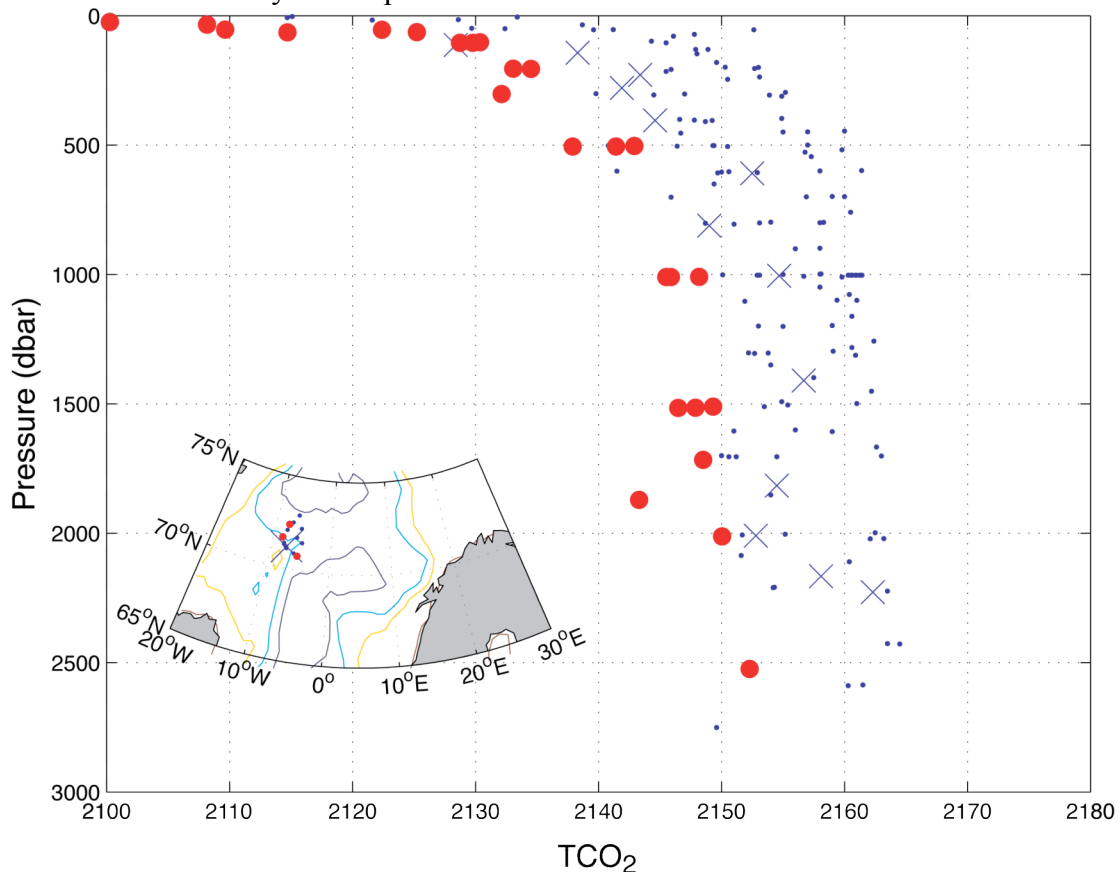


5.6 06MT19920701

No results were obtained with the crossover and inversion analysis as there were very few data from deeper than 1900 dbar -the minimum sampling depth for data to be considered in the crossovers. The figure below shows the TCO_2 data from 3 stations of the 06MT19920701 cruise, along with more recent as well as earlier (TTO-NAS) data from the same area, north of Jan Mayen. The 06MT19920701 TCO_2 data appears too low, between 5 and 10 $\mu\text{mol kg}^{-1}$. A similar offset was evident in the TCO_2 data obtained in the other regions covered by this cruise. Gathering information regarding these data was not trivial as the group that collected them has ceased to exist. The cruise report does not mention whether CRMs were used or not, but given the age we consider it unlikely. It is also not clear whether these samples were measured using potentiometric or coulometric titration, as both types of analytical systems were used on the cruise. However, the latter was carried for testing and we consider it more likely that the reported values are from the potentiometric system. An offset in these data is thus not unlikely. From the figure it appears to be between 5 and 10 $\mu\text{mol kg}^{-1}$. It cannot be further constrained given the possible anthropogenic change, the scarcity of deep-water samples from this cruise (a total of only 3 samples from below 2000 m), and the lack of nutrients data, which prohibits use of MLR. Therefore, rather than possibly introducing errors it is recommended that these data are flagged questionable and not used in the synthesis product.



TCO_2 data obtained to the north of Jan Mayen at the 06MT19920701 (red circles) cruise, along with data from other cruises in the same region. X's are the TTO-NAS data and blue dots are more recent data.