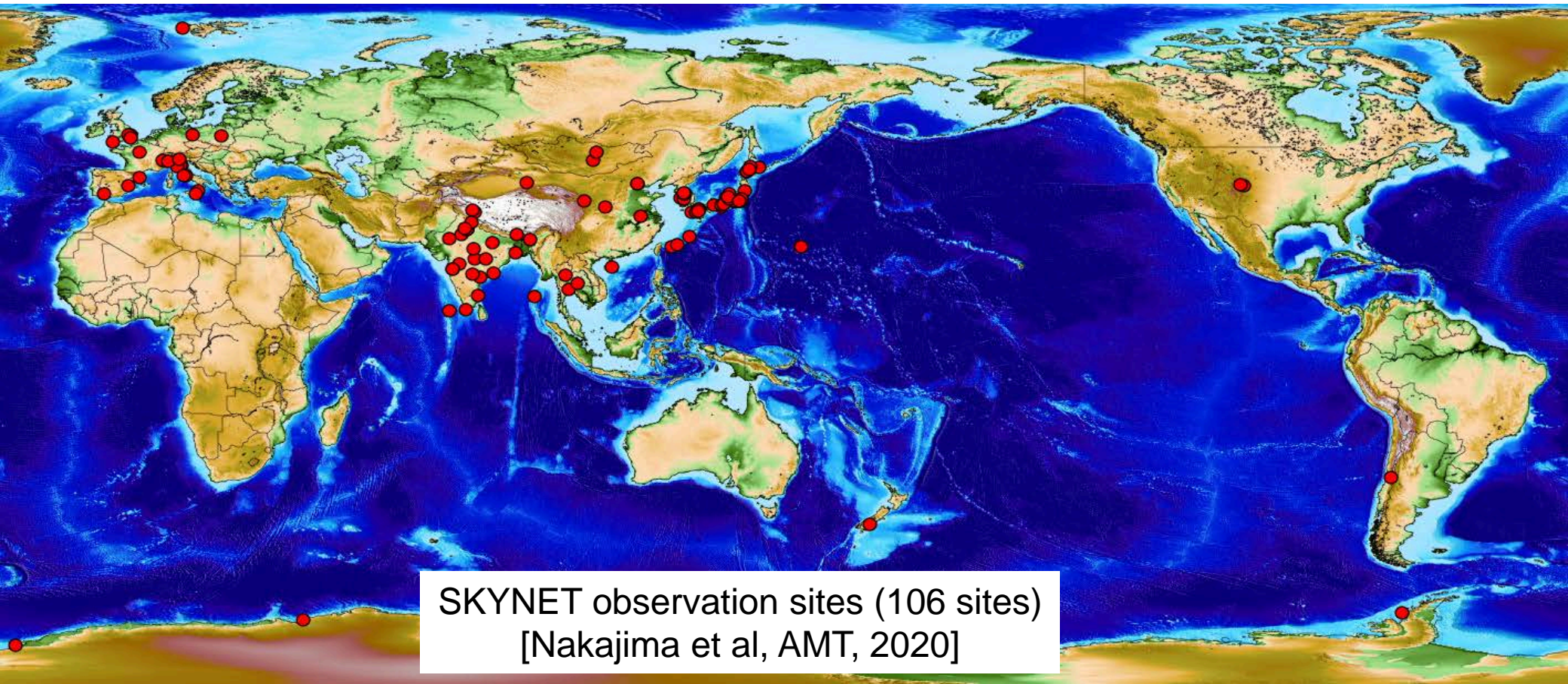**ET-ACDM meeting**

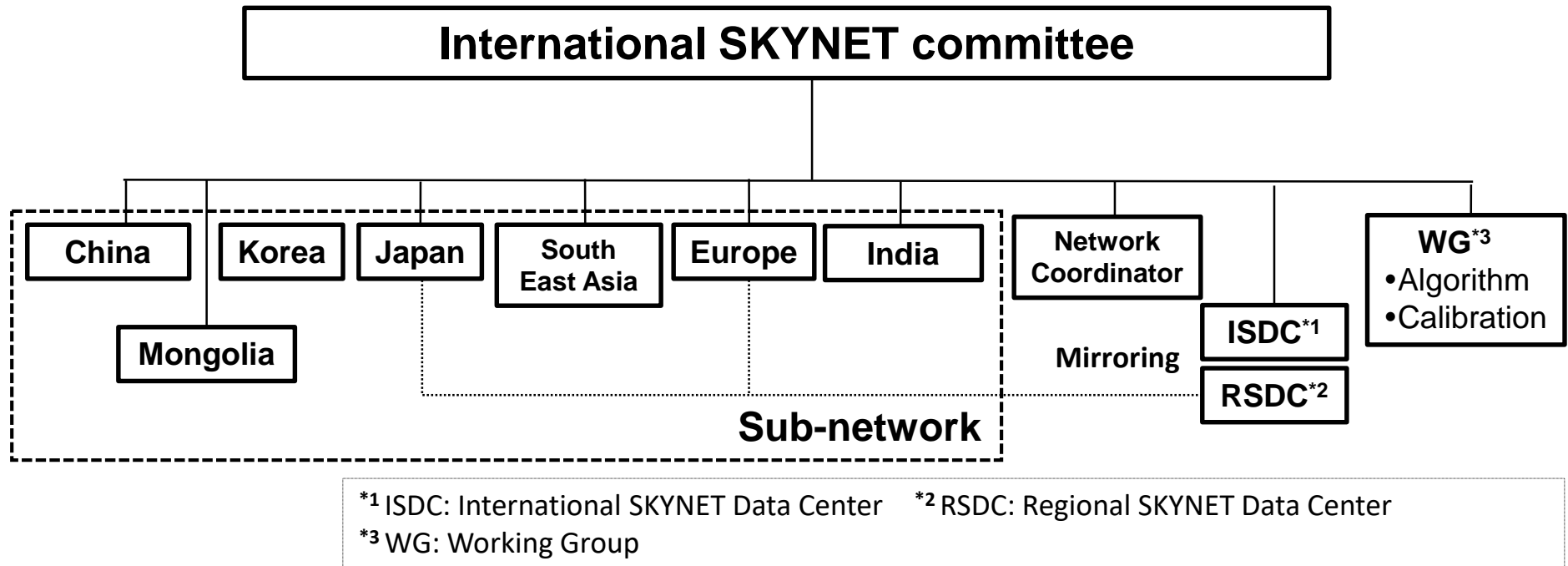# Current status in SKYNET
1 September 2020
SKYNET team

SKYNET observation sites (106 sites)
[Nakajima et al, AMT, 2020]

SKYNET entering the New Phase

International SKYNET committee

China | Korea | Japan | South East Asia | Europe | India | Network Coordinator | WG*3
•Algorithm
•Calibration

Mongolia

ISDC*1

Mirroring

RSDC*2

Sub-network

*1 ISDC: International SKYNET Data Center   *2 RSDC: Regional SKYNET Data Center
*3 WG: Working Group

Chair: T. Nakajima
Vice: M. Campanelli, G. Pandithurai
China: H. Che, L. Dong
Korea (KSNET): S.-W. Kim, J. Kim
Japan: H. Irie, T. Nishizawa
South East: B. Thana
Europe (ESR): M. Campanelli, V. Estelles
India: V.K. Soni, G. Pandithurai
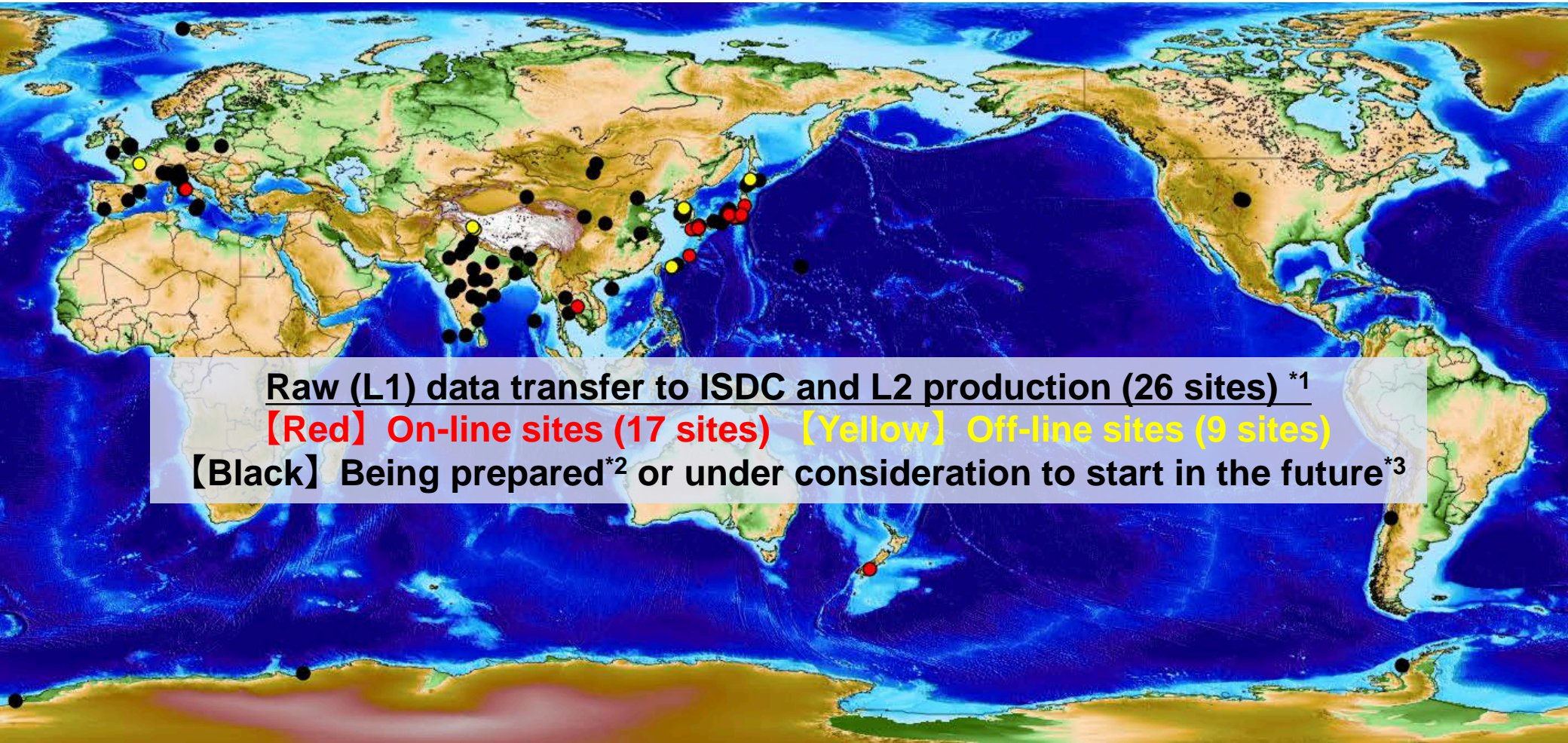**Mongolia: T. Nas-urt**

Network Coordinator: K. Aoki
ISDC: Nishizawa@NIES
Calibration WG: Che
Algorithm WG: Irie

Sky radiometer sites (as of September 2020)

Raw (L1) data transfer to ISDC and L2 production (26 sites) [*1]
【Red】 On-line sites (17 sites)　【Yellow】 Off-line sites (9 sites)
【Black】 Being prepared[*2] or under consideration to start in the future[*3]

Hedo, Okinawa, Japan

[*1] L2 product: Optical and microphysical properties (AOT, dV/dr…)
[*2] MOU agreements between instrument owners and ISDC are underway.
[*3] High-order organization agreements are considered to realize L1 data sharing with ISDC.
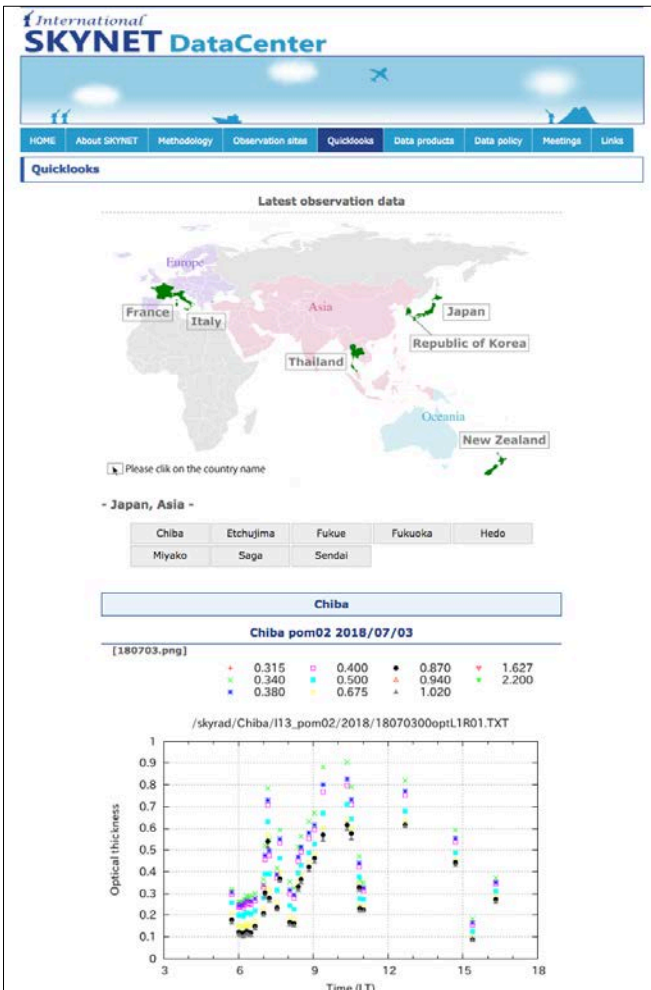
Web-site to provide SKYNET standard products

◉ SKYNET constructed and opened a web-site to provide standard products and quick-looks.
(http://www.skynet-isdc.org/)

【Quick-looks】

【Data download*】

**Data files
(Netcdf format)**

Download 1-year data

Download 1-day data

*The data files are formatted in netcdf style. The currently provided products are AOTs, Angstrom exponent, and turbidity coefficient, however, SSA, refractive index, and size distributions as well as AOTs will be provided in the near future (see next slide)

Standard products from SKYNET

【**Current version**】 : 14-site data are published

✓ Used main program: SKYRAD.PACK ver4.2
✓ Cloud screening: ver 1.0 (Khatri and Takamura 2009)
✓ Standard Products:
- ● **AOT**[1] (0.32, 0.34, 0.38, 0.4, 0.5, 0.675, 0.87, 0.94, 1.02, 1.63, 2.2μm)
- ● **Angstron exponent**
- ● Turbidity coefficient (0.5μm)
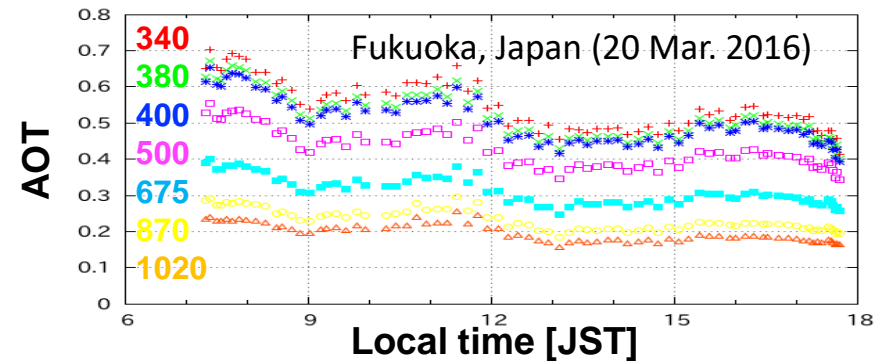
Plan to open the new version in Winter this year

【**New version**】 : **26-site or more** data will be published

✓ Used main program:
  Modified SKYRAD.Pack ver 4.2 (ESR improved version)[2]
  Modified SKYRAD.Pack ver 5.0 (SR-CEReS ver01.00.00)[2]
✓ Cloud screening: ver 1.0 (Khatri and Takamura 2009)
✓ Standard Products:
- ● **AOT**[1] (0.34, 0.38, 0.4, 0.5, 0.675, 0.87, 1.02μm)
- ● **SSA**[1] (0.34, 0.38, 0.4, 0.5, 0.675, 0.87, 1.02μm)
- ● **Refractive index**[1] **(Re, Im)**
     (0.34, 0.38, 0.4, 0.5, 0.675, 0.87, 1.02μm)
- ● **Aerosol size distribution (dV/dlnR)**
- ● **Angstron exponent**
- ● Turbidity coefficient (0.5μm)

[1] The wavelengths depend on specification of the skyradiometer.
[2] The "standard program" and "standard product" have been determined in the international SKYNET committee (ISC).