# Chilean Copper Mining

## Investigating Environmental Impact

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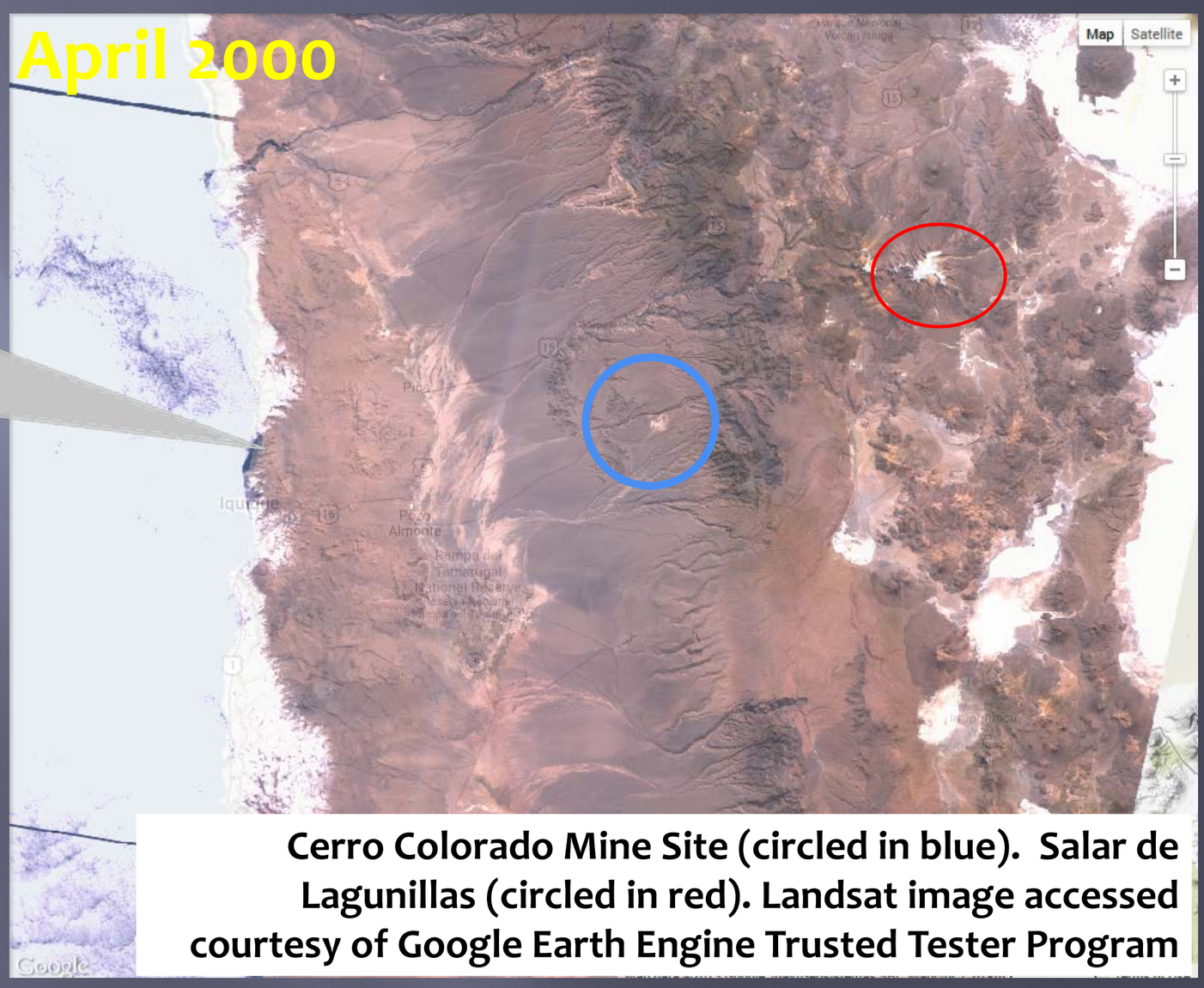
Artist's view of a U.S. Landsat satellite. Credits: NASA.

**Open-pit copper mining is criticized for having a universally negative impact on the environment. In my opinion, if proper actions are taken to preserve natural areas, impacts can safely be minimized. I wanted to investigate the Cerro Colorado Mine in Chile and see what I could learn from satellite imagery**

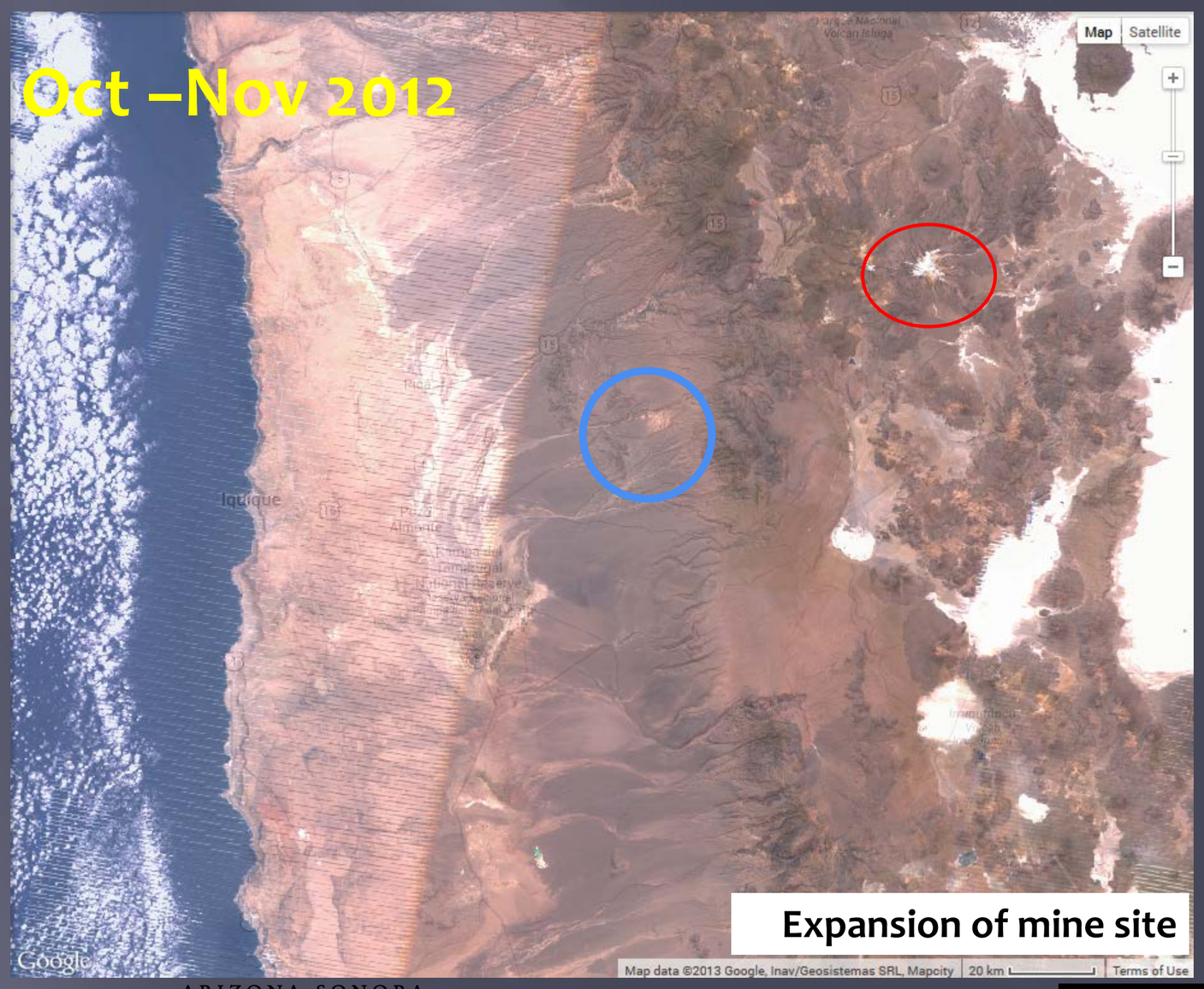

**Left: Chile, South America, with Iquique's location highlighted in white., 2013**




**Cerro Colorado Mine Site (circled in blue). Salar de Lagunillas (circled in red). Landsat image accessed courtesy of Google Earth Engine Trusted Tester Program**

In 1981, scientific investigation of the groundwater under Salar de Lagunillas salt flats began as a possible water source for the Cerro Colorado Mine. Providing water for operations is a major issue due to the mine's location in the Atacama Desert in northern Chile, near the city of Iquique. The mine was projected to have a 30-year lifespan and is still in operation.

I was not able to see major changes with the imagery available, however, one can see a larger footprint over time.




**Expansion of mine site**

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