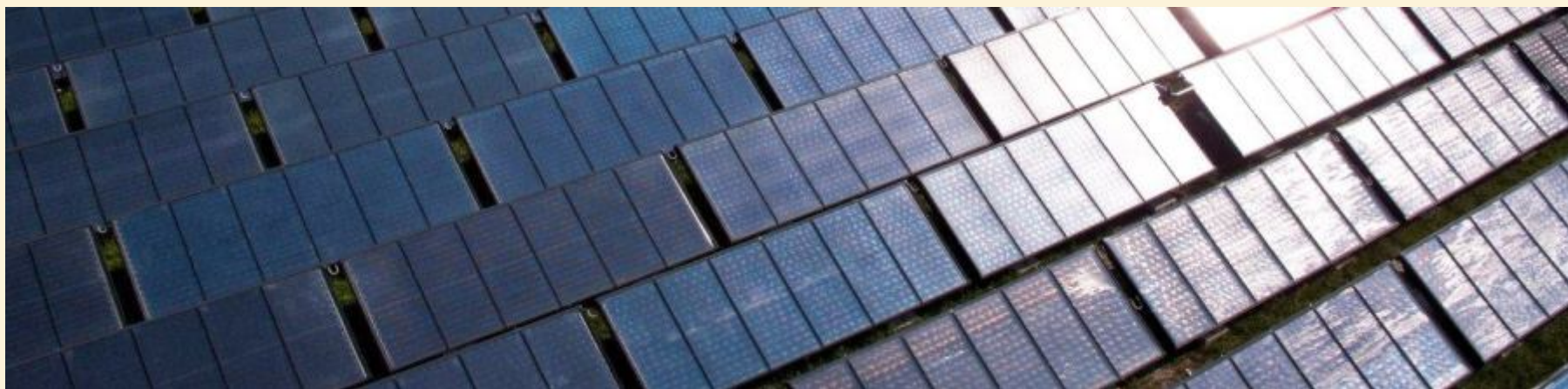


SAC system Desert Mountain High School

Scottsdale, Arizona
USA



S.O.L.I.D. Activities



Large solar thermal systems (>100m²)

- Project development
- Design & engineering
- Construction
- Operation & maintenance
- Financing (ESCo)
- Research & development

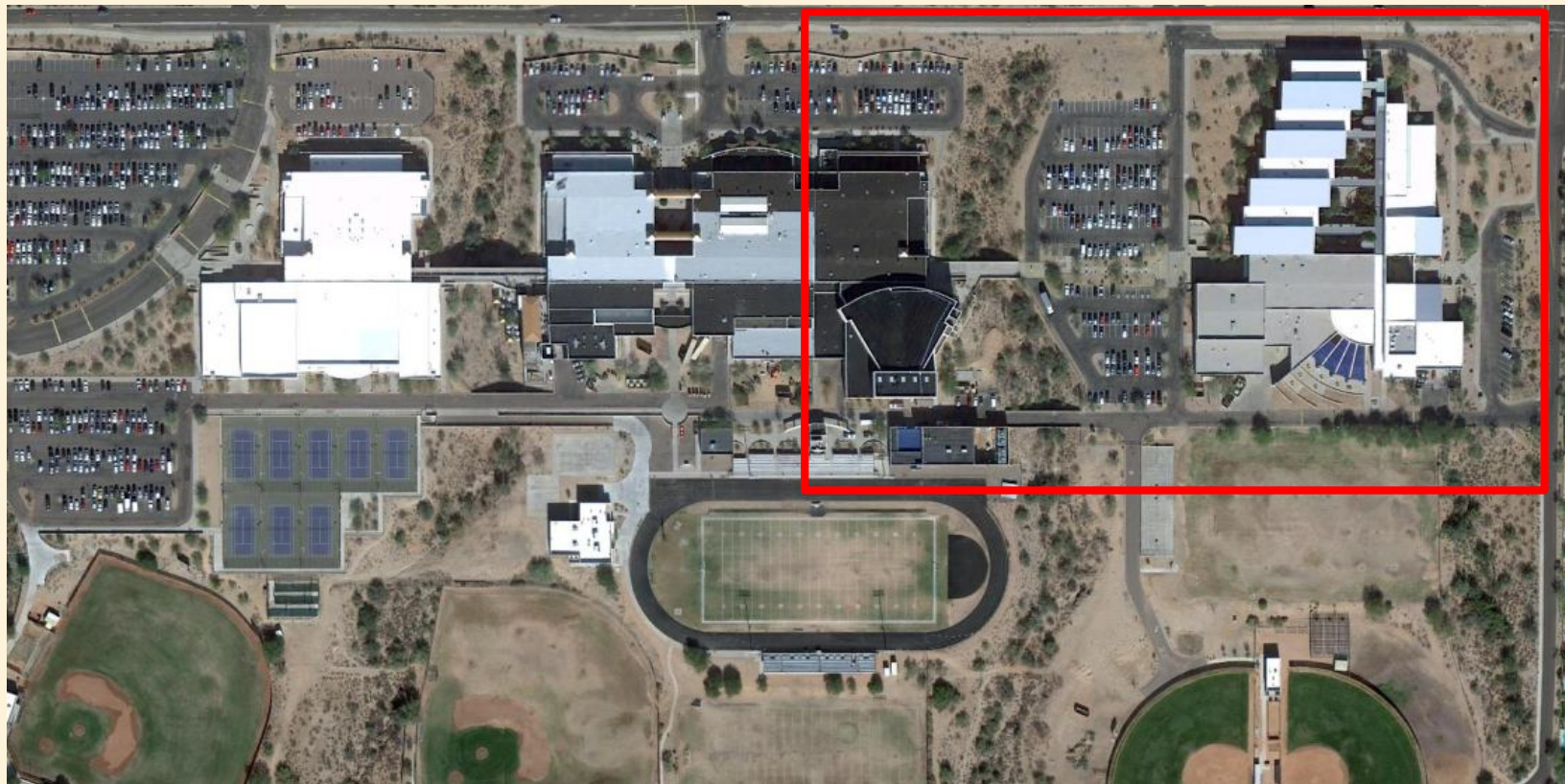


Desert Mountain High School, USA



Scottsdale, Arizona, USA
Solar Cooling for Middle School and High school

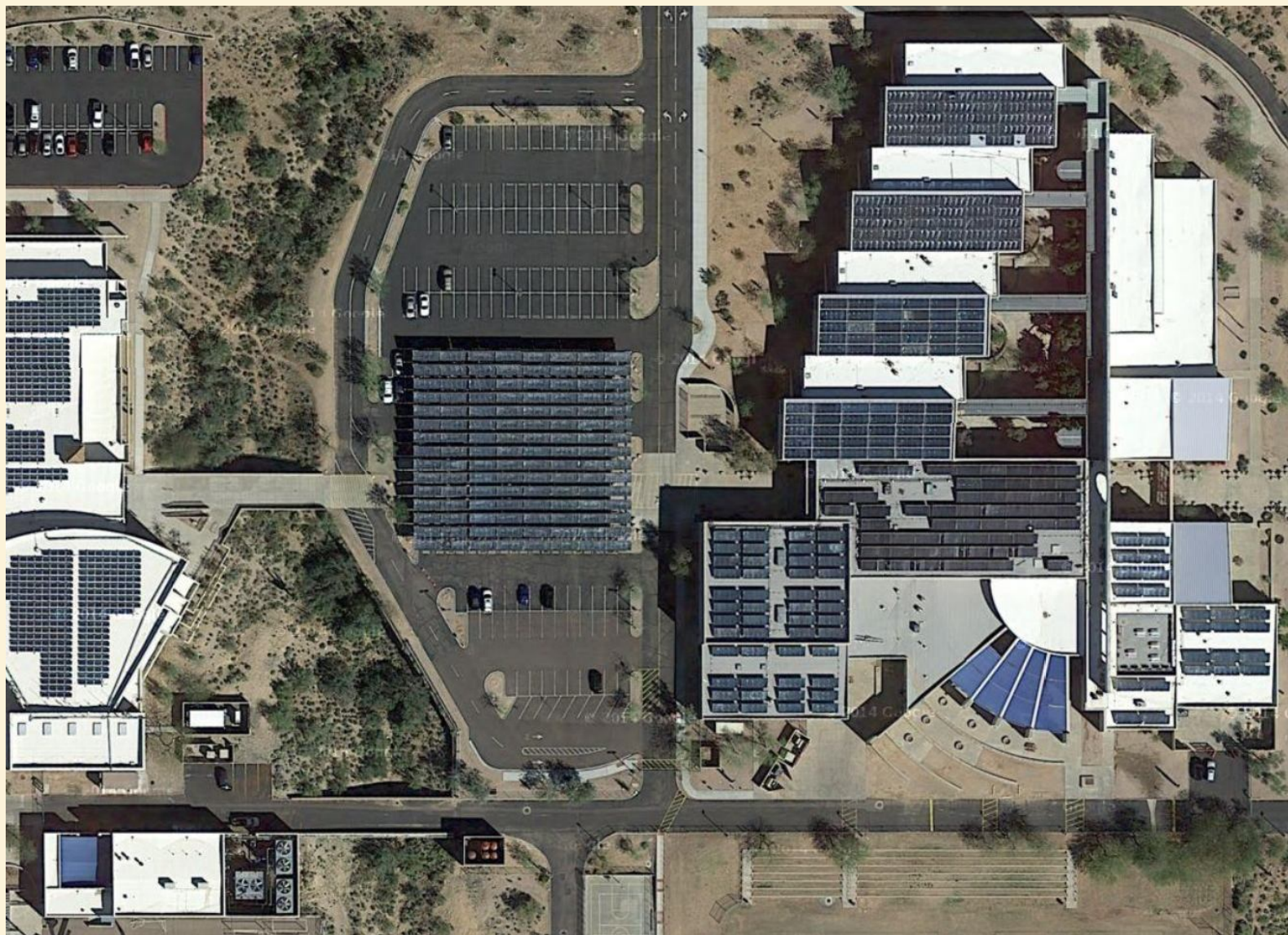
20% larger than SOLID's Singapore project



Desert Mountain High School, USA



Desert Mountain High School, USA



Google Maps, March 8th 2014

Desert Mountain High School, USA



Solar Panels: 5,000 m² → 3.5 MW

Cooling load: 500 tons /1750 kW

In operation since 2014

**World's most powerful
Solar Cooling System**



Desert Mountain High School, USA



Collectors:

5000 m² → 3500 kW_{heat}

Chiller:

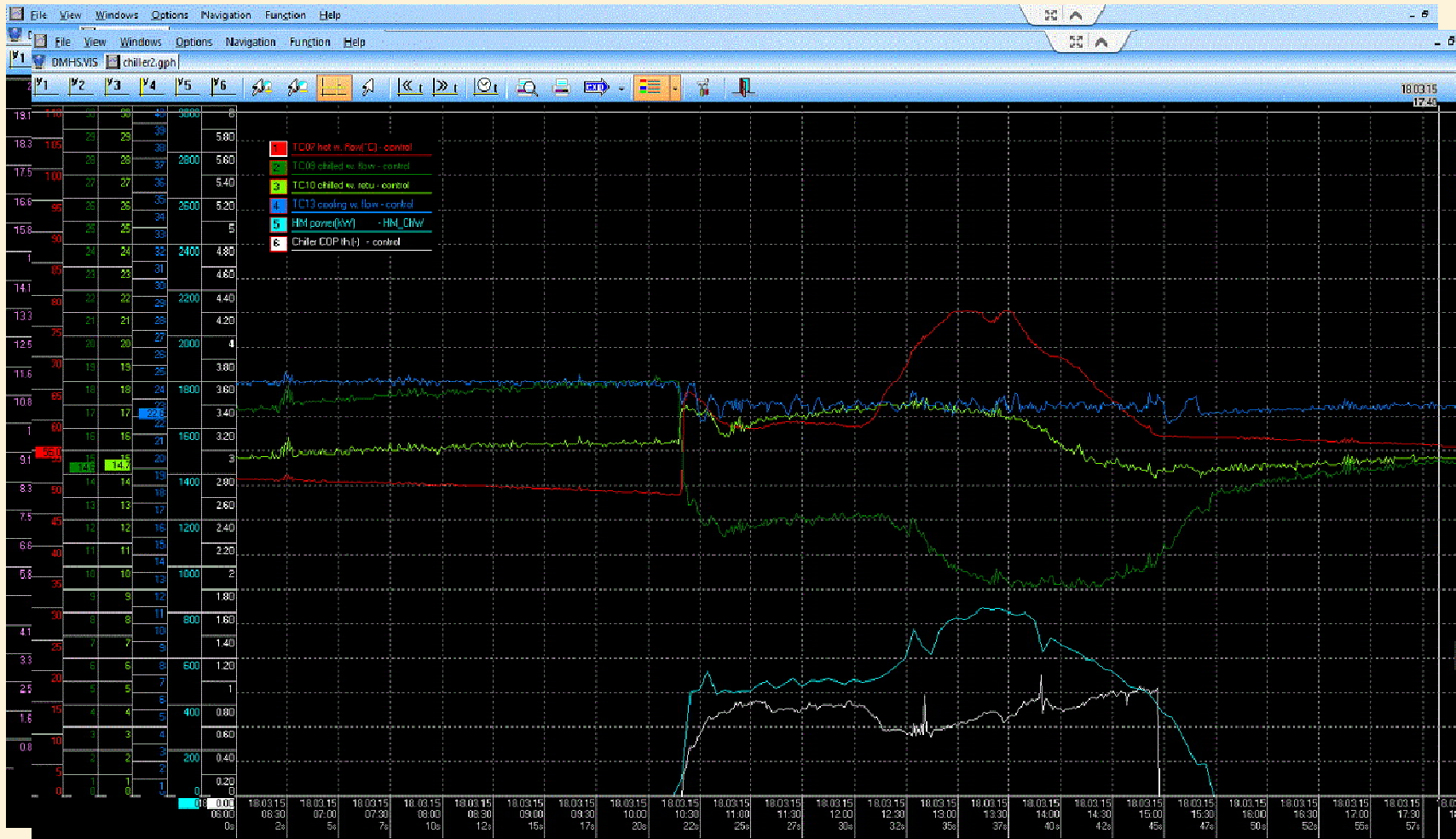
500 tons / 1750 kW_{cooling}

ESCo

In operation since 2014

**World's most powerful
Solar Cooling System**

Desert Mountain High School, USA





Desert Mountain High School, USA

Preliminary results after 6 months of operation:

- Very stable and reliable operations
- Chiller COP_{thermal} 0,7 – 0,75
- Peak Hour COP_{electric} 42
- Full day $COPs_{\text{electric}}$ 25-30

How to achieve these results?

- Learn how to run chillers and cooling towers within and beyond manufacturers specs !
- Develop intelligent control strategies adapted to Solar Thermal heat input profile.
- Benefit from Arizona climate  

Thank you for your kind attention!



S.O.L.I.D. Gesellschaft für Solarinstallation und Design mbH

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