2011 Workshop: Joint LISN Jicamarca

Long title
Joint LISN - Jicamarca workshop
Conveners
Cesar E Valladares
D. L. Hysell
J. L. Chau
Description

Jicamarca is a class-one facility composed of several radars used to probe the disturbed and undisturbed equatorial ionosphere. Other instrumentation, such as imagers, Fabry-Perot interferometers, and scintillation receivers are on site or nearby, offering a comprehensive view of the equatorial ionosphere. The low-latitude Ionospheric Sensor Network (LISN) is a permanent array of geophysical instruments designed to investigate the complex day-to-day variability and the extreme state of disturbance that occurs in the equatorial ionosphere nearly every day after sunset. LISN consists of 40+ ground-based GPS receivers, 5 magnetometers installed on 2 baselines across South America, and 1 VIPIR ionosonde operating in Puerto Maldonado. Using a dedicated website, LISN provides the aeronomy community with near real-time observables from different instruments spaced across South America.

This workshop will allow Jicamarca and LISN investigators to present recent discoveries, announce timetables for instrument installations, discuss new analysis techniques, and introduce new datasets accessible through the facility web pages. We invite the CEDAR community to participate in round-table discussions about new projects that can be conducted with the Jicamarca facility, LISN, or both simultaneously.

Justification

Jicamarca is a class-one facility composed of several radars used to probe the disturbed and undisturbed equatorial ionosphere. Other instrumentation, such as imagers, Fabry-Perot interferometers, and scintillation receivers are on site or nearby, offering a comprehensive view of the equatorial ionosphere. The low-latitude Ionospheric Sensor Network (LISN) is a permanent array of geophysical instruments

designed to investigate the complex day-to-day variability and the extreme state of disturbance that occurs in the equatorial ionosphere nearly every day after sunset. LISN consists of 40+ ground-based GPS receivers, 5 magnetometers installed on 2 baselines across South America, and 1 VIPIR ionosonde operating in Puerto Maldonado. Using a dedicated website, LISN provides the aeronomy community with near real-time observables from different instruments spaced across South America.

This workshop will allow Jicamarca and LISN investigators to present recent discoveries, announce timetables for instrument installations, discuss new analysis techniques, and introduce new datasets accessible through the facility web pages. We invite the CEDAR community to participate in round-table discussions about new projects that can be conducted with the Jicamarca facility, LISN, or both simultaneously.

View PDF