



ATLAS

Forecaster

Growth Simulation Software
Flexible Simulation of Forest Growth and Yield



Silvicultural scheduling

Regime evaluation

Yield table generation

Growth Prediction and Value

ATLAS Forecaster can predict the impact of site, silviculture and genetics on tree and branch growth, yield and wood properties, and hence on wood value, internal rate of return and net present value.

Modelling Growth

Both proven, stand-level models and new individual-tree growth models are incorporated into ATLAS Forecaster. The basis for projecting growth is the modelling of changes in a list of individual stems, including quality factors such as wood density, pruned height and DOS (diameter over stubs), as well as the position and size of unpruned branches.

Yield Forecasting

Maximising the value of logs harvested is of primary concern to forest management. ATLAS Forecaster uses the most up-to-date models to simulate yields

of log types which can incorporate quality factors such as pruning, branch size, and wood density.

Scenario Testing

Decision makers need to be able to examine stand growth and yields under a range of scenarios in order to determine the best way to achieve the desired business outcomes. These scenarios can be used as the basis for stand-level economic evaluations.

Silvicultural Scheduling

The correct timing of operations has a big impact on tree quality and hence on log value at time of harvest. Pruning and thinning operations can be triggered by a range of stand attributes, including age, and measures of height and mean DOS. The use of triggers other than age means that stands growing at different rates can still share the same regime.

ATLAS Forecaster at a Glance

Feature:	Benefit:
Operations scheduled to occur at the right time	Silvicultural operations can be scheduled to meet specified management objectives and constraints by using appropriate growth models and functions.
Decisions based on use of the correct models and functions	Appropriate combinations of functions and models can be pre-defined, simplifying the process, and reducing user errors. Models available have been developed by industry research consortia as well as individual research providers and companies. Users can implement their own local functions in most cases.
Flexible reporting	Report options can be pre-defined, so that only the information actually required by the user is generated. Standard reports and charts are available, or report tables can be saved in other formats including Excel and CSV.
Management options analysed for effects on yields	ATLAS Forecaster can simulate the effects of genetics, site and management on yields and quality of log products over time.
Future-proofing	The underlying stem model can include more wood quality parameters as the research becomes available. Site and stem properties that may be required by future models can already be included.
Wide range of options explored quickly and efficiently	ATLAS Forecaster can process a large number of scenarios in a single project and the information collected can be reused and shared. Multiple scenarios can be compared simultaneously in reports.
Calibration of distributions from assessments	Predicted values can be modified by data collected in field assessments.
Detailed modelling of silviculture	Tree list projection allows more complex stem selection criteria for pruning and thinning to be modelled, as well as variable-lift pruning and catch-up pruning.
Compatible with Microsoft products	Windows-based. Reports export to Excel. Uses SQL Server (or MSDE). Built on .NET technology.
Extensibility	The Application Programming Interface allows for complete encapsulation of Forecaster within other applications and systems in corporate systems.



ATLAS Technology,
Te Papa Tipu Innovation Park,
49 Sala Street, Private Bag 3020, Rotorua 3046, New Zealand.
Tel: +64 7 343 5624 Email: info@atlastech.co.nz
Web: www.atlastech.co.nz
FREECALL (NZ) 0800 786 285 (0800 RUN ATLAS)

