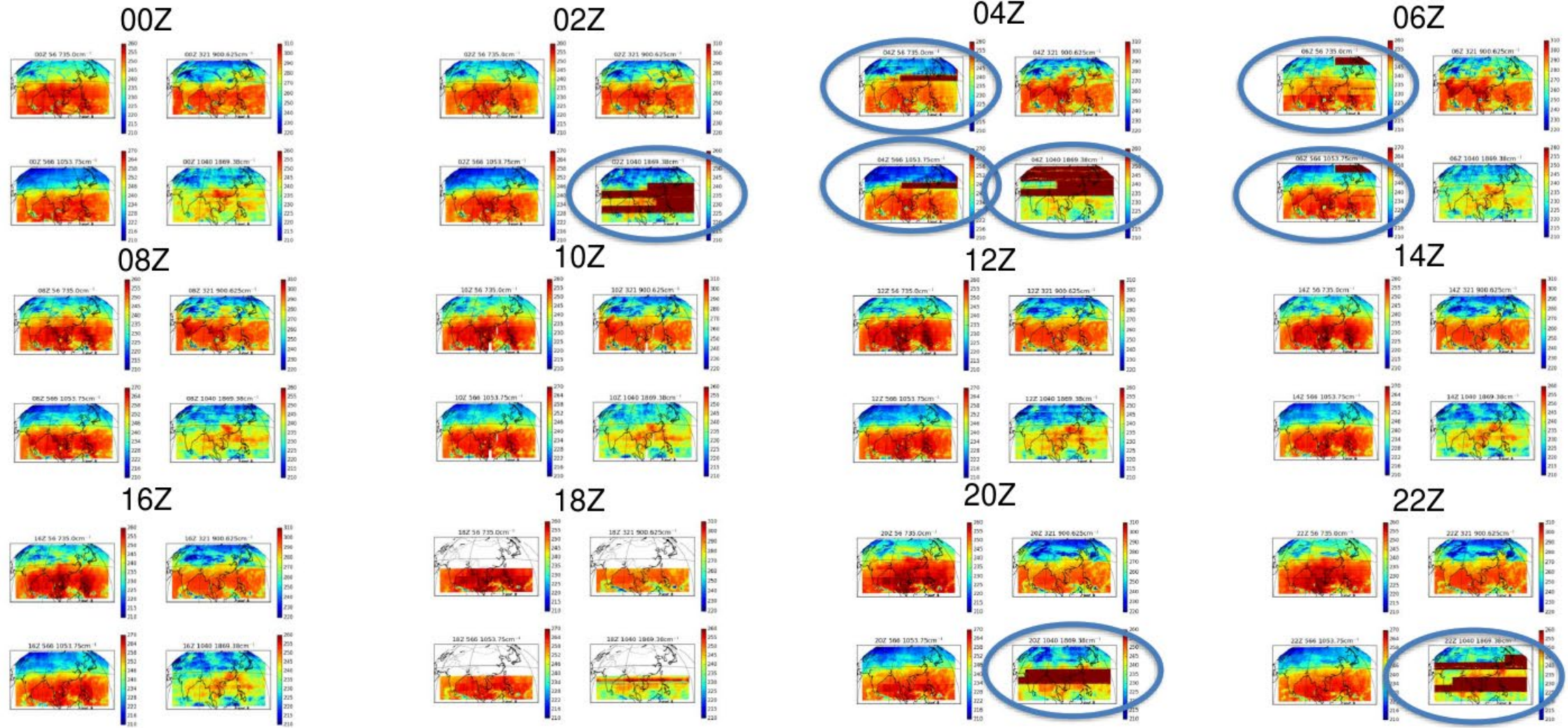


Using the ECMWF model + IASI to evaluate FY-4A GIIRS

Christopher Burrows + Tony McNally

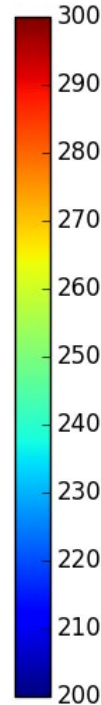
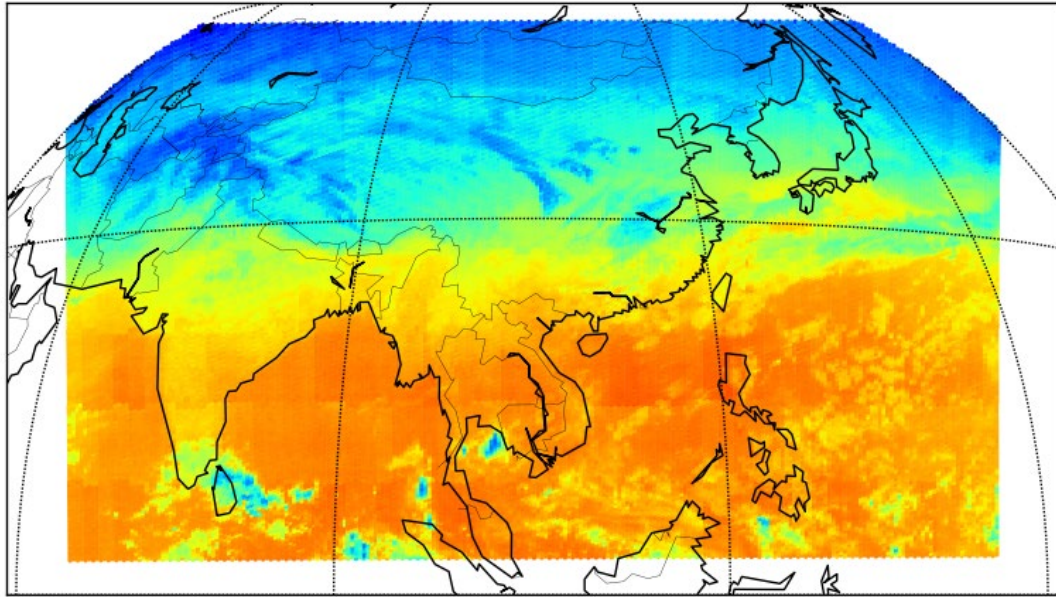
Christopher.Burrows@ecmwf.int

FY-4A Some very serious data problems...mostly extreme variations between dwells

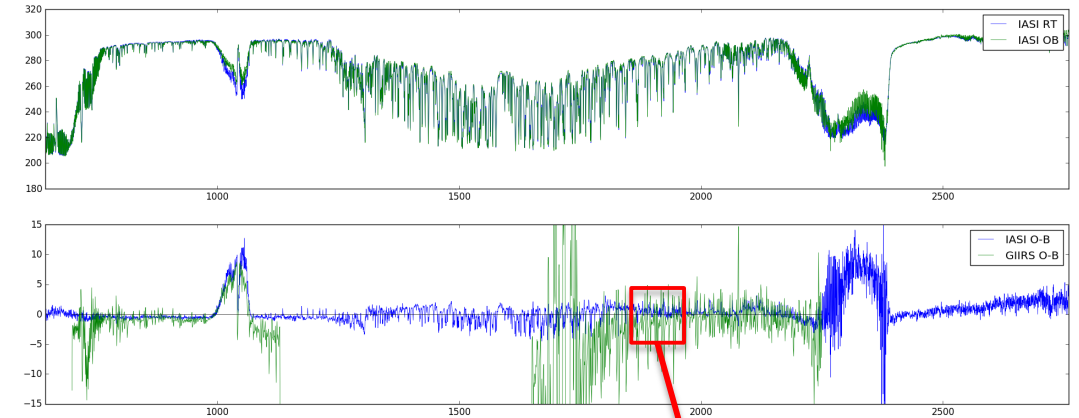


Using the ECMWF model + IASI to evaluate FY-4A

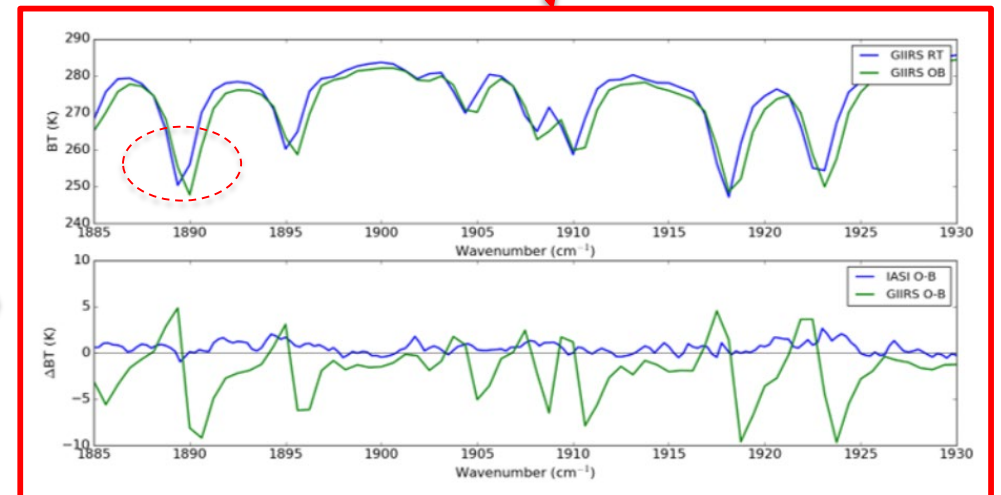
FY- 4A GIIRS radiance observations 20190301



Initial evaluations suggested the GIIRS radiances were significantly more noisy than similar IASI channels

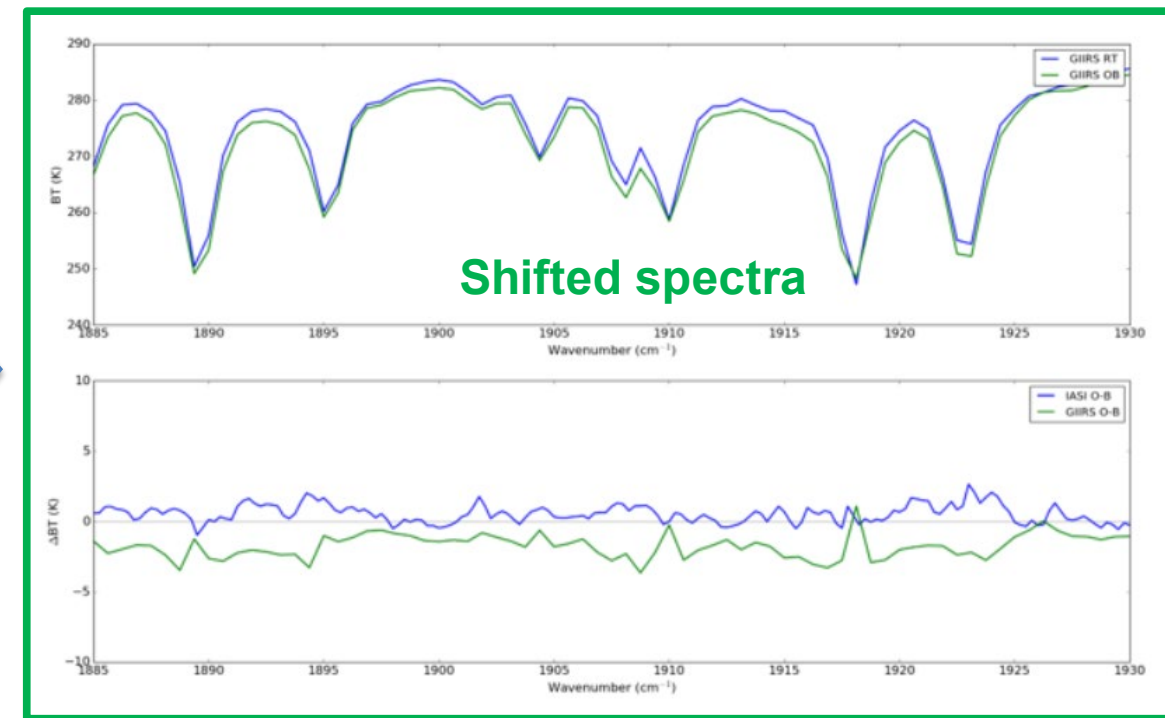
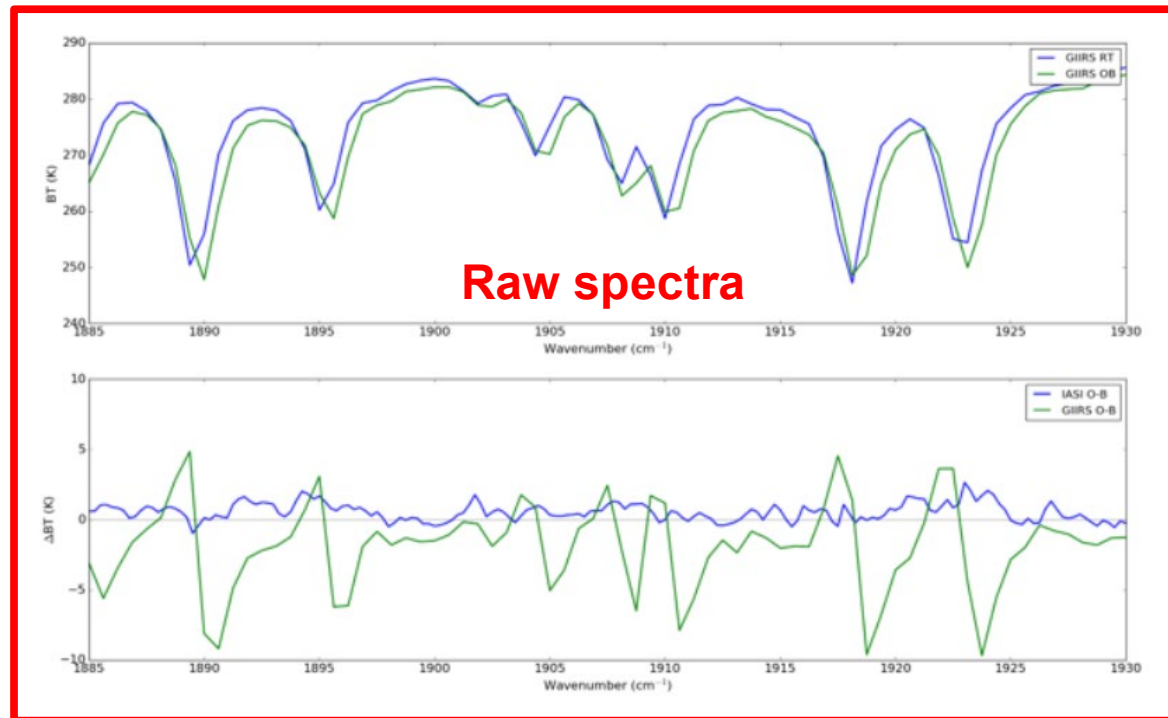


Cross checking with model simulations and IASI suggests much of the noise can be explained (and removed) with a spectral shift



Using the ECMWF model + IASI to correct FY-4A

Applying a diagnosed and constant shift of 0.325 cm^{-1} across the entire GIIRS spectrum **removes much of the additional noise** and significantly improves agreement with ECMWF model simulations and IASI observations.



FY-4A assimilation experiments to follow...