

## PURPOSE

**Aim:** Clearly and concisely describe the parameter(s) provided by the product including a full description of the underpinning theory.

**Audience:** Users requiring technical detail on product derivation (e.g. for comparison of products).

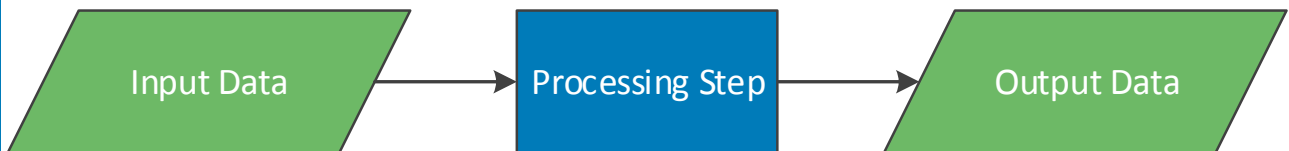
For more details, see the ATBD template.

## SECTIONS OF ATBD

- 1. Introduction:** Include subsections describing product name, purpose of document, definitions of parameters.
- 2. Background:** Details of potential applications of the product and how it is different from others including any proposed future developments.
- 3. Overview of Algorithm:** A brief description of the algorithm being implemented (with *processing diagram*) and a list of assumptions.

### Processing Step Details

- Purpose of applying the step.
- Principles underpinning step.
- Assumptions, simplifications and approximations.



- 4. Processing step #1:** Dedicate a section to each processing step. Include details on the step and the input and output data.
- 5. Quality Information:** Quality Indicators (QIs) used in the product including value definitions.
- 6. Uncertainty information:** Details of uncertainty analysis and estimates for each processing step and input dataset. See **table** for example of layout of information.

### Input / Output Data Details

- Dataset name and version number.
- Justification for use.
- Variable(s) used.
- Gaps, trends, discontinuities data which impact the product.

### Maturity Matrix Requirements:

- Comprehensive science methodology report available and updated as required.
- Paper on science methodology published and updated as required.

### Uncertainty Estimates Table

Uncertainty Contributor	Estimation Method	Estimate (and coverage factor, i.e. $k = 1$ )
The source of uncertainty, for example, input data.	Method for estimating the impact of the contributor on the final product.	Estimate if applicable to entire spatial / temporal range. Otherwise, say included in product, or provide range of values.