



SCAR Sub-Group

SG

Person
Responsible:

TATE

PS

Sheeba
Nettukandy
Chenoli

SCAR Executive Committee Meeting 2019

Plovdiv, Bulgaria, 29-31 July 2019

Tropical Antarctic Teleconnections (TATE)

2018-19 Report

A relaunch of the action group (AG) at Davos proposed the selection of a research-active AG chair. Therefore, a new chair was selected. Details as follows:

TATE members

Sheeba Nettukandy Chenoli – Chair

Francisco Aquino – Secretary

Azizan Abu Samah	Malaysia
David Bromwich	USA
Kyle Clem	New Zealand
Ryan Fogt	USA
Seong-Joong Kim	Republic of Korea
Sheeba Chenoli - <i>Chair</i>	Malaysia
Sebastián Marisek	Argentina
Jefferson C. Simões	Brazil
Francisco Aquino - <i>Secretary</i>	Brazil

Optional additional information

The Tropical Antarctic Teleconnections (TATE) group plans to sponsor a half-day workshop on TATE on 20 June 2019 in conjunction with 8th Malaysian International Seminar on Antarctica. A report on the TATE workshop would be published in *Advances in Polar Sciences* after the workshop. TATE group also contributes to a session on “*Tropical and Antarctic Teleconnection and Antarctic Climate Change*” in ISAES 2019 meeting to be held at Songdo Convensia in July.

The TATE group would be proposing a session in the SCAR Open Science Conference in Hobart (2020). In addition, we plan to publish a selection of papers on TATE's subjects based on the works presented in Malaysia and Hobart.

TATE would also be linking to the Asian Forum for Polar Sciences (AFOPS) and plans to contribute to the new SRP **Near-term Variability and Prediction of the Antarctic Climate System (AntClim^{now})**.

Updates for your group's SCAR web page

Nil

Notable Papers

One article submitted in Polar Science: The Linkage between Antarctic Sea Ice Extent and Indian Summer Monsoon Rainfall

Workshop reports will be published after TATE workshop as well as SCAR 2020.

Submitted to Theoretical and Applied Climatology (February 2019)
The Antarctic atmospheric circulation anomalies and explosive cyclogenesis in spring 2016 - Schossler et al

in preparation, full article for 8 MISA
Tropical Antarctic connections from rainfall stable isotope ratios of an explosive cyclone in Southern Brazil

in preparation
Amazon and Antarctic stable isotope ratios in the 2016 – 2017 Southern Brazilian rainfall

Other information for publicity purposes

Special report for Brazilian television on Tropical Antarctica Teleconnections and environmental changes in Antarctica and Brazil (May 2019).

<https://g1.globo.com/fantastico/noticia/2019/05/12/derretimento-da-antartica-ja-esta-seis-vezes-mais-rapido-do-que-ha-40-anos.ghtml>

Any other information or issues you would like to raise

In Brazil, a group led by Dr. Aquino investigates the large-scale atmospheric environment that develops mesoscale convective systems over South America, particularly focusing on the Antarctic influence on subtropical extreme events. New studies look at how the stable isotope composition in the Amazon and the South Atlantic precipitation were related with the Antarctic (frontal systems, SACZ and MCCs) in neutral and ENSO years; and

the variability of the South Atlantic subtropical anticyclone and the SACZ in events of retraction and expansion of Antarctic sea ice.

TATE would like to promote international collaboration in creating a network of polar researchers across national boundary to share ideas and to identify the knowledge gaps so as to develop new research directions and collaborations.