

V699-4

Bedrock Geology of the Cold Hollow Mountains Quadrangle, by B. Doolan, C. Hengstenberg, B. Copans, K. Brooks and D. Sonenburg

Sweetsburg Formation

COs Graphitic phyllite and/or black calcareous slate, locally with thin marble beds,

Fairfield Pond Formation

CZfp Rusty-weathering, greenish to greenish gray phyllite and phyllitic schist with fine bedding laminations.

Jay Peak Formation

CZj Fine-grained, light gray-green quartz-chlorite-albite phyllitic schist and quartzite; white quartzofeldspathic layers alternate with green chloritic phyllitic layers.

Underhill Formation

CZu Quartz-albite-chlorite-sericite schist with magnetite of variable abundances.

Fayston Formation

CZf: Silver-green weathering chlorite-quartz-muscovite schist and gneiss +/- albite (white to gray) +/- magnetite; local white quartzite layers; local quartz-feldspar-biotite-muscovite gneiss.

Hazens Notch Formation

CZhn: Rusty weathering quartz-muscovite-chlorite +/- albite (gray to black) +/- garnet schist interlayered with black-weathering graphitic quartz-muscovite-chlorite schist; rusty weathering quartz-muscovite-pyrite schist, +/- tourmaline +/- ilmenite; black and white quartzite; local quartz-feldspar-biotite gneiss. Also, layers similar to Mount Abraham Formation, especially near Peaked Mountain Greenstone.

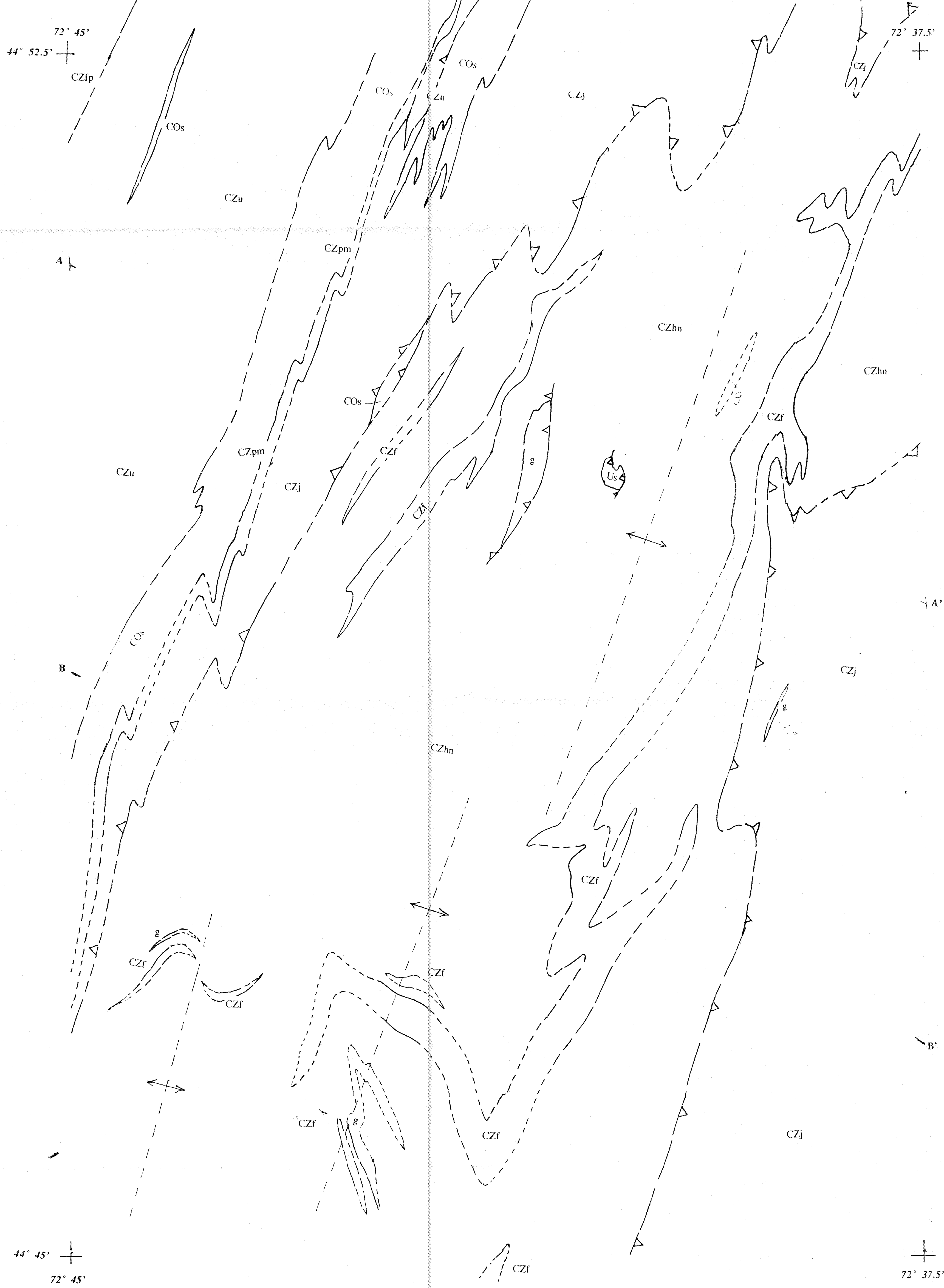
CZpm :Peaked Mountain Greenstone: chlorite-albite-epidote-carbonate greenstone, +/- magnetite +/- amphibole.

g: Thinner layers and lenses of chlorite-albite-carbonate greenstone.

Us: serpentine; talc-carbonate schist

g Greenstone: chlorite-albite-epidote-calcite- magnetite/ilmenite schist.

Plate 1: Geologic Map and axial traces of Green Mountain anticlinorium



Cold Hollow Mountains Quadrangle (Lithic Contacts and Faults)

Geology by: Barry Doolan (south), Carey Hengstenberg and Kim Brooks (northwest), Ben Copens and Dave Sonenberg (northeast).  
Scale: 1:24,000

72° 45'  
+ 44° 52.5'

Plate 2: Outcrop locations

Cold Hollow Mountains Quadrangle (Outcrop)

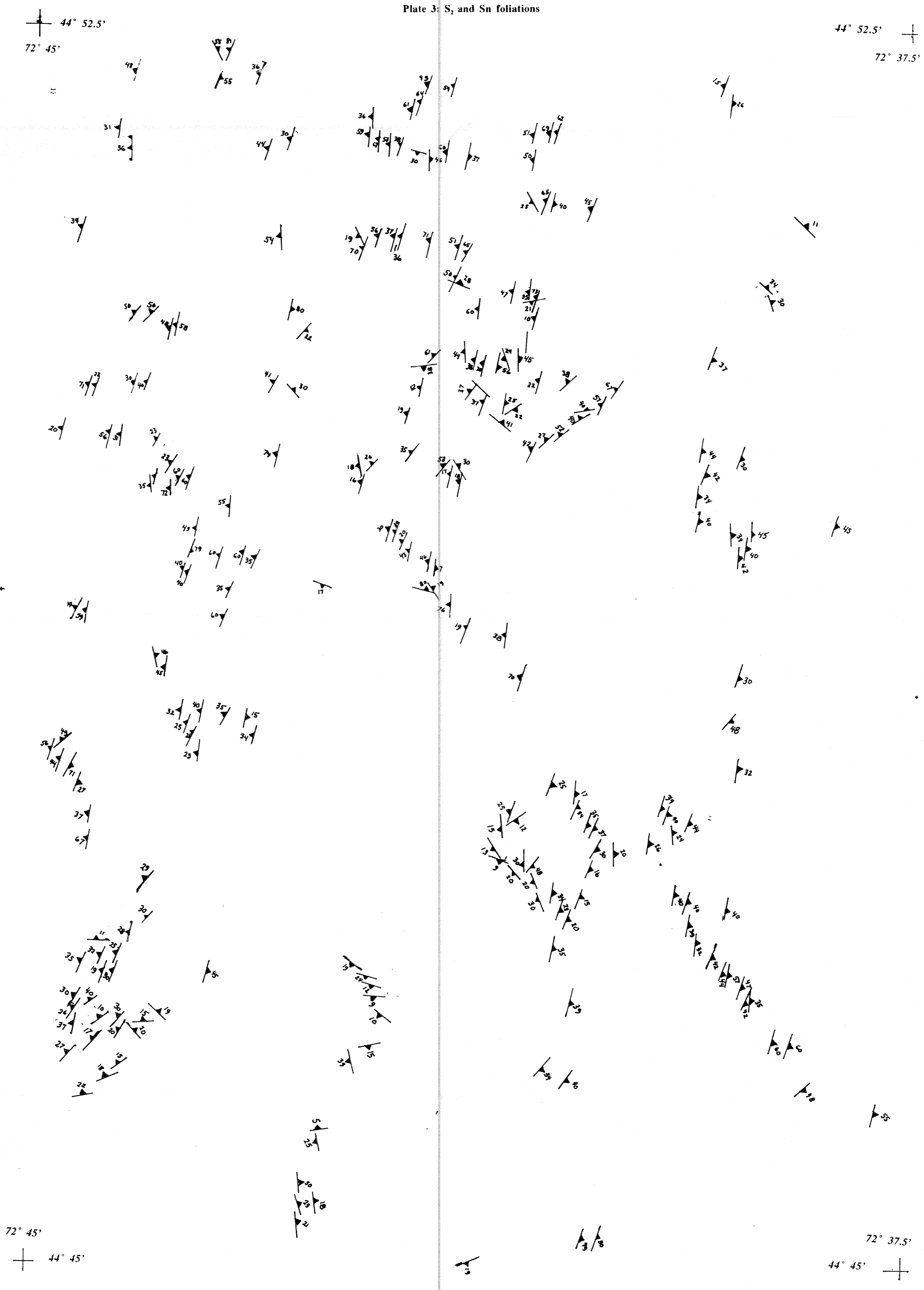
72° 37.5'  
+ 44° 52.5'



+ 44° 45'

+ 44° 45'

Plate 3: S<sub>2</sub> and S<sub>n</sub> foliations

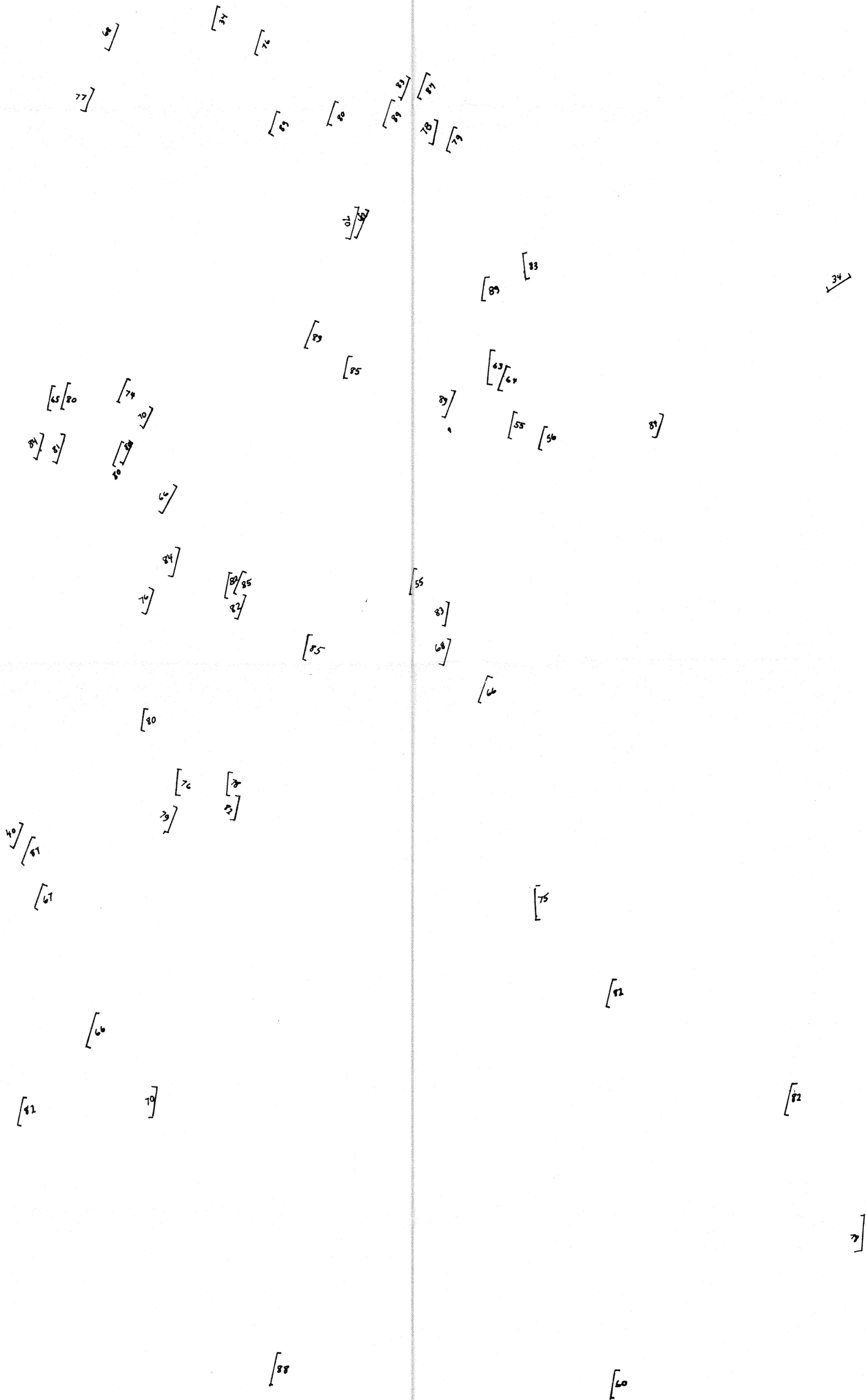


S<sub>3</sub> FOLIATION / Cleavage Data

Plate 4: S<sub>3</sub> cleavage

72° 45'  
44° 52.5'

72° 37.5'  
44° 52.5'



44° 45'  
72° 45'

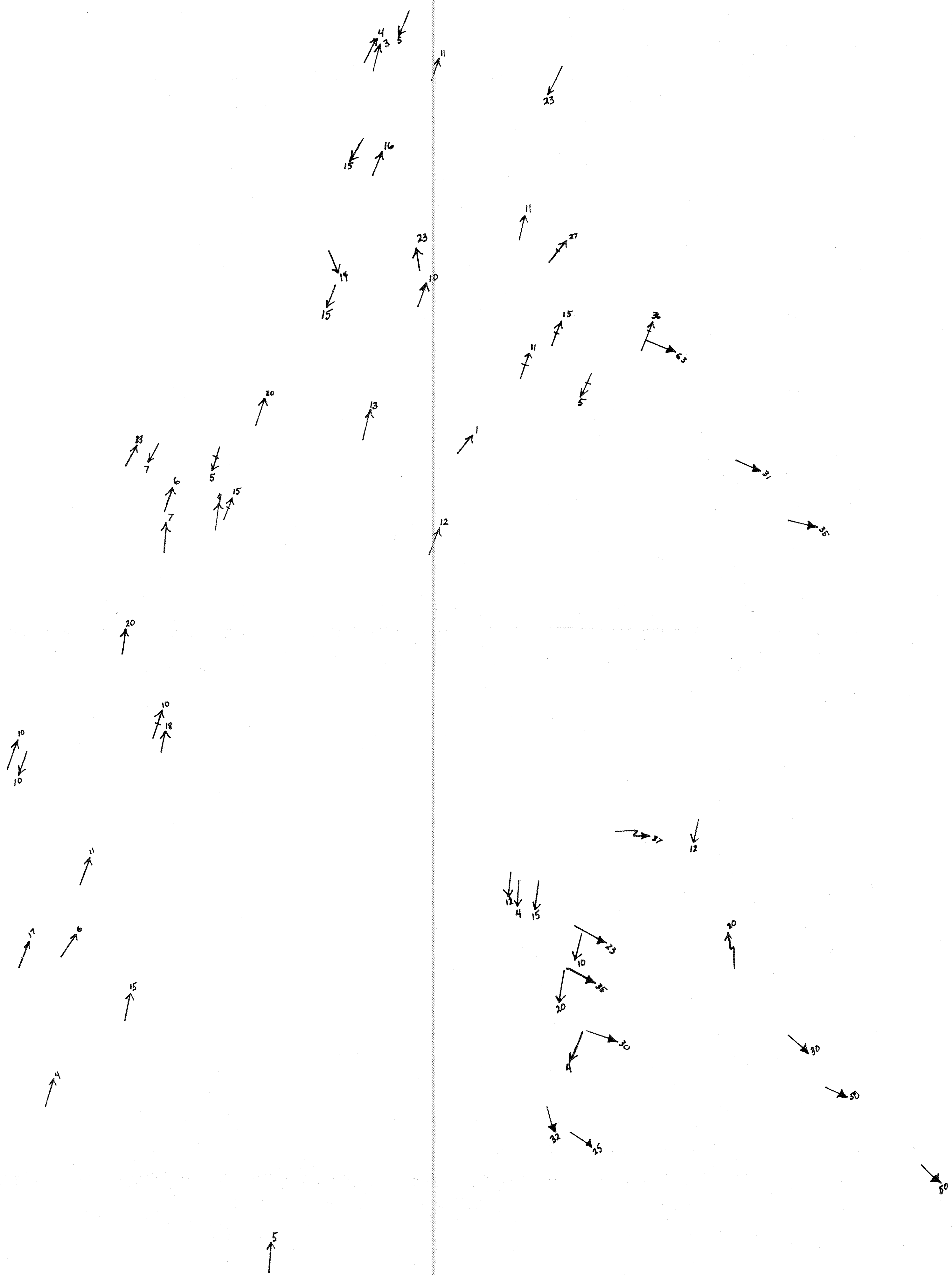
44° 45'  
72° 37.5'

72° 45'  
+ 44° 52.5'

→ 23  
F<sub>2</sub>/S<sub>2</sub> Qtz rods/Smear lineation + F<sub>2</sub> fold hinge  
→ 32 F<sub>2</sub> Fold hinge (dextral)

↑\* F<sub>3</sub> fold hinge  
↑<sup>||</sup> L<sub>3</sub><sup>2</sup> intersection of S<sub>2</sub> or S<sub>n</sub> on S<sub>3</sub>

72° 37.5'  
+

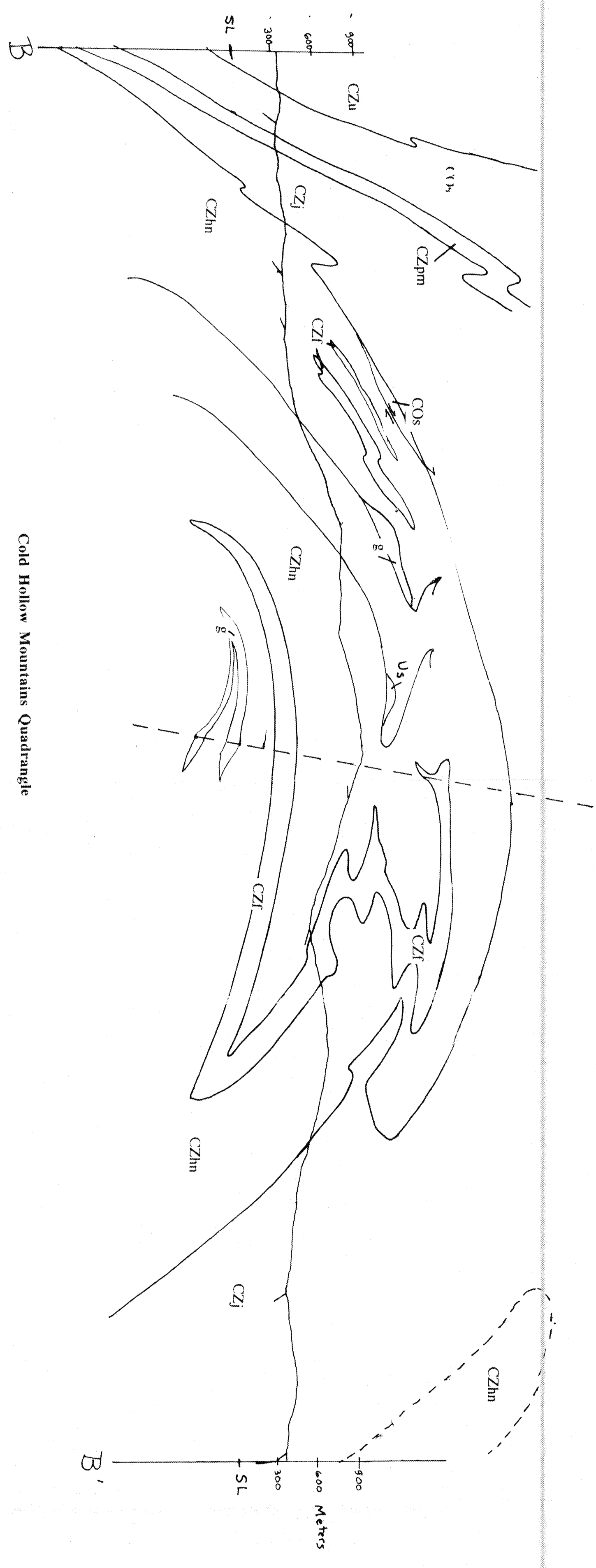
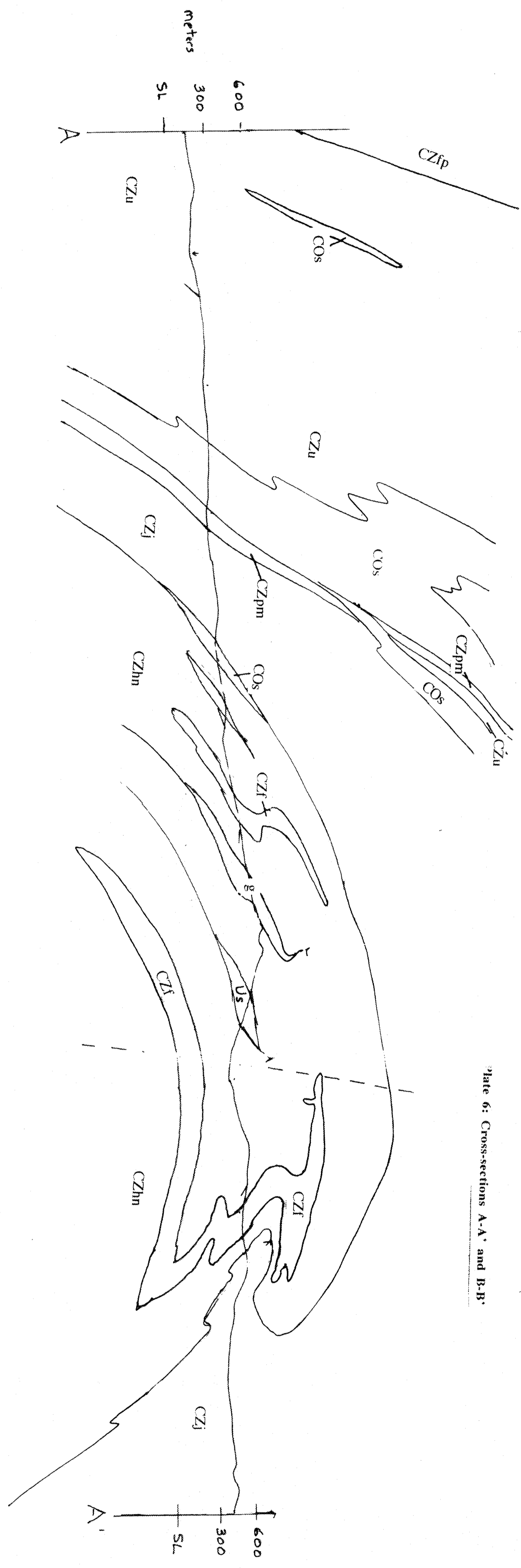


+ 44° 45'  
72° 45'

Plate 5: F<sub>2</sub> fold axes; F<sub>3</sub> fold axes; S<sub>2</sub> lineations; L<sub>3</sub><sup>2</sup> intersections

+ 72° 37.5'

Plate 6: Cross-sections A-A' and B-B'



Cold Hollow Mountains Quadrangle