Sun Stuff

A

active regions

Alfvén waves

C

coronal holes

coronal loops

- *Modelled* as flux tubes; probably consist of many flux tubes.

coronal mass ejections (CMEs)

faculae

- Appear in *photosphere*; same thing as plages.
- Bright spots — reason why total brightness is higher at solar maximum.

filament

- Viewed on disk; same thing as prominences.
- Thin, cool, dark ribbons

flares

flux tubes

- Formed deep in the convection zone.
- Rise by magnetic buoyancy in an Ω-shaped loop.
- Magnetic field lines can be thought of as infinitely thin flux tubes.

frozen-in flux

In a perfectly conducting material (i.e. $\eta = 0$), Ohm's law goes from $\vec{E} + \vec{v} \times \vec{B} = \vec{J}\eta$ to $\vec{E} + \vec{v} \times \vec{B} = 0$ Nothing can be perpendicular to the field lines ... See Alfvén's Theorem.

1 J

jets

2 K

3 L

4 M

5 N

6 O

7 P

plages

- Appear in *chromosphere*; same thing as faculae.

pores

prominence

- Viewed on the limb; same thing as filaments.
- May erupt sometime during its life and be associated with a CME

8 Q

9 R

10 S

solar wind

spicules

sunspots

Dark regions of intense magnetic field.

surges