

## **Wikiprint Book**

**Title: Running Ecosim on a variable time step**

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## Running Ecosim on a variable time step

Ecosim can be run on a variable time step via a plugin. When run from the Scientific Interface Ecosim runs 1 time step per month, 12 time steps per year. The number of timesteps per month can be set in code via the `cEcosimDataStructures.StepsPerMonth` property. This allows a plugin to run Ecosim on sub time steps, multiple time steps in a month.

### Sub time step data

When running on sub time steps Ecosim will only update its results objects `cCore.cEcoSimResults()`, `cCore.cEcosimGroupOutput()`, `cCore.cEcosimOutput()` and `cCore.cEcosimFleetOutput()` once at the end of the month. Data computed for the sub time step can only be access via the `cEcosimDataStructres` provided by the `IEcosimSubTimestepsPlugin.EcosimSubTimeStepBegin()` and `IEcosimSubTimestepsPlugin.EcosimSubTimeStepEnd()` plugin points. The `IEcosimBeginTimestepPlugin.EcosimBeginTimeStep()` and `IEcosimEndTimestepPlugin.EcosimEndTimeStep()` will only be call at the start and end of the month not during the sub time step and will not contain the sub time step data.