During 23–26 April 2014, 33 people from 16 countries with an interest in biomass burning research descended on Max Planck Societies’ Ringberg Castle in the Bavarian Alps to participate in the third workshop for the IGAC/iLEAPS/WMO Interdisciplinary Biomass Burning Initiative (IBBI). In the setting of the eclectic castle the workshop discussed opportunities for advancing the scientific understanding of processes in biomass burning (BB) by connecting separate research communities in order to improve air quality forecasts and climate predictions.

During the workshop we discussed gaps in, and contributions to, understanding of BB via a series of presentations and open discussion focused on the themes identified in previous workshops (summarised in IGAC Newsletter Issue 50). These included fire products (burned area, fire radiative power), fire models and fires within models, observations of fires and atmospheric composition, the under prediction of smoke aerosol optical depth (AOD) in atmospheric composition and climate models relative to satellite AOD observations, emission factors, the influence of BB on air quality and the link between fires and climate change and fire climate feedbacks. The presentations are available on the IBBI website.

Several new collaborations started during the workshop and two IBBI ad-hoc working groups were formed. The first will develop a historical fire emissions inventory for 1750–2014 that will combine emission inventories, fire models and charcoal records that will be a contribution to the IGAC/iLEAPS/AIMES Global Emission Initiative (GEIA) Historical Emissions effort to produce historical emission inventories for use in CMIP6, the IGAC/SPARC Chemistry-Climate Model Initiative (CCMI) and other applications.

The second ad-hoc working group will develop an integrated case study for an individual fire event that will combine fire and plume modelling across scales (from fire behaviour to global) with observations of the fire across platforms.

The workshop also agreed to support other initiatives including the AEROCOM Biomass burning Aerosol Emission Experiments and the Fire Model Intercomparison Project (FireMIP).

The need for continuous network funding was seen as a key requirement for capitalising on the new connections made at the workshop and involving further relevant communities, in particular those from health and economic sciences. We also worked on the development of a COST Action to provide funding for IBBI activities into the future, in particular to support workshops, publications, visitor exchanges and administrative costs.

IBBI will be the subject of a special issue of Atmospheric Environment entitled “IBBI Biomass Burning”. Submissions for this issue are due by 1 November 2014. If you are interested in contributing your research to this special issue please contact Johannes Kaiser or Melita Keywood. If you would like to participate in IBBI activity please join the IBBI mailing list to keep informed of upcoming activities.

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