

STRUCTURAL SYNTHESIS OF THE BOLIVIAN SUBANDEAN ZONE

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RESUME: Une synthèse structurale de la Zone Subandine Bolivienne est présentée à partir de coupes équilibrées et d'une nouvelle méthode d'équilibrage de cartes. On met ainsi en évidence et on quantifie les relations chevauchements-décrochements de part et d'autre du Coude de Santa Cruz.

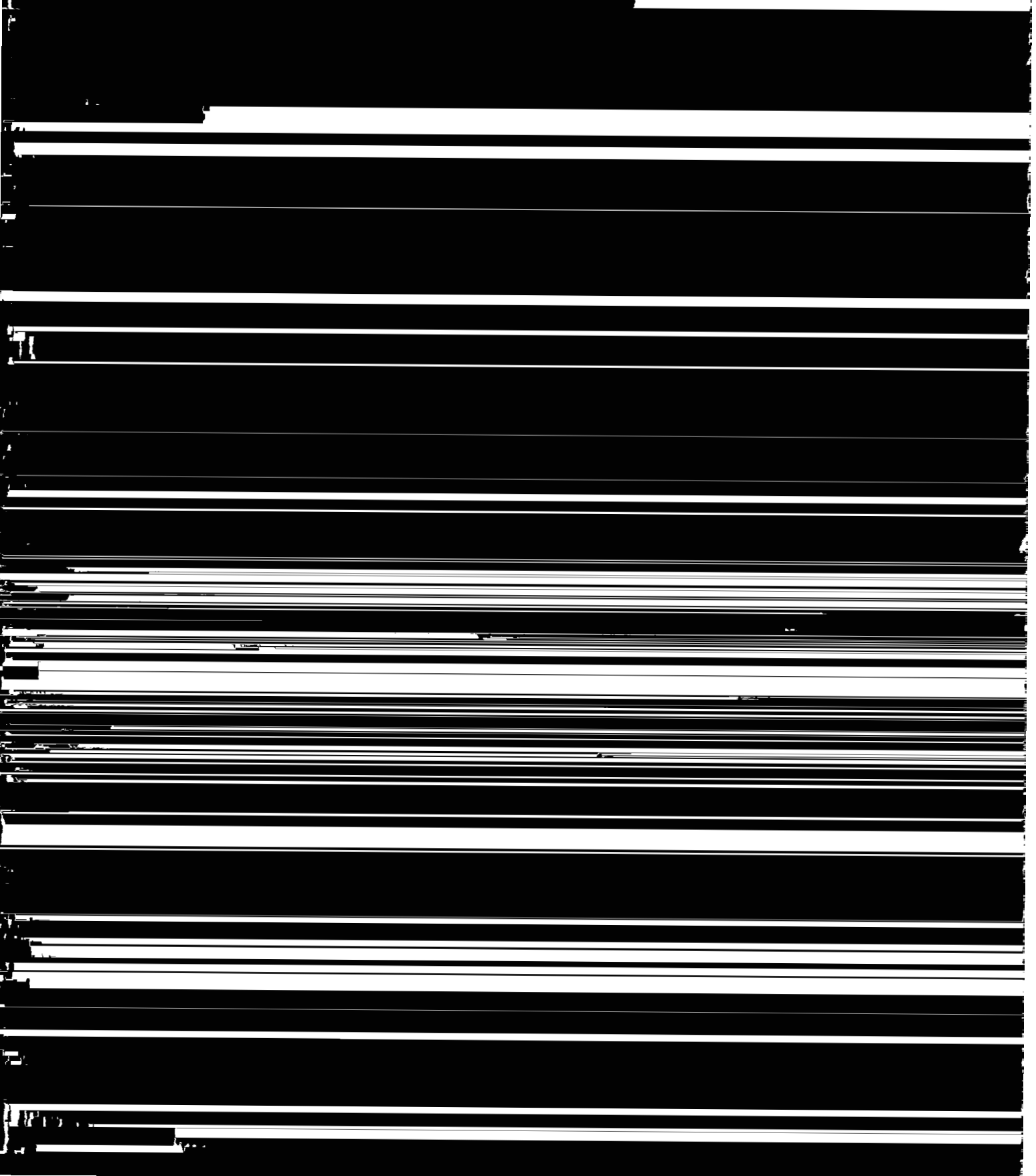
KEY WORDS: Subandean, Bolivia, balanced cross section, map balancing, wrenching, plate convergence.

INTRODUCTION

The Subandean Zone of Bolivia is a complex foreland fold and thrust belt [Sheffels, 1988; Roeder, 1988; Baby et al., 1989, 1992] that forms the eastern edge of the central Andes mountains (fig. 1). In its central part (between 16°S and 18°S), this fold and thrust belt

forms a band (Santa Cruz band) characterized by important transfer zones. From north to

Subandean Zone NW-SE oriented, the Central Subandean Zone which changes from a NW-SE



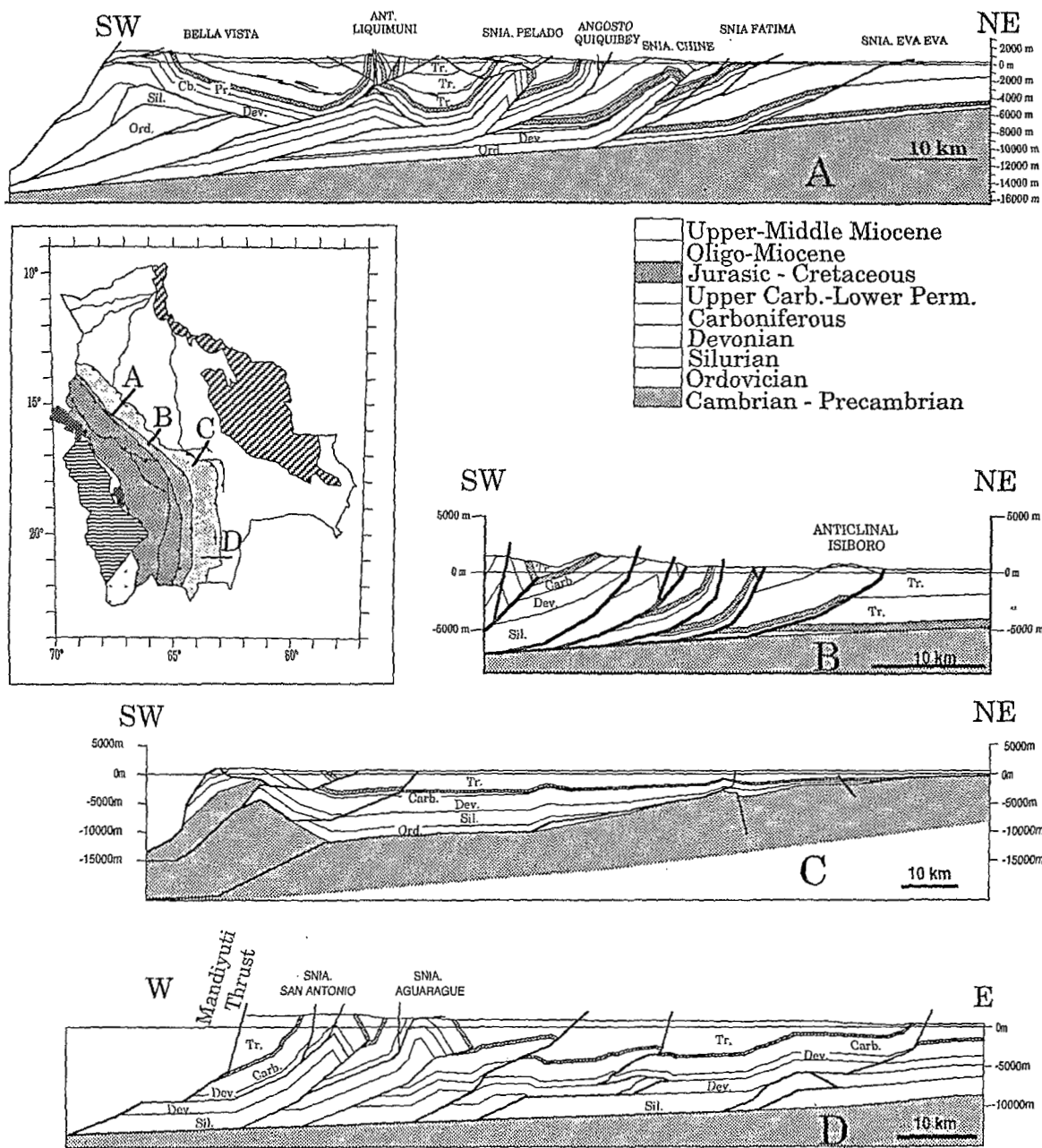


Fig. 1: Balanced cross sections in the Bolivian Subandean Zone

Subandean Zone, it is accommodated by W-E shortening and N-S dextral wrenching. The amount of shortening can reach 140 km and the amount of wrenching 35 km. The structural geometry of the Santa Cruz bend has been controlled by the northern border of the Paleozoic sedimentary wedge.

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