

**A 1D Model for Nucleation of Ice from Aerosol Particles:  
An Application to a Mixed-Phase Arctic Stratus Cloud Layer**

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**This repository contains all model output data in netCDF format to reproduce simulation results and corresponding figures given in above listed publication.**

File name description:

Type of parameterization: *INN, INAS, ABIFM*

INP treatment, diagnostic or prognostic: *diag, prog*

Aerosol size distribution:

*05mu*: monodisperse 0.5  $\mu\text{m}$  diameter

*15mu*: monodisperse 0.5  $\mu\text{m}$  diameter

*polydisperse*: polydisperse particle size distribution

Model initialization and thermodynamic data: *model\_data*

Aerosol/INP data: *aerosol\_data, polydisperse\_data*

Change in ice nucleation efficiency: *10X, 100X*