



A new data catalogue for the South African National Space Agency

<http://catalogue.sansa.org.za>



Search



Visualise



Order



**Earth
Observation
Data**

Key Features



Earth Observation Data



General Public



SAC Strategic Partners



SAC Staff

Target Audience



Easy To Use



Modern User Interface



Open Architecture and Extensible



Use Open Source and Open Standards

Guiding Principles



Internet



Database Host



Application Host



15TB Online Storage

Hardware Architecture





No Flash, Java Applets, ActiveX or other 'Disabling Technologies' !



OpenLayers, JQuery, HTML & Ajax



IE8, FireFox, Safari, Chrome, Opera



GeoDjango, MapServer, TileCache



Apache, mod_python, PostgreSQL



Debian PPC64, Ubuntu Server 64

Software Architecture



Informix



SACC



CBERS



More...!



Database



Open Services



Storage

- ✓ **All code is version controlled**
- ✓ **All code is hosted at and available to SAC (no vendor lock in)**
- ✓ **Comprehensive system documentation**

Best Practices



Sensor

Count

Active Microwave Instrument ERS-1	20896
Advanced Very High Resolution Radiometer NOAA	3162
Enhanced Thematic Mapper Plus Landsat 7	16624
Haute Resolution Visible Spot2	145506
High Resolution CCD Camera CBERS2-B	2187
High Resolution Geometric Spot 5	549763
High-Resolution Visible and Infrared sensor Spot 4	151753
Moderate-Resolution Imaging Spectroradiometer Aqua	1000
Multispectral Imager ZA-002	857
Multispectral Medium Resolution Scanner SAC-C	285
Multi-Spectral-Scanner Landsat 2	35
Multi-Spectral-Scanner Landsat 3	20
Multi-Spectral-Scanner Landsat 4	67
Multi-Spectral-Scanner Landsat 5	17021
RapidEye Earth Imaging System RapidEye-2	1692
RapidEye Earth Imaging System RapidEye-3	1604
RapidEye Earth Imaging System RapidEye-4	1463
RapidEye Earth Imaging System RapidEye-5	1347
Spot 1,2,3 HRV Xs	1239054
Thematic Mapper Landsat 5	120975
TSX-SAR TSX-1	11146
Total	2286457

System Status (06/2011)



**Lets take a look at the
system in action!**

Demo



- WMS Services allow innovation and uses not planned in the original system
- Clean architecture provides ability to easily add extension points e.g. Communications with DIMS
- Loosely coupled architecture allows improvements to be rolled out incrementally
- Easy to redeploy at other institutions e.g. International partnerships

Its a platform



Demo WMS Desktop Client



- Tasking interface
- Sumbandilasat coverages
- Common simplified data model ...

Recent developments



- Architecture diagram

Architecture Diagram

- Direct access to data for free products e.g. MODIS
- Subscriptions and notifications
- DIMS integration
- More varied search options

In the pipeline



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Thank you