

Working Group D

The Africa Reference Frame Project –

AFREF

Richard Wonnacott
International Committee on GNSS
Pasadena, California
10 December 2008

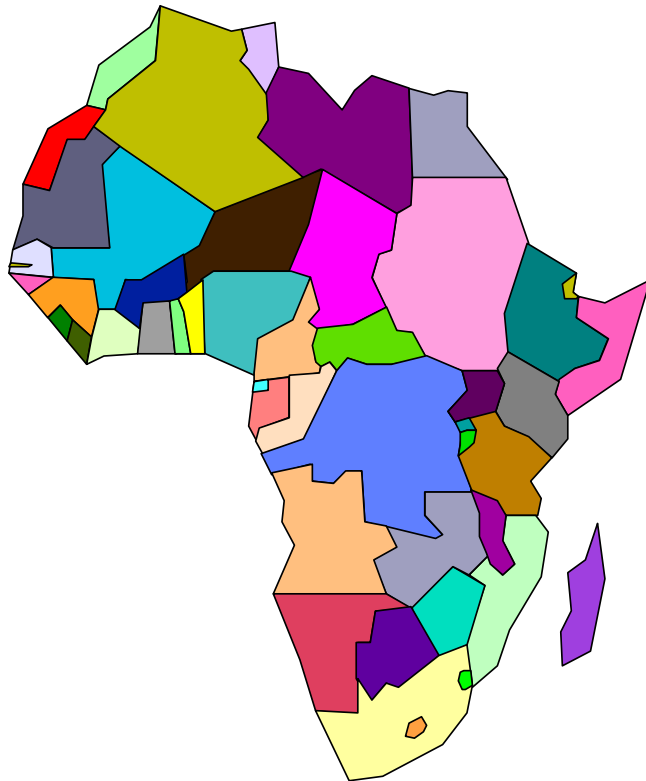


Background

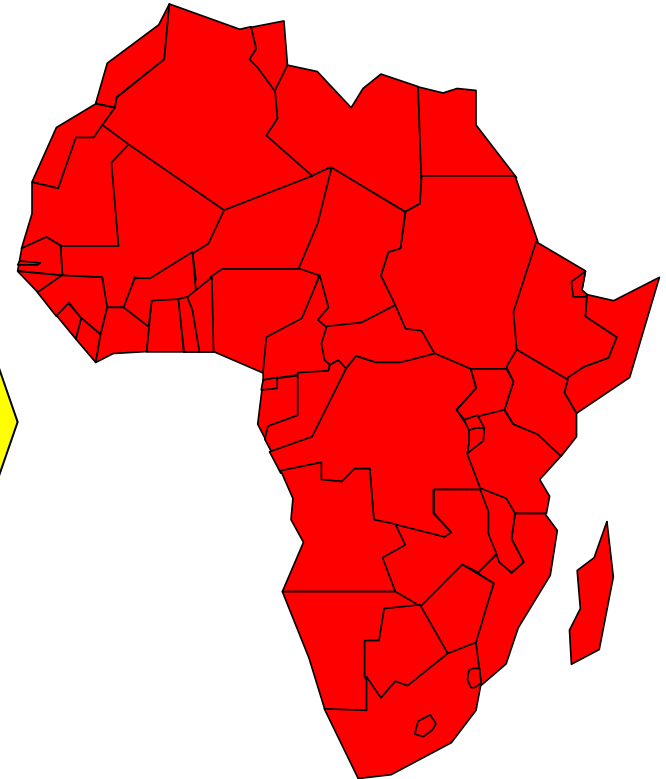
- Over 50 countries in Africa each with their own geodetic reference system and frame and some with 2 or more systems.
- Two of the objectives of AFREF are
 - To determine a continental reference system for Africa consistent and homogeneous with the global reference frame of the **ITRF** as a basis for national 3-d reference networks.
 - To establish **continuous, permanent GNSS base stations** at a spacing such that the **users will be within 1000km** of a base station and that data is freely available to all nations.



Unification Through GNSS & ITRF

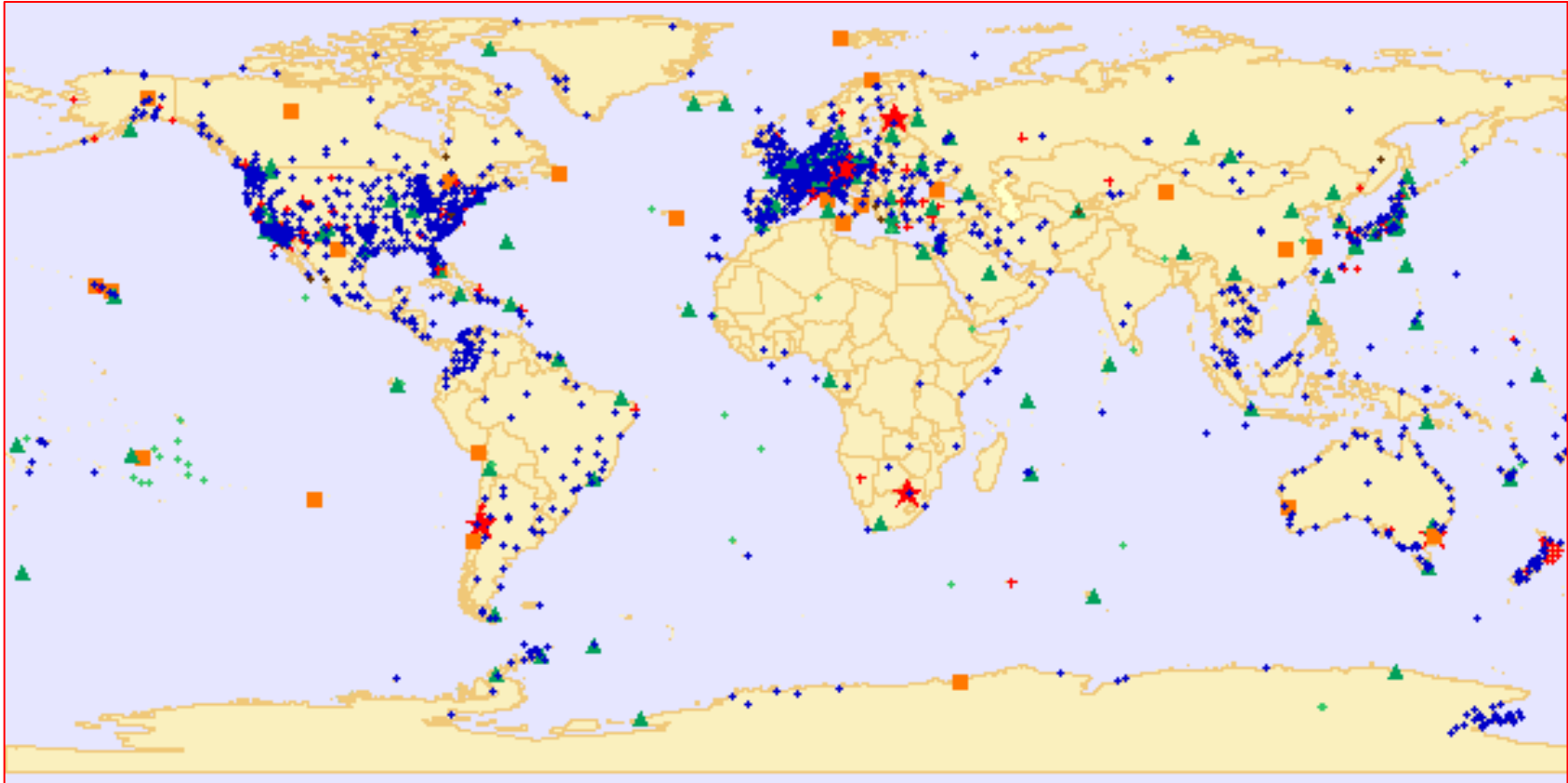


**GNSS
+
ITRF**





Global Distribution of IGS Stations

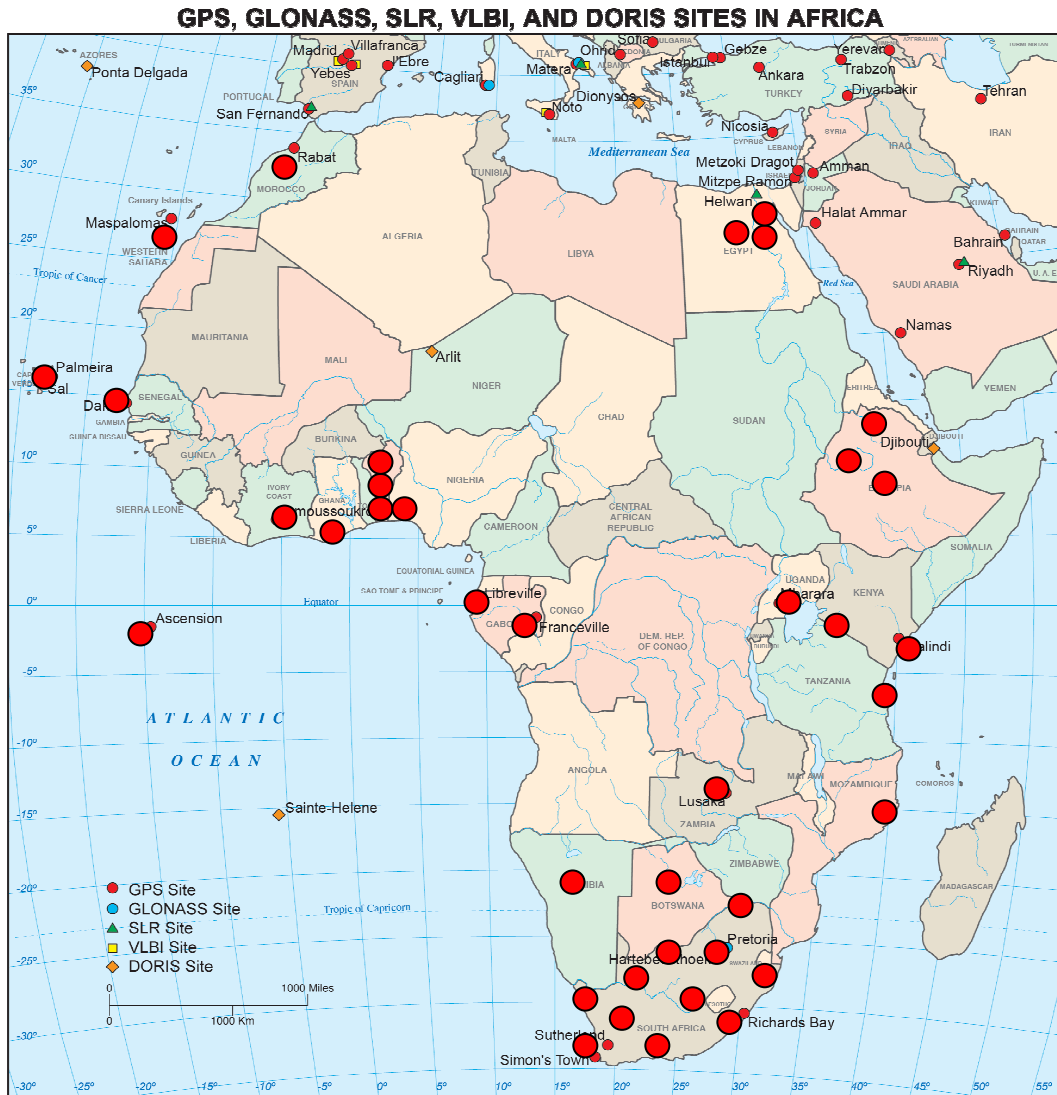




Situation in Africa

Some known installed and planned GNSS station June 2008
(Not all stations shown for clarity)

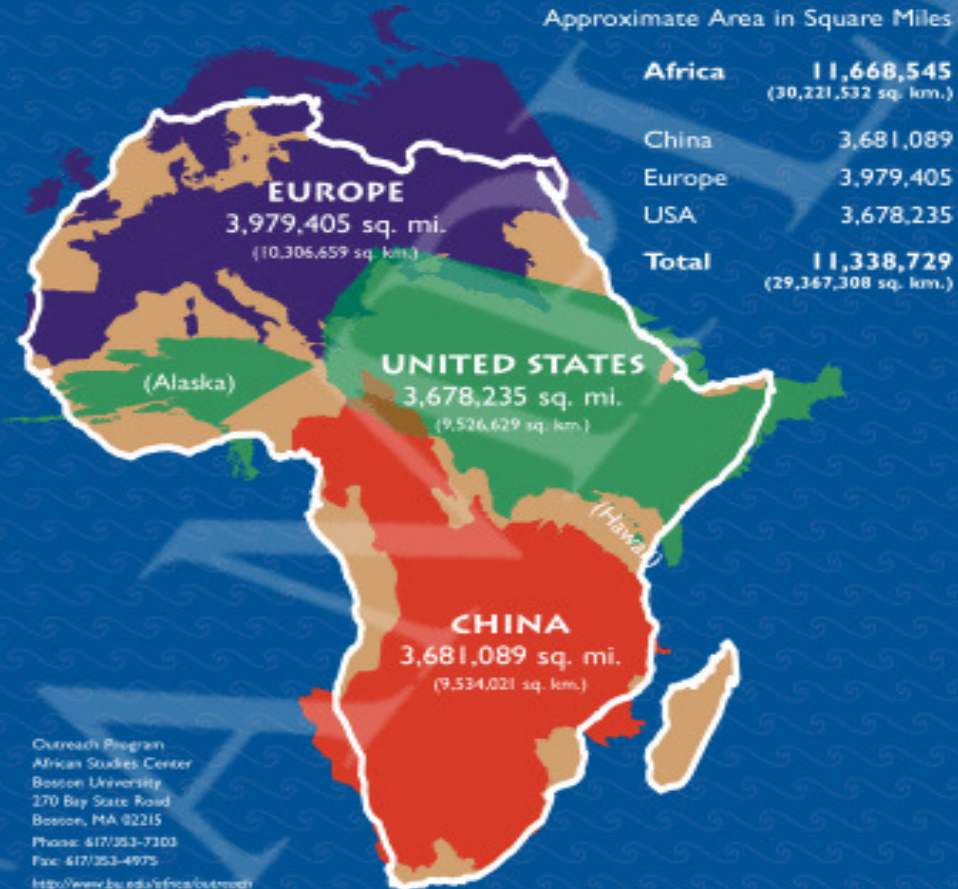
● Installed





HOW BIG IS AFRICA?

Approximate Area in Square Miles



Outreach Program
African Studies Center
Boston University
270 Bay State Road
Boston, MA 02215
Phone: 617/353-7100
Fax: 617/353-4995
<http://www.bu.edu/africa/outreach>
© Trustees of Boston University
2007

Mollweide Equal Area Projection