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2026 Solar Climate Intervention Impacts on Extremes (SCI-EX)

University of Texas Institute for Geophysics,
The University of Texas at Austin

All sessions will take place in the UTIG Seminar Room (ROC 1.603)

Wednesday, March 25, 2026

8:30 – 9 a.m. Registration, Coffee & Breakfast

9 – 9:15 a.m. Welcome & Workshop Overview
Danielle Touma and **Demian Saffer**

Session 1: Opportunities and Challenges of SCI Research

9:15 – 10:15 a.m. — **Keynote: Shuchi Talati** (DSG) —
Governance and Ethics Considerations in
SRM Research

10:15 – 10:35 a.m. — **Virginia (Ginny) Selz** (Ocean
Visions) — From Roadmap to Research: Assessing
Approaches to Slow Arctic Sea Ice Loss

10:35 – 10:50 a.m. — Moderated Discussion

10:50 – 11:00 a.m. — Break



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Session 2: SCI Research and Modeling Landscape

11:00 – 11: 50 a.m. — Keynote: Daniele Vioni (Cornell University) — Steps Toward a More Robust Assessment of Climate Intervention Strategies

11:50 a.m. – 12:10 p.m. — Mari Tye (NSF NCAR) — An Overview of SAI Research Efforts at NSF NCAR

12:10 – 12:20 p.m. — Moderated Discussion

12:20 – 1:40 p.m. — Lunch, The Commons at Pickle Research Campus

Session 3: Large-Scale Climate and S2D Predictability under SCI

1:40 – 2 p.m. — Chen Xing (UT Austin) — Subtropical Marine Cloud Brightening Suppresses the El Niño–Southern Oscillation

2 – 2:20 p.m. — Kirsten Mayer (NSF NCAR) — Future Seasonal Surface Temperature Predictability with and without ARISE–Stratospheric Aerosol Injection-1.5

2:20 – 2:30 p.m. — Moderated Discussion

2:30 – 2:40 p.m. — Break



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Session 4: SCI Impacts on Extreme Climate Events

2:40 – 3 p.m. — Leyuan “Lexie” Zhang

(UT Austin) — How Solar Climate Intervention May Shape Extreme Climate Events

3 – 3:20 p.m. — Ivy Glade (Colorado State University) — Comparing Future Projections of Warm Spells under Climate Change and Stratospheric Aerosol Injection in CESM2 and UKESM1

3:20 – 3:40 p.m. — Kwesi T. Quagraine (Texas A&M University) — How does SAI impact Atmospheric Rivers?

3:40 – 4:00 p.m. — Danielle Touma (UT Austin) — Impacts of Stratospheric Aerosol Injection on Extreme Fire Weather

4 – 4:45 p.m. — Moderated Discussion & Day 1 Wrap-Up

6 p.m. — Workshop Dinner

Taverna at The Domain

3120 Palm Way #160, Austin, TX 78758

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Thursday, March 26, 2026

8:30 – 9:00 a.m. — Coffee & Breakfast

Session 5: High-Resolution Modeling Insights into SCI Impacts

9 – 9:20 a.m. — **Kwesi A. Quagraine** (NSF NCAR) —
Toward Reliable Regional Climate Intervention Information for
Africa: Insights from Variable-Resolution CESM Experiments

9:20 – 9:40 a.m. — **Kelly Núñez Ocasio** (Texas A&M
University) — Evaluating the Impact of Solar Climate
Intervention on Tropical Weather Extremes Using a
Convection-Permitting Model for MPAS-A

9:40 – 9:50 a.m. — Moderated Discussion

9:50 – 10:15 a.m. — Workshop Deliberation & Breakout
Preparation

10:15 – 10:30 a.m. — Break

10:30 – 11:15 a.m. — Breakout Sessions

11:15 – 11:45 a.m. — Report Back

11:45 a.m. – 12 p.m. — Closing Remarks

12:00 p.m. — Adjourn



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