



World Meteorological Organization
Organisation météorologique mondiale

Secrétariat

7 bis, avenue de la Paix – Case postale 2300 – CH 1211 Genève 2 – Suisse

Tél.: +41 (0) 22 730 81 11 – Fax: +41 (0) 22 730 81 81

wmo@wmo.int – www.wmo.int

Weather • Climate • Water
Temps • Climat • Eau

Our ref.: OBS/GCOS

GENEVA, 17 October 2013

Annex: 1

Subject: International Surface Temperature Initiative (ISTI)

Action required: Support to the ISTI (See guidance in the Annex)

Dear Sir/Madam,

You might recall that in November 2009, following the hacking of a server at the Climatic Research Unit (CRU) at the University of East Anglia (UEA), it was alleged that scientists had manipulated climate data to support statements about the significance of human induced climate change.

Following this event, and based on the concept endorsed by the fifteenth session of the Commission for Climatology (CCI-XV) held in Antalya, Turkey from 19 to 24 February 2010, the International Surface Temperature Initiative (ISTI) was formally launched at a workshop held at the UK Met Office in September 2010. The ISTI (<http://www.surface temperatures.org/home>) aims at building an internationally agreed databank on surface temperature with the required metadata and traceability. The ISTI reports to the WMO Commission for Climatology as well as to the International Bureau of Weights and Measures (BIPM) and to The International Environmetrics Society (TIES). It also works with the Global Climate Observing System (GCOS) and the World Climate Research Programme (WCRP) to further their aims in this domain.

At the outset, I would like to express my appreciation to the WMO Members and the numerous experts around the world who have contributed thus far to the work of the ISTI. I also wish to refer to the significant progress made by the ISTI and solicit your assistance in taking this initiative further towards reaching its aim.

To: Permanent Representatives (or Directors of Meteorological or Hydrometeorological Services) of Members of WMO (PR-6722)

cc: National focal points for GCOS and related climatological data)
Dr Tom Peterson, president of CCI)
Dr Peter Thorne, Chair, Steering Committee,)
International Surface Temperature Initiative) (for information)
Prof. Antonio J. Busalacchi, Chair, WCRP Joint Scientific Committee)
Prof. Adrian Simmons, Chair, GCOS Steering Committee)
Chair, GCOS/WCRP Atmospheric Observation Panel for Climate)

In the three years since its inception, the main focus of this initiative has been on the construction of a consolidated set of original station data series from publicly available holdings. With help from organizations and individuals from many countries, a set of almost 60 national, regional and international holdings ranging from two stations to several tens of thousands of stations have been collated and merged, with the application of appropriate quality-control measures and based the information provided with the holdings. The merged holdings comprise monthly resolution records for over 30,000 station series from across the globe. This provides a greatly improved basis for undertaking scientific research on land surface air temperatures at multiple space- and time-scales and for producing improved global and regional products.

It is a basic prerequisite that quality assured essential climate data and products are accessible for users as a concrete step towards the implementation of the Research and Modelling Pillar of the Global Framework for Climate Services (GFCS).

The GCOS/WCRP Atmospheric Observation Panel for Climate (AOPC), at its eighteenth meeting in April 2013, while reviewing the progress made by the ISTI, suggested that an essential next step in the establishment of the ISTI was to seek renewed national contacts through the Permanent Representatives (PRs) of WMO Members for national verification of the merged database and for finding, if possible, additional supporting information and new data sources.

Therefore, to improve the overall quality and reliability of the ISTI, I would greatly appreciate feedback from your Service on the ISTI Databank. Specifically, we would request your inputs on key aspects as outlined in the Annex.

I would like to take this opportunity to thank you for your continued support to WMO Programmes and activities.

Yours faithfully,

A handwritten signature in dark ink, consisting of a stylized, cursive script that begins with a large, sweeping loop and ends with a short, horizontal stroke.

(J. Lengoasa)
for the Secretary-General

WORLD METEOROLOGICAL ORGANIZATION

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OBS/GCOS, ANNEX

GUIDANCE ON HOW TO SUPPORT THE INTERNATIONAL SURFACE TEMPERATURE INITIATIVE (ISTI)

At this juncture we would greatly appreciate support and feedback from your National Hydrometeorological Service on the databank. Specifically, we would request inputs on the following aspects:

1. Confirmation that the databank holdings for stations under your auspices are correct, including but not limited to: present geographical coordinates, period of record, and correspondence of the record to any official records of the raw data that you hold;
2. Sharing of any metadata records which you hold for these stations, including aspects such as changes in the time of observation, the equipment, the instrument location or other observing practices either on a site-by-site basis or nationally;
3. Any additional data that you may hold, either collected directly or from other private or volunteer national networks, which can be shared for academic use without restriction¹;
4. Any holdings of parallel measurements which you have undertaken to quantify and manage change within the network. This could be, for example, a side-by-side running of manual and automated measurements for a period of time to understand their differences. We would also welcome reports and summaries of these measurement campaigns. These data would greatly facilitate better understanding of the nature and impact of observing changes that have been undertaken over time.

More information can be found on the ISTI website (www.surfacetemperatures.org). The current data holdings are accessible through the Global Observing System Information Center (GOSIC) portal at: www.gosic.org/GLOBAL_SURFACE_DATABANK/GBD.html. The databank will be updated in near real-time with periodic record updates, which will include newly submitted holdings.

¹ Data submission guidance is available at the ISTI website under:
<http://www.surfacetemperatures.org/databank/DataSubmission-Stage1-Guidance.pdf?attredirects=0>