



# **SMAP Cal and Val over Kuwait desert**

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Oxnard, CA**



# Soil Moisture Campaigns-Kuwait Desert

1. Field campaign 2000
2. Field campaign 2006
3. Field campaign 2011

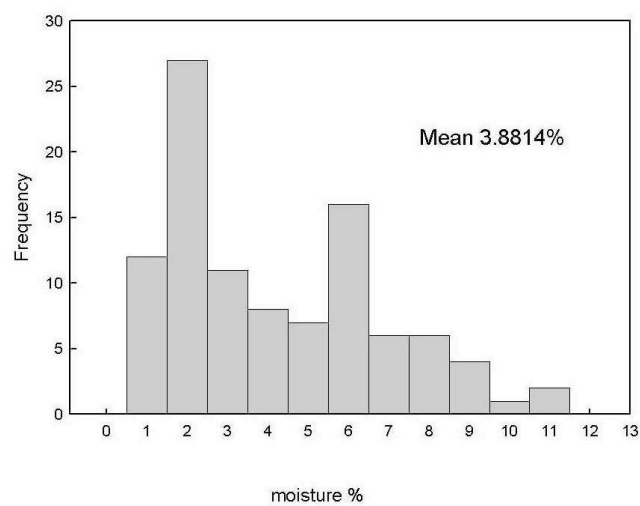
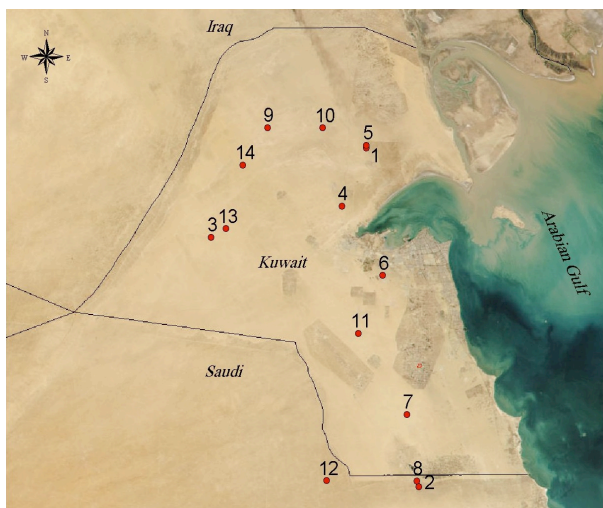


# Field campaign - year 2000

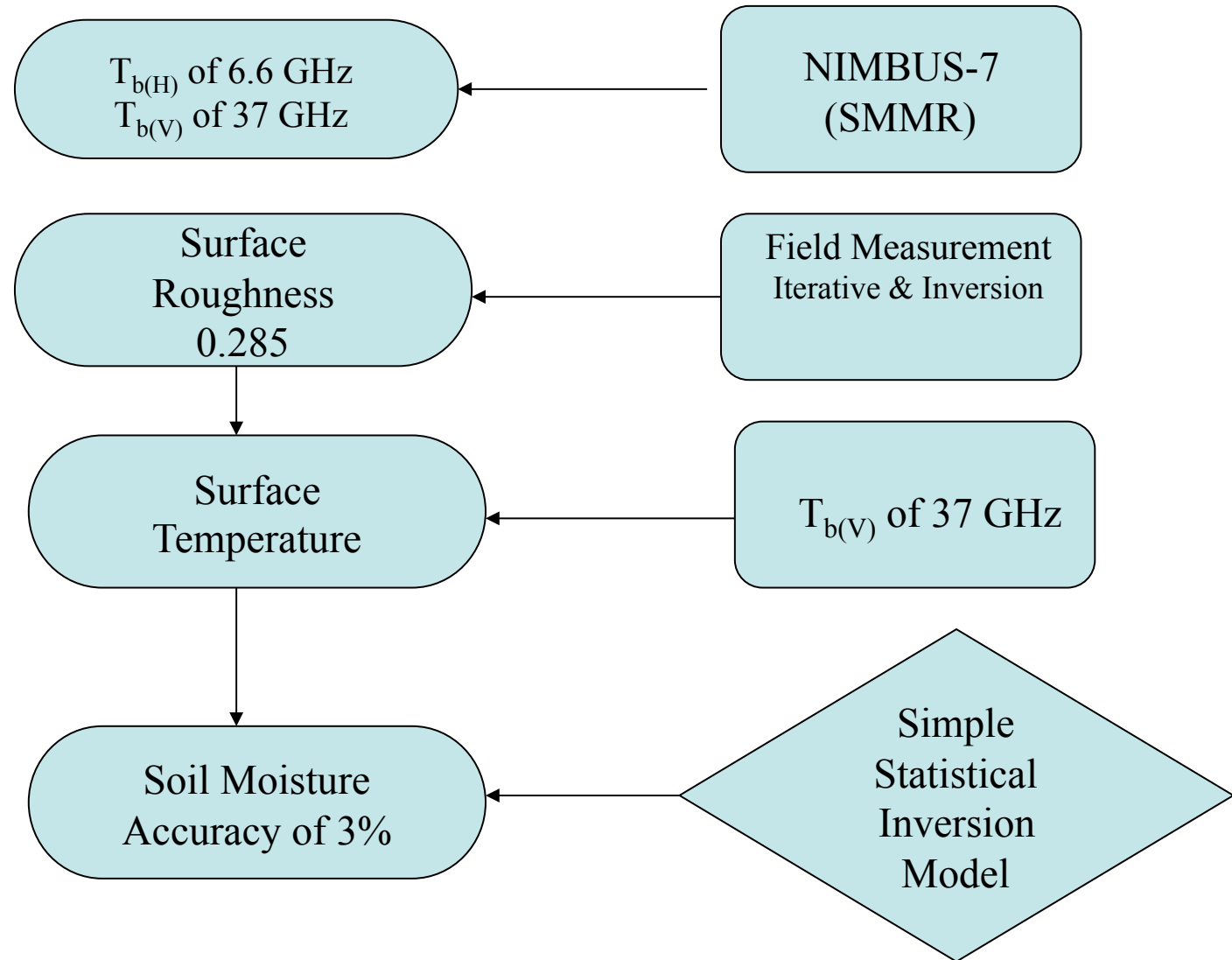
## Project SP03/02

### Funded by

### Kuwait University

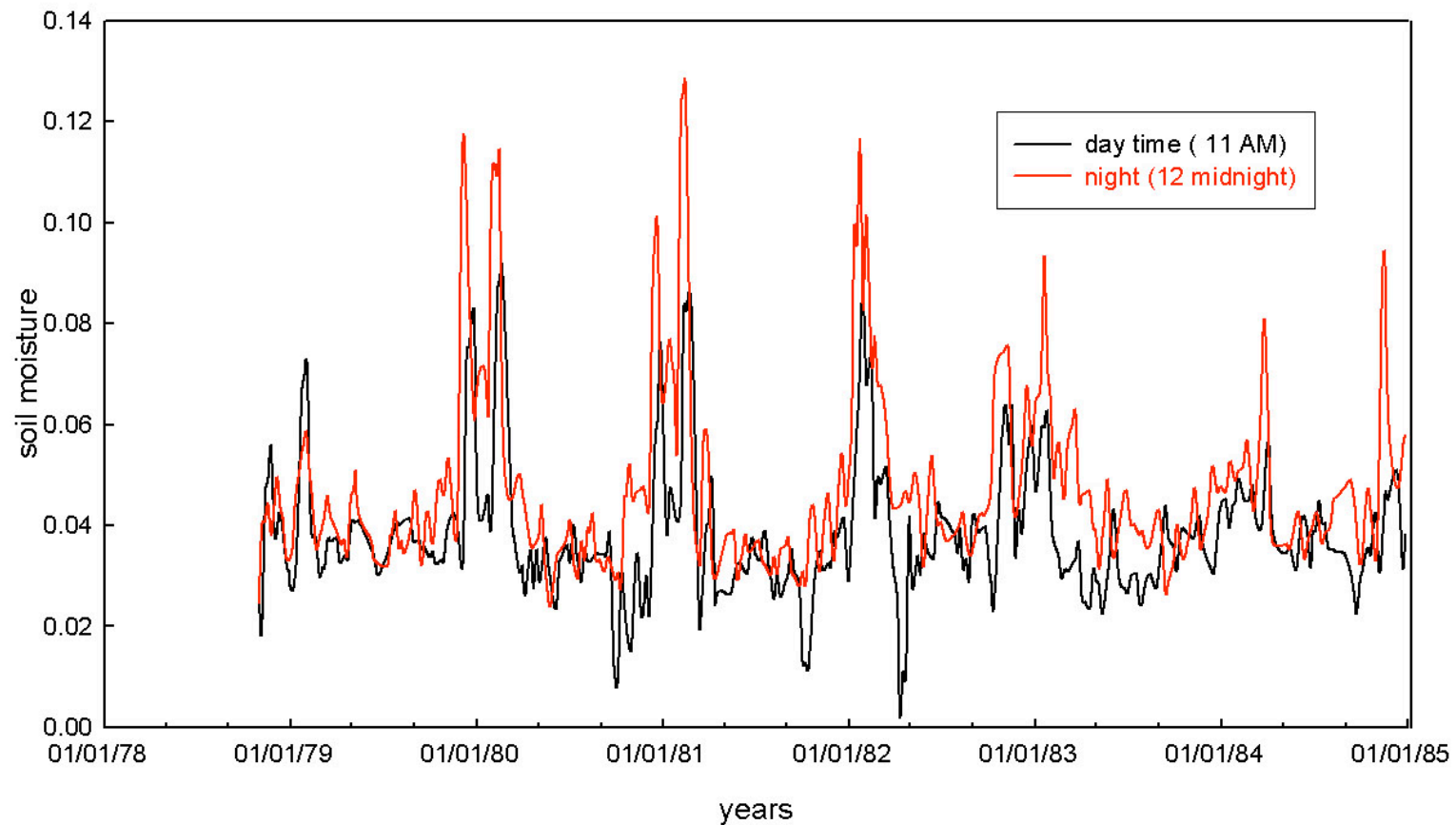


# Soil Moisture Retrieval from SMMR





# Time series of retrieved soil moisture for day and night passes

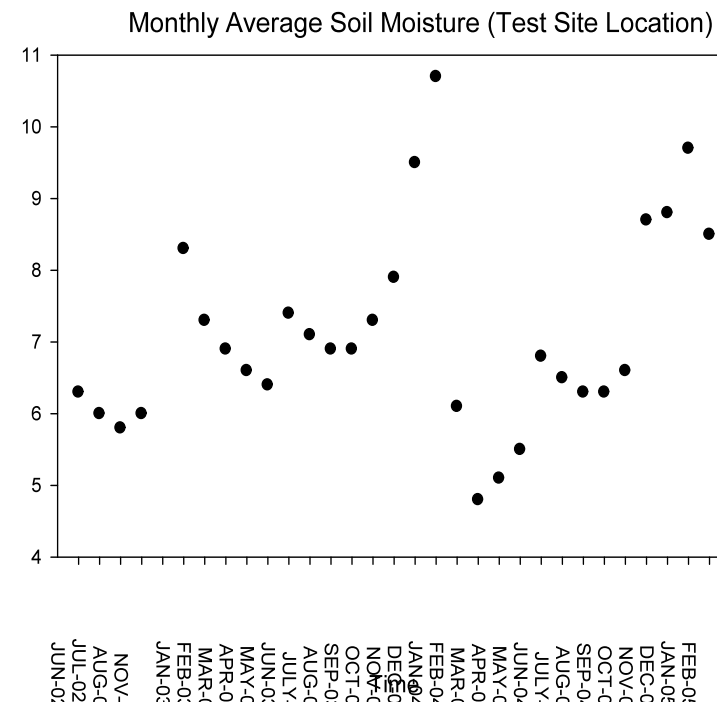




# Field campaign - year 2006

Project SP06/04

Funded by Kuwait University  
(AMSR-E)





## ■ **Field campaign - year 2011**

**Kuwait Water, Climate & Vegetation  
Project**

**under**

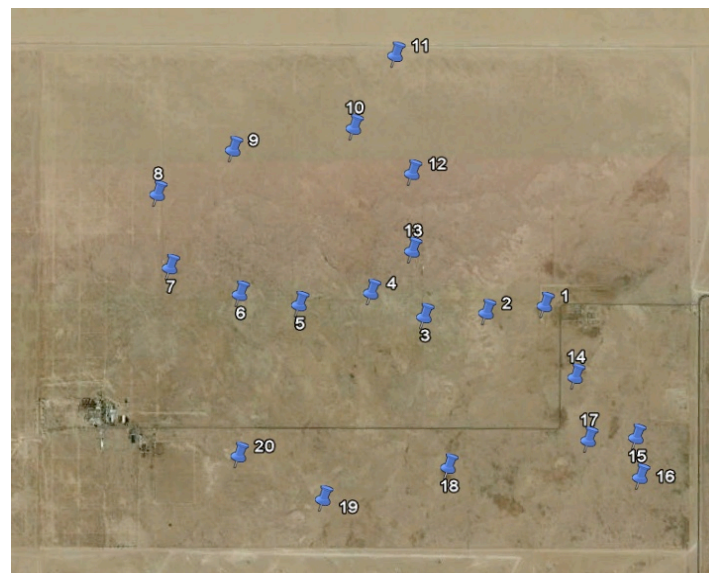
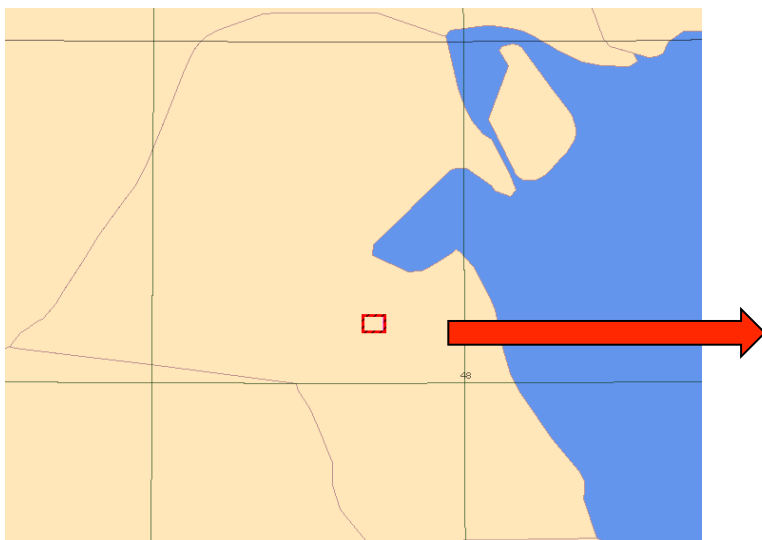
**Kuwait-MIT**

**Funded by KFAS**



# Survey area

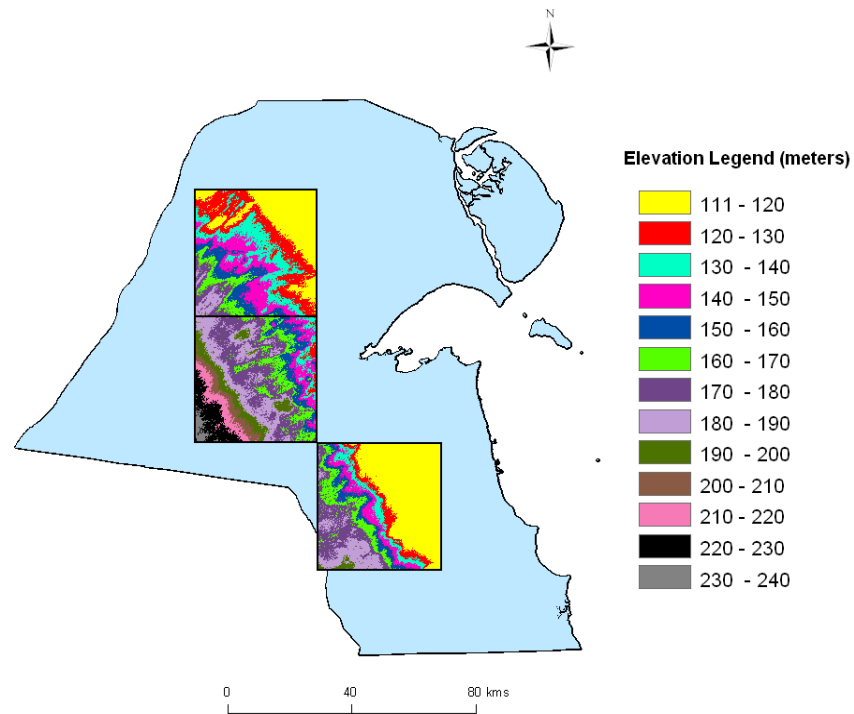
## Sulaibiya - KISR







# SMAP Test Sites



DEM of three pixels of 40 km resolution of SMAP is shown in the background of Kuwait. The elevations vary from 110 to 140 m.