

Open Science Indicators Column Descriptions

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Column descriptions for data provided in PLOS-Dataset_v1_Dec22.csv and Comparator-Dataset_v1_Dec22.csv. The Method column indicates how data is gathered, whether from XML file data or found by DataSeer's assessment.

| Column Name | Column description | Method | Additional Notes | Present in comparator set? Additional notes. |
|------------------|--------------------------------------|--------|---|--|
| Publication date | Date of publication for each article | XML | "epub" date is used, format: dd/mm/yyyy | Yes. Some dates are not in the standard format. Other formats are month-month/yyyy (e.g. Jul-Sept/2020), mm/yyyy and yyyy. |
| Publication Year | Year of publication for each article | XML | | Yes |

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|--------------------------------|--|----------|---|--|
| DOI | Digital object identifier (DOI) for each article | XML | | Yes |
| Discipline | A list of all disciplines each article is identified as | XML | | Yes. Labelled as 'Major Mesh Terms', list of identified Major MeSH terms for each article |
| Country | Country of the listed affiliation of the first listed corresponding author | XML | If multiple affiliations are listed the first one is used. If multiple corresponding authors are listed, the first listed corresponding author is used. | Yes (only present for ~3% of sample) |
| DA | The article's data availability statement | XML | | Yes. It comprises any Availability type statements (e.g. Data Availability or Code Availability) found in the article. If multiple statements are found they are separated by the " " character. |
| Data_Section Text:Generated | Which sections of the research article indicated data was generated when assessed by DataSeer algorithm. | DataSeer | Labeled N/A if no data/code generation detected. Multiple sections are separated by " " (e.g. Methods Supplementary) If XML section tags are not available this will be labeled "Full Text" | Yes |
| Data_Generated | Was data generated in this text as | | Labeled "Yes" or "No" | Yes |

| | | | | |
|--------------------------------|--|----------|---|-----|
| | assessed by DataSeer algorithm. | DataSeer | | |
| Data_Shared | Was data shared in this text as assessed by DataSeer algorithm. | DataSeer | Labeled “Yes” or “No” | Yes |
| Data_location | Location of data that was indicated as shared. | DataSeer | Labeled “Online” when a repository was used. Multiple sections are separated by “ ” (e.g. Online Supplementary) | Yes |
| URL | A list of any URL/DOIs if host data or code online that were detected by DataSeer algorithm. | DataSeer | Multiple URLs or DOIs separated by “,” | Yes |
| Accessions | A list of Accession IDs from identified repositories that host data or code online that were detected by DataSeer algorithm. | DataSeer | Multiple Accession IDs separated by “,” | Yes |
| Repositories | A list of standard repositories that were identified by DataSeer as having been used in the sharing of data/code in each article. Repositories are identified from URL/DOI/Accession IDs where possible. Only repositories from a standardized list will be identified. Domains will be provided for unidentified URLs where possible. | DataSeer | Multiple repositories separated by “ ” (e.g. Github Dryad) | Yes |
| Code_Section Text:Generated | Which sections of the research article indicated code was generated when assessed by DataSeer algorithm. | DataSeer | Labeled N/A if no code generation detected. Multiple sections are separated by “ ” (e.g. Methods Supplementary) If XML section tags are not available this will be labeled “Full Text” | Yes |

| | | | | |
|-----------------|---|-------------------|--|-----|
| Code_Generated | Was code generated in this text as assessed by DataSeer algorithm. | DataSeer | Labeled “Yes” or “No” | Yes |
| Code_Shared | Was code shared in this text as assessed by DataSeer algorithm. | DataSeer | Labeled “Yes” or “No” Note: Shared <i>code is only detected if it is executable</i> (e.g. shared as a .R or .py file format), code shared in pdf of other image formats is not labeled as shared. | Yes |
| Code_location | Location of code that was indicated as shared. | DataSeer | Labeled “Online” when a repository was used. Multiple sections are separated by “ ” (e.g. Online Supplementary) | Yes |
| Preprint_Match | Whether a preprint was identified for this published article when searching common DOI registration agencies. | DataSeer | “Yes” or “No” indicating whether a match was found across DOI registration agencies. Match is completed using title and author information. Queries Crossref and Datacite. | Yes |
| Preprint_DOI | DOI of identified preprint match. | Preprint Metadata | Gathered from DOI agency metadata. | Yes |
| Preprint_Date | Date of preprint DOI registration, usually same date as publication. | Preprint Metadata | Note: Datacite metadata does not always include a detailed date (will sometimes only include year level). Format: dd/mm/yyyy or yyyy. | Yes |
| Preprint_URL | URL to access top preprint match. | Preprint Metadata | Provided where available, dependent on metadata. | Yes |
| Preprint_Server | Server top preprint match is hosted on. | Preprint Metadata | If server name is not provided in preprint metadata DOI prefix is used to identify server when possible. | Yes |