



Catalogue Funded by the Department of Science & Technology

A new data catalogue for the South African National Space Agency

http://catalogue.sansa.org.za





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Search



Visualise



Order



Earth
Observation
Data

Key Features





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Earth Observation Data





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General Public



SAC Strategic Partners



SAC Staff

Target Audience





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Easy To Use



Modern User Interface



Open Architecture and Extensible



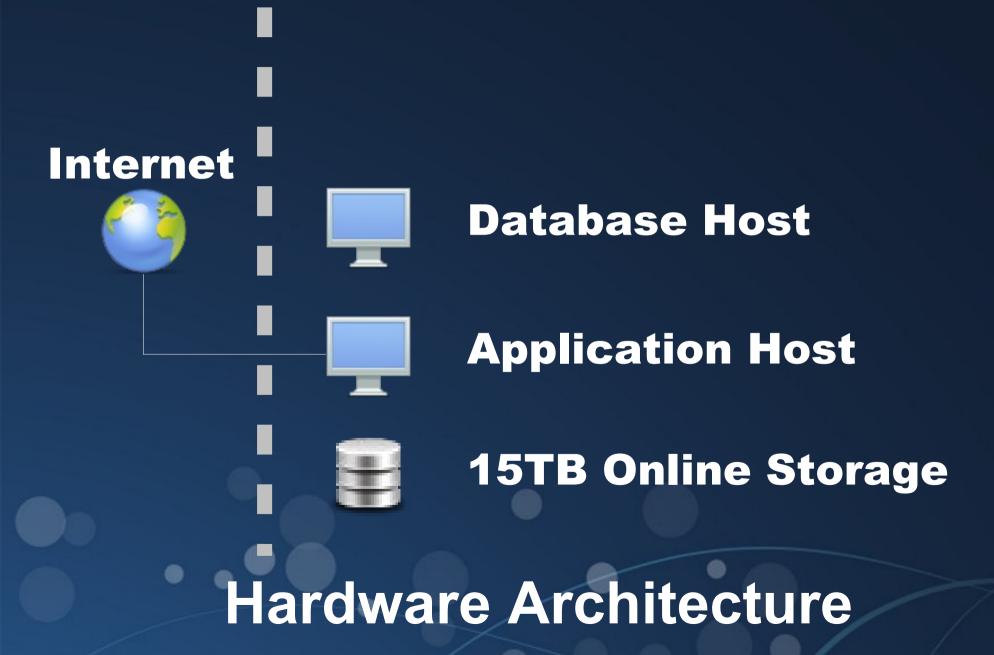
Use Open Source and Open Standards

Guiding Principles





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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



SANSA Earth Observation Data Flow Online Catalogue

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Informix



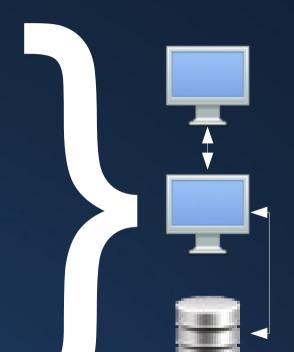
SACC



CBERS



More...!



Database

Open Services

Storage





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All code is version controlled



All code is hosted at and available to SAC (no vendor lock in)



Comprehensive system documentation

Best Practices





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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)





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Lets take a look at the system in action!

Demo





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- WMS Services allow innovation and uses not planned in the original system
- Clean architecture provides ability to easily add extention 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





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Demo WMS Desktop Client





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

Recent developments





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Architecture diagram

Architecture Diagram





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- 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