

Stratos

A family that rethinks concepts of weight and width, spanning multiple hierarchies within a single style.

Stratos is a geometric grotesque whose peculiar utility is derived from unusual ideas about proportion. It eschews conventional notions of typographic relationships — not just for novel effect, but to empower the user to do more interesting things with type.

The first and most obvious of these surprises can be seen in the difference between its upper- and lowercase. The caps are condensed, inspired by gothic wood type of the 20th century, while the minuscules are akin to certain classic geometric sans serifs, with circular rounds (o, d, b, p, q) and horizontal terminals (a, c, e, g, s). This contradiction presents intriguing possibilities. Used separately, the two designs exude individual personalities: the compact caps fill a page with the impact of a Victorian-era poster; the lowercase conveys an austere modernity. When employed together, the look is unexpected but surprisingly functional, thanks to carefully balanced spacing and weight.

The other uncommon concept has to do with the widths between weights. In Stratos, a line set in Black occupies no more space than one set in Thin. Each of the family's ten weights share a common width — a technique known as multiplexing. This is useful for experimenting with font choice in magazine layouts, where content can remain constant while weight is adjusted. It also presents interesting opportunities for expressive and responsive typography. A website with dynamic backgrounds, for example, can serve the appropriate weight for optimal legibility without effecting the width of the text or the wrapping of lines. The upper- and lowercase letters are multiplexed as well, offering even more design flexibility.

20 styles
10 weights
Roman & Italic

Stratos Thin
Stratos ExtraLight
Stratos Light
Stratos SemiLight
Stratos Regular
Stratos Medium
Stratos SemiBold
Stratos Bold
Stratos ExtraBold
Stratos Black

Stratos Thin Italic
Stratos ExtraLight Italic
Stratos Light Italic
Stratos SemiLight Italic
Stratos Italic
Stratos Medium Italic
Stratos SemiBold Italic
Stratos Bold Italic
Stratos ExtraBold Italic
Stratos Black Italic

Frontogenesis

Thin

Stüve Diagram

ExtraLight

Percy Jackson

Light

Windscale Fire

SemiLight

Younger Dryas

Regular

Condensation

Medium

Dark Lightning

Bold

Scintillometer

SemiBold

Air Stagnation

ExtraBold

Cirrus Floccus

Black

Arctic Cyclone

Thin Italic

Keraunic Level

ExtraLight Italic

Ceiling Balloon

Light Italic

Cloud Seeding

SemiLight Italic

Condensation

Italic

Weather Front

Medium Italic

Freezing Level

Bold Italic

Aureole Effect

SemiBold Italic

Orbital Tuning

ExtraBold Italic

Aeroacoustics

Black Italic

Bond Event

Hyetograph

Supralateral Arc

High-Pressure Area

Anti-Greenhouse Effect

Seasonal Affective Disorder

Monsoon Sun Dog (Sundog) (Parhelion)

Integrated Forecast System Anticyclone (In Meteorology)

Agrometeorology Hurricane Convective Storm Detection

Secondary Organic Aerosols Katabatic Wind Temperature

Convective Temperature Crometeo Aeronomy Of Ice In The Mesosphere

Laser-Assisted Water Condensation Warm Period Inversion Temperature

Denver Convergence Vorticity Zone (Heat Budget: See) Radiation Budget

Stratos Thin

CONVECTION

ANTICYCLONE

BREATHING GASES

HARDENING (BOTANY)

OUTSIDE AIR TEMPERATURE

ANNULAR HURRICANE AIR MASS

SYNCHRONOUS METEOROLOGICAL SATELLITE

ATMOSPHERIC RESEARCH WINDS MESOSCALE CONVECTIVE SYSTEM

FORENSIC METEOROLOGY CLOUD BARON TORNADO INDEX EXOBASE

GLOBAL TEMPERATURE TORNADO OZONE MONITORING INSTRUMENT

COASTAL ZONE COLOR SCANNER PORTAL JOURNAL OF THE ATMOSPHERIC SCIENCES

INTERNATIONAL STANDARD ATMOSPHERE MAXIMUM-VALUE COMPOSITE PROCEDURE

UNITED STATES TEMPERATURE EXTREMES EUROPEAN SEVERE STORMS LABORATORY

Stratos Thin

Genera cirrocumulus (high-étage), altocumulus (middle-étage), and stratocumulus (low-étage) Clouds of this structure have both cumuliform and stratiform characteristics in the form of rolls or ripples. They generally form as a result of limited convection in an otherwise mostly stable airmass topped by an inversion layer. Layered altocumulus and cirrocumulus are physically more closely related to stratocumulus than to cumulus heaps. However, some semantic ambiguity regarding

Clouds initially form in clear air or become clouds when fog rises above surface level. The genus of a newly formed cloud is determined mainly by air mass characteristics such as stability and moisture content. If these characteristics change over time, the genus tends to change accordingly. When this happens, the original genus is called a mother cloud. If the mother cloud retains much of its original form after the appearance of the new genus, it is termed a genitus cloud. One example of this is stratocumulus cumulogenitus, a stratocumulus cloud formed by the partial spreading of a cumulus

These clouds have low to middle-étage bases that form anywhere from near surface to about 2,400 m (8,000 ft). Some classifications limit the term vertical to upward-growing free-convective cumuliform and cumulonimbiform genera. Downward-growing nimbostratus can be as thick as most upward-growing vertical cumulus, but its horizontal extent tends to be even greater. This sometimes leads to the exclusion of this genus type from the group of vertical clouds. Classifications that follow this approach usually show nimbostratus either as low-étage to denote its normal base height range, or as middle, based on the altitude range at which it normally forms. Sometimes the terms multi-level or multi-étage are used for all very thick or tall cloud types including nimbostratus to avoid the association of 'vertical' with free-convective cumuliform only. Alternatively, some classificatio

Stratos Thin Italic

Sea Breeze

Island Wake

Richard P. Turco

Stephen Schneider

Mediterranean Climate

Kelvin Wave Weather Radar

Severe Weather Terminology (Canada)

Dansgaard-Oeschger Event Pseudo-Warm Front Tornado

Trajectory (Fluid Mechanics) Convective Temperature Sky

Secondary Organic Aerosols Waterspout Siberian Express

Mesonet Subsidence (Atmosphere) European Severe Storms Laboratory

Aeronomy Of Ice In The Mesosphere Convective Condensation Level (CcI)

Water Vapor In Earth's Atmosphere Chemical Thermodynamics Drought

Stratos Thin Italic

CONVECTION

AEROBIOLOGY

MERIDIONAL FLOW

HARDENING (BOTANY)

AUTUMN IN NEW ENGLAND

GREENLAND ICE CORE PROJECT

SYNCHRONOUS METEOROLOGICAL SATELLITE

WET-BULB GLOBE TEMPERATURE MESOSCALE CONVECTIVE VORTEX

METEOSAT SECOND GENERATION OZONE MONITORING INSTRUMENT

COASTAL ZONE COLOR SCANNER GREAT ARCTIC CYCLONE OF 2012

SPERRY-PILTZ ICE ACCUMULATION INDEX TELLURIC CONTAMINATION MESOCYCLONE

CORONA (METEOROLOGY) POLAR CIRCLE (GAS WARFARE: SEE) CHEMICAL WARFARE

IONOSPHERIC OCCULTATION EXPERIMENT UNITED STATES TEMPERATURE EXTREMES

Stratos Thin Italic

In 1896, the first cloud atlas sanctioned by the IMO was produced by Teisserenc de Bort e based on collaborations with Hugo H. Hildebrandsson. The latter had become the first researcher to use photography for the study and classification of clouds in 1879. Alternatives to Howard's classification system were proposed throughout the 19th. century. Heinrich Dove of Germany and Elias Loomis of the United States came up with other schemes in 1828 and 1841 respectively, but

Howard's original system established three general cloud forms based on physical appearance and process of formation: cirriform (mainly detached and wispy), cumuliform or convective (mostly detached and heaped, rolled, or rippled), and non-convective stratiform (mainly continuous layers in sheets). These were cross-classified into lower and upper étages. Cumuliform clouds forming in the lower level were given the genus name cumulus from the Latin word for heap, and low stratiform clouds the genus name stratulus from the Latin word for sheet or layer. Physically similar clouds

One physical form appears as non-convective stratiform sheets in stable air. If the airmass is slightly or partly unstable, limited-convective stratocumuliform rolls or ripples may appear. Both these layered forms have low, middle, and high-étage variants. Cloud types in the two upper étages are identified respectively by the prefixes alto- and cirro-. Thin or occasionally dense cirriform filaments are found only at high altitudes of the troposphere and may form in stable or partly unstable air. More generally unstable air tends to favor the formation of free-convective low or multi-level cumuliform heaps. Strong airmass instability or cyclonic lift can produce storm clouds with significant vertical extent through more than one étage. Prefixes are then used whenever necessary to express variations or complexities in their physical structures. These include cumulo- for com

Pluvial Lake
Turbopause
Lightning Safety
Stephen Schneider
Anti-Greenhouse Effect
Synoptic Scale Meteorology
Aeronomy Clausius–Clapeyron Relation
Convective Storm Detection Solar Greenhouse (Technical)
Geocorona Monsoon Trough China Meteorological Agency
Radiosonde Compressed Air Freezing Rain Weather Radar
Denver Convergence Vorticity Zone Laser-Assisted Water Condensation
Midnight Homologous Temperature (Heat Equator: See) Thermal Equator
Laser-Assisted Water Condensation Meteosat Aerography (Meteorology)

Stratos ExtraLight

ULTRAVIOLET

HAIL CANNON

PAN EVAPORATION

EVAPORATIVE COOLER

OUTFLOW (METEOROLOGY)

TORNADO OUTBREAK SEQUENCE

SYNCHRONOUS METEOROLOGICAL SATELLITE

ANTARCTIC CIRCUMPOLAR WAVE SKIPPING TORNADO WATERSPOUT

METEOSAT SECOND GENERATION SURFACE WEATHER OBSERVATION

STORM TIDE THERMOCHEMISTRY FEBRUARY 13, 1979 WINDSTORM

AEROGRAPHY (METEOROLOGY) BLIZZARD EXTREME WEATHER SECOND ATMOSPHERE

INTERNATIONAL STANDARD ATMOSPHERE SODAR (SONIC DETECTION AND RANGING)

ISLAND WAKE AIR-MASS THUNDERSTORM EUROPEAN SEVERE STORMS LABORATORY

Stratos ExtraLight

A second group describes the occasional arrangements of cloud structures into particular patterns that are discernible by a surface-based observer (cloud fields usually being visible only from a significant altitude above the formations). These varieties are not always present with the genera and species with which they are otherwise associated, but only appear when atmospheric conditions favor their formation. Intortus and vertebratus varieties occur on occasion with cirrus

In meteorology, a cloud is an aerosol comprising a visible mass of liquid droplets or frozen crystals made of water or various chemicals. The droplets or particles are suspended in the atmosphere above the surface of a planetary body. Terrestrial cloud formation is the result of air in any of the lower three principal layers of Earth's atmosphere (collectively known as the homosphere) becoming saturated due to either or both of two processes: cooling of the air and adding water vapor. Cloud types in the troposphere, the atmospheric layer closest to Earth's surface, have Latin names due to the

Weather forecasting is the application of science and technology to predict the state of the atmosphere for a future time and a given location. Human beings have attempted to predict the weather informally for millennia, and formally since at least the 19th century. Weather forecasts are made by collecting quantitative data about the current state of the atmosphere and using scientific understanding of atmospheric processes to project how the atmosphere will evolve. Once an all-human endeavor based mainly upon changes in barometric pressure, current weather conditions, and sky condition, forecast models are now used to determine future conditions. Human input is still required to pick the best possible forecast model to base the forecast upon, which involves pattern recognition skills, teleconnections, knowledge of model performance, and knowledge of model b

*Convective
Waterspout
Psychrometrics
Incoherent Scatter
Temperature Extremes
Magnetopause Ice Nucleus
Mercury-In-Glass Thermometer Hirlam
Dansgaard-Oeschger Event Anticyclone (In Meteorology)
Synoptic Scale Meteorology Metarea Isothermal Process
Arden Buck Equation Mmr06 China Meteorological Agency
Uah Satellite Temperature Dataset Mesoscale Convective System (Mcs)
(Lake Surge: See) Storm Surge Wind International Standard Atmosphere
Convective Storm Detection Hirlam Air Mass Geometrothermodynamics*

Stratos ExtraLight Italic

*HEMIBOREAL
SILVER IODIDE
DART (ROCKETRY)
WIND CHILL WARNING
EQUIVALENT TEMPERATURE
IONOSPHERIC SOUNDING SNOW
SYNCHRONOUS METEOROLOGICAL SATELLITE
WET-BULB TEMPERATURE FRONT CLAUDIUS-CLAPEYRON RELATION
TORRO K-INDEX (METEOROLOGY) EXTRATROPICAL CYCLONE FLOOD
GLORY (OPTICAL PHENOMENON) TRAJECTORY (FLUID MECHANICS)
INTERNATIONAL STANDARD ATMOSPHERE ATMOSPHERIC TEMPERATURE RANGE FOG
SHIRANUI (OPTICAL PHENOMENON) DAM SOUTH PACIFIC CONVERGENCE ZONE FOG
SPERRY-PILTZ ICE ACCUMULATION INDEX EUROPEAN SEVERE STORMS LABORATORY*

Stratos ExtraLight Italic

Synoptic scale meteorology is generally large area dynamics referred to in horizontal coordinates and with respect to time. The phenomena typically described by synoptic meteorology include events like extratropical cyclones, baroclinic troughs and ridges, frontal zones, and to some extent jet streams. All of these are typically given on weather maps for a specific time. The minimum horizontal scale of synoptic phenomena is limited to the spacing between surface obs

Meteorologists are scientists who study meteorology. The American Meteorological Society published and continually updates an authoritative electronic Meteorology Glossary. Meteorologists work in government agencies, private consulting and research services, industrial enterprises, utilities, radio and television stations, and in education. In the United States, meteorologists held about 9,400 jobs in 2009. Meteorologists are best known by the public for weather forecasting. Some radio and television weather forecasters are professional meteorologists, while others are reporters (

The beginnings of meteorology can be traced back to ancient India, as the Upanishads contain serious discussion about the processes of cloud formation and rain and the seasonal cycles caused by the movement of earth around the sun. Varāhamihira's classical work Brihatsamhita, written about 500 AD, provides clear evidence that a deep knowledge of atmospheric processes existed even in those times. In 350 BC, Aristotle wrote Meteorology. Aristotle is considered the founder of meteorology. One of the most impressive achievements described in the Meteorology is the description of what is now known as the hydrologic cycle. The book De Mundo (composed before 250 BC or between 350 and 200 BC) noted If the flashing body is set on fire and rushes violently to the earth it is called a thunderbolt; if it be only half of fire, but violent also and massive, it is call

Stratos Light

Wind Shear

Storm Track

Richard Lindzen

Incidental Radiator

Margaret Anne Lemone

Coastal Zone Color Scanner

Summer Sunset High Desert, California

Marine Weather Forecasting Tropical Cyclone Observation

Convective Storm Detection Magnetism And Temperature

Integrated Forecast System Pneumonia Front Temperate

Aeronomy Of Ice In The Mesosphere Isobar Quasi-Geostrophic Equations

Aerography (Meteorology) Exobase European Severe Storms Laboratory

Mesoscale Convective Vortex (Mcv) Laser-Assisted Water Condensation

Stratos Light

IONOSPHERE
HAIL CANNON
CROW INSTABILITY
CLIMATE OF ECUADOR
AIR-MASS THUNDERSTORM
HEMISPHERICAL PHOTOGRAPHY
REGIONAL ATMOSPHERIC MODELING SYSTEM
GLORY (OPTICAL PHENOMENON) TRAJECTORY (FLUID MECHANICS)
METEOROLOGISCHE ZEITSCHRIFT CLAUDIUS-CLAPEYRON RELATION
WET-BULB GLOBE TEMPERATURE MESOSCALE CONVECTIVE VORTEX
ANACOUSTIC ZONE SUNSHINE RECORDER SNOWBOARD (METEOROLOGY) ICE CLOUD
INTERNATIONAL STANDARD ATMOSPHERE CONVECTIVE CONDENSATION LEVEL (CCL)
AIRCRAFT METEOROLOGICAL DATA RELAY INTERNATIONAL STANDARD ATMOSPHERE

Stratos Light

Climate models use quantitative methods to simulate the interactions of the atmosphere, oceans, land surface, and ice. They are used for a variety of purposes from study of the dynamics of the weather and climate system to projections of future climate. All climate models balance, or very nearly balance, incoming energy as short wave (including visible) electromagnetic radiation to the earth with outgoing energy as long wave (infrared) electromagnetic radiation from the earth.

A more complicated way of making a forecast, the analog technique requires remembering a previous weather event which is expected to be mimicked by an upcoming event. What makes it a difficult technique to use is that there is rarely a perfect analog for an event in the future. Some call this type of forecasting pattern recognition, which remains a useful method of observing rainfall over data voids such as oceans with knowledge of how satellite imagery relates to precipitation rates over land, as well as the forecasting of precipitation amounts and distribution in the future. A variation

Meteorology is the interdisciplinary scientific study of the atmosphere. Studies in the field stretch back millennia, though significant progress in meteorology did not occur until the 18th century. The 19th century saw modest progress in the field after observing networks formed across several countries. It wasn't until after the development of the computer in the latter half of the 20th century that significant breakthroughs in weather forecasting were achieved. Meteorological phenomena are observable weather events that illuminate, and are explained by the science of meteorology. Those events are bound by the variables of Earth's atmosphere: temperature, air pressure, water vapor, and the gradients and interactions of each variable, and how they change over time. Different spatial scales are studied to determine how systems on local, regional, and global levels impact

Sea Breeze

Lifted Index

Climate Pattern

High Pressure Area

Atmospheric Research

Ocean Surface Topography

Severe Weather Terminology (Canada)

Richard Lindzen Euroclydon Marine Weather Forecasting

Seasonal Affective Disorder Monthly Weather Review Hail

Glossary Of Climate Change Convective Temperature (Tc)

Mountain Breeze And Valley Breeze Ionospheric Occultation Experiment

Japan Meteorological Agency Jma Thermodynamic Temperature Mars

Hydrometeorology Biometeorology Andrew Grosse Measurement Tower

Stratos Light Italic

FOEHN WIND

BOWEN RATIO

DART (ROCKETRY)

INCOHERENT SCATTER

PLAN POSITION INDICATOR

GREENLAND ICE CORE PROJECT

SYNCHRONOUS METEOROLOGICAL SATELLITE

POLAR FRONT KYOTO PROTOCOL MESOSCALE CONVECTIVE VORTEX

WET-BULB GLOBE TEMPERATURE VIRTUAL TEMPERATURE NAVAREA

MARINE WEATHER FORECASTING MESOSCALE CONVECTIVE VORTEX

INTERNATIONAL STANDARD ATMOSPHERE (GAS WARFARE: SEE) CHEMICAL WARFARE

CRICKETSONDE ISOGON (METEOROLOGY) FUNNEL CLOUD (RELATED TO A TORNADO)

CLIMOGRAPH TELLURIC CONTAMINATION TROPOSPHERE COALESCENCE (PHYSICS)

Stratos Light Italic

Easterly winds, on average, dominate the flow pattern across the poles, westerly winds blow across the mid-latitudes of the earth, polewards of the subtropical ridge, while easterlies again dominate the tropics. Directly under the subtropical ridge are the doldrums, or horse latitudes, where winds are lighter. Many of the Earth's deserts lie near the average latitude of the subtropical ridge, where descent reduces the relative humidity of the air mass. The strongest winds

The Madden–Julian Oscillation (MJO) is an equatorial traveling pattern of anomalous rainfall that is planetary in scale. It is characterized by an eastward progression of large regions of both enhanced and suppressed tropical rainfall, observed mainly over the Indian and Pacific Oceans. The anomalous rainfall is usually first evident over the western Indian Ocean, and remains evident as it propagates over the very warm ocean waters of the western and central tropical Pacific. This pattern of tropical rainfall then generally becomes very nondescript as it moves over the cooler o

Scientists use climate indices based on several climate patterns (known as modes of variability) in their attempt to characterize and understand the various climate mechanisms that culminate in our daily weather. Much in the way the Dow Jones Industrial Average, which is based on the stock prices of 30 companies, is used to represent the fluctuations in the stock market as a whole, climate indices are used to represent the essential elements of climate. Climate indices are generally devised with the twin objectives of simplicity and completeness, and each index typically represents the status and timing of the climate factor it represents. By their very nature, indices are simple, and combine many details into a generalized, overall description of the atmosphere or ocean which can be used to characterize the factors which impact the global climate s

Eady Model
Stormwater
Severe Weather
Sunshine Recorder
Line Echo Wave Pattern
Maximum Parcel Level (Mpl)
Emagram Meteorological Monographs
Meteorologische Zeitschrift Anticyclone (In Meteorology)
Integrated Forecast System Equilibrium Thermodynamics
Convective Storm Detection Geomagnetic Storms Suetes
Laser-Assisted Water Condensation Laser-Assisted Water Condensation
Aeronomy Of Ice In The Mesosphere Veerabhadran Ramanathan Ice2Sea
Ozone Monitoring Instrument Jules European Severe Storms Laboratory

Stratos SemiLight

DEPTH HOAR
EVACUATIONS
ATHERMALIZATION
CIRRUS VERTEBRATUS
ATMOSPHERIC CHEMISTRY
HEMISPHERICAL PHOTOGRAPHY
SYNCHRONOUS METEOROLOGICAL SATELLITE
ADIABATIC FLAME TEMPERATURE MESOSCALE CONVECTIVE VORTEX
MARINE WEATHER FORECASTING SURFACE WEATHER OBSERVATION
SYNOPTIC SCALE METEOROLOGY STEPPE SEA ICE CONCENTRATION
INTERNATIONAL STANDARD ATMOSPHERE EUROPEAN SEVERE STORMS LABORATORY
AIRCRAFT METEOROLOGICAL DATA RELAY SATELLITE TEMPERATURE MEASUREMENTS
UNITED STATES TEMPERATURE EXTREMES SODAR (SONIC DETECTION AND RANGING)

Stratos SemiLight

Rather than air, the solar wind is a stream of charged particles—a plasma—ejected from the upper atmosphere of the sun at a rate of 400 kilometers per second (890,000 mph). It consists mostly of electrons and protons with energies of about 1 keV. The stream of particles varies in temperature and speed with the passage of time. These particles are able to escape the sun's gravity, in part because of the high temperature of the corona, but also because of high kinetic energy.

Climatology or climate science is the study of climate, scientifically defined as weather conditions averaged over a period of time. This modern field of study is regarded as a branch of the atmospheric sciences and a subfield of physical geography, which is one of the Earth sciences. Climatology now includes aspects of oceanography and biogeochemistry. Basic knowledge of climate can be used within shorter term weather forecasting using analog techniques such as the El Niño – Southern Oscillation (ENSO), the Madden-Julian Oscillation (MJO), the North Atlantic Oscillation (NAO), the N

Historically, the Beaufort wind force scale provides an empirical description of wind speed based on observed sea conditions. Originally it was a 13-level scale, but during the 1940s, the scale was expanded to 17 levels. There are general terms that differentiate winds of different average speeds such as a breeze, a gale, a storm, tornado, or a hurricane. Within the Beaufort scale, gale-force winds lie between 28 knots (52 km/h) and 55 knots (102 km/h) with preceding adjectives such as moderate, fresh, strong, and whole used to differentiate the wind's strength within the gale category. A storm has winds of 56 knots (104 km/h) to 63 knots (117 km/h). The terminology for tropical cyclones differs from one region to another globally. Most ocean basins use the average wind speed to determine the tropical cyclone's category. Below is a summary of the classifications used b

Stratos SemiLight Italic

*Lapse Rate
Garua Torro
Held-Hou Model
Basic Precipitation
Temperature Extremes
Ocean Surface Topography
Severe Weather Terminology
(Canada)*

*Bounded Weak Echo Region Coastal Zone Color Scanner Suetes
Penman-Monteith Equation Trajectory (Fluid Mechanics)
Convective Storm Detection Clausius-Clapeyron Relation
Low-Rate Picture Transmission Fog Meteorological Monographs
Earth System Modeling Framework (Heat Equator: See) Thermal Equator*

Stratos SemiLight Italic

*WIND SHEAR
TRADE WINDS
BREATHING GASES
HIGH PRESSURE AREA
PLAN POSITION INDICATOR
GREENLAND ICE CORE PROJECT
GLOBAL HORIZONTAL SOUNDING TECHNIQUE
SYNOPTIC SCALE METEOROLOGY TROPICAL CYCLONE RADIOSONDE
GLORY (OPTICAL PHENOMENON) TERRESTRIAL GAMMA-RAY FLASH
COASTAL ZONE COLOR SCANNER MESOSCALE CONVECTIVE VORTEX
MESOSCALE CONVECTIVE VORTEX (MCV) WORLD METEOROLOGICAL ORGANIZATION
INTERNATIONAL STANDARD ATMOSPHERE GLOSSARY OF TROPICAL CYCLONE TERMS
COASTAL-MARINE AUTOMATED NETWORK INFRALATERAL ARC COUNTERCLOCKWISE*

Stratos SemiLight Italic

There are local names for winds associated with sand and dust storms. The Calima carries dust on southeast winds into the Canary islands. The Harmattan carries dust during the winter into the Gulf of Guinea. The Sirocco brings dust from north Africa into southern Europe because of the movement of extratropical cyclones through the Mediterranean Sea. Spring storm systems moving across the eastern Mediterranean Sea cause dust to carry across Egypt and the Ar

Erosion can be the result of material movement by the wind. There are two main effects. First, wind causes small particles to be lifted and therefore moved to another region. This is called deflation. Second, these suspended particles may impact on solid objects causing erosion by abrasion (ecological succession). Wind erosion generally occurs in areas with little or no vegetation, often in areas where there is insufficient rainfall to support vegetation. An example is the formation of sand dunes, on a beach or in a desert. Loess is a homogeneous, typically nonstratified, porous, friab

Wind is caused by differences in the atmospheric pressure. When a difference in atmospheric pressure exists, air moves from the higher to the lower pressure area, resulting in winds of various speeds. On a rotating planet, air will also be deflected by the Coriolis effect, except exactly on the equator. Globally, the two major driving factors of large-scale wind patterns (the atmospheric circulation) are the differential heating between the equator and the poles (difference in absorption of solar energy leading to buoyancy forces) and the rotation of the planet. Outside the tropics and aloft from frictional effects of the surface, the large-scale winds tend to approach geostrophic balance. Near the Earth's surface, friction causes the wind to be slower than it would be otherwise. Surface friction also causes winds to blow more inward into low pressure areas

Stratos Regular

**Storm Data
Island Wake
Carbon Fixation
Radio Atmospheric
Air-Mass Thunderstorm
Penman–Monteith Equation
Japan Meteorological Agency Jma Fog
Synoptic Scale Meteorology Ecmwf Re-Analysis Hurricane
Secondary Organic Aerosols Boundary-Layer Meteorology
Convective Storm Detection Trajectory (Fluid Mechanics)
Tornado Hydrological Phenomenon Laser-Assisted Water Condensation
Laser-Assisted Water Condensation Accumulated Thermal Unit Radiance
Denver Convergence Vorticity Zone Thermodynamic Temperature Ninjo**

Stratos Regular

IONOSPHERE

KÁRMÁN LINE

BREATHING GASES

MOUSTERIAN PLUVIAL

ICE ACCRETION INDICATOR

GREENHOUSE GAS MONITORING

SYNCHRONOUS METEOROLOGICAL SATELLITE

HUMIDITY SOUNDER FOR BRAZIL MESOSCALE CONVECTIVE VORTEX

SYNOPTIC SCALE METEOROLOGY SUBSUN MET ÉIREANN (IRELAND)

WET-BULB GLOBE TEMPERATURE ANTICREPUSCULAR RAYS FLOODS

NATIONAL SEVERE STORMS LABORATORY EUROPEAN SEVERE STORMS LABORATORY

INTERNATIONAL STANDARD ATMOSPHERE CONVECTIVE CONDENSATION LEVEL (CCL)

MESOSCALE CONVECTIVE SYSTEM (MCS) KEETCH-BYRAM DROUGHT INDEX SEASON

Stratos Regular

In human civilization, wind has inspired mythology, influenced the events of history, expanded the range of transport and warfare, and provided a power source for mechanical work, electricity and recreation. Wind powers the voyages of sailing ships across Earth's oceans. Hot air balloons use the wind to take short trips, and powered flight uses it to increase lift and reduce fuel consumption. Areas of wind shear caused by various weather phenomena can lead to dangerous situations.

Wind is the flow of gases on a large scale. On the surface of the Earth, wind consists of the bulk movement of air. In outer space, solar wind is the movement of gases or charged particles from the Sun through space, while planetary wind is the outgassing of light chemical elements from a planet's atmosphere into space. Winds are commonly classified by their spatial scale, their speed, the types of forces that cause them, the regions in which they occur, and their effect. The strongest observed winds on a planet in our solar system occur on Neptune and Saturn. Winds have various aspects.

In meteorology, winds are often referred to according to their strength, and the direction from which the wind is blowing. Short bursts of high speed wind are termed gusts. Strong winds of intermediate duration (around one minute) are termed squalls. Long-duration winds have various names associated with their average strength, such as breeze, gale, storm, and hurricane. Wind occurs on a range of scales, from thunderstorm flows lasting tens of minutes, to local breezes generated by heating of land surfaces and lasting a few hours, to global winds resulting from the difference in absorption of solar energy between the climate zones on Earth. The two main causes of large-scale atmospheric circulation are the differential heating between the equator and the poles, and the rotation of the planet (Coriolis effect). Within the tropics, thermal low circulations over ter

Stratos Italic

Sea Breeze

Lifted Index

Richard B. Rood

Evaporative Cooler

Temperature Extremes

Cape Verde-Type Hurricane

Atmospheric Radiation Measurement

Synoptic Scale Meteorology Post-Glacial Rebound Isobar

Coastal Zone Color Scanner Climatological Normal Dawn

Penman–Monteith Equation Richard M. Goody Landspout

National Severe Storms Laboratory Gregale Secondary Organic Aerosols

World Meteorological Organization Laser-Assisted Water Condensation

Mountain Breeze And Valley Breeze Mud Season Apparent Temperature

Stratos Italic

WALL CLOUD
OCCULTATION
CLIMATE PATTERN
TEMPEST (EXEMPLAR)
ANTI-GREENHOUSE EFFECT
GREENHOUSE GAS MONITORING
GLOBAL HORIZONTAL SOUNDING TECHNIQUE
GLORY (OPTICAL PHENOMENON) ADIABATIC FLAME TEMPERATURE
MARINE WEATHER FORECASTING TERRESTRIAL GAMMA-RAY FLASH
JAMES H. COON MESOVORTICES CLAUSIUS-CLAPEYRON RELATION
GLOSSARY OF ENVIRONMENTAL SCIENCE ATMOSPHERIC RADIATION MEASUREMENT
DENVER CONVERGENCE VORTICITY ZONE CLIVAR MULTICELLULAR THUNDERSTORM
VOLUNTARY OBSERVING SHIP PROGRAM INTERNATIONAL ARCTIC BUOY PROGRAM

Stratos Italic

The polar see-saw (also: Bipolar seesaw) is the phenomenon that temperature changes in the northern and southern hemispheres may be out of phase. The theory (or hypothesis) states that large changes, f.e. when the glaciers are intensely growing or depleting, in the formation of ocean bottom water in both poles take a long time to exert their effect in the other hemisphere. Estimates of the period of delay vary, one typical estimate is 1500 years. This is usually stud

In the context of passive solar building design the aim of the designer is normally to maximise solar gain within the building in the winter (to reduce space heating demand), and to control it in summer (to minimise cooling requirements). Thermal mass may be used to even out the fluctuations during the day, and to some extent between days. In direct solar gain systems, the composition and coating of the building glazing can also be manipulated to optimise the greenhouse effect, while its size, position and shading can be used to optimise solar gain. Solar gain can also be

Solar gain (also known as solar heat gain or passive solar gain) refers to the increase in temperature in a space, object or structure that results from solar radiation. The amount of solar gain increases with the strength of the sunlight, and with the ability of any intervening material to transmit or resist the radiation. Objects struck by sunlight absorb the short-wave radiation from the light and reradiate the heat at longer infrared wavelengths. Certain materials and substances, such as glass, are more transparent to the shorter wavelengths than the longer; when the sun shines through such materials, the net result is an increase in temperature — solar gain. This effect, the greenhouse effect, so called due to the solar gain that is experienced behind the glass of a greenhouse, has since become well known in the context of global warming.

**Rain Gauge
Storm Scale
Haze Westerlies
Boyle Temperature
Ionospheric Reflection
Coastal Zone Color Scanner
Maximum-Value Composite Procedure
Marine Weather Forecasting Magnetism And Temperature
False Sunset Puelche (Wind) Anticyclone (In Meteorology)
Secondary Organic Aerosols Clausius–Clapeyron Relation
Monsoon Frost Creep (Frost Heave) International Standard Atmosphere
Thunderstorm Sunshine Recorders (Heat Equator: See) Thermal Equator
World Meteorological Organization Laser-Assisted Water Condensation**

Stratos Medium

IONOSPHERE

OCCULTATION

RICHARD LINDZEN

EVAPORATIVE COOLER

VIEHLAND-MASON THEORY

CONVECTIVE STORM DETECTION

TROPICAL CYCLONE RAINFALL CLIMATOLOGY

CONVECTIVE TEMPERATURE (TC) LIST OF GEOENGINEERING TOPICS

COASTAL ZONE COLOR SCANNER SEA SURFACE TEMPERATURE CC9

MARINE WEATHER FORECASTING CLAUDIUS-CLAPEYRON RELATION

GLOSSARY OF ENVIRONMENTAL SCIENCE SODAR (SONIC DETECTION AND RANGING)

ADIABATIC FLAME TEMPERATURE SUETES SPERRY-PILTZ ICE ACCUMULATION INDEX

DENVER CONVERGENCE VORTICITY ZONE SEVERE WEATHER TERMINOLOGY (JAPAN)

Stratos Medium

Insolation onto a surface is largest when the surface directly faces (is normal to) the sun. As the angle between the surface and the Sun moves from normal, the insolation is reduced in proportion to the angle's Cosine; see Effect of sun angle on climate. In the figure, the angle shown is between the ground and the sunbeam rather than between the vertical direction and the sunbeam; hence the sine rather than the cosine is appropriate. A sunbeam one mile (1.6 km) wide arriv

Solar irradiance is the power per unit area produced by the Sun in the form of electromagnetic radiation. Irradiance may be measured in space or at the Earth's surface after atmospheric absorption and scattering. Total solar irradiance (TSI), is a measure of the solar radiative power per unit area normal to the rays, incident on the Earth's upper atmosphere. The solar constant is a conventional measure of mean TSI at a distance of one Astronomical Unit (AU). Irradiance is a function of distance from the Sun, the solar cycle, and cross-cycle changes. Irradiance on Earth is most intense at

Air masses can be modified in a variety of ways. Surface flux from underlying vegetation, such as forest, acts to moisten the overlying air mass. Heat from underlying warmer waters can significantly modify an air mass over distances as short as 35 kilometres (22 mi) to 40 kilometres (25 mi). For example, southwest of extratropical cyclones, curved cyclonic flow bringing cold air across the relatively warm water bodies can lead to narrow lake-effect snow bands. Those bands bring strong localized precipitation since large water bodies such as lakes efficiently store heat that results in significant temperature differences (larger than 13 °C or 23 °F) between the water surface and the air above. Because of this temperature difference, warmth and moisture are transported upward, condensing into vertically oriented clouds (see satellite picture) which produce snow sho

Stratos Medium Italic

Jet Stream

Climograph

Polar Easterlies

Witch Of November

Temperature Extremes

Multicellular Thunderstorm

Historical Impacts Of Climate Change

Dansgaard-Oeschger Event Bloodstorm (Marvel Comics)

Antenna Noise Temperature Monsoon Subnivean Climate

Dansgaard-Oeschger Event Stormwater Joseph B. Klemp

Road Weather Information System Temperature Inversion Storm-Scale

Mountain Breeze And Valley Breeze Thermal Loop Cumulonimbus Velum

Vorticity Tornado Intercept Vehicle Earth System Modeling Framework

Stratos Medium Italic

DOLE EFFECT

LITHOSPHERE

INSAT-3A LOWERN

KIRILL Y. KONDRATYEV

CLIMATOLOGICAL NORMAL

CIRROCUMULUS STRATIFORMIS

FRONTOGENESIS TRAINING (METEOROLOGY)

TROPICAL ATLANTIC VARIABILITY ***INTERNATIONAL ARCTIC BUOY PROGRAM***

K-INDEX (METEOROLOGY) ***SOLAR PROTON EVENT SEA LEVEL***

EARTH ***ADIABATIC FLAME TEMPERATURE***

WET-BULB GLOBE TEMPERATURE ***SQUALL FREE CONVECTIVE LAYER***

RADIUS OF OUTERMOST CLOSED ISOBAR ***IONOSPHERIC OCCULTATION EXPERIMENT***

NATIONAL SEVERE STORMS LABORATORY ***EUROPEAN SEVERE STORMS LABORATORY***

Stratos Medium Italic

A weather front is a boundary separating two masses of air of different densities, and is the principal cause of meteorological phenomena. In surface weather analyses, fronts are depicted using various colored lines and symbols, depending on the type of front. The air masses separated by a front usually differ in temperature and humidity. Cold fronts may feature narrow bands of thunderstorms and severe weather, and may on occasion be preceded by squall lines

Arctic, Antarctic, and polar air masses are cold. The qualities of arctic air are developed over ice and snow-covered ground. Arctic air is deeply cold, colder than polar air masses. Arctic air can be shallow in the summer, and rapidly modify as it moves equatorward. Polar air masses develop over higher latitudes over the land and or ocean, are very stable, and generally shallower than arctic air. Polar air over the ocean (maritime) loses its stability as it gains moisture over warmer ocean waters. Tropical and equatorial air masses are hot as they develop over lower latitudes. Those

The Bergeron classification is the most widely accepted form of air mass classification, though others have produced more refined versions of this scheme over different regions of the globe. Air mass classification involves three letters. The first letter describes its moisture properties, with c used for continental air masses (dry) and m for maritime air masses (moist). The second letter describes the thermal characteristic of its source region: T for Tropical, P for Polar, A for arctic or Antarctic, M for monsoon, E for equatorial, and S for superior air (an adiabatically drying and warming air formed by significant downward motion in the atmosphere). For instance, an air mass originating over the desert southwest of the United States in summer may be designated "cT". An air mass originating over northern Siberia in winter may be indicated as "cA". The stabi

Stratos SemiBold

Föhn Cloud

Hyetograph

Held-Hou Model

Radio Atmospheric

Ice Accretion Indicator

Climate Research (Journal)

Severe Weather Terminology (Canada)

Seasonal Affective Disorder Temperature Inversion Aatsr

Meteorological Intelligence Wet-Bulb Globe Temperature

Secondary Organic Aerosols Tornado Outbreak Sequence

Solar Cell Surface Weather Analysis Intertropical Convergence Zone Fog

Washington Atmospheric Sciences (Gas Warfare: See) Chemical Warfare

Anemometer Forensic Meteorology Aeronomy Of Ice In The Mesosphere

Stratos SemiBold

IRRADIATION

BAROTROPY

RAINING ANIMALS

INCOHERENT SCATTER

CUMULUS HUMILIS CLOUD

TORNADO OUTBREAK SEQUENCE

SYNCHRONOUS METEOROLOGICAL SATELLITE

COASTAL ZONE COLOR SCANNER LIST OF GEOENGINEERING TOPICS

WET-BULB GLOBE TEMPERATURE CANWARN ISENTROPIC ANALYSIS

KELVIN-HELMHOLTZ INSTABILITY MESOSCALE CONVECTIVE VORTEX

AUTOMATED AIRPORT WEATHER STATION SOLAR AND HELIOSPHERIC OBSERVATORY

CERTIFIED CONSULTING METEOROLOGIST EUROPEAN SEVERE STORMS LABORATORY

INTERNATIONAL ARCTIC BUOY PROGRAM WIND-INDUCED SURFACE HEAT EXCHANGE

Stratos SemiBold

In meteorology, an air mass is a volume of air defined by its temperature and water vapor content. Air masses cover many hundreds or thousands of square miles, and adapt to the characteristics of the surface below them. They are classified according to latitude and their continental or maritime source regions. Colder air masses are termed polar or arctic, while warmer air masses are deemed tropical. Continental and superior air masses are dry while maritime and monsoon

A mesoscale convective vortex (MCV) is a low-pressure center within an mesoscale convective system (MCS) that pulls winds into a circling pattern, or vortex. With a core only 30 to 60 miles (97 km) wide and 1 to 3 miles (4.8 km) deep, an MCV is often overlooked in standard weather analysis. But an MCV can take on a life of its own, persisting for up to 12 hours after its parent MCS has dissipated. This orphaned MCV will sometimes then become the seed of the next thunderstorm outbreak. An MCV that moves into tropical waters, such as the Gulf of Mexico, can serve as the nucleus for a tr

A supercell is a thunderstorm that is characterized by the presence of a mesocyclone: a deep, persistently rotating updraft. For this reason, these storms are sometimes referred to as rotating thunderstorms. Of the four classifications of thunderstorms (supercell, squall line, multi-cell, and single-cell), supercells are the overall least common and have the potential to be the most severe. Supercells are often isolated from other thunderstorms, and can dominate the local weather up to 32 kilometres (20 mi) away. Supercells are often put into three classification types: Classic, Low-precipitation (LP), and High-precipitation (HP). LP supercells are usually found in climates that are more arid, such as the high plains of the United States, and HP supercells are most often found in moist climates. Supercells can occur anywhere in the world under the right pre-existing weather

Foo Fighter

Mesovortex

Hough Function

Sunshine Recorder

Apparent Temperature

Greenland Ice Core Project

Atmospheric Thermodynamics Fronts

Bounded Weak Echo Region Marine Weather Forecasting

Dansgaard-Oeschger Event Trajectory (Fluid Mechanics)

Solenoid (Meteorology) Fog Convective Temperature

Denver Convergence Vorticity Zone (Tc)

Road Weather Information System International Standard Atmosphere

List Of Severe Weather Phenomena Aeronomy Of Ice In The Mesosphere

Stratos SemiBold Italic

IONOSPHERE

LEIDEN SCALE

SPLITTING STORM

INCOHERENT SCATTER

VIEHLAND-MASON THEORY

GLOSSARY OF CLIMATE CHANGE

GLOBAL HORIZONTAL SOUNDING TECHNIQUE

METEOSAT SECOND GENERATION ANTICYCLOGENESIS IONOSPHERE

SYNOPTIC SCALE METEOROLOGY METEOROLOGISCHE ZEITSCHRIFT

WET-BULB GLOBE TEMPERATURE CLAUDIUS-CLAPEYRON RELATION

TROPICAL CYCLONE PREDICTION MODEL (HEAT EQUATOR: SEE) THERMAL EQUATOR

ATMOSPHERIC PHYSICS ALPINE CLIMATE MALAYSIAN CENTRE OF REMOTE SENSING

INTERNATIONAL ARCTIC BUOY PROGRAM INTERNATIONAL STANDARD ATMOSPHERE

Stratos SemiBold Italic

Showers and thunderstorms along thunder storm trains usually develop in one area of stationary instability, and are advanced along a single path by prevailing winds. Additional showers and storms can also develop when the gust front from a storm collides with warmer air outside of the storm. The same process repeats in the new storms, until overall conditions in the surrounding atmosphere become too stable for support of thunderstorm activity. Showers and stor

Optical phenomena are any observable events that result from the interaction of light and matter. See also list of optical topics and optics. A mirage is an example of an optical phenomenon. Common optical phenomena are often due to the interaction of light from the sun or moon with the atmosphere, clouds, water, dust, and other particulates. One common example is the rainbow, when light from the sun is reflected and refracted by water droplets. Some, such as the green ray, are so rare they are sometimes thought to be mythical. Others, such as Fata Morganas, are

Atmosphere sea ice/ocean interaction. Interaction between the atmosphere, ice and ocean is confined to the atmospheric boundary layer, which is mainly influenced by surface characteristics. In polar regions, these are sea ice roughness and sea ice concentration, which greatly influence surface temperature distribution. Wind speed and direction, the temperature of the air, and the location of the wind contact are other factors. Both sea ice and wind have great impact on the atmospheric boundary layer, which is often used to measure conditions in polar areas. The atmospheric portion of the hydrological cycle in polar regions plays an important role in that: the balance of polar ice masses is inseparably linked to precipitation, clouds modify the radiation transfer, the release of latent heat modifies the temperature of the air, hence circulations.

Stratos Bold

Ceilometer

Stormwater

Carbon Fixation

Temperate Climate

Ionospheric Reflection

Albedo Paleotempestology

Maximum-Value Composite Procedure

Dewbow Noctilucent Clouds Lithosphere Standard Dry Air

Meteorological Intelligence Bloodstorm (Marvel Comics)

Convective Storm Detection Marine Weather Forecasting

Corona (Optical Phenomenon) Dam NOAA-15 Golden Hour (Photography)

Sigma Heat Parallel Ocean Program Secondary Circulation Temperature

Foo Fighter Misoscale Meteorology International Standard Atmosphere

Stratos Bold

WALL CLOUD

EVACUATIONS

TIERRA TEMPLADA

MOUSTERIAN PLUVIAL

ATMOSPHERIC CHEMISTRY

TORNADO OUTBREAK SEQUENCE

AUSTRALIAN INTEGRATED FORECAST SYSTEM

MARINE WEATHER FORECASTING MESOSCALE CONVECTIVE VORTEX

GLORY (OPTICAL PHENOMENON) TORNADO CANOPY INTERCEPTION

METEOSAT SECOND GENERATION CLAUDIUS-CLAPEYRON RELATION

GLOSSARY OF ENVIRONMENTAL SCIENCE NEUTRON TEMPERATURE JAMES H. COON

DENVER CONVERGENCE VORTICITY ZONE AVIATION CIRROCUMULUS STRATIFORMIS

AUTOMATED AIRPORT WEATHER STATION SPERRY-PILTZ ICE ACCUMULATION INDEX

Stratos Bold

Airglow (also called nightglow) is a faint emission of light by a planetary atmosphere. In the case of Earth's atmosphere, this optical phenomenon causes the night sky never to be completely dark, even after the effects of starlight and diffused sunlight from the far side are removed. The airglow phenomenon was first identified in 1868 by Swedish scientist Anders Ångström. Since then, it has been studied in the laboratory, and various chemical reactions have been observed to

SwissCube-1 is a Swiss satellite operated by Ecole Polytechnique Fédérale de Lausanne. The spacecraft is a single unit CubeSat, which was designed to conduct research into airglow within the Earth's atmosphere and to develop technology for future spacecraft. Though SwissCube-1 is rather small (10 × 10 × 10 cm) and weighs less than 1 kg, it carries a small telescope for obtaining images of the airglow. The first SwissCube-1 image came down on February 18, 2011 and was quite black with some thermal noise on it. The first airglow image came down on March 3, 2011. This image has been

A weather front is a boundary separating two masses of air of different densities, and is the principal cause of meteorological phenomena. In surface weather analyses, fronts are depicted using various colored lines and symbols, depending on the type of front. The air masses separated by a front usually differ in temperature and humidity. Cold fronts may feature narrow bands of thunderstorms and severe weather, and may on occasion be preceded by squall lines or dry lines. Warm fronts are usually preceded by stratiform precipitation and fog. The weather usually clears quickly after a front's passage. Some fronts produce no precipitation and little cloudiness, although there is invariably a wind shift. Cold fronts and occluded fronts generally move from west to east, while warm fronts move poleward. Because of the greater density of air in their wake, cold fronts

Stratos Bold Italic

Lapse Rate
Rain Sensor
Density Altitude
Subnivean Climate
Atmospheric Sounding
Pacific Decadal Oscillation
Grasshopper (Robot Weather Station)
Dansgaard-Oeschger Event ***Trajectory (Fluid Mechanics)***
Antenna Noise Temperature ***Atmospheric Physics Metnet***
Meteorological Intelligence ***Marine Weather Forecasting***
Frontolysis Line Echo Wave Pattern ***International Standard Atmosphere***
Radius Of Outermost Closed Isobar ***Mesoscale Convective Vortex (Mcv)***
Water Vapor In Earth's Atmosphere ***Agrometeorology Extreme Weather***

Stratos Bold Italic

FOEHN WIND

FIRES VORTEX

CARBON FIXATION

ISENTROPIC ANALYSIS

ATMOSPHERIC CHEMISTRY

CONVECTIVE STORM DETECTION

GLOBAL HORIZONTAL SOUNDING TECHNIQUE

SYNOPTIC SCALE METEOROLOGY CLAUDIUS-CLAPEYRON RELATION

HORIZONTAL CONVECTIVE ROLLS CONVECTIVE INHIBITION HUAYCO

WET-BULB GLOBE TEMPERATURE METEOROLOGISCHE ZEITSCHRIFT

INTERNATIONAL ARCTIC BUOY PROGRAM INTERNATIONAL STANDARD ATMOSPHERE

AUTOMATED AIRPORT WEATHER STATION EUROPEAN SEVERE STORMS LABORATORY

GLOSSARY OF ENVIRONMENTAL SCIENCE WORLD METEOROLOGICAL ORGANIZATION

Stratos Bold Italic

High-pressure systems are frequently associated with light winds at the surface and subsidence through the lower portion of the troposphere. Subsidence will generally dry out an air mass by adiabatic, or compressional, heating. Thus, high pressure typically brings clear skies. During the day, since no clouds are present to reflect sunlight, there is more incoming shortwave solar radiation and temperatures rise. At night, the absence of clouds means that outgoing lo

An extratropical cyclone is a synoptic scale low-pressure weather system that has neither tropical nor polar characteristics, being connected with fronts and horizontal gradients in temperature and dew point otherwise known as “baroclinic zones”. The descriptor “extratropical” refers to the fact that this type of cyclone generally occurs outside of the tropics, in the middle latitudes of the planet. These systems may also be described as “mid-latitude cyclones” due to their area of formation, or “post-tropical cyclones” where extratropical transition has occurred, and are of

Surface weather analyses have special symbols which show frontal systems, cloud cover, precipitation, or other important information. For example, an H represents high pressure, implying good and fair weather. An L represents low pressure, which frequently accompanies precipitation. Various symbols are used not just for frontal zones and other surface boundaries on weather maps, but also to depict the present weather at various locations on the weather map. Areas of precipitation help determine the frontal type and location. Mesoscale systems and boundaries such as tropical cyclones, outflow boundaries and squall lines also are analyzed on surface weather analyses. Isobars are commonly used to place surface boundaries from the horse latitudes poleward, while streamline analyses are used in the tropics.

Stratos ExtraBold

Ceilometer

Portal Flood

Compressed Air

Stephen Schneider

Composite Reflectivity

Anticrepuscular Rays Leste

Maximum-Value Composite Procedure

Seasonal Affective Disorder Wet-Bulb Globe Temperature

Convective Storm Detection Bloodstorm (Marvel Comics)

Kombayashi–Ingersoll Limit Trajectory (Fluid Mechanics)

Japan Meteorological Agency Jma Laser-Assisted Water Condensation

Equivalent Temperature Westerlies Thermal Enhanced Vegetation Index

Tornado Vortex Signature Monsoon Surface Weather Observation Portal

Stratos ExtraBold

FOEHN WIND

POLAR FRONT

HURRICANE ALLEY

EVAPORATIVE COOLER

GLOBAL FORECAST SYSTEM

BREWER-DOBSON CIRCULATION

GLOBAL HORIZONTAL SOUNDING TECHNIQUE

MARINE WEATHER FORECASTING **ADIABATIC FLAME TEMPERATURE**

SYNOPTIC SCALE METEOROLOGY **METEOROLOGISCHE ZEITSCHRIFT**

METEOSAT SECOND GENERATION **POTENTIAL EVAPORATION CLIVAR**

GLOSSARY OF ENVIRONMENTAL SCIENCE **EUROPEAN SEVERE STORMS LABORATORY**

MEDITERRANEAN CLIMATE EVAPORATION **(GAS WARFARE: SEE) CHEMICAL WARFARE**

AUTOMATED AIRPORT WEATHER STATION **WORLD METEOROLOGICAL ORGANIZATION**

Stratos ExtraBold

A surface weather analysis is a special type of weather map that provides a view of weather elements over a geographical area at a specified time based on information from ground-based weather stations. Weather maps are created by plotting or tracing the values of relevant quantities such as sea level pressure, temperature, and cloud cover onto a geographical map to help find synoptic scale features such as weather fronts. The first weather maps in the 19th century w

The synoptic scale in meteorology (also known as large scale or cyclonic scale) is a horizontal length scale of the order of 1000 kilometres (about 620 miles) or more. This corresponds to a horizontal scale typical of mid-latitude depressions (e.g. extratropical cyclones). Most high and low-pressure areas seen on weather maps such as surface weather analyses are synoptic-scale systems, driven by the location of Rossby waves in their respective hemisphere. Low-pressure areas and their related frontal zones occur on the leading edge of a trough within the Rossby wave pattern, whil

The potential for convection in the atmosphere is often measured by an atmospheric temperature/dewpoint profile with height. This is often displayed on a Skew-T chart or other similar thermodynamic diagram. These can be plotted by a measured sounding analysis, which is the sending of a radiosonde attached to a balloon into the atmosphere to take the measurements with height. Forecast models can also create these diagrams, but are less accurate due to model uncertainties and biases, and have lower spatial resolution. Although, the temporal resolution of forecast model soundings is greater than the direct measurements, where the former can have plots for intervals of up to every 3 hours, and the latter as having only 2 per day (although when a convective event is expected a special sounding might be taken outside of the normal schedule of 00Z and t

Stratos ExtraBold Italic

Lapse Rate

Pulse Storm

Teleconnection

Severe Weather Uk

Telluric Contamination

Annular Hurricane Tornado

Atmospheric Radiation Measurement

Greenhouse Gas Monitoring Marine Weather Forecasting

Meteorological Phenomena Tornado Outbreak Sequence

Coastal Zone Color Scanner Rocketsonde Stüve Diagram

Road Weather Information System International Standard Atmosphere

Radius Of Outermost Closed Isobar Laser-Assisted Water Condensation

Kenya Meteorological Department Denver Convergence Vorticity Zone

Stratos ExtraBold Italic

WIND SHEAR

ICE CRYSTALS

RADIANT BARRIER

HUMIDITY BUFFERING

ATMOSPHERIC CHEMISTRY

GLOSSARY OF CLIMATE CHANGE

GLOBAL HORIZONTAL SOUNDING TECHNIQUE

METEOSAT SECOND GENERATION ***ADIABATIC FLAME TEMPERATURE***

MARINE WEATHER FORECASTING ***CLAUSIUS-CLAPEYRON RELATION***

HORIZONTAL CONVECTIVE ROLLS ***TERRESTRIAL GAMMA-RAY FLASH***

CLIMATE SAVERS COMPUTING INITIATIVE ***EUROPEAN SEVERE STORMS LABORATORY***

LASER-ASSISTED WATER CONDENSATION ***MODEL FOR PREDICTION ACROSS SCALES***

AUTOMATED AIRPORT WEATHER STATION ***INTERNATIONAL STANDARD ATMOSPHERE***

A downburst is created by a column of sinking air that, after hitting ground level, spreads out in all directions and is capable of producing damaging straight-line winds of over 240 kilometres per hour (150 mph), often producing damage similar to, but distinguishable from, that caused by tornadoes. This is because the physical properties of a downburst are completely different from those of a tornado. Downburst damage will radiate from a central point as the descent

A tornado is a dangerous rotating column of air in contact with both the surface of the earth and the base of a cumulonimbus cloud (thundercloud) or a cumulus cloud, in rare cases. Tornadoes come in many sizes but typically form a visible condensation funnel whose narrowest end reaches the earth and surrounded by a cloud of debris and dust. Tornadoes wind speeds generally average between 64 kilometres per hour (40 mph) and 180 kilometres per hour (110 mph). They are approximately 75 metres (246 ft) across and travel a few kilometers before dissipating. So

Despite the fact that there might be a layer in the atmosphere that has positive values of CAPE, if the parcel does not reach or begin rising to that level, the most significant convection that occurs in the FCL will not be realized. This can occur for numerous reasons. Primarily, it is the result of a cap, or convective inhibition (CIN/CINH). Processes that can erode this inhibition are heating of the Earth's surface and forcing. Such forcing mechanisms encourage upward vertical velocity, characterized by a speed that is relatively low to what you find in a thunderstorm updraft. Because of this, it is not the actual air being pushed to its LFC that "breaks through" the inhibition, but rather the forcing cools the inhibition adiabatically. This would counter, or "erode" the increase of temperature with height that is present during a capping inversion. Forcing

Stratos Black

Cloudburst

Turbopause

Density Altitude

Incoherent Scatter

Atmospheric Research

Climate Research (Journal)

Maximum-Value Composite Procedure

Secondary Organic Aerosols Bloodstorm (Marvel Comics)

Hemispherical Photography Clausius–Clapeyron Relation

Kombayashi–Ingersoll Limit Marine Weather Forecasting

Tropical Cyclone Observation Flood Advanced Microwave Sounding Unit

World Meteorological Organization Climate Savers Computing Initiative

Mountain Breeze And Valley Breeze Aeronomy Of Ice In The Mesosphere

Stratos Black

HIMAWARI 8

BAROTROPITY

SPLITTING STORM

LIDAR LIST OF FLOODS

ANTI-GREENHOUSE EFFECT

CIRROCUMULUS STRATIFORMIS

GLOBAL HORIZONTAL SOUNDING TECHNIQUE

SYNOPTIC SCALE METEOROLOGY NOAA-4 DEGREE (TEMPERATURE)

COASTAL ZONE COLOR SCANNER CLAUSIUS-CLAPEYRON RELATION

WET-BULB GLOBE TEMPERATURE TURBINE INLET AIR COOLING FOG

GLOSSARY OF ENVIRONMENTAL SCIENCE EUROPEAN SEVERE STORMS LABORATORY

AUTOMATED AIRPORT WEATHER STATION WORLD METEOROLOGICAL ORGANIZATION

DENVER CONVERGENCE VORTICITY ZONE TROPICAL UPPER TROPOSPHERIC TROUGH

A thermal column (or thermal) is a vertical section of rising air in the lower altitudes of the Earth's atmosphere. Thermals are created by the uneven heating of the Earth's surface from solar radiation. The Sun warms the ground, which in turn warms the air directly above it. The warmer air expands, becoming less dense than the surrounding air mass, and creating a thermal low. The mass of lighter air rises, and as it does, it cools due to its expansion at lower high-altitude pres

Warm air has a lower density than cool air, so warm air rises within cooler air, similar to hot air balloons. Clouds form as relatively warmer air carrying moisture rises within cooler air. As the moist air rises, it cools causing some of the water vapor in the rising packet of air to condense. When the moisture condenses, it releases energy known as latent heat of fusion which allows the rising packet of air to cool less than its surrounding air, continuing the cloud's ascension. If enough instability is present in the atmosphere, this process will continue long enough for cumulonimbus clouds

All thunderstorms, regardless of type, go through three stages: the developing stage, the mature stage, and the dissipation stage. The average thunderstorm has a 24 km (15 mi) diameter. Depending on the conditions present in the atmosphere, these three stages take an average of 30 minutes to go through. There are four main types of thunderstorms: single-cell, multicell, squall line (also called multicell line) and supercell. Which type forms depends on the instability and relative wind conditions at different layers of the atmosphere ("wind shear"). Single-cell thunderstorms form in environments of low vertical wind shear and last only 20–30 minutes. Organized thunderstorms and thunderstorm clusters/lines can have longer life cycles as they form in environments of significant vertical wind shear, which aids the development of stronger updrafts as well as va

Stratos Black Italic

Fahrenheit

Waterspout

Thalpotentiginy

Boyle Temperature

Atmospheric Research

Ocean Surface Topography

Atmospheric Radiation Measurement

Inversion Temperature Mist Great Arctic Cyclone Of 2012

Seasonal Affective Disorder Trajectory (Fluid Mechanics)

Coastal Zone Color Scanner Echam Ice-Albedo Feedback

Glossary Of Environmental Science Laser-Assisted Water Condensation

Road Weather Information System Skew-T Log-P Diagram Temperature

Kenya Meteorological Department Kenya Meteorological Department

Stratos Black Italic

SOUTH WIND

ISLAND WAKE

CLIMATE PATTERN

EVAPORATIVE COOLER

VIEHLAND-MASON THEORY

CIRROCUMULUS STRATIFORMIS

MINUANO ANTICYCLONE (IN METEOROLOGY)

MARINE WEATHER FORECASTING ADIABATIC FLAME TEMPERATURE

CLIMATE ENSEMBLE NEPHOLOGY METEOROLOGICAL INTELLIGENCE

METEOSAT SECOND GENERATION CLAUDIUS-CLAPEYRON RELATION

AUTOMATED AIRPORT WEATHER STATION WORLD METEOROLOGICAL ORGANIZATION

THERMODYNAMIC TEMPERATURE EARTH MODEL FOR PREDICTION ACROSS SCALES

METEOROLOGICAL INSTITUTE HAMBURG DENVER CONVERGENCE VORTICITY ZONE

The rear-inflow jet is a component of bow echoes in a mesoscale convective system that aids in creating a stronger cold pool and downdraft. The jet forms as a response to a convective circulation having upper level tilt and horizontal pressure gradients. The cold pool that comes from the outflow of a storm forms an area of high pressure at the surface. In response to the surface high and warmer temperatures aloft due to convection, a mid-level mesolow forms

The Bergeron classification is the most widely accepted form of air mass classification, though others have produced more refined versions of this scheme over different regions of the globe. An air mass classification involves three letters. The first letter describes its moisture properties, with c used for continental air masses (dry) and m for maritime air masses (moist). The second letter describes the thermal characteristic of its source region: T for Tropical, P for Polar, A for arctic or Antarctic, M for monsoon, E for Equatorial, and S for superior air (an adiabatically drying an

There are a few general archetypes of atmospheric instability that correspond to convection and lack thereof. Steeper and/or positive lapse rates (environmental air cools quickly with height) suggests atmospheric convection is more likely, while weaker and/or negative environmental lapse rates suggest it is less likely. This is because any displaced air parcels will become more (less) buoyant, given their sign of adiabatic temperature change, in the steep (weak) lapse rate environments. Convection begins at the level of free convection (LFC), where it begins its ascent through the free convective layer (FCL), and then stops at the equilibrium level (EL). The rising parcel, if having enough momentum, will continue to rise to the maximum parcel level (MPL) until negative buoyancy decelerates the parcel to a stop. Acceleration is of little relevance to co

Stratos

OpenType features

OFF

ON

All caps
[CPSP]

Lowercase

UPPERCASE

Case-sensitive forms
[CASE]

[Case-sensitive]
!;?¿-—()[]{}<><<>>·@

[CASE-SENSITIVE]
!;?¿-—()[]{}<><<>>·@

Standard ligatures
[LIGA]

fi fl fb ff fh fj fk ft
ffb ffh ffi ffj ffk ffl fft

fi fl fb ff fh fj fk ft
ffb ffh ffi ffj ffk ffl fft

Slashed zero
[ZERO]

0123456789

Ø123456789

Tabular
lining figures
[TNUM + LNUM]

H0123456789

H0123456789

Tabular
oldstyle figures
[TNUM + ONUM]

H0123456789

H0123456789

Proportional
lining figures
[PNUM + LNUM]

H0123456789

H0123456789

Proportional
oldstyle figures
[PNUM + ONUM]

H0123456789

H0123456789

Superscript/Superior
[SUPS]

Hsuperscript
H0123456789
H,.)+-x÷=€\$¢

Hsuperscript
H0123456789
H,.)+-x÷=€\$¢

Subscript/Inferior
[SINF]

H0123456789
H,.)+-x÷=€\$¢

H₀₁₂₃₄₅₆₇₈₉
H_{,.)+-x÷=€\$¢}

Numerator
[NUMR]

H0123456789
H,.)+-x÷=€\$¢

H⁰¹²³⁴⁵⁶⁷⁸⁹
H^{,.)+-x÷=€\$¢}

Denominator
[DNOM]

H0123456789
H,.)+-x÷=€\$¢

H₀₁₂₃₄₅₆₇₈₉
H_{,.)+-x÷=€\$¢}

Stratos

OpenType features

OFF

ON

Fractions
[FRAC]

1/4 1/2 3/4 2/3 7/8
0/0 0/00

¼ ½ ¾ ⅔ ⅞
% ‰

Ordinals
[ORDN]

2^a 2^o N^o N^o n^o n^o

2^a 2^o N^o N^o N^o N^o

Stylistic set 1
Alternate a [SS01]

another animal

another animal

Stylistic set 2
Alternate g [SS02]

big guy, tough guy

big guy, tough guy

Stylistic set 3 & 4:
circled numbers
[SS03 & SS04]

012345678910
012345678910

①②③④⑤⑥⑦⑧⑨⑩
①②③④⑤⑥⑦⑧⑨⑩

Stylistic set 5:
arrows [SS05]

<> + - × ÷ = ±

↔ ↑ ↓ ↖ ↗ ↘ ↙

Stylistic set 6:
ornaments [SS06]

abcdef

■ ◆ ● ► ♥ ♡

Stratos

Information

Supported languages	Afrikaans, Albanian, Asu, Basque, Bemba, Bena, Bosnian, Catalan, Chiga, Congo Swahili, Cornish, Croatian, Czech, Danish, Dutch, Embu, English, Esperanto, Estonian, Faroese, Filipino, Finnish, French, Galician, Ganda, German, Gusii, Hungarian, Icelandic, Indonesian, Irish, Italian, Jola-Fonyi, Kabuverdianu, Kalenjin, Kamba, Kikuyu, Kinyarwanda, Latvian, Lithuanian, Luo, Luyia, Machame, Makhuwa-Meetto, Makonde, Malagasy, Malay, Maltese, Manx, Meru, Morisyen, North Ndebele, Norwegian Bokmål, Norwegian Nynorsk, Nyankole, Oromo, Polish, Portuguese, Romanian, Romansh, Rombo, Rundi, Rwa, Samburu, Sango, Sangu, Sena, Shambala, Shona, Slovak, Slovenian, Soga, Somali, Spanish, Swahili, Swedish, Swiss German, Taita, Teso, Turkish, Vunjo, Welsh, Zulu.
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