First day, Monday 4.05.2015 (Start at 9:30)

WG1 (group that doing calculation of ionization, members: Galina Bazilevskaya, Vladimir Makhmutov, Alexander Mishev, Maik Wissing, Anton Artamonov).

We have also invited Rolf Bütikofer and Erwin Flueckiger.

Most important days: 1-2 days (first and half of second working day) - ionization of atmosphere by electrons and protons. (Discussion of more important events for analysis, calculations of electron/proton spectrums and ionization)

Second day, Tuesday 5.05.2015 (Start at 9:00)

WG1 and WG2 (members of WG1 and WG2 - people of chemical/ climate model community and data analysis under effects of ionization, members: Miriam Sinnhuber, Alexei Krivolutsky, Irina Mironova)

Most important: 2nd day - discussion results of WG1 and presenting results of WG2 (homework) + plans for common analysis.

Third days, Wednesday 6.05.2015 (Start at 9:00)

WG1 and WG3 (group of measurements of ionization and atmospheric parameters, members: Giles Harrison, Keri Nicoll, Karen Aplin, Galina Bazilevskaya, Vladimir Makhmutov, Roy Yaniv)

Most important days: 3d-4th day – observations, comparison of measurements results + discussion and improving of calculation and solving still open questions (at least question about altitude of measurements...)

Fourth day, Thursday 7.05.2015 (start at 9:00)

WG3 and WG1 – continue of work

WG1 and WG2 – presenting results of work

Fifth day, Friday 8.05.2015 (start at 9:00)

WG3 and WG1 – presenting results of work

Finally reports of WG1, WG2, WG3 + common plans for future work

Talks:

First day, Monday, 4.05.2015

(Anton will arrive at the evening, Maik will be after lunchtime)

Bazilevskaya G. A. "Quasi-biennial variations in solar activity and cosmic rays. What can be learned?"

Mishev A. "Time evolution of ionization effect due to cosmic rays in terrestrial atmosphere during GLE 70"

Buetikofer R. "Characteristics of solar cosmic rays near Earth as determined by different procedures based on neutron monitor data"

Makhmutov V.S., Bazilevskaya G.A. "Relativistic Electron Precipitation in the Earth's atmosphere as observed in the LPI balloon experiment."

Wissing M. "Differences of the POES satellites and the spectrum derived from the bremsstrahlung measurements."

Second day, Tuesday, 5.05.2015

Artamonov A. "Calculation of ionization profiles from relativistic electrons" **Wissing M.** "Comparison results"

Krivolutsky A., Cherepanova L. "Global structure of electron and ion compounds in D-region" (simulations with CHARM-I)

Sinnhuber M. "Observation and ion chemistry modelling of atmospheric ionization events (REP/SCR) in the lower stratosphere".

Mironova I. "Changes chemical compositions during GLE event."

Third days, Wednesday, 6.05.2015

Bazilevskaya G. A. "Quasi-biennial variations in solar activity and cosmic rays. What can be learned?"

Makhmutov V.S., Bazilevskaya G.A. "Joint launches of balloons with devices from Reading and LPI"