Improper: Random K-Fold Cross-Validation (Information Leakage Risk) USA -CHN -DEU -T T T T Countries JPN GBR FRA T T T ITA -T T BRA -2010 2015 2016 2017 2012 2019 2013 2018 2020 2022 2011 2014 2021 **Proper: Blocked Cross-Validation** (Temporal + Spatial Blocking) USA - \mathbf{V} \mathbf{V} CHN - \mathbf{V} \mathbf{V} \mathbf{V} \mathbf{V} Te Te DEU V V V V Te Countries GBR Training Tr JPN - \mathbf{V} \mathbf{V} \mathbf{V} Tr Tr Tr \mathbf{V} Te Te Te Validation \mathbf{V} \mathbf{V} \mathbf{V} \mathbf{V} Te Testing \mathbf{V} \mathbf{V} \mathbf{V} \mathbf{V} FRA -Te Te ITA - \mathbf{V} Te BRA -Te Te \mathbf{V} Te Te Te Te Te Te 2015 2018 2011 2012 2013 2016 2017 2019 2021 2022

Years