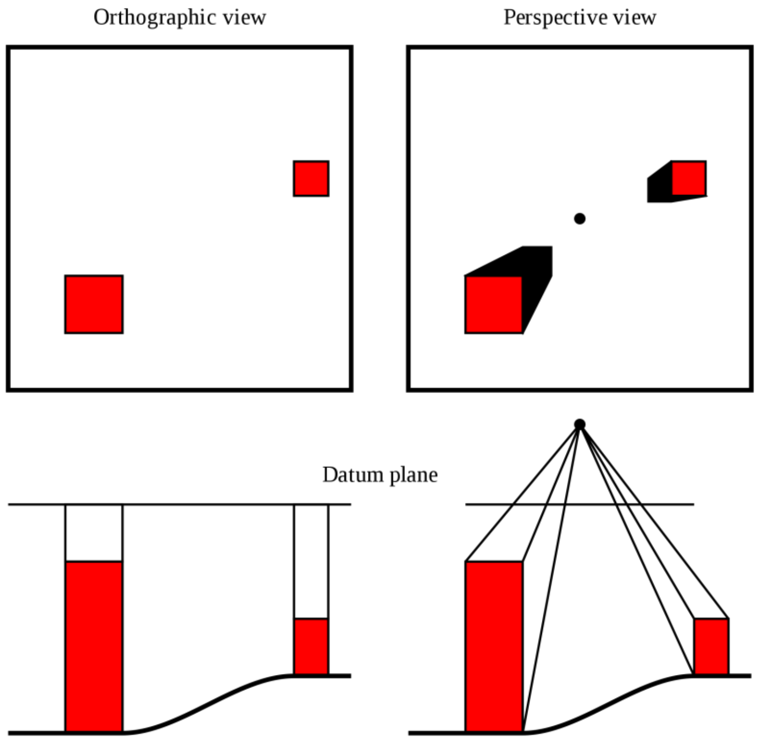
ORTHOPHOTO

An orthophoto or orthoimage is an image from above that has been geometrically corrected ("orthorectified") such that the scale is uniform across all the image points.

An orthoimage can be used to measure true distances.

An orthomosaic is an image made by merging orthophotos

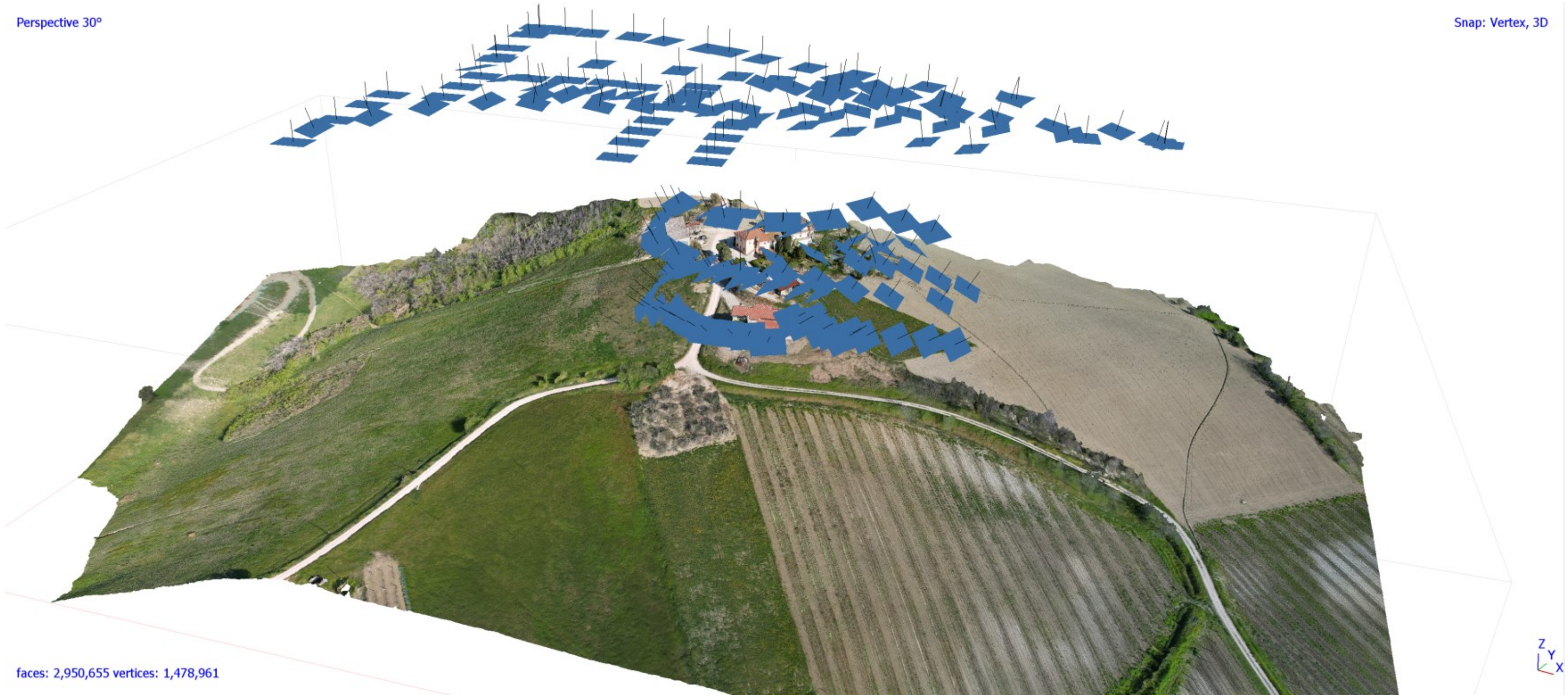
ORTHOPHOTO

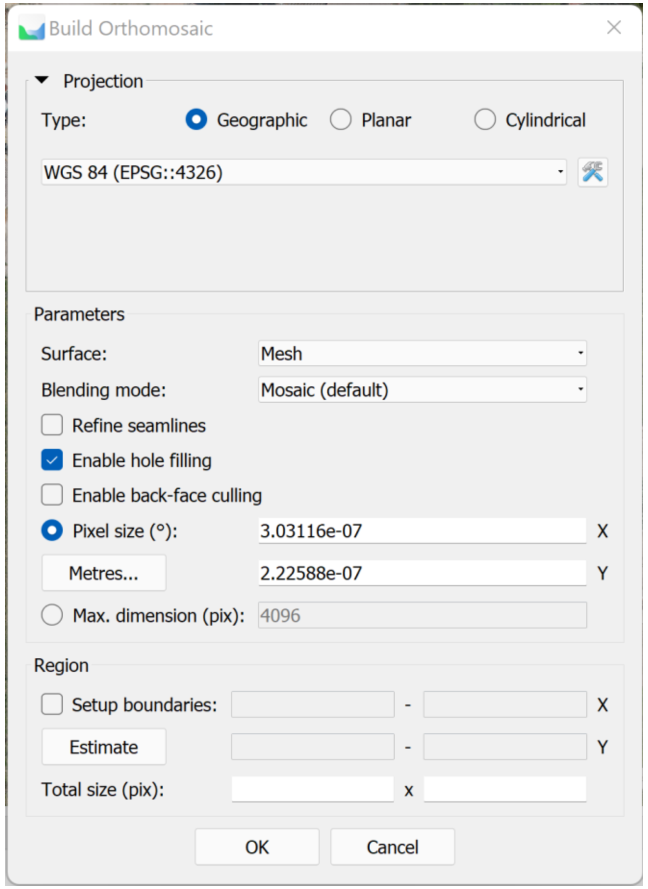


An orthoimage is produced through orthographic projection in which all the projection lines are orthogonal to the projection plane.

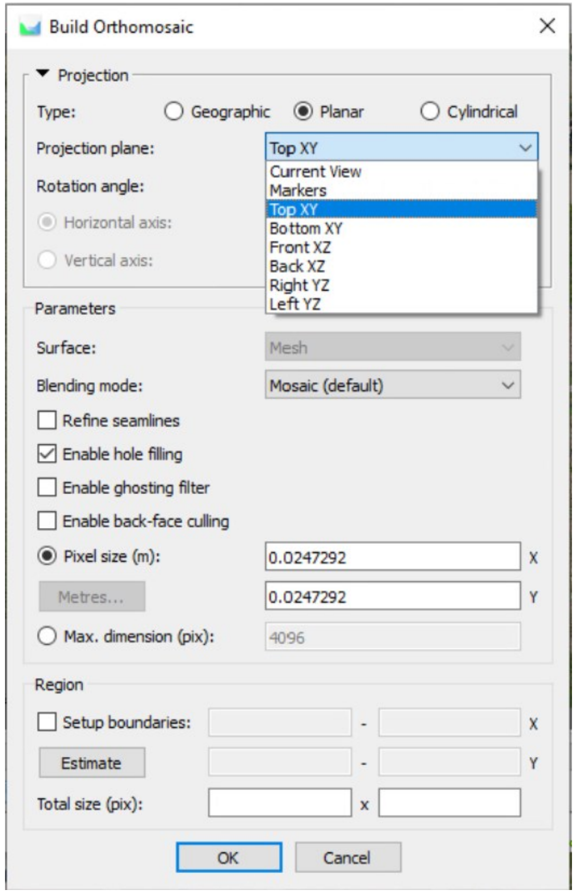
WHICH IMAGE IS THE ORTHOMOSAIC? HOW CAN YOU RECOGNIZE THEM?

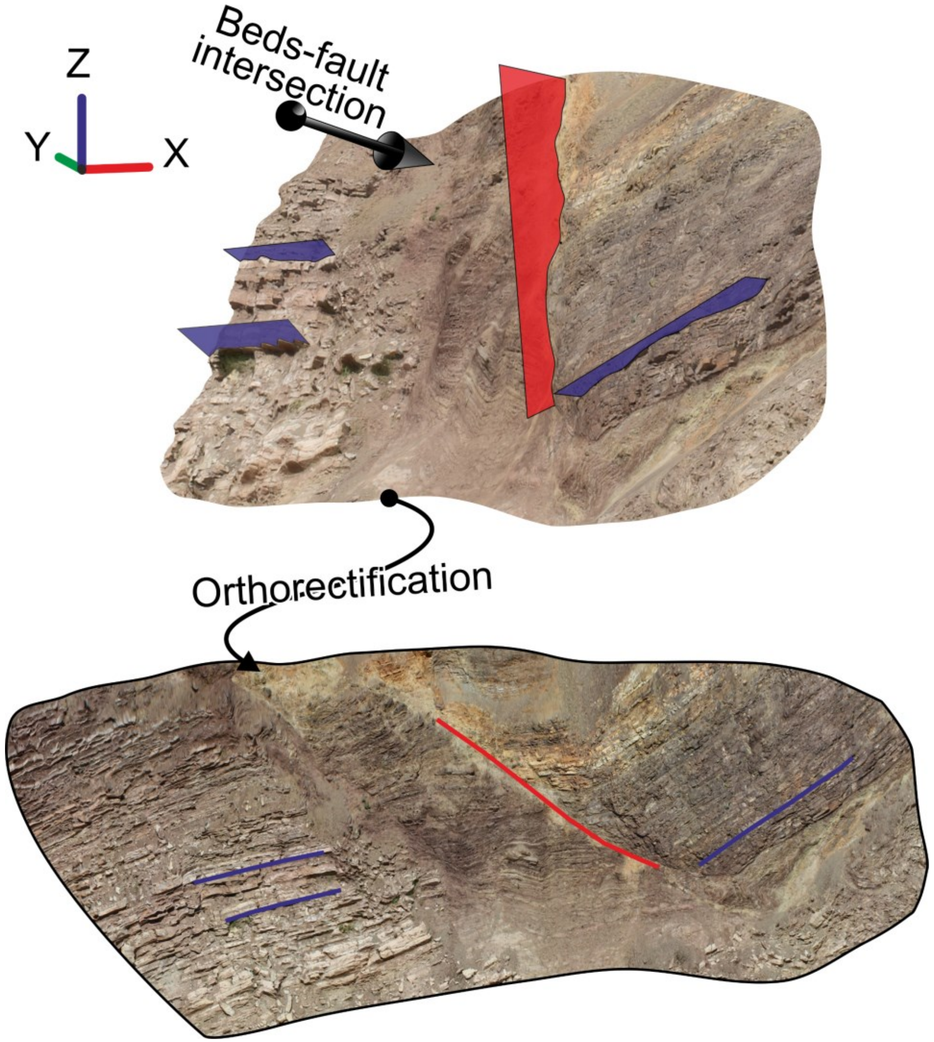
Orthomosaic in Metashape



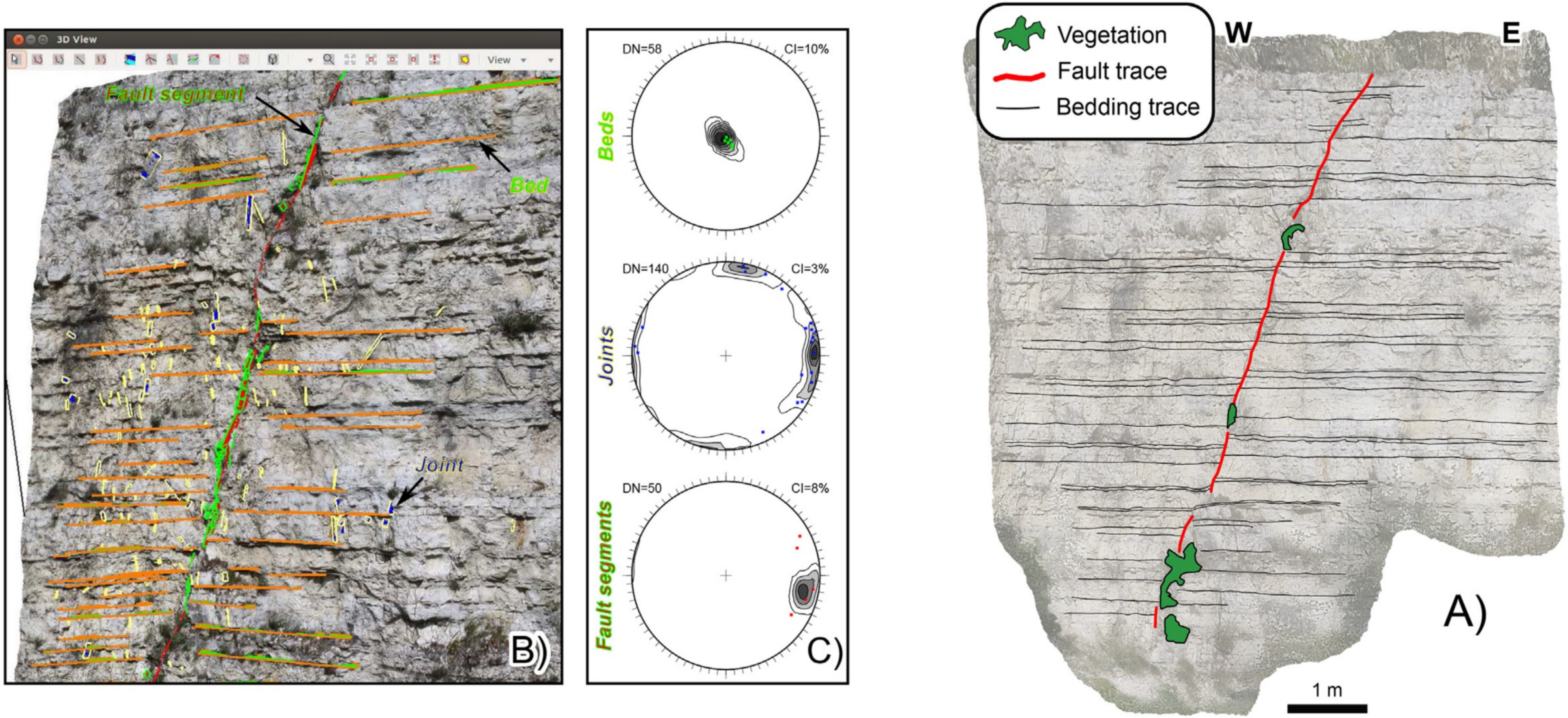


ORTHOMOSAIS OF VOMS

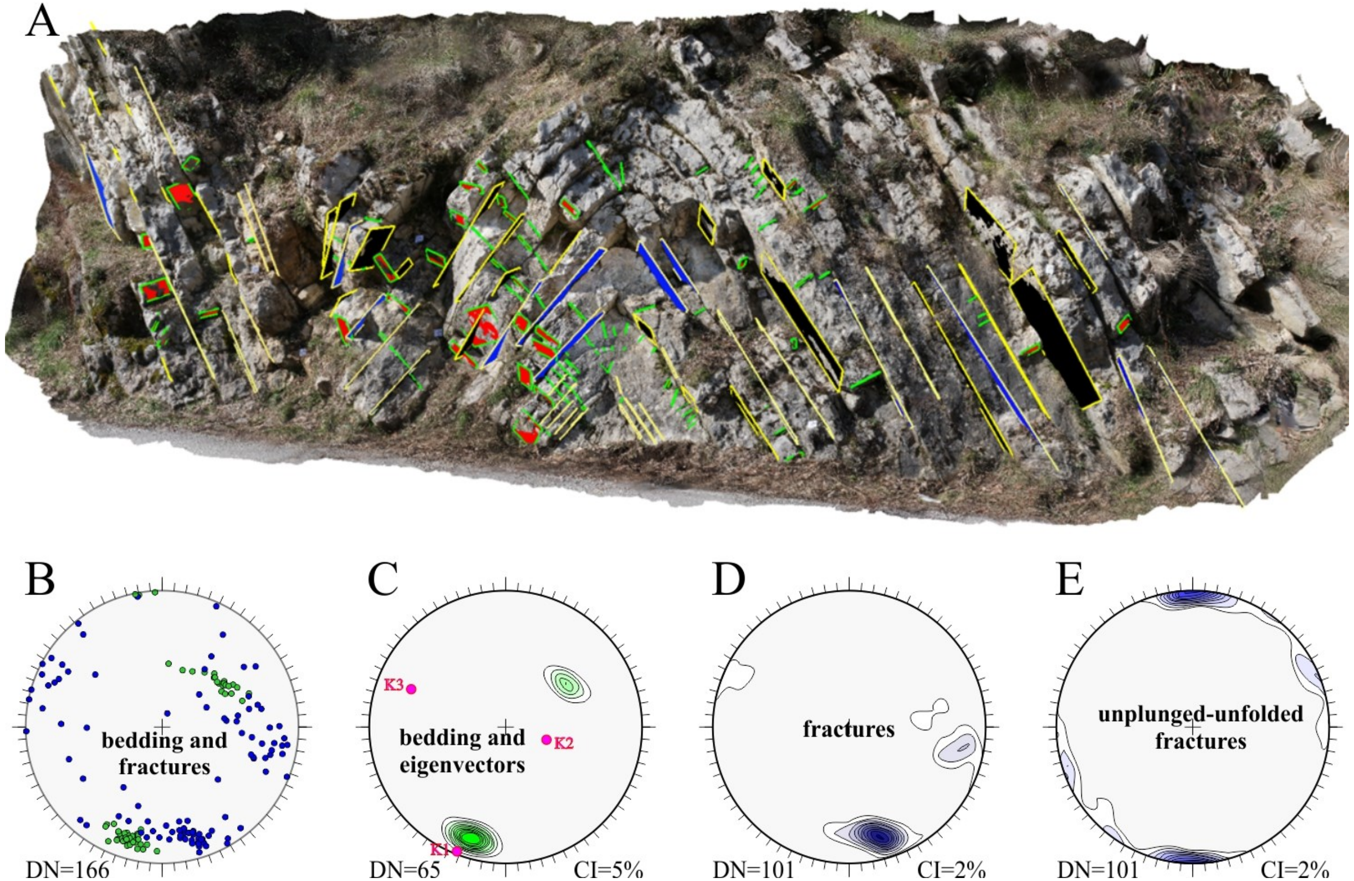


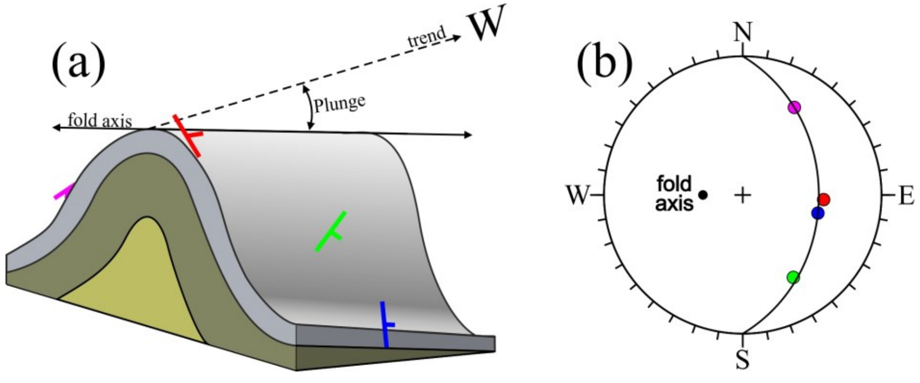


Orthomosais of VOMs



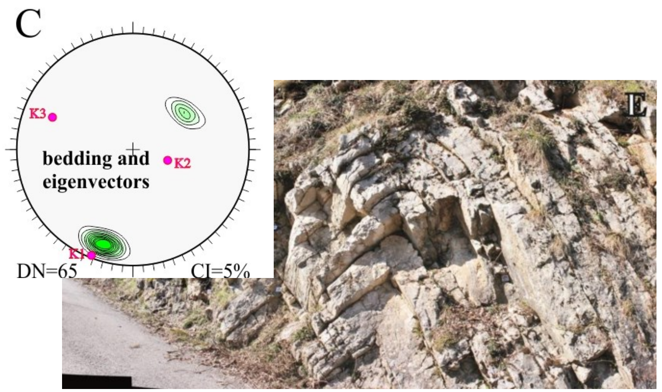
ORTHOMOSAIS OF VOMs

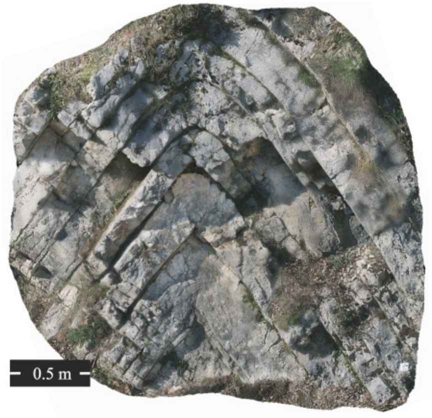


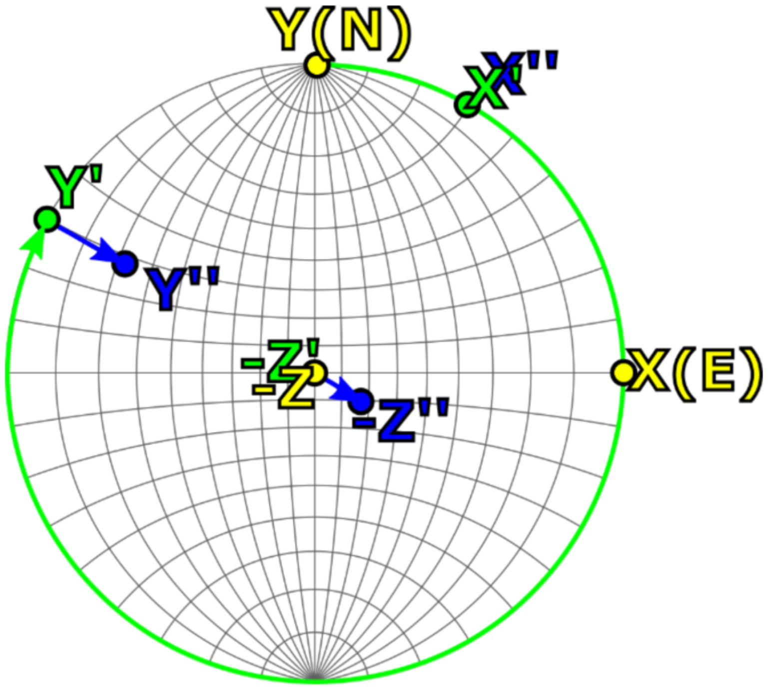


CHANGE OF BASIS

A change of basis consists of converting every assertion expressed in terms of coordinates relative to one basis into an assertion expressed in terms of coordinates relative to the other basis.







$$R_z(azimuth[\alpha]) = \begin{bmatrix} \cos(\alpha) & -\sin(\alpha) & 0 \\ \sin(\alpha) & \cos(\alpha) & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

to rotate of an angle α around the Z axis, and by:

$$R_x(dip[\delta]) = \begin{bmatrix} 1 & 0 & 0 \\ 0 & \cos(\delta) & -\sin(\delta) \\ 0 & \sin(\delta) & \cos(\delta) \end{bmatrix}$$

to rotate of an angle δ around the X axis.