



#### ELECTRONIC ANNEX 1

XRD patterns (after drying at 40 °C) of subsamples from different depth intervals (0 – 30 mm) of the profile through nodule SO205-44KG-2. All three patterns indicate distinct basal peaks at  $\sim 10 \text{ \AA}$  and broad and low intensities at  $\sim 7 \text{ \AA}$  as well as two hk-bands at  $\sim 2.45 \text{ \AA}$  and  $\sim 1.42 \text{ \AA}$ . Stars indicate impurities.