

## **Name + Surname**

Karen Chantal Steenkamp

## **Job Designation**

Senior Remote Sensing Researcher

## **Qualifications**

- BSc Earth Sciences (Geography and Botany) - Rand Afrikaans University 1993
- BSc (Honours) Geography - Rand Afrikaans University 1994
- MSc Geography & Environmental Management (cum laude) - Rand Afrikaans University 1998

## **Employment history**

Rand Afrikaans University Geography Research Assistant - Jan 1995 - Dec 1997

Rand Afrikaans University - Junior Lecturer: 1998

Rand Afrikaans University Lecturer: Climatology & Cartography - 1999

CSIR Satellite Applications Centre - Geo-Spatial Specialist- 1999 - 2001

CSIR Satellite Applications Centre –Manager (Earth Observation Value Addition) 2001-2004

CSIR Satellite Applications Centre - Researcher: 2004 - 2005

VITO Belgium - Guest Scientist June 2005 – October 2005

CSIR Meraka Institute – Senior Researcher November 2005 - present

## **Time with CSIR**

7 Years

## **Key interest areas**

My key interest areas are the use of MODIS, AVHRR and SPOT Vegetation satellite sensors in multi-temporal time series analyses in order to determine phenological parameters of vegetation communities in Southern Africa. Research in these parameters can further contribute to the knowledge of how change in vegetation coverage, composition and growth cycles reflects natural trends in climate or the impact of climate change. This application is underpinned by the integration and inter-calibration of different satellite sensors in building long term datasets. Another interest area is the use of hyperspectral imagery and spectroscopy in the characterization of bio-physical processes in vegetation.

## **Current Research**

Multi-temporal analyses of AVHRR data series from 1985 to 2000 and the interpretation of phenological parameters as obtained from TIMESAT

## **Awards + recognition**

Medal from Geographical Society of South Africa for best MSc Geography thesis in 1998