Model for *Cistus ladanifer* stands Zamora (Spain)

Model

Cladanifer_stand__zam__v01.py

Model description

- Specie: *Cistus ladanifer*
- Spanish Forest Inventory (SFI) code: 1101
- Geographical area: Zamora
- Geographical area (administrative): Zamora

Figure 1: *Cistus ladanifer* flower

Model type

- Category: stand growth
- Model level: stand
- Species composition: monospecific stands
- Forest origin: natural

Figure 2: *Cistus ladanifer* field

Model requirements and recommended use

- Initial inventory requirements: TR, TIME_AT, SEPTEMBER_RAIN, RAIN_AS, TMIN_SO, TMIN_ON, TMIN_OND, TMMIN_OCT, TSUM_MEAN_SO, TSUM_MMIN_SO, TSUM_MMIN_ON, TSUM_MMIN_SOND (check metadata to know how to calculate it)
- Geographical area: Zamora, closer places and other places with similar characteristics (assuming differences)
- Stand type: monospecific stands
- Execution recommended time: no recommendations

Figure 3: Details of *Cistus ladanifer*

Bibliography

Complete SIMANFOR model recommended citation):

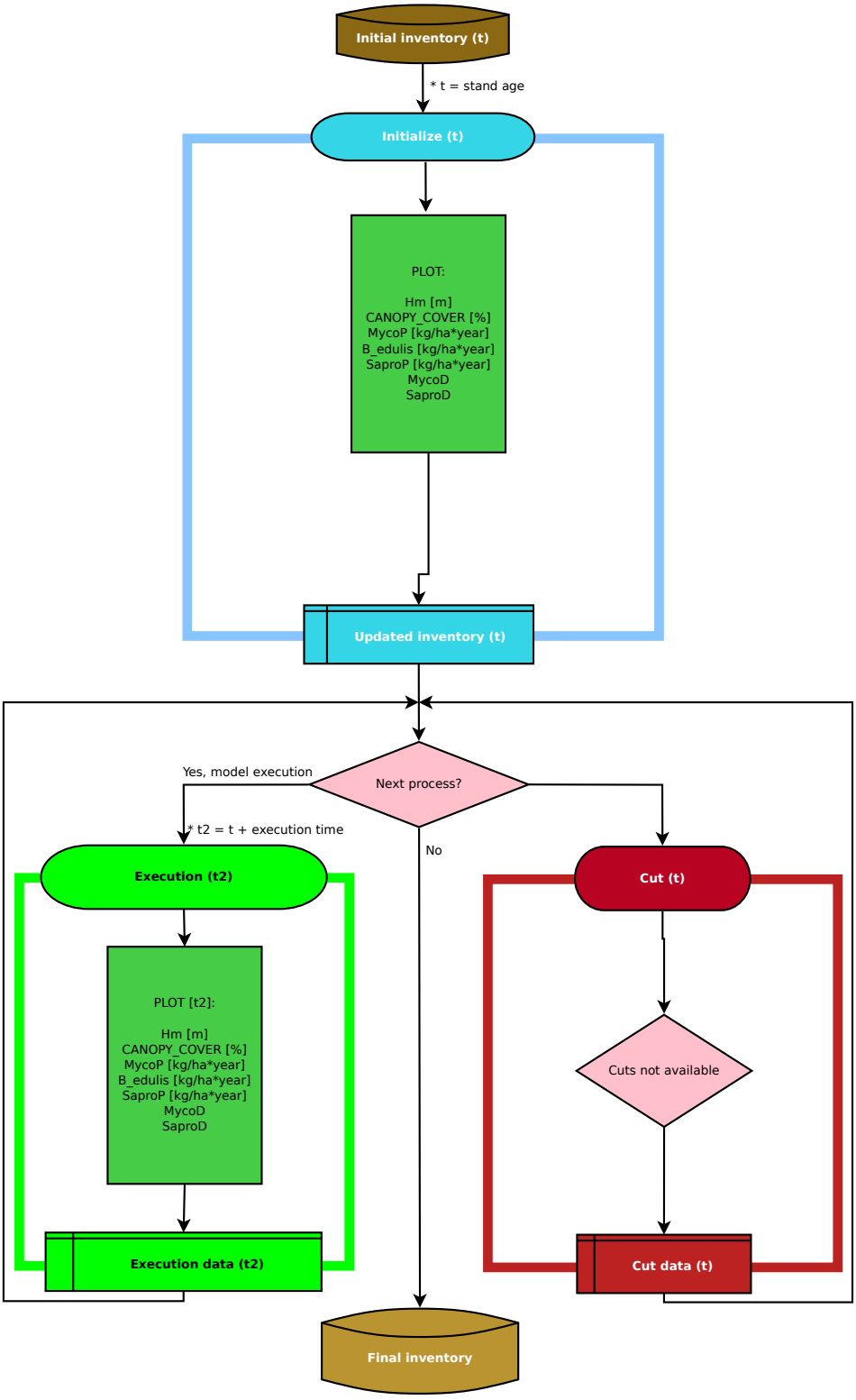
SIMANFOR (2022). Stand growth model for common gum cistus (*Cistus ladanifer*) in Zamora (Spain).

Model components:

- **Mean height equation**:
  Hernández-Rodríguez M, de-Miguel S, Pukkala T, Oria-de-Rueda JA & Martín-Pinto P (2015). Climate-sensitive models for mushroom yields and diversity in Cistus ladanifer scrublands. Agricultural and Forest Meteorology, 213, 173-182
- **Canopy cover equation**:
  Hernández-Rodríguez M, de-Miguel S, Pukkala T, Oria-de-Rueda JA & Martín-Pinto P (2015). Climate-sensitive models for mushroom yields and diversity in Cistus ladanifer scrublands. Agricultural and Forest Meteorology, 213, 173-182
- **Mushroom equations**:
  Hernández-Rodríguez M, de-Miguel S, Pukkala T, Oria-de-Rueda JA & Martín-Pinto P (2015). Climate-sensitive models for mushroom yields and diversity in Cistus ladanifer scrublands. Agricultural and Forest Meteorology, 213, 173-182
- **Harvest equations**:
  NOT AVAILABLE

Figures:

- **Figure 1:** by De Juan Sanchez - [1], CC BY-SA 2.0, `https://commons.wikimedia.org/w/index.php?curid=1876104`
- **Figure 2:** by De Javier martin - Own work release donated to Wikipedia foundation., CC BY-SA 3.0, `https://commons.wikimedia.org/w/index.php?curid=2156980`
- **Figure 3:** by De Curtis, William The Botanical Magazine, Vol. 4 - `http://www.gutenberg.org/files/17979/17979-h/17979-h.htm#Cistus`, Dominio público, `https://commons.wikimedia.org/w/index.php?curid=1091956`


Initial inventory (t)
* t = stand age
Initialize (t)
PLOT:
Hm [m]
CANOPY_COVER [%]
MycoP [kg/ha*year]
B_edulis [kg/ha*year]
SaproP [kg/ha*year]
MycoD
SaproD
Updated inventory (t)
Yes, model execution
Next process?
* t2 = t + execution time
No
Execution (t2)
PLOT [t2]:
Hm [m]
CANOPY_COVER [%]
MycoP [kg/ha*year]
B_edulis [kg/ha*year]
SaproP [kg/ha*year]
MycoD
SaproD
Execution data (t2)
Cut (t)
Cuts not available
Cut data (t)
Final inventory

Contacts

Sustainable Forest Management Research Institute UVa-INIA, iuFOR (University of Valladolid-INIA)
Dendrochronology and Forest Modeling Department

Higher Technical School of Agricultural Engineering of Palencia - Avd. Madrid 57; 34004 - Palencia (Spain)
Vegetal Production and Forest Resources Department

Aitor Vázquez Veloso
Tel.: +34 979 108 430
e-mail: aitor.vazquez.veloso@uva.es
more information: `http://sostenible.palencia.uva.es/users/aitorvazquez`

Cristóbal Ordóñez
Tel.: +34 979 108 417
e-mail: a_cristo@pvs.uva.es
more information: `http://sostenible.palencia.uva.es/users/acristo`

Felipe Bravo Oviedo
Tel.: +34 979 108 417
e-mail: fbravo@pvs.uva.es
more information: `http://sostenible.palencia.uva.es/users/fbravo`

Interest Links

SIMANFOR - Support system for simulating Sustainable Forest Management Alternatives. Accessed 11 May 2021, in `https://www.simanfor.es/`

iuFOR - Sustainable Forest Management Research Institute UVa-INIA. Accessed 11 May 2021, in `http://sostenible.palencia.uva.es/`

ETSIIAA Palencia - Higher Technical School of Agricultural Engineering of Palencia. Accessed 11 May 2021, in `http://etsiiaa.uva.es/`

UVa - University of Valladolid. Accessed 11 May 2021, in `https://www.uva.es`