

What future functionalities can be expected?

- Search functionality
- Spatial viewer
- User will design own Programmes and Networks

How to get hold of us and register as a user?

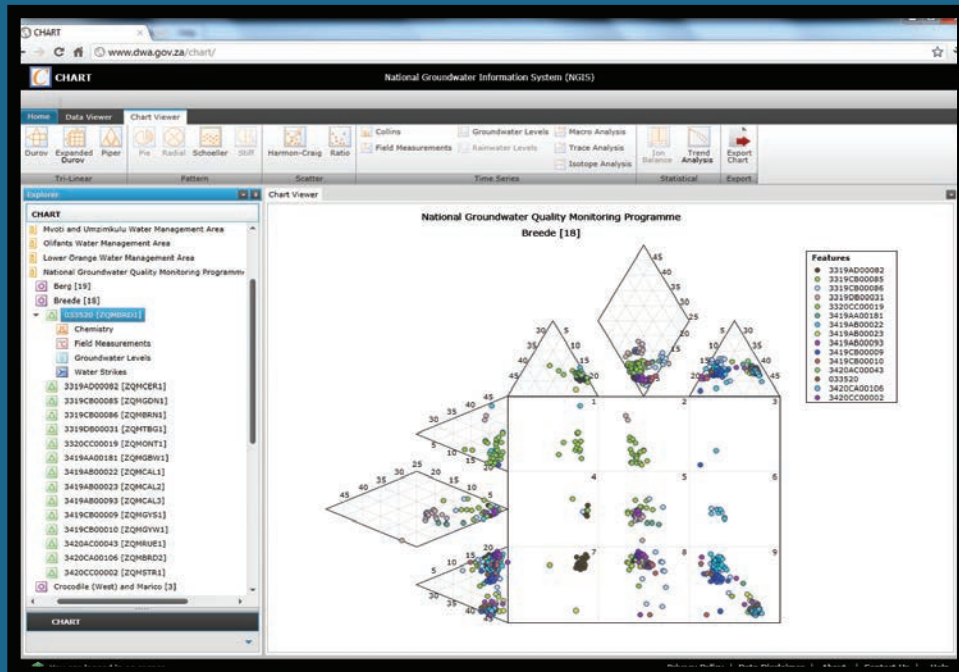
To register go to: <http://www.dwa.gov.za/ngis>

Registered users go to: <http://www.dwa.gov.za/chart>

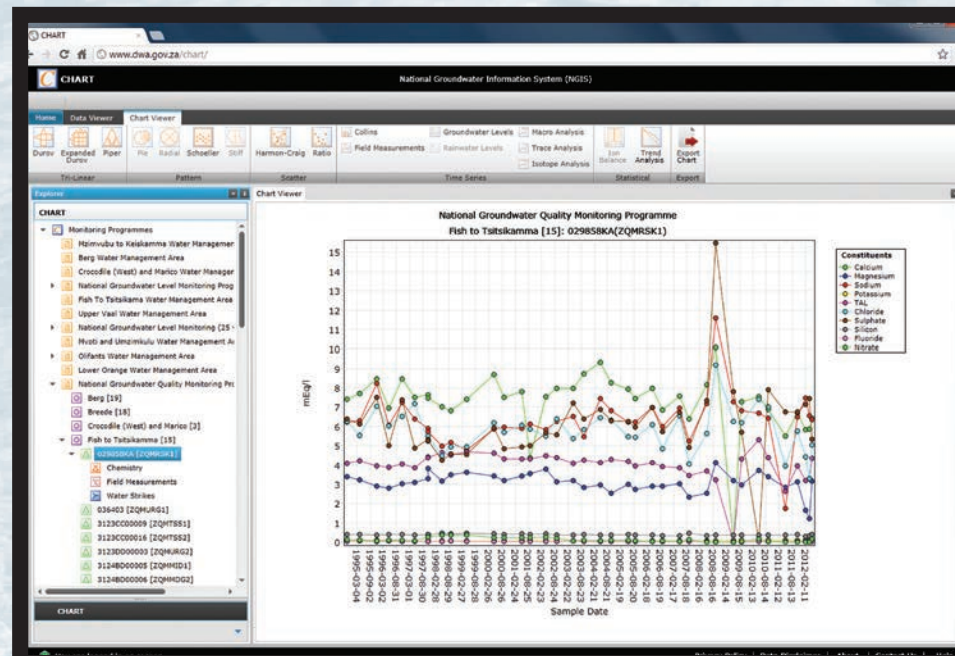
Enquiries: ngaur@dwa.gov.za

Other related links:

Groundwater Website: <http://www.dwa.gov.za/Groundwater>



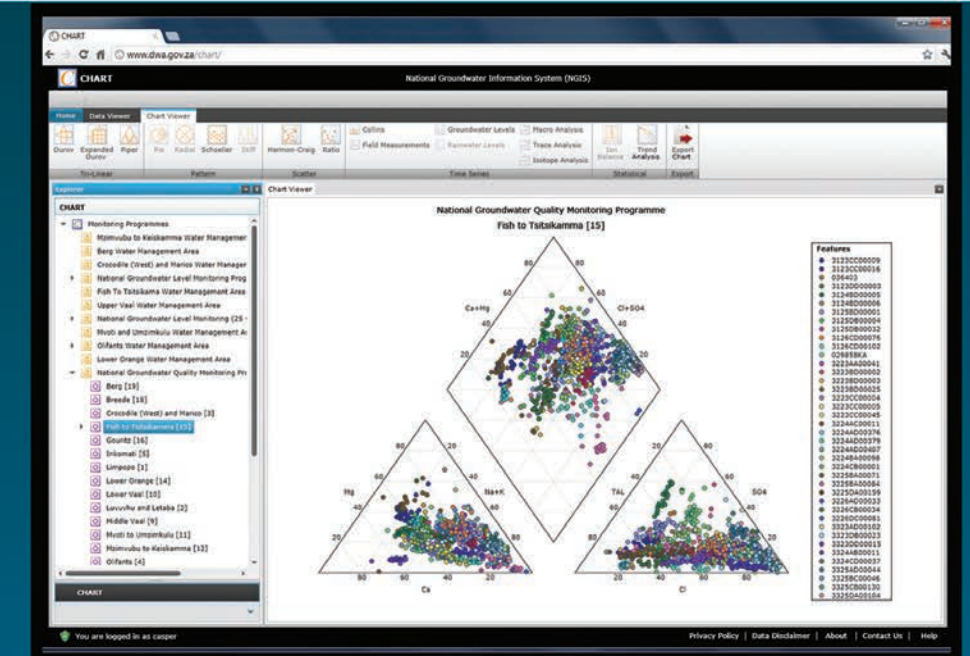
Expanded Durov chart



Macro analysis time series chart

| Identifier | Name | Site Type | ZQM Number | G Number | Latitude | Longitude | Elevation | Drainage P |
|------------|---------------------------------------|-----------|------------|-----------|-----------------|----------------|-----------|------------|
| 3123CC0005 | Karee Kloof 0245 | Borehole | ZQHTSS1 | | -31° 53' 57.79" | 23° 4' 1.99" | 1122.00 | L11C |
| 3123CC0016 | THREE SISTERS 0244 | Borehole | ZQHTSS2 | | -31° 58' 36.11" | 23° 4' 17.00" | 1120.00 | L11C |
| 036403 | MURRAYSBURG PRIMARY SCHOOL 0000 | Borehole | ZQHRG1 | 0036403 | -31° 58' 0.91" | 23° 45' 42.01" | 1180.00 | L21E |
| 3122DD0003 | HARRAYSBURG PRIMERE SKOOLKOSHUIS 0000 | Borehole | ZQHRG2 | | -31° 58' 0.80" | 23° 45' 32.90" | 1191.00 | L21E |
| 3124BD0005 | MIDDELBURG TOEKENKENS GERIE 0000 | Borehole | ZQHM101 | | -31° 19' 5.89" | 24° 59' 31.20" | 1270.00 | Q14B |
| 3124BD0006 | THREEPORTEN GED. VLAKONTENY 0011 | Spring | ZQHM002 | | -31° 19' 10.88" | 24° 58' 56.21" | 1440.00 | Q14B |
| 3125BD0001 | STEVENSBURG TOWN 0000 | Borehole | ZQHTS1 | | -31° 17' 46.10" | 25° 49' 49.69" | 1471.00 | Q12B |
| 3125BD0004 | HOFMEYER TOWN 0000 | Borehole | ZQHR1 | | -31° 39' 11.09" | 25° 48' 54.50" | 1275.00 | Q13A |
| 3125BD0003 | PRAM KOPPEN LEEGTE 0000 | Borehole | ZQHMFR2 | | -31° 39' 18.18" | 25° 48' 59.83" | 1270.00 | Q13A |
| 3126CD0002 | GOLDEN VALLEY 0129 | Borehole | ZQHTAR1 | | -31° 57' 32.90" | 26° 16' 31.48" | 1390.00 | Q45C |
| 3126CD0007 | GOLDEN VALLEY 0129 | Borehole | ZQHTAR2 | | -31° 57' 33.95" | 26° 16' 31.48" | 1340.00 | Q45C |
| 3126CD0010 | GOLDEN VALLEY 0129 | Borehole | ZQHTAR3 | | -31° 57' 30.02" | 26° 16' 34.18" | 1450.00 | Q45C |
| 3222BD0026 | RHEINOSTERKOP 0155 | Borehole | ZQHRK2 | | -32° 12' 56.27" | 22° 48' 35.57" | 963.23 | L11F |
| 029858KA | RHEINOSTERKOP 0155 | Borehole | ZQHRK1 | 0029858KA | -32° 12' 56.99" | 22° 49' 4.89" | 964.00 | L11F |
| 3223AD0041 | KLIJKRAAL 0127 | Borehole | ZQHRK1 | | -32° 2' 21.77" | 23° 0' 25.00" | 1020.10 | L11D |
| 3123BD0002 | FARM 94(ABERDEEN) 0094 | Borehole | ZQHAB02 | | -32° 28' 33.82" | 23° 48' 21.06" | 880.00 | N14A |
| 3223BD0003 | FARM 94 GED. PERSVERANCE 0094 | Borehole | ZQHAB04 | | -32° 27' 26.10" | 23° 48' 39.20" | 883.00 | N14A |
| 3223BD0005 | FARM 49 PTH. PERSVERANCE 0000 | Borehole | ZQHAB04 | | -32° 27' 26.75" | 23° 48' 39.06" | 125.00 | N14A |
| 3223CD0004 | KAREEKUIL 0029 | Borehole | ZQHR02 | | -32° 58' 29.82" | 23° 6' 55.04" | 820.00 | L12C |
| 3223CD0005 | KAREEKUIL 0029 | Borehole | ZQHR03 | | -32° 58' 29.82" | 23° 6' 55.08" | 820.00 | L12C |

Data viewer



The Department of Water Affairs is responsible for Groundwater Information in South Africa. This includes the collection and distribution of all groundwater related data and information products. Adequate groundwater information is paramount, particularly in a dry country such as the Republic of South Africa.

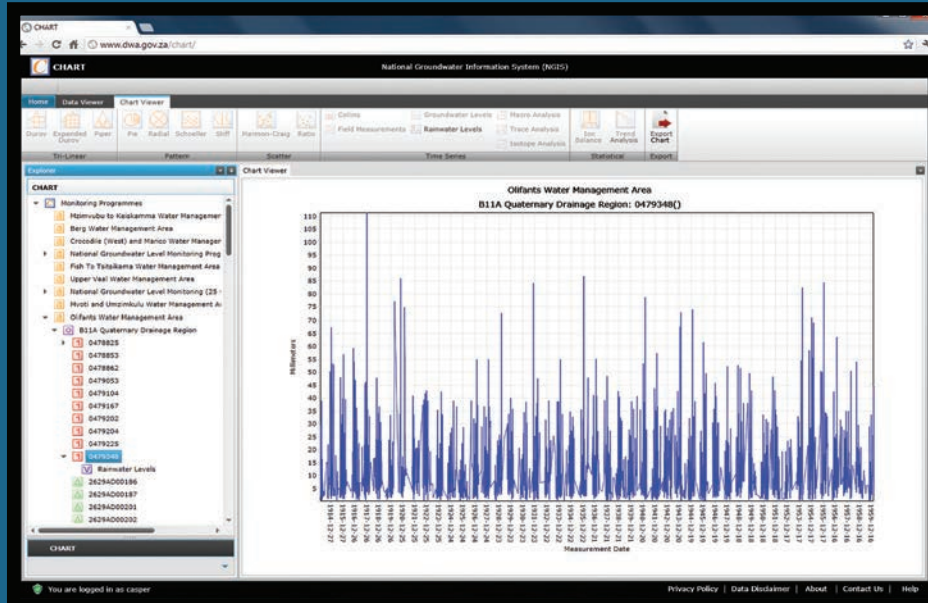
To be able to support strategic development objectives, it is important to analyse and assess the complete hydrogeological cycle and hydrochemical trends in an integrated fashion with collaboration between groundwater, surface water, and meteorological data in a single snapshot or dashboard solution like **CHART**.

The prominent features of **CHART** are depicted in this pamphlet.



water affairs
Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA





Rainfall time series chart

What is CHART?

CHART is a web enabled, integrated, hydrogeological analysis and reporting solution that aims to assist hydrogeologists and hydrogeochemists in decision-making during analysis and assessment of hydrogeological and hydrogeochemical data.

Why CHART?

The DWA has a legal obligation to ensure that water resources (including groundwater) are protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner.

The National Water Act (NWA) (Act No 36 of 1998), Chapter 14 Part 2

requires the establishment of national monitoring and information systems because the availability of information about water resources is regarded as critical to the main purpose of the NWA. Section 139.2 (a) refers specifically to a national groundwater information system, which translates to the National Groundwater Information Systems (NGIS) Portfolio.

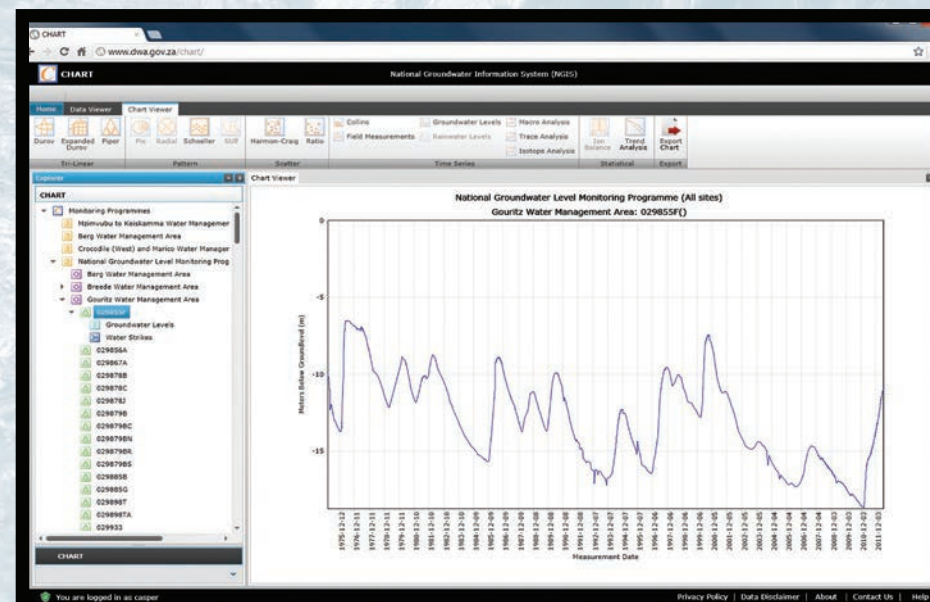
Within the NGIS Portfolio, **CHART** is a solution to analyse and interpret groundwater, surface water, meteorological data and present information for effective groundwater monitoring and decision making.

What are the benefits of CHART?

- Accessible 24 hours a day
- No license fees
- User-defined data sets made available on request
- Instant plotting of standard and custom-build charts
- Read-only access to data
 - Groundwater features (from National Groundwater Archive (NGA))
 - Water quality (from Water Management System (WMS))
 - Surface and groundwater levels, rainfall measurements (from HYDSTRA)

What functionalities are currently available?

- Users can export chart images
- Users can export displayed time series data
- Plotting various charts
- Microsoft® Windows and Outlook® style data viewing



Groundwater level time series chart

What charts are currently available?

| Chart Type | Chart Name | Data Plotted |
|----------------|--------------------|--------------------------|
| Tri-Linear | Durov | Water quality |
| | Expanded Durov | Water quality |
| | Piper | Water quality |
| Pattern | Pie | Water quality |
| | Radial | Water quality |
| | Schoeller | Water quality |
| | Stiff | Water quality |
| Scatter | Harmon-Craig | Water quality |
| | Ratio | Water quality |
| | Time Series | Water quality |
| Time Series | Field Measurements | Water quality |
| | Groundwater Levels | Groundwater measurements |
| | Rainfall Levels | Rainfall measurements |
| | Macro Analysis | Water quality |
| | Trace Analysis | Water quality |
| Statistical | Isotope Analysis | Water quality |
| | Ion Balance | Water quality |
| Trend Analysis | Trend Analysis | Water quality |
| | Logs | Hydrogeological Log |