Note how the word "Volume" in the full book citation is written out and capitalized, unlike how volumes are noted in abstract citations.

SWC [28]: A CD-ROM source is a readable file that is accessed through a CD. Because the book is in a digital format, the form of the book is noted.

SWC [29]: The editors names are listed here, as you are citing the whole book. Individual names of authors who wrote each chapter would be cited if you were only citing an individual chapter from a book, as demonstrated below.
Notice that even with only 2 authors, there is a comma between names.

SWC [30]: Sometimes multi-volume books will use letters to indicate the volume rather than numbers



Chapter in a Book/Paper in a Multiauthor Volume

Sawyer, D.S., Buffler, R.T., and Pilger, R.H., 1991, The crust under the Gulf of Mexico basin, in Salvador, A., ed., The Gulf of Mexico Basin: Boulder, Colorado, Geological Society of America, Geology of North America, v. J, p. 53-72.

Comment, Discussion, or Reply

Retallack, G.J., 1993, Classification of paleosols: Discussion: Geological Society of America Bulletin, v. 105, p. 1635-1636, [https://doi.org/10.1130/0016-7606\(1993\)105<1635:COPDAR>2.3.CO;2](https://doi.org/10.1130/0016-7606(1993)105<1635:COPDAR>2.3.CO;2).

- SWC [31]:** Author(s)
- SWC [32]:** Year of publication
- SWC [33]:** Title of chapter
- SWC [34]:** "in" (italicized) Editor(s) of full volume. The editor name will be in the same format as the author name for the individual chapter (Last Name, Initials) with a comma afterwards. The editor name(s) "ed." is included, followed by another comma. If there is more than one editor, the abbreviation is eds.
- SWC [35]:** Title of full volume, followed by a colon.
- SWC [36]:** Place of publication including city and state.
- SWC [37]:** Publisher
- SWC [38]:** Series name
- SWC [39]:** Volume
- SWC [40]:** Page numbers of the chapter. Since only a chapter of the book is being used, the page range of the chapter is written instead of the total number of pages in the book.
- SWC [41]:** The meaning of comment/discussion/reply in this context is a source that is someone else's discussion of an initial research work and/or a reply of the original author. These are often found in journals; for example, authors might reply to a discussion of their work.
- SWC [42]:** Author
- SWC [43]:** Year of publication
- SWC [44]:** Title of comment/discussion thread/reply - note that the first word of the title and subtitle are the only words (other than proper nouns) which are capitalized.
- SWC [45]:** Whether it's a comment/discussion thread/reply
- SWC [46]:** Publication name
- SWC [47]:** Volume number
- SWC [48]:** Page number(s)
- SWC [49]:** DOI



Computer Program

Lahr, J.C., 1999, HYPOELLIPSE: A computer program for determining local earthquake hypocentral parameters, magnitude, and first-motion pattern: U.S. Geological Survey Open-File Report 99-23, version 1.1, <https://pubs.usgs.gov/of/1999/ofr-99-0023/>.

SWC [50]: This refers to a manual with the source code and operating instructions, not the actual program.

SWC [51]: Author (or authoring organization) of the manual.

SWC [52]: Year the report on the program came out.

Database

U.S. Geological Survey, 2006, Quaternary fault and fold database for the United States: <https://www.usgs.gov/natural-hazards/earthquake-hazards/faults> (accessed June 2012).

SWC [54]: Title of the program. It is in all caps because that is the way the program capitalizes its title- if the program title does not do that, it will not be in all caps in the citation.

SWC [55]: Creators' description of what the program does, in sentence case.

SWC [56]: Program creator(s)

SWC [57]: Version

SWC [58]: URL

SWC [59]: Authoring Organization OR Author last name, Author first initial(s)

SWC [60]: Year

SWC [61]: Database title, with the initial word and proper nouns capitalized.

SWC [62]: URL

SWC [63]: Date last accessed in form of (accessed Full Month Year)

SWC [64]: Author(s)

SWC [65]: Publication year

SWC [66]: Title (and subtitle if included). Written in sentence case, with the initial word and proper nouns capitalized. The question mark is included in this case because it is part of the article's title.

SWC [67]: Publication

SWC [68]: Volume number

SWC [69]: Page numbers

Journal Article

Coogan, L.A., and Hinton, R.W., 2006, Do the trace element compositions of detrital zircons require Hadean continental crust?: *Geology*, v. 34, p. 633–636, doi:10.1130/G22737.1.



In Press

Thomson, O.A., Cavosie, A.J., Moser, D.E., Barker, I., Radovan, H.A., and French, B.M., 2014, Preservation of detrital shocked minerals derived from the 1.85 Ga Sudbury impact structure in modern alluvium and Holocene glacial deposits: Geological Society of America Bulletin, <https://doi.org/10.1130/B30958.1> [(in press)].

SWC [70]: In-press are pieces of literature that have been approved for publication but are not yet published. The types of sources you will most often see as in-press resources are book manuscripts and journal articles.

Map

Ernst, W.G., 1993, Geology of the Pacheco Pass quadrangle, central California Coast Ranges: Geological Society of America, Map and Chart Series MCH078, scale 1:24 000, 1 sheet, 12 p. text.

SWC [71]: This section of the citation is the same as the normal citation for whatever type of source it is. This specific source is a journal article.

SWC [72]: (in press) to indicate that it has been formally accepted but not published.

SWC [73]: Author(s)

SWC [74]: Year of publication

SWC [75]: Title, with proper nouns capitalized; central is not capitalized because it a location, but not the proper name of the location.

SWC [76]: Publisher

SWC [77]: Series number (if available)

SWC [78]: Scale (if available)

SWC [79]: Number of sheets (if available)

SWC [80]: Number of text pages (if applicable). Notice when it's total number of pages, the p comes after the number.

SWC [81]: Differing from a journal article, an online PDF citation is used when the source is in the form of a PDF but is not a journal article (for example a government bureau's publication as the example shows). If it is a journal article you happen to find in the form of a PDF, it would be cited as a journal article.

SWC [82]: Author (or authoring organization)

SWC [83]: Year

SWC [84]: Document title. The 'Vol 1' in this section is part of the title of the document, so it is written that way to reflect it being in the title itself. If it were written as 'v. 1' in the title, for example, you would do that instead.

SWC [85]: URL

SWC [86]: Date last accessed in form of (accessed Full Month Year)

Online PDF

Bureau of Land Management, 2010, Plan amendment/final EIS for the Genesis Solar Energy Project, Vol. 1: [https://energy.gov/sites/prod/files/nepapub/nepa_documents/Re dDont/EIS-0455-FEIS-01-2010.pdf](https://energy.gov/sites/prod/files/nepapub/nepa_documents/Re%20dDont/EIS-0455-FEIS-01-2010.pdf) (accessed March 2014).



Open-File Report

Choquette, A.F., 2014, Pesticides and nitrate in groundwater underlying citrus croplands, Lake Wales Ridge, central Florida, 1999–2005: U.S. Geological Survey Open-File Report 2013-1271, 35 p., <https://pubs.usgs.gov/of/2013/1271/pdf/of2013-1271.pdf>.

Paper in a Government or University Serial Publication

Hay, R.L., 1963, Stratigraphy and zeolitic diagenesis of the John Day Formation of Oregon: *University of California Publications in Geological Sciences*, v. 42, p. 199–262.

Proceedings from a Symposium or Conference

Baar, C., 1972, Creep measured in deep potash mines vs. theoretical predictions, *in* Proceedings, Canadian Rock Mechanics Symposium, 7th, Edmonton: Ottawa, Canada Department of Energy, Mines and Resources, p. 23–77.

SWC [87]: Author surname and first initial(s)

SWC [88]: Year

SWC [89]: Report title in sentence case.

SWC [90]: Publisher name

SWC [91]: Report type (in this case it would remain "Open-File Report")

SWC [92]: Report number

SWC [93]: Total pages

SWC [94]: DOI

SWC [95]: Author(s)

SWC [96]: Publication year

SWC [97]: Title

SWC [98]: Publisher

SWC [99]: Volume (if applicable)

SWC [100]: Page range. Note the single p. even though it is for multiple pages.

SWC [101]: Author

SWC [102]: Year

SWC [103]: Title in sentence case.

SWC [104]: *in* (italicized) Proceedings, Conference/Symposium title

SWC [105]: Conference/Symposium number

SWC [106]: Location

SWC [107]: Conference/Symposium host

SWC [108]: Page numbers of the specific proceeding you are citing



Thesis/Dissertation

Wopat, M.A., 1990, Quaternary alkaline volcanism and tectonics in the Mexican Volcanic Belt near Tequila, Jalisco, southwestern Mexico [Ph.D. dissertation]: Berkeley, University of California, 277 p.

Website

Entire website:

Scotese, C.R., 2003, PALEOMAP Project: <http://www.scotese.com> (accessed August 2019).

Single webpage:

Witscher, E., 2024, Land movement hazards in a changing climate: Speaking of Geoscience: <https://speakingofgeoscience.org/2024/01/31/land-movement-hazards-in-a-changing-climate/> (accessed May 2024).

SWC [109]: Author

SWC [110]: Year

SWC [111]: Thesis/dissertation title

SWC [112]: Thesis type (e.g., Master's thesis, Ph.D. dissertation, etc.). Also note the comma after the brackets.

SWC [113]: City of university and university name where the thesis candidate is from. This information can be found on the title page.

SWC [114]: Total number of pages

SWC [115]: Author

SWC [116]: Year of publication

SWC [117]: Title of website.

SWC [118]: URL

SWC [119]: Month (written out in full) and year you accessed the site

SWC [120]: Author surname, author first initial, year

SWC [121]: The name of the specific page on the website you are citing (with a colon afterwards)

SWC [122]: Title of the overarching website

SWC [123]: Website URL

SWC [124]: Date accessed, in format of Month Year