

# Aggregation of the GlobSnow SWE product

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# Aggregated SWE products

- Baseline product: daily SWE (northern Hemisphere)
  - Possible gaps in data (wet snow, missing data...)
  - Aggregated products easier to compare for climate research purposes
- Several possibilities for Aggregated products
  - 5-days, 10-days
  - Weekly, biweekly (7, 14-days), monthly
  - Minimum, average, maximum





## Aggregated SWE products

- The aggregated SE-product (10-days proposed)
  - A product matching the SE aggregation will be made
  - Is there a need for another one (5 -10 days, weekly)
- The climate research products
  - Monthly average, monthly maximum
  - Which other products are required, if any?





## Aggregated SWE products

- The example products generated for 15 January 2008:
  - 5-day average (11-15 Jan 2008) current -4 days
  - Weekly average (9-15 Jan 2008) current -6 days
  - 10-day average (6-15 Jan 2008) ...
  - 14-day average (1-15 Jan 2008) ...
  - Monthly average (January 2008)
  - Monthly maximum (January 2008)
- Similar product can be calculated for any day
- The aggregation can also be made "around" the day of interest





#### 5-day average (11-15 Jan 2008) current - 4 days





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#### Weekly average (9-15 Jan 2008) current -6 days





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### 10-day average (6-15 Jan 2008) current -9 days



![](_page_6_Picture_2.jpeg)

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![](_page_6_Picture_5.jpeg)

#### 14-day average (1-15 Jan 2008) current -13 days

![](_page_7_Figure_1.jpeg)

![](_page_7_Picture_2.jpeg)

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![](_page_7_Picture_5.jpeg)

### Monthly average (January 2008)

![](_page_8_Figure_1.jpeg)

![](_page_8_Picture_2.jpeg)

### Monthly maximum (January 2008)

![](_page_9_Figure_1.jpeg)

• Need for weather station data filtering is obvious!

![](_page_9_Picture_3.jpeg)

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![](_page_9_Picture_6.jpeg)

### Conclusions on aggregation

- Several possibilities for Aggregated products decision based upon User requests
  - 5-days / 7-days / 10-days / 14-days ?
  - Monthly: average, maximum, (minimum?)
- **Proposition from consortium** (in addition to the daily product):
  - Either 10-days or 14-days (matching the SE product)
    - Creating additional ones from the daily product is a simple enough task for the end-users needing them
  - Monthly average and monthly maximum
    - The most useful parameters for climate modelers

![](_page_10_Picture_9.jpeg)

![](_page_10_Picture_12.jpeg)