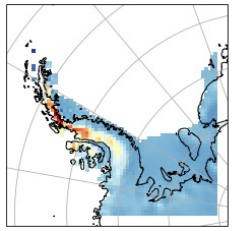
Data pre-processing

RCM
MAR(ACCESS-1.3), CMIP5
1980-2090, RCP85

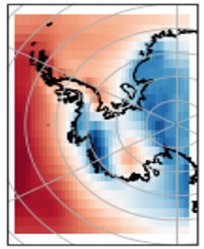


High resolution, local res (~35km)

Conservative interpolation

3x3 moving average filter

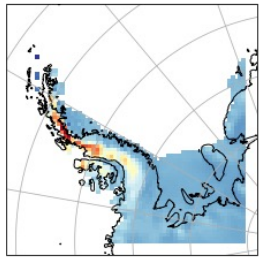
Normalization



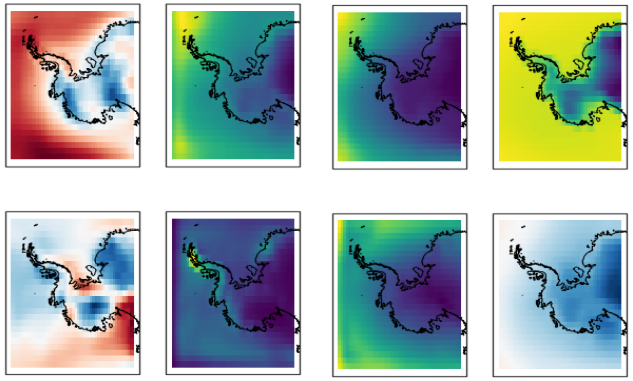
UPRCM outputs upscaled to res (1.2˚) (~60x200km)

Feature selection

Output:
Y_t: ice surface mass balance

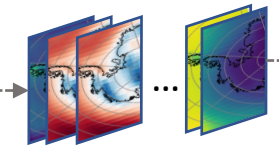


Input:
$(\tilde{X}, \tilde{Z})$: 1D and 2D UPRCM vectors



Training

$\boldsymbol{X_t}$: 2D input
$[t, 32, 32, C_1]$



Emulator

$\boldsymbol{Y_t}$: target
$[t, 64, 64]$

$\boldsymbol{Z_t}$: 1D input
$[t, 1, 1, C_2]$