**Supplementary Material**

**Low-cost environmental sensor networks: recent advances and future directions**

**Feng Mao, Kieran Khamis, Stefan Krause, Julian Clark and David Hannah**

School of Geography, Earth and Environmental Sciences, University of Birmingham, Edgbaston, United Kingdom, B15 2TT

**Table S1**. List of the Web of Science categories used to filter the initial pool of literature.

|  |
| --- |
| Web of Science categories |
| Environmental Sciences | Oceanography  | Limnology  |
| Meteorology Atmospheric Sciences | Environmental Studies | Soil Science |
| Green Sustainable Science Technology | Geochemistry Geophysics | Biodiversity Conservation |
| Geography Physical | Agronomy | Biology  |
| Water Resources | Engineering Geological | Geology |
| Agriculture Multidisciplinary | Ecology |  |
| Geosciences Multidisciplinary | Forestry  |  |
| Multidisciplinary Sciences | Geography |  |

**Table S2**. Data collated for each paper with the hypothesis each data grouping addressed highlighted in the column headers.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| General information | Study system (H1) | Sensor/ data collection (H2) | Stakeholder involvement (H3) | Sustainability and context (H4) |
| Year of publication | Atmosphere | Sensor mobility | Single stakeholder | Long-term operating mechanisms and societal impact* Considered
* Not considered
 |
| Study country | Hydrosphere | Data transmission | Multiple stakeholders |
| Paper type* Case study
* Review/ conceptual
 | Earth system (e.g. soils, seismic activity) | Data processing | Citizen science |
| Ecosystem (e.g. livestock, forest etc) | Data accessibility |  |
| Indoor environment |  |  |