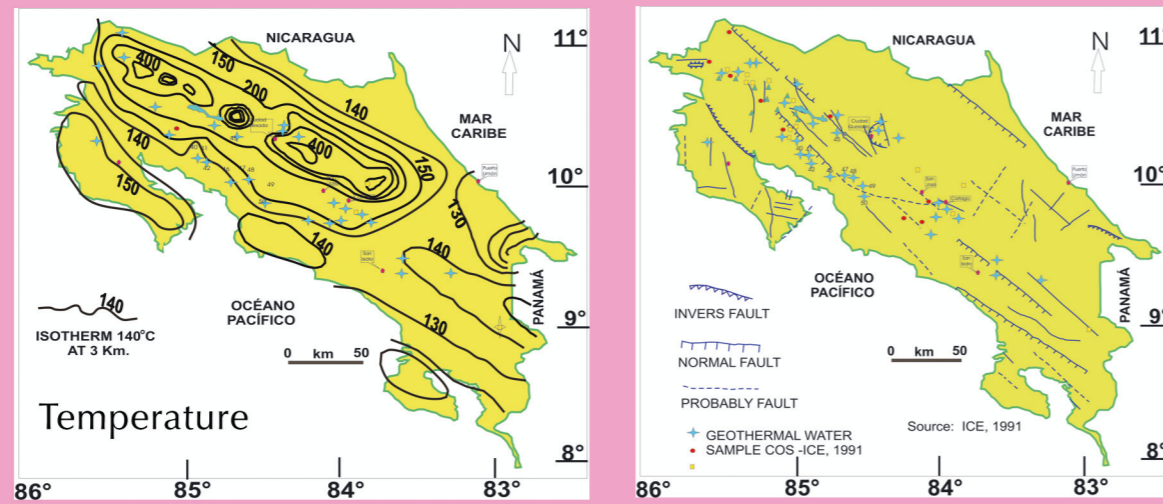


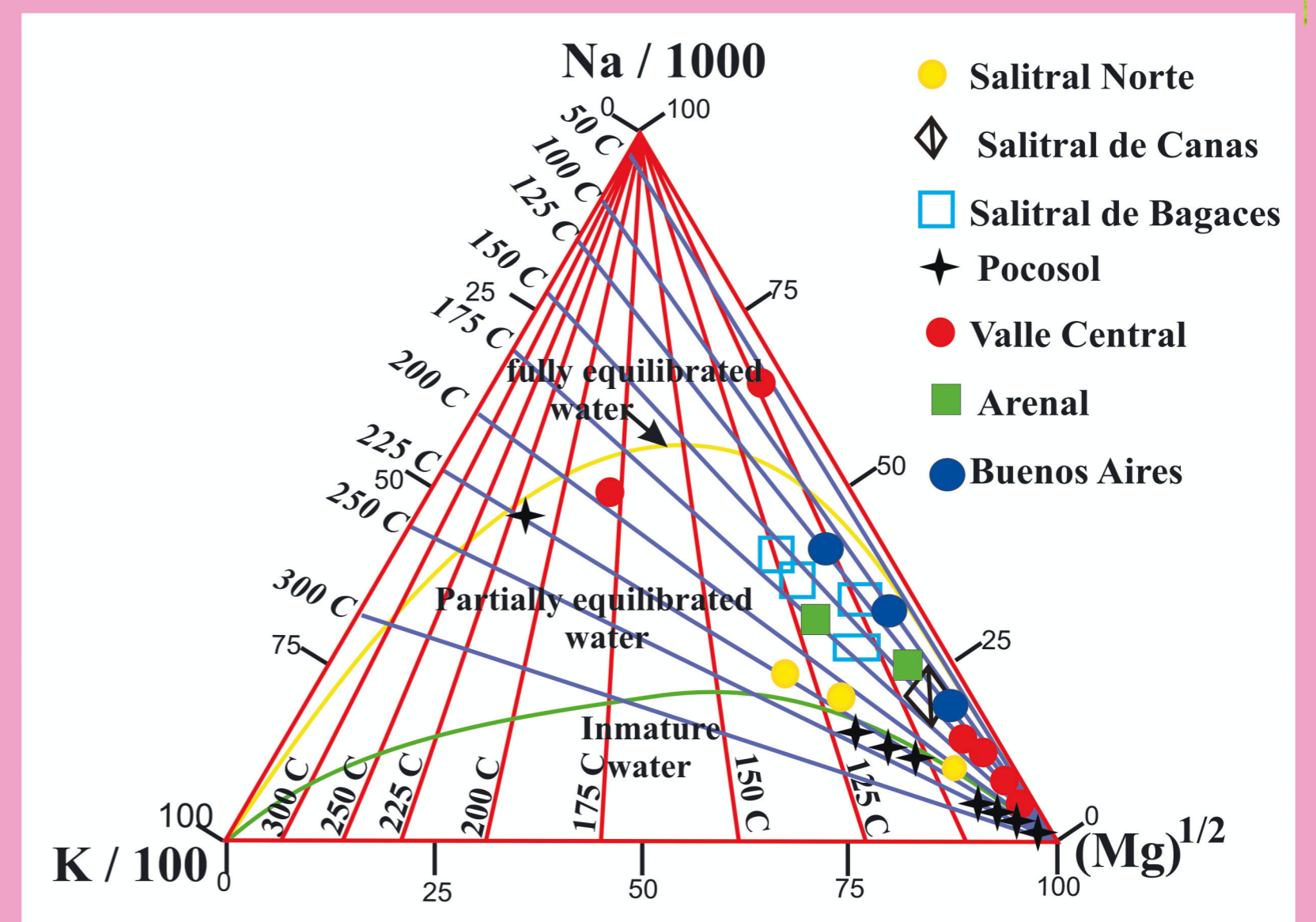
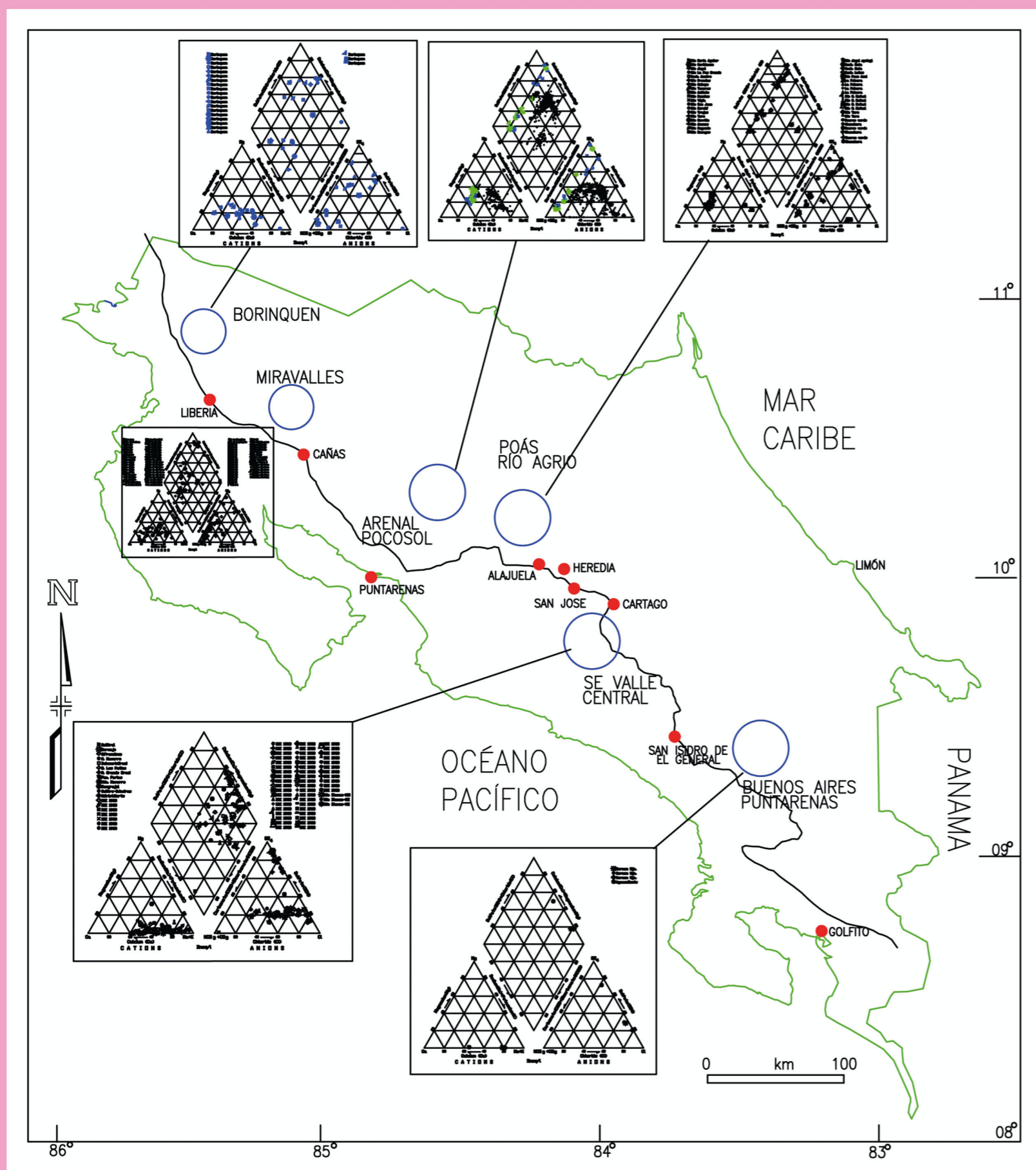
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## INTRODUCTION

Costa Rica is characterized by a magmatic arc associated with high enthalpy geothermal systems.



**HYDROGEOCHEMISTRY** The water samples from the Miravalles and Rincón de la Vieja volcanic areas are bicarbonate-mixed type. In the Arenal and Poás areas, the waters are neutral in pH and of Bicarbonate/sulfate-calcium character. The samples in the southeastern part of the central valley are of chloride/sulfate-sodium type.



**REFERENCES** Rowe, G., Brantley, S., Fernández, J., Borgia, A., 1955: The chemical and hydrological structure of Poás volcano, Costa Rica. J. Volcanology and Geot. Research 64, 233-267.  
Giggenbach, 1988: Geothermal solute equilibria. Derivation of Na-K-Mg-Ca geoindicators. Geochimica et Cosmochimica Acta Vol. 52. pp 2749-2765. ICE., 1991: Evaluación del potencial geotérmico de Costa Rica. Inst. Cost. Electricidad. San José

**TEMPERATURES** The main geothermal potential of the country, is estimated to be provided mainly by the Guanacaste area (Miravalles and Rincón de la Vieja areas) and Central volcanic ranges. It is expected that non-volcanic zones with surface manifestations have a medium potential to produce electricity. Temperatures at Miravalles geothermal field and in the non-exploited area of Las Pailas (northwestern slope of Rincón de la Vieja volcano) range between 230°C and 250°C. The estimated temperature in Pocosol area is near to 200°C.

