

CLARA-A2 Level 2B
0.25x0.25 deg, 1982-2015

COMET MMDC
0.05x0.05 deg, 1991-2015

CLARA-A2
Cloud fraction
0.75x0.75 deg

AVHRR time of
observation
0.75x0.75 deg

COMET multi-annual
MMDC
0.75x0.75 deg

Predict COMET CFC
for every grid and
AVHRR time of
observation

A cubic smoothing
spline model for
CFC diurnal cycle
for every grid and
month (MM)

Predict hourly
COMET CFC for
every grid
(YYYY-MM-DD HH)

Modelled
AVHRR-like CFC
Instantaneous

Reference
COMET CFC
Hourly means

Daily means

Daily means

CLARA-A2 CFC
Monthly anomalies

Modelled
AVHRR-like CFC
Monthly means

Reference
COMET CFC
Monthly means

Trend in
CLARA-A2 CFC

bcRMSE

MBE (modelled
AVHRR minus
reference COMET)

Trend in MBE (i.e.
false trend in
AVHRR-based CFC)

Comparison

Statistics calculated per NOAA satellite and node,
for NOAA AM satellites, for NOAA PM satellites,
and for all satellites