

2010 Sea Ice Outlook June Report based on May Data

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1. Extent 5.1 Million Square km for the Sept average.
2. Method (barely) statistical - aka amateur guesswork
3. Rationale My baseline is simply the NSIDC linear regression through past Sept averages. That would predict about 5.3. Beyond that are many competing factors.

Factors that lower the estimate:

1. The May melt has been the fastest in the satellite record.
2. May ended in a near tie for lowest extent at that time of year in the satellite record. Thus, albedo feedback in the period around the solstice should be as high as it has ever been
3. Warmer than average North Atlantic.
4. PIOMAS volume estimates are very low.

Factors that increase the estimate:

1. Arctic oscillation has tended towards a state with lower than average ice export through Fram Strait - but that may be moderating
2. Colder than average Bering Sea

4. Summary

The long term decline will continue. The most important factor in interannual variability will continue to be export through Fram Strait, but earlier fragmentation north of the strait will tend to increase that export. Earlier fragmentation will be driven by warmer winter temperatures leading to thinner new ice.