

Martin Miles
2008 Sea Ice Minimum Summary Report

The physics that appear to have played a role in the near-record minimum September sea ice this year are: The predominantly first-year ice that comprised the ice cover preconditioned it to be more vulnerable to melt through the summer, even in August when the major radiative/thermodynamic effects are generally less than in June and July; The atmospheric patterns were less conducive to melt and (apparently) ice export than in 2007, so a new record was averted. The preconditioning and the state of ice cover in spring is clearly useful for prediction, even if we can't predict the weather patterns. However, it appears that slightly more of this first-year ice managed to survive than would be predicted solely on survival rates based on previous years, so more can be done here.