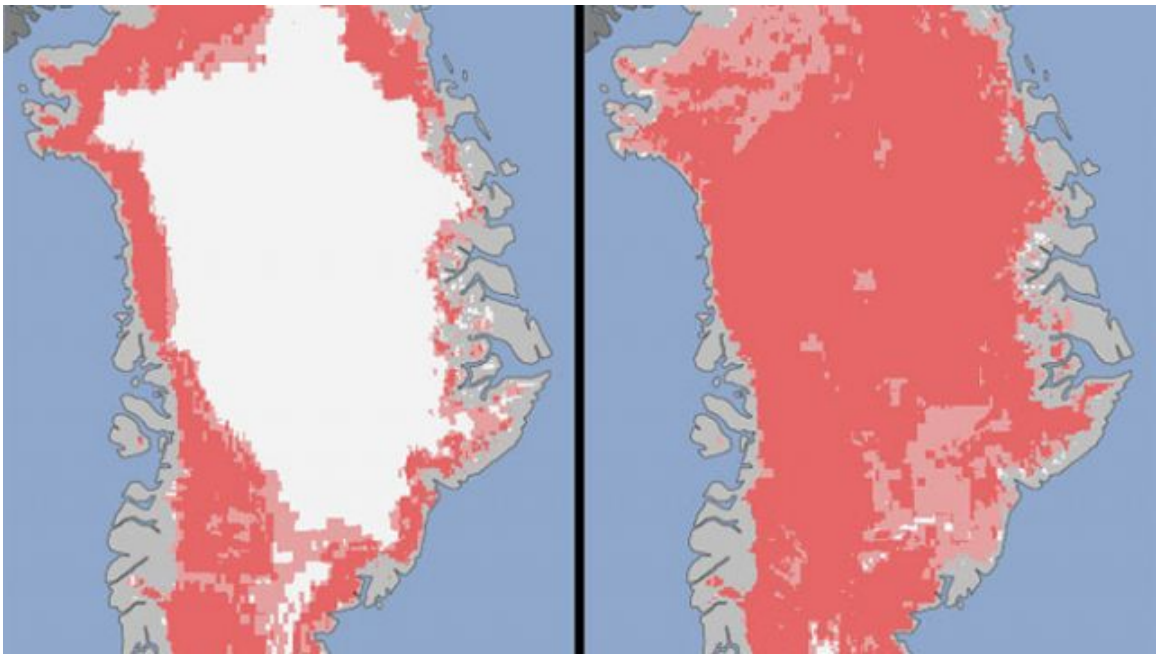
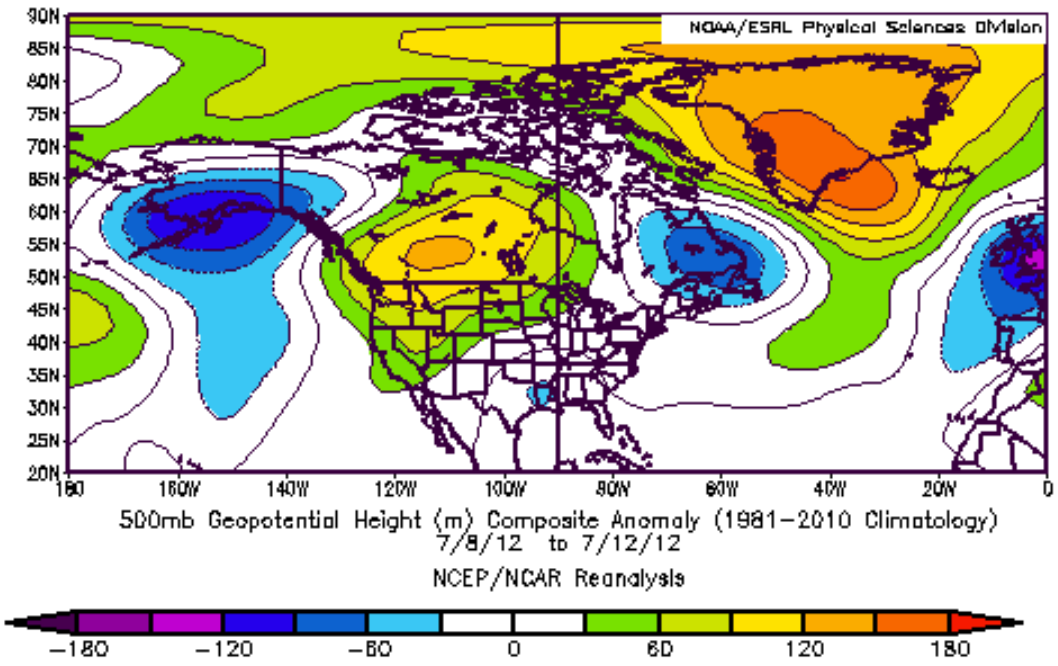
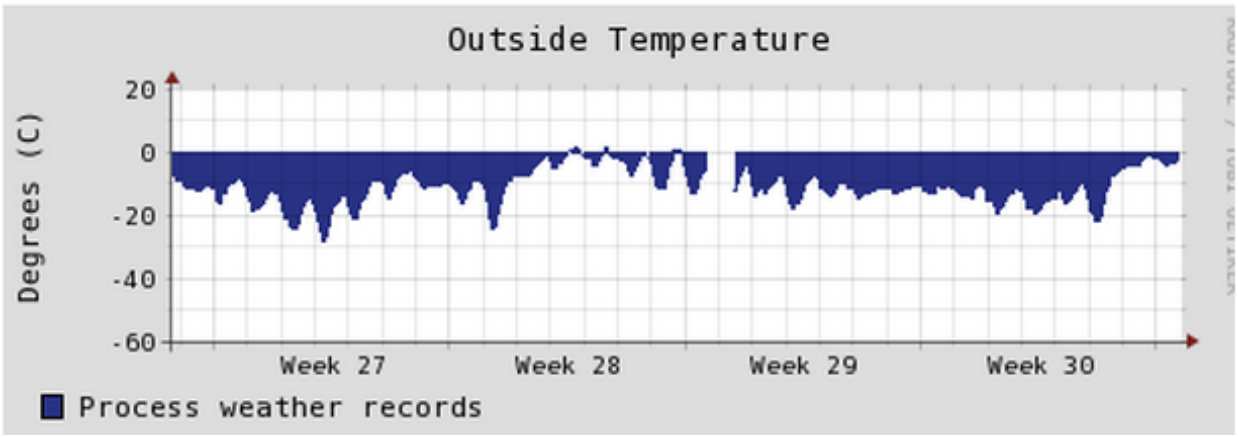
ARCTIC SUMMER SNOWSTORM

By Joseph D'Aleo CCM

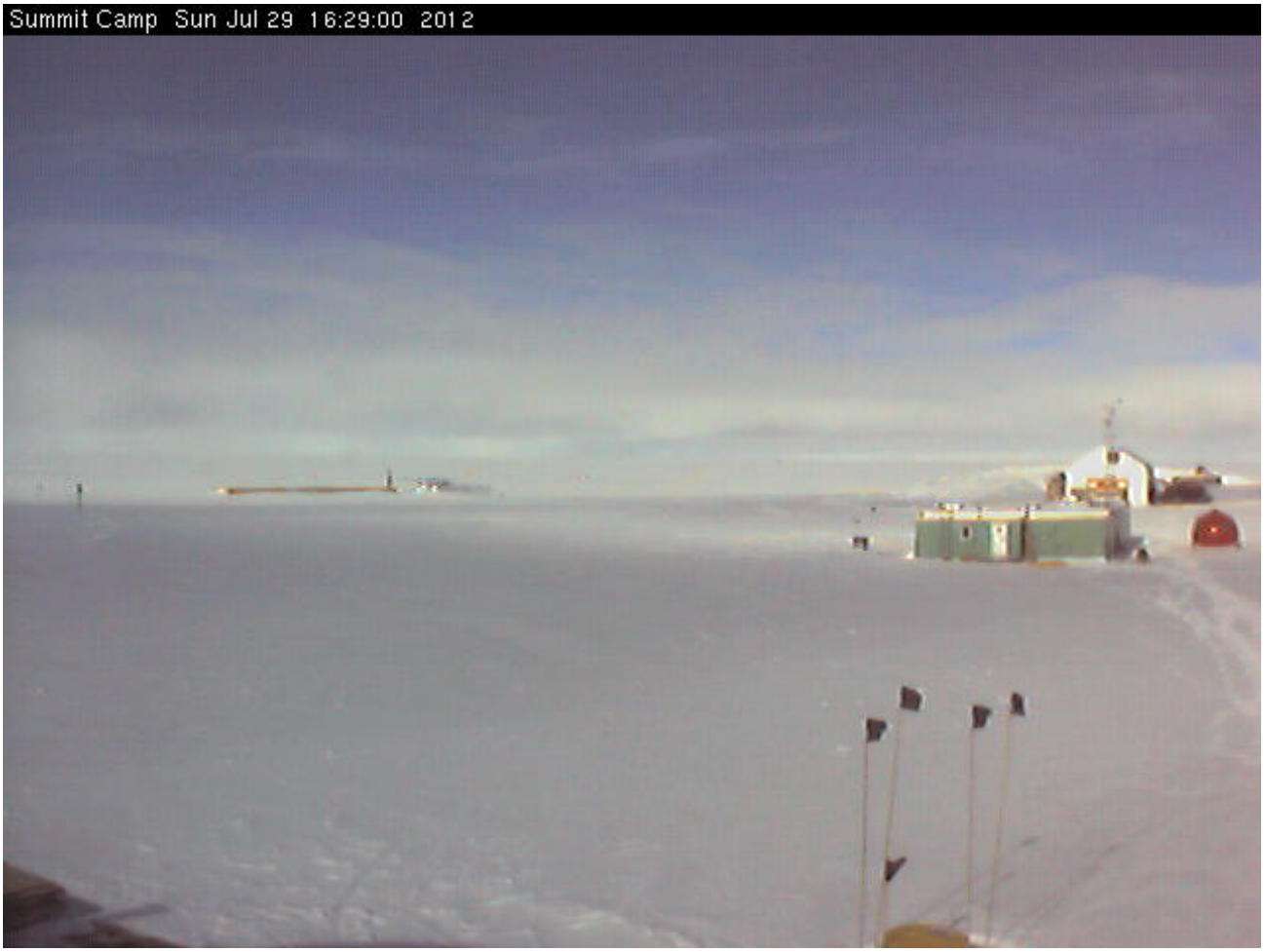
Remember a year ago when few days of July 'warmth' with strong blocking over Greenland had the media abuzz. Last July a brief spell of temperatures in the mid 30s had caused some surface slush formation on top of the 1 to 1.5 mile thick Greenland ice. The NASA sensors merely color-coded the phase of the water – ice (white), mixed water and ice (rose) and none (land grey). Rose meant some surface liquid. It quickly refroze in a few days even before the flurry of news stories hyping it stopped.



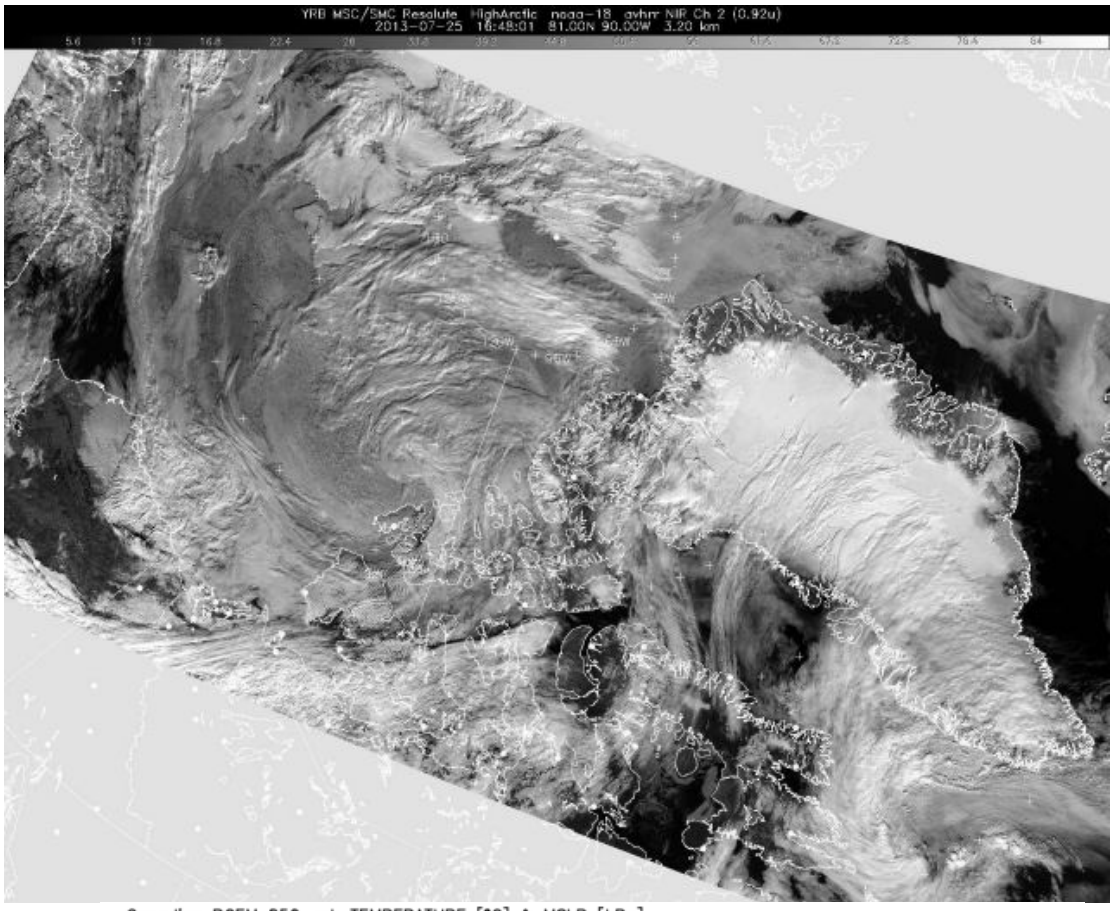




You can see the ice at the summit was very much still in evidence.

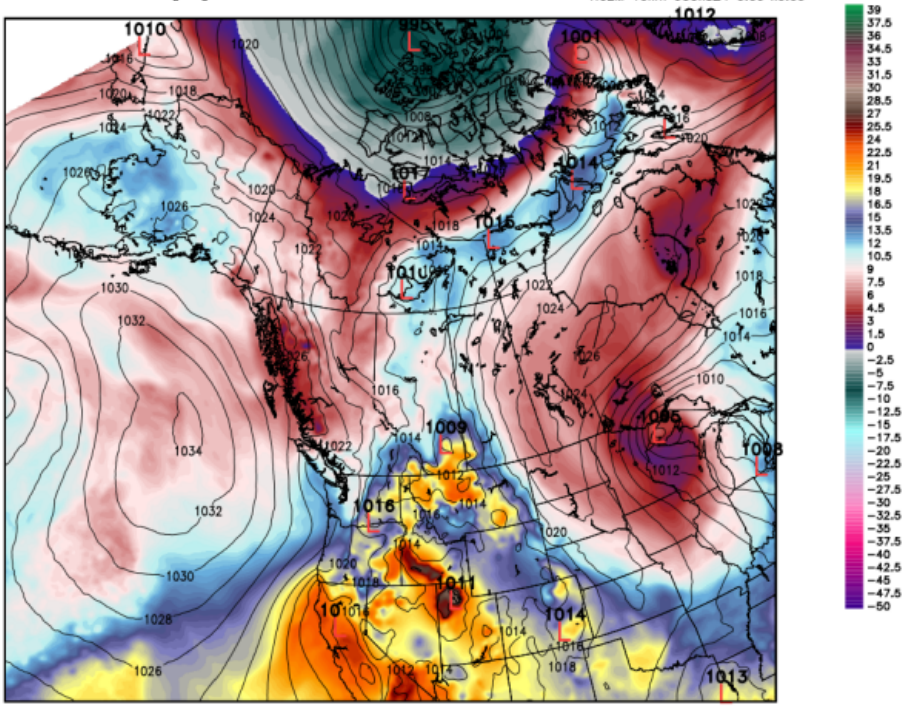


Well a year later, an interesting opposite scenario with a deep arctic low bringing snow to the arctic and Greenland in late July.



Canadian RGEM 850-mb TEMPERATURE [°C] & MSLP [hPa]
Init: 12Z25JUL2013 -- [48] hr --> Valid Sat 12Z27JUL2013

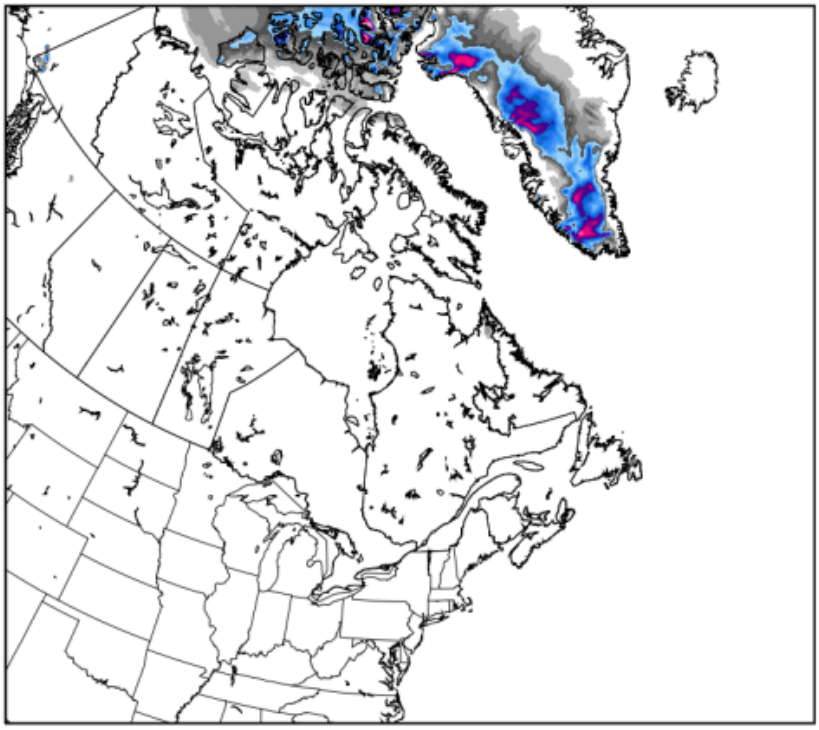
Min|Max: -10.8° 28.9°C
RGEM 10km 935x824 0.09°x0.09°

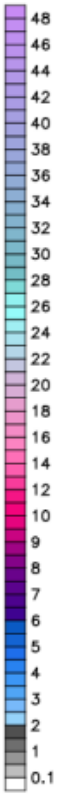


WxBell

Canadian RGEM Accumulated Snowfall [inch]
Init: 12Z25JUL2013 -- [48] hr --> Valid Sat 12Z27JUL2013

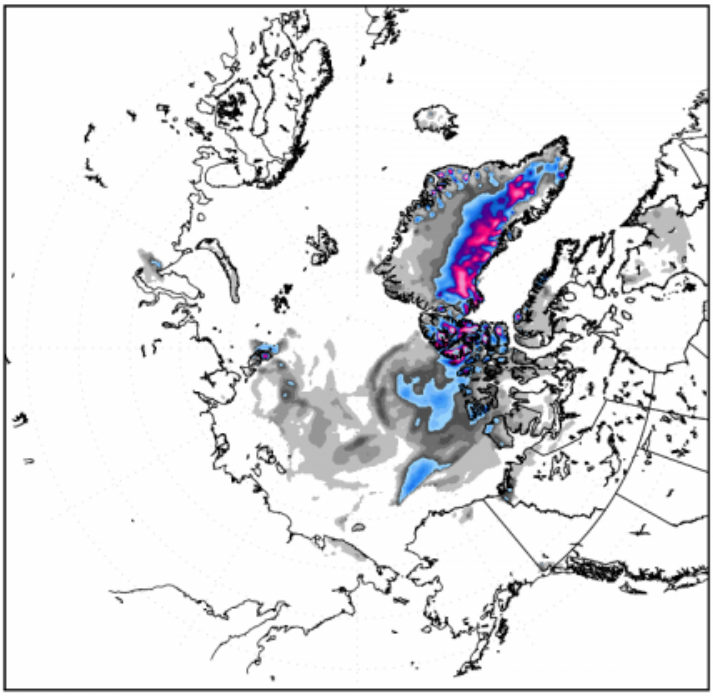
RGEM 10km 935x824 0.09°x0.09°

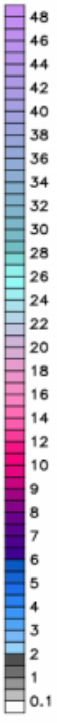




WxBell

NCEP GFS 6-hourly Accumulated Snowfall [inches] between 06Z25JUL2013 -- 06Z02AUG2013
Init: 06Z25JUL2013 -- [192] hr --> Valid Fri 06Z02AUG2013 Maximum: 46.8 in.

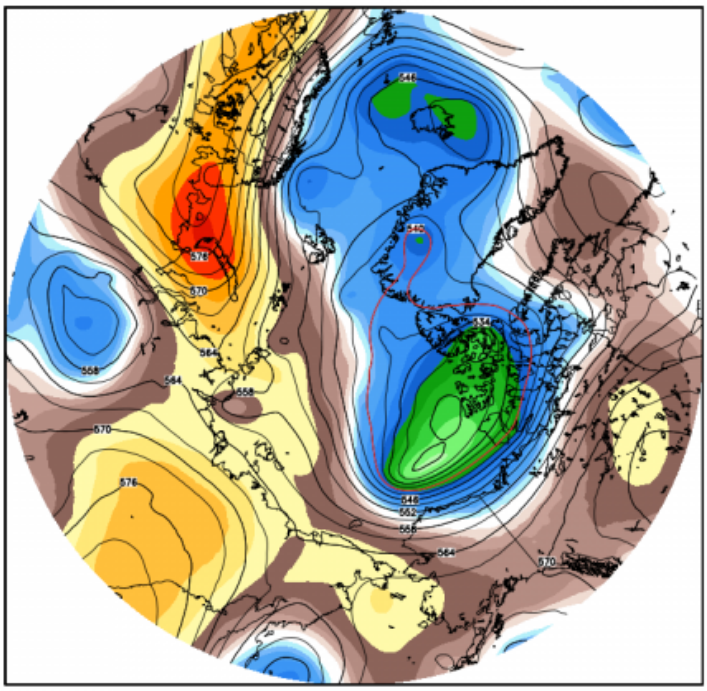


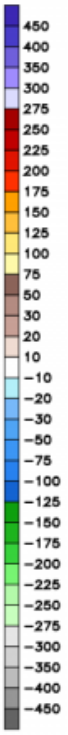


GFS 1760x880 sflux Forecast Grid | Total Accumulated Snowfall (shaded)

WxBell

ECMWF 500 hPa Geopotential Height (gpm/10) Anomaly
Init: 00Z25JUL2013 -- [192] hr --> Valid Fri 00Z02AUG2013



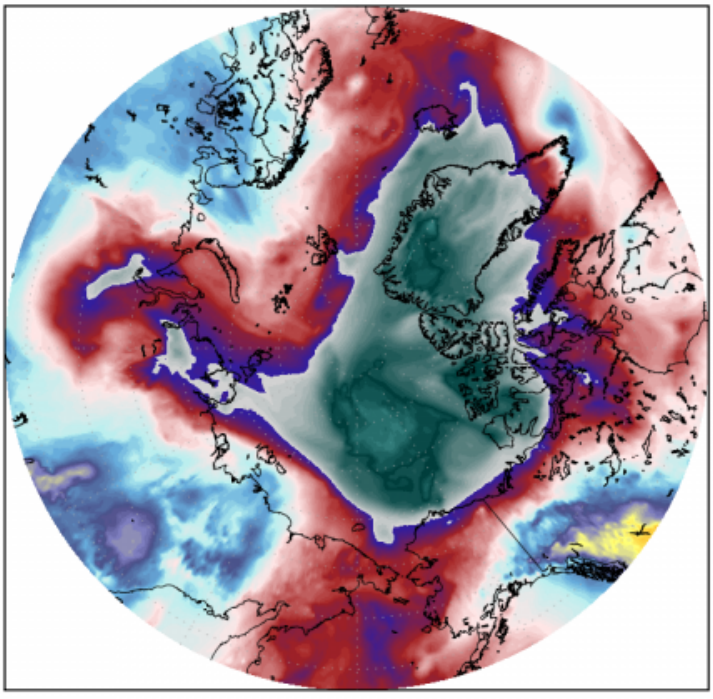


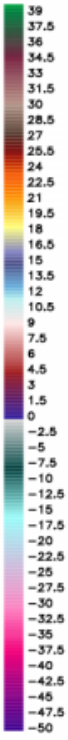
ECMWF T1279 Deterministic Forecast Model

WχBell°

ECMWF 850 hPa Temperature [°C]
Init: 00Z25JUL2013 -- [168] hr --> Valid Thu 00Z01AUG2013

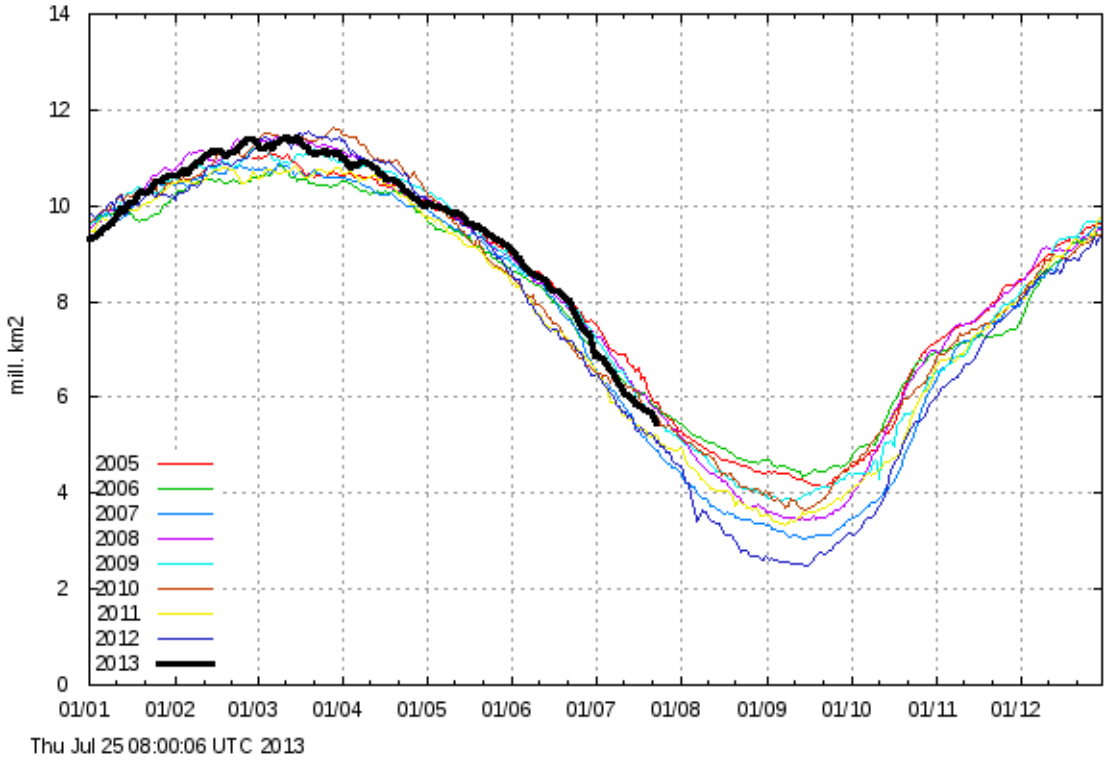
Min|Max T850: −11.1° | 20.3°C





ECMWF T1279 Deterministic Forecast Model

WχBell°



Arctic Sea ice extent 30% or greater (DMI)