We discuss activities in SAGE III project including some recent algorithm/data quality experiments and initial steps toward a SAGE III mission aboard the International Space Station (ISS). We will discuss fixes for light leakage in the short wavelength section of the SAGE III spectrometer (<320 nm) that has a deleterious impact on mesospheric ozone. Version 4 has the first effort at this fix and comparisons with other instruments suggest that the usability of the mesospheric ozone data product (compared to Version 3) is significantly improved. An improved version of this correction, a candidate for Version 5 and future mission use, is also demonstrated. Efforts to infer new gas species will also be presented. These species (e.g., BrO, OBrO and CH₄) are marginal measurements that most of which also require exercising the flexible readout capacities of the SAGE III spectrometer. Some candidate species may be testable using ‘spectral-survey’ data from SAGE III/Meteor. During these events (3 events), the entire 800-pixel array is readout at a rate approximately 1/10th of normal solar events. One candidate, IO, has a significant absorption feature that overlap with the measurements that are a part of the 19-channel NO₂ measurement band between 430 and 450 nm. Thus the existing solar data provides a test bed for an IO retrieval. Some preliminary results will be presented. Finally, an effort to deploy a SAGE III instrument aboard the ISS has been initiated. We will present information regarding the refurbishment of the ISS instrument and outline features of an ISS mission.