

Internal Alps worksheet

This worksheet is to be used in conjunction with the virtual field excursion to the Internal Alps. Students can use this sheet to help answer the related MCQ. You are advised to enlarge this sheet onto A3....

MATTERHORN

After plotting a stereogram of the structural data you can sketch this on the template provided.

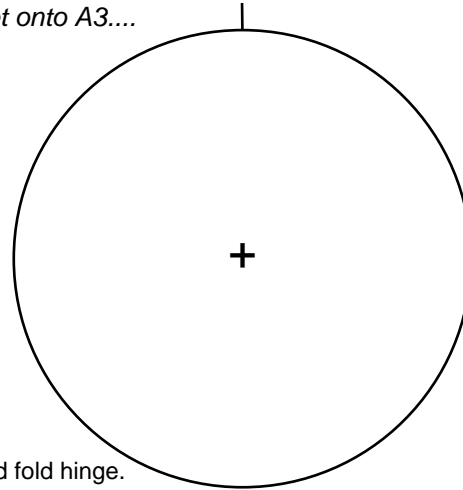
How do the deformation fabrics compare across the contact at the base of the Dent Blanche klippe?

What is the sense of shear implied by the photograph?

What is the relationship between the fold hinge lines and the stretching lineations?

Discuss the relationship between stretching lineation and fold hinge.

Discuss the nature and deformation state of the Combin metasediments. Can you estimate the approximate axial ratio and orientation of the apparent strain ellipse?

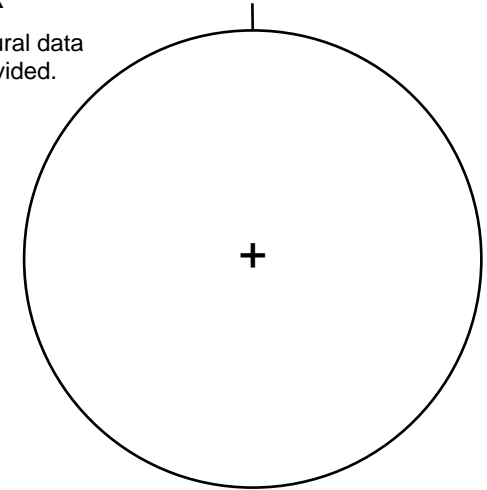


MATTMARK

After plotting a stereogram of the structural data you can sketch this on the template provided.

What is the attitude and interlimb angle of the fold?

How would you describe the fold and its kinematic formation?



VERRES

What is the angle between the location and shape fabric?

What is the value of shear strain implied for the deflection of the aplite branches?

COMPARISONS BETWEEN SITES

List the structures found in the three Internal Alps sites.

What is the chief shearing direction found in the sites (is it broadly consistent)?

Which of the following terms best describe the deformation in the Internal Alps?

Lots of cataclasis and brittle faulting

Pressure solution

Upright folds

Open folds

High values of distortional strain

Intense shear that has made different linear and different planar structures near parallel

recumbent and tight folds

Strong stretching lineations

Sheath folds

Fault-bend folds

COMPARISONS BETWEEN INTERNAL AND EXTERNAL ZONES

Contrast the types of small-scale structures and the large-scale structural styles between the Internal and External Alps.

How do the movement-direction indicators compare between the two zones?