

Week 42

Lecture 15

- The ionosphere – height profile
- Ionization production processes
 - Primary Photoionization, secondary ionization processes, Charge exchange
 - Ionization loss processes: Dissociative recombination of molecular ions, radiative recombination of atomic ions, charge exchange
- Density profile in the lower ionosphere, density balance equation

Lecture 16

- Density profiles in the E-Region, lower F-Region and upper ionosphere
- Barometric density distribution
- Polarization (Pannekoek-Rosland) field
- Transport equilibrium
- Systematic variations of the ionization density (Diurnal, Seasonal, Solar Cycle)
- Equatorial plasma fountain