

# National Simultaneous Storytime ...from space!

Give me some **Space!**  
PHILIP BUNTING

Wednesday 19 May 2021 [www.alia.org.au/nss](http://www.alia.org.au/nss)



## NSS2021 Experiment - Information Sheet

ALIA, along with the Australian Space Agency and The Office of the Chief Scientist, and with help from Science Time From Space, is very excited to be able to bring an additional science and educational component to NSS 2021 – a science experiment from the International Space Station!

The experiment is designed to shed some light on the important issue of climate change. The science concept shown will be that changing the surface of Earth results in changes to sun/earth/space heat balance. When we change the surface of the Earth from trees, oceans and dirt to concrete, bare fields and roads and increase CO<sub>2</sub> levels in the atmosphere, we change the temperature on Earth and its atmosphere.

Astronauts on the International Space Station will use heat sources and a ball to represent earth and show how changes to the surface of the balls result in different temperature on the balls. This experiment will be shared by video so that NSS participants can see the results.

We need your help! We are calling on NSS participants to join the experiment as citizen scientists. You will need to collect temperature data and share the data you collect. This, along with satellite data, will be used to map the temperature of Australia.

Objectives for participants:

1. Become involved in science and learn from their involvement.
2. Learn that data is of key importance to solving problems.
3. Contribute to temperature data and share that data with other kids in Australia.
4. *Learn about Satellite data – how does a satellite get these measurements and how does it help?*
5. Determine if their temperature readings are consistent with satellite data.
6. Understand that adding in satellite data helps to give a full picture of what is happening with temperatures throughout Australia.
7. Use arithmetic to find average temperatures.
8. *Use Mapping skills to map temperatures around Australia.*
9. To understand global warming, this whole process has to be done over the whole Earth, over a long period of time, like 100 years, but the principles can be explored locally.
10. To understand that when scientists talk about global warming, they are utilizing data gathered over a long period of time, actually much longer than 100 years.

The activity is designed to shed some light on this large and very important issue of climate change. We want to obtain a great number of temperature observations from all around Australia and to share these measurements with all the participants. By students plotting these measurements on a map of Australia we can learn two key things: first, the measurements are quite easy to take and will lead us to better understand how temperatures around Australia vary; and second, we can obtain these only where people live, leaving out much of the land area of Australia, and almost all of the sea area around Australia.

# National Simultaneous Storytime ...from space!

Wednesday 19 May 2021 [www.alia.org.au/nss](http://www.alia.org.au/nss)

## Materials -

Thermometer  
YOU!

## What you need to do -

1. It's simple, head outside anytime on the morning of Wednesday 12 May 2021 & record the temperature at your location. You could have students take an individual reading and work out an average, or each class takes the temperature to work out a school average – it's up to you.
2. To record your findings [simply head to this link](#) to record your data. Your average will then be recorded along with other NSS participants. Satellite observations will also be recorded on this date to compare the data collected from the experiment & that collected by the satellite to work out an average temperature in Australia at that time.
3. The team over at Science Time From Space will be collecting the data collated by the Astronauts on the International Space Station and providing a video of the experiment, outlining what the astronaut found comparing it to what NSS participants found and what this all means.
4. We will share the information collected and the astronaut experiment video with all registered NSS participants after the event.