Not until the 1954 scientific work took off in Antarctic in 1957-58 (international Geophysics Year) that knowledge was gathered to answer fundamental questions about the Earth’s systems.

What impact is human activity having on atmosphere, climate, weather and oceans? This work identified major gaps in our scientific knowledge. This information was crucial as a result of atmospheric testing of nuclear weapons and upper atmospheric and space flight.

One of the benefits was the critical role of the Antarctic on climate. There was not a complete map of Antarctic in 1957.
Wilkes Station February 1960 from the Air.
Photographer H Black Copyright AAD 4401A6
US Navy unloading in Newcomb Bay on the 1st February 1957

Photographer Ralph Glasgal 1957
February 1957 – levelling the site
Photographer Ralph Glasgal 1957 US Official Photograph AAD 4405C4
US Navy getting the gear ashore, all 11,000 tons. Stores and prefabricated building materials. Photographer Ralph Glasgal 1957
Erecting the Jamesways huts for a hundred “Seabees” (construction crew) to live in for 14 days.
Photographer Ralph Glasgal 1957
Putting down the foundations. Clements buildings were used by the US for housing the permanent activities of the Station. Photographer Ralph Glasgal 1957

- Tongue for levelling wall panels
- 100mm thick plywood insulated stress skin panels
- Floor trusses at 1.2m centres.
- Levelling beam.
- Foundations.
Assembling the Clements prefabricated building system

- Installing the roof panels.
- The wall panels are in place.
- Clements buildings are based on a 4 foot (1.2m) module. The buildings are usually 20 feet (6m) wide and 48 feet (14.4m) or 56 feet (16.8m) long.
10 days later
Photographer Ralph Glasgal 1957 US Official Photograph AAD 4406B6
The auroral tower to the end of the science wing
Photographer Ralph Glasgal 1957

- Auroral tower. The All sky camera recorded the aurora's at night. The tower is mounted on this frame to ensure it remains above the snow drift.
- Radar dome on top of the meteorological building
Installing the all-sky camera  Photographer Ralph Glasgal 1957
Australia takes over

- Life at the Station from 1959-1969
7th February 1959 Australia takes over – sort of!!

The formal handover ceremony in Market Square.

While officially Australia took over operational command – remaining US personnel did not take kindly to being under Australian control. Consequently there was a compromise until 1961 when the Station came under exclusive Australian National Antarctic Expedition (ANARE) control.

Photographer A Campbell Drury Copyright AAD 4402C4
Balloon hut was used twice daily to release meteorological balloons.

Riometer is a Relative Ionospheric Opacity Meter, a crude form of radio telescope that was part of the upper atmospheric research programme in the 1960’s.
The dome housed the radar that manually tracked the radiosonde that was taken aloft by the meteorological balloon.
Tracking a radiosonde

- Readings from the balloon equipment are recorded on this instrument via the radar, taking measurements of altitude of the balloon, position of the balloon, hence wind speed in the upper atmosphere, temperature and humidity. This information is then used for meteorological forecasting.
Inside the Clements huts. Photographer A Campbell Drury Copyright AAD 4178B1
This communication centre was a crucial link between Australia and our other Australian stations of Davis and Mawson.

- Teletype machines used to send typed and coded messages.
Keeping his mind on the job?
This is the communications building built by Australia, now known as the Wilkes Hilton.

- The Wilkes Hilton is a field hut 500m East from the old Wilkes Station. The radio equipment has now been removed and the hut is fitted out with bunks and stoves. It is used as an escape Station life at Casey.
The workshop was used for servicing and repair of all the Station vehicles.
Always respect the difficulties of working in Antarctica. The graves of Hartley Robinson and R.N. Sullivan, Nella Dan in the background.
Sunroom

- Sunray lamps for maintaining a tan because there is no sun in the middle of winter.
ANARE Changeover. In the recreation room. The new party has to become familiar with the idiosyncrasies of operating the equipment and locating the necessary spare parts to keep the Station going.
A jam session in progress – Phil Law the first Director of ANARE leading the way on the Accordion.
A grand feast – Australian style.
Efforts were made on social occasions to maintain a standard of dress.
The recreation room — Gee, the men had to do their own washing, ironing and mending. There were 200 feature films, 1000 long playing records and music tapes.
A male world – this now an equal opportunity issue and hence sexual harassment.
Least we forget - Anzac Day 1962 morning service in Market Square. The snow drift is covering the Station as was the original intention when the Station was designed. Photographer J Baytte
What’s left behind?

- What needs to be done after the Madrid Protocol.
- The Madrid Protocol is the agreement that all Nations clean up and remove what is not historic place.
- The way that historic is assessed is by asking does a place represent or address history, philosophy, custom, taste, design, usage, process, technique, materials or associations with events or persons.
1992 a big melt — this is market square the burlap over the plywood frames used to create enclosed corridors is exposed to the elements.

Photographer Graeme Snow 1992 Copyright AAD 2120A3
These Jamesways were initially used to house the 100 strong construction crew.

Later these buildings housed stores. While these photos were taken in 1992 even less of these double thickness canvas structures with fibreglass insulation remains in 2001.

Photographer Graeme Snow 1992 Copyright AAD 2119D6
Pristine Wilkes as a working Station everything was in order and had a place. Photographer A Campbell Drury Copyright AAD 4396C4 C 1959
The remaining Station, is both an historical record of the US International Geophysical Year Station 1957 – 58 and a situation that needs to be rectified in terms of the impact on the environment.  Photographer Graeme Snow 1992 Copyright AAD 2120C2
Keeping buildings maintained and intact allows for their future interpretation and visitor access. Triple glassed window hatches in the roof panels have been broken and as a result the interior of the building has filled with drift. Photographer R.Reeve Copyright AAD 2118B2
Rubbish and a corrosion test. The details on the end of this drum identify it as being from 1957 Deep Freeze II.

Photographer Graeme Snow 1992 Copyright AAD 2120A5
This husky needs a decent burial.

Photographer Graeme Snow 1992 Copyright AAD 2119D4
Certainly not the way to leave things. This site obviously needs cleaning up. Photographer Graeme Snow 1992 Copyright AAD 2120C1
Most of the time the snow and ice covers most of the remains of the Station. Photographer Elspeth Wishart 2000