

## Climate at a Glance: Snowpack

### **Bullet-Point Summary:**

- **Average North American snowpack** extent is **virtually unchanged** in recent years **compared to the late 1960s**, when satellite measurements began.
- After a short-term decline in the late 1980s, North American snowpack has been on **an upward trend since the late 1980s**.
- Average snowpack has **increased throughout the Northern Hemisphere in the fall and winter** months.
- A modest decline in Eurasian snowpack has occurred, but that has affected North America little if at all.

**Short Summary:** Satellites have been measuring snow cover since 1966. The lines in the chart in Figure 1, below, represent snow cover anomaly, which is the departure from a defined reference point. The blue dots are **North America snow cover**, which show **almost no trend since 1966, and a rising trend since the late 1980s**. The overall Northern Hemisphere trend looks worse than the North America trend because of Eurasian trends (which nevertheless show no decline since the late 1980s).

**Snowpack** throughout the Northern Hemisphere **have increased in the fall and winter**, as shown below in Figures 2 and 3.

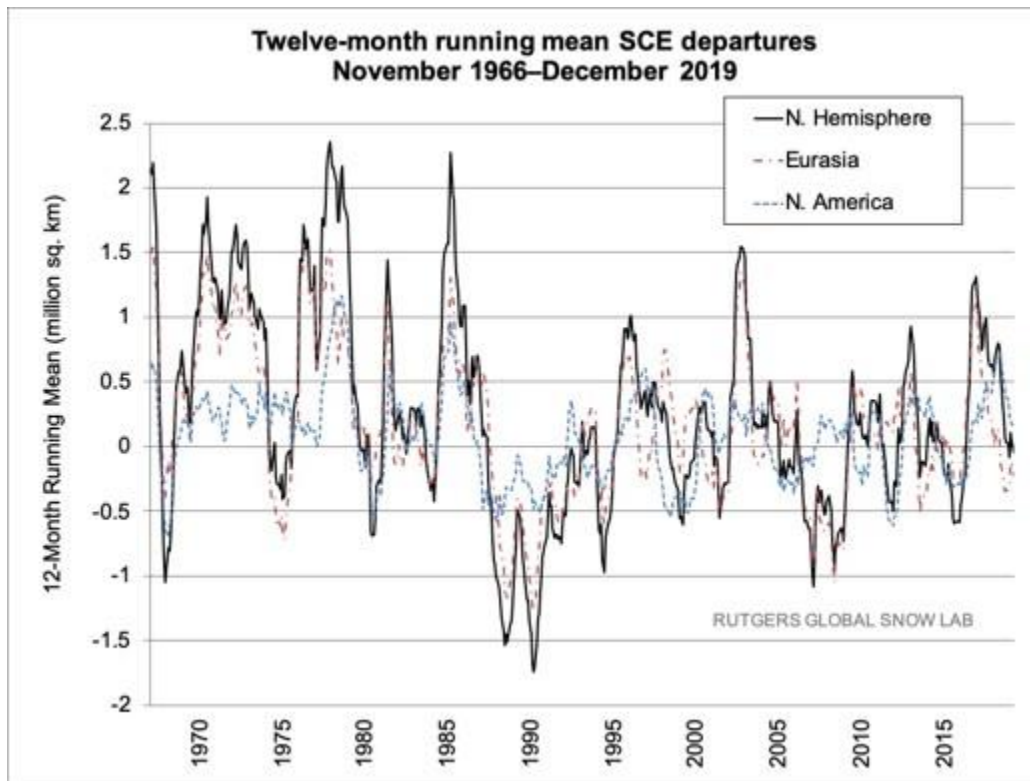


Figure 1: Annual North American snowpack, represented by the blue dots, remains virtually unchanged in recent years compared to the late 1960s, when satellite measurements first began. Source: Rutgers

University Global Snow Lab,

[https://climate.rutgers.edu/snowcover/chart\\_anom.php?ui\\_set=0&ui\\_region=nhland&ui\\_month=2](https://climate.rutgers.edu/snowcover/chart_anom.php?ui_set=0&ui_region=nhland&ui_month=2).

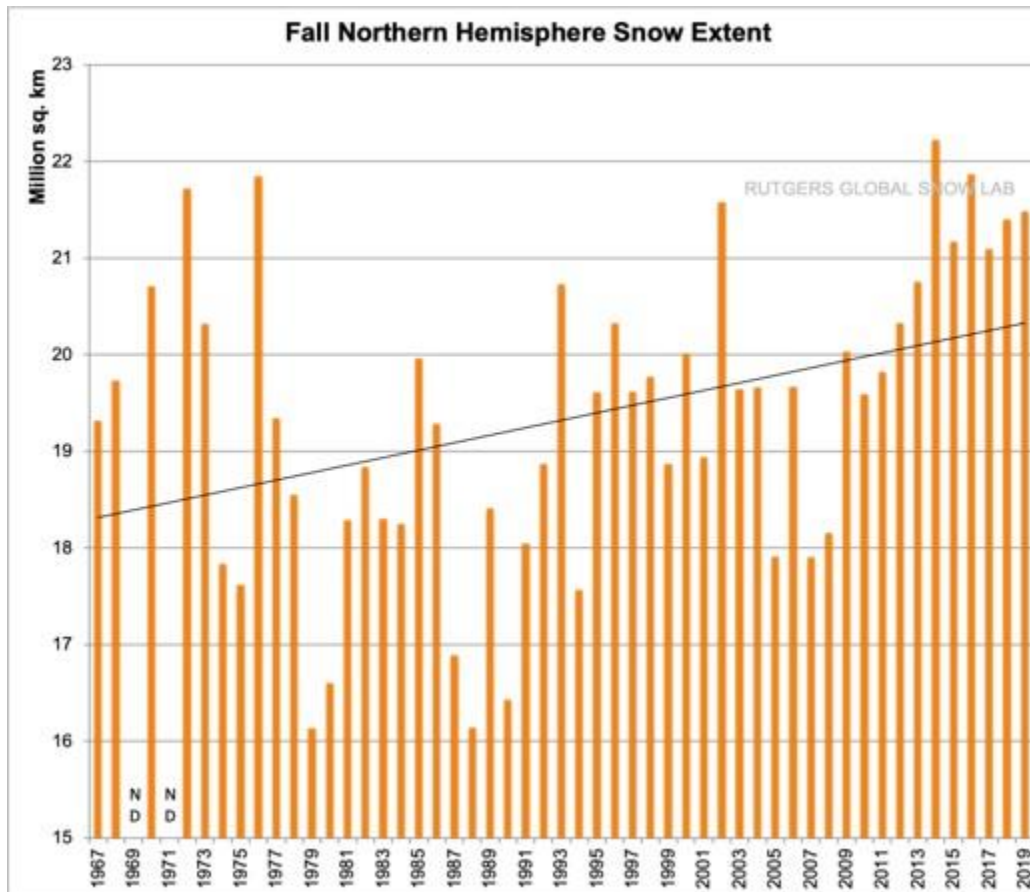


Figure 2: Snow cover throughout the Northern Hemisphere has increased during the fall months.

Source: Rutgers University Global Snow Lab,

[https://climate.rutgers.edu/snowcover/chart\\_seasonal.php?ui\\_set=nhland&ui\\_season=4](https://climate.rutgers.edu/snowcover/chart_seasonal.php?ui_set=nhland&ui_season=4).

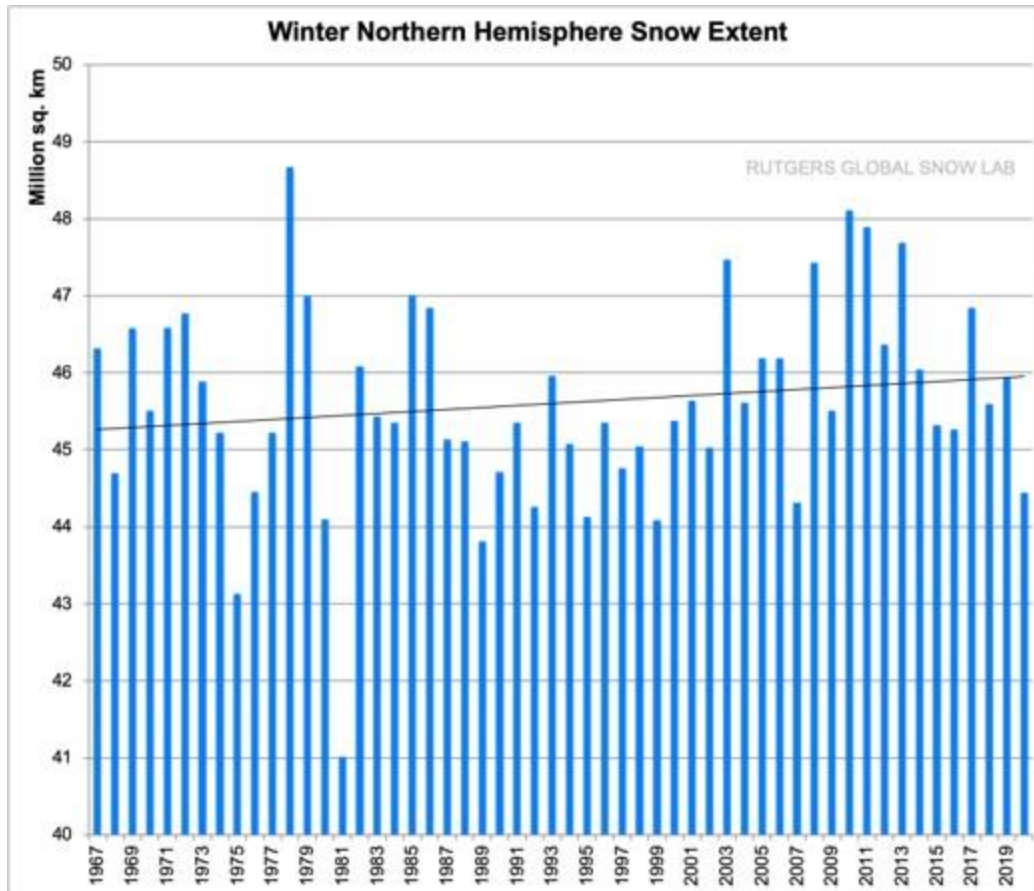


Figure 3: Global snow cover throughout the Northern Hemisphere has increased during the winter months. Source: Rutgers University Global Snow Lab, [https://climate.rutgers.edu/snowcover/chart\\_seasonal.php?ui\\_set=nhland&ui\\_season=1](https://climate.rutgers.edu/snowcover/chart_seasonal.php?ui_set=nhland&ui_season=1).