48^2, **Gaussian filter**

(a) Kinetic energy — E, m^2/s^2 vs t, *years*

(b) KE spectrum — $E(\kappa)$, m^3/s^2 vs wavenumber κ, m^{-1}

(c) Energy transfer — $\partial_t \mathcal{E}(\kappa)$, m^3/s^3 vs wavenumber κ, m^{-1}

(d) Upper enstrophy — PDF density vs $\frac{1}{2}\mathrm{curl}|\mathbf{u}_1|^2$, s^{-2}

(e) Upper KE — PDF density vs $\frac{1}{2}|\mathbf{u}_1|^2$, $m^2 s^{-2}$

(f) Lower KE — PDF density vs $\frac{1}{2}|\mathbf{u}_2|^2$, $m^2 s^{-2}$

Legend: $\overline{\text{hires}}$, lores, GZ(mean), GZ, GAN, VAE