



UNIVERSIDAD
DE LA REPÚBLICA
URUGUAY



Práctico 4: Variables WRF

05/05/2023

ncdump

- Comando para convertir datos netCDF a texto.
- En terminal podemos escribir **ncdump** para ver las opciones de este comando.

Probar con la opción -h:

- ncdump -h wrfout_d01_2019-11-01_00_00_00 > var_WRF.txt
- ncdump -h met_em.d01.2019-11-01_00_00_00.nc

[https://www.unidata.ucar.edu/software/netcdf/
workshops/2011/utilities/Ncdump.html](https://www.unidata.ucar.edu/software/netcdf/workshops/2011/utilities/Ncdump.html)

Grilla C Arakawa

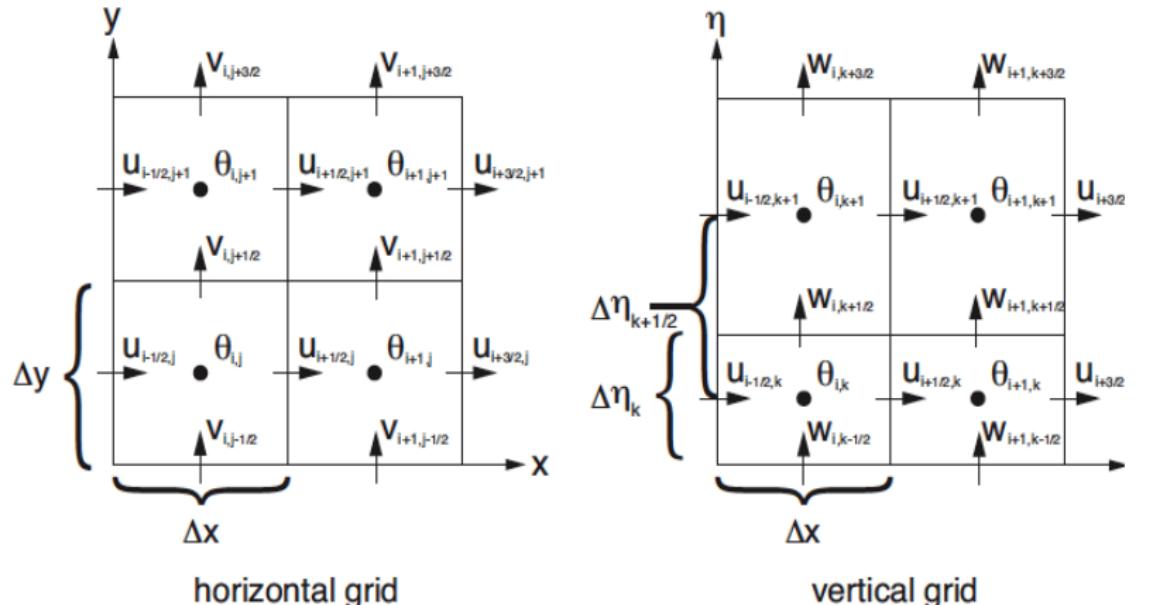


Figure 1: Grilla C Arakawa

Variables WRF

WRF variable	dimension	description
ZNW	1-D	sigma value of full levels
ZNU	1-D	sigma value of half levels
PB	3-D	base value of pressure
P	3-D	perturbation of pressure
PHB	3-D	base value of geopotential
PH	3-D	perturbation of geopotential
T	3-D	temperature
QVAPOR	3-D	specific humidity
TKE	3-D	turbulent kinetic energy (optional)
XLAT	2-D	Latitude
XLONG	2-D	Longitude
MAPFAC_M	2-D	Map factor
PSFC	2-D	surface pressure
$U10$	2-D	10 m wind along x-axis
$V10$	2-D	10 m wind along y-axis
$T2$	2-D	2 m temperature
$Q2$	2-D	2 m dew point
SWDOWN	2-D	surface solar radiation (optional)
RAINNC	2-D	large scale precipitation (optional)
RAINC	2-D	convective precipitation (optional)
HFX	2-D	surface sensible heat flux (optional)
UST	2-D	friction velocity (optional)
PBLH	2-D	PBL height (optional)
if WIND_OPTION ≤ 0 is used		
U	3-D	wind along x-axis
V	3-D	wind along y-axis
W	3-D	Cartesian vertical velocity