Lamont-Doherty Earth Observatory COLUMBIA UNIVERSITY | EARTH INSTITUTE

HOW FAST IS YOUR GLACIER MOVING?

Scientists are measuring glacier movement in the polar-regions to see how fast ice is moving into the world's oceans. Ice that moves from the land into the oceans contributes to rising sea level. Check your glacier speed against these famous polar glaciers!



ANTARCTICA'S PINE ISLAND GLACIER = UP TO 31 FT/DAY (This fast flowing glacier on West coast of Antarctica empties into the Amundsen Sea)



GREENLAND'S JAKOBSHAVN ISBREA (GLACIER) = UP TO 113 FT/DAY (This fastest moving glacier in the world empties into Disko Bayoff the west coast of Greenland)



ANTARCTICA'S BYRD GLACIER = UP TO 9.5 FT/DAY (This glacier drains an extensive area from the East Antarctic Ice Sheet into the Ross Ice Shelf)



YOUR GLACIER! _____ PLACE YOUR GLACIER AT THE LINE MARKED "6 INCHES FROM HERE TO BOTTOM". USE THE STOPWATCH AND TIME HOW LONG IT TAKES THE FRONT OF YOUR GLACIER TO TRAVEL TO THE BOTTOM OF THE GRID. THEN CALCULATE:

TRAVEL TO THE BOTTOM OF THE GRID. THEN CALCULATE:

1) 0.5 FT IN ____MINUTES X 2 = *___MINUTES TO TRAVEL 1 FOOT

2) SO HOW FAR WILL IT GO IN A DAY? CALCULATE MINUTES IN ONE DAY:

60 MINUTES/HOUR X 24 HOURS/DAY = 1,440 MINUTES/DAY

3) FOR OUR ANSWER WE NEED 1440 /* ___YOUR TIME STARRED ABOVE HOW MANY FEET YOUR GLACIER WILL MOVE A DAY? ANSWER = _____

HOW DID YOUR GLACIER STACK UP AGAINST THESE POLAR LEGENDS?