

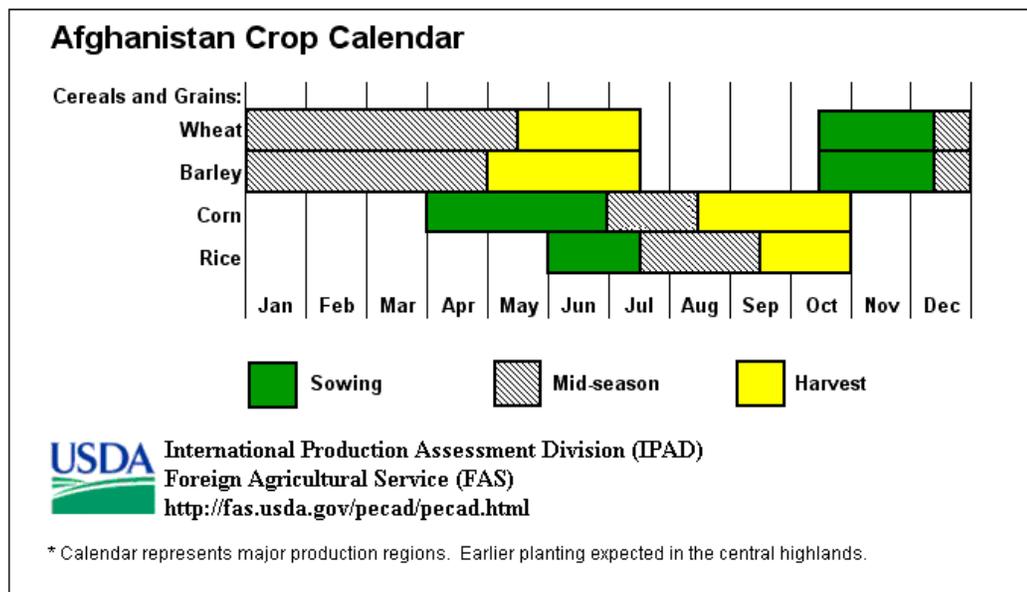
FAS – Office of Global Analysis (OGA)
United States Department of Agriculture (USDA)
International Operational Agriculture Monitoring Program



November Monthly Report

November 21st, 2008

1. Cumulative precipitation (CMORPH) during the month of October was relatively sparse with the West Central and Northeast provinces receiving most of the accumulation. Rainfall from Nov 1st to Nov 18th was slightly better with most accumulation occurring around higher elevations in the Central and Eastern provinces (Figure 1). Precipitation events in these regions are crucial for developing good snow pack for spring irrigation.
2. Temperatures for the month of October were well above normal in most regions, but the month of November showed temperatures decreasing near normal (Figure 2).
3. MODIS 500-meter snow cover product showed a steady accumulation of snow in the Central and Northeastern highlands. Change detection analysis revealed a 71% increase in snow cover from Nov 13th to Nov 20th (Figure 3). AFWA snow product showed a slight depth increase in the Northeast provinces from November 10th to November 20th (Figure 4). The snow pack will be carefully monitored during the current winter grains season given that high temperatures and poor snow pack were major causes to the previous season's crop losses.
4. NOAA Global Forecast System (GFS) is predicting up to 60mm cumulative precipitation and increases in snow accumulation for the East and Northeast provinces over the next 7-days (Figure 5).
5. Supplemental maps showing the provincial contribution to total wheat area from 2005/06 and 2007/08 (Figure 6).



CMORPH Cumulative Precipitation Comparison

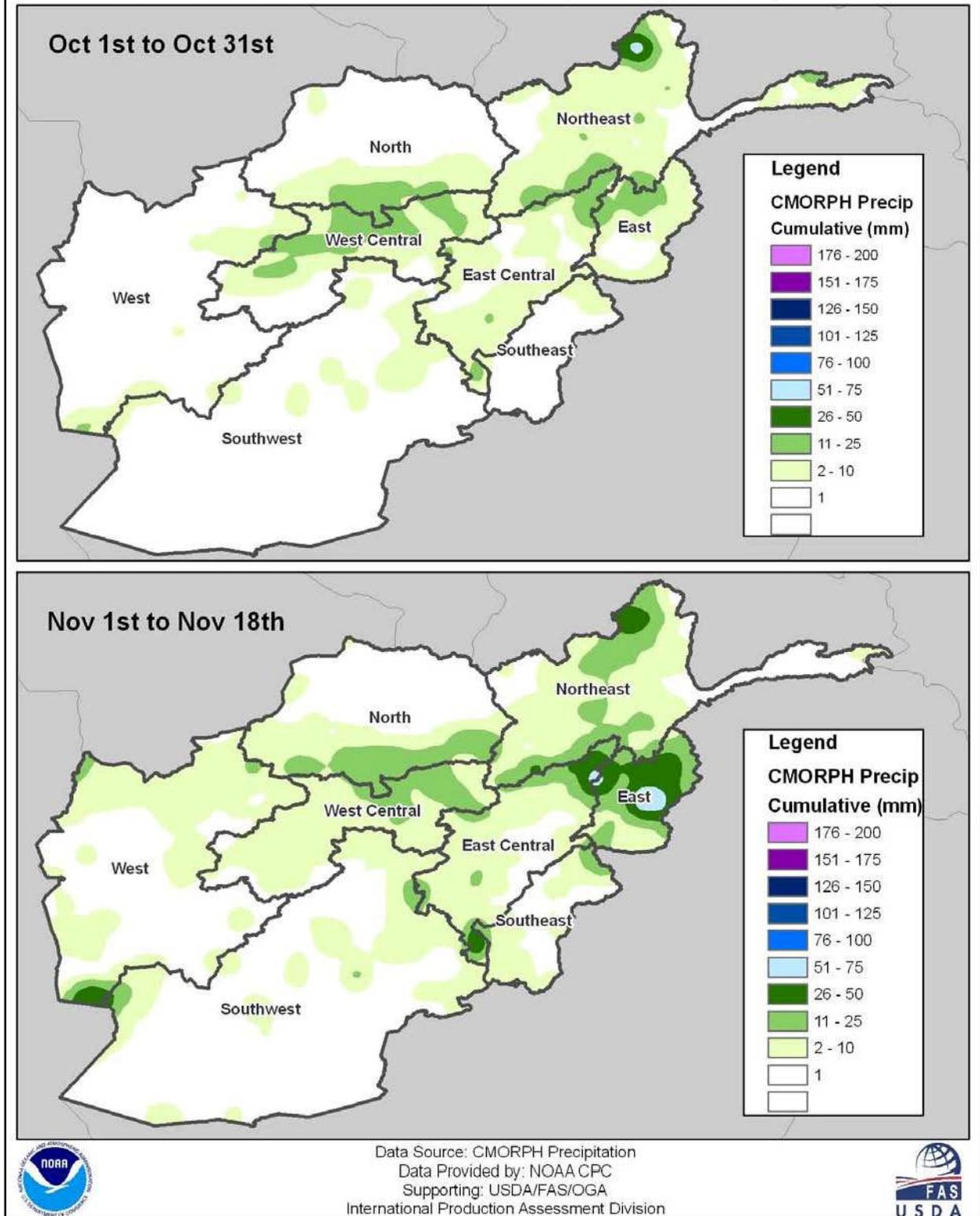


Figure 1: CMORPH cumulative precipitation data: Comparing October to November.

AFWA Temperature: Departure from Normal

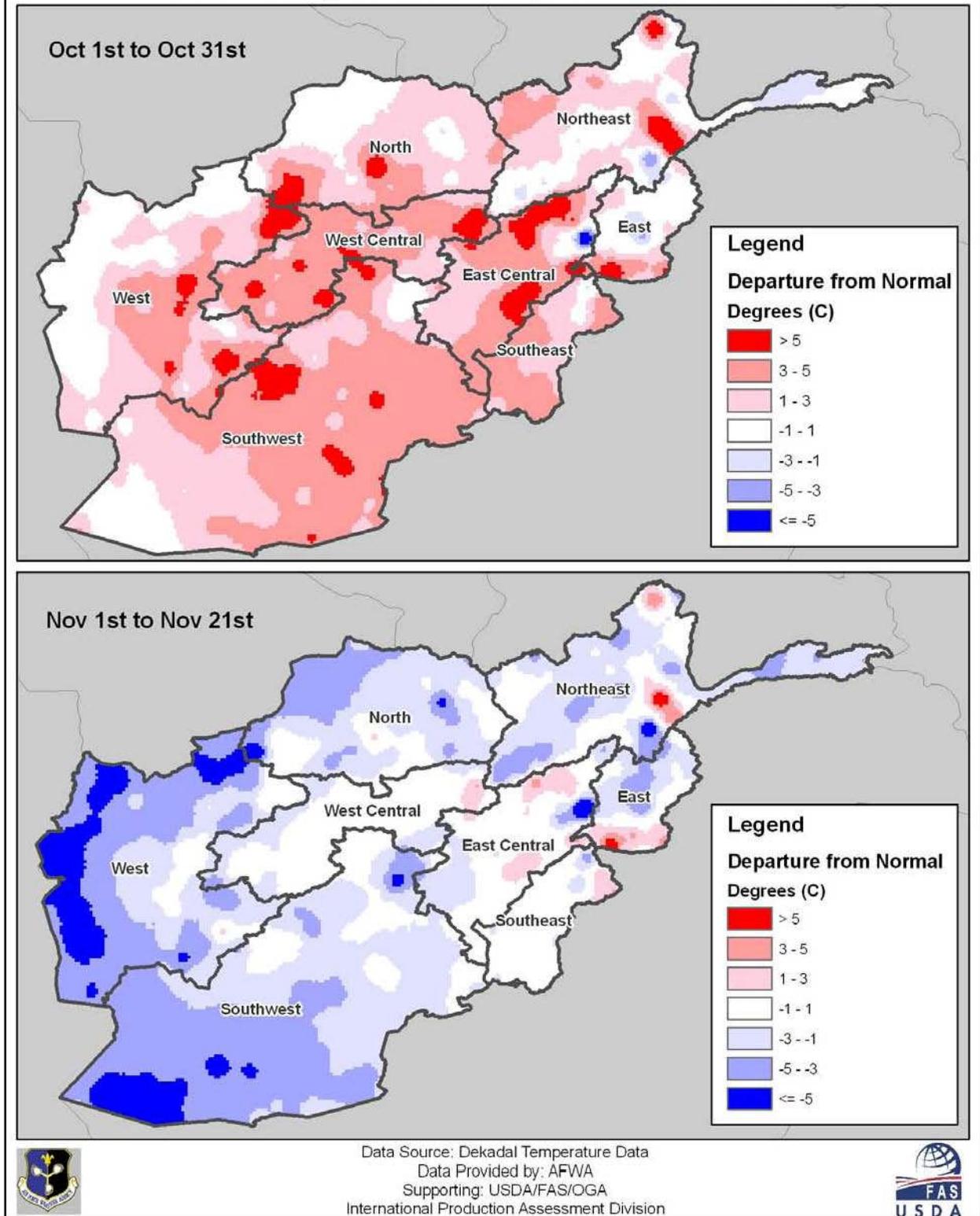


Figure 2: AFWA decadal temperature departure from normal: Comparing October to November.

MODIS 500-Meter Snow Cover

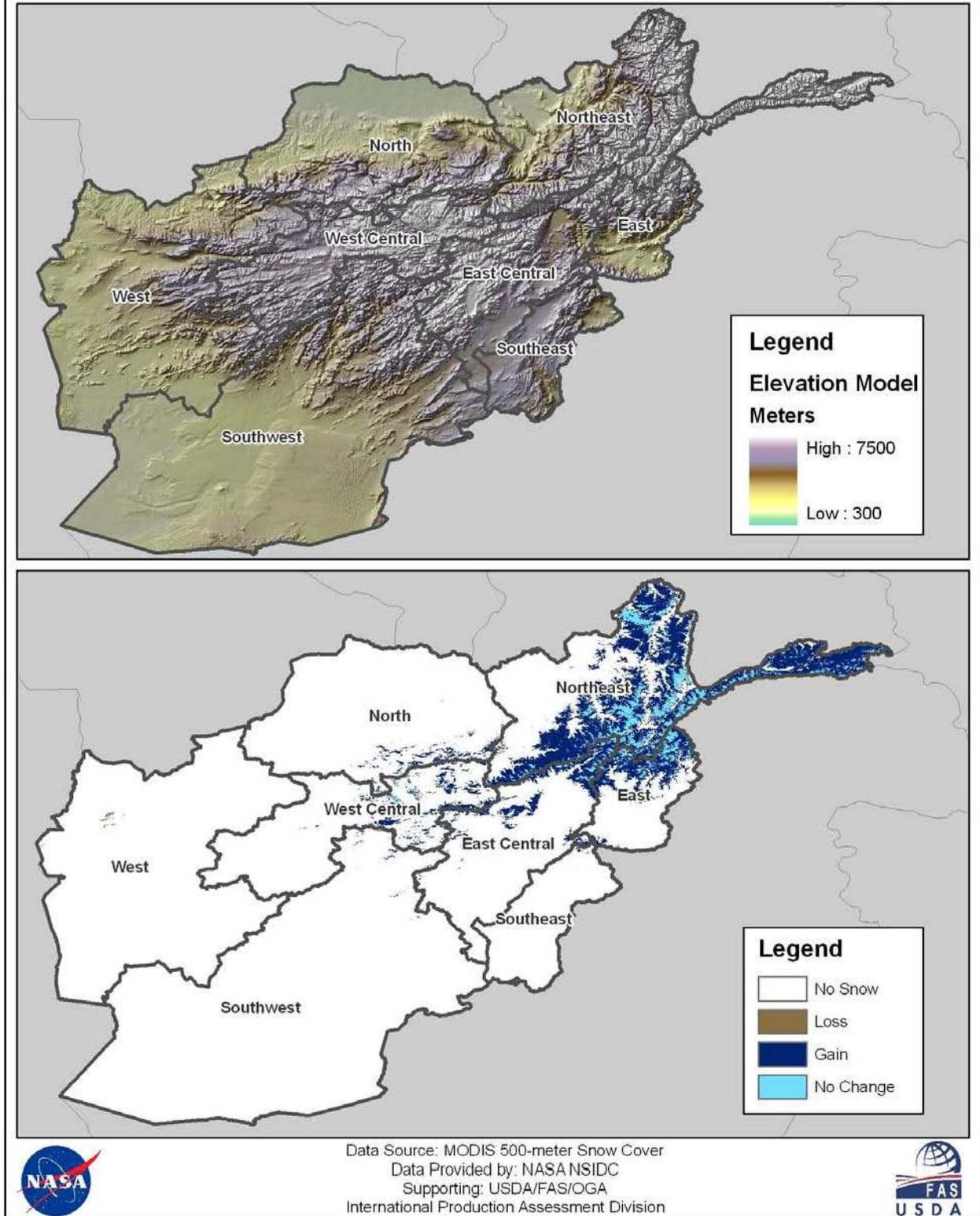


Figure 3: MODIS 500-meter snow cover product: Comparing November (Dekad 1) to November (Dekad 2).

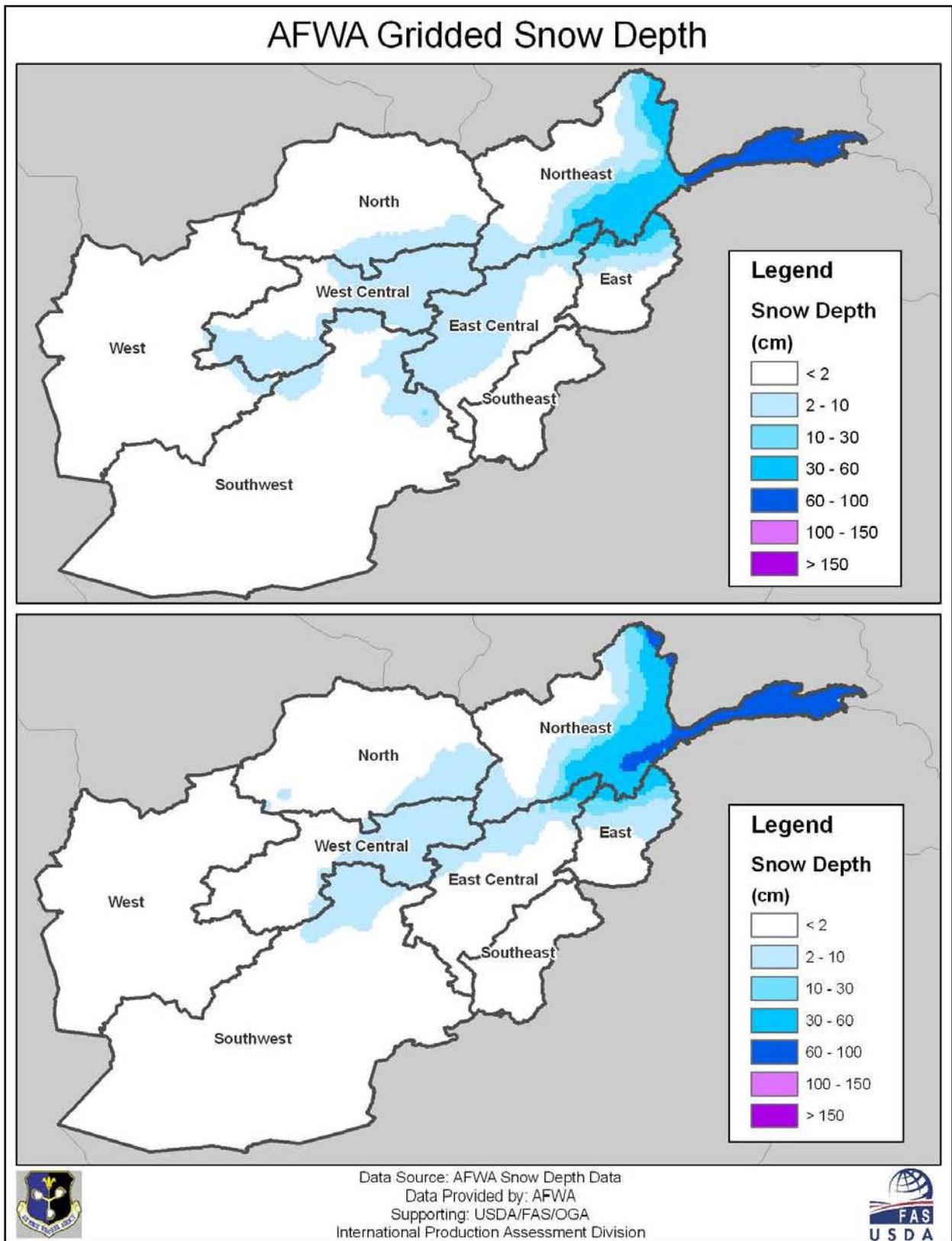


Figure 4: AFWA snow depth product: Comparing November (Dekad 1) to November (Dekad 2).

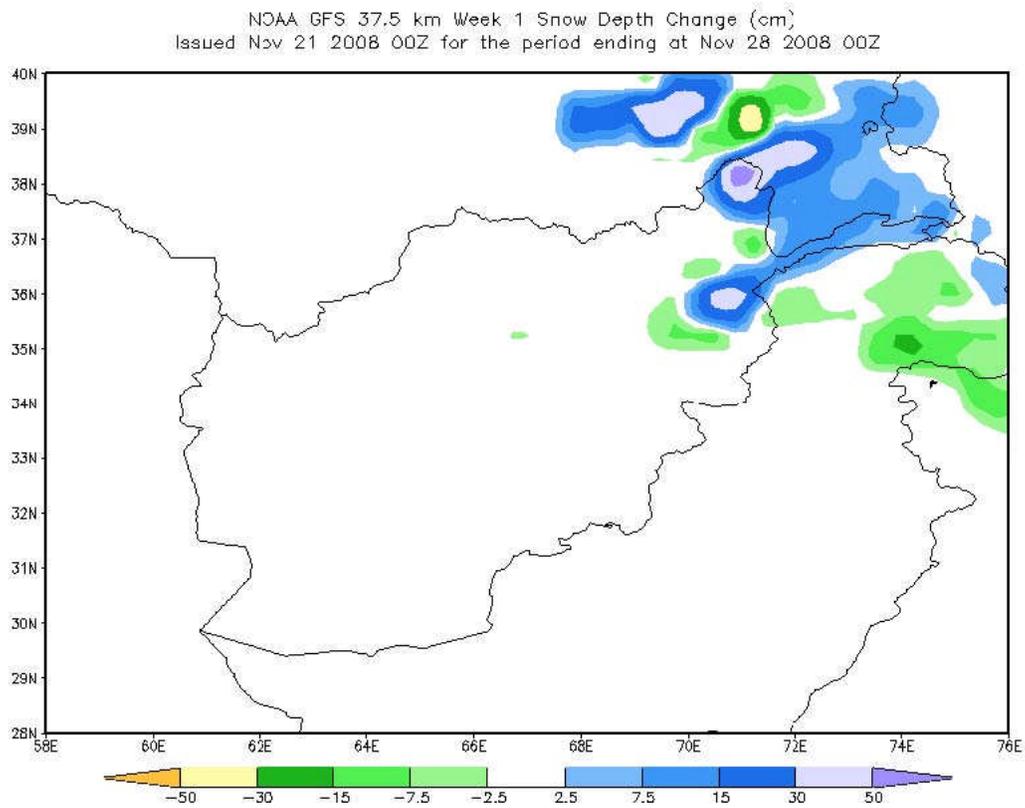
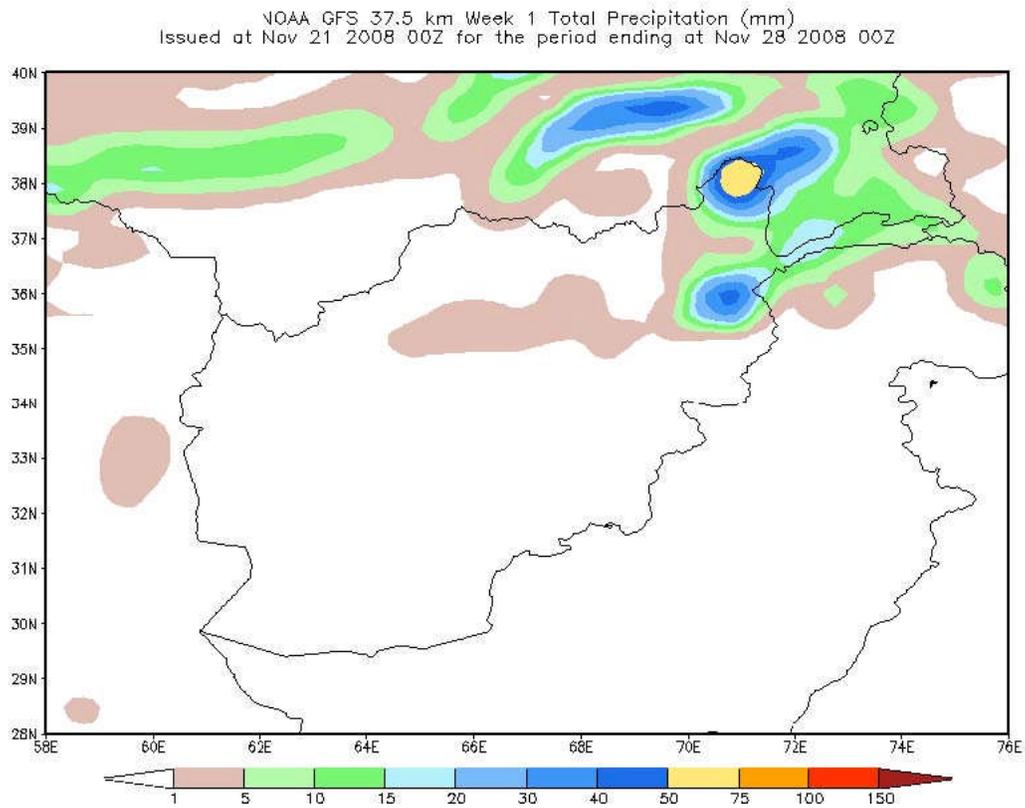


Figure 5: NOAA GFS 7-day cumulative precipitation and snow change outlook.

Regional Wheat Area Statistics: Irrigated vs Rainfed

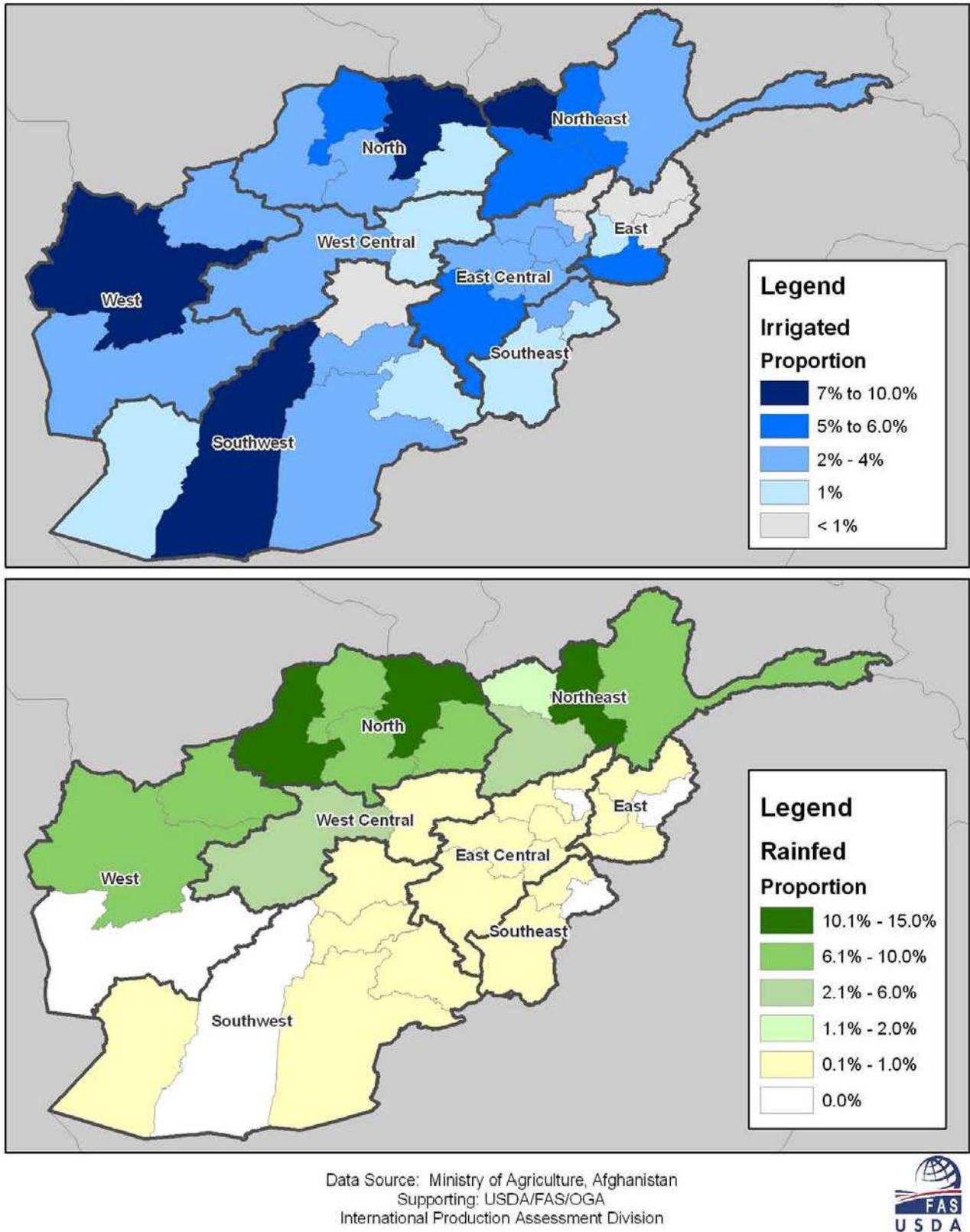


Figure 6: Regional area wheat statistics from 2005/06 to 2007/08.