For each single variable we provide the variable code, variable explanation, unit of measurement and native spatial grain

| Code   | Variable explanation                                                                 | Unit         | Source      | Native spatial grain |
|--------|--------------------------------------------------------------------------------------|--------------|-------------|----------------------|
| bio_1  | Annual Mean Temperature                                                            | °C * 10      | WorldClim   | 30 arcsec            |
| bio_2  | Mean Diurnal Range (Mean of monthly (max temp - min temp))                          | °C * 10      | WorldClim   | 30 arcsec            |
| bio_3  | Isothermality (BIO2/BIO7) (×100)                                                    | Dimensionless| WorldClim   | 30 arcsec            |
| bio_4  | Temperature Seasonality (standard deviation ×100)                                    | °C * 10      | WorldClim   | 30 arcsec            |
| bio_5  | Max Temperature of Warmest Month                                                    | °C * 10      | WorldClim   | 30 arcsec            |
| bio_6  | Min Temperature of Coldest Month                                                    | °C * 10      | WorldClim   | 30 arcsec            |
| bio_7  | Temperature Annual Range (BIO5-BIO6)                                                | °C * 10      | WorldClim   | 30 arcsec            |
| bio_8  | Mean Temperature of Wettest Quarter                                                 | °C * 10      | WorldClim   | 30 arcsec            |
| bio_9  | Mean Temperature of Driest Quarter                                                  | °C * 10      | WorldClim   | 30 arcsec            |
| bio_10 | Mean Temperature of Warmest Quarter                                                 | °C * 10      | WorldClim   | 30 arcsec            |
| bio_11 | Mean Temperature of Coldest Quarter                                                 | °C * 10      | WorldClim   | 30 arcsec            |
| bio_12 | Annual Precipitation                                                               | mm           | WorldClim   | 30 arcsec            |
| bio_13 | Precipitation of Wettest Month                                                     | mm           | WorldClim   | 30 arcsec            |
| bio_14 | Precipitation of Driest Month                                                       | mm           | WorldClim   | 30 arcsec            |
| bio_15 | Precipitation Seasonality (Coefficient of Variation)                               | Dimensionless| WorldClim   | 30 arcsec            |
| bio_16 | Precipitation of Wettest Quarter                                                   | mm           | WorldClim   | 30 arcsec            |
| bio_17 | Precipitation of Driest Quarter                                                    | mm           | WorldClim   | 30 arcsec            |
| bio_18 | Precipitation of Warmest Quarter                                                   | mm           | WorldClim   | 30 arcsec            |
| bio_19 | Precipitation of Coldest Quarter                                                   | mm           | WorldClim   | 30 arcsec            |
| havg_01| Bioclim 1, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_02| Bioclim 2, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_03| Bioclim 3, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_04| Bioclim 4, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_05| Bioclim 5, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_06| Bioclim 6, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_07| Bioclim 7, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_08| Bioclim 8, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_09| Bioclim 9, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_10| Bioclim 10, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_11| Bioclim 11, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | °C * 10      | WorldClim   | 30 arcsec            |
| havg_12| Bioclim 12, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | [mm]         | WorldClim   | 30 arcsec            |
| havg_13| Bioclim 13, average across sub-catchment (water courses only)—see http://worldclim.org/bioclim | [mm]         | WorldClim   | 30 arcsec            |
| Code     | Description                                                                 | Unit       | Source            | Resolution |
|----------|------------------------------------------------------------------------------|------------|-------------------|------------|
| `havg_14` | Bioclim 14, average across sub-catchment (water courses only)                | [mm]       | WorldClim         | 30 arcsec |
| `havg_15` | Bioclim 15, average across sub-catchment (water courses only)                | *100       | WorldClim         | 30 arcsec |
| `havg_16` | Bioclim 16, average across sub-catchment (water courses only)                | [mm]       | WorldClim         | 30 arcsec |
| `havg_17` | Bioclim 17, average across sub-catchment (water courses only)                | [mm]       | WorldClim         | 30 arcsec |
| `havg_18` | Bioclim 18, average across sub-catchment (water courses only)                | [mm]       | WorldClim         | 30 arcsec |
| `havg_19` | Bioclim 19, average across sub-catchment (water courses only)                | [mm]       | WorldClim         | 30 arcsec |
| `lcmax_2` | Evergreen broadleaf trees, maximum across sub-catchment                      | [%]        | Consensus land cover | 30 arcsec |
| `lcmax_7` | Cultivated and managed vegetation, maximum across sub-catchment              | [%]        | Consensus land cover | 30 arcsec |
| `lcmax_9` | Urban/built-up, maximum across sub-catchment                                | [%]        | Consensus land cover | 30 arcsec |
| `lcmax_12` | Open water, maximum across sub-catchment                                    | [%]        | Consensus land cover | 30 arcsec |
| `lcran_2`  | Evergreen broadleaf trees, range across sub-catchment                        | [%]        | Consensus land cover | 30 arcsec |
| `lcran_7`  | Cultivated and managed vegetation, range across sub-catchment                | [%]        | Consensus land cover | 30 arcsec |
| `lcran_9`  | Urban/built-up, range across sub-catchment                                   | [%]        | Consensus land cover | 30 arcsec |
| `lcran_12` | Open water, range across sub-catchment                                       | [%]        | Consensus land cover | 30 arcsec |
| `lcavg_2`  | Evergreen broadleaf trees, average across sub-catchment                      | [%]        | Consensus land cover | 30 arcsec |
| `lcavg_7`  | Cultivated and managed vegetation, average across sub-catchment              | [%]        | Consensus land cover | 30 arcsec |
| `lcavg_9`  | Urban/built-up, average across sub-catchment                                 | [%]        | Consensus land cover | 30 arcsec |
| `lcavg_12` | Open water, average across sub-catchment                                     | [%]        | Consensus land cover | 30 arcsec |
| `lcw_2`    | Weighted average land cover across sub-catchment: Evergreen broadleaf trees  | [%]        | Consensus land cover | 30 arcsec |
| `lcw_7`    | Weighted average land cover across sub-catchment: Cultivated and managed vegetation | [%] | Consensus land cover | 30 arcsec |
| `lcw_9`    | Weighted average land cover across sub-catchment: Urban/built-up            | [%]        | Consensus land cover | 30 arcsec |
| `lcw_12`   | Weighted average land cover across sub-catchment: Open water                 | [%]        | Consensus land cover | 30 arcsec |
| `Biolc_2`  | Evergreen Broadleaf Trees                                                    | %          | Consensus land cover | 30 arcsec |
| `Biolc_9`  | Urban/Built-up                                                              | %          | Consensus land cover | 30 arcsec |
| `Biolc_12` | Open Water                                                                  | %          | Consensus land cover | 30 arcsec |
| `s_pto`    | slope average                                                                | [°C] * 100 | HydroSHEDS        | 30 arcsec |
| `s_avg`    | Average slope across sub-catchment                                           | [°C] * 100 | HydroSHEDS        | 30 arcsec |
| `caudal`   | Maximum, minimum and average flow from 1960 to 2000                          | [m³ s⁻¹]   | Barbarroja, FLO1K | 30 arcsec |