

## Blog 2

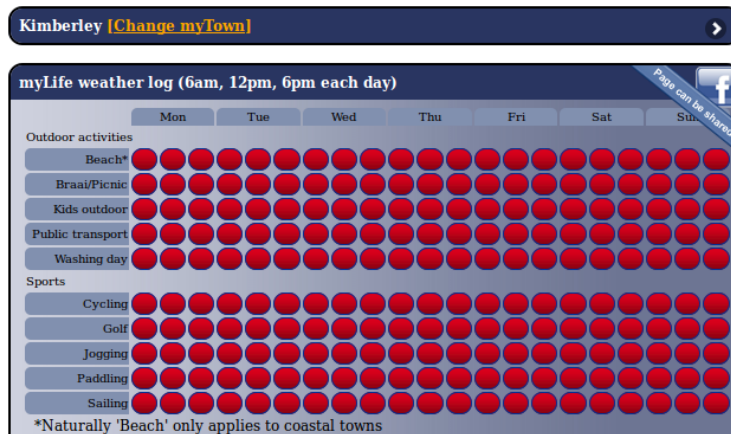
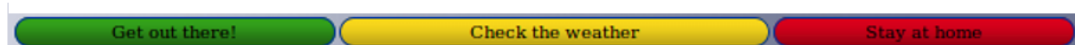
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I have an admission to make: I'm a weather freak. I find the daily weather bulletin as riveting a read as Stieg Larsson's *Millennium* trilogy and browsing through climate statistics as exciting as watching the IPL final. There was a time (in primary school) when watching the evening television weather forecast was the highlight of my day.

Since I'm a South African, this inevitably means I have found myself consulting data and forecasts provided by our met office, the South African Weather Service (SAWS). I remember the first time I was introduced to the internet (in 2001, I think), how excited I was to find the amount of climate and weather data that was available from their site (<http://www.weathersa.co.za/>). I have followed the development of the site with keen interest. But the journey has not always been a smooth and pleasant one; recently the site has been regularly relaunched or updated, with increasingly elaborate graphical displays, but also more forecast locations, longer range and more detailed forecasts for more variables. So, being the data lover that I am, while many others became increasingly irritated with a somewhat cumbersome interface (for those who did not visit the site quite as frequently as I do), displays that were difficult to read and forecasts that were more difficult to interpret than the straightforward output that had previously been available, I remained loyal and supportive of the site and its evolution.

Until late last year, that is, when, in the aftermath of their latest upgrade, disillusionment began to set in. I remained patient for a long time while they claimed to be responding to people's concerns and problems with the site, admittedly bringing back previously free features that they had removed and made available to paying subscribers only. But the internal problems at SAWS are becoming all too painfully apparent on the site. Over the course of the past three years, my beloved daily weather bulletin has become increasingly ridden with missing and highly suspicious data values. Missing data have also become increasingly common in daily, 10-day and monthly rainfall statistics. This appears to be a symptom of increasing neglect of surface data stations, upon which we will have to rely for future data to assess climate change trends and model accuracy. There has been a slow but marked trend towards fewer active, reporting weather stations in South Africa for a number of decades, but, from my limited exposure to their data, the trend seems to have accelerated alarmingly of late. And this while SAWS proudly proclaims on a banner on their website: "We calibrate our weather forecasts against 2400 weather stations in SA," and "We use far more extensive observation and prediction infrastructure than any international source in SA."



Big Brother has spoken: STAY AT HOME!

Not that humility is something that has been in particularly great supply from SAWS of late. The site allows one to share free forecasts and images with one's virtual buddies on social networking sites such as Facebook, where links appear with a thumbnail announcing "South Africa (sic) Weather from the official MET office. The ONLY accurate source of SA weather." Further indication that their confidence exceeds their grammatical competence is given by a banner proclaiming: "The highly skilled forecast team is made up of South Africans with insight into the local climate and prevalent weather (sic) conditions."

All of which might have been forgivable if they were at least producing publicly available, quality weather forecasts. Which they aren't. Perhaps the most significant problem is the astonishing inconsistencies in their forecasts: on one graphic they indicate sunny skies, on another rainfall, yet another indicates partly cloudy weather or fog. All for the same time. And sometimes the associated description of yet another weather pattern altogether. The example forecast below and the activity log for a sunny week in Kimberley, above, demonstrate this amply, I think (notice, for example, how the temperature forecast for 6am on Monday is 6°C higher than the predicted minimum).

Cape Town (Airport) [\[Change myTown\]](#)

7-Day table ▾

Key is at bottom

**Monday 28/05**  
**Clear skies: 6/21°C** (will not coincide with times below)  
**0%, 0mm** (Forecaster modified detail below)

Page can be shared

Time	Cloud	Temp/Humidity	Wind	Fog
0:00		13°C /68%	NE 9km/h	50%
6:00		12°C /62%	NW 19km/h	50%
12:00		18°C /61%	W 11km/h	1%
18:00		12°C /86%	W 19km/h	7%

Mobile phone: m.WeatherSA.co.za

**Tuesday 29/05**  
**Cloudy with rain: 10/17°C** (will not coincide with times below)  
**30%, 2mm** (Forecaster modified detail below)

Time	Cloud	Temp/Humidity	Wind	Fog
0:00		12°C /87%	NW 9km/h	32%
6:00		12°C /90%	SE 19km/h	32%
12:00		16°C /83%	SE 20km/h	5%
18:00		13°C /80%	SE 19km/h	15%

Mobile phone: m.WeatherSA.co.za

**Key: We're testing something very new here; a visual way to impart a lot of info that is easy to scan. Please give us constructive feedback.**

The grey bar below the icon indicates the percentage of cloud cover. A full bar is 100% cloud, and a clear bar is 0%

26°C /41% We provide temperature in °C, and relative humidity in percentage. The bar range is 0-45°C. NEW: Red tick indicates dewpoint

SW 17km/h The wind arrow indicates the direction the wind will blow to, and the letters indicate the source (as wind is so named). The bar below indicates the speed with a full bar being 60kmph.

How to deal with forecast uncertainty: predict every possible weather condition in one of your graphics and one of them is bound to be correct...

Not only are their forecasts inconsistent, they are sometimes truly bizarre. Such as the fact that the icon corresponding to “cloudy and cold” looks suspiciously to me like sleet - something which comes across as somewhat out of place in a forecast for Vredendal in February, for example (even if the day might be cool

and rainy).

Recently the site has also been upgraded to give free forecasts for 350 locations, which seems great on the face of it. Until you realise that many of the locations are either given exactly the same forecast as surrounding areas (try finding differences between the forecasts for Cape Town (City Bowl), Cape Town (Region) and Cape Town (Kirstenbosch)) or forecasts are strongly biased (the forecast for Vredendal is generally 5 -10°C lower than what the daily weather bulletin reports the next day). I could continue to give many more examples, but I think the point is clear: somewhere along the line, something is very wrong.

The description for the forecast shown does note that it “will not coincide with [the forecasts for the] times [shown beneath it]” (which begs the question which one should be trusted). Experience has shown the description to be generally far more accurate than the tabled data. Suspecting from what is stated that this perhaps indicated that this was the actual forecast provided by meteorologists which elsewhere becomes entangled and lost in the included graphics, I decided to do some checking on who runs the site.

An innocuous disclaimer at the bottom of the home page states “website operated by Weather Intelligence Systems.” A quick web search reveals that Weather Intelligence Systems (WIS) is a subsidiary of the Future-Foresights Group, a company specialising “business building,” and “bid development.” It proudly proclaims on its home page to have led MTN’s controversial mobile license bid and that they “have built arguably the world’s most advanced telecommunications valuation model” which has been applied “by more than 5 significant (sic) operators.” More to the point, they also unashamedly states that WIS is “commercialising”SAWS and that it has “exclusive rights to the ... amazing technical aptitude [of SAWS].”

I suspect many may beg to differ with the use of such flattering language in relation to SAWS, but the main point here is that the company exclusively responsible for SAWS’s sales and marketing services, and therefore intimately involved in the dissemination of most of their information, is not particularly concerned with providing reliable forecasts for average folk; or, for that matter, the collection and preservation important meteorological data - they want the cash that only big industry can provide.

Whether other weather sites produce better forecasts is a question open to debate - I will reserve judgement until a rigorous comparative statistical analysis is conducted - but when it comes to South African weather and climate data, I have simply not been able to find any other comparable source of information (if anyone knows of some such thing, please let me know!). Since SAWS is legally mandated to provide certain services to the South African public and as a result have numerous exclusive rights (such as for providing weather warnings), our nation remains dependent upon the functioning of the organisation - we can’t simply shift to using forecasts from other private providers. In effect, the current combination of profit-centred privatisation with an inefficient bureaucratic organisational structure could have potentially disastrous consequences for meteorological and climatological services and research in South Africa.