*Date of study*

Fall 2015 - July 2017 (referred to as ‘original’); data updated in Summer 2019 (update2019)

*Date of Public Archiving:*

July 2019 (published budburst data with updating later, see below)

*Last modified*:

13 February 2025 (before: 30 November 2023; 5 January 2021)

*Goal*

Quantitative review of literature on environmental control of spring phenology in woody plants, with a focus on addressing the relative strength of photoperiod to temperature control of budburst, as well as length and intensity of winter chilling.

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*General Files*

|  |  |  |
| --- | --- | --- |
| **File** | **Where** | **What** |
| Overview | [Github](https://github.com/lizzieinvancouver/ospree/blob/master/README.txt) | Overview of project, general goals and analyses, authorship, etc. |
| Methods | [Github](https://github.com/lizzieinvancouver/ospree/blob/master/writing/Budreview.pdf) | Some basic info in the [earlywriting](https://github.com/lizzieinvancouver/ospree/tree/master/notes/earlywriting) and more exact info [here](https://github.com/lizzieinvancouver/ospree/tree/master/notes/litreviewnotes) |
| Task list | [Github to do list](https://github.com/lizzieinvancouver/ospree/blob/master/ospree_todo.txt)  [Github issues](https://github.com/lizzieinvancouver/ospree/issues)  [Wiki](https://github.com/lizzieinvancouver/ospree/wiki) | To-do list for analysis work, data processing, and paper writing |

*Data and Code*

**Github** [https://github.com/lizzieinvancouver/](https://github.com/lizzieinvancouver/buds/tree/master/analyses/data)ospree

**W drive:** WeldShare > Wolkovich Lab > Budburst Review

**External hard drive** (Mac formatted) OSPREE climate

**Published data** (Budburst data only, with chilling) Elizabeth Wolkovich, Ailene Ettinger, Daniel Flynn, Tim Savas, Catherine Chamberlain, et al. 2019. Observed Spring Phenology Responses in Experimental Environments (OSPREE). Knowledge Network for Biocomplexity. doi:10.5063/F1CZ35KB.<https://knb.ecoinformatics.org/view/doi%3A10.5063%2FF1CZ35KB>

We published on knb the following version: ospree\_clean\_withchill\_BB.csv, with some extraneous columns removed. Code used to create this slightly modified version is [here](https://github.com/lizzieinvancouver/ospree/tree/bbculdesac/docs/budburst/code_for_knb_optionB_Used) (bbculdesac/docs/budburst/code\_for\_knb\_optionB\_Used) on GitHub.

We have continued to update the KNB data posting! Most recently in fall 2023, we included new files for Nacho’s phylogeny ms.

The citation as of February 2025 is: Elizabeth Wolkovich, Ailene Ettinger, Daniel Flynn, Tim Savas, Catherine Chamberlain, Daniel Buonaiuto, Jehane Samaha, & Ignacio Morales-Castilla. (2019). *Observed Spring Phenology Responses in Experimental Environments (OSPREE)*. Knowledge Network for Biocomplexity. [doi:10.5063/F18P5XZF](https://doi.org/10.5063/F18P5XZF).

And Nacho published code (and datafile that goes with the code) for the phyloms (Morales-Castilla *et al.* 2024, *Nature Climate Change*) on Zenodo: <https://zenodo.org/records/10902899>

*As of February 2025: I am not updating the below files (and not sure when we last did, same for General Files above).*

|  |  |  |
| --- | --- | --- |
| **File** | **Where** | **What** |
| Master dataset:  ospree.csv | [Github: analyses/input](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/input) | Raw phenology records from experiments in csv format; needs cleaning  (over 12k rows in original database; update is over 16k rows) |
| General cleaning files | [Github: analyses/cleaning](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/cleaning) | Set of scripts to clean data centralized and called from cleanmerge\_all.R |
| Creates chilling data and does a good deal of cleaning along the way | [Github: analyses/chilling](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/chilling) | Scripts to pull climate data for chilling, and cleans a lot related to chilling while doing this |
| Cleaning files for budburst analyses | [Github: analyses/bb\_analyses/cleaning](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/bb_analysis) | Set of scripts to clean data for budburst analyses centralized and called from bb\_cleanmerge\_all.R |
| Climate data | W Share: Wolkovich lab > Budburst Review > Ospree > climate data | .nc formatted files with climatic data for NAm and Europe (>108Gb)  See below for notes file on where these climate data come from |
| notes/dailyclimatedata.txt | [Github: notes/](https://github.com/lizzieinvancouver/ospree/blob/master/notes/dailyclimatedata.txt)dailyclimatedata.txt | .txt file describing where to download our climate data for Europe and North America. Includes information on 2019 update and information on past data used for previous manuscripts |
| ospree\_clean.csv | [Github: analyses/output](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/output) | Cleaned phenology records |
| Budburst models | [Github: analyses/bb\_analysis](https://github.com/lizzieinvancouver/ospree/tree/master/analyses/bb_analysis) | Stan and rstanarm models for days to budburst analyses |
|  |  |  |

Also known as: **OSPREE** - Observed Spring Phenology Responses in Éxperimental Environments