The two NASA STEREO spacecraft are now approaching a quadrature configuration with respect to the Earth. In conjunction with the rising solar activity this represents a great opportunity to study coronal mass ejections (CMEs) during their journey from the Sun to 1 AU. We are in particular concerned with those events which were observed by the STEREO/SECCHI imaging instrument in the inner heliosphere and which were also detected in situ at 1 AU with STEREO (IMPACT/PLASTIC) or WIND (SWE/MFI). This allows for example to check (1) if the direction of propagation given by various direction–finding techniques is indeed correlated with the signatures which are later observed in situ and (2) if the orientation of the magnetic flux rope inside the ICME, which we model using the Grad-Shafranov technique, is reflected in properties of the CME. Also, the classic three-part structure of CMEs can be related to the in situ data. The results are discussed regarding the possibility to forecast ICME properties from observations closer to the Sun.