ORIENTEERING CLUB APPENNINO

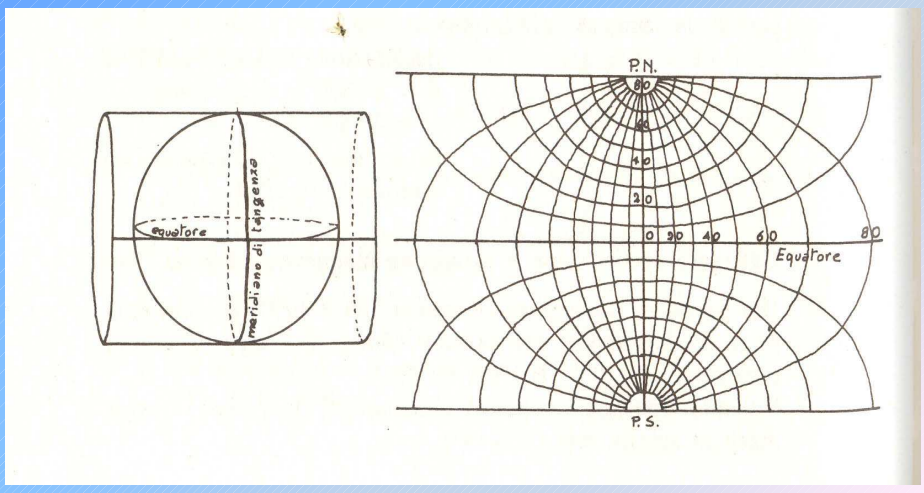
ORIENTAMENTO

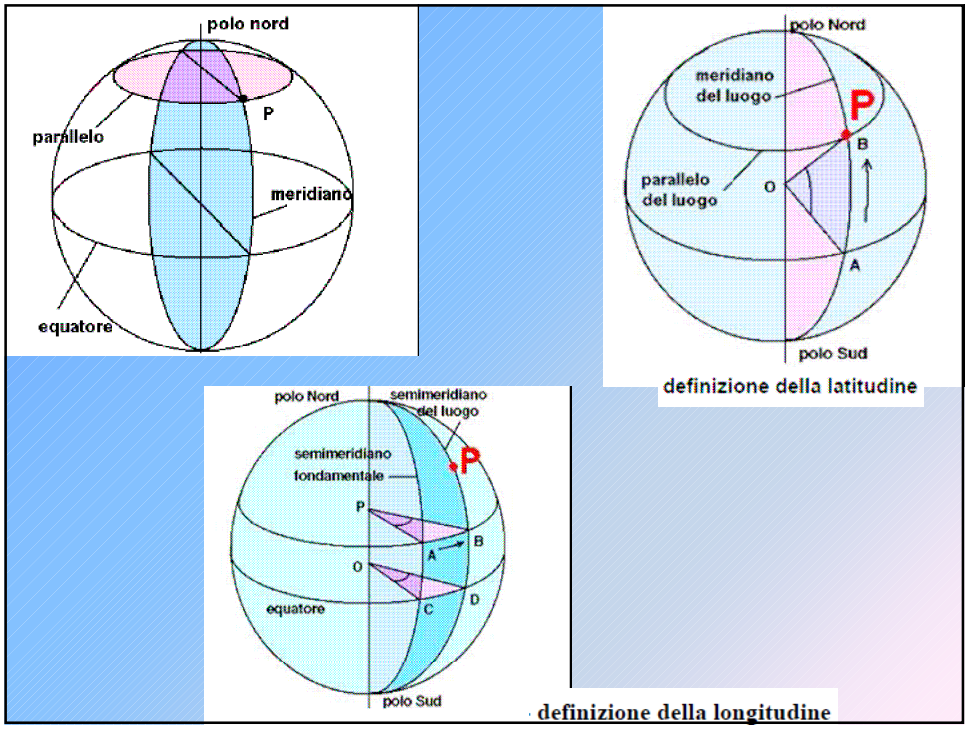
COME RITROVARSI VELOCEMENTE
DOPO ESSERSI PERSI

a cura
Dott. Paolo Vincenzo Filetto

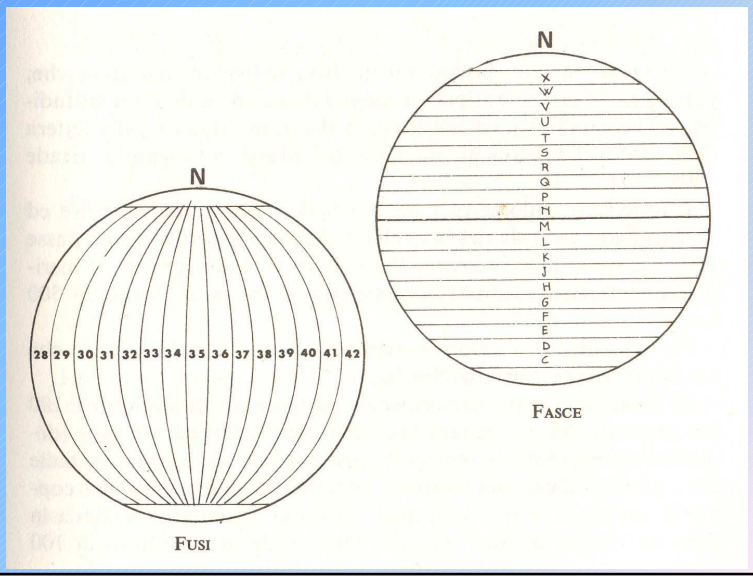
SISTEMA U.T.M.

UNIVERSALE TRASVERSA DI MERCATORE

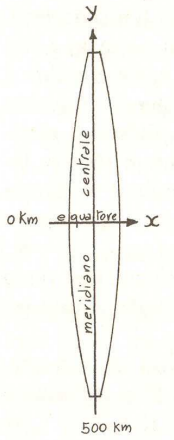


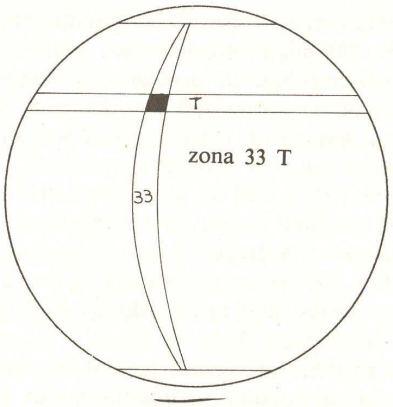

polo nord
P
parallelo
meridiano
equatore
polo Nord
meridiano del luogo
P
B
parallelo del luogo
O
A
polo Sud
definizione della latitudine
polo Nord
semimeridiano del luogo
semimeridiano fondamentale
P
P
B
A
O
D
C
equatore
polo Sud
definizione della longitudine

FUSI E FASCE


N
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42
FUSI
N
X W V U T S R Q P N M L K J H G F E D C
FASCE

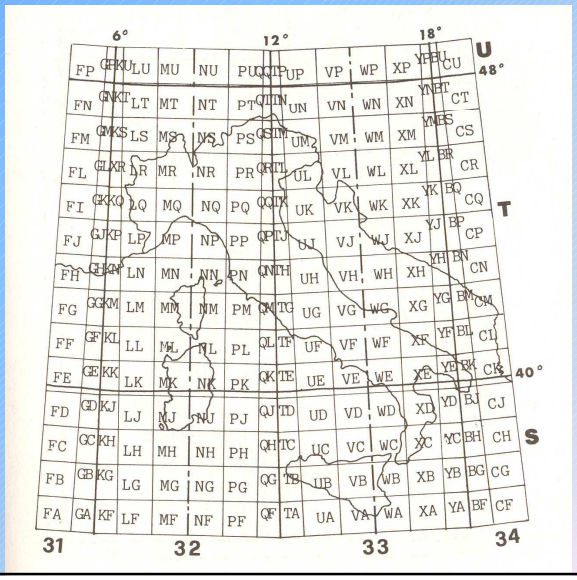
ZONA



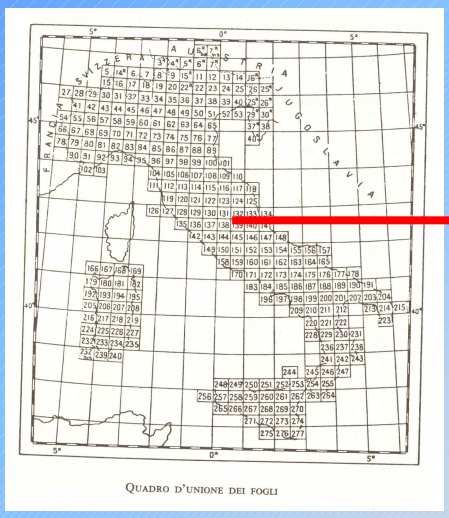


Assi di riferimento del fuso

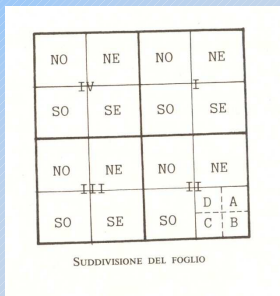
SISTEMA I.G.M.



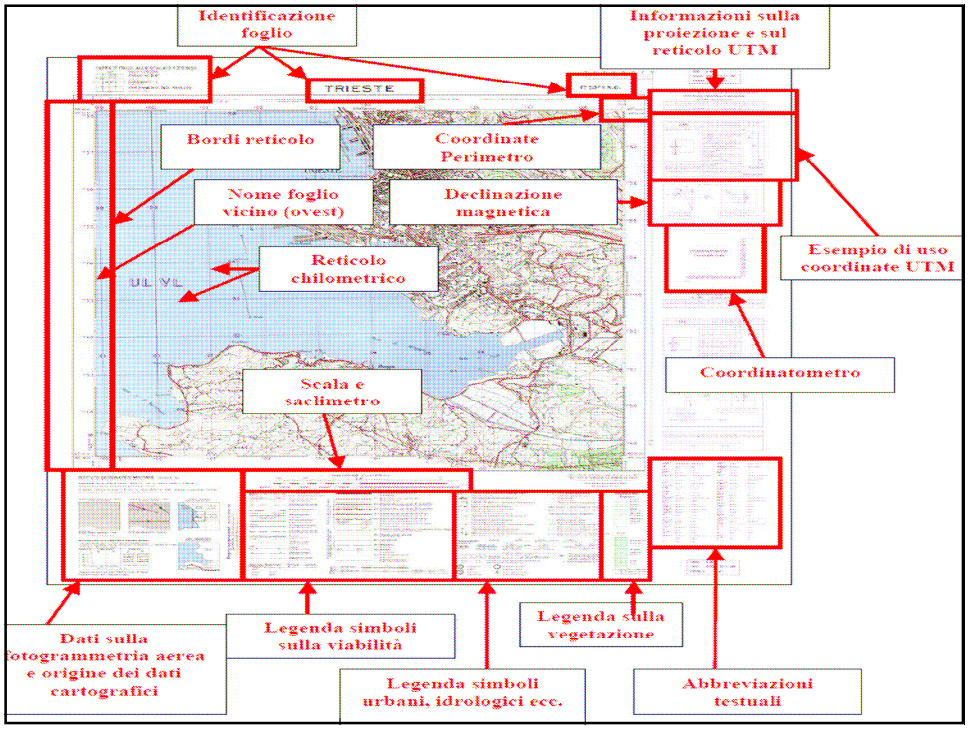
FOGLI E TAVOLETTE



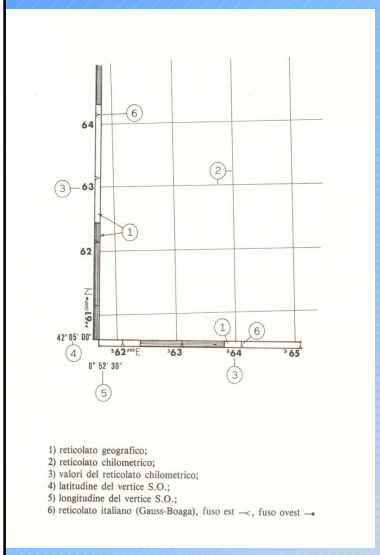
Quadro d'unione dei fogli

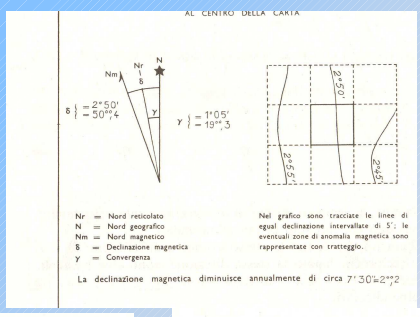


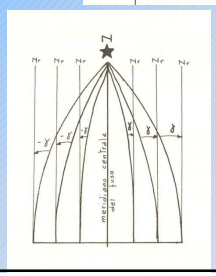
Suddivisione del foglio

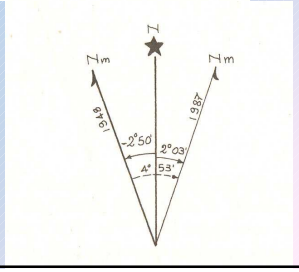


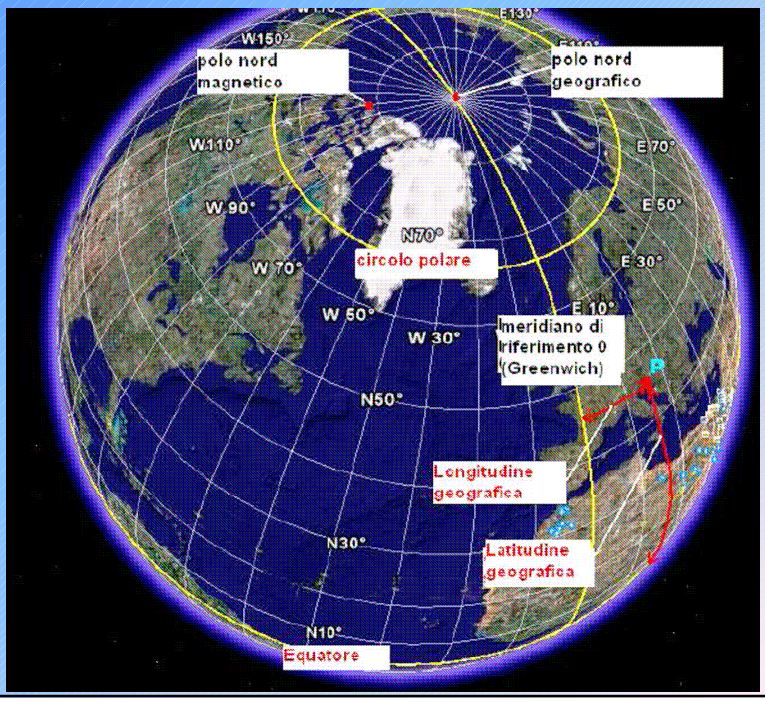
RELAZIONE TRA AZIMUT GEOGRAFICO, RETE E MAGNETICO

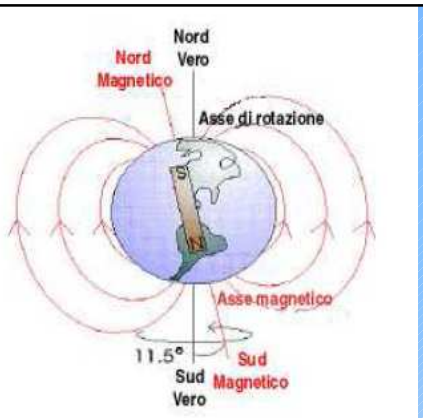


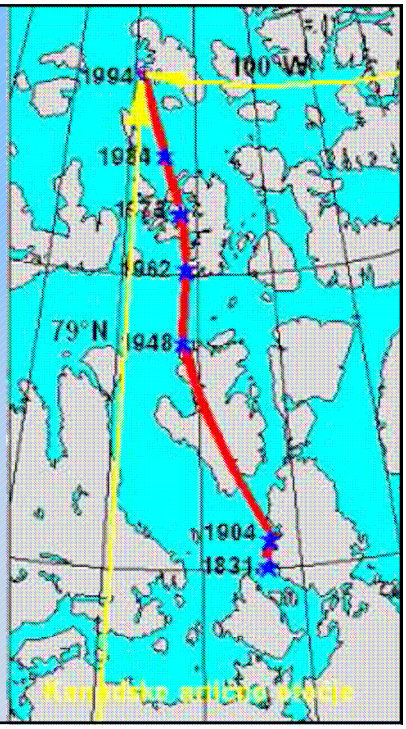






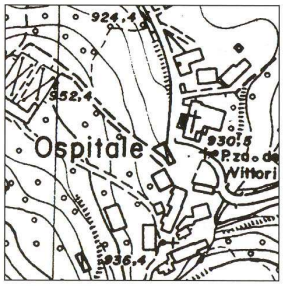






CARTOGRAFIA C.T.R.

1:5.000



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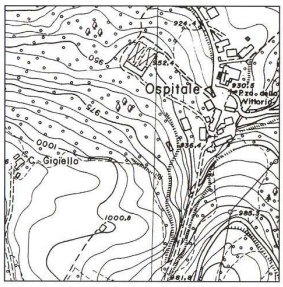
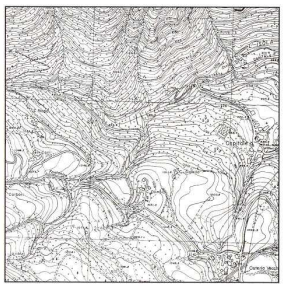
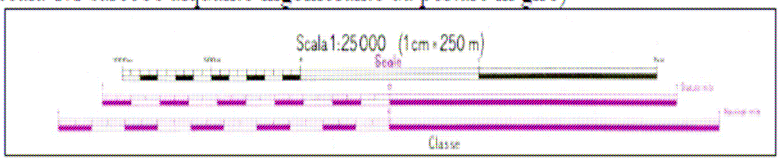


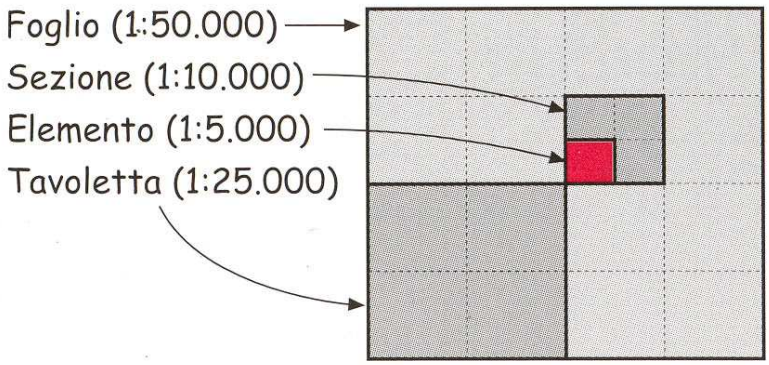
1:25.000



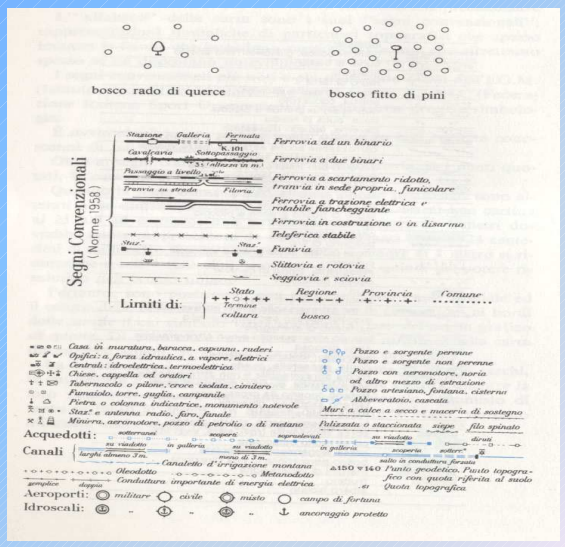
1: 40.000.000 – un mappamondo di medie dimensioni dove 1cm = 400km
1: 5.000.000 – carta geografica dell'Europa (come quelle appese a scuola) 1cm = 50km
1: 500.000 – carta stradale del nord Italia – 1cm = 5km
1: 50.000 – carta escursionistica 1cm = 500m
1: 25.000 – cartina topografica, tavoletta 53°1 N.O. - TRIESTE – 1cm = 250m
1: 10.000 – mappa catastale – 1cm = 100m
1:2880 – vecchia mappa catastale – 1 cm 28,8m
1: 500 – mappe Müller (acquedotti, cavi elettrici ecc.) – 1cm = 5m
1:100 – planimetria di un appartamento – 1cm = 1m
1:25 – modellino di un'automobile, soldatino di piombo – 7 cm = 1m75cm
1:1 – grandezza naturale, "La Pietà" di Michelangelo - 1cm=1cm (….una cartina topografica in scala 1:1 sarebbe alquanto ingombrante da portare in giro)



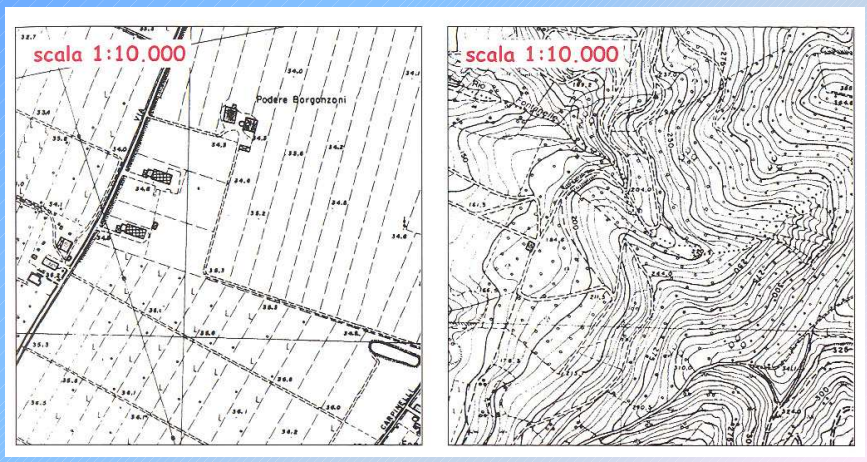
SCALA DELLE CARTE

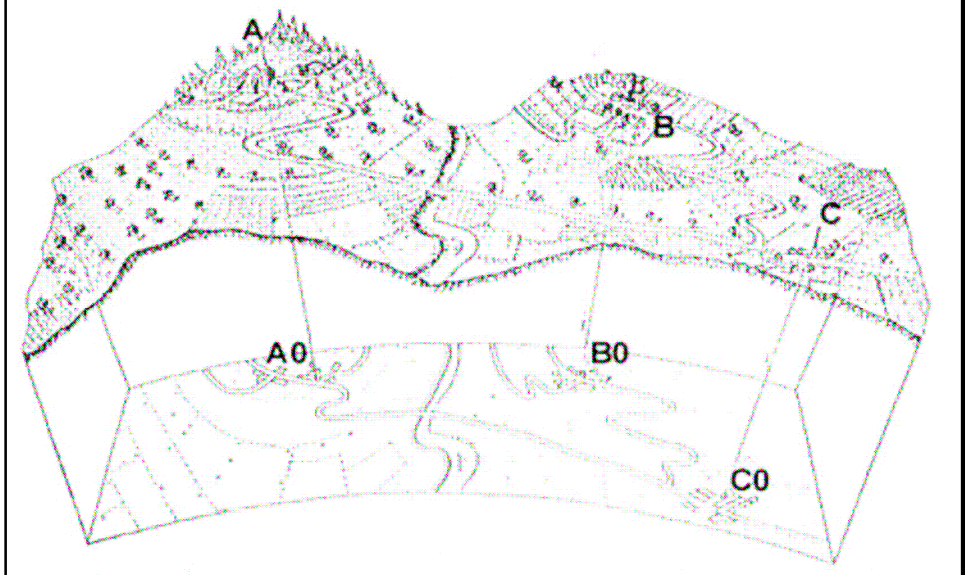


legenda

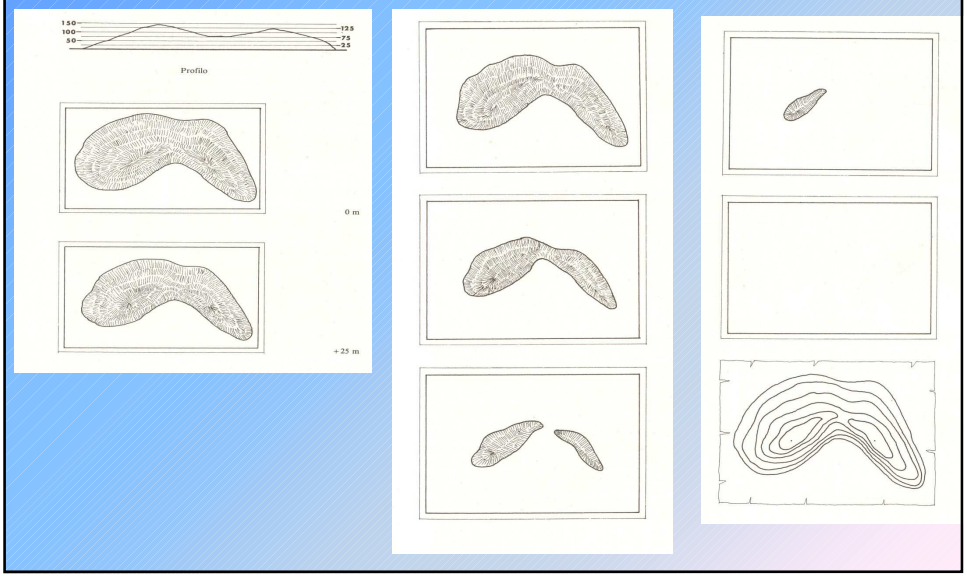


CURVE DI LIVELLO

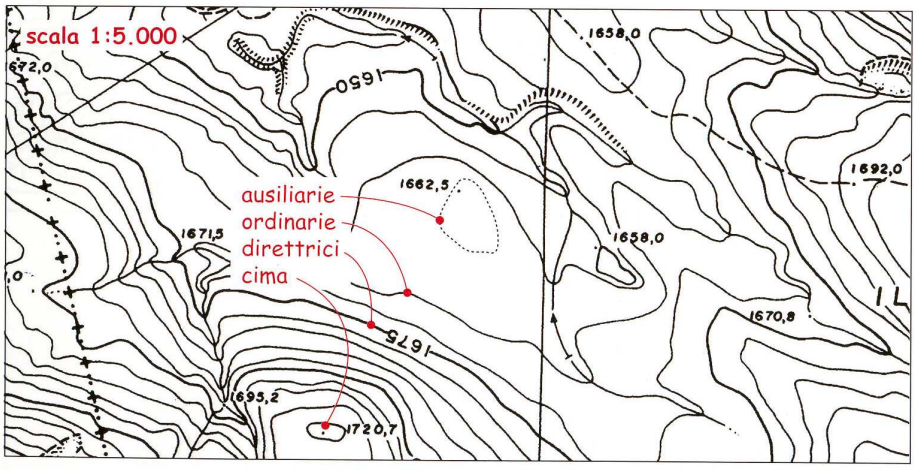



A
B
C
A0
B0
C0

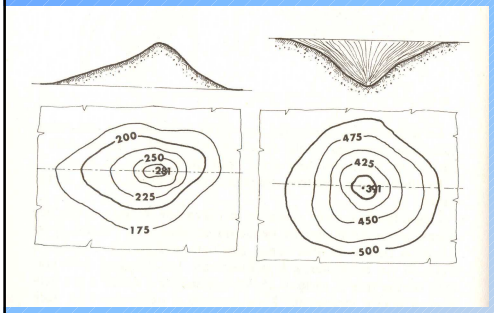

300
200

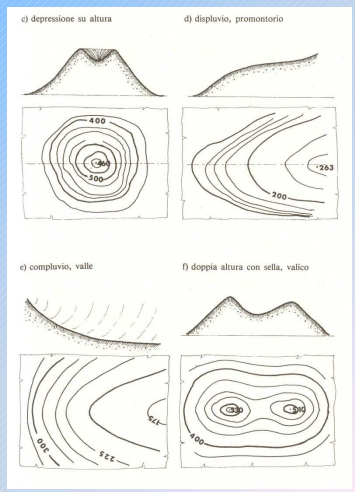


CURVE LIVELLO

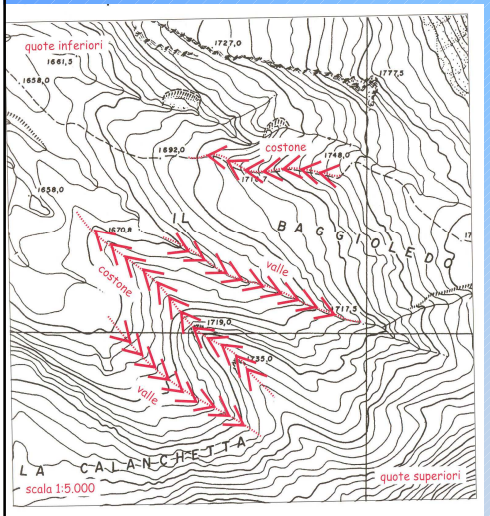


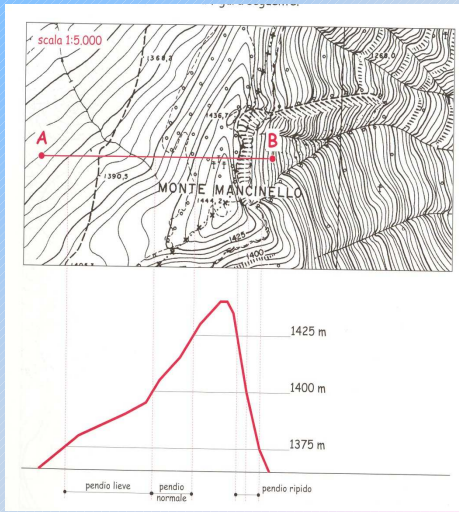
FORME DEL TERRENO

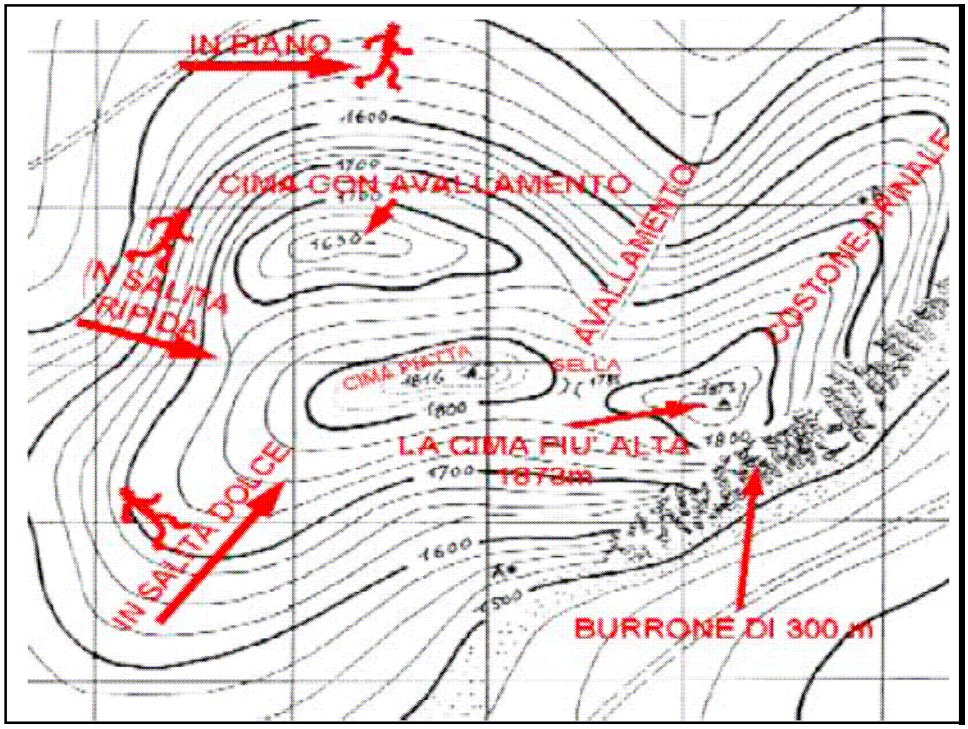


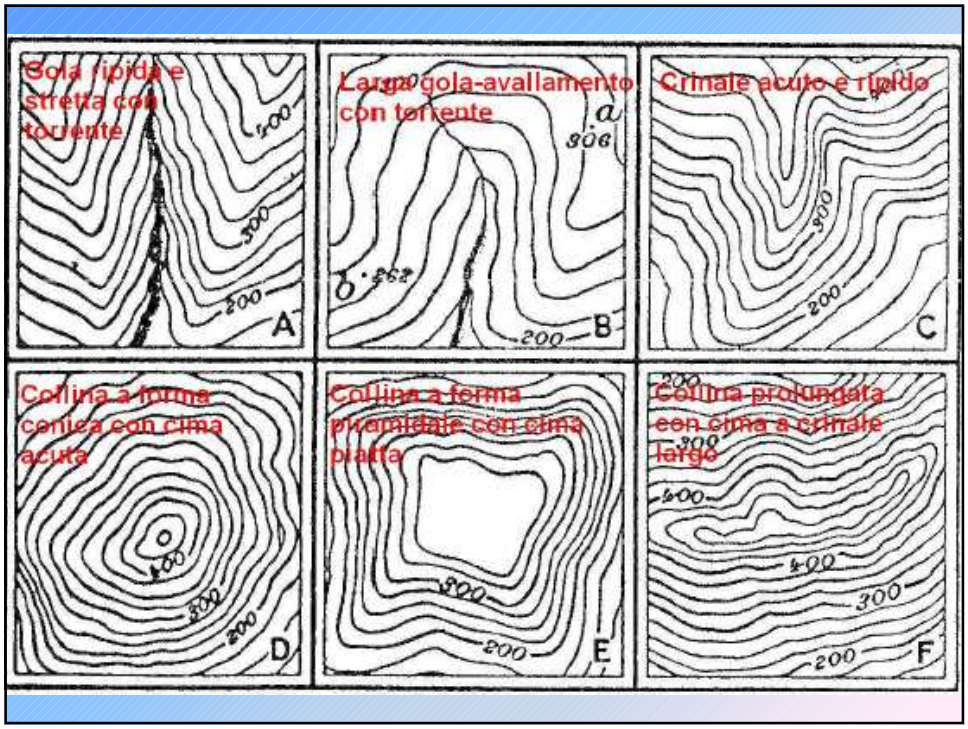


COSA CI DICE LA CARTA

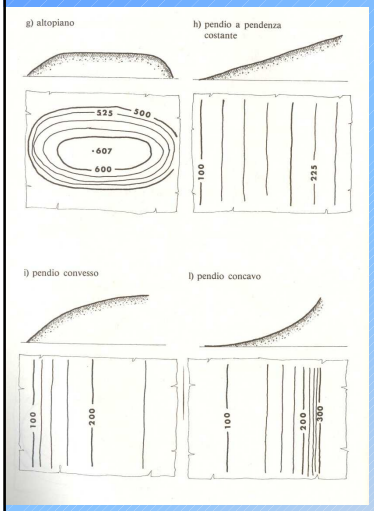


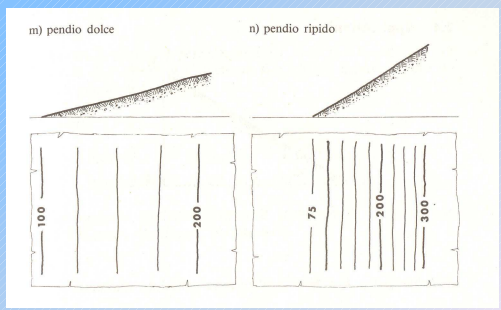



IN PIANO
CIMA CON AVALLAMENTO
IN SALITA RIPIDA
AVALLAMENTO
COSTONE TRIANGOLARE
CIMA PIATTA
SELLA
LA CIMA PIU' ALTA
1678m
IN SALITA DOLCE
BURRONE DI 300 m

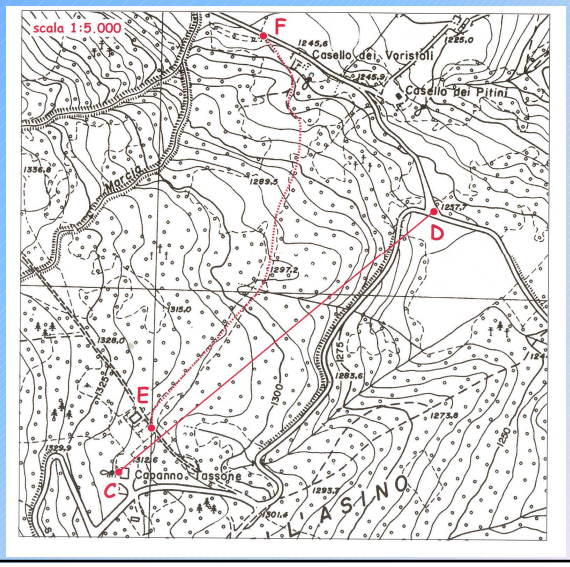

Gola ripida e stretta con torrente
A
Largo gola-avallamento con torrente
B
Crinale acuto e ripido
C
Collina a forma conica con cima acuta
D
Collina a forma piramidale con cima piatta
E
Collina prolungata con cima a crinale largo
F

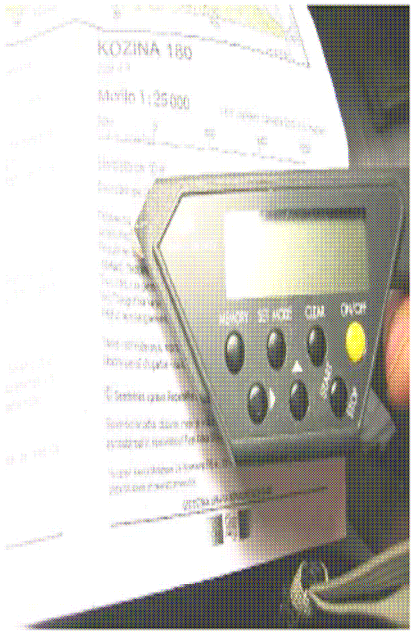
ALTRE FORME

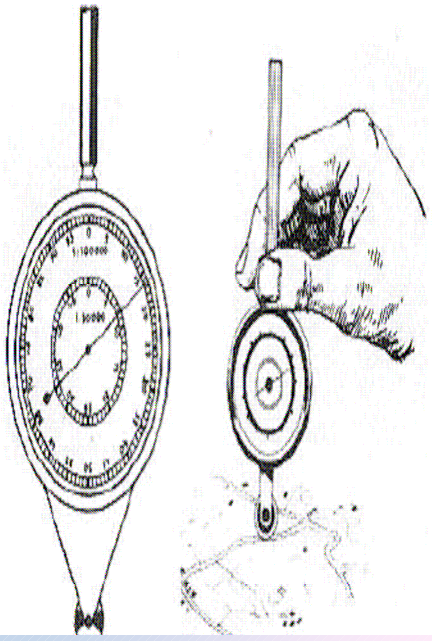




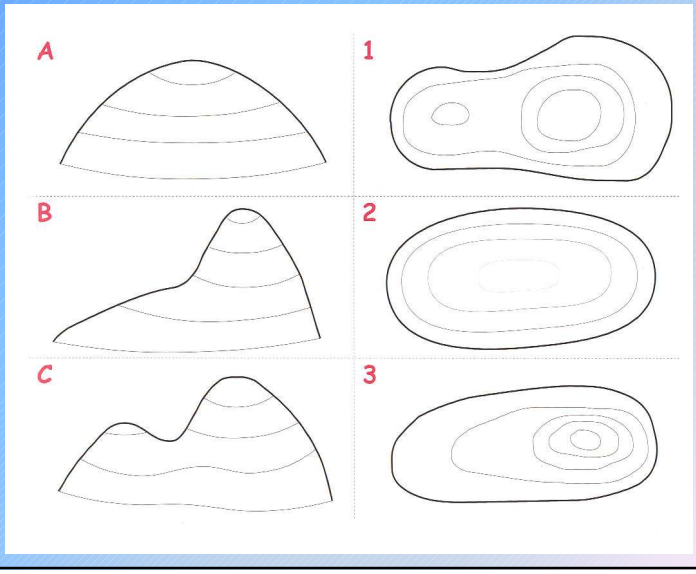
SAPRESTE CALCOLARE LA DISTANZA FRA I PUNTI?



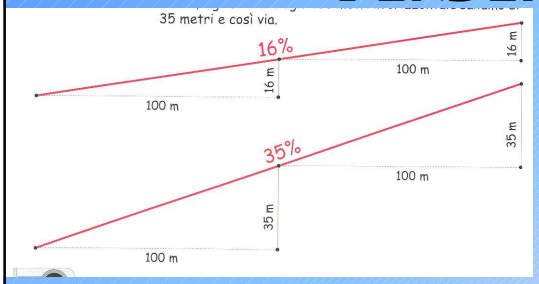




ESERCIZIO



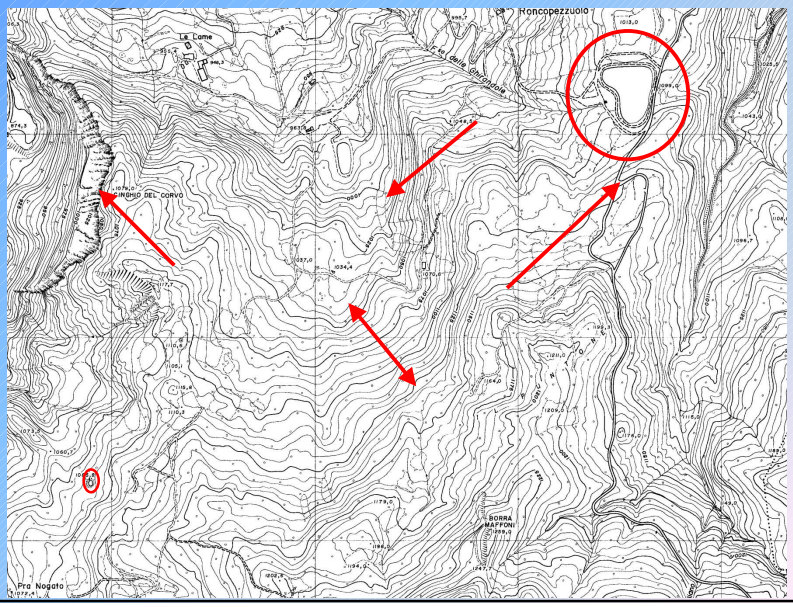
PENDENZA



✗ **pendenza = dislivello : distanza x 100**

p%	α	k	p%	α	k	p%	α	k
0	0	1,00	60	31,0	1,17	120	50,2	1,56
2	1,1	1,00	62	31,8	1,18	122	50,7	1,58
4	2,3	1,00	64	32,6	1,19	124	51,1	1,59
6	3,4	1,00	66	33,4	1,20	126	51,6	1,61
8	4,6	1,00	68	34,2	1,21	128	52,0	1,62
10	5,7	1,00	70	35,0	1,22	130	52,4	1,64
12	6,8	1,01	72	35,8	1,23	132	52,9	1,66
14	8,0	1,01	74	36,5	1,24	134	53,3	1,67
16	9,1	1,01	76	37,2	1,26	136	53,7	1,69
18	10,2	1,02	78	38,0	1,27	138	54,1	1,70
20	11,3	1,02	80	38,7	1,28	140	54,5	1,72
22	12,4	1,02	82	39,4	1,29	142	54,8	1,74
24	13,5	1,03	84	40,0	1,31	144	55,2	1,75
26	14,6	1,03	86	40,7	1,32	146	55,6	1,77
28	15,6	1,04	88	41,3	1,33	148	56,0	1,79
30	16,7	1,04	90	42,0	1,35	150	56,3	1,80
32	17,7	1,05	92	42,6	1,36	200	63,4	2,24
34	18,8	1,06	94	43,2	1,37	250	68,2	2,69
36	19,8	1,06	96	43,8	1,39	300	71,6	3,16
38	20,8	1,07	98	44,4	1,40	350	74,1	3,64
40	21,8	1,08	100	45,0	1,41	400	76,0	4,12
42	22,8	1,08	102	45,6	1,43	450	77,5	4,61
44	23,7	1,09	104	46,1	1,44	500	78,7	5,10
46	24,7	1,10	106	46,7	1,46	550	79,7	5,59
48	25,6	1,11	108	47,2	1,47	600	80,5	6,08
50	26,6	1,12	110	47,7	1,49	700	81,9	7,07
52	27,5	1,13	112	48,2	1,50	800	82,9	8,06
54	28,4	1,14	114	48,7	1,52	900	83,7	9,06
56	29,2	1,15	116	49,2	1,53	1.000	84,3	10,05
58	30,1	1,16	118	49,7	1,55	2.000	87,1	20,02

ESERCIZIO



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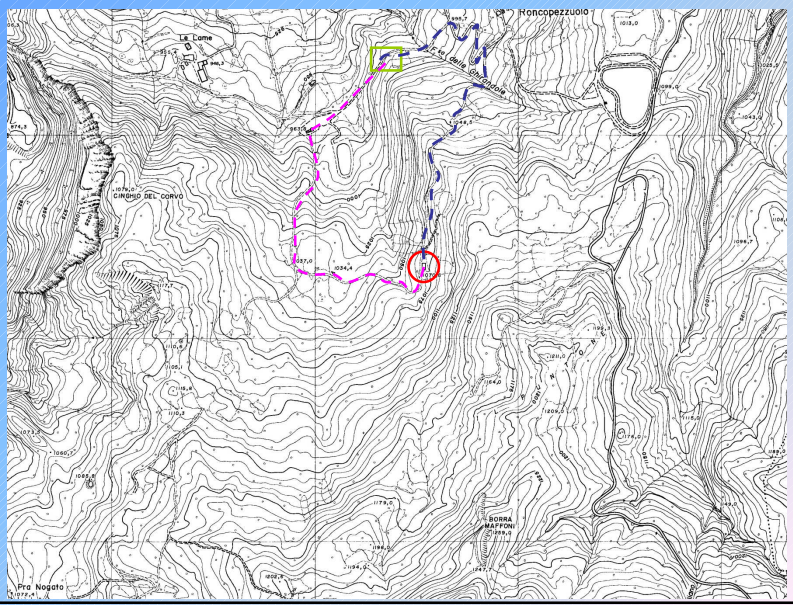
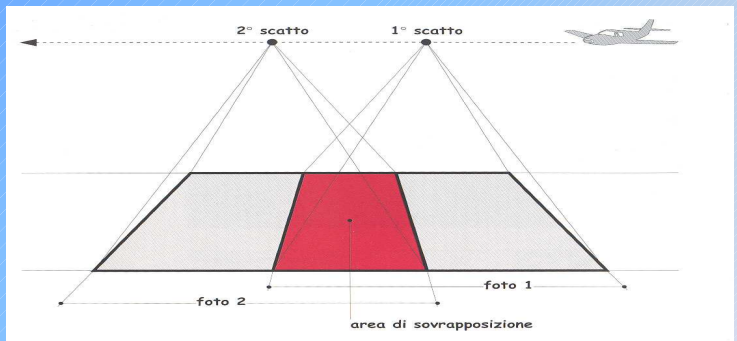
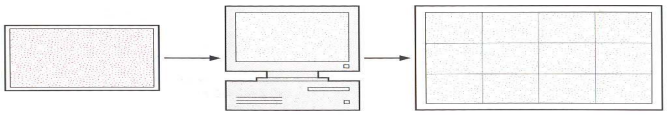


COME I REALIZZANO LE CARTE TOPOGRAFICHE

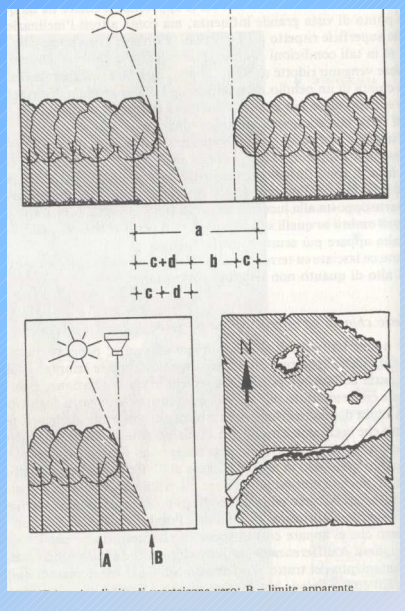


2. Le fotografie scattate dall'aeroplano vengono elaborate da un **computer** che le scansiona e ne ricava il prodotto desiderato, cioè la carta del territorio.



Volo quickbird 2003

Volo RER 2008

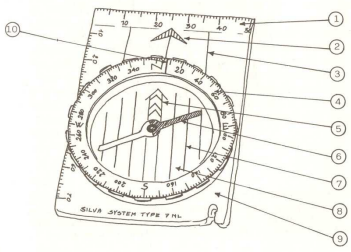


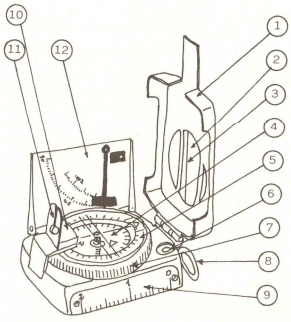
STRUMENTI

Gli strumenti

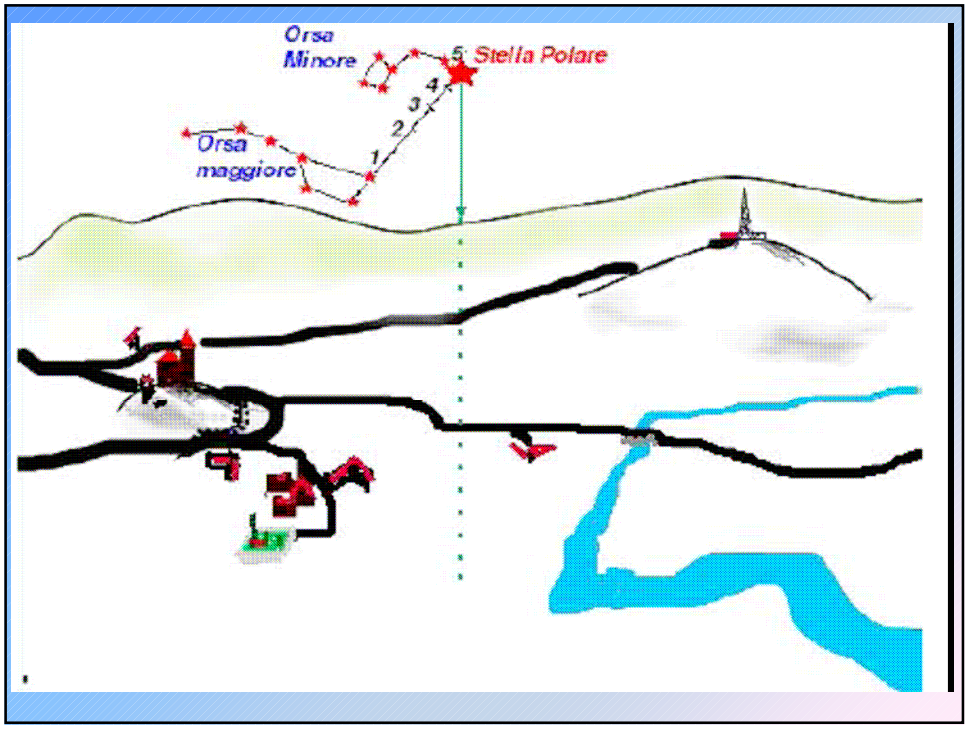
4.1 La bussola

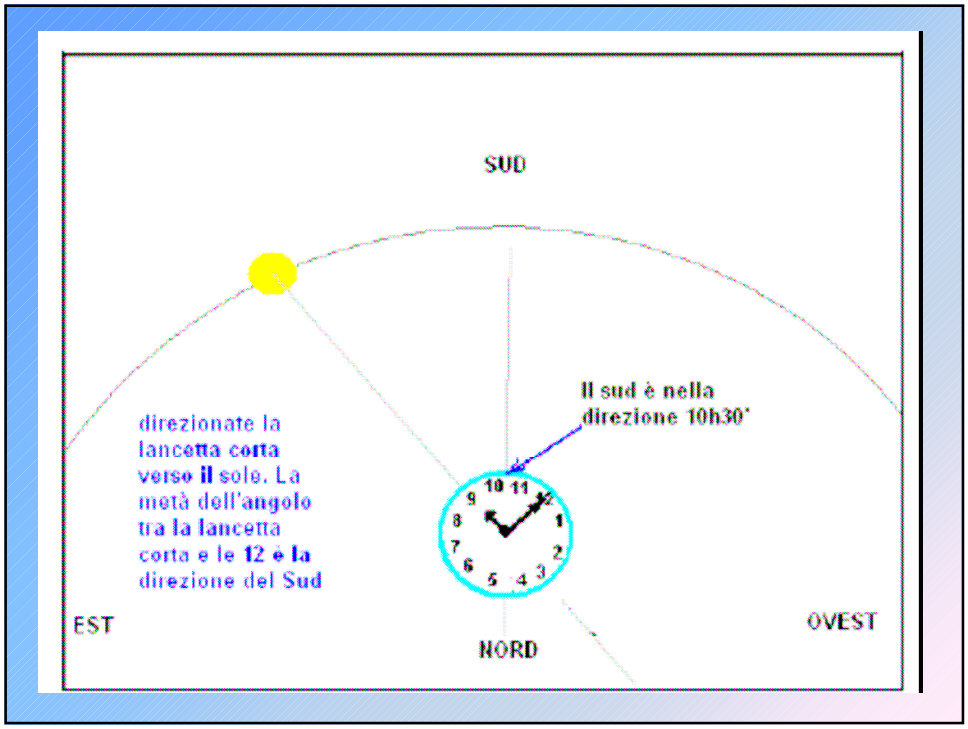
1) Scala
2) Freccia di direzione
3) Linee ausiliarie
4) Graduazione
5) Freccia del Nord
6) Ago magnetico (parte rossa Nord)
7) Linee meridiane
8) Capsula ruotante
9) Placca trasparente in resina acrilica
10) Linea indice

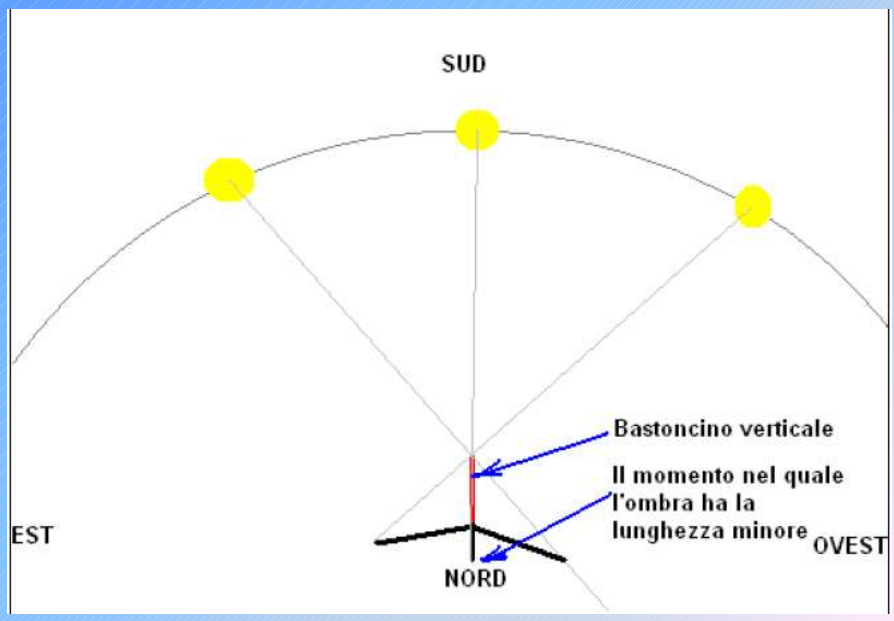




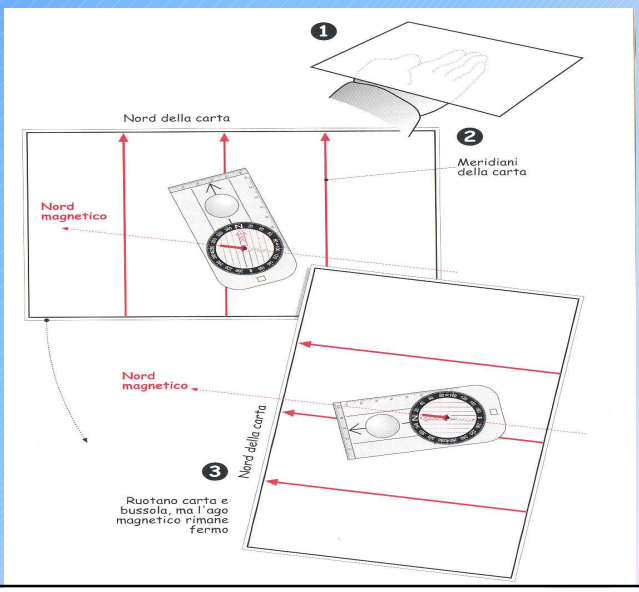
1) Coperchio ribaltabile; 2) Finestrella del coperchio; 3) Linea di mira incisa sul vetro; 4) Disco graduato girevole immerso nel liquido oleoso della capsula; 5) Graduazione esterna; 6) Livella a bolla; 7) Ghiera zigrinata; 8) Anello per il pollice; 9) Scala lineare; 10) Prisma; 11) Oculare e fessura di 3/10 mm; 12) Clinometro


Orsa
Minore
5
Stella Polare
4
3
2
1
Orsa
maggiore


SUD
direzionate la
lancetta corta
verso il sole. La
metà dell'angolo
tra la lancetta
corta e le 12 è la
direzione del Sud
Il sud è nella
direzione 10h30'
EST
OVEST
NORD



ORIENTARE LA CARTA

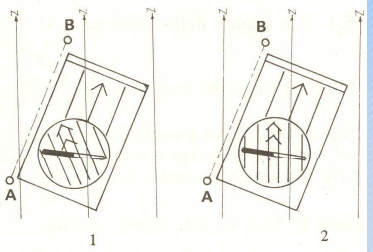


COME USARE LA BUSSOLA

DALLA CARTA AL TERRENO

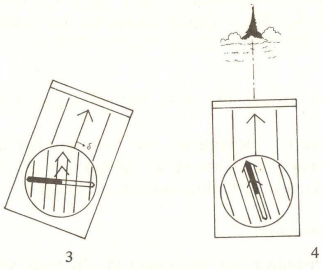
1 - Disporre la bussola sulla carta, col bordo lungo il percorso da seguire e freccia verso la destinazione.

2 - Rendere parallele le linee meridiane della capsula con i meridiani della carta.

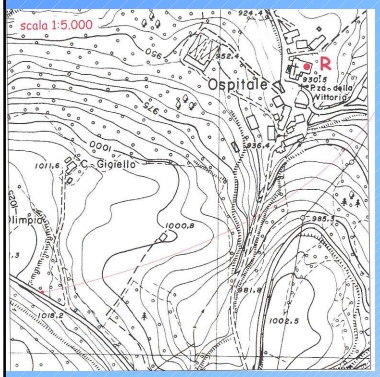


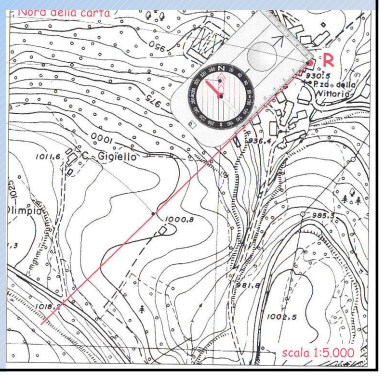
3 - Correggere la declinazione (o variazione) magnetica.

4 - Ruotare con la bussola, fino a che l'ago non sia parallelo alla freccia del nord (parte rossa dell'ago, verso la punta).

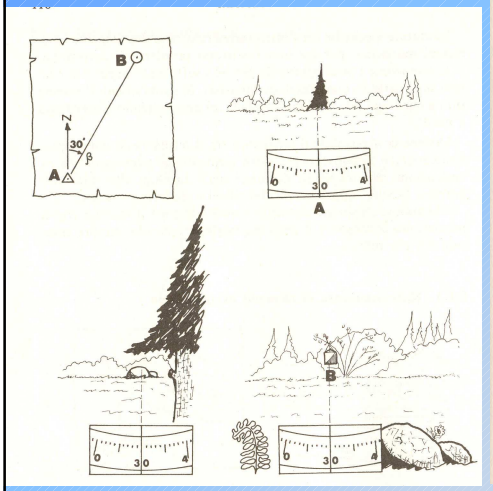


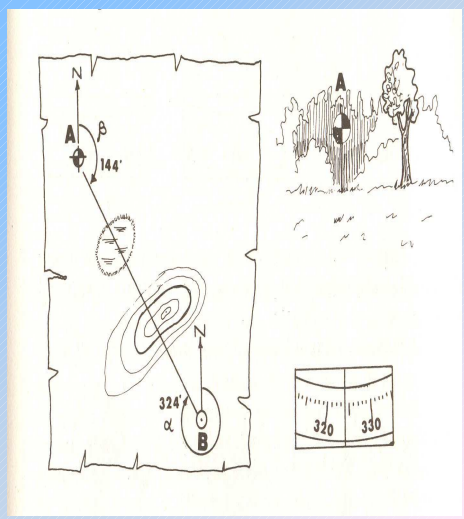
DAL TERRENO ALLA CARTA



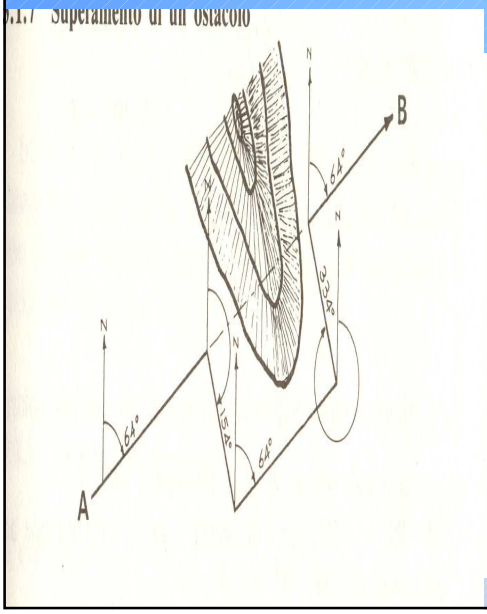


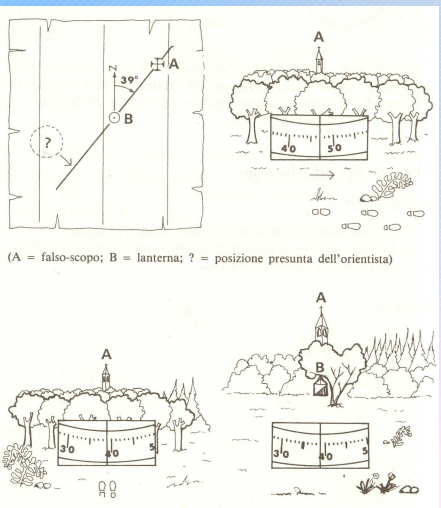
ESEMPI DI PROGRESSIONE



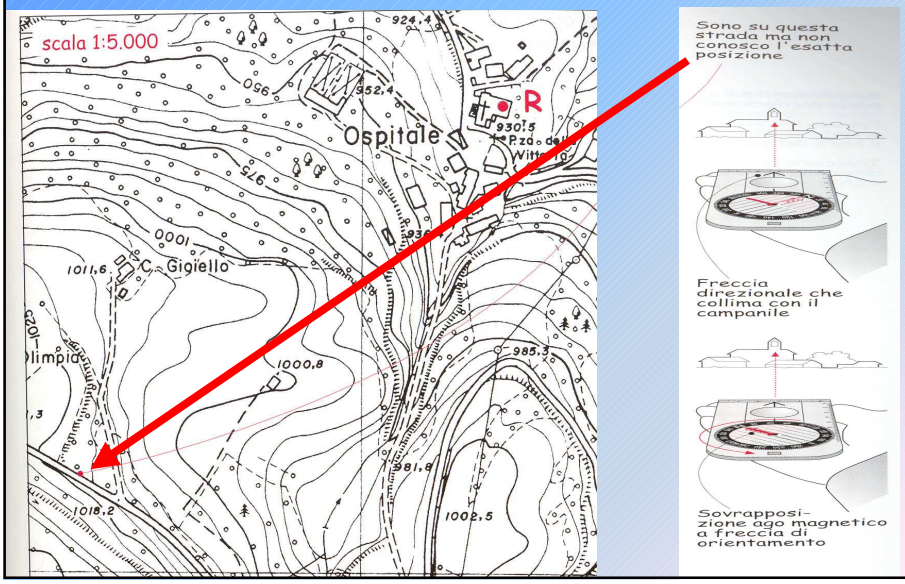


ALTRI ESEMPI

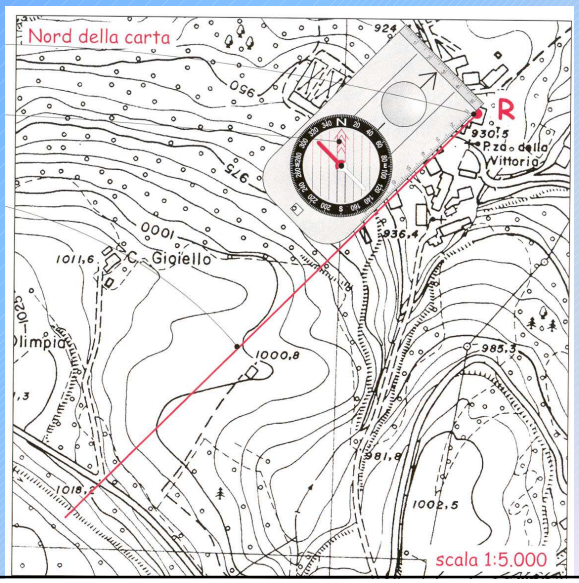


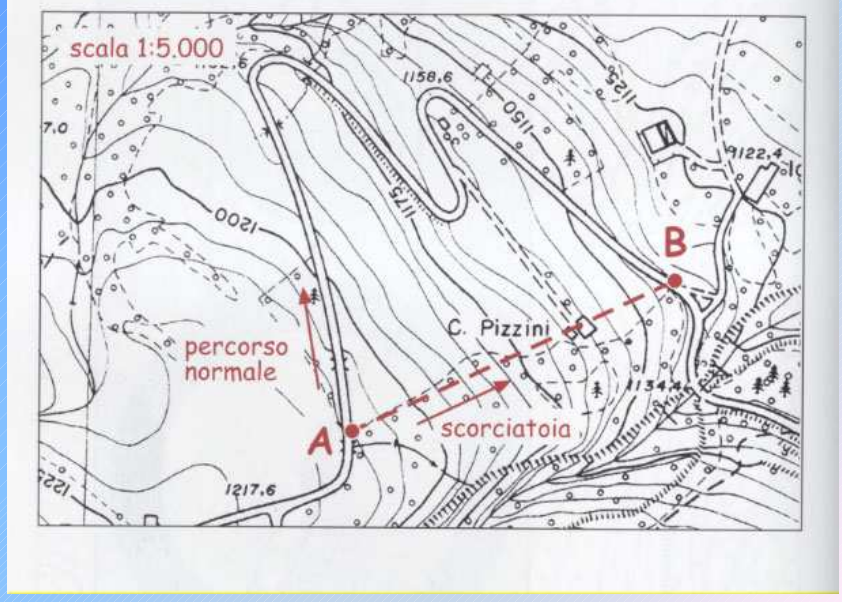


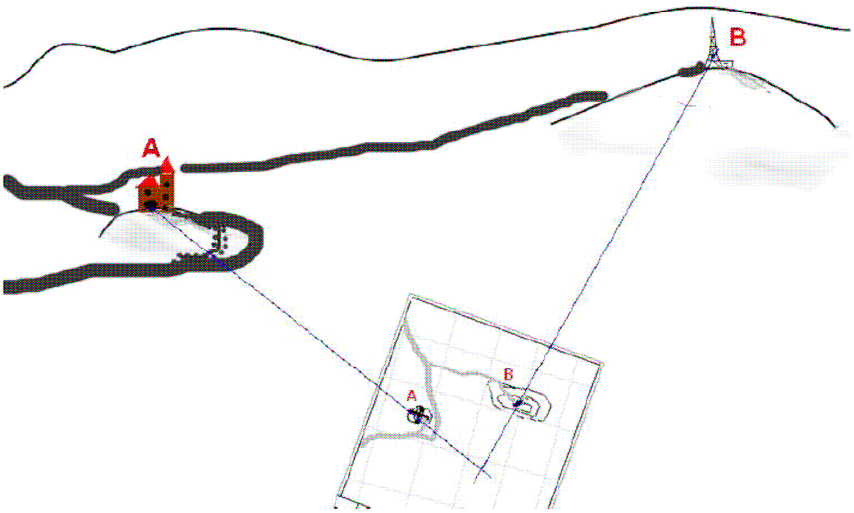
COME TROVARE IL PUNTO DI PARTENZA



TROVATO IL PUNTO!

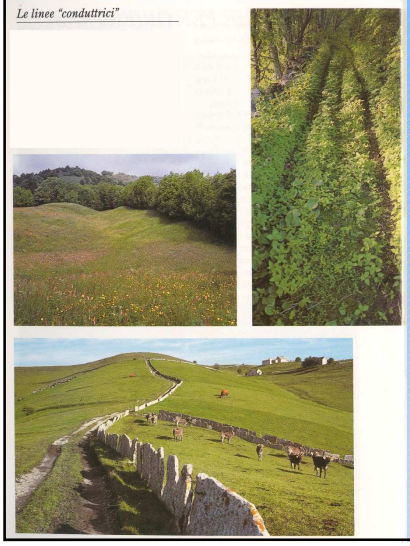



scala 1:5.000
1158,6
1150
1175
1200
1217,6
1134,4
B
C. Pizzini
percorso
normale
A
scorciatoia

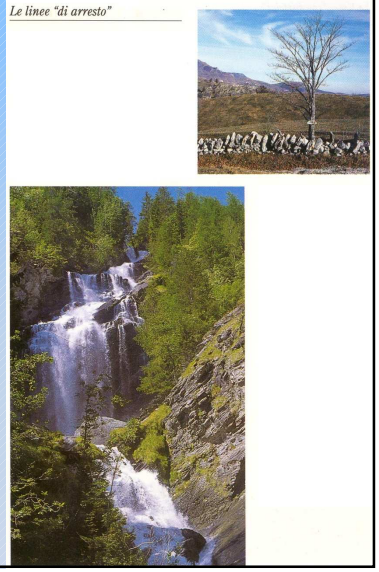

A
B
A
B

COSA OSSERVARE SUL TERRENO

Le linee "conduttrici"

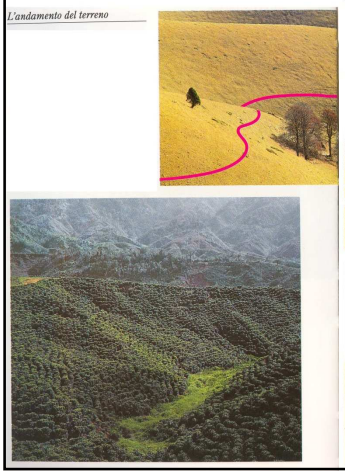


Le linee "di arresto"

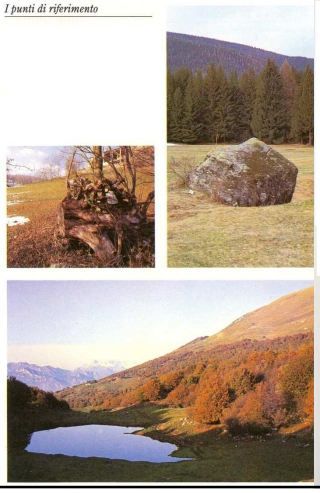


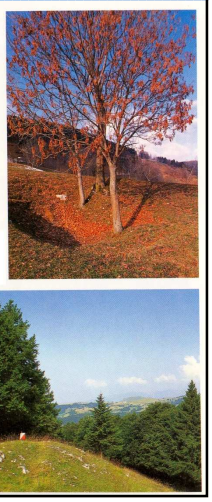
ALTRI ELEMENTI

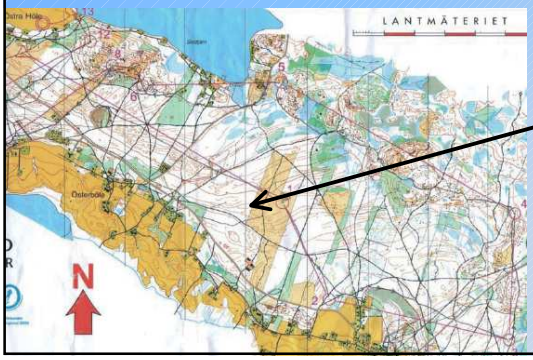
L'andamento del terreno



I punti di riferimento

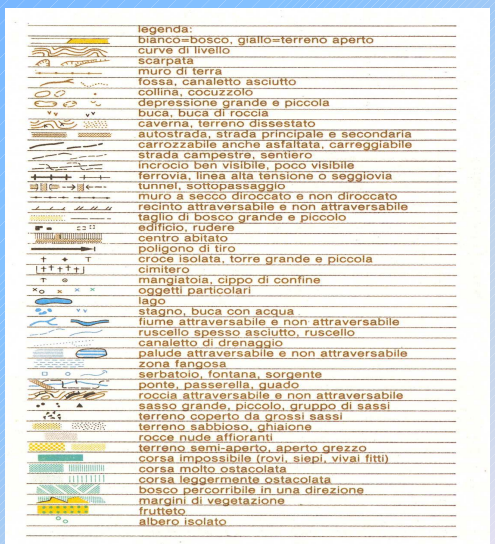


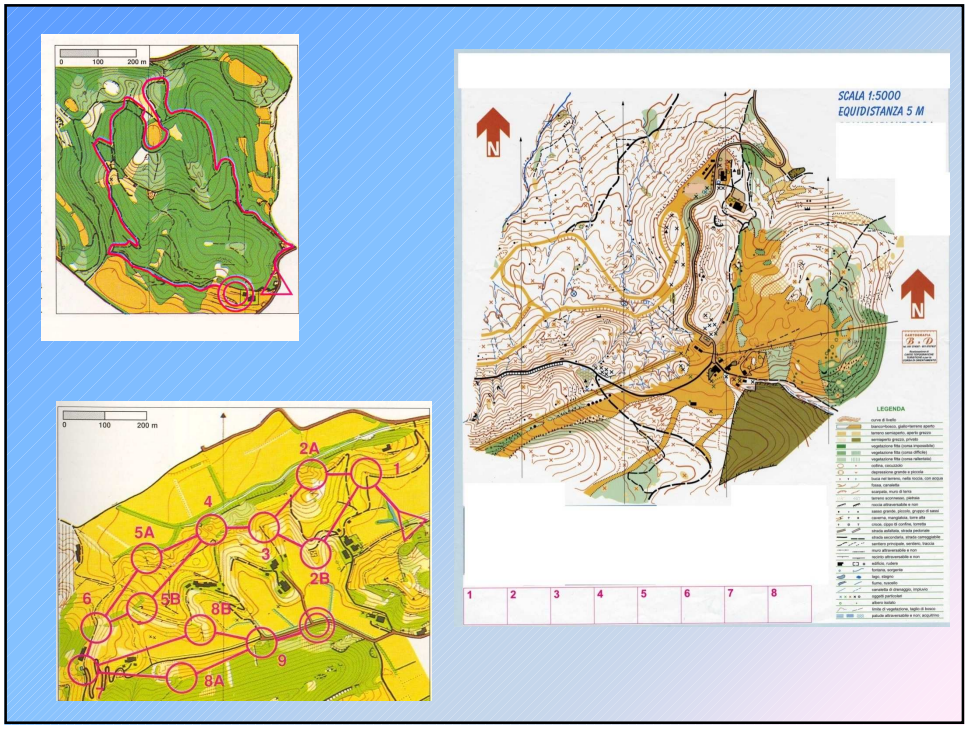




L'ORIENTAMENTO E' ANCHE UNO SPORT

LA LEGENDA DELLE CARTE DA GARA




0 100 200 m
SCALA 1:5000
EQUIDISTANZA 5 M
LEGENDA
2A
1
4
5A
3
2B
6
5B
8B
9
8A


ORIENTEERING
GRAZIE PER
L'ATTENZIONE
Vai dove
ti porta la
mappa