Consiglio Nazionale delle Ricerche
Istituto sull'Inquinamento Atmosferico

Quaderno tematico

SNOWTERM: A THESAURUS ON SNOW AND ICE

HIERARCHICAL AND ALPHABETICAL LISTINGS

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SnowTerm: a thesaurus on snow and ice
hierarchical and alphabetical listings

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Paolo Plini[1], Rosamaria Salvatori[2], Mauro Valt[3], Valentina De Santis[1], Sabina Di Franco[1]

Abstract

SnowTerm is the result of an ongoing work on a structured reference multilingual scientific and technical vocabulary covering the terminology of a specific knowledge domain like the polar and the mountain environment. The terminological system contains around 3.700 terms and it is arranged according to the EARTh thesaurus semantic model. It is foreseen an updated and expanded version of this system.

1. Introduction

The use, management and diffusion of information is changing very quickly in the environmental domain, due also to the increased use of Internet, which has resulted in people having at their disposition a large sphere of information and has subsequently increased the need for multilingualism.

To exploit the interchange of data, it is necessary to overcome problems of interoperability that exist at both the semantic and technological level and by improving our understanding of the semantics of the data. This can be achieved only by using a controlled and shared language.

After a research on the internet, several glossaries related to polar and mountain environment were found, written mainly in English. Typically these glossaries -with a few exceptions- are not structured and are presented as flat lists containing one or more definitions.

The occurrence of multiple definitions might contribute to increase the semantic ambiguity, leaving up to the user the decision about the preferred meaning of a term. On the contrary, providing a structure to the lexicon so that each term is placed within a semantic network allows to specify its meaning.

The preliminary results of this work of selection and classification of terms on polar and mountain environment are presented here, as a proposal of controlled and structured language with the goal to develop a prototype of a thesaurus on this specific sector.

The thematic areas, covered at present, deal with snow and ice physics, snow and ice morphology, snow and ice radiometry, remote sensing and GIS in cryosphere environment, sea ice, avalanches, glaciers, disaster management and risk prevention.

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2. Identification of terminological sources and selection of terms

The first sources used to collect the terminology consist of the "Glossario dei termini usati nei bollettini nivometeorologici" by AINEVA and by Friuli-Venezia Giulia Region, the "Sea Ice Glossary" of the Scientific Committee on Antarctic Research-SCAR, the USGS "Glossary of Selected Glacier and Related Terminology", the "Sea Ice Nomenclature" (Merenkulkulaitoksen julkaisuja 5/2002), the trilingual "Glossary on snow and avalanches" by the Working Group on Avalanches Warning Services of the Swiss Federal Institute for Snow and Avalanche Research, the "Večjezični Slovar - Sneg in plazovi" developed by Pavle Šegula. Additional sources were added later on.

The terminology of these sources was analysed with respect to the degree of semantic relevance in the field. Terms too generic or considered as non pertinent were excluded. Groups of terms that could be collected in specific appendixes were also excluded.

At present the database contains 3.700 records; more than 1.200 non-descriptors have been identified and assigned.

3. Classification of terms

The classification and relational structure is based on the EARTh (Environmental Applications Reference Thesaurus) semantic model.

The terms are arranged according to a classification scheme which is founded on categories. At the first level, the system is structured into categories defined as "ENTITIES", "ATTRIBUTES", "DYNAMIC ASPECTS" and "DIMENSIONS". The "ENTITIES" describe material and immaterial objects; the "ATTRIBUTES" define the nature of the objects, at least as far as their static aspects are concerned; "DYNAMIC ASPECTS" define the activities, the processes and the conditions in which they are involved; the "DIMENSIONS" identify the spatio-temporal circumstances in which all this occurs.

The system is then organized in a framework of different levels and classification knots, and it comprises hierarchical relations. It continues into further levels as they obtain a greater specificity in order to allow a rational arrangement of objects.

The vertical structure can be used as a semantic reference system, stable and partially independent from the context.

The model envisages the possibility of complementing the faceted structure with a system of themes which by crossing with the vertical structure would form a matrix system.

In a thematic approach, the terms linked to a specific sector, are reassembled, while the facet structure tends to scatter them under the more general referral concept.

Moreover, the system of themes, as it was conceived, should be developed by a user according to the specific needs of the applicative context.

One example of thematic setup is provided by the classification into sectors contained in the "Sea Ice Nomenclature" where the terms are clustered according to "ice development", "sky and air indications", "ice arrangement", "terms relating to surface shipping", "terms relating to submarine navigation".

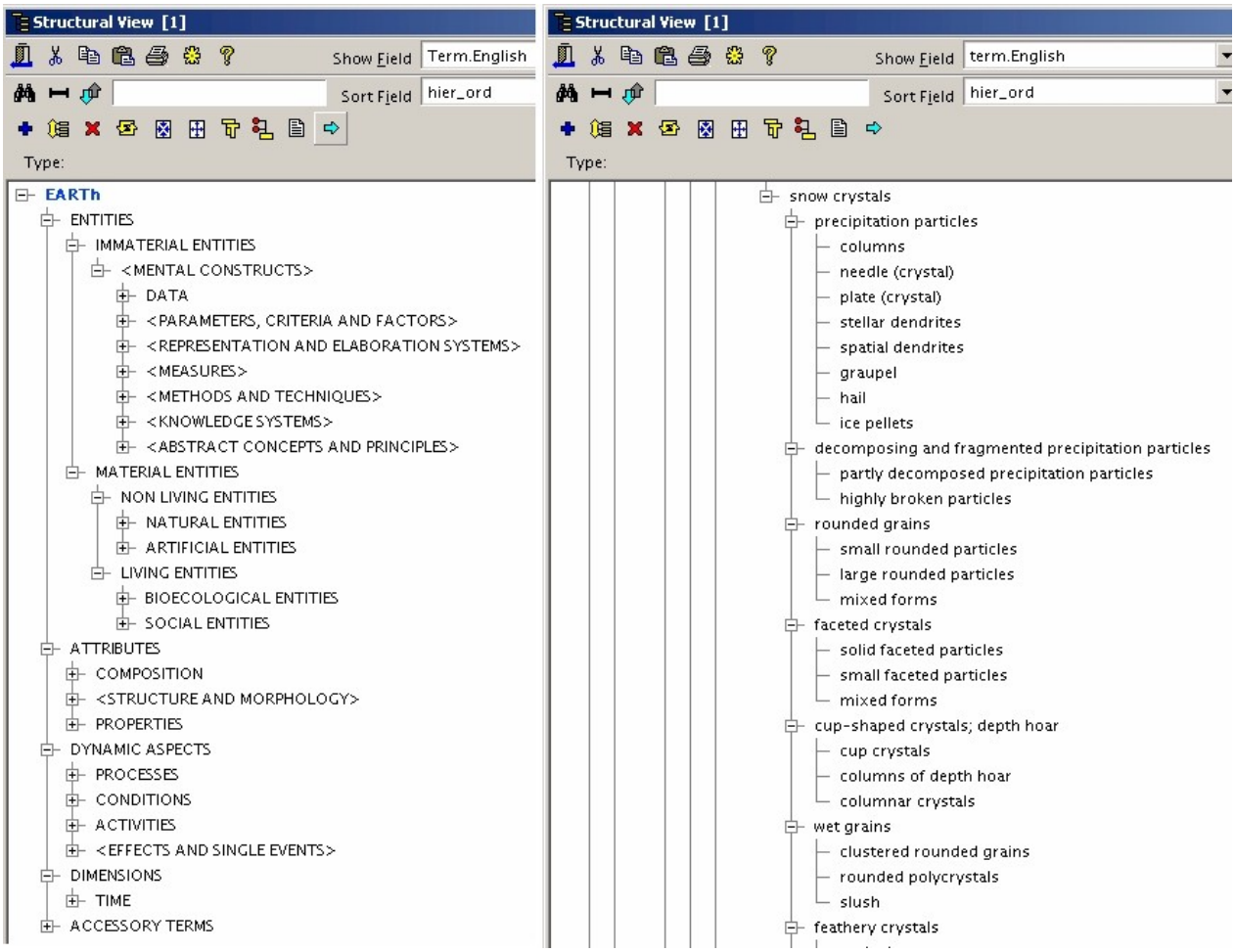


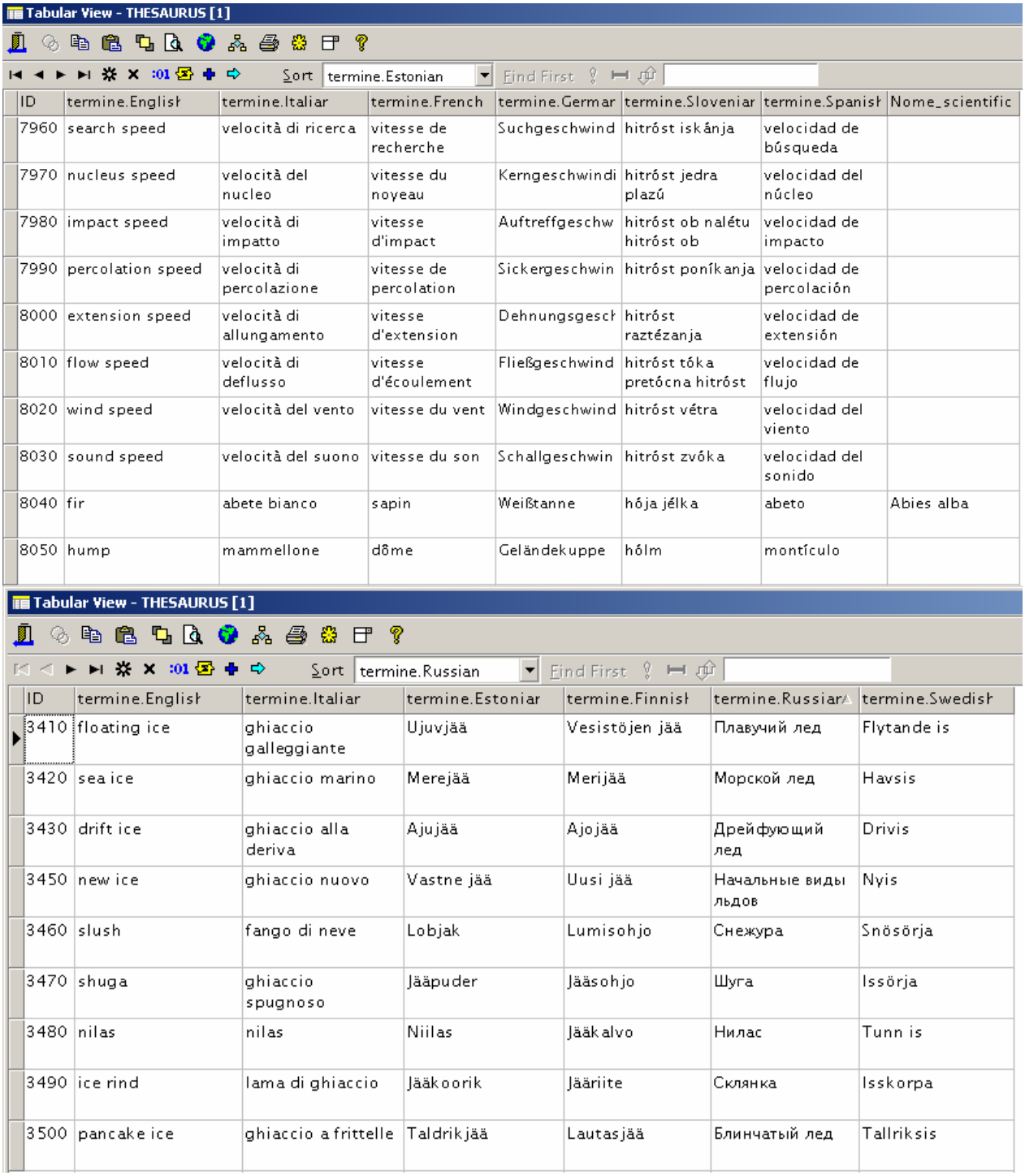
Fig. 1 - The present status of the Classification Scheme and an example of the hierarchical setup

4. Software details

All the terms are stored into Firebird, an open source, client-server, SQL database. In order to handle properly the terminological database the SuperThes software (Batschi, 2002) was adopted. It is a tool for thesaurus management developed with the scientific supervision of EKOLab, in the frame of an international cooperation. The web interface will allow to access the system through the internet.

5. Multilingualism

Multilingualism is not the main interest of our working group. Nevertheless, in order not to waste important resources, the already available translations have been collected. The system now contains (including synonyms) 3.200 English terms, the other language are Italian (3.024), Estonian, Finnish, Russian and Swedish (94), French (1.970), German (1.770), Slovenian (1.300) and Spanish (1.870). The enlargement of the number of linguistic equivalents in French and German is mandatory due to the geographical and political position of the alpine area. Other languages will be updated following a direct interest and willingness to cooperate by other institutions.



Tabular View - THESAURUS [1]

Sort: termine.Estonian — Find First

ID	termine.English	termine.Italian	termine.French	termine.German	termine.Slovenian	termine.Spanish	Nome_scientific
7960	search speed	velocità di ricerca	vitesse de recherche	Suchgeschwind	hitróst iskánja	velocidad de búsqueda	
7970	nucleus speed	velocità del nucleo	vitesse du noyeau	Kerngeschwindi	hitróst jedra plazú	velocidad del núcleo	
7980	impact speed	velocità di impatto	vitesse d'impact	Auftreffgeschw	hitróst ob nalétu hitróst ob	velocidad de impacto	
7990	percolation speed	velocità di percolazione	vitesse de percolation	Sickergeschwin	hitróst poníkanja	velocidad de percolación	
8000	extension speed	velocità di allungamento	vitesse d'extension	Dehnungsgesch	hitróst raztézanja	velocidad de extensión	
8010	flow speed	velocità di deflusso	vitesse d'écoulement	Fließgeschwind	hitróst tóka pretócna hitróst	velocidad de flujo	
8020	wind speed	velocità del vento	vitesse du vent	Windgeschwind	hitróst vétra	velocidad del viento	
8030	sound speed	velocità del suono	vitesse du son	Schallgeschwin	hitróst zvóka	velocidad del sonido	
8040	fir	abete bianco	sapin	Weißtanne	hója jélka	abeto	Abies alba
8050	hump	mammellone	dôme	Geländekuppe	hólm	montículo	

Tabular View - THESAURUS [1]

Sort: termine.Russian — Find First

ID	termine.English	termine.Italian	termine.Estonian	termine.Finnish	termine.Russian	termine.Swedish
3410	floating ice	ghiaccio galleggiante	Ujuvjää	Vesistöjen jää	Плавучий лед	Flytande is
3420	sea ice	ghiaccio marino	Merejää	Merijää	Морской лед	Havsis
3430	drift ice	ghiaccio alla deriva	Ajujää	Ajojää	Дрейфующий лед	Drivis
3450	new ice	ghiaccio nuovo	Vastne jää	Uusi jää	Начальные виды льдов	Nyis
3460	slush	fango di neve	Lobjak	Lumisohjo	Снежура	Snösörja
3470	shuga	ghiaccio spugnoso	Jääpuder	Jäsohjo	Шуга	Issörja
3480	nilas	nilas	Niilas	Jääkalvo	Нилас	Tunn is
3490	ice rind	lama di ghiaccio	Jääkoorik	Jääriite	Склянка	Isskorpa
3500	pancake ice	ghiaccio a frittelle	Taldrikjää	Lautasjää	Блинчатый лед	Tallriksis

Fig. 2 - Two screenshots of the tabular window

6. Results, their use and future development

The results of this work is the production of a monolingual terminological system organized both in vertical way -according to a classification system based on categories- and horizontally on the basis of the systems of themes.

SnowTerm could be considered as one of the first attempt to develop a thesaurus on Snow, Ice and Mountain Environment domain.

In order to ensure a better and updated conceptual and terminological coverage, an extension and revision of the system is foreseen. Any other reliable glossary or term list will be considered as potential additional sources.

The semantic structure of the system will also be strengthened. In order to increase the efficiency of the system in information retrieval operations, a set of associative and equivalence relations will be implemented.

The organization of knowledge -through the support of a thesaurus- could bring a strong contribution to the management of the information in the specific domain: by suggesting a language that different institutions could share; ensuring a higher semantic transparency to terminology; providing tools for indexing and retrieving the information and to interchange of data and suggesting semantic maps usable for the conceptual description of the domain.

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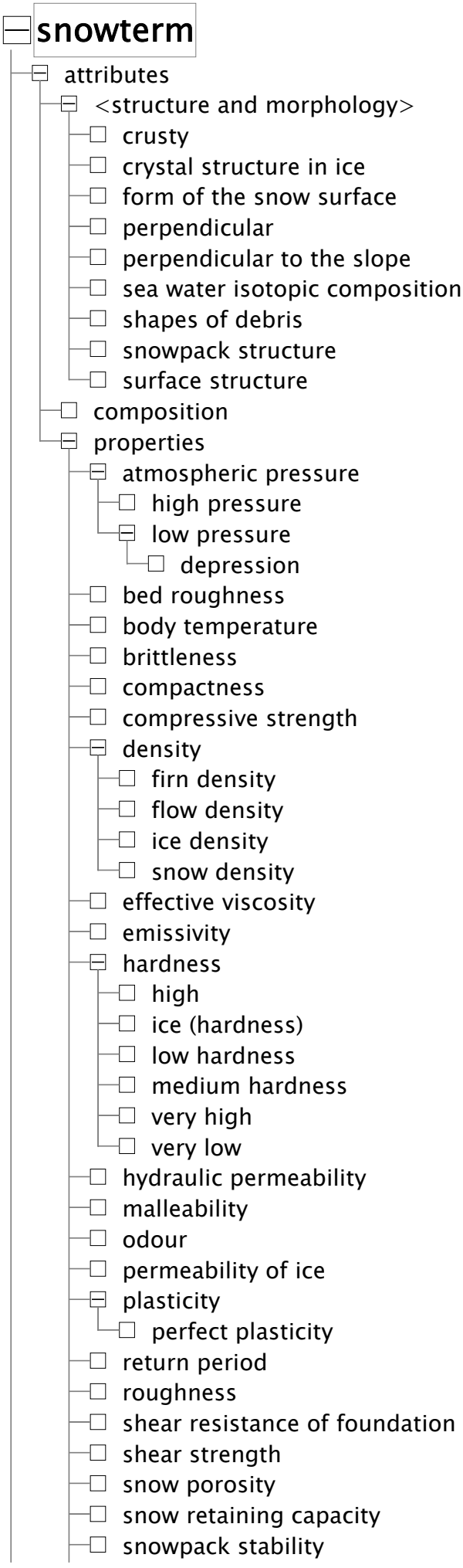
Hierarchical Listing


snowterm
attributes
<structure and morphology>
crusty
crystal structure in ice
form of the snow surface
perpendicular
perpendicular to the slope
sea water isotopic composition
shapes of debris
snowpack structure
surface structure
composition
properties
atmospheric pressure
high pressure
low pressure
depression
bed roughness
body temperature
brittleness
compactness
compressive strength
density
firn density
flow density
ice density
snow density
effective viscosity
emissivity
hardness
high
ice (hardness)
low hardness
medium hardness
very high
very low
hydraulic permeability
malleability
odour
permeability of ice
plasticity
perfect plasticity
return period
roughness
shear resistance of foundation
shear strength
snow porosity
snow retaining capacity
snowpack stability

- soluble properties in ice sheet
- specific gravity
  - specific snow weight
- specific heat capacity of ice
- static friction
- surface roughness
  - smooth surface
  - undulated
- temperature
  - average at 1000m and 2000m
  - glacier temperature
    - glacier temperature at depth
    - glacier temperature near surface
  - ice sheet temperature
    - ice sheet temperature near surface
    - measured ice sheet temperature
  - ice shelf temperature
  - ice stream temperature
  - maximum (temperature)
  - minimum (temperature)
  - temperate glacier temperature
- tidewater glacier viscosity
- till porosity
- wind force

- dimensions
  - space
  - time
    - balance year
    - interval
    - measurement year
    - season
      - autumn
      - spring
      - summer
      - winter

- dynamic aspects
  - activities
    - <physical operations>
      - <disposal and restoration>
      - <manipulation, production, consumption>
        - clear cutting
        - clearing and grubbing
        - discharge above the snow surface
        - firing
          - projectile firing
        - forest clearing
        - intervention
        - reforestation
        - regeneration (forest)
        - ultrasonic logging

- cement grouting
- helicopter transport
- orientation mark
- practical snow stability tests (skiers)
- release an avalanche through test skiing
- rescue
  - air rescue
  - artificial respiration
  - body recovery
  - companion rescue
  - crevasse rescue
  - digging out
  - hasty search
  - heart massage
  - helicopter drop
  - immediate aid
  - improvised search
  - locating
    - close range location rescue beacon (RB)
    - long range search (rescue beacon)
  - organized rescue
  - organized rescue operation
  - probe
    - coarse probing
    - fine probing
    - probing with improvised equipment
  - radio-link
  - rescue (victim alive)
  - rescue of living victim
  - respiration mouth to mouth
  - revival
  - revival attempts
  - search of buried victim
  - self-belay
  - self-help
  - self-rescue
  - warning
- trigger an avalanche

<policy activities>

- avalanche classification
- avalanche course
- avalanche rescue organisation
- classification of glaciers
- closure
- effective protective measures
- evacuation
- issuing of avalanche warning
- patrolling of ski runs (skipatrol)
- permanent protective measures
- planning

- prevention
- protective measures against avalanches
- protective measures against gliding snow
- safety procedure
- shut down of operation
- temporary protective measures
- zoning

- <productive sectors>
- <research activities>
  - assessment of avalanche hazard
    - erroneous evaluation
    - qualitative evaluation of avalanche hazard
    - quantitative evaluation of avalanche danger
    - stability evaluation
  - avalanche forecasting
  - cohesion test
  - complete avalanche survey
  - crystal fabrics strength measurement
  - hand test
  - hardness test
  - ice methods of dating
  - ice sheet numerical modelling
  - location of surging glaciers
  - measurement
    - measurement of settlement
    - meltwater measurement
    - meteorological measurements
  - probe test
  - radio-echo sounding ice thickness measurement
  - rutschblock test
  - shovel shear test
  - shovel test
  - ski pole test
  - slide wedge test
  - snow measurements
  - snow pack examination
  - snowpack analysis (profile)
  - snowpit for profile survey
  - soil investigation for foundation
- <social and cultural activities>
  - ascension
  - ascent
    - winter ascent
  - choice of route
  - descent
  - dropping from helicopter
  - exploration
  - high altitude tour
  - hike
    - ski tour

- ice climbing
- icefall climbing
- investigation
- ski sport
  - Nordic skiing
    - cross country skiing
  - back-country skiing
  - ski mountaineering
  - skiing-extreme
    - extreme ski-run
  - skitouring
- snow profile survey
- snow profile survey at high altitude
- staking out
- telemark
- tour planning
- traverse
- warning service

- conditions
  - <conditions related to safety>
    - avalanche situation
    - crouched position
    - danger
    - destabilised
    - exposed
    - hazard
      - avalanche hazard
        - avalanche hazard indicated by warning signs
        - considerable avalanche hazard
        - general avalanche hazard
        - high avalanche hazard
        - latent avalanche hazard
        - local avalanche hazard
        - moderate avalanche hazard
        - objective avalanche hazard
        - slab avalanche hazard
        - subjective avalanche danger
        - very high avalanche hazard
      - potential avalanche hazard
    - hazard awareness
    - no avalanche hazard
    - outside of controlled runs
    - recovery position (E)
    - risky situation
    - snow-clad
  - biological conditions
    - anoxaemia
    - anoxia
    - oxygen shortage
  - chemical conditions

- environmental conditions
  - atmospheric variability
  - bad weather
  - cloudiness
    - clear
    - cloudy
    - light cloudy
    - overcast
    - variable
  - contamination
  - gusty day
  - in particular with a strong additional load
  - insolation
  - instability
  - leeward
  - microclimate
  - recent weather
  - snow surface conditions
  - snowfree
  - stabilized
  - steady state
  - stormy
  - sunny
  - sunny side
  - sunshine
  - time favourable for avalanche formation
  - upwind
  - weather conditions
    - site conditions
  - windward
- fibrillation (heart)
- physical conditions
  - compressed
  - equitemperature
  - inertia
  - irreversible
  - kinetic energy
- social conditions

effects and single events

- Carbon dioxide effect on heat budget
- accident
  - avalanche accident
- avalanche
  - avalanche as composition
    - compact snow avalanche
    - mixed-snow avalanche
    - new-snow avalanche
    - unclean avalanche
  - avalanche as induced cause
    - induced (intentional) avalanche

- skier's avalanche
- natural avalanche
- avalanche as motion sort
  - flowing avalanche
  - gliding snow avalanche
  - powder snow avalanche
  - snow sliding
    - weak cohesion snow release
- avalanche as release sort
  - loose-snow avalanche
  - slab avalanche
- avalanche as size
  - big avalanche
  - medium avalanche
  - small avalanche
- avalanche as sliding surface position
  - ground avalanche
    - ground avalanche carrying debris
  - surface avalanche
- avalanche as snow humidity
  - dry snow avalanche
    - powdery snow avalanche
  - wet snow avalanche
  - wet-snow avalanche
- avalanche as track sort
  - channelled avalanche
  - unconfined avalanche
- catastrophic avalanche
- climax avalanche
- erratic avalanche
- extraordinary avalanche
- further avalanche
- glacier avalanche
- ice avalanche
- primary avalanche
- secondary avalanche
- valley avalanche

- avalanche effects
- avalanche occurrence
- avalanche warning
- bang
- blasting
- blasting effect
- carving effect (cutting furrows in)
- compression collapse
- crystal fabrics effect on deformation rate
- damage
  - damage to a forest
  - damage to terrain
  - ground abrasion

- material damage
- strand crack
- tensile crack
- density effect on deformation rate
- destruction
- dip
- discharging of snow (from trees)
- displacement
- effect of deformation on crystal fabrics
- emergency call
- emerging due to disappearing of snow
- fall
- fracture of avalanche
- glacier temperature effect on deformation rate
- ice flow effect on temperature
- ice impurities effect on deformation rate
- impact
- mass balance effect of change ??? on glacier
- meltwater effect on firn formation
- meltwater effect on firn temperature
- meltwater effect on mass-balance
- partial burial
- possible event
- pressure effect on deformation rate
- probable event
- rockslide
- sag
- snow interception by trees
- snow-slide
- total burial
- unloading (slope)
- water effect on heat budget
- water effect on ice deformation
- water effect on sliding velocity
- whiteout

processes

- <abiotic environment processes>
  - <geolithological processes>
    - foliation
  - <geomorphic processes>
    - accumulation
    - creep
      - snow creep
    - frostheaving
    - slide
      - sliding with cavitation
      - sliding without cavitation
    - snow cover erosion
      - wind erosion
    - solifluction

- <hydrosphere processes>
  - <cryosphere processes>
    - ablation
      - differential ablation
    - ablation relation to air temperature
    - abrasion
    - accumulation of snow
      - snow cushion
    - additional load
      - light additional load
      - strong additional load
    - anisotropic ice deformation
    - arrangement of ice needles
    - avalanche activity
    - avalanche dynamics
    - compaction
    - crystal growth in firn
    - crystal growth in ice
    - deformation processes
      - fracture propagation
      - fracturing
      - hummocking
      - ice crystals deformation
      - rafting
        - finger rafting
      - ridging
      - shore ice ride-up
      - subglacial till deformation
      - weathering
    - diffusion of ice molecules
    - endoglacial conveyance
    - firn-ice transition
    - firnification
    - fissure (crevasse) formation
    - floating ice motion processes
      - compacting
      - diverging
      - glacial surge
      - shearing
    - formation of avalanches
    - formation of cornices
    - formation of fracture
    - formation of snow-slide
    - funicular regime
    - fusion and refreezing crust
    - glacial course
    - glacial erosion
    - glide and creep
    - gliding
    - ice deformation


ice sheet area-volume relationship
ice sheet growth and decay
ice stream thickness change
increasing in a snow layer strength
increasing in snow depth
jökulhlaup
melting of snow cover
meltwater refreezing in firn
metamorphism of snow
high gradient metamorphism
light gradient metamorphism
melt metamorphism
packing of snow grains
pendular regime
plucking
polygonization
recrystallization
dynamic recrystallization
redistribution of snow
regelation
release
avalanche release
artificial triggering
artificial triggering
explosive control by hand
intentional release
long distance release
postcontrol release
release by accidental triggering
release by skier
close release
spontaneous release
fracture starting from a line
fracture starting from a point
natural release
riming
saturation with water (snow pack)
seasonal variations
seasonal variations in firn temperature
seasonal variations in ice-core chemistry
settlement of snow
sintering
sintering in firn
snow conveyance
aeolian conveyance
rolling
saltation
turbulent conveyance
snow settling
snow stratification

- snow to ice transformation
- snow-increase
- snowpack evolution
- softening
- strain at failure
- strength
- strength reduction in a snow layer
- stress
  - additional stress
  - allowable stress
  - compressive stress
  - driving stress
    - ice stream driving stress
  - effective stress
  - normal strain
  - normal stress
  - octahedral stress
  - plane strain
  - principal strain
  - principal stress
  - shear strain
  - shear stress
    - basal shear stress
    - effective shear stress
  - tensile stress
  - yield stress
    - tidewater glacier yield stress
    - yield stress of ice
    - yield stress of till
- subglacial conveyance
- supercooling
- superglacial conveyance
- surface release
- tidewater glacier deformation
- turbolent suspension
- uplift of glacier surface
- water flow of glacier-fed stream
- water flow within glacier
  - water flow at glacier bed
    - water flow over soft bed
  - water flow in linked cavities
  - water flow in tunnel
- wetting (snow pack)

- changes in sea level

- atmospheric processes
  - Atlantic front
  - accretion
  - accumulations
  - air flow
  - anticyclone

- breathing pocket
- change of weather conditions
  - sudden change in weather
- cloud-burst
- cold front
- decrease in temperature
- draught
  - dry draught
  - sirocco draught
  - wet draught
- exposed to the sun
- hurricane
- hydrometeor
  - fern frost
  - fog
    - ice fog
    - supercooled fog
  - glaze
  - haze
  - hoar
  - mist
  - rain
    - drizzle
      - supercooled drizzle
    - frozen rain
    - intense rain
    - light rain
    - moderate rain
    - plentiful rain
    - rain shower
    - sleet
    - supercooled rain
  - small hail
  - snow fall
  - transport of snow by wind
    - blowing snow
    - drifting snow
- ice-air interactions
- improvement
- increase in temperature
- inflow of air masses
- lightning
- low clouds
- occlusion
- precipitation
- radiation
  - infra-red radiation
  - long wave radiation
  - net radiation
  - radiation in heat budget

- short-wave radiation
- solar radiation
- visible radiation
- regelation
- snow shower
- storm
  - snowstorm
- temperature fluctuations
- thermal inversion
- thermal range
- thunder
- thunderbolt
- thunderstorm
- trough
- warm front
- weather
- weather pattern development
- weather with high radiation cooling
- whirl
- wind
  - blizzard
  - bora
  - breeze
  - föhn
  - gust of wind
  - katabatic wind
  - sirocco (south west wind)
  - surface wind
  - whirlwind
  - wind aloft
- mechanism of movement
- release mechanism

- <bioecological processes>
  - <pathological processes>
    - cardiac and circulatory arrest
    - chilblains
    - hypothermia
    - hypothermic
    - icing
      - frostbite
    - lesion
    - signs of death
    - snow-blindness
    - suffocation
  - behavioural processes
  - biological processes
    - acclimatisation
    - death
      - death by asphyxia
    - scent

- ecological processes
- <cognitive processes>
- <physical and chemical processes>
  - biochemical processes
  - chemical processes
  - physical processes
    - avalanche air pressure
    - birefringence
    - buckling
    - change in audio volume
    - cohesion
      - low cohesion
    - compression failure
    - cooling
    - density variation with depth
    - disturbance
    - heat conduction in ice
    - internal friction
    - inversion
    - radiation penetration of snow and ice
    - strain inside snow cover
    - sublimation
    - superimposed pressure
    - velocity variation in time
  - physical-chemical processes
    - isotope-temperature relation
      - ice sheet isotope-temperature relation
    - warming up
  - shock wave
  - sound wave
- <processes related to materials and products>
  - sections, screwed together
- <social, cultural and policy processes>
  - distress signal

- entities
  - immaterial entities
    - <abstract concepts and principles>
      - cause of death
      - external causes
      - feeling for terrain
      - internal causes
    - <knowledge systems>
      - <forms of culture>
        - Ice Saints
      - disciplines
        - climatology
        - geothermics
        - glaciology
        - orography
        - snow science

- technology
- <measures>
  - UIAA label
  - administrative measures
    - blasting licence
  - economic measures
  - legislative measures
  - planning measures
    - rezoning
  - preventive measures
  - search strategy
- <methods and techniques>
  - Carbon-14 dating
  - cross bracing
  - dating of ice
  - finite element method
  - hard rope
  - hydrological method (mass balance)
  - interrupted arrangement
  - location method
  - mass balance measurement methods
  - method of direction-finding
  - revival methods
  - staggered arrangement
  - test arrangement
- <parameters, criteria and factors>
  - criteria
  - factors
    - ablation controlling factors
    - accumulation controlling factors
    - altitude factor
    - edge effect force
    - enhancement factor
    - marginal factor
    - safety factor
    - shape factor
    - trigger factor
    - weather factors
  - parameters
    - biological parameter
    - chemical parameters
      - Beryllium-10 in ice
      - Deuterium excess
      - Oxygen isotopes in sea water
    - ecological parameter
      - tree line
    - general parameter
      - frequency
      - position
      - relative height

- slope distance
- geomorfological parameter
  - altitude
  - change of slope inclination
  - contour line
  - equilibrium line
  - exposedness
  - extension of deposits
  - fall-line
  - fracture line
  - geothermal heat
  - grade
    - maximum gradient
  - ground clearance
  - ground roughness
  - ridge situation
  - slope inclination
  - slope orientation
  - slope tilt
    - maximum slope inclination
  - stress longitudinal gradients
  - trimline
- health and safety parameter
  - accuracy of location
  - anchor point
  - angle of repose
  - avalanche interval
  - critical limit value
  - deflection angle
  - degree of avalanche danger
  - depth of burial
  - distance of rope
  - distribution of local risks
  - duration of burial
  - failure load (snow cover)
  - frequency of issue of avalanche bulletin
  - hour of burial
  - last seen point (of the avalanche victim)
  - load carrying capacity
  - location of victim
  - location point
  - location speed
  - low avalanche hazard
  - mesh size
  - number of dangerous places
  - observation plot
  - point of capture
  - probability of locating
  - probability of release
  - probability of response

- probability of survival
- risk
  - residual risk
- safety distance
- search speed
- search strip width
- size of a defense zone (retaining structure)
- surface search speed (min/m²)
- survival chance

- hydrological parameter
  - column of water
  - flow line
  - hydraulic conductivity
  - hydraulic diffusivity
  - ice and snow parameters
    - accumulation area ratio
    - accumulation of snow dimension
    - accumulation pressure (avalanche)
    - activation volume
    - air bubbles age in ice
    - air bubbles disappearance in ice
    - air content of ice
    - amount of new snow
    - avalanche dimension
    - avalanche frequency
    - avalanche length
    - avalanche pressure
    - consolidation coefficient
    - creep factor
    - crystal size
    - elastic limit
    - extreme snow depth
    - firn edge line
    - firn limit
    - flow height (avalanche)
    - fracture depth
    - fracture length
    - fracture width
    - glacier heat budgets
      - condensation in heat budget
      - convection in heat budget
      - heat budget of glacier surface
        - evaporation (surface heat budget)
      - ice sheet heat budget
        - ice sheet summer heat budget
    - glacier response time
    - glide factor
    - grain dimension
      - big
      - extreme

- medium temperature)
- small
- very big
- very small
- grain shape
- grain size
- height of crown
- height of deposit in compression zone
- ice concentration
- ice cover
- ice impurities concentration
- ice limit
- ice sheet mass balance
- ice sheet rate of thickness change
- ice sheet response to changes
- ice sheet stability
- ice sheet volume
- ice thermal conductivity
- ice thermal diffusivity
- internal snow strength
- layer depth
- length of structure
- limit of a layer
- liquid water content
- mechanism of avalanche
- penetration depth
- ram resistance
- resistance to deformation
- runout distance (avalanche)
- slush limit
- snow average depth at 1600m
- snow height
  - total depth of snow cower
- snow line
- snow load
- snow pressure
- snow-line
  - annual snow line
  - dry snow line
- stretch limit
- subglacial water pressure
- surge period
- temperate glacier impurity content
- thaw time
- thickness of fracture
- thickness of snow cover
- time lag in glacier response
- total depth of recent snow
- velocity
  - average velocity over cross-section

- balance velocity
- flow speed
- friction velocity
- impact speed
- nucleus speed
- percolation speed
- sliding velocity
- strain rate
  - strain rate variation with depth
- submergence velocity
- velocity in extending/compressing flow
- velocity in laminar flow
- velocity in transverse section
- velocity on longitudinal line
- velocity on vertical line
- velocity vertical component
- viscosity coefficient
- water content
  - liquid water content
- water equivalent of snow
- water pressure within glacier
- wet-snow line
- rate of flow
- oceanographic parameter
- paremeters related to buildings
  - effective length of structure
  - grate tilt
  - height of grate
    - effective height of the defense structure
  - inclination of the supporting plane
  - roof shape coefficient
  - shape of roof
  - space between protective structures
  - space between supports
  - vertical height of a structure
  - width of section
- physical parameter
  - activation energy
    - creep activation energy
    - grain boundary self-diffusion activation energy
    - volume self-diffusion activation energy
  - advection parameter
  - air pressure inside the pores
  - albedo
  - allowable loading
  - angle of friction
  - coefficient of resistance
  - deflecting force
  - deformation
  - degree of loading

- density
- dew point
- elastic modulus
- extension speed
- force of impact
- force of propulsion
- freezing point
- friction coefficient
- friction energy
- inclination
- influence coefficient
- isotherm
- kinetic friction angle
- latent heat
  - fusion latent heat
    - ice latent heat
  - latent heat in ice
  - vaporization latent heat
- loading
- longitudinal strain rate
- melting point
- point of application of a force
- power of resistance
- resistance to movement
- saturation
- sky and air indications
  - frost smoke
  - ice blink
  - water sky
- sound speed
- strength
- stress distribution
- stress rate
- suction force
- supersaturation
- supply of external heat
- tensile strength
- thickness
- transfer coefficient
- transverse force
- velocity of kinematic wave
- viscous flow

- pollution and refuse parameter
- social parameter
  - density of constructions
- time parameters
  - closure period
  - period of closure
  - period of validity of avalanche bulletin
  - search time

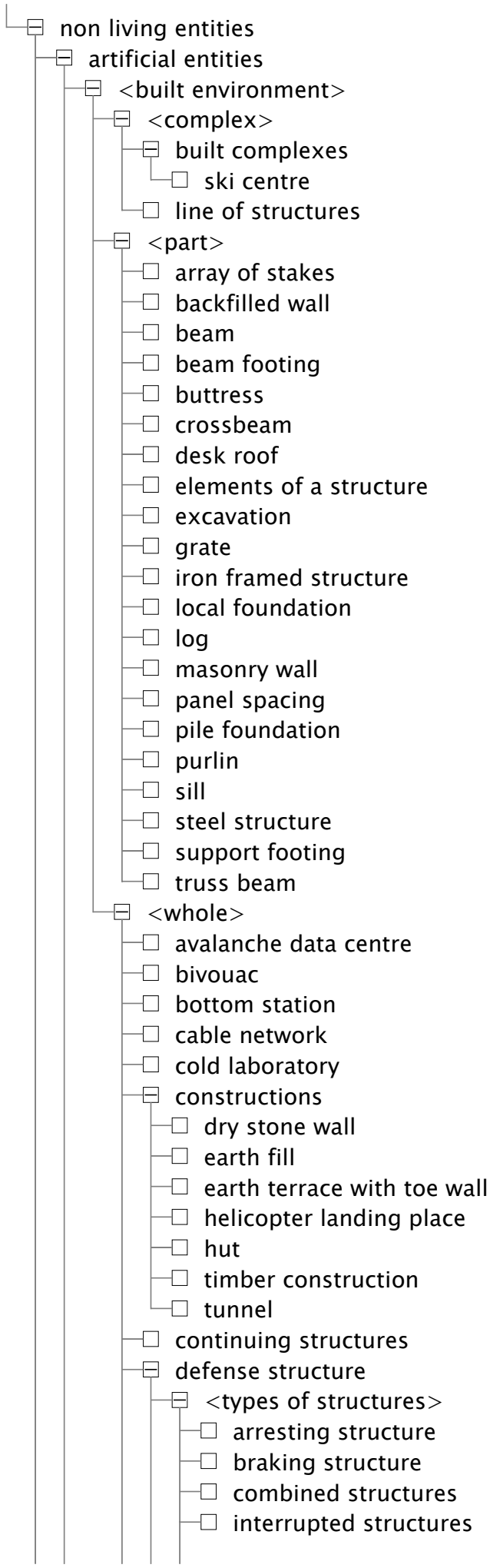
- time taken to dig out
- travel time
  - water through glacier travel time
- weather parameter
  - air humidity
    - relative humidity of the air
  - air permeability
  - chance of shower
  - flow direction of airmasses
  - freezing level
  - freezing level
  - period of foehn
  - precipitation intensity
  - pressure gradient
  - reliability of forecast
  - snow level
  - snowfall rate
  - temperature gradient
    - high thermal gradient
    - ice sheet negative temperature gradient
    - light thermal gradient
    - medium thermal gradient
  - thunderstorm chance
  - wind direction
  - wind force
  - wind speed
  - wind-load
- <representation and elaboration systems>
  - European scale of avalanche hazard
  - average maximum snow depth
  - ice sheet flow model
  - ice shelf profile
    - ice sheet isotopic profiles
    - ice sheet surface profile
  - interface
  - longitudinal section
  - mass balance
    - mass balance of Antarctic ice sheet
    - mass balance of Greenland ice sheet
    - net mass balance
    - summer (mass) balance
    - winter mass balance
  - profile at high altitude
  - profile of one single snowfall
  - raster
  - route description
  - scale of difficulties (ski-mountaineering)
  - scale of difficulty
  - sliding theories
  - strata profile

- snow profile
  - hand profile
  - ram profile
  - snow profile at the fracture line
  - snow profile on hang
- temperature history
- temperature history from ice cores
- temperature history from temperature profile
- temperature profile
- time profile
- time scale of ice core
- transverse section

- data
  - data from satellites
  - guideline value
  - measurement result

- material entities
  - living entities
    - bio-ecological entities
      - <complex>
        - <flora and fauna>
        - biosphere
        - communities
          - forest
            - coniferous forest
            - protective forest
          - leafy wood
          - mountain forest
          - wood
        - ecosystems
        - population
        - systems of ecosystems
        - vegetation
          - mixed forest
      - <part>
        - body components
          - animal components
            - breathing paths
          - plant components
            - sapwood
            - tree core
      - <whole>
        - organisms
          - European stone-pine
          - Scots pine
          - alder
          - birch
          - fir
          - knee pine
          - larch

- mountain ash
- spruce
- social entities
  - <complex>
    - avalanche committee
    - avalanche warning service
    - rescue column
    - roped party
    - safety committee
    - social system
      - juridical entities
        - <governmental institutions>
        - <non governmental institutions>
          - International Commission for Alpine Rescue
          - International Union of Alpinist Associations
          - Mountain Rescue Service
      - rescue service
      - social groups
  - <whole>
    - avalanche dog
    - avalanche dog master
    - avalanche guard
    - avalanche victim
      - partially buried victim
      - victim died during rescue operation
      - victim who died later
    - back-country skier
    - blaster
    - buried victim
    - dead
    - eyewitness
    - fatally injured
    - forester
    - frostbitten
    - injured person
    - leading of the tour
    - mountain guide
    - mountaineer
    - non-buried victim
    - operation leader
    - person
    - rescuer
    - ski mountaineer
    - ski-tourer
    - skier
    - snow-blind
    - solo traveller
    - survivor
    - team leader
    - tourist


non living entities
artificial entities
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ski centre
line of structures
<part>
array of stakes
backfilled wall
beam
beam footing
buttress
crossbeam
desk roof
elements of a structure
excavation
grate
iron framed structure
local foundation
log
masonry wall
panel spacing
pile foundation
purlin
sill
steel structure
support footing
truss beam
<whole>
avalanche data centre
bivouac
bottom station
cable network
cold laboratory
constructions
dry stone wall
earth fill
earth terrace with toe wall
helicopter landing place
hut
timber construction
tunnel
continuing structures
defense structure
<types of structures>
arresting structure
braking structure
combined structures
interrupted structures

- lateral structure
- massive structures
- protecting structures
- retaining structures
  - avalanche defense structure
  - permanent retaining structure
  - temporary retaining structure
- single structure
- staggered structures
- supporting structure

- arresting wall
- avalanche shed
- buffer-line
- catching dam
- defenses against snow creep
- deflecting barrier
- deflecting structure
- deflecting wall
- deflection dam
- horizontal board fence
  - solid snow fence
- jet roof
- network of avalanche defense structures
- protective ramp
- reinforcement of potentially endangered buildings
- snow rake
- snowfences
- trench
- vertical board fence
- wall deflector
- wind baffle
- wind net

- earth terrace for reforestation
- free-standing wall
- heliport
- limit of the construction area
- mid station
- observation station
  - comparative observation station
- permanent structures
- retarding mound
- shelter
- slide ramp
- top terminal
- wall terrace

- <materials and products>
  - <materials and products by properties>
    - light metal
  - materials
    - U section

- angle iron
- channel iron
- channel steel
- double T beam
- hardwood
- mortar
- rectangular timber
- rolled steel
- sawn timber
- strand
- thin section

products

- <cultural products>
  - appraisal
  - avalanche bulletin (AB)
  - avalanche register
  - avalanche zone plan
  - bulletin of the Avalanche Warning Service
  - chart of snow cover heights
  - ice sheet map
  - map
  - map of avalanche paths
  - snow and weather bulletin
  - statement
  - synoptic chart
- <products for the consumption>
  - alignment ribbon
  - anchor system
    - anchor loop
    - basal anchorage
    - rock anchor
    - steel anchor
  - calorimeter
  - charge
    - explosive charge
    - propulsion charge
  - crampons
  - current meter
  - dud
  - dynamometer
  - explosive
  - freezing mixture
  - gap
  - hot water bottle
  - ice-axe
  - impact fuse
  - mortar shell
  - net of cables
  - shape charge projectile
  - side guy

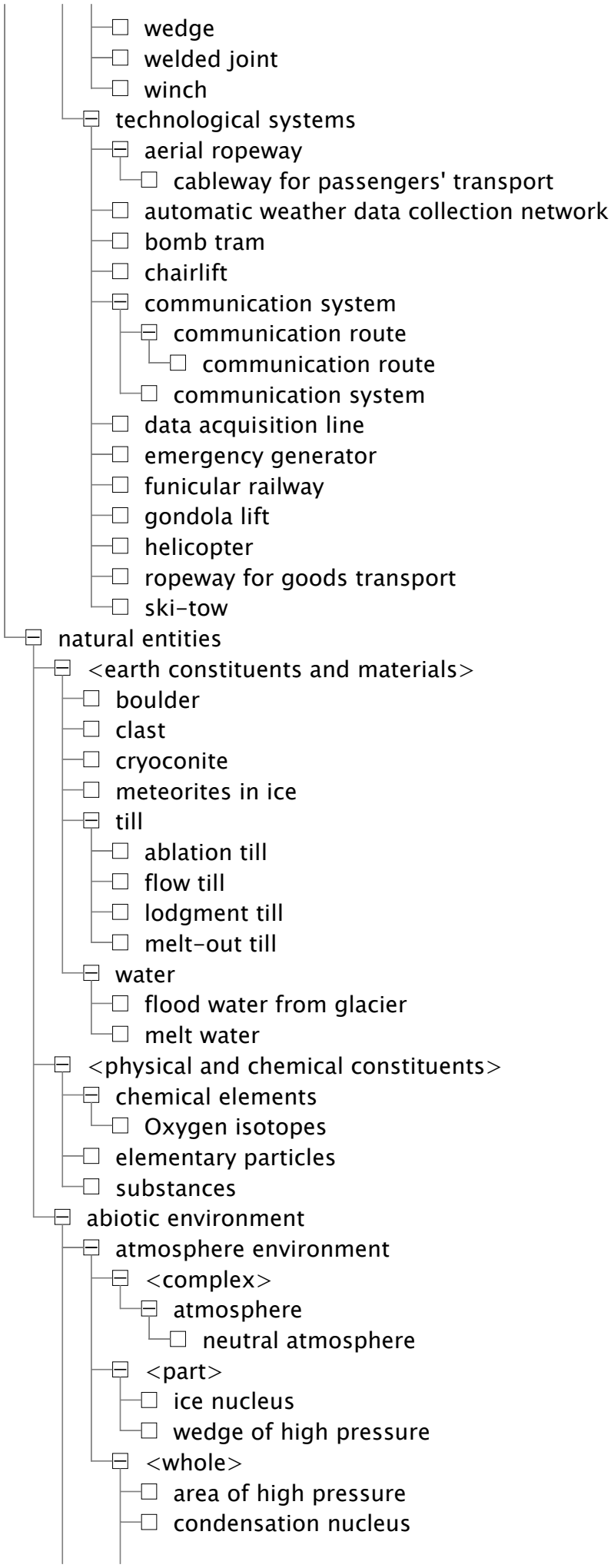
- ski
- ski binding
- ski pole
- ski-brake
- snow net
- snow tires
- snow wall
- stretcher
- wire net
- wood preservative
- <wastes and pollutants>
  - pollutants in ice
  - pollutants in ice sheet
- heatpack

<open spaces, cultural landscape>

- accident area
- area of weakness
- area with defense structures
- areas putting safety
- course
- dangerous site
- defense structure area
- developed area
- end of the construction area
- escape direction
- observation site
- path
  - avalanche path
  - high level path
  - mule path
  - path in snow
- periphery
- route
  - avalanche track
  - descent route
  - escape route
  - uphill route
- run
  - ski run
    - cross country skiing track
    - marked ski run
- search area
- ski area
  - controlled ski area
- test area
- tour area
- track
  - ascent track
  - descent track
  - entrance track (avalanche)

- ski track
- skilift track
- usual track
- variant
- equipment and technological systems
  - equipment
    - Ambu manual breathing device
    - GAZEX
    - active identifying object
    - akia
    - avalanche airblast
    - avalanche brake
    - avalanche breaker
    - avalanche cord
    - avalanche shovel
    - backstay
    - ball joint
    - bazooka
    - boom for explosive charge
    - cable
    - climbing skins
    - cog railway
    - cruciform wind-baffle
    - cutter-blower
    - deadman
    - direction finding antenna
    - down jacket
    - dummy
    - electronic transceiver
    - emergency radio facility
    - flange
    - flexible joint
    - fragmentation shell
    - full harness
    - fuse
      - detonating cord
    - gas exploder
    - hammer
    - igniter
      - instantaneous igniter
      - projectile detonator
    - improvised shovel
    - loop
    - magnetometer
    - measuring cap
    - minishowel
    - mortar
    - outrigger for explosive charge
    - over-snow vehicle
    - passive identifying object

- patroller
- pin
- pin joint
- pole for explosive charges
- post
- pressure measuring device
- probe
  - avalanche probe
  - improvised probe
  - metal detector
  - ram penetrometer
- pulley
- radar
- rescue beacon (RB)
  - double frequency rescue beacon
- responder
- retarding wedge
- rope pulley
- safety binding
- safety straps
- shear-frame
- ski crampons
- ski pole grip
- ski pole probe
- ski pole strap
- sledge
  - emergency sledge
  - explosives sleigh
  - rescue toboggan
  - two-ski drag
- sledge runner
- snow blower
- snow cutter
- snow lysimeter
- snow sampler
- snow shoes
- snow stake
- snowboard
- snowcat
- snowplough
- splitting wedge
- string line
- support
  - adjustable support
- tail unit
- telescopic pole
- tension anchor
- trestle
- warm-air inhaler
- warning sign(s)


wedge
welded joint
winch
technological systems
aerial ropeway
cableway for passengers' transport
automatic weather data collection network
bomb tram
chairlift
communication system
communication route
communication route
communication system
data acquisition line
emergency generator
funicular railway
gondola lift
helicopter
ropeway for goods transport
ski-tow
natural entities
<earth constituents and materials>
boulder
clast
cryoconite
meteorites in ice
till
ablation till
flow till
lodgment till
melt-out till
water
flood water from glacier
melt water
<physical and chemical constituents>
chemical elements
Oxygen isotopes
elementary particles
substances
abiotic environment
atmosphere environment
<complex>
atmosphere
neutral atmosphere
<part>
ice nucleus
wedge of high pressure
<whole>
area of high pressure
condensation nucleus

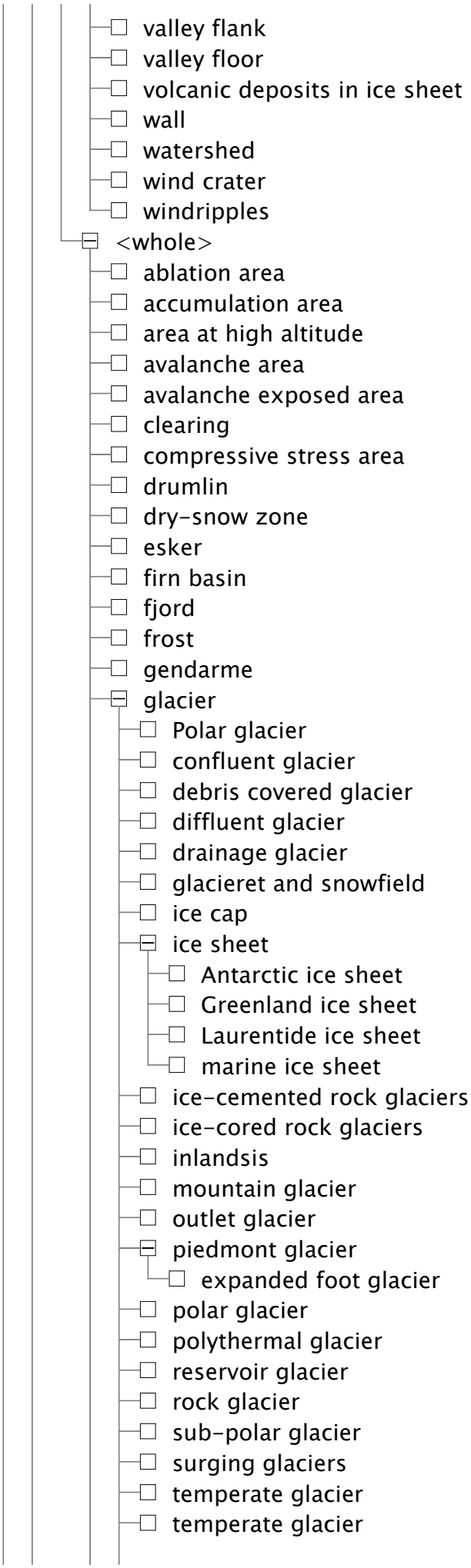
- depression area
- dew
- terrestrial environment
  - <terrestrial areas and landforms>
    - <complex>
      - altitude band
      - compound basins
      - ice streams
    - <part>
      - avalanche catchment area
      - avalanche cone
      - basin
        - arresting basin
        - catchment basin
        - deep basin
      - bed surface
      - bottom of the valley
      - branch (avalanche)
      - brow
      - brèches
      - bédières
      - cavities at glacier bed
      - chasm
      - chattermarks
      - cirque
        - mount cirque
        - valley cirque
      - concave furrows
      - convex furrows
      - cornice
        - cornice
      - crater
      - crest area
      - crevasse
        - bergschrund
        - longitudinal crevasse
        - moat
        - transverse crevasse
      - crown surface
      - cryoconite holes
      - debris
      - deposit (avalanche)
      - descent passage
      - foot of a rock face
      - foothills
      - fractured surface
      - glacier front
        - confluent front
        - expanded foot
        - lobed front

- piedmont front
- glacier mill
- gorge
- gully
- gully
  - avalanche gully
  - snow gully
- hollow
  - shallow basin
- hump
- ice apron
- ice dome
- initial failure
- interspace
- kettle holes
- layer
  - acid layers (in ice)
  - annual layer
  - base of the snowpack
  - bomb layers in ice
  - bottom layer
    - depth hoar
  - bottom layer of old snow
  - boundary layer
  - fracture layer
  - glide surface
  - ice rind
  - layer without cohesion
  - lubricating layer
  - radioactive layers in ice
  - regelation layer
    - regelation layer at glacier base
  - sedimentary bands
  - shear bands
  - snow layer
  - surface layer
    - surface hoar
  - thin layer
  - weak cohesion layer
  - weak cohesion snow layer
  - weak layer
    - very weak layer
- ledge
- maze of crevasses
- melt channels
- morainic bank
- morainic ridge
- mountain pass
- narrow terrace
- niche

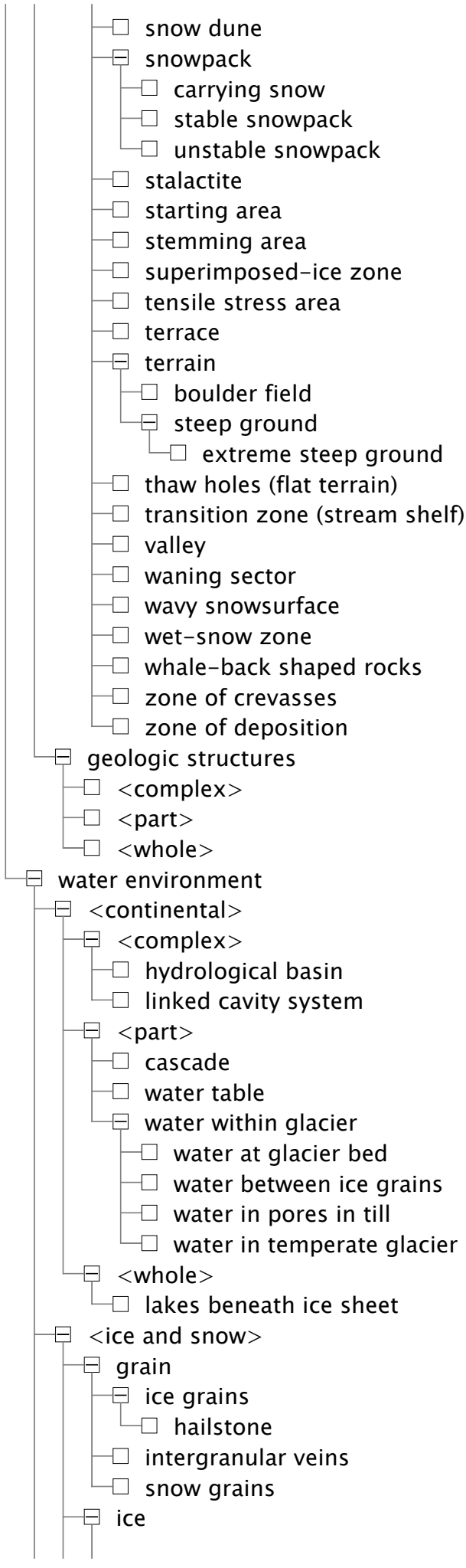
- obstacle
  - obstacle surrounded by the avalanche
- ogives
  - banded ogives
  - waved ogives
- openings in the ice
  - cavities within glacier
  - fracture
    - crack
      - brittle fracture
      - flaw
      - frost crack
      - glide crack
      - tide crack
    - large fracture
    - medium fracture
    - secondary fracture
    - shear fracture
    - small fracture
    - very small fracture
  - fracture zone
  - lead
    - flaw lead
    - shore lead
  - polynya
    - flaw polynya
    - recurring polynya
    - shore polynya
  - shear
- pass
- precipice
- projection
- pulpit
- random furrows
- ravine
- rib
- ridge
- ridge
- ridge
- rock barrier
- rock face
- rock needle
- rock ridge
- rocky flank
- scarp
- serac
- shear planes
- shoulder
- sliding surface
- slopes

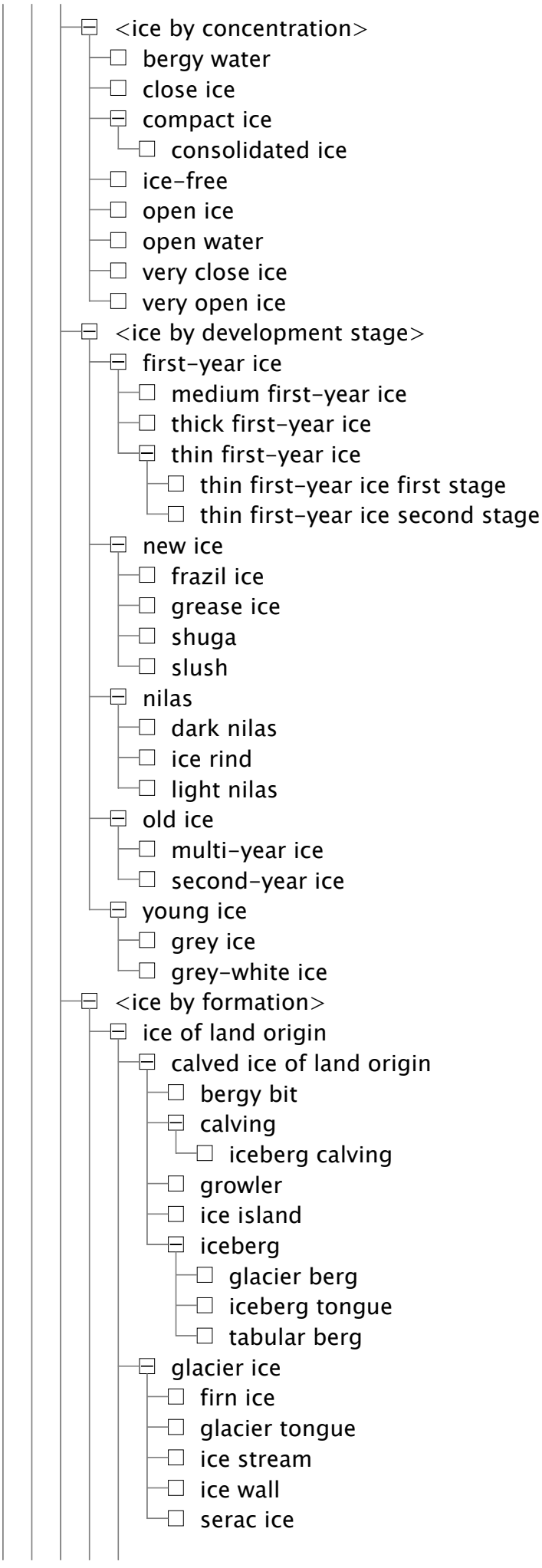
- avalanche slope
- closed slope
- east slope
- east slopes
- flank
- north side
- north slope
- north slopes
- open slope
- reverse slope
- scree slope
- shady side
- slope
  - avalanche slope
  - concave slope
  - convex slope
  - east slope
  - foot of a slope
  - grassy slope
  - lee slope
  - north slope
  - open slope
  - opposite side slope
  - shaded slope
  - slope with accumulation of drifted snow
  - snow covered slope
  - south slope
  - steep slope
    - extreme slope
    - extreme steep slope
  - sunny slope
  - upwind slope
- slope in the shade
- south side
- south slopes
- west slope
- west slopes

- snow barkhan
- snow bridge
- snow ridge
- snow slab
  - hard slab
  - snow slab on lee slope
  - soft slab
  - wind-slab
- snowfield
- solid base of snow cover
  - weak base of snow cover
- spur
- summit


valley flank
valley floor
volcanic deposits in ice sheet
wall
watershed
wind crater
windripples
<whole>
ablation area
accumulation area
area at high altitude
avalanche area
avalanche exposed area
clearing
compressive stress area
drumlin
dry-snow zone
esker
firn basin
fjord
frost
gendarme
glacier
Polar glacier
confluent glacier
debris covered glacier
diffluent glacier
drainage glacier
glacieret and snowfield
ice cap
ice sheet
Antarctic ice sheet
Greenland ice sheet
Laurentide ice sheet
marine ice sheet
ice-cemented rock glaciers
ice-cored rock glaciers
inlandsis
mountain glacier
outlet glacier
piedmont glacier
expanded foot glacier
polar glacier
polythermal glacier
reservoir glacier
rock glacier
sub-polar glacier
surging glaciers
temperate glacier
temperate glacier

- tidewater glacier
- valley glacier
- glacier table
- gliding snow area
- ground surface
- group
- horn
- ice cave
- ice cone
- ice mushroom
- ice ridge
- icicle
- kame
- kame deposits
- kame terrace
- moraine
  - dump moraine
  - fluted moraines
  - folded moraines
  - ground moraine
  - lateral moraines
  - medial moraines
    - ablation-dominant moraines (AD)
    - ice-stream interaction moraines (ISI)
  - neoformation moraine
  - overlayed moraine
  - push moraines
  - recessional moraines
  - shear moraines
  - tardi-glacial moraine
  - terminal moraines
- mountain-pasture
- natural breaking buttress
- nunatak
- outer area
- penitentes
- percolation zone
- permafrost
- plateau
- protected reafforestation area
- runout zone
- secondary summit
- simple basin
- slope surface
- smooth surface of snow
- snow cap
- snow cover
  - old snow cover
  - seasonal snow cover
- snow cups


snow dune
snowpack
carrying snow
stable snowpack
unstable snowpack
stalactite
starting area
stemming area
superimposed-ice zone
tensile stress area
terrace
terrain
boulder field
steep ground
extreme steep ground
thaw holes (flat terrain)
transition zone (stream shelf)
valley
waning sector
wavy snowsurface
wet-snow zone
whale-back shaped rocks
zone of crevasses
zone of deposition
geologic structures
<complex>
<part>
<whole>
water environment
<continental>
<complex>
hydrological basin
linked cavity system
<part>
cascade
water table
water within glacier
water at glacier bed
water between ice grains
water in pores in till
water in temperate glacier
<whole>
lakes beneath ice sheet
<ice and snow>
grain
ice grains
hailstone
intergranular veins
snow grains
ice


<ice by concentration>
bergy water
close ice
compact ice
consolidated ice
ice-free
open ice
open water
very close ice
very open ice
<ice by development stage>
first-year ice
medium first-year ice
thick first-year ice
thin first-year ice
thin first-year ice first stage
thin first-year ice second stage
new ice
frazil ice
grease ice
shuga
slush
nilas
dark nilas
ice rind
light nilas
old ice
multi-year ice
second-year ice
young ice
grey ice
grey-white ice
<ice by formation>
ice of land origin
calved ice of land origin
bergy bit
calving
iceberg calving
growler
ice island
iceberg
glacier berg
iceberg tongue
tabular berg
glacier ice
firn ice
glacier tongue
ice stream
ice wall
serac ice

- ice shelf
  - ice front
- lake ice
- river ice
- sea ice
- <ice by its arrangement>
  - ice belt
  - ice bight
  - ice boundary
    - concentration boundary
    - fast-ice boundary
  - ice edge
    - compacted ice edge
      - jammed brash barrier
    - diffuse ice edge
    - fast-ice edge
    - mean ice edge
  - ice field
    - ice patch
    - large ice field
    - medium ice field
    - small ice field
  - ice jam
  - ice massif
  - ice strip
    - ice isthmus
  - ice tongue
- <ice by its location>
  - floating ice
    - <floating ice by its occurrences>
      - drift ice
      - floating ice of land origin
    - forms of floating ice
      - brash ice
      - floe
        - big floe
        - giant floe
        - medium floe
        - small floe
        - vast floe
      - floeberg
        - floebit
      - ice breccia
      - ice cake
        - small ice cake
      - pancake ice
  - forms of fast ice
    - anchor ice
    - fast ice
      - young coastal ice

- icefoot
- stranded ice
  - grounded hummock
- ground ice
- ice in solar system
  - planetary ice
- ice on the soil
- superimposed ice

<ice by stages of melting>

- dried ice
- flooded ice
- puddle
- rotten ice
- shore melt
- silty ice
- thaw holes

<ice by surface features>

- bare ice
- deformed ice
  - hummock
    - hummocked ice
    - rubble field
  - rafted ice
    - finger rafted ice
  - ridge
    - aged ridge
    - consolidated ridge
    - new ridge
    - ridged ice
      - ridged ice zone
    - shear ridge
      - shear ridge field
    - very weathered ridge
    - weathered ridge
- level ice
- ram
- snow-covered ice
  - sastrugi
  - snow drift
- standing floe

<ice related to submarine navigation>

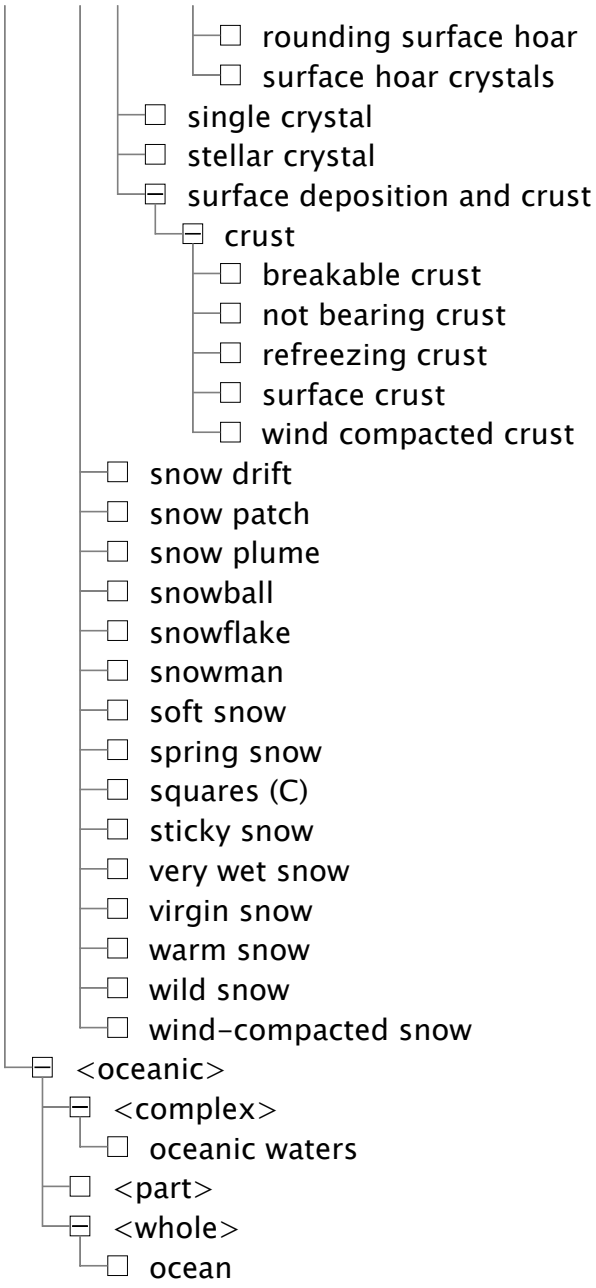
- ice canopy
  - bummock
  - friendly ice
  - hostile ice
  - ice keel
  - skylight

<ice related to surface navigation>

- beset
- ice port

- ice under pressure
- ice-bound
- nip
- blue ice
- ice crystals
- ice needle
- nucleus of crystallization
- white-fine bubbly ice
- impurities in ice
  - Carbon dioxide in air bubbles in ice
  - Carbon dioxide in ice
  - Oxygen isotopes in snow and ice
  - dust in ice
  - insoluble impurities in ice sheet
  - methane in ice
  - microparticles in ice
  - nuclear fall-out in ice
  - volcanic deposits in ice
- snow
  - avalanching snow
  - cohesive snow
  - cold snow
  - coloured snow
  - crusty drifted snow
  - deep snow
  - diamond dust
  - drifted snow
  - dry snow
  - early snow
  - felt-like snow
  - fine grained snow
  - firn
    - firn mirror
  - firn snow
  - gliding snow
  - granular snow
  - hard snow
  - loose snow
  - melting snow
  - moist snow
  - new snow
  - old snow
    - old snow with facet(t)ed grains
    - old snow with rounded grains
  - perennial snow
  - powder snow
  - prism (crystal)
  - recent (new) snow
  - rotten snow
  - settled snow

- slush
- snow crystals
  - <classificazione internazionale della neve stagionale al suolo 200
    - decomposing and fragmented precipitation particles
      - partly decomposed particles
      - wind broken particles
    - depth hoar
      - chains of depth hoar
      - hollow cups
      - hollow prisms
      - large striated crystals
      - rounding depth hoar
    - faceted crystals
      - near surface faceted particles
      - rounding faceted particles
      - solid faceted particles
    - ice formations
      - basal ice
      - ice column
      - ice layer
      - rain crust
      - sun crust
    - machine made snow
      - crushed ice particles
      - round polycrystalline particles
    - melt forms
      - clustered rounded grains
      - melt-freeze crust
      - rounded polycrystals
      - slush
    - precipitation particles
      - columns
      - graupel
      - hail
      - ice pellets
      - irregular crystals
      - needles
      - plates
      - rime
        - hard rime
        - soft rime
      - spatial dendrite
      - stellar & dendrites
    - rounded grains
      - compattate dal vento
      - faceted rounded particles
      - large rounded particles
      - small rounded particles
    - surface hoar
      - cavity hoar


rounding surface hoar
surface hoar crystals
single crystal
stellar crystal
surface deposition and crust
crust
breakable crust
not bearing crust
refreezing crust
surface crust
wind compacted crust
snow drift
snow patch
snow plume
snowball
snowflake
snowman
soft snow
spring snow
squares (C)
sticky snow
very wet snow
virgin snow
warm snow
wild snow
wind-compacted snow
<oceanic>
<complex>
oceanic waters
<part>
<whole>
ocean

Alphabetical Listing

abiotic environment
ablation
ablation area
ablation controlling factors
ablation relation to air temperature
ablation till
ablation-dominant moraines (AD)
abrasion
accident
accident area
acclimatisation
accretion
accumulation
accumulation area
accumulation area ratio
accumulation controlling factors
accumulation of snow
accumulation of snow dimension
accumulation pressure (avalanche)
accumulations
accuracy of location
acid layers (in ice)
activation energy
activation volume
active identifying object
activities
additional load
additional stress
adjustable support
administrative measures
advection parameter
aeolian conveyance
aerial ropeway
aged ridge
air bubbles age in ice
air bubbles disappearance in ice
air content of ice
air flow
air humidity
air permeability
air pressure inside the pores
air rescue
akia
albedo
alder
alignment ribbon
allowable loading
allowable stress
altitude
altitude band
altitude factor
Ambu manual breathing device
amount of new snow
anchor ice
anchor loop
anchor point
anchor system
angle iron
angle of friction
angle of repose
animal components
anisotropic ice deformation
annual layer
annual snow line
anoxaemia
anoxia
Antarctic ice sheet
anticyclone
appraisal
area at high altitude
area of high pressure
area of weakness
area with defense structures
areas putting safety
arrangement of ice needles
array of stakes
arresting basin
arresting structure
arresting wall
artificial entities
artificial respiration
artificial triggering
artificial triggering
ascension
ascent
ascent track
assessment of avalanche hazard
Atlantic front
atmosphere
atmosphere environment
atmospheric pressure
atmospheric processes
atmospheric variability
attributes
automatic weather data collection network
autumn
avalanche
avalanche accident
avalanche activity
avalanche air pressure
avalanche airblast
avalanche area

avalanche as composition
avalanche as induced cause
avalanche as motion sort
avalanche as release sort
avalanche as size
avalanche as sliding surface position
avalanche as snow humidity
avalanche as track sort
avalanche brake
avalanche breaker
avalanche bulletin (AB)
avalanche catchment area
avalanche classification
avalanche committee
avalanche cone
avalanche cord
avalanche course
avalanche data centre
avalanche defense structure
avalanche dimension
avalanche dog
avalanche dog master
avalanche dynamics
avalanche effects
avalanche exposed area
avalanche forecasting
avalanche frequency
avalanche guard
avalanche gully
avalanche hazard
avalanche hazard indicated by warning signs
avalanche interval
avalanche length
avalanche occurrence
avalanche path
avalanche pressure
avalanche probe
avalanche register
avalanche release
avalanche rescue organisation
avalanche shed
avalanche shovel
avalanche situation
avalanche slope
avalanche slope
avalanche track
avalanche victim
avalanche warning
avalanche warning service
avalanche zone plan
avalanching snow
average at 1000m and 2000m
average maximum snow depth
average velocity over cross-section
back-country skier
back-country skiing
backfilled wall
backstay
bad weather
balance velocity
balance year
ball joint
banded ogives
bang
bare ice
basal anchorage
basal ice
basal shear stress
base of the snowpack
basin
bazooka
beam
beam footing
bed roughness
bed surface
bédières
behavioural processes
bergschrund
bergy bit
bergy water
Beryllium-10 in ice
beset
big
big avalanche
big floe
biochemical processes
bio-ecological entities
biological conditions
biological parameter
biological processes
biosphere
birch
birefringence
bivouac
blaster
blasting
blasting effect
blasting licence
blizzard
blowing snow
blue ice
body components

body recovery
body temperature
bomb layers in ice
bomb tram
boom for explosive charge
bora
bottom layer
bottom layer of old snow
bottom of the valley
bottom station
boulder
boulder field
boundary layer
braking structure
branch (avalanche)
brash ice
breakable crust
breathing paths
breathing pocket
brèches
breeze
brittle fracture
brittleness
brow
buckling
buffer-line
built complexes
bulletin of the Avalanche Warning Service
bummock
buried victim
buttress
cable
cable network
cableway for passengers' transport
calorimeter
calved ice of land origin
calving
Carbon dioxide effect on heat budget
Carbon dioxide in air bubbles in ice
Carbon dioxide in ice
Carbon-14 dating
cardiac and circulatory arrest
carrying snow
carving effect (cutting furrows in)
cascade
catastrophic avalanche
catching dam
catchment basin
cause of death
cavities at glacier bed
cavities within glacier
cavity hoar
cement grouting
chains of depth hoar
chairlift
chance of shower
change in audio volume
change of slope inclination
change of weather conditions
changes in sea level
channel iron
channel steel
channelled avalanche
charge
chart of snow cover heights
chasm
chattermarks
chemical conditions
chemical elements
chemical parameters
chemical processes
chilblains
choice of route
cirque
classification of glaciers
clast
clear
clear cutting
clearing
clearing and grubbing
climatology
climax avalanche
climbing skins
close ice
close range location rescue beacon (RB)
close release
closed slope
closure
closure period
cloud-burst
cloudiness
cloudy
clustered rounded grains
coarse probing
coefficient of resistance
cog railway
cohesion
cohesion test
cohesive snow
cold front
cold laboratory
cold snow

coloured snow
column of water
columns
combined structures
communication route
communication route
communication system
communication system
communities
compact ice
compact snow avalanche
compacted ice edge
compacting
compaction
compactness
companion rescue
comparative observation station
compattate dal vento
complete avalanche survey
composition
compound basins
compressed
compression collapse
compression failure
compressive strength
compressive stress
compressive stress area
concave furrows
concave slope
concentration boundary
condensation in heat budget
condensation nucleus
conditions
confluent front
confluent glacier
coniferous forest
considerable avalanche hazard
consolidated ice
consolidated ridge
consolidation coefficient
constructions
contamination
continuing structures
contour line
controlled ski area
convection in heat budget
convex furrows
convex slope
cooling
cornice
cornice
course
crack
crampons
crater
creep
creep activation energy
creep factor
crest area
crevasse
crevasse rescue
criteria
critical limit value
cross bracing
cross country skiing
cross country skiing track
crossbeam
crouched position
crown surface
cruciform wind-baffle
crushed ice particles
crust
crusty
crusty drifted snow
cryoconite
cryoconite holes
crystal fabrics effect on deformation rate
crystal fabrics strength measurement
crystal growth in firn
crystal growth in ice
crystal size
crystal structure in ice
current meter
cutter-blower
damage
damage to a forest
damage to terrain
danger
dangerous site
dark nilas
data
data acquisition line
data from satellites
dating of ice
dead
deadman
death
death by asphyxia
debris
debris covered glacier
decomposing and fragmented precipitation particles

decrease in temperature
deep basin
deep snow
defense structure
defense structure area
defenses against snow creep
deflecting barrier
deflecting force
deflecting structure
deflecting wall
deflection angle
deflection dam
deformation
deformation processes
deformed ice
degree of avalanche danger
degree of loading
density
density
density effect on deformation rate
density of constructions
density variation with depth
deposit (avalanche)
depression
depression area
depth hoar
depth hoar
depth of burial
descent
descent passage
descent route
descent track
desk roof
destabilised
destruction
detonating cord
Deuterium excess
developed area
dew
dew point
diamond dust
differential ablation
diffluent glacier
diffuse ice edge
diffusion of ice molecules
digging out
dimensions
dip
direction finding antenna
discharge above the snow surface
discharging of snow (from trees)
disciplines
displacement
distance of rope
distress signal
distribution of local risks
disturbance
diverging
double frequency rescue beacon
double T beam
down jacket
drainage glacier
draught
dried ice
drift ice
drifted snow
drifting snow
driving stress
drizzle
dropping from helicopter
drumlin
dry draught
dry snow
dry snow avalanche
dry snow line
dry stone wall
dry-snow zone
dud
dummy
dump moraine
duration of burial
dust in ice
dynamic aspects
dynamic recrystallization
dynamometer
early snow
earth fill
earth terrace for reforestation
earth terrace with toe wall
east slope
east slope
east slopes
ecological parameter
ecological processes
economic measures
ecosystems
edge effect force
effect of deformation on crystal fabrics
effective height of the defense structure
effective length of structure
effective protective measures
effective shear stress

effective stress
effective viscosity
effects and single events
elastic limit
elastic modulus
electronic transceiver
elementary particles
elements of a structure
emergency call
emergency generator
emergency radio facility
emergency sledge
emerging due to disappearing of snow
emissivity
end of the construction area
endoglacial conveyance
enhancement factor
entities
entrance track (avalanche)
environmental conditions
equilibrium line
equipment
equipment and technological systems
equitemperature
erratic avalanche
erroneous evaluation
escape direction
escape route
esker
European scale of avalanche hazard
European stone-pine
evacuation
evaporation (surface heat budget)
excavation
expanded foot
expanded foot glacier
exploration
explosive
explosive charge
explosive control by hand
explosives sleigh
exposed
exposed to the sun
exposedness
extension of deposits
extension speed
external causes
extraordinary avalanche
extreme
extreme ski-run
extreme slope
extreme snow depth
extreme steep ground
extreme steep slope
eyewitness
faceted crystals
faceted rounded particles
factors
failure load (snow cover)
fall
fall-line
fast ice
fast-ice boundary
fast-ice edge
fatally injured
feeling for terrain
felt-like snow
fern frost
fibrillation (heart)
fine grained snow
fine probing
finger rafted ice
finger rafting
finite element method
fir
firing
firn
firn basin
firn density
firn edge line
firn ice
firn limit
firn mirror
firn snow
firn-ice transition
firnification
first-year ice
fissure (crevasse) formation
fjord
flange
flank
flaw
flaw lead
flaw polynya
flexible joint
floating ice
floating ice motion processes
floating ice of land origin
floe
floeberg
floebit
flood water from glacier

flooded ice
flow density
flow direction of airmasses
flow height (avalanche)
flow line
flow speed
flow till
flowing avalanche
fluted moraines
fog
föhn
folded moraines
foliation
foot of a rock face
foot of a slope
foothills
force of impact
force of propulsion
forest
forest clearing
forester
form of the snow surface
formation of avalanches
formation of cornices
formation of fracture
formation of snow-slide
forms of fast ice
forms of floating ice
fracture
fracture depth
fracture layer
fracture length
fracture line
fracture of avalanche
fracture propagation
fracture starting from a line
fracture starting from a point
fracture width
fracture zone
fractured surface
fracturing
fragmentation shell
frazil ice
free-standing wall
freezing level
freezing level
freezing mixture
freezing point
frequency
frequency of issue of avalanche bulletin
friction coefficient
friction energy
friction velocity
friendly ice
frost
frost crack
frost smoke
frostbite
frostbitten
frostheaving
frozen rain
full harness
funicular railway
funicular regime
further avalanche
fuse
fusion and refreezing crust
fusion latent heat
gap
gas exploder
GAZEX
gendarme
general avalanche hazard
general parameter
geologic structures
geomorfological parameter
geothermal heat
geothermics
giant floe
glacial course
glacial erosion
glacial surge
glacier
glacier avalanche
glacier berg
glacier front
glacier heat budgets
glacier ice
glacier mill
glacier response time
glacier table
glacier temperature
glacier temperature at depth
glacier temperature effect on deformation rate
glacier temperature near surface
glacier tongue
glacieret and snowfield
glaciology
glaze
glide and creep
glide crack
glide factor

glide surface
gliding
gliding snow
gliding snow area
gliding snow avalanche
gondola lift
gorge
grade
grain
grain boundary self-diffusion activation energy
grain dimension
grain shape
grain size
granular snow
grassy slope
grate
grate tilt
graupel
grease ice
Greenland ice sheet
grey ice
grey-white ice
ground abrasion
ground avalanche
ground avalanche carrying debris
ground clearance
ground ice
ground moraine
ground roughness
ground surface
grounded hummock
group
growler
guideline value
gully
gully
gust of wind
gusty day
hail
hailstone
hammer
hand profile
hand test
hard rime
hard rope
hard slab
hard snow
hardness
hardness test
hardwood
hasty search
hazard
hazard awareness
haze
health and safety parameter
heart massage
heat budget of glacier surface
heat conduction in ice
heatpack
height of crown
height of deposit in compression zone
height of grate
helicopter
helicopter drop
helicopter landing place
helicopter transport
heliport
high
high altitude tour
high avalanche hazard
high gradient metamorphism
high level path
high pressure
high thermal gradient
hike
hoar
hollow
hollow cups
hollow prisms
horizontal board fence
horn
hostile ice
hot water bottle
hour of burial
hummock
hummocked ice
hummocking
hump
hurricane
hut
hydraulic conductivity
hydraulic diffusivity
hydraulic permeability
hydrological basin
hydrological method (mass balance)
hydrological parameter
hydrometeor
hypothermia
hypothermic
ice
ice (hardness)

ice and snow parameters
ice apron
ice avalanche
ice belt
ice bight
ice blink
ice boundary
ice breccia
ice cake
ice canopy
ice cap
ice cave
ice climbing
ice column
ice concentration
ice cone
ice cover
ice crystals
ice crystals deformation
ice deformation
ice density
ice dome
ice edge
ice field
ice flow effect on temperature
ice fog
ice formations
ice front
ice grains
ice impurities concentration
ice impurities effect on deformation rate
ice in solar system
ice island
ice isthmus
ice jam
ice keel
ice latent heat
ice layer
ice limit
ice massif
ice methods of dating
ice mushroom
ice needle
ice nucleus
ice of land origin
ice on the soil
ice patch
ice pellets
ice port
ice ridge
ice rind
ice rind
Ice Saints
ice sheet
ice sheet area-volume relationship
ice sheet flow model
ice sheet growth and decay
ice sheet heat budget
ice sheet isotope-temperature relation
ice sheet isotopic profiles
ice sheet map
ice sheet mass balance
ice sheet negative temperature gradient
ice sheet numerical modelling
ice sheet rate of thickness change
ice sheet response to changes
ice sheet stability
ice sheet summer heat budget
ice sheet surface profile
ice sheet temperature
ice sheet temperature near surface
ice sheet volume
ice shelf
ice shelf profile
ice shelf temperature
ice stream
ice stream driving stress
ice stream temperature
ice stream thickness change
ice streams
ice strip
ice thermal conductivity
ice thermal diffusivity
ice tongue
ice under pressure
ice wall
ice-air interactions
ice-axe
iceberg
iceberg calving
iceberg tongue
ice-bound
ice-cemented rock glaciers
ice-cored rock glaciers
icefall climbing
icefoot
ice-free
ice-stream interaction moraines (ISI)
icicle
icing
igniter
immaterial entities

immediate aid
impact
impact fuse
impact speed
improvement
improvised probe
improvised search
improvised shovel
impurities in ice
in particular with a strong additional load
inclination
inclination of the supporting plane
increase in temperature
increasing in a snow layer strength
increasing in snow depth
induced (intentional) avalanche
inertia
inflow of air masses
influence coefficient
infra-red radiation
initial failure
injured person
inlandsis
insolation
insoluble impurities in ice sheet
instability
instantaneous igniter
intense rain
intentional release
interface
intergranular veins
internal causes
internal friction
internal snow strength
International Commission for Alpine Rescue
International Union of Alpinist Associations
interrupted arrangement
interrupted structures
interspace
interval
intervention
inversion
investigation
iron framed structure
irregular crystals
irreversible
isotherm
isotope-temperature relation
issuing of avalanche warning
jammed brash barrier
jet roof
jökulhlaup
juridical entities
kame
kame deposits
kame terrace
katabatic wind
kettle holes
kinetic energy
kinetic friction angle
knee pine
lake ice
lakes beneath ice sheet
larch
large fracture
large ice field
large rounded particles
large striated crystals
last seen point (of the avalanche victim)
latent avalanche hazard
latent heat
latent heat in ice
lateral moraines
lateral structure
Laurentide ice sheet
layer
layer depth
layer without cohesion
lead
leading of the tour
leafy wood
ledge
lee slope
leeward
legislative measures
length of structure
lesion
level ice
light additional load
light cloudy
light gradient metamorphism
light metal
light nilas
light rain
light thermal gradient
lightning
limit of a layer
limit of the construction area
line of structures
linked cavity system
liquid water content
liquid water content

living entities
load carrying capacity
loading
lobed front
local avalanche hazard
local foundation
locating
location method
location of surging glaciers
location of victim
location point
location speed
lodgment till
log
long distance release
long range search (rescue beacon)
long wave radiation
longitudinal crevasse
longitudinal section
longitudinal strain rate
loop
loose snow
loose-snow avalanche
low avalanche hazard
low clouds
low cohesion
low hardness
low pressure
lubricating layer
machine made snow
magnetometer
malleability
map
map of avalanche paths
marginal factor
marine ice sheet
marked ski run
masonry wall
mass balance
mass balance effect of change ??? on glacier
mass balance measurement methods
mass balance of Antarctic ice sheet
mass balance of Greenland ice sheet
massive structures
material damage
material entities
materials
maximum (temperature)
maximum gradient
maximum slope inclination
maze of crevasses
mean ice edge
measured ice sheet temperature
measurement
measurement of settlement
measurement result
measurement year
measuring cap
mechanism of avalanche
mechanism of movement
medial moraines
medium avalanche
medium first-year ice
medium floe
medium fracture
medium hardness
medium ice field
medium temperature)
medium thermal gradient
melt channels
melt forms
melt metamorphism
melt water
melt-freeze crust
melting of snow cover
melting point
melting snow
melt-out till
meltwater effect on firn formation
meltwater effect on firn temperature
meltwater effect on mass-balance
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mesh size
metal detector
metamorphism of snow
meteorites in ice
meteorological measurements
methane in ice
method of direction-finding
microclimate
microparticles in ice
mid station
minimum (temperature)
minishowel
mist
mixed forest
mixed-snow avalanche
moat
moderate avalanche hazard
moderate rain
moist snow

moraine
morainic bank
morainic ridge
mortar
mortar
mortar shell
mount cirque
mountain ash
mountain forest
mountain glacier
mountain guide
mountain pass
Mountain Rescue Service
mountaineer
mountain-pasture
mule path
multi-year ice
narrow terrace
natural avalanche
natural breaking buttress
natural entities
natural release
near surface faceted particles
needles
neoformation moraine
net mass balance
net of cables
net radiation
network of avalanche defense structures
neutral atmosphere
new ice
new ridge
new snow
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niche
nilas
nip
no avalanche hazard
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Nordic skiing
normal strain
normal stress
north side
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north slope
north slopes
not bearing crust
nuclear fall-out in ice
nucleus of crystallization
nucleus speed
number of dangerous places
nunatak
objective avalanche hazard
observation plot
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observation station
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obstacle surrounded by the avalanche
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ocean
oceanic waters
oceanographic parameter
octahedral stress
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ogives
old ice
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old snow cover
old snow with facet(t)ed grains
old snow with rounded grains
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open slope
open water
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operation leader
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organized rescue operation
orientation mark
orography
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outlet glacier
outrigger for explosive charge
outside of controlled runs
overcast
overlayed moraine
over-snow vehicle
Oxygen isotopes
Oxygen isotopes in sea water
Oxygen isotopes in snow and ice
oxygen shortage
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pancake ice
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paremeters related to buildings
partial burial
partially buried victim
partly decomposed particles

pass
passive identifying object
path
path in snow
patroller
patrolling of ski runs (skipatrol)
pendular regime
penetration depth
penitentes
percolation speed
percolation zone
perennial snow
perfect plasticity
period of closure
period of foehn
period of validity of avalanche bulletin
periphery
permafrost
permanent protective measures
permanent retaining structure
permanent structures
permeability of ice
perpendicular
perpendicular to the slope
person
physical conditions
physical parameter
physical processes
physical-chemical processes
piedmont front
piedmont glacier
pile foundation
pin
pin joint
plane strain
planetary ice
planning
planning measures
plant components
plasticity
plateau
plates
plentiful rain
plucking
point of application of a force
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Polar glacier
polar glacier
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pollution and refuse parameter
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polythermal glacier
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possible event
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potential avalanche hazard
powder snow
powder snow avalanche
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power of resistance
practical snow stability tests (skiers)
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precipitation intensity
precipitation particles
pressure effect on deformation rate
pressure gradient
pressure measuring device
prevention
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principal strain
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probability of release
probability of response
probability of survival
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profile of one single snowfall
projectile detonator
projectile firing
projection
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protecting structures
protective forest
protective measures against avalanches
protective measures against gliding snow

protective ramp
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pulley
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purlin
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quantitative evaluation of avalanche danger
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radiation in heat budget
radiation penetration of snow and ice
radioactive layers in ice
radio-echo sounding ice thickness measurement
radio-link
rafted ice
rafting
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rain crust
rain shower
ram
ram penetrometer
ram profile
ram resistance
random furrows
raster
rate of flow
ravine
recent (new) snow
recent weather
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recovery position (E)
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recurring polynya
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relative humidity of the air
release
release an avalanche through test skiing
release by accidental triggering
release by skier
release mechanism
reliability of forecast
rescue
rescue (victim alive)
rescue beacon (RB)
rescue column
rescue of living victim
rescue service
rescue toboggan
rescuer
reservoir glacier
residual risk
resistance to deformation
resistance to movement
respiration mouth to mouth
responder
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retarding mound
retarding wedge
return period
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ridge
ridge
ridge
ridge
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ridged ice
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ridging
rime
riming
risk
risky situation
river ice
rock anchor
rock barrier
rock face
rock glacier
rock needle
rock ridge
rockslide
rocky flank
rolled steel
rolling
roof shape coefficient

rope pulley
roped party
ropeway for goods transport
rotten ice
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round polycrystalline particles
rounded grains
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safety factor
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safety straps
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sapwood
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saturation with water (snow pack)
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scale of difficulties (ski-mountaineering)
scale of difficulty
scarp
scent
Scots pine
scree slope
sea ice
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search speed
search strategy
search strip width
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seasonal snow cover
seasonal variations
seasonal variations in firn temperature
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secondary avalanche
secondary fracture
secondary summit
second-year ice
sections, screwed together
sedimentary bands
self-belay
self-help
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serac
serac ice
settled snow
settlement of snow
shaded slope
shady side
shallow basin
shape charge projectile
shape factor
shape of roof
shapes of debris
shear
shear bands
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shear moraines
shear planes
shear resistance of foundation
shear ridge
shear ridge field
shear strain
shear strength
shear stress
shear-frame
shearing
shelter
shock wave
shore ice ride-up
shore lead
shore melt
shore polynya
short-wave radiation
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shovel shear test
shovel test
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side guy
signs of death
sill
silty ice
simple basin
single crystal

single structure
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sintering in firn
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sirocco draught
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size of a defense zone (retaining structure)
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ski area
ski binding
ski centre
ski crampons
ski mountaineer
ski mountaineering
ski pole
ski pole grip
ski pole probe
ski pole strap
ski pole test
ski run
ski sport
ski tour
ski track
ski-brake
skier
skier's avalanche
skiing-extreme
skilift track
ski-tourer
skitouring
ski-tow
sky and air indications
skylight
slab avalanche
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sledge runner
sleet
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slide ramp
slide wedge test
sliding surface
sliding theories
sliding velocity
sliding with cavitation
sliding without cavitation
slope
slope distance
slope in the shade
slope inclination
slope orientation
slope surface
slope tilt
slope with accumulation of drifted snow
slopes
slush
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slush
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small
small avalanche
small floe
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small hail
small ice cake
small ice field
small rounded particles
smooth surface
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snow
snow and weather bulletin
snow average depth at 1600m
snow barkhan
snow blower
snow bridge
snow cap
snow conveyance
snow cover
snow cover erosion
snow covered slope
snow creep
snow crystals
snow cups
snow cushion
snow cutter
snow density
snow drift
snow drift
snow dune
snow fall
snow grains
snow gully
snow height
snow interception by trees
snow layer
snow level
snow line
snow load
snow lysimeter
snow measurements
snow net
snow pack examination

snow patch
snow plume
snow porosity
snow pressure
snow profile
snow profile at the fracture line
snow profile on hang
snow profile survey
snow profile survey at high altitude
snow rake
snow retaining capacity
snow ridge
snow sampler
snow science
snow settling
snow shoes
snow shower
snow slab
snow slab on lee slope
snow sliding
snow stake
snow stratification
snow surface conditions
snow tires
snow to ice transformation
snow wall
snowball
snow-blind
snow-blindness
snowboard
snowcat
snow-clad
snow-covered ice
snowfall rate
snowfences
snowfield
snowflake
snowfree
snow-increase
snow-line
snowman
snowpack
snowpack analysis (profile)
snowpack evolution
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snowpack structure
snowpit for profile survey
snowplough
snow-slide
snowstorm
social conditions
social entities
social groups
social parameter
social system
soft rime
soft slab
soft snow
softening
soil investigation for foundation
solar radiation
solid base of snow cover
solid faceted particles
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solifluction
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soluble properties in ice sheet
sound speed
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south side
south slope
south slopes
space
space between protective structures
space between supports
spatial dendrite
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specific heat capacity of ice
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spruce
spur
squares (C)
stability evaluation
stabilized
stable snowpack
staggered arrangement
staggered structures
staking out
stalactite
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starting area
statement
static friction
steady state
steel anchor
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steep ground
steep slope

stellar & dendrites
stellar crystal
stemming area
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storm
stormy
strain at failure
strain inside snow cover
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strain rate variation with depth
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stranded ice
strata profile
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strength
strength reduction in a snow layer
stress
stress distribution
stress longitudinal gradients
stress rate
stretch limit
stretcher
string line
strong additional load
subglacial conveyance
subglacial till deformation
subglacial water pressure
subjective avalanche danger
sublimation
submergence velocity
sub-polar glacier
substances
suction force
sudden change in weather
suffocation
summer
summer (mass) balance
summit
sun crust
sunny
sunny side
sunny slope
sunshine
supercooled drizzle
supercooled fog
supercooled rain
supercooling
superglacial conveyance
superimposed ice
superimposed pressure
superimposed-ice zone
supersaturation
supply of external heat
support
support footing
supporting structure
surface avalanche
surface crust
surface deposition and crust
surface hoar
surface hoar
surface hoar crystals
surface layer
surface release
surface roughness
surface search speed (min/m^2)
surface structure
surface wind
surge period
surging glaciers
survival chance
survivor
synoptic chart
systems of ecosystems
tabular berg
tail unit
tardi-glacial moraine
team leader
technological systems
technology
telemark
telescopic pole
temperate glacier
temperate glacier
temperate glacier impurity content
temperate glacier temperature
temperature
temperature fluctuations
temperature gradient
temperature history
temperature history from ice cores
temperature history from temperature profile
temperature profile
temporary protective measures
temporary retaining structure
tensile crack
tensile strength
tensile stress
tensile stress area
tension anchor
terminal moraines

terrace
terrain
terrestrial environment
test area
test arrangement
thaw holes
thaw holes (flat terrain)
thaw time
thermal inversion
thermal range
thick first-year ice
thickness
thickness of fracture
thickness of snow cover
thin first-year ice
thin first-year ice first stage
thin first-year ice second stage
thin layer
thin section
thunder
thunderbolt
thunderstorm
thunderstorm chance
tide crack
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tidewater glacier deformation
tidewater glacier viscosity
tidewater glacier yield stress
till
till porosity
timber construction
time
time favourable for avalanche formation
time lag in glacier response
time parameters
time profile
time scale of ice core
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top terminal
total burial
total depth of recent snow
total depth of snow cower
tour area
tour planning
tourist
track
transfer coefficient
transition zone (stream shelf)
transport of snow by wind
transverse crevasse
transverse force
transverse section
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traverse
tree core
tree line
trench
trestle
trigger an avalanche
trigger factor
trimline
trough
truss beam
tunnel
turbolent suspension
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two-ski drag
U section
UIAA label
ultrasonic logging
unclean avalanche
unconfined avalanche
undulated
unloading (slope)
unstable snowpack
uphill route
uplift of glacier surface
upwind
upwind slope
usual track
valley
valley avalanche
valley cirque
valley flank
valley floor
valley glacier
vaporization latent heat
variable
variant
vast floe
vegetation
velocity
velocity in extending/compressing flow
velocity in laminar flow
velocity in transverse section
velocity of kinematic wave
velocity on longitudinal line
velocity on vertical line
velocity variation in time
velocity vertical component
vertical board fence
vertical height of a structure

very big
very close ice
very high
very high avalanche hazard
very low
very open ice
very small
very small fracture
very weak layer
very weathered ridge
very wet snow
victim died during rescue operation
victim who died later
virgin snow
viscosity coefficient
viscous flow
visible radiation
volcanic deposits in ice
volcanic deposits in ice sheet
volume self-diffusion activation energy
wall
wall deflector
wall terrace
waning sector
warm front
warm snow
warm-air inhaler
warming up
warning
warning service
warning sign(s)
water
water at glacier bed
water between ice grains
water content
water effect on heat budget
water effect on ice deformation
water effect on sliding velocity
water environment
water equivalent of snow
water flow at glacier bed
water flow in linked cavities
water flow in tunnel
water flow of glacier-fed stream
water flow over soft bed
water flow within glacier
water in pores in till
water in temperate glacier
water pressure within glacier
water sky
water table
water through glacier travel time
water within glacier
watershed
waved ogives
wavy snowsurface
weak base of snow cover
weak cohesion layer
weak cohesion snow layer
weak cohesion snow release
weak layer
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weather factors
weather parameter
weather pattern development
weather with high radiation cooling
weathered ridge
weathering
wedge
wedge of high pressure
welded joint
west slope
west slopes
wet draught
wet snow avalanche
wet-snow avalanche
wet-snow line
wet-snow zone
wetting (snow pack)
whale-back shaped rocks
whirl
whirlwind
white-fine bubbly ice
whiteout
width of section
wild snow
winch
wind
wind aloft
wind baffle
wind broken particles
wind compacted crust
wind crater
wind direction
wind erosion
wind force
wind net
wind speed
wind-compacted snow
wind-load
windripples

wind-slab
windward
winter
winter ascent
winter mass balance
wire net
wood
wood preservative
yield stress
yield stress of ice
yield stress of till
young coastal ice
young ice
zone of crevasses
zone of deposition
zoning