

IODP SHIPBOARD WRITING GUIDE

International Ocean Discovery Program 2019

IODP sample identifiers

A full sample identifier for an IODP sample includes the following, in order:

Expedition - Site+Hole - Core+CoreType - Section, interval cm.

Hard rock identifiers may also include Piece number and offset interval on the piece. Section half type (A or W) is generally included in a sample identifier only if needed to highlight if the analyses was done on a non-standard half.

- Sample 319-C0009A-9R-1, 5–7 cm.
- Sample 324-U1356A-5R-3 (Piece 2, 2–4 cm)
- Sample 335-U1256A-119R-1 (Piece 1A)
- Section 366-U1491B-5H-CC

Parts of the sample identifier

- **Expedition:** official expedition number; for IODP a 300-series number
- **Site:** numbered in the order drilled: *JOIDES Resolution* site numbers are prefaced with “U”: Site U1362
- **Hole:** each hole spudded, drilled, or cored at a site is given a new letter, starting with “A”
- **Core:** each core or half-core barrel deployment is given a number, starting with “1” at the top of the hole.
- **Core type:** indicates coring tool used to deploy the core barrel, identifies drilled intervals, or identifies material recovered during drilling:
 - **H:** advanced piston corer
 - **F:** half-length advanced piston corer
 - **X:** extended core barrel
 - **R:** rotary core barrel
 - **G:** ghost (material from unknown depth recovered during drilling or advance without coring)
 - numerical core type (1, 2, 3, etc.): drilled interval; no core retrieved
- **Section:** each core is cut into 1.5 m long sections for easier handling in the laboratory, numbered starting with “1” at the top of each core. A 9.5 m core with good recovery generally has six 150-m-long sections plus the core catcher section (notated as CC).
- **Section half:** each section is split lengthwise into two halves:
 - **A:** archive half (used for core description, SHMSL and SHIL measurements, photographs, and archiving)
 - **W:** working half (used when samples are taken from the core, for most laboratory tests)
 - **WR:** whole-round sample (taken from the section before core splitting; generally for IW and microbiology tests).
- **Piece:** for some hard rock cores, broken but consolidated pieces of the core are numbered sequentially from the top of the core. Subpieces that can be fit together may be lettered and curated (Piece 1A, 1B, etc.).
- **Interval** (offset from top of section): a length of material that was collected from the section; the interval top and bottom are given in centimeters measured from the top of the section.

Sample identifier usage

Reporting data

- In text or tables, use the full sample identifier including expedition, hole, core and core type, section, and interval measured from the top of section or offset from top of section (for single point measurement):
 - Sample 313-M0028A-16R-1, 15–20 cm
 - Sample 313-M0028A-16R-1, 100 cm

Imaging

Images are taken on the archive half sample type. The identifier can be given with or without the section half type.

- **Line-scan section images:** full section identifier: Section 330-U1375A-15X-6
- **Close-up images:** full sample identifier including interval photographed: interval 330-U1375A-15X-6, 25–105 cm
- **Photomicrographs:** full identifier including interval taken to make the thin section: Sample 329-U1368B-4R-2, 0–2 cm

Text

- Discussions of cores, sections, and samples must include Expedition, Site, and Hole: Core 325-M0051A-5R
- Sites and holes can be referenced without an accompanying expedition number: Site U1353; Hole C0004A
- Add “Site,” “Hole,” “Core,” “Section,” “Sample,” or “interval” before a sample or interval identifier whenever possible in text for clarity. The first time a core, section, interval, or sample is mentioned in a paragraph, include the complete identifier:
 - Core 323-U1348B-5H
 - Section 323-U1348B-5H-1
 - Sample 324-U1352A-5H-1, 2–4 cm
 - interval 324-U1352A-5H-1, 14–37 cm
 - interval 324-U1352A-5H-1, 20 cm, through 10H-5, 3 cm
- Subsequent references in the same paragraph that refer to the same Hole in can be shortened to Core, Section, and interval (if clarity is retained):
 - Section 5H-1
 - Cores 5H and 10H
 - Sample 5H-1, 2–4 cm
 - Sample 5H-CC
- If in the paragraph a different site or hole is mentioned, then the entire identifier, including expedition number, must be repeated to avoid confusion.

Depths

- The science party should agree to use a consistent depth terminology throughout the volume, and then use this depth scale unit in text, tables, and figures.
- Common depth terminology options include the following. Define the correlation of each unit to IODP depth scale terminology in the methods chapter.
 - Depth units defined in the IODP Depth Scales document: CSF, CSF, CCSF, DSF, WSF, WMSF, DRF, etc.
 - Standard depth units: mbsf, mcd, mbrf, mbsl, etc.
- Using “m” for depth measurements is not recommended, as measurements other than length need to be expressed relative to a starting point (seafloor, sea level, rig floor, etc.) in order to be meaningful.
- See *IODP Depth Scales Terminology* for more information (<http://www.iodp.org/policies-and-guidelines>).

Capitalization

Capitalize the following

- “Expedition,” “Site,” “Hole,” “Core,” “Section,” “Sample,” and “Piece” when referencing IODP material.
- Designations that precede a letter or numeral: Figure F5, Line XL2052, Seismic Reflector C, Lithologic Unit IV.
- Formally named water masses, currents, and underwater features: Ridge, Trough, Plateau, Basin.
- Formally defined geological events: Last Glacial Maximum, Laschamp Event, Marshall Paraconformity.
- Formally defined geological features and geologic/geographic names: Equator, Northern Hemisphere, North Pole.
- Formally defined magnetostratigraphic divisions: Chron C2n, Brunhes Chron, Jaramillo Subchron.
- Formally defined biostratigraphic divisions: Subzone NP1a, *Paralia sulcata* Zone, Zone NN12.
- Official titles of persons with or without personal names: Co-Chief Scientist, Operations Superintendent.
- First word of all bulleted or numbered list elements in vertical lists.

Do NOT capitalize the following

- Structural features preceded by a proper name—plate, arc, shelf, margin: Pacific plate, Mariana arc, Cascadia margin
- Subdivisions of series/epochs or subdivisions of units of lower rank: early, middle, late/lower, middle, upper
- Genus names used as common nouns: discoasters, heterohelids
- Proper names used as measurement units: faraday, newton, pascal, tesla, watt

Geologic strata/Geologic time

- Early, middle, and late refer to geologic time or age: *sediments were dated to the early Miocene*
- Upper, middle, and lower describe location in the stratigraphic column: *Upper Pleistocene sediment contained late Pleistocene nannofossils.*
- Biozones are positional: *lower Zone NN12 assemblage.*
- Express geologic ages using units giga-annum (Ga: 10^9 y), mega-annum (Ma: 10^6 y), or kiloannum (ka: 10^3 y)
- Express duration of time similarly in years (Gy, My, or ky): *the Cretaceous lasted 80 My, from 144 to 65 Ma.*

Units and numbers

- Use singular forms with units: lb *not* lbs, kg *not* kgs.
- Do not use periods within or after units except at the end of a sentence: my, ky.
- Leave a space between a numeral and a letter unit: 16 km.
- Close up the space between a numeral and a symbol unit: 34.5%, 36°C, 3.2‰, $0.2^{\circ}2\theta$, 2σ .
- Drill pipe and BHA measurements are by industry custom in US API units. *Do not* convert BHA/pipe measurements to metric: 9 $\frac{1}{8}$ inches *not* 9.875 inches.
- Follow a decimal with a zero only to represent precision: 27°C and 27.0°C are not interchangeable.
- Express numerical ranges using “from...to,” “between...and,” or use a dash to indicate a range: K values range 9–12 mM; K values are *between 9 and 12* mM; K values are *from 9 to 12* mM.
- Use molarity (M) rather than normality (N) to express solution concentrations: 6 M HNO₃ *not* 6 N HNO₃.

Grammar

Verb tenses

- Activities that took place during the expedition—past tense: We preserved microbiology samples for shore analysis.
- Observations and results—present tense: Ba reaches a maximum at 57.25 mbsf.
- Discussion/conclusions—present or past, consistently: We place(d) the Zone NN11/NN12 boundary in Core 52X.
- Results obtained at a specific time in the past—past tense: Howe et al. analyzed samples from Site 1134.
- Actions from an indefinite time in the past—present perfect: Several investigators have observed the same result.

Collective nouns

- A singular verb emphasizes the group: For LOI, 3–5 g of sediment was weighed into a crucible; VSP testing was suspended while a pod of whales was in the area.
- A plural verb emphasizes individual members of the group: Fifteen samples *were* analyzed.
- “Data” is always used in a plural sense in IODP publications: NGR data *were* uniformly lower than background.

Tables

- Break Microsoft Excel workbooks into separate worksheet table files; change calculated fields to text/numerical.
- Define blank spaces in data tables or designate meaning using a dash or abbreviation: —, ND (not determined), NA (not applicable or not analyzed), NM (not measured), BDL (below detection limit).
- Do not use spanned headings, as these cannot be read by text readers and do not translate well to csv.
- Check the number of significant digits reported for reasonable precision with analysis method.
- Use symbols (*, †) to indicate meaning in tables rather than bold, italics, or color (special formatting cannot be read by text readers and will drop out of csv).
- All volume tables will be available in csv format; descriptive and non-data tables will also be typeset in the chapter.

Figures

- Keep chapter figure presentation in mind (portrait orientation; quarter page or half-width [21 pica] if possible).
- Avoid using bold, underlining, or italics in figures (exception: age model figures in Methods chapter).
- Use a sans-serif font such as Helvetica or Arial for text.
- Check axis labels and units, symbols, text, placement of data points, and legend/key.
- Core numbers should be accompanied by a core letter.
- Add “U” before IODP hole and site numbers.
- Identify unit columns as Lith., Log/Logging, Basalt, Igneous, Seismic, Physical Properties (PP), etc.

Permissions to use published figures

It is the authors’ responsibility to obtain permissions to use figures from other sources in IODP publications. Use the following terminology when attributing a figure to the original source. All of these instances require proper attribution in the figure caption and on the reference list. Figures from previous ODP and IODP publications can be used without permissions.

- “From...” means figure reprinted from another publication (*permissions needed*).
- “After...” means possible redrafting but no changes to information in figure (*permissions needed*).
- “Modified from...” means there have been minor changes made to the original figure (*permissions may be needed*).
- “Adapted from...” means substantial changes have been made (*no permission needed*).

IODP style conventions

Prefixes without hyphens when used with a noun:

- | | |
|---------------------------------|-------------------------------|
| • <i>re</i> : reexamine | • <i>sub</i> : subbasin |
| • <i>pre</i> : preexpedition | • <i>mid</i> : midslope |
| • <i>post</i> : postcruise | • <i>semi</i> : semiopaque |
| • <i>over</i> : overriding | • <i>non</i> : nonviolent |
| • <i>under</i> : underthrust | • <i>co</i> : collocated |
| • <i>paleo</i> : paleomagnetism | • <i>infra</i> : infrared |
| • <i>micro</i> : microfossil | • <i>multi</i> : multichapter |
| • <i>macro</i> : macroscopic | • <i>bio</i> : biozone |

Preposition selection:

- | | |
|---------------------------------|-------------------------|
| • compare <i>with</i> | • overlain <i>by</i> |
| • different, differ <i>from</i> | • filled <i>with</i> |
| • correlate <i>with</i> | • replaced <i>by</i> |
| • correspond <i>to</i> | • independent <i>of</i> |
| • juxtapose <i>to</i> | • accompanied <i>by</i> |

Preferred spellings:

- | | |
|-------------------------------|---|
| • <i>analyze</i> vs. analyse | • <i>paleontology</i> vs. palaeontology |
| • <i>labeled</i> vs. labelled | • <i>foraminifers</i> vs. foraminifera |
| • <i>center</i> vs. centre | • <i>radiolarians</i> vs. radiolaria |
| • <i>color</i> vs. colour | • <i>planktonic</i> vs. planktic |
| • <i>analog</i> vs. analogue | • <i>benthic</i> vs. benthonic |

Word choice:

- Avoid using *with* when you mean *and*, *but*, *having*, or *using*.
- Avoid using *above* if you mean *greater than* or *shallower than*.
- Avoid using *under* when you mean *less than*, *better than*, or *deeper than*.
- Avoid using *since*, *as*, or *due to* when you mean *because*.

Plural forms:

- | | |
|------------------------|--------------------|
| • index, indexes | • hiatus, hiatuses |
| • appendix, appendixes | • datum, datums |