

NORTHERN RESEARCH BASINS QUESTIONNAIRE
WATER BALANCE STUDIES
March 12, 2004

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| 1) Name and location of research watershed | De Geer Valley, Spitsbergen, Svalbard. 78° 16'N, 11° 19'E |
| 2) Participants with address and email | Ånund Killingtveit - Department of Hydraulic and Environmental Engineering, Norwegian University of Science and Technology, NO-7491 Trondheim, Norway. E-mail aanund.killingtveit@ntnu.no Knut Sand – SWECO-Grøner AS, Box 331, NO-7403 Trondheim, Norway. Lars-Evan Pettersson – Norwegian Water Resources and Energy Directorate, Box 5091 Majorstua, NO-0301 Oslo, Norway |
| 3) Watershed size | 79.1 km ² |
| 4) Permafrost extent | Continuous |
| 5) Soils description | Moraines, riverbed, tundra, rock |
| 6) Vegetation description | Uniform lichen cover with patches of Rock Sedge (<i>Carex rupestris</i>) and Mountain avens (<i>Dryas octopetala</i>). There are no trees or tall shrubs. At higher elevations mostly gravel, stones and rock. |
| 7) Climate | High Arctic, mean annual temperature -6 °C Average annual precipitation (measured) 182 mm/year at nearest meteorological station, Svalbard Airport |
| 8) Topography | It consists of a river valley in the centre, with mountains on both sides. Elevation ranges from 40 up to 987 m.a.s.l., average elevation is 410 m.a.s.l. 10% of the catchment is covered by glaciers |
| 9) Period of record | Runoff measured from 1991-today Precipitation and climate data are measured at Svalbard Airport, about 20 km SE of de Geer, from 1911. Snow measurements (seasonal snow) from 1991-today |
| 10) Other | The de Geer Valley runoff station is located about 20 km from Longyearbyen. Access by boat or helicopter in the summer, by snowmobile during winter. |