



“FLOW PATH DELIMITATION IN A GROUNDWATER FLOW SYSTEM DISCHARGING INTO MEXICO'S MAJOR LAKES”

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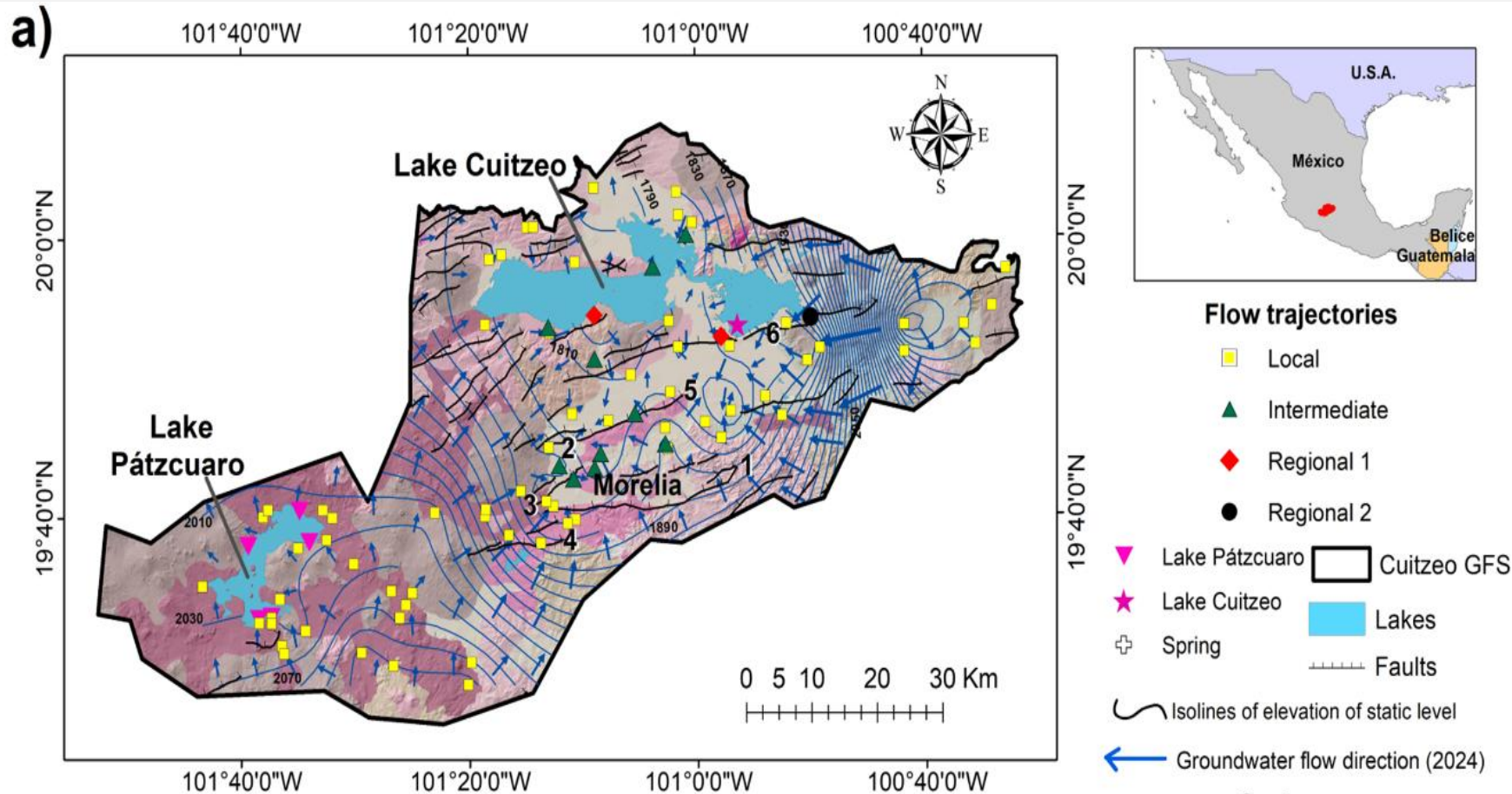
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I. STUDY AREA



Quaternary

- Andesite-Basalt
- Lacustrine
- Lahar
- Basalt-Andesite

Pliocene

- Andesite-Dacite
- Ignimbrite-Rhyolite
- Andesite-Basalt
- Andesite-Dacite-Rhyolite

Miocene

- Granite
- Rhyolitic Tuff
- Basalt-Andesite
- Andesitic Tuff

Oligocene

- Ignimbrite-Rhyolite
- Andesite-Andesitic Gap

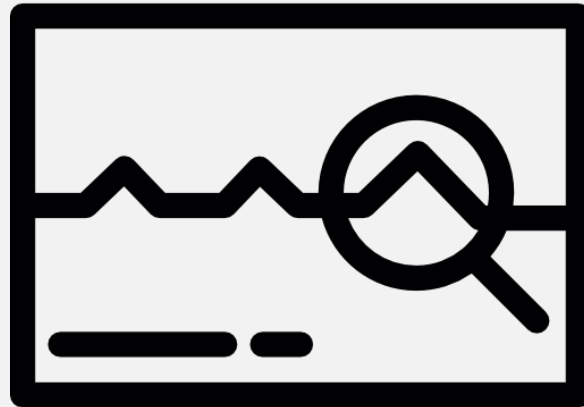
Paleocene

- Sandstone

2. RESEARCH QUESTIONS

What are the flow trajectories?

How lakes are impacted by the trajectories behavior?

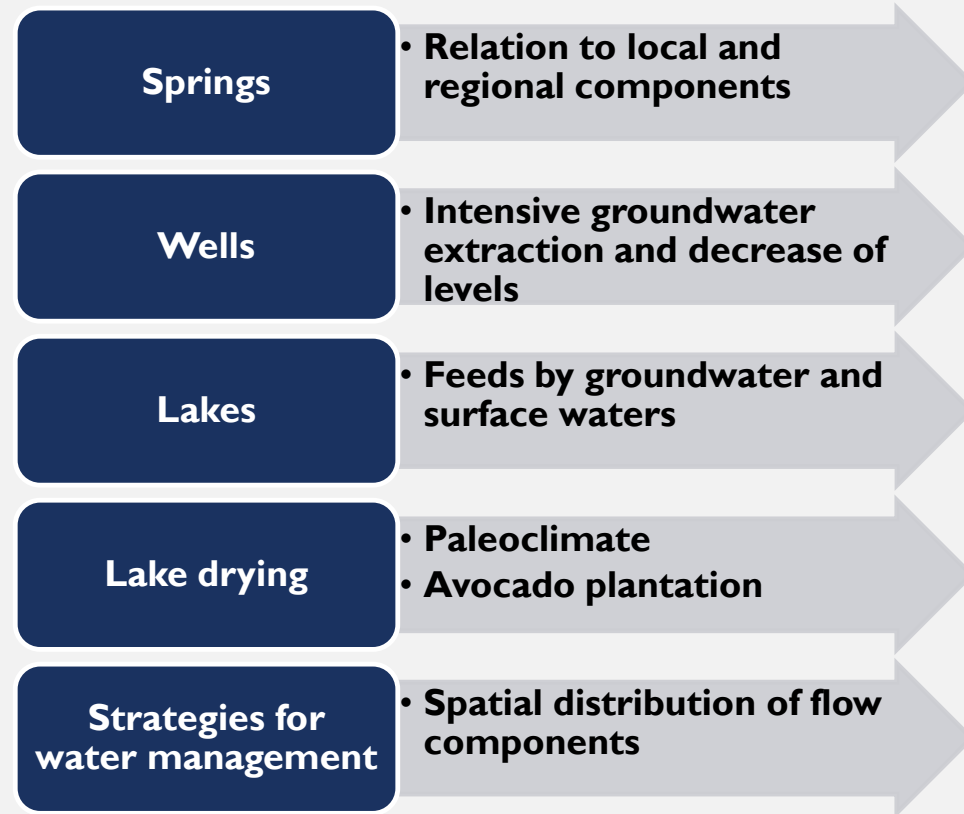
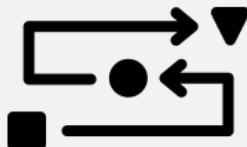
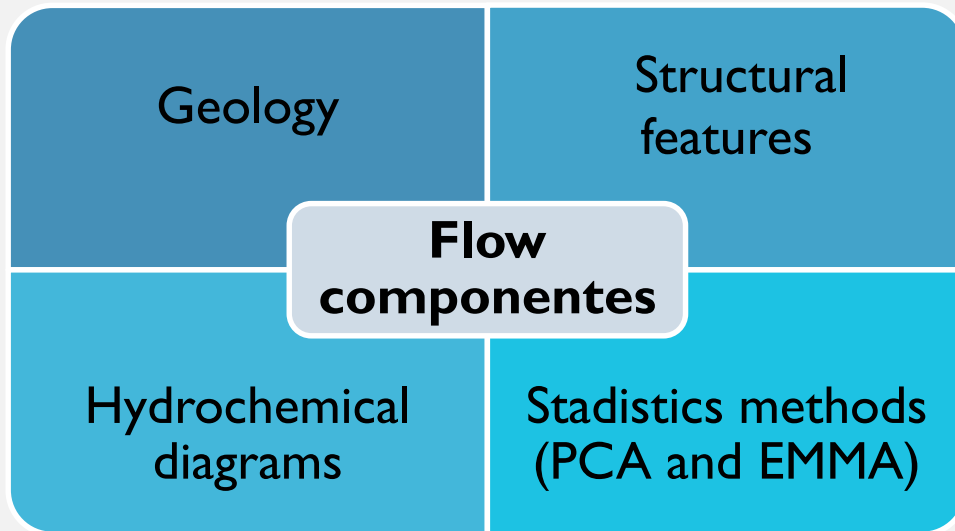


Flow trajectories



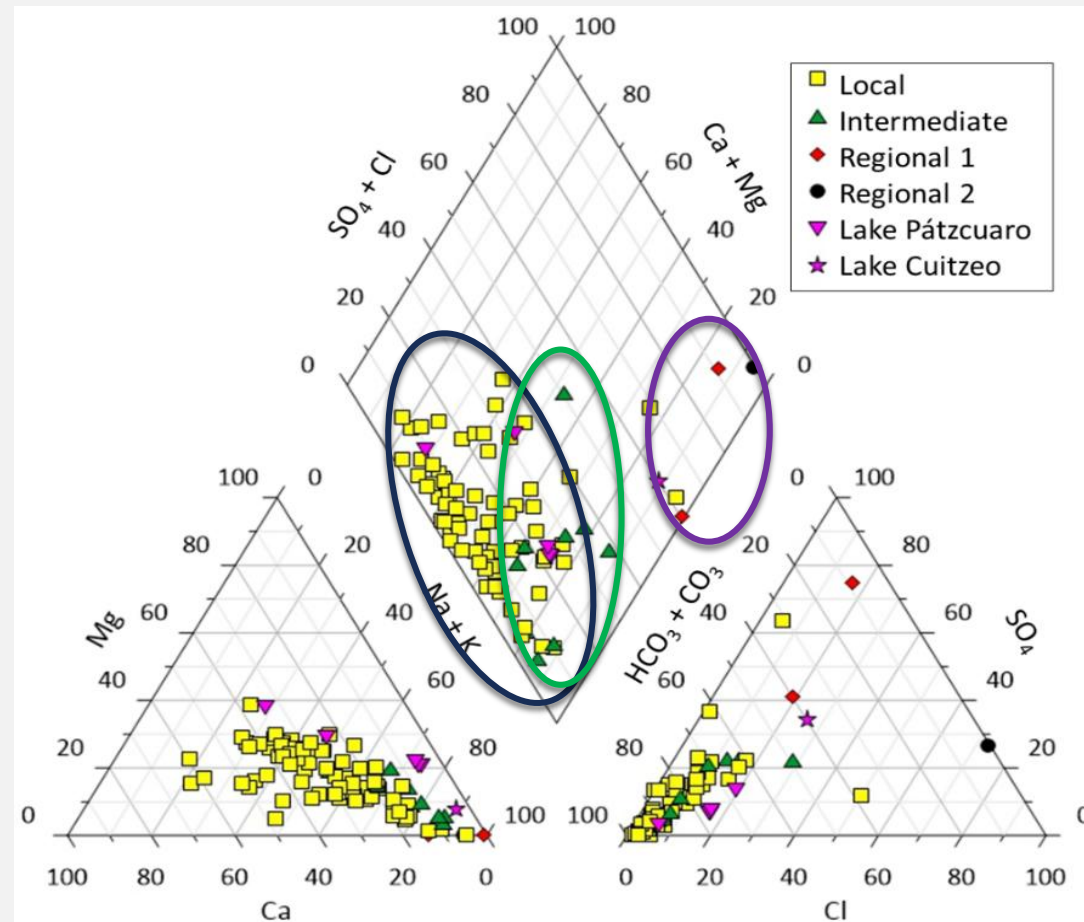
Inputs of lakes

3. METHODOLOGY



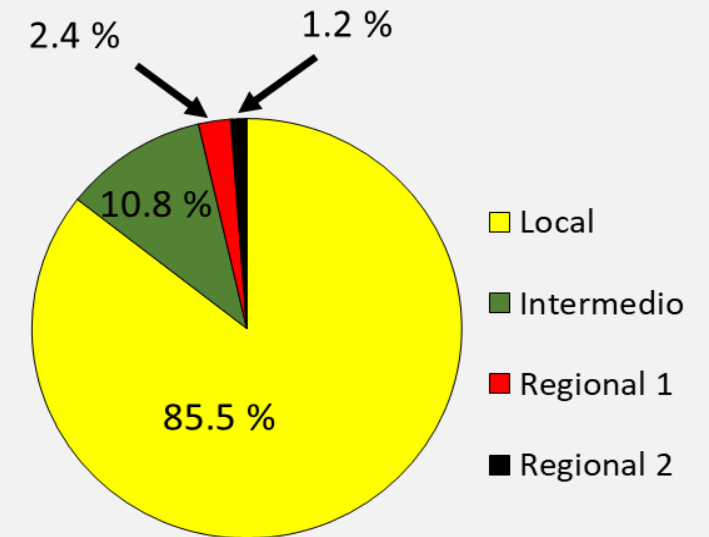
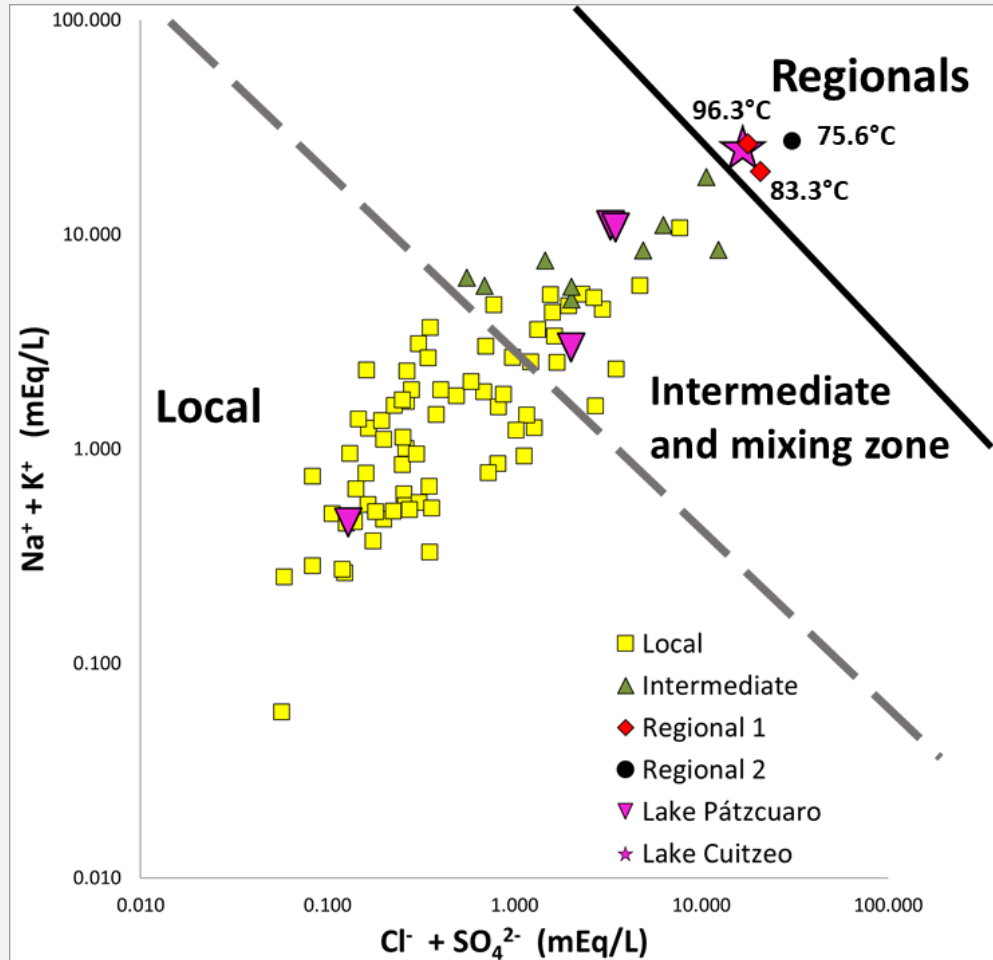
4. RESULTS AND DISCUSSION

Piper

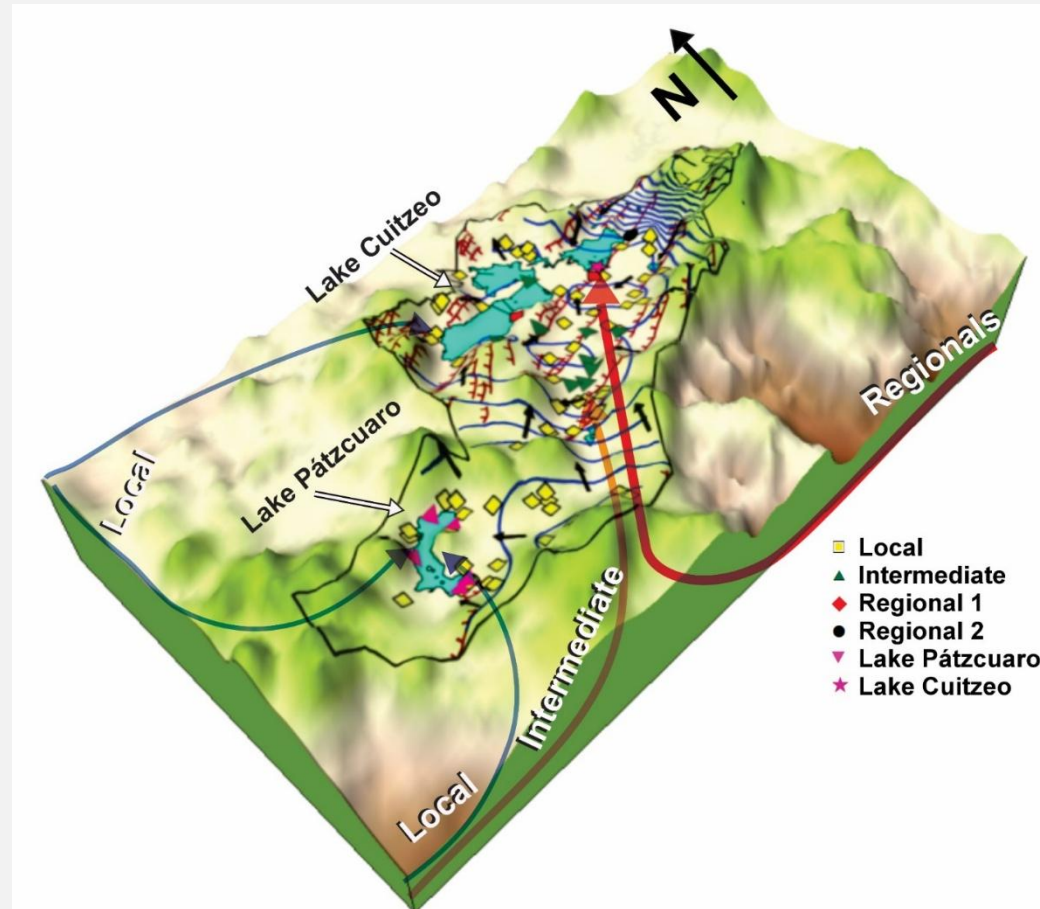


4. RESULTS AND DISCUSSION

Mifflin



4. RESULTS AND DISCUSSION



5. CONCLUSIONS

- Local component is the most present component in the system.
- The intermediate component is related to the faults presence.
- Regional components are related to the presence of faults close to Lake Pátzcuaro.
- Lake Pátzcuaro is fed by a local component.
- Lake Cuitzeo depends on local and regional components' rainfall, sewage, and groundwater input.
- The groundwater availability in the zone is related to recent climate.

