

# How Climate Scientists Think about Climate Prediction

...with comments from at least one climate scientist:

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## Initialized Earth System prediction from subseasonal to decadal timescales

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Initial value problem

Boundary value problem

Predictability sources

Seasonal-to-Decadal (S2D)  
Seasonal-to-Interannual (S2I)  
Subseasonal-to-Seasonal (S2S)

Deep ocean/GHG emission/Land use

PDV/AMV/GMST

ENSO/Sea-ice

Stratosphere (QBO, SSWs)

MJO/NAO

Soil moisture/Sea-ice

Day

Week

Month

Season

Year

Decade

Century

Weather

Subseasonal

Seasonal

Interannual

Decadal

Climate projection

Timescales of prediction

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