

SIMANF{R}

Model for *Pinus radiata* Galicia (Spain)

Model

Pradiata Galicia

Individual tree growth model for *Pinus radiata* in Galicia (Spain)

Model description

- Species: *Pinus radiata* D. Don
- Species SFNI (Spanish Forest National Inventory) code: 28
- Geographical area: Galicia
- Geographical area (administrative): A Coruña, Lugo, Pontevedra and Ourense

Model requirements and recommended use

- Initial inventory requirements: age, dominant height and basal area of the plot; expan and dbh of the trees
- Geographical area: Galicia, closer places and another places with similar characteristics (assuming differences)
- Stand type: monospecific stands
- Execution recommended time: 1 year execution (survival, growth and ingrowth equations developed by using that criteria)
- Site Index is defined as top height at a base age of 20 years



Figure 1: *Pinus radiata*



Figure 2: Details of *Pinus radiata*

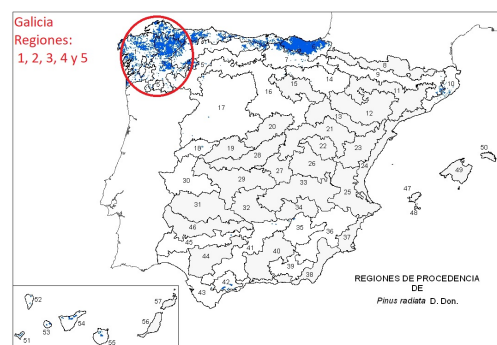


Figure 3: Provenance regions of *Pinus radiata* in Spain

Bibliography

SIMANFOR model recommended citation:

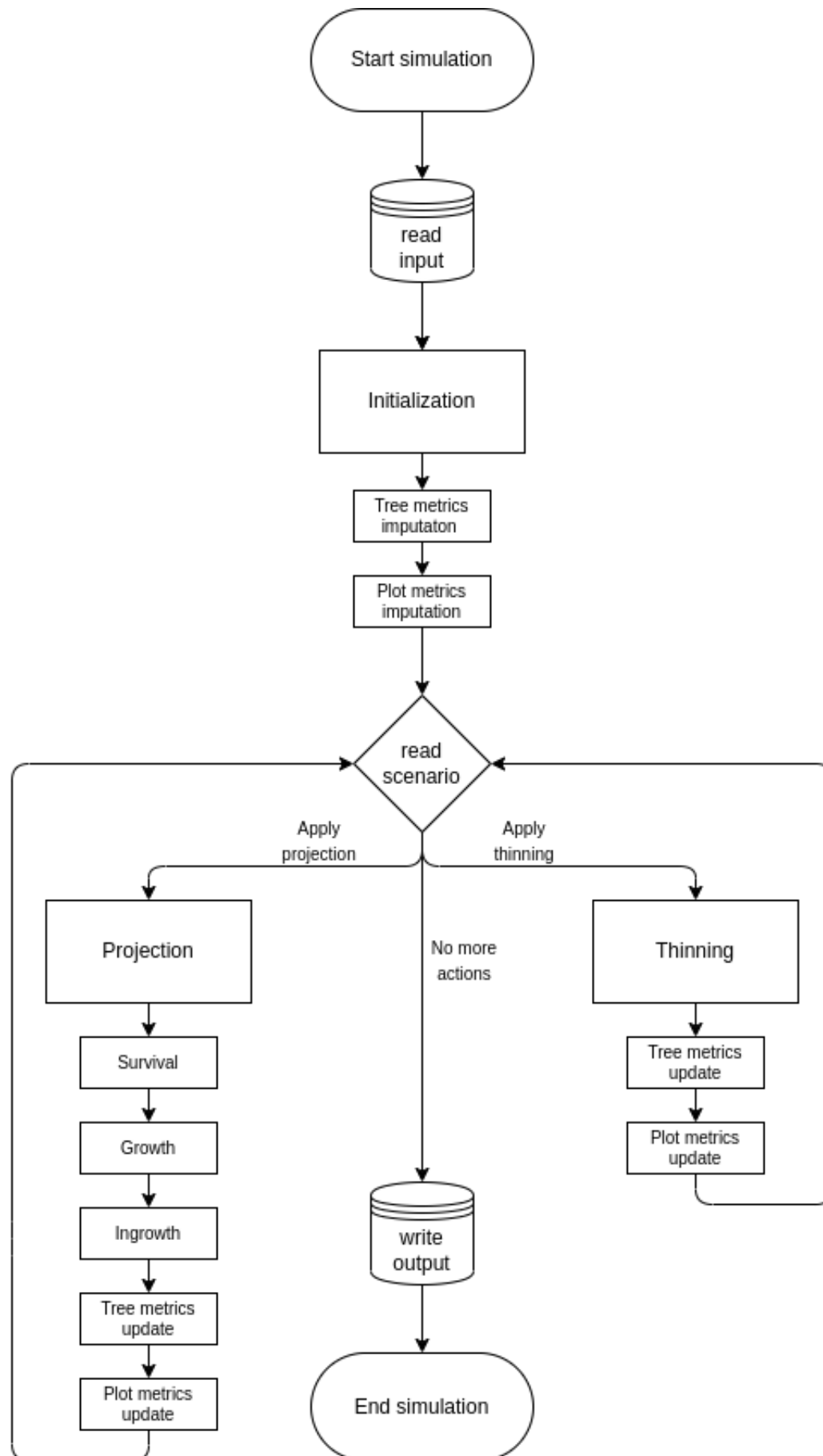
SIMANFOR (year). Individual tree growth model independent from distance for radiata pine (*Pinus radiata*) in Galicia (Spain). <https://www.simanfor.es/>

Model components:

- **Site Index equations:**
Diéguez-Aranda U, Burkhardt HE, Rodríguez-Soalleiro R (2005). Modeling dominant height growth of radiata pine (*Pinus radiata* D. Don) plantations in north-western Spain. *Forest Ecology and Management*, 215(1-3), 271-284
- **Survival equation:**
Crecente-Campo F (2008). Modelo de crecimiento de árbol individual para *Pinus radiata* D. Don en Galicia. Univ Santiago de Compostela
- **Diameter growth equation:**
Crecente-Campo F (2008). Modelo de crecimiento de árbol individual para *Pinus radiata* D. Don en Galicia. Univ Santiago de Compostela
- **Height growth equation:**
Crecente-Campo F (2008). Modelo de crecimiento de árbol individual para *Pinus radiata* D. Don en Galicia. Univ Santiago de Compostela
- **General calculations: bal, g, slenderness, normal circumference:**
Standard equations
- **Generalized height-diameter equation:**
Dorado FC, Diéguez-Aranda U, Anta MB, Rodríguez MS, von Gadow K (2006). A generalized height-diameter model including random components for radiata pine plantations in northwestern Spain. *Forest Ecology and Management*, 229(1-3), 202-213
- **Crown equations:**
Crecente-Campo F (2008). Modelo de crecimiento de árbol individual para *Pinus radiata* D. Don en Galicia. Univ Santiago de Compostela
- **Taper equations over bark (volume):**
Diéguez-Aranda U, Rojo A, Castedo-Dorado F, et al (2009). Herramientas selvícolas para la gestión forestal sostenible en Galicia. *Forestry*, 82, 1-16
- **Biomass equations:**
Diéguez-Aranda U, Rojo A, Castedo-Dorado F, et al (2009). Herramientas selvícolas para la gestión forestal sostenible en Galicia. *Forestry*, 82, 1-16
- **Technological wood uses information:**
Rodríguez F (2009). Cuantificación de productos forestales en la planificación forestal: Análisis de casos con cubiFOR. In *Congresos Forestales*
- **Value for Reineke Index equation:**
Standard

Figures:

- **Figure 1:** licensed under CC BY 2.0, <https://commons.wikimedia.org/w/index.php?curid=550387>
- **Figure 2:** by 'Manual de selvicultura del Pino Radiata en Galicia', website: <http://www.agrobyte.com/publicaciones/pinoradiata/cap1.html>
- **Figure 3:** extracted from MAPA



Contacts

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Related information

SIMANFOR - Support System for the Simulation of Sustainable Forest Management Alternatives. Website (<https://www.simanfor.es/>) and GitHub repository <https://github.com/simanfor>

iuFOR - University Institute for Sustainable Forest Management. Website: <http://sostenible.palencia.uva.es/> y <https://iufor.uva.es/>

ETSIIAA Palencia - Higher Technical School of Agricultural Engineering of Palencia. Website: <http://etsiiaa.uva.es/>

UVa - University of Valladolid. Website <https://www.uva.es>

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