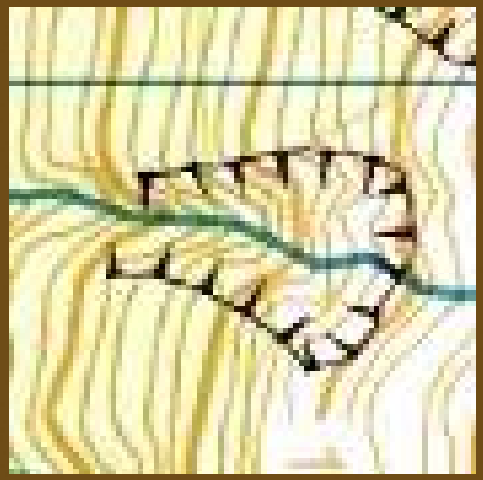
New topographic mapping

ICA - Mountain Cartography Workshop, Taurewa, New Zealand
1-5 September 2012

Principles?

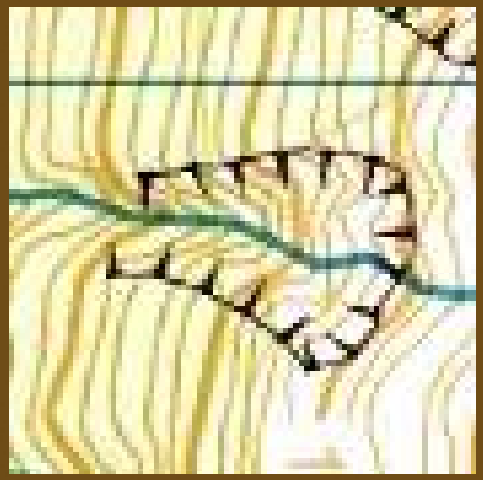
- Continuous features – continuous symbols
- Accurately defined features – clear graphic definition
- Relief: subtle, integrating minimum colour influence
- Avoid contrasting lineal elements
- Careful use of black colour
- Re-evaluate traditional symbols
- Simplify symbol families

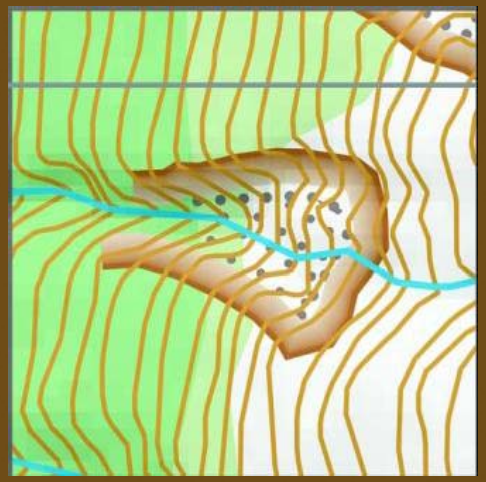
Cliff
or
river
terrace



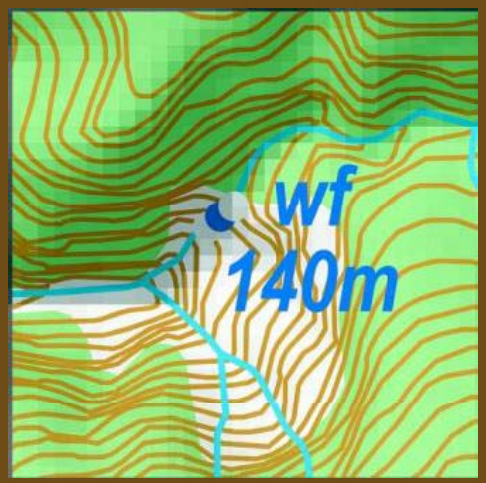
Waterfall

Cliff
or
river
terrace

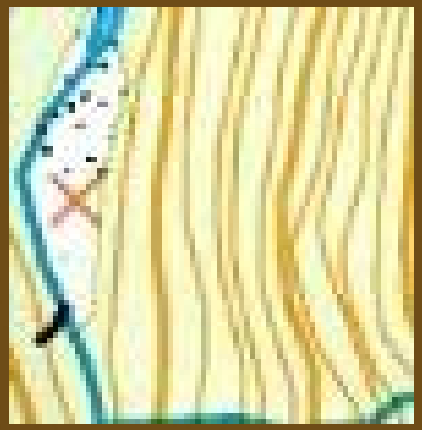




Waterfall



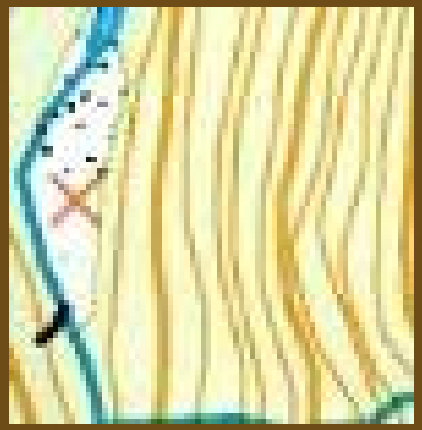
Hot spring



Swamp

Pine forest

Hot spring



Swamp

Pine forest

Relief shading

a vital visual component

balance with other components essential

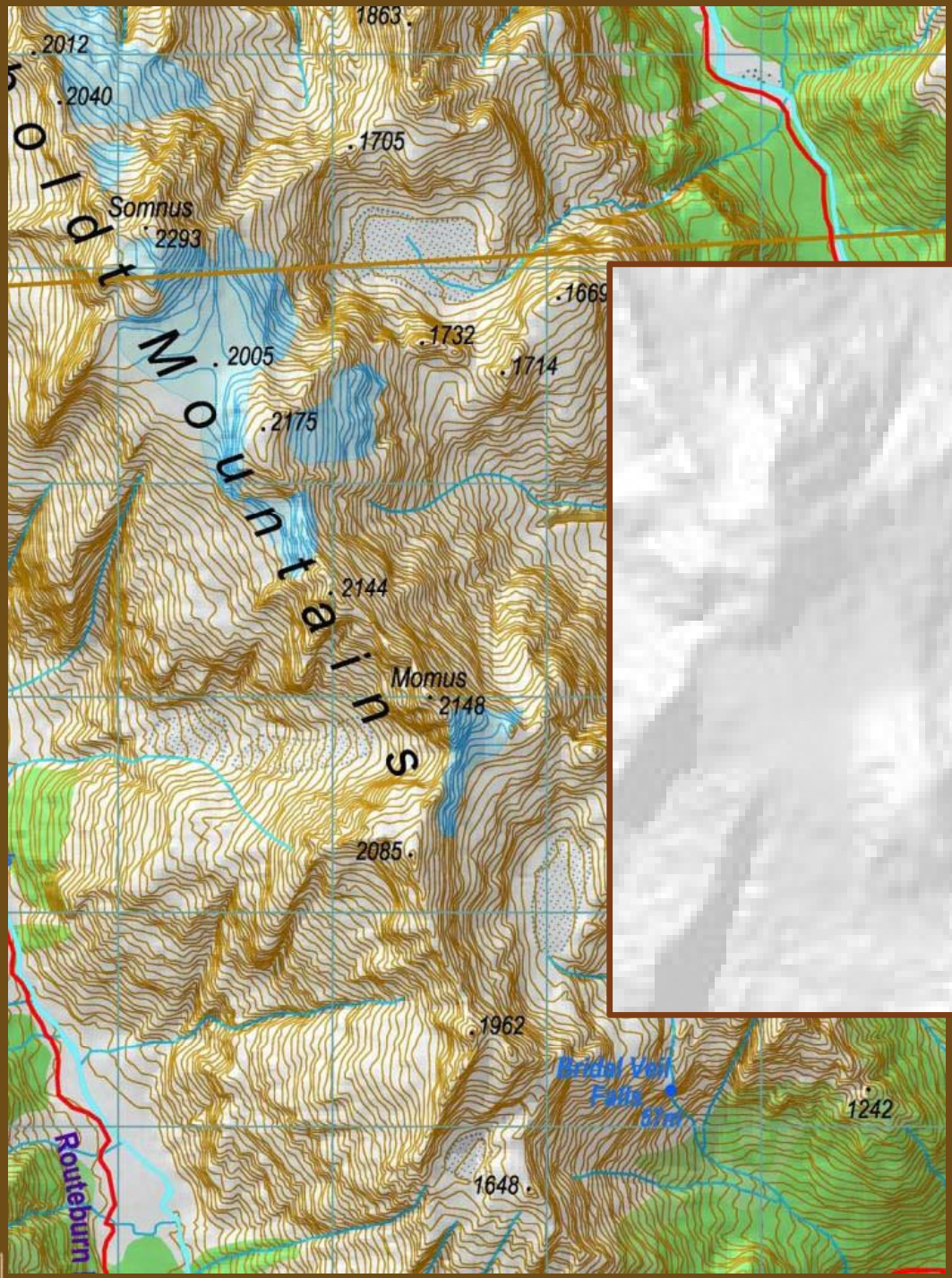
specially produced by Geographx

20m pixel: typically...

flat areas 10C, 7Y, 7M, 0K

deep shadow 40C, 30M, 25Y, 4K

result is a clear legible image


1863
2012
2040
1705
Somnus
2293
Mount
2005
1732
1714
2175
Mountains
2144
Momus
2148
2085
1962
Bridal Veil
Falls
1242
1648
Routeburn

Black relief difficulties:

Difficult balance between relief and text

Conflict with area tints, lines and text

Gloomy or muddy appearance of map

CMY no K relief advantages:

Managed balance between relief and text

Managed discrimination between elements

Clean map image with increased legibility

Offset printing

‘printing’ is not just *printing*

new technology is amazing

design to the machine capabilities

printer uses Heidelberg and HP Indigo

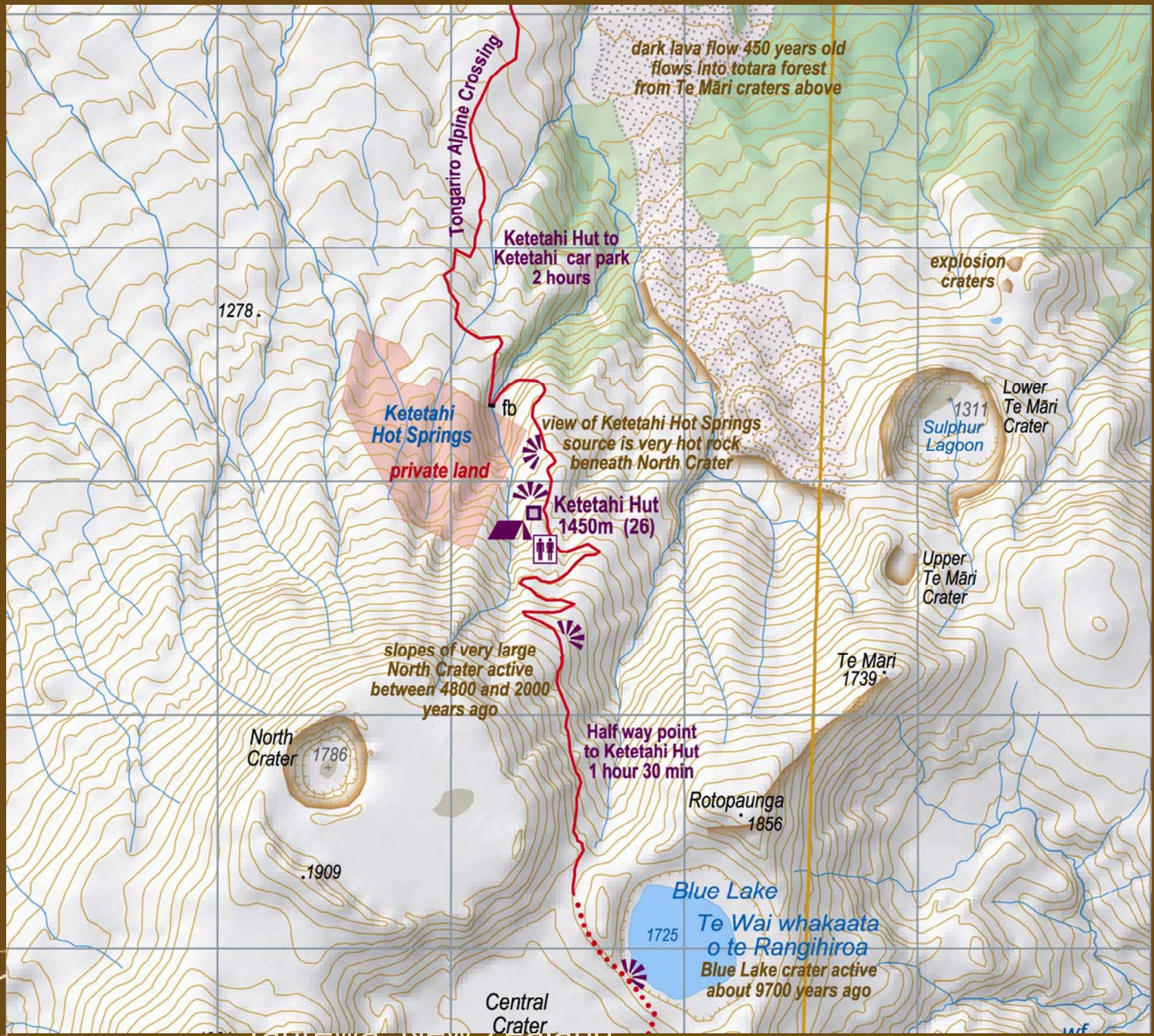
Paper

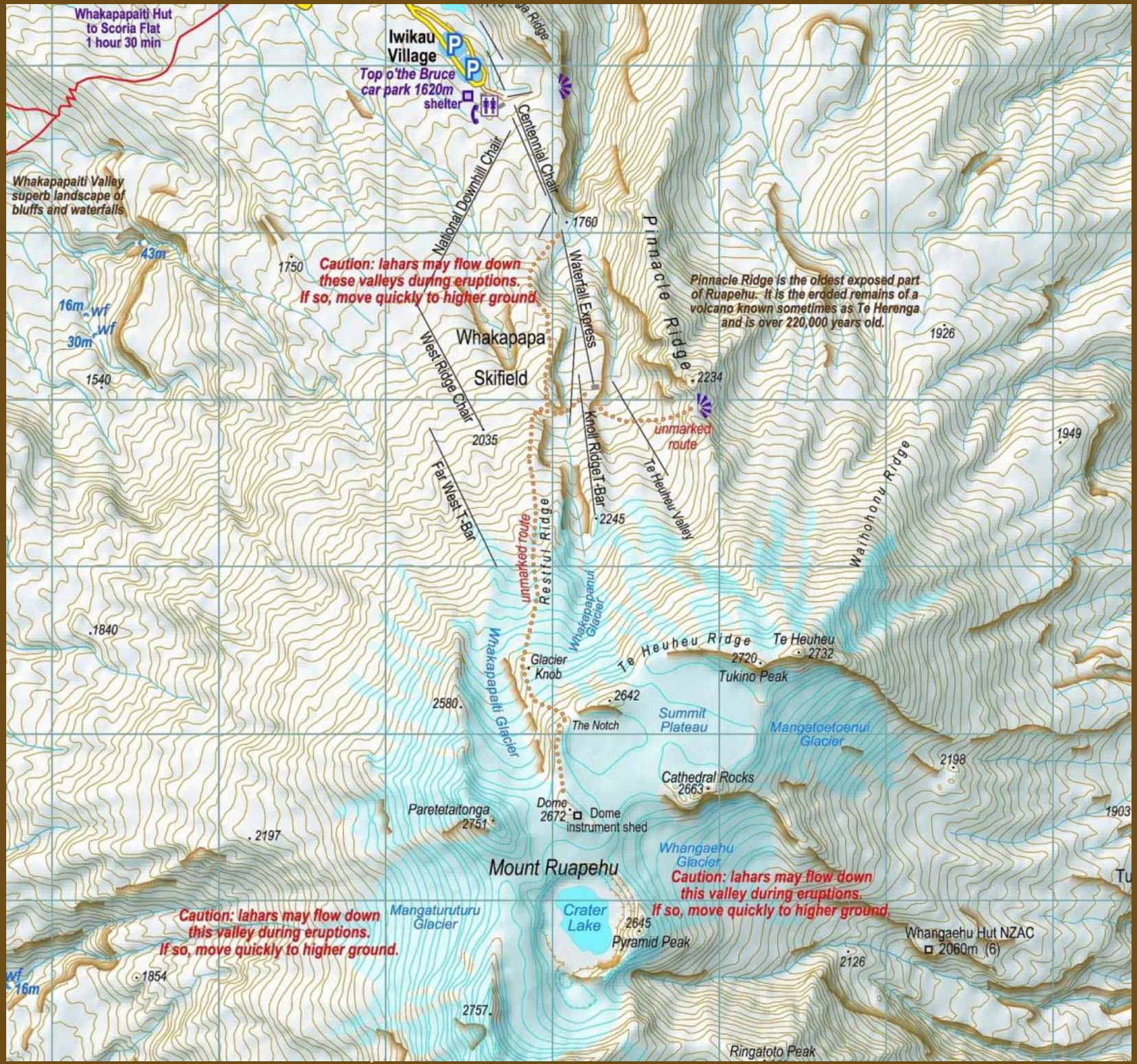
‘paper’ is not just *paper*

useful to know the paper’s characteristics

two-sided surface differences

94gsm high-wet-strength and 113gsm Sumo


dark lava flow 450 years old
flows into totara forest
from Te Māri craters above
Tongariro Alpine Crossing
Ketetahi Hut to
Ketetahi car park
2 hours
explosion
craters
1278
Ketetahi
Hot Springs
private land
fb
view of Ketetahi Hot Springs
source is very hot rock
beneath North Crater
Lower
Te Māri
Crater
1311
Sulphur
Lagoon
Ketetahi Hut
1450m (26)
Upper
Te Māri
Crater
slopes of very large
North Crater active
between 4800 and 2000
years ago
Te Māri
1739
North
Crater
1786
Half way point
to Ketetahi Hut
1 hour 30 min
Rotopaunga
1856
.1909
Blue Lake
Te Wai whakaata
o te Rangihiroa
1725
Blue Lake crater active
about 9700 years ago
Central
Crater


Whakapapaiti Hut
to Scoria Flat
1 hour 30 min
Iwikau
Village
Top o'the Bruce
car park 1620m
shelter
Centennial Chair
National Downhill Chair
Whakapapaiti Valley
superb landscape of
bluffs and waterfalls
43m
16m
Wf
Wf
30m
1540
1750
Caution: lahars may flow down
these valleys during eruptions.
If so, move quickly to higher ground.
1760
Waterfall Express
Pinnacle Ridge
Pinnacle Ridge is the oldest exposed part
of Ruapehu. It is the eroded remains of a
volcano known sometimes as Te Herenga
and is over 220,000 years old.
1926
Whakapapa
Skifield
West Ridge Chair
2234
unmarked
route
1949
2035
Knoll Ridge T-Bar
Te Heuheu Valley
Waihohonu Ridge
Far West T-Bar
2245
unmarked route
Restful Ridge
Whakapapanui
Glacier
1840
Whakapapaiti Glacier
Glacier
Knob
Te Heuheu Ridge
Te Heuheu
2720
2732
Tukino Peak
2580
2642
Summit
Plateau
The Notch
Mangatoetoenui
Glacier
2198
Cathedral Rocks
2663
Paretetaitonga
2751
Dome
2672
Dome
instrument shed
1903
2197
Whangaehu
Glacier
Mount Ruapehu
Caution: lahars may flow down
this valley during eruptions.
If so, move quickly to higher ground.
Caution: lahars may flow down
this valley during eruptions.
If so, move quickly to higher ground.
Mangaturuturu
Glacier
Crater
Lake
2645
Pyramid Peak
Whangaehu Hut NZAC
2060m (6)
2126
Wf
16m
1854
2757
Ringatoto Peak

Topographic maps

Published by NewTopo
August 2012

Thanks for your attention and the discussion