

IAF SYMPOSIUM ON FUTURE SPACE ASTRONOMY AND SOLAR-SYSTEM SCIENCE MISSIONS
(A7)
Space Agency Strategies and Plans (1)

Author: Dr. Muthanna AlMahmoud
UAE Space Agency, United Arab Emirates, malmahmo@ieee.org

ATMOSPHERIC ANALYSIS OF THE UNITED ARAB EMIRATES FOR RADIO-ASTRONOMY
ACTIVITIES

Abstract

Ground-based astronomy is confined to the visible and radio atmospheric windows, wavelength ranges in which the atmosphere is nearly transparent. When the sky is clear, the principal sources of atmospheric attenuation are the molecular resonances of water vapor, oxygen and ozone. In the interest of building the science capabilities in the United Arab Emirates (UAE), the UAE Space Agency conducted a study over several sites to understand the country's geographic suitability for radioastronomy observations. This paper will outline the method of conducting the measurements, analysis, and results.