Review of Previous Presentations and Discussion:
Project Formulation, Brainstorm, Articulating the Goals, Gaps

• The Project should be a blended RDP/FDP but with an RDP emphasis?
• Do we have a critical mass of participants from International Community.....Yes?
• Does Russia have the instrumentation, modeling and personnel required ..... Yes
Main Goals of SNOW-V10
Related to Nowcasting in Complex Terrain (Developed at March 08 Workshop)

• To improve our understanding and ability to forecast/nowcast low cloud, and visibility;
• To improve our understanding and ability to forecast precipitation amount and type;
• To improve forecasts of wind speed, gusts and direction;
• To develop better forecast system production system(s).
• Assess and evaluate value to end users;
• To increase the capacity of WMO member states (Training component).
What are the Goals for Sochi 2014?

• Improve/Quantify/Exploit
  – mesoscale simulations/forecasts of high impact weather in complex terrain environment (mountains close to large body of water).
  – the benefit of regional EPS
  – Nowcasts in complex terrain

• Improve our understanding/physics of high impact weather phenomena important to region.

• Deliver/Demonstrate/Show Utility forecasts products (probabilistic and deterministic) in real time to Olympic 2014 forecasters and decision makers.

• Leave a lasting legacy for host country and world.
• Also verification, social impacts, forecast delivery systems.
• High Impact means significant precipitation amounts including phase determination, high winds, low visibilities, (should be more specific?)
• Engage international research community to resolve significant problems in weather forecasting in complex terrain
Discussion on Modeling

- Should we have an EPS component? (7km or 2km resolution) Countries involved? RDP or FDP?
- What should be the resolution of the deterministic model (1km or less?). Countries involved? RDP or FDP?
- Improve boundary layer and convection formulation
- Tests of parameterizations for visibility, wind gusts, precipitation type and snow density. (snow surface temperature?)
- Data Assimilation
  - Radar winds (yes)
  - Radar reflectivity (no)
  - Wind and temperature profiles from local sounders (yes)
  - AMDAR (yes)
GEM LAM for points along Sea to Sky Highway showing flow reversal with day time heating. Note 23 Z is 15 Local Time.
Data Gaps

- Microwave radiometer soundings (and balloons) alpine area and coast.
- Wind profiler ski jump area and coast
- Scanning Doppler radar in valley
- Vertically pointing Doppler radar at alpine area
- Gondola Sonde
- Heated anemometers (to stop icing)
- High frequency anemometer at ski jump
- Buoys out in Black Sea
Data Gaps 2

- Vaisalla FD12P and weighing snow gauges (Pluvio) or equivalent at three sites up mountain
- Particle Size Distribution and Type, Snow Density, Precip Photos up the mountain
- Official observer at lower elevation (finish line) up mountain.
- Precipitation Test Site near alpine area. (Have at least one reference gauge such as DFIR)
Other

• Need research support desk (RSD). Language?
• How will data become available to participants and models (real time and later)
• How will data and model products be sent to users (forecasters)? Web based products, multiple screen displays, etc. How often updated?
• Should models attempt to do a first guess of forecaster table?
• Road and Aviation Forecasts?