

Realising that Geomatics plays an important role in the study of climate change through creation of geospatial databases, satellite image analysis, integrated modeling, it is resolved that:

1. Indicators of climate change like glacial retreat, vegetation, coral health, sea level rise will be studied using geospatial techniques.
2. Systematic and comprehensive studies will be launched to delineate the sources and sinks of carbon like anthropogenic and natural green house gases.
3. Realising the need for readiness of society to face the effects of climate change, modeling and prediction analysis will be undertaken to quantify the possible input on food and water security and disaster mitigation.
4. Considering the importance of unique biological and physical diversity of Himalayan ecosystems of Uttarakhand is resolved to create geospatial databases and collate and analyze the satellite and other data for balance of conservation and development, mitigation of disasters, mapping and monitoring of natural resources.

It is recommended that state govt. to base all its resources decisions on geospatial technology through its own experts.

5. Finding that the country has a number of lead centers on different aspects of climate change studies, it is resolved that suitable mechanisms will be evolved for exchange of data and information and all possible efforts will be made towards synergistic efforts. Since state of Uttarakhand is a home of large premier institutions, the exercise of synergy can begin here.
6. Taking note of the proposed initiative of GOI on climate action plan, it is resolved that ISG as a group of professionals will contribute in terms of expertise, initiative and sharing of knowledge and data.
7. Realising that space technology is vital for studies on climate change, a systematic study on sensors and technologies will be conducted. Meanwhile we should fully gear up to use the ISRO missions like high resolution sensors, hyperspectral imagers, radar missions etc. Also data products and delivery policies should take cognizance of climate change studies.
8. A collaborative data repository of all work/mapping can be of a good step towards dissemination and encouragement of research in geospatial

technologies. SOI can be congratulated for their liberalized policy and is requested to update policy more frequently.

9. Going beyond mere science of climate change, Geomatics should work towards action related contributions like carbon trade evaluation, so that it becomes a medium for authentication measures for carbon sale/trade/commerce. Energy potential of renewable like solar, wind, geothermal can be more active subjects of Geomatics for potential distribution and monitoring of renewables, ISG can also have active media relation.
10. On a long term basis, holistic picture of study results is required for gap analysis and for tying up all the entities towards a good model of climate change, an independent centre of climate change studies can be proposed.