

# IPCN

## Tahmoor South Coal Project SSD 8445

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## History

I have been installing and maintaining monitoring systems to ensure public safety and minimise impacts from mining since 2007.

### Sites

- Rail
- Inghams
- Picton Industrial Area
- Picton High School
- Picton Water Recycling Plant

Since 2013 I have been working for myself.

Tahmoor represents a significant proportion of my work over that period and I anticipate continuing work from Tahmoor South.

## Aim of Monitoring Work

Automated continuous monitoring is part of the management process use by Tahmoor Coal.

Continuous monitoring chosen to be installed;

- Critical infrastructure.
- Optimal monitoring technique.
- Minimises impact on infrastructure owner.

Provides continuous monitoring of critical infrastructure.

Identifies developing problems before they are noticed and cause issues for the site.

Early identification allows rectification before they have significant impact.

Some critical systems are alarmed so any issues can be responded to ASAP.

# Monitoring Equipment

Laser distance meters

Tilt meters

Strain gauges

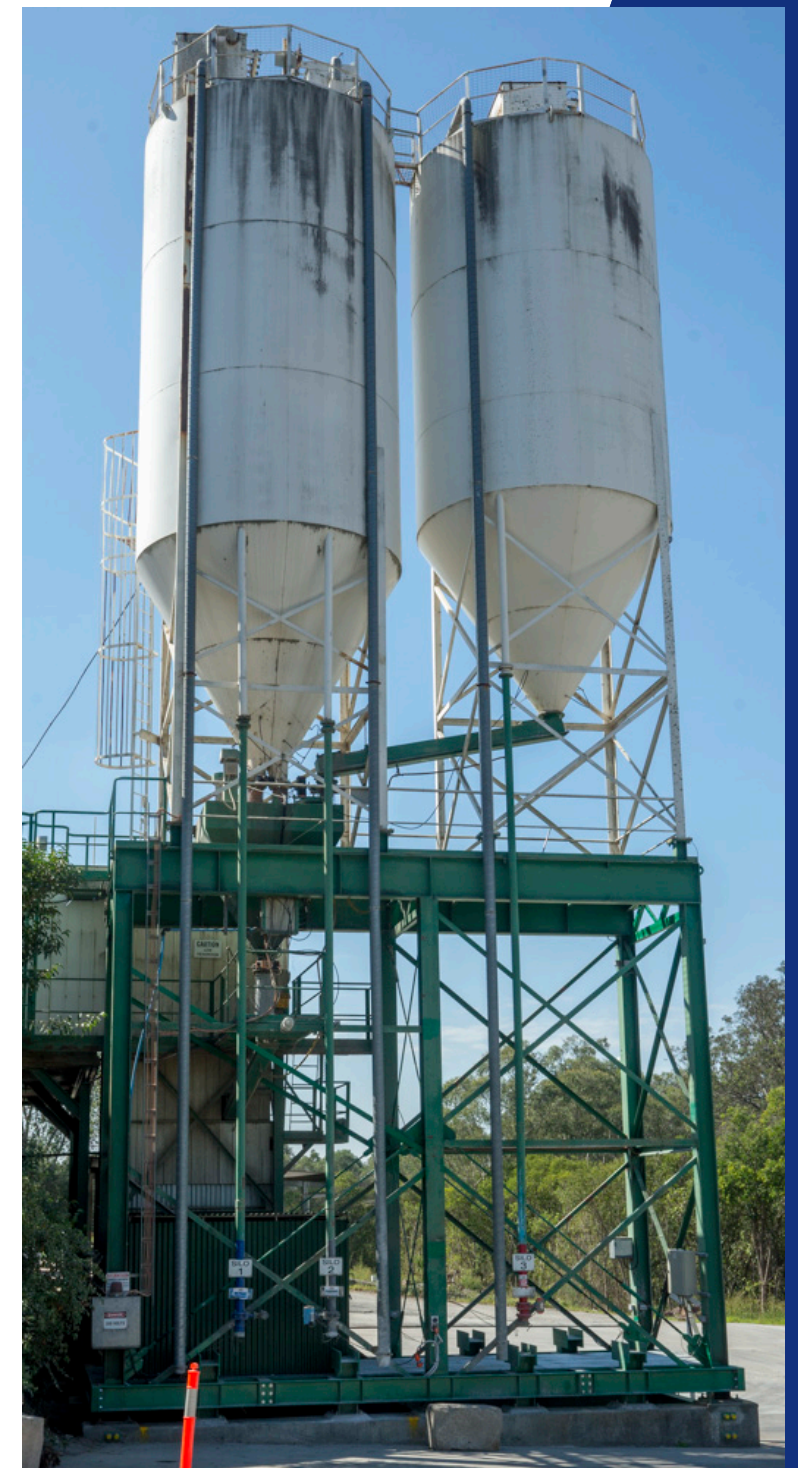
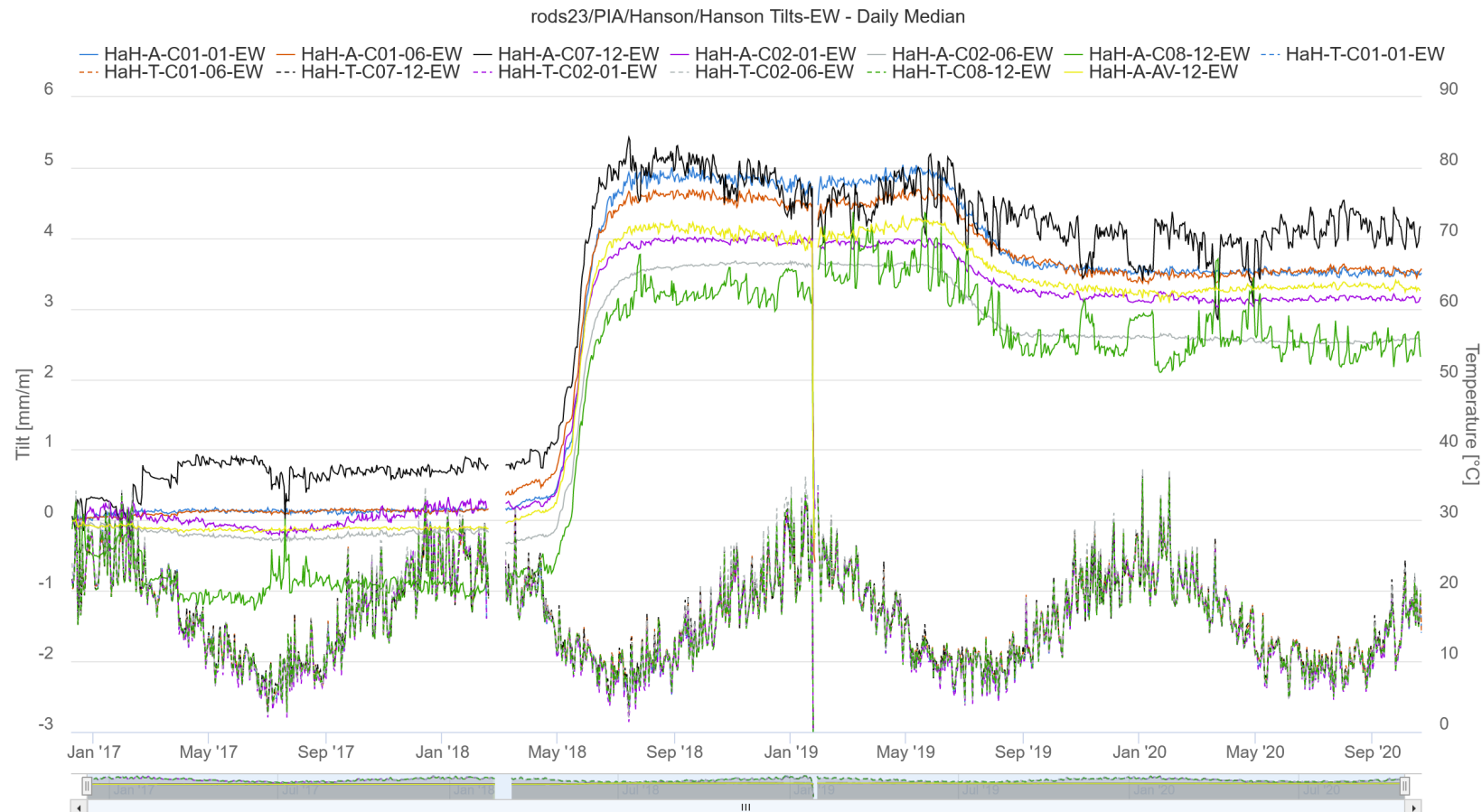
Temperature



# Examples of Monitoring

## Concrete silos

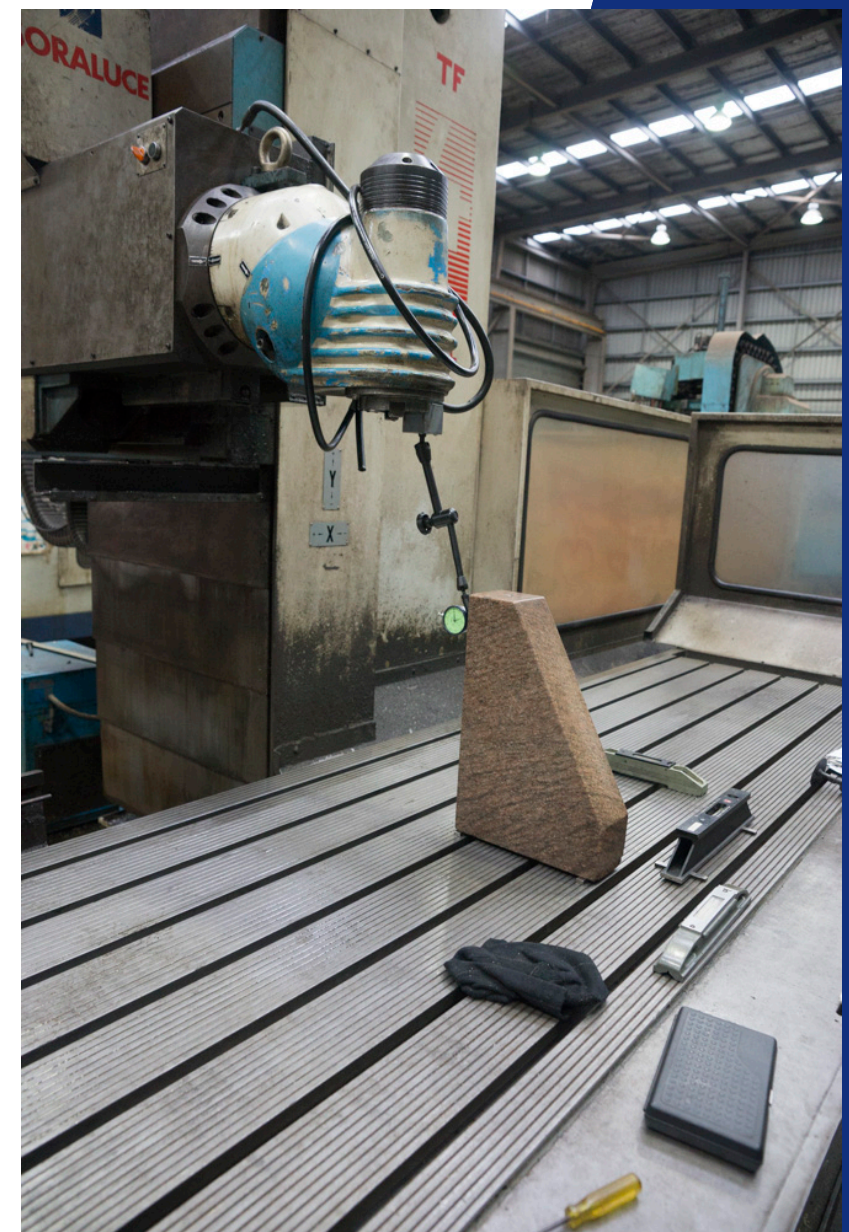
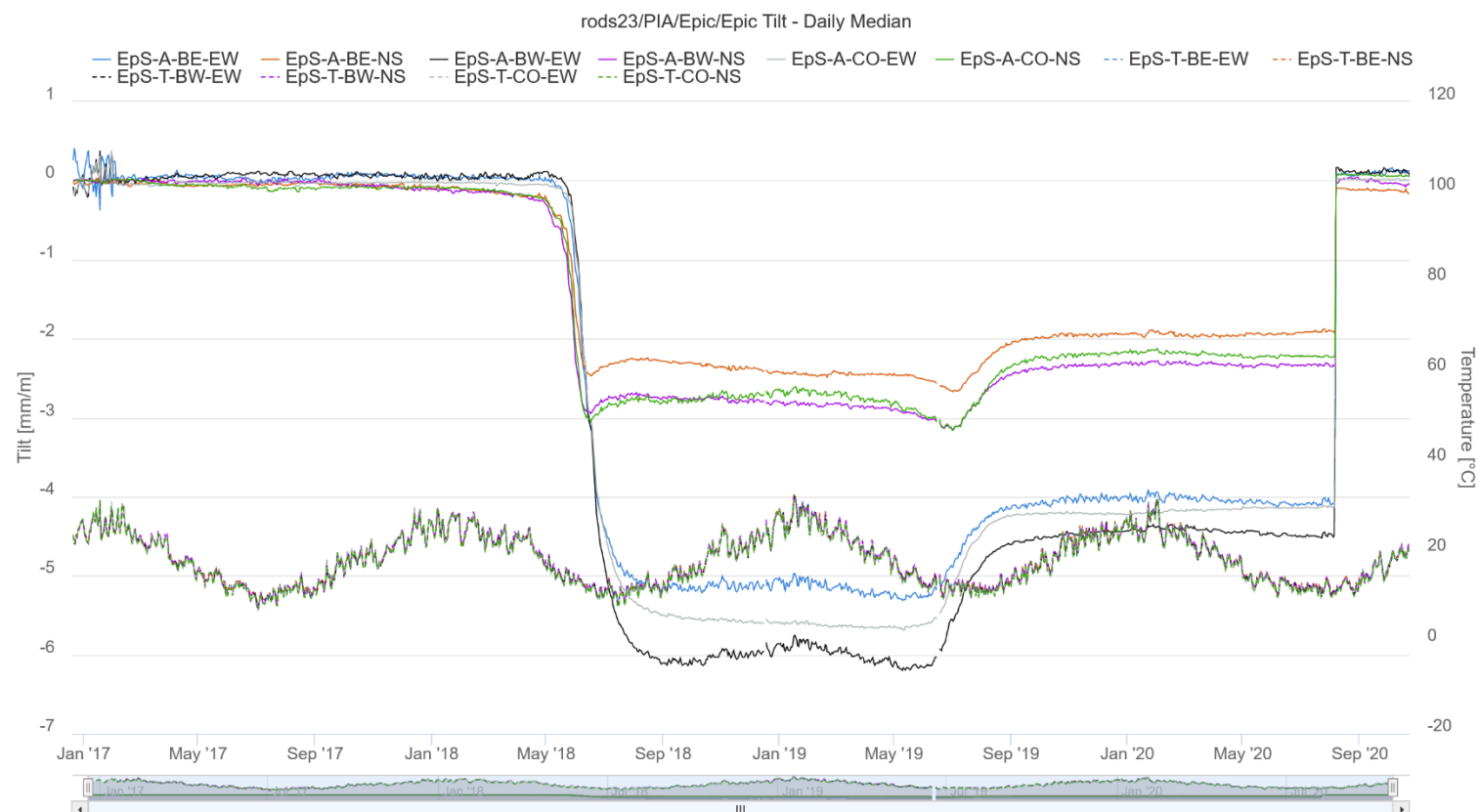
- Tilt meters and strain gauges installed prior to subsidence.
- Modifications done prior to mining to allow releveling.
- Tilted but no issues, no levelling required.
- Sensors could tell us hopper level.



# Examples of Monitoring

## Picton Industrial Area

- Tiltmeters installed on machinery.
- Laser distance installed on gantry cranes.
- Machinery levelled if required during mining and post mining – still ongoing.
- All sites remained operational with minimal impact.



## Outcome of Monitoring

No infrastructure has been forced to stop operations temporarily or permanently due to mining.

Many sites showed negligible impact from mining (e.g. Picton Water Recycling Plant, Picton High School).

All impacts have developed slowly allowing interventions to be planned where required.

System are developed to account for faster unsystematic subsidence but this has not occurred.

Most impacts we know about before the site notices any issues, allowing any required maintenance to be planned.

The impacts on all sites has been minimal.

There have been no safety issues.