

SQUARE KILOMETER ARRAY US CONSORTIUM

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ARECIBO OBSERVATORY/NAIC, CORNELL UNIVERSITY**

Where on Earth Do You Put the SKA?

Speaker: Yervant Terzian, Cornell/NAIC

AT PRESENT

LACK OF SKA DEFINITION

- **1000 km site**
- **Earth size site**

Dual or triple sites ?

SKA

Site Requirements

- **The SKA site must be relatively free from RFI. This suggests a remote location (low population density).**
- **The SKA must be located in a politically stable country. (No political revolutions within the last 50 years!)**
- **The SKA should be located on a site that is accessible with relative ease. Preferably close to a small town.**
- **The site should have favorable weather conditions (no extremes).**
- **The site should be able to expand in some directions up to 1000 km.**
- **The site should have access to power and water supplies.**
- **It should be possible to connect the site with the rest of the world via fiber optics with minimal cost.**

SKA

Other Site Considerations

- **Proximity to other expert sites.**
- **Site should be at a location with low cost of construction.**
- **Site should be at a location where it can be designated as an International Interference Free Zone.**
- **Site should be in a country with significant contributions to the SKA (at least 20 to 30%) !**
- **Latitude range $\pm 35^\circ$? (Geographic) Dual N/S sites**

SKA

Possible Sites

- **Western Australia (Upper Gascoyne-Murchison Region)**
- **Southwestern US (Nevada, Arizona, New Mexico, Western Texas)**
- **Mexico (Yucatan Region) / Argentina / Brazil**
- **Eastern China / India / Russia**
- **The Egyptian Sahara**
- **On the backside of the Moon !**

SITE SELECTION PROCESS:

(Schematic Proposal)

- **Call for proposals by International SKA Board (ISB)**
- **Competitive proposals by National (or multi-national) consortia**
 - **Proposals to conform to ISB guidelines**
 - **Proposals to include site evaluations and construction permits**
- **Decision ! (after evaluations)**

ISB ?

Funding agencies ?