



**WE DO GIVE A RATS**

## **Rail and Ambient Temperature Monitoring (RATS).**

### **Better, safer, faster, smarter.**

Nitty-gritty technical challenges, like scouring the globe to source the best product for a given solution, or inventing one that's even better.

That's just the way we're wired. That's why, when we say we'll deliver a solution, we deliver. First time. And that's how we save you time, trouble and money – when you're dealing directly with the industry's brightest minds, you get the answers you need, faster.

**No excuses. No cost blow outs. Just a solution that works.**

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## RAIL AND AMBIENT TEMPERATURE MONITORING



Availability log file Last Week: 0.000% (20/11 to 21/11, 0 days in the reported value)

Scroll down to the bottom of the page for links to additional log data and notes

Station Name	Current Observations							Rail Extremes		Ambient Extremes				
	Time	Net Address	Field Status	Rail Temp (C)	Ambient Temp (C)	OTemp Switch	ACFail (UPS)	BattFail (UPS)	Min Temp (C)	Max Temp (C)	Min Temp (C)	Max Temp (C)		
Q&R Network														
Telegraph Rd	12:45	123.209.14.190	OK	30.8	29.4		Normal	Normal	17.8	05:05 45.8	12:40	19.0	05:00 30.1	12:10
Frederick St	12:45	123.209.136.157	OK	30.8	31.1		Normal	Normal	18.7	04:50 51.8	12:40	19.6	04:50 32.7	12:25
Siedels Rd	12:45	123.209.52.69	OK	30.1	31.8		Normal	Normal	18.1	04:35 49.1	12:45	16.6	04:35 32.4	12:40
Nathan Rd	12:45	123.209.139.115	OK	30.9	32.4		Normal	Normal	20.4	04:50 50.0	12:40	19.6	04:50 32.6	12:05
Sanford Rd	12:45	123.209.42.32	OK	30.8	29.8		Normal	Normal	17.8	04:55 49.5	10:45	18.0	05:05 31.1	10:40
Glenora St	12:45	123.209.185.103	OK	30.6	28.3		Normal	Normal	19.9	04:25 45.9	12:25	21.4	04:15 29.1	10:10
Roma Street	12:45	123.209.54.59	OK	44.3	30.1		Normal	Normal	19.5	04:55 45.6	10:40	20.8	05:20 30.4	09:30
Abion	12:45	123.209.1.121	OK	44.0	29.7		Normal	Normal	18.3	04:20 44.8	12:35	20.6	04:20 29.9	12:00
Exhibition Maysse	12:45	123.209.158.174	OK	30.9	31.2		Normal	Normal	19.8	04:45 45.9	12:45	0.0	07:45 31.2	12:45
MorningsideByDO	12:45	123.209.162.29	OK	30.8	30.1		Normal	Normal	20.9	04:35 47.8	12:25	20.4	04:20 30.1	12:45

## THE PROBLEM

The tactical and early application of speed restrictions based on accurate ambient and rail temperature data can reduce the risk buckles and resultant train delays and derailments.

### QUICK FACTS

- Low cost
- Identifies variance from BOM advice
- Provides alarms and alerts
- Integrates easily to client systems
- Self-powered.
- 3G/4G communications

## OUR SOLUTION

The ARCS Group has identified a simple and elegant solution to reducing potential buckling in railways. Variations in ambient temperatures during hot and cold weather can cause rail buckles and breaks in the rail impacting the safe running of trains. It is both costly to the asset owner and operator and dangerous to rail passengers and users. Traditional methods and controls apply system wide speed restrictions based on BOM current temperature predictions often this does not accurately reflect the true conditions of the rail.

RATS is a low cost, solar powered, cloud based connected operational support tool which makes rail and ambient temperature data available anywhere, any time. Allowing operators to proactively apply speed restrictions at targeted locations on the railway RATS includes a real time user interface with colour coding for warning and alarm conditions and historical graphing system this allow users to quickly assimilate the prevailing conditions on the rail and any potential risks.

## OUR APPROACH

The ARCS approach is to provide a low costs measurement of rail temperature to allow multiple systems to be deployed over a rail corridor to provide actual rail temperature in real-time. The system has been developed to ensure low costs and a highly reliable sophisticated system together with a proprietary top-end integration into client systems.

RATS allow ARCS to design, build and deploy a proven reliability and cost effective solution across the client railway. This approach ensures flexibility in deployment and accommodates all types of client requirements, providing our clients with a better, safer, faster and smarter solution.