



8-STATION INDEX (8SI)

POWERING CALIFORNIA'S WATER & ENERGY DECISIONS

The 8-Station Index (8SI) tracks precipitation across eight key stations in the Northern Sierra Nevada, feeding major reservoirs like Shasta and Oroville and supporting the State Water Project.



WATER SUPPLY

Anticipate availability and manage risk



HYDROPOWER

Optimize generation and operations



ENERGY MARKETS

Inform pricing and procurement strategies



FORECASTING

Gain insight months in advance

CLIMFORMATICS 2026 WATER YEAR OUTLOOK

- ✓ Monthly and cumulative precipitation forecasts up to 9 months ahead
- ✓ Probabilistic ranges (deciles) for risk-informed planning
- ✓ Early signals for wet/dry conditions impacting hydropower generation
- ✓ Strategic insights for water resource management and energy markets
- ✓ Monthly forecast updates to incorporate the latest climate signals and observations



WHY IT MATTERS

In an era of increasing climate variability, success depends on anticipating not just the most likely outcome—but the full range of possibilities. Our forecasts help organizations shift from reactive to proactive decision-making.



If your operations depend on Sierra precipitation—whether for hydropower, water supply, or energy markets—let's connect. We'd be happy to share our latest outlook and explore how it can support your strategy.

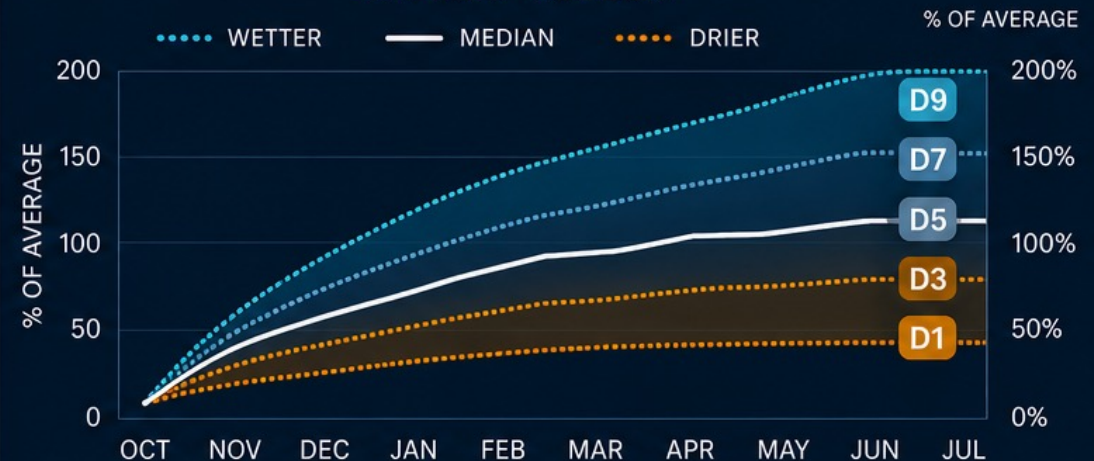


LET'S CONNECT

info@climformatics.com

8SI CUMULATIVE PRECIPITATION FORECAST

OCT 2025 – JUL 2026



Deciles (D1–D9) show the range of possible outcomes.

WHY IT MATTERS: Year-Ahead 8-SI Forecast.

See further. Plan Smarter. Win in the Market.

The 8-Station Index (8-SI) is the most critical driver of Northern California's water supply and hydropower generation.

Our probabilistic forecasts give you **up to 9 months of lead time** to see what's coming—so you can act with confidence.



The 8-SI drives water into Shasta, Oroville, and the State Water Project—powering millions and shaping the energy market.



KNOW TODAY. PLAN TODAY. PROFIT TOMORROW.

Year-ahead insight into water-year conditions helps you optimize power purchase agreements, hedge price risk, and maximize portfolio value.



BETTER TIMING

Lock in PPAs and hedges before market prices adjust.



REDUCE RISK

Avoid overpaying in dry years or missing opportunities in wet years.



MAXIMIZE VALUE

Align procurement strategies with hydropower availability.



COMPETITIVE EDGE

Turn climate uncertainty into strategic advantage.

IMPROVE OPERATIONAL MARGINS

In our test case, our improved forecasts increased operational margins on average **from 13% to 34%.**

13%

Traditional Forecasts

34%

Climformatics Forecasts



More accurate outlooks. Better decisions. Stronger results.

TWO VERY DIFFERENT MARKETS. ONE POWERFUL ADVANTAGE.



WET WATER YEAR (High 8-SI)

More water. More hydro. Lower prices.



- ✓ Abundant hydro generation
- ✓ Lower wholesale power prices
- ✓ Opportunity to secure lower-cost PPAs



8-SI FORECAST UP TO 9 MONTHS AHEAD

Better foresight.
Better outcomes.



DRY WATER YEAR (Low 8-SI)

Less water. Less hydro. Higher prices.



- ✓ Constrained hydro generation
- ✓ Higher wholesale power prices
- ✓ Secure supply early to avoid price spikes

WHO BENEFITS



Energy Traders
Position early in forward markets



Utilities & CCAs
Optimize resource planning and PPAs



Portfolio Managers
Improve risk-adjusted returns



Risk Managers
Stress-test scenarios and hedge smarter



CLIMATE INTELLIGENCE. MARKET IMPACT.

Climformatics delivers probabilistic 8-SI forecasts that translate climate uncertainty into actionable market insight—so you can make decisions that move the needle.



SEE FURTHER.



PLAN SMARTER.



WIN IN THE MARKET.

Smarter Solar Power Forecasting Starts Here.

AI-powered forecasts from **day ahead** to seasonal outlooks that turn climate intelligence into **energy confidence**.



Day Ahead Solar Forecasting

High-resolution hourly forecasts updated daily to maximize tomorrow's solar output.



Seasonal Outlooks

1 day to 6+ months ahead
Probabilistic. Actionable. Reliable.

KEY VARIABLES THAT POWER YOUR DECISIONS



Solar Irradiance



Temperature



Relative Humidity



Wind Speed



Cooling & Heating Degree Days (CDD/HDD)



Heat Waves & Fire Danger Analytics

BUILT FOR ENERGY LEADERS



Utilities & Grid Operators



Community Choice Aggregators (CCAs)



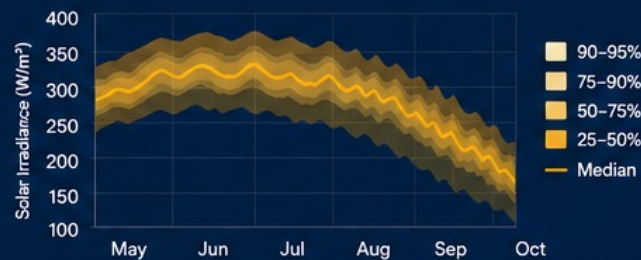
Solar Developers & IPPs



Energy Traders & Analysts

SEASONAL SOLAR IRRADIANCE OUTLOOK

Santa Rosa, California | May – October 2025



Probabilistic Distributions
Daily & monthly insights



Trend & Anomaly Analysis
Understand what's driving changes



Extreme Weather Early Warnings
Heat waves, fire risk & more



Solar Generation Capacity Estimates
Plan with confidence months ahead

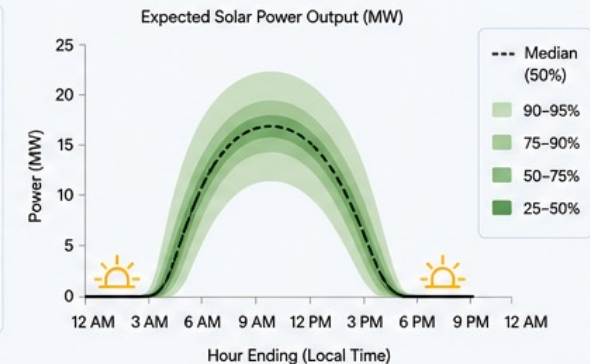
DAY AHEAD HOURLY SOLAR POWER FORECAST

Santa Rosa, California | Forecast for May 20, 2025



Peak Power Forecast
18.6 MW

Daily Energy Forecast
112 MWh



Optimize solar generation & portfolio performance



Anticipate energy demand & grid stress



Improve reliability & renewable integration



Mitigate climate risks from extreme heat & wildfires



Learn more about our forecasting solutions
climformatics.com



Better forecasts. Better decisions.
Stronger grids. A cleaner future.



From day ahead to seasonal, we've got your energy future covered.
Partner with Climformatics.



AI-Powered Climate Intelligence



Location-Specific & High Resolution



1 Day to 6+ Months Lead Time



Probabilistic. Actionable. Reliable.



Climate Intelligence. Better Decisions.

ANTICIPATE RISK. STRENGTHEN RESILIENCE.

Extreme heat and wildfire risk are rising.
Stay ahead with **climate intelligence**.

Climformatics delivers **seasonal, probabilistic forecasts and analytics** that help energy providers and CCAs anticipate risks, optimize operations, and strengthen grid resilience.

PROACTIVE INSIGHTS. REAL IMPACT.



Anticipate peak demand and manage energy supply



Optimize energy procurement and pricing strategies



Plan vegetation management and preventative maintenance



Enhance grid resilience and reduce outage risk



FIRE DANGER ANALYTICS

FWI & SFDI forecasts to
assess ignition and fire
spread potential



HEAT WAVE ANALYTICS

Forecasts of frequency,
duration, and intensity of
extreme heat events



Monthly updates.
Actionable insights.
Stronger outcomes.

Probabilistic forecasts
expressed in deciles to
support **risk-informed
decision-making**.

WHAT SETS US APART



**Near-to-Long-Term
Forecasts**
1 to 9 months ahead



**Probabilistic
Intelligence**
Deciles (10th–90th
percentiles)



Local & Relevant
High-resolution insights
for your region



Monthly Updates
Incorporating the
latest climate signals



Built for Decision Makers
Designed for energy providers,
CCAs, utilities, and grid
operators



AI-POWERED CLIMATE INTELLIGENCE. BETTER FORECASTS. BETTER DECISIONS.

Advanced AI and high-resolution modeling deliver actionable insights across the full spectrum of climate risks.



SOLAR FORECASTING

High-resolution solar irradiance and power forecasting from day ahead to seasonal outlooks.



PRECIPITATION FORECASTING (8 STATION INDEX)

8 Station Index (8SI) precipitation forecasts with high accuracy and lead times from days to seasons.



FIRE-DANGER ANALYTICS

Fire-weather and fuel moisture analytics to assess risk and support proactive decision-making.



HEAT WAVE ANALYTICS

Heat wave detection, intensity, and duration analytics to protect communities and infrastructure.

SCAN TO CONNECT
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AI-Powered
Insights



Probabilistic.
Actionable.



From Day Ahead
to Seasonal



Trusted by Energy
Leaders



Stronger Grids.
Safer Communities.
Resilient Future.