PhenoALP project final meeting \ 12 – 14 October 2011 \ Field trip

Vegetative phenology in a subalpine pasture

Observations on vegetative phenology in the subalpine Nardus stricta pasture at Torgnon have been carried out during the 2009-2011 growing seasons from snow melting to senescence. LAI, green biomass and percentage of greening of vegetation, measured through visual estimate and digital image analysis, were monitored every two weeks on 12 samples.

1

Greening measures
Visual estimate and digital image analysis (WinCAM)

Measures have been carried on the 4 corners of each plot in a 50 x 50 cm quadrat (12 for each site). Percentage of the green and dry vegetation cover have been estimated at visual census as well as through digital images analysis (WinCam).

2

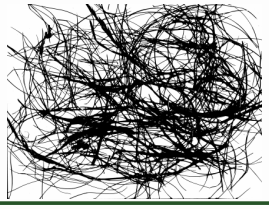
Biomass measurements

12 samples have been collected on the corners of each plot using a 30 x 30 cm quadrat. Green and dry biomass are divided and weighted in laboratory during the days immediately after monitoring.

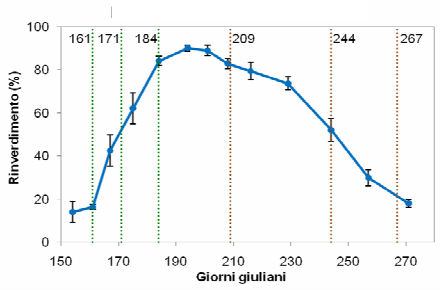
3

LAI (Leaf Area Index)

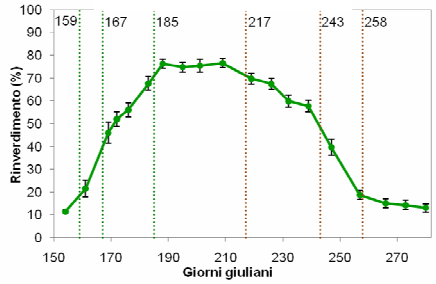
After having acquired the green biomass samples LAI is calculated using an open source software (Leaf Area) analyzing scanned images of the leaves.



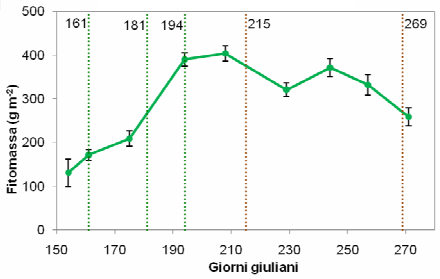
1 Greening Visual Estimate



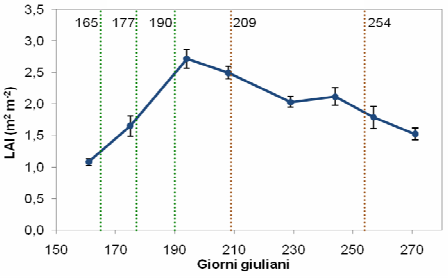
Greening WinCAM



2 Green Biomass



3 LAI



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