

Athens, 28.10.2021



A new GLE Alert issued in real-time by the **Athens Neutron Monitor Alert System** operated in ESA Space Weather Service Network _R-ESC



Ground Level Enhancement (GLE 73) on 28.10.2021

On **28 October 2021**, the operational worldwide Neutron Monitor Network recorded a ground level enhancement of the cosmic ray intensity, named **GLE73** followed by a **Minor Radiation Storm!**

The new real-time **GLE ALERT++** system of the Athens Neutron Monitor Station issued an **Alert signal** on **28.10.2021 at 16:06 UT**
45 min earlier from GOES satellites!!

<http://swe.ssa.esa.int/web/guest/space-radiation>

<http://cosray.phys.uoa.gr>

Federated products from the NKUA Cosmic Ray Group (NKUA)

Welcome to the European Neutron Monitor Service

The new real-time GLE-Alert++

A.Ne.Mo.S
Athens Neutron Monitor Station (A.Ne.Mo.S)

THURSDAY, 28 OCTOBER 2021, 18:02:31 UTC
STATUS NOW: **QUIET**

General Alert Status

Ground Level Enhancement (GLE) Alert

Minor Radiation Storm

Continuous measurements of GCRs from Neutron monitors around the world

A.Ne.Mo.S
Athens Neutron Monitor Station (A.Ne.Mo.S)

Home Description Database Archived GLEs Acknowledgements Registration

Year: 2021 Month: 10 Day: 28 Hour: 16 Minute: 21

THU, 28 OCT 2021, 16:21:00 UTC
STATUS: **ALERT**

General Alert Status

A new alert is registered on 2021-10-28 16:06:00 based on stations:
FSMT
SOPB
SOPD

Please visit <https://glealertplus.phys.uoa.gr/glealertplus2> for more info.

Station Status	
<input type="checkbox"/>	AAITB
<input type="checkbox"/>	APTY
<input type="checkbox"/>	ATHN
<input type="checkbox"/>	BKSN
<input type="checkbox"/>	BJRB
<input type="checkbox"/>	CALM
<input type="checkbox"/>	ESOI
<input type="checkbox"/>	FSMT
<input type="checkbox"/>	JNYK
<input type="checkbox"/>	TER2
<input type="checkbox"/>	IRK3
<input type="checkbox"/>	IRKY
<input type="checkbox"/>	JUNG
<input type="checkbox"/>	JUNGL
<input type="checkbox"/>	KEEG
<input type="checkbox"/>	KTEL2
<input type="checkbox"/>	LJES
<input type="checkbox"/>	MCHI
<input type="checkbox"/>	MCRG
<input type="checkbox"/>	MGRN
<input type="checkbox"/>	MOSC
<input type="checkbox"/>	MROV
<input type="checkbox"/>	NAIN
<input type="checkbox"/>	NEBK
<input type="checkbox"/>	NYBK
<input type="checkbox"/>	OULO
<input type="checkbox"/>	PWIK
<input type="checkbox"/>	RONG
<input type="checkbox"/>	SOPB
<input type="checkbox"/>	SOPD
<input type="checkbox"/>	TERA
<input type="checkbox"/>	TRUL
<input type="checkbox"/>	YXSY
<input type="checkbox"/>	YXKY

Summary	
<input type="checkbox"/>	Total [34]
<input checked="" type="checkbox"/>	Alert [3]
<input type="checkbox"/>	Warning [0]
<input type="checkbox"/>	Watch [1]
<input type="checkbox"/>	Delayed [0]
<input type="checkbox"/>	Offline [12]

NMDB: the Neutron Monitor Database

Real-Time Database for high-resolution Neutron Monitor measurements

one stop shop for cosmic ray data

Notification via e-mail was sent to the subscribed users

NM Stations contribute to the Alert++
Red -Alert mode

GLE73 recorded by Neutron Monitor Database (NMDB)

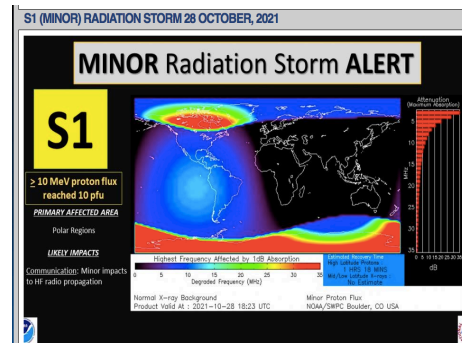
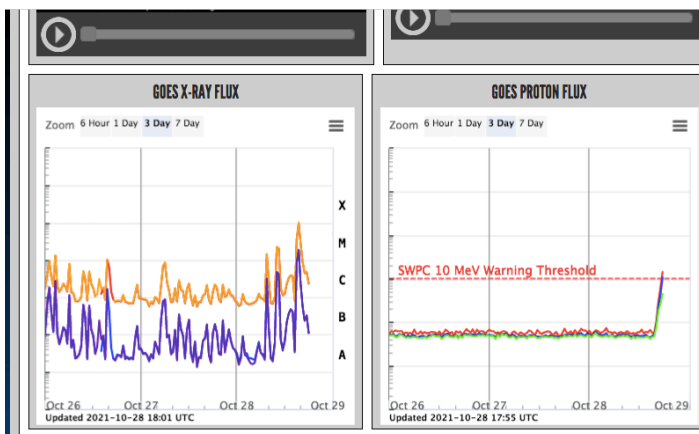
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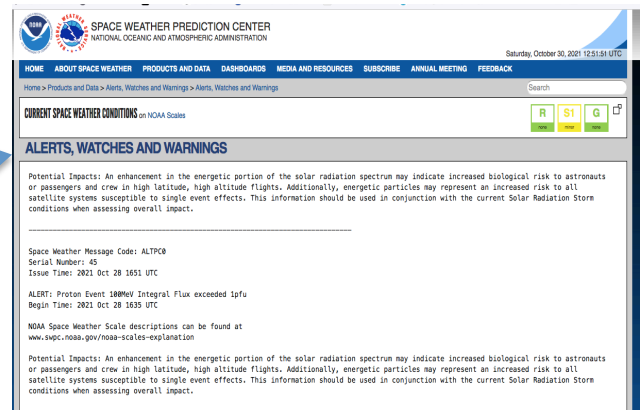
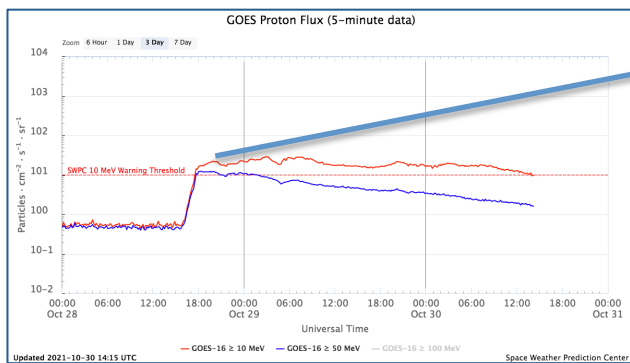
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The **relevant ALERT** from GOES of **>100 MeV protons** and **flux > 1pfu** was issued in real-time by NOAA on **28.10.2021 at 16:51 UT!**



Space born measurements of proton fluxes >10 MeV and SXR flare from GOES satellite.



Proton fluxes >100 MeV measured by GOES (SWPC_NOAA)

Alert signal issued by Space Weather Prediction Center _SWPC of NOAA

GLE Alert ++ signal 45 min earlier than the alert issued by GOES!!!

NKUA_ Athens Neutron Monitor Station
Cosmic Ray Group