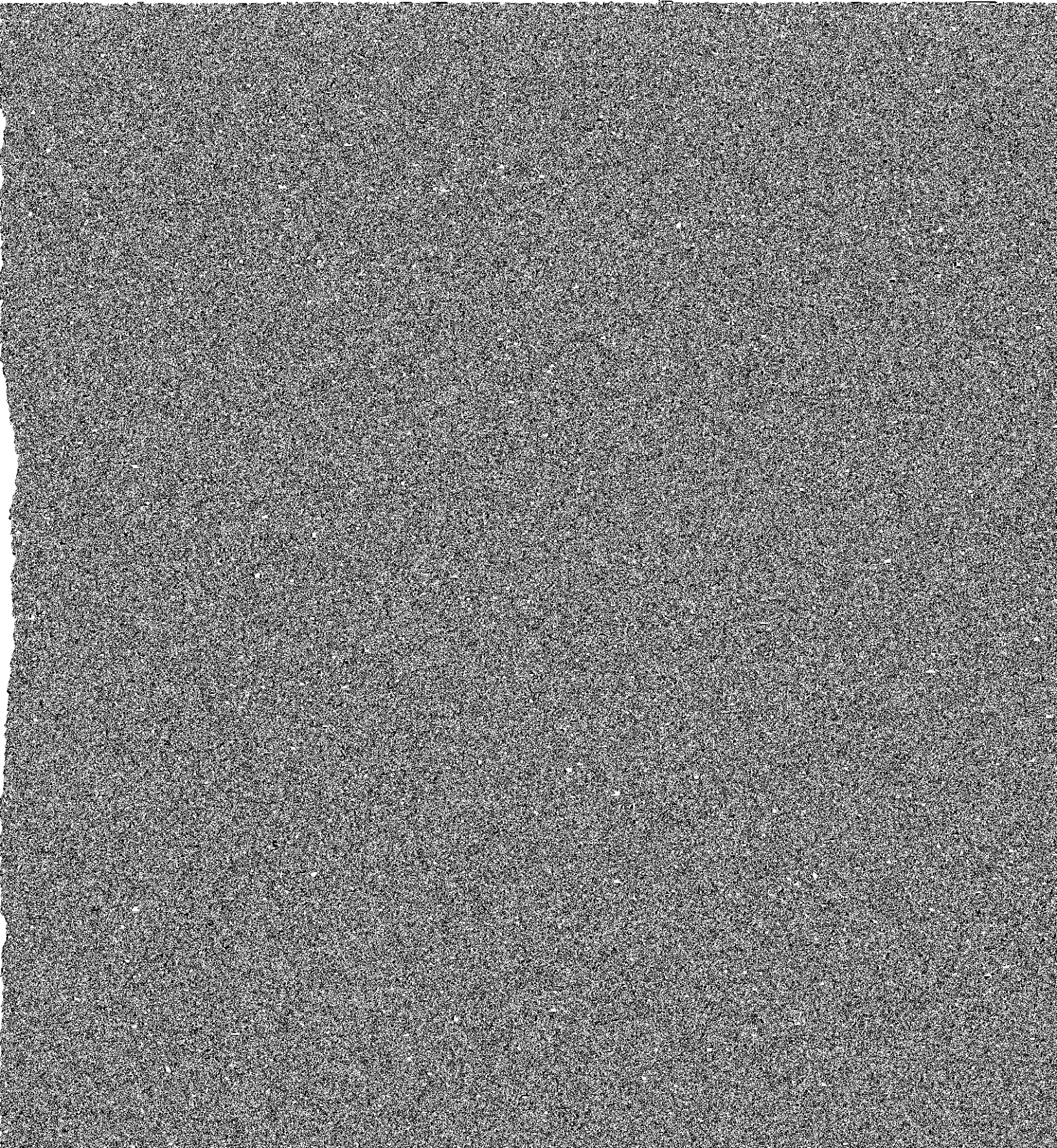


Introduction



flow and response to storm events. (Space et al., 1991; Busek et al., 1991; McDonnel et al, 1991). Recent use of oxygen isotopes in groundwater studies is discussed below.

locations of collectors are shown in Figure 1. Collectors were installed downgradient of the Mt. Mansfield basin as well as to the north and south, to examine spatial distribution of $\delta^{18}\text{O}$ rainfall composition. Rain collectors were designed to capture rain during the one week monitoring

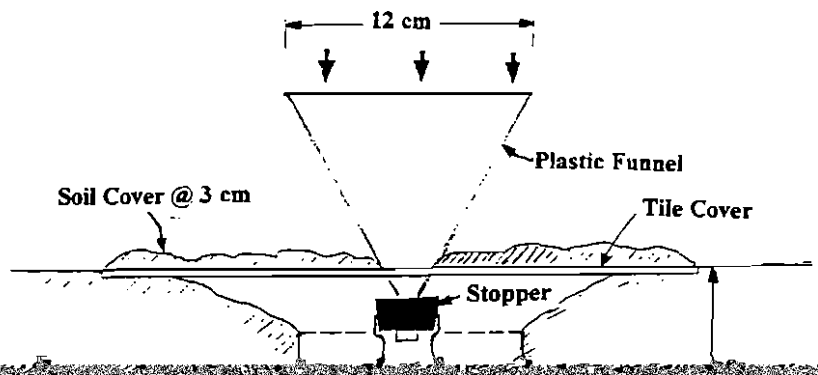
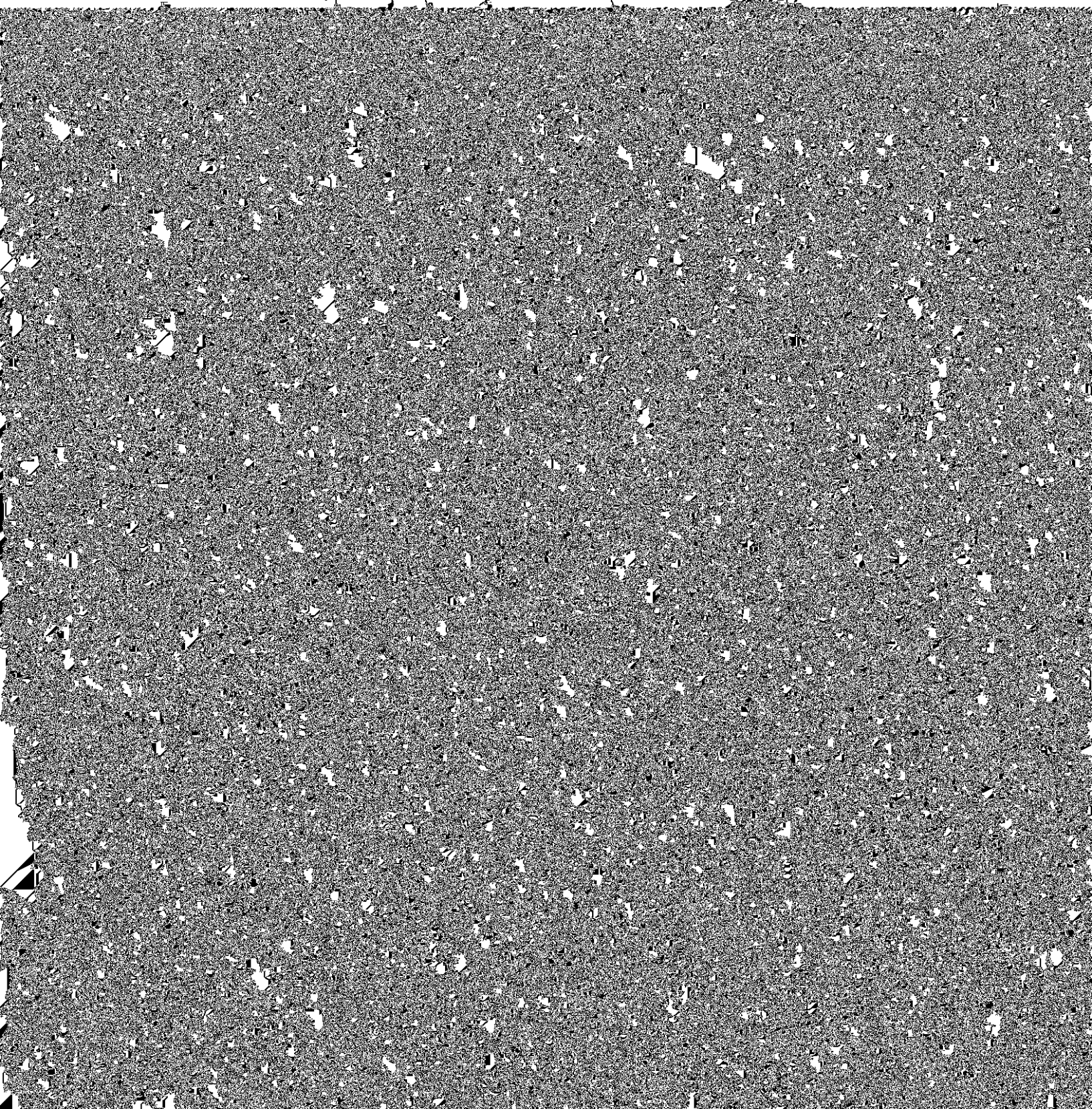


Figure 2



Mount Mansfield
Summit - 1339 m



δD composition to determine if the water has been fractionated through evaporation or other mechanisms prior to entering the groundwater system.

As discussed earlier, photolysis of organic matter is used to identify significant

